1957 Letter
WARREN E. BUFFETT
5202 Underwood Ave. Omaha, Nebraska

SECOND ANNUAL LETTER TO LIMITED PARTNERS

The General Stock Market Picture in 1957

In last year's letter to partners, I said the following:

My view of the general market level is that it is priced above intrinsic value. This view relates to blue-chip securities. This view, if accurate, carries with it the possibility of a substantial decline in all stock prices, both undervalued and otherwise. In any event I think the probability is very slight that current market levels will be thought of as cheap five years from now. Even a full-scale bear market, however, should not hurt the market value of our work-outs substantially.

If the general market were to return to an undervalued status our capital might be employed exclusively in general issues and perhaps some borrowed money would be used in this operation at that time. Conversely, if the market should go considerably higher our policy will be to reduce our general issues as profits present themselves and increase the work-out portfolio.

All of the above is not intended to imply that market analysis is foremost in my mind. Primary attention is given at all times to the detection of substantially undervalued securities.

The past year witnessed a moderate decline in stock prices. I stress the word "moderate" since casual reading of the press or conversing with those who have had only recent experience with stocks would tend to create an impression of a much greater decline. Actually, it appears to me that the decline in stock prices has been considerably less than the decline in corporate earning power under present business conditions. This means that the public is still very bullish on blue chip stocks and the general economic picture. I make no attempt to forecast either business or the stock market; the above is simply intended to dispel any notions that stocks have suffered any drastic decline or that the general market, is at a low level. I still consider the general market to be priced on the high side based on long term investment value.

Our Activities in 1957

The market decline has created greater opportunity among undervalued situations so that, generally, our portfolio is heavier in undervalued situations relative to work-outs than it was last year. Perhaps an explanation of the term "work-out" is in order. A work-out is an investment which is dependent on a specific corporate action for its profit rather than a general advance in the price of the stock as in the case of undervalued situations. Work-outs come about through: sales, mergers, liquidations, tenders, etc. In each case, the risk is that something will upset the applecart and cause the abandonment of the planned action, not that the economic picture will deteriorate and stocks decline generally. At the end of 1956, we had a ratio of about 70-30 between general issues and work-outs. Now it is about 85-15.

During the past year we have taken positions in two situations which have reached a size where we may expect to take some part in corporate decisions. One of these positions accounts for between 10% and 20% of the portfolio of the various partnerships and the other accounts for about 5%. Both of these will probably take in the neighborhood of three to five years of work but they presently appear to have potential for a high average annual rate of return with a minimum of risk. While not in the classification of work-outs, they have very little

dependence on the general action of the stock market. Should the general market have a substantial rise, of course, I would expect this section of our portfolio to lag behind the action of the market.

Results for 1957

In 1957 the three partnerships which we formed in 1956 did substantially better than the general market. At the beginning of the year, the Dow-Jones Industrials stood at 499 and at the end of the year it was at 435 for a loss of 64 points. If one had owned the Averages, he would have received 22 points in dividends reducing the overall loss to 42 points or 8.470% for the year. This loss is roughly equivalent to what would have been achieved by investing in most investment funds and, to my knowledge, no investment fund invested in stocks showed a gain for the year.

All three of the 1956 partnerships showed a gain during the year amounting to about 6.2%, 7.8% and 25% on yearend 1956 net worth. Naturally a question is created as to the vastly superior performance of the last partnership, particularly in the mind of the partners of the first two. This performance emphasizes the importance of luck in the short run, particularly in regard to when funds are received. The third partnership was started the latest in 1956 when the market was at a lower level and when several securities were particularly attractive. Because of the availability of funds, large positions were taken in these issues. Whereas the two partnerships formed earlier were already substantially invested so that they could only take relatively small positions in these issues.

Basically, all partnerships are invested in the same securities and in approximately the same percentages. However, particularly during the initial stages, money becomes available at varying times and varying levels of the market so there is more variation in results than is likely to be the case in later years. Over the years, I will be quite satisfied with a performance that is 10% per year better than the Averages, so in respect to these three partnerships, 1957 was a successful and probably better than average, year.

Two partnerships were started during the middle of 1957 and their results for the balance of the year were roughly the same as the performance of the Averages which were down about 12% for the period since inception of the 1957 partnerships. Their portfolios are now starting to approximate those of the 1956 partnerships and performance of the entire group should be much more comparable in the future.

Interpretation of results

To some extent our better than average performance in 1957 was due to the fact that it was a generally poor year for most stocks. Our performance, relatively, is likely to be better in a bear market than in a bull market so that deductions made from the above results should be tempered by the fact that it was the type of year when we should have done relatively well. In a year when the general market had a substantial advance I would be well satisfied to match the advance of the Averages.

I can definitely say that our portfolio represents better value at the end of 1957 than it did at the end of 1956. This is due to both generally lower prices and the fact that we have had more time to acquire the more substantially undervalued securities which can only be acquired with patience. Earlier I mentioned our largest position which comprised 10% to 20% of the assets of the various partnerships. In time I plan to have this represent 20% of the assets of all partnerships but this cannot be hurried. Obviously during any acquisition period, our primary interest is to have the stock do nothing or decline rather than advance. Therefore, at any given time, a fair proportion of our portfolio may be in the sterile stage. This policy, while requiring patience, should maximize long term profits.

I have tried to cover points which I felt might be of interest and disclose as much of our philosophy as may be imparted without talking of individual issues. If there are any questions concerning any phase of the operation, I would welcome hearing from you.

1958 Letter
Warren E Buffett
5202 Underwood Ave. Omaha, Nebraska

THE GENERAL STOCK MARKET IN 1958

A friend who runs a medium-sized investment trust recently wrote: "The mercurial temperament, characteristic of the American people, produced a major transformation in 1958 and 'exuberant' would be the proper word for the stock market, at least".

I think this summarizes the change in psychology dominating the stock market in 1958 at both the amateur and professional levels. During the past year almost any reason has been seized upon to justify "Investing" in the market. There are undoubtedly more mercurially-tempered people in the stock market now than for a good many years and the duration of their stay will be limited to how long they think profits can be made quickly and effortlessly. While it is impossible to determine how long they will continue to add numbers to their ranks and thereby stimulate rising prices, I believe it is valid to say that the longer their visit, the greater the reaction from it.

I make no attempt to forecast the general market - my efforts are devoted to finding undervalued securities. However, I do believe that widespread public belief in the inevitability of profits from investment in stocks will lead to eventual trouble. Should this occur, prices, but not intrinsic values in my opinion, of even undervalued securities can be expected to be substantially affected.

RESULTS IN 1958

In my letter of last year, I wrote:

> "Our performance, relatively, is likely to be better in a bear market than in a bull market so that deductions made from the above results should be tempered by the fact that it was the type of year when we should have done relatively will. In a year when the general market had a substantial advance, I would be well satisfied to match the advance of the averages."

The latter sentence describes the type of year we had in 1958 and my forecast worked out. The Dow-Jones Industrial average advanced from 435 to 583 which, after adding back dividends of about 20 points, gave an overall gain of 38.5% from the Dow-Jones unit. The five partnerships that operated throughout the entire year obtained results averaging slightly better than this 38.5%. Based on market values at the end of both years, their gains ranged from 36.7% to 46.2%. Considering the fact that a substantial portion of assets has been and still is invested in securities, which benefit very little from a fast-rising market, I believe these results are reasonably good. I will continue to forecast that our results will be above average in a declining or level market, but it will be all we can do to keep pace with a rising market.

TYPICAL SITUATION

So that you may better understand our method of operation, I think it would be well to review a specific activity of 1958. Last year I referred to our largest holding which comprised 10% to 20% of the assets of the various partnerships. I pointed out that it was to our interest to have this stock decline or remain relatively steady, so that we could acquire an even larger position and that for this reason such a security would probably hold back our comparative performance in a bull market.

This stock was the Commonwealth Trust Co. of Union City, New Jersey. At the time we started to purchase the stock, it had an intrinsic value $125 per share computed on a conservative basis. However, for good reasons, it

paid no cash dividend at all despite earnings of about $10 per share which was largely responsible for a depressed price of about $50 per share. So here we had a very well managed bank with substantia1 earnings power selling at a large discount from intrinsic value. Management was friendly to us as new stockholders and risk of any ultimate loss seemed minimal.

Commonwealth was 25.5% owned by a larger bank (Commonwealth had assets of about $50 Million – about half the size of the First National in Omaha), which had desired a merger for many years. Such a merger was prevented for persona1 reasons, but there was evidence that this situation would not continue indefinitely. Thus we had a combination of:

1. Very strong defensive characteristics;
2. Good solid value building up at a satisfactory pace and;
3. Evidence to the effect that eventually this value would be unlocked although it might be one year or ten years. If the latter were true, the value would presumably have been built up to a considerably larger figure, say, $250 per share.

Over a period of a year or so, we were successful in obtaining about 12% of the bank at a price averaging about $51 per share. Obviously it was definitely to our advantage to have the stock remain dormant in price. Our block of stock increased in value as its size grew, particularly after we became the second largest stockholder with sufficient voting power to warrant consultation on any merger proposa1.

Commonwealth only had about 300 stockholders and probably averaged two trades or so per month, so you can understand why I say that the activity of the stock market generally had very little effect on the price movement of some of our holdings.

Unfortunately we did run into some competition on buying, which railed the price to about $65 where we were neither buyer nor seller. Very small buying orders can create price changes of this magnitude in an inactive stock, which explains the importance of not having any "Leakage" regarding our portfolio holdings.

Late in the year we were successful in finding a special situation where we could become the largest holder at an attractive price, so we sold our block of Commonwealth obtaining $80 per share although the quoted market was about 20% lower at the time.

It is obvious that we could still be sitting with $50 stock patiently buying in dribs and drabs, and I would be quite happy with such a program although our performance relative to the market last year would have looked poor. The year when a situation such at Commonwealth results in a realized profit is, to a great extent, fortuitous. Thus, our performance for any single year has serious limitations as a basis for estimating long term results. However, I believe that a program of investing in such undervalued well protected securities offers the surest means of long term profits in securities.

I might mention that the buyer of the stock at $80 can expect to do quite well over the years. However, the relative undervaluation at $80 with an intrinsic value $135 is quite different from a price $50 with an intrinsic value of $125, and it seemed to me that our capital could better be employed in the situation which replaced it. This new situation is somewhat larger than Commonwealth and represents about 25% of the assets of the various partnerships. While the degree of undervaluation is no greater than in many other securities we own (or even than some) we are the largest stockholder and this has substantial advantages many times in determining the length of time required to correct the undervaluation. In this particular holding we are virtually assured of a performance better than that of the Dow-Jones for the period we hold it.

THE CURRENT SITUATION

The higher the level of the market, the fewer the undervalued securities and I am finding some difficulty in

securing an adequate number of attractive investments. I would prefer to increase the percentage of our assets in work-outs, but these are very difficult to find on the right terms.

To the extent possible, therefore, I am attempting to create my own work-outs by acquiring large positions in several undervalued securities. Such a policy should lead to the fulfillment of my earlier forecast – an above average performance in a bear market. It is on this basis that I hope to be judged. If you have any questions, feel free to ask them.

WARREN E. BUFFETT 2-11-59

1959 Letter
WARREN E. BUFFETT
5202 Underwood Ave. Omaha, Nebraska

The General Stock Market in 1959:

The Dow-Jones Industrial Average, undoubtedly the most widely used index of stock market behavior, presented a somewhat faulty picture in 1959. This index recorded an advance from 583 to 679, or 16.4% for the year. When the dividends which would have been received through ownership of the average are added, an overall gain of 19.9% indicated for 1959.

Despite this indication of a robust market, more stocks declined than advanced on the New York Stock Exchange during the year by a margin of 710 to 628. Both the Dow-Jones Railroad Average and Utility Average registered declines.

Most investment trusts had a difficult time in comparison with the Industrial Average. Tri-Continental Corp. the nation's largest closed-end investment company (total asset $400 million) had an overall gain of about 5.7% for the year. Fred Brown, its President, had this to say about the 1959 marked in a recent speech to the Analysts Society:

> "But, even though we like the portfolio, the market performance of Tri-Continental's holdings in 1959 was disappointing to us. Markets in which investor sentiment and enthusiasm play so large a part as those of 1959, are difficult for investment managers trained in values and tuned to investing for the long-term. Perhaps we haven't had our space boots adjusted properly. However, we believe that there is a limit to risks that an investing institution such as Tri-Continental should take with its stockholders' money, and we believe that the portfolio is in shape for the year ahead."

Massachusetts Investors Trust, the country's largest mutual fund with assets of $1.5 billion showed an overall gain of about 9% for the year.

Most of you know I have been very apprehensive about general stock market levels for several years. To date, this caution has been unnecessary. By previous standards, the present level of "blue chip" security prices contains a substantial speculative component with a corresponding risk of loss. Perhaps other standards of valuation are evolving which will permanently replace the old standard. I don't think so. I may very well be wrong; however, I would rather sustain the penalties resulting from over-conservatism than face the consequences of error, perhaps with permanent capital loss, resulting from the adoption of a "New Era" philosophy where trees really do grow to the sky.

Results in 1959:

There has been emphasis in previous letters on a suggested standard of performance involving relatively good results (compared to the general market indices and leading investment trusts) in periods of declining or level prices but relatively unimpressive results in rapidly rising markets.

We were fortunate to achieve reasonably good results in 1959. The six partnerships that operated throughout the year achieved overall net gains ranging from 22.3% to 30.0%, and averaging about 25.9%. Portfolios of these partnerships are now about 80%comparable, but there is some difference due to securities and cash becoming available at varying times, payments made to partners, etc. Over the past few years, there hasn't been any partnership which has consistently been at the top or bottom of performance from year to year, and the variance is narrowing as the portfolios tend to become comparable.

The overall net gain is determined on the basis of market values at the beginning and end of the year adjusted for payments made to partners or contributions received from them. It is not based on actual realized profits during the year, but is intended to measure the change in liquidating value for the year. It is before interest allowed to partners (where that is specified in the partnership agreement) and before any division of profit to the general partner, but after operating expenses.

The principal operating expense is the Nebraska Intangibles Tax which amounts to .4% of market value on practically all securities. Last year represented the first time that this tax had been effectively enforced and, of course penalized our results to the extent of .4%.

The present portfolio:

Last year, I mentioned a new commitment which involved about 25% of assets of the various partnerships. Presently this investment is about 35% of assets. This is an unusually large percentage, but has been made for strong reasons. In effect, this company is partially an investment trust owing some thirty or forty other securities of high quality. Our investment was made and is carried at a substantial discount from asset value based on market value of their securities and a conservative appraisal of the operating business.

We are the company's largest stockholder by a considerable margin, and the two other large holders agree with our ideas. The probability is extremely high that the performance of this investment will be superior to that of the general market until its disposition, and I am hopeful that this will take place this year.

The remaining 65% of the portfolio is in securities which I consider undervalued and work-out operations. To the extent possible, I continue to attempt to invest in situations at least partially insulated from the behavior of the general market.

This policy should lead to superior results in bear markets and average performance in bull markets. The first prediction may be subject to test this year since, at this writing, the Dow-Jones Industrials have retraced over half of their 1959 advance.

Should you have any questions or if I have not been clear in any respect, I would be very happy to hear from you.

Warren E. Buffett
2-20-60

1960 Letter
WARREN E. BUFFETT
5202 Underwood Ave. Omaha, Nebraska

The General Stock Market in 1960:

A year ago, I commented on the somewhat faulty picture presented in 1959 by the Dow-Jones Industrial Average which had advanced from 583 to 679, or 16.4%. Although practically all investment companies showed gains for that year, less than 10% of them were able to match or better the record of the Industrial Average. The Dow-Jones Utility Average had a small decline and the Railroad Average recorded a substantial one.

In 1960, the picture was reversed. The Industrial Average declined from 679 to 616, or 9.3%. Adding back the dividends which would have been received through ownership of the Average still left it with an overall loss of 6.3%. On the other hand, the Utility Average showed a good gain and, while all the results are not now available, my guess is that about 90% of all investment companies outperformed the Industrial Average. The majority of investment companies appear to have ended the year with overall results in the range of plus or minus 5%. On the New York Stock Exchange, 653 common stocks registered losses for the year while 404 showed gains.

Results in 1960:

My continual objective in managing partnership funds is to achieve a long-term performance record superior to that of the Industrial Average. I believe this Average, over a period of years, will more or less parallel the results of leading investment companies. Unless we do achieve this superior performance there is no reason for existence of the partnerships.

However, I have pointed out that any superior record which we might accomplish should not be expected to be evidenced by a relatively constant advantage in performance compared to the Average. Rather it is likely that if such an advantage is achieved, it will be through better-than-average performance in stable or declining markets and average, or perhaps even poorer- than-average performance in rising markets.

I would consider a year in which we declined 15% and the Average 30% to be much superior to a year when both we and the Average advanced 20%. Over a period of time there are going to be good and bad years; there is nothing to be gained by getting enthused or depressed about the sequence in which they occur. The important thing is to be beating par; a four on a par three hole is not as good as a five on a par five hole and it is unrealistic to assume we are not going to have our share of both par three's and par five's.

The above dose of philosophy is being dispensed since we have a number of new partners this year and I want to make sure they understand my objectives, my measure of attainment of these objectives, and some of my known limitations.

With this background it is not unexpected that 1960 was a better-than-average year for us. As contrasted with an overall loss of 6.3% for the Industrial Average, we had a 22.8% gain for the seven partnerships operating throughout the year. Our results for the four complete years of partnership operation after expenses but before interest to limited partners or allocation to the general partner are:

Year	Partnerships Operating Entire Year	Partnership Gain	Dow-Jones Gain
1957	3	10.4%	-8.4%
1958	5	40.9%	38.5%

1959	6	25.9%	19.9%
1960	7	22.8%	-6.3%

It should be emphasized again that these are the net results to the partnership; the net results to the limited partners would depend on the partnership agreement that they had selected.

The overall gain or loss is computed on a market to market basis. After allowing for any money added or withdrawn, such a method gives results based upon what would have been realized upon liquidation of the partnership at the beginning, of the year and what would have been realized upon liquidation at year end and is different, of course, from our tax results, which value securities at cost and realize gains or losses only when securities are actually sold.

On a compounded basis, the cumulative results have been:

Year	Partnership Gain	Dow-Jones Gain
1957	10.4%	-8.4%
1958	55.6%	26.9%
1959	95.9%	52.2%
1960	140.6%	42.6%

Although four years is entirely too short a period from which to make deductions, what evidence there is points toward confirming the proposition that our results should be relatively better in moderately declining or static markets. To the extent that this is true, it indicates that our portfolio may be more conservatively, although decidedly less conventionally, invested than if we owned "blue-chip" securities. During a strongly rising market for the latter, we might have real difficulty in matching their performance.

Multiplicity of Partnerships:

A preceding table shows that the family is growing. There has been no partnership which has had a consistently superior or inferior record compared to our group average, but there has been some variance each year despite my efforts to "keep all partnerships invested in the same securities and in about the same proportions. This variation, of course, could be eliminated by combining the present partnerships into one large partnership. Such a move would also eliminate much detail and a moderate amount of expense.

Frankly, I am hopeful of doing something along this line in the next few years. The problem is that various partners have expressed preferences for varying partnership arrangements. Nothing will be done without unanimous consent of partners.

Advance Payments:

Several partners have inquired about adding money during the year to their partnership. Although an exception has been made, it is too difficult to amend partnership agreements during mid-year where we have more than one family represented among the limited partners. Therefore, in mixed partnerships an additional interest can only be acquired at the end of the year.

We do accept advance payments during the year toward a partnership interest and pay interest at 6% on this payment from the time received until the end of the year. At that time, subject to amendment of the agreement by the partners, the payment plus interest is added to the partnership capital and thereafter participates in profits and losses.

Sanborn Map:

Last year mention was made of an investment which accounted for a very high and unusual proportion (35%) of our net assets along with the comment that I had some hope this investment would be concluded in 1960. This hope materialized. The history of an investment of this magnitude may be of interest to you.

Sanborn Map Co. is engaged in the publication and continuous revision of extremely detailed maps of all cities of the United States. For example, the volumes mapping Omaha would weigh perhaps fifty pounds and provide minute details on each structure. The map would be revised by the paste-over method showing new construction, changed occupancy, new fire protection facilities, changed structural materials, etc. These revisions would be done approximately annually and a new map would be published every twenty or thirty years when further pasteovers became impractical. The cost of keeping the map revised to an Omaha customer would run around $100 per year.

This detailed information showing diameter of water mains underlying streets, location of fire hydrants, composition of roof, etc., was primarily of use to fire insurance companies. Their underwriting departments, located in a central office, could evaluate business by agents nationally. The theory was that a picture was worth a thousand words and such evaluation would decide whether the risk was properly rated, the degree of conflagration exposure in an area, advisable reinsurance procedure, etc. The bulk of Sanborn's business was done with about thirty insurance companies although maps were also sold to customers outside the insurance industry such as public utilities, mortgage companies, and taxing authorities.

For seventy-five years the business operated in a more or less monopolistic manner, with profits realized in every year accompanied by almost complete immunity to recession and lack of need for any sales effort. In the earlier years of the business, the insurance industry became fearful that Sanborn's profits would become too great and placed a number of prominent insurance men on Sanborn's board of directors to act in a watch-dog capacity.

In the early 1950's a competitive method of under-writing known as "carding" made inroads on Sanborn's business and after-tax profits of the map business fell from an average annual level of over $500,000 in the late 1930's to under $100,000 in 1958 and 1959. Considering the upward bias in the economy during this period, this amounted to an almost complete elimination of what had been sizable, stable earning power.

However, during the early 1930's Sanborn had begun to accumulate an investment portfolio. There were no capital requirements to the business so that any retained earnings could be devoted to this project. Over a period of time, about $2.5 million was invested, roughly half in bonds and half in stocks. Thus, in the last decade particularly, the investment portfolio blossomed while the operating map business wilted.

Let me give you some idea of the extreme divergence of these two factors. In 1938 when the Dow-Jones Industrial Average was in the 100-120 range, Sanborn sold at $110 per share. In 1958 with the Average in the 550 area, Sanborn sold at $45 per share. Yet during that same period the value of the Sanborn investment portfolio increased from about $20 per share to $65 per share. This means, in effect, that the buyer of Sanborn stock in 1938 was placing a positive valuation of $90 per share on the map business ($110 less the $20 value of the investments unrelated to the map business) in a year of depressed business and stock market conditions. In the tremendously more vigorous climate of 1958 the same map business was evaluated at a minus $20 with the buyer of the stock unwilling to pay more than 70 cents on the dollar for the investment portfolio with the map business thrown in for nothing.

How could this come about? Sanborn in 1958 as well as 1938 possessed a wealth of information of substantial value to the insurance industry. To reproduce the detailed information they had gathered over the years would have cost tens of millions of dollars. Despite "carding" over $500 million of fire premiums were underwritten

by “mapping” companies. However, the means of selling and packaging Sanborn’s product, information had remained unchanged throughout the year and finally this inertia was reflected in the earnings.

The very fact that the investment portfolio had done so well served to minimize in the eyes of most directors the need for rejuvenation of the map business. Sanborn had a sales volume of about $2 million per year and owned about $7 million worth of marketable securities. The income from the investment portfolio was substantial, the business had no possible financial worries, the insurance companies were satisfied with the price paid for maps, and the stockholders still received dividends. However, these dividends were cut five times in eight years although I could never find any record of suggestions pertaining to cutting salaries or director's and committee fees.

Prior to my entry on the Board, of the fourteen directors, nine were prominent men from the insurance industry who combined held 46 shares of stock out of 105,000 shares outstanding. Despite their top positions with very large companies which would suggest the financial wherewithal to make at least a modest commitment, the largest holding in this group was ten shares. In several cases, the insurance companies these men ran owned small blocks of stock but these were token investments in relation to the portfolios in which they were held. For the past decade the insurance companies had been only sellers in any transactions involving Sanborn stock.

The tenth director was the company attorney, who held ten shares. The eleventh was a banker with ten shares who recognized the problems of the company, actively pointed them out, and later added to his holdings. The next two directors were the top officers of Sanborn who owned about 300 shares combined. The officers were capable, aware of the problems of the business, but kept in a subservient role by the Board of Directors. The final member of our cast was a son of a deceased president of Sanborn. The widow owned about 15,000 shares of stock.

In late 1958, the son, unhappy with the trend of the business, demanded the top position in the company, was turned down, and submitted his resignation, which was accepted. Shortly thereafter we made a bid to his mother for her block of stock, which was accepted. At the time there were two other large holdings, one of about 10,000 shares (dispersed among customers of a brokerage firm) and one of about 8,000. These people were quite unhappy with the situation and desired a separation of the investment portfolio from the map business, as did we.

Subsequently our holdings (including associates) were increased through open market purchases to about 24,000 shares and the total represented by the three groups increased to 46,000 shares. We hoped to separate the two businesses, realize the fair value of the investment portfolio and work to re-establish the earning power of the map business. There appeared to be a real opportunity to multiply map profits through utilization of Sanborn's wealth of raw material in conjunction with electronic means of converting this data to the most usable form for the customer.

There was considerable opposition on the Board to change of any type, particularly when initiated by an outsider, although management was in complete accord with our plan and a similar plan had been recommended by Booz, Allen & Hamilton (Management Experts). To avoid a proxy fight (which very probably would not have been forthcoming and which we would have been certain of winning) and to avoid time delay with a large portion of Sanborn’s money tied up in blue-chip stocks which I didn’t care for at current prices, a plan was evolved taking out all stockholders at fair value who wanted out. The SEC ruled favorably on the fairness of the plan. About 72% of the Sanborn stock, involving 50% of the 1,600 stockholders, was exchanged for portfolio securities at fair value. The map business was left with over $l,25 million in government and municipal bonds as a reserve fund, and a potential corporate capital gains tax of over $1 million was eliminated. The remaining stockholders were left with a slightly improved asset value, substantially higher earnings per share, and an increased dividend rate.

Necessarily, the above little melodrama is a very abbreviated description of this investment operation. However, it does point up the necessity for secrecy regarding our portfolio operations as well as the futility of measuring our results over a short span of time such as a year. Such control situations may occur very infrequently. Our bread-and-butter business is buying undervalued securities and selling when the undervaluation is corrected along with investment in special situations where the profit is dependent on corporate rather than market action. To the extent that partnership funds continue to grow, it is possible that more opportunities will be available in "control situations."

The auditors should be mailing your financial statement and tax information within about a week. If you have any questions at all regarding either their report or this letter, be sure to let me know.

Warren E. Buffett 1-30-61

1960 Letter
BUFFETT PARTNERSHIP, LTD.
810 KIEWIT PLAZA
OMAHA 31, NEBRASKA

July, 1961

TO MY PARTNERS:

In the past, partners have commented that a once-a-year letter was "a long time between drinks," and that a semi-annual letter would be a good idea. It really shouldn't be too difficult to find something to say twice a year; at least it isn't this year. Hence, this letter which will be continued in future years.

During the first half of 1961, the overall gain of the Dow-Jones Industrial Average was about 13%, including dividends. Although this is the type of period when we should have the most difficulty in exceeding this standard, all partnerships that operated throughout the six months did moderately better then the Average. Partnerships formed during 1961 either equaled or exceeded results of the Average from the time of formation, depending primarily on how long they were in operation.

Let me, however, emphasize two points. First, one year is far too short a period to form any kind of an opinion as to investment performance, and measurements based upon six months become even more unreliable. One factor that has caused some reluctance on my part to write semi-annual letters is the fear that partners may begin to think in terms of short-term performance which can be most misleading. My own thinking is much more geared to five year performance, preferably with tests of relative results in both strong and weak markets.

The second point I want everyone to understand is that if we continue in a market which advances at the pace of the first half of 1961, not only do I doubt that we will continue to exceed the results of the DJIA, but it is very likely that our performance will fall behind the Average.

Our holdings, which I always believe to be on the conservative side compared to general portfolios, tend to grow more conservative as the general market level rises. At all times, I attempt to have a portion of our portfolio in securities as least partially insulated from the behavior of the market, and this portion should increase as the market rises. However appetizing results for even the amateur cook (and perhaps particularly the amateur), we find that more of our portfolio is not on the stove.

We have also begun open market acquisition of a potentially major commitment which I, of course, hope does nothing marketwise for at least a year. Such a commitment may be a deterrent to short range performance, but it gives strong promise of superior results over a several year period combined with substantial defensive characteristics.

Progress has been made toward combining all partners at yearend. I have talked with all partners joining during this past year or so about this goal, and have also gone over the plans with representative partners of all earlier partnerships

Some of the provisions will be:

(A) A merger of all partnerships, based on market value at yearend, with provisions for proper allocation among partners of future tax liability due to unrealized gains at yearend. The merger itself will be tax-free, and will result in no acceleration of realization of profits;

(B) A division of profits between the limited partners and general partner, with the first 6% per year to partners based upon beginning capital at market, and any excess divided one-fourth to the general partner and three-fourths to all partners proportional to their capital. Any deficiencies in earnings below the 6% would be carried forward against future earnings, but would not be carried back. Presently, there are three profit arrangements which have been optional to incoming partners:

	Interest Provision	**Excess to Gen. Partner**	**Excess to Ltd. Partners**
(1)	6%	1/3	2/3
(2)	4%	1/4	3/4
(3)	None	1/6	5/6

In the event of profits, the new division will obviously have to be better for limited partners than the first two arrangements. Regarding the third, the new arrangement will be superior up to 18% per year; but above this rate the limited partners would do better under the present agreement. About 80% of total partnership assets have selected the first two arrangements, and I am hopeful, should we average better than 18% yearly, partners presently under the third arrangement will not feel short-changed under the new agreement;

(C) In the event of losses, there will be no carry back against amounts previously credited to me as general partner. Although there will be a carry-forward against future excess earnings. However, my wife and I will have the largest single investment in the new partnership, probably about one-sixth of total partnership assets, and thereby a greater dollar stake in losses than any other partner of family group, I am inserting a provision in the partnership agreement which will prohibit the purchase by me or my family of any marketable securities. In other words, the new partnership will represent my entire investment operation in marketable securities, so that my results will have to be directly proportional to yours, subject to the advantage I obtain if we do better than 6%;

(D) A provision for monthly payments at the rate of 6% yearly, based on beginning of the year capital valued at market. Partners not wishing to withdraw money currently can have this credited back to them automatically as an advance payment, drawing 6%, to purchase an additional equity interest in the partnership at yearend. This will solve one stumbling block that has heretofore existed in the path of consolidation, since many partners desire regular withdrawals and others wish to plow everything back;

(E) The right to borrow during the year, up to 20% of the value of your partnership interest, at 6%, such loans to be liquidated at yearend or earlier. This will add a degree of liquidity to an investment which can now only be disposed of at yearend. It is not intended that anything but relatively permanent funds be invested in the partnership, and we have no desire to turn it into a bank. Rather, I expect this to be a relatively unused provision, which is available when something unexpected turns up and a wait until yearend to liquidate part of all of a partner's interest would cause hardship;

(F) An arrangement whereby any relatively small tax adjustment, made in later years on the partnership's return will be assessed directly to me. This way, we will not be faced with the problem of asking eighty people, or more, to amend their earlier return over some small matter. As it stands now, a small change, such as a decision that a dividend received by the partnership has 63% a return of capital instead of 68%, could cause a multitude of paper work. To prevent this, any change amounting to less than $1,000 of tax will be charged directly to me.

We have submitted the proposed agreement to Washington for a ruling that the merger would be tax-free, and that the partnership would be treated as a partnership under the tax laws. While all of this is a lot of work, it will make things enormously easier in the future. You might save this letter as a reference to read in conjunction with the agreement which you will receive later in the year.

The minimum investment for new partners is currently $25,000, but, of course, this does not apply to present partners. Our method of operation will enable the partners to add or withdraw amounts of any size (in round $100) at yearend. Estimated total assets of the partnership will be in the neighborhood of $4 million, which enables us to consider investments such as the one mentioned earlier in this letter, which we would have had to pass several years ago.

This has turned out to be more of a production than my annual letter. If you have any questions, particularly regarding anything that isn't clear in my discussion of the new partnership agreement, be sure to let me know. If there are a large number of questions, I will write a supplemental letter to all partners giving the questions that arise and the answers to them.

Warren E. Buffett

Vlb
July 22, 1961

1961 Letter
BUFFETT PARTNERSHIP, LTD.
810 KIEWIT PLAZA
OMAHA 31, NEBRASKA

January 24, 1962

Our Performance in 1961

I have consistently told partners that it is my expectation and hope (it's always hard to tell which is which) that we will do relatively well compared to the general market in down or static markets, but that we may not look so good in advancing markets. In strongly advancing markets I expect to have real difficulty keeping up with the general market.

Although 1961 was certainly a good year for the general market, and in addition, a very good year for us on both an absolute and relative basis, the expectations in the previous paragraph remain unchanged.

During 1961, the general market as measured by the Dow-Jones Industrial Average (hereinafter called the "Dow") showed an over-all gain of 22.2% including dividends received through ownership of the Dow. The gain for all partnerships operating throughout the entire year, after all expenses of operation, but before payments to limited partners or accrual to the general partner, averaged 45.9%. The details of this gain by partnership are shown in the appendix along with results for the partnerships started during the year.

We have now completed five full years of partnership operation, and the results of these five years are shown below on a year-by-year basis and also on a cumulative or compounded basis. These results are stated on the basis described in the preceding paragraph; after expenses, but before division of gains among partners or payments to partners.

Year	Partnerships Operating Entire Year	Partnership Gain	Dow-Jones Industrials Gain*
1957	3	10.4%	-8.4%
1958	5	40.9%	38.5%
1959	6	25.9%	19.9%
1960	7	22.8%	-6.3%
1961	7	45.9%	22.2%

* Including dividends received through ownership of the Dow.

On a compounded basis, the cumulative results have been:

Year	Partnership Gain	Dow-Jones Industrials Gain
1957	10.4%	-8.4%
1957-58	55.6%	26.9%
1057-59	95.9%	52.2%
1957-60	140.6%	42.6%
1957-61	251.0%	74.3%

These results do not measure the gain to the limited partner, which of course, is the figure in which you are most interested. Because of the varying partnership arrangements that have existed in the past, I have used the over-all net gain (based on market values at the beginning and end of the year) to the partnership as being the fairest measure of over-all performance.

On a pro-forma basis adjusted to the division of gains entailed in our present Buffett Partnership, Ltd. agreement, the results would have been:

Year	Limited Partners' Gain	Dow Gain
1957	9.3%	-8.4%
1958	32.2%	38.5%
1959	20.9%	19.9%
1960	18.6%	-6.3%
1961	35.9%	22.2%
	COMPOUNDED	
1957	9.3%	-8.4%
1957-58	44.5%	26.9%
1957-59	74.7%	52.2%
1957-60	107.2%	42.6%
1957-61	181.6%	74.3%

A Word About Par

The outstanding item of importance in my selection of partners, as well as in my subsequent relations with them, has been the determination that we use the same yardstick. If my performance is poor, I expect partners to withdraw, and indeed, I should look for a new source of investment for my own funds. If performance is good, I am assured of doing splendidly, a state of affairs to which I am sure I can adjust.

The rub, then, is in being sure that we all have the same ideas of what is good and what is poor. I believe in establishing yardsticks prior to the act; retrospectively, almost anything can be made to look good in relation to something or other.

I have continuously used the Dow-Jones Industrial Average as our measure of par. It is my feeling that three years is a very minimal test of performance, and the best test consists of a period at least that long where the terminal level of the Dow is reasonably close to the initial level.

While the Dow is not perfect (nor is anything else) as a measure of performance, it has the advantage of being widely known, has a long period of continuity, and reflects with reasonable accuracy the experience of investors generally with the market. I have no objection to any other method of measurement of general market performance being used, such as other stock market averages, leading diversified mutual stock funds, bank common trust funds, etc.

You may feel I have established an unduly short yardstick in that it perhaps appears quite simple to do better than an unmanaged index of 30 leading common stocks. Actually, this index has generally proven to be a reasonably tough competitor. Arthur Wiesenberger's classic book on investment companies lists performance for the 15 years 1946-60, for all leading mutual funds. There is presently over $20 billion invested in mutual funds, so the experience of these funds represents, collectively, the experience of many million investors. My own belief, though the figures are not obtainable, is that portfolios of most leading investment counsel organizations and bank trust departments have achieved results similar to these mutual funds.

Wiesenberger lists 70 funds in his "Charts & Statistics" with continuous records since 1946. I have excluded 32 of these funds for various reasons since they were balanced funds (therefore not participating fully in the general market rise), specialized industry funds, etc. Of the 32 excluded because I felt a comparison would not be fair,

31 did poorer than the Dow, so they were certainly not excluded to slant the conclusions below.

Of the remaining 38 mutual funds whose method of operation I felt was such as to make a comparison with the Dow reasonable, 32 did poorer than the Dow, and 6 did better. The 6 doing better at the end of 1960 had assets of about $1 billion, and the 32 doing poorer had assets of about $6-1/2 billion. None of the six that were superior beat the Dow by more than a few percentage points a year.

Below I present the year-by-year results for our period of operation (excluding 1961 for which I don't have exact data, although rough figures indicate no variance from the 1957-60 figures) for the two largest common stock open-end investment companies (mutual funds) and the two largest closed-end investment companies:

Year	Mass. Inv. Trust	Investors Stock	Lehman	Tri-Cont.	Dow	Limited Partners
1957	-12.0%	-12.4%	-11.4%	-2.4%	-8.4%	9.3%
1958	44.1%	47.6%	40.8%	33.2%	38.5%	32.2%
1959	8.2%	10.3%	8.1%	8.4%	19.9%	20.9%
1960	-0.9%	-0.1%	2.6%	2.8%	-6.3%	18.6%

(From Moody's Banks & Finance Manual, 1961)

COMPOUNDED

Year	Mass. Inv. Trust	Investors Stock	Lehman	Tri-Cont.	Dow	Limited Partners
1957	-12.0%	-12.4%	-11.4%	-2.4%	-8.4%	9.3%
1957-58	26.8%	29.3%	24.7%	30.0%	26.9%	44.5%
1957-59	37.2%	42.6%	34.8%	40.9%	52.2%	74.7%
1957-60	36.0%	42.5%	38.3%	44.8%	42.6%	107.2%

Massachusetts Investors Trust has net assets of about $1.8 billion; Investors Stock Fund about $1 billion; Tri -Continental Corporation about $ .5 billion; and Lehman Corporation about $350 million; or a total of over $3.5 billion.

I do not present the above tabulations and information with the idea of indicting investment companies. My own record of investing such huge sums of money, with restrictions on the degree of activity I might take in companies where we had investments, would be no better, if as good. I present this data to indicate the Dow as an investment competitor is no pushover, and the great bulk of investment funds in the country are going to have difficulty in bettering, or perhaps even matching, its performance.

Our portfolio is very different from that of the Dow. Our method of operation is substantially different from that of mutual funds.

However, most partners, as all alternative to their investment in the partnership, would probably have their funds invested in a media producing results comparable to the Dow, therefore, I feel it is a fair test of performance.

Our Method of Operation

Our avenues of investment break down into three categories. These categories have different behavior characteristics, and the way our money is divided among them will have an important effect on our results, relative to the Dow in any given year. The actual percentage division among categories is to some degree planned, but to a great extent, accidental, based upon availability factors.

The first section consists of generally undervalued securities (hereinafter called "generals") where we have nothing to say about corporate policies and no timetable as to when the undervaluation may correct itself. Over the years, this has been our largest category of investment, and more money has been made here than in either of the other categories. We usually have fairly large positions (5% to 10% of our total assets) in each of five or six generals, with smaller positions in another ten or fifteen.

Sometimes these work out very fast; many times they take years. It is difficult at the time of purchase to know any specific reason why they should appreciate in price. However, because of this lack of glamour or anything pending which might create immediate favorable market action, they are available at very cheap prices. A lot of value can be obtained for the price paid. This substantial excess of value creates a comfortable margin of safety in each transaction. This individual margin of safety, coupled with a diversity of commitments creates a most attractive package of safety and appreciation potential. Over the years our timing of purchases has been considerably better than our timing of sales. We do not go into these generals with the idea of getting the last nickel, but are usually quite content selling out at some intermediate level between our purchase price and what we regard as fair value to a private owner.

The generals tend to behave market-wise very much in sympathy with the Dow. Just because something is cheap does not mean it is not going to go down. During abrupt downward movements in the market, this segment may very well go down percentage-wise just as much as the Dow. Over a period of years, I believe the generals will outperform the Dow, and during sharply advancing years like 1961, this is the section of our portfolio that turns in the best results. It is, of course, also the most vulnerable in a declining market.

Our second category consists of “work-outs.” These are securities whose financial results depend on corporate action rather than supply and demand factors created by buyers and sellers of securities. In other words, they are securities with a timetable where we can predict, within reasonable error limits, when we will get how much and what might upset the applecart. Corporate events such as mergers, liquidations, reorganizations, spin-offs, etc., lead to work-outs. An important source in recent years has been sell-outs by oil producers to major integrated oil companies.

This category will produce reasonably stable earnings from year to year, to a large extent irrespective of the course of the Dow. Obviously, if we operate throughout a year with a large portion of our portfolio in work-outs, we will look extremely good if it turns out to be a declining year for the Dow or quite bad if it is a strongly advancing year. Over the years, work-outs have provided our second largest category. At any given time, we may be in ten to fifteen of these; some just beginning and others in the late stage of their development. I believe in using borrowed money to offset a portion of our work-out portfolio since there is a high degree of safety in this category in terms of both eventual results and intermediate market behavior. Results, excluding the benefits derived from the use of borrowed money, usually fall in the 10% to 20% range. My self-imposed limit regarding borrowing is 25% of partnership net worth. Oftentimes we owe no money and when we do borrow, it is only as an offset against work-outs.

The final category is "control" situations where we either control the company or take a very large position and attempt to influence policies of the company. Such operations should definitely be measured on the basis of several years. In a given year, they may produce nothing as it is usually to our advantage to have the stock be stagnant market-wise for a long period while we are acquiring it. These situations, too, have relatively little in common with the behavior of the Dow. Sometimes, of course, we buy into a general with the thought in mind that it might develop into a control situation. If the price remains low enough for a long period, this might very well happen. If it moves up before we have a substantial percentage of the company's stock, we sell at higher levels and complete a successful general operation. We are presently acquiring stock in what may turn out to be control situations several years hence.

Dempster Mill Manufacturing Company

We are presently involved in the control of Dempster Mill Manufacturing Company of Beatrice, Nebraska. Our first stock was purchased as a generally undervalued security five years ago. A block later became available, and I went on the Board about four years ago. In August 1961, we obtained majority control, which is indicative of the fact that many of our operations are not exactly of the "overnight" variety.

Presently we own 70% of the stock of Dempster with another 10% held by a few associates. With only 150 or so other stockholders, a market on the stock is virtually non-existent, and in any case, would have no meaning for a controlling block. Our own actions in such a market could drastically affect the quoted price.

Therefore, it is necessary for me to estimate the value at yearend of our controlling interest. This is of particular importance since, in effect, new partners are buying in based upon this price, and old partners are selling a portion of their interest based upon the same price. The estimated value should not be what we hope it would be worth, or what it might be worth to an eager buyer, etc., but what I would estimate our interest would bring if sold under current conditions in a reasonably short period of time. Our efforts will be devoted toward increasing this value, and we feel there are decent prospects of doing this.

Dempster is a manufacturer of farm implements and water systems with sales in 1961 of about $9 million. Operations have produced only nominal profits in relation to invested capital during recent years. This reflected a poor management situation, along with a fairly tough industry situation. Presently, consolidated net worth (book value) is about $4.5 million, or $75 per share, consolidated working capital about $50 per share, and at yearend we valued our interest at $35 per share. While I claim no oracular vision in a matter such as this, I feel this is a fair valuation to both new and old partners. Certainly, if even moderate earning power can be restored, a higher valuation will be justified, and even if it cannot, Dempster should work out at a higher figure. Our controlling interest was acquired at an average price of about $28, and this holding currently represents 21% of partnership net assets based on the $35 value.

Of course, this section of our portfolio is not going to be worth more money merely because General Motors, U.S. Steel, etc., sell higher. In a raging bull market, operations in control situations will seem like a very difficult way to make money, compared to just buying the general market. However, I am more conscious of the dangers presented at current market levels than the opportunities. Control situations, along with work-outs, provide a means of insulating a portion of our portfolio from these dangers.

The Question of Conservatism

The above description of our various areas of operation may provide some clues as to how conservatively our portfolio is invested. Many people some years back thought they were behaving in the most conservative manner by purchasing medium or long-term municipal or government bonds. This policy has produced substantial market depreciation in many cases, and most certainly has failed to maintain or increase real buying power.

Conscious, perhaps overly conscious, of inflation, many people now feel that they are behaving in a conservative manner by buying blue chip securities almost regardless of price-earnings ratios, dividend yields, etc. Without the benefit of hindsight as ill the bond example, I feel this course of action is fraught with danger. There is nothing at all conservative, in my opinion, about speculating as to just how high a multiplier a greedy and capricious public will put on earnings.

You will not be right simply because a large number of people momentarily agree with you. You will not be right simply because important people agree with you. In many quarters the simultaneous occurrence of the two above factors is enough to make a course of action meet the test of conservatism.

You will be right, over the course of many transactions, if your hypotheses are correct, your facts are correct, and your reasoning is correct. True conservatism is only possible through knowledge and reason.

I might add that in no way does the fact that our portfolio is not conventional prove that we are more conservative or less conservative than standard methods of investing. This can only be determined by examining the methods or examining the results.

I feel the most objective test as to just how conservative our manner of investing is arises through evaluation of performance in down markets. Preferably these should involve a substantial decline in the Dow. Our performance in the rather mild declines of 1957 and 1960 would confirm my hypothesis that we invest in an extremely conservative manner. I would welcome any partner's suggesting objective tests as to conservatism to see how we stack up. We have never suffered a realized loss of more than 0.5% of 1% of total net assets, and our ratio of total dollars of realized gains to total realized losses is something like 100 to 1. Of course; this reflects the fact that on balance we have been operating in an up market. However, there have been many opportunities for loss transactions even in markets such as these (you may have found out about a few of these yourselves) so I think the above facts have some significance.

The Question of Size

Aside from the question as to what happens upon my death (which with a metaphysical twist, is a subject of keen interest to me), I am probably asked most often: "What affect is the rapid growth of partnership funds going to have upon performance?"

Larger funds tug in two directions. From the standpoint of "passive" investments, where we do not attempt by the size of our investment to influence corporate policies, larger sums hurt results. For the mutual fund or trust department investing in securities with very broad markets, the effect of large sums should be to penalize results only very slightly. Buying 10,000 shares of General Motors is only slightly more costly (on the basis of mathematical expectancy) than buying 1,000 or 100 shares.

In some of the securities in which we deal (but not all by any means) buying 10,000 shares is much more difficult than buying 100 and is sometimes impossible. Therefore, for a portion of our portfolio, larger sums are definitely disadvantageous. For a larger portion of the portfolio, I would say increased sums are only slightly disadvantageous. This category includes most of our work-outs and some generals.

However, in the case of control situations increased funds are a definite advantage. A "Sanborn Map" cannot be accomplished without the wherewithal. My definite belief is that the opportunities increase in this field as the funds increase. This is due to the sharp fall-off in competition as the ante mounts plus the important positive correlation that exists between increased size of company and lack of concentrated ownership of that company's stock.

Which is more important -- the decreasing prospects of profitability in passive investments or the increasing prospects in control investments? I can't give a definite answer to this since to a great extent it depends on the type of market in which we are operating. My present opinion is that there is no reason to think these should not be offsetting factors; if my opinion should change, you will be told. I can say, most assuredly, that our results in 1960 and 1961 would not have been better if we had been operating with the much smaller sums of 1956 and 1957.

And a Prediction

Regular readers (I may be flattering myself) will feel I have left the tracks when I start talking about predictions. This is one thing from which I have always shied away and I still do in the normal sense.

I am certainly not going to predict what general business or the stock market are going to do in the next year or two since I don't have the faintest idea.

I think you can be quite sure that over the next ten years there are going to be a few years when the general market is plus 20% or 25%, a few when it is minus on the same order, and a majority when it is in between. I haven't any notion as to the sequence in which these will occur, nor do I think it is of any great importance for the long-term investor.

Over any long period of years, I think it likely that the Dow will probably produce something like 5% to 7% per year compounded from a combination of dividends and market value gain. Despite the experience of recent years, anyone expecting substantially better than that from the general market probably faces disappointment.

Our job is to pile up yearly advantages over the performance of the Dow without worrying too much about whether the absolute results in a given year are a plus or a minus. I would consider a year in which we were down 15% and the Dow declined 25% to be much superior to a year when both the partnership and the Dow advanced 20%. I have stressed this point in talking with partners and have watched them nod their heads with varying degrees of enthusiasm. It is most important to me that you fully understand my reasoning in this regard and agree with me not only in your cerebral regions, but also down in the pit of your stomach.

For the reasons outlined in my method of operation, our best years relative to the Dow are likely to be in declining or static markets. Therefore, the advantage we seek will probably come in sharply varying amounts. There are bound to be years when we are surpassed by the Dow, but if over a long period we can average ten percentage points per year better than it, I will feel the results have been satisfactory.

Specifically, if the market should be down 35% or 40% in a year (and I feel this has a high probability of occurring one year in the next ten--no one knows which one), we should be down only 15% or 20%. If it is more or less unchanged during the year, we would hope to be up about ten percentage points. If it is up 20% or more, we would struggle to be up as much. The consequence of performance such as this over a period of years would mean that if the Dow produces a 5% to 7% per year overall gain compounded, I would hope our results might be 15% to 17% per year.

The above expectations may sound somewhat rash, and there is no question but that they may appear very much so when viewed from the vantage point of 1965 or 1970. It may turn out that I am completely wrong. However, I feel the partners are certainly entitled to know what I am thinking in this regard even though the nature of the business is such as to introduce a high probability of error in such expectations. In anyone year, the variations may be quite substantial. This happened in 1961, but fortunately the variation was on the pleasant side. They won't all be!

Miscellaneous

We are now installed in an office at 810 Kiewit Plaza with a first-class secretary, Beth Henley, and an associate with considerable experience in my type of securities, Bill Scott. My father is sharing office space with us (he also shares the expenses) and doing a brokerage business in securities. None of our brokerage is done through him so we have no "vicuna coat" situation.
Overall, I expect our overhead, excluding interest on borrowings and Nebraska Intangibles Tax, to run less than 0.5 of 1% of net assets. We should get our money's worth from this expenditure, and you are most cordially invited to drop in and see how the money is being spent.

With over 90 partners and probably 40 or so securities, you can understand that it is quite a welcome relief to me to shake loose from some of the details.

We presently have partners residing in locations from California to Vermont, and net assets at the beginning of 1962 amounted to $ 7,178,500.00. Susie and I have an interest in the partnership amounting to $1,025,000.00, and other relatives of mine have a combined interest totaling $782,600.00. The minimum for new partners last year was $25,000, but I am giving some thought to increasing it this year.

Peat, Marwick, Mitchell & Company did an excellent job of expediting the audit, providing tax figures much earlier than in the past. They assure me this performance can be continued.

Let me hear from you regarding questions you may have on any aspects of this letter, your audit, status of your partnership interest, etc. that may puzzle you.

Cordially Warren E. Buffett.

APPENDIX

Partnerships Operating Throughout 1961

Partnership	1/1/61 Capital at Market	Overall Gain in 1961*	Percentage Gain
Buffett Associates	486,874.27	225,387.80	46.3%
Buffett Fund	351,839.29	159,696.93	45.4%
Dacee	235,480.31	116,504.47	49.5%
Emdee	140,005.24	67,387.28	48.1%
Glenoff	78,482.70	39,693.80	50.5%
Mo-Buff	325,844.71	149,163.71	45.8%
Underwood	582,256.82	251,951.26	43.3%
	2,200,783.34	1,009,785.25	45.9%

Partnerships Started in 1961

Partnership	Paid-in	Overall Gain in 1961	Percentage Gain
Ann Investments	100,100 (1-30-61)	35,367.93	35.3%
Buffett-TD	250,100 ($200,100 on 3-8-61, $50,000 on 5-31-61)	70,294.08	28.1%
Buffett-Holland	125,100 (5-17-61)	16,703.76	13.3%

* Gain in net assets at market values plus payments to limited partners during year.

BUFFETT PARTNERSHIP, LTD.
810 KIEWIT PLAZA
OMAHA 31, NEBRASKA

July 6, 1962

A Reminder:

In my letter of January 24, 1962 reporting on 1961, I inserted a section entitled. "And a Prediction." While I have no desire to inflict cruel and unusual punishment upon my readers, nevertheless, a reprinting of that section, in its entirety, may be worthwhile:

> And a Prediction
>
> Regular readers (I may be flattering myself) will feel I have left the tracks when I start talking about predictions. This is one thing from which I have always shied away and I still do in the normal sense.
>
> I am certainly not going to predict what general business or the stock market are going to do in the next year or two since I don't have the faintest idea.
>
> I think you can be quite sure that over the next ten years there are going to be a few years when the general market is plus 20% or 25%, a few when it is minus on the same order, and a majority when it is in between. I haven't any notion as to the sequence in which these will occur, nor do I think it is of any great importance for the long-term investor.
>
> Over any long period of years, I think it likely that the Dow will probably produce something like 5% to 7% per year compounded from a combination of dividends and market value gain. Despite the experience of recent years, anyone expecting substantially better than that from the general market probably faces disappointment.
>
> Our job is to pile up yearly advantages over the performance of the Dow without worrying too much about whether the absolute results in a given year are a plus or a minus. I would consider a year in which we were down 15% and the Dow declined 25% to be much superior to a year when both the partnership and the Dow advanced 20%. I have stressed this point in talking with partners and have watched them nod their heads with varying degrees of enthusiasm.
>
> It is most important to me that you fully understand my reasoning in this regard and agree with me not only in your cerebral regions, but also down in the pit of your stomach.
>
> For the reasons outlined in my method of operation, our best years relative to the Dow are likely to be in declining or static markets. Therefore, the advantage we seek will probably come in sharply varying amounts. There are bound to be years when we are surpassed by the Dow, but if over a long period we can average ten percentage points per year better than it, I will feel the results have been satisfactory.
>
> Specifically, if the market should be down 35% or 40% in a year (and I feel this has a high probability of occurring one year in the next ten--no one knows which one), we should be down only 15% or 20%. If it is more or less unchanged during the year, we would hope to be up about ten percentage points. If it is up 20% or more, we would struggle to be up as much. The consequence of performance such as this over a period of years would mean that if the Dow produces a 5% to 7% per year over-all gain compounded, I would hope our results might be 15% to 17% per year.

The above expectations may sound somewhat rash, and there is no question but that they may appear very much so when viewed from the vantage point of 1965 or 1970. It may turn out that I am completely wrong. However, I feel the partners are certainly entitled to know what I am thinking in this regard even though the nature of the business is such as to introduce a high probability of error in such expectations. In anyone year, the variations may be quite substantial. This happened in 1961, but fortunately the variation was on the pleasant side. They won't all be!

The First Half of 1962:

Between yearend 1961 and June 30, 1962 the Dow declined from 731.14 to 561.28. If one had owned the Dow during this period, dividends of approximately $11.00 would have been received so that overall a loss of 21.7% would have been the result of investing in the Dow. For the statistical minded, Appendix A gives the results of the Dow by years since formation of the predecessor partnerships.

As stated above, a declining Dow gives us our chance to shine and pile up the percentage advantages which, coupled with only an average performance during advancing markets, will give us quite satisfactory long-term results. Our target is an approximately 1/2% decline for each 1% decline in the Dow and if achieved, means we have a considerably more conservative vehicle for investment in stocks than practically any alternative.

As outlined in Appendix B, showing combined predecessor partnership results, during the first half of 1962 we had one of the best periods in our history, achieving a minus 7.5% result before payments to partners, compared to the minus 21.7% overall result on the Dow. This 14.2 percentage points advantage can be expected to widen during the second half if the decline in the general market continues, but will probably narrow should the market turn upward. Please keep in mind my continuing admonition that six-months' or even one-year's results are not to be taken too seriously. Short periods of measurement exaggerate chance fluctuations in performance. While circumstances contributed to an unusually good first half, there are bound to be periods when we do relatively poorly. The figures for our performance involve no change in the valuation of our controlling interest in Dempster Mill Manufacturing Company, although developments in recent months point toward a probable higher realization.

Investment Companies during the First Half:

Past letters have stressed our belief that the Dow is no pushover as a yardstick for investment performance. To the extent that funds are invested in common stocks, whether the manner of investment be through investment companies, investment counselors, bank trust departments, or do-it-yourself, our belief is that the overwhelming majority will achieve results roughly comparable to the Dow. Our opinion is that the deviations from the Dow are much more likely to be toward a poorer performance than a superior one.

To illustrate this point, we have continually measured the Dow and limited partners' results against the two largest open-end investment companies (mutual funds) following a program of common stock investment and the two largest closed-end investment companies. The tabulation in Appendix C shows the five -years' results, and you will note the figures are extraordinarily close to those of the Dow. These companies have total assets of about $3.5 billion.

In the interest of getting this letter out promptly, we are mailing it before results are available for the closed-end companies. However, the two mutual funds both did poorer than the Dow, with Massachusetts Investors Trust having a minus 23% overall performance, and Investors Stock Fund realizing a minus 25.4%. This is not unusual as witness the lead article in the WALL STREET JOURNAL of June 13, 1962 headed "Funds vs. Market." Of the 17 large common stock funds studied, everyone had a record poorer than the Dow from the peak on the Dow of 734, to the date of the article, although in some cases the margin of inferiority was minor.

Particularly hard hit in the first half were the so-called “growth” funds which, almost without exception, were down considerably more than the Dow. The three large "growth" (the quotation marks are more applicable now) funds with the best record in the preceding few years, Fidelity Capital Fund, Putnam Growth Fund, and Wellington Equity Fund averaged an overall minus 32.3% for the first half. It is only fair to point out that because of their excellent records in 1959-61, their overall performance to date is still better than average, as it may well be in the future. Ironically, however, this earlier superior performance had caused such a rush of new investors to come to them that the poor performance this year was experienced by very many more holders than enjoyed the excellent performance of earlier years. This experience tends to confirm my hypothesis that investment performance must be judged over a period of time with such a period including both advancing and declining markets. There will continue to be both; a point perhaps better understood now than six months ago.

In outlining the results of investment companies, I do so not because we operate in a manner comparable to them or because our investments are similar to theirs. It is done because such funds represent a public batting average of professional, highly-paid investment management handling a very significant $20 billion of securities. Such management, I believe, is typical of management handling even larger sums. As an alternative to an interest in the partnership, I believe it reasonable to assume that many partners would have investments managed similarly.

Asset Values:

The above calculations of results are before allocation to the General Partner and monthly payments to partners. Of course, whenever the overall results for the year are not plus 6% on a market value basis (with deficiencies carried forward) there is no allocation to the General Partner. Therefore, non-withdrawing partners have had a decrease in their market value equity during the first six months of 7.5% and partners who have withdrawn at the rate of 6% per annum have had a decrease in their market value equity during the first half of 10.5%. Should our results for the year be less than plus 6% (and unless there should be a material advance in the Dow, this is very probable) partners receiving monthly payments will have a decrease in their market value equity at December 31, 1962. This means that monthly payments at 6% on this new market equity next year will be on a proportionately reduced basis. For example, if our results were an overall minus 7% for the year, a partner receiving monthly payments who had a market value interest of $100,000 on January 1, 1962 would have an equity at December 31, 1962 of $87,000. This reduction would arise from the minus 7% result, or $7, 000 plus monthly payments of $500 for an additional $6,000. Thus, with $87,000 of market equity on January 1, 1963, monthly payments next year would be $435.00.

None of the above, of course, has any applicability to advance payments received during 1962 which do not participate in profits or losses, but earn a straight 6%.

APPENDIX A

DOW-JONES INDUSTRIAL AVERAGE

Year	Closing Dow	Change for Year	Dow Dividend	Overall Result from Dow	Percentage Result
1956	499.47	--	--	--	--
1957	435.69	-63.78	21.61	-42.17	-8.4%
1958	583.65	147.96	20.00	167.96	38.5%
1959	679.36	95.71	20.74	116.45	20.0%
1960	615.89	63.47	21.36	42.11	-6.2%
1961	731.14	115.25	22.61	137.86	22.4%
6/30/62	561.28	169.86	11.00 Est.	-158.86	-21.7%

APPENDIX B

PARTNERSHIP PERFORMANCE

Year	Partnership Result (1)	Limited Partners' Results (2)
1957	10.4%	9.3%
1958	40.9%	32.2%
1959	25.9%	20.9%
1960	22.8%	18.6%
1961	45.9%	35.9%
6/30/62	-7.5%	-7.5%

(1) For 1957-61 consists of combined results of all predecessor limited partnerships operating throughout entire year after all expenses but before distributions to partners or allocations to the general partners.

(2) For 1957-61 computed on basis of preceding column of partnership results allowing for allocation to general partner based upon present partnership agreement.

APPENDIX C

YEARLY RESULTS

Year	Mass. Inv. Trust (1)	Investors Stock (1)	Lehman (2)	Tri-Cont. (2)
1957	-11.4%	-12.4%	-11.4%	-2.4%
1958	42.7%	47.5%	40.8%	33.2%
1959	9.0%	10.3%	8.1%	8.4%
1960	-1.0%	-0.6%	2.5%	2.8%
1961	25.6%	24.9%	23.6%	22.5%
6/30/92	23.0%	-25.4%	N.A.	N.A.

(1) Computed from changes in asset value plus any distributions to holders of record during year.

(2) From Moody's Bank & Finance Manual - 1962.

CUMULATIVE RESULTS

Years	Mass. Inv. Trust	Investors Stock	Lehman	Tri-Cont.	Dow	Limited Partners
1957	-11.4%	-12.4%	-11.4%	-2.4%	-8.4%	9.3%
1957-58	26.4%	29.2%	24.7%	30.0%	26.9%	44.5%
1957-59	37.8%	42.5%	34.8%	40.9%	52.3%	74.7%
1957-60	36.4%	41.6%	38.2%	44.8%	42.9%	107.2
1957-61	71.4%	76.9%	70.8%	77.4%	74.9%	181.6
1957-6/30/62	31.9%	32.0%	N.A.	N.A.	37.0%	160.5%

BUFFETT PARTNERSHIP, LTD.
810 KIEWIT PLAZA
OMAHA 31, NEBRASKA

November 1, 1962

TO MY PARTNERS FOR 1963:

Here we go on the annual paper flurry. Two copies of an amended partnership agreement for 1963 are enclosed. The one with the General Provisions attached is to be kept by you and the other single-page agreement should be returned. There are no substantive changes of any sort from last year's agreement. This amendment is merely to allow for a few new partners and in several places to reword in clearer (we hope) language provisions of the present agreement. Practically all of the rewording is in General Provision 5 (paragraph 7 in last year's agreement). Rather than have a separate amending document, we have incorporated the changes into one complete document embodying the entire agreement.

We are also enclosing two commitment letters (one for you--one to be returned) on which you are to indicate your wishes regarding additions or withdrawals at January 1st. We would like to have the agreement and the commitment letter back by December 1st. However, the commitment letter can be amended right up until the end of the year (not after) so if you should have a change of plans and you have already mailed us your commitment letter, all you have to do is get in touch with me, and I will make whatever changes you desire.

Any withdrawals will be paid immediately after January 1st. Any additions must reach us by January 10th, and should they be paid in during November, they will take on the status of advance payments and draw interest at the rate of 6% until yearend.

Please be sure the signature on your partnership agreement is notarized. Partners in Omaha may obtain the notarization at our office if they wish. Also, be sure to let us know by an appropriate circle on the commitment letter whether you wish to receive monthly payments in 1963. In order to be sure everyone understands this, let me again state that these monthly payments are in no sense guaranteed earnings or anything of the sort. They represent a convenient form of regular withdrawal, which to the extent we earn better than 6% are payments from earnings, and to the extent we don't, are payments from capital.

Complete tax information for your 1962 return will be in your hands by January 20th. If you should need an estimate of your tax position before that time, let me know and I will give you a rough idea. We will also send out a short letter on taxes in late December.

Having read this far, you are entitled to a report on how we have done to date in 1962. For the period ending October 31st, the Dow-Jones Industrials showed an overall loss, including dividends received, of approximately 16.8%. We intend to use the same method or valuing our controlling interest in Dempster Mill Manufacturing at this yearend that we did at the end of last year. This involved applying various discounts to the balance sheet items to reflect my opinion as to what could be realized on a very prompt sale. Last year this involved a 40% discount on inventories, a 15% discount on receivables, estimated auction value of fixed assets, etc., which led to an approximate value or $35.00 per share.

The successful conversion of substantial portions of the assets of Dempster to cash, at virtually 100 cents on the dollar, has been the high point of 1962. For example, inventory of $4.2 million at last yearend will probably be about $1.9 million this yearend, reducing the discount on this item by about $920,000 (40% of $2.3 million reduction). I will give this story my full journalistic treatment in my annual letter. Suffice to say at this point that applying the same discounts described above will probably result in a yearend value of at least $50.00 per share. The extent of the asset conversion job can perhaps best be illustrated in a sentence by pointing out that whereas

we had $166,000 of cash and $2,315,000 of liabilities at November 30, 1961 (Dempster fiscal yearend), we expect this year to have about $1 million in cash and investments (of the type the Partnership buys) against total liabilities of $250,000. Prospects for further improvement in this situation in 1963 appear good, and we expect a substantially expanded investment portfolio in Dempster next year.

Valuing Dempster at $50 per share, our overall gain (before any payments to partners) to October 31st for the Partnership has been 5.5%. This 22.3 percentage-points advantage over the Dow, if maintained until the end of the year, will be among the largest we have ever had. About 60% of this advantage was accomplished by the portfolio other than Dempster, and 40% was the result of increased value at Dempster.

I want all partners and prospective partners to realize the results described above are distinctly abnormal and will recur infrequently, if at all. This performance is mainly the result of having a large portion of our money in controlled assets and workout situations rather than general market situations at a time when the Dow declined substantially. If the Dow had advanced materially in 1962, we could have looked very bad on a relative basis, and our success to date in 1962 certainly does not reflect any ability on my part to guess the market (I never try), but merely reflects the fact that the high prices of generals partially forced me into other categories or investment. If the Dow had continued to soar, we would have been low man on the totem pole. We fully expect to have years when our method of operation will not even match the results of the Dow, although obviously I don't expect this on any long-term basis or I would throw in the towel and buy the Dow.

I'll cut this sermon short with the conclusion that I certainly do not want anyone to think that the pattern of the last few years is likely to be repeated; I expect future performance to reflect much smaller advantages on average over the Dow.

Each letter ends with the request that you let me know about anything that isn't clear. Please be sure that you do this. We are all geared up with secretarial help, a new typewriter, etc., and we want to be sure that this letter and agreement are understood by all.

Cordially,
Warren E. Buffett

WEB:bf
P/S: There are no prizes for being the last ones to get in the agreement and commitment letter, so please get to it as soon as possible. Remember the commitment letter can be amended by a postcard or a phone call--we are just trying to get the bulk of the work out of the way well before December 31st so we can concentrate on getting the audit, tax information, etc., out pronto at yearend.

BUFFETT PARTNERSHIP, LTD.
810 KIEWIT PLAZA
OMAHA 31, NEBRASKA

January 18, 1963

The Ground Rules

Some partners have confessed (that's the proper word) that they sometimes find it difficult to wade through my entire annual letter. Since I seem to be getting more long-winded each year, I have decided to emphasize certain axioms on the first pages. Everyone should be entirely clear on these points. To most of you this material will seem unduly repetitious, but I would rather have nine partners out of ten mildly bored than have one out of ten with any basic misconceptions.

1. In no sense is any rate of return guaranteed to partners. Partners who withdraw one-half of 1% monthly are doing just that--withdrawing. If we earn more than 6% per annum over a period of years, the withdrawals will be covered by earnings and the principal will increase. If we don't earn 6%, the monthly payments are partially or wholly a return of capital.

2. Any year in which we fail to achieve at least a plus 6% performance will be followed by a year when partners receiving monthly payments will find those payments lowered.

3. Whenever we talk of yearly gains or losses, we are talking about market values; that is, how we stand with assets valued at market at yearend against how we stood on the same basis at the beginning of the year. This may bear very little relationship to the realized results for tax purposes in a given year.

4. Whether we do a good job or a poor job is not to be measured by whether we are plus or minus for the year. It is instead to be measured against the general experience in securities as measured by the Dow-Jones Industrial Average, leading investment companies, etc. If our record is better than that of these yardsticks, we consider it a good year whether we are plus or minus. If we do poorer, we deserve the tomatoes.

5. While I much prefer a five-year test, I feel three years is an absolute minimum for judging performance. It is a certainty that we will have years when the partnership performance is poorer, perhaps substantially so, than the Dow. If any three-year or longer period produces poor results, we all should start looking around for other places to have our money. An exception to the latter statement would be three years covering a speculative explosion in a bull market.

6. I am not in the business of predicting general stock market or business fluctuations. If you think I can do this, or think it is essential to an investment program, you should not be in the partnership.

7. I cannot promise results to partners. What I can and do promise is that:

    a. Our investments will be chosen on the basis of value, not popularity;

    b. That we will attempt to bring risk of permanent capital loss (not short-term quotational loss) to an absolute minimum by obtaining a wide margin of safety in each commitment and a diversity of commitments; and

    c. My wife, children and I will have virtually our entire net worth invested in the partnership.

Our Performance in 1962

I have consistently told partners that we expect to shine on a relative basis during minus years for the Dow, whereas plus years of any magnitude may find us blushing. This held true in 1962.

Because of a strong rally in the last few months, the general market as measured by the Dow really did not have such a frightening decline as many might think. From 731 at the beginning of the year, it dipped to 535 in June, but closed at 652. At the end of 1960, the Dow stood at 616, so you can see that while there has been a good deal of action the past few years, the investing public as a whole is not too far from where it was in 1959 or 1960. If one had owned the Dow last year (and I imagine there are a few people playing the high flyers of 1961 who wish they had), they would have had a shrinkage in market value of 79.04 or 10.8%. However, dividends of approximately 23.30 would have been received to bring the overall results from the Dow for the year to minus 7.6%. Our own overall record was plus 13.9%. Below we show the year-by-year performance of the Dow, the partnership before allocation to the general partner, and the limited partners' results for all full years of Buffett Partnership, Ltd.'s and predecessor partnerships' activities:

Year	Overall Results from Dow	Partnership Results (1)	Limited Partners Results (2)
1957	-8.4%	10.4%	9.3%
1958	38.5%	40.9%	32.2%
1959	20.0%	25.9%	20.9%
1960	-6.2%	22.8%	18.6%
1961	22.4%	45.9%	35.9%
1962	-7.6%	13.9%	11.9%

(1) For 1957-61 consists of combined results of all predecessor limited partnerships operating throughout entire year after all expenses but before distributions to partners or allocations to the general partner.
(2) For 1957-61 computed on basis of preceding column of partnership results allowing for allocation to general partner based upon present partnership agreement.

The following table shows the cumulative or compounded results in the same three categories, as well as the average annual compounded rate:

Year	Overall Results from Dow	Partnership Results	Limited Partners Results
1957	-8.4%	10.4%	9.3%
1957-58	26.9%	55.6%	44.5%
1957-59	52.3%	95.9%	74.7%
1957-60	42.9%	140.6%	107.2%
1957-61	74.9%	251.0%	181.6%
1957-62	61.6%	299.8%	215.1%
Annual Compounded Rate	8.3%	26.0%	21.1%

My (unscientific) opinion is that a margin of ten percentage points per annum over the Dow is the very maximum that can be achieved with invested funds over any long period of years, so it may be well to mentally modify some of the above figures.

Partners have sometimes expressed concern as to the effect of size upon performance. This subject was reflected upon in last year’s annual letter. The conclusion reached was that there were some situations where larger sums

helped and some where they hindered, but on balance, I did not feel they would penalize performance. I promised to inform partners if my conclusions on this should change. At the beginning of 1957, combined limited partnership assets totaled $303,726 and grew to $7,178,500 at the beginning or 1962. To date, anyway, our margin over the Dow has indicated no tendency to narrow as funds increase.

Investment Companies

Along with the results of the Dow, we have regularly included the tabulations on the two largest open-end investment companies (mutual funds) following a common stock policy, and the two largest diversified closed-end investment companies. These four companies, Massachusetts Investors Trust, Investors Stock Fund, Tri-Continental Corp. and Lehman Corp. manage over $3 billion and are probably typical of most of the $20 billion investment company industry. My opinion is that their results parallel those of most bank trust departments and investment counseling organizations which handle, in aggregate, vastly greater sums.

The purpose of this tabulation, which is shown below, is to illustrate that the Dow is no pushover as an index of investment achievement. The advisory talent managing just the four companies shown commands annual fees of approximately $7 million and this represents a very small fraction of the industry. Nevertheless, the public batting average of this highly-paid talent indicates results slightly less favorable than the Dow. In no sense is this statement intended as criticism. Within their institutional framework and handling the many billions of dollars involved, I consider such average results virtually the only possible ones. Their merits lie in other than superior results.

Both our portfolio and method of operation differ substantially from the companies mentioned above. However, most partners, as an alternative to their interest in the partnership would probably have their funds invested in media producing results comparable with investment companies, and I, therefore feel they offer a meaningful test of performance.

Year	Mass. Inv. Trust (1)	Investors Stock (1)	Lehman (2)	Tri-Cont. (2)	Dow	Limited Partners
1957	-11.4%	-12.4%	-11.4%	-2.4%	-8.4%	9.3%
1958	42.7%	47.5%	40.8%	33.2%	38.5%	32.2%
1959	9.0%	10.3%	8.1%	8.4%	20.0%	20.9%
1960	-1.0%	-0.6%	2.5%	2.8%	-6.2%	18.6%
1961	25.6%	24.9%	23.6%	22.5%	22.4%	35.9%
1962	-9.8%	-13.4%	-13.0%	-10.0%	-7.6%	11.9%

(1) Computed from changes in asset value plus any distributions to holders of record during year.

(2) From 1962 Moody's Bank & Finance Manual for 1957-61. Estimated for 1962.

COMPOUNDED

Year	Mass. Inv. Trust	Investor Stock	Lehman	Tri-Cont.	Dow	Limited Partners
1957	-11.4%	-12.4%	-11.4%	-2.4%	-8.4%	9.3%
1957-58	26.4%	29.2%	24.7%	30.0%	26.9%	44.5%
1957-59	37.8%	42.5%	34.8%	40.9%	52.3%	74.7%
1957-60	36.4%	41.6%	38.2%	44.8%	42.9%	107.2%
1957-61	71.3%	76.9%	70.8%	77.4%	74.9%	181.6%
1957-62	54.5%	53.2%	48.6%	59.7%	61.6%	215.1%

Annual Compounded Rate	7.5%	7.4%	6.8%	8.1%	8.3%	21.1%

The Joys of Compounding

I have it from unreliable sources that the cost of the voyage Isabella originally underwrote for Columbus was approximately $30,000. This has been considered at least a moderately successful utilization of venture capital. Without attempting to evaluate the psychic income derived from finding a new hemisphere, it must be pointed out that even had squatter's rights prevailed, the whole deal was not exactly another IBM. Figured very roughly, the $30,000 invested at 4% compounded annually would have amounted to something like $2,000,000,000,000 (that's $2 trillion for those of you who are not government statisticians) by 1962. Historical apologists for the Indians of Manhattan may find refuge in similar calculations. Such fanciful geometric progressions illustrate the value of either living a long time, or compounding your money at a decent rate. I have nothing particularly helpful to say on the former point.

The following table indicates the compounded value of $100,000 at 5%, 10% and 15% for 10, 20 and 30 years. It is always startling to see how relatively small differences in rates add up to very significant sums over a period of years. That is why, even though we are shooting for more, we feel that a few percentage points advantage over the Dow is a very worthwhile achievement. It can mean a lot of dollars over a decade or two.

	5%	**10%**	**15%**
10 Years	$162,889	$259,374	$404,553
20 Years	$265,328	$672,748	$1,636,640
30 Years	$432,191	$1,744,930	$6,621,140

Our Method of Operation

Our avenues of investment break down into three categories. These categories have different behavior characteristics, and the way our money is divided among them will have an important effect on our results, relative to the Dow, in any given year. The actual percentage division among categories is to some degree planned, but to a great extent, accidental, based upon availability factors.

The first section consists of generally undervalued securities (hereinafter called “generals”) where we have nothing to say about corporate policies and no timetable as to when the undervaluation may correct itself .Over the years, this has been our largest category of investment, and more money has been made here than in either of the other categories. We usually have fairly large positions (5% to 10% of our total assets) in each of five or six generals, with smaller positions in another ten or fifteen.

Sometimes these work out very fast; many times they take years. It is difficult at the time of purchase to know any compelling reason why they should appreciate in price. However, because of this lack of glamour or anything pending which might create immediate favorable market action, they are available at very cheap prices. A lot of value can be obtained for the price paid. This substantial excess of value creates a comfortable margin of safety in each transaction. Combining this individual margin of safety with a diversity of commitments creates a most attractive package of safety and appreciation potential. We do not go into these generals with the idea of getting the last nickel, but are usually quite content selling out at some intermediate level between our purchase price and what we regard as fair value to a private owner.

Many times generals represent a form of "coattail riding" where we feel the dominating stockholder group has plans for the conversion of unprofitable or under-utilized assets to a better use. We have done that ourselves in

Sanborn and Dempster, but everything else equal we would rather let others do the work. Obviously, not only do the values have to be ample in a case like this, but we also have to be careful whose coat we are holding.

The generals tend to behave market-wise very much in sympathy with the Dow. Just because something is cheap does not mean it is not going to go down. During abrupt downward movements in the market, this segment may very well go down percentage-wise just as much as the Dow. Over a period of years, I believe the generals will outperform the Dow, and during sharply advancing years like 1961. This is the section of our portfolio that turns in the best results. It is, of course, also the most vulnerable in a declining market, and in 1962, not only did we not make any money out of our general category, but I am even doubtful if it did better than the Dow.

Our second category consists of "work-outs. These are securities whose financial results depend on corporate action rather than supply and demand factors created by buyers and sellers of securities. In other words, they are securities with a timetable where we can predict, within reasonable error limits, when we will get how much and what might upset the applecart. Corporate events such as mergers, liquidations, reorganizations, spin-offs, etc., I lead to work-outs. An important source in recent years has been sell-outs by oil producers to major integrated oil companies.

This category will produce reasonably stable earnings from year to year, to a large extent irrespective of the course of the Dow. Obviously, if we operate throughout a year with a large portion of our portfolio in work-outs, we will look extremely good if it turns out to be a declining year for the Dow, or quite bad if it is a strongly advancing year.

We were fortunate in that we had a good portion of our portfolio in work outs in 1962. As I have said before, this was not due to any notion on my part as to what the market would do, but rather because I could get more of what I wanted in this category than in the generals. This same concentration in work-outs hurt our performance during the market advance in the second half of the year.

Over the years, work-outs have provided our second largest category. At any given time, we may be in five to ten of these; some just beginning and others in the late stage of their development. I believe in using borrowed money to offset a portion of our work-out portfolio, since there is a high degree of safety in this category in terms of both eventual results and intermediate market behavior. For instance, you will note when you receive our audit report, that we paid $75,000 of interest to banks and brokers during the year. Since our borrowing was at approximately 5%, this means we had an average of $1,500,000 borrowed from such sources. Since 1962 was a down year in the market, you might think that such borrowing would hurt results. However, all of our loans were to offset work-outs, and this category turned in a good profit for the year. Results, excluding the benefits derived from the use of borrowed money, usually fall in the 10% to 20% per annum range. My self-imposed standard limit regarding borrowing is 25% of partnership net worth, although something extraordinary could result in modifying this for a limited period of time.

You will note on our yearend balance sheet (part of the audit you will receive) securities sold short totaling some $340,000. Most of this occurred in conjunction with a work-out entered into late in the year. In this case, we had very little competition for a period of time and were able to create a 10% or better profit (gross, not annualized) for a few months tie-up of money. The short sales eliminated the general market risk.

The final category is I “control” situations, where we either control the company or take a very large position and attempt to influence policies of the company. Such operations should definitely be measured on the basis of several years. In a given year, they may produce nothing as it is usually to our advantage to have the stock be stagnant market-wise for a long period while we are acquiring it. These situations, too, have relatively little in common with the behavior of the Dow. Sometimes, of course, we buy into a general with the thought in mind that it might develop into a control situation. If the price remains low enough for a long period, this might very well happen. Usually, it moves up before we have a substantial percentage of the company's stock, and we sell

at higher levels and complete a successful general operation.

Dempster Mill Manufacturing Company

The high point of 1962 from a performance standpoint was our present control situation --73% owned Dempster Mill. Dempster has been primarily in farm implements (mostly items retailing for $1,000 or under), water systems, water well supplies and jobbed plumbing lines.

The operations for the past decade have been characterized by static sales, low inventory turnover and virtually no profits in relation to invested capital.

We obtained control in August, 1961 at an average price of about $28 per share, having bought some stock as low as $16 in earlier years, but the vast majority in an offer of $30.25 in August. When control of a company is obtained, obviously what then becomes all-important is the value of assets, not the market quotation for a piece of paper (stock certificate).

Last year, our Dempster holding was valued by applying what I felt were appropriate discounts to the various assets. These valuations were based on their status as non-earning assets and were not assessed on the basis of potential, but on the basis of what I thought a prompt sale would produce at that date. Our job was to compound these values at a decent rate. The consolidated balance sheet last year and the calculation of fair value are shown below.

(000's omitted)

Assets	**Book Figure**	**Valued @**	**Adjusted Valuation**	**Liabilities**	
Cash	$166	100%	$166	Notes Payable	$1,230
Accts. Rec. (net)	$1,040	85%	$884	Other Liabilities	$1,088
Inventory	$4,203	60%	$2,522		
Ppd. Exp. Etc.	$82	25%	$21		
Current Assets	$5,491		$3,593	Total Liabilities	$2,318
Cash Value Life ins., etc.	$45	100 Est. net auction value	$45	Net Work per Books:	$4,601
Net Plant Equipment	$1383		$800	Net Work as Adjusted to Quickly Realizable Values	$2,120
Total Assets	$6,919		$4,438	Shares outstanding 60,146 Adj. Value per Share	$35.25

Dempster's fiscal year ends November 30th, and because the audit was unavailable in complete form, I approximated some of the figures and rounded to $35 per share last year.

Initially, we worked with the old management toward more effective utilization of capital, better operating margins, reduction of overhead, etc. These efforts were completely fruitless. After spinning our wheels for about six months, it became obvious that while lip service was being given to our objective, either through inability or unwillingness, nothing was being accomplished. A change was necessary.

A good friend, whose inclination is not toward enthusiastic descriptions, highly recommended Harry Bottle for

our type of problem. On April 17, 1962 I met Harry in Los Angeles, presented a deal which provided for rewards to him based upon our objectives being met, and on April 23rd he was sitting in the president's chair in Beatrice.

Harry is unquestionably the man of the year. Every goal we have set for Harry has been met, and all the surprises have been on the pleasant side. He has accomplished one thing after another that has been labeled as impossible, and has always taken the tough things first. Our breakeven point has been cut virtually in half, slow-moving or dead merchandise has been sold or written off, marketing procedures have been revamped, and unprofitable facilities have been sold.

The results of this program are partially shown in the balance sheet below, which, since it still represents non-earning assets, is valued on the same basis as last year.

(000's omitted)

Assets	**Book Figure**	**Valued @**	**Adjusted Valuation**	**Liabilities**	
Cash	$60	100%	$60	Notes payable	$0
Marketable securities	$758	Mrkt. 12/31/62	$834	Other liabilities	$346
Accts. Rec. (net)	$796	85%	$676	Total liabilities	$346
Inventory	$1,634	60%	$981		
Cash value life ins.	$41	100%	$41	Net Worth:	
Recoverable Income Tax	$170	100%	$170	Per Books	$4,077
Ppd. Exp. Etc.	$14	25%	$4	As Adjusted to quickly realizable values	$3,125
				Add: proceeds from potential exercise of option to Harry Bottle	$60
Current Assets	$3,473		$2,766		
				Shares outstanding 60,146	
Misc. Invest.	$5	100%	$5	Add: shs. Potentially outstanding under option 2000	
				Total shs. 62,146	
Net Plant Equipment	$945	Est. net auction value	$700		
				Adjusted value per share	$51.26
Total Assets	$4,423		$3,471		

Three facts stand out: (1) Although net worth has been reduced somewhat by the housecleaning and writedowns ($550,000 was written out of inventory; fixed assets overall brought more than book value), we have converted assets to cash at a rate far superior to that implied in our year-earlier valuation. (2) To some extent, we have converted the assets from the manufacturing business (which has been a poor business) to a business which we think is a good business --securities. (3) By buying assets at a bargain price, we don't need to pull any rabbits out of a hat to get extremely good percentage gains. This is the cornerstone of our investment philosophy: "Never count on making a good sale. Have the purchase price be so attractive that even a mediocre sale gives good results. The better sales will be the frosting on the cake."

On January 2, 1963, Dempster received an unsecured term loan of $1,250,000. These funds, together with the funds all ready "freed-up" will enable us to have a security portfolio of about $35 per share at Dempster, or considerably more than we paid for the whole company. Thus our present valuation will involve a net of about $16 per share in the manufacturing operation and $35 in a security operation comparable to that of Buffett Partnership, Ltd.

We, of course, are devoted to compounding the $16 in manufacturing at an attractive rate and believe we have some good ideas as to how to accomplish this. While this will be easy if the business as presently conducted earns money, we have some promising ideas even if it shouldn't.

It should be pointed out that Dempster last year was 100% an asset conversion problem and therefore, completely unaffected by the stock market and tremendously affected by our success with the assets. In 1963, the manufacturing assets will still be important, but from a valuation standpoint it will behave considerably more like a general since we will have a large portion of its money invested in generals pretty much identical with those in Buffett Partnership, Ltd. For tax reasons, we will probably not put workouts in Dempster. Therefore, if the Dow should drop substantially, it would have a significant effect on the Dempster valuation. Likewise, Dempster would benefit this year from an advancing Dow which would not have been the case most of last year.

There is one final point of real significance for Buffett Partnership, Ltd. We now have a relationship with an operating man which could be of great benefit in future control situations. Harry had never thought of running an implement company six days before he took over. He is mobile, hardworking and carries out policies once they are set. He likes to get paid well for doing well, and I like dealing with someone who is not trying to figure how to get the fixtures in the executive washroom gold-plated.
Harry and I like each other, and his relationship with Buffett Partnership, Ltd. should be profitable for all of us.

The Question of Conservatism

Because I believe it may be even more meaningful after the events of 1962 I would like to repeat this section from last year's letter:

"The above description of our various areas of operation may provide some clues as to how conservatively our portfolio is invested. Many people some years back thought they were behaving in the most conservative manner by purchasing medium or long-term municipal or government bonds. This policy has produced substantial market depreciation in many cases, and most certainly has failed to maintain or increase real buying power.

"Conscious, perhaps overly conscious, of inflation, many people now feel that they are behaving in a conservative manner by buying blue chip securities almost regardless of price-earnings ratios, dividend yields, etc. Without the benefit of hindsight as in the bond example, I feel this course of action is fraught with danger. There is nothing at all conservative, in my opinion, about speculating as to just how high a multiplier a greedy and capricious public will put on earnings.

You will not be right simply because a large number of people momentarily agree with you. You will not be right simply because important people agree with you. In many quarters the simultaneous occurrence of the two above factors is enough to make a course of action meet the test of conservatism.

"You will be right, over the course of many transactions, if your hypotheses are correct, your facts are correct, and your reasoning is correct. True conservatism is only possible through knowledge and reason.

I might add that in no way does the fact that our portfolio is not conventional prove that we are more

conservative or less conservative than standard methods of investing. This can only be determined by examining the methods or examining the results.

I feel the most objective test as to just how conservative our manner of investing is arises through evaluation of performance in down markets. Preferably these should involve a substantial decline in the Dow. Our performance in the rather mild declines of 1957 and 1960 would confirm my hypothesis that we invest in an extremely conservative manner. I would welcome any partner's suggesting objective tests as to conservatism to see how we stack up. We have never suffered a realized loss of more than ½ of 1% of total net assets and our ratio of total dollars of realized gains to total realized losses is something like 100 to 1. Of course, this reflects the fact that on balance we have been operating in an up market. However there have been many opportunities for loss transactions even in markets such as these (you may have found out about a few of these yourselves) so I think the above facts have some significance.

In 1962, we did realize a loss on one commitment or 1.0% and our ratio or realized gains to losses was only slightly over 3 to 1. However, compared to more conventional (often termed conservative which is not synonymous) methods of common stock investing, it would appear that our method involved considerably less risk. Our advantage over the Dow was all achieved when the market was going down; we lost a bit of this edge on the way up.

The Usual Prediction

I am certainly not going to predict what general business or the stock market are going to do in the next year or two, since I don't have the faintest idea.

I think you can be quite sure that over the next ten years, there are going to be a few years when the general market is plus 20% or 25% a few when it is minus on the same order, and a majority when it is in between. I haven't any notion as to the sequence in which these will occur, nor do I think it is of any great importance for the long-term investor. If you will take the first table on page 3 and shuffle the years around, the compounded result will stay the same. If the next four years are going to involve, say, a +40%, -30%, +10% and –6%, the order in which they fall is completely unimportant for our purposes as long as we all are around at the end of the four years. Over a long period of years, I think it likely that the Dow will probably produce something like 5% per year compounded from a combination of dividends and market value gain. Despite the experience of the last decade, anyone expecting substantially better than that from the general market probably faces disappointment.

Our job is to pile up yearly advantages over the performance of the Dow without worrying too much about whether the absolute results in a given year are a plus or a minus. I would consider a year in which we were down 15% and the Dow declined 25% to be much superior to a year when both the partnership and the Dow advanced 20%.

For the reasons outlined in our method of operation, our best years relative to the Dow are likely to be in declining or static markets. Therefore, the advantage we seek will probably come in sharply varying amounts. There are bound to be years when we are surpassed by the Dow, but if over a long period we can average ten percentage points per year better than it, I will feel the results have been satisfactory.

Specifically, if the market should be down 35% or 40% in a year (and I feel this has a high probability of occurring one year in the next ten --no one knows which one), we should be down only 15% or 20%. If it is more or less unchanged during the year, we would hope to be up about ten percentage points. If it is up 20% or more, we would struggle to be up as much. It is certainly doubtful we could match a 20% or 25% advance from the December 31, 1962 level. The consequence of performance such as this over a period of years would mean that if the Dow produces a 5% per year overall gain compounded, I would hope our results might be 15% per year.

The above expectations may sound somewhat rash, and there is no question but that they may appear very much so when viewed from the vantage point of 1965 or 1970. Variations in any given year from the behavior described above would be wide, even if the long-term expectation was correct. Certainly, you have to recognize the possibility of substantial personal bias in such hopes.

Miscellaneous

This year marked the transition from the office off the bedroom to one a bit (quite a bit) more conventional. Surprising as it may seem, the return to a time clock life has not been unpleasant. As a matter of fact, I enjoy not keeping track of everything on the backs of envelopes.

We are starting off this year with net assets of $9,405,400.00. At the start of 1962, Susie and I had three "non-marketable security" investments of other than nominal size, and two of these have been sold. The third will be continued indefinitely. From the proceeds of the two sales, we have added to our partnership interest so that we now have an interest of $1,377,400.00. Also, my three children, mother, father, two sisters, two brothers-in-law, father-in-law, three aunts, four cousins, five nieces and nephews have interests directly or indirectly totaling $893,600.00.

Bill Scott who has fit into our operation splendidly has an interest (with his wife) of $167,400.00; A very large portion of his net worth. So we are all eating our own cooking.

You will note from the auditor's certificate that they made a surprise check during the year and this will be a continuing part of their procedure. Peat, Marwick, Mitchell & Co. again did an excellent job on the audit, meeting our rather demanding time schedules.

Susie was in charge of equipping the office which means we did not follow my "orange crate" approach to interior decorating. We have an ample supply of Pepsi on hand and look forward to partners dropping in.

Beth Feehan continues to demonstrate why she is the high priestess of the CPS (certified professional secretary, that is) group.

Partners did a wonderful job of cooperating in the return of agreements and commitment letters, and I am most appreciative of this. It makes life a lot easier. Enclosed you will find Schedule "A" to your partnership agreement. You will be receiving your audit and tax figures very soon, and if you have questions on any of this be sure to let me hear from you.

Cordially,
Warren E. Buffett

BUFFETT PARTNERSHIP, LTD.
810 KIEWIT PLAZA
OMAHA 31, NEBRASKA

July 10, 1963

First Half Performance

During the first half of 1963, the Dow Jones Industrial Average (hereinafter called the "Dow") advanced from 652.10 to 706.88. If one had owned the Dow during this period, dividends of $10.66 would have been received, bringing the overall return from the Dow during the first half to plus 10.0%.

Our incantation has been: (1) that short-term results (less than three years) have little meaning, particularly in reference to an investment operation such as ours that devotes a portion of resources to control situations, and; (2) That our results relative to the Dow and other common-stock-form media, will be better in declining markets and may well have a difficult time just matching such media in bubbling markets.

Nevertheless, our first-half performance, excluding any change in Dempster valuation (and its valuation did change --I'm saving this for dessert later in the letter) was plus 14%. This 14% is computed on total net assets (not non-Dempster assets) and is after expenses, but before monthly payments (to those who take them) to partners and allocation to the General Partner. Such allocations are academic on an interim basis, but if we were also plus 14% at yearend, the first 6% would be allocated to partners according to their capital, plus three-quarters of the balance of 8% (14% -6%), or an additional 6%, giving the limited partners a plus 12% performance.

Despite the relatively pleasant results of the first half the admonitions stated two paragraphs earlier hold in full force. At plus 14% versus plus 10% for the Dow, this six months has been a less satisfactory period than the first half of 1962 when we were minus 7.5% versus minus 21.7% for the Dow. You should completely understand our thinking in this regard which has been emphasized in previous letters.

During the first half we had an average net investment in "generals" (long positions in generals minus short positions in generals) of approximately $5,275,000. Our overall gain from this net investment in generals (for a description of our investment categories see the last annual letter) was about $1,100,000 for a percentage gain from this category of roughly 21%. This again illustrates the extent to which the allocation of our resources among various categories affects short-term results. In 1962 the generals were down for the year and only an outstanding performance by both of the other two categories, "work-outs" and "controls," gave us our unusually favorable results for that year.

Now this year, our work-outs have done poorer than the Dow and have been a drag on performance, as they are expected to be in rising markets. While it would be very nice to be 100% in generals in advancing markets and 100% in work-outs in declining markets, I make no attempt to guess the course of the stock market in such a manner. We consider all three of our categories to be good businesses on a long-term basis, although their short-term price behavior characteristics differ substantially in various types of markets. We consider attempting to gauge stock market fluctuations to be a very poor business on a long-term basis and are not going to be in it, either directly or indirectly through the process of trying to guess which of our categories is likely to do best in the near future.

Investment Companies

Shown below are the usual statistics on a cumulative basis for the Dow and Buffett Partnership. Ltd. (including predecessor partnerships) as well as for the two largest open-end (mutual funds) and two largest closed-end

investment companies following a diversified common-stock investment policy:

Year	Dow	Mass.Inv. Trust (1)	Investors Stock (1)	Tri-Cont. (2)
1957	-8.4%	-11.4%	-12.4%	-2.4%
1957 – 58	26.9%	26.4%	29.2%	30.0%
1957 – 59	52.3%	37.8%	42.5%	40.9%
1957 – 60	42.9%	36.4%	41.6%	44.8%
1957 – 61	74.9%	71.3%	76.9%	77.4%
1957 – 62	61.6%	54.5%	53.2%	59.7%
1957 – 6/30/63	77.8%	72.4%	69.3%	75.7%
Annual Compounded Rate	9.3%	8.7%	8.4%	9.1%

Year	Lehman (2)	Partnership (3)	Limited Partners (4)
1957	-11.4%	10.4%	9.3%
1957 – 58	24.7%	55.6%	44.5%
1957 – 59	34.8%	95.9%	74.7%
1957 – 60	38.2%	140.6%	107.2%
1957 – 61	70.8%	251.0%	181.6%
1957 – 62	46.2%	299.8%	215.1%
1957 – 6/30/63	60.8%	355.8%	252.9%
Annual Compounded Rate	7.6%	26.3%	21.4%

Footnotes :

(1) Computed from changes in asset value plus any distributions to holders of record during year.

(2) From 1963 Moody's Bank & Finance Manual for 1957-62. Estimated for first half 1963.

(3) For 1957-61 consists of combined results of all predecessor limited partnerships operating throughout entire year after all expenses but before distributions to partners or allocations to the general partner.

(4) For 1957-61 computed on basis of preceding column of partnership results allowing for allocation to general partner based upon present partnership agreement.

The results continue to show that the most highly paid and respected investment advice has difficulty matching the performance of an unmanaged index of blue-chip stocks. This in no sense condemns these institutions or the investment advisers and trust departments whose methods, reasoning, and results largely parallel such investment companies. These media perform a substantial service to millions of investors in achieving adequate diversification, providing convenience and peace of mind, avoiding issues of inferior quality, etc. However, their services do not include (and in the great majority of cases, are not represented to include) the compounding of money at a rate greater than that achieved by the general market.

Our partnership's fundamental reason for existence is to compound funds at a better-than-average rate with less exposure to long-term loss of capital than the above investment media. We certainly cannot represent that we will achieve this goal. We can and do say that if we don't achieve this goal over any reasonable period excluding

an extensive speculative boom, we will cease operation.

Dempster Mill Manufacturing Company

In our most recent annual letter, I described Harry Bottle as the "man of the year". If this was an understatement.

Last year Harry did an extraordinary job of converting unproductive assets into cash which we then, of course, began to invest in undervalued securities. Harry has continued this year to turn under-utilized assets into cash, but in addition, he has made the remaining needed assets productive. Thus we have had the following transformation in balance sheets during the last nineteen months:

November 30, 1961 (000's omitted)

Assets	**Book Figure**	**Valued @**	**Adjusted Valuation**	**Liabilities**	
Cash	$166	100%	$166	Notes Payable	$1,230
Accts. Rec. (net)	$1,040	85%	$884	Other Liabilities	$1,088
Inventory	$4,203	60%	$2,522		
Ppd. Exp. Etc.	$82	25%	$21	Total Liabilities	$2,318
Current Assets	$5,491		$3,593	Net Worth:	
				Per Books	$4,601
Cash Value Life ins., etc.	$45	100%	$45	As adjusted to quickly realizable values	$2,120
Net Plant & equipment	$1,383	Est. Net Auction Value	$800		
Total Assets	$6,919		$4,438	Share outstanding 60,146. Adj. Value per Share	$35.25

November 30, 1962 (000's omitted)

Assets	**Book Figure**	**Valued @**	**Adjusted Valuation**	**Liabilities**	
Cash	$60	100%	$60	Notes payable	$0
Marketable Securities	$758	Mkt. 12/31/62	$834	Other liabilities	$346
Accts. Rec. (net)	$796	85%	$676	Total liabilities	$346
Inventory	$1,634	60%	$981		
Cash value life ins.	$41	100%	$41	Net Worth:	
Recoverable income tax	$170	100%	$170	Per books	$4,077
Ppd. Exp. Etc	$14	25%	$4	As adjusted to quickly realizable values	$3,125
				Add: proceeds from potential exercise of option to Harry Bottle	$60
Current Assets	$3,473		$2,766		$3,185
				Shares Outstanding 60,146	
Misc. Invest.	$5	100%	$5	Add: shs. Potentially outstanding under option: 2,000	
				Total shs. 62,146	
Net plant & equipment	$945	Est. net auction value	$700	Adj. Value per Share	$51.26
Total Assets	$4,423		$3,471		

November 30, 1963 (000's omitted)

Assets	Book Figure	Valued @	Adjusted Valuation	Liabilities	
Cash	$144	100%	$144	Notes payable (paid 7/3/63)	$125
Marketable Securities	$1,772	Mkt. 6/30/63	$2,029	Other liabilities	$394
Accts. Rec. (net)	$1,262	85%	$1,073	Total Liabilities	$519
Inventory	$977	60%	$586		
Ppd. Exp. Etc	$12	25%	$3	Net Worth:	
				Per books	$4,582
Current Assets	$4,167		$3,835	As adjusted to quickly realizable values	$4,028
Misc. Invest	$62	100%	$62	Shares outstanding 62,146	
Net plant & equip.	$872	Est. net auction value	$650	Adj. Value per share	$64.81
Total assets	$5,101		$4,547		

I have included above the conversion factors we have previously used in valuing Dempster for B.P.L. purposes to reflect estimated immediate sale values of non-earning assets.

As can be seen, Harry has converted the assets at a much more favorable basis than was implied by my valuations. This largely reflects Harry's expertise and, perhaps, to a minor degree my own conservatism in valuation.

As can also be seen, Dempster earned a very satisfactory operating profit in the first half (as well as a substantial unrealized gain in securities) and there is little question that the operating business, as now conducted, has at least moderate earning power on the vastly reduced assets needed to conduct it. Because of a very important-seasonal factor and also the presence of a tax carry forward, however, the earning power is not nearly what might be inferred simply by a comparison of the 11/30/62 and 6/30/63 balance sheets. Partly because of this seasonality, but more importantly, because of possible developments in Dempster before 1963 yearend, we have left our Dempster holdings at the same $51.26 valuation used at yearend 1962 in our figures for B.P.L's first half. However, I would be very surprised if it does not work out higher than this figure at yearend.

One sidelight for the fundamentalists in our group: B.P.L. owns 71.7% of Dempster acquired at a cost of $1,262,577.27. On June 30, 1963 Dempster had a small safe deposit box at the Omaha National Bank containing securities worth $2,028,415.25. Our 71.7% share of $2,028,415.25 amounts to $1,454,373.70. Thus, everything above ground (and part of it underground) is profit. My security analyst friends may find this a rather primitive method of accounting, but I must confess that I find a bit more substance in this fingers and toes method than in any prayerful reliance that someone will pay me 35 times next year's earnings.

Advance Payments and Advance Withdrawals

We accept advance payments from partners and prospective partners at 6% interest from date of receipt until the end of the year. While there is no obligation to convert the payment to a partnership interest at the end of the year, this should be the intent at the time of payment.

Similarly, we allow partners to withdraw up to 20% of their partnership account prior to yearend and charge them 6% from date of withdrawal until yearend when it is charged against their capital account. Again, it is not intended that partners use US like a bank, but that they use the withdrawal right for unanticipated need for funds.

The willingness to both borrow and lend at 6% may seem "un-Buffett-like." We look at the withdrawal right as a means of giving some liquidity for unexpected needs and, as a practical matter, are reasonably sure it will be far more than covered by advance payments.

Why then the willingness to pay 6% for advance payment money when we can borrow from commercial banks at substantially lower rates? For example, in the first half we obtained a substantial six-month bank loan at 4%. The answer is that we expect on a long-term basis to earn better than 6% (the general partner's allocation is zero unless we do although it is largely a matter of chance whether we achieve the 6% figure in any short period. Moreover, I can adopt a different attitude in the investment of money that can be expected to soon be a part of our equity capital than I can on short-term borrowed money. The advance payments have the added advantage to us of spreading the investment of new money over the year, rather than having it hit us all at once in January. On the other hand, 6% is more than can be obtained in short-term dollar secure investments by our partners, so I consider it mutually profitable. On June 30, 1963 we had advance withdrawals of $21,832.00 and advance payments of $562,437.11.

Taxes

There is some possibility that we may have fairly substantial realized gains this year. Of course, this may not materialize at all and actually does not have anything to do with our investment performance this year. I am an outspoken advocate of paying large amounts of income taxes -- at low rates. A tremendous number of fuzzy, confused investment decisions are rationalized through so-called "tax considerations."

My net worth is the market value of holdings less the tax payable upon sale. The liability is just as real as the asset unless the value of the asset declines (ouch), the asset is given away (no comment), or I die with it. The latter course of action would appear to at least border on a Pyrrhic victory.

Investment decisions should be made on the basis of the most probable compounding of after-tax net worth with minimum risk. Any isolation of low-basis securities merely freezes a portion of net worth at a compounding factor identical with the assets isolated. While this may work out either well or badly in individual cases, it is a nullification of investment management. The group experience holding various low basis securities will undoubtedly approximate group experience on securities as a whole, namely compounding at the compounding rate of the Dow. We do not consider this the optimum in after-tax compounding rates.

I have said before that if earnings from the partnership can potentially amount to a sizable portion of your total taxable income, the safe thing to do is to estimate this year the same tax you incurred last year. If you do this, you cannot run into penalties. In any event, tax liabilities for those who entered the partnership on 1/1/63 will be minimal because of the terms of our partnership agreement first allocating capital gains to those having an interest in unrealized appreciation.

As in past years, we will have a letter out about November 1st (to partners and those who have indicated an interest to me by that time in becoming partners) with the amendment to the partnership agreement, commitment letter for 1964, estimate of the 1963 tax situation, etc.

My closing plea for questions regarding anything not clear always draws a blank. Maybe no one reads this far. Anyway, the offer is still open.

Cordially,

Warren E. Buffett

BUFFETT PARTNERSHIP, LTD.
810 KIEWIT PLAZA
OMAHA 31, NEBRASKA

November 6, 1963

To My Partners for 1964:

Enclosed is the usual assortment of Thanksgiving reading material:

(1) Two copies of an amended partnership agreement for 1964. The one with the General Provisions attached is to be kept by you (exactly the same as last year) and the other single page agreement is to be signed, notarized and returned to us. Partners in Omaha may come in and obtain the notarization at our office.

(2) A copy of that priceless treatise, "The Ground Rules," I would like every partner to read this at least once a year, and it is going to be a regular item in my November package. Don't sign the partnership agreement unless you fully understand the concepts set forth and are in accord with them -- mentally and viscerally.

(3) Two copies of the commitment letter for 1964, one to be kept by you and one returned to us. You may amend this commitment letter right up to midnight, December 31st, so get it back to us early, and if it needs to be changed, just let us know by letter or phone.

Any withdrawals will be paid immediately after January 1st. You may withdraw any amount you desire from $100 up to your entire equity. Similarly, additions can be for any amount and should reach us by January 10th. In the event you are disposing of anything, this will give you a chance to have the transaction in 1964 if that appears to be advantageous for tax reasons. If additions reach us in November, they take on the status of advance payments and draw interest at the rate of 6% until yearend. This is not true of additions reaching us in December.

Complete tax information for your 1963 return will be in your hands by January 25th. If you should need an estimate of your tax position before that time, let me know and I will give you a rough idea. We will also send out a short letter on taxes in late December.

At the end of October, the overall result from the Dow for 1963 was plus 18.8%. We have had a good year in all three categories, generals, work-outs and controls. A satisfactory sale on a going concern basis of Dempster Mill Manufacturing operating assets was made about a month ago. I will give the full treatment to the Dempster story in the annual letter, perhaps climaxed by some lyrical burst such as “Ode to Harry Bottle.” While we always had a built-in profit in Dempster because of our bargain purchase price, Harry accounted for several extra servings of dessert by his extraordinary job. Harry, incidentally, has made an advance payment toward becoming a limited partner in 1964-- we consider this the beginning, not the end.

However, 1963 has not been all Dempster. While a great deal can happen the last two months and therefore interim results should not be taken too seriously, at the end of October the overall gain for the partnership was about 32%. Based on the allocation embodied in our agreement, this works out to plus 25 1/2% for the limited partners before monthly payments to those who take them. Of our approximate $3 million gain, something over $2 million came from marketable securities and a little less than $1 million from Dempster operating assets. The combined gain from our single best general and best work-out situation approximated the gain on the Dempster operating assets.

You should be aware that if our final results relative to the Dow for 1963 are as favorable as on October 31st, I will regard it as an abnormal year. I do not consider a 13.2 percentage point margin to be in the cards on a long term basis. A considerably more moderate annual edge over the Dow will be quite satisfactory.

Cordially

Warren E. Buffett

P/S. Last year we announced there would be no prizes for the last ones to get the material back to us. This continues to be our policy. Save us some last minute scurrying by getting your agreement and commitment letter back pronto. Give Bill or me a call if we can be of any help. Thanks!

BUFFETT PARTNERSHIP, LTD.
810 KIEWIT PLAZA
OMAHA 31, NEBRASKA

January 18, 1964

Our Performance in 1963

1963 was a good year. It was not a good year because we had an overall gain of $3,637,167 or 38.7% on our beginning net assets, pleasant as that experience may be to the pragmatists in our group. Rather it was a good year because our performance was substantially better than that of our fundamental yardstick --the Dow-Jones Industrial Average (hereinafter called the "Dow"). If we had been down 20% and the Dow had been down 30%, this letter would still have begun "1963 was a good year." Regardless of whether we are plus or minus in a particular year, if we can maintain a satisfactory edge on the Dow over an extended period of time, our long term results will be satisfactory -- financially as well as philosophically.

To bring the record up to date, the following summarizes the year-by-year performance of the Dow, the performance of the Partnership before allocation to the general partner, and the limited partners' results for all full years of BPL's and predecessor partnerships' activities:

Year	Overall Results From Dow (1)	Partnership Results (2)	Limited Partners' Results (3)
1957	-8.4%	10.4%	9.3%
1958	38.5%	40.9%	32.2%
1959	20.0%	25.9%	20.9%
1960	-6.2%	22.8%	18.6%
1961	22.4%	45.9%	35.9%
1962	-7.6%	13.9%	11.9%
1963	20.7%	38.7%	30.5%

(1) Based on yearly changes in the value of the Dow plus dividends that would have been received through ownership of the Dow during that year.

(2) For 1957-61 consists of combined results of all predecessor limited partnerships operating throughout the entire year after all expenses but before distributions to partners or allocations to the general partner.

(3) For 1957-61 computed on the basis of the preceding column of partnership results allowing for allocation to the general partner based upon the present partnership agreement.

One wag among the limited partners has suggested I add a fourth column showing the results of the general partner --let's just say he, too, has an edge on the Dow.

The following table shows the cumulative or compounded results based on the preceding table:

Year	Overall Results From Dow	Partnership Results	Limited Partners' Results
1957	-8.4%	10.4%	9.3%
1957 – 58	26.9%	55.6%	44.5%
1957 – 59	52.3%	95.9%	74.7%

1957 – 60	42.9%	140.6%	107.2%
1957 – 61	74.9%	251.0%	181.6%
1957 – 62	61.6%	299.8%	215.1%
1957 – 63	95.1%	454.5%	311.2%
Annual Compounded Rate	10.0%	27.7%	22.3%

It appears that we have completed seven fat years. With apologies to Joseph we shall attempt to ignore the biblical script. (I've never gone overboard for Noah's ideas on diversification either.)

In a more serious vein, I would like to emphasize that, in my judgment; our 17.7 margin over the Dow shown above is unattainable over any long period of time. A ten percentage point advantage would be a very satisfactory accomplishment and even a much more modest edge would produce impressive gains as will be touched upon later. This view (and it has to be guesswork -- informed or otherwise) carries with it the corollary that we must expect prolonged periods of much narrower margins over the Dow as well as at least occasional years when our record will be inferior (perhaps substantially so) to the Dow.

Much of the above sermon is reflected in "The Ground Rules" sent to everyone in November, but it can stand repetition.

Investment Companies

We regularly compare our results with the two largest open-end investment companies (mutual funds) that follow a policy of being, typically, 95 -100% invested in common stocks, and the two largest diversified closed-end investment companies. These four companies, Massachusetts Investors Trust, Investors Stock Fund, Tri-Continental Corp. and Lehman Corp. manage about $4 billion and are probably typical of most of the $25 billion investment company industry. My opinion is that their results roughly parallel those of the vast majority or other investment advisory organizations which handle, in aggregate, vastly greater sums.

The purpose or this tabulation, which is shown below, is to illustrate that the Dow is no pushover as an index or investment achievement. The advisory talent managing just the four companies shown commands' annual fees of over $7 million, and this represents a very small fraction of the industry. The public batting average of this highly-paid talent indicates they achieved results slightly less favorable than the Dow.

Both our portfolio and method of operation differ substantially from the investment companies in the table. However, most partners, as an alternative to their interest in the Partnership would probably have their funds invested in media producing results comparable with investment companies, and I, therefore, feel they offer a meaningful standard of performance.

YEARLY RESULTS

Year	Mass. Inv. Trust (1)	Investors Stock (1)	Lehman (2)	Tri-Cont. (2)	Dow	Limited Partners
1957	-11.4%	-12.4%	-11.4%	-2.4%	-8.4%	9.3%
1958	42.7%	47.5%	40.8%	33.2%	38.5%	32.2%
1959	9.0%	10.3%	8.1%	8.4%	20.0%	20.9%
1960	-1.0%	-0.6%	2.5%	2.8%	-6.2%	18.6%
1961	25.6%	24.9%	23.6%	22.5%	22.4%	35.9%
1962	-9.8%	-13.4%	-14.4%	-10.0%	-7.6%	11.9%
1963	20.0%	16.5%	23.8%	19.5%	20.7%	30.5%

(1) Computed from changes in asset value plus any distributions to holders of record during year.

(2) From 1963 Moody's Bank & Finance Manual for 1957-62; Estimated for 1963.

COMPOUNDED

Year	Mass. Inv. Trust	Investors Stock	Lehman	Tri-Cont.	Dow	Limited Partners
1957	-11.4%	-12.4%	-11.4%	-2.4%	-8.4%	9.3%
1957 – 58	26.4%	29.2%	24.7%	30.0%	26.9%	44.5%
1957 – 59	37.8%	42.5%	34.8%	40.9%	52.3%	74.7%
1957 – 60	36.4%	41.6%	38.2%	44.8%	42.9%	107.2%
1957 – 61	71.3%	76.9%	70.8%	77.4%	74.9%	181.6%
1957 – 62	54.5%	53.2%	46.2%	59.7%	61.6%	215.1%
1957 – 63	85.4%	78.5%	81.0%	90.8%	95.1%	311.2%
Annual Compounded Rate	9.2%	8.6%	8.8%	9.7%	10.0%	22.3%

The Dow, of course, is an unmanaged index, and it may seem strange to the reader to contemplate the high priests of Wall Street striving vainly to surpass or even equal it. However, this is demonstrably the case. Moreover, such a failure cannot be rationalized by the assumption that the investment companies *et al* are handling themselves in a more conservative manner than the Dow. As the table above indicates, and as more extensive studies bear out, the behavior of common stock portfolio managed by this group, on average, have declined in concert with the Dow. By such a test of behavior in declining markets, our own methods of operation have proven to be considerably more conservative than the common stock component of the investment company or investment advisor group. While this has been true in the past, there obviously can be no guarantees about the future.

The above may seem like rather strong medicine, but it is offered as a factual presentation and in no way as criticism. Within their institutional framework and handling the many billions of dollars involved, the results achieved are the only ones attainable. To behave unconventionally within this framework is extremely difficult. Therefore, the collective record of such investment media is necessarily tied to the record of corporate America. Their merits, except in the unusual case, do not lie in superior results or greater resistance to decline in value. Rather, I feel they earn their keep by the ease of handling, the freedom from decision making and the automatic diversification they provide, plus, perhaps most important, the insulation afforded from temptation to practice patently inferior techniques which seem to entice so many world-be investors.

The Joys of Compounding

Now to the pulse-quickening portion of our essay. Last year, in order to drive home the point on compounding, I took a pot shot at Queen Isabella and her financial advisors. You will remember they were euchred into such an obviously low-compound situation as the discovery of a new hemisphere.

Since the whole subject of compounding has such a crass ring to it, I will attempt to introduce a little class into this discussion by turning to the art world. Francis I of France paid 4,000 ecus in 1540 for Leonardo da Vinci's Mona Lisa. On the off chance that a few of you have not kept track of the fluctuations of the ecu 4,000 converted out to about $20,000.

If Francis had kept his feet on the ground and he (and his trustees) had been able to find a 6% after-tax

investment, the estate now would be worth something over $1,000,000,000,000,000.00. That's $1 quadrillion or over 3,000 times the present national debt, all from 6%. I trust this will end all discussion in our household about any purchase or paintings qualifying as an investment.

However, as I pointed out last year, there are other morals to be drawn here. One is the wisdom of living a long time. The other impressive factor is the swing produced by relatively small changes in the rate of compound.

Below are shown the gains from $100,000 compounded at various rates:

	4%	**8%**	**12%**	**16%**
10 Years	$48,024	$115,892	$210,584	$341,143
20 Years	$119,111	$366,094	$864,627	$1,846,060
30 Years	$224,337	$906,260	$2,895,970	$8,484,940

It is obvious that a variation of merely a few percentage points has an enormous effect on the success of a compounding (investment) program. It is also obvious that this effect mushrooms as the period lengthens. If, over a meaningful period of time, Buffett Partnership can achieve an edge of even a modest number of percentage points over the major investment media, its function will be fulfilled.

Some of you may be downcast because I have not included in the above table the rate of 22.3% mentioned on page 3. This rate, of course, is before income taxes which are paid directly by you --not the Partnership. Even excluding this factor, such a calculation would only prove the absurdity of the idea of compounding at very high rates -- even with initially modest sums. My opinion is that the Dow is quite unlikely to compound for any important length of time at the rate it has during the past seven years and, as mentioned earlier, I believe our margin over the Dow cannot be maintained at its level to date. The product of these assumptions would be a materially lower average rate of compound for BPL in the future than the rate achieved to date. Injecting a minus 30% year (which is going to happen from time to time) into our tabulation of actual results to date, with, say, a corresponding minus 40% for the Dow brings both the figures on the Dow and BPL more in line with longer range possibilities. As the compounding table above suggests, such a lowered rate can still provide highly satisfactory long term investment results.

Our Method of Operation

At this point I always develop literary schizophrenia. On the one hand, I know that we have in the audience a number of partners to whom details of our business are interesting. We also have a number to whom this whole thing is Greek and who undoubtedly wish I would quit writing and get back to work.

To placate both camps, I am just going to sketch briefly our three categories at this point and those who are interested in getting their doctorate can refer to the appendix for extended treatment of examples.

Our three investment categories are not differentiated by their expected profitability over an extended period of time. We are hopeful that they will each, over a ten or fifteen year period, produce something like the ten percentage point margin over the Dow that is our goal. However, in a given year they will have violently different behavior characteristics, depending primarily on the type of year it turns out to be for the stock market generally. Briefly this is how they shape up:

> "Generals" - A category of generally undervalued stocks, determined primarily by quantitative standards, but with considerable attention also paid to the qualitative factor. There is often little or nothing to indicate immediate market improvement. The issues lack glamour or market sponsorship. Their main qualification is a bargain price; that is, an overall valuation on the enterprise substantially below what careful analysis indicates its value to a private owner to be. Again let me emphasize that

while the quantitative comes first and is essential, the qualitative is important. We like good management - we like a decent industry - we like a certain amount of “ferment” in a previously dormant management or stockholder group. But we demand value. The general group behaves very much in sympathy with the Dow and will turn in a big minus result during a year of substantial decline by the Dow. Contrarywise, it should be the star performer in a strongly advancing market. Over the years we expect it, of course, to achieve a satisfactory margin over the Dow.

“Workouts” - These are the securities with a timetable. They arise from corporate activity - sell-outs, mergers, reorganizations, spin-offs, etc. In this category we are not talking about rumors or "inside information" pertaining to such developments, but to publicly announced activities of this sort. We wait until we can read it in the paper. The risk pertains not primarily to general market behavior (although that is sometimes tied in to a degree), but instead to something upsetting the applecart so that the expected development does not materialize. Such killjoys could include anti-trust or other negative government action, stockholder disapproval, withholding of tax rulings, etc. The gross profits in many workouts appear quite small. A friend refers to this as getting the last nickel after the other fellow has made the first ninety-five cents. However, the predictability coupled with a short holding period produces quite decent annual rates of return. This category produces more steady absolute profits from year to year than generals do. In years of market decline, it piles up a big edge for us; during bull markets, it is a drag on performance. On a long term basis, I expect it to achieve the same sort of margin over the Dow attained by generals.

“Controls” - These are rarities, but when they occur they are likely to be of significant size. Unless we start off with the purchase of a sizable block or stock, controls develop from the general category. They result from situations where a cheap security does nothing price-wise for such an extended period of time that we are able to buy a significant percentage of the company's stock. At that point we are probably in a position to assume some degree of, or perhaps complete, control of the company's activities; whether we become active or remain relatively passive at this point depends upon our assessment of the company’s future and the management's capabilities. The general we have been buying the most aggressively in recent months possesses excellent management following policies that appear to make very good sense to us. If our continued buying puts us in a controlling position at some point in the future, we will probably remain very passive regarding the operation or this business.

We do not want to get active merely for the sake of being active. Everything else being equal I would much rather let others do the work. However, when an active role is necessary to optimize the employment of capital you can be sure we will not be standing in the wings.

Active or passive, in a control situation there should be a built-in profit. The sine qua non of this operation is an attractive purchase price. Once control is achieved, the value of our investment is determined by the value of the enterprise, not the oftentimes irrationalities of the marketplace.

Our willingness and financial ability to assume a controlling position gives us two-way stretch on many purchases in our group of generals. If the market changes its opinion for the better, the security will advance in price. If it doesn't, we will continue to acquire stock until we can look to the business itself rather than the market for vindication of our judgment.

Investment results in the control category have to be measured on the basis of at least several years. Proper buying takes time. If needed, strengthening management, re-directing the utilization of capital, perhaps effecting a satisfactory sale or merger, etc., are also all factors that make this a business to be measured in years rather than months. For this reason, in controls, we are looking for wide margins of profit-if it looks at all close, we pass.

Controls in the buying stage move largely in sympathy with the Dow. In the later stages their behavior is geared more to that of workouts.

As I have mentioned in the past, the division of our portfolio among the three categories is largely determined by the accident or availability. Therefore, in a minus year for the Dow, whether we are primarily in generals or workouts is largely a matter of luck, but it will have a great deal to do with our performance relative to the Dow. This is one or many reasons why a single year's performance is of minor importance and, good or bad, should never be taken too seriously.

If there is any trend as our assets grow, I would expect it to be toward controls which heretofore have been our smallest category. I may be wrong in this expectation - a great deal depends, of course, on the future behavior of the market on which your guess is as good as mine (I have none). At this writing, we have a majority of our capital in generals, workouts rank second, and controls are third.

Miscellaneous

We are starting off the year with net assets of $17,454,900. Our rapid increase in assets always raises the question of whether this will result in a dilution of future performance. To date, there is more of a positive than inverse correlation between size of the Partnership and its margin over the Dow. This should not be taken seriously however. Larger sums may be an advantage at some times and a disadvantage at others. My opinion is that our present portfolio could not be improved if our assets were $1 million or $5 million. Our idea inventory has always seemed to be 10% ahead of our bank account. If that should change, you can count on hearing from me.

Susie and I have an investment of $2,392,900 in the Partnership. For the first time I had to withdraw funds in addition to my monthly payments, but it was a choice of this or disappointing the Internal Revenue Service. Susie and I have a few non-marketable (less than 300 holders) securities of nominal size left over from earlier years which in aggregate are worth perhaps 1% of our partnership interest. In addition we have one non-marketable holding of more material size of a local company purchased in 1960 which we expect to hold indefinitely. Aside from this all our eggs are in the BPL basket and they will continue to be. I can't promise results but I can promise a common destiny. In addition, that endless stream of relatives of mine consisting of my three children, mother, father, two sisters, two brothers-in-law, father-in-law, four aunts four cousins and five nieces and nephews, have interests in BPL directly or indirectly totaling $1,247,190.

Bill Scott is also in with both feet, having an interest along with his wife or $237,400, the large majority or their net worth. Bill has done an excellent job and on several or our more interesting situations going into 1964, he has done the majority or the contact work. I have also shoved off on him as much as possible of the administrative work so if you need anything done or have any questions, don't hesitate to ask for Bill if I'm not around.

Beth and Donna have kept an increasing work load flowing in an excellent manner. During December and January, I am sure they wish they had found employment elsewhere, but they always manage to keep a mountain of work ship-shape.

Peat, Marwick, Mitchell has done their usual excellent job of meeting a tough timetable. We have instructed them to conduct two surprise checks a year (rather than one as in past years) on our securities, cash, etc., in the future. These are relatively inexpensive, and I think make a good deal of sense in any financial organization.

Within the next week you will receive:

(1) A tax letter giving you all BPL information needed for your 1963 federal income tax return. This letter

is the only item that counts for tax purposes.

(2) An audit from Peat, Marwick, Mitchell & Co. for 1963, setting forth the operations and financial position of BPL as well as your own capital account.

(3) A letter signed by me setting forth the status of your BPL interest on 1/1/64. This is identical with the figure developed in the audit.

(4) Schedule "A" to the partnership agreement listing all partners.

Let me know if anything needs clarifying. As we grow, there is more chance of missing letters, a name skipped over, a figure transposition, etc., so speak up if it appears we might have erred. Our next letter will be about July 15th summarizing the first half.

Cordially,

Warren E. Buffett

APPENDIX

TEXAS NATIONAL PETROLEUM

This situation was a run-of-the-mill workout arising from the number one source of workouts in recent years -- the sellouts of oil and gas producing companies.

TNP was a relatively small producer with which I had been vaguely familiar for years.

Early in 1962 I heard rumors regarding a sellout to Union Oil of California. I never act on such information, but in this case it was correct and substantially more money would have been made if we had gone in at the rumor stage rather than the announced stage. However, that's somebody else's business, not mine.

In early April, 1962, the general terms of the deal were announced. TNP had three classes of securities outstanding:

(1) 6 1/2% debentures callable at 104 1/4 which would bear interest until the sale transpired and at that time would be called. There were $6.5 million outstanding of which we purchased $264,000 principal amount before the sale closed.

(2) About 3.7 million shares of common stock of which the officers and directors owned about 40%. The proxy statement estimated the proceeds from the liquidation would produce $7.42 per share. We purchased 64,035 shares during the six months or so between announcement and closing.

(3) 650,000 warrants to purchase common stock at $3.50 per share. Using the proxy statement estimate of $7.42 for the workout on the common resulted in $3.92 as a workout on the warrants. We were able to buy 83,200 warrants or about 13% of the entire issue in six months.

The risk of stockholder disapproval was nil. The deal was negotiated by the controlling stockholders, and the price was a good one. Any transaction such as this is subject to title searches, legal opinions, etc., but this risk could also be appraised at virtually nil. There were no anti-trust problems. This absence of legal or anti-trust problems is not always the case, by any means.

The only fly in the ointment was the obtaining of the necessary tax ruling. Union Oil was using a standard ABC production payment method of financing. The University of Southern California was the production payment holder and there was some delay because of their eleemosynary status.

This posed a new problem for the Internal Revenue Service, but we understood USC was willing to waive this status which still left them with a satisfactory profit after they borrowed all the money from a bank. While getting this ironed out created delay, it did not threaten the deal.

When we talked with the company on April 23rd and 24th, their estimate was that the closing would take place in August or September. The proxy material was mailed May 9th and stated the sale "will be consummated during the summer of 1962 and that within a few months thereafter the greater part of the proceeds will be distributed to stockholders in liquidation." As mentioned earlier, the estimate was $7.42 per share.
Bill Scott attended the stockholders meeting in Houston on May 29th where it was stated they still expected to close on September 1st.

The following are excerpts from some of the telephone conversations we had with company officials in ensuing months:

On June 18th the secretary stated "Union has been told a favorable IRS ruling has been formulated but must be passed on by additional IRS people. Still hoping for ruling in July."

On July 24th the president said that he expected the IRS ruling "early next week."

On August 13th the treasurer informed us that the TNP, Union Oil, and USC people were all in Washington attempting to thrash out a ruling.

On September 18th the treasurer informed us "No news, although the IRS says the ruling could be ready by next week."

The estimate on payout was still $7.42.

The ruling was received in late September, and the sale closed October 31st. Our bonds were called November 13th. We converted our warrants to common stock shortly thereafter and received payments on the common of $3.50 December 14, 1962, $3.90 February 4, 1963, and 15 cent on April 24, 1963. We will probably get another 4 cent in a year or two. On 147,235 shares (after exercise of warrants) even 4 cent per share is meaningful.

This illustrates the usual pattern: (1) the deals take longer than originally projected; and (2) the payouts tend to average a little better than estimates. With TNP it took a couple of extra months, and we received a couple of extra percent.

The financial results of TNP were as follows:

(1) On the bonds we invested $260,773 and had an average holding period of slightly under five months. We received 6 ½% interest on our money and realized a capital gain of $14,446. This works out to an overall rate of return of approximately 20% per annum.

(2) On the stock and warrants we have realized capital gain of $89,304, and we have stubs presently valued at $2,946. From an investment or $146,000 in April, our holdings ran to $731,000 in October. Based on the time the money was employed, the rate or return was about 22% per annum.

In both cases, the return is computed on an all equity investment. I definitely feel some borrowed money is warranted against a portfolio of workouts, but feel it is a very dangerous practice against generals.

We are not presenting TNP as any earth-shaking triumph. We have had workouts which were much better and some which were poorer. It is typical of our bread-and-butter type of operation. We attempt to obtain all facts possible, continue to keep abreast of developments and evaluate all of this in terms of our experience. We certainly don't go into all the deals that come along -- there is considerable variation in their attractiveness. When a workout falls through, the resulting market value shrink is substantial. Therefore, you cannot afford many errors, although we fully realize we are going to have them occasionally.

DEMPSTER MILL MFG.

This situation started as a general in 1956. At that time the stock was selling at $18 with about $72 in book value of which $50 per share was in current assets (Cash, receivables and inventory) less all liabilities. Dempster had earned good money in the past but was only breaking even currently.

The qualitative situation was on the negative side (a fairly tough industry and unimpressive management), but the figures were extremely attractive. Experience shows you can buy 100 situations like this and have perhaps 70 or 80 work out to reasonable profits in one to three years. Just why any particular one should do so is hard to

say at the time of purchase, but the group expectancy is favorable, whether the impetus is from an improved industry situation, a takeover offer, a change in investor psychology, etc.

We continued to buy the stock in small quantities for five years. During most or this period I was a director and was becoming consistently less impressed with the earnings prospects under existing management. However, I also became more familiar with the assets and operations and my evaluation of the quantitative factors remained very favorable.

By mid-1961 we owned about 30% or Dempster (we had made several tender offers with poor results), but in August and September 1961 made, several large purchases at $30.25 per share, which coupled with a subsequent tender offer at the same price, brought our holding to over 70%. Our purchases over the previous five years had been in the $16-$25 range.

On assuming control, we elevated the executive vice president to president to see what he would do unfettered by the previous policies. The results were unsatisfactory and on April 23, 1962 we hired Harry Bottle as president.

Harry was the perfect man for the job. I have recited his triumphs before and the accompanying comparative balance sheets speak louder than any words in demonstrating the re-employment of capital.

	11/30/61	**7/31/63 (unaudited)**
Cash	$166,000	$89,000
US Gov't Securities – at cost		$289,000
Other marketable securities – at market (which exceeds cost)		$2,049,000
Total Cash and Securities	**$166,000**	**$2,436,000**
Accounts receivable (net)	$1,040,000	$864,000
Inventory	$4,203,000	$890,000
Prepaid expenses, etc.	$82,000	$12,000
Current Assets	**$5,491,000**	**$4,202,000**
Other Assets	$45,000	$62,000
Net Plant and Equipment	$1,383,000	$862,000
Total Assets	**$6,919,000**	**$5,126,000**
Notes Payable	$1,230,000	
Other Liability	$1,088,000	$274,000
Total Liabilities	**$2,318,000**	**$274,000**
Net worth		
60,146 shs. 11/30/61		
62,146 shs. 7/31/63	$4,601,000	$4,852,000
Total liabilities and net worth	**$6,919,000**	**$5,126,000**

Harry:

(1) took the inventory from over $4 million (much of it slow moving) to under $1 million reducing carrying costs and obsolescence risks tremendously;

(2) correspondingly freed up capital for marketable security purchases from which we gained over

$400,000

(3) cut administration and selling expense from $150,000 to $75,000 per month;

(4) cut factory overhead burden from $6 to $4.50 per direct labor hour;

(5) closed the five branches operating unprofitably (leaving us with three good ones) and replaced them with more productive distributors;

(6) cleaned up a headache at an auxiliary factory operation at Columbus, Nebraska;

(7) eliminated jobbed lines tying up considerable money (which could be used profitably in securities) while producing no profits;

(8) adjusted prices of repair parts, thereby producing an estimated $200,000 additional profit with virtually no loss of volume; and most important;

(9) through these and many other steps, restored the earning capacity to a level commensurate with the capital employed.

In 1963, the heavy corporate taxes we were facing (Harry surprised me by the speed with which he had earned up our tax loss carry-forward) coupled with excess liquid funds within the corporation compelled us to either in some way de-incorporate or to sell the business.

We set out to do either one or the other before the end of 1963. De-incorporating had many problems but would have, in effect, doubled earnings for our partners and also eliminated the problem of corporate capital gain tax on Dempster securities.

At virtually the last minute, after several earlier deals had fallen through at reasonably advanced stages, a sale of assets was made. Although there were a good many wrinkles to the sale, the net effect was to bring approximately book value. This, coupled with the gain we have in our portfolio of marketable securities, gives us a realization of about $80 per share. Dempster (now named First Beatrice Corp. - we sold the name to the new Co.) is down to almost entirely cash and marketable securities now. On BPL's yearend audit, our First Beatrice holdings were valued at asset value (with securities at market) less a $200,000 reserve for various contingencies.

I might mention that we think the buyers will do very well with Dempster. They impress us as people of ability and they have sound plans to expand the business and its profitability. We would have been quite happy to operate Dempster on an unincorporated basis, but we are also quite happy to sell it for a reasonable price. Our business is making excellent purchases -- not making extraordinary sales.

Harry works the same way I do -- he likes big carrots. He is presently a limited partner of BPL, and the next belt-tightening operation we have, he's our man.

The Dempster saga points up several morals:

(1) Our business is one requiring patience. It has little in common with a portfolio of high-flying glamour stocks and during periods of popularity for the latter, we may appear quite stodgy.

It is to our advantage to have securities do nothing price wise for months, or perhaps years, why we are buying them. This points up the need to measure our results over an adequate period of time. We

suggest three years as a minimum.

(2) We cannot talk about our current investment operations. Such an open-mouth policy could never improve our results and in some situations could seriously hurt us. For this reason, should anyone, including partners, ask us whether we are interested in any security, we must plead the "5th Amendment."

BUFFETT PARTNERSHIP, LTD.
810 KIEWIT PLAZA
OMAHA 31, NEBRASKA

July 8, 1964

First Half Performance

The whole family is leaving for California on June 23rd so I am fudging a bit on this report and writing it June 18th. However, for those of you who set your watches by the receipt of our letters. I will maintain our usual chronological symmetry in reporting, leaving a few blanks which Bill will fill in after the final June 30th figures are available.

During the first half of 1964 the Dow-Jones Industrial Average (hereinafter called the "DOW") advanced from 762.95 to 831.50. If one had owned the Dow during this period, dividends of approximately 14.40 would have been received, bringing the overall return from the Dow during the first half to plus 10.0%. As I write this on June 18th, it appears that our results will differ only insignificantly from those of the Dow. I would feel much better reporting to you that the Dow had broken even, and we had been plus 5%, or better still, that the Dow had been minus 10%, and we had broken even. I have always pointed out, however, that gaining an edge on the Dow is more difficult for us in advancing markets than in static or declining ones.

To bring the record up to date, the following summarizes the performance of the Dow, the performance of the Partnership before allocation to the general partner and the limited partners' results:

Year	**Overall Results From Dow (1)**	**Partnership Results (2)**	**Limited Partners' Results (3)**
1957	-8.4%	10.4%	9.3%
1958	38.5%	40.9%	32.2%
1959	20.0%	25.9%	20.9%
1960	-6.2%	22.8%	18.6%
1961	22.4%	45.9%	35.9%
1962	-7.6%	13.9%	11.9%
1963	20.6%	38.7%	30.5%
1st half 1964	10.9%	12.0%	10.5%
Cumulative results	**116.1%**	**521.0%**	**354.4%**
Annual compounded rate	**10.8%**	**27.6%**	**22.2%**

(See next page for footnotes to table.)

Footnotes to preceding table:

(1) Based on yearly changes in the value of the Dow plus dividends that would have been received through ownership of the Dow during that year. The table includes all complete years of partnership activity.

(2) For 1957-61 consists of combined results of all predecessor limited partnerships operating throughout the entire year after all expenses but before distributions to partners or allocations to the general partner.

(3) For 1957-61 computed on the basis of the preceding column of partnership results allowing for

allocation to the general partner based up on the present partnership agreement, but before monthly withdrawals by limited partners.

Buying activities during the first half were quite satisfactory. This is of particular satisfaction to me since I consider the buying end to be about 90% of this business. Our General category now includes three companies where B.P.L. is the largest single stockholder. These stocks have been bought and are continuing to be bought at prices considerably below their value to a private owner. We have been buying one of these situations for approximately eighteen months and both of the others for about a year. It would not surprise me if we continue to do nothing but patiently buy these securities week after week for at least another year, and perhaps even two years or more.

What we really like to see in situations like the three mentioned above is a condition where the company is making substantial progress in terms of improving earnings, increasing asset values, etc., but where the market price of the stock is doing very little while we continue to acquire it. This doesn't do much for our short-term performance, particularly relative to a rising market, but it is a comfortable and logical producer of longer-term profits. Such activity should usually result in either appreciation of market prices from external factors or the acquisition by us of a controlling position in a business at a bargain price. Either alternative suits me.

It is important to realize, however, that most of our holdings in the General category continue to be securities which we believe to be considerably undervalued, but where there is not the slightest possibility that we could have a controlling position. We expect the market to justify our analyses of such situations in a reasonable period of time, but we do not have the two strings to our bow mentioned in the above paragraph working for us in these securities.

Investment Companies

We regularly compare our results with the two largest open-end investment companies (mutual funds) that follow a policy of being typically 95%-100% invested in common stocks, and the two largest diversified closed-end investment companies. These four companies, Massachusetts Investors Trust, Investors Stock Fund, Tri-Continental Corp., and Lehman Corp., manage over $4 billion and are probably typical of most of the $28 billion investment company industry. Their results are shown below. My opinion is that this performance roughly parallels that of the overwhelming majority of other investment advisory organizations which handle, in aggregate, vastly greater sums.

Year	Mass. Inv. Trust (1)	Investors Stock (1)	Lehman (2)	Tri-Cont. (2)	Dow	Limited Partners
1957	-11.4%	-12.4%	-11.4%	-2.4%	-8.4%	9.3%
1958	42.7%	47.5%	40.8%	33.2%	38.5%	32.2%
1959	9.0%	10.3%	8.1%	8.4%	20.0%	20.9%
1960	-1.0%	-0.6%	2.5%	2.8%	-6.2%	18.6%
1961	25.6%	24.9%	23.6%	22.5%	22.4%	35.9%
1962	-9.8%	-13.4%	-14.4%	-10.0%	-7.6%	11.9%
1963	20.0%	16.5%	23.7%	18.3%	20.6%	30.5%
1st half 1964	11.0%	9.5%	9.6%	8.6%	10.9%	10.5%
Cumulative Results	105.8%	95.5%	98.2%	105.1%	116.1%	354.4%
Annual Compounded Rate	10.1%	9.4%	9.6%	10.1%	10.8%	22.2%

(1) Computed from changes in asset value plus any distributions to holders of record during year.

(2) From 1964 Moody's Bank & Finance Manual for 1957-63. Estimated for first half 1964.

These figures continue to show that the most highly paid and respected investment management has difficulty matching the performance of an unmanaged index of blue chip stocks. The results of these companies in some ways resemble the activity of a duck sitting on a pond. When the water (the market) rises, the duck rises; when it falls, back goes the duck. SPCA or no SPCA, I think the duck can only take the credit (or blame) for his own activities. The rise and fall of the lake is hardly something for him to quack about. The water level has been of great importance to B.P.L's performance as the table on page one indicates. However, we have also occasionally flapped our wings.

I would like to emphasize that I am not saying that the Dow is the only way of measuring investment performance in common stocks. However, I do say that all investment managements (including self-management) should be subjected to objective tests, and that the standards should be selected a priori rather than conveniently chosen retrospectively.

The management of money is big business. Investment managers place great stress on evaluating company managements in the auto industry, steel industry, chemical industry, etc. These evaluations take enormous amounts of work, are usually delivered with great solemnity, and are devoted to finding out which companies are well managed and which companies have management weaknesses. After devoting strenuous efforts to objectively measuring the managements of portfolio companies, it seems strange indeed that similar examination is not applied to the portfolio managers themselves. We feel it is essential that investors and investment managements establish standards of performance and, regularly and objectively, study their own results just as carefully as they study their investments.

We will regularly follow this policy wherever it may lead. It is perhaps too obvious to say that our policy of measuring performance in no way guarantees good results--it merely guarantees objective evaluation. I want to stress the points mentioned in the "Ground Rules" regarding application of the standard--namely that it should be applied on at least a three-year basis because of the nature of our operation and also that during a speculative boom we may lag the field. However, one thing I can promise you. We started out with a 36-inch yardstick and we'll keep it that way. If we don't measure up, we won't change yardsticks. In my opinion, the entire field of investment management, involving hundreds of billions of dollars, would be more satisfactorily conducted if everyone had a good yardstick for measurement of ability and sensibly applied it. This is regularly done by most people in the conduct of their own business when evaluating markets, people, machines, methods, etc., and money management is the largest business in the world.

Taxes

We entered 1964 with net unrealized gains of $2,991,090 which is all attributable to partners belonging during 1963. Through June 30th we have realized capital gains of $2,826,248.76 (of which 96% are long term) so it appears very likely that at least all the unrealized appreciation attributable to your interest and reported to you in our letter of January 25, 1964, (item 3) will be realized this year. I again want to emphasize that this has nothing to do with how we are doing. It is possible that I could have made the above statement, and the market value of your B.P.L. interest could have shrunk substantially since January 1st, so the fact that we have large realized gains is no cause for exultation. Similarly when our realized gains are very small there is not necessarily any reason to be discouraged. We do not play any games to either accelerate or defer taxes. We make investment decisions based on our evaluation of the most profitable combination of probabilities. If this means paying taxes I'm glad the rates on long-term capital gains are as low as they are.

As previously stated in our most recent tax letter of April 1, 1964 the safe course to follow on interim estimates

is to pay the same estimated tax for 1964 as your actual tax was for 1963. There can be no penalties if you follow this procedure.

The tax liability for partners who entered January 1st will, of course, be quite moderate, as it always is in the first year for any partner. This occurs because realized capital gains are first attributed to old partners having an interest in unrealized appreciation. This, again, of course, has nothing to do with economic performance. All limited partners, new and old, (except for Bill Scott, Ruth Scott and Susan Buffett per paragraph five of the Partnership Agreement) end up with exactly the same results. As usual, net ordinary income for all partners is nominal to date.

As in past years, we will have a letter out about November 1st (to partners and those who have indicated an interest, to us by that time in becoming partners) with the amendment to the Partnership Agreement, Commitment Letter for 1965, estimate or the 1964 tax situation, etc. In the meantime, keep Bill busy this summer clearing up anything in this letter that comes out fuzzy.

Cordially,

Warren E. Buffett

BUFFETT PARTNERSHIP, LTD.
810 KIEWIT PLAZA
OMAHA 31, NEBRASKA

January 18, 1965

Our Performance in 1964

Although we had an overall gain of $4,846,312.37 in 1964, it was not one of our better years as judged by our fundamental yardstick, the Dow-Jones Industrial Average (hereinafter called the "Dow"). The overall result for BPL was plus 27.8% compared to an overall plus 18.7% for the Dow. The overall result for limited partners was plus 22.3%. Both the advantage of 9.1 percentage points on a partnership basis and 3.6 points by the limited partners were the poorest since 1959, which was a year of roughly comparable gains for the Dow.

Nevertheless, I am not depressed. It was a strong year for the general market, and it is always tougher for us to outshine the Dow in such a year. We are certain to have years when the Dow gives us a drubbing and, in some respects, I feel rather fortunate that 1964 wasn't the year. Because of the problems that galloping markets pose for us, a Dow repeat in 1965 of 1964 results would make it most difficult for us to match its performance, let alone surpass it by a decent margin.

To bring the record up to date, the following summarizes the year-by-year performance of the Dow, the performance of the Partnership before allocation to the general partner, and the limited partner's results:

Year	Overall Results From Dow (1)	Partnership Results (2)	Limited Partners' Results (3)
1957	-8.4%	10.4%	9.3%
1958	38.5%	40.9%	32.2%
1959	20.0%	25.9%	20.9%
1960	-6.2%	22.8%	18.6%
1961	22.4%	45.9%	35.9%
1962	-7.6%	13.9%	11.9%
1963	20.6%	38.7%	30.5%
1964	18.7%	27.8%	22.3%

(1) Based on yearly changes in the value of the Dow plus dividends that would have been received through ownership of the Dow during that year. The table includes all complete years of partnership activity.

(2) For 1957-61 consists of combined results of all predecessor limited partnerships operating throughout the entire year after all expenses, but before distributions to partners or allocations to the general partner.

(3) For 1957-61 computed on the basis of the preceding column of partnership results allowing for allocation to the general partner based upon the present partnership agreement, but before monthly withdrawals by limited partners.

On a cumulative or compounded basis, the results are:

Year	Overall Results From Dow	Partnership Results	Limited Partners' Results
1957	-8.4%	10.4%	9.3%
1957 – 58	26.9%	55.6%	44.5%

1957 – 59	52.3%	95.9%	74.7%
1957 – 60	42.9%	140.9%	107.2%
1957 – 61	74.9%	251.0%	181.6%
1957 – 62	61.6%	299.8%	215.1%
1957 – 63	94.9%	454.5%	311.2%
1957 – 64	131.3%	608.7%	402.9%
Annual Compounded Rate	**11.1%**	**27.7%**	**22.3%**

Investment Companies

We regularly compare our results with the two largest open-end investment companies (mutual funds) that follow a policy of being typically 95-100% invested in common stock, and the two largest diversified closed-end investment companies. These four companies, Massachusetts Investors Trust, Investors Stock Fund, Tri-Continental Corporation, and Lehman Corporation, manage about $4.5 billion, are owned by about 550,000 shareholders, and are probably typical of most of the $30 billion investment company industry. My opinion is that their results roughly parallel those of the overwhelming majority of other investment advisory organizations which handle, in aggregate, vastly greater sums.

The purpose of this tabulation, which is shown below, is to illustrate that the Dow is no pushover as an index of investment achievement. The advisory talent managing just the four companies shown commands annual fees of over $8 million and this represents a very small fraction of the professional investment management industry. The public batting average of this highly-paid and widely respected talent indicates performance a shade below that of the Dow, an unmanaged index.

YEARLY RESULTS

Year	Mass. Inv. Trust (1)	Investors Stock (1)	Lehman (2)	Tri-Cont (2)	Dow	Limited Partners
1957	-11.4%	-12.4%	-11.4%	-2.4%	-8.4%	9.3%
1958	42.7%	47.5%	40.8%	33.2%	38.5%	32.2%
1959	9.0%	10.3%	8.1%	8.4%	20.0%	20.9%
1960	-1.0%	-0.6%	2.5%	2.8%	-6.2%	18.6%
1961	25.6%	24.9%	23.6%	22.5%	22.4%	35.9%
1962	-9.8%	-13.4%	-14.4%	-10.0%	-7.6%	11.9%
1963	20.0%	16.5%	23.7%	18.3%	20.6%	30.5%
1964	15.9%	14.3%	13.6%	12.6%	18.7%	22.3%

(1) Computed from changes in asset value plus any distributions to holders of record during year.

(2) From 1964 Moody's Bank & Finance Manual for 1957-63. Estimated for 1964.

COMPOUNDED

Year	Mass. Inv. Trust (1)	Investors Stock (1)	Lehman (2)	Tri-Cont (2)	Dow	Limited Partners
1957	-11.4%	-12.4%	-11.4%	-2.4%	-8.4%	9.3%
1957 – 58	26.4%	29.2%	24.7%	30.0%	26.9%	44.5%
1957 – 59	37.8%	42.5%	34.8%	40.9%	52.3%	74.7%
1957 – 60	36.4%	41.6%	38.2%	44.8%	42.9%	107.2%

1957 – 61	71.3%	76.9%	70.8%	77.4%	74.9%	181.6%
1957 – 62	54.5%	53.2%	46.2%	59.7%	61.6%	215.1%
1957 – 63	85.4%	78.5%	80.8%	88.9%	94.9%	311.2%
1957 – 64	114.9%	104.0%	105.4%	112.7%	131.3%	402.9%
Annual Compounded Rate	**10.0%**	**9.3%**	**9.4%**	**9.9%**	**11.1%**	**22.3%**

The repetition of these tables has caused partners to ask: "Why in the world does this happen to very intelligent managements working with (1) bright, energetic staff people, (2) virtually unlimited resources, (3) the most extensive business contacts, and (4) literally centuries of aggregate investment experience?" (The latter qualification brings to mind the fellow who applied for a job and stated he had twenty years of experience - which was corrected by the former employer to read “one year's experience -twenty times.”)

This question is of enormous importance, and you would expect it to be the subject of considerable study by investment managers and substantial investors. After all, each percentage point on $30 billion is $300 million per year. Curiously enough, there is practically nothing in the literature of Wall Street attracting this problem, and discussion of it is virtually absent at security analyst society meetings, conventions, seminars, etc. My opinion is that the first job of any investment management organization is to analyze its own techniques and results before pronouncing judgment on the managerial abilities and performance of the major corporate entities of the United States.

In the great majority of cases the lack of performance exceeding or even matching an unmanaged index in no way reflects lack of either intellectual capacity or integrity. I think it is much more the product of: (1) group decisions - my perhaps jaundiced view is that it is close to impossible for outstanding investment management to come from a group of any size with all parties really participating in decisions; (2) a desire to conform to the policies and (to an extent) the portfolios of other large well-regarded organizations; (3) an institutional framework whereby average is "safe" and the personal rewards for independent action are in no way commensurate with the general risk attached to such action; (4) an adherence to certain diversification practices which are irrational; and finally and importantly, (5) inertia.

Perhaps the above comments are unjust. Perhaps even our statistical comparisons are unjust. Both our portfolio and method of operation differ substantially from the investment companies in the table. However, I believe both our partners and their stockholders feel their managements are seeking the same goal - the maximum long-term average return on capital obtainable with the minimum risk of permanent loss consistent with a program of continuous investment in equities. Since we should have common goals, and most partners, as an alternative to their interest in BPL, would probably have their funds invested in media producing results comparable with these investment companies, I feel their performance record is meaningful in judging our own results.

There is no question that an important service is provided to investors by investment companies, investment advisors, trust departments, etc. This service revolves around the attainment of adequate diversification, the preservation of a long-term outlook, the ease of handling investment decisions and mechanics, and most importantly, the avoidance of the patently inferior investment techniques which seem to entice some individuals. All but a few of the organizations do not specifically promise to deliver superior investment performance although it is perhaps not unreasonable for the public to draw such an inference from their advertised emphasis on professional management.

One thing I pledge to you as partners - just as I consider the previously stated performance comparison to be meaningful now, so will I in future years, no, matter what tale unfolds. Correspondingly, I ask that you, if you do not feel such a standard to be relevant, register such disagreement now and suggest other standards which can be applied prospectively rather than retrospectively.

One additional thought - I have not included a column in my table for the most widely-used investment advisor in the world - Bell management. People who watch their weight, golf scores, and fuel bills seem to shun quantitative evaluation of their investment management skills although it involves the most important client in the world - themselves. While it may be of academic interest to evaluate the management accomplishments of Massachusetts Investors Trust or Lehman Corporation, it is of enormous dollars-and-cents importance to evaluate objectively the accomplishments of the fellow who is actually handling your money - even if it's you.

The Question of Conservatism

In looking at the table of investment company performance, the question might be asked: "Yes, but aren't those companies run more conservatively than the Partnership?" If you asked that question of the investment company managements, they, in absolute honesty, would say they were more conservative. If you asked the first hundred security analysts you met, I am sure that a very large majority of them also would answer for the investment companies. I would disagree. I have over 90% of my net worth in BPL, and most of my family have percentages in that area, but of course, that only demonstrates the sincerity of my view - not the validity of it.

It is unquestionably true that the investment companies have their money more conventionally invested than we do. To many people conventionality is indistinguishable from conservatism. In my view, this represents erroneous thinking. Neither a conventional nor an unconventional approach, per se, is conservative.

Truly conservative actions arise from intelligent hypotheses, correct facts and sound reasoning. These qualities may lead to conventional acts, but there have been many times when they have led to unorthodoxy. In some corner of the world they are probably still holding regular meetings of the Flat Earth Society.

We derive no comfort because important people, vocal people, or great numbers of people agree with us. Nor do we derive comfort if they don't. A public opinion poll is no substitute for thought. When we really sit back with a smile on our face is when we run into a situation we can understand, where the facts are ascertainable and clear, and the course of action obvious. In that case - whether other conventional or unconventional - whether others agree or disagree - we feel - we are progressing in a conservative manner.

The above may seem highly subjective. It is. You should prefer an objective approach to the question. I do. My suggestion as to one rational way to evaluate the conservativeness of past policies is to study performance in declining markets. We have only three years of declining markets in our table and unfortunately (for purposes of this test only) they were all moderate declines. In all three of these years we achieved appreciably better investment results than any of the more conventional portfolios.

Specifically, if those three years had occurred in sequence, the cumulative results would have been:

Tri-Continental Corp.	-9.7%
Dow	-20.6%
Mass. Investors Trust	-20.9%
Lehman Corp.	-22.3%
Investors Stock Fund	-24.6%
Limited Partners	+45.0%

We don't think this comparison is all important, but we do think it has some relevance. We certainly think it makes more sense than saying "We own (regardless of price) A.T. &T., General Electric, IBM and General Motors and are therefore conservative." In any event, evaluation of the conservatism of any investment program or management (including self-management) should be based upon rational objective standards, and I suggest performance in declining markets to be at least one meaningful test.

The Joys of Compounding

Readers of our early annual letters registered discontent at a mere recital of contemporary investment experience, but instead hungered for the intellectual stimulation that only could be provided by a depth study of investment strategy spanning the centuries. Hence, this section.

Our last two excursions into the mythology of financial expertise have revealed that purportedly shrewd investments by Isabella (backing the voyage of Columbus) and Francis I (original purchase of Mona Lisa) bordered on fiscal lunacy. Apologists for these parties have presented an array of sentimental trivia. Through it all, our compounding tables have not been dented by attack.

Nevertheless, one criticism has stung a bit. The charge has been made that this column has acquired a negative tone with only the financial incompetents of history receiving comment. We have been challenged to record on these pages a story of financial perspicacity which will be a bench mark of brilliance down through the ages.

One story stands out. This, of course, is the saga of trading acumen etched into history by the Manhattan Indians when they unloaded their island to that notorious spendthrift, Peter Minuit in 1626. My understanding is that they received $24 net. For this, Minuit received 22.3 square miles which works out to about 621,688,320 square feet. While on the basis of comparable sales, it is difficult to arrive at a precise appraisal, a $20 per square foot estimate seems reasonable giving a current land value for the island of $12,433,766,400 ($12 1/2 billion). To the novice, perhaps this sounds like a decent deal. However, the Indians have only had to achieve a 6 1/2% return (The tribal mutual fund representative would have promised them this.) to obtain the last laugh on Minuit. At 6 1/2%, $24 becomes $42,105,772,800 ($42 billion) in 338 years, and if they just managed to squeeze out an extra half point to get to 7%, the present value becomes $205 billion.

So much for that.

Some of you may view your investment policies on a shorter term basis. For your convenience, we include our usual table indicating the gains from compounding $100,000 at various rates:

	4%	8%	12%	16%
10 Years	$48,024	$115,892	$210,584	$341,143
20 Years	$119,111	$366,094	$864,627	$1,846,060
30 Years	$224,337	$906,260	$2,895,970	$8,484,940

This table indicates the financial advantages of:

(1) A long life (in the erudite vocabulary of the financial sophisticate this is referred to as the Methusalah Technique)

(2) A high compound rate

(3) A combination of both (especially recommended by this author)

To be observed are the enormous benefits produced by relatively small gains in the annual earnings rate. This explains our attitude which while hopeful of achieving a striking margin of superiority over average investment results, nevertheless, regards every percentage point of investment return above average as having real meaning.

Our Goal

You will note that there are no columns in the preceding table for the 27.7% average of the Partnership during its eight-year lifespan or the 22.3% average of the limited partners. Such figures are nonsensical for the long term for several reasons: (Don't worry about me "holding back" to substantiate this prophecy.)

(1) Any significant sums compounded at such rates take on national debt proportions at alarming speed.

(2) During our eight-year history a general revaluation of securities has produced average annual rates of overall gain from the whole common stock field which I believe unattainable in future decades. Over a span of 20 or 30 years, I would expect something more like 6% - 7% overall annual gain from the Dow instead of the 11.1% during our brief history. This factor alone would tend to knock 4 points or so off of our annual compounding rate. It would only take a minus 20.5% year in 1965 for the Dow to bring it down to a 7% average figure for the nine years. Such years (or worse) should definitely be expected from time to time by those holding equity investments. If a 20% or 30% drop in the market value of your equity holdings (such as BPL) is going to produce emotional or financial distress, you should simply avoid common stock type investments. In the words of the poet - Harry Truman – "If you can't stand the heat, stay out of the kitchen. It is preferable, of course, to consider the problem before you enter the "kitchen."

(3) We do not consider it possible on an extended basis to maintain the 16.6 percentage point advantage over the Dow of the Partnership or the 11.2 percentage point edge enjoyed by the limited partners. We have had eight consecutive years in which our pool of money has out-performed the Dow, although the profit allocation arrangement left the limited partners short of Dow results in one of those years. We are certain to have years (note the plural) when the Partnership results fall short of the Dow despite considerable gnashing of teeth by the general partner (I hope not too much by the limited partners). When that happens our average margin of superiority will drop sharply. I might say that I also think we will continue to have some years of very decent margins in our favor. However, to date we have benefited by the fact that we have not had a really mediocre (or worse) year included in our average, and this obviously cannot be expected to be a permanent experience.

So what can we expect to achieve? Of course, anything I might say is largely guesswork, and my own investment philosophy has developed around the theory that prophecy reveals far more of the frailties of the prophet than it reveals of the future.

Nevertheless, you, as partners, are entitled to know my expectations, tenuous as they may be. I am hopeful that our longer term experience will unfold along the following basis:

(1) An overall gain from the Dow (including dividends, of course) averaging in the area of 7% per annum, exhibiting customarily wide amplitudes in achieving this average -- say, on the order or minus 40% to plus 50% at the extremes with the majority of years in the minus 10% to plus 20% range;

(2) An average advantage of ten percentage points per annum for BPL before allocation to the general partner - again with large amplitudes in the margin from perhaps 10 percentage points worse than the Dow in a bad year to 25 percentage points better when everything clicks; and

(3) The product of these two assumptions gives an average of 17% to BPL or about 14% to limited partners. This figure would vary enormously from year to year; the final amplitudes, of course, depending, on the interplay of the extremes hypothesized in (1) and (2).

I would like to emphasize that the above is conjecture, perhaps heavily influenced by self-interest, ego, etc. Anyone with a sense of financial history knows this sort of guesswork is subject to enormous error. It might better be left out of this letter, but it is a question frequently and legitimately asked by partners. Long-range

expectable return is the primary consideration of all of us belonging to BPL, and it is reasonable that I should be put on record, foolish as that may later make me appear. My rather puritanical view is that any investment manager, whether operating as broker, investment counselor, trust department, Investment Company, etc., should be willing to state unequivocally what he is going to attempt to accomplish and how he proposes to measure the extent to which he gets the job done.

Our Method of Operation

In past annual letters I have always utilized three categories to describe investment operations we conduct. I now feel that a four-category division is more appropriate. Partially, the addition of a new section - "Generals Relatively Undervalued" - reflects my further consideration of essential differences that have always existed to a small extent with our "Generals" group. Partially, it reflects the growing importance of what once was a very small sub-category but is now a much more significant part of our total portfolio. This increasing importance has been accompanied by excellent results to date justifying significant time and effort devoted to finding additional opportunities in this area. Finally, it partially reflects the development and implementation of a new and somewhat unique investment technique designed to improve the expectancy and consistency of operations in this category. Therefore, our four present categories are:

1. "Generals -Private Owner Basis" - a category of generally undervalued stocks, determined by quantitative standards, but with considerable attention also paid to the qualitative factor. There is often little or nothing to indicate immediate market improvement. The issues lack glamour or market sponsorship. Their main qualification is a bargain price; that is, an overall valuation of the enterprise substantially below what careful analysis indicates its value to a private owner to be. Again, let me emphasize that while the quantitative comes first and is essential, the qualitative is important. We like good management - we like a decent industry - we like a certain amount of "ferment" in a previously dormant management or stockholder group. But, we demand value.

Many times in this category we have the desirable "two strings to our bow" situation where we should either achieve appreciation of market prices from external factors or from the acquisition of a controlling position in a business at a bargain price. While the former happens in the overwhelming majority of cases, the latter represents an insurance policy most investment operations don't have. We have continued to enlarge the positions in the three companies described in our 1964 midyear report where we are the largest stockholder. All three companies are increasing their fundamental value at a very satisfactory rate, and we are completely passive in two situations and active only on a very minor scale in the third. It is unlikely that we will ever take a really active part in policy-making in any of these three companies, but we stand ready if needed.

2. "Generals -Relatively Undervalued" - this category consists of securities selling at prices relatively cheap compared to securities of the same general quality. We demand substantial discrepancies from current valuation standards, but (usually because of large size) do not feel value to a private owner to be a meaningful concept. It is important in this category, of course, that apples be compared to apples - and not to oranges, and we work hard at achieving that end. In the great majority of cases we simply do not know enough about the industry or company to come to sensible judgments -in that situation we pass.

As mentioned earlier, this new category has been growing and has produced very satisfactory results. We have recently begun to implement a technique, which gives promise of very substantially reducing the risk from an overall change in valuation standards; e.g. I we buy something at 12 times earnings when comparable or poorer quality companies sell at 20 times earnings, but then a major revaluation takes place so the latter only sell at 10 times.
This risk has always bothered us enormously because of the helpless position in which we could be left compared to the "Generals -Private Owner" or "Workouts" types. With this risk diminished, we think this category has a promising future.

3. "Workouts" - these are the securities with a timetable. They arise from corporate activity - sell-outs, mergers, reorganizations, spin-offs, etc. In this category we are not talking about rumors or "inside information" pertaining to such developments, but to publicly announced activities of this sort. We wait until we can read it in the paper. The risk pertains not primarily to general market behavior (although that is sometimes tied in to a degree), but instead to something upsetting the applecart so that the expected development does not materialize. Such killjoys could include anti-trust or other negative government action, stockholder disapproval, withholding of tax rulings, etc. The gross profits in many workouts appear quite small. It's a little like looking for parking meters with some time left on them. However, the predictability coupled with a short holding period produces quite decent average annual rates of return after allowance for the occasional substantial loss. This category produces more steady absolute profits from year to year than generals do. In years of market decline it should usually pile up a big edge for us; during bull markets it will probably be a drag on performance. On a long-term basis, I expect the workouts to achieve the same sort of margin over the Dow attained by generals.

4. "Controls" - these are rarities, but when they occur they are likely to be of significant size. Unless we start off with the purchase of a sizable block of stock, controls develop from the general - private owner category. They result from situations where a cheap security does nothing pricewise for such an extended period of time that we are able to buy a significant percentage of the company's stock. At that point we are probably in a position to assume a degree of or perhaps complete control of the company's activities. Whether we become active or remain relatively passive at this point depends upon our assessment of the company's future and the managements capabilities.

We do not want to get active merely for the sake of being active. Everything else being equal, I would much rather let others do the work. However, when an active role is necessary to optimize the employment of capital, you can be sure we will not be standing in the wings.

Active or passive, in a control situation there should be a built-in profit. The sine qua non of this operation is an attractive purchase price. Once control is achieved, the value of our investment is determined by the value of the enterprise, not the oftentimes irrationalities of the market place.

Any of the three situations where we are now the largest stockholders mentioned under Generals - Private Owner could, by virtue of the two-way stretch they possess, turn into controls. That would suit us fine, but it also suits us if they advance in the market to a price more in line with intrinsic value enabling us to sell them, thereby completing a successful generals - private owner operation.

Investment results in the control category have to be measured on the basis of at least several years. Proper buying takes time. If needed, strengthening management, redirecting the utilization of capital, perhaps effecting a satisfactory sale or merger, etc., are also all factors that make this a business to be measured in years rather than months. For this reason, in controls, we are looking for wide margins of profit -if it appears at all close, we quitclaim.

Controls in the buying stage move largely in sympathy with the Dow. In the later stages their behavior is geared more to that of workouts.

You might be interested to know that the buyers of our former control situation, Dempster Mill Manufacturing, seem to be doing very well with it. This fulfills our expectation and is a source of satisfaction. An investment operation that depends on the ultimate buyer making a bum deal (in Wall Street they call this the "Bigger Fool Theory") is tenuous indeed. How much more satisfactory it is to buy at really bargain prices so that only an average disposition brings pleasant results.

As I have mentioned in the past, the division of our portfolio among categories is largely determined by the

accident of availability. Therefore, in any given year the mix between generals, workouts, or controls is largely a matter of chance, and this fickle factor will have a great deal to do with our performance relative to the Dow. This is one of many reasons why single year's performance is of minor importance and good or bad, should never be taken too seriously.

To give an example of just how important the accident of division between these categories is, let me cite the example of the past three years. Using an entirely different method of calculation than that used to measure the performance of BPL in entirety, whereby the average monthly investment at market value by category is utilized, borrowed money and office operating expenses excluded, etc., (this gives the most accurate basis for intergroup comparisons but does not reflect overall BPL results) the generals (both present categories combined), workouts, and the Dow, shape up as follows:

Year	Generals	Workouts	Dow
1962	-1.0%	14.6%	-8.6%
1963	20.5%	30.6%	18.4%
1964	27.8%	10.3%	16.7%

Obviously the workouts (along with controls) saved the day in 1962, and if we had been light in this category that year, our final result would have been much poorer, although still quite respectable considering market conditions during the year. We could just as well have had a much smaller percentage of our portfolio in workouts that year; availability decided it, not any notion on my part as to what the market was going to do. Therefore, it is important to realize that in 1962 we were just plain lucky regarding mix of categories.

In 1963 we had one sensational workout which greatly influenced results, and generals gave a good account of themselves, resulting in a banner year. If workouts had been normal, (say, more like 1962) we would have looked much poorer compared to the Dow. Here it wasn't our mix that did much for us, but rather excellent situations.

Finally, in 1964 workouts were a big drag on performance. This would be normal in any event during a big plus year for the Dow such as 1964, but they were even a greater drag than expected because of mediocre experience. In retrospect it would have been pleasant to have been entirely in generals, but we don’t play the game in retrospect.

I hope the preceding table drives home the point that results in a given year are subject to many variables - some regarding which we have little control or insight. We consider all categories to be good businesses and we are very happy we have several to rely on rather than just one. It makes for more discrimination within each category and reduces the chance we will be put completely out of operation by the elimination of opportunities in a single category.

Taxes

We have had a chorus of groans this year regarding partners' tax liabilities. Of course, we also might have had a few if the tax sheet had gone out blank.

More investment sins are probably committed by otherwise quite intelligent people because of "tax considerations" than from any other cause. One of my friends - a noted West Coast philosopher maintains that a majority of life's errors are caused by forgetting what one is really trying to do. This is certainly the case when an emotionally supercharged element like taxes enters the picture (I have another friend -a noted East Coast philosopher who says it isn't the lack of representation he minds -it's the taxation).

Let's get back to the West Coast. What is one really trying to do in the investment world? Not pay the least

taxes, although that may be a factor to be considered in achieving the end. Means and end should not be confused, however, and the end is to come away with the largest after-tax rate of compound. Quite obviously if two courses of action promise equal rates of pre-tax compound and one involves incurring taxes and the other doesn't the latter course is superior. However, we find this is rarely the case.

It is extremely improbable that 20 stocks selected from, say, 3000 choices are going to prove to be the optimum portfolio both now and a year from now at the entirely different prices (both for the selections and the alternatives) prevailing at that later date. If our objective is to produce the maximum after-tax compound rate, we simply have to own the most attractive securities obtainable at current prices, And, with 3,000 rather rapidly shifting variables, this must mean change (hopefully “tax-generating” change).

It is obvious that the performance of a stock last year or last month is no reason, per se, to either own it or to not own it now. It is obvious that an inability to "get even" in a security that has declined is of no importance. It is obvious that the inner warm glow that results from having held a winner last year is of no importance in making a decision as to whether it belongs in an optimum portfolio this year.

If gains are involved, changing portfolios involves paying taxes. Except in very unusual cases (I will readily admit there are some cases), the amount of the tax is of minor importance if the difference in expectable performance is significant. I have never been able to understand why the tax comes as such a body blow to many people since the rate on long-term capital gain is lower than on most lines of endeavor (tax policy indicates digging ditches is regarded as socially less desirable than shuffling stock certificates).

I have a large percentage of pragmatists in the audience so I had better get off that idealistic kick. There are only three ways to avoid ultimately paying the tax: (1) die with the asset - and that's a little too ultimate for me even the zealots would have to view this "cure" with mixed emotions; (2) give the asset away - you certainly don't pay any taxes this way, but of course you don't pay for any groceries, rent, etc., either; and (3) lose back the gain if your mouth waters at this tax-saver, I have to admire you -you certainly have the courage of your convictions.

So it is going to continue to be the policy of BPL to try to maximize investment gains, not minimize taxes. We will do our level best to create the maximum revenue for the Treasury -at the lowest rates the rules will allow.

An interesting sidelight on this whole business of taxes, vis-à-vis investment management, has appeared in the last few years. This has arisen through the creation of so-called "swap funds" which are investment companies created by the exchange of the investment company's shares for general market securities held by potential investors. The dominant sales argument has been the deferment (deferment, when pronounced by an enthusiastic salesman, sometimes comes very close phonetically to elimination) of capital gains taxes while trading a single security for a diversified portfolio. The tax will only finally be paid when the swap fund's shares are redeemed. For the lucky ones, it will be avoided entirely when any of those delightful alternatives mentioned two paragraphs earlier eventuates.

The reasoning implicit in the swapee's action is rather interesting. He obviously doesn't really want to hold what he is holding or he wouldn't jump at the chance to swap it (and pay a fairly healthy commission - usually up to $100,000) for a grab-bag of similar hot potatoes held by other tax-numbed investors. In all fairness, I should point out that after all offerees have submitted their securities for exchange and had a chance to review the proposed portfolio they have a chance to back out but I understand a relatively small proportion do so.

There have been twelve such funds (that I know of) established since origination of the idea in 1960, and several more are currently in the works. The idea is not without appeal since sales totaled well over $600 million. All of the funds retain an investment manager to whom they usually pay 1/2 of 1% of asset value. This investment manager faces an interesting problem; he is paid to manage the fund intelligently (in each of the five largest funds this fee currently ranges from $250,000 to $700,000 per year), but because of the low tax basis inherited

from the contributors of securities, virtually his every move creates capital gains tax liabilities. And, of course, he knows that if he incurs such liabilities, he is doing so for people who are probably quite sensitive to taxes or they wouldn't own shares in the swap fund in the first place.

I am putting all of this a bit strongly, and I am sure there are some cases where a swap fund may be the best answer to an individual's combined tax and investment problems. Nevertheless, I feel they offer a very interesting test-tube to measure the ability of some of the most respected investment advisors when they are trying to manage money without paying (significant) taxes.

The three largest swap funds were all organized in 1961, and combined have assets now of about $300 million. One of these, Diversification Fund, reports on a fiscal year basis which makes extraction of relevant data quite difficult for calendar year comparisons. The other two, Federal Street Fund and Westminster Fund (respectively first and third largest in the group) are managed by investment advisors who oversee at least $2 billion of institutional money.

Here's how they shape up for all full years of existence:

Year	Federal Street	Westminster	Dow
1962	-19.0%	-22.5%	-7.6%
1963	17.0%	18.7%	20.6%
1964	13.8%	12.3%	18.7%
Annual Compounded Rate	2.6%	1.1%	9.8%

This is strictly the management record. No allowance has been made for the commission in entering and any taxes paid by the fund on behalf of the shareholders have been added back to performance.

Anyone for taxes?

Miscellaneous

In the December 21st issue of AUTOMOTIVE NEWS it was reported that Ford Motor Co. plans to spend $700 million in 1965 to add 6,742,000 square feet to its facilities throughout the world. Buffett Partnership, Ltd., never far behind, plans to add 227 1/4 square feet to its facilities in the spring of 1965.

Our growth in net assets from $105,100 (there's no prize for guessing who put in the $100) on May 5, 1956 when the first predecessor limited partnership.(Buffett Associates, Ltd.) was organized, to $26,074,000 on 1/1/65 creates the need for an occasional reorganization in internal routine. Therefore, roughly contemporaneously with the bold move from 682 to 909 ¼ square feet, a highly capable is going to join our organization with responsibility for the administrative (and certain other) functions. This move will particularly serve to free up more of Bill Scott's time for security analysis which is his forte. I'll have more to report on this in the midyear letter.

Bill (who continues to do a terrific job) and his wife have an investment in the Partnership of $298,749, a very large majority of their net worth. Our new associate (his name is being withheld until his present employer has replaced him), along with his wife and children, has made an important investment in the Partnership. Susie and I presently have an interest of $3,406,700 in BPL which represents virtually our entire net worth, with the exception of our continued holding of Mid-Continent Tab Card Co., a local company into which I bought in 1960 when it had less than 10 stockholders. Additionally, my relatives, consisting of three children, mother , two sisters, two brothers-in-law, father-in-Law, four aunts, four cousins and six nieces and nephews, have interests in BPL, directly or indirectly, totaling $1,942,592. So we all continue to eat home cooking.

We continue to represent the ultimate in seasonal businesses --open one day a year. This creates real problems in keeping the paper flowing smoothly, but Beth and Donna continue to do an outstanding job of coping with this and other problems.

Peat, Marwick, Mitchell has distinguished itself in its usual vital role of finding out what belongs to whom. We continue to throw impossible deadlines at them --and they continue to perform magnificently. You will note in their certificate this year that they have implemented the new procedure whereby they now pounce on us unannounced twice a year in addition to the regular yearend effort.

Finally -and most sincerely -let me thank you partners who cooperate magnificently in getting things to us promptly and properly and thereby maximize the time we can spend working where we should be -by the cash register. I am extremely fortunate in being able to spend the great majority of my time thinking about where our money should be invested, rather than getting bogged down in the minutiae that seems to overwhelm so many business entities. We have an organizational structure which makes this efficiency a possibility, and more importantly, we have a group of partners that make it a reality. For this, I am most appreciative and we are all wealthier.

Our past policy has been to admit close relatives of present partners without a minimum capital limitation. This year a flood of children, grandchildren, etc., appeared which called this policy into question; therefore, I have decided to institute a $25,000 minimum on interests of immediate relatives of present partners.

Within the coming two weeks you will receive:

(1) A tax letter giving you all BPL information needed for your 1964 federal income tax return. This letter is the only item that counts for tax purposes.

(2) An audit from Peat, Marwick, Mitchell & Co. for 1964, setting forth the operations and financial position of BPL as well as your own capital account.

(3) A letter signed by me setting forth the status of your BPL interest on 111165. This is identical with the figure developed in the audit.

(4) Schedule “A” to the partnership agreement listing all partners.

Let Bill or me know if anything needs clarifying. Even with our splendid staff our growth means there is more chance of missing letters, overlooked instructions, a name skipped over, a figure transposition, etc., so speak up if you have any question at all that we might have erred. My next letter will be about July 15th" summarizing the first half of this year.

Cordially,

Warren E. Buffett

BUFFETT PARTNERSHIP, LTD.
810 KIEWIT PLAZA
OMAHA 31, NEBRASKA

July 9, 1965

Warren E. Buffett, General Partner
William Scott
John M. Harding

First Half Performance:

During the first half of 1965, the Dow Jones Industrial Average (hereinafter call the "Dow") declined from 874.13 to 868.03. This minor change was accomplished in a decidedly non-Euclidian manner. The Dow instead took the scenic route, reaching a high of 939.62 on May 14th. Adding back dividends on the Dow of 13.49 gives an overall gain through ownership of the Dow for the first half of 7.39 or 0.8%.

We had one of our better periods with an overall gain, before allocation to the general partner, of 10.4% or a 9.6 percentage point advantage over the Dow. To bring the record up to date, the following summarizes the year-by-year performance of the Dow, the performance of the Partnership before allocation to the general partner, and the limited partners' results:

Year	Overall Results From Dow (1)	Partnership Results (2)	Limited Partners' Results (3)
1957	-8.4%	10.4%	9.3%
1958	38.5%	40.9%	32.2%
1959	20.0%	25.9%	20.9%
1960	-6.2%	22.8%	18.6%
1961	22.4%	45.9%	35.9%
1962	-7.6%	13.9%	11.9%
1963	20.6%	38.7%	30.5%
1964	18.7%	27.8%	22.3%
1st half 1965	0.8%	10.4%	9.3%
Cumulative results	**133.2%**	**682.4%**	**449.7%**
Annual compounded rate	**10.5%**	**27.4%**	**22.2%**

(1) Based on yearly changes in the value of the Dow plus dividends that would have been received through ownership of the Dow during that year. The table includes all complete years of partnership activity.
(2) For 1957-61 consists of combined results of all predecessor limited partnerships operating throughout the entire year after all expenses but before distributions to partners or allocations to the general partner.
(3) For 1957-61 computed on the basis of the preceding column of partnership results allowing for allocation to the general partner based upon the present partnership agreement, but before monthly withdrawals by limited partners.

Our constant admonitions have been: (1) that short-term results (less than three years) have little meaning, particularly in reference to an investment operation such as ours that may devote a portion of resources to control situations; and, (2) that our results, relative to the Dow and other common-stock-form media usually will be better in declining markets and may well have a difficult time just matching such media in very strong

markets.

With the latter point in mind, it might be imagined that we struggled during the first four months of the half to stay even with the Dow and then opened up our margin as it declined in May and June. Just the opposite occurred. We actually achieved a wide margin during the upswing and then fell at a rate fully equal to the Dow during the market decline.

I don't mention this because I am proud of such performance – on the contrary, I would prefer it if we had achieved our gain in the hypothesized manner. Rather, I mention it for two reasons: (1) you are always entitled to know when I am wrong as well as right; and, (2) it demonstrates that although we deal with probabilities and expectations, the actual results can deviate substantially from such expectations, particularly on a short-term basis. As mentioned in the most recent annual letter, our long-term goal is to achieve a ten percentage point per annum advantage over the Dow. Our advantage of 9.6 points achieved during the first six months must be regarded as substantially above average. The fortitude demonstrated by our partners in tolerating such favorable variations is commendable. We shall most certainly encounter periods when the variations are in the other direction.

During the first half, a series of purchases resulted in the acquisition of a controlling interest in one of the situations described in the "General Private Owner" section of the last annual letter. When such a controlling interest is acquired, the assets and earning power of the business become the immediate predominant factors in value. When a small minority interest in a company is held, earning power and assets are, of course, very important, but they represent an indirect influence on value which, in the short run, may or may not dominate the factors bearing on supply and demand which result in price.

When a controlling interest is held, we own a business rather then a stock, and a business valuation is appropriate. We have carried our controlling position at a conservative valuation at midyear and will reevaluate it in terms of assets and earning power at yearend. The annual letter, issued in January, 1966, will carry a full story on this current control situation. At this time it is enough to say that we are delighted with both the acquisition cost and the business operation, and even happier about the people we have managing the business.

Investment Companies:

We regularly compare our results with the two largest open-end investment companies (mutual funds) that follow a policy of being, typically, 95-100% invested in common stocks, and the two largest diversified closed-end investment companies. These four companies, Massachusetts Investors Trust, Investors Stock Fund, Tri-Continental Corp., and Lehman Corp., manage over $4 billion and are probably typical of most of the $30 billion investment company industry. Their results are shown in the following table. My opinion is that this performance roughly parallels that of the overwhelming majority of other investment advisory organizations which handle, in aggregate, vastly greater sums.

Year	**Mass. Inv. Trust (1)**	**Investors Stock (1)**	**Lehman (2)**	**Tri-Cont (2)**	**Dow**	**Limited Partners**
1957	-11.4%	-12.4%	-11.4%	-2.4%	-8.4%	9.3%
1958	42.7	47.5	40.8	33.2	38.5	32.2
1959	9.0	10.3	8.1	8.4	20.0	20.9
1960	-1.0	-0.6	2.5	2.8	-6.2	18.6
1961	25.6	24.9	23.6	22.5	22.4	35.9
1962	-9.8	-13.4	-14.4	-10.0	-7.6	11.9
1963	20.0	16.5	23.7	18.7	20.6	30.5
1964	15.9	14.3	14.0	13.6	18.7	22.3
1st half 1965	0.0	-0.6	2.7	0.0	0.8	9.3

Cumulative Results	114.9	102.8	111.7	115.4	133.2	449.7
Annual Compounded Rate	9.4	8.7	9.2	9.5	10.5	22.2

(1) Computed from changes in asset value plus any distributions to holders of record during year.
(2) From 1965 Moody's Bank & Finance Manual for 1957-64. Estimated for first half 1965.

Last year I mentioned that the performance of these companies in some ways resembles the activity of a duck sitting on a pond. When the water (the market) rises, the duck rises; when if falls, back goes the duck. The water level was virtually unchanged during the first half of 1965. The ducks, as you can see from the table, are still sitting on the pond.

As I mentioned earlier in the letter, the ebb of the tide in May and June also substantially affected us. Nevertheless, the fact we had flapped our wings a few times in the preceding four months enabled us to gain a little altitude on the rest of the flock. Utilizing a somewhat more restrained lexicon, James H. Lorie, director of the University of Chicago's Center for Research in Security Prices was quoted in the May 25, 1965, WALL STREET JOURNAL as saying: "There is no evidence that mutual funds select stocks better than by the random method."

Of course, the beauty of the American economic scene has been that random results have been pretty darned good results. The water level has been rising. In our opinion, the probabilities are that over a long period of time, it will continue to rise, though, certainly not without important interruptions. It will be our policy, however, to endeavor to swim strongly, with or against the tide. If our performance declines to a level you can achieve by floating on your back, we will turn in our suits.

Advance Payments and Advance Withdrawals:

We accept advance payments from partners and prospective partners at 6% interest from date of receipt until the end of the year. While there is no obligation to convert such advance payments to a partnership interest at the end of the year, this should be the intent at the time it is paid to us.

Similarly, we allow partners to withdraw up to 20% of their partnership account prior to yearend and charge them 6% from date of withdrawal until yearend when it is charged against their capital account. Again, it is not intended that partners use us like a bank, but that they use the withdrawal right for a truly unexpected need for funds. Predictable needs for funds such as quarterly federal tax payments should be handled by a beginning-of-the-year reduction in capital rather than through advance withdrawals from B.P.L. during the year. The withdrawal privilege is to provide for the unanticipated.

The willingness to borrow (through advance payments) and lend (through advance withdrawals) at the same 6% rate may sound downright "un-Buffettlike". (You can be sure it doesn't start my adrenaline flowing.) Certainly such a no-spread arbitrage is devoid of the commercial overtones an observer might impute to the preponderance of our transactions. Nevertheless, we think it makes sense and is in the best interest of all partners.

The partner who has a large investment in indirect ownership of a group of liquid assets should have some liquidity present in his partnership interest other than at yearend. As a practical matter, we are reasonably certain

that advance withdrawals will be far more than covered by advance payments. For example, on June 30, 1965, we had $98,851 of advance withdrawals and $652,931 of advance payments.

Why then the willingness to pay 6% for the net of advance payments over advance withdrawals when we can borrow from commercial banks at substantially lower rates? The answer is that we expect on a long-term basis to earn better than 6% (the general partner's allocation is zero unless we do) although it is largely a matter of chance whether we achieve the 6% figure in any short period. Moreover, I can adopt a different attitude regarding the investment of money that can be expected to soon be a part of our equity capital than I can on short-term borrowed money. The advance payments have the added advantage to us of spreading the investment of new money over the year, rather than having it hit us all at once in January. On the other hand, 6% is more than can be obtained in short-term dollar secure investments by our partners, so I consider it mutually profitable.

Miscellaneous:

The bold expansion program to 909 ¼ square feet described in the annual letter was carried off without a hitch (the Pepsi's never even got warm).

John Harding joined us in April and is continuing the record whereby all the actions in the personnel field have been winning ones.

As in past years, we will have a letter out about November 1st (to partners and those who have indicated an interest to me by that time in becoming partners) with the commitment letter for 1966, estimate of the 1965 tax situation, etc.

Cordially,
Warren E. Buffett

BUFFETT PARTNERSHIP, LTD.
810 KIEWIT PLAZA
OMAHA 31, NEBRASKA

November 1, 1965

To My Partners for 1966:

Enclosed are:

(1) Two copies or the commitment letter for 1966, one to be kept by you and one returned to us. You may amend the commitment letter right up to midnight, December 31st. So get it back to us early, and if it needs to be changed, just let us know by letter or phone. Commitment letters become final on December 31st. Every year I get a number or calls in the first week in January expressing a desire to add to the January 1st capital. THIS CAN'T BE DONE.

(2) A copy of our ever-popular "The Ground Rules." It is essential that we see eye-to-eye on the matters covered therein. If you have different views - fine, yours may be better - but you shouldn't be in the partnership. Please particularly note Ground Rule 7. This has been added this year reflecting a moderate shift in my attitude over a period of time. It represents a decidedly unconventional (but logical in my opinion when applied to our operation) approach and is therefore specifically called to your attention.

Any withdrawals will be paid January 5th. You may withdraw any amount you desire from $100 up to your entire equity. Similarly, additions can be for any amount and should reach us by January 10th. In the event you are disposing of anything, this will give you a chance to have the transaction in 1966 if that appears to be advantageous for tax reasons. If additions reach us in November, they take on the status of advance payments and draw 6% interest until yearend. This is not true of additions reaching us in December.

The partnership owns a controlling interest in Berkshire Hathaway Inc., a publicly-traded security. As mentioned in my midyear letter, asset values and earning power are the dominant factors affecting the valuation of a controlling interest in a business. Market price, which governs valuation of minority interest positions, is of little or no importance in valuing a controlling interest. We will value our position in Berkshire Hathaway at yearend at a price halfway between net current asset value and book value. Because of the nature of our receivables and inventory this, in effect, amounts to valuation of our current assets at 100 cents on the dollar and our fixed assets at 50 cents on the dollar. Such a value in my opinion is fair to both adding and withdrawing partners. It may be either of lower than market value at the time.

As I write this, we are orbiting in quite satisfactory fashion. Our margin over the Dow is well above average, and even those Neanderthal partners who utilize such crude yardsticks as net profit would find performance satisfactory. This is all, of course, subject to substantial change by yearend.

If anything needs clarification, call or write John Harding who is in charge of "de-confusing" partners. The tax situation is about as reported in the August letter, but if you would like John to make the calculation for you, he will be glad to do it.

Cordially,

Warren E. Buffett

P/S: We are continuing our "no prize" policy for the last ones to get their commitment letters back to us. It will make things easier for us if you get it back pronto. If you want to make changes later (before January lst), just give us a call, and we'll amend it for you.

BUFFETT PARTNERSHIP, LTD.
810 KIEWIT PLAZA
OMAHA 31, NEBRASKA

January 20, 1966

Our Performance in 1965

Our War on Poverty was successful in 1965.

Specially, we were $12,304,060 less poor at the end of the year.

Last year under a section in the annual letter entitled "Our Goal" (please particularly note it was not headed "Our Promise"), I stated we were trying to achieve "… An average advantage (relative to the Dow) of ten percentage points per annum for BPL before allocation to the general partner again with large amplitudes in the margin from perhaps 10 percentage points worse than the Dow in a bad year to 25 percentage points better when everything clicks."

My fallibility as a forecaster was quickly demonstrated when the first year fell outside my parameters. We achieved our widest margin over the Dow in the history of BPL with an overall gain of 47.2% compared to an overall gain (including dividends which would have been received through ownership of the Dow) of 14.2% for the Dow. Naturally, no writer likes to be publicly humiliated by such a mistake. It is unlikely to be repeated.

The following summarizes the year-by-year performance of the Dow, the performance of the Partnership before allocation (one quarter of the excess over 6%) to the general partner, and the results for limited partners:

Year	**Overall Results From Dow (1)**	**Partnership Results (2)**	**Limited Partners' Results (3)**
1957	-8.4%	10.4%	9.3%
1958	38.5%	40.9%	32.2%
1959	20.0%	25.9%	20.9%
1960	-6.2%	22.8%	18.6%
1961	22.4%	45.9%	35.9%
1962	-7.6%	13.9%	11.9%
1963	20.6%	38.7%	30.5%
1964	18.7%	27.8%	22.3%
1965	14.2%	47.2%	36.9%

(1) Based on yearly changes in the value of the Dow plus dividends that would have been received through ownership of the Dow during that year. The table includes all complete years of partnership activity.

(2) For 1957-61 consists of combined results of all predecessor limited partnerships operating throughout the entire year after all expenses, but before distributions to partners or allocations to the general partner.

(3) For 1957-61 computed on the basis of the preceding column of partnership results allowing for allocation to the general partner based upon the present partnership agreement, but before monthly withdrawals by limited partners.

On a cumulative or compounded basis, the results are:

Year	Overall Results From Dow	Partnership Results	Limited Partners' Results
1957	-8.4%	10.4%	9.3%
1957 – 58	26.9%	55.6%	44.5%
1957 – 59	52.3%	95.9%	74.7%
1957 – 60	42.9%	140.6%	107.2%
1957 – 61	74.9%	251.0%	181.6%
1957 – 62	61.6%	299.8%	215.1%
1957 – 63	95.1%	454.5%	311.2%
1957 – 64	131.3%	608.7%	402.9%
1957 – 65	164.1%	943.2%	588.5%
Annual Compounded Rate	**11.4%**	**29.8%**	**23.9%**

After last year the question naturally arises, "What do we do for an encore?" A disadvantage of this business is that it does not possess momentum to any significant degree. If General Motors accounts for 54% of domestic new car registrations in 1965, it is a pretty safe bet that they are going to come fairly close to that figure in 1966 due to owner loyalties, dealer capabilities, productive capacity, consumer image, etc. Not so for BPL. We start from scratch each year with everything valued at market when the gun goes off. Partners in 1966, new or old, benefit to only a very limited extent from the efforts of 1964 and 1965. The success of past methods and ideas does not transfer forward to future ones.

I continue to hope, on a longer-range basis, for the sort of achievement outlined in the "Our Goal" section of last year's letter (copies still available). However, those who believe 1965 results can be achieved with any frequency are probably attending weekly meetings of the Halley's Comet Observers Club. We are going to have loss years and are going to have years inferior to the Dow - no doubt about it. But I continue to believe we can achieve average performance superior to the Dow in the future. If my expectation regarding this should change, you will hear immediately.

Investment Companies

We regularly compare our results with the two largest open-end investment companies (mutual funds) that follow a policy of being typically 95% - 100% invested in common stocks, and the two largest diversified closed-end investment companies. These four companies, Massachusetts Investors Trust, Investors Stock Fund, Tri-Continental Corp., and Lehman Corp. manage over $5 billion, are owned by about 600,000 shareholders, and are probably typical of most of the $35 billion investment company industry. My opinion is that their results roughly parallel those of the overwhelming majority of other investment advisory organizations which handle, in aggregate, vastly greater sums.

The purpose of this tabulation is to illustrate that the Dow is no pushover as an index of investment achievement. The advisory talent managing just the four companies shown commands annual fees of about $10 million and this represents a very small fraction of the professional investment management industry. The public batting average of this highly paid and widely respected talent indicates performance a shade below that of the Dow, an unmanaged index.

YEARLY RESULTS

Year	Mass. Inv.	Investors	Lehman (2)	Tri-Cont	Dow	Limited

	Trust (1)	Stock (1)		(2)		Partners
1957	-11.4%	-12.4%	-11.4%	-2.4%	-8.4%	9.3%
1958	42.7%	47.5%	40.8%	33.2%	38.5%	32.2%
1959	9.0%	10.3%	8.1%	8.4%	20.0%	20.9%
1960	-1.0%	-0.6%	2.5%	2.8%	-6.2%	18.6%
1961	25.6%	24.9%	23.6%	22.5%	22.4%	35.9%
1962	-9.8%	-13.4%	-14.4%	-10.0%	-7.6%	11.9%
1963	20.0%	16.5%	23.7%	18.3%	20.6%	30.5%
1964	15.9%	14.3%	13.6%	12.6%	18.7%	22.3%
1965	10.2%	9.8%	19.0%	10.7%	14.2%	36.9%

(1) Computed from changes in asset value plus any distributions to holders of record during year.
(2) From 1965 Moody's Bank & Finance Manual for 1957-64. Estimated for 1965.

COMPOUNDED

Year	Mass. Inv. Trust (1)	Investors Stock (1)	Lehman (2)	Tri-Cont (2)	Dow	Limited Partners
1957	-11.4%	-12.4%	-11.4%	-2.4%	-8.4%	9.3%
1957 – 58	26.4%	29.2%	24.7%	30.0%	26.9%	44.5%
1957 – 59	37.8%	42.5%	34.8%	40.9%	52.3%	74.7%
1957 – 60	36.4%	41.6%	38.2%	44.8%	42.9%	107.2%
1957 – 61	71.3%	76.9%	70.8%	77.4%	74.9%	181.6%
1957 – 62	54.5%	53.2%	46.2%	59.7%	61.6%	215.1%
1957 – 63	85.4%	78.5%	80.8%	88.9%	94.9%	311.2%
1957 – 64	114.9%	104.0%	105.4%	112.7%	131.3%	402.9%
1957 – 65	136.8%	124.0%	145.3%	138.4%	164.1%	588.5%
Annual Compounded Rate	**10.1%**	**9.4%**	**10.5%**	**10.1%**	**11.4%**	**23.9%**

A number of the largest investment advisory operations (managing, in some cases, well into the billions of dollars) also manage investment companies partly as a convenience for smaller clients and partly as a public showcase. The results of these funds roughly parallel those of the four funds on which we report.

I strongly believe in measurement. The investment managers mentioned above utilize measurement constantly in their activities. They constantly study changes in market shares, profit margins, return on capital, etc. Their entire decision-making process is geared to measurement - of managements, industries, comparative yields, etc. I am sure they keep score on their new business efforts as well as the profitability of their advisory operation. What then can be more fundamental than the measurement, in turn, of investment ideas and decisions? I certainly do not believe the standards I utilize (and wish my partners to utilize) in measuring my performance are the applicable ones for all money managers. But I certainly do believe anyone engaged in the management of money should have a standard of measurement, and that both he and the party whose money is managed should have a clear understanding why it is the appropriate standard, what time period should be utilized, etc.

Frank Block put it very well in the November-December 1965 issue of the Financial Analysts Journal. Speaking of measurement of investment performance he said," ...However, the fact is that literature suffers a yawning hiatus in this subject. If investment management organizations sought always the best performance, there would be nothing unique in careful measurement of investment results. It does not matter that the customer has failed to ask for a formal presentation of the results. Pride alone should be sufficient to demand that each or us determine objectively the quality of his recommendations. This can hardly be done without precise knowledge

of the outcome. Once this knowledge is in hand, it should be possible to extend the analysis to some point at which patterns of weakness and strength begin to assert themselves. We criticize a corporate management for failure to use the best of tools to keep it aware of the progress of a complicated industrial organization. We can hardly be excused for failure to provide ourselves with equal tools to show the efficiency of our own efforts to handle other people's money. ...Thus, it is our dreary duty to report that systems of performance measurement are not automatically included in the data processing programs of most investment management organizations. The sad fact is that some seem to prefer not to know how well or poorly they are doing.

Frankly, I have several selfish reasons for insisting that we apply a yardstick and that we both utilize the same yardstick. Naturally, I get a kick out of beating par - in the lyrical words of Casey Stengel, "Show me a good loser, and I'll show you a loser." More importantly, I insure that I will not get blamed for the wrong reason (having losing years) but only for the right reason (doing poorer than the Dow). Knowing partners will grade me on the right basis helps me do a better job. Finally, setting up the relevant yardsticks ahead of time insures that we will all get out of this business if the results become mediocre (or worse). It means that past successes cannot cloud judgment of current results. It should reduce the chance of ingenious rationalizations of inept performance. (Bad lighting has been bothering me at the bridge table lately.) While this masochistic approach to measurement may not sound like much of an advantage, I can assure you from my observations of business entities that such evaluation would have accomplished a great deal in many investment and industrial organizations.

So if you are evaluating others (or yourself!) in the investment field, think out some standards - apply them - interpret them. If you do not feel our standard (a minimum of a three-year test versus the Dow) is an applicable one, you should not be in the Partnership. If you do feel it is applicable, you should be able to take the minus years with equanimity in the visceral regions as well as the cerebral regions -as long as we are surpassing the results of the Dow.

The Sorrows of Compounding

Usually, at this point in my letter, I have paused to modestly attempt to set straight the historical errors of the last four or five hundred years. While it might seem difficult to accomplish this in only a few paragraphs a year, I feel I have done my share to reshape world opinion on Columbus, Isabella, Francis I, Peter Minuit and the Manhattan Indians. A by-product of this endeavor has been to demonstrate the overwhelming power of compound interest. To insure reader attention I have entitled these essays "The Joys of Compounding. " The sharp-eyed may notice a slight change this year.

A decent rate (better we have an indecent rate) of compound -plus the addition of substantial new money has brought our beginning capital this year to $43,645,000. Several times in the past I have raised the question whether increasing amounts of capital would harm our investment performance. Each time I have answered negatively and promised you that if my opinion changed, I would promptly report it.

I do not feel that increased capital has hurt our operation to date. As a matter of fact, I believe that we have done somewhat better during the past few years with the capital we have had in the Partnership than we would have done if we had been working with a substantially smaller amount. This was due to the partly fortuitous development of several investments that were just the right size for us -big enough to be significant and small enough to handle.

I now feel that we are much closer to the point where increased size may prove disadvantageous. I don't want to ascribe too much precision to that statement since there are many variables involved. What may be the optimum size under some market and business circumstances can be substantially more or less than optimum under other circumstances. There have been a few times in the past when on a very short-term basis I have felt it would have been advantageous to be smaller but substantially more times when the converse was true.

Nevertheless, as circumstances presently appear, I feel substantially greater size is more likely to harm future results than to help them. This might not be true for my own personal results, but it is likely to be true for your results.

Therefore, unless it appears that circumstances have changed (under some conditions added capital would improve results) or unless new partners can bring some asset to the Partnership other than simply capital, I intend to admit no additional partners to BPL.

The only way to make this effective is to apply it across-the-board and I have notified Susie that if we have any more children, it is up to her to find some other partnership for them.

Because I anticipate that withdrawals (for taxes, among other reasons) may well approach additions by present partners and also because I visualize the curve of expectable performance sloping only very mildly as capital increases, I presently see no reason why we should restrict capital additions by existing partners.

The medically oriented probably will interpret this entire section as conclusive evidence that an effective antithyroid pill has been developed.

Trends in Our Business

Last year I discussed our various categories of investments. Knowing the penalties for cruel and unusual punishments, I will skip a rehash of the characteristics of each category, but merely refer you to last year's letter. However, a few words should be said to bring you up to date on the various segments of the business, and perhaps to give you a better insight into their strengths and weaknesses.

The "Workout" business has become very spasmodic. We were able to employ an average of only about $6 million during the year in the Workout section, and this involved only a very limited number of situations. Although we earned about $1,410,000 or about 23 ½% on average capital employed (this is calculated on an all equity basis - borrowed money is appropriate in most Workout situations, and we utilize it, which improves our rate of return above this percentage), over half of this was earned from one situation. I think it unlikely that a really interesting rate of return can be earned consistently on large sums of money in this business under present conditions. Nevertheless, we will continue to try to remain alert for the occasional important opportunity and probably continue to utilize a few of the smaller opportunities where we like the probabilities.

The "Generals-Private Owner Basis" category was very good to us in 1965. Opportunities in this area have become more scarce with a rising Dow, but when they come along, they are often quite significant. I mentioned at the start of last year that we were the largest stockholder of three companies in this category. Our largest yearend 1964 investment in this category was disposed of in 1965 pursuant to a tender offer resulting in a realized gain for BPL of $3,188,000. At yearend 1964 we had unrealized appreciation in this investment of $451,000. Therefore, the economic gain attributable to 1965 for this transaction was only $2,737,000 even though the entire tax effect fell in that year. I mention these figures to illustrate how our realized gain for tax purposes in any year bears no necessary relationship to our economic gain.

The fundamental concept underlying the Generals-Private Owner category is demonstrated by the above case. A private owner was quite willing (and in our opinion quite wise) to pay a price for control of the business which isolated stock buyers were not willing to pay for very small fractions of the business. This has been a quite common condition in the securities markets over many years, and although purchases in this category work out satisfactorily in terms of just general stock market behavior, there is the occasional dramatic profit due to corporate action such as the one above.

The "Control" section of our business received a transfer member from our “Private Owner” category. Shares in Berkshire Hathaway had been acquired since November 1962 on much the same line of reasoning as prevailed in the security mentioned above. In the case of Berkshire, however, we ended up purchasing enough stock to assume a controlling position ourselves rather than the more usual case of either selling our stock in the market or to another single buyer.

Our purchases of Berkshire started at a price of $7.60 per share in 1962. This price partially reflected large losses incurred by the prior management in closing some of the mills made obsolete by changing conditions within the textile business (which the old management had been quite slow to recognize). In the postwar period the company had slid downhill a considerable distance, having hit a peak in 1948 when about $29 1/2 million was earned before tax and about 11,000 workers were employed. This reflected output from 11 mills.

At the time we acquired control in spring of 1965, Berkshire was down to two mills and about 2,300 employees. It was a very pleasant surprise to find that the remaining units had excellent management personnel, and we have not had to bring a single man from the outside into the operation. In relation to our beginning acquisition cost of $7.60 per share (the average cost, however, was $14.86 per share, reflecting very heavy purchases in early 1965), the company on December 31, 1965, had net working capital alone (before placing any value on the plants and equipment) of about $19 per share.

Berkshire is a delight to own. There is no question that the state of the textile industry is the dominant factor in determining the earning power of the business, but we are most fortunate to have Ken Chace running the business in a first-class manner, and we also have several of the best sales people in the business heading up this end of their respective divisions.

While a Berkshire is hardly going to be as profitable as a Xerox, Fairchild Camera or National Video in a hypertensed market, it is a very comfort able sort of thing to own. As my West Coast philosopher says, “It is well to have a diet consisting of oatmeal as well as cream puffs.”

Because of our controlling interest, our investment in Berkshire is valued for our audit as a business, not as a marketable security. If Berkshire advances $5 per share in the market, it does BPL no good - our holdings are not going to be sold. Similarly, if it goes down $5 per share, it is not meaningful to us. The value of our holding is determined directly by the value of the business. I received no divine inspiration in that valuation of our holdings. (Maybe the owners of the three wonder stocks mentioned above do receive such a message in respect to their holdings -I feel I would need something at least that reliable to sleep well at present prices.) I attempt to apply a conservative valuation based upon my knowledge of assets, earning power, industry conditions, competitive position, etc. We would not be a seller of our holdings at such a figure, but neither would we be a seller of the other items in our portfolio at yearend valuations –otherwise, we would already have sold them.

Our final category is "Generals-Relatively Undervalued.” This category has been growing in relative importance as opportunities in the other categories become less frequent.

Frankly, operating in this field is somewhat more ethereal than operating in the other three categories, and I'm just not an ethereal sort. Therefore, I feel accomplishments here are less solid and perhaps less meaningful for future projections than in the other categories. Nevertheless, our results in 1965 were quite good in the “Relatively Undervalued” group, partly due to implementation of the technique referred to in last year's letter which serves to reduce risk and potentially augment gains. It should reduce risk in any year, and it definitely augmented the gains in 1965. It is necessary to point out that results in this category were greatly affected for the better by only two investments.

Candor also demands I point out that during 1965 we had our worst single investment experience in the history of BPL on one idea in this group.

Overall, we had more than our share of good breaks in 1965. We did not have a great quantity of ideas, but the quality, with the one important exception mentioned above, was very good and circumstances developed which accelerated the timetable in several. I do not have a great flood of good ideas as I go into 1966, although again I believe I have at least several potentially good ideas of substantial size. Much depends on whether market conditions are favorable for obtaining a larger position.

All in all, however, you should recognize that more came out of the pipeline in 1965 than went in.

Diversification

Last year in commenting on the inability of the overwhelming majority of investment managers to achieve performance superior to that of pure chance, I ascribed it primarily to the product of: "(1) group decisions - my perhaps jaundiced view is that it is close to impossible for outstanding investment management to come from a group of any size with all parties really participating in decisions; (2) a desire to conform to the policies and (to an extent) the portfolios of other large well-regarded organizations; (3) an institutional framework whereby average is "safe" and the personal rewards for independent action are in no way commensurate with the general risk attached to such action; (4) an adherence to certain diversification practices which are irrational; and finally and importantly, (5) inertia."

This year in the material which went out in November, I specifically called your attention to a new Ground Rule reading, "7. We diversify substantially less than most investment operations. We might invest up to 40% of our net worth in a single security under conditions coupling an extremely high probability that our facts and reasoning are correct with a very low probability that anything could drastically change the underlying value of the investment."

We are obviously following a policy regarding diversification which differs markedly from that of practically all public investment operations. Frankly, there is nothing I would like better than to have 50 different investment opportunities, all of which have a mathematical expectation (this term reflects the range of all possible relative performances, including negative ones, adjusted for the probability of each - no yawning, please) of achieving performance surpassing the Dow by, say, fifteen percentage points per annum. If the fifty individual expectations were not intercorelated (what happens to one is associated with what happens to the other) I could put 2% of our capital into each one and sit back with a very high degree of certainty that our overall results would be very close to such a fifteen percentage point advantage.

It doesn't work that way.

We have to work extremely hard to find just a very few attractive investment situations. Such a situation by definition is one where my expectation (defined as above) of performance is at least ten percentage points per annum superior to the Dow. Among the few we do find, the expectations vary substantially. The question always is, "How much do I put in number one (ranked by expectation of relative performance) and how much do I put in number eight?" This depends to a great degree on the wideness of the spread between the mathematical expectation of number one versus number eight." It also depends upon the probability that number one could turn in a really poor relative performance. Two securities could have equal mathematical expectations, but one might have .05 chance of performing fifteen percentage points or more worse than the Dow, and the second might have only .01 chance of such performance. The wider range of expectation in the first case reduces the desirability of heavy concentration in it.

The above may make the whole operation sound very precise. It isn't. Nevertheless, our business is that of ascertaining facts and then applying experience and reason to such facts to reach expectations. Imprecise and emotionally influenced as our attempts may be, that is what the business is all about. The results of many years

of decision-making in securities will demonstrate how well you are doing on making such calculations - whether you consciously realize you are making the calculations or not. I believe the investor operates at a distinct advantage when he is aware of what path his thought process is following.

There is one thing of which I can assure you. If good performance of the fund is even a minor objective, any portfolio encompassing one hundred stocks (whether the manager is handling one thousand dollars or one billion dollars) is not being operated logically. The addition of the one hundredth stock simply can't reduce the potential variance in portfolio performance sufficiently to compensate for the negative effect its inclusion has on the overall portfolio expectation.

Anyone owning such numbers of securities after presumably studying their investment merit (and I don't care how prestigious their labels) is following what I call the Noah School of Investing - two of everything. Such investors should be piloting arks. While Noah may have been acting in accord with certain time-tested biological principles, the investors have left the track regarding mathematical principles. (I only made it through plane geometry, but with one exception, I have carefully screened out the mathematicians from our Partnership.)

Of course, the fact that someone else is behaving illogically in owning one hundred securities doesn't prove our case. While they may be wrong in overdiversifying, we have to affirmatively reason through a proper diversification policy in terms of our objectives.

The optimum portfolio depends on the various expectations of choices available and the degree of variance in performance which is tolerable. The greater the number of selections, the less will be the average year-to-year variation in actual versus expected results. Also, the lower will be the expected results, assuming different choices have different expectations of performance.

I am willing to give up quite a bit in terms of leveling of year-to-year results (remember when I talk of “results,” I am talking of performance relative to the Dow) in order to achieve better overall long-term performance. Simply stated, this means I am willing to concentrate quite heavily in what I believe to be the best investment opportunities recognizing very well that this may cause an occasional very sour year - one somewhat more sour, probably, than if I had diversified more. While this means our results will bounce around more, I think it also means that our long-term margin of superiority should be greater.

You have already seen some examples of this. Our margin versus the Dow has ranged from 2.4 percentage points in 1958 to 33.0 points in 1965. If you check this against the deviations of the funds listed on page three, you will find our variations have a much wider amplitude. I could have operated in such a manner as to reduce our amplitude, but I would also have reduced our overall performance somewhat although it still would have substantially exceeded that of the investment companies. Looking back, and continuing to think this problem through, I feel that if anything, I should have concentrated slightly more than I have in the past. Hence, the new Ground Rule and this long-winded explanation.

Again let me state that this is somewhat unconventional reasoning (this doesn't make it right or wrong - it does mean you have to do your own thinking on it), and you may well have a different opinion - if you do, the Partnership is not the place for you. We are obviously only going to go to 40% in very rare situations - this rarity, of course, is what makes it necessary that we concentrate so heavily, when we see such an opportunity. We probably have had only five or six situations in the nine-year history of the Partnership where we have exceeded 25%. Any such situations are going to have to promise very significantly superior performance relative to the Dow compared to other opportunities available at the time. They are also going to have to possess such superior qualitative and/or quantitative factors that the chance of serious permanent loss is minimal (anything can happen on a short-term quotational basis which partially explains the greater risk of widened year-to-year variation in results). In selecting the limit to which I will go in anyone investment, I attempt to reduce to a tiny figure the probability that the single investment (or group, if there is intercorrelation) can produce a result

for our total portfolio that would be more than ten percentage points poorer than the Dow.

We presently have two situations in the over 25% category - one a controlled company, and the other a large company where we will never take an active part. It is worth pointing out that our performance in 1965 was overwhelmingly the product of five investment situations. The 1965 gains (in some cases there were also gains applicable to the same holding in prior years) from these situations ranged from about $800,000 to about $3 1/2 million. If you should take the overall performance of our five smallest general investments in 1965, the results are lackluster (I chose a very charitable adjective).

Interestingly enough, the literature of investment management is virtually devoid of material relative to deductive calculation of optimal diversification.
All texts counsel "adequate" diversification, but the ones who quantify "adequate" virtually never explain how they arrive at their conclusion. Hence, for our summation on overdiversification, we turn to that eminent academician Billy Rose, who says, "You've got a harem of seventy girls; you don't get to know any of them very well."

Miscellaneous

Last year we boldly announced an expansion move, encompassing an additional 227 1/4 square feet. Older partners shook their heads. I feel that our gain from operations in 1965 of $12,304,060 indicates that we did not overextend ourselves. Fortunately, we didn't sign a percentage lease. Operationally, things have never been running more smoothly, and I think our present setup unquestionably lets me devote a higher percentage of my time to thinking about the investment process than virtually anyone else in the money management business. This, of course, is the result of really outstanding personnel and cooperative partners.

John Harding has taken complete charge of all administrative operations with splendid results. Bill Scott continues to develop detailed information on investments which substantially enhances our net profit figure. Beth Feehan, Donna Walter and Elizabeth Hanon (who joined us in November) have all handled large work loads (secretary's note -Amen!) accurately and efficiently.

The above people, their spouses (one apiece) and children have a combined investment in the Partnership of over $600,000. Susie and I have an investment of $6,849,936, which should keep me from slipping away to the movies in the afternoon. This represents virtually our entire net worth, with the exception of our continued holding of Mid-Continent Tab Card, a local company into which I bought in 1960 when it had less than 10 stockholders.

Additionally, my relatives, consisting of three children, mother, two sisters, two brothers-in-law, father-in-law, three aunts, two uncles, five cousins, and six nieces and nephews have interests in BPL, directly or indirectly, totaling $2,708,233. So don't get any ideas about voting a change in the Partnership name.

Peat, Marwick, Mitchell & Co. has done the customary excellent job of expediting the audit and tax information. This requires great effort and ability, and they supply both. This year a computer was brought to bear on our problems, and naturally, I was a little worried someone else would come out as the general partner. However, it all worked quite smoothly.

Within the coming two weeks you will receive:

1. A tax letter giving you all BPL information needed for your 1965 federal income tax return. This letter is the only item that counts for tax purposes.

2. An audit from Peat, Marwick, Mitchell & Co. for 1965, setting forth the operations and financial

position of BPL, as well as your own capital account.

3. A letter signed by me setting forth the status of your BPL interest on 1/1/66. This is identical with the figures developed in the audit.

Let me know if anything in this letter or that occurs during the year needs clarifying. It is difficult to anticipate all of the questions you may have and if there is anything that is confusing, I want to hear about it. For instance, we received an excellent suggestion last year from a partner regarding the presentation of the reconciliation of personal capital accounts.

My next letter will be about July 15th, summarizing the first ha1f of this year.

Cordially,

Warren E. Buffett

BUFFETT PARTNERSHIP. LTD.
610 KIEWIT PLAZA
OMAHA, NEBRASKA 68131
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July 12, 1966

First Half Performance

During the first half of 1966, the Dow-Jones Industrial Average (hereinafter called the "Dow") declined from 969.26 to 870.10. If one had owned the Dow during this period, dividends of approximately 14.70 would have been received, reducing the overall loss of the Dow to about 8.7%.

It is my objective and my hope (but not my prediction!) that we achieve over a long period of time, an average yearly advantage of ten percentage points relative to the Dow. During the first half we did considerably better than expected with an overall gain of approximately 8.2%. Such results should be regarded as decidedly abnormal. I have previously complimented partners on the good-natured tolerance they display in shrugging off such unexpected positive variances. The nature of our business is such that over the years, we will not disappoint the many of you who must also desire a test of your capacity for tolerance of negative variances.

The following summarizes the year-by-year performance of the Dow, the performance of the Partnership before allocation to the general partner, and the results for limited partners:

Year	**Overall Results From Dow (1)**	**Partnership Results (2)**	**Limited Partners' Results (3)**
1957	-8.4%	10.4%	9.3%
1958	38.5%	40.9%	32.2%
1959	20.0%	25.9%	20.9%
1960	-6.2%	22.8%	18.6%
1961	22.4%	45.9%	35.9%
1962	-7.6%	13.9%	11.9%
1963	20.6%	38.7%	30.5%
1964	18.7%	27.8%	22.3%
1965	14.2%	47.2%	36.9%
First half of 1966	-8.7%	8.2%	7.7%
Cumulative Results	**141.1%**	**1028.7%**	**641.5%**
Annual Compounded Rate	**9.7%**	**29.0%**	**23.5%**

1. Based on yearly changes in the value of the Dow plus dividends that would have been received through ownership of the Dow during that year. The table includes all complete years of partnership activity.

2. For 1957-61 consists of combined results of all predecessor limited partnerships operating throughout the entire year after all expenses but before distributions to partners or allocations to the general partner.

3. For 1957-61 computed on the basis of the preceding column of partnership results allowing for allocation to the general partner based upon the present partnership agreement, but before monthly withdrawals by limited partners.

Even Samson gets clipped occasionally. If you had invested $100.000 on January 1 equally among -

a. the world's largest auto company (General Motors);
b. the world's largest oil company (Standard of New Jersey);
c. the world's largest retailing company (Sears Roebuck);
d. the world's largest chemical company (Dupont);
e. the world's largest steel company (U.S. Steel);
f. the world's largest stockholder-owned insurance company (Aetna);
g. the world's largest public utility (American Telephone & Telegraph);
h. the world's largest bank (Bank of America);

your total portfolio (including dividends received) would have been worth $83,370 on June 30 for a loss of 16.6%. The total market value on January 1 of these eight giants was well over $100 billion. Everyone of them was selling lower on June 30.

Investment Companies

On the next page we bring up to date our regular comparison with the results of the two largest open-end investment companies (mutual funds) that follow a policy of being, typically, 95-100% invested in common stocks, and the two largest diversified closed-end investment companies.

YEARLY RESULTS

Year	Mass. Inv. Trust (1)	Investors Stock (1)	Lehman (2)	Tri-Cont (2)	Dow	Limited Partners
1957	-11.4%	-12.4%	-11.4%	-2.4%	-8.4%	9.3%
1958	42.7%	47.5%	40.8%	33.2%	38.5%	32.2%
1959	9.0%	10.3%	8.1%	8.4%	20.0%	20.9%
1960	-1.0%	-0.6%	2.5%	2.8%	-6.2%	18.6%
1961	25.6%	24.9%	23.6%	22.5%	22.4%	35.9%
1962	-9.8%	-13.4%	-14.4%	-10.0%	-7.6%	11.9%
1963	20.0%	16.5%	23.7%	18.3%	20.6%	30.5%
1964	15.9%	14.3%	13.6%	12.6%	18.7%	22.3%
1965	10.2%	9.8%	19.0%	10.7%	14.2%	36.9%
First half 1966	-7.9%	-7.9%	-1.0%	-5.2%	-8.7%	7.7%
Cumulative Results	**118.1%**	**106.3%**	**142.8%**	**126.9%**	**141.1%**	**641.5%**
Annual Compounded Rate	**8.6%**	**7.9%**	**9.8%**	**9.0%**	**9.7%**	**23.5%**

(1) Computed from changes in asset value plus any distributions to holders of record during year.
(2) From 1966 Moody's Bank & Finance Manual for 1957-1965. Estimated for first half of 1966.

Proponents of institutional investing frequently cite its conservative nature. If “conservative” is interpreted to mean "productive of results varying only slightly from average experience" I believe the characterization is proper. Such results are almost bound to flow from wide diversification among high grade securities. Since, over a long period, "average experience" is likely to be good experience, there is nothing wrong with the typical investor utilizing this form of investment medium.

However, I believe that conservatism is more properly interpreted to mean "subject to substantially less temporary or permanent shrinkage in value than total experience". This simply has not been achieved, as the record of the four largest funds (presently managing over $5 billion) illustrates. Specifically, the Dow declined in 1957, 1960, 1962 and the first half of 1966. Cumulating the shrinkage in the Dow during the three full year periods produces a decline of 20.6%. Following a similar technique for the four largest funds produces declines of 9.7%, 20.9%, 22.3% and 24.6%. Including the interim performance for the first half of 1966 results in a decline in the Dow of 27.5% and for the funds declines of 14.4%, 23.1%, 27.1% and 30.6%. Such funds (and I believe their results are quite typical of institutional experience in common stocks) seem to meet the first definition of conservatism but not the second one.

Most investors would climb a rung intellectually if they clearly delineated between the above two interpretations of conservatism. The first might be better labeled "conventionalism" - what it really says is that "when others are making money in the general run of securities, so will we and to about the same degree; when they are losing money, we'll do it at about the same rate." This is not to be equated with "when others are making it, we'll make as much and when they are losing it, we will lose less." Very few investment programs accomplish the latter - we certainly don't promise it but we do intend to keep trying. (I have always felt our objectives should be somewhat loftier than those Herman Hickman articulated during the desperate years when Yale was losing eight games a season. Said Herman, "I see my job as one of keeping the alumni sullen but not mutinous.")

Hochschild, Kohn & Co.

During the first half we, and two 10% partners, purchased all of the stock of Hochschild, Kohn & Co., a privately owned Baltimore department store. This is the first time in the history of the Partnership that an entire business has been purchased by negotiation, although we have, from time to time, negotiated purchase of specific important blocks of marketable securities. However, no new principles are involved. The quantitative and qualitative aspects of the business are evaluated and weighed against price, both on an absolute basis and relative to other investment opportunities. HK (learn to call it that - I didn't find out how to pronounce it until the deal was concluded) stacks up fine in all respects.

We have topnotch people (both from a personal and business standpoint) handling the operation. Despite the edge that my extensive 75 cents an hour experience at the Penney's store in Omaha some years back gives us (I became an authority on the Minimum Wage Act), they will continue to run the business as in the past. Even if the price had been cheaper but the management had been run-of-the-mill, we would not have bought the business.

It is impossible to avoid some public notice when a business with several thousand employees is acquired. However, it is important that you do not infer the degree of financial importance to BPL from its news value to the public. We have something over $50 million invested, primarily in marketable securities, of which only about 10% is represented by our net investment in HK. We have an investment of over three times this much in a marketable security where our ownership will never come to public attention. This is not to say an HK is not important - a 10% holding definitely is. However, it is not as significant relative to our total operation as it would be easy to think. I still prefer the iceberg approach toward investment disclosure.

It is my intention to value HK at yearend at cost plus our share of retained earnings since purchase. This policy will be followed in future years unless there is a demonstrable change in our position relative to other department stores or in other objective standards of value. Naturally we wouldn't have purchased HK unless we felt the price was quite attractive. Therefore, a valuation policy based upon cost may somewhat undervalue our holdings. Nevertheless, it seems the most objective figure to apply. All of our investments usually appear undervalued to me - otherwise we wouldn't own them.

Market Forecasting

Ground Rule No.6 (from our November packet) says: “I am not in the business of predicting general stock market or business fluctuations. If you think I can do this, or think it is essential to an investment program, you should not be in the partnership.”

Of course, this rule can be attacked as fuzzy, complex, ambiguous, vague, etc. Nevertheless, I think the point is well understood by the great majority of our partners. We don't buy and sell stocks based upon what other people think the stock market is going to do (I never have an opinion) but rather upon what we think the company is going to do. The course of the stock market will determine, to a great degree, when we will be right, but the accuracy of our analysis of the company will largely determine whether we will be right. In other words, we tend to concentrate on what should happen, not when it should happen.

In our department store business I can say with considerable assurance that December will be better than July. (Notice how sophisticated I have already become about retailing.) What really counts is whether December is better than last December by a margin greater than our competitors' and what we are doing to set the stage for future Decembers. However, in our partnership business I not only can't say whether December will be better than July, but I can't even say that December won't produce a very large loss. It sometimes does. Our investments are simply not aware that it takes 365-1/4 days for the earth to make it around the sun. Even worse, they are not aware that your celestial orientation (and that of the IRS) requires that I report to you upon the conclusion of each orbit (the earth's - not ours). Therefore, we have to use a standard other than the calendar to measure our progress. This yardstick is obviously the general experience in securities as measured by the Dow. We have a strong feeling that this competitor will do quite decently over a period of years (Christmas will come even if it's in July) and if we keep beating our competitor we will have to do something better than "quite decently". It's something like a retailer measuring his sales gains and profit margins against Sears' - beat them every year and somehow you'll see daylight.

I resurrect this "market-guessing" section only because after the Dow declined from 995 at the peak in February to about 865 in May, I received a few calls from partners suggesting that they thought stocks were going a lot lower. This always raises two questions in my mind: (1) if they knew in February that the Dow was going to 865 in May, why didn't they let me in on it then; and, (2) if they didn't know what was going to happen during the ensuing three months back in February, how do they know in May? There is also a voice or two after any hundred point or so decline suggesting we sell and wait until the future is clearer. Let me again suggest two points: (1) the future has never been clear to me (give us a call when the next few months are obvious to you – or, for that matter the next few hours); and, (2) no one ever seems to call after the market has gone up one hundred points to focus my attention on how unclear everything is, even though the view back in February doesn't look so clear in retrospect.

If we start deciding, based on guesses or emotions, whether we will or won't participate in a business where we should have some long run edge, we're in trouble. We will not sell our interests in businesses (stocks) when they are attractively priced just because some astrologer thinks the quotations may go lower even though such forecasts are obviously going to be right some of the time. Similarly, we will not buy fully priced securities because "experts" think prices are going higher. Who would think of buying or selling a private business because of someone's guess on the stock market? The availability of a question for your business interest (stock) should always be an asset to be utilized if desired. If it gets silly enough in either direction, you take advantage of it. Its availability should never be turned into a liability whereby its periodic aberrations in turn formulate your judgments. A marvelous articulation of this idea is contained in chapter two (The Investor and Stock Market Fluctuations) of Benjamin Graham's "The Intelligent Investor". In my opinion, this chapter has more investment importance than anything else that has been written.

We will have a letter out about November 1 with the Commitment Letter for 1967 and an estimate of the 1966 tax situation.

Cordially,

Warren Buffett

WEB eh

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January 25, 1967

The First Decade

The Partnership had its tenth anniversary during 1966. The celebration was appropriate -an all-time record (both past and future) was established for our performance margin relative to the Dow. Our advantage was 36 points which resulted from a plus 20.4% for the Partnership and a minus 15.6% for the Dow.

This pleasant but non-repeatable experience was partially due to a lackluster performance by the Dow. Virtually all investment managers outperformed it during the year. The Dow is weighted by the dollar price of the thirty stocks involved. Several of the highest priced components, which thereby carry disproportionate weight (Dupont, General Motors), were particularly poor performers in 1966. This, coupled with the general aversion to conventional blue chips, caused the Dow to suffer relative to general investment experience, particularly during the last quarter.

The following summarizes the year-by-year performance of the Dow, the performance of the Partnership before allocation (one quarter of the excess over 6%) to the general partner, and the results for limited partners:

Year	Overall Results From Dow (1)	Partnership Results (2)	Limited Partners' Results (3)
1957	-8.4%	10.4%	9.3%
1958	38.5%	40.9%	32.2%
1959	20.0%	25.9%	20.9%
1960	-6.2%	22.8%	18.6%
1961	22.4%	45.9%	35.9%
1962	-7.6%	13.9%	11.9%
1963	20.6%	38.7%	30.5%
1964	18.7%	27.8%	22.3%
1965	14.2%	47.2%	36.9%
1966	-15.6%	20.4%	16.8%
Cumulative Results	**141.1%**	**1028.7%**	**641.5%**
Annual Compounded Rate	**9.7%**	**29.0%**	**23.5%**

(1) Based on yearly changes in the value of the Dow plus dividends that would have been received through ownership of the Dow during that year. The table includes all complete years of partnership activity.

(2) For 1957-61 consists of combined results of all predecessor limited partnerships operating throughout the entire year after all expenses, but before distributions to partners or allocations to the general partner.

(3) For 1957-61 computed on the basis of the preceding column of partnership results allowing for allocation to the general partner based upon the present partnership agreement. but before monthly withdrawals by limited partners.

On a cumulative or compounded basis, the results are:

Year	Overall Results From Dow	Partnership Results	Limited Partners' Results
1957	-8.4%	10.4%	9.3%
1957 – 58	26.9%	55.6%	44.5%
1957 – 59	52.3%	95.9%	74.7%
1957 – 60	42.9%	140.6%	107.2%
1957 – 61	74.9%	251.0%	181.6%
1957 – 62	61.6%	299.8%	215.1%
1957 – 63	95.1%	454.5%	311.2%
1957 – 64	131.3%	608.7%	402.9%
1957 – 65	164.1%	943.2%	588.5%
1957 – 66	122.9%	1156.0%	704.2%
Annual Compounded Rate	**11.4%**	**29.8%**	**23.9%**

Investment Companies

On the following page is the usual tabulation showing the results of the two largest open-end investment companies (mutual funds) that follow a policy of being, typically, 95-100% invested in common stocks, and the two largest diversified closed-end investment companies.

Year	Mass. Inv. Trust (1)	Investors Stock (1)	Lehman (2)	Tri-Cont (2)	Dow	Limited Partners
1957	-11.4%	-12.4%	-11.4%	-2.4%	-8.4%	9.3%
1958	42.7%	47.5%	40.8%	33.2%	38.5%	32.2%
1959	9.0%	10.3%	8.1%	8.4%	20.0%	20.9%
1960	-1.0%	-0.6%	2.5%	2.8%	-6.2%	18.6%
1961	25.6%	24.9%	23.6%	22.5%	22.4%	35.9%
1962	-9.8%	-13.4%	-14.4%	-10.0%	-7.6%	11.9%
1963	20.0%	16.5%	23.7%	18.3%	20.6%	30.5%
1964	15.9%	14.3%	13.6%	12.6%	18.7%	22.3%
1965	10.2%	9.8%	19.0%	10.7%	14.2%	36.9%
1966	-7.7%	-10.0%	-2.6%	-6.9%	-15.6%	16.8%
Cumulative Results	**118.1%**	**106.3%**	**142.8%**	**126.9%**	**141.1%**	**641.5%**
Annual Compounded Rate	**8.6%**	**7.9%**	**9.8%**	**9.0%**	**9.7%**	**23.5%**

(1) Computed from changes in asset value plus any distributions to holders of record during year.
(2) From 1966 Moody's Bank & Finance Manual for 1957-1965. Estimated for 1966.

These investment company performance figures have been regularly reported here to show that the now is no patsy as an investment standard. It should again be emphasized that the companies were not selected on the basis of comparability to Buffett Partnership, Ltd. There are important differences including: (1) investment companies operate under both internally and externally imposed restrictions on their investment actions that are not applicable to us; (2) investment companies diversify far more than we do and, in all probability, thereby

have less chance for a really bad performance relative to the now in a single year; and (3) their managers have considerably less incentive for abnormal performance and greater incentive for conventionality.

However, the records above do reveal what well-regarded, highly paid, full-time professional investment managers have been able to accomplish while working with common stocks. These managers have been favorites of American investors (more than 600,000) making free choices among many alternatives in the investment management field. It is probable that their results are typical of the overwhelming majority of professional investment managers.

It is not true, however, that these are the best records achieved in the investment field. A few mutual funds and some private investment operations have compiled records vastly superior to the Dow and, in some cases, substantially superior to Buffett Partnership, Ltd. Their investment techniques are usually very dissimilar to ours and not within my capabilities. However, they are generally managed by very bright, motivated people and it is only fair that I mention the existence of such superior results in this general discussion of the record of professional investment management.

Trends in Our Business

A keen mind working diligently at interpreting the figures on page one could come to a lot of wrong conclusions.

The results of the first ten years have absolutely no chance of being duplicated or even remotely approximated during the next decade. They may well be achieved by some hungry twenty-five year old working with $105,100 initial partnership capital and operating during a ten year business and market environment which is frequently conducive to successful implementation of his investment philosophy.

They will not be achieved by a better fed thirty-six year old working with our $54,065,345 current partnership capital who presently finds perhaps one-fifth to one-tenth as many really good ideas as previously to implement his investment philosophy.

Buffett Associates. Ltd. (predecessor to Buffett Partnership. Ltd.) was founded on the west banks of the Missouri. May 5. 1956 by a hardy little band consisting of four family members, three close friends and $105,100. (I tried to find some brilliant flash of insight regarding our future or present conditions from my first page and a half annual letter of January, 1957 to insert as a quote here. However, someone evidently doctored my file copy so as to remove the perceptive remarks I must have made.)

At that time, and for some years subsequently, there were substantial numbers of securities selling at well below the "value to a private owner" criterion we utilized for selection of general market investments. We also experienced a flow of "workout" opportunities where the percentages were very much to our liking. The problem was always which, not what. Accordingly, we were able to own fifteen to twenty-five issues and be enthusiastic about the probabilities inherent in all holdings.

In the last few years this situation has changed dramatically. We now find very few securities that are understandable to me, available in decent size, and which offer the expectation of investment performance meeting our yardstick of ten percentage points per annum superior to the Dow. In the last three years we have come up with only two or three new ideas a year that have had such an expectancy of superior performance. Fortunately, in some cases, we have made the most of them. However, in earlier years, a lesser effort produced literally dozens of comparable opportunities. It is difficult to be objective about the causes for such diminution of one's own productivity. Three factors that seem apparent are: (1) a somewhat changed market environment; (2) our increased size; and (3) substantially more competition.

It is obvious that a business based upon only a trickle of fine ideas has poorer prospects than one based upon a steady flow of such ideas. To date the trickle has provided as much financial nourishment as the flow. This is true because there is only so much one can digest (million dollar ideas are of no great benefit to thousand dollar bank accounts - this was impressed on me in my early days) and because a limited number of ideas causes one to utilize those available more intensively. The latter factor has definitely been operative with us in recent years. However, a trickle has considerably more chance of drying up completely than a flow.

These conditions will not cause me to attempt investment decisions outside my sphere of understanding (I don't go for the "If you can't lick 'em, join 'em" philosophy - my own leaning is toward "If you can't join 'em, lick 'em"). We will not go into businesses where technology which is away over my head is crucial to the investment decision. I know about as much about semi-conductors or integrated circuits as I do of the mating habits of the chrzaszcz. (That's a Polish May bug, students - if you have trouble pronouncing it, rhyme it with thrzaszcz.)

Furthermore, we will not follow the frequently prevalent approach of investing in securities where an attempt to anticipate market action overrides business valuations. Such so-called "fashion" investing has frequently produced very substantial and quick profits in recent years (and currently as I write this in January). It represents an investment technique whose soundness I can neither affirm nor deny. It does not completely satisfy my intellect (or perhaps my prejudices), and most definitely does not fit my temperament. I will not invest my own money based upon such an approach hence, I will most certainly not do so with your money.

Finally, we will not seek out activity in investment operations, even if offering splendid profit expectations, where major human problems appear to have a substantial chance of developing.

What I do promise you, as partners, is that I will work hard to maintain the trickle of ideas and try to get the most out of it that is possible – but if it should dry up completely, you will be informed honestly and promptly so that we may all take alternative action.

Analysis of 1966 Results

All four main categories of our investment operation worked out well in 1966. Specifically, we had a total overall gain of $8,906,701 derived as follows:

Category	Average Investment	Overall Gain
Controls	$17,259,342	$1,566,302
Generals – Private Owner	$1,359,340	$1,004,362
Generals – Relatively Undervalued	$21,847,045	$5,124254
Workouts	$7,666314	$1,714,181
Miscellaneous, including US Treasury Bills	$1,332,609	$(18,422)
Total Income		$9,390,677
Less: General Expense		$483,976
Overall Gain		$8,906,701

A few caveats are necessary before we get on with the main discussion:

1. An explanation of the various categories listed above was made in the January 18, 1965 letter. If your memory needs refreshing and your favorite newsstand does not have the pocketbook edition. we'll be glad to give you a copy.

2. The classifications are not iron-clad. Nothing is changed retroactively but the initial decision as to category is sometimes arbitrary.

3. Percentage returns calculated on the average investment base by category would be understated relative to partnership percentage returns which are calculated on a beginning investment base. In the above figures, a security purchased by us at 100 on January 1 which appreciated at an even rate to 150 on December 31 would have an average investment of 125 producing a 40% result contrasted to a 50% result by the customary approach. In other words, the above figures use a monthly average of market values in calculating the average investment.

4. All results are based on a 100% ownership, non-leverage, basis. Interest and other general expenses are deducted from total performance and not segregated by category. Expenses directly related to specific investment operations, such as dividends paid on short stock, are deducted by category. When securities are borrowed directly and sold short, the net investment (longs minus shorts) is shown for the applicable average investment category.

5. The above table has only limited use. The results applicable to each category are dominated by one or two investments. They do not represent a collection of great quantities of stable data (mortality rates of all American males or something of the sort) from which conclusions can be drawn and projections made. Instead, they represent infrequent, non-homogeneous phenomena leading to very tentative suggestions regarding various courses of action and are so used by us.

6. Finally, these calculations are not made with the same loving care we apply to counting the money and are subject to possible clerical or mathematical error since they are not entirely self-checking.

Controls

There were three main sources of gain during 1966 in respect to controlled companies. These arose through: (1) retained business earnings applicable to our holdings in 1966; (2) open market purchases of additional stock below our controlling interest valuation and; (3) unrealized appreciation in marketable securities held by the controlled companies. The total of all positive items came to $2,600,838 in 1966.

However, due to factors mentioned in my November 1, 1966 letter, specific industry conditions, and other relevant valuation items, this gain was reduced by $1,034,780 in arriving at our fair valuation applicable to controlling interests as of December 31, 1966. Thus the overall gain in the control category was reduced to $1,566,058 for the year.

We were undoubtedly fortunate that we had a relatively high percentage of net assets invested in businesses and not stocks during 1966. The same money in general market holdings would probably have produced a loss, perhaps substantial, during the year. This was not planned and if the stock market had advanced substantially during the year, this category would have been an important drag on overall performance. The same situation will prevail during 1967.

Generals -Private Owner

Our performance here falls in the "twenty-one dollars a day, once a month" category. In the middle of 1965 we started purchasing a very attractive widely held security which was selling far below its value to a private owner. Our hope was that over a two or three year period we could get $10 million or more invested at the favorable prices prevailing. The various businesses that the company operated were understandable and we could check out competitive strengths and weaknesses thoroughly with competitors, distributors, customers,

suppliers, ex-employees, etc. Market conditions peculiar to the stock gave us hope that, with patience, we could buy substantial quantities of the stock without disturbing the price.

At yearend 1965 we had invested $1,956,980 and the market value of our holding was $2,358,412 so that $401,432 was contributed to performance luring 1965. We would have preferred, of course, to have seen the market below cost since our interest was in additional buying, not in selling. This would have dampened Buffett Partnerships Ltd.'s 1965 performance and perhaps reduced the euphoria experienced by limited partners (psychically, the net result to all partners would have been a standoff since the general partner would have been floating) but would have enhanced long term performance. The fact that the stock had risen somewhat above our cost had already slowed down our buying program and thereby reduced ultimate profit.

An even more dramatic example of the conflict between short term performance and the maximization of long term results occurred in 1966. Another party, previously completely unknown to me, issued a tender offer which foreclosed opportunities for future advantageous buying. I made the decision that the wisest course (it may not have been) for us to follow was to dispose of our holdings and we thus realized a total profit of $1,269,181 in February, of which $867,749 was applicable to 1966.

While any gains looked particularly good in the market environment that intimately developed in 1966, you can be sure I don't delight in going round making molehills out of mountains. The molehill, of course, was reflected in 1966 results. However, we would have been much better off from a long range standpoint if 1966 results had been five percentage points worse and we were continuing to buy substantial quantities of the stock at the depressed prices that might have been expected to prevail in this year's market environment.

Good ideas were a dime a dozen, such a premature ending would not be unpleasant. There is something to be said, of course, for a business operation where some of the failures produce moderate profits. However, you can see how hard it is to develop replacement ideas by examining our average investment in the Private Owner category - we came up with nothing during the remainder of the year despite lower stock prices, which should have been conducive to finding such opportunities.

Generals - Relatively Undervalued

Our relative performance in this category was the best we have ever had - due to one holding which was our largest investment at yearend 1965 and also yearend 1966. This investment has substantially out-performed the general market for us during each year (1964, 1965, 1966) that we have held it. While any single year's performance can be quite erratic, we think the probabilities are highly favorable for superior future performance over a three or four year period. The attractiveness and relative certainty of this particular security are what caused me to introduce Ground Rule 7 in November, 1965 to allow individual holdings of up to 40% of our net assets. We spend considerable effort continuously evaluating every facet of the company and constantly testing our hypothesis that this security is superior to alternative investment choices. Such constant evaluation and comparison at shifting prices is absolutely essential to our investment operation.

It would be much more pleasant (and indicate a more favorable future) to report that our results in the Generals -Relatively Undervalued category represented fifteen securities in ten industries, practically all of which outperformed the market. We simply don't have that many good ideas. As mentioned above, new ideas are continually measured against present ideas and we will not make shifts if the effect is to downgrade expectable performance. This policy has resulted in limited activity in recent years when we have felt so strongly about the relative merits of our largest holding. Such a condition has meant that realized gains have been a much smaller portion of total performance than in earlier years when the flow of good ideas was more substantial.

The sort of concentration we have in this category is bound to produce wide swings in short term performance – some, most certainly, unpleasant. There have already been some of these applicable to shorter time spans than I

use in reporting to partners. This is one reason I think frequent reporting to be foolish and potentially misleading in a long term oriented business such as ours.

Personally, within the limits expressed in last year's letter on diversification, I am willing to trade the pains (forget about the pleasures) of substantial short term variance in exchange for maximization of long term performance. However, I am not willing to incur risk of substantial permanent capital loss in seeking to better long term performance. To be perfectly clear - under our policy of concentration of holdings, partners should be completely prepared for periods of substantial underperformance (far more likely in sharply rising markets) to offset the occasional over performance such as we have experienced in 1965 and 1966, and as a price we pay for hoped-for good long term performance.

All this talk about the long pull has caused one partner to observe that “even five minutes is a long time if one's head is being held under water." This is the reason, of course, that we use borrowed money very sparingly in our operation. Average bank borrowings during 1966 were well under 10% of average net worth.

One final word about the Generals - Relatively Undervalued category. In this section we also had an experience which helped results in 1966 but hurt our long term prospects. We had just one really important new idea in this category in 1966. Our purchasing started in late spring but had only come to about $1.6 million (it could be bought steadily but at only a moderate pace) when outside conditions drove the stock price up to a point where it was not relatively attractive. Though our overall gain was $728,141 on an average holding period of six and a half months in 1966, it would have been much more desirable had the stock done nothing for a long period of time while we accumulated a really substantial position.

Workouts

In last year's letter I forecast reduced importance for workouts. While they were not of the importance of some past years. I was pleasantly surprised by our experience in 1966 during which we kept an average of $7,666,314 employed in this category. Furthermore, we tend to ascribe borrowings to the workout section so that our net equity capital employed was really something under this figure and our return was somewhat better than the 22.4% indicated on page six. Here, too, we ran into substantial variation. At June 30, our overall profit on this category was $16,112 on an average investment of $7,870,151 so that we really had a case of an extraordinarily good second half offsetting a poor first half.

In past years, sometimes as much as 30-40% of our net worth has been invested in workouts, but it is highly unlikely that this condition will prevail in the future. Nevertheless, they may continue to produce some decent returns on the moderate amount of capital employed.

Miscellaneous

Operationally, we continue to function well above rated capacity with Bill, John, Elizabeth and Donna all contributing excellent performances. At Buffett Partnership. Ltd. we have never had to divert investment effort to offset organizational shortcomings and this has been an important ingredient in the performance over the years.

Peat, Marwick, Mitchell & Co., aided for the second year by their computer, turned in the usual speedy, efficient and comprehensive job.

We all continue to maintain more than an academic interest in the Partnership. The employees and I, our spouses and children, have a total of over $10 million invested at January 1, 1967. In the case of my family, our Buffett Partnership, Ltd. investment represents well over 90% of our net worth.

Within the coming two weeks you will receive:

1. A tax letter giving you all BPL information needed for your 1966 federal income tax return. This letter is the only item that counts for tax purposes.

2. An audit from Peat, Marwick, Mitchell & Co. for 1966, setting forth the operations and financial position of BPL, as well as your own capital account.

3. A letter signed by me setting forth the status of your BPL interest on January 1, 1967. This is identical with the figures developed in the audit.

Let me know if anything in this letter or that occurs during the year needs clarifying. My next letter will be about July 15 summarizing the first half of this year.

Cordially,

Warren E. Buffett

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July 12, 1967

First Half Performance

Again, this is being ,written in late June prior to the family's trip to California. To maintain the usual chronological symmetry (I try to sublimate my aesthetic urges when it comes to creating symmetry in the profit and loss statement), I will leave a few blanks and trust that the conclusions look appropriate when the figures are entered.

We began 1967 on a traumatic note with January turning out to be one of the worst months we have experienced with a plus 3.3% for BPL versus a plus 8.5% for the Dow. Despite this sour start, we finished the half about plus 21% for an edge of 9.6 percentage points over the Dow. Again, as throughout 1966, the Dow was a relatively easy competitor (it won't be every year, prevailing thinking to the contrary notwithstanding) and a large majority of investment managers outdid this yardstick. The following table summarizes performance to date on the usual basis:

Year	**Overall Results From Dow (1)**	**Partnership Results (2)**	**Limited Partners' Results (3)**
1957	-8.4%	10.4%	9.3%
1958	38.5%	40.9%	32.2%
1959	20.0%	25.9%	20.9%
1960	-6.2%	22.8%	18.6%
1961	22.4%	45.9%	35.9%
1962	-7.6%	13.9%	11.9%
1963	20.6%	38.7%	30.5%
1964	18.7%	27.8%	22.3%
1965	14.2%	47.2%	36.9%
1966	-15.6%	20.4%	16.8%
First half 1967	11.4%	21.0%	17.3%
Cumulative Results	**148.3%**	**1419.8%**	**843.3%**
Annual Compounded Rate	**9.1%**	**29.6%**	**23.8%**

(1) Based on yearly changes in the value of the Dow plus dividends that would have been received through ownership of the Dow during that year. The table includes all complete years of partnership activity.

(2) For 1957-61 consists of combined results of all predecessor limited partnerships operating throughout the entire year after all expenses but before distributions to partners or allocations to the general partner.

(3) For 1957-61 computed on the basis of the preceding column of partnership results allowing for allocation to the general partner based upon the present partnership agreement, but before monthly withdrawals by limited partners.

BPL's performance during the first hall reflects no change in valuation of our controlled companies and was thus achieved solely by the 63.3% of our net assets invested in marketable securities at the beginning of the year.

Any revaluation of Diversified Retailing Company (DRC) and Berkshire Hathaway Inc. (B-H) will be made in December prior to the time the commitment letters become final and will be based upon all relevant criteria (including current operating. market and credit conditions) at that time.

Both DRC and B-H made important acquisitions during the first half. The overall progress of DRC (80% owned) and both of its subsidiaries (Hochschild Kohn and Associated Cotton Shops) is highly satisfactory. However, B-H is experiencing and faces real difficulties in the textile business, while I don't presently foresee any loss in underlying values. I similarly see no prospect of a good return on the assets employed in the textile business. Therefore, this segment of our portfolio will be a substantial drag on our relative performance (as it has been during the first half) if the Dow continues to advance. Such relative performance with controlled companies is expected in a strongly advancing market, but is accentuated when the business is making no progress. As a friend of mine says. “Experience is what you find when you're looking for something else.”

Investment Companies

The usual comparison follows showing the results of the two largest open-end and two largest closed-end investment companies which pursue a policy of 95-100% investment in common stocks.

Year	**Mass. Inv. Trust (1)**	**Investors Stock (1)**	**Lehman (2)**	**Tri-Cont (2)**	**Dow**	**Limited Partners**
1957	-11.4%	-12.4%	-11.4%	-2.4%	-8.4%	9.3%
1958	42.7%	47.5%	40.8%	33.2%	38.5%	32.2%
1959	9.0%	10.3%	8.1%	8.4%	20.0%	20.9%
1960	-1.0%	-0.6%	2.5%	2.8%	-6.2%	18.6%
1961	25.6%	24.9%	23.6%	22.5%	22.4%	35.9%
1962	-9.8%	-13.4%	-14.4%	-10.0%	-7.6%	11.9%
1963	20.0%	16.5%	23.7%	18.3%	20.6%	30.5%
1964	15.9%	14.3%	13.6%	12.6%	18.7%	22.3%
1965	10.2%	9.8%	19.0%	10.7%	14.2%	36.9%
1966	-7.7%	-10.0%	-2.6%	-6.9%	-15.6%	16.8%
First half 1967	11.3%	12.3%	19.3%	14.4%	11.4%	17.3%
Cumulative Results	**143.3%**	**126.4%**	**185.4%**	**156.8%**	**148.3%**	**843.3%**
Annual Compounded Rate	**8.9%**	**8.1%**	**10.5%**	**9.4%**	**9.1%**	**23.8%**

(1) Computed from changes in asset value plus any distributions to holders of record during year.
(2) From 1967 Moody's Bank & Finance Manual for 1957-1966. Estimated for first half of 1967.

The tide continues to be far more important than the swimmers.

Taxes

We entered 1967 with unrealized gains of $16,361,974. Through June 30 we have realized net capital gains of $7,084,104 so it appears likely that we will realize in 1967 a fairly substantial portion of the unrealized gain attributable to your interest at the beginning of the year. This amount was reported to you as Item 3 of our February 2, 1967 letter. A copy of that letter, along with a tax letter, will be mailed to you in November giving a rough idea of the tax situation at that time.

As I regularly suggest, the safe course to follow on interim estimates is to pay the same estimated tax for 1967 as your actual tax was for 1966. There can be no penalties if you follow this procedure.

Whatever our final figure, it looks now as if it will be very largely long term capital gain with only minor amounts, if any, of short term gain and ordinary income. (I consider the whole Income-Principal Myth fair game for one of my soft-spoken gently worded critiques. As I told Susie in the early days of our marriage, “Don't worry about the income; just the outcome.”)

Miscellaneous

During the first half, Stan Perimeter resigned from the Dissolution Committee because of his present full-time involvement in investment management. Fred Stanback, Jr., a long time partner and experienced investor, was elected by the remaining members to fill the vacancy.

As in past years, we will have a report out about November 11 along with the Commitment Letter, and the rough estimate of the 1967 tax situation, etc.

However, there will be a special letter (to focus your attention upon it) in October. The subject matter will not relate to change in the Partnership Agreement, but will involve some evolutionary changes in several "Ground Rules" which I want you to have ample time to contemplate before making your plans for 1968. Whereas the Partnership Agreement represents the legal understanding among us, the "Ground Rules" represent the personal understanding and in some ways is the more important document. I consider it essential that any changes be clearly set forth and explained prior to their effect on partnership activity or performance – hence, the October letter.

Cordially,

Warren E. Buffett

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October 9, 1967

To My Partners:

Over the past eleven years, I have consistently set forth as the BPL investment goal an average advantage in our performance of ten percentage points per annum in comparison with the Dow Jones Industrial Average. Under the environment that existed during that period. I have considered such an objective difficult but obtainable.

The following conditions now make a change in yardsticks appropriate:

1. The market environment has changed progressively over the past decade, resulting in a sharp diminution in the number of obvious quantitatively based investment bargains available;

2. Mushrooming interest in investment performance (which has its ironical aspects since I was among a lonely few preaching the importance of this some years ago) has created a hyper-reactive pattern of market behavior against which my analytical techniques have limited value;

3. The enlargement of our capital base to about $65 million when applied against a diminishing trickle of good investment ideas has continued to present the problems mentioned in the January, 1967 letter; and

4. My own personal interests dictate a less compulsive approach to superior investment results than when I was younger and leaner.

Let's look at each of these factors in more detail.

The evaluation of securities and businesses for investment purposes has always involved a mixture of qualitative and quantitative factors. At the one extreme, the analyst exclusively oriented to qualitative factors would say. "Buy the right company (with the right prospects, inherent industry conditions, management, etc.) and the price will take care of itself." On the other hand, the quantitative spokesman would say, "Buy at the right price and the company (and stock) will take care of itself." As is so often the pleasant result in the securities world, money can be made with either approach. And, of course, any analyst combines the two to some extent - his classification in either school would depend on the relative weight he assigns to the various factors and not to his consideration of one group of factors to the exclusion of the other group.

Interestingly enough, although I consider myself to be primarily in the quantitative school (and as I write this no one has come back from recess - I may be the only one left in the class), the really sensational ideas I have had over the years have been heavily weighted toward the qualitative side where I have had a "high-probability insight". This is what causes the cash register to really sing. However, it is an infrequent occurrence, as insights usually are, and, of course, no insight is required on the quantitative side - the figures should hit you over the head with a baseball bat. So the really big money tends to be made by investors who are right on qualitative decisions but, at least in my opinion, the more sure money tends to be made on the obvious quantitative decisions.

Such statistical bargains have tended to disappear over the years. This may be due to the constant combing and recombing of investments that has occurred during the past twenty years, without an economic convulsion such as that of the '30s to create a negative bias toward equities and spawn hundreds of new bargain securities. It may

be due to the new growing social acceptance, and therefore usage (or maybe it's vice versa - I'll let the behaviorists figure it out) of takeover bids which have a natural tendency to focus on bargain issues. It may be due to the exploding ranks of security analysts bringing forth an intensified scrutiny of issues far beyond what existed some years ago. Whatever the cause, the result has been the virtual disappearance of the bargain issue as determined quantitatively - and thereby of our bread and butter. There still may be a few from time to time. There will also be the occasional security where I am really competent to make an important qualitative judgment. This will offer our best chance for large profits. Such instances will. however, be rare. Much of our good performance during the past three years has been due to a single idea of this sort.

The next point of difficulty is the intensified interest in investment performance. For years I have preached the importance of measurement. Consistently I have told partners that unless our performance was better than average, the money should go elsewhere. In recent years this idea has gained momentum throughout the investment (or more importantly, the investing) community. In the last year or two it has started to look a bit like a tidal wave. I think we are witnessing the distortion of a sound idea.

I have always cautioned partners that I considered three years a minimum in determining whether we were "performing". Naturally, as the investment public has taken the bit in its teeth, the time span of expectations has been consistently reduced to the point where investment performance by large aggregates of money is being measured yearly, quarterly, monthly, and perhaps sometimes even more frequently (leading to what is known as "instant research"). The payoff for superior short term performance has become enormous, not only in compensation for results actually achieved, but in the attraction of new money for the next round. Thus a self-generating type of activity has set in which leads to larger and larger amounts of money participating on a shorter and shorter time span. A disturbing corollary is that the vehicle for participation (the particular companies or stocks) becomes progressively less important - at times virtually incidental - as the activity accelerates.

In my opinion what is resulting is speculation on an increasing scale. This is hardly a new phenomenon; however, a dimension has been added by the growing ranks of professional (in many cases formerly quite docile) investors who feel they must “get aboard”. The game is dignified, of course, by appropriate ceremonies, personages and lexicon. To date it has been highly profitable. It may also be that this is going to be the standard nature of the market in the future. Nevertheless, it is an activity at which I am sure I would not do particularly well. As I said on page five of my last annual letter,

> "Furthermore, we will not follow the frequently prevalent approach of investing in securities where an attempt to anticipate market action overrides business valuations. Such so-called 'fashion' investing has frequently produced very substantial and quick profits in recent years (and currently as I write this in January). It represents an investment technique whose soundness I can neither affirm nor deny. It does not completely satisfy my intellect (or perhaps my prejudices), and most definitely does not fit my temperament. I will not invest my own money based upon such an approach – hence, I will most certainly not do so with your money.”

Any form of hyper-activity with large amounts of money in securities markets can create problems for all participants. I make no attempt to guess the action of the stock market and haven't the foggiest notion as to whether the Dow will be at 600, 900 or 1200 a year from now. Even if there are serious consequences resulting from present and future speculative activity, experience suggests estimates of timing are meaningless. However, I do believe certain conditions that now exist are likely to make activity in markets more difficult for us for the intermediate future.

The above may simply be "old-fogeyism" (after all, I am 37). When the game is no longer being played your way, it is only human to say the new approach is all wrong, bound to lead to trouble, etc. I have been scornful of such behavior by others in the past. I have also seen the penalties incurred by those who evaluate conditions as

they were - not as they are. Essentially I am out of step with present conditions. On one point, however, I am clear. I will not abandon a previous approach whose logic I understand (although I find it difficult to apply) even though it may mean foregoing large and apparently easy, profits to embrace an approach which I don't fully understand, have not practiced successfully and which, possibly, could lead to substantial permanent loss of capital.

The third point of difficulty involves our much greater base of capital. For years my investment ideas were anywhere from 110% to 1000% of our capital. It was difficult for me to conceive that a different condition could ever exist. I promised to tell partners when it did and in my January, 1967 letter had to make good on that promise. Largely because of the two conditions previously mentioned, our greater capital is now something of a drag on performance. I believe it is the least significant factor of the four mentioned, and that if we were operating with one-tenth of our present capital our performance would be little better. However, increased funds are presently a moderately negative factor.

The final, and most important, consideration concerns personal motivation. When I started the partnership I set the motor that regulated the treadmill at "ten points better than the DOW". I was younger, poorer and probably more competitive. Even without the three previously discussed external factors making for poorer performance. I would still feel that changed personal conditions make it advisable to reduce the speed of the treadmill. I have observed many cases of habit patterns in all activities of life, particularly business, continuing (and becoming accentuated as years pass) long after they ceased making sense. Bertrand Russell has related the story of two Lithuanian girls who lived at his manor subsequent to World War I. Regularly each evening after the house was dark, they would sneak out and steal vegetables from the neighbors for hoarding in their rooms; this despite the fact that food was bountiful at the Russell table. Lord Russell explained to the girls that while such behavior may have made a great deal of sense in Lithuania during the war, it was somewhat out of place in the English countryside. He received assenting nods and continued stealing.

He finally contented himself with the observation that their behavior, strange as it might seem to the neighbors, was really not so different from that of the elder Rockefeller.

Elementary self-analysis tells me that I will not be capable of less than all-out effort to achieve a publicly proclaimed goal to people who have entrusted their capital to me. All-out effort makes progressively less sense. I would like to have an economic goal which allows for considerable non-economic activity. This may mean activity outside the field of investments or it simply may mean pursuing lines within the investment field that do not promise the greatest economic reward. An example of the latter might be the continued investment in a satisfactory (but far from spectacular) controlled business where I liked the people and the nature of the business even though alternative investments offered an expectable higher rate of return. More money would be made buying businesses at attractive prices, then reselling them. However, it may be more enjoyable (particularly when the personal value of incremental capital is less) to continue to own them and hopefully improve their performance, usually in a minor way, through some decisions involving financial strategy.

Thus, I am likely to limit myself to things which are reasonably easy, safe, profitable and pleasant. This will not make our operation more conservative than in the past since I believe, undoubtedly with some bias, that we have always operated with considerable conservatism. The long-term downside risk will not be less; the upside potential will merely be less.

Specifically, our longer term goal will be to achieve the lesser of 9% per annum or a five percentage point advantage over the Dow. Thus, if the Dow averages -2% over the next five years, I would hope to average +3% but if the Dow averages +12%, I will hope to achieve an average of only +9%. These may be limited objectives, but I consider it no more likely that we will achieve even these more modest results under present conditions than I formerly did that we would achieve our previous goal of a ten percentage point average annual edge over the Dow. Furthermore, I hope limited objectives will make for more limited effort (I'm quite sure the converse is

true).

I will incorporate this new goal into the Ground Rules to be mailed you about November 1, along with the 1968 Commitment Letter. I wanted to get this letter off to you prior to that mailing so you would have ample time to consider your personal situation, and if necessary get in touch with me to clear up some of the enclosed, before making a decision on 1968. As always, I intend to continue to leave virtually all of my capital (excluding Data Documents stock), along with that of my family, in BPL. What I consider satisfactory and achievable may well be different from what you consider so. Partners with attractive alternative investment opportunities may logically decide that their funds can be better employed elsewhere, and you can be sure I will be wholly in sympathy with such a decision.

I have always found behavior most distasteful which publicly announces one set of goals and motivations when actually an entirely different set of factors prevails. Therefore, I have always tried to be l00% candid with you about my goals and personal feelings so you aren't making important decisions pursuant to phony proclamations (I've run into a few of these in our investment experience). Obviously all the conditions enumerated in this letter haven't appeared overnight. I have been thinking about some of the points involved for a long period of time. You can understand, I am sure, that I wanted to pick a time when past goals had been achieved to set forth a reduction in future goals. I would not want to reduce the speed of the treadmill unless I had fulfilled my objectives to this point.

Please let me know if I can be of any help in deciphering any portion of this letter.

Cordially,

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January 24, 1968

Our Performance in 1967

By most standards, we had a good year in 1967. Our overall performance was plus 35.9% compared to plus 19.0% for the Dow, thus surpassing our previous objective of performance ten points superior to the Dow. Our overall gain was $19,384,250 which, even under accelerating inflation, will buy a lot of Pepsi. And, due to the sale of some longstanding large positions in marketable securities, we had realized taxable income of $27,376,667 which has nothing to do with 1967 performance but should give all of you a feeling of vigorous participation in The Great Society on April 15th.

The minor thrills described above are tempered by any close observation of what really took place in the stock market during 1967. Probably a greater percentage of participants in the securities markets did substantially better than the Dow last year than in virtually any year in history. In 1967, for many, it rained gold and it paid to be out playing the bass tuba. I don't have a final tabulation at this time but my guess is that at least 95% of investment companies following a common stock program achieved better results than the Dow - in many cases by very substantial amounts. It was a year when profits achieved were in inverse proportion to age - and I am in the geriatric ward, philosophically.

The following summarizes the year-by-year performance of the Dow, the Partnership before allocation (one quarter of the excess over 6%) to the general partner, and the results for limited partners:

Year	Overall Results From Dow (1)	Partnership Results (2)	Limited Partners' Results (3)
1957	-8.4%	10.4%	9.3%
1958	38.5%	40.9%	32.2%
1959	20.0%	25.9%	20.9%
1960	-6.2%	22.8%	18.6%
1961	22.4%	45.9%	35.9%
1962	-7.6%	13.9%	11.9%
1963	20.6%	38.7%	30.5%
1964	18.7%	27.8%	22.3%
1965	14.2%	47.2%	36.9%
1966	-15.6%	20.4%	16.8%
1967	19.0%	35.9%	28.4%

(1) Based on yearly changes in the value of the Dow plus dividends that would have been received through ownership of the Dow during that year. The table includes all complete years of partnership activity.

(2) For 1957-61 consists of combined results of all predecessor limited partnerships operating throughout the entire year after all expenses, but before distributions to partners or allocations to the general partner.

(3) For 1957-61 computed on the basis of the preceding column of partnership results allowing for allocation to the general partner based upon the present partnership agreement, but before monthly

withdrawals by limited partners.

On a cumulative or compounded basis, the results are:

Year	Overall Results From Dow	Partnership Results	Limited Partners' Results
1957	-8.4%	10.4%	9.3%
1957 – 58	26.9%	55.6%	44.5%
1957 – 59	52.3%	95.9%	74.7%
1957 – 60	42.9%	140.6%	107.2%
1957 – 61	74.9%	251.0%	181.6%
1957 – 62	61.6%	299.8%	215.1%
1957 – 63	95.1%	454.5%	311.2%
1957 – 64	131.3%	608.7%	402.9%
1957 – 65	164.1%	943.2%	588.5%
1957 – 66	122.9%	1156.0%	704.2%
1957 – 67	165.3%	1606.9%	932.6%
Annual Compounded Rate	**9.3%**	**29.4%**	**23.6%**

Investment Companies

On the following page is the usual tabulation showing the results of what were the two largest mutual funds (they have stood at the top in size since BPL was formed - this year, however, Dreyfus Fund overtook them) that follow a policy of being, typically, 95-100% invested in common stocks, and the two largest diversified closed-end investment companies.

Year	Mass. Inv. Trust (1)	Investors Stock (1)	Lehman (2)	Tri-Cont (2)	Dow	Limited Partners
1957	-11.4%	-12.4%	-11.4%	-2.4%	-8.4%	9.3%
1958	42.7%	47.5%	40.8%	33.2%	38.5%	32.2%
1959	9.0%	10.3%	8.1%	8.4%	20.0%	20.9%
1960	-1.0%	-0.6%	2.5%	2.8%	-6.2%	18.6%
1961	25.6%	24.9%	23.6%	22.5%	22.4%	35.9%
1962	-9.8%	-13.4%	-14.4%	-10.0%	-7.6%	11.9%
1963	20.0%	16.5%	23.7%	18.3%	20.6%	30.5%
1964	15.9%	14.3%	13.6%	12.6%	18.7%	22.3%
1965	10.2%	9.8%	19.0%	10.7%	14.2%	36.9%
1966	-7.7%	-10.0%	-2.6%	-6.9%	-15.6%	16.8%
1967	20.0%	22.8%	28.0%	25.4%	19.0%	28.4%
Cumulative Results	**162.3%**	**147.6%**	**206.2%**	**181.5%**	**165.3%**	**932.6%**
Annual Compounded Rate	**9.2%**	**8.6%**	**10.7%**	**9.9%**	**9.3%**	**23.6%**

(1) Computed from changes in asset value plus any distributions to holders of record during year.
(2) From 1967 Moody's Bank & Finance Manual for 1957-1966. Estimated for 1967.

Last year I said:

> "A few mutual funds and some private investment operations have compiled records vastly superior to the Dow and, in some cases, substantially superior to Buffett Partnership, Ltd. Their investment techniques are usually very dissimilar to ours and not within my capabilities."

In 1967 this condition intensified. Many investment organizations performed substantially better than BPL, with gains ranging to over 100%. Because of these spectacular results, money, talent and energy are converging in a maximum effort for the achievement of large and quick stock market profits. It looks to me like greatly intensified speculation with concomitant risks -but many of the advocates insist otherwise.

My mentor, Ben Graham, used to say. "Speculation is neither illegal, immoral nor fattening (financially)." During the past year, it was possible to become fiscally flabby through a steady diet of speculative bonbons. We continue to eat oatmeal but if indigestion should set in generally, it is unrealistic to expect that we won't have some discomfort.

Analysis of 1967 Results

The overall figures given earlier conceal vast differences in profitability by portfolio category during 1967.

We had our worst performance in history in the "Workout" section. In the 1965 letter, this category was defined as,

> "...securities with a timetable. They arise from corporate activity -- sell-outs, mergers, reorganizations, spin-offs, etc. In this category, we are not talking about rumors or inside information pertaining to such developments, but to publicly announced activities of this sort. We wait until we can read it in the paper. The risk does not pertain primarily to general market behavior (although that is sometimes tied in. to a degree). but instead to something upsetting the applecart so that the expected corporate development does not materialize."

The streets were filled with upset applecarts - our applecarts - during 1967. Thus, on an average investment of $17,246,879, our overall gain was $153,273. For those of you whose slide rule does not go to such insulting depths, this represents a return of .89 of 1%. While I don't have complete figures. I doubt that we have been below 10% in any past year. As in other categories, we tend to concentrate our investments in the workout category in just a few situations per year. This technique gives more variation in yearly results than would be the case if we used an across-the-board approach. I believe our approach will result in as great (or greater) profitability on a long-term basis, but you can't prove it by 1967.

Our investment in controlled companies was a similar drag on relative performance in 1967, but this is to be expected in strong markets. On an average investment of $20,192,776 we had an overall gain of $2,894,571. I am pleased with this sort of performance, even though this category will continue to underperform if the market continues strong during 1968. Through our two controlled companies (Diversified Retailing and Berkshire Hathaway), we acquired two new enterprises in 1967. Associated Cotton Shops and National Indemnity (along with National Fire & Marine, an affiliated company). These acquisitions couldn't be more gratifying. Everything was as advertised or better. The principal selling executives, Ben Rosner and Jack Ringwalt, have continued to do a superb job (the only kind they know), and in every respect have far more than lived up to their end of the bargain.

The satisfying nature of our activity in controlled companies is a minor reason for the moderated investment objectives discussed in the October 9th letter. When I am dealing with people I like, in businesses I find stimulating (what business isn't ?), and achieving worthwhile overall returns on capital employed (say, 10 -12%), it seems foolish to rush from situation to situation to earn a few more percentage points. It also does not seem sensible to me to trade known pleasant personal relationships with high grade people, at a decent rate of

return, for possible irritation, aggravation or worse at potentially higher returns. Hence, we will continue to keep a portion of our capital (but not over 40% because of the possible liquidity requirements arising from the nature of our partnership agreement) invested in controlled operating businesses at an expected rate of return below that inherent in an aggressive stock market operation.

With a combined total of $37,439,655 in workouts and controls producing an overall gain of only $3,047,844, the more alert members of the class will have already concluded we had a whale of a year in the "Generals - Relatively Undervalued" category. On a net average investment of $19,487,996, we had an overall gain of $14,096,593, or 72%. Last year I referred to one investment which substantially outperformed the general market in 1964, 1965 and 1966 and because of its size (the largest proportion we have ever had in anything - we hit our 40% limit) had a very material impact on our overall results and, even more so, this category. This excellent performance continued throughout 1967 and a large portion of total gain was again accounted for by this single security. Our holdings of this security have been very substantially reduced and we have nothing in this group remotely approaching the size or potential which formerly existed in this investment.

The "Generals - Private Owner" section produced good results last year ($1,297,215 on $5,141,710 average investment), and we have some mildly interesting possibilities in this area at present.

Miscellaneous

We begin the new year with net assets of $68,108,088. We had partners with capital of about $1,600,000 withdraw at yearend, primarily because of the reduced objectives announced in the October 9th letter. This makes good sense for them, since most of them have the ability and motivation to surpass our objectives and I am relieved from pushing for results that I probably can't attain under present conditions.

Some of those who withdrew (and many who didn't) asked me, "What do you really mean?" after receiving the October 9th letter. This sort of a question is a little bruising to any author, but I assured them I meant exactly what I had said. I was also asked whether this was an initial stage in the phasing out of the partnership. The answer to this is, “Definitely, no”. As long as partners want to put up their capital alongside of mine and the business is operationally pleasant (and it couldn't be better), I intend to continue to do business with those who have backed me since tennis shoes.

Gladys Kaiser has joined us and is doing the same sort of top-notch job that we have long received from Donna, Bill and John. The office group, spouses and children have over $15 million invested in BPL on January 1, 1968, so we have not had a need for NoDoz during business hours.

Within a few days, you will receive:

1. A tax letter giving you all BPL information needed for your 1967 federal income tax return. This letter is the only item that counts for tax purposes.

2. An audit from Peat, Marwick, Mitchell & Co. (they have again done an excellent job) for 1967, setting forth the operations and financial position of BPL, as well as your own capital account.

3. A letter signed by me setting forth the status of your BPL interest on January 1, 1968. This is identical with the figures developed in the audit.

Let me know if anything in this letter or that occurs during the year needs clarifying. My next letter will be about July15th, summarizing the first half of this year.

Cordially,

Warren E. Buffett

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OMAHA, NEBRASKA 68131
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July 11th, 1968

First Half Performance

During the first half of 1968, the Dow-Jones Industrial Average declined fractionally from 905 to 898. Ownership of the Dow would also have produced dividends of about $15 during the half, resulting in an overall gain of 0.9% for that Average. The Dow, once again, was an anemic competitor for most investment managers, although it was not surpassed by anything like the margins of 1967.

Our own performance was unusually good during the first half, with an overall gain of 16% excluding any change in valuation for controlled companies (which represented slightly over one-third of net assets at the beginning of the year). However, any release of adrenalin is unwarranted. Our marketable security investments are heavily concentrated in a few situations, making relative performance potentially more volatile than in widely diversified investment vehicles. Our long term performance goals are as stated in the revised "Ground Rules" and I will be quite happy if we achieve those limited objectives over a period of years. The following table summarizes performance to date on the usual basis:

Year	**Overall Results From Dow (1)**	**Partnership Results (2)**	**Limited Partners' Results (3)**
1957	-8.4%	10.4%	9.3%
1958	38.5%	40.9%	32.2%
1959	20.0%	25.9%	20.9%
1960	-6.2%	22.8%	18.6%
1961	22.4%	45.9%	35.9%
1962	-7.6%	13.9%	11.9%
1963	20.6%	38.7%	30.5%
1964	18.7%	27.8%	22.3%
1965	14.2%	47.2%	36.9%
1966	-15.6%	20.4%	16.8%
1967	19.0%	35.9%	28.4%
First Half 1968	0.9%	16.0%	13.5%
Cumulative Results	167.7%	1880.0%	1072.0%
Annual Compounded Rate	8.9%	29.6%	23.8%

(1) Based on yearly changes in the value of the Dow plus dividends that would have been received through ownership of the Dow during that year. The table includes all complete years of partnership activity.

(2) For 1957-61 consists of combined results of all predecessor limited partnerships operating throughout the entire year after all expenses but before distributions to partners or allocations to the general partner.

(3) For 1957-61 computed on the basis of the preceding column of partnership results allowing for allocation to the general partner based upon the present partnership agreement, but before monthly withdrawals by limited partners.

Although we revise valuations of our controlled companies only at yearend, it presently appears that our share of their 1968 earnings will be something over $3 million. Those with primary responsibility for their operations, Ken Chace at Berkshire Hathaway, Louis Kohn at Hochschild Kohn, Jack Ringwalt at National Indemnity and Ben Rosner at Associated Cotton Shops, continue to meld effort and ability into results.

This year, Diversified Retailing Company (owner of Hochschild Kohn and Associated Cotton Shops) issued its first published annual report. This was occasioned by the public sale of debentures to approximately 1,000 investors last December. Thus, DRC is in the rather unusual position of being a public company from a creditors' viewpoint, but a private one (there are three stockholders -BPL owns 80%) for ownership purposes. I am enclosing the DRC report with this letter (except where duplicates go to one house hold) and plan to continue to send them along with future mid-year letters.

As I have mentioned before, we cannot make the same sort of money out of permanent ownership of controlled businesses that can be made from buying and reselling such businesses, or from skilled investment in marketable securities. Nevertheless, they offer a pleasant long term form of activity (when conducted in conjunction with high grade, able people) at satisfactory rates of return.

Investment Companies

On the following page is the form sheet on the usual investment companies:

Year	Mass. Inv. Trust (1)	Investors Stock (1)	Lehman (2)	Tri-Cont (2)	Dow	Limited Partners
1957	-11.4%	-12.4%	-11.4%	-2.4%	-8.4%	9.3%
1958	42.7%	47.5%	40.8%	33.2%	38.5%	32.2%
1959	9.0%	10.3%	8.1%	8.4%	20.0%	20.9%
1960	-1.0%	-0.6%	2.5%	2.8%	-6.2%	18.6%
1961	25.6%	24.9%	23.6%	22.5%	22.4%	35.9%
1962	-9.8%	-13.4%	-14.4%	-10.0%	-7.6%	11.9%
1963	20.0%	16.5%	23.7%	18.3%	20.6%	30.5%
1964	15.9%	14.3%	13.6%	12.6%	18.7%	22.3%
1965	10.2%	9.8%	19.0%	10.7%	14.2%	36.9%
1966	-7.7%	-10.0%	-2.6%	-6.9%	-15.6%	16.8%
1967	20.0%	22.8%	28.0%	25.4%	19.0%	28.4%
First Half 1968	5.1%	2.8%	4.4%	2.0%	0.9%	13.5%
Cumulative Results	**175.7%**	**154.5%**	**218.6%**	**186.7%**	**167.7%**	**1072.0%**
Annual Compounded Rate	**9.2%**	**8.5%**	**10.6%**	**9.6%**	**8.9%**	**23.8%**

(1) Computed from changes in asset value plus any distributions to holders of record during year.
(2) From 1968 Moody's Bank & Finance Manual for 1957 -1967. Estimated for first half of 1968.

Due to a sluggish performance by the Dow in the last few years, the four big funds now have, on average, about a one-half point per annum advantage over the Dow for the full period.

The Present Environment

I make no effort to predict the course of general business or the stock market. Period. However, currently there are practices snowballing in the security markets and business world which, while devoid of short term predictive value, bother me as to possible long term consequences.

I know that some of you are not particularly interested (and shouldn't be) in what is taking place on the financial stage. For those who are, I am enclosing a reprint of an unusually clear and simple article which lays bare just what is occurring on a mushrooming scale. Spectacular amounts of money are being made by those participating (whether as originators, top employees. professional advisors, investment bankers, stock speculators, etc…) in the chain-letter type stock-promotion vogue. The game is being played by the gullible, the self-hypnotized, and the cynical. To create the proper illusions, it frequently requires accounting distortions (one particularly progressive entrepreneur told me he believed in "bold, imaginative accounting"), tricks of capitalization and camouflage of the true nature of the operating businesses involved. The end product is popular, respectable and immensely profitable (I'll let the philosophers figure in which order those adjectives should be placed).

Quite candidly, our own performance has been substantially improved on an indirect basis because of the fall-out from such activities. To create an ever widening circle of chain letters requires increasing amounts of corporate raw material and this has caused many intrinsically cheap (and not so cheap) stocks to come to life. When we have been the owners of such stocks, we have reaped market rewards much more promptly than might otherwise have been the case. The appetite for such companies, however, tends to substantially diminish the number of fundamentally attractive investments which remain.

I believe the odds are good that, when the stock market and business history of this period is being written, the phenomenon described in Mr. May's article will be regarded as of major importance, and perhaps characterized as a mania. You should realize, however, that his "The Emperor Has No Clothes" approach is at odds (or dismissed with a “SO What?” or an "Enjoy, Enjoy”) with the views of most investment banking houses and currently successful investment managers. We live in an investment world, populated not by those who must be logically persuaded to believe, but by the hopeful, credulous and greedy, grasping for an excuse to believe.

Finally, for a magnificent account of the current financial scene, you should hurry out and get a copy of “The Money Game” by Adam Smith. It is loaded with insights and supreme wit. (Note: Despite my current “Support Your Local Postmaster” drive, I am not enclosing the book with this letter - it retails for $6.95.)

Taxes

Several unusual factors make the tax figure even more difficult than usual to estimate this year. We will undoubtedly have an above average amount of ordinary income. The picture on short term and long term capital gain is subject to unusually substantial variance. At the beginning of the year, I suggested that you use an 8% ordinary income factor (it won't come in this manner but this figure embodies an adjustment for long term capital gain) applied to your BPL capital account on an interim basis to compute quarterly tax estimates. If a figure different from 8% seems more appropriate for your September 15th quarterly estimate. I will let you know by September 5th. If no change is necessary, you will next hear from me on November 1st with the Commitment Letter for 1969.

Cordially,

Warren E. Buffett

WEB/glk

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January 22nd, 1969

Our Performance in 1968

Everyone makes mistakes.

At the beginning of 1968, I felt prospects for BPL performance looked poorer than at any time in our history. However, due in considerable measure to one simple but sound idea whose time had come (investment ideas, like women are often more exciting than punctual), we recorded an overall gain of $40,032,691.

Naturally, you all possess sufficient intellectual purity to dismiss the dollar result and demand an accounting of performance relative to the Dow-Jones Industrial Average. We established a new mark at plus 58.8% versus an overall plus 7.7 % for the Dow, including dividends which would have been received through ownership of the Average throughout the year. This result should be treated as a freak like picking up thirteen spades in a bridge game. You bid the slam, make it look modest, pocket the money and then get back to work on the part scores. We will also have our share of hands when we go set.

The following summarizes the year-by-year performance of the Dow, the Partnership before allocation (one quarter of the excess over 6%) to the General Partner and the results for limited partners:

Year	Overall Results From Dow (1)	Partnership Results (2)	Limited Partners' Results (3)
1957	-8.4%	10.4%	9.3%
1958	38.5%	40.9%	32.2%
1959	20.0%	25.9%	20.9%
1960	-6.2%	22.8%	18.6%
1961	22.4%	45.9%	35.9%
1962	-7.6%	13.9%	11.9%
1963	20.6%	38.7%	30.5%
1964	18.7%	27.8%	22.3%
1965	14.2%	47.2%	36.9%
1966	-15.6%	20.4%	16.8%
1967	19.0%	35.9%	28.4%
1968	7.7%	58.8%	45.6%

(1) Based on yearly changes in the value of the Dow plus dividends that would have been received through ownership of the Dow during that year. The table includes all complete years of Partnership activity.

(2) For 1957-61 consists of combined results of all predecessor limited partnerships operating throughout the entire year after all expenses, but before distributions to partners or allocations to the General Partner.

(3) For 1957-61 computed on the basis of the preceding column of Partnership results allowing for allocation to the General Partner based upon the present Partnership Agreement, but before monthly withdrawals by limited partners.

On a cumulative or compounded basis, the results are:

Year	Overall Results From Dow	Partnership Results	Limited Partners' Results
1957	-8.4%	10.4%	9.3%
1957 – 58	26.9%	55.6%	44.5%
1957 – 59	52.3%	95.9%	74.7%
1957 – 60	42.9%	140.6%	107.2%
1957 – 61	74.9%	251.0%	181.6%
1957 – 62	61.6%	299.8%	215.1%
1957 – 63	95.1%	454.5%	311.2%
1957 – 64	131.3%	608.7%	402.9%
1957 – 65	164.1%	943.2%	588.5%
1957 – 66	122.9%	1156.0%	704.2%
1957 – 67	165.3%	1606.9%	932.6%
1957 – 68	185.7%	2610.6%	1403.5%
Annual Compounded Rate	**9.1%**	**31.6%**	**25.3%**

Investment Companies

On the following page is the usual tabulation showing the results of what were the two largest mutual funds (they stood at the top in size from 1957 through 1966 - they are still number two and three) that follow a policy of being, typically, 95 -100% invested in common stocks, and the two largest diversified closed-end investment companies.

Year	Mass. Inv. Trust (1)	Investors Stock (1)	Lehman (2)	Tri-Cont (2)	Dow	Limited Partners
1957	-11.4%	-12.4%	-11.4%	-2.4%	-8.4%	9.3%
1958	42.7%	47.5%	40.8%	33.2%	38.5%	32.2%
1959	9.0%	10.3%	8.1%	8.4%	20.0%	20.9%
1960	-1.0%	-0.6%	2.5%	2.8%	-6.2%	18.6%
1961	25.6%	24.9%	23.6%	22.5%	22.4%	35.9%
1962	-9.8%	-13.4%	-14.4%	-10.0%	-7.6%	11.9%
1963	20.0%	16.5%	23.7%	18.3%	20.6%	30.5%
1964	15.9%	14.3%	13.6%	12.6%	18.7%	22.3%
1965	10.2%	9.8%	19.0%	10.7%	14.2%	36.9%
1966	-7.7%	-10.0%	-2.6%	-6.9%	-15.6%	16.8%
1967	20.0%	22.8%	28.0%	25.4%	19.0%	28.4%
1968	10.3%	8.1%	6.7%	6.8%	7.7%	45.6%
Cumulative Results	**189.3%**	**167.7%**	**225.6%**	**200.2%**	**185.7%**	**1403.5%**
Annual Compounded Rate	**9.3%**	**8.6%**	**10.3%**	**9.6%**	**9.1%**	**25.3%**

(1) Computed from changes in asset value plus any distributions to holders of record during year.
(2) From 1968 Moody's Bank & Finance Manual for 1957-1967. Estimated for 1968.

It is interesting that after twelve years these four funds (which presently aggregate well over $5 billion and account for over 10% of the investment company industry) have averaged only a fraction of one percentage point annually better than the Dow.

Some of the so-called "go-go" funds have recently been re-christened "no-go" funds. For example, Gerald Tsai's Manhattan Fund, perhaps the world's best-known aggressive investment vehicle, came in at minus 6.9% for 1968. Many smaller investment entities continued to substantially outperform the general market in 1968, but in nothing like the quantities of 1966 and 1967.

The investment management business, which I used to severely chastise in this section for excessive lethargy, has now swung in many quarters to acute hypertension. One investment manager, representing an organization (with an old established name you would recognize) handling mutual funds aggregating well over $1 billion, said upon launching a new advisory service in 1968:

> "The complexities of national and international economics make money management a full-time job. A good money manager cannot maintain a study of securities on a week-by-week or even a day-by-day basis. Securities must be studied in a minute-by-minute program."

Wow!

This sort of stuff makes me feel guilty when I go out for a Pepsi. When practiced by large and increasing numbers of highly motivated people with huge amounts of money on a limited quantity of suitable securities, the result becomes highly unpredictable. In some ways it is fascinating to watch and in other ways it is appalling.

Analysis of 1968 Results

All four main categories of our investment operation worked out well in 1968. Our total overall gain of $40,032,691 was divided as follows:

Category	**Average Investment**	**Overall Gain**
Controls	$24,996,998	$5,886,109
Generals – Private Owner	$16,363,100	$21,994,736
Generals – Relatively Undervalued	$8,766,878	$4,271,825
Workouts	$18,980,602	$7,317,128
Miscellaneous, primarily US Treasury Bills	$12,744,973	$839,496
Total Income		$40,309,294
Less – General Expense, including Interest		$276,603
Overall Gain		$40,032,691

A few caveats, as mentioned in my letter two years ago, are again in order (non-doctoral candidates may proceed to next section):

1. An explanation of the various categories listed above was made in the January 18, 1965 letter. If your memory needs refreshing and your favorite newsstand does not have the pocketbook edition. We'll be glad to give you a copy.

2. The classifications are not iron clad. Nothing is changed retroactively, but the initial decision as to

category is sometimes arbitrary. Sometimes later classification proves difficult; e.g. a workout that falls through but that I continue to hold for reasons unrelated or only partially related to the original decision (like stubbornness).

3. Percentage returns calculated on the average investment base by category would be significantly understated relative to Partnership percentage returns which are calculated on a beginning investment base. In the foregoing figures, a security purchased by us at 100 on January 1 which appreciated at an even rate to 200 on December 31 would have an average investment of 150 producing a 66-2/3% result contrasted to a 100% result by the customary approach. In other words, the foregoing figures use a monthly average of market values in calculating the average investment.

4. All results are based on a 100% ownership, non-leverage basis. Interest and other general expenses are deducted from total performance and not segregated by category. Expenses directly related to specific investment operations, such as dividends paid on short stock, are deducted by category. When securities are borrowed directly and sold short, the net investment (longs minus shorts) is shown for the applicable category's average investment.

5. The foregoing table has only limited use. The results applicable to each category are dominated by one or two investments. They do not represent a collection of great quantities of stable data (mortality rates of all American males or something of the sort) from which conclusions can be drawn and projections made. Instead, they represent infrequent, non-homogeneous phenomena leading to very tentative suggestions regarding various courses of action and are so used by us.

6. Finally, these calculations are not made with the same loving care we apply to counting the money and are subject to possible clerical or mathematical error since they are not entirely se1f-checking.

Controls

Overall, the controlled companies turned in a decent performance during 1968. Diversified Retailing Company Inc. (80% owned) and Berkshire Hathaway Inc. (70% owned) had combined after-tax earnings of over $5 million.

Particularly outstanding performances were turned in by Associated Cotton Shops, a subsidiary of DRC run by Ben Rosner, and National Indemnity Company, a subsidiary of B-H run by Jack Ringwalt. Both of these companies earned about 20% on capital employed in their businesses. Among Fortune's “500” (the largest manufacturing entities in the country, starting with General Motors), only 37 companies achieved this figure in 1967, and our boys outshone such mildly better-known (but not better appreciated) companies as IBM, General Electric, General Motors, Procter & Gamble, DuPont, Control Data, Hewlett-Packard, etc...

I still sometimes get comments from partners like: "Say, Berkshire is up four points - that's great!" or "What's happening to us, Berkshire was down three last week?" Market price is irrelevant to us in the valuation of our controlling interests. We valued B-H at 25 at yearend 1967 when the market was about 20 and 31 at yearend 1968 when the market was about 37. We would have done the same thing if the markets had been 15 and 50 respectively. ("Price is what you pay. value is what you get"). We will prosper or suffer in controlled investments in relation to the operating performances of our businesses - we will not attempt to profit by playing various games in the securities markets.

Generals -Private Owner

Over the years this has been our best category, measured by average return, and has also maintained by far the best percentage of profitable transactions. This approach was the way I was taught the business, and it formerly

accounted for a large proportion of all our investment ideas. Our total individual profits in this category during the twelve year BPL history are probably fifty times or more our total losses. The cash register really rang on one simple industry idea (implemented in several ways) in this area in 1968. We even received a substantial fee (included in Other Income in the audit) for some work in this field.

Our total investment in this category (which is where I feel by far the greatest certainty regarding consistently decent results) is presently under $2 million and I have nothing at all in the hopper to bolster this. What came through like the Johnstown flood in 1968 looks more like a leaky faucet in Altoona for 1969.

Generals - Relatively Undervalued

This category produced about two-thirds of the overall gain in 1966 and 1967 combined. I mentioned last year that the great two-year performance here had largely come from one idea. I also said, "We have nothing in this group remotely approaching the size or potential which formerly existed in this investment." It gives me great pleasure to announce that this statement was absolutely correct. It gives me somewhat less pleasure to announce that it must be repeated this year.

Workouts

This category, which was a disaster in 1967, did well during 1968. Our relatively heavy concentration in just a few situations per year (some of the large arbitrage houses may become involved in fifty or more workouts per annum) gives more variation in yearly results than an across-the-board approach. I feel the average profitability will be as good with our policy and 1968 makes me feel better about that conclusion than 1967 did.

It should again be stated that our results in the Workout area (as well as in other categories) are somewhat understated compared to the more common method of determining results computed on an initial base figure and utilizing borrowed money (which is often a sensible part of the Workout business).

****

I can't emphasize too strongly that the quality and quantity of ideas is presently at an all time low - the product of the factors mentioned in my October 9th, 1967 letter, which have largely been intensified since then.

Sometimes I feel we should have a plaque in our office like the one at the headquarters of Texas Instruments in Dallas which reads: "We don't believe in miracles, we rely on them." It is possible for an old, overweight ball player, whose legs and batting eye are gone, to tag a fast ball on the nose for a pinch-hit home run, but you don't change your line-up because of it.

We have a number of important negatives operating on our future and, while they shouldn't add up to futility, they certainly don't add up to more than an average of quite moderate profitability.

Memorabilia

As one of my older friends says, "Nostalgia just isn't what it used to be." Let's take a stab at it, anyway.

Buffett Associates, Ltd., the initial predecessor partnership, was formed May 5, 1956 with seven limited partners (four family, three close friends), contributing $105,000, and the General Partner putting his money where his mouth was by investing $100. Two additional single-family limited partnerships were formed during 1956, so that on January 1, 1957 combined net assets were $303,726. During 1957, we had a gain of $31,615.97, leading to the 10.4% figure shown on page one. During 1968 I would guess that the New York Stock Exchange

was open around 1,200 hours, giving us a gain of about $33,000 per hour (sort of makes you wish they had stayed with the 5-1/2 hour, 5 day week, doesn't it), or roughly the same as the full year gain in 1957.

On January 1, 1962 we consolidated the predecessor limited partnerships moved out of the bedroom and hired our first full-time employees. Net assets at that time were $7,178,500. From that point to our present net assets of $104,429,431 we have added one person to the payroll. Since 1963 (Assets $9,405,400) rent has gone from $3,947 to $5,823 (Ben Rosner would never have forgiven me if I had signed a percentage lease) travel from $3,206 to $3,603, and dues and subscriptions from $900 to $994. If one of Parkinson's Laws is operating, at least the situation hasn't gotten completely out of control.

In making our retrospective survey of our financial assets, our conclusion need not parallel that of Gypsy Rose Lee who opined, when reviewing her physical assets on her fifty-fifth birthday: “I have everything I had twenty years ago - it's just that it's all lower.”

Miscellaneous

Although the investment environment is difficult, the office environment is superb. With Donna, Gladys, Bill and John, we have an organization that functions speedily, efficiently and pleasantly. They are the best.

The office group, along with spouses (one apiece - I still haven't figured out how I should handle that plural) and children have over $27 million invested in BPL on January 1, 1969. Assorted sizes and shapes of aunts, uncles, parents, in-laws, brothers, sisters and cousins make the BPL membership list read like “Our Crowd” - which, so far as I am concerned, is exactly what it is.

Within a few days, you will receive:

1. A tax letter giving you all BPL information needed for your 1968 federal income tax return. This letter is the only item that counts for tax purposes.

2. An audit from Peat Marwick. Mitchell & Co. (they have again done an excellent job) for 1968, setting forth the operations and financial position of BPL, as well as your own capital account.

3. A letter signed by me setting forth the status of your BPL interest on January 1, 1969. This is identical with the figures developed in the audit.

Let me know if anything in this letter or that occurs during the year needs clarifying. My next letter will be about July 10th, summarizing the first half of this year.

Cordially,

Warren E. Buffett

WEB/glk

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May 29th, 1969

To My Partners:

About eighteen months ago I wrote to you regarding changed environmental and personal factors causing me to modify our future performance objectives.

The investing environment I discussed at that time (and on which I have commented in various other letters has generally become more negative and frustrating as time has passed. Maybe I am merely suffering from a lack of mental flexibility. (One observer commenting on security analysts over forty stated: “They know too many things that are no longer true.”)

However, it seems to me that: (1) opportunities for investment that are open to the analyst who stresses quantitative factors have virtually disappeared, after rather steadily drying up over the past twenty years; (2) our $100 million of assets further eliminates a large portion of this seemingly barren investment world, since commitments of less than about $3 million cannot have a real impact on our overall performance, and this virtually rules out companies with less than about $100 million of common stock at market value; and (3) a swelling interest in investment performance has created an increasingly short-term oriented and (in my opinion) more speculative market.

The October 9th, 1967 letter stated that personal considerations were the most important factor among those causing me to modify our objectives. I expressed a desire to be relieved of the (self-imposed) necessity of focusing 100% on BPL. I have flunked this test completely during the last eighteen months. The letter said: I hope limited objectives will make for more limited effort. It hasn't worked out that way. As long as I am “on stage”, publishing a regular record and assuming responsibility for management of what amounts to virtually 100% of the net worth of many partners, I will never be able to put sustained effort into any non-BPL activity. If I am going to participate publicly. I can't help being competitive. I know I don't want to be totally occupied with out-pacing an investment rabbit all my life. The only way to slow down is to stop.

Therefore, before yearend. I intend to give all limited partners the required formal notice of my intention to retire. There are, of course, a number of tax and legal problems in connection with liquidating the Partnership, but overall, I am concerned with working out a plan that attains the following objectives:

1. The most important item is that I have an alternative regarding money management to suggest to the many partners who do not want to handle this themselves. Some partners of course, have alternatives of their own in which they have confidence and find quite acceptable. To the others, however, I will not hand over their money with a "good luck". I intend to suggest an alternative money manager to whom I will entrust funds of my relatives and others for whom I have lifetime financial responsibility. This manager has integrity and ability and will probably perform as well or better than I would in the future (although nowhere close to what he or I have achieved in the past). He will be available to any partner, so that no minimum size for accounts will cause any of you a problem. I intend, in the future, to keep in general touch with what he is doing, but only on an infrequent basis with any advice on my part largely limited to a negative type.

2. I want all partners to have the option of receiving cash and possibly readily marketable securities (there will probably be only one where this will apply) where I like both the prospects and price but which

partners will be able to freely convert to cash if they wish.

3. However, I also want all partners to have the option of maintaining their proportional interests in our two controlled companies (Diversified Retailing Company Inc. and Berkshire Hathaway Inc.) and one other small "restricted" holding. Because these securities will be valued unilaterally by me at fair value, I feel it is essential that, if you wish, you can maintain your proportionate interest at such valuation.

   However, these securities are not freely marketable (various SEC restrictions apply to “control” stock and non-registered stock) and they will probably be both non-transferable and non-income -producing for a considerable period of time. Therefore, I want you to be able to go either way in our liquidation - either stick with the restricted securities or take cash equivalent. I strongly like all of the people running our controlled businesses (joined now by the Illinois National Bank and Trust Company of Rockford, Illinois, a $100 million plus, extremely well-run bank, purchased by Berkshire Hathaway earlier this year), and want the relationship to be life long. I certainly have no desire to sell a good controlled business run by people I like and admire, merely to obtain a fancy price. However, specific conditions may cause the sale of one operating unit at some point.

I believe we will have a liquidation program which will accomplish the above objectives. Our activities in this regard should cause no change in your tax planning for 1969.

One final objective, I would like very much to achieve (but which just isn't going to happen) is to go out with a bang. I hate to end with a poor year, but we are going to have one in 1969. My best guess is that at yearend, allowing for a substantial increase in value of controlled companies (against which all partners except me will have the option of taking cash), we will show a breakeven result for 1969 before any monthly payments to partners. This will be true even if the market should advance substantially between now and yearend, since we will not be in any important position which will expose us to much upside potential.

Our experience in workouts this year has been atrocious - during this period I have felt like the bird that inadvertently flew into the middle of a badminton game. We are not alone in such experience, but it came at a time when we were toward the upper limit of what has been our historical range of percentage commitment in this category.

Documenting one's boners is unpleasant business. I find "selective reporting" even more distasteful. Our poor experience this year is 100% my fault. It did not reflect bad luck, but rather an improper assessment of a very fast-developing governmental trend. Paradoxically, I have long believed the government should have been doing (in terms of the problem attacked – not necessarily the means utilized) what it finally did - in other words, on an overall basis, I believe the general goal of the activity which has cost us substantial money is socially desirable and have so preached for some time. Nevertheless, I didn't think it would happen. I never believe in mixing what I think should happen (socially) with what I think will happen in making decisions - in this case, we would be some millions better off if I had.

Quite frankly, in spite of any factors set forth on the earlier pages. I would continue to operate the Partnership in 1970, or even 1971, if I had some really first class ideas. Not because I want to, but simply because I would so much rather end with a good year than a poor one. However. I just don't see anything available that gives any reasonable hope of delivering such a good year and I have no desire to grope around, hoping to "get lucky" with other people's money. I am not attuned to this market environment and I don't want to spoil a decent record by trying to play a game I don't understand just so I can go out a hero.

Therefore, we will be liquidating holdings throughout the year, working toward a residual of the controlled companies, the one "investment letter" security, the one marketable security with favorable long-term prospects,

and the miscellaneous "stubs", etc. of small total value which will take several years to clean up in the Workout category.

I have written this letter a little early in lieu of the mid-year letter. Once I made a decision, I wanted you to know. I also wanted to be available in Omaha for a period after you received this letter to clear up anything that may be confusing in it. In July, I expect to be in California.

Some of you are going to ask, "What do you plan to do?" I don't have an answer to that question. I do know that when I am 60, I should be attempting to achieve different personal goals than those which had priority at age 20. Therefore, unless I now divorce myself from the activity that has consumed virtually all of my time and energies during the first eighteen years of my adult life, I am unlikely to develop activities that will be appropriate to new circumstances in subsequent years.

We will have a letter out in the Fall, probably October, elaborating on the liquidation procedure, the investment advisor suggestion, etc…

Cordially,

Warren E. Buffett

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October 9th, 1969

To My Partners:

Here is my present estimate of the BPL calendar for the months to come:

(1) This letter - to tell you something of Bill Ruane, the money manager within my knowledge who ranks the highest when combining the factors of integrity, ability and continued availability to all partners. I also want to comment upon the present range of expectations involved in deciding on a bond-stock mix.

(2) Late November - the required thirty days formal notice of my intent to retire from the Partnership at the end of the year.

(3) Early December - a package of publicly available material, as well as some general comments by me relating to our controlled companies. Berkshire Hathaway Inc. (owning the textile business, Illinois National Bank and Trust Company of Rockford, Illinois, National Indemnity Company and National Fire and Marine Insurance Company and Sun Newspapers) and Diversified Retailing Company (owning Hochschild, Kohn & Co. and Associated Cotton Shops). I want you to have ample time to study the material relating to such companies before you make any decision to hold, sell or buy such securities after distribution to you in early January. I will solicit written questions from partners (I don't want to talk to you individually about such companies, as I want all partners to obtain exactly the same information) and then have a further mailing late in December, giving all questions received relating to these companies along with my answers, if possible. I still anticipate having a plan enabling partners to promptly convert such controlled company holdings to cash, if they wish.

(4) About January 5th - (a) a cash distribution amounting to at least 56% (probably more - depending upon what percentage of our remaining holdings are sold before yearend) of your January 1, 1969 capital, less any distributions (the regular monthly payments many of you receive) or borrowings by you during 1969, (b) your proportional share of our holdings in Diversified Retailing Company Inc. and Berkshire Hathaway Inc. I which, if you dispose of them, will bring 30% - 35% (my estimate of value will be made at yearend) of your January 1, 1969 capital.

We may make substantial additional sales before yearend - if so, the early January cash distribution will be somewhat larger than the 56% mentioned above. If we don't, such sales will be made during the first half of 1970 and an interim distribution made. Residual assets will be sold at appropriate times and I believe not more than 10% of our present asset value will remain after June 30th, 1970 pending a final distribution when all assets and liabilities have been cleaned up.

Unless there is a further substantial decline in the market. I still expect about a breakeven performance before any monthly payments for 1969. We were lucky - if we had not been in liquidation this year, our results would have been significantly worse. Ideas that looked potentially interesting on a "continuing" basis have on balance performed poorly to date. We have only two items of real size left - one we are selling as I write this and the other is a holding of limited marketability representing about 7-1/2% of the outstanding stock of Blue Chip Stamps which we may sell via a registered public offering around yearend, depending upon market conditions and other factors.

(5) March 1st. 1970 - John Harding expects to leave Buffett Partnership. Ltd. and open a branch office in Omaha for Ruane, Cunniff & Stires. Bill Scott and I will be available at BPL offices to help any partners who are desirous of purchasing bonds, tax-free or taxable. We will set aside the month of March to make our services available without cost to those who want to acquire bonds. Because of some experience we have in analysis and purchasing, as well as the access we have to wholesale markets. I think it is likely we can save material elements of cost as well as help select better relative values for those of you who wish to invest in bonds. After April 1st, however, we want to be out of any form of personal advisory activity.

(6) After March, 1970 - Bill and I will continue to office in Kiewit Plaza, spending a very minor portion of our time completing the wind-up of BPL. This will mean filing tax returns for 1970 and probably 1971 resolving minor assets and liabilities etc.

Now, to Bill Ruane - we met in Ben Graham's class at Columbia University in 1951 and I have had considerable opportunity to observe his qualities of character, temperament and intellect since that time. If Susie and I were to die while our children are minors, he is one of three trustees who have carte blanche on investment matters - the other two are not available for continuous investment management for all partners, large or small.

There is no way to eliminate the possibility of error when judging humans particularly in regard to future behavior in an unknown environment. However, decisions have to be made - whether actively or passively - and I consider Bill to be an exceptionally high probability decision on character and a high probability one on investment performance. I also consider it likely that Bill will continue as a money manager for many years to come.

Bill has recently formed a New York Stock Exchange firm, Ruane, Cunniff & Stires, Inc., 85 Broad Street, New York, N.Y. 10004, telephone number (212) 344-6700. John Harding presently plans to establish an office for the firm in Omaha about March 1st, 1970. Bill manages accounts individually on a fee basis and also executes brokerage for the accounts - presently with some portion of the brokerage commissions used to offset a portion of the investment advisory fee. His method of operation allows monthly withdrawals on a basis similar to BPL - as a percentage of capital and unrelated to realized or unrealized gain or loss. It is possible he may form some sort of pooled account but such determinations will be made between him and those of you who elect to go with him. I, of course, will not be involved with his operation. I am making my list of partners available to him and he will be writing you fairly soon regarding a trip he plans to make before yearend to Omaha, Los Angeles and Chicago, so that those of you who wish to meet him may do so. Any of you who are going to be in New York during the next few months can contact him directly.

Bill's overall record has been very good-averaging fairly close to BPL's, but with considerably greater variation. From 1956-1961 and from 1964-1968, a composite of his individual accounts averaged over 40% per annum. However, in 1962, undoubtedly somewhat as a product of the euphoric experience of the earlier years, he was down about 50%. As he re-oriented his thinking, 1963 was about breakeven.

While two years may sound like a short time when included in a table of performance, it may feel like a long time when your net worth is down 50%. I think you run this sort of short-term risk with virtually any money manager operating in stocks and it is a factor to consider in deciding the portion of your capital to commit to equities. To date in 1969, Bill is down about 15%, which I believe to be fairly typical of most money managers. Bill, of course, has not been in control situations or workouts, which have usually tended to moderate the swings in BPL year-to-year performance. Even excluding these factors, I believe his performance would have been somewhat more volatile (but not necessarily poorer by any means) than mine - his style is different, and while his typical portfolio (under most conditions) would tend to have a mild overlap with mine, there would always be very significant differences.

Bill has achieved his results working with an average of $5 to $10 million. I consider the three most likely negative factors in his future to be: (1) the probability of managing significantly larger sums - this is a problem you are going to have rather quickly with any successful money manager, and it will tend to moderate performance; I believe Bill's firm is now managing $20 -$30 million and, of course, they will continue to add accounts; (2) the possibility of Bill's becoming too involved in the detail of his operation rather than spending all of his time simply thinking about money management. The problems of being the principal factor in a NYSE firm as well as handling many individual accounts can mean that he, like most investment advisors, will be subject to pressures to spend much of his time in activities that do nothing to lead to superior investment performance. In this connection, I have asked Bill to make his services available to all BPL partners - large or small and he will, but I have also told him he is completely a free agent if he finds particular clients diverting him from his main job; (3) the high probability that even excellent investment management during the next decade will only produce limited advantages over passive management. I will comment on this below.

The final point regarding the negatives listed above is that they are not the sort of drawbacks leading to horrible performance, but more likely the sort of things that lead to average performance. I think this is the main risk you run with Bill - and average performance is just not that terrible a risk.

In recommending Bill, I am engaging in the sort of activity I have tried to avoid in BPL portfolio activities - a decision where there is nothing to gain (personally) and considerable to lose. Some of my friends who are not in the Partnership have suggested that I make no recommendation since, if results were excellent it would do me no good and, if something went wrong, I might well get a portion of the blame. If you and I had just had a normal commercial relationship, such reasoning might be sound. However, the degree of trust partners have extended to me and the cooperation manifested in various ways precludes such a "hands off" policy. Many of you are professional investors or close thereto and need no advice from me on managers - you may well do better yourself. For those partners who are financially inexperienced. I feel it would be totally unfair for me to assume a passive position and deliver you to the most persuasive salesman who happened to contact you early in 1970.

Finally, a word about expectations. A decade or so ago was quite willing to set a target of ten percentage points per annum better than the Dow, with the expectation that the Dow would average about 7%. This meant an expectancy for us of around 17%, with wide variations and no guarantees, of course - but, nevertheless, an expectancy. Tax-free bonds at the time yielded about 3%. While stocks had the disadvantage of irregular performance, overall they seemed much the more desirable option. I also stressed this preference for stocks in teaching classes, participating in panel discussions, etc…

For the first time in my investment lifetime. I now believe there is little choice for the average investor between professionally managed money in stocks and passive investment in bonds. If correct. this view has important implications. Let me briefly (and in somewhat oversimplified form) set out the situation as I see it:

(1) I am talking about the situation for, say, a taxpayer in a 40% Federal Income Tax bracket who also has some State Income Tax to pay. Various changes are being proposed in the tax laws, which may adversely affect net results from presently tax-exempt income, capital gains, and perhaps other types of investment income. More proposals will probably come in the future. Overall, I feel such changes over the years will not negate my relative expectations about after-tax income from presently tax-free bonds versus common stocks, and may well even mildly reinforce them.

(2) I am talking about expectations over the next ten years - not the next weeks or months. I find it much easier to think about what should develop over a relatively long period of time than what is likely in any short period. As Ben Graham said: “In the long run, the market is a weighing machine - in the short run, a voting machine.” I have always found it easier to evaluate weights dictated by fundamentals than votes dictated by psychology.

(3) Purely passive investment in tax-free bonds will now bring about 6-1/2%. This yield can be achieved with excellent quality and locked up for just about any period for which the investor wishes to contract. Such conditions may not exist in March when Bill and I will be available to assist you in bond purchases, but they exist today.

(4) The ten year expectation for corporate stocks as a group is probably not better than 9% overall. say 3% dividends and 6% gain in value. I would doubt that Gross National Product grows more than 6% per annum - I don't believe corporate profits are likely to grow significantly as a percentage of GNP - and if earnings multipliers don't change (and with these assumptions and present interest rates they shouldn't) the aggregate valuation of American corporate enterprise should not grow at a long-term compounded rate above 6% per annum. This typical experience in stocks might produce (for the taxpayer described earlier) 1-3/4% after tax from dividends and 4-3/4% after tax from capital gain, for a total after-tax return of about 6-1/2%. The pre-tax mix between dividends and capital gains might be more like 4% and 5%, giving a slightly lower aftertax result. This is not far from historical experience and overall, I believe future tax rules on capital gains are likely to be stiffer than in the past.

(5) Finally, probably half the money invested in stocks over the next decade will be professionally managed. Thus, by definition virtually, the total investor experience with professionally managed money will be average results (or 6-1/2% after tax if my assumptions above are correct).

My judgment would be that less than 10% of professionally managed money (which might imply an average of $40 billion just for this superior segment) handled consistently for the decade would average 2 points per annum over group expectancy. So-called "aggressively run" money is unlikely to do significantly better than the general run of professionally managed money. There is probably $50 billion in various gradations of this "aggressive" category now - maybe 100 times that of a decade ago - and $50 billion just can't "perform".

If you are extremely fortunate and select advisors who achieve results in the top 1% to 2% of the country (but who will be working with material sums of money because they are that good), I think it is unlikely you will do much more than 4 points per annum better than the group expectancy. I think the odds are good that Bill Ruane is in this select category. My estimate . therefore, is that over the next decade the results of really excellent management for our "typical taxpayer" after tax might be 1-3/4% from dividends and 7-3/4% from capital gain. or 9 –1.2% overall.

(6) The rather startling conclusion is that under today's historically unusual conditions, passive investment in tax-free bonds is likely to be fully the equivalent of expectations from professionally managed money in stocks, and only modestly inferior to extremely well-managed equity money.

(7) A word about inflation - it has very little to do with the above calculation except that it enters into the 6% assumed growth rate in GNP and contributes to the causes producing 6-1/2% on tax-free bonds. If stocks should produce 8% after tax and bonds 4%, stocks are better to own than bonds, regardless of whether prices go up, down or sidewise. The converse is true if bonds produce 6-1/2% after tax. and stocks 6%. The simple truth, of course, is that the best expectable after-tax rate of return makes the most sense - given a rising, declining or stable dollar.

All of the above should be viewed with all the suspicion properly accorded to assessments of the future. It does seem to me to be the most realistic evaluation of what is always an uncertain future - I present it with no great feeling regarding its approximate accuracy, but only so you will know what I think at this time.

You will have to make your own decision as between bonds and stocks and, if the latter, who advises you on

such stocks. In many cases, I think the decision should largely reflect your tangible and intangible (temperamental) needs for regularity of income and absence of large principal fluctuation, perhaps balanced against psychic needs for some excitement and the fun associated with contemplating and perhaps enjoying really juicy results. If you would like to talk over the problem with me, I will be very happy to help.

Sincerely,

Warren E. Buffett

WEB/glk

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December 5th, 1969

To My Partners:

This letter is to supply you with some published information relating to our two controlled companies (and their four principal operating components), as well as to give you my general views regarding their operations. My comments are not designed to give you loads of detailed information prospectus-style, but only my general "slant" as I see the businesses at this time.

At yearend, BPL will own 800,000 of 1,000,000 shares outstanding of Diversified Retailing Company. First Manhattan Company and Wheeler, Munger & Company will each own 100,000 shares. DRC previously owned 100% of Hochschild, Kohn & Company of Baltimore, and currently owns 100% of Associated Retail Stores (formerly named Associated Cotton Shops). On December 1st, DRC sold its entire interest in H-K to Supermarkets General Corp. for $5,045,205 of cash plus non-interest bearing SGC notes for $2 million due 2-1-70, and $4,540,000 due 2-1-71. The present value of these notes approximates $6.0 million so, effectively, DRC received about $11 million on the sale. Various warranties were made by DRC in connection with the sale, and, while we expect no claims pursuant to the contract, a remote contingent liability always exists while warranties are in force.

Associated Retail Stores has a net worth of about $7.5 million. It is an excellent business with a strong financial position, good operating margins and a record of increasing sales and earnings in recent years. Last year, sales were about $37.5 million and net income about $1 million. This year should see new records in sales and earnings, with my guess on the latter to be in the area of $1.1 million after full taxes.

DRC has $6.6 million in debentures outstanding (prospectus with full description of the business as of December 18th, 1967 and the debenture terms will be sent you upon request) which have one unusual feature in that if I, or an entity controlled by me, is not the largest shareholder of DRC, the debentureholders have the right to present their debentures for payment by the company at par.

Thus, DRC has tangible net assets of about $11.50 - $12.00 per share, an excellent operating business and substantial funds available for reinvestment in other operating businesses. On an interim basis, such funds will be employed in marketable securities.

Berkshire Hathaway Inc. has 983,582 shares outstanding, of which BPL owns 691,441. B-H has three main operating businesses, the textile operation, the insurance operation (conducted by National Indemnity Company and National Fire & Marine Insurance Company, which will be collectively called the insurance company) and the Illinois National Bank and Trust Company of Rockford, Illinois. It also owns Sun Newspapers Inc, Blacker Printing Company and 70% of Gateway Underwriters, but these operations are not financially significant relative to the total.

The textile operation presently employs about $16 per share in capital and, while I think it has made some progress relative to the textile industry generally, cannot be judged a satisfactory business. Its return on capital has not been sufficient to support the assets employed in the business and, realistically, an adequate return has less than an even chance of being averaged in the future. It represents the best segments of the business that existed when we purchased control four and one-half years ago. Capital from the other segments has been

successfully redeployed - first, on an interim basis into marketable securities and, now on a permanent basis into insurance and banking. I like the textile operating people - they have worked hard to improve the business under difficult conditions - and, despite the poor return, we expect to continue the textile operation as long as it produces near current levels.

The insurance operation (of which B-H owns virtually 100%) and the bank (where B-H owns 97.7%) present a much happier picture. Both are first-class businesses, earning good returns on capital and stacking up well on any absolute or comparative analysis of operating statistics. The bank has about $17 per share of net tangible assets applicable to B-H, and the insurance company approximately $15. I would estimate their normal current earning power to be about $4 per share (compared to about $3.40 from operations pro-forma in 1968), with good prospects for future growth on the combined $32 of tangible net assets in the bank and insurance company. Adding in the textile business and miscellaneous assets, and subtracting parent company bank debt of about $7 million, gives a tangible net asset value of about $43 per share for B-H, or about $45 stated book value, allowing for the premium over tangible assets paid for the bank.

One caveat - when I talk above of tangible net assets. I am valuing the $75 million of bonds held by the insurance company and bank at amortized cost. This is in accord with standard accounting procedures used in those industries and also in accord with the realities of their business operations where it is quite unlikely that bonds will have to be sold before maturity. At today's historically low bond prices, however, our bonds have a market value substantially below carrying value, probably on the order of $10 per share of B-H stock.

Between DRC and B-H, we have four main operating businesses with three of them in my opinion, definitely first class by any of the usual standards of evaluation. The three excellent businesses are all run by men over sixty who are largely responsible for building each operation from scratch. These men are hard working, wealthy, and good – extraordinarily good. Their age is a negative, but it is the only negative applicable to them. One of the reasons I am happy to have a large segment of my capital in B-H and DRC is because we have such excellent men in charge of the operating businesses.

We have various annual reports, audits, interim reports, proxy materials prospectuses, etc… applicable to our control holdings and we will be glad to supply you with any item you request. I also solicit your written questions and will send to all partners the questions and answers shortly before yearend. Don't hesitate to ask any question at all that comes to mind - if it isn't clear to you, it probably isn't clear to others - and there is no reason for any of you to be wondering about something that I might clear up.

DRC and B-H presently pay no dividends and will probably pay either no dividends or very modest dividends for some years to come. There are a number of reasons for this. Both parent companies have borrowed money - we want to maintain a good level of protection for depositors at the bank and policyholders at the insurance company - some of the operating companies have very satisfactory ways to utilize additional capital - and we are hopeful of finding new businesses to both diversify and augment our earning power.

My personal opinion is that the intrinsic value of DRC and B-H will grow substantially over the years. While no one knows the future, I would be disappointed if such growth wasn't at a rate of approximately 10% per annum. Market prices for stocks fluctuate at great amplitudes around intrinsic value but, over the long term, intrinsic value is virtually always reflected at some point in market price. Thus, I think both securities should be very decent long-term holdings and I am happy to have a substantial portion of my net worth invested in them. You should be unconcerned about short-term price action when you own the securities directly, just as you were unconcerned when you owned them indirectly through BPL. I think about them as businesses, not “stocks”, and if the business does all right over the long term, so will the stock.

I want to stress that I will not be in a managerial or partnership status with you regarding your future holdings of such securities. You will be free to do what you wish with your stock in the future and so, of course, will I. I

think that there is a very high probability that I will maintain my investment in DRC and B-H for a very long period, but I want no implied moral commitment to do so nor do so nor do I wish to advise others over an indefinite future period regarding their holdings. The companies, of course, will keep all shareholders advised of their activities and you will receive reports as issued by them, probably on a semi-annual basis. Should I continue to hold the securities, as I fully expect to do, my degree of involvement in their activities may vary depending upon my other interests. The odds are that I will take an important position on matters of policy, but I want no moral obligation to be other than a passive shareholder, should my interests develop elsewhere.

We presently plan to make the initial BPL cash distribution on January 5th, which will now come to at least 64% of January 1, 1969 capital less any distributions (including monthly payments) you have received from us since January 1, 1969. There is now pending a public offering, headed by Merrill, Lynch, Pierce, Fenner & Smith, of our Blue Chip Stamps holdings which, if completed this month as expected, should bring the figure to at least 70%.

If you wish Bill and me to give you our ideas regarding bonds in March, you should purchase U.S. Treasury Bills maturing in late March with the applicable portion of the January 5th distribution. Then advise us in the last week of February of the amount you wish to invest in bonds and we will let you know our thoughts.

About the middle of January (as soon as the exact amounts are figured and shares are received from the Transfer Agent after having been registered in your name) we will distribute the DRC and B-H stock applicable to your partnership interest and subsequently advise you of your tax basis and acquisition date attributable to the stock. Such shares will be "legended" as described in the enclosed letter from Monen, Seidler & Ryan. These stock certificates are valuable and should be kept in a safe place.

In past letters I had expressed the hope that BPL could supply a mechanism whereby you could, if you wished, automatically convert your DRC and B-H to cash. I have had two law firms consider extensively the status of these shares in your hands following the liquidation and the accompanying letters (which should be saved and kept with the shares) give their conclusions. As you can see, it is not an area that produces simple, clear-cut guidelines. I see no prudent way to implement the alternatives I had previously been considering. Therefore, you must follow the guidelines they set forth if you wish to dispose of your shares. As you probably realize, the restrictions on subsequent sale apply more severely to Susie and me (because of my continued "insider" position) than they probably do to you. Substantial quantities of securities often are sold via the "private sale" option described in paragraph (3) of the opinion. If the rules become clearer or more simplified in the future, I will be sure to let you know.

At the time of distribution of DRC and B-H, I will advise you of the values applied to such shares at 1969 yearend. You will receive our audit and tax letter about the end of January. It presently appears that sale of our Blue Chip shares and a substantial increase in value of DRC and B- H will bring our overall gain for the year to slightly over 6%.

My next letter will be in late December, summarizing the questions and answers regarding DRC and B-H. and also supplying a final estimate on the January 5th cash distribution.

Warren E. Buffett

WEBI glk
Enclosures:
Legal opinion. Monen, Seidler & Ryan
Concurring opinion, Munger, Tolles. Hills & Rickershauser 1968 Annual Report. Berkshire Hathaway. Inc.
1969 Semi-Annual Report. Berkshire Hathaway. Inc.
April 3. 1969 letter to Shareholders. Berkshire Hathaway. Inc. 1968 Annual Report. Diversified Retailing

Company. Inc.
Financial information regarding Associated Retail Stores. Inc. Financial information regarding Illinois National Bank & Trust Co. 1969 Best's Report. National Indemnity Company
1969 Best's Report. National Fire & Marine Insurance Company

BUFFETT PARTNERSHIP. LTD.
610 KIEWIT PLAZA
OMAHA, NEBRASKA 68131
TELEPHONE 042-4110

December 26, 1969

To My Partners:

Our plans regarding the initial cash distribution have been finalized and we expect to mail to you on January 3rd a check dated January 5th, 1970 for approximately 64% of your January 1st. 1969 capital, less any distributions made to you (including monthly payments) since January 1st. 1969. If you have taken no monthly payments during 1969, there will be a small interest adjustment in your favor; if you have had loans from BPL, there will be an interest charge. I couldn't be more delighted about the action of the bond and stock markets from the standpoint of the timing of our liquidation. I believe practically all partners - whether they would have invested in bonds or stocks - will be far better off receiving the cash now than if we had liquidated at the end of last year. Those seeking income will receive about 40% more after tax on the same principal investment than they would have achieved only a year ago at what then seemed like generous yields.

Our tax picture is virtually complete and it appears that you will have ordinary income (dividends plus interest income less ordinary loss) for Federal tax purposes of about 3 –3/4% of your January 1st. 1969 capital (item 1 in enclosed letter), no significant long-term capital gain or loss, and a short-term capital loss of about 8-1/2% of your January 1st, 1969 unrealized appreciation (item 3). These estimates are just rough approximations - definitive figures will reach you in early February.

The sale of our 371,400 shares of Blue Chip Stamps was not completed in 1969. When the stock went into registration, it was selling at about $24 per share. The underwriters indicated a range where they expected to offer our shares (along with others) with heavy weight placed on a comparison with Sperry & Hutchinson. Shortly before the stock was to be offered, with the Dow-Jones Industrials much lower but S & H virtually unchanged, they indicated a price below their former range. We reluctantly agreed and felt we had a deal but, on the next business day, they stated that our agreed price was not feasible. We then withdrew and a much smaller offering was done.

I intend to hold our block of Blue Chip Stamps in BPL for a more advantageous disposal or eventual distribution to our partners. The odds are decent that we will do better in this manner -even if it takes a year or two - than if we had participated in a very large sale into a somewhat distressed market. Unless there is a material change in the market in the next few days, I plan to value our Blue Chip holdings at yearend at the price received by selling shareholders on the public offering after underwriting discount and expenses.

Various questions have been asked pursuant to the last letter:

1. If we are not getting a good return on the textile business of Berkshire Hathaway Inc., why do we continue to operate it?

Pretty much for the reasons outlined in my letter. I don't want to liquidate a business employing 1100 people when the Management has worked hard to improve their relative industry position, with reasonable results, and as long as the business does not require substantial additional capital investment. I have no desire to trade severe human dislocations for a few percentage points additional return per annum. Obviously, if we faced material compulsory additional investment or sustained operating losses, the decision might have to be different, but I don't anticipate such alternatives.

2. How large is our investment in Sun Newspapers, etc., and do we intend to expand in the newspaper, radio and TV business?

The combined investment in Sun, Blacker Printing and Gateway Underwriters is a little over $1 per share of Berkshire Hathaway, and earns something less than 10 cent per share. We have no particular plans to expand in the communication field.

3. What does Gateway Underwriters do?

Gateway Underwriters serves primarily as a General Agent for National Indemnity Company in the State of Missouri.

4. Are there good "second men" to take over from the men running the three excellent operating businesses?

In any company where the founder and chief driving force behind the enterprise is still active, it is very difficult to evaluate "second men". The only real way to see how someone is going to do when running a company is to let him run it. Some of our businesses have certainly been more "one-man shows" than the typical corporation. Subject to the foregoing caveat, I think that we do have some good "second men" coming along.

5. In what area do you plan to invest the cash in Diversified Retailing Company and do you intend to stick primarily to the retailing field?

While we prefer the retailing field, we do not preclude anything that will make sense. We have been looking without success for two years for an intelligent acquisition for DRC, so we are not about to rule out any industry, if the business looks good. Pending such time as we find one or more operating businesses to buy, the money will be invested in marketable securities.

6. Why didn't DRC payout the money it received on the sale of Hochschild, Kohn & Company?

In addition to the fact that such a payment would constitute a dividend, taxable in significant part as ordinary income, there are restrictions in the bond indenture which prevent such a pay-out without turning over control of the company to the bondholders.

7. Will distribution of the DRC stock cause the DRC debentures to be called?

After distribution of the stock, I will be the largest stockholder in DRC and, hence, the call provision will not apply.

8. How would we know if the DRC debentures were called?

All stockholders and debenture holders would find out directly from the company through regular or special reports that the company issues to its security holders. There is no intention at all of calling the debentures.

9. Why did you not register our Berkshire Hathaway and Diversified Retailing shares so that the stock, when received by the partners, would be freely marketable?

We considered this possibility but rejected it for both practical and legal considerations. I will just discuss the practicalities, since they would independently dictate the decision we made.

There is presently no existing market for Diversified Retailing, and our holdings of Berkshire Hathaway are probably four or five times the present floating supply of this stock. An attempt to quickly buy or sell a few thousand shares can easily move BH stock several points or more. We own 691,441 shares. Were we to distribute these stocks to you via a registration without an underwriting, and with the possibility that a substantial portion would be offered for sale by many sellers operating individually but virtually simultaneously, there is a real likelihood, particularly in a stock market environment such as we have seen recently, that the market for these two stocks would be little short of chaotic. It has not seemed to me that this was the kind of situation with which I should leave you, both from the standpoint of the price level which might prevail, as well as for the reason that different partners might well have to liquidate at widely varying price levels. The more sophisticated partners might have an important edge on the less sophisticated ones, and I believe many partner's might have no chance to realize the prices I anticipate using for yearend valuation. This would rightly seem most unfair to you, since I would have received some allocation of 1969 BPL profits based upon these yearend valuations. If the markets were to become distressed, I would probably come in for criticism, whether I personally bought at lower prices or, perhaps more so, if I refrained from buying.

Were we to attempt to sponsor an underwriting in connection with a registration for those partners who might wish to sell, there would be, in my opinion, the likelihood that the result would still be far less than satisfactory. We have just been around this track with our holdings of Blue Chip Stamps, where we watched the price of our stock go from 24 to 16-1/2 after announcement of the underwriting, of which we originally were to be a part. I did not want this sort of result for the partners with respect to their holdings of Berkshire and Diversified.

It is my belief that, by confining sales to private placements, those partners who wish to sell will realize more for their stock (with the sophisticated partners having no marketing edge on the less knowledgeable) than would be achieved, through an underwriting at this time. Also, the stock should be more likely to find its way into the hands of long-term investment-minded holders, which should mean less volatile markets in the future. We have had several phone calls from persons indicating that they wish to make private sales - we anticipate there will be no difficulty in effectuating such sales at prices related to our yearend valuations.

Those partners who would prefer an underwritten distribution always have the option of having a registration of their own. I will be glad to facilitate this by placing all partners in touch with each other who indicate to me their desire to sell via a registered underwriting, at their expense and through an underwriter of their choice. In this way the expense of an underwriting, which can be considerable, would be borne by the selling partners and not by the partners as a whole.

I have also had partners ask if they could participate in a registered offering in the future if I should sell shares in this manner. I think it is almost certain I will never sell stock via public offering but, should it ever happen, I will be glad to let any of you participate in any underwritten offering in which I might be involved. In all probability, if it ever did happen, your stock would already be "free", although mine would still be restricted. I cannot make the same commitment to you regarding any private sale I might make in the future, just as I can't expect you to restrict any sale options you might have in order to include me.

10. Will you let us know if you sell your holdings of BH or DRC?

You would undoubtedly know from corporate communications, reports in the press and reports to Government agencies if I disposed of my holdings. I have no intention at all of doing so in the foreseeable future - I merely make no commitment not to. However, former BPL partners will have no priority over other BH or DRC security holders in obtaining information relating to their corporate activities.

11. Should I hold my BH or DRC stock?

I can't give you the answer on this one. All I can say is that I'm going to do so and I plan to buy more. I am very happy to have a material portion of my net worth invested in these companies on a long term basis. Obviously, I think they will be worth significantly more money five or ten years hence. Compared to most stocks, I think there is a low risk of loss. I hope their price patterns follow a rather moderate range related to business results rather than behaving in a volatile manner related to speculative enthusiasm or depression. Obviously, I cannot control the latter phenomena, but there is no intent to "promote" the stocks a la much of the distasteful general financial market activity of recent years.

12. Can I give either BH or DRC shares to my wife or children?

We are advised by counsel that this is permissible but, of course the same restrictions on transfer that applied to you would apply to the donee of the gift.

13. Why are you waiting until March to give us your suggestions regarding bonds?

January and February promise to be very busy months. Many partners may want to talk to me about their questions and objectives regarding bonds. I want to have all important BPL matters out of the way before I talk with any of them on an individual basis. I make no forecasts regarding the bond market (or stock market) - it may be higher or lower in March than now. After my October letter, several partners became very eager to buy bonds immediately - to date they are much better off by waiting. The excellent quality tax-free bonds I talked about at that time with yields of 6 -1/2% can now be bought to yield about 7%.

Cordially,

Warren E. Buffett

WEB/glk

BUFFETT PARTNERSHIP. LTD.
610 KIEWIT PLAZA
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February 25th, 1970

To My Partners:

This letter will attempt to provide a very elementary education regarding tax-exempt bonds with emphasis on the types and maturities of bonds which we expect to help partners in purchasing next month. If you expect to use our help in the purchase of bonds, it is important that you carefully read (and, if necessary , reread) this letter as it will serve as background for the specific purchases I suggest. If you disagree with me as to conclusions regarding types of bonds or maturities (and you would have been right and I would have been wrong if you had disagreed with me on the latter point either one or two years ago), you may well be correct, but we cannot be of assistance to you in the purchase of bonds outside our area. We will simply have our hands full concentrating in our recommended area, so will be unavailable to assist or advise in the purchase of convertible bonds, corporate bonds or short term issues.

I have tried to boil this letter down as much as possible. Some of it will be a little weighty - some a little over-simplified. I apologize for the shortcomings in advance. I have a feeling I am trying to put all the meat of a 100 page book in 10 pages - and have it read like the funny papers.

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I am sure you understand that our aid in the purchase of bonds will involve no future assistance regarding either these specific bonds or general investment decisions. I want to be available at this time to be of help because of the unusual amount of cash you have received in one distribution from us. I have no desire to be in the investment counseling business, directly or indirectly, and will not be available for discussion of financial matters after March 31st.

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The mechanics of Tax-Free Bonds.

For those who wish our help, we will arrange the purchase of bonds directly from municipal bond dealers throughout the country and have them confirm sale of the bonds directly to you. The confirmation should be saved as a basic document for tax purposes. You should not send a check to the bond dealer since he will deliver the bonds to your bank, along with a draft which the bank will pay by charging your account with them. In the case of bonds purchased in the secondary market (issues already outstanding), this settlement date will usually be about a week after confirmation date whereas, on new issues, the settlement date may be as much as a month later. The settlement date is shown plainly on the confirmation ticket (in the case of new issues this will be the second and final ticket rather than the preliminary "when issued" ticket), and you should have the funds at your bank ready to pay for the bonds on the settlement date. If you presently own Treasury Bills, they can be sold on a couple of days notice by your bank upon your instructions, so you should experience no problems in having the money available on time. Interest begins to accrue to you on the settlement date, even if the bond dealer is late in getting them delivered to your bank.

Bonds will be delivered in negotiable form (so-called "bearer" form which makes them like currency) with

coupons attached. Usually the bonds are in $5,000 denominations and frequently they can be exchanged for registered bonds (sometimes at considerable expense and sometimes free-it depends upon the terms). Bonds in registered form are nonnegotiable without assignment by you, since you are the registered owner on the Transfer Agent's books. Bonds trade almost exclusively on a bearer basis and it is virtually impossible to sell registered bonds without converting them back into bearer form. Thus, unless you are going to own great physical quantities of bonds. I recommend keeping bonds in bearer form. This means keeping them in a very safe place and clipping the coupons every six months. Such coupons, when clipped, can be deposited in your bank account just like checks. If you have $250,000 in bonds, this probably means about fifty separate pieces of paper ($5,000 denominations) and perhaps six or eight trips a year to the safe deposit section to cut and deposit coupons.

It is also possible to open a custody account with a bank where, for a fairly nominal cost, they will keep the bonds, collect the interest and preserve your records for you. For example, a bank will probably perform the custodial service for you for about $200 a year on a $250,000 portfolio. If you are interested in a custodial account, you should talk to a Trust Officer at your commercial bank as to the nature of their services and cost. Otherwise, you should have a safe deposit box.

Taxation

The interest received upon the deposit of coupons from tax-free bonds is, of course, free from Federal Income Taxes. This means if you are at a 30% top Federal Income Tax bracket, a 6% return from tax-free bonds is equivalent to about 8-1/2% from taxable bonds. Thus, for most of our partners, excluding minors or some retired people, tax-free bonds will be more attractive than taxable bonds. For people with little or no income from wages or dividends, but with substantial capital, it is possible that a combination of taxable bonds (to bring taxable income up to about the 25% or 30% bracket) plus tax-free bonds will bring the highest total after-tax income. Where appropriate, we will work with you to achieve such a balance.

The situation in respect to State Income Taxes is more complicated. In Nebraska. where the State Income Tax is computed as a percentage of the Federal Income Tax, the effect is that there is no state tax on interest from tax-free bonds. My understanding of both the New York and California law is that tax-free bonds of entities within the home state are not subject to State Income Tax, but tax-free bonds from other states are subject to the local State Income Tax. I also believe that the New York City Income Tax exempts tax-free bonds of entities based within the State of New York, but taxes those from other states. I am no expert on state income taxes and make no attempt to post myself on changes taking place within the various states or cities. Therefore, I defer to your local tax advisor, but simply mention these few general impressions so that you will be alert to the existence of a potential problem. In Nebraska there is no need to have any local considerations enter into the after-tax calculation. Where out-of-state issues are subject to local taxation, the effective cost of your State or Municipal Income Tax is reduced by the benefit received from deducting it on your Federal Income Tax return. This, of course, varies with the individual. Additionally, in some states there are various taxes on intangible property which may apply to all tax-free bonds or just those of out-of-state entities. There are none of these in Nebraska, but I cannot advise on the other states.

When bonds are bought at a discount from par and later are sold or mature (come due and get paid), the difference between the proceeds and cost is subject to capital gain or loss treatment. (There are minor exceptions to this statement as, unfortunately, there are to most general statements on investments and taxes but they will be pointed out to you should they affect any securities we recommend). This reduces the net after-tax yield by a factor involving the general rate of future capital gains taxes and the specific future tax position of the individual. Later on, we will discuss the impact of such capital gains taxes in calculating the relative attractiveness of discount bonds versus "full coupon" bonds.

Finally, one most important point. Although the law is not completely clear, you should probably not contemplate owning tax-free bonds if you have, or expect to have, general purpose bank or other indebtedness.

The law excludes the deductibility of interest on loans incurred or continued to purchase or carry tax-free bonds, and the interpretation of this statute will probably tend to be broadened as the years pass. For example, my impression is that you have no problem if you have a mortgage against real property (unless the debt was incurred in order to acquire municipal bonds) in deducting the mortgage interest on your Federal Tax return, even though you own tax-free bonds at the same time. However, I believe that if you have a general bank loan, even though the proceeds were directly used to purchase stocks, a handball court, etc. and the tax-free bonds are not used for security for the loan, you are asking for trouble if you deduct the interest and, at the same time, are the owner of tax-free bonds. Therefore, I would pay off bank loans before owning tax-free bonds, but I leave detailed examination of this question to you and your tax advisor. I merely mention it to make you aware of the potential problem.

Marketability

Tax-free bonds are materially different from common stocks or corporate bonds in that there are literally hundreds of thousands of issues, with the great majority having very few holders. This substantially inhibits the development of close, active markets. Whenever the City of New York or Philadelphia wants to raise money it sells perhaps twenty, thirty or forty non-identical securities, since it will offer an issue with that many different maturities. A 6% bond of New York coming due in 1980 is a different animal from a 6% bond of New York coming due in 1981. One cannot be exchanged for the other, and a seller has to find a buyer for the specific item he holds. When you consider that New York may offer bonds several times a year, it is easy to see why just this one city may have somewhere in the neighborhood of 1,000 issues outstanding. Grand Island, Nebraska may have 75 issues outstanding. The average amount of each issue might be $100,000 and the average number of holders may be six or eight per issue. Thus, it is absolutely impossible to have quoted markets at all times for all issues and spreads between bids and offers may be very wide. You can't set forth in the morning to buy a specific Grand Island issue of your choosing. It may not be offered at any price, anywhere, and if you do find one seller, there is no reason why he has to be realistic compared to other offerings of similar quality. On the other hand, there are single issues such as those of the Ohio Turnpike, Illinois Turnpike, etc. that amount to $200 million or more and have thousands of bondholders owning a single entirely homogeneous and interchangeable issue. Obviously, here you get a high degree of marketability.

My impression is that marketability is generally a function of the following three items, in descending order of importance: (1) the size of the particular issue; (2) the size of the issuer (a $100,000 issue of the State of Ohio will be more marketable than a $100,000 issue of Podunk, Ohio); and (3) the quality of the issuer. By far the most sales effort goes into the selling of new issues of bonds. An average of over $200 million per week of new issues comes up for sale, and the machinery of bond distribution is geared to get them sold, large or small. In my opinion, there is frequently insufficient differential in yield at time of issue for the marketability differences that will exist once the initial sales push is terminated. We have frequently run into markets in bonds where the spread between bid and asked prices may get to 15%. There is no need to buy bonds with the potential for such grotesque markets (although the profit spread to the dealer who originally offers them is frequently wider than on more marketable bonds) and we will not be buying them for you. The bonds we expect to buy will usually tend to have spreads (reflecting the difference between what you would pay net for such bonds on purchase and receive net on sale at the same point in time) of from 2% to 5%. Such a spread would be devastating if you attempted to trade in such bonds, but I don't believe it should be a deterrent for a long-term investor. The real necessity is to stay away from bonds of very limited marketability - which frequently are the type local bond dealers have the greatest monetary incentive to push.

Specific Areas of Purchase

We will probably concentrate our purchases in the following general areas:

(1) Large revenue-producing public entities such as toll roads, electric power districts, water districts, etc.

Many of these issues possess high marketability, are subject to quantitative analysis, and sometimes have favorable sinking fund or other factors which tend not to receive full valuation in the market place.

(2) Industrial Development Authority bonds which arise when a public entity holds title to property leased to a private corporation. For example, Lorain, Ohio holds title to an $80 million project for U.S. Steel Corp. The Development Authority Board issued bonds to pay for the project and has executed a net and absolute lease with U.S. Steel to cover the bond payments. The credit of the city or state is not behind the bonds and they are only as good as the company that is on the lease. Many top-grade corporations stand behind an aggregate of several billion dollars of these obligations, although new ones are being issued only in small amounts ($5 million per project or less) because of changes in the tax laws. For a period of time there was a very substantial prejudice against such issues, causing them to sell at yields considerably higher than those commensurate with their inherent credit standing. This prejudice has tended to diminish, reducing the premium yields available, but I still consider it a most attractive field. Our insurance company owns a majority of its bonds in this category.

(3) Public Housing Authority Issues for those of you who wish the very highest grade of tax-free bonds. In effect, these bonds bear the guarantee of the U.S. Government, so they are all rated AAA. In states where local taxes put a premium on buying in-state issues, and I can't fill your needs from (1) and (2) , my tendency would be to put you into Housing Authority issues rather than try to select from among credits that I don't understand. If you direct me to buy obligations of your home state, you should expect substantial quantities of Housing Authority issues. There is no need to diversify among such issues, as they all represent the top credit available.

(4) State obligations of a direct or indirect nature.

You will notice I am not buying issues of large cities. I don't have the faintest idea how to analyze a New York City, Chicago, Philadelphia, etc. (a friend mentioned the other day when Newark was trying to sell bonds at a very fancy rate that the Mafia was getting very upset because Newark was giving them a bad name). Your analysis of a New York City - and I admit it is hard to imagine them not paying their bills for any extended period of time - would be as good as mine. My approach to bonds is pretty much like my approach to stocks. If I can't understand something, I tend to forget it. Passing an opportunity which I don't understand - even if someone else is perceptive enough to analyze it and get paid well for doing it - doesn't bother me. All I want to be sure of is that I get paid well for the things I do feel capable of handling - and that I am right when I make affirmative decisions.

We will probably tend to purchase somewhere between five and ten issues for most of you. However, if you wish to limit me to your home state, it may be fewer issues - and perhaps those will only be Housing Authorities. We will try not to buy in smaller than $25,000 pieces and will prefer larger amounts where appropriate. Smaller lots of bonds are usually penalized upon resale, sometimes substantially. The bond salesman doesn't usually explain this to you when you buy the $10,000 of bonds from him, but it gets explained when you later try to sell the $10,000 to him. We may make exceptions where we are buying secondary market issues in smaller pieces - but only if we are getting an especially good price on the buy side because of the small size of the offering.

Callable Bonds

We will not buy bonds where the issuer of the bonds has a right to call (retire) the bonds on a basis which substantially loads the contract in his favor. It is amazing to me to see people buy bonds which are due in forty years, but where the issuer has the right to call the bonds at a tiny premium in five or ten years. Such a contract essentially means that you have made a forty year deal if it is advantageous to the issuer (and disadvantageous to you) and a five year deal if the initial contract turns out to be advantageous to you (and disadvantageous to the

issuer). Such contracts are really outrageous and exist because bond investors can't think through the implications of such a contract form and bond dealers don't insist on better terms for their customers. One extremely interesting fact is that bonds with very unattractive call features sell at virtually the same yield as otherwise identical bonds which are noncallable.

It should be pointed out that most Nebraska bonds carry highly unfair call provisions. Despite this severe contractual disadvantage, they do not offer higher yields than bonds with more equitable terms.

One way to avoid this problem is to buy bonds which are totally noncallable. Another way is to buy discount bonds where the right of the issuer to call the bond is at a price so far above your cost as to render the possible call inconsequential. If you buy a bond at 60 which is callable at 103, the effective cost to you of granting the issuer the right to prematurely terminate the contract (which is a right you never have) is insignificant. But to buy a bond of the Los Angeles Department of Water and Power at 100 to come due at 100 in 1999 or to come due at
104 in 1974, depending on which is to the advantage of the issuer and to your disadvantage, is the height of foolishness when comparable yields are available on similar credits without such an unfair contract. Nevertheless, just such a bond was issued in October, 1969 and similar bonds continue to be issued every day. I only write at such length about an obvious point, since it is apparent from the continual sale of such bonds that many investors haven't the faintest notion how this loads the dice against them and many bond salesmen aren't about to tell them.

Maturity and the Mathematics of Bonds

Many people, in buying bonds, select maturities based on how long they think they are going to want to hold bonds, how long they are going to live, etc. While this is not a silly approach, it is not necessarily the most logical. The primary determinants in selection of maturity should probably be (1) the shape of the yield curve; (2) your expectations regarding future levels of interest rates and (3) the degree of quotational fluctuation you are willing to endure or hope to possibly profit from. Of course, (2) is the most important but by far the most difficult upon which to comment intelligently.

Let's tackle the yield curve first. When other aspects of quality are identical, there will be a difference in interest rates paid based upon the length of the bond being offered. For example, a top grade bond being offered now might have a yield of 4.75% if it came due in six or nine months, 5.00% in two years, 5.25% in five years, 5.50% in ten years and 6.25% in twenty years. When long rates are substantially higher than short rates, the curve is said to be strongly positive. In the U. S. Government bond market, rates recently have tended to produce a negative yield curve; that is, a long term Government bond over the last year or so has consistently yielded less than a short term one. Sometimes the yield curve has been very flat, and sometimes it is positive out to a given point, such as ten years, and then flattens out. What you should understand is that it varies, often very substantially, and that on an historical basis the present slope tends to be in the high positive range. This doesn't mean that long bonds are going to be worth more but it does mean that you are being paid more to extend maturity than in many periods. If yields remained constant for several years, you would do better with longer bonds than shorter bonds, regardless of how long you intended to hold them.

The second factor in determining maturity selection is expectations regarding future rate levels. Anyone who has done much predicting in this field has tended to look very foolish very fast. I did not regard rates as unattractive one year ago, and I was proved very wrong almost immediately. I believe present rates are not unattractive and I may look foolish again. Nevertheless, a decision has to be made and you can make just as great a mistake if you buy short term securities now and rates available on reinvestment in a few years are much lower.

The final factor involves your tolerance for quotational fluctuation. This involves the mathematics of bond investment and may be a little difficult for you to understand. Nevertheless, it is important that you get a general

grasp of the principles. Let's assume for the moment a perfectly flat yield curve and a non-callable bond. Further assume present rates are 5% and that you buy two bonds, one due in two years and one due in twenty years. Now assume one year later that yields on new issues have gone to 3% and that you wish to sell your bonds. Forgetting about market spreads, commissions, etc. , you will receive $1,019.60 for the original two year $1,000 bond (now with one year to run) and $1,288.10 for the nineteen year bond (originally twenty years). At these prices, a purchaser will get exactly 3% on his money after amortizing the premium he has paid and cashing the stream of 5% coupons attached to each bond. It is a matter of indifference to him whether to buy your nineteen year 5% bond at $1,288.10 or a new 3% bond (which we have assumed is the rate current - one year later) at $1,000.00. On the other hand, let's assume rates went to 7%. Again we will ignore commissions, capital gains taxes on the discount, etc. Now the buyer will only pay $981.00 for the bond with one year remaining until maturity and $791.60 for the bond with nineteen years left. Since he can get 7% on new issues, he is only willing to buy your bond at a discount sufficient so that accrual of this discount will give him the same economic benefits from your 5% coupon that a 7% coupon at $1,000.00 would give him.

The principle is simple. The wider the swings in interest rates and the longer the bond, the more the value of a bond can go up or down on an interim basis before maturity. It should be pointed out in the first example where rates went to 3%, our long term bond would only have appreciated to about $1,070.00 if it had been callable in five years at par, although it would have gone down just as much if 7% rates had occurred. This just illustrates the inherent unfairness of call provisions.

For over two decades, interest rates on tax-free bonds have almost continuously gone higher and buyers of long term bonds have continuously suffered. This does not mean it is bad now to buy long term bonds - it simply means that the illustration in the above paragraph has worked in only one direction for a long period of time and people are much more conscious of the downside risks from higher rates than the upside potential from lower ones.

If it is a 50-50 chance as to the future general level of interest rates and the yield curve is substantially positive, then the odds are better in buying long term non-callable bonds than shorter term ones. This reflects my current conclusion and, therefore, I intend to buy bonds within the ten to twenty-five year range. If you have any preferences within that range, we will try to select bonds reflecting such preferences, but if you are interested in shorter term bonds, we will not be able to help you as we are not searching out bonds in this area.

Before you decide to buy a twenty year bond, go back and read the paragraph showing how prices change based upon changes in interest rates. Of course, if you hold the bond straight through, you are going to get the contracted rate of interest, but if you sell earlier, you are going to be subject to the mathematical forces described in that paragraph, for better or for worse. Bond prices also change because of changes in quality over the years but, in the tax-free area, this has tended to be - and probably will continue to be - a relatively minor factor compared to the impact of changes in the general structure of interest rates.

Discount Versus Full Coupon Bonds

You will have noticed in the above discussion that if you now wanted to buy a 7% return on a nineteen year bond, you had a choice between buying a new nineteen year bond with a 7% coupon rate or buying a bond with a 5% coupon at $791.60, which would pay you $1,000.00 in nineteen years. Either purchase would have yielded exactly 7% compounded semi-annually to you. Mathematically, they are the same. In the case of tax-free bonds the equation is complicated, however, by the fact that the $70.00 coupon is entirely tax-free to you, whereas the bond purchased at a discount gives you tax-free income of $50.00 per year but a capital gain at the end of the nineteenth year of $208.40. Under the present tax law, you would owe anything from a nominal tax, if the gain from realization of the discount was your only taxable income in the nineteenth year, up to a tax of over $70.00 if it came on top of very large amounts of capital gain at that time (the new tax law provides for capital gain rates of 35%, and even slightly higher on an indirect basis in 1972 and thereafter for those realizing very large

gains.) In addition to this, you might have some state taxes to pay on the capital gain.

Obviously, under these circumstances you are not going to pay the $791.60 for the 5% coupon and feel you are equally as well off as with the 7% coupon at $1,000.00. Neither is anyone else. Therefore, identical quality securities with identical maturities sell at considerably higher gross yields when they have low coupons and are priced at discounts than if they bear current high coupons.

Interestingly enough, for most taxpayers, such higher gross yields over-compensate for the probable tax to be paid. This is due to several factors. First, no one knows what the tax law will be when the bonds mature and it is both natural and probably correct to assume the tax rate will be stiffer at that time than now. Second, even though a 5% coupon on a $1,000.00 bond purchased at $791.60 due in nineteen years is the equivalent of a 7% coupon on a $1,000.00 bond purchased at par with the same maturity, people prefer to get the higher current return in their pocket. The owner of the 5% coupon bond is only getting around 6.3% current yield on his $791.60 with the balance necessary to get him up to 7% coming from the extra $208.40 he picks up at the end. Finally, the most important factor affecting prices currently on discount bonds (and which will keep affecting them) is that banks have been taken out of the market as buyers of discount tax-free bonds by changes brought about in bank tax treatment through the 1969 Tax Reform Act. Banks have historically been the largest purchasers and owners of tax-free bonds and anything that precludes them from one segment of the market has dramatic effects on the supply-demand situation in that segment. This may tend to give some edge to individuals in the discount tax-free market, particularly those who are not likely to be in a high tax bracket when the bonds mature or are sold.

If I can get a significantly higher effective after-tax yield (allowing for sensible estimates of your particular future tax rate possibilities), I intend to purchase discount bonds for you. I know some partners prefer full coupon bonds, even though their effective yield is less, since they prefer to maximize the current cash yield and if they will so advise me, we will stick to full coupon issues (or very close thereto) in their cases.

Procedure

I intend to be in the office solidly through March (including every Saturday except March 7th) and will be glad to see any partner or talk with him by phone. To aid in scheduling, please make an appointment with Gladys (or me). The only request I make is that you absorb as much as possible of this letter before we talk. As you can see, it would be an enormous problem if I had to explain each item to all of you.

If you decide you want us to help you in buying bonds, you should let us know:

(1) Whether you want to restrict purchases to your home state for local tax reasons;

(2) Whether you want to restrict us to full coupon issues or let us use our judgment as to where you get the best value;

(3) Your preference as to maturity in the ten to twenty-five year range or if you prefer to let us use our judgment in that area;

(4) How much you want to invest - we may end up several per cent short of the figure you name, but we will never go over;

(5) On what bank the bonds should be drafted.

We will advise you by phone or letter as we buy bonds. Bill and John will be doing much of the mechanical work. Needless to say, none of us will have any financial interest in any transaction. Should you have any

questions regarding the mechanics, please direct them to John or Bill as I will probably be swamped and they will be more familiar with specific transactions. After March 31st, I don't expect to be around the office for several months. Therefore, if you want to talk things over, come in by then. The completion of all purchases may go into April, but Bill will be taking care of this and the mechanics will all be set up.

You should realize that because of the enormous diversity of issues mentioned earlier, it is impossible to say just what will be bought. Sometimes the tax-free bond market has more similarities to real estate than to stocks. There are hundreds of thousands of items of varying comparability, some with no sellers, some with reluctant sellers and some with eager sellers. Which may be the best buy depends on the quality of what is being offered, how well it fits your needs and the eagerness of the seller. The standard of comparison is always new issues where an average of several hundred million dollars worth have to be sold each week - however, specific secondary market opportunities (issues already outstanding) may be more attractive than new issues and we can only find out how attractive they are when we are ready to make bids.

Although markets can change, it looks as if we will have no difficulty in getting in the area of 6-1/2% after tax (except from Housing Authority issues) on bonds in the twenty-year maturity range.

Cordially,

Warren E. Buffett

WEBI glk

April 3, 1970

To the Stockholders of Berkshire Hathaway Inc.:

Four years ago your management committed itself to the development of more substantial and more consistent earning power than appeared possible if capital continued to be invested exclusively in the textile industry. The funds for this program were temporarily utilized in marketable securities, pending the acquisition of operating businesses meeting our investment and management criteria.

This policy has proved reasonably successful—particularly when contrasted with results achieved by firms which have continued to commit large sums to textile expansion in the face of totally inadequate returns. We have been able to conclude two major purchases of operating businesses, and their successful operations enabled Berkshire Hathaway to achieve an over-all return of more than 10% on average stockholders' equity last year in the face of less than a 5% return from the portion of our capital employed in the textile business. We have liquidated our entire holdings of marketable securities over the last two years at a profit of more than $5 million after taxes. These gains provided important funds to facilitate our major purchase of 1969, when borrowed money to finance acquisitions was generally most difficult to obtain.

We anticipate no further purchases of marketable securities, but our search for desirable acquisitions continues. Any acquisition will, of course, be dependent upon obtaining appropriate financing.

Textile Operations

Dollar sales volume in 1969 was approximately 12% below 1968. Net earnings were slightly higher despite substantial operating losses incurred in the termination of our Box Loom Division. Earnings on capital employed improved modestly but still remain unsatisfactory despite strenuous efforts toward improvement.

We are presently in the midst of a textile recession of greater intensity than we have seen for some years. There is an over-all lack of demand for textile products in a great many end uses. This lack of demand has required curtailment of production to avoid inventory build-up. Both our Menswear Lining Division and Home Fabrics Division have been forced to schedule two-week shutdowns during the first quarter of 1970, but inventories remain on the high side. The

slowdown in demand appears even greater than that normally occurring in the cyclical textile market. Recovery from this cycle will probably be dependent upon Federal Government action on economic factors they can control.

We have concentrated our textile operations in those areas that appear, from historical performance and from our market projections, to be potentially satisfactory businesses. Improvements have been made in our mill operations which, under better industry conditions, should produce substantial cost reductions. However, the present picture is for lower profits in this business during 1970.

Insurance Operations

Jack Ringwalt and his outstanding management group turned in new records in just about every department during 1969. During another year in which the fire and casualty insurance industry experienced substantial underwriting losses, our insurance subsidiaries achieved significant adjusted underwriting profits. Since establishment of the business in 1941, Mr. Ringwalt has held to the principle of underwriting for a profit—a policy which is frequently talked about within the industry but much less frequently achieved.

Our new surety department, although small, made good progress during the year. We are entering the workmen's compensation market in California through the establishment of a branch office in Los Angeles. Our new reinsurance division seems to be off to a strong start, although the nature of this business is such that it takes at least several years to render an intelligent verdict as to operating results. We also have interesting plans for a new "home state" insurance operation.

Phil Liesche—over 20 years a major contributor to outstanding results in the production and underwriting departments—was elected Executive Vice President early this year.

Expectations are for continued growth in our insurance operations.

Banking Operations

The most significant event of 1969 for Berkshire Hathaway was the acquisition of 97.7% of the stock of The Illinois National Bank and Trust Co. of Rockford, Illinois. This bank had been built by Eugene Abegg, without addition of outside capital, from $250,000 of net worth and $400,000 of deposits in 1931 to $17 million of net worth and $100 million of deposits in 1969. Mr. Abegg

has continued as Chairman and produced record operating earnings (before security losses) of approximately $2 million in 1969. Such earnings, as a percentage of either deposits or total assets, are close to the top among larger commercial banks in the country which are not primarily trust department operations. It will not be easy to achieve greater earnings in 1970 because (1) our bank is already a highly efficient business, and (2) the unit banking law of Illinois makes more than modest deposit growth difficult for a major downtown bank.

After almost a year of ownership, we are delighted with our investment in Illinois National Bank, and our association with Mr. Abegg.

Kenneth V. Chace *President*

1971 Letter

To the Stockholders of Berkshire Hathaway Inc.:

It is a pleasure to report that operating earnings in 1971, excluding capital gains, amounted to more than 14% of beginning shareholders' equity. This result—considerably above the average of American industry—was achieved in the face of inadequate earnings in our textile operation, making clear the benefits of redeployment of capital inaugurated five years ago. It will continue to be the objective of management to improve return on total capitalization (long term debt plus equity), as well as the return on equity capital. However, it should be realized that merely maintaining the present relatively high rate of return may well prove more difficult than was improvement from the very low levels of return which prevailed throughout most of the 1960's.

Textile Operations

We, in common with most of the textile industry, continued to struggle throughout 1971 with inadequate gross margins. Strong efforts to hammer down costs and a continuous search for less price-sensitive fabrics produced only marginal profits. However, without these efforts we would have operated substantially in the red. Employment was more stable throughout the year as our program to improve control of inventories achieved reasonable success.

As mentioned last year, Ken Chace and his management group have been swimming against a strong industry tide. This negative environment has only caused them to intensify their efforts. Currently we are witnessing a mild industry pickup which we intend to maximize with our greatly strengthened sales force. With the improvement now seen in volume and mix of business, we would expect better profitability—although not of a dramatic nature—from our textile operation in 1972.

Insurance Operations

An unusual combination of factors—reduced auto accident frequency, sharply higher effective rates in large volume lines, and the absence of major catastrophes—produced an extraordinarily good year for the property and casualty insurance industry. We shared in these benefits, although they are not without their negative connotations.

Our traditional business—and still our largest segment—is in the specialized policy or non-standard insured. When standard markets become tight because of unprofitable industry underwriting, we experience substantial volume increases as producers look to us. This was the condition several years ago, and largely accounts for the surge of direct volume experienced in 1970 and 1971. Now that underwriting has turned very profitable on an industry-wide basis, more companies are seeking the insureds they were rejecting a short while back and rates are being cut in some areas. We continue to have underwriting profitability as our primary goal and this may well mean a substantial decrease in National Indemnity's direct volume during 1972. Jack Ringwalt and Phil Liesche continue to guide this operation in a manner matched by very few in the business.

Our reinsurance business, which has been developed to a substantial operation in just two years by the outstanding efforts of George Young, faces much the same situation. We entered the reinsurance business late in 1969 at a time when rates had risen substantially and capacity was tight. The reinsurance industry was exceptionally profitable in 1971, and we are now seeing rate-cutting as well as the formation of well-capitalized aggressive new competitors. These lower rates are frequently accompanied by greater exposure. Against this background we expect to see our business curtailed somewhat in 1972. We set no volume goals in our insurance business generally—and certainly not in reinsurance—as virtually any volume can be achieved if profitability standards are ignored. When catastrophes occur and underwriting experience sours, we plan to have the resources available to handle the increasing volume which we will then expect to be available at proper prices.

We inaugurated our "home-state" insurance operation in 1970 by the formation of Cornhusker Casualty Company. To date, this has worked well from both a marketing and an underwriting standpoint. We have therefore further developed this approach by the formation of Lakeland Fire & Casualty Company in Minnesota during 1971, and Texas United Insurance in 1972. Each of these companies will devote its entire efforts to a single state seeking to bring the agents and insureds of its area a combination of large company capability and small company accessibility and sensitivity. John Ringwalt has been in overall charge of this operation since inception. Combining hard work with imagination and intelligence, he has transformed an idea into a well-

organized business. The “home-state” companies are still very small, accounting for a little over $1.5 million in premium volume during 1971. It looks as though this volume will more than double in 1972 and we will develop a more creditable base upon which to evaluate underwriting performance.

A highlight of 1971 was the acquisition of Home & Automobile Insurance Company, located in Chicago. This company was built by Victor Raab from a small initial investment into a major auto insurer in Cook County, writing about $7.5 million in premium volume during 1971. Vic is cut from the same cloth as Jack Ringwalt and Gene Abegg, with a talent for operating profitably accompanied by enthusiasm for his business. These three men have built their companies from scratch and, after selling their ownership position for cash, retain every bit of the proprietary interest and pride that they have always had.

While Vic has multiplied the original equity of Home & Auto many times since its founding, his ideas and talents have always been circumscribed by his capital base. We have added capital funds to the company, which will enable it to establish branch operations extending its highly-concentrated and on-the-spot marketing and claims approach to other densely populated areas.

All in all, it is questionable whether volume added by Home & Auto, plus the “home-state” business in 1972, will offset possible declines in direct and reinsurance business of National Indemnity Company. However, our large volume gains in 1970 and 1971 brought in additional funds for investment at a time of high interest rates, which will be of continuing benefit in future years. Thus, despite the unimpressive prospects regarding premium volume, the outlook for investment income and overall earnings from insurance in 1972 is reasonably good.

Banking Operations

Our banking subsidiary, The Illinois National Bank & Trust Company, continued to lead its industry as measured by earnings as a percentage of deposits. In 1971, Illinois National earned well over 2% after tax on average deposits while (1) not using borrowed funds except for very occasional reserve balancing transactions; (2) maintaining a liquidity position far above average; (3) recording loan losses far below average; and (4) utilizing a mix of over 50% time deposits

with all consumer savings accounts receiving maximum permitted interest rates throughout the year. This reflects a superb management job by Gene Abegg and Bob Kline.

Interest rates received on loans and investments were down substantially throughout the banking industry during 1971. In the last few years, Illinois National's mix of deposits has moved considerably more than the industry average away from demand money to much more expensive time money. For example, interest paid on deposits has gone from under $1.7 million in 1969 to over $2.7 million in 1971. Nevertheless, the unusual profitability of the Bank has been maintained. Marketing efforts were intensified during the year, with excellent results.

With interest rates even lower now than in 1971, the banking industry is going to have trouble achieving gains in earnings during 1972. Our deposit gains at Illinois National continue to come in the time money area, which produces only very marginal incremental income at present. It will take very close cost control to enable Illinois National to maintain its 1971 level of earnings during 1972.

Financial

Because of the volume gains being experienced by our insurance subsidiaries early in 1971, we re-cast Berkshire Hathaway's bank loan so as to provide those companies with additional capital funds. This financing turned out to be particularly propitious when the opportunity to purchase Home & Auto occurred later in the year.

Our insurance and banking subsidiaries possess a fiduciary relationship with the public. We retain a fundamental belief in operating from a very strongly financed position so as to be in a position to unquestionably fulfill our responsibilities. Thus, we will continue to map our financial future for maximum financial strength in our subsidiaries as well as at the parent company level.

Warren E. Buffett *Chairman of the Board* March 13, 1972

1972 Letter

To the Stockholders of Berkshire Hathaway Inc.:

Operating earnings of Berkshire Hathaway during 1972 amounted to a highly satisfactory 19.8% of beginning shareholders' equity. Significant improvement was recorded in all of our major lines of business, but the most dramatic gains were in insurance underwriting profit. Due to an unusual convergence of favorable factors—diminishing auto accident frequency, moderating accident severity, and an absence of major catastrophes—underwriting profit margins achieved a level far above averages of the past or expectations of the future.

While we anticipate a modest decrease in operating earnings during 1973, it seems clear that our diversification moves of recent years have established a significantly higher base of normal earning power. Your present management assumed policy control of the company in May, 1965. Eight years later, our 1972 operating earnings of $11,116,256 represent a return many-fold higher than would have been produced had we continued to devote our resources entirely to the textile business. At the end of the 1964 fiscal year, shareholders' equity totaled $22,138,753. Since that time, no additional equity capital has been introduced into the business, either through cash sale or through merger. On the contrary, some stock has been reacquired, reducing outstanding shares by 14%. The increase in book value per share from $19.46 at fiscal year-end 1964 to $69.72 at 1972 year-end amounts to about 16.5% compounded annually.

Our three major acquisitions of recent years have all worked out exceptionally well—from both the financial and human standpoints. In all three cases, the founders were major sellers and received significant proceeds in cash—and, in all three cases, the same individuals, Jack Ringwalt, Gene Abegg and Vic Raab, have continued to run the businesses with undiminished energy and imagination which have resulted in further improvement of the fine records previously established.

We will continue to search for logical extensions of our present operations, and also for new operations which will allow us to continue to employ our capital effectively.

Textile Operations

As predicted in last year's annual report, the textile industry experienced a pickup in 1972. In recent years, Ken Chace and Ralph Rigby have developed an outstanding sales organization enjoying a growing reputation for service and reliability. Manufacturing capabilities have been restructured to complement our sales strengths.

Helped by the industry recovery, we experienced some payoff from these efforts in 1972. Inventories were controlled, minimizing close-out losses in addition to minimizing capital requirements; product mix was greatly improved. While the general level of profitability of the industry will always be the primary factor in determining the level of our textile earnings, we believe that our relative position within the industry has noticeably improved. The outlook for 1973 is good.

Insurance Underwriting

Our exceptional underwriting profits during 1972 in the large traditional area of our insurance business at National Indemnity present a paradox. They served to swell substantially total corporate profits for 1972, but the factors which produced such profits induced exceptional amounts of new competition at what we believe to be a non-compensatory level of rates. Over-all, we probably would have retained better prospects for the next five years if profits had not risen so dramatically this year.

Substantial new competition was forecast in our annual report for last year and we experienced in 1972 the decline in premium volume that we stated such competition implied. Our belief is that industry underwriting profit margins will narrow substantially in 1973 or 1974 and, in time, this may produce an environment in which our historical growth can be resumed. Unfortunately, there is a lag between deterioration of underwriting results and tempering of competition. During this period we expect to continue to have negative volume comparisons in our traditional operation. Our seasoned management, headed by Jack Ringwalt and Phil Liesche, will continue to underwrite to produce a profit, although not at the level of 1972, and base our rates on long-term expectations rather than short-term hopes. Although this approach has meant dips in volume from time to time in the past, it has produced excellent long-term results.

Also as predicted in last year's report, our reinsurance division experienced many of the same competitive factors in 1972. A multitude of new organizations entered what has historically been a rather small field, and rates were often cut substantially, and we believe unsoundly, particularly in the catastrophe area. The past year turned out to be unusually free of catastrophes and our underwriting experience was good.

George Young has built a substantial and profitable reinsurance operation in just a few years. In the longer term we plan to be a very major factor in the reinsurance field, but an immediate expansion of volume is not sensible against a background of deteriorating rates. In our view, underwriting exposures are greater than ever. When the loss potential inherent in such exposures becomes an actuality, repricing will take place which should give us a chance to expand significantly.

In the "home state" operation, our oldest and largest such company, Cornhusker Casualty Company, operating in Nebraska only, achieved good underwriting results. In the second full year, the home state marketing appeal has been proven with the attainment of volume on the order of one-third of that achieved by "old line" giants who have operated in the state for many decades.

Our two smaller companies, in Minnesota and Texas, had unsatisfactory loss ratios on very small volume. The home state managements understand that underwriting profitably is the yardstick of success and that operations can only be expanded significantly when it is clear that we are doing the right job in the underwriting area. Expense ratios at the new companies are also high, but that is to be expected when they are in the development stage.

John Ringwalt has done an excellent job of launching this operation, and plans to expand into at least one additional state during 1973. While there is much work yet to be done, the home state operation appears to have major long-range potential.

Last year it was reported that we had acquired Home and Automobile Insurance Company of Chicago. We felt good about the acquisition at the time, and we feel even better now. Led by Vic Raab, this company continued its excellent record in 1972. During 1973 we expect to enter the Florida (Dade County) and California (Los Angeles) markets with the same sort of specialized urban auto coverage which Home and Auto has practiced so successfully in Cook County. Vic

has the managerial capacity to run a much larger operation. Our expectation is that Home and Auto will expand significantly within a few years.

Insurance Investment Results

We were most fortunate to experience dramatic gains in premium volume from 1969 to 1971 coincidental with virtually record-high interest rates. Large amounts of investable funds were thus received at a time when they could be put to highly advantageous use. Most of these funds were placed in tax-exempt bonds and our investment income, which has increased from $2,025,201 in 1969 to $6,755,242 in 1972, is subject to a low effective tax rate.

Our bond portfolio possesses unusually good call protection, and we will benefit for many years to come from the high average yield of the present portfolio. The lack of current premium growth, however, will moderate substantially the growth in investment income during the next several years.

Banking Operations

Our banking subsidiary, The Illinois Bank and Trust Co. of Rockford, maintained its position of industry leadership in profitability. After-tax earnings of 2.2% on average deposits in 1972 are the more remarkable when evaluated against such moderating factors as: (1) a mix of 50% time deposits heavily weighted toward consumer savings instruments, all paying the maximum rates permitted by law; (2) an unvaryingly strong liquid position and avoidance of money-market borrowings; (3) a loan policy which has produced a net charge-off ratio in the last two years of about 5% of that of the average commercial bank. This record is a direct tribute to the leadership of Gene Abegg and Bob Kline who run a bank where the owners and the depositors can both eat well and sleep well.

During 1972, interest paid to depositors was double the amount paid in 1969. We have aggressively sought consumer time deposits, but have not pushed for large “money market” certificates of deposit although, during the past several years, they have generally been a less costly source of time funds.

During the past year, loans to our customers expanded approximately 38%. This is considerably more than indicated by the enclosed balance sheet which includes $10.9 million in short-term commercial paper in the 1971 loan total, but which has no such paper included at the end of

1972. Our position as “Rockford’s Leading Bank” was enhanced during 1972. Present rate structures, a decrease in investable funds due to new Federal Reserve collection procedures, and a probable increase in already substantial non-federal taxes make it unlikely that Illinois National will be able to increase its earnings during 1973.

Financial

On March 15, 1973, Berkshire Hathaway borrowed $20 million at 8% from twenty institutional lenders. This loan is due March 1, 1993, with principal repayments beginning March 1, 1979. From the proceeds, $9 million was used to repay our bank loan and the balance is being invested in insurance subsidiaries. Periodically, we expect that there will be opportunities to achieve significant expansion in our insurance business and we intend to have the financial resources available to maximize such opportunities.

Our subsidiaries in banking and insurance have major fiduciary responsibilities to their customers. In these operations we maintain capital strength far above industry norms, but still achieve a good level of profitability on such capital. We will continue to adhere to the former objective and make every effort to continue to maintain the latter.

Warren E. Buffett Chairman of the Board March 16, 1973

1973 Letter

To the Stockholders of Berkshire Hathaway Inc.:

Our financial results for 1973 were satisfactory, with operating earnings of $11,930,592, producing a return of 17.4% on beginning stockholders' equity. Although operating earnings improved from $11.43 to $12.18 per share, earnings on equity decreased from the 19.8% of 1972. This decline occurred because the gain in earnings was not commensurate with the increase in shareholders' investment. We had forecast in last year's report that such a decline was likely. Unfortunately, our forecast proved to be correct.

Our textile, banking, and most insurance operations had good years, but certain segments of the insurance business turned in poor results. Overall, our insurance business continues to be a most attractive area in which to employ capital.

Management's objective is to achieve a return on capital over the long term which averages somewhat higher than that of American industry generally—while utilizing sound accounting and debt policies. We have achieved this goal in the last few years, and are trying to take those steps which will enable us to maintain this performance in the future. Prospects for 1974 indicate some further decline in rate of return on our enlarged capital base.

Textile Operations

Textile demand remained unusually strong throughout 1973. Our main problems revolved around shortages of fiber, which complicated operations and resulted in something less than full utilization of loom capacity. Prices of some fibers skyrocketed during the year.

Cost of Living Council regulations prevented the pricing of many finished products at levels of some of our competitors. However, profits were reasonably commensurate with our capital investment, although below those that apparently might have been achieved had we been able to price at market levels. The textile business has been highly cyclical and price controls may have served to cut down some of the hills while still leaving us with the inevitable valleys.

Because of the extraordinary price rises in raw materials during 1973, which show signs of continuing in 1974, we have elected to adopt the "lifo" method of inventory pricing. This

method more nearly matches current costs against current revenues, and minimizes inventory "profits" included in reported earnings. Further information on this change is included in the footnotes to our financial statements.

Insurance Operations

During 1973, Jack Ringwalt retired as President of National Indemnity Company after an absolutely brilliant record since founding the business in 1940. He was succeeded by Phil Liesche who, fortunately for us, possesses the same underwriting and managerial philosophy that worked so well for Jack.

Our traditional business, specialized auto and general liability lines conducted through National Indemnity Company and National Fire and Marine Insurance Company, had an exceptionally fine underwriting year during 1973. We again experienced a decline in volume. Competition was intense, and we passed up the chance to match rate-cutting by more optimistic underwriters. There currently are faint indications that some of these competitors are learning of the inadequacy of their rates (and also of their loss reserves) which may result in easing of market pressures as the year develops. If so, we may again experience volume increases.

Our reinsurance operation had a somewhat similar year—good underwriting experience, but difficulty in maintaining previous volume levels. This operation, guided by the tireless and well-directed efforts of George Young, has been a major profit producer since its inception in 1969.

Our "home state" insurance companies made excellent progress in Nebraska and Minnesota, with both good growth in volume and acceptable loss ratios. We began operations late in the year in Iowa. To date, our big problem has been Texas. In that state we virtually had to start over during 1973 as the initial management we selected proved incapable of underwriting successfully. The Texas experience has been expensive, and we still have our work cut out for us. Overall, however, the home state operation appears to have a promising potential.

Our specialized urban auto operation, Home and Automobile Insurance Company, experienced very poor underwriting in Chicago during 1973. It would appear that rates are inadequate in our primary Cook County marketing area, although the current energy situation confuses the picture. The question is whether possible lowered accident frequency because of reduced driving will more than offset continuing inflation in medical and repair costs, as well as jury

awards. We believe that inflation will hurt us more than reduced driving will help us, but some of our competitors appear to believe otherwise.

Home and Auto expanded into Florida and California during the year, but it is too early to know how these moves will prove out financially.

A contributing factor in our unsatisfactory earnings at Home and Auto during 1973 was an accounting system which was not bringing information to management on a sufficiently timely basis.

On the investment side of our insurance operation, we made substantial additional commitments in common stocks during 1973. We had significant unrealized depreciation—over $12 million—in our common stock holdings at year-end, as indicated in our financial statements. Nevertheless, we believe that our common stock portfolio at cost represents good value in terms of intrinsic business worth. In spite of the large unrealized loss at year-end, we would expect satisfactory results from the portfolio over the longer term.

Banking Operations

The Illinois National Bank & Trust Co. of Rockford again had a record year in 1973. Average deposits were approximately $130 million, of which approximately 60% were time deposits.

Interest rates were increased substantially in the important consumer savings area when regulatory maximums were raised at mid-year.

Despite this mix heavily weighted toward interest bearing deposits, our operating earnings after taxes (including a new Illinois state income tax) were again over 2.1% of average deposits.

We continue to be the largest bank in Rockford. We continue to maintain unusual liquidity. We continue to meet the increasing loan demands of our customers. And we continue to maintain our unusual profitability. This is a direct tribute to the abilities of Gene Abegg, Chairman, who has been running the Bank since it opened its doors in 1931, and Bob Kline, our President.

Merger With Diversified Retailing Company, Inc.

Your Directors have approved the merger of Diversified Retailing Company, Inc. into Berkshire Hathaway Inc. on terms involving issuance of 195,000 shares of Berkshire stock for the 1,000,000 shares of Diversified stock outstanding. Because Diversified and its subsidiaries own 109,551 shares of Berkshire, the net increase in the number of shares of Berkshire outstanding

after giving effect to this transaction will not exceed 85,449. Various regulatory approvals must be obtained before this merger can be completed, and proxy material will be submitted to you later this year so that you may vote upon it.

Diversified Retailing Company, Inc., though subsidiaries, operates a chain of popular-priced women's apparel stores and also conducts a reinsurance business. In the opinion of management, its most important asset is 16% of the stock of Blue Chip Stamps.

Blue Chip Stamps

Our holdings of stock in Blue Chip Stamps at year-end amounted to approximately 19% of that company's outstanding shares. Since year-end, we have increased our holdings so that they now represent approximately 22.5%: implementation of the proposed merger with Diversified Retailing Company, Inc. would increase this figure to about 38.5%.

Our equity in earnings of Blue Chip Stamps became significant for the first time in 1973, and posed an accounting question as to just what period's earnings should be recognized by Berkshire Hathaway Inc. as applicable to the financial statements covered by this annual report. Blue Chip's fiscal year ends on the Saturday closest to February 28, or two months after the fiscal year-end of Berkshire Hathaway Inc. Or, viewed alternatively, their year ends ten months prior to Berkshire Hathaway's. An acceptable accounting choice for us, and one which, if made, would not have required an auditor's disclaimer as to scope, was to recognize in our 1973 income an equity of $632,000 in Blue Chip's earnings for their year ended March 3, 1973 with regard to the fewer shares of Blue Chip we owned during this earlier period. But such an approach seemed at odds with reality, and would have meant a ten month lag each year in the future. Therefore, we chose to reflect as 1973 income our equity of $1,008,000 in Blue Chip's earnings based upon unaudited interim earnings through November as publicly reported by Blue Chip Stamps and with regard to our shareholdings during 1973. Because we made this choice of unaudited but current figures, as opposed to the alternative of audited but far from current figures, Peat, Marwick, Mitchell & Co. were unable to express an opinion on our 1973 earnings attributable to Blue Chip Stamps.

The annual report of Blue Chip Stamps, which will contain financial statements for the year ending March 2, 1974 audited by Price, Waterhouse and Company, will be available in early

May. Any shareholder of Berkshire Hathaway Inc. who desires an annual report of Blue Chip Stamps may obtain it at that time by writing Mr. Robert H. Bird, Secretary, Blue Chip Stamps, 5801 South Eastern Avenue, Los Angeles, California 90040.

Blue Chip's trading stamp business has declined drastically over the past year or so, but it has important sources of earning power in its See's Candy Shops subsidiary as well as Wesco Financial Corporation, a 54% owned subsidiary engaged in the savings and loan business. We expect Blue Chip Stamps to achieve satisfactory earnings in future years related to capital employed, although certainly at a much lower level than would have been achieved if the trading stamp business had been maintained at anything close to former levels.

Your Chairman is on the Board of Directors of Blue Chip Stamps, as well as Wesco Financial Corporation, and is Chairman of the Board of See's Candy Shops Incorporated. Operating management of all three entities is in the hands of first-class, able, experienced executives.

Sun Newspapers, Inc.

In the 1969 annual report we commented on the purchase of Sun Newspapers Inc., a group of weekly papers published in the metropolitan Omaha area. Since that time we have not commented on their operations in the text of our annual reports, nor have we consolidated their financial results since the operation, because of the small investment involved, has been "financially insignificant."

During 1973 it was made quite apparent that such insignificance did not extend to publishing quality. On May 7th Sun Newspapers was awarded a Pulitzer Prize for local investigative reporting (the first time in history that a weekly had won in this category) for its special section of March 30,1972 relating to Boys Town. We reported the extraordinary contrast between decreasing services and mounting wealth that had taken place since Father Flanagan's death in 1948.

In addition to the Pulitzer Prize, the reporting job also won the Public Service Award of Sigma Delta Chi, the national society of professional journalists, as well as seven other national awards.

Our congratulations go to Paul Williams, Editor, and Stan Lipsey, Publisher, as well as the entire editorial staff of Sun Newspapers for their achievement, which vividly illustrated that size need not be equated with significance in publishing.

Warren E. Buffett Chairman of the Board March 29, 1974

1974 Letter

To the Stockholders of Berkshire Hathaway Inc.:

Operating results for 1974 overall were unsatisfactory due to the poor performance of our insurance business. In last year's annual report some decline in profitability was predicted but the extent of this decline, which accelerated during the year, was a surprise. Operating earnings for 1974 were $8,383,576, or $8.56 per share, for a return on beginning shareholders' equity of 10.3%. This is the lowest return on equity realized since 1970. Our textile division and our bank both performed very well, turning in improved results against the already good figures of 1973. However, insurance underwriting, which has been mentioned in the last several annual reports as running at levels of unsustainable profitability, turned dramatically worse as the year progressed.

The outlook for 1975 is not encouraging. We undoubtedly will have sharply negative comparisons in our textile operation and probably a moderate decline in banking earnings. Insurance underwriting is a large question mark at this time—it certainly won't be a satisfactory year in this area, and could be an extremely poor one. Prospects are reasonably good for an improvement in both insurance investment income and our equity in earnings of Blue Chip Stamps. During this period we plan to continue to build financial strength and liquidity, preparing for the time when insurance rates become adequate and we can once again aggressively pursue opportunities for growth in this area.

Textile Operations

During the first nine months of 1974 textile demand was exceptionally strong, resulting in very firm prices. However, in the fourth quarter significant weaknesses began to appear, which have continued into 1975.

We currently are operating at about one-third of capacity. Obviously, at such levels operating losses must result. As shipments have fallen, we continuously have adjusted our level of operations downward so as to avoid building inventory.

Our products are largely in the curtain goods area. During a period of consumer uncertainty, curtains may well be high on the list of deferrable purchases. Very low levels of housing starts also serve to dampen demand. In addition, retailers have been pressing to cut inventories generally, and we probably are feeling some effect from these efforts. These negative trends should reverse in due course, and we are attempting to minimize losses until that time comes.

Insurance Underwriting

In the last few years we consistently have commented on the unusual profitability in insurance underwriting. This seemed certain eventually to attract unintelligent competition with consequent inadequate rates. It also has been apparent that many insurance organizations, major as well as minor, have been guilty of significant underreserving of losses, which inevitably produces faulty information as to the true cost of the product being sold. In 1974, these factors, along with a high rate of inflation, combined to produce a rapid erosion in underwriting results. The costs of the product we deliver (auto repair, medical payments, compensation benefits, etc.) are increasing at a rate we estimate to be in the area of 1% per month. Of course, this increase doesn't proceed in an even flow but, inexorably, inflation grinds very heavily at the repair services—to humans and to property—that we provide. However, rates virtually have been unchanged in the property and casualty field for the last few years. With costs moving forward rapidly and prices remaining unchanged, it was not hard to predict what would happen to profit margins.

Best's, the authoritative voice of the insurance industry, estimates that in 1974 all auto insurance premiums in the United States increased only about 2%. Such a growth in the pool of dollars available to pay insured losses and expenses was woefully inadequate. Obviously, medical costs applicable to people injured during the year, jury awards for pain and suffering, and body shop charges for repairing damaged cars increased at a dramatically greater rate during the year. Since premiums represent the sales dollar and the latter items represent the cost of goods sold, profit margins turned sharply negative.

As this report is being written, such deterioration continues. Loss reserves for many giant companies still appear to be understated by significant amounts, which means that these competitors continue to underestimate their true costs. Not only must rates be increased

sufficiently to match the month-by-month increase in cost levels, but the existed expense-revenue gap must be overcome. At this time it appears that insurors must experience even more devastating underwriting results before they take appropriate pricing action.

All major areas of insurance operations, except for the "home state" companies, experienced significantly poorer results for the year.

The direct business of National Indemnity Company, our largest area of insurance activity, produced an underwriting loss of approximately 4% after several years of high profitability. Volume increased somewhat, but we are not encouraging such increases until rates are more adequate. At some point in the cycle, after major insurance companies have had their fill of red ink, history indicates that we will experience an inflow of business at compensatory rates. This operation, headed by Phil Liesche, a most able underwriter, is staffed by highly profit-oriented people and we believe it will provide excellent earnings in most future years, as it has in the past.

Intense competition in the reinsurance business has produced major losses for practically every company operating in the area. We have been no exception. Our underwriting loss was something over 12%—a horrendous figure, but probably little different from the average of the industry. What is even more frightening is that, while about the usual number of insurance catastrophes occurred during 1974, there really was no "super disaster" which might have accounted for the poor figures of the industry. Rather, a condition of inadequate rates prevails, particularly in the casualty area where we have significant exposure. Our reinsurance department is run by George Young, an exceptionally competent and hardworking manager. He has cancelled a great many contracts where prices are totally inadequate, and is making no attempt to increase volume except in areas where premiums are commensurate with risk. Based upon present rate levels, it seems highly unlikely that the reinsurance industry generally, or we, specifically, will have a profitable year in 1975.

Our "home state" companies, under the leadership of John Ringwalt, made good progress in 1974. We appear to be developing a sound agency group, capable of producing business with acceptable loss ratios. Our expense ratios still are much too high, but will come down as the operation develops into units of economic size. The Texas problem which was commented

upon in last year's report seems to be improving. We consider the "home state" operation one of our most promising areas for the future.

Our efforts to expand Home and Automobile Insurance Company into Florida proved disastrous. The underwriting loss from operations in that market will come to over $2 million, a very large portion of which was realized in 1974. We made the decision to drop out of the Florida market in the middle of 1974, but losses in substantial amounts have continued since that time because of the term nature of insurance contracts, as well as adverse development of outstanding claims. We can't blame external insurance industry conditions for this mistake. In retrospect, it is apparent that our management simply did not have the underwriting information and the pricing knowledge necessary to be operating in the area. In Cook County, where Home and Auto's volume traditionally has been concentrated, evidence also became quite clear during 1974 that rates were inadequate. Therefore, rates were increased during the middle of the year but competition did not follow; consequently, our volume has dropped significantly in this area as competitors take business from us at prices that we regard as totally unrealistic.

While the tone of this section is pessimistic as to 1974 and 1975, we consider the insurance business to be inherently attractive. Our overall return on capital employed in this area—even including the poor results of 1974—remains high. We have made every effort to be realistic in the calculation of loss and administrative expense. Because of accruals, this had a double effect at both the bank and corporate level in 1974.

Under present money market conditions, we expect bank earnings to be down somewhat in 1975 although we believe they still are likely to compare favorably with those of practically any banking institution in the country.

Blue Chip Stamps

During 1974 we increased our holdings of Blue Chip Stamps to approximately 25.5% of the outstanding shares of that company. Overall, we are quite happy about the results of Blue Chip and its prospects for the future. Stamp sales continue at a greatly reduced level, but the Blue Chip management has done an excellent job of adjusting operating costs. The See's Candy Shops, Inc. subsidiary had an outstanding year, and has excellent prospects for the future.

Your Chairman is on the Board of Directors of Blue Chip Stamps, as well as Wesco Financial Corporation, a 64% owned subsidiary, and is Chairman of the Board of See's Candy Shops, Inc. We expect Blue Chip Stamps to be a source of continued substantial earning power for Berkshire Hathaway Inc.

The annual report of Blue Chip Stamps, which will contain financial statements for the year ended March 1, 1975 audited by Price, Waterhouse and Company, will be available in May. Any shareholder of Berkshire Hathaway Inc. who desires an annual report of Blue Chip Stamps may obtain it at any time by writing Mr. Robert H. Bird, Secretary, Blue Chip Stamps, 5801 South Eastern Avenue, Los Angeles, California 90040.

Merger with Diversified Retailing Company, Inc.

As you previously have been informed, the proposed merger with Diversified Retailing Company, Inc. was terminated by the respective Boards of Directors on January 28, 1975. We continue to view such a merger as eventually desirable, and hope to reopen the subject at some future time.

Warren E. Buffett Chairman of the Board March 31, 1975

1975 Letter

To the Stockholders of Berkshire Hathaway Inc.:

Last year, when discussing the prospects for 1975, we stated "the outlook for 1975 is not encouraging." This forecast proved to be distressingly accurate. Our operating earnings for 1975 were $6,713,592, or $6.85 per share, producing a return on beginning shareholders' equity of 7.6%. This is the lowest return on equity experienced since 1967. Furthermore, as explained later in this letter, a large segment of these earnings resulted from Federal income tax refunds which will not be available to assist performance in 1976.

On balance, however, current trends indicate a somewhat brighter 1976. Operations and prospects will be discussed in greater detail below, under specific industry titles. Our expectation is that significantly better results in textiles, earnings added from recent acquisitions, an increase in equity in earnings of Blue Chip Stamps resulting from an enlarged ownership interest, and at least a moderate improvement in insurance underwriting results will more than offset other possible negatives to produce greater earnings in 1976. The major variable—and by far the most difficult to predict with any feeling of confidence—is the insurance underwriting result. Present *very tentative* indications are that underwriting improvement is in prospect. If such improvement is moderate, our overall gain in earnings in 1976 likewise will prove moderate. More significant underwriting improvement could give us a major gain in earnings.

Textile Operations

During the first half of 1975 sales of textile products were extremely depressed, resulting in major production curtailments. Operations ran at a significant loss, with employment down as much as 53% from a year earlier.

In contrast with previous cyclical slumps, however, most textile producers quickly reduced production to match incoming orders, thus preventing massive industry-wide accumulation of inventories. Such cutbacks caused quite prompt reflection at the mill operating level when demand revived at retail. As a result, beginning about midyear business rebounded at a fairly

rapid rate. This “V” shaped textile depression, while one of the sharpest on record, also became one of the shortest ones in our experience. The fourth quarter produced an excellent profit for our textile division, bringing results for the year into the black.

On April 28, 1975 we acquired Waumbec Mills Incorporated and Waumbec Dyeing and Finishing Co., Inc. located in Manchester, New Hampshire. These companies have long sold woven goods into the drapery and apparel trade. Such drapery materials complement and extend the line already marketed through the Home Fabrics Division of Berkshire Hathaway. In the period prior to our acquisition, the company had run at a very substantial loss, with only about 55% of looms in operation and the finishing plant operating at about 50% of capacity. Losses continued on a reduced basis for a few months after acquisition. Outstanding efforts by our manufacturing, administrative and sales people now have produced major improvements, which, coupled with the general revival in textiles, have moved Waumbec into a significant profit position.

We expect a good level of profits from textiles in 1976. Continued progress is being made in the movement of Waumbec goods into areas of traditional marketing strength of Berkshire Hathaway, productivity should improve in both the weaving and finishing areas at Manchester, and textile demand continues to firm at decent prices.

We have great confidence in the ability of Ken Chace and his team to maximize our strengths in textiles. Therefore, we continue to look for ways to increase further our scale of operations while avoiding major capital investment in new fixed assets which we consider unwise, considering the relatively low returns historically earned on large scale investment in new textile equipment.

Insurance Underwriting

The property and casualty insurance industry had its worst year in history during 1975. We did our share—unfortunately, even somewhat more. Really disastrous results were concentrated in auto and long-tail (contracts where settlement of loss usually occurs long after the loss event) lines.

Economic inflation, with the increase in cost of repairing humans and property far outstripping the general rate of inflation, produced ultimate loss costs which soared beyond premium levels

established in a different cost environment. “Social” inflation caused the liability concept to be expanded continuously, far beyond limits contemplated when rates were established—in effect, adding coverage beyond what was paid for. Such social inflation increased significantly both the propensity to sue and the possibility of collecting mammoth jury awards for events not previously considered statistically significant in the establishment of rates. Furthermore, losses to policyholders which otherwise would result from mushrooming insolvencies of companies inadequately reacting to these problems are divided through Guaranty Funds among remaining solvent insurers. These trends will continue, and should moderate any optimism which otherwise might be justified by the sharply increased rates now taking effect.

Berkshire Hathaway’s insurance subsidiaries have a disproportionate concentration of business in precisely the lines which produced the worst underwriting results in 1975. Such lines produce unusually high investment income and, therefore, have been particularly attractive to us under previous underwriting conditions. However, our “mix” has been very disadvantageous during the past two years and it well may be that we will remain positioned in the more difficult part of the insurance spectrum during the inflationary years ahead.

The only segment to show improved results for us during 1975 was the “home state” operation, which has made continuous progress under the leadership of John Ringwalt. Although still operating at a significant underwriting loss, the combined ratio improved from 1974. Adjusted for excess costs attributable to operations still in the start-up phase, underwriting results are satisfactory. Texas United Insurance Company, a major problem a few years ago, has made outstanding progress since George Billing has assumed command. With an almost totally new agency force, Texas United was the winner of the “Chairman’s Cup” for achievement of the lowest loss ratio among the home state companies. Cornhusker Casualty Company, oldest and largest of the home state companies, continues its outstanding operation with major gains in premium volume and a combined ratio slightly under 100. Substantial premium growth is expected at the home state operation during 1976; the measurement of success, however, will continue to be the achievement of a low combined ratio.

Our traditional business at National Indemnity Company, representing well over half of our insurance volume, had an extraordinarily bad underwriting year in 1975. Although rates were

increased frequently and significantly, they continually lagged loss experience throughout the year. Several special programs instituted in the early 1970s have caused significant losses, as well as a heavy drain on managerial time and energies. Present indications are that premium volume will show a major increase in 1976, and we hope that underwriting results will improve.

Reinsurance suffered the same problems as our direct business during 1975. The same remedial efforts were attempted. Because reinsurance contract settlements lag those of direct business, it well may be that any upturn in results from our direct insurance business will precede those of the reinsurance segment.

At our Home and Automobile Insurance Company subsidiary, now writing auto business only in the Cook County area of Illinois, experience continued very bad in 1975 resulting in a management change in October. John Seward was made President at that time, and has energetically and imaginatively implemented a completely revamped underwriting approach.

Overall, our insurance operation will produce a substantial gain in premium volume during 1976. Much of this will reflect increased rates rather than more policies. Under normal circumstances such a gain in volume would be welcome, but our emotions are mixed at present. Underwriting experience *should* improve—and we expect it to—but our confidence level is not high. While our efforts will be devoted to obtaining a combined ratio below 100, it is unlikely to be attained during 1976.

Insurance Investments

Gains in investment income were moderate during 1975 because premium volume remained flat and underwriting losses reduced funds available for investment. Invested assets, measured at cost at yearend, were close to identical with the level at the beginning of the year.

At the end of 1974 the net unrealized loss in the stock section of our portfolio amounted to about $17 million, but we expressed the opinion, nevertheless, that this portfolio overall represented good value at its carrying value of cost. During 1975 a net capital loss of $2,888,000 before tax credits was realized, but our present expectation is that 1976 will be a year of realized capital gain. On March 31, 1976 our net unrealized gains applicable to equities amounted to about $15 million. Our equity investments are heavily concentrated in a few companies which are selected based on favorable economic characteristics, competent and

honest management, and a purchase price attractive when measured against the yardstick of value to a private owner.

When such criteria are maintained, our intention is to hold for a long time; indeed, our largest equity investment is 467,150 shares of Washington Post "B" stock with a cost of $10.6 million, which we expect to hold permanently.

With this approach, stock market fluctuations are of little importance to us—except as they may provide buying opportunities—but business performance is of major importance. On this score we have been delighted with progress made by practically all of the companies in which we now have significant investments.

We have continued to maintain a strong liquid position in our insurance companies. In last year's annual report we explained how variations of 1/10 of 1% in interest rates result in million dollar swings in market value of our bonds. We consider such market fluctuation of minor importance as our liquidity and general financial strength make it highly improbable that bonds will have to be sold at times other than those of our choice.

Banking

It is difficult to find adjectives to describe the performance of Eugene Abegg, Chief Executive of Illinois National Bank and Trust of Rockford, Illinois, our banking subsidiary.

In a year when many banking operations experienced major troubles, Illinois National continued its outstanding record. Against average loans of about $65 million, net loan losses were $24,000, or .04%. Unusually high liquidity is maintained with obligations of the U. S. Government and its agencies, all due within one year, at yearend amounting to about 75% of demand deposits. Maximum rates of interest are paid on all consumer savings instruments which make up more than $2 million, it consistently has generated favorable earnings. Positioned as we now are with respect to income taxes, the addition of a solid source of taxable income is particularly welcome.

General Review

Your present management assumed responsibility at Berkshire Hathaway in May, 1965. At the end of the prior fiscal year (September, 1964) the net worth of the Company was $22.1 million, and 1,137,778 common shares were outstanding, with a resulting book value of $19.46 per

share. Ten years earlier, Berkshire Hathaway's net worth had been $53.4 million. Dividends and stock repurchases accounted for over $21 million of the decline in company net worth, but aggregate net losses of $9.8 million had been incurred on sales of $595 million during the decade.

In 1965, two New England textile mills were the company's only sources of earning power and, before Ken Chace assumed responsibility for the operation, textile earnings had been erratic and, cumulatively, something less than zero subsequent to the merger of Berkshire Fine Spinning and Hathaway Manufacturing. Since 1964, net worth has been built to $92.9 million, or $94.92 per share. We have acquired total, or virtually total ownership of six businesses through negotiated purchases for cash (or cash and notes) from private owners, started four others, purchased a 31.5% interest in a large affiliate enterprise and reduced the number of outstanding shares of Berkshire Hathaway to 979,569. Overall, equity per share has compounded at an annual rate of slightly over 15%.

While 1975 was a major disappointment, efforts will continue to develop growing and diversified sources of earnings. Our objective is a conservatively financed and highly liquid business—possessing extra margins of balance sheet strength consistent with the fiduciary obligations inherent in the banking and insurance industries—which will produce a long term rate of return on equity capital exceeding that of American industry as a whole.

Warren E. Buffett, Chairman

1976 Letter

To the Stockholders of Berkshire Hathaway Inc.:

After two dismal years, operating results in 1976 improved significantly. Last year we said the degree of progress in insurance underwriting would determine whether our gain in earnings would be "moderate" or "major." As it turned out, earnings exceeded even the high end of our expectations. In large part, this was due to the outstanding efforts of Phil Liesche's managerial group at National Indemnity Company.

In dollar terms, operating earnings came to $16,073,000, or $16.47 per share. While this is a record figure, we consider return on shareholders' equity to be a much more significant yardstick of economic performance. Here our result was 17.3%, moderately above our long-term average and even further above the average of American industry, but well below our record level of 19.8% achieved in 1972.

Our present estimate, subject to all the caveats implicit in forecasting, is that dollar operating earnings are likely to improve somewhat in 1977, but that return on equity may decline a bit from the 1976 figure.

Textile Operations

Our textile division was a significant disappointment during 1976. Earnings, measured either by return on sales or by return on capital employed, were inadequate. In part, this was due to industry conditions which did not measure up to expectations of a year ago. But equally important were our own shortcomings. Marketing efforts and mill capabilities were not properly matched in our new Waumbec operation. Unfavorable manufacturing cost variances were produced by improper evaluation of machinery and personnel capabilities. Ken Chace, as always, has been candid in reporting problems and has worked diligently to correct them. He is a pleasure to work with—even under difficult operating conditions.

While the first quarter outlook is for red ink, our quite tentative belief is that textile earnings in 1977 will equal, or exceed modestly, those of 1976. Despite disappointing current results, we continue to look for ways to build our textile operation and presently have one moderate-size

acquisition under consideration. It should be recognized that the textile business does not offer the expectation of high returns on investment. Nevertheless, we maintain a commitment to this division—a very important source of employment in New Bedford and Manchester—and believe reasonable returns on average are possible.

Insurance Underwriting

Casualty insurers enjoyed some rebound from the disaster levels of 1975 as rate increases finally outstripped relentless cost increases. Preliminary figures indicate that the stockholder owned portion of the property and casualty industry had a combined ratio of 103.0 in 1976, compared to 108.3 in 1975. (100 represents a break-even position on underwriting—and higher figures represent underwriting losses.) We are unusually concentrated in auto lines where stock companies had an improvement from 113.5 to 107.4. Our own overall improvement was even more dramatic, from 115.4 to 98.7.

Our major insurance sector in insurance, the traditional auto and general liability business of National Indemnity Company, had an outstanding year, achieving profit levels significantly better than the industry generally. Credit for this performance must be given to Phil Liesche, aided particularly by Roland Miller in Underwriting and Bill Lyons in Claims.

Volume at National Indemnity Company grew rapidly during 1976 as competitors finally reacted to the inadequacy of past rates. But, as mentioned in last year's annual report, we are concentrated heavily in lines that are particularly susceptible to both economic and social inflation. Thus present rates, which are adequate for today, will not be adequate tomorrow. Our opinion is that before long, perhaps in 1978, the industry will fall behind on rates as temporary prosperity produces unwise competition. If this happens, we must be prepared to meet the next wave of inadequate pricing by a significant reduction in volume.

Reinsurance underwriting has lagged the improvement in direct business. When mistakes are made in the pricing of reinsurance, the effects continue for even longer than when similar mistakes are made in direct underwriting. George Young, an outstanding manager, has worked tirelessly to achieve his goal of profitable underwriting, and has cancelled a great many contracts where appropriate rate adjustments were not obtainable. Here, as in the direct

business, we have had a concentration in casualty lines which have been particularly hard hit by inflationary conditions. The near term outlook still is not good for our reinsurance business.

Our "home state" operation continues to make substantial progress under the management of John Ringwalt. The combined ratio improved from 108.4 in 1975 to 102.7 in 1976. There still are some excess costs reflected in the combined ratio which result from the small size of several operations. Cornhusker Casualty Company, oldest and largest of the home state companies, was the winner of the Chairman's Cup in 1976 for achievement of the lowest loss ratio among the home state companies. Cornhusker also achieved the lowest combined ratio in its history at 94.4, marking the fifth time in its six full years of existence that a ratio below 100 has been recorded. Premium growth was 78% at the home state companies in 1976, as market position improved significantly. We presently plan a new home state operation later this year.

Our Home and Automobile Insurance Company subsidiary, writing primarily automobile business in the Cook County area of Illinois, experienced a strong recovery in 1976. This is directly attributable to John Seward who, in his first full year, has revamped significantly both rating methods and marketing. The auto business has been shifted to a six month direct bill policy, which permits a faster reaction time to underwriting trends. Our general liability business at Home and Automobile has been expanded significantly with good results. While it remains to be proven that we can achieve sustained underwriting profitability at Home and Auto, we are delighted with the progress John Seward has achieved.

Overall, we expect a good year in insurance in 1977. Volume is high and present rate levels should allow profitable underwriting. Longer term, however, there are significant negatives in the insurance picture. Auto lines, in particular, seem highly vulnerable to pricing and regulatory problems produced by political and social factors beyond the control of individual companies.

Insurance Investments

Pre-tax investment income in 1976 improved to $10,820,000 from $8,918,000 as invested assets built up substantially, both from better levels of profitability and from gains in premium volume.

In recent reports we have noted the unrealized depreciation in our bond account, but stated that we considered such market fluctuations of minor importance as our liquidity and general

financial strength made it improbable that bonds would have to be sold at times other than those of our choice. The bond market rallied substantially in 1976, giving us moderate net unrealized gains at yearend in the bond portfolios of both our bank and insurance companies. This, too, is of minor importance since our intention is to hold a large portion of our bonds to maturity. The corollary to higher bond prices is that lower earnings are produced by the new funds generated for investment. On balance, we prefer a situation where our bond portfolio has a current market value less than carrying value, but more attractive rates are available on issues purchased with newly-generated funds.

Last year we stated that we expected 1976 to be a year of realized capital gains and, indeed, gains of $9,962,000 before tax, primarily from stocks, were realized during the year. It presently appears that 1977 also will be a year of net realized capital gains. We now have a substantial unrealized gain in our stock portfolio as compared to a substantial unrealized loss several years ago. Here again we consider such market fluctuations from year to year relatively unimportant; unrealized appreciation in our equity holdings, which amounted to $45.7 million at yearend, has declined by about $5 million as this is written on March 21st.

However, we consider the yearly business progress of the companies in which we own stocks to be very important. And here, we have been delighted by the 1976 business performance achieved by most of our portfolio companies. If the business results continue excellent over a period of years, we are certain eventually to achieve good financial results from our stock holdings, regardless of wide year-to-year fluctuations in market values.

Our equity holdings with a market value of over $3 million on December 31, 1976 were as follows:

No. of Shares	Company	Cost
141,987	California Water Service Company	$3,608,711
1,986,953	Government Employees Insurance Company Covertible Preferred	19,416,635
1,294,308	Government Employees Insurance Company Common Stock	4,115,670
395,100	Interpublic Group of Companies	4,530,615
562,900	Kaiser Industries, Inc.	8,270,871
188,900	Munsingwear, Inc.	3,398,404
83,400	National Presto Industries, Inc.	1,689,896
170,800	Ogilvy & Mather International	2,762,433
934,300	The Washington Post Company Class B	10,627,604

1977 Letter

BERKSHIRE HATHAWAY INC.

To the Stockholders of Berkshire Hathaway Inc.:

Operating earnings in 1977 of $21,904,000, or $22.54 per share, were moderately better than anticipated a year ago. Of these earnings, $1.43 per share resulted from substantial realized capital gains by Blue Chip Stamps which, to the extent of our proportional interest in that company, are included in our operating earnings figure. Capital gains or losses realized directly by Berkshire Hathaway Inc. or its insurance subsidiaries are not included in our calculation of operating earnings. While too much attention should not be paid to the figure for any single year, over the longer term the record regarding aggregate capital gains or losses obviously is of significance.

Textile operations came in well below forecast, while the results of the Illinois National Bank as well as the operating earnings attributable to our equity interest in Blue Chip Stamps were about as anticipated. However, insurance operations, led again by the truly outstanding results of Phil Liesche's managerial group at National Indemnity Company, were even better than our optimistic expectations.

Most companies define "record" earnings as a new high in earnings per share. Since businesses customarily add from year to year to their equity base, we find nothing particularly noteworthy in a management performance combining, say, a 10% increase in equity capital and a 5% increase in earnings per share. After all, even a totally dormant savings account will produce steadily rising interest earnings each year because of compounding.

Except for special cases (for example, companies with unusual debt-equity ratios or those with important assets carried at unrealistic balance sheet values), we believe a more appropriate measure of managerial economic performance to be return on equity capital. In 1977 our operating earnings on beginning equity capital amounted to 19%, slightly better than

last year and above both our own long-term average and that of American industry in aggregate. But, while our operating earnings per share were up 37% from the year before, our beginning capital was up 24%, making the gain in earnings per share considerably less impressive than it might appear at first glance.

We expect difficulty in matching our 1977 rate of return during the forthcoming year. Beginning equity capital is up 23% from a year ago, and we expect the trend of insurance underwriting profit margins to turn down well before the end of the year. Nevertheless, we expect a reasonably good year and our present estimate, subject to the usual caveats regarding the frailties of forecasts, is that operating earnings will improve somewhat on a per share basis during 1978.

Textile Operations

The textile business again had a very poor year in 1977. We have mistakenly predicted better results in each of the last two years. This may say something about our forecasting abilities, the nature of the textile industry, or both. Despite strenuous efforts, problems in marketing and manufacturing have persisted. Many difficulties experienced in the marketing area are due primarily to industry conditions, but some of the problems have been of our own making.

A few shareholders have questioned the wisdom of remaining in the textile business which, over the longer term, is unlikely to produce returns on capital comparable to those available in many other businesses. Our reasons are several: (1) Our mills in both New Bedford and Manchester are among the largest employers in each town, utilizing a labor force of high average age possessing relatively non-transferable skills. Our workers and unions have exhibited unusual understanding and effort in cooperating with management to achieve a cost structure and product mix which might allow us to maintain a viable operation. (2) management also has been energetic and straightforward in its approach to our textile problems. In particular, Ken Chace's efforts after the change in corporate control took place in 1965 generated capital from the textile division needed to finance the acquisition and expansion of our profitable insurance operation. (3) With hard work and some imagination regarding manufacturing and marketing configurations, it seems reasonable that at least

modest profits in the textile division can be achieved in the future.

Insurance Underwriting

Our insurance operation continued to grow significantly in 1977. It was early in 1967 that we made our entry into this industry through the purchase of National Indemnity Company and National Fire and Marine Insurance Company (sister companies) for approximately $8.6 million. In that year their premium volume amounted to $22 million. In 1977 our aggregate insurance premium volume was $151 million. No additional shares of Berkshire Hathaway stock have been issued to achieve any of this growth.

Rather, this almost 600% increase has been achieved through large gains in National Indemnity's traditional liability areas plus the starting of new companies (Cornhusker Casualty Company in 1970, Lakeland Fire and Casualty Company in 1971, Texas United Insurance Company in 1972, The Insurance Company of Iowa in 1973, and Kansas Fire and Casualty Company in late 1977), the purchase for cash of other insurance companies (Home and Automobile Insurance Company in 1971, Kerkling Reinsurance Corporation, now named Central Fire and Casualty Company, in 1976, and Cypress Insurance Company at yearend 1977), and finally through the marketing of additional products, most significantly reinsurance, within the National Indemnity Company corporate structure.

In aggregate, the insurance business has worked out very well. But it hasn't been a one-way street. Some major mistakes have been made during the decade, both in products and personnel. We experienced significant problems from (1) a surety operation initiated in 1969, (2) the 1973 expansion of Home and Automobile's urban auto marketing into the Miami, Florida area, (3) a still unresolved aviation "fronting" arrangement, and (4) our Worker's Compensation operation in California, which we believe retains an interesting potential upon completion of a reorganization now in progress. It is comforting to be in a business where some mistakes can be made and yet a quite satisfactory overall performance can be achieved. In a sense, this is the opposite case from our textile business where even very good management probably can average only modest results. One of the lessons your management has learned - and, unfortunately, sometimes re-learned - is the importance of being in businesses where tailwinds prevail rather than headwinds.

In 1977 the winds in insurance underwriting were squarely behind us. Very large rate increases were effected throughout the industry in 1976 to offset the disastrous underwriting results of 1974 and 1975. But, because insurance policies typically are written for one-year periods, with pricing mistakes capable of correction only upon renewal, it was 1977 before the full impact was felt upon earnings of those earlier rate increases.

The pendulum now is beginning to swing the other way. We estimate that costs involved in the insurance areas in which we operate rise at close to 1% per month. This is due to continuous monetary inflation affecting the cost of repairing humans and property, as well as "social inflation", a broadening definition by society and juries of what is covered by insurance policies. Unless rates rise at a comparable 1% per month, underwriting profits must shrink. Recently the pace of rate increases has slowed dramatically, and it is our expectation that underwriting margins generally will be declining by the second half of the year.

We must again give credit to Phil Liesche, greatly assisted by Roland Miller in Underwriting and Bill Lyons in Claims, for an extraordinary underwriting achievement in National Indemnity's traditional auto and general liability business during 1977. Large volume gains have been accompanied by excellent underwriting margins following contraction or withdrawal by many competitors in the wake of the 1974-75 crisis period. These conditions will reverse before long. In the meantime, National Indemnity's underwriting profitability has increased dramatically and, in addition, large sums have been made available for investment. As markets loosen and rates become inadequate, we again will face the challenge of philosophically accepting reduced volume. Unusual managerial discipline will be required, as it runs counter to normal institutional behavior to let the other fellow take away business - even at foolish prices.

Our reinsurance department, managed by George Young, improved its underwriting performance during 1977. Although the combined ratio (see definition on page 12) of 107.1 was unsatisfactory, its trend was downward throughout the year. In addition, reinsurance generates unusually high funds for investment as a percentage of premium volume.

At Home and Auto, John Seward continued to make progress on all fronts. John was a battlefield promotion several years ago when Home and Auto's underwriting was awash in red

ink and the company faced possible extinction. Under his management it currently is sound, profitable, and growing.

John Ringwalt's homestate operation now consists of five companies, with Kansas Fire and Casualty Company becoming operational late in 1977 under the direction of Floyd Taylor. The homestate companies had net premium volume of $23 million, up from $5.5 million just three years ago. All four companies that operated throughout the year achieved combined ratios below 100, with Cornhusker Casualty Company, at 93.8, the leader. In addition to actively supervising the other four homestate operations, John Ringwalt manages the operations of Cornhusker which has recorded combined ratios below 100 in six of its seven full years of existence and, from a standing start in 1970, has grown to be one of the leading insurance companies operating in Nebraska utilizing the conventional independent agency system. Lakeland Fire and Casualty Company, managed by Jim Stodolka, was the winner of the Chairman's Cup in 1977 for achieving the lowest loss ratio among the homestate companies. All in all, the homestate operation continues to make excellent progress.

The newest addition to our insurance group is Cypress Insurance Company of South Pasadena, California. This Worker's Compensation insurer was purchased for cash in the final days of 1977 and, therefore, its approximate $12.5 million of volume for that year was not included in our results. Cypress and National Indemnity's present California Worker's Compensation operation will not be combined, but will operate independently utilizing somewhat different marketing strategies. Milt Thornton, President of Cypress since 1968, runs a first-class operation for policyholders, agents, employees and owners alike. We look forward to working with him.

Insurance companies offer standardized policies which can be copied by anyone. Their only products are promises. It is not difficult to be licensed, and rates are an open book. There are no important advantages from trademarks, patents, location, corporate longevity, raw material sources, etc., and very little consumer differentiation to produce insulation from competition. It is commonplace, in corporate annual reports, to stress the difference that people make. Sometimes this is true and sometimes it isn't. But there is no question that the nature of

the insurance business magnifies the effect which individual managers have on company performance. We are very fortunate to have the group of managers that are associated with us.

Insurance Investments

During the past two years insurance investments at cost (excluding the investment in our affiliate, Blue Chip Stamps) have grown from $134.6 million to $252.8 million. Growth in insurance reserves, produced by our large gain in premium volume, plus retained earnings, have accounted for this increase in marketable securities. In turn, net investment income of the Insurance Group has improved from $8.4 million pre-tax in 1975 to $12.3 million pre-tax in 1977.

In addition to this income from dividends and interest, we realized capital gains of $6.9 million before tax, about one-quarter from bonds and the balance from stocks. Our unrealized gain in stocks at yearend 1977 was approximately $74 million but this figure, like any other figure of a single date (we had an unrealized loss of $17 million at the end of 1974), should not be taken too seriously. Most of our large stock positions are going to be held for many years and the scorecard on our investment decisions will be provided by business results over that period, and not by prices on any given day. Just as it would be foolish to focus unduly on short-term prospects when acquiring an entire company, we think it equally unsound to become mesmerized by prospective near term earnings or recent trends in earnings when purchasing small pieces of a company; i.e., marketable common stocks.

A little digression illustrating this point may be interesting. Berkshire Fine Spinning Associates and Hathaway

Manufacturing were merged in 1955 to form Berkshire Hathaway Inc. In 1948, on a pro forma combined basis, they had earnings after tax of almost $18 million and employed 10,000 people at a dozen large mills throughout New England. In the business world of that period they were an economic powerhouse. For example, in that same year earnings of IBM were $28 million (now $2.7 billion), Safeway Stores, $10 million, Minnesota Mining, $13 million, and Time, Inc., $9 million. But, in the decade following the 1955 merger aggregate sales of $595 million

produced an aggregate loss for Berkshire Hathaway of $10 million. By 1964 the operation had been reduced to two mills and net worth had shrunk to $22 million, from $53 million at the time of the merger. So much for single year snapshots as adequate portrayals of a business.

Equity holdings of our insurance companies with a market value of over $5 million on December 31, 1977 were as follows:

No. of Shares	**Company**	**Cost (000's omitted)**	**Market (000's omitted)**
220,000	Capital Cities Communications, Inc	$10,909	$13,228
1,986,953	Government Employees Insurance Company Convertible Preferred	$19,417	$33,033
1,294,308	Government Employees Insurance Company Common Stock	$4,116	$10,516
592,650	Interpublic Group of Companies	$4,531	$17,187
324,580	Kaiser Aluminum& Chemical Corporation	$11,218	$9,981
1,305,800	Kaiser Industries, Inc.	$778	$6,039
226,900	Knight-Ridder Newspapers, Inc	$7,534	$8,736
170,800	Ogilvy & Mather International, Inc.	$2,762	$6,960
934,300	The Washington Post Company Class B	$10,628	$33,401
	Total	**$71,893**	**$139,081**
	All Other Holdings	**$34,996**	**$41,992**
	Total Equities	**$106,889**	**$181,073**

We select our marketable equity securities in much the same way we would evaluate a business for acquisition in its entirety. We want the business to be (1) one that we can understand, (2) with favorable long-term prospects, (3) operated by honest and competent people, and (4) available at a very attractive price. We ordinarily make no attempt to buy equities for anticipated favorable stock price behavior in the short term. In fact, if

their business experience continues to satisfy us, we welcome lower market prices of stocks we own as an opportunity to acquire even more of a good thing at a better price.

Our experience has been that pro-rata portions of truly outstanding businesses sometimes sell in the securities markets at very large discounts from the prices they would command in negotiated transactions involving entire companies. Consequently, bargains in business ownership, which simply are not available directly through corporate acquisition, can be obtained indirectly through stock ownership. When prices are appropriate, we are willing to take very large positions in selected companies, not with any intention of taking control and not foreseeing sell-out or merger, but with the expectation that excellent business results by corporations will translate over the long term into correspondingly excellent market value and dividend results for owners, minority as well as majority.

Such investments initially may have negligible impact on our operating earnings. For example, we invested $10.9 million in Capital Cities Communications during 1977. Earnings attributable to the shares we purchased totaled about $1.3 million last year. But only the cash dividend, which currently provides $40,000 annually, is reflected in our operating earnings figure.

Capital Cities possesses both extraordinary properties and extraordinary management. And these management skills extend equally to operations and employment of corporate capital. To purchase, directly, properties such as Capital Cities owns would cost in the area of twice our cost of purchase via the stock market, and direct ownership would offer no important advantages to us. While control would give us the opportunity - and the responsibility - to manage operations and corporate resources, we would not be able to provide management in either of those respects equal to that now in place. In effect, we can obtain a better management result through non-control than control. This is an unorthodox view, but one we believe to be sound.

Banking

In 1977 the Illinois National Bank continued to achieve a rate of earnings on assets about three times that of most large banks. As usual, this record was achieved while the bank paid

maximum rates to savers and maintained an asset position combining low risk and exceptional liquidity. Gene Abegg formed the bank in 1931 with $250,000. In its first full year of operation, earnings amounted to $8,782. Since that time, no new capital has been contributed to the bank; on the contrary, since our purchase in 1969, dividends of $20 million have been paid. Earnings in 1977 amounted to $3.6 million, more than achieved by many banks two or three times its size.

Late last year Gene, now 80 and still running a banking operation without peer, asked that a successor be brought in. Accordingly, Peter Jeffrey, formerly President and Chief Executive Officer of American National Bank of Omaha, has joined the Illinois National Bank effective March 1st as President and Chief Executive Officer.

Gene continues in good health as Chairman. We expect a continued successful operation at Rockford's leading bank.

Blue Chip Stamps

We again increased our equity interest in Blue Chip Stamps, and owned approximately 36 1/2% at the end of 1977. Blue Chip had a fine year, earning approximately $12.9 million from operations and, in addition, had realized securities gains of $4.1 million. Both Wesco Financial Corp., an 80% owned subsidiary of Blue Chip Stamps, managed by Louis Vincenti, and See's Candies, a 99% owned subsidiary, managed by Chuck Huggins, made good progress in 1977. Since See's was purchased by Blue Chip Stamps at the beginning of 1972, pre-tax operating earnings have grown from $4.2 million to $12.6 million with little additional capital investment. See's achieved this record while operating in an industry experiencing practically no unit growth. Shareholders of Berkshire Hathaway Inc. may obtain the annual report of Blue Chip Stamps by requesting it from Mr. Robert H. Bird, Blue Chip Stamps, 5801 South Eastern Avenue, Los Angeles, California 90040.

1978 Letter

BERKSHIRE HATHAWAY INC.

To the Shareholders of Berkshire Hathaway Inc.:

First, a few words about accounting. The merger with Diversified Retailing Company, Inc. at yearend adds two new complications in the presentation of our financial results. After the merger, our ownership of Blue Chip Stamps increased to approximately 58% and, therefore, the accounts of that company must be fully consolidated in the Balance Sheet and Statement of Earnings presentation of Berkshire. In previous reports, our share of the net earnings only of Blue Chip had been included as a single item on Berkshire's Statement of Earnings, and there had been a similar one-line inclusion on our Balance Sheet of our share of their net assets.

This full consolidation of sales, expenses, receivables, inventories, debt, etc. produces an aggregation of figures from many diverse businesses - textiles, insurance, candy, newspapers, trading stamps - with dramatically different economic characteristics. In some of these your ownership is 100% but, in those businesses which are owned by Blue Chip but fully consolidated, your ownership as a Berkshire shareholder is only 58%. (Ownership by others of the balance of these businesses is accounted for by the large minority interest item on the liability side of the Balance Sheet.) Such a grouping of Balance Sheet and Earnings items - some wholly owned, some partly owned - tends to obscure economic reality more than illuminate it. In fact, it represents a form of presentation that we never prepare for internal use during the year and which is of no value to us in any management activities.

For that reason, throughout the report we provide much separate financial information and commentary on the various segments of the business to help you evaluate Berkshire's performance and prospects. Much of this segmented information is mandated by SEC disclosure rules and covered in "Management's Discussion" on pages 29 to 34. And in this letter we try to present to you a view of our various operating entities from the same perspective that we view them managerially.

A second complication arising from the merger is that the 1977 figures shown in this report are different from the 1977 figures shown in the report we mailed to you last year. Accounting convention requires that when two entities such as Diversified and Berkshire are merged, all financial data subsequently must be presented as if the companies had been merged at the time they were formed rather than just recently. So the enclosed financial statements, in effect, pretend that in 1977 (and earlier years) the Diversified-Berkshire merger already had taken place, even though the actual merger date was December 30, 1978. This shifting base makes comparative commentary confusing and, from time to time in our narrative report, we will talk of figures and performance for Berkshire shareholders as historically reported to you rather than as restated after the Diversified merger.

With that preamble it can be stated that, with or without restated figures, 1978 was a good year. Operating earnings, exclusive of capital gains, at 19.4% of beginning shareholders' investment were within a fraction of our 1972 record. While we believe it is improper to include capital gains or losses in evaluating the performance of a single year, they are an important component of the longer term record. Because of such gains, Berkshire's long-term growth in equity per share has been greater than would be indicated by compounding the returns from operating earnings that we have reported annually.

For example, over the last three years - generally a bonanza period for the insurance industry, our largest profit producer - Berkshire's per share net worth virtually has doubled, thereby compounding at about 25% annually through a combination of good operating earnings and fairly substantial capital gains. Neither this 25% equity gain from all sources nor the 19.4% equity gain from operating earnings in 1978 is sustainable. The insurance cycle has turned downward in 1979, and it is almost certain that operating earnings measured by return on equity will fall this year. However, operating earnings measured in dollars are likely to increase on the much larger shareholders' equity now employed in the business.

In contrast to this cautious view about near term return from operations, we are optimistic about prospects for long term return from major equity investments held by our insurance companies. We make no attempt to predict how security markets will behave; successfully forecasting short term stock price movements is something we think neither we nor anyone

else can do. In the longer run, however, we feel that many of our major equity holdings are going to be worth considerably more money than we paid, and that investment gains will add significantly to the operating returns of the insurance group.

Sources of Earnings

To give you a better picture of just where Berkshire's earnings are produced, we show below a table which requires a little explanation. Berkshire owns close to 58% of Blue Chip which, in addition to 100% ownership of several businesses, owns 80% of Wesco Financial Corporation. Thus, Berkshire's equity in Wesco's earnings is about 46%. In aggregate, businesses that we control have about 7,000 full-time employees and generate revenues of over $500 million.

The table shows the overall earnings of each major operating category on a pre-tax basis (several of the businesses have low tax rates because of significant amounts of tax-exempt interest and dividend income), as well as the share of those earnings belonging to Berkshire both on a pre-tax and after-tax basis. Significant capital gains or losses attributable to any of the businesses are not shown in the operating earnings figure, but are aggregated on the "Realized Securities Gain" line at the bottom of the table. Because of various accounting and tax intricacies, the figures in the table should not be treated as holy writ, but rather viewed as close approximations of the 1977 and 1978 earnings contributions of our constituent businesses.

000's of $'s	Earnings Before Income Taxes Net Earnings After Tax Total Total Berkshire Share Berkshire Share 1978 1977 1978 1977 1978 1977
Total – All entities	**$66,180 $57,089 $54,350 $42,234 $39,242 $30,393**
Earnings from Operations: Insurance Group: Underwriting	$3,001 $5,802 $3,000 $5,802 $1,560 $3,017
Net investment income	$19,705 $12,804 $19,691 $12,804 $16,400 $11,360
Berkshire Waumbec textiles	$2,916 ($620) $2,916 ($620) $1,342 ($322)
Associated Retail Stores, Inc	$2,757 $2,775 $2,757 $2,775 $1,176 $1,429
See's Candies	$12,482 $12,840 $7,013 $6,598 $3,049 $2,974
Buffalo Evening News	($2,913) $751 ($1,637) $389 ($738) $158
Blue Chip Stamps - Parent	$2,133 $1,091 $1,198 $566 $1,382 $892
Illinois National Bank and Trust Company	$4,822 $3,800 $4,710 $3,706 $4,262 $3,288
Wesco Financial Corporation – Parent	$1,771 $2,006 $777 $813 $665 $419
Mutual Savings and Loan Association	$10,556 $6,779 $4,638 $2,747 $3,042 $1,946
Interest on Debt	($5,566) ($5,302) ($4,546) ($4,255) ($2,349) ($2,129)
Other	$720 $165 $438 $102 $261 $48
Total Earnings from Operations	$52,384 $42,891 $40,955 $31,427 $30,052 $23,080
Realized Securities Gain	$13,796 $14,198 $13,395 $10,807 $9,190 $7,313
Total Earnings	**$66,180 $57,089 $54,350 $42,234 $39,242 $30,393**

Blue Chip and Wesco are public companies with reporting requirements of their own. Later in this report we are reproducing the narrative reports of the principal executives of both companies, describing their 1978 operations. Some of the figures they utilize will not match to the penny the ones we use in this report, again because of accounting and tax complexities. But their comments should be helpful to you in understanding the underlying economic characteristics of these important partly-owned businesses. A copy of the full annual report of either company will be mailed to any shareholder of Berkshire upon request to Mr. Robert H. Bird for Blue Chips Stamps, 5801 South Eastern Avenue, Los Angeles, California 90040, or to Mrs. Bette Deckard for Wesco Financial Corporation, 315 East Colorado Boulevard, Pasadena, California 91109.

Textiles

Earnings of $1.3 million in 1978, while much improved from 1977, still represent a low return on the $17 million of capital employed in this business. Textile plant and equipment are on the books for a very small fraction of what it would cost to replace such equipment today. And, despite the age of the equipment, much of it is functionally similar to new equipment being installed by the industry. But despite this "bargain cost" of fixed assets, capital turnover is relatively low reflecting required high investment levels in receivables and inventory compared to sales. Slow capital turnover, coupled with low profit margins on sales, inevitably produces inadequate returns on capital. Obvious approaches to improved profit margins involve differentiation of product, lowered manufacturing costs through more efficient equipment or better utilization of people, redirection toward fabrics enjoying stronger market trends, etc. Our management is diligent in pursuing such objectives. The problem, of course, is that our competitors are just as diligently doing the same thing.

The textile industry illustrates in textbook style how producers of relatively undifferentiated goods in capital intensive businesses must earn inadequate returns except under conditions of tight supply or real shortage. As long as excess productive capacity exists, prices tend to reflect direct operating costs rather than capital employed. Such a supply-excess condition appears likely to prevail most of the time in the textile industry, and our expectations are for profits of relatively modest amounts in relation to capital.

We hope we don't get into too many more businesses with such tough economic characteristics. But, as we have stated before: (1) our textile businesses are very important employers in their communities, (2) management has been straightforward in reporting on problems and energetic in attacking them, (3) labor has been cooperative and understanding in facing our common problems, and (4) the business should average modest cash returns relative to investment. As long as these conditions prevail - and we expect that they will - we intend to continue to support our textile business despite more attractive alternative uses for capital.

Insurance Underwriting

The number one contributor to Berkshire's overall excellent results in 1978 was the segment of National Indemnity Company's insurance operation run by Phil Liesche. On about $90 million of earned premiums, an underwriting profit of approximately $11 million was realized, a truly extraordinary achievement even against the background of excellent industry conditions. Under Phil's leadership, with outstanding assistance by Roland Miller in Underwriting and Bill Lyons in Claims, this segment of National Indemnity (including National Fire and Marine Insurance Company, which operates as a running mate) had one of its best years in a long history of performances which, in aggregate, far outshine those of the industry. Present successes reflect credit not only upon present managers, but equally upon the business talents of Jack Ringwalt, founder of National Indemnity, whose operating philosophy remains etched upon the company.

Home and Automobile Insurance Company had its best year since John Seward stepped in and straightened things out in 1975. Its results are combined in this report with those of Phil Liesche's operation under the insurance category entitled "Specialized Auto and General Liability".

Worker's Compensation was a mixed bag in 1978. In its first year as a subsidiary, Cypress Insurance Company, managed by Milt Thornton, turned in outstanding results. The worker's compensation line can cause large underwriting losses when rapid inflation interacts with changing social concepts, but Milt has a cautious and highly professional staff to cope with

these problems. His performance in 1978 has reinforced our very good feelings about this purchase.

Frank DeNardo came with us in the spring of 1978 to straighten out National Indemnity's California Worker's Compensation business which, up to that point, had been a disaster. Frank has the experience and intellect needed to correct the major problems of the Los Angeles office. Our volume in this department now is running only about 25% of what it was eighteen months ago, and early indications are that Frank is making good progress.

George Young's reinsurance department continues to produce very large sums for investment relative to premium volume, and thus gives us reasonably satisfactory overall results. However, underwriting results still are not what they should be and can be. It is very easy to fool yourself regarding underwriting results in reinsurance (particularly in casualty lines involving long delays in settlement), and we believe this situation prevails with many of our competitors. Unfortunately, self-delusion in company reserving almost always leads to inadequate industry rate levels. If major factors in the market don't know their true costs, the competitive "fall-out" hits all - even those with adequate cost knowledge. George is quite willing to reduce volume significantly, if needed, to achieve satisfactory underwriting, and we have a great deal of confidence in the long term soundness of this business under his direction.

The homestate operation was disappointing in 1978. Our unsatisfactory underwriting, even though partially explained by an unusual incidence of Midwestern storms, is particularly worrisome against the backdrop of very favorable industry results in the conventional lines written by our homestate group. We have confidence in John Ringwalt's ability to correct this situation. The bright spot in the group was the performance of Kansas Fire and Casualty in its first full year of business. Under Floyd Taylor, this subsidiary got off to a truly remarkable start. Of course, it takes at least several years to evaluate underwriting results, but the early signs are encouraging and Floyd's operation achieved the best loss ratio among the homestate companies in 1978.

Although some segments were disappointing, overall our insurance operation had an excellent year. But of course we should expect a good year when the industry is flying high, as

in 1978. It is a virtual certainty that in 1979 the combined ratio (see definition on page 31) for the industry will move up at least a few points, perhaps enough to throw the industry as a whole into an underwriting loss position. For example, in the auto lines - by far the most important area for the industry and for us - CPI figures indicate rates overall were only 3% higher in January 1979 than a year ago. But the items that make up loss costs - auto repair and medical care costs - were up over 9%. How different than yearend 1976 when rates had advanced over 22% in the preceding twelve months, but costs were up 8%.

Margins will remain steady only if rates rise as fast as costs. This assuredly will not be the case in 1979, and conditions probably will worsen in 1980. Our present thinking is that our underwriting performance relative to the industry will improve somewhat in 1979, but every other insurance management probably views its relative prospects with similar optimism - someone is going to be disappointed. Even if we do improve relative to others, we may well have a higher combined ratio and lower underwriting profits in 1979 than we achieved last year.

We continue to look for ways to expand our insurance operation. But your reaction to this intent should not be unrestrained joy. Some of our expansion efforts - largely initiated by your Chairman have been lackluster, others have been expensive failures. We entered the business in 1967 through purchase of the segment which Phil Liesche now manages, and it still remains, by a large margin, the best portion of our insurance business. It is not easy to buy a good insurance business, but our experience has been that it is easier to buy one than create one. However, we will continue to try both approaches, since the rewards for success in this field can be exceptional.

Insurance Investments

We confess considerable optimism regarding our insurance equity investments. Of course, our enthusiasm for stocks is not unconditional. Under some circumstances, common stock investments by insurers make very little sense.

We get excited enough to commit a big percentage of insurance company net worth to equities only when we find (1) businesses we can understand, (2) with favorable long-term

prospects, (3) operated by honest and competent people, and (4) priced very attractively. We usually can identify a small number of potential investments meeting requirements (1), (2) and (3), but (4) often prevents action. For example, in 1971 our total common stock position at Berkshire's insurance subsidiaries amounted to only $10.7 million at cost, and $11.7 million at market. There were equities of identifiably excellent companies available - but very few at interesting prices. (An irresistible footnote: in 1971, pension fund managers invested a record 122%
of net funds available in equities - at full prices they couldn't buy enough of them. In 1974, after the bottom had fallen out, they committed a then record low of 21% to stocks.)

The past few years have been a different story for us. At the end of 1975 our insurance subsidiaries held common equities with a market value exactly equal to cost of $39.3 million. At the end of 1978 this position had been increased to equities (including a convertible preferred) with a cost of $129.1 million and a market value of $216.5 million. During the intervening three years we also had realized pre-tax gains from common equities of approximately $24.7 million. Therefore, our overall unrealized and realized pre-tax gains in equities for the three year period came to approximately $112 million. During this same interval the Dow-Jones Industrial Average declined from 852 to 805. It was a marvelous period for the value-oriented equity buyer.

We continue to find for our insurance portfolios small portions of really outstanding businesses that are available, through the auction pricing mechanism of security markets, at prices dramatically cheaper than the valuations inferior businesses command on negotiated sales.

This program of acquisition of small fractions of businesses (common stocks) at bargain prices, for which little enthusiasm exists, contrasts sharply with general corporate acquisition activity, for which much enthusiasm exists. It seems quite clear to us that either corporations are making very significant mistakes in purchasing entire businesses at prices prevailing in negotiated transactions and takeover bids, or that we eventually are going to make considerable sums of money buying small portions of such businesses at the greatly discounted valuations prevailing in the stock market. (A second footnote: in 1978 pension managers, a

group that logically should maintain the longest of investment perspectives, put only 9% of net available funds into equities - breaking the record low figure set in 1974 and tied in 1977.)

We are not concerned with whether the market quickly revalues upward securities that we believe are selling at bargain prices. In fact, we prefer just the opposite since, in most years, we expect to have funds available to be a net buyer of securities. And consistent attractive purchasing is likely to prove to be of more eventual benefit to us than any selling opportunities provided by a short-term run up in stock prices to levels at which we are unwilling to continue buying.

Our policy is to concentrate holdings. We try to avoid buying a little of this or that when we are only lukewarm about the business or its price. When we are convinced as to attractiveness, we believe in buying worthwhile amounts.

Equity holdings of our insurance companies with a market value of over $8 million on December 31, 1978 were as follows:

No. of Shares	**Company**	**Cost (000's omitted)**	**Market (000's omitted)**
246,450	American Broadcasting Companies, Inc	$6,082	$8,626
1,294,308	Government Employees Insurance Company Common Stock	$4,116	$9,060
1,986,953	Government Employees Insurance Company Preferred	$19,417	$28,314
592,650	Interpublic Group of Companies	$4,531	$19,039
1,066,934	Kaiser Aluminum& Chemical Corporation	$18,085	$18,671
453,800	Knight-Ridder Newspapers, Inc	$7,534	$10,267
953,750	SAFECO Corporation	$23,867	$26,467
934,300	The Washington Post Company Class B	$10,628	$43,445
	Total	**$94,260**	**$163,889**
	All Other Holdings	**$39,506**	**$57,040**
	Total Equities	**$133,766**	**$220,929**

In some cases our indirect interest in earning power is becoming quite substantial. For example, note our holdings of 953,750 shares of SAFECO Corp. SAFECO probably is the best run large property and casualty insurance company in the United States. Their underwriting abilities are simply superb, their loss reserving is conservative, and their investment policies make great sense.

SAFECO is a much better insurance operation than our own (although we believe certain segments of ours are much better than average), is better than one we could develop and, similarly, is far better than any in which we might negotiate purchase of a controlling interest. Yet our purchase of SAFECO was made at substantially under book value. We paid less than 100 cents on the dollar for the best company in the business, when far more than 100 cents on the dollar is being paid for mediocre companies in corporate transactions. And there is no way to start a new operation - with necessarily uncertain prospects - at less than 100 cents on the dollar.

Of course, with a minor interest we do not have the right to direct or even influence management policies of SAFECO. But why should we wish to do this? The record would indicate that they do a better job of managing their operations than we could do ourselves. While there may be less excitement and prestige in sitting back and letting others do the work, we think that is all one loses by accepting a passive participation in excellent management. Because, quite clearly, if one controlled a company run as well as SAFECO, the proper policy also would be to sit back and let management do its job.

Earnings attributable to the shares of SAFECO owned by Berkshire at yearend amounted to $6.1 million during 1978, but only the dividends received (about 18% of earnings) are reflected in our operating earnings. We believe the balance, although not reportable, to be just as real in terms of eventual benefit to us as the amount distributed. In fact, SAFECO's retained earnings (or those of other well-run companies if they have opportunities to employ additional capital advantageously) may well eventually have a value to shareholders greater than 100 cents on the dollar.

We are not at all unhappy when our wholly-owned businesses retain all of their earnings if they can utilize internally those funds at attractive rates. Why should we feel differently about

retention of earnings by companies in which we hold small equity interests, but where the record indicates even better prospects for profitable employment of capital? (This proposition cuts the other way, of course, in industries with low capital requirements, or if management has a record of plowing capital into projects of low profitability; then earnings should be paid out or used to repurchase shares - often by far the most attractive option for capital utilization.)

The aggregate level of such retained earnings attributable to our equity interests in fine companies is becoming quite substantial. It does not enter into our reported operating earnings, but we feel it well may have equal long-term significance to our shareholders. Our hope is that conditions continue to prevail in securities markets which allow our insurance companies to buy large amounts of underlying earning power for relatively modest outlays. At some point market conditions undoubtedly will again preclude such bargain buying but, in the meantime, we will try to make the most of opportunities.

Banking

Under Gene Abegg and Pete Jeffrey, the Illinois National Bank and Trust Company in Rockford continues to establish new records. Last year's earnings amounted to approximately 2.1% of average assets, about three times the level averaged by major banks. In our opinion, this extraordinary level of earnings is being achieved while maintaining significantly less asset risk than prevails at most of the larger banks.

We purchased the Illinois National Bank in March 1969. It was a first-class operation then, just as it had been ever since Gene Abegg opened the doors in 1931. Since 1968, consumer time deposits have quadrupled, net income has tripled and trust department income has more than doubled, while costs have been closely controlled.

Our experience has been that the manager of an already high-cost operation frequently is uncommonly resourceful in finding new ways to add to overhead, while the manager of a tightly-run operation usually continues to find additional methods to curtail costs, even when his costs are already well below those of his competitors. No one has demonstrated this latter ability better than Gene Abegg.

We are required to divest our bank by December 31, 1980. The most likely approach is to spin it off to Berkshire shareholders sometime in the second half of 1980.

Retailing

Upon merging with Diversified, we acquired 100% ownership of Associated Retail Stores, Inc., a chain of about 75 popular priced women's apparel stores. Associated was launched in Chicago on March 7, 1931 with one store, $3200, and two extraordinary partners, Ben Rosner and Leo Simon. After Mr. Simon's death, the business was offered to Diversified for cash in 1967. Ben was to continue running the business - and run it, he has.

Associated's business has not grown, and it consistently has faced adverse demographic and retailing trends. But Ben's combination of merchandising, real estate and cost-containment skills has produced an outstanding record of profitability, with returns on capital necessarily employed in the business often in the 20% after-tax area.

Ben is now 75 and, like Gene Abegg, 81, at Illinois National and Louie Vincenti, 73, at Wesco, continues daily to bring an almost passionately proprietary attitude to the business. This group of top managers must appear to an outsider to be an overreaction on our part to an OEO bulletin on age discrimination. While unorthodox, these relationships have been exceptionally rewarding, both financially and personally. It is a real pleasure to work with managers who enjoy coming to work each morning and, once there, instinctively and unerringly think like owners. We are associated with some of the very best.

Warren E. Buffett, Chairman
March 26, 1979

1979 Letter

BERKSHIRE HATHAWAY INC.

To the Shareholders of Berkshire Hathaway Inc.:

Again, we must lead off with a few words about accounting. Since our last annual report, the accounting profession has decided that equity securities owned by insurance companies must be carried on the balance sheet at market value. We previously have carried such equity securities at the lower of aggregate cost or aggregate market value. Because we have large unrealized gains in our insurance equity holdings, the result of this new policy is to increase substantially both the 1978 and 1979 yearend net worth, even after the appropriate liability is established for taxes on capital gains that would be payable should equities be sold at such market valuations.

As you know, Blue Chip Stamps, our 60% owned subsidiary, is fully consolidated in Berkshire Hathaway's financial statements. However, Blue Chip still is required to carry its equity investments at the lower of aggregate cost or aggregate market value, just as Berkshire Hathaway's insurance subsidiaries did prior to this year. Should the same equities be purchased at an identical price by an insurance subsidiary of Berkshire Hathaway and by Blue Chip Stamps, present accounting principles often would require that they end up carried on our consolidated balance sheet at two different values. (That should keep you on your toes.) Market values of Blue Chip Stamps' equity holdings are given in footnote 3 on page 18.

1979 Operating Results

We continue to feel that the ratio of operating earnings (before securities gains or losses) to shareholders' equity *with all securities valued at cost* is the most appropriate way to measure any single year's operating performance.

Measuring such results against shareholders' equity with securities valued at market could significantly distort the operating performance percentage because of wide year-to-year market value changes in the net worth figure that serves as the denominator. For example, a large decline in securities values could result in a very low "market value" net worth that, in turn, could cause mediocre operating earnings to look unrealistically good. Alternatively, the more successful that equity investments have been, the larger the net worth base becomes and the poorer the operating performance figure appears. Therefore, we will continue to report operating performance measured against beginning net worth, with securities valued at cost.

On this basis, we had a reasonably good operating performance in 1979 - but not quite as good as that of 1978 - with operating earnings amounting to 18.6% of beginning net worth. Earnings per share, of course, increased somewhat (about 20%) but we regard this as an improper figure upon which to focus. We had substantially more capital to work within 1979 than in 1978, and our performance in utilizing that capital fell short of the earlier year, even though per-share earnings rose. "Earnings per share" will rise constantly on a dormant savings account or on a U.S. Savings Bond bearing a fixed rate of return simply because "earnings" (the stated interest rate) are continuously plowed back and added to the capital base. Thus, even a "stopped clock" can look like a growth stock if the dividend payout ratio is low.

The primary test of managerial economic performance is the achievement of a high earnings rate on equity capital employed (without undue leverage, accounting gimmickry, etc.) and not the achievement of consistent gains in earnings per share. In our view, many businesses would be better understood by their shareholder owners, as well as the general public, if anagements and financial analysts modified the primary emphasis they place upon earnings per share, and upon yearly changes in that figure.

Long Term Results

In measuring long term economic performance - in contrast to yearly performance - we believe it is appropriate to recognize fully any realized capital gains or losses as well as

extraordinary items, and also to utilize financial statements presenting equity securities at market value. Such capital gains or losses, either realized or unrealized, are fully as important to shareholders over a period of years as earnings realized in a more routine manner through operations; it is just that their impact is often extremely capricious in the short run, a characteristic that makes them inappropriate as an indicator of single year managerial performance.

The book value per share of Berkshire Hathaway on September 30, 1964 (the fiscal yearend prior to the time that your present management assumed responsibility) was $19.46 per share. At yearend 1979, book value with equity holdings carried at market value was $335.85 per share. The gain in book value comes to 20.5% compounded annually. This figure, of course, is far higher than any average of our yearly operating earnings calculations, and reflects the importance of capital appreciation of insurance equity investments in determining the overall results for our shareholders. It probably also is fair to say that the quoted book value in 1964 somewhat overstated the intrinsic value of the enterprise, since the assets owned at that time on either a going concern basis or a liquidating value basis were not worth 100 cents on the dollar. (The liabilities were solid, however.)

We have achieved this result while utilizing a low amount of leverage (both financial leverage measured by debt to equity, and operating leverage measured by premium volume to capital funds of our insurance business), and also without significant issuance or repurchase of shares. Basically, we have worked with the capital with which we started. From our textile base we, or our Blue Chip and Wesco subsidiaries, have acquired total ownership of thirteen businesses through negotiated purchases from private owners for cash, and have started six others. (It's worth a mention that those who have sold to us have, almost without exception, treated us with exceptional honor and fairness, both at the time of sale and subsequently.)

But before we drown in a sea of self-congratulation, a further - and crucial - observation must be made. A few years ago, a business whose per-share net worth compounded at 20% annually would have guaranteed its owners a highly successful real investment return. Now such an outcome seems less certain. For the inflation rate, coupled with individual tax rates, will be the ultimate determinant as to whether our internal operating performance produces

successful investment results - i.e., a reasonable gain in purchasing power from funds committed - for you as shareholders.

Just as the original 3% savings bond, a 5% passbook savings account or an 8% U.S. Treasury Note have, in turn, been transformed by inflation into financial instruments that chew up, rather than enhance, purchasing power over their investment lives, a business earning 20% on capital can produce a negative real return for its owners under inflationary conditions not much more severe than presently prevail.

If we should continue to achieve a 20% compounded gain - not an easy or certain result by any means - and this gain is translated into a corresponding increase in the market value of Berkshire Hathaway stock as it has been over the last fifteen years, your after-tax purchasing power gain is likely to be very close to zero at a 14% inflation rate. Most of the remaining six percentage points will go for income tax any time you wish to convert your twenty percentage points of nominal annual gain into cash.

That combination - the inflation rate plus the percentage of capital that must be paid by the owner to transfer into his own pocket the annual earnings achieved by the business (i.e., ordinary income tax on dividends and capital gains tax on retained earnings) - can be thought of as an "investor's misery index". When this index exceeds the rate of return earned on equity by the business, the investor's purchasing power (real capital) shrinks even though he consumes nothing at all. *We have no corporate solution to this problem; high inflation rates will not help us earn higher rates of return on equity.*

One friendly but sharp-eyed commentator on Berkshire has pointed out that our book value at the end of 1964 would have bought about one-half ounce of gold and, fifteen years later, after we have plowed back all earnings along with much blood, sweat and tears, the book value produced will buy about the same half ounce. A similar comparison could be drawn with Middle Eastern oil. The rub has been that government has been exceptionally able in printing money and creating promises, but is unable to print gold or create oil.

We intend to continue to do as well as we can in managing the internal affairs of the business. But you should understand that external conditions affecting the stability of currency

may very well be the most important factor in determining whether there are any real rewards from your investment in Berkshire Hathaway.

Sources of Earnings

We again present a table showing the sources of Berkshire's earnings. As explained last year, Berkshire owns about 60% of Blue Chip Stamps which, in turn, owns 80% of Wesco Financial Corporation. The table shows both aggregate earnings of the various business entities, as well as Berkshire's share. All of the significant capital gains or losses attributable to any of the business entities are aggregated in the realized securities gain figure at the bottom of the table, and are not included in operating earnings.

000's of $'s	Earnings Before Income Taxes Net Earnings After Tax Total Total Berkshire Share Berkshire Share 1979 1978 1979 1978 1979 1978
Total – All entities	**$68,632 $66,180 $54,350 $54,350 $39,242 $39,242**
Earnings from Operations: Insurance Group: Underwriting	$3,742 $3,001 $3,741 $3,000 $2,214 $1,560
Net investment income	$24,224 $19,705 $24,216 $19,691 $20,106 $16,400
Berkshire Waumbec Textiles	$1,723 $2,916 $1,723 $2,916 $848 $1,342
Associated Retail Stores, Inc	$2,775 $2,757 $2,775 $2,757 $1,280 $1,176
See's Candies	$12,785 $12,482 $7,598 $7,013 $3,448 $3,049
Buffalo Evening News	(4,617) ($2,913) (2,744) ($1,637) ($1,333) ($738)
Blue Chip Stamps - Parent	$2,397 $2,133 $1,425 $1,198 $1,624 $1,382
Illinois National Bank and Trust Company	$5,747 $4,822 $5,614 $4,710 $5,027 $4,262
Wesco Financial Corporation – Parent	$2,413 $1,771 $1,098 $777 $937 $665
Mutual Savings and Loan Association	$10,447 $10,556 $4,751 $4,638 $3,261 $3,042
Precision Steel	$3,254 - $1,480 - $723 -
Interest on Debt	($8,248) ($5,566) ($5,860) ($4,546) ($2,900) ($2,349)
Other	$1,342 $720 $996 $438 $753 $261
Total Earnings from Operations	$57,984 $52,384 $46,813 $40,955 $35,988 $30,052
Realized Securities Gain	$10,648 $13,796 $9,614 $13,395 $6,829 $9,190
Total Earnings	**$68,632 $66,180 $56,427 $42,234 $42,817 $30,393**

Blue Chip and Wesco are public companies with reporting requirements of their own. On pages 37-43 of this report, we have reproduced the narrative reports of the principal executives of both companies, in which they describe 1979 operations. Some of the numbers they mention in their reports are not precisely identical to those in the above table because of accounting and tax complexities. (The Yanomamo Indians employ only three numbers: one, two, and more than two. Maybe their time will come.) However, the commentary in those reports should be helpful to you in understanding the underlying economic characteristics and future prospects of the important businesses that they manage.

A copy of the full annual report of either company will be mailed to any shareholder of Berkshire upon request to Mr. Robert H. Bird for Blue Chip Stamps, 5801 South Eastern Avenue, Los Angeles, California 90040, or to Mrs. Bette Deckard for Wesco Financial Corporation, 315 East Colorado Boulevard, Pasadena, California 91109.

Textiles and Retailing

The relative significance of these two areas has diminished somewhat over the years as our insurance business has grown dramatically in size and earnings. Ben Rosner, at Associated Retail Stores, continues to pull rabbits out of the hat - big rabbits from a small hat. Year after year, he produces very large earnings relative to capital employed - realized in cash and not in increased receivables and inventories as in many other retail businesses - in a segment of the market with little growth and unexciting demographics. Ben is now 76 and, like our other "up-and-comers", Gene Abegg, 82, at Illinois National and Louis Vincenti, 74, at Wesco, regularly achieves more each year.

Our textile business also continues to produce some cash, but at a low rate compared to capital employed. This is not a reflection on the managers, but rather on the industry in which they operate. In some businesses - a network TV station, for example - it is virtually impossible to avoid earning extraordinary returns on tangible capital employed in the business. And assets in such businesses sell at equally extraordinary prices, one thousand cents or more on the dollar, a valuation reflecting the splendid, almost unavoidable, economic results obtainable. Despite a fancy price tag, the "easy" business may be the better route to go.

We can speak from experience, having tried the other route. Your Chairman made the decision a few years ago to purchase Waumbec Mills in Manchester, New Hampshire, thereby expanding our textile commitment. By any statistical test, the purchase price was an extraordinary bargain; we bought well below the working capital of the business and, in effect, got very substantial amounts of machinery and real estate for less than nothing. But the purchase was a mistake. While we labored mightily, new problems arose as fast as old problems were tamed.

Both our operating and investment experience cause us to conclude that "turnarounds" seldom turn, and that the same energies and talent are much better employed in a good business purchased at a fair price than in a poor business purchased at a bargain price. Although a mistake, the Waumbec acquisition has not been a disaster. Certain portions of the operation are proving to be valuable additions to our decorator line (our strongest franchise) at New Bedford, and it's possible that we may be able to run profitably on a considerably reduced scale at Manchester. However, our original rationale did not prove out.

Insurance Underwriting

We predicted last year that the combined underwriting ratio (see definition on page 36) for the insurance industry would "move up at least a few points, perhaps enough to throw the industry as a whole into an underwriting loss position". That is just about the way it worked out. The industry underwriting ratio rose in 1979 over three points, from roughly 97.4% to 100.7%. We also said that we thought our underwriting performance relative to the industry would improve somewhat in 1979 and, again, things worked out as expected. Our own underwriting ratio actually decreased from 98.2% to 97.1%. Our forecast for 1980 is similar in one respect; again we feel that the industry's performance will worsen by at least another few points. However, this year we have no reason to think that our performance relative to the industry will further improve. (Don't worry - we won't hold back to try to validate that forecast.)

Really extraordinary results were turned in by the portion of National Indemnity Company's insurance operation run by Phil Liesche. Aided by Roland Miller in Underwriting and Bill Lyons

in Claims, this section of the business produced an underwriting profit of $8.4 million on about $82 million of earned premiums. Only a very few companies in the entire industry produced a result comparable to this.

You will notice that earned premiums in this segment were down somewhat from those of 1978. We hear a great many insurance managers talk about being willing to reduce volume in order to underwrite profitably, but we find that very few actually do so. Phil Liesche is an exception: if business makes sense, he writes it; if it doesn't, he rejects it. It is our policy not to lay off people because of the large fluctuations in work load produced by such voluntary volume changes. We would rather have some slack in the organization from time to time than keep everyone terribly busy writing business on which we are going to lose money. Jack Ringwalt, the founder of National Indemnity Company, instilled this underwriting discipline at the inception of the company, and Phil Liesche never has wavered in maintaining it. We believe such strong-mindedness is as rare as it is sound - and absolutely essential to the running of a first-class casualty insurance operation.

John Seward continues to make solid progress at Home and Automobile Insurance Company, in large part by significantly expanding the marketing scope of that company in general liability lines. These lines can be dynamite, but the record to date is excellent and, in John McGowan and Paul Springman, we have two cautious liability managers extending our capabilities.

Our reinsurance division, led by George Young, continues to give us reasonably satisfactory overall results after allowing for investment income, but underwriting performance remains unsatisfactory. We think the reinsurance business is a very tough business that is likely to get much tougher. In fact, the influx of capital into the business and the resulting softer price levels for continually increasing exposures may well produce disastrous results for many entrants (of which they may be blissfully unaware until they are in over their heads; much reinsurance business involves an exceptionally "long tail", a characteristic that allows catastrophic current loss experience to fester undetected for many years). It will be hard for us to be a whole lot smarter than the crowd and thus our reinsurance activity may decline substantially during the projected prolonged period of extraordinary competition.

The Homestate operation was disappointing in 1979. Excellent results again were turned in by George Billings at Texas United Insurance Company, winner of the annual award for the low loss ratio among Homestate companies, and Floyd Taylor at Kansas Fire and Casualty Company. But several of the other operations, particularly Cornhusker Casualty Company, our first and largest Homestate operation and historically a winner, had poor underwriting results which were accentuated by data processing, administrative and personnel problems. We have made some major mistakes in reorganizing our data processing activities, and those mistakes will not be cured immediately or without cost. However, John Ringwalt has thrown himself into the task of getting things straightened out and we have confidence that he, aided by several strong people who recently have been brought aboard, will succeed.

Our performance in Worker's Compensation was far, far better than we had any right to expect at the beginning of 1979. We had a very favorable climate in California for the achievement of good results but, beyond this, Milt Thornton at Cypress Insurance Company and Frank DeNardo at National Indemnity's California Worker's Compensation operation both performed in a simply outstanding manner. We have admitted - and with good reason - some mistakes on the acquisition front, but the Cypress purchase has turned out to be an absolute gem. Milt Thornton, like Phil Liesche, follows the policy of sticking with business that he understands and wants, without giving consideration to the impact on volume. As a result, he has an outstanding book of business and an exceptionally well-functioning group of employees. Frank DeNardo has straightened out the mess he inherited in Los Angeles in a manner far beyond our expectations, producing savings measured in seven figures. He now can begin to build on a sound base.

At yearend we entered the specialized area of surety reinsurance under the management of Chet Noble. At least initially, this operation will be relatively small since our policy will be to seek client companies who appreciate the need for a long term "partnership" relationship with their reinsurers. We are pleased by the quality of the insurers we have attracted, and hope to add several more of the best primary writers as our financial strength and stability become better known in the surety field.

The conventional wisdom is that insurance underwriting overall will be poor in 1980, but that rates will start to firm in a year or so, leading to a turn in the cycle some time in 1981. We disagree with this view. Present interest rates encourage the obtaining of business at underwriting loss levels formerly regarded as totally unacceptable. Managers decry the folly of underwriting at a loss to obtain investment income, but we believe that many will. Thus we expect that competition will create a new threshold of tolerance for underwriting losses, and that combined ratios will average higher in the future than in the past.

To some extent, the day of reckoning has been postponed because of marked reduction in the frequency of auto accidents - probably brought on in major part by changes in driving habits induced by higher gas prices. In our opinion, if the habits hadn't changed, auto insurance rates would have been very little higher and underwriting results would have been much worse. This dosage of serendipity won't last indefinitely.

Our forecast is for an average combined ratio for the industry in the 105 area over the next five years. While we have a high degree of confidence that certain of our operations will do considerably better than average, it will be a challenge to us to operate below the industry figure. You can get a lot of surprises in insurance.

Nevertheless, we believe that insurance can be a very good business. It tends to magnify, to an unusual degree, human managerial talent - or the lack of it. We have a number of managers whose talent is both proven and growing. (And, in addition, we have a very large indirect interest in two truly outstanding management groups through our investments in SAFECO and GEICO.) Thus we expect to do well in insurance over a period of years. However, the business has the potential for really terrible results in a single specific year. If accident frequency should turn around quickly in the auto field, we, along with others, are likely to experience such a year.

Insurance Investments

In recent years we have written at length in this section about our insurance equity investments. In 1979 they continued to perform well, largely because the underlying companies in which we have invested, in practically all cases, turned in outstanding performances. Retained earnings applicable to our insurance equity investments, not reported

in our financial statements, continue to mount annually and, in aggregate, now come to a very substantial number. We have faith that the managements of these companies will utilize those retained earnings effectively and will translate a dollar retained by them into a dollar or more of subsequent market value for us. In part, our unrealized gains reflect this process.

Below we show the equity investments which had a yearend market value of over $5 million:

No. of Shares	Company	Cost (000's omitted)	Market (000's omitted)
289,700	Affiliated Publications, Inc.	$2,821	$8,800
112,545	Amerada Hess	$2,861	$5,487
246,450	American Broadcasting Companies, Inc	$6,082	$9,673
5,730,114	GEICO Corp. (Common Stock)	$28,288	$68,045
328,700	General Foods, Inc.	$11,437	$11,053
1,007,500	Handy & Harman	$21,825	$38,537
711,180	Interpublic Group of Companies	$4,531	$23,736
1,211,834	Kaiser Aluminum& Chemical Corporation	$20,629	$23,328
282,500	Media General, Inc.	$4,545	$7,345
391,400	Ogilvy & Mather International	$3,709	$7,828
953,750	SAFECO Corporation	$23,867	$35,527
1,868,000	The Washington Post Company Class B	$10,628	$39,241
771,900	F. W. Woolworth Company	$15,515	$19,394
	Total	**$156,738**	**$297,994**
	All Other Holdings	**$28,675**	**$38,686**
	Total Equities	**$185,413**	**$336,680**

We currently believe that equity markets in 1980 are likely to evolve in a manner that will result in an underperformance by our portfolio for the first time in recent years. We very much like the companies in which we have major investments, and plan no changes to try to attune ourselves to the markets of a specific year.

Since we have covered our philosophy regarding equities extensively in recent annual reports, a more extended discussion of bond investments may be appropriate for this one, particularly in light of what has happened since yearend. An extraordinary amount of money has been lost by the insurance industry in the bond area - notwithstanding the accounting convention that allows insurance companies to carry their bond investments at amortized cost, regardless of impaired market value. Actually, that very accounting convention may have contributed in a major way to the losses; had management been forced to recognize market values, its attention might have been focused much earlier on the dangers of a very long-term bond contract.

Ironically, many insurance companies have decided that a one-year auto policy is inappropriate during a time of inflation, and six-month policies have been brought in as replacements. "How," say many of the insurance managers, "can we be expected to look forward twelve months and estimate such imponderables as hospital costs, auto parts prices, etc.?" But, having decided that one year is too long a period for which to set a fixed price for insurance in an inflationary world, they then have turned around, taken the proceeds from the sale of that six-month policy, and sold the money at a fixed price for thirty or forty years.

The very long-term bond contract has been the last major fixed price contract of extended duration still regularly initiated in an inflation-ridden world. The buyer of money to be used between 1980 and 2020 has been able to obtain a firm price now for each year of its use while the buyer of auto insurance, medical services, newsprint, office space - or just about any other product or service - would be greeted with laughter if he were to request a firm price now to apply through 1985. For in virtually all other areas of commerce, parties to long-term contracts now either index prices in some manner, or insist on the right to review the situation every year or so.

A cultural lag has prevailed in the bond area. The buyers (borrowers) and middlemen (underwriters) of money hardly could be expected to raise the question of whether it all made sense, and the sellers (lenders) slept through an economic and contractual revolution.

For the last few years our insurance companies have not been a net purchaser of any straight long-term bonds (those without conversion rights or other attributes offering profit

possibilities). There have been some purchases in the straight bond area, of course, but they have been offset by sales or maturities. Even prior to this period, we never would buy thirty or forty-year bonds; instead we tried to concentrate in the straight bond area on shorter issues with sinking funds and on issues that seemed relatively undervalued because of bond market inefficiencies.

However, the mild degree of caution that we exercised was an improper response to the world unfolding about us. You do not adequately protect yourself by bring half awake while others are sleeping. It was a mistake to buy fifteen-year bonds, and yet we did; we made an even more serious mistake in not selling them (at losses, if necessary) when our present views began to crystallize. (Naturally, those views are much clearer and definite in retrospect; it would be fair for you to ask why we weren't writing about this subject last year.)

Of course, we must hold significant amounts of bonds or other fixed dollar obligations in conjunction with our insurance operations. In the last several years our net fixed dollar commitments have been limited to the purchase of convertible bonds. We believe that the conversion options obtained, in effect, give that portion of the bond portfolio a far shorter average life than implied by the maturity terms of the issues (i.e., at an appropriate time of our choosing, we can terminate the bond contract by conversion into stock).

This bond policy has given us significantly lower unrealized losses than those experienced by the great majority of property and casualty insurance companies. We also have been helped by our strong preference for equities in recent years that has kept our overall bond segment relatively low. Nevertheless, we are taking our lumps in bonds and feel that, in a sense, our mistakes should be viewed less charitably than the mistakes of those who went about their business unmindful of the developing problems.

Harking back to our textile experience, we should have realized the futility of trying to be very clever (via sinking funds and other special type issues) in an area where the tide was running heavily against us.

We have severe doubts as to whether a very long-term fixed-interest bond, denominated in dollars, remains an appropriate business contract in a world where the value of dollars seems

almost certain to shrink by the day. Those dollars, as well as paper creations of other governments, simply may have too many structural weaknesses to appropriately serve as a unit of long term commercial reference. If so, really long bonds may turn out to be obsolete instruments and insurers who have bought those maturities of 2010 or 2020 could have major and continuing problems on their hands. We, likewise, will be unhappy with our fifteen-year bonds and will annually pay a price in terms of earning power that reflects that mistake.

Some of our convertible bonds appear exceptionally attractive to us, and have the same sort of earnings retention factor (applicable to the stock into which they may be converted) that prevails in our conventional equity portfolio. We expect to make money in these bonds (we already have, in a few cases) and have hopes that our profits in this area may offset losses in straight bonds.

And, of course, there is the possibility that our present analysis is much too negative. The chances for very low rates of inflation are not nil. Inflation is man-made; perhaps it can be man-mastered. The threat which alarms us may also alarm legislators and other powerful groups, prompting some appropriate response.

Furthermore, present interest rates incorporate much higher inflation projections than those of a year or two ago. Such rates may prove adequate or more than adequate to protect bond buyers. We even may miss large profits from a major rebound in bond prices. However, our unwillingness to fix a price now for a pound of See's candy or a yard of Berkshire cloth to be delivered in 2010 or 2020 makes us equally unwilling to buy bonds which set a price on money now for use in those years. Overall, we opt for Polonius (slightly restated): "Neither a short-term borrower nor a long-term lender be."

Banking

This will be the last year that we can report on the Illinois National Bank and Trust Company as a subsidiary of Berkshire Hathaway. Therefore, it is particularly pleasant to report that, under Gene Abegg's and Pete Jeffrey's management, the bank broke all previous records and earned approximately 2.3% on average assets last year, a level again over three times that achieved by the average major bank, and more than double that of banks regarded as outstanding. The record is simply extraordinary, and the shareholders of Berkshire Hathaway

owe a standing ovation to Gene Abegg for the performance this year and every year since our purchase in 1969.

As you know, the Bank Holding Company Act of 1969 requires that we divest the bank by December 31, 1980. For some years we have expected to comply by effecting a spin-off during 1980. However, the Federal Reserve Board has taken the firm position that if the bank is spun off, no officer or director of Berkshire Hathaway can be an officer or director of the spun-off bank or bank holding company, even in a case such as ours in which one individual would own over 40% of both companies.

Under these conditions, we are investigating the possible sale of between 80% and 100% of the stock of the bank. We will be most choosy about any purchaser, and our selection will not be based solely on price. The bank and its management have treated us exceptionally well and, if we have to sell, we want to be sure that they are treated equally as well. A spin-off still is a possibility if a fair price along with a proper purchaser cannot be obtained by early fall.

However, you should be aware that we do not expect to be able to fully, or even in very large part, replace the earning power represented by the bank from the proceeds of the sale of the bank. You simply can't buy high quality businesses at the sort of price/earnings multiple likely to prevail on our bank sale.

Financial Reporting

During 1979, NASDAQ trading was initiated in the stock of Berkshire Hathaway This means that the stock now is quoted on the Over-the-Counter page of the Wall Street journal under "Additional OTC Quotes". Prior to such listing, the Wall Street journal and the Dow-Jones news ticker would not report our earnings, even though such earnings were one hundred or more times the level of some companies whose reports they regularly picked up.

Now, however, the Dow-Jones news ticker reports our quarterly earnings promptly after we release them and, in addition, both the ticker and the Wall Street journal report our annual earnings. This solves a dissemination problem that had bothered us.

In some ways, our shareholder group is a rather unusual one, and this affects our manner of reporting to you. For example, at the end of each year about 98% of the shares outstanding are held by people who also were shareholders at the beginning of the year. Therefore, in our

annual report we build upon what we have told you in previous years instead of restating a lot of material. You get more useful information this way, and we don't get bored.

Furthermore, perhaps 90% of our shares are owned by investors for whom Berkshire is their largest security holding, very often far and away the largest. Many of these owners are willing to spend a significant amount of time with the annual report, and we attempt to provide them with the same information we would find useful if the roles were reversed.

In contrast, we include no narrative with our quarterly reports. Our owners and managers both have very long time-horizons in regard to this business, and it is difficult to say anything new or meaningful each quarter about events of long-term significance.

But when you do receive a communication from us, it will come from the fellow you are paying to run the business. Your Chairman has a firm belief that owners are entitled to hear directly from the CEO as to what is going on and how he evaluates the business, currently and prospectively. You would demand that in a private company; you should expect no less in a public company. A once-a-year report of stewardship should not be turned over to a staff specialist or public relations consultant who is unlikely to be in a position to talk frankly on a manager-to-owner basis.

We feel that you, as owners, are entitled to the same sort of reporting by your manager as we feel is owed to us at Berkshire Hathaway by managers of our business units. Obviously, the degree of detail must be different, particularly where information would be useful to a business competitor or the like. But the general scope, balance, and level of candor should be similar. We don't expect a public relations document when our operating managers tell us what is going on, and we don't feel you should receive such a document.

In large part, companies obtain the shareholder constituency that they seek and deserve. If they focus their thinking and communications on short-term results or short-term stock market consequences they will, in large part, attract shareholders who focus on the same factors. And if they are cynical in their treatment of investors, eventually that cynicism is highly likely to be returned by the investment community.

Phil Fisher, a respected investor and author, once likened the policies of the corporation in attracting shareholders to those of a restaurant attracting potential customers. A restaurant

could seek a given clientele - patrons of fast foods, elegant dining, Oriental food, etc. - and eventually obtain an appropriate group of devotees. If the job were expertly done, that clientele, pleased with the service, menu, and price level offered, would return consistently. But the restaurant could not change its character constantly and end up with a happy and stable clientele. If the business vacillated between French cuisine and take-out chicken, the result would be a revolving door of confused and dissatisfied customers.

So it is with corporations and the shareholder constituency they seek. You can't be all things to all men, simultaneously seeking different owners whose primary interests run from high current yield to long-term capital growth to stock market pyrotechnics, etc.

The reasoning of managements that seek large trading activity in their shares puzzles us. In effect, such managements are saying that they want a good many of the existing clientele continually to desert them in favor of new ones - because you can't add lots of new owners (with new expectations) without losing lots of former owners.

We much prefer owners who like our service and menu and who return year after year. It would be hard to find a better group to sit in the Berkshire Hathaway shareholder "seats" than those already occupying them. So we hope to continue to have a very low turnover among our owners, reflecting a constituency that understands our operation, approves of our policies, and shares our expectations. And we hope to deliver on those expectations.

Prospects

Last year we said that we expected operating earnings in dollars to improve but return on equity to decrease. This turned out to be correct. Our forecast for 1980 is the same. If we are wrong, it will be on the downside. In other words, we are virtually certain that our operating earnings expressed as a percentage of the new equity base of approximately $236 million, valuing securities at cost, will decline from the 18.6% attained in 1979. There is also a fair chance that operating earnings in aggregate dollars will fall short of 1979; the outcome depends partly upon the date of disposition of the bank, partly upon the degree of slippage in insurance underwriting profitability, and partly upon the severity of earnings problems in the savings and loan industry.

We continue to feel very good about our insurance equity investments. Over a period of years, we expect to develop very large and growing amounts of underlying earning power attributable to our fractional ownership of these companies. In most cases they are splendid businesses, splendidly managed, purchased at highly attractive prices.

Your company is run on the principle of centralization of financial decisions at the top (the very top, it might be added), and rather extreme delegation of operating authority to a number of key managers at the individual company or business unit level. We could just field a basketball team with our corporate headquarters group (which utilizes only about 1500 square feet of space).

This approach produces an occasional major mistake that might have been eliminated or minimized through closer operating controls. But it also eliminates large layers of costs and dramatically speeds decision-making. Because everyone has a great deal to do, a very great deal gets done. Most important of all, it enables us to attract and retain some extraordinarily talented individuals - people who simply can't be hired in the normal course of events - who find working for Berkshire to be almost identical to running their own show.

We have placed much trust in them - and their achievements have far exceeded that trust.

Warren E. Buffett, Chairman

March 3, 1980

1980 Letter

BERKSHIRE HATHAWAY INC.

To the Shareholders of Berkshire Hathaway Inc.:

Operating earnings improved to $41.9 million in 1980 from $36.0 million in 1979, but return on beginning equity capital (with securities valued at cost) fell to 17.8% from 18.6%. We believe the latter yardstick to be the most appropriate measure of single-year managerial economic performance. Informed use of that yardstick, however, requires an understanding of many factors, including accounting policies, historical carrying values of assets, financial leverage, and industry conditions.

In your evaluation of our economic performance, we suggest that two factors should receive your special attention - one of a positive nature peculiar, to a large extent, to our own operation, and one of a negative nature applicable to corporate performance generally. Let's look at the bright side first.

Non-Controlled Ownership Earnings

When one company owns part of another company, appropriate accounting procedures pertaining to that ownership interest must be selected from one of three major categories. The percentage of voting stock that is owned, in large part, determines which category of accounting principles should be utilized.

Generally accepted accounting principles require (subject to exceptions, naturally, as with our former bank subsidiary) full consolidation of sales, expenses, taxes, and earnings of business holdings more than 50% owned. Blue Chip Stamps, 60% owned by Berkshire Hathaway Inc., falls into this category. Therefore, all Blue Chip income and expense items are included in full in Berkshire's Consolidated Statement of Earnings, with the 40% ownership interest of others in Blue Chip's net earnings reflected in the Statement as a deduction for "minority interest".

Full inclusion of underlying earnings from another class of holdings, companies owned 20% to 50% (usually called "investees"), also normally occurs. Earnings from such companies - for example, Wesco Financial, controlled by Berkshire but only 48% owned - are included via a one-line entry in the owner's Statement of Earnings. Unlike the over-50% category, all items of revenue and expense are omitted; just the proportional share of net income is included. Thus, if Corporation A owns one-third of Corporation B, one-third of B's earnings, whether or not distributed by B, will end up in A's earnings. There are some modifications, both in this and the over-50% category, for intercorporate taxes and purchase price adjustments, the explanation of which we will save for a later day. (We know you can hardly wait.)

Finally come holdings representing less than 20% ownership of another corporation's voting securities. In these cases, accounting rules dictate that the owning companies include in their earnings only dividends received from such holdings. Undistributed earnings are ignored. Thus, should we own 10% of Corporation X with earnings of $10 million in 1980, we would report in our earnings (ignoring relatively minor taxes on intercorporate dividends) either (a) $1 million if X declared the full $10 million in dividends; (b) $500,000 if X paid out 50%, or $5 million, in dividends; or (c) zero if X reinvested all earnings.

We impose this short - and over-simplified - course in accounting upon you because Berkshire's concentration of resources in the insurance field produces a corresponding concentration of its assets in companies in that third (less than 20% owned) category. Many of these companies pay out relatively small proportions of their earnings in dividends. This means that only a small proportion of their current earning power is recorded in our own current operating earnings. But, while our reported operating earnings reflect only the dividends received from such companies, our economic well-being is determined by their earnings, not their dividends.

Our holdings in this third category of companies have increased dramatically in recent years as our insurance business has prospered and as securities markets have presented particularly attractive opportunities in the common stock area. The large increase in such holdings, plus the growth of earnings experienced by those partially-owned companies, has produced an

unusual result; the part of "our" earnings that these companies retained last year (the part not paid to us in dividends) exceeded the total reported annual operating earnings of Berkshire Hathaway. Thus, conventional accounting only allows less than half of our earnings "iceberg" to appear above the surface, in plain view. Within the corporate world such a result is quite rare; in our case it is likely to be recurring.

Our own analysis of earnings reality differs somewhat from generally accepted accounting principles, particularly when those principles must be applied in a world of high and uncertain rates of inflation. (But it's much easier to criticize than to improve such accounting rules. The inherent problems are monumental.) We have owned 100% of businesses whose reported earnings were not worth close to 100 cents on the dollar to us even though, in an accounting sense, we totally controlled their disposition. (The "control" was theoretical. Unless we reinvested all earnings, massive deterioration in the value of assets already in place would occur. But those reinvested earnings had no prospect of earning anything close to a market return on capital.) We have also owned small fractions of businesses with extraordinary reinvestment possibilities whose retained earnings had an economic value to us far in excess of 100 cents on the dollar.

The value to Berkshire Hathaway of retained earnings is not determined by whether we own 100%, 50%, 20% or 1% of the businesses in which they reside. Rather, the value of those retained earnings is determined by the use to which they are put and the subsequent level of earnings produced by that usage. This is true whether we determine the usage, or whether managers we did not hire - but did elect to join - determine that usage. (It's the act that counts, not the actors.) And the value is in no way affected by the inclusion or non-inclusion of those retained earnings in our own reported operating earnings. If a tree grows in a forest partially owned by us, but we don't record the growth in our financial statements, we still own part of the tree.

Our view, we warn you, is non-conventional. But we would rather have earnings for which we did not get accounting credit put to good use in a 10%-owned company by a management we did not personally hire, than have earnings for which we did get credit put into projects of more dubious potential by another management - even if we are that management.

(We can't resist pausing here for a short commercial. One usage of retained earnings we often greet with special enthusiasm when practiced by companies in which we have an investment interest is repurchase of their own shares. The reasoning is simple: if a fine business is selling in the market place for far less than intrinsic value, what more certain or more profitable utilization of capital can there be than significant enlargement of the interests of all owners at that bargain price? The competitive nature of corporate acquisition activity almost guarantees the payment of a full - frequently more than full price when a company buys the entire ownership of another enterprise. But the auction nature of security markets often allows finely-run companies the opportunity to purchase portions of their own businesses at a price under 50% of that needed to acquire the same earning power through the negotiated acquisition of another enterprise.)

Long-Term Corporate Results

As we have noted, we evaluate single-year corporate performance by comparing operating earnings to shareholders' equity with securities valued at cost. Our long-term yardstick of performance, however, includes all capital gains or losses, realized or unrealized. We continue to achieve a long-term return on equity that considerably exceeds the average of our yearly returns. The major factor causing this pleasant result is a simple one: the retained earnings of those non-controlled holdings we discussed earlier have been translated into gains in market value.

Of course, this translation of retained earnings into market price appreciation is highly uneven (it goes in reverse some years), unpredictable as to timing, and unlikely to materialize on a precise dollar-for-dollar basis. And a silly purchase price for a block of stock in a corporation can negate the effects of a decade of earnings retention by that corporation. But when purchase prices are sensible, some long-term market recognition of the accumulation of retained earnings almost certainly will occur. Periodically you even will receive some frosting on the cake, with market appreciation far exceeding post-purchase retained earnings.

In the sixteen years since present management assumed responsibility for Berkshire, book value per share with insurance-held equities valued at market has increased from $19.46 to $400.80, or 20.5% compounded annually. (You've done better: the value of the mineral content

in the human body compounded at 22% annually during the past decade.) It is encouraging, moreover, to realize that our record was achieved despite many mistakes. The list is too painful and lengthy to detail here. But it clearly shows that a reasonably competitive corporate batting average can be achieved in spite of a lot of managerial strikeouts.

Our insurance companies will continue to make large investments in well-run, favorably-situated, non-controlled companies that very often will pay out in dividends only small proportions of their earnings. Following this policy, we would expect our long-term returns to continue to exceed the returns derived annually from reported operating earnings. Our confidence in this belief can easily be quantified: if we were to sell the equities that we hold and replace them with long-term tax-free bonds, our reported operating earnings would rise immediately by over $30 million annually. Such a shift tempts us not at all.

So much for the good news.

Results for Owners

Unfortunately, earnings reported in corporate financial statements are no longer the dominant variable that determines whether there are any real earnings for you, the owner. For only gains in purchasing power represent real earnings on investment. If you (a) forego ten hamburgers to purchase an investment; (b) receive dividends which, after tax, buy two hamburgers; and (c) receive, upon sale of your holdings, after-tax proceeds that will buy eight hamburgers, then (d) you have had no real income from your investment, no matter how much it appreciated in dollars. You may feel richer, but you won't eat richer.

High rates of inflation create a tax on capital that makes much corporate investment unwise - at least if measured by the criterion of a positive real investment return to owners. This "hurdle rate" the return on equity that must be achieved by a corporation in order to produce any real return for its individual owners - has increased dramatically in recent years. The average tax-paying investor is now running up a down escalator whose pace has accelerated to the point where his upward progress is nil.

For example, in a world of 12% inflation a business earning 20% on equity (which very few manage consistently to do) and distributing it all to individuals in the 50% bracket is chewing

up their real capital, not enhancing it. (Half of the 20% will go for income tax; the remaining 10% leaves the owners of the business with only 98% of the purchasing power they possessed at the start of the year - even though they have not spent a penny of their "earnings"). The investors in this bracket would actually be better off with a combination of stable prices and corporate earnings on equity capital of only a few per cent.

Explicit income taxes alone, unaccompanied by any implicit inflation tax, never can turn a positive corporate return into a negative owner return. (Even if there were 90% personal income tax rates on both dividends and capital gains, some real income would be left for the owner at a zero inflation rate.) But the inflation tax is not limited by reported income. Inflation rates not far from those recently experienced can turn the level of positive returns achieved by a majority of corporations into negative returns for all owners, including those not required to pay explicit taxes. (For example, if inflation reached 16%, owners of the 60% plus of corporate America earning less than this rate of return would be realizing a negative real return - even if income taxes on dividends and capital gains were eliminated.)

Of course, the two forms of taxation co-exist and interact since explicit taxes are levied on nominal, not real, income. Thus you pay income taxes on what would be deficits if returns to stockholders were measured in constant dollars.

At present inflation rates, we believe individual owners in medium or high tax brackets (as distinguished from tax-free entities such as pension funds, eleemosynary institutions, etc.) should expect no real long-term return from the average American corporation, even though these individuals reinvest the entire after-tax proceeds from all dividends they receive. The average return on equity of corporations is fully offset by the combination of the implicit tax on capital levied by inflation and the explicit taxes levied both on dividends and gains in value produced by retained earnings.

As we said last year, Berkshire has no corporate solution to the problem. (We'll say it again next year, too.) Inflation does not improve our return on equity.

Indexing is the insulation that all seek against inflation. But the great bulk (although there are important exceptions) of corporate capital is not even partially indexed. Of course,

earnings and dividends per share usually will rise if significant earnings are "saved" by a corporation; i.e., reinvested instead of paid as dividends. But that would be true without inflation. A thrifty wage earner, likewise, could achieve regular annual increases in his total income without ever getting a pay increase - *if* he were willing to take only half of his paycheck in cash (his wage "dividend") and consistently add the other half (his "retained earnings") to a savings account. Neither this high-saving wage earner nor the stockholder in a high-saving corporation whose annual dividend rate increases while its rate of return on equity remains flat is truly indexed.

For capital to be truly indexed, return on equity must rise, i.e., business earnings consistently must increase in proportion to the increase in the price level *without any need for the business to add to capital - including working capital - employed.* (Increased earnings produced by increased investment don't count.) Only a few businesses come close to exhibiting this ability. And Berkshire Hathaway isn't one of them.

We, of course, have a corporate policy of reinvesting earnings for growth, diversity and strength, which has the incidental effect of minimizing the current imposition of explicit taxes on our owners. However, on a day-by-day basis, you will be subjected to the implicit inflation tax, and when you wish to transfer your investment in Berkshire into another form of investment, or into consumption, you also will face explicit taxes.

Sources of Earnings

The table below shows the sources of Berkshire's reported earnings. Berkshire owns about 60% of Blue Chip Stamps, which in turn owns 80% of Wesco Financial Corporation. The table shows aggregate earnings of the various business entities, as well as Berkshire's share of those earnings. All of the significant capital gains and losses attributable to any of the business entities are aggregated in the realized securities gains figure at the bottom of the table, and are not included in operating earnings. Our calculation of operating earnings also excludes the gain from sale of Mutual's branch offices. In this respect it differs from the presentation in our audited financial statements that includes this item in the calculation of "Earnings Before Realized Investment Gain".

000's of $'s	Earnings Before Income Taxes Net Earnings After Tax Total Total Berkshire Share Berkshire Share 1980 1979 1980 1979 1980 1979
Total – All entities	**$85,945 $68,632 $70,146 $54,350 $53,122 $39,242**
Earnings from Operations: Insurance Group: Underwriting	$6,738 $3,742 $6,737 $3,741 $3,637 $2,214
Net investment income	$30,939 $24,224 $30,927 $24,216 $25,607 $20,106
Berkshire Waumbec Textiles	($508) $1,723 ($508) $1,723 $202 $848
Associated Retail Stores, Inc	$2,440 $2,775 $2,440 $2,775 $1,169 $1,280
See's Candies	$15,031 $12,785 $8,958 $7,598 $4,212 $3,448
Buffalo Evening News	($2,805) ($4,617) ($1,672) ($2,744) ($816) ($1,333)
Blue Chip Stamps - Parent	$7,699 $2,397 $4,588 $1,425 $3,060 $1,624
Illinois National Bank and Trust Company	$5,324 $5,747 $5,200 $5,614 $4,731 $5,027
Wesco Financial Corporation – Parent	$2,916 $2,413 $1,392 $1,098 $1,044 $937
Mutual Savings and Loan Association	$5,814 $10,447 $2,775 $4,751 $1,974 $3,261
Precision Steel	$2,833 $3,254 $1,352 $1,480 $656 $723
Interest on Debt	($12,230) ($8,248) ($9,390) ($5,860) ($4,809) ($2,900)
Other	$2,170 $1,342 $1,590 $996 $1,255 $753
Total Earnings from Operations	$66,361 $57,984 $54,389 $46,813 $41,922 $35,988
Mutual Savings and Loan sale of branches	$5,873 - $2,803 - $1,293 -
Realized Securities Gain	$13,711 $10,648 $12,954 $9,614 $9,907 $6,829
Total Earnings	**$85,945 $68,632 $70,146 $56,427 $53,122 $42,817**

Blue Chip Stamps and Wesco are public companies with reporting requirements of their own. On pages 40 to 53 of this report we have reproduced the narrative reports of the principal executives of both companies, in which they describe 1980 operations. We recommend a careful reading, and suggest that you particularly note the superb job done by Louie Vincenti and Charlie Munger in repositioning Mutual Savings and Loan. A copy of the full annual report of either company will be mailed to any Berkshire shareholder upon request to Mr. Robert H. Bird for Blue Chip Stamps, 5801 South Eastern Avenue, Los Angeles, California 90040, or to Mrs. Bette Deckard for Wesco Financial Corporation, 315 East Colorado Boulevard, Pasadena, California 91109.

As indicated earlier, undistributed earnings in companies we do not control are now fully as important as the reported operating earnings detailed in the preceding table. The distributed portion, of course, finds its way into the table primarily through the net investment income section of Insurance Group earnings.

We show below Berkshire's proportional holdings in those non-controlled businesses for which only distributed earnings (dividends) are included in our own earnings.

No. of Shares	Company	Cost (000's omitted)	Market (000's omitted)
434,550 (a)	Affiliated Publications, Inc.	$2,821	$12,222
464,317 (a)	Aluminum Company of America	$25,577	$27,685
475,217 (b)	Cleveland-Cliffs Iron Company	$12,942	$15,894
1,983,812 (b)	General Foods, Inc.	$62,507	$59,889
7,200,000 (a)	GEICO Corporation	$47,138	$105,300
2,015,000 (a)	Handy & Harman	$21,825	$58,435
711,180 (a)	Interpublic Group of Companies	$4,531	$22,135
1,211,834 (a)	Kaiser Aluminum& Chemical Corporation	$20,629	$27,569
282,500 (a)	Media General, Inc.	$4,545	$8,334
247,039 (b)	National Detroit Corporation	$5,930	$6,299
881,500 (a)	National Student Marketing	$5,128	$5,895
391,400 (a)	Ogilvy & Mather Int'l. Inc.	$3,709	$9,981
370,088 (b)	Pinkerton's, Inc.	$12,144	$16,489
245,700 (b)	R. J. Reynolds Industries	$8,702	$11,228
1,250,525 (b)	SAFECO Corporation	$32,062	$45,177
151,104 (b)	The Times Mirror Company	$4,447	$6,271
1,868,600 (a)	The Washington Post Company Class B	$10,628	$42,277
667,124 (b)	E. W. Woolworth Company	$13,583	$16,511
	Total	**$298,848**	**$497,591**
	All Other Common Stockholdings	**$26,313**	**$32,096**
	Total Common Stocks	**$325,161**	**$529,687**

(a) All owned by Berkshire or its insurance subsidiaries.

(b) Blue Chip and/or Wesco own shares of these companies. All numbers represent Berkshire's net interest in the larger gross holdings of the group.

From this table, you can see that our sources of underlying earning power are distributed far differently among industries than would superficially seem the case. For example, our

insurance subsidiaries own approximately 3% of Kaiser Aluminum, and 1 1/4% of Alcoa. Our share of the 1980 earnings of those companies amounts to about $13 million. (If translated dollar for dollar into a combination of eventual market value gain and dividends, this figure would have to be reduced by a significant, but not precisely determinable, amount of tax; perhaps 25% would be a fair assumption.) Thus, we have a much larger economic interest in the aluminum business than in practically any of the operating businesses we control and on which we report in more detail. If we maintain our holdings, our long-term performance will be more affected by the future economics of the aluminum industry than it will by direct operating decisions we make concerning most companies over which we exercise managerial control.

GEICO Corp.

Our largest non-controlled holding is 7.2 million shares of GEICO Corp., equal to about a 33% equity interest. Normally, an interest of this magnitude (over 20%) would qualify as an "investee" holding and would require us to reflect a proportionate share of GEICO's earnings in our own. However, we purchased our GEICO stock pursuant to special orders of the District of Columbia and New York Insurance Departments, which required that the right to vote the stock be placed with an independent party. Absent the vote, our 33% interest does not qualify for investee treatment. (Pinkerton's is a similar situation.)

Of course, whether or not the undistributed earnings of GEICO are picked up annually in our operating earnings figure has nothing to do with their economic value to us, or to you as owners of Berkshire. The value of these retained earnings will be determined by the skill with which they are put to use by GEICO management.

On this score, we simply couldn't feel better. GEICO represents the best of all investment worlds - the coupling of a very important and very hard to duplicate business advantage with an extraordinary management whose skills in operations are matched by skills in capital allocation.

As you can see, our holdings cost us $47 million, with about half of this amount invested in 1976 and most of the remainder invested in 1980. At the present dividend rate, our reported

earnings from GEICO amount to a little over $3 million annually. But we estimate our share of its earning power is on the order of $20 million annually. Thus, undistributed earnings applicable to this holding alone may amount to 40% of total reported operating earnings of Berkshire.

We should emphasize that we feel as comfortable with GEICO management retaining an estimated $17 million of earnings applicable to our ownership as we would if that sum were in our own hands. In just the last two years GEICO, through repurchases of its own stock, has reduced the share equivalents it has outstanding from 34.2 million to 21.6 million, dramatically enhancing the interests of shareholders in a business that simply can't be replicated. The owners could not have been better served.

We have written in past reports about the disappointments that usually result from purchase and operation of "turnaround" businesses. Literally hundreds of turnaround possibilities in dozens of industries have been described to us over the years and, either as participants or as observers, we have tracked performance against expectations. Our conclusion is that, with few exceptions, when a management with a reputation for brilliance tackles a business with a reputation for poor fundamental economics, it is the reputation of the business that remains intact.

GEICO may appear to be an exception, having been turned around from the very edge of bankruptcy in 1976. It certainly is true that managerial brilliance was needed for its resuscitation, and that Jack Byrne, upon arrival in that year, supplied that ingredient in abundance.

But it also is true that the fundamental business advantage that GEICO had enjoyed - an advantage that previously had produced staggering success - was still intact within the company, although submerged in a sea of financial and operating troubles.

GEICO was designed to be the low-cost operation in an enormous marketplace (auto insurance) populated largely by companies whose marketing structures restricted adaptation. Run as designed, it could offer unusual value to its customers while earning unusual returns for itself. For decades it had been run in just this manner. Its troubles in the mid-70s were not produced by any diminution or disappearance of this essential economic advantage.

GEICO's problems at that time put it in a position analogous to that of American Express in 1964 following the salad oil scandal. Both were one-of-a-kind companies, temporarily reeling from the effects of a fiscal blow that did not destroy their exceptional underlying economics. The GEICO and American Express situations, extraordinary business franchises with a localized excisable cancer (needing, to be sure, a skilled surgeon), should be distinguished from the true "turnaround" situation in which the managers expect - and need - to pull off a corporate Pygmalion.

Whatever the appellation, we are delighted with our GEICO holding which, as noted, cost us $47 million. To buy a similar $20 million of earning power in a business with first-class economic characteristics and bright prospects would cost a minimum of $200 million (much more in some industries) if it had to be accomplished through negotiated purchase of an entire company. A 100% interest of that kind gives the owner the options of leveraging the purchase, changing managements, directing cash flow, and selling the business. It may also provide some excitement around corporate headquarters (less frequently mentioned).

We find it perfectly satisfying that the nature of our insurance business dictates we buy many minority portions of already well-run businesses (at prices far below our share of the total value of the entire business) that do not need management change, re-direction of cash flow, or sale. There aren't many Jack Byrnes in the managerial world, or GEICOs in the business world. What could be better than buying into a partnership with both of them?

Insurance Industry Conditions

The insurance industry's underwriting picture continues to unfold about as we anticipated, with the combined ratio (see definition on page 37) rising from 100.6 in 1979 to an estimated 103.5 in 1980. It is virtually certain that this trend will continue and that industry underwriting losses will mount, significantly and progressively, in 1981 and 1982. To understand why, we recommend that you read the excellent analysis of property-casualty competitive dynamics done by Barbara Stewart of Chubb Corp. in an October 1980 paper. (Chubb's annual report consistently presents the most insightful, candid and well-written discussion of industry conditions; you should get on the company's mailing list.) Mrs. Stewart's analysis may not be cheerful, but we think it is very likely to be accurate.

And, unfortunately, a largely unreported but particularly pernicious problem may well prolong and intensify the coming industry agony. It is not only likely to keep many insurers scrambling for business when underwriting losses hit record levels - it is likely to cause them at such a time to redouble their efforts.

This problem arises from the decline in bond prices and the insurance accounting convention that allows companies to carry bonds at amortized cost, regardless of market value. Many insurers own long-term bonds that, at amortized cost, amount to two to three times net worth. If the level is three times, of course, a one-third shrink from cost in bond prices - if it were to be recognized on the books - would wipe out net worth. And shrink they have. Some of the largest and best known property-casualty companies currently find themselves with nominal, or even negative, net worth when bond holdings are valued at market. Of course their bonds could rise in price, thereby partially, or conceivably even fully, restoring the integrity of stated net worth. Or they could fall further. (We believe that short-term forecasts of stock or bond prices are useless. The forecasts may tell you a great deal about the forecaster; they tell you nothing about the future.)

It might strike some as strange that an insurance company's survival is threatened when its stock portfolio falls sufficiently in price to reduce net worth significantly, but that an even greater decline in bond prices produces no reaction at all. The industry would respond by pointing out that, no matter what the current price, the bonds will be paid in full at maturity, thereby eventually eliminating any interim price decline. It may take twenty, thirty, or even forty years, this argument says, but, as long as the bonds don't have to be sold, in the end they'll all be worth face value. Of course, if they are sold even if they are replaced with similar bonds offering better relative value - the loss must be booked immediately. And, just as promptly, published net worth must be adjusted downward by the amount of the loss.

Under such circumstances, a great many investment options disappear, perhaps for decades. For example, when large underwriting losses are in prospect, it may make excellent business logic for some insurers to shift from tax-exempt bonds into taxable bonds. Unwillingness to recognize major bond losses may be the sole factor that prevents such a sensible move.

But the full implications flowing from massive unrealized bond losses are far more serious than just the immobilization of investment intellect. For the source of funds to purchase *and hold* those bonds is a pool of money derived from policyholders and claimants (with changing faces) - money which, in effect, is temporarily on deposit with the insurer. As long as this pool retains its size, no bonds must be sold. If the pool of funds shrinks - which it will if the volume of business declines significantly - assets must be sold to pay off the liabilities. And if those assets consist of bonds with big unrealized losses, such losses will rapidly become realized, decimating net worth in the process.

Thus, an insurance company with a bond market value shrinkage approaching stated net worth (of which there are now many) and also faced with inadequate rate levels that are sure to deteriorate further has two options. One option for management is to tell the underwriters to keep pricing according to the exposure involved - "be sure to get a dollar of premium for every dollar of expense cost plus expectable loss cost".

The consequences of this directive are predictable: (a) with most business both price sensitive and renewable annually, many policies presently on the books will be lost to competitors in rather short order; (b) as premium volume shrinks significantly, there will be a lagged but corresponding decrease in liabilities (unearned premiums and claims payable); (c) assets (bonds) must be sold to match the decrease in liabilities; and (d) the formerly unrecognized disappearance of net worth will become partially recognized (depending upon the extent of such sales) in the insurer's published financial statements.

Variations of this depressing sequence involve a smaller penalty to stated net worth. The reaction of some companies at (c) would be to sell either stocks that are already carried at market values or recently purchased bonds involving less severe losses. This ostrich-like behavior - selling the better assets and keeping the biggest losers - while less painful in the short term, is unlikely to be a winner in the long term.

The second option is much simpler: just keep writing business regardless of rate levels and whopping prospective underwriting losses, thereby maintaining the present levels of premiums, assets and liabilities - and then pray for a better day, either for underwriting or for bond prices. There is much criticism in the trade press of "cash flow" underwriting; i.e., writing

business regardless of prospective underwriting losses in order to obtain funds to invest at current high interest rates. This second option might properly be termed "asset maintenance" underwriting - the acceptance of terrible business just to keep the assets you now have.

Of course you know which option will be selected. And it also is clear that as long as many large insurers feel compelled to choose that second option, there will be no better day for underwriting. For if much of the industry feels it must maintain premium volume levels regardless of price adequacy, all insurers will have to come close to meeting those prices. Right behind having financial problems yourself, the next worst plight is to have a large group of competitors with financial problems that they can defer by a "sell-at-any-price" policy.

We mentioned earlier that companies that were unwilling - for any of a number of reasons, including public reaction, institutional pride, or protection of stated net worth - to sell bonds at price levels forcing recognition of major losses might find themselves frozen in investment posture for a decade or longer. But, as noted, that's only half of the problem. *Companies that have made extensive commitments to long-term bonds may have lost, for a considerable period of time, not only many of their investment options, but many of their underwriting options as well.*

Our own position in this respect is satisfactory. We believe our net worth, valuing bonds of all insurers at amortized cost, is the strongest relative to premium volume among all large property-casualty stockholder-owned groups. When bonds are valued at market, our relative strength becomes far more dramatic. (But lest we get too puffed up, we remind ourselves that our asset and liability maturities still are far more mismatched than we would wish and that we, too, lost important sums in bonds because your Chairman was talking when he should have been acting.)

Our abundant capital and investment flexibility will enable us to do whatever we think makes the most sense during the prospective extended period of inadequate pricing. But troubles for the industry mean troubles for us. Our financial strength doesn't remove us from the hostile pricing environment now enveloping the entire property-casualty insurance ndustry. It just gives us more staying power and more options.

Insurance Operations

The National Indemnity managers, led by Phil Liesche with the usual able assistance of Roland Miller and Bill Lyons, outdid themselves in 1980. While volume was flat, underwriting margins relative to the industry were at an all-time high. We expect decreased volume from this operation in 1981. But its managers will hear no complaints from corporate headquarters, nor will employment or salaries suffer. We enormously admire the National Indemnity underwriting discipline - embedded from origin by the founder, Jack Ringwalt - and know that this discipline, if suspended, probably could not be fully regained.

John Seward at Home and Auto continues to make good progress in replacing a diminishing number of auto policies with volume from less competitive lines, primarily small-premium general liability. Operations are being slowly expanded, both geographically and by product line, as warranted by underwriting results.

The reinsurance business continues to reflect the excesses and problems of the primary writers. Worse yet, it has the potential for magnifying such excesses. Reinsurance is characterized by extreme ease of entry, large premium payments in advance, and much-delayed loss reports and loss payments. Initially, the morning mail brings lots of cash and few claims. This state of affairs can produce a blissful, almost euphoric, feeling akin to that experienced by an innocent upon receipt of his first credit card.

The magnetic lure of such cash-generating characteristics, currently enhanced by the presence of high interest rates, is transforming the reinsurance market into “amateur night”. Without a super catastrophe, industry underwriting will be poor in the next few years. If we experience such a catastrophe, there could be a bloodbath with some companies not able to live up to contractual commitments. George Young continues to do a first-class job for us in this business. Results, with investment income included, have been reasonably profitable. We will retain an active reinsurance presence but, for the foreseeable future, we expect no premium growth from this activity.

We continue to have serious problems in the Homestate operation. Floyd Taylor in Kansas has done an outstanding job but our underwriting record elsewhere is considerably below average. Our poorest performer has been Insurance Company of Iowa, at which large losses have been sustained annually since its founding in 1973. Late in the fall we abandoned

underwriting in that state, and have merged the company into Cornhusker Casualty. There is potential in the homestate concept, but much work needs to be done in order to realize it.

Our Workers Compensation operation suffered a severe loss when Frank DeNardo died last year at 37. Frank instinctively thought like an underwriter. He was a superb technician and a fierce competitor; in short order he had straightened out major problems at the California Workers Compensation Division of National Indemnity. Dan Grossman, who originally brought Frank to us, stepped in immediately after Frank's death to continue that operation, which now utilizes Redwood Fire and Casualty, another Berkshire subsidiary, as the insuring vehicle.

Our major Workers Compensation operation, Cypress Insurance Company, run by Milt Thornton, continues its outstanding record. Year after year Milt, like Phil Liesche, runs an underwriting operation that far outpaces his competition. In the industry he is admired and copied, but not matched.

Overall, we look for a significant decline in insurance volume in 1981 along with a poorer underwriting result. We expect underwriting experience somewhat superior to that of the industry but, of course, so does most of the industry. There will be some disappointments.

Textile and Retail Operations

During the past year we have cut back the scope of our textile business. Operations at Waumbec Mills have been terminated, reluctantly but necessarily. Some equipment was transferred to New Bedford but most has been sold, or will be, along with real estate. Your Chairman made a costly mistake in not facing the realities of this situation sooner.

At New Bedford we have reduced the number of looms operated by about one-third, abandoning some high-volume lines in which product differentiation was insignificant. Even assuming everything went right - which it seldom did - these lines could not generate adequate returns related to investment. And, over a full industry cycle, losses were the most likely result.

Our remaining textile operation, still sizable, has been divided into a manufacturing and a sales division, each free to do business independent of the other. Thus, distribution strengths and mill capabilities will not be wedded to each other. We have more than doubled capacity in our most profitable textile segment through a recent purchase of used 130-inch Saurer looms. Current conditions indicate another tough year in textiles, but

with substantially less capital employed in the operation.

Ben Rosner's record at Associated Retail Stores continues to amaze us. In a poor retailing year, Associated's earnings continued excellent - and those earnings all were translated into cash. On March 7, 1981 Associated will celebrate its 50th birthday. Ben has run the business (along with Leo Simon, his partner from 1931 to 1966) in each of those fifty years.

Disposition of Illinois National Bank and Trust of Rockford

On December 31, 1980 we completed the exchange of 41,086 shares of Rockford Bancorp Inc. (which owns 97.7% of Illinois National Bank) for a like number of shares of Berkshire Hathaway Inc.

Our method of exchange allowed all Berkshire shareholders to maintain their proportional interest in the Bank (except for me; I was permitted 80% of my proportional share). They were thus guaranteed an ownership position identical to that they would have attained had we followed a more conventional spinoff approach. Twenty-four shareholders (of our approximate 1300) chose this proportional exchange option.

We also allowed overexchanges, and thirty-nine additional shareholders accepted this option, thereby increasing their ownership in the Bank and decreasing their proportional ownership in Berkshire. All got the full amount of Bancorp stock they requested, since the total shares desired by these thirty-nine holders was just slightly less than the number left available by the remaining 1200-plus holders of Berkshire who elected not to part with any Berkshire shares at all. As the exchanger of last resort, I took the small balance (3% of Bancorp's stock). These shares, added to shares I received from my basic exchange allotment (80% of normal), gave me a slightly reduced proportional interest in the Bank and a slightly enlarged proportional interest in Berkshire.

Management of the Bank is pleased with the outcome. Bancorp will operate as an inexpensive and uncomplicated holding company owned by 65 shareholders. And all of those shareholders will have become Bancorp owners through a conscious affirmative decision.

Financing

In August we sold $60 million of 12 3/4% notes due August 1, 2005, with a sinking fund to begin in 1991. The managing underwriters, Donaldson, Lufkin & Jenrette Securities Corporation,

represented by Bill Fisher, and Chiles, Heider & Company, Inc., represented by Charlie Heider, did an absolutely first-class job from start to finish of the financing.

Unlike most businesses, Berkshire did not finance because of any specific immediate needs. Rather, we borrowed because we think that, over a period far shorter than the life of the loan, we will have many opportunities to put the money to good use. The most attractive opportunities may present themselves at a time when credit is extremely expensive - or even unavailable. At such a time we want to have plenty of financial firepower.

Our acquisition preferences run toward businesses that generate cash, not those that consume it. As inflation intensifies, more and more companies find that they must spend all funds they generate internally just to maintain their existing physical volume of business. There is a certain mirage-like quality to such operations. However attractive the earnings numbers, we remain leery of businesses that never seem able to convert such pretty numbers into no-strings-attached cash.

Businesses meeting our standards are not easy to find. (Each year we read of hundreds of corporate acquisitions; only a handful would have been of interest to us.) And logical expansion of our present operations is not easy to implement. But we'll continue to utilize both avenues in our attempts to further Berkshire's growth.

Under all circumstances we plan to operate with plenty of liquidity, with debt that is moderate in size and properly structured, and with an abundance of capital strength. Our return on equity is penalized somewhat by this conservative approach, but it is the only one with which we feel comfortable.

* * * * * * * * * * * *

Gene Abegg, founder of our long-owned bank in Rockford, died on July 2, 1980 at the age of 82. As a friend, banker and citizen, he was unsurpassed.

You learn a great deal about a person when you purchase a business from him and he then stays on to run it as an employee rather than as an owner. Before the purchase the seller knows the business intimately, whereas you start from scratch. The seller has dozens of opportunities to mislead the buyer - through omissions, ambiguities, and misdirection. After the check has changed hands, subtle (and not so subtle) changes of attitude can occur and

implicit understandings can evaporate. As in the courtship-marriage sequence, disappointments are not infrequent.

From the time we first met, Gene shot straight 100% of the time - the only behavior pattern he had within him. At the outset of negotiations, he laid all negative factors face up on the table; on the other hand, for years after the transaction was completed he would tell me periodically of some previously undiscussed items of value that had come with our purchase.

Though he was already 71 years of age when he sold us the Bank, Gene subsequently worked harder for us than he had for himself. He never delayed reporting a problem for a minute, but problems were few with Gene. What else would you expect from a man who, at the time of the bank holiday in 1933, had enough cash on the premises to pay all depositors in full? Gene never forgot he was handling other people's money. Though this fiduciary attitude was always dominant, his superb managerial skills enabled the Bank to regularly achieve the top position nationally in profitability.

Gene was in charge of the Illinois National for close to fifty years - almost one-quarter of the lifetime of our country. George Mead, a wealthy industrialist, brought him in from Chicago to open a new bank after a number of other banks in Rockford had failed. Mr. Mead put up the money and Gene ran the show. His talent for leadership soon put its stamp on virtually every major civic activity in Rockford.

Dozens of Rockford citizens have told me over the years of help Gene extended to them. In some cases this help was financial; in all cases it involved much wisdom, empathy and friendship. He always offered the same to me. Because of our respective ages and positions I was sometimes the junior partner, sometimes the senior. Whichever the relationship, it always was a special one, and I miss it.

Warren E. Buffett
February 27, 1981
Chairman of the Board

1981 Letter

BERKSHIRE HATHAWAY INC.

February 26, 1982

To the Shareholders of Berkshire Hathaway Inc.:

Operating earnings of $39.7 million in 1981 amounted to 15.2% of beginning equity capital (valuing securities at cost) compared to 17.8% in 1980. Our new plan that allows stockholders to designate corporate charitable contributions (detailed later) reduced earnings by about $900,000 in 1981. This program, which we expect to continue subject to annual evaluation of our corporate tax position, had not been initiated in 1980.

Non-Controlled Ownership Earnings

In the 1980 annual report we discussed extensively the concept of non-controlled ownership earnings, i.e., Berkshire's share of the undistributed earnings of companies we don't control or significantly influence but in which we, nevertheless, have important investments. (We will be glad to make available to new or prospective shareholders copies of that discussion or others from earlier reports to which we refer in this report.) No portion of those undistributed earnings is included in the operating earnings of Berkshire.

However, our belief is that, in aggregate, those undistributed and, therefore, unrecorded earnings will be translated into tangible value for Berkshire shareholders just as surely as if subsidiaries we control had earned, retained - and reported - similar earnings.

We know that this translation of non-controlled ownership earnings into corresponding realized and unrealized capital gains for Berkshire will be extremely irregular as to time of occurrence. While market values track business values quite well over long periods, in any given year the relationship can gyrate capriciously. Market recognition of retained earnings also will be unevenly realized among companies. It will be disappointingly low or negative in cases where earnings are employed non-productively, and far greater than dollar-for-dollar of

retained earnings in cases of companies that achieve high returns with their augmented capital. Overall, if a group of non-controlled companies is selected with reasonable skill, the group result should be quite satisfactory.

In aggregate, our non-controlled business interests have more favorable underlying economic characteristics than our controlled businesses. That's understandable; the area of choice has been far wider. Small portions of exceptionally good businesses are usually available in the securities markets at reasonable prices. But such businesses are available for purchase in their entirety only rarely, and then almost always at high prices.

General Acquisition Behavior

As our history indicates, we are comfortable both with total ownership of businesses and with marketable securities representing small portions of businesses. We continually look for ways to employ large sums in each area. (But we try to avoid small commitments - "If something's not worth doing at all, it's not worth doing well".) Indeed, the liquidity requirements of our insurance and trading stamp businesses mandate major investments in marketable securities.

Our acquisition decisions will be aimed at maximizing real economic benefits, not at maximizing either managerial domain or reported numbers for accounting purposes. (In the long run, managements stressing accounting appearance over economic substance usually achieve little of either.)

Regardless of the impact upon immediately reportable earnings, we would rather buy 10% of Wonderful Business T at X per share than 100% of T at 2X per share. Most corporate managers prefer just the reverse, and have no shortage of stated rationales for their behavior.

However, we suspect three motivations - usually unspoken - to be, singly or in combination, the important ones in most high-premium takeovers:

(1) Leaders, business or otherwise, seldom are deficient in animal spirits and often relish increased activity and challenge. At Berkshire, the corporate pulse never beats faster than when an acquisition is in prospect.

(2) Most organizations, business or otherwise, measure themselves, are measured by others, and compensate their managers far more by the yardstick of size than by any other yardstick.

(Ask a *Fortune 500* manager where his corporation stands on that famous list and, invariably, the number responded will be from the list ranked by size of sales; he may well not even know where his corporation places on the list *Fortune* just as faithfully compiles ranking the same 500 corporations by profitability.)

(3) Many managements apparently were overexposed in impressionable childhood years to the story in which the imprisoned handsome prince is released from a toad's body by a kiss from a beautiful princess. Consequently, they are certain their managerial kiss will do wonders for the profitability of Company T(arget). Such optimism is essential. Absent that rosy view, why else should the shareholders of Company A(cquisitor) want to own an interest in T at the 2X takeover cost rather than at the X market price they would pay if they made direct purchases on their own?In other words, investors can always buy toads at the going price for toads. If investors instead bankroll princesses who wish to pay double for the right to kiss the toad, those kisses had better pack some real dynamite. We've observed many kisses but very few miracles. Nevertheless, many managerial princesses remain serenely confident about the future potency of their kisses - even after their corporate backyards are knee-deep in unresponsive toads.

In fairness, we should acknowledge that some acquisition records have been dazzling. Two major categories stand out.

The first involves companies that, through design or accident, have purchased only businesses that are particularly well adapted to an inflationary environment. Such favored business must have two characteristics: (1) an ability to increase prices rather easily (even when product demand is flat and capacity is not fully utilized) without fear of significant loss of either market share or unit volume, and (2) an ability to accommodate large dollar volume increases in business (often produced more by inflation than by real growth) with only minor additional investment of capital. Managers of ordinary ability, focusing solely on acquisition possibilities meeting these tests, have achieved excellent results in recent decades. However, very few enterprises possess both characteristics, and competition to buy those that do has now become fierce to the point of being self-defeating.

The second category involves the managerial superstars - men who can recognize that rare prince who is disguised as a toad, and who have managerial abilities that enable them to peel away the disguise. We salute such managers as Ben Heineman at Northwest Industries, Henry Singleton at Teledyne, Erwin Zaban at National Service Industries, and especially Tom Murphy at Capital Cities Communications (a real managerial "twofer", whose acquisition efforts have been properly focused in Category 1 and whose operating talents also make him a leader of Category 2). From both direct and vicarious experience, we recognize the difficulty and rarity of these executives' achievements. (So do they; these champs have made very few deals in recent years, and often have found repurchase of their own shares to be the most sensible employment of corporate capital.)

Your Chairman, unfortunately, does not qualify for Category 2. And, despite a reasonably good understanding of the economic factors compelling concentration in Category 1, our actual acquisition activity in that category has been sporadic and inadequate. Our preaching was better than our performance. (We neglected the Noah principle: predicting rain doesn't count, building arks does.)

We have tried occasionally to buy toads at bargain prices with results that have been chronicled in past reports. Clearly our kisses fell flat. We have done well with a couple of princes - but they were princes when purchased. At least our kisses didn't turn them into toads. And, finally, we have occasionally been quite successful in purchasing fractional interests in easily-identifiable princes at toad-like prices.

Berkshire Acquisition Objectives

We will continue to seek the acquisition of businesses in their entirety at prices that will make sense, even should the future of the acquired enterprise develop much along the lines of its past. We may very well pay a fairly fancy price for a Category 1 business if we are reasonably confident of what we are getting. But we will not normally pay a lot in any purchase for what we are supposed to bring to the party - for we find that we ordinarily don't bring a lot.

During 1981 we came quite close to a major purchase involving both a business and a manager we liked very much. However, the price finally demanded, considering alternative

uses for the funds involved, would have left our owners worse off than before the purchase. The empire would have been larger, but the citizenry would have been poorer.

Although we had no success in 1981, from time to time in the future we will be able to purchase 100% of businesses meeting our standards. Additionally, we expect an occasional offering of a major "non-voting partnership" as discussed under the Pinkerton's heading on page 47 of this report. We welcome suggestions regarding such companies where we, as a substantial junior partner, can achieve good economic results while furthering the long-term objectives of present owners and managers.

Currently, we find values most easily obtained through the open-market purchase of fractional positions in companies with excellent business franchises and competent, honest managements. We never expect to run these companies, but we do expect to profit from them.

We expect that undistributed earnings from such companies will produce full value (subject to tax when realized) for Berkshire and its shareholders. If they don't, we have made mistakes as to either: (1) the management we have elected to join; (2) the future economics of the business; or (3) the price we have paid.

We have made plenty of such mistakes - both in the purchase of non-controlling and controlling interests in businesses. Category (2) miscalculations are the most common. Of course, it is necessary to dig deep into our history to find illustrations of such mistakes - sometimes as deep as two or three months back. For example, last year your Chairman volunteered his expert opinion on the rosy future of the aluminum business. Several minor adjustments to that opinion - now aggregating approximately 180 degrees - have since been required.

For personal as well as more objective reasons, however, we generally have been able to correct such mistakes far more quickly in the case of non-controlled businesses (marketable securities) than in the case of controlled subsidiaries. Lack of control, in effect, often has turned out to be an economic plus.

As we mentioned last year, the magnitude of our non-recorded "ownership" earnings has grown to the point where their total is greater than our reported operating earnings. We

expect this situation will continue. In just four ownership positions in this category - GEICO Corporation, General Foods Corporation, R. J. Reynolds Industries, Inc. and The Washington Post Company - our share of undistributed and therefore unrecorded earnings probably will total well over $35 million in 1982. The accounting rules that entirely ignore these undistributed earnings diminish the utility of our annual return on equity calculation, or any other single year measure of economic performance.

Long-Term Corporate Performance

In measuring long-term economic performance, equities held by our insurance subsidiaries are valued at market subject to a charge reflecting the amount of taxes that would have to be paid if unrealized gains were actually realized. If we are correct in the premise stressed in the preceding section of this report, our unreported ownership earnings will find their way, irregularly but inevitably, into our net worth. To date, this has been the case.

An even purer calculation of performance would involve a valuation of bonds and non-insurance held equities at market. However, GAAP accounting does not prescribe this procedure, and the added purity would change results only very slightly. Should any valuation difference widen to significant proportions, as it has at most major insurance companies, we will report its effect to you.

On a GAAP basis, during the present management's term of seventeen years, book value has increased from $19.46 per share to $526.02 per share, or 21.1% compounded annually. This rate of return number is highly likely to drift downward in future years. We hope, however, that it can be maintained significantly above the rate of return achieved by the average large American corporation.

Over half of the large gain in Berkshire's net worth during 1981 - it totaled $124 million, or about 31% - resulted from the market performance of a single investment, GEICO Corporation. In aggregate, our market gain from securities during the year considerably outstripped the gain in underlying business values. Such market variations will not always be on the pleasant side.

In past reports we have explained how inflation has caused our apparently satisfactory long-term corporate performance to be illusory as a measure of true investment results for our

owners. We applaud the efforts of Federal Reserve Chairman Volcker and note the currently more moderate increases in various price indices. Nevertheless, our views regarding long-term inflationary trends are as negative as ever. Like virginity, a stable price level seems capable of maintenance, but not of restoration.

Despite the overriding importance of inflation in the investment equation, we will not punish you further with another full recital of our views; inflation itself will be punishment enough. (Copies of previous discussions are available for masochists.) But, because of the unrelenting destruction of currency values, our corporate efforts will continue to do a much better job of filling your wallet than of filling your stomach.

Equity Value-Added

An additional factor should further subdue any residual enthusiasm you may retain regarding our long-term rate of return. The economic case justifying equity investment is that, in aggregate, additional earnings above passive investment returns - interest on fixed-income securities - will be derived through the employment of managerial and entrepreneurial skills in conjunction with that equity capital. Furthermore, the case says that since the equity capital position is associated with greater risk than passive forms of investment, it is "entitled" to higher returns. A "value-added" bonus from equity capital seems natural and certain.

But is it? Several decades back, a return on equity of as little as 10% enabled a corporation to be classified as a "good" business - i.e., one in which a dollar reinvested in the business logically could be expected to be valued by the market at more than one hundred cents. For, with long-term taxable bonds yielding 5% and long-term tax-exempt bonds 3%, a business operation that could utilize equity capital at 10% clearly was worth some premium to investors over the equity capital employed. That was true even though a combination of taxes on dividends and on capital gains would reduce the 10% earned by the corporation to perhaps 6%-8% in the hands of the individual investor.

Investment markets recognized this truth. During that earlier period, American business earned an average of 11% or so on equity capital employed and stocks, in aggregate, sold at valuations far above that equity capital (book value), averaging over 150 cents on the dollar. Most businesses were "good" businesses because they earned far more than their keep (the

return on long-term passive money). The value-added produced by equity investment, in aggregate, was substantial.

That day is gone. But the lessons learned during its existence are difficult to discard. While investors and managers must place their feet in the future, their memories and nervous systems often remain plugged into the past. It is much easier for investors to utilize historic p/e ratios or for managers to utilize historic business valuation yardsticks than it is for either group to rethink their premises daily. When change is slow, constant rethinking is actually undesirable; it achieves little and slows response time. But when change is great, yesterday's assumptions can be retained only at great cost. And the pace of economic change has become breathtaking.

During the past year, long-term taxable bond yields exceeded 16% and long-term tax-exempts 14%. The total return achieved from such tax-exempts, of course, goes directly into the pocket of the individual owner. Meanwhile, American business is producing earnings of only about 14% on equity. And this 14% will be substantially reduced by taxation before it can be banked by the individual owner. The extent of such shrinkage depends upon the dividend policy of the corporation and the tax rates applicable to the investor.

Thus, *with interest rates on passive investments at late 1981 levels,* a typical American business is no longer worth one hundred cents on the dollar to owners who are individuals. (If the business is owned by pension funds or other tax-exempt investors, the arithmetic, although still unenticing, changes substantially for the better.) Assume an investor in a 50% tax bracket; if our typical company pays out all earnings, the income return to the investor will be equivalent to that from a 7% tax-exempt bond. And, if conditions persist - if all earnings are paid out and return on equity stays at 14% - the 7% tax-exempt equivalent to the higher-bracket individual investor is just as frozen as is the coupon on a tax-exempt bond. Such a perpetual 7% tax-exempt bond might be worth fifty cents on the dollar as this is written.

If, on the other hand, all earnings of our typical American business are retained and return on equity again remains constant, earnings will grow at 14% per year. If the p/e ratio remains constant, the price of our typical stock will also grow at 14% per year. But that 14% is not yet in the pocket of the shareholder. Putting it there will require the payment of a capital

gains tax, presently assessed at a maximum rate of 20%. This net return, of course, works out to a poorer rate of return than the currently available passive after-tax rate.

Unless passive rates fall, companies achieving 14% per year gains in earnings per share while paying no cash dividend are an economic failure for their individual shareholders. The returns from passive capital outstrip the returns from active capital. This is an unpleasant fact for both investors and corporate managers and, therefore, one they may wish to ignore. But facts do not cease to exist, either because they are unpleasant or because they are ignored.

Most American businesses pay out a significant portion of their earnings and thus fall between the two examples. And most American businesses are currently "bad" businesses economically - producing less for their individual investors after-tax than the tax-exempt passive rate of return on money. Of course, some high-return businesses still remain attractive, even under present conditions. But American equity capital, in aggregate, produces no value-added for individual investors.

It should be stressed that this depressing situation does not occur because corporations are jumping, economically, less high than previously. In fact, they are jumping somewhat higher: return on equity has improved a few points in the past decade. But the crossbar of passive return has been elevated much faster. Unhappily, most companies can do little but hope that the bar will be lowered significantly; there are few industries in which the prospects seem bright for substantial gains in return on equity.

Inflationary experience and expectations will be major (but not the only) factors affecting the height of the crossbar in future years. If the causes of long-term inflation can be tempered, passive returns are likely to fall and the intrinsic position of American equity capital should significantly improve. Many businesses that now must be classified as economically "bad" would be restored to the "good" category under such circumstances.

A further, particularly ironic, punishment is inflicted by an inflationary environment upon the owners of the "bad" business. To continue operating in its present mode, such a low-return business usually must retain much of its earnings - no matter what penalty such a policy produces for shareholders.

Reason, of course, would prescribe just the opposite policy. An individual, stuck with a 5% bond with many years to run before maturity, does not take the coupons from that bond and pay one hundred cents on the dollar for more 5% bonds while similar bonds are available at, say, forty cents on the dollar. Instead, he takes those coupons from his low-return bond and - if inclined to reinvest - looks for the highest return with safety currently available. Good money is not thrown after bad.

What makes sense for the bondholder makes sense for the shareholder. Logically, a company with historic *and prospective* high returns on equity should retain much or all of its earnings so that shareholders can earn premium returns on enhanced capital. Conversely, low returns on corporate equity would suggest a very high dividend payout so that owners could direct capital toward more attractive areas. (The Scriptures concur. In the parable of the talents, the two high-earning servants are rewarded with 100% retention of earnings and encouraged to expand their operations. However, the non-earning third servant is not only chastised - "wicked and slothful" - but also is required to redirect all of his capital to the top performer. *Matthew 25: 14-30)*

But inflation takes us through the looking glass into the upside-down world of *Alice in Wonderland.* When prices continuously rise, the "bad" business must retain every nickel that it can. Not because it is attractive as a repository for equity capital, but precisely because it is so unattractive, the low-return business must follow a high retention policy. If it wishes to continue operating in the future as it has in the past - and most entities, including businesses, do - it simply has no choice.

For inflation acts as a gigantic corporate tapeworm. That tapeworm preemptively consumes its requisite daily diet of investment dollars regardless of the health of the host organism. Whatever the level of reported profits (even if nil), more dollars for receivables, inventory and fixed assets are continuously required by the business in order to merely match the unit volume of the previous year. The less prosperous the enterprise, the greater the proportion of available sustenance claimed by the tapeworm.

Under present conditions, a business earning 8% or 10% on equity often has no leftovers for expansion, debt reduction or "real" dividends. The tapeworm of inflation simply cleans the

plate. (The low-return company's inability to pay dividends, understandably, is often disguised. Corporate America increasingly is turning to dividend reinvestment plans, sometimes even embodying a discount arrangement that all but forces shareholders to reinvest. Other companies sell newly issued shares to Peter in order to pay dividends to Paul. Beware of "dividends" that can be paid out only if someone promises to replace the capital distributed.)

Berkshire continues to retain its earnings for offensive, not defensive or obligatory, reasons. But in no way are we immune from the pressures that escalating passive returns exert on equity capital. We continue to clear the crossbar of after-tax passive return - but barely. Our historic 21% return - not at all assured for the future - still provides, after the current capital gain tax rate (which we expect to rise considerably in future years), a modest margin over current after-tax rates on passive money. It would be a bit humiliating to have our corporate value-added turn negative. But it can happen here as it has elsewhere, either from events outside anyone's control or from poor relative adaptation on our part.

Sources of Reported Earnings

The table below shows the sources of Berkshire's reported earnings. Berkshire owns about 60% of Blue Chip Stamps which, in turn, owns 80% of Wesco Financial Corporation. The table displays aggregate operating earnings of the various business entities, as well as Berkshire's share of those earnings. All of the significant gains and losses attributable to unusual sales of assets by any of the business entities are aggregated with securities transactions in the line near the bottom of the table and are not included in operating earnings.

000's of $'s	Earnings Before Income Taxes Net Earnings After Tax Total Total Berkshire Share Berkshire Share 1981 1980 1981 1980 1981 1980
Total – All entities	**$85,945 $85,945 $70,146 $70,146 $53,122 $53,122**
Operating Earnings: Underwriting	$1,478 $6,738 $1,478 $6,737 $798 $3,637
Net investment income	$38,823 $30,939 $38,823 $30,927 $32,401 $25,607
Berkshire Waumbec Textiles	($2,669) ($508) ($2,669) ($508) $1,493 $202
Associated Retail Stores	$1,763 $2,440 $1,763 $2,440 $759 $1,169
See's Candies	$21,891 $15,475 $13,046 $9,223 $6,289 $4,459
Buffalo Evening News	($1,057) ($2,777) ($630) ($1,655) ($276) ($800)
Blue Chip Stamps - Parent	$3,642 $7,699 $2,171 $4,588 $2,134 $3,060
Wesco Financial – Parent	$4,495 $2,916 $2,145 $1,392 $1,590 $1,044
Mutual Savings & Loan	$1,605 $5,814 $766 $2,775 $1,536 $1,974
Precision Steel	$3,453 $2,833 $1,648 $1,352 $841 $656
Interest on Debt	($14,656) ($12,230 ($12,649) ($9,390) ($6,671) ($4,809)
Other*	$1,895 $1,698 $1,344 $1,308 $1,513 $992
Sub-total – Continuing Operations	$60,663 $61,037 $47,236 $49,189 $39,421 $37,191
Illinois National Bank**	-- $5,324 -- $5,200 -- $4,731
Operating Earnings	$60,663 $66,361 $47,236 $54,389 $39,421 $41,922
Sale of securities and unusual sales of assets	$37,801 $19,584 $33,150 $15,757 $23,183 $11,200
Total Earnings- all entities	**$98,464 $85,945 $80,386 $70,146 $62,604 $53,122**

**Amortization of intangibles arising in accounting for purchases of businesses (i.e. See's, Mutual and Buffalo Evening News) is reflected in the category designated as "Other".*

***Berkshire divested itself of its ownership of the Illinois National Bank on December 31, 1980.*

Blue Chip Stamps and Wesco are public companies with reporting requirements of their own. On pages 38-50 of this report we have reproduced the narrative reports of the principal executives of both companies, in which they describe 1981 operations. A copy of the full annual report of either company will be mailed to any Berkshire shareholder upon request to Mr. Robert H. Bird for Blue Chip Stamps, 5801 South Eastern Avenue, Los Angeles, California 90040, or to Mrs. Jeanne Leach for Wesco Financial Corporation, 315 East Colorado Boulevard, Pasadena, California 91109.

As we indicated earlier, undistributed earnings in companies we do not control are not fully as important as the reported operating earnings detailed in the preceding table. The distributed portion of earnings, of course, finds its way into the table primarily through the net investment income segment of Insurance Group earnings.

We show below Berkshire's proportional holdings in those non-controlled businesses for which only distributed earnings (dividends) are included in our earnings.

No. of Shares	Company	Cost (000's omitted)	Market (000's omitted)
451,650 (a)	Affiliated Publications, Inc.	$3,297	$14,114
703,634 (a)	Aluminum Company of America	$19,359	$18,031
420,441 (a)	Arcata Corporation	$14,076	$15,136
475,217 (b)	Cleveland-Cliffs Iron Company	$12,942	$14,362
441,522 (a)	GATX Corporation	$17,147	$13,466
2,101,244 (b)	General Foods, Inc.	$66,277	$66,714
7,200,000 (a)	GEICO Corporation	$47,138	$199,800
2,015,000 (a)	Handy & Harman	$21,825	$36,270
711,180 (a)	Interpublic Group of Companies	$4,531	$23,202
282,500 (a)	Media General, Inc.	$4,545	$11,088
391,400 (a)	Ogilvy & Mather Int'l. Inc.	$3,709	$12,329
370,088 (b)	Pinkerton's, Inc.	$12,144	$19,675
1,764,824 (b)	R. J. Reynolds Industries	$76,668	$83,127
785,225 (b)	SAFECO Corporation	$21,329	$31,016
151,104 (b)	The Times Mirror Company	$4,447	$6,271
1,868,600 (a)	The Washington Post Company Class B	$10,628	$58,160
	Total	**$335,615**	**$616,490**
	All Other Common Stockholdings	**$16,131**	**$22,739**
	Total Common Stocks	**$351,746**	**$639,229**

(a) All owned by Berkshire or its insurance subsidiaries.

(b) Blue Chip and/or Wesco own shares of these companies. All numbers represent Berkshire's net interest in the larger gross holdings of the group.

Our controlled and non-controlled businesses operate over such a wide spectrum of activities that detailed commentary here would prove too lengthy. Much additional financial information is included in Management's Discussion on pages 34-37 and in the narrative

reports on pages 38-50. However, our largest area of both controlled and non-controlled activity has been, and almost certainly will continue to be, the property-casualty insurance area, and commentary on important developments in that industry is appropriate.

Insurance Industry Conditions

"Forecasts", said Sam Goldwyn, "are dangerous, particularly those about the future." (Berkshire shareholders may have reached a similar conclusion after rereading our past annual reports featuring your Chairman's prescient analysis of textile prospects.)

There is no danger, however, in forecasting that 1982 will be the worst year in recent history for insurance underwriting. That result already has been guaranteed by present pricing behavior, coupled with the term nature of the insurance contract.

While many auto policies are priced and sold at six-month intervals - and many property policies are sold for a three-year term - a weighted average of the duration of all property-casualty insurance policies probably runs a little under twelve months. And prices for the insurance coverage, of course, are frozen for the life of the contract. Thus, this year's sales contracts ("premium written" in the parlance of the industry) determine about one-half of next year's level of revenue ("premiums earned"). The remaining half will be determined by sales contracts written next year that will be about 50% earned in that year. The profitability consequences are automatic: if you make a mistake in pricing, you have to live with it for an uncomfortable period of time.

Note in the table below the year-over-year gain in industry-wide premiums written and the impact that it has on the current and following year's level of underwriting profitability. The result is exactly as you would expect in an inflationary world. When the volume gain is well up in double digits, it bodes well for profitability trends in the current and following year. When the industry volume gain is small, underwriting experience very shortly will get worse, no matter how unsatisfactory the current level.

The Best's data in the table reflect the experience of practically the entire industry, including stock, mutual and reciprocal companies. The combined ratio indicates total operating and loss costs as compared to premiums; a ratio below 100 indicates an underwriting profit, and one above 100 indicates a loss.

Year	Yearly Change in Premium Written	Yearly Change in Premium Earned	Combined Ratio after Policy-holder Dividends
1972	10.2%	10.9%	96.2
1973	8.0%	8.8%	99.2
1974	6.2%	6.9%	105.4
1975	11.0%	9.6%	107.9
1976	21.9%	19.4%	102.4
1977	19.8%	20.5%	97.2
1978	12.8%	14.3%	97.5
1979	10.3%	10.4%	100.6
1980	6.0%	7.8%	103.1
1981	3.6%	4.1%	105.7

Source: Best's Aggregates and Averages.

As Pogo would say, "The future isn't what it used to be." Current pricing practices promise devastating results, particularly if the respite from major natural disasters that the industry has enjoyed in recent years should end. *For underwriting experience has been getting worse in spite of good luck, not because of bad luck.* In recent years hurricanes have stayed at sea and motorists have reduced their driving. They won't always be so obliging.

And, of course the twin inflations, monetary and "social" (the tendency of courts and juries to stretch the coverage of policies beyond what insurers, relying upon contract terminology and precedent, had expected), are unstoppable. Costs of repairing both property and people - and the extent to which these repairs are deemed to be the responsibility of the insurer - will advance relentlessly.

Absent any bad luck (catastrophes, increased driving, etc.), an immediate industry volume gain of at least 10% per year probably is necessary to *stabilize* the record level of

underwriting losses that will automatically prevail in mid-1982. (Most underwriters expect incurred losses in aggregate to rise at least 10% annually; each, of course, counts on getting less than his share.) Every percentage point of annual premium growth below the 10% equilibrium figure quickens the pace of deterioration. Quarterly data in 1981 underscore the conclusion that a terrible underwriting picture is worsening at an accelerating rate.

In the 1980 annual report we discussed the investment policies that have destroyed the integrity of many insurers' balance sheets, forcing them to abandon underwriting discipline and write business at any price in order to avoid negative cash flow. It was clear that insurers with large holdings of bonds valued, for accounting purposes, at nonsensically high prices would have little choice but to keep the money revolving by selling large numbers of policies at nonsensically low prices. Such insurers necessarily fear a major decrease in volume more than they fear a major underwriting loss.

But, unfortunately, all insurers are affected; it's difficult to price much differently than your most threatened competitor. This pressure continues unabated and adds a new motivation to the others that drive many insurance managers to push for business; worship of size over profitability, and the fear that market share surrendered never can be regained.

Whatever the reasons, we believe it is true that virtually no major property-casualty insurer - despite protests by the entire industry that rates are inadequate and great selectivity should be exercised - has been willing to turn down business to the point where cash flow has turned significantly negative. Absent such a willingness, prices will remain under severe pressure.

Commentators continue to talk of the underwriting cycle, usually implying a regularity of rhythm and a relatively constant midpoint of profitability Our own view is different. We believe that very large, although obviously varying, underwriting losses will be the norm for the industry, and that the best underwriting years in the future decade may appear substandard against the average year of the past decade.

We have no magic formula to insulate our controlled insurance companies against this deteriorating future. Our managers, particularly Phil Liesche, Bill Lyons, Roland Miller, Floyd Taylor and Milt Thornton, have done a magnificent job of swimming against the tide. We have sacrificed much volume, but have maintained a substantial underwriting superiority in

relation to industry-wide results. The outlook at Berkshire is for continued low volume. Our financial position offers us maximum flexibility, a very rare condition in the property-casualty insurance industry. And, at some point, should fear ever prevail throughout the industry, our financial strength could become an operational asset of immense value.

We believe that GEICO Corporation, our major non-controlled business operating in this field, is, by virtue of its extreme and improving operating efficiency, in a considerably more protected position than almost any other major insurer. GEICO is a brilliantly run implementation of a very important business idea.

Shareholder Designated Contributions

Our new program enabling shareholders to designate the recipients of corporate charitable contributions was greeted with extraordinary enthusiasm. A copy of the letter sent October 14, 1981 describing this program appears on pages 51-53. Of 932,206 shares eligible for participation (shares where the name of the actual owner appeared on our stockholder record), 95.6% responded. Even excluding Buffet-related shares, the response topped 90%.

In addition, more than 3% of our shareholders voluntarily wrote letters or notes, all but one approving of the program. Both the level of participation and of commentary surpass any shareholder response we have witnessed, even when such response has been intensively solicited by corporate staff and highly paid professional proxy organizations. In contrast, your extraordinary level of response occurred without even the nudge of a company-provided return envelope. This self-propelled behavior speaks well for the program, and speaks well for our shareholders.

Apparently the owners of our corporation like both possessing and exercising the ability to determine where gifts of their funds shall be made. The “father-knows-best” school of corporate governance will be surprised to find that none of our shareholders sent in a designation sheet with instructions that the officers of Berkshire - in their superior wisdom, of course - make the decision on charitable funds applicable to his shares. Nor did anyone suggest that his share of our charitable funds be used to match contributions made by our corporate directors to charities of the directors’ choice (a popular, proliferating and non-publicized policy at many large corporations).

All told, $1,783,655 of shareholder-designed contributions were distributed to about 675 charities. In addition, Berkshire and subsidiaries continue to make certain contributions pursuant to local level decisions made by our operating managers.

There will be some years, perhaps two or three out of ten, when contributions by Berkshire will produce substandard tax deductions - or none at all. In those years we will not effect our shareholder designated charitable program. In all other years we expect to inform you about October 10th of the amount per share that you may designate. A reply form will accompany the notice, and you will be given about three weeks to respond with your designation. *To qualify, your shares must be registered in your own name or the name of an owning trust, corporation, partnership or estate, if applicable, on our stockholder list of September 30th, or the Friday preceding if such date falls on a Saturday or Sunday.*

Our only disappointment with this program in 1981 was that some of our shareholders, through no fault of their own, missed the opportunity to participate. The Treasury Department ruling allowing us to proceed without tax uncertainty was received early in October. The ruling did not cover participation by shareholders whose stock was registered in the name of nominees, such as brokers, and additionally required that the owners of all designating shares make certain assurances to Berkshire. These assurances could not be given us in effective form by nominee holders.

Under these circumstances, we attempted to communicate with all of our owners promptly (via the October 14th letter) so that, if they wished, they could prepare themselves to articipate by the November 13th record date. It was particularly important that this information be communicated promptly to stockholders whose holdings were in nominee name, since they would not be eligible unless they took action to re-register their shares before the record date.

Unfortunately, communication to such non-record shareholders could take place only through the nominees. We therefore strongly urged those nominees, mostly brokerage houses, to promptly transmit our letter to the real owners. We explained that their failure to do so could deprive such owners of an important benefit.

The results from our urgings would not strengthen the case for private ownership of the U.S. Postal Service. Many of our shareholders never heard from their brokers (as some

shareholders told us after reading news accounts of the program). Others were forwarded our letter too late for action.

One of the largest brokerage houses claiming to hold stock for sixty of its clients (about 4% of our shareholder population), apparently transmitted our letter about three weeks after receipt - too late for any of the sixty to participate. (Such lassitude did not pervade all departments of that firm; it billed Berkshire for mailing services within six days of that belated and ineffectual action.)

We recite such horror stories for two reasons: (1) if you wish to participate in future designated contribution programs, be sure to have your stock registered in your name well before September 30th; and (2) even if you don't care to participate and prefer to leave your stock in nominee form, it would be wise to have at least one share registered in your own name. By so doing, you can be sure that you will be notified of any important corporate news at the same time as all other shareholders.

The designated-contributions idea, along with many other ideas that have turned out well for us, was conceived by Charlie Munger, Vice Chairman of Berkshire and Chairman of Blue Chip. Irrespective of titles, Charlie and I work as partners in managing all controlled companies. To almost a sinful degree, we enjoy our work as managing partners. And we enjoy having you as our financial partners.

Warren E. Buffett
Chairman of the Board

1982 Letter

BERKSHIRE HATHAWAY INC.

March 3, 1983

To the Stockholders of Berkshire Hathaway Inc.:

Operating earnings of $31.5 million in 1982 amounted to only 9.8% of beginning equity capital (valuing securities at cost), down from 15.2% in 1981 and far below our recent high of 19.4% in 1978. This decline largely resulted from:

(1) a significant deterioration in insurance underwriting results;

(2) a considerable expansion of equity capital without a corresponding growth in the businesses we operate directly; and

(3) a continually-enlarging commitment of our resources to investment in partially-owned, nonoperated businesses; accounting rules dictate that a major part of our pro-rata share of earnings from such businesses must be excluded from Berkshire's reported earnings.

It was only a few years ago that we told you that the operating earnings/equity capital percentage, with proper allowance for a few other variables, was the most important yardstick of single-year managerial performance. While we still believe this to be the case with the vast majority of companies, we believe its utility in our own case has greatly diminished. You should be suspicious of such an assertion. Yardsticks seldom are discarded while yielding favorable readings. But when results deteriorate, most managers favor disposition of the yardstick rather than disposition of the manager.

To managers faced with such deterioration, a more flexible measurement system often suggests itself: just shoot the arrow of business performance into a blank canvas and then carefully draw the bullseye around the implanted arrow. We generally believe in pre-set, long-lived and small bullseyes. However, because of the importance of item (3) above, further explained in the following section, we believe our abandonment of the operating earnings/equity capital bullseye to be warranted.

Non-Reported Ownership Earnings

The appended financial statements reflect "accounting" earnings that generally include our proportionate share of earnings from any underlying business in which our ownership is at least 20%. Below the 20% ownership figure, however, only our share of dividends paid by the underlying business units is included in our accounting numbers; undistributed earnings of such less-than-20%-owned businesses are totally ignored.

There are a few exceptions to this rule; e.g., we own about 35% of GEICO Corporation but, because we have assigned our voting rights, the company is treated for accounting purposes as a less-than-20% holding. Thus, dividends received from GEICO in 1982 of $3.5 million after tax are the only item included in our "accounting"earnings. An additional $23 million that represents our share of GEICO's undistributed operating earnings for 1982 is totally excluded from our reported operating earnings. If GEICO had earned less money in 1982 but had paid an additional $1 million in dividends, our reported earnings would have been larger despite the poorer business results. Conversely, if GEICO had earned an additional $100 million - and retained it all - our reported earnings would have been unchanged. Clearly "accounting" earnings can seriously misrepresent economic reality.

We prefer a concept of "economic" earnings that includes all undistributed earnings, regardless of ownership percentage. In our view, the value to all owners of the retained earnings of a business enterprise is determined by the effectiveness with which those earnings are used - and not by the size of one's ownership percentage. If you have owned .01 of 1% of Berkshire during the past decade, you have benefited economically in full measure from your share of our retained earnings, no matter what your accounting system. Proportionately, you have done just as well as if you had owned the magic 20%. But if you have owned 100% of

a great many capital-intensive businesses during the decade, retained earnings that were credited fully and with painstaking precision to you under standard accounting methods have resulted in minor or zero economic value. This is not a criticism of accounting procedures. We would not like to have the job of designing a better system. It's simply to say that managers and investors alike must understand that accounting numbers are the beginning, not the end, of business valuation.

In most corporations, less-than-20% ownership positions are unimportant (perhaps, in part, because they prevent maximization of cherished reported earnings) and the distinction between accounting and economic results we have just discussed matters little. But in our own case, such positions are of very large and growing importance. Their magnitude, we believe, is what makes our reported operating earnings figure of limited significance.

In our 1981 annual report we predicted that our share of undistributed earnings from four of our major non-controlled holdings would aggregate over $35 million in 1982. With no change in our holdings of three of these companies - GEICO, General Foods and The Washington Post - and a considerable increase in our ownership of the fourth, R. J. Reynolds Industries, our share of undistributed 1982 operating earnings of this group came to well over $40 million. This number - not reflected at all in our earnings - is greater than our total reported earnings, which include only the $14 million in dividends received from these companies. And, of course, we have a number of smaller ownership interests that, in aggregate, had substantial additional undistributed earnings.

We attach real significance to the general magnitude of these numbers, but we don't believe they should be carried to ten decimal places. Realization by Berkshire of such retained earnings through improved market valuations is subject to very substantial, but indeterminate, taxation. And while retained earnings over the years, and in the aggregate, have translated into at least equal market value for shareholders, the translation has been both extraordinarily uneven among companies and irregular and unpredictable in timing.

However, this very unevenness and irregularity offers advantages to the value-oriented purchaser of fractional portions of businesses. This investor may select from almost the entire

array of major American corporations, including many far superior to virtually any of the businesses that could be bought in their entirety in a negotiated deal. And fractional-interest purchases can be made in an auction market where prices are set by participants with behavior patterns that sometimes resemble those of an army of manic-depressive lemmings.

Within this gigantic auction arena, it is our job to select businesses with economic characteristics allowing each dollar of retained earnings to be translated eventually into at least a dollar of market value. Despite a lot of mistakes, we have so far achieved this goal. In doing so, we have been greatly assisted by Arthur Okun's patron saint for economists - St.
Offset. In some cases, that is, retained earnings attributable to our ownership position have had insignificant or even negative impact on market value, while in other major positions a dollar retained by an investee corporation has been translated into two or more dollars of market value. To date, our corporate over-achievers have more than offset the laggards. If we can continue this record, it will validate our efforts to maximize "economic" earnings, regardless of the impact upon "accounting" earnings.

Satisfactory as our partial-ownership approach has been, what really makes us dance is the purchase of 100% of good businesses at reasonable prices. We've accomplished this feat a
few times (and expect to do so again), but it is an extraordinarily difficult job - far more difficult than the purchase at attractive prices of fractional interests.

As we look at the major acquisitions that others made during 1982, our reaction is not envy, but relief that we were non-participants. For in many of these acquisitions, managerial intellect wilted in competition with managerial adrenaline The thrill of the chase blinded the pursuers to the consequences of the catch. Pascal's observation seems apt: "It has struck me that all men's misfortunes spring from the single cause that they are unable to stay quietly in one room."

(Your Chairman left the room once too often last year and almost starred in the Acquisition Follies of 1982. In retrospect, our major accomplishment of the year was that a very large purchase to which we had firmly committed was unable to be completed for reasons totally beyond our control. Had it come off, this transaction would have consumed extraordinary amounts of time and energy, all for a most uncertain payoff. If we were to introduce graphics

to this report, illustrating favorable business developments of the past year, two blank pages depicting this blown deal would be the appropriate centerfold.)

Our partial-ownership approach can be continued soundly only as long as portions of attractive businesses can be acquired at attractive prices. We need a moderately-priced stock market to assist us in this endeavor. The market, like the Lord, helps those who help themselves. But, unlike the Lord, the market does not forgive those who know not what they do. For the investor, a too-high purchase price for the stock of an excellent company can undo the effects of a subsequent decade of favorable business developments.

Should the stock market advance to considerably higher levels, our ability to utilize capital effectively in partial-ownership positions will be reduced or eliminated. This will happen periodically: just ten years ago, at the height of the two-tier market mania (with high-return-on-equity businesses bid to the sky by institutional investors), Berkshire's insurance subsidiaries owned only $18 million in market value of equities, excluding their interest in Blue Chip Stamps. At that time, such equity holdings amounted to about 15% of our insurance company investments versus the present 80%. There were as many good businesses around in 1972 as in 1982, but the prices the stock market placed upon those businesses in 1972 looked absurd. While high stock prices in the future would make our performance look good temporarily, they would hurt our long-term business prospects rather than help them. We currently are seeing early traces of this problem.

Long-Term Corporate Performance

Our gain in net worth during 1982, valuing equities held by our insurance subsidiaries at market value (less capital gain taxes payable if unrealized gains were actually realized) amounted to $208 million. On a beginning net worth base of $519 million, the percentage gain was 40%.

During the 18-year tenure of present management, book value has grown from $19.46 per share to $737.43 per share, or 22.0% compounded annually. You can be certain that this percentage will diminish in the future. Geometric progressions eventually forge their own anchors.

Berkshire's economic goal remains to produce a long-term rate of return well above the return achieved by the average large American corporation. Our willingness to purchase either partial or total ownership positions in favorably-situated businesses, coupled with reasonable discipline about the prices we are willing to pay, should give us a good chance of achieving our goal.

Again this year the gain in market valuation of partially-owned businesses outpaced the gain in underlying economic value of those businesses. For example, $79 million of our $208 million gain is attributable to an increased market price for GEICO. This company continues to do exceptionally well, and we are more impressed than ever by the strength of GEICO's basic business idea and by the management skills of Jack Byrne. (Although not found in the catechism of the better business schools, "Let Jack Do It" works fine as a corporate creed for us.)

However, GEICO's increase in market value during the past two years has been considerably greater than the gain in its intrinsic business value, impressive as the latter has been. We expected such a favorable variation at some point, as the perception of investors converged with business reality. And we look forward to substantial future gains in underlying business value accompanied by irregular, but eventually full, market recognition of such gains.

Year-to-year variances, however, cannot consistently be in our favor. Even if our partially-owned businesses continue to perform well in an economic sense, there will be years when they perform poorly in the market. At such times our net worth could shrink significantly. We will not be distressed by such a shrinkage; if the businesses continue to look attractive and we have cash available, we simply will add to our holdings at even more favorable prices.

Sources of Reported Earnings

The table below shows the sources of Berkshire's reported earnings. In 1981 and 1982 Berkshire owned about 60% of Blue Chip Stamps which, in turn, owned 80% of Wesco Financial Corporation. The table displays aggregate operating earnings of the various business entities, as well as Berkshire's share of those earnings. All of the significant gains and losses attributable to unusual sales of assets by any of the business entities are aggregated with securities transactions in the line near the bottom of the table, and are not included in operating earnings.

	Earnings	***Before***	***Income***	***Taxes***	**Net Earnings**	**After Tax**
	Total	Total	Berkshire	Share	Berkshire	Share
000's of $'s	1982	1981	1982	1981	1982	1981
Operating Earnings: Underwriting	($21,558)	$1,478	($21,558)	$1,478	($11,345)	$798
Net investment income	$41,620	$38,823	$41,620	$38,823	$35,270	$32,401
Berkshire Waumbec Textiles	($1,545)	($2,669)	($1,545)	($2,669)	$(862)	$(1,493)
Associated Retail Stores	$914	$1,763	$914	$1,763	$446	$759
See's Candies	$23,884	$20,961	$14,235	$12,493	$6,914	$5,910
Buffalo Evening News	($1,215)	($1,217)	($724)	($725)	($226)	($320)
Blue Chip Stamps - Parent	$4,182	$3,642	$2,492	$2,171	$2,472	$2,134
Wesco Financial – Parent	$6,156	$4,495	$2,937	$2,145	$2,210	$1,590
Mutual Savings & Loan	(6)	$1,605	(2)	$766	$1,524	$1,536
Precision Steel	$1,035	$3,453	$493	$1,648	$265	$841
Interest on Debt	($14,996)	($14,656)	($12,977)	($12,649)	($6,951)	($6,671)
Other*	$2,631	$2,985	$1,857	$1,992	$1,780	$1,513
Operating Earnings	$41,102	$60,663	$27,742	$47,236	$31,497	$39,421
Sale of securities and unusual sales of assets	$36,651	$37,801	$21,875	$33,150	$14,877	$23,183
Total Earnings- all entities	**$77,753**	**$98,464**	**$49,617**	**$80,386**	**$46,374**	**$62,604**

* Amortization of intangibles arising in accounting for purchases of businesses (i.e. See's, Mutual and Buffalo Evening News) is reflected in the category designated as "Other".

On pages 45-61 of this report we have reproduced the narrative reports of the principal executives of Blue Chip and Wesco, in which they describe 1982 operations. A copy of the full annual report of either company will be mailed to any Berkshire shareholder upon request to Mr. Robert H. Bird for Blue Chip Stamps, 5801 South Eastern Avenue, Los Angeles, California 90040, or to Mrs. Jeanne Leach for Wesco Financial Corporation, 315 East Colorado Boulevard, Pasadena, California 91109.

I believe you will find the Blue Chip chronicle of developments in the Buffalo newspaper situation particularly interesting. There are now only 14 cities in the United States with a daily newspaper whose weekday circulation exceeds that of the Buffalo News. But the real story has been the growth in Sunday circulation. Six years ago, prior to introduction of a Sunday edition of the News, the long-established Courier-Express, as the only Sunday newspaper published in Buffalo, had circulation of 272,000. The News now has Sunday circulation of 367,000, a 35% gain - even though the number of households within the primary circulation area has shown little change during the six years. We know of no city in the United States with a long history of seven-day newspaper publication in which the percentage of households purchasing the Sunday newspaper has grown at anything like this rate. To the contrary, in most cities household penetration figures have grown negligibly, or not at all. Our key managers in Buffalo - Henry Urban, Stan Lipsey, Murray Light, Clyde Pinson, Dave Perona and Dick Feather - deserve great credit for this unmatched expansion in Sunday readership.

As we indicated earlier, undistributed earnings in companies we do not control are now fully as important as the reported operating earnings detailed in the preceding table. The distributed portion of non-controlled earnings, of course, finds its way into that table primarily through the net investment income segment of Insurance Group earnings.

We show below Berkshire's proportional holdings in those non-controlled businesses for which only distributed earnings (dividends) are included in our earnings.

No. of Shares	Company	Cost (000's omitted)	Market (000's omitted)
460,650 (a)	Affiliated Publications, Inc.	$3,516	$16,929
908,800 (c)	Crum & Forster	$47,144	$48,962
2,101,244 (b)	General Foods, Inc.	$66,277	$83,680
7,200,000 (a)	GEICO Corporation	$47,138	$309,600
2,379,200 (a)	Handy & Harman	$27,318	$46,692
711,180 (a)	Interpublic Group of Companies	$4,531	$34,314
282,500 (a)	Media General, Inc.	$4,545	$12,289
391,400 (a)	Ogilvy & Mather Int'l. Inc.	$3,709	$17,319
3,107,675 (b)	R. J. Reynolds Industries	$142,343	$158,715
1,531,391 (a)	Time, Inc.	$45,273	$79,824
1,868,600 (a)	The Washington Post Company Class B	$10,628	$103,240
	Total	**$402,422**	**$911,564**
	All Other Common Stockholdings	**$21,611**	**$21,611**
	Total Common Stocks	**$424,033**	**$945,622**

(a) All owned by Berkshire or its insurance subsidiaries.

(b) Blue Chip and/or Wesco own shares of these companies. All numbers represent Berkshire's net interest in the larger gross holdings of the group.

(c) Temporary holding as cash substitute.

In case you haven't noticed, there is an important investment lesson to be derived from this table: nostalgia should be weighted heavily in stock selection. Our two largest unrealized gains are in Washington Post and GEICO, companies with which your Chairman formed his first commercial connections at the ages of 13 and 20, respectively After straying for roughly 25 years, we returned as investors in the mid-1970s. The table quantifies the rewards for even long-delayed corporate fidelity.

Our controlled and non-controlled businesses operate over such a wide spectrum that detailed commentary here would prove too lengthy. Much financial and operational

information regarding the controlled businesses is included in Management's Discussion on pages 34-39, and in the narrative reports on pages 45-61. However, our largest area of business activity has been, and almost certainly will continue to be, the property-casualty insurance area. So commentary on developments in that industry is appropriate.

Insurance Industry Conditions

We show below an updated table of the industry statistics we utilized in last year's annual report. Its message is clear: underwriting results in 1983 will not be a sight for the squeamish.

Year	Yearly Change in Premium Written (%)	Yearly Change in Premium Earned (%)	Combined Ratio after Policy-holder Dividends
1972	10.2	10.9	96.2
1973	8.0	8.8	99.2
1974	6.2	6.9	105.4
1975	11.0	9.6	107.9
1976	21.9	19.4	102.4
1977	19.8	20.5	97.2
1978	12.8	14.3	97.5
1979	10.3	10.4	100.6
1980	6.0	7.8	103.1
1981 (Rev)	3.9	4.1	106.0
1982 (Est)	5.1	4.6	109.5

Source: Best's Aggregates and Averages.

The Best's data reflect the experience of practically the entire industry, including stock, mutual and reciprocal companies. The combined ratio represents total operating and loss costs as compared to revenue from premiums; a ratio below 100 indicates an underwriting profit, and one above 100 indicates a loss.

For reasons outlined in last year's report, as long as the annual gain in industry premiums written falls well below 10%, you can expect the underwriting picture in the next year to deteriorate. This will be true even at today's lower general rate of inflation. With the number of policies increasing annually, medical inflation far exceeding general inflation, and concepts of insured liability broadening, it is highly unlikely that yearly increases in insured losses will fall much below 10%.

You should be further aware that the 1982 combined ratio of 109.5 represents a "best case" estimate. In a given year, it is possible for an insurer to show almost any profit number it wishes, particularly if it (1) writes "long-tail" business (coverage where current costs can be only estimated, because claim payments are long delayed), (2) has been adequately reserved in the past, or (3) is growing very rapidly. There are indications that several large insurers opted in 1982 for obscure accounting and reserving maneuvers that masked significant deterioration in their underlying businesses. In insurance, as elsewhere, the reaction of weak managements to weak operations is often weak accounting. ("It's difficult for an empty sack to stand upright.")

The great majority of managements, however, try to play it straight. But even managements of integrity may subconsciously be less willing in poor profit years to fully recognize adverse loss trends. Industry statistics indicate some deterioration in loss reserving practices during 1982 and the true combined ratio is likely to be modestly worse than indicated by our table.

The conventional wisdom is that 1983 or 1984 will see the worst of underwriting experience and then, as in the past, the "cycle" will move, significantly and steadily, toward better results. We disagree because of a pronounced change in the competitive environment, hard to see for many years but now quite visible.

To understand the change, we need to look at some major factors that affect levels of corporate profitability generally. Businesses in industries with both substantial over-capacity and a "commodity" product (undifferentiated in any customer-important way by factors such as performance, appearance, service support, etc.) are prime candidates for profit troubles. These may be escaped, true, if prices or costs are administered in some manner and thereby insulated at least partially from normal market forces. This administration can be carried out

(a) legally through government intervention (until recently, this category included pricing for truckers and deposit costs for financial institutions), (b) illegally through collusion, or (c) "extra-legally" through OPEC-style foreign cartelization (with tag-along benefits for domestic non-cartel operators).

If, however, costs and prices are determined by full-bore competition, there is more than ample capacity, and the buyer cares little about whose product or distribution services he uses, industry economics are almost certain to be unexciting. They may well be disastrous.

Hence the constant struggle of every vendor to establish and emphasize special qualities of product or service. This works with candy bars (customers buy by brand name, not by asking for a "two-ounce candy bar") but doesn't work with sugar (how often do you hear, "I'll have a cup of coffee with cream and C & H sugar, please").

In many industries, differentiation simply can't be made meaningful. A few producers in such industries may consistently do well if they have a cost advantage that is both wide and sustainable. By definition such exceptions are few, and, in many industries, are non-existent. For the great majority of companies selling "commodity"products, a depressing equation of business economics prevails: persistent over-capacity without administered prices (or costs) equals poor profitability.

Of course, over-capacity may eventually self-correct, either as capacity shrinks or demand expands. Unfortunately for the participants, such corrections often are long delayed. When they finally occur, the rebound to prosperity frequently produces a pervasive enthusiasm for expansion that, within a few years, again creates over-capacity and a new profitless environment. In other words, nothing fails like success.

What finally determines levels of long-term profitability in such industries is the ratio of supply-tight to supply-ample years. Frequently that ratio is dismal. (It seems as if the most recent supply-tight period in our textile business - it occurred some years back - lasted the better part of a morning.)

In some industries, however, capacity-tight conditions can last a long time. Sometimes actual growth in demand will outrun forecasted growth for an extended period. In other cases,

adding capacity requires very long lead times because complicated manufacturing facilities must be planned and built.

But in the insurance business, to return to that subject, capacity can be instantly created by capital plus an underwriter's willingness to sign his name. (Even capital is less important in a world in which state-sponsored guaranty funds protect many policyholders against insurer insolvency.) Under almost all conditions except that of fear for survival - produced, perhaps, by a stock market debacle or a truly major natural disaster - the insurance industry operates under the competitive sword of substantial overcapacity. Generally, also, despite heroic attempts to do otherwise, the industry sells a relatively undifferentiated commodity-type product. (Many insureds, including the managers of large businesses, do not even know the names of their insurers.) Insurance, therefore, would seem to be a textbook case of an industry usually faced with the deadly combination of excess capacity and a "commodity" product.

Why, then, was underwriting, despite the existence of cycles, generally profitable over many decades? (From 1950 through 1970, the industry combined ratio averaged 99.0 allowing all investment income plus 1% of premiums to flow through to profits.) The answer lies primarily in the historic methods of regulation and distribution. For much of this century, a large portion of the industry worked, in effect, within a legal quasi-administered pricing system fostered by insurance regulators. While price competition existed, it was not pervasive among the larger companies. The main competition was for agents, who were courted via various non-price-related strategies.

For the giants of the industry, most rates were set through negotiations between industry "bureaus" (or through companies acting in accord with their recommendations) and state regulators. Dignified haggling occurred, but it was between company and regulator rather than between company and customer. When the dust settled, Giant A charged the same price as Giant B - and both companies and agents were prohibited by law from cutting such filed rates.

The company-state negotiated prices included specific profit allowances and, when loss data indicated that current prices were unprofitable, both company managements and state regulators expected that they would act together to correct the situation. Thus, most of the

pricing actions of the giants of the industry were “gentlemanly”, predictable, and profit-producing. Of prime importance - and in contrast to the way most of the business world operated - insurance companies could legally price their way to profitability even in the face of substantial over-capacity.

That day is gone. Although parts of the old structure remain, far more than enough new capacity exists outside of that structure to force all parties, old and new, to respond. The new capacity uses various methods of distribution and is not reluctant to use price as a prime competitive weapon. Indeed, it relishes that use. In the process, customers have learned that insurance is no longer a one-price business. They won’t forget.

Future profitability of the industry will be determined by current competitive characteristics, not past ones. Many managers have been slow to recognize this. It’s not only generals that prefer to fight the last war. Most business and investment analysis also comes from the rear-view mirror. It seems clear to us, however, that only one condition will allow the insurance industry to achieve significantly improved underwriting results. That is the same condition that will allow better results for the aluminum, copper, or corn producer - a major narrowing of the gap between demand and supply.

Unfortunately, there can be no surge in demand for insurance policies comparable to one that might produce a market tightness in copper or aluminum. Rather, the supply of available insurance coverage must be curtailed. “Supply”, in this context, is mental rather than physical: plants or companies need not be shut; only the willingness of underwriters to sign their names need be curtailed.

This contraction will not happen because of generally poor profit levels. Bad profits produce much hand-wringing and finger-pointing. But they do not lead major sources of insurance capacity to turn their backs on very large chunks of business, thereby sacrificing market share and industry significance.

Instead, major capacity withdrawals require a shock factor such as a natural or financial “megadisaster”. One might occur tomorrow - or many years from now. The insurance business - even taking investment income into account - will not be particularly profitable in the meantime.

When supply ultimately contracts, large amounts of business will be available for the few with large capital capacity, a willingness to commit it, and an in-place distribution system. We would expect great opportunities for our insurance subsidiaries at such a time.

During 1982, our insurance underwriting deteriorated far more than did the industry's. From a profit position well above average, we, slipped to a performance modestly below average. The biggest swing was in National Indemnity's traditional coverages. Lines that have been highly profitable for us in the past are now priced at levels that guarantee underwriting losses. In 1983 we expect our insurance group to record an average performance in an industry in which average is very poor.

Two of our stars, Milt Thornton at Cypress and Floyd Taylor at Kansas Fire and Casualty, continued their outstanding records of producing an underwriting profit every year since joining us. Both Milt and Floyd simply are incapable of being average. They maintain a passionately proprietary attitude toward their operations and have developed a business culture centered upon unusual cost-consciousness and customer service. It shows on their scorecards.

During 1982, parent company responsibility for most of our insurance operations was given to Mike Goldberg. Planning, recruitment, and monitoring all have shown significant improvement since Mike replaced me in this role.

GEICO continues to be managed with a zeal for efficiency and value to the customer that virtually guarantees unusual success. Jack Byrne and Bill Snyder are achieving the most elusive of human goals - keeping things simple and remembering what you set out to do. In Lou Simpson, additionally, GEICO has the best investment manager in the property-casualty business. We are happy with every aspect of this operation. GEICO is a magnificent illustration of the high-profit exception we described earlier in discussing commodity industries with over-capacity - a company with a wide and sustainable cost advantage. Our 35% interest in GEICO represents about $250 million of premium volume, an amount considerably greater than all of the direct volume we produce.

Issuance of Equity

Berkshire and Blue Chip are considering merger in 1983. If it takes place, it will involve an exchange of stock based upon an identical valuation method applied to both companies. The one other significant issuance of shares by Berkshire or its affiliated companies that occurred during present management's tenure was in the 1978 merger of Berkshire with Diversified Retailing Company.

Our share issuances follow a simple basic rule: we will not issue shares unless we receive as much intrinsic business value as we give. Such a policy might seem axiomatic. Why, you might ask, would anyone issue dollar bills in exchange for fifty-cent pieces? Unfortunately, many corporate managers have been willing to do just that.

The first choice of these managers in making acquisitions may be to use cash or debt. But frequently the CEO's cravings outpace cash and credit resources (certainly mine always have). Frequently, also, these cravings occur when his own stock is selling far below intrinsic business value. This state of affairs produces a moment of truth. At that point, as Yogi Berra has said, "You can observe a lot just by watching." For shareholders then will find which objective the management truly prefers - expansion of domain or maintenance of owners' wealth.

The need to choose between these objectives occurs for some simple reasons. Companies often sell in the stock market below their intrinsic business value. But when a company wishes to sell out completely, in a negotiated transaction, it inevitably wants to - and usually can - receive full business value in whatever kind of currency the value is to be delivered. If cash is to be used in payment, the seller's calculation of value received couldn't be easier. If stock of the buyer is to be the currency, the seller's calculation is still relatively easy: just figure the market value in cash of what is to be received in stock.

Meanwhile, the buyer wishing to use his own stock as currency for the purchase has no problems if the stock is selling in the market at full intrinsic value.

But suppose it is selling at only half intrinsic value. In that case, the buyer is faced with the unhappy prospect of using a substantially undervalued currency to make its purchase.

Ironically, were the buyer to instead be a seller of its entire business, it too could negotiate for, and probably get, full intrinsic business value. But when the buyer makes a partial sale of

itself - *and that is what the issuance of shares to make an acquisition amounts to* - it can customarily get no higher value set on its shares than the market chooses to grant it.

The acquirer who nevertheless barges ahead ends up using an undervalued (market value) currency to pay for a fully valued (negotiated value) property. In effect, the acquirer must give up $2 of value to receive $1 of value. Under such circumstances, a marvelous business purchased at a fair sales price becomes a terrible buy. For gold valued as gold cannot be purchased intelligently through the utilization of gold - or even silver - valued as lead.

If, however, the thirst for size and action is strong enough, the acquirer's manager will find ample rationalizations for such a value-destroying issuance of stock. Friendly investment bankers will reassure him as to the soundness of his actions. (Don't ask the barber whether you need a haircut.)

A few favorite rationalizations employed by stock-issuing managements follow:

(a) "The company we're buying is going to be worth a lot more in the future." (Presumably so is the interest in the old business that is being traded away; future prospects are implicit in the business valuation process. If 2X is issued for X, the imbalance still exists when both parts double in business value.)

(b) "We have to grow." (Who, it might be asked, is the "we"? For present shareholders, the reality is that all existing businesses shrink when shares are issued. Were Berkshire to issue shares tomorrow for an acquisition, Berkshire would own everything that it now owns plus the new business, but *your* interest in such hard-to-match businesses as See's Candy Shops, National Indemnity, etc. would automatically be reduced. If (1) your family owns a 120-acre farm and (2) you invite a neighbor with 60 acres of comparable land to merge his farm into an equal partnership - with you to be managing partner, then (3) your managerial domain will have grown to 180 acres but you will have permanently shrunk by 25% your family's ownership interest in both acreage and crops. Managers who want to expand their domain at the expense of owners might better consider a career in government.)

(c) “Our stock is undervalued and we’ve minimized its use in this deal - but we need to give the selling shareholders 51% in stock and 49% in cash so that certain of those shareholders can get the tax-free exchange they want.” (This argument acknowledges that it is beneficial to the acquirer to hold down the issuance of shares, and we like that. But if it hurts the old owners to utilize shares on a 100% basis, it very likely hurts on a 51% basis. After all, a man is not charmed if a spaniel defaces his lawn, just because it’s a spaniel and not a St. Bernard. And the wishes of sellers can’t be the determinant of the best interests of the buyer - what would happen if, heaven forbid, the seller insisted that as a condition of merger the CEO of the acquirer be replaced?)

There are three ways to avoid destruction of value for old owners when shares are issued for acquisitions. One is to have a true business-value-for-business-value merger, such as the Berkshire-Blue Chip combination is intended to be. Such a merger attempts to be fair to shareholders of *both* parties, with each receiving just as much as it gives in terms of intrinsic business value. The Dart Industries-Kraft and Nabisco Standard Brands mergers appeared to be of this type, but they are the exceptions. It’s not that acquirers wish to avoid such deals; it’s just that they are very hard to do.

The second route presents itself when the acquirer’s stock sells at or above its intrinsic business value. In that situation, the use of stock as currency actually may enhance the wealth of the acquiring company’s owners. Many mergers were accomplished on this basis in the 1965-69 period. The results were the converse of most of the activity since 1970: the shareholders of the *acquired* company received very inflated currency (frequently pumped up by dubious accounting and promotional techniques) and were the losers of wealth through such transactions.

During recent years the second solution has been available to very few large companies. The exceptions have primarily been those companies in glamorous or promotional businesses to which the market temporarily attaches valuations at or above intrinsic business valuation.

The third solution is for the acquirer to go ahead with the acquisition, but then subsequently repurchase a quantity of shares equal to the number issued in the merger. In this manner,

what originally was a stock-for-stock merger can be converted, effectively, into a cash-for-stock acquisition. Repurchases of this kind are damage-repair moves. Regular readers will correctly guess that we much prefer repurchases that directly enhance the wealth of owners instead of repurchases that merely repair previous damage. Scoring touchdowns is more exhilarating than recovering one's fumbles. But, when a fumble has occurred, recovery is important and we heartily recommend damage-repair repurchases that turn a bad stock deal into a fair cash deal.

The language utilized in mergers tends to confuse the issues and encourage irrational actions by managers. For example, "dilution" is usually carefully calculated on a pro forma basis for both book value and current earnings per share. Particular emphasis is given to the latter item. When that calculation is negative (dilutive) from the acquiring company's standpoint, a justifying explanation will be made (internally, if not elsewhere) that the lines will cross favorably at some point in the future. (While deals often fail in practice, they never fail in projections - if the CEO is visibly panting over a prospective acquisition, subordinates and consultants will supply the requisite projections to rationalize any price.) Should the calculation produce numbers that are immediately positive - that is, anti-dilutive - for the acquirer, no comment is thought to be necessary.

The attention given this form of dilution is overdone: current earnings per share (or even earnings per share of the next few years) are an important variable in most business valuations, but far from all powerful.

There have been plenty of mergers, non-dilutive in this limited sense, that were instantly value destroying for the acquirer. And some mergers that have diluted current and near-term earnings per share have in fact been value-enhancing. What really counts is whether a merger is dilutive or anti-dilutive in terms of intrinsic business value (a judgment involving consideration of many variables). We believe calculation of dilution from this viewpoint to be all-important (and too seldom made).

A second language problem relates to the equation of exchange. If Company A announces that it will issue shares to merge with Company B, the process is customarily described as

"Company A to Acquire Company B", or "B Sells to A". Clearer thinking about the matter would result if a more awkward but more accurate description were used: "Part of A sold to acquire B", or "Owners of B to receive part of A in exchange for their properties". In a trade, what you are giving is just as important as what you are getting. This remains true even when the final tally on what is being given is delayed. Subsequent sales of common stock or convertible issues, either to complete the financing for a deal or to restore balance sheet strength, must be fully counted in evaluating the fundamental mathematics of the original acquisition. (If corporate pregnancy is going to be the consequence of corporate mating, the time to face that fact is before the moment of ecstasy.)

Managers and directors might sharpen their thinking by asking themselves if they would sell 100% of their business on the same basis they are being asked to sell part of it. And if it isn't smart to sell all on such a basis, they should ask themselves why it is smart to sell a portion. A cumulation of small managerial stupidities will produce a major stupidity - not a major triumph. (Las Vegas has been built upon the wealth transfers that occur when people engage in seemingly-small disadvantageous capital transactions.)

The "giving versus getting" factor can most easily be calculated in the case of registered investment companies. Assume Investment Company X, selling at 50% of asset value, wishes to merge with Investment Company Y. Assume, also, that Company X therefore decides to issue shares equal in market value to 100% of Y's asset value.

Such a share exchange would leave X trading $2 of its previous intrinsic value for $1 of Y's intrinsic value. Protests would promptly come forth from both X's shareholders and the SEC, which rules on the fairness of registered investment company mergers. Such a transaction simply would not be allowed.

In the case of manufacturing, service, financial companies, etc., values are not normally as precisely calculable as in the case of investment companies. But we have seen mergers in these industries that just as dramatically destroyed value for the owners of the acquiring company as was the case in the hypothetical illustration above. This destruction could not happen if management and directors would assess the fairness of any transaction by using the same yardstick in the measurement of both businesses.

Finally, a word should be said about the "double whammy" effect upon owners of the acquiring company when value-diluting stock issuances occur. Under such circumstances, the first blow is the loss of intrinsic business value that occurs through the merger itself. The second is the downward revision in market valuation that, quite rationally, is given to that now-diluted business value. For current and prospective owners understandably will not pay as much for assets lodged in the hands of a management that has a record of wealth-destruction through unintelligent share issuances as they will pay for assets entrusted to a management with precisely equal operating talents, but a known distaste for anti-owner actions. Once management shows itself insensitive to the interests of owners, shareholders will suffer a long time from the price/value ratio afforded their stock (relative to other stocks), no matter what assurances management gives that the value-diluting action taken was a one-of-a-kind event.

Those assurances are treated by the market much as one-bug-in-the-salad explanations are treated at restaurants. Such explanations, even when accompanied by a new waiter, do not eliminate a drop in the demand (and hence market value) for salads, both on the part of the offended customer and his neighbors pondering what to order. Other things being equal, the highest stock market prices relative to intrinsic business value are given to companies whose managers have demonstrated their unwillingness to issue shares at any time on terms unfavorable to the owners of the business.

At Berkshire, or any company whose policies we determine (including Blue Chip and Wesco), we will issue shares only if our owners receive in business value as much as we give. We will not equate activity with progress or corporate size with owner-wealth.

Miscellaneous

This annual report is read by a varied audience, and it is possible that some members of that audience may be helpful to us in our acquisition program.

We prefer:

(1) large purchases (at least $5 million of after-tax earnings),

(2) demonstrated consistent earning power (future projections are of little interest to us, nor are "turn-around" situations),

(3) businesses earning good returns on equity while employing little or no debt,

(4) management in place (we can't supply it),

(5) simple businesses (if there's lots of technology, we won't understand it),

(6) an offering price (we don't want to waste our time or that of the seller by talking, even preliminarily, about a transaction when price is unknown).

We will not engage in unfriendly transactions. We can promise complete confidentiality and a very fast answer as to possible interest - customarily within five minutes. Cash purchases are preferred, but we will consider the use of stock when it can be done on the basis described in the previous section.

* * * * *

Our shareholder-designated contributions program met with enthusiasm again this year; 95.8% of eligible shares participated. This response was particularly encouraging since only $1 per share was made available for designation, down from $2 in 1981. If the merger with Blue Chip takes place, a probable by-product will be the attainment of a consolidated tax position that will significantly enlarge our contribution base and give us a potential for designating bigger per-share amounts in the future.

If you wish to participate in future programs, we strongly urge that you immediately make sure that your shares are registered in the actual owner's name, not a "street" or nominee name. For new shareholders, a more complete description of the program is on pages 62-63.

* * * * *

In a characteristically rash move, we have expanded World Headquarters by 252 square feet (17%), coincidental with the signing of a new five-year lease at 1440 Kiewit Plaza. The five people who work here with me - Joan Atherton, Mike Goldberg, Gladys Kaiser, Verne McKenzie and Bill Scott - outproduce corporate groups many times their number. A compact organization lets all of us spend our time managing the business rather than managing each other.

Charlie Munger, my partner in management, will continue to operate from Los Angeles whether or not the Blue Chip merger occurs. Charlie and I are interchangeable in business decisions. Distance impedes us not at all: we've always found a telephone call to be more productive than a half-day committee meeting.

* * * * *

Two of our managerial stars retired this year: Phil Liesche at 65 from National Indemnity Company, and Ben Rosner at 79 from Associated Retail Stores. Both of these men made you, as shareholders of Berkshire, a good bit wealthier than you otherwise would have been. National Indemnity has been the most important operation in Berkshire's growth. Phil and Jack Ringwalt, his predecessor, were the two prime movers in National Indemnity's success. Ben Rosner sold Associated Retail Stores to Diversified Retailing Company for cash in 1967, promised to stay on only until the end of the year, and then hit business home runs for us for the next fifteen years.

Both Ben and Phil ran their businesses for Berkshire with every bit of the care and drive that they would have exhibited had they personally owned 100% of these businesses. No rules were necessary to enforce or even encourage this attitude; it was embedded in the character of these men long before we came on the scene. Their good character became our good fortune. If we can continue to attract managers with the qualities of Ben and Phil, you need not worry about Berkshire's future.

Warren E. Buffett
Chairman of the Board

1983 Letter

BERKSHIRE HATHAWAY INC.

To the Shareholders of Berkshire Hathaway Inc.:

This past year our registered shareholders increased from about 1900 to about 2900. Most of this growth resulted from our merger with Blue Chip Stamps, but there also was an acceleration in the pace of "natural" increase that has raised us from the 1000 level a few years ago.

With so many new shareholders, it's appropriate to summarize the major business principles we follow that pertain to the manager-owner relationship:

o Although our form is corporate, our attitude is partnership. Charlie Munger and I think of our shareholders as owner-partners, and of ourselves as managing partners. (Because of the size of our shareholdings we also are, for better or worse, controlling partners.) We do not view the company itself as the ultimate owner of our business assets but, instead, view the company as a conduit through which our shareholders own the assets.

o In line with this owner-orientation, our directors are all major shareholders of Berkshire Hathaway. In the case of at least four of the five, over 50% of family net worth is represented by holdings of Berkshire. We eat our own cooking.

o Our long-term economic goal (subject to some qualifications mentioned later) is to maximize the average annual rate of gain in intrinsic business value on a per-share basis. We do not measure the economic significance or performance of Berkshire by its size; we measure by per-share progress. We are certain that the rate of per-share progress will diminish in the future - a greatly enlarged capital base will see to that. But we will be disappointed if our rate does not exceed that of the average large American corporation.

o Our preference would be to reach this goal by directly owning a diversified group of businesses that generate cash and consistently earn above-average returns on capital. Our second choice is to own parts of similar businesses, attained primarily through purchases of

marketable common stocks by our insurance subsidiaries. The price and availability of businesses and the need for insurance capital determine any given year's capital allocation.

o Because of this two-pronged approach to business ownership and because of the limitations of conventional accounting, consolidated reported earnings may reveal relatively little about our true economic performance. Charlie and I, both as owners and managers, virtually ignore such consolidated numbers. However, we will also report to you the earnings of each major business we control, numbers we consider of great importance. These figures, along with other information we will supply about the individual businesses, should generally aid you in making judgments about them.

o Accounting consequences do not influence our operating or capital-allocation decisions. When acquisition costs are similar, we much prefer to purchase $2 of earnings that is not reportable by us under standard accounting principles than to purchase $1 of earnings that is reportable. This is precisely the choice that often faces us since entire businesses (whose earnings will be fully reportable) frequently sell for double the pro-rata price of small portions (whose earnings will be largely unreportable). In aggregate and over time, we expect the unreported earnings to be fully reflected in our intrinsic business value through capital gains.

o We rarely use much debt and, when we do, we attempt to structure it on a long-term fixed rate basis. We will reject interesting opportunities rather than over-leverage our balance sheet. This conservatism has penalized our results but it is the only behavior that leaves us comfortable, considering our fiduciary obligations to policyholders, depositors, lenders and the many equity holders who have committed unusually large portions of their net worth to our care.

o A managerial "wish list" will not be filled at shareholder expense. We will not diversify by purchasing entire businesses at control prices that ignore long-term economic consequences to our shareholders. We will only do with your money what we would do with our own, weighing fully the values you can obtain by diversifying your own portfolios through direct purchases in the stock market.

o We feel noble intentions should be checked periodically against results. We test the wisdom of retaining earnings by assessing whether retention, over time, delivers shareholders at least $1 of market value for each $1 retained. To date, this test has been met. We will continue to apply it on a five-year rolling basis. As our net worth grows, it is more difficult to use retained earnings wisely.

o We will issue common stock only when we receive as much in business value as we give. This rule applies to all forms of issuance - not only mergers or public stock offerings, but stock for-debt swaps, stock options, and convertible securities as well. We will not sell small portions of your company - and that is what the issuance of shares amounts to - on a basis inconsistent with the value of the entire enterprise.

o You should be fully aware of one attitude Charlie and I share that hurts our financial performance: regardless of price, we have no interest at all in selling any good businesses that Berkshire owns, and are very reluctant to sell sub-par businesses as long as we expect them to generate at least some cash and as long as we feel good about their managers and labor relations. We hope not to repeat the capital-allocation mistakes that led us into such sub-par businesses. And we react with great caution to suggestions that our poor businesses can be restored to satisfactory profitability by major capital expenditures. (The projections will be dazzling - the advocates will be sincere - but, in the end, major additional investment in a terrible industry usually is about as rewarding as struggling in quicksand.) Nevertheless, gin rummy managerial behavior (discard your least promising business at each turn) is not our style. We would rather have our overall results penalized a bit than engage in it.

o We will be candid in our reporting to you, emphasizing the pluses and minuses important in appraising business value. Our guideline is to tell you the business facts that we would want to know if our positions were reversed. We owe you no less. Moreover, as a company with a major communications business, it would be inexcusable for us to apply lesser standards of accuracy, balance and incisiveness when reporting on ourselves than we would expect our news people to apply when reporting on others. We also believe candor benefits us as managers: the CEO who misleads others in public may eventually mislead himself in private.

o Despite our policy of candor, we will discuss our activities in marketable securities only to the extent legally required. Good investment ideas are rare, valuable and subject to competitive appropriation just as good product or business acquisition ideas are. Therefore, we normally will not talk about our investment ideas. This ban extends even to securities we have sold (because we may purchase them again) and to stocks we are incorrectly rumored to be buying. If we deny those reports but say "no comment" on other occasions, the no-comments become confirmation.

That completes the catechism, and we can now move on to the high point of 1983 - the acquisition of a majority interest in Nebraska Furniture Mart and our association with Rose Blumkin and her family.

Nebraska Furniture Mart

Last year, in discussing how managers with bright, but adrenalin-soaked minds scramble after foolish acquisitions, I quoted Pascal: "It has struck me that all the misfortunes of men spring from the single cause that they are unable to stay quietly in one room."

Even Pascal would have left the room for Mrs. Blumkin.

About 67 years ago Mrs. Blumkin, then 23, talked her way past a border guard to leave Russia for America. She had no formal education, not even at the grammar school level, and knew no English. After some years in this country, she learned the language when her older daughter taught her, every evening, the words she had learned in school during the day.

In 1937, after many years of selling used clothing, Mrs. Blumkin had saved $500 with which to realize her dream of opening a furniture store. Upon seeing the American Furniture Mart in Chicago - then the center of the nation's wholesale furniture activity - she decided to christen her dream Nebraska Furniture Mart.

She met every obstacle you would expect (and a few you wouldn't) when a business endowed with only $500 and no locational or product advantage goes up against rich, long-entrenched competition. At one early point, when her tiny resources ran out, "Mrs. B" (a personal trademark now as well recognized in Greater Omaha as Coca-Cola or Sanka) coped in a way not taught at business schools: she simply sold the furniture and appliances from her home in order to pay creditors precisely as promised.

Omaha retailers began to recognize that Mrs. B would offer customers far better deals than they had been giving, and they pressured furniture and carpet manufacturers not to sell to her. But by various strategies she obtained merchandise and cut prices sharply. Mrs. B was then hauled into court for violation of Fair Trade laws. She not only won all the cases, but received invaluable publicity. At the end of one case, after demonstrating to the court that she could profitably sell carpet at a huge discount from the prevailing price, she sold the judge $1400 worth of carpet.

Today Nebraska Furniture Mart generates over $100 million of sales annually out of one 200,000 square-foot store. No other home furnishings store in the country comes close to that volume. That single store also sells more furniture, carpets, and appliances than do all Omaha competitors combined.

One question I always ask myself in appraising a business is how I would like, assuming I had ample capital and skilled personnel, to compete with it. I'd rather wrestle grizzlies than compete with Mrs. B and her progeny. They buy brilliantly, they operate at expense ratios competitors don't even dream about, and they then pass on to their customers much of the savings. It's the ideal business - one built upon exceptional value to the customer that in turn translates into exceptional economics for its owners.

Mrs. B is wise as well as smart and, for far-sighted family reasons, was willing to sell the business last year. I had admired both the family and the business for decades, and a deal was quickly made. But Mrs. B, now 90, is not one to go home and risk, as she puts it, "losing her marbles". She remains Chairman and is on the sales floor seven days a week. Carpet sales are her specialty. She personally sells quantities that would be a good departmental total for other carpet retailers.

We purchased 90% of the business - leaving 10% with members of the family who are involved in management - and have optioned 10% to certain key young family managers.

And what managers they are. Geneticists should do handsprings over the Blumkin family. Louie Blumkin, Mrs. B's son, has been President of Nebraska Furniture Mart for many years and is widely regarded as the shrewdest buyer of furniture and appliances in the country. Louie says he had the best teacher, and Mrs. B says she had the best student. They're both right.

Louie and his three sons all have the Blumkin business ability, work ethic, and, most important, character. On top of that, they are really nice people. We are delighted to be in partnership with them.

Corporate Performance

During 1983 our book value increased from $737.43 per share to $975.83 per share, or by 32%. We never take the one-year figure very seriously. After all, why should the time required for a planet to circle the sun synchronize precisely with the time required for business actions to pay off? Instead, we recommend not less than a five-year test as a rough yardstick of economic performance. Red lights should start flashing if the five-year average annual gain falls much below the return on equity earned over the period by American industry in aggregate. (Watch out for our explanation if that occurs as Goethe observed, "When ideas fail, words come in very handy.")

During the 19-year tenure of present management, book value has grown from $19.46 per share to $975.83, or 22.6% compounded annually. Considering our present size, nothing close to this rate of return can be sustained. Those who believe otherwise should pursue a career in sales, but avoid one in mathematics.

We report our progress in terms of book value because in our case (though not, by any means, in all cases) it is a conservative but reasonably adequate proxy for growth in intrinsic business value - *the measurement that really counts.* Book value's virtue as a score-keeping measure is that it is easy to calculate and doesn't involve the subjective (but important) judgments employed in calculation of intrinsic business value. It is important to understand, however, that the two terms - book value and intrinsic business value - have very different meanings.

Book value is an accounting concept, recording the accumulated financial input from both contributed capital and retained earnings. Intrinsic business value is an economic concept, estimating future cash output discounted to present value. Book value tells you what has been put in; intrinsic business value estimates what can be taken out.

An analogy will suggest the difference. Assume you spend identical amounts putting each of two children through college. The book value (measured by financial input) of each child's

education would be the same. But the present value of the future payoff (the intrinsic business value) might vary enormously - from zero to many times the cost of the education. So, also, do businesses having equal financial input end up with wide variations in value.

At Berkshire, at the beginning of fiscal 1965 when the present management took over, the $19.46 per share book value considerably overstated intrinsic business value. All of that book value consisted of textile assets that could not earn, on average, anything close to an appropriate rate of return. In the terms of our analogy, the investment in textile assets resembled investment in a largely-wasted education.

Now, however, our intrinsic business value considerably exceeds book value. There are two major reasons:

(1) Standard accounting principles require that common stocks held by our insurance subsidiaries be stated on our books at market value, but that other stocks we own be carried at the lower of aggregate cost or market. At the end of 1983, the market value of this latter group exceeded carrying value by $70 million pre-tax, or about $50 million after tax. This excess belongs in our intrinsic business value, but is not included in the calculation of book value;

(2) More important, we own several businesses that possess economic Goodwill (which is properly includable in intrinsic business value) far larger than the accounting Goodwill that is carried on our balance sheet and reflected in book value.

Goodwill, both economic and accounting, is an arcane subject and requires more explanation than is appropriate here. The appendix that follows this letter - “Goodwill and its Amortization: The Rules and The Realities” - explains why economic and accounting Goodwill can, and usually do, differ enormously.

You can live a full and rewarding life without ever thinking about Goodwill and its amortization. But students of investment and management should understand the nuances of the subject. My own thinking has changed drastically from 35 years ago when I was taught to favor tangible assets and to shun businesses whose value depended largely upon economic Goodwill. This bias caused me to make many important business mistakes of omission, although relatively few of commission.

Keynes identified my problem: "The difficulty lies not in the new ideas but in escaping from the old ones." My escape was long delayed, in part because most of what I had been taught by the same teacher had been (and continues to be) so extraordinarily valuable. Ultimately, business experience, direct and vicarious, produced my present strong preference for businesses that possess large amounts of enduring Goodwill and that utilize a minimum of tangible assets.

I recommend the Appendix to those who are comfortable with accounting terminology and who have an interest in understanding the business aspects of Goodwill. Whether or not you wish to tackle the Appendix, you should be aware that Charlie and I believe that Berkshire possesses very significant economic Goodwill value above that reflected in our book value.

Sources of Reported Earnings

The table below shows the sources of Berkshire's reported earnings. In 1982, Berkshire owned about 60% of Blue Chip Stamps whereas, in 1983, our ownership was 60% throughout the first six months and 100% thereafter. In turn, Berkshire's net interest in Wesco was 48% during 1982 and the first six months of 1983, and 80% for the balance of 1983. Because of these changed ownership percentages, the first two columns of the table provide the best measure of underlying business performance.

All of the significant gains and losses attributable to unusual sales of assets by any of the business entities are aggregated with securities transactions on the line near the bottom of the table, and are not included in operating earnings. (We regard any annual figure for realized capital gains or losses as meaningless, but we regard the aggregate realized and unrealized capital gains over a period of years as very important.) Furthermore, amortization of Goodwill is not charged against the specific businesses but, for reasons outlined in the Appendix, is set forth as a separate item.

	Earnings	***Before***	***Income***	***Taxes***	**Net Earnings**	**After Tax**
	Total	Total	Berkshire	Share	Berkshire	Share
000's of $'s	1983	1982	1983	1982	1983	1982
Operating Earnings: Underwriting	($33,872)	($21,558)	($33,872)	($21,558)	($18,400)	($11,345)
Net investment income	$43,810	$41,620	$43,810	$41,620	$39,114	$35,270
Berkshire Waumbec Textiles	($100)	($1,545)	($100)	($1,545)	($63)	($862)
Associated Retail Stores	$697	$914	$697	$914	$355	$446
Nebraska Furntiure Mart (1)	$3,812	--	$3,049	--	$1,521	--
See's Candies	$27,411	$23,884	$24,526	$14,235	$12,212	$6,914
Buffalo Evening News	$19,352	($1,215)	$16,547	($724)	$8,832	($226)
Blue Chip Stamps (2)	($1,422	$4,182	($1,876)	$2,492	($353)	$2,472
Wesco Financial – Parent	$7,493	$6,156	$4,844	$2,937	$3,448	$2,210
Mutual Savings & Loan	($798)	($6)	($467)	($2)	$1,917	$1,524
Precision Steel	$3,241	$1,035	$2,102	$493	$1,136	$265
Interest on Debt	($15,104)	($14,996)	($13,844)	($12,977)	($7,346)	($6,951)
Special GEICO Distribution	$21,000	--	$21,000	--	$19,551	--
Shareholder-Designated Contributions	($3,066)	($891)	($3,066)	($891)	($1,656)	($481)
Amortization of Goodwill	($532)	$151	($563)	$90	($563)	$90
Other*	$10,121	$3,371	$9,623	$2,658	$8,490	$2,171
Operating Earnings	$82,043	$41,102	$72,410	$27,742	$68,195	$31,497
Sale of securities and unusual sales of assets	$67,260	$36,651	$65,089	$21,875	$45,298	$14,877
Total Earnings- all entities	**$149,303**	**$77,753**	**$137,499**	**$49,617**	**$113,493**	**$46,374**

(1) October through December

(2) 1982 and 1983 are not comparable; major assets were transferred in the merger.

For a discussion of the businesses owned by Wesco, please read Charlie Munger's report on pages 46-51. Charlie replaced Louie Vincenti as Chairman of Wesco late in 1983 when health forced Louie's retirement at age 77. In some instances, "health" is a euphemism, but in Louie's case nothing but health would cause us to consider his retirement. Louie is a marvelous man and has been a marvelous manager.

The special GEICO distribution reported in the table arose when that company made a tender offer for a portion of its stock, buying both from us and other shareholders. At GEICO's request, we tendered a quantity of shares that kept our ownership percentage the same after the transaction as before. The proportional nature of our sale permitted us to treat the proceeds as a dividend. Unlike individuals, corporations net considerably more when earnings are derived from dividends rather than from capital gains, since the effective Federal income tax rate on dividends is 6.9% versus 28% on capital gains.

Even with this special item added in, our total dividends from GEICO in 1983 were considerably less than our share of GEICO's earnings. Thus it is perfectly appropriate, from both an accounting and economic standpoint, to include the redemption proceeds in our reported earnings. It is because the item is large and unusual that we call your attention to it.

The table showing you our sources of earnings includes dividends from those non-controlled companies whose marketable equity securities we own. But the table does not include earnings those companies have retained that are applicable to our ownership. In aggregate and over time we expect those undistributed earnings to be reflected in market prices and to increase our intrinsic business value on a dollar-for-dollar basis, just as if those earnings had been under our control and reported as part of our profits. That does not mean we expect all of our holdings to behave uniformly; some will disappoint us, others will deliver pleasant surprises. To date our experience has been better than we originally anticipated, In aggregate, we have received far more than a dollar of market value gain for every dollar of earnings retained.

The following table shows our 1983 yearend net holdings in marketable equities. All numbers represent 100% of Berkshire's holdings, and 80% of Wesco's holdings. The portion attributable to minority shareholders of Wesco has been excluded.

No. of Shares	Company	Cost (000's omitted)	Market (000's omitted)
690,975	Affiliated Publications, Inc.	$3,516	$26,603
4,451,544	General Foods Corporation (a)	$163,786	$228,698
6,850,000	GEICO Corporation	$47,138	$398,156
2,379,200	Handy & Harman	$27,318	$42,231
636,310	Interpublic Group of Companies	$4,056	$33,088
197,200	Media General	$3,191	$11,191
250,400	Ogilvy & Mather Int'l. Inc.	$2,580	$12,833
5,618,661	R. J. Reynolds Industries, Inc. (a)	$268,918	$314,334
901,788	Time, Inc.	$27,732	$56,860
1,868,600	The Washington Post Company Class B	$10,628	$136,875
	Total	**$558,863**	**$1,287,869**
	All Other Common Stockholdings	**$7,485**	**$18,044**
	Total Common Stocks	**$566,348**	**$1,305,913**

(a) WESCO owns shares in these companies.

Based upon present holdings and present dividend rates - excluding any special items such as the GEICO proportional redemption last year - we would expect reported dividends from this group to be approximately $39 million in 1984. We can also make a very rough guess about the earnings this group will retain that will be attributable to our ownership: these may total about $65 million for the year. These retained earnings could well have no immediate effect on market prices of the securities. Over time, however, we feel they will have real meaning.

In addition to the figures already supplied, information regarding the businesses we control appears in Management's Discussion on pages 40-44. The most significant of these are Buffalo

Evening News, See's, and the Insurance Group, to which we will give some special attention here.

Buffalo Evening News

First, a clarification: our corporate name is Buffalo Evening News, Inc. but the name of the newspaper, since we began a morning edition a little over a year ago, is Buffalo News.

In 1983 the News somewhat exceeded its targeted profit margin of 10% after tax. Two factors were responsible: (1) a state income tax cost that was subnormal because of a large loss carry-forward, now fully utilized, and (2) a large drop in the per-ton cost of newsprint (an unanticipated fluke that will be reversed in 1984).

Although our profit margins in 1983 were about average for newspapers such as the News, the paper's performance, nevertheless, was a significant achievement considering the economic and retailing environment in Buffalo.

Buffalo has a concentration of heavy industry, a segment of the economy that was hit particularly hard by the recent recession and that has lagged the recovery. As Buffalo consumers have suffered, so also have the paper's retailing customers. Their numbers have shrunk over the past few years and many of those surviving have cut their linage.

Within this environment the News has one exceptional strength: its acceptance by the public, a matter measured by the paper's "penetration ratio" - the percentage of households within the community purchasing the paper each day. Our ratio is superb: for the six months ended September 30, 1983 the News stood number one in weekday penetration among the 100 largest papers in the United States (the ranking is based on "city zone" numbers compiled by the Audit Bureau of Circulations).

In interpreting the standings, it is important to note that many large cities have two papers, and that in such cases the penetration of either paper is necessarily lower than if there were a single paper, as in Buffalo. Nevertheless, the list of the 100 largest papers includes many that have a city to themselves. Among these, the News is at the top nationally, far ahead of many of the country's best-known dailies.

Among Sunday editions of these same large dailies, the News ranks number three in penetration - ten to twenty percentage points ahead of many well-known papers. It was not

always this way in Buffalo. Below we show Sunday circulation in Buffalo in the years prior to 1977 compared with the present period. In that earlier period the Sunday paper was the Courier-Express (the News was not then publishing a Sunday paper). Now, of course, it is the News.

Average Sunday Circulation

Year	Circulation
1970	314,000
1971	306,000
1972	302,000
1973	290,000
1974	278,000
1974	269,000
1975	270,000
1984 (Current)	376,000

We believe a paper's penetration ratio to be the best measure of the strength of its franchise. Papers with unusually high penetration in the geographical area that is of prime interest to major local retailers, and with relatively little circulation elsewhere, are exceptionally efficient buys for those retailers. Low-penetration papers have a far less compelling message to present to advertisers.

In our opinion, three factors largely account for the unusual acceptance of the News in the community. Among these, points 2 and 3 also may explain the popularity of the Sunday News compared to that of the Sunday Courier-Express when it was the sole Sunday paper:

(1) The first point has nothing to do with merits of the News. Both emigration and immigration are relatively low in Buffalo. A stable population is more interested and involved in the activities of its community than is a shifting population - and, as a result, is more interested in the content of the local daily paper. Increase the movement in and out of a city and penetration ratios will fall.

(2) The News has a reputation for editorial quality and integrity that was honed by our longtime editor, the legendary Alfred Kirchhofer, and that has been preserved and extended by Murray Light. This reputation was enormously important to our success in establishing a Sunday paper against entrenched competition. And without a Sunday edition, the News would not have survived in the long run.

(3) The News lives up to its name - it delivers a very unusual amount of news. During 1983, our "news hole" (editorial material - not ads) amounted to 50% of the newspaper's content (excluding preprinted inserts). Among papers that dominate their markets and that are of comparable or larger size, we know of only one whose news hole percentage exceeds that of the News. Comprehensive figures are not available, but a sampling indicates an average percentage in the high 30s. In other words, page for page, our mix gives readers over 25% more news than the typical paper. This news-rich mixture is by intent. Some publishers, pushing for higher profit margins, have cut their news holes during the past decade. We have maintained ours and will continue to do so. Properly written and edited, a full serving of news makes our paper more valuable to the reader and contributes to our unusual penetration ratio.

Despite the strength of the News' franchise, gains in ROP linage (advertising printed within the newspaper pages as contrasted to preprinted inserts) are going to be very difficult to achieve. We had an enormous gain in preprints during 1983: lines rose from 9.3 million to 16.4 million, revenues from $3.6 million to $8.1 million. These gains are consistent with national trends, but exaggerated in our case by business we picked up when the Courier-Express closed.

On balance, the shift from ROP to preprints has negative economic implications for us. Profitability on preprints is less and the business is more subject to competition from alternative means of delivery. Furthermore, a reduction in ROP linage means less absolute space devoted to news (since the news hole percentage remains constant), thereby reducing the utility of the paper to the reader.

Stan Lipsey became Publisher of the Buffalo News at midyear upon the retirement of Henry Urban. Henry never flinched during the dark days of litigation and losses following our introduction of the Sunday paper - an introduction whose wisdom was questioned

by many in the newspaper business, including some within our own building. Henry is admired by the Buffalo business community, he's admired by all who worked for him, and he is admired by Charlie and me. Stan worked with Henry for several years, and has worked for Berkshire Hathaway since 1969. He has been personally involved in all nuts-and-bolts aspects of the newspaper business from editorial to circulation. We couldn't do better.

See's Candy Shops

The financial results at See's continue to be exceptional. The business possesses a valuable and solid consumer franchise and a manager equally valuable and solid.

In recent years See's has encountered two important problems, at least one of which is well on its way toward solution. That problem concerns costs, except those for raw materials. We have enjoyed a break on raw material costs in recent years though so, of course, have our competitors. One of these days we will get a nasty surprise in the opposite direction. In effect, raw material costs are largely beyond our control since we will, as a matter of course, buy the finest ingredients that we can, regardless of changes in their price levels. We regard product quality as sacred.

But other kinds of costs are more controllable, and it is in this area that we have had problems. On a per-pound basis, our costs (not including those for raw materials) have increased in the last few years at a rate significantly greater than the increase in the general price level. It is vital to our competitive position and profit potential that we reverse this trend.

In recent months much better control over costs has been attained and we feel certain that our rate of growth in these costs in 1984 will be below the rate of inflation. This confidence arises out of our long experience with the managerial talents of Chuck Huggins. We put Chuck in charge the day we took over, and his record has been simply extraordinary, as shown by the following table:

52 – 53 Week Year Ended About December 31	Sales Revenues	Operating Profits After Taxes	Number of Pounds of Candy Sold	Number of Stores Open at Year End
1983 (53 Weeks)	$133,531,000	$13,699,000	24,651,000	207
1982	123,662,000	11,875,000	24,216,000	202
1981	112,578,000	10,779,000	24,052,000	199
1980	97,715,000	7,547,000	24,065,000	191
1979	87,314,000	6,330,000	23,985,000	188
1978	73,653,000	6,178,000	22,407,000	182
1977	62,886,000	6,154,000	20,921,000	179
1976	56,333,000	5,569,000	20,553,000	173
1975	50,492,000	5,132,000	19,134,000	172
1974	41,248,000	3,021,000	17,883,000	170
1973	35,050,000	1,940,000	17,813,000	169
1972	31,337,000	2,083,000	16,954,000	167

The other problem we face, as the table suggests, is our recent inability to achieve meaningful gains in pounds sold. The industry has the same problem. But for many years we outperformed the industry in this respect and now we are not.

The poundage volume in our retail stores has been virtually unchanged each year for the past four, despite small increases every year in the number of shops (and in distribution expense as well). Of course, dollar volume has increased because we have raised prices significantly. But we regard the most important measure of retail trends to be units sold per store rather than dollar volume. On a same-store basis (counting only shops open throughout both years) with all figures adjusted to a 52-week year, poundage was down .8 of 1% during 1983. This small decline was our best same-store performance since 1979; the cumulative

decline since then has been about 8%. Quantity-order volume, about 25% of our total, has plateaued in recent years following very large poundage gains throughout the 1970s.

We are not sure to what extent this flat volume - both in the retail shop area and the quantity order area - is due to our pricing policies and to what extent it is due to static industry volume, the recession, and the extraordinary share of market we already enjoy in our primary marketing area. Our price increase for 1984 is much more modest than has been the case in the past few years, and we hope that next year we can report better volume figures to you. But we have no basis to forecast these.

Despite the volume problem, See's strengths are many and important. In our primary marketing area, the West, our candy is preferred by an enormous margin to that of any competitor. In fact, we believe most lovers of chocolate prefer it to candy costing two or three times as much. (In candy, as in stocks, price and value can differ; price is what you give, value is what you get.) The quality of customer service in our shops - operated throughout the country by us and not by franchisees is every bit as good as the product. Cheerful, helpful personnel are as much a trademark of See's as is the logo on the box. That's no small achievement in a business that requires us to hire about 2000 seasonal workers. We know of no comparably-sized organization that betters the quality of customer service delivered by Chuck Huggins and his associates.

Because we have raised prices so modestly in 1984, we expect See's profits this year to be about the same as in 1983.

Insurance - Controlled Operations

We both operate insurance companies and have a large economic interest in an insurance business we don't operate, GEICO. The results for all can be summed up easily: in aggregate, the companies we operate and whose underwriting results reflect the consequences of decisions that were my responsibility a few years ago, had absolutely terrible results. Fortunately, GEICO, whose policies I do not influence, simply shot the lights out. The inference you draw from this summary is the correct one. I made some serious mistakes a few years ago that came home to roost.

The industry had its worst underwriting year in a long time, as indicated by the table below:

Year	Yearly Change in Premium Written (%)	Combined Ratio after Policy-holder Dividends
1972	10.2	96.2
1973	8.0	99.2
1974	6.2	105.4
1975	11.0	107.9
1976	21.9	102.4
1977	19.8	97.2
1978	12.8	97.5
1979	10.3	100.6
1980	6.0	103.1
1981	3.9	106.0
1982 (Rev)	4.4	109.7
1983 (Est)	4.6	110.0

Source: Best's Aggregates and Averages.

Best's data reflect the experience of practically the entire industry, including stock, mutual, and reciprocal companies. The combined ratio represents total insurance costs (losses incurred plus expenses) compared to revenue from premiums; a ratio below 100 indicates an underwriting profit and one above 100 indicates a loss.

For the reasons outlined in last year's report, we expect the poor industry experience of 1983 to be more or less typical for a good many years to come. (As Yogi Berra put it: "It will be deja vu all over again.") That doesn't mean we think the figures won't bounce around a bit; they are certain to. But we believe it highly unlikely that the combined ratio during the balance of the decade will average significantly below the 1981-1983 level. Based on our expectations regarding inflation - *and we are as pessimistic as ever on that front* - industry premium volume must grow about 10% annually merely to stabilize loss ratios at present levels.

Our own combined ratio in 1983 was 121. Since Mike Goldberg recently took over most of the responsibility for the insurance operation, it would be nice for me if our shortcomings could be placed at his doorstep rather than mine. But unfortunately, as we have often pointed out, the insurance business has a long lead-time. Though business policies may be changed and personnel improved, a significant period must pass before the effects are seen. (This characteristic of the business enabled us to make a great deal of money in GEICO; we could picture what was likely to happen well before it actually occurred.) So the roots of the 1983 results are operating and personnel decisions made two or more years back when I had direct managerial responsibility for the insurance group.

Despite our poor results overall, several of our managers did truly outstanding jobs. Roland Miller guided the auto and general liability business of National Indemnity Company and National Fire and Marine Insurance Company to improved results, while those of competitors deteriorated. In addition, Tom Rowley at Continental Divide Insurance - our fledgling Colorado homestate company - seems certain to be a winner. Mike found him a little over a year ago, and he was an important acquisition.

We have become active recently - and hope to become much more active - in reinsurance transactions where the buyer's overriding concern should be the seller's long-term creditworthiness. In such transactions our premier financial strength should make us the number one choice of both claimants and insurers who must rely on the reinsurer's promises for a great many years to come.

A major source of such business is structured settlements - a procedure for settling losses under which claimants receive periodic payments (almost always monthly, for life) rather than a single lump sum settlement. This form of settlement has important tax advantages for the claimant and also prevents his squandering a large lump-sum payment. Frequently, some inflation protection is built into the settlement. Usually the claimant has been seriously injured, and thus the periodic payments must be unquestionably secure for decades to come. We believe we offer unparalleled security. No other insurer we know of - even those with much larger gross assets - has our financial strength.

We also think our financial strength should recommend us to companies wishing to transfer loss reserves. In such transactions, other insurance companies pay us lump sums to assume all (or a specified portion of) future loss payments applicable to large blocks of expired business. Here also, the company transferring such claims needs to be certain of the transferee's financial strength for many years to come. Again, most of our competitors soliciting such business appear to us to have a financial condition that is materially inferior to ours.

Potentially, structured settlements and the assumption of loss reserves could become very significant to us. Because of their potential size and because these operations generate large amounts of investment income compared to premium volume, we will show underwriting results from those businesses on a separate line in our insurance segment data. We also will exclude their effect in reporting our combined ratio to you. We "front end" no profit on structured settlement or loss reserve transactions, and all attributable overhead is expensed currently. Both businesses are run by Don Wurster at National Indemnity Company.

Insurance - GEICO

Geico's performance during 1983 was as good as our own insurance performance was poor. Compared to the industry's combined ratio of 111, GEICO wrote at 96 *after* a large voluntary accrual for policyholder dividends. A few years ago I would not have thought GEICO could so greatly outperform the industry. Its superiority reflects the combination of a truly exceptional business idea and an exceptional management.

Jack Byrne and Bill Snyder have maintained extraordinary discipline in the underwriting area (including, crucially, provision for full and proper loss reserves), and their efforts are now being further rewarded by significant gains in new business. Equally important, Lou Simpson is the class of the field among insurance investment managers. The three of them are some team.

We have approximately a one-third interest in GEICO. That gives us a $270 million share in the company's premium volume, an amount some 80% larger than our own volume. Thus, the major portion of our total insurance business comes from the best insurance book in the country. This fact does not moderate by an iota the need for us to improve our own operation.

Stock Splits and Stock Activity

We often are asked why Berkshire does not split its stock. The assumption behind this question usually appears to be that a split would be a pro-shareholder action. We disagree. Let me tell you why.

One of our goals is to have Berkshire Hathaway stock sell at a price rationally related to its intrinsic business value. (But note "rationally related", not "identical": if well-regarded companies are generally selling in the market at large discounts from value, Berkshire might well be priced similarly.) The key to a rational stock price is rational shareholders, both current and prospective.

If the holders of a company's stock and/or the prospective buyers attracted to it are prone to make irrational or emotion-based decisions, some pretty silly stock prices are going to appear periodically. Manic-depressive personalities produce manic-depressive valuations. Such aberrations may help us in buying and selling the stocks of other companies. But we think it is in both your interest and ours to minimize their occurrence in the market for Berkshire.

To obtain only high quality shareholders is no cinch. Mrs. Astor could select her 400, but anyone can buy any stock. Entering members of a shareholder "club" cannot be screened for intellectual capacity, emotional stability, moral sensitivity or acceptable dress. Shareholder eugenics, therefore, might appear to be a hopeless undertaking.

In large part, however, we feel that high quality ownership can be attracted and maintained if we consistently communicate our business and ownership philosophy - *along with no other conflicting messages* - and then let self selection follow its course. For example, self selection will draw a far different crowd to a musical event advertised as an opera than one advertised as a rock concert even though anyone can buy a ticket to either.

Through our policies and communications - our "advertisements" - we try to attract investors who will understand our operations, attitudes and expectations. (And, fully as important, we try to dissuade those who won't.) We want those who think of themselves as business owners and invest in companies with the intention of staying a long time. And, we want those who keep their eyes focused on business results, not market prices.

Investors possessing those characteristics are in a small minority, but we have an exceptional collection of them. I believe well over 90% - probably over 95% - of our shares are held by

those who were shareholders of Berkshire or Blue Chip five years ago. And I would guess that over 95% of our shares are held by investors for whom the holding is at least double the size of their next largest. Among companies with at least several thousand public shareholders and more than $1 billion of market value, we are almost certainly the leader in the degree to which our shareholders think and act like owners. Upgrading a shareholder group that possesses these characteristics is not easy.

Were we to split the stock or take other actions focusing on stock price rather than business value, we would attract an entering class of buyers inferior to the exiting class of sellers. At $1300, there are very few investors who can't afford a Berkshire share. Would a potential one-share purchaser be better off if we split 100 for 1 so he could buy 100 shares? Those who think so and who would buy the stock because of the split or in anticipation of one would definitely downgrade the quality of our present shareholder group. (Could we really improve our shareholder group by trading some of our present clear-thinking members for impressionable new ones who, preferring paper to value, feel wealthier with nine $10 bills than with one $100 bill?) People who buy for non-value reasons are likely to sell for non-value reasons. Their presence in the picture will accentuate erratic price swings unrelated to underlying business developments.

We will try to avoid policies that attract buyers with a short-term focus on our stock price and try to follow policies that attract informed long-term investors focusing on business values. just as you purchased your Berkshire shares in a market populated by rational informed investors, you deserve a chance to sell - should you ever want to - in the same kind of market. We will work to keep it in existence.

One of the ironies of the stock market is the emphasis on activity. Brokers, using terms such as "marketability" and "liquidity", sing the praises of companies with high share turnover (those who cannot fill your pocket will confidently fill your ear). But investors should understand that what is good for the croupier is not good for the customer. A hyperactive stock market is the pickpocket of enterprise.

For example, consider a typical company earning, say, 12% on equity. Assume a very high turnover rate in its shares of 100% per year. If a purchase and sale of the stock each extract

commissions of 1% (the rate may be much higher on low-priced stocks) and if the stock trades at book value, the owners of our hypothetical company will pay, in aggregate, 2% of the company's net worth annually for the privilege of transferring ownership. This activity does nothing for the earnings of the business, and means that 1/6 of them are lost to the owners through the "frictional" cost of transfer. (And this calculation does not count option trading, which would increase frictional costs still further.)

All that makes for a rather expensive game of musical chairs. Can you imagine the agonized cry that would arise if a governmental unit were to impose a new 16 2/3% tax on earnings of corporations or investors? By market activity, investors can impose upon themselves the equivalent of such a tax.

Days when the market trades 100 million shares (and that kind of volume, when over-the-counter trading is included, is today abnormally low) are a curse for owners, not a blessing - for they mean that owners are paying twice as much to change chairs as they are on a 50-million-share day. If 100 million-share days persist for a year and the average cost on each purchase and sale is 15 cents a share, the chair-changing tax for investors in aggregate would total about $7.5 billion - an amount roughly equal to the combined 1982 profits of Exxon, General Motors, Mobil and Texaco, the four largest companies in the Fortune 500.

These companies had a combined net worth of $75 billion at yearend 1982 and accounted for over 12% of both net worth and net income of the entire Fortune 500 list. Under our assumption investors, in aggregate, every year forfeit all earnings from this staggering sum of capital merely to satisfy their penchant for "financial flip-flopping". In addition, investment management fees of over $2 billion annually - sums paid for chair-changing advice - require the forfeiture by investors of all earnings of the five largest banking organizations (Citicorp, Bank America, Chase Manhattan, Manufacturers Hanover and J. P. Morgan). These expensive activities may decide who eats the pie, but they don't enlarge it.

(We are aware of the pie-expanding argument that says that such activities improve the rationality of the capital allocation process. We think that this argument is specious and that, on balance, hyperactive equity markets subvert rational capital allocation and act as pie shrinkers. Adam Smith felt that all noncollusive acts in a free market were guided by an

invisible hand that led an economy to maximum progress; our view is that casino-type markets and hair-trigger investment management act as an invisible foot that trips up and slows down a forward-moving economy.)

Contrast the hyperactive stock with Berkshire. The bid-and-ask spread in our stock currently is about 30 points, or a little over 2%. Depending on the size of the transaction, the difference between proceeds received by the seller of Berkshire and cost to the buyer may range downward from 4% (in trading involving only a few shares) to perhaps 1 1/2% (in large trades where negotiation can reduce both the market-maker's spread and the broker's commission). Because most Berkshire shares are traded in fairly large transactions, the spread on all trading probably does not average more than 2%.

Meanwhile, true turnover in Berkshire stock (excluding inter-dealer transactions, gifts and bequests) probably runs 3% per year. Thus our owners, in aggregate, are paying perhaps 6/100 of 1% of Berkshire's market value annually for transfer privileges. By this very rough estimate, that's $900,000 - not a small cost, but far less than average. Splitting the stock would increase that cost, downgrade the quality of our shareholder population, and encourage a market price less consistently related to intrinsic business value. We see no offsetting advantages.

Miscellaneous

Last year in this section I ran a small ad to encourage acquisition candidates. In our communications businesses we tell our advertisers that repetition is a key to results (which it is), so we will again repeat our acquisition criteria.

We prefer:

(1) large purchases (at least $5 million of after-tax earnings),

(2) demonstrated consistent earning power (future projections are of little interest to us, nor are "turn-around" situations),

(3) businesses earning good returns on equity while employing little or no debt,

(4) management in place (we can't supply it),

(5) simple businesses (if there's lots of technology, we won't understand it),

(6) an offering price (we don't want to waste our time or that of the seller by talking, even preliminarily, about a transaction when price is unknown).

We will not engage in unfriendly transactions. We can promise complete confidentiality and a very fast answer as to possible interest - customarily within five minutes. Cash purchases are preferred, but we will consider the use of stock when it can be done on the basis described in the previous section.

We will not engage in unfriendly takeovers. We can promise complete confidentiality and a very fast answer - customarily within five minutes - as to whether we're interested. We prefer to buy for cash, but will consider issuance of stock when we receive as much in intrinsic business value as we give. We invite potential sellers to check us out by contacting people with whom we have done business in the past. For the right business - and the right people - we can provide a good home.

* * * * *

About 96.4% of all eligible shares participated in our 1983 shareholder-designated contributions program. The total contributions made pursuant to this program - disbursed in the early days of 1984 but fully expensed in 1983 - were $3,066,501, and 1353 charities were recipients. Although the response measured by the percentage of shares participating was extraordinarily good, the response measured by the percentage of holders participating was not as good. The reason may well be the large number of new shareholders acquired through the merger and their lack of familiarity with the program. We urge new shareholders to read the description of the program on pages 52-53.

If you wish to participate in future programs, we strongly urge that you immediately make sure that your shares are registered in the actual owner's name, not in "street" or nominee name. Shares not so registered on September 28, 1984 will not be eligible for any 1984 program.

* * * * *

The Blue Chip/Berkshire merger went off without a hitch. Less than one-tenth of 1% of the shares of each company voted against the merger, and no requests for appraisal were made. In 1983, we gained some tax efficiency from the merger and we expect to gain more in the future.

One interesting sidelight to the merger: Berkshire now has 1,146,909 shares outstanding compared to 1,137,778 shares at the beginning of fiscal 1965, the year present management assumed responsibility. For every 1% of the company you owned at that time, you now would own .99%. Thus, all of today's assets - the News, See's, Nebraska Furniture Mart, the Insurance Group, $1.3 billion in marketable stocks, etc. - have been added to the original textile assets with virtually no net dilution to the original owners.

We are delighted to have the former Blue Chip shareholders join us. To aid in your understanding of Berkshire Hathaway, we will be glad to send you the Compendium of Letters from the Annual Reports of 1977-1981, and/or the 1982 Annual report. Direct your request to the Company at 1440 Kiewit Plaza, Omaha, Nebraska 68131.

Warren E. Buffett

March 14, 1984 Chairman of the Board

Appendix

BERKSHIRE HATHAWAY INC.

Goodwill and its Amortization: The Rules and The Realities

This appendix deals only with economic and accounting Goodwill – not the goodwill of everyday usage. For example, a business may be well liked, even loved, by most of its customers but possess no economic goodwill. (AT&T, before the breakup, was generally well thought of, but possessed not a dime of economic Goodwill.) And, regrettably, a business may be disliked by its customers but possess substantial, and growing, economic Goodwill. So, just for the moment, forget emotions and focus only on economics and accounting.

When a business is purchased, accounting principles require that the purchase price first be assigned to the fair value of the identifiable assets that are acquired. Frequently the sum of the fair values put on the assets (after the deduction of liabilities) is less than the total purchase price of the business. In that case, the difference is assigned to an asset account entitled

"excess of cost over equity in net assets acquired". To avoid constant repetition of this mouthful, we will substitute "Goodwill".

Accounting Goodwill arising from businesses purchased before November 1970 has a special standing. Except under rare circumstances, it can remain an asset on the balance sheet as long as the business bought is retained. That means no amortization charges to gradually extinguish that asset need be made against earnings.

The case is different, however, with purchases made from November 1970 on. When these create Goodwill, it must be amortized over not more than 40 years through charges – of equal amount in every year – to the earnings account. Since 40 years is the maximum period allowed, 40 years is what managements (including us) usually elect. This annual charge to earnings is not allowed as a tax deduction and, thus, has an effect on after-tax income that is roughly double that of most other expenses.

That's how accounting Goodwill works. To see how it differs from economic reality, let's look at an example close at hand. We'll round some figures, and greatly oversimplify, to make the example easier to follow. We'll also mention some implications for investors and managers.

Blue Chip Stamps bought See's early in 1972 for $25 million, at which time See's had about $8 million of net tangible assets. (Throughout this discussion, accounts receivable will be classified as tangible assets, a definition proper for business analysis.) This level of tangible assets was adequate to conduct the business without use of debt, except for short periods seasonally. See's was earning about $2 million after tax at the time, and such earnings seemed conservatively representative of future earning power in constant 1972 dollars.

Thus our first lesson: businesses logically are worth far more than net tangible assets when they can be expected to produce earnings on such assets considerably in excess of market rates of return. The capitalized value of this excess return is economic Goodwill.

In 1972 (and now) relatively few businesses could be expected to consistently earn the 25% after tax on net tangible assets that was earned by See's – doing it, furthermore, with conservative accounting and no financial leverage. It was not the fair market value of the inventories, receivables or fixed assets that produced the premium rates of return. Rather it was a combination of intangible assets, particularly a pervasive favorable reputation with

consumers based upon countless pleasant experiences they have had with both product and personnel.

Such a reputation creates a consumer franchise that allows the value of the product to the purchaser, rather than its production cost, to be the major determinant of selling price. Consumer franchises are a prime source of economic Goodwill. Other sources include governmental franchises not subject to profit regulation, such as television stations, and an enduring position as the low cost producer in an industry.

Let's return to the accounting in the See's example. Blue Chip's purchase of See's at $17 million over net tangible assets required that a Goodwill account of this amount be established as an asset on Blue Chip's books and that $425,000 be charged to income annually for 40 years to amortize that asset. By 1983, after 11 years of such charges, the $17 million had been reduced to about $12.5 million. Berkshire, meanwhile, owned 60% of Blue Chip and, therefore, also 60% of See's. This ownership meant that Berkshire's balance sheet reflected 60% of See's Goodwill, or about $7.5 million.

In 1983 Berkshire acquired the rest of Blue Chip in a merger that required purchase accounting as contrasted to the "pooling" treatment allowed for some mergers. Under purchase accounting, the "fair value" of the shares we gave to (or "paid") Blue Chip holders had to be spread over the net assets acquired from Blue Chip. This "fair value" was measured, as it almost always is when public companies use their shares to make acquisitions, by the market value of the shares given up.

The assets "purchased" consisted of 40% of everything owned by Blue Chip (as noted, Berkshire already owned the other 60%). What Berkshire "paid" was more than the net identifiable assets we received by $51.7 million, and was assigned to two pieces of Goodwill: $28.4 million to See's and $23.3 million to Buffalo Evening News.

After the merger, therefore, Berkshire was left with a Goodwill asset for See's that had two components: the $7.5 million remaining from the 1971 purchase, and $28.4 million newly created by the 40% "purchased" in 1983. Our amortization charge now will be about $1.0 million for the next 28 years, and $.7 million for the following 12 years, 2002 through 2013.

In other words, different purchase dates and prices have given us vastly different asset values and amortization charges for two pieces of the same asset. (We repeat our usual disclaimer: we have no better accounting system to suggest. The problems to be dealt with are mind boggling and require arbitrary rules.)

But what are the economic realities? One reality is that the amortization charges that have been deducted as costs in the earnings statement each year since acquisition of See's were not true economic costs. We know that because See's last year earned $13 million after taxes on about $20 million of net tangible assets – a performance indicating the existence of economic Goodwill far larger than the total original cost of our accounting Goodwill. In other words, while accounting Goodwill regularly decreased from the moment of purchase, economic Goodwill increased in irregular but very substantial fashion.

Another reality is that annual amortization charges in the future will not correspond to economic costs. It is possible, of course, that See's economic Goodwill will disappear. But it won't shrink in even decrements or anything remotely resembling them. What is more likely is that the Goodwill will *increase* – in current, if not in constant, dollars – because of inflation.

That probability exists because true economic Goodwill tends to rise in nominal value proportionally with inflation. To illustrate how this works, let's contrast a See's kind of business with a more mundane business. When we purchased See's in 1972, it will be recalled, it was earning about $2 million on $8 million of net tangible assets. Let us assume that our hypothetical mundane business then had $2 million of earnings also, but needed $18 million in net tangible assets for normal operations. Earning only 11% on required tangible assets, that mundane business would possess little or no economic Goodwill.

A business like that, therefore, might well have sold for the value of its net tangible assets, or for $18 million. In contrast, we paid $25 million for See's, even though it had no more in earnings and less than half as much in "honest-to-God" assets. Could less really have been more, as our purchase price implied? The answer is "yes" – *even if both businesses were expected to have flat unit volume* – as long as you anticipated, as we did in 1972, a world of continuous inflation.

To understand why, imagine the effect that a doubling of the price level would subsequently have on the two businesses. Both would need to double their nominal earnings to $4 million to keep themselves even with inflation. This would seem to be no great trick: just sell the same number of units at double earlier prices and, assuming profit margins remain unchanged, profits also must double.

But, crucially, to bring that about, both businesses probably would have to double their nominal investment in net tangible assets, since that is the kind of economic requirement that inflation usually imposes on businesses, both good and bad. A doubling of dollar sales means correspondingly more dollars must be employed immediately in receivables and inventories. Dollars employed in fixed assets will respond more slowly to inflation, but probably just as surely. And all of this inflation-required investment will produce no improvement in rate of return. The motivation for this investment is the survival of the business, not the prosperity of the owner.

Remember, however, that See's had net tangible assets of only $8 million. So it would only have had to commit an additional $8 million to finance the capital needs imposed by inflation. The mundane business, meanwhile, had a burden over twice as large – a need for $18 million of additional capital.

After the dust had settled, the mundane business, now earning $4 million annually, might still be worth the value of its tangible assets, or $36 million. That means its owners would have gained only a dollar of nominal value for every new dollar invested. (This is the same dollar-for-dollar result they would have achieved if they had added money to a savings account.)

See's, however, also earning $4 million, might be worth $50 million if valued (as it logically would be) on the same basis as it was at the time of our purchase. So it would have gained $25 million in nominal value while the owners were putting up only $8 million in additional capital – over $3 of nominal value gained for each $1 invested.

Remember, even so, that the owners of the See's kind of business were forced by inflation to ante up $8 million in additional capital just to stay even in real profits. Any unleveraged business that requires some net tangible assets to operate (and almost all do) is hurt by inflation. Businesses needing little in the way of tangible assets simply are hurt the least.

And that fact, of course, has been hard for many people to grasp. For years the traditional wisdom – long on tradition, short on wisdom – held that inflation protection was best provided by businesses laden with natural resources, plants and machinery, or other tangible assets ("In Goods We Trust"). It doesn't work that way. Asset-heavy businesses generally earn low rates of return – rates that often barely provide enough capital to fund the inflationary needs of the existing business, with nothing left over for real growth, for distribution to owners, or for acquisition of new businesses.

In contrast, a disproportionate number of the great business fortunes built up during the inflationary years arose from ownership of operations that combined intangibles of lasting value with relatively minor requirements for tangible assets. In such cases earnings have bounded upward in nominal dollars, and these dollars have been largely available for the acquisition of additional businesses. This phenomenon has been particularly evident in the communications business. That But that statement applies, naturally, only to true economic Goodwill. Spurious accounting Goodwill – and there is plenty of it around – is another matter. When an overexcited management purchases a business at a silly price, the same accounting niceties described earlier are observed. Because it can't go anywhere else, the silliness ends up in the Goodwill account. Considering the lack of managerial discipline that created the account, under such circumstances it might better be labeled "No-Will". Whatever the term, the 40-year ritual typically is observed and the adrenalin so capitalized remains on the books as an "asset" just as if the acquisition had been a sensible one.

business has required little in the way of tangible investment – yet its franchises have endured. During inflation, Goodwill is the gift that keeps giving.

* * * * *

If you cling to any belief that accounting treatment of Goodwill is the best measure of economic reality, I suggest one final item to ponder.

Assume a company with $20 per share of net worth, all tangible assets. Further assume the company has internally developed some magnificent consumer franchise, or that it was fortunate enough to obtain some important television stations by original FCC grant. Therefore, it earns a great deal on tangible assets, say $5 per share, or 25%.

With such economics, it might sell for $100 per share or more, and it might well also bring that price in a negotiated sale of the entire business.

Assume an investor buys the stock at $100 per share, paying in effect $80 per share for Goodwill (just as would a corporate purchaser buying the whole company). Should the investor impute a $2 per share amortization charge annually ($80 divided by 40 years) to calculate "true" earnings per share? And, if so, should the new "true" earnings of $3 per share cause him to rethink his purchase price?

* * * * *

We believe managers and investors alike should view intangible assets from two perspectives:

In analysis of operating results – that is, in evaluating the underlying economics of a business unit – amortization charges should be ignored. What a business can be expected to earn on unleveraged net tangible assets, excluding any charges against earnings for amortization of Goodwill, is the best guide to the economic attractiveness of the operation. It is also the best guide to the current value of the operation's economic Goodwill.

In evaluating the wisdom of business acquisitions, amortization charges should be ignored also. They should be deducted neither from earnings nor from the cost of the business. This means forever viewing purchased Goodwill at its full cost, before any amortization. Furthermore, cost should be defined as including the full intrinsic business value – not just the recorded accounting value – of all consideration given, irrespective of market prices of the securities involved at the time of merger and irrespective of whether pooling treatment was allowed. For example, what we truly paid in the Blue Chip merger for 40% of the Goodwill of See's and the News was considerably more than the $51.7 million entered on our books. This disparity exists because the market value of the Berkshire shares given up in the merger was less than their intrinsic business value, which is the value that defines the true cost to us.

Operations that appear to be winners based upon perspective (1) may pale when viewed from perspective (2). A good business is not always a good purchase – although it's a good place to look for one.

We will try to acquire businesses that have excellent operating economics measured by (1) and that provide reasonable returns measured by (2). Accounting consequences will be totally ignored.

At yearend 1983, net Goodwill on our accounting books totaled $62 million, consisting of the $79 million you see stated on the asset side of our balance sheet, and $17 million of negative Goodwill that is offset against the carrying value of our interest in Mutual Savings and Loan.

We believe net economic Goodwill far exceeds the $62 million accounting number.

1984 Letter

BERKSHIRE HATHAWAY INC.

To the Shareholders of Berkshire Hathaway Inc.:

Our gain in net worth during 1984 was $152.6 million, or $133 per share. This sounds pretty good but actually it's mediocre. Economic gains must be evaluated by comparison with the capital that produces them. Our twenty-year compounded annual gain in book value has been 22.1% (from $19.46 in 1964 to $1108.77 in 1984), but our gain in 1984 was only 13.6%.

As we discussed last year, the gain in per-share intrinsic business value is the economic measurement that really counts. But calculations of intrinsic business value are subjective. In our case, book value serves as a useful, although somewhat understated, proxy. In my judgment, intrinsic business value and book value increased during 1984 at about the same rate.

Using my academic voice, I have told you in the past of the drag that a mushrooming capital base exerts upon rates of return. Unfortunately, my academic voice is now giving way to a reportorial voice. Our historical 22% rate is just that - history. To earn even 15% annually over the next decade (assuming we continue to follow our present dividend policy, about which more will be said later in this letter) we would need profits aggregating about $3.9 billion. Accomplishing this will require a few big ideas - small ones just won't do. Charlie Munger, my partner in general management, and I do not have any such ideas at present, but our experience has been that they pop up occasionally. (How's that for a strategic plan?)

Sources of Reported Earnings

The table on the following page shows the sources of Berkshire's reported earnings. Berkshire's net ownership interest in many of the constituent businesses changed at midyear 1983 when the Blue Chip merger took place. Because of these changes, the first two columns of the table provide the best measure of underlying business performance.

All of the significant gains and losses attributable to unusual sales of assets by any of the business entities are aggregated with securities transactions on the line near the bottom of the table, and are not included in operating earnings. (We regard any annual figure for realized

capital gains or losses as meaningless, but we regard the aggregate realized and unrealized capital gains over a period of years as very important.)

Furthermore, amortization of Goodwill is not charged against the specific businesses but, for reasons outlined in the Appendix to my letter in the 1983 annual report, is set forth as a separate item.

000's of $'s	***Earnings*** Total 1984	***Before*** Total 1983	***Income*** Berkshire 1984	***Taxes*** Share 1983	**Net Earnings** Berkshire 1984	**After Tax** Share 1983
Operating Earnings: Underwriting	$(48,060)	$(33,872)	$(48,060)	$(33,872)	$(25,955)	$(18,400)
Net investment income	68,903	43,810	68,903	43,810	62,059	39,114
Buffalo News	27,328	19,352	27,328	16,547	13,317	8,832
Nebraska Furniture Mart (1)	14,511	3,812	11,609	3,049	5,917	1,521
See's Candies	26,644	27,411	26,644	24,526	13,380	12,212
Associated Retail Stores	(1,072)	697	(1,072)	697	(579)	355
Blue Chip Stamps (2)	(1,853)	(1,422)	(1,843)	(1,876)	(899)	(353)
Mutual Savings & Loan	1,456	(798)	1,166	(467)	3,151	1,917
Precision Steel	4,092	3,241	3,278	2,102	1,696	1,136
Textiles	418	(100)	418	(100)	226	(63)
Wesco Financial	9,777	7,493	7,831	4,844	4,828	3,448
Amortization of Goodwill	(1,434)	(532)	(1,434)	(563)	(1,434)	(563)
Interest On Debt	(14,734)	(15,104)	(14,734)	(13,844)	(7,452)	(7,346)
Shareholder-Designated Contributions	(3,179)	(3,066)	(3,179)	(3,066)	(1,716)	(1,656)
Other*	4,932	10,121	4,529	9,623	3,476	8,490
Operating Earnings	87,739	61,043	82.021	51,410	70,015	48,644
Special GEICO Distribution	--	19,575	--	19,575	--	18,224
Special Gen. Foods Distribution	8,111	--	7,896	--	7,294	--
Sale of securities and unusual sales of assets	104,699	**$**67,260	101,376	65,089	**71,587**	45,298
Total Earnings- all entities	**$200,549**	**$147,878**	**$191,293**	**$136,074**	**$148,896**	**$112,166**

(1) 1983 figures are those for October through December.

(2) 1984 and 1983 are not comparable; major assets were transferred in the mid-year 1983 merger of Blue Chip Stamps.

Sharp-eyed shareholders will notice that the amount of the special GEICO distribution and its location in the table have been changed from the presentation of last year. Though they reclassify and reduce "accounting" earnings, the changes are entirely of form, not of substance. The story behind the changes, however, is interesting.

As reported last year: (1) in mid-1983 GEICO made a tender offer to buy its own shares; (2) at the same time, we agreed by written contract to sell GEICO an amount of its shares that would be proportionately related to the aggregate number of shares GEICO repurchased via the tender from all other shareholders; (3) at completion of the tender, we delivered 350,000 shares to GEICO, received $21 million cash, and were left owning exactly the same percentage of GEICO that we owned before the tender; (4) GEICO's transaction with us amounted to a proportionate redemption, an opinion rendered us, without qualification, by a leading law firm; (5) the Tax Code logically regards such proportionate redemptions as substantially equivalent to dividends and, therefore, the $21 million we received was taxed at only the 6.9% inter-corporate dividend rate; (6) importantly, that $21 million was far less than the previously-undistributed earnings that had inured to our ownership in GEICO and, thus, from the standpoint of economic substance, was in our view equivalent to a dividend.

Because it was material and unusual, we highlighted the GEICO distribution last year to you, both in the applicable quarterly report and in this section of the annual report. Additionally, we emphasized the transaction to our auditors, Peat, Marwick, Mitchell & Co. Both the Omaha office of Peat Marwick and the reviewing Chicago partner, without objection, concurred with our dividend presentation.

In 1984, we had a virtually identical transaction with General Foods. The only difference was that General Foods repurchased its stock over a period of time in the open market, whereas GEICO had made a "one-shot" tender offer. In the General Foods case we sold to the company, on each day that it repurchased shares, a quantity of shares that left our ownership percentage precisely unchanged. Again our transaction was pursuant to a written contract executed before repurchases began. And again the money we received was far less than the retained earnings that had inured to our ownership interest since our purchase. Overall we received $21,843,601 in cash from General Foods, and our ownership remained at exactly 8.75%.

At this point the New York office of Peat Marwick came into the picture. Late in 1984 it indicated that it disagreed with the conclusions of the firm's Omaha office and Chicago

reviewing partner. The New York view was that the GEICO and General Foods transactions should be treated as sales of stock by Berkshire rather than as the receipt of dividends. Under this accounting approach, a portion of the cost of our investment in the stock of each company would be charged against the redemption payment and any gain would be shown as a capital gain, not as dividend income. This is an accounting approach only, having no bearing on taxes: Peat Marwick agrees that the transactions were dividends for IRS purposes.

We disagree with the New York position from both the viewpoint of economic substance and proper accounting. But, to avoid a qualified auditor's opinion, we have adopted herein Peat Marwick's 1984 view and restated 1983 accordingly. None of this, however, has any effect on intrinsic business value: our ownership interests in GEICO and General Foods, our cash, our taxes, and the market value and tax basis of our holdings all remain the same.

This year we have again entered into a contract with General Foods whereby we will sell them shares concurrently with open market purchases that they make. The arrangement provides that our ownership interest will remain unchanged at all times. By keeping it so, we will insure ourselves dividend treatment for tax purposes. In our view also, the economic substance of this transaction again is the creation of dividend income. However, we will account for the redemptions as sales of stock rather than dividend income unless accounting rules are adopted that speak directly to this point. We will continue to prominently identify any such special transactions in our reports to you.

While we enjoy a low tax charge on these proportionate redemptions, and have participated in several of them, we view such repurchases as at least equally favorable for shareholders who do not sell. When companies with outstanding businesses and comfortable financial positions find their shares selling far below intrinsic value in the marketplace, no alternative action can benefit shareholders as surely as repurchases.

(Our endorsement of repurchases is limited to those dictated by price/value relationships and does not extend to the "greenmail" repurchase - a practice we find odious and repugnant. In these transactions, two parties achieve their personal ends by exploitation of an innocent and unconsulted third party. The players are: (1) the "shareholder" extortionist who, even before the ink on his stock certificate dries, delivers his "your-money-or-your-life" message to managers; (2) the corporate insiders who quickly seek peace at any price - as long as the

price is paid by someone else; and (3) the shareholders whose money is used by (2) to make (1) go away. As the dust settles, the mugging, transient shareholder gives his speech on "free enterprise", the muggee management gives its speech on "the best interests of the company", and the innocent shareholder standing by mutely funds the payoff.)

The companies in which we have our largest investments have all engaged in significant stock repurhases at times when wide discrepancies existed between price and value. As shareholders, we find this encouraging and rewarding for two important reasons - one that is obvious, and one that is subtle and not always understood. The obvious point involves basic arithmetic: major repurchases at prices well below per-share intrinsic business value immediately increase, in a highly significant way, that value. When companies purchase their own stock, they often find it easy to get $2 of present value for $1. Corporate acquisition programs almost never do as well and, in a discouragingly large number of cases, fail to get anything close to $1 of value for each $1 expended.

The other benefit of repurchases is less subject to precise measurement but can be fully as important over time. By making repurchases when a company's market value is well below its business value, management clearly demonstrates that it is given to actions that enhance the wealth of shareholders, rather than to actions that expand management's domain but that do nothing for (or even harm) shareholders. Seeing this, shareholders and potential shareholders increase their estimates of future returns from the business. This upward revision, in turn, produces market prices more in line with intrinsic business value. These prices are entirely rational. Investors should pay more for a business that is lodged in the hands of a manager with demonstrated pro-shareholder leanings than for one in the hands of a self-interested manager marching to a different drummer. (To make the point extreme, how much would you pay to be a minority shareholder of a company controlled by Robert Wesco?)

The key word is "demonstrated". A manager who consistently turns his back on repurchases, when these clearly are in the interests of owners, reveals more than he knows of his motivations. No matter how often or how eloquently he mouths some public relations-inspired phrase such as "maximizing shareholder wealth" (this season's favorite), the market correctly discounts assets lodged with him. His heart is not listening to his mouth - and, after a while, neither will the market.

We have prospered in a very major way - as have other shareholders - by the large share repurchases of GEICO, Washington Post, and General Foods, our three largest holdings. (Exxon, in which we have our fourth largest holding, has also wisely and aggressively repurchased shares but, in this case, we have only recently established our position.) In each of these companies, shareholders have had their interests in outstanding businesses materially enhanced by repurchases made at bargain prices. We feel very comfortable owning interests in businesses such as these that offer excellent economics combined with shareholder-conscious managements.

The following table shows our 1984 yearend net holdings in marketable equities. All numbers exclude the interests attributable to minority shareholders of Wesco and Nebraska Furniture Mart.

Shares	Company	Cost (000's omitted)	Market (000's omitted)
690,975	Affiliated Publications, Inc.	$3,516	$32,908
740,400	American Broadcasting Companies, Inc.	44,416	46,738
3,895,710	Exxon Corporation	173,401	175,307
4,047,191	General Foods Corporation (a)	149,870	226,137
6,850,000	GEICO Corporation	45,713	397,300
2,379,200	Handy & Harman	27,318	38,662
818,872	Interpublic Group of Companies	2,570	28,149
555,949	Northwest Industries	26,581	27,242
2,553,488	Time, Inc.	89,327	109,162
1,868,600	The Washington Post Company Class B	10,628	149,955
	Total	**$573,340**	**$1,231,560**
	All Other Common Stockholdings	11,634	37,326
	Total Common Stocks	**$584,974**	**$1,268,886**

It's been over ten years since it has been as difficult as now to find equity investments that meet both our qualitative standards and our quantitative standards of value versus price.

We try to avoid compromise of these standards, although we find doing nothing the most difficult task of all. (One English statesman attributed his country's greatness in the nineteenth century to a policy of "masterly inactivity". This is a strategy that is far easier for historians to commend than for participants to follow.)

In addition to the figures supplied at the beginning of this section, information regarding the businesses we own appears in Management's Discussion on pages 42-47. An amplified discussion of Wesco's businesses appears in Charlie Munger's report on pages 50-59. You will find particularly interesting his comments about conditions in the thrift industry. Our other major controlled businesses are Nebraska Furniture Mart, See's, Buffalo Evening News, and the Insurance Group, to which we will give some special attention here.

Nebraska Furniture Mart

Last year I introduced you to Mrs. B (Rose Blumkin) and her family. I told you they were terrific, and I understated the case. After another year of observing their remarkable talents and character, I can honestly say that I never have seen a managerial group that either functions or behaves better than the Blumkin family.

Mrs. B, Chairman of the Board, is now 91, and recently was quoted in the local newspaper as saying, "I come home to eat and sleep, and that's about it. I can't wait until it gets daylight so I can get back to the business". Mrs. B is at the store seven days a week, from opening to close, and probably makes more decisions in a day than most CEOs do in a year (better ones, too).

In May Mrs. B was granted an Honorary Doctorate in Commercial Science by New York University. (She's a "fast track" student: not one day in her life was spent in a school room prior to her receipt of the doctorate.) Previous recipients of honorary degrees in business from NYU include Clifton Garvin, Jr., CEO of Exxon Corp.; Walter Wriston, then CEO of Citicorp; Frank Cary,
then CEO of IBM; Tom Murphy, then CEO of General Motors; and, most recently, Paul Volcker. (They are in good company.)

The Blumkin blood did not run thin. Louie, Mrs. B's son, and his three boys, Ron, Irv, and Steve, all contribute in full measure to NFM's amazing success. The younger generation has attended the best business school of them all - that conducted by Mrs. B and Louie - and their training is evident in their performance.

Last year NFM's net sales increased by $14.3 million, bringing the total to $115 million, all from the one store in Omaha. That is by far the largest volume produced by a single home furnishings store in the United States. In fact, the gain in sales last year was itself greater than the annual volume of many good-sized successful stores. The business achieves this success because it deserves this success. A few figures will tell you why.

In its fiscal 1984 10-K, the largest independent specialty retailer of home furnishings in the country, Levitz Furniture, described its prices as "generally lower than the prices charged by conventional furniture stores in its trading area". Levitz, in that year, operated at a gross margin of 44.4% (that is, on average, customers paid it $100 for merchandise that had cost it

$55.60 to buy). The gross margin at NFM is not much more than half of that. NFM's low mark-ups are possible because of its exceptional efficiency: operating expenses (payroll, occupancy, advertising, etc.) are about 16.5% of sales versus 35.6% at Levitz.

None of this is in criticism of Levitz, which has a well-managed operation. But the NFM operation is simply extraordinary (and, remember, it all comes from a $500 investment by Mrs. B in 1937). By unparalleled efficiency and astute volume purchasing, NFM is able to earn excellent returns on capital while saving its customers at least $30 million annually from what, on average, it would cost them to buy the same merchandise at stores maintaining typical mark-ups. Such savings enable NFM to constantly widen its geographical reach and thus to enjoy growth well beyond the natural growth of the Omaha market.

I have been asked by a number of people just what secrets the Blumkins bring to their business. These are not very esoteric. All members of the family: (1) apply themselves with an enthusiasm and energy that would make Ben Franklin and Horatio Alger look like dropouts; (2) define with extraordinary realism their area of special competence and act decisively on all matters within it; (3) ignore even the most enticing propositions failing outside of that area of special competence; and, (4) unfailingly behave in a high-grade manner with everyone they deal with. (Mrs. B boils it down to "sell cheap and tell the truth".)

Our evaluation of the integrity of Mrs. B and her family was demonstrated when we purchased 90% of the business: NFM had never had an audit and we did not request one; we did not take an inventory nor verify the receivables; we did not check property titles. We gave Mrs. B a check for $55 million and she gave us her word. That made for an even exchange.

You and I are fortunate to be in partnership with the Blumkin family.

See's Candy Shops, Inc.

Below is our usual recap of See's performance since the time of purchase by Blue Chip Stamps:

52-53 Week Year Ended About December 31	Sales Revenues	Operating Profits After Taxes	Number of Pounds of Candy Sold	Number of Stores Open at Year End
1984	$135,946,000	$13,380,000	24,759,000	214
1983 (53 Weeks)	133,531,000	13,699,000	24,651,000	207
1982	123,662,000	11,875,000	24,216,000	202
1981	112,578,000	10,779,000	24,052,000	199
1980	97,715,000	7,547,000	24,065,000	191
1979	87,314,000	6,330,000	23,985,000	188
1978	73,653,000	6,178,000	22,407,000	182
1977	62,886,000	6,154,000	20,921,000	179
1976 (53 Weeks)	56,333,000	5,569,000	20,553,000	173
1975	50,492,000	5,132,000	19,134,000	172
1974	41,248,000	3,021,000	17,883,000	170
1973	35,050,000	1,940,000	17,813,000	169
1972	31,337,000	2,083,000	16,954,000	167

This performance has not been produced by a generally rising tide. To the contrary, many well-known participants in the boxed-chocolate industry either have lost money in this same period or have been marginally profitable. To our knowledge, only one good-sized competitor has achieved high profitability. The success of See's reflects the combination of an exceptional product and an exceptional manager, Chuck Huggins.

During 1984 we increased prices considerably less than has been our practice in recent years: per-pound realization was $5.49, up only 1.4% from 1983. Fortunately, we made good progress on cost control, an area that has caused us problems in recent years. Per-pound costs - other than those for raw materials, a segment of expense largely outside of our control - increased by only 2.2% last year.

Our cost-control problem has been exacerbated by the problem of modestly declining volume (measured by pounds, not dollars) on a same-store basis. Total pounds sold through shops in

recent years has been maintained at a roughly constant level only by the net addition of a few shops annually. This more-shops-to-get-the-same-volume situation naturally puts heavy pressure on per-pound selling costs.

In 1984, same-store volume declined 1.1%. Total shop volume, however, grew 0.6% because of an increase in stores. (Both percentages are adjusted to compensate for a 53-week fiscal year in 1983.)

See's business tends to get a bit more seasonal each year. In the four weeks prior to Christmas, we do 40% of the year's volume and earn about 75% of the year's profits. We also earn significant sums in the Easter and Valentine's Day periods, but pretty much tread water the rest of the year. In recent years, shop volume at Christmas has grown in relative importance, and so have quantity orders and mail orders. The increased concentration of business in the Christmas period produces a multitude of managerial problems, all of which have been handled by Chuck and his associates with exceptional skill and grace.

Their solutions have in no way involved compromises in either quality of service or quality of product. Most of our larger competitors could not say the same. Though faced with somewhat less extreme peaks and valleys in demand than we, they add preservatives or freeze the finished product in order to smooth the production cycle and thereby lower unit costs. We reject such techniques, opting, in effect, for production headaches rather than product modification.

Our mall stores face a host of new food and snack vendors that provide particularly strong competition at non-holiday periods. We need new products to fight back and during 1984 we introduced six candy bars that, overall, met with a good reception. Further product introductions are planned.

In 1985 we will intensify our efforts to keep per-pound cost increases below the rate of inflation. Continued success in these efforts, however, will require gains in same-store poundage. Prices in 1985 should average 6% - 7% above those of 1984. Assuming no change in same-store volume, profits should show a moderate gain.

Buffalo Evening News

Profits at the News in 1984 were considerably greater than we expected. As at See's, excellent progress was made in controlling costs. Excluding hours worked in the newsroom, total hours worked decreased by about 2.8%. With this productivity improvement, overall costs

increased only 4.9%. This performance by Stan Lipsey and his management team was one of the best in the industry.

However, we now face an acceleration in costs. In mid-1984 we entered into new multi-year union contracts that provided for a large "catch-up" wage increase. This catch-up is entirely appropriate: the cooperative spirit of our unions during the unprofitable 1977-1982 period was an important factor in our success in remaining cost competitive with The Courier-Express. Had we not kept costs down, the outcome of that struggle might well have been different.

Because our new union contracts took effect at varying dates, little of the catch-up increase was reflected in our 1984 costs. But the increase will be almost totally effective in 1985 and, therefore, our unit labor costs will rise this year at a rate considerably greater than that of the industry. We expect to mitigate this increase by continued small gains in productivity, but we cannot avoid significantly higher wage costs this year. Newsprint price trends also are less favorable now than they were in 1984. Primarily because of these two factors, we expect at least a minor contraction in margins at the News.

Working in our favor at the News are two factors of major economic importance:

(1) Our circulation is concentrated to an unusual degree in the area of maximum utility to our advertisers. "Regional" newspapers with wide-ranging circulation, on the other hand, have a significant portion of their circulation in areas that are of negligible utility to most advertisers. A subscriber several hundred miles away is not much of a prospect for the puppy you are offering to sell via a classified ad - nor for the grocer with stores only in the metropolitan area. "Wasted" circulation - as the advertisers call it - hurts profitability: expenses of a newspaper are determined largely by gross circulation while advertising revenues (usually 70% - 80% of total revenues) are responsive only to useful circulation;

(2) Our penetration of the Buffalo retail market is exceptional; advertisers can reach almost all of their potential customers using only the News.

Last year I told you about this unusual reader acceptance: among the 100 largest newspapers in the country, we were then number one, daily, and number three, Sunday, in penetration. The most recent figures show us number one in penetration on weekdays and number two on Sunday. (Even so, the number of households in Buffalo has declined, so our current weekday circulation is down slightly; on Sundays it is unchanged.)

I told you also that one of the major reasons for this unusual acceptance by readers was the unusual quantity of news that we delivered to them: a greater percentage of our paper is devoted to news than is the case at any other dominant paper in our size range. In 1984 our "news hole" ratio was 50.9%, (versus 50.4% in 1983), a level far above the typical 35% - 40%. We will continue to maintain this ratio in the 50% area. Also, though we last year reduced total hours worked in other departments, we maintained the level of employment in the newsroom and, again, will continue to do so. Newsroom costs advanced 9.1% in 1984, a rise far exceeding our overall cost increase of 4.9%.

Our news hole policy costs us significant extra money for newsprint. As a result, our news costs (newsprint for the news hole plus payroll and expenses of the newsroom) as a percentage of revenue run higher than those of most dominant papers of our size. There is adequate room, however, for our paper or any other dominant paper to sustain these costs: the difference between "high" and "low" news costs at papers of comparable size runs perhaps three percentage points while pre-tax profit margins are often ten times that amount.

The economics of a dominant newspaper are excellent, among the very best in the business world. Owners, naturally, would like to believe that their wonderful profitability is achieved only because they unfailingly turn out a wonderful product. That comfortable theory wilts before an uncomfortable fact. While first-class newspapers make excellent profits, the profits of third-rate papers are as good or better - as long as either class of paper is dominant within its community. Of course, product quality may have been crucial to the paper in achieving dominance. We believe this was the case at the News, in very large part because of people such as Alfred Kirchhofer who preceded us.

Once dominant, the newspaper itself, not the marketplace, determines just how good or how bad the paper will be. Good or bad, it will prosper. That is not true of most businesses: inferior quality generally produces inferior economics. But even a poor newspaper is a bargain to most citizens simply because of its "bulletin board" value. Other things being equal, a poor product will not achieve quite the level of readership achieved by a first-class product. A poor product, however, will still remain essential to most citizens, and what commands their attention will command the attention of advertisers.

Since high standards are not imposed by the marketplace, management must impose its own. Our commitment to an above-average expenditure for news represents an important quantitative

standard. We have confidence that Stan Lipsey and Murray Light will continue to apply the far-more important qualitative standards. Charlie and I believe that newspapers are very special institutions in society. We are proud of the News, and intend an even greater pride to be justified in the years ahead.

Insurance Operations

Shown below is an updated version of our usual table listing two key figures for the insurance industry:

Year	Yearly Change in Premiums Written (%)	Combined Ratio after Policy-holder Dividends
1972	10.2	96.2
1973	8.0	99.2
1974	6.2	105.4
1975	11.0	107.9
1976	21.9	102.4
1976	19.8	97.2
1978	12.8	97.5
1979	10.3	100.6
1980	6.0	103.1
1981	3.9	106.0
1982	4.4	109.7
1983 (Revised)	4.5	111.9
1984 (Est.)	8.1	117.7

Best's data reflect the experience of practically the entire industry, including stock, mutual, and reciprocal companies. The combined ratio represents total insurance costs (losses incurred plus expenses) compared to revenue from premiums; a ratio below 100 indicates an underwriting profit, and one above 100 indicates a loss.

For a number of years, we have told you that an annual increase by the industry of about 10% per year in premiums written is necessary for the combined ratio to remain roughly unchanged. We assumed in making that assertion that expenses as a percentage of premium volume would stay relatively stable and that losses would grow at about 10% annually because of the combined influence of unit volume increases, inflation, and judicial rulings that expand what is covered by the insurance policy.

Our opinion is proving dismayingly accurate: a premium increase of 10% per year since 1979 would have produced an aggregate increase through 1984 of 61% and a combined ratio in 1984 almost identical to the 100.6 of 1979. Instead, the industry had only a 30% increase in premiums and a 1984 combined ratio of 117.7. Today, we continue to believe that the key index to the trend of underwriting profitability is the year-to-year percentage change in industry premium volume.

It now appears that premium volume in 1985 will grow well over 10%. Therefore, assuming that catastrophes are at a "normal" level, we would expect the combined ratio to begin easing downward toward the end of the year. However, under our industrywide loss assumptions (i.e., increases of 10% annually), five years of 15%-per-year increases in premiums would be required to get the combined ratio back to 100. This would mean a doubling of industry volume by 1989, an outcome that seems highly unlikely to us. Instead, we expect several years of premium gains somewhat above the 10% level, followed by highly-competitive pricing that generally will produce combined ratios in the 108-113 range.

Our own combined ratio in 1984 was a humbling 134. (Here, as throughout this report, we exclude structured settlements and the assumption of loss reserves in reporting this ratio. Much additional detail, including the effect of discontinued operations on the ratio, appears on pages 42-43). This is the third year in a row that our underwriting performance has been far poorer than that of the industry. We expect an improvement in the combined ratio in 1985, and also expect our improvement to be substantially greater than that of the industry. Mike Goldberg has corrected many of the mistakes I made before he took over insurance operations. Moreover, our business is concentrated in lines that have experienced poorer-than-average results during the past several years, and that circumstance has begun to subdue many of our competitors and even eliminate some. With the competition shaken, we were able during the last half of 1984 to raise prices significantly in certain important lines with little loss of business.

For some years I have told you that there could be a day coming when our premier financial strength would make a real difference in the competitive position of our insurance operation. That day may have arrived. We are almost without question the strongest property/casualty insurance operation in the country, with a capital position far superior to that of well-known companies of much greater size.

Equally important, our corporate policy is to retain that superiority. The buyer of insurance receives only a promise in exchange for his cash. The value of that promise should be appraised against the possibility of adversity, not prosperity. At a minimum, the promise should appear able to withstand a prolonged combination of depressed financial markets and exceptionally unfavorable underwriting results. Our insurance subsidiaries are both willing and able to keep their promises in any such environment - and not too many other companies clearly are.

Our financial strength is a particular asset in the business of structured settlements and loss reserve assumptions that we reported on last year. The claimant in a structured settlement and the insurance company that has reinsured loss reserves need to be completely confident that payments will be forthcoming for decades to come. Very few companies in the property/casualty field can meet this test of unquestioned long-term strength. (In fact, only a handful of companies exists with which we will reinsure our own liabilities.)

We have grown in these new lines of business: funds that we hold to offset assumed liabilities grew from $16.2 million to $30.6 million during the year. We expect growth to continue and perhaps to greatly accelerate. To support this projected growth we have added substantially to the capital of Columbia Insurance Company, our reinsurance unit specializing in structured settlements and loss reserve assumptions. While these businesses are very competitive, returns should be satisfactory.

At GEICO the news, as usual, is mostly good. That company achieved excellent unit growth in its primary insurance business during 1984, and the performance of its investment portfolio continued to be extraordinary. Though underwriting results deteriorated late in the year, they still remain far better than those of the industry. Our ownership in GEICO at yearend amounted to 36% and thus our interest in their direct property/casualty volume of $885 million amounted to $320 million, or well over double our own premium volume.

I have reported to you in the past few years that the performance of GEICO's stock has considerably exceeded that company's business performance, brilliant as the latter has been. In those years, the carrying value of our GEICO investment on our balance sheet grew at a rate greater than the growth in GEICO's intrinsic business value. I warned you that over performance by the stock relative to the performance of the business obviously could not occur every year, and that in some years the stock must under perform the business. In 1984 that occurred and the carrying value of our interest in GEICO changed hardly at all, while the intrinsic business value of that interest increased substantially. Since 27% of Berkshire's net worth at the beginning of 1984 was represented by GEICO, its static market value had a significant impact upon our rate of gain for the year. We are not at all unhappy with such a result: we would far rather have the business value of GEICO increase by X during the year, while market value decreases, than have the intrinsic value increase by only 1/2 X with market value soaring. In GEICO's case, as in all of our investments, we look to business performance, not market performance. If we are correct in expectations regarding the business, the market eventually will follow along.

You, as shareholders of Berkshire, have benefited in enormous measure from the talents of GEICO's Jack Byrne, Bill Snyder, and Lou Simpson. In its core business - low-cost auto and homeowners insurance - GEICO has a major, sustainable competitive advantage. That is a rare asset in business generally, and it's almost non-existent in the field of financial services. (GEICO, itself, illustrates this point: despite the company's excellent management, superior profitability has eluded GEICO in all endeavors other than its core business.) In a large industry, a competitive advantage such as GEICO's provides the potential for unusual economic rewards, and Jack and Bill continue to exhibit great skill in realizing that potential.

Most of the funds generated by GEICO's core insurance operation are made available to Lou for investment. Lou has the rare combination of temperamental and intellectual characteristics that produce outstanding long-term investment performance. Operating with below-average risk, he has generated returns that have been by far the best in the insurance industry. I applaud and appreciate the efforts and talents of these three outstanding managers.

Errors in Loss Reserving

Any shareholder in a company with important interests in the property/casualty insurance business should have some understanding of the weaknesses inherent in the reporting of

current earnings in that industry. Phil Graham, when publisher of the Washington Post, described the daily newspaper as "a first rough draft of history". Unfortunately, the financial statements of a property/casualty insurer provide, at best, only a first rough draft of earnings and financial condition.

The determination of costs is the main problem. Most of an insurer's costs result from losses on claims, and many of the losses that should be charged against the current year's revenue are exceptionally difficult to estimate. Sometimes the extent of these losses, or even their existence, is not known for decades.

The loss expense charged in a property/casualty company's current income statement represents: (1) losses that occurred and were paid during the year; (2) estimates for losses that occurred and were reported to the insurer during the year, but which have yet to be settled; (3) estimates of ultimate dollar costs for losses that occurred during the year but of which the insurer is unaware (termed "IBNR": incurred but not reported); and (4) the net effect of revisions this year of similar estimates for (2) and (3) made in past years.

Such revisions may be long delayed, but eventually any estimate of losses that causes the income for year X to be misstated must be corrected, whether it is in year X + 1, or X + 10. This, perforce, means that earnings in the year of correction also are misstated. For example, assume a claimant was injured by one of our insureds in 1979 and we thought a settlement was likely to be made for $10,000. That year we would have charged $10,000 to our earnings statement for the estimated cost of the loss and, correspondingly, set up a liability reserve on the balance sheet for that amount. If we settled the claim in 1984 for $100,000, we would charge earnings with a loss cost of $90,000 in 1984, although that cost was truly an expense of 1979. And if that piece of business was our only activity in 1979, we would have badly misled ourselves as to costs, and you as to earnings.

The necessarily-extensive use of estimates in assembling the figures that appear in such deceptively precise form in the income statement of property/casualty companies means that some error must seep in, no matter how proper the intentions of management. In an attempt to minimize error, most insurers use various statistical techniques to adjust the thousands of individual loss evaluations (called case reserves) that comprise the raw data for estimation of aggregate liabilities. The extra reserves created by these adjustments are variously labeled

"bulk", "development", or "supplemental" reserves. The goal of the adjustments should be a loss-reserve total that has a 50-50 chance of being proved either slightly too high or slightly too low when all losses that occurred prior to the date of the financial statement are ultimately paid.

At Berkshire, we have added what we thought were appropriate supplemental reserves but in recent years they have not been adequate. It is important that you understand the magnitude of the errors that have been involved in our reserving. You can thus see for yourselves just how imprecise the process is, and also judge whether we may have some systemic bias that should make you wary of our current and future figures.

The following table shows the results from insurance underwriting as we have reported them to you in recent years, and also gives you calculations a year later on an "if-we-knew-then-what-we think-we-know-now" basis. I say "what we think we know now" because the adjusted figures still include a great many estimates for losses that occurred in the earlier years.
However, many claims from the earlier years have been settled so that our one-year-later estimate contains less guess work than our earlier estimate:

Year	**Underwriting Results as Reported to You**	**Corrected Figures After One Year's Experience**
1980	$6,738,000	$14,887,000
1981	1,478,000	(1,118,000)
1982	(21,462,000)	(25,066,000)
1984	(33,192,000)	(50,974,000)
1984	(45,413,000)	?

Our structured settlement and loss-reserve assumption businesses are not included in this table. Important additional information on loss reserve experience appears on pages 43-45.

To help you understand this table, here is an explanation of the most recent figures: 1984's reported pre-tax underwriting loss of $45.4 million consists of $27.6 million we estimate that

we lost on 1984's business, plus the increased loss of $17.8 million reflected in the corrected figure for 1983.

As you can see from reviewing the table, my errors in reporting to you have been substantial and recently have always presented a better underwriting picture than was truly the case. This is a source of particular chagrin to me because: (1) I like for you to be able to count on what I say; (2) our insurance managers and I undoubtedly acted with less urgency than we would have had we understood the full extent of our losses; and (3) we paid income taxes calculated on overstated earnings and thereby gave the government money that we didn't need to. (These overpayments eventually correct themselves, but the delay is long and we don't receive interest on the amounts we overpaid.)

Because our business is weighted toward casualty and reinsurance lines, we have more problems in estimating loss costs than companies that specialize in property insurance. (When a building that you have insured burns down, you get a much faster fix on your costs than you do when an employer you have insured finds out that one of his retirees has contracted a disease attributable to work he did decades earlier.) But I still find our errors embarrassing. In our direct business, we have far underestimated the mushrooming tendency of juries and courts to make the "deep pocket" pay, regardless of the factual situation and the past precedents for establishment of liability. We also have underestimated the contagious effect that publicity regarding giant awards has on juries. In the reinsurance area, where we have had our worst experience in under reserving, our customer insurance companies have made the same mistakes. Since we set reserves based on information they supply us, their mistakes have become our mistakes.

I heard a story recently that is applicable to our insurance accounting problems: a man was traveling abroad when he received a call from his sister informing him that their father had died unexpectedly. It was physically impossible for the brother to get back home for the funeral, but he told his sister to take care of the funeral arrangements and to send the bill to him. After returning home he received a bill for several thousand dollars, which he promptly paid. The following month another bill came along for $15, and he paid that too. Another month followed, with a similar bill. When, in the next month, a third bill for $15 was presented, he called his sister to ask what was going on. "Oh", she said. "I forgot to tell you. We buried Dad in a rented suit."

If you've been in the insurance business in recent years - particularly the reinsurance business - this story hurts. We have tried to include all of our "rented suit" liabilities in our current financial statement, but our record of past error should make us humble, and you suspicious. I will continue to report to you the errors, plus or minus, that surface each year.

Not all reserving errors in the industry have been of the innocent-but-dumb variety. With underwriting results as bad as they have been in recent years - and with managements having as much discretion as they do in the presentation of financial statements - some unattractive aspects of human nature have manifested themselves. Companies that would be out of business if they realistically appraised their loss costs have, in some cases, simply preferred to take an extraordinarily optimistic view about these yet-to-be-paid sums. Others have engaged in various transactions to hide true current loss costs.

Both of these approaches can "work" for a considerable time: external auditors cannot effectively police the financial statements of property/casualty insurers. If liabilities of an insurer, correctly stated, would exceed assets, it falls to the insurer to volunteer this morbid information. In other words, the corpse is supposed to file the death certificate. Under this "honor system" of mortality, the corpse sometimes gives itself the benefit of the doubt.

In most businesses, of course, insolvent companies run out of cash. Insurance is different: you can be broke but flush. Since cash comes in at the inception of an insurance policy and losses are paid much later, insolvent insurers don't run out of cash until long after they have run out of net worth. In fact, these "walking dead" often redouble their efforts to write business, accepting almost any price or risk, simply to keep the cash flowing in. With an attitude like that of an embezzler who has gambled away his purloined funds, these companies hope that somehow they can get lucky on the next batch of business and thereby cover up earlier shortfalls. Even if they don't get lucky, the penalty to managers is usually no greater for a $100 million shortfall than one of $10 million; in the meantime, while the losses mount, the managers keep their jobs and perquisites.

The loss-reserving errors of other property/casualty companies are of more than academic interest to Berkshire. Not only does Berkshire suffer from sell-at-any-price competition by the "walking dead", but we also suffer when their insolvency is finally acknowledged. Through various state guarantee funds that levy assessments, Berkshire ends up paying a portion of the

insolvent insurers' asset deficiencies, swollen as they usually are by the delayed detection that results from wrong reporting. There is even some potential for cascading trouble. The insolvency of a few large insurers and the assessments by state guarantee funds that would follow could imperil weak-but-previously-solvent insurers. Such dangers can be mitigated if state regulators become better at prompt identification and termination of insolvent insurers, but progress on that front has been slow.

Washington Public Power Supply System

From October, 1983 through June, 1984 Berkshire's insurance subsidiaries continuously purchased large quantities of bonds of Projects 1, 2, and 3 of Washington Public Power Supply System ("WPPSS"). This is the same entity that, on July 1, 1983, defaulted on $2.2 billion of bonds issued to finance partial construction of the now-abandoned Projects 4 and 5. While there are material differences in the obligors, promises, and properties underlying the two categories of bonds, the problems of Projects 4 and 5 have cast a major cloud over Projects 1, 2, and 3, and might possibly cause serious problems for the latter issues. In addition, there have been a multitude of problems related directly to Projects 1, 2, and 3 that could weaken or destroy an otherwise strong credit position arising from guarantees by Bonneville Power Administration.

Despite these important negatives, Charlie and I judged the risks *at the time we purchased the bonds and at the prices Berkshire paid* (much lower than present prices) to be considerably more than compensated for by prospects of profit.

As you know, we buy marketable stocks for our insurance companies based upon the criteria we would apply in the purchase of an entire business. This business-valuation approach is not widespread among professional money managers and is scorned by many academics. Nevertheless, it has served its followers well (to which the academics seem to say, "Well, it may be all right in practice, but it will never work in theory.") Simply put, we feel that if we can buy small pieces of businesses with satisfactory underlying economics at a fraction of the per-share value of the entire business, something good is likely to happen to us - particularly if we own a group of such securities.

We extend this business-valuation approach even to bond purchases such as WPPSS. We compare the $139 million cost of our yearend investment in WPPSS to a similar $139 million investment in an operating business. In the case of WPPSS, the "business" contractually earns

$22.7 million after tax (via the interest paid on the bonds), and those earnings are available to us currently in cash. We are unable to buy operating businesses with economics close to these. Only a relatively few businesses earn the 16.3% after tax on unleveraged capital that our PPSS investment does and those businesses, when available for purchase, sell at large premiums to that capital. In the average negotiated business transaction, unleveraged corporate earnings of $22.7 million after-tax (equivalent to about $45 million pre-tax) might command a price of $250 - $300 million (or sometimes far more). For a business we understand well and strongly like, we will gladly pay that much. But it is double the price we paid to realize the same earnings from WPPSS bonds.

However, in the case of WPPSS, there is what we view to be a very slight risk that the "business" could be worth nothing within a year or two. There also is the risk that interest payments might be interrupted for a considerable period of time. Furthermore, the most that the "business" could be worth is about the $205 million face value of the bonds that we own, an amount only 48% higher than the price we paid.

This ceiling on upside potential is an important minus. It should be realized, however, that the great majority of operating businesses have a limited upside potential also unless more capital is continuously invested in them. That is so because most businesses are unable to significantly improve their average returns on equity - even under inflationary conditions, though these were once thought to automatically raise returns.

(Let's push our bond-as-a-business example one notch further: if you elect to "retain" the annual earnings of a 12% bond by using the proceeds from coupons to buy more bonds, earnings of that bond "business" will grow at a rate comparable to that of most operating businesses that similarly reinvest all earnings. In the first instance, a 30-year, zero-coupon, 12% bond purchased today for $10 million will be worth $300 million in 2015. In the second, a $10 million business that regularly earns 12% on equity and retains all earnings to grow, will also end up with $300 million of capital in 2015. Both the business and the bond will earn over $32 million in the final year.)

Our approach to bond investment - treating it as an unusual sort of "business" with special advantages and disadvantages - may strike you as a bit quirky. However, we believe that many staggering errors by investors could have been avoided if they had viewed bond investment with a businessman's perspective. For example, in 1946, 20-year AAA tax-exempt bonds traded at

slightly below a 1% yield. In effect, the buyer of those bonds at that time bought a "business" that earned about 1% on "book value" (and that, moreover, could never earn a dime more than 1% on book), and paid 100 cents on the dollar for that abominable business.

If an investor had been business-minded enough to think in those terms - and that was the precise reality of the bargain struck - he would have laughed at the proposition and walked away. For, at the same time, businesses with excellent future prospects could have been bought at, or close to, book value while earning 10%, 12%, or 15% after tax on book. Probably no business in America changed hands in 1946 at book value that the buyer believed lacked the ability to earn more than 1% on book. But investors with bond-buying habits eagerly made economic commitments throughout the year on just that basis. Similar, although less extreme, conditions prevailed for the next two decades as bond investors happily signed up for twenty or thirty years on terms outrageously inadequate by business standards. (In what I think is by far the best book on investing ever written - "The Intelligent Investor", by Ben Graham - the last section of the last chapter begins with, "Investment is most intelligent when it is most businesslike." This section is called "A Final Word", and it is appropriately titled.)

We will emphasize again that there is unquestionably some risk in the WPPSS commitment. It is also the sort of risk that is difficult to evaluate. Were Charlie and I to deal with 50 similar evaluations over a lifetime, we would expect our judgment to prove reasonably satisfactory. But we do not get the chance to make 50 or even 5 such decisions in a single year. Even though our long-term results may turn out fine, in any given year we run a risk that we will look extraordinarily foolish. (That's why all of these sentences say "Charlie and I", or "we".)

Most managers have very little incentive to make the intelligent-but-with-some-chance-of-looking-like-an-idiot decision. Their personal gain/loss ratio is all too obvious: if an unconventional decision works out well, they get a pat on the back and, if it works out poorly, they get a pink slip. (Failing conventionally is the route to go; as a group, lemmings may have a rotten image, but no individual lemming has ever received bad press.)

Our equation is different. With 47% of Berkshire's stock, Charlie and I don't worry about being fired, and we receive our rewards as owners, not managers. Thus we behave with Berkshire's money as we would with our own. That frequently leads us to unconventional behavior both in investments and general business management.

We remain unconventional in the degree to which we concentrate the investments of our insurance companies, including those in WPPSS bonds. This concentration makes sense only because our insurance business is conducted from a position of exceptional financial strength. For almost all other insurers, a comparable degree of concentration (or anything close to it) would be totally inappropriate. Their capital positions are not strong enough to withstand a big error, no matter how attractive an investment opportunity might appear when analyzed on the basis of probabilities.

With our financial strength we can own large blocks of a few securities that we have thought hard about and bought at attractive prices. (Billy Rose described the problem of over-diversification: "If you have a harem of forty women, you never get to know any of them very well.") Over time our policy of concentration should produce superior results, though these will be tempered by our large size. When this policy produces a really bad year, as it must, at least you will know that our money was committed on the same basis as yours.

We made the major part of our WPPSS investment at different prices and under somewhat different factual circumstances than exist at present. If we decide to change our position, we will not inform shareholders until long after the change has been completed. (We may be buying or selling as you read this.) The buying and selling of securities is a competitive business, and even a modest amount of added competition on either side can cost us a great deal of money. Our WPPSS purchases illustrate this principle. From October, 1983 through June, 1984, we attempted to buy almost all the bonds that we could of Projects 1, 2, and 3. Yet we purchased less than 3% of the bonds outstanding. Had we faced even a few additional well-heeled investors, stimulated to buy because they knew we were, we could have ended up with a materially smaller amount of bonds, purchased at a materially higher price. (A couple of coat-tail riders easily could have cost us $5 million.) For this reason, we will not comment about our activities in securities - neither to the press, nor shareholders, nor to anyone else - unless legally required to do so.

One final observation regarding our WPPSS purchases: we dislike the purchase of most long-term bonds under most circumstances and have bought very few in recent years. That's because bonds are as sound as a dollar - and we view the long-term outlook for dollars as dismal. We believe substantial inflation lies ahead, although we have no idea what the average

rate will turn out to be. Furthermore, we think there is a small, but not insignificant, chance of runaway inflation.

Such a possibility may seem absurd, considering the rate to which inflation has dropped. But we believe that present fiscal policy - featuring a huge deficit - is both extremely dangerous and difficult to reverse. (So far, most politicians in both parties have followed Charlie Brown's advice: "No problem is so big that it can't be run away from.") Without a reversal, high rates of inflation may be delayed (perhaps for a long time), but will not be avoided. If high rates materialize, they bring with them the potential for a runaway upward spiral.

While there is not much to choose between bonds and stocks (as a class) when annual inflation is in the 5%-10% range, runaway inflation is a different story. In that circumstance, a diversified stock portfolio would almost surely suffer an enormous loss in real value. But bonds already outstanding would suffer far more. Thus, we think an all-bond portfolio carries a small but unacceptable "wipe out" risk, and we require any purchase of long-term bonds to clear a special hurdle. Only when bond purchases appear decidedly superior to other business opportunities will we engage in them. Those occasions are likely to be few and far between.

Dividend Policy

Dividend policy is often reported to shareholders, but seldom explained. A company will say something like, "Our goal is to pay out 40% to 50% of earnings and to increase dividends at a rate at least equal to the rise in the CPI". And that's it - no analysis will be supplied as to why that particular policy is best for the owners of the business. Yet, allocation of capital is crucial to business and investment management. Because it is, we believe managers and owners should think hard about the circumstances under which earnings should be retained and under which they should be distributed.

The first point to understand is that all earnings are not created equal. In many businesses particularly those that have high asset/profit ratios - inflation causes some or all of the reported earnings to become ersatz. The ersatz portion - let's call these earnings "restricted" - cannot, if the business is to retain its economic position, be distributed as dividends. Were these earnings to be paid out, the business would lose ground in one or more of the following areas: its ability to maintain its unit volume of sales, its long-term competitive position, its financial strength. No matter how conservative its payout ratio, a company that consistently distributes restricted earnings is destined for oblivion unless equity capital is otherwise infused.

Restricted earnings are seldom valueless to owners, but they often must be discounted heavily. In effect, they are conscripted by the business, no matter how poor its economic potential. (This retention-no-matter-how-unattractive-the-return situation was communicated unwittingly in a marvelously ironic way by Consolidated Edison a decade ago. At the time, a punitive regulatory policy was a major factor causing the company's stock to sell as low as one-fourth of book value; i.e., every time a dollar of earnings was retained for reinvestment in the business, that dollar was transformed into only 25 cents of market value. But, despite this gold-into-lead process, most earnings were reinvested in the business rather than paid to owners. Meanwhile, at construction and maintenance sites throughout New York, signs proudly proclaimed the corporate slogan, "Dig We Must".)

Restricted earnings need not concern us further in this dividend discussion. Let's turn to the much-more-valued unrestricted variety. These earnings may, with equal feasibility, be retained or distributed. In our opinion, management should choose whichever course makes greater sense for the owners of the business.

This principle is not universally accepted. For a number of reasons managers like to withhold unrestricted, readily distributable earnings from shareholders - to expand the corporate empire over which the managers rule, to operate from a position of exceptional financial comfort, etc. But we believe there is only one valid reason for retention. Unrestricted earnings should be retained only when there is a reasonable prospect - backed preferably by historical evidence or, when appropriate, by a thoughtful analysis of the future - that *for every dollar retained by the corporation, at least one dollar of market value will be created for owners.* This will happen only if the capital retained produces incremental earnings equal to, or above, those generally available to investors.

To illustrate, let's assume that an investor owns a risk-free 10% perpetual bond with one very unusual feature. Each year the investor can elect either to take his 10% coupon in cash, or to reinvest the coupon in more 10% bonds with identical terms; i.e., a perpetual life and coupons offering the same cash-or-reinvest option. If, in any given year, the prevailing interest rate on long-term, risk-free bonds is 5%, it would be foolish for the investor to take his coupon in cash since the 10% bonds he could instead choose would be worth considerably more than 100 cents on the dollar. Under these circumstances, the investor wanting to get his hands on cash should take his coupon in additional bonds and then immediately sell them. By doing that,

he would realize more cash than if he had taken his coupon directly in cash. Assuming all bonds were held by rational investors, no one would opt for cash in an era of 5% interest rates, not even those bondholders needing cash for living purposes.

If, however, interest rates were 15%, no rational investor would want his money invested for him at 10%. Instead, the investor would choose to take his coupon in cash, even if his personal cash needs were nil. The opposite course - reinvestment of the coupon - would give an investor additional bonds with market value far less than the cash he could have elected. If he should want 10% bonds, he can simply take the cash received and buy them in the market, where they will be available at a large discount.

An analysis similar to that made by our hypothetical bondholder is appropriate for owners in thinking about whether a company's unrestricted earnings should be retained or paid out. Of course, the analysis is much more difficult and subject to error because the rate earned on reinvested earnings is not a contractual figure, as in our bond case, but rather a fluctuating figure. Owners must guess as to what the rate will average over the intermediate future. However, once an informed guess is made, the rest of the analysis is simple: you should wish your earnings to be reinvested if they can be expected to earn high returns, and you should wish them paid to you if low returns are the likely outcome of reinvestment.

Many corporate managers reason very much along these lines in determining whether subsidiaries should distribute earnings to their parent company. At that level,. the managers have no trouble thinking like intelligent owners. But payout decisions at the parent company level often are a different story. Here managers frequently have trouble putting themselves in the shoes of their shareholder-owners.

With this schizoid approach, the CEO of a multi-divisional company will instruct Subsidiary A, whose earnings on incremental capital may be expected to average 5%, to distribute all available earnings in order that they may be invested in Subsidiary B, whose earnings on incremental capital are expected to be 15%. The CEO's business school oath will allow no lesser behavior. But if his own long-term record with incremental capital is 5% - and market rates are 10% - he is likely to impose a dividend policy on shareholders of the parent company that merely follows some historical or industry-wide payout pattern. Furthermore, he will expect managers of subsidiaries to give him a full account as to why it makes sense for earnings to be

retained in their operations rather than distributed to the parent-owner. But seldom will he supply his owners with a similar analysis pertaining to the whole company.

In judging whether managers should retain earnings, shareholders should not simply compare total incremental earnings in recent years to total incremental capital because that relationship may be distorted by what is going on in a core business. During an inflationary period, companies with a core business characterized by extraordinary economics can use small amounts of incremental capital in that business at very high rates of return (as was discussed in last year's section on Goodwill). But, unless they are experiencing tremendous unit growth, outstanding businesses by definition generate large amounts of excess cash. If a company sinks most of this money in other businesses that earn low returns, the company's overall return on retained capital may nevertheless appear excellent because of the extraordinary returns being earned by the portion of earnings incrementally invested in the core business. The situation is analogous to a Pro-Am golf event: even if all of the amateurs are hopeless duffers, the team's best-ball score will be respectable because of the dominating skills of the professional.

Many corporations that consistently show good returns both on equity and on overall incremental capital have, indeed, employed a large portion of their retained earnings on an economically unattractive, even disastrous, basis. Their marvelous core businesses, however, whose earnings grow year after year, camouflage repeated failures in capital allocation elsewhere (usually involving high-priced acquisitions of businesses that have inherently mediocre economics). The managers at fault periodically report on the lessons they have learned from the latest disappointment. They then usually seek out future lessons. (Failure seems to go to their heads.)

In such cases, shareholders would be far better off if earnings were retained only to expand the high-return business, with the balance paid in dividends or used to repurchase stock (an action that increases the owners' interest in the exceptional business while sparing them participation in subpar businesses). Managers of high-return businesses who consistently employ much of the cash thrown off by those businesses in other ventures with low returns should be held to account for those allocation decisions, regardless of how profitable the overall enterprise is.

Nothing in this discussion is intended to argue for dividends that bounce around from quarter to quarter with each wiggle in earnings or in investment opportunities. Shareholders of public corporations understandably prefer that dividends be consistent and predictable. Payments, therefore, should reflect long-term expectations for both earnings and returns on incremental capital. Since the long-term corporate outlook changes only infrequently, dividend patterns should change no more often. But over time distributable earnings that have been withheld by managers should earn their keep. If earnings have been unwisely retained, it is likely that managers, too, have been unwisely retained.

Let's now turn to Berkshire Hathaway and examine how these dividend principles apply to it. Historically, Berkshire has earned well over market rates on retained earnings, thereby creating over one dollar of market value for every dollar retained. Under such circumstances, any distribution would have been contrary to the financial interest of shareholders, large or small.

In fact, significant distributions in the early years might have been disastrous, as a review of our starting position will show you. Charlie and I then controlled and managed three companies, Berkshire Hathaway Inc., Diversified Retailing Company, Inc., and Blue Chip Stamps (all now merged into our present operation). Blue Chip paid only a small dividend, Berkshire and DRC paid nothing. If, instead, the companies had paid out their entire earnings, we almost certainly would have no earnings at all now - and perhaps no capital as well. The three companies each originally made their money from a single business: (1) textiles at Berkshire; (2) department stores at Diversified; and (3) trading stamps at Blue Chip. These cornerstone businesses (carefully chosen, it should be noted, by your Chairman and Vice Chairman) have, respectively, (1) survived but earned almost nothing, (2) shriveled in size while incurring large losses, and (3) shrunk in sales volume to about 5% its size at the time of our entry. (Who says "you can't lose 'em all"?) Only by committing available funds to much better businesses were we able to overcome these origins. (It's been like overcoming a misspent youth.) Clearly, diversification has served us well.

We expect to continue to diversify while also supporting the growth of current operations though, as we've pointed out, our returns from these efforts will surely be below our historical

returns. But as long as prospective returns are above the rate required to produce a dollar of market value per dollar retained, we will continue to retain all earnings. Should our estimate of future returns fall below that point, we will distribute all unrestricted earnings that we believe can not be effectively used. In making that judgment, we will look at both our historical record and our prospects. Because our year-to-year results are inherently volatile, we believe a five-year rolling average to be appropriate for judging the historical record.

Our present plan is to use our retained earnings to further build the capital of our insurance companies. Most of our competitors are in weakened financial condition and reluctant to expand substantially. Yet large premium-volume gains for the industry are imminent, amounting probably to well over $15 billion in 1985 versus less than $5 billion in 1983. These circumstances could produce major amounts of profitable business for us. Of course, this result is no sure thing, but prospects for it are far better than they have been for many years.

Miscellaneous

This is the spot where each year I run my small "business wanted" ad. In 1984 John Loomis, one of our particularly knowledgeable and alert shareholders, came up with a company that met all of our tests. We immediately pursued this idea, and only a chance complication prevented a deal. Since our ad is pulling, we will repeat it in precisely last year's form:

We prefer:

(1) large purchases (at least $5 million of after-tax earnings),

(2) demonstrated consistent earning power (future projections are of little interest to us, nor are "turn-around" situations),

(3) businesses earning good returns on equity while employing little or no debt,

(4) management in place (we can't supply it),

(5) simple businesses (if there's lots of technology, we won't understand it),

(6) an offering price (we don't want to waste our time or that of the seller by talking, even preliminarily, about a transaction when price is unknown).

We will not engage in unfriendly transactions. We can promise complete confidentiality and a very fast answer as to possible interest - customarily within five minutes. Cash purchases are preferred, but we will consider the use of stock when it can be done on the basis described in the previous section.

We will not engage in unfriendly takeovers. We can promise complete confidentiality and a very fast answer - customarily within five minutes - as to whether we're interested. We prefer to buy for cash, but will consider issuance of stock when we receive as much in intrinsic business value as we give. We invite potential sellers to check us out by contacting people with whom we have done business in the past. For the right business - and the right people - we can provide a good home.

* * *

A record 97.2% of all eligible shares participated in Berkshire's 1984 shareholder-designated contributions program. Total contributions made through this program were $3,179,000, and 1,519 charities were recipients. Our proxy material for the annual meeting will allow you to cast an advisory vote expressing your views about this program - whether you think we should continue it and, if so, at what per-share level. (You may be interested to learn that we were unable to find a precedent for an advisory vote in which management seeks the opinions of shareholders about owner-related corporate policies. Managers who put their trust in capitalism seem in no hurry to put their trust in capitalists.)

We urge new shareholders to read the description of our shareholder-designated contributions program that appears on pages 60 and 61. If you wish to participate in future programs, we strongly urge that you immediately make sure that your shares are registered in the name of the actual owner, not in "street" name or nominee name. Shares not so registered on September 30, 1985 will be ineligible for the 1985 program.

* * *

Our annual meeting will be on May 21, 1985 in Omaha, and I hope that you attend. Many annual meetings are a waste of time, both for shareholders and for management. Sometimes that is true because management is reluctant to open up on matters of business substance. More often a nonproductive session is the fault of shareholder participants who are more concerned about their own moment on stage than they are about the affairs of the

corporation. What should be a forum for business discussion becomes a forum for theatrics, spleen-venting and advocacy of issues. (The deal is irresistible: for the price of one share you get to tell a captive audience your ideas as to how the world should be run.) Under such circumstances, the quality of the meeting often deteriorates from year to year as the antics of those interested in themselves discourage attendance by those interested in the business.

Berkshire's meetings are a different story. The number of shareholders attending grows a bit each year and we have yet to experience a silly question or an ego-inspired commentary. Instead, we get a wide variety of thoughtful questions about the business. Because the annual meeting is the time and place for these, Charlie and I are happy to answer them all, no matter how long it takes. (We cannot, however, respond to written or phoned questions at other times of the year; one-person-at-a time reporting is a poor use of management time in a company with 3000 shareholders.) The only business matters that are off limits at the annual meeting are those about which candor might cost our company real money. Our activities in securities would be the main example.

We always have bragged a bit on these pages about the quality of our shareholder-partners. Come to the annual meeting and you will see why. Out-of-towners should schedule a stop at Nebraska Furniture Mart. If you make some purchases, you'll save far more than enough to pay for your trip, and you'll enjoy the experience.

Warren E. Buffett
Chairman of the Board
February 25, 1985

Subsequent Event: On March 18, a week after copy for this report went to the typographer but shortly before production, we agreed to purchase three million shares of Capital Cities Communications, Inc. at $172.50 per share. Our purchase is contingent upon the acquisition of American Broadcasting Companies, Inc. by Capital Cities, and will close when that transaction closes. At the earliest, that will be very late in 1985. Our admiration for the management of Capital Cities, led by Tom Murphy and Dan Burke, has been expressed several times in previous annual reports. Quite simply, they are tops in both ability and integrity. We will have more to say about this investment in next year's report.

1985 Letter

BERKSHIRE HATHAWAY INC.

To the Shareholders of Berkshire Hathaway Inc.:

You may remember the wildly upbeat message of last year's report: nothing much was in the works but our experience had been that something big popped up occasionally. This carefully-crafted corporate strategy paid off in 1985. Later sections of this report discuss (a) our purchase of a major position in Capital Cities/ABC, (b) our acquisition of Scott & Fetzer, (c) our entry into a large, extended term participation in the insurance business of Fireman's Fund, and (d) our sale of our stock in General Foods.

Our gain in net worth during the year was $613.6 million, or 48.2%. It is fitting that the visit of Halley's Comet coincided with this percentage gain: neither will be seen again in my lifetime. Our gain in per-share book value over the last twenty-one years (that is, since present management took over) has been from $19.46 to $1643.71, or 23.2% compounded annually, another percentage that will not be repeated.

Two factors make anything approaching this rate of gain unachievable in the future. One factor probably transitory - is a stock market that offers very little opportunity compared to the markets that prevailed throughout much of the 1964-1984 period. Today we cannot find significantly-undervalued equities to purchase for our insurance company portfolios. The current situation is 180 degrees removed from that existing about a decade ago, when the only question was which bargain to choose.

This change in the market also has negative implications for our present portfolio. In our 1974 annual report I could say: "We consider several of our major holdings to have great potential for significantly increased values in future years." I can't say that now. It's true that our insurance companies currently hold major positions in companies with exceptional underlying economics and outstanding managements, just as they did in 1974. But current market prices generously appraise these attributes, whereas they were ignored in 1974. Today's

valuations mean that our insurance companies have no chance for future portfolio gains on the scale of those achieved in the past.

The second negative factor, far more telling, is our size. Our equity capital is more than twenty times what it was only ten years ago. And an iron law of business is that growth eventually dampens exceptional economics. just look at the records of high-return companies once they have amassed even $1 billion of equity capital. None that I know of has managed subsequently, over a ten-year period, to keep on earning 20% or more on equity while reinvesting all or substantially all of its earnings. Instead, to sustain their high returns, such companies have needed to shed a lot of capital by way of either dividends or repurchases of stock. Their shareholders would have been far better off if all earnings could have been reinvested at the fat returns earned by these exceptional businesses. But the companies simply couldn't turn up enough high-return opportunities to make that possible.

Their problem is our problem. Last year I told you that we needed profits of $3.9 billion over the ten years then coming up to earn 15% annually. The comparable figure for the ten years now ahead is $5.7 billion, a 48% increase that corresponds - as it must mathematically - to the growth in our capital base during 1985. (Here's a little perspective: leaving aside oil companies, only about 15 U.S. businesses have managed to earn over $5.7 billion during the past ten years.)

Charlie Munger, my partner in managing Berkshire, and I are reasonably optimistic about Berkshire's ability to earn returns superior to those earned by corporate America generally, and you will benefit from the company's retention of all earnings as long as those returns are forthcoming. We have several things going for us: (1) we don't have to worry about quarterly or annual figures but, instead, can focus on whatever actions will maximize long-term value; (2) we can expand the business into any areas that make sense - our scope is not circumscribed by history, structure, or concept; and (3) we love our work. All of these help. Even so, we will also need a full measure of good fortune to average our hoped-for 15% - far more good fortune than was required for our past 23.2%.

We need to mention one further item in the investment equation that could affect recent purchasers of our stock. Historically, Berkshire shares have sold modestly below intrinsic business value. With the price there, purchasers could be certain (as long as they did not experience a widening of this discount) that their personal investment experience would at least

equal the financial experience of the business. But recently the discount has disappeared, and occasionally a modest premium has prevailed.

The elimination of the discount means that Berkshire's market value increased even faster than business value (which, itself, grew at a pleasing pace). That was good news for any owner holding while that move took place, but it is bad news for the new or prospective owner. If the financial experience of new owners of Berkshire is merely to match the future financial experience of the company, any premium of market value over intrinsic business value that they pay must be maintained.

Management cannot determine market prices, although it can, by its disclosures and policies, encourage rational behavior by market participants. My own preference, as perhaps you'd guess, is for a market price that consistently approximates business value. Given that relationship, all owners prosper precisely as the business prospers during their period of ownership. Wild swings in market prices far above and below business value do not change the final gains for owners in aggregate; in the end, investor gains must equal business gains. But long periods of substantial undervaluation and/or overvaluation will cause the gains of the business to be inequitably distributed among various owners, with the investment result of any given owner largely depending upon how lucky, shrewd, or foolish he happens to be.

Over the long term there has been a more consistent relationship between Berkshire's market value and business value than has existed for any other publicly-traded equity with which I am familiar. This is a tribute to you. Because you have been rational, interested, and investment-oriented, the market price for Berkshire stock has almost always been sensible. This unusual result has been achieved by a shareholder group with unusual demographics: virtually all of our shareholders are individuals, not institutions. No other public company our size can claim the same.

You might think that institutions, with their large staffs of highly-paid and experienced investment professionals, would be a force for stability and reason in financial markets. They are not: stocks heavily owned and constantly monitored by institutions have often been among the most inappropriately valued.

Ben Graham told a story 40 years ago that illustrates why investment professionals behave as they do: An oil prospector, moving to his heavenly reward, was met by St. Peter with bad news. "You're qualified for residence", said St. Peter, "but, as you can see, the compound reserved for

oil men is packed. There's no way to squeeze you in." After thinking a moment, the prospector asked if he might say just four words to the present occupants. That seemed harmless to St. Peter, so the prospector cupped his hands and yelled, "Oil discovered in hell." Immediately the gate to the compound opened and all of the oil men marched out to head for the nether regions. Impressed, St. Peter invited the prospector to move in and make himself comfortable. The prospector paused. "No," he said, "I think I'll go along with the rest of the boys. There might be some truth to that rumor after all."

Sources of Reported Earnings

The table on the next page shows the major sources of Berkshire's reported earnings. These numbers, along with far more detailed sub-segment numbers, are the ones that Charlie and I focus upon. We do not find consolidated figures an aid in either managing or evaluating Berkshire and, in fact, never prepare them for internal use.

Segment information is equally essential for investors wanting to know what is going on in a multi-line business. Corporate managers always have insisted upon such information before making acquisition decisions but, until a few years ago, seldom made it available to investors faced with acquisition and disposition decisions of their own. Instead, when owners wishing to understand the economic realities of their business asked for data, managers usually gave them a we-can't-tell-you-what-is-going-on-because-it-would-hurt-the-company answer. Ultimately the SEC ordered disclosure of segment data and management began supplying real answers. The change in their behavior recalls an insight of Al Capone: "You can get much further with a kind word and a gun than you can with a kind word alone."

In the table, amortization of Goodwill is not charged against the specific businesses but, for reasons outlined in the Appendix to my letter in the 1983 annual report, is aggregated as a separate item. (A compendium of the 1977-1984 letters is available upon request.) In the Business Segment Data and Management's Discussion sections on pages 39-41 and 49-55, much additional information regarding our businesses is provided, including Goodwill and Goodwill Amortization figures for each of the segments. I urge you to read those sections as well as Charlie Munger's letter to Wesco shareholders, which starts on page 56.

Operating Earnings	**Pre-Tax**	**Earnings**	**Berkshire**	**Share**
(000s omitted)	**1985**	**1984**	**1985**	**1984**
Underwriting	$(44,230)	$(48,060)	$(23,569)	$(25,955)
Net investment income	95,217	68,903	79,716	62,059
Associated Retail Stores	270	(1,072)	134	(579)
Blue Chip Stamps	5,763	(1,843)	2,813	(899)
Buffalo News	29,921	27,328	14,580	13,317
Mutual Savings & Loan	2,622	1,456	4,016	3,151
Nebraska Furniture Mart	12,686	14,511	5,181	5,917
Precision Steel	3,896	4,092	1,477	1,696
See's Candies	28,989	26,644	14,558	13,380
Textiles	(2,395)	418	(1,324)	226
Wesco Financial	9,500	9,777	4,191	4,828
Amortization of Goodwill	(1,475)	(1,434)	(1,475)	(1,434)
Interest On Debt	(14,415)	(14,734)	(7,288)	(7,452)
Shareholder-Designated Contributions	(4,006)	(3,179)	(2,164)	(1,716)
Other	3,106	4,932	2,102	3,475
Operating Earnings	125,449	87,739	92,948	70,015
Special General Foods Distribution	4,127	8,111	3,779	7,294
Special Washington Post Distribution	14,877	--	13,851	--
Sales of Securities	468,903	104,699	325,237	71,587
Total Earnings- all entities	**$200,549**	**$147,878**	**$191,293**	**$148,896**

Our 1985 results include unusually large earnings from the sale of securities. This fact, in itself, does not mean that we had a particularly good year (though, of course, we did). Security profits in a given year bear similarities to a college graduation ceremony in which the knowledge gained over four years is recognized on a day when nothing further is learned. We may hold a stock for a decade or more, and during that period it may grow quite consistently in both business and market value. In the year in which we finally sell it there may be no increase in value, or there may even be a decrease. But all growth in value since purchase will be reflected in the accounting earnings of the year of sale. (If the stock owned is in our insurance subsidiaries, however, any gain or loss in market value will be reflected in net worth annually.) Thus, reported capital gains or losses in any given year are meaningless as a measure of how well we have done in the current year.

A large portion of the realized gain in 1985 ($338 million pre-tax out of a total of $488 million) came about through the sale of our General Foods shares. We held most of these shares since 1980, when we had purchased them at a price far below what we felt was their per/share business value. Year by year, the managerial efforts of Jim Ferguson and Phil Smith substantially increased General Foods' business value and, last fall, Philip Morris made an offer for the company that reflected the increase. We thus benefited from four factors: a bargain purchase price, a business with fine underlying economics, an able management concentrating on the interests of shareholders, and a buyer willing to pay full business value. While that last factor is the only one that produces reported earnings, we consider identification of the first three to be the key to building value for Berkshire shareholders. In selecting common stocks, we devote our attention to attractive purchases, not to the possibility of attractive sales.

We have again reported substantial income from special distributions, this year from Washington Post and General Foods. (The General Foods transactions obviously took place well before the Philip Morris offer.) Distributions of this kind occur when we sell a portion of our shares in a company back to it simultaneously with its purchase of shares from other shareholders. The number of shares we sell is contractually set so as to leave our percentage ownership in the company precisely the same after the sale as before. Such a transaction is quite properly regarded by the IRS as substantially equivalent to a dividend since we, as a shareholder, receive cash while maintaining an unchanged ownership interest. This tax treatment benefits us because corporate taxpayers, unlike individual taxpayers, incur much lower taxes on dividend income than on income from long-term capital gains. (This difference will be widened further if the House-passed tax bill becomes law: under its provisions, capital gains realized by corporations will be taxed at the same rate as ordinary income.) However, accounting rules are unclear as to proper treatment for shareholder reporting. To conform with last year's treatment, we have shown these transactions as capital gains.

Though we have not sought out such transactions, we have agreed to them on several occasions when managements initiated the idea. In each case we have felt that non-selling shareholders (all of whom had an opportunity to sell at the same price we received) benefited because the companies made their repurchases at prices below intrinsic business value. The tax advantages we receive and our wish to cooperate with managements that are increasing values

for all shareholders have sometimes led us to sell - but only to the extent that our proportional share of the business was undiminished.

At this point we usually turn to a discussion of some of our major business units. Before doing so, however, we should first look at a failure at one of our smaller businesses. Our Vice Chairman, Charlie Munger, has always emphasized the study of mistakes rather than successes, both in business and other aspects of life. He does so in the spirit of the man who said: "All I want to know is where I'm going to die so I'll never go there." You'll immediately see why we make a good team: Charlie likes to study errors and I have generated ample material for him, particularly in our textile and insurance businesses.

Shutdown of Textile Business

In July we decided to close our textile operation, and by yearend this unpleasant job was largely completed. The history of this business is instructive.

When Buffett Partnership, Ltd., an investment partnership of which I was general partner, bought control of Berkshire Hathaway 21 years ago, it had an accounting net worth of $22 million, all devoted to the textile business. The company's intrinsic business value, however, was considerably less because the textile assets were unable to earn returns commensurate with their accounting value. Indeed, during the previous nine years (the period in which Berkshire and Hathaway operated as a merged company) aggregate sales of $530 million had produced an aggregate loss of $10 million. Profits had been reported from time to time but the net effect was always one step forward, two steps back.

At the time we made our purchase, southern textile plants - largely non-union - were believed to have an important competitive advantage. Most northern textile operations had closed and many people thought we would liquidate our business as well.

We felt, however, that the business would be run much better by a long-time employee whom. we immediately selected to be president, Ken Chace. In this respect we were 100% correct: Ken and his recent successor, Garry Morrison, have been excellent managers, every bit the equal of managers at our more profitable businesses.

In early 1967 cash generated by the textile operation was used to fund our entry into insurance via the purchase of National Indemnity Company. Some of the money came from earnings and some from reduced investment in textile inventories, receivables, and fixed assets.

This pullback proved wise: although much improved by Ken's management, the textile business never became a good earner, not even in cyclical upturns.

Further diversification for Berkshire followed, and gradually the textile operation's depressing effect on our overall return diminished as the business became a progressively smaller portion of the corporation. We remained in the business for reasons that I stated in the 1978 annual report (and summarized at other times also): "(1) our textile businesses are very important employers in their communities, (2) management has been straightforward in reporting on problems and energetic in attacking them, (3) labor has been cooperative and understanding in facing our common problems, and (4) the business should average modest cash returns relative to investment." I further said, "As long as these conditions prevail - and we expect that they will - we intend to continue to support our textile business despite more attractive alternative uses for capital."

It turned out that I was very wrong about (4). Though 1979 was moderately profitable, the business thereafter consumed major amounts of cash. By mid-1985 it became clear, even to me, that this condition was almost sure to continue. Could we have found a buyer who would continue operations, I would have certainly preferred to sell the business rather than liquidate it, even if that meant somewhat lower proceeds for us. But the economics that were finally obvious to me were also obvious to others, and interest was nil.

I won't close down businesses of sub-normal profitability merely to add a fraction of a point to our corporate rate of return. However, I also feel it inappropriate for even an exceptionally profitable company to fund an operation once it appears to have unending losses in prospect. Adam Smith would disagree with my first proposition, and Karl Marx would disagree with my second; the middle ground is the only position that leaves me comfortable.

I should reemphasize that Ken and Garry have been resourceful, energetic and imaginative in attempting to make our textile operation a success. Trying to achieve sustainable profitability, they reworked product lines, machinery configurations and distribution arrangements. We also made a major acquisition, Waumbec Mills, with the expectation of important synergy (a term widely used in business to explain an acquisition that otherwise makes no sense). But in the end nothing worked and I should be faulted for not quitting sooner. A recent *Business Week* article stated that 250 textile mills have closed since 1980. Their owners were not privy to any

information that was unknown to me; they simply processed it more objectively. I ignored Comte's advice - "the intellect should be the servant of the heart, but not its slave" - and believed what I preferred to believe.

The domestic textile industry operates in a commodity business, competing in a world market in which substantial excess capacity exists. Much of the trouble we experienced was attributable, both directly and indirectly, to competition from foreign countries whose workers are paid a small fraction of the U.S. minimum wage. But that in no way means that our labor force deserves any blame for our closing. In fact, in comparison with employees of American industry generally, our workers were poorly paid, as has been the case throughout the textile business. In contract negotiations, union leaders and members were sensitive to our disadvantageous cost position and did not push for unrealistic wage increases or unproductive work practices. To the contrary, they tried just as hard as we did to keep us competitive. Even during our liquidation period they performed superbly. (Ironically, we would have been better off financially if our union had behaved unreasonably some years ago; we then would have recognized the impossible future that we faced, promptly closed down, and avoided significant future losses.)

Over the years, we had the option of making large capital expenditures in the textile operation that would have allowed us to somewhat reduce variable costs. Each proposal to do so looked like an immediate winner. Measured by standard return-on-investment tests, in fact, these proposals usually promised greater economic benefits than would have resulted from comparable expenditures in our highly-profitable candy and newspaper businesses.

But the promised benefits from these textile investments were illusory. Many of our competitors, both domestic and foreign, were stepping up to the same kind of expenditures and, once enough companies did so, their reduced costs became the baseline for reduced prices industrywide. Viewed individually, each company's capital investment decision appeared cost-effective and rational; viewed collectively, the decisions neutralized each other and were irrational (just as happens when each person watching a parade decides he can see a little better if he stands on tiptoes). After each round of investment, all the players had more money in the game and returns remained anemic.

Thus, we faced a miserable choice: huge capital investment would have helped to keep our textile business alive, but would have left us with terrible returns on ever-growing amounts of

capital. After the investment, moreover, the foreign competition would still have retained a major, continuing advantage in labor costs. A refusal to invest, however, would make us increasingly non-competitive, even measured against domestic textile manufacturers. I always thought myself in the position described by Woody Allen in one of his movies: "More than any other time in history, mankind faces a crossroads. One path leads to despair and utter hopelessness, the other to total extinction. Let us pray we have the wisdom to choose correctly."

For an understanding of how the to-invest-or-not-to-invest dilemma plays out in a commodity business, it is instructive to look at Burlington Industries, by far the largest U.S. textile company both 21 years ago and now. In 1964 Burlington had sales of $1.2 billion against our $50 million. It had strengths in both distribution and production that we could never hope to match and also, of course, had an earnings record far superior to ours. Its stock sold at 60 at the end of 1964; ours was 13.

Burlington made a decision to stick to the textile business, and in 1985 had sales of about $2.8 billion. During the 1964-85 period, the company made capital expenditures of about $3 billion, far more than any other U.S. textile company and more than $200-per-share on that $60 stock. A very large part of the expenditures, I am sure, was devoted to cost improvement and expansion. Given Burlington's basic commitment to stay in textiles, I would also surmise that the company's capital decisions were quite rational.

Nevertheless, Burlington has lost sales volume in real dollars and has far lower returns on sales and equity now than 20 years ago. Split 2-for-1 in 1965, the stock now sells at 34 -- on an adjusted basis, just a little over its $60 price in 1964. Meanwhile, the CPI has more than tripled. Therefore, each share commands about one-third the purchasing power it did at the end of 1964. Regular dividends have been paid but they, too, have shrunk significantly in purchasing power.

This devastating outcome for the shareholders indicates what can happen when much brain power and energy are applied to a faulty premise. The situation is suggestive of Samuel Johnson's horse: "A horse that can count to ten is a remarkable horse - not a remarkable mathematician." Likewise, a textile company that allocates capital brilliantly within its industry is a remarkable textile company - but not a remarkable business.

My conclusion from my own experiences and from much observation of other businesses is that a good managerial record (measured by economic returns) is far more a function of what

business boat you get into than it is of how effectively you row (though intelligence and effort help considerably, of course, in any business, good or bad). Some years ago I wrote: "When a management with a reputation for brilliance tackles a business with a reputation for poor fundamental economics, it is the reputation of the business that remains intact." Nothing has since changed my point of view on that matter. Should you find yourself in a chronically-leaking boat, energy devoted to changing vessels is likely to be more productive than energy devoted to patching leaks.

* * *

There is an investment postscript in our textile saga. Some investors weight book value heavily in their stock-buying decisions (as I, in my early years, did myself). And some economists and academicians believe replacement values are of considerable importance in calculating an appropriate price level for the stock market as a whole. Those of both persuasions would have received an education at the auction we held in early 1986 to dispose of our textile machinery.

The equipment sold (including some disposed of in the few months prior to the auction) took up about 750,000 square feet of factory space in New Bedford and was eminently usable. It originally cost us about $13 million, including $2 million spent in 1980-84, and had a current book value of $866,000 (after accelerated depreciation). Though no sane management would have made the investment, the equipment could have been replaced new for perhaps $30-$50 million.

Gross proceeds from our sale of this equipment came to $163,122. Allowing for necessary pre- and post-sale costs, our net was less than zero. Relatively modern looms that we bought for $5,000 apiece in 1981 found no takers at $50. We finally sold them for scrap at $26 each, a sum less than removal costs.

Ponder this: the economic goodwill attributable to two paper routes in Buffalo - or a single See's candy store - considerably exceeds the proceeds we received from this massive collection of tangible assets that not too many years ago, under different competitive conditions, was able to employ over 1,000 people.

Three Very Good Businesses (and a Few Thoughts About Incentive Compensation)

When I was 12, I lived with my grandfather for about four months. A grocer by trade, he was also working on a book and each night he dictated a few pages to me. The title - brace yourself -

was “How to Run a Grocery Store and a Few Things I Have Learned About Fishing”. My grandfather was sure that interest in these two subjects was universal and that the world awaited his views. You may conclude from this section’s title and contents that I was overexposed to Grandpa’s literary style (and personality).

I am merging the discussion of Nebraska Furniture Mart, See’s Candy Shops, and Buffalo Evening News here because the economic strengths, weaknesses, and prospects of these businesses have changed little since I reported to you a year ago. The shortness of this discussion, however, is in no way meant to minimize the importance of these businesses to us: in 1985 they earned an aggregate of $72 million pre-tax. Fifteen years ago, before we had acquired any of them, their aggregate earnings were about $8 million pre-tax.

While an increase in earnings from $8 million to $72 million sounds terrific - and usually is - you should not automatically assume that to be the case. You must first make sure that earnings were not severely depressed in the base year. If they were instead substantial in relation to capital employed, an even more important point must be examined: how much additional capital was required to produce the additional earnings?

In both respects, our group of three scores well. First, earnings 15 years ago were excellent compared to capital then employed in the businesses. Second, although annual earnings are now $64 million greater, the businesses require only about $40 million more in invested capital to operate than was the case then.

The dramatic growth in earning power of these three businesses, accompanied by their need for only minor amounts of capital, illustrates very well the power of economic goodwill during an inflationary period (a phenomenon explained in detail in the 1983 annual report). The financial characteristics of these businesses have allowed us to use a very large portion of the earnings they generate elsewhere. Corporate America, however, has had a different experience: in order to increase earnings significantly, most companies have needed to increase capital significantly also. The average American business has required about $5 of additional capital to generate an additional $1 of annual pre-tax earnings. That business, therefore, would have required over $300 million in additional capital from its owners in order to achieve an earnings performance equal to our group of three.

When returns on capital are ordinary, an earn-more-by-putting-up-more record is no great managerial achievement. You can get the same result personally while operating from your

rocking chair. just quadruple the capital you commit to a savings account and you will quadruple your earnings. You would hardly expect hosannas for that particular accomplishment. Yet, retirement announcements regularly sing the praises of CEOs who have, say, quadrupled earnings of their widget company during their reign - with no one examining whether this gain was attributable simply too many years of retained earnings and the workings of compound interest.

If the widget company consistently earned a superior return on capital throughout the period, or if capital employed only doubled during the CEO's reign, the praise for him may be well deserved. But if return on capital was lackluster and capital employed increased in pace with earnings, applause should be withheld. A savings account in which interest was reinvested would achieve the same year-by-year increase in earnings - and, at only 8% interest, would quadruple its annual earnings in 18 years.

The power of this simple math is often ignored by companies to the detriment of their shareholders. Many corporate compensation plans reward managers handsomely for earnings increases produced solely, or in large part, by retained earnings - i.e., earnings withheld from owners. For example, ten-year, fixed-price stock options are granted routinely, often by companies whose dividends are only a small percentage of earnings.

An example will illustrate the inequities possible under such circumstances. Let's suppose that you had a $100,000 savings account earning 8% interest and "managed" by a trustee who could decide each year what portion of the interest you were to be paid in cash. Interest not paid out would be "retained earnings" added to the savings account to compound. And let's suppose that your trustee, in his superior wisdom, set the "pay-out ratio" at one-quarter of the annual earnings.

Under these assumptions, your account would be worth $179,084 at the end of ten years. Additionally, your annual earnings would have increased about 70% from $8,000 to $13,515 under this inspired management. And, finally, your "dividends" would have increased commensurately, rising regularly from $2,000 in the first year to $3,378 in the tenth year. Each year, when your manager's public relations firm prepared his annual report to you, all of the charts would have had lines marching skyward.

Now, just for fun, let's push our scenario one notch further and give your trustee-manager a ten-year fixed-price option on part of your "business" (i.e., your savings account) based on its

fair value in the first year. With such an option, your manager would reap a substantial profit at your expense - just from having held on to most of your earnings. If he were both Machiavellian and a bit of a mathematician, your manager might also have cut the pay-out ratio once he was firmly entrenched.

This scenario is not as farfetched as you might think. Many stock options in the corporate world have worked in exactly that fashion: they have gained in value simply because management retained earnings, not because it did well with the capital in its hands.

Managers actually apply a double standard to options. Leaving aside warrants (which deliver the issuing corporation immediate and substantial compensation), I believe it is fair to say that nowhere in the business world are ten-year fixed-price options on all or a portion of a business granted to outsiders. Ten months, in fact, would be regarded as extreme. It would be particularly unthinkable for managers to grant a long-term option on a business that was regularly adding to its capital. Any outsider wanting to secure such an option would be required to pay fully for capital added during the option period.

The unwillingness of managers to do-unto-outsiders, however, is not matched by an unwillingness to do-unto-themselves. (Negotiating with one's self seldom produces a barroom brawl.) Managers regularly engineer ten-year, fixed-price options for themselves and associates that, first, totally ignore the fact that retained earnings automatically build value and, second, ignore the carrying cost of capital. As a result, these managers end up profiting much as they would have had they had an option on that savings account that was automatically building up in value.

Of course, stock options often go to talented, value-adding managers and sometimes deliver them rewards that are perfectly appropriate. (Indeed, managers who are really exceptional almost always get far less than they should.) But when the result is equitable, it is accidental. Once granted, the option is blind to individual performance. Because it is irrevocable and unconditional (so long as a manager stays in the company), the sluggard receives rewards from his options precisely as does the star. A managerial Rip Van Winkle, ready to doze for ten years, could not wish for a better "incentive" system.

(I can't resist commenting on one long-term option given an "outsider": that granted the U.S. Government on Chrysler shares as partial consideration for the government's guarantee of some lifesaving loans. When these options worked out well for the government, Chrysler sought to

modify the payoff, arguing that the rewards to the government were both far greater than intended and outsize in relation to its contribution to Chrysler's recovery. The company's anguish over what it saw as an imbalance between payoff and performance made national news. That anguish may well be unique: to my knowledge, no managers - anywhere - have been similarly offended by unwarranted payoffs arising from options granted to themselves or their colleagues.)

Ironically, the rhetoric about options frequently describes them as desirable because they put managers and owners in the same financial boat. In reality, the boats are far different. No owner has ever escaped the burden of capital costs, whereas a holder of a fixed-price option bears no capital costs at all. An owner must weigh upside potential against downside risk; an option holder has no downside. In fact, the business project in which you would wish to have an option frequently is a project in which you would reject ownership. (I'll be happy to accept a lottery ticket as a gift - but I'll never buy one.)

In dividend policy also, the option holders' interests are best served by a policy that may ill serve the owner. Think back to the savings account example. The trustee, holding his option, would benefit from a no-dividend policy. Conversely, the owner of the account should lead to a total payout so that he can prevent the option-holding manager from sharing in the account's retained earnings.

Despite their shortcomings, options can be appropriate under some circumstances. My criticism relates to their indiscriminate use and, in that connection, I would like to emphasize three points:

First, stock options are inevitably tied to the overall performance of a corporation. Logically, therefore, they should be awarded only to those managers with overall responsibility. Managers with limited areas of responsibility should have incentives that pay off in relation to results under their control. The .350 hitter expects, and also deserves, a big payoff for his performance - even if he plays for a cellar-dwelling team. And the .150 hitter should get no reward - even if he plays for a pennant winner. Only those with overall responsibility for the team should have their rewards tied to its results.

Second, options should be structured carefully. Absent special factors, they should have built into them a retained-earnings or carrying-cost factor. Equally important, they should be priced realistically. When managers are faced with offers for their companies, they unfailingly point

out how unrealistic market prices can be as an index of real value. But why, then, should these same depressed prices be the valuations at which managers sell portions of their businesses to themselves? (They may go further: officers and directors sometimes consult the Tax Code to determine the *lowest* prices at which they can, in effect, sell part of the business to insiders. While they're at it, they often elect plans that produce the worst tax result for the company.) Except in highly unusual cases, owners are not well served by the sale of part of their business at a bargain price - whether the sale is to outsiders or to insiders. The obvious conclusion: options should be priced at true business value.

Third, I want to emphasize that some managers whom I admire enormously - and whose operating records are far better than mine - disagree with me regarding fixed-price options. They have built corporate cultures that work, and fixed-price options have been a tool that helped them. By their leadership and example, and by the use of options as incentives, these managers have taught their colleagues to think like owners. Such a Culture is rare and when it exists should perhaps be left intact - despite inefficiencies and inequities that may infest the option program. "If it ain't broke, don't fix it" is preferable to "purity at any price".

At Berkshire, however, we use an incentive@compensation system that rewards key managers for meeting targets in their own bailiwicks. If See's does well, that does not produce incentive compensation at the News - nor vice versa. Neither do we look at the price of Berkshire stock when we write bonus checks. We believe good unit performance should be rewarded whether Berkshire stock rises, falls, or stays even. Similarly, we think average performance should earn no special rewards even if our stock should soar. "Performance", furthermore, is defined in different ways depending upon the underlying economics of the business: in some our managers enjoy tailwinds not of their own making, in others they fight unavoidable headwinds.

The rewards that go with this system can be large. At our various business units, top managers sometimes receive incentive bonuses of five times their base salary, or more, and it would appear possible that one manager's bonus could top $2 million in 1986. (I hope so.) We do not put a cap on bonuses, and the potential for rewards is not hierarchical. The manager of a relatively small unit can earn far more than the manager of a larger unit if results indicate he should. We believe, further, that such factors as seniority and age should not affect incentive

compensation (though they sometimes influence basic compensation). A 20-year-old who can hit .300 is as valuable to us as a 40-year-old performing as well.

Obviously, all Berkshire managers can use their bonus money (or other funds, including borrowed money) to buy our stock in the market. Many have done just that - and some now have large holdings. By accepting both the risks and the carrying costs that go with outright purchases, these managers truly walk in the shoes of owners.

Now let's get back - at long last - to our three businesses:

At Nebraska Furniture Mart our basic strength is an exceptionally low-cost operation that allows the business to regularly offer customers the best values available in home furnishings. NFM is the largest store of its kind in the country. Although the already-depressed farm economy worsened considerably in 1985, the store easily set a new sales record. I also am happy to report that NFM's Chairman, Rose Blumkin (the legendary "Mrs. B"), continues at age 92 to set a pace at the store that none of us can keep up with. She's there wheeling and dealing seven days a week, and I hope that any of you who visit Omaha will go out to the Mart and see her in action. It will inspire you, as it does me.

At See's we continue to get store volumes that are far beyond those achieved by any competitor we know of. Despite the unmatched consumer acceptance we enjoy, industry trends are not good, and we continue to experience slippage in poundage sales on a same-store basis. This puts pressure on per-pound costs. We now are willing to increase prices only modestly and, unless we can stabilize per-shop poundage, profit margins will narrow.

At the News volume gains are also difficult to achieve. Though linage increased during 1985, the gain was more than accounted for by preprints. ROP linage (advertising printed on our own pages) declined. Preprints are far less profitable than ROP ads, and also more vulnerable to competition. In 1985, the News again controlled costs well and our household penetration continues to be exceptional.

One problem these three operations do not have is management. At See's we have Chuck Huggins, the man we put in charge the day we bought the business. Selecting him remains one of our best business decisions. At the News we have Stan Lipsey, a manager of equal caliber. Stan has been with us 17 years, and his unusual business talents have become more evident with every additional level of responsibility he has tackled. And, at the Mart, we have the amazing Blumkins - Mrs. B, Louie, Ron, Irv, and Steve - a three-generation miracle of management.

I consider myself extraordinarily lucky to be able to work with managers such as these. I like them personally as much as I admire them professionally.

Insurance Operations

Shown below is an updated version of our usual table, listing two key figures for the insurance industry:

Year	Yearly Change in Premiums Written (%)	Combined Ratio after Policy-holder Dividends
1972	10.2	96.2
1973	8.0	99.2
1974	6.2	105.4
1975	11.0	107.9
1976	21.9	102.4
1976	19.8	97.2
1978	12.8	97.5
1979	10.3	100.6
1980	6.0	103.1
1981	3.9	106.0
1982	4.4	109.7
1983	4.5	111.9
1984 (Revised)	9.2	118.0
1985 (Est.)	20.9	118.0

The combined ratio represents total insurance costs (losses incurred plus expenses) compared to revenue from premiums: a ratio below 100 indicates an underwriting profit, and one above 100 indicates a loss.

The industry's 1985 results were highly unusual. The revenue gain was exceptional, and had insured losses grown at their normal rate of most recent years - that is, a few points above the

inflation rate - a significant drop in the combined ratio would have occurred. But losses in 1985 didn't cooperate, as they did not in 1984. Though inflation slowed considerably in these years, insured losses perversely accelerated, growing by 16% in 1984 and by an even more startling 17% in 1985. The year's growth in losses therefore exceeds the inflation rate by over 13 percentage points, a modern record.

Catastrophes were not the culprit in this explosion of loss cost. True, there were an unusual number of hurricanes in 1985, but the aggregate damage caused by all catastrophes in 1984 and 1985 was about 2% of premium volume, a not unusual proportion. Nor was there any burst in the number of insured autos, houses, employers, or other kinds of "exposure units".

A partial explanation for the surge in the loss figures is all the additions to reserves that the industry made in 1985. As results for the year were reported, the scene resembled a revival meeting: shouting "I've sinned, I've sinned", insurance managers rushed forward to confess they had under reserved in earlier years. Their corrections significantly affected 1985 loss numbers.

A more disturbing ingredient in the loss surge is the acceleration in "social" or "judicial" inflation. The insurer's ability to pay has assumed overwhelming importance with juries and judges in the assessment of both liability and damages. More and more, "the deep pocket" is being sought and found, no matter what the policy wording, the facts, or the precedents.

This judicial inflation represents a wild card in the industry's future, and makes forecasting difficult. Nevertheless, the short-term outlook is good. Premium growth improved as 1985 went along (quarterly gains were an estimated 15%, 19%, 24%, and 22%) and, barring a supercatastrophe, the industry's combined ratio should fall sharply in 1986.

The profit improvement, however, is likely to be of short duration. Two economic principles will see to that. First, commodity businesses achieve good levels of profitability only when prices are fixed in some manner or when capacity is short. Second, managers quickly add to capacity when prospects start to improve and capital is available.

In my 1982 report to you, I discussed the commodity nature of the insurance industry extensively. The typical policyholder does not differentiate between products but concentrates instead on price. For many decades a cartel-like procedure kept prices up, but this arrangement has disappeared for good. The insurance product now is priced as any other commodity for which a free market exists: when capacity is tight, prices will be set

remuneratively; otherwise, they will not be.

Capacity currently is tight in many lines of insurance - though in this industry, unlike most, capacity is an attitudinal concept, not a physical fact. Insurance managers can write whatever amount of business they feel comfortable writing, subject only to pressures applied by regulators and Best's, the industry's authoritative rating service. The comfort level of both managers and regulators is tied to capital. More capital means more comfort, which in turn means more capacity. In the typical commodity business, furthermore, such as aluminum or steel, a long gestation precedes the birth of additional capacity. In the insurance industry, capital can be secured instantly. Thus, any capacity shortage can be eliminated in short order. That's exactly what's going on right now. In 1985, about 15 insurers raised well over $3 billion, piling up capital so that they can write all the business possible at the better prices now available. The capital-raising trend has accelerated dramatically so far in 1986.

If capacity additions continue at this rate, it won't be long before serious price-cutting appears and next a fall in profitability. When the fall comes, it will be the fault of the capital-raisers of 1985 and 1986, not the price-cutters of 198X. (Critics should be understanding, however: as was the case in our textile example, the dynamics of capitalism cause each insurer to make decisions that for itself appear sensible, but that collectively slash profitability.)

In past reports, I have told you that Berkshire's strong capital position - the best in the industry - should one day allow us to claim a distinct competitive advantage in the insurance market. With the tightening of the market, that day arrived. Our premium volume more than tripled last year, following a long period of stagnation. Berkshire's financial strength (and our record of maintaining unusual strength through thick and thin) is now a major asset for us in securing good business.

We correctly foresaw a flight to quality by many large buyers of insurance and reinsurance who belatedly recognized that a policy is only an IOU - and who, in 1985, could not collect on many of their IOUs. These buyers today are attracted to Berkshire because of its strong capital position. But, in a development we did not foresee, we also are finding buyers drawn to us because our ability to insure substantial risks sets us apart from the crowd.

To understand this point, you need a few background facts about large risks. Traditionally, many insurers have wanted to write this kind of business. However, their willingness to do so

has been almost always based upon reinsurance arrangements that allow the insurer to keep just a small portion of the risk itself while passing on ("laying off") most of the risk to its reinsurers. Imagine, for example, a directors and officers ("D & O") liability policy providing $25 million of coverage. By various "excess-of-loss" reinsurance contracts, the company issuing that policy might keep the liability for only the first $1 million of any loss that occurs. The liability for any loss above that amount up to $24 million would be borne by the reinsurers of the issuing insurer. In trade parlance, a company that issues large policies but retains relatively little of the risk for its own account writes a large gross line but a small net line.

In any reinsurance arrangement, a key question is how the premiums paid for the policy should be divided among the various "layers" of risk. In our D & O policy, for example. what part of the premium received should be kept by the issuing company to compensate it fairly for taking the first $1 million of risk and how much should be passed on to the reinsurers to compensate them fairly for taking the risk between $1 million and $25 million?

One way to solve this problem might be deemed the Patrick Henry approach: "I have but one lamp by which my feet are guided, and that is the lamp of experience." In other words, how much of the total premium would reinsurers have needed in the past to compensate them fairly for the losses they actually had to bear?

Unfortunately, the lamp of experience has always provided imperfect illumination for reinsurers because so much of their business is "long-tail", meaning it takes many years before they know what their losses are. Lately, however, the light has not only been dim but also grossly misleading in the images it has revealed. That is, the courts' tendency to grant awards that are both huge and lacking in precedent makes reinsurers' usual extrapolations or inferences from past data a formula for disaster. Out with Patrick Henry and in with Pogo: "The future ain't what it used to be."

The burgeoning uncertainties of the business, coupled with the entry into reinsurance of many unsophisticated participants, worked in recent years in favor of issuing companies writing a small net line: they were able to keep a far greater percentage of the premiums than the risk. By doing so, the issuing companies sometimes made money on business that was distinctly unprofitable for the issuing and reinsuring companies combined. (This result was not necessarily by intent: issuing companies generally knew no more than reinsurers did about the ultimate costs that would be experienced at higher layers of risk.) Inequities of this sort have been particularly

pronounced in lines of insurance in which much change was occurring and losses were soaring; e.g., professional malpractice, D & 0, products liability, etc. Given these circumstances, it is not surprising that issuing companies remained enthusiastic about writing business long after premiums became woefully inadequate on a gross basis.

An example of just how disparate results have been for issuing companies versus their reinsurers is provided by the 1984 financials of one of the leaders in large and unusual risks. In that year the company wrote about $6 billion of business and kept around $2 1/2 billion of the premiums, or about 40%. It gave the remaining $3 1/2 billion to reinsurers. On the part of the business kept, the company's underwriting loss was less than $200 million - an excellent result in that year. Meanwhile, the part laid off produced a loss of over $1.5 billion for the reinsurers. Thus, the issuing company wrote at a combined ratio of well under 110 while its reinsurers, participating in precisely the same policies, came in considerably over 140. This result was not attributable to natural catastrophes; it came from run-of-the-mill insurance losses (occurring, however, in surprising frequency and size). The issuing company's 1985 report is not yet available, but I would predict it will show that dramatically unbalanced results continued.

A few years such as this, and even slow-witted reinsurers can lose interest, particularly in explosive lines where the proper split in premium between issuer and reinsurer remains impossible to even roughly estimate. The behavior of reinsurers finally becomes like that of Mark Twain's cat: having once sat on a hot stove, it never did so again - but it never again sat on a cold stove, either. Reinsurers have had so many unpleasant surprises in long-tail casualty lines that many have decided (probably correctly) to give up the game entirely, regardless of price inducements. Consequently, there has been a dramatic pull-back of reinsurance capacity in certain important lines.

This development has left many issuing companies under pressure. They can no longer commit their reinsurers, time after time, for tens of millions per policy as they so easily could do only a year or two ago, and they do not have the capital and/or appetite to take on large risks for their own account. For many issuing companies, gross capacity has shrunk much closer to net capacity - and that is often small, indeed.

At Berkshire we have never played the lay-it-off-at-a-profit game and, until recently, that put us at a severe disadvantage in certain lines. Now the tables are turned: we have the underwriting capability whereas others do not. If we believe the price to be right, we are willing to write a net

line larger than that of any but the largest insurers. For instance, we are perfectly willing to risk losing $10 million of our own money on a single event, as long as we believe that the price is right and that the risk of loss is not significantly correlated with other risks we are insuring. Very few insurers are willing to risk half that much on single events - although, just a short while ago, many were willing to lose five or ten times that amount as long as virtually all of the loss was for the account of their reinsurers.

In mid-1985 our largest insurance company, National Indemnity Company, broadcast its willingness to underwrite large risks by running an ad in three issues of an insurance weekly. The ad solicited policies of only large size: those with a minimum premium of $1 million. This ad drew a remarkable 600 replies and ultimately produced premiums totaling about $50 million. (Hold the applause: it's all long-tail business and it will be at least five years before we know whether this marketing success was also an underwriting success.) Today, our insurance subsidiaries continue to be sought out by brokers searching for large net capacity.

As I have said, this period of tightness will pass; insurers and reinsurers will return to underpricing. But for a year or two we should do well in several segments of our insurance business. Mike Goldberg has made many important improvements in the operation (prior mismanagement by your Chairman having provided him ample opportunity to do so). He has been particularly successful recently in hiring young managers with excellent potential. They will have a chance to show their stuff in 1986.

Our combined ratio has improved - from 134 in 1984 to 111 in 1985 - but continues to reflect past misdeeds. Last year I told you of the major mistakes I had made in loss-reserving, and promised I would update you annually on loss-development figures. Naturally, I made this promise thinking my future record would be much improved. So far this has not been the case. Details on last year's loss development are on pages 50-52. They reveal significant underreserving at the end of 1984, as they did in the several years preceding.

The only bright spot in this picture is that virtually all of the underreserving revealed in 1984 occurred in the reinsurance area - and there, in very large part, in a few contracts that were discontinued several years ago. This explanation, however, recalls all too well a story told me many years ago by the then Chairman of General Reinsurance Company. He said that every year his managers told him that "except for the Florida hurricane" or "except for Midwestern tornadoes", they would have had a terrific year. Finally he called the group together and

suggested that they form a new operation - the Except-For Insurance Company - in which they would henceforth place all of the business that they later wouldn't want to count.

In any business, insurance or otherwise, "except for" should be excised from the lexicon. If you are going to play the game, you must count the runs scored against you in all nine innings. Any manager who consistently says "except for" and then reports on the lessons he has learned from his mistakes may be missing the only important lesson - namely, that the real mistake is not the act, but the actor.

Inevitably, of course, business errors will occur and the wise manager will try to find the proper lessons in them. But the trick is to learn most lessons from the experiences of others. Managers who have learned much from personal experience in the past usually are destined to learn much from personal experience in the future.

GEICO, 38%-owned by Berkshire, reported an excellent year in 1985 in premium growth and investment results, but a poor year - by its lofty standards - in underwriting. Private passenger auto and homeowners insurance were the only important lines in the industry whose results deteriorated significantly during the year. GEICO did not escape the trend, although its record was far better than that of virtually all its major competitors.

Jack Byrne left GEICO at mid-year to head Fireman's Fund, leaving behind Bill Snyder as Chairman and Lou Simpson as Vice Chairman. Jack's performance in reviving GEICO from near-
bankruptcy was truly extraordinary, and his work resulted in enormous gains for Berkshire. We owe him a great deal for that.

We are equally indebted to Jack for an achievement that eludes most outstanding leaders: he found managers to succeed him who have talents as valuable as his own. By his skill in identifying, attracting and developing Bill and Lou, Jack extended the benefits of his managerial stewardship well beyond his tenure.

Fireman's Fund Quota-Share Contract

Never one to let go of a meal ticket, we have followed Jack Byrne to Fireman's Fund ("FFIC") where he is Chairman and CEO of the holding company.

On September 1, 1985 we became a 7% participant in all of the business in force of the FFIC group, with the exception of reinsurance they write for unaffiliated companies. Our contract runs for four years, and provides that our losses and costs will be proportionate to theirs throughout

the contract period. If there is no extension, we will thereafter have no participation in any ongoing business. However, for a great many years in the future, we will be reimbursing FFIC for our 7% of the losses that occurred in the September 1, 1985 - August 31, 1989 period.

Under the contract FFIC remits premiums to us promptly and we reimburse FFIC promptly for expenses and losses it has paid. Thus, funds generated by our share of the business are held by us for investment. As part of the deal, I'm available to FFIC for consultation about general investment strategy. I'm not involved, however, in specific investment decisions of FFIC, nor is Berkshire involved in any aspect of the company's underwriting activities.

Currently FFIC is doing about $3 billion of business, and it will probably do more as rates rise. The company's September 1, 1985 unearned premium reserve was $1.324 billion, and it therefore transferred 7% of this, or $92.7 million, to us at initiation of the contract. We concurrently paid them $29.4 million representing the underwriting expenses that they had incurred on the transferred premium. All of the FFIC business is written by National Indemnity Company, but two-sevenths of it is passed along to Wesco-Financial Insurance Company ("Wes-FIC"), a new company organized by our 80%-owned subsidiary, Wesco Financial Corporation. Charlie Munger has some interesting comments about Wes-FIC and the reinsurance business on pages 60-62.

To the Insurance Segment tables on page 41, we have added a new line, labeled Major Quota Share Contracts. The 1985 results of the FFIC contract are reported there, though the newness of the arrangement makes these results only very rough approximations.

After the end of the year, we secured another quota-share contract, whose 1986 volume should be over $50 million. We hope to develop more of this business, and industry conditions suggest that we could: a significant number of companies are generating more business than they themselves can prudently handle. Our financial strength makes us an attractive partner for such companies.

Marketable Securities

We show below our 1985 yearend net holdings in marketable equities. All positions with a market value over $25 million are listed, and the interests attributable to minority shareholders of Wesco and Nebraska Furniture Mart are excluded.

Shares	Company	Cost (000's omitted)	Market (000's omitted)
1,036,461	Affiliated Publications, Inc.	$3,516	$55,710
900,800	American Broadcasting Companies, Inc.	54,435	108,997
2,350,922	Exxon Corporation	106,811	108,142
6,850,000	GEICO Corporation	45,713	595,950
2,379,200	Handy & Harman	27,318	43,718
847,788	Time, Inc.	20,385	52,669
1,727,765	The Washington Post Company	9,731	205,172
	Total	**$267,909**	**$1,170,358**
	All Other Common Stockholdings	7,201	27,963
	Total Common Stocks	**$275,110**	**$1,198,321**

We mentioned earlier that in the past decade the investment environment has changed from one in which great businesses were totally unappreciated to one in which they are appropriately recognized. The Washington Post Company ("WPC") provides an excellent example.

We bought all of our WPC holdings in mid-1973 at a price of not more than one-fourth of the then per-share business value of the enterprise. Calculating the price/value ratio required no unusual insights. Most security analysts, media brokers, and media executives would have estimated WPC's intrinsic business value at $400 to $500 million just as we did. And its $100 million stock market valuation was published daily for all to see. Our advantage, rather, was attitude: we had learned from Ben Graham that the key to successful investing was the purchase of shares in good businesses when market prices were at a large discount from underlying business values.

Most institutional investors in the early 1970s, on the other hand, regarded business value as of only minor relevance when they were deciding the prices at which they would buy or sell. This now seems hard to believe. However, these institutions were then under the spell of academics at prestigious business schools who were preaching a newly-fashioned theory: the stock market was totally efficient, and therefore calculations of business value - and even thought, itself - were of no importance in investment activities. (We are enormously indebted to those academics: what could be more advantageous in an intellectual contest - whether it be

bridge, chess, or stock selection than to have opponents who have been taught that thinking is a waste of energy?)

Through 1973 and 1974, WPC continued to do fine as a business, and intrinsic value grew. Nevertheless, by yearend 1974 our WPC holding showed a loss of about 25%, with market value at $8 million against our cost of $10.6 million. What we had thought ridiculously cheap a year earlier had become a good bit cheaper as the market, in its infinite wisdom, marked WPC stock down to well below 20 cents on the dollar of intrinsic value.

You know the happy outcome. Kay Graham, CEO of WPC, had the brains and courage to repurchase large quantities of stock for the company at those bargain prices, as well as the managerial skills necessary to dramatically increase business values. Meanwhile, investors began to recognize the exceptional economics of the business and the stock price moved closer to underlying value. Thus, we experienced a triple dip: the company's business value soared upward, per-share business value increased considerably faster because of stock repurchases and, with a narrowing of the discount, the stock price outpaced the gain in per-share business value.

We hold all of the WPC shares we bought in 1973, except for those sold back to the company in 1985's proportionate redemption. Proceeds from the redemption plus yearend market value of our holdings total $221 million.

If we had invested our $10.6 million in any of a half-dozen media companies that were investment favorites in mid-1973, the value of our holdings at yearend would have been in the area of $40 - $60 million. Our gain would have far exceeded the gain in the general market, an outcome reflecting the exceptional economics of the media business. The extra $160 million or so we gained through ownership of WPC came, in very large part, from the superior nature of the managerial decisions made by Kay as compared to those made by managers of most media companies. Her stunning business success has in large part gone unreported but among Berkshire shareholders it should not go unappreciated.

Our Capital Cities purchase, described in the next section, required me to leave the WPC Board early in 1986. But we intend to hold indefinitely whatever WPC stock FCC rules allow us to. We expect WPC's business values to grow at a reasonable rate, and we know that management is both able and shareholder-oriented. However, the market now values the company at over $1.8 billion, and there is no way that the value can progress from that level at a

rate anywhere close to the rate possible when the company's valuation was only $100 million. Because market prices have also been bid up for our other holdings, we face the same vastly-reduced potential throughout our portfolio.

You will notice that we had a significant holding in Beatrice Companies at yearend. This is a short-term arbitrage holding - in effect, a parking place for money (though not a totally safe one, since deals sometimes fall through and create substantial losses). We sometimes enter the arbitrage field when we have more money than ideas, but only to participate in announced mergers and sales. We would be a lot happier if the funds currently employed on this short-term basis found a long-term home. At the moment, however, prospects are bleak.

At yearend our insurance subsidiaries had about $400 million in tax-exempt bonds, of which $194 million at amortized cost were issues of Washington Public Power Supply System ("WPPSS") Projects 1, 2, and 3. 1 discussed this position fully last year, and explained why we would not disclose further purchases or sales until well after the fact (adhering to the policy we follow on stocks). Our unrealized gain on the WPPSS bonds at yearend was $62 million, perhaps one-third arising from the upward movement of bonds generally, and the remainder from a more positive investor view toward WPPSS 1, 2, and 3s. Annual tax-exempt income from our WPPSS issues is about $30 million.

Capital Cities/ABC, Inc.

Right after yearend, Berkshire purchased 3 million shares of Capital Cities/ABC, Inc. ("Cap Cities") at $172.50 per share, the market price of such shares at the time the commitment was made early in March, 1985. I've been on record for many years about the management of Cap Cities: I think it is the best of any publicly-owned company in the country. And Tom Murphy and Dan Burke are not only great managers, they are precisely the sort of fellows that you would want your daughter to marry. It is a privilege to be associated with them - and also a lot of fun, as any of you who know them will understand.

Our purchase of stock helped Cap Cities finance the $3.5 billion acquisition of American Broadcasting Companies. For Cap Cities, ABC is a major undertaking whose economics are likely to be unexciting over the next few years. This bothers us not an iota; we can be very patient. (No matter how great the talent or effort, some things just take time: you can't produce a baby in one month by getting nine women pregnant.)

As evidence of our confidence, we have executed an unusual agreement: for an extended period Tom, as CEO (or Dan, should he be CEO) votes our stock. This arrangement was initiated by Charlie and me, not by Tom. We also have restricted ourselves in various ways regarding sale of our shares. The object of these restrictions is to make sure that our block does not get sold to anyone who is a large holder (or intends to become a large holder) without the approval of management, an arrangement similar to ones we initiated some years ago at GEICO and
Washington Post.

Since large blocks frequently command premium prices, some might think we have injured Berkshire financially by creating such restrictions. Our view is just the opposite. We feel the long-term economic prospects for these businesses - and, thus, for ourselves as owners - are enhanced by the arrangements. With them in place, the first-class managers with whom we have aligned ourselves can focus their efforts entirely upon running the businesses and maximizing long-term values for owners. Certainly this is much better than having those managers distracted by "revolving-door capitalists" hoping to put the company "in play". (Of course, some managers place their own interests above those of the company and its owners and deserve to be shaken up - but, in making investments, we try to steer clear of this type.)

Today, corporate instability is an inevitable consequence of widely-diffused ownership of voting stock. At any time a major holder can surface, usually mouthing reassuring rhetoric but frequently harboring uncivil intentions. By circumscribing our blocks of stock as we often do, we intend to promote stability where it otherwise might be lacking. That kind of certainty, combined with a good manager and a good business, provides excellent soil for a rich financial harvest. That's the economic case for our arrangements.

The human side is just as important. We don't want managers we like and admire - and who have welcomed a major financial commitment by us - to ever lose any sleep wondering whether surprises might occur because of our large ownership. I have told them there will be no surprises, and these agreements put Berkshire's signature where my mouth is. That signature also means the managers have a corporate commitment and therefore need not worry if my personal participation in Berkshire's affairs ends prematurely (a term I define as any age short of three digits).

Our Cap Cities purchase was made at a full price, reflecting the very considerable enthusiasm for both media stocks and media properties that has developed in recent years (and that, in the case of some property purchases, has approached a mania). it's no field for bargains. However, our Cap Cities investment allies us with an exceptional combination of properties and people - and we like the opportunity to participate in size.

Of course, some of you probably wonder why we are now buying Cap Cities at $172.50 per share given that your Chairman, in a characteristic burst of brilliance, sold Berkshire's holdings in the same company at $43 per share in 1978-80. Anticipating your question, I spent much of 1985 working on a snappy answer that would reconcile these acts.

A little more time, please.

Acquisition of Scott & Fetzer

Right after yearend we acquired The Scott & Fetzer Company ("Scott Fetzer") of Cleveland for about $320 million. (In addition, about $90 million of pre-existing Scott Fetzer debt remains in place.) In the next section of this report I describe the sort of businesses that we wish to buy for Berkshire. Scott Fetzer is a prototype - understandable, large, well-managed, a good earner.

The company has sales of about $700 million derived from 17 businesses, many leaders in their fields. Return on invested capital is good to excellent for most of these businesses. Some well-known products are Kirby home-care systems, Campbell Hausfeld air compressors, and Wayne burners and water pumps.

World Book, Inc. - accounting for about 40% of Scott Fetzer's sales and a bit more of its income - is by far the company's largest operation. It also is by far the leader in its industry, selling more than twice as many encyclopedia sets annually as its nearest competitor. In fact, it sells more sets in the U.S. than its four biggest competitors combined.

Charlie and I have a particular interest in the World Book operation because we regard its encyclopedia as something special. I've been a fan (and user) for 25 years, and now have grandchildren consulting the sets just as my children did. World Book is regularly rated the most useful encyclopedia by teachers, librarians and consumer buying guides. Yet it sells for less than any of its major competitors. Childcraft, another World Book, Inc. product, offers similar value. This combination of exceptional products and modest prices at World Book, Inc. helped make us willing to pay the price demanded for Scott Fetzer, despite declining results for many companies in the direct-selling industry.

An equal attraction at Scott Fetzer is Ralph Schey, its CEO for nine years. When Ralph took charge, the company had 31 businesses, the result of an acquisition spree in the 1960s. He disposed of many that did not fit or had limited profit potential, but his focus on rationalizing the original potpourri was not so intense that he passed by World Book when it became available for purchase in 1978. Ralph's operating and capital-allocation record is superb, and we are delighted to be associated with him.

The history of the Scott Fetzer acquisition is interesting, marked by some zigs and zags before we became involved. The company had been an announced candidate for purchase since early 1984. A major investment banking firm spent many months canvassing scores of prospects, evoking interest from several. Finally, in mid-1985 a plan of sale, featuring heavy participation by an ESOP (Employee Stock Ownership Plan), was approved by shareholders. However, as difficulty in closing followed, the plan was scuttled.

I had followed this corporate odyssey through the newspapers. On October 10, well after the ESOP deal had fallen through, I wrote a short letter to Ralph, whom I did not know. I said we admired the company's record and asked if he might like to talk. Charlie and I met Ralph for dinner in Chicago on October 22 and signed an acquisition contract the following week.

The Scott Fetzer acquisition, plus major growth in our insurance business, should push revenues above $2 billion in 1986, more than double those of 1985.

Miscellaneous

The Scott Fetzer purchase illustrates our somewhat haphazard approach to acquisitions. We have no master strategy, no corporate planners delivering us insights about socioeconomic trends, and no staff to investigate a multitude of ideas presented by promoters and intermediaries. Instead, we simply hope that something sensible comes along - and, when it does, we act.

To give fate a helping hand, we again repeat our regular "business wanted" ad. The only change from last year's copy is in (1): because we continue to want any acquisition we make to have a measurable impact on Berkshire's financial results, we have raised our minimum profit requirement.

Here's what we're looking for:

(1) large purchases (at least $10 million of after-tax earnings),

(2) demonstrated consistent earning power (future projections are of little interest to us, nor are "turn-around" situations),

(3) businesses earning good returns on equity while employing little or no debt,

(4) management in place (we can't supply it),

(5) simple businesses (if there's lots of technology, we won't understand it),

(6) an offering price (we don't want to waste our time or that of the seller by talking, even preliminarily, about a transaction when price is unknown).

We will not engage in unfriendly takeovers. We can promise complete confidentiality and a very fast answer - customarily within five minutes - as to whether we're interested. We prefer to buy for cash, but will consider issuance of stock when we receive as much in intrinsic business value as we give. Indeed, following recent advances in the price of Berkshire stock, transactions involving stock issuance may be quite feasible. We invite potential sellers to check us out by contacting people with whom we have done business in the past. For the right business - and the right people - we can provide a good home.

On the other hand, we frequently get approached about acquisitions that don't come close to meeting our tests: new ventures, turnarounds, auction-like sales, and the ever-popular (among brokers) "I'm-sure-something-will-work-out-if-you-people-get-to-know-each-other". None of these attracts us in the least.

* * *

Besides being interested in the purchases of entire businesses as described above, we are also interested in the negotiated purchase of large, but not controlling, blocks of stock, as in our Cap Cities purchase. Such purchases appeal to us only when we are very comfortable with both the economics of the business and the ability and integrity of the people running the operation. We prefer large transactions: in the unusual case we might do something as small as $50 million (or even smaller), but our preference is for commitments many times that size.

* * *

About 96.8% of all eligible shares participated in Berkshire's 1985 shareholder-designated contributions program. Total contributions made through the program were $4 million, and

1,724 charities were recipients. We conducted a plebiscite last year in order to get your views about this program, as well as about our dividend policy. (Recognizing that it's possible to influence the answers to a question by the framing of it, we attempted to make the wording of ours as neutral as possible.) We present the ballot and the results in the Appendix on page 69. I think it's fair to summarize your response as highly supportive of present policies and your group preference - allowing for the tendency of people to vote for the status quo - to be for increasing the annual charitable commitment as our asset values build.

We urge new shareholders to read the description of our shareholder-designated contributions program that appears on pages 66 and 67. If you wish to participate in future programs, we strongly urge that you immediately make sure that your shares are registered in the name of the actual owner, not in "street" name or nominee name. Shares not so registered on September 30, 1986 will be ineligible for the 1986 program.

* * *

Five years ago we were required by the Bank Holding Company Act of 1969 to dispose of our holdings in The Illinois National Bank and Trust Company of Rockford, Illinois. Our method of doing so was unusual: we announced an exchange ratio between stock of Rockford Bancorp Inc. (the Illinois National's holding company) and stock of Berkshire, and then let each of our shareholders - except me - make the decision as to whether to exchange all, part, or none of his Berkshire shares for Rockford shares. I took the Rockford stock that was left over and thus my own holding in Rockford was determined by your decisions. At the time I said, "This technique embodies the world's oldest and most elementary system of fairly dividing an object. Just as when you were a child and one person cut the cake and the other got first choice, I have tried to cut the company fairly, but you get first choice as to which piece you want."

Last fall Illinois National was sold. When Rockford's liquidation is completed, its shareholders will have received per-share proceeds about equal to Berkshire's per-share intrinsic value at the time of the bank's sale. I'm pleased that this five-year result indicates that the division of the cake was reasonably equitable.

Last year I put in a plug for our annual meeting, and you took me up on the invitation. Over 250 of our more than 3,000 registered shareholders showed up. Those attending behaved just

as those present in previous years, asking the sort of questions you would expect from intelligent and interested owners. You can attend a great many annual meetings without running into a crowd like ours. (Lester Maddox, when Governor of Georgia, was criticized regarding the state's abysmal prison system. "The solution", he said, "is simple. All we need is a better class of prisoners." Upgrading annual meetings works the same way.)

I hope you come to this year's meeting, which will be held on May 20 in Omaha. There will be only one change: after 48 years of allegiance to another soft drink, your Chairman, in an unprecedented display of behavioral flexibility, has converted to the new Cherry Coke. Henceforth, it will be the Official Drink of the Berkshire Hathaway Annual Meeting.

And bring money: Mrs. B promises to have bargains galore if you will pay her a visit at The Nebraska Furniture Mart after the meeting.

Warren E. Buffett
Chairman of the Board

1986 Letter

BERKSHIRE HATHAWAY INC.

To the Shareholders of Berkshire Hathaway Inc.:

Our gain in net worth during 1986 was $492.5 million, or 26.1%. Over the last 22 years (that is, since present management took over), our per-share book value has grown from $19.46 to $2,073.06, or 23.3% compounded annually. Both the numerator and denominator are important in the per-share book value calculation: during the 22-year period our corporate net worth has increased 10,600% while shares outstanding have increased less than 1%.

In past reports I have noted that book value at most companies differs widely from intrinsic business value - the number that really counts for owners. In our own case, however, book value has served for more than a decade as a reasonable if somewhat conservative proxy for business value. That is, our business value has moderately exceeded our book value, with the ratio between the two remaining fairly steady.

The good news is that in 1986 our percentage gain in business value probably exceeded the book value gain. I say "probably" because business value is a soft number: in our own case, two equally well-informed observers might make judgments more than 10% apart.

A large measure of our improvement in business value relative to book value reflects the outstanding performance of key managers at our major operating businesses. These managers - the Blumkins, Mike Goldberg, the Heldmans, Chuck Huggins, Stan Lipsey, and Ralph Schey - have over the years improved the earnings of their businesses dramatically while, except in the case of insurance, utilizing little additional capital. This accomplishment builds economic value, or "Goodwill," that does not show up in the net worth figure on our balance sheet, nor in our per-share book value. In 1986 this unrecorded gain was substantial.

So much for the good news. The bad news is that my performance did not match that of our managers. While they were doing a superb job in running our businesses, I was unable to skillfully deploy much of the capital they generated.

Charlie Munger, our Vice Chairman, and I really have only two jobs. One is to attract and keep outstanding managers to run our various operations. This hasn't been all that difficult. Usually the managers came with the companies we bought, having demonstrated their talents throughout careers that spanned a wide variety of business circumstances. They were managerial stars long before they knew us, and our main contribution has been to not get in their way. This approach seems elementary: if my job were to manage a golf team - and if Jack Nicklaus or Arnold Palmer were willing to play for me - neither would get a lot of directives from me about how to swing.

Some of our key managers are independently wealthy (we hope they all become so), but that poses no threat to their continued interest: they work because they love what they do and relish the thrill of outstanding performance. They unfailingly think like owners (the highest compliment we can pay a manager) and find all aspects of their business absorbing.

(Our prototype for occupational fervor is the Catholic tailor who used his small savings of many years to finance a pilgrimage to the Vatican. When he returned, his parish held a special meeting to get his first-hand account of the Pope. "Tell us," said the eager faithful, "just what sort of fellow is he?" Our hero wasted no words: "He's a forty-four, medium.")

Charlie and I know that the right players will make almost any team manager look good. We subscribe to the philosophy of Ogilvy & Mather's founding genius, David Ogilvy: "If each of us hires people who are smaller than we are, we shall become a company of dwarfs. But, if each of us hires people who are bigger than we are, we shall become a company of giants."

A by-product of our managerial style is the ability it gives us to easily expand Berkshire's activities. We've read management treatises that specify exactly how many people should report to any one executive, but they make little sense to us. When you have able managers of high character running businesses about which they are passionate, you can have a dozen or more reporting to you and still have time for an afternoon nap. Conversely, if you have even one person reporting to you who is deceitful, inept or uninterested, you will find yourself with more than you can handle. Charlie and I could work with double the number of managers we now have, so long as they had the rare qualities of the present ones.

We intend to continue our practice of working only with people whom we like and admire. This policy not only maximizes our chances for good results, it also ensures us an extraordinarily good time. On the other hand, working with people who cause your stomach to churn seems

much like marrying for money - probably a bad idea under any circumstances, but absolute madness if you are already rich.

The second job Charlie and I must handle is the allocation of capital, which at Berkshire is a considerably more important challenge than at most companies. Three factors make that so: we earn more money than average; we retain all that we earn; and, we are fortunate to have operations that, for the most part, require little incremental capital to remain competitive and to grow. Obviously, the future results of a business earning 23% annually and retaining it all are far more affected by today's capital allocations than are the results of a business earning 10% and distributing half of that to shareholders. If our retained earnings - and those of our major investees, GEICO and Capital Cities/ABC, Inc. - are employed in an unproductive manner, the economics of Berkshire will deteriorate very quickly. In a company adding only, say, 5% to net worth annually, capital-allocation decisions, though still important, will change the company's economics far more slowly.

Capital allocation at Berkshire was tough work in 1986. We did make one business acquisition - The Fechheimer Bros. Company, which we will discuss in a later section. Fechheimer is a company with excellent economics, run by exactly the kind of people with whom we enjoy being associated. But it is relatively small, utilizing only about 2% of Berkshire's net worth.

Meanwhile, we had no new ideas in the marketable equities field, an area in which once, only a few years ago, we could readily employ large sums in outstanding businesses at very reasonable prices. So our main capital allocation moves in 1986 were to pay off debt and stockpile funds. Neither is a fate worse than death, but they do not inspire us to do handsprings either. If Charlie and I were to draw blanks for a few years in our capital-allocation endeavors, Berkshire's rate of growth would slow significantly.

We will continue to look for operating businesses that meet our tests and, with luck, will acquire such a business every couple of years. But an acquisition will have to be large if it is to help our performance materially. Under current stock market conditions, we have little hope of finding equities to buy for our insurance companies. Markets will change significantly - you can be sure of that and some day we will again get our turn at bat. However, we haven't the faintest idea when that might happen.

It can't be said too often (although I'm sure you feel I've tried) that, even under favorable conditions, our returns are certain to drop substantially because of our enlarged size. We have told you that we hope to average a return of 15% on equity and we maintain that hope, despite some negative tax law changes described in a later section of this report. If we are to achieve this rate of return, our net worth must increase $7.2 billion in the next ten years. A gain of that magnitude will be possible only if, before too long, we come up with a few very big (and good) ideas. Charlie and I can't promise results, but we do promise you that we will keep our efforts focused on our goals.

Sources of Reported Earnings

The table on the next page shows the major sources of Berkshire's reported earnings. This table differs in several ways from the one presented last year. We have added four new lines of business because of the Scott Fetzer and Fechheimer acquisitions. In the case of Scott Fetzer, the two major units acquired were World Book and Kirby, and each is presented separately. Fourteen other businesses of Scott Fetzer are aggregated in Scott Fetzer - Diversified Manufacturing. SF Financial Group, a credit company holding both World Book and Kirby receivables, is included in "Other." This year, because Berkshire is so much larger, we also have eliminated separate reporting for several of our smaller businesses.

In the table, amortization of Goodwill is not charged against the specific businesses but, for reasons outlined in the Appendix to my letter in the 1983 Annual Report, is aggregated as a separate item. (A Compendium of earlier letters, including the Goodwill discussion, is available upon request.) Both the Scott Fetzer and Fechheimer acquisitions created accounting Goodwill, which is why the amortization charge for Goodwill increased in 1986.

Additionally, the Scott Fetzer acquisition required other major purchase-price accounting adjustments, as prescribed by generally accepted accounting principles (GAAP). The GAAP figures, of course, are the ones used in our consolidated financial statements. But, in our view, the GAAP figures are not necessarily the most useful ones for investors or managers. Therefore, the figures shown for specific operating units are earnings before purchase-price adjustments are taken into account. In effect, these are the earnings that would have been reported by the businesses if we had not purchased them.

A discussion of our reasons for preferring this form of presentation is in the Appendix to this letter. This Appendix will never substitute for a steamy novel and definitely is not required

reading. However, I know that among our 6,000 shareholders there are those who are thrilled by my essays on accounting - and I hope that both of you enjoy the Appendix.

In the Business Segment Data on pages 41-43 and in the Management's Discussion section on pages 45-49, you will find much additional information about our businesses. I urge you to read those sections, as well as Charlie Munger's letter to Wesco shareholders, describing the various businesses of that subsidiary, which starts on page 50.

Operating Earnings (000s omitted)	**Pre-Tax 1987**	**Earnings 1986**	**Berkshire 1987**	**Share 1986**
Insurance Group: Underwriting	$(55,844)	$(44,230)	$(29,894)	$(23,569)
Net investment income	107,143	95,217	96,440	79,716
Buffalo News	34,736	29,921	16,918	14,580
Fechheimer (Aquired 6/3/86)	8,400	---	3,792	---
Kirby	20,218	---	10,508	---
Nebraska Furniture Mart	17,685	12,686	7,192	5,181
Scott Fetzer – Diversified Mfg.	25,358	---	13,354	---
See's Candies	30,347	28,989	15,176	14,558
Wesco – Other than Insurance	5,542	16,018	5,550	9,684
World Book	21,978	---	11,670	---
Amortization of Goodwill	(2,555)	(1,475)	4,191	(1,475)
Other Purchase Price accounting charges	(10,033)	---	(2,555)	---
Interest On Debt and Pre-Payment Penalty	(23,891)	(14,415)	(12,213)	(7,288)
Shareholder-Designated Contributions	(3,997)	(4,006)	(2,158)	(2,164)
Other	20,770	6,744	8,685	3,725
Operating Earnings	195,857	125,449	131,464	92,948
Special General Foods Distribution	---	4,127	---	3,779
Special Washington Post Distribution	---	14,877	---	13,851
Sales of Securities	216,242	468,903	150,897	325,237
Total Earnings- all entities	**$412,099**	**$613,356**	**$282,361**	**$435,815**

As you can see, operating earnings substantially improved during 1986. Some of the improvement came from the insurance operation, whose results I will discuss in a later section. Fechheimer also will be discussed separately. Our other major businesses performed as follows:

o Operating results at The Buffalo News continue to reflect a truly superb managerial job by Stan Lipsey. For the third year in a row, man-hours worked fell significantly and other costs were closely controlled. Consequently, our operating margins improved materially in 1986, even though our advertising rate increases were well below those of most major newspapers.

Our cost-control efforts have in no way reduced our commitment to news. We continue to deliver a 50% "news hole" (the portion of the total space in the paper devoted to news), a higher percentage, we believe, than exists at any dominant newspaper in this country of our size or larger.

The average news hole at papers comparable to the News is about 40%. The difference between 40% and 50% is more important than it might first seem: a paper with 30 pages of ads and a 40% news hole delivers 20 pages of news a day, whereas our paper matches 30 pages of ads with 30 pages of news. Therefore, given ad pages equal in number, we end up delivering our readers no less than 50% more news.

We believe this heavy commitment to news is one of the reasons The Buffalo News has the highest weekday penetration rate (the percentage of households in the paper's primary marketing area purchasing it each day) among any of the top 50 papers in the country. Our Sunday penetration, where we are also number one, is even more impressive. Ten years ago, the only Sunday paper serving Buffalo (the Courier-Express) had circulation of 271,000 and a penetration ratio of about 63%. The Courier-Express had served the area for many decades and its penetration ratio - which was similar to those existing in many metropolitan markets - was thought to be a "natural" one, accurately reflecting the local citizenry's appetite for a Sunday product.

Our Sunday paper was started in late 1977. It now has a penetration ratio of 83% and sells about 100,000 copies more each Sunday than did the Courier-Express ten years ago - even though population in our market area has declined during the decade. In recent history, no other city that has long had a local Sunday paper has experienced a penetration gain anywhere close to Buffalo's.

Despite our exceptional market acceptance, our operating margins almost certainly have peaked. A major newsprint price increase took effect at the end of 1986, and our advertising rate increases in 1987 will again be moderate compared to those of the industry. However, even if margins should materially shrink, we would not reduce our news-hole ratio.

As I write this, it has been exactly ten years since we purchased The News. The financial rewards it has brought us have far exceeded our expectations and so, too, have the non-financial rewards. Our respect for the News - high when we bought it - has grown consistently ever since the purchase, as has our respect and admiration for Murray Light, the editor who turns out the product that receives such extraordinary community acceptance. The efforts of Murray and Stan, which were crucial to the News during its dark days of financial reversals and litigation, have not in the least been lessened by prosperity. Charlie and I are grateful to them.

o The amazing Blumkins continue to perform business miracles at Nebraska Furniture Mart. Competitors come and go (mostly go), but Mrs. B. and her progeny roll on. In 1986 net sales increased 10.2% to $132 million. Ten years ago sales were $44 million and, even then, NFM appeared to be doing just about all of the business available in the Greater Omaha Area. Given NFM's remarkable dominance, Omaha's slow growth in population and the modest inflation rates that have applied to the goods NFM sells, how can this operation continue to rack up such large sales gains? The only logical explanation is that the marketing territory of NFM's one-and-only store continues to widen because of its ever-growing reputation for rock-bottom everyday prices and the broadest of selections. In preparation for further gains, NFM is expanding the capacity of its warehouse, located a few hundred yards from the store, by about one-third.

Mrs. B, Chairman of Nebraska Furniture Mart, continues at age 93 to outsell and out-hustle any manager I've ever seen. She's at the store seven days a week, from opening to close. Competing with her represents a triumph of courage over judgment.

It's easy to overlook what I consider to be the critical lesson of the Mrs. B saga: at 93, Omaha based Board Chairmen have yet to reach their peak. Please file this fact away to consult before you mark your ballot at the 2024 annual meeting of Berkshire.

o At See's, sales trends improved somewhat from those of recent years. Total pounds sold rose about 2%. (For you chocaholics who like to fantasize, one statistic: we sell over 12,000 tons annually.) Same-store sales, measured in pounds, were virtually unchanged. In the previous six years, same store poundage fell, and we gained or maintained poundage volume only by adding stores. But a particularly strong Christmas season in 1986 stemmed the decline. By stabilizing same-store volume and making a major effort to control costs, See's was able to maintain its excellent profit margin in 1986 though it put through only minimal price increases. We have Chuck Huggins, our long-time manager at See's, to thank for this significant achievement.

See's has a one-of-a-kind product "personality" produced by a combination of its candy's delicious taste and moderate price, the company's total control of the distribution process, and the exceptional service provided by store employees. Chuck rightfully measures his success by the satisfaction of our customers, and his attitude permeates the organization. Few major retailing companies have been able to sustain such a customer-oriented spirit, and we owe Chuck a great deal for keeping it alive and well at See's.

See's profits should stay at about their present level. We will continue to increase prices very modestly, merely matching prospective cost increases.

o World Book is the largest of 17 Scott Fetzer operations that joined Berkshire at the beginning of 1986. Last year I reported to you enthusiastically about the businesses of Scott Fetzer and about Ralph Schey, its manager. A year's experience has added to my enthusiasm for both. Ralph is a superb businessman and a straight shooter. He also brings exceptional versatility and energy to his job: despite the wide array of businesses that he manages, he is on top of the operations, opportunities and problems of each. And, like our other managers, Ralph is a real pleasure to work with. Our good fortune continues.

World Book's unit volume increased for the fourth consecutive year, with encyclopedia sales up 7% over 1985 and 45% over 1982. Childcraft's unit sales also grew significantly.

World Book continues to dominate the U.S. direct-sales encyclopedia market - and for good reasons. Extraordinarily well-edited and priced at under 5 cents per page, these books are a bargain for youngster and adult alike. You may find one editing technique interesting: World Book ranks over 44,000 words by difficulty. Longer entries in the encyclopedia include only the most easily comprehended words in the opening sections, with the difficulty of the material gradually escalating as the exposition proceeds. As a result, youngsters can easily and profitably read to the point at which subject matter gets too difficult, instead of immediately having to deal with a discussion that mixes up words requiring college-level comprehension with others of fourth-grade level.

Selling World Book is a calling. Over one-half of our active salespeople are teachers or former teachers, and another 5% have had experience as librarians. They correctly think of themselves as educators, and they do a terrific job. If you don't have a World Book set in your house, I recommend one.

o Kirby likewise recorded its fourth straight year of unit volume gains. Worldwide, unit sales grew 4% from 1985 and 33% from 1982. While the Kirby product is more expensive than most cleaners, it performs in a manner that leaves cheaper units far behind ("in the dust," so to speak). Many 30- and 40-year-old Kirby cleaners are still in active duty. If you want the best, you buy a Kirby.

Some companies that historically have had great success in direct sales have stumbled in recent years. Certainly the era of the working woman has created new challenges for direct sales organizations. So far, the record shows that both Kirby and World Book have responded most successfully.

The businesses described above, along with the insurance operation and Fechheimer, constitute our major business units. The brevity of our descriptions is in no way meant to diminish the importance of these businesses to us. All have been discussed in past annual reports and, because of the tendency of Berkshire owners to stay in the fold (about 98% of the stock at the end of each year is owned by people who were owners at the start of the year), we want to avoid undue repetition of basic facts. You can be sure that we will immediately report to you in detail if the underlying economics or competitive position of any of these businesses should materially change. In general, the businesses described in this section can be characterized as having very strong market positions, very high returns on capital employed, and the best of operating managements.

The Fechheimer Bros. Co.

Every year in Berkshire's annual report I include a description of the kind of business that we would like to buy. This "ad" paid off in 1986.

On January 15th of last year I received a letter from Bob Heldman of Cincinnati, a shareholder for many years and also Chairman of Fechheimer Bros. Until I read the letter, however, I did not know of either Bob or Fechheimer. Bob wrote that he ran a company that met our tests and suggested that we get together, which we did in Omaha after their results for 1985 were compiled.

He filled me in on a little history: Fechheimer, a uniform manufacturing and distribution business, began operations in 1842. Warren Heldman, Bob's father, became involved in the business in 1941 and his sons, Bob and George (now President), along with their sons,

subsequently joined the company. Under the Heldmans' management, the business was highly successful.

In 1981 Fechheimer was sold to a group of venture capitalists in a leveraged buy out (an LBO), with management retaining an equity interest. The new company, as is the case with all LBOS, started with an exceptionally high debt/equity ratio. After the buy out, however, operations continued to be very successful. So by the start of last year debt had been paid down substantially and the value of the equity had increased dramatically. For a variety of reasons, the venture capitalists wished to sell and Bob, having dutifully read Berkshire's annual reports, thought of us.

Fechheimer is exactly the sort of business we like to buy. Its economic record is superb; its managers are talented, high-grade, and love what they do; and the Heldman family wanted to continue its financial interest in partnership with us. Therefore, we quickly purchased about 84% of the stock for a price that was based upon a $55 million valuation for the entire business.

The circumstances of this acquisition were similar to those prevailing in our purchase of Nebraska Furniture Mart: most of the shares were held by people who wished to employ funds elsewhere; family members who enjoyed running their business wanted to continue both as owners and managers; several generations of the family were active in the business, providing management for as far as the eye can see; and the managing family wanted a purchaser who would not re-sell, regardless of price, and who would let the business be run in the future as it had been in the past. Both Fechheimer and NFM were right for us, and we were right for them.

You may be amused to know that neither Charlie nor I have been to Cincinnati, headquarters for Fechheimer, to see their operation. (And, incidentally, it works both ways: Chuck Huggins, who has been running See's for 15 years, has never been to Omaha.) If our success were to depend upon insights we developed through plant inspections, Berkshire would be in big trouble. Rather, in considering an acquisition, we attempt to evaluate the economic characteristics of the business - its competitive strengths and weaknesses - and the quality of the people we will be joining. Fechheimer was a standout in both respects. In addition to Bob and George Heldman, who are in their mid-60s - spring chickens by our standards - there are three members of the next generation, Gary, Roger and Fred, to insure continuity.

As a prototype for acquisitions, Fechheimer has only one drawback: size. We hope our next acquisition is at least several times as large but a carbon copy in all other respects. Our threshold

for minimum annual after-tax earnings of potential acquisitions has been moved up to $10 million from the $5 million level that prevailed when Bob wrote to me.

Flushed with success, we repeat our ad. If you have a business that fits, call me or, preferably, write.

Here's what we're looking for:

(1) large purchases (at least $10 million of after-tax earnings),

(2) demonstrated consistent earning power (future projections are of little interest to us, nor are "turn-around" situations),

(3) businesses earning good returns on equity while employing little or no debt.

(4) management in place (we can't supply it),

(5) simple businesses (if there's lots of technology, we won't understand it),

(6) an offering price (we don't want to waste our time or that of the seller by talking, even preliminarily, about a transaction when price is unknown).

We will not engage in unfriendly takeovers. We can promise complete confidentiality and a very fast answer - customarily within five minutes - as to whether we're interested. We prefer to buy for cash, but will consider issuing stock when we receive as much in intrinsic business value as we give. Indeed, following recent advances in the price of Berkshire stock, transactions involving stock issuance may be quite feasible. We invite potential sellers to check us out by contacting people with whom we have done business in the past. For the right business - and the right people - we can provide a good home. On the other hand, we frequently get approached about acquisitions that don't come close to meeting our tests: new ventures, turnarounds, auction-like sales, and the ever-popular (among brokers) "I'm-sure-something-will-work-out-if-you-people-get-to-know-each-other." None of these attracts us in the least.

* * *

Besides being interested in the purchases of entire businesses as described above, we are also interested in the negotiated purchase of large, but not controlling, blocks of stock, as in our Cap Cities purchase. Such purchases appeal to us only when we are very comfortable with both the economics of the business and the ability and integrity of the people running the operation. We

prefer large transactions: in the unusual case we might do something as small as $50 million (or even smaller), but our preference is for commitments many times that size.

Insurance Operations

We present our usual table of industry figures, expanded this year to include data about incurred losses and the GNP inflation index. The contrast in 1986 between the growth in premiums and growth in incurred losses will show you why underwriting results for the year improved materially:

Year	Yearly Change in Premiums Written (%)	Statutory Combined Ratio after Policyholder Dividends	Yearly Change in Incurred Losses (%)	Inflation Rate Measured by GNP Deflator (%)
1981	3.8	106.0	6.5	9.7
1982	4.4	109.8	8.4	6.4
1983	4.6	112.0	6.8	3.9
1984	9.2	117.9	16.9	3.8
1985	22.1	116.5	16.1	3.3
1986 (Est.)	22.6	108.5	15.5	2.6

Source: Best's Insurance Management Reports

The combined ratio represents total insurance costs (losses incurred plus expenses) compared to revenue from premiums: a ratio below 100 indicates an underwriting profit, and one above 100 indicates a loss. When the investment income that an insurer earns from holding on to policyholders' funds ("the float") is taken into account, a combined ratio in the 107-112 range typically produces an overall break-even result, exclusive of earnings on the funds provided by shareholders.

The math of the insurance business, encapsulated by the table, is not very complicated. In years when the industry's annual gain in revenues (premiums) pokes along at 4% or 5%, underwriting losses are sure to mount. This is not because auto accidents, fires, windstorms and the like are occurring more frequently, nor has it lately been the fault of general inflation.

Today, social and judicial inflation are the major culprits; the cost of entering a courtroom has simply ballooned. Part of the jump in cost arises from skyrocketing verdicts, and part from the tendency of judges and juries to expand the coverage of insurance policies beyond that contemplated by the insurer when the policies were written. Seeing no let-up in either trend, we continue to believe that the industry's revenues must grow at close to 10% annually for it to just hold its own in terms of profitability, even though general inflation may be running only 2% - 4%.

In 1986, as noted, the industry's premium volume soared even faster than loss costs. Consequently, the underwriting loss of the industry fell dramatically. In last year's report we predicted this sharp improvement but also predicted that prosperity would be fleeting. Alas, this second prediction is already proving accurate. The rate of gain in the industry's premium volume has slowed significantly (from an estimated 27.1% in 1986's first quarter, to 23.5% in the second, to 21.8% in the third, to 18.7% in the fourth), and we expect further slowing in 1987. Indeed, the rate of gain may well fall below my 10% "equilibrium" figure by the third quarter.

Nevertheless, underwriting results in 1987, assuming they are not dragged down by a major natural catastrophe, will again improve materially because price increases are recognized in revenues on a lagged basis. In effect, the good news in earnings follows the good news in prices by six to twelve months. But the improving trend in earnings will probably end by late 1988 or early 1989. Thereafter the industry is likely to head south in a hurry.

Pricing behavior in the insurance industry continues to be exactly what can be expected in a commodity-type business. Only under shortage conditions are high profits achieved, and such conditions don't last long. When the profit sun begins to shine, long-established insurers shower investors with new shares in order to build capital. In addition, newly-formed insurers rush to sell shares at the advantageous prices available in the new-issue market (prices advantageous, that is, to the insiders promoting the company but rarely to the new shareholders). These moves guarantee future trouble: capacity soars, competitive juices flow, and prices fade.

It's interesting to observe insurance leaders beseech their colleagues to behave in a more "statesmanlike" manner when pricing policies. "Why," they ask, "can't we learn from history, even out the peaks and valleys, and consistently price to make reasonable profits?" What they wish, of course, is pricing that resembles, say, that of The Wall Street journal, whose prices are ample to start with and rise consistently each year.

Such calls for improved behavior have all of the efficacy of those made by a Nebraska corn grower asking his fellow growers, worldwide, to market their corn with more statesmanship. What's needed is not more statesmen, but less corn. By raising large amounts of capital in the last two years, the insurance industry has, to continue our metaphor, vastly expanded its plantings of corn. The resulting increase in "crop" - i.e., the proliferation of insurance capacity - will have the same effect on prices and profits that surplus crops have had since time immemorial.

Our own insurance operation did well in 1986 and is also likely to do well in 1987. We have benefited significantly from industry conditions. But much of our prosperity arises from the efforts and ability of Mike Goldberg, manager of all insurance operations.

Our combined ratio (on a statutory basis and excluding structured settlements and financial reinsurance) fell from 111 in 1985 to 103 in 1986. In addition, our premium growth has been exceptional: although final figures aren't available, I believe that over the past two years we were the fastest growing company among the country's top 100 insurers. Some of our growth, it is true, came from our large quota-share contract with Fireman's Fund, described in last year's report and updated in Charlie's letter on page 54. But even if the premiums from that contract are excluded from the calculation, we probably still ranked first in growth.

Interestingly, we were the slowest-growing large insurer in the years immediately preceding 1985. In fact, we shrank - and we will do so again from time to time in the future. Our large swings in volume do not mean that we come and go from the insurance marketplace. Indeed, we are its most steadfast participant, always standing ready, at prices we believe adequate, to write a wide variety of high-limit coverages. The swings in our volume arise instead from the here-today, gone-tomorrow behavior of other insurers. When most insurers are "gone," because their capital is inadequate or they have been frightened by losses, insured's rush to us and find us ready to do business. But when hordes of insurers are "here," and are slashing prices far below expectable costs, many customers naturally leave us in order to take advantage of the bargains temporarily being offered by our competition.

Our firmness on prices works no hardship on the consumer: he is being bombarded by attractively priced insurance offers at those times when we are doing little business. And it works no hardship on our employees: we don't engage in layoffs when we experience a cyclical slowdown at one of our generally-profitable insurance operations. This no-layoff practice is in

our self-interest. Employees who fear that large layoffs will accompany sizable reductions in premium volume will understandably produce scads of business through thick and thin (mostly thin).

The trends in National Indemnity's traditional business - the writing of commercial auto and general liability policies through general agents - suggest how gun-shy other insurersbecame for a while and how brave they are now getting. In the last quarter of 1984, NICO's monthly volume averaged $5 million, about what it had been running for several years. By the first quarter of 1986, monthly volume had climbed to about $35 million. In recent months, a sharp decline has set in. Monthly volume is currently about $20 million and will continue to fall as new competitors surface and prices are cut. Ironically, the managers of certain major new competitors are the very same managers that just a few years ago bankrupted insurers that were our old competitors. Through state-mandated guaranty funds, we must pay some of the losses these managers left unpaid, and now we find them writing the same sort of business under a new name. C'est la guerre.

The business we call "large risks" expanded significantly during 1986, and will be important to us in the future. In this operation, we regularly write policies with annual premiums of $1 - $3 million, or even higher. This business will necessarily be highly volatile - both in volume and profitability - but our premier capital position and willingness to write large net lines make us a very strong force in the market when prices are right. On the other hand, our structured settlement business has become near-dormant because present prices make no sense to us.

The 1986 loss reserve development of our insurance group is chronicled on page 46. The figures show the amount of error in our yearend 1985 liabilities that a year of settlements and further evaluation has revealed. As you can see, what I told you last year about our loss liabilities was far from true - and that makes three years in a row of error. If the physiological rules that applied to Pinocchio were to apply to me, my nose would now draw crowds.

When insurance executives belatedly establish proper reserves, they often speak of "reserve strengthening," a term that has a rather noble ring to it. They almost make it sound as if they are adding extra layers of strength to an already-solid balance sheet. That's not the case: instead the term is a euphemism for what should more properly be called "correction of previous untruths" (albeit non-intentional ones).

We made a special effort at the end of 1986 to reserve accurately. However, we tried just as hard at the end of 1985. Only time will tell whether we have finally succeeded in correctly estimating our insurance liabilities.

Despite the difficulties we have had in reserving and the commodity economics of the industry, we expect our insurance business to both grow and make significant amounts of money - but progress will be distinctly irregular and there will be major unpleasant surprises from time to time. It's a treacherous business and a wary attitude is essential. We must heed Woody Allen: "While the lamb may lie down with the lion, the lamb shouldn't count on getting a whole lot of sleep."

In our insurance operations we have an advantage in attitude, we have an advantage in capital, and we are developing an advantage in personnel. Additionally, I like to think we have some long-term edge in investing the float developed from policyholder funds. The nature of the business suggests that we will need all of these advantages in order to prosper.

* * *

GEICO Corporation, 41% owned by Berkshire, had an outstanding year in 1986. Industrywide, underwriting experience in personal lines did not improve nearly as much as it did in commercial lines. But GEICO, writing personal lines almost exclusively, improved its combined ratio to 96.9 and recorded a 16% gain in premium volume. GEICO also continued to repurchase its own shares and ended the year with 5.5% fewer shares outstanding than it had at the start of the year. Our share of GEICO's premium volume is over $500 million, close to double that of only three years ago. GEICO's book of business is one of the best in the world of insurance, far better indeed than Berkshire's own book.

The most important ingredient in GEICO's success is rock-bottom operating costs, which set the company apart from literally hundreds of competitors that offer auto insurance. The total of GEICO's underwriting expense and loss adjustment expense in 1986 was only 23.5% of premiums. Many major companies show percentages 15 points higher than that. Even such huge direct writers as Allstate and State Farm incur appreciably higher costs than does GEICO.

The difference between GEICO's costs and those of its competitors is a kind of moat that protects a valuable and much-sought-after business castle. No one understands this moat-

around-the-castle concept better than Bill Snyder, Chairman of GEICO. He continually widens the moat by driving down costs still more, thereby defending and strengthening the economic franchise. Between 1985 and 1986, GEICO's total expense ratio dropped from 24.1% to the 23.5% mentioned earlier and, under Bill's leadership, the ratio is almost certain to drop further. If it does - and if GEICO maintains its service and underwriting standards - the company's future will be brilliant indeed.

The second stage of the GEICO rocket is fueled by Lou Simpson, Vice Chairman, who has run the company's investments since late 1979. Indeed, it's a little embarrassing for me, the fellow responsible for investments at Berkshire, to chronicle Lou's performance at GEICO. Only my ownership of a controlling block of Berkshire stock makes me secure enough to give you the following figures, comparing the overall return of the equity portfolio at GEICO to that of the Standard & Poor's 500:

Year	GEICO's Equities	S&P 500
1980	23.7%	32.3%
1981	5.4	(5.0)
1982	45.8	21.4
1983	36.0	22.4
1984	21.8	6.2
1985	45.8	31.6
1986	38.7	18.6

These are not only terrific figures but, fully as important, they have been achieved in the right way. Lou has consistently invested in undervalued common stocks that, individually, were unlikely to present him with a permanent loss and that, collectively, were close to risk-free.

In sum, GEICO is an exceptional business run by exceptional managers. We are fortunate to be associated with them.

Marketable Securities

During 1986, our insurance companies purchased about $700 million of tax-exempt bonds, most having a maturity of 8 to 12 years. You might think that this commitment indicates a considerable enthusiasm for such bonds. Unfortunately, that's not so: at best, the bonds are

mediocre investments. They simply seemed the least objectionable alternative at the time we bought them, and still seem so. (Currently liking neither stocks nor bonds, I find myself the polar opposite of Mae West as she declared: "I like only two kinds of men - foreign and domestic.")

We must, of necessity, hold marketable securities in our insurance companies and, as money comes in, we have only five directions to go: (1) long-term common stock investments; (2) long-term fixed-income securities; (3) medium-term fixed-income securities; (4) short-term cash equivalents; and (5) short-term arbitrage commitments.

Common stocks, of course, are the most fun. When conditions are right that is, when companies with good economics and good management sell well below intrinsic business value - stocks sometimes provide grand-slam home runs. But we currently find no equities that come close to meeting our tests. This statement in no way translates into a stock market prediction: we have no idea - and never have had - whether the market is going to go up, down, or sideways in the near- or intermediate term future.

What we do know, however, is that occasional outbreaks of those two super-contagious diseases, fear and greed, will forever occur in the investment community. The timing of these epidemics will be unpredictable. And the market aberrations produced by them will be equally unpredictable, both as to duration and degree. Therefore, we never try to anticipate the arrival or departure of either disease. Our goal is more modest: we simply attempt to be fearful when others are greedy and to be greedy only when others are fearful.

As this is written, little fear is visible in Wall Street. Instead, euphoria prevails - and why not? What could be more exhilarating than to participate in a bull market in which the rewards to owners of businesses become gloriously uncoupled from the plodding performances of the businesses themselves. Unfortunately, however, stocks can’t outperform businesses indefinitely.

Indeed, because of the heavy transaction and investment management costs they bear, stockholders as a whole and over the long term must inevitably underperform the companies they own. If American business, in aggregate, earns about 12% on equity annually, investors must end up earning significantly less. Bull markets can obscure mathematical laws, but they cannot repeal them.

The second category of investments open to our insurance companies is long-term bonds. These are unlikely to be of interest to us except in very special situations, such as the Washington Public Power Supply System #1, #2 and #3 issues, discussed in our 1984 report. (At

yearend, we owned WPPSS issues having an amortized cost of $218 million and a market value of $310 million, paying us $31.7 million in annual tax-exempt income.) Our aversion to long-term bonds relates to our fear that we will see much higher rates of inflation within the next decade. Over time, the behavior of our currency will be determined by the behavior of our legislators. This relationship poses a continuing threat to currency stability - and a corresponding threat to the owners of long-term bonds.

We continue to periodically employ money in the arbitrage field. However, unlike most arbitrageurs, who purchase dozens of securities each year, we purchase only a few. We restrict ourselves to large deals that have been announced publicly and do not bet on the come. Therefore, our potential profits are apt to be small; but, with luck, our disappointments will also be few.

Our yearend portfolio shown below includes one arbitrage commitment, Lear-Siegler. Our balance sheet also includes a receivable for $145 million, representing the money owed us (and paid a few days later) by Unilever, then in the process of purchasing Chesebrough-Ponds, another of our arbitrage holdings. Arbitrage is an alternative to Treasury Bills as a short-term parking place for money - a choice that combines potentially higher returns with higher risks. To date, our returns from the funds committed to arbitrage have been many times higher than they would have been had we left those funds in Treasury Bills. Nonetheless, one bad experience could change the scorecard markedly.

We also, though it takes some straining, currently view medium-term tax-exempt bonds as an alternative to short-term Treasury holdings. Buying these bonds, we run a risk of significant loss if, as seems probable, we sell many of them well before maturity. However, we believe this risk is more than counter-balanced first, by the much higher after-tax returns currently realizable from these securities as compared to Treasury Bills and second, by the possibility that sales will produce an overall profit rather than a loss. Our expectation of a higher total return, after allowing for the possibility of loss and after taking into account all tax effects, is a relatively close call and could well be wrong. Even if we sell our bonds at a fairly large loss, however, we may end up reaping a higher after-tax return than we would have realized by repeatedly rolling over Treasury Bills.

In any event, you should know that our expectations for both the stocks and bonds we now hold are exceptionally modest, given current market levels. Probably the best thing that could

happen to us is a market in which we would choose to sell many of our bond holdings at a significant loss in order to re-allocate funds to the far-better equity values then very likely to exist. The bond losses I am talking about would occur if high interest rates came along; the same rates would probably depress common stocks considerably more than medium-term bonds.

We show below our 1986 yearend net holdings in marketable equities. All positions with a market value of over $25 million are listed, and the interests attributable to minority shareholdings of Wesco Financial Corp. and Nebraska Furniture Mart are excluded.

Shares	**Company**	**Cost (000's omitted)**	**Market (000's omitted)**
2,990,000	Capital Cities/ABC, Inc.	$515,775	$801,694
6,850,000	GEICO Corporation.	45,713	674,725
2,379,200	Handy & Harman	27,318	46,989
489,300	Lear Siegler, Inc.	44,064	46,989
1,727,765	The Washington Post Company	9,731	205,172
	Total	**$642,601**	**$1,837,526**
	All Other Common Stockholdings	12,763	36,507
	Total Common Stocks	**$655,364**	**$1,874,033**

We should note that we expect to keep permanently our three primary holdings, Capital Cities/ABC, Inc., GEICO Corporation, and The Washington Post. Even if these securities were to appear significantly overpriced, we would not anticipate selling them, just as we would not sell See's or Buffalo Evening News if someone were to offer us a price far above what we believe those businesses are worth.

This attitude may seem old-fashioned in a corporate world in which activity has become the order of the day. The modern manager refers to his "portfolio" of businesses - meaning that all of them are candidates for "restructuring" whenever such a move is dictated by Wall Street preferences, operating conditions or a new corporate "concept." (Restructuring is defined narrowly, however: it extends only to dumping offending businesses, not to dumping the officers and directors who bought the businesses in the first place. "Hate the sin but love the sinner" is a theology as popular with the Fortune 500 as it is with the Salvation Army.)

Investment managers are even more hyperkinetic: their behavior during trading hours makes whirling dervishes appear sedated by comparison. Indeed, the term "institutional investor" is becoming one of those self-contradictions called an oxymoron, comparable to "jumbo shrimp," "lady mudwrestler" and "inexpensive lawyer."

Despite the enthusiasm for activity that has swept business and financial America, we will stick with our 'til-death-do-us-part policy. It's the only one with which Charlie and I are comfortable, it produces decent results, and it lets our managers and those of our investees run their businesses free of distractions.

NHP, Inc.

Last year we paid $23.7 million for about 50% of NHP, Inc., a developer, syndicator, owner and manager of multi-family rental housing. Should all executive stock options that have been authorized be granted and exercised, our equity interest will decline to slightly over 45%.

NHP, Inc. has a most unusual genealogy. In 1967, President Johnson appointed a commission of business and civic leaders, led by Edgar Kaiser, to study ways to increase the supply of multifamily housing for low- and moderate-income tenants. Certain members of the commission subsequently formed and promoted two business entities to foster this goal. Both are now owned by NHP, Inc. and one operates under unusual ground rules: three of its directors must be appointed by the President, with the advice and consent of the Senate, and it is also required by law to submit an annual report to the President.

Over 260 major corporations, motivated more by the idea of public service than profit, invested $42 million in the two original entities, which promptly began, through partnerships, to develop government-subsidized rental property. The typical partnership owned a single property and was largely financed by a non-recourse mortgage. Most of the equity money for each partnership was supplied by a group of limited partners who were primarily attracted by the large tax deductions that went with the investment. NHP acted as general partner and also purchased a small portion of each partnership's equity.

The Government's housing policy has, of course, shifted and NHP has necessarily broadened its activities to include non-subsidized apartments commanding market-rate rents. In addition, a subsidiary of NHP builds single-family homes in the Washington, D.C. area, realizing revenues of about $50 million annually.

NHP now oversees about 500 partnership properties that are located in 40 states, the District of Columbia and Puerto Rico, and that include about 80,000 housing units. The cost of these properties was more than $2.5 billion and they have been well maintained. NHP directly manages about 55,000 of the housing units and supervises the management of the rest. The company's revenues from management are about $16 million annually, and growing.

In addition to the equity interests it purchased upon the formation of each partnership, NHP owns varying residual interests that come into play when properties are disposed of and distributions are made to the limited partners. The residuals on many of NHP's "deep subsidy" properties are unlikely to be of much value. But residuals on certain other properties could prove quite valuable, particularly if inflation should heat up.

The tax-oriented syndication of properties to individuals has been halted by the Tax Reform Act of 1986. In the main, NHP is currently trying to develop equity positions or significant residual interests in non-subsidized rental properties of quality and size (typically 200 to 500 units). In projects of this kind, NHP usually works with one or more large institutional investors or lenders. NHP will continue to seek ways to develop low- and moderate-income apartment housing, but will not likely meet success unless government policy changes.

Besides ourselves, the large shareholders in NHP are Weyerhauser (whose interest is about 25%) and a management group led by Rod Heller, chief executive of NHP. About 60 major corporations also continue to hold small interests, none larger than 2%.

Taxation

The Tax Reform Act of 1986 affects our various businesses in important and divergent ways. Although we find much to praise in the Act, the net financial effect for Berkshire is negative: our rate of increase in business value is likely to be at least moderately slower under the new law than under the old. The net effect for our shareholders is even more negative: every dollar of increase in per-share business value, assuming the increase is accompanied by an equivalent dollar gain in the market value of Berkshire stock, will produce 72 cents of after-tax gain for our shareholders rather than the 80 cents produced under the old law. This result, of course, reflects the rise in the maximum tax rate on personal capital gains from 20% to 28%.

Here are the main tax changes that affect Berkshire:

o The tax rate on corporate ordinary income is scheduled to decrease from 46% in 1986 to 34% in 1988. This change obviously affects us positively - and it also has a significant positive effect on two of our three major investees, Capital Cities/ABC and The Washington Post Company.

I say this knowing that over the years there has been a lot of fuzzy and often partisan commentary about who really pays corporate taxes - businesses or their customers. The argument, of course, has usually turned around tax increases, not decreases. Those people resisting increases in corporate rates frequently argue that corporations in reality pay none of the taxes levied on them but, instead, act as a sort of economic pipeline, passing all taxes through to consumers. According to these advocates, any corporate-tax increase will simply lead to higher prices that, for the corporation, offset the increase. Having taken this position, proponents of the "pipeline" theory must also conclude that a tax decrease for corporations will not help profits but will instead flow through, leading to correspondingly lower prices for consumers.

Conversely, others argue that corporations not only pay the taxes levied upon them, but absorb them also. Consumers, this school says, will be unaffected by changes in corporate rates.

What really happens? When the corporate rate is cut, do Berkshire, The Washington Post, Cap Cities, etc., themselves soak up the benefits, or do these companies pass the benefits along to their customers in the form of lower prices? This is an important question for investors and managers, as well as for policymakers.

Our conclusion is that in some cases the benefits of lower corporate taxes fall exclusively, or almost exclusively, upon the corporation and its shareholders, and that in other cases the benefits are entirely, or almost entirely, passed through to the customer. What determines the outcome is the strength of the corporation's business franchise and whether the profitability of that franchise is regulated.

For example, when the franchise is strong and after-tax profits are regulated in a relatively precise manner, as is the case with electric utilities, changes in corporate tax rates are largely reflected in prices, not in profits. When taxes are cut, prices will usually be reduced in short order. When taxes are increased, prices will rise, though often not as promptly.

A similar result occurs in a second arena - in the price-competitive industry, whose companies typically operate with very weak business franchises. In such industries, the free market "regulates" after-tax profits in a delayed and irregular, but generally effective, manner. The marketplace, in effect, performs much the same function in dealing with the price-competitive

industry as the Public Utilities Commission does in dealing with electric utilities. In these industries, therefore, tax changes eventually affect prices more than profits.

In the case of unregulated businesses blessed with strong franchises, however, it's a different story: the corporation and its shareholders are then the major beneficiaries of tax cuts. These companies benefit from a tax cut much as the electric company would if it lacked a regulator to force down prices.

Many of our businesses, both those we own in whole and in part, possess such franchises. Consequently, reductions in their taxes largely end up in our pockets rather than the pockets of our customers. While this may be impolitic to state, it is impossible to deny. If you are tempted to believe otherwise, think for a moment of the most able brain surgeon or lawyer in your area. Do you really expect the fees of this expert (the local "franchise-holder" in his or her specialty) to be reduced now that the top personal tax rate is being cut from 50% to 28%?

Your joy at our conclusion that lower rates benefit a number of our operating businesses and investees should be severely tempered, however, by another of our convictions: scheduled 1988 tax rates, both individual and corporate, seem totally unrealistic to us. These rates will very likely bestow a fiscal problem on Washington that will prove incompatible with price stability. We believe, therefore, that ultimately - within, say, five years - either higher tax rates or higher inflation rates are almost certain to materialize. And it would not surprise us to see both.

o Corporate capital gains tax rates have been increased from 28% to 34%, effective in 1987. This change will have an important adverse effect on Berkshire because we expect much of our gain in business value in the future, as in the past, to arise from capital gains. For example, our three major investment holdings - Cap Cities, GEICO, and Washington Post - at yearend had a market value of over $1.7 billion, close to 75% of the total net worth of Berkshire, and yet they deliver us only about $9 million in annual income. Instead, all three retain a very high percentage of their earnings, which we expect to eventually deliver us capital gains.

The new law increases the rate for all gains realized in the future, including the unrealized gains that existed before the law was enacted. At yearend, we had $1.2 billion of such unrealized gains in our equity investments. The effect of the new law on our balance sheet will be delayed because a GAAP rule stipulates that the deferred tax liability applicable to unrealized gains should be stated at last year's 28% tax rate rather than the current 34% rate. This rule is

expected to change soon. The moment it does, about $73 million will disappear from our GAAP net worth and be added to the deferred tax account.

o Dividend and interest income received by our insurance companies will be taxed far more heavily under the new law. First, all corporations will be taxed on 20% of the dividends they receive from other domestic corporations, up from 15% under the old law. Second, there is a change concerning the residual 80% that applies only to property/casualty companies: 15% of that residual will be taxed if the stocks paying the dividends were purchased after August 7, 1986. A third change, again applying only to property/casualty companies, concerns tax-exempt bonds: interest on bonds purchased by insurers after August 7, 1986 will only be 85% tax-exempt.

The last two changes are very important. They mean that our income from the investments we make in future years will be significantly lower than would have been the case under the old law. My best guess is that these changes alone will eventually reduce the earning power of our insurance operation by at least 10% from what we could previously have expected.

o The new tax law also materially changes the timing of tax payments by property/casualty insurance companies. One new rule requires us to discount our loss reserves in our tax returns, a change that will decrease deductions and increase taxable income. Another rule, to be phased in over six years, requires us to include 20% of our unearned premium reserve in taxable income.

Neither rule changes the amount of the annual tax accrual in our reports to you, but each materially accelerates the schedule of payments. That is, taxes formerly deferred will now be front-ended, a change that will significantly cut the profitability of our business. An analogy will suggest the toll: if, upon turning 21, you were required to immediately pay tax on all income you were due to receive throughout your life, both your lifetime wealth and your estate would be a small fraction of what they would be if all taxes on your income were payable only when you died.

Attentive readers may spot an inconsistency in what we say. Earlier, discussing companies in price-competitive industries, we suggested that tax increases or reductions affect these companies relatively little, but instead are largely passed along to their customers. But now we are saying that tax increases will affect profits of Berkshire's property/casualty companies even though they operate in an intensely price-competitive industry.

The reason this industry is likely to be an exception to our general rule is that not all major insurers will be working with identical tax equations. Important differences will exist for several reasons: a new alternative minimum tax will materially affect some companies but not others; certain major insurers have huge loss carry-forwards that will largely shield their income from significant taxes for at least a few years; and the results of some large insurers will be folded into the consolidated returns of companies with non-insurance businesses. These disparate conditions will produce widely varying marginal tax rates in the property/casualty industry. That will not be the case, however, in most other price-competitive industries, such as aluminum, autos and department stores, in which the major players will generally contend with similar tax equations.

The absence of a common tax calculus for property/casualty companies means that the increased taxes falling on the industry will probably not be passed along to customers to the degree that they would in a typical price-competitive industry. Insurers, in other words, will themselves bear much of the new tax burdens.

o A partial offset to these burdens is a "fresh start" adjustment that occurred on January 1, 1987 when our December 31, 1986 loss reserve figures were converted for tax purposes to the newly-required discounted basis. (In our reports to you, however, reserves will remain on exactly the same basis as in the past - undiscounted except in special cases such as structured settlements.) The net effect of the "fresh start" is to give us a double deduction: we will get a tax deduction in 1987 and future years for a portion of our-incurred-but-unpaid insurance losses that have already been fully deducted as costs in 1986 and earlier years.

The increase in net worth that is produced by this change is not yet reflected in our financial statements. Rather, under present GAAP rules (which may be changed), the benefit will flow into the earnings statement and, consequently, into net worth over the next few years by way of reduced tax charges. We expect the total benefit from the fresh-start adjustment to be in the $30 - $40 million range. It should be noted, however, that this is a one-time benefit, whereas the negative impact of the other insurance-related tax changes is not only ongoing but, in important respects, will become more severe as time passes.

o The General Utilities Doctrine was repealed by the new tax law. This means that in 1987 and thereafter there will be a double tax on corporate liquidations, one at the corporate level and another at the shareholder level. In the past, the tax at the corporate level could be avoided, If Berkshire, for example, were to be liquidated - which it most certainly won’t be - shareholders

would, under the new law, receive far less from the sales of our properties than they would have if the properties had been sold in the past, assuming identical prices in each sale. Though this outcome is theoretical in our case, the change in the law will vary materially affect many companies. Therefore, it also affects our evaluations of prospective investments. Take, for example, producing oil and gas businesses, selected media companies, real estate companies, etc. that might wish to sell out. The values that their shareholders can realize are likely to be significantly reduced simply because the General Utilities Doctrine has been repealed - though the companies' operating economics will not have changed adversely at all. My impression is that this important change in the law has not yet been fully comprehended by either investors or managers.

This section of our report has been longer and more complicated than I would have liked. But the changes in the law are many and important, particularly for property/casualty insurers. As I have noted, the new law will hurt Berkshire's results, but the negative impact is impossible to quantify with any precision.

Miscellaneous

We bought a corporate jet last year. What you have heard about such planes is true: they are very expensive and a luxury in situations like ours where little travel to out-of-the-way places is required. And planes not only cost a lot to operate, they cost a lot just to look at. Pre-tax, cost of capital plus depreciation on a new $15 million plane probably runs $3 million annually. On our own plane, bought for $850,000 used, such costs run close to $200,000 annually.

Cognizant of such figures, your Chairman, unfortunately, has in the past made a number of rather intemperate remarks about corporate jets. Accordingly, prior to our purchase, I was forced into my Galileo mode. I promptly experienced the necessary "counter-revelation" and travel is now considerably easier - and considerably costlier - than in the past. Whether Berkshire will get its money's worth from the plane is an open question, but I will work at achieving some business triumph that I can (no matter how dubiously) attribute to it. I'm afraid Ben Franklin had my number. Said he: "So convenient a thing it is to be a reasonable creature, since it enables one to find or make a reason for everything one has a mind to do."

About 97% of all eligible shares participated in Berkshire's 1986 shareholder-designated contributions program. Contributions made through the program were $4 million, and 1,934 charities were recipients.

We urge new shareholders to read the description of our shareholder-designated contributions program that appears on pages 58 and 59. If you wish to participate in future programs, we strongly urge that you immediately make sure your shares are registered in the name of the actual owner, not in "street" name or nominee name. Shares not so registered on September 30, 1987 will be ineligible for the 1987 program.

* * *

Last year almost 450 people attended our shareholders' meeting, up from about 250 the year before (and from about a dozen ten years ago). I hope you can join us on May 19th in Omaha. Charlie and I like to answer owner-related questions and I can promise you that our shareholders will pose many good ones. Finishing up the questions may take quite a while - we had about 65 last year so you should feel free to leave once your own have been answered.

Last year, after the meeting, one shareholder from New Jersey and another from New York went to the Furniture Mart, where each purchased a $5,000 Oriental rug from Mrs. B. (To be precise, they purchased rugs that might cost $10,000 elsewhere for which they were charged about $5,000.) Mrs. B was pleased - but not satisfied - and she will be looking for you at the store after this year's meeting. Unless our shareholders top last year's record, I'll be in trouble. So do me (and yourself) a favor, and go see her.

Warren E. Buffett

February 27, 1987 Chairman of the Board

Appendix

Purchase-Price Accounting Adjustments and the "Cash Flow" Fallacy

First a short quiz: below are abbreviated 1986 statements of earnings for two companies. Which business is the more valuable?

(000's Omitted)	**Company O**	**Company N**
Revenues	$677,240	$677,240
Cost of Goods Sold		
Historical Costs Excluding Depreciation	341,170	341,170
Special non-cash inventory costs	0	4,979
Depreciation of plant and equipment	8,301	13,355
Total	**349,471**	**359,504**
Gross Profit	327,769	317,736
Selling and Administrative Expense	260,286	260,286
Amortization of Goodwill	0	595
Total	**260,286**	**260,881**
Operating Profit	67,483	56,855
Other Income, Net	4,135	4,135
Pre-Tax Income	71,618	60,990
Applicable Income Tax		
Historical deferred and current tax	31,387	31,387
Non-Cash Inter-period Allocation Adjustment	0	998
Total	**31,387**	**32,385**
Net Income	**40,231**	**28,605**

As you've probably guessed, Companies O and N are the same business - Scott Fetzer. In the "O" (for "old") column we have shown what the company's 1986 GAAP earnings would have been if we had not purchased it; in the "N" (for "new") column we have shown Scott Fetzer's GAAP earnings as actually reported by Berkshire. It should be emphasized that the two columns depict identical economics - i.e., the same sales, wages, taxes, etc. And both "companies" generate the

same amount of cash for owners. Only the accounting is different. So, fellow philosophers, which column presents truth? Upon which set of numbers should managers and investors focus? Before we tackle those questions, let's look at what produces the disparity between O and N. We will simplify our discussion in some respects, but the simplification should not produce any inaccuracies in analysis or conclusions.

The contrast between O and N comes about because we paid an amount for Scott Fetzer that was different from its stated net worth. Under GAAP, such differences - such premiums or discounts - must be accounted for by "purchase-price adjustments." In Scott Fetzer's case, we paid $315 million for net assets that were carried on its books at $172.4 million. So we paid a premium of $142.6 million.

The first step in accounting for any premium paid is to adjust the carrying value of current assets to current values. In practice, this requirement usually does not affect receivables, which are routinely carried at current value, but often affects inventories. Because of a $22.9 million LIFO reserve and other accounting intricacies, Scott Fetzer's inventory account was carried at a $37.3 million discount from current value. So, making our first accounting move, we used $37.3 million of our $142.6 million premium to increase the carrying value of the inventory.

Assuming any premium is left after current assets are adjusted, the next step is to adjust fixed assets to current value. In our case, this adjustment also required a few accounting acrobatics relating to deferred taxes. Since this has been billed as a simplified discussion, I will skip the details and give you the bottom line: $68.0 million was added to fixed assets and $13.0 million was eliminated from deferred tax liabilities. After making this $81.0 million adjustment, we were left with $24.3 million of premium to allocate.

Had our situation called for them two steps would next have been required: the adjustment of intangible assets other than Goodwill to current fair values, and the restatement of liabilities to current fair values, a requirement that typically affects only long-term debt and unfunded pension liabilities. In Scott Fetzer's case, however, neither of these steps was necessary.

The final accounting adjustment we needed to make, after recording fair market values for all assets and liabilities, was the assignment of the residual premium to Goodwill (technically known as "excess of cost over the fair value of net assets acquired"). This residual amounted to $24.3 million. Thus, the balance sheet of Scott Fetzer immediately before the acquisition, which is summarized below in column O, was transformed by the purchase into the balance sheet

shown in column N. In real terms, both balance sheets depict the same assets and liabilities - but, as you can see, certain figures differ significantly.

(000's Omitted)	**Company O**	**Company N**
Assets		
Cash and Cash Equivalents	$3,593	$3,593
Receivables, net	90,919	90,919
Inventories	77,489	114,764
Other	5,954	5,954
Total Current Assets	177,955	215,230
Property, Plant, and Equipment, net	80,967	148,960
Investments in and Advances to Unconsolidated Subsidiaries and Joint Ventures	93,589	93,589
Other Assets, including Goodwill	9,836	34,210
Total	**$362,347**	**491,989**
Liabilities		
Notes Payable and Current Portion of Long-term Debt	4,650	4,650
Accounts Payable	39,003	39,003
Accrued Liabilities	84,939	84,939
Total Current Liabilities	128,592	128,592
Long-term Debt and Capitalized Leases	34,669	34,669
Deferred Income Taxes	17,052	17,052
Othered Deferred Credits	9,657	9,657
Total Liabilities	189,970	176,993
Shareholders' Equity	172,377	314,996
Total	**$362,347**	**$491,989**

The higher balance sheet figures shown in column N produce the lower income figures shown in column N of the earnings statement presented earlier. This is the result of the asset write-ups and of the fact that some of the written-up assets must be depreciated or amortized. The higher the asset figure, the higher the annual depreciation or amortization charge to earnings must be. The charges that flowed to the earnings statement because of the balance sheet write-ups were numbered in the statement of earnings shown earlier:

1. $4,979,000 for non-cash inventory costs resulting, primarily, from reductions that Scott Fetzer made in its inventories during 1986; charges of this kind are apt to be small or non-existent in future years.
2. $5,054,000 for extra depreciation attributable to the write-up of fixed assets; a charge approximating this amount will probably be made annually for 12 more years.
3. $595,000 for amortization of Goodwill; this charge will be made annually for 39 more years in a slightly larger amount because our purchase was made on January 6 and, therefore, the 1986 figure applies to only 98% of the year.
4. $998,000 for deferred-tax acrobatics that are beyond my ability to explain briefly (or perhaps even non-briefly); a charge approximating this amount will probably be made annually for 12 more years.

It is important to understand that none of these newly-created accounting costs, totaling $11.6 million, are deductible for income tax purposes. The "new" Scott Fetzer pays exactly the same tax as the "old" Scott Fetzer would have, even though the GAAP earnings of the two entities differ greatly. And, in respect to operating earnings, that would be true in the future also. However, in the unlikely event that Scott Fetzer sells one of its businesses, the tax consequences to the "old" and "new" company might differ widely.

By the end of 1986 the difference between the net worth of the "old" and "new" Scott Fetzer had been reduced from $142.6 million to $131.0 million by means of the extra $11.6 million that was charged to earnings of the new entity. As the years go by, similar charges to earnings will cause most of the premium to disappear, and the two balance sheets will converge. However, the higher land values and most of the higher inventory values that were established on the new balance sheet will remain unless land is disposed of or inventory levels are further reduced.

* * *

What does all this mean for owners? Did the shareholders of Berkshire buy a business that earned $40.2 million in 1986 or did they buy one earning $28.6 million? Were those $11.6 million of new charges a real economic cost to us? Should investors pay more for the stock of Company O than of Company N? And, if a business is worth some given multiple of earnings, was Scott Fetzer worth considerably more the day before we bought it than it was worth the following day?

If we think through these questions, we can gain some insights about what may be called "owner earnings." These represent (a) reported earnings plus (b) depreciation, depletion, amortization, and certain other non-cash charges such as Company N's items (1) and (4) less c the average annual amount of capitalized expenditures for plant and equipment, etc. that the business requires to fully maintain its long-term competitive position and its unit volume. (If the business requires additional working capital to maintain its competitive position and unit volume, the increment also should be included in c . However, businesses following the LIFO inventory method usually do not require additional working capital if unit volume does not change.)

Our owner-earnings equation does not yield the deceptively precise figures provided by GAAP, since c must be a guess - and one sometimes very difficult to make. Despite this problem, we consider the owner earnings figure, not the GAAP figure, to be the relevant item for valuation purposes - both for investors in buying stocks and for managers in buying entire businesses. We agree with Keynes's observation: "I would rather be vaguely right than precisely wrong."

The approach we have outlined produces "owner earnings" for Company O and Company N that are identical, which means valuations are also identical, just as common sense would tell you should be the case. This result is reached because the sum of (a) and (b) is the same in both columns O and N, and because c is necessarily the same in both cases.

And what do Charlie and I, as owners and managers, believe is the correct figure for the owner earnings of Scott Fetzer? Under current circumstances, we believe c is very close to the "old" company's (b) number of $8.3 million and much below the "new" company's (b) number of $19.9 million. Therefore, we believe that owner earnings are far better depicted by the reported earnings in the O column than by those in the N column. In other words, we feel owner earnings of Scott Fetzer are considerably larger than the GAAP figures that we report.

That is obviously a happy state of affairs. But calculations of this sort usually do not provide such pleasant news. Most managers probably will acknowledge that they need to spend something more than (b) on their businesses over the longer term just to hold their ground in terms of both unit volume and competitive position. When this imperative exists - that is, when c exceeds (b) - GAAP earnings overstate owner earnings. Frequently this overstatement is substantial. The oil industry has in recent years provided a conspicuous example of this phenomenon. Had most major oil companies spent only (b) each year, they would have guaranteed their shrinkage in real terms.

All of this points up the absurdity of the "cash flow" numbers that are often set forth in Wall Street reports. These numbers routinely include (a) plus (b) - but do not subtract c . Most sales brochures of investment bankers also feature deceptive presentations of this kind. These imply that the business being offered is the commercial counterpart of the Pyramids - forever state-of-the-art, never needing to be replaced, improved or refurbished. Indeed, if all U.S. corporations were to be offered simultaneously for sale through our leading investment bankers - and if the sales brochures describing them were to be believed - governmental projections of national plant and equipment spending would have to be slashed by 90%.

"Cash Flow", true, may serve as a shorthand of some utility in descriptions of certain real estate businesses or other enterprises that make huge initial outlays and only tiny outlays thereafter. A company whose only holding is a bridge or an extremely long-lived gas field would be an example. But "cash flow" is meaningless in such businesses as manufacturing, retailing, extractive companies, and utilities because, for them, c is always significant. To be sure, businesses of this kind may in a given year be able to defer capital spending. But over a five- or ten-year period, they must make the investment - or the business decays.

Why, then, are "cash flow" numbers so popular today? In answer, we confess our cynicism: we believe these numbers are frequently used by marketers of businesses and securities in attempts to justify the unjustifiable (and thereby to sell what should be the unsalable). When (a) - that is, GAAP earnings - looks by itself inadequate to service debt of a junk bond or justify a foolish stock price, how convenient it becomes for salesmen to focus on (a) + (b). But you shouldn't add (b) without subtracting c : though dentists correctly claim that if you ignore your teeth they'll go away, the same is not true for c . The company or investor believing

that the debt-servicing ability or the equity valuation of an enterprise can be measured by totaling (a) and (b) while ignoring c is headed for certain trouble.

* * *

To sum up: in the case of both Scott Fetzer and our other businesses, we feel that (b) on an historical-cost basis - i.e., with both amortization of intangibles and other purchase-price adjustments excluded - is quite close in amount to c . (The two items are not identical, of course. For example, at See's we annually make capitalized expenditures that exceed depreciation by $500,000 to $1 million, simply to hold our ground competitively.) Our conviction about this point is the reason we show our amortization and other purchase-price adjustment items separately in the table on page 8 and is also our reason for viewing the earnings of the individual businesses as reported there as much more closely approximating owner earnings than the GAAP figures.

Questioning GAAP figures may seem impious to some. After all, what are we paying the accountants for if it is not to deliver us the "truth" about our business. But the accountants' job is to record, not to evaluate. The evaluation job falls to investors and managers.

Accounting numbers, of course, are the language of business and as such are of enormous help to anyone evaluating the worth of a business and tracking its progress. Charlie and I would be lost without these numbers: they invariably are the starting point for us in evaluating our own businesses and those of others. Managers and owners need to remember, however, that accounting is but an aid to business thinking, never a substitute for it.

1987 Letter

BERKSHIRE HATHAWAY INC.

To the Shareholders of Berkshire Hathaway Inc.:

Our gain in net worth during 1987 was $464 million, or 19.5%. Over the last 23 years (that is, since present management took over), our per-share book value has grown from $19.46 to $2,477.47, or at a rate of 23.1% compounded annually.

What counts, of course, is the rate of gain in per-share business value, not book value. In many cases, a corporation's book value and business value are almost totally unrelated. For example, just before they went bankrupt, LTV and Baldwin-United published yearend audits showing their book values to be $652 million and $397 million, respectively. Conversely, Belridge Oil was sold to Shell in 1979 for $3.6 billion although its book value was only $177 million.

At Berkshire, however, the two valuations have tracked rather closely, with the growth rate in business value over the last decade moderately outpacing the growth rate in book value. This good news continued in 1987.

Our premium of business value to book value has widened for two simple reasons: We own some remarkable businesses and they are run by even more remarkable managers.

You have a right to question that second assertion. After all, CEOs seldom tell their shareholders that they have assembled a bunch of turkeys to run things. Their reluctance to do so makes for some strange annual reports. Oftentimes, in his shareholders' letter, a CEO will go on for pages detailing corporate performance that is woefully inadequate. He will nonetheless end with a warm paragraph describing his managerial comrades as "our most precious asset." Such comments sometimes make you wonder what the other assets can possibly be.

At Berkshire, however, my appraisal of our operating managers is, if anything, understated. To understand why, first take a look at page 7, where we show the earnings (on an historical-cost accounting basis) of our seven largest non-financial units: Buffalo News, Fechheimer, Kirby,

Nebraska Furniture Mart, Scott Fetzer Manufacturing Group, See's Candies, and World Book. In 1987, these seven business units had combined operating earnings before interest and taxes of $180 million.

By itself, this figure says nothing about economic performance. To evaluate that, we must know how much total capital - debt and equity - was needed to produce these earnings. Debt plays an insignificant role at our seven units: Their net interest expense in 1987 was only $2 million. Thus, pre-tax earnings on the equity capital employed by these businesses amounted to $178 million. And this equity - again on an historical-cost basis - was only $175 million.

If these seven business units had operated as a single company, their 1987 *after*-tax earnings would have been approximately $100 million - a return of about 57% on equity capital. You'll seldom see such a percentage anywhere, let alone at large, diversified companies with nominal leverage. Here's a benchmark: In its 1988 Investor's Guide issue, Fortune reported that among the 500 largest industrial companies and 500 largest service companies, only six had averaged a return on equity of over 30% during the previous decade. The best performer among the 1000 was Commerce Clearing House at 40.2%.

Of course, the returns that Berkshire earns from these seven units are not as high as their underlying returns because, in aggregate, we bought the businesses at a substantial premium to underlying equity capital. Overall, these operations are carried on our books at about $222 million above the historical accounting values of the underlying assets. However, the managers of the units should be judged by the returns they achieve on the underlying assets; what we pay for a business does not affect the amount of capital its manager has to work with. (If, to become a shareholder and part owner of Commerce Clearing House, you pay, say, six times book value, that does not change CCH's return on equity.)

Three important inferences can be drawn from the figures I have cited. First, the current business value of these seven units is far above their historical book value and also far above the value at which they are carried on Berkshire's balance sheet. Second, because so little capital is required to run these businesses, they can grow while concurrently making almost all of their earnings available for deployment in new opportunities. Third, these businesses are run by truly extraordinary managers. The Blumkins, the Heldmans, Chuck Huggins, Stan Lipsey, and Ralph Schey all meld unusual talent, energy and character to achieve exceptional financial results.

For good reasons, we had very high expectations when we joined with these managers. In every case, however, our experience has greatly exceeded those expectations. We have received far more than we deserve, but we are willing to accept such inequities. (We subscribe to the view Jack Benny expressed upon receiving an acting award: "I don't deserve this, but then, I have arthritis and I don't deserve that either.")

Beyond the Sainted Seven, we have our other major unit, insurance, which I believe also has a business value well above the net assets employed in it. However, appraising the business value of a property-casualty insurance company is a decidedly imprecise process. The industry is volatile, reported earnings oftentimes are seriously inaccurate, and recent changes in the Tax Code will severely hurt future profitability. Despite these problems, we like the business and it will almost certainly remain our largest operation. Under Mike Goldberg's management, the insurance business should treat us well over time.

With managers like ours, my partner, Charlie Munger, and I have little to do with operations. in fact, it is probably fair to say that if we did more, less would be accomplished. We have no corporate meetings, no corporate budgets, and no performance reviews (though our managers, of course, oftentimes find such procedures useful at their operating units). After all, what can we tell the Blumkins about home furnishings, or the Heldmans about uniforms?

Our major contribution to the operations of our subsidiaries is applause. But it is not the indiscriminate applause of a Pollyanna. Rather it is informed applause based upon the two long careers we have spent intensively observing business performance and managerial behavior. Charlie and I have seen so much of the ordinary in business that we can truly appreciate a virtuoso performance. Only one response to the 1987 performance of our operating managers is appropriate: sustained, deafening applause.

Sources of Reported Earnings

The table on the following page shows the major sources of Berkshire's reported earnings. In the table, amortization of Goodwill and other major purchase-price accounting adjustments are not charged against the specific businesses to which they apply but, instead, are aggregated and shown separately. In effect, this procedure presents the earnings of our businesses as they would have been reported had we not purchased them. In appendixes to my letters in the 1983 and 1986 annual reports, I explained why this form of presentation seems to us to be more useful to

investors and managers than the standard GAAP presentation, which makes purchase-price adjustments on a business-by business basis. The total net earnings we show in the table are, of course, identical to the GAAP figures in our audited financial statements.

In the Business Segment Data on pages 36-38 and in the Management's Discussion section on pages 40-44 you will find much additional information about our businesses. In these sections you will also find our segment earnings reported on a GAAP basis. I urge you to read that material, as well as Charlie Munger's letter to Wesco shareholders, describing the various businesses of that subsidiary, which starts on page 45.

Operating Earnings (000s omitted)	**Pre-Tax 1986**	**Earnings 1985**	**Berkshire 1986**	**Share 1985**
Insurance Group: Underwriting	$(55,429)	$(55,844)	$(20,696)	$(29,894)
Net investment income	152,483	107,143	136,658	96,440
Buffalo News	39,410	34,736	21,304	16,918
Fechheimer (Aquired 6/3/86)	13,332	8,400	6,580	3,792
Kirby	22,408	20,218	12,891	10,508
Nebraska Furniture Mart	16,837	17,685	7,554	7,192
Scott Fetzer – Diversified Mfg.	30,591	25,358	17,555	13,354
See’s Candies	31,693	30,347	17,363	15,176
Wesco – Other than Insurance	6,209	5,542	4,978	5,550
World Book	25,745	21,978	15,135	11,670
Amortization of Goodwill	(2,862)	(2,555)	(2,862)	(2,555)
Other Purchase Price accounting charges	(5,546)	(10,033)	(6,544)	(11,031
Interest On Debt and Pre-Payment Penalty	(11,474)	(23,891)	(5,905)	(12,213)
Shareholder-Designated Contributions	(4,938)	(3,997)	(2,963)	(2,158)
Other	22,460	20,770	13,696	8,685
Operating Earnings	280,919	195,857	214,745	131,464
Sales of Securities	27,319	216,242	19,807	150,897
Total Earnings- all entities	**$308,238**	**$412,099**	**$234,552**	**$282,361**

Gypsy Rose Lee announced on one of her later birthdays: "I have everything I had last year; it's just that it's all two inches lower." As the table shows, during 1987 almost all of our businesses aged in a more upbeat way.

There's not a lot new to report about these businesses - and that's good, not bad. Severe change and exceptional returns usually don't mix. Most investors, of course, behave as if just the opposite were true. That is, they usually confer the highest price-earnings ratios on exotic-sounding businesses that hold out the promise of feverish change. That prospect lets investors fantasize about future profitability rather than face today's business realities. For such investor-dreamers, any blind date is preferable to one with the girl next door, no matter how desirable she may be.

Experience, however, indicates that the best business returns are usually achieved by companies that are doing something quite similar today to what they were doing five or ten years ago. That is no argument for managerial complacency. Businesses always have opportunities to improve service, product lines, manufacturing techniques, and the like, and obviously these opportunities should be seized. But a business that constantly encounters major change also encounters many chances for major error. Furthermore, economic terrain that is forever shifting violently is ground on which it is difficult to build a fortress-like business franchise. Such a franchise is usually the key to sustained high returns.

The Fortune study I mentioned earlier supports our view. Only 25 of the 1,000 companies met two tests of economic excellence - an average return on equity of over 20% in the ten years, 1977 through 1986, and no year worse than 15%. These business superstars were also stock market superstars: During the decade, 24 of the 25 outperformed the S&P 500.

The Fortune champs may surprise you in two respects. First, most use very little leverage compared to their interest-paying capacity. Really good businesses usually don't need to borrow. Second, except for one company that is "high-tech" and several others that manufacture ethical drugs, the companies are in businesses that, on balance, seem rather mundane. Most sell non-sexy products or services in much the same manner as they did ten years ago (though in larger quantities now, or at higher prices, or both). The record of these 25 companies confirms that making the most of an already strong business franchise, or concentrating on a single winning business theme, is what usually produces exceptional economics.

Berkshire's experience has been similar. Our managers have produced extraordinary results by doing rather ordinary things - but doing them exceptionally well. Our managers protect their franchises, they control costs, they search for new products and markets that build on their existing strengths and they don't get diverted. They work exceptionally hard at the details of their businesses, and it shows.

Here's an update:

o Agatha Christie, whose husband was an archaeologist, said that was the perfect profession for one's spouse: "The older you become, the more interested they are in you." It is students of business management, not archaeologists, who should be interested in Mrs. B (Rose Blumkin), the 94-year-old chairman of Nebraska Furniture Mart.

Fifty years ago Mrs. B started the business with $500, and today NFM is far and away the largest home furnishings store in the country. Mrs. B continues to work seven days a week at the job from the opening of each business day until the close. She buys, she sells, she manages - and she runs rings around the competition. It's clear to me that she's gathering speed and may well reach her full potential in another five or ten years. Therefore, I've persuaded the Board to scrap our mandatory retirement-at-100 policy. (And it's about time: With every passing year, this policy has seemed sillier to me.)

Net sales of NFM were $142.6 million in 1987, up 8% from 1986. There's nothing like this store in the country, and there's nothing like the family Mrs. B has produced to carry on: Her son Louie, and his three boys, Ron, Irv and Steve, possess the business instincts, integrity and drive of Mrs. B. They work as a team and, strong as each is individually, the whole is far greater than the sum of the parts.

The superb job done by the Blumkins benefits us as owners, but even more dramatically benefits NFM's customers. They saved about $30 million in 1987 by buying from NFM. In other words, the goods they bought would have cost that much more if purchased elsewhere.

You'll enjoy an anonymous letter I received last August: "Sorry to see Berkshire profits fall in the second quarter. One way you may gain back part of your lost. (sic) Check the pricing at The Furniture Mart. You will find that they are leaving 10% to 20% on the table. This additional profit on $140 million of sells (sic) is $28 million. Not small change in anyone's pocket! Check out other furniture, carpet, appliance and T.V. dealers. Your raising prices to a reasonable profit will help. Thank you. /signed/ A Competitor."

NFM will continue to grow and prosper by following Mrs. B's maxim: "Sell cheap and tell the truth."

o Among dominant papers of its size or larger, the Buffalo News continues to be the national leader in two important ways: (1) its weekday and Sunday penetration rate (the percentage of households in the paper's primary market area that purchase it); and (2) its "news-hole" percentage (the portion of the paper devoted to news).

It may not be coincidence that one newspaper leads in both categories: an exceptionally "newsrich" product makes for broad audience appeal, which in turn leads to high penetration. Of course, quantity must be matched by quality. This not only means good reporting and good writing; it means freshness and relevance. To be indispensable, a paper must promptly tell its readers many things they want to know but won't otherwise learn until much later, if ever.

At the News, we put out seven fresh editions every 24 hours, each one extensively changed in content. Here's a small example that may surprise you: We redo the obituary page in every edition of the News, or seven times a day. Any obituary added runs through the next six editions until the publishing cycle has been completed.

It's vital, of course, for a newspaper to cover national and international news well and in depth. But it is also vital for it to do what only a local newspaper can: promptly and extensively chronicle the personally-important, otherwise-unreported details of community life. Doing this job well requires a very broad range of news - and that means lots of space, intelligently used.

Our news hole was about 50% in 1987, just as it has been year after year. If we were to cut it to a more typical 40%, we would save approximately $4 million annually in newsprint costs. That interests us not at all - and it won't interest us even if, for one reason or another, our profit margins should significantly shrink.

Charlie and I do not believe in flexible operating budgets, as in "Non-direct expenses can be X if revenues are Y, but must be reduced if revenues are Y - 5%." Should we really cut our news hole at the Buffalo News, or the quality of product and service at See's, simply because profits are down during a given year or quarter? Or, conversely, should we add a staff economist, a corporate strategist, an institutional advertising campaign or something else that does Berkshire no good simply because the money currently is rolling in?

That makes no sense to us. We neither understand the adding of unneeded people or activities because profits are booming, nor the cutting of essential people or activities because profitability

is shrinking. That kind of yo-yo approach is neither business-like nor humane. Our goal is to do what makes sense for Berkshire's customers and employees at all times, and never to add the unneeded. ("But what about the corporate jet?" you rudely ask. Well, occasionally a man must rise above principle.)

Although the News' revenues have grown only moderately since 1984, superb management by Stan Lipsey, its publisher, has produced excellent profit growth. For several years, I have incorrectly predicted that profit margins at the News would fall. This year I will not let vou down: Margins will, without question, shrink in 1988 and profit may fall as well. Skyrocketing newsprint costs will be the major cause.

o Fechheimer Bros. Company is another of our family businesses - and, like the Blumkins, what a family. Three generations of Heldmans have for decades consistently, built the sales and profits of this manufacturer and distributor of uniforms. In the year that Berkshire acquired its controlling interest in Fechheimer - 1986 - profits were a record. The Heldmans didn't slow down after that. Last year earnings increased substantially and the outlook is good for 1988.

There's nothing magic about the Uniform business; the only magic is in the Heldmans. Bob, George, Gary, Roger and Fred know the business inside and out, and they have fun running it. We are fortunate to be in partnership with them.

o Chuck Huggins continues to set new records at See's, just as he has ever since we put him in charge on the day of our purchase some 16 years ago. In 1987, volume hit a new high at slightly Under 25 million pounds. For the second year in a row, moreover, same-store sales, measured in pounds, were virtually unchanged. In case you are wondering, that represents improvement: In each of the previous six years, same-store sales had fallen.

Although we had a particularly strong 1986 Christmas season, we racked up better store-for-store comparisons in the 1987 Christmas season than at any other time of the year. Thus, the seasonal factor at See's becomes even more extreme. In 1987, about 85% of our profit was earned during December.

Candy stores are fun to visit, but most have not been fun for their owners. From what we can learn, practically no one besides See's has made significant profits in recent years from the operation of candy shops. Clearly, Chuck's record at See's is not due to a rising industry tide. Rather, it is a one-of-a-kind performance.

His achievement requires an excellent product - which we have - but it also requires genuine affection for the customer. Chuck is 100% customer-oriented, and his attitude sets the tone for the rest of the See's organization.

Here's an example of Chuck in action: At See's we regularly add new pieces of candy to our mix and also cull a few to keep our product line at about 100 varieties. Last spring we selected 14 items for elimination. Two, it turned out, were badly missed by our customers, who wasted no time in letting us know what they thought of our judgment: "A pox on all in See's who participated in the abominable decision...;" "May your new truffles melt in transit, may they sour in people's mouths, may your costs go up and your profits go down...;" "We are investigating the possibility of obtaining a mandatory injunction requiring you to supply...;" You get the picture. In all, we received many hundreds of letters.

Chuck not only reintroduced the pieces, he turned this miscue into an opportunity. Each person who had written got a complete and honest explanation in return. Said Chuck's letter: "Fortunately, when I make poor decisions, good things often happen as a result...;" And with the letter went a special gift certificate.

See's increased prices only slightly in the last two years. In 1988 we have raised prices somewhat more, though still moderately. To date, sales have been weak and it may be difficult for See's to improve its earnings this year.

o World Book, Kirby, and the Scott Fetzer Manufacturing Group are all under the management of Ralph Schey. And what a lucky thing for us that they are. I told you last year that Scott Fetzer performance in 1986 had far exceeded the expectations that Charlie and I had at the time of our purchase. Results in 1987 were even better. Pre-tax earnings rose 10% while average capital employed declined significantly.

Ralph's mastery of the 19 businesses for which he is responsible is truly amazing, and he has also attracted some outstanding managers to run them. We would love to find a few additional units that could be put under Ralph's wing.

The businesses of Scott Fetzer are too numerous to describe in detail. Let's just update you on one of our favorites: At the end of 1987, World Book introduced its most dramatically-revised edition since 1962. The number of color photos was increased from 14,000 to 24,000; over 6,000 articles were revised; 840 new contributors were added. Charlie and I recommend this

product to you and your family, as we do World Book's products for younger children, Childcraft and Early World of Learning.

In 1987, World Book unit sales in the United States increased for the fifth consecutive year. International sales and profits also grew substantially. The outlook is good for Scott Fetzer operations in aggregate, and for World Book in particular.

Insurance Operations

Shown below is an updated version of our usual table presenting key figures for the insurance industry:

Year	Yearly Change in Premiums Written (%)	Statutory Combined Ratio after Policyholder Dividends	Yearly Change in Incurred Losses (%)	Inflation Rate Measured by GNP Deflator (%)
1981	3.8	106.0	6.5	9.6
1982	4.4	109.8	8.4	6.4
1983	4.6	112.0	6.8	3.9
1984	9.2	117.9	16.9	3.8
1985	22.1	116.5	16.1	3.3
1986 (Rev.)	22.2	108.0	13.5	2.6
1987 (Est.)	8.7	104.7	6.8	3.0

Source: Best's Insurance Management Reports

The combined ratio represents total insurance costs (losses incurred plus expenses) compared to revenue from premiums: A ratio below 100 indicates an underwriting profit, and one above 100 indicates a loss. When the investment income that an insurer earns from holding on to policyholders' funds ("the float") is taken into account, a combined ratio in the 107-111 range typically produces an overall break-even result, exclusive of earnings on the funds provided by shareholders.

The math of the insurance business, encapsulated by the table, is not very complicated. In years when the industry's annual gain in revenues (premiums) pokes along at 4% or 5%,

underwriting losses are sure to mount. That is not because auto accidents, fires, windstorms and the like are occurring more frequently, nor has it lately been the fault of general inflation. Today, social and judicial inflation are the major culprits; the cost of entering a courtroom has simply ballooned. Part of the jump in cost arises from skyrocketing verdicts, and part from the tendency of judges and juries to expand the coverage of insurance policies beyond that contemplated by the insurer when the policies were written. Seeing no let-up in either trend, we continue to believe that the industry's revenues must grow at about 10% annually for it to just hold its own in terms of profitability, even though general inflation may be running at a considerably lower rate.

The strong revenue gains of 1985-87 almost guaranteed the industry an excellent underwriting performance in 1987 and, indeed, it was a banner year. But the news soured as the quarters rolled by: Best's estimates that year-over-year volume increases were 12.9%, 11.1%, 5.7%, and 5.6%. In 1988, the revenue gain is certain to be far below our 10% "equilibrium" figure. Clearly, the party is over.

However, earnings will not immediately sink. A lag factor exists in this industry: Because most policies are written for a one-year term, higher or lower insurance prices do not have their full impact on earnings until many months after they go into effect. Thus, to resume our metaphor, when the party ends and the bar is closed, you are allowed to finish your drink. If results are not hurt by a major natural catastrophe, we predict a small climb for the industry's combined ratio in 1988, followed by several years of larger increases.

The insurance industry is cursed with a set of dismal economic characteristics that make for a poor long-term outlook: hundreds of competitors, ease of entry, and a product that cannot be differentiated in any meaningful way. In such a commodity-like business, only a very low-cost operator or someone operating in a protected, and usually small, niche can sustain high profitability levels.

When shortages exist, however, even commodity businesses flourish. The insurance industry enjoyed that kind of climate for a while but it is now gone. One of the ironies of capitalism is that most managers in commodity industries abhor shortage conditions - even though those are the only circumstances permitting them good returns. Whenever shortages appear, the typical manager simply can't wait to expand capacity and thereby plug the hole through which money is

showering upon him. This is precisely what insurance managers did in 1985-87, confirming again Disraeli's observation: "What we learn from history is that we do not learn from history."

At Berkshire, we work to escape the industry's commodity economics in two ways. First, we differentiate our product by our financial strength, which exceeds that of all others in the industry. This strength, however, is limited in its usefulness. It means nothing in the personal insurance field: The buyer of an auto or homeowners policy is going to get his claim paid even if his insurer fails (as many have). It often means nothing in the commercial insurance arena: When times are good, many major corporate purchasers of insurance and their brokers pay scant attention to the insurer's ability to perform under the more adverse conditions that may exist, say, five years later when a complicated claim is finally resolved. (Out of sight, out of mind - and, later on, maybe out-of-pocket.)

Periodically, however, buyers remember Ben Franklin's observation that it is hard for an empty sack to stand upright and recognize their need to buy promises only from insurers that have enduring financial strength. It is then that we have a major competitive advantage. When a buyer really focuses on whether a $10 million claim can be easily paid by his insurer five or ten years down the road, and when he takes into account the possibility that poor underwriting conditions may then coincide with depressed financial markets and defaults by reinsurer, he will find only a few companies he can trust. Among those, Berkshire will lead the pack.

Our second method of differentiating ourselves is the total indifference to volume that we maintain. In 1989, we will be perfectly willing to write five times as much business as we write in 1988 - or only one-fifth as much. We hope, of course, that conditions will allow us large volume. But we cannot control market prices. If they are unsatisfactory, we will simply do very little business. No other major insurer acts with equal restraint.

Three conditions that prevail in insurance, but not in most businesses, allow us our flexibility. First, market share is not an important determinant of profitability: In this business, in contrast to the newspaper or grocery businesses, the economic rule is not survival of the fattest. Second, in many sectors of insurance, including most of those in which we operate, distribution channels are not proprietary and can be easily entered: Small volume this year does not preclude huge volume next year. Third, idle capacity - which in this industry largely means people - does not result in intolerable costs. In a way that industries such as printing or steel cannot, we can operate at quarter-speed much of the time and still enjoy long-term prosperity.

We follow a price-based-on-exposure, not-on-competition policy because it makes sense for our shareholders. But we're happy to report that it is also pro-social. This policy means that we are always available, given prices that we believe are adequate, to write huge volumes of almost any type of property-casualty insurance. Many other insurers follow an in-and-out approach. When they are "out" - because of mounting losses, capital inadequacy, or whatever - we are available. Of course, when others are panting to do business we are also available - but at such times we often find ourselves priced above the market. In effect, we supply insurance buyers and brokers with a large reservoir of standby capacity.

One story from mid-1987 illustrates some consequences of our pricing policy: One of the largest family-owned insurance brokers in the country is headed by a fellow who has long been a shareholder of Berkshire. This man handles a number of large risks that are candidates for placement with our New York office. Naturally, he does the best he can for his clients. And, just as naturally, when the insurance market softened dramatically in 1987 he found prices at other insurers lower than we were willing to offer. His reaction was, first, to place all of his business elsewhere and, second, to buy more stock in Berkshire. Had we been really competitive, he said, we would have gotten his insurance business but he would not have bought our stock.

Berkshire's underwriting experience was excellent in 1987, in part because of the lag factor discussed earlier. Our combined ratio (on a statutory basis and excluding structured settlements and financial reinsurance) was 105. Although the ratio was somewhat less favorable than in 1986, when it was 103, our profitability improved materially in 1987 because we had the use of far more float. This trend will continue to run in our favor: Our ratio of float to premium volume will increase very significantly during the next few years. Thus, Berkshire's insurance profits are quite likely to improve during 1988 and 1989, even though we expect our combined ratio to rise.

Our insurance business has also made some important non-financial gains during the last few years. Mike Goldberg, its manager, has assembled a group of talented professionals to write larger risks and unusual coverages. His operation is now well equipped to handle the lines of business that will occasionally offer us major opportunities.

Our loss reserve development, detailed on pages 41-42, looks better this year than it has previously. But we write lots of "long-tail" business - that is, policies generating claims that

often take many years to resolve. Examples would be product liability, or directors and officers liability coverages. With a business mix like this, one year of reserve development tells you very little.

You should be very suspicious of any earnings figures reported by insurers (including our own, as we have unfortunately proved to you in the past). The record of the last decade shows that a great many of our best-known insurers have reported earnings to shareholders that later proved to be wildly erroneous. In most cases, these errors were totally innocent: The unpredictability of our legal system makes it impossible for even the most conscientious insurer to come close to judging the eventual cost of long-tail claims.

Nevertheless, auditors annually certify the numbers given them by management and in their opinions unqualifiedly state that these figures "present fairly" the financial position of their clients. The auditors use this reassuring language even though they know from long and painful experience that the numbers so certified are likely to differ dramatically from the true earnings of the period. Despite this history of error, investors understandably rely upon auditors' opinions. After all, a declaration saying that "the statements present fairly" hardly sounds equivocal to the non-accountant.

The wording in the auditor's standard opinion letter is scheduled to change next year. The new language represents improvement, but falls far short of describing the limitations of a casualty-insurer audit. If it is to depict the true state of affairs, we believe the standard opinion letter to shareholders of a property-casualty company should read something like: "We have relied upon representations of management in respect to the liabilities shown for losses and loss adjustment expenses, the estimate of which, in turn, very materially affects the earnings and financial condition herein reported. We can express no opinion about the accuracy of these figures. Subject to that important reservation, in our opinion, etc."

If lawsuits develop in respect to wildly inaccurate financial statements (which they do), auditors will definitely say something of that sort in court anyway. Why should they not be forthright about their role and its limitations from the outset?

We want to emphasize that we are not faulting auditors for their inability to accurately assess loss reserves (and therefore earnings). We fault them only for failing to publicly acknowledge that they can't do this job.

From all appearances, the innocent mistakes that are constantly made in reserving are accompanied by others that are deliberate. Various charlatans have enriched themselves at the expense of the investing public by exploiting, first, the inability of auditors to evaluate reserve figures and, second, the auditors' willingness to confidently certify those figures as if they had the expertise to do so. We will continue to see such chicanery in the future. Where "earnings" can be created by the stroke of a pen, the dishonest will gather. For them, long-tail insurance is heaven. The audit wording we suggest would at least serve to put investors on guard against these predators.

The taxes that insurance companies pay - which increased materially, though on a delayed basis, upon enactment of the Tax Reform Act of 1986 - took a further turn for the worse at the end of 1987. We detailed the 1986 changes in last year's report. We also commented on the irony of a statute that substantially increased 1987 reported earnings for insurers even as it materially reduced both their long-term earnings potential and their business value. At Berkshire, the temporarily-helpful "fresh start" adjustment inflated 1987 earnings by $8.2 million.

In our opinion, the 1986 Act was the most important economic event affecting the insurance industry over the past decade. The 1987 Bill further reduced the intercorporate dividends-received credit from 80% to 70%, effective January 1, 1988, except for cases in which the taxpayer owns at least 20% of an investee.

Investors who have owned stocks or bonds through corporate intermediaries other than qualified investment companies have always been disadvantaged in comparison to those owning the same securities directly. The penalty applying to indirect ownership was greatly increased by the 1986 Tax Bill and, to a lesser extent, by the 1987 Bill, particularly in instances where the intermediary is an insurance company. We have no way of offsetting this increased level of taxation. It simply means that a given set of pre-tax investment returns will now translate into much poorer after-tax results for our shareholders.

All in all, we expect to do well in the insurance business, though our record is sure to be uneven. The immediate outlook is for substantially lower volume but reasonable earnings improvement. The decline in premium volume will accelerate after our quota-share agreement with Fireman's Fund expires in 1989. At some point, likely to be at least a few years away, we

may see some major opportunities, for which we are now much better prepared than we were in 1985.

Marketable Securities - Permanent Holdings

Whenever Charlie and I buy common stocks for Berkshire's insurance companies (leaving aside arbitrage purchases, discussed later) we approach the transaction as if we were buying into a private business. We look at the economic prospects of the business, the people in charge of running it, and the price we must pay. We do not have in mind any time or price for sale. Indeed, we are willing to hold a stock indefinitely so long as we expect the business to increase in intrinsic value at a satisfactory rate. When investing, we view ourselves as business analysts - not as market analysts, not as macroeconomic analysts, and not even as security analysts.

Our approach makes an active trading market useful, since it periodically presents us with mouth-watering opportunities. But by no means is it essential: a prolonged suspension of trading in the securities we hold would not bother us any more than does the lack of daily quotations on World Book or Fechheimer. Eventually, our economic fate will be determined by the economic fate of the business we own, whether our ownership is partial or total.

Ben Graham, my friend and teacher, long ago described the mental attitude toward market fluctuations that I believe to be most conducive to investment success. He said that you should imagine market quotations as coming from a remarkably accommodating fellow named Mr. Market who is your partner in a private business. Without fail, Mr. Market appears daily and names a price at which he will either buy your interest or sell you his.

Even though the business that the two of you own may have economic characteristics that are stable, Mr. Market's quotations will be anything but. For, sad to say, the poor fellow has incurable emotional problems. At times he feels euphoric and can see only the favorable factors affecting the business. When in that mood, he names a very high buy-sell price because he fears that you will snap up his interest and rob him of imminent gains. At other times he is depressed and can see nothing but trouble ahead for both the business and the world. On these occasions he will name a very low price, since he is terrified that you will unload your interest on him.

Mr. Market has another endearing characteristic: He doesn't mind being ignored. If his quotation is uninteresting to you today, he will be back with a new one tomorrow. Transactions

are strictly at your option. Under these conditions, the more manic-depressive his behavior, the better for you.

But, like Cinderella at the ball, you must heed one warning or everything will turn into pumpkins and mice: Mr. Market is there to serve you, not to guide you. It is his pocketbook, not his wisdom, that you will find useful. If he shows up some day in a particularly foolish mood, you are free to either ignore him or to take advantage of him, but it will be disastrous if you fall under his influence. Indeed, if you aren't certain that you understand and can value your business far better than Mr. Market, you don't belong in the game. As they say in poker, "If you've been in the game 30 minutes and you don't know who the patsy is, *you're* the patsy."

Ben's Mr. Market allegory may seem out-of-date in today's investment world, in which most professionals and academicians talk of efficient markets, dynamic hedging and betas. Their interest in such matters is understandable, since techniques shrouded in mystery clearly have value to the purveyor of investment advice. After all, what witch doctor has ever achieved fame and fortune by simply advising "Take two aspirins"?

The value of market esoterica to the consumer of investment advice is a different story. In my opinion, investment success will not be produced by arcane formulae, computer programs or signals flashed by the price behavior of stocks and markets. Rather an investor will succeed by coupling good business judgment with an ability to insulate his thoughts and behavior from the super-contagious emotions that swirl about the marketplace. In my own efforts to stay insulated, I have found it highly useful to keep Ben's Mr. Market concept firmly in mind.

Following Ben's teachings, Charlie and I let our marketable equities tell us by their operating results - not by their daily, or even yearly, price quotations - whether our investments are successful. The market may ignore business success for a while, but eventually will confirm it. As Ben said: "In the short run, the market is a voting machine but in the long run it is a weighing machine." The speed at which a business's success is recognized, furthermore, is not that important as long as the company's intrinsic value is increasing at a satisfactory rate. In fact, delayed recognition can be an advantage: It may give us the chance to buy more of a good thing at a bargain price.

Sometimes, of course, the market may judge a business to be more valuable than the underlying facts would indicate it is. In such a case, we will sell our holdings. Sometimes, also,

we will sell a security that is fairly valued or even undervalued because we require funds for a still more undervalued investment or one we believe we understand better.

We need to emphasize, however, that we do not sell holdings just because they have appreciated or because we have held them for a long time. (Of Wall Street maxims the most foolish may be "You can't go broke taking a profit.") We are quite content to hold any security indefinitely, so long as the prospective return on equity capital of the underlying business is satisfactory, management is competent and honest, and the market does not overvalue the business.

However, our insurance companies own three marketable common stocks that we would not sell even though they became far overpriced in the market. In effect, we view these investments exactly like our successful controlled businesses - a permanent part of Berkshire rather than merchandise to be disposed of once Mr. Market offers us a sufficiently high price. To that, I will add one qualifier: These stocks are held by our insurance companies and we would, if absolutely necessary, sell portions of our holdings to pay extraordinary insurance losses. We intend, however, to manage our affairs so that sales are never required.

A determination to have and to hold, which Charlie and I share, obviously involves a mixture of personal and financial considerations. To some, our stand may seem highly eccentric.(Charlie and I have long followed David Oglivy's advice: "Develop your eccentricities while you are young. That way, when you get old, people won't think you're going ga-ga.") Certainly, in the transaction-fixated Wall Street of recent years, our posture must seem odd: To many in that arena, both companies and stocks are seen only as raw material for trades.

Our attitude, however, fits our personalities and the way we want to live our lives. Churchill once said, "You shape your houses and then they shape you." We know the manner in which we wish to be shaped. For that reason, we would rather achieve a return of X while associating with people whom we strongly like and admire than realize 110% of X by exchanging these relationships for uninteresting or unpleasant ones. And we will never find people we like and admire more than some of the main participants at the three companies - our permanent holdings - shown below:

Shares	Company	Cost (000's omitted)	Market (000's omitted)
3,000,000	Capital Cities/ABC, Inc.	$517,500	$1,035,000
6,850,000	GEICO Corporation.	45,713	756,925
1,727,765	The Washington Post Company	9,731	323,092

We really don't see many fundamental differences between the purchase of a controlled business and the purchase of marketable holdings such as these. In each case we try to buy into businesses with favorable long-term economics. Our goal is to find an outstanding business at a sensible price, not a mediocre business at a bargain price. Charlie and I have found that making silk purses out of silk is the best that we can do; with sow's ears, we fail.

(It must be noted that your Chairman, always a quick study, required only 20 years to recognize how important it was to buy good businesses. In the interim, I searched for "bargains" - and had the misfortune to find some. My punishment was an education in the economics of short-line farm implement manufacturers, third-place department stores, and New England textile manufacturers.)

Of course, Charlie and I may misread the fundamental economics of a business. When that happens, we will encounter problems whether that business is a wholly-owned subsidiary or a marketable security, although it is usually far easier to exit from the latter. (Indeed, businesses can be misread: Witness the European reporter who, after being sent to this country to profile Andrew Carnegie, cabled his editor, "My God, you'll never believe the sort of money there is in running libraries.")

In making both control purchases and stock purchases, we try to buy not only good businesses, but ones run by high-grade, talented and likeable managers. If we make a mistake about the managers we link up with, the controlled company offers a certain advantage because we have the power to effect change. In practice, however, this advantage is somewhat illusory: Management changes, like marital changes, are painful, time-consuming and chancy. In any event, at our three marketable-but permanent holdings, this point is moot: With Tom Murphy and Dan Burke at Cap Cities, Bill Snyder and Lou Simpson at GEICO, and Kay Graham and Dick Simmons at The Washington Post, we simply couldn't be in better hands.

I would say that the controlled company offers two main advantages. First, when we control a company we get to allocate capital, whereas we are likely to have little or nothing to say about this process with marketable holdings. This point can be important because the heads of many companies are not skilled in capital allocation. Their inadequacy is not surprising. Most bosses rise to the top because they have excelled in an area such as marketing, production, engineering, administration or, sometimes, institutional politics.

Once they become CEOs, they face new responsibilities. They now must make capital allocation decisions, a critical job that they may have never tackled and that is not easily mastered. To stretch the point, it's as if the final step for a highly-talented musician was not to perform at Carnegie Hall but, instead, to be named Chairman of the Federal Reserve.

The lack of skill that many CEOs have at capital allocation is no small matter: After ten years on the job, a CEO whose company annually retains earnings equal to 10% of net worth will have been responsible for the deployment of more than 60% of all the capital at work in the business.

CEOs who recognize their lack of capital-allocation skills (which not all do) will often try to compensate by turning to their staffs, management consultants, or investment bankers. Charlie and I have frequently observed the consequences of such "help." On balance, we feel it is more likely to accentuate the capital-allocation problem than to solve it.

In the end, plenty of unintelligent capital allocation takes place in corporate America. (That's why you hear so much about "restructuring.") Berkshire, however, has been fortunate. At the companies that are our major non-controlled holdings, capital has generally been well-deployed and, in some cases, brilliantly so.

The second advantage of a controlled company over a marketable security has to do with taxes. Berkshire, as a corporate holder, absorbs some significant tax costs through the ownership of partial positions that we do not when our ownership is 80%, or greater. Such tax disadvantages have long been with us, but changes in the tax code caused them to increase significantly during the past year. As a consequence, a given business result can now deliver Berkshire financial results that are as much as 50% better if they come from an 80%-or-greater holding rather than from a lesser holding.

The disadvantages of owning marketable securities are sometimes offset by a huge advantage: Occasionally the stock market offers us the chance to buy non-controlling pieces of

extraordinary businesses at truly ridiculous prices - dramatically below those commanded in negotiated transactions that transfer control. For example, we purchased our Washington Post stock in 1973 at $5.63 per share, and per-share operating earnings in 1987 after taxes were $10.30. Similarly, Our GEICO stock was purchased in 1976, 1979 and 1980 at an average of $6.67 per share, and after-tax operating earnings per share last year were $9.01. In cases such as these, Mr. Market has proven to be a mighty good friend.

An interesting accounting irony overlays a comparison of the reported financial results of our controlled companies with those of the permanent minority holdings listed above. As you can see, those three stocks have a market value of over $2 billion. Yet they produced only $11 million in reported after-tax earnings for Berkshire in 1987.

Accounting rules dictate that we take into income only the dividends these companies pay us - which are little more than nominal - rather than our share of their earnings, which in 1987 amounted to well over $100 million. On the other hand, accounting rules provide that the carrying value of these three holdings - owned, as they are, by insurance companies - must be recorded on our balance sheet at current market prices. The result: GAAP accounting lets us reflect in our net worth the up-to-date underlying values of the businesses we partially own, but does not let us reflect their underlying earnings in our income account.

In the case of our controlled companies, just the opposite is true. Here, we show full earnings in our income account but never change asset values on our balance sheet, no matter how much the value of a business might have increased since we purchased it.

Our mental approach to this accounting schizophrenia is to ignore GAAP figures and to focus solely on the future earning power of both our controlled and non-controlled businesses. Using this approach, we establish our own ideas of business value, keeping these independent from both the accounting values shown on our books for controlled companies and the values placed by a sometimes foolish market on our partially-owned companies. It is this business value that we hope to increase at a reasonable (or, preferably, unreasonable) rate in the years ahead.

Marketable Securities - Other

In addition to our three permanent common stock holdings, we hold large quantities of marketable securities in our insurance companies. In selecting these, we can choose among five major categories: (1) long-term common stock investments, (2) medium-term fixed-income

securities, (3) long-term fixed income securities, (4) short-term cash equivalents, and (5) short-term arbitrage commitments.

We have no particular bias when it comes to choosing from these categories. We just continuously search among them for the highest after-tax returns as measured by "mathematical expectation," limiting ourselves always to investment alternatives we think we understand. Our criteria have nothing to do with maximizing immediately reportable earnings; our goal, rather, is to maximize eventual net worth.

o Let's look first at common stocks. During 1987 the stock market was an area of much excitement but little net movement: The Dow advanced 2.3% for the year. You are aware, of course, of the roller coaster ride that produced this minor change. Mr. Market was on a manic rampage until October and then experienced a sudden, massive seizure.

We have "professional" investors, those who manage many billions, to thank for most of this turmoil. Instead of focusing on what businesses will do in the years ahead, many prestigious money managers now focus on what they expect other money managers to do in the days ahead. For them, stocks are merely tokens in a game, like the thimble and flatiron in Monopoly.

An extreme example of what their attitude leads to is "portfolio insurance," a money-management strategy that many leading investment advisors embraced in 1986-1987. This strategy - which is simply an exotically-labeled version of the small speculator's stop-loss order dictates that ever increasing portions of a stock portfolio, or their index-future equivalents, be sold as prices decline. The strategy says nothing else matters: A downtick of a given magnitude automatically produces a huge sell order. According to the Brady Report, $60 billion to $90 billion of equities were poised on this hair trigger in mid-October of 1987.

If you've thought that investment advisors were hired to invest, you may be bewildered by this technique. After buying a farm, would a rational owner next order his real estate agent to start selling off pieces of it whenever a neighboring property was sold at a lower price? Or would you sell your house to whatever bidder was available at 9:31 on some morning merely because at 9:30 a similar house sold for less than it would have brought on the previous day?

Moves like that, however, are what portfolio insurance tells a pension fund or university to make when it owns a portion of enterprises such as Ford or General Electric. The less these companies are being valued at, says this approach, the more vigorously they should be sold. As

a "logical" corollary, the approach commands the institutions to repurchase these companies - *I'm not making this up* - once their prices have rebounded significantly. Considering that huge sums are controlled by managers following such Alice-in-Wonderland practices, is it any surprise that markets sometimes behave in aberrational fashion?

Many commentators, however, have drawn an incorrect conclusion upon observing recent events: They are fond of saying that the small investor has no chance in a market now dominated by the erratic behavior of the big boys. This conclusion is dead wrong: Such markets are ideal for any investor - small or large - so long as he sticks to his investment knitting. Volatility caused by money managers who speculate irrationally with huge sums will offer the true investor more chances to make intelligent investment moves. He can be hurt by such volatility only if he is forced, by either financial or psychological pressures, to sell at untoward times.

At Berkshire, we have found little to do in stocks during the past few years. During the break in October, a few stocks fell to prices that interested us, but we were unable to make meaningful purchases before they rebounded. At yearend 1987 we had no major common stock investments (that is, over $50 million) other than those we consider permanent or arbitrage holdings. However, Mr. Market will offer us opportunities - you can be sure of that - and, when he does, we will be willing and able to participate.

o In the meantime, our major parking place for money is medium-term tax-exempt bonds, whose limited virtues I explained in last year's annual report. Though we both bought and sold some of these bonds in 1987, our position changed little overall, holding around $900 million. A large portion of our bonds are "grandfathered" under the Tax Reform Act of 1986, which means they are fully tax-exempt. Bonds currently purchased by insurance companies are not.

As an alternative to short-term cash equivalents, our medium-term tax-exempts have - so far served us well. They have produced substantial extra income for us and are currently worth a bit above our cost. Regardless of their market price, we are ready to dispose of our bonds whenever something better comes along.

o We continue to have an aversion to long-term bonds (and may be making a serious mistake by not disliking medium-term bonds as well). Bonds are no better than the currency in which they are denominated, and nothing we have seen in the past year - or past decade - makes us enthusiastic about the long-term future of U.S. currency.

Our enormous trade deficit is causing various forms of "claim checks" - U.S. government and corporate bonds, bank deposits, etc. - to pile up in the hands of foreigners at a distressing rate. By default, our government has adopted an approach to its finances patterned on that of Blanche DuBois, of *A Streetcar Named Desire*, who said, "I have always depended on the kindness of strangers." In this case, of course, the "strangers" are relying on the integrity of our claim checks although the plunging dollar has already made that proposition expensive for them.

The faith that foreigners are placing in us may be misfounded. When the claim checks outstanding grow sufficiently numerous and when the issuing party can unilaterally determine their purchasing power, the pressure on the issuer to dilute their value by inflating the currency becomes almost irresistible. For the debtor government, the weapon of inflation is the economic equivalent of the "H" bomb, and that is why very few countries have been allowed to swamp the world with debt denominated in their own currency. Our past, relatively good record for fiscal integrity has let us break this rule, but the generosity accorded us is likely to intensify, rather than relieve, the eventual pressure on us to inflate. If we do succumb to that pressure, it won't be just the foreign holders of our claim checks who will suffer. It will be all of us as well.

Of course, the U.S. may take steps to stem our trade deficit well before our position as a net debtor gets out of hand. (In that respect, the falling dollar will help, though unfortunately it will hurt in other ways.) Nevertheless, our government's behavior in this test of its mettle is apt to be consistent with its Scarlett O'Hara approach generally: "I'll think about it tomorrow." And, almost inevitably, procrastination in facing up to fiscal problems will have inflationary consequences.

Both the timing and the sweep of those consequences are unpredictable. But our inability to quantify or time the risk does not mean we should ignore it. While recognizing the possibility that we may be wrong and that present interest rates may adequately compensate for the inflationary risk, we retain a general fear of long-term bonds.

We are, however, willing to invest a moderate portion of our funds in this category if we think we have a significant edge in a specific security. That willingness explains our holdings of the Washington Public Power Supply Systems #1, #2 and #3 issues, discussed in our 1984 report. We added to our WPPSS position during 1987. At yearend, we had holdings with an amortized cost of $240 million and a market value of $316 million, paying us tax-exempt income of $34 million annually.

o We continued to do well in arbitrage last year, though - or perhaps because - we operated on a very limited scale. We enter into only a few arbitrage commitments each year and restrict ourselves to large transactions that have been publicly announced. We do not participate in situations in which green-mailers are attempting to put a target company "in play."

We have practiced arbitrage on an opportunistic basis for decades and, to date, our results have been quite good. Though we've never made an exact calculation, I believe that overall we have averaged annual pre-tax returns of at least 25% from arbitrage. I'm quite sure we did better than that in 1987. But it should be emphasized that a really bad experience or two - such as many arbitrage operations suffered in late 1987 - could change the figures dramatically.

Our only $50 million-plus arbitrage position at yearend 1987 was 1,096,200 shares of Allegis, with a cost of $76 million and a market value of $78 million.

o We had two other large holdings at yearend that do not fit precisely into any of our five categories. One was various Texaco, Inc. bonds with short maturities, all purchased after Texaco went into bankruptcy. Were it not for the extraordinarily strong capital position of our insurance companies, it would be inappropriate for us to buy defaulted bonds. At prices prevailing after Texaco's bankruptcy filing, however, we regarded these issues as by far the most attractive bond investment available to us.

On a worst-case basis with respect to the Pennzoil litigation, we felt the bonds were likely to be worth about what we paid for them. Given a sensible settlement, which seemed likely, we expected the bonds to be worth considerably more. At yearend our Texaco bonds were carried on our books at $104 million and had a market value of $119 million.

By far our largest - and most publicized - investment in 1987 was a $700 million purchase of Salomon Inc 9% preferred stock. This preferred is convertible after three years into Salomon common stock at $38 per share and, if not converted, will be redeemed ratably over five years beginning October 31, 1995. From most standpoints, this commitment fits into the medium-term fixed-income securities category. In addition, we have an interesting conversion possibility.

We, of course, have no special insights regarding the direction or future profitability of investment banking. By their nature, the economics of this industry are far less predictable than those of most other industries in which we have major Commitments. This unpredictability is one of the reasons why our participation is in the form of a convertible preferred.

What we do have a strong feeling about is the ability and integrity of John Gutfreund, CEO of Salomon Inc. Charlie and I like, admire and trust John. We first got to know him in 1976 when he played a key role in GEICO's escape from near-bankruptcy. Several times since, we have seen John steer clients away from transactions that would have been unwise, but that the client clearly wanted to make - even though his advice provided no fee to Salomon and acquiescence would have delivered a large fee. Such service-above-self behavior is far from automatic in Wall Street.

For the reasons Charlie outlines on page 50, at yearend we valued our Salomon investment at 98% of par, $14 million less than our cost. However, we believe there is a reasonable likelihood that a leading, high-quality capital-raising and market-making operation can average good returns on equity. If so, our conversion right will eventually prove to be valuable.

Two further comments about our investments in marketable securities are appropriate. First, we give you our usual warning: Our holdings have changed since yearend and will continue to do so without notice.

The second comment is related: During 1987, as in some earlier years, there was speculation in the press from time to time about our purchase or sale of various securities. These stories were sometimes true, sometimes partially true, and other times completely untrue. Interestingly, there has been no correlation between the size and prestige of the publication and the accuracy of the report. One dead-wrong rumor was given considerable prominence by a major national magazine, and another leading publication misled its readers by writing about an arbitrage position as if it were a long-term investment commitment. (In not naming names, I am observing the old warning that it's not wise to pick fights with people who buy ink by the barrel.)

You should understand that we simply don't comment in any way on rumors, whether they are true or false. If we were to deny the incorrect reports and refuse comment on the correct ones, we would in effect be commenting on all.

In a world in which big investment ideas are both limited and valuable, we have no interest in telling potential competitors what we are doing except to the extent required by law. We certainly don't expect others to tell us of their investment ideas. Nor would we expect a media company to disclose news of acquisitions it was privately pursuing or a journalist to tell his competitors about stories on which he is working or sources he is using.

I find it uncomfortable when friends or acquaintances mention that they are buying X because it has been reported - incorrectly - that Berkshire is a buyer. However, I do not set them straight. If they want to participate in whatever Berkshire actually is buying, they can always purchase Berkshire stock. But perhaps that is too simple. Usually, I suspect, they find it more exciting to buy what is being talked about. Whether that strategy is more profitable is another question.

Financing

Shortly after yearend, Berkshire sold two issues of debentures, totaling $250 million. Both issues mature in 2018 and will be retired at an even pace through sinking fund operations that begin in 1999. Our overall interest cost, after allowing for expenses of issuance, is slightly over 10%. Salomon was our investment banker, and its service was excellent.

Despite our pessimistic views about inflation, our taste for debt is quite limited. To be sure, it is likely that Berkshire could improve its return on equity by moving to a much higher, though still conventional, debt-to-business-value ratio. It's even more likely that we could handle such a ratio, without problems, under economic conditions far worse than any that have prevailed since the early 1930s.

But we do not wish it to be only likely that we can meet our obligations; we wish that to be certain. Thus we adhere to policies - both in regard to debt and all other matters - that will allow us to achieve acceptable long-term results under extraordinarily adverse conditions, rather than optimal results under a normal range of conditions.

Good business or investment decisions will eventually produce quite satisfactory economic results, with no aid from leverage. Therefore, it seems to us to be both foolish and improper to risk what is important (including, necessarily, the welfare of innocent bystanders such as policyholders and employees) for some extra returns that are relatively unimportant. This view is not the product of either our advancing age or prosperity: Our opinions about debt have remained constant.

However, we are not phobic about borrowing. (We're far from believing that there is no fate worse than debt.) We are willing to borrow an amount that we believe - on a worst-case basis - will pose no threat to Berkshire's well-being. Analyzing what that amount might be, we can look to some important strengths that would serve us well if major problems should engulf our economy: Berkshire's earnings come from many diverse and well-entrenched businesses; these businesses seldom require much capital investment; what debt we have is structured well; and we

maintain major holdings of liquid assets. Clearly, we could be comfortable with a higher debt-to-business-value ratio than we now have.

One further aspect of our debt policy deserves comment: Unlike many in the business world, we prefer to finance in anticipation of need rather than in reaction to it. A business obtains the best financial results possible by managing both sides of its balance sheet well. This means obtaining the highest-possible return on assets and the lowest-possible cost on liabilities. It would be convenient if opportunities for intelligent action on both fronts coincided. However, reason tells us that just the opposite is likely to be the case: Tight money conditions, which translate into high costs for liabilities, will create the best opportunities for acquisitions, and cheap money will cause assets to be bid to the sky. Our conclusion: Action on the liability side should sometimes be taken independent of any action on the asset side.

Alas, what is "tight" and "cheap" money is far from clear at any particular time. We have no ability to forecast interest rates and - maintaining our usual open-minded spirit - believe that no one else can. Therefore, we simply borrow when conditions seem non-oppressive and hope that we will later find intelligent expansion or acquisition opportunities, which - as we have said - are most likely to pop up when conditions in the debt market are clearly oppressive. Our basic principle is that if you want to shoot rare, fast-moving elephants, you should always carry a loaded gun.

Our fund-first, buy-or-expand-later policy almost always penalizes near-term earnings. For example, we are now earning about 6 1/2% on the $250 million we recently raised at 10%, a disparity that is currently costing us about $160,000 per week. This negative spread is unimportant to us and will not cause us to stretch for either acquisitions or higher-yielding short-term instruments. If we find the right sort of business elephant within the next five years or so, the wait will have been worthwhile.

Miscellaneous

We hope to buy more businesses that are similar to the ones we have, and we can use some help. If you have a business that fits the following criteria, call me or, preferably, write.

Here's what we're looking for:

(1) large purchases (at least $10 million of after-tax earnings),

(2) demonstrated consistent earning power (future projections are of little interest to us, nor are "turnaround" situations),

(3) businesses earning good returns on equity while employing little or no debt,

(4) management in place (we can't supply it),

(5) simple businesses (if there's lots of technology, we won't understand it),

(6) an offering price (we don't want to waste our time or that of the seller by talking, even preliminarily, about a transaction when price is unknown).

We will not engage in unfriendly takeovers. We can promise complete confidentiality and a very fast answer - customarily within five minutes - as to whether we're interested. We prefer to buy for cash, but will consider issuing stock when we receive as much in intrinsic business value as we give. We invite potential sellers to check us out by contacting people with whom we have done business in the past. For the right business - and the right people - we can provide a good home.

On the other hand, we frequently get approached about acquisitions that don't come close to meeting our tests: new ventures, turnarounds, auction-like sales, and the ever-popular (among brokers) "I'm-sure-something-will-work-out-if-you-people-get-to-know-each-other." None of these attracts us in the least.

Besides being interested in the purchases of entire businesses as described above, we are also interested in the negotiated purchase of large, but not controlling, blocks of stock comparable to those we hold in Cap Cities and Salomon. We have a special interest in purchasing convertible preferreds as a long-term investment, as we did at Salomon.

* * *

And now a bit of *deja vu*. Most of Berkshire's major stockholders received their shares at yearend 1969 in a liquidating distribution from Buffett Partnership, Ltd. Some of these former partners will remember that in 1962 I encountered severe managerial problems at Dempster Mill Manufacturing Co., a pump and farm implement manufacturing company that BPL controlled.

At that time, like now, I went to Charlie with problems that were too tough for me to solve. Charlie suggested the solution might lie in a California friend of his, Harry Bottle, whose special knack was never forgetting the fundamental. I met Harry in Los Angeles on April 17, 1962, and

on April 23 he was in Beatrice, Nebraska, running Dempster. Our problems disappeared almost immediately. In my 1962 annual letter to partners, I named Harry "Man of the Year."

Fade to 24 years later: The scene is K & W Products, a small Berkshire subsidiary that produces automotive compounds. For years K & W did well, but in 1985-86 it stumbled badly, as it pursued the unattainable to the neglect of the achievable. Charlie, who oversees K & W, knew there was no need to consult me. Instead, he called Harry, now 68 years old, made him CEO, and sat back to await the inevitable. He didn't wait long. In 1987 K & W's profits set a record, up more than 300% from 1986. And, as profits went up, capital employed went down: K & W's investment in accounts receivable and inventories has decreased 20%.

If we run into another managerial problem ten or twenty years down the road, you know whose phone will ring.

* * *

About 97.2% of all eligible shares participated in Berkshire's 1987 shareholder-designated contributions program. Contributions made through the program were $4.9 million, and 2,050 charities were recipients.

A recent survey reported that about 50% of major American companies match charitable contributions made by directors (sometimes by a factor of three to one). In effect, these representatives of the owners direct funds to their favorite charities, and never consult the owners as to their charitable preferences. (I wonder how they would feel if the process were reversed and shareholders could invade the directors' pockets for charities favored by the shareholders.) When A takes money from B to give to C and A is a legislator, the process is called taxation. But when A is an officer or director of a corporation, it is called philanthropy. We continue to believe that contributions, aside from those with quite clear direct benefits to the company, should reflect the charitable preferences of owners rather than those of officers and directors.

We urge new shareholders to read the description of our shareholder-designated contributions program that appears on pages 54 and 55. If you wish to participate in future programs, we strongly urge that you immediately make sure your shares are registered in the name of the actual owner, not in "street" name or nominee name. Shares not so registered on September 30, l988 will be ineligible for the 1988 program.

* * *

Last year we again had about 450 shareholders at our annual meeting. The 60 or so questions they asked were, as always, excellent. At many companies, the annual meeting is a waste of time because exhibitionists turn it into a sideshow. Ours, however, is different. It is informative for shareholders and fun for us. (At Berkshire's meetings, the exhibitionists are on the dais.)

This year our meeting will be on May 23, 1988 in Omaha, and we hope that you come. The meeting provides the forum for you to ask any owner-related questions you may have, and we will keep answering until all (except those dealing with portfolio activities or other proprietary information) have been dealt with.

Last year we rented two buses - for $100 - to take shareholders interested in the trip to the Furniture Mart. Your actions demonstrated your good judgment: You snapped up about $40,000 of bargains. Mrs. B regards this expense/sales ratio as on the high side and attributes it to my chronic inattention to costs and generally sloppy managerial practices. But, gracious as always, she has offered me another chance and we will again have buses available following the meeting. Mrs. B says you must beat last year's sales figures, and I have told her she won't be disappointed.

Warren E. Buffett
Chairman of the Board

1988 Letter

BERKSHIRE HATHAWAY INC.

To the Shareholders of Berkshire Hathaway Inc.:

Our gain in net worth during 1988 was $569 million, or 20.0%. Over the last 24 years (that is, since present management took over), our per-share book value has grown from $19.46 to $2,974.52, or at a rate of 23.0% compounded annually.

We've emphasized in past reports that what counts, however, is intrinsic business value - the figure, necessarily an estimate, indicating what all of our constituent businesses are worth. By our calculations, Berkshire's intrinsic business value significantly exceeds its book value. Over the 24 years, business value has grown somewhat faster than book value; in 1988, however, book value grew the faster, by a bit.

Berkshire's past rates of gain in both book value and business value were achieved under circumstances far different from those that now exist. Anyone ignoring these differences makes the same mistake that a baseball manager would were he to judge the future prospects of a 42-year-old center fielder on the basis of his lifetime batting average.

Important negatives affecting our prospects today are: (1) a less attractive stock market than generally existed over the past 24 years; (2) higher corporate tax rates on most forms of investment income; (3) a far more richly-priced market for the acquisition of businesses; and (4) industry conditions for Capital Cities/ABC, Inc., GEICO Corporation, and The Washington Post Company - Berkshire's three permanent investments, constituting about one-half of our net worth - that range from slightly to materially less favorable than those existing five to ten years ago. All of these companies have superb management and strong properties. But, at current prices, their upside potential looks considerably less exciting to us today than it did some years ago.

The major problem we face, however, is a growing capital base. You've heard that from us before, but this problem, like age, grows in significance each year. (And also, just as with age, it's better to have this problem continue to grow rather than to have it "solved.")

Four years ago I told you that we needed profits of $3.9 billion to achieve a 15% annual return over the decade then ahead. Today, for the next decade, a 15% return demands profits of $10.3 billion. That seems like a very big number to me and to Charlie Munger, Berkshire's Vice Chairman and my partner. (Should that number indeed prove too big, Charlie will find himself, in future reports, retrospectively identified as the senior partner.)

As a partial offset to the drag that our growing capital base exerts upon returns, we have a very important advantage now that we lacked 24 years ago. Then, all our capital was tied up in a textile business with inescapably poor economic characteristics. Today part of our capital is invested in some really exceptional businesses.

Last year we dubbed these operations the Sainted Seven: Buffalo News, Fechheimer, Kirby, Nebraska Furniture Mart, Scott Fetzer Manufacturing Group, See's, and World Book. In 1988 the Saints came marching in. You can see just how extraordinary their returns on capital were by examining the historical-cost financial statements on page 45, which combine the figures of the Sainted Seven with those of several smaller units. With no benefit from financial leverage, this group earned about 67% on average equity capital.

In most cases the remarkable performance of these units arises partially from an exceptional business franchise; in all cases an exceptional management is a vital factor. The contribution Charlie and I make is to leave these managers alone.

In my judgment, these businesses, in aggregate, will continue to produce superb returns. We'll need these: Without this help Berkshire would not have a chance of achieving our 15% goal. You can be sure that our operating managers will deliver; the question mark in our future is whether Charlie and I can effectively employ the funds that they generate.

In that respect, we took a step in the right direction early in 1989 when we purchased an 80% interest in Borsheim's, a jewelry business in Omaha. This purchase, described later in this letter, delivers exactly what we look for: an outstanding business run by people we like, admire, and trust. It's a great way to start the year.

Accounting Changes

We have made a significant accounting change that was mandated for 1988, and likely will have another to make in 1990. When we move figures around from year to year, without any change in economic reality, one of our always-thrilling discussions of accounting is necessary.

First, I'll offer my customary disclaimer: Despite the shortcomings of generally accepted accounting principles (GAAP), I would hate to have the job of devising a better set of rules. The limitations of the existing set, however, need not be inhibiting: CEOs are free to treat GAAP statements as a beginning rather than an end to their obligation to inform owners and creditors - and indeed they should. After all, any manager of a subsidiary company would find himself in hot water if he reported barebones GAAP numbers that omitted key information needed by his boss, the parent corporation's CEO. Why, then, should the CEO himself withhold information vitally useful to *his* bosses - the shareholder-owners of the corporation?

What needs to be reported is data - whether GAAP, non-GAAP, or extra-GAAP - that helps financially-literate readers answer three key questions: (1) Approximately how much is this company worth? (2) What is the likelihood that it can meet its future obligations? and (3) How good a job are its managers doing, given the hand they have been dealt?

In most cases, answers to one or more of these questions are somewhere between difficult and impossible to glean from the minimum GAAP presentation. The business world is simply too complex for a single set of rules to effectively describe economic reality for all enterprises, particularly those operating in a wide variety of businesses, such as Berkshire.

Further complicating the problem is the fact that many managements view GAAP not as a standard to be met, but as an obstacle to overcome. Too often their accountants willingly assist them. ("How much," says the client, "is two plus two?" Replies the cooperative accountant, "What number did you have in mind?") Even honest and well-intentioned managements sometimes stretch GAAP a bit in order to present figures they think will more appropriately describe their performance. Both the smoothing of earnings and the "big bath" quarter are "white lie" techniques employed by otherwise upright managements.

Then there are managers who actively use GAAP to deceive and defraud. They know that many investors and creditors accept GAAP results as gospel. So these charlatans interpret the rules "imaginatively" and record business transactions in ways that technically comply with GAAP but actually display an economic illusion to the world.

As long as investors - including supposedly sophisticated institutions - place fancy valuations on reported "earnings" that march steadily upward, you can be sure that some managers and promoters will exploit GAAP to produce such numbers, no matter what the truth may be. Over the years, Charlie and I have observed many accounting-based frauds of staggering size. Few of

the perpetrators have been punished; many have not even been censured. It has been far safer to steal large sums with a pen than small sums with a gun.

Under one major change mandated by GAAP for 1988, we have been required to fully consolidate all our subsidiaries in our balance sheet and earnings statement. In the past, Mutual Savings and Loan, and Scott Fetzer Financial (a credit company that primarily finances installment sales of World Book and Kirby products) were consolidated on a "one-line" basis. That meant we (1) showed our equity in their combined net worths as a single-entry asset on Berkshire's consolidated balance sheet and (2) included our equity in their combined annual earnings as a single-line income entry in our consolidated statement of earnings. Now the rules require that we consolidate each asset and liability of these companies in our balance sheet and each item of their income and expense in our earnings statement.

This change underscores the need for companies also to report segmented data: The greater the number of economically diverse business operations lumped together in conventional financial statements, the less useful those presentations are and the less able investors are to answer the three questions posed earlier. Indeed, the only reason we ever prepare consolidated figures at Berkshire is to meet outside requirements. On the other hand, Charlie and I constantly study our segment data.

Now that we are required to bundle more numbers in our GAAP statements, we have decided to publish additional supplementary information that we think will help you measure both business value and managerial performance. (Berkshire's ability to discharge its obligations to creditors - the third question we listed - should be obvious, whatever statements you examine.) In these supplementary presentations, we will not necessarily follow GAAP procedures, or even corporate structure. Rather, we will attempt to lump major business activities in ways that aid analysis but do not swamp you with detail. Our goal is to give you important information in a form that we would wish to get it if our roles were reversed.

On pages 41-47 we show separate combined balance sheets and earnings statements for: (1) our subsidiaries engaged in finance-type operations, which are Mutual Savings and Scott Fetzer Financial; (2) our insurance operations, with their major investment positions itemized; (3) our manufacturing, publishing and retailing businesses, leaving aside certain non-operating assets and purchase-price accounting adjustments; and (4) an all-other category that includes the non-

operating assets (primarily marketable securities) held by the companies in (3) as well as various assets and debts of the Wesco and Berkshire parent companies.

If you combine the earnings and the net worths of these four segments, you will derive totals matching those shown on our GAAP statements. However, we want to emphasize that our new presentation does not fall within the purview of our auditors, who in no way bless it. (In fact, they may be horrified; I don't want to ask.)

I referred earlier to a major change in GAAP that is expected in 1990. This change relates to the calculation of deferred taxes, and is both complicated and controversial - so much so that its imposition, originally scheduled for 1989, was postponed for a year.

When implemented, the new rule will affect us in various ways. Most important, we will be required to change the way we calculate our liability for deferred taxes on the unrealized appreciation of stocks held by our insurance companies.

Right now, our liability is layered. For the unrealized appreciation that dates back to 1986 and earlier years, $1.2 billion, we have booked a 28% tax liability. For the unrealized appreciation built up since, $600 million, the tax liability has been booked at 34%. The difference reflects the increase in tax rates that went into effect in 1987.

It now appears, however, that the new accounting rule will require us to establish the entire liability at 34% in 1990, taking the charge against our earnings. Assuming no change in tax rates by 1990, this step will reduce our earnings in that year (and thereby our reported net worth) by $71 million. The proposed rule will also affect other items on our balance sheet, but these changes will have only a minor impact on earnings and net worth.

We have no strong views about the desirability of this change in calculation of deferred taxes. We should point out, however, that neither a 28% nor a 34% tax liability precisely depicts economic reality at Berkshire since we have no plans to sell the stocks in which we have the great bulk of our gains.

To those of you who are uninterested in accounting, I apologize for this dissertation. I realize that many of you do not pore over our figures, but instead hold Berkshire primarily because you know that: (1) Charlie and I have the bulk of our money in Berkshire; (2) we intend to run things so that your gains or losses are in direct proportion to ours; and (3) the record has so far been satisfactory. There is nothing necessarily wrong with this kind of "faith" approach to investing. Other shareholders, however, prefer an "analysis" approach and we want to supply the

information they need. In our own investing, we search for situations in which both approaches give us the same answer.

Sources of Reported Earnings

In addition to supplying you with our new four-sector accounting material, we will continue to list the major sources of Berkshire's reported earnings just as we have in the past.

In the following table, amortization of Goodwill and other major purchase-price accounting adjustments are not charged against the specific businesses to which they apply but are instead aggregated and shown separately. This procedure lets you view the earnings of our businesses as they would have been reported had we not purchased them. I've explained in past reports why this form of presentation seems to us to be more useful to investors and managers than the standard GAAP presentation, which makes purchase-price adjustments on a business-by-business basis. The total net earnings we show in the table are, of course, identical to the GAAP total in our audited financial statements.

Further information about these businesses is given in the Business Segment section on pages 32-34, and in the Management's Discussion section on pages 36-40. In these sections you also will find our segment earnings reported on a GAAP basis. For information on Wesco's businesses, I urge you to read Charlie Munger's letter, which starts on page 52. It contains the best description I have seen of the events that produced the present savings-and-loan crisis. Also, take special note of Dave Hillstrom's performance at Precision Steel Warehouse, a Wesco subsidiary. Precision operates in an extremely competitive industry, yet Dave consistently achieves good returns on invested capital. Though data is lacking to prove the point, I think it is likely that his performance, both in 1988 and years past, would rank him number one among his peers.

Operating Earnings (000s omitted)	**Pre-Tax 1988**	**Earnings 1987**	**Berkshire 1988**	**Share 1987**
Insurance Group: Underwriting	$(11,081)	$(55,429)	$(1,045)	$(20,696)
Net investment income	231,250	152,483	197,779	136,658
Buffalo News	42,429	39,410	25,462	21,304
Fechheimer (Aquired 6/3/86)	14,152	13,332	7,720	6,580
Kirby	26,891	22,408	17,842	12,891
Nebraska Furniture Mart	18,439	16,837	9,099	7,554
Scott Fetzer – Diversified Mfg.	28,542	30,591	17,640	17,555
See's Candies	32,473	31,693	19,671	17,363
Wesco – Other than Insurance	16,133	6,209	10,650	4,978
World Book	27,890	25,745	18,021	15,135
Amortization of Goodwill	(2,806)	(2,862)	(2,806)	(2,862)
Other Purchase Price accounting charges	(6,342)	(5,546)	(7,340)	(6,544)
Interest On Debt and Pre-Payment Penalty	(35,613)	(11,474)	(23,212)	(5,905)
Shareholder-Designated Contributions	(4,966)	(4,938)	(3,217)	(2,963)
Other	41,059	23,217	27,177	13,696
Operating Earnings	418,450	280,919	313,441	214,745
Sales of Securities	131,671	28,838	85,829	19,807
Total Earnings- all entities	**$550,121**	**$310,514**	**$399,270**	**$234,552**

**Excludes interest expense of Scott Fetzer Financial Group.*

The earnings achieved by our operating businesses are superb, whether measured on an absolute basis or against those of their competitors. For that we thank our operating managers: You and I are fortunate to be associated with them.

At Berkshire, associations like these last a long time. We do not remove superstars from our lineup merely because they have attained a specified age - whether the traditional 65, or the 95 reached by Mrs. B on the eve of Hanukkah in 1988. Superb managers are too scarce a resource to be discarded simply because a cake gets crowded with candles. Moreover, our experience with newly-minted MBAs has not been that great. Their academic records always look terrific and the candidates always know just what to say; but too often they are short on personal commitment to the company and general business savvy. It's difficult to teach a new dog old tricks.

Here's an update on our major non-insurance operations:

o At Nebraska Furniture Mart, Mrs. B (Rose Blumkin) and her cart roll on and on. She's been the boss for 51 years, having started the business at 44 with $500. (Think what she would have done with $1,000!) With Mrs. B, old age will always be ten years away. The Mart, long the largest home furnishings store in the country, continues to grow. In the fall, the store opened a detached 20,000 square foot Clearance Center, which expands our ability to offer bargains in all price ranges.

Recently Dillard's, one of the most successful department store operations in the country, entered the Omaha market. In many of its stores, Dillard's runs a full furniture department, undoubtedly doing well in this line. Shortly before opening in Omaha, however, William Dillard, chairman of the company, announced that his new store would not sell furniture. Said he, referring to NFM: "We don't want to compete with them. We think they are about the best there is."

At the Buffalo News we extol the value of advertising, and our policies at NFM prove that we practice what we preach. Over the past three years NFM has been the largest ROP advertiser in the Omaha World-Herald. (ROP advertising is the kind printed in the paper, as contrasted to the preprinted-insert kind.) In no other major market, to my knowledge, is a home furnishings operation the leading customer of the newspaper. At times, we also run large ads in papers as far away as Des Moines, Sioux City and Kansas City - always with good results. It truly does pay to advertise, as long as you have something worthwhile to offer.

Mrs. B's son, Louie, and his boys, Ron and Irv, complete the winning Blumkin team. It's a joy to work with this family. All its members have character that matches their extraordinary abilities.

o Last year I stated unequivocally that pre-tax margins at The Buffalo News would fall in 1988. That forecast would have proved correct at almost any other newspaper our size or larger. But Stan Lipsey - bless him - has managed to make me look foolish.

Though we increased our prices a bit less than the industry average last year, and though our newsprint costs and wage rates rose in line with industry norms, Stan actually improved margins a tad. No one in the newspaper business has a better managerial record. He has achieved it, furthermore, while running a paper that gives readers an extraordinary amount of news. We believe that our "newshole" percentage - the portion of the paper devoted to news - is bigger than that of any other dominant paper of our size or larger. The percentage was 49.5% in 1988 versus

49.8% in 1987. We are committed to keeping it around 50%, whatever the level or trend of profit margins.

Charlie and I have loved the newspaper business since we were youngsters, and we have had great fun with the News in the 12 years since we purchased it. We were fortunate to find Murray Light, a top-flight editor, on the scene when we arrived and he has made us proud of the paper ever since.

o See's Candies sold a record 25.1 million pounds in 1988. Prospects did not look good at the end of October, but excellent Christmas volume, considerably better than the record set in 1987, turned the tide.

As we've told you before, See's business continues to become more Christmas-concentrated. In 1988, the Company earned a record 90% of its full-year profits in December: $29 million out of $32.5 million before tax. (It's enough to make you believe in Santa Claus.) December's deluge of business produces a modest seasonal bulge in Berkshire's corporate earnings. Another small
bulge occurs in the first quarter, when most World Book annuals are sold.

Charlie and I put Chuck Huggins in charge of See's about five minutes after we bought the company. Upon reviewing his record, you may wonder what took us so long.

o At Fechheimer, the Heldmans - Bob, George, Gary, Roger and Fred - are the Cincinnati counterparts of the Blumkins. Neither furniture retailing nor uniform manufacturing has inherently attractive economics. In these businesses, only exceptional managements can deliver high returns on invested capital. And that's exactly what the five Heldmans do. (As Mets announcer Ralph Kiner once said when comparing pitcher Steve Trout to his father, Dizzy Trout, the famous Detroit Tigers pitcher: "There's a lot of heredity in that family.")

Fechheimer made a fairly good-sized acquisition in 1988. Charlie and I have such confidence in the business savvy of the Heldman family that we okayed the deal without even looking at it. There are very few managements anywhere - including those running the top tier companies of the Fortune 500 - in which we would exhibit similar confidence.

Because of both this acquisition and some internal growth, sales at Fechheimer should be up significantly in 1989.

o All of the operations managed by Ralph Schey - World Book, Kirby, and The Scott Fetzer Manufacturing Group - performed splendidly in 1988. Returns on the capital entrusted to Ralph continue to be exceptional.

Within the Scott Fetzer Manufacturing Group, particularly fine progress was recorded at its largest unit, Campbell Hausfeld. This company, the country's leading producer of small and medium-sized air compressors, has more than doubled earnings since 1986.

Unit sales at both Kirby and World Book were up significantly in 1988, with export business particularly strong. World Book became available in the Soviet Union in September, when that country's largest American book store opened in Moscow. Ours is the only general encyclopedia offered at the store.

Ralph's personal productivity is amazing: In addition to running 19 businesses in superb fashion, he is active at The Cleveland Clinic, Ohio University, Case Western Reserve, and a venture capital operation that has spawned sixteen Ohio-based companies and resurrected many others. Both Ohio and Berkshire are fortunate to have Ralph on their side.

Borsheim's

It was in 1983 that Berkshire purchased an 80% interest in The Nebraska Furniture Mart. Your Chairman blundered then by neglecting to ask Mrs. B a question any schoolboy would have thought of: "Are there any more at home like you?" Last month I corrected the error: We are now 80% partners with another branch of the family.

After Mrs. B came over from Russia in 1917, her parents and five siblings followed. (Her two other siblings had preceded her.) Among the sisters was Rebecca Friedman who, with her husband, Louis, escaped in 1922 to the west through Latvia in a journey as perilous as Mrs. B's earlier odyssey to the east through Manchuria. When the family members reunited in Omaha they had no tangible assets. However, they came equipped with an extraordinary combination of brains, integrity, and enthusiasm for work - and that's all they needed. They have since proved themselves invincible.

In 1948 Mr. Friedman purchased Borsheim's, a small Omaha jewelry store. He was joined in the business by his son, Ike, in 1950 and, as the years went by, Ike's son, Alan, and his sons-in-law, Marvin Cohn and Donald Yale, came in also.

You won't be surprised to learn that this family brings to the jewelry business precisely the same approach that the Blumkins bring to the furniture business. The cornerstone for both

enterprises is Mrs. B's creed: "Sell cheap and tell the truth." Other fundamentals at both businesses are: (1) single store operations featuring huge inventories that provide customers with an enormous selection across all price ranges, (2) daily attention to detail by top management, (3) rapid turnover, (4) shrewd buying, and (5) incredibly low expenses. The combination of the last three factors lets both stores offer everyday prices that no one in the country comes close to matching.

Most people, no matter how sophisticated they are in other matters, feel like babes in the woods when purchasing jewelry. They can judge neither quality nor price. For them only one rule makes sense: If you don't know jewelry, know the jeweler.

I can assure you that those who put their trust in Ike Friedman and his family will never be disappointed. The way in which we purchased our interest in their business is the ultimate testimonial. Borsheim's had no audited financial statements; nevertheless, we didn't take inventory, verify receivables or audit the operation in any way. Ike simply told us what was so -- and on that basis we drew up a one-page contract and wrote a large check.

Business at Borsheim's has mushroomed in recent years as the reputation of the Friedman family has spread. Customers now come to the store from all over the country. Among them have been some friends of mine from both coasts who thanked me later for getting them there.

Borsheim's new links to Berkshire will change nothing in the way this business is run. All members of the Friedman family will continue to operate just as they have before; Charlie and I will stay on the sidelines where we belong. And when we say "all members," the words have real meaning. Mr. and Mrs. Friedman, at 88 and 87, respectively, are in the store daily. The wives of Ike, Alan, Marvin and Donald all pitch in at busy times, and a fourth generation is beginning to learn the ropes.

It is great fun to be in business with people you have long admired. The Friedmans, like the Blumkins, have achieved success because they have deserved success. Both families focus on what's right for the customer and that, inevitably, works out well for them, also. We couldn't have better partners.

Insurance Operations

Shown below is an updated version of our usual table presenting key figures for the insurance industry:

Year	Yearly Change in Premiums Written (%)	Statutory Combined Ratio after Policyholder Dividends	Yearly Change in Incurred Losses (%)	Inflation Rate Measured by GNP Deflator (%)
1981	3.8	106.0	6.5	9.6
1982	4.4	109.8	8.4	6.4
1983	4.6	112.0	6.8	3.9
1984	9.2	117.9	16.9	3.8
1985	22.1	116.5	16.1	3.3
1986	22.2	108.0	13.5	2.7
1987	9.4	104.6	7.8	3.3
1988 (Est.)	3.9	105.4	4.2	3.6

Source: A.M. Best Co.

The combined ratio represents total insurance costs (losses incurred plus expenses) compared to revenue from premiums: A ratio below 100 indicates an underwriting profit, and one above 100 indicates a loss. When the investment income that an insurer earns from holding on to policyholders' funds ("the float") is taken into account, a combined ratio in the 107-111 range typically produces an overall break-even result, exclusive of earnings on the funds provided by shareholders.

For the reasons laid out in previous reports, we expect the industry's incurred losses to grow by about 10% annually, even in years when general inflation runs considerably lower. If premium growth meanwhile materially lags that 10% rate, underwriting losses will mount, though the industry's tendency to underreserve when business turns bad may obscure their size for a time. As the table shows, the industry's underwriting loss grew in 1988. This trend is almost certain to continue - and probably will accelerate - for at least two more years.

The property-casualty insurance industry is not only subnormally profitable, it is subnormally popular. (As Sam Goldwyn philosophized: "In life, one must learn to take the bitter with the sour.") One of the ironies of business is that many relatively-unprofitable industries that are

plagued by inadequate prices habitually find themselves beat upon by irate customers even while other, hugely profitable industries are spared complaints, no matter how high their prices.

Take the breakfast cereal industry, whose return on invested capital is more than double that of the auto insurance industry (which is why companies like Kellogg and General Mills sell at five times book value and most large insurers sell close to book). The cereal companies regularly impose price increases, few of them related to a significant jump in their costs. Yet not a peep is heard from consumers. But when auto insurers raise prices by amounts that do not even match cost increases, customers are outraged. If you want to be loved, it's clearly better to sell high-priced corn flakes than low-priced auto insurance.

The antagonism that the public feels toward the industry can have serious consequences: Proposition 103, a California initiative passed last fall, threatens to push auto insurance prices down sharply, even though costs have been soaring. The price cut has been suspended while the courts review the initiative, but the resentment that brought on the vote has not been suspended: Even if the initiative is overturned, insurers are likely to find it tough to operate profitably in California. (Thank heavens the citizenry isn't mad at bonbons: If Proposition 103 applied to candy as well as insurance, See's would be forced to sell its product for $5.76 per pound. rather than the $7.60 we charge - and would be losing money by the bucketful.)

The immediate direct effects on Berkshire from the initiative are minor, since we saw few opportunities for profit in the rate structure that existed in California prior to the vote. However, the forcing down of prices would seriously affect GEICO, our 44%-owned investee, which gets about 10% of its premium volume from California. Even more threatening to GEICO is the possibility that similar pricing actions will be taken in other states, through either initiatives or legislation.

If voters insist that auto insurance be priced below cost, it eventually must be sold by government. Stockholders can subsidize policyholders for a short period, but only taxpayers can subsidize them over the long term. At most property-casualty companies, socialized auto insurance would be no disaster for shareholders. Because of the commodity characteristics of the industry, most insurers earn mediocre returns and therefore have little or no economic goodwill to lose if they are forced by government to leave the auto insurance business. But GEICO, because it is a low-cost producer able to earn high returns on equity, has a huge amount of economic goodwill at risk. In turn, so do we.

At Berkshire, in 1988, our premium volume continued to fall, and in 1989 we will experience a large decrease for a special reason: The contract through which we receive 7% of the business of Fireman's Fund expires on August 31. At that time, we will return to Fireman's Fund the unearned premiums we hold that relate to the contract. This transfer of funds will show up in our "premiums written" account as a negative $85 million or so and will make our third-quarter figures look rather peculiar. However, the termination of this contract will not have a significant effect on profits.

Berkshire's underwriting results continued to be excellent in 1988. Our combined ratio (on a statutory basis and excluding structured settlements and financial reinsurance) was 104. Reserve development was favorable for the second year in a row, after a string of years in which it was very unsatisfactory. Details on both underwriting and reserve development appear on pages 36-38.

Our insurance volume over the next few years is likely to run very low, since business with a reasonable potential for profit will almost certainly be scarce. So be it. At Berkshire, we simply will not write policies at rates that carry the expectation of economic loss. We encounter enough troubles when we expect a gain.

Despite - or perhaps because of - low volume, our profit picture during the next few years is apt to be considerably brighter than the industry's. We are sure to have an exceptional amount of float compared to premium volume, and that augurs well for profits. In 1989 and 1990 we expect our float/premiums ratio to be at least three times that of the typical property/casualty company. Mike Goldberg, with special help from Ajit Jain, Dinos Iordanou, and the National Indemnity managerial team, has positioned us well in that respect.

At some point - we don't know when - we will be deluged with insurance business. The cause will probably be some major physical or financial catastrophe. But we could also experience an explosion in business, as we did in 1985, because large and increasing underwriting losses at other companies coincide with their recognition that they are far underreserved. in the meantime, we will retain our talented professionals, protect our capital, and try not to make major mistakes.

Marketable Securities

In selecting marketable securities for our insurance companies, we can choose among five major categories: (1) long-term common stock investments, (2) medium-term fixed-income

securities, (3) long-term fixed-income securities, (4) short-term cash equivalents, and (5) short-term arbitrage commitments.

We have no particular bias when it comes to choosing from these categories. We just continuously search among them for the highest after-tax returns as measured by "mathematical expectation," limiting ourselves always to investment alternatives we think we understand. Our criteria have nothing to do with maximizing immediately reportable earnings; our goal, rather, is to maximize eventual net worth.

o Below we list our common stock holdings having a value over $100 million, not including arbitrage commitments, which will be discussed later. A small portion of these investments belongs to subsidiaries of which Berkshire owns less than 100%.

Shares	**Company**	**Cost (000's omitted)**	**Market (000's omitted)**
3,000,000	Capital Cities/ABC, Inc.	$517,500	$1,086,750
14,172,500	The Coca-Cola Company	592,540	632,448
2,400,000	Federal Home Loan Mortgage Corporation Preferred*	71,729	121,200
6,850,000	GEICO Corporation.	45,713	849,400
1,727,765	The Washington Post Company	9,731	364,126

**Although nominally a preferred stock, this security is financially equivalent to a common stock.*

Our permanent holdings - Capital Cities/ABC, Inc., GEICO Corporation, and The Washington Post Company - remain unchanged. Also unchanged is our unqualified admiration of their managements: Tom Murphy and Dan Burke at Cap Cities, Bill Snyder and Lou Simpson at GEICO, and Kay Graham and Dick Simmons at The Washington Post. Charlie and I appreciate enormously the talent and integrity these managers bring to their businesses.

Their performance, which we have observed at close range, contrasts vividly with that of many CEOs, which we have fortunately observed from a safe distance. Sometimes these CEOs

clearly do not belong in their jobs; their positions, nevertheless, are usually secure. The supreme irony of business management is that it is far easier for an inadequate CEO to keep his job than it is for an inadequate subordinate.

If a secretary, say, is hired for a job that requires typing ability of at least 80 words a minute and turns out to be capable of only 50 words a minute, she will lose her job in no time. There is a logical standard for this job; performance is easily measured; and if you can't make the grade, you're out. Similarly, if new sales people fail to generate sufficient business quickly enough, they will be let go. Excuses will not be accepted as a substitute for orders.

However, a CEO who doesn't perform is frequently carried indefinitely. One reason is that performance standards for his job seldom exist. When they do, they are often fuzzy or they may be waived or explained away, even when the performance shortfalls are major and repeated. At too many companies, the boss shoots the arrow of managerial performance and then hastily paints the bullseye around the spot where it lands.

Another important, but seldom recognized, distinction between the boss and the foot soldier is that the CEO has no immediate superior whose performance is itself getting measured. The sales manager who retains a bunch of lemons in his sales force will soon be in hot water himself. It is in his immediate self-interest to promptly weed out his hiring mistakes. Otherwise, he himself may be weeded out. An office manager who has hired inept secretaries faces the same imperative.

But the CEO's boss is a Board of Directors that seldom measures itself and is infrequently held to account for substandard corporate performance. If the Board makes a mistake in hiring, and perpetuates that mistake, so what? Even if the company is taken over because of the mistake, the deal will probably bestow substantial benefits on the outgoing Board members. (The bigger they are, the softer they fall.)

Finally, relations between the Board and the CEO are expected to be congenial. At board meetings, criticism of the CEO's performance is often viewed as the social equivalent of belching. No such inhibitions restrain the office manager from critically evaluating the substandard typist.

These points should not be interpreted as a blanket condemnation of CEOs or Boards of Directors: Most are able and hard-working, and a number are truly outstanding. But the

management failings that Charlie and I have seen make us thankful that we are linked with the managers of our three permanent holdings. They love their businesses, they think like owners, and they exude integrity and ability.

o In 1988 we made major purchases of Federal Home Loan Mortgage Pfd. ("Freddie Mac") and Coca Cola. We expect to hold these securities for a long time. In fact, when we own portions of outstanding businesses with outstanding managements, our favorite holding period is forever. We are just the opposite of those who hurry to sell and book profits when companies perform well but who tenaciously hang on to businesses that disappoint. Peter Lynch aptly likens such behavior to cutting the flowers and watering the weeds. Our holdings of Freddie Mac are the maximum allowed by law, and are extensively described by Charlie in his letter. In our consolidated balance sheet these shares are carried at cost rather than market, since they are owned by Mutual Savings and Loan, a non-insurance subsidiary.

We continue to concentrate our investments in a very few companies that we try to understand well. There are only a handful of businesses about which we have strong long-term convictions. Therefore, when we find such a business, we want to participate in a meaningful way. We agree with Mae West: "Too much of a good thing can be wonderful."

o We reduced our holdings of medium-term tax-exempt bonds by about $100 million last year. All of the bonds sold were acquired after August 7, 1986. When such bonds are held by property-casualty insurance companies, 15% of the "tax-exempt" interest earned is subject to tax.

The $800 million position we still hold consists almost entirely of bonds "grandfathered" under the Tax Reform Act of 1986, which means they are entirely tax-exempt. Our sales produced a small profit and our remaining bonds, which have an average maturity of about six years, are worth modestly more than carrying value.

Last year we described our holdings of short-term and intermediate-term bonds of Texaco, which was then in bankruptcy. During 1988, we sold practically all of these bonds at a pre-tax profit of about $22 million. This sale explains close to $100 million of the reduction in fixed-income securities on our balance sheet.

We also told you last year about our holdings of another security whose predominant characteristics are those of an intermediate fixed-income issue: our $700 million position in Salomon Inc 9% convertible preferred. This preferred has a sinking fund that will retire it in equal annual installments from 1995 to 1999. Berkshire carries this holding at cost. For reasons

discussed by Charlie on page 69, the estimated market value of our holding has improved from moderately under cost at the end of last year to moderately over cost at 1988 year end.

The close association we have had with John Gutfreund, CEO of Salomon, during the past year has reinforced our admiration for him. But we continue to have no great insights about the near, intermediate or long-term economics of the investment banking business: This is not an industry in which it is easy to forecast future levels of profitability. We continue to believe that our conversion privilege could well have important value over the life of our preferred. However, the overwhelming portion of the preferred's value resides in its fixed-income characteristics, not its equity characteristics.

o We have not lost our aversion to long-term bonds. We will become enthused about such securities only when we become enthused about prospects for long-term stability in the purchasing power of money. And that kind of stability isn't in the cards: Both society and elected officials simply have too many higher-ranking priorities that conflict with purchasing-power stability. The only long-term bonds we hold are those of Washington Public Power Supply Systems (WPPSS). A few of our WPPSS bonds have short maturities and many others, because of their high coupons, are likely to be refunded and paid off in a few years. Overall, our WPPSS holdings are carried on our balance sheet at $247 million and have a market value of about $352 million.

We explained the reasons for our WPPSS purchases in the 1983 annual report, and are pleased to tell you that this commitment has worked out about as expected. At the time of purchase, most of our bonds were yielding around 17% after taxes and carried no ratings, which had been suspended. Recently, the bonds were rated AA- by Standard & Poor's. They now sell at levels only slightly below those enjoyed by top-grade credits.

In the 1983 report, we compared the economics of our WPPSS purchase to those involved in buying a business. As it turned out, this purchase actually worked out better than did the general run of business acquisitions made in 1983, assuming both are measured on the basis of unleveraged, after tax returns achieved through 1988.

Our WPPSS experience, though pleasant, does nothing to alter our negative opinion about long-term bonds. It only makes us hope that we run into some other large stigmatized issue, whose troubles have caused it to be significantly misappraised by the market.

Arbitrage

In past reports we have told you that our insurance subsidiaries sometimes engage in arbitrage as an alternative to holding short-term cash equivalents. We prefer, of course, to make major long-term commitments, but we often have more cash than good ideas. At such times, arbitrage sometimes promises much greater returns than Treasury Bills and, equally important, cools any temptation we may have to relax our standards for long-term investments. (Charlie's sign off after we've talked about an arbitrage commitment is usually: "Okay, at least it will keep you out of bars.")

During 1988 we made unusually large profits from arbitrage, measured both by absolute dollars and rate of return. Our pre-tax gain was about $78 million on average invested funds of about $147 million.

This level of activity makes some detailed discussion of arbitrage and our approach to it appropriate. Once, the word applied only to the simultaneous purchase and sale of securities or foreign exchange in two different markets. The goal was to exploit tiny price differentials that might exist between, say, Royal Dutch stock trading in guilders in Amsterdam, pounds in London, and dollars in New York. Some people might call this scalping; it won't surprise you that practitioners opted for the French term, arbitrage.

Since World War I the definition of arbitrage - or "risk arbitrage," as it is now sometimes called - has expanded to include the pursuit of profits from an announced corporate event such as sale of the company, merger, recapitalization, reorganization, liquidation, self-tender, etc. In most cases the arbitrageur expects to profit regardless of the behavior of the stock market. The major risk he usually faces instead is that the announced event won't happen.

Some offbeat opportunities occasionally arise in the arbitrage field. I participated in one of these when I was 24 and working in New York for Graham-Newman Corp. Rockwood & Co., a Brooklyn based chocolate products company of limited profitability, had adopted LIFO inventory valuation in 1941 when cocoa was selling for 50 cents per pound. In 1954 a temporary shortage of cocoa caused the price to soar to over 60 cents. Consequently Rockwood wished to unload its valuable inventory - quickly, before the price dropped. But if the cocoa had simply been sold off, the company would have owed close to a 50% tax on the proceeds.

The 1954 Tax Code came to the rescue. It contained an arcane provision that eliminated the tax otherwise due on LIFO profits if inventory was distributed to shareholders as part of a plan reducing the scope of a corporation's business. Rockwood decided to terminate one of its

businesses, the sale of cocoa butter, and said 13 million pounds of its cocoa bean inventory was attributable to that activity. Accordingly, the company offered to repurchase its stock in exchange for the cocoa beans it no longer needed, paying 80 pounds of beans for each share.

For several weeks I busily bought shares, sold beans, and made periodic stops at Schroeder Trust to exchange stock certificates for warehouse receipts. The profits were good and my only expense was subway tokens.

The architect of Rockwood's restructuring was an unknown, but brilliant Chicagoan, Jay Pritzker, then 32. If you're familiar with Jay's subsequent record, you won't be surprised to hear the action worked out rather well for Rockwood's continuing shareholders also. From shortly before the tender until shortly after it, Rockwood stock appreciated from 15 to 100, even though the company was experiencing large operating losses. Sometimes there is more to stock valuation than price-earnings ratios.

In recent years, most arbitrage operations have involved takeovers, friendly and unfriendly. With acquisition fever rampant, with anti-trust challenges almost non-existent, and with bids often ratcheting upward, arbitrageurs have prospered mightily. They have not needed special talents to do well; the trick, a la Peter Sellers in the movie, has simply been "Being There." In Wall Street the old proverb has been reworded: "Give a man a fish and you feed him for a day. Teach him how to arbitrage and you feed him forever." (If, however, he studied at the Ivan Boesky School of Arbitrage, it may be a state institution that supplies his meals.)

To evaluate arbitrage situations you must answer four questions: (1) How likely is it that the promised event will indeed occur? (2) How long will your money be tied up? (3) What chance is there that something still better will transpire - a competing takeover bid, for example? and (4) What will happen if the event does not take place because of anti-trust action, financing glitches, etc.?

Arcata Corp., one of our more serendipitous arbitrage experiences, illustrates the twists and turns of the business. On September 28, 1981 the directors of Arcata agreed in principle to sell the company to Kohlberg, Kravis, Roberts & Co. (KKR), then and now a major leveraged-buyout firm. Arcata was in the printing and forest products businesses and had one other thing going for it: In 1978 the U.S. Government had taken title to 10,700 acres of Arcata timber, primarily old-growth redwood, to expand Redwood National Park. The government had paid

$97.9 million, in several installments, for this acreage, a sum Arcata was contesting as grossly inadequate. The parties also disputed the interest rate that should apply to the period between the taking of the property and final payment for it. The enabling legislation stipulated 6% simple interest; Arcata argued for a much higher and compounded rate.

Buying a company with a highly-speculative, large-sized claim in litigation creates a negotiating problem, whether the claim is on behalf of or against the company. To solve this problem, KKR offered $37.00 per Arcata share plus two-thirds of any additional amounts paid by the government for the redwood lands.

Appraising this arbitrage opportunity, we had to ask ourselves whether KKR would consummate the transaction since, among other things, its offer was contingent upon its obtaining "satisfactory financing." A clause of this kind is always dangerous for the seller: It offers an easy exit for a suitor whose ardor fades between proposal and marriage. However, we were not particularly worried about this possibility because KKR's past record for closing had been good.

We also had to ask ourselves what would happen if the KKR deal did fall through, and here we also felt reasonably comfortable: Arcata's management and directors had been shopping the company for some time and were clearly determined to sell. If KKR went away, Arcata would likely find another buyer, though of course, the price might be lower.

Finally, we had to ask ourselves what the redwood claim might be worth. Your Chairman, who can't tell an elm from an oak, had no trouble with that one: He coolly evaluated the claim at somewhere between zero and a whole lot.

We started buying Arcata stock, then around $33.50, on September 30 and in eight weeks purchased about 400,000 shares, or 5% of the company. The initial announcement said that the $37.00 would be paid in January, 1982. Therefore, if everything had gone perfectly, we would have achieved an annual rate of return of about 40% - not counting the redwood claim, which would have been frosting.

All did not go perfectly. In December it was announced that the closing would be delayed a bit. Nevertheless, a definitive agreement was signed on January 4. Encouraged, we raised our stake, buying at around $38.00 per share and increasing our holdings to 655,000 shares, or over 7% of the company. Our willingness to pay up - even though the closing had been postponed - reflected our leaning toward "a whole lot" rather than "zero" for the redwoods.

Then, on February 25 the lenders said they were taking a "second look" at financing terms " in view of the severely depressed housing industry and its impact on Arcata's outlook." The stockholders' meeting was postponed again, to April. An Arcata spokesman said he "did not think the fate of the acquisition itself was imperiled." When arbitrageurs hear such reassurances, their minds flash to the old saying: "He lied like a finance minister on the eve of devaluation."

On March 12 KKR said its earlier deal wouldn't work, first cutting its offer to $33.50, then two days later raising it to $35.00. On March 15, however, the directors turned this bid down and accepted another group's offer of $37.50 plus one-half of any redwood recovery. The shareholders okayed the deal, and the $37.50 was paid on June 4.

We received $24.6 million versus our cost of $22.9 million; our average holding period was close to six months. Considering the trouble this transaction encountered, our 15% annual rate of return excluding any value for the redwood claim - was more than satisfactory.

But the best was yet to come. The trial judge appointed two commissions, one to look at the timber's value, the other to consider the interest rate questions. In January 1987, the first commission said the redwoods were worth $275.7 million and the second commission recommended a compounded, blended rate of return working out to about 14%.

In August 1987 the judge upheld these conclusions, which meant a net amount of about $600 million would be due Arcata. The government then appealed. In 1988, though, before this appeal was heard, the claim was settled for $519 million. Consequently, we received an additional $29.48 per share, or about $19.3 million. We will get another $800,000 or so in 1989.

Berkshire's arbitrage activities differ from those of many arbitrageurs. First, we participate in only a few, and usually very large, transactions each year. Most practitioners buy into a great many deals perhaps 50 or more per year. With that many irons in the fire, they must spend most of their time monitoring both the progress of deals and the market movements of the related stocks. This is not how Charlie nor I wish to spend our lives. (What's the sense in getting rich just to stare at a ticker tape all day?)

Because we diversify so little, one particularly profitable or unprofitable transaction will affect our yearly result from arbitrage far more than it will the typical arbitrage operation. So far, Berkshire has not had a really bad experience. But we will - and when it happens we'll report the gory details to you.

The other way we differ from some arbitrage operations is that we participate only in transactions that have been publicly announced. We do not trade on rumors or try to guess takeover candidates. We just read the newspapers, think about a few of the big propositions, and go by our own sense of probabilities.

At yearend, our only major arbitrage position was 3,342,000 shares of RJR Nabisco with a cost of $281.8 million and a market value of $304.5 million. In January we increased our holdings to roughly four million shares and in February we eliminated our position. About three million shares were accepted when we tendered our holdings to KKR, which acquired RJR, and the returned shares were promptly sold in the market. Our pre-tax profit was a better-than-expected $64 million.

Earlier, another familiar face turned up in the RJR bidding contest: Jay Pritzker, who was part of a First Boston group that made a tax-oriented offer. To quote Yogi Berra; "It was deja vu all over again."

During most of the time when we normally would have been purchasers of RJR, our activities in the stock were restricted because of Salomon's participation in a bidding group. Customarily, Charlie and I, though we are directors of Salomon, are walled off from information about its merger and acquisition work. We have asked that it be that way: The information would do us no good and could, in fact, occasionally inhibit Berkshire's arbitrage operations.

However, the unusually large commitment that Salomon proposed to make in the RJR deal required that all directors be fully informed and involved. Therefore, Berkshire's purchases of RJR were made at only two times: first, in the few days immediately following management's announcement of buyout plans, before Salomon became involved; and considerably later, after the RJR board made its decision in favor of KKR. Because we could not buy at other times, our directorships cost Berkshire significant money.

Considering Berkshire's good results in 1988, you might expect us to pile into arbitrage during 1989. Instead, we expect to be on the sidelines.

One pleasant reason is that our cash holdings are down - because our position in equities that we expect to hold for a very long time is substantially up. As regular readers of this report know, our new commitments are not based on a judgment about short-term prospects for the stock market. Rather, they reflect an opinion about long-term business prospects for specific

companies. We do not have, never have had, and never will have an opinion about where the stock market, interest rates, or business activity will be a year from now.

Even if we had a lot of cash we probably would do little in arbitrage in 1989. Some extraordinary excesses have developed in the takeover field. As Dorothy says: "Toto, I have a feeling we're not in Kansas anymore."

We have no idea how long the excesses will last, nor do we know what will change the attitudes of government, lender and buyer that fuel them. But we do know that the less the prudence with which others conduct their affairs, the greater the prudence with which we should conduct our own affairs. We have no desire to arbitrage transactions that reflect the unbridled - and, in our view, often unwarranted - optimism of both buyers and lenders. In our activities, we will heed the wisdom of Herb Stein: "If something can't go on forever, it will end."

Efficient Market Theory

The preceding discussion about arbitrage makes a small discussion of "efficient market theory" (EMT) also seem relevant. This doctrine became highly fashionable - indeed, almost holy scripture in academic circles during the 1970s. Essentially, it said that analyzing stocks was useless because all public information about them was appropriately reflected in their prices. In other words, the market always knew everything. As a corollary, the professors who taught EMT said that someone throwing darts at the stock tables could select a stock portfolio having prospects just as good as one selected by the brightest, most hard-working security analyst. Amazingly, EMT was embraced not only by academics, but by many investment professionals and corporate managers as well. Observing correctly that the market was *frequently* efficient, they went on to conclude incorrectly that it was *always* efficient. The difference between these propositions is night and day.

In my opinion, the continuous 63-year arbitrage experience of Graham-Newman Corp. Buffett Partnership, and Berkshire illustrates just how foolish EMT is. (There's plenty of other evidence, also.) While at Graham-Newman, I made a study of its earnings from arbitrage during the entire 1926-1956 lifespan of the company. Unleveraged returns averaged 20% per year. Starting in 1956, I applied Ben Graham's arbitrage principles, first at Buffett Partnership and then Berkshire. Though I've not made an exact calculation, I have done enough work to know that the 1956-1988 returns averaged well over 20%. (Of course, I operated in an environment far more favorable than Ben's; he had 1929-1932 to contend with.)

All of the conditions are present that are required for a fair test of portfolio performance: (1) the three organizations traded hundreds of different securities while building this 63-year record; (2) the results are not skewed by a few fortunate experiences; (3) we did not have to dig for obscure facts or develop keen insights about products or managements - we simply acted on highly-publicized events; and (4) our arbitrage positions were a clearly identified universe - they have not been selected by hindsight.

Over the 63 years, the general market delivered just under a 10% annual return, including dividends. That means $1,000 would have grown to $405,000 if all income had been reinvested. A 20% rate of return, however, would have produced $97 million. That strikes us as a statistically-significant differential that might, conceivably, arouse one's curiosity.

Yet proponents of the theory have never seemed interested in discordant evidence of this type. True, they don't talk quite as much about their theory today as they used to. But no one, to my knowledge, has ever said he was wrong, no matter how many thousands of students he has sent forth misinstructed. EMT, moreover, continues to be an integral part of the investment curriculum at major business schools. Apparently, a reluctance to recant, and thereby to demystify the priesthood, is not limited to theologians.

Naturally the disservice done students and gullible investment professionals who have swallowed EMT has been an extraordinary service to us and other followers of Graham. In any sort of a contest - financial, mental, or physical - it's an enormous advantage to have opponents who have been taught that it's useless to even try. From a selfish point of view, Grahamites should probably endow chairs to ensure the perpetual teaching of EMT.

All this said, a warning is appropriate. Arbitrage has looked easy recently. But this is not a form of investing that guarantees profits of 20% a year or, for that matter, profits of any kind. As noted, the market is reasonably efficient much of the time: For every arbitrage opportunity we seized in that 63-year period, many more were foregone because they seemed properly-priced.

An investor cannot obtain superior profits from stocks by simply committing to a specific investment category or style. He can earn them only by carefully evaluating facts and continuously exercising discipline. Investing in arbitrage situations, per se, is no better a strategy than selecting a portfolio by throwing darts.

New York Stock Exchange Listing

Berkshire's shares were listed on the New York Stock Exchange on November 29, 1988. On pages 50-51 we reproduce the letter we sent to shareholders concerning the listing.

Let me clarify one point not dealt with in the letter: Though our round lot for trading on the NYSE is ten shares, any number of shares from one on up can be bought or sold.

As the letter explains, our primary goal in listing was to reduce transaction costs, and we believe this goal is being achieved. Generally, the spread between the bid and asked price on the NYSE has been well below the spread that prevailed in the over-the-counter market.

Henderson Brothers, Inc., the specialist in our shares, is the oldest continuing specialist firm on the Exchange; its progenitor, William Thomas Henderson, bought his seat for $500 on September 8, 1861. (Recently, seats were selling for about $625,000.) Among the 54 firms acting as specialists, HBI ranks second in number of stocks assigned, with 83. We were pleased when Berkshire was allocated to HBI, and have been delighted with the firm's performance. Jim Maguire, Chairman of HBI, personally manages the trading in Berkshire, and we could not be in better hands.

In two respects our goals probably differ somewhat from those of most listed companies. First, we do not want to maximize the price at which Berkshire shares trade. We wish instead for them to trade in a narrow range centered at intrinsic business value (which we hope increases at a reasonable - or, better yet, unreasonable - rate). Charlie and I are bothered as much by significant overvaluation as significant undervaluation. Both extremes will inevitably produce results for many shareholders that will differ sharply from Berkshire's business results. If our stock price instead consistently mirrors business value, each of our shareholders will receive an investment result that roughly parallels the business results of Berkshire during his holding period.

Second, we wish for very little trading activity. If we ran a private business with a few passive partners, we would be disappointed if those partners, and their replacements, frequently wanted to leave the partnership. Running a public company, we feel the same way.

Our goal is to attract long-term owners who, at the time of purchase, have no timetable or price target for sale but plan instead to stay with us indefinitely. We don't understand the CEO who wants lots of stock activity, for that can be achieved only if many of his owners are constantly exiting. At what other organization - school, club, church, etc. - do leaders cheer when members leave? (However, if there were a broker whose livelihood depended upon the

membership turnover in such organizations, you could be sure that there would be at least one proponent of activity, as in: “There hasn’t been much going on in Christianity for a while; maybe we should switch to Buddhism next week.“)

Of course, some Berkshire owners will need or want to sell from time to time, and we wish for good replacements who will pay them a fair price. Therefore we try, through our policies, performance, and communications, to attract new shareholders who understand our operations, share our time horizons, and measure us as we measure ourselves. If we can continue to attract this sort of shareholder - and, just as important, can continue to be uninteresting to those with short-term or unrealistic expectations - Berkshire shares should consistently sell at prices reasonably related to business value.

David L. Dodd

Dave Dodd, my friend and teacher for 38 years, died last year at age 93. Most of you don’t know of him. Yet any long-time shareholder of Berkshire is appreciably wealthier because of the indirect influence he had upon our company.

Dave spent a lifetime teaching at Columbia University, and he co-authored *Security Analysis* with Ben Graham. From the moment I arrived at Columbia, Dave personally encouraged and educated me; one influence was as important as the other. Everything he taught me, directly or through his book, made sense. Later, through dozens of letters, he continued my education right up until his death.

I have known many professors of finance and investments but I have never seen any, except for Ben Graham, who was the match of Dave. The proof of his talent is the record of his students: No other teacher of investments has sent forth so many who have achieved unusual success.

When students left Dave’s classroom, they were equipped to invest intelligently for a lifetime because the principles he taught were simple, sound, useful, and enduring. Though these may appear to be unremarkable virtues, the teaching of principles embodying them has been rare.

It’s particularly impressive that Dave could practice as well as preach. just as Keynes became wealthy by applying his academic ideas to a very small purse, so, too, did Dave. Indeed, his financial performance far outshone that of Keynes, who began as a market-timer (leaning on business and credit-cycle theory) and converted, after much thought, to value investing. Dave was right from the start.

In Berkshire's investments, Charlie and I have employed the principles taught by Dave and Ben Graham. Our prosperity is the fruit of their intellectual tree.

Miscellaneous

We hope to buy more businesses that are similar to the ones we have, and we can use some help. If you have a business that fits the following criteria, call me or, preferably, write.

Here's what we're looking for:

(1) large purchases (at least $10 million of after-tax earnings),

(2) demonstrated consistent earning power (future projections are of little interest to us, nor are "turnaround" situations),

(3) businesses earning good returns on equity while employing little or no debt,

(4) management in place (we can't supply it),

(5) simple businesses (if there's lots of technology, we won't understand it),

(6) an offering price (we don't want to waste our time or that of the seller by talking, even preliminarily, about a transaction when price is unknown).

We will not engage in unfriendly takeovers. We can promise complete confidentiality and a very fast answer - customarily within five minutes - as to whether we're interested. We prefer to buy for cash, but will consider issuing stock when we receive as much in intrinsic business value as we give.

Our favorite form of purchase is one fitting the Blumkin-Friedman-Heldman mold. In cases like these, the company's owner-managers wish to generate significant amounts of cash, sometimes for themselves, but often for their families or inactive shareholders. However, these managers also wish to remain significant owners who continue to run their companies just as they have in the past. We think we offer a particularly good fit for owners with these objectives and invite potential sellers to check us out by contacting people with whom we have done business in the past.

Charlie and I frequently get approached about acquisitions that don't come close to meeting our tests: We've found that if you advertise an interest in buying collies, a lot of people will call hoping to sell you their cocker spaniels. Our interest in new ventures, turnarounds, or auction-like sales can best be expressed by another Goldwynism: "Please include me out."

Besides being interested in the purchase of businesses as described above, we are also interested in the negotiated purchase of large, but not controlling, blocks of stock comparable to

those we hold in Cap Cities and Salomon. We have a special interest in purchasing convertible preferreds as a long-term investment, as we did at Salomon.

* * *

We received some good news a few weeks ago: Standard & Poor's raised our credit rating to AAA, which is the highest rating it bestows. Only 15 other U.S. industrial or property-casualty companies are rated AAA, down from 28 in 1980.

Corporate bondholders have taken their lumps in the past few years from "event risk." This term refers to the overnight degradation of credit that accompanies a heavily-leveraged purchase or recapitalization of a business whose financial policies, up to then, had been conservative. In a world of takeovers inhabited by few owner-managers, most corporations present such a risk. Berkshire does not. Charlie and I promise bondholders the same respect we afford shareholders.

* * *

About 97.4% of all eligible shares participated in Berkshire's 1988 shareholder-designated contributions program. Contributions made through the program were $5 million, and 2,319 charities were recipients. If we achieve reasonable business results, we plan to increase the per-share contributions in 1989.

We urge new shareholders to read the description of our shareholder-designated contributions program that appears on pages 48-49. If you wish to participate in future programs, we strongly urge that you immediately make sure your shares are registered in the name of the actual owner, not in the nominee name of a broker, bank or depository. Shares not so registered on September 30, 1989 will be ineligible for the 1989 program.

* * *

Berkshire's annual meeting will be held in Omaha on Monday, April 24, 1989, and I hope you will come. The meeting provides the forum for you to ask any owner-related questions you

may have, and we will keep answering until all (except those dealing with portfolio activities or other proprietary information) have been dealt with.

After the meeting we will have several buses available to take you to visit Mrs. B at The Nebraska Furniture Mart and Ike Friedman at Borsheim's. Be prepared for bargains.

Out-of-towners may prefer to arrive early and visit Mrs. B during the Sunday store hours of noon to five. (These Sunday hours seem ridiculously short to Mrs. B, who feels they scarcely allow her time to warm up; she much prefers the days on which the store remains open from 10 a.m. to 9 p.m.) Borsheims, however, is not open on Sunday.

Ask Mrs. B the secret of her astonishingly low carpet prices. She will confide to you - as she does to everyone - how she does it: "I can sell so cheap 'cause I work for this dummy who doesn't know anything about carpet."

Warren E. Buffett
Chairman of the Board

1989 Letter

BERKSHIRE HATHAWAY INC.

To the Shareholders of Berkshire Hathaway Inc.:

Our gain in net worth during 1989 was $1.515 billion, or 44.4%. Over the last 25 years (that is, since present management took over) our per-share book value has grown from $19.46 to$4,296.01, or at a rate of 23.8% compounded annually.

What counts, however, is intrinsic value - the figure indicating what all of our constituent businesses are rationally worth. With perfect foresight, this number can be calculated by taking all future cash flows of a business - in and out - and discounting them at prevailing interest rates. So valued, all businesses, from manufacturers of buggy whips to operators of cellular phones, become economic equals.

Back when Berkshire's book value was $19.46, intrinsic value was somewhat less because the book value was entirely tied up in a textile business not worth the figure at which it was carried. Now most of our businesses are worth far more than their carrying values. This agreeable evolution from a discount to a premium means that Berkshire's intrinsic business value has compounded at a rate that somewhat exceeds our 23.8% annual growth in book value.

The rear-view mirror is one thing; the windshield is another. A large portion of our book value is represented by equity securities that, with minor exceptions, are carried on our balance sheet at current market values. At yearend these securities were valued at higher prices, relative to their own intrinsic business values, than has been the case in the past. One reason is the buoyant 1989 stock market. More important, the virtues of these businesses have been widely recognized. Whereas once their stock prices were inappropriately low, they are not now.

We will keep most of our major holdings, regardless of how they are priced relative to intrinsic business value. This 'til-death-do-us-part attitude, combined with the full prices these holdings command, means that they cannot be expected to push up Berkshire's value in the future as sharply as in the past. In other words, our performance to date has benefited from a

double-dip: (1) the exceptional gains in intrinsic value that our portfolio companies have achieved; (2) the additional bonus we realized as the market appropriately "corrected" the prices of these companies, raising their valuations in relation to those of the average business. We will continue to benefit from good gains in business value that we feel confident our portfolio companies will make. But our "catch-up" rewards have been realized, which means we'll have to settle for a single-dip in the future.

We face another obstacle: In a finite world, high growth rates must self-destruct. If the base from which the growth is taking place is tiny, this law may not operate for a time. But when the base balloons, the party ends: A high growth rate eventually forges its own anchor.

Carl Sagan has entertainingly described this phenomenon, musing about the destiny of bacteria that reproduce by dividing into two every 15 minutes. Says Sagan: "That means four doublings an hour, and 96 doublings a day. Although a bacterium weighs only about a trillionth of a gram, its descendants, after a day of wild asexual abandon, will collectively weigh as much as a mountain...in two days, more than the sun - and before very long, everything in the universe will be made of bacteria." Not to worry, says Sagan: Some obstacle always impedes this kind of exponential growth. "The bugs run out of food, or they poison each other, or they are shy about reproducing in public."

Even on bad days, Charlie Munger (Berkshire's Vice Chairman and my partner) and I do not think of Berkshire as a bacterium. Nor, to our unending sorrow, have we found a way to double its net worth every 15 minutes. Furthermore, we are not the least bit shy about reproducing - financially - in public. Nevertheless, Sagan's observations apply. From Berkshire's present base of $4.9 billion in net worth, we will find it much more difficult to average 15% annual growth in book value than we did to average 23.8% from the $22 million we began with.

Taxes

Our 1989 gain of $1.5 billion was achieved after we took a charge of about $712 million for income taxes. In addition, Berkshire's share of the income taxes paid by its five major investees totaled about $175 million. Of this year's tax charge, about $172 million will be paid currently; the remainder, $540 million, is deferred. Almost all of the deferred portion relates to the 1989 increase in unrealized profits in our common stock holdings. Against this increase, we have reserved a 34% tax.

We also carry reserves at that rate against all unrealized profits generated in 1987 and 1988. But, as we explained last year, the unrealized gains we amassed before 1987 - about $1.2 billion - carry reserves booked at the 28% tax rate that then prevailed.

A new accounting rule is likely to be adopted that will require companies to reserve against all gains at the current tax rate, whatever it may be. With the rate at 34%, such a rule would increase our deferred tax liability, and decrease our net worth, by about $71 million - the result of raising the reserve on our pre-1987 gain by six percentage points. Because the proposed rule has sparked widespread controversy and its final form is unclear, we have not yet made this change.

As you can see from our balance sheet on page 27, we would owe taxes of more than $1.1 billion were we to sell all of our securities at year-end market values. Is this $1.1 billion liability equal, or even similar, to a $1.1 billion liability payable to a trade creditor 15 days after the end of the year? Obviously not - despite the fact that both items have exactly the same effect on audited net worth, reducing it by $1.1 billion.

On the other hand, is this liability for deferred taxes a meaningless accounting fiction because its payment can be triggered only by the sale of stocks that, in very large part, we have no intention of selling? Again, the answer is no.

In economic terms, the liability resembles an interest-free loan from the U.S. Treasury that comes due only at our election (unless, of course, Congress moves to tax gains before they are realized). This "loan" is peculiar in other respects as well: It can be used only to finance the ownership of the particular, appreciated stocks and it fluctuates in size - daily as market prices change and periodically if tax rates change. In effect, this deferred tax liability is equivalent to a very large transfer tax that is payable only if we elect to move from one asset to another. Indeed, we sold some relatively small holdings in 1989, incurring about $76 million of "transfer" tax on $224 million of gains.

Because of the way the tax law works, the Rip Van Winkle style of investing that we favor - if successful - has an important mathematical edge over a more frenzied approach. Let's look at an extreme comparison.

Imagine that Berkshire had only $1, which we put in a security that doubled by yearend and was then sold. Imagine further that we used the after-tax proceeds to repeat this process in each of the next 19 years, scoring a double each time. At the end of the 20 years, the 34% capital

gains tax that we would have paid on the profits from each sale would have delivered about $13,000 to the government and we would be left with about $25,250. Not bad. If, however, we made a single fantastic investment that *itself* doubled 20 times during the 20 years, our dollar would grow to $1,048,576. Were we then to cash out, we would pay a 34% tax of roughly $356,500 and be left with about $692,000.

The sole reason for this staggering difference in results would be the timing of tax payments. Interestingly, the government would gain from Scenario 2 in exactly the same 27:1 ratio as we - taking in taxes of $356,500 vs. $13,000 - though, admittedly, it would have to wait for its money.

We have not, we should stress, adopted our strategy favoring long-term investment commitments because of these mathematics. Indeed, it is possible we could earn greater after-tax returns by moving rather frequently from one investment to another. Many years ago, that's exactly what Charlie and I did.

Now we would rather stay put, even if that means slightly lower returns. Our reason is simple: We have found splendid business relationships to be so rare and so enjoyable that we want to retain all we develop. This decision is particularly easy for us because we feel that these relationships will producegood - though perhaps not optimal - financial results. Considering that, we think it makes little sense for us to give up time with people we know to be interesting and admirable for time with others we do not know and who are likely to have human qualities far closer to average. That would be akin to marrying for money - a mistake under most circumstances, insanity if one is already rich.

Sources of Reported Earnings

The table below shows the major sources of Berkshire's reported earnings. In this presentation, amortization of Goodwill and other major purchase-price accounting adjustments are not charged against the specific businesses to which they apply, but are instead aggregated and shown separately. This procedure lets you view the earnings of our businesses as they would have been reported had we not purchased them. I've explained in past reports why this form of presentation seems to us to be more useful to investors and managers than one utilizing generally accepted accounting principles (GAAP), which require purchase-price adjustments to be made on a business-by-business basis. The total net earnings we show in the table are, of course, identical to the GAAP total in our audited financial statements.

Further information about these businesses is given in the Business Segment section on pages 37-39, and in the Management's Discussion section on pages 40-44. In these sections you also will find our segment earnings reported on a GAAP basis. For information on Wesco's businesses, I urge you to read Charlie Munger's letter, which starts on page 54. In addition, we have reprinted on page 71 Charlie's May 30, 1989 letter to the U. S. League of Savings Institutions, which conveyed our disgust with its policies and our consequent decision to resign.

Operating Earnings	**Pre-Tax**	**Earnings**	**Berkshire**	**Share**
(000s omitted)	**1989**	**1988**	**1989**	**1988**
Insurance Group:				
Underwriting	$(24,400)	$(11,081)	$(12,259)	$(1,045)
Net investment income	243,599	231,250	213,642	197,779
Buffalo News	46,047	42,429	27,771	25,462
Fechheimer	12,621	14,152	6,789	7,720
Kirby	26,114	26,891	16,803	17,842
Nebraska Furniture Mart	17,070	18,439	8,441	9,099
Scott Fetzer – Manufacturing Group	33,165	28,542	19,996	17,640
See's Candies	34,235	32,473	20,626	19,671
Wesco – other than Insurance	13,008	16,133	9,810	10,650
World Book	25,583	27,890	16,372	18,021
Amortization of Goodwill	(3,387)	(2,806)	(3,372)	(2,806)
Other Purchase Price Accounting charges	(5,740)	(6,342)	(6,668)	(7,340)
Interest Expense*	(42,389)	(35,613)	(27,098)	(23,212)
Shareholder-Designated Contributions	(5,867)	(4,966)	(3,814)	(3,217)
Other	23,755	41,059	12,863	27,177
Operating Earnings	393,414	418,450	299,902	313,441
Sales of Securities	223,810	131,671	147,575	85,829
Total Earnings- all entities	**$617,224**	**$550,121**	**$447,477**	**$399,270**

**Excludes interest expense of Scott Fetzer Financial Group and Mutual Savings & Loan.*

We refer you also to pages 45-51, where we have rearranged Berkshire's financial data into four segments. These correspond to the way Charlie and I think about the business and should help you calculate Berkshire's intrinsic value. Shown on these pages are balance sheets and

earnings statements for: (1) our insurance operations, with their major investment positions itemized; (2) our manufacturing, publishing and retailing businesses, leaving aside certain non-operating assets and purchase-price accounting adjustments; (3) our subsidiaries engaged in finance-type operations, which are Mutual Savings and Scott Fetzer Financial; and (4) an all-other category that includes the non-operating assets (primarily marketable securities) held by the companies in segment (2), all purchase price accounting adjustments, and various assets and debts of the Wesco and Berkshire parent companies.

If you combine the earnings and net worths of these four segments, you will derive totals matching those shown on our GAAP statements. However, I want to emphasize that this four-category presentation does not fall within the purview of our auditors, who in no way bless it.

In addition to our reported earnings, we also benefit from significant earnings of investees that standard accounting rules do not permit us to report. On page 15, we list five major investees from which we received dividends in 1989 of about $45 million, after taxes. However, our share of the *retained* earnings
of these investees totaled about $212 million last year, not counting large capital gains realized by GEICO and Coca-Cola. If this $212 million had been distributed to us, our own operating earnings, after the payment of additional taxes, would have been close to $500 million rather than the $300 million shown in the table.

The question you must decide is whether these undistributed earnings are as valuable to us as those we report. We believe they are - and even think they may be more valuable. The reason for this a-bird-in-the-bush-may-be-worth-two-in-the-hand conclusion is that earnings retained by these investees will be deployed by talented, owner-oriented managers who sometimes have better uses for these funds in their own businesses than we would have in ours. I would not make such a generous assessment of most managements, but it is appropriate in these cases.

In our view, Berkshire's fundamental earning power is best measured by a "look-through" approach, in which we append our share of the operating earnings retained by our investees to our own reported operating earnings, excluding capital gains in both instances. For our intrinsic business value to grow at an average of 15% per year, our "look-through" earnings must grow at about the same pace. We'll need plenty of help from our present investees, and also need to add a new one from time to time, in order to reach this 15% goal.

Non-Insurance Operations

In the past, we have labeled our major manufacturing, publishing and retail operations "The Sainted Seven." With our acquisition of Borsheim's early in 1989, the challenge was to find a new title both alliterative and appropriate. We failed: Let's call the group "The Sainted Seven Plus One."

This divine assemblage - Borsheim's, The Buffalo News, Fechheimer Bros., Kirby, Nebraska Furniture Mart, Scott Fetzer Manufacturing Group, See's Candies, World Book - is a collection of businesses with economic characteristics that range from good to superb. Its managers range from superb to superb.

Most of these managers have no need to work for a living; they show up at the ballpark because they like to hit home runs. And that's exactly what they do. Their combined financial statements (including those of some smaller operations), shown on page 49, illustrate just how outstanding their performance is. On an historical accounting basis, after-tax earnings of these operations were 57% on average equity capital. Moreover, this return was achieved with no net leverage: Cash equivalents have matched funded debt. When I call off the names of our managers - the Blumkin, Friedman and Heldman families, Chuck Huggins, Stan Lipsey, and Ralph Schey - I feel the same glow that Miller Huggins must have experienced when he announced the lineup of his 1927 New York Yankees.

Let's take a look, business by business:

o In its first year with Berkshire, Borsheim's met all expectations. Sales rose significantly and are now considerably better than twice what they were four years ago when the company moved to its present location. In the six years prior to the move, sales had also doubled. Ike Friedman, Borsheim's managing genius - and I mean that - has only one speed: fast-forward.

If you haven't been there, you've never seen a jewelry store like Borsheim's. Because of the huge volume it does at one location, the store can maintain an enormous selection across all price ranges. For the same reason, it can hold its expense ratio to about one-third that prevailing at jewelry stores offering comparable merchandise. The store's tight control of expenses, accompanied by its unusual buying power, enable it to offer prices far lower than those of other jewelers. These prices, in turn, generate even more volume, and so the circle goes 'round and 'round. The end result is store traffic as high as 4,000 people on seasonally-busy days.

Ike Friedman is not only a superb businessman and a great showman but also a man of integrity. We bought the business without an audit, and all of our surprises have been on the plus

side. "If you don't know jewelry, know your jeweler" makes sense whether you are buying the whole business or a tiny diamond.

A story will illustrate why I enjoy Ike so much: Every two years I'm part of an informal group that gathers to have fun and explore a few subjects. Last September, meeting at Bishop's Lodge in Santa Fe, we asked Ike, his wife Roz, and his son Alan to come by and educate us on jewels and the jewelry business.

Ike decided to dazzle the group, so he brought from Omaha about $20 million of particularly fancy merchandise. I was somewhat apprehensive - Bishop's Lodge is no Fort Knox - and I mentioned my concern to Ike at our opening party the evening before his presentation. Ike took me aside. "See that safe?" he said. "This afternoon we changed the combination and now even the hotel management doesn't know what it is." I breathed easier. Ike went on: "See those two big fellows with guns on their hips? They'll be guarding the safe all night." I now was ready to rejoin the party. But Ike leaned closer: "And besides, Warren," he confided, "the jewels aren't in the safe."

How can we miss with a fellow like that - particularly when he comes equipped with a talented and energetic family, Alan, Marvin Cohn, and Don Yale.

o At See's Candies we had an 8% increase in pounds sold, even though 1988 was itself a record year. Included in the 1989 performance were excellent same-store poundage gains, our first in many years.

Advertising played an important role in this outstanding performance. We increased total advertising expenditures from $4 million to $5 million and also got copy from our agency, Hal Riney & Partners, Inc., that was 100% on the money in conveying the qualities that make See's special.

In our media businesses, such as the Buffalo News, we sell advertising. In other businesses, such as See's, we are buyers. When we buy, we practice exactly what we preach when we sell. At See's, we more than tripled our expenditures on newspaper advertising last year, to the highest percentage of sales that I can remember. The payoff was terrific, and we thank both Hal Riney and the power of well-directed newspaper advertising for this result.

See's splendid performances have become routine. But there is nothing routine about the management of Chuck Huggins: His daily involvement with all aspects of production and sales

imparts a quality-and-service message to the thousands of employees we need to produce and distribute over 27 million pounds of candy annually. In a company with 225 shops and a massive mail order and phone business, it is no small trick to run things so that virtually every customer leaves happy. Chuck makes it look easy.

o The Nebraska Furniture Mart had record sales and excellent earnings in 1989, but there was one sad note. Mrs. B - Rose Blumkin, who started the company 52 years ago with $500 - quit in May, after disagreeing with other members of the Blumkin family/management about the remodeling and operation of the carpet department.

Mrs. B probably has made more smart business decisions than any living American, but in this particular case I believe the other members of the family were entirely correct: Over the past three years, while the store's other departments increased sales by 24%, carpet sales declined by 17% (but not because of any lack of sales ability by Mrs. B, who has always personally sold far more merchandise than any other salesperson in the store).

You will be pleased to know that Mrs. B continues to make Horatio Alger's heroes look like victims of tired blood. At age 96 she has started a new business selling - what else? - carpet and furniture. And as always, she works seven days a week.

At the Mart Louie, Ron, and Irv Blumkin continue to propel what is by far the largest and most successful home furnishings store in the country. They are outstanding merchants, outstanding managers, and a joy to be associated with. One reading on their acumen: In the fourth quarter of 1989, the carpet department registered a 75.3% consumer share in the Omaha market, up from 67.7% a year earlier and over six times that of its nearest competitor.

NFM and Borsheim's follow precisely the same formula for success: (1) unparalleled depth and breadth of merchandise at one location; (2) the lowest operating costs in the business; (3) the shrewdest of buying, made possible in part by the huge volumes purchased; (4) gross margins, and therefore prices, far below competitors'; and (5) friendly personalized service with family members on hand at all times.

Another plug for newspapers: NFM increased its linage in the local paper by over 20% in 1989 - off a record 1988 - and remains the paper's largest ROP advertiser by far. (ROP advertising is the kind printed in the paper, as opposed to that in preprinted inserts.) To my knowledge, Omaha is the only city in which a home furnishings store is the advertising leader.

Many retailers cut space purchases in 1989; our experience at See's and NFM would indicate they made a major mistake.

o The Buffalo News continued to star in 1989 in three important ways: First, among major metropolitan papers, both daily and Sunday, the News is number one in household penetration - the percentage of local households that purchase it each day. Second, in "news hole" - the portion of the paper devoted to news - the paper stood at 50.1% in 1989 vs. 49.5% in 1988, a level again making it more news-rich than any comparable American paper. Third, in a year that saw profits slip at many major papers, the News set its seventh consecutive profit record.

To some extent, these three factors are related, though obviously a high-percentage news hole, by itself, reduces profits significantly. A large and intelligently-utilized news hole, however, attracts a wide spectrum of readers and thereby boosts penetration. High penetration, in turn, makes a newspaper particularly valuable to retailers since it allows them to talk to the entire community through a single "megaphone." A low-penetration paper is a far less compelling purchase for many advertisers and will eventually suffer in both ad rates and profits.

It should be emphasized that our excellent penetration is neither an accident nor automatic. The population of Erie County, home territory of the News, has been falling - from 1,113,000 in 1970 to 1,015,000 in 1980 to an estimated 966,000 in 1988. Circulation figures tell a different story. In 1975, shortly before we started our Sunday edition, the Courier-Express, a long-established Buffalo paper, was selling 207,500 Sunday copies in Erie County. Last year - with population at least 5% lower - the News sold an average of 292,700 copies. I believe that in no other major Sunday market has there been anything close to that increase in penetration.

When this kind of gain is made - and when a paper attains an unequaled degree of acceptance in its home town - someone is doing something right. In this case major credit clearly belongs to Murray Light, our long-time editor who daily creates an informative, useful, and interesting product. Credit should go also to the Circulation and Production Departments: A paper that is frequently late, because of production problems or distribution weaknesses, will lose customers, no matter how strong its editorial content.

Stan Lipsey, publisher of the News, has produced profits fully up to the strength of our product. I believe Stan's managerial skills deliver at least five extra percentage points in profit margin compared to the earnings that would be achieved by an average manager given the same

circumstances. That is an amazing performance, and one that could only be produced by a talented manager who knows - and cares - about every nut and bolt of the business.

Stan's knowledge and talents, it should be emphasized, extend to the editorial product. His early years in the business were spent on the news side and he played a key role in developing and editing a series of stories that in 1972 won a Pulitzer Prize for the Sun Newspaper of Omaha. Stan and I have worked together for over 20 years, through some bad times as well as good, and I could not ask for a better partner.

o At Fechheimer, the Heldman clan - Bob, George, Gary, Roger and Fred - continue their extraordinary performance. Profits in 1989 were down somewhat because of problems the business experienced in integrating a major 1988 acquisition. These problems will be ironed out in time. Meanwhile, return on invested capital at Fechheimer remains splendid.

Like all of our managers, the Heldmans have an exceptional command of the details of their business. At last year's annual meeting I mentioned that when a prisoner enters San Quentin, Bob and George probably know his shirt size. That's only a slight exaggeration: No matter what area of the country is being discussed, they know exactly what is going on with major customers and with the competition.

Though we purchased Fechheimer four years ago, Charlie and I have never visited any of its plants or the home office in Cincinnati. We're much like the lonesome Maytag repairman: The Heldman managerial product is so good that a service call is never needed.

o Ralph Schey continues to do a superb job in managing our largest group - World Book, Kirby, and the Scott Fetzer Manufacturing Companies. Aggregate earnings of these businesses have increased every year since our purchase and returns on invested capital continue to be exceptional. Ralph is running an enterprise large enough, were it standing alone, to be on the Fortune 500. And he's running it in a fashion that would put him high in the top decile, measured by return on equity.

For some years, World Book has operated out of a single location in Chicago's Merchandise Mart. Anticipating the imminent expiration of its lease, the business is now decentralizing into four locations. The expenses of this transition are significant; nevertheless profits in 1989 held up well. It will be another year before costs of the move are fully behind us.

Kirby's business was particularly strong last year, featuring large gains in export sales. International business has more than doubled in the last two years and quintupled in the past

four; its share of unit sales has risen from 5% to 20%. Our largest capital expenditures in 1989 were at Kirby, in preparation for a major model change in 1990.

Ralph's operations contribute about 40% of the total earnings of the non-insurance group whose results are shown on page 49. When we bought Scott Fetzer at the start of 1986, our acquisition of Ralph as a manager was fully as important as our acquisition of the businesses. In addition to generating extraordinary earnings, Ralph also manages capital extremely well. These abilities have produced funds for Berkshire that, in turn, have allowed us to make many other profitable commitments.

And that completes our answer to the 1927 Yankees.

Insurance Operations

Shown below is an updated version of our usual table presenting key figures for the property-casualty insurance industry:

Year	Yearly Change in Premiums Written (%)	Statutory Combined Ratio after Policyholder Dividends	Yearly Change in Incurred Losses (%)	Inflation Rate Measured by GNP Deflator (%)
1981	3.8	106.0	6.5	9.6
1982	4.4	109.8	8.4	6.4
1983	4.6	112.0	6.8	3.9
1984	9.2	117.9	16.9	3.8
1985	22.1	116.5	16.1	3.3
1986	22.2	108.0	13.5	2.7
1987	9.4	104.6	7.8	3.1
1988	4.4	105.4	5.5	3.3
1989 (Est.)	2.1	110.4	8.7	4.2

Source: A.M. Best Co.

The combined ratio represents total insurance costs (losses incurred plus expenses) compared to revenue from premiums: A ratio below 100 indicates an underwriting profit, and one above 100 indicates a loss. When the investment income that an insurer earns from holding policyholders' funds ("the float") is taken into account, a combined ratio in the 107-111 range typically produces an overall breakeven result, exclusive of earnings on the funds provided by shareholders.

For the reasons laid out in previous reports, we expect the industry's incurred losses to grow by about 10% annually, even in years when general inflation runs considerably lower. (Actually, over the last 25 years, incurred losses have grown at a still faster rate, 11%.) If premium growth meanwhile materially lags that 10% rate, underwriting losses will mount, though the industry's tendency to underreserve when business turns bad may obscure their size for a time.

Last year we said the climb in the combined ratio was "almost certain to continue - and probably will accelerate - for at least two more years." This year we will not predict acceleration, but otherwise must repeat last year's forecast. Premium growth is running far below the 10% required annually. Remember also that a 10% rate would only stabilize the combined ratio, not bring it down.

The increase in the combined ratio in 1989 was a little more than we had expected because catastrophes (led by Hurricane Hugo) were unusually severe. These abnormalities probably accounted for about two points of the increase. If 1990 is more of a "normal" year, the combined ratio should rise only minimally from the catastrophe-swollen base of 1989. In 1991, though, the ratio is apt to climb by a greater degree.

Commentators frequently discuss the "underwriting cycle" and speculate about its next turn. If that term is used to connote rhythmic qualities, it is in our view a misnomer that leads to faulty thinking about the industry's fundamental economics.

The term was appropriate some decades ago when the industry and regulators cooperated to conduct the business in cartel fashion. At that time, the combined ratio fluctuated rhythmically for two reasons, both related to lags. First, data from the past were analyzed and then used to set new "corrected" rates, which were subsequently put into effect by virtually all insurers. Second, the fact that almost all policies were then issued for a one-to three-year term - which meant that it took a considerable time for mispriced policies to expire - delayed the impact of new rates on revenues. These two lagged responses made combined ratios behave much like

alternating current. Meanwhile, the absence of significant price competition guaranteed that industry profits, averaged out over the cycle, would be satisfactory.

The cartel period is long gone. Now the industry has hundreds of participants selling a commodity-like product at independently-established prices. Such a configuration - whether the product being sold is steel or insurance policies - is certain to cause subnormal profitability in all circumstances but one: a shortage of usable capacity. Just how often these periods occur and how long they last determines the average profitability of the industry in question.

In most industries, capacity is described in physical terms. In the insurance world, however, capacity is customarily described in financial terms; that is, it's considered appropriate for a company to write no more than X dollars of business if it has Y dollars of net worth. In practice, however, constraints of this sort have proven ineffective. Regulators, insurance brokers, and customers are all slow to discipline companies that strain their resources. They also acquiesce when companies grossly overstate their true capital. Hence, a company can write a great deal of business with very little capital if it is so inclined. At bottom, therefore, the amount of industry capacity at any particular moment primarily depends on the mental state of insurance managers.

All this understood, it is not very difficult to prognosticate the industry's profits. Good profits will be realized only when there is a shortage of capacity. Shortages will occur only when insurers are frightened. That happens rarely - and most assuredly is not happening now.

Some analysts have argued that the more onerous taxes recently imposed on the insurance industry and 1989's catastrophes - Hurricane Hugo and the California earthquake - will cause prices to strengthen significantly. We disagree. These adversities have not destroyed the eagerness of insurers to write business at present prices. Therefore, premium volume won't grow by 10% in 1990, which means the negative underwriting trend will not reverse.

The industry will meantime say it needs higher prices to achieve profitability matching that of the average American business. Of course it does. So does the steel business. But needs and desires have nothing to do with the long-term profitability of industries. Instead, economic fundamentals determine the outcome. Insurance profitability will improve only when virtually all insurers are turning away business *despite* higher prices. And we're a long way from that point.

Berkshire's premium volume may drop to $150 million or so in 1990 (from a high of $1 billion in 1986), partly because our traditional business continues to shrink and partly because the contract under which we received 7% of the business of Fireman's Fund expired last August.

Whatever the size of the drop, it will not disturb us. We have no interest in writing insurance that carries a mathematical expectation of loss; we experience enough disappointments doing transactions we believe to carry an expectation of profit.

However, our appetite for appropriately-priced business is ample, as one tale from 1989 will tell. It concerns "CAT covers," which are reinsurance contracts that primary insurance companies (and also reinsurers themselves) buy to protect themselves against a single catastrophe, such as a tornado or hurricane, that produces losses from a large number of policies. In these contracts, the primary insurer might retain the loss from a single event up to a maximum of, say, $10 million, buying various layers of reinsurance above that level. When losses exceed the retained amount, the reinsurer typically pays 95% of the excess up to its contractual limit, with the primary insurer paying the remainder. (By requiring the primary insurer to keep 5% of each layer, the reinsurer leaves him with a financial stake in each loss settlement and guards against his throwing away the reinsurer's money.)

CAT covers are usually one-year policies that also provide for one automatic reinstatement, which requires a primary insurer whose coverage has been exhausted by a catastrophe to buy a second cover for the balance of the year in question by paying another premium. This provision protects the primary company from being "bare" for even a brief period after a first catastrophic event. The duration of "an event" is usually limited by contract to any span of 72 hours designated by the primary company. Under this definition, a wide-spread storm, causing damage for three days, will be classified as a single event if it arises from a single climatic cause. If the storm lasts four days, however, the primary company will file a claim carving out the 72 consecutive hours during which it suffered the greatest damage. Losses that occurred outside that period will be treated as arising from a separate event.

In 1989, two unusual things happened. First, Hurricane Hugo generated $4 billion or more of insured loss, at a pace, however, that caused the vast damage in the Carolinas to occur slightly more than 72 hours after the equally severe damage in the Caribbean. Second, the California earthquake hit within weeks, causing insured damage that was difficult to estimate, even well after the event. Slammed by these two - or possibly three - major catastrophes, some primary insurers, and also many reinsurers that had themselves bought CAT protection, either used up their automatic second cover or became uncertain as to whether they had done so.

At that point sellers of CAT policies had lost a huge amount of money - perhaps twice because of the reinstatements - and not taken in much in premiums. Depending upon many variables, a CAT premium might generally have run 3% to 15% of the amount of protection purchased. For some years, we've thought premiums of that kind inadequate and have stayed away from the business.

But because the 1989 disasters left many insurers either actually or possibly bare, and also left most CAT writers licking their wounds, there was an immediate shortage after the earthquake of much-needed catastrophe coverage. Prices instantly became attractive, particularly for the reinsurance that CAT writers themselves buy. Just as instantly, Berkshire Hathaway offered to write up to $250 million of catastrophe coverage, advertising that proposition in trade publications. Though we did not write all the business we sought, we did in a busy ten days book a substantial amount.

Our willingness to put such a huge sum on the line for a loss that could occur tomorrow sets us apart from any reinsurer in the world. There are, of course, companies that sometimes write $250 million or even far more of catastrophe coverage. But they do so only when they can, in turn, reinsure a large percentage of the business with other companies. When they can't "lay off" in size, they disappear from the market.

Berkshire's policy, conversely, is to retain the business we write rather than lay it off. When rates carry an expectation of profit, we want to assume as much risk as is prudent. And in our case, that's a lot.

We will accept more reinsurance risk for our own account than any other company because of two factors: (1) by the standards of regulatory accounting, we have a net worth in our insurance companies of about $6 billion - the second highest amount in the United States; and (2) we simply don't care what earnings we report quarterly, or even annually, just as long as the decisions leading to those earnings (or losses) were reached intelligently.

Obviously, if we write $250 million of catastrophe coverage and retain it all ourselves, there is some probability that we will lose the full $250 million in a single quarter. That probability is low, but it is not zero. If we had a loss of that magnitude, our after-tax cost would be about $165 million. Though that is far more than Berkshire normally earns in a quarter, the damage would be a blow only to our pride, not to our well-being.

This posture is one few insurance managements will assume. Typically, they are willing to write scads of business on terms that almost guarantee them mediocre returns on equity. But they do not want to expose themselves to an embarrassing single-quarter loss, even if the managerial strategy that causes the loss promises, over time, to produce superior results. I can understand their thinking: What is best for their owners is not necessarily best for the managers. Fortunately Charlie and I have both total job security and financial interests that are identical with those of our shareholders. We are willing to *look* foolish as long as we don't feel we have *acted* foolishly.

Our method of operation, incidentally, makes us a stabilizing force in the industry. We add huge capacity when capacity is short and we become less competitive only when capacity is abundant. Of course, we don't follow this policy in the interest of stabilization - we follow it because we believe it to be the most sensible and profitable course of action. Nevertheless, our behavior steadies the market. In this case, Adam Smith's invisible hand works as advertised.

Currently, we hold an exceptional amount of float compared to premium volume. This circumstance should produce quite favorable insurance results for us during the next few years as it did in 1989. Our underwriting losses should be tolerable and our investment income from policyholder funds large. This pleasant situation, however, will gradually deteriorate as our float runs off.

At some point, however, there will be an opportunity for us to write large amounts of profitable business. Mike Goldberg and his management team of Rod Eldred, Dinos Iordanou, Ajit Jain, Phil Urban, and Don Wurster continue to position us well for this eventuality.

Marketable Securities

In selecting marketable securities for our insurance companies, we generally choose among five major categories: (1) long-term common stock investments, (2) medium-term fixed income securities, (3) long-term fixed income securities, (4) short-term cash equivalents, and (5) short-term arbitrage commitments.

We have no particular bias when it comes to choosing from these categories; we just continuously search among them for the highest after-tax returns as measured by "mathematical expectation," limiting ourselves always to investment alternatives we think we understand. Our criteria have nothing to do with maximizing immediately reportable earnings; our goal, rather, is to maximize eventual net worth.

o Below we list our common stock holdings having a value of over $100 million. A small portion of these investments belongs to subsidiaries of which Berkshire owns less than 100%.

Shares	Company	Cost (000's omitted)	Market (000's omitted)
3,000,000	Capital Cities/ABC, Inc.	$517,500	$1,692,375
23,350,000	The Coca-Cola Company	1,023,920	1,803,787
2,400,000	Federal Home Loan Mortgage Corporation Preferred*	71,729	161,100
6,850,000	GEICO Corporation.	45,713	1,044,625
1,727,765	The Washington Post Company	9,731	486,366

This list of companies is the same as last year's and in only one case has the number of shares changed: Our holdings of Coca-Cola increased from 14,172,500 shares at the end of 1988 to 23,350,000.

This Coca-Cola investment provides yet another example of the incredible speed with which your Chairman responds to investment opportunities, no matter how obscure or well-disguised they may be. I believe I had my first Coca-Cola in either 1935 or 1936. Of a certainty, it was in 1936 that I started buying Cokes at the rate of six for 25 cents from Buffett & Son, the family grocery store, to sell around the neighborhood for 5 cents each. In this excursion into high-margin retailing, I duly observed the extraordinary consumer attractiveness and commercial possibilities of the product.

I continued to note these qualities for the next 52 years as Coke blanketed the world. During this period, however, I carefully avoided buying even a single share, instead allocating major portions of my net worth to street railway companies, windmill manufacturers, anthracite producers, textile businesses, trading-stamp issuers, and the like. (If you think I'm making this up, I can supply the names.) Only in the summer of 1988 did my brain finally establish contact with my eyes.

What I then perceived was both clear and fascinating. After drifting somewhat in the 1970's, Coca-Cola had in 1981 become a new company with the move of Roberto Goizueta to CEO. Roberto, along with Don Keough, once my across-the-street neighbor in Omaha, first rethought

and focused the company's policies and then energetically carried them out. What was already the world's most ubiquitous product gained new momentum, with sales overseas virtually exploding.

Through a truly rare blend of marketing and financial skills, Roberto has maximized both the growth of his product and the rewards that this growth brings to shareholders. Normally, the CEO of a consumer products company, drawing on his natural inclinations or experience, will cause either marketing or finance to dominate the business at the expense of the other discipline. With Roberto, the mesh of marketing and finance is perfect and the result is a shareholder's dream.

Of course, we should have started buying Coke much earlier, soon after Roberto and Don began running things. In fact, if I had been thinking straight I would have persuaded my grandfather to sell the grocery store back in 1936 and put all of the proceeds into Coca-Cola stock. I've learned my lesson: My response time to the next glaringly attractive idea will be slashed to well under 50 years.

As I mentioned earlier, the yearend prices of our major investees were much higher relative to their intrinsic values than theretofore. While those prices may not yet cause nosebleeds, they are clearly vulnerable to a general market decline. A drop in their prices would not disturb us at all - it might in fact work to our eventual benefit - but it *would* cause at least a one-year reduction in Berkshire's net worth. We think such a reduction is almost certain in at least one of the next three years. Indeed, it would take only about a 10% year-to-year decline in the aggregate value of our portfolio investments to send Berkshire's net worth down.

We continue to be blessed with extraordinary managers at our portfolio companies. They are high-grade, talented, and shareholder-oriented. The exceptional results we have achieved while investing with them accurately reflect their exceptional personal qualities.

o We told you last year that we expected to do little in arbitrage during 1989, and that's the way it turned out. Arbitrage positions are a substitute for short-term cash equivalents, and during part of the year we held relatively low levels of cash. In the rest of the year we had a fairly good-sized cash position and even so chose not to engage in arbitrage. The main reason was corporate transactions that made no economic sense to us; arbitraging such deals comes too close to playing the greater-fool game. (As Wall Streeter Ray DeVoe says: "Fools rush in where angels

fear to trade.") We will engage in arbitrage from time to time - sometimes on a large scale - but only when we like the odds.

o Leaving aside the three convertible preferreds discussed in the next section, we substantially reduced our holdings in both medium- and long-term fixed-income securities. In the long-terms, just about our only holdings have been Washington Public Power Supply Systems (WPPSS) bonds carrying coupons ranging from low to high. During the year we sold a number of the low-coupon issues, which we originally bought at very large discounts. Many of these issues had approximately doubled in price since we purchased them and in addition had paid us 15%-17% annually, tax-free. Our prices upon sale were only slightly cheaper than typical high-grade tax-exempts then commanded. We have kept all of our high-coupon WPPSS issues. Some have been called for redemption in 1991 and 1992, and we expect the rest to be called in the early to mid-1990s.

We also sold many of our medium-term tax-exempt bonds during the year. When we bought these bonds we said we would be happy to sell them - regardless of whether they were higher or lower than at our time of purchase - if something we liked better came along. Something did - and concurrently we unloaded most of these issues at modest gains. Overall, our 1989 profit from the sale of tax-exempt bonds was about $51 million pre-tax.

o The proceeds from our bond sales, along with our excess cash at the beginning of the year and that generated later through earnings, went into the purchase of three convertible preferred stocks. In the first transaction, which took place in July, we purchased $600 million of The Gillette Co. preferred with an 8 3/4% dividend, a mandatory redemption in ten years, and the right to convert into common at $50 per share. We next purchased $358 million of USAir Group, Inc. preferred stock with mandatory redemption in ten years, a dividend of 9 1/4%, and the right to convert into common at $60 per share. Finally, late in the year we purchased $300 million of Champion International Corp. preferred with mandatory redemption in ten years, a 9 1/4% dividend, and the right to convert into common at $38 per share.

Unlike standard convertible preferred stocks, the issues we own are either non-salable or non-convertible for considerable periods of time and there is consequently no way we can gain from short-term price blips in the common stock. I have gone on the board of Gillette, but I am not on the board of USAir or Champion. (I thoroughly enjoy the boards I am on, but can't handle any more.)

Gillette's business is very much the kind we like. Charlie and I think we understand the company's economics and therefore believe we can make a reasonably intelligent guess about its future. (If you haven't tried Gillette's new Sensor razor, go right out and get one.) However, we have no ability to forecast the economics of the investment banking business (in which we have a position through our 1987 purchase of Salomon convertible preferred), the airline industry, or the paper industry. This does not mean that we predict a negative future for these industries: we're agnostics, not atheists. Our lack of strong convictions about these businesses, however, means that we must structure our investments in them differently from what we do when we invest in a business appearing to have splendid economic characteristics.

In one major respect, however, these purchases are not different: We only want to link up with people whom we like, admire, and trust. John Gutfreund at Salomon, Colman Mockler, Jr. at Gillette, Ed Colodny at USAir, and Andy Sigler at Champion meet this test in spades.

They in turn have demonstrated some confidence in us, insisting in each case that our preferreds have unrestricted voting rights on a fully-converted basis, an arrangement that is far from standard in corporate finance. In effect they are trusting us to be intelligent owners, thinking about tomorrow *instead* of today, just as we are trusting them to be intelligent managers, thinking about tomorrow *as well* as today.

The preferred-stock structures we have negotiated will provide a mediocre return for us if industry economics hinder the performance of our investees, but will produce reasonably attractive results for us if they can earn a return comparable to that of American industry in general. We believe that Gillette, under Colman's management, will far exceed that return and believe that John, Ed, and Andy will reach it unless industry conditions are harsh.

Under almost any conditions, we expect these preferreds to return us our money plus dividends. If that is all we get, though, the result will be disappointing, because we will have given up flexibility and consequently will have missed some significant opportunities that are bound to present themselves during the decade. Under that scenario, we will have obtained only a preferred-stock yield during a period when the typical preferred stock will have held no appeal for us whatsoever. The only way Berkshire can achieve satisfactory results from its four preferred issues is to have the common stocks of the investee companies do well.

Good management and at least tolerable industry conditions will be needed if that is to happen. But we believe Berkshire's investment will also help and that the other shareholders of

each investee will profit over the years ahead from our preferred-stock purchase. The help will come from the fact that each company now has a major, stable, and interested shareholder whose Chairman and Vice Chairman have, through Berkshire's investments, indirectly committed a very large amount of their own money to these undertakings. In dealing with our investees, Charlie and I will be supportive, analytical, and objective. We recognize that we are working with experienced CEOs who are very much in command of their own businesses but who nevertheless, at certain moments, appreciate the chance to test their thinking on someone without ties to their industry or to decisions of the past.

As a group, these convertible preferreds will not produce the returns we can achieve when we find a business with wonderful economic prospects that is unappreciated by the market. Nor will the returns be as attractive as those produced when we make our favorite form of capital deployment, the acquisition of 80% or more of a fine business with a fine management. But both opportunities are rare, particularly in a size befitting our present and anticipated resources.

In summation, Charlie and I feel that our preferred stock investments should produce returns moderately above those achieved by most fixed-income portfolios and that we can play a minor but enjoyable and constructive role in the investee companies.

Zero-Coupon Securities

In September, Berkshire issued $902.6 million principal amount of Zero-Coupon Convertible Subordinated Debentures, which are now listed on the New York Stock Exchange. Salomon Brothers handled the underwriting in superb fashion, providing us helpful advice and a flawless execution.

Most bonds, of course, require regular payments of interest, usually semi-annually. A zero-coupon bond, conversely, requires no current interest payments; instead, the investor receives his yield by purchasing the security at a significant discount from maturity value. The effective interest rate is determined by the original issue price, the maturity value, and the amount of time between issuance and maturity.

In our case, the bonds were issued at 44.314% of maturity value and are due in 15 years. For investors purchasing the bonds, that is the mathematical equivalent of a 5.5% current payment compounded semi-annually. Because we received only 44.31 cents on the dollar, our proceeds from this offering were $400 million (less about $9.5 million of offering expenses).

The bonds were issued in denominations of $10,000 and each bond is convertible into .4515 shares of Berkshire Hathaway. Because a $10,000 bond cost $4,431, this means that the conversion price was $9,815 per Berkshire share, a 15% premium to the market price then existing. Berkshire can call the bonds at any time after September 28, 1992 at their accreted value (the original issue price plus 5.5% compounded semi-annually) and on two specified days, September 28 of 1994 and 1999, the bondholders can require Berkshire to buy the securities at their accreted value.

For tax purposes, Berkshire is entitled to deduct the 5.5% interest accrual each year, even though we make no payments to the bondholders. Thus the net effect to us, resulting from the reduced taxes, is positive cash flow. That is a very significant benefit. Some unknowable variables prevent us from calculating our exact effective rate of interest, but under all circumstances it will be well below 5.5%. There is meanwhile a symmetry to the tax law: Any taxable holder of the bonds must pay tax each year on the 5.5% interest, even though he receives no cash.

Neither our bonds nor those of certain other companies that issued similar bonds last year (notably Loews and Motorola) resemble the great bulk of zero-coupon bonds that have been issued in recent years. Of these, Charlie and I have been, and will continue to be, outspoken critics. As I will later explain, such bonds have often been used in the most deceptive of ways and with deadly consequences to investors. But before we tackle that subject, let's travel back to Eden, to a time when the apple had not yet been bitten.

If you're my age you bought your first zero-coupon bonds during World War II, by purchasing the famous Series E U. S. Savings Bond, the most widely-sold bond issue in history. (After the war, these bonds were held by one out of two U. S. households.) Nobody, of course, called the Series E a zero-coupon bond, a term in fact that I doubt had been invented. But that's precisely what the Series E was.

These bonds came in denominations as small as $18.75. That amount purchased a $25 obligation of the United States government due in 10 years, terms that gave the buyer a compounded annual return of 2.9%. At the time, this was an attractive offer: the 2.9% rate was higher than that generally available on Government bonds and the holder faced no market-fluctuation risk, since he could at any time cash in his bonds with only a minor reduction in interest.

A second form of zero-coupon U. S. Treasury issue, also benign and useful, surfaced in the last decade. One problem with a normal bond is that even though it pays a given interest rate - say 10% - the holder cannot be assured that a compounded 10% return will be realized. For that rate to materialize, each semi-annual coupon must be reinvested at 10% as it is received. If current interest rates are, say, only 6% or 7% when these coupons come due, the holder will be unable to compound his money over the life of the bond at the advertised rate. For pension funds or other investors with long-term liabilities, "reinvestment risk" of this type can be a serious problem. Savings Bonds might have solved it, except that they are issued only to individuals and are unavailable in large denominations. What big buyers needed was huge quantities of "Savings Bond Equivalents."

Enter some ingenious and, in this case, highly useful investment bankers (led, I'm happy to say, by Salomon Brothers). They created the instrument desired by "stripping" the semi-annual coupons from standard Government issues. Each coupon, once detached, takes on the essential character of a Savings Bond since it represents a single sum due sometime in the future. For example, if you strip the 40 semi-annual coupons from a U. S. Government Bond due in the year 2010, you will have 40 zero-coupon bonds, with maturities from six months to 20 years, each of which can then be bundled with other coupons of like maturity and marketed. If current interest rates are, say, 10% for all maturities, the six-month issue will sell for 95.24% of maturity value and the 20-year issue will sell for 14.20%. The purchaser of any given maturity is thus guaranteed a compounded rate of 10% for his entire holding period. Stripping of government bonds has occurred on a large scale in recent years, as long-term investors, ranging from pension funds to individual IRA accounts, recognized these high-grade, zero-coupon issues to be well suited to their needs.

But as happens in Wall Street all too often, what the wise do in the beginning, fools do in the end. In the last few years zero-coupon bonds (and their functional equivalent, pay-in-kind bonds, which distribute additional PIK bonds semi-annually as interest instead of paying cash) have been issued in enormous quantities by ever-junkier credits. To these issuers, zero (or PIK) bonds offer one overwhelming advantage: It is impossible to default on a promise to pay nothing. Indeed, if LDC governments had issued no debt in the 1970's other than long-term zero-coupon obligations, they would now have a spotless record as debtors.

This principle at work - that you need not default for a long time if you solemnly promise to pay nothing for a long time - has not been lost on promoters and investment bankers seeking to finance ever-shakier deals. But its acceptance by lenders took a while: When the leveraged buy-out craze began some years back, purchasers could borrow only on a reasonably sound basis, in which conservatively-estimated *free* cash flow - that is, operating earnings plus depreciation and amortization less normalized capital expenditures - was adequate to cover both interest and modest reductions in debt.

Later, as the adrenalin of deal-makers surged, businesses began to be purchased at prices so high that all free cash flow necessarily had to be allocated to the payment of interest. That left nothing for the paydown of debt. In effect, a Scarlett O'Hara "I'll think about it tomorrow" position in respect to principal payments was taken by borrowers and accepted by a new breed of lender, the buyer of original-issue junk bonds. Debt now became something to be refinanced rather than repaid. The change brings to mind a *New Yorker* cartoon in which the grateful borrower rises to shake the hand of the bank's lending officer and gushes: "I don't know how I'll ever repay you."

Soon borrowers found even the new, lax standards intolerably binding. To induce lenders to finance even sillier transactions, they introduced an abomination, EBDIT - Earnings Before Depreciation, Interest and Taxes - as the test of a company's ability to pay interest. Using this sawed-off yardstick, the borrower ignored depreciation as an expense on the theory that it did not require a current cash outlay.

Such an attitude is clearly delusional. At 95% of American businesses, capital expenditures that over time roughly approximate depreciation are a necessity and are every bit as real an expense as labor or utility costs. Even a high school dropout knows that to finance a car he must have income that covers not only interest and operating expenses, but also realistically-calculated depreciation. He would be laughed out of the bank if he started talking about EBDIT.

Capital outlays at a business can be skipped, of course, in any given month, just as a human can skip a day or even a week of eating. But if the skipping becomes routine and is not made up, the body weakens and eventually dies. Furthermore, a start-and-stop feeding policy will over time produce a less healthy organism, human or corporate, than that produced by a steady diet. As businessmen, Charlie and I relish having competitors who are unable to fund capital expenditures.

You might think that waving away a major expense such as depreciation in an attempt to make a terrible deal look like a good one hits the limits of Wall Street's ingenuity. If so, you haven't been paying attention during the past few years. Promoters needed to find a way to justify even pricier acquisitions. Otherwise, they risked - heaven forbid! - losing deals to other promoters with more "imagination."

So, stepping through the Looking Glass, promoters and their investment bankers proclaimed that EBDIT should now be measured against cash interest only, which meant that interest accruing on zero-coupon or PIK bonds could be ignored when the financial feasibility of a transaction was being assessed. This approach not only relegated depreciation expense to the let's-ignore-it corner, but gave similar treatment to what was usually a significant portion of interest expense. To their shame, many professional investment managers went along with this nonsense, though they usually were careful to do so only with clients' money, not their own. (Calling these managers "professionals" is actually too kind; they should be designated "promotees.")

Under this new standard, a business earning, say, $100 million pre-tax and having debt on which $90 million of interest must be paid currently, might use a zero-coupon or PIK issue to incur another $60 million of annual interest that would accrue and compound but not come due for some years. The rate on these issues would typically be very high, which means that the situation in year 2 might be $90 million cash interest plus $69 million accrued interest, and so on as the compounding proceeds. Such high-rate reborrowing schemes, which a few years ago were appropriately confined to the waterfront, soon became models of modern finance at virtually all major investment banking houses.

When they make these offerings, investment bankers display their humorous side: They dispense income and balance sheet projections extending five or more years into the future for companies they barely had heard of a few months earlier. If you are shown such schedules, I suggest that you join in the fun: Ask the investment banker for the *one-year* budgets that his own firm prepared as the last few years began and then compare these with what actually happened.

Some time ago Ken Galbraith, in his witty and insightful *The Great Crash*, coined a new economic term: "the bezzle," defined as the current amount of undiscovered embezzlement. This

financial creature has a magical quality: The embezzlers are richer by the amount of the bezzle, while the embezzlees do not yet feel poorer.

Professor Galbraith astutely pointed out that this sum should be added to the National Wealth so that we might know the Psychic National Wealth. Logically, a society that wanted to *feel* enormously prosperous would both encourage its citizens to embezzle and try not to detect the crime. By this means, "wealth" would balloon though not an era of productive work had been done.

The satirical nonsense of the bezzle is dwarfed by the real-world nonsense of the zero-coupon bond. With zeros, one party to a contract can experience "income" without his opposite experiencing the pain of expenditure. In our illustration, a company capable of earning only $100 million dollars annually - and therefore capable of paying only that much in interest - magically creates "earnings" for bondholders of $150 million. As long as major investors willingly don their Peter Pan wings and repeatedly say "I believe," there is no limit to how much "income" can be created by the zero-coupon bond.

Wall Street welcomed this invention with the enthusiasm less-enlightened folk might reserve for the wheel or the plow. Here, finally, was an instrument that would let the Street make deals at prices no longer limited by actual earning power. The result, obviously, would be more transactions: Silly prices will always attract sellers. And, as Jesse Unruh might have put it, transactions are the mother's milk of finance.

The zero-coupon or PIK bond possesses one additional attraction for the promoter and investment banker, which is that the time elapsing between folly and failure can be stretched out. This is no small benefit. If the period before all costs must be faced is long, promoters can create a string of foolish deals - and take in lots of fees - before any chickens come home to roost from their earlier ventures.

But in the end, alchemy, whether it is metallurgical or financial, fails. A base business cannot be transformed into a golden business by tricks of accounting or capital structure. The man claiming to be a financial alchemist may become rich. But gullible investors rather than business achievements will usually be the source of his wealth.

Whatever their weaknesses, we should add, many zero-coupon and PIK bonds will not default. We have in fact owned some and may buy more if their market becomes sufficiently distressed. (We've not, however, even considered buying a new issue from a weak credit.) No

financial instrument is evil per se; it's just that some variations have far more potential for mischief than others.

The blue ribbon for mischief-making should go to the zero-coupon issuer unable to make its interest payments on a current basis. Our advice: Whenever an investment banker starts talking about EBDIT - or whenever someone creates a capital structure that does not allow all interest, both payable and accrued, to be comfortably met out of current cash flow *net of ample capital expenditures* - zip up your wallet. Turn the tables by suggesting that the promoter and his high-priced entourage accept zero-coupon fees, deferring their take until the zero-coupon bonds have been paid in full. See then how much enthusiasm for the deal endures.

Our comments about investment bankers may seem harsh. But Charlie and I - in our hopelessly old-fashioned way - believe that they should perform a gatekeeping role, guarding investors against the promoter's propensity to indulge in excess. Promoters, after all, have throughout time exercised the same judgment and restraint in accepting money that alcoholics have exercised in accepting liquor. At a minimum, therefore, the banker's conduct should rise to that of a responsible bartender who, when necessary, refuses the profit from the next drink to avoid sending a drunk out on the highway. In recent years, unfortunately, many leading investment firms have found bartender morality to be an intolerably restrictive standard. Lately, those who have traveled the high road in Wall Street have not encountered heavy traffic.

One distressing footnote: The cost of the zero-coupon folly will not be borne solely by the direct participants. Certain savings and loan associations were heavy buyers of such bonds, using cash that came from FSLIC-insured deposits. Straining to show splendid earnings, these buyers recorded - but did not receive - ultra-high interest income on these issues. Many of these associations are now in major trouble. Had their loans to shaky credits worked, the owners of the associations would have pocketed the profits. In the many cases in which the loans will fail, the taxpayer will pick up the bill. To paraphrase Jackie Mason, at these associations it was the managers who should have been wearing the ski masks.

Mistakes of the First Twenty-five Years (A Condensed Version)

To quote Robert Benchley, "Having a dog teaches a boy fidelity, perseverance, and to turn around three times before lying down." Such are the shortcomings of experience. Nevertheless, it's a good idea to review past mistakes before committing new ones. So let's take a quick look at the last 25 years.

o My first mistake, of course, was in buying control of Berkshire. Though I knew its business - textile manufacturing - to be unpromising, I was enticed to buy because the price looked cheap. Stock purchases of that kind had proved reasonably rewarding in my early years, though by the time Berkshire came along in 1965 I was becoming aware that the strategy was not ideal.

If you buy a stock at a sufficiently low price, there will usually be some hiccup in the fortunes of the business that gives you a chance to unload at a decent profit, even though the long-term performance of the business may be terrible. I call this the "cigar butt" approach to investing. A cigar butt found on the street that has only one puff left in it may not offer much of a smoke, but the "bargain purchase" will make that puff all profit.

Unless you are a liquidator, that kind of approach to buying businesses is foolish. First, the original "bargain" price probably will not turn out to be such a steal after all. In a difficult business, no sooner is one problem solved than another surfaces - never is there just one cockroach in the kitchen. Second, any initial advantage you secure will be quickly eroded by the low return that the business earns. For example, if you buy a business for $8 million that can be sold or liquidated for $10 million and promptly take either course, you can realize a high return. But the investment will disappoint if the business is sold for $10 million in ten years and in the interim has annually earned and distributed only a few percent on cost. Time is the friend of the wonderful business, the enemy of the mediocre.

You might think this principle is obvious, but I had to learn it the hard way - in fact, I had to learn it several times over. Shortly after purchasing Berkshire, I acquired a Baltimore department store, Hochschild Kohn, buying through a company called Diversified Retailing that later merged with Berkshire. I bought at a substantial discount from book value, the people were first-class, and the deal included some extras - unrecorded real estate values and a significant LIFO inventory cushion. How could I miss? So-o-o - three years later I was lucky to sell the business for about what I had paid. After ending our corporate marriage to Hochschild Kohn, I had memories like those of the husband in the country song, "My Wife Ran Away With My Best Friend and I Still Miss Him a Lot."

I could give you other personal examples of "bargain-purchase" folly but I'm sure you get the picture: It's far better to buy a wonderful company at a fair price than a fair company at a wonderful price. Charlie understood this early; I was a slow learner. But now, when buying

companies or common stocks, we look for first-class businesses accompanied by first-class managements.

o That leads right into a related lesson: Good jockeys will do well on good horses, but not on broken-down nags. Both Berkshire's textile business and Hochschild, Kohn had able and honest people running them. The same managers employed in a business with good economic characteristics would have achieved fine records. But they were never going to make any progress while running in quicksand.

I've said many times that when a management with a reputation for brilliance tackles a business with a reputation for bad economics, it is the reputation of the business that remains intact. I just wish I hadn't been so energetic in creating examples. My behavior has matched that admitted by Mae West: "I was Snow White, but I drifted."

o A further related lesson: Easy does it. After 25 years of buying and supervising a great variety of businesses, Charlie and I have *not* learned how to solve difficult business problems. What we have learned is to avoid them. To the extent we have been successful, it is because we concentrated on identifying one-foot hurdles that we could step over rather than because we acquired any ability to clear seven-footers.

The finding may seem unfair, but in both business and investments it is usually far more profitable to simply stick with the easy and obvious than it is to resolve the difficult. On occasion, tough problems *must* be tackled as was the case when we started our Sunday paper in Buffalo. In other instances, a great investment opportunity occurs when a marvelous business encounters a one-time huge, but solvable, problem as was the case many years back at both American Express and GEICO. Overall, however, we've done better by avoiding dragons than by slaying them.

o My most surprising discovery: the overwhelming importance in business of an unseen force that we might call "the institutional imperative." In business school, I was given no hint of the imperative's existence and I did not intuitively understand it when I entered the business world. I thought then that decent, intelligent, and experienced managers would automatically make rational business decisions. But I learned over time that isn't so. Instead, rationality frequently wilts when the institutional imperative comes into play.

For example: (1) As if governed by Newton's First Law of Motion, an institution will resist any change in its current direction; (2) Just as work expands to fill available time, corporate

projects or acquisitions will materialize to soak up available funds; (3) Any business craving of the leader, however foolish, will be quickly supported by detailed rate-of-return and strategic studies prepared by his troops; and (4) The behavior of peer companies, whether they are expanding, acquiring, setting executive compensation or whatever, will be mindlessly imitated.

Institutional dynamics, not venality or stupidity, set businesses on these courses, which are too often misguided. After making some expensive mistakes because I ignored the power of the imperative, I have tried to organize and manage Berkshire in ways that minimize its influence. Furthermore, Charlie and I have attempted to concentrate our investments in companies that appear alert to the problem.

o After some other mistakes, I learned to go into business only with people whom I like, trust, and admire. As I noted before, this policy of itself will not ensure success: A second-class textile or department-store company won't prosper simply because its managers are men that you would be pleased to see your daughter marry. However, an owner - or investor - can accomplish wonders if he manages to associate himself with such people in businesses that possess decent economic characteristics. Conversely, we do not wish to join with managers who lack admirable qualities, no matter how attractive the prospects of their business. We've never succeeded in making a good deal with a bad person.

o Some of my worst mistakes were not publicly visible. These were stock and business purchases whose virtues I understood and yet didn't make. It's no sin to miss a great opportunity outside one's area of competence. But I have passed on a couple of really big purchases that were served up to me on a platter and that I was fully capable of understanding. For Berkshire's shareholders, myself included, the cost of this thumb-sucking has been huge.

o Our consistently-conservative financial policies may appear to have been a mistake, but in my view were not. In retrospect, it is clear that significantly higher, though still conventional, leverage ratios at Berkshire would have produced considerably better returns on equity than the 23.8% we have actually averaged. Even in 1965, perhaps we could have judged there to be a 99% probability that higher leverage would lead to nothing but good. Correspondingly, we might have seen only a 1% chance that some shock factor, external or internal, would cause a conventional debt ratio to produce a result falling somewhere between temporary anguish and default.

We wouldn't have liked those 99:1 odds - and never will. A small chance of distress or disgrace cannot, in our view, be offset by a large chance of extra returns. If your actions are sensible, you are certain to get good results; in most such cases, leverage just moves things along faster. Charlie and I have never been in a big hurry: We enjoy the process far more than the proceeds - though we have learned to live with those also.

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We hope in another 25 years to report on the mistakes of the first 50. If we are around in 2015 to do that, you can count on this section occupying many more pages than it does here.

Miscellaneous

We hope to buy more businesses that are similar to the ones we have, and we can use some help. If you have a business that fits the following criteria, call me or, preferably, write.

Here's what we're looking for:

(1) Large purchases (at least $10 million of after-tax earnings),

(2) demonstrated consistent earning power (future projections are of little interest to us, nor are "turnaround" situations),

(3) businesses earning good returns on equity while employing little or no debt,

(4) management in place (we can't supply it),

(5) simple businesses (if there's lots of technology, we won't understand it),

(6) an offering price (we don't want to waste our time or that of the seller by talking, even preliminarily, about a transaction when price is unknown).

We will not engage in unfriendly takeovers. We can promise complete confidentiality and a very fast answer - customarily within five minutes - as to whether we're interested. We prefer to buy for cash, but will consider issuing stock when we receive as much in intrinsic business value as we give.

Our favorite form of purchase is one fitting the Blumkin-Friedman-Heldman mold. In cases like these, the company's owner-managers wish to generate significant amounts of cash, sometimes for themselves, but often for their families or inactive shareholders. At the same time, these managers wish to remain significant owners who continue to run their companies just as they have in the past. We think we offer a particularly good fit for owners with such objectives.

We invite potential sellers to check us out by contacting people with whom we have done business in the past.

Charlie and I frequently get approached about acquisitions that don't come close to meeting our tests: We've found that if you advertise an interest in buying collies, a lot of people will call hoping to sell you their cocker spaniels. Our interest in new ventures, turnarounds, or auction-like sales can best be expressed by a Goldwynism: "Please include me out."

Besides being interested in the purchase of businesses as described above, we are also interested in the negotiated purchase of large, but not controlling, blocks of stock comparable to those we hold in Capital Cities, Salomon, Gillette, USAir and Champion. Last year we said we had a special interest in large purchases of convertible preferreds. We still have an appetite of that kind, but it is limited since we now are close to the maximum position we feel appropriate for this category of investment.

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Two years ago, I told you about Harry Bottle, who in 1962 quickly cured a major business mess at the first industrial company I controlled, Dempster Mill Manufacturing (one of my "bargain" purchases) and who 24 years later had reappeared to again rescue me, this time from problems at K&W Products, a small Berkshire subsidiary that produces automotive compounds. As I reported, in short order Harry reduced capital employed at K&W, rationalized production, cut costs, and quadrupled profits. You might think he would then have paused for breath. But last year Harry, now 70, attended a bankruptcy auction and, for a pittance, acquired a product line that is a natural for K&W. That company's profitability may well be increased 50% by this coup. Watch this space for future bulletins on Harry's triumphs.

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With more than a year behind him of trading Berkshire's stock on the New York Stock Exchange, our specialist, Jim Maguire of Henderson Brothers, Inc. ("HBI"), continues his outstanding performance. Before we listed, dealer spreads often were 3% or more of market

price. Jim has maintained the spread at 50 points or less, which at current prices is well under 1%. Shareholders who buy or sell benefit significantly from this reduction in transaction costs.

Because we are delighted by our experience with Jim, HBI and the NYSE, I said as much in ads that have been run in a series placed by the NYSE. Normally I shun testimonials, but I was pleased in this instance to publicly compliment the Exchange.

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Last summer we sold the corporate jet that we purchased for $850,000 three years ago and bought another used jet for $6.7 million. Those of you who recall the mathematics of the multiplying bacteria on page 5 will understandably panic: If our net worth continues to increase at current rates, and the cost of replacing planes also continues to rise at the now-established rate of 100% compounded annually, it will not be long before Berkshire's entire net worth is consumed by its jet.

Charlie doesn't like it when I equate the jet with bacteria; he feels it's degrading to the bacteria. His idea of traveling in style is an air-conditioned bus, a luxury he steps up to only when bargain fares are in effect. My own attitude toward the jet can be summarized by the prayer attributed, apocryphally I'm sure, to St. Augustine as he contemplated leaving a life of secular pleasures to become a priest. Battling the conflict between intellect and glands, he pled: "Help me, Oh Lord, to become chaste - but not yet."

Naming the plane has not been easy. I initially suggested "The Charles T. Munger." Charlie countered with "The Aberration." We finally settled on "The Indefensible."

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About 96.9% of all eligible shares participated in Berkshire's 1989 shareholder-designated contributions program. Contributions made through the program were $5.9 million, and 2,550 charities were recipients.

We urge new shareholders to read the description of our shareholder-designated contributions program that appears on pages 52-53. If you wish to participate in future programs, we strongly urge that you immediately make sure your shares are registered in the name of the actual owner,

not in the nominee name of a broker, bank or depository. Shares not so registered on August 31, 1990 will be ineligible for the 1990 program.

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The annual meeting this year will take place at 9:30 a.m. on Monday, April 30, 1990. Attendance grew last year to about 1,000, very close to the seating capacity of the Witherspoon Hall at Joslyn Museum. So this year's meeting will be moved to the Orpheum Theatre, which is in downtown Omaha, about one-quarter of a mile from the Red Lion Hotel. The Radisson-Redick Tower, a much smaller but nice hotel, is located across the street from the Orpheum. Or you may wish to stay at the Marriott, which is in west Omaha, about 100 yards from Borsheim's. We will have buses at the Marriott that will leave at 8:30 and 8:45 for the meeting and return after it ends.

Charlie and I always enjoy the meeting, and we hope you can make it. The quality of our shareholders is reflected in the quality of the questions we get: We have never attended an annual meeting anywhere that features such a consistently high level of intelligent, owner-related questions.

An attachment to our proxy material explains how you can obtain the card you will need for admission to the meeting. Because weekday parking can be tight around the Orpheum, we have lined up a number of nearby lots for our shareholders to use. The attachment also contains information about them.

As usual, we will have buses to take you to Nebraska Furniture Mart and Borsheim's after the meeting and to take you to downtown hotels or to the airport later. I hope that you will allow plenty of time to fully explore the attractions of both stores. Those of you arriving early can visit the Furniture Mart any day of the week; it is open from 10 a.m. to 5:30 p.m. on Saturdays, and from noon to 5:30 p.m. on Sundays.

Borsheim's normally is closed on Sunday, but we will open for shareholders and their guests from noon to 6 p.m. on Sunday, April 29th. Ike likes to put on a show, and you can rely on him to produce something very special for our shareholders.

In this letter we've had a lot to say about rates of compounding. If you can bear having your own rate turn negative for a day - not a pretty thought, I admit - visit Ike on the 29th.

Warren E. Buffett

Chairman of the Board

March 2, 1990

1990 Letter

BERKSHIRE HATHAWAY INC.

To the Shareholders of Berkshire Hathaway Inc.:

Last year we made a prediction: "A reduction [in Berkshire's net worth] is almost certain in at least one of the next three years." During much of 1990's second half, we were on the road to quickly proving that forecast accurate. But some strengthening in stock prices late in the year enabled us to close 1990 with net worth up by $362 million, or 7.3%. Over the last 26 years (that is, since present management took over) our per-share book value has grown from $19.46 to $4,612.06, or at a rate of 23.2% compounded annually.

Our growth rate was lackluster in 1990 because our four major common stock holdings, in aggregate, showed little change in market value. Last year I told you that though these companies - Capital Cities/ABC, Coca-Cola, GEICO, and Washington Post - had fine businesses and superb managements, widespread recognition of these attributes had pushed the stock prices of the four to lofty levels. The market prices of the two media companies have since fallen significantly - for good reasons relating to evolutionary industry developments that I will discuss later - and the price of Coca-Cola stock has increased significantly for what I also believe are good reasons. Overall, yearend 1990 prices of our "permanent four," though far from enticing, were a bit more appealing than they were a year earlier.

Berkshire's 26-year record is meaningless in forecasting future results; so also, we hope, is the one-year record. We continue to aim for a 15% average annual gain in intrinsic value. But, as we never tire of telling you, this goal becomes ever more difficult to reach as our equity base, now $5.3 billion, increases.

If we do attain that 15% average, our shareholders should fare well. However, Berkshire's corporate gains will produce an identical gain for a specific shareholder only if he eventually sells his shares at the same relationship to intrinsic value that existed when he bought them. For example, if you buy at a 10% premium to intrinsic value; if intrinsic value subsequently grows at 15% a year; and if you then sell at a 10% premium, your own return will correspondingly be 15% compounded. (The calculation assumes that no dividends are paid.) If, however, you buy at a premium and sell at a smaller premium, your results will be somewhat inferior to those achieved by the company.

Ideally, the results of every Berkshire shareholder would closely mirror those of the company during his period of ownership. That is why Charlie Munger, Berkshire's Vice Chairman and my partner, and I hope for Berkshire to sell consistently at about intrinsic value. We prefer such steadiness to the value-ignoring volatility of the past two years: In 1989 intrinsic value grew less than did book value, which was up 44%, while the market price rose 85%; in 1990 book value and intrinsic value increased by a small amount, while the market price fell 23%.

Berkshire's intrinsic value continues to exceed book value by a substantial margin. We can't tell you the exact differential because intrinsic value is necessarily an estimate; Charlie and I might, in fact, differ by 10% in our appraisals. We do know, however, that we own some exceptional businesses that are worth considerably more than the values at which they are carried on our books.

Much of the extra value that exists in our businesses has been created by the managers now running them. Charlie and I feel free to brag about this group because we had nothing to do with developing the skills they possess: These superstars just came that way. Our job is merely to identify talented managers and provide an environment in which they can do their stuff. Having done it, they send their cash to headquarters and we face our only other task: the intelligent deployment of these funds.

My own role in operations may best be illustrated by a small tale concerning my granddaughter, Emily, and her fourth birthday party last fall. Attending were other children, adoring relatives, and Beemer the Clown, a local entertainer who includes magic tricks in his act.

Beginning these, Beemer asked Emily to help him by waving a "magic wand" over "the box of wonders." Green handkerchiefs went into the box, Emily waved the wand, and Beemer removed blue ones. Loose handkerchiefs went in and, upon a magisterial wave by Emily, emerged knotted. After four such transformations, each more amazing than its predecessor, Emily was unable to contain herself. Her face aglow, she exulted: "Gee, I'm really good at this."

And that sums up my contribution to the performance of Berkshire's business magicians - the Blumkins, the Friedman family, Mike Goldberg, the Heldmans, Chuck Huggins, Stan Lipsey and Ralph Schey. They deserve your applause.

Sources of Reported Earnings

The table below shows the major sources of Berkshire's reported earnings. In this presentation, amortization of Goodwill and other major purchase-price accounting adjustments are not charged against the specific businesses to which they apply, but are instead aggregated and shown separately. This procedure lets you view the earnings of our businesses as they would have been reported had we not purchased them. I've explained in past reports why this form of presentation seems to us to be more useful to investors and managers than one utilizing generally accepted accounting principles (GAAP), which require purchase-price adjustments to be made on a business-by-business basis. The total net earnings we show in the table are, of course, identical to the GAAP total in our audited financial statements.

Much additional information about these businesses is given on pages 39-46, where you also will find our segment earnings reported on a GAAP basis. For information on Wesco's businesses, I urge you to read Charlie Munger's letter, which

starts on page 56. His letter also contains the clearest and most insightful discussion of the banking industry that I have seen.

Operating Earnings (000s omitted)	**Pre-Tax 1990**	**Earnings 1989**	**Berkshire 1990**	**Share 1989**
Insurance Group: Underwriting	$(26,647)	$(24,400)	$(14,936)	$(12,259)
Net investment income	327,048	243,599	282,613	213,642
Buffalo News	43,954	46,047	25,981	27,771
Fechheimer	12,450	12,621	6,605	6,789
Kirby	27,445	26,114	17,613	16,803
Nebraska Furniture Mart	17,248	17,070	8,485	8,441
Scott Fetzer Manufacturing Group	30,378	33,165	18,458	19,996
See's Candies	39,580	34,235	23,892	20,626
Wesco – other than Insurance	12,441	13,008	9,679	9,810
World Book	31,896	25,583	20,420	16,372
Amortization of Goodwill	(3,476)	(3,387)	(3,461)	(3,372)
Other Purchase Price Accounting charges	(5,951)	(5,740)	(6,856)	(6,668)
Interest Expense*	(76,374)	(42,389)	(49,726)	(27,098)
Shareholder-Designated Contributions	(5,824)	(5,867)	(3,801)	(3,814)
Other	58,309	23,755	35,782	12,863
Operating Earnings	482,477	393,414	370,745	299,902
Sales of Securities	33,989	223,810	23,348	147,575
Total Earnings- All entities	**$516,466**	**$617,224**	**$394,093**	**$447,477**

**Excludes interest expense of Scott Fetzer Financial Group and Mutual Savings & Loan.*

We refer you also to pages 47-53, where we have rearranged Berkshire's financial data into four segments. These correspond to the way Charlie and I think about the business and should help you more in estimating Berkshire's intrinsic value than consolidated figures would do. Shown on these pages are balance sheets and earnings statements for: (1) our insurance operations, with their major investment positions

itemized; (2) our manufacturing, publishing and retailing businesses, leaving aside certain non- operating assets and purchase-price accounting adjustments; (3) our subsidiaries engaged in finance-type operations, which are Mutual Savings and Scott Fetzer Financial; and (4) an all-other category that includes the non-operating assets (primarily marketable securities) held by the companies in segment (2), all purchase-price accounting adjustments, and various assets and debts of the Wesco and Berkshire parent companies.

If you combine the earnings and net worths of these four segments, you will derive totals matching those shown on our GAAP statements. However, I want to emphasize that this four-category presentation does not fall within the purview of our auditors, who in no way bless it.

"Look-Through" Earnings

The term "earnings" has a precise ring to it. And when an earnings figure is accompanied by an unqualified auditor's certificate, a naive reader might think it comparable in certitude to pi, calculated to dozens of decimal places.

In reality, however, earnings can be as pliable as putty when a charlatan heads the company reporting them. Eventually truth will surface, but in the meantime a lot of money can change hands. Indeed, some important American fortunes have been created by the monetization of accounting mirages.

Funny business in accounting is not new. For connoisseurs of chicanery, I have attached as Appendix A on page 22 a previously unpublished satire on accounting practices written by Ben Graham in 1936. Alas, excesses similar to those he then lampooned have many times since found their way into the financial statements of major American corporations and been duly certified by big-name auditors. Clearly, investors must always keep their guard up and use accounting numbers as a beginning, not an end, in their attempts to calculate true "economic earnings" accruing to them.

Berkshire's own reported earnings are misleading in a different, but important, way: We have huge investments in companies ("investees") whose earnings far exceed their dividends and in which we record our share of earnings only to the extent of the dividends we receive. The extreme case is Capital Cities/ABC, Inc. Our 17% share of the company's earnings amounted to more than $83 million last year. Yet only about $530,000 ($600,000 of dividends it paid us less some $70,000 of tax) is counted in Berkshire's GAAP earnings. The residual $82 million-plus stayed with Cap Cities as retained earnings, which work for our benefit but go unrecorded on our books.

Our perspective on such "forgotten-but-not-gone" earnings is simple: The way they are accounted for is of no importance, but their ownership and subsequent utilization is all-important. We care not whether the auditors hear a tree fall in the forest; we do care who owns the tree and what's next done with it.

When Coca-Cola uses retained earnings to repurchase its shares, the company increases our percentage ownership in what I regard to be the most valuable franchise in the world. (Coke also, of course, uses retained earnings in many other value-enhancing ways.) Instead of repurchasing stock, Coca-Cola could pay those funds to us in dividends, which we could then use to purchase more Coke shares. That would be a less efficient scenario: Because of taxes we would pay on dividend income, we would not be able to increase our proportionate ownership to the degree that Coke can, acting for us. If this less efficient procedure were followed, however, Berkshire would report far greater "earnings."

I believe the best way to think about our earnings is in terms of "look-through" results, calculated as follows: Take $250 million, which is roughly our share of the 1990 operating earnings retained by our investees; subtract $30 million, for the incremental taxes we would have owed had that $250 million been paid to us in dividends; and add the remainder, $220 million, to our reported operating earnings of $371 million. Thus our 1990 "look-through earnings" were about $590 million.

As I mentioned last year, we hope to have look-through earnings grow about 15% annually. In 1990 we substantially exceeded that rate but in 1991 we will fall far short of it. Our Gillette preferred has been called and we will convert it into common stock on April 1. This will reduce reported earnings by about $35 million annually and look-through earnings by a much smaller, but still significant, amount. Additionally, our media earnings - both direct and look-through - appear sure to decline. Whatever the results, we will post you annually on how we are doing on a look-through basis.

Non-Insurance Operations

Take another look at the figures on page 51, which aggregate the earnings and balance sheets of our non-insurance operations. After-tax earnings on average equity in 1990 were 51%, a result that would have placed the group about 20th on the 1989 Fortune 500.

Two factors make this return even more remarkable. First, leverage did not produce it: Almost all our major facilities are owned, not leased, and such small debt as these operations have is basically offset by cash they hold. In fact, if the measurement was return on assets - a calculation that eliminates the effect of debt upon returns - our group would rank in Fortune's top ten.

Equally important, our return was not earned from industries, such as cigarettes or network television stations, possessing spectacular economics for all participating in them. Instead it came from a group of businesses operating in such prosaic fields as furniture retailing, candy, vacuum cleaners, and even steel warehousing. The explanation is clear: Our extraordinary returns flow from outstanding operating managers, not fortuitous industry economics.

Let's look at the larger operations:

o It was a poor year for retailing - particularly for big-ticket items - but someone forgot to tell Ike Friedman at Borsheim's. Sales were up 18%. That's both a same-stores and all-stores percentage, since Borsheim's operates but one establishment.

But, oh, what an establishment! We can't be sure about the fact (because most fine-jewelry retailers are privately owned) but we believe that this jewelry store does more volume than any other in the U.S., except for Tiffany's New York store.

Borsheim's could not do nearly that well if our customers came only from the Omaha metropolitan area, whose population is about 600,000. We have long had a huge percentage of greater Omaha's jewelry business, so growth in that market is necessarily limited. But every year business from non-Midwest customers grows dramatically. Many visit the store in person. A large number of others, however, buy through the mail in a manner you will find interesting.

These customers request a jewelry selection of a certain type and value - say, emeralds in the $10,000 -$20,000 range - and we then send them five to ten items meeting their specifications and from which they can pick. Last year we mailed about 1,500 assortments of all kinds, carrying values ranging from under $1,000 to hundreds of thousands of dollars.

The selections are sent all over the country, some to people no one at Borsheim's has ever met. (They must always have been well recommended, however.) While the number of mailings in 1990 was a record, Ike has been sending merchandise far and wide for decades. Misanthropes will be crushed to learn how well our "honor-system" works: We have yet to experience a loss from customer dishonesty.

We attract business nationwide because we have several advantages that competitors can't match. The most important item in the equation is our operating costs, which run about 18% of sales compared to 40% or so at the typical competitor. (Included in the 18% are occupancy and buying costs, which some public companies include in "cost of goods sold.") Just as Wal-Mart, with its 15% operating costs, sells

at prices that high-cost competitors can't touch and thereby constantly increases its market share, so does Borsheim's. What works with diapers works with diamonds.

Our low prices create huge volume that in turn allows us to carry an extraordinarily broad inventory of goods, running ten or more times the size of that at the typical fine-jewelry store. Couple our breadth of selection and low prices with superb service and you can understand how Ike and his family have built a national jewelry phenomenon from an Omaha location.

And family it is. Ike's crew always includes son Alan and sons-in-law Marvin Cohn and Donald Yale. And when things are busy - that's often - they are joined by Ike's wife, Roz, and his daughters, Janis and Susie. In addition, Fran Blumkin, wife of Louie (Chairman of Nebraska Furniture Mart and Ike's cousin), regularly pitches in. Finally, you'll find Ike's 89-year-old mother, Rebecca, in the store most afternoons, Wall Street Journal in hand. Given a family commitment like this, is it any surprise that Borsheim's runs rings around competitors whose managers are thinking about how soon 5 o'clock will arrive?

o While Fran Blumkin was helping the Friedman family set records at Borsheim's, her sons, Irv and Ron, along with husband Louie, were setting records at The Nebraska Furniture Mart. Sales at our one-and-only location were $159 million, up 4% from 1989. Though again the fact can't be conclusively proved, we believe NFM does close to double the volume of any other home furnishings store in the country.

The NFM formula for success parallels that of Borsheim's. First, operating costs are rock-bottom - 15% in 1990 against about 40% for Levitz, the country's largest furniture retailer, and 25% for Circuit City Stores, the leading discount retailer of electronics and appliances. Second, NFM's low costs allow the business to price well below all competitors. Indeed, major chains, knowing what they will face, steer clear of Omaha. Third, the huge volume generated by our bargain prices allows us to carry the broadest selection of merchandise available anywhere.

Some idea of NFM's merchandising power can be gleaned from a recent report of consumer behavior in Des Moines, which showed that NFM was Number 3 in popularity among 20 furniture retailers serving that city. That may sound like no big deal until you consider that 19 of those retailers are located in Des Moines, whereas our store is 130 miles away. This leaves customers driving a distance equal to that between Washington and Philadelphia in order to shop with us, even though they have a multitude of alternatives next door. In effect, NFM, like Borsheim's, has dramatically expanded the territory it serves - not by the traditional method of opening new stores but rather by creating an irresistible magnet that employs price and selection to pull in the crowds.

Last year at the Mart there occurred an historic event: I experienced a counterrevelation. Regular readers of this report know that I have long scorned the boasts of corporate executives about synergy, deriding such claims as the last refuge of scoundrels defending foolish acquisitions. But now I know better: In Berkshire's first synergistic explosion, NFM put a See's candy cart in the store late last year and sold more candy than that moved by some of the full-fledged stores See's operates in California. This success contradicts all tenets of retailing. With the Blumkins, though, the impossible is routine.

o At See's, physical volume set a record in 1990 - but only barely and only because of good sales early in the year. After the invasion of Kuwait, mall traffic in the West fell. Our poundage volume at Christmas dropped slightly, though our dollar sales were up because of a 5% price increase.

That increase, and better control of expenses, improved profit margins. Against the backdrop of a weak retailing environment, Chuck Huggins delivered outstanding results, as he has in each of the nineteen years we have owned See's. Chuck's imprint on the business - a virtual fanaticism about quality and service - is visible at all of our 225 stores.

One happening in 1990 illustrates the close bond between See's and its customers. After 15 years of operation, our store in Albuquerque was endangered: The landlord would not renew our lease, wanting us instead to move to an inferior location in the mall and even so to pay a much higher rent. These changes would have wiped out the store's profit. After extended negotiations got us nowhere, we set a date for closing the store.

On her own, the store's manager, Ann Filkins, then took action, urging customers to protest the closing. Some 263 responded by sending letters and making phone calls to See's headquarters in San Francisco, in some cases threatening to boycott the mall. An alert reporter at the Albuquerque paper picked up the story. Supplied with this evidence of a consumer uprising, our landlord offered us a satisfactory deal. (He, too, proved susceptible to a counterrevelation.)

Chuck subsequently wrote personal letters of thanks to every loyalist and sent each a gift certificate. He repeated his thanks in a newspaper ad that listed the names of all 263. The sequel: Christmas sales in Albuquerque were up substantially.

o Charlie and I were surprised at developments this past year in the media industry, including newspapers such as our Buffalo News. The business showed far more vulnerability to the early stages of a recession than has been the case in the past. The question is whether this erosion is just part of an aberrational cycle - to be fully made up in the next upturn - or whether the business has slipped in a way that permanently reduces intrinsic business values.

Since I didn't predict what *has* happened, you may question the value of my prediction about what *will* happen. Nevertheless, I'll proffer a judgment: While many media businesses will remain economic marvels in comparison with American industry generally, they will prove considerably less marvelous than I, the industry, or lenders thought would be the case only a few years ago.

The reason media businesses have been so outstanding in the past was not physical growth, but rather the unusual pricing power that most participants wielded. Now, however, advertising dollars are growing slowly. In addition, retailers that do little or no media advertising (though they sometimes use the Postal Service) have gradually taken market share in certain merchandise categories. Most important of all, the number of both print and electronic advertising channels has substantially increased. As a consequence, advertising dollars are more widely dispersed and the pricing power of ad vendors has diminished. These circumstances materially reduce the intrinsic value of our major media investments and also the value of our operating unit, Buffalo News - though all remain fine businesses.

Notwithstanding the problems, Stan Lipsey's management of the News continues to be superb. During 1990, our earnings held up much better than those of most metropolitan papers, falling only 5%. In the last few months of the year, however, the rate of decrease was far greater.

I can safely make two promises about the News in 1991: (1) Stan will again rank at the top among newspaper publishers; and (2) earnings will fall substantially. Despite a slowdown in the demand for newsprint, the price per ton will average significantly more in 1991 and the paper's labor costs will also be considerably higher. Since revenues may meanwhile be down, we face a real squeeze.

Profits may be off but our pride in the product remains. We continue to have a larger "news hole" - the portion of the paper devoted to news - than any comparable paper. In 1990, the proportion rose to 52.3% against 50.1% in 1989. Alas, the increase resulted from a decline in advertising pages rather than from a gain in news pages. Regardless of earnings pressures, we will maintain at least a 50% news hole. Cutting product quality is not a proper response to adversity.

o The news at Fechheimer, our manufacturer and retailer of uniforms, is all good with one exception: George Heldman, at 69, has decided to retire. I tried to talk him

out of it but he had one irrefutable argument: With four other Heldmans - Bob, Fred, Gary and Roger - to carry on, he was leaving us with an abundance of managerial talent.

Fechheimer's operating performance improved considerably in 1990, as many of the problems we encountered in integrating the large acquisition we made in 1988 were moderated or solved. However, several unusual items caused the earnings reported in the "Sources" table to be flat. In the retail operation, we continue to add stores and now have 42 in 22 states. Overall, prospects appear excellent for Fechheimer.

o At Scott Fetzer, Ralph Schey runs 19 businesses with a mastery few bring to running one. In addition to overseeing three entities listed on page 6 - World Book, Kirby, and Scott Fetzer Manufacturing - Ralph directs a finance operation that earned a record $12.2 million pre-tax in 1990.

Were Scott Fetzer an independent company, it would rank close to the top of the Fortune 500 in terms of return on equity, although it is not in businesses that one would expect to be economic champs. The superior results are directly attributable to Ralph.

At World Book, earnings improved on a small decrease in unit volume. The costs of our decentralization move were considerably less in 1990 than 1989 and the benefits of decentralization are being realized. World Book remains far and away the leader in United States encyclopedia sales and we are growing internationally, though from a small base.

Kirby unit volume grew substantially in 1990 with the help of our new vacuum cleaner, The Generation 3, which was an unqualified success. Earnings did not grow as fast as sales because of both start-up expenditures and "learning-curve" problems we encountered in manufacturing the new product. International business, whose

dramatic growth I described last year, had a further 20% sales gain in 1990. With the aid of a recent price increase, we expect excellent earnings at Kirby in 1991.

Within the Scott Fetzer Manufacturing Group, Campbell Hausfeld, its largest unit, had a particularly fine year. This company, the country's leading producer of small and medium-sized air compressors, achieved record sales of $109 million, more than 30% of which came from products introduced during the last five years.

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In looking at the figures for our non-insurance operations, you will see that net worth increased by only $47 million in 1990 although earnings were $133 million. This does not mean that our managers are in any way skimping on investments that strengthen their business franchises or that promote growth. Indeed, they diligently pursue both goals.

But they also never deploy capital without good reason. The result: In the past five years they have funneled well over 80% of their earnings to Charlie and me for use in new business and investment opportunities.

Insurance Operations

Shown below is an updated version of our usual table presenting key figures for the property-casualty insurance industry:

Year	Yearly Change in Premiums Written (%)	Statutory Combined Ratio after Policyholder Dividends	Yearly Change in Incurred Losses (%)	Inflation Rate Measured by GNP Deflator (%)
1981	3.8	106.0	6.5	9.6
1982	4.4	109.8	8.4	6.4
1983	4.6	112.0	6.8	3.9
1984	9.2	117.9	16.9	3.8
1985	22.1	116.5	16.1	3.3
1986	22.2	108.0	13.5	2.7
1987	9.4	104.6	7.8	3.1
1988	4.4	105.4	5.5	3.3
1989 (Revised)	3.2	109.2	7.7	4.1
1990 (Est.)	4.5	109.8	5.0	4.1

Source: A.M. Best Co.

The combined ratio represents total insurance costs (losses incurred plus expenses) compared to revenue from premiums: A ratio below 100 indicates an underwriting profit, and one above 100 indicates a loss. The higher the ratio, the worse the year. When the investment income that an insurer earns from holding policyholders' funds ("the float") is taken into account, a combined ratio in the 107 - 111 range typically produces an overall breakeven result, exclusive of earnings on the funds provided by shareholders.

For the reasons laid out in previous reports, we expect the industry's incurred losses to grow at an average of 10% annually, even in periods when general inflation runs considerably lower. (Over the last 25 years, incurred losses have in reality grown at a still faster rate, 11%.) If premium growth meanwhile materially lags that 10% rate, underwriting losses will mount, though the industry's tendency to under-reserve when business turns bad may obscure their size for a time.

Last year premium growth fell far short of the required 10% and underwriting results therefore worsened. (In our table, however, the severity of the deterioration in 1990 is masked because the industry's 1989 losses from Hurricane Hugo caused the ratio for that year to be somewhat above trendline.) The combined ratio will again increase in 1991, probably by about two points.

Results will improve only when most insurance managements become so fearful that they run from business, even though it can be done at much higher prices than now exist. At some point these managements will indeed get the message: The most important thing to do when you find yourself in a hole is to stop digging. But so far that point hasn't gotten across: Insurance managers continue to dig - sullenly but vigorously.

The picture would change quickly if a major physical or financial catastrophe were to occur. Absent such a shock, one to two years will likely pass before underwriting losses become large enough to raise management fear to a level that would spur major price increases. When that moment arrives, Berkshire will be ready - both financially and psychologically - to write huge amounts of business.

In the meantime, our insurance volume continues to be small but satisfactory. In the next section of this report we will give you a framework for evaluating insurance results. From that discussion, you will gain an understanding of why I am so enthusiastic about the performance of our insurance manager, Mike Goldberg, and his cadre of stars, Rod Eldred, Dinos Iordanou, Ajit Jain, and Don Wurster.

In assessing our insurance results over the next few years, you should be aware of one type of business we are pursuing that could cause them to be unusually volatile. If this line of business expands, as it may, our underwriting experience will deviate from the trendline you might expect: In most years we will somewhat exceed expectations and in an occasional year we will fall far below them.

The volatility I predict reflects the fact that we have become a large seller of insurance against truly major catastrophes ("super-cats"), which could for example be

hurricanes, windstorms or earthquakes. The buyers of these policies are reinsurance companies that themselves are in the business of writing catastrophe coverage for primary insurers and that wish to "lay off," or rid themselves, of part of their exposure to catastrophes of special severity. Because the need for these buyers to collect on such a policy will only arise at times of extreme stress - perhaps even chaos - in the insurance business, they seek financially strong sellers. And here we have a major competitive advantage: In the industry, our strength is unmatched.

A typical super-cat contract is complicated. But in a plain- vanilla instance we might write a one-year, $10 million policy providing that the buyer, a reinsurer, would be paid that sum only if a catastrophe caused two results: (1) specific losses for the reinsurer above a threshold amount; and (2) aggregate losses for the insurance industry of, say, more than $5 billion. Under virtually all circumstances, loss levels that satisfy the second condition will also have caused the first to be met.

For this $10 million policy, we might receive a premium of, say, $3 million. Say, also, that we take in annual premiums of $100 million from super-cat policies of all kinds. In that case we are very likely in any given year to report either a profit of close to $100 million or a loss of well over $200 million. Note that we are not spreading risk as insurers typically do; we are concentrating it. Therefore, our yearly combined ratio on this business will almost never fall in the industry range of 100 - 120, but will instead be close to either zero or 300%.

Most insurers are financially unable to tolerate such swings. And if they have the ability to do so, they often lack the desire. They may back away, for example, because they write gobs of primary property insurance that would deliver them dismal results at the very time they would be experiencing major losses on super- cat reinsurance. In addition, most corporate managements believe that their shareholders dislike volatility in results.

We can take a different tack: Our business in primary property insurance is small and we believe that Berkshire shareholders, if properly informed, can handle unusual

volatility in profits so long as the swings carry with them the prospect of superior long-term results. (Charlie and I always have preferred a lumpy 15% return to a smooth 12%.)

We want to emphasize three points: (1) While we expect our super-cat business to produce satisfactory results over, say, a decade, we're sure it will produce absolutely terrible results in at least an occasional year; (2) Our expectations can be based on little more than subjective judgments - for this kind of insurance, historical loss data are of very limited value to us as we decide what rates to charge today; and (3) Though we expect to write significant quantities of super-cat business, we will do so only at prices we believe to be commensurate with risk. If competitors become optimistic, our volume will fall. This insurance has, in fact, tended in recent years to be woefully underpriced; most sellers have left the field on stretchers.

At the moment, we believe Berkshire to be the largest U.S. writer of super-cat business. So when a major quake occurs in an urban area or a winter storm rages across Europe, light a candle for us.

Measuring Insurance Performance

In the previous section I mentioned "float," the funds of others that insurers, in the conduct of their business, temporarily hold. Because these funds are available to be invested, the typical property-casualty insurer can absorb losses and expenses that exceed premiums by 7% to 11% and still be able to break even on its business. Again, this calculation excludes the earnings the insurer realizes on net worth - that is, on the funds provided by shareholders.

However, many exceptions to this 7% to 11% range exist. For example, insurance covering losses to crops from hail damage produces virtually no float at all. Premiums on this kind of business are paid to the insurer just prior to the time hailstorms are a threat, and if a farmer sustains a loss he will be paid almost immediately. Thus, a combined ratio of 100 for crop hail insurance produces no profit for the insurer.

At the other extreme, malpractice insurance covering the potential liabilities of doctors, lawyers and accountants produces a very high amount of float compared to annual premium volume. The float materializes because claims are often brought long after the alleged wrongdoing takes place and because their payment may be still further delayed by lengthy litigation. The industry calls malpractice and certain other kinds of liability insurance "long- tail" business, in recognition of the extended period during which insurers get to hold large sums that in the end will go to claimants and their lawyers (and to the*insurer's* lawyers as well).

In long-tail situations a combined ratio of 115 (or even more) can prove profitable, since earnings produced by the float will exceed the 15% by which claims and expenses overrun premiums. The catch, though, is that "long-tail" means exactly that: Liability business written in a given year and presumed at first to have produced a combined ratio of 115 may eventually smack the insurer with 200, 300 or worse when the years have rolled by and all claims have finally been settled.

The pitfalls of this business mandate an operating principle that too often is ignored: Though certain long-tail lines may prove profitable at combined ratios of 110 or 115, insurers will invariably find it unprofitable to price using those ratios as targets. Instead, prices must provide a healthy margin of safety against the societal trends that are forever springing expensive surprises on the insurance industry. Setting a target of 100 can itself result in heavy losses; aiming for 110 - 115 is business suicide.

All of that said, what should the measure of an insurer's profitability be? Analysts and managers customarily look to the combined ratio - and it's true that this yardstick usually is a good indicator of where a company ranks in profitability. We believe a better measure, however, to be a comparison of underwriting loss to float developed.

This loss/float ratio, like any statistic used in evaluating insurance results, is meaningless over short time periods: Quarterly underwriting figures and even annual ones are too heavily based on estimates to be much good. But when the ratio takes in a

period of years, it gives a rough indication of the cost of funds generated by insurance operations. A low cost of funds signifies a good business; a high cost translates into a poor business.

On the next page we show the underwriting loss, if any, of our insurance group in each year since we entered the business and relate that bottom line to the average float we have held during the year. From this data we have computed a "cost of funds developed from insurance."

(in $ Millions)	(1) Underwriting Loss	(2) Average Float	Approximate Cost of Funds	Yearend Yield on Long-Term Govt. Bonds
1967	Profit	$17.3	< 0	5.50%
1968	Profit	19.9	< 0	5.90%
1969	Profit	23.4	< 0	6.79%
1970	$0.37	32.4	1.14%	6.25%
1971	Profit	52.5	< 0	5.81%
1972	Profit	69.5	< 0	5.82%
1973	Profit	73.3	< 0	7.27%
1974	7.36	79.1	9.30%	8.13%
1975	11.35	87.6	12.96%	8.03%
1976	Profit	102.6	< 0	7.30%
1977	Profit	139.0	< 0	7.97%
1978	Profit	190.4	< 0	8.93%
1979	Profit	227.3	< 0	10.08%
1980	Profit	237.0	< 0	11.94%
1981	Profit	228.4	< 0	13.61%
1982	21.56	220.6	9.77%	10.64%
1983	33.87	231.3	14.64%	11.84%
1984	48.06	253.2	18.98%	11.58%
1985	44.23	390.2	11.34%	9.34%
1986	55.84	797.5	7.00%	7.60%
1987	55.43	1,266.7	4.38%	8.95%
1988	11.08	1,497.7	0.74%	9.00%
1989	24.40	1,541.3	1.58%	7.97%
1990	26.65	1,637.3	1.63%	8.24%

The float figures are derived from the total of loss reserves, loss adjustment expense reserves and unearned premium reserves minus agents' balances, prepaid acquisition costs and deferred charges applicable to assumed reinsurance. At some

insurers other items should enter into the calculation, but in our case these are unimportant and have been ignored.

During 1990 we held about $1.6 billion of float slated eventually to find its way into the hands of others. The underwriting loss we sustained during the year was $27 million and thus our insurance operation produced funds for us at a cost of about 1.6%. As the table shows, we managed in some years to underwrite at a profit and in those instances our cost of funds was less than zero. In other years, such as 1984, we paid a very high price for float. In 19 years out of the 24 we have been in insurance, though, we have developed funds at a cost below that paid by the government.

There are two important qualifications to this calculation. First, the fat lady has yet to gargle, let alone sing, and we won't know our true 1967 - 1990 cost of funds until all losses from this period have been settled many decades from now. Second, the value of the float to shareholders is somewhat undercut by the fact that they must put up their own funds to support the insurance operation and are subject to double taxation on the investment income these funds earn. Direct investments would be more tax-efficient.

The tax penalty that indirect investments impose on shareholders is in fact substantial. Though the calculation is necessarily imprecise, I would estimate that the owners of the average insurance company would find the tax penalty adds about one percentage point to their cost of float. I also think that approximates the correct figure for Berkshire.

Figuring a cost of funds for an insurance business allows anyone analyzing it to determine whether the operation has a positive or negative value for shareholders. If this cost (including the tax penalty) is higher than that applying to alternative sources of funds, the value is negative. If the cost is lower, the value is positive - and if the cost is *significantly* lower, the insurance business qualifies as a very valuable asset.

So far Berkshire has fallen into the significantly-lower camp. Even more dramatic are the numbers at GEICO, in which our ownership interest is now 48% and which

customarily operates at an underwriting profit. GEICO's growth has generated an ever-larger amount of funds for investment that have an effective cost of considerably less than zero. Essentially, GEICO's policyholders, in aggregate, pay the company interest on the float rather than the other way around. (But handsome is as handsome does: GEICO's unusual profitability results from its extraordinary operating efficiency and its careful classification of risks, a package that in turn allows rock-bottom prices for policyholders.)

Many well-known insurance companies, on the other hand, incur an underwriting loss/float cost that, combined with the tax penalty, produces negative results for owners. In addition, these companies, like all others in the industry, are vulnerable to catastrophe losses that could exceed their reinsurance protection and take their cost of float right off the chart. Unless these companies can materially improve their underwriting performance - and history indicates that is an almost impossible task - their shareholders will experience results similar to those borne by the owners of a bank that pays a higher rate of interest on deposits than it receives on loans.

All in all, the insurance business has treated us very well. We have expanded our float at a cost that on the average is reasonable, and we have further prospered because we have earned good returns on these low-cost funds. Our shareholders, true, have incurred extra taxes, but they have been more than compensated for this cost (so far) by the benefits produced by the float.

A particularly encouraging point about our record is that it was achieved despite some colossal mistakes made by your Chairman prior to Mike Goldberg's arrival. Insurance offers a host of opportunities for error, and when opportunity knocked, too often I answered. Many years later, the bills keep arriving for these mistakes: In the insurance business, there is no statute of limitations on stupidity.

The intrinsic value of our insurance business will always be far more difficult to calculate than the value of, say, our candy or newspaper companies. By any measure, however, the business is worth far more than its carrying value. Furthermore, despite

the problems this operation periodically hands us, it is the one - among all the fine businesses we own - that has the greatest potential.

Marketable Securities

Below we list our common stock holdings having a value of over $100 million. A small portion of these investments belongs to subsidiaries of which Berkshire owns less than 100%.

Shares	Company	Cost (000's omitted)	Market (000's omitted)
3,000,000	Capital Cities/ABC, Inc.	$517,500	$1,377,375
46,700,00	The Coca-Cola Company	1,023,920	2,171,550
2,400,000	Federal Home Loan Mortgage Corporation Preferred*	71,729	117,000
6,850,000	GEICO Corporation.	45,713	1,110,556
1,727,765	The Washington Post Company	9,731	342,097
5,000,000	Wells Fargo & Company	289,431	289,375

Lethargy bordering on sloth remains the cornerstone of our investment style: This year we neither bought nor sold a share of five of our six major holdings. The exception was Wells Fargo, a superbly-managed, high-return banking operation in which we increased our ownership to just under 10%, the most we can own without the approval of the Federal Reserve Board. About one-sixth of our position was bought in 1989, the rest in 1990.

The banking business is no favorite of ours. When assets are twenty times equity - a common ratio in this industry - mistakes that involve only a small portion of assets can destroy a major portion of equity. And mistakes have been the rule rather than the

exception at many major banks. Most have resulted from a managerial failing that we described last year when discussing the "institutional imperative:" the tendency of executives to mindlessly imitate the behavior of their peers, no matter how foolish it may be to do so. In their lending, many bankers played follow-the-leader with lemming-like zeal; now they are experiencing a lemming-like fate.

Because leverage of 20:1 magnifies the effects of managerial strengths and weaknesses, we have no interest in purchasing shares of a poorly-managed bank at a "cheap" price. Instead, our only interest is in buying into well-managed banks at fair prices.

With Wells Fargo, we think we have obtained the best managers in the business, Carl Reichardt and Paul Hazen. In many ways the combination of Carl and Paul reminds me of another - Tom Murphy and Dan Burke at Capital Cities/ABC. First, each pair is stronger than the sum of its parts because each partner understands, trusts and admires the other. Second, both managerial teams pay able people well, but abhor having a bigger head count than is needed. Third, both attack costs as vigorously when profits are at record levels as when they are under pressure. Finally, both stick with what they understand and let their abilities, not their egos, determine what they attempt. (Thomas J. Watson Sr. of IBM followed the same rule: "I'm no genius," he said. "I'm smart in spots - but I stay around those spots.")

Our purchases of Wells Fargo in 1990 were helped by a chaotic market in bank stocks. The disarray was appropriate: Month by month the foolish loan decisions of once well-regarded banks were put on public display. As one huge loss after another was unveiled - often on the heels of managerial assurances that all was well - investors understandably concluded that no bank's numbers were to be trusted. Aided by their flight from bank stocks, we purchased our 10% interest in Wells Fargo for $290 million, less than five times after-tax earnings, and less than three times pre-tax earnings.

Wells Fargo is big - it has $56 billion in assets - and has been earning more than 20% on equity and 1.25% on assets. Our purchase of one-tenth of the bank may be thought of as roughly equivalent to our buying 100% of a $5 billion bank with identical financial characteristics. But were we to make such a purchase, we would have to pay about twice the $290 million we paid for Wells Fargo. Moreover, that $5 billion bank, commanding a premium price, would present us with another problem: We would not be able to find a Carl Reichardt to run it. In recent years, Wells Fargo executives have been more avidly recruited than any others in the banking business; no one, however, has been able to hire the dean.

Of course, ownership of a bank - or about any other business - is far from riskless. California banks face the specific risk of a major earthquake, which might wreak enough havoc on borrowers to in turn destroy the banks lending to them. A second risk is systemic - the possibility of a business contraction or financial panic so severe that it would endanger almost every highly-leveraged institution, no matter how intelligently run. Finally, the market's major fear of the moment is that West Coast real estate values will tumble because of overbuilding and deliver huge losses to banks that have financed the expansion. Because it is a leading real estate lender, Wells Fargo is thought to be particularly vulnerable.

None of these eventualities can be ruled out. The probability of the first two occurring, however, is low and even a meaningful drop in real estate values is unlikely to cause major problems for well-managed institutions. Consider some mathematics: Wells Fargo currently earns well over $1 billion pre-tax annually after expensing more than $300 million for loan losses. If 10% of all $48 billion of the bank's loans - not just its real estate loans - were hit by problems in 1991, and these produced losses (including foregone interest) averaging 30% of principal, the company would roughly break even.

A year like that - which we consider only a low-level possibility, not a likelihood - would not distress us. In fact, at Berkshire we would love to acquire businesses or

invest in capital projects that produced no return for a year, but that could then be expected to earn 20% on growing equity. Nevertheless, fears of a California real estate disaster similar to that experienced in New England caused the price of Wells Fargo stock to fall almost 50% within a few months during 1990. Even though we had bought some shares at the prices prevailing before the fall, we welcomed the decline because it allowed us to pick up many more shares at the new, panic prices.

Investors who expect to be ongoing buyers of investments throughout their lifetimes should adopt a similar attitude toward market fluctuations; instead many illogically become euphoric when stock prices rise and unhappy when they fall. They show no such confusion in their reaction to food prices: Knowing they are forever going to be buyers of food, they welcome falling prices and deplore price increases. (It's the seller of food who doesn't like declining prices.) Similarly, at the Buffalo News we would cheer lower prices for newsprint - even though it would mean marking down the value of the large inventory of newsprint we always keep on hand - because we know we are going to be perpetually buying the product.

Identical reasoning guides our thinking about Berkshire's investments. We will be buying businesses - or small parts of businesses, called stocks - year in, year out as long as I live (and longer, if Berkshire's directors attend the seances I have scheduled). Given these intentions, declining prices for businesses benefit us, and rising prices hurt us.

The most common cause of low prices is pessimism - sometimes pervasive, sometimes specific to a company or industry. We *want* to do business in such an environment, not because we like pessimism but because we like the prices it produces. It's optimism that is the enemy of the rational buyer.

None of this means, however, that a business or stock is an intelligent purchase simply because it is unpopular; a contrarian approach is just as foolish as a follow-the-crowd strategy. What's required is thinking rather than polling. Unfortunately,

Bertrand Russell's observation about life in general applies with unusual force in the financial world: "Most men would rather die than think. Many do."

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Our other major portfolio change last year was large additions to our holdings of RJR Nabisco bonds, securities that we first bought in late 1989. At yearend 1990 we had $440 million invested in these securities, an amount that approximated market value. (As I write this, however, their market value has risen by more than $150 million.)

Just as buying into the banking business is unusual for us, so is the purchase of below-investment-grade bonds. But opportunities that interest us and that are also large enough to have a worthwhile impact on Berkshire's results are rare. Therefore, we will look at any category of investment, so long as we understand the business we're buying into and believe that price and value may differ significantly. (Woody Allen, in another context, pointed out the advantage of open-mindedness: "I can't understand why more people aren't bi-sexual because it doubles your chances for a date on Saturday night.")

In the past we have bought a few below-investment-grade bonds with success, though these were all old-fashioned "fallen angels" - bonds that were initially of investment grade but that were downgraded when the issuers fell on bad times. In the 1984 annual report we described our rationale for buying one fallen angel, the Washington Public Power Supply System.

A kind of bastardized fallen angel burst onto the investment scene in the 1980s - "junk bonds" that were far below investment- grade when issued. As the decade progressed, new offerings of manufactured junk became ever junkier and ultimately the predictable outcome occurred: Junk bonds lived up to their name. In 1990 - even

before the recession dealt its blows - the financial sky became dark with the bodies of failing corporations.

The disciples of debt assured us that this collapse wouldn't happen: Huge debt, we were told, would cause operating managers to focus their efforts as never before, much as a dagger mounted on the steering wheel of a car could be expected to make its driver proceed with intensified care. We'll acknowledge that such an attention-getter would produce a very alert driver. But another certain consequence would be a deadly - and unnecessary - accident if the car hit even the tiniest pothole or sliver of ice. The roads of business are riddled with potholes; a plan that requires dodging them all is a plan for disaster.

In the final chapter of The Intelligent Investor Ben Graham forcefully rejected the dagger thesis: "Confronted with a challenge to distill the secret of sound investment into three words, we venture the motto, Margin of Safety." Forty-two years after reading that, I still think those are the right three words. The failure of investors to heed this simple message caused them staggering losses as the 1990s began.

At the height of the debt mania, capital structures were concocted that guaranteed failure: In some cases, so much debt was issued that even highly favorable business results could not produce the funds to service it. One particularly egregious "kill- 'em-at-birth" case a few years back involved the purchase of a mature television station in Tampa, bought with so much debt that the interest on it exceeded the station's *gross revenues.* Even if you assume that all labor, programs and services were donated rather than purchased, this capital structure required revenues to explode - or else the station was doomed to go broke. (Many of the bonds that financed the purchase were sold to now-failed savings and loan associations; as a taxpayer, you are picking up the tab for this folly.)

All of this seems impossible now. When these misdeeds were done, however, dagger-selling investment bankers pointed to the "scholarly" research of academics, which reported that over the years the higher interest rates received from low-grade

bonds had more than compensated for their higher rate of default. Thus, said the friendly salesmen, a diversified portfolio of junk bonds would produce greater net returns than would a portfolio of high-grade bonds. (Beware of past-performance "proofs" in finance: If history books were the key to riches, the Forbes 400 would consist of librarians.)

There was a flaw in the salesmen's logic - one that a first- year student in statistics is taught to recognize. An assumption was being made that the universe of newly-minted junk bonds was identical to the universe of low-grade fallen angels and that, therefore, the default experience of the latter group was meaningful in predicting the default experience of the new issues. (That was an error similar to checking the historical death rate from Kool-Aid before drinking the version served at Jonestown.)

The universes were of course dissimilar in several vital respects. For openers, the manager of a fallen angel almost invariably yearned to regain investment-grade status and worked toward that goal. The junk-bond operator was usually an entirely different breed. Behaving much as a heroin user might, he devoted his energies not to finding a cure for his debt-ridden condition, but rather to finding another fix. Additionally, the fiduciary sensitivities of the executives managing the typical fallen angel were often, though not always, more finely developed than were those of the junk-bond-issuing financiopath.

Wall Street cared little for such distinctions. As usual, the Street's enthusiasm for an idea was proportional not to its merit, but rather to the revenue it would produce. Mountains of junk bonds were sold by those who didn't care to those who didn't think - and there was no shortage of either.

Junk bonds remain a mine field, even at prices that today are often a small fraction of issue price. As we said last year, we have never bought a new issue of a junk bond. (The only time to buy these is on a day with no "y" in it.) We are, however, willing to look at the field, now that it is in disarray.

In the case of RJR Nabisco, we feel the Company's credit is considerably better than was generally perceived for a while and that the yield we receive, as well as the potential for capital gain, more than compensates for the risk we incur (though that is far from nil). RJR has made asset sales at favorable prices, has added major amounts of equity, and in general is being run well.

However, as we survey the field, most low-grade bonds still look unattractive. The handiwork of the Wall Street of the 1980s is even worse than we had thought: Many important businesses have been mortally wounded. We will, though, keep looking for opportunities as the junk market continues to unravel.

Convertible Preferred Stocks

We continue to hold the convertible preferred stocks described in earlier reports: $700 million of Salomon Inc, $600 million of The Gillette Company, $358 million of USAir Group, Inc. and $300 million of Champion International Corp. Our Gillette holdings will be converted into 12 million shares of common stock on April 1. Weighing interest rates, credit quality and prices of the related common stocks, we can assess our holdings in Salomon and Champion at yearend 1990 as worth about what we paid, Gillette as worth somewhat more, and USAir as worth substantially less.

In making the USAir purchase, your Chairman displayed exquisite timing: I plunged into the business at almost the exact moment that it ran into severe problems. (No one pushed me; in tennis parlance, I committed an "unforced error.") The company's troubles were brought on both by industry conditions and by the post-merger difficulties it encountered in integrating Piedmont, an affliction I should have expected since almost all airline mergers have been followed by operational turmoil.

In short order, Ed Colodny and Seth Schofield resolved the second problem: The airline now gets excellent marks for service. Industry-wide problems have proved to be far more serious. Since our purchase, the economics of the airline industry have

deteriorated at an alarming pace, accelerated by the kamikaze pricing tactics of certain carriers. The trouble this pricing has produced for all carriers illustrates an important truth: In a business selling a commodity-type product, it's impossible to be a lot smarter than your dumbest competitor.

However, unless the industry is decimated during the next few years, our USAir investment should work out all right. Ed and Seth have decisively addressed the current turbulence by making major changes in operations. Even so, our investment is now less secure than at the time I made it.

Our convertible preferred stocks are relatively simple securities, yet I should warn you that, if the past is any guide, you may from time to time read inaccurate or misleading statements about them. Last year, for example, several members of the press calculated the value of all our preferreds as equal to that of the common stock into which they are convertible. By their logic, that is, our Salomon preferred, convertible into common at $38, would be worth 60% of face value if Salomon common were selling at $22.80. But there is a small problem with this line of reasoning: Using it, one must conclude that all of the value of a convertible preferred resides in the conversion privilege and that the value of a *non*-convertible preferred of Salomon would be zero, no matter what its coupon or terms for redemption.

The point you should keep in mind is that most of the value of our convertible preferreds is derived from their fixed-income characteristics. That means the securities cannot be worth less than the value they would possess as non-convertible preferreds and may be worth more because of their conversion options.

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I deeply regret having to end this section of the report with a note about my friend, Colman Mockler, Jr., CEO of Gillette, who died in January. No description better fitted Colman than "gentleman" - a word signifying integrity, courage and modesty.

Couple these qualities with the humor and exceptional business ability that Colman possessed and you can understand why I thought it an undiluted pleasure to work with him and why I, and all others who knew him, will miss Colman so much.

A few days before Colman died, Gillette was richly praised in a Forbes cover story. Its theme was simple: The company's success in shaving products has come not from marketing savvy (though it exhibits that talent repeatedly) but has instead resulted from its devotion to quality. This mind-set has caused it to consistently focus its energies on coming up with something better, even though its existing products already ranked as the class of the field. In so depicting Gillette, Forbes in fact painted a portrait of Colman.

Help! Help!

Regular readers know that I shamelessly utilize the annual letter in an attempt to acquire businesses for Berkshire. And, as we constantly preach at the Buffalo News, advertising does work: Several businesses have knocked on our door because someone has read in these pages of our interest in making acquisitions. (Any good ad salesman will tell you that trying to sell something without advertising is like winking at a girl in the dark.)

In Appendix B (on pages 26-27) I've reproduced the essence of a letter I wrote a few years back to the owner/manager of a desirable business. If you have no personal connection with a business that might be of interest to us but have a friend who does, perhaps you can pass this report along to him.

Here's the sort of business we are looking for:

(1) Large purchases (at least $10 million of after-tax earnings),

(2) Demonstrated consistent earning power (future projections are of little interest to us, nor are "turnaround" situations),

(3) Businesses earning good returns on equity while employing little or no debt,

(4) Management in place (we can't supply it),

(5) Simple businesses (if there's lots of technology, we won't understand it),

(6) An offering price (we don't want to waste our time or that of the seller by talking, even preliminarily, about a transaction when price is unknown).

We will not engage in unfriendly takeovers. We can promise complete confidentiality and a very fast answer - customarily within five minutes - as to whether we're interested. We prefer to buy for cash, but will consider issuing stock when we receive as much in intrinsic business value as we give.

Our favorite form of purchase is one fitting the Blumkin- Friedman-Heldman mold. In cases like these, the company's owner- managers wish to generate significant amounts of cash, sometimes for themselves, but often for their families or inactive shareholders. At the same time, these managers wish to remain significant owners who continue to run their companies just as they have in the past. We think we offer a particularly good fit for owners with such objectives. We invite potential sellers to check us out by contacting people with whom we have done business in the past.

Charlie and I frequently get approached about acquisitions that don't come close to meeting our tests: We've found that if you advertise an interest in buying collies, a lot of people will call hoping to sell you their cocker spaniels. A line from a country song expresses our feeling about new ventures, turnarounds, or auction-like sales: "When the phone don't ring, you'll know it's me."

Besides being interested in the purchase of businesses as described above, we are also interested in the negotiated purchase of large, but not controlling, blocks of stock comparable to those we hold in Capital Cities, Salomon, Gillette, USAir, and Champion. We are not interested, however, in receiving suggestions about purchases we might make in the general stock market.

Miscellaneous

Ken Chace has decided not to stand for reelection as a director at our upcoming annual meeting. We have no mandatory retirement age for directors at Berkshire (and won't!), but Ken, at 75 and living in Maine, simply decided to cut back his activities.

Ken was my immediate choice to run the textile operation after Buffett Partnership, Ltd. assumed control of Berkshire early in 1965. Although I made an economic mistake in sticking with the textile business, I made no mistake in choosing Ken: He ran the operation well, he was always 100% straight with me about its problems, and he generated the funds that allowed us to diversify into insurance.

My wife, Susan, will be nominated to succeed Ken. She is now the second largest shareholder of Berkshire and if she outlives me will inherit all of my stock and effectively control the company. She knows, and agrees, with my thoughts on successor management and also shares my view that neither Berkshire nor its subsidiary businesses and important investments should be sold simply because some very high bid is received for one or all.

I feel strongly that the fate of our businesses and their managers should not depend on my health - which, it should be added, is excellent - and I have planned accordingly. Neither my estate plan nor that of my wife is designed to preserve the family fortune; instead, both are aimed at preserving the character of Berkshire and returning the fortune to society.

Were I to die tomorrow, you could be sure of three things: (1) None of my stock would have to be sold; (2) Both a controlling shareholder and a manager with philosophies similar to mine would follow me; and (3) Berkshire's earnings would increase by $1 million annually, since Charlie would immediately sell our corporate jet, The Indefensible (ignoring my wish that it be buried with me).

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About 97.3% of all eligible shares participated in Berkshire's 1990 shareholder-designated contributions program. Contributions made through the program were $5.8 million, and 2,600 charities were recipients.

We suggest that new shareholders read the description of our shareholder-designated contributions program that appears on pages 54-55. To participate in future programs, you must make sure your shares are registered in the name of the actual owner, not in the nominee name of a broker, bank or depository. Shares not so registered on August 31, 1991 will be ineligible for the 1991 program.

In addition to the shareholder-designated contributions that Berkshire distributes, managers of our operating businesses make contributions, including merchandise, averaging about $1.5 million annually. These contributions support local charities, such as The United Way, and produce roughly commensurate benefits for our businesses.

However, neither our operating managers nor officers of the parent company use Berkshire funds to make contributions to broad national programs or charitable activities of special personal interest to them, except to the extent they do so as shareholders. If your employees, including your CEO, wish to give to their alma maters or other institutions to which they feel a personal attachment, we believe they should use their own money, not yours.

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The annual meeting this year will be held at the Orpheum Theater in downtown Omaha at 9:30 a.m. on Monday, April 29, 1991. Attendance last year grew to a record 1,300, about a 100-fold increase from ten years ago.

We recommend getting your hotel reservations early at one of these hotels: (1) The Radisson-Redick Tower, a small (88 rooms) but nice hotel across the street from the Orpheum; (2) the much larger Red Lion Hotel, located about a five-minute walk

from the Orpheum; or (3) the Marriott, located in West Omaha about 100 yards from Borsheim's and a twenty minute drive from downtown. We will have buses at the Marriott that will leave at 8:30 and 8:45 for the meeting, and return after it ends.

Charlie and I always enjoy the meeting, and we hope you can make it. The quality of our shareholders is reflected in the quality of the questions we get: We have never attended an annual meeting anywhere that features such a consistently high level of intelligent, owner-related questions.

An attachment to our proxy material explains how you can obtain the card you will need for admission to the meeting. Because weekday parking can be tight around the Orpheum, we have lined up a number of nearby lots for our shareholders to use. The attachment also contains information about them.

As usual, we will have buses to take you to Nebraska Furniture Mart and Borsheim's after the meeting and to take you to downtown hotels or to the airport later. I hope that you will allow plenty of time to fully explore the attractions of both stores. Those of you arriving early can visit the Furniture Mart any day of the week; it is open from 10 a.m. to 5:30 p.m. on Saturdays, and from noon to 5:30 p.m. on Sundays. While there, stop at the See's Candy cart and see for yourself the dawn of synergism at Berkshire.

Borsheim's normally is closed on Sunday, but we will open for shareholders and their guests from noon to 6 p.m. on Sunday, April 28. At our Sunday opening last year you made Ike very happy: After totaling the day's volume, he suggested to me that we start holding annual meetings quarterly. Join us at Borsheim's even if you just come to watch; it's a show you shouldn't miss.

Last year the first question at the annual meeting was asked by 11-year-old Nicholas Kenner, a third-generation shareholder from New York City. Nicholas plays rough: "How come the stock is down?" he fired at me. My answer was not memorable.

We hope that other business engagements won't keep Nicholas away from this year's meeting. If he attends, he will be offered the chance to again ask the first question; Charlie and I want to tackle him while we're *fresh*. This year, however, it's Charlie's turn to answer.

Warren E. Buffett
Chairman of the Board
March 1, 1991

APPENDIX A

U. S. STEEL ANNOUNCES SWEEPING MODERNIZATION SCHEME*

* An unpublished satire by Ben Graham, written in 1936 and given by the author to Warren Buffett in 1954.

Myron C. Taylor, Chairman of U. S. Steel Corporation, today announced the long awaited plan for completely modernizing the world's largest industrial enterprise. Contrary to expectations, no changes will be made in the company's manufacturing or selling policies. Instead, the bookkeeping system is to be entirely revamped. By adopting and further improving a number of modern accounting and financial devices the corporation's earning power will be amazingly transformed. Even under the subnormal conditions of 1935, it is estimated that the new bookkeeping methods would have yielded a reported profit of close to $50 per share on the common stock. The scheme of improvement is the result of a comprehensive survey made by Messrs. Price, Bacon, Guthrie & Colpitts; it includes the following six points:

1. Writing down of Plant Account to Minus $1,000,000,000.
2. Par value of common stock to be reduced to 1¢.
3. Payment of all wages and salaries in option warrants.
4. Inventories to be carried at $1.
5. Preferred Stock to be replaced by non-interest bearing bonds redeemable at 50% discount.

6. A $1,000,000,000 Contingency Reserve to be established.

The official statement of this extraordinary Modernization Plan follows in full:

The Board of Directors of U. S. Steel Corporation is pleased to announce that after intensive study of the problems arising from changed conditions in the industry, it has approved a comprehensive plan for remodeling the Corporation's accounting methods. A survey by a Special Committee, aided and abetted by Messrs. Price, Bacon, Guthrie & Colpitts, revealed that our company has lagged somewhat behind other American business enterprises in utilizing certain advanced bookkeeping methods, by means of which the earning power may be phenomenally enhanced without requiring any cash outlay or any changes in operating or sales conditions. It has been decided not only to adopt these newer methods, but to develop them to a still higher stage of perfection. The changes adopted by the Board may be summarized under six heads, as follows:

1. Fixed Assets to be written down to Minus $1,000,000,000.

Many representative companies have relieved their income accounts of all charges for depreciation by writing down their plant account to $1. The Special Committee points out that if their plants are worth only $1, the fixed assets of U. S. Steel Corporation are worth a good deal less than that sum. It is now a well-recognized fact that many plants are in reality a liability rather than an asset, entailing not only depreciation charges, but taxes, maintenance, and other expenditures. Accordingly, the Board has decided to extend the write-down policy initiated in the 1935 report, and to mark down the Fixed Assets from $1,338,522,858.96 to a round Minus $1,000,000,000.

The advantages of this move should be evident. As the plant wears out, the liability becomes correspondingly reduced. Hence, instead of the present depreciation charge of some $47,000,000 yearly there will be an annual appreciation credit of 5%, or $50,000,000. This will increase earnings by no less than $97,000,000 per annum.

2. Reduction of Par Value of Common Stock to 1¢, and

3. Payment of Salaries and Wages in Option Warrants.

Many corporations have been able to reduce their overhead expenses substantially by paying a large part of their executive salaries in the form of options to buy stock, which carry no charge against earnings. The full possibilities of this modern device have apparently not been adequately realized. The Board of Directors has adopted the following advanced form of this idea:

The entire personnel of the Corporation are to receive their compensation in the form of rights to buy common stock at $50 per share, at the rate of one purchase right for each $50 of salary and/or wages in their present amounts. The par value of the common stock is to be reduced to 1¢.

The almost incredible advantages of this new plan are evident from the following:

A. The payroll of the Corporation will be entirely eliminated, a saving of $250,000,000 per annum, based on 1935 operations.

B. At the same time, the effective compensation of all our employees will be increased severalfold. Because of the large earnings per share to be shown on our common stock under the new methods, it is certain that the shares will command a price in the market far above the option level of $50 per share, making the readily realizable value of these option warrants greatly in excess of the present cash wages that they will replace.

C. The Corporation will realize an additional large annual profit through the exercise of these warrants. Since the par value of the common stock will be fixed at 1¢, there will be a gain of $49.99 on each share subscribed for. In the interest of conservative accounting, however, this profit will not be included in the income account, but will be shown separately as a credit to Capital Surplus.

D. The Corporation's cash position will be enormously strengthened. In place of the present annual cash <u>outgo</u> of $250,000,000 for wages (1935 basis), there will be annual cash <u>inflow</u> of $250,000,000 through exercise of the subscription warrants for 5,000,000 shares of common stock. The Company's large earnings and strong cash position will permit the payment of a liberal dividend which, in turn, will result in the

exercise of these option warrants immediately after issuance which, in turn, will further improve the cash position which, in turn, will permit a higher dividend rate -- and so on, indefinitely.

4. Inventories to be carried at $1.

Serious losses have been taken during the depression due to the necessity of adjusting inventory value to market. Various enterprises -- notably in the metal and cotton-textile fields -- have successfully dealt with this problem by carrying all or part of their inventories at extremely low unit prices. The U. S. Steel Corporation has decided to adopt a still more progressive policy, and to carry its entire inventory at $1. This will be effected by an appropriate write-down at the end of each year, the amount of said write-down to be charged to the Contingency Reserve hereinafter referred to.

The benefits to be derived from this new method are very great. Not only will it obviate all possibility of inventory depreciation, but it will substantially enhance the annual earnings of the Corporation. The inventory on hand at the beginning of the year, valued at $1, will be sold during the year at an excellent profit. It is estimated that our income will be increased by means of this method to the extent of at least $150,000,000 per annum which, by a coincidence, will about equal the amount of the write-down to be made each year against Contingency Reserve.

A minority report of the Special Committee recommends that Accounts Receivable and Cash also be written down to $1, in the interest of consistency and to gain additional advantages similar to those just discussed. This proposal has been rejected for the time being because our auditors still require that any recoveries of receivables and cash so charged off be credited to surplus instead of to the year's income. It is expected, however, that this auditing rule -- which is rather reminiscent of the horse-and-buggy days -- will soon be changed in line with modern tendencies. Should this occur, the minority report will be given further and favorable consideration.

5. Replacement of Preferred Stock by Non-Interest-Bearing Bonds Redeemable at 50% Discount.

During the recent depression many companies have been able to offset their operating losses by including in income profits arising from repurchases of their own bonds at a substantial discount from par. Unfortunately the credit of U. S. Steel Corporation has always stood so high that this lucrative source of revenue has not hitherto been available to it. The Modernization Scheme will remedy this condition.

It is proposed that each share of preferred stock be exchanged for $300 face value of non-interest-bearing sinking-fund notes, redeemable by lot at 50% of face value in 10 equal annual installments. This will require the issuance of $1,080,000,000 of new notes, of which $108,000,000 will be retired each year at a cost to the Corporation of only $54,000,000, thus creating an annual profit of the same amount.

Like the wage-and/or-salary plan described under 3. above, this arrangement will benefit both the Corporation and its preferred stockholders. The latter are assured payment for their present shares at 150% of par value over an average period of five years. Since short-term securities yield practically no return at present, the non-interest-bearing feature is of no real importance. The Corporation will convert its present annual <u>charge</u> of $25,000,000 for preferred dividends into an annual bond-retirement <u>profit</u> of $54,000,000 -- an aggregate yearly gain of $79,000,000.

6. Establishment of a Contingency Reserve of $1,000,000,000.

The Directors are confident that the improvements hereinbefore described will assure the Corporation of a satisfactory earning power under all conditions in the future. Under modern accounting methods, however, it is unnecessary to incur the slightest risk of loss through adverse business developments of any sort, since all these may be provided for in advance by means of a Contingency Reserve.

The Special Committee has recommended that the Corporation create such a Contingency Reserve in the fairly substantial amount of $1,000,000,000. As previously set forth, the annual write-down of inventory to $1 will be absorbed by this

reserve. To prevent eventual exhaustion of the Contingency Reserve, it has been further decided that it be replenished each year by transfer of an appropriate sum from Capital Surplus. Since the latter is expected to increase each year by not less than $250,000,000 through the exercise of the Stock Option Warrants (see 3. above), it will readily make good any drains on the Contingency Reserve.

In setting up this arrangement, the Board of Directors must confess regretfully that they have been unable to improve upon the devices already employed by important corporations in transferring large sums between Capital, Capital Surplus, Contingency Reserves and other Balance Sheet Accounts. In fact, it must be admitted that our entries will be somewhat too simple, and will lack that element of extreme mystification that characterizes the most advanced procedure in this field. The Board of Directors, however, have insisted upon clarity and simplicity in framing their Modernization Plan, even at the sacrifice of possible advantage to the Corporation's earning power.

In order to show the combined effect of the new proposals upon the Corporation's earning power, we submit herewith a condensed Income Account for 1935 on two bases, viz:

	A. As Reported	**B. Pro-Forma Giving Effect to Changes Proposed Herewith**
Gross Receipts from all Sources (Including Inter-Company)	$765,000,000	$765,000,000
Salaries and Wages	251,000,000	--
Other Operating Expenses and Taxes	461,000,000	311,000,000
Depreciation	47,000,000	(50,000,000)
Interest	5,000,000	5,000,000
Discount on Bonds Retired	--	(54,000,000)
Preferred Dividends	25,000,000	--

Balance for Common	(24,000,000)	553,000,000
Average Shares Outstanding	8,703,252	11,203,252
Earned Per Share	($2.76)	$49.80

In accordance with a somewhat antiquated custom there is appended herewith a condensed pro-forma Balance Sheet of the U. S. Steel Corporation as of December 31, 1935, after giving effect to proposed changes in asset and liability accounts.

Assets	
Fixed Assets, net	($1,000,000,000)
Cash Assets	142,000,000
Receivables	56,000,000
Inventory	1
Miscellaneous Assets	27,000,000
Total	**($774,999,999)**
Liabilities	
Common Stock Par 1¢ (Par Value $87,032.52)	($3,500,000,000)
Stated Value*	
Subsidiaries' Bonds and Stocks	113,000,000
New Sinking Fund Notes	1,080,000,000
Current Liabilities	69,000,000
Contingency Reserve	1,000,000,000
Other Reserves	74,000,000
Initial Surplus	389,000,001
Total	**($774,999,999)**

*Given a Stated Value differing from Par Value, in accordance with the laws of the State of Virginia, where the company will be re-incorporated.

It is perhaps unnecessary to point out to our stockholders that modern accounting methods give rise to balance sheets differing somewhat in appearance from those of a less advanced period. In view of the very large earning power that will result from

these changes in the Corporation's Balance Sheet, it is not expected that undue attention will be paid to the details of assets and liabilities.

In conclusion, the Board desires to point out that the combined procedure, whereby plant will be carried at a minus figure, our wage bill will be eliminated, and inventory will stand on our books at virtually nothing, will give U. S. Steel Corporation an enormous competitive advantage in the industry. We shall be able to sell our products at exceedingly low prices and still show a handsome margin of profit. It is the considered view of the Board of Directors that under the Modernization Scheme we shall be able to undersell all competitors to such a point that the anti-trust laws will constitute the only barrier to 100% domination of the industry.

In making this statement, the Board is not unmindful of the possibility that some of our competitors may seek to offset our new advantages by adopting similar accounting improvements. We are confident, however, that U. S. Steel will be able to retain the loyalty of its customers, old and new, through the unique prestige that will accrue to it as the originator and pioneer in these new fields of service to the user of steel. Should necessity arise, moreover, we believe we shall be able to maintain our deserved superiority by introducing still more advanced bookkeeping methods, which are even now under development in our Experimental Accounting Laboratory.

APPENDIX B

Some Thoughts on Selling Your Business*

*This is an edited version of a letter I sent some years ago to a man who had indicated that he might want to sell his family business. I present it here because it is a message I would like to convey to other prospective sellers. -- W.E.B.

Dear _____:

Here are a few thoughts pursuant to our conversation of the other day.

Most business owners spend the better part of their lifetimes building their businesses. By experience built upon endless repetition, they sharpen their skills in merchandising, purchasing, personnel selection, etc. It's a learning process, and mistakes made in one year often contribute to competence and success in succeeding years.

In contrast, owner-managers sell their business only once -- frequently in an emotionally-charged atmosphere with a multitude of pressures coming from different directions. Often, much of the pressure comes from brokers whose compensation is contingent upon consummation of a sale, regardless of its consequences for both buyer and seller. The fact that the decision is so important, both financially and personally, to the owner can make the process more, rather than less, prone to error. And, mistakes made in the once-in-a-lifetime sale of a business are not reversible.

Price is very important, but often is not the most critical aspect of the sale. You and your family have an extraordinary business -- one of a kind in your field -- and any buyer is going to recognize that. It's also a business that is going to get more valuable as the years go by. So if you decide not to sell now, you are very likely to realize more money later on. With that knowledge you can deal from strength and take the time required to select the buyer you want.

If you should decide to sell, I think Berkshire Hathaway offers some advantages that most other buyers do not. Practically all of these buyers will fall into one of two categories:

(1) A company located elsewhere but operating in your business or in a business somewhat akin to yours. Such a buyer -- no matter what promises are made -- will usually have managers who feel they know how to run your business operations and, sooner or later, will want to apply some hands-on "help." If the acquiring company is much larger, it often will have squads of managers, recruited over the years in part by promises that they will get to run future acquisitions. They will have their own way of doing things and, even though your business record undoubtedly will be far better

than theirs, human nature will at some point cause them to believe that their methods of operating are superior. You and your family probably have friends who have sold their businesses to larger companies, and I suspect that their experiences will confirm the tendency of parent companies to take over the running of their subsidiaries, particularly when the parent knows the industry, or thinks it does.

(2) A financial maneuverer, invariably operating with large amounts of borrowed money, who plans to resell either to the public or to another corporation as soon as the time is favorable. Frequently, this buyer's major contribution will be to change accounting methods so that earnings can be presented in the most favorable light just prior to his bailing out. I'm enclosing a recent article that describes this sort of transaction, which is becoming much more frequent because of a rising stock market and the great supply of funds available for such transactions.

If the sole motive of the present owners is to cash their chips and put the business behind them -- and plenty of sellers fall in this category -- either type of buyer that I've just described is satisfactory. But if the sellers' business represents the creative work of a lifetime and forms an integral part of their personality and sense of being, buyers of either type have serious flaws.

Berkshire is another kind of buyer -- a rather unusual one. We buy to keep, but we don't have, and don't expect to have, operating people in our parent organization. All of the businesses we own are run autonomously to an extraordinary degree. In most cases, the managers of important businesses we have owned for many years have not been to Omaha or even met each other. When we buy a business, the sellers go on running it just as they did before the sale; we adapt to their methods rather than vice versa.

We have no one -- family, recently recruited MBAs, etc. -- to whom we have promised a chance to run businesses we have bought from owner-managers. And we won't have.

You know of some of our past purchases. I'm enclosing a list of everyone from whom we have ever bought a business, and I invite you to check with them as to our performance versus our promises. You should be particularly interested in checking with the few whose businesses did not do well in order to ascertain how we behaved under difficult conditions.

Any buyer will tell you that he needs you personally -- and if he has any brains, he most certainly does need you. But a great many buyers, for the reasons mentioned above, don't match their subsequent actions to their earlier words. We will behave exactly as promised, both because we have so promised, and because we need to in order to achieve the best business results.

This need explains why we would want the operating members of your family to retain a 20% interest in the business. We need 80% to consolidate earnings for tax purposes, which is a step important to us. It is equally important to us that the family members who run the business remain as owners. Very simply, we would not want to buy unless we felt key members of present management would stay on as our partners. Contracts cannot guarantee your continued interest; we would simply rely on your word.

The areas I get involved in are capital allocation and selection and compensation of the top man. Other personnel decisions, operating strategies, etc. are his bailiwick. Some Berkshire managers talk over some of their decisions with me; some don't. It depends upon their personalities and, to an extent, upon their own personal relationship with me.

If you should decide to do business with Berkshire, we would pay in cash. Your business would not be used as collateral for any loan by Berkshire. There would be no brokers involved.

Furthermore, there would be no chance that a deal would be announced and that the buyer would then back off or start suggesting adjustments (with apologies, of course, and with an explanation that banks, lawyers, boards of directors, etc. were to

be blamed). And finally, you would know exactly with whom you are dealing. You would not have one executive negotiate the deal only to have someone else in charge a few years later, or have the president regretfully tell you that his board of directors required this change or that (or possibly required sale of your business to finance some new interest of the parent's).

It's only fair to tell you that you would be no richer after the sale than now. The ownership of your business already makes you wealthy and soundly invested. A sale would change the form of your wealth, but it wouldn't change its amount. If you sell, you will have exchanged a 100%-owned valuable asset that you understand for another valuable asset -- cash -- that will probably be invested in small pieces (stocks) of other businesses that you understand less well. There is often a sound reason to sell but, if the transaction is a fair one, the reason is not so that the seller can become wealthier.

I will not pester you; if you have any possible interest in selling, I would appreciate your call. I would be extraordinarily proud to have Berkshire, along with the key members of your family, own _____; I believe we would do very well financially; and I believe you would have just as much fun running the business over the next 20 years as you have had during the past 20.

Sincerely

/s/ Warren Buffett

1991 Letter

BERKSHIRE HATHAWAY INC.

To the Shareholders of Berkshire Hathaway Inc.:

Our gain in net worth during 1991 was $2.1 billion, or 39.6%. Over the last 27 years (that is, since present management took over) our per-share book value has grown from $19 to $6,437, or at a rate of 23.7% compounded annually.

The size of our equity capital - which now totals $7.4 billion - makes it certain that we cannot maintain our past rate of gain or, for that matter, come close to doing so. As Berkshire grows, the universe of opportunities that can significantly influence the company's performance constantly shrinks. When we were working with capital of $20 million, an idea or business producing $1 million of profit added five percentage points to our return for the year. Now we need a $370 million idea (i.e., one contributing over $550 million of pre-tax profit) to achieve the same result. And there are many more ways to make $1 million than to make $370 million.

Charlie Munger, Berkshire's Vice Chairman, and I have set a goal of attaining a 15% average annual increase in Berkshire's intrinsic value. If our growth in *book* value is to keep up with a 15% pace, we must earn $22 billion during the next decade. Wish us luck - we'll need it.

Our outsized gain in book value in 1991 resulted from a phenomenon not apt to be repeated: a dramatic rise in the price-earnings ratios of Coca-Cola and Gillette. These two stocks accounted for nearly $1.6 billion of our $2.1 billion growth in net worth last year. When we loaded up on Coke three years ago, Berkshire's net worth was $3.4 billion; now our Coke stock alone is worth more than that.

Coca-Cola and Gillette are two of the best companies in the world and we expect their earnings to grow at hefty rates in the years ahead. Over time, also, the value of our holdings in these stocks should grow in rough proportion. Last year, however, the valuations of these two companies rose far faster than their earnings. In effect, we got a double-dip benefit, delivered partly by the excellent earnings growth and even more so by the market's reappraisal of these stocks. We believe this reappraisal was warranted. But it can't recur annually: We'll have to settle for a single dip in the future.

A Second Job

In 1989 when I - a happy consumer of five cans of Cherry Coke daily - announced our purchase of $1 billion worth of Coca-Cola stock, I described the move as a rather extreme example of putting our money where my mouth was. On August 18 of last year, when I was elected Interim Chairman of Salomon Inc, it was a different story: I put my mouth where our money was.

You've all read of the events that led to my appointment. My decision to take the job carried with it an implicit but important message: Berkshire's operating managers are so outstanding that I knew I could materially reduce the time I was spending at the company and yet remain confident that its economic progress would not skip a beat. The Blumkins, the Friedman family, Mike Goldberg, the Heldmans, Chuck Huggins, Stan Lipsey, Ralph Schey and Frank Rooney (CEO of H.H. Brown, our latest acquisition, which I will describe later) are all masters of their operations and need no help from me. My job is merely to treat them right and to allocate the capital they generate. Neither function is impeded by my work at Salomon.

The role that Charlie and I play in the success of our operating units can be illustrated by a story about George Mira, the one-time quarterback of the University of Miami, and his coach, Andy Gustafson. Playing Florida and near its goal line, Mira dropped back to pass. He spotted an open receiver but found his right shoulder in the unshakable grasp of a Florida linebacker. The right-handed Mira thereupon switched the ball to his other hand and threw the only left-handed pass of his life - for a touchdown. As the crowd erupted, Gustafson calmly turned to a reporter and declared: "Now that's what I call coaching."

Given the managerial stars we have at our operating units, Berkshire's performance is not affected if Charlie or I slip away from time to time. You should note, however, the "interim" in my Salomon title. Berkshire is my first love and one that will never fade: At the Harvard Business School last year, a student asked me when I planned to retire and I replied, "About five to ten years after I die."

Sources of Reported Earnings

The table below shows the major sources of Berkshire's reported earnings. In this presentation, amortization of Goodwill and other major purchase-price accounting adjustments are not charged against the specific businesses to which they apply, but are instead aggregated and shown separately. This procedure lets you view the earnings of our businesses as they would

have been reported had we not purchased them. I've explained in past reports why this form of presentation seems to us to be more useful to investors and managers than one utilizing generally accepted accounting principles (GAAP), which require purchase-price adjustments to be made on a business-by-business basis. The total net earnings we show in the table are, of course, identical to the GAAP total in our audited financial statements.

A large amount of additional information about these businesses is given on pages 33-47, where you also will find our segment earnings reported on a GAAP basis. However, we will not in this letter discuss each of our non-insurance operations, as we have in the past. Our businesses have grown in number - and will continue to grow - so it now makes sense to rotate coverage, discussing one or two in detail each year.

Operating Earnings	**Pre-Tax**	**Earnings**	**Berkshire**	**Share**
(000s omitted)	**1991**	**1990**	**1991**	**1990**
Insurance Group:				
Underwriting	$(119,593)	$(26,647)	$(77,229)	$(14,936)
Net investment income	331,846	327,048	285,173	282,613
H. H. Brown (acquired 7/1/91)	13,616	---	8,611	---
Buffalo News	37,113	43,954	21,841	25,981
Fechheimer	12,947	12,450	6,843	6,605

Kirby	35,726	27,445	22,555	17,613
Nebraska Furniture Mart	14,384	17,248	6,993	8,485
Scott Fetzer Manufacturing Group	26,123	30,378	15,901	18,458
See's Candies	42,390	39,580	25,575	23,892
Wesco – other than Insurance	12,230	12,441	8,777	9,679
World Book	22,483	31,896	15,487	20,420
Amortization of Goodwill	(4,113)	(3,476)	(4,098)	(3,461)
Other Purchase Price Accounting charges	(6,021)	(5,951)	(7,019)	(6,856)
Interest Expense*	(89,250)	(76,374)	(57,165)	(49,726)
Shareholder-Designated Contributions	(6,772)	(5,824)	(4,388)	(3,801)
Other	77,399	58,309	47,896	35,782
Operating Earnings	400,508	482,477	315,753	370,745
Sales of Securities	192,478	33,989	124,155	23,348
Total Earnings- All entities	**$592,986**	**$516,466**	**$439,908**	**$394,093**

**Excludes interest expense of Scott Fetzer Financial Group and Mutual Savings & Loan.*

"Look-Through" Earnings

We've previously discussed look-through earnings, which consist of: (1) the operating earnings reported in the previous section, plus; (2) the retained operating earnings of major investees that, under GAAP accounting, are not reflected in our profits, less; (3) an allowance for the tax that would be paid by Berkshire if these retained earnings of investees had instead been distributed to us.

I've told you that over time look-through earnings must increase at about 15% annually if our intrinsic business value is to grow at that rate. Indeed, since present management took over in 1965, our look-through earnings have grown at almost the identical 23% rate of gain recorded for book value.

Last year, however, our look-through earnings did not grow at all but rather declined by 14%. To an extent, the decline was precipitated by two forces that I discussed in last year's report and that I warned you would have a negative effect on look-through earnings.

First, I told you that our media earnings - both direct and look-through - were "sure to decline" and they in fact did. The second force came into play on April 1, when the call of our Gillette preferred stock required us to convert it into common. The after-tax earnings in 1990

from our preferred had been about $45 million, an amount somewhat higher than the combination in 1991 of three months of dividends on our preferred plus nine months of look-through earnings on the common.

Two other outcomes that I did not foresee also hurt look-through earnings in 1991. First, we had a break-even result from our interest in Wells Fargo (dividends we received from the company were offset by negative retained earnings). Last year I said that such a result at Wells was "a low-level possibility - not a likelihood." Second, we recorded significantly lower - though still excellent - insurance profits.

The following table shows you how we calculate look-through earnings, although I warn you that the figures are necessarily very rough. (The dividends paid to us by these investees have been included in the operating earnings itemized on page 6, mostly under "Insurance Group: Net Investment Income.")

Berkshire's Major Investees	**Berkshire's Ownership**	**Approximate at Yearend**	**Berkshire's Undistributed**	**Share of Operating Earnings**
	1991	**1990**	**1991**	**1990**
Capitla Cities / ABC Inc.	18.l%	17.9%	$61	$85
The Coca-Cola Company	7.0%	7.0%	69	58
Federal Home Loan Mortgage Corp	3.4% (1)	3.2% (1)	15	10
The Gillette Compnay	11.0%	---	23 (2)	---
GEICO Corp.	48.2%	46.1%	69	76
The Washington Post Company	14.6%	14.6%	10	18
Wells Fargo & Company	9.6%	9.7%	(17)	19 (3)
Berkshire's share of undistributed earnings of major investees			$230	$266
Hypothetical tax on these undistributed investee earnings			(30)	(35)
Reported operating earnings of Berkshire			316	371
Total look-through earnings of Bekrshire			$516	$602

(1) Net of minority interest at Wesco

(2) For the nine months after Berkshire converted its preferred on April 1

(3) Calculated on average ownership for the year

* * * * * * * * * * * *

We also believe that investors can benefit by focusing on their own look-through earnings. To calculate these, they should determine the underlying earnings attributable to the shares they hold in their portfolio and total these. The goal of each investor should be to create a portfolio (in effect, a "company") that will deliver him or her the highest possible look-through earnings a decade or so from now.

An approach of this kind will force the investor to think about long-term business prospects rather than short-term stock market prospects, a perspective likely to improve results. It's true, of course, that, in the long run, the scoreboard for investment decisions is market price. But prices will be determined by future earnings. In investing, just as in baseball, to put runs on the scoreboard one must watch the playing field, not the scoreboard.

A Change in Media Economics and Some Valuation Math

In last year's report, I stated my opinion that the decline in the profitability of media companies reflected secular as well as cyclical factors. The events of 1991 have fortified that case: The economic strength of once-mighty media enterprises continues to erode as retailing patterns change and advertising and entertainment choices proliferate. In the business world, unfortunately, the rear-view mirror is always clearer than the windshield: A few years back no one linked to the media business - neither lenders, owners nor financial analysts - saw the economic deterioration that was in store for the industry. (But give me a few years and I'll probably convince myself that I did.)

The fact is that newspaper, television, and magazine properties have begun to resemble *businesses* more than *franchises* in their economic behavior. Let's take a quick look at the characteristics separating these two classes of enterprise, keeping in mind, however, that many operations fall in some middle ground and can best be described as weak franchises or strong businesses.

An economic franchise arises from a product or service that: (1) is needed or desired; (2) is thought by its customers to have no close substitute and; (3) is not subject to price regulation. The existence of all three conditions will be demonstrated by a company's ability to regularly price its product or service aggressively and thereby to earn high rates of return on capital. Moreover, franchises can tolerate mis-management. Inept managers may diminish a franchise's profitability, but they cannot inflict mortal damage.

In contrast, "a business" earns exceptional profits only if it is the low-cost operator or if supply of its product or service is tight. Tightness in supply usually does not last long. With superior management, a company may maintain its status as a low-cost operator for a much longer time, but even then unceasingly faces the possibility of competitive attack. And a business, unlike a franchise, can be killed by poor management.

Until recently, media properties possessed the three characteristics of a franchise and consequently could both price aggressively and be managed loosely. Now, however, consumers looking for information and entertainment (their primary interest being the latter) enjoy greatly broadened choices as to where to find them. Unfortunately, demand can't expand in response to this new supply: 500 million American eyeballs and a 24-hour day are all that's available. The result is that competition has intensified, markets have fragmented, and the media industry has lost some - though far from all - of its franchise strength.

* * * * * * * * * * *

The industry's weakened franchise has an impact on its value that goes far beyond the immediate effect on earnings. For an understanding of this phenomenon, let's look at some much over-simplified, but relevant, math.

A few years ago the conventional wisdom held that a newspaper, television or magazine property would forever increase its earnings at 6% or so annually and would do so *without the employment of additional capital*, for the reason that depreciation charges would roughly match capital expenditures and working capital requirements would be minor. Therefore, reported earnings (before amortization of intangibles) were also freely-distributable earnings, which meant that ownership of a media property could be construed as akin to owning a perpetual annuity set to grow at 6% a year. Say, next, that a discount rate of 10% was used to determine

the present value of that earnings stream. One could then calculate that it was appropriate to pay a whopping $25 million for a property with current after-tax earnings of $1 million. (This after-tax multiplier of 25 translates to a multiplier on pre-tax earnings of about 16.)

Now change the assumption and posit that the $1 million represents "normal earning power" and that earnings will bob around this figure cyclically. A "bob-around" pattern is indeed the lot of most businesses, whose income stream grows only if their owners are willing to commit more capital (usually in the form of retained earnings). Under our revised assumption, $1 million of earnings, discounted by the same 10%, translates to a $10 million valuation. Thus a seemingly modest shift in assumptions reduces the property's valuation to 10 times after-tax earnings (or about 6 1/2 times pre-tax earnings).

Dollars are dollars whether they are derived from the operation of media properties or of steel mills. What in the past caused buyers to value a dollar of earnings from media far higher than a dollar from steel was that the earnings of a media property were expected to constantly grow (without the business requiring much additional capital), whereas steel earnings clearly fell in the bob-around category. Now, however, expectations for media have moved toward the bob-around model. And, as our simplified example illustrates, valuations must change dramatically when expectations are revised.

We have a significant investment in media - both through our direct ownership of Buffalo News and our shareholdings in The Washington Post Company and Capital Cities/ABC - and the intrinsic value of this investment has declined materially because of the secular transformation that the industry is experiencing. (Cyclical factors have also hurt our current look-through earnings, but these factors do not reduce intrinsic value.) However, as our Business Principles on page 2-3 note, one of the rules by which we run Berkshire is that we do not sell businesses - or investee holdings that we have classified as permanent - simply because we see ways to use the money more advantageously elsewhere. (We did sell certain other media holdings sometime back, but these were relatively small.)

The intrinsic value losses that we have suffered have been moderated because the Buffalo News, under Stan Lipsey's leadership, has done far better than most newspapers and because both Cap Cities and Washington Post are exceptionally well-managed. In particular, these companies stayed on the sidelines during the late 1980's period in which purchasers of media properties regularly paid irrational prices. Also, the debt of both Cap Cities and Washington Post

is small and roughly offset by cash that they hold. As a result, the shrinkage in the value of their assets has not been accentuated by the effects of leverage. Among publicly-owned media companies, our two investees are about the only ones essentially free of debt. Most of the other companies, through a combination of the aggressive acquisition policies they pursued and shrinking earnings, find themselves with debt equal to five or more times their current net income.

The strong balance sheets and strong managements of Cap Cities and Washington Post leave us more comfortable with these investments than we would be with holdings in any other media companies. Moreover, most media properties continue to have far better economic characteristics than those possessed by the average American business. But gone are the days of bullet-proof franchises and cornucopian economics.

Twenty Years in a Candy Store

We've just passed a milestone: Twenty years ago, on January 3, 1972, Blue Chip Stamps (then an affiliate of Berkshire and later merged into it) bought control of See's Candy Shops, a West Coast manufacturer and retailer of boxed-chocolates. The nominal price that the sellers were asking - calculated on the 100% ownership we ultimately attained - was $40 million. But the company had $10 million of excess cash, and therefore the true offering price was $30 million. Charlie and I, not yet fully appreciative of the value of an economic franchise, looked at the company's mere $7 million of tangible net worth and said $25 million was as high as we would go (and we meant it). Fortunately, the sellers accepted our offer.

The sales of trading stamps by Blue Chip thereafter declined from $102.5 million in 1972 to $1.2 million in 1991. But See's candy sales in the same period increased from $29 million to $196 million. Moreover, profits at See's grew even faster than sales, from $4.2 million pre-tax in 1972 to $42.4 million last year.

For an increase in profits to be evaluated properly, it must be compared with the incremental capital investment required to produce it. On this score, See's has been astounding: The company now operates comfortably with only $25 million of net worth, which means that our beginning base of $7 million has had to be supplemented by only $18 million of reinvested earnings. Meanwhile, See's remaining pre-tax profits of $410 million were distributed to Blue Chip/Berkshire during the 20 years for these companies to deploy (after payment of taxes) in whatever way made most sense.

In our See's purchase, Charlie and I had one important insight: We saw that the business had untapped pricing power. Otherwise, we were lucky twice over. First, the transaction was not derailed by our dumb insistence on a $25 million price. Second, we found Chuck Huggins, then See's executive vice-president, whom we instantly put in charge. Both our business and personal experiences with Chuck have been outstanding. One example: When the purchase was made, we shook hands with Chuck on a compensation arrangement - conceived in about five minutes and never reduced to a written contract - that remains unchanged to this day.

In 1991, See's sales volume, measured in dollars, matched that of 1990. In pounds, however, volume was down 4%. All of that slippage took place in the last two months of the year, a period that normally produces more than 80% of annual profits. Despite the weakness in sales, profits last year grew 7%, and our pre-tax profit margin was a record 21.6%.

Almost 80% of See's sales come from California and our business clearly was hurt by the recession, which hit the state with particular force late in the year. Another negative, however, was the mid-year initiation in California of a sales tax of 7%-8«% (depending on the county involved) on "snack food" that was deemed applicable to our candy.

Shareholders who are students of epistemological shadings will enjoy California's classifications of "snack" and "non-snack" foods:

Taxable "Snack" Foods	**Non-Taxable "Non-Snack" Foods**
Ritz Crackers	Soda Crackers
Popped Popcorn	Unpopped Popcorn
Granola Bars	Granola Cereal
Slice of Pie (Wrapped)	Whole Pie
Milky Way Candy Bar	Milky Way Ice Cream Bar

What - you are sure to ask - is the tax status of a *melted* Milky Way ice cream bar? In that androgynous form, does it more resemble an ice cream bar or a candy bar that has been left in the sun? It's no wonder that Brad Sherman, Chairman of California's State Board of Equalization,

who opposed the snack food bill but must now administer it, has said: "I came to this job as a specialist in tax law. Now I find my constituents should have elected Julia Child."

Charlie and I have many reasons to be thankful for our association with Chuck and See's. The obvious ones are that we've earned exceptional returns and had a good time in the process. Equally important, ownership of See's has taught us much about the evaluation of franchises. We've made significant money in certain common stocks because of the lessons we learned at See's.

H. H. Brown

We made a sizable acquisition in 1991 - the H. H. Brown Company - and behind this business is an interesting history. In 1927 a 29-year-old businessman named Ray Heffernan purchased the company, then located in North Brookfield, Massachusetts, for $10,000 and began a 62-year career of running it. (He also found time for other pursuits: At age 90 he was still joining new golf clubs.) By Mr. Heffernan's retirement in early 1990 H. H. Brown had three plants in the United States and one in Canada; employed close to 2,000 people; and earned about $25 million annually before taxes.

Along the way, Frances Heffernan, one of Ray's daughters, married Frank Rooney, who was sternly advised by Mr. Heffernan before the wedding that he had better forget any ideas he might have about working for his father-in-law. That was one of Mr. Heffernan's few mistakes: Frank went on to become CEO of Melville Shoe (now Melville Corp.). During his 23 years as boss, from 1964 through 1986, Melville's earnings averaged more than 20% on equity and its stock (adjusted for splits) rose from $16 to $960. And a few years after Frank retired, Mr. Heffernan, who had fallen ill, asked him to run Brown.

After Mr. Heffernan died late in 1990, his family decided to sell the company - and here we got lucky. I had known Frank for a few years but not well enough for him to think of Berkshire as a possible buyer. He instead gave the assignment of selling Brown to a major investment banker, which failed also to think of us. But last spring Frank was playing golf in Florida with John Loomis, a long-time friend of mine as well as a Berkshire shareholder, who is always on the alert for something that might fit us. Hearing about the impending sale of Brown, John told Frank that the company should be right up Berkshire's alley, and Frank promptly gave me a call. I thought right away that we would make a deal and before long it was done.

Much of my enthusiasm for this purchase came from Frank's willingness to continue as CEO. Like most of our managers, he has no financial need to work but does so because he loves the game and likes to excel. Managers of this stripe cannot be "hired" in the normal sense of the word. What we must do is provide a concert hall in which business artists of this class will wish to perform.

Brown (which, by the way, has no connection to Brown Shoe of St. Louis) is the leading North American manufacturer of work shoes and boots, and it has a history of earning unusually fine margins on sales and assets. Shoes are a tough business - of the billion pairs purchased in the United States each year, about 85% are imported - and most manufacturers in the industry do poorly. The wide range of styles and sizes that producers offer causes inventories to be heavy; substantial capital is also tied up in receivables. In this kind of environment, only outstanding managers like Frank and the group developed by Mr. Heffernan can prosper.

A distinguishing characteristic of H. H. Brown is one of the most unusual compensation systems I've encountered - but one that warms my heart: A number of key managers are paid an annual salary of $7,800, to which is added a designated percentage of the profits of the company after these are reduced by a charge for capital employed. These managers therefore truly stand in the shoes of owners. In contrast, most managers talk the talk but don't walk the walk, choosing instead to employ compensation systems that are long on carrots but short on sticks (and that almost invariably treat equity capital as if it were cost-free). The arrangement at Brown, in any case, has served both the company and its managers exceptionally well, which should be no surprise: Managers eager to bet heavily on their abilities usually have plenty of ability to bet on.

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It's discouraging to note that though we have on four occasions made major purchases of companies whose sellers were represented by prominent investment banks, we were in only one of these instances contacted by the investment bank. In the other three cases, I myself or a friend initiated the transaction at some point after the investment bank had solicited its own list of prospects. We would love to see an intermediary earn its fee by thinking of us - and therefore repeat here what we're looking for:

(1) Large purchases (at least $10 million of after-tax earnings),

(2) Demonstrated consistent earning power (future projections are of little interest to us, nor are "turnaround" situations),

(3) Businesses earning good returns on equity while employing little or no debt,

(4) Management in place (we can't supply it),

(5) Simple businesses (if there's lots of technology, we won't understand it),

(6) An offering price (we don't want to waste our time or that of the seller by talking, even preliminarily, about a transaction when price is unknown).

We will not engage in unfriendly takeovers. We can promise complete confidentiality and a very fast answer - customarily within five minutes - as to whether we're interested. (With Brown, we didn't even need to take five.) We prefer to buy for cash, but will consider issuing stock when we receive as much in intrinsic business value as we give.

Our favorite form of purchase is one fitting the pattern through which we acquired Nebraska Furniture Mart, Fechheimer's and Borsheim's. In cases like these, the company's owner-managers wish to generate significant amounts of cash, sometimes for themselves, but often for their families or inactive shareholders. At the same time, these managers wish to remain significant owners who continue to run their companies just as they have in the past. We think we offer a particularly good fit for owners with such objectives and we invite potential sellers to check us out by contacting people with whom we have done business in the past.

Charlie and I frequently get approached about acquisitions that don't come close to meeting our tests: We've found that if you advertise an interest in buying collies, a lot of people will call hoping to sell you their cocker spaniels. A line from a country song expresses our feeling about new ventures, turnarounds, or auction-like sales: "When the phone don't ring, you'll know it's me."

Besides being interested in the purchase of businesses as described above, we are also interested in the negotiated purchase of large, but not controlling, blocks of stock comparable to those we hold in Capital Cities, Salomon, Gillette, USAir, Champion, and American Express. We are not interested, however, in receiving suggestions about purchases we might make in the general stock market.

Insurance Operations

Shown below is an updated version of our usual table presenting key figures for the property-casualty insurance industry:

Year	Yearly Change in Premiums Written (%)	Statutory Combined Ratio after Policyholder Dividends	Yearly Change in Incurred Losses (%)	Inflation Rate Measured by GNP Deflator (%)
1981	3.8	106.0	6.5	9.6
1982	4.4	109.8	8.4	6.4
1983	4.6	112.0	6.8	3.9
1984	9.2	117.9	16.9	3.8
1985	22.1	116.5	16.1	3.3
1986	22.2	108.0	13.5	2.7
1987	9.4	104.6	7.8	3.1
1988	4.4	105.4	5.5	3.3
1989	3.2	109.2	7.7	4.1
1990 (Revised)	4.4	109.6	4.8	4.1
1991 (Est.)	3.1	109.1	2.9	3.7

The combined ratio represents total insurance costs (losses incurred plus expenses) compared to revenue from premiums: A ratio below 100 indicates an underwriting profit, and one above 100 indicates a loss. The higher the ratio, the worse the year. When the investment income that an insurer earns from holding policyholders' funds ("the float") is taken into account, a combined ratio in the 107 - 111 range typically produces an overall break-even result, exclusive of earnings on the funds provided by shareholders.

For the reasons laid out in previous reports, we expect the industry's incurred losses to grow at close to 10% annually, even in periods when general inflation runs considerably lower. (Over the last 25 years, incurred losses have in reality grown at a still faster rate, 11%.) If premium growth meanwhile materially lags that 10% rate, underwriting losses will mount.

However, the industry's tendency to under-reserve when business turns bad may obscure the picture for a time - and that could well describe the situation last year. Though premiums did not

come close to growing 10%, the combined ratio failed to deteriorate as I had expected but instead slightly improved. Loss-reserve data for the industry indicate that there is reason to be skeptical of that outcome, and it may turn out that 1991's ratio should have been worse than was reported. In the long run, of course, trouble awaits managements that paper over operating problems with accounting maneuvers. Eventually, managements of this kind achieve the same result as the seriously-ill patient who tells his doctor: "I can't afford the operation, but would you accept a small payment to touch up the x-rays?"

Berkshire's insurance business has changed in ways that make combined ratios, our own or the industry's, largely irrelevant to our performance. What counts with us is the "cost of funds developed from insurance," or in the vernacular, "the cost of float."

Float - which we generate in exceptional amounts - is the total of loss reserves, loss adjustment expense reserves and unearned premium reserves minus agents balances, prepaid acquisition costs and deferred charges applicable to assumed reinsurance. And the cost of float is measured by our underwriting loss.

The table below shows our cost of float since we entered the business in 1967.

(in $ Millions)	**(1) Underwriting Loss**	**(2) Average Float**	**Approximate Cost of Funds**	**Yearend Yield on Long-Term Govt. Bonds**
1967	Profit	$17.3	< 0	5.50%
1968	Profit	19.9	< 0	5.90%
1969	Profit	23.4	< 0	6.79%
1970	$0.37	32.4	1.14%	6.25%
1971	Profit	52.5	< 0	5.81%
1972	Profit	69.5	< 0	5.82%
1973	Profit	73.3	< 0	7.27%

1974	7.36	79.1	9.30%	8.13%
1975	11.35	87.6	12.96%	8.03%
1976	Profit	102.6	< 0	7.30%
1977	Profit	139.0	< 0	7.97%
1978	Profit	190.4	< 0	8.93%
1979	Profit	227.3	< 0	10.08%
1980	Profit	237.0	< 0	11.94%
1981	Profit	228.4	< 0	13.61%
1982	21.56	220.6	9.77%	10.64%
1983	33.87	231.3	14.64%	11.84%
1984	48.06	253.2	18.98%	11.58%
1985	44.23	390.2	11.34%	9.34%
1986	55.84	797.5	7.00%	7.60%
1987	55.43	1,266.7	4.38%	8.95%
1988	11.08	1,497.7	0.74%	9.00%
1989	24.40	1,541.3	1.58%	7.97%
1990	26.65	1,637.3	1.63%	8.24%
1991	119.6	1,895.0	6.31%	7.40%

As you can see, our cost of funds in 1991 was well below the U. S. Government's cost on newly-issued long-term bonds. We have in fact beat the government's rate in 20 of the 25 years we have been in the insurance business, often by a wide margin. We have over that time also substantially increased the amount of funds we hold, which counts as a favorable development but only because the cost of funds has been satisfactory. Our float should continue to grow; the challenge will be to garner these funds at a reasonable cost.

Berkshire continues to be a very large writer - perhaps the largest in the world - of "super-cat" insurance, which is coverage that other insurance companies buy to protect themselves against major catastrophic losses. Profits in this business are enormously volatile. As I mentioned last year, $100 million in super-cat premiums, which is roughly our annual expectation, could deliver us anything from a $100 million profit (in a year with no big catastrophe) to a $200 million loss (in a year in which a couple of major hurricanes and/or earthquakes come along).

We price this business expecting to pay out, over the long term, about 90% of the premiums we receive. In any given year, however, we are likely to appear either enormously profitable or

enormously unprofitable. That is true in part because GAAP accounting does not allow us to set up reserves in the catastrophe-free years for losses that are certain to be experienced in other years. In effect, a one-year accounting cycle is ill-suited to the nature of this business - and that is a reality you should be aware of when you assess our annual results.

Last year there appears to have been, by our definition, one super-cat, but it will trigger payments from only about 25% of our policies. Therefore, we currently estimate the 1991 underwriting profit from our catastrophe business to have been about $11 million. (You may be surprised to learn the identity of the biggest catastrophe in 1991: It was neither the Oakland fire nor Hurricane Bob, but rather a September typhoon in Japan that caused the industry an insured loss now estimated at about $4-$5 billion. At the higher figure, the loss from the typhoon would surpass that from Hurricane Hugo, the previous record-holder.)

Insurers will always need huge amounts of reinsurance protection for marine and aviation disasters as well as for natural catastrophes. In the 1980's much of this reinsurance was supplied by "innocents" - that is, by insurers that did not understand the risks of the business - but they have now been financially burned beyond recognition. (Berkshire itself was an innocent all too often when I was personally running the insurance operation.) Insurers, though, like investors, eventually repeat their mistakes. At some point - probably after a few catastrophe-scarce years - innocents will reappear and prices for super-cat policies will plunge to silly levels.

As long as apparently-adequate rates prevail, however, we will be a major participant in super-cat coverages. In marketing this product, we enjoy a significant competitive advantage because of our premier financial strength. Thinking insurers know that when "the big one" comes, many reinsurers who found it easy to write policies will find it difficult to write checks. (Some reinsurers can say what Jackie Mason does: "I'm fixed for life - as long as I don't buy anything.") Berkshire's ability to fulfill all its commitments under conditions of even extreme adversity is unquestioned.

Overall, insurance offers Berkshire its greatest opportunities. Mike Goldberg has accomplished wonders with this operation since he took charge and it has become a very valuable asset, albeit one that can't be appraised with any precision.

Marketable Common Stocks

On the next page we list our common stock holdings having a value of over $100 million. A small portion of these investments belongs to subsidiaries of which Berkshire owns less than 100%.

Shares	Company	Cost (000's omitted)	Market (000's omitted)
3,000,000	Capital Cities/ABC, Inc.	$517,500	$1,300,500
46,700,00	The Coca-Cola Company	1,023,920	3,747,675
2,495,200	Federal Home Loan Mortgage Corp	77,245	343,090
6,850,000	GEICO Corporation.	45,713	1,363,150
24,000,000	The Gillette Company	600,000	1,347,000
31,247,000	Guinness PLC	264,782	296,755
1,727,765	The Washington Post Company	9,731	336,050
5,000,000	Wells Fargo & Company	289,431	290,000

As usual the list reflects our Rip Van Winkle approach to investing. Guinness is a new position. But we held the other seven stocks a year ago (making allowance for the conversion of our Gillette position from preferred to common) and in six of those we hold an unchanged number of shares. The exception is Federal Home Loan Mortgage ("Freddie Mac"), in which our shareholdings increased slightly. Our stay-put behavior reflects our view that the stock market serves as a relocation center at which money is moved from the active to the patient. (With tongue only partly in check, I suggest that recent events indicate that the much-maligned "idle rich" have received a bad rap: They have maintained or increased their wealth while many of the "energetic rich" - aggressive real estate operators, corporate acquirers, oil drillers, etc. - have seen their fortunes disappear.)

Our Guinness holding represents Berkshire's first significant investment in a company domiciled outside the United States. Guinness, however, earns its money in much the same fashion as Coca-Cola and Gillette, U.S.-based companies that garner most of their profits from international operations. Indeed, in the sense of where they earn their profits - continent-by-continent - Coca-Cola and Guinness display strong similarities. (But you'll never get their drinks confused - and your Chairman remains unmovably in the Cherry Coke camp.)

We continually search for large businesses with understandable, enduring and mouth-watering economics that are run by able and shareholder-oriented managements. This focus doesn't guarantee results: We both have to buy at a sensible price and get business performance from our companies that validates our assessment. But this investment approach - searching for the superstars - offers us our only chance for real success. Charlie and I are simply not smart enough, considering the large sums we work with, to get great results by adroitly buying and selling portions of far-from-great businesses. Nor do we think many others can achieve long-term investment success by flitting from flower to flower. Indeed, we believe that according the name "investors" to institutions that trade actively is like calling someone who repeatedly engages in one-night stands a romantic.

If my universe of business possibilities was limited, say, to private companies in Omaha, I would, first, try to assess the long-term economic characteristics of each business; second, assess the quality of the people in charge of running it; and, third, try to buy into a few of the best operations at a sensible price. I certainly would not wish to own an equal part of every business in town. Why, then, should Berkshire take a different tack when dealing with the larger universe of public companies? And since finding great businesses and outstanding managers is so difficult, why should we discard proven products? (I was tempted to say "the real thing.") Our motto is: "If at first you do succeed, quit trying."

John Maynard Keynes, whose brilliance as a practicing investor matched his brilliance in thought, wrote a letter to a business associate, F. C. Scott, on August 15, 1934 that says it all: "As time goes on, I get more and more convinced that the right method in investment is to put fairly large sums into enterprises which one thinks one knows something about and in the management of which one thoroughly believes. It is a mistake to think that one limits one's risk by spreading too much between enterprises about which one knows little and has no reason for special confidence. . . . One's knowledge and experience are definitely limited and there are seldom more than two or three enterprises at any given time in which I personally feel myself entitled to put *full* confidence."

Mistake Du Jour

In the 1989 annual report I wrote about "Mistakes of the First 25 Years" and promised you an update in 2015. My experiences in the first few years of this second "semester" indicate that my backlog of matters to be discussed will become unmanageable if I stick to my original plan.

Therefore, I will occasionally unburden myself in these pages in the hope that public confession may deter further bumblings. (Post-mortems prove useful for hospitals and football teams; why not for businesses and investors?)

Typically, our most egregious mistakes fall in the omission, rather than the commission, category. That may spare Charlie and me some embarrassment, since you don't see these errors; but their invisibility does not reduce their cost. In this mea culpa, I am not talking about missing out on some company that depends upon an esoteric invention (such as Xerox), high-technology (Apple), or even brilliant merchandising (Wal-Mart). We will never develop the competence to spot such businesses early. Instead I refer to business situations that Charlie and I can understand and that seem clearly attractive - but in which we nevertheless end up sucking our thumbs rather than buying.

Every writer knows it helps to use striking examples, but I wish the one I now present wasn't quite so dramatic: In early 1988, we decided to buy 30 million shares (adjusted for a subsequent split) of Federal National Mortgage Association (Fannie Mae), which would have been a $350-$400 million investment. We had owned the stock some years earlier and understood the company's business. Furthermore, it was clear to us that David Maxwell, Fannie Mae's CEO, had dealt superbly with some problems that he had inherited and had established the company as a financial powerhouse - with the best yet to come. I visited David in Washington and confirmed that he would not be uncomfortable if we were to take a large position.

After we bought about 7 million shares, the price began to climb. In frustration, I stopped buying (a mistake that, thankfully, I did not repeat when Coca-Cola stock rose similarly during our purchase program). In an even sillier move, I surrendered to my distaste for holding small positions and sold the 7 million shares we owned.

I wish I could give you a halfway rational explanation for my amateurish behavior vis-a-vis Fannie Mae. But there isn't one. What I *can* give you is an estimate as of yearend 1991 of the approximate gain that Berkshire *didn't* make because of your Chairman's mistake: about $1.4 billion.

Fixed-Income Securities

We made several significant changes in our fixed-income portfolio during 1991. As I noted earlier, our Gillette preferred was called for redemption, which forced us to convert to common

stock; we eliminated our holdings of an RJR Nabisco issue that was subject to an exchange offer and subsequent call; and we purchased fixed-income securities of American Express and First Empire State Corp., a Buffalo-based bank holding company. We also added to a small position in ACF Industries that we had established in late 1990. Our largest holdings at yearend were:

Issuer (000's omitted)	**Cost of Preferreds and Amortized Value of Bonds**	**Market**
ACF Industries	$ 93,918(2)	$118,683
American Express	300,000	263,265(1)(2)
Champion International	300,000(2)	300,000(1)
First Empire State	40,000	50,000(1)(2)
RJR Nabisco	222,148(2)	285,683
Salomon	700,000(2)	714,000(1)
USAir	358,000(2)	232,700(1)
Washington Public Power Systems	158,553(2)	203,071

(1) Fair value as determined by Charlie and me
(2) Carrying value in our financial statements

Our $40 million of First Empire State preferred carries a 9% coupon, is non-callable until 1996 and is convertible at $78.91 per share. Normally I would think a purchase of this size too small for Berkshire, but I have enormous respect for Bob Wilmers, CEO of First Empire, and like being his partner on any scale.

Our American Express preferred is not a normal fixed-income security. Rather it is a "Perc," which carries a fixed dividend of 8.85% on our $300 million cost. Absent one exception mentioned later, our preferred must be converted three years after issuance, into a maximum of 12,244,898 shares. If necessary, a downward adjustment in the conversion ratio will be made in order to limit to $414 million the total value of the common we receive. Though there is thus a ceiling on the value of the common stock that we will receive upon conversion, there is no floor. The terms of the preferred, however, include a provision allowing us to extend the conversion date by one year if the common stock is below $24.50 on the third anniversary of our purchase.

Overall, our fixed-income investments have treated us well, both over the long term and recently. We have realized large capital gains from these holdings, including about $152 million in 1991. Additionally, our after-tax yields have considerably exceeded those earned by most fixed-income portfolios.

Nevertheless, we have had some surprises, none greater than the need for me to involve myself personally and intensely in the Salomon situation. As I write this letter, I am also writing a letter for inclusion in Salomon's annual report and I refer you to that report for an update on the company. (Write to: Corporate Secretary, Salomon Inc, Seven World Trade Center, New York, NY 10048) Despite the company's travails, Charlie and I believe our Salomon preferred stock increased slightly in value during 1991. Lower interest rates and a higher price for Salomon's common produced this result.

Last year I told you that our USAir investment "should work out all right unless the industry is decimated during the next few years." Unfortunately 1991 was a decimating period for the industry, as Midway, Pan Am and America West all entered bankruptcy. (Stretch the period to 14 months and you can add Continental and TWA.)

The low valuation that we have given USAir in our table reflects the risk that the industry will remain unprofitable for virtually all participants in it, a risk that is far from negligible. The risk is heightened by the fact that the courts have been encouraging bankrupt carriers to continue operating. These carriers can temporarily charge fares that are below the industry's costs because the bankrupts don't incur the capital costs faced by their solvent brethren and because they can fund their losses - and thereby stave off shutdown - by selling off assets. This burn-the-furniture-to-provide-firewood approach to fare-setting by bankrupt carriers contributes to the toppling of previously-marginal carriers, creating a domino effect that is perfectly designed to bring the industry to its knees.

Seth Schofield, who became CEO of USAir in 1991, is making major adjustments in the airline's operations in order to improve its chances of being one of the few industry survivors. There is no tougher job in corporate America than running an airline: Despite the huge amounts of equity capital that have been injected into it, the industry, in aggregate, has posted a net loss since its birth after Kitty Hawk. Airline managers need brains, guts, and experience - and Seth possesses all three of these attributes.

Miscellaneous

About 97.7% of all eligible shares participated in Berkshire's 1991 shareholder-designated contributions program. Contributions made through the program were $6.8 million, and 2,630 charities were recipients.

We suggest that new shareholders read the description of our shareholder-designated contributions program that appears on pages 48-49. To participate in future programs, you must make sure your shares are registered in the name of the actual owner, not in the nominee name of a broker, bank or depository. Shares not so registered on August 31, 1992 will be ineligible for the 1992 program.

In addition to the shareholder-designated contributions that Berkshire distributes, managers of our operating businesses make contributions, including merchandise, averaging about $1.5 million annually. These contributions support local charities, such as The United Way, and produce roughly commensurate benefits for our businesses.

However, neither our operating managers nor officers of the parent company use Berkshire funds to make contributions to broad national programs or charitable activities of special personal interest to them, except to the extent they do so as shareholders. If your employees, including your CEO, wish to give to their alma maters or other institutions to which they feel a personal attachment, we believe they should use their own money, not yours.

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The faithful will notice that, for the first time in some years, Charlie's annual letter to Wesco shareholders is not reprinted in this report. Since his letter is relatively barebones this year, Charlie said he saw no point in including it in these pages; my own recommendation, however, is that you get a copy of the Wesco report. Simply write: Corporate Secretary, Wesco Financial Corporation, 315 East Colorado Boulevard, Pasadena, CA 91101.

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Malcolm G. Chace, Jr., now 88, has decided not to stand for election as a director this year. But the association of the Chace family with Berkshire will not end: Malcolm III (Kim), Malcolm's

son, will be nominated to replace him.

In 1931, Malcolm went to work for Berkshire Fine Spinning Associates, which merged with Hathaway Manufacturing Co. in 1955 to form our present company. Two years later, Malcolm became Berkshire Hathaway's Chairman, a position he held as well in early 1965 when he made it possible for Buffett Partnership, Ltd. to buy a key block of Berkshire stock owned by some of his relatives. This purchase gave our partnership effective control of the company. Malcolm's immediate family meanwhile kept its Berkshire stock and for the last 27 years has had the second-largest holding in the company, trailing only the Buffett family. Malcolm has been a joy to work with and we are delighted that the long-running relationship between the Chace family and Berkshire is continuing to a new generation.

* * * * * * * * * * *

The annual meeting this year will be held at the Orpheum Theater in downtown Omaha at 9:30 a.m. on Monday, April 27, 1992. Attendance last year grew to a record 1,550, but that still leaves plenty of room at the Orpheum.

We recommend that you get your hotel reservations early at one of these hotels: (1) The Radisson-Redick Tower, a small (88 rooms) but nice hotel across the street from the Orpheum; (2) the much larger Red Lion Hotel, located about a five-minute walk from the Orpheum; or (3) the Marriott, located in West Omaha about 100 yards from Borsheim's and a twenty minute drive from downtown. We will have buses at the Marriott that will leave at 8:30 and 8:45 for the meeting and return after it ends.

Charlie and I always enjoy the meeting, and we hope you can make it. The quality of our shareholders is reflected in the quality of the questions we get: We have never attended an annual meeting anywhere that features such a consistently high level of intelligent, owner-related questions.

An attachment to our proxy material explains how you can obtain the card you will need for admission to the meeting. With the admission card, we will enclose information about parking facilities located near the Orpheum. If you are driving, come a little early. Nearby lots fill up quickly and you may have to walk a few blocks.

As usual, we will have buses to take you to Nebraska Furniture Mart and Borsheim's after the meeting and to take you from there to downtown hotels or the airport later. I hope that you will allow plenty of time to fully explore the attractions of both stores. Those of you arriving early can visit the Furniture Mart any day of the week; it is open from 10 a.m. to 5:30 p.m. on Saturdays and from noon to 5:30 p.m. on Sundays. While there, stop at the See's Candy Cart and find out for yourself why Americans ate 26 million pounds of See's products last year.

Borsheim's normally is closed on Sunday, but we will be open for shareholders and their guests from noon to 6 p.m. on Sunday, April 26. Borsheim's will also have a special party the previous evening at which shareholders are welcome. (You must, however, write Mrs. Gladys Kaiser at our office for an invitation.) On display that evening will be a 150-year retrospective of the most exceptional timepieces made by Patek Philippe, including watches once owned by Queen Victoria, Pope Pius IX, Rudyard Kipling, Madame Curie and Albert Einstein. The centerpiece of the exhibition will be a $5 million watch whose design and manufacture required nine years of labor by Patek Philippe craftsmen. Along with the rest of the collection, this watch will be on display at the store on Sunday - unless Charlie has by then impulsively bought it.

Nicholas Kenner nailed me - again - at last year's meeting, pointing out that I had said in the 1990 annual report that he was 11 in May 1990, when actually he was 9. So, asked Nicholas rather caustically: "If you can't get that straight, how do I know the numbers in the back [the financials] are correct?" I'm still searching for a snappy response. Nicholas will be at this year's meeting - he spurned my offer of a trip to Disney World on that day - so join us to watch a continuation of this lop-sided battle of wits.

Warren E. Buffett
Chairman of the Board

1992 Letter

BERKSHIRE HATHAWAY INC.

To the Shareholders of Berkshire Hathaway Inc.:

Our per-share book value increased 20.3% during 1992. Over the last 28 years (that is, since present management took over) book value has grown from $19 to $7,745, or at a rate of 23.6% compounded annually.

During the year, Berkshire's net worth increased by $1.52 billion. More than 98% of this gain came from earnings and appreciation of portfolio securities, with the remainder coming from the issuance of new stock. These shares were issued as a result of our calling our convertible debentures for redemption on January 4, 1993, and of some holders electing to receive common shares rather than the cash that was their alternative. Most holders of the debentures who converted into common waited until January to do it, but a few made the move in December and therefore received shares in 1992. To sum up what happened to the $476 million of bonds we had outstanding: $25 million were converted into shares before yearend; $46 million were converted in January; and $405 million were redeemed for cash. The conversions were made at $11,719 per share, so altogether we issued 6,106 shares.

Berkshire now has 1,152,547 shares outstanding. That compares, you will be interested to know, to 1,137,778 shares outstanding on October 1, 1964, the beginning of the fiscal year during which Buffett Partnership, Ltd. acquired control of the company.

We have a firm policy about issuing shares of Berkshire, doing so only when we receive as much value as we give. Equal value, however, has not been easy to obtain, since we have always valued our shares highly. So be it: We wish to increase Berkshire's size only when doing that also increases the wealth of its owners.

Those two objectives do not necessarily go hand-in-hand as an amusing but value-destroying experience in our past illustrates. On that occasion, we had a significant investment in a bank whose management was hell-bent on expansion. (Aren't they all?) When our bank wooed a

smaller bank, its owner demanded a stock swap on a basis that valued the acquiree's net worth and earning power at over twice that of the acquirer's. Our management - visibly in heat - quickly capitulated. The owner of the acquiree then insisted on one other condition: "You must promise me," he said in effect, "that once our merger is done and I have become a major shareholder, you'll never again make a deal this dumb."

You will remember that our goal is to increase our per-share intrinsic value - for which our book value is a conservative, but useful, proxy - at a 15% annual rate. This objective, however, cannot be attained in a smooth manner. Smoothness is particularly elusive because of the accounting rules that apply to the common stocks owned by our insurance companies, whose portfolios represent a high proportion of Berkshire's net worth. Since 1979, generally accepted accounting principles (GAAP) have required that these securities be valued at their market prices (less an adjustment for tax on any net unrealized appreciation) rather than at the lower of cost or market. Run-of-the-mill fluctuations in equity prices therefore cause our annual results to gyrate, especially in comparison to those of the typical industrial company.

To illustrate just how volatile our progress has been - and to indicate the impact that market movements have on short-term results - we show on the facing page our annual change in per-share net worth and compare it with the annual results (including dividends) of the S&P 500.

You should keep at least three points in mind as you evaluate this data. The first point concerns the many businesses we operate whose annual earnings are unaffected by changes in stock market valuations. The impact of these businesses on both our absolute and relative performance has changed over the years. Early on, returns from our textile operation, which then represented a significant portion of our net worth, were a major drag on performance, averaging far less than would have been the case if the money invested in that business had instead been invested in the S&P 500. In more recent years, as we assembled our collection of exceptional businesses run by equally exceptional managers, the returns from our operating businesses have been high - usually well in excess of the returns achieved by the S&P.

A second important factor to consider - and one that significantly hurts our relative performance - is that both the income and capital gains from our securities are burdened by a substantial corporate tax liability whereas the S&P returns are pre-tax. To comprehend the damage, imagine that Berkshire had owned nothing other than the S&P index during the 28-year period covered. In that case, the tax bite would have caused our corporate performance to be

appreciably below the record shown in the table for the S&P. Under present tax laws, a gain for the S&P of 18% delivers a corporate holder of that index a return well short of 13%. And this problem would be intensified if corporate tax rates were to rise. This is a structural disadvantage we simply have to live with; there is no antidote for it.

The third point incorporates two predictions: Charlie Munger, Berkshire's Vice Chairman and my partner, and I are virtually certain that the return over the next decade from an investment in the S&P index will be far less than that of the past decade, and we are dead certain that the drag exerted by Berkshire's expanding capital base will substantially reduce our historical advantage relative to the index.

Making the first prediction goes somewhat against our grain: We've long felt that the only value of stock forecasters is to make fortune tellers look good. Even now, Charlie and I continue to believe that short-term market forecasts are poison and should be kept locked up in a safe place, away from children and also from grown-ups who behave in the market like children. However, it is clear that stocks cannot forever overperform their underlying businesses, as they have so dramatically done for some time, and that fact makes us quite confident of our forecast that the rewards from investing in stocks over the next decade will be significantly smaller than they were in the last. Our second conclusion - that an increased capital base will act as an anchor on our relative performance - seems incontestable. The only open question is whether we can drag the anchor along at some tolerable, though slowed, pace.

We will continue to experience considerable volatility in our annual results. That's assured by the general volatility of the stock market, by the concentration of our equity holdings in just a few companies, and by certain business decisions we have made, most especially our move to commit large resources to super-catastrophe insurance. We not only accept this volatility but welcome it: A tolerance for short-term swings improves our long-term prospects. In baseball lingo, our performance yardstick is slugging percentage, not batting average.

The Salomon Interlude

Last June, I stepped down as Interim Chairman of Salomon Inc after ten months in the job. You can tell from Berkshire's 1991-92 results that the company didn't miss me while I was gone. But the reverse isn't true: I missed Berkshire and am delighted to be back full-time. There is no job in the world that is more fun than running Berkshire and I count myself lucky to be where I am.

The Salomon post, though far from fun, was interesting and worthwhile: In Fortune's annual survey of America's Most Admired Corporations, conducted last September, Salomon ranked second among 311 companies in the degree to which it improved its reputation. Additionally, Salomon Brothers, the securities subsidiary of Salomon Inc, reported record pre-tax earnings last year - 34% above the previous high.

Many people helped in the resolution of Salomon's problems and the righting of the firm, but a few clearly deserve special mention. It is no exaggeration to say that without the combined efforts of Salomon executives Deryck Maughan, Bob Denham, Don Howard, and John Macfarlane, the firm very probably would not have survived. In their work, these men were tireless, effective, supportive and selfless, and I will forever be grateful to them.

Salomon's lead lawyer in its Government matters, Ron Olson of Munger, Tolles & Olson, was also key to our success in getting through this trouble. The firm's problems were not only severe, but complex. At least five authorities - the SEC, the Federal Reserve Bank of New York, the U.S. Treasury, the U.S. Attorney for the Southern District of New York, and the Antitrust Division of the Department of Justice - had important concerns about Salomon. If we were to resolve our problems in a coordinated and prompt manner, we needed a lawyer with exceptional legal, business and human skills. Ron had them all.

Acquisitions

Of all our activities at Berkshire, the most exhilarating for Charlie and me is the acquisition of a business with excellent economic characteristics and a management that we like, trust and admire. Such acquisitions are not easy to make but we look for them constantly. In the search, we adopt the same attitude one might find appropriate in looking for a spouse: It pays to be active, interested and open-minded, but it does not pay to be in a hurry.

In the past, I've observed that many acquisition-hungry managers were apparently mesmerized by their childhood reading of the story about the frog-kissing princess. Remembering her success, they pay dearly for the right to kiss corporate toads, expecting wondrous transfigurations. Initially, disappointing results only deepen their desire to round up new toads. ("Fanaticism," said Santyana, "consists of redoubling your effort when you've forgotten your aim.") Ultimately, even the most optimistic manager must face reality. Standing knee-deep in unresponsive toads, he then announces an enormous "restructuring" charge. In this

corporate equivalent of a Head Start program, the CEO receives the education but the stockholders pay the tuition.

In my early days as a manager I, too, dated a few toads. They were cheap dates - I've never been much of a sport - but my results matched those of acquirers who courted higher-priced toads. I kissed and they croaked.

After several failures of this type, I finally remembered some useful advice I once got from a golf pro (who, like all pros who have had anything to do with my game, wishes to remain anonymous). Said the pro: "Practice doesn't make perfect; practice makes permanent." And thereafter I revised my strategy and tried to buy good businesses at fair prices rather than fair businesses at good prices.

Last year, in December, we made an acquisition that is a prototype of what we now look for. The purchase was 82% of Central States Indemnity, an insurer that makes monthly payments for credit-card holders who are unable themselves to pay because they have become disabled or unemployed. Currently the company's annual premiums are about $90 million and profits about $10 million. Central States is based in Omaha and managed by Bill Kizer, a friend of mine for over 35 years. The Kizer family - which includes sons Bill, Dick and John - retains 18% ownership of the business and will continue to run things just as it has in the past. We could not be associated with better people.

Coincidentally, this latest acquisition has much in common with our first, made 26 years ago. At that time, we purchased another Omaha insurer, National Indemnity Company (along with a small sister company) from Jack Ringwalt, another long-time friend. Jack had built the business from scratch and, as was the case with Bill Kizer, thought of me when he wished to sell. (Jack's comment at the time: "If I don't sell the company, my executor will, and I'd rather pick the home for it.") National Indemnity was an outstanding business when we bought it and continued to be under Jack's management. Hollywood has had good luck with sequels; I believe we, too, will.

Berkshire's acquisition criteria are described on page 23. Beyond purchases made by the parent company, however, our subsidiaries sometimes make small "add-on" acquisitions that extend their product lines or distribution capabilities. In this manner, we enlarge the domain of managers we already know to be outstanding - and that's a low-risk and high-return proposition. We made five acquisitions of this type in 1992, and one was not so small: At yearend, H. H. Brown purchased Lowell Shoe Company, a business with $90 million in sales that makes

Nursemates, a leading line of shoes for nurses, and other kinds of shoes as well. Our operating managers will continue to look for add-on opportunities, and we would expect these to contribute modestly to Berkshire's value in the future.

Then again, a trend has emerged that may make further acquisitions difficult. The parent company made one purchase in 1991, buying H. H. Brown, which is run by Frank Rooney, who has eight children. In 1992 our only deal was with Bill Kizer, father of nine. It won't be easy to keep this string going in 1993.

Sources of Reported Earnings

The table below shows the major sources of Berkshire's reported earnings. In this presentation, amortization of Goodwill and other major purchase-price accounting adjustments are not charged against the specific businesses to which they apply, but are instead aggregated and shown separately. This procedure lets you view the earnings of our businesses as they would have been reported had we not purchased them. I've explained in past reports why this form of presentation seems to us to be more useful to investors and managers than one utilizing GAAP, which requires purchase-price adjustments to be made on a business-by-business basis. The total net earnings we show in the table are, of course, identical to the GAAP total in our audited financial statements.

Operating Earnings	**Pre-Tax**	**Earnings**	**Berkshire**	**Share**
(000s omitted)	**1992**	**1991**	**1992**	**1991**
Insurance Group:				
Underwriting	$(108,961)	$(119,593)	$(71,141)	$(77,229)
Net investment income	355,067	331,846	305,763	285,173
H. H. Brown (acquired 7/1/91)	27,883	13,616	17,340	8,611
Buffalo News	47,863	37,113	28,163	21,841
Fechheimer	13,698	12,947	7,267	6,843
Kirby	35,653	35,726	22,795	22,555
Nebraska Furniture Mart	17,110	14,384	8,072	6,993
Scott Fetzer Manufacturing Group	31,954	26,123	19,883	15,901
See's Candies	42,357	42,390	25,501	25,575
Wesco – other than Insurance	15,153	12,230	9,195	8,777
World Book	29,044	22,483	19,503	15,487
Amortization of Goodwill	(4,702)	(4,113)	(4,687)	(4,098)
Other Purchase Price Accounting charges	(7,385)	(6,021)	(8,383)	(7,019)
Interest Expense*	(98,643)	(89,250)	(62,899)	(57,165)
Shareholder-Designated Contributions	(7,634)	(6,772)	(4,913)	(4,388)
Other	72,223	77,399	36,267	47,896
Operating Earnings	460,680	400,508	347,726	315,753
Sales of Securities	89,937	192,478	59,559	124,155
Total Earnings- All entities	**$550,617**	**$592,986**	**$407,285**	**$439,908**

**Excludes interest expense of Scott Fetzer Financial Group and Mutual Savings & Loan. Includes $22.5 million in 1992 and $5.7 million in 1991 of premiums paid on the early redemption of debt.*

A large amount of additional information about these businesses is given on pages 37-47, where you will also find our segment earnings reported on a GAAP basis. Our goal is to give you
all of the financial information that Charlie and I consider significant in making our own evaluation of Berkshire.

"Look-Through" Earnings

We've previously discussed look-through earnings, which consist of: (1) the operating earnings reported in the previous section, plus; (2) the retained operating earnings of major investees that, under GAAP accounting, are not reflected in our profits, less; (3) an allowance for the tax that would be paid by Berkshire if these retained earnings of investees had instead been distributed to us. Though no single figure can be perfect, we believe that the look-through number more accurately portrays the earnings of Berkshire than does the GAAP number.

I've told you that over time look-through earnings must increase at about 15% annually if our intrinsic business value is to grow at that rate. Our look-through earnings in 1992 were $604 million, and they will need to grow to more than $1.8 billion by the year 2000 if we are to meet that 15% goal. For us to get there, our operating subsidiaries and investees must deliver excellent performances, and we must exercise some skill in capital allocation as well.

We cannot promise to achieve the $1.8 billion target. Indeed, we may not even come close to it. But it does guide our decision-making: When we allocate capital today, we are thinking about what will maximize look-through earnings in 2000.

We do not, however, see this long-term focus as eliminating the need for us to achieve decent short-term results as well. After all, we were thinking long-range thoughts five or ten years ago, and the moves we made then should now be paying off. If plantings made confidently are repeatedly followed by disappointing harvests, something is wrong with the farmer. (Or perhaps with the farm: Investors should understand that for certain companies, and even for some industries, there simply is *no* good long-term strategy.) Just as you should be suspicious of managers who pump up short-term earnings by accounting maneuvers, asset sales and the like, so also should you be suspicious of those managers who fail to deliver for extended periods and blame it on their long-term focus. (Even Alice, after listening to the Queen lecture her about "jam tomorrow," finally insisted, "It must come sometimes to jam today.")

The following table shows you how we calculate look-through earnings, though I warn you that the figures are necessarily *very* rough. (The dividends paid to us by these investees have been included in the operating earnings itemized on page 8, mostly under "Insurance Group: Net Investment Income.")

Berkshire's Major Investees	Berkshire's Ownership	Approximate at Yearend	Berkshire's Undistributed	Share of Operating Earnings
	1992	1991	1992	1991
Capitla Cities / ABC Inc.	18.2%	18.l%	$70	$61
The Coca-Cola Company	7.1%	7.0%	82	69
Federal Home Loan Mortgage Corp.	8.2% (1)	3.4% (1)	29 (2)	15
GEICO Corp.	48.1%	48.2%	34 (3)	69 (3)
General Dynamics Corp.	14.1%	--	11 (2)	--
The Gillette Compnay	10.9%	11.0%	38	23 (2)
Guinness PLC	2.0%	1.6%	7	--
The Washington Post Company	14.6%	14.6%	11	10
Wells Fargo & Company	11.5%	9.6%	16 (2)	(17)
Berkshire's share of undistributed earnings of major investees			$298	$230
Hypothetical tax on these undistributed investee earnings			(42)	(30)
Reported operating earnings of Berkshire			348	316
Total look-through earnings of Bekrshire			$604	$516

(1) Net of minority interest at Wesco

(2) Calculated on average ownership for the year

(3) Excludes realized capital gains, which have been both recurring and significant

Insurance Operations

Shown below is an updated version of our usual table presenting key figures for the property-casualty insurance industry:

Year	Yearly Change in Premiums Written (%)	Combined Ratio after Policyholder Dividends
1981	3.8	106.0
1982	4.4	109.8
1983	4.6	112.0
1984	9.2	117.9
1985	22.1	116.5
1986	22.2	108.0
1987	9.4	104.6
1988	4.4	105.4
1989	3.2	109.2
1990	4.5	109.6
1991 (Revised)	2.4	108.8
1992 (Est.)	2.7	114.8

The combined ratio represents total insurance costs (losses incurred plus expenses) compared to revenue from premiums: A ratio below 100 indicates an underwriting profit, and one above 100 indicates a loss. The higher the ratio, the worse the year. When the investment income that an insurer earns from holding policyholders' funds ("the float") is taken into account, a combined ratio in the 106 - 110 range typically produces an overall break-even result, exclusive of earnings on the funds provided by shareholders.

About four points in the industry's 1992 combined ratio can be attributed to Hurricane Andrew, which caused the largest insured loss in history. Andrew destroyed a few small insurers. Beyond that, it awakened some larger companies to the fact that their reinsurance protection against catastrophes was far from adequate. (It's only when the tide goes out that you learn who's been swimming naked.) One major insurer escaped insolvency solely because it had a wealthy parent that could promptly supply a massive transfusion of capital.

Bad as it was, however, Andrew could easily have been far more damaging if it had hit Florida 20 or 30 miles north of where it actually did and had hit Louisiana further east than was

the case. All in all, many companies will rethink their reinsurance programs in light of the Andrew experience.

As you know we are a large writer - perhaps the largest in the world - of "super-cat" coverages, which are the policies that other insurance companies buy to protect themselves against major catastrophic losses. Consequently, we too took our lumps from Andrew, suffering losses from it of about $125 million, an amount roughly equal to our 1992 super-cat premium income. Our other super-cat losses, though, were negligible. This line of business therefore produced an overall loss of only $2 million for the year. (In addition, our investee, GEICO, suffered a net loss from Andrew, after reinsurance recoveries and tax savings, of about $50 million, of which our share is roughly $25 million. This loss did not affect our operating earnings, but did reduce our look-through earnings.)

In last year's report I told you that I hoped that our super-cat business would over time achieve a 10% profit margin. But I also warned you that in any given year the line was likely to be "either enormously profitable or enormously unprofitable." Instead, both 1991 and 1992 have come in close to a break-even level. Nonetheless, I see these results as aberrations and stick with my prediction of huge annual swings in profitability from this business.

Let me remind you of some characteristics of our super-cat policies. Generally, they are activated only when two things happen. First, the direct insurer or reinsurer we protect must suffer losses of a given amount - that's the policyholder's "retention" - from a catastrophe; and second, industry-wide insured losses from the catastrophe must exceed some minimum level, which usually is $3 billion or more. In most cases, the policies we issue cover only a specific geographical area, such as a portion of the U.S., the entire U.S., or everywhere other than the U.S. Also, many policies are not activated by the first super-cat that meets the policy terms, but instead cover only a "second-event" or even a third- or fourth-event. Finally, some policies are triggered only by a catastrophe of a specific type, such as an earthquake. Our exposures are large: We have one policy that calls for us to pay $100 million to the policyholder if a specified catastrophe occurs. (Now you know why I suffer eyestrain: from watching The Weather Channel.)

Currently, Berkshire is second in the U.S. property-casualty industry in net worth (the leader being State Farm, which neither buys nor sells reinsurance). Therefore, we have the capacity to

assume risk on a scale that interests virtually no other company. We have the appetite as well: As Berkshire's net worth and earnings grow, our willingness to write business increases also. But let me add that means good business. The saying, "a fool and his money are soon invited everywhere," applies in spades in reinsurance, and we actually reject more than 98% of the business we are offered. Our ability to choose between good and bad proposals reflects a management strength that matches our financial strength: Ajit Jain, who runs our reinsurance operation, is simply the best in this business. In combination, these strengths guarantee that we will stay a major factor in the super-cat business so long as prices are appropriate.

What constitutes an appropriate price, of course, is difficult to determine. Catastrophe insurers can't simply extrapolate past experience. If there is truly "global warming," for example, the odds would shift, since tiny changes in atmospheric conditions can produce momentous changes in weather patterns. Furthermore, in recent years there has been a mushrooming of population and insured values in U.S. coastal areas that are particularly vulnerable to hurricanes, the number one creator of super-cats. A hurricane that caused *x* dollars of damage 20 years ago could easily cost 10*x* now.

Occasionally, also, the unthinkable happens. Who would have guessed, for example, that a major earthquake could occur in Charleston, S.C.? (It struck in 1886, registered an estimated 6.6 on the Richter scale, and caused 60 deaths.) And who could have imagined that our country's most serious quake would occur at New Madrid, Missouri, which suffered an estimated 8.7 shocker in 1812. By comparison, the 1989 San Francisco quake was a 7.1 - and remember that each one-point Richter increase represents a ten-fold increase in strength. Someday, a U.S. earthquake occurring far from California will cause enormous losses for insurers.

When viewing our quarterly figures, you should understand that our accounting for super-cat premiums differs from our accounting for other insurance premiums. Rather than recording our super-cat premiums on a pro-rata basis over the life of a given policy, we defer recognition of revenue until a loss occurs or until the policy expires. We take this conservative approach because the likelihood of super-cats causing us losses is particularly great toward the end of the year. It is then that weather tends to kick up: Of the ten largest insured losses in U.S. history, nine occurred in the last half of the year. In addition, policies that are not triggered by a first event are unlikely, by their very terms, to cause us losses until late in the year.

The bottom-line effect of our accounting procedure for super-cats is this: Large losses may be reported in any quarter of the year, but significant profits will only be reported in the fourth quarter.

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As I've told you in each of the last few years, what counts in our insurance business is "the cost of funds developed from insurance," or in the vernacular, "the cost of float." Float - which we generate in exceptional amounts - is the total of loss reserves, loss adjustment expense reserves and unearned premium reserves minus agents' balances, prepaid acquisition costs and deferred charges applicable to assumed reinsurance. The cost of float is measured by our underwriting loss.

The table below shows our cost of float since we entered the business in 1967.

(in $ Millions)	(1) Underwriting Loss	(2) Average Float	Approximate Cost of Funds	Yearend Yield on Long-Term Govt. Bonds
1967	Profit	$17.3	< 0	5.50%
1968	Profit	19.9	< 0	5.90%
1969	Profit	23.4	< 0	6.79%
1970	$0.37	32.4	1.14%	6.25%
1971	Profit	52.5	< 0	5.81%
1972	Profit	69.5	< 0	5.82%
1973	Profit	73.3	< 0	7.27%
1974	7.36	79.1	9.30%	8.13%
1975	11.35	87.6	12.96%	8.03%
1976	Profit	102.6	< 0	7.30%
1977	Profit	139.0	< 0	7.97%
1978	Profit	190.4	< 0	8.93%
1979	Profit	227.3	< 0	10.08%
1980	Profit	237.0	< 0	11.94%
1981	Profit	228.4	< 0	13.61%
1982	21.56	220.6	9.77%	10.64%
1983	33.87	231.3	14.64%	11.84%
1984	48.06	253.2	18.98%	11.58%
1985	44.23	390.2	11.34%	9.34%
1986	55.84	797.5	7.00%	7.60%
1987	55.43	1,266.7	4.38%	8.95%
1988	11.08	1,497.7	0.74%	9.00%
1989	24.40	1,541.3	1.58%	7.97%
1990	26.65	1,637.3	1.63%	8.24%
1991	119.6	1,895.0	6.31%	7.40%
1992	108.9	2,290.4	4.76%	7.39%

Last year, our insurance operation again generated funds at a cost below that incurred by the U.S. Government on its newly-issued long-term bonds. This means that in 21 years out of the 26 years we have been in the insurance business we have beaten the Government's rate, and often we have done so by a wide margin. (If, on average, we didn't beat the Government's rate, there would be no economic reason for us to be in the business.)

In 1992, as in previous years, National Indemnity's commercial auto and general liability business, led by Don Wurster, and our homestate operation, led by Rod Eldred, made excellent

contributions to our low cost of float. Indeed, both of these operations recorded an underwriting profit last year, thereby generating float at a less-than-zero cost. The bulk of our float, meanwhile, comes from large transactions developed by Ajit. His efforts are likely to produce a further growth in float during 1993.

Charlie and I continue to like the insurance business, which we expect to be our main source of earnings for decades to come. The industry is huge; in certain sectors we can compete world-wide; and Berkshire possesses an important competitive advantage. We will look for ways to expand our participation in the business, either indirectly as we have done through GEICO or directly as we did by acquiring Central States Indemnity.

Common Stock Investments

Below we list our common stock holdings having a value of over $100 million. A small portion of these investments belongs to subsidiaries of which Berkshire owns less than 100%.

Shares	Company	Cost (000's omitted)	Market (000's omitted)
3,000,000	Capital Cities/ABC, Inc.	$517,500	$1,523,500
93,400,000	The Coca-Cola Company	1,023,920	3,911,125
16,196,700	Federal Home Loan Mortgage Corp. ("Freddie Mac")	414,257	783,515
34,250,000	GEICO Corporation.	45,713	2,226,250
4,350,000	General Dynamics Corp	312,438	450,769
24,000,000	The Gillette Company	600,000	1,365,000
38,335,000	Guinness PLC	333,019	299,581
1,727,765	The Washington Post Company	9,731	396,954
6,358,418	Wells Fargo & Company	380,983	485,624

Leaving aside splits, the number of shares we held in these companies changed during 1992 in only four cases: We added moderately to our holdings in Guinness and Wells Fargo, we more than doubled our position in Freddie Mac, and we established a new holding in General Dynamics. We like to buy.

Selling, however, is a different story. There, our pace of activity resembles that forced upon a traveler who found himself stuck in tiny Podunk's only hotel. With no T.V. in his room, he faced an evening of boredom. But his spirits soared when he spied a book on the night table entitled "Things to do in Podunk." Opening it, he found just a single sentence: "You're doing it."

We were lucky in our General Dynamics purchase. I had paid little attention to the company until last summer, when it announced it would repurchase about 30% of its shares by way of a Dutch tender. Seeing an arbitrage opportunity, I began buying the stock for Berkshire, expecting to tender our holdings for a small profit. We've made the same sort of commitment perhaps a half-dozen times in the last few years, reaping decent rates of return for the short periods our money has been tied up.

But then I began studying the company and the accomplishments of Bill Anders in the brief time he'd been CEO. And what I saw made my eyes pop: Bill had a clearly articulated and rational strategy; he had been focused and imbued with a sense of urgency in carrying it out; and the results were truly remarkable.

In short order, I dumped my arbitrage thoughts and decided that Berkshire should become a long-term investor with Bill. We were helped in gaining a large position by the fact that a tender greatly swells the volume of trading in a stock. In a one-month period, we were able to purchase 14% of the General Dynamics shares that remained outstanding after the tender was completed.

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Our equity-investing strategy remains little changed from what it was fifteen years ago, when we said in the 1977 annual report: "We select our marketable equity securities in much the way we would evaluate a business for acquisition in its entirety. We want the business to be one (a) that we can understand; (b) with favorable long-term prospects; (c) operated by honest and competent people; and (d) available at a very attractive price." We have seen cause to make only one change in this creed: Because of both market conditions and our size, we now substitute "an attractive price" for "a very attractive price."

But how, you will ask, does one decide what's "attractive"? In answering this question, most analysts feel they must choose between two approaches customarily thought to be in opposition:

"value" and "growth." Indeed, many investment professionals see any mixing of the two terms as a form of intellectual cross-dressing.

We view that as fuzzy thinking (in which, it must be confessed, I myself engaged some years ago). In our opinion, the two approaches are joined at the hip: Growth is *always* a component in the calculation of value, constituting a variable whose importance can range from negligible to enormous and whose impact can be negative as well as positive.

In addition, we think the very term "value investing" is redundant. What is "investing" if it is not the act of seeking value at least sufficient to justify the amount paid? Consciously paying more for a stock than its calculated value - in the hope that it can soon be sold for a still-higher price - should be labeled speculation (which is neither illegal, immoral nor - in our view - financially fattening).

Whether appropriate or not, the term "value investing" is widely used. Typically, it connotes the purchase of stocks having attributes such as a low ratio of price to book value, a low price-earnings ratio, or a high dividend yield. Unfortunately, such characteristics, even if they appear in combination, are far from determinative as to whether an investor is indeed buying something for what it is worth and is therefore truly operating on the principle of obtaining value in his investments. Correspondingly, opposite characteristics - a high ratio of price to book value, a high price-earnings ratio, and a low dividend yield - are in no way inconsistent with a "value" purchase.

Similarly, business growth, per se, tells us little about value. It's true that growth often has a positive impact on value, sometimes one of spectacular proportions. But such an effect is far from certain. For example, investors have regularly poured money into the domestic airline business to finance profitless (or worse) growth. For these investors, it would have been far better if Orville had failed to get off the ground at Kitty Hawk: The more the industry has grown, the worse the disaster for owners.

Growth benefits investors only when the business in point can invest at incremental returns that are enticing - in other words, only when each dollar used to finance the growth creates over a dollar of long-term market value. In the case of a low-return business requiring incremental funds, growth hurts the investor.

In <u>The Theory of Investment Value</u>, written over 50 years ago, John Burr Williams set forth the equation for value, which we condense here: *The value of any stock, bond or business today*

is determined by the cash inflows and outflows - discounted at an appropriate interest rate - that can be expected to occur during the remaining life of the asset. Note that the formula is the same for stocks as for bonds. Even so, there is an important, and difficult to deal with, difference between the two: A bond has a coupon and maturity date that define future cash flows; but in the case of equities, the investment analyst must himself estimate the future "coupons." Furthermore, the quality of management affects the bond coupon only rarely - chiefly when management is so inept or dishonest that payment of interest is suspended. In contrast, the ability of management can dramatically affect the equity "coupons."

The investment shown by the discounted-flows-of-cash calculation to be the cheapest is the one that the investor should purchase - irrespective of whether the business grows or doesn't, displays volatility or smoothness in its earnings, or carries a high price or low in relation to its current earnings and book value. Moreover, though the value equation has usually shown equities to be cheaper than bonds, that result is not inevitable: When bonds are calculated to be the more attractive investment, they should be bought.

Leaving the question of price aside, the best business to own is one that over an extended period can employ large amounts of incremental capital at very high rates of return. The worst business to own is one that must, or *will*, do the opposite - that is, consistently employ ever-greater amounts of capital at very low rates of return. Unfortunately, the first type of business is very hard to find: Most high-return businesses need relatively little capital. Shareholders of such a business usually will benefit if it pays out most of its earnings in dividends or makes significant stock repurchases.

Though the mathematical calculations required to evaluate equities are not difficult, an analyst - even one who is experienced and intelligent - can easily go wrong in estimating future "coupons." At Berkshire, we attempt to deal with this problem in two ways. First, we try to stick to businesses we believe we understand. That means they must be relatively simple and stable in character. If a business is complex or subject to constant change, we're not smart enough to predict future cash flows. Incidentally, that shortcoming doesn't bother us. What counts for most people in investing is not how much they know, but rather how realistically they define what they don't know. An investor needs to do very few things right as long as he or she avoids big mistakes.

Second, and equally important, we insist on a margin of safety in our purchase price. If we calculate the value of a common stock to be only slightly higher than its price, we're not interested in buying. We believe this margin-of-safety principle, so strongly emphasized by Ben Graham, to be the cornerstone of investment success.

Fixed-Income Securities

Below we list our largest holdings of fixed-income securities:

Issuer (000's omitted)	**Cost of Preferreds and Amortized Value of Bonds**	**Market**
ACF Industries	$133,065(1)	$163,327
American Express "Percs"	300,000	309,000(1)(2)
Champion International Conv. Pfd.	300,000(1)	309,000(2)
First Empire State Conv. Pfd	40,000	68,000(1)(2)
Salomon Conv. Pfd	700,000(1)	756,000(2)
Salomon	700,000(2)	714,000(1)
USAir Conv. Pfd	358,000(1)	268,500(2)
Washington Public Power Systems Bonds	58,768(1)	81,002

(1) Carrying value in our financial statements

(2) Fair value as determined by Charlie and me

During 1992 we added to our holdings of ACF debentures, had some of our WPPSS bonds called, and sold our RJR Nabisco position.

Over the years, we've done well with fixed-income investments, having realized from them both large capital gains (including $80 million in 1992) and exceptional current income. Chrysler Financial, Texaco, Time-Warner, WPPSS and RJR Nabisco were particularly good investments for us. Meanwhile, our fixed-income losses have been negligible: We've had thrills but so far no spills.

Despite the success we experienced with our Gillette preferred, which converted to common stock in 1991, and despite our reasonable results with other negotiated purchases of preferreds, our overall performance with such purchases has been inferior to that we have achieved with

purchases made in the secondary market. This is actually the result we expected. It corresponds with our belief that an intelligent investor in common stocks will do better in the secondary market than he will do buying new issues.

The reason has to do with the way prices are set in each instance. The secondary market, which is periodically ruled by mass folly, is constantly setting a "clearing" price. No matter how foolish that price may be, it's what counts for the holder of a stock or bond who needs or wishes to sell, of whom there are always going to be a few at any moment. In many instances, shares worth *x*in business value have sold in the market for 1/2*x* or less.

The new-issue market, on the other hand, is ruled by controlling stockholders and corporations, who can usually select the timing of offerings or, if the market looks unfavorable, can avoid an offering altogether. Understandably, these sellers are not going to offer any bargains, either by way of a public offering or in a negotiated transaction: It's rare you'll find *x* for1/2*x* here. Indeed, in the case of common-stock offerings, selling shareholders are often motivated to unload *only* when they feel the market is overpaying. (These sellers, of course, would state that proposition somewhat differently, averring instead that they simply resist selling when the market is underpaying for their goods.)

To date, our negotiated purchases, as a group, have fulfilled but not exceeded the expectation we set forth in our 1989 Annual Report: "Our preferred stock investments should produce returns modestly above those achieved by most fixed-income portfolios." In truth, we would have done better if we could have put the money that went into our negotiated transactions into open-market purchases of the type we like. But both our size and the general strength of the markets made that difficult to do.

There was one other memorable line in the 1989 Annual Report: "We have no ability to forecast the economics of the investment banking business, the airline industry, or the paper industry." At the time some of you may have doubted this confession of ignorance. Now, however, even my mother acknowledges its truth.

In the case of our commitment to USAir, industry economics had soured before the ink dried on our check. As I've previously mentioned, it was I who happily jumped into the pool; no one pushed me. Yes, I knew the industry would be ruggedly competitive, but I did not expect its leaders to engage in prolonged kamikaze behavior. In the last two years, airline companies have

acted as if they are members of a competitive tontine, which they wish to bring to its conclusion as rapidly as possible.

Amidst this turmoil, Seth Schofield, CEO of USAir, has done a truly extraordinary job in repositioning the airline. He was particularly courageous in accepting a strike last fall that, had it been lengthy, might well have bankrupted the company. Capitulating to the striking union, however, would have been equally disastrous: The company was burdened with wage costs and work rules that were considerably more onerous than those encumbering its major competitors, and it was clear that over time any high-cost producer faced extinction. Happily for everyone, the strike was settled in a few days.

A competitively-beset business such as USAir requires far more managerial skill than does a business with fine economics. Unfortunately, though, the near-term reward for skill in the airline business is simply survival, not prosperity.

In early 1993, USAir took a major step toward assuring survival - and eventual prosperity - by accepting British Airways' offer to make a substantial, but minority, investment in the company. In connection with this transaction, Charlie and I were asked to join the USAir board. We agreed, though this makes five outside board memberships for me, which is more than I believe advisable for an active CEO. Even so, if an investee's management and directors believe it particularly important that Charlie and I join its board, we are glad to do so. We expect the managers of our investees to work hard to increase the value of the businesses they run, and there are times when large owners should do their bit as well.

Two New Accounting Rules and a Plea for One More

A new accounting rule having to do with deferred taxes becomes effective in 1993. It undoes a dichotomy in our books that I have described in previous annual reports and that relates to the accrued taxes carried against the unrealized appreciation in our investment portfolio. At yearend 1992, that appreciation amounted to $7.6 billion. Against $6.4 billion of that, we carried taxes at the current 34% rate. Against the remainder of $1.2 billion, we carried an accrual of 28%, the tax rate in effect when that portion of the appreciation occurred. The new accounting rule says we must henceforth accrue all deferred tax at the current rate, which to us seems sensible.

The new marching orders mean that in the first quarter of 1993 we will apply a 34% rate to all of our unrealized appreciation, thereby increasing the tax liability and reducing net worth by $70

million. The new rule also will cause us to make other minor changes in our calculation of deferred taxes.

Future changes in tax rates will be reflected immediately in the liability for deferred taxes and, correspondingly, in net worth. The impact could well be substantial. Nevertheless, what is important in the end is the tax rate at the time we sell securities, when unrealized appreciation becomes realized.

Another major accounting change, whose implementation is required by January 1, 1993, mandates that businesses recognize their present-value liability for post-retirement health benefits. Though GAAP has previously required recognition of pensions to be paid in the future, it has illogically ignored the costs that companies will then have to bear for health benefits. The new rule will force many companies to record a huge balance-sheet liability (and a consequent reduction in net worth) and also henceforth to recognize substantially higher costs when they are calculating annual profits.

In making acquisitions, Charlie and I have tended to avoid companies with significant post-retirement liabilities. As a result, Berkshire's present liability and future costs for post-retirement health benefits - though we now have 22,000 employees - are inconsequential. I need to admit, though, that we had a near miss: In 1982 I made a huge mistake in committing to buy a company burdened by extraordinary post-retirement health obligations. Luckily, though, the transaction fell through for reasons beyond our control. Reporting on this episode in the 1982 annual report, I said: "If we were to introduce graphics to this report, illustrating favorable business developments of the past year, two blank pages depicting this blown deal would be the appropriate centerfold." Even so, I wasn't expecting things to get as bad as they did. Another buyer appeared, the business soon went bankrupt and was shut down, and thousands of workers found those bountiful health-care promises to be largely worthless.

In recent decades, no CEO would have dreamed of going to his board with the proposition that his company become an insurer of uncapped post-retirement health benefits that other corporations chose to install. A CEO didn't need to be a medical expert to know that lengthening life expectancies and soaring health costs would guarantee an insurer a financial battering from such a business. Nevertheless, many a manager blithely committed his own company to a self-insurance plan embodying precisely the same promises - and thereby doomed his shareholders to suffer the inevitable consequences. In health-care, open-ended promises have created open-

ended liabilities that in a few cases loom so large as to threaten the global competitiveness of major American industries.

I believe part of the reason for this reckless behavior was that accounting rules did not, for so long, require the booking of post-retirement health costs as they were incurred. Instead, the rules allowed cash-basis accounting, which vastly understated the liabilities that were building up. In effect, the attitude of both managements and their accountants toward these liabilities was "out-of-sight, out-of-mind." Ironically, some of these same managers would be quick to criticize Congress for employing "cash-basis" thinking in respect to Social Security promises or other programs creating future liabilities of size.

Managers thinking about accounting issues should never forget one of Abraham Lincoln's favorite riddles: "How many legs does a dog have if you call his tail a leg?" The answer: "Four, because calling a tail a leg does not make it a leg." It behooves managers to remember that Abe's right even if an auditor is willing to certify that the tail is a leg.

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The most egregious case of let's-not-face-up-to-reality behavior by executives and accountants has occurred in the world of stock options. In Berkshire's 1985 annual report, I laid out my opinions about the use and misuse of options. But even when options are structured properly, they are accounted for in ways that make no sense. The lack of logic is not accidental: For decades, much of the business world has waged war against accounting rulemakers, trying to keep the costs of stock options from being reflected in the profits of the corporations that issue them.

Typically, executives have argued that options are hard to value and that therefore their costs should be ignored. At other times managers have said that assigning a cost to options would injure small start-up businesses. Sometimes they have even solemnly declared that "out-of-the-money" options (those with an exercise price equal to or above the current market price) have no value when they are issued.

Oddly, the Council of Institutional Investors has chimed in with a variation on that theme, opining that options should not be viewed as a cost because they "aren't dollars out of a company's coffers." I see this line of reasoning as offering exciting possibilities to American

corporations for instantly improving their reported profits. For example, they could eliminate the cost of insurance by paying for it with options. So if you're a CEO and subscribe to this "no cash-no cost" theory of accounting, I'll make you an offer you can't refuse: Give us a call at Berkshire and we will happily sell you insurance in exchange for a bundle of long-term options on your company's stock.

Shareholders should understand that companies incur costs when they deliver something of value to another party and not just when cash changes hands. Moreover, it is both silly and cynical to say that an important item of cost should not be recognized simply because it can't be quantified with pinpoint precision. Right now, accounting abounds with imprecision. After all, no manager or auditor knows how long a 747 is going to last, which means he also does not know what the yearly depreciation charge for the plane should be. No one knows with any certainty what a bank's annual loan loss charge ought to be. And the estimates of losses that property-casualty companies make are notoriously inaccurate.

Does this mean that these important items of cost should be ignored simply because they can't be quantified with absolute accuracy? Of course not. Rather, these costs should be estimated by honest and experienced people and then recorded. When you get right down to it, what other item of major but hard-to-precisely-calculate cost - other, that is, than stock options - does the accounting profession say should be ignored in the calculation of earnings?

Moreover, options are just not that difficult to value. Admittedly, the difficulty is increased by the fact that the options given to executives are restricted in various ways. These restrictions affect value. They do not, however, eliminate it. In fact, since I'm in the mood for offers, I'll make one to any executive who is granted a restricted option, even though it may be out of the money: On the day of issue, Berkshire will pay him or her a substantial sum for the right to any future gain he or she realizes on the option. So if you find a CEO who says his newly-issued options have little or no value, tell him to try us out. In truth, we have far more confidence in our ability to determine an appropriate price to pay for an option than we have in our ability to determine the proper depreciation rate for our corporate jet.

It seems to me that the realities of stock options can be summarized quite simply: If options aren't a form of compensation, what are they? If compensation isn't an expense, what is it? And, if expenses shouldn't go into the calculation of earnings, where in the world should they go?

The accounting profession and the SEC should be shamed by the fact that they have long let themselves be muscled by business executives on the option-accounting issue. Additionally, the lobbying that executives engage in may have an unfortunate by-product: In my opinion, the business elite risks losing its credibility on issues of significance to society - about which it may have much of value to say - when it advocates the incredible on issues of significance to itself.

Miscellaneous

We have two pieces of regrettable news this year. First, Gladys Kaiser, my friend and assistant for twenty-five years, will give up the latter post after the 1993 annual meeting, though she will certainly remain my friend forever. Gladys and I have been a team, and though I knew her retirement was coming, it is still a jolt.

Secondly, in September, Verne McKenzie relinquished his role as Chief Financial Officer after a 30-year association with me that began when he was the outside auditor of Buffett Partnership, Ltd. Verne is staying on as a consultant, and though that job description is often a euphemism, in this case it has real meaning. I expect Verne to continue to fill an important role at Berkshire but to do so at his own pace. Marc Hamburg, Verne's understudy for five years, has succeeded him as Chief Financial Officer.

I recall that one woman, upon being asked to describe the perfect spouse, specified an archeologist: "The older I get," she said, "the more he'll be interested in me." She would have liked my tastes: I treasure those extraordinary Berkshire managers who are working well past normal retirement age and who concomitantly are achieving results much superior to those of their younger competitors. While I understand and empathize with the decision of Verne and Gladys to retire when the calendar says it's time, theirs is not a step I wish to encourage. It's hard to teach a new dog old tricks.

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I am a moderate in my views about retirement compared to Rose Blumkin, better known as Mrs. B. At 99, she continues to work seven days a week. And about her, I have some particularly good news.

You will remember that after her family sold 80% of Nebraska Furniture Mart (NFM) to Berkshire in 1983, Mrs. B continued to be Chairman and run the carpet operation. In 1989,

however, she left because of a managerial disagreement and opened up her own operation next door in a large building that she had owned for several years. In her new business, she ran the carpet section but leased out other home-furnishings departments.

At the end of last year, Mrs. B decided to sell her building and land to NFM. She'll continue, however, to run her carpet business at its current location (no sense slowing down just when you're hitting full stride). NFM will set up shop alongside her, in that same building, thereby making a major addition to its furniture business.

I am delighted that Mrs. B has again linked up with us. Her business story has no parallel and I have always been a fan of hers, whether she was a partner or a competitor. But believe me, partner is better.

This time around, Mrs. B graciously offered to sign a non-compete agreement - and I, having been incautious on this point when she was 89, snapped at the deal. Mrs. B belongs in the Guinness Book of World Records on many counts. Signing a non-compete at 99 merely adds one more.

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Ralph Schey, CEO of Scott Fetzer and a manager who I hope is with us at 99 also, hit a grand slam last year when that company earned a record $110 million pre-tax. What's even more impressive is that Scott Fetzer achieved such earnings while employing only $116 million of equity capital. This extraordinary result is not the product of leverage: The company uses only minor amounts of borrowed money (except for the debt it employs - appropriately - in its finance subsidiary).

Scott Fetzer now operates with a significantly smaller investment in both inventory and fixed assets than it had when we bought it in 1986. This means the company has been able to distribute more than 100% of its earnings to Berkshire during our seven years of ownership while concurrently increasing its earnings stream - which was excellent to begin with - by a lot. Ralph just keeps on outdoing himself, and Berkshire shareholders owe him a great deal.

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Those readers with particularly sharp eyes will note that our corporate expense fell from $5.6 million in 1991 to $4.2 million in 1992. Perhaps you will think that I have sold our corporate jet, The Indefensible. Forget it! I find the thought of retiring the plane even more revolting than the thought of retiring the Chairman. (In this matter I've demonstrated uncharacteristic flexibility: For years I argued passionately against corporate jets. But finally my dogma was run over by my karma.)

Our reduction in corporate overhead actually came about because those expenses were especially high in 1991, when we incurred a one-time environmental charge relating to alleged pre-1970 actions of our textile operation. Now that things are back to normal, our after-tax overhead costs are under 1% of our reported operating earnings and less than 1/2 of 1% of our look-through earnings. We have no legal, personnel, public relations, investor relations, or strategic planning departments. In turn this means we don't need support personnel such as guards, drivers, messengers, etc. Finally, except for Verne, we employ no consultants. Professor Parkinson would like our operation - though Charlie, I must say, still finds it outrageously fat.

At some companies, corporate expense runs 10% or more of operating earnings. The tithing that operations thus makes to headquarters not only hurts earnings, but more importantly slashes capital values. If the business that spends 10% on headquarters' costs achieves earnings at its operating levels identical to those achieved by the business that incurs costs of only 1%, shareholders of the first enterprise suffer a 9% loss in the value of their holdings simply because of corporate overhead. Charlie and I have observed no correlation between high corporate costs and good corporate performance. In fact, we see the simpler, low-cost operation as more likely to operate effectively than its bureaucratic brethren. We're admirers of the Wal-Mart, Nucor, Dover, GEICO, Golden West Financial and Price Co. models.

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Late last year Berkshire's stock price crossed $10,000. Several shareholders have mentioned to me that the high price causes them problems: They like to give shares away each year and find themselves impeded by the tax rule that draws a distinction between annual gifts of $10,000 or under to a single individual and those above $10,000. That is, those gifts no greater than $10,000 are completely tax-free; those above $10,000 require the donor to use up a portion of his

or her lifetime exemption from gift and estate taxes, or, if that exemption has been exhausted, to pay gift taxes.

I can suggest three ways to address this problem. The first would be useful to a married shareholder, who can give up to $20,000 annually to a single recipient, as long as the donor files a gift tax return containing his or her spouse's written consent to gifts made during the year.

Secondly, a shareholder, married or not, can make a bargain sale. Imagine, for example, that Berkshire is selling for $12,000 and that one wishes to make only a $10,000 gift. In that case, sell the stock to the giftee for $2,000. (Caution: You will be taxed on the amount, if any, by which the sales price to your giftee exceeds your tax basis.)

Finally, you can establish a partnership with people to whom you are making gifts, fund it with Berkshire shares, and simply give percentage interests in the partnership away each year. These interests can be for any value that you select. If the value is $10,000 or less, the gift will be tax-free.

We issue the customary warning: Consult with your own tax advisor before taking action on any of the more esoteric methods of gift-making.

We hold to the view about stock splits that we set forth in the 1983 Annual Report. Overall, we believe our owner-related policies - including the no-split policy - have helped us assemble a body of shareholders that is the best associated with any widely-held American corporation. Our shareholders think and behave like rational long-term owners and view the business much as Charlie and I do. Consequently, our stock consistently trades in a price range that is sensibly related to intrinsic value.

Additionally, we believe that our shares turn over far less actively than do the shares of any other widely-held company. The frictional costs of trading - which act as a major "tax" on the owners of many companies - are virtually non-existent at Berkshire. (The market-making skills of Jim Maguire, our New York Stock Exchange specialist, definitely help to keep these costs low.) Obviously a split would not change this situation dramatically. Nonetheless, there is no way that our shareholder group would be upgraded by the new shareholders enticed by a split. Instead we believe that modest degradation would occur.

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As I mentioned earlier, on December 16th we called our zero-coupon, convertible debentures for payment on January 4, 1993. These obligations bore interest at 5 1/2%, a low cost for funds when they were issued in 1989, but an unattractive rate for us at the time of call.

The debentures could have been redeemed at the option of the holder in September 1994, and 5 1/2% money available for no longer than that is not now of interest to us. Furthermore, Berkshire shareholders are disadvantaged by having a conversion option outstanding. At the time we issued the debentures, this disadvantage was offset by the attractive interest rate they carried; by late 1992, it was not.

In general, we continue to have an aversion to debt, particularly the short-term kind. But we are willing to incur modest amounts of debt when it is both properly structured and of significant benefit to shareholders.

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About 97% of all eligible shares participated in Berkshire's 1992 shareholder-designated contributions program. Contributions made through the program were $7.6 million, and 2,810 charities were recipients. I'm considering increasing these contributions in the future at a rate greater than the increase in Berkshire's book value, and I would be glad to hear from you as to your thinking about this idea.

We suggest that new shareholders read the description of our shareholder-designated contributions program that appears on pages 48-49. To participate in future programs, you must make sure your shares are registered in the name of the actual owner, not in the nominee name of a broker, bank or depository. Shares not so registered on August 31, 1993 will be ineligible for the 1993 program.

In addition to the shareholder-designated contributions that Berkshire distributes, managers of our operating businesses make contributions, including merchandise, averaging about $2.0 million annually. These contributions support local charities, such as The United Way, and produce roughly commensurate benefits for our businesses.

However, neither our operating managers nor officers of the parent company use Berkshire funds to make contributions to broad national programs or charitable activities of special personal interest to them, except to the extent they do so as shareholders. If your employees,

including your CEO, wish to give to their alma maters or other institutions to which they feel a personal attachment, we believe they should use their own money, not yours.

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This year the Annual Meeting will be held at the Orpheum Theater in downtown Omaha at 9:30 a.m. on Monday, April 26, 1993. A record 1,700 people turned up for the meeting last year, but that number still leaves plenty of room at the Orpheum.

We recommend that you get your hotel reservations early at one of these hotels: (1) The Radisson-Redick Tower, a small (88 rooms) but nice hotel across the street from the Orpheum; (2) the much larger Red Lion Hotel, located about a five-minute walk from the Orpheum; or (3) the Marriott, located in West Omaha about 100 yards from Borsheim's, which is a twenty minute drive from downtown. We will have buses at the Marriott that will leave at 8:30 and 8:45 for the meeting and return after it ends.

Charlie and I always enjoy the meeting, and we hope you can make it. The quality of our shareholders is reflected in the quality of the questions we get: We have never attended an annual meeting anywhere that features such a consistently high level of intelligent, owner-related questions.

An attachment to our proxy material explains how you can obtain the card you will need for admission to the meeting. With the admission card, we will enclose information about parking facilities located near the Orpheum. If you are driving, come a little early. Nearby lots fill up quickly and you may have to walk a few blocks.

As usual, we will have buses to take you to Nebraska Furniture Mart and Borsheim's after the meeting and to take you from there to downtown hotels or the airport later. I hope that you will allow plenty of time to fully explore the attractions of both stores. Those of you arriving early can visit the Furniture Mart any day of the week; it is open from 10 a.m. to 5:30 p.m. on Saturdays and from noon to 5:30 p.m. on Sundays. While there, stop at the See's Candy Cart and find out for yourself why Charlie and I are a good bit wider than we were back in 1972 when we bought See's.

Borsheim's normally is closed on Sunday but will be open for shareholders and their guests from noon to 6 p.m. on Sunday, April 25. Charlie and I will be in attendance, sporting our

jeweler's loupes, and ready to give advice about gems to anyone foolish enough to listen. Also available will be plenty of Cherry Cokes, See's candies, and other lesser goodies. I hope you will join us.

Warren E. Buffett
Chairman of the Board
March 1, 1993

1993 Letter

BERKSHIRE HATHAWAY INC.

To the Shareholders of Berkshire Hathaway Inc.:

Our per-share book value increased 14.3% during 1993. Over the last 29 years (that is, since present management took over) book value has grown from $19 to $8,854, or at a rate of 23.3% compounded annually.

During the year, Berkshire's net worth increased by $1.5 billion, a figure affected by two negative and two positive non-operating items. For the sake of completeness, I'll explain them here. If you aren't thrilled by accounting, however, feel free to fast-forward through this discussion:

1. The first negative was produced by a change in Generally Accepted Accounting Principles (GAAP) having to do with the taxes we accrue against unrealized appreciation in the securities we carry at market value. The old rule said that the tax rate used should be the one in effect when the appreciation took place. Therefore, at the end of 1992, we were using a rate of 34% on the $6.4 billion of gains generated after 1986 and 28% on the $1.2 billion of gains generated before that. The new rule stipulates that the current tax rate should be applied to all gains. The rate in the first quarter of 1993, when this rule went into effect, was 34%. Applying that rate to our pre-1987 gains reduced net worth by $70 million.

2. The second negative, related to the first, came about because the corporate tax rate was raised in the third quarter of 1993 to 35%. This change required us to make an additional charge of 1% against all of our unrealized gains, and that charge penalized net worth by $75 million. Oddly, GAAP required both this charge and the one described above to be deducted from the earnings we report, even though the unrealized appreciation that gave rise to the charges was never included in earnings, but rather was credited directly to net worth.

3. Another 1993 change in GAAP affects the value at which we carry the securities that we own. In recent years, both the common stocks and certain common-equivalent securities held by

our insurance companies have been valued at market, whereas equities held by our non-insurance subsidiaries or by the parent company were carried at their aggregate cost or market, whichever was lower. Now GAAP says that *all* common stocks should be carried at market, a rule we began following in the fourth quarter of 1993. This change produced a gain in Berkshire's reported net worth of about $172 million.

4. Finally, we issued some stock last year. In a transaction described in last year's Annual Report, we issued 3,944 shares in early January, 1993 upon the conversion of $46 million convertible debentures that we had called for redemption. Additionally, we issued 25,203 shares when we acquired Dexter Shoe, a purchase discussed later in this report. The overall result was that our shares outstanding increased by 29,147 and our net worth by about $478 million. Per-share book value also grew, because the shares issued in these transactions carried a price above their book value.

Of course, it's per-share intrinsic value, not book value, that counts. Book value is an accounting term that measures the capital, including retained earnings, that has been put into a business. Intrinsic value is a present-value estimate of the cash that can be taken out of a business during its remaining life. At most companies, the two values are unrelated. Berkshire, however, is an exception: Our book value, though significantly below our intrinsic value, serves as a useful device for tracking that key figure. In 1993, each measure grew by roughly 14%, advances that I would call satisfactory but unexciting.

These gains, however, were outstripped by a much larger gain - 39% - in Berkshire's market price. Over time, of course, market price and intrinsic value will arrive at about the same destination. But in the short run the two often diverge in a major way, a phenomenon I've discussed in the past. Two years ago, Coca-Cola and Gillette, both large holdings of ours, enjoyed market price increases that dramatically outpaced their earnings gains. In the 1991 Annual Report, I said that the stocks of these companies could not continuously over perform their businesses.

From 1991 to 1993, Coke and Gillette increased their annual operating earnings per share by 38% and 37% respectively, but their market prices moved up only 11% and 6%. In other words, the companies overperformed their stocks, a result that no doubt partly reflects Wall Street's new apprehension about brand names. Whatever the reason, what will count over time is the earnings

performance of these companies. If they prosper, Berkshire will also prosper, though not in a lock-step manner.

Let me add a lesson from history: Coke went public in 1919 at $40 per share. By the end of 1920 the market, coldly reevaluating Coke's future prospects, had battered the stock down by more than 50%, to $19.50. At yearend 1993, that single share, with dividends reinvested, was worth more than $2.1 million. As Ben Graham said: "In the short-run, the market is a voting machine - reflecting a voter-registration test that requires only money, not intelligence or emotional stability - but in the long-run, the market is a weighing machine."

So how should Berkshire's over-performance in the market last year be viewed? Clearly, Berkshire was selling at a higher percentage of intrinsic value at the end of 1993 than was the case at the beginning of the year. On the other hand, in a world of 6% or 7% long-term interest rates, Berkshire's market price was not inappropriate if - and you should understand that this is a huge if - Charlie Munger, Berkshire's Vice Chairman, and I can attain our long-standing goal of increasing Berkshire's per-share intrinsic value at an average annual rate of 15%. We have not retreated from this goal. But we again emphasize, as we have for many years, that the growth in our capital base makes 15% an ever-more difficult target to hit.

What we have going for us is a growing collection of good-sized operating businesses that possess economic characteristics ranging from good to terrific, run by managers whose performance ranges from terrific to terrific. You need have no worries about this group.

The capital-allocation work that Charlie and I do at the parent company, using the funds that our managers deliver to us, has a less certain outcome: It is not easy to find new businesses and managers comparable to those we have. Despite that difficulty, Charlie and I relish the search, and we are happy to report an important success in 1993.

Dexter Shoe

What we did last year was build on our 1991 purchase of H. H. Brown, a superbly-run manufacturer of work shoes, boots and other footwear. Brown has been a real winner: Though we had high hopes to begin with, these expectations have been considerably exceeded thanks to Frank Rooney, Jim Issler and the talented managers who work with them. Because of our confidence in Frank's team, we next acquired Lowell Shoe, at the end of 1992. Lowell was a long-established manufacturer of women's and nurses' shoes, but its business needed some fixing. Again, results have surpassed our expectations. So we promptly jumped at the chance

last year to acquire Dexter Shoe of Dexter, Maine, which manufactures popular-priced men's and women's shoes. Dexter, I can assure you, needs *no* fixing: It is one of the best-managed companies Charlie and I have seen in our business lifetimes.

Harold Alfond, who started working in a shoe factory at 25 cents an hour when he was 20, founded Dexter in 1956 with $10,000 of capital. He was joined in 1958 by Peter Lunder, his nephew. The two of them have since built a business that now produces over 7.5 million pairs of shoes annually, most of them made in Maine and the balance in Puerto Rico. As you probably know, the domestic shoe industry is generally thought to be unable to compete with imports from low-wage countries. But someone forgot to tell this to the ingenious managements of Dexter and H. H. Brown and to their skilled labor forces, which together make the U.S. plants of both companies highly competitive against all comers.

Dexter's business includes 77 retail outlets, located primarily in the Northeast. The company is also a major manufacturer of golf shoes, producing about 15% of U.S. output. Its bread and butter, though, is the manufacture of traditional shoes for traditional retailers, a job at which it excels: Last year both Nordstrom and J.C. Penney bestowed special awards upon Dexter for its performance as a supplier during 1992.

Our 1993 results include Dexter only from our date of merger, November 7th. In 1994, we expect Berkshire's shoe operations to have more than $550 million in sales, and we would not be surprised if the combined pre-tax earnings of these businesses topped $85 million. Five years ago we had no thought of getting into shoes. Now we have 7,200 employees in that industry, and I sing "There's No Business Like Shoe Business" as I drive to work. So much for strategic plans.

At Berkshire, we have no view of the future that dictates what businesses or industries we will enter. Indeed, we think it's usually poison for a corporate giant's shareholders if it embarks upon new ventures pursuant to some grand vision. We prefer instead to focus on the economic characteristics of businesses that we wish to own and the personal characteristics of managers with whom we wish to associate - and then to hope we get lucky in finding the two in combination. At Dexter, we did.

* * * * * * * * * * *

And now we pause for a short commercial: Though they owned a business jewel, we believe that Harold and Peter (who were not interested in cash) made a sound decision in exchanging their Dexter stock for shares of Berkshire. What they did, in effect, was trade a 100% interest in a single terrific business for a smaller interest in a large group of terrific businesses. They incurred no tax on this exchange and now own a security that can be easily used for charitable or personal gifts, or that can be converted to cash in amounts, and at times, of their own choosing. Should members of their families desire to, they can pursue varying financial paths without running into the complications that often arise when assets are concentrated in a private business.

For tax and other reasons, private companies also often find it difficult to diversify outside their industries. Berkshire, in contrast, can diversify with ease. So in shifting their ownership to Berkshire, Dexter's shareholders solved a reinvestment problem. Moreover, though Harold and Peter now have non-controlling shares in Berkshire, rather than controlling shares in Dexter, they know they will be treated as partners and that we will follow owner-oriented practices. If they elect to retain their Berkshire shares, their investment result from the merger date forward will exactly parallel my own result. Since I have a huge percentage of my net worth committed for life to Berkshire shares - and since the company will issue me neither restricted shares nor stock options - my gain-loss equation will always match that of all other owners.

Additionally, Harold and Peter know that at Berkshire we can keep our promises: There will be no changes of control or culture at Berkshire for many decades to come. Finally, and of paramount importance, Harold and Peter can be sure that they will get to run their business - an activity they dearly love - exactly as they did before the merger. At Berkshire, we do not tell .400 hitters how to swing.

What made sense for Harold and Peter probably makes sense for a few other owners of large private businesses. So, if you have a business that might fit, let me hear from you. Our acquisition criteria are set forth in the appendix on page 22.

Sources of Reported Earnings

The table below shows the major sources of Berkshire's reported earnings. In this presentation, amortization of Goodwill and other major purchase-price accounting adjustments are not charged against the specific businesses to which they apply, but are instead aggregated and shown separately. This procedure lets you view the earnings of our businesses as they would have been reported had we not purchased them. I've explained in past reports why this

form of presentation seems to us to be more useful to investors and managers than one utilizing GAAP, which requires purchase-price adjustments to be made on a business-by-business basis. The total net earnings we show in the table are, of course, identical to the GAAP total in our audited financial statements.

Operating Earnings (000s omitted)	**Pre-Tax 1993**	**Earnings 1992**	**Berkshire 1993**	**Share 1992**
Insurance Group:				
Underwriting	$30,876	$(108,961)	$20,156	$(71,141)
Net investment income	375,946	355,067	321,321	305,763
H. H. Brown, Lowell, and Dexter	44,025*	27,883	28,829	17,340
Buffalo News	50,962	47,863	29,696	28,163
Commercial & Consumer Finance	22,695	19,836	14,161	12,664
Fechheimer	13,442	13,698	6,931	7,267
Kirby	39,147	35,653	25,056	22,795
Nebraska Furniture Mart	21,540	17,110	10,398	8,072
Scott Fetzer Manufacturing Group	38,196	31,954	23,809	19,883
See's Candies	41,150	42,357	24,367	25,501
World Book	19,915	29,044	13,537	19,503
Purchase-Price Accounting & Goodwill Changes	(17,033)	(12,087)	(13,996)	(13,070)
Interest Expense**	(56,545)	(98,643)	(35,614)	(62,899)
Shareholder-Designated Contributions	(9,448)	(7,634)	(5,994)	(4,913)
Other	28,428	56,540	15,094	32,798
Operating Earnings	643,296	460,680	477,751	347,726
Sales of Securities	546,422	89,937	356,702	59,559
Tax Accruals Caused by New Accounting Rules	---	---	(146,332)	---
Total Earnings- All entities	**$1,189,718**	**$550,617**	**$688,121**	**$407,285**

** Includes Dexter's earnings only from the date it was acquired, November 7, 1993.*

***Excludes interest expense of Commercial and Consumer Finance businesses. In 1992 includes $22.5 million of premiums paid on the early redemption of debt.*

A large amount of information about these businesses is given on pages 38-49, where you will also find our segment earnings reported on a GAAP basis. In addition, on pages 52-59, we have rearranged Berkshire's financial data into four segments on a non-GAAP basis, a presentation that corresponds to the way Charlie and I think about the company. Our intent is to supply you with the financial information that we would wish you to give us if our positions were reversed.

"Look-Through" Earnings

We've previously discussed look-through earnings, which we believe more accurately portray the earnings of Berkshire than does our GAAP result. As we calculate them, look-through earnings consist of: (1) the operating earnings reported in the previous section, plus; (2) the retained operating earnings of major investees that, under GAAP accounting, are not reflected in our profits, less; (3) an allowance for the tax that would be paid by Berkshire if these retained earnings of investees had instead been distributed to us. The "operating earnings" of which we speak here exclude capital gains, special accounting items and major restructuring charges.

Over time, our look-through earnings need to increase at about 15% annually if our intrinsic value is to grow at that rate. Last year, I explained that we had to increase these earnings to about $1.8 billion in the year 2000, were we to meet the 15% goal. Because we issued additional shares in 1993, the amount needed has risen to about $1.85 billion.

That is a tough goal, but one that we expect you to hold us to. In the past, we've criticized the managerial practice of shooting the arrow of performance and *then* painting the target, centering it on whatever point the arrow happened to hit. We will instead risk embarrassment by painting first and shooting later.

If we are to hit the bull's-eye, we will need markets that allow the purchase of businesses and securities on sensible terms. Right now, markets are difficult, but they can - and will - change in unexpected ways and at unexpected times. In the meantime, we'll try to resist the temptation to do something marginal simply because we are long on cash. There's no use running if you're on the wrong road.

The following table shows how we calculate look-through earnings, though I warn you that the figures are necessarily *very* rough. (The dividends paid to us by these investees have been included in the operating earnings itemized on page 8, mostly under "Insurance Group: Net Investment Income.")

Berkshire's Major Investees	Berkshire's Ownership	Approximate at Yearend	Berkshire's Undistributed	Share of Operating Earnings
	1993	1992	1993	1992
Capitla Cities / ABC Inc.	13.0%	18.2%	$83 (2)	$70
The Coca-Cola Company	7.2%	7.1%	94	82
Federal Home Loan Mortgage Corp.	6.8% (1)	8.2% (1)	41 (2)	29 (2)
GEICO Corp.	48.4%	48.1%	76 (3)	34 (3)
General Dynamics Corp.	13.9%	14.1%	25	11 (2)
The Gillette Compnay	10.9%	10.9%	44	38
Guinness PLC	1.9%	2.0%	8	7
The Washington Post Company	14.8%	14.6%	15	11
Wells Fargo & Company	12.2%	11.5%	53 (2)	16 (2)
Berkshire's share of undistributed earnings of major investees			$439	$298
Hypothetical tax on these undistributed investee earnings (4)			(61)	(42)
Reported operating earnings of Berkshire			478	348
Total look-through earnings of Bekrshire			$856	$516

(1) Does not include shares allocable to the minority interest at Wesco

(2) Calculated on average ownership for the year

(3) Excludes realized capital gains, which have been both recurring and significant

(4) The tax rate used is 14%, which is the rate Berkshire pays on the dividends it receives

We have told you that we expect the undistributed, hypothetically-taxed earnings of our investees to produce at least equivalent gains in Berkshire's intrinsic value. To date, we have far exceeded that expectation. For example, in 1986 we bought three million shares of Capital Cities/ABC for $172.50 per share and late last year sold one-third of that holding for $630 per share. After paying 35% capital gains taxes, we realized a $297 million profit from the sale. In contrast, during the eight years we held these shares, the retained earnings of Cap Cities

attributable to them - hypothetically taxed at a lower 14% in accordance with our look-through method - were only $152 million. In other words, we paid a much larger tax bill than our look-through presentations to you have assumed and nonetheless realized a gain that far exceeded the undistributed earnings allocable to these shares.

We expect such pleasant outcomes to recur often in the future and therefore believe our look-through earnings to be a conservative representation of Berkshire's true economic earnings.

Taxes

As our Cap Cities sale emphasizes, Berkshire is a substantial payer of federal income taxes. In aggregate, we will pay 1993 federal income taxes of $390 million, about $200 million of that attributable to operating earnings and $190 million to realized capital gains. Furthermore, our share of the 1993 federal and foreign income taxes paid by our investees is well over $400 million, a figure you don't see on our financial statements but that is nonetheless real. Directly and indirectly, Berkshire's 1993 federal income tax payments will be about 1/2 of 1% of the total paid last year by all American corporations.

Speaking for our own shares, Charlie and I have absolutely no complaint about these taxes. We know we work in a market-based economy that rewards our efforts far more bountifully than it does the efforts of others whose output is of equal or greater benefit to society. Taxation should, and does, partially redress this inequity. But we still remain extraordinarily well-treated.

Berkshire and its shareholders, in combination, would pay a much smaller tax if Berkshire operated as a partnership or "S" corporation, two structures often used for business activities. For a variety of reasons, that's not feasible for Berkshire to do. However, the penalty our corporate form imposes is mitigated - though far from eliminated - by our strategy of investing for the long term. Charlie and I would follow a buy-and-hold policy even if we ran a tax-exempt institution. We think it the soundest way to invest, and it also goes down the grain of our personalities. A third reason to favor this policy, however, is the fact that taxes are due only when gains are realized.

Through my favorite comic strip, Li'l Abner, I got a chance during my youth to see the benefits of delayed taxes, though I missed the lesson at the time. Making his readers feel superior, Li'l Abner bungled happily, but moronically, through life in Dogpatch. At one point he became infatuated with a New York temptress, Appassionatta Van Climax, but despaired of marrying her because he had only a single silver dollar and she was interested solely in

millionaires. Dejected, Abner took his problem to Old Man Mose, the font of all knowledge in Dogpatch. Said the sage: Double your money 20 times and Appassionatta will be yours (1, 2, 4, 8 . . . . 1,048,576).

My last memory of the strip is Abner entering a roadhouse, dropping his dollar into a slot machine, and hitting a jackpot that spilled money all over the floor. Meticulously following Mose's advice, Abner picked up two dollars and went off to find his next double. Whereupon I dumped Abner and began reading Ben Graham.

Mose clearly was overrated as a guru: Besides failing to anticipate Abner's slavish obedience to instructions, he also forgot about taxes. Had Abner been subject, say, to the 35% federal tax rate that Berkshire pays, and had he managed one double annually, he would after 20 years only have accumulated $22,370. Indeed, had he kept on both getting his annual doubles and paying a 35% tax on each, he would have needed 7 1/2 years more to reach the $1 million required to win Appassionatta.

But what if Abner had instead put his dollar in a single investment and held it until it doubled the same 27 1/2 times? In that case, he would have realized about $200 million pre-tax or, after paying a $70 million tax in the final year, about $130 million after-tax. For that, Appassionatta would have crawled to Dogpatch. Of course, with 27 1/2 years having passed, how Appassionatta would have looked to a fellow sitting on $130 million is another question.

What this little tale tells us is that tax-paying investors will realize a far, far greater sum from a single investment that compounds internally at a given rate than from a succession of investments compounding at the same rate. But I suspect many Berkshire shareholders figured that out long ago.

Insurance Operations

At this point in the report we've customarily provided you with a table showing the annual "combined ratio" of the insurance industry for the preceding decade. This ratio compares total insurance costs (losses incurred plus expenses) to revenue from premiums. For many years, the ratio has been above 100, a level indicating an underwriting loss. That is, the industry has taken in less money each year from its policyholders than it has had to pay for operating expenses and for loss events that occurred during the year.

Offsetting this grim equation is a happier fact: Insurers get to hold on to their policyholders' money for a time before paying it out. This happens because most policies require that

premiums be prepaid and, more importantly, because it often takes time to resolve loss claims. Indeed, in the case of certain lines of insurance, such as product liability or professional malpractice, many years may elapse between the loss event and payment.

To oversimplify the matter somewhat, the total of the funds prepaid by policyholders and the funds earmarked for incurred-but-not-yet-paid claims is called "the float." In the past, the industry was able to suffer a combined ratio of 107 to 111 and still break even from its insurance writings because of the earnings derived from investing this float.

As interest rates have fallen, however, the value of float has substantially declined. Therefore, the data that we have provided in the past are no longer useful for year-to-year comparisons of industry profitability. A company writing at the same combined ratio now as in the 1980's today has a far less attractive business than it did then.

Only by making an analysis that incorporates both underwriting results and the current risk-free earnings obtainable from float can one evaluate the true economics of the business that a property-casualty insurer writes. Of course, the *actual* investment results that an insurer achieves from the use of both float and stockholders' funds is also of major importance and should be carefully examined when an investor is assessing managerial performance. But that should be a separate analysis from the one we are discussing here. The value of float funds - in effect, their transfer price as they move from the insurance operation to the investment operation - should be determined simply by the risk-free, long-term rate of interest.

On the next page we show the numbers that count in an evaluation of Berkshire's insurance business. We calculate our float - which we generate in exceptional amounts relative to our premium volume - by adding loss reserves, loss adjustment reserves and unearned premium reserves and then subtracting agent's balances, prepaid acquisition costs and deferred charges applicable to assumed reinsurance. Our cost of float is determined by our underwriting loss or profit. In those years when we have had an underwriting profit, which includes 1993, our cost of float has been negative, and we have determined our insurance earnings by adding underwriting profit to float income.

(in $ Millions)	(1) Underwriting Loss	(2) Average Float	Approximate Cost of Funds	Yearend Yield on Long-Term Govt. Bonds
1967	Profit	$17.3	< 0	5.50%
1968	Profit	19.9	< 0	5.90%
1969	Profit	23.4	< 0	6.79%
1970	$0.37	32.4	1.14%	6.25%
1971	Profit	52.5	< 0	5.81%
1972	Profit	69.5	< 0	5.82%
1973	Profit	73.3	< 0	7.27%
1974	7.36	79.1	9.30%	8.13%
1975	11.35	87.6	12.96%	8.03%
1976	Profit	102.6	< 0	7.30%
1977	Profit	139.0	< 0	7.97%
1978	Profit	190.4	< 0	8.93%
1979	Profit	227.3	< 0	10.08%
1980	Profit	237.0	< 0	11.94%
1981	Profit	228.4	< 0	13.61%
1982	21.56	220.6	9.77%	10.64%
1983	33.87	231.3	14.64%	11.84%
1984	48.06	253.2	18.98%	11.58%
1985	44.23	390.2	11.34%	9.34%
1986	55.84	797.5	7.00%	7.60%
1987	55.43	1,266.7	4.38%	8.95%
1988	11.08	1,497.7	0.74%	9.00%
1989	24.40	1,541.3	1.58%	7.97%
1990	26.65	1,637.3	1.63%	8.24%
1991	119.6	1,895.0	6.31%	7.40%
1992	108.9	2,290.4	4.76%	7.39%
1993	Profit	2,624.7	< 0	6.35%

As you can see, in our insurance operation last year we had the use of $2.6 billion at no cost; in fact we were paid $31 million, our underwriting profit, to hold these funds. This sounds good - is good - but is far from as good as it sounds.

We temper our enthusiasm because we write a large volume of "super-cat" policies (which other insurance and reinsurance companies buy to recover part of the losses they suffer from

mega-catastrophes) and because last year we had no losses of consequence from this activity. As that suggests, the truly catastrophic Midwestern floods of 1993 did not trigger super-cat losses, the reason being that very few flood policies are purchased from private insurers.

It would be fallacious, however, to conclude from this single-year result that the super-cat business is a wonderful one, or even a satisfactory one. A simple example will illustrate the fallacy: Suppose there is an event that occurs 25 times in every century. If you annually give 5-for-1 odds against its occurrence *that* year, you will have many more winning years than losers. Indeed, you may go a straight six, seven or more years without loss. You also will eventually go broke.

At Berkshire, we naturally believe we are obtaining adequate premiums and giving more like 3 1/2-for-1 odds. But there is no way for us - or anyone else - to calculate the true odds on super-cat coverages. In fact, it will take decades for us to find out whether our underwriting judgment has been sound.

What we do know is that when a loss comes, it's likely to be a lulu. There may well be years when Berkshire will suffer losses from the super-cat business equal to three or four times what we earned from it in 1993. When Hurricane Andrew blew in 1992, we paid out about $125 million. Because we've since expanded our super-cat business, a similar storm today could cost us $600 million.

So far, we have been lucky in 1994. As I write this letter, we are estimating that our losses from the Los Angeles earthquake will be nominal. But if the quake had been a 7.5 instead of a 6.8, it would have been a different story.

Berkshire is ideally positioned to write super-cat policies. In Ajit Jain, we have by far the best manager in this business. Additionally, companies writing these policies need enormous capital, and our net worth is ten to twenty times larger than that of our main competitors. In most lines of insurance, huge resources aren't that important: An insurer can diversify the risks it writes and, if necessary, can lay off risks to reduce concentration in its portfolio. That isn't possible in the super-cat business. So these competitors are forced into offering far smaller limits than those we can provide. Were they bolder, they would run the risk that a mega-catastrophe - or a confluence of smaller catastrophes - would wipe them out.

One indication of our premier strength and reputation is that each of the four largest reinsurance companies in the world buys very significant reinsurance coverage from Berkshire.

Better than anyone else, these giants understand that the test of a reinsurer is its ability and willingness to pay losses under trying circumstances, not its readiness to accept premiums when things look rosy.

One caution: There has recently been a substantial increase in reinsurance capacity. Close to $5 billion of equity capital has been raised by reinsurers, almost all of them newly-formed entities. Naturally these new entrants are hungry to write business so that they can justify the projections they utilized in attracting capital. This new competition won't affect our 1994 operations; we're filled up there, primarily with business written in 1993. But we are now seeing signs of price deterioration. If this trend continues, we will resign ourselves to much-reduced volume, keeping ourselves available, though, for the large, sophisticated buyer who requires a super-cat insurer with large capacity and a sure ability to pay losses.

In other areas of our insurance business, our home state operation, led by Rod Eldred; our workers' compensation business, headed by Brad Kinstler; our credit-card operation, managed by the Kizer family; and National Indemnity's traditional auto and general liability business, led by Don Wurster, all achieved excellent results. In combination, these four units produced a significant underwriting profit and substantial float.

All in all, we have a first-class insurance business. Though its results will be highly volatile, this operation possesses an intrinsic value that exceeds its book value by a large amount - larger, in fact, than is the case at any other Berkshire business.

Common Stock Investments

Below we list our common stockholdings having a value of over $250 million. A small portion of these investments belongs to subsidiaries of which Berkshire owns less than 100%.

Shares	Company	Cost (000's omitted)	Market (000's omitted)
3,000,000	Capital Cities/ABC, Inc.	$345,000	$1,239,000
93,400,000	The Coca-Cola Company	1,023,920	4,167,975
13,654,600	Federal Home Loan Mortgage Corp. ("Freddie Mac")	307,505	681,023
34,250,000	GEICO Corporation.	45,713	1,759,594
4,350,000	General Dynamics Corp	94,938	401,287
24,000,000	The Gillette Company	600,000	1,431,000
38,335,000	Guinness PLC	333,019	270,822
1,727,765	The Washington Post Company	9,731	440,148
6,791,218	Wells Fargo & Company	423,680	878,614

Considering the similarity of this year's list and the last, you may decide your management is hopelessly comatose. But we continue to think that it is usually foolish to part with an interest in a business that is both understandable and durably wonderful. Business interests of that kind are simply too hard to replace.

Interestingly, corporate managers have no trouble understanding that point when they are focusing on a business they operate: A parent company that owns a subsidiary with superb long-term economics is not likely to sell that entity regardless of price. "Why," the CEO would ask, "should I part with my crown jewel?" Yet that same CEO, when it comes to running his personal investment portfolio, will offhandedly - and even impetuously - move from business to business when presented with no more than superficial arguments by his broker for doing so. The worst of these is perhaps, "You can't go broke taking a profit." Can you imagine a CEO using this line to urge his board to sell a star subsidiary? In our view, what makes sense in business also makes sense in stocks: An investor should ordinarily hold a small piece of an outstanding business with the same tenacity that an owner would exhibit if he owned all of that business.

Earlier I mentioned the financial results that could have been achieved by investing $40 in The Coca-Cola Co. in 1919. In 1938, more than 50 years after the introduction of Coke, and long after the drink was firmly established as an American icon, *Fortune* did an excellent story

on the company. In the second paragraph the writer reported: "Several times every year a weighty and serious investor looks long and with profound respect at Coca-Cola's record, but comes regretfully to the conclusion that he is looking too late. The specters of saturation and competition rise before him."

Yes, competition there was in 1938 and in 1993 as well. But it's worth noting that in 1938 The Coca-Cola Co. sold 207 million cases of soft drinks (if its gallonage then is converted into the 192-ounce cases used for measurement today) and in 1993 it sold about 10.7 billion cases, a 50-fold increase in physical volume from a company that in 1938 was already dominant in its very major industry. Nor was the party over in 1938 for an investor: Though the $40 invested in 1919 in one share had (with dividends reinvested) turned into $3,277 by the end of 1938, a fresh $40 then invested in Coca-Cola stock would have grown to $25,000 by yearend 1993.

I can't resist one more quote from that 1938 *Fortune* story: "It would be hard to name any company comparable in size to Coca-Cola and selling, as Coca-Cola does, an unchanged product that can point to a ten-year record anything like Coca-Cola's." In the 55 years that have since passed, Coke's product line has broadened somewhat, but it's remarkable how well that description still fits.

Charlie and I decided long ago that in an investment lifetime it's just too hard to make hundreds of smart decisions. That judgment became ever more compelling as Berkshire's capital mushroomed and the universe of investments that could significantly affect our results shrank dramatically. Therefore, we adopted a strategy that required our being smart - and not too smart at that - only a very few times. Indeed, we'll now settle for one good idea a year. (Charlie says it's my turn.)

The strategy we've adopted precludes our following standard diversification dogma. Many pundits would therefore say the strategy must be riskier than that employed by more conventional investors. We disagree. We believe that a policy of portfolio concentration may well *decrease* risk if it raises, as it should, both the intensity with which an investor thinks about a business and the comfort-level he must feel with its economic characteristics before buying into it. In stating this opinion, we define risk, using dictionary terms, as "the possibility of loss or injury."

Academics, however, like to define investment "risk" differently, averring that it is the relative volatility of a stock or portfolio of stocks - that is, their volatility as compared to that of a

large universe of stocks. Employing data bases and statistical skills, these academics compute with precision the "beta" of a stock - its relative volatility in the past - and then build arcane investment and capital-allocation theories around this calculation. In their hunger for a single statistic to measure risk, however, they forget a fundamental principle: It is better to be approximately right than precisely wrong.

For owners of a business - and that's the way we think of shareholders - the academics' definition of risk is far off the mark, so much so that it produces absurdities. For example, under beta-based theory, a stock that has dropped very sharply compared to the market - as had Washington Post when we bought it in 1973 - becomes "riskier" at the lower price than it was at the higher price. Would that description have then made any sense to someone who was offered the entire company at a vastly-reduced price?

In fact, the true investor *welcomes* volatility. Ben Graham explained why in Chapter 8 of *The Intelligent Investor*. There he introduced "Mr. Market," an obliging fellow who shows up every day to either buy from you or sell to you, whichever you wish. The more manic-depressive this chap is, the greater the opportunities available to the investor. That's true because a wildly fluctuating market means that irrationally low prices will periodically be attached to solid businesses. It is impossible to see how the availability of such prices can be thought of as increasing the hazards for an investor who is totally free to either ignore the market or exploit its folly.

In assessing risk, a beta purist will disdain examining what a company produces, what its competitors are doing, or how much borrowed money the business employs. He may even prefer not to know the company's name. What he treasures is the price history of its stock. In contrast, we'll happily forgo knowing the price history and instead will seek whatever information will further our understanding of the company's business. After we buy a stock, consequently, we would not be disturbed if markets closed for a year or two. We don't need a daily quote on our 100% position in See's or H. H. Brown to validate our well-being. Why, then, should we need a quote on our 7% interest in Coke?

In our opinion, the real risk that an investor must assess is whether his aggregate after-tax receipts from an investment (including those he receives on sale) will, over his prospective holding period, give him at least as much purchasing power as he had to begin with, plus a modest rate of interest on that initial stake. Though this risk cannot be calculated with

engineering precision, it can in some cases be judged with a degree of accuracy that is useful. The primary factors bearing upon this evaluation are:

1) The certainty with which the long-term economic characteristics of the business can be evaluated;

2) The certainty with which management can be evaluated, both as to its ability to realize the full potential of the business and to wisely employ its cash flows;

3) The certainty with which management can be counted on to channel the rewards from the business to the shareholders rather than to itself;

4) The purchase price of the business;

5) The levels of taxation and inflation that will be experienced and that will determine the degree by which an investor's purchasing-power return is reduced from his gross return.

These factors will probably strike many analysts as unbearably fuzzy, since they cannot be extracted from a data base of any kind. But the difficulty of precisely quantifying these matters does not negate their importance nor is it insuperable. Just as Justice Stewart found it impossible to formulate a test for obscenity but nevertheless asserted, "I know it when I see it," so also can investors - in an inexact but useful way - "see" the risks inherent in certain investments without reference to complex equations or price histories.

Is it really so difficult to conclude that Coca-Cola and Gillette possess far less business risk over the long term than, say, *any* computer company or retailer? Worldwide, Coke sells about 44% of all soft drinks, and Gillette has more than a 60% share (in value) of the blade market. Leaving aside chewing gum, in which Wrigley is dominant, I know of no other significant businesses in which the leading company has long enjoyed such global power.

Moreover, both Coke and Gillette have actually increased their worldwide shares of market in recent years. The might of their brand names, the attributes of their products, and the strength of their distribution systems give them an enormous competitive advantage, setting up a protective moat around their economic castles. The average company, in contrast, does battle daily without any such means of protection. As Peter Lynch says, stocks of companies selling commodity-like products should come with a warning label: "Competition may prove hazardous to human wealth."

The competitive strengths of a Coke or Gillette are obvious to even the casual observer of business. Yet the beta of their stocks is similar to that of a great many run-of-the-mill companies

who possess little or no competitive advantage. Should we conclude from this similarity that the competitive strength of Coke and Gillette gains them nothing when business risk is being measured? Or should we conclude that the risk in owning a piece of a company - its stock - is somehow divorced from the long-term risk inherent in its business operations? We believe neither conclusion makes sense and that equating beta with investment risk also makes no sense.

The theoretician bred on beta has no mechanism for differentiating the risk inherent in, say, a single-product toy company selling pet rocks or hula hoops from that of another toy company whose sole product is Monopoly or Barbie. But it's quite possible for ordinary investors to make such distinctions if they have a reasonable understanding of consumer behavior and the factors that create long-term competitive strength or weakness. Obviously, every investor will make mistakes. But by confining himself to a relatively few, easy-to-understand cases, a reasonably intelligent, informed and diligent person can judge investment risks with a useful degree of accuracy.

In many industries, of course, Charlie and I can't determine whether we are dealing with a "pet rock" or a "Barbie." We couldn't solve this problem, moreover, even if we were to spend years intensely studying those industries. Sometimes our own intellectual shortcomings would stand in the way of understanding, and in other cases the nature of the industry would be the roadblock. For example, a business that must deal with fast-moving technology is not going to lend itself to reliable evaluations of its long-term economics. Did we foresee thirty years ago what would transpire in the television-manufacturing or computer industries? Of course not. (Nor did most of the investors and corporate managers who enthusiastically entered those industries.) Why, then, should Charlie and I now think we can predict the future of other rapidly-evolving businesses? We'll stick instead with the easy cases. Why search for a needle buried in a haystack when one is sitting in plain sight?

Of course, some investment strategies - for instance, our efforts in arbitrage over the years - require wide diversification. If significant risk exists in a single transaction, overall risk should be reduced by making that purchase one of many mutually-independent commitments. Thus, you may consciously purchase a risky investment - one that indeed has a significant possibility of causing loss or injury - if you believe that your gain, weighted for probabilities, considerably exceeds your loss, comparably weighted, and if you can commit to a number of similar, but unrelated opportunities. Most venture capitalists employ this strategy. Should you choose to

pursue this course, you should adopt the outlook of the casino that owns a roulette wheel, which will want to see lots of action because it is favored by probabilities, but will refuse to accept a single, huge bet.

Another situation requiring wide diversification occurs when an investor who does not understand the economics of specific businesses nevertheless believes it in his interest to be a long-term owner of American industry. That investor should both own a large number of equities and space out his purchases. By periodically investing in an index fund, for example, the know-nothing investor can actually out-perform most investment professionals. Paradoxically, when "dumb" money acknowledges its limitations, it ceases to be dumb.

On the other hand, if you are a know-*something* investor, able to understand business economics and to find five to ten sensibly-priced companies that possess important long-term competitive advantages, conventional diversification makes no sense for you. It is apt simply to hurt your results and increase your risk. I cannot understand why an investor of that sort elects to put money into a business that is his 20th favorite rather than simply adding that money to his top choices - the businesses he understands best and that present the least risk, along with the greatest profit potential. In the words of the prophet Mae West: "Too much of a good thing can be wonderful."

Corporate Governance

At our annual meetings, someone usually asks "What happens to this place if you get hit by a truck?" I'm glad they are still asking the question in this form. It won't be too long before the query becomes: "What happens to this place if you *don't* get hit by a truck?"

Such questions, in any event, raise a reason for me to discuss corporate governance, a hot topic during the past year. In general, I believe that directors have stiffened their spines recently and that shareholders are now being treated somewhat more like true owners than was the case not long ago. Commentators on corporate governance, however, seldom make any distinction among three fundamentally different manager/owner situations that exist in publicly-held companies. Though the legal responsibility of directors is identical throughout, their ability to effect change differs in each of the cases. Attention usually falls on the first case, because it prevails on the corporate scene. Since Berkshire falls into the second category, however, and will someday fall into the third, we will discuss all three variations.

The first, and by far most common, board situation is one in which a corporation has no controlling shareholder. In that case, I believe directors should behave as if there is a single absentee owner, whose long-term interest they should try to further in all proper ways. Unfortunately, "long-term" gives directors a lot of wiggle room. If they lack either integrity or the ability to think independently, directors can do great violence to shareholders while still claiming to be acting in their long-term interest. But assume the board is functioning well and must deal with a management that is mediocre or worse. Directors then have the responsibility for changing that management, just as an intelligent owner would do if he were present. And if able but greedy managers over-reach and try to dip too deeply into the shareholders' pockets, directors must slap their hands.

In this plain-vanilla case, a director who sees something he doesn't like should attempt to persuade the other directors of his views. If he is successful, the board will have the muscle to make the appropriate change. Suppose, though, that the unhappy director can't get other directors to agree with him. He should then feel free to make his views known to the absentee owners. Directors seldom do that, of course. The temperament of many directors would in fact be incompatible with critical behavior of that sort. But I see nothing improper in such actions, assuming the issues are serious. Naturally, the complaining director can expect a vigorous rebuttal from the unpersuaded directors, a prospect that should discourage the dissenter from pursuing trivial or non-rational causes.

For the boards just discussed, I believe the directors ought to be relatively few in number - say, ten or less - and ought to come mostly from the outside. The outside board members should establish standards for the CEO's performance and should also periodically meet, without his being present, to evaluate his performance against those standards.

The requisites for board membership should be business savvy, interest in the job, and owner-orientation. Too often, directors are selected simply because they are prominent or add diversity to the board. That practice is a mistake. Furthermore, mistakes in selecting directors are particularly serious because appointments are so hard to undo: The pleasant but vacuous director need never worry about job security.

The second case is that existing at Berkshire, where the controlling owner is also the manager. At some companies, this arrangement is facilitated by the existence of two classes of stock endowed with disproportionate voting power. In these situations, it's obvious that the board does

not act as an agent between owners and management and that the directors cannot effect change except through persuasion. Therefore, if the owner/manager is mediocre or worse - or is over-reaching - there is little a director can do about it except object. If the directors having no connections to the owner/manager make a unified argument, it may well have some effect. More likely it will not.

If change does not come, and the matter is sufficiently serious, the outside directors should resign. Their resignation will signal their doubts about management, and it will emphasize that no outsider is in a position to correct the owner/manager's shortcomings.

The third governance case occurs when there is a controlling owner who is not involved in management. This case, examples of which are Hershey Foods and Dow Jones, puts the outside directors in a potentially useful position. If they become unhappy with either the competence or integrity of the manager, they can go directly to the owner (who may also be on the board) and report their dissatisfaction. This situation is ideal for an outside director, since he need make his case only to a single, presumably interested owner, who can forthwith effect change if the argument is persuasive. Even so, the dissatisfied director has only that single course of action. If he remains unsatisfied about a critical matter, he has no choice but to resign.

Logically, the third case should be the most effective in insuring first-class management. In the second case the owner is not going to fire himself, and in the first case, directors often find it very difficult to deal with mediocrity or mild over-reaching. Unless the unhappy directors can win over a majority of the board - an awkward social and logistical task, particularly if management's behavior is merely odious, not egregious - their hands are effectively tied. In practice, directors trapped in situations of this kind usually convince themselves that by staying around they can do at least some good. Meanwhile, management proceeds unfettered.

In the third case, the owner is neither judging himself nor burdened with the problem of garnering a majority. He can also insure that outside directors are selected who will bring useful qualities to the board. These directors, in turn, will know that the good advice they give will reach the right ears, rather than being stifled by a recalcitrant management. If the controlling owner is intelligent and self-confident, he will make decisions in respect to management that are meritocratic and pro-shareholder. Moreover - and this is critically important - he can readily correct any mistake he makes.

At Berkshire we operate in the second mode now and will for as long as I remain functional. My health, let me add, is excellent. For better or worse, you are likely to have me as an owner/manager for some time.

After my death, all of my stock will go to my wife, Susie, should she survive me, or to a foundation if she dies before I do. In neither case will taxes and bequests require the sale of consequential amounts of stock.

When my stock is transferred to either my wife or the foundation, Berkshire will enter the third governance mode, going forward with a vitally interested, but non-management, owner and with a management that must perform for that owner. In preparation for that time, Susie was elected to the board a few years ago, and in 1993 our son, Howard, joined the board. These family members will not be managers of the company in the future, but they will represent the controlling interest should anything happen to me. Most of our other directors are also significant owners of Berkshire stock, and each has a strong owner-orientation. All in all, we're prepared for "the truck."

Shareholder-Designated Contributions

About 97% of all eligible shares participated in Berkshire's 1993 shareholder-designated contributions program. Contributions made through the program were $9.4 million and 3,110 charities were recipients.

Berkshire's practice in respect to discretionary philanthropy - as contrasted to its policies regarding contributions that are clearly related to the company's business activities - differs significantly from that of other publicly-held corporations. There, most corporate contributions are made pursuant to the wishes of the CEO (who often will be responding to social pressures), employees (through matching gifts), or directors (through matching gifts or requests they make of the CEO).

At Berkshire, we believe that the company's money is the owners' money, just as it would be in a closely-held corporation, partnership, or sole proprietorship. Therefore, if funds are to be given to causes unrelated to Berkshire's business activities, it is the charities favored by our owners that should receive them. We've yet to find a CEO who believes he should personally fund the charities favored by his shareholders. Why, then, should they foot the bill for his picks?

Let me add that our program is easy to administer. Last fall, for two months, we borrowed one person from National Indemnity to help us implement the instructions that came from our

7,500 registered shareholders. I'd guess that the average corporate program in which employee gifts are matched incurs far greater administrative costs. Indeed, our entire corporate overhead is less than half the size of our charitable contributions. *(Charlie, however, insists that I tell you that $1.4 million of our $4.9 million overhead is attributable to our corporate jet, The Indefensible.)*

Below is a list showing the largest categories to which our shareholders have steered their contributions.

(a) 347 churches and synagogues received 569 gifts

(b) 283 colleges and universities received 670 gifts

(c) 244 K-12 schools (about two-thirds secular, one-third religious) received 525 gifts

(d) 288 institutions dedicated to art, culture or the humanities received 447 gifts

(e) 180 religious social-service organizations (split about equally between Christian and Jewish) received 411 gifts

(f) 445 secular social-service organizations (about 40% youth-related) received 759 gifts

(g) 153 hospitals received 261 gifts

(h) 186 health-related organizations (American Heart Association, American Cancer Society, etc.) received 320 gifts

Three things about this list seem particularly interesting to me. First, to some degree it indicates what people choose to give money to when they are acting of their own accord, free of pressure from solicitors or emotional appeals from charities. Second, the contributions programs of publicly-held companies almost never allow gifts to churches and synagogues, yet clearly these institutions are what many shareholders would like to support. Third, the gifts made by our shareholders display conflicting philosophies: 130 gifts were directed to organizations that believe in making abortions readily available for women and 30 gifts were directed to organizations (other than churches) that discourage or are opposed to abortion.

Last year I told you that I was thinking of raising the amount that Berkshire shareholders can give under our designated-contributions program and asked for your comments. We received a few well-written letters opposing the entire idea, on the grounds that it was our job to run the business and not our job to force shareholders into making charitable gifts. Most of the shareholders responding, however, noted the tax efficiency of the plan and urged us to increase

the designated amount. Several shareholders who have given stock to their children or grandchildren told me that they consider the program a particularly good way to get youngsters thinking at an early age about the subject of giving. These people, in other words, perceive the program to be an educational, as well as philanthropic, tool. The bottom line is that we did raise the amount in 1993, from $8 per share to $10.

In addition to the shareholder-designated contributions that Berkshire distributes, our operating businesses make contributions, including merchandise, averaging about $2.5 million annually. These contributions support local charities, such as The United Way, and produce roughly commensurate benefits for our businesses.

We suggest that new shareholders read the description of our shareholder-designated contributions program that appears on pages 50-51. *To participate in future programs, you must make sure your shares are registered in the name of the actual owner, not in the nominee name of a broker, bank or depository. Shares not so registered on August 31, 1994 will be ineligible for the 1994 program.*

A Few Personal Items

Mrs. B - Rose Blumkin - had her 100th birthday on December 3, 1993. (The candles cost more than the cake.) That was a day on which the store was scheduled to be open in the evening. Mrs. B, who works seven days a week, for however many hours the store operates, found the proper decision quite obvious: She simply postponed her party until an evening when the store was closed.

Mrs. B's story is well-known but worth telling again. She came to the United States 77 years ago, unable to speak English and devoid of formal schooling. In 1937, she founded the Nebraska Furniture Mart with $500. Last year the store had sales of $200 million, a larger amount by far than that recorded by any other home furnishings store in the United States. Our part in all of this began ten years ago when Mrs. B sold control of the business to Berkshire Hathaway, a deal we completed without obtaining audited financial statements, checking real estate records, or getting any warranties. In short, her word was good enough for us.

Naturally, I was delighted to attend Mrs. B's birthday party. After all, she's promised to attend *my* 100th.

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Katharine Graham retired last year as the chairman of The Washington Post Company, having relinquished the CEO title three years ago. In 1973, we purchased our stock in her company for about $10 million. Our holding now garners $7 million a year in dividends and is worth over $400 million. At the time of our purchase, we knew that the economic prospects of the company were good. But equally important, Charlie and I concluded that Kay would prove to be an outstanding manager and would treat all shareholders honorably. That latter consideration was particularly important because The Washington Post Company has two classes of stock, a structure that we've seen some managers abuse.

All of our judgments about this investment have been validated by events. Kay's skills as a manager were underscored this past year when she was elected by *Fortune's* Board of Editors to the Business Hall of Fame. On behalf of our shareholders, Charlie and I had long ago put her in Berkshire's Hall of Fame.

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Another of last year's retirees was Don Keough of Coca-Cola, although, as he puts it, his retirement lasted "about 14 hours." Don is one of the most extraordinary human beings I've ever known - a man of enormous business talent, but, even more important, a man who brings out the absolute best in everyone lucky enough to associate with him. Coca-Cola wants its product to be present at the happy times of a person's life. Don Keough, as an individual, invariably increases the happiness of those around him. It's impossible to think about Don without feeling good.

I will edge up to how I met Don by slipping in a plug for my neighborhood in Omaha: Though Charlie has lived in California for 45 years, his home as a boy was about 200 feet away from the house where I now live; my wife, Susie, grew up 1 1/2 blocks away; and we have about 125 Berkshire shareholders in the zip code. As for Don, in 1958 he bought the house directly across the street from mine. He was then a coffee salesman with a big family and a small income.

The impressions I formed in those days about Don were a factor in my decision to have Berkshire make a record $1 billion investment in Coca-Cola in 1988-89. Roberto Goizueta had become CEO of Coke in 1981, with Don alongside as his partner. The two of them took hold of

a company that had stagnated during the previous decade and moved it from $4.4 billion of market value to $58 billion in less than 13 years. What a difference a pair of managers like this makes, even when their product has been around for 100 years.

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Frank Rooney did double duty last year. In addition to leading H. H. Brown to record profits - 35% above the 1992 high - he also was key to our merger with Dexter.

Frank has known Harold Alfond and Peter Lunder for decades, and shortly after our purchase of H. H. Brown, told me what a wonderful operation they managed. He encouraged us to get together and in due course we made a deal. Frank told Harold and Peter that Berkshire would provide an ideal corporate "home" for Dexter, and that assurance undoubtedly contributed to their decision to join with us.

I've told you in the past of Frank's extraordinary record in building Melville Corp. during his 23 year tenure as CEO. Now, at 72, he's setting an even faster pace at Berkshire. Frank has a low-key, relaxed style, but don't let that fool you. When he swings, the ball disappears far over the fence.

The Annual Meeting

This year the Annual Meeting will be held at the Orpheum Theater in downtown Omaha at 9:30 a.m. on Monday, April 25, 1994. A record 2,200 people turned up for the meeting last year, but the theater can handle many more. We will have a display in the lobby featuring many of our consumer products - candy, spray guns, shoes, cutlery, encyclopedias, and the like. Among my favorites slated to be there is a See's candy assortment that commemorates Mrs. B's 100th birthday and that features her picture, rather than Mrs. See's, on the package.

We recommend that you promptly get hotel reservations at one of these hotels: (1) The Radisson-Redick Tower, a small (88 rooms) but nice hotel across the street from the Orpheum; (2) the much larger Red Lion Hotel, located about a five-minute walk from the Orpheum; or (3) the Marriott, located in West Omaha about 100 yards from Borsheim's, which is a twenty-minute drive from downtown. We will have buses at the Marriott that will leave at 8:30 and 8:45 for the meeting and return after it ends.

An attachment to our proxy material explains how you can obtain the card you will need for admission to the meeting. With the admission card, we will enclose information about parking facilities located near the Orpheum. If you are driving, come a little early. Nearby lots fill up quickly and you may have to walk a few blocks.

As usual, we will have buses to take you to Nebraska Furniture Mart and Borsheim's after the meeting and to take you from there to downtown hotels or the airport later. Those of you arriving early can visit the Furniture Mart any day of the week; it is open from 10 a.m. to 5:30 p.m. on Saturdays and from noon to 5:30 p.m. on Sundays. Borsheim's normally is closed on Sunday but will be open for shareholders and their guests from noon to 6 p.m. on Sunday, April 24.

In past trips to Borsheim's, many of you have met Susan Jacques. Early in 1994, Susan was made President and CEO of the company, having risen in 11 years from a $4-an-hour job that she took at the store when she was 23. Susan will be joined at Borsheim's on Sunday by many of the managers of our other businesses, and Charlie and I will be there as well.

On the previous evening, Saturday, April 23, there will be a baseball game at Rosenblatt Stadium between the Omaha Royals and the Nashville Sounds (which could turn out to be Michael Jordan's team). As you may know, a few years ago I bought 25% of the Royals (a capital-allocation decision for which I will not become famous) and this year the league has cooperatively scheduled a home stand at Annual Meeting time.

I will throw the first pitch on the 23rd, and it's a certainty that I will improve on last year's humiliating performance. On that occasion, the catcher inexplicably called for my "sinker" and I dutifully delivered a pitch that barely missed my foot. This year, I will go with my high hard one regardless of what the catcher signals, so bring your speed-timing devices. The proxy statement will include information about obtaining tickets to the game. I regret to report that you won't have to buy them from scalpers.

Warren E. Buffett
Chairman of the Board
March 1, 1994

Morning Session - 1994 Meeting

1. Bigger meeting venue needed next year

WARREN BUFFETT: Put this over here.

CHARLIE MUNGER:

WARREN BUFFETT: Am I live yet? Yeah.

Morning.

AUDIENCE: Morning.

WARREN BUFFETT: We were a little worried today because we weren't sure from the reservations whether we can handle everybody, but it looks to me like there may be a couple seats left up there.

But I think next year, we're going to have to find a different spot because it looks to me like we're up about 600 this year from last year, and to be on the safe side we will seek out a larger spot.

Now, there are certain implications to that because, as some of the more experienced of you know, a few years ago we were holding this meeting at the Joslyn Museum, which is a temple of culture. (Laughter)

And we've now, of course, moved to an old vaudeville theater. And the only place in town that can hold us next year, I think, is the Ak-Sar-Ben Coliseum where they have keno and racetracks. (Laughter)

We are sliding down the cultural chain — (laughter) — just as Charlie predicted years ago. He saw all this coming. (Laughter)

2. Buffett loses "Miss Congeniality" title to Munger

WARREN BUFFETT: Charlie — I have some rather distressing news to report. There are always a few people that vote against everyone on the slate for directors and there's maybe a dozen or so people do that. And then there are others that single shot it, and they pick out people to vote against.

And, this will come as news to Charlie, I haven't told him yet. But he is the only one among our candidates for directors that received no negative votes this year. (Applause).

Hold it — hold it. No need to applaud.

I tell you, when you lose out the title of Miss Congeniality to Charlie, you know you're in trouble. (Laughter)

3. Meeting timetable

WARREN BUFFETT: Now, I'd like to tell you a little bit how we'll run this. We will have the business meeting in a hurry with the cooperation of all of you, and then we will introduce our managers who are here, and then we will have a Q&A period.

We will run that until 12 o'clock, at which point we'll break, and then at 12:15, if the hardcore want to stick around, we will have another hour or so until about 1:15 of questions.

So, you're free to leave, of course, any time and I've pointed out in the past that it's much better form if you leave while Charlie is talking rather than when I'm talking, but — (Laughter)

Feel free anytime, but you can — if you're panicked and you're worried about being conspicuous by leaving, you will be able to leave at noon.

We will have buses out front that will take you to the hotels or the airport or to any place in town in which we have a commercial interest. (Laughter)

We encourage you staying around on that basis.

4. Berkshire directors introduced

WARREN BUFFETT: Let's have the — let's get the business of the meeting out of the way. Then we can get on to more interesting things.

I will first introduce the Berkshire Hathaway directors that are present in addition to myself and —

First of all, there's Charlie, who is the vice chairman of Berkshire, and if the rest of you will stand.

We have Susan T. Buffett, Howard Buffett, Malcolm Chase III, and Walter Scott Jr. And that's it. (Applause)

5. Meeting quorum

WARREN BUFFETT: Also with us today are partners in the firm of Deloitte and Touche, our auditors, Mr. Ron Burgess and Mr. Craig Christiansen (PH).

They are available to respond to appropriate questions you might have concerning their firm's audit of the accounts of Berkshire.

Mr. Forrest Krutter, secretary of Berkshire. He will make a written record of the proceedings.

Mr. Robert M. Fitzsimmons has been appointed inspector of election at this meeting. He will certify to the count of votes cast in the election for directors.

The named proxy holders for this meeting are Walter Scott Jr. and Marc D. Hamburg.

Proxy cards have been returned through last Friday representing 1,035,680 Berkshire shares to be voted by the proxy holders as indicated on the cards. That number of shares represents a quorum and we will therefore directly proceed with the meeting.

We will conduct the business of the meeting and then adjourn to the formal meeting — and then adjourn the formal meeting. After that, we will entertain questions that you might have.

First order of business will be a reading of the minutes of the last meeting of shareholders.

I recognize Mr. Walter Scott Jr. who will place a motion before the meeting.

WALTER SCOTT: I move that the reading of the minutes of the last meeting of the shareholders be dispensed with.

WARREN BUFFETT: Do I hear a second?

VOICES: Seconded.

Motion has been moved and seconded. Are there any comments or questions? Hearing none, we will vote on the motion by voice vote. (Laughter)

All those in favor say aye.

VOICES: Aye.

WARREN BUFFETT: Opposed? The motion is carried and it's a vote.

Does the secretary have a report of the number of Berkshire shares outstanding entitled to vote and represented at the meeting?

FORREST KRUTTER: Yes, I do. As indicated in the proxy statement that accompanied the notice of this meeting that was sent by first class mail to all shareholders of record on March 8, 1994, being the record date for this meeting, there were 1,177,750 shares of Berkshire common stock outstanding, with each share entitled to one vote on motions considered at the meeting. Of

that number, 1,035,680 shares are represented at this meeting by proxies returned through last Friday.

6. Directors elected

WARREN BUFFETT: Thank you. We will proceed to elect directors.

If a shareholder is present who wishes to withdraw a proxy previously sent in and vote in person, he or she may do so.

Also, if any shareholder that's present has not turned in a proxy and desires a ballot in order to vote in person, you may do so.

If you wish to do this, please identify yourself to meeting officials in the aisles who will furnish a ballot to you.

Would those persons desiring ballots please identify themselves so that we may distribute them? Just raise your hand.

I now recognize Mr. Walter Scott Jr. to place a motion before the meeting with respect to election of directors.

WALTER SCOTT: I move that Warren Buffett, Susan Buffett, Howard Buffett, Malcolm Chase, Charles Munger, and Walter Scott be elected as directors.

WARREN BUFFETT: Is there a second?

VOICE: Seconded.

WARREN BUFFETT: It's been moved and seconded that Warren E. Buffett, Susan T. Buffett, Howard G. Buffett, Malcolm G. Chase III, Charles T. Munger, and Walter Scott Jr. be elected as directors.

Are there any other nominations? Is there any discussion? Motions and nominations are ready to be acted upon.

If there are any shareholders voting in person, they should now mark their ballots and allow the ballots to be delivered to the inspector of elections.

Seeing none, will the proxy holders please also submit to the inspector of elections the ballot voting the proxies in accordance with the instructions they have received.

Mr. Fitzsimmons, when you're ready you may give your report.

ROBERT FITZSIMMONS: My report is ready. The ballot of the proxy holders received through last Friday cast not less than a 1,035,407 votes for each nominee.

That number far exceeds a majority of the number of all shares outstanding and a more precise count cannot change the results of the election.

However, the certification required by Delaware law regarding the precise count of the votes, including the votes cast in person at this meeting, will be given to the secretary to be placed with the minutes of this meeting.

WARREN BUFFETT: Thank you, Mr. Fitzsimmons.

Warren E. Buffett, Susan T. Buffett, Howard G. Buffett, Malcolm G. Chase III, Charles T. Munger, and Walter Scott Jr. have been elected as directors. (Applause)

7. Formal meeting adjourns

WARREN BUFFETT: Does anyone have any further business to come before this meeting before we adjourn?

If not, I recognize Mr. Walter Scott Jr. to place a motion before the meeting.

WALTER SCOTT: I move the meeting be adjourned.

WARREN BUFFETT: Second?

VOICES: Seconded.

The motion to adjourn has been made and seconded. We will vote by voice. Is there any discussion? If not, all in favor say aye?

VOICES: Aye

WARREN BUFFETT: Opposed say no, the meeting is adjourned. (Laughter)

It's democracy in Middle America. (Laughter)

8. Berkshire managers introduced

WARREN BUFFETT: Now, I'd like to introduce some of the people that make this place work to you. And if you would hold your applause until the end because there are quite a number of our managers here.

I'm not sure which ones for sure are here, some of them may be out tending the store as well.

But, first of all, from Nebraska Furniture Mart, Louie, Ron, and Irv Blumkin. I'm not sure who's here, but would you stand please, any of the Blumkins that are present?

OK, we've — looks like Irv. I can't quite see it.

From Borsheims, is Susan Jacques here? Susan? There she is. Susan had a record day yesterday. She just — (applause) — Susan became CEO just a few months ago and she's turning in records already. Keep it up. (Laughter)

And from Central States Indemnity, we have the Kizers. I'm not sure which ones are here, but there's Bill Sr., Bill Jr., John, and Dick.

Kizers, stand up. I think I can see him — John.

Don Wurster from National Indemnity.

Rod Eldred from the Homestate Companies.

Brad Kinstler from Cypress, our worker's comp company.

Ajit Jain, the big ticket writer in the East.

And Mike Goldberg, who runs our real estate finance group and also generally oversees the insurance group. Mike.

Gary Heldman from Fechheimers.

Chuck Huggins from See's, the candy man.

Stan Lipsey from the Buffalo News.

Chuck's been with us, incidentally, twenty-odd years. Stan's been working with me for well over 25 years.

Frank Rooney and Jim Issler from H.H. Brown.

Dave Hillstrom from Precision Steel.

Ralph Schey from Scott Fetzer.

Peter Lunder, who is with our newest acquisition, Dexter Shoe. And Harold Alfond, his partner, couldn't be with us because his wife is ill.

And finally, the manager that's been with Charlie and me the longest, Harry Bottle from K&W. Harry, you here? There's Harry.

Harry saved our bacon back in 19 — what? — 62 or so, when in some mad moment I went into the windmill business. And Harry got me out of it. (Laughter)

That's our group of managers and I appreciate it if you give them a hand. (Applause)

9. Midwest Express adding flights to Omaha

WARREN BUFFETT: I have one piece of good news about next year for you.

In addition to moving to larger quarters, they're going to add nonstop air service from New York, Washington, and Los Angeles here in the next few months, Midwest Express.

So, I hope they do very well with it and I hope that makes it easier for you to get into town.

10. Q&A logistics

WARREN BUFFETT: Now, in this — for the next two hours and 15 minutes or so, we'll have a session where we will take questions.

We have seven zones, three on the main floor. We'll go start over there with zone one and work across.

On the main floor, if you'll raise your hand, the person who is handling the mic will pass it to you and we'll try to not repeat any individual in any one zone till everyone in that zone has had a chance to ask one question. So, after you've been on once, let other people get a shot.

When we move up to the loge, we have one person there and in the case — and then we have three in the balcony, which is essentially full now.

And we would, up there, we would appreciate it if you would you leave your seat and go to the person with the mic. It'll be a little easier in both the loge and the balcony to handle it that way.

And if you'll go a little ahead of time, that way if there's a line of two or three you can you can line up for questions in both the loge and balcony.

So, whatever you'd care to ask. If you want an optimistic answer you'll, of course, direct your question to Charlie. If you'd like a little more realism you'll come to me and — (laughter).

11. Derivatives: dangerous combination of "ignorance and borrowed money"

WARREN BUFFETT: Let's start over in zone 1.

Sometimes we can't see too well from up here, but —

In fact, I can't even see the monitor right now, but do we have one over there?

And if you'll identify yourself by name and your hometown, we'd appreciate it.

AUDIENCE MEMBER: My name is Michael Mullen (PH) from Omaha.

Would you comment on the use of derivatives? I noticed that Dell computer stock was off 2 1/2 points Friday with the loss of derivatives.

WARREN BUFFETT: Question is about derivatives. We have in this room the author of the best thing you can read on that. There was an article in Fortune about a month ago or so by Carol Loomis on derivatives, and far and away it's the best article that has been written.

We also have some people in the room that do business in derivatives from Salomon.

And it's a very broad subject. It — as we said last year, I think someone asked what might be the big financial story of the '90s and we said we obviously don't know, but that if we had to pick a topic that it could well be derivatives because they lend themselves to the use of unusual amounts of leverage and they're sometimes not completely understood by the people involved.

And any time you combine ignorance and borrowed money — (laughter) — you can get some pretty interesting consequences. (Laughter)

Particularly when the numbers get vague. And you've seen that, of course, recently with the recent Procter and Gamble announcement.

Now, I don't know the details of the P&G derivatives, but I understand, at least from press reports, that what started out as interest rate swaps ended up with P&G writing puts on large quantities of U.S. and, I think, one other country's bonds. And any time you go from selling soap to writing puts on bonds, you've made a big jump. (Laughter)

And it — the ability to borrow enormous amounts of money combined with a chance to get either very rich or very poor very quickly, has historically been a recipe for trouble at some point.

Derivatives are not going to go away. They serve useful purposes and all that, but I'm just saying that it has that potential. We've seen a little bit of that.

I can't think of anything that we've done that would — can you think of anything we do that approaches derivatives, Charlie? Directly?

CHARLIE MUNGER: No. (Laughter)

WARREN BUFFETT: I may have to cut him off if he talks too long. (Laughter)

Is there anything you would like to add to your already extensive remarks? (Laughter)

CHARLIE MUNGER: No. (Laughter)

WARREN BUFFETT: OK.

12. Berkshire participated in Cap Cities stock buyback

WARREN BUFFETT: In that case we'll go to zone 2. (Laughter)

AUDIENCE MEMBER: My name is Hugh Stevenson (PH). I'm a shareholder from Atlanta.

My question involves the company's investment in the stock of Cap Cities. It's been my understanding in the past that that was regarded as one of the four, quote unquote, "permanent" holdings of the company.

So I was a little bit confused by the disposition of one million shares. Could you clarify that? Was my previous misunderstanding — was my previous understanding incorrect? Or has there been some change or is there a third possibility?

WARREN BUFFETT: Well, we have classified the Washington Post Company and Cap Cities and GEICO and Coke in the category of permanent holdings. And —

But in the case of three of those four, The Washington Post Company, I don't know, maybe seven or eight years ago, GEICO some years back, and now Cap Cities, we have participated in tenders where the company has repurchased shares.

Now the first two, the Post and GEICO, we participated proportionally. That was not feasible, and incidentally, not as attractive taxwise anymore.

The 1968 Tax Act changed the desirability of proportional redemptions of shares, from our standpoint. That point has been missed by a lot of journalists in commenting on it, but it just so happens that the commentary that has been written has been obsolete, in some cases, by six or seven years.

But, we did participate in the Cap Cities tender offer, just as we did in the Post and GEICO.

We still are, by far, the largest shareholder of Cap Cities. We think it's a superbly run operation in a business that looks a little tougher than it did 15 years ago, but looks a little bit better than it did 15 months ago.

Charlie, you have anything?

CHARLIE MUNGER: Uh, no. (Laughter)

WARREN BUFFETT: He's thinking it over now though before — (Laughter)

13. Unlikely we'd buy company with no current cash flow

WARREN BUFFETT: Zone 3.

AUDIENCE MEMBER: Good morning. My name is Howard Bask (PH) and I'm from Kansas City. And I've got a theoretical value question for you.

If you were to buy a business and you bought it at its intrinsic value, what's the minimum after-tax free cash flow yield you'd need to get?

WARREN BUFFETT: Well, your question is if we were buying all of a business and we're buying at what we thought was intrinsic value, what was the minimum —

AUDIENCE MEMBER: Correct.

WARREN BUFFETT: — present earning power or what the present — the minimum discount rate of future streams?

AUDIENCE MEMBER: No, what's the minimum current after-tax free cash flow yield you'd…

WARREN BUFFETT: We could conceivably buy a business — I don't think we would be likely to — but we could we could conceivably buy a business that had no current after-tax cash flow. But, we would have to think it had a tremendous future.

But we would not find — obviously the current figures, particularly in the kind of businesses we buy, tend to be representative, we think, of what's going to happen in the future.

But that would not necessarily have to be the case. You can argue, for example, in buying stocks, we bought GEICO at a time when it was losing significant money. We didn't expect it to continue to lose significant money.

But if we think the present value of the future earning power is attractive enough compared to the purchase price, we would not be overwhelmed by what the first year's figure would be.

Charlie, you want to add to that?

CHARLIE MUNGER: Yeah. We don't care what we report in the first year or two of — after buying anything.

AUDIENCE MEMBER OFF MIC: (INAUDIBLE) on average over the years (INAUDIBLE).

WARREN BUFFETT: Well, I would say that in a world of 7 percent long-term bond rates that we would certainly want to think we were discounting future after-tax streams of cash at at least a 10 percent rate.

But that will depend on the certainty we feel about the business. The more certain we feel about a business, the closer we are willing to play it.

We have to feel pretty certain about any business before we're even interested at all. But there are still degrees of certainty, and —

If we thought we were getting a stream of cash over the next 30 years that we felt extremely certain about, we would use a discount rate that would be somewhat less than if it was one where we thought we might get some surprises in five or 10 years — possibility existed. Charlie?

CHARLIE MUNGER: Nothing to add.

14. Insurance business intrinsic value is well above book value

WARREN BUFFETT: OK. Zone 4.

AUDIENCE MEMBER: Morris Spence (PH) from Omaha, Nebraska.

You've made comments on several occasions about the intrinsic business value of the insurance operations. And in this year's report you state that the insurance business possesses an intrinsic value that exceeds book value by a large amount, larger, in fact, than is the case at any Berkshire — other Berkshire business.

I was wondering if you would explain in greater detail why you believe that to be true.

WARREN BUFFETT: Well, I — it's very hard to quantify, as we've said many times in the report. But, I think that it's clear that even taking fairly pessimistic assumptions, that the excess of intrinsic value over carrying value is higher, by some margin, for the insurance business.

And I think that the table in the report that shows you what our cost to float has been over the years, and also what the trend of float has been over the years, would, unless you thought that table had no validity for the future, I think that that table would tend to the point you in the direction of saying the insurance business does have a very significant excess of intrinsic value over carrying value.

Very hard number to put something on. But — and you don't want to extrapolate that table out. But I think that table shows that we started with maybe 20 million of float and that we're up to something close to three billion of float. And that that float has come to us at a cost that's extremely attractive, on average, over the years.

And just to pick an example, last year, when we actually had an underwriting profit, the value of that float was something over $200 million. And that figure was a lot bigger than it was 10 years ago or 20 years ago.

So that's — that is a stream — last year was unusually favorable, but that is a — that's a very significant stream of earnings, and it's one we feel we have reasonably good prospects in. So we feel very good about the insurance business.

15. Why Berkshire doesn't split its stock

WARREN BUFFETT: OK. Zone 5?

AUDIENCE MEMBER: My name is Cy Rademacher (PH) from Omaha.

Is there any point at which your stock would rise to the point where you might split the stock?

WARREN BUFFETT: Surprise, surprise. (Laughter)

I think I'll let Charlie answer that this year. (Laughs)

He's so popular with the shareholders that I can afford to let him take the tough questions. (Laughter)

CHARLIE MUNGER: I think the answer is no. (Laughter and applause)

I think the idea of carving ownerships in an enterprise into little, tiny $20 pieces is almost insane. And it's quite inefficient to service a $20 account and I don't see why there shouldn't be a minimum as a condition of joining some enterprise. Certainly we'd all feel that way if we were organizing a private enterprise.

WARREN BUFFETT: Yeah, we would not carve it up in $20 units.

We find it very — it's interesting because every company finds a way to fill up its common shareholder list. And you can start with the As and work through to the Zs and you'll — every company in the New York Stock Exchange, one way or another, has attracted some constituency of shareholders.

And frankly, we can't imagine a better constituency than is in this room. I mean, we have — we don't think we can improve on this group, and we followed certain policies that we think attracted certain types of shareholders and actually pushed away others.

And that is part of our eugenics program here at Berkshire. (Laughter)

CHARLIE MUNGER: Yeah, just look around this room and as you mingle with one another. This is a very outstanding group of people. And why would anybody want a different kind of a group?

WARREN BUFFETT: Yeah, if we cause — if we follow some policies that cause a whole bunch of people to buy Berkshire for the wrong reason, the only way they can buy it is to replace somebody in this room, or in this larger metaphorical room, of shareholders that we have.

So someone in one of these seats gets up and somebody else walks in. The question is do we have a better audience?

I don't think so. So I think that — I think Charlie said it very well.

16. Buffett is keeping his private jet

WARREN BUFFETT: Zone 6.

AUDIENCE MEMBER: Mr. Buffett, my name is Rob Na (PH) and I'm from Omaha, Nebraska.

My question is, given the recent announcement of Midwest Express and their nonstop jet service between East and West Coasts, will this cut down on your use of "The Indefensible?" (Laughter)

And will you use more commercial air travel?

WARREN BUFFETT: This is a question planted by Charlie. (Laughter)

I think you should know, I take it to the drugstore at the moment, and I — (Laughter)

No, it's just a question when I start sleeping in it at the hangar.

Nothing will cut back on "The Indefensible." It's being painted right now, but I told them to make it last a long time.

Charlie, though, was pointing out the merits of other kinds of transportation last night at the meeting of our managers. He might want to repeat those here.

CHARLIE MUNGER: Well, I just pointed out that the back of the plane arrived at the same time as the front of the plane, invariably. (Laughter)

WARREN BUFFETT: He's even more of an authority on buses, incidentally, if anybody has his — (Laughter)

17. Buffett's next goal in life

WARREN BUFFETT: Zone 7.

AUDIENCE MEMBER: Mr. Buffett, my name's Allan Maxwell from Omaha. I've got two questions.

What is your next goal in life now that you're the richest man in the country?

WARREN BUFFETT: That's easy. It's to be the oldest man in the country. (Laughter and applause)

18. "Two yardsticks" for judging management

AUDIENCE MEMBER: Secondly, you talk about good management with corporations and that you try and buy companies with good management.

I feel that I have about as much chance of meeting good managers, other than yourself, as I do bringing Richard Nixon back to life.

How do I, as an average investor, find out what good management is?

WARREN BUFFETT: Well, I think you judge management by two yardsticks.

One is how well they run the business and I think you can learn a lot about that by reading about both what they've accomplished and what their competitors have accomplished, and seeing how they have allocated capital over time.

You have to have some understanding of the hand they were dealt when they themselves got a chance to play the hand.

But, if you understand something about the business they're in — and you can't understand it in every business, but you can find industries or companies where you can understand it — then you simply want to look at how well they have been doing in playing the hand, essentially, that's been dealt with them.

And then the second thing you want to figure out is how well that they treat their owners. And I think you can get a handle on that, oftentimes. A lot of times you can't. I mean it — they're many companies that obviously fall in — somewhere — in that 20th to 80th percentile and it's a little hard to pick out where they do fall.

But, I think you can usually figure out — I mean, it's not hard to figure out that, say, Bill Gates, or Tom Murphy, or Don Keough, or people like that, are really outstanding managers. And it's not hard to figure out who they're working for.

And I can give you some cases on the other end of the spectrum, too.

It's interesting how often the ones that, in my view, are the poor managers also turn out to be the ones that really don't think that much about the shareholders, too. The two often go hand in hand.

But, I think reading of reports — reading of competitors' reports — I think you'll get a fix on that in some cases. You don't have to — you know, you don't have to make a hundred correct judgments in this business or 50 correct judgments. You only have to make a few. And that's all we try to do.

And, generally speaking, the conclusions I've come to about managers have really come about the same way you can make yours. I mean they come about by reading reports rather than any intimate personal knowledge or — and knowing them personally at all.

So it — you know, read the proxy statements, see what they think of — see how they treat themselves versus how they treat the shareholders, look at what they have accomplished, considering what the hand was that they were dealt when they took over compared to what is going on in the industry.

And I think you can figure it out sometimes. You don't have to figure out very often.

Charlie?

CHARLIE MUNGER: Nothing to add.

19. How Berkshire keeps great managers

WARREN BUFFETT: Ok, we're back to zone 1.

AUDIENCE MEMBER: Hi there. My name is Lee. I'm from Palo Alto, California.

In meeting Ajit Jain, I've been very impressed over the years. And I think I even met his parents once they came from India.

Please comment on your deepest impressions of his personality and managerial skills, and also how you go about exactly keeping somebody who has such fine skills within the fold. He might go to Walt Disney someday and, you know, pull down 200 million.

WARREN BUFFETT: Well, if he gets offered 200 million — (laughs) — we may not compete too vigorously at that level. (Laughter)

We basically try to run a business so that — Charlie and I have two jobs. We have to identify and keep good managers interested after we've figured out who they are.

And that often is a little different here, because I would say a majority of our managers are financially independent, so that they don't go to work because they are worried about putting kids through school or putting food on the table. So they have to have some reason to go to work aside from that.

They have to be treated fairly in terms of compensation, but they also have to figure it is better than playing golf every day or whatever it may be.

And, so that's one of the jobs we have and we basically attack that the same way — we look at what they do the same way we look at what we do.

We've got a wonderful group of shareholders. Before I ran this, I had a partnership. I had a great group of partners. And essentially, I like to be left alone to do what I did. I like to be judged on the scorecard at the end of the year rather than on every stroke, and not second guessed in a way that was inappropriate.

I like to have people who understood the environment in which I was operating.

And so the important thing we do with managers, generally, is to find the .400 hitters and then not tell them how to swing, as I put in the report.

The second thing we do is allocate capital. And aside from that, we play bridge. (Laughter)

Pretty much what happens at Berkshire.

So, with any of the managers you might name here, we try to make it interesting and fun for them to run their business. We try to have a compensation arrangement that's appropriate for the kind of business they're in.

We have no company-wide compensation plan. We wouldn't dream of having some compensation expert or consultant come in and screw it up. (Laughter)

We try to — some businesses require a lot of capital that we're in, some require no capital. Some are easy businesses where good profit margins are a cinch to come by, but we're really paying for the extra beyond that. Some are very tough businesses to make money in.

And it would be crazy to have some huge framework that we try to place everybody in that — where one size would fit all.

People, generally, are compensated relating in some manner that relates to how their business does as opposed to — there's no reason to pay anybody based on how Berkshire does, because no one has responsibility for Berkshire except for Charlie and me.

And we try to make them responsible for their own units, compensated based on how those units do.

We try to understand the businesses they're in, so we know what the difference between a good performance and a bad performance —

And that's about — that's how we work with people.

We've had terrific luck over the years in retaining the managers that we wanted to retain. I think, largely, it's because — particularly if they sell us a business — to a great extent, the next day they're running it just as they were the day before. And they're having as much fun running their business as I am running Berkshire.

Charlie?

CHARLIE MUNGER: Well, I've got nothing to add, but I think that concept of treating the other fellow the way you'd like to be treated if the roles were reversed — it's so simple, when you stop to think about it, but —

It's a rare evening when Ajit and Warren aren't talking once on the phone. It's more than a business relationship, at least it seems that way to me.

WARREN BUFFETT: Yeah, well, it is. It will stay that way, too.

CHARLIE MUNGER: And by the way, we like our businesses — our relationships — to be more than a business relationship

WARREN BUFFETT: Charlie and I are very — we basically — it's a luxury but it's a luxury that we should try to nurture — we get to work with people we like. And it makes life a lot simpler.

It probably helps in that goal of being the oldest living American, too. (Laughter)

CHARLIE MUNGER: Yeah, and we tend to like people we admire. (Laughter)

WARREN BUFFETT: Yeah, who do we like that we don't admire, Charlie? (Laughter)

Start naming names. These people have names. (Laughter)

20. Guinness hurt by weak demand for scotch

WARREN BUFFETT: Zone 2.

AUDIENCE MEMBER: My name is Peter Bevelin from Sweden.

How do you perceive Guinness long-term, economics growth-wise?

WARREN BUFFETT: Fitz — would you repeat that please, Fitz. What was it? What firm growth-wise?

VOICE: Guinness.

AUDIENCE MEMBER: Guinness.

WARREN BUFFETT: Oh, Guinness.

I'm not as much of an expert on Guinness' products as Charlie is.

CHARLIE MUNGER: We approved that. (Laughter)

WARREN BUFFETT: You didn't hear him. He said, "I approved that."

I made the decision to buy Guinness and Guinness has — it's down somewhat from — actually, the price in pounds is about the same but the pound is at about $1.46 or -7 against an average of $1.80-something, so we've had a significant exchange loss on that.

The — Guinness' — despite the name — you know, the main product, of course, is scotch. And that's where most of the money is made, although they make good money in brewing.

But, distilling is the main business. And, you know, the usage of scotch, particularly in this country, the trends have not been strong at all, but that was true when we bought it, too.

There are some countries around the world where it's grown and there are certain countries where it's a huge prestige item.

I mean, in certain parts of the Far East, the more you pay for scotch, the better you think people think of you. Which I don't understand completely, but I hope it continues. (Laughter)

But — the scotch — worldwide scotch consumption has not been anything to write home about.

Guinness makes a lot of money in the business. But, I would not — I don't see anything in the — in published history that would lead you to believe that the growth prospects, in terms of physical volume, are high for scotch.

The — Guinness itself, the beer, actually has shown pretty good growth rates in some countries. Actually, from a very tiny base in the U.S. as well.

But, they will have to do well in distilling or — I mean that will govern the outcome of Guinness.

I think Guinness is well run and it's a very important company in that business. But, I wouldn't count on a lot of physical growth.

Charlie, what — any consumer insights?

CHARLIE MUNGER: No. (Laughter)

21. Why Berkshire will be OK if Buffett dies suddenly

WARREN BUFFETT: Zone 3.

AUDIENCE MEMBER: Mr. Buffett, my name is Arthur Coleus (PH) from Canton, Massachusetts.

And I'd like to know how you'd respond to the question that my associates ask me when they say that Berkshire Hathaway has been a good investment up to now, but what happens to your investment if, God forbid, something happens to Mr. Warren Buffett?

WARREN BUFFETT: Well, I'm glad you didn't say Charlie Munger. (Laughter)

No, there — Berkshire will do just fine. We've got a wonderful group of businesses.

I've told you the two things I do in life. And, in terms of the managers we have, you have to come in and really want to mess it up, I would think. And we don't have anybody like that, in terms of succession plans at Berkshire.

And then there's the question of allocation of capital. And, you could do worse than just adding it to some of the positions that we already had.

The ownership is — if I die tonight, the ownership structure does not change. So, you've the same large block of stock that has every interest in having good successor management as I would.

I mean, there's no — there would be no greater interest. And it is not a complicated business. I mean, you ought to worry more about, if you own Microsoft, about Bill Gates, I think, or something of the sort.

But, this place is, you know, we've got a group down here that are running these. You didn't see me out at Borsheims selling any jewelry the other day. I mean, that's somebody else's job. So, I — it is not — it's not very complicated.

Incidentally, I think I'm in pretty good health. I mean this stuff (Coca-Cola) will do wonders for you if you'll just try it. (Laughter)

Charlie, do you want to add anything as the —?

CHARLIE MUNGER: Yeah. I think the prospects of Berkshire would be diminished — obviously diminished — if Warren were to drop off tomorrow morning. But it would still be one hell of a company and I think it would still do quite well.

I used to do legal work, when I was young, for Charlie Skouras. I heard him once say, my business, which was movie theaters like this one, was off 25 percent last year, and last year was off 25 percent from the year before, and that was off 25 percent from the year before, and then he pounded the table and he'd say, "But it's still one hell of a business."

WARREN BUFFETT: It's not a formula we want to test, incidentally.

CHARLIE MUNGER: No, no. (Laughter)

WARREN BUFFETT: It is one hell of a business that we've got here. I mean — and if you saw what happened at Berkshire headquarters, you would not worry as much. There's very little going on there that contributes to things. (Laughter)

We're, right now, at our peak of activity. This is it.

22. Easy answer: no reverse split, either

WARREN BUFFETT: Zone 4.

AUDIENCE MEMBER: First of all, my name is Al Martin (PH) and my wife Terry (PH) is here with me. And I appreciate the invitation to attend this meeting.

I was a little bit dubious and quite excited at that game Saturday night. I didn't know which side was going to throw the game to the other one. But I did find out at the end.

The first question, actually, was somewhat answered, but not fully. Has the board considered a reverse split? My experience has been that —

WARREN BUFFETT: Would you like to make that a motion? There was a motion for a reserve — reverse split. (Laughter)

AUDIENCE MEMBER: I would say a two-for-one because if it were three or four-for-one I might end up with no shares. Or fractional shares.

But, anyway, my experience has been that all of the stocks that have split have gone down in the next two or three months or the next two or three years, including one which you are drinking, which is a flat Coke.

Also, I have observed Merck over the last several years to be hitting a low, which split three-for-one.

So, I think that, you know, the reasons for splitting stocks are to make it affordable. I found that every stock I ever bought was never affordable. I found the reason I bought it was because I couldn't afford not to buy it.

So that's a different philosophy, I guess, as somewhat shared indirectly with the boards running the stock.

The second question, which is — has to do with —

WARREN BUFFETT: Hope it's as easy as the first question. (Laughter)

AUDIENCE MEMBER: Well, I didn't want to wait for an answer of the first question for that reason, because it could be complicated and confusing and so forth.

23. Hillary Clinton's success as commodities trader

AUDIENCE MEMBER: The second question has to do with, could the board consider looking into a commodity broker, or a lawyer, or both, that could take action similar to Hillary Clinton's?

I think, you know, making your net worth go up by a factor of five overnight is more than enticing. Some of us might even want to wait for ten months to get a 100-to-1 return on the money.

WARREN BUFFETT: Well, I want to say — I want to say to you, when I saw that 530 percent in one day, it — Charlie has never done that for us.

I mean — (laughter) — it really caused me to reassess succession plans at Berkshire. (Laughter)

And Hillary may be free in a few years. (Laughter and applause)

I hope you're applauding over her coming to Berkshire, not — but I'll leave that up — (Laughter)

OK, that was their second question. (Laughs)

AUDIENCE MEMBER: That was my second question.

Of course, in my experience, it's been that most of us have thought through this situation and I guess it's pretty speculative, but I found out that the rules and laws that are made for trading are interpreted rather than enforced. And I think that applied to this particular case, so let's go on to the third question. (Laughter)

WARREN BUFFETT: Alright. They're getting easier. (Laughter)

24. Blue Chip Stamps is a disaster under Buffett and Munger

AUDIENCE MEMBER: This one is real easy. My wife was a collector of Blue Chip stamps for many, many years. And she brought some stamps with her. What should she do with them?

WARREN BUFFETT: Well, that — we can give you a definitive answer to that. Charlie and I entered the trading stamp business to apply our wizardry to it in what, 1969 or so, Charlie?

CHARLIE MUNGER: Yes.

WARREN BUFFETT: We were doing what then, about 110 million?

CHARLIE MUNGER: No, it went up to 120.

WARREN BUFFETT: OK. And then we arrived on the scene and we're going to do what, about 400,000 this year?

CHARLIE MUNGER: Yes.

WARREN BUFFETT: Yeah. (Laughter)

That shows you what can be done when your management gets active. (Laughter)

CHARLIE MUNGER: We have presided over a decline of 99 1/2 percent. (Laughter)

WARREN BUFFETT: Yeah. Yeah. But, we're waiting for a bounce — (Laughter)

I would say this. The trading stamp business, as those of you who have followed all know, it only works because of the float.

I mean, there — a very, very high percentage of the stamps in the '60s were cashed in. We have some years that we've gone up to 99 percent, I believe — we sampled the returns — because they were given out in such quantity.

But, our advice to anyone who has stamps is to save them because they're going to be collector's items, and besides if you bring them to us we have to give you merchandise for them.

Tell her to keep them. They'll do nothing but gain in value over years. (Laughter)

25. Stock split wouldn't raise long-term average price

WARREN BUFFETT: Going back, incidentally, to your point on the split.

I think most people think that the stock would sell for more money split.

A, we wouldn't necessarily think that was advisable in the first place.

But we — in the second place, we don't think it would necessarily be true over a period of time.

We think our stock is more likely to be rationally priced over time following the present policies than if we were to split it in some major way.

And we don't think the average price would necessarily be higher. We think that the volatility would probably be somewhat greater, and we see no way that volatility helps our shareholders as a group.

26. Fed Chairman Greenspan's actions are "quite sound"

WARREN BUFFETT: Zone 5.

AUDIENCE MEMBER: I am Peg Gallagher from Omaha.

Mr. Buffett, are you interested in influencing Mr. Greenspan at the Fed to stop raising interest rates?

WARREN BUFFETT: Well, I wouldn't have any influence with him. He was on the board of Cap Cities some years ago and I know him a bit. But I don't think anyone would have any influence with Mr. Greenspan on that point.

But, I generally think that his actions have been quite sound during his period as Fed chief.

I mean, it's part of the job of the Fed, as Mr. Martin said many years ago, was to take away the punchbowl at the party, occasionally. And that's a very difficult, difficult policy to quantify working with markets day-by-day.

And, of course, it's always been the job of the Fed, basically, to lean against the wind. Which, of course, means if the wind changes, you fall flat on your face. But that's another question.

But the — I don't — I think what he has done is probably been somewhat appropriate. I think he's probably been surprised, a little bit, as to what has happened with long-term rates as he's nudged up short-term rates.

I think he was hoping that — this is just a guess on my part — that action, sort of early in the cycle on the short-term rate front, would — might make people feel more confident about the longer-term rates and therefore that the yield curve would flatten some. I don't know that. And, he may have been a little surprised on that.

But it's not an easy job he has. So, I would not second guess him myself.

Charlie, how do you feel about him?

CHARLIE MUNGER: Fine. (Laughter)

WARREN BUFFETT: Greenspan is safe. (Laughter)

27. Don't pay attention to what people say about stocks

WARREN BUFFETT: Zone 6.

MILLER: Mr. Buffett, I'm Lee Miller (PH) from St Louis.

There was an article in the April 18th Barron's that attempted to calculate the value behind each Berkshire Hathaway share.

I'm sure you have some views on that and I'd be very interested in your perspective on that issue.

WARREN BUFFETT: Yeah, there was an article about a week or so ago in Barron's. The same fellow wrote an article about four years ago reaching pretty much the same conclusion, and I hope he hasn't been short in between, but the — (Laughter)

I would say this. It is not the way I would calculate the intrinsic value of Berkshire.

But everyone in securities markets make choices on that. Every day somebody sells a few shares of Berkshire and someone sell — buys — and, you know, they are probably coming to differing opinions about valuation.

I would say that I found it strange that apparently he forgot we were in the insurance business, but that — that's not — (Applause).

It really doesn't make any difference. I mean, what — we don't pay any attention to what people say about Coca-Cola stock or Gillette stock or any of those things.

I mean, on any given day, two million shares of Coca-Cola may trade. That's a lot of people selling, a lot of people buying. If you talk to one person, you'd hear one thing, and you'd talk to another — you really should not make decisions in securities based on what other people think.

If you're doing that, you should think about doing something else, because it's —

A public opinion poll will just — it will not get you rich on Wall Street. So you really want to stick with businesses that you feel you can somehow evaluate yourself.

And, I don't think — I mean Charlie and I, we don't read anything about what business is going to be — the economy is going to do, or the market's going to do, or what anybody —

Anytime I see some article that says, you know, these analysts say this or that about some business, it just — it doesn't mean anything to us.

You cannot get rich with a weather vane.

28. Judge bank stock buybacks on case-by-case basis

WARREN BUFFETT: Zone 7.

AUDIENCE MEMBER: I'm Edward Barr from Lexington, Kentucky, and I'd like to ask, given the amount of capital in the banking industry, do you think that more banks should be buying back significant amounts of their stock, like SunTrust, versus just the token amounts that they're buying back or just the authorized amounts?

And then also, related question in banking. Are they — are banks too focused on goodwill amortization when declining to buy other banks for cash, thereby using purchase accounting versus the normal practice in the industry of pooling accounting even when the stock they issue may be depressed or undervalued?

WARREN BUFFETT: Well, the first question about the capital in the industry — that — you really have to look at that on a bank-by-bank basis and there is a lot more repurchasing of shares by banks taking place.

You mentioned SunTrust, but National City is — they bought it back, I think, 5 percent of their — National City of Cleveland — bought back 5 percent of their stock in the first quarter.

There's much more repurchasing going on, and that's simply a judgment call by management that — as to the level of capital they need going forward, and what level of capital enables them to earn the return on equity that they think appropriate and whether they — what they feel like paying for their own shares.

So, I think you have to look at that on case-by-case.

We certainly like it, if we were to own a bank, we would — or own shares in a bank — we would like the idea of the bank repurchasing its stock at a price that we thought was attractive. We would think that they probably knew more about their own bank than some other bank they were going to buy and that if the numbers are right, it's an attractive way to use capital.

29. We don't pay attention to accounting of a transaction

WARREN BUFFETT: Your second question about goodwill amortization and purchase accounting versus pooling: we care not — at Berkshire, it absolutely makes no difference to us what accounting treatment we get on something. We are interested in the economics of a transaction.

Some banks — some businesses generally, most businesses perhaps — prefer pooling because they don't like to take a goodwill amortization charge.

We think our shareholders are smart enough, particularly if we make it clear to them — the accounting consequences — we think they're smart enough to look through to the economic reality of what Berkshire's businesses are all about.

And I think that some managements sell short their own ownership group by doing various kinds of financial acrobatics in order to have the charges come in a certain way rather than, as you point out, often they might be better off buying for cash rather than using their own stock as currency, but they may prefer to use their own stock because they avoid goodwill charges.

We've written a few things on goodwill in the past and past annual reports that might get to that subject.

We don't care what accounting — we sort of rewrite the accounting for any business that we're looking at, because in our heads we want to have, in effect, a standardized way of looking at businesses.

And if one company goes through pooling transactions and another goes through purchase transactions, we're going to recast them in our own minds so that there is comparability.

Charlie?

CHARLIE MUNGER: Yeah, the published accounting results are in accordance with standard convention and they're a place to start economic analysis. The figures are frequently quite silly on a functional basis. I'm not criticizing accounting conventions except for some. (Laughter)

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: But, I think it's just a place to start thinking about economic reality.

By their nature, they can't tie perfectly — they can't even tie very well — to economic reality.

WARREN BUFFETT: We regard it is a negative when we find a management that's preoccupied with accounting considerations. But, we find it so frequent that we can't afford to use it as a total exclusionary factor.

It really surprises me how many managements focus on accounting, and the time they spend on it, the — it's really unproductive.

If you find a management that doesn't care about the accounting but does explain to you in clear terms what's going on, I think you should regard that as a plus in owning a security.

30. Buffett praises new Salomon Brothers management

WARREN BUFFETT: Zone 1.

AUDIENCE MEMBER: Mr. Buffett, my name is Bill Ackman. I'm from New York City. And my question relates to the appeal of Salomon Brothers as an investment.

You talked earlier about leverage and the dangers of leverage. Salomon is a business which is levered 30-to-1, which has very narrow margins, and earns a relatively modest return on equity, in light of the amount of leverage that they use. What is the appeal of the business to you?

WARREN BUFFETT: We have here today the chief executive of Salomon, Inc., the parent company, and also the chief executive of Salomon Brothers, the investment banking arm.

And, I would say one of the things we — Charlie and I — feel extraordinarily good about are the two fellows that are running that operation. They did an exceptional job under extraordinarily difficult circumstances, as did John Macfarlane, who's also here today.

The three of them — I mentioned four people in the annual report — and Salomon wouldn't be here today without those three. And it wouldn't be the company in the future that it's going to be without them. They did an absolutely fabulous job.

It's the sort of business that, as you point out, uses a lot of leverage. It doesn't — in one way it doesn't use as much as it looks like and in another way it uses even more than it looks like.

But — it — the test will be: A, whether they control that business in a way that that leverage does not prove dangerous, and secondly, what kind of returns on equity they earn while using it.

You certainly should expect to earn somewhat higher returns on equity when you are necessarily exposed to a small amount of systemic risk and significant amounts of borrowed money, than you would in a business that's an extremely plain vanilla business.

But, I don't know whether you've met Bob and Deryck, but, I think you'd feel better about having a leverage in their hands than about any other hand you can imagine.

Charlie?

CHARLIE MUNGER: Why don't we have those three gentlemen stand up?

WARREN BUFFETT: Yeah, you ought to give them a hand.

CHARLIE MUNGER: They really have done a job for Berkshire in this last year.

WARREN BUFFETT: Yeah, I'll lead the applause for them. Where are they? There they are. (Applause).

I mentioned this before, but it's worth mentioning again. Deryck took on the job of being the operating head of Salomon Brothers on what, August 18th, 1991.

He didn't know what — he couldn't know what he was getting into, exactly. He — two months later or three months later, we'd never had a conversation about compensation. He did not ask me for Berkshire, or my, guarantee for indemnification because he was walking in not knowing legal problems. We didn't know what we would finally uncover.

And he worked incredible hours to keep that place together, which was not easy.

Bob Denham, I called — I guess on the 23rd or so, 20th. I called him on a Friday. I got home on a Saturday, the 24th of August.

He was living a nice pleasant peaceful life in California. And had a first class law firm, a good group of clients, wife had a good job there.

And I told him I was in a mess and there wasn't any second choice and three days later he was back in New York and living in a small apartment in Battery City and handling the general counsel's job at Salomon.

They found John Macfarlane on that Sunday, on the 18th. I think he was running a triathlon or something.

Not a practice that Charlie and I follow, but, ah — (Laughter)

And he was yanked from that and came down, and I think John was over in New Jersey, but he holed up in the Downtown Athletic Club. And it was his job to keep funding what was then $150 billion balance sheet during a period when people right and left were canceling.

It's not because we weren't a good credit, but because they just didn't want to have anything to do with us for a while.

And the World Bank and the State of Texas pension fund and CalPERS, all these people were shutting off funding at a time — and funding in a business is — gentleman just indicated — is the lifeblood of an enterprise like Salomon.

And so those three deserve an enormous hand by — really by the Salomon shareholders — but by this group in turn because we have an important investment. So I thank them publicly. (Applause)

31. Wesco sold small savings and loan as regulations tightened after crisis

WARREN BUFFETT: Zone 2.

AUDIENCE MEMBER: I'm Kelly Ranson from San Antonio, Texas.

And I wondered if you could comment on the Mutual Savings and Loan. There was just a footnote that the deposits have been assumed by a federal savings bank.

And also, what about the annual report for Wesco Financial that I know it used to be in the annual report for Berkshire. Just wondered if you could comment on that, please.

WARREN BUFFETT: The question is about — we — our 80 percent-owned subsidiary Wesco Financial sold its ownership in Mutual Savings and Loan of Pasadena last year. I'll let Charlie comment on that.

And then the second question is about the Wesco report, which is available to any Berkshire shareholder simply by writing Wesco. But, we found that the stapling problems and other things made it a little difficult to keep adding that every year to the report. So, now we just — we make it available to anyone who would, at Berkshire, who would like to have it.

But Charlie, want to comment on the sale of Mutual?

CHARLIE MUNGER: Yes. The savings and loan business became very much more heavily regulated after the huge nationwide collection of scandal and insolvency and so on.

And meanwhile, we had a very small savings and loan association. And the combination of the new regulation, and the fact that it was a very small part of our operation, made us decide that we were better off without it.

That does happen from time to time in Berkshire. We do exit once in a while.

And, by the way, we would reserve the right to change our mind. I always liked Lord Keynes when he said that he got new facts or new insights, why he changed his mind and then he'd say, what do you do? So we changed our mind.

WARREN BUFFETT: They start — they asked our directors at Mutual to start going to school on Saturday, didn't they, Charlie? Or something? I think that helped change our mind about Mutual.

CHARLIE MUNGER: There's a time to vote with your feet. (Laughter)

WARREN BUFFETT: And even your wallet.

32. Shoe industry is tough, but Dexter has great managers

WARREN BUFFETT: Zone 3.

AUDIENCE MEMBER: (Inaudible) Chicago. Can you speak to some of the economic characteristics of the shoe industry that allow the business to be profitable and, in your view, attractive?

WARREN BUFFETT: I didn't hear that. Did you hear that, Charlie?

CHARLIE MUNGER: He wanted you to comment on the merits of the shoe industry.

WARREN BUFFETT: Well, I think our feelings for the shoe industry are very clear from what's been happening the last few years.

We think it's a great business to be in as long as you're in with Frank Rooney and Jim Issler and Peter Lunder and Harold Alfond. Otherwise, it hasn't been too good.

The — we have a couple of extraordinary shoe operations, but they're not extraordinary because we get our leather from different steers or anything of the sort.

It's — we have two companies, really three now that Lowell's been brought in, too, but that have truly extraordinary records. I think those same managements would have been enormous successes in any business they'd gone into.

But, they have gone into the — they are in the shoe business and the companies earn unusual returns on equity. They earn unusual returns on sale. They've got terrific trade reputations.

And I think that to the extent we can find ways to expand in the shoe business while employing those managements, we'll be very excited about doing so.

It isn't because we think that the shoe industry is any cinch, you know, per se, or anything of the sort. But we've got a lot of talent employed in the shoe business and whenever we've got talent we like to try and figure out a way to give them as big a domain as we can.

And it's not inconceivable that we would expand the shoe business, perhaps even significantly over time.

33. Buffett on investing in tobacco companies

WARREN BUFFETT: Zone 4.

AUDIENCE MEMBER: Yeah, thanks Mr. Buffett. My name is Stewart Hartman from Sioux City. After the brevity of the last question from section 4, I'll try to be extremely brief.

The — given the scrutiny that the tobacco business is going under right now, number one, what do you see as the business prospects for those huge cash cows? And, at any point, would that be attractive to you given their liability?

WARREN BUFFETT: The question is about the future of the tobacco business?

I don't — I probably know no more about that then you do because it's fraught with questions that relate to societal attitudes and you can form an opinion on that just as well as I could.

But, I would not like to have a significant percentage of my net worth in the tobacco business myself, but —

They may have better futures than I envision. I don't really think that I have special insights on that.

Charlie, you —?

CHARLIE MUNGER: No.

WARREN BUFFETT: You have to come to a conclusion as to how society is going to want to treat — and the present administration for that matter. And the economics of the business may be fine, but that doesn't mean it has a great future.

34. "Hard to argue with the market"

WARREN BUFFETT: Zone 5.

AUDIENCE MEMBER: I'm Harriet Morton from Seattle, Washington.

I'm wondering, when you are considering an acquisition, how you look at the usefulness of the product?

WARREN BUFFETT: In looking at any business?

AUDIENCE MEMBER: Yes.

WARREN BUFFETT: Yeah. Well, obviously we look at what the market says is the utility. And the market has voted very heavily for Dexter Shoe, just to be an example.

I don't know many how many pairs of shoes they were turning out back in 1958 or thereabouts, but year after year, people have essentially voted for the utility of that product.

There are 750 million or so 8-ounce servings of one product or another from the Coca-Cola Company consumed every day around the world. And there are those of us who think the utility is very high. I can't make it through the day without a few. But there are other people that might rate it differently.

But essentially, people are going to get thirsty and if this is the way they take care of their thirst better than — and they prefer that to other forms — then I would rate the utility high of the product. But, I think it's hard to argue with the market on that.

I mean, people — some people may think that, you know, listening to a rock concert is not something of high utility. Other people might think it's terrific.

And so, we would judge that — I don't think we would come to an independent decision that there was some great utility residing in some product that had been available to the public for a long time, but that the public and not endorsed in any way.

Charlie?

CHARLIE MUNGER: Well, I think that's right. But, that's averaged out.

We're in a bunch of high-utility products. I mean, nurses' shoes, work shoes, casual shoes. We don't have a lot of, what, Italian pumps? (Laughter)

WARREN BUFFETT: Don't rule it out, Charlie. We may be here next year defending it. (Laughter)

CHARLIE MUNGER: Yeah, right, well.

No, I'm just saying, if you judge the existing portfolio as indicating what the future's likely to be like, why —

WARREN BUFFETT: Well, certainly a lot of essentials were sold out of Borsheims yesterday.

CHARLIE MUNGER: Yes. (Laughter and applause)

WARREN BUFFETT: I hear my family clapping.

35. No question from zone 6

WARREN BUFFETT: Zone 6.

VOICE: We have no question up here.

36. Insurers have "head in the sand" on catastrophes

WARREN BUFFETT: OK, zone 7.

AUDIENCE MEMBER: Good morning, Mr. Berkshire, uh, Buffett. (Laughter)

WARREN BUFFETT: I have a niece here who has a son named Berkshire so it —

AUDIENCE MEMBER: I'm Chris Blunt (PH) from Omaha.

My first question is, in years past, we've had samples of various products. When are we going to have some Guinness?

WARREN BUFFETT: Some what now?

AUDIENCE MEMBER: Guinness samples?

WARREN BUFFETT: (Laughs)

AUDIENCE MEMBER: And my second question is, in light of the multiple disasters that have taken place in LA, has that had any impact on the cats for Berkshire?

WARREN BUFFETT: On our super-cat business?

AUDIENCE MEMBER: Yes.

WARREN BUFFETT: The LA earthquake, which is originally — I believe the first estimate of insured damage was a billion-five, which struck us as kind of ludicrous, but has now escalated.

The last official estimate, the one we use that's a trigger in our policies, I think is either 4.5 billion or 4.8 billion. But it's going to be higher than that.

Our losses are fairly minor. If it gets to eight billion of insured damage, that would trigger another policy or two. But, I would say that the LA quake — which did considerably more damage, I think, than people would have anticipated from a 6.7 for various reasons having to do with how quakes operate — that quake is not going to turn out to be of any real — it's not the kind of super-cat that a 15 or $20 billion hurricane which hit Florida or Long Island or New England would be.

That's the kind of — we could lose — or we could pay out — 6 or $700 million in sort of a worst case super-cat. Now our total premiums this year might be, say, 250 million or something in that area.

So one super-cat in the wrong place would produce — and there could be more than one — could produce, we'll say, a $400 million or thereabouts underwriting loss from that business.

The LA quake is peanuts on that scale, but it wouldn't have taken a whole lot more in terms of numbers on the Richter scale, if it happened to have an epicenter where it did, and be of the type that it was, relatively shallow, that we could have had that sort of thing happen.

I think that the insurance industry has vastly underestimated — maybe not now, but up till a few years ago — the full potential of what a super-cat could do. But Hurricane Andrew and the LA quake may have been something of a wake-up call.

They were far from a worst-case situation. A really big Type Five hurricane on Long Island would end up leaving a lot of very major insurance companies in significant trouble.

We define our losses — essentially, 700 million sounds like a lot of money. It is a lot of money. But, there are limits on our policies. That is not true of people that are just writing the basic homeowners or business. Those losses could go off the chart.

There were certain companies in the LA quake that thought they had a — what they call a "probable maximum loss" for California quakes. And the LA quake, which was far from the worst case you can imagine, turned out to far exceed those probable maximum losses.

So, I think the industry has had, and may still have, its head in the sand a little bit, in terms of what can happen, either in terms of a quake in California or, more probably, in terms of a hurricane along the East Coast.

So far this year we're in reasonable shape, but that doesn't mean much because, by far, the larger exposure is in hurricanes and essentially 50 percent of the hurricanes hit in September. And about — I think it's about 15 percent would be in August. Close to 15 percent in October. So you have 80 percent, roughly, in those three months and there's a little tail on both sides.

But that's when you find out whether you've had a good or bad year in the super-cat business, basically.

It's a business we like at the right rates because there are very few people who can afford to write it at the level that the underlying company, the reinsured companies, need it. And we're in a position, if the rates are right, to do significant business.

Charlie?

CHARLIE MUNGER: Nothing to add.

37. Book recommendations

WARREN BUFFETT: Zone 1,

AUDIENCE MEMBER: Clayton Riley (PH) from Jacksonville, Florida.

This is a little different than all the other questions, but what were the three best books you read last year outside of the investment field? Why don't — even one will do.

WARREN BUFFETT: I'll give you — I'll tout a book first that I've read but that isn't available yet. But it will be in September.

The woman who wrote it, I believe, is in the audience and it's Ben Graham's biography, which will be available in September, by Janet Lowe. And I've read it and I think those of you who are interested in investments, for sure, will enjoy it. She's done a good job of capturing Ben.

One of the books I enjoyed a lot was written also by a shareholder who is not here because he's being sworn in, I believe today or tomorrow, maybe tomorrow, as head of the Voice of America.

And that's Geoff Cowan's book, which is on "The People v. Clarence Darrow." It's the story of the Clarence Darrow trial for, essentially, jury bribery in Los Angeles back around 1912, when the McNamara brothers had bombed the LA Times.

It's a fascinating book. Geoff uncovered a lot of information that the previous biographies of Darrow didn't have. I think you'd enjoy that.

Charlie?

CHARLIE MUNGER: Well, I very much enjoyed Connie Bruck's biography Master of the Game, which was a biography of Steve Ross, who headed Warner and later was, what, co-chairman of Time Warner.

WARREN BUFFETT: Yeah, he's a little more than co-chairman. (Laughs)

CHARLIE MUNGER: Yeah, and — she's a very insightful writer and it's a very interesting story.

I am rereading a book I really like, which is Van Doren's biography of Benjamin Franklin, which came out in 1952, and I'd almost forgotten how good a book it was. And that's available in paperback everywhere. We've never had anybody quite like Franklin in this country. Never again.

WARREN BUFFETT: He believed in compound interest, too, incidentally, as you may remember. (Laughter)

What did he — he set up those two little funds, one in Philadelphia, one in Boston?

CHARLIE MUNGER: Right.

WARREN BUFFETT: Yeah, to demonstrate the advantages of compound interest. I think that's the part Charlie's rereading. (Laughter)

38. Nike and Reebok

WARREN BUFFETT: Zone 2.

AUDIENCE MEMBER: Thank you for teaching me — teaching so much to all of us about business. My name is Mike Assail (PH) from New York City.

You mentioned earlier that Berkshire's shoe business was great, but that other shoe businesses were not so good.

What are the uncertainties of the global brand leaders that Berkshire seems to like? They like Coke and Gillette. The global brand leaders in the shoe business being Nike and Reebok.

What are their uncertainties, in terms of long-term competitive advantage, business economics, consumer behavior, and the other risk factors that you mentioned in the annual report this year? Thank you.

WARREN BUFFETT: So, you're really asking about the future prospects of Nike and Reebok?

Yeah. I don't know that much about those businesses. We do have one person in this audience, at least, who owns a lot of Reebok.

But I am not expressing a negative view in any way on that. I just — I don't understand that — I don't understand their competitive position and the likelihood of permanence of their competitive position over a 10 or 20 year period as well as I think I understand the position of Brown and Dexter.

That doesn't mean I think that it's inferior. Doesn't mean I think that we've got better businesses or anything.

I think we've got very good businesses. But I — I'm not — I haven't done the work and I'm not sure if I did the work I would understand them.

I think they are harder to understand, frankly, and to develop a fix on, than our kinds. But, they may be easier for other people who just have a better insight into that kind of business.

39. "You don't have to do exceptional things to get exceptional results"

WARREN BUFFETT: Some businesses are a lot easier to understand than others. And Charlie and I don't like difficult problems. I mean, we — if something is hard to figure, you know, we'd rather multiply by three than by pi. I mean it's just easier for us. (Laughter)

Charlie, you have any —?

CHARLIE MUNGER: Well, that is such an obvious point. And yet so many people think if they just hire somebody with the appropriate labels they can do something very difficult. That is one of the most dangerous ideas a human being can have.

All kinds of things just intrinsically create problems. The other day I was dealing with a problem and I said, this thing — it's a new building — and I said this thing has three things I've learned to fear: an architect, a contractor, and a hill. (Laughter)

And — if you go at life like that, I think you, at least, make fewer mistakes than people who think they can do anything by just hiring somebody with a label.

WARREN BUFFETT: We don't comment — excuse me, go ahead.

CHARLIE MUNGER: You don't have to hire out your thinking if you keep it simple.

WARREN BUFFETT: You don't have to do — we've said this before — but you don't have to do exceptional things to get exceptional results.

And some people think that if you jump over a seven-foot bar that the ribbon they pin on you is going to be worth more money than if you step over a one-foot bar. And it just isn't true in the investment world, at all.

So, you can do very ordinary things. I mean, what is complicated about this? But, you know, we're $3 billion pretax better off than we were a few years ago because of it.

There's nothing that I know about that product, or its distribution system, its finances, or anything, that, really, hundreds of thousands — or millions — of people aren't capable of, that they don't already know. They just don't do anything about it.

And similarly, if you get into some complicated business, you can get a report that's a thousand pages thick and you got Ph.D.s working on it, but it doesn't mean anything.

You know, what you've got is a report but you don't — it — you won't understand that business, what it's going to look like in 10 or 15 years.

The big thing to do is avoid being wrong. (Laughter)

CHARLIE MUNGER: There are some things that are so intrinsically dangerous. Another of my heroes is Mark Twain, who looked at the promoters of his day and he said, “A mine is a hole in the ground owned by a liar.” (Laughter)

And that’s the way I’ve come to look at projections. I mean, basically, I can remember, Warren and I were offered $2 million worth of projections once in the course of buying a business and the book was this thick.

WARREN BUFFETT: For nothing.

CHARLIE MUNGER: And, if we were given it for nothing, and we wouldn’t open it.

WARREN BUFFETT: We almost paid 2 million not to look at it. (Laughter)

It’s ridiculous. I do not understand why any buyer of a business looks at a bunch of projections put together by a seller or —

CHARLIE MUNGER: Or his agent.

WARREN BUFFETT: — or his agent.

I mean, it — you can almost say that it’s naive to think that that has any utility whatsoever. We just are not interested.

If we don’t have some idea ourselves of what we think the future is, to sit there and listen to some other guy who’s trying to sell us the business or get a commission on it tell us what the future’s going to be — it — like I say, it’s very naïve.

CHARLIE MUNGER: Yeah, and five years out.

WARREN BUFFETT: Yeah. We had a line in the report one time, “Don’t ask the barber whether you need a haircut.” And — (laughter) — it’s quite applicable to projections of — by sellers — of businesses.

40. Cutting USAir’s costs will be “enormously tough”

WARREN BUFFETT: Zone 3.

AUDIENCE MEMBER: Mr. Buffett, Greg Elright (PH) from Washington, DC.

In the last year, United Airlines and Northwest have resolved some of their financial problems by moving ownership over to the employees.

With USAir's current positions — uh, problems — what do you see as occurring with USAir and do you see any movement toward employee ownership? And how will that affect Berkshire's interest in the company?

WARREN BUFFETT: USAir has a cost structure which is non-viable in today's airline business. Now that, in an important way, involves its labor cost, but it involves other things, too. But it certainly involves its labor costs.

And they've stated this publicly. And I think — and they have — they are talking with their unions about it and they're talking with other people about other parts of their cost structure.

And I think you'll just see what unfolds in the next relatively few months, because there isn't any question that the cost structure is out of line. I think the cost structure could be brought into line. But whether it will be brought into line or not is another is another question.

And, looking backwards, the answer is not to get into businesses that need to solve problems like that. It's to — but — that was a mistake I made.

And I think in Seth Schofield you've got a manager who understands that business extremely well, who probably is as — in my view, anyway — is as well regarded and trusted by people who are going to have to make changes as anyone could be in that position. But that may not be enough. I mean that — there's enormous tensions when you need to take hundreds and hundreds of millions of dollars out of the cost structure of any business.

And when you need cooperative action, all by various groups, each one of which feels that maybe they're having to give a little more than some other group, and understandably feels that way, you know that is an enormously tough negotiating job.

I think Seth is as well-equipped for that as anyone. But I would not want to — you know, I cannot predict the outcome.

WARREN BUFFETT: Charlie, do you —?

CHARLIE MUNGER: Well, if I were a union leader, I would give Seth whatever he wants because he's not the kind of a fellow who would ask for more than he needs. And, it's perfectly obvious that's the correct decision on the labor side. But whether the obvious will be done or not is in the lap of the gods.

WARREN BUFFETT: It's a lot of people with a lot of different motivations and, I mean, those are really tough questions. I mean, we — Charlie and I've been involved in that sort of thing a few times and frequently it works out, but it's not preordained.

41. We're "not in any hurry" to retire

WARREN BUFFETT: Zone 4.

AUDIENCE MEMBER: My name is Sheldon Scizick (PH) from Chicago, Illinois. I have two questions.

The first one is concerning Mr. Munger. We know what Mr. Buffett's retirement plans are. I was wondering what yours — your plans for the future concerning Berkshire are?

CHARLIE MUNGER: I have always preferred the system of retirement where you can't quite tell from observing from the outside whether the man is working or retired. (Laughter)

WARREN BUFFETT: He does it well, too. (Laughter)

CHARLIE MUNGER: You know, a problem in many businesses, particularly the more bureaucratic ones, is that your employees retire, but they don't tell you. (Laughter)

WARREN BUFFETT: I think I can speak for Charlie on this one.

Charlie and I are not in any hurry to retire. He's trying to outlast me, actually. (Laughter)

AUDIENCE MEMBER: Thank you.

42. Berkshire sold some Cap Cities shares in tender offer

AUDIENCE MEMBER: My second question is, I was just curious why you sold a portion of Cap Cities?

WARREN BUFFETT: We thought that — we thought it was a good idea for Cap Cities to have a tender offer. They had cash that we thought that they could not use in any — they were not likely to be able to use — in a better way than repurchasing their own shares because they do have some very good businesses.

They, and we, felt that a tender offer would not be successful, in terms of attracting a number of shares unless Berkshire were tendering. We felt the price was reasonable to tender at.

It turned out that the business was getting stronger during that period and various things were happening in media, so there were only 100,000 shares or so tendered outside of our million. That isn't necessarily what we thought was going to happen going in, but that is what happened.

It's acceptable to us, but that doesn't mean that it was the desired outcome. We would not have tendered all of our shares or anything of the sort.

We want to remain a substantial shareholder of Cap Cities. We've always — most of the time we favored Cap Cities buying in its stock and it's bought in a fair amount of stock since the ABC merger took place in 19 — started in 1986.

43. Structured settlements business isn't big, but is "perfectly satisfactory"

WARREN BUFFETT: Zone 5.

AUDIENCE MEMBER: Good morning. My name is Matt Voke (PH). I'm from Omaha.

In last year's meeting you made reference to structured settlements. I was wondering, how is that business progressing for you?

WARREN BUFFETT: Question's about the structured settlement business, which is a business in which Berkshire guarantees, in effect, an annuity to some claimant of another — usually — of another insurance company, who suffered an injury and instead of getting a lump sum now wants to get a stream of payments over many years in the future, sometimes going out 75 years.

We have set up a life company to do that business. We formerly did it all through our property-casualty companies. And, we have done some business, but it's not been a big business yet, and it may never be a big business.

It's a perfectly satisfactory business, but it's not an important item at present in the analysis of Berkshire's value.

Are you getting — having a problem with sound out there on this or no? Just — no?

44. No comment on Wrigley

WARREN BUFFETT: Zone 6.

AUDIENCE MEMBER: My name is David Samra. I'm from San Francisco, California.

In your annual report, I noticed you mention Wrigley as being a company that has worldwide dominance, somewhat like Coca-Cola and Gillette. And, was curious to know if you had looked at the company in any detail. And, if so, whether or not — if you decided not to invest, what were the reasons why?

WARREN BUFFETT: Well, we wouldn't want to comment on a company like that because we might or might not be buying it. We might or might not be selling it. We might or might not buy or sell it in the future. (Laughter)

And, since it falls under that narrow definition of things that we don't talk about —

It's a good illustration of a company that has a high market share worldwide, but you can understand the Wrigley Company just as well as I can. I have no insights in the — into the Wrigley Company that you wouldn't have and I don't — I wouldn't want to go beyond that in giving you our evaluation of the company.

I hate to disappoint you on those, but on specific securities, we are not too forthcoming sometimes.

Charlie?

CHARLIE MUNGER: I'm good at not being forthcoming. (Laughter)

45. "No specific desire" to buy companies in certain parts of the world

WARREN BUFFETT: Zone 7.

AUDIENCE MEMBER: Mr. Buffett, Kathleen Ambrose (PH) from Omaha.

I have a question regarding global diversification. Just in general, what do you look for in a company and, if so, as far as Europe or Latin America, if you'd like to be specific?

WARREN BUFFETT: The question is about global diversification.

All we want to be in is businesses that we understand, run by people that we like, and priced attractively compared to the future prospects.

So, there is no specific desire to either be in the rest of Europe, or the rest of the world, or Far East, or to avoid it.

It's simply a factor that — it's not a big factor. There may be more chances for growth in some countries.

We — 80 percent of Coca-Cola's earnings, roughly, will come from outside the United States. Eighty percent of Guinness's earnings will come from outside the United States, but they're domiciled outside the United States, whereas Coca-Cola is domiciled here.

Certainly, in many cases, there are markets outside the United States that have way better prospects for growth than the U.S. market would have, but they probably have some other risks to them that this market may not have.

But, we, you know, we like the international prospects, obviously, of a company like Coke. We like the international prospects of a company like Gillette. Gillette earned 70 percent of its money outside this country.

So, if you look — on a look-through basis — Coke — we might this year get something like $150 million of earnings, indirectly, for Berkshire's interest from the rest of the world just through Coca-Cola alone.

But, we don't make any specific — we don't think in terms of, I like this region so I want to be there or something of a sort.

It's something that's specific to the companies we're looking at, then we'll try to evaluate that.

Coke is expanding in China. Well, it — you know — I think that — I forget what they showed last year, maybe 38 percent growth, or something like that, in cases. Maybe —

It's nice to have markets like that that are relatively untapped.

Actually, Gillette is expanding in China in a big way and the Chinese don't shave as often. And more of them are what they call "dry shavers" than "wet shavers" there, which is electric shavers.

But you know, maybe we could stick something in the Coke that would — (laughter)

Maybe a little synergy at Berkshire, finally. Who knows?

46. Hurricanes are bigger insurance risk than riots

WARREN BUFFETT: Zone 1.

AUDIENCE MEMBER: Good morning. I'm Marshall Patton (PH) from Bandera, Texas.

And back to the insurance losses. What is the comparison between natural disasters, such as the earthquake, and so on, and the LA riots?

WARREN BUFFETT: Well, I'm not sure what the connection —

They, you know, they obviously can both lead to super-cats that we insure against, because if there is enough insured damage, it's likely to trigger a payment under some of our policies.

It would take some really big riot damage to get to our levels, because normally we don't kick in now until an event gets up to at least, you know, $5 billion or so of insured damage under a very large majority of our policies.

Something like a quake causes a fair amount of damage that is not insured, because of the extent that it's highways and things of that sort, public buildings. A lot of that is not insured.

But you get interesting questions on this. Usually we insure an event, but what's an event? If you go back to the riots that occurred after Martin Luther King was shot, you had riots in dozens of cities.

Is that one event or is that a multiple number of events? I mean, it was started by different people, but maybe arising from a common cause. Some of those things aren't actually very well-defined, even after hundreds of years of insurance law and custom, the experience of that. But I would say that rioting is very unlikely to get to a level that triggers our policy.

The big risks we face are quake and hurricanes, and hurricanes are a more significant risk than quake. They call them typhoons in the Pacific Ocean.

But floods, tremendous damage from floods last year. But basically there's not a lot of private flood insurance bought, so the insured losses do not get large.

Just watch the Weather Channel. (Laughter)

47. Why we have no short-term opinion on stocks

WARREN BUFFETT: Zone 2.

AUDIENCE MEMBER: Diane West (PH) from Corona Del Mar, California.

I know, Mr. Buffett, that you said that you don't read what other people say about the market or the economy, but do either you or Charlie have an opinion about how you think things are going to go? Are you bullish or bearish?

WARREN BUFFETT: You may have trouble believing this, but Charlie and I never have an opinion about the market because it wouldn't be any good and it might interfere with the opinions we have that are good. (Laughter)

If we're right about a business, if we think a business is attractive, it would be very foolish for us to not take action on that because we thought something about what the market was going to do, or anything of that sort.

Because we just don't know. And to give up something that you do know and that is profitable for something that you don't know and won't know because of that, it just doesn't make any sense to us, and it doesn't really make any difference to us.

I mean, I bought my first stock in, probably, April of 1942 when I was 11. And since then, I mean, actually World War II didn't look so good at that time. I mean, the prospects, they really didn't. I mean, you know, we were not doing well in the Pacific. I'm not sure I calculated that into my purchase of my three shares. (Laughter)

But I mean, just think of all the things that have happened since then, you know? Atomic weapons and major wars, presidents resigning, and all kinds of things, massive inflation at certain times.

To give up what you're doing well because of guesses about what's going to happen in some macro way just doesn't make any sense to us. The best thing that can happen from Berkshire's standpoint — we don't wish this on anybody — but is that over time is to have markets that go down a tremendous amount.

I mean, we are going to be buyers of things over time. And if you're going to be buyers of groceries over time, you like grocery prices to go down. If you're going to be buying cars over time, you like car prices to go down.

We buy businesses. We buy pieces of businesses: stocks. And we're going to be much better off if we can buy those things at an attractive price than if we can't.

So we don't have any fear at all. I mean, what we fear is an irrational bull market that's sustained for some long period of time.

You, as shareholders of Berkshire, unless you own your shares on borrowed money or are going to sell them in a very short period of time, are better off if stocks get cheaper, because it means that we can be doing more intelligent things on your behalf than would be the case otherwise.

But we have no idea what — and we wouldn't care what anybody thought about it. I mean, most of all ourselves. (Laughter)

Charlie, do you have anything?

CHARLIE MUNGER: No. I think the — if you're agnostic about those macro factors and therefore devote all your time to thinking about the individual businesses and the individual opportunities, it's just, it's a way more efficient way to behave, at least with our particular talents and lacks thereof.

WARREN BUFFETT: If you're right about the businesses, you'll end up doing fine.

We don't know, and we don't think about when something will happen. We think about what will happen. It's fairly, it's not so difficult to figure out what will happen. It's impossible, in our view, to figure out when it will happen. So we focus on what will happen.

This company in 1890 or thereabouts, the whole company sold for $2,000. It's got a market value now of about 50-odd-billion, you know?

Somebody could've said to the fellow who was buying this in 1890, you know, "You're going to have a couple of great World Wars, and you know, you'll have the panic of 1907, all these things will happen. And wouldn't it be a better idea to wait?" (Laughter)

We can't afford that mistake, basically. Yeah.

48. We'd rather buy an entire company, but stocks offer more bargains

WARREN BUFFETT: Zone 3.

AUDIENCE MEMBER: Mr. Buffett, Mr. Munger, last year — I'm Tim Medley from Jackson, Mississippi — last year the question was asked about your preference for purchasing entire businesses versus parts of public companies.

You mentioned you prefer to buy private businesses because of the tax advantages and your attraction to the people in those businesses.

Are you finding today that there are better purchases within the private market versus in the public securities market?

WARREN BUFFETT: Well, I would answer that no.

We do not — we very seldom find something to buy on a negotiated basis for an entire business. We have certain size requirements. A big limiting factor is it has to be something we can understand. I mean, that eliminates 95 percent of the businesses.

And we don't pay any attention to them, but we get lots of proposals for things that just are totally outside the boundaries of what we've already said we're interested in.

We prefer to buy entire businesses, or 80 percent or greater interest in businesses, partly for the tax reasons you mentioned, and frankly, we like it better. We just, it's the kind of business we would like to build if we had our absolute druthers on it.

Counter to that is we can usually get more for our money in wonderful businesses, in terms of buying little pieces of them in the market, because the market is far more inefficient in pricing businesses than is the negotiated market.

You're not going to buy any bargains, and I mean, you shouldn't even approach the idea of buying a bargain in a negotiated purchase.

You want to buy it from people who are going to run it for you. You want to buy it from people who are intelligent enough to price their business properly, and they are. I mean, that's the way things are.

The market does not do that. The market — in the stock market, you get a chance to buy businesses at foolish prices, and that is why we end up with a lot of money in marketable securities.

If we absolutely had our choice, we would own a group of — we would own three times the number of businesses we own outright.

We're unlikely to get that opportunity over time, but periodically we'll get the chance to find something that fits our test.

And in between we will, when the market offers us the right prices, we will buy more, either businesses we already own pieces of, or we'll buy one or two new ones. Something's usually going on.

There are tax advantages to owning all of them, but that's more than offset by the fact that you'll never get a chance to buy the whole Coca-Cola Company or the whole Gillette company.

I mean, businesses like that, sensational businesses, are just not available. Sometimes you get a chance to make a sensible purchase in the market of such businesses.

Charlie?

CHARLIE MUNGER: Well, I think that's exactly right. And if you stop to think about it, if a hundred percent of a business is for sale, you've got — the average corporate buyer is being run by people who have the mindset of people buying with somebody else's money. And we have the mindset of people buying with our own money.

And there's also a class of buyers for a hundred percent of businesses who are basically able and assured financial promoters. I'm talking about the leveraged buyout funds and so on.

And those people tend to have the upside, but not the downside, in the private arrangements they've made with their investors. And naturally, they tend to be somewhat optimistic.

And so we have formidable competition when we try and buy a hundred percent of businesses.

WARREN BUFFETT: Most managers are better off, in terms of their personal equation, if they're running something larger. And they're also better off if they're running something larger and more profitable.

But the first condition alone will usually leave them better off. We're only better off if we're running something that's more profitable. We also like it if it's larger, too.

But our equation, actually, our personal equation is actually different than a great many managers in that respect. Even if that didn't operate, I think most managers psychically would

enjoy running something larger. And if you can pay for it with other people's money, I mean, that gets pretty attractive.

You know, how much would — and let's just say you're a baseball fan — well, how much would you pay to own whatever your hometown, the Yankees?

You might pay more if you were writing a check on someone else's bank account than if you were writing it on your own. It's been known to happen. (Laughter)

And in corporate America, animal spirits are there. And those are our competitors on buying entire businesses. In terms of buying securities, most managers don't even think about it.

It's very interesting to me, because they'll say that — they'll have somebody else manage their money in terms of portfolio securities. Well, all that is is a portfolio of businesses.

And I'll say, "Well, why don't you pick out your own portfolio?" And they'll say, "That's much too difficult."

And then some guy will come along with some business that they never heard of a week before and give them some figures and a few projections, and the guy thinks he knows enough to buy that business. It's very puzzling to me sometimes.

49. Revealing Wesco's estimated intrinsic value was a "quirk"

WARREN BUFFETT: Zone 4.

Could you hold it a little closer to you? I can't hear too well.

It's hard to hear. Is the mic on there?

AUDIENCE MEMBER: It's on.

WARREN BUFFETT: OK, I can hear that fine.

AUDIENCE MEMBER: Let's try it one more time. Dan Raider (PH) —

WARREN BUFFETT: Got it.

AUDIENCE MEMBER: — San Mateo, California. This is a question for Mr. Munger.

In your most recent letter to shareholders in Wesco's annual report, you calculated the intrinsic value of Wesco at about $100 per share, and compared that to the then-current market price of Wesco of about $130 per share.

In the same letter, you stated that it was unclear whether at then-current market prices Berkshire or Wesco presented a better value to prospective purchasers.

In light of that, would you compare the intrinsic value of Berkshire to its current market price?

CHARLIE MUNGER: Well, the answer to that is no. (Laughter)

Berkshire has never calculated intrinsic value per share and reported it to the shareholders, and Wesco never did before this year.

We changed our mind at Wesco because we really thought some of the buyers had gone a little crazy, and a lot of things were being said to prospective shareholders that, in our opinion, were unwise.

And we don't really like attracting — even though we've had nothing to do with it — we don't like attracting people in at high prices that may not be wise.

So we departed from our long precedent, and we did in the Wesco report make an estimate of intrinsic value per share.

But we're not changing the general policy. That was just a one-time quirk.

WARREN BUFFETT: Well, and also I think it's true that the Wesco intrinsic value per share can be estimated by anyone within fairly close limits.

It just isn't that complicated because there aren't a number of businesses there that have values different than carrying values, or where they are, they're all footnoted, in terms of numbers.

So it would be almost impossible to come up with numbers that are significantly different than the number Charlie put in there.

Berkshire has assets that, number one of which would be the insurance business, that it's clear have very significant excess values, but one person might estimate those at maybe three times what somebody else would estimate them at. That's less true of our other businesses, but it's still true in a way, so that Berkshire's range would be somewhat greater.

And as Charlie — we basically — we don't want to disappoint people, but we also don't want to disappoint ourselves. But we have our own yardsticks for what we think is doable.

We try to convey that as well as we can to the people who are partners in the business, and I think that we saw some things being published about Wesco that simply might have led to, and probably did lead to, some expectations that simply weren't consonant with our own personal expectations. And that leaves us uncomfortable.

50. Risk is "inextricably wound up" in how long an asset is held

WARREN BUFFETT: Zone 5.

AUDIENCE MEMBER: Hello, my name is Charles Pyle (PH) from Ann Arbor, Michigan.

I'd like to ask you to expound on your view of risk in the financial world, and I ask that against the background of what appear to be a number of inconsistencies between your view of risk and the conventional view of risk.

I mention that in a recent article you pointed out inconsistency in the use of beta as a measure of risk, which is a common standard.

And I mention that derivatives are dangerous, and yet you feel comfortable playing at derivatives through Salomon Brothers. And betting on hurricanes is dangerous, and yet you feel comfortable playing with hurricanes through insurance companies.

So it appears that you have some view of risk that's inconsistent with what would appear on the face of it to be the conventional view of risk.

WARREN BUFFETT: Well, we do define risk as the possibility of harm or injury. And in that respect we think it's inextricably wound up in your time horizon for holding an asset.

I mean, if your risk is that you're going — if you intend to buy XYZ Corporation at 11:30 this morning and sell it out before the close today, I mean, that is, in our view, that is a very risky transaction. Because we think 50 percent of the time you're going to suffer some harm or injury.

If you have a time horizon on a business, we think the risk of buying something like Coca-Cola at the price we bought it at a few years ago is essentially, is so close to nil, in terms of our perspective holding period. But if you asked me the risk of buying Coca-Cola this morning and you're going to sell it tomorrow morning, I say that is a very risky transaction.

Now, as I pointed out in the annual report, it became very fashionable in the academic world, and then that spilled over into the financial markets, to define risk in terms of volatility, of which beta became a measure.

But that is no measure of risk to us. The risk, in terms of our super-cat business, is not that we lose money in any given year. We know we're going to lose money in some given day, that is for certain. And we're extremely likely to lose money in a given year.

Our time horizon of writing that business, you know, would be at least a decade. And we think the probability of losing money over a decade is low. So we feel that, in terms of our horizon of

investment, that that is not a risky business. And it's a whole lot less risky than writing something that's much more predictable.

Interesting thing is that using conventional measures of risk, something whose return varies from year to year between plus-20 percent and plus-80 percent is riskier, as defined, than something whose return is 5 percent a year every year.

We just think the financial world has gone haywire in terms of measures of risk.

We look at what we do — we are perfectly willing to lose money on a given transaction, arbitrage being an example, any given insurance policy being another example. We are perfectly willing to lose money on any given transaction.

We are not willing to enter into transactions in which we think the probability of doing a number of mutually independent events, but of a similar type, has an expectancy of loss. And we hope that we are entering into our transactions where our calculations of those probabilities have validity.

And to do so, we try to narrow it down. There are a whole bunch of things we just won't do because we don't think we can write the equation on them.

But we, basically, Charlie and I by nature are pretty risk-averse. But we are very willing to enter into transactions —

We, if we knew it was an honest coin, and someone wanted to give us seven-to-five or something of the sort on one flip, how much of Berkshire's net worth would we put on that flip?

Well we would — it would sound like a big number to you. It would not be a huge percentage of the net worth, but it would be a significant number. We will do things when probabilities favor us.

Charlie?

CHARLIE MUNGER: Yeah, we, I would say we try and think like Fermat and Pascal as if they'd never heard of modern finance theory.

I really think that a lot of modern finance theory can only be described as disgusting. (Laughter)

51. Buffett favors a "steeply progressive" consumption tax

WARREN BUFFETT: Zone 6.

AUDIENCE MEMBER: Good morning, I'm Paul Miller (PH) from Kansas City, Missouri. I've got two questions.

First, not too long ago, I believe it was Fortune Magazine that ran an article regarding personal tax rates.

And at the risk of misquoting you, my recollection is that you favored higher personal rates, rates even higher than those proposed by those in Washington.

The second question is, I've heard Berkshire Hathaway referred to as nothing more than a high-priced rich man's mutual fund. Would you care to comment on that also?

WARREN BUFFETT: Well, on tax rates, if you ask me what I personally favor, I personally favor a steeply progressive consumption tax.

That has a little more attention being paid to it now, although the "steeply progressive" might be modified by most of the advocates of the consumption tax, maybe to "mildly progressive" or something of the sort.

There's a Nunn-Domenici proposal along that line, and there are other people that are talking about it more. It may be examined by the new Kerrey-Danforth Commission, of which we've got a member in the audience.

But I believe, in one way or another, I believe in progressive taxes. So I am not shocked in terms of my own situation, and I don't think Charlie is particularly, about having a progressive income tax.

Although, like I say, I think society would run better over time if it were a progressive consumption tax instead.

Do you want the comment on the tax situation, Charlie?

CHARLIE MUNGER: Well, I think there is a point at which income taxes become quite counterproductive if their progression is too high. But I don't think we're there yet.

WARREN BUFFETT: We think — at least I think — I'm extraordinarily well treated by this society, and I think most people with high incomes are. I think if you transported most of them to Bangladesh or Peru or something, they would find out how much of it is them and how much is the society.

And I think there's nothing better than a market system, in terms of motivating people and in terms of producing the goods and services that the society wants.

But I do think it gets a little out of whack, in terms of what the productivity may be of an outstanding teacher compared to somebody who is good at figuring out the intrinsic value of businesses.

I don't have a better system on the income side, but I think society should figure out some way to make those who are particularly blessed, in a sense, that have talents that get paid off enormously in a market system, to give back a fair amount of that to the society that produces that.

52. Berkshire isn't a "rich man's mutual fund"

WARREN BUFFETT: The question about Berkshire being I think it was, was it rich man's mutual fund or something like that?

We don't look at it that way at all. We look at it as a collection of businesses, and ideally we would own all of those businesses.

So it's, to the extent that a mutual fund owns stock in a lot of companies and diversifies among businesses and we try to own a lot of businesses ourselves, I guess that's true. But I guess you could say the same thing of General Electric, or an operation like that.

We are more prone to buy pieces of businesses than the typical manager, but we are trying to do, in a sense, the same thing Jack Welch is trying to do at General Electric, which is try to own a number of first-class businesses.

He gets to put the imprint of his own management, which I think is very good, on those businesses, and we are more hands-off, both in the businesses we own outright and in the ones that we own pieces of.

But we're going at it the same way. And General Electric has been very successful under Jack's leadership, and doing it his way.

We think, in terms of what we bring to the game, and the problems of putting money to work all the time, that our own system will work best for us.

Charlie?

CHARLIE MUNGER: Yeah, I've got nothing to add to that.

53. Don't need interest rate outlook to value companies

WARREN BUFFETT: Zone 1.

CHRISTOPHER DAVIS: Hello, I'm Christopher Davis from New York City.

I'm interested in that many of the holdings of Berkshire are in industries that are perceived as interest rate-sensitive industries, including Wells Fargo, Salomon, Freddie Mac, even GEICO. And yet you have an admitted sort of ambivalence towards interest rates or changes in interest rates.

And it therefore seems that you don't feel that those changes affect the fundamental attractiveness of those businesses.

I thought maybe you could share your thoughts on what you see in these businesses that the investment community as a whole is ignoring.

WARREN BUFFETT: Well, the value of every business, the value of a farm, the value of an apartment house, the value of any economic asset, is 100 percent sensitive to interest rates, because all you are doing in investing is transferring some money to somebody now in exchange for what you expect the stream of money to be, to come in, over a period of time. And the higher interest rates are, the less that present value is going to be.

So every business, by its nature, whether it's Coca-Cola or Gillette or Wells Fargo, is in its intrinsic valuation, is a hundred percent sensitive to interest rates.

Now, the question as to whether a Wells Fargo or a Freddie Mac or whatever it may be, whether their business gets better or worse internally, as opposed to the valuation process, because of higher interest rates, that is not easy to figure.

I mean, GEICO, if they write their insurance business at the same underwriting ratio — in other words they have the same loss and expense experience relative to premiums — they benefit by higher interest rates, obviously, over time, because they're a float business, and the float is worth more to them.

Now, externally, getting back to the valuation part, the present value of those earnings also becomes less then.

But the present value of Coke's earnings becomes less in a higher interest rate environment.

Wells Fargo, it's — whether they earn more or less money under any given interest rate scenario is hard to figure. There may be one short-term effect and there may be another long-term effect.

So I do not have to have a view on interest rates — and I don't have a view on interest rates — to make a decision as to an insurance business, or a mortgage guarantor business, or a banking business, or something of the sort, relative to making a judgment about Coke or Gillette.

Charlie?

CHARLIE MUNGER: I've got nothing to add.

54. "Retroactive" insurance is small part of our business

WARREN BUFFETT: Zone two?

AUDIENCE MEMBER: Hello, I'm Benjamin Baron (PH) from New York.

Could you speak about your insurance business a little bit? And especially the retroactive policies you've been writing.

WARREN BUFFETT: Can we speak about the — you say the reinsurance business?

CHARLIE MUNGER: Retroactive —

WARREN BUFFETT: I heard the retroactive part, but the first part.

BENJAMIN BARON: The reinsurance and the retroactive, and also the market in Bermuda and how you see it as one of your potential markets.

WARREN BUFFETT: I think the retroactive market is, what's called "retroactive insurance," has been pretty well eliminated by developments in accounting.

So I would not expect us to really have any volume in retroactive-type policies.

Now, when we write workers' comp with a policy holder dividend, in effect that's a retroactive policy. But that's a relative — that's small part of Berkshire's business.

Did I answer what you were driving at there?

AUDIENCE MEMBER: (Inaudible)

WARREN BUFFETT: Pardon me?

AUDIENCE MEMBER: (Inaudible)

WARREN BUFFETT: Did you get that, Charlie?

55. "You don't find out who's been swimming naked until the tide goes out"

CHARLIE MUNGER: Just comment on the development of the insurance business in Bermuda.

WARREN BUFFETT: Oh, Bermuda is simply a, you know, a new competitor. They're not so new, I mean, there've been companies in Bermuda before.

But in the last 15 months, 18 months, maybe there's been 4 billion-plus raised. And because, for tax reasons — maybe other reasons as well, but certainly for tax reasons — that capacity has been concentrated in Bermuda-based, Bermuda-domiciled reinsurers.

But essentially there's no great difference between that type of competition and other reinsurers competition, except for the fact that that capacity is new and the money's just been raised, and so there may be some greater pressure on the managers of those businesses to go out and write business promptly than on somebody that's been around for 50 years.

But it's no plus for us any time new capacity enters any business that we're in, and that certainly goes for the reinsurance business.

Reinsurance business, by its nature, will be a business in which some very stupid things are done en masse periodically. I mean, you can be doing dumb things and not know it in reinsurance, and then all of a sudden wake up and find out, you know, the money is gone.

And it's what people have found out — and I used that line in the report a year ago — it's what people have found out that were speculating on bonds with (inaudible) margins recently, that, you know, you don't find out who's been swimming naked until the tide goes out. And — (laughter) — essentially that's what happens in reinsurance. You don't, you really don't find out who's been swimming naked until the wind blows at them.

56. When cash "piles up," it's not through choice

WARREN BUFFETT: Zone 3.

AUDIENCE MEMBER: I'm Whitney Anderson (PH) from Miami, Florida. And my question is, right now, we are reading about various analysts and how you should, in their individual opinion, adjust your more cash, more stocks, more bonds because of …

How does Berkshire Hathaway feel about times of relative financial insecurity? Do you arrange for more cash reserves looking forward to a time when you might be able to buy? Or do you go along your path?

WARREN BUFFETT: I think the question is do we sort of get into asset allocation by maintaining given levels of cash, depending on some kind of outlook or something of the sort?

We don't really think that way at all. If we have cash, it's because we haven't found anything intelligent to do with it that day, in the way of buying into the kind of businesses we like.

And when we can't find anything for a while, the cash piles up. But that's not through choice, that's because we're failing at what we essentially are trying to do, which is to find things to buy, and —

We make no attempt to guess whether cash is going to be worth more three months from now or six months from now or a year from now.

So it is — you will never see — we don't have any meetings of any kind anyway at Berkshire, but we would never have an asset allocation meeting. We would — (laughter) — keep looking. I mean, Charlie's looking, I'm looking. Some of our managers are looking.

We're looking for things to buy that meet our tests, and if we showed no cash or short-term securities at year-end, we would love it, because it would mean that we'd found ways to employ the money in ways that we like.

I think I would have to admit that if we have a lot of money around, we are a little dumber than usual. I mean, it tends to make you careless.

And I would say that the best purchases are usually made when you have to sell something to raise the money to get them, because it just raises the bar a little bit that you jump over in the mental decisions.

But we have, I don't know what we'll show, but certainly well over a billion dollars of cash around, and that's not through choice. That is a — you can look at that as an index of failure on the part of your management.

And we will be happy when we can buy businesses, or small pieces of businesses, that use up that money.

57. Fannie Mae and Freddie Mac as investments

WARREN BUFFETT: Zone 4.

AUDIENCE MEMBER: Gentlemen, my name is Richard Sercer from Tucson, Arizona.

I understand that 40 percent of all home mortgages have been securitized by Fannie Mae and Freddie Mac, the duopoly.

I would, at the risk of asking you for a projection, since you've talked about projections before, I'd be interested in understanding what you think will happen to that market share over time for this duopoly. Thank you.

WARREN BUFFETT: Well, the answer to that doesn't involve much of a prediction. That market share is essentially certain to go up.

That doesn't mean that those are wonderful businesses to buy, but the market share is essentially certain to go up because the economics that those two entities possess, compared

to other ways of intermediating money between investors and people who want to borrow, no one else has those economics.

So what holds the share of Freddie Mac and Fannie Mae down is the fact that they are only allowed to loan roughly $200,000 on any mortgage. That's a limiting factor. It's probably been a good thing for them that it has been a limiting factor, but they are shut out of part of the market.

But the market that they are in, they essentially have economics that other people can't touch for intermediating money, including the savings and loan business that we were in.

We had a business that intermediated money, went out and got it from depositors and lent it to people who wanted to borrow on a home.

Freddie Mac and Fannie Mae do it the same way. They don't do it exactly the same way, but they perform the same function. And they could do it so much more cheaply than we could do it by having branches or anything of the sort and paying the insurance fee we paid.

They're going to get the business. They should get the business. And so their market share will grow.

Charlie?

CHARLIE MUNGER: Well, I think that's right. (Laughter)

WARREN BUFFETT: You're doing great. (Laughter)

58. Increased information speed doesn't affect our decisions

WARREN BUFFETT: Zone 5.

AUDIENCE MEMBER: Good morning, I'm Sarah Pruitt (PH) from Milwaukee, Wisconsin.

And I wondered if you feel that the speed with which information is available and disseminated today has affected your business-buying decision process. And do you believe that speed has caused you to miss opportunities?

WARREN BUFFETT: Question about seas expanding?

CHARLIE MUNGER: No. Does the speed of information today affect our decision-making process?

WARREN BUFFETT: No, we — I would say that we perform about like we were doing 30 or 40 years ago.

I mean — (laughter) — we read annual reports.

It isn't the — the speed of information really doesn't make any difference to us. It's the processing and finally coming to some judgment that actually has some utility, that is, that it's a judgment about the price of a business or a part of a business, a security, versus what it's essentially worth.

And none of that involves anything to do, really, with quick information. It involves getting good information.

But usually that — it's not — we're not looking for needles in haystacks or anything of the sort. You know, we like haystacks, not needles, basically. And we want it to shout at us.

And I would say that, well, virtually everything we've done has been reading public reports, and then maybe asking questions around to ascertain trade positions or product strengths or something of that sort.

But we never have to — we can make decisions very fast. I mean, we get called on a business — or we can make up our mind whether we're interested in two or three minutes. That takes no time. We may have to do a little checking on a few things subsequently.

But we don't need to get — I can't think of anything where we really need lots of price data or things like that extremely fast to make any decisions.

We've got good management information systems in our operating businesses, but that's just another — that's a question of keeping inventories where they should be and all of that sort of thing.

I don't think the invest — I think you could be in someplace where the mails were delayed three weeks, and the quotations were delayed three weeks, and I think you could do just fine in investing.

59. Why a stock buyback is unlikely

WARREN BUFFETT: Zone 6.

AUDIENCE MEMBER: James Pan (PH), New York City. I have a two-parter question.

One, do you think the stock price of Berkshire Hathaway is trading within 15 percent of its intrinsic value currently?

And two, if you think Berkshire Hathaway is undervalued with the amount of cash you have on your balance sheet, would you consider a buyback?

WARREN BUFFETT: The answer about a buyback is that we generally have felt that market conditions that would make Berkshire attractively priced is probably going to make other things even more attractively priced, because we think our shareholders are more rational than the shareholders of many companies.

It's more likely that we will find some wonderful business at a silly price than we will find Berkshire at a silly price as we go along. So — (applause) that tends to eliminate repurchases.

But it doesn't rule them out, but it explains why the circumstances will not arise very often where repurchases would make good sense.

60. Why we don't estimate our intrinsic value

WARREN BUFFETT: In terms of giving you a number on intrinsic value, I don't want to spoil your fun. I mean, you really should work that one out for yourself. (Laughter)

Charlie is the expert on intrinsic —

Do you have any comment for him, Charlie?

CHARLIE MUNGER: Well, your attitude on that subject reminds me of a famous headmaster who used to address the graduating class every year. And he'd say, "You know," he says, "Five percent of you people are going to end up criminals." And he says, "I know exactly who you are." (Laughter)

And he said, "But I'm not going to tell you, because it would deprive your lives of a sense of excitement." (Laughter)

If you stop to think about it, the companies that constantly told their shareholders what the intrinsic value was were the real estate holding companies in corporate form.

And I must say, that the amount of folly and misbehavior that crept into that process was disgusting. We would be just associating with a bad group if we were to change our ways.

WARREN BUFFETT: Bill Zeckendorf Sr. I think was probably the first one to do that, with Webb and Knapp back in the late '50s. I still have those annual reports. And he would announce, you know, like, to eight decimal places what the intrinsic value of Webb and Knapp was. And he did it right till the day they filed for Chapter 11. (Laughter)

CHARLIE MUNGER: I remember that well, because somebody said that he fell into bankruptcy. And somebody else said, "How can you fall off a pancake?" (Laughter)

WARREN BUFFETT: Beware of people that give you a lot of numbers about their businesses. I mean, in terms of projections or valuations or that sort of thing.

We try to give you all of the numbers that we would use ourselves in making our own calculations of value.

We really — if you read the Berkshire reports, you essentially — you have all the information that Charlie and I would use in making a decision about the security.

And if there's anything really lacking in that respect, you know, we would actually — we would truly appreciate hearing from you, because we want to have that kind of information in the report. But then we want you to make the calculation.

But we've stuck, I mean, that material, for example, on the float in the insurance business, we consider that quite relevant, obviously, because we use up almost a page printing it. It's pretty serious stuff at Berkshire. (Laughter)

But that is relevant. I mean, your interpretation may be different than mine or Charlie's, but those are important numbers.

And we could give you a lot of baloney about satisfied policyholders, you know, in Lincoln, Nebraska. It wouldn't tell you a thing about what the company's worth — and have pictures of them, and happy, you know, receiving the check from the agent and all of that. (Laughter)

We're not going to do that.

61. Buffett on Peter Lynch

WARREN BUFFETT: Zone 1.

AUDIENCE MEMBER: Mike Macy (PH) from Indianapolis.

I have really enjoyed reading your annual letters and your annual report, and I've gone back and read all of the older ones, too. They're terrific.

I have also enjoyed reading the two books by Peter Lynch, and I see a lot of commonalities between the two of you, the way you think, your philosophy, et cetera.

I'd certainly appreciate it if you'd make a few comments on what you think of Peter Lynch, the things he says in his two books, and the advice that he gives to investors. Thank you.

WARREN BUFFETT: Well, I know Peter. I don't know him well, but we've played bridge together in Omaha as a matter of fact.

I like him personally, and obviously he has an outstanding record. And he has written those two books, which have been bestsellers, about his investment philosophy. I don't really have anything — you know, I'm not going to embroider on his.

There's certainly a fair amount of overlap. There's some difference.

Peter, obviously, likes to diversify a lot more than I do. He owns more stocks than the names of companies I can remember. I mean, but that's Peter. (Laughter)

And, you know, I've said in investing, in the past, that there's more than one way to get to heaven. And there isn't a true religion in this, but there's some very useful religions.

And Peter's got one, and I think we've got one that's useful, too. And there is a lot of overlap.

But I would not do as well if I tried to do it the way Peter does it, and he probably wouldn't do as well if he tried to do it exactly the way I'd do it.

I like him personally very much. He's a high-grade guy.

62. We'll only write insurance when prices make sense

WARREN BUFFETT: Zone 2.

AUDIENCE MEMBER: Mr. Buffett, Mr. Munger, my name is Dave Lankes (PH). I'm a senior editor at Business Insurance Magazine.

A two-part question for you. Can you explain a little bit regarding your primary insurance operations? What drove up written premiums by more than 50 percent last year, and if you expect that to continue this year?

And then regarding your earlier comments on the stupid things reinsurers can do en masse, can you explain what potential pitfalls that the new cat facilities in Bermuda will have to avoid that you feel Berkshire Hathaway won't fall into?

WARREN BUFFETT: Well, the first question about our primary insurance figures, you'll find it way in the back someplace. But they're a little distorted because we bought Central States Indemnity, what would it be, late in the year '92. So there's a lot more premium volume in there for Central States in '93 than there was in '92.

Our basic — National Indemnity's basic insurance, which is commercial, auto, and general liability, premium volume was fairly flat, the Homestate operation fairly flat, Cypress up somewhat. But those numbers were not anything like the changes —

So our business last year, pro forma for including Central States Indemnity for all of '92, would not have shown a dramatic change. There really hasn't been much happening in our primary business, except that it's been run, it's done very well, but it is not growing or exploding. And that's true this year as well as last year.

It's a good business. And it could grow in certain kinds of markets very substantially, but it is not growing in this market, and it did not grow last year, although its underwriting was very good.

In the reinsurance business, I think, essentially, the difference in our reinsurance business from many others, you know — it doesn't include them all in a place like Bermuda — is essentially the difference that may exist in our operations and securities versus other people.

We will offer reinsurance at any time in very large quantities at prices we think make sense. But we won't do business if we don't think it makes sense, just like we will buy securities, to the extent of the cash we have available, if they make sense. But we have no interest in being in the stock market per say just to be in it. We want to own securities that make sense to us.

I think for most managements, if the only thing they're in is the reinsurance business, they may like it better when prices make sense, but they will, I think they will be prone to do quite a bit of business when prices don't make sense as well, because there's no alternative, except to give the money back to the owners. And that is not something that most managements, you know, do somersaults over. (Laughter)

So, I think we are in a favored position, essentially being — having the flexibility of capital allocation that lets us take the lack of business with a certain equanimity that most managements probably can't, because of their sole focus on the business.

Rates will get silly, in all likelihood, after a period when nothing much happens, when you've had a couple of years of good experience.

We price to what we think is exposure. We don't price to experience. I mean, the fact that there was no big hurricane last year — I forget the name of the one that was coming in at North Carolina and then veered out essentially — but to us, it has nothing to do with the rates next year whether that hurricane actually came in in a big way or veered out into the Atlantic again. I mean, we are pricing to exposure.

And everyone says that, but the market tends to price and respond to experience, and generally to recent experience. That's why all the retrocessional operations in London, you know, in the spiral, went busted, because they priced, in our view, they priced to experience rather than to exposure.

It's very hard not to do that, to be there year after year with business coming by and investors expecting this of you and not do that.

But we will never knowingly do that. We may get influenced subconsciously in some way to do that, but we will not do that any more than we will accept stock market norms as being the proper way for us to invest money and equities.

Basically, when you lay out money or accept insurance risks, you really have to think for yourself. You cannot let the market think for you.

Charlie?

CHARLIE MUNGER: Yeah, I think Berkshire is basically a very old-fashioned kind of a place. And it tries to exert discipline to stay old-fashioned.

And I don't mean old-fashioned stupid, I mean, you know, the eternal verity, so to speak, basic mathematics, you know, basic horse sense, basic fear, basic discriminations regarding human nature, all very old-fashioned. And if you just do that with a certain amount of discipline, I think it's likely to work out quite well.

63. Praise from Sandy Gottesman

WARREN BUFFETT: Zone 3.

DAVID GOTTESMAN: David Gottesman from New York.

It's no wonder that this meeting draws stockholders from all over the country. And despite the talk about age today, I'm happy to say this meeting gets better every year.

Berkshire stands unique in American business as a company whose name has become synonymous with management excellence.

Unlike many American corporations, we, as stockholders, don't have to worry about reorganizations, large write-offs, massive restructurings, overstated earnings, and overpaid executives with strategic visions.

Instead, year in and year out, we enjoy the benefits of the common sense and brilliance of Charlie and Warren. (APPLAUSE)

WARREN BUFFETT: What did you say your name was? (Laughter)

DAVID GOTTESMAN: I want to add to that, to say nothing of your good humor.

It's easy to take such consistently outstanding results for granted, but we in this room are the direct beneficiaries of their efforts.

By our presence here today, we show our appreciation to them for their exceptional performance. But we can also demonstrate in another way. I would like to suggest we give them a rousing hand of applause for a job well done. Thank you. (APPLAUSE)

WARREN BUFFETT: Thank you. That was Sandy Gottesman. We've worked together for 30-odd years, and he's finally got that down. I appreciate that, Sandy. (Laughter)

64. Brief adjournment

WARREN BUFFETT: With that, we will adjourn. And anyone who wants to stay around, we'll reconvene in 15 minutes, and then we'll be here till about 1:15.

Afternoon Session - 1994 Meeting

1. No comment on Guinness investment

WARREN BUFFETT: Zone 2 now. Well, I don't know where zone 2 is, but we'll — (laughs)

AUDIENCE MEMBER: Do you feel basically the same about your investment in Guinness now as when you made the investment, in terms of the company?

WARREN BUFFETT: Well, I wouldn't like to comment on anything that we own, in terms of how we rate them as desirability or anything. I mean, whether it's Coke or Gillette or anything that — we made decisions at a given time, at a given price, which you can figure out by looking at our purchases.

But we may be buying or selling any of those securities right as we talk. And we simply don't think it's in the interest of Berkshire shareholders as a group to be talking about things that we could be buying or selling.

2. World Book's sales slide: "I wish I knew the answer"

WARREN BUFFETT: OK?

AUDIENCE MEMBER: Hi, David Winters, from Mountain Lakes, New Jersey.

Just wondering, World Book's had a tough time lately, and I'm wondering if there's things you're doing to try to improve that.

And also, The Buffalo News has been fabulous. And I'm kind of wondering what's driving The Buffalo News?

WARREN BUFFETT: Buffalo News is doing what?

AUDIENCE MEMBER: Fabulously.

WARREN BUFFETT: Yeah, it's doing well, right. Well, I would say you got to give credit Stan Lipsey — I'm not sure whether Stan's here right now, but — who's been running the News.

World Book, in terms of unit sales — as we put in the report — have fallen off significantly the last few years. It's actually surprising, in a sense, how well the profits have held up because they've done a good job, a very good job, in that respect.

And as we put in the report, we don't know the answer, precisely. We are, Ralph Schey is — has taken some actions — is taking some actions — that he thinks will improve the operations. Ralph's record as a manager is absolutely at the top of the list. I mean, it — I wrote about it in the 1992 report.

In 1993, Ralph did even better. I mean, it was a — fabulous. I think, probably, may have been 110 or so million pre-tax on 90-some million of average equity capital, or something of the sort. So it's a fabulous record.

But Encyclopedia Britannica, as you probably know, ran at a loss last year. The encyclopedia business has been very — has been poor. Could be due to electronic competition, could be due to recruiting problems for salespeople. Obviously, it can be a combination of many factors.

If we knew the answer, we'd have — you wouldn't be seeing those figures right now. But it is a top item of attention for Ralph. He takes anything that's not performing as well as before very seriously. And we will see what happens.

But I don't have a prediction on it. I wish I knew the answer. I don't see any variables to, in any intelligent way, tell you or — we put in the report the best we could do on that.

The profitability has, like I say, has been pretty good. But obviously, current trends of new sales will catch up with us at some point, unless we boost unit sales.

I don't think our market share, if you look at print encyclopedias, has fallen. But I can't be sure of that, but I think that's probably true. But there are an awful lot of encyclopedias going out there as part of a bundled product with computer sales.

3. Breaking up Berkshire wouldn't help

WARREN BUFFETT: How are we going to do this, is there?

VOICE: We got three now.

WARREN BUFFETT: OK, I'll let you hand the mic to whomever, you —

VOICE: (Inaudible) three.

AUDIENCE MEMBER: Lee again, from Palo Alto. By Omaha standards you are a relatively young man.

And every year, you point out that Berkshire's size now precludes you from making the great, relatively small trades which made your reputation.

How much thought have you given to breaking up Berkshire into smaller entities?

WARREN BUFFETT: How much what?

AUDIENCE MEMBER: How much thought have you given into breaking up Berkshire into smaller entities, which would allow you to make those nice, small, wonderful trades that you made from the beginning?

WARREN BUFFETT: It wouldn't do any good to break into smaller entities, because I'd still own, you know, we'd still have 10 billion-plus of capital to be responsible for, wherever it would be.

So, the — we could distribute it out to the shareholders, and let them make their own decisions, obviously. And any time we thought that we weren't going to get more than a dollar of value per dollar retained, that, obviously, would be the course to follow.

But there's no magic to creating multiple little — I mean, we could call Berkshire Two, Berkshire Three, Berkshire Four, but you still got the problem. There's $10 billion to invest, and it doesn't really solve anything.

Charlie, do you have any thoughts on that?

CHARLIE MUNGER: No, the — Berkshire is incredibly decentralized, in the — in terms of power and decisions resting in the operating divisions. In terms of the marketable securities, it's incredibly centralized.

And so far, we have not had any big penalty from not being able to do the things that we did when we were young. Eventually we will reach the penalty.

WARREN BUFFETT: Yeah, I think we're — there's no question we could earn higher percentage returns working with $100,000, though, than $10 billion. But, yeah — but it hasn't hurt us as much as we thought it would, as size has increased.

But your universe of opportunity shrinks. But it shrinks no matter — I mean, you can set it up in 20 bank accounts or one bank account, but you still — the universe still has to fit the 10 billion, in aggregate.

4. "Absolutely sensational job" by General Dynamics management

WARREN BUFFETT: Now, how are we doing this? Do we have another zone over there? Yeah.

AUDIENCE MEMBER: Michael Bunyaner (PH), New York City.

Two questions. One, last year you discussed in your annual report your investment in General Dynamics. And you also gave your proxy to the company and its management. This year, it appears you have sold the stock.

WARREN BUFFETT: This year, what?

AUDIENCE MEMBER: This year, it appears that you have sold the stock in General Dynamics.

What has changed that you sold 20 percent of your stake? This is question number one, and I have number two.

WARREN BUFFETT: Probably inappropriate to be talking about what we're buying or selling, except to the extent that we make a public — have to make a public announcement, which, on something like General Dynamics, we've got 13G requirements if we change by more than 5 percent.

And we also have — as long as we own more than 10 percent — we have monthly reporting requirements under Form 4.

We think the management of General Dynamics has done an absolutely sensational job.

Obviously, also it isn't the kind of business, basically, that we have a 20-year view on, or something of the sort. So, it's — the shareholders of General Dynamics have been extraordinarily well-served by the management of that company. And we've — we're thankful, because we prospered accordingly.

AUDIENCE MEMBER: But should I take from this comment that you have changed your view about the business itself?

WARREN BUFFETT: Pardon me?

AUDIENCE MEMBER: Should I take from your comment that you have changed your view about the business itself?

WARREN BUFFETT: No, no. I think you take my comments as saying just what I've said. (Laughs)

AUDIENCE MEMBER: OK. (Laughter)

Question number two, could you tell me —

WARREN BUFFETT: I think we want to give people a chance around the room, and then when, in the zone you're in, when a second question comes along, it will be fine. But we want to get as many people in this hour as we can, because this is the hard core here.

5. No encouragement for short-term stockholders

WARREN BUFFETT: Zone 1?

AUDIENCE MEMBER: It appeared to me that in 1993 the variation between the stock price for the high and the low was much greater than years in the past. Would you mind commenting on that?

WARREN BUFFETT: Well, there was more volatility in the price of Berkshire last year. And as I put in the annual report, the stock overperformed the business last year.

Now, over any 10 or 20 or 30-year history, every year the stock is going to perform a little differently, at least, from the business. I mean, it may slightly underperform, or slightly overperform.

We would prefer that those variations be as small as possible. But there was more variability last year than historically's been the case. Although we've had one or two other — we had a few years like that. We —

Our best way to handle that is to give all the information we can to shareholders and prospective shareholders, and follow policies that we think will induce the investment-oriented with long time horizons to join us, and not to encourage other people. But, occasionally — you know, we can't guarantee that result.

One of the things that was interesting to me, I don't know whether it was three months ago or when, but I happened to be talking to the [NYSE] specialist, terrific specialist, Jimmy Maguire. He had to leave, but he was here earlier in the session.

And I think, at the time, the stock was around 16,000 or something like that. And he had some rather significant stop-loss orders on the books at 15-5, or thereabouts, involving some hundreds of shares.

And that to me is a signal that, you know, we have some people that are — in my view — are not really the kind of owners that we would like to attract. Because why somebody wants to put in an order to sell something for 15,500 that they don't want to sell at 16,000 is beyond me, but — (Laughter)

The idea of people using stop-loss orders with Berkshire, obviously — it tells me that we've got some people in that are using it as trading vehicle of some sort, or have some totally non-investment-type calculations in their mind.

I don't think we have very many of them. But obviously, if we have enough people like that, you will have a more volatile stock than if you have a whole bunch of people who look at it as something that they're going to hold for the rest of their life.

And the stock did go down at that time and hit 15,500. And there were — that — I think it was close to 300 shares, which is 4 1/2 million dollars' worth of stock.

And somebody made a decision, apparently, that they — or some small number of people — made a decision that they wanted to sell something at 15,500 that they could have sold for 16,000. The lower it went, the better they liked it, apparently. I mean, the better they liked the sale. (Laughter)

Which, you know, has always struck me as like having a house that you like, and you're living in, and, you know, it's worth $100,000 and you tell your broker, you know, if anybody ever comes along and offers 90, you want to sell it. I mean, it doesn't — (laughter) — make any sense to me.

But it has — I would say that there's been some small — I think, relatively small — tendency for people to get — relatively few people — but to get more interested in the price of the stock in terms of — and thinking of it in terms of whether it's going to go up or down in the next six months, than might formerly have been the case.

I think we're unusually well-blessed in that respect, in that we've got people who basically want to own it for a very long time.

But to the extent that you get people who were owning it because they think the stock market's going to go up, or something of that sort's going to happen, that is not good news from our standpoint, and it will increase the volatility in it.

We will do nothing to encourage that.

6. Berkshire benefits when the stock market falls

WARREN BUFFETT: Zone 2?

AUDIENCE MEMBER: Yes, Mr. Buffett, Steve Lang (PH) from Toronto.

I was just curious about when you were saying that one of the best things that could happen to shareholders is the — the market goes down and you're able to buy good businesses at foolish prices.

And then a little on, you were saying that we could judge your ability to do what it is that you feel you should be doing by how much cash you have in the account at any given point in time, and —

WARREN BUFFETT: By what?

AUDIENCE MEMBER: By the amount of cash that you have in the account. In other words, I guess, what you feel you're supposed to be doing is investing the cash in good businesses.

So I'm just wondering about that kind of dichotomy. Where does the cash come from if the market does go down, if you've been successful in your first ability? Would that be from the cash flow on the operations of the business from the float?

WARREN BUFFETT: Yeah.

AUDIENCE MEMBER: Is that —?

WARREN BUFFETT: Yeah.

AUDIENCE MEMBER: So really, the success of the company then is, to some degree, the fact that you're able to dollar-cost average into the market on an ongoing basis? Is that right?

WARREN BUFFETT: Well, it isn't that precise. But A, we do generate cash in considerable amounts, so that we will not husband cash, simply because we think the market's going to go down, in order to buy something.

But obviously, as cash comes in, we're always looking for things to do. And the cheaper that the market is generally, the more likely it is that we will find something that we understand and that we like, and that the price will be attractive, and that we will do it.

But it isn't like we can change around the whole portfolio then, because that doesn't gain us anything. I mean, we'd be selling things at lower prices to buy things at lower prices.

But to the extent that we have net cash coming in — which we do, and which we will have — on balance, we're, you know, we're adding to our businesses at more attractive prices than would be the other case.

And it's no prediction on any given company. I mean, whether it's Gillette or Coke, or anything. It might be something we already own, it might be something we don't own. But we welcome the chance to buy more shares.

We're not wishing it on anybody. But if you asked us next month whether Berkshire would be better off if the whole stock market were down 50 percent or where it is now, we would be better off if it was down 50 percent, whether we had any cash on hand now or not, because we would be generating cash to buy things.

7. Salomon's compensation: "Far from ideal"

WARREN BUFFETT: Zone 3?

AUDIENCE MEMBER: Byron Ransdell (PH) from Raleigh, North Carolina. Thanks for your hospitality to this weekend.

WARREN BUFFETT: Well, we thank you for coming, too.

AUDIENCE MEMBER: My question concerns Salomon, Inc., and more specifically, Salomon Brothers. I know that you were on the board of directors, I think, from ’87 to the current time. Very much interested in compensation there, and maybe on the compensation committee.

Between 1987 and 1992, Salomon’s financial results were quite dismal in a very lumpy way, but overall, quite dismal.

In your opinion, if the compensation had been rational during this time, would Salomon have shown results that would make it a quite decent business?

WARREN BUFFETT: Would Salomon — if the compensation —

CHARLIE MUNGER: If the past compensation —

WARREN BUFFETT: — had been more rational —

CHARLIE MUNGER: — decisions had been more rational, ’87 to the current time, would Salomon have done better? Yeah, was that it?

AUDIENCE MEMBER: Yes, sir.

WARREN BUFFETT: Well, I would — yeah, I would say that, if the present people and the present compensation philosophy — which allows for very large payments for very large results — I think the company would have done better, yeah.

It — you’re going to see very big numbers paid in Wall Street. That’s the nature of it. The trick is to pay them only when you’re getting very big results for the owners. I mean, it — there’s no way you’re going to pay numbers that look like numbers in other industries, and get great results for owners.

But if you pay these big numbers, I think you should be getting very good results for owners.

And there — the old system was not — I mean, it wasn’t totally off the mark on that. But it was far from an ideal system, in my view.

8. Unlikely to write put options on Coca-Cola again

WARREN BUFFETT: Zone 1?

AUDIENCE MEMBER: Warren, I have one question.

Last year you were using Coca-Cola puts as a way to increase income, and conversely, if they were exercised, as a way of increasing your position. Do you still use puts in this type on investments you wish to add to?

(BREAK IN RECORDING)

WARREN BUFFETT: — five million shares, as I remember, of Coke sometime in the early fall or thereby — I don't remember exactly — last year. And the puts, I think the premium was around 7 1/2 million dollars, and they were priced around 35.

We have not done that very often, and we're unlikely to do very much of it. For one thing, there are position limits on puts, which don't apply to us, but they apply to the brokers for which we do them. And those position limits were not clear before that. But we could probably write puts on that same amount by doing it through a bunch of different brokers.

It's not something we're really very likely to do. I was happy to do it, and in that particular case, we made 7 1/2 million dollars.

But we're better off, probably — if we like something well enough to write a put on it, we're probably better off buying the security itself, and particularly since we can't do it in the kind of quantities that really would make it meaningful to Berkshire.

There are securities I would not mind writing puts for 10 million shares or something, but I — that probably — it's probably allowable for us to do it. It's not allowed — we'd probably have to do it through multiple brokers to get the job done.

And on balance, I don't think it's as useful a way to spend my time as just looking for securities to buy outright.

Charlie, you have anything?

CHARLIE MUNGER: No.

9. Don't believe reports on what we're buying or selling

WARREN BUFFETT: Zone 2?

AUDIENCE MEMBER: Mr. Buffett, I'm from West Point. And my name is Rogers.

A couple of months ago, there were stories in The World-Herald that Berkshire Hathaway had taken a large position in Philip Morris, and UST. But in your annual report, I don't see anything about that. Can you comment?

WARREN BUFFETT: Yeah, I would say, in the last two years maybe — I'm just approximating — I've probably seen reports in either The Wall Street Journal, or USA Today — maybe picked up by The Associated Press, or in The Herald, but in papers of some significance — I've probably seen stories that we were buying maybe any one of 10 companies in aggregate over that period of time. I would say a significant majority were erroneous.

We don't correct the erroneous ones, because if we don't correct the erroneous ones — if we correct the erroneous ones, and don't say anything about the correct ones, in effect we're identifying the correct ones, too.

So we will never comment on those stories, no matter how ridiculous they are.

And it's interesting because, you know, they keep getting printed. And frankly, from our standpoint, the fact that most of them are inaccurate is probably useful to us. We don't do anything to encourage it, but it — the fact that people are reading that we are buying A, B, C, or X, Y, Z when we aren't — you know, that's — I don't think people should be buying stocks because they're reading in the paper that we're buying something. But if they do, they may get cured of it at some point.

Maybe the newspapers will even get cured of writing the stories when they don't know, you know, what the facts are.

But it's something we live with, and we'll probably continue to live with.

And I would say that based on history, if you read something about us buying or selling something, other than through reports we've filed with the SEC or regulatory bodies, the chances are well over 50 percent — that I can tell you, based on history, is correct — well over 50 percent that it's wrong.

10. Unlikely Berkshire will be a Dow or S&P 500 stock

WARREN BUFFETT: Zone 3?

AUDIENCE MEMBER: Do you expect that Berkshire will become one of the Standard & Poor 500 stocks, or a Dow Jones stock?

WARREN BUFFETT: Well, I think it's unlikely it ever becomes a Dow Jones stock.

I don't know what the criteria are for the S&P 500. But I imagine there's some reason why we don't fit. I don't know whether they have questions about number of shares outstanding or — I've never checked with S&P.

I wouldn't be surprised if we have the largest market capitalization of any company that isn't in the S&P, although I don't know that. But they may have some criteria that preclude Berkshire being part of it.

I've always thought it would be very interesting, for those of you who like to think about such things, that if we were part of the S&P 500, and enough people became indexed so that 60 percent of the market was indexed, and if Charlie and I wouldn't sell, which we wouldn't, it'd be an interesting proposition as to how the index funds would ever get their 60 percent if they tried to replicate the S&P.

It'd be — I don't know whether they have rules even about concentration of ownership. That same line of thinking might have applied to Walmart, or some company.

Because just take the extreme example of a company that had 90 percent of its stock owned by one individual, and 12 percent of the money in the market were indexed, and the 90 percent wouldn't sell, it would bring back the Northern Pacific Corner or something of the sort.

In any event, I don't think that's going to be a problem. And I don't think we are going to end up being in either index, so —

11. Diversify if you don't understand businesses

WARREN BUFFETT: Yeah, zone 1?

AUDIENCE MEMBER: Mr. Buffett, my name is Aaron Morris (PH). I'm from California.

What I wanted to know was how you think about how large a position you're willing to take in a given security, both in your case, where you have new cash coming in that you can invest, and in the case of an investor, where they have a fixed amount of capital, and they're trying to decide what's the most (inaudible) security that they really love?

WARREN BUFFETT: Well, Charlie and I have — probably at our present size, we will never find anything that we get as much money into as we want. Don't you think that's probably true, Charlie? If we really like it?

CHARLIE MUNGER: Yeah, I think that's quite likely.

WARREN BUFFETT: Yeah, so we will probably never hit the limit. We would love to. We'd love to find something we felt that strongly about, and occasionally we do.

But we won't get as much money into it as we would wish, or as if we were running a million dollars of our own money or some number like that, so —

We are willing to put a lot of money into a single security. When I ran the partnership, the limit I got to was about 40 percent in a single stock. I think Charlie, when you ran your partnership, you had more than 40 percent in —

CHARLIE MUNGER: Sure. (Laughter)

WARREN BUFFETT: And we would do the same thing if we were running smaller partnerships, or our own capital were smaller and we were running that ourselves.

Because, no, we're not going to do that unless we think we understand the business very well, and we think the nature of the business, what we're paying for it, the people running it, and all of that lead up to virtually no risk, and —

But you find those things, occasionally. And we would put — assuming it were that much more attractive than the second, and third, and fourth choices — we would put a big percentage of our net worth in it.

We only advise you to do that — well, we probably don't advise you to do it all, maybe — but we would only advise you to do it, if you're doing it based on your conclusions about — your own ideas of value, and something that you really feel you know enough to buy the whole business, if your funds were sufficient, and it was being offered to you. You ought to really understand the business.

But people do that all the time, incidentally, in private businesses, which have got terrible prospects. I mean, they buy dry cleaning establishments, or filling stations, or whatever, and they put very high —franchises of some kind — they put a very high percentage of their net worth into something — a business that's very risky, basically. I mean, it —

People put all their money in a farm, you know. It's a business. It's subject to all kinds of business risk.

So it's not crazy, if you understand the business well, and if the price is sufficiently attractive, to put a very significant percentage of your net worth in. If you don't understand businesses, then you're better off diversifying and fairly widely diversifying.

Zone — go ahead. Sorry

CHARLIE: Berkshire has a substantial shareholder whose father accumulated the original position, and when he died he left a very large estate, practically all of which was in two securities, Berkshire and one other outstanding company.

A bank was co-trustee. And the bank trust officer said you've got to diversify this. And, you know, it was a very large estate.

And the young man who was co-trustee with the bank said, “Well,” he says, “you know, if my father believed the way you do, he might have been a trust officer in a bank instead of — (laughter) — leaving this large estate.” (Applause)

And that young man holds the Berkshire to this day. And I suppose the bank is still giving the same advice. (Laughter)

12. We don’t like to “give you our answers” on Coca-Cola

WARREN BUFFETT: Zone 2?

AUDIENCE MEMBER: Mr. Buffett, this is Chuck Peterson (PH) from Omaha.

And I was just wondering if you could comment on the Coca-Cola Company — you haven’t really talked about it too much today — in regards to what you foresee over the next five years, the earnings per share growth, and where this growth is, perhaps, going to come from.

WARREN BUFFETT: Was that the question, about the growth of Coke?

CHARLIE MUNGER: Yeah.

WARREN BUFFETT: You really have to come to your own conclusion.

Coca-Cola Company writes — their annual reports are extremely good. I mean, they’re very informative. You know, you —

My guess is that, at least, if you read a few of the reports, you’d absolutely know as much about the Coca-Cola Company as I would.

But in the end, you have to make your own decisions about growth potential, profitability potential, and all that.

But the one thing I can assure you is that, probably, if you spend a relatively small amount of time on it, the facts that you will have available to you for making a decision on that question will be just as good, essentially, as the facts you’d get if you’d worked at the Coca-Cola Company for 20 years, or if you were a food and beverage analyst in Wall Street or anything of the sort.

That’s the kind of businesses we like to look at, are things that we think we can understand that way. And they’re also businesses that, usually, I think you could understand that way.

But we don’t like you to give you our answers. I mean, that would not be a good idea.

13. Allianz deal was “close to a wash”

WARREN BUFFETT: Zone 3?

AUDIENCE MEMBER: David — I'm sorry — David Swab (PH) from Austin, Texas.

I have a question pertaining to the convertible bonds that were outstanding for about four years.

Any thoughts on, if you're a teacher, to grade if that was a good deal, bad deal, how the money was employed compared to the cost of getting out of the bonds? Any thoughts?

WARREN BUFFETT: Charlie what? Did you get that?

CHARLIE MUNGER: He wants to know if you think, in retrospect, your deal with Allianz was a good deal for Berkshire.

WARREN BUFFETT: No, I would say that if I knew everything at the time that we did the Allianz deal — which was a convertible shareholder coupon debenture — if I knew everything now — then — that I know now, would we have done it? Probably pretty close. We had relatively few bonds converted when we called — when he called them. And so — that — it really wasn't a negative in that sense.

But if we'd had more — we could have easily had a lot more converted. And that would not have been so good, obviously, if we'd ended up selling a lot of stock at 11,800 or whatever it was.

It's very hard to measure exactly what we did with the 400 million or so that we took in at the time. So, money being fungible, separating that 400 million from other resources to measure the — what happened on the plus side from having the money — is hard to do.

But my guess is, if you could play the whole hand over again, it probably was maybe a tiny minus to have issued them. What do you think, Charlie?

CHARLIE MUNGER: It's certainly close to a wash.

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: Now, you could ask about USAir, and that is one we would have been well to duck. (Laughter)

WARREN BUFFETT: And I might say Charlie had nothing to do with that decision. (Laughter) He didn't even know about it till I did it. And when he knew about it, hmmm. (Laughter)

14. "Size is a disadvantage" in buying and selling

WARREN BUFFETT: Zone 1?

AUDIENCE MEMBER: Mr. Buffett, I'm Joe Sirdevan from Toronto.

With respect to Berkshire's non-permanent, but large — and therefore, illiquid — holdings, what is your strategy for managing market impact on sales, given the intense scrutiny that Berkshire's under by the market?

WARREN BUFFETT: I didn't get that either. You get that?

CHARLIE MUNGER: I'm not hearing that very well.

WARREN BUFFETT: Yeah, I don't know whether you're too close to the mic — we're having a little trouble on that.

CHARLIE MUNGER: Speak a little more slowly.

WARREN BUFFETT: Or maybe the monitor can repeat that and — would you repeat the question?

AUDIENCE MEMBER: Sorry. Just with respect to Berkshire's large non-permanent holdings that are, therefore, illiquid, I'm just wondering what your strategy is for managing market impact when you do decide to sell portions of those holdings, given the intense scrutiny you're under?

WARREN BUFFETT: Yeah, question about the things we might sell, and what's going to happen to the market when we sell them.

That depends. I mean, it can be a very significant impact. It can be a negligible impact.

And it depends on market conditions, it depends on whether we might sell in a couple of large blocks to some institutions, it depends on — it could be, you know, there could be a tender off or something of the sort we would sell through. So, it's hard to measure.

But it is a disadvantage. Size is a disadvantage, you're absolutely correct in the basic point, both in buying and in selling. And we don't know any way around that.

We allow for it, in terms of what we expect, you know, the kind of possibilities we need to see. And we do — we sell so infrequently, that it's not a crusher of a negative point, but it's a negative we have that you do not.

15. No key man insurance for Buffett and Munger

WARREN BUFFETT: Zone 2?

AUDIENCE MEMBER: My name is Anna (inaudible). I'm from Roanoke, Virginia.

Does Berkshire Hathaway or any of its subsidiaries have key man insurance on you and Mr. Munger?

CHARLIE MUNGER: Does Berkshire have key man insurance on —

WARREN BUFFETT: Oh, no. No. We have no life insurance, to my knowledge, on anyone except the maybe standard — the group life contracts people have. We have no key man insurance.

It really doesn't — it wouldn't be material.

I mean, that if we have a market value of 18 billion or something like that, if it really didn't — if it — a one — if it made a 1 percent difference, it'd be $180 million.

And basically, the math of intelligently selling insurance is better than the math of intelligently buying insurance. (Laughter and applause)

16. Guinness-VNMH restructuring was "logical"

WARREN BUFFETT: Zone 3?

AUDIENCE MEMBER: Mr. Buffett, I'm Barry Siskind (PH) from Mesa, Arizona. Long-time admirer of yours. Question pertains to Guinness.

I remember reading in a publication I greatly respect, Outstanding Investor Digest by [editor] Henry Emerson in New York, that back in — I think it was '58 or '59, you made an investment in Cuba, decided to never to make an investment outside the United States again at that time.

Have subsequently invested in Guinness. I'm a fellow investor in Guinness. I've invested in Guinness for — and its sister company, Louis Vuitton Moët Hennessy — for over five years. And I'm very happy with those investments, by the way.

There's been a restructuring, as you know, of the Guinness-LVMH relationship, where Guinness no longer owns 24 percent of LVMH. Rather, it owns only its distilling, or I should say, alcoholic beverage-related businesses —

WARREN BUFFETT: The Moët Hennessy part.

AUDIENCE MEMBER: Right, the Moët Hennessy part.

The other parts of LVMH are showing better results these days, namely the Louis Vuitton luggage, as well as the Christian Dior perfume. They've also expanded into the newspaper business this past year, a business that you understand.

Do you intend to look at the possibility, first of all, of participating in those businesses that you no longer own now — with the restructured Guinness-LVMH deal — through some other form?

And the second question relates to the currency risk inherent in the Guinness investment, having bought it at about $1.80, as you mentioned, pound sterling now down to about $1.48.

The cost of hedging foreign currency through the FX has diminished through the combination of lower interest rates in the U.K., and higher interest rates, most recently in the U.S., to just about zero.

I take it we're all investors in companies, not speculators in currencies. So, the second part of the question is, do you intend to do anything about the currency risk portion of that investment?

WARREN BUFFETT: Well LVMH, which as you mentioned was 24 percent owned by Guinness — you know, that's one of thousands of securities that we could be a buyer or a seller of. So, I really don't want to comment on LVMH's specific attractiveness, or lack thereof.

And Guinness, I think what Guinness did was quite logical. I mean, their interest in that operation was basically through the distribution advantages that it gave to Guinness's own brands around the world, to be hooked up with Moët Hennessy, and vice versa. So, I think what they did was logical.

You can — the question of the exchange rate and all of that — the exchange rate, in terms of what they got in the spirits business, versus what they gave up in the luggage business, as in Christian Dior and a few things. You can form your own opinion on that.

But I think the logic was sound. But in terms of whether we want to be in LVMH by itself, that's like any other security, which we really can't answer.

17. Berkshire doesn't hedge currencies

WARREN BUFFETT: Second question related to —

CHARLIE MUNGER: Hedging.

WARREN BUFFETT: Hedge. Yeah, the hedging of currency —

CHARLIE MUNGER: Do we hedge?

WARREN BUFFETT: The answer to that is we don't. And Coca-Cola, as I mentioned, gets 80 percent of their earnings from a variety of currencies, the yen and the mark being two very important ones. They're going to be getting a very high percentage five years from now, 10 years from now.

They do certain currency transactions, but it's a practical matter. If you own Coca-Cola, you own a bunch of foreign bonds with coupons on them, denominated in local currencies, that go on forever.

Now, should you try and engage in currency swaps on all those coupons — you don't know what those coupons are yet, because you don't know how much they're going to earn in Japan or Germany, but you do know it's going to go on for decades, and it's — they're going to be very significant sums.

Should you try and engage in a whole bunch of currency swaps to go on out and convert all that stream into dollars or anything?

We basically don't think it's worth it. We don't think our opinion on currencies is any good. We don't think — we think the market probably know — well, we know it knows as much about it — it probably knows more about currencies, but it — we don't know — we do not know more than the market does about currencies.

So there are costs to hedging. And even though interest rate structures may cause the curve to look flat going out forward, so that, in effect, there's no contango on it, there's still the cost — there are costs in it. Now, it's a relatively efficient market, so that they're not huge.

But we see no reason to incur those costs with what we regard as a — totally, a 50-50 proposition. And it really doesn't go out that far anyway. I mean, we could do it for a couple of years.

But if you take that — the way we look at businesses, being the discounted flow of future cash out between now and Judgment Day, we can't really hedge that kind of a risk anyway. We could keep rolling hedges, but there's a cost to it that we don't want to incur.

We don't — we wouldn't worry a whole lot about whether some portion of our earnings, whether it's from Guinness, whether it's from Coke, whether it's from Gillette, are denominated at some mixture of marks, and pounds, and yen, and dollars, or whether they're all in dollars.

We'd slightly prefer if it were all in dollars, but we don't lose sleep over the fact that it may be coming from a mix of currencies like that. We wouldn't like it, in terms of, obviously, some very weak currencies.

18. Insurance intrinsic value far exceeds book value

WARREN BUFFETT: Zone 1?

AUDIENCE MEMBER: Lawrence Grawning (PH), Mill Valley, California.

On page 13 of the annual report, in — talking about the insurance operation, you say that it possesses an intrinsic value that exceeds its book value by a "large amount — larger, in fact, than is the case at any other Berkshire business."

To refine an earlier question that was asked, could you tell me whether you mean that it is larger in — by a percentage or in absolute dollars, that is —

WARREN BUFFETT: By absolute dollars. And —

AUDIENCE MEMBER: That's what you're referring to?

WARREN BUFFETT: Yeah, by absolute — it's very hard to stick a percentage figure on the insurance business, because we have so much capital in there that —

And then — and we have other businesses. I think that the — we've got businesses with a book value of in the tens of millions that are worth in the many hundreds of millions. So, you couldn't apply that to the insurance company (Inaudible). So, it's absolute dollars.

But in terms of absolute dollars, we think the excess of intrinsic value over carrying value — at least I do — is substantially greater for the insurance business than any other business we own.

Charlie, do you have any —

CHARLIE MUNGER: No —

WARREN BUFFETT: — thoughts on that?

CHARLIE MUNGER: — that's exactly right.

19. No concerns on Coca-Cola succession

AUDIENCE MEMBER: Joe Little (PH), Vancouver, Canada.

Does the management succession issue for the top job at Coca-Cola concern you?

WARREN BUFFETT: Management picture, you'd do what with the —?

AUDIENCE MEMBER: The management succession issue over the next several years.

WARREN BUFFETT: Oh, yeah.

AUDIENCE MEMBER: The top job. Does that concern you?

WARREN BUFFETT: At Coca-Cola —

AUDIENCE MEMBER: Yeah.

WARREN BUFFETT: I think any announcement that — from that would come with — from Coca-Cola.

CHARLIE MUNGER: He said do you like it?

AUDIENCE MEMBER: Does it concern you?

CHARLIE MUNGER: Does it concern you?

WARREN BUFFETT: Oh, I'm not concerned at all, no. No, Coca-Cola is very well managed. (Laughs)

20. Salomon CEO's $24M bonus target "hellishly hard to hit"

WARREN BUFFETT: Zone 3?

AUDIENCE MEMBER: Chris Stavrou (PH) from New York.

According to the latest Salomon Brothers proxy, if [Chairman and CEO] Deryck [Maughan] earns 30 percent on allocated equity of Salomon Brothers, provided that that's at least 10 percent above the return for competitors, he could earn a bonus of $24 million.

My question is whether that return number is reduced by a charge for preferred dividends?

WARREN BUFFETT: I, Charlie, do you remember on the comp committee —?

CHARLIE MUNGER: I can't remember the detail on that.

WARREN BUFFETT: I think the equity — I — my — I'm fairly sure, but I'm not positive, that the equity figure would include our preferred, but not non-convertible preferreds.

And it would apply to the earnings applicable to the — to our preferred plus common, but not — but it would be after dividends on non-convertible preferred.

But I, you know, I'm not on the comp committee, and I have not read the description that carefully.

CHARLIE MUNGER: Well, I am, and I can't remember. (Laughter)

But I will tell you, one thing I do remember about that, and that is a target which would be one — would be hellishly hard to hit.

WARREN BUFFETT: It'd be unbelievable. I mean —

CHARLIE MUNGER: That's is, you're talking about Babe Ruth —

WARREN BUFFETT: Squared.

CHARLIE MUNGER: Yeah, doing 150 home runs in a season instead of a — if that happens, you'll be very glad to pay the money. (Laughter)

WARREN BUFFETT: Very. Under either calculation, yeah. It really — but it, you know, I'm glad it's there. (Laughs)

I hope Deryck's paying attention to it.

21. Salomon is a "better company than it was some years back"

WARREN BUFFETT: Zone 1?

AUDIENCE MEMBER: Hi, I'm Chris Davis again, from New York.

I wanted to ask if you — I feel there's such a huge discrepancy between the valuation of some of your holdings versus others, in terms of the market valuation, in terms of price-to-earnings, price-to-book.

In your opinion, do the growth prospects of Salomon Brothers, or the quality — or your anticipation of your ability to clip the coupons at Salomon Brothers — justify such a dramatic discount to the growth prospects of Coca-Cola or Gillette, in terms of our ability as Berkshire shareholders to clip those coupons?

And if you could explain, or perhaps share your thoughts on why the market perception, if it is — justifies that distinction?

WARREN BUFFETT: Yeah, I'm not sure I can answer that question without getting into a discussion of the relative merits of the two companies — or the three companies — you mentioned, at these prices, but —

Salomon and Coca-Cola are obviously very different kinds of businesses, or Salomon and Gillette. And Charlie and I do our best to try to understand the businesses.

Obviously, it's easier to understand the future of a Coca-Cola than it is a Salomon. But that doesn't mean it's a better buy.

And what you see at any given time in our holdings is partly the historical accident, even, of when we bought, and when we had money available, and all that. But it reflected an affirmative decision at that point, obviously.

Our guess would be that the — you know, we would feel reasonably good about anything that we owned, in terms of the price at which we bought it, and the facts at the time we bought it. And the facts change over time.

Salomon, I think, is a better company now than it was some years back. But it's still in a business that's — can be very volatile, and it has a small amount — as does any investment banking firm and as any commercial banking firm — of systemic risk. I mean, you can't get rid of that.

Charlie, you want to?

CHARLIE MUNGER: No, I've got nothing to add.

22. Calculating intrinsic value

WARREN BUFFETT: Zone 2?

AUDIENCE MEMBER: Thank you. Sean Barry, Regina, Canada.

Mr. Buffett, you've indicated that most of us in this room could acquire a lot of the information that you and Charlie acquire through the annual reports. Yet you both also indicated that the GAAP rules, a lot of times, leave a little to be desired.

Could you perhaps give an indication as to how you and Charlie come up with the economic value, or the intrinsic value, of the businesses that you finally decide to invest in? And a little bit about the process that you go through with that? Thank you.

WARREN BUFFETT: Well, the — in the 1992 annual report, we discuss that a fair amount.

But the economic value of any asset, essentially, is the present value, the appropriate interest rate, of all the future streams of cash going in or out of the business.

And there are all kinds of businesses that Charlie and I don't think we have the faintest idea what that future stream will look like. And if we don't have the faintest idea what the future stream is going to look like, we don't have the faintest idea what it's worth, now. Now that —

So, if you think you know what the price of a stock should be today, but you don't think you have any idea what the stream of cash will be over the next 20 years, you've got cognitive dissonance, I guess, is what they call it. (Laughter) The —

So we are looking for things where we feel — fairly high degree of probability — that we can come within a range of looking at those numbers out over a period of time, and then we discount them back.

And we are more concerned with the certainty of those numbers than we are with getting the one that looks absolutely the cheapest, but based upon numbers that we don't have any — we don't have great confidence in.

And that's basically what economic value is all about.

The numbers in any accounting report mean nothing, per se, as to economic value. They are guidelines to tell you something about how to get at economic value.

But they don't tell you anything. It — there are no answers in the financial statements. There are guidelines to enable you to figure out the answer. And to figure out that answer, you have to understand something about business.

You don't have to understand a lot about mathematics. I mean, the math is not complicated. But you do have to understand something about the business.

But that's the same thing you would do if you were going to buy an apartment house, or a farm, or any other small business you might be interested in.

You would try to figure out what you are laying out currently, and what you are likely to get back over time, and how certain you felt about getting it, and how it compared to other alternatives. That's all we do, we just do it with large businesses, basically.

The accounting figures are very helpful to us, in the sense that they generally guide us to what we should be thinking about.

And of course, if we find numbers where it looks like people are taking the most optimistic interpretation of things that they can under GAAP and all of that, we get very worried about people who look like they massage the numbers in any way. And there are plenty of people that do.

23. Growth alone doesn't make a company a good investment

WARREN BUFFETT: Zone 3?

AUDIENCE MEMBER: I'm Howard Bask (PH). I'm from Kansas City.

When you are estimating a growth rate on a company (inaudible), a very predictable company, I imagine you apply a big margin of safety to it. What kind of rate do you generally apply? I mean, high single digits?

WARREN BUFFETT: In the margin of safety, or —

AUDIENCE MEMBER: What kind of growth rate would you, on a predictable company, might you —

WARREN BUFFETT: We are willing to —

AUDIENCE MEMBER: — stab at?

WARREN BUFFETT: — buy companies that aren't going to grow at all.

AUDIENCE MEMBER: OK.

WARREN BUFFETT: It — assuming we get enough for our money when we do it. So, it — we are not looking — we are looking at projecting numbers out, as to what kind of cash we think we'll get back over time.

But you know, would you rather have a savings — if you're going to put a million dollars in a savings account, would you rather have something that paid you 10 percent a year and never changed, or would you rather have something that paid you 2 percent a year and increased at 10 percent a year? Well, you can work out the math to answer those questions.

But you can certainly have a situation where there's absolutely no growth in the business, and it's a much better investment than some company that's going to grow at very substantial rates, particularly if they're going to need capital in order to grow.

There's a huge difference in the business that grows and requires a lot of capital to do so, and the business that grows, and doesn't require capital.

And I would say that, generally, financial analysts do not give adequate weight to the difference in those. In fact, it's amazing how little attention is paid to that. Believe me, if you're investing, you should pay a lot of attention to it.

Charlie?

CHARLIE MUNGER: I agree with that. But it's fairly simple, but it's not so simple it can all be explained in one sentence. (Laughter)

WARREN BUFFETT: Our — some of our best businesses that we own outright don't grow. But they throw off lots of money, which we can use to buy something else. And therefore, our capital is growing, without physical growth being in the business.

And we are much better off being in that kind of situation [than] being in some business that, itself, is growing, but that takes up all the money in order to grow, and doesn't produce at high returns as we go along. A lot of managements don't understand that very well, actually.

24. Capital allocation shouldn't be delegated

WARREN BUFFETT: Zone 1?

AUDIENCE MEMBER: Byron Wien from New York.

You said that you decentralized the operating decisions, but centralized the capital allocation decisions.

What kind of staff do you have in Omaha to help you with the capital allocation decisions and the stock selection decisions you make? Or do you and Charlie do that, pretty much, by yourselves?

WARREN BUFFETT: Yeah, we don't have any staff to help us on it. I mean, basically we tell them to mail all the money to Omaha — (laughter) — and then when we get there, we put our arms around it. (Laughs)

And we allocate all the capital ourselves. I mean, that is our job.

And we don't feel we should delegate, I mean, we wouldn't do it anyway. Our personalities aren't such that we would delegate our — allocating our own money to someone — letting somebody else allocate our own money.

But we feel that's our job. And it's interesting, and we've — I've written about this in the past — that that's an important job for most managements. There's some companies where it's not, but it's a — it usually is a very important job for most managements.

And if you take a CEO that's in a job for 10 years, and he has a business that earns, say, 12 percent on equity, and he's — and he pays out a third, that means he's got 8 percent per year of equity. I mean, when you think of his tenure in office, how much capital he's allocated, it's an enormous factor over time.

And yet, probably relatively few chief executives are either trained for, or are selected on, the basis of their ability to allocate capital. I mean, they get there through other routes.

So, I've said it's like somebody playing the piano all their life, and then getting to Carnegie Hall and they hand him a violin. I mean, it is a different function than most — than the route — than the functions that exist along the routes to the CEO's job at most companies.

And so many CEOs, when they get there, think they can solve it by either having a staff that does it, or by hiring consultants, or whatever it may be.

And in our view, that is — and that's a terrible mistake, because it's — it is, if not the key function of the CEO, it's one of two or three key functions at say 80 or 90 percent of all companies.

And if you can't do it yourself, you're going to make a lot of mistakes. You may make a lot of mistakes even if you do it yourself. But if you —

You know, you wouldn't want anybody in any other position of that importance in the company essentially saying, "I don't know how to do this, so I'm going to have somebody else do it," when it's their key responsibility. But that's the way it works in business.

And Charlie and I take responsibility for all capital allocation decisions, other than just, sort of, routine expenditures at the operating businesses. And we don't get into those at all.

I mean, if our managers are spending three or four million dollars a year on machinery — or if one of them is, I mean — on machinery, equipment, plants, new leases — we have no review process on that. We don't have a staff at headquarters. We don't waste the time to do that.

We think those people know how to allocate the money that relates to the actual operations of their business. We think, in terms of the capital that is generated above that, that that's our job.

Charlie, anything —?

CHARLIE MUNGER: I would say we have practically nobody at headquarters in Omaha. One of the reasons Warren shines up so well is, you know, he's being compared to practically nobody. (Laughter)

WARREN BUFFETT: I might say if — one interesting — when we're having this meeting, for example, I think there's one person there in the office. I mean, the rest of them are down here helping on the meeting. I mean, it —

CHARLIE MUNGER: Here we are, Warren and I are selling candy and encyclopedias, and so forth. The chief financial officer of Berkshire Hathaway is handling the microphones. I mean, this makes Southwest Airlines look like they don't understand —

WARREN BUFFETT: Cost control. (Laughter)

CHARLIE MUNGER: — cost accounting, yeah. It's a very old-fashioned place.

And by the way, speaking of hawking our merchandise, if any of you have safety deposit boxes full of Berkshire Hathaway certificates, and have children or grandchildren who don't have World Book in print in the house, you are making a very serious error.

That is a marvelous thing for — to have in the house with —

WARREN BUFFETT: And the discount only applies —

CHARLIE MUNGER: — full of young people.

WAWRREN BUFFETT: The discount only applies today — (laughs) — incidentally. I think that's right.

CHARLIE MUNGER: It is. That is, it may not be selling too well because of the current vogue for encyclopedias on computers. And by the way, those encyclopedias that are available are inferior compared to World Book, which is very user-friendly for children, and I like it that way myself. And —

WARREN BUFFETT: We —

CHARLIE MUNGER: That is one product you really ought to buy.

WARREN BUFFETT: We both use it, personally. I mean, I keep a set at the office, and a set at home. And I —

CHARLIE MUNGER: I give away more of that product —

WARREN BUFFETT: — I use it a lot.

CHARLIE MUNGER: — than other product that Berkshire Hathaway makes in any subsidiary. It's a perfectly fabulous human achievement. To edit a thing, to — that user friendly, with that much wisdom encapsulated. It is a — it's a fabulous thing.

25. Keynes: Great "wisdom" about investing

WARREN BUFFETT: Zone 2?

AUDIENCE MEMBER: (Inaudible) from Houston, Texas. From time to time, you have quoted John Maynard Keynes, the British economist.

So, I would assume that you have read the investment writings very extensively. What are two or three investment lessons, in your opinion, one can learn from that economist?

WARREN BUFFETT: Well, I forget which, I think it's chapter eight of "The General Theory," do you remember Charlie? Or is it chapter —

CHARLIE MUNGER: No.

WARREN BUFFETT: There's one chapter in "The General Theory" that relates to markets, and the psychology of markets, and the behavior of market participants and so on, that probably is, aside from Ben Graham's two chapters, eight and 20, in "The Intelligent Investor" — I think you'll find you'll get as much wisdom from reading that as anything written in investments. And you'll know it when you see it in "The General Theory."

It's a chapter that jumps out to you about securities and so on. And I — could be chapter eight, but I may be wrong on that. But I would recommend reading that.

Keynes and Graham, from vastly different starting points, came to the same conclusion at about the same time in the '30s, as to the soundest way to invest over time. They differed some on their ideas on diversification. Keynes believed in diversifying far less than did Graham.

But Keynes started off with the wrong theory, I would say, in the '20s and essentially tried to predict business cycles in markets, and then shifted to fundamental analysis of businesses in the '30s, and did extremely well.

And about the same time, Graham was writing his first material. I think Janet Lowe, in her book on Ben Graham, actually has a little correspondence that took place between Keynes and Ben. So I would advise you to read that.

And there's some letters of his that he — of Keynes' — that he wrote to co-trustees of life insurance societies, and colleges, and so on, that I think you'd find interesting, too.

SYNC TRANSCRIPT TO VIDEO

1994 Letter

BERKSHIRE HATHAWAY INC.

To the Shareholders of Berkshire Hathaway Inc.:

Our gain in net worth during 1994 was $1.45 billion or 13.9%. Over the last 30 years (that is, since present management took over) our per-share book value has grown from $19 to $10,083, or at a rate of 23% compounded annually.

Charlie Munger, Berkshire's Vice Chairman and my partner, and I make few predictions. One we will confidently offer, however, is that the future performance of Berkshire won't come close to matching the performance of the past.

The problem is not that what has worked in the past will cease to work in the future. To the contrary, we believe that our formula - the purchase at sensible prices of businesses that have good underlying economics and are run by honest and able people - is certain to produce reasonable success. We expect, therefore, to keep on doing well.

A fat wallet, however, is the enemy of superior investment results. And Berkshire now has a net worth of $11.9 billion compared to about $22 million when Charlie and I began to manage the company. Though there are as many good businesses as ever, it is useless for us to make purchases that are inconsequential in relation to Berkshire's capital. (As Charlie regularly reminds me, "If something is not worth doing at all, it's not worth doing well.") We now consider a security for purchase only if we believe we can deploy at least $100 million in it. Given that minimum, Berkshire's investment universe has shrunk dramatically.

Nevertheless, we will stick with the approach that got us here and try not to relax our standards. Ted Williams, in The Story of My Life, explains why: "My argument is, to be a good hitter, you've got to get a good ball to hit. It's the first rule in the book. If I have to bite at stuff that is out of my happy zone, I'm not a .344 hitter. I might only be a .250 hitter." Charlie and I agree and will try to wait for opportunities that are well within our own "happy zone."

We will continue to ignore political and economic forecasts, which are an expensive distraction for many investors and businessmen. Thirty years ago, no one could have foreseen the huge expansion of the Vietnam War, wage and price controls, two oil shocks, the resignation

of a president, the dissolution of the Soviet Union, a one-day drop in the Dow of 508 points, or treasury bill yields fluctuating between 2.8% and 17.4%.

But, surprise - none of these blockbuster events made the slightest dent in Ben Graham's investment principles. Nor did they render unsound the negotiated purchases of fine businesses at sensible prices. Imagine the cost to us, then, if we had let a fear of unknowns cause us to defer or alter the deployment of capital. Indeed, we have usually made our best purchases when apprehensions about some macro event were at a peak. Fear is the foe of the faddist, but the friend of the fundamentalist.

A different set of major shocks is sure to occur in the next 30 years. We will neither try to predict these nor to profit from them. If we can identify businesses similar to those we have purchased in the past, external surprises will have little effect on our long-term results.

What we promise you - along with more modest gains - is that during your ownership of Berkshire, you will fare just as Charlie and I do. If you suffer, we will suffer; if we prosper, so will you. And we will not break this bond by introducing compensation arrangements that give us a greater participation in the upside than the downside.

We further promise you that our personal fortunes will remain overwhelmingly concentrated in Berkshire shares: We will not ask you to invest with us and then put our own money elsewhere. In addition, Berkshire dominates both the investment portfolios of most members of our families and of a great many friends who belonged to partnerships that Charlie and I ran in the 1960's. We could not be more motivated to do our best.

Luckily, we have a good base from which to work. Ten years ago, in 1984, Berkshire's insurance companies held securities having a value of $1.7 billion, or about $1,500 per Berkshire share. Leaving aside all income and capital gains from those securities, Berkshire's pre-tax earnings that year were only about $6 million. We had earnings, yes, from our various manufacturing, retailing and service businesses, but they were almost entirely offset by the combination of underwriting losses in our insurance business, corporate overhead and interest expense.

Now we hold securities worth $18 billion, or over $15,000 per Berkshire share. If you again exclude all income from these securities, our pre-tax earnings in 1994 were about $384 million. During the decade, employment has grown from 5,000 to 22,000 (including eleven people at World Headquarters).

We achieved our gains through the efforts of a superb corps of operating managers who get extraordinary results from some ordinary-appearing businesses. Casey Stengel described managing a baseball team as "getting paid for home runs other fellows hit." That's my formula at Berkshire, also.

The businesses in which we have partial interests are equally important to Berkshire's success. A few statistics will illustrate their significance: In 1994, Coca-Cola sold about 280 billion 8-ounce servings and earned a little less than a penny on each. But pennies add up. Through Berkshire's 7.8% ownership of Coke, we have an economic interest in 21 billion of its servings, which produce "soft-drink earnings" for us of nearly $200 million. Similarly, by way of its Gillette stock, Berkshire has a 7% share of the world's razor and blade market (measured by revenues, not by units), a proportion according us about $250 million of sales in 1994. And, at Wells Fargo, a $53 billion bank, our 13% ownership translates into a $7 billion "Berkshire Bank" that earned about $100 million during 1994.

It's far better to own a significant portion of the Hope diamond than 100% of a rhinestone, and the companies just mentioned easily qualify as rare gems. Best of all, we aren't limited to simply a few of this breed, but instead possess a growing collection.

Stock prices will continue to fluctuate - sometimes sharply - and the economy will have its ups and down. Over time, however, we believe it highly probable that the sort of businesses we own will continue to increase in value at a satisfactory rate.

Book Value and Intrinsic Value

We regularly report our per-share book value, an easily calculable number, though one of limited use. Just as regularly, we tell you that what counts is intrinsic value, a number that is impossible to pinpoint but essential to estimate.

For example, in 1964, we could state with certitude that Berkshire's per-share book value was $19.46. However, that figure considerably overstated the stock's intrinsic value since all of the company's resources were tied up in a sub-profitable textile business. Our textile assets had neither going-concern nor liquidation values equal to their carrying values. In 1964, then, anyone inquiring into the soundness of Berkshire's balance sheet might well have deserved the answer once offered up by a Hollywood mogul of dubious reputation: "Don't worry, the liabilities are solid."

Today, Berkshire's situation has reversed: Many of the businesses we control are worth far more than their carrying value. (Those we don't control, such as Coca-Cola or Gillette, are carried at current market values.) We continue to give you book value figures, however, because they serve as a rough, albeit significantly understated, tracking measure for Berkshire's intrinsic value. Last year, in fact, the two measures moved in concert: Book value gained 13.9%, and that was the approximate gain in intrinsic value also.

We define intrinsic value as the discounted value of the cash that can be taken out of a business during its remaining life. Anyone calculating intrinsic value necessarily comes up with a highly subjective figure that will change both as estimates of future cash flows are revised and as interest rates move. Despite its fuzziness, however, intrinsic value is all-important and is the only logical way to evaluate the relative attractiveness of investments and businesses.

To see how historical input (book value) and future output (intrinsic value) can diverge, let's look at another form of investment, a college education. Think of the education's cost as its "book value." If it is to be accurate, the cost should include the earnings that were foregone by the student because he chose college rather than a job.

For this exercise, we will ignore the important non-economic benefits of an education and focus strictly on its economic value. First, we must estimate the earnings that the graduate will receive over his lifetime and subtract from that figure an estimate of what he would have earned had he lacked his education. That gives us an excess earnings figure, which must then be discounted, at an appropriate interest rate, back to graduation day. The dollar result equals the intrinsic economic value of the education.

Some graduates will find that the book value of their education exceeds its intrinsic value, which means that whoever paid for the education didn't get his money's worth. In other cases, the intrinsic value of an education will far exceed its book value, a result that proves capital was wisely deployed. In all cases, what is clear is that book value is meaningless as an indicator of intrinsic value.

Now let's get less academic and look at Scott Fetzer, an example from Berkshire's own experience. This account will not only illustrate how the relationship of book value and intrinsic value can change but also will provide an accounting lesson that I know you have been breathlessly awaiting. Naturally, I've chosen here to talk about an acquisition that has turned out to be a huge winner.

Berkshire purchased Scott Fetzer at the beginning of 1986. At the time, the company was a collection of 22 businesses, and today we have exactly the same line-up - no additions and no disposals. Scott Fetzer's main operations are World Book, Kirby, and Campbell Hausfeld, but many other units are important contributors to earnings as well.

We paid $315.2 million for Scott Fetzer, which at the time had $172.6 million of book value. The $142.6 million premium we handed over indicated our belief that the company's intrinsic value was close to double its book value.

In the table below we trace the book value of Scott Fetzer, as well as its earnings and dividends, since our purchase.

Year	**Beginning Book Value (1) (In $ Millions)**	**Earnings (2)**	**Dividends (3)**	**Ending Book Value (4) (1) + (2) – (3)**
1986	$172.6	$40.3	$125.0	$87.9
1987	87.9	48.6	41.0	95.5
1988	95.5	58.0	35.0	118.6
1989	118.6	58.5	71.5	105.5
1990	105.5	61.3	33.5	133.3
1991	133.3	61.4	74.0	120.7
1992	120.7	70.5	80.0	111.2
1993	111.2	77.5	98.0	90.7
1994	90.7	79.3	76.0	94.0

Because it had excess cash when our deal was made, Scott Fetzer was able to pay Berkshire dividends of $125 million in 1986, though it earned only $40.3 million. I should mention that we have not introduced leverage into Scott Fetzer's balance sheet. In fact, the company has gone from very modest debt when we purchased it to virtually no debt at all (except for debt used by its finance subsidiary). Similarly, we have not sold plants and leased them back, nor sold receivables, nor the like. Throughout our years of ownership, Scott Fetzer has operated as a conservatively-financed and liquid enterprise.

As you can see, Scott Fetzer's earnings have increased steadily since we bought it, but book value has not grown commensurately. Consequently, return on equity, which was exceptional at the time of our purchase, has now become truly extraordinary. Just how extraordinary is illustrated by comparing Scott Fetzer's performance to that of the Fortune 500, a group it would qualify for if it were a stand-alone company.

Had Scott Fetzer been on the 1993 500 list - the latest available for inspection - the company's return on equity would have ranked 4th. But that is far from the whole story. The top three companies in return on equity were Insilco, LTV and Gaylord Container, each of which emerged from bankruptcy in 1993 and none of which achieved meaningful earnings that year except for those they realized when they were accorded debt forgiveness in bankruptcy proceedings. Leaving aside such non-operating windfalls, Scott Fetzer's return on equity would have ranked it first on the Fortune 500, well ahead of number two. Indeed, Scott Fetzer's return on equity was double that of the company ranking tenth.

You might expect that Scott Fetzer's success could only be explained by a cyclical peak in earnings, a monopolistic position, or leverage. But no such circumstances apply. Rather, the company's success comes from the managerial expertise of CEO Ralph Schey, of whom I'll tell you more later.

First, however, the promised accounting lesson: When we paid a $142.6 million premium over book value for Scott Fetzer, that figure had to be recorded on Berkshire's balance sheet. I'll spare you the details of how this worked (these were laid out in an appendix to our 1986 Annual Report) and get to the bottom line: After a premium is initially recorded, it must in almost all cases be written off over time through annual charges that are shown as costs in the acquiring company's earnings statement.

The following table shows, first, the annual charges Berkshire has made to gradually extinguish the Scott Fetzer acquisition premium and, second, the premium that remains on our books. These charges have no effect on cash or the taxes we pay, and are not, in our view, an economic cost (though many accountants would disagree with us). They are merely a way for us to reduce the carrying value of Scott Fetzer on our books so that the figure will eventually match the net worth that Scott Fetzer actually employs in its business.

Year	Beginning Purchase Premium (In $ Millions)	Purchase-Premium Charge to Berkshire Earnings	Ending Purchase Premium
1986	$142.6	$11.6	$131.0
1987	131.0	7.1	123.9
1988	123.9	7.9	115.9
1989	115.9	7.0	108.9
1990	108.9	7.1	101.9
1991	101.9	6.9	95.0
1992	95.0	7.7	87.2
1993	87.2	28.1	59.1
1994	59.1	4.9	54.2

Note that by the end of 1994 the premium was reduced to $54.2 million. When this figure is added to Scott Fetzer's year-end book value of $94 million, the total is $148.2 million, which is the current carrying value of Scott Fetzer on Berkshire's books. That amount is less than half of our carrying value for the company when it was acquired. Yet Scott Fetzer is now earning about twice what it then did. Clearly, the intrinsic value of the business has consistently grown, even though we have just as consistently marked down its carrying value through purchase-premium charges that reduced Berkshire's earnings and net worth.

The difference between Scott Fetzer's intrinsic value and its carrying value on Berkshire's books is now huge. As I mentioned earlier - but am delighted to mention again - credit for this agreeable mismatch goes to Ralph Schey, a focused, smart and high-grade manager.

The reasons for Ralph's success are not complicated. Ben Graham taught me 45 years ago that in investing it is not necessary to do extraordinary things to get extraordinary results. In later life, I have been surprised to find that this statement holds true in business management as well. What a manager must do is handle the basics well and not get diverted. That's precisely Ralph's formula. He establishes the right goals and never forgets what he set out to do. On the personal side, Ralph is a joy to work with. He's forthright about problems and is self-confident without being self-important.

He is also experienced. Though I don't know Ralph's age, I do know that, like many of our managers, he is over 65. At Berkshire, we look to performance, not to the calendar. Charlie and I, at 71 and 64 respectively, now keep George Foreman's picture on our desks. You can make book that our scorn for a mandatory retirement age will grow stronger every year.

Intrinsic Value and Capital Allocation

Understanding intrinsic value is as important for managers as it is for investors. When managers are making capital allocation decisions - including decisions to repurchase shares - it's vital that they act in ways that increase per-share intrinsic value and avoid moves that decrease it. This principle may seem obvious but we constantly see it violated. And, when misallocations occur, shareholders are hurt.

For example, in contemplating business mergers and acquisitions, many managers tend to focus on whether the transaction is immediately dilutive or anti-dilutive to earnings per share (or, at financial institutions, to per-share book value). An emphasis of this sort carries great dangers. Going back to our college-education example, imagine that a 25-year-old first-year MBA student is considering merging his future economic interests with those of a 25-year-old day laborer. The MBA student, a non-earner, would find that a "share-for-share" merger of his equity interest in himself with that of the day laborer would enhance his near-term earnings (in a big way!). But what could be sillier for the student than a deal of this kind?

In corporate transactions, it's equally silly for the would-be purchaser to focus on current earnings when the prospective acquiree has either different prospects, different amounts of non-operating assets, or a different capital structure. At Berkshire, we have rejected many merger and purchase opportunities that would have boosted current and near-term earnings but that would have reduced per-share intrinsic value. Our approach, rather, has been to follow Wayne Gretzky's advice: "Go to where the puck is going to be, not to where it is." As a result, our shareholders are now many billions of dollars richer than they would have been if we had used the standard catechism.

The sad fact is that most major acquisitions display an egregious imbalance: They are a bonanza for the shareholders of the acquiree; they increase the income and status of the acquirer's management; and they are a honey pot for the investment bankers and other professionals on both sides. But, alas, they usually reduce the wealth of the acquirer's shareholders, often to a substantial extent. That happens because the acquirer typically gives up

more intrinsic value than it receives. Do that enough, says John Medlin, the retired head of Wachovia Corp., and "you are running a chain letter in reverse."

Over time, the skill with which a company's managers allocate capital has an enormous impact on the enterprise's value. Almost by definition, a really good business generates far more money (at least after its early years) than it can use internally. The company could, of course, distribute the money to shareholders by way of dividends or share repurchases. But often the CEO asks a strategic planning staff, consultants or investment bankers whether an acquisition or two might make sense. That's like asking your interior decorator whether you need a $50,000 rug.

The acquisition problem is often compounded by a biological bias: Many CEO's attain their positions in part because they possess an abundance of animal spirits and ego. If an executive is heavily endowed with these qualities - which, it should be acknowledged, sometimes have their advantages - they won't disappear when he reaches the top. When such a CEO is encouraged by his advisors to make deals, he responds much as would a teenage boy who is encouraged by his father to have a normal sex life. It's not a push he needs.

Some years back, a CEO friend of mine - in jest, it must be said - unintentionally described the pathology of many big deals. This friend, who ran a property-casualty insurer, was explaining to his directors why he wanted to acquire a certain life insurance company. After droning rather unpersuasively through the economics and strategic rationale for the acquisition, he abruptly abandoned the script. With an impish look, he simply said: "Aw, fellas, all the other kids have one."

At Berkshire, our managers will continue to earn extraordinary returns from what appear to be ordinary businesses. As a first step, these managers will look for ways to deploy their earnings advantageously in their businesses. What's left, they will send to Charlie and me. We then will try to use those funds in ways that build per-share intrinsic value. Our goal will be to acquire either part or all of businesses that we believe we understand, that have good, sustainable underlying economics, and that are run by managers whom we like, admire and trust.

Compensation

At Berkshire, we try to be as logical about compensation as about capital allocation. For example, we compensate Ralph Schey based upon the results of Scott Fetzer rather than those of Berkshire. What could make more sense, since he's responsible for one operation but not the

other? A cash bonus or a stock option tied to the fortunes of Berkshire would provide totally capricious rewards to Ralph. He could, for example, be hitting home runs at Scott Fetzer while Charlie and I rang up mistakes at Berkshire, thereby negating his efforts many times over. Conversely, why should option profits or bonuses be heaped upon Ralph if good things are occurring in other parts of Berkshire but Scott Fetzer is lagging?

In setting compensation, we like to hold out the promise of large carrots, but make sure their delivery is tied directly to results in the area that a manager controls. When capital invested in an operation is significant, we also both charge managers a high rate for incremental capital they employ and credit them at an equally high rate for capital they release.

The product of this money's-not-free approach is definitely visible at Scott Fetzer. If Ralph can employ incremental funds at good returns, it pays him to do so: His bonus increases when earnings on additional capital exceed a meaningful hurdle charge. But our bonus calculation is symmetrical: If incremental investment yields sub-standard returns, the shortfall is costly to Ralph as well as to Berkshire. The consequence of this two-way arrangement is that it pays Ralph - and pays him well - to send to Omaha any cash he can't advantageously use in his business.

It has become fashionable at public companies to describe almost every compensation plan as aligning the interests of management with those of shareholders. In our book, alignment means being a partner in both directions, not just on the upside. Many "alignment" plans flunk this basic test, being artful forms of "heads I win, tails you lose."

A common form of misalignment occurs in the typical stock option arrangement, which does not periodically increase the option price to compensate for the fact that retained earnings are building up the wealth of the company. Indeed, the combination of a ten-year option, a low dividend payout, and compound interest can provide lush gains to a manager who has done no more than tread water in his job. A cynic might even note that when payments to owners are held down, the profit to the option-holding manager increases. I have yet to see this vital point spelled out in a proxy statement asking shareholders to approve an option plan.

I can't resist mentioning that our compensation arrangement with Ralph Schey was worked out in about five minutes, immediately upon our purchase of Scott Fetzer and without the "help" of lawyers or compensation consultants. This arrangement embodies a few very simple ideas -

not the kind of terms favored by consultants who cannot easily send a large bill unless they have established that you have a large problem (and one, of course, that requires an annual review). Our agreement with Ralph has never been changed. It made sense to him and to me in 1986, and it makes sense now. Our compensation arrangements with the managers of all our other units are similarly simple, though the terms of each agreement vary to fit the economic characteristics of the business at issue, the existence in some cases of partial ownership of the unit by managers, etc.

In all instances, we pursue rationality. Arrangements that pay off in capricious ways, unrelated to a manager's personal accomplishments, may well be welcomed by certain managers. Who, after all, refuses a free lottery ticket? But such arrangements are wasteful to the company and cause the manager to lose focus on what should be his real areas of concern. Additionally, irrational behavior at the parent may well encourage imitative behavior at subsidiaries.

At Berkshire, only Charlie and I have the managerial responsibility for the entire business. Therefore, we are the only parties who should logically be compensated on the basis of what the enterprise does as a whole. Even so, that is not a compensation arrangement we desire. We have carefully designed both the company and our jobs so that we do things we enjoy with people we like. Equally important, we are forced to do very few boring or unpleasant tasks. We are the beneficiaries as well of the abundant array of material and psychic perks that flow to the heads of corporations. Under such idyllic conditions, we don't expect shareholders to ante up loads of compensation for which we have no possible need.

Indeed, if we were not paid at all, Charlie and I would be delighted with the cushy jobs we hold. At bottom, we subscribe to Ronald Reagan's creed: "It's probably true that hard work never killed anyone, but I figure why take the chance."

Sources of Reported Earnings

The table on the next page shows the main sources of Berkshire's reported earnings. In this presentation, purchase-premium charges of the type we discussed in our earlier analysis of Scott Fetzer are not assigned to the specific businesses to which they apply, but are instead aggregated and shown separately. This procedure lets you view the earnings of our businesses as they would have been reported had we not purchased them. This form of presentation seems to us to be more useful to investors and managers than one utilizing GAAP, which requires purchase

premiums to be charged off, business-by-business. The total earnings we show in the table are, of course, identical to the GAAP total in our audited financial statements.

Operating Earnings	**Pre-Tax**	**Earnings**	**Berkshire**	**Share**
(000s omitted)	**1994**	**1993**	**1994**	**1993**
Insurance Group:				
Underwriting	$129,926	$30,876	$80,860	$20,156
Net investment income	419,422	375,946	350,453	321,321
Buffalo News	54,238	50,962	31,685	29,696
Fechheimer	14,260	13,442	7,107	6,931
Finance Business	21,568	22,695	14,293	14,161
Kirby	42,349	39,147	27,719	25,056
Nebraska Furniture Mart	17,356	21,540	8,652	10,398
Scott Fetzer Manufacturing Group	39,435	38,196	24,909	23,809
See's Candies	47,539	41,150	28,247	24,367
Shoe Group	85,503	44,025*	55,750	28,829
World Book	24,662	19,915	17,275	13,537
Purchase-Price Premium Changes	(22,595)	(17,033)	(19,355)	(13,996)
Interest Expense**	(60,111)	(56,545)	(37,264)	(35,614)
Shareholder-Designated Contributions	(10,419)	(9,448)	(6,668)	(5,994)
Other	36,232	28,428	22,576	15,094
Operating Earnings	839,365	643,296	606,239	477,751
Sales of Securities	91,332	546,422	61,138	356,702
Decline in Value of USAir Preferred Stock	(268,500)	---	(172,579)	---
Tax Accruals Caused by New Accounting Rules	---	---	---	(146,332)
Total Earnings- All entities	**$662,197**	**$1,189,718**	**$688,121**	**$688,121**

** Includes Dexter's earnings only from the date it was acquired, November 7, 1993.*

***Excludes interest expense of Finance Businesses.*

A large amount of information about these businesses is given on pages 37-48, where you will also find our segment earnings reported on a GAAP basis. In addition, on pages 53-59, we have rearranged Berkshire's financial data into four segments on a non-GAAP basis, a presentation that corresponds to the way Charlie and I think about the company. Our intent is to

supply you with the financial information that we would wish you to give us if our positions were reversed.

"Look-Through" Earnings

In past reports, we've discussed look-through earnings, which we believe more accurately portray the earnings of Berkshire than does our GAAP result. As we calculate them, look-through earnings consist of: (1) the operating earnings reported in the previous section, plus; (2) the retained operating earnings of major investees that, under GAAP accounting, are not reflected in our profits, less; (3) an allowance for the tax that would be paid by Berkshire if these retained earnings of investees had instead been distributed to us. The "operating earnings" of which we speak here exclude capital gains, special accounting items and major restructuring charges.

If our intrinsic value is to grow at our target rate of 15%, our look-through earnings, over time, must also increase at about that pace. When I first explained this concept a few years back, I told you that meeting this 15% goal would require us to generate look-through earnings of about $1.8 billion by 2000. Because we've since issued about 3% more shares, that figure has grown to $1.85 billion.

We are now modestly ahead of schedule in meeting our goal, but to a significant degree that is because our super-cat insurance business has recently delivered earnings far above trend-line expectancy (an outcome I will discuss in the next section). Giving due weight to that abnormality, we still expect to hit our target but that, of course, is no sure thing.

The following table shows how we calculate look-through earnings, though I warn you that the figures are necessarily very rough. (The dividends paid to us by these investees have been included in the operating earnings itemized on page 12, mostly under "Insurance Group: Net Investment Income.")

Berkshire's Major Investees	Berkshire's Ownership	Approximate at Yearend	Berkshire's Undistributed	Share of Operating Earnings
	1994	1993	1994	1993
American Express Company	5.5%	5.5%	$25 (2)	$25 (2)
Capitla Cities / ABC Inc.	13.0%	13.0%	$85 (2)	$83 (2)
The Coca-Cola Company	7.8%	7.2%	116 (2)	94
Federal Home Loan Mortgage Corp.	6.3% (1)	6.8% (1)	47 (2)	41 (2)
Gannett Co. Inc.	4.9%	---	4 (2)	---
GEICO Corp.	50.2%	48.4%	63 (3)	76 (3)
The Gillette Compnay	10.8%	10.9%	51	44
PNC Bank Crop.	8.3%	---	10 (2)	---
The Washington Post Company	15.2%	14.8%	18	15
Wells Fargo & Company	13.3%	12.2%	73	53 (2)
Berkshire's share of undistributed earnings of major investees			$492	$422
Hypothetical tax on these undistributed investee earnings (4)			(68)	(59)
Reported operating earnings of Berkshire			606	478
Total look-through earnings of Bekrshire			$1,030	$841

(1) Does not include shares allocable to the minority interest at Wesco

(2) Calculated on average ownership for the year

(3) Excludes realized capital gains, which have been both recurring and significant

(4) The tax rate used is 14%, which is the rate Berkshire pays on the dividends it receives

Insurance Operations

As we've explained in past reports, what counts in our insurance business is, first, the amount of "float" we develop and, second, its cost to us. Float is money we hold but don't own. In an insurance operation, float arises because most policies require that premiums be prepaid and, more importantly, because it usually takes time for an insurer to hear about and resolve loss claims.

Typically, the premiums that an insurer takes in do not cover the losses and expenses it must pay. That leaves it running an "underwriting loss" - and that loss is the cost of float.

An insurance business is profitable over time if its cost of float is less than the cost the company would otherwise incur to obtain funds. But the business has a negative value if the cost of its float is higher than market rates for money.

As the numbers in the following table show, Berkshire's insurance business has been an enormous winner. For the table, we have compiled our float - which we generate in exceptional amounts relative to our premium volume - by adding loss reserves, loss adjustment reserves, funds held under reinsurance assumed and unearned premium reserves and then subtracting agents' balances, prepaid acquisition costs, prepaid taxes and deferred charges applicable to assumed reinsurance. Our cost of float is determined by our underwriting loss or profit. In those years when we have had an underwriting profit, such as the last two, our cost of float has been negative, and we have determined our insurance earnings by adding underwriting profit to float income.

(in $ Millions)	(1) Underwriting Loss	(2) Average Float	Approximate Cost of Funds	Yearend Yield on Long-Term Govt. Bonds
1967	Profit	$17.3	< 0	5.50%
1968	Profit	19.9	< 0	5.90%
1969	Profit	23.4	< 0	6.79%
1970	$0.37	32.4	1.14%	6.25%
1971	Profit	52.5	< 0	5.81%
1972	Profit	69.5	< 0	5.82%
1973	Profit	73.3	< 0	7.27%
1974	7.36	79.1	9.30%	8.13%
1975	11.35	87.6	12.96%	8.03%
1976	Profit	102.6	< 0	7.30%
1977	Profit	139.0	< 0	7.97%
1978	Profit	190.4	< 0	8.93%
1979	Profit	227.3	< 0	10.08%
1980	Profit	237.0	< 0	11.94%
1981	Profit	228.4	< 0	13.61%
1982	21.56	220.6	9.77%	10.64%
1983	33.87	231.3	14.64%	11.84%
1984	48.06	253.2	18.98%	11.58%
1985	44.23	390.2	11.34%	9.34%
1986	55.84	797.5	7.00%	7.60%
1987	55.43	1,266.7	4.38%	8.95%
1988	11.08	1,497.7	0.74%	9.00%
1989	24.40	1,541.3	1.58%	7.97%
1990	26.65	1,637.3	1.63%	8.24%
1991	119.6	1,895.0	6.31%	7.40%
1992	108.9	2,290.4	4.76%	7.39%
1993	Profit	2,624.7	< 0	6.35%
1994	Profit	3,056.6	< 0	7.88%

Charlie and I are delighted that our float grew in 1994 and are even more pleased that it proved to be cost-free. But our message this year echoes the one we delivered in 1993: Though we have a fine insurance business, it is not as good as it currently looks.

The reason we must repeat this caution is that our "super-cat" business (which sells policies that insurance and reinsurance companies buy to protect themselves from the effects of mega-

catastrophes) was again highly profitable. Since truly major catastrophes occur infrequently, our super-cat business can be expected to show large profits in most years but occasionally to record a huge loss. In other words, the attractiveness of our super-cat business will take many years to measure. Certainly 1994 should be regarded as close to a best-case. Our only significant losses arose from the California earthquake in January. I will add that we do not expect to suffer a major loss from the early-1995 Kobe earthquake.

Super-cat policies are small in number, large in size and non-standardized. Therefore, the underwriting of this business requires far more judgment than, say, the underwriting of auto policies, for which a mass of data is available. Here Berkshire has a major advantage: Ajit Jain, our super-cat manager, whose underwriting skills are the finest. His value to us is simply enormous.

In addition, Berkshire has a special advantage in the super-cat business because of our towering financial strength, which helps us in two ways. First, a prudent insurer will want its protection against true mega-catastrophes - such as a $50 billion windstorm loss on Long Island or an earthquake of similar cost in California - to be absolutely certain. But that same insurer knows that the disaster making it dependent on a large super-cat recovery is also the disaster that could cause many reinsurers to default. There's not much sense in paying premiums for coverage that will evaporate precisely when it is needed. So the certainty that Berkshire will be both solvent and liquid after a catastrophe of unthinkable proportions is a major competitive advantage for us.

The second benefit of our capital strength is that we can write policies for amounts that no one else can even consider. For example, during 1994, a primary insurer wished to buy a short-term policy for $400 million of California earthquake coverage and we wrote the policy immediately. We know of no one else in the world who would take a $400 million risk, or anything close to it, for their own account.

Generally, brokers attempt to place coverage for large amounts by spreading the burden over a number of small policies. But, at best, coverage of that sort takes considerable time to arrange. In the meantime, the company desiring reinsurance is left holding a risk it doesn't want and that may seriously threaten its well-being. At Berkshire, on the other hand, we will quote prices for coverage as great as $500 million on the same day that we are asked to bid. No one else in the industry will do the same.

By writing coverages in large lumps, we obviously expose Berkshire to lumpy financial results. That's totally acceptable to us: Too often, insurers (as well as other businesses) follow sub-optimum strategies in order to "smooth" their reported earnings. By accepting the prospect of volatility, we expect to earn higher long-term returns than we would by pursuing predictability.

Given the risks we accept, Ajit and I constantly focus on our "worst case," knowing, of course, that it is difficult to judge what this is, since you could conceivably have a Long Island hurricane, a California earthquake, and Super Cat X all in the same year. Additionally, insurance losses could be accompanied by non-insurance troubles. For example, were we to have super-cat losses from a large Southern California earthquake, they might well be accompanied by a major drop in the value of our holdings in See's, Wells Fargo and Freddie Mac.

All things considered, we believe our worst-case *insurance* loss from a super-cat is now about $600 million after-tax, an amount that would slightly exceed Berkshire's annual earnings from other sources. If you are not comfortable with this level of exposure, the time to sell your Berkshire stock is now, not after the inevitable mega-catastrophe.

Our super-cat volume will probably be down in 1995. Prices for garden-variety policies have fallen somewhat, and the torrent of capital that was committed to the reinsurance business a few years ago will be inclined to chase premiums, irrespective of their adequacy. Nevertheless, we have strong relations with an important group of clients who will provide us with a substantial amount of business in 1995.

Berkshire's other insurance operations had excellent results in 1994. Our homestate operation, led by Rod Eldred; our workers' compensation business, headed by Brad Kinstler; our credit card operation, managed by the Kizer family; National Indemnity's traditional auto and general liability business, led by Don Wurster - all of these generated significant underwriting profits accompanied by substantial float.

We can conclude this section as we did last year: All in all, we have a first-class insurance business. Though its results will be highly volatile, this operation possesses an intrinsic value that exceeds its book value by a large amount - larger, in fact, than is the case at any other Berkshire business.

Common Stock Investments

Below we list our common stockholdings having a value of over $300 million. A small portion of these investments belongs to subsidiaries of which Berkshire owns less than 100%.

Shares	Company	Cost (000's omitted)	Market (000's omitted)
27,759,941	American Express Company	$723,919	$818,918
20,000,000	Capital Cities/ABC, Inc.	345,000	1,705,000
100,000,000	The Coca-Cola Company	1,298,888	5,150,000
12,761,200	Federal Home Loan Mortgage Corp. ("Freddie Mac")	270,468	644,441
6,854,500	Gannett Co., Inc.	335,216	365,002
34,250,000	GEICO Corporation.	45,713	1,678,250
24,000,000	The Gillette Company	600,000	1,797,000
19,453,300	PNC Bank Corporation	503,046	410,951
1,727,765	The Washington Post Company	9,731	418,983
6,791,218	Wells Fargo & Company	423,680	984,727

Our investments continue to be few in number and simple in concept: The truly big investment idea can usually be explained in a short paragraph. We like a business with enduring competitive advantages that is run by able and owner-oriented people. When these attributes exist, and when we can make purchases at sensible prices, it is hard to go wrong (a challenge we periodically manage to overcome).

Investors should remember that their scorecard is not computed using Olympic-diving methods: Degree-of-difficulty doesn't count. If you are right about a business whose value is largely dependent on a single key factor that is both easy to understand and enduring, the payoff is the same as if you had correctly analyzed an investment alternative characterized by many constantly shifting and complex variables.

We try to *price,* rather than *time,* purchases. In our view, it is folly to forego buying shares in an outstanding business whose long-term future is predictable, because of short-term worries about an economy or a stock market that we know to be unpredictable. Why scrap an informed decision because of an uninformed guess?

We purchased National Indemnity in 1967, See's in 1972, Buffalo News in 1977, Nebraska Furniture Mart in 1983, and Scott Fetzer in 1986 because those are the years they became available and because we thought the prices they carried were acceptable. In each case, we pondered what the business was likely to do, not what the Dow, the Fed, or the economy might do. If we see this approach as making sense in the purchase of businesses in their entirety, why should we change tack when we are purchasing small pieces of wonderful businesses in the stock market?

Before looking at new investments, we consider adding to old ones. If a business is attractive enough to buy once, it may well pay to repeat the process. We would love to increase our economic interest in See's or Scott Fetzer, but we haven't found a way to add to a 100% holding. In the stock market, however, an investor frequently gets the chance to increase his economic interest in businesses he knows and likes. Last year we went that direction by enlarging our holdings in Coca-Cola and American Express.

Our history with American Express goes way back and, in fact, fits the pattern of my pulling current investment decisions out of past associations. In 1951, for example, GEICO shares comprised 70% of my personal portfolio and GEICO was also the first stock I sold - I was then 20 - as a security salesman (the sale was 100 shares to my Aunt Alice who, bless her, would have bought anything I suggested). Twenty-five years later, Berkshire purchased a major stake in GEICO at the time it was threatened with insolvency. In another instance, that of the Washington Post, about half of my initial investment funds came from delivering the paper in the 1940's. Three decades later Berkshire purchased a large position in the company two years after it went public. As for Coca-Cola, my first business venture - this was in the 1930's - was buying a six-pack of Coke for 25 cents and selling each bottle for 5 cents. It took only fifty years before I finally got it: The real money was in the syrup.

My American Express history includes a couple of episodes: In the mid-1960's, just after the stock was battered by the company's infamous salad-oil scandal, we put about 40% of Buffett Partnership Ltd.'s capital into the stock - the largest investment the partnership had ever made. I should add that this commitment gave us over 5% ownership in Amex at a cost of $13 million. As I write this, we own just under 10%, which has cost us $1.36 billion. (Amex earned $12.5 million in 1964 and $1.4 billion in 1994.)

My history with Amex's IDS unit, which today contributes about a third of the earnings of the company, goes back even further. I first purchased stock in IDS in 1953 when it was growing rapidly and selling at a price-earnings ratio of only 3. (There was a lot of low-hanging fruit in those days.) I even produced a long report - do I ever write a short one? - on the company that I sold for $1 through an ad in the Wall Street Journal.

Obviously American Express and IDS (recently renamed American Express Financial Advisors) are far different operations today from what they were then. Nevertheless, I find that a long-term familiarity with a company and its products is often helpful in evaluating it.

Mistake Du Jour

Mistakes occur at the time of decision. We can only make our mistake-du-jour award, however, when the foolishness of the decision become obvious. By this measure, 1994 was a vintage year with keen competition for the gold medal. Here, I would like to tell you that the mistakes I will describe originated with Charlie. But whenever I try to explain things that way, my nose begins to grow.

And the nominees are . . .

Late in 1993 I sold 10 million shares of Cap Cities at $63; at year-end 1994, the price was $85.25. (The difference is $222.5 million for those of you who wish to avoid the pain of calculating the damage yourself.) When we purchased the stock at $17.25 in 1986, I told you that I had previously sold our Cap Cities holdings at $4.30 per share during 1978-80, and added that I was at a loss to explain my earlier behavior. Now I've become a repeat offender. Maybe it's time to get a guardian appointed.

Egregious as it is, the Cap Cities decision earns only a silver medal. Top honors go to a mistake I made five years ago that fully ripened in 1994: Our $358 million purchase of USAir preferred stock, on which the dividend was suspended in September. In the 1990 Annual Report I correctly described this deal as an "unforced error," meaning that I was neither pushed into the investment nor misled by anyone when making it. Rather, this was a case of sloppy analysis, a lapse that may have been caused by the fact that we were buying a senior security or by hubris. Whatever the reason, the mistake was large.

Before this purchase, I simply failed to focus on the problems that would inevitably beset a carrier whose costs were both high and extremely difficult to lower. In earlier years, these life-

threatening costs posed few problems. Airlines were then protected from competition by regulation, and carriers could absorb high costs because they could pass them along by way of fares that were also high.

When deregulation came along, it did not immediately change the picture: The capacity of low-cost carriers was so small that the high-cost lines could, in large part, maintain their existing fare structures. During this period, with the longer-term problems largely invisible but slowly metastasizing, the costs that were non-sustainable became further embedded.

As the seat capacity of the low-cost operators expanded, their fares began to force the old-line, high-cost airlines to cut their own. The day of reckoning for these airlines could be delayed by infusions of capital (such as ours into USAir), but eventually a fundamental rule of economics prevailed: In an unregulated commodity business, a company must lower its costs to competitive levels or face extinction. This principle should have been obvious to your Chairman, but I missed it.

Seth Schofield, CEO of USAir, has worked diligently to correct the company's historical cost problems but, to date, has not managed to do so. In part, this is because he has had to deal with a moving target, the result of certain major carriers having obtained labor concessions and other carriers having benefitted from "fresh-start" costs that came out of bankruptcy proceedings. (As Herb Kelleher, CEO of Southwest Airlines, has said: "Bankruptcy court for airlines has become a health spa.") Additionally, it should be no surprise to anyone that those airline employees who contractually receive above-market salaries will resist any reduction in these as long as their checks continue to clear.

Despite this difficult situation, USAir may yet achieve the cost reductions it needs to maintain its viability long-term. But it is far from sure that will happen.

Accordingly, we wrote our USAir investment down to $89.5 million, 25 cents on the dollar at yearend 1994. This valuation reflects both a possibility that our preferred will have its value fully or largely restored and an opposite possibility that the stock will eventually become worthless. Whatever the outcome, we will heed a prime rule of investing: You don't have to make it back the way that you lost it.

The accounting effects of our USAir writedown are complicated. Under GAAP accounting, insurance companies are required to carry all stocks on their balance sheets at estimated market value. Therefore, at the end of last year's third quarter, we were carrying our USAir preferred at

$89.5 million, or 25% of cost. In other words, our net worth was at that time reflecting a value for USAir that was far below our $358 million cost.

But in the fourth quarter, we concluded that the decline in value was, in accounting terms, "other than temporary," and that judgment required us to send the write-down of $269 million through our income statement. The amount will have no other fourth-quarter effect. That is, it will not reduce our net worth, because the diminution of value had already been reflected.

Charlie and I will not stand for reelection to USAir's board at the upcoming annual meeting. Should Seth wish to consult with us, however, we will be pleased to be of any help that we can.

Miscellaneous

Two CEO's who have done great things for Berkshire shareholders retired last year: Dan Burke of Capital Cities/ABC and Carl Reichardt of Wells Fargo. Dan and Carl encountered very tough industry conditions in recent years. But their skill as managers allowed the businesses they ran to emerge from these periods with record earnings, added luster, and bright prospects. Additionally, Dan and Carl prepared well for their departure and left their companies in outstanding hands. We owe them our gratitude.

* * * * * * * * * * *

About 95.7% of all eligible shares participated in Berkshire's 1994 shareholder-designated contributions program. Contributions made through the program were $10.4 million and 3,300 charities were recipients.

Every year a few shareholders miss participating in the program because they either do not have their shares registered in their own names on the prescribed record date or because they fail to get the designation form back to us within the 60-day period allowed for its return. Since we don't make exceptions when requirements aren't met, we urge that both new shareholders and old read the description of our shareholder-designated contributions program that appears on pages 50-51.

To participate in future programs, you must make sure your shares are registered in the name of the actual owner, not in the nominee name of a broker, bank or depository. Shares not so registered on August 31, 1995 will be ineligible for the 1995 program.

We made only one minor acquisition during 1994 - a small retail shoe chain - but our interest in finding good candidates remains as keen as ever. The criteria we employ for purchases or mergers is detailed in the appendix on page 21.

Last spring, we offered to merge with a large, family-controlled business on terms that included a Berkshire convertible preferred stock. Though we failed to reach an agreement, this episode made me realize that we needed to ask our shareholders to authorize preferred shares in case we wanted in the future to move quickly if a similar acquisition opportunity were to appear. Accordingly, our proxy presents a proposal that you authorize a large amount of preferred stock, which will be issuable on terms set by the Board of Directors. You can be sure that Charlie and I will not use these shares without being completely satisfied that we are receiving as much in intrinsic value as we are giving.

* * * * * * * * * * * *

Charlie and I hope you can come to the Annual Meeting - at a new site. Last year, we slightly overran the Orpheum Theater's seating capacity of 2,750, and therefore we will assemble at 9:30 a.m. on Monday, May 1, 1995, at the Holiday Convention Centre. The main ballroom at the Centre can handle 3,300, and if need be, we will have audio and video equipment in an adjacent room capable of handling another 1,000 people.

Last year we displayed some of Berkshire's products at the meeting, and as a result sold about 800 pounds of candy, 507 pairs of shoes, and over $12,000 of World Books and related publications. All these goods will be available again this year. Though we like to think of the meeting as a spiritual experience, we must remember that even the least secular of religions includes the ritual of the collection plate.

Of course, what you really should be purchasing is a video tape of the 1995 Orange Bowl. Your Chairman views this classic nightly, switching to slow motion for the fourth quarter. Our cover color this year is a salute to Nebraska's football coach, Tom Osborne, and his Cornhuskers, the country's top college team. I urge you to wear Husker red to the annual meeting and promise you that at least 50% of your managerial duo will be in appropriate attire.

We recommend that you promptly get hotel reservations for the meeting, as we expect a large crowd. Those of you who like to be downtown (about six miles from the Centre) may wish to

stay at the Radisson Redick Tower, a small (88 rooms) but nice hotel or at the much larger Red Lion Hotel a few blocks away. In the vicinity of the Centre are the Holiday Inn (403 rooms), Homewood Suites (118 rooms) and Hampton Inn (136 rooms). Another recommended spot is the Marriott, whose west Omaha location is about 100 yards from Borsheim's and a ten-minute drive from the Centre. There will be buses at the Marriott that will leave at 8:45 and 9:00 for the meeting and return after it ends.

An attachment to our proxy material explains how you can obtain the card you will need for admission to the meeting. A good-sized parking area is available at the Centre, while those who stay at the Holiday Inn, Homewood Suites and Hampton Inn will be able to walk to the meeting.

As usual, we will have buses to take you to the Nebraska Furniture Mart and Borsheim's after the meeting and to take you from there to hotels or the airport later. I hope you make a special effort to visit the Nebraska Furniture Mart because it has opened the Mega Mart, a true retailing marvel that sells electronics, appliances, computers, CD's, cameras and audio equipment. Sales have been sensational since the opening, and you will be amazed by both the variety of products available and their display on the floor.

The Mega Mart, adjacent to NFM's main store, is on our 64-acre site about two miles north of the Centre. The stores are open from 10 a.m. to 9 p.m. on Fridays, 10 a.m. to 6 p.m. on Saturdays and noon to 6 p.m. on Sundays. When you're there be sure to say hello to Mrs. B, who, at 101, will be hard at work in our Mrs. B's Warehouse. She never misses a day at the store - or, for that matter, an hour.

Borsheim's normally is closed on Sunday but will be open for shareholders and their guests from noon to 6 p.m. on Sunday. This is always a special day, and we will try to have a few surprises. Usually this is the biggest sales day of the year, so for more reasons than one Charlie and I hope to see you there.

On Saturday evening, April 29, there will be a baseball game at Rosenblatt Stadium between the Omaha Royals and the Buffalo Bisons. The Buffalo team is owned by my friends, Mindy and Bob Rich, Jr., and I'm hoping they will attend. If so, I will try to entice Bob into a one-pitch duel on the mound. Bob is a capitalist's Randy Johnson - young, strong and athletic - and not the sort of fellow you want to face early in the season. So I will need plenty of vocal support.

The proxy statement will include information about obtaining tickets to the game. About 1,400 shareholders attended the event last year. Opening the game that night, I had my stuff and

threw a strike that the scoreboard reported at eight miles per hour. What many fans missed was that I shook off the catcher's call for my fast ball and instead delivered my change-up. This year it will be all smoke.

Warren E. Buffett
Chairman of the Board
March 7, 1995

Morning Session - 1995 Meeting

1. Welcome

WARREN BUFFETT: Morning. I'm Warren Buffett, the chairman of Berkshire Hathaway. And on my left is Charlie Munger, the vice chairman and my partner. And we'll try to get him to say a few words at some point in the proceedings. (Laughter)

The format today is going to be just slightly different.

We have one item to — normally, we breeze through the meeting pretty fast, and we'll do that, but we have one item of business on the preferred stock that I could tell caused some confusion with people. So, I'll discuss that a little bit.

And if, before the vote on that, anybody would like to talk about the preferred issue, we'll have any comments or questions at that time. And then we'll breeze through the rest of the meeting, and then we'll open it up. And I'll have one announcement to make then, too.

And then after that, we'll go for, maybe, close to noon. And feel free, earlier, anybody that would like to leave, you're free to, obviously, at any time. Better form to do it while Charlie's talking, as I've mentioned. (Laughter) And you'll have to be quick. (Laughter)

But then we'll have a break a little before noon for a few minutes, while a more orderly retreat can be conducted. And we'll have buses outside to take you back to the hotels or to any of the commercial establishments that Berkshire's involved in.

And then because so many of the — we have people here, at least based on the tickets reserved, from 49 of the 50 states. Only Vermont is absent. We have — but we have Alaska, we have a delegation from every place.

We have people from Australia, Israel, Sweden, France, the U.K., 40-some from Canada. So, a lot of people have come a long way. So, Charlie and I will stick around.

In fact, we'll eat our lunch right up here. And we will — you don't want to watch what we eat. The — but the — well, we'll stick around until perhaps as late as even 3 o'clock, but if the crowd gets below a couple of hundred, then we'll feel we can cut it off.

But we do want to answer everyone's questions. You people are part owners of the company. And any question that relates to your ownership of Berkshire, we want to be able to give you a chance to ask.

And it's tough because of the numbers of people here. I don't know how many are in the other room. But there're about 3,300, I believe, in this room. And we want to get to you — to all of you. So, that will come after the meeting.

Now, we've got a little business to take care of.

2. Election of directors

WARREN BUFFETT: The meeting will come to order. And I'll first introduce the directors of Berkshire, in addition to myself. They're right down here. And if you'll stand up when I give your name.

Susan T. Buffett (Applause).

Howard Buffett (Applause)

These are names we found in the phone book, you can understand — (Laughter)

Malcolm Chace, III (Applause)

And Walter Scott Jr. (Applause)

Also with us today are partners in the firm of Deloitte and Touche, our auditors, Mr. Ron Burgess and Mr. Craig Christiansen (PH). They're available to respond to appropriate questions you might have concerning their firm's audit of the accounts of Berkshire.

Mr. Forrest Krutter is secretary of Berkshire. He will make a written record of the proceedings.

Mr. Robert M. Fitzsimmons has been appointed inspector of elections at this meeting. He will certify to the account of votes cast in the election for directors.

The named proxy holders for this meeting are Walter Scott Jr. and Marc Hamburg. Proxy cards have been returned through last Friday representing 998,258 Berkshire shares to be voted by the proxy holders as indicated on the cards.

That number of shares represents a quorum, and we will therefore directly proceed with the meeting. We will conduct the business of the meeting and then adjourn the formal meeting. After that we'll entertain questions you might have.

First order of business will be a reading of the minutes of the last meeting of shareholders. I recognize Mr. Walter Scott Jr. who will place a motion before the meeting.

WALTER SCOTT JR.: I move that the reading of the minutes of the last meeting of the shareholders be dispensed with.

WARREN BUFFETT: Do I hear a second?

VOICE: I second the motion.

WARREN BUFFETT: Do I hear a second? (Laughter)

VOICE: I second the motion.

WARREN BUFFETT: The motion has been moved and seconded. Are there any comments or questions? We'll vote on the motion by voice vote. All of those in favor say, "Aye."

VOICES: Aye.

WARREN BUFFETT: Opposed? The motion is carried. (Laughter)

Does the secretary have a report of the number of Berkshire shares outstanding entitled to vote and represented at the meeting?

FORREST KRUTTER: Yes, I do. As indicated in the proxy statement that accompanied the notice of this meeting that was sent by first-class mail to all shareholders of record on March 7, 1995, being the record date for this meeting, there were 1,177,750 shares of Berkshire common stock outstanding, with each share entitled to one vote on motions considered at the meeting.

Of that number, 998,258 shares are represented at this meeting by proxies returned through last Friday.

WARREN BUFFETT: Thank you. If a shareholder is present who wishes to withdraw a proxy previously sent in and vote in person on the two items of business provided for in the proxy statement, he or she may do so.

Also, if any shareholder that's present has not turned in a proxy and desires a ballot in order to vote in person on these two items, you may do so. If you wish to do this, please identify yourself to meeting officials in the aisles who will furnish two ballots to you, one for each item.

Would those persons desiring ballots please identify themselves so we may distribute them? Just raise your hand and you'll get one.

The first item of business of this meeting is to elect directors. I now recognize Mr. Walter Scott Jr. to place a motion before the meeting with respect to election of directors.

WALTER SCOTT JR.: I move that Warren E. Buffett, Susan T. Buffett, Howard G. Buffett, Malcolm G. Chase, III, Charles T. Munger and Walter Scott Jr. be elected as directors.

VOICE: I second the motion.

WARREN BUFFETT: It has been moved and seconded that Warren E. Buffett, Susan T. Buffett, Howard G. Buffett, Malcolm G. Chase, III, Charles T. Munger and Walter Scott Jr. be elected as directors. Are there any other nominations? There any discussion? You're doing fine. (Laughter)

The nominations are ready to be acted upon. If there are shareholders voting in person, they should now mark their ballots on the election for directors and allow the ballots to be delivered to the inspector of election. Collect those, please.

Would the proxy holders please also submit to the inspector of elections, a ballot on the election of directors, voting the proxies in accordance with the instructions they've received?

Mr. Fitzsimmons, when you're ready, you may give your report.

ROBERT FITZSIMMONS: My report is ready. The ballot of the proxy holders received through last Friday cast not less than 996,892 votes for each nominee. That number far exceeds a majority of the number of shares outstanding.

The certification required by Delaware law regarding the precise count of the votes, including the votes cast in person at this meeting, will be given to the secretary to be placed with the minutes of this meeting.

WARREN BUFFETT: Thank you, Mr. Fitzsimmons. Warren E. Buffett, Susan T. Buffett, Howard G. Buffett, Malcolm G. Chase, III, Charles T. Munger and Walter Scott Jr. Have been elected as directors.

3. Motion authorizing preferred stock

WARREN BUFFETT: The second item of business at this meeting is to consider the recommendation of the board of directors to amend the company's certificate of incorporation.

The proposed amendment would add a provision to the certificate of incorporation authorizing the board of directors to issue up to one million shares of preferred stock in one or more series, with such preferences, limitations, and relative rights as the board of directors may determine.

Now, we discussed this some in the annual report. But I would say — and we'll find out the exact number — but I think we probably had 11 or 12 — maybe 12,000 or so shares voted against the proposal. And I think we had a couple thousand shares that abstained.

And since there really is no downside to the proposal, that indicated to me that I'd not done a very adequate job of explaining the logic of authorizing the preferred. So, I'd like to discuss that for a minute now.

And I'd also like anybody that would like to ask questions about it, they can do so now. We can talk about it later, too. But if you'd like to do it before the vote, that'd be fine.

The authorization is just that. It's an authorization. It's not a command to issue shares. It's not a directive. It simply gives the directors of the company the ability, in a situation where it makes sense for the company to issue preferred shares, to do so.

Now, when we acquire businesses — and I'll tell you about one when we're through with this in a few minutes — when we acquire businesses, sometimes the seller of the business wants cash. Sometimes they would like common stock.

And it's certainly possible, as one potential seller did last year, that they wanted, in that case, a convertible preferred stock.

Now, from our standpoint, as long as the value of the consideration that we give equates, we really don't care, aside from a question of tax basis we might obtain, but we —

In other economic respects, we don't care what form of consideration we use, because we will equate the value of cash, versus a straight preferred, versus a convertible preferred, versus common stock, whatever it may be.

So, if the worry is that we will do something dumb in issuing the preferred stock, you should — that's a perfectly valid worry. But you should worry just as much we'll do something dumb in terms of using cash or common stock.

I mean, if we're going to do something unintelligent, we can do it with a variety of instruments. (Laughter)

And we will not get more licentious in our behavior or anything simply because we have the preferred stock.

And the preferred stock may offer sellers of a business the chance to do a tax-free exchange with us. And they may not want common stock, because they may have an ownership situation where they don't want to run the risk of common stock ownership. And that's why our preferred is flexible as to terms.

Because we could give those people a straight preferred with a coupon that made it worth par at the time we issued it. And then they would know what their income would be for the next umpteen years. And that may be of paramount interest to them.

We could issue them an adjustable-rate preferred, which as money market conditions change, would also change its coupon. And then they would be sure of a constant principal value for the rest of their lifetimes. And one or both of those factors could be more important to one seller or another.

So that we simply have more forms of currency available to make acquisitions if we have the ability to issue various forms of preferred. Because a preferred stock, if it's properly structured, allows for the possibility of a tax-free transaction with a seller. And that's important to many sellers.

Now, in the end, many sellers will prefer cash, just as in the past. And probably most of the sellers that don't want cash will want common stock. But we will have a preferred stock available.

We're only authorizing a million shares because under Delaware law, there's an annual — I think there's an annual fee. I know there's an initial fee. And I think there's an annual fee that relates to the amount of shares authorized.

So, if we authorized a hundred million shares, we would be paying a larger annual fee, which is something Mr. Munger wouldn't let me do. (Laughter)

So what we will do, if we issue this, we will issue — undoubtedly, we will issue some sub-shares so that the numbers of shares, for taxation purposes, is relatively limited.

But that we will issue sub-shares to make it easier to make change, essentially, in the market.

We may issue — if the occasion demands — we may issue a convertible preferred. But that convertible preferred would not be worth any more, at the time we issue it, than a straight preferred. We would adjust, in terms of the coupon, and the conversion price, and so on.

So we can equate various forms of currency to fit the desires of the seller of the business. And this is simply one more tool to do it. There's no downside, like I say, unless we do something stupid.

And if we do something stupid with this, we would do something stupid with cash or whatever. So it —we probably should've done this some time ago, but we never had a case of a seller wanting that form of currency before.

And so it just — and we always felt we could get it authorized promptly. But there's no reason to lose a couple of months, if a transaction is pending, to call a meeting to get this on the books. So, it's simply one more tool.

And if there are — anybody that has any questions or comments on the preferred, like I say, you can hold them until later, but I'd be glad to have them before we have the vote. Do we have any?

Yeah, there's a question over there. If you'll wait just a second, we'll get a microphone to you.

When you ask questions, now or later, if you'll give your name and where you live, I'd appreciate it.

AUDIENCE MEMBER: Hi, my name is Dr. Lawrence Wasser. I'm from New York.

My question is this. If you want to buy a business and the people in the business want cash, you have to have cash, cash that — you know, this kind of cash.

WARREN BUFFETT: We're familiar with it.

AUDIENCE MEMBER: Yeah. (Laughter and applause)

But it strikes me that the preferred isn't really cash, it's fiat currency. That is, it's currency that we can create.

WARREN BUFFETT: That's true. It's like common stock in that respect. It is the — it is a form — it is an alternate form of currency, and — but it is —

Just in terms of common stock, for example, assuming we had enough authorized, we have an unlimited ability to create currency. Now, if we created the wrong price, it dilutes the value of the old currency. But go ahead on.

AUDIENCE MEMBER: Until we vote in the affirmative, which I'm sure that this group will probably do because of their confidence in you, but until we vote in the affirmative, it doesn't exist.

WARREN BUFFETT: That is correct. That would be true, incidentally, with common stock. If we had no more authorized common stock out than we had issued, we have, I think, a million and a half authorized.

But let's assume that we'd issued all that we had authorized. Until more was authorized by the shareholders, there would — it would not be available to be issued.

AUDIENCE MEMBER: But if more were authorized by the shareholders then isn't it true that the value of the shareholders' holding would be diluted?

WARREN BUFFETT: Only if we receive less in value than we give. That's the key to it.

I mean, if we issue $200 million worth of preferred and we receive a business that's only worth 150 million, there's no question you're worse off than before. So are we, incidentally. But we're all worse off.

The — and that's true if we give cash that's worth more for a business than the business is worth. If we give 200 million of cash for a business that's worth a 150 million, we are worse off. We may not have issued a share of stock. But we have diluted the value of your stock if we do that.

As long as we get value received, in terms of whether — of cash, common stock, or preferred stock — then you are not diluted in terms of value. It's an important point.

And obviously, a number of companies, as you may have — Charlie and I have commented about in reports and elsewhere — a number of companies, in our opinion, have issued common stock, particularly, which has a value greater than what they receive.

And — when they do that, they are running what I — what John Medlin of the Wachovia called a "chain letter in reverse." (Laughter)

And that's cost American shareholders a lot of money. I don't think it'll cost them any money at Berkshire. But it's a perfectly valid worry for shareholders to have.

Because a management can build an empire just by issuing these little pieces of paper, which they feel don't cost them anything.

I think Charlie had one story about that in the past. You want to comment on that, Charlie? No-names basis, of course. (Laughs)

CHARLIE MUNGER: There was a particular bank where one of the officers wanted stock options, pointed out to the management that they could issue all these shares and it didn't cost anything.

Now, imagine hiring a manager who thinks that way and paying them money — (laughter) — to behave like Judas in your very midst.

WARREN BUFFETT: We have had conversations with managers — (laughter) — where they tell us how fortunate they feel because the stock is down and they can issue options cheaper.

Now, if they were issuing those to the third parties, you know, I'm not sure whether they'd have exactly the same attitude.

But we have no feeling that we're getting richer when we issue shares. We have a feeling we're getting richer when we get at least as much value in a business as the shares are worth that we issue. And we don't intend to issue them under any other circumstances. But it's a perfectly valid worry.

AUDIENCE MEMBER: The second part of the question is that, obviously, with preferred issue, you have a situation where the common shareholder is — moves to the back of the line, as it were.

Why should the common shareholder in this room want to step to the back of the line if he's at the front of the line now?

WARREN BUFFETT: Well, it — but it's also true if we buy a business for cash, and we — let's say we borrow the money, the bank that we borrow the money from will come ahead of the common shareholder.

There's no question. Any time you move — you engage in transactions that involve the capital structure, you are changing the potential for each part of the capital structure.

If you issue a lot of common and you've got some debt outstanding, you've generally improved the position of the debt.

And the question really becomes whether you think that the position of the common shareholder is improved by issuing either preferred stock, or perhaps borrowing a lot of money, to make an acquisition.

I mean, a couple of times in the history of Berkshire, we've borrowed money to buy something, to buy a business. And when we do that, we are placing a bank, or an insurance company, or whomever, ahead of the position of the common shareholder. We did that when we issued some debt a few years back.

And there's a question of weighing whether the common shareholders are going to be better off by borrowing money. But borrowing money is not necessarily at all harmful to shareholders — although certainly, if it's carried to excess, it is.

And the preferred is a form of quasi-borrowed money that does rank ahead of the common shareholder. But then, at the same time, we're adding a business which we think is going to benefit the shareholder, if we issue that. So that's the tradeoff.

Yeah.

AUDIENCE MEMBER: My name is Matt Zuckerman (PH). I'm from Miami, Florida.

My question is, it seems to me that there's some requirement for shareholder votes if convertible stock — preferred stock — is issued beyond a certain limit. What are those limits?

WARREN BUFFETT: There are no limits on the conversion term that we might do. But for example, if we were going to issue a convertible preferred — now we have no plans to do it, but it could happen. In fact, it might well happen this year.

The — we would — and the alternative, we'll say, was giving somebody a hundred million dollars in cash for a business. If we were to issue a straight preferred, we would figure out what a hundred million dollars' worth of a straight preferred would sell for, what coupon would be necessary.

And that would depend on call provisions and a few things. But for a triple-A credit like Berkshire, you know, it would be somewhere in the area of 7 percent or thereabouts. And then they would have no participation in the upside of the common.

If they wanted something that was sure to maintain its principal value, then you have to issue an adjustable-rate preferred that will keep its value around par.

That preferred might have an initial coupon of, say, 5 percent or something of the sort, because it has the ability to go up or down based on interest rates. But it would always be worth about par.

If we were to issue a convertible preferred, it might have a conversion price of, just to pick a figure, 28,000 or something of the sort, and a coupon well below the coupon on a straight preferred.

And so, whatever we did, they would equate out in our mind as to the value we were giving.

We're not going to give 120 percent of X if we're only willing to pay a hundred percent of X, just because the form of a deal changes.

But you may well see us issue, at some point — you may see us issue a convertible preferred. You may see us issue a straight preferred. You may see us issue an adjustable-rate preferred. I hope we do something because I'd like, you know —

AUDIENCE MEMBER: Yeah. Based on —

WARREN BUFFETT: If we do it, we'll think we're better off.

AUDIENCE MEMBER: Well, based on your past performance, I'm sure you'll get more value than you give.

WARREN BUFFETT: Well.

AUDIENCE MEMBER: But in any case, it was my understanding that if the amount of shares issued for a conversion of a convertible issue were greater than 20 percent of the total amount of shares outstanding, then it would require a vote of the stockholders, under Delaware law. I may be wrong.

WARREN BUFFETT: I think it's a stock exchange rule, isn't it, Charlie?

CHARLIE MUNGER: Yes.

WARREN BUFFETT: You're right about the rule, but —

CHARLIE MUNGER: It's a New York Stock Exchange rule.

WARREN BUFFETT: It's a New York Stock Exchange rule. That would be $5 billion-plus of deal. And, you know, we would love to make a $5 billion deal, but I don't think we're going to do it.

So I would say that the chances of any acquisition being large enough so that it requires a shareholder vote is probably slim.

But it isn't because we wouldn't be interested. (Laughter)

And you know, if we have one, we'll be coming back to you — (laughter) — with the votes already in hand. (Laughter and applause)

Are there any other questions on the preferred? We can talk more about it later, too. I just want to — oh, here we are. Sure.

AUDIENCE MEMBER: Good morning, Mr. Buffett.

WARREN BUFFETT: Morning.

AUDIENCE MEMBER: I'm Raina Di Costiloy (PH) from Chicago. I'm very proud to be here. And I've seen you grow so, that pretty soon we're going to be out in a football field. (Laughter)

I think your explanation was very helpful. Because as I read this, and I'm sure many of the other lay folk, I didn't understand what you —

WARREN BUFFETT: (Inaudible)

RAYNA DI COSTILOY: — what you were doing. And you mentioned the preferred stock. But in the prospectus, it's not clear whether it would be the convertible preferred, the straight preferred. And you cleared that, answering a few other questions, but some of the people felt it would dilute their stock.

WARREN BUFFETT: Yeah. Well, I should've made that clear in the annual report. And I'm glad I've had this chance to do it today.

Anything else on the preferred? OK.

AUDIENCE MEMBER: You don't have to come back to the shareholders for a vote, after these shares are authorized, for the terms of it. And you've discussed this in terms of buying companies.

My question is, you yourself, through Berkshire Hathaway, own the preferred shares of several companies: Salomon, USAir, American Express.

Do those shareholders have to vote on the terms of the preferred shares that you bought for those companies? Or is that left at the board of directors' decision level.

WARREN BUFFETT: Those —

AUDIENCE MEMBER: Could you clarify that point?

WARREN BUFFETT: Go — excuse me, go ahead.

AUDIENCE MEMBER: Could you clarify that point, please?

WARREN BUFFETT: Yeah. We bought a — I think we've probably bought six issues of preferred directly from companies.

And since none of those triggered that New York Stock Exchange rule that we discussed earlier — and they could've if they'd been somewhat larger, but they didn't — none of those deals had to be approved by the shareholders.

I think the only deal we've had with a company that had to be approved by the shareholders was when we bought the Cap Cities/ABC stock. Well, we bought early in 1986. I think it was approved by their shareholders in 1985.

But the only situations where it would've had to have been approved is if it triggered the New York Stock Exchange rule. And our purchases were not that large that they did that.

Any other questions? Yeah, there's one more.

AUDIENCE MEMBER: My name is Dale Vocawitz (PH). I'm from Champagne, Illinois.

A recent issue of Barron's indicated that it may be possible to issue a best of all possible worlds preferred, that being one where the dividend looks like interest to the issuer and is tax-deductible.

And to the purchaser, it would qualify for the dividends received deduction. Do you think that structure might be possible with these shares?

WARREN BUFFETT: Well, we haven't thought about that. I know what you're talking about on that, but I don't think it would be possible.

For one thing, I don't think you probably have a tax-free deal that way. Charlie, do you?

CHARLIE MUNGER: We probably wouldn't try and be that cute. (Laughter)

WARREN BUFFETT: I've got several quips in mind, but I think I'll keep them to myself. (Laughter)

My guess is that that form does not work for a long time. I know what you're talking about on it, but my guess is it doesn't.

Some companies — then we'll get on with this — but some companies care about the consideration they give in a deal, whether it's cash, or preferred, or so on, because they care about the accounting treatment that they get.

They want — they usually want pooling treatment rather than purchase accounting treatment. I won't get into that here. I know it's going to disappoint you, but I won't get into that here. Although I may in the next annual report.

And that is of absolutely no consequence to us. We care not a wit about the accounting treatment that we receive. We feel that we have a shareholder body that's intelligent enough to understand the economic reality of a transaction.

And that by playing various games, in terms of how we try to structure it, and maybe flow part of the purchase price back through the income statement or anything of the sort, which is done — that's not something that we care about at all.

We would rather do whatever makes the most sense for us and for the seller, and then explain to you whatever accounting peculiarities may arise out of the transaction. And that probably differentiates us from most companies. And it probably helps us make a deal, occasionally.

Anything else?

AUDIENCE MEMBER: — really

WARREN BUFFETT: OK, now I can hear you fine.

DALE VOCAWITZ: OK. And I was wondering, will there be any opportunity for shareholders who may find the preferred issue preferable, for any number of reasons, to participate in that?

WARREN BUFFETT: Well, if we issued a preferred and it became actively traded — let's say it was a company with many shareholders instead of a few. Obviously, that would be something that any new or present shareholder could make a decision on whether they preferred that issue than others.

We could, but have no plans of doing it and I don't see it happening, we could offer to exchange preferred for present common.

And it's conceivable a few people would have an interest, but the — most people have self-selected in terms of the kind of security they want to own in terms of owning Berkshire common.

So it's unlikely they would want to switch into a preferred, because they would — we wouldn't have a premium of value, it would just be an alternative security.

We could do that, though. I mean, and it would probably be a tax-free deal.

We have no plans of doing that, but it's something that if we ever thought that enough people might want, we could offer it. But no one would be obliged to take it. It's a good question.

OK? We'll move on.

Is there a motion to adopt the board of directors' recommendation?

WALTER SCOTT JR.: I move the adoption of the amendment to the fourth article of the certificate of corporation as set forth in exhibit A of the company's proxy statement for this meeting.

WARREN BUFFETT: Is there a second?

VOICE: I second the motion.

WARREN BUFFETT: Motion's been made and seconded to adopt the proposed amendment to certificate of incorporation. Any further discussion?

We are ready to act upon the motion. If there are any shareholders voting in person, they should now mark their ballot on the proposed amendment to the certificate of incorporation and allow the ballots to be delivered to the inspector of election.

Collecting a few there. Would the proxy holders please also submit to the inspector of elections a ballot on the proposed amendment voting the proxies in accordance with the instructions they have received?

We'll wait just a second here.

Mr. Fitzsimmons, when you're ready you may give your report.

ROBERT FITZSIMMONS: My report is ready. The ballot of the proxy holders received through last Friday cast lot — not less than 928,889 in favor of the proposed amendment to the certificate of incorporation.

That number far exceeds the majority of the number of all shares outstanding. The certification required by Delaware law regarding the precise count of the votes, including the votes cast in person at this meeting, will be given to the secretary to be placed with the minutes of this meeting.

WARREN BUFFETT: Thank you, Mr. Fitzsimmons. The amendment to the certificate of incorporation as set forth in exhibit A to the proxy statement for this meeting is approved.

After adjournment of the business meeting, I will respond to questions that you may have that relate to the businesses of Berkshire, but do not call for any action at this meeting.

Does anyone have any further business to come before this meeting before we adjourn? If not, I recognize Walter Scott Jr. to place a motion before the meeting.

WALTER SCOTT JR.: I move this meeting be adjourned.

VOICE: I second the motion.

WARREN BUFFETT: Motion to adjourn has been made and seconded. We will vote by voice. Any discussion? If not, all in favor say, "Aye."

AUDIENCE: Aye.

WARREN BUFFETT: All opposed say, "No." The meeting is adjourned. (Laughter)

4. Helzberg's Diamonds acquisition

WARREN BUFFETT: Now, I'd like to tell you about one thing that — since the annual report — that some of you probably read about in the papers, but maybe not all of you have heard about.

Just shortly after the annual report was issued, we completed a transaction with Helzberg's Diamonds, with Barnett Helzberg, who's here today. Barnett, would you stand up, please? All right. There he is. Give him a hand. (Applause)

You may be interested in how it came about, because Barnett attended two of the last three meetings of Berkshire. He had a few shares in an IRA account, and he was here last year.

And shortly after this meeting, I was back in New York City. And I was crossing the street at 58th Street, right near the Plaza Hotel on 5th Avenue. And a woman said, "Mr. Buffett," and I turned around.

And she came up, and she said she'd attended the annual meeting last year — or a few days ago — and said that she enjoyed it. And I said, "That's terrific," and I started to cross again.

And Barnett had been about 30 or 40 feet away. I didn't know him, and he had heard this woman. So, he said the same thing. And I turned around. And we shook hands. First time I'd met him, and he said, "You know," he said, "I might have a business you'd be interested in."

And I get that all the time, so — (Laughter)

So I said, “Well, why don’t you write me?” And a time went by, and I got a letter from Barnett. And he’d been thinking about doing something with the business his father had started in 1950, and based in Kansas City that whole time. And he’d been exploring various avenues.

But probably, in some part because of his background as Berkshire shareholder, he had some specific interest in the company becoming associated with Berkshire. He cared very much about the company having a permanent home.

He cared very much about it having an environment in which it could grow and be run autonomously and be based in Kansas City. And he wanted to receive something in exchange — that he was happy to own for the rest of his life.

And so, we worked out a transaction shortly — just very shortly after the annual report went to press.

And so now Berkshire, as of 12:01, I guess, yesterday morning, the deal closed. There’s this waiting period because of the Hart-Scott-Rodino Act and a few other things.

The transaction closed. And now Berkshire is the owner of Helzberg’s Diamonds, which has roughly 150 stores around, perhaps, 26 or 27 states. I’m not sure the exact number. And mostly in malls, although some others. It’s been enormously successful.

Barnett brought in Jeff Comment, who formerly ran Wanamaker’s about eight years ago, I guess it is.

And the company has both expanded in its traditional format — it’s gone with a new format recently, which has been very successful.

It is — in its position in the jewelry industry, it tends to compete with a Zales or Gordon’s, but it does a far, far better job.

Their sales, per store, on roughly equivalent square footage, will be very close to double what competitors achieve.

It’s got a magnificent morale, and organizational structure. And the people — Barnett was very generous with people in making the sale. He took it out of his own pocket to treat people right because they’d done such a terrific job over the years.

And I think you’ll see Helzberg’s become a very big factor in Berkshire over time. And it just shows you what can come out of these annual meetings. So, the rest of you, you know, do your stuff. (Laughter)

So anyway, that is an acquisition that was made for — largely for common stock. It did not involve preferred, and — because Barnett preferred common.

And — but different people have different needs. And sometimes there's a group of shareholders that can have different priorities. And that's the reason we want to have various currencies.

If we had not been able to use common stock, we would not have made this transaction, because Barnett has been in no hurry to write a large check to the government. And we can help him in that respect with a common stock deal.

So anyway, we're glad to have Helzberg's become part of Berkshire. I wouldn't be surprised if we have another announcement or two in the next year before we have the next meeting. I hope so. But there's no guarantees.

5. Buffetts on the board adds stability

WARREN BUFFETT: Now we're going to turn the meeting open for questions. We'll do it as we've done before. We've got this room divided into six zones. And if you will raise your hand, the monitor in that — in your zone will recognize you. And we'll keep going around.

We will not go to a second person in any zone until we've exhausted all those who have yet to ask their first question. We have — we also have a zone in the overflow room. So, there'll be a total of seven.

And we'll just keep going around, if you'll identify yourself, please. And we'll be delighted to answer your questions. And the more, the better. So, we'll start with zone 1.

AUDIENCE MEMBER: My name is Fred Elfell Jr. (PH) from Sacramento, California.

And I wanted to ask if you could elaborate upon the logic of adding two family members to the board of trustees?

WARREN BUFFETT: Well, it's terrific for family harmony, just to start with. (Laughter)

The — as I've talked about in the annual report, the — if I die tonight, you know, my stock goes to my wife, who is a member of the board of directors.

And she will own that stock until her death, when it will go to a foundation. So, there is a desire to have as long a term and permanent ownership structure as can really be done, in terms of planning, and the tax laws, and so on.

I mean, I — we have invited people like Helzberg's to join in with Berkshire into what we think is a particularly advantageous way for them to conduct a business and to know the future that they're joining.

And part of knowing the future that they're joining involves knowing that the ownership is stable. And it will be stable for a very long period of time in Berkshire, probably about as long as you can — anybody can plan for in this world.

After my death, the family would not be involved in the management of the business, but they'd be involved in the ownership of the business.

And you would have a very large concentrated ownership position, going well on into the foundation, that would care very much about having the best management structure in place.

And to, in effect, prepare for that over time, I think it's very advisable that family members who will not be involved in management, but who will have a key ownership role to play, become more and more familiar with the business and the philosophy behind it.

I discussed that some in the — I guess, it was the 1993 annual report, because I think it's important that you understand.

And anybody that wants to sell us a business — if you've built a business since 1915, and you care enormously about it, and you care about the people that you've developed, but you've got something else you want to do in life, it's more than, you know, advertising your car in the paper to sell it.

I mean, it is an important — a very important transaction to you. Not just in terms of how much money you receive, but in terms of who you deliver thousands of people that have joined you — who you deliver them to.

And I think we have a structure that is about as good as you can do. Nothing is forever.

But we have a structure that's about as good as you can do, in terms of people knowing what they're getting into when they make a deal with us and being able to count on the conditions that prevail at the time of the deal, continuing for a long period in the future.

Many people — I had a fellow tell me the other day about a business where he'd been wooed by the acquirer. And, you know, the day after the deal, they came in and fired the top half-dozen people. They had a secret plan all along. Well, I don't think you run into much of that.

But what you do run into is the company that's the acquiring company, itself, either being acquired or some new management coming along, or some new management consultant coming along, and saying, "Well, this doesn't fit our strategic plan anymore, so let's dump this division."

And people that join in with Berkshire can be relatively, I think, comfortable about nothing like that happening.

Charlie, you want to elaborate on —

CHARLIE MUNGER: No. (Laughter)

WARREN BUFFETT: I was hoping Charlie would have a near-life experience this morning. (Laughter)

Keep encouraging him.

6. No comment on Kerkorian's Chrysler bid

WARREN BUFFETT: Zone 2.

AUDIENCE MEMBER: Hello. My name is Jim Lichty (PH) from Des Moines. I'm interested in, like, Chrysler. Can you make a comment on the Chrysler Corporation? (Laughter)

WARREN BUFFETT: No, I don't think I can make a comment on Chrysler. (Laughter)

I think Salomon Brothers, incidentally, has been retained by them. We have nothing to do with it. Charlie and I — I read that in the paper.

And Charlie and I are not familiar with — normally — with investment banking arrangements at Salomon.

But it has been in the paper that Salomon's involved with that. We have no involvement.

Charlie, you're not interested in commenting on the question? No? (Laughter)

Try him on something else.

7. Managers need to know "money costs money"

WARREN BUFFETT: Zone 3.

AUDIENCE MEMBER: I'm Jim Vardaman (PH) from Jackson, Mississippi.

In describing the — your allocation of capital to your wholly-owned subsidiaries, you wrote in the annual report that, quote, you "charge managers a high rate for incremental capital they employ and credit them at an equally high rate for capital they release," end quote.

How do you determine this high rate, and how do they determine how much capital they can release?

WARREN BUFFETT: Well, what we try to do with those — the question's about incentive arrangements we have with managers or other situations, where we either advance capital to a wholly-owned subsidiary or withdraw it — usually, that ties in with the compensation plan.

And we want our managers to understand just how highly we do value capital. And we feel there's nothing that creates a better understanding than to charge them for it.

So, we have different arrangements. Sometimes it's based a little on the history of the company. It may be based a little bit on the industry. It may be based on interest rates at the time that we first draw it up.

We have arrangements depending on the — on those variables and perhaps some others and perhaps just, you know, how we felt the day we drew it up, that range between 14 percent and 20 percent, in terms of capital advanced.

And sometimes we have an arrangement where, if it's a seasonal business where, for a few months of the year, when they have a seasonal requirement, we give it to them very cheap at LIBOR.

But, if they use more capital over — beyond that, we start saying, "Well, that's permanent capital," so we charge them considerably more.

Now, if we buy a business that's using a couple hundred million of capital, and we work out a bonus arrangement, and the manager figures out a way to do the business with less capital, we may credit him at a very high rate — same rate we would use in charging him — in terms of his bonus arrangement.

So, we believe in managers knowing that money costs money. And I would say that, just generally, my experience in business is that most managers, when using their own money, understand that money costs money.

But sometimes managers, when using other people's money, start thinking of it a little bit like free money. And that's a habit we don't want to encourage around Berkshire.

We — by sticking these rates on capital, we are telling the people who run our business how much capital is worth to us.

And I think that's a useful guideline, in terms of the decisions they're making, because we don't make very many decisions about our operating business. We make very, very few. I don't see capital budgets, in most cases, from our hundred percent-owned subsidiaries.

And if I don't see them, no one else sees them. I mean, we have no staff at headquarters looking at this kind of thing.

We give them great responsibility on it. But we do want them to know how we calibrate the use of capital. And so far, I would say, it's really worked quite well.

Our managers don't mind being measured, and they like getting a — I think they enjoy seeing a batting average posted. And a batting average that does not include a cost of capital is a phony batting average.

Charlie?

CHARLIE MUNGER: Well, I certainly agree. (Laughter)

WARREN BUFFETT: And his name isn't even Buffett. I mean — (Laughter)

8. The two reasons for buying insurance

WARREN BUFFETT: Zone 4.

AUDIENCE MEMBER: Hi, my name's Dave Lancasam (PH) with Business Insurance Magazine.

The sum of property-casualty risk management experts are advising commercial insurance buyers to forge five- and 10-year policies with their property-casualty insurers to promote stronger partnerships with their insurers, as well as to maintain the smooth PC market of the past seven, eight years.

Do you believe this idea will take hold for most policyholders? And if so, what would be the implications for policyholders' costs and insurers' underwriting results?

WARREN BUFFETT: The question is about partnerships between, probably, commercial policyholders and their insurers. And there are a lot of ways of doing that by various retrospective plans or adjustable rates of various sorts, and self-insured retentions, and that sort of thing.

As a general matter, there are only two reasons for buying insurance. One is to protect yourself against a loss that you are unable or unwilling to bear yourself. And that is partly a — an objective decision. It's partly subjective.

For example, a manager that's terribly worried that his board of directors may second-guess him if he has an uninsured loss, is going to buy a lot more protection, probably, than the company really needs.

But he knows he's never going to have to go in front of his board of directors and say, "We just had a million-dollar fire loss."

And then the next question the director asks is, “Was it insured?” And then he doesn’t want to answer no.

So, he may do something that is very unintelligent from the company’s standpoint merely to protect his own position.

But the reason for buying insurance is, whether — and this is true of life insurance, it’s true of property-casualty, it’s true of personal insurance, it’s true of commercial insurance — is to protect against losses that you’re unwilling or unable to bear yourself.

Or the second reason, which occasionally comes up, is if you think the insurance company is actually selling you a policy that’s too cheap, so that you really expect, over a period of time, to have a mathematical advantage by buying insurance.

Well, we try to avoid selling the second kind and to concentrate on selling the first kind.

And we think any company we can sell insurance to — and of course, we — much of the insurance we sell is to other insurance companies. I mean, we are a reinsurer, in very large part.

We are selling them insurance against a loss that they are either unable or unwilling to sustain.

And a typical case, you know, might be a company that had a lot of homeowners policies in California. And if those include earthquake coverage, they may not be able to sustain the kind of loss that is possible, even though they want to keep a distribution system in place that merchandises en masse to homeowners in California.

So, we will write a policy. They may take the first 5 million of loss, they may take the first 50 million of loss — depends on their own capabilities — but then they come to us.

And we are really uniquely situated to take care of problems that no else — that the companies can’t bear themselves and that they can’t find anybody else to insure.

But we really don’t want to insure someone for a loss that they can afford themselves, because if we’re doing that it may because they’re dumb. But it may be because they also have a loss expectancy that’s higher than the premium we’re charging, which is not what we’re trying to do in business.

I think that — I think probably, as compared to 30 years ago, that risk managers at corporations are probably more intelligent about the way they buy their insurance than many years ago. I think it’s become a — I think they’re more sophisticated and they’ve thought it through better.

But there’s a lot of insurance — there’s some — there’s a fair amount of insurance bought that doesn’t make sense. And there’s a fair amount of insurance that isn’t bought that should be bought.

There are certain companies that are exposing themselves in this country to losses which would wipe them out. And they prefer not to buy reinsurance because it's, quote, "expensive." But what they're really doing is betting on something that won't happen very often, happening not at all.

And if you take a huge hurricane on Long Island or you take a major quake in California, there are a number of companies that are not — that have not positioned themselves to withstand those losses.

And if you're a 63-year-old CEO and you figure, "I'm going to retire in a couple of years," you know, the odds are pretty good that it won't happen on your watch.

But the — it will happen on somebody's watch. And we try to sell reinsurance to those people. And usually, we do. But sometimes we don't.

Charlie?

CHARLIE MUNGER: Nothing to add. (Laughter)

9. "We can sustain shocks … that others can't"

WARREN BUFFETT: OK. Zone 5.

He's saving himself. He'll be dynamite when he gets going. (Laughter)

AUDIENCE MEMBER: My name is Hugh Stephenson (PH). I'm a shareholder from Atlanta, Georgia. My question involves the company's catastrophe lines of insurance.

It seems that there's a relative ease of entry into that business through Bermuda-based companies and others. And given the importance of that business to the overall company, I'm curious how the ease of entry into the business affects its long-term competitive position and its rates of return?

WARREN BUFFETT: Well, you're very right, there is an ease of entry into the catastrophe business. And, you know, it's sort of attractive for — it's particularly attractive for promoters.

Because if you start an insurance company to write earthquake insurance in California and you raise a few hundred million dollars, you'll either have essentially have no losses or, if you write enough of it, you'll go broke. And most years, you'll have no losses.

So, if your intention is to sell your stock publicly in a year or two, that — the odds are very good that you will have a beautiful record for a couple of years. And you can sell.

And, you know, maybe one time out of ten, you'll go broke. And nine times out of ten, you'll sell to somebody else who will eventually go broke.

And it — there is — there's real ease of entry. The only thing that may restrict that is that if the buyer is sophisticated enough to question the viability of that company under really extreme conditions, which is the only conditions that count when you're buying catastrophe insurance, that may restrict it.

The second thing is, of course, none of the people that have started up can offer anywhere near the amount of coverage that Berkshire has. Berkshire is really one of a kind in terms of its capital strength in the business.

I'm — I don't think any money in Bermuda that I can remember — I don't think Ajit's out there. But I don't think anybody has a billion of net worth. And you know, we have — at present, we probably have close to 13 billion of net worth and considerably more of value.

So we can sustain shocks, and we will sustain shocks, I should add, that others can't. And we try to get paid appropriately for that.

But when we say we can take a billion-dollar loss, we can take a billion-dollar loss. And we will have a billion-dollar loss at some point.

And anyone buying it knows we can take it, or something greater. And they should know that very few other — very few of our competitors can. So, there's competition.

We do an unusual proportion of our business with the eight or ten largest insurance — reinsurance companies and insurance companies in the world. So, we really have established with the people who understand the real risks of the business.

They come to Berkshire and — a lot more often than they stop in Bermuda, because they know that we'll pay. And they've been around long enough to know that, in the end, that's what really counts with an insurance company.

If the rates — if there were enough capacity at really ridiculous rates, I mean, in the end, we wouldn't be writing that business at that time. But I don't think that will happen. It certainly hasn't happened so far. And if it happens, you know, so be it. We'll all play golf until the loss occurs.

Charlie? (Laughter)

CHARLIE MUNGER: Nothing to add.

10. Graham's principles for high-tech stocks?

WARREN BUFFETT: Zone 6? Or did we do — yeah.

AUDIENCE MEMBER: Chairmen, most company Berkshire invest at this time are not high in — are not in high-technology sector. What we have seen in the last few years, that there seems to be a significant growth, both in sales and earnings of the high-technology area.

And also, what invest — what U.S. shareholder believe that the times are changing from a brand name to high-technology.

My question is, can someone apply your investment principle, business philosophy, and your discipline in life to build a portfolio of, say, five or six high-technology company? Let's call it Berkshire Hathaway Technology Fund? (Laughter)

WARREN BUFFETT: Well, I think it would sell. (Laughter)

The question about — Charlie and I won't be able to do it. We — Charlie probably understands high-tech. But you can see how hard it is to get any information out of him. So — (laughter) — he hasn't told me yet.

We try not to get into things we — that we don't understand. And if we're going to lose your money, we want to be able to come before you, you know, next year and tell you we lost your money because we thought this and it turned out to be that.

We don't want to say, you know, somebody wrote us a report saying if, you know, "This is what's going to happen," in some field that we don't understand and that, therefore, we lost your money by following someone else's advice. So, we won't do it ourselves.

At — I think that the principles — I think Ben Graham's principles — are perfectly valid when applied to high-tech companies. It's that we don't know how to do it, but that doesn't mean somebody else doesn't know how to do it.

My guess is that if Bill Gates were thinking about some company in an arena that he understood and that I didn't understand, he would apply much the same way of thinking about the investment decision that I would. He would just understand the business.

I might think I understand Coca-Cola or Gillette. And he may have a — he may have the ability to understand a lot of other businesses that seems as clear to him as Coke or Gillette would seem to me.

I think once he identified those, he would apply pretty much the same yardsticks in deciding how to act.

I think he would act — I think he would have a margin of safety principle that might be a little different because there's essentially more risk in a high-tech company. But he would still have

the margin of safety principle on a — sort of adjusted for the mathematical risk of loss in his mind.

He would have — he would look at it as a business, not as a stock.

You know, he would not buy it on borrowed money. I mean, it — a bunch of principles would be carried through.

But our circle of things we understand is really unlikely to enlarge, maybe a tiny bit here or there. But if the capital doesn't get too large, the circle's OK.

And — but we will not —if we have trouble finding things within our circle, we will not enlarge the circle. You know, we'll wait. That's our approach.

11. USAir: "You don't have to make it back the way you lost it"

WARREN BUFFETT: Now, how are we set up for Zone 7? Can we do it out — yeah, here we are.

AUDIENCE MEMBER: Are you there? Hi, I'm Susie Taylor (PH) from Lincoln, Nebraska.

By way of explaining — we wrote down the value of USAir, reflecting our investment's current market value.

You had a good explanation in your report as to why the economics of the business are unattractive. And I presume, given the choice, we wouldn't do it over again.

WARREN BUFFETT: I think that's a fair assumption. (Laughter)

I should mention, anybody wanted to ask about USAir, we put them in the other room, just so you'll know why. (Laughter)

AUDIENCE MEMBER: And then the second part is better.

WARREN BUFFETT: But I'm watching you. I can see you on the monitor. (Laughs)

AUDIENCE MEMBER: And quoting from your profound statement, "You don't have to make it back the way you lost it."

WARREN BUFFETT: Right.

AUDIENCE MEMBER: Wouldn't it be a good idea to put that 89 million in something you are really behind as opposed to USAir?

WARREN BUFFETT: Well, that's a very good question. Because it is true that a very important principle in investing is you don't have to make it back the way you lost it. And in fact, it's usually a mistake to make — try and make it back the way that you lost it.

And we have — when we write our — an investment down, as we did with USAir at 89 million, we probably think it's worth something more than that. But we tend to want to be on the conservative side. But it's worth a whole lot less than we paid.

And the nature of that preferred, as well as other private issues we've bought, usually makes it quite difficult to sell. That's one of the things we know going in.

When we bought preferred, some people thought that we were getting unusually favorable terms. I haven't heard from them lately on USAir, but — (Laughter)

But one of the considerations in that is that, if you buy a hundred shares of a preferred that's being offered through a securities firm, from the same issuer, you can sell it tomorrow. And we are restricted, in some ways legally, and in other ways simply by the way that markets work, from disposing of holdings like that.

And we know that there's an extra cost involved to us if we should try to sell, or it may be impossible.

And that's not of great importance with us because we don't buy things to sell, but it's of some importance.

And we are not in the same position owning our Series A preferred of USAir as we would be if we bought a thousand shares or 5,000 shares of the Series B preferred, I believe it is, that trades on the New York Stock Exchange. That would be very saleable.

And our preferred could well even be saleable at a price modestly above what we carry it for, but it would require — it would not be very easy to do.

It might — if it were do — if we went about to do it, we could probably — assuming we could do it at all — we could probably get a little more money for it.

But it would not be easy to do, partly because of legal restrictions. Charlie and I are on the board. That complicates things.

We always know something that, just by being on the board, that the public doesn't know. So, that complicates things.

And in the end, we usually find that dealing with anything where we've got fiduciary obligations is, maybe, not practical at all. And if it is, it's probably more trouble than it's worth.

Charlie?

CHARLIE MUNGER: Well, it's certainly been an interesting experience, the USAir experience. (Laughter)

WARREN BUFFETT: Is that it, Charlie? OK. No, he —

CHARLIE MUNGER: I'd like to repeat that business about not having to get it back the way you lost it. You know, that's the reason so many people are ruined by gambling.

They get behind and then they feel they have to get it back the way they lost it. It's a deep part of the human nature.

And it's very smart just to lick it by will, and little phrases like that are very useful.

WARREN BUFFETT: Yeah, one of the important things in stocks is that the stock does not know that you own it. You know, you have all these feelings about it. You know, and — (laughter) — you remember what you paid, you know? (Laughter)

You remember who told you about it. All these little things, you know?

And it — you know, it doesn't give a damn, you know? (Laughter)

It just sits there. And it — you know, a stock at 50, somebody's paid a hundred, they feel terrible. Somebody else paid 10, they feel wonderful. All these feelings, and it has no impact whatsoever.

And so, it's — as Charlie says, gambling is the classic example. Someone builds a business over years. You know, that, they know how to do.

And then they go out some place and get into a mathematically disadvantageous game. Start losing it and they think they've got to make it back, not only the way they lost it, but that night. And — (laughter) it's a great mistake.

12. Beware of complicated fads and "high priests"

WARREN BUFFETT: Zone 1.

AUDIENCE MEMBER: My name is Donald Stone. I'm from Riverside, Connecticut. I'm — this is my second shareholders meeting, ever, at age 61. So, I'm really very privileged to be here.

My first was Coca-Cola a week and a half ago. And there were only 200 people there. I'm trying to figure this out. (Laughter)

I think the rule is that the number of people present is in direct proportion to the price of the shares.

WARREN BUFFETT: Well, in that case, we won't split. (Laughter)

AUDIENCE MEMBER: OK.

Prefatory comment to my question: the November 24th, 1994 issue of Fortune Magazine had an article, a featured article, entitled "America's Greatest Wealth Builders," dealing with the concepts of market value added and economic value added.

It was with great glee that I noticed that Coca-Cola was number two on that list, second only to General Electric, and that Coca-Cola had done twice as well as Pepsi-Cola, number nine on the list, with one-third as much capitalization.

My question is this: whether the concept of market value added and economic value added, as such, or any of its variants, is a concept that's applicable and useful to Berkshire Hathaway as a whole, or in analyzing its line of business segments?

I'd really like to hear from Charlie Munger on this first. (Laughter) Because I've heard —

WARREN BUFFETT: So would I. (Laughter)

AUDIENCE MEMBER: I've heard —

WARREN BUFFETT: Charlie?

AUDIENCE MEMBER: I've heard that he's thought a lot about this particular subject.

WARREN BUFFETT: Right.

CHARLIE MUNGER: If Warren is using economic value added exactly the way they're now teaching it in the business schools, he hasn't told me.

Obviously, the concept has some merit in it. But the exact formal methods, I don't believe we use.

Warren, are you using this stuff secretly?

WARREN BUFFETT: No, we — (laughter) — in a sense, they're trying to get at the same thing we do. Or we're trying to get at the same thing they do. But I think it's — A, I think it has some flaws in it.

Although I think it generally comes out with the right answers, it sort of forces itself to come out with the right answers.

But I really don't think you need that sort of thing. I mean, I do not think it's that complicated to figure out, you know, where it makes sense to put money. You can make mistakes doing it. But in terms of the mental manipulations you go through, I don't think it's a very complicated subject.

And I don't think that — I think that the people marketing one or another fad in management tend to make them a little more complicated than needed so that you have to call in the high priest.

And, you know, it — if all that really counts is the Ten Commandments, you know, it's very tough on religious counselors and everything. (Laughs)

It doesn't take — it just doesn't make it complicated enough.

And I think there's some of that in — quite a bit of that — in management consulting and in the books that you see and all of that, that come out.

CHARLIE MUNGER: It's way less silly than the capital assets pricing model. So that, at least academia's improving. (Laughter)

WARREN BUFFETT: Really, yeah. The capital asset pricing model, which is — I don't know how much it's used now. Certainly — you know, they had these great waves of popularity. You get that in management. You get it in investing. I mean, real estate, you know, may have been popular, or international.

I — you can read Pensions & Investment magazine, which is a pretty good magazine. But you can just see these fads sort of going through. And then they have seminars on them and everything. And, you know, the investment bankers create product to satisfy the demand.

And there're these fads in management — I mean, obviously, listening to your customer and things like that, I mean, that is — nothing makes more sense. But it's hard to write a 300-page book that just says, "Listen to your customer." (Laughter)

And, you know, that's one of the things I liked about Graham's book. I mean, you know, he wrote — everything he wrote sort of made sense. He didn't sort of get into all the frills and try and make it more complicated than it really, truly is.

You know, I really didn't need to read the November issue — 1994 issue of Fortune — to know that Coca-Cola had added a lot of value. (Laughter)

We added about 4 billion-some of value to Berkshire. That's good enough for me. (Laughter)

13. Derivatives: "Potential for mistakes and mischief"

WARREN BUFFETT: Zone 2.

AUDIENCE MEMBER: My name is Maurus Spence (PH) from Omaha, Nebraska. I have a two-part question on derivatives.

Does Berkshire Hathaway currently, or had they in the past, engaged in strategies involving derivatives?

If so, do you as CEO, fully understand these financial instruments? (Laughter)

WARREN BUFFETT: Whoever suggested that crazy notion? (Laughter)

AUDIENCE MEMBER: Finally, would Charlie care — you or Charlie — care to comment on the use of these by other financial institutions?

WARREN BUFFETT: The question about derivatives — the reason I inject that remark — in a Fortune article that all of you should read if you haven't, I suggested that the use of derivatives would be dramatically reduced if the CEO had to say in the report whether he understood them or not, and — (Laughter)

The answer to your question, though, is we have two types, I guess it would be, of derivative transactions, of very modest size. But that doesn't mean we wouldn't — if the conditions were right, we either wouldn't have them on a much greater scale now, or we wouldn't have done it in the past.

We have two types of transactions, and I do understand them. And there are times when there are things that we would want to do — not often — but there would be times when they could be best accomplished by a transaction involving a derivative security. And we wouldn't hesitate to do so.

We would obviously care very much about the counterparty, because that transaction is just a little piece of paper between two people. And it's going to cause one of the two to have to do something painful at the end of the period, usually, which is to write a check to the other person.

And therefore, you want to be sure that that person will be both willing and able to write the check. And so, we're probably more concerned about counterparty risk than most people might be.

Last year and the year before, I think I said that derivatives often combine borrowed money with ignorance, and that that is a rather dangerous combination. And I think that we've seen some of that in the last year.

When you can engage in, sort of, non-physical transactions that involve hundreds of millions, or billions, or tens of billions of dollars, as long as you can get some party on the other side to accept your signature, that really has — that has the potential for a lot of mistakes and mischief.

And if you've looked at the formulas involved in some, particularly I guess, interest rate-type derivative instruments, it is really hard to conceive of how any business purpose could be solved by the creation of those instruments.

I mean, they essentially had a huge, really, gambling element to them.

And I use that in the terms of engaging in a risk that doesn't even need to be created, as opposed to speculative aspects. They involved a creation of risk, not the transfer of risk, you know, not the moderation of risk, but the creation of risk on a huge scale.

And it may be fortunate that in the last year, half a dozen or so cases of people that have gotten into trouble on them have come out because it — that may tend to moderate the troubles of the future.

The potential is huge. I mean, you can do things in the derivative markets —

Well, I've used this example before, but in borrowing money on securities, the Federal Reserve of the U.S. Government decided many decades ago that society had an interest in limiting the degree to which people could use borrowed money in buying securities.

They had the example of the 1920s, with what was 10 percent margin. That was regarded as contributing to the Great Crash.

So, the government, through the Fed, established margin requirements and said, "I don't care if you're John D. Rockefeller," you know, "You're going to have to put up 50 percent of the cost of buying your General Motors stock," or whatever it may be.

And they said that maybe Mr. Rockefeller doesn't need that, but society needs that. They don't — we don't want a bunch of people on thin margins gambling, you know, essentially, in shares, where the ripple effects can cause all kinds of problems for society.

And that's still a law. But it means nothing anymore because various derivative instruments have made 10 percent margins of the 1920s, you know, look like what a small-town banker in Nebraska would regard as conservative, compared to what goes on.

So, it's been an interesting history. You know, like I say, perhaps the experiences of the last year — they've got everybody focused on derivatives. Nobody knows exactly what to do about them.

Berkshire Hathaway will — if we think something makes sense and Charlie and I understand it — we may find ways to use them to what we think will be our advantage.

Charlie, you want to add anything on that?

CHARLIE MUNGER: Well, I disapprove even more than you do, which is hard.

If I were running the world, we wouldn't have options exchanges. The derivative transactions would be about 5 percent of what they are. And the complexity of the contracts would go way down. The clearing systems would be tougher.

I think the world has gone a little bonkers. And I'm very happy that I'm not so located in life that I have to be an apologist for it.

You know, a lot of these people, I feel sorry for them. You know, they had great banks. And they have to go before people, sometimes even including their children and friends, and argue that these things are wonderful.

14. Salomon's murky future

WARREN BUFFETT: Zone 3?

AUDIENCE MEMBER: Good morning. I'm John Nugier (PH) from Kingsburg, California. And my question relates to Salomon.

And where — I'm just asking if you could take us out the next two or three years in your vision. It started out as a good investment. You got a good return on it, or your interest.

And it's clearly had some problems. And we have gotten in deeper and deeper as those problems have continued. And it doesn't look like it's superbright.

So, it — you must understand where it's going. But could you just give us where you see it going in the next two or three years?

WARREN BUFFETT: Well, no, I think it's very difficult to forecast where Salomon or, really, almost any major investment bank, slash, trading house will do over actually the next two or three months, let alone the next two or three years.

The nature of that business is obviously far more volatile than the blade and razor business. Now the — and the tough part is assessing over a longer period of time whether — because of volatility, it's much harder to assess whether — what the average returns might be from a business.

And the answer is, Charlie and I, probably, if we were to try and write the forecast for the next two or three years, we would not have a high — a feeling that we had a high probability of being able to predict what that company, or other companies in that industry either, would earn three years out or would probably have in the way of average earnings.

Our own commitment is to a $700 million preferred issue, which has five redemption dates starting in October 31st of this year and then every year thereafter.

On those dates, we can either take cash or stock. And that's an advantage, obviously, to have an option. Any time you have an option in this world, it's to an advantage — it's to your advantage.

It may be a very small advantage, but it's — giving options is generally a mistake, and accepting options is usually a good idea, if it doesn't cost you anything.

And we will — the other thing about options is you don't make a decision on them until you have to make a decision. But — so, we, in addition to that $700 million of preferred, which in our view is a hundred percent money-good — I mean, we'd like to own more of that.

But we also have about 6 million-odd shares of common, which we paid perhaps $48 a share for, or something in that area. In any event, considerably more than the present market of 35 or '6. So, we have a loss of probably 80 or $90 million, or some number like that, at market in the common.

The preferred has actually treated us fine. We've received $63 million a year.

Incidentally, by owning the amount of common we own, this probably isn't generally known, but — or recognized — if you own 20 percent of the voting power of a company, you have a somewhat different dividends-received credit. You have somewhat different tax treatment than if you own less than 20 percent.

So, until we own that common, we paid somewhat more tax on our preferred dividend than we now pay. It's not a huge item, but it's not immaterial, either.

Charlie?

CHARLIE MUNGER: Well, I certainly agree, it's hard to forecast what's going to happen in the big investment banking, dash — slash, trading houses.

I would like to say that Berkshire Hathaway was a large customer of Salomon long before we bought the preferred, and that we've had marvelous service over the years.

I think Salomon's going to be around for a long time, rendering very good service to various clients.

WARREN BUFFETT: We sold —

CHARLIE MUNGER: Satisfied clients.

WARREN BUFFETT: We sold our first debt issue of Berkshire, I think, in 1973, through Salomon. So, we've had an investing banking relationship for 21 or 22 years there. And actually, we'd done business with them before that in various other ways. So, it's a long-term relationship.

But there's no question about Salomon being around. The question — and that's why our preferred is absolutely money-good.

But the question is what the average return on capital will be. And we knew that was difficult to predict when we went in. And we found out it's even more difficult to predict than we thought.

15. Honoring mutual fund pioneer Phil Carret

WARREN BUFFETT: Zone 4?

AUDIENCE MEMBER: Thank you for the opportunity. Dick Jensen (PH) from Omaha, a fellow Nebraska University supporter.

A rather convoluted question: very interested in your recent purchase and your future intention of American Express. And as I understand the company, I know it's a rather involved and complicated and rather expansive company, insofar as it has its interest in many areas.

I know one of which, of course, is the credit card. But there's also the major part of the organization of IDS and others that I don't even know about.

And I wondered, what your hopes are for that investment.

And I also, just recently, as perhaps you have, became curious to know if you are personally acquainted with Mr. Phil Carret, I believe, his name is. And how about the purchase of his firm in your future? Thank you.

WARREN BUFFETT: Dick, I think Phil Carret is here today. Phil?

CHARLIE MUNGER: He's right back there.

WARREN BUFFETT: Phil, would you stand up? There he is. (Applause)

Give him a hand.

Phil is 98. I first met him in 1952, 43 years ago. He attends every eclipse around the world. And you can run into him in some very strange places.

Wrote his first book on securities, I believe, in 1924. I — am I right on that, Phil? Yeah.

And wrote an autobiography here, recently.

Probably the greatest long-term investment record in this country's history. And — but I think — I, you know, my impression is that Phil sold part, or a good bit, of Pioneer some years ago, which he managed for decades, many decades.

In fact, I first learned about Phil when I was leafing through Moody's Banks and Financial Manual 40-odd years ago, and I saw this company with this great record and with some securities that looked terribly interesting.

So, we got in touch. And he was out in Omaha and we got acquainted. It — so, anybody that can get Phil to talk to them, listen carefully. I advise that.

16. Cards are key to future of American Express

WARREN BUFFETT: The question about American Express: we own just under 10 percent of American Express. And obviously, even though you mentioned they're in a number of businesses, the — by far, the key, the most important factor in American Express's future for a good many years to come — a great many years to come — will be the credit card.

And that is a business that has become, and will forever, probably, become ever more competitive. I mean, I followed it since — I think I met Ralph Schneider at the Diners' Club in the late 1950s.

And American Express entered into the credit card business out of fear. I mean, they were worried about what the credit card was going to do to their traveler's check business. Traveler's check business had been originated back in 1890-something, I believe.

And that was, in turn, building off of the old express business where, I think, it was Henry Wells and William Fargo, they would chain themselves to the express boxes as they delivered them through the — to the West.

And they decided that maybe issuing traveler's checks would a little easier — (laughter) — than carrying all this stuff around.

So, that — the traveler's check was the — evolved out of the express business.

And the credit card business with American Express arose out of fear of what — particularly Diners' Club at the time. They were all terrified of Diners' Club, which got this — got the jump on everybody.

And they became enormously successful with it. And the American Express card, as you know, had a terribly strong position in what they called the "travel and entertainment" part of the card business.

And of course, the banks entered in on a big scale. And Visa's been enormously successful.

So, the card has a strong franchise in certain areas, like the corporate card. Although people like First Bank System are very aggressive in going after them there.

The card — but the card has a significant franchise, but it does not have the breadth of franchise that it had many years ago.

For a while, it was "the" card. And now it's "the" card in certain areas, but nothing like as broad an area as before.

It has certain, very important, advantages and economic strengths and it has some weaknesses. And you have to suss those, in deciding where it'll be in the year 2000 or 2005.

And we think that the management of American Express thinks well about the question of how to — how you keep the card special in certain situations. And they've reacted to the merchant backlash for higher discount fees, I think, in an intelligent way.

So, we'll see how it all plays out. But the key — IDS, which has now been renamed, but is a very big part of American Express — it accounts for close to a third of their earnings — but the real key will be how the card does over time.

Charlie?

CHARLIE MUNGER: Nothing to add.

17. "Corruption won" in stock option accounting rule

WARREN BUFFETT: Zone 5?

AUDIENCE MEMBER: Hi, my name is Philip King (PH) from San Francisco.

And my question has to do with how the FASB has caved in on the stock option proposal.

And the people opposed to the proposal argue that it would hurt capital formation for companies and that the cost of stock options is already reflected in shares outstanding, in fully diluted calculations.

And I was curious, what is your feelings about what's happened?

WARREN BUFFETT: Well, as those of you have followed this issue — FASB did cave, and they were — they hated it. I mean, they knew they were right. Matter of fact, most of the, what are now, I guess, the big six auditing firms, many years ago, sided with the position.

But in my opinion, the auditing firms caved to their clients, in that respect.

In terms of capital formation, I would argue that the most intelligent form of capital formation follows from the most accurate form of accounting.

I mean, it — if all the companies with — whose names began with A through M didn't have to count depreciation and all the ones with N through Z did, or something, you know, that might help in capital formation for companies that were — had names with A thru M. And incidentally, they probably all change their names.

But I don't think that bad accounting is an aid to capital formation. In fact, I think probably over time, it distorts capital formation.

Because if we were to pay all of the shareholders with — I mean, all of the people who worked for Berkshire Hathaway — in stock, and therefore record no wage expense, you know, we might be able to sucker in a bunch of people who thought the earnings were real.

But that would not be a great step forward for capital formation, in my view.

I really think that — you know, I've talked privately to a number of managers about this. And they understand it. But they, you know, they prefer the present situation. And they used a lot of muscle in Washington many years ago.

And I think I have this authenticated now. This fellow — mathematics professor — sent me some material after I'd written this. I try to get a little proof after the fact when I can.

I believe it was in the Indiana legislature, where a legislator introduced a bill to change the value of pi, the mathematical symbol pi, to three. Because he said that it was too difficult for the schoolchildren to work with this — (laughter) — complicated 3.14159.

And he was right. I mean, it was difficult. And I — and Congress, in connection with the stock option question, received all kinds of pressure to, in turn, pressure FASB and the SEC to not count stock option costs as part of compensation.

I've never met anybody that wanted to be compensated that felt that, if he received his present salary plus an option, he was not getting compensated more than if he just received a salary. So, he thought it was compensation.

And I will tell you that if we'd been issuing options over a period of time at Berkshire for things unrelated to the performance of the entire business, that we would've had a cost, perhaps measuring in the billions of dollars, whether it was recorded or not.

So, it goes back to Bishop Berkeley's question of whether a tree that falls in the forest and doesn't make a sound, you know, when — et cetera.

But it — I think it is — I really think that it makes you a bit of a cynic about American business when you see the extent to which a group has pressured — even to the extent of talking about financial — withdrawing financial support from the Financial Accounting Standards Board — the degree to which they've pressured people to make sure the value of pi stays at three instead of 3.14, simply because it was their own ox that was being gored a bit.

In any event, it's — it looks like it's all over now for some time. In fact, now they're pressuring them to even weaken further the standards that have been set. So, self-interest is alive and well in corporate America.

Charlie?

CHARLIE MUNGER: Yeah, I think dishonor won. And I think that — I think it is quite important for a civilization to have sound engineering and good accounting.

And it is a very regrettable episode, leading politicians — leading venture capitalists.

I think to some extent, it's an indictment of the educational system, that this thing could be so widely looked at, and so wrongly.

WARREN BUFFETT: It's bad enough people want to cheat on their accounting. And they do cheat on their accounting. But to want it to be endorsed as the system —

CHARLIE MUNGER: Yeah.

WARREN BUFFETT: — is really kind of disgusting.

CHARLIE MUNGER: Yeah, corruption won.

WARREN BUFFETT: Well, put us down on undecided on that and we'll move on to zone 6. (Laughter)

18. Why there's no video of Berkshire meetings

AUDIENCE MEMBER: Good morning, Mr. Buffett, Mr. Munger, Mike Lee-Chin from Hamilton, Ontario.

Could you consider availing a videotape of this meeting to us, the shareholders?

CHARLIE MUNGER: I didn't quite get that.

AUDIENCE MEMBER: Would you consider availing this videotape of the shareholder — this particular shareholder meeting to us, the shareholders?

CHARLIE MUNGER: Distributing a videotape?

WARREN BUFFETT: A transcript or a videotape?

AUDIENCE MEMBER: Yes.

WARREN BUFFETT: Yeah, we've had that suggested a number of times. It's a good suggestion, and we've considered it.

The thing we're worried about, in connection with that, is discouraging attendance.

I mean, it — (laughter) — we'd hate to have two people here asking questions and then send it out to tens of thousands. So — (laughter) — in the end —

CHARLIE MUNGER: Particularly if it might make sales go down at the jewelry store.

WARREN BUFFETT: Yeah. (Laughter and applause)

Since we were just attacking hypocrisy in American business, Charlie felt like he should add that to my comments. (Laughter)

But we — it's a close call on that because we would like everybody —

Of course, we try to cover a great many subjects in the annual report. But we like the idea of the meeting — answering a lot of shareholders questions.

We don't want to discourage attendance. And it's fun to have everybody come in and ask questions.

And the chances are, if we had far fewer people, we would have, you know, far more — far fewer — good questions. So that the quality of the meeting is enhanced, I think, by having a lot of people come.

But you've come a long way, so I can understand why you might be interested in a transcript. (Laughs)

I apprentice that. Thank you.

AUDIENCE MEMBER: — or no. Is that a yes or a no?

WARREN BUFFETT: It's — (Laughter)

CHARLIE MUNGER: It was a no.

WARREN BUFFETT: It's a no.

AUDIENCE MEMBER: OK. (Applause)

WARREN BUFFETT: Most everything we say is a no. But we have various ways of getting there. (Laughter)

19. Berkshire meetings boost Borsheims' sales

WARREN BUFFETT: OK. Zone 7 from the other room, I can see you.

AUDIENCE MEMBER: Good morning, Mr. Buffett and Mr. Munger.

I was wondering if you could tell us what the sales at Borsheims were yesterday and how it compared to a year ago?

WARREN BUFFETT: Well, I can tell you how it compared to a year ago. They were 15 percent above a year ago. And a year ago it was 40-odd percent above the year before. And I forget how much that was before.

So, we keep setting records. But we haven't announced any numbers. But it's a pretty good size number. You're a sporty crowd.

AUDIENCE MEMBER: Thank you. (Laughter)

20. An "idiot" could successfully run Berkshire

WARREN BUFFETT: Zone 1?

AUDIENCE MEMBER: Good morning. My name is Patrick Terhune from Fort Lauderdale, Florida.

And first of all, I see, per your request, there are a lot of people who wore red in honor of the Cornhuskers. (Applause)

Of course, my team was the — or is the Miami Hurricanes. And I've got my green and orange on under my clothes. So — but if we were to lose, I'm glad we lost to Nebraska and Tom Osborne.

I've got a request for Warren and Charlie, and that is, recognizing that the value, both intrinsic and extrinsic, of Berkshire Hathaway, is the result of your combined skills in acquiring growth

companies and with your prudent and expert investing of the company's capital for growth, I'd like to know if you have a plan — a succession plan — to be executed in the event, God forbid, something happens to one or both of you, which would remove your input to the strategic decisions.

I sincerely hope you're in the process of developing individuals to carry forward your collective visions and to manage the company's resources as effectively and as profitably as is being done now.

WARREN BUFFETT: Well, I appreciate that question. And the answer is, obviously, we do care enormously about that because both Charlie and I — in addition to a lot of other reasons, but in — we both have a very significant percentage of our net worth in Berkshire.

And neither one of us has figured out how to sell it all exactly, you know, 15 minutes before we get hit by a truck. So, we will not have the jump on the rest of you.

And therefore, our continuing interest will go — financially — will go well, well beyond our deaths.

And it will — in terms of foundations or something like that, it will go to organizations that we care very much about having maximum resources available to.

So, we do have some plans. We don't name names or anything of the sort.

It's not quite as tough as you might think because we have a collection of fabulous businesses. Some of them owned totally, some of them owned in part.

And I don't think razor blade sales or Coca-Cola sales are going to fall off dramatically the day Charlie or I die. It — we've got some great businesses. And then same is true of the wholly-owned businesses.

So the question is more that of allocating capital in the future. And you know, that's a problem for Charlie and me right now, simply because of the size with — it's not easy to find things to do that make sense with lots of money.

And sometimes a year will go by and we don't find anything. And other times a year goes by, and we think we found something, but it turns out we were wrong.

So, it's not easy. But we think we will have some very smart people working on that.

And we don't think it will be the end of the world if they don't find anything the first year, because the businesses will run very well.

We have a big advantage in that, as contrasted to virtually almost every other company, we, now and in the future, are willing — eager — to buy parts of wonderful businesses or all of them.

I mean, most managements have a — most investors are limited to buying parts of businesses. And most managers, psychologically, are geared to owning all of something that they can run themselves.

We — you know, it's like, I think Woody Allen said some years ago, the advantage of being bisexual is it doubles your chances of a date on Saturday night. (Laughter)

And we can go either direction, in that respect. (Laughter)

And our successors will also. So very — Charlie, you want to add anything?

CHARLIE MUNGER: I think few business operations have ever been constructed to require so little continuing intelligence in corporate headquarters. (Laughter)

An idiot who was willing just to sit here would have a very good record long after the present incumbents were dead.

WARREN BUFFETT: I think that's true.

CHARLIE MUNGER: Yeah. I think it would be a little better if Warren would keep alive, in terms of allocating the new capital. I don't think we'll easily replace Warren.

But, you know, we don't have to keep getting rich at the same rate we have in the past. (Laughter)

WARREN BUFFETT: That's a tie vote. (Laughter)

21. Decisions so obvious that exact numbers aren't needed

WARREN BUFFETT: Zone 2?

AUDIENCE MEMBER: Hi, this —

WARREN BUFFETT: (Inaudible)

AUDIENCE MEMBER: — Keith Briar from San Francisco.

I have a question. When you're valuing the companies and you discount back the future earnings that you talk about, how many years out do you generally go? And if you don't go out a general number of years, how do you arrive at that time period?

WARREN BUFFETT: Well, that's a very good question. And it's — I mean, it's the heart of investing or buying businesses, which we regard as the same thing, but —

And it is the framework in which we operate. I mean, we are trying to look at businesses in terms of what kind of cash can they produce, if we're buying all of them, or will they produce, if we're buying part of them. And there's a difference. And then at what discount rate do we bring it back.

And I think your question was how far out do we look, and all that.

Despite the fact that we can define that in a very kind of simple and direct equation, you know, we are — we've never actually sat down and written out a set of numbers to relate that equation.

We do it in our heads, in a way, obviously. I mean, that's what it's all about.

But there is no piece of paper. And we never — there never was a piece of paper that shows what our calculation on Helzberg's or See's Candy or The Buffalo News was, in that respect.

So, it would be attaching a little more scientific quality to our analysis than there really is, if I gave you some gobbledygook about, "Well, we do it for 18 years and stick a terminal value on and do all of this."

We are sitting in the office thinking about that question with each business or each investment. And we have discount rates, in a general way, in mind.

But we really like the decision to be obvious enough to us that it doesn't require making a detailed calculation.

And it's the framework. But it's not applied in the sense that we actually fill in all the variables.

Is that a fair way of stating it, Charlie?

CHARLIE MUNGER: Yeah. Berkshire is being run the way Thomas Hunt Morgan, the great Nobel laureate, ran the biology department at Caltech.

He banned the Friden calculator, which was the computer of that era. And people said, "How can you do this? Every place else in Caltech, we have Friden calculators going everywhere."

And he said, "Well, we're picking up these great nuggets of gold just by organized common sense, and resources are short, and we're not going to resort to any damn placer mining as long as we can pick up these major aggregations of gold."

That's the way Berkshire works. And I hope the placer mining era will never come.

Somebody once subpoenaed our staffing papers on some acquisition. And of course, not only did we not have any staffing papers, we didn't have any staff. (Laughter and applause)

22. "Something will happen" and we want to be ready

WARREN BUFFETT: Zone 3?

AUDIENCE MEMBER: I'm Tom Morrow (PH) from Laguna Beach, California. And the question I have to ask pertains to the issuance of the new stock.

And again, as Charles mentioned, is there some potential gold mine out there that you have specifically in mind with the — some large acquisition that you have specifically in mind at this time, without revealing any strategic secrets?

WARREN BUFFETT: Yeah. There are things we would like to do. Whether we ever get a chance to do them or not is another question. But you know, I will be surprised if, in the next five years, we haven't used some preferred stock one time or another.

As I mentioned in the report, we had one last year that if we'd done it, it would've involved the issuance of maybe a billion dollars' worth of — no, more than that, I'm sorry — a couple billion dollars' worth of preferred.

That one isn't going to happen, in my view. I mean, it — there's one chance in a hundred it'll — it could happen or something of the sort — but, probably, it isn't going to happen.

On the other hand, we want to be prepared for it. Something will happen. That's always been our experience.

You know, we have sat through some dry spells. And this is true in both the stock market and the acquisition business.

You know, I closed up the partnership in 1969 because there was nothing that made sense to do. And I'm glad I did because that situation prevailed in '71 and '2.

But in 1973 and '4, you know, there were all kinds of things to do.

And that will happen from time to time. People will behave, particularly in markets, just as foolishly in the future as they have in the past. It'll come at unexpected times. But we will get a chance to do something.

Now, that's more of a cash-type purchase, obviously, in the market. But we will get a chance to use the preferred.

And we will try to think about big things. We may not find them. But Charlie and I, the larger something is, the more interested we are.

23. Big assets make float more flexible

WARREN BUFFETT: Zone 4.

AUDIENCE MEMBER: Jim Moss (PH) from Los Angeles.

I was reading through your annual report. And to me, an eye-popping number in there was the amount of float in 1994, at a cost of less than zero — I think it was $3 billion.

And I was wondering if there are any restrictions on your investment of that money, or can that go into your marketable equity securities?

WARREN BUFFETT: The question relates to — we have that long table we put in — we introduced about four years ago or so in the annual report, that shows the amount of float and the cost of float.

And that's a very important table. It — in terms of our operating businesses, that's probably the most important piece of information in the report.

And that float is, as you noted, well over $3 billion now — last year, because of various favorable factors, including the fact that our super-cat business was favorable, but also, because our other insurance businesses did very well — amazingly well.

The cost of that float, which is money that we're holding that eventually — does not belong to us, but will go to somebody else. The cost of that float was less than zero, and that is a very valuable asset.

And the question is, how much flexibility we have in investing that, which I think was the core of your question.

The answer is we have a lot of flexibility. We are not disadvantaged by that money being in float, as opposed to equity, really, in any significant way.

Now, if we had a very limited amount of equity and a very large amount of float, we would impose a lot of restrictions on ourselves as to how we would do it, because we would want to be very sure that we were in a position to distribute that float, in effect, to policyholders, or claimants, or whatever it may be at the time that was appropriate.

But we have so much net worth that, in effect, that float is just about as useful to us as equity money. And that means quite useful. It's a big asset of Berkshire's.

24. Not feeling threatened by Beardstown Ladies

WARREN BUFFETT: Let's see, we've got zone 5.

AUDIENCE MEMBER: Susan Scott (PH) from Madison, Wisconsin.

On a more serious note, are you beginning to feel threatened by the success of the Beardstown Ladies? (Laughter)

WARREN BUFFETT: Which lady?

CHARLIE MUNGER: I —

WARREN BUFFETT: Which lady was that? I —

CHARLIE MUNGER: I didn't get it.

WARREN BUFFETT: I got everything except what lady that was.

AUDIENCE MEMBER: The Beardstown Ladies, the investment group?

WARREN BUFFETT: Oh, that group. Yeah, the best-seller. Yeah. I have not read that book. I hate to admit that to an audience of shareholders, that I —

This is a book that's — I think it's probably number, I don't know, seven or eight or something like that on the Times best-seller list, and been up there for a couple of months now.

It's a group — an investment group — that, apparently, is sharing with the world their secrets of success.

I'm always suspicious of people when they're sharing with the world any great ideas on investments. But we are not threatened at the moment, no. (Laughter)

25. Economics of the moat and the castle

WARREN BUFFETT: Zone 6.

WARREN BUFFETT: Mike Assail (PH) from New York City.

In the mistake du jour section of the annual report, you mentioned a fundamental rule of economics that you missed. I'd like to know the two or three most important fundamental rules of economics you habitually get right.

In other words, what are the fundamental rules of economics you used to make money for Berkshire?

And I'm not talking about Ben Graham's principles here, but rather, rules of economics which may be found in an economics textbook. Thank you.

WARREN BUFFETT: We — Yeah, we try to — I mean, we try to follow Ben's principles, in terms of the attitude we bring toward both investing and in buying businesses.

But the most important thing you can — you know, what we're trying to do is we're trying to find a business with a wide and long-lasting moat around it, surround — protecting a terrific economic castle with an honest lord in charge of the castle.

And in essence, that's what business is all about. I mean, you want to be the lord of the castle, yourself. In which case, you don't worry about that last factor.

But what you're trying to — what we're trying to find is a business that, for one reason or another — it can be because it's the low-cost producer in some area, it can be because it has a natural franchise because of surface capabilities, it could be because of its position in the consumers' mind, it can be because of a technological advantage, or any kind of reason at all, that it has this moat around it.

And then our — then what we have to decide is — all moats are subject to attack in a capitalistic system, so everybody is going to try and — if you've got a big castle in there, people are going to be trying to figure out how to get to it.

And what we have to decide — and most moats aren't worth a damn in, you know, in capitalism. I mean, that's the nature of it. And it's a constructive thing that that's the case.

But we are trying to figure out what is keeping — why is that castle still standing? And what's going to keep it standing or cause it not to be standing five, 10, 20 years from now. What are the key factors? And how permanent are they? How much do they depend on the genius of the lord in the castle?

And then if we feel good about the moat, then we try to figure out whether, you know, the lord is going to try to take it all for himself, whether he's likely to do something stupid with the proceeds, et cetera. But that's the way we look at businesses.

Charlie, you want to add anything?

CHARLIE MUNGER: Well, I think he wants it translated into the ordinary terms of economics. The honest lord is low agency cost. That's the word in economics.

And the microeconomic business advantages are, by and large, advantages of scale — scale of market dominance, which can be a retailer that just has huge advantages in terms of buying cheaper and enjoying higher sales per square foot.

So you're — by and large, you're talking economies of scale. You can have scale of intelligence. In other words, you can have a lord with enough extra intelligence that he has a big advantage. So you're — by and large, you're talking scale advantages and low agency costs.

WARREN BUFFETT: Yeah, to some extent, Charlie and I try and distinguish between businesses where you have to have been smart once and businesses where you have to stay smart.

And, I mean, retailing is a good case of a business where you have to stay smart.

But you can — you are under attack all of the time. People are in your store. If you're doing something successful, they're in your store the next day trying to figure out what it is about your success that they can transplant and maybe add a little something on in their own situation. So, you cannot coast in retailing.

There are other businesses where you only have to be smart once, at least for a very long time. There was once a southern publisher who was doing very well with his newspaper. And someone asked him the secret of his success. And he said monopoly and nepotism. (Laughter)

And I mean, he wasn't so dumb. I mean, he didn't have any illusions about himself.

And if you had a big network of television affiliates station 30 years ago, there's still a major difference between good management and bad management. I mean, a major difference.

But you could be a terrible manager and make a fortune, basically. Because the one decision to own the network TV affiliate overcame almost any deficiency that existed from that point forward.

And that would not be true if you were the first one to come up with some concept in retailing or something of the sort. I mean, you would have to be out there defending it every day.

Ideally, you know, is you want terrific management at a terrific business. And that's what we look for.

But as we pointed out in the past, if you have to choose between the two, get a terrific business.

Charlie, any more?

CHARLIE MUNGER: No.

26. Compliments for Helzbergs of Kansas City

WARREN BUFFETT: Let's see, zone 7, I believe is next?

VOICE: No questions from zone 7.

WARREN BUFFETT: OK. How about zone 1?

AUDIENCE MEMBER: Paul Miller (PH) from Kansas City.

First, I'd like to comment on your purchase of Kansas City-based Helzberg Jewelers. You commented about Barnett Helzberg and his — what he's done, retailing-wise.

For those of us in Kansas City, you've also picked up Barnett and Shirley Helzberg, who are the first family in philanthropy in Kansas City.

And for the shareholders in this room, the Helzbergs are wonderful people. And to have them added to this group of companies says miles about Warren Buffett and that they pick companies based upon their management and their people.

So, kudos to Berkshire Hathaway for picking up the Helzbergs, and thanks to the Helzbergs for everything they've done to Kansas City. Now, my — (Applause)

WARREN BUFFETT: Appreciate that. (Applause)

27. Putting a value on the subsidiaries

AUDIENCE MEMBER: My question relates to value. We can look in the annual report, and we can all see the purchase of a Washington Post, for instance, for $10 million that has a value today of 420 million.

But discerning the value of the other consortium of non-publicly traded businesses, the Nebraska Furniture Marts, the Borsheims, et cetera — the value of their purchase price over the years versus their value today, how can we understand that value and how is it reflected in the annual reports?

WARREN BUFFETT: Yeah, well we try to — that's a good question. We try to give you the information that we would want in answering that question, in the annual report.

Part of it, we do in those pages where we say it's not according to GAAP accounting. But there's a lot of useful information in there.

We're not — we don't stick a number on each company. But we try to give you enough information about the capital employ, the margins, and all of that sort of thing on the bigger businesses that you can make estimates that are probably just about as good as ours.

WARREN BUFFETT: Charlie and I would not need more information than is in the report to come up with a pretty good idea of what the controlled businesses are worth. And there's no

information we're holding back that we think would be of any real importance in evaluating those businesses.

But you're right, it's a lot easier with marketable securities than it is — at least in terms of current numbers — than it is with the wholly-owned businesses.

The wholly-owned businesses, generally speaking, some of them are worth a whole lot more than we've — than they're carried on the books for. And we feel pretty good about, essentially, all of them.

But they're — they've turned out remarkably well, I would say that, over the years. And my guess is that they keep working pretty well.

We have managers in a number of those businesses here. I'm not going to introduce them all because we have so many that it would take a considerable period of time.

But you named The Washington Post. In the front row there, close to the front row, we have Don Keough, would you step up, of Coca-Cola? (Applause)

And we have Kay Graham for the Post. (Applause)

And Tom Murphy from Cap Cities. (Applause)

CHARLIE MUNGER: Is Paul Hazen here, too?

WARREN BUFFETT: And I'm going to try and do — well, there's a whole bunch more. I don't want to get — but I — but those three were sitting together and I was struck by the fact that if — those three combined, we have about 6 1/2 billion of profit in, so far. (Laughs)

So, I would say that that's a — (Applause) —

Those are three businesses that have been fantastic. And like — I emphasize "so far" because we'd like to be able to name a bigger number in the future.

But we have a group of managers, both at the controlled companies and at the partly-owned companies, that have just created incredible value for Berkshire.

I mean, Charlie and I sit around and read the paper every day and a lot of magazines and things, watch OJ Simpson or whatever it may be. (Laughter)

And these people are out there creating a ton of value for us. So, we're not going to change it. That —

28. Salomon Brothers culture clash

WARREN BUFFETT: Now, let's see. I think, zone — is it zone 2 now? Or is it — yeah.

AUDIENCE MEMBER: Hello. I'm Tim Palmer (PH) from Dillon, Colorado. I have a question for you regarding Salomon.

In the past week, there's been an article in The New York Times, The Wall Street Journal, and I believe it's Businessweek, that were rather unflattering, as far as what's going on with the management and your selection. There seems to be a — somewhat of a cultural clash there.

I don't know that to be a fact. But I wondered, number one, how you keep yourself open to bad news before it's news.

And what is going on in Salomon there, the compensation plan, et cetera? How do you think that, culturally, is going to work out?

WARREN BUFFETT: Charlie and I are always — we're more interested in bad news, always, than good news. We figure good news takes care of itself. And one — we only give a couple of instructions to people when they go to work for us.

And one of them is to think like an owner. And the second one is to just tell us the bad news immediately, because good news takes care of itself. And we can take bad news, but we don't like bad news late.

So, I would say, in connection with Salomon, that there is, and has been, some culture clash. And there probably almost always would be a culture clash in a business where there is that amount of tension.

Whether it be the entertainment business, or the investment banking business, or the sports business, there's going to be a certain amount of tension when — between compensation to the people that work there and compensation to the owners.

And I think there's been some — that strain has existed at Salomon from the day I was first there and far before that. I mean, I — that was no surprise. It's understandable.

You're seeing a tension, actually, in the airline business between the people that work there and capital. And it's produced terrible results in the airline business. And the people that work there have been able to — and I'm not talking about USAir specifically, although that's a case. But it goes beyond that.

They have had contracts, which were, as I pointed out in the report, were executed in an earlier age, which, essentially, will not allow — in many cases — capital to receive any compensation. And that produces a lot of tension.

You don't have contracts like that in the investment banking business or Wall Street, generally. But you have that same sort of tension.

And changing a culture around, A, takes time and, B, probably takes some change in people. I mean, I don't think that's a great surprise if you expect to do it.

I have — I don't think you can find two better people than Bob Denham and Deryck Maughan. They're smart, they're high-grade, they're willing to work very hard. And there will be people that buy into the arrangements they want to have. And there are people that won't.

Not all of the people that have left, by a long shot, are leaving of their own volition, but most of them are. But some aren't. I mean, there — Salomon lost a lot of money last year. And many of the people that have left were not responsible for some of those losses, but some of the people were.

So, that is not something where you announce names in the paper. But some people are leaving because they can make more money elsewhere. And some people are, maybe, leaving because we think we can make more money without them. (Laughter)

Charlie?

CHARLIE MUNGER: Yeah, I don't think the tensions that have been commented on within Salomon are all that unusual. I think they pretty well exist everywhere on Wall Street. And even in the banks, which have tried to imitate Wall Street. I just think it comes with the territory.

WARREN BUFFETT: I don't know what percentage of the Goldman Sachs partners left this year, but they had tensions that were produced, obviously, when they had a bad year. And they're going to have a bad year from time to time. Everyone's going to have a bad year.

But it — the partners — the general partners — of Goldman Sachs, in the year ended November 30th, 1994, did not do well. They may have not done anything at all. And they'd made some very big money in prior years. And they'll probably make some very big money in subsequent years.

But in the year when they didn't make any money, it was a lot of turnover. And maybe some of that turnover, also, was not all at the volition of the general partners that you read about leaving. I don't know the facts in that case.

But there's a certain amount of tension that exists in Wall Street under any circumstances. And when you aren't making money, there's a lot of tension.

29. Best edition of Ben Graham's "Security Analysis"

WARREN BUFFETT: Zone 3?

AUDIENCE MEMBER: Yeah. My name is Michael Johnson. I'm a native to Omaha, and however, my family and I are Americans living abroad in Dhahran, Saudi Arabia.

My question is related to intrinsic value and Ben Graham's "Security Analysis."

I read a book earlier this year by Janet Lowe, who said that you were more toward the first or second editions of "Security Analysis" and not so much toward the fourth.

Yet, the fourth edition seemed to move more toward growth and value being kind of joined at the hip, like you've said in your last few annual reports.

And so, if I'm a person who's always studying security analysis like I do — I think I spend more time with that — do you think I need to get those first editions? Or is the fourth edition kind of more of what you've moved toward, with your comments such as value and growth are joined at the hip?

WARREN BUFFETT: Janet Lowe is here, incidentally, today. She wrote a very good book on Ben Graham. I recommend that any of you that haven't read it, go out and buy a copy.

The — I still prefer the — I think the second edition is cheaper to buy than the first edition, by some margin. And I think it's basically the same book. So, I — that's the one I would recommend. I — it isn't because of differences on value and growth.

I just think that the reasoning is better and more consistent throughout the second edition, which is really the last one that Ben was the hundred percent — along with Dave Dodd helping him in various ways — was responsible for writing.

So, I think that the book has gotten away, to quite an extent, from both Graham's thinking and from his way of expressing himself. So I really — but I have no quarrel with anybody that wants to read later editions at all.

I do think, probably, the second edition, if you're a real student of security analysis and you read and understand that, you'll — you should do all right.

In terms of — a lot of the mistakes that were made, in terms of junk bonds and accounting and all of that sort of thing, were covered in 1934 in that first edition, and subsequently in 1940 in the second edition. There's a lot of meat in there.

Later on, you know — I must admit, I didn't read the last edition as carefully as the earlier ones. But it struck me, it was — it — what was said was not as important and it wasn't said as well. And it was more expensive. (Laughter)

Charlie, you have any thoughts on that?

CHARLIE MUNGER: No.

30. Why Berkshire doesn't sell businesses

WARREN BUFFETT: Zone 4?

AUDIENCE MEMBER: Yes, Jeff Peskin (PH) from New York City.

And I was — I have a question on the annual report where you say that, obviously, going forward, due to the size of Berkshire, the returns going forward probably won't match the returns of the past.

And then you go on to state that one thing that may hinder that is the fact that you don't really like to sell companies that you own.

And I would just like to know what the reasoning is in that, if you've got a company or investment that you don't think is going to do as well as where you can put the money going forward. What really the reasoning is for holding on and not redeploying the money elsewhere?

WARREN BUFFETT: Yeah. I'll just correct you just slightly. A, I didn't say we'd probably do worse than the past. I said we will do worse than the past. I mean, there's no way we can match percentage numbers of the past.

That, you know, we would — in a period that would not take that long, we would — assuming we paid out nothing — we would gobble up the whole GDP, which is something we may think about, occasionally, but — (laughter) — we don't really expect to accomplish. The —

But — and the second point, that relates to size. That does not relate to our unwillingness to sell businesses, because that unwillingness has existed for decades. But the size has not existed for decades.

The size is — you know, doubling 12 billion or so is harder than doubling 1 billion-2, which was harder than doubling 120 million. I mean, there's no question about that.

So, eventually — well, already it will be a drag on performance. It doesn't mean that the performance will be terrible, but it does mean that 23 percent is an historical figure. It has no predictive value.

The unwillingness to sell businesses, like I say, goes back a long way. That is not what — that —

If that hurts performance, it's peanuts. That's simply a fact — a function of the attitude Charlie and I have, is that if we want to live our lives, we find it a rarity when we find people in the business that we want to associate with. When we do find that, we enjoy it.

We don't see any reason to make an extra half a percent a year or 1 percent a year — don't try us on higher numbers. But the — (laughter) — we don't see a reason to go around ending friendships we have with people, or contact, or relationships. It just doesn't make any sense to us. It —

We don't want to get committed to that sort of activity. We know we wouldn't do it if we were a private company.

Now, in Berkshire, we feel we've enunciated that position. We want to get that across to everybody who might join with us because we don't want them to expect us to do it.

We want them to expect us to work hard to get a decent result, and to make sure that the shareholders get the same result we get, and all of that sort of thing.

But we don't want to enter into any implicit contract with our fellow shareholders that will cause us to have to behave in a way that we really don't want to behave.

If that's the price of making more money, it's a price we don't want to pay.

There's other things we forgo also, but that is the one that people might disagree with us on. So, we want to be very sure that everybody understands that, going in. That's part of what you buy here.

And it may — I don't think it'll hurt performance that much anyway. But to the extent that it does, it's a limitation you get with us.

Charlie? (Applause)

CHARLIE MUNGER: I don't think there's any way to measure it, exactly. But my guess is that, if you could appraise something you might call the character of the people that are running the operating businesses in Berkshire, many of whom helped create the businesses in the first place, and are leading citizens in their community, like the Helzbergs —

I don't think there's any other corporation in America that has done as well as we have, if you measure the human quality of the people who are in it.

Now, you can say we've collected high-grade people because we sure as hell couldn't create them. But one way or another, this is a remarkable system. And why would we tinker with it?

WARREN BUFFETT: If you want to — (applause) — attract high-grade people, you probably ought to try and behave pretty well yourself.

I mean it's just — besides, it wouldn't be any fun doing the other. I mean, it — I was in that position, a little bit, when I ran the partnership back in the '60s.

And I really — you know, people were coming into partnership with me. And my job was to turn out the best return that we could. And I found that if I got into a business, that presented certain alternatives that I didn't like. So, Berkshire's much more satisfactory in that respect.

31. Focus on Graham's three principles

WARREN BUFFETT: Zone 5?

AUDIENCE MEMBER: John Rankin (PH), Fort Collins, Colorado. Thanks for having us.

In the book, "Warren Buffett Way," the author describes the capital growth model that you've used to evaluate intrinsic value in common stock purchases.

My question is, do you also still use the formula Ben Graham described in "The Intelligent Investor," that uses evaluating anticipated growth, but also book value?

It seems to me that fair value is always a bit higher when using Mr. Graham's formula than the stream of cash discounted back to present value that is in "Warren Buffett Way" and also that you've alluded to in annual reports.

WARREN BUFFETT: Yeah, we've tried to put in the annual report pretty much how we approach securities. And book value is not a consideration — virtually, not a consideration at all.

And the best businesses, by definition, are going to be businesses that earn very high returns on capital employed over time. So, by nature, if we want to own good businesses, we're going to own things that have relatively little capital employed compared to our purchase price.

That would not have been Ben Graham's approach. But Ben Graham was — Ben was not working with very large sums of money. And he would not have argued with this approach, he just would've said his was easier. And it is easier, perhaps, when you're working with small amounts of money.

My friend Walter Schloss has hewed much more toward the kind of securities that Ben would've selected. But he's worked with smaller amounts of money. He has an absolutely sensational record. And it's not surprising to me at all. I mean, when Walter left Graham-Newman, I would've expected him to do well.

But I don't look at the primary message, from our standpoint, of Graham, really, as being in that — in anything to do with formulas. In other words, there's three important aspects to it.

You know, one is your attitude toward the stock market. That's covered in chapter eight of "The Intelligent Investor." I mean, if you've got that attitude toward the market, you start ahead of 99 percent of all people who are operating in the market. So, you have an enormous advantage.

Second principle is the margin of safety, which again, gives you an enormous edge, and actually has applicability far beyond just the investment world.

And then the third is just looking at stocks as businesses, which gives you an entirely different view than most people that are in the market.

And with those three sort of philosophical benchmarks, the exact — the evaluation technique you use is not really that important. Because you're not going to go way off the track, whether you use Walter's approach — Walter Schloss's — or mine, or whatever.

Phil Carret has a slightly different approach. But it's got those three cornerstones to it, I will guarantee. And believe me, he's done very well.

Charlie?

32. Don't believe projections

CHARLIE MUNGER: Yeah. To the extent that the method of estimating future cash flow requires projections, I would say that projections, while they're logically required by the circumstances, on average, do more harm than good in America.

Most of them are put together by people who have an interest in a particular outcome. And the subconscious bias that goes into the process, and its apparent precision, make it — makes it some — well, it's fatuous, or dishonorable, or foolish, or what have you.

Mark Twain used to say a mine is a hole in the ground owned by a liar. And a projection prepared in America by anybody with a commission, or an executive trying to justify a particular course of action, will frequently be a lie.

It's not a deliberate lie, in most cases. The man has gotten to believe it himself. And that's the worst kind.

So, I don't think we should — projections are to be handled with great care, particular when somebody has an interest in misleading you.

WARREN BUFFETT: Charlie and I, I think it's fair to say, we've never looked at a projection in connection with either a security we've bought or a business we've bought. We've had them offered to us in great quantities.

Now, the fact that we voluntarily turn them away when people try to thrust them upon us — I mean, it — the very fact that they are prepared so meticulously by the people who are selling the businesses, or by the executives who are presenting to their boards and all of that sort of thing, you know, I mean, either we're wrong or they're wrong.

It's a ritual that managers go through to justify doing what they wanted to do in the first place, in about nine cases out of ten.

I have never, you know, I have never met an executive who wanted to buy something that said, "Well, I had to turn it down because the projections didn't work." I mean, it's just — it's never happened.

And there will always be somebody that will come up with the projections that will satisfy the guy who's signing his paycheck or will sign the deal that provides the commissions.

And they will pass those along to whomever else they need, the bankers or the board, to approve it.

It is total nonsense. I was recently involved in some — in a situation where projections were a part of the presentation. And I asked that the record of the people who made the projections, their past projections also be presented at the same time. (Laughter)

It was a very rude act. (Laughter)

CHARLIE MUNGER: It was regarded as apostasy.

WARREN BUFFETT: It — but believe me, it proved the point. I mean, it was a joke, I mean. So, we'll leave it at that.

33. First question when looking at an investment

WARREN BUFFETT: We're going to have another — one more question, maybe. And then we'll take a break.

And Charlie and I will be eating up here. The ones who want to stick around can stick around. And the ones who are in the other room, undoubtedly there will be seats in here to fill.

So, we'll sort of regroup in 10 or 15 minutes. And then we'll go on as long as that group lasts.

So, let's take one more from zone 6. And then we'll take a break.

AUDIENCE MEMBER: Hello, my name is Peter Bevelin from Sweden.

What is the absolutely first question you ask yourself when you look at a potential investment? And do you and Mr. Munger ask yourself the same first question?

WARREN BUFFETT: Yeah. Well, I think — I don't ask myself whether Charlie's going to like it because — (laughter) — that will be a tough one.

No, the first question is, can I understand it? And unless it's going to be in a business that I think I can understand, there's no sense looking at it.

There's no sense kidding myself into thinking that I'm going to understand some software company, or some biotech company, or something of the sort. What the hell am I going to know about it? I mean, you know, I can — so that's the first threshold question.

And then the second question is, you know, does it look like it has good economics? Has it earned high returns on capital? You know, does it strike me as something that's likely to do that? And then I sort of go from there.

How about you, Charlie?

CHARLIE MUNGER: Yeah. We tend to judge by the past record. By and large, if the thing has a lousy past record and a bright future, we're going to miss the opportunity. (Laughter and applause)

Afternoon Session - 1995 Meeting

1. Banks are in our circle of competence

WARREN BUFFETT: OK, we're ready to start here with a question from zone 1, if you'll take your seats, please. We've got to —

AUDIENCE MEMBER: Mr. Buffett, I'm Brian Murphy (PH) from Clearwater, Florida.

I'd like to ask you a question concerning your present thinking behind your acquisitions of banks, such as PNC and SunTrust, particularly in light of the fact that banks were selling so cheaply in 1990 and now many have tripled in price.

And it would appear from recent publications and the financial literature that you've become much more interested in banks at these higher prices, relative to the 1990 valuations. Could you comment on your thinking there?

WARREN BUFFETT: Yeah, we really have no different — there's no difference in the criteria we apply to banks than to other businesses. And a couple of publications have, maybe, made a little more of that than is warranted, because I doubt if there's more than a couple percentage points difference in —

And we don't think of it that way, incidentally. And we do not have a lot of sector — we don't have any sector allocation theories whatsoever.

So, we simply apply the same criteria when looking at banks that we would at any other business that —

There — incidentally, there — sometimes, you should know, that there's — I would say that maybe half, or maybe even a little more, of the reports about our activities are — in the press are erroneous. Now, some are accurate, too.

And then, of course, some are way out of date. I mean, we get confidential treatment on our — on the filings we make with the SEC as to our holdings, so they're published well over a year after we've filed them.

And therefore, there have been a couple of stories in the last month or two as to something we've bought. And of course, if you read the story carefully, we bought it a year and a half ago, maybe. And we may have sold it, we may have bought more, all kinds of things.

So that, I'd be careful about press reports, generally.

We've — we actually — we bought a bank for Berkshire in 1969, the Illinois National Bank and Trust of Rockford. We've had an interest in the banking business.

We feel it's something that we can — that falls within our circle of competence to evaluate. That doesn't mean we'll be right every time, but it — we don't think it's beyond us to understand the banking business. And so, it's — we look at businesses in that area.

Charlie?

CHARLIE MUNGER: Nothing to add.

2. Buffett always plans to write a book "six months from now"

WARREN BUFFETT: OK. And do we have zone 2?

AUDIENCE MEMBER: Larry Myers from Omaha.

Warren, two quick questions, the first one very brief. Do you have any timetable regarding when you will write your own book about your career and philosophy?

WARREN BUFFETT: Yes, my timetable's always been six months from now. (Laughter)

The answer on that is I've thought about doing it a few times, and I think about it. It always seems to me there's way more interesting things yet to happen than have happened so far, and I don't want to — I know I won't write a second one, so I keep postponing it. That's my rationale on it, anyway.

3. Coca-Cola "doing exactly the right thing" with its cash

AUDIENCE MEMBER: Thank you. Second question concerns dividends. Last Friday night, by coincidence, on Louis Rukeyser's weekly television show, the special guest was Philip Carret.

And Mr. Carret made the statement that his favorite American stock is Berkshire Hathaway. And one of the major reasons he stated was that, "Berkshire has never paid a dividend, as we all know," and consequently, you had superior utilization of the extra cash.

Now, if you extend that reasoning, could it also be a beneficial policy if Coca-Cola and Gillette stopped paying dividends and utilized the cash in other ways?

WARREN BUFFETT: Well, it depends what they could use the — how they would use — utilize the cash, what they could use it for. Those are more focused enterprises than Berkshire, at least in terms of products.

And they — I think — I commend managements that have a wonderful business for utilizing cash in those wonderful businesses, or in businesses that they understand and that will also have wonderful economics, and for getting the rest of the money back to the shareholders.

So, Coca-Cola, in my book, is doing exactly the right thing with its cash when it both — when, A, it uses all the cash that it can, effectively, in the business to expand in new markets and all of that sort of thing.

But then beyond that, it pays a dividend which distributes cash to shareholders, and then it repurchases shares in a big way, which returns cash on a selective basis to shareholders, but in a way that benefits all of them.

So, we — you will benefit from us not paying dividends just as long as we can use the — every dollar we retain — to produce more than a dollar of value, and of market value over time.

Whether we can continue doing that, you know, how long we can continue doing that, I can't promise you, but that is the — that's the yardstick by which the decision is made.

And that is the yardstick, I think, by which Coca-Cola's making the decision, too. And I think that they deserve great credit for exercising the discipline to quit when they — using cash — when they've run out of the opportunities to use it well, and then to use it — then to further deploy it advantageously by repurchasing shares.

I think one of the things I admire about my friend, Bill Gates, he's got 4 1/2 billion of cash in Microsoft, and very few managements can stand having 4 1/2 billion of cash and not doing something unintelligent with it.

So far, it's made sense for us to retain everything we earn, and I think it'll make sense for a while longer, but it may not make sense indefinitely.

Charlie?

CHARLIE MUNGER: I hope it lasts a long time. (Laughter)

4. Why is Wall Street compensation so high?

WARREN BUFFETT: Zone 3?

AUDIENCE MEMBER: My name is Dan O'Neil from Santa Fe, New Mexico.

And I would ask — like to ask you a more specific question about Salomon Brothers, which is, why do we pay our employees there so much?

WARREN BUFFETT: Why what?

AUDIENCE MEMBER: Why do we pay our employees there so much money? The conventional theory seems to be that there's just a different pay scale on Wall Street than the rest of the world.

And it's based on the idea that traders are smarter than — that some traders are smarter than others, and, in some supernatural way, are able to receive signals that the future is sending back to the present. And how do we know that that isn't just an urban legend like alligators in the New York City sewers?

Another theory would be that the large amount of shareholders' capital allows the traders to capture inefficiencies that are in the market in the same way that the house does in Las Vegas.

I mean, if we owned a casino, it wouldn't make any difference if we hired Albert Einstein or Forrest Gump to run the blackjack table, and we would pay them the same. And I wonder which theory you think is closer to the truth.

WARREN BUFFETT: Well, you put it well. (Laughter and applause)

In the end, of course, you end up paying at a, what you think, at least, is a market rate. And to some extent, the market tests you out by whether people leave because they can get a higher rate.

But the limiting factor on that should be that you pay them a market rate as long as you are getting a market rate on capital. But it's harder to measure the market rate on capital in a short period than it is to measure the market rate on compensation.

So, the — a good many of the people that have left — but far from all — have left because they felt that they would obtain — presumably — because they would obtain greater compensation elsewhere.

The market was working in that way, just as it works in entertainment that way and it works in the athletic field that way.

And whether it — when it works that way, it leaves a return for capital that's adequate, is an open question. I mean, I haven't looked at the figures on all the baseball teams, but I've seen some of them. And certainly, in some of the smaller markets, I mean, the books were not phony.

I mean, it is very hard to pay market rates for ballplayers in Kansas City and still make money running a ball team, where you've got a smaller television market and all of that of the big cities.

So, in the end you're going to have to pay market rates to retain people, but part of that will also depend upon the period over which they measure their — what they are going to be paid.

I mean, if you want to look at Goldman Sachs last year, they were paid nothing. Does that mean that everybody will leave because they can get paid something someplace else? No, because 80 percent of the partners, or 90 percent of the partners, have a longer time horizon than that. And they have an anticipated earnings figure in mind when comparing it with what they're being offered elsewhere.

If you have a situation where market rates, you know, exceed the earning capacity of the business, then at some point, capital will flow away from the business.

In the airline industry, which I use as an example, the market rate — most — well, the — in terms of the bigger airlines, people are not being paid market rates, they're being paid contractual rates. Well, you can't blame anybody for that.

If you have a contract that entitles you to X and the current market is a half of X, you're going to hang onto that contract very aggressively. And like I say, you don't blame anybody for that, it's just if you end up in that condition, though, you've got a real problem.

And if you have the same problem that you have if the market is higher than — or a similar problem — the one you have if the market is higher than one that you can sustain in your own business.

My guess is that there — that, in effect, Salomon has put in a more Goldman Sachs-like system because, essentially, it created, to a degree, a partnership within it. That —

To have that work, A, over time, the partners have to earn good money or it won't work, but, B, you have to have people that have a partnership mentality in it. And if you change from one culture to another, you are not going to get a hundred percent acceptance of any new system.

Charlie?

CHARLIE MUNGER: Yes, it was kind of a bad break to put in a new compensation system and then have a very bad year. In the very nature of things, people are going to blame the compensation system subconsciously.

And then, two, I think that Wall Street generally has more envy-jealousy effects than are typically present elsewhere.

5. Buffett on the "real" advantage of being rich

I have a friend whose grandmother used to say that she couldn't understand why people got into envy-jealousy, because it was the only one of the sins that you could never possibly have any fun at. And — (Laughter)

But generally speaking, on Wall Street I think a lot of people have had the wrong kind of grandmothers. (Laughter and applause)

WARREN BUFFETT: Yeah, I've commented from time to time that — what's his name? Robin Leach has it all wrong on "Lifestyles of the Rich and Famous," because he's presenting all these wonderful things that will happen to you if you get rich.

But they really aren't that all that wonderful, these fancy houses and boats and all that. The real advantage of being rich, as I explain to people, is that it enables you to hate so effectively.

That if you're terribly rich, you know, and — but your brother or whomever, cousin or somebody, is getting a little more attention in the world or something of the sort, you can hate in a very major way.

You can hire accountants and lawyers to cause him all kinds of trouble. If you're poor, you just snub him at Thanksgiving and don't show up or something of the sort. (Laughter)

But I've noticed that these rich people, particularly when they inherit great amounts of money, sooner or later they start — frequently — they get very antagonistic toward siblings, or cousins, or whatever it may be.

And they really can — they can hate in a way that — or get envious in a way that the rest of us really can't really aspire to. So, that's the benefit that hasn't appeared on Robin Leach lately, but I —

But you see that — you see a little of that in the athletic field and the entertainment field, and perhaps even on Wall Street, that making a million dollars a year looks great until this guy that sits next to you that can't possibly be as smart as you is making a million-two. And then the whole world, it turns into a very unfair place. (Laughter)

6. "It's never a policy of ours to hold a lot of cash"

WARREN BUFFETT: Zone 4?

AUDIENCE MEMBER: Good afternoon. My question is simply about the cash and cash equivalents that are shown on the balance sheet this year versus last year.

In my thinking, cash equivalents is always something good to have around in case of a big market drop, being able to make opportunistic buys, as I know you've referred to "Mr. Market" getting manic-depressive at times.

Is there something that is less than obvious here that I'm not seeing? Or is the position not there now, should that happen in the marketplace?

WARREN BUFFETT: Cash at Berkshire is a residual. I mean, we would like to have no cash at all times. We also don't want to owe a lot of money at any time.

But we — if we have cash around, it's simply because we haven't found anything we like to do, and we hope — always hope —- to deploy it as soon as possible.

We never are thinking about whether the market's going to go down or something of the sort, or whether we might buy something even cheaper. If we like something, we'll buy it.

And when you see cash on our balance sheet of any size, that's an acknowledgement by Charlie and me that we have not found anything, in size anyway, attractive at that point. It's never a policy of ours to hold a lot of cash.

7. Newspaper business is "exceptionally good," but not as good

WARREN BUFFETT: Zone 5?

AUDIENCE MEMBER: David Winters, Mountain Lakes, New Jersey. I'll stand up.

David Winters, Mountain Lakes, New Jersey.

Years ago, you said you loved the newspaper business and then, over time, I guess, it — said it declined a bit in how much you loved it. And I'm kind of wondering how you feel about it now, and if you can prognosticate a little bit for us at all?

WARREN BUFFETT: Well, I used to love it in two respects. I loved the economics and I loved the activity, both. The activity — the love of the activity has not diminished.

The economics are still exceptionally good compared to virtually any business in the world. They aren't quite as good as they were 15 years ago.

So, they have — I wrote about that a couple of years ago, whereas what was — seemed almost the most bulletproof of franchises is still an exceptionally good business, but it isn't quite as bulletproof as might've been the case 10 or 20 years ago.

I still think it's about as interesting a business as there is in the world I'm in. But if you're talking pure economics, the — I can't think of many other businesses that, if I just owned one asset over my life, that I would rather own than a newspaper in a single-newspaper town.

But I wouldn't have quite the feeling of absolute certainty that I had — that I would've had 10 or 15 years ago.

Charlie?

CHARLIE MUNGER: Yeah, I think it's obvious, I — the newspaper proprietors are getting a touch of paranoia for the first time.

I mean, they worry about the electronic revolution, they worry about the fact that young people, you know, don't read. It's not as much fun going to newspaper conventions as it used to be.

WARREN BUFFETT: They're still making exceptional money. I mean, that's the interesting thing.

CHARLIE MUNGER: Ah, but they — I've heard you say a dozen times, "People don't seem to care what floor they're at, just whether the elevator is going up or down."

WARREN BUFFETT: That's right, that is true. (Laughter)

People feel better when they're on the second floor of an elevator that's just come from one than they do when they're on the 99th floor coming down from a hundred, there's no question about that.

They have this projection. And of course, it's particularly the case where they've been in a business where the money — the profits — were automatic, because they start thinking about, you know, questions of whether they really have the ability to make a lot of money, absent this favored position.

And that's not something they've had to dwell on before. So, it can make them uncomfortable.

They're all screaming about newsprint prices. We'd probably scream about them a little bit, too.

I mean, if you compare being in the newsprint business over time to being in the newspaper business, I mean, it's a joke.

And newsprint prices, if you — you can graph them from any point, you know, 15 or 20 years ago, or 10 years ago, and the price of the newspaper, the price of advertising has gone up more.

I mean, it is interesting to hear them yelling foul, because they have moved a lot in the last 12 months and they'll move some more in the next six months. But believe me, it's better to be in the newspaper business than the newsprint business.

8. Buffett's semi-hostile takeover of Berkshire

WARREN BUFFETT: Zone 6?

AUDIENCE MEMBER: Mr. Buffett, my name is Liz Pruce (PH), I'm from New York City.

I was wondering, on your acquisition criteria — I know part of that is that Berkshire Hathaway won't participate in unfriendly takeovers. I wondered how that philosophy may or may not apply to your role as a member of the board of several other companies.

WARREN BUFFETT: That's an interesting question. And I haven't been on the board of any company where the CEO has brought to the board the question of a hostile takeover.

Can you think of anything I'm forgetting? No, and — but there's no rule that that can't happen.

So, I don't know exactly what I would do if that came along. That's a very good question.

I used to be — I used to have a whole different attitude on that. I mean, in effect — we actually — if you go back 40 years, we bought, in effect, control of companies.

Well, in the case of Berkshire, Malcolm Chace, the chairman, was all in favor of us buying our stock in Berkshire. But Seabury Stanton, the president, would not have been in favor of it, and Seabury was the — was managing the business.

So, it wasn't hostile, but Seabury would not have been in favor of it. It would — but Malcolm would've been.

So, I don't know what the situation would be today if somebody walked in Gillette or Cap Cities, or someplace like that.

I don't think it's going to happen, but I have not — I don't have any policy on it at this point.

What do you think we'd do, Charlie?

CHARLIE MUNGER: I don't think our behavior is totally predictable. (Laughter and applause)

WARREN BUFFETT: And he's right. (Laughter)

9. Comparing investing styles of Ben Graham and Phil Fisher

WARREN BUFFETT: Zone 1?

AUDIENCE MEMBER: Yes, Neil McMahon (PH), New York City, also a Sequoia shareholder.

Ben Graham investing encouraged turnover. Looking at Berkshire's holdings, concentration and long-term, are you still a 15 percent Phil Fisher and 85 percent Graham?

WARREN BUFFETT: I don't know what the percentage would be. I'm a hundred percent Ben Graham in those three points I mentioned earlier, and those really count.

I am very — I was very influenced by Phil Fisher when I first read his two books, back around 1960 or thereabouts. And I think that they're terrific books, and I think Phil is a terrific guy.

So, I think I probably gave that percentage to — I think I first used it in Forbes one time when Jim Michaels wrote me. And I think I, you know, it was one of those things. I just named a number.

But I think I'd rather think of myself as being a sort of a hundred percent Ben Graham and a hundred percent Phil Fisher in the points where they don't — and they really don't — contradict each other. It's just that they had a vastly different emphasis.

Ben would not have disagreed with the proposition that if you can find a business with a high rate of return on capital that can keep using more capital on that — that that's the best business in the world. And of course, he made most of his money out of GEICO, which was precisely that sort of business.

So, he recognized it, it's just that he felt that the other system of buying things that were statistically very cheap, and buying a large number of them, was an easier policy to apply, and one that was a little more teachable.

He would've felt that Phil Fisher's approach was less teachable than his, but his had a more limited value because it was not workable with really large sums of money.

At Graham-Newman Corp — Graham-Newman Corp was a closed-end fund — oh, it was technically an open-end fund, but it had $6 million of net worth. And Newman and Graham, the partnership that was affiliated with it, had 6 million. So, you had a total pool of 12 million.

Well, you could go around buying little machine tool companies — stocks in machine tool companies, whatever it might be, all statistically cheap. And that was a very good group operation.

And he had — you have — if you own a lousy business, you have to sell it at some point. I mean, if you own a group of lousy businesses, you better hope some of them get taken over or something happens. You need turnover.

If you own a wonderful business, you know, you don't want turnover, basically.

Charlie?

CHARLIE MUNGER: What was interesting to me about the Phil Fisher businesses is that a very great many of them didn't last as wonderful businesses.

One of his businesses was Title Insurance and Trust Company, which dominated the state of California.

It had the biggest title plant, which was maintained by hand, and it had great fiscal solvency, and integrity, and so forth. It just dominated a lucrative field.

And along came the computer, and now you could create, for a few million dollars, a title plant and keep it up without an army of clerks.

And pretty soon, we had 20 different title companies, and they would go to great, big customers like big lenders and big real estate brokers, and pay them outlandish commissions by the standards of yore, and bid away huge blocks of business.

And in due course, in the State of California, the aggregate earnings of all the title insurance companies combined went below zero — starting with a virtual monopoly.

WARREN BUFFETT: From what looked like a monopoly.

CHARLIE MUNGER: So, very few companies are so safe that you can just look ahead 20 years. And technology is sometimes your friend and it's sometimes your bitter enemy.

If Title Insurance and Trust Company had been smart, they would've looked on that computer, which they saw as a cost reducer, as one of the worst curses that ever came to man.

WARREN BUFFETT: You can — it probably takes more business experience and insights, to some degree, to apply Phil Fisher's approach than it does Graham's approach. If you —

The only problem is, you may be shut out of doing anything for a long time with Ben's approach, and you may have a lot of difficulty in doing it with big money.

But if you strictly applied, for example, his working capital test to securities, you know, it will work. It just may not work on a very big scale, and there may be periods when you're not doing much.

Ben really was more of a teacher than a — I mean, he had no urge to make a lot of money. It did not interest him. So he was — he really wanted something that he thought was teachable as a cornerstone of his philosophy and approach.

And he felt you could read his books sitting out here in Omaha and apply — buying things that were statistically cheap, and you didn't have to have any special insights about business or consumer behavior, or anything of the sort.

And I don't think there's any question about that being true, but I also don't think you can manage lots of money in accord with it.

10. Munger's sales of Berkshire shares

WARREN BUFFETT: Zone 2?

AUDIENCE MEMBER: Hi, Rob Pitts, shareholder from New York City.

This is a question for Mr. Munger. I've noticed, in the insider sales activity sheets, that you've been a rather consistent seller of your Berkshire stock over the last few months.

Wondered if you would comment on why you're doing this, especially in light of the prospective tax change in capital gains, where it might be reduced, which would obviously be beneficial to you and beneficial to Berkshire by reducing its deferred tax liability?

CHARLIE MUNGER: I've given away a fair amount of Berkshire in the last couple of years and I've also sold some. I gave away the Berkshire because I thought it was the right way to behave, and I sold some because I had uses for the money. (Laughter and applause)

WARREN BUFFETT: He doesn't know anything I don't know. I (Inaudible) it's selling, I'd checked that, but — (Laughter)

11. When a company's accounting is confusing, stay away

WARREN BUFFETT: Zone 3?

Charlie has a very high percentage of his net worth in Berkshire, as do I.

Go ahead. I'm sorry, go ahead. I don't think it's working, quite —

AUDIENCE MEMBER: Hello?

WARREN BUFFETT: OK.

AUDIENCE MEMBER: Hi, Gorem Pulich (PH) from New York City.

I have a two-part question, first part very short. I think a lot of people have difficulty valuing businesses because of some convoluted accounting schemes that are out there.

Do you have any suggestions, in terms of books, or something you can read, where you can sort of make sense of some of the accounting stories that are going around?

WARREN BUFFETT: Well, that's a good question. Abe Briloff used to write for Barron's quite frequently on various accounting machinations, and Barron's has continued that somewhat.

But you're right that there are people out there who will try to paint pictures with accounting that are something far from the economic reality. And sometimes, the rules of accounting themselves lead to that.

I would say that when the accounting confuses you, I would just tend to forget about it as a company. I mean, it's probably — it may well be intentional, and in any event, you don't want to go near it.

I — we have never had any great investment results from companies whose accounting we regarded as suspect. I can't think of a one. Can you, Charlie?

CHARLIE MUNGER: No.

WARREN BUFFETT: It's a very bad sign.

CHARLIE MUNGER: I made a short sale once that worked out well — (laughter) — in a case like that.

WARREN BUFFETT: It really — accounting can be a — accounting can offer you a lot of insight into the character of management.

And I would say there's a lot — you know, there's a — you run into a fair amount of bad accounting. I used to call it creative accounting. And you'd probably run into a lot more, if it was allowed.

But some companies have been able to push their auditors pretty far, and I would be very skeptical of anything that looks suspicious to you.

I think there have been — there've been a couple of things written, but I can't think of where they've appeared, where people talk about the questions of, you know, what —

Obviously, if some prepaid expense, deferred asset accounts start building up suspiciously high, and inventories look out of line, you know, with sales and, particularly, the trend of them and all that, you want to look twice at companies like that.

Life insurance, you know, frequently, you know, we see weak accounting in. You can — when you don't have a product where revenues and expenses are being matched up on something close to cash in the short-term, you have the opportunity for people playing games with numbers.

And some people have learned how to do that very well, and they've sometimes created long-lasting stock manipulation or promotion schemes that have enriched themselves, or they've enriched the managers or the creators of it, at the expense of the public, over time.

If you ever get suspicious about accounting, just go onto the next company.

12. Lloyd's of London has slipped in recent years

WARREN BUFFETT: Zone 4?

AUDIENCE MEMBER: Yes. Miss Wasserman (PH) from Chicago.

In order to understand the reinsurance business a little better, can you explain your relationship with Lloyd's of London in the marketplace, how you — which is probably the leader in the field?

How often do you compete directly, or if you've ever done reinsurance business for them, since they've had losses in recent years, and how you see the industry changing as their economics changes?

WARREN BUFFETT: Well, Lloyd's, which is not an insurance company, as you know, but a — well, originally it was a place — it was a coffee house, but people think what — it's a place where a large number of syndicates operate and congregate in a given physical location. And it's had a history for larger, more exotic risks over time.

Lloyd's has lost its relative position to a fairly significant degree in the last 10 or so years, partly because — well, in significant part, because of bad results, which had the other effects of causing capital to withdraw and people who backed the syndicates to become unhappy.

So, Lloyd's is still an important competitive factor in the reinsurance business and in certain specialized kinds of primary insurance. It's a very — you know, it's very important factor.

But it's not the factor it was 10 or 15 years ago. And I'm not sure how Berkshire's capital compares with the capital of all those syndicates at Lloyd's, but it's certainly changed in its relative importance in the last five or 10 years.

And the ability of Lloyd's to attract capital with the problems they had has been diminished, although they're working on that problem.

But we regard Lloyd's as a competitor just like we would regard any one of a number of reinsurance companies as competitor.

But we also do business with a number of syndicates at Lloyd's, and we'll probably do a lot of business over the next 10 years with various syndicates.

Charlie?

CHARLIE MUNGER: Yeah, Lloyd's is a very interesting institution because it had this reputation for integrity, what they paid off in — what, the San Francisco fire, and so on, and so on.

But I would argue that 10 or 15 years ago, a lot of slop and folly got into Lloyd's, in certain syndicates particularly.

And too many commissions coming off the top as the same risks circulated around the system. Too much fine tailoring and three-hour lunches with fine wines. And it wasn't right, and they got in a lot of trouble.

WARREN BUFFETT: Actually, in the history of Berkshire, the most significant insurance problem we ever had was in connection with Lloyd's almost — or certain syndicates of Lloyds — almost 20 years ago.

And as Charlie said, they had this terrific reputation — behavioral reputation — over centuries. And I think that they coasted for a while on that. And we had a behavioral problem with — in one situation. And it was very expensive to us. So, we may have gotten an early lesson in what was coming.

There are a lot of different syndicates at Lloyd's, and there are different people running them, and they have had different standards of behavior, to some extent. And people who assumed that, because they were dealing with Lloyd's, that they would have no problems of any kind have found out otherwise.

But they will continue to be a major force in insurance, and they will get by their present troubles, and they'll probably come out of it better structured than they went in.

13. We'll keep a dollar if we can make more than a dollar of value

WARREN BUFFETT: Was that zone 5 that we did there?

AUDIENCE MEMBER: Christopher Jones (PH) from Scottsdale, Arizona. I had a couple of questions for you.

You've mentioned several times today about the difficulty and the frustration that you both have in trying to find capable companies to acquire, or acquire parts of, in the United States.

And I realize that, of course, when we own Coca-Cola and Gillette we are a part of the global environment.

But it's surprising to me that there haven't been any global franchises or global managements that have been interesting to either of you that — and I realize, in the past we've owned some pieces of some.

So, I was — questioned, because of the size of Berkshire now, might we see something more of a global flavor to the portfolio?

And second question, you've also addressed the intelligent use of cash as something that you look for in management.

Many management teams now are buying back their own shares because they can't find anything cheaper or better in the marketplace.

Does your current philosophy of not buying back your own shares suggest that maybe you think Berkshire's overpriced at these prices?

WARREN BUFFETT: Well, we have never bought back shares. I — we actually bought a few back in the '60s — but we basically have never bought back shares, although there were plenty of times when we thought it would be quite attractive to do it.

But we've also felt that if we could create more than a dollar of market value by — and maybe well over a dollar of market value — by retaining a dollar, that on balance that that would work out better over time.

As long as we can find ways to use the cash, which, overall, we feel will turn dollar bills into something larger than dollar bills, we will — we'll keep retaining the money.

And we won't measure that on whether we can find anything this week or this month, but we'll certainly measure it based on whether we can find anything in a couple of years, always.

We've had dry spells. Actually, right now, there's a little more going on than usual. But we've had dry spells a lot of times over a 20-odd year period. And you know, as I said, I wound up the partnership during one dry spell.

So that — it will be measured — it's measured partly on what's going on now, and it's measured partly on the expectancy.

And I don't think, whether our stock was selling at X or three-quarters of X right now, would make a lot of difference. But it would make a difference if we thought we couldn't find things to do with the money externally.

14. "Not too likely" we'll buy a business outside the U.S.

WARREN BUFFETT: The question about nondomestic operations, as you mentioned, we've got almost $8 billion in Coca-Cola and Gillette combined, and Coke has 80 percent-plus of their earnings from non-U.S. sources, and Gillette has maybe two-thirds or thereabout.

So, you can argue that almost 40 percent of the net worth of Berkshire — 35 to 40 percent — is operating outside the United States, just in those two investments alone.

In terms of buying a business outright, we don't preclude buying a non-U.S. domicile business. But it's not too likely that it'll happen.

We'd like to do it, particularly if it were large and if we understood it. But are we as likely to get a fix on a Helzberg's of Europe as we would a Helzberg's in the United States? You know, I doubt it.

I just don't know whether we would develop as much confidence in understanding the scene in which they operated, and understanding the management, and all that. But we might.

It would have to be a pretty simple business, and it would have to be a business where we thought we really understood the moat for a long time.

And it would have to be a business where we could establish a rapport with the management, despite coming from somewhat different backgrounds. It's not impossible, but I would say it's, you know, it's less than likely.

Charlie?

CHARLIE MUNGER: I've got nothing to add.

15. Buffett: my growing fame isn't a distraction

WARREN BUFFETT: Zone 6?

AUDIENCE MEMBER: Hi there. My name is Lee Debroff (PH) from Morgantown, West Virginia.

Ever since the Salomon debacle, it appears that you have attracted more and more media attention.

In this regard, there have been numerous displays that would appear to be distractions from the actual business of investing. To wit, we have watched as you attended Bill Gates' wedding in Hawaii, and bought a personal computer, and now wear striking designer ties. (Laughter)

And yesterday —

WARREN BUFFETT: Bill would've invited me to the wedding even if I hadn't have been at Salomon. (Laughs)

AUDIENCE MEMBER: Yesterday, we got those pennants during the rainout.

A very serious question, now that you've become this media darling, how can you assure us that you're still keeping your eyes concentrated on the proverbial ball? (Laughter)

WARREN BUFFETT: Well, I do get more mail than I used to, so we've developed a little more of a system on that. But I just — I do what I like to do.

Just take speeches, I probably get asked to make, maybe, 20 times as many speeches as I would've been asked to make 10 years ago, but I make the same number. You know, I've got the — I've got my own selection process for what I do on that.

And it's the same way, you know, I'm invited to, you know, I don't know how many dinner tributes, et cetera. And you know, they basically — I don't change the way I — what I do, because I don't want to change the way —

If I wanted something else — if, while I was building Berkshire, that was being done to end up in some other spot, I'd have been there by now. And it just doesn't change anything.

It does change the volume of mail, but I've got that so that that is not a big distraction.

Pardon me?

WARREN BUFFETT: Oh, I'll remain in Omaha. Yeah, there's no question about that. I mean, I — if I hadn't wanted to be in Omaha, I would have figured out ways to change, and it would have been very easy to change decades ago.

I think it's — we've got a lot of people here who aren't from Omaha, but that's their problem. I mean — (Laughter)

CHARLIE MUNGER: I have been watching Warren for a long time, and people who are concerned that he will change have a huge appetite for needless worry. (Laughter)

WARREN BUFFETT: The odds that I will change are about as good as the odds that Charlie will change. (Laughter)

The mail thing is a, you know, you wish you didn't — that there was an easier way to handle it.

But you essentially can't answer all the letters you get, it's that's simple. And that's about the — once you get past that and get a form letter that takes care of it, that takes care of it.

16. Decline in GEICO's return on equity

WARREN BUFFETT: Zone 1?

AUDIENCE MEMBER: Yes. I'm Samuel Park (PH) from Tulsa, Oklahoma.

My question is regarding GEICO. I noticed that, for the last five years, their return on equity has come down every year. Is this something that signifies change of a business, or just temporary things?

WARREN BUFFETT: Question is about GEICO's return on equity?

AUDIENCE MEMBER: Yes.

WARREN BUFFETT: Yes. Well, it's true, it has come down to some extent. The — GEICO's growth is, more or less, a function of, basically — I mean there's a natural rate of growth there.

And the growth in capital has been greater than the growth rate in premium volume and in invested assets, so that achieving the same success on underwriting and achieving the same success on investments will produce a lower return on capital unless they buy in stock, which they have done fairly significantly. But that's limited by availability, too, but —

It's a very good business. But it's not a business where, if you double the capital, you can double the earnings easily.

Charlie?

CHARLIE MUNGER: I have nothing to add.

17. No comment on Guinness investment

WARREN BUFFETT: Zone 2?

AUDIENCE MEMBER: My name's Mark Hake (PH) from Scottsdale.

And I think your question — my question — about foreign equity investment was pretty much answered by the other gentleman.

But I noticed that you had made an investment in Guinness in the past. And can you comment on that? Do you — is it still owned? And if not, why not?

WARREN BUFFETT: We don't comment on purchases and sales of securities or ownership, unless either we're legally required to, or they hit this threshold level where we report annually.

And we move the threshold level up as our assets move up. We don't move it up as a percentage of assets. So that we used, as a cutoff this year, 300 million, I believe, of market value as to where we reported.

Now, if we'd owned the same amount of Guinness — which I'm not saying that we did — but if we owned the same amount of Guinness on December 31st, 1994, it would not have hit that threshold as we had on December 31st, '93. It would not have hit that threshold.

And we really don't want to get in the business where we are talking at all about what we're buying or selling. We get a lot of speculation on that, but it's of no use to Berkshire to be talking about purchases or sales.

If we were acquiring a piece of land downtown and we bought a quarter of what we intended to buy, for example, we would not feel we were benefitted by a front-page story in the paper saying that we were acquiring land.

And it — we are not in the business of giving investment advice, basically. We'll talk about our principles.

So, the only conclusion you can come to about Guinness, or anything else that does not show up on our list at year-end, is that we did not own $300 million's worth at market value at that time.

18. Buffett's Berkshire shirt isn't available

WARREN BUFFETT: Zone 3?

AUDIENCE MEMBER: Yes, Mr. Buffett. My name is Don Bresca (PH), I'm from Boston, Massachusetts.

Recently I've noticed you wearing an IZOD shirt with Berkshire Hathaway in the middle — there was a fist grasping cash. Is that the new insignia?

And the second question is, is that shirt available to stockholders? (Laughter)

WARREN BUFFETT: The shirt is not available. That shirt was a gift from someone, and the shirt is not available to stockholders. But you can draw your own conclusions, the meaning of it. (Laughs)

19. No matchmaking for Mrs. B and Phil Carret

WARREN BUFFETT: Zone 4?

AUDIENCE MEMBER: Yes. I'm Lyle McIntosh from Missouri Valley, Iowa, about 25 miles up the road.

And Warren, recognizing this is corn country, and I farm, and there's several other farmer shareholders, this meeting hits right in the middle of corn planting.

Could you move it back about three weeks? (Laughter)

And also, I noticed [mutual fund pioneer] Phil Carret was on "Wall Street Week" Friday night. I'm sorry I don't know his marital status, but if he is available have you thought about introducing him to Mrs. B. [Nebraska Furniture Mart founder Rose Blumkin]? (Laughter)

WARREN BUFFETT: Well, Mrs. B., incidentally, was out working yesterday. I went out and dropped by to see her about 4 o'clock, and she was doing fine.

She will be 102 late this year, and my guess is she will be working on her 102nd birthday as well. But I'll let Phil and Mrs. B. handle their own affairs, in that respect. (Laughter)

CHARLIE MUNGER: He's probably a little too young for her. (Laughter)

20. "We're open to buying anything"

WARREN BUFFETT: Zone 5?

AUDIENCE MEMBER: Well, I'm Ken Donovant (PH), a Cincinnati investor.

You've addressed the subject of your feelings about buying entire foreign corporations.

I wonder if you'd say something about, or is Berkshire looking for opportunities to buy, we'll call them near-franchise companies, that might be based overseas — buying a stock interest or a part interest? And also, how do you feel about fixed-debt investments of overseas companies?

WARREN BUFFETT: Debt investments, was that?

AUDIENCE MEMBER: Yes. Well, the first part was buying a stock investment rather than a whole company.

WARREN BUFFETT: Right.

AUDIENCE MEMBER: And the second part was debt investments.

WARREN BUFFETT: Yeah. Well, we're open to buying anything. When you say, are we looking at them, I've never been quite sure how we look at things anyway. I mean, they just seem to sort of pop up from reading or something of the sort.

But we're — it's less likely we end up doing it, for some of the reasons I've given earlier. But we have bought stock in companies that — aside from Guinness, that are domiciled outside of the United States. And we would have — we could conceivably buy debt instruments.

We don't buy a lot of debt instruments anyway, so it'd be very unlikely.

But we will do anything we think makes sense at Berkshire, that's compatible with the way we want to operate. And certainly, we don't care where — the domicile is not that important.

Charlie?

21. Helzberg has unusually good sales for jewelry retailer

WARREN BUFFETTL OK, zone 5, is it?

AUDIENCE MEMBER: Scott Spilcovich (PH), New York City.

My question is regarding the Helzberg acquisition. Can you comment on things such as the acquisition price, your sales and profit expectations, and how much debt was on the books at the time of the acquisition?

WARREN BUFFETT: This is in reference to which acquisition?

AUDIENCE MEMBER: Helzberg.

CHARLIE MUNGER: Helzberg.

WARREN BUFFETT: Well, we have not put out the figures on Helzberg's, and we won't be.

But we evaluate — the sales have been published at about 280 million for the year that ended in February, and there'll be considerably more in the current year.

But we have not put out the figures. I can tell you that, obviously, that we think that, in terms of the amount we are laying out in terms of shares and/or cash — we think, over time, that it's going to be a very decent acquisition.

It's the same line of reasoning we've applied in other businesses. Retailing, as I mentioned earlier, is the kind of business where you have to stay smart over time, and we have a terrific manager, a fellow named Jeff Comment, who's going to be running it.

And his record is extremely good, and I would bet the record would stay good.

It earns good returns on invested capital or we wouldn't be buying into it. We always look for good returns on capital.

And a lot of companies in the jewelry business do not get good returns on capital. I mean, it's not an industry that — where most of the participants are prosperous.

It takes unusual sales per square foot compared to competitors to succeed in that, and we have one operation that does that in spades at Borsheims, and then a different type of operation that does it at Helzberg's.

The typical jewelry store operation is not a very good business, but we think we've got two good operations.

Charlie?

CHARLIE MUNGER: Yeah, we frequently find that owners of entire businesses have schizophrenia. They want to sell their business for a little more than it's worth, taking stock, so they don't have to pay taxes.

And they want the stock to be the kind of — to be in a kind of business that will make just one dumb acquisition — theirs, and thereafter will guard the stock like gold, making no more dumb acquisitions. (Laughter)

Needless to say, the world is not that easy. And I think over time, we've made acquisitions that were fair on both sides, and averaged out, they've worked well for Berkshire.

And I think a company that behaves that way is giving the best long-term value to the private owner who wants to sell. You do not want to sell your business for stock to a firm that likes issuing stock.

22. Insurance float important in estimating intrinsic value

WARREN BUFFETT: Zone 6?

VOICE: That was six.

WARREN BUFFETT: Where do we have the mic? Oh, there. I don't think it's on.

AUDIENCE MEMBER: Can you hear me now?

WARREN BUFFETT: Yeah, sure.

AUDIENCE MEMBER: Jack Glanding (PH) from Knoxville, Tennessee.

I have a question which may not be appropriate for the officers of Berkshire to answer, but I think I'll ask it anyway.

You focused on intrinsic value in your annual report, and you suggested that by reviewing the grey pages in the back that one could come up with a — possibly come up — with a value of intrinsic value for Berkshire.

I've made an effort to do this, and I think I come up with a price-to-earnings ratio somewhere around 21, which seems to be a little overvalued.

I'd like to ask you, Mr. Buffett, if you would care to divulge what you believe is the intrinsic value of Berkshire?

And if you're not willing to do that, do you consider the price of Berkshire at this level to be fair?

WARREN BUFFETT: I — every year I get asked that, in one form or another, and I always say that I don't want to spoil the fun for those of you who are working out the intrinsic value for yourself.

You have all the numbers that we have that are key to it.

And I would say that there are some important factors besides P/E. I mentioned earlier that I thought that the page where we describe float, for example, is probably as important a page as there is in the report.

And then the question is, you know, what do you do with the capital as you allocate it over time? And obviously, that makes a difference in intrinsic value, too.

But I would say in a general way that I — and this has been true virtually all of the time that — I think — I would say that the intrinsic value of Berkshire in relation to its — actually, I'll put it the other way.

The price of Berkshire in relation to its intrinsic value, I think, probably offers as much value as, or more, than the majority of stocks that I see. But I don't want to go any further than that.

Charlie?

CHARLIE MUNGER: I've got nothing to add.

The — your story about the fun of working it out, though, there's a famous English headmaster who used to say to each graduating class, he said, "Five percent of you are going to become criminals, and I know just who you are.

"But I'm not going to tell you, because I don't want to deprive your lives of a sense of excitement." (Mild laughter)

WARREN BUFFETT: We'll explain that later on. (Scattered laughter and applause)

There is a lot more to — there's more to intrinsic value, as we've discussed earlier, than just adding up what you think you can sell the pieces for at any given time, because it is a prospective figure. It is future cash discounted back to the present. And capital allocation is a good part of that.

What you expect the float to do, for example, over time, would not — that would lead to a large swing in possible numbers relative to value.

I mean, if — when we bought National Indemnity in 1967, when it had whatever it had, 15 or 20 million in float, we didn't see it then.

But if we could have foreseen the eventual development of float over time, it might have turned out that the intrinsic value of National Indemnity was many multiples of what most people might have thought at the time, and probably what we thought at the time.

23. Hagstrom book had "some effect" on Berkshire's stock price

WARREN BUFFETT: Zone 1.

AUDIENCE MEMBER: Richard Ducheck (PH) from Melbourne, Florida.

I have a two-prong question, first on the stock. As we all know, the first month this year we ramped up about 25 percent and then we pulled back, I guess, about 20.

Just wondering your thoughts on that, if specifically you attribute that to the books perhaps, or institutional buying or, you know, what explanation you might have for that. And second —

WARREN BUFFETT: I would say — I'll answer that first. I would say [Robert] Hagstrom's book ["The Warren Buffett Way"] undoubtedly had some effect on that. It's impossible to measure, but that book sold a lot of copies. And my guess is that that had some effect.

AUDIENCE MEMBER: OK. More so than institutional buying? Because I've heard rumors like Fidelity and whatever were buying —

WARREN BUFFETT: I can't — I just don't know the — I don't know how to separate out the variables, but I would say that the book was certainly a factor at that time, and it's unreasonable to assume that it had no effect.

CHARLIE MUNGER: Well, a lot of the buying came in in odd lots, so —

WARREN BUFFETT: A lot of odd lot activity, yeah.

CHARLIE MUNGER: Certainly looked like book buyers. (Laughter)

24. Buffett doesn't understand Microsoft, despite his friendship with Gates

AUDIENCE MEMBER: Secondary question, I'm an electronics engineer by profession. So, the technology sector is of prime interest to me, and I think we'll all agree, at least the last six to eight months has been phenomenal for the technology sector.

And I also see that you're somewhat befriending Mr. Gates, inviting him into your house, et cetera.

Is there a possibility down the road apiece of you doing some type of purchase of Microsoft, or acquiring that? Or is there something — (laughter) — you two could work out together?

WARREN BUFFETT: I bought a hundred shares one of the day — first day — I met Bill, and that was the end of it. I just want to be sure I got his reports from that point on. This is personal, not in the — not in Berkshire.

There's no chance we'll be in businesses we don't understand, and I won't understand it.

AUDIENCE MEMBER: No, you're quite clear on that. I just thought maybe there'd be an exception, because apparently —

WARREN BUFFETT: Well, if you made an exception, he would be a good guy to make — a very good guy — to make an exception with. But I don't think I'll make an exception.

25. Business schools should study Mrs. B's success

WARREN BUFFETT: Zone 2?

AUDIENCE MEMBER: My name is (inaudible) from Arlington, Texas.

Mr. Buffett and Mr. Munger, what possibility to use these two great minds for a long term in life, by either taking apprenticeship in Berkshire or open a school?

CHARLIE MUNGER: I didn't follow that one. Warren, you handle it.

WARREN BUFFETT: Is it a question of what —?

AUDIENCE MEMBER: What the possibility of using these two great minds of yours to educate a new generation as a long-term investment in this country, either through apprenticeship in Berkshire for young people or open a business school?

CHARLIE MUNGER: Well, let me try that one because I have a demonstrated record of nonperformance. (Laughter)

I have had great difficulty enabling my children to know what I know. (Laughter)

And Warren, maybe you have failed less. (Laughter)

WARREN BUFFETT: My children, in many ways, are a lot smarter than I am. So, I've had different experience, Charlie. (Laughs)

No, I think you can — you know, I've mainly learned by reading myself, so I don't think I have any original ideas that — I've certainly got a lot —

I mean, I've talked about reading Graham, I read Phil Fisher, and I've gotten a lot of ideas myself from reading. And in my own case, I mean, talk about your parents having influences, you know, my parents had an enormous influence.

So, I think you can learn a lot from other people. In fact, I think, if you learn reasonably well from other people, you don't have to get any new ideas or do much on your own. You can just apply the best of what you see.

CHARLIE MUNGER: Generally speaking, I think we always get a group of wise people after sifting millions. But I don't think anybody's invented a way to teach so that everybody is wise.

It's extraordinary how resistant some people are to learning anything. (Laughter and applause)

WARREN BUFFETT: Really, what is astounding is how resistant they are when it's in their self-interest to learn.

I mean, I was always astounded by how much attention was paid to Graham — I mean, he was regarded 40 years ago as the dean of security analysts —but how little attention was paid, in

terms of the principles he taught. And it wasn't because people were refuting them, and it wasn't because people didn't have a self-interest in learning sound investment principles. It's just this incredible resistance to thinking or change.

I mean, I quoted Bertrand Russell one time as saying — who said that, "Most men would rather die than think. Many have." (Laughter)

In the financial sense, that's very true. It's not complicated. I mean, human relations, you know, usually aren't that complicated, but — and certainly it's in people's self-interest to develop habits that work well in human relations, but an amazing number of people seem to mess it up one way or another.

CHARLIE MUNGER: How much has Berkshire Hathaway been copied, either in investing America or corporate America? I'm not saying we deserve to be, necessarily. But people don't want to do it differently than they're presently doing it.

WARREN BUFFETT: You might argue that Mrs. B. [Nebraska Furniture Mart founder Rose Blumkin], having started what you may have seen out there this weekend, with $500 in 1937, you know, without a day in school in her life, and building that into a great enterprise, you might say, "Well, that is something to study."

I mean, is it because she couldn't speak English when we got — you know, she got over? Maybe we can explain to people — I mean, what is there to learn from seeing somebody create an incredible success like that in a competitive business?

She didn't invent something that the world had never seen before. She didn't have a lock on some piece of real estate that protected her from competition.

You know, all of these — and yet, she accomplished something that virtually no one has accomplished.

Now, why aren't business schools studying her? You know, why are they talking about EVA, you know, economic value added, as we talked about earlier? I mean, here is a success. Something has made her a success.

You know, is it something — is it a 200 — and she's very smart — but is it a 220 IQ? No, it isn't. It's a very smart woman, but it's not something that's incapable of being replicated in the habits and the way of thinking. But who is studying her?

I mean, they present her as a curiosity. But if you go to any of the top 20 business schools, you know, there's not one page that's being given to anybody to study what is an incredible success. And I just — I find that very interesting that — and to some extent, you know, I've seen it in the investment world.

There's this — for one thing, the high — you know, it's probably a little discouraging to a professor of management at some major business school that has gone on to get his doctorate and everything, to think he has to come and hang around the Furniture Mart — (laughter) — study a woman in a golf cart, I mean — (Laughter)

But you could — they'd be better off if they did.

26. Do what you like now, not later

WARREN BUFFETT: Where were we on that? What zone are we on, four, are we? Wherever it is. Zone 3 maybe, huh?

AUDIENCE MEMBER: Yes, thank you. I'm Jim Ludke (PH) from Phoenix, Arizona.

And I haven't been to one of your annual meetings for about 10 years now. The last one was down at the Red Lion Inn by the water. And I congratulate you on your popularity.

WARREN BUFFETT: Thank you.

AUDIENCE MEMBER: I wish I had bought more stock then. (Laughter)

But like Charlie, I too, have been giving mine away for charitable purposes. So, your beneficial effects have reciprocated and rippled throughout the economy. I congratulate you.

WARREN BUFFETT: No, I congratulate you.

AUDIENCE MEMBER: What do you think has changed — well, one thing is that Ben Graham — commenting on what you just said — I'm a student of Ben Graham, and he said it never ceased to amaze him how widely read he was and least followed.

But how have you changed in the last 10 years? Much, if any? Or none at all? Or —

WARREN BUFFETT: Well, we'll let Charlie — he's been watching me. (Laughter)

CHARLIE MUNGER: I'd say about one stone. (Laughter)

Takes one to know one. (Laughter)

WARREN BUFFETT: If we'd wanted to change, we would have changed a long time ago.

I mean, I've never believed much in this theory of, you know, if I have 2X instead of X that I'm going to do this or that, or I'll take this job I don't like now, and I'll get one I like later on, or —

It doesn't make that much sense to me. I mean, there aren't that many years around, so you ought to be doing what you like at the present time, and Charlie and I have always followed that pretty well.

27. "We let .400 hitters swing the way they want to swing"

WARREN BUFFETT: Zone 4?

AUDIENCE MEMBER: Peter Borma (PH), Chicago.

Every year, you have your operating companies send a check back to Omaha. What percentage do the heads of the operating companies keep as a bonus, and how do you set that figure?

WARREN BUFFETT: Well, we have different bonus arrangements at different companies. It would be a big mistake, with businesses with as many different economic characteristics, or as varying economic characteristics existing, as they do at Berkshire, to try and have some formula approach that paid managers in all of these different businesses based on a simple formula of one kind.

So, we have, I think, four businesses where they own a part of it. And we have varying arrangements with the various businesses.

Some businesses, capital employed is unimportant. There simply isn't a way to employ a lot of capital. So, we do not have a capital charge, even, at those businesses. We don't believe in going through a lot of machinations if it's going to involve peanuts at the end.

So, some businesses have a capital charge, some businesses don't have a capital charge. If they use a lot of capital, they're going to have a capital charge, is what it amounts to.

Some businesses are easy businesses, some businesses are tougher businesses. So, we have different thresholds where things kick in based on that.

We simply sit down and try and figure out, in the case of each business, what makes sense. And that usually isn't very hard to figure out.

I mean, we want something that's fair. The best managers, we aren't going to change their behavior much by the compensation thing. We may a little bit, in terms of teaching them how we think about capital employed.

But in terms of their enthusiasm for the business, imagination, and marketing, and all that, basically we usually buy businesses with those people in place.

But it would be — A, it'd be wrong not to treat people fairly, and they would resent it if they weren't treated fairly, too, understandably.

So we try to have a system that rewards the things that we want to have rewarded, and treats them fairly in a way that they understand they're treated fairly.

And I don't think we have any two businesses that have the same arrangement. They're different in each case.

Incidentally, that applies in their policies, too. We don't get into — very seldom, I should say, maybe once or twice — but they have different arrangements in terms of compensating their employees.

Some of our businesses have budgets, some of them don't. We don't have any budgets that come up to headquarters. We let .400 hitters swing the way they want to swing. And some of them, you know, have a little different swings than others, but overall, they're extremely effective.

And they feel, and we want them to feel, like they own their own business. If they felt — if somebody that's independently wealthy sold us a business and we started telling them how to swing, they would tell us what we could do with it very quickly, because they don't need that in life.

So, what we have to do is create a situation, or maintain a situation, where they are having more fun doing what they're doing than anything else they can do in life, and that's what's we're designing for. And then we have to treat them fairly in respect to that.

Charlie?

CHARLIE MUNGER: Nothing to add.

28. "Foreign exchange baffles me, frankly"

WARREN BUFFETT: Zone 5.

AUDIENCE MEMBER: Roger Hill from Racine, Wisconsin.

Gentlemen, a little change of pace. Could we get your opinion on the present situation with international exchange? Do you think we have a dollar problem, or is — the Japanese have a yen problem?

WARREN BUFFETT: Well, I'm going to let Charlie answer that. (Laughter)

CHARLIE MUNGER: I have no comment. (Laughter)

WARREN BUFFETT: That's probably — that's a very good question, but the trouble is anytime I say, "That's a very good question," it's probably because I don't know the answer.

And I — you know, I don't know the answer to that. Foreign exchange baffles me, frankly.

I mean, you know, I think in terms of purchasing power parity, because that's a natural way to approach it. But purchasing power parity does not work very well as a guide to how exchange values will behave in any shorter, medium, or maybe even long term, because the world adapts in different ways.

Sometimes it adapts by high rates of inflation to a sinking currency. Usually it does. It hasn't done that in respect to ours, but we're only sinking relative to a couple of other important currencies.

I don't have a great answer for you on that, sorry.

29. We don't look for small stock bargains anymore, but they exist

WARREN BUFFETT: Zone 6?

AUDIENCE MEMBER: Hi, I'm Howard Winston (PH) from Cincinnati, Ohio.

First, I wanted to thank you and Charlie for sharing your time with us today.

WARREN BUFFETT: Thank you.

AUDIENCE MEMBER: My question is, you've repeatedly said that you see many wonderful stock ideas but can't invest because they're too small.

Given that many in the audience today have a lower dollar investment threshold — (Laughter)

WARREN BUFFETT: "Do these stocks have names?" (Laughter)

AUDIENCE MEMBER: Yeah. Well said. (Laughter)

WARREN BUFFETT: Well, the answer to that is that we don't look anymore. We assume that there are a reasonable number of opportunities as you work with smaller amounts of capital because it's always been true.

I mean it was — over the years, as I looked at things, clearly, you run into companies that are less followed as you get smaller. And there's more chances for inefficiency when you're dealing with something where you can buy $100,000 worth of it in a month, rather than 100 million.

But that is not because I am carrying around in my head the names of 25 companies that we could put 100,000 in. I just don't look at that universe anymore. I —

Sometimes, people send me annual reports, or I get letters from managers and they say, you know, "I've got this wonderful thing." I look — I usually know ahead of time, but I mean, I would first look at the size. And if the size isn't right — and it isn't going to be virtually any time — I don't look any further, because there's just no time to be looking at all kinds of smaller opportunities.

I do think, if you're working with very small amounts of money, that there almost always are some significant inefficiency someplace — to find things.

I've mentioned to some people, when I started out, I actually went through all of the Moody's manuals and the Standard and Poor's manuals page by page.

And you know, it was probably 20,000 pages, but there were a lot of things that popped out, and none of them were in any brokerage report or anything of the sort. They were just plain overlooked, and you had to —

You could find out about them, but nobody was going to tell you about them. And my guess is that continues to be true, but not on anything like the scale it was then.

Charlie?

30. Early Buffett cigar butt: Delta Duck Club

CHARLIE MUNGER: Well, I can remember when you bought one membership in some duck club that had oil under it, when you were young.

WARREN BUFFETT: Yeah, that was a company called Atled —

CHARLIE MUNGER: When you get down to one duck club membership, well, you're really scavenging for cigar butts. (Laughter) But —

WARREN BUFFETT: Not a bad cigar butt. There were 98 shares outstanding. It was the Delta Duck Club. And the Delta Duck Club was founded by a hundred guys who put in 50 bucks each, except two fellows didn't pay, so there were only 98 shares outstanding.

They bought a piece of land down in Louisiana, and one time somebody shot downward instead of upward, and oil and gas started spewing forth out of the ground. (Laughter)

So, they renamed it Atled, which is Delta spelled backwards, which was — sort of illustrated the sophistication of this group. (Laughter)

And a few years later, they were taking up — at $3 a barrel oil — they were taking about a million dollars a year in royalties out of the place. And the stock was selling at $29,000 a share, and it was earning $10,000 a share —

No, it was earning about $7,000 a share after-tax, about 11,000 pretax, and it had about 20,000 a share in cash. And it was a long-lived field.

So, you know, I use that sometimes as an example of efficient markets, because somebody called me and offered me a share of it, and those things, you know — is that an efficient market or not?

You know, 29,000 for 20,000 of cash, plus 11,000 of royalty income at 25 cent gas and $3 oil? I don't think so.

You can find things out there. I'll give you hunting rights on all my duck clubs in the future. (Laughter)

31. Secret to avoiding lawsuits: "You can't make a good deal with a bad person"

WARREN BUFFETT: Zone 1.

Don't think the mic —

AUDIENCE MEMBER: How do Berkshire and Berkshire companies protect themselves against lawsuit-happy lawyers? And is it possible for American businesses to survive the financial and time-consuming costs of dealing with lawyers?

WARREN BUFFETT: Well, that's a good question and we've probably had less litigation than any company, you know, with a $25 billion market value in America.

But it's, you know — we were sued one time at Blue Chip Stamps — what was it for, Charlie, and how many billion by some guy?

CHARLIE MUNGER: Lots.

WARREN BUFFETT: Yeah. It was — you know, there — you cannot protect yourself against lawsuits, and there are certainly a lot of frivolous ones we've — like I say, we have — it's not been a drain on our time or money — but particularly time — to date.

And I think one thing you'd have to do is, if you ran into anything of that sort, you would not pay and you would make life as — try to make life comparably difficult for the other party as they made it for you. But that has not been our experience so far.

Charlie?

CHARLIE MUNGER: Yeah. Well, I can tell an Omaha story on that one which demonstrates the Berkshire Hathaway technique for minimizing lawsuits.

When I was a very young boy, I said to my father, who was a practicing lawyer here in Omaha, "Why do you do so much work for X," who was an overreaching blowhard — (Laughter) — "and so little work for Grant McFayden," who was such a wonderful man?

And my father looked at me as though I was slightly slow in the head. And he said, "Charlie," he said, "Grant McFayden treats his employees right, his customers right, everybody right.

"When he gets involved with somebody who's a little nuts, he gets up from his desk, and walks to where they are, and extricates himself as soon as he can." And he says, "Charlie, a man like Grant McFayden doesn't have enough law business to keep you in school. (Laughter)

"Ah, but X," he said, "he's a walking minefield of continuous legal troubles, and he's a wonderful client for a lawyer."

Now, my father was trying to teach me, and I must say it worked beautifully, because I decided that I would adopt the Grant McFayden approach.

And I would argue that Warren independently reached the same approach very early in life. Boy has that saved us a lot of trouble. That is a — it is a good system.

WARREN BUFFETT: You can't — yeah, we basically have the attitude that you can't make a good deal with a bad person. And you can — that means we just forget about it.

I mean, we don't try and protect ourselves by contracts, or getting into all kinds of, you know, due diligence, or —

We just forget about it. We can do fine over time, dealing with people that we like, and admire, and trust.

So we have never — and a lot of people do get the idea, because the bad actor will tend to try and tantalize you in one way or another, and —you won't win. It just pays to avoid them.

We started out with that attitude, and you know, maybe one or two experiences have convinced us, even more so, that that's the way to play the game.

32. Why there's just one Borsheims store

WARREN BUFFETT: Zone 2.

AUDIENCE MEMBER: I'm Clarence Cafferty from Long Pine, Nebraska.

I'd like to know if we can get another .400 hitter by starting another Borsheims store someplace in this United States.

WARREN BUFFETT: Well, it's an interesting question about both the Borsheims and the [Nebraska Furniture] Mart. I mean, they — and of course, they're owned — as you probably know — historically, by the same family. I mean, it was Mrs. B.'s sister's family that bought Borsheims, but, in effect, started it virtually from scratch.

And the — both of those institutions offer this incredible selection, low prices brought about by huge volume, low operating costs, and all of that.

Operating multiple locations, you would get some benefit, obviously, from the name and the reputation.

But you would lose something, in terms of the amount of selection that could be offered. There's $50 million-plus at retail of jewelry at Borsheims' one location.

Well, when someone wants to buy a ring, or a pearl necklace, or something of the sort, they can see more offerings at a place like that than they possibly could at somebody who is trying to maintain inventory at 20 or 50 locations.

Similarly, that gives us a volume out of a given location that results in operating costs that, again, can't be matched if you have an enormous number of locations.

So, I think those businesses tend to be more successful in that particular mode as one-location businesses.

Now, a Helzberg's will be bringing merchandise to people all over the country at malls. And they will do — through that mode of operation, they perform that exceptionally well.

But Borsheims can't be Helzberg's, and Helzberg's can't be Borsheims. They're both going for two different — in a sense, two different customers, to some degree.

Sol Price, Charlie's friend who started the Price Club, the first big wholesale club, said that part of his success was due to figuring out the customer he didn't want. I think that's right, isn't it, Charlie?

CHARLIE MUNGER: Right.

WARREN BUFFETT: You have to figure out what you're good at and who you really can offer something special to. Borsheims offers something very special to people, but in part, it comes about through being at one location.

You can see more of almost any kind of jewelry you want there than you're going to see virtually any place in the world. And that will bring people there, or it will bring male people there.

And that gives you operating costs that are many — oh, 20 percentage points — off of what somebody else will be doing without that pulling power.

And that, in turn, enables you to offer the lower prices, which keeps the circle going. I mean, it's very hard to replicate something like that. And trying to do it in 10 spots probably wouldn't work well.

But it's a question you ask yourself as you go along, obviously, when you — McDonald's certainly did well by deciding to open a second store. I mean — (Laughter)

33. Factors boosting reported return on equity

WARREN BUFFETT: Zone 3?

AUDIENCE MEMBER: Warren, I'm Frank Martin from Elkhart, Indiana.

You have written extensively on the subject of the immutability of return on equity for American industry, as a whole, being stuck in the 12 to 13 percent range.

What forces do you see, since we're above the mean, to cause that number to regress to the mean over time?

WARREN BUFFETT: Yeah, it's true, it has been higher in the last few years. Although Fortune's got some interesting figures in the current issue, on the 500, that shows decade by decade what the return has been on the Fortune 500 group — which is a shifting group, of course.

And it's tended to stick, although I would say it was more between 12 and 13 than 11 and 12, probably, in that one.

The return, to some extent, in certain business has gotten a big kick because they finally put the health liabilities on the balance sheet, and therefore reduced equity.

So if you — anything you do that tends to pull down equity, if it doesn't change your ability to do the same sales volume — it's leveraged American business, in effect, by putting the health liabilities on the balance sheet.

It may be wrong. It may be that business can earn 15 percent or so. But I think competitive factors tend to, over time, keep pushing that number down, somewhat.

And 12 or 13, when you think about it, is not bad at all. I mean, it's a level, with 7 percent interest rates, that allows stocks and equity to be worth much more when employed in equity than elsewhere in the world.

But if I had to pick a figure for the next 10 years, I would pick some figure between 12 and 13, but that doesn't mean I'd be right on it.

Charlie?

CHARLIE MUNGER: Yeah. I think all of those published averages overstate what's earned anyway. They're the biggest companies, they're the winners, they're the ones whose stock sells at high multiples, so they can issue it to other people for high-earning assets.

And many of the low-return people are constantly being dropped out of the figures. Now, you can say that was true in the past, too. But it would be remarkable to me if, on average, American business earned 13 percent on capital after taxes.

WARREN BUFFETT: Those figures, incidentally — it isn't a huge item, but it's not totally insignificant. They don't show as a cost, for example, the cost of stock options.

And the American shareholders pay that, so the American shareholder has not gotten the returns on equity shown by those numbers, although it's not a huge factor.

But I wouldn't be surprised if it was, you know, two or three-tenths of a percent just for that one cost that's omitted.

If you let me omit my costs, I can show a very high return on equity. (Laughter)

34. Return on capital at Berkshire subsidiaries

WARREN BUFFETT: Zone 4?

AUDIENCE MEMBER: Jeff Peskin (PH) from New York. And I have a question for you.

It's really more of an observation, in that you've written about when you look at acquiring a business, you look a lot at how they allocate capital.

And my question is, once you acquire a stake in a company, do you find that, just by the fact that you are helping doing the allocation of capital and doing the compensation, that that alone makes a company have a lot higher return?

Or is there some benefit by the fact that you own, or some major shareholder, owns a big slug of the company that also allows a company to increase its return on capital?

WARREN BUFFETT: Well, that's a good question. The answer is sort of, some of the time, some of the places. It's the —

There's no question, in a business that earns a high rate on capital, that doesn't have natural ways to employ that money within the business, that we actually may contribute significantly to the long-term results of that business by taking the capital out.

Because if they don't have a place to use it, nevertheless, they might well use it someplace. And we have the whole universe to spread that money over.

So we can take the money that's earned in some operating business and we can buy part of the Coca-Cola Company with it, and buy into another wonderful business, whereas very few managements probably would do that. So, there's an advantage there.

Now on the other hand, Helzberg's, for example, will probably grow very substantially. They'll probably use all the capital they generate. Maybe they'll even use more. Well, they don't really need us for that. I mean, they would've done that under any circumstances.

We may actually give them the ability to grow even a little faster because if a company — and this is not the — these are not the Helzberg's figures — but if a company is earning 20 percent on equity but can grow 25 percent a year, you know, they're going to feel equity strains at some point. And we, obviously, would love the idea of supplying extra capital that would earn 20 percent on equity.

So, there can be some advantage to having us as a parent, in terms of sending capital to the business, as well as taking capital from the business.

We also, I think, can be helpful in some situations, in that once we are there, a lot of the rituals — particularly in a public company — but a lot of the things that people waste time doing in business, they don't have to do with us.

I mean, there's an awful lot of time spent in some businesses just preparing for committee meetings, and directors meetings, and all kinds of things like that, show-and-tell stuff. And none of that's needed with us. We won't go near them.

And so, we really free them up to spend a hundred percent of the time thinking about what is good for the business over time. If they have extra money, they don't have to worry about what to do with it.

If they need extra money for a good business, it'll be supplied. So, there are some advantages that way. And I guess —

Charlie, can you take it any further?

CHARLIE MUNGER: Yeah. I think our chief contribution to the businesses we acquire is what we don't do.

(BREAK IN RECORDING)

35. “Advanced math is of no use” in investing

AUDIENCE MEMBER: — it’s hard to continue to grow at the rate you’ve grown in the past because the company has gotten so big. And I’m wondering if you could elaborate a little bit on that.

And my second question, which is totally unrelated, but I’ve also read where you’re very good with numbers, with working things in your head. And I’m totally a rookie when it comes to economics and accounting and things like that, but I’m very good with numbers and keeping things in my head.

And I’m wondering if there’s some way a mathematician who knows very little about the business world, what I could read or what I could do to learn how better to invest and how you did that.

WARREN BUFFETT: Well, going to the first question, when you say it’s going to be hard — it’s going to be impossible. I mean, now that’s the answer. We cannot compound money at 23 percent from a $12 billion base.

We don’t know how to do that, and it would be a mistake for anybody to think that we could come close to that. We still — we think we can do OK with money, but we did not start with a $12 billion base.

And we’ve never seen anybody in the world compound numbers like that, at that rate. So, we’ll forget it — that part of it, but there are intelligent things we can be doing.

The second part of the question, I don’t think any great amount of mathematical aptitude is — not aptitude, but mathematical knowledge is a — advanced math is of no use in the investment process.

And understanding a mathematical relationship, sort of an ability to quantify — a numeracy, as they call it, I think that’s generally helpful in investments because something that tells you when things make sense or don’t make sense, or sort of how an item in one area relates to something someplace else.

But that doesn’t really require any great mathematical ability. It really requires sort of a mathematical awareness and a numeracy. And I think it is a help to be able to see that.

I mean, I think Charlie and I probably, when we read about one business, we’re always thinking of it against a screen of dozens of businesses — it’s just sort of automatic, and —

But that's just like a scout in baseball thinking about one baseball player against an alternative. I mean, you only have a given number on the squad and thinking, you know, "One guy may be a little faster, one guy can hit a little better," all of that sort of thing. And it's always in your mind, you are prioritizing and selecting in some manner.

My own feeling about the best way to apply that is just to read everything in sight. You know, I mean, if you're reading a few hundred annual reports a year and you've read Graham, and Fisher, and a few things, you'll soon see whether it kind of falls into place or not.

Charlie?

CHARLIE MUNGER: Yeah. I think the set of numbers — the one set of numbers in America that are the best quick guide to measuring one business against another are the Value Line numbers.

WARREN BUFFETT: I'd agree with that.

CHARLIE MUNGER: That stuff on the log scale paper going back 15 years, that is the best one-shot description of a lot of big businesses that exists in America. I can't imagine anybody being in the investment business involving common stocks without that thing on the shelf.

WARREN BUFFETT: And, if you sort of have in your head how all of that looks in different industries and different businesses, then you've got a backdrop against which to measure.

I mean, if you'd never watched a baseball game and never seen a statistic on it, you wouldn't know whether a .300 hitter was a good hitter or not.

You have to have some kind of a mosaic there that you're thinking is implanted against, in effect. And the Value Line figures, you know, they cycle it every 13 weeks. And if you ripple through that, you'll have a pretty good idea of what's happened over time in American business.

CHARLIE MUNGER: By the way, I pay no attention to their timeliness ratings, or stock ratings.

WARREN BUFFETT: No, none of that means anything. It's too bad they have to put that there, but that —it's the statistical material, not the —

CHARLIE MUNGER: I would like to have that material going all the way back. They cut it off about, what, 15 years back?

WARREN BUFFETT: Yeah, but I save the old ones. (Laughter)

CHARLIE MUNGER: Yeah. But you know, I wish I had that in the office, but I don't.

WARREN BUFFETT: Yeah, we — Charlie and I — maybe even, I do it more — we tend to go back. I mean, if I'm buying Coca-Cola, I'll probably go back and read the Fortune articles from the 1930s on it or something.

I like a lot of historical background on things, just to, sort of, get it in my head as to how the business has evolved over time, and what's been permanent and what hasn't been permanent, and all of that. I probably do that more for fun than for actually decision making.

But I think it is — I think if you think about if — we're trying to buy businesses we want to own forever, you know, and if you're thinking that way you might as well see what it's been like to own them forever, and look back a ways.

36. Management made the difference for Wells Fargo

WARREN BUFFETT: Zone 6.

AUDIENCE MEMBER: I'm Stewart Horejsi from Salina, Kansas.

When you first bought part of Wells Fargo a few years back, I looked at it and I couldn't tell it was any better than any of the other banks. I think, now, anybody that would look at it can tell it's better than almost any bank.

Now you've bought PNC Bank, and again, I can't see how it's distinguished from any of the other banks. (Laughter)

What did you see in PNC Bank that made you select it over all the other banks that were available?

WARREN BUFFETT: (Laughs) Well, we're not going to give any stock advice on that. So, I think that going back to Wells, it was very clear that, if you —

I knew something about Carl Reichardt, and to a lesser extent at that time, Paul Hazen, from having met them and also from having read a lot of things they said.

So, they were different — they were certainly different than the typical banker. And then the question was, is how much did that difference make, in terms of how they would run the place?

And they ran into some very heavy seas, subsequently. And I think, probably, the difference — I probably think those human differences that were perceived earlier are what enabled them to come through as well as they did. But that's about all I can say on banks.

CHARLIE MUNGER: You know, you might add to that slightly, because that Wells Fargo thing is a very interesting example. They had a huge concentration of real estate lending, a field in which people took the biggest —

It was the biggest collapse in 40 or 50 years in that field, so that if they had been destined to suffer the same sort of average loss per real estate loan that an ordinary bank would've suffered, the place would've been broke.

So, we were basically betting that their real estate lending was way better than average. And indeed, it was. And they also handled it on the way down, way better than average.

So, you can argue that everybody else was looking at this horrible concentration of real estate loans and this sea of troubles in the real estate field, and in bankers to the real estate field. And they just assumed that Wells Fargo was going to go broke.

And we figured, no, that since their loans were way higher quality, and their loan collection methods were way higher quality than others, that it would be all right. And so, it worked out.

WARREN BUFFETT: Yeah, we couldn't have told that — if we hadn't gone a little further, though, than just looking at numbers, we would not have been able to make that decision.

37. Nothing "magic" about a positive shareholders' equity

WARREN BUFFETT: Zone 1.

AUDIENCE MEMBER: David Carr, Durham, North Carolina.

Tambrands and U.S. Tobacco are two companies which are primarily single-focus product companies, that seem to possibly have some barriers to growth in unit sales and pricing, and have employed a strategy of returning cash to shareholders through stock repurchases.

Both companies have, at times — when they thought the stock was at a discount to intrinsic value — used debt to accentuate the repurchases.

Those companies recently have talked about problems with going into a negative shareholders — a negative stake to shareholders' equity position — through the use of additional debt to repurchase more shares, at a time when both companies believe their stock's very cheap. And they appear to have the type of long-term cash flow that would at least allow that.

Would you comment on the, at least, accounting treatment and the stated shareholders' equity, and if you think that should be a real concern for management in those areas?

WARREN BUFFETT: What was the first company, besides U.S. Tobacco?

AUDIENCE MEMBER: Tambrands.

WARREN BUFFETT: Do you want to?

CHARLIE MUNGER: Tambrands?

AUDIENCE MEMBER: Yes.

WARREN BUFFETT: Yeah, I don't think there's anything magic about whether shareholder equity is positive or negative. The — Coca-Cola has a shareholder equity of $5 billion. It has a market value of 75 billion or so.

Now, they're not going to do it and I'm not going to recommend it, but if they were to spend $10 billion buying in their stock they would have a negative shareholders' equity of 5 billion. They would — their credit would be sound.

I mean, if somebody else were to buy the company for 75 billion, they'd have 5 billion of tangible assets and 70 billion of intangible assets.

And there is nothing magic about a company having a positive shareholders' equity. And it isn't done very often. And I can't even think of a case where it's been done, but it may have been.

But I see no — I see nothing wrong with a company having a negative shareholders' equity, although it may be prohibited by the state in which they're incorporated, in terms of repurchasing shares at a time that would produce that. You'd have to look at the state law on that.

But anytime a company in an LBO, or something, is bought out at some very large number over book value, in effect, they're creating a negative— if they borrow enough money on it — they're creating a negative shareholders' equity, in terms of the previous shareholders' equity. And it's just a fiction, as to the numbers between the two organizations.

You should buy in your stock when you don't have a use for the money. And that could be management specific. I mean, some managements might have a use for the money if their field of capital allocation were large enough, whereas another management that was more specialized in their own business might not.

But once a company has attended to the things that are required or advantageous for the present business, we think reacquisition of stock is a very logical thing to consider, as long as you don't think you're paying more than the intrinsic value of the business in doing it.

And obviously, the bigger the discount from intrinsic value, the more compelling that particular use of money is.

Charlie?

CHARLIE MUNGER: I've got nothing to add. Generally speaking, maybe Coca-Cola can have a negative equity, but I don't think it would be a good idea for General Motors. I think there is something to be said for a positive shareholders' equity.

38. Looking for winners in competitive credit card business

WARREN BUFFETT: Zone 3.

AUDIENCE MEMBER: Edward Barr, Lexington, Kentucky. I had a two-fold question.

Number one, you mentioned American Express earlier. And I was curious as to whether the fact that credit card usage is only 10 percent of all transactions, and that may continue to grow for some time going forward, was a factor in your decision?

And the other part of the question pertains to the durability and permanence of the banking franchise with regard to alternative delivery channels that may appear over the next few years, including the possibility of the Microsoft/Intuit merger.

WARREN BUFFETT: Well, the specific number you mentioned about credit card usage and so on, that's not a big factor with us. We think credit cards are both here to stay and likely to grow, to some extent.

Although at some point you start reaching limits, at least in terms of outstandings [outstanding credit card debt] that people are — that make any sense.

But the credit card field is a very big field. The question is, is who's got the edge in it? Because everybody is going to want to be in it, and they already are. And there are a lot of different ways you can play the game if you're in the credit card business.

And you better have some way of playing one part of the game, preferably a large part. But you better have some way of playing one part of the game better than others or natural capitalistic forces are going to grind you down.

I mean, it's a business that people are willing to change their minds about what they do in. I mean, if you offer somebody a credit card that gives them some advantages that don't exist on their earlier card, people are quite willing to shift cards.

So, you need some kind of an edge in some particular segment of the market. So, the growth aspects overall of the market were not a big — are not a big factor with us.

It's really a question of figuring out who's going to win what game, and who's going to lose what game.

And what was the second question again on that?

39. Expect big changes in banking over next 20 years

AUDIENCE MEMBER: The second question pertained to the permanence and durability of the banking franchise.

WARREN BUFFETT: Oh yeah, sure.

AUDIENCE MEMBER: And whether alternative delivery channels over the next few years may erode the durability of that, including the Microsoft/Intuit merger.

WARREN BUFFETT: Well, that's a good question. You're certainly seeing the value of bank branches diminish significantly. It used to be a point of enormous pride with managements, in how many branches they had.

And it was, you know, often political influence and everything else was called into obtaining branch permits.

The world will change in banking, probably in some very major ways, over a 20 or 30-year period. Exactly what players will benefit and which ones will be hurt, you know, is a very tough question.

But I would expect — I would not — I don't think I'd expect really significant change in banking over the next five years, but I'd certainly expect it over the next 20 years.

And there are a lot of people that have their eye on that market, including Microsoft, as you mention.

It may be to their advantage to hook up with the present players. I mean, I know it's certainly something that gets explored. But they may figure out a way to go around the present players, too. And that's one investment consideration.

Charlie?

CHARLIE MUNGER: Yeah. The interesting player that went around the rest was Merrill Lynch. Merrill Lynch went heavily into banking with its cash management accounts. And I don't think it's the only innovation that'll come along.

WARREN BUFFETT: What's the name of that book?

CHARLIE MUNGER: You know, I'd forgotten, that's a marvelous book.

WARREN BUFFETT: Yes, there's a great book.

CHARLIE MUNGER: Maybe Molly remembers. What was that book you gave me? It was the history of the credit card.

WARREN BUFFETT: Was it Joe Nocera's? Yeah, Joe Nocera was the author. I don't remember the title ["A Piece of the Action: How the Middle Class Joined the Money Class"]. But it came out about six months to a year ago. It's a terrific history of the credit card business.

And if you read that you will get some idea of the amount of change that can occur in something like, you know, the movement of money. And my guess is that if there's another edition of it in 20 years, there'll be plenty more to write about. So —

CHARLIE MUNGER: By the way, that is a fabulous book. Most of the people who are here will not be able to put it down. I mean, for a book about an economic development, it captures the human background in a very interesting way.

40. No comment on SunTrust and PNC moats

WARREN BUFFETT: Is it zone 4? That seems far away for zone 3. Yeah.

AUDIENCE MEMBER: I was — Adam Engel (PH) from Boulder, Colorado.

I was wondering if you could comment on the moat you see around the castles of SunTrust and PNC.

WARREN BUFFETT: Well, I don't think I should comment on specific holdings like that. But — so I would say you would look at those in a general way very much as you'd look at banking operations first.

And then you'd try and figure out what are the specific strengths or weaknesses of both organizations. But there, again, I don't want to spoil the fun for you.

Charlie?

CHARLIE MUNGER: Nothing to add.

41. "Wiseass" comment on Salomon that Munger wishes hadn't occurred

WARREN BUFFETT: Zone 5.

AUDIENCE MEMBER: My name is Bob McClure (PH). I'm from the States but I live in Singapore.

About a week ago, in the Asian Wall Street Journal, a remark was attributed to Mr. Munger, specifically that owning Salomon Brothers was like owning a casino with a restaurant in the front. (Laughter)

The casino, eluding to the proprietary trading, and the restaurant, to the so-called client-driven business. If that attribution is correct or accurate can you —

Charlie Munger: Well, I don't think —

AUDIENCE MEMBER: — elaborate on why you view the business in that way?

CHARLIE MUNGER: I don't think it's entirely correct, but I have a pithy way of speaking on occasion. (Laughter)

And I frequently speak in a way that works with an in-group, but wouldn't necessarily work everywhere else.

And every once in a while, when you take one of those wiseass comments — (laughter) — out of context — why, I very much wish that it hadn't occurred. (Laughter)

This was such a case. (Laughter and applause)

WARREN BUFFETT: It won't stop him in the future, though. (Laughter)

Or me.

42. National debt isn't scary now, when compared to GDP

WARREN BUFFETT: Zone 6? Or are we in 5? Which one are we in? Kelly? Or —

AUDIENCE MEMBER: Mr. Buffett, I'm Randall Bellows (PH) from Chicago.

And the two questions I have, since you're answering questions so far afield, are, if you were to look at the balance sheet of the United States of America, is the national debt as frightening as — that it appears to be?

And secondly, in terms of redeployment of capital, if Coca-Cola is such a wonderful investment, as it returned so much, why not redeploy some capital in purchasing additional shares of Coca-Cola?

And finally, thank you for letting Jane do that portrait of you. And if it's good, we'll do Mr. Munger next. Thank you.

WARREN BUFFETT: First question about the U.S. balance sheet, it — the net national debt is about — it would be about 60-odd percent of GDP.

CHARLIE MUNGER: Without counting unfunded pensions.

WARREN BUFFETT: Yeah, but that's — but also with a claim on the income, in effect, of future citizens, which was an asset, too, that you could set up the —

But that figure, I think, at the end of World War II, may have been — I know it was around at least 125 percent, may have been 150 percent or so, of GDP. So we have sustained —

Now, the interest rate on that debt was much lower. A lot of it was at 2.9 percent because that's what savings bonds paid.

But that level of debt, which I don't advocate in relation to GDP, turned out to be quite sustainable. And as a matter of fact, it drifted down year after year for a long time until the early '80s, when it started rising again. And now it's actually fallen a little bit in the last few years, the ratio of debt to GDP.

There are a lot of measurements of how much debt is too much and all of that. But, probably, I think that if I had to look at one single statistic, I would look at that ratio, just like I would look at a ratio of debt to income for an individual.

Then you'd get into the question of the stability of the income and to whom it is owed.

But I do not think that the level of debt, relative to the economy, is of anything that's of a frightening nature. I like the idea of it trending downward a little bit over time rather than trending upward. And if it keeps trending upward, it can get awkward.

Although, it's — I think, in Italy, I think it's close to 150 percent now. And you start getting to 150 percent, and talk 8 percent interest rates, and you're talking 12 percent of GDP essentially going to interest.

If you were to put a balance sheet of the country together, it's kind of interesting, because you would have this 4 billion of net debt on the liability side, and you'd also have a lot of pension obligations, as Charlie mentions, on the liability side.

But you've got a lot of assets, too. You've got a 35 percent interest — profits interest — in all the American corporations. I mean, the government, if it has a 35 percent tax rate, really owns 35 percent of the stock of American business. They own a significant part of Berkshire Hathaway.

We write them a check every year. We don't write you a check every year, but we write them a check. We plow your earnings back to create more value for their stock, in other words, the taxes they get.

CHARLIE MUNGER: Are you trying to cheer these people up? (Laughter)

WARREN BUFFETT: But what would you pay to have the right, today, to receive all the future corporate tax payments made by all the companies in the United States, the discounted value? You'd pay a very big number.

What would you pay to have a right to take a percentage of the income of every individual that makes more than X in the United States, and also the right to change your percentage as you went along? That's a very big number, too. (Laughter)

So, you've got a very big asset there that — and you've got some very big liabilities, too. But the country is very solvent.

And I would not like to see debt rise at any rapid rate. I wouldn't like to see it rise at all, but I wouldn't like to see it, particularly, rise at a rapid rate, because that sets a lot of things in motion, if it's rising as a percentage of GDP.

But if you tell me that 20 years from now the national debt will be $10 trillion, but that it'll be the same percentage of GDP, does that alarm me? Not in the least. I mean, I expect it to increase and I think there's some arguments why — even, why it may be advisable to have it increase.

But I don't think it's a good idea to have it take up more and more of your income, because that sets a lot of other things in motion.

So, I welcome what's happened in the last couple of years, which is to see it decrease modestly from the trend that existed the previous 10 or 12 years.

Charlie?

CHARLIE MUNGER: Well, generally I think that you're right, that it isn't all bad. And to the extent that it is bad, a great nation with a capitalistic economy will stand quite a bit of abuse on the political side. It's a damn good thing, too, because — I don't think we should be terribly discouraged.

If there's anything that's really going to do the country in it'll be what I call a "Serpico effect," where you start rewarding what you don't want more of, and it then just grows, and grows, and grows. But I don't think that's necessarily a bad fiscal result, it's just a bad result.

WARREN BUFFETT: Berkshire owes 7 or 800 million — or whatever it is now, in debt, and we owe another 3 billion-some of float. You know, those numbers would've sounded very big to me 25 years ago, but — and yet we're one of the most conservatively financed operations you'll find.

Ten years from now we may owe more money, and it may be a smaller percentage still. I mean, you can't talk about debt levels without relating it to the ability to pay debt. And this country is probably in better financial shape now than it was in 1947.

43. Coca-Cola as "measuring stock" to evaluate alternatives

Zone 1. What, there was a second — was there a second question that I didn't answer on that? Or —

AUDIENCE MEMBER: (Inaudible)

WARREN BUFFETT: Oh, in terms of repurchasing shares. Right.

CHARLIE MUNGER: No, you said, "Why don't we buy more?"

WARREN BUFFETT: Well, we think about it.

CHARLIE MUNGER: We did, not long ago —

WARREN BUFFETT: Yeah, we did. We bought more last year, and it's not a bad measuring stick against buying other things.

But there's — I would not rule out Berkshire buying more. I don't have any plans to do it right now, but I wouldn't rule that out at all because it's — if I'm going to look at another business I will say, you know, "Why would I rather have this than more Coca-Cola?"

CHARLIE MUNGER: Well, there he is saying something that is very useful to practically any investor, when he said, "Use this as a measuring stick," in terms of buying other things. For an ordinary individual the best thing you have easily available is your measuring stick.

If it isn't — if the new thing isn't better than what you already know is available, it hasn't met your threshold, then that screens out, you know, 99 percent of what you see, and it's an enormous thought conserver. And it is not taught in the business schools, by and large.

WARREN BUFFETT: No, and that's why we think it's slightly nuts when big institutions decide, because everybody else is doing it, to put 4 percent of their money in international equities or 3 percent in emerging growth countries — some damn thing like that.

I mean, the only reason to put the money in there is if they've measured against what they're already doing.

And if they measure it against what they're already doing and they think it's a screamingly good idea to leave 97 percent in the other place and put 3 percent in, you know, I mean, it just doesn't make any sense whatsoever.

But it's what committees are talked to about and what keeps investment managers going to conferences and everything, so —

CHARLIE MUNGER: They're deliberately using a technique that takes away the best mental tool they have. And you can say this is nuts, and you're right.

And I think {German philosopher Friedrich] Nietzsche said it pretty well when he said he laughed at the man who thought he could walk better because he had a lame leg.

I mean, they literally are blinding themselves and then they're teaching our children how to do this in our own business schools. Very interesting, don't you think?

And all Warren says is, deciding whether to do something, just compare the best opportunity you have. If that one is better and you're not taking it, why would you do this just because somebody tells you you need 2 percent in international equities?

44. Buy Berkshire or let your money manager loose?

WARREN BUFFETT: Zone 1?

AUDIENCE MEMBER: Hi, my name is Mark Wheeler (PH), I'm from Portland, Oregon. And I have a few eggs in your basket. My grandmother always said, "Don't put all your eggs in one basket."

I have a question, and I think you answered this a couple of years ago in one of your reports about Little Abner's investment approach.

Suppose I had $100,000 and I decide to buy four or five more of your shares, and that was sort of a buy and hold thing for four or five years.

And also I have a money manager — I've already got one — and he does pretty well – 10, 15 percent.

But he churns the assets all the time. You know, every time I turn around all this mailbox full of paperwork. And I guess my question is, how can I arrive at which is a better deal for me?

In other words, to buy Berkshire, which I like, and obviously I'm here, so I'm interested in it, or hang onto my money manager, who just seems to be churning the hell out of the account?

WARREN BUFFETT: Well, it's better than having a broker churning the hell out of the account. (Laughs)

He had a little less incentive if he's getting a management fee.

But I can't answer your question as to which decision you should make in that case.

But I would say that if — you're right, in the sense that, if you buy Berkshire, you should only think about buying it for a very long period of time.

We have no idea what Berkshire is going to do, either intrinsically or in the market, in the next year. And you know, we care about the intrinsic part of it. We don't care about the market aspect. We do care about building intrinsic value.

And you know, in the end, we don't think — well, when we own Berkshire, we don't think of all our eggs being in one basket, I mean, because we have got a lot of good businesses.

But if you're talking about some, you know, lightning from someplace, the huge liability suit or something like that hitting one corporate entity, we're one corporate entity. But if you think about it in terms of the business risk implicit in an entity, we have a lot of different good businesses.

In fact, we probably have as decent a collection of good businesses as any company I can think of.

But your money manager will also undoubtedly have the advantage of working with, probably, with smaller sums, too, and that gives him a bigger universe of opportunity.

We're not set up, taxwise, perfectly, as compared to an individual working with their own capital. We're set up, taxwise, fine for somebody that's going to sort of own it forever. But we're not set up, taxwise, as well for somebody that's going to own it a year or something of the sort.

Charlie? Anything?

CHARLIE MUNGER: Nothing to add.

45. "We like people who are candid"

WARREN BUFFETT: Zone what? Oh, back there. I don't think it's on. OK.

AUDIENCE MEMBER: I'm Jeff Johnson (PH). I'm grateful to be here from Tulsa, Oklahoma.

I have two questions. First, I was hoping you could explain, or offer an opinion as to why investors in property-casualty insurance companies are willing to accept traditionally below-average type of returns.

Second question relates to an answer you gave me yesterday, that being that intuition or gut feeling has nothing to do in your — in making investment decisions.

I was wondering if there is anything subjective in yours and Mr. Munger's assessment of whether or not you like someone, and how it is that you determine whether or not you like the lord of the castle?

WARREN BUFFETT: Well. I don't know. Charlie, do you want to answer that second part?

CHARLIE MUNGER: Well, we spoke about agency costs. And there are two different kinds of agency costs. One, the guy favors himself at the expense of the shareholders, and the other is he's — he does foolish things. Or he's not trying to favor himself, he just is foolish by nature.

Either way, it's very costly to you, as the shareholder. So, you have to judge those two aspects of human character, and they're terribly important.

And on the other hand, there are some businesses so good that they'll easily stand a lot of folly in the managerial suite. And I — much as we like perfect people, I don't think we've always invested with them.

WARREN BUFFETT: No. But generally, we like people who are candid. We can usually tell when somebody's dancing around something, or where their — when the reports are essentially a little dishonest, or biased, or something. And it's just a lot easier to operate with people that are candid.

And we like people who are smart, you know. I don't mean geniuses. But that — and we like people who are focused on the business.

It's not real complicated, but we generally — you know, there may be a whole bunch of people in the middle that we don't really have any feeling on one way or the other, and then we see some that we know we don't want to be associated with, and some that we know we very much enjoy being associated with.

CHARLIE MUNGER: Averaged out, we've been very fortunate.

WARREN BUFFETT: Very lucky.

46. Difficult to get capital out of a sub-par business

CHARLIE MUNGER: And your other question, you said, why is it that these investors accept below-average results? Well, in the nature of things, approximately half the investors are going to get below-average results. They didn't exactly accept it in advance. It's just the way it turned out.

WARREN BUFFETT: And the money tends to be fairly captive, once it's in a company. I mean, it takes a lot — if you have a business that gets subnormal returns over time, there's a big

threshold in terms of either a takeover, or a proxy fight, or something like that to unleash the capital.

So, money that's tied up in an unprofitable business, or a sub-profitable business, is likely to stay tied up for a good period of time.

Eventually something will probably correct it. But capitalism does not operate so efficiently as to move capital around promptly when it's misallocated.

We are in a better position to do that when Berkshire owns a company. And obviously, we're in no position to do it — because it involves something we don't want to do — if we own it through some other enterprise. We just sell to somebody else who takes another — who takes our chair — at the table, in effect.

47. Focus on future, not current, earnings

WARREN BUFFETT: Zone 3?

AUDIENCE MEMBER: Hi, Philip King (PH) from San Francisco.

I've got another question about valuation — more specifically, the relation of P/Es to interest rates.

I understand that you don't want to lay down a rigid formula for valuation, but I also know that you don't want people to think that a multiple of 20 times earnings is cheap, or a multiple of five times earnings is expensive.

So, Benjamin Graham, he devised a central value theory that valued the average stock at an earnings yield that's about a third above bond yields.

In other words, that would work out to maybe 11 times earnings, currently. And I know that you've compared the average business to a 13 percent bond that's worth roughly book at 13 percent interest rates, and worth perhaps roughly twice book at 6 percent interest rates.

So, given current interest rates of 7 to 8 percent, as they are now, that would tend to imply that stocks are worth perhaps 12 to 13 times earnings.

And yet, the acquisitions that I've seen in the private market have gone out at more like 17 to 20 times earnings. And I'd like to know, what do you think is the rough range of multiples that make sense?

WARREN BUFFETT: Yeah. Well, it isn't a multiple of today's earnings that is primarily determinate of things. We bought our Coca-Cola, for example, in 1988 and '89, on this stock, at a price of $11 a share. Which — as low as 9, as high as 13, but it averaged about $11.

And it'll earn, we'll say, most estimates are between 230 and 240 this year. So, that's under five times this year's earnings, but it was a pretty good size multiple back when we bought it.

It's the future that counts. It's like what I wrote there, what Wayne Gretzky says, to go where the puck is going to be, not where it is.

So, the current multiple interacts with the reinvestment of capital and the rate at which that capital's invested, to determine the attractiveness of something now.

And we are affected in that valuation process to a considerable degree by interest rates, but not by whether they're 7.3, or 7.0, or 7.5. But I mean, we'll be thinking much differently if they're — long-term rates are 11 percent or 5 percent. And — but we don't have any magic multiples in mind.

We're thinking — we want to be in the business that 10 years from now is earning a whole lot more money than it is now, and that we will still feel good about the prospects of the business at that time.

That's the kind of business we're trying to buy all of, and that's the kind of business that we try and buy part of. And then sometimes we buy others, too. (Laughs)

Charlie?

CHARLIE MUNGER: We don't do any of that rigid formulaic stuff.

WARREN BUFFETT: There's a general framework, that you can call a formula, in our mind. But we also don't kid ourselves that we know so much about the specifics that we would actually make a calculation, in terms of the equation.

When we bought Coke in '88 and '89 we had this idea about what we thought the business would do over time, but we never reduced it to making a calculation.

Maybe we should, but I mean, it just — we don't think there's that kind of precision to it.

We think it's the right way to think in a general way. And we think, if you try to — if you think that you can do it to pinpoint it, you're kidding yourself.

And therefore, we think that when we make a decision, there ought to be such a margin of safety that it ought to be so attractive that you don't have to carry it out to three decimal places.

We'll take a couple more and then we'll have to leave. We've got a directors — we have one directors meeting a year and we don't want to disappoint them.

48. USAir was mistake, despite five years of dividends

WARREN BUFFETT: Zone 4? (Laughs)

AUDIENCE MEMBER: Yes, I'm Roy Christian from Aptos, California.

I wanted to ask one question about USAir, which has not been questioned much at this meeting.

When you were on television talking about the losses there, it was funny how so many of my friends or, maybe, acquaintances came forward to tell me this piece of startling news. And, you know, I tried to stand up for you, a little bit. And at least —

WARREN BUFFETT: It was a mistake. (Laughter)

You should've just taken a dive. (Laughter)

AUDIENCE MEMBER: Well, at least I wanted to point out to them —

WARREN BUFFETT: No —

AUDIENCE MEMBER: — that you did have dividends over a period of —

WARREN BUFFETT: Right.

AUDIENCE MEMBER — about five or six years, and that that money was reinvested, maybe at a better return than USAir.

So, that it wasn't quite the disaster that was pictured on television when you spoke about it, or the impression that all my friends — or I should call them acquaintances — pointed out to me.

Just a comment, I guess, is what I'm asking for.

WARREN BUFFETT: Yes. Well, you're right, it could've been worse. But it was a mistake. But we received five years, I guess — yeah, it'd be five years of dividends at a good rate while we got it.

But it's like somebody says, "It isn't the return on principal that you care about, it's the return of principal." And we —

But we're better off — we're a lot better off, obviously, than if we'd bought the common [stock], and we're even better off than if we bought some other stocks.

But it was still a big mistake on my part. But keep standing up for me. I need all the help I can get on this one. (Laughter)

49. Charlie's and Warren's book recommendations

WARREN BUFFETT: Zone 5?

AUDIENCE MEMBER: Hi, I'm Chris Stabru (PH) from New York.

Charlie, in addition to the book that you mentioned on credit cards, are there any other books you have been reading that you'd recommend to us?

And Warren, are there any books that you have been reading that you'd recommend? I know you're a fan of Bertrand Russell. Any favorite one or two of his books?

WARREN BUFFETT: Been a long time since I've read those, though. I mean, I read a lot of Russell, but I did that a — he hasn't written much in the last 10 or 15 years. (Laughs)

Charlie?

CHARLIE MUNGER: There's a textbook which is called, I think, "Judgment in Managerial Decision Making." And it's used in some of the business schools, and it's actually quite a good book.

It's not spritely — it's not written in a spritely way that makes it fun to read, but there's a lot of wisdom in it. It's something like Braberman [Max Bazerman]. But it's "Judgment in Managerial Decision Making."

WARREN BUFFETT: Since taking up computer bridge, which is 10 hours a week, it's really screwed up my reading. (Laughter)

It's a lot of fun, though.

50. Despite "awkward to disadvantageous" per share price, Berkshire won't split stock

WARREN BUFFETT: Zone 6? We'll take a couple more and then we'll —

AUDIENCE MEMBER: Yes. I am Dick Leighton from Rockford, Illinois.

This is the first annual meeting that I've attended and it's been very beneficial to me. I've been extremely impressed with the number of people here, but even more so with the number of young people who have come.

And I would like very much to be able to bring my grandchildren as shareholders, but I find it difficult to get shares into their hands with the current per unit value.

WARREN BUFFETT: That's the nicest introduction to the stock split question we've had. (Laughter)

It really is, too.

AUDIENCE MEMBER: I thought you would appreciate that. (Laughter)

Obviously you understand the question. I understand the position you've taken over the years and the fact that it adds no value to make the split.

In this case, however, it could be a tax savings to many of us who would like to get stock shares into the hands of other family members.

Should I just go to work on my congressman to change the tax code, or would you consider a change? (Laughter)

WARREN BUFFETT: Well, that's a very valid question. And there's certainly a couple of areas, one of which you've just mentioned.

And I had someone else mention to me that they had their Berkshire in an IRA account. And now they were getting into the mandatory payment arrangement, and it didn't work well, in terms of using the Berkshire — although I think they could sell it and then pay out a percentage of it.

There are certain aspects, primarily of gifting, where it is anywhere from awkward to disadvantageous to have the price per share on a stock that exists with Berkshire.

And you know, we're aware of it, we've thought about it, and we've got our own personal situations even, sometimes, that are involved in that. I've got one in the family, which we've worked — figured out ways around.

The disadvantage, of course, is that you saw a little even earlier this year of what a book ["The Warren Buffett Way"] can do.

We want to attract shareholders who are as investment-oriented as we can possibly obtain, with as long-term horizons.

And to some extent, the publicity about me is negative, in that respect. Because I know that if we had something that it was a lot easier for anybody with $500 to buy, that we would get an awful lot of people buying it who didn't have the faintest idea what they were doing, but heard the name bandied around in some way.

And secondly, to the extent that ever created a market that was even — that was stronger — you then would have people buying it simply because it was going up. We got a little bit of that going on this year.

There are a lot of people that are attracted to stocks that are going upward. It doesn't attract us, but it attracts the rest of the world to some degree.

So we are almost certain that we would get — we don't know the degree to which it would happen — we are almost certain we would get a shareholder base that would not have the level of sophistication and the synchronization of objectives with us that we have now. That is almost a cinch.

And what we really don't need in Berkshire stock is more demand. I mean, that is not — we don't care to have it sell higher, except as intrinsic value grows.

Ideally, we would have the stock price exactly parallel to change in intrinsic value over time because then everybody would be treated fairly among our shareholders.

They would all gain or lose, as the company gained or lost, over their ownership period. And anything that artificially stimulated the price in one period simply means that some other period's shareholders are going to be disappointed.

I mean, we don't want the stock to sell at twice intrinsic value, or 50 percent above intrinsic value. We want the intrinsic value to grow a lot.

And I don't think there's any question, but that we would get a worse result in that aspect if we introduce splits in, because then people would think about other possibilities that might give the stock a temporary boost.

We — they had a tabulation in Businessweek a couple of months ago on turnover on the exchange. We were at 3 percent, and I don't think anybody was, that I saw on the list, was under double digits and bigger numbers.

But those are people who are simply, you know, their shareholders leaving frequently, and new shareholders coming in with shorter-term anticipations. We have wanted this to be as much like a private partnership as we can have, with everybody having the ability to buy it.

We don't think the minimum investment is too high to — in this investment world. I mean, there are all kinds of investment opportunities that are limited to 25,000 or 50,000, and that sort of thing.

But the problem of making change, you know, in terms of gifts or — you know, that I wish I had a better answer for, because I think that is a —

CHARLIE MUNGER: My grandchildren pay me the difference between $20,000 and the current price. And I think that's a very reasonable way for them to behave, particularly when they are, sometimes, they're only six weeks old. (Laughter)

WARREN BUFFETT: You need a spouse's consent to make it — to work with 20, obviously.

But most of the things can be solved, but I'll admit it isn't as easy to solve as if we just had a stock denominated in lower dollars per share.

I do think that once you get a shareholder base that is — has got — that has different objectives or expectations or anything, you can't get rid of it. I mean, you can keep a shareholder base like Berkshire, but you can't reconstruct it if you destroy it in some way.

And it's important to us who we're in with. I mean, it enables us to — I think it helps us in our operation. I think it even may — in some cases, it may even help us in acquisitions, in terms of who we attract.

It may — for all I know, it may hurt us someplace, too, that I don't know about. But I don't think so, because I think we can design — particularly with a preferred stock — we can design something to satisfy somebody who might have in mind a different denomination of security.

CHARLIE MUNGER: Look around you. Are we really likely to do a lot better? This is a good bunch.

1995 Letter

BERKSHIRE HATHAWAY INC.

To the Shareholders of Berkshire Hathaway Inc.:

Our gain in net worth during 1995 was $5.3 billion, or 45.0%. Per-share book value grew by a little less, 43.1%, because we paid stock for two acquisitions, increasing our shares outstanding by 1.3%. Over the last 31 years (that is, since present management took over) per-share book value has grown from $19 to $14,426, or at a rate of 23.6% compounded annually.

There's no reason to do handsprings over 1995's gains. This was a year in which any fool could make a bundle in the stock market. And we did. To paraphrase President Kennedy, a rising tide lifts all yachts.

Putting aside the financial results, there was plenty of good news at Berkshire last year: We negotiated three acquisitions of exactly the type we desire. Two of these, Helzberg's Diamond Shops and R.C. Willey Home Furnishings, are included in our 1995 financial statements, while our largest transaction, the purchase of GEICO, closed immediately after the end of the year. (I'll tell you more about all three acquisitions later in the report.)

These new subsidiaries roughly double our revenues. Even so, the acquisitions neither materially increased our shares outstanding nor our debt. And, though these three operations employ over 11,000 people, our headquarters staff grew only from 11 to 12. (No sense going crazy.)

Charlie Munger, Berkshire's Vice Chairman and my partner, and I want to build a collection of companies - both wholly- and partly-owned - that have excellent economic characteristics and that are run by outstanding managers. Our favorite acquisition is the negotiated transaction that allows us to purchase 100% of such a business at a fair price. But we are almost as happy when the stock market offers us the chance to buy a modest percentage of an outstanding business at a pro-rata price well below what it would take to buy 100%. This double-barrelled approach -

purchases of entire businesses through negotiation or purchases of part-interests through the stock market - gives us an important advantage over capital-allocators who stick to a single course. Woody Allen once explained why eclecticism works: "The real advantage of being bisexual is that it doubles your chances for a date on Saturday night."

Over the years, we've been Woody-like in our thinking, attempting to increase our marketable investments in wonderful businesses, while simultaneously trying to buy similar businesses in their entirety. The following table illustrates our progress on both fronts. In the tabulation, we show the marketable securities owned per share of Berkshire at ten-year intervals. A second column lists our per-share operating earnings (before taxes and purchase-price adjustments but after interest and corporate overhead) from all other activities. In other words, the second column shows what we earned excluding the dividends, interest and capital gains that we realized from investments. Purchase-price accounting adjustments are ignored for reasons we have explained at length in previous reports and which, as an act of mercy, we won't repeat. (We'll be glad to send masochists the earlier explanations, however.)

Year	**Marketable Securities Per Share**	**Pre-tax Earnings Per Share Excluding All Income from Investments**
1965	$4	$4.08
1975	159	(6.48)
1985	2,443	18.86
1995	22,088	258.20
Yearly Growth Rate 1965 - 95	33.4%	14.7%

These results have not sprung from some master plan that we concocted in 1965. In a general way, we knew then what we hoped to accomplish but had no idea what specific opportunities might make it possible. Today we remain similarly unstructured: Over time, we expect to improve the figures in both columns but have no road map to tell us how that will come about.

We proceed with two advantages: First, our operating managers are outstanding and, in most cases, have an unusually strong attachment to Berkshire. Second, Charlie and I have had

considerable experience in allocating capital and try to go at that job rationally and objectively. The giant disadvantage we face is size: In the early years, we needed only good ideas, but now we need good *big* ideas. Unfortunately, the difficulty of finding these grows in direct proportion to our financial success, a problem that increasingly erodes our strengths.

I will have more to say about Berkshire's prospects later in this report, when I discuss our proposed recapitalization.

Acquisitions

It may seem strange that we exult over a year in which we made three acquisitions, given that we have regularly used these pages to question the acquisition activities of most managers. Rest assured, Charlie and I haven't lost our skepticism: We believe most deals do damage to the shareholders of the acquiring company. Too often, the words from *HMS Pinafore* apply: "Things are seldom what they seem, skim milk masquerades as cream." Specifically, sellers and their representatives invariably present financial projections having more entertainment value than educational value. In the production of rosy scenarios, Wall Street can hold its own against Washington.

In any case, why potential buyers even look at projections prepared by sellers baffles me. Charlie and I never give them a glance, but instead keep in mind the story of the man with an ailing horse. Visiting the vet, he said: "Can you help me? Sometimes my horse walks just fine and sometimes he limps." The vet's reply was pointed: "No problem - when he's walking fine, sell him." In the world of mergers and acquisitions, that horse would be peddled as Secretariat.

At Berkshire, we have all the difficulties in perceiving the future that other acquisition-minded companies do. Like they also, we face the inherent problem that the seller of a business practically always knows far more about it than the buyer and also picks the time of sale - a time when the business is likely to be walking "just fine."

Even so, we do have a few advantages, perhaps the greatest being that we *don't* have a strategic plan. Thus we feel no need to proceed in an ordained direction (a course leading almost invariably to silly purchase prices) but can instead simply decide what makes sense for our owners. In doing that, we always mentally compare any move we are contemplating with dozens of other opportunities open to us, including the purchase of small pieces of the best businesses in the world via the stock market. Our practice of making this comparison - acquisitions against passive investments - is a discipline that managers focused simply on expansion seldom use.

Talking to *Time Magazine* a few years back, Peter Drucker got to the heart of things: "I will tell you a secret: Dealmaking beats working. Dealmaking is exciting and fun, and working is grubby. Running anything is primarily an enormous amount of grubby detail work . . . dealmaking is romantic, sexy. That's why you have deals that make no sense."

In making acquisitions, we have a further advantage: As payment, we can offer sellers a stock backed by an extraordinary collection of outstanding businesses. An individual or a family wishing to dispose of a single fine business, but also wishing to defer personal taxes indefinitely, is apt to find Berkshire stock a particularly comfortable holding. I believe, in fact, that this calculus played an important part in the two acquisitions for which we paid shares in 1995.

Beyond that, sellers sometimes care about placing their companies in a corporate home that will both endure and provide pleasant, productive working conditions for their managers. Here again, Berkshire offers something special. Our managers operate with extraordinary autonomy. Additionally, our ownership structure enables sellers to know that when I say we are buying to keep, the promise means something. For our part, we like dealing with owners who care what happens to their companies and people. A buyer is likely to find fewer unpleasant surprises dealing with that type of seller than with one simply auctioning off his business.

In addition to the foregoing being an explanation of our acquisition style, it is, of course, a not-so-subtle sales pitch. If you own or represent a business earning $25 million or more before tax, and it fits the criteria listed on page 23, just give me a call. Our discussion will be confidential. And if you aren't interested now, file our proposition in the back of your mind: We are never going to lose our appetite for buying companies with good economics and excellent management.

Concluding this little dissertation on acquisitions, I can't resist repeating a tale told me last year by a corporate executive. The business he grew up in was a fine one, with a long-time record of leadership in its industry. Its main product, however, was distressingly glamourless. So several decades ago, the company hired a management consultant who - naturally - advised diversification, the then-current fad. ("Focus" was not yet in style.) Before long, the company acquired a number of businesses, each after the consulting firm had gone through a long - and expensive - acquisition study. And the outcome? Said the executive sadly, "When we started, we were getting 100% of our earnings from the original business. After ten years, we were getting 150%."

Helzberg's Diamond Shops

A few years back, management consultants popularized a technique called "management by walking around" (MBWA). At Berkshire, we've instituted ABWA (acquisitions by walking around).

In May 1994, a week or so after the Annual Meeting, I was crossing the street at 58th and Fifth Avenue in New York, when a woman called out my name. I listened as she told me she'd been to, and had enjoyed, the Annual Meeting. A few seconds later, a man who'd heard the woman stop me did so as well. He turned out to be Barnett Helzberg, Jr., who owned four shares of Berkshire and had also been at our meeting.

In our few minutes of conversation, Barnett said he had a business we might be interested in. When people say that, it usually turns out they have a lemonade stand - with potential, of course, to quickly grow into the next Microsoft. So I simply asked Barnett to send me particulars. That, I thought to myself. will be the end of that.

Not long after, Barnett sent me the financial statements of Helzberg's Diamond Shops. The company had been started by his grandfather in 1915 from a single store in Kansas City and had developed by the time we met into a group with 134 stores in 23 states. Sales had grown from $10 million in 1974 to $53 million in 1984 and $282 million in 1994. We weren't talking lemonade stands.

Barnett, then 60, loved the business but also wanted to feel free of it. In 1988, as a step in that direction, he had brought in Jeff Comment, formerly President of Wanamaker's, to help him run things. The hiring of Jeff turned out to be a homerun, but Barnett still found that he couldn't shake a feeling of ultimate responsibility. Additionally, he owned a valuable asset that was subject to the vagaries of a single, very competitive industry, and he thought it prudent to diversify his family's holdings.

Berkshire was made to order for him. It took us awhile to get together on price, but there was never any question in my mind that, first, Helzberg's was the kind of business that we wanted to own and, second, Jeff was our kind of manager. In fact, we would not have bought the business if Jeff had not been there to run it. Buying a retailer without good management is like buying the Eiffel Tower without an elevator.

We completed the Helzberg purchase in 1995 by means of a tax-free exchange of stock, the only kind of transaction that interested Barnett. Though he was certainly under no obligation

to do so, Barnett shared a meaningful part of his proceeds from the sale with a large number of his associates. When someone behaves that generously, you know you are going to be treated right as a buyer.

The average Helzberg's store has annual sales of about $2 million, far more than competitors operating similarly-sized stores achieve. This superior per-store productivity is the key to Helzberg's excellent profits. If the company continues its first-rate performance - and we believe it will - it could grow rather quickly to several times its present size.

Helzberg's, it should be added, is an entirely different sort of operation from Borsheim's, our Omaha jewelry business, and the two companies will operate independently of each other. Borsheim's had an excellent year in 1995, with sales up 11.7%. Susan Jacques, its 36-year-old CEO, had an even better year, giving birth to her second son at the start of the Christmas season. Susan has proved to be a terrific leader in the two years since her promotion.

R.C. Willey Home Furnishings

It was Nebraska Furniture Mart's Irv Blumkin who did the walking around in the case of R.C. Willey, long the leading home furnishings business in Utah. Over the years, Irv had told me about the strengths of that company. And he had also told Bill Child, CEO of R.C. Willey, how pleased the Blumkin family had been with its Berkshire relationship. So in early 1995, Bill mentioned to Irv that for estate tax and diversification reasons, he and the other owners of R.C. Willey might be interested in selling.

From that point forward, things could not have been simpler. Bill sent me some figures, and I wrote him a letter indicating my idea of value. We quickly agreed on a number, and found our personal chemistry to be perfect. By mid-year, the merger was completed.

R.C. Willey is an amazing story. Bill took over the business from his father-in-law in 1954 when sales were about $250,000. From this tiny base, Bill employed Mae West's philosophy: "It's not what you've got - it's what you do with what you've got." Aided by his brother, Sheldon, Bill has built the company to its 1995 sales volume of $257 million, and it now accounts for over 50% of the furniture business in Utah. Like Nebraska Furniture Mart, R.C. Willey sells appliances, electronics, computers and carpets in addition to furniture. Both companies have about the same sales volume, but NFM gets all of its business from one complex in Omaha, whereas R.C. Willey will open its sixth major store in the next few months.

Retailing is a tough business. During my investment career, I have watched a large number of retailers enjoy terrific growth and superb returns on equity for a period, and then suddenly nosedive, often all the way into bankruptcy. This shooting-star phenomenon is far more common in retailing than it is in manufacturing or service businesses. In part, this is because a retailer must stay smart, day after day. Your competitor is always copying and then topping whatever you do. Shoppers are meanwhile beckoned in every conceivable way to try a stream of new merchants. In retailing, to coast is to fail.

In contrast to this have-to-be-smart-every-day business, there is what I call the have-to-be-smart-*once* business. For example, if you were smart enough to buy a network TV station very early in the game, you could put in a shiftless and backward nephew to run things, and the business would still do well for decades. You'd do far better, of course, if you put in Tom Murphy, but you could stay comfortably in the black without him. For a retailer, hiring that nephew would be an express ticket to bankruptcy.

The two retailing businesses we purchased this year are blessed with terrific managers who love to compete and have done so successfully for decades. Like the CEOs of our other operating units, they will operate autonomously: We want them to feel that the businesses they run are *theirs.* This means no second-guessing by Charlie and me. We avoid the attitude of the alumnus whose message to the football coach is "I'm 100% with you - win or tie." Our basic goal as an owner is to behave with our managers as we like our owners to behave with us.

As we add more operations, I'm sometimes asked how many people I can handle reporting to me. My answer to that is simple: If I have one person reporting to me and he is a lemon, that's one too many, and if I have managers like those we now have, the number can be almost unlimited. We are lucky to have Bill and Sheldon associated with us, and we hope that we can acquire other businesses that bring with them managers of similar caliber.

GEICO Corporation

Right after yearend, we completed the purchase of 100% of GEICO, the seventh largest auto insurer in the United States, with about 3.7 million cars insured. I've had a 45-year association with GEICO, and though the story has been told before, it's worth a short recap here.

I attended Columbia University's business school in 1950-51, not because I cared about the degree it offered, but because I wanted to study under Ben Graham, then teaching there. The time I spent in Ben's classes was a personal high, and quickly induced me to learn all I could

about my hero. I turned first to *Who's Who in America*, finding there, among other things, that Ben was Chairman of Government Employees Insurance Company, to me an unknown company in an unfamiliar industry.

A librarian next referred me to Best's Fire and Casualty insurance manual, where I learned that GEICO was based in Washington, DC. So on a Saturday in January, 1951, I took the train to Washington and headed for GEICO's downtown headquarters. To my dismay, the building was closed, but I pounded on the door until a custodian appeared. I asked this puzzled fellow if there was anyone in the office I could talk to, and he said he'd seen one man working on the sixth floor.

And thus I met Lorimer Davidson, Assistant to the President, who was later to become CEO. Though my only credentials were that I was a student of Graham's, "Davy" graciously spent four hours or so showering me with both kindness and instruction. No one has ever received a better half-day course in how the insurance industry functions nor in the factors that enable one company to excel over others. As Davy made clear, GEICO's method of selling - direct marketing - gave it an enormous cost advantage over competitors that sold through agents, a form of distribution so ingrained in the business of these insurers that it was impossible for them to give it up. After my session with Davy, I was more excited about GEICO than I have ever been about a stock.

When I finished at Columbia some months later and returned to Omaha to sell securities, I naturally focused almost exclusively on GEICO. My first sales call - on my Aunt Alice, who always supported me 100% - was successful. But I was then a skinny, unpolished 20-year-old who looked about 17, and my pitch usually failed. Undaunted, I wrote a short report late in 1951 about GEICO for "The Security I Like Best" column in The *Commercial and Financial Chronicle*, a leading financial publication of the time. More important, I bought stock for my own account.

You may think this odd, but I have kept copies of every tax return I filed, starting with the return for 1944. Checking back, I find that I purchased GEICO shares on four occasions during 1951, the last purchase being made on September 26. This pattern of persistence suggests to me that my tendency toward self-intoxication was developed early. I probably came back on that September day from unsuccessfully trying to sell some prospect and decided - despite my already having more than 50% of my net worth in GEICO - to load up further. In any event, I

accumulated 350 shares of GEICO during the year, at a cost of $10,282. At yearend, this holding was worth $13,125, more than 65% of my net worth.

You can see why GEICO was my first business love. Furthermore, just to complete this stroll down memory lane, I should add that I earned most of the funds I used to buy GEICO shares by delivering *The Washington Post*, the chief product of a company that much later made it possible for Berkshire to turn $10 million into $500 million.

Alas, I sold my entire GEICO position in 1952 for $15,259, primarily to switch into Western Insurance Securities. This act of infidelity can partially be excused by the fact that Western was selling for slightly more than one times its current earnings, a p/e ratio that for some reason caught my eye. But in the next 20 years, the GEICO stock I sold grew in value to about $1.3 million, which taught me a lesson about the inadvisability of selling a stake in an identifiably-wonderful company.

In the early 1970's, after Davy retired, the executives running GEICO made some serious errors in estimating their claims costs, a mistake that led the company to underprice its policies - and that almost caused it to go bankrupt. The company was saved only because Jack Byrne came in as CEO in 1976 and took drastic remedial measures.

Because I believed both in Jack and in GEICO's fundamental competitive strength, Berkshire purchased a large interest in the company during the second half of 1976, and also made smaller purchases later. By yearend 1980, we had put $45.7 million into GEICO and owned 33.3% of its shares. During the next 15 years, we did not make further purchases. Our interest in the company, nonetheless, grew to about 50% because it was a big repurchaser of its own shares.

Then, in 1995, we agreed to pay $2.3 billion for the half of the company we didn't own. That is a steep price. But it gives us full ownership of a growing enterprise whose business remains exceptional for precisely the same reasons that prevailed in 1951. In addition, GEICO has two extraordinary managers: Tony Nicely, who runs the insurance side of the operation, and Lou Simpson, who runs investments.

Tony, 52, has been with GEICO for 34 years. There's no one I would rather have managing GEICO's insurance operation. He has brains, energy, integrity and focus. If we're lucky, he'll stay another 34 years.

Lou runs investments just as ably. Between 1980 and 1995, the equities under Lou's management returned an average of 22.8% annually vs. 15.7% for the S&P. Lou takes the same

conservative, concentrated approach to investments that we do at Berkshire, and it is an enormous plus for us to have him on board. One point that goes beyond Lou's GEICO work: His presence on the scene assures us that Berkshire would have an extraordinary professional immediately available to handle its investments if something were to happen to Charlie and me.

GEICO, of course, must continue both to attract good policyholders and keep them happy. It must also reserve and price properly. But the ultimate key to the company's success is its rock-bottom operating costs, which virtually no competitor can match. In 1995, moreover, Tony and his management team pushed underwriting and loss adjustment expenses down further to 23.6% of premiums, nearly one percentage point below 1994's ratio. In business, I look for economic castles protected by unbreachable "moats." Thanks to Tony and his management team, GEICO's moat widened in 1995.

Finally, let me bring you up to date on Davy. He's now 93 and remains my friend and teacher. He continues to pay close attention to GEICO and has always been there when the company's CEOs - Jack Byrne, Bill Snyder and Tony - have needed him. Our acquisition of 100% of GEICO caused Davy to incur a large tax. Characteristically, he still warmly supported the transaction.

Davy has been one of my heroes for the 45 years I've known him, and he's never let me down. You should understand that Berkshire would not be where it is today if Davy had not been so generous with his time on a cold Saturday in 1951. I've often thanked him privately, but it is fitting that I use this report to thank him on behalf of Berkshire's shareholders.

Insurance Operations

In addition to acquiring GEICO, we enjoyed other favorable developments in insurance during 1995.

As we've explained in past reports, what counts in our insurance business is, first, the amount of "float" we generate and, second, its cost to us. Float is money we hold but don't own. In an insurance operation, float arises because most policies require that premiums be prepaid and, more importantly, because it usually takes time for an insurer to hear about and resolve loss claims.

Typically, the premiums that an insurer takes in do not cover the losses and expenses it must pay. That leaves it running an "underwriting loss" - and that loss is the cost of float. An insurance business is profitable over time if its cost of float is less than the cost the company

would otherwise incur to obtain funds. But the business has a negative value if the cost of its float is higher than market rates for money.

As the numbers in the following table show, Berkshire's insurance business has been a huge winner. For the table, we have calculated our float - which we generate in exceptional amounts relative to our premium volume - by adding loss reserves, loss adjustment reserves, funds held under reinsurance assumed and unearned premium reserves, and then subtracting agents' balances, prepaid acquisition costs, prepaid taxes and deferred charges applicable to assumed reinsurance. Our cost of float is determined by our underwriting loss or profit. In those years when we have had an underwriting profit, such as the last three, our cost of float has been negative, which means we have calculated our insurance earnings by adding underwriting profit to float income.

(in $ Millions)	(1) Underwriting Loss	(2) Average Float	Approximate Cost of Funds	Yearend Yield on Long-Term Govt. Bonds
1967	Profit	$17.3	< 0	5.50%
1968	Profit	19.9	< 0	5.90%
1969	Profit	23.4	< 0	6.79%
1970	$0.37	32.4	1.14%	6.25%
1971	Profit	52.5	< 0	5.81%
1972	Profit	69.5	< 0	5.82%
1973	Profit	73.3	< 0	7.27%
1974	7.36	79.1	9.30%	8.13%
1975	11.35	87.6	12.96%	8.03%
1976	Profit	102.6	< 0	7.30%
1977	Profit	139.0	< 0	7.97%
1978	Profit	190.4	< 0	8.93%
1979	Profit	227.3	< 0	10.08%
1980	Profit	237.0	< 0	11.94%
1981	Profit	228.4	< 0	13.61%
1982	21.56	220.6	9.77%	10.64%
1983	33.87	231.3	14.64%	11.84%
1984	48.06	253.2	18.98%	11.58%
1985	44.23	390.2	11.34%	9.34%
1986	55.84	797.5	7.00%	7.60%
1987	55.43	1,266.7	4.38%	8.95%
1988	11.08	1,497.7	0.74%	9.00%
1989	24.40	1,541.3	1.58%	7.97%
1990	26.65	1,637.3	1.63%	8.24%
1991	119.6	1,895.0	6.31%	7.40%
1992	108.9	2,290.4	4.76%	7.39%
1993	Profit	2,624.7	< 0	6.35%
1994	Profit	3,056.6	< 0	7.88%
1995	Profit	3,607.2	< 0	5.95%

Since 1967, when we entered the insurance business, our float has grown at an annual compounded rate of 20.7%. In more years than not, our cost of funds has been less than nothing. This access to "free" money has boosted Berkshire's performance in a major way.

Any company's level of profitability is determined by three items: (1) what its assets earn; (2) what its liabilities cost; and (3) its utilization of "leverage" - that is, the degree to which its assets are funded by liabilities rather than by equity. Over the years, we have done well on Point 1, having produced high returns on our assets. But we have also benefitted greatly - to a degree that is not generally well-understood - because our liabilities have cost us very little. An important reason for this low cost is that we have obtained float on very advantageous terms. The same cannot be said by many other property and casualty insurers, who may generate plenty of float, but at a cost that exceeds what the funds are worth to them. In those circumstances, leverage becomes a disadvantage.

Since our float has cost us virtually nothing over the years, it has in effect served as equity. Of course, it differs from true equity in that it doesn't belong to us. Nevertheless, let's assume that instead of our having $3.4 billion of float at the end of 1994, we had replaced it with $3.4 billion of equity. Under this scenario, we would have owned no more assets than we did during 1995. We would, however, have had somewhat lower earnings because the cost of float was negative last year. That is, our float threw off profits. And, of course, to obtain the replacement equity, we would have needed to sell many new shares of Berkshire. The net result - more shares, equal assets and lower earnings - would have materially reduced the value of our stock. So you can understand why float wonderfully benefits a business - *if* it is obtained at a low cost.

Our acquisition of GEICO will immediately increase our float by nearly $3 billion, with additional growth almost certain. We also expect GEICO to operate at a decent underwriting profit in most years, a fact that will increase the probability that our total float will cost us nothing. Of course, we paid a very substantial price for the GEICO float, whereas virtually all of the gains in float depicted in the table were developed internally.

Our enthusiasm over 1995's insurance results must be tempered once again because we had our third straight year of good fortune in the super-cat business. In this operation, we sell policies that insurance and reinsurance companies buy to protect themselves from the effects of mega-catastrophes. Since truly major catastrophes occur infrequently, our super-cat business can be expected to show large profits in most years but occasionally to record a huge loss. In other words, the attractiveness of our super-cat business will take many years to measure. We know that the results of years like the past three will be at least partially offset by some truly terrible year in the future. We just hope that "partially" turns out to be the proper adverb.

There were plenty of catastrophes last year, but no super-cats of the insured variety. The Southeast had a close call when Opal, sporting winds of 150 miles per hour, hovered off Florida. However, the storm abated before hitting land, and so a second Andrew was dodged. For insurers, the Kobe earthquake was another close call: The economic damage was huge - perhaps even a record - but only a tiny portion of it was insured. The insurance industry won't always be that lucky.

Ajit Jain is the guiding genius of our super-cat business and writes important non-cat business as well. In insurance, the term "catastrophe" is applied to an event, such as a hurricane or earthquake, that causes a great many insured losses. The other deals Ajit enters into usually cover only a single large loss. A simplified description of three transactions from last year will illustrate both what I mean and Ajit's versatility. We insured: (1) The life of Mike Tyson for a sum that is large initially and that, fight-by-fight, gradually declines to zero over the next few years; (2) Lloyd's against more than 225 of its "names" dying during the year; and (3) The launch, and a year of orbit, of two Chinese satellites. Happily, both satellites are orbiting, the Lloyd's folk avoided abnormal mortality, and if Mike Tyson looked any healthier, no one would get in the ring with him.

Berkshire is sought out for many kinds of insurance, both super-cat and large single-risk, because: (1) our financial strength is unmatched, and insureds know we can and will pay our losses under the most adverse of circumstances; (2) we can supply a quote faster than anyone in the business; and (3) we will issue policies with limits larger than anyone else is prepared to write. Most of our competitors have extensive reinsurance treaties and lay off much of their business. While this helps them avoid shock losses, it also hurts their flexibility and reaction time. As you know, Berkshire moves quickly to seize investment and acquisition opportunities; in insurance we respond with the same exceptional speed. In another important point, large coverages don't frighten us but, on the contrary, intensify our interest. We have offered a *policy* under which we could have lost $1 billion; the largest coverage that a client *accepted* was $400 million.

We will get hit from time to time with large losses. Charlie and I, however, are quite willing to accept relatively volatile results in exchange for better long-term earnings than we would otherwise have had. In other words, we prefer a lumpy 15% to a smooth 12%. Since most managers opt for smoothness, we are left with a competitive advantage that we try to maximize.

We do, though, monitor our aggregate exposure in order to keep our "worst case" at a level that leaves us comfortable.

Indeed, our worst case from a "once-in-a-century" super-cat is far less severe - relative to net worth - than that faced by many well-known primary companies writing great numbers of property policies. These insurers don't issue single huge-limit policies as we do, but their small policies, in aggregate, can create a risk of staggering size. The "big one" would blow right through the reinsurance covers of some of these insurers, exposing them to uncapped losses that could threaten their survival. In our case, losses would be large, but capped at levels we could easily handle.

Prices are weakening in the super-cat field. That is understandable considering the influx of capital into the reinsurance business a few years ago and the natural desire of those holding the capital to employ it. No matter what others may do, we will not knowingly write business at inadequate rates. We unwittingly did this in the early 1970's and, after more than 20 years, regularly receive significant bills stemming from the mistakes of that era. My guess is that we will still be getting surprises from that business 20 years from now. A bad reinsurance contract is like hell: easy to enter and impossible to exit.

I actively participated in those early reinsurance decisions, and Berkshire paid a heavy tuition for my education in the business. Unfortunately, reinsurance students can't attend school on scholarship. GEICO, incidentally, suffered a similar, disastrous experience in the early 1980's, when it plunged enthusiastically into the writing of reinsurance and large risks. GEICO's folly was brief, but it will be cleaning things up for at least another decade. The well-publicized problems at Lloyd's further illustrate the perils of reinsurance and also underscore how vital it is that the interests of the people who write insurance business be aligned - on the downside as well as the upside - with those of the people putting up the capital. When that kind of symmetry is missing, insurers almost invariably run into trouble, though its existence may remain hidden for some time.

A small, apocryphal story about an insurance CEO who was visited by an analyst tells a lot about this industry. To the analyst's questions about his business, the CEO had nothing but gloomy answers: Rates were ridiculously low; the reserves on his balance sheet weren't adequate for ordinary claims, much less those likely to arise from asbestos and environmental problems; most of his reinsurers had long since gone broke, leaving him holding the sack. But

then the CEO brightened: "Still, things could be a lot worse," he said. "It could be *my* money." At Berkshire, it's *our* money.

Berkshire's other insurance operations, though relatively small, performed magnificently in 1995. National Indemnity's traditional business had a combined ratio of 84.2 and developed, as usual, a large amount of float compared to premium volume. Over the last three years, this segment of our business, run by Don Wurster, has had an average combined ratio of 85.6. Our homestate operation, managed by Rod Eldred, grew at a good rate in 1995 and achieved a combined ratio of 81.4. Its three-year combined ratio is an amazing 82.4. Berkshire's California workers' compensation business, run by Brad Kinstler, faced fierce price-cutting in 1995 and lost a great many renewals when we refused to accept inadequate rates. Though this operation's volume dropped materially, it produced an excellent underwriting profit. Finally, John Kizer, at Central States Indemnity, continues to do an extraordinary job. His premium volume was up 23% in 1995, and underwriting profit grew by 59%. Ajit, Don, Rod, Brad and John are all under 45, an embarrassing fact demolishing my theory that managers only hit their stride after they reach 70.

To sum up, we entered 1995 with an exceptional insurance operation of moderate size. By adding GEICO, we entered 1996 with a business still better in quality, much improved in its growth prospects, and doubled in size. More than ever, insurance is our core strength.

Sources of Reported Earnings

The table below shows the main sources of Berkshire's reported earnings. In this presentation, purchase-premium charges are not assigned to the specific businesses to which they apply, but are instead aggregated and shown separately. This procedure lets you view the earnings of our businesses as they would have been reported had we not purchased them. This form of presentation seems to us to be more useful to investors and managers than one utilizing GAAP, which requires purchase-premiums to be charged off, business-by-business. The total earnings we show in the table are, of course, identical to the GAAP total in our audited financial statements.

Operating Earnings	**Pre-Tax**	**Earnings**	**Berkshire**	**Share**
(In Millions)	**1995**	**1994**	**1995**	**1994**
Insurance Group:				
Underwriting	$20.5	$129.9	$11.3	$80.9
Net investment income	501.6	419.4	417.7	350.5
Buffalo News	46.8	54.2	27.3	31.7
Fechheimer	16.9	14.3	8.8	7.1
Finance Business	20.8	22.1	12.6	14.6
Home Furnishings	29.7 (1)	17.4	16.7 (1)	8.7
Jewelry	33.9 (2)	--- (3)	19.1 (2)	--- (3)
Kirby	50.2	42.3	32.1	27.7
Scott Fetzer Manufacturing Group	34.1	39.5	21.2	24.9
See's Candies	50.2	47.5	29.8	28.2
Shoe Group	58.4	85.5	37.5	55.8
World Book	8.8	24.7	7.0	17.3
Purchase-Price Premium Changes	(27.0)	(22.6)	(23.4)	(19.4)
Interest Expense (4)	(56.0)	(60.1)	(34.9)	(37.3)
Shareholder-Designated Contributions	(11.6)	(10.4)	(7.0)	(6.7)
Other	37.4	35.7	24.4	22.3
Operating Earnings	814.7	839.4	600.2	606.2
Sales of Securities	194.1	91.3	125.0	61.1
Decline in Value of USAir Preferred Stock	---	(268.5)	---	(172.6)
Total Earnings- All entities	**$1,008.8**	**$662.2**	**$725.2**	**$494.8**

(1) Includes R.C. Willey from June 29, 1995.

(2) Includes Helzberg's from April 30, 1995.

(3) Jewelry earnings were included in "Other" in 1994.

(4) Excludes interest expense of Finance Businesses.

A large amount of information about these businesses is given on pages 41-52, where you will also find our segment earnings reported on a GAAP basis. In addition, on pages 57-63, we have rearranged Berkshire's financial data into four segments on a non-GAAP basis, a presentation that corresponds to the way Charlie and I think about the company. Our intent is to

supply you with the financial information that we would wish you to give us if our positions were reversed.

At Berkshire, we believe in Charlie's dictum - "Just tell me the bad news; the good news will take care of itself" - and that is the behavior we expect of our managers when they are reporting to us. Consequently, I also owe you - Berkshire's owners - a report on three operations that, though they continued to earn decent (or better) returns on invested capital, experienced a decline in earnings last year. Each encountered a different type of problem.

Our shoe business operated in an industry that suffered depressed earnings throughout last year, and many of our competitors made only marginal profits or worse. That means we at least maintained, and in some instances widened, our competitive superiority. So I have no doubt that our shoe operations will climb back to top-grade earnings in the future. In other words, though the turn has not yet occurred, we believe you should view last year's figures as reflecting a cyclical problem, not a secular one.

The Buffalo News, though still doing very well in comparison to other newspapers, is another story. In this case, industry trends are not good. In the 1991 Annual Report, I explained that newspapers had lost a notch in their economic attractiveness from the days when they appeared to have a bullet-proof franchise. Today, the industry retains its excellent economics, but has lost still another notch. Over time, we expect the competitive strength of newspapers to gradually erode, though the industry should nevertheless remain a fine business for many years to come.

Berkshire's most difficult problem is World Book, which operates in an industry beset by increasingly tough competition from CD-ROM and on-line offerings. True, we are still profitable, a claim that perhaps no other print encyclopedia can make. But our sales and earnings trends have gone in the wrong direction. At the end of 1995, World Book made major changes in the way it distributes its product, stepped up its efforts with electronic products and sharply reduced its overhead costs. It will take time for us to evaluate the effects of these initiatives, but we are confident they will significantly improve our viability.

All of our operations, including those whose earnings fell last year, benefit from exceptionally talented and dedicated managers. Were we to have the choice of any other executives now working in their industries, there is not one of our managers we would replace.

Many of our managers don't have to work for a living, but simply go out and perform every day for the same reason that wealthy golfers stay on the tour: They love both doing what they

do and doing it well. To describe them as working may be a misnomer - they simply prefer spending much of their time on a productive activity at which they excel to spending it on leisure activities. Our job is to provide an environment that will keep them feeling this way, and so far we seem to have succeeded: Thinking back over the 1965-95 period, I can't recall that a single key manager has left Berkshire to join another employer.

Common Stock Investments

Below we present our common stock investments. Those with a market value of more than $600 million are itemized.

Shares	Company	Cost	Market
		(dollars in millions)	
49,456,900	American Express Company	$1,392.7	$2,046.3
20,000,000	Capital Cities/ABC, Inc.	345.0	2,467.5
100,000,000	The Coca-Cola Company	1,298.8	7,425.0
12,502,500	Federal Home Loan Mortgage Corp. (“Freddie Mac”)	260.1	1,044.0
34,250,000	GEICO Corporation.	45.7	2,393.2
48,000,000	The Gillette Company	600	2,502.0
6,791,218	Wells Fargo & Company	423.7	1,466.9
	Others	1,379.0	2,655.4
	Total Common Stocks	**$5,745.1**	**$22,000.3**

We continue in our Rip Van Winkle mode: Five of our six top positions at yearend 1994 were left untouched during 1995. The sixth was American Express, in which we increased our ownership to about 10%.

In early 1996, two major events affected our holdings: First, our purchase of the GEICO stock we did not already own caused that company to be converted into a wholly-owned subsidiary. Second, we exchanged our Cap Cities shares for a combination of cash and Disney stock.

In the Disney merger, Cap Cities shareholders had a choice of actions. If they chose, they could exchange each of their Cap Cities shares for one share of Disney stock plus $65. Or they

could ask for - though not necessarily get - all cash or all stock, with their ultimate allotment of each depending on the choices made by other shareholders and certain decisions made by Disney. For our 20 million shares, we sought stock, but do not know, as this report goes to press, how much we were allocated. We are certain, however, to receive something over 20 million Disney shares. We have also recently bought Disney stock in the market.

One more bit of history: I first became interested in Disney in 1966, when its market valuation was less than $90 million, even though the company had earned around $21 million pre-tax in 1965 and was sitting with more cash than debt. At Disneyland, the $17 million Pirates of the Caribbean ride would soon open. Imagine my excitement - a company selling at only five times rides!

Duly impressed, Buffett Partnership Ltd. bought a significant amount of Disney stock at a split-adjusted price of 31› per share. That decision may appear brilliant, given that the stock now sells for $66. But your Chairman was up to the task of nullifying it: In 1967 I sold out at 48› per share.

Oh well - we're happy to be once again a large owner of a business with both unique assets and outstanding management.

Convertible Preferred Stocks

As many of you will remember, Berkshire made five private purchases of convertible preferred stocks during the 1987-91 period and the time seems right to discuss their status. Here are the particulars:

Company	Dividend Rate	Year of Purchase	Cost	Market Value
Champion International Corp.	9 ¼%	1989	$300	$388 (1)
First Empire State Corp.	9%	1991	40	110
The Gillette Company	8 ¾%	1989	600	2,502 (2)
Salomon Inc.	9%	1987	700	728 (3)
USAir Group, Inc.	9 ¼%	1989	358	215

(1) Proceeds from sale of common we received through conversion in 1995.

(2) 12/31/95 value of common we received through conversion in 1991.

(3) Includes $140 we received in 1995 from partial redemption.

In each case we had the option of sticking with these preferreds as fixed-income securities or converting them into common stock. Initially, their value to us came primarily from their fixed-income characteristics. The option we had to convert was a kicker.

Our $300 million private purchase of American Express "Percs" - described in the 1991 Annual Report - is not included in the table because that security was a modified form of common stock whose fixed-income characteristics contributed only a minor portion of its initial value. Three years after we bought them, the Percs automatically were converted to common stock. In contrast, the five securities in the table were set to become common stocks only if we wished them to - a crucial difference.

When we purchased our convertible securities, I told you that we expected to earn after-tax returns from them that "moderately" exceeded what we could earn from the medium-term fixed-income securities they replaced. We beat this expectation - but only because of the performance of a single issue. I also told you that these securities, as a group, would "not produce the returns we can achieve when we find a business with wonderful economic prospects." Unfortunately, that prediction was fulfilled. Finally, I said that "under almost any conditions, we expect these preferreds to return us our money plus dividends." That's one I would like to have back. Winston Churchill once said that "eating my words has never given me indigestion." My assertion, however, that it was almost impossible for us to lose money on our preferreds has caused me some well-deserved heartburn.

Our best holding has been Gillette, which we told you from the start was a superior business. Ironically, though, this is also the purchase in which I made my biggest mistake - of a kind, however, never recognized on financial statements.

We paid $600 million in 1989 for Gillette preferred shares that were convertible into 48 million (split-adjusted) common shares. Taking an alternative route with the $600 million, I probably could have purchased 60 million shares of common from the company. The market on the common was then about $10.50, and given that this would have been a huge private placement carrying important restrictions, I probably could have bought the stock at a discount of at least 5%. I can't be sure about this, but it's likely that Gillette's management would have been just as happy to have Berkshire opt for common.

But I was far too clever to do that. Instead, for less than two years, we received some extra dividend income (the difference between the preferred's yield and that of the common), at which point the company - quite properly - called the issue, moving to do that as quickly as was possible. If I had negotiated for common rather than preferred, we would have been better off at yearend 1995 by $625 million, minus the "excess" dividends of about $70 million.

In the case of Champion, the ability of the company to call our preferred at 115% of cost forced a move out of us last August that we would rather have delayed. In this instance, we converted our shares just prior to the pending call and offered them to the company at a modest discount.

Charlie and I have never had a conviction about the paper industry - actually, I can't remember ever owning the common stock of a paper producer in my 54 years of investing - so our choice in August was whether to sell in the market or to the company. Champion's management had always been candid and honorable in dealing with us and wished to repurchase common shares, so we offered our stock to the company. Our Champion capital gain was moderate - about 19% after tax from a six-year investment - but the preferred delivered us a good after-tax dividend yield throughout our holding period. (That said, many press accounts have overstated the after-tax yields earned by property-casualty insurance companies on dividends paid to them. What the press has failed to take into account is a change in the tax law that took effect in 1987 and that significantly reduced the dividends received credit applicable to insurers. For details, see our 1986 Annual Report.)

Our First Empire preferred will be called on March 31, 1996, the earliest date allowable. We are comfortable owning stock in well-run banks, and we will convert and keep our First Empire common shares. Bob Wilmers, CEO of the company, is an outstanding banker, and we love being associated with him.

Our other two preferreds have been disappointing, though the Salomon preferred has modestly outperformed the fixed-income securities for which it was a substitute. However, the amount of management time Charlie and I have devoted to this holding has been vastly greater than its economic significance to Berkshire. Certainly I never dreamed I would take a new job at age 60 - Salomon interim chairman, that is - because of an earlier purchase of a fixed-income security.

Soon after our purchase of the Salomon preferred in 1987, I wrote that I had "no special insights regarding the direction or future profitability of investment banking." Even the most charitable commentator would conclude that I have since proved my point.

To date, our option to convert into Salomon common has not proven of value. Furthermore, the Dow Industrials have doubled since I committed to buy the preferred, and the brokerage group has performed equally as well. That means my decision to go with Salomon because I saw value in the conversion option must be graded as very poor. Even so, the preferred has continued under some trying conditions to deliver as a fixed-income security, and the 9% dividend is currently quite attractive.

Unless the preferred is converted, its terms require redemption of 20% of the issue on October 31 of each year, 1995-99, and $140 million of our original $700 million was taken on schedule last year. (Some press reports labeled this a sale, but a senior security that matures is not "sold.") Though we did not elect to convert the preferred that matured last year, we have four more bites at the conversion apple, and I believe it quite likely that we will yet find value in our right to convert.

I discussed the USAir investment at length in last year's report. The company's results improved in 1995, but it still faces significant problems. On the plus side for us is the fact that our preferred is structurally well-designed: For example, though we have not been paid dividends since June 1994, the amounts owed us are compounding at 5% over the prime rate. On the minus side is the fact that we are dealing with a weak credit.

We feel much better about our USAir preferred than we did a year ago, but your guess is as good as mine as to its ultimate value. (Indeed, considering my record with this investment, it's fair to say that your guess may be *better* than mine.) At yearend we carried our preferred (in which there is no public market) at 60% of par, though USAir also has outstanding a junior preferred that is significantly inferior to ours in all respects except conversion price and that was then trading at 82% of par. As I write this, the junior issue has advanced to 97% of par. Let's hope the market is right.

Overall, our preferreds have performed well, but that is true only because of one huge winner, Gillette. Leaving aside Gillette, our preferreds as a group have delivered us after-tax returns no more than equal to those we could have earned from the medium-term fixed-income issues that they replaced.

A Proposed Recapitalization

At the Annual Meeting you will be asked to approve a recapitalization of Berkshire, creating two classes of stock. If the plan is adopted, our existing common stock will be designated as Class A Common Stock and a new Class B Common Stock will be authorized.

Each share of the "B" will have the rights of 1/30th of an "A" share with these exceptions: First, a B share will have 1/200th of the vote of an A share (rather than 1/30th of the vote). Second, the B will not be eligible to participate in Berkshire's shareholder-designated charitable contributions program.

When the recapitalization is complete, each share of A will become convertible, at the holder's option and at any time, into 30 shares of B. This conversion privilege will not extend in the opposite direction. That is, holders of B shares will not be able to convert them into A shares.

We expect to list the B shares on the New York Stock Exchange, where they will trade alongside the A stock. To create the shareholder base necessary for a listing - and to ensure a liquid market in the B stock - Berkshire expects to make a public offering for cash of at least $100 million of new B shares. The offering will be made only by means of a prospectus.

The market will ultimately determine the price of the B shares. Their price, though, should be in the neighborhood of 1/30th of the price of the A shares.

Class A shareholders who wish to give gifts may find it convenient to convert a share or two of their stock into Class B shares. Additionally, arbitrage-related conversions will occur if demand for the B is strong enough to push its price to slightly above 1/30th of the price of A.

However, because the Class A stock will entitle its holders to full voting rights and access to Berkshire's contributions program, these shares will be superior to the Class B shares and we would expect most shareholders to remain holders of the Class A - which is precisely what the Buffett and Munger families plan to do, except in those instances when we ourselves might convert a few shares to facilitate gifts. The prospect that most shareholders will stick to the A stock suggests that it will enjoy a somewhat more liquid market than the B.

There are tradeoffs for Berkshire in this recapitalization. But they do not arise from the proceeds of the offering - we will find constructive uses for the money - nor in any degree from the price at which we will sell the B shares. As I write this - with Berkshire stock at $36,000 - Charlie and I do not believe it undervalued. Therefore, the offering we propose will not diminish the per-share intrinsic value of our existing stock. Let me also put our thoughts about valuation more baldly: Berkshire is selling at a price at which Charlie and I would not consider buying it.

What Berkshire will incur by way of the B stock are certain added costs, including those involving the mechanics of handling a larger number of shareholders. On the other hand, the stock should be a convenience for people wishing to make gifts. And those of you who have hoped for a split have gained a do-it-yourself method of bringing one about.

We are making this move, though, for other reasons - having to do with the appearance of expense-laden unit trusts purporting to be low-priced "clones" of Berkshire and sure to be aggressively marketed. The idea behind these vehicles is not new: In recent years, a number of people have told me about their wish to create an "all-Berkshire" investment fund to be sold at a low dollar price. But until recently, the promoters of these investments heard out my objections and backed off.

I did not discourage these people because I prefer large investors over small. Were it possible, Charlie and I would love to turn $1,000 into $3,000 for multitudes of people who would find that gain an important answer to their immediate problems.

In order to quickly triple small stakes, however, we would have to just as quickly turn our present market capitalization of $43 billion into $129 billion (roughly the market cap of General

Electric, America's most highly valued company). *We can't come close to doing that.* The very best we hope for is - on average - to double Berkshire's per-share intrinsic value every five years, and we may well fall far short of that goal.

In the end, Charlie and I do not care whether our shareholders own Berkshire in large or small amounts. What we wish for are shareholders of any size who are knowledgeable about our operations, share our objectives and long-term perspective, and are aware of our limitations, most particularly those imposed by our large capital base.

The unit trusts that have recently surfaced fly in the face of these goals. They would be sold by brokers working for big commissions, would impose other burdensome costs on their shareholders, and would be marketed *en masse* to unsophisticated buyers, apt to be seduced by our past record and beguiled by the publicity Berkshire and I have received in recent years. The sure outcome: a multitude of investors destined to be disappointed.

Through our creation of the B stock - a low-denomination product far superior to Berkshire-only trusts - we hope to make the clones unmerchandisable.

But both present and prospective Berkshire shareholders should pay special attention to one point: Though the per-share intrinsic value of our stock has grown at an excellent rate during the past five years, its market price has grown still faster. The stock, in other words, has outperformed the business.

That kind of market overperformance cannot persist indefinitely, neither for Berkshire nor any other stock. *Inevitably, there will be periods of underperformance as well.* The price volatility that results, though endemic to public markets, is not to our liking. What we would prefer instead is to have the market price of Berkshire precisely track its intrinsic value. Were the stock to do that, every shareholder would benefit during his period of ownership in exact proportion to the progress Berkshire itself made in the period.

Obviously, the market behavior of Berkshire's stock will never conform to this ideal. But we will come closer to this goal than we would otherwise if our present and prospective shareholders are informed, business-oriented and not exposed to high-commission salesmanship when making their investment decisions. To that end, we are better off if we can blunt the merchandising efforts of the unit trusts - and that is the reason we are creating the B stock.

We look forward to answering your questions about the recapitalization at the Annual Meeting.

Miscellaneous

Berkshire isn't the only American corporation utilizing the new, exciting ABWA strategy. At about 1:15 p.m. on July 14, 1995, Michael Eisner, CEO of The Walt Disney Company, was walking up Wildflower Lane in Sun Valley. At the same time, I was leaving a lunch at Herbert Allen's home on that street to meet Tom Murphy, CEO of Cap Cities/ABC, for a golf game.

That morning, speaking to a large group of executives and money managers assembled by Allen's investment bank, Michael had made a brilliant presentation about Disney, and upon seeing him, I offered my congratulations. We chatted briefly - and the subject of a possible combination of Disney and Cap Cities came up. This wasn't the first time a merger had been discussed, but progress had never before been made, in part because Disney wanted to buy with cash and Cap Cities desired stock.

Michael and I waited a few minutes for Murph to arrive, and in the short conversation that ensued, both Michael and Murph indicated they might bend on the stock/cash question. Within a few weeks, they both did, at which point a contract was put together in three very busy days.

The Disney/Cap Cities deal makes so much sense that I'm sure it would have occurred without that chance encounter in Sun Valley. But when I ran into Michael that day on Wildflower Lane, he was heading for his plane, so without that accidental meeting the deal certainly wouldn't have happened in the time frame it did. I believe both Disney and Cap Cities will benefit from the fact that we all serendipitously met that day.

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It's appropriate that I say a few words here about Murph. To put it simply, he is as fine an executive as I have ever seen in my long exposure to business. Equally important, he possesses human qualities every bit the equal of his managerial qualities. He's an extraordinary friend, parent, husband and citizen. In those rare instances in which Murph's personal interests diverged from those of shareholders, he unfailingly favored the owners. When I say that I like to be associated with managers whom I would love to have as a sibling, in-law, or trustee of my will, Murph is the exemplar of what I mean.

If Murph should elect to run another business, don't bother to study its value - just buy the stock. And don't later be as dumb as I was two years ago when I sold one-third of our holdings

in Cap Cities for $635 million (versus the $1.27 billion those shares would bring in the Disney merger).

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About 96.3% of all eligible shares participated in Berkshire's 1995 shareholder-designated contributions program. Contributions made were $11.6 million and 3,600 charities were recipients. A full description of the shareholder-designated contributions program appears on pages 54-55.

Every year a few shareholders miss out on the program because they don't have their shares registered in their own names on the prescribed record date or because they fail to get their designation form back to us within the 60-day period allowed. That second problem pained me especially this year because two good friends with substantial holdings missed the deadline. We had to deny their requests to be included because we can't make exceptions for some shareholders while refusing to make them for others.

To participate in future programs, you must own Class A shares that are registered in the name of the actual owner, not the nominee name of a broker, bank or depository. Shares not so registered on August 31, 1996, will be ineligible for the 1996 program. When you get the form, return it promptly so that it does not get put aside or forgotten.

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When it comes to our Annual Meetings, Charlie and I are managerial oddballs: We thoroughly enjoy the event. So come join us on Monday, May 6. At Berkshire, we have no investor relations department and don't use financial analysts as a channel for disseminating information, earnings "guidance," or the like. Instead, we prefer direct manager-to-owner communication and believe that the Annual Meeting is the ideal place for this interchange of ideas. Talking to you there is efficient for us and also democratic in that all present simultaneously hear what we have to say.

Last year, for the first time, we had the Annual Meeting at the Holiday Convention Centre and the logistics seemed to work. The ballroom there was filled with about 3,200 people, and we

had a video feed into a second room holding another 800 people. Seating in the main room was a little tight, so this year we will probably configure it to hold 3,000. This year we will also have two rooms for the overflow.

All in all, we will be able to handle 5,000 shareholders. The meeting will start at 9:30 a.m., but be warned that last year the main ballroom was filled shortly after 8:00 a.m.

Shareholders from 49 states attended our 1995 meeting - where were you, Vermont? - and a number of foreign countries, including Australia, Sweden and Germany, were represented. As always, the meeting attracted shareholders who were interested in Berkshire's business - as contrasted to shareholders who are primarily interested in themselves - and the questions were all good. Charlie and I ate lunch on stage and answered questions for about five hours.

We feel that if owners come from all over the world, we should try to make sure they have an opportunity to ask their questions. Most shareholders leave about noon, but a thousand or so hardcore types usually stay to see whether we will drop. Charlie and I are in training to last at least five hours again this year.

We will have our usual array of Berkshire products at the meeting and this year will add a sales representative from GEICO. At the 1995 meeting, we sold 747 pounds of candy, 759 pairs of shoes, and over $17,500 of World Books and related publications. In a move that might have been dangerous had our stock been weak, we added knives last year from our Quikut subsidiary and sold 400 sets of these. (We draw the line at soft fruit, however.) All of these goods will again be available this year. We don't consider a cultural event complete unless a little business is mixed in.

Because we expect a large crowd for the meeting, we recommend that you promptly get both plane and hotel reservations. Those of you who like to be downtown (about six miles from the Centre) may wish to stay at the Radisson Redick Tower, a small (88 rooms) but nice hotel, or at the much larger Red Lion Hotel a few blocks away. In the vicinity of the Centre are the Holiday Inn (403 rooms), Homewood Suites (118 rooms) and Hampton Inn (136 rooms). Another recommended spot is the Marriott, whose west Omaha location is about 100 yards from Borsheim's and a ten-minute drive from the Centre. There will be buses at the Marriott that will leave at 7:30, 8:00 and 8:30 for the meeting and return after it ends.

An attachment to our proxy material explains how you can obtain the card you will need for admission to the meeting. A good-sized parking area is available at the Centre, while those who

stay at the Holiday Inn, Homewood Suites and Hampton Inn will be able to walk to the meeting. As usual, we will have buses to take you to the Nebraska Furniture Mart and Borsheim's after the meeting and to take you from there to hotels or the airport later.

NFM's main store, on its 64-acre site about two miles north of the Centre, is open from 10 a.m. to 9 p.m. on weekdays, 10 a.m. to 6 p.m. on Saturdays, and noon to 6 p.m. on Sundays. Rose Blumkin - "Mrs. B" - is now 102, but will be hard at work in Mrs. B's Warehouse. She was honored in November at the opening of The Rose, a classic downtown theater of the 20's that has been magnificently restored, but that would have been demolished had she not saved it.
Ask her to tell you the story.

Borsheim's normally is closed on Sunday but will be open for shareholders and their guests from 10 a.m. to 6 p.m. on May 5th. Additionally, we will have a special opening for shareholders on Saturday, the 4th, from 6 p.m. to 9 p.m. Last year, on Shareholders Day, we wrote 1,733 tickets in the six hours we were open - which is a sale every 13 seconds. Remember, though, that records are made to be broken.

At Borsheim's, we will also have the world's largest faceted diamond on display. Two years in the cutting, this inconspicuous bauble is 545 carats in size. Please inspect this stone and let it guide you in determining what size gem is appropriate for the one you love.

On Saturday evening, May 4, there will be a baseball game at Rosenblatt Stadium between the Omaha Royals and the Louisville Redbirds. I expect to make the opening pitch - owning a quarter of the team assures me of one start per year - but our manager, Mike Jirschele, will probably make his usual mistake and yank me immediately after. About 1,700 shareholders attended last year's game. Unfortunately, we had a rain-out, which greatly disappointed the many scouts in the stands. But the smart ones will be back this year, and I plan to show them my best stuff.

Our proxy statement will include information about obtaining tickets to the game. We will also offer an information packet this year listing restaurants that will be open on Sunday night and describing various things that you can do in Omaha on the weekend.

For years, I've unsuccessfully tried to get my grade school classmate, "Pal" Gorat, to open his steakhouse for business on the Sunday evening preceding the meeting. But this year he's relented. Gorat's is a family-owned enterprise that has thrived for 52 years, and if you like steaks, you'll love this place. I've told Pal he will get a good crowd, so call Gorat's at 402-551-3733 for a

reservation. You'll spot me there - I'll be the one eating the rare T-bone with a double order of hash browns.

Warren E. Buffett
Chairman of the Board
March 1, 1996

Morning Session - 1996 Meeting

1. Welcome

WARREN BUFFETT: Just a little early, but I think everyone's had a chance to take their seats.

I must say, this is the first time I've seen this program. They told me they'd surprise me, and they certainly did. (Laughter)

Marc Hamburg, our chief financial officer, who is now known around the office as CB, was in charge of putting all this together. And we — I want you to know, we have no multimedia (inaudible). (Applause)

This entire meeting is handled by a regular staff. We have no public relations department, or investor relations, or multimedia department, or anything of the sort. So, everybody just pitches in. And Marc will, forevermore, be in charge of the pregame ceremonies. (Laughter)

We have a very large crowd today. I hope everybody has found a seat, either in this main room or in the three overflow rooms. I think we can handle around 5,400. And historically, 62 percent or just about exactly 62 percent, every year, of the people who request tickets have come to the meeting.

And if that percentage holds true today, we have just filled the rooms. And we will have a problem in the future, which we haven't figured out the answer to yet. But we've got another year.

The way we'll run the meeting is that we'll get the business out of way — out of the way — at the start. And we'll talk about the Class B issuance, then, too. So, it'll take a little longer than historically has been the case.

And, then, we'll have Q & A for — until about noon. We'll have a short break at noon. There'll be sandwiches outside, which you can buy. (Laughter)

And Charlie and I will have a couple of sandwiches up here at the podium.

And, then, we will stay around until about 3 o'clock to answer more questions. And at that time, after noon, I'm sure everybody in the overflow rooms will be able to find a seat here in the main room.

But people have come from great distances to attend this meeting. So, we really want to get a — give everyone a chance to get their questions asked. And Charlie and I are delighted to — but we'll have to break it up at three, no matter what. But we'll be delighted to stick around.

You can leave anytime, obviously. As I've explained in the past, it's much better form to leave while Charlie is talking. (Laughter)

But the — feel free to do that. And then at noon you'll get a chance to do it en masse.

We have buses available to take you to — if you have any money left at all after yesterday — to take you to other business establishments of Berkshire, locally.

So that will be the plan. I hope everyone does get their questions answered.

We've got a system where we break this room into six zones. And we have a couple of zones in other rooms. And then this afternoon, everybody will be able to be here in the main room. So, that is the procedure.

I'm sure you recognize Charlie Munger, the vice chairman of Berkshire Hathaway, who also had not seen that movie before. (Laughs)

And showed — we were — I think Marc was afraid to show it to us. But in any event — (laughter) — we will go on.

I thought you might be interested. This is a list of people that came in for tickets. And we had, in addition to 99 from Canada and, of course, the U.S., we had Australia, the Channel Islands, England, Greece, Hong Kong, Israel, Portugal, Puerto Rico, Singapore, Sweden, and Switzerland.

I'm not sure all of those people are with us today. But they did send for tickets. And I've met a number that did come in from a distance.

2. Election of directors

WARREN BUFFETT: So, with that introduction, I will call the meeting to order.

I'm Warren Buffett, chairman of the board of the directors. And I do welcome you to this meeting. I hope everybody has a good time this weekend.

And I'd like to introduce the directors, in addition to myself and to Charlie.

Now, you don't get quite your money's worth this year from our directors. They've — collectively, they've lost 100 pounds since last — our last meeting. I think they've been trying to live on the director's fees. (Laughter)

We have with us Howard Buffett — let's stand. (Applause)

Susan T. Buffett. (Applause)

Malcolm G. Chace III. (Applause)

And Walter Scott Jr. (Applause)

Along with us today are partners in the firm of Deloitte & Touche, our auditors, Mr. Ron Burgess and Mr. Craig Christiansen (PH). They're available to respond to appropriate questions you might have concerning their firm's audit of the accounts of Berkshire.

Mr. Forrest Krutter is secretary of Berkshire. He will make a written record of the proceedings.

Mr. Robert M. Fitzsimmons has been appointed inspector of elections at this meeting. He will certify to the count of votes cast in the election for directors.

The named proxy holders for this meeting are Walter Scott Jr. and Marc D. Hamburg. Proxy cards have been returned through last Friday representing, it says "number to come." (Laughter)

VOICE: There's another script.

WARREN BUFFETT: Ah, OK, there's another — oh, yeah. Here's the script on that one: 1,041,567 Berkshire shares to be voted by the proxy holders, as indicated on the cards. That number of shares represents a quorum. And we will therefore proceed — directly proceed — with the meeting.

We will conduct the business of the meeting, then adjourn the formal meeting. After that, we will entertain questions that you may have.

First order of business will be a reading of the minutes of the last meeting of shareholders. I recognize Mr. Walter Scott Jr. who will place a motion before the meeting.

WALTER SCOTT JR.: I move that the reading of the minutes of the last meeting of shareholders be dispensed with.

WARREN BUFFETT: Do I hear a second?

VOICE: I second the motion.

WARREN BUFFETT: The motion has been moved and seconded. Are there any comments or questions? We will vote on this motion by voice vote. All those in favor say, "Aye."

VOICES: Aye.

WARREN BUFFETT: Opposed? Motion's carried.

Does the secretary have a report of the number of Berkshire shares outstanding, entitled to vote, and represented at the meeting?

ROBERT M. FITZSIMMONS: Yes. I do. As indicated in the proxy statement that accompanied the notice of this meeting that was sent by first-class mail to all shareholders of record on March 8, 1996, being the record date for this meeting, there were 1,193,512 shares of Berkshire Hathaway common stock outstanding with each share entitled to one vote on motions considered at the meeting.

Of that number, 1,041,567 shares are represented at this meeting by proxies returned through last Friday.

WARREN BUFFETT: Thank you. If a shareholder is present who wishes to withdraw a proxy previously sent in and vote in person on the two items of business provided for in the proxy statement, he or she may do so.

Also, if any shareholder that's present has not turned in a proxy and desires a ballot in order to vote in person on those two items, you may do so.

If you wish to do this, please identify yourself to meeting officials in the aisles who will furnish two ballots to you, one for each item.

Will those persons desiring ballots please identify themselves, so that we may distribute them?

First item of business at this meeting is to elect directors. And I'll recognize Mr. Walter Scott Jr. to place a motion before the meeting, with respect to election of directors.

WALTER SCOTT JR.: I move that Warren E. Buffett, Susan T. Buffett, Howard G. Buffett, Malcolm G. Chace III, Charles T. Munger, and Walter Scott Jr. be elected as directors.

WARREN BUFFETT: Is there a second?

VOICE: I second the motion.

WARREN BUFFETT: Are there any other nominations? Is there any discussion?

I learned a lot in China. We did so — (Laughter)

The nominations are ready to be acted upon. If there are any shareholders voting in person, they should now mark their ballots on the election of directors and allow the ballots to be delivered to the inspector of elections.

Will the proxy holders please also submit to the inspector of elections a ballot on the election of directors, voting the proxies in accordance with the instructions they have received?

Mr. Fitzsimmons, when you're ready, you may give your report.

ROBERT M. FITZSIMMONS: My report is ready. The ballot of the proxy holders received through last Friday cast not less than 1,040,667 votes for each nominee. That number far exceeds the majority of the number of all shares outstanding.

The certification required by Delaware law regarding the precise count of the votes, including the votes cast in person at this meeting, will be given to the secretary to be placed in the minutes of this meeting.

WARREN BUFFETT: Thank you, Mr. Fitzsimmons.

Warren E. Buffett, Susan T. Buffett, Howard G. Buffett, Malcom G. Chace III, Charles T. Munger, and Walter Scott Jr. have been elected as directors.

3. Why Class B shares were created

WARREN BUFFETT: The second item of business of this meeting is to consider the recommendation of the board of directors to amend the company's restated certificate of incorporation.

The proposed amendment would add a provision to the restated certificate of incorporation authorizing the board of directors to issue up to 50 million shares of a new Class B common stock, with each Class B share having economic rights equivalent to 1/30th of a share of the current common stock, and with 1/200th of the vote, and to re-designate the company's current common stock as Class A common stock and to make each share of Class A common stock convertible into 30 shares of the new Class B stock at the option of the holder.

I think, before we get into moving that motion — I think this would be a good time to have discussion and take your questions regarding the issuance of the Class B. And I should give you a little background.

I think many of you know the background on this. But over the years, we've had probably half a dozen people, one time or another, propose that the creation of an all-Berkshire investment company or unit trust.

In other words, an entity that would hold nothing but Berkshire stock, and then would parcel out its own shares in smaller denomination pieces to the public.

And we have generally discouraged that because we felt that there was considerable potential for abuse in such an arrangement.

And our discouragement has been successful up until last fall, when there was one — there were two proposals — that went as far as submission to the SEC for clearance, that involved unit trusts.

And these unit trusts would've owned nothing but Berkshire shares and, then, been sold to the public in small denominations, probably with a minimum investment of around a thousand dollars or so.

And holders of those trusts would've bought into an entity that had a defined life, but that had considerable, in the way of costs and some tax consequences, that they might not anticipate when they came in.

And Charlie and I were worried that a combination of Berkshire's past record — which cannot be repeated — and high sales commissions, and a low denomination, and a lot of publicity about Berkshire and myself, which, as you've seen this morning, we attempt to discourage (Laughter) —

The — that the — a great many people would end up buying these unit trust holdings without any idea, really, of what they were buying, and with unrealistic expectations as to the future.

And that that would, in turn, create a considerable demand — because these unit trusts would go out and buy Berkshire shares — that would create a considerable demand against a fixed supply, much of which is almost unavailable because people have a low tax basis and are reluctant to sell, and I hope they're reluctant to sell for other reasons.

And that the very action of the creation of these, and that push on the demand, would — might very well create some speculative spurt in the stock, which in turn, would induce people who had been approached about the trust to feel they were missing even more of a good thing by rushing in.

Rising prices in certain kinds of markets create their own kind of demand. It's not a sustained demand. And it's a demand that the reversal of which, later on, when people become disillusioned, can cause a lot of problems.

But that potential was there with a flood of buyers with unrealistic expectations, high commissions, and a fixed supply. So, we attempted to dissuade both of the promoters.

One backed away and then came out a few months later with something that was a combination of Berkshire and some other securities, which were at least thought to be in our portfolio.

And we started hearing from people that it was clear had no understanding of what they were buying, or the costs involved, or the potential tax implications, or anything of the sort.

So, at that time, we faced — we had to make a decision, and we had to make it rather quickly, as to what would be the best solution to this problem that, in turn, wouldn't create the same sort of thing that we felt had potential harm when being done by these promoters.

Obviously, we considered a split of the stock. But we were worried that a split would send out signals to all kinds of people who want to believe in things that may not be too believable about future performance and that they would look at it as some grand chance to buy in at a lower price.

Of course, it wouldn't really be a lower price in relation to value. But it would be a lower denomination.

And that, again, against a fixed supply, might very well have created the same kind of problem, maybe even a greater problem, than would occur with the unit trusts.

So, we came upon the idea of the Class B shares, which would create a supply that would match the demand for, in effect, split shares, and that would be offered in a way that did not create special inducements, or to create false inducements to people thinking of buying.

And one of the things we did was we stuck a commission on it, on the issuance of the Class B shares, that was about as low as any I've ever seen in many years in Wall Street, because we did not want salespeople to have a great inducement — we — to go out and sell the shares.

We wanted anyone that was interested to read the prospectus, and think about it, and make their own decisions.

And we did another thing, which is quite counter to the normal commercial approach, which is that we said we would issue as many shares as people wanted to buy.

And, you know, you do much better in this world if you're selling something, to say "only one to a customer," and "you have to get in early," or "you have to know somebody in order to get shares." And many new issues are sold that way, and it's very effective.

I mean, you know, it's like those old stories in Russia where there'd be lines, and people would get in them without knowing what they were going to buy when they got to the front of the line.

And that's a very effective selling tool. And it's one that Wall Street is not unfamiliar with.

But we decided that, to reduce any of that feeling that you have to get in early, or only the big guy's going to get it, or something of the sort, that we would announce loud and clearly that we would have shares available for everyone that wanted.

So, there was no reason to assume that — it couldn't be a hot stock, in effect. And we've done various other things.

So, I — our hope is that the Class B shareholders that we attract are of the same quality as the people in this room, that they have an investment attitude where they feel they are buying into

part of a business, that they expect to stay with it for the indefinite future, maybe the rest of their lives.

And they do not think of it as a little piece of paper that may be hot because it's a new issue or something of the sort.

It lets the people who are happy with the present shares stay in exactly the same position, which is what I'm going to do, what Charlie will do.

We have made the B very slightly disadvantageous, in two respects, to the A. It has a lower vote, and it will not participate in the shareholder contributions programs.

There were reasons for both of those, but in addition to the — the explicit reasons, there also is the desire that the B not be made fully — it's just a slight bit inferior —but it's not fully as attractive as the A, because we did not want to do anything that pushed everybody into converting into the B.

If that started in a big way, the B would then enjoy the better market, and it would create its own dynamic where it made sense for everybody to do it.

So we have left it so there's no reason for you, if you own the A, to convert to the B, unless you wish to sell or give away some portion of your holding that would be less than a full A share.

And it will be convenient for that reason. But beyond that, there should be no incentive.

If the B should trade slightly above 1/30th of the price of the A, there will be arbitrage activity that will keep that from being anything other than a negligible amount.

It, of course, could trade well below 1/30th because the B is not convertible into the A.

Charlie, would you like to add anything before we start taking questions on this? And I —

CHARLIE MUNGER: No. (Laughter)

WARREN BUFFETT: — I encourage everyone to ask.

Charlie, as you will note during the meeting, does not get paid by the word. (Laughter)

But we — I encourage every — anyone to ask any question. There are no bad questions about this. I mean, it — last year, we talked about a preferred issue. And people had very valid questions.

I might take those two points of difference between the A and B, just to start with, on the shareholder-designated contributions program, which was $12 a share last year.

In addition to wanting the A to have a very small edge over the B, which would be a reason for not having the B participate, it also would get very impractical, in terms of taking $12, and dividing it by 30, and soliciting the names of charities and to designate contributions.

We can handle the present program fairly efficiently. But we would not want to be sending out checks for a dollar or two, and it would get very inefficient.

So, we have told prospective B holders that that's not going to happen. And so, they're fully informed coming in.

In connection with the vote, the issuance of the B does create more votes outstanding. So, absent any change in the situation, through the issuance of shares which we are not particularly eager to issue, the vote — my vote — will be diluted, somewhat, by this.

And, frankly, I had no desire to create a lot more shares which would dilute the vote of the Buffett family. It will be diluted, somewhat, by this action because we will have all the present votes outstanding, plus some votes from the B.

If there is a lot of conversion to the B, it is true that our holding will go up, percentage-wise. But I see no reason why people really should convert. So, I don't think that's likely. I think, in the end, it'll stay very much the same.

And as I mentioned earlier, we want there to be a slight disadvantage to the B.

In all other respects, we will treat the B just as the A. We have a problem with numbers at this annual meeting. We're going to have to do something next year. And we haven't figured it out yet, either.

But the suggestion was made by someone that maybe the B would get second-class seating or something. We're not going to have any of that. (Laughter)

But from this point forward, with the point — with the exception of two things we put in the prospectus, the B shares will be treated, in every way, as equivalent to A. There —

So, with that, and with Charlie's reluctance to elaborate, we have a six-zone system in here. And then we have another two zones in the overflow rooms.

So, if there are any questions in zone 1, somebody — just raise your hand and somebody will bring a microphone.

Zone 1 is over there. Two is back in the corner. Three, four, five, and six. So it just goes right around clockwise. Just raise your hand and somebody will bring a microphone to you.

4. Class B IPO price is the same for everyone

WARREN BUFFETT: We've got a question, I think, in zone 1.

AUDIENCE MEMBER: Good morning. I'm Marshall Patton (PH) from Bandera, Texas.

And when the price is struck on the Class B shares, those of us who buy our shares through computer programs, do we have assurance that, whoever we buy from, that that will be the price that we pay for these shares?

WARREN BUFFETT: Yeah, the — well, the price — there'll be a price established, probably, Wednesday night or thereabouts of this week. And everybody will pay the same price. And a very high percentage of that price, incidentally, will come to Berkshire.

I mean, there is a very, very low underwriting spread, compared to any other offering.

Now, once the initial offering is — everybody will pay the same price: large institutions, the buyer of one share will pay the same price.

Subsequently, the stock will, we expect, will be listed on the New York Stock Exchange, probably, Thursday morning. And we have the world's greatest specialist here, I believe, Jimmy Maguire, who handles the trading, now, of the common and will handle the trading of both the A and B.

Jimmy, are you here? Do you want to stand up? Just so — there he is. The world's greatest specialist, Jimmy Maguire. (Applause)

I think he leads the singing of "Wait 'Till the Sun Shines, Nellie," too, annually. You can see him on CNBC occasionally, and the Nightly Business Report. I want to give equal time here. The —

But Jimmy will be trading both classes of stock starting Thursday. As I say — as I said, the — it will be impossible, after the first few days, it would be impossible for the B to sell much above 1/30th of the A, because people would buy the A and sell the B if more than a very small — with even the smallest of arbitrage differentials.

But there will be markets in two shares and — in two classes. They will both trade in 10-share lots. That will be the round lot — so-called round lot. Usually the round lot on the New York Stock Exchange is 100 shares. But in the case of both Berkshire shares, the round lot will be ten shares.

Now, I read one or two press accounts that said, therefore, the minimum purchase is ten shares. That's not true. The minimum purchase of each stock — each class of stock — is one share. I mean, you can buy one share or two shares. Or you can sell one share or two shares.

And you have an odd lot differential, just as you would if you were working with less than 100 shares of a company whose stock traded in 100 share round lots. But there's no minimum size in the case of either share.

And you will see, when they get mechanics straightened out, and they may have a little bit trouble with it, but you will see Berkshire A and Berkshire B in — quoted in the papers. And I think that you're — that it'll be quite clear after Thursday what is going on, on that.

I don't know about the computer purchases. But I don't that — certainly, in terms of the initial offering, that will be through one of, I think, 137 people — or brokers — in the selling group. And it's the same, no matter who you deal with.

5. Downside of Berkshire unit trusts

WARREN BUFFETT: Zone 2?

AUDIENCE MEMBER: My name is David Hendel (PH). I'm from Boca Raton, Florida.

To your knowledge, will this program effectively discourage the unit trusts?

WARREN BUFFETT: Well, it's certainly designed to. And I think the answer to that is yes, because I see no way that a unit trust — either in connection with the initial offering or with the subsequent trading — I see no way that the unit trust could offer people as an efficient and inexpensive way of participating in Berkshire as direct purchase of the B.

Bear in mind, if a unit trust were established, it would have to buy Berkshire shares in the market. So, it would have the costs that people have in buying shares. And, then, on top of it, it would superimpose these other costs. And in addition to the initial commission, they even had a valuation fee.

That was a job I wanted to have because every — (laughter) — three months or however often, maybe every day, somebody, their job was to evaluate this trust value which involved the great skill of being able to locate it alphabetically — (laughter) — in the newspaper.

The figure was left blank as to what the evaluator's fee would be. But I had a feeling that it was one of the more cushy jobs available. (Laughter)

There was an added problem, too. I mean, if these unit trusts started and did not get off the ground very far, they could've become something in the way of orphans. And they certainly would've become expensive to operate.

And, then, with Berkshire paying nothing in the way of dividends, but with the trust incurring expenses, including this evaluator's fee, among others — but with the trust incurring expenses,

they would have to sell small amounts periodically to pay the expenses. And that would create tax consequences for every unit trust holder.

I mean, people would not know what — we felt they would not know what they were getting into.

The more serious problem is that somebody would flash our past record in front of them or show them some chart on Berkshire's stock price and say, "You know, this is your chance to do the same thing." And it, obviously, isn't — wouldn't have been.

And — but based on what we have seen, right now, we anticipate the offering being 350,000 shares. But the extent to which the number of tickets involved, that even seeking out informed purchasers only, there's very substantial demand.

So I think if you widen that circle to include uninformed, it might have been quite an experience.

I think the answer is that we will not have a problem with the unit trusts in the future.

6. No plans for Class B secondary offering

WARREN BUFFETT: Zone 3?

AUDIENCE MEMBER: I'm Adam Ingle (PH) from Boulder, Colorado.

In terms of the number of shares that you're going to issue, B shares, do you plan to just look at the book on Wednesday and issue enough to totally satisfy the demand? And do you have any plans to do a secondary if it starts becoming a hot number?

WARREN BUFFETT: Yeah. Well, I think what we plan is to tailor the size of the offering to fit the demand that appears Tuesday night or Wednesday morning, or whenever the exact moment will be on that. But the offering will be designed to do that.

Like most offerings, I would anticipate that the underwriter will — and this is a supposition at the moment — but I — it's frequently done — would sell some more shares than the initial offering with the intention of creating some short position in the security.

And, then, they have an option to take — from the company — for 30 days up to 15 percent of whatever we initially sell, which protects them on their short position. But the short position also helps in terms of having an orderly market in the stock, subsequently.

But we will, essentially, tailor the size of the issue to the demand as it appears to us midweek.

We have no plans for any secondary offering. I think this has been sufficiently publicized. There's a large network of selling group members. So that people that are interested, but wanted to buy in a smaller denomination, will have had their chance.

I think there will be a — well, present indications, there'd be 350,000 shares out. There would be a fairly large — a large — number of holders based on what we're seeing.

So, the market should, starting Thursday morning on the exchange, there should be, in my opinion, a reasonable market based on that kind of quantity and the number of people buying. And so, I anticipate nothing subsequently.

7. We don't think Berkshire shares are "undervalued"

WARREN BUFFETT: Zone 4?

AUDIENCE MEMBER: Can you hear me?

WARREN BUFFETT: Yep.

AUDIENCE MEMBER: My name's Tom Conrad (PH). I'm from McLean, Virginia, and I (inaudible) to this meeting and tell all my friends and family members to buy it last week. But I've been reading in some publications that you said that you would not advise your friends and family members to buy it at its current pricing.

And I'm just concerned, if I go out and run and tell them why you're saying — what your feeling would be, should I go tell my friends and family members? — (Laughter)

WARREN BUFFETT: I think I'll leave that one up to you. What I said — (laughter) — I said, at present prices, Charlie and I do not think Berkshire stock is undervalued. And that, now that is not what's gotten reported sometimes. I mean, sometimes people have said we thought it was overvalued.

We did not — if you look at the prospectus or if you look at the — if you look at the prospectus, you will see that what we said was we do not think it's undervalued.

Now, I find it somewhat entertaining that people regard that as kind of an amazing statement by somebody making a public offering.

But if you think about it a bit, can you imagine a management that goes out and says to the world, "We are selling you something — in a new stock — and it's way undervalued."

What do you say to your present shareholders if you go out and say to the public, "We're selling you something that's worth a dollar, and we're going to sell it to you for 80 cents?" Now, that would leave me very unhappy.

So, I feel that any management that is talking about selling their stock and they say it's very undervalued, either doesn't know what's good for their present shareholders or they may have their tongue in cheek.

We would not be selling — we would not sell a part of your interest in Berkshire at a price which we did not feel was adequate for the present shareholders. It's that simple.

If we sell 1 percent of the company, and 350,000 shares is close to that figure of B, we are selling 1 percent of your ownership in See's Candy. We're selling 1 percent of your ownership in GEICO. We're selling 1 percent of your ownership in The Buffalo News. Those are all valuable assets.

We have no intention of selling 1 percent, or 10 percent, or the hundred percent of any of those entities at a price that is not fair to present shareholders.

That doesn't mean it's unfair to new shareholders, but we're not going to — we would not be selling the stock if we thought it was undervalued.

I'm not sure what we would've done if we'd had that position when the unit trust came along. But we have — and put in the prospectus — but we are not selling any of our shares. Frequently, on a new offering you see present holders. But, you know, I have very close to 100 percent of my net worth in Berkshire and it leaves me quite happy.

I've got a trust I run set up in 1964. I'm the sole trustee. I can do anything in that trust I want. And I'm freed by the person who set up the trust of responsibility for a concentration of investments. And I have some members of my family who are beneficiaries of that trust.

That trust owns nothing but Berkshire Hathaway stock. That doesn't bother me at all. That — I'm not recommending purchase. But I'm perfectly happy owning Berkshire.

But we do not want — (applause) — we do not want people to think, when they buy into Berkshire, that they're buying something that's undervalued, because it's not.

And we say in that fourth caveat on the prospectus that we want people to buy it only if they expect to be holders for a very long time.

Charlie and I expect to be holders for a very long time. And, in fact, you may see us up here sometime where we don't know who the guy next to us is. (Laughter)

But we'll put on an act, though. (Laughter) The — we —

You know, that is our attitude toward Berkshire. We do not want people to come in who think it's going to be a hot stock or selling for more a year from now, because we don't have the faintest idea whether it's going to be selling for more or less a year from now. Never have had.

We do think that to the extent that Berkshire attracts a special class of shareholder that really looks at themselves as owning a part interest in a business, like they'd own a part of a farm or part of an apartment house, and they expect to hold it, really, for the rest of their lives, we think that it's a perfectly sensible thing to do because we're doing it ourselves. But we don't want to go beyond that.

8. No plans for the Class B proceeds

WARREN BUFFETT: I'm not sure whether we got zone 4. Can we go back there?

AUDIENCE MEMBER: My name is Gordon Shepherd (PH) from Montreal.

I wondered whether you had any plans for what to do with the money? (Laughter)

WARREN BUFFETT: Well, the answer to that is in the prospectus, but the — we have no immediate plans for the money. But we've faced that situation a number of times.

I mean, the money — the inflow of money and outflow of money should not be, in our view, attempted to be matched too carefully in this world, because you get investment and business opportunities at times that differ from the times that funds come in.

And one of the most important disciplines in running a business or managing investments is that — is to not get your — not to try to coordinate your actions simply with the availability of cash.

Over time, we found a way to use money. It's much tougher for us to run 17 billion than it was when we had 20 million in the business. There's no question about that. And we pointed that out many times. And it'll get tougher still if we get larger, which I hope we do.

But the fact that, if 400 million comes in on this offering or whatever, that's really no different than 400 million coming in in some other manner.

And when our float grows, we take in more money. When our earnings are retained, we take in more money. When we have — I forget what the check would've been on the Cap Cities transaction, but it was certainly well over a billion dollars that came in on a single day.

So, money's fungible, and we have to keep looking for bigger and bigger things as we go along. And that's what we do focus on.

But it doesn't bother me to take it. It wouldn't bother me if we weren't taking it. It wouldn't bother me if we took in three times as much. It doesn't make a lot of difference.

And we will have — we — the constant challenge for Charlie and me is to allocate capital is we go along. And it's a nice challenge. (Laughter)

9. Discouraging buyers with unreasonable expectations

WARREN BUFFETT: Zone 5?

AUDIENCE MEMBER: Hi there. Lee Debroff (PH), long-time shareholder, I think, going back a number of years now to when it was a little more intimate affair. Not quite sure whether I should look at you in the TV here or in real life, on stage. But anyway, I'm on the very right of you.

And I see all the guards around you, and I see all the security and that sort of thing. And then, I see this offering of the Class B. And I sort of wonder whether, from your perspective, you feel you might be in the same boat that the pope and the president are?

And I mean this absolutely sincerely, because I don't think that you have, perhaps, as good a handle as some of us do on the renown that you carry outside of Omaha, Nebraska. People who have no idea what investments are about are fully aware of who you are.

And when they see this offering, I think you may find that there are substantially more people who are interested in just having a piece of you for the sake of saying they have a piece of you than having absolutely any idea what they're doing.

And I notice that on — I try to read the fine print here — on page 14, first paragraph, second line, that you indicate some 50 million shares of Class B common stock may be offered.

And so, I'd like you to comment on this situation that you find yourself in, where you may be, perhaps, out of touch with the popularity that you have.

WARREN BUFFETT: Well, my first reaction: maybe I should tell my barber we could save the clippings and sell them. (Laughter)

The — I don't think it's quite as extreme as you say.

But, you know, I — in relation to the 50 million first, we have to authorize enough shares, because we are going to allow every share of class A — or present common stock — but the class A, to convert to B.

So we have to have the shares authorized to take care of 30 times the present one point almost two million shares. So, 36 million shares, in effect, are reserved for the present common stock. And, as long as we were authorizing it —

Well, we need that much, or we wouldn't have the shares actually available if everybody came around to convert. That's not going to happen. But we still have to be prepared for it.

We have no plans to issue a lot of shares. The — but the point you mention, which I think you stressed a little more than I would've, but the — that is what we were worried about, in terms of the unit trusts.

There are people that think that it can all happen again from this kind of a base which, you know, is mathematically a joke. And Charlie and I would settle for one whole lot less, you know, right today.

And we have done everything we can — I mean, if we hadn't done this, the unit trusts would've moved forward. And I think they would've cashed in on that phenomenon you suggested.

And in a few years, you know, it would not — I would've been in a somewhat different position because people can get very disillusioned if they have hopes that aren't realized.

And we have done everything possible, I think, to filter out those who might have an unrealistic belief.

And everyone should read a prospectus before they buy shares, and —

I think we have tailored — we've designed what we're doing about as well as we can to moderate that phenomenon you're talking about. There may be a few come in but not too many.

Charlie, do you have any thoughts on that?

CHARLIE MUNGER: Well, if we only issue the amount we're now talking about, it's sort of a non-event around Berkshire. It'd be 1 percent —

WARREN BUFFETT: Yeah. It's 1 percent.

CHARLIE MUNGER: — or something like that of the —

It solves the problem of these disreputable followers — (laughter) — and 1 percent, what does it matter? (Applause)

WARREN BUFFETT: Wait, you heard that remark, referring to Charlie earlier, about all I want to know is where I'm going to die, so I'll never go there. (Laughter)

Well, we think about that, in terms — we believe in reverse engineering.

And how do we keep people from buying it, who really are going to be unhappy, you know, a few years later?

You know, it's a little like singing country songs. You all — you should sing them backwards. That way, you get your home back and your auto back and — (laughter) — your wife back, and —

10. Almost like buying direct from Berkshire

WARREN BUFFETT: Zone 6? Have we got —?

VOICE: There was a hand over here, wasn't there? Here. Right here.

AUDIENCE MEMBER: Good morning. I'm Rena Lowie (PH) from Chicago, proud to be here. At mic —

WARREN BUFFETT: Where are we? Oh, over here. OK.

AUDIENCE MEMBER: I have a question that's been asked me, and I really don't know. Several people wanted to know if they could buy directly from the company.

WARREN BUFFETT: The answer to that is no. But Salomon Brothers is the underwriter of the issue. They have a hundred and, I think, 37-or-something broker-dealers, all — virtually all — the major ones in the country, in the selling group.

The cost to the company of doing this are really very, very low compared to any issue I've seen. When AT&T had their spinoff — or sale of Lucent — which was close to a $3 billion deal — you know, their percentage costs were more than double what our costs will be, for example, on this offering of Berkshire.

So, it's almost as if you're buying it — a Class B holder — is buying it from us, in terms of the, what I would call the frictional costs involved of getting the issue done. In fact, if we handled it ourselves, it might cost more.

But the company, itself, is not a broker-dealer. And it's — it would require a whole group of different hoops to jump through in order to have a direct issue. It will be sold only through broker-dealers.

11. All-Berkshire mutual fund for retirement plans?

WARREN BUFFETT: Zone 7?

This will come in from another room. Here we are.

VOICE: There aren't any questions in zone 7.

WARREN BUFFETT: No questions in zone 7. Zone 8?

VOICE: No questions from zone 8.

WARREN BUFFETT: OK. Then, we'll go back to zone 1.

AUDIENCE MEMBER: Mike Rocker (PH) from Flint, Michigan, God's country.

I noticed in the press, when this issue of the unit trust was going on, that there apparently also were some people trying to form mutual funds to carry Berkshire stock, which I kind of thought was a good idea, because there's one potential class of Berkshire owners that could only own Berkshire stock via either an open-end mutual fund or a closed-end mutual fund.

And that is those thousands of teachers and hospital employees whose future retirement money is in 403(b) plans that are limited to investing in mutual funds only. And so, I wonder if, first of all, if you were aware of that? And if so, if you considered that? And if not, if you might?

WARREN BUFFETT: Well, the answer is I wasn't aware of that. So it wasn't considered.

There are, of course, some mutual funds that own Berkshire shares. But there's no all-Berkshire fund, outstanding.

I would say this: that if the law was set up to, in some way, to restrict investments of this group you're talking about to options that involve mutual funds but that don't involve individual stocks, I would think it might even be regarded as a way around it, if a fund owned nothing but one stock.

Because, if you can't buy General Motors directly under, I assume, the relevant rules or statutes on that, it would seem that a fund that owned nothing but General Motors might be regarded as a way of getting around that.

But the answer is that it was not considered. I don't know where the rules are derived, whether there — whether they can be changed by some organization or they're part of some statute.

But if they're part of some organization, by a vote of their directors, they might be able to allow purchase of individual stocks within those plans that you describe. But if not, it does seem to me that an all one-stock fund is — might be regarded as simply a way around the rules.

12. Suggestion for Class B symbol

WARREN BUFFETT: Zone 2?

AUDIENCE MEMBER: Alan Rank, Pittsburgh, Pennsylvania.

Have you determined what the symbol will be for the Class B?

WARREN BUFFETT: The symbol? No, we haven't.

AUDIENCE MEMBER: May I make a suggestion? As a broker, the stocks that have come out and given theirselves Class A and Class B cause massive confusion.

If there'd be any way to make symbol something like BRB and just keep it a simple, three-letter symbol, it aids people both in following it on the tape on CNBC. As brokers, four-letter symbols on the New York restrict a lot of things we can do as far as punching them in.

If there's any way you could keep the symbol for the B a simple one, two or three-letter symbol, it would be greatly appreciated.

WARREN BUFFETT: Well, thanks for the suggestion. Now, the exchange has generally been exceptionally cooperative in trying to work with us. I mean, a 10-share trading unit is no piece of cake for them.

And I'm sure, at times, that they have wished we were a little more like some of the other companies that list on the exchange. But they've been very cooperative and helpful. And we are — they'll — they listen to things we suggest. We listen to things they suggest.

So, we will try to do whatever facilitates things at the exchange and the reporting of prices. And it's nothing we will try to impose on them, believe me.

I have no favorite name that I'm looking for. So, we'll see what they — what ideas they have. And we'll include that suggestion.

13. Not expecting big change in Class B offering size

WARREN BUFFETT: Zone 3?

AUDIENCE MEMBER: Paula Finster (PH) from Tulsa, Oklahoma. Very glad to be here. I'm one of those few second generation, finally finagled a ticket out of my dad. (Clears throat)

Three years ago —

WARREN BUFFETT: Her dad has a soda fountain, incidentally. If you're ever in Tulsa, be sure to see him. (Laughter)

AUDIENCE MEMBER: He certainly does. And you're certainly invited to come back. (Laughter)

I was here three years ago for the movie theater. And considering the growth — I know you won't leave your beloved Omaha — but maybe you could build a stadium with — that's covered — (laughter) — considering the growth — (Buffett laughs) — with adequate parking. (Laughter)

Here's my question. You said there's going to be unlimited offering, as much as they want. This question is not designed to get a rise out of Mr. Munger, however —

WARREN BUFFETT: That's not easy to do. (Laughter)

AUDIENCE MEMBER: Understood, considering the bridge game of yesterday.

Anyway, my question is, you're authorizing up to 1 percent. What happens if it goes bananas, as zone 5 suggested, and it goes greater?

You said this 1 percent is yours. Is the next 1 percent yours? Is the next 1 percent ours? Do — I know we are limited partners. And you're a controlling partner. But how far does this ballgame go?

WARREN BUFFETT: Well, in terms of the size of the offering, it — whatever the size of the offering, it affects everybody economically the same. I mean, our shares are no different than the ones than the people in this room.

So, we do not care, from an economic standpoint, whether the issue turns out to be approximately 1 percent or whether it was 1 1/2 or 3/4 of 1 percent.

It simply — as long as we're not selling the stock below its true value, we are not going to be hurt by it. So, that —it's inconsequential to us. We're not going to be helped in any significant way by a large sale.

The — it would appear, to me —we're just a few days away from the offering, and it's been out there awhile.

So, I would doubt if there's huge changes. But I don't know the answer to that. I mean, that could depend on what happens in the general stock market.

But I don't think you'll see any huge change in the offering. If there were a big change, we, obviously, would very promptly let the SEC know. The SEC has wanted us, as we have seen changes in demand as we've gone along, promptly change the size of the offering. And the covering page gets modified.

And we've done that. Every day as indications come along, we've tried to be responsive to their instructions on that. And the 350,000 shares is our best estimate, as of last Friday, and —

We'll look at it the next day or two. But I don't think it's going to change dramatically. I don't know, though. I don't want to — I'm giving you a definitive answer on that. But it's just my — it's a strong impression. Thank you.

14. Only Class B questions

WARREN BUFFETT: Zone 4?

AUDIENCE MEMBER: Mike Assail (PH) from New York City with a question for Charlie —

WARREN BUFFETT: Good.

AUDIENCE MEMBER: — about his investment models.

I'd like to know the most useful models on industry consolidation, vertical integration, and models which explain the special cases when it makes sense to invest in retailing stocks —

WARREN BUFFETT: Ah, well, I think —

AUDIENCE MEMBER: — and if —

WARREN BUFFETT: — I don't want to interrupt you now, but I think we'll save those to the general question and answer. This is only on the issuance of the Class B right now.

AUDIENCE MEMBER: Oh. Sorry, sorry.

WARREN BUFFETT: But we're glad to have that question later on.

AUDIENCE MEMBER: Sorry.

WARREN BUFFETT: It'll give Charlie time to figure out the answer for one thing. (Laughter and applause)

We'll go through all of the questions regarding the Class B. And, then, we'll have a vote on the class —authorization of the Class B. And, then, we'll get into general questions and answers.

15. Do B shares penalize Class A shareholders?

AUDIENCE MEMBER: Sir —

WARREN BUFFETT: Somebody over there — we'll take another one from zone 4 if there's somebody — monitor.

AUDIENCE MEMBER: Mark Findidi (PH) from Connecticut. I'll apologize ahead. This isn't meant to be an impudent question or — in any way, shape, or form.

Do you think that the issuance of the B, in any way, might — in an effort to protect the folks who might be out there suckered in by the trust, if you will — in any way penalizes the A shareholders, either, one — or might penalize them — either, one, financially or, two, philosophically in the BRK experience?

I don't mean that in any kind of elitist fashion, because I don't think you've ever propagated that. BRK doesn't propagate that. But clearly, there's a room full of people — or rooms full of people — who have made a commitment financially to show that their philosophy is with you. Does that get diminished?

The other part of the question is the trusts, as you portrayed them, didn't sound terribly attractive. In a longer term, would they, perhaps, have ultimately failed as folks realize that they hadn't gotten into what they thought?

WARREN BUFFETT: Well, they might've. But I think the rub off would've been on us rather than the promoters of the trust — might've been on the promoters, too. But in terms of the failure of the trust, I don't mean failure in an absolute sense, but in terms of disappointing their investors.

I really think if tens of thousands or hundreds of thousands of people had come into something that was sold as being an all-Berkshire-type trust, if people came away disappointed in some years, I think they would tend to project that disappointment upon Berkshire fully as much as the promoter who sold the trust, who they might not even be able to find at that time.

The first question, you know, this — I don't think — we wouldn't be doing this if we thought it would hurt present shareholders, we — as much as we might detest something else that was going on. And we designed it so it — we felt that it wouldn't hurt present shareholders.

In terms of them having a philosophy — the new shareholders having a philosophy similar to the present ones — we've tried to filter those out coming in.

But I intend, after the offering, to send out a booklet, you know, kind of like freshmen at college, you know, orientation, greetings to Siwash U.

And we'll send it to everybody, new shareholders and the old shareholders, explaining our philosophy, just as an orientation course on the company. And we'll get that out, probably, in a month or so after the offering settles down.

I don't see any reason that — you know, Berkshire has evolved over a long period of time. We had 12 shareholders at the annual meeting 15 years ago. And it — we seem to be able to retain the same class and group of shareholders, in terms of people who really understand the business. It's a different group than you find at other companies.

And I think we can — as long as we've had this filter in effect, operating as new people join us, I think we can keep it.

Charlie?

CHARLIE MUNGER: Yeah. If the offering went wild and you issued 3 percent of the company, new, you're also taking in a billion-odd dollars. It is a — it's a non-event for us. (Laughter)

WARREN BUFFETT: He's very excitable. Don't say anything to him. (Laughter)

16. Berkshire can't match previous gains

WARREN BUFFETT: Zone 5.

AUDIENCE MEMBER: Ed Johnson (PH) from Park City, Utah.

As you receive the proceeds of the Class B sale and generate other cash, are you seeing opportunities out in the marketplace to continue to provide the kinds of returns that we've been fortunate enough to experience in the past?

WARREN BUFFETT: With or without the sale of the B, we don't see things to do that can maintain anything close to the average returns of the past. We've tried to convey that.

And it becomes a mathematical absurdity. Money just won't compound at that rate in this world, absent extraordinary inflation. It certainly won't compound in real terms.

So, absent the issue of the B, we are not looking at them. We're not seeing things. We're not hoping to find things that match some of the things that we have found in the past, relative to the capital base we've had in the past.

But we have that problem with or without the B. And it has not changed in any, even very minor degree, by the issuance of the B.

We are looking for things all of the time. Anytime we find anything that makes sense to us, we will do it.

The harder part is to make sure that we don't do something when we don't find something that makes sense. I mean, that's the bigger worry.

And when we find them, you know, they'll come along. And you never have — you never know when it's going to happen.

We run into businesses — I described a little bit of that in the annual report — almost by accident that we've had — contracted to make one purchase this year. The people who run it are here today. And it came about because I was attending a birthday party. And, you know, I'll go to more in the future. (Laughter)

So, things have not ended around here. We'll find interesting things to do over time. But they can't remotely be as profitable as the things we've found in the past, simply because of the large capital base.

17. Not expecting volume spike for B shares

WARREN BUFFETT: Zone 6?

AUDIENCE MEMBER: Hi. I'm Matt Zuckerman from Miami.

I don't know, I think Charlie is the same class as Ev Dirksen. You know, $3 billion, we'll soon be talking about real money. (Laughter)

WARREN BUFFETT: Yeah.

AUDIENCE MEMBER: The two questions I have, basically, are, one — number one, referring to the gentleman over here before who commented on your popularity, which will definitely affect the stock, don't you think —?

And the second part of that is that even my wife's beautician has put in for some shares of this stock, and he represents a small tip of a large group who are probably doing the same thing on the one hand, so that there's going to be a large popular demand for the stock, which probably is not reflected in the numbers that the selling brokers are getting from institutions.

And number two, mutual funds themselves, in order to lend some panache or glamour or whatever to their portfolios will certainly be sucking up Berkshire stock after this.

And have you taken all of this into consideration when you decided upon the number of shares to go — that you're sending out, number one?

And number two, that the reaction, at least in the first 14 days, of the public to the shares, which will probably be in the range of $1,100, might not send the B shares up high enough to make a very, very interesting spike in the price of the A stock.

WARREN BUFFETT: Well, I — we've considered what you're talking about. I think that the issue has been well enough publicized that the demand will largely be reflected on the books of the underwriter in a day or two.

And I see no reason at all for a spike in the stock. I mean, the way we've designed it should really prevent that. We — and we tell people not to expect it.

If any institution wants to buy it, if any individual wants to buy it, they're going to have a chance to do it.

And I don't see any reason why there should be some huge influx of people immediately subsequent to the offering that didn't hear about it during the offering period.

It's interesting. I think most of the demand will be retail and smaller holdings, not so much institutional.

The — most new offerings are done in a manner where the idea is to have far more demand than supply, and therefore cause people to, maybe, order stock they didn't even want, and just on the idea that this restricted supply will cause a big jump the first day, whether, you know — you've seen Yahoo or a number of other offerings.

I think — I don't personally like that sort of distribution arrangement because you'll find that 30 to 40 percent of the issue will, perhaps, trade the first day. Well, I think — and, perhaps, at a lot higher price.

I think there's something a little wrong with that kind of an offering, because the company obviously isn't getting the proceeds that are equivalent to what people are willing to pay. And favored customers get the chance to flip the stock and really are getting paid an exorbitant underwriting fee themselves, even though they're called purchasers, because they sell it the first day.

We will be very interested in seeing the volume in the B stock the first couple of days, relative to the amount of the issuance.

And I will be disappointed and I'll be surprised if the trading volume in the B stock the first couple days, related to whatever the size of the issue is, turns out to be anywhere near as high as with most new issues.

I think that we will have a better success in finding people who really want to own it and who did not buy it to flip it, I think, by this method of distribution. But we'll have a test of that. We will see what happens in trading volume.

And I invite you to look at the volume and compare it to the amount we issue and, then, look at that relative to other new issues this year and just see how successful we were in finding real investors rather than people who were buying it to sell it to somebody else the next day.

18. Buffett's visibility and safety concerns

WARREN BUFFETT: Let's see, was that zone 6? I guess we go to zone 1.

(Long pause)

CHARLIE MUNGER (quietly to Buffett): Maybe we can vote.

WARREN BUFFETT (quietly to Munger): Yeah, but I don't want to cut off —

VOICE: Uh —

WARREN BUFFETT: Charlie says maybe we can vote, but I do — I want people to have their questions — (Applause)

It just encourages him when you do that. (Laughter)

I want to be sure people get their questions answered on this. I don't want to prolong it beyond —

If you feel your question has been 95 percent answered by an earlier question, I hope you'll skip asking it.

But we do want to have people that have questions about it answered, because I can tell by commentary and letters I've received that some people have genuine concerns. Yes?

AUDIENCE MEMBER: My concern — oh, my name is Jan Anglin (PH). I'm from Southern Indiana. And this is my first Berkshire meeting.

WARREN BUFFETT: Good.

AUDIENCE MEMBER: I did have a concern about the B shares that's less business and more — I guess it would be concerned with your and Mr. Munger's personal safety.

I often see your picture in the newspaper. And I certainly don't mind seeing it on financial magazines, but now, it's kind of, like, proliferating. I don't like the idea that you are so visible. (Laughter)

That bothers me. It's — I mean, do you understand what I'm saying?

WARREN BUFFETT: No. I understand exactly.

AUDIENCE MEMBER: This isn't —

WARREN BUFFETT: It's occurred to me. (Laughter)

I appreciate that, and I — but the answer is there's no other way, I mean, if —

AUDIENCE MEMBER: OK.

WARREN BUFFETT: — over time

AUDIENCE MEMBER: But can —

WARREN BUFFETT: — in terms of what happens. And —

AUDIENCE MEMBER: So —

WARREN BUFFETT: — as it grows, you get more visible, basically.

AUDIENCE MEMBER: Oh, I know. But along with the B shares and things, can you, kind of, like, be quotable but less available for photos? (Laughter)

WARREN BUFFETT: Well, I normally am. I — if you've noticed, in terms of interviews or anything of the sort, I do not do them. I've been invited to go on all of the news shows. And I, basically, don't do it.

Frankly, with the shareholders, I feel differently about this group. I'm delighted to see everybody come here. And I enjoy getting together with the shareholders. (Applause)

I think the real protection is, if we'd done something that had caused the stock to balloon way up and then come way down, I might have had to be a little more careful. (Laughter)

CHARLIE MUNGER: I think she has a very good idea. Having seen that acting — (Laughter)

I think hereafter, maybe you should be the voice of Mickey Mouse. (Laughter)

WARREN BUFFETT: I do appreciate the sentiment out of everybody. And there is a — it is unavoidable, to a fair degree. Although, Charlie may have thought I wasn't pushed into those acting jobs.

19. Class A "forever" convertible to Class B

WARREN BUFFETT: Zone 2.

AUDIENCE MEMBER: This Joe Greer (PH) from Omaha, Nebraska of all places. (Laughter)

Regarding the conversion privilege, is there a time limit on the converting from the A to a B?

WARREN BUFFETT: No. That's a good — I'm glad you asked that question.

The first five days or so after issuance — business days — there's no conversion. But after that, you'll be able to convert until judgment day. It's forever convertible from A to B. But it's not convertible from B to A.

So there's no need to convert it until you have a reason to do so. It — and as I've pointed out, there's a very slight disadvantage in converting. And I wouldn't — until I had a need, I would not convert it.

20. How to convert Class A shares to B

WARREN BUFFETT: Zone 3?

AUDIENCE MEMBER: Scott Dowling from Redmond, Washington.

Kind of related to this question, as an A shareholder, I can only see really two reasons to convert A shares into B shares, one of them being gifting reasons.

In regard to that, how does one convert A shares into B?

WARREN BUFFETT: Yeah. That — yeah, there are instructions on that in the proxy statement as to how that — I guess it's in the annual report, too, that it describes how to do it.

But, basically, you get in touch with the Bank of Boston to do that and proceed from there. Or if you have your shares with a broker, you would instruct your broker to do it.

21. Class B price meant to discourage unreasonable expectations

WARREN BUFFETT: Zone 4?

AUDIENCE MEMBER: Good morning. I'm Ruth Owades from San Francisco.

I wondered, how did you decide that the ratio of the Bs should be 30-to-1 instead of 300-to-1 or something in between?

WARREN BUFFETT: Yeah. We wanted to have something that was roughly — would trade, initially, at least, in the thousand-dollar range.

We thought it very unlikely that anyone would find it commercially feasible to set up a trust that offered units that were denominated much below that.

So, that's as low as we felt we had to go. And we did not want to signal, in any way, that, you know, some sort of last chance, or something like that, to get in for some very low sum for people that, you know, just had some wishes that they could turn a hundred dollars into 100,000 or something.

I get letters from people that, you know, think that somehow that can be done. It can't be done.

And we don't want to appeal subliminally or any other way to people who harbor those hopes.

I'm sympathetic with them. But we don't have the answer to that. So, we went down to the level to match the unit trusts.

22. B shares will increase book value, but not intrinsic value

WARREN BUFFETT: Zone 5?

We'll try and do — we'll try to end the questions on the B fairly soon. But I don't want anybody that feels that they've got a — got some reservations about this — not to have a shot at asking their question.

AUDIENCE MEMBER: My name is Bob McClure (PH). I live in Singapore.

And the way I figure it, the sale of the B shares at the price they will probably be sold, will give an immediate boost to the book value of Berkshire Hathaway. So, as far as I'm concerned, the more the merrier.

Can you give us your thinking on that, the accounting treatment, how this will affect the book value of Berkshire?

WARREN BUFFETT: Well, any sell — shares we sell at the equivalent per A share of in the range of 33,000 or thereabouts, where the stock is selling now, will increase the book value per share.

But that does not mean it increases the intrinsic value per share.

I've said many times in the report, we use book value as a proxy in tracking movement of intrinsic value. But it does not represent anything like intrinsic value per share.

And the key is not what it does to book value per share, but what it does to intrinsic value per share. And, you know, we believe the intrinsic value is materially higher than the book value.

We don't spoil your fun by ever giving you a number. But — (laughter) — we do not regard the fact that it increases the book value per share as being any kind of a determinant in deciding to issue the shares.

But it will have that consequence mathematically. The key is the relation to intrinsic value.

23. "The facts are out on what we do"

WARREN BUFFETT: Zone 6?

VOICE: I think there was a question over here.

WARREN BUFFETT: Any questions in six?

VOICE: Behind you.

AUDIENCE MEMBER: Your problem seems to be that you've attracted a fair number of potential shareholders that don't have a way of estimating intrinsic value or developing expectations about what Berkshire's future prospects are.

Now, do you have any suggestions about how they might do that, short of the general guidance that you can't continue to compound your intrinsic value at the same high rate that you have in the past because of your asset base, and that you don't believe the share is undervalued?

WARREN BUFFETT: Yeah. Well, we'll probably talk more in the general question and answer period about our various businesses, but we simply try to give you all of the information about our businesses in a large, general way that Charlie and I consider important and that we would want if our positions were reversed.

I can assure you that if all Charlie and I knew about our businesses, what we've publicly disclosed, it would not change our estimates from what they might be from being intimately involved with the businesses. The facts are out regarding what we do.

So, you are in the same position to the extent that you have followed our kind of businesses and understand industry conditions and all of that.

And we'll continue to do that. We essentially regard you as our partners. And we tell — we try to tell you exactly what we, as partners, would want to know if you were running the place. And we'll continue to do that.

We won't tell you a number because we don't know the number. We have a range in our mind. Things change that range over time. And we'd probably get in all kinds of trouble if we tried to put out that range.

And Charlie and I would not come up with exactly the same range. But they'd be pretty close. We'll talk more about that a little later.

24. Shareholders approve Class B shares

WARREN BUFFETT: We do have questions now from zone 7 and 8 in the other room. So, we'll take on zone 7, please.

VOICE: I guess you've answered our questions in seven.

WARREN BUFFETT: Oh, took care of zone 7. How about zone 8?

VOICE: No questions from zone 8.

WARREN BUFFETT: Oh, OK. (Applause)

I think, at this point, we can move on to general questions after we have this vote.

And then, if you have another question or two that comes up during the general question and answer period, I'll be glad to — we'll be glad to work those in at that time.

So, we are now at the point: is there a motion to adopt the board of directors' recommendation?

WALTER SCOTT JR.: I move the adoption of the amendment to the fourth article of the restated certificate of incorporation that's set forth in exhibit A of the company's proxy statement for this meeting.

VOICE: I second the motion.

WARREN BUFFETT: The motion has been made and seconded to adopt the proposed amendment to the certificate of incorporation. It says here, "Is there any discussion?" but I'm not going to say that. We are ready to act upon the motion.

If there are any shareholders voting in person, they should now mark their ballot on the proposed amendment to the certificate of incorporation and allow the ballots to be delivered to the inspector of elections.

Would the proxy holders please also submit to the inspector of elections a ballot on the proposed amendment, voting the proxies in accordance with the instructions they have received?

Mr. Fitzsimmons, when you're ready, you may give your report.

ROBERT M. FITZSIMMONS: My report is ready. The ballot of the proxy holders received through last Friday cast not less than 970,495 votes in favor of the proposed amendment. That number far exceeds the majority of the number of all shares outstanding.

The certification required by Delaware law regarding the precise count of the votes, including the votes cast in person at this meeting, will be given to the secretary to be placed with the minutes of this meeting.

WARREN BUFFETT: Thank you, Mr. Fitzsimmons.

The amendment to the certificate of incorporation, as set forth in exhibit A to the proxy statement for this meeting, is approved.

After adjournment of the business meeting, I will respond to questions that you may have that relate to the business Berkshire but do not call for any action at this meeting.

Anyone have any further business to come before this meeting before we adjourn? If not, I recognize Mr. Walter Scott Jr. to place a motion before the meeting.

WALTER SCOTT JR.: I move this meeting be adjourned.

VOICE: I second the motion.

WARREN BUFFETT: The motion to adjourn has been made and seconded. We will vote by voice. Is there any discussion? If not, all in favor say, "Aye."

VOICES: Aye.

WARREN BUFFETT: All opposed say, "No." The meeting's adjourned. (Applause)

25. Berkshire is more than its breakup value

WARREN BUFFETT: Now we'll to move to a — to general questions. And we'll do it by the same zone system.

As I said earlier, any of you are free, obviously, to leave at any time. We will break formally at noon and reconvene about 15 minutes later, after you've all had a chance to buy a sandwich, and you can — (Laughter).

Those in the other rooms can come in here. And we will go from then until about 3 o'clock.

So, we'll start in with zone 1.

AUDIENCE MEMBER: I'm Will Jacks (PH) from Chicago. I'm sort of representing Benjamin Graham today, the question he might ask.

You talked earlier about how you — about the value of your shares, the A shares, let's say, because the B is tied to the A.

But — and I know it — I don't expect a complete answer, but generally, how would you go about placing a value on the A shares?

WARREN BUFFETT: Yeah. Well, that's obviously a key question. As I've said, we try to give you the information.

But I think people, to the extent they've made a mistake in the past in valuing Berkshire — and they have made this mistake over time, including many commentators, including some institutions — is to look at it as simply a breakup value to our businesses.

I mean, you know, you can — you could do the same with General Electric, we — a magnificently run operation by Jack Welch. But I don't think the way you should look at a business like General Electric is to think about what would happen if they sold each division today, paid the taxes, and then distributed the proceeds.

And that has tended to be the case with many people looking at Berkshire, looking at it on a static basis. And that is not the way that Charlie and I have looked at it over time.

It lends itself a little more to that kind of analysis because we have a lot of money in marketable securities. But we have a lot of money in other things, too.

And the question of Berkshire, in valuing the intrinsic of any business, of course, is what is going to be the stream of cash over many years in the future — in fact, all of the years in the future, discounted back at an appropriate interest rate. I've talked about that in the past in the annual report.

Berkshire is a collection of businesses. And some of which we own in their entirety, some of which we own part of. And some of those businesses have very interesting dynamics to them.

And they — the value of our insurance business, for example, if you go back 26 — what was it? Twenty-eight years or so since we — 29, I guess — since we bought it from Jack Ringwalt. We paid 8.7 million, I believe, 8.4 — 8.7 million for two companies that Jack controlled.

If you had the foresight at that time to — and I didn't, but — if you had the foresight at that time to see what that would develop out of that insurance business, you would've come to the conclusion that their value to us was going to be far, far greater than the value at which they were then carried on our balance sheet. They were part of a business which had enormous potential.

And that's been, probably, the most significant asset that's been developed at Berkshire. But right now, we have over seven — right at 7 billion — over 7 billion — of float that's been developed from our insurance business.

We couldn't foresee that 25 or 30 years ago. But it would've been a big mistake to think in terms of the book value of that business being representative of its actual value to us over time, if it was run right.

And that situation probably prevails today.

So, it's a — Berkshire is a group of, on balance, very fine businesses to which we hope to add.

The intrinsic value will be affected by the job we do in allocating capital. It'll be affected by the job our managers do in running their businesses. It'll be affected by some items that we don't foresee now and, perhaps, have no control over.

But it is not measured, essentially, by what we could sell each separate business for and pay the tax on now. We haven't run it that way. We've run it so that we get the use of a lot of capital at very low cost.

Between deferred taxes and our insurance float, we have some 12 billion or so on the liability side that we think will be a very low cost. And that's — doesn't show as an asset, but it can be quite valuable.

Charlie, you want to —?

CHARLIE MUNGER: No. I don't think I've got anything to add to that.

WARREN BUFFETT: Oh. I was all set to write it down, too. (Laughter)

26. Buybacks at what appear to be high stock prices

WARREN BUFFETT: Zone 2, please.

AUDIENCE MEMBER: Mr. Buffett, Mr. Munger, I'm Tim Medley from Jackson, Mississippi.

My question is an allocation of capital one. You've indicated that one thing you like in companies is a willingness on the part of management to repurchase its own shares.

I wonder if you would talk for a minute about your own frame of reference on repurchases when it appears that the current price of the stock is rich in relation to its intrinsic value.

And some have said that, with the right company, ongoing repurchases of stock should be made, irrespective of the price.

So, would you speak for a moment, as to how you think it pencils out when the current price of the stock is rich in relation to its intrinsic value?

WARREN BUFFETT: Yeah. If you're repurchasing shares above a rationally calculated intrinsic value, you are harming your shareholders, just as if you issue shares beneath that figure, you are harming your shareholders.

That's a truism. Now, the tough part of that, of course, is coming up with the intrinsic value.

And, for example — a good example might be Coca-Cola.

I think a number of people might have thought Coca-Cola was repurchasing shares at a very high price, because they'll look at book value or P/E ratios. But there's a lot more to intrinsic value than book value and P/E ratios. And anytime anybody gives you some simplified formula for figuring it out, forget it.

You have to understand the business. The people who understood that business well, the management, have understood and been very forthright about saying so over the years, that by repurchasing their shares, they are adding to the value per share for remaining shareholders.

And like I say, people who didn't understand Coca-Cola, or who thought mechanistic methods of valuation could — should take precedence, really misjudged the value to the Coca-Cola Company of those repurchases.

So we favor — when you have a wonderful business — we favor using funds that are generated out of that business to make the business even more wonderful. And we favor repurchasing shares if those shares are below intrinsic value.

And I would say that if it's a really wonderful business, we probably come up with higher intrinsic values than most people do.

We have great respect, Charlie and I with — I think it's developed over the years — we have enormous respect for the power of a really outstanding business. And we recognize how scarce they are. And if a management wishes to further intensify our ownership by repurchasing shares, we applaud.

We own — we just went over 8 percent of the Coca-Cola Company, probably, in the last three or so months, by a very tiny fraction. But we had a second purchase one time.

But our percentage interest in the Coca-Cola Company has gone up significantly through their repurchases. And we are better off because they have bought those shares at what looked like, to some people, perhaps, high prices. And we thought they were wrong at the time, and I think now it's been indicated or proven.

So, I urge you, if you're trying to decide on the wisdom of repurchases, or of share issuances, that you don't think in terms of book value. You don't think in terms of specific P/Es. You don't think in terms of any little model.

But you think in terms of what would you really, A, pick businesses you can understand and, then, think what you really would pay to be in those businesses. And that's what counts over time, is whether the repurchases are made at a discount from that figure.

And I would say with the companies that we own shares in, we — our interest in GEICO went from 33 or so percent to 50 percent over a 15-year or so period, simply through repurchases. And we benefitted significantly.

So, did every other shareholder, I might add, that stayed with the company. And we benefited in no way disproportionate to them.

But that was a very wise action on their part. And there too, they were all — usually buying that stock at at least double book value. And you could compare it to other insurance stocks and say, “Well, that’s too much to pay.”

But GEICO wasn’t an insurance company that was comparable to other insurance companies. It was a very different sort of business. And they were very wise, in my view, to be following that course of action.

Charlie? No?

27. B shares won’t dilute value of A shares

WARREN BUFFETT: Zone 3?

VOICE: That’s you.

AUDIENCE MEMBER: Oh, sorry. I’m Elaine Cohen (PH) from San Diego.

I’m a little confused about how the B shares are going to be moving if they’re at 1/30th of the A shares when they get out on the market.

Are they always going to be 1/30th of the A shares? And if they are, is that going to dilute the earnings of the A shares? Could you just explain that?

WARREN BUFFETT: Yeah. It won’t dilute the earnings or value of the A shares as long as we use the money reasonably effectively that is produced.

As I mentioned earlier, if it happens to be 1 percent, you’ll own 1 percent less of all these other things — on the other hand, will have close to $400 million more of cash. So, it will not — in our view, it will not dilute the value of the A.

I expect, over time, that the B, a very large percentage of the time, will be selling very close to a 30th. But it could sell for less than that ratio. It can’t sell for any significant amount more than that ratio, or arbitrage will eat away at any slight premium. I think that takes care of that.

28. No “secret formulas” for Wells Fargo

WARREN BUFFETT: Zone 4.

AUDIENCE MEMBER: Mr. Buffett, my name is Hugh Stephenson. I’m a shareholder from Atlanta, Georgia.

My question involves the company's interest in Wells Fargo. As you know, Wells Fargo, like most banks, has a very expensive branch system for deposit-gathering and servicing their customers.

As I guess you know, they also have moved more into branches in supermarkets and in online banking that seems to have the potential to very significantly reduce their costs, relative to the branch system.

Would you comment on how you think that might play out and how significant it might be?

WARREN BUFFETT: Well, the question — you're right. Wells Fargo has been a leader in moving into supermarkets. They've got a couple different formats they've used. And they've been a — they've certainly been a leader in the online banking services.

Unfortunately, in banking, you know, it's a little hard to have any secret formulas. Coca-Cola has 7X down there in the vaults of the, what used to be the Trust Company of Georgia, now SunTrust. But in the banking business, anything you do, your competitors can copy.

Nevertheless, there's a — there is an advantage. And sometimes it can be a quite — a significant advantage in being first and learning more about different distribution methods. And I think Wells Fargo has done a terrific job in learning that.

I think they've got some advantages. They — but they aren't advantages that other people can't work at copying and chipping away at.

But it's a good management. They've done a very good job of seizing on that particular trend in supermarkets.

And as such, they are — they have the potential, perhaps, for having a relatively low-cost deposit-gathering operation. And every other bank in the world will be looking, noticing how that works, not only there but at other banks, to figure out whether they can copy it.

Charlie? OK.

29. GEICO benefits from being entirely owned by Berkshire

WARREN BUFFETT: Zone 5.

AUDIENCE MEMBER: My name's Alan Parsow from Omaha.

Berkshire has increased the rate of growth in its insurance float in excess of 20 percent a year since 1967.

In regards to GEICO, its rate of growth, what is its historic rate of growth been in its insurance float? And what impact will it have on the rate of growth in the overall Berkshire insurance float?

WARREN BUFFETT: Well, I would say that GEICO is a huge plus to Berkshire. Now, we owned 50 percent of it before. I mean, we've had a — we've benefitted from our GEICO investment in a big way, ever since 1976. So, it's not entirely a new benefit that's coming in.

We paid a good price for GEICO, but it is a terrific company. It has outstanding management. It has a low-cost method of distribution, which is very difficult for people to — I mean, everybody wants to have that. But they — very few come close to it.

The management is focused on bringing costs down even further and widening that competitive moat.

GEICO — I personally think that, just from what I see, that GEICO — I would think GEICO's growth rate is likely to be greater, at least, in the future, that I can see, over where it has been in the past. But it's been perfectly satisfactory in the past.

I think there are some advantages to it being part of Berkshire, in that there are costs attached to bringing new business on the books. And we care not at all about reported quarterly earnings.

GEICO was relatively insensitive to those before. And that's a compliment when I say that. But they had some more pressure on them in respect to reported earnings than they will have, as part of Berkshire.

And I think there's some really big opportunities, in terms of what can be done with GEICO as part of Berkshire.

So, I think five years from now, you'll be very happy with the fact that we own a hundred percent of GEICO.

And I think you will see that as marvelous a company as GEICO was independently — as an independent company — it will flourish maybe even a bit more as being part of Berkshire.

Not because we bring anything to the party. I mean, the management will continue to run it autonomously. But there's — there are some advantages for it in being part of a larger enterprise.

30. Berkshire businesses worth more than book value

WARREN BUFFETT: Zone 6.

AUDIENCE MEMBER: Mr. Buffett, my name is Steven Tuchner. I'm a shareholder from Toronto, Canada. And my question concerns the valuation of Berkshire shares.

Given the large number and dollar size of the private businesses recorded at historic cost, which Berkshire owns, shouldn't the multiple to book that the stock trades at, essentially, expand over time to reflect the increases in intrinsic value of the private holdings?

And I cite Buffalo News on the books at, essentially, I think around zero. And even GEICO now will be on the books at, probably, between 3 and 4 billion — worth more than that — as examples of the disparity between intrinsic value and book value?

WARREN BUFFETT: Most of the businesses that we own all of, or at least 80 percent of, are carried on the books at considerably less than they're now worth.

And with some of them, it's dramatic, although it's not dramatic compared to a $40 billion total market valuation for Berkshire. It's dramatic relative to the carrying price.

Because when we bought See's Candy for an effective $25 million in 1972, it was earning 4 million, pretax. It earned over 50 million, pretax, last year. When we bought the Buffalo News, it was making nothing. Paid 30 and a fraction million. And it's now earning, maybe, 45 million. And we've got a number of businesses. And GEICO's worth more than we carry it for because of the accounting peculiarities of the first 50 percent.

So, it is true that, overwhelmingly, our businesses are worth something more than intrinsic value — than book value — and, in many cases, very substantially more, although that's reflected in the market price of our stock.

I don't think you can go from year to year and trace the intrinsic value precisely by changes in book value. We use changes in book value as a very rough guide as to movement, and sometimes I comment.

There have been certain annual reports where I've said our intrinsic values grew more than the proportional change in book value, and there's been others where I've said I thought it was roughly the same.

So, I don't think you can use it as a — stick some multiplier on it and come up with a precise guide — a precise number. But I do think it's a guide to movement.

Our insurance business, though, is the most dramatic case of dollar difference between book value and intrinsic value. I mean, the number has gotten very big over time there. I personally think it will tend to get bigger, because I think GEICO will grow, and I think our other businesses will do well.

The trick, of course, is to take the new capital as it comes along — and not from the issuance of the B, because that's relatively small compared to the amount of capital we will just generate from operations.

Our float will grow from year to year. Our earnings will be retained. And we've got to go out and find things to do that three or five years from now that people say, "Well, that's worth more than the book value." And that's a job. It's a tougher job than it was. But it's kind of fun.

31. Not expecting B shares to affect price of A shares

WARREN BUFFETT: Zone 7?

AUDIENCE MEMBER: Yes. My name is Jim Elliot (PH). I'm from Minneapolis.

I wonder if you could help me with an upside scenario where the B shares, after they're issued, are limited and there's not a significant reissue afterwards. The A shareholders are somewhat reluctant to convert. And you have a run on the B shares where, let's say, it goes to $2,000 a share.

Do we then have the tail wagging the dog, where the 2,000 command a $60,000 price on the A shares? And, you know, what — does the — this arbitrage take care of that? Or —

WARREN BUFFETT: Well —

AUDIENCE MEMBER: — what do we do in that case?

WARREN BUFFETT: If there is demand for the B that pushes the price up somewhat, it will produce conversion from the A. I mean, the only way the B will be able to get — we'll just pick a figure — if it were to get to $1,200 — there is no way that the A could be selling appreciably below 36,000.

And I don't think — I think that introducing the B into the equation, may mean — it will mean — that there will be some people who like a lower denomination stock and come in.

But it takes a lot of that to, in an appreciable way, affect $40 billion worth of what is now A stock.

So, you know, if there were incremental demand of a hundred million dollars a year or something like that, that's a little more than the demand that might otherwise go into the A. But I do not see it producing anything in the way of a big movement.

But you're quite correct in that there's no way that the B stock can go up and not really force some conversion from the A. It'll — I think it'll be minor.

32. World Book Encyclopedia business won't be sold

WARREN BUFFETT: Zone 8?

AUDIENCE MEMBER: Hello. This is Rick Merliof (PH) from Oakland, California.

I wanted to ask you about World Book Encyclopedia. World Book seems to me to be an example where Berkshire has invested in technology without necessarily intending to.

I would expect that in five or 10 years it's going to be real tough to sell a paper encyclopedia, because at that time, you'll probably be able to buy the computer and the electronic encyclopedia for less than the paper encyclopedia.

Up till now, I haven't had the impression that World Book has been as aggressive as its competitors in marketing and developing its electronic product.

It's been the highest price that I have seen of the competition. It's — it asked at least — a year ago, its list price was 600 and the competition was 8,200.

You sold as low as a hundred on special promotions. But it — I don't think that was the list.

A year ago, you were still selling by direct sales. I have not yet seen it in a mass market software store. I've never seen it bundled with a computer.

And I have seen one newspaper review of electronic encyclopedias that mention the World Book print version but didn't seem to be aware that a World Book electronic version was available, which it was at that time.

In terms of the product itself, we have both the World Book and the Grolier's at our house. The Grolier's came with the computer. And both encyclopedias, in this last year, solicited us to buy an upgrade. World Book was asking $85. Grolier's was asking 30.

But in addition, I ended up buying only the Grolier's, because it addressed my biggest disappointment on the original version of both of them, which — it's sort of a — in a way, a minor issue. But I thought it was relevant for kids doing school reports.

Neither one allows you to print out a very big percentage of the pictures in the encyclopedia. They have a lot of pictures. But you can't print them. And you can get a color inkjet printer for under 200 bucks these days, so it's real practical to print things out.

The World Book made no mention of having any improvement in this area. The Grolier's said you can print out almost all the pictures. And I have found — since we got the upgrade — I found that to be true.

So, I'm concerned that — I'm not an expert on this, but I don't think World Book is as aggressive in either developing or marketing its electronic encyclopedia.

So, my question is, do you plan to become aggressive in this area and a leader in the electronic technology? Or have you considered selling your electronic business and just getting out of it?

WARREN BUFFETT: Yeah. We won't sell the electronic business. That, I can tell you.

You're quite correct. Some of the technical stuff I'm not very good at. I have a little trouble turning on the light switch.

But the — (laughter) — in terms of the bundled product, which is the encyclopedia that is offered with the purchase of a new computer, there's no question that that's become a large business in units.

It's not so large in terms of dollars, because those units, bundled with an original equipment sale, are very low. Actually, Encarta's probably — well I'm sure has sold, you know, many, many millions of units bundled with a new encyclopedia. It doesn't necessarily produce a lot of dollars. But it produces a lot of units out there.

We, at World Book — Encyclopedia — some of you may not have noticed, but Encyclopedia Britannica has, within the last couple of weeks, announced the cessation of direct distribution of the print product.

And unit sales of encyclopedias — print encyclopedias — in the country have gone down very significantly in the last few years, as they have at World Book.

We changed the — we are in the process of changing, and have already changed in some parts of the country — the distribution system because we are going to see what can be made to work, if anything, in the direct distribution.

There are some indications that we may be able to make money in that business but with a different cost structure than before. And it — well, we'll know more about that. We're not that far along, because we changed the distribution within the last — or partially changed it — within the last few months.

We — it's not easy to figure out how to make money in either the electronic or print encyclopedia end of the business. And we have some ideas in the electronic end that we'll know a lot more about in about six months or so, but I can't really — I don't want to go into any detail on those at present.

I've got the electronic product myself. It's a first-class product. We've got ideas about how to make it an even better product. And we have taken a lot of costs out of the print end of the

business. We'll be putting some of those into the electronic end. But we've taken a lot of costs out.

It may well be that it'll be a workable business for us, even though it isn't for anybody else, but the jury's still out on that.

It is not the business it was five years ago. And I don't think it will be the business that it was five years ago, because the world is changed in some ways on that.

But we're — we will not sell World Book. That I can just — I'll state that unequivocally. We will not sell electronic World Book. We are in the business to stay.

But we are groping a bit in terms of figuring out a configuration that will produce decent profits for us and sell a lot of World Books in the process.

Charlie?

CHARLIE MUNGER: We don't have any way of avoiding declines in some of our businesses some of the time.

Blue Chip Stamps once sold stamps at the rate of $120 million year. Now, it's about $200,000 a year. So, we lose some. (Laughter)

WARREN BUFFETT: We were in the windmill business many years ago. (Laughter)

We try to make — you know, we think plenty about the problems. But there are industry problems.

I was in anthracite coal at one time, too. Street railways. I've seen them all.

But World Book is a first-class product. It's a product I use, a product Charlie uses. And there is — through an electronic means, you can deliver information at costs far, far less than — I mean, unbelievably less — than was the case not that many years ago.

And the world, in many forms, will be adjusting to that, not just in encyclopedias. And it affects some of the businesses we're in. And it's something we think about. But it's very unlikely that Charlie and I are going to be smarter than the rest of the world, in terms of the electronic world.

I mean, we are looking at it as something where we're looking for the obvious, and something that is within our capability of doing something about. But we're not trying to beat people at their own game, where we're not very good at the game.

33. Protecting public shows "tremendous integrity"

WARREN BUFFETT: Zone 1?

AUDIENCE MEMBER: Mr. Buffett, Richard Charlton from Canada. One of the highlights of — good afternoon, Mr. Munger, also. (Laughter)

One of the highlights, for me, in coming to the annual meeting for the past seven or eight years was the way that you dealt with the question that was inevitably asked by a new shareholder as to why you will not split your shares.

I know how much it has meant to you to keep the shares trading in an exclusive way. And you have been my mentor for the last 17 years.

And I think that what you're doing in splitting these shares in order to protect the public, and indirectly, Berkshire shareholders, but mostly to protect the public, is just another expression of your and Mr. Munger's tremendous integrity.

And you're setting a fantastic example for corporate America. And I salute you, sir. And I thank you very much. (Applause)

WARREN BUFFETT: Thank you. Thank you.

34. "The fairer, the better" for Berkshire's stock price

WARREN BUFFETT: Well, I hate to leave zone one after that, but we'll go on to zone 2. (Laughter) Thank you.

AUDIENCE MEMBER: Wesley Jack from Oklahoma City, Oklahoma.

As a stock broker, I can say I definitely don't like UITs and I appreciate your plan for the B shares.

But as long — with the rest of the shareholders, what we hope — that the shares go up in value in the future. Don't you see a problem with them coming back with this idea in the future?

WARREN BUFFETT: On the unit — you mean on the issuance of unit trusts?

AUDIENCE MEMBER: Yes.

WARREN BUFFETT: Oh, I don't see any problem because the B will be out there. And it is a superior product, whatever its absolute merits may be. On a relative basis, it is a superior product to anything that is going to carry a big commission to a salesperson and a lot of annual costs.

So, I think — my guess is we've taken care of that problem. I wish it hadn't come up, but it — I would think that it would be very difficult for anyone to honestly offer a product — a derivative-type product — through a unit trust that would be superior to buying the product that will be available.

CHARLIE MUNGER: I think he's afraid that the B will go up to the place where the whole story comes again. And I must say that if that were to happen, we'd like it. (Laughter)

WARREN BUFFETT: Well, we'd like it, only if it reflected underlying values, but — (Laughs)

CHARLIE: Yeah.

WARREN BUFFETT: Yeah. We have a very strange attitude on that. I mean, most managements feel that the — on the price of their shares — that the higher, the better. And that's an understandable feeling. But the trouble is the game isn't over at any time.

We really feel the fairer, the better. Our goal is that every shareholder participates in the progress that Berkshire makes, during — as a business — during their holding period. In other words, we don't want one party getting wealthy off the other. We want them to share based on the gain in value of the business.

And to the extent that the stock got way overvalued or way undervalued, you know, that may make one party — in the first case, the seller, in the second case, the buyer — very happy. But there's somebody on the other side of the transaction.

In economics, you know, the most important question — maybe important beyond economics, too — but whenever somebody tells you something, you know, the first question to ask yourself is, "And then what?" And we tend to do that around Berkshire.

And so, the stock going up is not an end of itself, because it's — the next question is, "And then what?"

And to the extent that the stock goes up because the intrinsic value goes up, everyone is getting their fair share of the pie as they go along.

To the extent it exceeds that in some way, the selling shareholder gets a benefit. But the entering shareholder is at a disadvantage. And we really like the idea of the price tracking intrinsic value over time.

And we think that, by having the right kind of shareholders and by communicating with them properly and following the right kind of policies, that we can come as close to that as is attainable in a world where markets, essentially, are fairly volatile. And so far, I think it's worked out pretty well that way.

But the intention is to — and the goal — is to keep it that way.

One thing to remember: in the end, the owners of businesses, in aggregate, cannot come out anyway better than the businesses come out.

I mean, you can — the businesses are the — and not just our businesses, I'm talking about all American business — the profitability of American business determines the profitability of what the owners of American business have, and you can forget all about the little ticker symbols and everything else.

The owners suffer to the extent that they have some extra costs imposed in broker's commissions, fees, all kinds of things. That diminishes the return from the business. But no one has figured out yet how to perpetually have owners do better than their businesses.

And our idea is to have them do it as they go long in proportion to the gain that occurs during their tenure as a shareholder. And that isn't easy to do. And it's not attained perfectly. But that's the goal as we go along.

35. Insurance float: "Above all, get it cheap"

WARREN BUFFETT: Zone 3?

AUDIENCE MEMBER: Maurus Spence. And I have a serious question and, then, a less serious question first.

The less serious: you said that you and Charlie had lost, between you, a hundred pounds. I was curious who had lost more?

WARREN BUFFETT: No, no. I said the board had lost a hundred pounds. (Laughter)

I have some members of the board who would take umbrage of the fact that they weren't included in that total. (Laughter)

AUDIENCE MEMBER: OK, Who lost —?

WARREN BUFFETT: Charlie and I, we're pretty close at the moment, aren't we? Modesty prevents — (Laughs)

AUDIENCE MEMBER: I must say you're both looking very good, anyway.

WARREN BUFFETT: We're feeling good.

AUDIENCE MEMBER: I was wondering who lost the most and what your diet secrets were. (Laughter) And, then, the more serious question was about float.

You touched on this a little bit earlier. But you've often said that your insurance business is probably the most important business that you own.

On page 12 of the annual report, you said, "We have benefitted greatly to a degree that has not been generally understood, because our liabilities have cost us very little."

I was wondering if you could describe this a little bit better so we can understand it.

WARREN BUFFETT: Yeah, the — Charlie and I have lost about the same amount, at about 20 pounds each.

The insurance business provides us with float. And float is money that we hold that doesn't belong to us.

It's like a bank having deposits. A bank has deposits. The money doesn't belong to it. But it holds the money.

Now, when a bank holds deposits, on everything except demand deposits, there's an explicit cost, an interest rate attached to it. And, then, there are the costs of running the system and gathering the money which is — also must be attributed both to demand and time deposit.

So there's a cost to getting what they would call deposits and we could call float.

In the insurance business, a similar phenomenon takes place in that policy holders give us their money at the start of the policy period. And therefore, we get the money paid in advance for the product.

And secondly, it takes time to settle losses, particularly in the liability area. If you bang up a fender on your car, you — it's going to get settled very quickly, so there's — but if there's a complicated injury or something, it may take some years to settle. And during that period, we hold the money.

So, we have, in effect, something that is tantamount to the deposits of a bank. But whereas the deposits of a bank, it's quite easy to calculate the approximate cost, in the case of the float that the insurance company has, you don't really know what the cost of that float is until all your policies and losses — policies have expired and your losses have all been settled. Well, that's forever, in some cases.

So, you're only making an estimate, as you go along, of what that float is costing.

To date with Berkshire, in the 29 years we've been in the business, it appears — never certain, because you don't know for sure what's going to happen — but it appears that our float has not cost us anything, in — on average.

There's been years when we've had an underwriting loss when there's a cost. There's been years when we had an underwriting profit. And so, we had a reverse cost.

So we have obtained that float on very advantageous terms over the years. Far more than — fully as important as that— it's important to get it at a low cost, in our case, no cost. But the other important thing is that we've grown it dramatically.

And so, we've gotten more and more money without having any cost attached to it. And if we still had our 16 — or 17 million, I guess — of float that we had in 1967 and it was no cost, it would be very nice.

But 17 million of free money is worth something, but it's not worth a ton.

Having seven billion, if we can achieve that as free money, it's worth a lot of money. And that growth has not, probably, generally, been appreciated fully in connection with Berkshire nor has the interplay of how having zero-cost money, in terms of affecting our gain in value over time.

People have looked at — always looked at our asset side, but they haven't paid as much attention to the liability side. Charlie and I pay a lot of attention to that.

And, I mean, this — it's not entirely an accident that the business has developed in this manner. And we have intentions of trying to make it continue to develop in this manner, and in that manner, in the future. But we've got competitors out there, too.

Float, per se, is not a blessing. We can show you many insurance companies that thought it was wonderful to generate float. And they have lost so much money in underwriting that they'd be better off if they'd never heard of the insurance business.

But, you know, the job is to get it, get it in increasing quantities, but above all, get it cheap. And that's what we work at.

And you do that in the business through having some kind of competitive advantages. You won't do it just by having an ordinary insurance company. The ordinary insurance company is not a good business.

We have it, in certain respects, because of our attitude toward the business. We have it because of our financial strength gives us certain competitive advantages, and we have it in the case of GEICO, because of a very low-cost operation.

And it's us — up to us — to try and figure out ways to maximize each one of those competitive advantages over time.

We've built those advantages. I mean, in 1967, we were not looked at that way in the insurance business. We were — we've built a position of competitive strengths. And in the case of GEICO, they had it without us. But we have bought into it over time.

It's a very important asset. And you ought to pay a lot of attention over the years as to what is happening in — with that asset as to both growth and costs. And that will aid you in calculating intrinsic value.

Charlie?

CHARLIE MUNGER: Nothing to add.

WARREN BUFFETT: OK.

36. Intrinsic value isn't above current stock price

WARREN BUFFETT: Zone 4 is the next.

AUDIENCE MEMBER: Henry Neuhoff (PH), shareholder, Dallas, Texas.

My guess is that you consider the intrinsic value of the shares to be more than that represented by the price.

WARREN BUFFETT: By more than represented by what?

AUDIENCE MEMBER: More than represented by the current price of the shares.

If that be the case, what would be your thoughts about Berkshire repurchasing its own shares?

WARREN BUFFETT: Yeah, no. We have said we do not consider Berkshire undervalued at this price. We didn't say we thought it was overvalued. But we said we did not consider it undervalued.

So, a repurchase based on our estimate would not be in the interests of shareholders.

It's conceivable it could be at some time, but we do not think that's the case. We think intrinsic value far exceeds book value, but we do not think it exceeds present price.

We're not selling any shares, though, either. (Laughter)

(Break in tape)

37. Complications from "street name" shareholders

WARREN BUFFETT: Zone 6?

AUDIENCE MEMBER: My name is Carlos Lucera (PH). I'm from Idaho. And my question relates to street names.

Our stock at Berkshire Hathaway is in a family limited partnership. And in addition to that, it's in a street name.

Now, what is the reason, and the rationale behind the reason, for street name shares not being able to participate in the charitable contributions by Berkshire Hathaway?

WARREN BUFFETT: Yeah. We submitted a request for ruling to the IRS — I don't know, 15 or so years ago, in connection with the shareholder-designated contribution program.

And the ruling we received specifies record holders and not street name holders. Now, that doesn't mean that a different ruling might not be obtained.

But frankly, when we get into the multitude of indirect holdings and the problems we have with those indirect holdings in other respects, I think it would be a bit of a nightmare for us to attempt to get that program extended through — into street name holders.

I think the costs would far exceed the benefits. And I think that it is the situation, and anybody with it in street name can move it into their own name if they want to.

So I think, with very small amount of effort on the part of an individual shareholder, it would offset an enormous set of problems that we would encounter at Berkshire.

We can handle the present system. We've got 12 people there. And they run the annual meeting. They make movies. They do all kinds of things. (Laughter)

And it would be — it would be very tough and — you know, if an extra 10,000 shares participated, it'd be $120,000 of contributions. I just don't think it would be worthwhile.

Our ruling doesn't presently cover the subject, in any event. It's something we've thought about.

Charlie?

CHARLIE MUNGER: Yeah. I think even if they changed the ruling, we wouldn't change the policy. It would be, administratively, very difficult.

WARREN BUFFETT: We run into other problems, in terms of people getting their material — just the material on the annual meeting.

And we've heard from a number of shareholders that they can't get it from their broker, and they're — they don't know what the B is all about because they didn't get their proxies. And it just — street name posed more problems.

Although, we have a — now we have — probably have more than — forget about the B. We have more than twice as many, I believe, holders in street name as in direct ownership. Although, the number of shares is far, far — I mean it's — it'd be less than 20 percent of the shares. But it's probably double the number of holders.

38. No "look-through earnings" in annual report

WARREN BUFFETT: Zone 7?

AUDIENCE MEMBER: Good afternoon. My name is Bill Guerra (PH). I'm from the San Francisco Bay area. I've owned your shares for many years and appreciate the good job you've done.

However, in this year's chairman's letter — you developed a concept a few years ago called look-through earnings.

WARREN BUFFETT: Right.

AUDIENCE MEMBER: And I failed to see that this year. And I'm wondering if that no longer is a valid concept or why you refrained from showing the data?

WARREN BUFFETT: Yeah. That's a good question. I should have actually covered that in the annual report, in terms of mentioning — because I've talked about it, and we'll talk about it in the future.

And we do have a goal on look-through earnings of $2 billion in the year 2000. And that's going to be adjusted upward to allow for the fact there are more shares outstanding. It'll be the same basic goal.

But there were two reasons that it was skipped this year. And like I said, I should've mentioned it.

One was it was the longest letter we've ever had. And having that section in there would've elongated it even a bit more. And that, coupled with the fact — and this is the important part of it — we had major changes in our — the composition of the company — immediately after the end of the year.

So, our Capital City stock disappeared. At the time it disappeared, we didn't know whether it was going into cash, or all Disney stock, or a combination.

We had the acquisition of the other half of GEICO where, even now, the accounting treatment isn't clear. And I felt that —

The look-through earnings last year were fine. But I felt that, by the time I got through explaining all of the adjustments you would have to make for the transactions then pending, that adding it to the — to already the longest letter I've written, would've slowed things down a lot and not been particularly helpful.

It will be back in this year, this upcoming report, and future reports, because it's a very important concept. And it's something that we're focused on.

It's just that last year's number — it would've been a mess by the time I got through trying to explain it.

You know, I normally — the accounting stuff, I know, puts a lot of you to sleep. But believe me, it isn't so much fun writing it either. (Laughter)

So, I skipped it this year. We'll have it next year. And the number would've been OK last year, but there would've been a lot of asterisks attached.

39. Discount rate for estimating intrinsic value

WARREN BUFFETT: Zone 8, please.

AUDIENCE MEMBER: Yes. Mr. Buffett, good morning. My name's Ed Walzak (PH) from New York. I'm a student and an admirer of your investment philosophy. I have a question.

In determining a company's intrinsic value, you seem to write or indicate that you project out a company's owner earnings for a number of years, and then discount that back by prevailing rates.

My question is, how much of a premium, if any, to prevailing risk-free rates do you demand when you discount back the owner earnings of a company?

Or stated differently, for example, today, with loan rates at about 7 percent, if you did the same exercise with Coca-Cola, at what rate of interest would you discount back their owner earnings?

WARREN BUFFETT: Yeah. We get asked that question a lot. And we've answered it to some extent in past annual reports about what discount rate to use.

We basically think in terms of the long-term government rate.

And there may be times, when in a very — because we don't think we're any good at predicting interest rates, but probably in times of very — what would seem like very low rates — we might use a little higher rate.

But we don't put the risk factor in, per se, because essentially, the purity of the idea is that you're discounting future cash. And it doesn't make any difference whether cash comes from a risky business or a safe business — so-called safe business.

So, the value of the cash delivered by a water company, which is going to be around for a hundred years, is not different than the value of the cash derived from some high-tech company, if any, that — (laughter) — you might be looking at.

It may be harder for you to make the estimate. And you may, therefore, want a bigger discount when you get all through with the calculation. But up to the point where you decide what you're willing to pay — you may decide you can't estimate it at all. I mean, that's what happens with us with most companies.

But we believe in using a government bond-type interest rate. We believe in trying to stick with businesses where we think we can see the future reasonably well — you never see it perfectly, obviously — but where we think we have a reasonable handle on it.

And we would differentiate to some extent. We don't want to go below a certain threshold of understanding. So, we want to stick with businesses we think we understand quite well, and not try to have the whole panoply with all different kinds of risk rates, because, frankly, we think that'd just be playing games with numbers.

I mean, we — I don't think you can stick something — numbers on a highly speculative business, where the whole industry's going to change in five years, and have it mean anything when you get through.

If you say I'm going to stick an extra 6 percent in on the interest rate to allow for the fact — I tend to think that's kind of nonsense. I mean, it may look mathematical. But it's mathematical gibberish in my view.

You better just stick with businesses that you can understand, use the government bond rate. And when you can buy them — something you understand well — at a significant discount, then, you should start getting excited.

Charlie? (Laughter)

CHARLIE MUNGER: Yeah. The discounts were once greater than we now see.

WARREN BUFFETT: That's all you're going to get, folks. (Laughter)

40. See's Candies not going fat-free anytime soon

WARREN BUFFETT: Zone 1?

AUDIENCE MEMBER: Hi. Warren, it's Peter Newman, Nick and Racky's son. You can't see me because I'm on your hard left over here.

And by the way, Racky says to send her love to you —

WARREN BUFFETT: Great.

AUDIENCE MEMBER: — and Susie.

I'm going to take a cue from something that the guy who asked the questions about the World Book —

I know you're loathe to, normally, interfere in the running of your individual corporations, because they do so well on their own. And I am particularly fond of See's Candy and their products. And you may or may not know that we have a chocoholic in our family, as you do in yours.

WARREN BUFFETT: Yeah. Makes good chocolate syrup, too. (Laughs)

AUDIENC MEMBER: Yeah, I won't mention who.

However, when I was in there this Christmas buying some gifts, I noted that, with the exception of the little candy canes, there's nothing in that store that is fat-free.

And we are facing a trend — (laughter) — in the world, especially in dessert items and ice cream and candy items, of fat-freeness.

And I just thought that, perhaps, it would be a word — worth a word to management to consider expanding the hard candy line.

WARREN BUFFETT: Well, we look at a lot of things. One of the problems, as you probably know, for example, in using aspartame is it doesn't interact well with heat. And so that's been sort of tough.

Now, Charlie and I have kept getting our regular boxes of candy during this weight loss-program. And we've — (laughter) — devoured them.

And candy, you know, it may be, on average, a hundred and — depends on whether it's a sugar product or not.

But, take the lollipop, it'd be about 110 calories per ounce. But there's — that's one and a half, or one and a quarter lollipops, or something like that.

Most things are, you know, in that hundred per ounce to 150 per ounce range. So, candy is not a specific no-no.

If we can find something that the customer likes, that makes them think they're getting skinnier by eating it — (laughter) — you know, that will be a breakthrough.

And we look forward — and we test everything that comes along. I can assure you. (Laughter)

In fact, Charlie and I may be the main testers.

Chuck Huggins is here today — and if you've got any ideas on it — who runs See's. Done a terrific job of running See's ever since we took over in 1972. He'd appreciate ideas.

But we are looking for things that appeal to the consumer that taste good and that they'll go for. I mean, just as is, you know, the Coca-Cola Company, in terms of carbonated soft drinks. So, it's a constant subject.

And, you know, there were high hopes on aspartame originally. But it just hasn't panned out in terms of candy. And I've read a few articles about the fat-free stuff.

Well, it should be the fat substitute, which didn't get me too excited about trying it. But I'm not sure whether some of you read those articles or not. We'll keep looking, Peter, I appreciate it.

41. GEICO's price: "We gulped a few times and paid it."

WARREN BUFFETT: Zone 2.

AUDIENCE MEMBER: Good morning, Mr. Buffett and Mr. Munger.

As an aspiring shareholder, I'm very happy and proud to be here. Maybe I can encourage Mr. Munger to respond to my question this morning.

In regards to your purchase of the other half of GEICO, would you comment on your reasoning behind paying the premium above market value and why you, instead, did not purchase shares in the open market?

CHARLIE MUNGER: Well, we couldn't have purchased very many shares in the open market at the quoted price. And the price we paid, with the large number of shares we got, we thought was a very satisfactory price.

WARREN BUFFETT: Yeah. We — what Charlie said is a hundred percent right. We also had a restriction that we agreed to many, many years ago — almost 20 years ago — as to the number of shares we would own without the consent — of the directors and, I believe, the Insurance Department.

So, we actually had some special restrictions on us in the case of GEICO. But if we hadn't have had those restrictions, we'd have behaved in exactly the same manner.

And we didn't think we could buy it any cheaper than that price. And we gulped a few times and paid it. And I think we will be happy that we did, as it's turning out.

GEICO is doing very well. It — I mean, I knew it would do well. But I feel very good about it.

42. Newspaper business is still good, but not as good

WARREN BUFFETT: Zone 3.

AUDIENCE MEMBER: Mr. Buffett, my name is David Lowe (PH) from Ventura, California.

My first Berkshire meeting, and I want to mention that I'm very intrigued at the influence you have over the shareholders here. I note that the first beverage they ran out of in the lobby was Cherry Coke. (Laughter)

My question is about The Buffalo News. You say, in the letter for the '95 report, that the newspaper industry has lost another notch in its economic attractiveness. Can you elaborate on that?

WARREN BUFFETT: Yeah. The — what you are seeing in newspapers is a circulation trend that has been prevalent for a long time, in terms of newspapers per household.

But that has been declining, and that — daily newspapers — and that I would say the trends of the last couple years are somewhat worse, in that respect.

I would say that the ability to price, both at the circulation and advertising level, is — has weakened a bit in recent years — not dramatically, but it's weakened a bit.

At one time, newspapers really — daily newspapers in single-newspaper towns were probably as attractive, economically, as any business you could find. I mean, it — a large percentage of advertisers had very little choice, in terms of using them as an advertising medium.

People had less options, in the way of learning what was going on around them other than the daily newspaper. So, the — they started from a position of extraordinary strength.

They still have a very strong position. And I've tried to emphasize that in the report. I mean, they're a bargain at the price they sell for. They give you all kinds of information with very low price. And they're a magnificent way for most merchants to reach their customers.

But they are not — they do not have the exclusive advantages, in many cases, that they had 15 or 20 years ago.

Third-class mail has become more of an option. People have more ways of obtaining information. As we talked earlier, information can be processed electronically and delivered at far lower cost than people dreamt of 20 years ago.

So, all of those things eat away a little bit. It's still a very fine business. But those — I don't see anything that will reverse those trends. I don't think that they will necessarily accelerate.

But I think that, if the only thing you owned in life was a daily newspaper in a single-newspaper town 20 years ago, you would feel slightly less secure today than you did at that time. But you'd still be a lot better off than owning virtually any other business.

Charlie?

CHARLIE MUNGER: Nothing to add.

43. "Outside information" in annual reports

WARREN BUFFETT: How about zone 4?

AUDIENCE MEMBER: Mr. Buffett, my name is Hutch Vernon. I'm from Baltimore, Maryland.

I know that you read lots and lots of annual reports. And I'm curious what you are reading for, if you would share that with us.

But I'm more curious — because I think I know what you're reading for — if there are any disclosures — any further disclosures — that you would like to see companies make in their financial reporting, or that the SEC require in financial reporting or proxies or other communications with their shareholders? And that would be for both you and for Mr. Munger.

WARREN BUFFETT: Yeah. The main thing that they can't mandate in annual reports: I really like to have — I like to know as much as I can about the person that's running it and how they think about the business and what's really going on in the business.

In other words, I would like to have a report that would be identical to what — if I owned half of a company but was away for a year, and I had a partner who owned the other half — when I came back, that he would tell me about what had taken place during the past year and what he foresaw coming up and all of that.

I — that is what I think the purpose of the report is. Now, the SEC mandates a lot of information, and —

VOICE: — side on?

WARREN BUFFETT: — some of that is helpful. But there's an intent behind the report. I mean, if it's a sales document I'm, you know, I'm less interested. I'm — and —

I don't see any way to mandate what I'm talking about. But that's the kind of report I'm looking for.

What I'm trying to do as I read reports, A, I like to understand just generally what's going on in all kinds of businesses.

If we own stock in a company and in an industry, and there are eight other companies that are in the same industry, I want to own or be on the mailing list for the reports for the other eight, because I can't understand how my company is doing unless I understand what the other eight are doing.

I want to have the perspective of, in terms of market share, what's going on in the business or their margins or the trend of margins, all kinds of things that I can't get unless I know —

I can't be an intelligent owner of a business unless I know what all the other businesses in that industry are doing. And so, I try to get that information out of a report.

If I'm thinking about investing in a specific company, I try to size up their business and the people that are running it.

And over the years, I have found reading a lot of reports to be quite useful in terms of making business decisions at Berkshire.

If we own all of a business, I want to own shares in all of the competitors just to keep track of what's going on. And I want to be able to intelligently evaluate how our managers are doing that. And I can't do that unless I know the industry backdrop against which they're working.

It's amazing, you know, what — how well you can do in investing, really, with what I would call outside information. I find inside information — I'm not sure how useful that is.

But outside information — there's all kinds of information around, as to businesses. And you don't have to understand all of them. You just have to understand the ones that you're thinking about getting in. And you can do it, if you just — nobody will do it for you.

You can't read — in my view — you can't read Wall Street reports and get anything out of them. You have to do it yourself and get your arms around it.

I don't think we've ever gotten an idea, you know, in 40 years from a Wall Street report. But we've gotten a lot of ideas from annual reports.

Charlie?

CHARLIE MUNGER: What I find is that it takes a long time to read the annual report even if it's a comparatively simple business, because if you really are trying to understand it, it's not a bit easy.

WARREN BUFFETT: Yeah. I would say that, on average, in a business we're really interested in, even though we know what to skip, to some extent, and what to read, I mean, it's going to be 45 minutes or an hour on a report.

And if there are six or eight companies in the industry, that's going to be six or eight hours, perhaps, and then their quarterlies and a lot of other —

I mean, it — the way you learn about businesses is by absorbing information about them, thinking, deciding what counts and what doesn't count, relating one thing to another. And, you know, that's the job.

And you can't get that by looking at a bunch of little numbers on a chart bobbing up and down about a — or reading, you know, market commentary and periodicals or anything of the sort. That just won't do it. You've got to understand the businesses. That's where it all begins and ends.

44. "Berkshire is not a one-man show"

WARREN BUFFETT: Zone 5?

AUDIENCE MEMBER: Mr. Buffett, my name is Hank Strickland (PH). I'm from Fairfax, Virginia, which, if it were a city, would be the tenth largest in the United States. I'm here as a stockholder. And my daughter, who's also my broker, is here with me.

We were also out there Friday night when we watched you warming up for the beginning of the ballgame. And we noted that you didn't drop the ball. You seemed to be able to get it to the guy that was warming you up.

We noticed your first pitch, which I had difficulty characterizing as either being a passed ball or a wild pitch.

WARREN BUFFETT: It was a premature sinker, actually. (Laughter)

Very hard to hit, I might add. (Laughter)

AUDIENCE MEMBER: And, then, you moved spritely into the stands, did a lot of picture taking, photo opportunities, signed autographs, vaulted over a rail or two. And we noted, with great enthusiasm, your fitness.

Now that all having been said, many people would characterize Berkshire as a one-man company, with all due respect to Charlie. And many of this audience here, I'm sure, are retired or semi-retired. It's not unthinkable that, perhaps, you might want to retire, or for good — God's sakes —

WARREN BUFFETT: It's unthinkable. I don't want that one to go by. (Applause)

AUDIENCE MEMBER: Or for something — something worse could happen. And for those of us —

WARREN BUFFETT: That would be the worst, I think — (Laughter)

AUDIENCE MEMBER: Well I —

WARREN BUFFETT: I think death would be second. (Laughter)

AUDIENCE MEMBER: I could think of some things some of us might want to do to protect our sizeable investments, say, having owned Berkshire since Blue Shamp — Blue Chip Stamp days. But anyway, we could put in a stop order, might take out an insurance policy.

We might ask Charlie to masquerade as Warren after you've moved on. Those don't seem like very attractive options. So, I'm very serious now.

How would you respond to the question of a stockholder that's really concerned about Berkshire being a one-man show?

WARREN BUFFETT: Yeah. Well, Berkshire is not a one-man show. It's a two-man show, in terms of capital allocation. There's no question about that, at present.

But it's run by many managers that are doing an outstanding job and that don't need any guidance from Charlie or me as they go along.

But I might say that, you know, I will die with all of my Berkshire stock, essentially. And that will — stock will be held, either in the family or in a foundation, depending on the order of death, for a long time thereafter.

So, there's no one that's more concerned about the subsequent management issue than I. I mean, this is not something that ends, at all, on my death. And it doesn't end for the Buffett family or The Buffett Foundation. So, it's a subject that Charlie and I have both thought about.

The most likely situation — you got to get away from the idea that it's a one-man show because, right now, we've got 33,000 people working for Berkshire out there, you know, as we speak.

And I'm sitting around, you know, watching movies about myself or something. I mean, you can see how vital I am to the place. (Laughter) So the — but the question —

And the other thing we do, besides allocate capital, is we do identify these managers. And hopefully, we make it attractive for them to stay and work for Berkshire.

But that — you know, that doesn't require 150 IQ or anything to do that. It does require a certain sensitivity to why people want to get up in the morning and do what they do.

And when I'm not around, the logical, at some point — it depends on exactly when it happens, again. But Charlie's a little older than I am. And it's likely that it will be broken into a two-person function again, but not exactly the way Charlie and I function.

And that is that there will be someone in charge of investments and capital allocation. I mentioned Lou Simpson's position, because he is younger than I am, in the annual report, and then someone in charge of operations. And we have that person in the organization now.

Now, I don't know what the situation will be when I die, because it could be in 20 minutes or it could be in 20 years. And when that — so, I can't specifically name the individuals.

We have the individuals now for both those functions. We'll have the individuals for the same functions 20 years from now. I don't know whether they'll be the same people.

But it's quite a logical way to run the business. GEICO was run that way and still is run that way and has been for some years.

It's always struck me as terribly illogical, the way property-casualty insurance companies are run, because they've been dominated by the underwriting side of the business. And here they have this important investment side, but it's always been — virtually every company's been subservient to the underwriting.

And GEICO, very logically, set up a co-CEO arrangement some years back where — originally Bill Snyder before that — but Tony Nicely ran the underwriting end of the business and Lou Simpson ran the investment side.

And those are two very different functions. Same person, logically, doesn't fit both functions in most cases. I mean, it's a rarity when the same person happens to hit for both functions.

So GEICO worked very well that way. Still works that way. Lou runs investments. Tony runs underwriting.

And Berkshire — slightly different — it's a variant on it. But, essentially, at Berkshire headquarters, you need someone overseeing and not meddling in them too much, but making sure you've got the right manager and you're treating him fairly.

You need someone on the operating side. You need someone on the investment/capital allocation side. We've got those people now. And we'll have them, you know, whenever it happens, too.

That's the — that is the structure. And we've got some very good businesses.

And, you know, nobody's buying See's Candy because they think I'm sitting in some office in Omaha. And no one's buying a GEICO insurance policy because, you know, my name is there as chairman or CEO. The businesses are marvelous businesses. They'll continue very well.

And there will be a capital allocation problem then just like there is now. And there will be the problem of keeping good managers in place and treating them fairly. And that's a solvable problem.

So, that's the future as seen from Kiewit Plaza.

Charlie?

CHARLIE MUNGER: Yes. If you just run your mind through all the assets, I think you will quickly decide that there are large momentums in place that would do very well without us.

I mean, is Coca-Cola going to suddenly stop selling because some manager's dead at Berkshire Hathaway?

You know, are the people going to stop using Gillette razor blades? Is GEICO suddenly going to stop being intelligently run? Are — is the Nebraska Furniture Mart going to try any less hard?

So, the existing assets, you can argue, have been lovingly put together, so as not to require continuing intelligence at headquarters. (Laughter)

And what — there would be a disadvantage in that I think it would be unreasonable to expect that a successor would be as good at making new investments as Warren has been in the past. Well, that's just too damn bad. (Laughter and applause)

WARREN BUFFETT: The sympathetic ear over here. (Laughter)

45. Buffett doesn't answer individual letters

WARREN BUFFETT: Let's see, where are we? Zone 6 now?

AUDIENCE MEMBER: Mr. Buffett, I'm indebted to Walter Schloss for introducing me to you some 40 years ago. And finally in the early '80s, I became a stockholder.

My question is, now that you've expanded headquarters 9 percent from 11 people to 12 people — (laughter) — do you now more frequently answer letters from stockholders?

As a specific, had you looked at my letter from January 1986? (Laughter)

WARREN BUFFETT: We haven't gotten to January yet. (Laughter)

AUDIENCE MEMBER: Relating to Cap Cities/ABC and talk radio, the problem that occurred last month at cape — Cap Cities might have been prevented.

WARREN BUFFETT: You should get a form letter from us. But the — we do not — A, we do not get into the activities of our investee companies.

I mean, it — if people are unhappy about Coca-Cola or Gillette, and they shouldn't be — (laughs) — but if they happen to be, they should talk to the companies themselves. I don't interject myself into the management or operations of the investee companies.

In terms of questions about Berkshire — I put in the annual report a few years back — just running Berkshire takes up a fair amount of time, in terms of keeping track of a lot of businesses.

And it doesn't need to take up as much time as it does with me. But I enjoy it. But the — I feel that the annual report, the annual meeting, are the time to take up everything on shareholder's minds. And so, I don't answer one-on-one questions.

I get all kinds of letters. They want career guidance. They want advice on their business. I mean, there's a million letters that come in.

And it would really be — it would take a significant amount of time, that otherwise would be spent on Berkshire, to reply to that sort of thing. I may note them, in terms of what I address in subsequent annual reports.

But the annual meeting and the annual report, I feel, are the best ways to communicate with shareholders. And I really don't do it the rest of the year, although you will get some form reply or you should get some form reply on it.

AUDIENCE MEMBER: Thank you.

WARREN BUFFETT: Thanks. It's noon now. And I'd like to give everybody a chance to visit our other stores and everything. But we will be back here at 12:15.

Afternoon Session - 1996 Meeting

1. Investing with "the two wealthiest guys"

WARREN BUFFETT: OK, if we've got a monitor over in zone 1, we're ready to start.

AUDIENCE MEMBER: Yes. Thank you very much. My name is Maria Nicholas Kelly (PH). I'm from Tacoma, Washington.

And my husband and I have rather different investment approaches. And in 1988, he bought me one share of Berkshire, so that I could learn something about investing. We both started about that same time.

And he has chosen to invest in, let's say, about 40 different stocks and buying and selling, and doing rather well for us, frankly.

My approach is more simple. And basically, I finally figured out last year that I should invest in the companies of the two wealthiest men in the world.

So — (laughter) — I decided we should buy, monthly, more Berkshire and Microsoft. So, then this year — and so, we've been able to do that.

This year, we read in your report that Berkshire is selling "at a price at which Charlie and I would not consider buying it," so my husband has challenged my investment strategy. (Laughter)

I know that you are an honest man. And while you may not — (laughter) — you may not recommend to "my partner, Charlie," to buy more Berkshire at this time, do you recommend that I continue — (Buffett laughs) — my rather automatic investment buying of Berkshire?

And I wanted — I think I know the answer. But I wanted my husband to hear it from the horse's mouth. (Laughter)

WARREN BUFFETT: I think you're using me here. (Laughter)

AUDIENCE MEMBER: But —

WARREN BUFFETT: Well, I — we don't recommend selling it, but we don't recommend buying it, either. We are neutral on that subject.

And I hope you continue to be in with the two wealthiest guys. I like the other fellow, too. (Laughter)

AUDIENCE MEMBER: Thank you.

WARREN BUFFETT: Yeah.

2. American Express has "slipped" in credit cards

WARREN BUFFETT: Zone 2?

AUDIENCE MEMBER: Mr. Buffett, I am Harriet Morton from the Emerald City [Seattle], the same area, the land of Microsoft. And I have a couple small questions.

The first one is, recognizing your lack of interest in technology or sense of familiarity with it, I'm wondering if you'd give a few comments on Bill Gates as a manager.

But the second one, dealing with a business that you're familiar with, has to do with American Express.

Would you comment on American Express' strategy to deal with their declining market share in the credit card industry and the rising importance of debit cards? Thank you.

WARREN BUFFETT: I'm not sure I got that entirely, Charlie. Did you? I mean, I got the part about American —

CHARLIE MUNGER: She wanted you to comment on Gates as a manager and American Express as — with the problems in declining in market share.

WARREN BUFFETT: Well, the first part is very easy. You know, Bill Gates is, you know, one of the great managers of all time and is an exceptional business talent who loves his business.

And when you get that combination and a high energy level and, now, an heir to leave it to, I don't think you do much better than that.

American Express has, you know — has slipped over from where they were 20 years ago, obviously, in the credit card business. And I think they may have taken their customer a little bit for granted for a while.

I think [CEO] Harvey Golub is very focused on correcting that and has made some progress. But the credit card business is a very different competitive struggle now than it was 20 or 25 years ago.

Interestingly enough, American Express, itself, backed into the business. Because they were worried about what was going to happen to their traveler's check business, originally.

And they saw Diners Club come along. A fellow named Ralph Schneider and — started it. And they saw the inroads that were being made. So, the credit card was a reactive move. And for a

while, they really dominated the field. And of course, they still dominate the travel and entertainment part of it.

But credit cards are going to be a very competitive business over time. And you need to establish — American Express needs to establish — special value for its card in some way, or it gets more commodity-like.

It's not an easy business. But their franchise — they've got a strong franchise. It is not what it was 20 years ago, relative to the competition.

3. "A lot of mediocrity" among CEOs

WARREN BUFFETT: Zone 3?

AUDIENCE MEMBER: Good afternoon. My name is John Weaver. I'm a shareholder from Bellingham, Washington.

You have discussed what a wonderful business is. One of the criterias in your acquisition, page 23 of your annual report, is management.

Could you discuss how you decide what good management is and how you decide whether you have a good manager?

WARREN BUFFETT: The really great business is one that doesn't require good management. I mean, that is a terrific business. And the poor business is one that can only succeed, or even survive, with great management. And —

But we look for people that know their businesses, love their businesses, love their shareholders, want to treat them as partners. And we still look to the underlying business, though. We —

If we have somebody that we think is extraordinary, but they're locked into one of those terrible businesses, because we've been in some terrible businesses, and you know, the best thing you can do, probably, is get out of it and get into something else.

But there's an enormous difference, frankly — there's an enormous difference in the talent of American business managers.

The CEOs of the Fortune 500 are not selected like 500 members of the American Olympic track and field team. And it is not the same process. And you do not have the uniformity of top quality that you get with the American Olympic team in any sport. You do not get that in top management in American business.

You get some very able people, some terrific people, like a Bill Gates, that we just mentioned. But you get a lot of mediocrity, too.

And the test — I think, in some cases, that it's fairly identifiable, who has done an extraordinary job. And we like people that have batted .350 or .360, in terms of predicting that they're going to bat over .300 in the future.

And some guy says, you know, "I batted .127 last year. But I've got a new bat or a new batting coach," you know, some management consultant has come in and told them how to do it, supposedly.

We're very suspicious of that. So we don't like banjo hitters who suddenly proclaim that they can become power hitters.

And then we try to figure out what their attitude is toward shareholders. And that isn't uniform, either, throughout corporate America. It's far from uniform.

We still want them to be in a good business, though. I would emphasize that.

We feel that — I mean, I gave the illustration of Tom Murphy in the annual report.

I mean, no one had either the ability — no one could top his ability or integrity, in terms of the way he ran Cap Cities for decades. I mean, and you could see it in 50 different ways.

I mean, he was thinking about the shareholders. And he not only thought about them, he knew what to do to forward their interests, and —

In terms of building the business, he only built it when it made sense, not when it did something for his ego or to make it larger alone. He did it when it was in his shareholders' interests.

And they're not all Tom Murphys. But when you find them, and they're in a decent business, you want to bet very heavily and not make the same mistake I made by selling out once or twice, too. (Laughter)

4. "Diversification is a protection against ignorance"

WARREN BUFFETT: Zone — was that zone 3 or —? Yeah, zone 4.

AUDIENCE MEMBER: Yeah, my name is Mark Hake (PH). I'm from Scottsdale, Arizona.

And I am very interested in your policies on diversification and also how you concentrate your investments.

And I've studied your annual reports going back a good number of years, and there's been years where you had a lot of stocks in your marketable, equitable securities portfolio. And there was one year where you only had three, in 1987.

So, I have two questions. Given the number of stocks that you have in the portfolio now, what does that imply about your view of the market in terms of, is it fairly valued, that kind of idea?

And second of all, whenever you — it seems that, whenever you take a new investment, you never take less than about 5 percent and never more than about 10 percent of the total portfolio with that new position. And I wanted to see if I'm correct about that.

WARREN BUFFETT: Yeah. Well, on the second point, that really isn't correct.

We have positions which you don't even see, because we only listed the ones above 600 million in the last report. And obviously, those are all smaller positions.

Sometimes, that's because they're smaller companies, and we couldn't get that much money in. Sometimes, it's because the prices moved up after we'd bought them. Sometimes, it's because we may be selling the position down, even. So there's nothing magic.

We like to put a lot of money in things that we feel strongly about. And that gets back to the diversification question.

You know, we think diversification is — as practiced generally — makes very little sense for anyone that knows what they're doing.

Diversification is a protection against ignorance.

I mean, if you want to make sure — (laughter) — that nothing bad happens to you relative to the market, you own everything. There's nothing wrong with that. I mean, that is a perfectly sound approach for somebody who does not feel they know how to analyze businesses.

If you know how to analyze businesses and value businesses, it's crazy to own 50 stocks or 40 stocks or 30 stocks, probably, because there aren't that many wonderful businesses that are understandable to a single human being, in all likelihood.

And to have some super-wonderful business and then put money in number 30 or 35 on your list of attractiveness and forego putting more money into number one, just strikes Charlie and me as madness.

And it's conventional practice, and it may — you know, if you all you have to achieve is average, it may preserve your job. But it's a confession, in our view, that you don't really understand the businesses that you own.

You know, I base — on a personal portfolio basis — you know, I own one stock. But it's a business I know. And it leaves me very comfortable. (Laughter)

So you know, do I need to own 28 stocks, you know, to have proper diversification, you know? It'd be nonsense.

And within Berkshire, I could pick out three of our businesses. And I would be very happy if they were the only businesses we owned, and I had all my money in Berkshire.

Now, I love it — the fact that we can find more than that, and that we keep adding to it. But three wonderful businesses is more than you need in this life to do very well.

And the average person isn't going to run into that. I mean, if you look at how the fortunes were built in this country, they weren't built out of a portfolio of 50 companies. They were built by someone who identified with a wonderful business. Coca-Cola's a great example. A lot of fortunes have been built on that.

And there aren't 50 Coca-Colas. You know, there aren't 20. If there were, it'd be fine. We could all go out and diversify like crazy among that group and get results that would be equal to owning the really wonderful one.

But you're not going to find it. And the truth is, you don't need it. I mean, if you had — a really wonderful business is very well protected against the vicissitudes of the economy over time and the competition.

I mean, you know, we're talking about businesses that are resistant to effective competition. And three of those will be better than 100 average businesses.

And they'll be safer, incidentally. I mean, there is less risk in owning three easy-to-identify, wonderful businesses than there is in owning 50 well-known, big businesses. And it's amazing what has been taught, over the years, in finance classes about that.

But I can assure you that I would rather pick — if I had to bet the next 30 years on the fortunes of my family that would be dependent upon the income from a given group of businesses, I would rather pick three businesses from those we own than own a diversified group of 50.

Charlie?

CHARLIE MUNGER: Yeah, what he's saying is that much of what is taught in modern corporate finance courses is twaddle. (Laughter and applause)

WARREN BUFFETT: You want to elaborate on that, Charlie? (Laughter)

CHARLIE MUNGER: You cannot believe this stuff. I mean, it's modern portfolio theory and — yeah, it's —

WARREN BUFFETT: It has no utility. But you know, it will tell you how to do average. But, you know, I think anybody can figure out how to do average in fifth grade. I mean, it's just not that difficult, and —

It's elaborate. And you know, there's lots of little Greek letters and all kinds of things to make you feel that you're in the big leagues. But it — (laughter) — there is no value added. (Laughs)

CHARLIE MUNGER: I have great difficulty with it because I am something of a student of dementia — (laughter) — and I have —

WARREN BUFFETT: And we hang around a lot together. (Laughter)

CHARLIE MUNGER: And I get ordinarily — classified dementia, you know, on some theory, structure of models. But the modern portfolio theory, it involves a type of dementia I just can't even classify. (Laughter)

Something very strange is going on. (Buffett laughs)

WARREN BUFFETT: If you find three wonderful businesses in your life, you'll get very rich. And if you understand them — bad things aren't going to happen to those three. I mean, that's the characteristic of it.

CHARLIE MUNGER: By the way, maybe that's the reason there's so much dementia. If you believed what Warren said, you could teach the whole course in about a week. (Laughter)

WARREN BUFFETT: Yeah, and the high priests wouldn't have any edge over the laypeople. And that never sells well. (Laughter)

CHARLIE MUNGER: Right.

5. Downsizing is sometimes needed to correct excessive hiring in the past

WARREN BUFFETT: OK, zone — what, 5, are we over there?

AUDIENCE MEMBER: Yes. Good afternoon, Mr. Buffett, Mr. Munger, board of directors.

Wanted to ask, in looking ahead, do you see the trends of extensive outsizing, the offshoring, the downsizing, the expendable workforce, the rightsizing, the diminished commitment to company loyalty, and the greater emphasis on the short term, quick buck, bottom line versus your commitment to the long-term investment affecting your pool of investment possibilities and your decision processes?

And do you possibly think of creating new companies on your own?

WARREN BUFFETT: Well, I think that the trends you talk about, and the attention devoted to them, could have some effect, just in terms of how the public and Congress may feel toward business.

Historically, you know, every industry, at all times, is interested in downsizing or becoming more efficient.

Now, if the industry is growing, you can achieve efficiency by doing more work, or turning out more output, with the same people.

But you know, if you go back 150 years and look at the percentage of people in farming, for example, farming has downsized from being a very appreciable percentage of the American workforce to a very small percentage. And essentially, that's released people to do other things.

So, it's in the interest of society to get as much output in anything as it can per unit of labor input. It's very difficult on the individual involved.

And you know, it's no fun — I guess it's no fun being a horse when the tractor comes along, or a blacksmith, and when the car comes along. But the —

So, I don't quarrel with the activities. I quarrel, sometimes, with how it's done. And I do think there's been a certain lack of, in certain cases, some empathy or sensitivity in terms of the way it's being done.

You should try to make your businesses more efficient. We hope we're not in businesses that will require us to lay off people over time, because we hope that physical output grows, and that we become more productive and can keep the same number of people to get greater output.

Dexter Shoe has done a great job of that over time. They've become more and more productive. But they've sold more shoes instead of selling the same number of shoes and letting people go. But sometimes, industry trends —

I mean, at World Book, we have fewer people than we had a year or two ago. And we didn't — we don't have any answer to that.

Over time, we got out of the textile business. I wish we didn't have to. But we did not know how to run a textile company in New England and compete effectively.

Like I say, I would — I love avoiding those businesses. And to the extent we can, we will.

I mean, GEICO is going to add people over time. And I think Berkshire Hathaway's going to add people over time.

But I can't — but it is in the interest of society to do jobs more effectively. It's also in the interest of society, it seems to me, to take care, in some way, of the people that are affected by that activity. And either — in some cases, it may be retraining.

But in other cases, you know, it doesn't work so well if you're 55 years old, and you've been working in a textile mill all your life, and all of a sudden the guy that runs the place can't make any money out of selling your output. I mean, that's not the fellow's fault that's been working at the textile mill for 30 years.

So, there's a balance in that. I think that the attention that's come about lately, I think there's — to some degree, it was a media fad based on some particularly dramatic examples at a couple of companies.

I don't think there is more displacement going on now, as a percentage of the labor force, annually, than there was 10 years ago, in terms of reconstituting what people do. But it's gotten a lot of attention lately.

There could be a backlash on that, in terms of corporate tax rates or a number of things. And we might feel it in that direction.

We want, at Berkshire, to do everything as efficiently as we can. Part of that, in a big way, is not taking on a lot of people we don't need.

A lot of the mistakes that are being corrected now are because people got very fat. And their businesses got very fat in the past and took on all kinds of people they don't need. We see that in a lot of businesses that we're exposed to.

And as long as they're very prosperous, really, no one does very much about it. And then when the time comes, they all of a sudden find out they can get way more output.

The oil companies are a classic example. You know, the people, probably, actually needed to produce, refine, and market oil probably hasn't changed that much. But if you look at the employment relative to barrels produced, refined, and marketed, it's gone down dramatically over 20 years ago.

To me, it just means that they weren't being run that well 20 years ago. And it never should've occurred in the first place.

We don't want to take on more people than we need in any of our businesses, because we don't want to lay people off, either.

Charlie?

CHARLIE MUNGER: Well, if you put it in reverse, you'd say, name a business that has been ruined because it was over-downsized. I cannot think of a single one.

But if you asked me to name businesses that were half-ruined, or ruined, by bloat, I mean, I could just rattle off name after name after name.

It's gotten fashionable to assume that downsizing is wrong. Well, it may have been wrong to let the business get so fat that it eventually had to downsize.

But if you've got way more people than are needed in the business, I see no social benefit in having people sit around half employed or unemployed.

WARREN BUFFETT: You're very likely to compete against some guy, at some point, who doesn't have more people around than needed in the business, too. But it doesn't change. For the people involved, they've got real problems, and —

CHARLIE MUNGER: Warren, can you name one that has been ruined by over-downsizing? There must be one, but —

WARREN BUFFETT: Well, it's like Eisenhower said about Nixon. Give me a week, and I'll come up with something. (Laughter)

6. No layoffs at insurance operations due to reduced volume

WARREN BUFFETT: How about zone 6?

AUDIENCE MEMBER: Mr. Buffett, Mr. Munger, I'm Walter Kaye of New York City.

WARREN BUFFETT: We're glad to have you here, Walter.

AUDIENCE MEMBER: What?

WARREN BUFFETT: We're glad to have you here. Walter's been a good friend of ours.

AUDIENCE MEMBER: Thank you very, very much. You just make me more of an egomaniac, a humble egomaniac, by saying that.

I don't know if Mr. Munger's wife is here and Mrs. Buffett is here, but back East, where I come from, in New York, they say, "When people — when men are successful, it's their wife's doing. But if they're a failure, it's because they're lazy." (Laughter)

But anyhow, I just wanted to, again, thank you very much. You've done such great things for our family. It's absolutely incredible.

And to those of you who don't know these two gentlemen, besides being financial geniuses, and you all know Mr. Buffett and, somewhat, Mr. Munger, too, they're the finest human beings you'll ever meet. I mean, just the way they explained this downsizing is the most intelligent thing that I've ever heard.

And eventually, like, you know, these people eventually find work. They have to be reeducated and everything like that.

But one point of business I'd like to ask you, if you don't mind. I have been noticing that there has been a tremendous amount of new capital going into reinsurance carriers.

And I was wondering if you could make a few comments about that, if you think that will affect the reinsurance business — have any effect on the insurance business in general, because, as you know better than I, we're still in a very soft market.

And there isn't a month that goes by that I don't hear of some new reinsurance carrier, whether in Bermuda or London or somewhere. Thank you.

WARREN BUFFETT: OK. Walter knows more about insurance than I do. But I'll, nevertheless, comment on that.

There has been a fair amount of capital. And there was a rush of it about, I'd say, maybe three years ago into the reinsurance business.

But there has been capital come in, and that is negative for our business. I mean, because any capital that's brought in, basically, will get employed.

We are willing, at Berkshire — and we do it — we are willing to sit on the sidelines in the reinsurance business.

We'll offer quotes. But somebody that — will cut those prices substantially, if they've got a lot of capital and want to keep busy. And if you've got a lot of capital in this business, or if you attracted a lot of capital, you will do something. You might like to do something smart, but if need be, you'll do something dumb.

You'll rationalize it, so you think it's smart. But you will do it. You won't just sit there and write the shareholders at the end of the year and say, you know, "We asked you for $300 million last year. And we'd like to report that it's all safely in a bank account at Citicorp." It just doesn't work that way.

So they will go out and do something. People don't like to sit around all day and do nothing.

And that means that prices will get cut under certain circumstances. And those circumstances — that's happening now.

We will — at Berkshire, we do have a rule about downsizing on that. We have promised people, at all of our insurance operations, that we will never have layoffs because of a drop in volume. We do not want the people who run our insurance business to feel they have to write X dollars in order to keep everybody there.

We can afford some overhead around that's costing us a little money for lack of using it at full capacity, because it isn't that much, relative to the size of our insurance operation.

What we can't afford are people feeling some internal compulsion to keep writing business in order to keep their job. So, we have a strong policy on that.

And if the business falls away, in terms of price, we won't be doing business. But we will be around to do business in a big way when the circumstances reverse.

They reversed in the casualty business for a while in 1985 or thereabouts. And we did a terrific amount of business.

They reversed in catastrophe reinsurance four or five years ago, and we became very active in that, and —

We will have times that are very good for us in insurance. It's a lot like investments. If you feel you have to invest every day, you're going to make a lot of mistakes. It just — it isn't that kind of a business. You have to wait until you get the fat pitch.

And in insurance, it's similar. You do not — if we had a budget for premium volume for our insurance companies, it would be the dumbest thing we could do, because they would meet the budget.

They could meet any budget I set out. I could tell some operation that wrote a hundred million last year to write 500 million this year, and they would meet it, you know, and I would be paying the bills for decades to come, so —

It's a very illogical way to try and plan 8 or 10 percent-a-year growth.

Now, GEICO is a different story in that GEICO is a business that is the low-cost operator and can attract, from a huge pool, business at, I think, a very good rate of growth simply by letting people know what's available out there. So that is a business that I see growing under almost any circumstances.

But our reinsurance business will swing around enormously, in terms of volume, based on what the competitor is doing. And what the competitors are doing depends, to a great extent, on how much money they've got burning a hole in their pocket.

And right now, it's going one direction. But it will change, I mean, just like investment markets change, you know. I've been through at least a half a dozen periods where people think, you know, they're never going to get a chance to buy securities at intelligent prices. And it always changes.

In the insurance business, people that misprice their policies will pay the price for it. And the world will still need insurance. And we will still be there.

7. International expansion for GEICO would be dangerous distraction

WARREN BUFFETT: Zone 7? Oh, we don't have any. I guess we have everybody in here now, so we'll go back to zone 1.

AUDIENCE MEMBER: Mr. Buffett, salutations from Portugal. I am from Portugal. My name is Herculano Fortado (PH). I have been a shareholder of your company since it was traded on the NASDAQ.

And I hold the shares and went on accumulating year after year, whenever funds were available and were at my disposal.

Now, a little bit about my history. As a student, I am from India. I was born in India, of Indian parentage. And my parents were very modest and could not afford me higher education. I started my school —

WARREN BUFFETT: I think maybe you'd better just get to the question, though, if you will, please.

AUDIENCE MEMBER: Yes. And then started writing insurance, life insurance, for a company which was a subsidiary of American Life.

My question now is this. I am now living in Portugal, and I see that the European market is developing and Berkshire Hathaway is having a very big slice of insurance investments.

They don't seem to be operating in the new markets that are emerging in Europe, and as well as in countries like India or the Pacific area, where the human — two-thirds of human beings are living.

Is there a policy or a plan, on the part of Berkshire Hathaway, to diversify and internationalize their insurance business? This is my only question.

WARREN BUFFETT: Thank you.

The reinsurance business of Berkshire Hathaway is totally international. I mean, we deal with risks all over the world. We deal with companies all over the world.

And that's the nature of the reinsurance business, generally, although there might be some that would be more specialized to this country, but —

We are quite willing to take on risks around the world, although they have to be risks with a large premium. I mean, that's the nature of our reinsurance business. We're not in the retail end of the business.

But we do that worldwide. And we'll continue to do that worldwide, because there are huge risks that exist for primary insurers around the world. And they need somebody to lay them off on.

Now, whether they will pay the proper price is another question. And it may be a little more difficult, in a few jurisdictions, to do business than in others. But that's an international operation.

GEICO has two-and-a-fraction percent of the U.S. auto market. We have about 2 1/2 million policyholders. There are over a hundred million in the country.

And there is such an opportunity here that it would be diversionary to go into other countries with GEICO.

There's been a firm that was very successful over in England that introduced a somewhat GEICO-like operation about 10 years ago. And they did very well. They are now encountering more competition. And their results are falling off somewhat, but —

There's a huge potential for GEICO in this country. And I would not want the management of GEICO to be going off in other directions now, when there's so much to be done here.

I mean, three percentage points on our growth rate here, for example, you know, would be 75 million or so of volume. And that, in turn, would keep compounding over time. Well that — there's too much to do here before we set up some startup operation around the world.

And there are actually various problems in a lot of jurisdictions in — to run a GEICO-like operation — although I wouldn't say that that prevails every place. I mean, there could be opportunities. But the opportunity here in this country is huge. And the management of GEICO is focused.

I love focused management. The management of — if you read the Coca-Cola annual report, you will not get the idea that Roberto Goizueta is thinking about a whole lot of things other than Coca-Cola.

And I have seen that work time after time. And when they lose that focus — as, actually, did Coke and Gillette both, at one point 20 to 30 years ago somewhat — it shows up.

I mean, it — two great organizations were not hitting their potential 20 years ago. And then they became refocused. And what a difference it makes. It makes tens of billions of dollars' worth of difference, in terms of market value.

GEICO actually started — they started fooling around in a number of things in the early '80s, and they paid a price to do it. They paid a very big price.

They paid a direct price, in terms of the cost of those things, because they almost all worked out badly. And then they paid an additional price in the loss of focus on the main business.

That will not happen with the present management. Tony Nicely thinks about nothing else but doing — carrying the GEICO message to people who — that 97 1/2 percent or so that are not policyholders. And that will work very well for us over time.

Charlie?

CHARLIE MUNGER: We are indirectly in all of these emerging markets through Coca-Cola and Gillette. So, it isn't true that we're totally absent.

WARREN BUFFETT: No. Well, at Coca-Cola the international markets are 80 percent of profits — actually, a little more.

Gillette, I think they're about 70 percent or so. So, the — we love the international aspects of the Coca-Cola or Gillette businesses. And that's a very major attraction.

But the management of those companies is focused on that. But they are doing — they have distribution systems, and they have recognition, and they've got a lot going for them over there. But the beauty of it is that they're maximizing what they do have going for them, which was not the case 20 years ago.

They just sort of let it go more by default, and they started fooling around with a lot of diversification. And you know, basically, that has not worked that well. So, we like focus. We love focus.

CHARLIE MUNGER: Yeah, and doing it indirectly, as we've done, one can argue that we, thereby, do it a lot better. (Laughter)

WARREN BUFFETT: We won't explore the implications of that. (Laughter)

8. Shareholders boost Borsheims sales

WARREN BUFFETT: Zone 2?

AUDIENCE MEMBER: My name's George Olson (PH). I'm from Atlanta, Georgia. I have a couple quick questions for you.

First of all, I'd like to have your comments on the USAir preferred that were — they're several quarters in arrears on.

And secondly, I was wondering about the Borsheims report from yesterday. You usually comment on that. (Laughter)

WARREN BUFFETT: Well, Susan Jacques, who runs Borsheims, called me this morning. And her voice was hoarse but happy, and — (Laughs)

Borsheims — that comparable day last year was the biggest day of the year. And it was about 60 percent up this year, so — I'm — you've done your part. (Applause)

CHARLIE MUNGER: We are starting a new custom at Berkshire Hathaway's annual meetings. A shareholder came up to me and asked for my autograph on his sales slip from Borsheims — (laughter) — which was a $54,000 watch.

Now, that is the kind of autographs we like to give. (Laughter and applause)

And so our message to you all is, "Go thou and do likewise." (Laughter)

WARREN BUFFETT: It wasn't a member of Charlie's family, incidentally. (Laughter)

9. USAir investment has improved, but was still a mistake

WARREN BUFFETT: The USAir preferred, as I mentioned in the annual report, it looks considerably better than it did 18 months ago or thereabouts.

But their fundamental problem — and Steve Wolf has said this — the new CEO of USAir — the fundamental problems are there. And they either address and correct those fundamental problems, or those problems will address and correct them. (Laughter)

And the — you know, their costs are out of line. Their costs are those that are relics of a regulated, protected environment. And they are not in a regulated, protected environment. And so far, they have not had any great success in correcting the situation.

Knowing Mr. Wolf, I'm sure he is, you know, focused entirely on getting that changed. And he will need to get it changed. And he — his record has been pretty successful at that.

So, we're a lot better off with our US Air preferred than we were 18 months ago, but it still is a mistake I made.

And we would've been a lot better off if I'd just, as Charlie says, gone out to a bar that night instead. (Laughter)

You got any comments, Charlie, on USAir? He doesn't want to comment. It may sound like it's his deal. (Laughter)

CHARLIE MUNGER: It's, plainly, worth a lot more than it was last year. (Laughter)

10. Newspapers may evolve, but won't disappear entirely

WARREN BUFFETT: And with that, we'll move to zone 3. (Laughter)

AUDIENCE MEMBER: Hi, David Winters, Mountain Lakes, New Jersey.

Without ruining my fun, can you give me a few hints about how I should think about calculating the intrinsic value — (Buffett laughs) — of the insurance businesses?

And secondly, I'm wondering about, not that you can foretell the future, either one of you, but with regards to newspapers, is there any concern that it goes the way of the printed World Book and Blue Chip Stamps?

WARREN BUFFETT: It could — I think it's very — I'll answer the second part first.

I think it's very unlikely — very, very unlikely, you know, down to a few percentage points, that newspapers will go the way of Blue Chip Stamps.

World Book is a different story. World Book has got — they have a reasonable shot at a decent future. But it's not automatic.

But the newspaper, it may be configured somewhat differently. It may get a different percentage of its revenue from circulation and advertising than it does. I mean, there may be some evolutionary-type changes in it. But it's still a bargain.

It is a bargain to anybody that is interested in their community. It's still a bargain to a great many advertisers.

We spend a lot of money advertising in newspapers in our various businesses. And we feel we are getting our money's worth, obviously. And it works.

But it just doesn't have the lock that it used to have on the business.

11. Why $7B of insurance float is better than $7B of cash

WARREN BUFFETT: Now, what was the other question about?

Did you want to repeat the first one?

AUDIENCE MEMBER: (Inaudible)

WARREN BUFFETT: Oh, yeah, the question about the insurance business, the intrinsic value.

I would say this. We have — I'm not going to give you a precise answer, but I will tell you this.

We have 7 billion, presently, of float. That's the money we're holding that belongs to someone else but that we have the use of.

Now, if I were asked, would I trade that for $7 billion and not have to pay tax on the gain that would result if I did that, but I would then have to stay out of the insurance business forever — total forever non-compete clause of any kind in insurance — would I accept that? And the answer is no.

Now, that is not because I would rather have 7 billion of float than 7 billion of net proceeds of free money. It's because I expect the 7 billion to grow.

And if I'd made that trade — that I'm just suggesting now — if I'd made that 27 years ago and said, "Will you take 17 million for the float you have, no tax to be paid, the float for which you just paid 8-million-7 when we bought the companies, and gotten out of the insurance business," I might've said yes in those days, but it would've —

CHARLIE MUNGER: Oh, you would've?

WARREN BUFFETT: Yeah. (Laughter) Yeah.

CHARLIE MUNGER: No, he keeps learning. That's one of his tricks. (Laughter and applause)

WARREN BUFFETT: That's probably true in this case. I'm not sure about other cases.

But it would've been a terrible mistake. It would've been a mistake to do it 10 or 12 years ago with 300 million.

It is not worth $7 billion to us to forego being in the insurance business forever at Berkshire Hathaway.

Even though it would all be, you know, it would be — if it were nontaxed profits, so we got the full 7 billion, pure addition to equity — we would not take it. And we wouldn't even think about it very long. So as Charlie says, that is not the answer that we would've given some time back. But it's a very valuable business.

It has to be run right. I mean, GEICO has to be run right. The reinsurance business has to be run right, National Indemnity, the Homestate Company. They all have to be run right. And it's not automatic.

But they have the people, the distribution structure, the reputation, the capital strength, the competitive advantages. They have those in place. And if nurtured, you know, they can become more valuable as time goes by.

12. Keeping more mortgages has increased Freddie Mac's risk a "tiny bit"

WARREN BUFFETT: Zone 4?

AUDIENCE MEMBER: Yes. I'd like to ask the chairman and Mr. Munger about Freddie Mac.

A few years ago, I think they were earning most of their money from the guarantee fees and the float. Now, they've got the huge balance sheet, a lot of short-term liabilities.

Do you think that's a more risky business now and that the spread might go away in some, you know, less-than-foreseen event?

WARREN BUFFETT: Charlie, I think he aimed that one at you. (Laughter)

CHARLIE MUNGER: It's probably slightly more risky, but I don't think they're taking horrible risks. It's still a very good business.

WARREN BUFFETT: Yeah, what the question referred to is that, formerly, Freddie Mac emphasized, normally, just the guarantee of credit and then passed all interest rate risk onto the market.

Now, they've retained, for their portfolio, a greater percentage of the mortgages that come through their hands.

I think they've structured the liabilities quite intelligently to handle what they call in the investment world "the convexity problem," but — which is that the borrower has the option of calling off the deal tomorrow or retaining it for 30 years. And that is a very disadvantageous contract to enter into, if you lend money.

They have done quite an intelligent job of attacking that by callable debt and various things. But you can't address a problem like that totally. There is no way to set up some model that satisfies that entire risk.

They've done a good job. But as Charlie says, the larger the portfolio, as compared to guarantee fees — because you've still got the — you got the credit risk on the portfolio, and you've added a little interest rate risk at the extremes.

And it doesn't keep us up nights, but it's a tiny bit riskier than it used to be.

13. Don't wait for downturn to buy a great company

WARREN BUFFETT: Zone 5?

AUDIENCE MEMBER: (Inaudible) — I'm the guy who asked you my question, my family last year — (inaudible) — my mom. This guy said fine, so I — (inaudible) — (laughter).

I know you said do what you want. I just wanted to let you know that —

WARREN BUFFETT: Well, you did what you wanted. I mean, you followed my advice. (Laughter)

I'm batting 1.000. We'll see what you're batting next year. (Laughter)

AUDIENCE MEMBER: I had one quick question — (inaudible) — you said, if you have three great companies, wonderful businesses, they could last you a lifetime.

And I have — one thing that struck me in a way that — (inaudible) — great businesses get pounded down. And then you bet big on them, like American Express and Disney at one time.

And my question is, I have capital to invest, but I haven't yet invested it. I have three great companies, which I've identified: Coca-Cola, Gillette, and McDonald's.

And my question is, if I have a lifetime ahead of me, where I want to keep an investment for more than 20 or 30 years, is it better to wait a year or two to see if one of those companies stumble, or to get in now and just stay with it over a long time horizon?

WARREN BUFFETT: Yeah. Well, I won't comment on the three companies that you've named.

But in general terms, unless you find the prices of a great company really offensive, if you feel you've identified it —

And by definition, a great company is one that's going to remain great for 30 years. If it's going to be a great company for three years, you know, it ain't a great company. I mean, it — (Laughter)

So, you really want to go along with the idea of something that, if you were going to take a trip for 20 years, you wouldn't feel bad leaving the money in with no orders with your broker and no power of attorney or anything, and you just go on the trip. And you know you come back, and it's going to be a terribly strong company.

I think it's better just to own them. I mean, you know, we could attempt to buy and sell some of the things that we own that we think are fine businesses. But they're too hard to find.

I mean, we found See's Candy in 1972, or we find, here and there, we get the opportunity to do something. But they're too hard to find.

So, to sit there and hope that you buy them in the throes of some panic, you know, that you sort of take the attitude of a mortician, you know, waiting for a flu epidemic or something, I mean — (laughter) — it — I'm not sure that will be a great technique.

I mean, it may be great if you inherit. You know, Paul Getty inherited the money at the bottom, in '32. I mean, he didn't inherit it exactly. He talked his mother out of it. But — (laughter) — it's true, actually.

CHARLIE MUNGER: Close enough.

WARREN BUFFETT: Yeah, close enough, right?

But he benefitted enormously by having access to a lot of cash in 19 — in the early '30s — that he didn't have access to in the late '20s. And so, you get some accidents like that.

But that's a lot to count on. And you know, if you start with the Dow at X, and you think it's too high, you know, when it goes to 90 percent of X, do you buy?

Well, if it does, and it goes to 50 percent of X, it gets — you know, you never get the benefits of those extremes anyway, unless you just come into some accidental sum of money at some time.

So, I think the main thing to do is find wonderful businesses.

Is Phil Carret here? We've got the world —there's the hero of investing. Phil, would you stand up?

Phil is 99. He wrote a book on investing in 1924 ["Buying a Bond"]. (Applause)

Phil has done awfully well by finding businesses he likes, and sticking with them, and not worrying too much about what they do day to day.

There's going to be — I think there's going to be an article in the Wall Street Journal about Phil on May 28th, and I advise you all to read it. And you'll probably learn a lot more than by coming to this meeting, but —

It's that approach of buying businesses — I mean, let's just say there was no stock market. And the owner of the best business in whatever your hometown is came to you and said, "Look it, you know, my brother just died, and he owned 20 percent of the business. And I want somebody to go in with me to buy that 20 percent.

"And the price looks a little high, maybe, but this is what I think I can get for it. You know, do you want to buy in?"

You know, I think, if you like the business, and you like the person that's coming to you, and the price sounds reasonable, and you really know the business, I think, probably, the thing to do is to take it and don't worry about how it's quoted. It won't be quoted tomorrow, or next week, or next month.

You know, I think people's investment would be more intelligent, you know, if stocks were quoted about once a year. But it isn't going to happen that way, so —

And if you happen to come in to some added money at some time when something dramatic has happened — I mean, we did well back in 1964, because American Express ran into a crook.

You know, we did well in 1976, because GEICO's managers and auditors didn't know what their loss reserves should've been the previous couple of years.

So, we've had our share of flu epidemics. But you don't want to spend your life — (laughs) — waiting around for them.

14. "Change is likely to work against us"

WARREN BUFFETT: Zone 6.

AUDIENCE MEMBER: I'm Joe Condon (PH) from London.

Both Mr. Buffett and Mr. Munger have addressed my question in annual reports and at previous meetings here. This is my first time. It has to do with investment in a few great, high-technology stocks.

I know your answer has been that, if you don't understand it, and I can't, after this performance, can't really believe that both of you don't understand most of the high-technology questions. But I'm thinking about not only Microsoft but, say, Pfizer and J&J.

All three companies, which have already proven that not only do they have a great product, proven management over 10 to 15 years, great market share positions, which are not easy to get into.

And I, frankly, don't see a big difference in the P/E ratios, for example, you could say, Coca-Cola, or, you know, against Johnson & Johnson or Pfizer, which are very powerful companies. I wonder if either or both of you would address that question again.

WARREN BUFFETT: Charlie, why don't you? (Laughter)

CHARLIE MUNGER: If you have something you think you understand that looks very attractive to you, we think it's smart to do what you understand. If — we've been unable to find companies that fit our slender talents.

We well might have been in the Pfizers and Microsofts and so forth. But we've never had to revert to it.

We don't sneer at it. Other people with more talent have found that a wonderful course of action.

WARREN BUFFETT: We generally look at businesses — we feel change is likely to work against us. We do not have great ability — we do not think we have great ability to predict where change is going to lead.

We think we have some ability to find businesses where we don't think change is going to be very important.

Now, at a Gillette, the product is going to be better 10 years from now than now, or 20 years from now than 10 years from now. You saw those earlier ads going back to the Blue Blade and all that. The Blue Blade seemed great at the time. But they keep — the shaving technology gets better and better.

But you know that Gillette — although they had that little experience with Wilkinson in the early '60s — but you know that Gillette is basically going to be spending many multiples the money on developing better shaving systems than exist now, compared to anyone else.

You know, they've got the distribution system. They've got the believability. If they bring out a product, and they say, "This is something that men ought to look at," men look at it.

And they found out here a few years ago that the same thing happened when they said to women to look at it in the shaving field. They wouldn't have that same credibility someplace else. But in the shaving field, they have it.

Those are assets that can't be built. And they're very hard to destroy.

So change — we think we know, in a general way, what the soft drink industry or the shaving industry or the candy business is going to look like 10 or 20 years from now.

We think Microsoft is a sensational company run by the best of managers. But we don't have any idea what that world is going to look like in 10 or 20 years.

Now, if you're going to bet on somebody that is going to see out and do what we can't do ourselves, I'd rather bet on Bill Gates than anybody else.

But that — I don't want to bet on anybody else. I mean, in the end, we want to understand, ourselves, where we think a business is going. And if somebody tells us the business is going to change a lot, in Wall Street, they love to tell you that, you know, that's great opportunity.

They don't think it's a great opportunity when Wall Street itself is going to change a lot, incidentally. (Laughter)

But they — you know, it's a great opportunity. We don't think it's an opportunity at all. I mean, we — it scares the hell out of us. Because we don't know how things are going to change.

We are looking, you know — when people are chewing chewing gum, we have a pretty good idea how they chewed it 20 years ago and how they'll chew it 20 years from now. And we don't really see a lot of technology going into the art of the chew, you know? (Laughter) So, that —

And as long as we don't have to make those other decisions, why in the world should we? I mean, you know, if I — all kinds of things, we don't know. And so, why going around trying to bet on things we don't know, when we can bet on the simple things?

Zone 1? (Applause)

I can see the shareholders like us sticking with the simple ones. They understand us, yeah.

15. We don't reveal more about our stocks than we have to

AUDIENCE MEMBER: Good afternoon, Warren. Jerry Zucker (PH), Los Angeles, California.

In the annual report, the second-largest holdings of unsecured securities are labeled, "Others."

Could you please expand on some of the holdings there? Like, do we still own PNC? And are we supposed to be buying Big Macs, as the press has reported?

WARREN BUFFETT: Yeah, well, actually, it's a very descriptive title, "Others." (Laughter)

We do that for several reasons. But one is that we have no interest in people buying Berkshire or looking at the Berkshire report or anything else, in order to generate investment ideas for themselves. Some people may do it, but we are not in that business.

Berkshire Hathaway shareholders are not being paid for that. There is no way it benefits the owners of the company.

So, we will not disclose, in the way of our security holdings, more than we feel we have to disclose in order to be fair about things that can be material to the company.

And we certainly have no interest in disclosing them to people who, essentially, want to use the information to try and figure out where our buying power may be, subsequently, or something of the sort.

So, we will keep raising the cutoff level. And you may see more and more in others.

And I will say this. There's a lot of speculation about what we do, in the press, and I'd say about half of it's accurate and about half of it's inaccurate.

And again, we leave to you the fun of figuring out which half is right. (Laughter)

Yeah, we hope you get a lot for your money in buying a share of Berkshire. But we don't want to act as an investment advisory service.

16. Buffett isn't worrying about the Y2K computer problem

WARREN BUFFETT: Zone 2?

AUDIENCE MEMBER: David Coles, Appleton, Wisconsin.

Earlier, you made reference to the vicissitudes of time. What are the plans to ensure that all the computer systems and companies in which Berkshire has an interest will function correctly with dates of January 1st of the year 2000 and beyond?

And what will you do to reassure shareholders that we will not suffer serious business loss or failure due to incorrect handling of these dates by computer systems?

WARREN BUFFETT: Well, actually, I've got a friend that's quite involved in the — (laughter) — question of — no, I'm serious about that — the 2000 question with computers. But that's the kind of thing I don't worry about.

I mean, I will let the people who run the operating businesses work on that. And I'll work on capital allocation. And I have a feeling, one way or another, we'll get through it.

But like I say, we have — there are a lot of things at Berkshire we don't — (applause) — we don't spend a lot of time on a lot of things at the headquarters that other companies have whole departments on.

And our managers have not let us down. I mean, I must say that we've got a group at one business after another. And they focus on their business. And they mail the money to us in Omaha. And we're all happy. (Laughter)

Charlie?

CHARLIE MUNGER: I have the feeling that our people will be quite good at keeping the computer systems in order and with backups. I also have the feeling that few companies could handle a big computer snafu better than we could.

I have the feeling the Coca-Cola stock would be there. The Gillette stock would be there. The Nebraska Furniture Mart would be full of furniture and know the customers.

I don't think a computer crash is going to do us in.

WARREN BUFFETT: Yeah. You're correct, though, that that is a problem for the computer world. But as Charlie says, it'll hit other people a lot harder than it hits us.

Most of the things — we try to be in businesses that are fairly simple and that can't get all messed up.

And by and large, I think that we've got an unusual portfolio of those. And when it gets to our investees, you know, they're going to worry about those problems themselves.

We really worry about allocating money around Berkshire and having the right managers in place. That — if we can do those two right, everything else'll take care of itself.

17. Berkshire businesses are "way easier to predict"

WARREN BUFFETT: Zone 3?

AUDIENCE MEMBER: My name is Peter Bevelin from Sweden.

You have said that you like franchise companies, companies that have — that are castles surrounded by moats, companies that are possible to — you can have some prediction five, 10 years down the road.

But aren't businesses like See's Candy, the furniture business, the jewelry business, the shoe business, businesses that are hard to predict the future, five, 10 years down the road?

WARREN BUFFETT: What was that on the last part of that?

CHARLIE MUNGER: Aren't these businesses hard to predict five or 10 years down the road?

WARREN BUFFETT: Yeah, I think —

CHARLIE MUNGER: Things like shoe business and —

WARREN BUFFETT: I think they're far easier to predict than most businesses. I think I can come closer to telling you the future of virtually all of the businesses we have, and not just because we have them — I mean, if they belonged to somebody else — than if I took the Dow 30, excluding the ones we own, or you know, the first 100 companies alphabetically on the New York Stock Exchange.

I think ours are way easier to predict. There are fair — they tend to be fundamental things, fairly simple. Rate of change is not fast, so I feel pretty comfortable.

I think, when you look at Berkshire five years from now, the businesses we have now will be performing pretty much as we've anticipated at this time.

I hope there are some new ones, and I hope they're big ones. But I don't think that we'll have had lots of surprises in the present ones.

My guess is we'll have had one surprise. I don't know what it'll be. But I mean, you know, that happens in life. But there won't be a series of them.

Whereas, if you — if we were to buy — if we owned a base metals business or many retailing businesses I can think of, or an auto business, I'm not sure I'd know where we would stand in the competitive pecking order five or 10 years from now.

I would not want to try and come in and displace See's Candies, for example, in the business it does, or the Furniture Mart. It's not an easy job.

So, I don't think you'll get lots of surprises with the present businesses of Berkshire, but the key is developing more of them.

18. Eisner is "most important factor" in Disney's success

WARREN BUFFETT: Zone 4?

AUDIENCE MEMBER: My name is Stafford Ordahl. I'm from Morris, New York.

I was just wondering if the surprise could be coming from Disney. Because it seems to me they've been coasting, up until very recently, on the efforts of a person that's no longer with

the company, [Jeffrey] Katzenberg, who is one of those rare geniuses, like [filmmaker Steven] Spielberg, that has his finger on the pulse of the American people.

And that — they don't come along every day, even in Hollywood.

They might be a very different company now that all of his efforts are, so to speak, out of the pipeline.

WARREN BUFFETT: Yeah. Have you finished, or —?

AUDIENCE MEMBER: Yes.

WARREN BUFFETT: Yeah, I — Katzenberg is a real talent. I would say that, by far, I mean, by far, the most important person at Disney in the last 12 years, or whatever it's been, has been [CEO] Michael Eisner.

I mean, if you know him and what he has done in the business, there's no one — [former President and Chief Operating Officer] Frank Wells did a terrific job in conjunction with Eisner.

But Eisner has been the "Walt Disney," in effect, of his tenure. He knows the business. He loves the business. You know, he eats and lives and breathes it. And he has been, in my view, by far, the most important factor in Disney's success.

Now, they face competition. The money is in — you know, the big money is in the animated films and everything that revolves around that, because you go from films to parks to character merchandising and back. And I mean, it's a circular sort of thing, which feeds on itself. There's going to be plenty of competition in that.

I mean, they've — you know, you've seen what MCA and Universal's going to do in the parks in Florida. And you know what DreamWorks is going to do in animation. And now, you've got new technology in animation, you know, through [Pixar CEO Steve Jobs.] And there's a lot of things going on in that field.

So the question is, 10 years from now, what place in the mind — because it's a share of mind. You know, they call it share of market, but it starts with share of mind — and what place in the mind of billions of children around the world, and their parents, does Disney itself have, and their characters, relative to that owned by other organizations and other characters?

And it's a competitive world, so there will be people fighting for that. But I would rather start with Disney's hand than anyone else's, by some margin. And I would rather start with Michael Eisner running the place than with anyone else, by some margin.

So that does not mean that it can't become a much more competitive business. Because people look at the video releases of a "Lion King," and they salivate.

You know, you sell 30 million copies of something at whatever it may be, 16 or $17, and you can figure out the manufacturing cost. And you know, it gets your attention. And it gets your competitors' attention.

But going back, if I had to — if I thought the children of the world were going to want to be entertained 10 or 20 years from now, and I had my choice of betting on who is going to have a special place, if anyone has a special place, in the minds of those kids and their parents, I think I would probably rather bet on Disney.

And I would feel particularly good about betting on them, if I had the guy who has done what Eisner has done over those years presiding in the future.

Charlie?

CHARLIE MUNGER: Well, I think it helps to do the simple arithmetic. Suppose you have a billion children of low-middle income 20 years from now. And suppose you could make $10 per year per child, after taxes, from your position. It gets into very large numbers.

And — (laughter) — I don't know about your children and grandchildren, but mine want to see Disney. And they want to see it — (applause) — over and over and over again. They don't want to see Katzenberg. (Laughter)

WARREN BUFFETT: Well I —

CHARLIE MUNGER: I mean, in terms of the trade name. (Laughter)

WARREN BUFFETT: It's a pretty good trade name. I mean, when you think about names around the world, it's interesting that, you know, it's very hard to beat the name Coca-Cola. But Disney's got a — it's very, very big name.

And Charlie's point that they want to see them over and over again, and it's kind of nice to be able to recycle Snow White every seven or eight years. You hit a different crowd.

And — (laughter) — it's kind of like having an oil field, you know, where you pump out all the oil and sell it. And then it all seeps back in over seven or eight years. (Laughter)

19. Why Wall Street businesses are "tough" to manage

WARREN BUFFETT: Zone 5?

AUDIENCE MEMBER: I'm Randall Bellows (PH) from Chicago. Thank you for this marathon question-and-answer period.

WARREN BUFFETT: We enjoy it. Thanks.

AUDIENCE MEMBER: Thank you. My question is on the security business, Wall Street firms, in general, and specifically, what you feel about Salomon at this time. Thank you.

WARREN BUFFETT: Well, we know more about the security business than we knew 10 years ago. (Laughter)

And it, you know, it is a tough business to manage.

There's a lot of money made in the business and then — throughout Wall Street, I'm talking about. There's, you know, there's very big sums of money made. And then the question is, how does it get divided up between the institution and the people there?

And you get to this question — I've often used the analogy of, you know, would you rather — if you're an investor, and you get a chance to buy the Mayo Clinic, you know, that is one sort of an investment. And if you get a chance to buy the local brain surgeon, that's another one.

You buy the local brain surgeon and his practice for X millions of dollars. And the next day, you know, what do you own?

And if you're buying the local brain surgeon, you would not pay any real multiple of earnings because he's going to have this revelation, several days later, that it's really him and not you there, with your little stock certificate, that's producing the earnings. And it's his reputation. And he doesn't care.

Can you imagine Berkshire Hathaway advertising brain surgery, you know, how much business we would do?

So — (laughter) — he owns the business, even though you've got the stock certificate.

Now, if you go to the Mayo Clinic, no one can name the name of anybody at the Mayo Clinic, unless you live within 10 miles of Rochester [Minnesota].

And there, the institution has the power. Now, it has to keep quality up and do all the things that an institution has to do. But whoever owns the Mayo Clinic has an asset that is independent of the attitude of any one person in the place the next day.

Wall Street has a mix of both. And there are some businesses that are more — where the value resides more in the institution. And there are some where the value resides more in the individuals.

We've got a couple of sensational people running Salomon. And they wrestle with this problem as they go along. And they seem to be wrestling considerably more successfully currently than was the case close to a year ago.

But it is not an easy business to run. And it's not an easy business to predict, unless you have a business that's very institutional in character, and there aren't many of those in Wall Street.

20. Not important if part of the market is "kind of screwy"

WARREN BUFFETT: Zone 6?

Sorry we got a — the microphone's over here.

CHARLIE MUNGER: (Inaudible)

WARREN BUFFETT: Yeah. Just raise your hand and the monitor will supply the microphone.

AUDIENCE MEMBER: Thank you. Howard Winston (PH) from Cincinnati, Ohio.

One question. Are you concerned about the rising valuations on the NASDAQ market, where companies trade at multiples of revenues instead of multiples of earnings?

WARREN BUFFETT: The rising value of what, did you say?

AUDIENCE MEMBER: The NASDAQ market —

WARREN BUFFETT: Oh.

AUDIENCE MEMBER: — where they trade at 10 times revenues or more, 30 times revenues, instead of 10 times earnings?

WARREN BUFFETT: Yeah. Well, we don't pay much attention to that. Because throughout the careers Charlie and I have had in investing, there have always been hundreds of cases, or thousands of cases, of things that are ridiculously priced, and phony stock promotions, and the gullible being led in to believe in things that just can't come true.

So that's always gone on. It always will go on. And it doesn't make any difference to us.

I mean, we are not trying to predict markets. We never will try and predict markets. We're trying to find wonderful businesses. And the fact that a part of the market is kind of screwy, you know, that's unimportant to us.

We tried, a few times, shorting some of those things in our innocence of youth. And it's very tough to make money shorting even the obvious frauds. And there are some obvious frauds.

It really is — it's not tough — it's not so tough to find the obvious frauds, and it's not tough to be right over 10 years. But it's very tough to make money being short them, although we tried a few times way back.

It's — we don't look at indicia from stocks in general, or from P/Es, or price-sales ratios, or what other things are doing.

We really just focus on businesses. We don't care if there's a stock market. I mean, would we want to own Coca-Cola, the 8 percent we own of Coca-Cola, or the 11 percent or Gillette, if they said, you know, "We're just going to delist the stock and we're never — you know, we'll open it again in 20 years?"

It's fine with us, you know. And if it goes down on the news, we'll buy more of it. So we care about what the business does. Yeah.

21. A business is more important than where it's based

WARREN BUFFETT: Norton, did — why don't you give him the microphone there?

AUDIENCE MEMBER: Thank you, Warren, for including me — (Buffett laughs) — out of order.

WARREN BUFFETT: It's good to have you here. Norton [Dodge] represents a family that came in nineteen-fifty —

AUDIENCE MEMBER: Six.

WARREN BUFFETT: Six! Yeah, that joined up with the partnership and has been with us ever since. (Applause)

AUDIENCE MEMBER: A very, very fortunate connection. (Laughter)

WARREN BUFFETT: Both ways, Norton, both ways.

AUDIENCE MEMBER: And —

CHARLIE MUNGER: Careful, Norton. We don't want you mobbed on the way out. (Laughter)

AUDIENCE MEMBER: But I might say that it all began with my father [Homer Dodge] discovering — thanks to a professor of finance that was also at the University of Oklahoma — Ben Graham, back in 1940.

And then later, when Ben Graham was about to retire, we were trying to find his protégé. And clearly, that was Warren. And so he belongs to that long tradition.

But the question I wanted to ask was, you've mentioned the very strong companies that Berkshire has that are really international companies, like Coca-Cola and the — Gillette.

But are you considering, or have you ever thought of considering, the foreign companies that are undervalued? Or have you, for some reason, not included that in your universe of companies to consider?

WARREN BUFFETT: We've looked at companies domiciled in other countries. And we continue to look at companies domiciled in other countries.

We wouldn't — you know, we're happy for the U.S. and for Atlanta that Coca-Cola's domiciled in Atlanta. But would we pass on it if it happened to be domiciled in England? No, we'd love it, if it were domiciled in England, too.

And we feel that the important thing is the business, not the domicile. Although, it's — A, we're more familiar, in a general way, with domestic companies that are domiciled here, although they make — they may make their money internationally.

And we feel a tiny bit more comfortable, just a tiny bit, in terms of understanding the nuances of taxes, and politics, and shareholder governance, and all of that in something where we've been reading and thinking about it daily than someplace where we've had a little less experience.

But we would love to find a wonderful business that is domiciled in any one of 30 or so countries around the world.

We look some. We don't look as hard as we look at domestic companies. We're not as familiar with them.

But I have read hundreds of annual reports of companies spread around the world. And we've owned a few, just a couple.

They're usually not as big, so just getting the kind of money in, in many cases, is more of a problem. But some of them are big.

And we do not have such a surplus of ideas that we can afford to ignore any possibilities. And if we can find something with a market cap, probably, of at least $5 billion or greater, that strikes us as having our kind of qualities, and the price is right and everything, we will buy.

22. We never reach "for an extra eight of a percent"

WARREN BUFFETT: Zone 1?

AUDIENCE MEMBER: Good afternoon, Mr. Buffett. I'm Nelson Coburn (PH) from Silver Spring, Maryland. I have one question I want to ask that hasn't come up here yet.

Where does the money sit that comes in, say, from dividends and whatever other income that comes into Berkshire, that you're waiting to invest someplace else? Is it get — someplace where it's taking in a profit? Or is it just sitting, gathering dust? (Laughter)

WARREN BUFFETT: Well, we only have about four or five commercial paper names we accept. We're very picky about where we put — the money all gets invested. We do not have anything sitting around in a safe or anyplace else. So it's all invested.

But we do not get venturesome, in the least, in terms of where our short-term money goes. So we only have, like I say, maybe four or five approved names on commercial paper, all of which I approve. I mean, if anything ever goes haywire on this, it's my fault.

Right now, we have, maybe, a billion and something in relatively short-term Treasurys. And we have a little extra in some commercial paper, maybe.

But you will never see us reaching for an extra eighth of a percent on short-term yields.

Some of you may remember the fiasco in the — in Penn Central, in the commercial paper market. And Penn Central, around 1970 or thereabouts, was paying a quarter of a point, as I remember, more than other commercial paper issuers.

And of course, they, one day, despite showing a positive net worth, I think, of a billion and a half or so, they said they had a lot of net worth but no cash. Turned out cash was more important. And so they defaulted.

Now, the interesting thing about doing that is, if you're getting a quarter of a point extra, and you came over on the Mayflower, and you landed, and you said, "Well, I'm going to apply myself to getting a quarter of a point extra on short-term money," and you didn't make any mistake until you got to Penn Central, you would — aside from the compounding aspect — you would be behind at that point.

And I don't like a business that you can do right for 300 years and then make one mistake and — (laughter) — be behind.

So we are very picky about short-term paper. But it is all invested. And when it's large amounts, it probably will be in Treasurys. A couple firms' commercial paper, we take.

23. Volatile earnings to be expected at Salomon

WARREN BUFFETT: Zone 2, please?

AUDIENCE MEMBER: My name is George Gotti (PH) from Zurich, Switzerland. I've got a question with respect to Salomon.

Salomon experienced quite a large volatility in profits and even revenues in the past years. What are your views on how this will develop in the future with respect to volatility in profits and revenues?

WARREN BUFFETT: I didn't get a hundred percent of that, Charlie. Want to —?

CHARLIE MUNGER: Yeah, well —

WARREN BUFFETT: I can see, he can hear. We make a great combination. (Laughter)

CHARLIE MUNGER: Well, you can see we aren't wasting much around the joint. (Laughter)

Salomon's earnings have always been volatile, at least all the time I've been around the place. And I don't think that that volatility will — is likely to disappear.

All that said, we very much like the people at Salomon. And they've done a ton of business with Berkshire over the years and in a whole lot of different capacities. And they've done it very well.

So we're high on the firm, as a customer. And the firms we like, as a customer, we think, maybe, other people will like, as a customer. And generally, we love it, volatile or no.

WARREN BUFFETT: If you — at Salomon, as well as other firms of that type, they mark their securities to market. And so the changes in those marks go through earnings daily, actually, but you see them quarterly.

Interestingly, if you took Berkshire over the last 30 years, and marked to market, as we do now for balance sheet purposes, but not for income statement purposes, because the rules are different in that case — if you did that, you would see enormous volatility, quarter to quarter, in Berkshire's figures.

You would — I don't think you'd necessarily have seen any down year. But you would've seen swings between a few percent and, perhaps, 50 percent or something.

And if you looked quarterly, you'd have seen a number of quarters of losses. And you would've seen some great upsurges, too.

The volatility would be extreme, if it had all been run through the income account. But accounting convention does not call for running it through the income account, in the case of Berkshire. And it does, in the case of Salomon.

But the nature of their business is volatile earnings. The nature of most Wall Street businesses is going to be volatile earnings. Some may follow policies that tend to make it look a little less volatile than it might actually be, even.

The real thing that counts is two things, really. I mean, it's running it so that the volatility never kills you in any way, and the second is having a decent return on equity over time. And I think that the people at the top of Salomon are very focused on that.

CHARLIE MUNGER: I think it's illogical for the credit rating agencies to mark down Salomon as much as they do because the earnings are volatile. But they're in a style business. And it's their game.

24. Very little interaction between Berkshire subsidiaries

WARREN BUFFETT: Zone — what are we? Zone 3 now? Yeah, zone 3.

AUDIENCE MEMBER: Yes. I have three quick questions.

Do you have any formal or informal way where the managements — I know that you don't interfere with the managements of the holdings — but where they can cross-pollinate ideas, for instance, you know, selling World Book through the GEICO channel or something like that?

WARREN BUFFETT: I'll answer that right now. There's very, very, very little of that, I — you know, maybe once in two or three years, maybe some idea might strike me as worth passing along. But I — they're doing fine running their own operations.

We don't do it within Berkshire, either. They really go their own way.

Now, they know what businesses we're in. And so they can always go directly to somebody else. But they don't need me to communicate.

25. Lloyd's of London reputation problems have helped Berkshire

WARREN BUFFETT: Zone 4?

AUDIENCE MEMBER: My name is Mike Macey (PH) from Las Vegas, Nevada.

My question is this. There have been some recent news articles on the problems at Lloyd's. What effect, if any, do you see the problems at Lloyd's having on an increase in the Berkshire insurance or reinsurance business?

WARREN BUFFETT: Well, I think, probably, I think it's fair to say that the problems of Lloyd's have helped us because Lloyd's had a terrific reputation. It was the first stop and, usually, the last stop for all kinds of unusual risks and large risks 20 years ago.

And the fact that they have lost some of their luster in that period has helped us. And, you know, we didn't do anything to contribute to it, but it obviously benefits us, as a competitor, when questions develop about an organization which has been a premier player in the industry.

So, Berkshire probably possesses more capital than all of Lloyd's put together, and it has established a reputation for being willing to quote on very large risks very quickly and to do exactly what it says. And it might very well be that, in many cases, we would get a call before they would get the call now.

So we've been a beneficiary and, probably, in a fairly good-sized way, from their problems. And it's more difficult for them to make inroads on us now than would've been the case 10 years ago.

We have a — I don't like to lay it on too strong — but we do have a preeminent position in a certain area of really large-scale reinsurance that will be difficult for anyone else to replicate.

Now, they may not like our prices. There may not be demand for some of the things we can do. But if there is demand, we are very likely to get some very significant business out of that position. And we've seen it some in recent years. And we'll see it more in the future.

26. "We assume we'll be around forever"

WARREN BUFFETT: Zone 5?

AUDIENCE MEMBER: Mike Assail (PH) from New York City with a question for Charlie about the hundred or so models we ought to have in our head —

WARREN BUFFETT: Here we go.

AUDIENCE MEMBER: — mentioned at the end of the excellent "Worldly Wisdom" speech.

I'd like to know the most useful models on industry consolidation, on product extension, on vertical integration, and any models which explain the special cases when it makes sense to invest in retailing stocks. And if Warren has anything to add or subtract, I'd love to hear it. Thank you very much.

CHARLIE MUNGER: Well, I'm glad to answer such a modest question. (Laughter)

I spoke about having a hundred models in your head. But those are all great, big models of considerable generality that are useful over and over again.

Now, you're down into very complex sub-modeling when you get into a separate model for what's going to happen in industrial consolidations and retail and so on, and I'm not up to all those sub-models. (Laughter)

WARREN BUFFETT: The truth is, you know, we're up to a few. But we take the general models and, you know, plug them in. And sometimes, the light goes on. And sometimes, it doesn't. But if it does, they could be quite useful.

If you focus, you do see repetition of certain business patterns and business behavior. And Wall Street tends to ignore those, incidentally. I mean, Wall Street really doesn't seem to learn, for very long, business lessons.

It may not be to their advantage to learn it. Charlie would — that would probably plug right in to Charlie's model. It's —

CHARLIE MUNGER: You bet.

WARREN BUFFETT: Yeah. It's better, if you're out selling the future, it may be better to forget the past, if you're getting paid on selling it and not on betting your life on it in some way.

One situation at Berkshire that really is somewhat different than many companies: we assume, and unfortunately, it's in error, but we assume we'll be around forever.

So when we — in our insurance business, we assume we're going to be here to pay every claim. And we're not going to retire at 65 and hand over something to someone else. And there wouldn't be any sense paying games on accounting because it would catch up with us later on.

And whereas, in many businesses, I don't think they have quite the same horizon on things. They do at a Coca-Cola, or they do at a Gillette.

But many companies are thinking about what kind of — I think, I'm afraid that, more than you'd like — are thinking about what little pictures they can paint for the next four quarters or so. And that's easy to do.

But our problem is we're going to be around a lot longer, we think, than four quarters, so that's not an option available to us. And we have to — we really run it as if, in the year 2050 or something, somebody's going to look and say, "Did — how'd it work out?"

27. Compensation plans must include cost of capital

WARREN BUFFETT: Zone, where are we, 5 or 6? Wherever the microphone is.

Zone 5, we got a mic over there? Maybe that was — 6! OK, we'll go to 6.

AUDIENCE MEMBER: You state, in your letter —

WARREN BUFFETT: Could you have the microphone? Or do we have one in the — yeah. Want to bring him the microphone? Particularly for the people behind you, it's a little difficult.

AUDIENCE MEMBER: Glen Rollins (PH), Atlanta, Georgia.

You state, in your letters to shareholders, that with your wholly owned companies, you reward them at a higher rate when they release capital to you. And you, likewise, charge them a higher rate when they need capital. Could you elaborate on that?

WARREN BUFFETT: Well, we — some of our businesses don't need capital at all, or need so little that it doesn't make sense to build it into a formula.

So we have certain businesses, those are the best businesses, incidentally, that take — to take, essentially, no capital because it means that, if you double the size of the business, you don't need any more capital. And those are really wonderful businesses. And we've got a few of those.

But where our businesses do produce capital, we could have all kinds of complicated systems and have capital budgeting groups at headquarters and do all kinds of things.

But we just figure it's simpler to charge people a fair amount for the money and then let them figure out, you know, whether they really want to buy a new slitter or whatever it may be in their business.

And it varies a little bit. It varies on the history of when we came in. It varies on interest rates that they — but we generally will be charging people something in the area of 15 percent, in terms of working out compensation arrangements for capital.

Now, 15 percent pretax, depending on state income taxes, is only 9 to 9 1/2 percent after-tax. So you can say that isn't even enough to charge people, but we find that 15 percent gets their attention.

And it should get their attention, but it shouldn't be such a high-hurdle rate that things that we want to do don't get done.

Our managers expect to be running their businesses for a long, long time. So we don't worry about them doing something that works for them in the next year but doesn't work five years out or vice — you know, where they don't make longer plans, because they see themselves as part-owners of the business. But we want them to be owners with a cost attached to capital.

We think it's awful, frankly, the way businesses reward executives with absolutely no regard for the cost of capital. I mean, a fixed-price option for 10 years — you know, imagine giving somebody an interest-free loan for 10 years. You're not going to do it.

And if a company is retaining a significant part of its earnings, and you give out a fixed-price option for 10 years, you know, they can do nothing with it but put it in a savings account, and they'll make some money off of it. So it — we like attaching a cost to the capital.

If we had options for me and Charlie at Berkshire, which would not — it's not going to happen, but it would not be illogical. We have responsibility for the whole place.

You could have some kind of a compensation arrangement that worked in respect to how the whole enterprise fared, and it would make sense for the two of us.

It wouldn't make sense for the rest of our managers because they work on specific units. And you should have compensation arrangements that apply to those units.

But assuming you had it for the two of us — which we're not going to have, I want to assure you — but we would say the fair way to do that would be to have an option at not less than present intrinsic value.

Forget what the market price is. Because, believe me, it — the idea of having the more depressed your market price be, the better your option price be, does not make any sense.

So we would have it at not less than intrinsic value. And then we would have it step up yearly based on something relating to a cost to capital. Because we would say, "Why should we get free use of the shareholders' capital?" And we could work out a fair stock option.

That would be perfectly appropriate. We won't do it, but it'd be a perfectly appropriate way to have us compensated that involved an issuance, then an initial price of not less than intrinsic value, and involve carrying costs.

And then we would be in a position, still, not totally analogous to shareholders, because we wouldn't have a downside that you have, but we would at least have the carrying cost that you have of ownership.

And we work that through into our unit compensation plans by having a cost of capital that, like I say, tends to run about that 15 percent area.

And if people can give us money, we should be able to figure out a way to do something better than 15 percent pretax with it. That's part of our job, too. So we will pay them to give us back money.

CHARLIE MUNGER: Well, we really invented a more extreme system. And that is the executives can buy Berkshire Hathaway stock in the market for cash.

This is a — (laughter) — very old-fashioned system, but most of them — it doesn't take any lawyers, or compensation consultants, or — and most of them have done it. And most of them have done very well with it. I don't know why it doesn't spread more. (Laughter)

WARREN BUFFETT: People say they want their management to think like shareholders. Management, you know, they're compensating them. We're going to have them think like shareholders. It's very easy to think like a shareholder. Become one, you know? (Laughter)

And you'll think exactly like a shareholder.

CHARLIE MUNGER: Right, right.

WARREN BUFFETT: It's not a great — it's not a huge psychological hurdle to get over, if you actually write a check. (Laughter)

28. Unlike many movie companies, Disney makes money for shareholders

WARREN BUFFETT: Zone 1?

AUDIENCE MEMBER: John Lichter from Boulder, Colorado.

Are there some worthwhile books that you could recommend to us?

And secondly, with respect to Eisner and Disney, how would you define Michael Eisner's circle of competence? And are you concerned that he might step outside it?

WARREN BUFFETT: Well, I would say that he has proven himself very good at understanding what Disney is really all about.

And you can look back to the predecessor management, between Walt and Eisner. And they didn't really do much with that, if you look at those years.

What is special about Disney? And how do you make it more special? And how do you make it more special to more people? I mean, those are the things that you want to — and you've got wonderful ingredients to work with when you're working with something like Disney.

I mean, it — you know, one of the advantages — we were talking about the Mayo Clinic and brain surgeons. The nice thing about the mouse is that he doesn't have an agent, you know. I mean, the mouse is yours. (Laughs)

He is not in there renegotiating and, you know, every week or every month and saying, you know — (laughter) — "Just look at how much more famous I've become in China," you know, or something. (Laughter)

So if you own the mouse, you own the mouse. And Eisner understands all of that very well. I would say he's been very skillful, in terms of how he's thought about it.

I worry about any manager. It has nothing to do with Michael Eisner. But Charlie and I worry about ourselves in terms of getting out of our circle of competence.

And we've done it. It is very tempting. And it's probably part of the human condition, in terms of hubris or something, that if, you know, that if you've — as Charlie would say, if you've — you know, if you're a duck floating on a pond, and it's been raining, and you're going up in the world, after a while, you think it's you and not the rain.

You know, that there — that you're some duck. (Laughter) But —

CHARLIE MUNGER: Right, right.

WARREN BUFFETT: And we all succumb to that a little bit.

But I think that Disney, Coca-Cola, Gillette — I think those companies are very focused. I think our operating units are very focused.

And I think that gives us a huge advantages over the managers that are getting a little bored and decide that they'd better fool around with this or that to show just how talented they really are.

Charlie?

CHARLIE MUNGER: Yeah. Eisner is quite creative. And he also distrusts projections. And that is a very good combination to have in the motion picture business. (Laughter)

WARREN BUFFETT: Yeah, Charlie was a lawyer for, what, 20th Century in the old —

CHARLIE: Yes.

WARREN BUFFETT: — days? Yeah, and he saw a little bit of how Hollywood operated. And it kept us out of buying any motion picture stocks for about 30 years. Every time I'd go near one, he'd regale me with a few stories of the past.

So it's a business where people are — can trade other people's money for their own significance in their world. And that is a dangerous combination, where if I can buy significance in my world with your money, you know, there's no telling what I'll do. (Laughter)

CHARLIE MUNGER: Part of the business reminds me of an oil company in California. And it was controlled by one individual. And people used to say, about it, "If they ever do find any oil, that old man will steal it." (Laughter)

The motion picture business, it's only about half of it that has normal commercial morals.

WARREN BUFFETT: Yeah, we're not applying that to Disney.

CHARLIE MUNGER: No.

WARREN BUFFETT: Disney is really — Disney's done an extraordinary job for the shareholders.

And they make real money out of movies. Most movie companies have — they make money for everybody associated with it, but not a lot has stuck to the shareholders.

Zone 2?

AUDIENCE MEMBER: I —

29. Book recommendations

WARREN BUFFETT: What? Oh, the books! Charlie, what are you reading these days? (Laughs)

CHARLIE MUNGER: Well, I'm almost ashamed to report because I've gone back and picked up the part of biology that I put up — should've picked up 10 or 15 years earlier. And if any of you haven't done it, it's a total circus, what they figured out over the last 20 or 30 years in biology.

And I — if you take [evolutionary biologist Richard] Dawkins, "The Selfish Gene" and "The Blind Watchmaker", I mean, these are marvelous books. And there are words in those books that are entering the English language that are going to be in the next Oxford Dictionary. I mean, these are powerful books. And they're a lot of fun.

I had to read "The Selfish Gene" twice before I fully understood it. And there were things I believed all my life that weren't so, and I think it's just wonderful, when you have those experiences. We always say, "It isn't the learning that's so hard. It's the unlearning."

WARREN BUFFETT: Yeah. I made the mistake of taking Charlie up to Microsoft in December. And he became friends with [Chief Technology Officer] Nathan Myhrvold.

And they are corresponding back and forth with increasing fervor and enthusiasm about mole rats. And they copy me on all these communications. So I'm getting to see this flow back and forth on the habits of mole rats.

I really haven't found a way to apply it at Berkshire. But I'm sure Charlie — (laughs) — has got something he's working on, on that. He's gotten very interested in biology lately.

I like — you know, I've always liked reading biography, but since the — the computer has changed my life. I now find myself playing bridge on the computer about 10 hours a week. And unfortunately, I didn't want to give up sleep or eating or Berkshire. So the reading has been kind of light.

On investment books, if you're asking about that, I would recommend the first two books that Phil Fisher wrote back around 1960, "Common Sense [Stocks] and Uncommon Profits" and the second one ["Paths to Wealth Through Common Stocks"]. They're very good books.

You know, I obviously recommend, first and foremost, [Benjamin Graham's] "The Intelligent Investor," with chapters eight and 20 are the ones that you really should read.

Two of the — well, all of the important ideas in investing, really, are in that book, because there's only about three ideas. And those — two of them are emphasized in those two chapters.

Actually, I think John Train's "Money Masters" is an interesting book.

I don't know. Can you think of any others, Charlie, that we want to tout? (Laughs)

CHARLIE MUNGER: I don't know. We have such a fingers-and-toes style around Berkshire Hathaway. (Laughter) So you sort of count.

WARREN BUFFETT: The three —

CHARLIE MUNGER: I've never seen — you know, Warren talks about these discounted cash flows. I've never seen him do one. (Laughter and applause)

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: If it ever —

WARREN BUFFETT: There are some things you only do in private, Charlie. (Laughter)

CHARLIE MUNGER: If it isn't pluperfect obvious that it's going to work out well, if you do the calculation, he tends to go on to the next idea.

WARREN BUFFETT: Yeah, it's sort of — it is true. You don't — if you have to actually do it on — with pencil and paper, it's too close to think about. I mean, it ought to just kind of scream at you that you've got this huge margin of safety.

I mentioned the three ideas. The three ideas, I should elaborate on. One is that — to think of yourself — to think of investing as owning a business and not buying something that wiggles around in price.

And the second one is your attitude, which ties in with that, the attitude toward the market, that's covered in chapter eight. And if you have the proper attitude toward market movements, it's an enormous help in securities.

And the final chapter is on the margin of safety, which means, don't try and drive a 9,800-pound truck over a bridge that says it's, you know, "Capacity: 10,000 pounds." But go down the road a little bit and find one that says, "Capacity: 15,000 pounds."

30. We'll do more in insurance, but we don't know what

WARREN BUFFETT: Zone 2?

AUDIENCE MEMBER: Yes, Chip Tucker (PH), Minneapolis.

Mr. Buffett and Mr. Munger, what market share does Berkshire have in super-cat insurance business? And what's your outlook for both the market growth in that business and the potential market share growth with — from Berkshire?

You answered a related question regarding GEICO's auto opportunities. Are there other insurance businesses potentially worth expanding into? Or is your focus on super-cat and autos opportunity enough?

CHARLIE MUNGER: You know, Warren can answer that question a lot better than I can.

WARREN BUFFETT: I — we don't — there wouldn't be any good market share figures in something like super-cat.

We know that, a couple years, and last year, I think, too, we had to be the biggest in terms of premium volume.

We simply take on so much more than anyone else will. And we were getting the calls on the big risks, you know, 400 million here or something of the sort. We had a quote we put out on a billion dollars on the New Madrid fault here a little while ago. Nobody else will be doing that.

So we got market share by our willingness to do large volume, by the fact that people knew we would pay subsequently, but we don't — while we know we were the largest, we can't give you any precise figures.

We also know we're slipping in that now, but that makes no difference to us. We'd only be interested if we were slipping in profitable markets.

And what was the second part of the question on that, Charlie?

AUDIENCE MEMBER: What other opportunities —

WARREN BUFFETT: Oh, what other opportunities in the insurance business?

We — just this year, we bought a very, very small company [Kansas Bankers Surety], the managers of whom are here, a very fine insurance company. It has a little niche.

It — I mean, it will never be huge or anything of the sort, but it's the kind of business that we can understand. And we like the people that run it. And we like the position they've achieved in the market. So we're delighted to be in it.

We are willing to think about a whole variety of things to do in insurance. But most of them, we find, make no sense. We'll be — we'll do other things in insurance over the next 10 or 15 years. It's just bound to happen, but I can't tell you what they will specifically be.

The biggest single thing we will do in terms of value, though, probably, is grow GEICO. But we will do other things. And who knows what they might be?

We have expanded some in the — it's a small business — the structured settlement business, from when we talked a year or two ago. And we are the preferred provider of structured settlements. Those are annuities, essentially, that are payable to people who are usually the victims of a very bad accident.

So they're very severely injured people, with injuries that will probably last for life. And so we will be making payments to people who are incapable of earning a living, may incur substantial medical bills, for many decades, sometimes, 50 or 60 years.

Those annuities are provided by our companies to other insurance companies and to these injured people, usually, with the approval of the injured person's attorney.

And when the advisors to the injured person think, "Who is going to be around in 50 years to pay money to this person who's been incapacitated," they frequently, and in our view, logically, think of Berkshire. So we have become much better known in that over the last couple of years.

It's not a big business. And it won't be a big business. But it's a perfectly decent business. And it's one where we have a competitive advantage over time.

We don't obtain the competitive advantage by price. We obtain the competitive advantage from the peace of mind that the injured party obtains from knowing that that check will be in the mail 50 years from now.

And that's the kind of business where we have some edge. And we'll find other things to do over time, but can't — I can't —

It isn't like we're looking at some specific area and saying, "We're focusing on this." We're aware, generally, of what's going on in the insurance business. And we're very ready to move when the time comes, so that we can do something intelligent.

31. People rewarded by capitalism need to help those who aren't

WARREN BUFFETT: Zone 3?

AUDIENCE MEMBER: Mr. Buffett and Mr. Munger, my family's been associated with Berkshire since 1968. So I ask this question with a great deal of respect for your integrity and your wisdom.

I work as an inner-city schoolteacher, where there is a rising and pervasive sense of hopelessness.

When I ask my students, "What would make you happy?" their predominant response is, "A million dollars." As some of the richest men in the world, I wonder what your response to them might be.

And as a second part of this question, the philosophical underpinnings of capitalism have largely ignored a systemic perspective involving issues of ongoing depletion of limited global resources exploited to sustain a market economy, widening gaps between the very wealthy and the severely impoverished, and an international view of America as a country whose primary values are greed and imperialism.

As we move into the 21st century, do you see a need to re-envision capitalist premises towards original notions of democracy, justice, and humanitarian concerns?

WARREN BUFFETT: I didn't get all of that.

CHARLIE MUNGER: Well — (laughter) — I will say this. I am higher on the existing social order than you are. (Applause)

I — there's always plenty wrong with a social order. And certainly, there are places where ours is a lot more broken than it used to be.

I don't think Warren and I have any wonderful solution to all the problems of the world. But wishing for a million dollars instead of some more tangible short step is the wrong frame of mind. That isn't the way we got our million dollars.

WARREN BUFFETT: But I don't — (Applause)

CHARLIE MUNGER: Warren might give a different answer, by the way. He's a —

WARREN BUFFETT: No, I would agree with the — I, you know — wishing for a job makes a lot of sense to me and figuring out how to get one and then going from there. But it —

There is and always has been — that doesn't mean it always should be — but there is a tremendous amount of inequality.

What you don't want is an inequality of opportunity. There will be a lot of inequality in ability.

A market system, like we have, churns out what people want. If they want to watch a heavyweight fight, and they want to watch Mike Tyson, they're going to pay him $25 million for getting in the ring for a few minutes.

And it produces what people like. And it produces it in abundance. And it's done very well in terms of production.

It is much better to be in the bottom 20 percent in this country now than it was 50 years ago. And it's better to be in the bottom 20 percent of this country than in any other country. But it still isn't very satisfactory.

The market system does not reward — it does not reward teachers, does not reward nurses — I mean, it does not reward all kinds of people who do all kinds of useful things in any way comparable to how it will reward entertainers, or people who can figure out the value of businesses, or athletes, or that sort of thing.

A market system pays very big for something that will entertain them. People want to be entertained a good bit of the day. And it pays better for people that will entertain than educate.

I think — I don't want to tinker with the market system. I don't think I should be telling people what they should want to do with their lives.

But I do think that it's incumbent on the people that do very well under that system to be taxed in a manner that takes reasonable care of anybody that is not well adapted to that system, but that is a perfectly decent citizen in every other regard.

And that is — you know, I don't want to start getting into comparable worth in terms of how I tax. But I do think that somebody like me, that happens to just fit this system magnificently, but wouldn't be worth a damn in Bangladesh or someplace, you know, because what I have wouldn't pay off there — their system would not reward that.

I think that we get from society — society provides me — this society provides me — with enormous rewards for what I bring to the game. And it does the same with Mike Tyson. And it does the same with some guy whose adenoids are right for singing or whatever it may be.

And I don't want to tamper with that. But I do think those people who are getting all kinds of claim checks on the rest of society from that — I think there should be a system that people — where people who are not well adapted to that system, but that are perfectly decent citizens in every other respect, do not really, you know, fall through the slats on that.

And I think progress has been made on that over the last 50 years. But I think we're far from a perfect society in that respect. And I hope, you know, more progress is made in the next 50 years.

I don't think the wishing for the million dollars, though — you know, it doesn't work that way. I think —

But if you are lucky enough to have something that the market system rewards, you do very well here. And if you're unlucky enough to have something it doesn't reward, you do better now than you would've 30 or 40 years ago. And you do better than in other countries.

But I can see where it seems very unjust to look at somebody else who has just a little different mix of talents that can achieve claim checks in a way that keeps them and the next five generations of their family in a position where they don't have to do very much.

CHARLIE MUNGER: I would say that I like a certain amount of social intervention that takes some of the inequality out of results in capitalism.

But I hate, with a passion, rewarding anything that can be easily faked. Because I think then people lie, and lying works, and the lying spreads. And I think your whole civilization deteriorates.

If I were running the world, the compensation for stress under workman's compensation would be zero, not because there isn't real stress. Because there's no way to keep the fakery out, if you reward stress at all.

WARREN BUFFETT: There was a great article, and this applies — (applause) — to an earlier question.

There was a very good article in Forbes about one issue ago that showed the occupational profile of the U.S. at a couple of different intervals, going back to 1900.

And one problem you can see, just by looking at that profile, is that, if you assume 20 percent of the — the bottom 20 percent — however you measure it, in terms of employability — whether it's measured by IQ, or interest in working, or energy level, or whatever you want to do — they fit, very well, most of the jobs that were available a hundred years ago.

In other words, you could do most of the jobs, of which there were many, with relatively unimpressive mental abilities. And as jobs have changed, the profile of people hasn't changed. So there are more people that end up on the short end.

Now, the good part of that is the society produces so much more that it can take care of those people, one way or another. Now, the trick is to take care of them and make them not only feel, but be productive and be part of the act, and —

We've got enough product to do that. But the country turns out way more output than 50 or a hundred years ago.

We don't have — we're not perfect at figuring out how to make the bottom 20 or 30 percent, in terms of abilities, fit a new, changing job profile.

I really recommend you look at that Forbes magazine. Because if you think through the implications of those charts, I think you'll see what social problems have to be attacked.

32. "No magic" to running a bank — just don't do "something foolish"

WARREN BUFFETT: Zone 4?

AUDIENCE MEMBER: Edward Barr, Lexington, Kentucky.

Earlier, you led us through a discussion of the competitive position of Disney. And you also discussed share repurchase.

I wondered if you could also lead us through a discussion of the competitive position of Wells Fargo, since they just effected such a large combination [with First Interstate], in addition with, perhaps, some discussion of their share repurchase, which is probably as large, in percentage terms, as any company I can think of at the present time.

WARREN BUFFETT: Well, Wells should repurchase their shares, if they feel that they're repurchasing them below intrinsic business value. And that's a calculation that they make.

And you should — have to ask the question of them what their calculus is of that. But that will determine whether that share repurchase program makes good sense or not.

The advantages of an in-market merger are — can be dramatic. Sometimes, it just causes a bank to do what they should've done anyway.

I mean, I'm not so — I'm not always as convinced that the economies come about through — totally through scale, as they are just from taking a hard look at how they run their business.

We may have in the audience today — he was here earlier — the CEO of the Bank of Granite, which is in Granite, North Carolina. And that bank earned 2.58 percent on assets, I believe, in the most recent quarter, annualized, and had a 33 percent efficiency ratio.

Now, that bank is 400 million or 500 million of assets. You know, it doesn't need to be 5 billion in order to get more efficient or anything of the sort.

It's got — it's so much more efficient than any of those larger banks that had to be put together to get those ratios that it makes you kind of wonder about the underlying rationale.

But I'm sure that Mr. [John] Forlines, who runs that bank, just focuses on — and he's been focusing on it for a lot of years — just doing the right things day after day. And it didn't take any in-market merger or anything of the sort to cause him to do that.

I recommend any of you in the banking business to get his report because there is nothing magic about the community of Granite, North Carolina.

Nor does he work under laws that are way different than the rest of bankers or anything of the sort. He just gets a record that — achieves a record — that makes all the rest of the records look silly.

We had a fellow over in Rockford, Illinois, in the bank we owned back in the '70s, Gene Abegg, whose brother is going to be 104. There was a fellow from Rockford here that got me to sign a note to Ed Abegg, who will be 104 soon. I wish Gene had lived to 104.

But Gene ran a bank in Rockford that, when banks — the best banks were earning one percent on assets, he earned two percent on assets. And he did it with way less leverage than anyone else and lower loan losses and big investment portfolio.

And there wasn't any magic about it. He just didn't do anything that didn't make sense.

And there's a lot of room for improvement in the banking business with or without mergers.

But I would say that Wells, on the record, has done an exceptionally good job of running their bank compared to other big banks. And I would say that those two operations put together will be run a whole lot more efficiently than if First Interstate had been run by — run on its own.

It's a business that can be a very good business, when run right, as the Bank of Granite or Illinois National Bank in Rockford proved. There's no magic to it. You just have to stay away from doing something foolish.

It's a little like investing. You know, you don't have to do anything very smart. You just have to avoid doing things that are ungodly dumb when looked at about a year later and — you know, airlines and that sort of thing. (Laughter)

And you know, that's the trick. It is not some great crystal ball game where you look into the future and see all these things that other people can't possibly see. I mean, what's complicated about Coca-Cola or Gillette or Wells Fargo, for that matter?

And that's — we like businesses like banking, if we've got somebody in charge of them that is going to run them right. We've got a — I don't know whether Bob Wilmers is here. But he runs First Empire, which we have a good-sized investment in. Bob just runs it right, you know?

I do not worry about surprises from Bob or First Empire. And he'll do things — if he can grow, and it's logical, he'll grow. And if it isn't logical to do something, he'll pass. He has no ego compulsions forcing him into some sort of action. And he runs a terrific bank.

Charlie?

33. We do "whatever comes along that makes sense"

WARREN BUFFETT: OK. Zone 5.

AUDIENCE MEMBER: Dorothy Craig (PH) from Seattle.

And I noticed, in the annual report, that your recent acquisitions doubled the revenue for Berkshire Hathaway. And it seemed astounding for me. I'm wondering how that's possible.

WARREN BUFFETT: Well, it's — for one thing, we started from kind of a small base. The — but we — the GEICO acquisition, you know, added 3 billion or so of revenues, and — actually more than that, a little more than that, but not much more. And RC Willey and Helzberg's probably added 600 million or so in the current year.

And since we were working off a base of 3 1/2 or so billion, those three acquisitions did double the revenues. We won't have many years when that happens. It's not any goal of ours to double the revenues or increase them 20 percent, even, or anything.

We just — we try to do whatever comes along that makes sense. And if there's a lot that comes along in one year that makes sense, we'll do a lot. And if there's nothing that comes along that makes sense, we'll do nothing.

So it's — there's a lot of accident in it. But last year, you know, a fair amount happened. And I'd love to see a lot happen next year. But we don't know at this point.

Charlie?

CHARLIE MUNGER: Nothing.

34. GEICO's Lou Simpson has more investing options now

WARREN BUFFETT: Zone 6.

AUDIENCE MEMBER: Oh me? Yes, my name is Victor Lapuma (PH). And I'm from the Virgin Islands. And my question is on the GEICO asset side.

One of the things that makes Berkshire unique is the high percentage in equity as opposed to fixed assets. And GEICO, as of the end of the year, looked like a typical insurance company with four times the fixed assets as equity assets.

And my question is, over time, will they have the same composite as Berkshire on the asset side?

And the second part of that question is, how are the asset allocations decisions being made at GEICO after the merger as compared to before the merger?

WARREN BUFFETT: The decisions at GEICO, which, as you say, is about 5 billion of marketable securities, have been made, and are being made, and will be made, by Lou Simpson. Lou has done a fabulous job of running the investments of GEICO since about 1979. And we're lucky to have him.

There are very few people that I will let run money running businesses that we have control over. But we're delighted, in the case of Lou. I mean, that's one in a thousand or something. But Lou has done a terrific job, will do a good job.

And the one thing we offer him, he has the ability to do whatever he wants to do with those assets now. He did not have that ability before GEICO became part of Berkshire. Because at that time, there were certain ratios that were necessary for — which were understandably necessary, that made sense.

With GEICO as a standalone entity, with its own net worth of a billion and a half or 2 billion, and doing 3 billion of business, it would've been inappropriate for him to take on a different configuration, beyond a certain point, in equities.

So he was constrained by the nature of the business he was in and its capitalization. That constraint no longer applies. So he, with that 5 billion, can do whatever he wants.

Now, if he does certain things, we would need to provide backup to GEICO, so that their policyholders would be protected under the most adverse of circumstances. But that's no problem for us.

We could do it by quota share reinsurance. We could do a lot of things. We could just guarantee their obligations. And we are in a position to do that.

We haven't done it yet because it's not — hasn't been necessary yet. But if it made sense — if Lou wanted to be 5 billion in equities and it made sense, we would arrange things so that the GEICO policyholders would be every bit as secure as under the most conservative of investment portfolios.

So Lou has another string to his bow now. And there may be a time when it gets used. He's been great under the old system. And he may be better under this system.

CHARLIE MUNGER: That's a very shrewd question. You're to be complimented.

WARREN BUFFETT: That means it's something we thought about — (laughs) — before, but you are to be complimented, right.

35. "Permanent holdings" probably won't be sold even if market overvalues them

WARREN BUFFETT: Let's see. Zone 1?

AUDIENCE MEMBER: Neil McMahon (PH), New York City.

Berkshire owns several companies — stock in several companies — which are called permanent holdings.

In the early '70s, we had a two-tier market, the one-decision stocks, high P/Es — 50, 60 times earnings.

If that were to reappear again, would Berkshire's companies still be permanent? Or is there a price for everything?

WARREN BUFFETT: Well, there are things that we think there's no price for. And we've been tested sometimes and haven't sold them, but —

You know, my friend, Bill Gates, says, you know, it has to be illogical at some point. The numbers have — at some price, you have to be willing to sell something that's a marketable security, forgetting about a controlled business.

But I doubt if we ever get tested on — there's only a couple of them in that category.

Actually, there — you know — I won't comment on that. (Laughs)

We really have a great reluctance to sell businesses where we like both the business and the people. So I don't think I'd count on seeing many sales. But if you ever attend a meeting here, and there are 60 or 70 times earnings, keep an eye on me. (Laughs)

Charlie?

CHARLIE MUNGER: The so-called two-tier market created difficulties, I would say, primarily because a lot of people or companies were called tier one when they really weren't. They just had been, at some time, a tier one. If you're right about the companies, you can hold them at pretty high values.

WARREN BUFFETT: Yeah, you can really hold them at extraordinary levels if you've got — it's too hard to find. You're not going to find businesses that are as good.

So then you have to say, "Am I going to get a chance to buy back the same business at a lot lower price? Or am I going to buy something that's almost as good at a lot lower price?"

We don't think we're very good at doing that. We'd rather just sit and hold the business and pretend the stock market doesn't exist.

That actually has worked out way better for us than I would've predicted 20 years ago. I mean, that mindset is — or 25 years ago — that mindset is — there's been a fair amount of good fortune that's flowed out of that that I really wouldn't have predicted.

CHARLIE MUNGER: But there, you're demonstrating your trick again, you know? Still learning. A lot of people regard that as cheating. (Laughter)

36. Buffett doesn't expect Gates will join Berkshire's board

WARREN BUFFETT: Zone 2.

AUDIENCE MEMBER: Yeah, Alan Rank, Pittsburgh, Pennsylvania.

Knowing your aversion to technology but your close affiliation with Bill Gates, Microsoft, have you ever considered either inviting him to be part of the Berkshire through the board, or being involved to maybe solve some of the problems with World Book and taking it to the new technology and expanding it?

And on the other end, you also love insurance and the float. Have you considered the other businesses that would have that similarity, such as cemeteries and funeral homes with their pre-need and their large cash reserves?

WARREN BUFFETT: The — Bill and I talked about the encyclopedia business some years ago. But he was pretty far down the line at Encarta, quite far down the line at Encarta, actually, before I even met him. So it wasn't — my guess is, if we had met earlier, that there might have been something evolve in that.

But he had put a lot of chips on Encarta and had done a good job with it. So it really wasn't — it wasn't a real option to work with him on World Book.

Bill also is very focused on his business. And I believe he's on the board of some biotech company in which he's got a significant investment.

But you will not see him on the boards of, at least I don't believe that you will, of American corporations — I think, if you look at the boards in the, say, up in the Pacific Northwest, where

he had a lot of friends and knows the companies well and maybe grew up with some of the people.

But I don't think you'll see him on anything which really doesn't — which is just a business that doesn't grab him intellectually on something. I do think there's one biotech company that he's involved in that way. And you know, he'd be a terrific asset.

But he really focuses on Microsoft. He has his board meetings, as I remember, on Saturday. They last, you know, all day. And then he goes after the business that way. He's not —

I don't think he'd be interested on being on a bank board or an insurance company board because he just figures he's got other things to do with his time. And I think he's probably right. (Laughs)

37. Not all "float" businesses are attractive

WARREN BUFFETT: Zone 3? Oh, the question was about other kinds.

We've always had an interest in float businesses of one sort or another, but —

You know, Blue Chip Stamps was such a business, until it disappeared — (laughs) — one day, and we couldn't find it. We went — looked in the closet. We looked everywhere, out in the backyard. (Laughs) Where was it?

So we like that sort of business. But most of the float businesses, the costs are pretty explicit. And like I say, we don't like most insurance companies as float businesses. We are not interested in buying the typical insurance business, because we think the float will end up costing us too much.

We'd rather borrow money with an explicit cost attached to it rather than have the implicit costs of an underwriting loss with most companies.

But we're always — we are interested in businesses that provide cash rather than use up cash. We're willing to have them use cash, if the — if what they use will produce high enough returns. But we've got this bias toward things that throw off cash.

Charlie?

CHARLIE MUNGER: Well, if we go into the pre-need funeral home business, that'll be the day. (Laughter)

38. Expect a "better" market for Class A than Class B

WARREN BUFFETT: Zone 3. (Laughter)

AUDIENCE MEMBER: Charlie is a difficult act to follow. I'm Robert Keeley (PH) from Washington, D.C.

I have a brief comment and a brief question. The comment is that I think you may be considerably underestimating the interest there will be in purchases of Class B stock later this week and next week.

I have at least 10 friends in Washington who are aware that I'm a Berkshire shareholder and that I was coming to this meeting. And they've insisted that I report back to them tomorrow on just what happened with the Class B stock because they're very interested in buying some of it.

Now, that's anecdotal, to be sure. But if you take that ratio of 10 people to even the shareholders who are present here today, you're talking about tens of thousands of people who are going to be in that market.

And my question relates to liquidity. On page 18 of your annual report, you say, and I quote, "The prospect that most shareholders will stick to the A stock suggests that it will enjoy a somewhat more liquid market than the B."

Could you explain that? It seems to me that if most shareholders keep their A stock, do not convert it or sell it, that the B stock will be much more liquid. Maybe I don't understand liquidity.

WARREN BUFFETT: No, I think you do. You understand it. And I'll elaborate just a bit.

The — certainly, in the first week, I would expect the B stock to trade far more, although I hope it doesn't trade like most new issues trade in relation to the amount sold.

It's just the nature of a new offering that there's usually — there's always some flurry of activity. Sometimes, I think it's quite excessive. And I don't think it will be with Berkshire. But there will be some flurry of activity.

But longer range, let's just assume that there's $400 million worth of B stock. There will be 40 billion of A.

Now, admittedly, you know, I'm not going to do anything with my stock. And many people in this room have a very low tax basis and, except under very unusual circumstances, have no intention of doing anything with their stock.

So of that 40 billion, there's a very significant percentage that you might say is almost inoculated against reaction to market changes.

But there still is a very significant dollar value. There's a fair amount held by funds, for example.

And so the market value of what I would call the potentially tradeable A is likely to far exceed the market value of the potentially tradeable B. Now, it may be that all of the B is potentially tradeable, whereas, only a small portion of the A is.

But that 40-billion-to-400-million ratio, I think, almost ensures that, after the initial flurry, that the better market — and when I say, "better market," I mean the ability to move large dollar amounts in both directions with minimal movement of price — the better market — not by a huge margin — but the better market is likely to be in the A. And frankly, we hope that it is. We still hope there's a good market in the B, obviously.

But if you're talking 10 shares of the A, which is a $300,000 or so investment, I think that, two months from now — that it's likely to be that buying or selling $300,000 worth of A will have slightly less of a percentage impact than buying or selling $300,000 worth of B, but not by a significant amount.

But that's what I meant by that comment of having a slightly better market in the A than the B. And that's important from our standpoint because, if that situation became reversed and the B became the better market, then people would have a real incentive to convert from A to B over time, and eventually the B market would dominate.

We don't anticipate that happening. And I think the way we've arranged it, it won't happen. But it could happen.

Charlie?

CHARLIE MUNGER: Yeah, well, I think we've also created arrangements in the way we've written the prospectus and rewarded the selling brokers that tend to dampen demand, both individual and institutional. And we sometimes accomplish what we try to do. (Laughter)

WARREN BUFFETT: Zone 4? Don't ask us for a list of those, what we've accomplished. (Laughter)

39. Corporate return on equity will probably drop

AUDIENCE MEMBER: Dan Pico (PH), Sioux City, Iowa.

In the mid-'70s, you wrote an article on how inflation swindles the equity investor and that the average return on equity for corporate America would be like 12 or 13 percent.

Last year, the average was more like 20. Have the laws of economics been repealed or modified? Or if not, what sort of calamities might occur as we revert to the mean?

WARREN BUFFETT: Well, I have been surprised by returns on equity. There was a good article in Fortune about two issues ago. Well, it was in the "Fortune 500" issue, whenever that was. And it discussed the question of return on equity.

And it made some good points about how the introduction of putting post-retirement health benefits on the balance sheet tends to swell equity returns subsequently. In other words, it moves down the denominator in terms of total equity employed.

And there's been a lot of big-bath accounting, where there have been write-offs, so that counting that, I don't think it has gotten to 20 percent. But it's higher than — it's certainly higher than I anticipated when I wrote that article.

And I would say that it would seem very extreme to me, in a world of — like we're living in now — to have equity cap — returns on equity — close to the 20 — average close to the 20 percent rate over time. But it has surprised me, how high returns have been.

Now, you have had situations like at Coke, for example, where 25 years ago, they would not have repurchased stock. And so, they'd have piled up more equity in the business. And Coke's return on equity, if it had been following the policies of 1970 or '75, would be far less than it is now.

Coke really doesn't need equity. And so, it can earn extraordinary returns and very large dollar sums. To the extent that impacts the figures, that has some impact on them.

To the extent that General Motors sets up many, many billions of a reserve for post-retirement health benefits, that tends to make the returns on GM look a lot better than it did in the past, when it wasn't even recognizing those costs and, therefore, had an equity that really was much larger than the true equity.

So there have been some things happen like that. But all in all, I don't think, under any system of accounting, the 20 percent returns for American industry are in the cards.

Charlie?

CHARLIE MUNGER: Well, I agree. And I think that this business of having way more consolidation and the successful companies, like Wells Fargo, buying in stock, I think that's had a huge effect, too.

I don't think it's actually gotten that much — obviously, we had a long period of real growth and so on. And I think that, on average, business has earned higher returns on equity. But I think a whole lot of things have combined to goose the results. And I don't see how it could go much farther.

40. Buffett's investment doesn't reflect any real estate insights

WARREN BUFFETT: Zone 5?

AUDIENCE MEMBER: Yes. My name is Ted Elliott (PH) from Connecticut.

The press reported a recent investment you made in the real estate business. And I wondered if you would comment as to your outlook for that business.

WARREN BUFFETT: Well, that's just sort of an asterisk. I've got virtually everything in Berkshire, and I own a few municipal bonds outside and a few other things, but I don't want to buy anything that Berkshire's involved in. It just complicates life. And all the best things I like — (laughs) — are in Berkshire.

So every now and then, some little thing happens to hit the radar screen that is too small, really, for Berkshire. And I'd bought a hundred shares of that company back when I — it's called Property Capital Trust — I'd bought 100 shares of that back when we owned NHP, which had done a couple of deals with them. So I — my policy of reading every annual report in sight that can further my knowledge about anything, I bought 100 shares.

And then I happened to see a year or so ago, where they said they were going to liquidate. So having some money around, I bought that. But it's not based on any feeling about the real estate business, any sophisticated analysis of the company, or anything else. It's a minor personal investment.

I have no insights whatsoever. We've done a few things in real estate at Berkshire. But they've been large things. And there was a brief period when there were a couple things that were intelligent to do.

If we'd started a little earlier, there might've been a lot more things. But we started a little late. So we're doing nothing now. But we listen to things, occasionally.

But we're looking. We're basically looking for big things at Berkshire. And we haven't found anything in real estate in a long time. And we may never.

But who can tell? I mean, we've got our oar in the water. And the couple things we're in are working out fine. But they're not significant relative to Berkshire's size.

41. Berkshire's past growth not a yardstick for new investments

WARREN BUFFETT: We'll go to zone 6. And this is the last question because it's going to be 3 o'clock. And let's have zone 6.

AUDIENCE MEMBER: Hi, my name's Mike Nolan from New Jersey. My wife and I have been shareholders since 1984, and happy ones. Thank you both. Two questions today.

In the retail store industry, in light of Berkshire's outstanding 23 percent annual growth in book value per share and the industry's roughly 8 to 9 percent growth in equity over the last several years, we wonder, why would Berkshire exchange stock for securities such as these, when the growth and the net worth of the acquired companies, if they're anywhere near the industry average that you've acquired this year, are one-third or less?

To quote Barnett Helzberg from the annual report, "The diamond business is a very competitive industry."

WARREN BUFFETT: Well, all retail is competitive. And both of those companies have averaged a lot better returns on equity than the numbers you cite for the industry.

And the second point, you know, we have no way of making 23.6 percent in the future. So we do not use our historical — if we used our historical average as a yardstick for new investments, we would make no new investments because we don't know how to make 23.6 percent in the future.

But we like — we regard the retail business as a very tough business. We like the records of those companies, their market positions, and their managements. And when we find a business like that, and we feel very comfortable with the people running it, we will make the deal.

But we won't expect to make 23.6 percent on our money over time doing that.

I'd like to thank everybody for coming. You've, you know — (Applause)

1996 Letter

BERKSHIRE HATHAWAY INC.

Chairman's Letter

To the Shareholders of Berkshire Hathaway Inc.:

Our gain in net worth during 1996 was $6.2 billion, or 36.1%. Per-share book value, however, grew by less, 31.8%, because the number of Berkshire shares increased: We issued stock in acquiring FlightSafety International and also sold new Class B shares.* Over the last 32 years (that is, since present management took over) per-share book value has grown from $19 to $19,011, or at a rate of 23.8% compounded annually.

** Each Class B share has an economic interest equal to 1/30th of that possessed by a Class A share, which is the new designation for the only stock that Berkshire had outstanding before May 1996. Throughout this report, we state all per-share figures in terms of "Class A equivalents," which are the sum of the Class A shares outstanding and 1/30th of the Class B shares outstanding.*

For technical reasons, we have restated our 1995 financial statements, a matter that requires me to present one of my less-than-thrilling explanations of accounting arcana. I'll make it brief.

The restatement was required because GEICO became a wholly-owned subsidiary of Berkshire on January 2, 1996, whereas it was previously classified as an investment. From an economic viewpoint - taking into account major tax efficiencies and other benefits we gained - the value of the 51% of GEICO we owned at year-end 1995 *increased* significantly when we acquired the remaining 49% of the company two days later. Accounting rules applicable to this type of "step acquisition," however, required us to *write down* the value of our 51% at the time we moved to 100%. That writedown - which also, of course, reduced book value - amounted to $478.4 million. As a result, we now carry our original 51% of GEICO at a value that is both lower than its market value at the time we purchased the remaining 49% of the company and lower than the value at which we carry that 49% itself.

There is an offset, however, to the reduction in book value I have just described: Twice during 1996 we issued Berkshire shares at a premium to book value, first in May when we sold the B shares for cash and again in December when we used both A and B shares as part-payment for FlightSafety. In total, the three non-operational items affecting book value contributed less than one percentage point to our 31.8% per-share gain last year.

I dwell on this rise in per-share book value because it roughly indicates our economic progress during the year. But, as Charlie Munger, Berkshire's Vice Chairman, and I have repeatedly told you, what counts at Berkshire is intrinsic value, not book value. The last time you got that message from us was in the Owner's Manual, sent to you in June after we issued the Class B shares. In that manual, we not only defined certain key terms - such as intrinsic value - but also set forth our economic principles.

For many years, we have listed these principles in the front of our annual report, but in this report, on pages 58 to 67, we reproduce the entire Owner's Manual. In this letter, we will occasionally refer to the manual so that we can avoid repeating certain definitions and explanations. For example, if you wish to brush up on "intrinsic value," see pages 64 and 65.

Last year, for the first time, we supplied you with a table that Charlie and I believe will help anyone trying to estimate Berkshire's intrinsic value. In the updated version of that table, which follows, we trace two key indices of value. The first column lists our per-share ownership of investments (including cash and equivalents) and the second column shows our per-share earnings from Berkshire's operating businesses before taxes and purchase-accounting adjustments but after all interest and corporate overhead expenses. The operating-earnings column excludesall dividends, interest and capital gains that we realized from the investments presented in the first column. In effect, the two columns show what Berkshire would have reported had it been broken into two parts.

Year	Marketable Securities Per Share	Pre-tax Earnings Per Share Excluding All Income from Investments
1965	$4	$4.08
1975	159	(6.48)
1985	2,443	18.86
1995	22,088	258.20
1996	28,500	421.39
Annual Growth Rate, 1965 - 95	33.4%	14.7%
One-Year Growth Rate, 1995-96	29.0%	63.2%

As the table tells you, our investments per share increased in 1996 by 29.0% and our non-investment earnings grew by 63.2%. Our goal is to keep the numbers in both columns moving ahead at a reasonable (or, better yet, unreasonable) pace.

Our expectations, however, are tempered by two realities. First, our past rates of growth cannot be matched nor even approached: Berkshire's equity capital is now large - in fact, fewer than ten businesses in America have capital larger - and an abundance of funds tends to dampen returns. Second, whatever our rate of progress, it will not be smooth: Year-to-year moves in the first column of the table above will be influenced in a major way by fluctuations in securities markets; the figures in the second column will be affected by wide swings in the profitability of our catastrophe-reinsurance business.

In the table, the donations made pursuant to our shareholder-designated contributions program are charged against the second column, though we view them as a shareholder benefit rather than as an expense. All other corporate expenses are also charged against the second column. These costs may be lower than those of any other large American corporation: Our after-tax headquarters expense amounts to less than two basis points (1/50th of 1%) measured against net worth. Even so, Charlie used to think this expense percentage outrageously high, blaming it on my use of Berkshire's corporate jet, *The Indefensible*. But Charlie has recently experienced a "counter-revelation": With our purchase of FlightSafety, whose major activity is the training of corporate pilots, he now rhapsodizes at the mere mention of jets.

Seriously, costs matter. For example, equity mutual funds incur corporate expenses - largely payments to the funds' managers - that average about 100 basis points, a levy likely to cut the returns their investors earn by 10% or more over time. Charlie and I make no promises about Berkshire's results. We do promise you, however, that virtually all of the gains Berkshire makes will end up with shareholders. We are here to make money with you, not off you.

The Relationship of Intrinsic Value to Market Price

In last year's letter, with Berkshire shares selling at $36,000, I told you: (1) Berkshire's gain in market value in recent years had outstripped its gain in intrinsic value, even though the latter gain had been highly satisfactory; (2) that kind of overperformance could not continue indefinitely; (3) Charlie and I did not at that moment consider Berkshire to be undervalued.

Since I set down those cautions, Berkshire's intrinsic value has increased very significantly - aided in a major way by a stunning performance at GEICO that I will tell you more about later - while the market price of our shares has changed little. This, of course, means that in 1996 Berkshire's stock underperformed the business. Consequently, today's price/value relationship is both much different from what it was a year ago and, as Charlie and I see it, more appropriate.

Over time, the aggregate gains made by Berkshire shareholders must of necessity match the business gains of the company. When the stock temporarily overperforms or underperforms the business, a limited number of shareholders - either sellers or buyers - receive outsized benefits at the expense of those they trade with. Generally, the sophisticated have an edge over the innocents in this game.

Though our primary goal is to maximize the amount that our shareholders, in total, reap from their ownership of Berkshire, we wish also to minimize the benefits going to some shareholders at the expense of others. These are goals we would have were we managing a family partnership, and we believe they make equal sense for the manager of a public company. In a partnership, fairness requires that partnership interests be valued equitably when partners enter or exit; in a public company, fairness prevails when market price and intrinsic value are in sync. Obviously, they won't always meet that ideal, but a manager - by his policies and communications - can do much to foster equity.

Of course, the longer a shareholder holds his shares, the more bearing Berkshire's business results will have on his financial experience - and the less it will matter what premium or discount to intrinsic value prevails when he buys and sells his stock. That's one reason we hope

to attract owners with long-term horizons. Overall, I think we have succeeded in that pursuit. Berkshire probably ranks number one among large American corporations in the percentage of its shares held by owners with a long-term view.

Acquisitions of 1996

We made two acquisitions in 1996, both possessing exactly the qualities we seek - excellent business economics and an outstanding manager.

The first acquisition was Kansas Bankers Surety (KBS), an insurance company whose name describes its specialty. The company, which does business in 22 states, has an extraordinary underwriting record, achieved through the efforts of Don Towle, an extraordinary manager. Don has developed first-hand relationships with hundreds of bankers and knows every detail of his operation. He thinks of himself as running a company that is "his," an attitude we treasure at Berkshire. Because of its relatively small size, we placed KBS with Wesco, our 80%-owned subsidiary, which has wanted to expand its insurance operations.

You might be interested in the carefully-crafted and sophisticated acquisition strategy that allowed Berkshire to nab this deal. Early in 1996 I was invited to the 40th birthday party of my nephew's wife, Jane Rogers. My taste for social events being low, I immediately, and in my standard, gracious way, began to invent reasons for skipping the event. The party planners then countered brilliantly by offering me a seat next to a man I always enjoy, Jane's dad, Roy Dinsdale - so I went.

The party took place on January 26. Though the music was loud - Why must bands play as if they will be paid by the decibel? - I just managed to hear Roy say he'd come from a directors meeting at Kansas Bankers Surety, a company I'd always admired. I shouted back that he should let me know if it ever became available for purchase.

On February 12, I got the following letter from Roy: "Dear Warren: Enclosed is the annual financial information on Kansas Bankers Surety. This is the company that we talked about at Janie's party. If I can be of any further help, please let me know." On February 13, I told Roy we would pay $75 million for the company - and before long we had a deal. I'm now scheming to get invited to Jane's next party.

Our other acquisition in 1996 - FlightSafety International, the world's leader in the training of pilots - was far larger, at about $1.5 billion, but had an equally serendipitous origin. The heroes of this story are first, Richard Sercer, a Tucson aviation consultant, and second, his wife, Alma

Murphy, an ophthalmology graduate of Harvard Medical School, who in 1990 wore down her husband's reluctance and got him to buy Berkshire stock. Since then, the two have attended all our Annual Meetings, but I didn't get to know them personally.

Fortunately, Richard had also been a long-time shareholder of FlightSafety, and it occurred to him last year that the two companies would make a good fit. He knew our acquisition criteria, and he thought that Al Ueltschi, FlightSafety's 79-year-old CEO, might want to make a deal that would both give him a home for his company and a security in payment that he would feel comfortable owning throughout his lifetime. So in July, Richard wrote Bob Denham, CEO of Salomon Inc, suggesting that he explore the possibility of a merger.

Bob took it from there, and on September 18, Al and I met in New York. I had long been familiar with FlightSafety's business, and in about 60 seconds I knew that Al was exactly our kind of manager. A month later, we had a contract. Because Charlie and I wished to minimize the issuance of Berkshire shares, the transaction we structured gave FlightSafety shareholders a choice of cash or stock but carried terms that encouraged those who were tax-indifferent to take cash. This nudge led to about 51% of FlightSafety's shares being exchanged for cash, 41% for Berkshire A and 8% for Berkshire B.

Al has had a lifelong love affair with aviation and actually piloted Charles Lindbergh. After a barnstorming career in the 1930s, he began working for Juan Trippe, Pan Am's legendary chief. In 1951, while still at Pan Am, Al founded FlightSafety, subsequently building it into a simulator manufacturer and a worldwide trainer of pilots (single-engine, helicopter, jet and marine). The company operates in 41 locations, outfitted with 175 simulators of planes ranging from the very small, such as Cessna 210s, to Boeing 747s. Simulators are not cheap - they can cost as much as $19 million - so this business, unlike many of our operations, is capital intensive. About half of the company's revenues are derived from the training of corporate pilots, with most of the balance coming from airlines and the military.

Al may be 79, but he looks and acts about 55. He will run operations just as he has in the past: We never fool with success. I have told him that though we don't believe in splitting Berkshire stock, we will split his age 2-for-1 when he hits 100.

An observer might conclude from our hiring practices that Charlie and I were traumatized early in life by an EEOC bulletin on age discrimination. The real explanation, however, is self-interest: It's difficult to teach a new dog old tricks. The many Berkshire managers who are past

70 hit home runs today at the same pace that long ago gave them reputations as young slugging sensations. Therefore, to get a job with us, just employ the tactic of the 76-year-old who persuaded a dazzling beauty of 25 to marry him. "How did you ever get her to accept?" asked his envious contemporaries. The comeback: "I told her I was 86."

* * * * * * * * * * *

And now we pause for our usual commercial: If you own a large business with good economic characteristics and wish to become associated with an exceptional collection of businesses having similar characteristics, Berkshire may well be the home you seek. Our requirements are set forth on page 21. If your company meets them - and if I fail to make the next birthday party you attend - give me a call.

Insurance Operations - Overview

Our insurance business was terrific in 1996. In both primary insurance, where GEICO is our main unit, and in our "super-cat" reinsurance business, results were outstanding.

As we've explained in past reports, what counts in our insurance business is, first, the amount of "float" we generate and, second, its cost to us. These are matters that are important for you to understand because float is a major component of Berkshire's intrinsic value that is not reflected in book value.

To begin with, float is money we hold but don't own. In an insurance operation, float arises because premiums are received before losses are paid. Secondly, the premiums that an insurer takes in typically do not cover the losses and expenses it eventually must pay. That leaves it running an "underwriting loss," which is the cost of float. An insurance business has value if its cost of float over time is less than the cost the company would otherwise incur to obtain funds. But the business is an albatross if the cost of its float is higher than market rates for money.

As the numbers in the following table show, Berkshire's insurance business has been a huge winner. For the table, we have calculated our float - which we generate in large amounts relative to our premium volume - by adding loss reserves, loss adjustment reserves, funds held under reinsurance assumed and unearned premium reserves, and then subtracting agents' balances, prepaid acquisition costs, prepaid taxes and deferred charges applicable to assumed reinsurance. Our cost of float is determined by our underwriting loss or profit. In those years

when we have had an underwriting profit, such as the last four, our cost of float has been negative. In effect, we have been paid for holding money.

(in $ Millions)	(1) Underwriting Loss	(2) Average Float	Approximate Cost of Funds	Yearend Yield on Long-Term Govt. Bonds
1967	Profit	$17.3	< 0	5.50%
1968	Profit	19.9	< 0	5.90%
1969	Profit	23.4	< 0	6.79%
1970	$0.37	32.4	1.14%	6.25%
1971	Profit	52.5	< 0	5.81%
1972	Profit	69.5	< 0	5.82%
1973	Profit	73.3	< 0	7.27%
1974	7.36	79.1	9.30%	8.13%
1975	11.35	87.6	12.96%	8.03%
1976	Profit	102.6	< 0	7.30%
1977	Profit	139.0	< 0	7.97%
1978	Profit	190.4	< 0	8.93%
1979	Profit	227.3	< 0	10.08%
1980	Profit	237.0	< 0	11.94%
1981	Profit	228.4	< 0	13.61%
1982	21.56	220.6	9.77%	10.64%
1983	33.87	231.3	14.64%	11.84%
1984	48.06	253.2	18.98%	11.58%
1985	44.23	390.2	11.34%	9.34%
1986	55.84	797.5	7.00%	7.60%
1987	55.43	1,266.7	4.38%	8.95%
1988	11.08	1,497.7	0.74%	9.00%
1989	24.40	1,541.3	1.58%	7.97%
1990	26.65	1,637.3	1.63%	8.24%
1991	119.6	1,895.0	6.31%	7.40%
1992	108.9	2,290.4	4.76%	7.39%
1993	Profit	2,624.7	< 0	6.35%
1994	Profit	3,056.6	< 0	7.88%
1995	Profit	3,607.2	< 0	5.95%
1996	Profit	6,702.0	< 0	6.64%

Since 1967, when we entered the insurance business, our float has grown at an annual compounded rate of 22.3%. In more years than not, our cost of funds has been less than nothing. This access to "free" money has boosted Berkshire's performance in a major way. Moreover, our acquisition of GEICO materially increases the probability that we can continue to obtain "free" funds in increasing amounts.

Super-Cat Insurance

As in the past three years, we once again stress that the good results we are reporting for Berkshire stem in part from our super-cat business having a lucky year. In this operation, we sell policies that insurance and reinsurance companies buy to protect themselves from the effects of mega-catastrophes. Since truly major catastrophes are rare occurrences, our super-cat business can be expected to show large profits in most years - and to record a huge loss occasionally. In other words, the attractiveness of our super-cat business will take a great many years to measure. *What you must understand, however, is that a truly terrible year in the super-cat business is not a possibility - it's a certainty. The only question is when it will come.*

I emphasize this lugubrious point because I would not want you to panic and sell your Berkshire stock upon hearing that some large catastrophe had cost us a significant amount. If you would tend to react that way, you should not own Berkshire shares now, just as you should entirely avoid owning stocks if a crashing market would lead you to panic and sell. Selling fine businesses on "scary" news is usually a bad decision. (Robert Woodruff, the business genius who built Coca-Cola over many decades and who owned a huge position in the company, was once asked when it might be a good time to sell Coke stock. Woodruff had a simple answer: "I don't know. I've never sold any.")

In our super-cat operation, our customers are insurers that are exposed to major earnings volatility and that wish to reduce it. The product we sell - for what we hope is an appropriate price - is our willingness to shift that volatility to our own books. Gyrations in Berkshire's earnings don't bother us in the least: Charlie and I would much rather earn a lumpy 15% over time than a smooth 12%. (After all, our earnings swing wildly on a daily and weekly basis - why should we demand that smoothness accompany each orbit that the earth makes of the sun?) We are most comfortable with that thinking, however, when we have shareholder/partners who can also accept volatility, and that's why we regularly repeat our cautions.

We took on some major super-cat exposures during 1996. At mid-year we wrote a contract with Allstate that covers Florida hurricanes, and though there are no definitive records that would allow us to prove this point, we believe that to have *then* been the largest single catastrophe risk ever assumed by one company for its own account. Later in the year, however, we wrote a policy for the California Earthquake Authority that goes into effect on April 1, 1997, and that exposes us to a loss more than twice that possible under the Florida contract. Again we retained all the risk for our own account. Large as these coverage's are, Berkshire's after-tax "worst-case" loss from a true mega-catastrophe is probably no more than $600 million, which is less than 3% of our book value and 1.5% of our market value. To gain some perspective on this exposure, look at the table on page 2 and note the much greater volatility that security markets have delivered us.

In the super-cat business, we have three major competitive advantages. First, the parties buying reinsurance from us know that we both can and will pay under the most adverse of circumstances. Were a truly cataclysmic disaster to occur, it is not impossible that a financial panic would quickly follow. If that happened, there could well be respected reinsurers that would have difficulty paying at just the moment that their clients faced extraordinary needs. Indeed, one reason we never "lay off" part of the risks we insure is that we have reservations about our ability to collect from others when disaster strikes. When it's Berkshire promising, insureds know with certainty that they can collect promptly.

Our second advantage - somewhat related - is subtle but important. After a mega-catastrophe, insurers might well find it difficult to obtain reinsurance even though their need for coverage would then be particularly great. At such a time, Berkshire would without question have very substantial capacity available - but it will naturally be our long-standing clients that have first call on it. That business reality has made major insurers and reinsurers throughout the world realize the desirability of doing business with us. Indeed, we are currently getting sizable "stand-by" fees from reinsurers that are simply nailing down their ability to get coverage from us should the market tighten.

Our final competitive advantage is that we can provide dollar coverages of a size neither matched nor approached elsewhere in the industry. Insurers looking for huge covers know that a single call to Berkshire will produce a firm and immediate offering.

A few facts about our exposure to California earthquakes - our largest risk - seem in order. The Northridge quake of 1994 laid homeowners' losses on insurers that greatly exceeded what computer models had told them to expect. Yet the intensity of that quake was mild compared to the "worst-case" possibility for California. Understandably, insurers became - ahem - shaken and started contemplating a retreat from writing earthquake coverage into their homeowners' policies.

In a thoughtful response, Chuck Quackenbush, California's insurance commissioner, designed a new residential earthquake policy to be written by a state-sponsored insurer, The California Earthquake Authority. This entity, which went into operation on December 1, 1996, needed large layers of reinsurance - and that's where we came in. Berkshire's layer of approximately $1 billion will be called upon if the Authority's aggregate losses in the period ending March 31, 2001 exceed about $5 billion. (The press originally reported larger figures, but these would have applied only if all California insurers had entered into the arrangement; instead only 72% signed up.)

So what are the true odds of our having to make a payout during the policy's term? We don't know - nor do we think computer models will help us, since we believe the precision they project is a chimera. In fact, such models can lull decision-makers into a false sense of security and thereby increase their chances of making a really huge mistake. We've already seen such debacles in both insurance and investments. Witness "portfolio insurance," whose destructive effects in the 1987 market crash led one wag to observe that it was the computers that should have been jumping out of windows.

Even if perfection in assessing risks is unattainable, insurers can underwrite sensibly. After all, you need not know a man's precise age to know that he is old enough to vote nor know his exact weight to recognize his need to diet. In insurance, it is essential to remember that virtually all surprises are unpleasant, and with that in mind we try to price our super-cat exposures so that about 90% of total premiums end up being eventually paid out in losses and expenses. Over time, we will find out how smart our pricing has been, but that will not be quickly. The super-cat business is just like the investment business in that it often takes a long time to find out whether you knew what you were doing.

What I can state with certainty, however, is that we have the best person in the world to run our super-cat business: Ajit Jain, whose value to Berkshire is simply enormous. In the

reinsurance field, disastrous propositions abound. I know that because I personally embraced all too many of these in the 1970s and also because GEICO has a large runoff portfolio made up of foolish contracts written in the early-1980s, able though its then-management was. Ajit, I can assure you, won't make mistakes of this type.

I have mentioned that a mega-catastrophe might cause a catastrophe in the financial markets, a possibility that is unlikely but not far-fetched. Were the catastrophe a quake in California of sufficient magnitude to tap our coverage, we would almost certainly be damaged in other ways as well. For example, See's, Wells Fargo and Freddie Mac could be hit hard. All in all, though, we can handle this aggregation of exposures.

In this respect, as in others, we try to "reverse engineer" our future at Berkshire, bearing in mind Charlie's dictum: "All I want to know is where I'm going to die so I'll never go there." (Inverting really works: Try singing country western songs backwards and you will quickly regain your house, your car and your wife.) If we can't tolerate a possible consequence, remote though it may be, we steer clear of planting its seeds. That is why we don't borrow big amounts and why we make sure that our super-cat business losses, large though the maximums may sound, will not put a major dent in Berkshire's intrinsic value.

Insurance - GEICO and Other Primary Operations

When we moved to total ownership of GEICO early last year, our expectations were high - and they are all being exceeded. That is true from both a business and personal perspective: GEICO's operating chief, Tony Nicely, is a superb business manager and a delight to work with. Under almost any conditions, GEICO would be an exceptionally valuable asset. With Tony at the helm, it is reaching levels of performance that the organization would only a few years ago have thought impossible.

There's nothing esoteric about GEICO's success: The company's competitive strength flows directly from its position as a low-cost operator. Low costs permit low prices, and low prices attract and retain good policyholders. The final segment of a virtuous circle is drawn when policyholders recommend us to their friends. GEICO gets more than one million referrals annually and these produce more than half of our new business, an advantage that gives us enormous savings in acquisition expenses - and that makes our costs still lower.

This formula worked in spades for GEICO in 1996: Its voluntary auto policy count grew 10%. During the previous 20 years, the company's best-ever growth for a year had been 8%, a

rate achieved only once. Better yet, the growth in voluntary policies accelerated during the year, led by major gains in the nonstandard market, which has been an underdeveloped area at GEICO. I focus here on voluntary policies because the involuntary business we get from assigned risk pools and the like is unprofitable. Growth in that sector is most unwelcome.

GEICO's growth would mean nothing if it did not produce reasonable underwriting profits. Here, too, the news is good: Last year we hit our underwriting targets and then some. Our goal, however, is not to widen our profit margin but rather to enlarge the price advantage we offer customers. Given that strategy, we believe that 1997's growth will easily top that of last year.

We expect new competitors to enter the direct-response market, and some of our existing competitors are likely to expand geographically. Nonetheless, the economies of scale we enjoy should allow us to maintain or even widen the protective moat surrounding our economic castle. We do best on costs in geographical areas in which we enjoy high market penetration. As our policy count grows, concurrently delivering gains in penetration, we expect to drive costs materially lower. GEICO's sustainable cost advantage is what attracted me to the company way back in 1951, when the entire business was valued at $7 million. It is also why I felt Berkshire should pay $2.3 billion last year for the 49% of the company that we didn't then own.

Maximizing the results of a wonderful business requires management and focus. Lucky for us, we have in Tony a superb manager whose business focus never wavers. Wanting also to get the entire GEICO organization concentrating as he does, we needed a compensation plan that was itself sharply focused - and immediately after our purchase, we put one in.

Today, the bonuses received by dozens of top executives, starting with Tony, are based upon only two key variables: (1) growth in voluntary auto policies and (2) underwriting profitability on "seasoned" auto business (meaning policies that have been on the books for more than one year). In addition, we use the same yardsticks to calculate the annual contribution to the company's profit-sharing plan. *Everyone* at GEICO knows what counts.

The GEICO plan exemplifies Berkshire's incentive compensation principles: Goals should be (1) tailored to the economics of the specific operating business; (2) simple in character so that the degree to which they are being realized can be easily measured; and (3) directly related to the daily activities of plan participants. As a corollary, we shun "lottery ticket" arrangements, such as options on Berkshire shares, whose ultimate value - which could range from zero to huge - is totally out of the control of the person whose behavior we would like to affect. In our view, a

system that produces quixotic payoffs will not only be wasteful for owners but may actually discourage the focused behavior we value in managers.

Every quarter, all 9,000 GEICO associates can see the results that determine our profit-sharing plan contribution. In 1996, they enjoyed the experience because the plan literally went off the chart that had been constructed at the start of the year. Even I knew the answer to that problem: Enlarge the chart. Ultimately, the results called for a record contribution of 16.9% ($40 million), compared to a five-year average of less than 10% for the comparable plans previously in effect. Furthermore, at Berkshire, we never greet good work by raising the bar. If GEICO's performance continues to improve, we will happily keep on making larger charts.

Lou Simpson continues to manage GEICO's money in an outstanding manner: Last year, the equities in his portfolio outdid the S&P 500 by 6.2 percentage points. In Lou's part of GEICO's operation, we again tie compensation to performance - but to investment performance over a four-year period, not to underwriting results nor to the performance of GEICO as a whole. We think it foolish for an insurance company to pay bonuses that are tied to overall corporate results when great work on one side of the business - underwriting or investment - could conceivably be completely neutralized by bad work on the other. If you bat .350 at Berkshire, you can be sure you will get paid commensurately even if the rest of the team bats .200. In Lou and Tony, however, we are lucky to have Hall-of-Famers in both key positions.

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Though they are, of course, smaller than GEICO, our other primary insurance operations turned in equally stunning results last year. National Indemnity's traditional business had a combined ratio of 74.2 and, as usual, developed a large amount of float compared to premium volume. Over the last three years, this segment of our business, run by Don Wurster, has had an average combined ratio of 83.0. Our homestate operation, managed by Rod Eldred, recorded a combined ratio of 87.1 even though it absorbed the expenses of expanding to new states. Rod's three-year combined ratio is an amazing 83.2. Berkshire's workers' compensation business, run out of California by Brad Kinstler, has now moved into six other states and, despite the costs of that expansion, again achieved an excellent underwriting profit. Finally, John Kizer, at Central States Indemnity, set new records for premium volume while generating good earnings

from underwriting. In aggregate, our smaller insurance operations (now including Kansas Bankers Surety) have an underwriting record virtually unmatched in the industry. Don, Rod, Brad and John have all created significant value for Berkshire, and we believe there is more to come.

Taxes

In 1961, President Kennedy said that we should ask not what our country can do for us, but rather ask what we can do for our country. Last year we decided to give his suggestion a try - and who says it never hurts to ask? We were told to mail $860 million in income taxes to the U.S. Treasury.

Here's a little perspective on that figure: If an equal amount had been paid by only 2,000 other taxpayers, the government would have had a balanced budget in 1996 without needing a dime of taxes - income or Social Security or what have you - from *any* other American. Berkshire shareholders can truly say, "I gave at the office."

Charlie and I believe that large tax payments by Berkshire are entirely fitting. The contribution we thus make to society's well-being is at most only proportional to its contribution to ours. Berkshire prospers in America as it would nowhere else.

Sources of Reported Earnings

The table that follows shows the main sources of Berkshire's reported earnings. In this presentation, purchase-accounting adjustments are not assigned to the specific businesses to which they apply, but are instead aggregated and shown separately. This procedure lets you view the earnings of our businesses as they would have been reported had we not purchased them. For the reasons discussed on pages 65 and 66, this form of presentation seems to us to be more useful to investors and managers than one utilizing generally-accepted accounting principles (GAAP), which require purchase-premiums to be charged off business-by-business. The total earnings we show in the table are, of course, identical to the GAAP total in our audited financial statements.

Operating Earnings	**Pre-Tax**	**Earnings**	**Berkshire**	**Share**
(In Millions)	**1996**	**1995**	**1996**	**1995**
Insurance Group:				
Underwriting	$222.1	$20.5	$142.8	$11.3
Net investment income	726.2	501.6	593.1	417.7
Buffalo News	50.4	46.8	29.5	27.3
Fechheimer	17.3	16.9	9.3	8.8
Finance Business	23.1	20.8	14.9	12.6
Home Furnishings	43.8	29.7 (1)	24.8	16.7 (1)
Jewelry	27.8	33.9 (2)	16.1	19.1 (2)
Kirby	58.5	50.2	39.9	32.1
Scott Fetzer Manufacturing Group	50.6	34.1	32.2	21.2
See's Candies	51.9	50.2	30.8	29.8
Shoe Group	61.6	58.4	41.0	37.5
World Book	12.6	8.8	9.5	7.0
Purchase-Accounting Adjustments	(75.7)	(27.0)	(70.5)	(23.4)
Interest Expense (4)	(94.3)	(56.0)	(56.6)	(34.9)
Shareholder-Designated Contributions	(13.3)	(11.6)	(8.5)	(7.0)
Other	58.8	37.4	34.8	24.4
Operating Earnings	1,221.4	814.7	883.1	600.2
Sales of Securities	2,484.5	194.1	1,605.5	125.0
Total Earnings- All entities	**$3,705.9**	**$1,008.8**	**$2,488.6**	**$725.2**

(1) Before the GEICO-related restatement.

(2) Includes R.C. Willey from June 29, 1995.

(3) Includes Helzberg's from April 30, 1995.

(4) Excludes interest expense of Finance Businesses.

In this section last year, I discussed three businesses that reported a decline in earnings - Buffalo News, Shoe Group and World Book. All, I'm happy to say, recorded gains in 1996.

World Book, however, did not find it easy: Despite the operation's new status as the only direct-seller of encyclopedias in the country (Encyclopedia Britannica exited the field last year), its unit volume fell. Additionally, World Book spent heavily on a new CD-ROM product that began to take in revenues only in early 1997, when it was launched in association with IBM. In the face of these factors, earnings would have evaporated had World Book not revamped

distribution methods and cut overhead at headquarters, thereby dramatically reducing its fixed costs. Overall, the company has gone a long way toward assuring its long-term viability in both the print and electronic marketplaces.

Our only disappointment last year was in jewelry: Borsheim's did fine, but Helzberg's suffered a material decline in earnings. Its expense levels had been geared to a sizable increase in same-store sales, consistent with the gains achieved in recent years. When sales were instead flat, profit margins fell. Jeff Comment, CEO of Helzberg's, is addressing the expense problem in a decisive manner, and the company's earnings should improve in 1997.

Overall, our operating businesses continue to perform exceptionally, far outdoing their industry norms. For this, Charlie and I thank our managers. If you should see any of them at the Annual Meeting, add your thanks as well.

More information about our various businesses is given on pages 36-46, where you will also find our segment earnings reported on a GAAP basis. In addition, on pages 51-57, we have rearranged Berkshire's financial data into four segments on a non-GAAP basis, a presentation that corresponds to the way Charlie and I think about the company. Our intent is to supply you with the financial information that we would wish you to give us if our positions were reversed.

"Look-Through" Earnings

Reported earnings are a poor measure of economic progress at Berkshire, in part because the numbers shown in the table presented earlier include only the dividends we receive from investees - though these dividends typically represent only a small fraction of the earnings attributable to our ownership. Not that we mind this division of money, since on balance we regard the undistributed earnings of investees as more valuable to us than the portion paid out. The reason is simple: Our investees often have the opportunity to reinvest earnings at high rates of return. So why should we want them paid out?

To depict something closer to economic reality at Berkshire than reported earnings, though, we employ the concept of "look-through" earnings. As we calculate these, they consist of: (1) the operating earnings reported in the previous section, plus; (2) our share of the retained operating earnings of major investees that, under GAAP accounting, are not reflected in our profits, less; (3) an allowance for the tax that would be paid by Berkshire if these retained earnings of investees had instead been distributed to us. When tabulating "operating earnings"

here, we exclude purchase-accounting adjustments as well as capital gains and other major non-recurring items.

The following table sets forth our 1996 look-through earnings, though I warn you that the figures can be no more than approximate, since they are based on a number of judgment calls. (The dividends paid to us by these investees have been included in the operating earnings itemized on page 12, mostly under "Insurance Group: Net Investment Income.")

Berkshire's Major Investees (in millions)	**Berkshires Approximate Ownership at Yearend (1)**	**Berkshire's Share of Undistributed Operating Earnings (2)**
American Express Company	10.5%	$132
The Coca-Cola Company	8.1%	180
The Walt Disney Company	3.6%	50
Federal Home Loan Mortgage Corp.	8.4%	77
The Gillette Company	8.6%	73
McDonald's Corporation	4.3%	38
The Washington Post Company	15.8%	27
Wells Fargo & Company	8.0%	84
Berkshire's share of undistributed earnings of major investees		$661
Hypothetical tax on these undistributed investee earnings (3)		(93)
Reported operating earnings of Berkshire		954
Total look-through earnings of Bekrshire		$1,522

(1) Does not include shares allocable to minority interests

(2) Calculated on average ownership for the year

(3) The tax rate used is 14%, which is the rate Berkshire pays on the dividends it receives

Common Stock Investments

Below we present our common stock investments. Those with a market value of more than $500 million are itemized.

Shares	Company	Cost	Market
		(dollars in millions)	
49,456,900	American Express Company	$1,392.7	$2,794.3
200,000,000	The Coca-Cola Company	1,298.8	10,525.0
24,614,214	The Walt Disney Company	577.0	1,716.8
64,246,000	Federal Home Loan Mortgage Corp	333.4	1,772.8
48,000,000	The Gillette Company	600.0	3,732.0
30,156,600	McDonald's Corporation	1,265.3	1,265.3
1,727,765	The Washington Post Company	10.6	579.0
7,291,418	Wells Fargo & Company	497.8	1,966.9
	Others	1,934.5	3,295.4
	Total Common Stocks	**$7,910.2**	**$27,750.6**

** Represents tax-basis cost which, in aggregate, is $1.2 billion less than GAAP cost.*

Our portfolio shows little change: We continue to make more money when snoring than when active.

Inactivity strikes us as intelligent behavior. Neither we nor most business managers would dream of feverishly trading highly-profitable subsidiaries because a small move in the Federal Reserve's discount rate was predicted or because some Wall Street pundit had reversed his views on the market. Why, then, should we behave differently with our minority positions in wonderful businesses? The art of investing in public companies successfully is little different from the art of successfully acquiring subsidiaries. In each case you simply want to acquire, at a sensible price, a business with excellent economics and able, honest management. Thereafter, you need only monitor whether these qualities are being preserved.

When carried out capably, an investment strategy of that type will often result in its practitioner owning a few securities that will come to represent a very large portion of his portfolio. This investor would get a similar result if he followed a policy of purchasing an interest in, say, 20% of the future earnings of a number of outstanding college basketball stars. A handful of these would go on to achieve NBA stardom, and the investor's take from them

would soon dominate his royalty stream. To suggest that this investor should sell off portions of his most successful investments simply because they have come to dominate his portfolio is akin to suggesting that the Bulls trade Michael Jordan because he has become so important to the team.

In studying the investments we have made in both subsidiary companies and common stocks, you will see that we favor businesses and industries unlikely to experience major change. The reason for that is simple: Making either type of purchase, we are searching for operations that we believe are virtually certain to possess enormous competitive strength ten or twenty years from now. A fast-changing industry environment may offer the chance for huge wins, but it precludes the certainty we seek.

I should emphasize that, as citizens, Charlie and I welcome change: Fresh ideas, new products, innovative processes and the like cause our country's standard of living to rise, and that's clearly good. As investors, however, our reaction to a fermenting industry is much like our attitude toward space exploration: We applaud the endeavor but prefer to skip the ride.

Obviously all businesses change to some extent. Today, See's is different in many ways from what it was in 1972 when we bought it: It offers a different assortment of candy, employs different machinery and sells through different distribution channels. But the reasons why people today buy boxed chocolates, and why they buy them from us rather than from someone else, are virtually unchanged from what they were in the 1920s when the See family was building the business. Moreover, these motivations are not likely to change over the next 20 years, or even 50.

We look for similar predictability in marketable securities. Take Coca-Cola: The zeal and imagination with which Coke products are sold has burgeoned under Roberto Goizueta, who has done an absolutely incredible job in creating value for his shareholders. Aided by Don Keough and Doug Ivester, Roberto has rethought and improved every aspect of the company. But the fundamentals of the business - the qualities that underlie Coke's competitive dominance and stunning economics - have remained constant through the years.

I was recently studying the 1896 report of Coke (and you think that *you* are behind in your reading!). At that time Coke, though it was already the leading soft drink, had been around for only a decade. But its blueprint for the next 100 years was already drawn. Reporting sales of $148,000 that year, Asa Candler, the company's president, said: "We have not lagged in our

efforts to go into all the world teaching that Coca-Cola is the article, par excellence, for the health and good feeling of all people." Though "health" may have been a reach, I love the fact that Coke still relies on Candler's basic theme today - a century later. Candler went on to say, just as Roberto could now, "No article of like character has ever so firmly entrenched itself in public favor." Sales of syrup that year, incidentally, were 116,492 gallons versus about 3.2 billion in 1996.

I can't resist one more Candler quote: "Beginning this year about March 1st . . . we employed ten traveling salesmen by means of which, with systematic correspondence from the office, we covered almost the territory of the Union." That's my kind of sales force.

Companies such as Coca-Cola and Gillette might well be labeled "The Inevitables." Forecasters may differ a bit in their predictions of exactly how much soft drink or shaving-equipment business these companies will be doing in ten or twenty years. Nor is our talk of inevitability meant to play down the vital work that these companies must continue to carry out, in such areas as manufacturing, distribution, packaging and product innovation. In the end, however, no sensible observer - not even these companies' most vigorous competitors, assuming they are assessing the matter honestly - questions that Coke and Gillette will dominate their fields worldwide for an investment lifetime. Indeed, their dominance will probably strengthen. Both companies have significantly expanded their already huge shares of market during the past ten years, and all signs point to their repeating that performance in the next decade.

Obviously many companies in high-tech businesses or embryonic industries will grow much faster in percentage terms than will The Inevitables. But I would rather be certain of a good result than hopeful of a great one.

Of course, Charlie and I can identify only a few Inevitables, even after a lifetime of looking for them. Leadership alone provides no certainties: Witness the shocks some years back at General Motors, IBM and Sears, all of which had enjoyed long periods of seeming invincibility. Though some industries or lines of business exhibit characteristics that endow leaders with virtually insurmountable advantages, and that tend to establish Survival of the Fattest as almost a natural law, most do not. Thus, for every Inevitable, there are dozens of Impostors, companies now riding high but vulnerable to competitive attacks. Considering what it takes to be an Inevitable, Charlie and I recognize that we will never be able to come up with a Nifty Fifty or

even a Twinkling Twenty. To the Inevitables in our portfolio, therefore, we add a few "Highly Probables."

You can, of course, pay too much for even the best of businesses. The overpayment risk surfaces periodically and, in our opinion, may now be quite high for the purchasers of virtually all stocks, The Inevitables included. Investors making purchases in an overheated market need to recognize that it may often take an extended period for the value of even an outstanding company to catch up with the price they paid.

A far more serious problem occurs when the management of a great company gets sidetracked and neglects its wonderful base business while purchasing other businesses that are so-so or worse. When that happens, the suffering of investors is often prolonged. Unfortunately, that is precisely what transpired years ago at both Coke and Gillette. (Would you believe that a few decades back they were growing shrimp at Coke and exploring for oil at Gillette?) Loss of focus is what most worries Charlie and me when we contemplate investing in businesses that in general look outstanding. All too often, we've seen value stagnate in the presence of hubris or of boredom that caused the attention of managers to wander. That's not going to happen again at Coke and Gillette, however - not given their current and prospective managements.

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Let me add a few thoughts about your own investments. Most investors, both institutional and individual, will find that the best way to own common stocks is through an index fund that charges minimal fees. Those following this path are sure to beat the net results (after fees and expenses) delivered by the great majority of investment professionals.

Should you choose, however, to construct your own portfolio, there are a few thoughts worth remembering. Intelligent investing is not complex, though that is far from saying that it is easy. What an investor needs is the ability to correctly evaluate selected businesses. Note that word "selected": You don't have to be an expert on every company, or even many. You only have to be able to evaluate companies within your circle of competence. The size of that circle is not very important; knowing its boundaries, however, is vital.

To invest successfully, you need not understand beta, efficient markets, modern portfolio theory, option pricing or emerging markets. You may, in fact, be better off knowing nothing of

these. That, of course, is not the prevailing view at most business schools, whose finance curriculum tends to be dominated by such subjects. In our view, though, investment students need only two well-taught courses - How to Value a Business, and How to Think About Market Prices.

Your goal as an investor should simply be to purchase, at a rational price, a part interest in an easily-understandable business whose earnings are virtually certain to be materially higher five, ten and twenty years from now. Over time, you will find only a few companies that meet these standards - so when you see one that qualifies, you should buy a meaningful amount of stock. You must also resist the temptation to stray from your guidelines: If you aren't willing to own a stock for ten years, don't even think about owning it for ten minutes. Put together a portfolio of companies whose aggregate earnings march upward over the years, and so also will the portfolio's market value.

Though it's seldom recognized, this is the exact approach that has produced gains for Berkshire shareholders: Our look-through earnings have grown at a good clip over the years, and our stock price has risen correspondingly. Had those gains in earnings not materialized, there would have been little increase in Berkshire's value.

The greatly enlarged earnings base we now enjoy will inevitably cause our future gains to lag those of the past. We will continue, however, to push in the directions we always have. We will try to build earnings by running our present businesses well - a job made easy because of the extraordinary talents of our operating managers - and by purchasing other businesses, in whole or in part, that are not likely to be roiled by change and that possess important competitive advantages.

USAir

When Richard Branson, the wealthy owner of Virgin Atlantic Airways, was asked how to become a millionaire, he had a quick answer: "There's really nothing to it. Start as a billionaire and then buy an airline." Unwilling to accept Branson's proposition on faith, your Chairman decided in 1989 to test it by investing $358 million in a 9.25% preferred stock of USAir.

I liked and admired Ed Colodny, the company's then-CEO, and I still do. But my analysis of USAir's business was both superficial and wrong. I was so beguiled by the company's long history of profitable operations, and by the protection that ownership of a senior security seemingly offered me, that I overlooked the crucial point: USAir's revenues would increasingly

feel the effects of an unregulated, fiercely-competitive market whereas its cost structure was a holdover from the days when regulation protected profits. These costs, if left unchecked, portended disaster, however reassuring the airline's past record might be. (If history supplied all of the answers, the Forbes 400 would consist of librarians.)

To rationalize its costs, however, USAir needed major improvements in its labor contracts - and that's something most airlines have found it extraordinarily difficult to get, short of credibly threatening, or actually entering, bankruptcy. USAir was to be no exception. Immediately after we purchased our preferred stock, the imbalance between the company's costs and revenues began to grow explosively. In the 1990-1994 period, USAir lost an aggregate of $2.4 billion, a performance that totally wiped out the book equity of its common stock.

For much of this period, the company paid us our preferred dividends, but in 1994 payment was suspended. A bit later, with the situation looking particularly gloomy, we wrote down our investment by 75%, to $89.5 million. Thereafter, during much of 1995, I offered to sell our shares at 50% of face value. Fortunately, I was unsuccessful.

Mixed in with my many mistakes at USAir was one thing I got right: Making our investment, we wrote into the preferred contract a somewhat unusual provision stipulating that "penalty dividends" - to run five percentage points over the prime rate - would be accrued on any arrearages. This meant that when our 9.25% dividend was omitted for two years, the unpaid amounts compounded at rates ranging between 13.25% and 14%.

Facing this penalty provision, USAir had every incentive to pay arrearages just as promptly as it could. And in the second half of 1996, when USAir turned profitable, it indeed began to pay, giving us $47.9 million. We owe Stephen Wolf, the company's CEO, a huge thank-you for extracting a performance from the airline that permitted this payment. Even so, USAir's performance has recently been helped significantly by an industry tailwind that may be cyclical in nature. The company still has basic cost problems that must be solved.

In any event, the prices of USAir's publicly-traded securities tell us that our preferred stock is now probably worth its par value of $358 million, give or take a little. In addition, we have over the years collected an aggregate of $240.5 million in dividends (including $30 million received in 1997).

Early in 1996, before any accrued dividends had been paid, I tried once more to unload our holdings - this time for about $335 million. You're lucky: I again failed in my attempt to snatch defeat from the jaws of victory.

In another context, a friend once asked me: "If you're so rich, why aren't you smart?" After reviewing my sorry performance with USAir, you may conclude he had a point.

Financings

We wrote four checks to Salomon Brothers last year and in each case were delighted with the work for which we were paying. I've already described one transaction: the FlightSafety purchase in which Salomon was the initiating investment banker. In a second deal, the firm placed a small debt offering for our finance subsidiary.

Additionally, we made two good-sized offerings through Salomon, both with interesting aspects. The first was our sale in May of 517,500 shares of Class B Common, which generated net proceeds of $565 million. As I have told you before, we made this sale in response to the threatened creation of unit trusts that would have marketed themselves as Berkshire look-alikes. In the process, they would have used our past, and definitely nonrepeatable, record to entice naive small investors and would have charged these innocents high fees and commissions.

I think it would have been quite easy for such trusts to have sold many billions of dollars worth of units, and I also believe that early marketing successes by these trusts would have led to the formation of others. (In the securities business, whatever can be sold will be sold.) The trusts would have meanwhile indiscriminately poured the proceeds of their offerings into a supply of Berkshire shares that is fixed and limited. The likely result: a speculative bubble in our stock. For at least a time, the price jump would have been self-validating, in that it would have pulled new waves of naive and impressionable investors into the trusts and set off still more buying of Berkshire shares.

Some Berkshire shareholders choosing to exit might have found that outcome ideal, since they could have profited at the expense of the buyers entering with false hopes. Continuing shareholders, however, would have suffered once reality set in, for at that point Berkshire would have been burdened with both hundreds of thousands of unhappy, indirect owners (trustholders, that is) and a stained reputation.

Our issuance of the B shares not only arrested the sale of the trusts, but provided a low-cost way for people to invest in Berkshire if they still wished to after hearing the warnings we issued.

To blunt the enthusiasm that brokers normally have for pushing new issues - because that's where the money is - we arranged for our offering to carry a commission of only 1.5%, the lowest payoff that we have ever seen in a common stock underwriting. Additionally, we made the amount of the offering open-ended, thereby repelling the typical IPO buyer who looks for a short-term price spurt arising from a combination of hype and scarcity.

Overall, we tried to make sure that the B stock would be purchased only by investors with a long-term perspective. Those efforts were generally successful: Trading volume in the B shares immediately following the offering - a rough index of "flipping" - was far below the norm for a new issue. In the end we added about 40,000 shareholders, most of whom we believe both understand what they own and share our time horizons.

Salomon could not have performed better in the handling of this unusual transaction. Its investment bankers understood perfectly what we were trying to achieve and tailored every aspect of the offering to meet these objectives. The firm would have made far more money - perhaps ten times as much - if our offering had been standard in its make-up. But the investment bankers involved made no attempt to tweak the specifics in that direction. Instead they came up with ideas that were counter to Salomon's financial interest but that made it much more certain Berkshire's goals would be reached. Terry Fitzgerald captained this effort, and we thank him for the job that he did.

Given that background, it won't surprise you to learn that we again went to Terry when we decided late in the year to sell an issue of Berkshire notes that can be exchanged for a portion of the Salomon shares that we hold. In this instance, once again, Salomon did an absolutely first-class job, selling $500 million principal amount of five-year notes for $447.1 million. Each $1,000 note is exchangeable into 17.65 shares and is callable in three years at accreted value. Counting the original issue discount and a 1% coupon, the securities will provide a yield of 3% to maturity for holders who do not exchange them for Salomon stock. But it seems quite likely that the notes will be exchanged before their maturity. If that happens, our interest cost will be about 1.1% for the period prior to exchange.

In recent years, it has been written that Charlie and I are unhappy about all investment-banking fees. That's dead wrong. We have paid a great many fees over the last 30 years - beginning with the check we wrote to Charlie Heider upon our purchase of National Indemnity

in 1967 - and we are delighted to make payments that are commensurate with performance. In the case of the 1996 transactions at Salomon Brothers, we more than got our money's worth.

Miscellaneous

Though it was a close decision, Charlie and I have decided to enter the 20th Century. Accordingly, we are going to put future quarterly and annual reports of Berkshire on the Internet, where they can be accessed via http://www.berkshirehathaway.com. We will always "post" these reports on a Saturday so that anyone interested will have ample time to digest the information before trading begins. Our publishing schedule for the next 12 months is May 17, 1997, August 16, 1997, November 15, 1997, and March 14, 1998. We will also post any press releases that we issue.

At some point, we may stop mailing our quarterly reports and simply post these on the Internet. This move would eliminate significant costs. Also, we have a large number of "street name" holders and have found that the distribution of our quarterlies to them is highly erratic: Some holders receive their mailings weeks later than others.

The drawback to Internet-only distribution is that many of our shareholders lack computers. Most of these holders, however, could easily obtain printouts at work or through friends. Please let me know if you prefer that we continue mailing quarterlies. We want your input - starting with whether you even read these reports - and at a minimum will make no change in 1997. Also, we will definitely keep delivering the annual report in its present form in addition to publishing it on the Internet.

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About 97.2% of all eligible shares participated in Berkshire's 1996 shareholder-designated contributions program. Contributions made were $13.3 million, and 3,910 charities were recipients. A full description of the shareholder-designated contributions program appears on pages 48-49.

Every year a few shareholders miss out on the program because they don't have their shares registered in their own names on the prescribed record date or because they fail to get the designation form back to us within the 60-day period allowed. This is distressing to Charlie and

me. But if replies are received late, we have to reject them because we can't make exceptions for some shareholders while refusing to make them for others.

To participate in future programs, you must own Class A shares that are registered in the name of the actual owner, not the nominee name of a broker, bank or depository. Shares not so registered on August 31, 1997, will be ineligible for the 1997 program. When you get the form, return it promptly so that it does not get put aside or forgotten.

The Annual Meeting

Our capitalist's version of Woodstock -the Berkshire Annual Meeting-will be held on Monday, May 5. Charlie and I thoroughly enjoy this event, and we hope that you come. We will start at 9:30 a.m., break for about 15 minutes at noon (food will be available - but at a price, of course), and then continue talking to hard-core attendees until at least 3:30. Last year we had representatives from all 50 states, as well as Australia, Greece, Israel, Portugal, Singapore, Sweden, Switzerland, and the United Kingdom. The annual meeting is a time for owners to get their business-related questions answered, and therefore Charlie and I will stay on stage until we start getting punchy. (When that happens, I hope you notice a change.)

Last year we had attendance of 5,000 and strained the capacity of the Holiday Convention Centre, even though we spread out over three rooms. This year, our new Class B shares have caused a doubling of our stockholder count, and we are therefore moving the meeting to the Aksarben Coliseum, which holds about 10,000 and also has a huge parking lot. The doors will open for the meeting at 7:00 a.m., and at 8:30 we will - upon popular demand - show a new Berkshire movie produced by Marc Hamburg, our CFO. (In this company, no one gets by with doing only a single job.)

Overcoming our legendary repugnance for activities even faintly commercial, we will also have an abundant array of Berkshire products *for sale* in the halls outside the meeting room. Last year we broke all records, selling 1,270 pounds of See's candy, 1,143 pairs of Dexter shoes, $29,000 of World Books and related publications, and 700 sets of knives manufactured by our Quikut subsidiary. Additionally, many shareholders made inquiries about GEICO auto policies. If you would like to investigate possible insurance savings, bring your present policy to the meeting. We estimate that about 40% of our shareholders can save money by insuring with us. (We'd like to say 100%, but the insurance business doesn't work that way: Because insurers

differ in their underwriting judgments, some of our shareholders are currently paying rates that are lower than GEICO's.)

An attachment to the proxy material enclosed with this report explains how you can obtain the card you will need for admission to the meeting. We expect a large crowd, so get both plane and hotel reservations promptly. American Express (800-799-6634) will be happy to help you with arrangements. As usual, we will have buses servicing the larger hotels to take you to and from the meeting, and also to take you to Nebraska Furniture Mart, Borsheim's and the airport after it is over.

NFM's main store, located on a 75-acre site about a mile from Aksarben, is open from 10 a.m. to 9 p.m. on weekdays, 10 a.m. to 6 p.m. on Saturdays, and noon to 6 p.m. on Sundays. Come by and say hello to "Mrs. B" (Rose Blumkin). She's 103 now and sometimes operates with an oxygen mask that is attached to a tank on her cart. But if you try to keep pace with her, it will be you who needs oxygen. NFM did about $265 million of business last year - a record for a single-location home furnishings operation - and you'll see why once you check out its merchandise and prices.

Borsheim's normally is closed on Sunday but will be open for shareholders from 10 a.m. to 6 p.m. on May 4th. Last year on "Shareholder Sunday" we broke every Borsheim's record in terms of tickets, dollar volume and, no doubt, attendees per square inch. Because we expect a capacity crowd this year as well, all shareholders attending on Sunday must bring their admission cards. Shareholders who prefer a somewhat less frenzied experience will get the same special treatment on Saturday, when the store is open from 10 a.m. to 5:30 p.m., or on Monday between 10 a.m. and 8 p.m. Come by at any time this year and let Susan Jacques, Borsheim's CEO, and her skilled associates perform a painless walletectomy on you.

My favorite steakhouse, Gorat's, was sold out last year on the weekend of the annual meeting, even though it added an additional seating at 4 p.m. on Sunday. You can make reservations beginning on April 1st *(but not earlier)* by calling 402-551-3733. I will be at Gorat's on Sunday after Borsheim's, having my usual rare T-bone and double order of hashbrowns. I can also recommend - this is the standard fare when Debbie Bosanek, my invaluable assistant, and I go to lunch - the hot roast beef sandwich with mashed potatoes and gravy. Mention Debbie's name and you will be given an extra boat of gravy.

The Omaha Royals and Indianapolis Indians will play baseball on Saturday evening, May 3rd, at Rosenblatt Stadium. Pitching in my normal rotation - one throw a year - I will start.

Though Rosenblatt is normal in appearance, it is anything but: The field sits on a unique geological structure that occasionally emits short gravitational waves causing even the most smoothly-delivered pitch to sink violently. I have been the victim of this weird phenomenon several times in the past but am hoping for benign conditions this year. There will be lots of opportunities for photos at the ball game, but you will need incredibly fast reflexes to snap my fast ball en route to the plate.

Our proxy statement includes information about obtaining tickets to the game. We will also provide an information packet listing restaurants that will be open on Sunday night and describing various things that you can do in Omaha on the weekend. The entire gang at Berkshire looks forward to seeing you.

In June 1996, Berkshire's Chairman, Warren E. Buffett, issued a booklet entitled **"An Owner's Manual*"** to Berkshire's Class A and Class B shareholders. The purpose of the manual was to explain Berkshire's broad economic principles of operation. An updated version is reproduced on this and the following pages.

OWNER-RELATED BUSINESS PRINCIPLES

At the time of the Blue Chip merger in 1983, I set down 13 owner-related business principles that I thought would help new shareholders understand our managerial approach. As is appropriate for "principles," all 13 remain alive and well today, and they are stated here in italics.

1. *Although our form is corporate, our attitude is partnership. Charlie Munger and I think of our shareholders as owner-partners, and of ourselves as managing partners. (Because of the size of our shareholdings we are also, for better or worse, controlling partners.) We do not view the company itself as the ultimate owner of our business assets but instead view the company as a conduit through which our shareholders own the assets.*

   Charlie and I hope that you do not think of yourself as merely owning a piece of paper whose price wiggles around daily and that is a candidate for sale when some economic or political event makes you nervous. We hope you instead visualize yourself as a part owner of a business that you expect to stay with indefinitely, much as you might if you owned a farm or apartment house in partnership with members of your family. For our part, we do not view Berkshire shareholders as faceless members of an ever-shifting crowd, but rather as co-venturers who have entrusted their funds to us for what may well turn out to be the remainder of their lives.

   The evidence suggests that most Berkshire shareholders have indeed embraced this long-term partnership concept. The annual percentage turnover in Berkshire's shares is a fraction of that occurring in the stocks of other major American corporations, even when the shares I own are excluded from the calculation.

   In effect, our shareholders behave in respect to their Berkshire stock much as Berkshire itself behaves in respect to companies in which it has an investment. As owners of, say, Coca-Cola or American Express shares, we think of Berkshire as being a non-managing partner in two extraordinary businesses, in which we measure our success by the long-term progress of the companies rather than by the month-to-month movements of their stocks. In fact, we would not care in the least if several years went by in which there was no trading, or quotation of prices, in the stocks of those companies. If we have good long-term expectations, short-term price changes are meaningless for us except to the extent they offer us an opportunity to increase our ownership at an attractive price.

2. *In line with Berkshire's owner-orientation, most of our directors have a significant portion of their net worth invested in the company. We eat our own cooking.*

   Charlie's family has the majority of its net worth in Berkshire shares; I have more than 98%. In addition, many of my relatives – my sisters and cousins, for example – keep a huge portion of their net worth in Berkshire stock.

   Charlie and I feel totally comfortable with this eggs-in-one-basket situation because Berkshire itself owns a wide variety of truly extraordinary businesses. Indeed, we believe that Berkshire is close to being unique in the quality and diversity of the businesses in which it owns either a controlling interest or a minority interest of significance.

   Charlie and I cannot promise you results. But we can guarantee that your financial fortunes will move in lockstep with ours for whatever period of time you elect to be our partner. We have no interest in large salaries or options or other means of gaining an "edge" over you. We want to make money only when our partners do and in exactly the same proportion. Moreover, when I do something dumb, I want you to be able to derive some solace from the fact that my financial suffering is proportional to yours.

3. *Our long-term economic goal (subject to some qualifications mentioned later) is to maximize Berkshire's average annual rate of gain in intrinsic business value on a per-share basis. We do not measure the economic significance or performance of Berkshire by its size; we measure by per-share progress. We are certain that the rate of per-share progress will diminish in the future – a greatly enlarged capital base will see to that. But we will be disappointed if our rate does not exceed that of the average large American corporation.*

4. *Our preference would be to reach our goal by directly owning a diversified group of businesses that generate cash and consistently earn above-average returns on capital. Our second choice is to own parts of similar businesses, attained primarily through purchases of marketable common stocks by our insurance subsidiaries. The price and availability of businesses and the need for insurance capital determine any given year's capital allocation.*

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In recent years we have made a number of acquisitions. Though there will be dry years, we expect to make many more in the decades to come, and our hope is that they will be large. If these purchases approach the quality of those we have made in the past, Berkshire will be well served.

The challenge for us is to generate ideas as rapidly as we generate cash. In this respect, a depressed stock market is likely to present us with significant advantages. For one thing, it tends to reduce the prices at which entire companies become available for purchase. Second, a depressed market makes it easier for our insurance companies to buy small pieces of wonderful businesses – including additional pieces of businesses we already own – at attractive prices. And third, some of those same wonderful businesses are consistent buyers of their own shares, which means that they, and we, gain from the cheaper prices at which they can buy.

Overall, Berkshire and its long-term shareholders benefit from a sinking stock market much as a regular purchaser of food benefits from declining food prices. So when the market plummets – as it will from time to time – neither panic nor mourn. It's good news for Berkshire.

5. *Because of our two-pronged approach to business ownership and because of the limitations of conventional accounting, consolidated reported earnings may reveal relatively little about our true economic performance. Charlie and I, both as owners and managers, virtually ignore such consolidated numbers. However, we will also report to you the earnings of each major business we control, numbers we consider of great importance. These figures, along with other information we will supply about the individual businesses, should generally aid you in making judgments about them.*

To state things simply, we try to give you in the annual report the numbers and other information that really matter. Charlie and I pay a great deal of attention to how well our businesses are doing, and we also work to understand the environment in which each business is operating. For example, is one of our businesses enjoying an industry tailwind or is it facing a headwind? Charlie and I need to know exactly which situation prevails and to adjust our expectations accordingly. We will also pass along our conclusions to you.

Over time, the large majority of our businesses have exceeded our expectations. But sometimes we have disappointments, and we will try to be as candid in informing you about those as we are in describing the happier experiences. When we use unconventional measures to chart our progress – for instance, you will be reading in our annual reports about insurance "float" – we will try to explain these concepts and why we regard them as important. In other words, we believe in telling you how we think so that you can evaluate not only Berkshire's businesses but also assess our approach to management and capital allocation.

6. *Accounting consequences do not influence our operating or capital-allocation decisions. When acquisition costs are similar, we much prefer to purchase $2 of earnings that is not reportable by us under standard accounting principles than to purchase $1 of earnings that is reportable. This is precisely the choice that often faces us since entire businesses (whose earnings will be fully reportable) frequently sell for double the pro-rata price of small portions (whose earnings will be largely unreportable). In aggregate and over time, we expect the unreported earnings to be fully reflected in our intrinsic business value through capital gains.*

We have found over time that the undistributed earnings of our investees, in aggregate, have been fully as beneficial to Berkshire as if they had been distributed to us (and therefore had been included in the earnings we officially report). This pleasant result has occurred because most of our investees are engaged in truly outstanding businesses that can often employ incremental capital to great advantage, either by putting it to work in their businesses or by repurchasing their shares. Obviously, every capital decision that our investees have made has not benefitted us as shareholders, but overall we have garnered far more than a dollar of value for each dollar they have retained. We consequently regard look-through earnings as realistically portraying our yearly gain from operations.

7. *We use debt sparingly. We will reject interesting opportunities rather than over-leverage our balance sheet. This conservatism has penalized our results but it is the only behavior that leaves us comfortable, considering our fiduciary obligations to policyholders, lenders and the many equity holders who have committed unusually large portions of their net worth to our care. (As one of the Indianapolis "500" winners said: "To finish first, you must first finish.")*

The financial calculus that Charlie and I employ would never permit our trading a good night's sleep for a shot at a few extra percentage points of return. I've never believed in risking what my family and friends have and need in order to pursue what they don't have and don't need.

Besides, Berkshire has access to two low-cost, non-perilous sources of leverage that allow us to safely own far more assets than our equity capital alone would permit: deferred taxes and "float," the funds of others that our insurance business holds because it receives premiums before needing to pay out losses. Both of these funding sources have grown rapidly and now total about $170 billion.

Better yet, this funding to date has often been cost-free. Deferred tax liabilities bear no interest. And as long as we can break even in our insurance underwriting the cost of the float developed from that operation is zero. Neither item, of course, is equity; these are real liabilities. But they are liabilities without covenants or due dates attached to them. In effect, they give us the benefit of debt – an ability to have more assets working for us – but saddle us with none of its drawbacks.

Of course, there is no guarantee that we can obtain our float in the future at no cost. But we feel our chances of attaining that goal are as good as those of anyone in the insurance business. Not only have we reached the goal in the past (despite a number of important mistakes by your Chairman), our 1996 acquisition of GEICO, materially improved our prospects for getting there in the future.

In our present configuration we expect additional borrowings to be concentrated in our utilities and railroad businesses, loans that are non-recourse to Berkshire. Here, we will favor long-term, fixed-rate loans.

8. *A managerial "wish list" will not be filled at shareholder expense. We will not diversify by purchasing entire businesses at control prices that ignore long-term economic consequences to our shareholders. We will only do with your money what we would do with our own, weighing fully the values you can obtain by diversifying your own portfolios through direct purchases in the stock market.*

   Charlie and I are interested only in acquisitions that we believe will raise the *per-share* intrinsic value of Berkshire's stock. The size of our paychecks or our offices will never be related to the size of Berkshire's balance sheet.

9. *We feel noble intentions should be checked periodically against results. We test the wisdom of retaining earnings by assessing whether retention, over time, delivers shareholders at least $1 of market value for each $1 retained. To date, this test has been met. We will continue to apply it on a five-year rolling basis. As our net worth grows, it is more difficult to use retained earnings wisely.*

   I should have written the "five-year rolling basis" sentence differently, an error I didn't realize until I received a question about this subject at the 2009 annual meeting.

   When the stock market has declined sharply over a five-year stretch, our market-price premium to book value has sometimes shrunk. And when that happens, we fail the test as I improperly formulated it. In fact, we fell far short as early as 1971-75, well before I wrote this principle in 1983.

   The five-year test should be: (1) during the period did our book-value gain exceed the performance of the S&P; and (2) did our stock consistently sell at a premium to book, meaning that every $1 of retained earnings was always worth more than $1? If these tests are met, retaining earnings has made sense.

10. *We will issue common stock only when we receive as much in business value as we give. This rule applies to all forms of issuance – not only mergers or public stock offerings, but stock-for-debt swaps, stock options, and convertible securities as well. We will not sell small portions of your company – and that is what the issuance of shares amounts to – on a basis inconsistent with the value of the entire enterprise.*

    When we sold the Class B shares in 1996, we stated that Berkshire stock was not undervalued – and some people found that shocking. That reaction was not well-founded. Shock should have registered instead had we issued shares when our stock *was* undervalued. Managements that say or imply during a public offering that their stock is undervalued are usually being economical with the truth or uneconomical with their existing shareholders' money: Owners unfairly lose if their managers deliberately sell assets for 80¢ that in fact are worth $1. We didn't commit that kind of crime in our offering of Class B shares and we never will. (We did *not*, however, say at the time of the sale that our stock was overvalued, though many media have reported that we did.)

11. *You should be fully aware of one attitude Charlie and I share that hurts our financial performance: Regardless of price, we have no interest at all in selling any good businesses that Berkshire owns. We are also very reluctant to sell sub-par businesses as long as we expect them to generate at least some cash and as long as we feel good about their managers and labor relations. We hope not to repeat the capital-allocation mistakes that led us into such sub-par businesses. And we react with great caution to suggestions that our poor businesses can be restored to satisfactory profitability by major capital expenditures. (The projections will be dazzling and the advocates sincere, but, in the end, major additional investment in a terrible industry usually is about as rewarding as struggling in quicksand.) Nevertheless, gin rummy managerial behavior (discard your least promising business at each turn) is not our style. We would rather have our overall results penalized a bit than engage in that kind of behavior.*

We continue to avoid gin rummy behavior. True, we closed our textile business in the mid-1980's after 20 years of struggling with it, but only because we felt it was doomed to run never-ending operating losses. We have not, however, given thought to selling operations that would command very fancy prices nor have we dumped our laggards, though we focus hard on curing the problems that cause them to lag. To clean up some confusion voiced in 2016, we emphasize that the comments here refer to businesses we control, not to marketable securities.

12. *We will be candid in our reporting to you, emphasizing the pluses and minuses important in appraising business value. Our guideline is to tell you the business facts that we would want to know if our positions were reversed. We owe you no less. Moreover, as a company with a major communications business, it would be inexcusable for us to apply lesser standards of accuracy, balance and incisiveness when reporting on ourselves than we would expect our news people to apply when reporting on others. We also believe candor benefits us as managers: The CEO who misleads others in public may eventually mislead himself in private.*

    At Berkshire you will find no "big bath" accounting maneuvers or restructurings nor any "smoothing" of quarterly or annual results. We will always tell you how many strokes we have taken on each hole and never play around with the scorecard. When the numbers are a very rough "guesstimate," as they necessarily must be in insurance reserving, we will try to be both consistent and conservative in our approach.

    We will be communicating with you in several ways. Through the annual report, I try to give all shareholders as much value-defining information as can be conveyed in a document kept to reasonable length. We also try to convey a liberal quantity of condensed but important information in the quarterly reports we post on the internet, though I don't write those (one recital a year is enough). Still another important occasion for communication is our Annual Meeting, at which Charlie and I are delighted to spend five hours or more answering questions about Berkshire. But there is one way we *can't* communicate: on a one-on-one basis. That isn't feasible given Berkshire's many thousands of owners.

    In all of our communications, we try to make sure that no single shareholder gets an edge: We do not follow the usual practice of giving earnings "guidance" or other information of value to analysts or large shareholders. Our goal is to have all of our owners updated at the same time.

13. *Despite our policy of candor, we will discuss our activities in marketable securities only to the extent legally required. Good investment ideas are rare, valuable and subject to competitive appropriation just as good product or business acquisition ideas are. Therefore we normally will not talk about our investment ideas. This ban extends even to securities we have sold (because we may purchase them again) and to stocks we are incorrectly rumored to be buying. If we deny those reports but say "no comment" on other occasions, the no-comments become confirmation.*

    Though we continue to be unwilling to talk about specific stocks, we freely discuss our business and investment philosophy. I benefitted enormously from the intellectual generosity of Ben Graham, the greatest teacher in the history of finance, and I believe it appropriate to pass along what I learned from him, even if that creates new and able investment competitors for Berkshire just as Ben's teachings did for him.

TWO ADDED PRINCIPLES

14. *To the extent possible, we would like each Berkshire shareholder to record a gain or loss in market value during his period of ownership that is proportional to the gain or loss in per-share intrinsic value recorded by the company during that holding period. For this to come about, the relationship between the intrinsic value and the market price of a Berkshire share would need to remain constant, and by our preferences at 1-to-1. As that implies, we would rather see Berkshire's stock price at a* ***fair*** *level than a* ***high*** *level. Obviously, Charlie and I can't control Berkshire's price. But by our policies and communications, we can encourage informed, rational behavior by owners that, in turn, will tend to produce a stock price that is also rational. Our it's-as-bad-to-be-overvalued-as-to-be-undervalued approach may disappoint some shareholders. We believe, however, that it affords Berkshire the best prospect of attracting long-term investors who seek to profit from the progress of the company rather than from the investment mistakes of their partners.*

15. *We regularly compare the gain in Berkshire's per-share book value to the performance of the S&P 500. Over time, we hope to outpace this yardstick. Otherwise, why do our investors need us? The measurement, however, has certain shortcomings that are described in the next section. Moreover, it now is less meaningful on a year-to-year basis than was formerly the case. That is because our equity holdings, whose value tends to move with the S&P 500, are a far smaller portion of our net worth than they were in earlier years. Additionally, gains in the S&P stocks are counted in full in calculating that index, whereas gains in Berkshire's equity holdings are counted at 79% because of the federal tax we incur. We, therefore, expect to outperform the S&P in lackluster years for the stock market and underperform when the market has a strong year.*

INTRINSIC VALUE

Now let's focus on a term that I mentioned earlier and that you will encounter in future annual reports.

Intrinsic value is an all-important concept that offers the only logical approach to evaluating the relative attractiveness of investments and businesses. Intrinsic value can be defined simply: It is the discounted value of the cash that can be taken out of a business during its remaining life.

The calculation of intrinsic value, though, is not so simple. As our definition suggests, intrinsic value is an estimate rather than a precise figure, and it is additionally an estimate that must be changed if interest rates move or forecasts of future cash flows are revised. Two people looking at the same set of facts, moreover – and this would apply even to Charlie and me – will almost inevitably come up with at least slightly different intrinsic value figures. That is one reason we never give you our estimates of intrinsic value. What our annual reports do supply, though, are the facts that we ourselves use to calculate this value.

Meanwhile, we regularly report our per-share book value, an easily calculable number, though one of limited use. The limitations do not arise from our holdings of marketable securities, which are carried on our books at their current prices. Rather the inadequacies of book value have to do with the companies we control, whose values as stated on our books may be far different from their intrinsic values.

The disparity can go in either direction. For example, in 1964 we could state with certitude that Berkshire's per-share book value was $19.46. However, that figure considerably overstated the company's intrinsic value, since all of the company's resources were tied up in a sub-profitable textile business. Our textile assets had neither going-concern nor liquidation values equal to their carrying values. Today, however, Berkshire's situation is reversed: Now, our book value *far* understates Berkshire's intrinsic value, a point true because many of the businesses we control are worth much more than their carrying value.

Inadequate though they are in telling the story, we give you Berkshire's book-value figures because they today serve as a rough, albeit significantly understated, tracking measure for Berkshire's intrinsic value. In other words, the percentage change in book value in any given year is likely to be reasonably close to that year's change in intrinsic value.

You can gain some insight into the differences between book value and intrinsic value by looking at one form of investment, a college education. Think of the education's cost as its "book value." If this cost is to be accurate, it should include the earnings that were foregone by the student because he chose college rather than a job.

For this exercise, we will ignore the important non-economic benefits of an education and focus strictly on its economic value. First, we must estimate the earnings that the graduate will receive over his lifetime and subtract from that figure an estimate of what he would have earned had he lacked his education. That gives us an excess earnings figure, which must then be discounted, at an appropriate interest rate, back to graduation day. The dollar result equals the intrinsic economic value of the education.

Some graduates will find that the book value of their education exceeds its intrinsic value, which means that whoever paid for the education didn't get his money's worth. In other cases, the intrinsic value of an education will far exceed its book value, a result that proves capital was wisely deployed. In all cases, what is clear is that book value is meaningless as an indicator of intrinsic value.

THE MANAGING OF BERKSHIRE

I think it's appropriate that I conclude with a discussion of Berkshire's management, today and in the future. As our first owner-related principle tells you, Charlie and I are the managing partners of Berkshire. But we subcontract all of the heavy lifting in this business to the managers of our subsidiaries. In fact, we delegate almost to the point of abdication: Though Berkshire has about 377,000 employees, only 26 of these are at headquarters.

Charlie and I mainly attend to capital allocation and the care and feeding of our key managers. Most of these managers are happiest when they are left alone to run their businesses, and that is customarily just how we leave them. That puts them in charge of all operating decisions and of dispatching the excess cash they generate to headquarters. By sending it to us, they don't get diverted by the various enticements that would come their way were they responsible for deploying the cash their businesses throw off. Furthermore, Charlie and I are exposed to a much wider range of possibilities for investing these funds than any of our managers could find in his or her own industry.

Most of our managers are independently wealthy, and it's therefore up to us to create a climate that encourages them to choose working with Berkshire over golfing or fishing. This leaves us needing to treat them fairly and in the manner that we would wish to be treated if our positions were reversed.

As for the allocation of capital, that's an activity both Charlie and I enjoy and in which we have acquired some useful experience. In a general sense, grey hair doesn't hurt on this playing field: You don't need good hand-eye coordination or well-toned muscles to push money around (thank heavens). As long as our minds continue to function effectively, Charlie and I can keep on doing our jobs pretty much as we have in the past.

On my death, Berkshire's ownership picture will change but not in a disruptive way: None of my stock will have to be sold to take care of the cash bequests I have made or for taxes. Other assets of mine will take care of these requirements. All Berkshire shares will be left to foundations that will likely receive the stock in roughly equal installments over a dozen or so years.

At my death, the Buffett family will not be involved in managing the business but, as very substantial shareholders, will help in picking and overseeing the managers who do. Just who those managers will be, of course, depends on the date of my death. But I can anticipate what the management structure will be: Essentially my job will be split into two parts. One executive will become CEO and responsible for operations. The responsibility for investments will be given to one or more executives. If the acquisition of new businesses is in prospect, these executives will cooperate in making the decisions needed, subject, of course, to board approval. We will continue to have an extraordinarily shareholder-minded board, one whose interests are solidly aligned with yours.

Were we to need the management structure I have just described on an immediate basis, our directors know my recommendations for both posts. All candidates currently work for or are available to Berkshire and are people in whom I have total confidence. Our managerial roster has never been stronger.

I will continue to keep the directors posted on the succession issue. Since Berkshire stock will make up virtually my entire estate and will account for a similar portion of the assets of various foundations for a considerable period after my death, you can be sure that the directors and I have thought through the succession question carefully and that we are well prepared. You can be equally sure that the principles we have employed to date in running Berkshire will continue to guide the managers who succeed me and that our unusually strong and well-defined culture will remain intact. As an added assurance that this will be the case, I believe it would be wise when I am no longer CEO to have a member of the Buffett family serve as the non-paid, non-executive Chairman of the Board. That decision, however, will be the responsibility of the then Board of Directors.

Lest we end on a morbid note, I also want to assure you that I have never felt better. I love running Berkshire, and if enjoying life promotes longevity, Methuselah's record is in jeopardy.

Warren E. Buffett
Chairman

Morning Session - 1997 Meeting

1. Buffett is losing his voice

WARREN BUFFETT: Good morning. I'm Warren Buffett, the chairman of Berkshire Hathaway, as you probably have gathered by now. (Laughs)

I had a real problem last night. I was losing my voice almost entirely. I don't want you to think I lost it cheering for myself this morning here. I think I'll do all right, but we've always got Charlie here to — he's always done the talking. I just move my lips, you know. (Laughter)

So I'd like to tell you a little bit about how we're going to conduct things. And then we'll go through a script that was written by the speechwriter for Saddam Hussein. It has all the warmth and charm and participatory elements you'd expect.

And we'll get through the business of the meeting as promptly as we can, which is usually about five or six minutes. And then Charlie and I will answer questions, your questions until noon, when we'll have a break for about a half an hour.

There's food outside all the time. And then at 12:30 we'll reconvene, and we'll go till 3:30 or thereabouts. And I hope my voice lasts. We've got various non-Coca-Cola products here designed to keep it going.

We'll have a zone system where we have 12 microphones placed around, and — I believe it's 12 — and we'll just go around in order. And if you'll go to the microphone nearest you, there will be someone there who will try to arrange the people — get to ask questions in the order in which they arrived. And we'll make sure that everybody gets a chance to ask their questions before people go on to second questions.

Particularly in the afternoon, we'll make a special effort to answer the questions from people that have come from outside North America. We really got quite an attendance today. All 50 states — at least in terms of tickets — all 50 states are represented.

We had — I had it here somewhere. Yeah, we had ticket requests, at least, and I met a number of people from South Africa, Australia, Brazil, England, France, Germany, Greece, Hong Kong, Ireland, Iceland, Israel, Saipan, New Zealand, Saudi Arabia, Singapore, Sweden, Switzerland.

So when people have come from that sort of distance, we want to make sure that they — obviously we want to make sure that they particularly get their questions answered.

Interestingly enough, we have an increased percentage from last year who come from Nebraska this year. And you have to be a little careful in interpreting that, because some people say they're from Nebraska and really aren't, because for status reasons they, you know, like that. (Laughter and applause)

So make them produce their driver's license if they tell you they came from Nebraska.

2. Formal business meeting begins

WARREN BUFFETT: I think that's most of the preliminaries, so I'm going to get into this. We'll get the meeting over with here promptly with your cooperation.

And I will go through this little script that's been prepared for me, and it says, the meeting will now come to order. I'm Warren Buffett, chairman of the board of directors of the company. I welcome you to this 1997 annual meeting of shareholders.

I will first introduce the Berkshire Hathaway directors that are present in addition to myself. I've introduced you to Charlie already.

And the other directors, I believe, are in the front row here. If they'd stand when I mention their names, you can withhold any applause until finished, and then it's optional. (Laughter)

Howard Buffett, Howie you want to stand up? Susan Buffett. Walter Scott. And Malcolm Chace III, "Kim" Chace. And that is our extensive directorate. (Applause)

Give them a lot of applause because they don't get much else for it. It's a rather low-paying board. (Applause)

Also with us today are partners in the firm of Deloitte and Touche, our auditors. They are available to respond to appropriate questions you might have concerning their firm's audit of the accounts of Berkshire.

Mr. Forrest Krutter is secretary of Berkshire. He will make a written record of the proceedings.

Miss Becki Amick has been appointed inspector of elections at this meeting. She will certify to the count of votes cast in the election for directors.

The named proxy holders for this meeting are Walter Scott Jr. and Marc B. Hamburg. Proxy cards have been returned through last Friday representing 1,012,050 Class A Berkshire shares and 645,940 Class B Berkshire shares, to be voted by the proxy holders as indicated on the cards. That number of shares represents a quorum, and we will therefore directly proceed with the meeting.

We will conduct the business of the meeting and then adjourn the formal meeting. After that we will entertain questions that you might have.

First order of business will be reading of the minutes of the last meeting of shareholders, and I recognize Mr. Walter Scott Jr. who will place the motion before the meeting.

WALTER SCOTT JR.: I move the reading of the minutes of the last meeting of shareholders will be dispensed with.

WARREN BUFFETT: Do I hear a second?

VOICES: (Inaudible)

WARREN BUFFETT: We got a second. The motion has been moved and seconded. Are there any comments or questions? We will vote on this motion by voice vote. Those in favor say "aye."

VOICES: Aye.

WARREN BUFFETT: Opposed? Say, "I'm leaving." (Laughter)

The motion is carried. Does the secretary have a report of the number of Berkshire shares outstanding, entitled to vote, and represented at the meeting?

FORREST KRUTTER: Yes, I do. As indicated, a proxy statement that accompanied the notice of this meeting that was sent by first-class mail to all shareholders of record on March 7, 1997, being the record date of this meeting, there were 1,205,078 shares of Class A Berkshire Hathaway common stock outstanding, with each share entitled to one vote on motions considered at the meeting, and 815,015 shares of Class B Berkshire Hathaway common stock outstanding with each share entitled to 1/200th of a vote on motions considered at the meeting. Of that number, 1,012,050 Class A shares and 645,940 Class B shares are represented at this meeting by proxies returned through last Friday.

WARREN BUFFETT: Thank you. If a shareholder is present who wishes to withdraw a proxy previously sent in and vote in person on the election of directors, he or she may do so.

Also, if any shareholder that is present has not turned in a proxy and desires a ballot in order to vote in person, you may do so. If you wish to do this, please identify yourself to meeting officials in the aisles who will furnish a ballot to you.

Will those persons desiring ballots please identify themselves so that we may distribute them?

3. Berkshire board elected

WARREN BUFFETT: OK, the one item of business for this meeting is to elect directors. I now recognize Mr. Walter Scott Jr. to place a motion before the meeting with respect to election of directors.

WALTER SCOTT JR.: I move that Warren E. Buffett, Susan T. Buffett, Howard G. Buffett, Malcolm G. Chace III, Charles T. Munger, and Walter Scott Jr. be elected as directors.

WARREN BUFFETT: It sounds good to me. Is there a second? (Laughter)

It has been moved and seconded that Warren E. Buffett, Susan T. Buffett, Howard G. Buffett, Malcolm G. Chace III, Charles T. Munger, and Walter Scott Jr. be elected as directors. Are there any other nominations? Is there any discussion?

My kind of group.

The nominations are ready to be acted upon. If there are any shareholders voting and present, they should now mark their ballots on the election of directors and allow the ballots to be delivered to the inspector of elections. Think we had one or two to collect there.

Would the proxy holders please also submit to the inspector of elections a ballot on the election of directors, voting the proxies in accordance with the instructions they have received?

Miss Amick, when you are ready you may give your report.

BECKI AMICK: My report is ready. The ballot of the proxy holders in response to proxies that were received through last Friday cast not less than 1,015,697 and 2,300 votes for each nominee. That number far exceeds the majority of the number of the total votes related to all Class A and Class B shares outstanding.

The certification required by Delaware law of the precise count of the votes, including the additional votes to be cast by the proxy holders in response to proxies delivered at this meeting, as well as those cast in person at this meeting, if any, will be given to the secretary to be placed with the minutes of this meeting.

WARREN BUFFETT: Thank you, Miss Amick.

Warren E. Buffett, Susan T. Buffett, Howard G. Buffett, Malcolm G. Chace III, and Charles T. Munger, and Walter Scott Jr. have been elected as directors. After adjournment of the business meeting I will respond to questions that you may have that relate to the business of Berkshire but do not call for any action at this meeting.

Does anyone have any further business to come before this meeting before we adjourn? If not, I recognize Mr. Walter Scott Jr. to place a motion before the meeting.

WALTER SCOTT JR.: I move this meeting be adjourned.

WARREN BUFFETT: Second?

VOICES: (Inaudible)

WARREN BUFFETT: Motion to adjourn has been made and seconded. We will vote by voice. Is there any discussion? If not, all in favor say "aye."

VOICES: Aye.

WARREN BUFFETT: Opposed, say "no." The meeting is adjourned. (Laughter and applause)

You're a very good group. You know, in that movie they said something about $350,000 an hour, and I see you're conserving your money here by moving this thing right along. (Laughter)

4. Q&A session begins

WARREN BUFFETT: Now we're going to answer questions. And if you'll just go to the nearest microphone, and let's see where we start here. I'm just orienting myself to a map here. And we have area 1 is right here.

I might describe this ahead of time. We have six areas on the main floor and we have six areas throughout the balcony. And they sort of work their way back one through six, and then seven starts over here, and then it works its way around to 12. And we look forward to having questions, the tougher the better. And if you always would just identify yourself and where you're from, and that you're a shareholder.

5. McDonald's isn't as "inevitable" as Coca-Cola and Gillette

AUDIENCE MEMBER: Yes, sir. My name is Tom Conrad (PH) and I'm from McLean, Virginia. And I'm a shareholder.

And I asked a question last year, Mr. Buffett, to you. I was struck with what you said, that it takes only three quality companies to be — to invest in to be set for a lifetime. And I asked you the question last year, "Should I wait until the market goes down, or should I get in now?"

And you advised to get in now, and the three companies that I chose were Coca-Cola, Gillette and Disney. And because of that advice I was able to afford the ticket to come back this year — (laughter) — to ask you a second question. (Buffett laughs)

And my question is this. I'm thinking of —

WARREN BUFFETT: You ought to quit while you're ahead, but go ahead. (Laughter)

AUDIENCE MEMBER: I'm thinking of expanding to a fourth company. The fourth company that I'm thinking of is McDonald's. And —

WARREN BUFFETT: I see.

AUDIENCE MEMBER: — I just wanted to ask you if you feel that McDonald's has the same ability to dominate the way Coca-Cola and Gillette has.

And secondly, do you feel that if the answer is yes, that I should wait until the price comes down a bit, or get in now? And that's my question.

WARREN BUFFETT: Would you it to the eighth of a point, or shall we round off? (Laughter)

In the annual report, we talked about Coca-Cola and Gillette in terms of their base business being what I call "The Inevitables." But that related, obviously, to the soft drink business in the case of Coca-Cola and the shaving products with Gillette. It doesn't extend to necessarily everything they do. But fortunately in both those companies those are very important products.

I would say that in the food business, you would never get the total certainty of dominance that you would get in products like Coca-Cola and Gillette. People move around in the food business, from where they eat, from — they may favor McDonald's but they will go to different places at different times. And somebody starts shaving with a Gillette Sensor Plus is very unlikely to go elsewhere, in my view.

So they do not — you just — you never would get in the food business, in my judgment, quite the inevitability that you would get in the soft drink business with a Coca-Cola.

You'll never get it again in the soft drink business. I mean, it took a hundred — I guess it'd be 1886, so it'd be about 111 years to get to the point where they are. And the infrastructure's incredible, and — so I wouldn't put it quite in the same class, in terms of inevitability.

That doesn't mean — it can be a better stock investment, depending on the price. But you're not going to get the price from me, and knowing Charlie I doubt if you'll get the price from him. But we'll give him a chance. (Laughs)

(Laughter)

He's breathing, folks. He's breathing. (Laughter and applause)

CHARLIE MUNGER: We've got this down to a routine. (Laughter)

No, I have nothing to add, Warren.

WARREN BUFFETT: OK. (Laughter)

I didn't have anything to say, either. I just took longer. (Laughter)

6. You can pay too much even if a business is "wonderful"

WARREN BUFFETT: How about area 2?

AUDIENCE MEMBER: Mr. Buffett, my name is Pete Banner (PH) and I'm from Boulder, Colorado, and I'm a shareholder.

Recently [Federal Reserve Chairman] Mr. [Alan] Greenspan made his comments about exuberance. And it wasn't long thereafter that you came out in the annual report and made your comments that you felt the market was fully valued or something of that nature.

Did you have, or have you had, any communication with Mr. Greenspan regarding the valuation of the stock market?

WARREN BUFFETT: No, the answer to that is no. The last time I — well, I can't remember precisely when the last time I saw Alan Greenspan was. It was a long time ago.

We had one conversation the day of the Salomon crisis, and he was formerly on the board of Cap Cities before he took his job with the Fed — Cap Cities/ABC — so I knew him then, but —

You know, it's very hard to understand what Alan says sometimes, so there's not much sense talking to him, I mean — (Laughter)

He's very careful about what he says.

But I should — I'm glad you brought up the subject of the annual report. Because what I was doing in the annual report is I had talked about Coke and Gillette as being "The Inevitables," and what wonderful businesses they were.

And I thought it appropriate, particularly — the report goes to a lot of people — that they would not take that as an unqualified buy recommendation about the companies, because they're absolutely wonderful companies run by outstanding managers.

But you can pay too much, at least in the short run, for businesses like that. So I thought it was only appropriate to point out that no matter how wonderful a business it is, that there always is a risk that you will pay a price where it will take a few years for the business to catch up with the stock. That the stock can get ahead of the business.

And I don't know where that point is with those companies or any other companies, but I did say that I thought that the risks were fairly high that that situation existed with most securities in the market, including companies such as "The Inevitables."

But it was designed to be sure that people did not take the remarks that I made about those companies, and just take that as an unqualified buy recommendation regardless of price.

We have no intention of selling those two stocks. We wouldn't sell them if they were selling at prices considerably higher than they are now.

But I didn't want — particularly — relatively unsophisticated people to see those names there and then think, "This guy is touting these as a wonderful buy." Generally speaking, I think if you're sure enough about a business being wonderful, it's more important to be certain about the business being a wonderful business than it is to be certain that the price is not 10 percent too high or 5 percent too high or something of the sort.

And that's a philosophy that I came slowly to. I originally was incredibly price conscious. We used to have prayer meetings before we would raise our bid an eighth, you know, around the office. (Laughter)

But that was a mistake. And in some cases, a huge mistake. I mean, we've missed things because of that.

And so what I said in the report was not a market prediction in any sense. We never try to predict the stock market.

We do try to price securities. We try to price businesses, is what we try to do. And we find it hard to find wonderful, good, average, substandard businesses that look to us like they're cheap now. But, you know, you don't always get a chance to buy things cheap.

Charlie?

CHARLIE MUNGER: Well, I certainly agree with that. (Laughter)

The one thing we can confidently guarantee is that real inflation-adjusted returns from investing in a standard collection of stocks will be lower in the long-term future than they've been in the last 15 years or so. This has been an unprecedented period, and there will be some regression toward the mean in average returns from investing in the stock market.

WARREN BUFFETT: American business has done extraordinarily well in the last decade-plus. And that's a huge plus for securities, because they just represent pieces of those businesses.

Interest rates over the last 15 years have fallen. That's a big plus for stocks. Anytime interest rates go down, the value of every financial asset goes up, in rational calculation.

Both of those factors have combined in recent years to produce conditions that enhance the true value of American business. But those are pretty widely recognized now, and after a while — Ben Graham always used to say you can get in more trouble in investment with a good premise than with a bad premise, because the bad premise will shout out to you immediately as being fallacious, whereas with a good premise it'll work for awhile.

You know, businesses are worth more money if interest rates fall and stocks rise. But then eventually the market action of the securities themselves creates its own rationale for a whole — for a large crop of buyers, and people forget about the reasons and the mathematical limitations that were implied in what they — in what got them excited in the first place. And after a while, rising prices themselves alone will keep people excited and cause more people to enter the game.

And therefore the good premise, after a while, is forgotten except for the fact that it produced these rising prices. And the prices themselves take over.

He wrote about that and the connection with the 1920s when Edgar Lawrence Smith in 1924 wrote a fine book on why stocks were better than bonds. And that was sort of the Bible of the bull market of the ’20s, and it made sense, if you paid attention to a couple of the caveats which were in Edgar Lawrence Smith’s little book, which related to price.

But people tend to forget about the importance of the price they pay as the experience of a bull market just sort of dulls the senses generally.

7. Berkshire discourages “street name” registrations of its stock

WARREN BUFFETT: Zone 3?

AUDIENCE MEMBER: Mr. Buffett, my name is Lola Wells (PH) and I come from Florida.

I’m a very minimum stockholder. And I’m curious why stockholders whose stock is held in street name aren’t eligible to make recommendations for your donations.

WARREN BUFFETT: The distinction really isn’t whether their stock is held in street — well, that’s one distinction. The Class B shareholders, as was pointed out in the prospectus originally for the B shares, do not participate in the program. The A shares that are held by the beneficial owner do participate.

We obtained a tax ruling — 1981 or thereabouts — that made sure that the — there would be no taxation as a constructive dividend of the amount that shareholders could designate. There always was that possibility that the IRS would take a position that by allowing shareholders to designate a contribution to a charity, that we were giving them something which first would be taxed as a dividend, and then they would later give away.

So we have a tax ruling, and that tax ruling applies to shares held by beneficial owners, or by record holders themselves. And we followed that ruling subsequently.

I might say it would be sort of a nightmare too, frankly, if we got into street name holders. We’re at the point now where we probably have 30 or 35,000 street name holders of the A, and

with the B it's probably 60,000 or some number like that. And it would be quite a nightmare to do.

And anyone, you know, unless they have margin debt against their stock, they can put it in their own name and we encourage people to do it.

One reason we encourage people to do it is that they'll get their shareholder communications more promptly, too. We find that it's quite erratic — that the distribution of reports is quite erratic — when handled through brokerage houses to street name holders.

So we really do encourage you to have your stock registered in your own name. You'll get the communications promptly, and if you get the A shares you'll be able to participate in the contributions program.

And don't minimize your holdings, incidentally. Between the two of us we control the company, so I'm glad to have you here. (Laughter)

Charlie?

CHARLIE MUNGER: There's no ideological bias against the small shareholder. It's just not technically feasible to do it as a matter of administration.

WARREN BUFFETT: I should point out that the entire shareholder-designated contributions program, really, all of the work in relation to this meeting, I mean, and Ak-Sar-Ben has been terrific. They've helped out enormously.

But in terms of sending out 11,000-plus tickets to the meeting, the baseball tickets, the planning that goes into it and everything, it's all done by the people at Berkshire, basically. They pitch in to do all kinds of work.

So when you look at that 3,000-plus square foot office — we get help from an internal auditor who works — does not work — in the office.

But very few people just do all of their regular jobs, and then they do this on top of it. And they never thought they were getting into this. (Applause)

Thank you.

We could have a department of 50 people, you know, assigned to something like this. But, the same way — you know, we get thousands and thousands of requests for annual reports, and they all come in, and we've got just a few people, and they handle it with courtesy and cheerfulness and I really tip my hat to them.

8. Why Buffett hasn't written a book

WARREN BUFFETT: Now, let's go to Zone Four please.

AUDIENCE MEMBER: Good morning. I'm Marshall Patton (PH) from Bandera, Texas.

And first I'd like to thank you very much for not only giving us a good investment vehicle, but giving us a good education along the way. And thanks a lot for the two-volume set of the letters to stockholders over the years. It's required reading around our place.

And if you can contain your hostility, I'd like to thank Charlie Munger for — (Buffett laughs) — the copy of his speech to the University of Southern California Business School students back in 1994. It's also required reading.

And I want to ask you, when are you going to write your book?

WARREN BUFFETT: (Laughs) Well, first of all I'd like to comment on Charlie's talk here.

I think every investor in the world ought to read that talk before they invest. I think that's a classic. And we have copies available for — we mailed it out a year or so ago to the shareholders at that time. But anybody'd like a copy of that talk I'd be glad to supply it.

There doesn't seem to be any need for me to write a book. Everybody else is doing it. (Laughter)

We've got Janet Lowe here who just wrote the most recent one.

You know, at one time or another I said everything I know and a good bit more. So I've never felt compelled to do it. I really feel that the annual reports are sort of a book on the installment system.

Plus I think very few people write two books, and I have this kind of unwarranted optimism, I guess, that the best is always yet to come and there are a lot more interesting things that are going to happen, and I would hate to preclude commenting on those. So I think it's going to be a few years. But I may get around to it at some point.

But I think maybe it'd be a bad sign if it happened, because it might be that I really thought that what I was writing about was more important than what was going to happen next.

Charlie, are you going to write a book?

CHARLIE MUNGER: No, but your comment about why you are unable to write a book reminds me of the Middle Western fellow who left an unfinished manuscript. And he apologized for not finishing his book, which was entitled Famous Middle Western Sons Of Bitches. (Laughter)

And he said he was always meeting a new one — (laughter) — and therefore he could never finish the book. (Laughter and applause)

WARREN BUFFETT: As a courtesy, Charlie and I are leaving each other out of the book that we write. (Laughter)

Charlie was — Charlie grew up in Nebraska, and he's authentic. He has the credentials to prove it. We worked in the same grocery store at different times many years ago.

9. "Realistic" expectations

WARREN BUFFETT: Area 5, please.

AUDIENCE MEMBER: Mr. Buffett, my name is J.P. from Singapore. I flew 24 hours to get here.

Mr. Buffett, throughout your life you have repeatedly under promised and over delivered. For many recent years, for example, you've targeted Berkshire Hathaway's long-term book value growth at 15 percent. Yet you have come through at about 24 percent. That is a big gap of 9 percent between your modesty and the outcome. Perhaps the biggest dose of modesty in corporate history.

May I ask, why is there such a big gap between your modesty and the outcome? (Laughter)

WARREN BUFFETT: I don't think it was modesty. I think it was —

For one thing, we've had a terrific market that has reappraised all businesses in the last ten or 15 years. So when we really started worrying about future performance, the key factor was having larger amounts of capital. And there's no question that the larger the amount of capital you work with, the more difficult the job is.

Now, we were fortunate that that ascension in capital happened to coincide with things that just lifted all the boats substantially. And so we've had better luck than I would have guessed we would have had ten years ago, or five years ago.

But it's been aided by a huge tailwind. And absent that tailwind we would not have done as well. I think maybe we would have done relatively as well, but we would not have done as well in absolute terms.

And we won't have that tailwind in the future, I can assure you of that. But we will have a larger amount of capital, which is the anchor that works on it.

So, if Charlie and I could make a deal to increase the intrinsic value of Berkshire at 15 percent a year over the next ten years, we would sign up now. And I don't want you to even tempt us with lower numbers, because those numbers get astounding.

If we paid no dividend at all over a ten-year period, you can figure out where a 15 percent rate would take us. And we hope to get there, but we think that is absolutely the tops.

And I think it's very likely for a period when the market starts underperforming businesses, that the rate could be very substantially lower than that.

Charlie, do you want to expand on that?

CHARLIE MUNGER: Well, the questioner came from Singapore, which has perhaps the best economic record in the history of developing an economy. And therefore he referred to 15 percent per annum as modest. It's not modest, it's arrogant. (Laughter)

Only somebody from Singapore would call it modest. (Laughter)

WARREN BUFFETT: Yeah. Yeah. Be careful, Charlie, or they'll have a voice vote that we should move to Singapore, I mean —

This is the group that wants performance.

Large quantities of money are not going to compound at super rates — at super compound rates. Small sums probably aren't either, but large sums aren't.

And if anybody that manages large sums of money that promises or implies that they can achieve really outstanding returns, you know, I'd stay away from them.

The numbers just get too big. And you know, you've seen some of that with certain money management organizations in recent years. And you know, 15 percent on an intrinsic value which is substantially greater than our book value gets to be a very, very big number.

And we need huge ideas. We don't need thousands of ideas. I mean, we might need them, but we could never come up with them. So what we look for is the very large idea.

But we're not finding them now. And we'll keep looking, and every now and then we will find something.

But really, if you think we're going to have any chance of doing better than 15 percent, and believe me, that is no number that I'd want to sign my name to, but you really shouldn't — you're going to be disappointed in Berkshire. And we don't want to disappoint you, so that's the reason we try to be realistic about expectations.

10. Pre-Buffett Berkshire shareholders

WARREN BUFFETT: Zone 6?

AUDIENCE MEMBER: My name is Darrell Patrick (PH) from Dayton, Ohio.

How many shareholders do you have that have owned Berkshire longer than you and Charlie? And have you ever gotten together with them?

WARREN BUFFETT: How many shareholders have had it longer than we have? Well, we started buying in 1962. And it was seven and — I think the first ticket was at 7 5/8ths or thereabouts.

It was 2,000 shares. I've got the trading card on the wall, and I paid a dime commission. I can't believe I was paying a dime commission in those days. We pay a nickel now, on much higher-priced stocks. (Laughter)

It's a good thing I didn't have a fistfight with a broker about whether to pay it or not. I might have not had those 2,000 shares.

We have as a director, Kim Chace, and his family's holdings in Berkshire go back to, what? Kim, where are you down here? There we are. What year would you —?

MALCOLM CHACE: The '20s.

WARREN BUFFETT: The '20s, yeah. The Chace family has been in Berkshire since the '20s.

But I would say — we bought about 70 percent of the — Buffett Partnership, which was a partnership I ran in the '60s — bought about 70 percent of the company. So that means they were 300,000 shares roughly that were not owned by us.

Aside from the Chace family, I'm sure there are people that — I'm sure we've got, you know, 50 or 100 shareholders maybe from that earlier dates that are still around, and I'm glad they are.

Charlie?

CHARLIE MUNGER: Nothing to add.

11. Buffett's jet: "Indefensible" to "Indispensable"

WARREN BUFFETT: Area 7, up in the balcony over here.

AUDIENCE MEMBER: Maurus Spence from Omaha, Nebraska.

In light of recent stock market volatility, could you give us your definition of stock market risk, and how does your definition differ from the standard definition?

Finally, due to Charlie's recent counter-revelation about jets, are you going to rename "The Indefensible?"

WARREN BUFFETT: Charlie would like to make an announcement on that second point. (Laughs)

CHARLIE MUNGER: Prompted by Al Ueltschi, we are changing the name of the company plane from “The Indefensible” to “The Indispensable.” (Laughter and applause)

WARREN BUFFETT: Yeah, it was Chateaubriand, who, incidentally, was a writer and philosopher in addition to being the father of a piece of meat — Chateaubriand wrote one time, I believe I’m correct on my attribution here, that events make more traitors than ideas.

And if you think about that in terms of Charlie’s remark, that the purchase of FlightSafety caused Charlie to have this counter-revelation. It’s an experience that is duplicated many times in life where people flip over very quickly to a new view based on their new circumstances.

Now, what was that first question again? (Laughter)

CHARLIE MUNGER: I might add that I have a friend who’s a United Airlines pilot, and he has recently been promoted into the 747-400. Before he started carrying people like you around for hire, he had to train intensively for five weeks. One-hundred percent of his training was in a simulator. They’re that good. So —

WARREN BUFFETT: They better be that good. They cost us about 19 million.

I mean, but they’re fabulous. I mean, if you think about — I think it’s 85 percent of the problems that you can encounter in a plane, if you attempted to teach people by actually being in a plane, they wouldn’t be here anymore, so there’s —

You want to develop the instincts and responses that can react to 85 percent of the problems, the only place to learn them is in a simulator, and probably the other 15 percent the best place is.

12. “Volatility is a huge plus to the real investor”

WARREN BUFFETT: Now, let’s go back to your first question. Give it to me again.

AUDIENCE MEMBER: The first part was, would you define — give us your definition of stock market risk and how it differs from the standard definition.

WARREN BUFFETT: Yeah. We don’t think in terms of — well, we think first in terms of business risk, you know.

We — the key to [Benjamin] Graham’s approach to investing is not thinking of stocks as stocks or part of a stock market. Stocks are part of a business. People in this room own a piece of a business. If the business does well, they’re going to do all right as long as they don’t pay way too much to join into that business.

So we look at — we're thinking about business risk. Now, business risk can arise in various ways. It can arise from the capital structure when somebody sticks a ton of debt into some business, and so that if there's a hiccup in the business that the lenders foreclose.

It can come about just by the nature of the — certain businesses are just very risky. Back in — when there were more commercial aircraft manufacturers, Charlie and I would think of making a commercial airplane, a big airliner, sort of as a bet-your-company risk because you would shove hundreds and hundreds of millions of dollars out into the pot before you really had customers.

And then if you had a problem with the plane, you know, that company could go. There's certain businesses that inherently — because of long lead times, because of heavy capital investment — that basically have a lot of risk.

And commodity businesses have risk unless you're the low-cost producer, because the low-cost producer can put you out of business.

Our textile business was not the low-cost producer. And we had a fine management, and everybody worked hard. We had cooperative unions, all kinds of things. But we weren't the low-cost producer, so it was a risky business. The guy who could sell it cheaper than we could made it risky for us.

So there's a lot of ways businesses can be risky.

We tend to go into businesses that inherently are low-risk, and are capitalized in a way that that low risk of the business is transformed into a low risk to the enterprise.

The risk beyond that is that even though you buy — identify — such businesses, that you pay too much for them. That risk is usually a risk of time rather than loss of principal, unless you get into a really extravagant situation.

But then the risk becomes the risk of you yourself. I mean, whether you can retain your belief in the real fundamentals of the business and not get too concerned about the stock market.

The stock market is there to serve you, and not to instruct you. And that's a key to owning a good business, and getting rid of the risk that would otherwise exist in the market.

You mentioned volatility. It doesn't make any difference to us whether the volatility of the stock market, you know, is — averages a half a percent a day or a quarter percent a day or 5 percent a day. In fact, we'd make a lot more money if volatility was higher, because it would create more mistakes in the market.

So volatility is a huge plus to the real investor.

Ben Graham used the example of “Mr. Market,” which is the — and we’ve used it. I’ve copied it in the report. I copy from all the good writers.

And Ben said, “You know, just imagine that when you buy a stock, that you — in effect, you’ve bought into a business where you have this obliging partner who comes around every day and offers you a price at which you’ll either buy or sell. And the price is identical.”

And no one ever gets that in a private business, where daily you get a buy-sell offer by a party. But in the stock market you get it. That’s a huge advantage. And it’s a bigger advantage if this partner of yours is a heavy-drinking manic depressive. (Laughter)

The crazier he is, the more money you’re going to make.

So you, as an investor, you love volatility. Not if you’re on margin, but if you’re an investor you aren’t on margin.

And if you’re an investor, you love the idea of wild swings because it means more things are going to get mispriced.

Actually, volatility in recent years has dampened from what it used to be. It looks bigger because people think in terms of Dow points and so they see these big numbers about plus 50 or minus 50 or something. But volatility was much higher many years ago than it is now. And you had — the amplitude of the swings was really wild. And that gave you more opportunity.

Charlie?

CHARLIE MUNGER: Well, it got to be the occasion in corporate finance departments of universities where they developed the notion of risk-adjusted returns. And my best advice to all of you would be to totally ignore this development.

Risk had a very good colloquial meaning, meaning a substantial chance that something would go horribly wrong. And the finance professors sort of got volatility mixed up with a lot of foolish mathematics.

To me, it’s less rational than what we do, and I don’t think we’re going to change. (Buffett laughs)

WARREN BUFFETT: Finance departments teach that volatility equals risk. Now, they want to measure risk, and they don’t know any other way. They don’t know how to do it, basically. And so they say that volatility measures risk.

And, you know, I’ve often used the example that the Washington Post stock when we first bought it had gone — in 1973 — had gone down almost 50 percent from a valuation of the whole company of close to, say, 180 or 175 million, down to maybe 80 million or 90 million.

And because it happened very fast, the beta of the stock had actually increased and a professor would have told you that the stock — company — was more risky if you bought it for 80 million than if you bought it for 170 million. Which is something that I've thought about ever since they told me that 25 years ago, and I still haven't figured it out. (Laughter)

13. University of Florida will teach Graham-style investing

WARREN BUFFETT: Incidentally, I should make an announcement on that, because I think that I've made a certain amount of fun of financial departments over the years.

A fellow named Mason Hawkins who runs Southeastern Asset Management just gave a million dollar gift to the University of Florida, and the state of Florida is matching that with 750,000.

So this million-seven-fifty is going to be used to have several courses in what essentially is the Graham approach to investing, I think, starting very soon. So that there will be at least — and there are more than this — but there will be a finance department in this case specifically devoted to teaching the Graham approach.

And I think they're even going to pick up on my suggestion that I stuck in the annual report about having a course on how to value a business and what your attitude toward the stock market should be.

So thanks to Mason, who's done very well managing money, I should add.

And there will be at least one university course that tackles what I think are the important questions in investing.

14. Compulsory reinvestment and "owner earnings"

WARREN BUFFETT: Zone 8, please.

AUDIENCE MEMBER: Gentlemen, my name is Richard Sercer from Tucson, Arizona.

WARREN BUFFETT: Let's give him a hand. This is the gentleman that led to the FlightSafety purchase. (Applause)

AUDIENCE MEMBER: My question relates to owner earnings. What guidance can you give us as to the calculation of item (c), which is maintenance capital spending and working capital requirements?

WARREN BUFFETT: Item (c)? Richard, I was going to ask you a question. How about another company? (Laughter)

Richard and his wife Alma have attended, what, maybe eight or so meetings, and what he did is covered in the annual report. But if it had not been for Richard we would not have merged with FlightSafety. And for that we owe him a lot of thanks.

Now, the item (c), I don't remember item (c).

CHARLIE MUNGER: He's talking about maintenance expenditures and working capital —

WARREN BUFFETT: Yeah, I know.

CHARLIE MUNGER: — and so forth. The compulsory reinvestment.

WARREN BUFFETT: Oh, oh, back on the — goes back some years on that description. Yeah.

In the case of the businesses that we're in, both wholly owned and major investee companies, we regard the reported earnings — with the exception of the — some major purchase accounting adjustment, which will usually be an amortization of intangibles item — we regard the reported earnings — actually the reported earnings plus — plus or minus, but usually plus — purchase accounting adjustments, to be a pretty good representation of the real earnings of the business.

Now you can make the argument that when Coca-Cola's spending a ton of money each year in marketing and advertising that they're expensing, that really a portion of that's creating an asset just as if they were building a factory, because it is creating more value for the company in the future, in addition to doing something for them in the present. And I wouldn't argue with that.

But of course, that was true in the past, too. And if you'd capitalized those expenditures in those earlier years, you'd be amortizing the cost of them at the present time.

I think with a relatively low inflation situation, with the kind of businesses we own, I think that reported earnings plus amortization of any — well, it's really amortization of intangibles. Other purchase accounting adjustments usually aren't that important. I would say that they give a good representation to us of owner earnings.

Can you think of any exceptions in our businesses particularly, Charlie?

CHARLIE MUNGER: No. We have — after some unpleasant early experience, we have tried to avoid places where there was a lot of compulsory reinvestment just in order to stand still.

But there are businesses out there that are still like that. It's just that we don't have any.

WARREN BUFFETT: Yeah. I would say that in the case of GEICO, for example, the earnings — the gain in intrinsic value — will be substantially greater than represented by the annual earnings.

Whether you want to call that extra amount owner earnings or not is another question. But as we build float from that business, as long as it's represented by the same kind of policyholders that we've had in the past, there is an added element to the gain in intrinsic value that goes well beyond the reported earnings for the year.

But whether you want to really think of that as earnings, or whether you just want to think of that as an increment to intrinsic value, you know, I sort of leave to you.

But I would say that there's no question that in our insurance business, where our float was $20 million or so when we went into it in 1967, and where it is now, that there have been earnings, in effect, through the buildup of the float that have been above and beyond the reported earnings that we've given to you.

I think our look-through earnings are — they're very rough. And we don't try to — we don't believe in carrying things out to four decimal places where, you know, we really don't know what the first digit is very well.

So, I don't want — I never want you to think of them as too precise, but I think they give a good rough indication of the actual earnings that are taking place, attributable to our situation every year.

And I think the pace at which they move gives you a good idea as to the progress, or the lack of progress, that we've made. The only big adjustment I would make in those is in the super-cat insurance business, we're going to have a really bad year occasionally. And you probably should take something off all of the good years, and you probably should not regard — when the bad year comes — you should not regard that as something to be projected into the future.

Charlie?

CHARLIE MUNGER: No more.

WARREN BUFFETT: No more.

15. Ratings after Walt Disney's purchase of ABC

WARREN BUFFETT: Zone 9, please.

AUDIENCE MEMBER: Mr. Buffett, I'm Rick Fulton from Omaha. Really.

Recently I was in Washington, D.C. on — with my wife on a business trip, and I wanted to tell Mrs. Graham, I know she's here, what a pleasure it is to get up in the morning to a good newspaper like the Washington Post.

Also, I have a question about CapCities and now Disney.

And is Mr. Murphy keeping busy now that ABC's owned by Disney? (Buffett laughs)

Also, every week you read in the paper the Nielsen ratings. And does it matter that ABC now, it seems that less people recently are watching? Does it matter to Disney's bottom line? Thank you.

WARREN BUFFETT: Well, the first question about Mr. Murphy is that if we could hire Mr. Murphy we would. I mean, there is no one in this world that is a better manager than Tom Murphy, or a better human being as far as that's concerned, so —

He — I think he's keeping pretty busy. He has been responsible for NYU Hospital. He wouldn't say that, but he's been the chairman of it for some years, and that's a $800 million a year or thereabouts organization. Charlie runs a hospital, so he knows how busy it can keep you.

And he — but I would say this, that I would love to find a business that I could entice Murph to come back and run. Because they don't get any better than he is.

And Charlie, you want to add anything on Murph, or?

CHARLIE MUNGER: Well, I'd like to because you're absolutely right. (Laughter)

WARREN BUFFETT: And what was the other part of the question?

AUDIENCE MEMBER: Sir, does recent — the decline in ABC's Nielsen ratings —

WARREN BUFFETT: Yeah.

AUDIENCE MEMBER: — have anything to do with the bottom line?

WARREN BUFFETT: Are we talking (inaudible) —

AUDIENCE MEMBER: — (inaudible) Forrest Gump last night? (Laughter)

WARREN BUFFETT: Yeah, it makes a difference, sure. Ratings translate in many cases into, not — depends on daypart, depends on a whole bunch of things. But overall, you make more money if your ratings are good in news, if they're good in early morning, if they're good in daytime, if they're good at late evening, whatever. I mean, ratings translate into money.

They may not translate immediately, particularly if they have some big hit show you may have sold it out too cheap. But over time the prices you receive for your product relate to ratings.

And over time, but over a longer period of time, the price that you pay for the product also relates to the ratings. But there's a difference in the time cycle. So that it makes a difference to any network's bottom line what their ratings level is.

Disney is conscious of that, and they are very able operators, and I predict you'll see in a couple of years. But you can't it immediately. The schedule fixes don't work on a, you know, week to week basis because people have habits, and there's a time lag involved in any change.

And you've seen — over the last 20 years — you've seen various networks on top or on the bottom from time to time. So it moves around. It moves around a fair amount.

Charlie?

CHARLIE MUNGER: Yeah, I think the TV network business is intrinsically a pretty tough business.

And Disney did way better on ESPN than they might have forecast, and they probably did a little worse on the network. These things happen.

WARREN BUFFETT: That was, incidentally, the situation when CapCities bought ABC. In 1985, we made the deal, I think, and it closed — I think it closed the first day or two of '86. I may be wrong on that.

But the network diminished — the ratings — diminished significantly, and particularly in daytime. We'd always thought daytime was almost a certainty to produce big earnings, and it had.

Primetime is what people pay the most attention to, but daytime slipped significantly after we bought it. It has no relationship to those movies — I mean, to a movie you saw earlier — when I started appearing on it. Don't want anybody to make that connection, but it did happen to be at the same time.

The kicker we got, again, was ESPN. ESPN was losing money when CapCities made the deal to buy ABC, and we never really regarded it as being that — having that big a potential.

And you know, it has been huge. It was enormously better for us than we ever anticipated.

Leonard Goldenson, who ran ABC, told us it was going to be that good. But, of course, we were too smart to pay any attention to him. And I think Disney has been pleasantly surprised by how well ESPN has done, too. It's a powerhouse.

16. Creation of Class B shares similar to a stock split

WARREN BUFFETT: Zone 10, please.

AUDIENCE MEMBER: My name is Bill Turan (PH). I'm from Des Moines, Iowa, and I'm a stockholder.

It would appear that there's going to be a capital gains tax cut. If it does materialize, would you consider a stock split? (Buffett laughs)

Secondly, is there an extra copy of your annual report available on the premises?

WARREN BUFFETT: My guess is we'll get you an annual report. In fact, if someone could take it up to zone 10, we'll be glad to get it to you.

I don't think — well, I'll put it this way. If they cut the capital gains tax to zero, we'll maybe — (Laughter)

I don't think I'd get Charlie's vote though, anyway. No, we will not be splitting Berkshire stock. (Applause)

Incidentally, we do not consider splitting the stock a pro-shareholder move. If we did, we'd do it.

We think that net, to take the entire experience, it's worked out well for shareholders, and we think we have a more investor-oriented — or investment-oriented — audience in this room today than we would have had if we'd split many times.

It is a way of enticing certain types of investors, and perhaps discouraging others. And so it's worked well.

But I will say this, too. We got pushed into, in effect, issuing the Class B shares last year. Wasn't our — wouldn't have been something we would have done, except for the possible formation of the unit trust. And I would say that's worked out very well from our standpoint. So we're happy that it happened, and we're happy that the Class B shareholders have joined us. And we now have something that's denominated, you know, at a much lower level.

And there have been no bad effects whatsoever from having the Class B out there. So anybody owns the A stock and wants to split, you can split 30-for-1 this afternoon. I mean, how many other companies give you that chance?

Charlie?

CHARLIE MUNGER: I think what he's trying to tell you is that you've had your stock split. (Laughter)

17. We don't know how to value Intel and Microsoft

WARREN BUFFETT: Zone 11, please.

AUDIENCE MEMBER: Yes, Mr. Buffett, I would like to thank you again for issuing the Class B shares.

WARREN BUFFETT: (Laughs) Well, I'm glad we did, and I hope you own them.

AUDIENCE MEMBER: I am a class B shareholder.

I need your comment on some analysis that we did. If someone uses your investment philosophy of building a highly concentrated portfolio of six to eight stocks, and adopts your buy-and-holding principle so that the max of compounding and no tax works for you, but however, with one major modification: invest in high-octane companies like Intel and Microsoft that are growing at 30 percent, instead of typical 15 percent growth company in your portfolio.

My question is, will this investment philosophy will translate into twice the shareholder return as you have historically provided to your shareholders?

WARREN BUFFETT: Yeah. Well, it will certainly work out to twice the return if Intel and Microsoft do twice as well as Coke and Gillette. I mean, it's a question of being able to identify businesses that you understand and feel very certain about.

And if you understand those businesses, and many people do, but Charlie and I don't, you have the opportunity to evaluate them. And if you decide they're fairly priced and they have marvelous prospects, you're going to do very well.

But there's a whole group of companies, a very large group of companies, that Charlie and I just don't know how to value. And that doesn't bother us. I mean, you know, we don't know what — we don't know how to figure out what cocoa beans are going to do, or the Russian ruble, or I mean, there's all kinds of financial instruments that we just don't feel we have the knowledge to evaluate.

And really, you know, it might be a little too much to expect that somebody would understand every business in the world.

And we find some that are much harder for us to understand. And when I say understand, my idea of understanding a business is that you've got a pretty good idea where it's going to be in ten years. And I just can't get that conviction with a lot of businesses, whereas I can get it with relatively few. But I only need a few. As you've pointed out, you only need a few, six or eight or something like that.

It would be better for you — it certainly would have been better for you — if we had the insights about what we regard as the somewhat more complicated businesses you describe, because there was and may still be a chance to make a whole lot more money if those growth rates that you describe are maintained.

But I don't think they're — I don't think you'll find better managers than Andy Grove at Intel and Bill Gates at Microsoft. And they certainly seem to have fantastic positions in the businesses they're in.

But I don't know enough about those businesses to be as sure that those positions are fantastic as I am about being sure that Gillette and Coca-Cola's businesses are fantastic.

You may understand those businesses better than you understand Coke and Gillette because of your background or just the way your mind is wired. But I don't, and therefore I have to stick with what I really think I can understand. And if there's more money to be made elsewhere, I think the people that make it are entitled to it.

Charlie?

CHARLIE MUNGER: Well, if you take a business like Intel, there are limitations under the laws of physics which eventually stop your putting more transistors on a single chip. And the 30 percent per annum, or something like that, you — I don't think — those limitations are still a good distance away, but they're not any infinite distance away.

That means that Intel has to leverage its current leadership into new activities, just as IBM leveraged the Hollerith machine into the computer. Predicting whether somebody's going to be able to do that in advance is just — it's too tough for us.

WARREN BUFFETT: Bob Noyce —

CHARLIE MUNGER: We could (inaudible) to you.

WARREN BUFFETT: Bob Noyce, one of the two founders of — two primary founders — of Intel, grew up in Grinnell, Iowa. I think he's the son of a minister in Grinnell, and went through Grinnell College and was chairman of the board of trustees of Grinnell when I went on the board of Grinnell back in the late '60s.

And when he left Fairchild to form Intel with Gordon Moore, Grinnell bought 10 percent of the private placement that funded — was the initial funding for Intel.

And Bob was a terrific guy. He was very easy to talk to, just as Bill Gates is. I mean, these fellows explained the businesses to me, and they're great teachers but I'm a lousy student. And they — I mean, they really do. They're very good at explaining their businesses.

Bob was a very down to earth Iowa boy who could tell you the risks and tell you the upside, and enormously likeable, a hundred percent honest, every way.

So we did buy 10 percent of the original issue. The genius that ran the investment committee and managed to sell those a few years later, I won't give you his name. (Laughter)

And there's no prize for anybody that calculates the value of those shares now.

Incidentally, one of the things Bob was very keen on originally, in fact he was probably the keenest on it, was he had some watch that Intel was making. And it was a fabulous watch, according to Bob.

It just had one problem. We sent a guy out from Grinnell who was going out to the West Coast to where Intel was. And Bob gave him one of these watches. And when he got back to Grinnell he wrote up a report about this little investment we had, and he said, "These watches are marvelous." He said, "Without touching anything, they managed to adapt to the time zones as they change as we went along." In other words, they were running very fast, as it turned out. (Laughter)

And they worked with that watch for about five or six years, and they fell on their face.

And as you know, you know, they had a total transformation in the mid-'80s when the product on which they relied also ran out of gas. So, it's not —

And Andy Grove has written a terrific book, incidentally, "Only the Paranoid Survive," which describes strategic inflection points. I recommend that every one of you read that book, because it is a terrific book.

But they had an Andy Grove there who made that transformation, along with some other people. But that doesn't happen every time. Companies get left behind.

We don't want to be in businesses where companies — where we feel companies can be left behind. And that means that, you know — and Intel could have, and almost did, go off the tracks. IBM owned a big piece of Intel, as you know, and they sold it in the mid-'80s.

So, you know, here are a bunch of people that should know a lot about that business but they couldn't see the future either.

I think it's very tough to make money that way, but I think some people can make a lot of money understanding those kinds of businesses. I mean, there are people with the insights.

Walter Scott, one of our directors, has done terrifically with a business that started, you know, just a gleam in the eye maybe ten or 12 years ago here in Omaha, and it turned into a huge business.

And you know, Walter explained that to me on the way down to football games, but bad student again, so — (Laughs)

Walter — if Walter could have connected, and you know, I'd cheer from the stands. But that doesn't bother me at all. I mean, what would bother me is if I think I understand a business and I don't. That would bother me.

Charlie?

CHARLIE MUNGER: Well, having flunked when we were young and strong at understanding some complex businesses, we're not looking to master what we earlier failed at — (laughs) — in our latter years. (Laughter)

WARREN BUFFETT: Zone 12? This may turn out like a revival meeting where we all confess our sins and come forward (inaudible). (Laughter)

18. Confident about Salomon but not rest of Wall St.

AUDIENCE MEMBER: Good morning, gentlemen. My name is Cary Blecker (PH) from Wellington, Florida.

I know in 1987 when you purchased — or invested — in the Salomon Brothers convertible preferred stock, you had the eight-year time frame to convert it into common or take the cash out. I know in '95 you took cash out, which was not a vote of confidence for Salomon Brothers. Any feelings on that in the future?

WARREN BUFFETT: Yeah. We — as the gentleman mentioned, we bought it in 1987, and starting in 1995 we have a — we have, every year for five years, we either have to take cash or convert to common, 20 percent of the original issue of 700 million.

We don't have to make those decisions ahead of time. So we, in 1995, we elected to take cash. In 1996 we elected to take stock.

And you know, we see no reason ever to swing at the ball while it's still in the pitcher's glove. We'd just as soon wait till it gets to the plate to make the decision. So the ball will get to the plate on October 31st of 1997, I believe, for the next 20 percent. And we'll decide whether to swing at that point. But we don't need to make that decision today.

I would say that, you know, the odds are overwhelming that we'll convert, but we'll wait until that time to make the final decision.

We have terrific confidence in the people that run Salomon. They helped us through some incredibly dark days in the past, and showed the stuff of which they were made. And so we feel very good about that.

We don't have the same degree of conviction about the profitability of the investment banking or brokerage business as a whole.

It's not the sort of — you don't develop that kind of conviction about that business versus a Coca-Cola or something. They're different. They have different economic characteristics.

So we will see how the businesses — the industry — evolves. But we feel very good about the management, and the odds are extremely high that we will convert. But we will swing at the ball when it gets to the plate.

Charlie?

CHARLIE MUNGER: No more.

WARREN BUFFETT: OK.

19. Can't exchange stocks without paying taxes

WARREN BUFFETT: Let's see. We did 12. We're back at 1 again.

AUDIENCE MEMBER: My name is Ted Vokali (PH) from Corpus Christi, Texas. And I would like to ask a question to you.

Companies are purchased from time to time, and the purchasing company will give shares instead of cash, and their shareholder will receive new shares.

Can an individual investor transfer non-Berkshire to Berkshire with or without going through a broker? And if not, how does Berkshire do this with another company? And if possible, I would like to also receive a copy of the annual report.

WARREN BUFFETT: OK, we'll get you a copy of the annual report.

The only way I know of — and maybe Charlie knows some other way — the only way you can switch your shares in one company for — into shares of another company is to have a tax-free merger. And the Internal Revenue Code has specifications about that.

You can have a transaction, as we had with FlightSafety where a portion is — of the shareholders — can take cash, and a portion can take stock, and it's still tax-free for the people who elect stock.

You can't have too many people take cash and have that happen. There are a lot of technical rules about what's tax-free.

But there's no way that you can own General Motors and transfer it into General Electric stock without a tax and a broker. Well, you don't have to have a broker. If your neighbor happens to own it you could make a deal privately. But the easiest way usually is through a broker.

But there's no way you can do it without tax, unless General Motors and General Electric decide to merge at some point.

So the opportunities to switch from one security to another without tax are really limited to merger.

And in terms of brokerage costs, it just happens to be that it's — that the most economical way of finding the person in the world that wants to both buy the stock you want to sell and sell you the stock you want to buy is through an intermediary — a broker. And the costs of that actually can be relatively low.

Charlie?

CHARLIE MUNGER: Well, I think there's one way still permitted by the tax laws. You can still form a partnership. If you own General Electric and I own General Motors and we each feel too concentrated, well, you could form a partnership and each put in your stock. And in essence you would each thereafter be invested half and half with some diversification. I will predict that Wall Street will eventually get around to promoting such partnerships.

WARREN BUFFETT: Yeah, well, they did through swap funds, you know, since 25 years ago. And then — that was where you put in your highly — your stock that had an enormous amount of unrealized appreciation in it, and a whole bunch of other people did, and then you owned a fund which itself had a lot of unrealized appreciation in it. And you had —

CHARLIE MUNGER: Plus a new layer of costs.

WARREN BUFFETT: Yeah, plus a new layer of costs, always.

And you owned a piece of this larger fund, and you owned a piece of everything else — everything that the other people wanted to get rid of, and they owned a piece of what you wanted to get rid of, and superimposed with some costs.

But that vehicle was sort of stopped in its tracks, I think, in the mid-'70s by an amendment to the Internal Revenue Code.

But as Charlie said, you could replicate the effect of a swap fund by doing it with a partnership. It'd be kind of awkward, but it can be done.

20. Strong businesses, but no "master plan"

WARREN BUFFETT: Zone 2?

AUDIENCE MEMBER: Gentlemen, I'm Marc Rabinov from Australia. I am a shareholder.

I had a question really related to our own businesses, and how they're going, and where you're looking to be in ten years' time.

Perhaps I could start with the insurance float. It's grown at 20 percent. Do you think that 20 percent growth rate will continue for the next ten years?

Do you think our stable businesses, which have been growing at, say, 5 or 7 percent will maintain that rate?

And do you think FlightSafety, which from the SEC filings has been growing at about 5 percent, do you think that'll continue at that rate?

WARREN BUFFETT: Well, we're glad to have you from Australia. I think we've got about 15 people here from Australia, so it — got a good representation.

I don't think the insurance float can grow at 20 percent a year. That's been helped by some acquisitions and things. I mean, it's done way better, obviously, than we ever thought it would 30, almost 30 years ago when we made the deal with Jack Ringwalt.

I would say, though, that I think GEICO is going to do even better than we expected when we bought it. And we thought it was going to do awfully well then.

In Tony Nicely, you know, we have an absolutely outstanding manager of that business. And he is focused on it. He knows it. I think he went to work there when he was 18. And he's been there 35 years or thereabouts. They don't come any better. And he is absolutely zeroed in on the things that he should be zeroed in on, and he's — the implementation gets better all the time.

I mentioned in the annual report that the unit growth of GEICO's voluntary auto business — and we talk about voluntary because you get assigned risk-type things that lose you money, but the real business is the voluntary auto business — grew at 10 percent last year, which was the best growth rate in over two decades.

First four months of this year, it's growing at about 16 percent. And 16 percent unit growth translates into about 20 percent a year premium growth.

So GEICO at present would give you some encouragement for at least that segment of the insurance float growing at a rate that's sort of comparable to the past.

Insurance is going to be a very big business for us. And the float will grow, in my view, at a good rate. But I wouldn't want to predict that good a rate.

Most of our other businesses, very good businesses. They don't have 20 percent a year growth possibilities in them. They throw off lots of cash, which we can use to buy other things, which may turn out to be a better strategy than even having a single high-growth business.

FlightSafety, about six weeks ago or thereabouts, announced a major hookup in a joint venture with Boeing, as you may have noticed. And they're a terrific partner, and it'll be a great partnership.

That's just for our — the training for our — for larger planes, primarily, I think, hundred-seat and up planes, although I think there may be a few Fokkers in there that are slightly smaller planes. But it's basically the big commercial planes.

And the combination of FlightSafety and Boeing worldwide in training over the coming decades, I think, will be a very powerful combination. So we've got some very good businesses.

And I don't see that movie that's presented before — I sit out here like you and watch it. But I like the ending of it.

And the people we have out there, they've run businesses extremely well in the past. They get better results out of those businesses, frankly, than other people would, or that other people in the industry generally do. So I think they have good futures.

But they will throw off lots of cash in aggregate. And the tough job — we like to tell people it's the tough job anyway — is that Charlie and I have to figure out where to put that cash to maintain higher — reasonable — growth rate.

AUDIENCE MEMBER: (Inaudible)

WARREN BUFFETT: Could you — I'm not sure that's — could you turn that on, please, so that —

MARK RAVENHILL: I'm sorry to pin you down, but —

WARREN BUFFETT: That's OK. You can pin me down.

AUDIENCE MEMBER: — would you guess that FlightSafety, then, is more likely to be in that 10 to 15 percent ballpark?

WARREN BUFFETT: Well, it's hard to tell on numbers. I mean, certainly there's going to be growth in pilot training around the world. But FlightSafety already has a significant portion of the corporate market, for example. So it would be hard to grow a lot faster in the corporate market, although I can hear Al grinding his teeth, you know, when I say that, because he plans to grow a lot faster than the market.

But the corporate market, we've got a significant percentage. Commercial market, there could be a lot of potential in. You know, it won't come tomorrow or the next day. But, you know, ideally we would like to see people when they buy a 777 or 747 or something, buy a lifetime pilot training contract at that time.

So I wouldn't want to stick a number on it, but I've got high hopes. And FlightSafety also announced recently a very major contract with the government through Raytheon. So it's a company that's got its sights set a lot higher than where it is now.

AUDIENCE MEMBER: And insurance, 15 percent? (Inaudible)

WARREN BUFFETT: Will you — you want tenths of a percent or will you — (Laughter)

We just don't know. I mean, we didn't know 25 — we didn't — 30 years ago we didn't know we would be in the insurance business.

I mean, Berkshire, we have no master plan. And Charlie and I did not sit down in 1960 — early '65 — and say, "We're going to do this and that," and all that.

We're going to do — we're going to try and do sensible things as we go along. The more money we have, the harder it is to find sensible things.

But that's the criteria. Insurance is certainly a major area of opportunity for us. It's been a major opportunity.

We have — in certain fields we have a terrific advantage for the three reasons I laid out in the annual report. But I mean, we have capital strength, and a willingness to take on risk, and a speed of action, and a certainty of payment, that in aggregate no one matches.

Now, how much demand there is for that depends on circumstances in the business and how much supply there is at lower prices that we think don't make sense is another question. But I think we'll do OK in insurance over time.

21. Most money managers have "gotten a lot for nothing"

WARREN BUFFETT: Zone 3?

AUDIENCE MEMBER: Mr. Buffett, Mr. Munger, I'm Tim Medley from Jackson, Mississippi.

WARREN BUFFETT: We're glad to have you back, Jim — Tim.

How many years have you come?

AUDIENCE MEMBER: This is my 11th.

WARREN BUFFETT: Good.

AUDIENCE MEMBER: They've been 11 great years. Thank you very much.

At this meeting four or five years ago, you commented that money managers in the aggregate have not done better than various market indices. And you attributed this, in part, to the frictional cost inherent in an actively-managed portfolio.

I wonder if today you would update your thoughts on this. And do you think that this underperformance compared to index funds will continue?

And then a related question, if the two of you were giving advice to a classroom of equity mutual fund managers, are there two or three things in particular that you would want to suggest to them?

WARREN BUFFETT: Yeah. Well, I would say this. Money managers, in the last few years since I made that statement, have not disappointed me. (Laughter)

In aggregate, they have underperformed index funds. And it's the nature of the game. They simply cannot overperform, in aggregate. There are too many of them managing too big a portion of the pool.

And for the same reason that the crowd could not come out here to Ak-Sar-Ben in the past years and make money, in aggregate, because there was a bite being taken out of every dollar that was invested in the parimutuel machines, that people that invest their dollars elsewhere through money managers in aggregate cannot do as well as they could do by themselves creating their own index fund, or it would be easier to have — just to buy into an index fund.

It's — you know, they say in this world you can't get something for nothing. But the truth is money managers, in aggregate, have gotten something for nothing. I mean, they've gotten a lot for nothing. And — (applause)

And people — investors have paid — and the corollary is investors have paid something for nothing.

And that doesn't mean that people are evil. It doesn't mean that they're charlatans or anything. It's the nature, if you got a 6 or $7 trillion, or whatever it may be, equity market, and you have a very significant percentage of it managed by professionals, and they charge you significant fees to invest with them, and they have costs when they change around.

They cannot do as well as unmanaged money, in aggregate.

And it's the only field in the world that I, you know, that I can think of — Charlie'll think of some others — but where the amateur, as long as he recognizes he's an amateur, will do better than the professional does for the people whose money he's handling.

And therefore if I were in a — teaching this class or speaking to that class, I would probably tell them that for their own psychological well-being they should probably leave the room. (Laughter)

Charlie?

CHARLIE MUNGER: Well, I pretty well said what I had to say on this subject in that talk I gave at USC. And anybody that wants to read that, why, can read it.

I will say that one of the things I like about the annual meeting is I get to interface with a whole lot of people that have even lower annual investment management expenses than Berkshire Hathaway the company does. I mean, if you stop to think about it, we've got our costs almost to zero, and many of you have gotten it to zero.

WARREN BUFFETT: Yeah, we — Charlie and I would be glad to take any money management organization in the world that manages — oh, just been handed a note that says, "Unfortunately, we don't have extra annual reports on site. Those shareholders desiring one should call us or write." So. And we're also on the internet. You can run it off there, too.

So I apologize for not having them on the — here. But they're easy to get. Just dial 346-1400 and there's an annual report line, and you'll have one sent to you.

We would be willing to take any money management organization in the world managing 10 billion or more, and in the case of brokerage houses who have their brokers in aggregate handling 10 billion or more, and we would be willing to bet that their aggregate investment experience over the next five years or ten years for the group that they advise will be less — will be poorer — than that achieved by a no-load, very low-cost index fund.

And we'd put up a lot of money to make that wager with anybody that would care to step forward.

Gambling may be illegal, but now you can do it through something called derivatives, you see? (Laughter)

We could create an instrument that would allow that, even though it might be against the laws of the state of Nebraska.

Charlie, would you join me on that or —?

CHARLIE MUNGER: Well, I certainly agree with you. I always say that the — exactly one-fifth have to be in the bottom 20 percent, and — (Laughter)

There are certain fundamental forces at work here that —

But it is a very peculiar profession where you have to be in a state of psychological denial to shave in the morning if you do the work. I don't think that's true for a handful —

WARREN BUFFETT: Well, it isn't.

CHARLIE MUNGER: — of investment managers. I think we know investment managers who add value. But it's a comparatively rare and small percentage.

WARREN BUFFETT: Yeah. There — we have identified, in the past even — I mean, on a prospective basis, not retrospective — managers who have added value. And there's couple of them in this room.

CHARLIE MUNGER: Well, and there's Lou Simpson of GEICO.

WARREN BUFFETT: Well, he's the one I had in mind. (Laughter)

You can do it. You can't do it with unlimited amounts of money, and a good record tends to attract money. Even a mediocre record presented by a good salesperson tends to attract money.

But there are people working with smaller amounts of money that — (coughs) — where the probabilities are that they will do better than — excuse me. (Clears throat)

Where the probabilities are that they will — (clears throat) — do better than average. But they're very rare.

Incidentally, I apologize on this voice. I had to leave Gorat's early last night, and there were a number of you I was hoping to see. But I just — it was gone entirely last night, and then I —

I'd like to tell you I did it by Cherry Coke, but I've managed to nurse it back to where it's working again in reasonable shape.

22. USAir CEO Stephen Wolf has done "terrific" job

WARREN BUFFETT: Zone 4?

AUDIENCE MEMBER: Martha Copeland (PH) from San Francisco.

My question involves the headwinds which face USAir. Are you considering redeploying assets? Or how will your management plan to improve this company?

WARREN BUFFETT: Well, we're just an investor in US — they call it now US Airways — but we're just an investor. We've owned a preferred stock for almost eight years.

The company had some very rough going. Charlie and I would not have thought its chances for survival were very good, even some years back.

But it's done quite well lately. Stephen Wolf has done a terrific job of running it.

So as of the middle of April, all of our dividends are — were caught up, current. We've received, I don't know, 260 or '70 million in dividends in the last eight years.

But we have nothing to do with managing the company. Matter of fact, there are some people that might have noted that when Charlie and I left as directors, that was when the fortunes of the company turned abruptly upward. (Laughter)

But — and we feel very good about what Stephen Wolf has done. I mean, he — there's no tougher job than running an airline. That is not a job I would wish on anyone. And he's improved the operating performance dramatically, and the financial performance has improved. And better yet, the preferred dividends have been paid. So we thank him for that, but we have nothing to do with it.

By the terms of our preferred, in just a little over two years, we are due to be paid back our principal amount. It was really a loan in equity form, with a kick — possible kicker on the upside because of the conversion privilege on the preferred.

We would have sold the conversion privilege for nothing a few years ago, but it actually is not so far away now. The stock's in the low 30s, and our conversion is in the high 30s. So we actually have some chance of even having conversion value on that. It's been a very pleasant surprise.

You know, I made a mistake in getting into it, but Mr. Wolf is — seems to be capable of nullifying my mistake.

Charlie?

CHARLIE MUNGER: Pass. (Laughter)

WARREN BUFFETT: We'll give him this (inaudible). (Laughter)

23. Put all your money into Berkshire stock?

WARREN BUFFETT: Zone 5, please.

AUDIENCE MEMBER: I'm Eric Butler (PH) from Menlo Park, California. A couple of questions, one serious, one not quite.

Considering Berkshire Hathaway is well run at low cost, and is diversified, why should anyone do anything but put all their money into Berkshire Hathaway instead of maintaining a diversified portfolio?

And in some of these hagiographic kind of biographies, it's apparent that you have other investments yourself beyond Berkshire Hathaway.

The second question I had, is there any significance to the fact that the Omaha World-Herald does not include Berkshire Hathaway in its stock tables on any day? Is this a sign that they do not honor profits?

WARREN BUFFETT: (Laughs) No, they — actually, they have a separate little table called Midlands — I think it's entitled Midlands Investment. But they pick out about 50 stocks that are of particular interest to people in this area, and they lift those from the regular table and put it in this separate table, which is usually on a second page right following the main stock table. So they give us our just due on that, but you do have to — you should look in a different table for that.

Second question about putting all your money in, I've got 99 percent of my money in Berkshire. But it was bought at a different price. (Laughter)

And Charlie's was bought a little cheaper, too, I think. So you know, we like the idea of having it all in there, but we don't recommend that people do that because it's — you will get very low-cost management. What we hope — well we hope is that from this point forward, that that cost does not reflect its value.

But the price at which you enter is very important. You do get a great group of businesses. You get a lot of great operating managers. You get very reasonable costs. But that is fairly widely recognized now compared to the past, and people pay more for it than they used to.

I'm still very comfortable with it, and I think Charlie's comfortable with it, too. But everyone has to make up their own mind about price.

Charlie?

CHARLIE MUNGER: Yeah. Eventually, if the success continues and we have more of this hagiography, the stock will get to such a high price that it's no longer sensible at all to buy.

We hope we dampen that process as we go along. And of course, there's always the very substantial chance that we'll just fail to meet expectations due to the vicissitudes of life.

WARREN BUFFETT: Falling on our face is what we call it. (Laughter)

24. Won't buy a tobacco company, but could buy tobacco stocks

WARREN BUFFETT: Zone 6.

AUDIENCE MEMBER: My name is Michael Hooper. I'm from Grand Island, Nebraska. I applaud Berkshire for starting the Class B shares.

My question deals with tobacco stocks, which have been beaten down lately. Does Berkshire own any tobacco stocks, and are some of these stocks attractive now that prices are down on some of them? And in particular, a company called UST. Thank you.

WARREN BUFFETT: Yeah. We have owned — we won't comment on what we own now — but we have owned tobacco stocks in the past. We've never owned a lot of them, although we may have made a mistake by not owning a lot of them. But we've owned tobacco stocks in the past, and I've had people write me about whether we should do it or not.

We own a newspaper in Buffalo. It carries tobacco advertising. We don't — well, actually, Charlie's a director of a sensational warehouse chain called Costco, which used to be called PriceCostco. You know, they sell cigarettes.

So we are part of the distribution chain in — with a hundred percent-owned subsidiary in the Buffalo News. And so we have felt that if we felt they were attractive as an investment, we would invest in tobacco stocks.

We made a decision some years ago that we didn't want to be in the manufacture of chewing tobacco. We were offered the chance to buy a company that has done sensationally well subsequently, and we sat in a hotel in Memphis in the lobby and talked about it, and finally decided we didn't want to do it.

Can I give you some —?

CHARLIE MUNGER: But it wasn't because we thought it wouldn't do well. We knew it was going to do well.

WARREN BUFFETT: We knew it was going to do well.

But now, why would we take the ads for those companies, or why would we own a supermarket, for example, that sells them, or a 7-Eleven, you know, or a convenience store that

sells them or something of the sort, and not want to manufacture them? I really can't give you the answer to that precisely.

But I just know that one bothers me and the other doesn't bother me. And I'm sure other people would draw the line in a different way.

So the fact that we've not been significant holders of tobacco stocks has not been because they've been on a boycotted list with us. It just means that overall we were uncomfortable enough about their prospects over time that we did not feel like making a big commitment in them.

Charlie?

CHARLIE MUNGER: Yeah. I think each company, each individual, has to draw its own ethical and moral lines, and personally, I like the messy complexity of having to do that. It makes life interesting.

WARREN BUFFETT: I hadn't heard that before. (Laughter)

We'll make him in charge of this decision.

CHARLIE MUNGER: Yeah, no, no. But I don't think we can justify our call, particularly. We just — we have to draw the line somewhere between what we're willing to do and what we're not, and we draw it by our own lights.

WARREN BUFFETT: We owned a lot of bonds at one time of RJR Nabisco, for example, some years back. And should we own the bonds and not own the stocks?

Should we own, you know — should be willing to own the stock but not be willing to own the business? Those are tough calls.

Probably the biggest distributor of — the biggest seller — of cigarettes in the United States is probably Walmart, but — just because they're the biggest seller of everything. They're the biggest seller of Gillette products, and they're huge.

And you know, do I find that morally reprehensible? I don't. If I owned — we owned all of Walmart, we'd be selling cigarettes at Walmart. But other people might call it differently, and I wouldn't disagree with them.

25. Buffett on anti-abortion protesters

WARREN BUFFETT: Zone 7?

AUDIENCE MEMBER: Gentlemen, I'm John Tarsney (PH), a shareholder from Omaha, Nebraska.

People have already asked any sophisticated question that I might have, so I'm reduced to my simple ones.

I first became a shareholder through FlightSafety, and at that time I wasn't sure that I wanted to be bought out. However, I decided that any man who could agree with me on FlightSafety might be a good man to go along with.

CHARLIE MUNGER: (Laughs) Well, that's one way of doing it. (Laughter)

Maybe you'd fit in well at headquarters. (Laughter)

AUDIENCE MEMBER: I have a couple — well, I don't use Gillette products, either, as those of you who are close to me can see. (Laughter)

My questions, my simple ones then, are, a couple of years ago, or within the recent times, you had said you would not necessarily buy Berkshire Hathaway. And I'd like to know whether you still feel the same way.

Secondly, since I came to you through FlightSafety I'm wondering if there's any other positions I should be looking at in that same — (laughter) — same light.

And thirdly, there was a very distressing sign to me — sign that I saw when I drove in. And I don't know what the meaning of it is, or if you do. And it said something about abortion. And I just don't have a clue.

If you do — now, you can use yes or no answers to these and save your voice. (Buffett laughs)

Or suit yourself and elaborate.

WARREN BUFFETT: Yeah, we'll work backwards.

I think the signs probably relate to the contributions to Planned Parenthood. (Applause)

Thank you.

We follow a policy, as you know, at Berkshire of corporate contributions being designated by shareholders. We have some made by our operating companies to their local communities, and the local managers do what they think appropriate within their communities and with their own businesses.

So Tony Nicely at GEICO — I have no idea what GEICO contributes to, but they make those decisions at GEICO.

But in terms of the parent company, we let the shareholders designate the contributions. We have a number of shareholders who designate Planned Parenthood. We have other shareholders who designate organizations that are — would be opposed to the ideas of Planned Parenthood. We make no judgment about those. (Mild applause)

And in terms of — I designate the Buffett Foundation every year, and then the Buffett Foundation, in turn, gives money to other things, including Planned Parenthood.

And so, in the sense that those funds come indirectly from Berkshire, they come in direct proportion to ownership the same way as everybody else gets a chance to do with their shares.

And we've had people write us about it. You know, I — there's no way in the world we would — you know, in fact there's some that would say that we should be boycotted because I do this.

And we would not dream of questioning, you know, the people that we buy our almonds from, or walnuts from, or chocolate from, as to what their beliefs were, you know, before we bought that, or whether we would hire somebody that they'd have to agree with our beliefs, so —

It seems to me perfectly appropriate for people to express their views on it, and they probably don't like — clearly they don't like — what I do on that. But it's where my reasoning and, you know, my own judgment leads me.

But they're out there, the few people out there expressing their views on it, and they're entitled to do that. And I don't have any problem with that.

I think when they start saying, you know, "We don't want to hire you because you have a different view than we do," or "We don't want to buy your products," I think that's a little different position to take. I wouldn't do that. But again, it's their right to do that.

26. Berkshire stock is now "more appropriately valued"

WARREN BUFFETT: Going back to whether we would buy the stock, I would say this a year ago — well, it was about March 1st because that's when I wrote the annual report in 1996 — the stock was 36,000 and I said it was not undervalued at that point.

And since we were more or less forced to have an offering by the unit trust, which I'm very glad in retrospect we did, but it was not our idea, we felt that it was only appropriate in connection with that offering to point out that we had said it was not undervalued, and since Charlie and I like to buy undervalued securities, that we would not buy it ourselves at that price or recommend that others do.

And in the ensuing year, the intrinsic value of Berkshire changed quite dramatically. And the price didn't change. In other words, the stock, after years of overperforming the business somewhat, underperformed the business. Which, of course, it's bound to do.

And we're glad that they got back more in tandem. So we said this year that we regarded the stock as being much more appropriately valued than it was a year earlier, which is obvious.

And I would say that the caution I made about securities generally would apply. I would not except Berkshire from that caution, but I would rather own or purchase Berkshire myself than I would most other securities. I can tell you that.

Charlie? (Applause)

Charlie gives to Planned Parenthood, too, so he has to — (laughs). They didn't put his names on those signs, but I'll take care of that. (Laughter)

CHARLIE MUNGER: I'm perfectly willing to have that limelight passed, as well as the opportunity to say more on the subject.

WARREN BUFFETT: Did I miss one question up there? I think there were three of them, and I addressed two of them.

AUDIENCE MEMBER: About any other area I should be looking at.

WARREN BUFFETT: That's the reason I skipped it. (Laughter)

Yeah, we don't direct people to any specific investments.

27. World Book encyclopedia vs Microsoft's Encarta

WARREN BUFFETT: Zone 8, please.

AUDIENCE MEMBER: Good morning, Mr. Buffett and Mr. Munger. This is Nancy Jacobs (PH) from Omaha, a shareholder for about four years now.

Before I leave today, I'm planning to purchase the World Book on CD-ROM for my ten-year-old daughter. And I'd like a few words from either one of you, or both of you, about why I'm making the right choice.

And second, does purchasing World Book over a competitor give her a somewhat improved chance of becoming a brilliant billionaire investor?

WARREN BUFFETT: Practically guarantees it, but go ahead. (Laughter)

AUDIENCE MEMBER: OK. I'm buying, then.

WARREN BUFFETT: Charlie, you want to — you love to talk about World Book.

CHARLIE MUNGER: Well, I think World Book is clearly the class of the field. They have every word in the English language graded for reading comprehensibility, and the articles are cleverly written so the difficulty of comprehension rises slightly as you go through it.

And it's very user-friendly to young people. And since it's something you want to encourage, making it user-friendly is wonderful. I also find that with whatever intellect I have, it's more user-friendly to me. And so I think it's a hell of a product, either for the young people or the old.

And for a quick reference system, I don't think there is anything better.

Personally, I like the reading version, being an old-fashioned fellow. And I can hardly imagine a world where the wise people don't do a lot of reading.

Now, maybe we're going to have wise people in the future who spend all their time in front of screens in the course of getting that wisdom. But I doubt it. That's all. (Laughter)

I think you may have bought a wonderful product, but I would have the other one, too. (Laughter)

WARREN BUFFETT: The product you see there was the joint development, and was launched in January of this year in conjunction with IBM. IBM has been our partner in that product. I believe it's being bundled into all the IBM PCs now being sold. So they've worked very well with us. Frankly, there's a book, even, that deals with this.

Bill Gates did a very good job of developing a product that was bundled with millions and millions and millions of PCs. It's called Encarta. It's actually Funk and Wagnalls. He hates it when that comes out, but they changed the name to Encarta, which was smart of him. (Laughter)

And there are a few people in this room who were witness to a demonstration four or five years ago in Bermuda, where in connection with Encarta, they showed the moon and the earth.

And the moon bumped into the earth in this. And I just, I don't know why it sticks in my mind. I thought I would mention it today, that the — (Laughter)

But his is doing very well. So apparently there are a number of people that don't care about the fact the moon and the earth collide, but in the World Book the moon and the earth never bump into each other. (Laughter)

He's done extremely well with Encarta, incidentally. I mean, it was a masterpiece of moving into an area and pushing hard. And you know, I tip my hat to him, but now we're going to —

CHARLIE MUNGER: Yeah, we copied him.

WARREN BUFFETT: Yeah, we copied him. Right. (Laughter)

OK, Nancy, be sure to buy the print version, too, so Charlie will respect you. (Laughter)

28. Tax fairness, economic prosperity, and the "ovarian lottery"

WARREN BUFFETT: Zone 9.

AUDIENCE MEMBER: Good morning, gentlemen. My name is Patrick Byrne. I'm here today from Hanover, New Hampshire.

I've searched for a couple questions upon which I might get the two of you to disagree.

First, what level of taxation — and I direct these as much to Mr. Munger, therefore, as to you Mr. Buffett — first, what level of taxation on capital gains is most conducive to the long-term economic health of a society, and is that also the fair or just rate?

In other words, is the just rate of taxation on capital gains precisely that rate that creates the most economic stuff? Or is there some other goal a state might pursue?

And as a not-so-subtly related question, I work in a New Hampshire factory that makes industrial torches.

WARREN BUFFETT: As CEO, I might add, Patrick. (Laughter)

AUDIENCE MEMBER: Say again?

WARREN BUFFETT: As CEO of — that "working" made it sound like you were down there on the floor. I just wanted people to — (Laughter).

Patrick writes me letters from chairman to chairman, so I think we've got to get him back at it.

AUDIENCE MEMBER: Continuing. (Laughter)

Well, it's a small company. I do work as CEO, but it's not much of a hierarchy.

We make torches used in heavy manufacturing, and the fortunes of our factory echo those of industrial America.

Do you agree with the conventional wisdom that maintains that the age of classical industrial America has passed, and that we will — that America cannot be competitive in the long term with low-wage countries?

So the first question is on taxation of capital gains, and then the second is on the future for industrial America.

WARREN BUFFETT: I have a sensational answer on the tip of my tongue, but I think I'll let Charlie go first — (laughs) — while I refine it a bit.

CHARLIE MUNGER: Well, I think there's an easy answer to your capital gain issue. And one is what makes an economy work best in some abstract mathematical sense. And the other is the consideration that you allude to, which gets into issues of fairness.

Aristotle felt that systems work better when they were generally perceived as fair. The civilization worked better if people saw the differences in rewards as having been fairly — reasonably fair, anyway.

And I think that if you had a civilization where if you work 90 hours a week driving a taxicab with no money, no medical insurance and so forth, and somebody else does nothing but own Berkshire Hathaway shares and sit on the country club porch and peel off a few every year to pay the bills, that would be regarded as so unfair that even if it had some theoretical economic efficiency it would be counterproductive for our particular civilization to have that kind of a tax code.

So I'm all for having some taxation of capital gains. Once you reach that conclusion, you get into the question of what should — what is the fair rate?

I think the fair rate might well be a little lower than it is now, but not much lower.

WARREN BUFFETT: Sounds to me like he's a seller — of Berkshire. (Laughs)

Patrick is a former heavyweight boxer, and just got his Ph.D. fairly recently from Stanford with a 700-page dissertation, which has in it some commentary that actually bears on this.

And I thank Patrick, actually, for introducing me to kind of a system of construct — mental construct — to attack questions like this.

Patrick gave me the example one time — and I think this may go back to John Rawls at Harvard — but he said, just imagine that you were going to be born 24 hours from now.

And you'd been granted this extraordinary power. You were given the right to determine the rules — the economic rules — of the society that you were going to enter. And those rules were going to prevail for your lifetime, and your children's lifetime, and your grandchildren's lifetime.

Now, you've got this ability in this 24-hour period to make this decision as to the structure, but there — as in most of these genie-type questions there's one hooker.

You don't know whether you're going to be born black or white. You don't know whether you're going to be born male or female. You don't know whether you're going to be born bright

or retarded. You don't know whether you're going to be born infirm or able-bodied. You don't know whether you're going to be born in the United States or Afghanistan.

In other words, you're going to participate in 24 hours in what I call the ovarian lottery. (Laughter)

It's the most important event in which you'll ever participate. It's going to determine way more than what school you go to, how hard you work, all kinds of things. You're going to get one ball drawn out of a barrel that probably contains 5.7 billion balls now, and that's you.

Now, what kind of a society are you going to construct with that in prospect?

Well, I suspect you would focus on two issues that Patrick mentioned in his question. You would try to figure out a system that is going to produce an abundant amount of goods, and where that abundance is going to increase at a rapid rate during your lifetime, and your children and your grandchildren, so they can live better than you do, in aggregate, and their grandchildren can live better.

So you'd want some system that turned out what people wanted and needed, and you'd want something that turned them out in increasing quantities for as far as the eye can see.

But you would also want a system that, while it did that, treated the people that did not win the ovarian lottery in a way that you would want to be treated if you were in their position. Because a lot of people don't win the lottery.

I mean, Charlie — when we were born the odds were over 30-to-1 against being born in the United States, you know? Just winning that portion of the lottery, enormous plus. We wouldn't be worth a damn in Afghanistan.

We'd be giving talks, nobody'd be listening. Terrible. (Laughter)

That's the worst of all worlds.

So we won it that way. We won it partially in the era in which we were born by being born male, you know —

When I was growing up, you know, women had — they could be teachers or secretaries or nurses, and that was about it. And 50 percent of the talent in the country was excluded from, in very large part, virtually all occupations.

We won it by being white. You know, no tribute to us, it just happened that way.

And we won it in another way by being wired in a certain way, which we had nothing to do with, that happens to enable us to be good at valuing businesses.

And you know, is that the greatest talent in the world? No. It just happens to be something that pays off like crazy in this system. (Laughter)

Now, when you get through with that, you still want to have a system where the people that are born —like Bill Gates or Andy Grove or something — get to turn those talents to work in a way that really maximizes those talents. I mean, it would be a crime to have Bill or Andy or people like that, or Tom Murphy, working in some pedestrian occupation just because you had this great egalitarian instinct.

The trick, it seems to me, is to have some balance that causes the people who have the talents that can produce goods that people want in a market society, to turn them out in great quantity, and to keep wanting to do it all their lives, and at the same time takes the people that lost the lottery and makes sure that just because they, you know, on that one moment in time they got the wrong ticket, don't live a life that's dramatically worse than the people that were luckier.

And when I get all through that long speech, I probably come out with the idea that the capital gains tax as it exists today is probably about right, so —

I see very few people — and I've been around a lot of people with money and talent over time — they don't always go together — but I've been around both classes — (laughs) — and the — I see very few of them that are turned off from using their talents by a 28 percent capital gains tax. It just doesn't happen.

I mean, they do what they like to do. And part of the reason they're good at what they do is they like to do it. And I've just never seen it happen.

And I've seen a lot of people that pay taxes that are higher than 28 percent that are contributing more to society, by some judgment other than a pure market system.

(BREAK IN TAPE)

29. "American economy encourages adaptation"

WARREN BUFFETT: The other question about the low-cost industrial — you know, how does the industrial society evolve, I — you know, the world evolves in a way, in a market society, so people do what they're best at. And this country's done very well in recent years — something like, you know, software that — where a Microsoft has been leading or an Intel or something. I mean, we have done very well.

Ten years ago the American public was sort of down on itself, or 15 years ago, in terms of what the economy could do.

But here we are with our unemployment rate — in Nebraska it's under 3 percent.

And you know, you look at the countries of Europe that were supposedly going to beat us into the ground, or you look at Japan.

I think the American economy encourages adaptation. I mean, Singapore may be better, but in terms of major large economies, I think the American economy does awfully well in encouraging adaptation to what people want, and delivering it to them in ever-increasing amounts. And you know, I view that as all to the good.

So I don't regard any industry as sacred. I regard innovation and freeing up the able people to — able, in terms of production of goods in a market economy — to spend 12 hours a day all the time — I don't see Andy or Bill letting up at all, in terms of where Intel and Microsoft are now.

I don't see Roberto Goizueta at Coca-Cola, or Michael Eisner at Disney, or any of those people.

They don't work 40-hour weeks, they work 70 or 80-hour weeks. And I think that system works very well in this country, and I don't worry particularly about the specific products that are turned out.

Charlie?

30. Munger critical of Harvard philosopher John Rawls

CHARLIE MUNGER: I would not like the conclusion that both Warren and I have reached, that issues of fairness are properly to be considered in the tax laws, to cause anyone here to believe that I have a great respect for Harvard University's philosopher John Rawls.

He is perhaps the world's best-known living philosopher. And personally, I think he's had a pernicious influence on human thought.

He doesn't know enough science. He doesn't know enough economics. He doesn't know enough about how systems work to be really good at figuring out what's fair in systems. And he studied too much philosophy and too little of everything else. (Laughter)

If anybody thinks we love John Rawls, well, you can count me out. (Laughter)

WARREN BUFFETT: No — I wasn't endorsing his conclusions, I was endorsing his thought — his original construct.

Charlie, how about the industries part of the question that Patrick asked?

CHARLIE MUNGER: Well, if Patrick isn't the smartest person in the room, there can't be many in his class.

You are getting questions from a very able man, and he's deliberately made them very difficult. (Laughter)

And that whole issue is too complex for me to usefully discuss here. There are also certain limitations on ability that enter the equation. (Laughter)

31. Class A stock may be exchanged for Class B at any time

WARREN BUFFETT: So we'll go to zone 10. (Laughter)

AUDIENCE MEMBER: Good day, gentlemen. My name is Bill Rodenberg (PH) from Dayton, Ohio. I'm a shareholder, and my daughter Sarah, who is 13, is also a shareholder. She chose not to join me in the limelight. I think the hot dogs had a higher appeal to her.

WARREN BUFFETT: Not to mention —

AUDIENCE MEMBER: And I'd like to say that it's very reassuring to know that Uncle Warren and Uncle Charlie are taking care of her college fund. And it's easy to sleep at night.

I have two questions, one related to a question my wife asked me, which I was unable to fake a good answer to, and a second one related to my daughter's one share of Berkshire A.

My wife asked me, in the annual report you stated that if anyone out there has a good company like FlightSafety, please let you know and you'd be glad to look it over and give an answer within five minutes or less.

And her question is, how can he do that? Where does he get the information to make that decision? And how does he know that that information is valid?

My second question has to do with my daughter. She's 13. In five years she'll be off to college, perhaps UNL, perhaps not.

In any case, she's going to face a significant capital gains when she sells that one share of stock.

WARREN BUFFETT: I hope so. (Laughter)

AUDIENCE MEMBER: You mentioned earlier, and I believe this is correct, you said that you could trade one share of A for 30 shares of B this afternoon. And I thought, wait a minute, I thought there was a limited window on that. We happened to be out of the country at the time that exchange took effect, and we missed it.

WARREN BUFFETT: No, the exchange exists forever. You can —

AUDIENCE MEMBER: Forever?

WARREN BUFFETT: You can always exchange a share of A for 30 shares of B. You cannot do it in reverse. You cannot shift 30 shares of B into one share of A. But there was no window or timetable on that.

The A stock is forever exchangeable for 30 shares of B. I don't recommend that she does it, because it's always an option, and in the meantime she gets the shareholder-designated contribution, and there's always the chance that the A will sell slight — at a price slightly above 30 shares of B. It doesn't do it very often and it won't be very much if it does, but —

We didn't want to create an incentive for people to exchange A for B, but we — they will always have the right to do so.

32. Just takes 5 minutes to know if we're interested in a company

WARREN BUFFETT: The five minute test is a — you know — Charlie and I have — we're familiar with virtually every company of a size that would interest us in the country. I mean, if you've been around for 40 or more years looking at businesses, it's just like if you were looking at — you know, studying baseball players every day. You get to know all the players after a while. And that's the way it works.

Then we have a bunch of filters we've developed in our minds over time. We don't say they're perfect filters. We don't say that those filters don't occasionally leave things out that should get through. But they're very — they're efficient.

And they work just as well as if we spent months and hired experts and did all kinds of things. So we really can tell you in five minutes whether we're interesting in something, and —

We'd never owned shares in FlightSafety but we'd been familiar with the company for at least 20 years, wouldn't you say, Charlie?

CHARLIE MUNGER: Sure, I had a partner who bought a lot of it 20 years ago. Yeah.

WARREN BUFFETT: Yeah. But that's true of almost any business. And we know — we've got a fix on what we don't understand, and then we don't care to know any more about them, particularly, although we'll pick up a little as we go along, maybe.

And then the ones that are — we're capable of understanding, we've probably gotten about as far as we'll get already. So we do know in five minutes.

Now, when we do something with FlightSafety, before the purchase and even for somewhat — a little after the purchase — I'd never been — I'd never set foot on a piece — they have 40 or so training centers around the world — I'd never set foot on one of them.

I'd never been to their headquarters. We never looked at a lease. We never look at title of the properties. I mean, we don't do all of those things.

And I will say this: to date, that's never cost us a penny. What costs us money is when we misassess the fundamental economic characteristics of the business.

But that is something we would not learn by what people generally consider due diligence. We could have lawyers look over all kinds of things, but that isn't what makes a deal a good deal or a bad deal. And we don't kid ourselves by having lots of studies made and lots of reports made. They're going to support whatever they think the guy that pays them, you know, wants anyway. So they don't mean anything. They're nonsense.

But we do care about being right about the economic characteristics of the business, and that's one thing we think we've got certain filters that tell us in certain cases that we know enough to assess. And then we make some mistakes.

Charlie?

CHARLIE MUNGER: I've got nothing to add to that, except that people underrate the importance of a few simple big ideas. And I think that to the extent Berkshire Hathaway is a didactic enterprise teaching the right systems of thought, I think that the chief lessons are that a few big ideas really work, as I think these filters of ours have worked pretty well. Because they're so simple.

WARREN BUFFETT: Yeah, I think most of the people in this room, if they just focused on what made a good business or didn't make a good business and thought about it a little while, they could develop a set of filters that would let them, in five minutes, figure out pretty well what made sense or didn't make sense.

I mean, there may be some reason after five minutes we don't get together on a deal of some sort, but —

Another thing you can usually tell — at least you can tell it in the extreme cases — you can tell whether you've got the kind of manager, very quickly, that you want to have. I mean, if you've got somebody that's been batting .400 all their life, and fortunately age doesn't change that picture, in terms of business performance, and they love what they do, it's going to work.

If the seller cares a lot about the money, you're probably not going to make a very good deal. If their real interest is going in the — is what they're going to do with the money, they may fall out of love or have less interest in their business subsequently.

We love working with people who are just plain nuts about their businesses. And it works very well. And you can usually spot that.

Now, having said that, we'll have a few people figuring out how to fake that attitude, you know, when they try and sell us some piece of junk here, but — (Laughter)

Charlie says we can get conned by some guy with a green eyeshade, you know, and a low-rent office and all that. But we won't get taken in by the guy with the suede shoes. (Laughter)

33. Buffett describes a "normal" day

WARREN BUFFETT: Zone 11.

AUDIENCE MEMBER: Mr. Buffett and Mr. Munger, thank you for having me here today. My name is Dorsey Brown from Baltimore, Maryland.

I have two quick questions for you. Could you please comment on any observations that either of you may have concerning executive compensation and option issuance, a topic that seems to be getting a lot more media attention? And are we going to — getting a little bit of excesses in that area?

And my second question to you, Mr. Buffett, could you just give us some idea of what a normal day, how you would like to spend a reasonable, normal day and — working on the investment side of the equation, or analysis, or reading, or just to give us some flavor of that? Thank you.

WARREN BUFFETT: OK, I'll answer the second question first. Very easy.

I just — I read a lot, and I talk on the telephone a fair amount. We have no meetings. We have no committees. We have no slide presentations. You know, we have nothing, I mean it — (Laughter)

And so I read a lot. I read annual reports. I read business publications. I could do it in way less time, but I enjoy doing it so I make it last, I mean, you know, like some other activities in life. The - (laughter)

So it's — there's really — it's the most boring job to anybody watching it, but I'm in love with it, you know. And so I like doing that.

And I don't like talking about it a lot, I just like to kind of keep up with what's going on. Like I say, by this point in life I could filter out so much of that I would — I just don't need to do that much of it.

But I kind of enjoy just seeing what's going on vicariously through doing a lot of reading. And I spend some time on the phone, and I'm on the computer a lot playing bridge, and I get to do what I like all the time.

We'll let Charlie describe what he does, which is even more bizarre. (Laughter)

And then we'll talk about compensation and options.

CHARLIE MUNGER: Well, there's a little more foolishness in my life than Warren's, and — including being chairman of a large hospital. I'm not suggesting that hospitals are foolish, I'm just suggesting that it takes a certain quirk of mind to be willing to be the chairman of a hospital.

And so my life is even more — it's less rational than Warren's. Warren lives one of the most rational lives I've ever seen. And it's almost unbelievable, and — (Laughter)

WARREN BUFFETT: He's got me wondering why I'm here today. (Laughter)

34. Abuse of stock options as executive compensation

WARREN BUFFETT: Well, we'll talk about comp then, a little.

CHARLIE MUNGER: Yeah, comp, yeah.

WARREN BUFFETT: The — comps — there are three or four aspects to that.

On the subject of options, I would say that most options are constructed poorly, from the standpoint of the owner, but they're constructed very well from the standpoint of the person who receives them, which is not entirely unexplainable because the — it's a very strange form of negotiation when the beneficiary is the one that also really does all the design and hires the experts to come in and tell him what is good for the company when the expert knows that the guy who signs the check would be quite interested also in hearing what's good for him.

There's nothing wrong with options per se, at all. Frankly, in terms of Berkshire, it would have been perfectly appropriate if a properly designed option had been given to me or to Charlie.

I mean, we have responsibility for the whole enterprise, and we believe that any kind of incentive for performance should be related to the area in which you have responsibility.

We feel that if you want a typist to type 100 words a minute, that you ought to pay for typing 100 words a minute, not what the earnings per share were last year.

We feel if a salesman gets paid for how many of the product is sold, he should get paid for that and not for some production quotas met.

So we believe in tying incentive comp to performance for which you have responsibility. And there are certain areas of a business that don't lend themselves to that staff performance and so on.

But that would lead to the corollary, that the people that are responsible for the entire results of the business, it's perfectly appropriate to compensate them by options that in some way reflect the performance of that entire business.

The trouble is that stock prices reflect other things than the performance of the business.

For one thing, over a period of time, they reflect simply the reinvestment of earnings. You know, I have pointed out in the past that if you gave me an option on your savings account — to manage your savings account — and you reinvested all the interest, I would take away a significant payment at the end of ten years simply because you left the interest in.

With a company that pays no dividend like Berkshire, if you're going to leave all your capital in every year, for me to get a fixed-price option for ten years would mean that I was getting a royalty on money that you left with me. And I made the choice to have you leave it with me. So that does not strike me as equitable.

So I think any option should have a step-up in price that reflects the fact that money is reinvested by the shareholders annually. That if somebody wants to pay out a hundred percent of the earnings every year, then I'd say that you can have a fixed-price option. If you give me the money every year, and you do more with the money that's left with you than the original sum, that's fine.

But if money is left with someone for ten years, there's going to be some increase in value even if they spend every day golfing. And to give a piece of that away simply over — to have a royalty on the passage of time for them is a mistake.

I think options ought to be granted, basically, at the fair value of the business at the time they're granted. Sometimes that's the market price, sometimes it isn't the market price, but —

Certainly the management of a company would not give an option on their business to some third party at a market price they felt was way too low, so I find it a little disingenuous when managements say that they're — when they get a takeover bid, they say that the company's really worth twice that much, but they're perfectly willing to issue options to themselves at this price which they say is totally inadequate, when the owners get the option elsewhere.

But options, properly structured, for people with responsibility for the business, I think, makes — can make sense. And I think that if something happened to me and to Charlie, in terms of the manager of the business subsequently, if it was structured properly, I would not see anything wrong with an option arrangement.

We carry this philosophy down to our subsidiaries where they generally get incentive arrangements that relate to the operation of their business. But they don't have incentive arrangements that relate to Berkshire overall, because if Chuck Huggins does a wonderful job at

See's Candy, as he has done, and I fall on my face, in terms of allocating capital, Berkshire stock will go no place despite what Chuck does.

And to penalize him, or to tie his rewards to something over which he has no control, I think, is kind of silly. So we tie it instead to the operations of the candy business.

In terms of overall level of compensation, the real sin is having a mediocre manager. I mean, that is what costs owners very significant amounts of money over time.

And if a mediocre manager is paid a relatively small sum, it's still a great mistake. And if they're paid huge sums, it's a travesty. And that happens sometimes.

It's almost impossible to pay the outstanding manager a sum that's disproportion to the value of that outstanding manager, when you get a large enterprise.

Coca-Cola had a market value of $4 billion when Roberto Goizueta took over. It had stagnated during the previous decade under an earlier management, despite having the same product and those great Mean Joe Greene commercials you saw, that was — Mean Joe Greene was in the '70s. The "Teach the World to Sing" commercial was in the '70s. All these great commercials. But the company didn't do much.

Roberto — if we'd bought the entire Coca-Cola Company — I wish we had — in 1981 or '2, whenever he came in, for 4 billion and we now had a business worth 150 billion, Roberto would have earned more money with us than he's earned under the present arrangement.

I mean, having the right person in place is just enormously important.

How much they should take is another question. That's more a philosophical question.

Tom Murphy, best manager, you know, in the world, he just didn't feel like taking a lot of money out of it, you know. And you know, I tip my hat to him, but I don't think that necessarily makes it wrong for somebody else to take more money for doing the job. But I think it ought to be related to doing the job.

When I ran a partnership in the 1960s, I took a quarter of the profit over 6 percent a year. And I didn't get paid any salary, but I could make a lot of money doing that. And that thought occurred to me as I ran the place from day to day, and I think it probably helped a little. (Laughter)

So I don't think it's a terrible thing to have somebody get paid for making money for the shareholders.

But they ought to get paid for really making it, not simply because the shareholders reinvest money with them. They ought to make it based on the fair value of what they had when they took over, and they ought to make it really for just excellent performance.

Charlie?

CHARLIE MUNGER: Well, we have remarked in previous Berkshire Hathaway meetings that we regard present mandated corporate accounting, with respect to stock options as weak, corrupt, and contemptible. And it is.

WARREN BUFFETT: Otherwise, we're undecided. (Laughter)

CHARLIE MUNGER: If something is so wonderful as a standard technique of compensation, why does it have to be masked under weak, corrupt, and contemptible accounting? I think it is no credit to our civilization that we've drifted into this particular modality.

And you can get, if you overuse stock options, where the whole thing is sort of a chain letter. I mean, in Silicon Valley there's one company that practically paid everybody in options, and as long as the chain letter galloped, it worked as far as the income account because nothing went through expense.

And then once everybody is issuing stock options, everybody else feels that he has to do it. And the practice spreads.

So I am not totally wild about the extreme prevalence of the stock option modality in American corporate life. Personally, I would vastly prefer different modalities, which would probably involve stock instead of stock options.

I'm all for sharing with the kind of people who are doing the important work pretty well down in the organization in a place like Costco or Coca-Cola or any other such company. But I don't much like the present scheme that civilization has drifted into.

With respect to the subject of do we have some wretched excesses in American corporate compensation, my answer would be yes. I don't think the excess is necessarily the guy who got the most money. In many cases I agree with Warren, that the money has been deserved.

But such is the envy effect that the practice spreads to everybody else. And then the taxi driver and everybody starts thinking the system is irrational, unfair, crazy.

And I think that's what causes some people, as they rise in American corporations, to, at a certain point of power gaining and wealth gaining, they start exercising extreme restraint as a sort of moral duty. And that's what Warren was saying about Tom Murphy.

And I would argue that the Tom Murphy attitude is the right attitude. And it goes way, way back in the history of civilization. The word “liturgy” comes from a Greek word which is just the same. I mean, if you were an important citizen of Athens, it was a lot like being an important person in Jewish culture.

I mean, you had duties to give back and to act as a certain example. And the civilization had social pressures that enforced those duties. And I would argue that the Berkshire Hathaway compensation system, considering what the people at the top already have, it would be better if we saw a little more of it.

WARREN BUFFETT: A few —

CHARLIE MUNGER: I think Warren and I do all right. (Laughter and applause)

WARREN BUFFETT: A few years — I think an added problem is the sort of, in terms of the accounting, the sort of hypocrisy that it pushes people into, and then which becomes accepted and sort of a norm, particularly when leaders do it.

And you know, you had a situation a few years back when there’s no question that any manager would say that stock options are a form of compensation. They would say that compensation is a form of expense, and they would say that expense belongs in the income account. But they didn’t want to have stock options counted because they felt that it might restrict their use.

So when the federal — the FASB, Financial Accounting Standards Board — came up with a proposal to actually have reality reflected en masse, corporate chieftains descended on Washington to pressure legislators to have Congress start enacting accounting standards, which as I mentioned, one time in Indiana in the 1890s, there was a legislator that introduced a bill to have the value of pi changed to an even 3 because he thought that 3.14159 was too tough for the schoolchildren and it would ease computational problems.

Well, that sort of behavior by corporate chieftains when they are in there, you know, arguing that black is white, in order to feather their own nest and maybe create a little higher stock prices, I think that it means that they forfeit, to some degree, their right to be taken seriously when they claim they’re operating for the good of the Republic, and march on Washington in other regards.

And I just think that when the organization recognizes its hypocrisy and so on, I think there’s a degradation that can set in through an organization that — whose leaders are also leaders in hypocrisy.

Like I say, we have no strong feelings on this subject, but — (Laughter)

Charlie, do you have anything?

CHARLIE MUNGER: It's rather interesting, though. There's an earlier example. Commodore Vanderbilt took no salary from his railroads. After all, he controlled the railroads. They paid all the dividends that he needed, and he got the fun of running the whole railroad, and he thought it was beneath Commodore Vanderbilt to take a salary.

We've never quite reached the Vanderbilt standard, but — (Laughter)

WARREN BUFFETT: We don't have any dividends, Charlie.

CHARLIE MUNGER: Yeah, yeah. (Laughs)

Well, maybe that's the reason. (Laughter)

Afternoon Session - 1997 Meeting

1. When opportunity knocks …

WARREN BUFFETT: OK. If we're live now — what we might do is maybe have just — I think maybe we only need four microphones for the afternoon session. So we'll have two on each side, one toward the back, one toward the front. And we'll just go around in four microphones. Are we OK on that?

And we'll start just one second. Everybody has a chance to get to their seats.

Charlie has promised to stop tapping the Coke can during this — (laughter) — session.

CHARLIE MUNGER: I only did that when somebody else was talking. (Laughter)

WARREN BUFFETT: Number 2? OK.

I used to have a friend that was a stock salesman many years ago. And when you'd have lunch with him, he would just keep going like this: (knocking sound).

And finally, it would get to you. And you'd say, "What's that?" And he'd say, "That's opportunity." (Laughter)

He was pretty good.

2. How to buy a business

WARREN BUFFETT: OK, let's — Kelly tells me we should start with number 2, zone 2. So we're going to start with zone 2.

AUDIENCE MEMBER: Yes. I'm Fred Cooker (PH) from Boulder, Colorado.

And this is a question about intrinsic value. And it's a question for both of you because you have written that, perhaps, you would come up with different answers.

You write and speak a great deal about intrinsic value, and you indicate that you try to give shareholders the tools in the annual report so they can come to their own determination.

What I'd like you to do is expand upon that a little bit. First of all, what do you believe to be the important tools, either in the Berkshire annual report or other annual reports that you review, in determining intrinsic value?

Secondly, what rules or principles or standards do you use in applying those tools?

And lastly, how does that process, that is the use of the tools, the application of the standards, relate to what you have previously described as the filters you use in determining your valuation of a company?

WARREN BUFFETT: If we could see, you know, looking at any business, what its future cash inflows or outflows from the business to the owners — or from the owners — would be over the next, we'll call it, a hundred years, or until the business is extinct, and then could discount that back at the appropriate interest rate, which I'll get to in a second, that would give us a number for intrinsic value.

In other words, it would be like looking at a bond that had a whole bunch of coupons on it that was due in a hundred years. And if you could see what those coupons are, you can figure the value of that bond compared to government bonds, if you want to stick an appropriate risk rate in.

Or you can compare one government bond with 5 percent coupons to another government bond with 7 percent coupons. Each one of those bonds has a different value because they have different coupons printed on them.

Businesses have coupons that are going to develop in the future, too. The only problem is they aren't printed on the instrument. And it's up to the investor to try to estimate what those coupons are going to be over time.

As we have said, in high-tech businesses or something like that, we don't have the faintest idea what the coupons are going to be.

When we get into businesses where we think we can understand them reasonably well, we are trying to print the coupons out. We are trying to figure out what businesses are going to be worth in ten or 20 years.

When we bought See's Candy in 1972, we had to come to the judgment as to whether we could figure out the competitive forces that would operate, the strengths and weaknesses of the company, and how that would look over a ten or 20 or 30-year period.

And if you attempt to assess intrinsic value, it all relates to cash flows.

The only reason for putting cash into any kind of an investment now is because you expect to take cash out. Not by selling it to somebody else, because that's just a game of who beats who, but, in a sense, by what the asset, itself, produces.

That's true if you're buying a farm. It's true if you're buying an apartment house. It's true if you're buying a business.

And the filters you describe. There are a number of filters which say to us we don't know what that business is going to be worth in ten or 20 years. And we can't even make an educated guess.

Obviously, we don't think we know to three decimal places, or two decimal places, or anything like that, precisely what's going to be produced. But we have a high degree of confidence that we're in the ballpark with certain kinds of businesses.

The filters are designed to make sure we're in those kinds of businesses. We, basically, use long-term, risk-free government bond-type interest rates to think back in terms of what we should discount at.

And, you know, that's what the game of investment is all about. Investment is putting out money to get more money back later on from the asset. And not by selling it to somebody else, but by what the asset, itself, will produce.

If you're an investor, you're looking at what the asset — you're looking at what the asset is going to do — in our case, businesses.

If you're a speculator, you're primarily focusing on what the price of the object is going to do independent of the business. And that's not our game.

So we figure if we're right about the business, we're going to make a lot of money. And if we're wrong about the business, we don't have any hopes — we don't expect to make money.

And in looking at Berkshire, we try to tell you as much as possible as we can about our business, of the key factors. Those are the things that Charlie and I —

With the things we put in our report about those businesses are the things that we look at ourselves.

So if Charlie had nothing to do with Berkshire but he looked at our report, he would probably, in my view, he would come to pretty much the same idea of intrinsic value that he would come to from being around it, you know, for X number of years. The information should be there.

We give you the information that, if the positions were reversed, we would want to get from you.

And in companies like Coca-Cola or Gillette or Disney or those kind of businesses, you will see the information in the reports. You have to have some understanding of what they're doing. But you have that in your everyday activities. You'll get that kind of knowledge.

You won't get it, you know, in terms of some high-tech company. But you'll get it with those kind of companies. And, then, you sit down and you try to print out the future.

Charlie?

CHARLIE MUNGER: I would argue that one filter that's useful in investing is the simple idea of opportunity cost.

If you have one opportunity that you already have available in large quantity, and you like it better than 98 percent of the other things you see, well, you can just screen out the other 98 percent because you already know something better.

So the people who have a lot of opportunities tend to make better investments than people that don't have a lot of opportunities. And people who have very good opportunities, and using a concept of opportunity cost, they can make better decisions about what to buy.

With this attitude, you get a concentrated portfolio, which we don't mind. That practice of ours, which is so simple, is not widely copied. I do not know why. Now, it's copied among the Berkshire shareholders. I mean, all of you people have learned it.

But it's not the standard in investment management, even at great universities and other intellectual institutions.

Very interesting question. If we're right, why are so many eminent places so wrong? (Laughter)

WARREN BUFFETT: There are several possible answers to that question. (Laughter)

The attitude, though — I mean, if somebody shows us a business, you know, the first thing that goes through our head is would we rather own this business than more Coca-Cola? Would we rather own it than more Gillette?

It's crazy not to compare it to things that you're very certain of. There's very few businesses that we'll find that we're certain of the future about as companies such as that. And therefore, we will want companies where the certainty gets close to that. And, then, we'll want to figure that we're better off than just buying more of those.

If every management, before they bought a business in some unrelated deal that they might not have even heard of, you know, more than a short time before that's being promoted to them, if they said, "Is this better than buying in our own stock, you know? Is this better than even buying, you know, buying Coca-Cola stock or something," there'd be a lot fewer deals done.

But they don't — they tend not to measure — we try to measure against what we regard as close to perfection as we can get.

Charlie, anything?

CHARLIE MUNGER: Well, I will say this, that the concept of intrinsic value used to be a lot easier, because there were all kinds of stocks that were selling for 50 percent or less of the amount at which you could've easily liquidated the whole corporation if you owned the whole corporation.

Indeed, in the history of Berkshire Hathaway, we've bought things at 20 percent of then-liquidating value.

And in the old days, the Ben Graham followers could run their Geiger counters over corporate America. And they could spill out a few things. And you could easily see, if you were at all familiar with the market prices of whole corporations, that you were buying at a huge discount.

Well, no matter how bad the management, if you're buying at 50 percent of asset value or 30 percent or so on down, you have a lot going for you.

And as the world has wised up and as stocks have behaved so well for people, good stocks, generally, have gone to higher and higher prices. That game gets much harder.

Now, to find something at a discount from intrinsic value, those simple systems, ordinarily, don't work. You've got to get into Warren's kind of thinking. And that is a lot harder.

I think you can predict the future in a few places best if you understand a few basic ideas that come from a good general education. And that's what I was talking about in that talk I gave at the USC Business School.

In other words, Coca-Cola's a simple company if it's stripped down and analyzed in terms of some elemental forces.

WARREN BUFFETT: When Charlie —

CHARLIE MUNGER: It's not hard to understand Costco, either, you know —

There are certain fundamental models out there that do not take — you don't have the kind of ability that quantum mechanics requires. You just have to know a few simple things and really know them.

WARREN BUFFETT: When Charlie talks about "liquidating value," he's not talking about closing up the enterprise. But he's talking about what somebody else would pay for that stream of cash, too, I mean —

CHARLIE MUNGER: Yeah.

WARREN BUFFETT: You could've looked at a collection of television stations owned by Cap Cities, for example, in the early to mid — well, 1974. It would've been worth, we'll say, four

times what the company was selling for. Not because you'd close the stations, but just their stream of income was worth that to somebody else. It's just that the marketplace was very distressed — depressed.

Although, like I say, on a negotiated basis, you could have gone and sold the properties for four times what the company was selling for. And you got wonderful management.

I mean, those things happen in markets. They will happen again. But part of investing and calculating intrinsic values is if you get the wrong answer when you get through — in other words, if it says don't buy, you can't buy just because somebody else thinks it's going to up or because your friends have made a lot of easy money lately or anything of the sort.

You just — you have to be able to walk away from anything that doesn't work. And very few things work these days. You also have to walk away from anything you don't understand which, in my case, is a big handicap.

CHARLIE MUNGER: But you would agree, wouldn't you, Warren, that it's much harder now?

WARREN BUFFETT: Yeah. But I would also agree that almost anytime over the last 40 years that we've been up on a podium, we would've said it was much harder in the past, (laughs) too.

But it is harder now. It's way harder.

Part of it being harder now, too, is the amount of the capital we run. I mean, if we were running $100,000, our prospects for returns would be — and we really needed the money — our prospects for return would be considerably better than they are running Berkshire. It's very simple. Our universe of possible ideas would expand by a huge factor.

We are looking at things today that, by their nature, a lot of people are looking at. And there were times in the past when we were looking at things that very few people were looking at.

But there were other times in the past when we were looking at things where the whole world was just looking at them kind of crazy. And that's a decided help.

3. Stocks look high, but not as high as they look

WARREN BUFFETT: Zone 3?

AUDIENCE MEMBER: My name is Bakul Patel (PH). I'm from upstate New York. I've got a few questions. And I need your permission to ask each question separately and wait for the answer.

WARREN BUFFETT: Well, we'll take a couple, but —

I got through college, you know, only answering three or four questions. So I don't want to go through that again. (Laughter)

AUDIENCE MEMBER: They are unrelated questions.

WARREN BUFFETT: OK. OK. We'll give you a couple, then we'll let other people have a chance. How about two, OK?

AUDIENCE MEMBER: Fine. Mr. Market is valuing Dow Jones at about 7,000 and S&P at about 800.

By your valuation model, at the current interest rate and current inflation rate and current growth rate, what is a fair valuation of both these companies?

WARREN BUFFETT: Well, that's a good question but a tough question. But I would say that if you believed American — the American business, in aggregate, could earn the kind of returns on equity that they have been earning in the last — or has in the last couple of years — and then you postulate no change in interest rates, you can justify 7,000 on the Dow and 800 on the S&P.

Now, you know, there's a couple ifs I threw in there. And if interest rates go higher, the valuation goes down automatically.

And more importantly, if the returns on equity of American industry — which are historic highs, and which sort of classical economics would tell you would be hard to maintain — if those returns go down, on average, that also would pull it down.

But if you're willing to accept the current level of returns on equity as being typical of the future case for American business and you're willing to assume present interest rates are lower, then, you can justify a valuation on the Dow and S&P.

And it's interesting because I got all that commentary after I wrote that line in the report which was, as I said earlier, designed for a little something else. I'll give you a little trivia quiz.

What two years in this century has the Dow had the greatest overall gain? The two years in the 1900s are 1933, which most of you don't think of as a banner year, and 1954. And in both of those years, the Dow was up over 50 percent, counting dividends.

In March of 1955, because of that, the fact that the Dow had gone up — bear in the mind that the high on the Dow was 381 in 1929 and it took 25 years before that was surpassed. And in 1954, the Dow went from, say, 280 up to 404, or something like that, just a little over 50 percent.

So what did they decide to do? They decided to have congressional hearings about it. And they did.

In March of 1955, they had hearings in the Senate Banking and Currency Committee, Chairman Fulbright. And my boss, Ben Graham, was called down to testify. And it's fascinating reading. Bernard Baruch was there, all kinds of people. I've got the hearings at home.

And Ben's opening comments about the market at that time were that the market looks high, it is high, but it's not as high as it looks. Well — (Laughter)

That's about the present situation. I mean, it looks very high, just by comparing 7,000, certainly, to the 404 at the end of 1954 when was Ben was testifying.

But there are — there have been huge changing in earnings and return on equity on American business in general. And, then, you had this big move in interest rates.

Now, those are underlying fundamentals that have had — powered a huge bull market. After a while, as I mentioned earlier, people get captivated simply by the notion of rising prices without going back to the underlying rationale. And that's when you get very dangerous conditions in terms of possible bubbles.

And it would — you know — I have no idea where markets will go. But if you had the kind of conditions that could cause real excesses, just like you had excesses in 1973 and '4, going back to when you could buy things at 20 cents on the dollar, you had excesses in the other direction.

You know, the country didn't disappear or anything. It's just people behave in extreme ways in markets. And over time, that's very good for people that keep their heads.

Charlie?

CHARLIE MUNGER: I've got nothing to add.

WARREN BUFFETT: OK. You get one more. (LAUGH)

4. When Berkshire is cheap, other things are usually cheaper

AUDIENCE MEMBER: If Mr. Market goes in the depressed phase that Berkshire Hathaway has got an investment portion of its book value about 28,000 per Class A share, that would put that Berkshire Hathaway share much lower than what it is now. Would Berkshire Hathaway consider buying back its own share? Or has it done so in the past? Or is it out of the question?

WARREN BUFFETT: If the market went in the tank, Berkshire stock would go in the tank, too. And so there shouldn't be anybody in this room that owns the stock that would not find it palatable, if not become positively enthusiastic, about the stock going down 50 percent.

It would not bother Charlie. It wouldn't bother me, because we would have very intelligent things, then, to do with whatever capital we came into. And we would be generating capital as we went along.

We wouldn't have sold our Coke. We wouldn't have sold our Gillette. We wouldn't have sold our businesses. So most of our capital would've ridden that down. But at least, we would have intelligent things to do with the money.

One of the intelligent things, possibly, could be to buy in our own stock. But that would imply that our own stock was cheaper relative to value than anything else we could find among possible opportunities. And the chances are we could find things that were more attractive.

Back in 1973 or '4, when we were buying Washington Post at a fraction of what it was worth, Berkshire stock may have been cheap then. But it wasn't as cheap as the Washington Post.

In 1987 or — well, in 1988 and '89, you know, Berkshire stock may or may not have been cheap. But it wasn't as cheap as Coca-Cola.

And it's unlikely that among the thousands of the possible investments that Berkshire will be the most attractive at any time. But if it were, you know, obviously, we would buy in our own stock.

But I think if the Dow went down 50 percent, we would have plenty of interesting things to do. And we would not be unhappy.

Charlie?

CHARLIE MUNGER: Yeah. We don't have any rule against it. Opportunity cost is the game around here.

5. International earnings in the United States

WARREN BUFFETT: Zone 4.

AUDIENCE MEMBER: I'm David Day from Coppell, Texas. And I'm a Berkshire shareholder.

Mr. Buffett, what is your opinion of investing in foreign company stocks?

WARREN BUFFETT: Well, we have a number, well, at least several major businesses, three or four at least, five, six, I mean, as I count along, that derive very significant percentages of their earnings from international operations.

Coca-Cola earns 80 percent or more from international operations. Gillette would earn two-thirds or more from international operations.

So if you look to where earnings are coming from, we get a lot from international companies. They don't have to be domiciled outside the United States.

It's a slight advantage to us to have them domiciled in this country. For example, their dividends are treated better. We get better treatment on the dividends if they are domestically based rather than based someplace else, just because of the way the U.S. tax laws work.

But if Coca-Cola were domiciled in Amsterdam, or Gillette were domiciled in London, they had the same basic businesses, we would be attracted to them to virtually the same degree we are as having them domiciled in Atlanta and Boston.

We look at businesses outside this country that are domiciled outside this country. Many don't meet our size requirements. But that's true here, too. We have to look at very big companies. But we have nothing against buying into companies that are domiciled — or even buying the entire business of a company — that's domiciled outside the United States.

We feel slightly less familiar with the tax laws and the corporate cultures, perhaps. But that would not be a huge factor in a great many countries. And, you know, we will keep looking. We need to look everywhere with the kind of money that we have available for investment.

Charlie?

CHARLIE MUNGER: Again, we've had a wonderful way of playing the rapid development of economies outside the United States. And so far, we haven't seen anything that attracted us as being better.

And if you can sell Coca-Cola, you know, do you really want to get into steel in Malaysia or something? (Laughter)

WARREN BUFFETT: We sold a substantial number of Kirby units outside of the United States last year. And that business has grown very significantly in recent years. And I think it promises to grow.

We're always looking for opportunities. Some things travel very well. And some things don't.

I mean, Gillette travels. Disney travels. McDonalds travels. Coke travels.

You know, See's Candy doesn't travel as well. It might if you spent 50 years working on it. But it's not an easy thing to travel. Actually, candy bars, themselves, don't travel very well.

If you look at the top-selling candy bars in France or in England and Japan, you don't find the similarity that you find in terms of the bestselling soft drinks or movies or fast food hamburgers or razor blades, and —

CHARLIE MUNGER: Except Snickers. For some reason, Snickers. (Laughter)

WARREN BUFFETT: Well.

CHARLIE MUNGER: It travels very well. Don't ask me why. (Laughter)

WARREN BUFFETT: Yeah. Well, Charlie's had a lot of experience as he goes around the world. (Laughter) You don't want to eat where we eat. You may want to invest where we invest, but — (Laughter)

6. Businesses with "natural limits" welcomed at Berkshire

WARREN BUFFETT: OK. Section 1.

AUDIENCE MEMBER: I'm Richard Tomkins (PH) from Gallatin, Tennessee. And I have just two quick questions.

Could both of y'all discuss the Kansas Bankers business and its competitors? How big of a moat Kansas Bankers has in the industry and if they're going to expand, you know, outside of the 22 or 20 states that they're currently in. And that's A.

And, then, secondly, just clue us in a little bit more on the five-year discount notes that you did that were tied to the Salomon stock. And was that a way to unload it? Or just kind of give us a little more than what we saw in the annual.

WARREN BUFFETT: Sometimes in the insurance business, you have a choice between being a good business or a big business. And fortunately, Don Towle, who runs Kansas Banker Surety, has chosen for a good business.

It's a specialized operation that sells, as its name implies, to bankers, and primarily policies that have fidelity coverage.

That is just not a big volume business in the whole United States. They do it exceptionally well. Don knows every, you know, he knows every account. He knows every claim. You know, he runs a fabulous operation. But it's not an operation that can double or triple in size doing what it does and doing well. There just aren't — there's not the opportunity there.

On the other hand, I think it's tough to compete against Don because he brings an element of knowledge and personal attention to the account and factors of that sort that a really large company would have trouble duplicating.

Charlie, you want to add anything on Kansas Bankers?

CHARLIE MUNGER: Yeah. There's a huge class of businesses in America which are very strong and will throw out large amounts of cash in relation to their size but which can't rationally be expanded very much. And if you try and expand certain kinds of businesses, you're throwing money down the rat hole.

The beauty of the Berkshire Hathaway system is that such businesses are very welcome here because the cash comes into headquarters and is allocated there.

If there's anything sensible to do at the subsidiary level, we always want it done. But there are businesses where — lots of businesses — where there isn't much of a way of redeploying the cash.

WARREN BUFFETT: Part the reason they have a moat around them is that they're of a size and have specialized skills that other organizations just can't get into it. I'll give you another example, and that's somewhat the same field.

There's a company called Western Surety. It's changed ownership a couple of times. Charlie and I went up to see them 15 years ago about buying it at Sioux Falls.

They write notary bonds. And they write a whole bunch of things that have $50 premiums or $25 premiums. They have — it was a company doing not that many millions of premiums, but they had 30,000 agents. But each agent, you know, may have done $500 worth of business within a year or a thousand dollars.

Well, Chubb can't go after that business the same way. We certainly can't at National Indemnity. They have a distribution system that works wonders. But you can't pump two or three times the volume through that distribution system. And if you could pump it through, there would've been more competition.

So there are businesses that have certain natural limits that, you know, you want to be careful that you don't talk yourself into thinking a business that has limits and find out that it really has way more potential.

I mean, it would've been a shame if Mr. [Asa Griggs] Candler decided that Coca-Cola only appealed to people in Atlanta or something of the sort. So you have to be a little careful on that.

But we — a fellow like Don will be very good at understanding, you know, where his competitive advantages can take him and where they don't take him. He's done a terrific job over the years doing it.

7. Debt deals vs. buying stock

WARREN BUFFETT: There was a second question, was there?

AUDIENCE MEMBER: Just the $500 million I think that y'all did, of the discount.

CHARLIE MUNGER: Oh, the Salomon notes.

WARREN BUFFETT: Oh, the Salomon notes. Yeah. Well, that is simply an issue of Berkshire — by Berkshire — of 500 million, as you mention, of a very low-coupon note — low-interest rate note, too — that is convertible — or exchangeable — into Salomon stock anytime during the next five years.

And it's a way of taking the capital out of that block of stock at a low-interest cost to use elsewhere, while retaining a limited portion of the upside in the Salomon stock.

And we just — we made that decision, whenever it was, six months ago or so, based on the thought that we might have some good opportunities at some point to use that money, and raising the money at a little over a one percent current cost, or a three percent cost to maturity — and we think the actual cost is likely to be close to the one percent — made sense for us.

We have never owned — I mean, we have the convertible preferreds of Champion, of US Airways, and of Salomon. And those are three industries — I don't think we've ever owned an airline stock, common stock. I don't think we've ever owned a paper company common stock. And we've only had a very limited amount of investment in the investment banking businesses.

Those are industries that we don't feel that we've got the same kind of long-term economic advantage that we have in something like a Coke or a Gillette. So those are not natural places for us to be common shareholders. And the issuance of that exchangeable debt reflected that view.

Charlie?

CHARLIE MUNGER: I agree. (Laughter)

8. Lower tax rate probably won't trigger Berkshire stock sales

WARREN BUFFETT: OK. Zone 2.

CHRISTINE SHRAM: My name Kristen Schramm (PH). I am from Springfield, Illinois.

I am a proud shareholder of Berkshire Hathaway. In light of the upcoming capital gains tax reduction, do you envision any increased selling pressure, such as buying opportunities for Berkshire stock?

WARREN BUFFETT: That's a good question, Kristen. We're proud to have you, too. (Applause)

A very high percentage of Berkshire shares is owned by people with a very low tax basis. So that if I had to guess, I would say that probably 80 percent, at least, of the shares are owned by people whose cost is less than a hundred dollars a share on the A stock.

And that, undoubtedly, contributes to some people's reluctance to sell, particularly if they're older, and —

But I think it would probably — it might make less difference than you think. I think most people, if there were a lower capital gains rate, I don't think it would be a huge change in the propensity to sell the stock.

I would hope, even if there was a zero capital gains tax, that there really wouldn't be any rush for the exits. It wouldn't affect my attitude, particularly. But I think it's perfectly reasonable to assume that as the tax rate goes down, there will be some greater tendency to sell by people with a low tax basis on their shares.

Charlie?

CHARLIE MUNGER: Well, I think the laws of microeconomics and the laws of psychology are such that if you said, "The tax rate will, for one month, go down to zero," you would have some very dramatic effects in the markets. It's not going to happen, of course.

WARREN BUFFETT: No. But if you said the tax rate was going to zero for one month, and then going to a hundred percent subsequently, I think you'd get a certain amount of activity. (Laughter)

CHARLIE MUNGER: But then you'd really —

So you could tinker with the tax laws in a way that would cause dramatic market effects. I don't anticipate any such things happening.

We had something similar back when they — what was it, '86 — where the tax rate was 20 percent on long-term capital gains. And it was the last year you could liquidate a corporation and not pay gains taxes on appreciated assets that were disposed of in the liquidation. And we got a great flood of liquidations in that year.

So it's possible to do things to the tax laws that have big market effects. But it gets very unlikely that any such thing is going to happen this year.

WARREN BUFFETT: Yeah. I agree with that.

9. We know our super-cat insurance risks, but many others don't

WARREN BUFFETT: Zone 2?

VOICE: (Inaudible)

VOICE: What number is this? Is this three or four? What is it?

WARREN BUFFETT: Is there a zone 2?

VOICE: Is this it?

WARREN BUFFETT: The microphone working?

Zone 3? Well, we'll go to zone 3, then.

AUDIENCE MEMBER: I am Charles Parcells (PH) from Grosse Pointe, Michigan. Very glad to be here. I'm a recent stockholder of Berkshire. I'm sorry to say that. (Laughter)

But it does not diminish my admiration for past performance or my confidence in future performance.

I heard recently a remark by, I think, a very successful investor, whom I think worked with the Bass family in Texas for a while.

And one of his comments, if I understand it correctly, said something like this. "Hurricane Andrew destroyed the super-cat industry." And that's about all he said. And I know we're into it. I'm interested in its importance to Berkshire and your comments on it, Mr. Buffett and Mr. Munger.

WARREN BUFFETT: Yeah. I guess I would say I don't fully understand why he would — or even partially understand — why he would say that.

I mean, we are in business in the super-cat business — and I should explain, super-cat business is very much like it sounds. I mean, we write insurance for other insurance companies, other reinsurance companies, to protect them, to pay them at a time when something really big comes along, a super catastrophe. And Hurricane Andrew was certainly a super catastrophe.

But that's the reason people do business with us, so —

We pay off infrequently, but we pay off big. And we paid off about 120 million at Hurricane Andrew. But if Hurricane Andrew happened today — well, at least in one of the policies (inaudible) we have — we would certainly be paying off at least, what, 6, 700 million, something like that.

And if it happens five years from now, we'll pay off a lot more than that because we will, undoubtedly, be writing more business at that time.

So it's just part of the game. And there will be super-cats of various kinds. There will be, you know, huge quakes. There will be more hurricanes than huge quakes. And when that time comes, we will write a big check.

But that doesn't — you know, prices may be firmer after such an event. They may not be. They didn't firm as much as you might expect after Andrew happened. Andrew was a huge surprise to people.

As a digression, you know, people in the insurance business thought that — they all had these models — and some of them were prepared by reinsurance brokers and some of them by various research institutes — as how much they would lose under certain kinds of circumstances.

And they couldn't have been further off with an Andrew, or with the Northridge earthquake.

Fortunately, we don't rely on those. We — I don't know what exactly we do rely on, but we don't rely on those. (Laughter)

And the — Hurricane Andrew was, you know, that was just — that's part of business with Berkshire.

And we will have another one. And we'll have another one after that. So every three, or five, or seven years, or who knows what, we will lose significant money in the super-cat business. And we expect that over 20 or 25 years, we will make more money than we lose.

We bring some real advantages to that business, as I wrote about in the report. And it makes sense for us to be in it. It only makes sense for us to be in it when the premium prices are right. But when they are appropriate, we will — we're more than willing to step up and take on a fair amount of risk.

As I wrote in the report, on the California Earthquake Authority, you know, we could, tomorrow, face a demand for roughly a billion dollars. And we are prepared to write a check that day to take care of that. And we will write it, if it happens. And there aren't many people in the world that an insured can count on to do that.

The interesting thing is that the worst exposure, still, for super-cats, are not borne by us. But they're borne implicitly by some very big direct writing companies that have lots of risk on Long Island or along the New Madrid Fault or other places.

And they have got, well, millions of policies, and maybe hundreds of thousands of exposed policies. And they don't think of themselves as being in the super-cat business. Well, they really do, but they don't think, you know, day by day about it. And they are very exposed.

Our exposures are limited to a given dollar amount. That dollar amount may be large. But at least we know what it is. And we take risks — that we're willing to take risks when we think we're appropriately paid.

There's a mentality to bring to the super-cat business that's somewhat akin to what you bring to the investment business. So we think we're well equipped for it.

Charlie?

CHARLIE MUNGER: Yeah. A billion dollars would be, what, 2 1/2 percent, or less, of the liquid assets and securities around Berkshire. And so that's irritating, but it — (laughter) — it's not going to destroy the enterprise.

Whereas, if you have an unwitting super-cat exposure that you don't even recognize you have, it could destroy your company. Twentieth Century, a very well-run direct writer of insurance, they all but went broke with the Northridge Earthquake.

WARREN BUFFETT: And they didn't think it was possible, either.

CHARLIE MUNGER: And they had no idea they had a super-cat exposure in what they thought was a simple, little direct writing insurance operation.

No, I don't think we've got the main super-cat risks at all at Berkshire.

WARREN BUFFETT: GEICO lost something like 150 million in Andrew. And their initial estimate of the loss was, like, $35 million. And that's after they thought they'd heard about most of it. You can really get fooled in this business.

In fact, 20th Century, which lost a billion dollars at Northridge just at the end of 1996, I think, added $40 million, as I remember, to the reserves for the Northridge Quake, which I think was in January of '94.

Now, you think on an earthquake, you know, you'd kind of know when it was over. But — (laughter) — you can really — you can get fooled.

And down at Andrew, I mean, the costs of construction go up dramatically in an area that's been wiped out. And then there were all kinds of things in the codes. I mean, I think they started requiring architects' drawings on everything, you know, over $5,000 in the way of repairs, some number like that — don't hold me to the number. And, of course, the architects had a field day.

And then it turned out that everybody had a homeowner's policy in the Oakland fire, for example. They all had a $300,000 book collection in their library. And, you know, who knows after the place has burned down? (Laughter)

It's not — you get a lot of surprises in that field. And the surprises in insurance are never symmetrical. They're all bad. (Laughs)

10. "You need a large margin of safety"

WARREN BUFFETT: Zone 4?

AUDIENCE MEMBER: Yes. My name is (inaudible). I'm from New Mexico. And I'm a shareholder. I have two questions.

First, in your '91 letter, you wrote about investors eventually repeat their mistakes. So what do you do to keep you from making the same mistake twice?

And the second question is, in your '92 letter, you wrote that you tend to deal with a problem of future earning in two ways. The first way is the business you understand. And the second is the margin of safety. And you say they are equally important. But if you — (loud noise) — but if you cannot find the happy combination of faster growth at a low key, which one do you think is more important, faster growth or low key? That's my two questions.

WARREN BUFFETT: I think we were told by — (loud noise) — we were told by some higher authority which one was more important there for a second. (Laughter)

Well, they're bound together. Obviously, if you understood a business perfectly — the future of a business — you would need very little in the way of a margin of safety.

So the more volatile the business is — or possibility is — but assuming you still want invest in it, the larger the margin of safety.

I think in that first edition of [Benjamin] Graham — I doubt if I'm right — was it (inaudible) and said, you know, maybe it was worth somewhere between 30 or 110, or some number. He said, "Well, that sounds — how much good does that do you to know that it's worth between 30 and 110?" Well, it does you some good if it's selling below 30 or above 110."

That's — you need a large margin of safety.

Well, if you're driving a truck across a bridge that holds — it says it holds 10,000 pounds — and you've got a 9,800 pound vehicle, you know, if the bridge is about six inches above the crevice that it covers, you may feel OK.

But if it's, you know, over the Grand Canyon, you may feel you want a little larger margin of safety, in terms of only driving a 4,000 pound truck, or something, across. So it depends on the nature of the underlying risk.

We don't get the margin of safety now that we got in a 1973-4 period, for example.

The biggest thing to do is understand the business. If you understand the business, and get into the kind of the businesses where surprises — by their nature — surprises are few. And we think we're largely in that type of business.

11. Learn from the mistakes of others

WARREN BUFFETT: The earlier part about — you know, I've said about learning from your mistakes, the best thing to do is learn from other guys' mistakes, I mean, you know —

It's like, you know, [U.S. General George] Patton used to say, you know, "It's an honor to die for your country. Make sure the other guy gets the honor," you know and — (Laughter)

So our approach is really to try and learn vicariously. But there's a lot of mistakes that I've repeated, I can tell you that.

The biggest one, probably — or the biggest category over time — is being reluctant to pay up a little for a business I knew was really outstanding, or to continue to buy it at higher prices when I knew it was outstanding.

So the cost of that has been many, many billions. And I'll probably keep making that mistake.

There are — the mistakes are made when there are businesses you can understand and they're attractive and you don't do something about it.

I don't worry at all about the mistakes that come about because when I met Bill Gates, I didn't buy Microsoft or something. That's not my game. But the mistakes are made when you — most of our mistakes have been mistakes of omission rather than commission.

Charlie?

CHARLIE MUNGER: Yeah. I think most people get very few, what I call, no-brainer opportunities, where it's just so damned obvious that this is going to work. And since they are very few and they may be separated by periods of years, I think people have to learn to have the courage and the intelligence to step up in a major way when those rare opportunities come by.

WARREN BUFFETT: Yeah. You got to be willing to take a really big bite. And it's crazy if you don't. And it's crazy if you dabble around at the edges, so you're not prepared to take a big bite when the time comes.

12. Treasury bonds are yardstick to compare investments

WARREN BUFFETT: We, apparently, have lost mike 4. So we're just going to use three mikes from now on. And if you'll just make your way to those mikes, we'll see how we do with them.

How about zone 1?

AUDIENCE MEMBER: Mr. Buffett, my name is Pete Brown (PH) from Columbus, Ohio, a Class B shareholder.

I had a couple questions if I could. The first is, I don't have a very good idea in my mind how our typical insurance operations work. I mean, in particular, how money leaves the insurance pool and enters the investment pool, and how our operations are different than the typical, run-of-the-mill insurance operation, you know, around the country.

Why are we able to generate so much more float than, you know, the XYZ Company, you know, somewhere else?

And a second question is, it kind of goes back to an article you wrote for Fortune Magazine back in the late '70s about the effect of inflation on equity values and that sort of thing. And in it, you asserted that stocks were — in businesses — were really like bonds. They just had their own par. And the par being the average 12 percent return on equity that companies have averaged.

You know, a company does better than that has assets that are worth way more than a hundred cents on a dollar. A company does less, you know, will be less, correspondingly.

My question is, when you're projecting cash flows of a company as a prospective investment, why would you use the interest rate, you know, of risk-free Treasury bills? Why wouldn't you use the sort of opportunity cost to discount that maybe Charlie was referring to, maybe 12 percent return on equity of average corporations? Maybe, you know, your 15 percent goal may be Coca-Cola's return on equity as a comparison.

I mean, doing that would dramatically change the value of the company that you're, you know, evaluating, as I'm sure you know. Why would you use the risk-free rate is my question.

WARREN BUFFETT: The risk-free rate is used merely to equate one item to another. In other words, we're looking for whatever's the most attractive. But in terms of present valuing anything, we're going to use a number.

And, obviously, we can always buy the government bonds. So that becomes the yardstick rate. It doesn't mean we want to buy government bonds. It doesn't mean we want to buy government bonds if the best thing we can find is only — has a present value that works out at a half percent a year better than the government bond.

But it's the appropriate yardstick, in our view, to simply use to compare across all kinds of investment opportunities, oil wells, farms, whatever it may be.

Now, it gets into degree of certainty, too. But it's the yardstick rate. It's not because we want to buy government bonds. But it does serve to make that a constant throughout the valuation process.

13. Insurance and investing are equal, but distinct, businesses

WARREN BUFFETT: In our insurance business, we really have a group of insurance businesses. And they have different characteristics.

The consistent characteristic, actually, is that they're all very, very good businesses. Some of them are a lot larger and have opportunities to get larger. And some of them are not so large and have limited opportunities, in terms of growth. But every insurance operation we have is a distinct asset to Berkshire.

We've got smaller — a worker's comp operation. We've got a credit operation — credit card — operation. We've got a Homestate operation. We have all these different businesses, Kansas Bankers Surety, whatever.

They're all good businesses. Some of them don't develop a lot of float relative to premium volume.

The nature of Kansas Bankers Surety is that it won't develop a lot of float. It just happens to be the kind of business they write.

The nature of comp is that it develops more float, because comp claims pay more slowly.

We — you really should think of each one, though, as having different characteristics.

GEICO is entirely different than the super-cap business. They're both good businesses.

In terms of how we invest the money when it comes in, we invest it when it comes in. I mean, we'll get a large super-cap premium today. It's invested.

Now, if we have a claim tomorrow, then, we disinvest and in a substantial way.

If you take something like GEICO, the cash flow is always going to be positive, probably, on that, you know.

We won't have another Hurricane Andrew, because we've backed out of the homeowner's business to quite an extent.

So month by month, the money comes in at a GEICO. And the faster it grows, the more the money that comes in.

We have so much capital that we can, basically, put that money into whatever makes the most sense for Berkshire. So we have none of either the mental or psychological constraints, or regulatory constraints, that many insurance companies operate under.

Many of them think they sort of should have this portion in this and this portion in that and so on.

Investments usually play second fiddle to the insurance business at most companies that are in the insurance business. We look at them as being of equal importance.

And we run them as two distinct businesses. We do whatever makes the most sense on the investment side, whatever makes the most sense on the insurance side. We never do anything on the investment side that will impinge on our business on the insurance side.

But you really should look at each one of our businesses separately. GEICO has entirely different characteristics than the super-cat business. They both call themselves insurance. They both develop float.

But in economic terms and in terms of competitive strengths and that sort of thing, they're two very different businesses. And our smaller businesses are different businesses. Some of those may grow reasonably well. We'll keep working on it.

Charlie?

14. Munger on choosing your spouse

CHARLIE MUNGER: Yeah. That — if you look at a corporate stock, it's obvious you can buy any maturity of government bond you want. So one opportunity cost of buying the stock is to compare it with a bond.

But you may find that half the stocks in America, you're so fearful about or know so little about or think so poorly of, that you'd rather have the government bond. So on an opportunity cost basis, they're taken out of the filter.

Now, you start finding corporations where you like the stocks way better than government bonds. You got to compare them one against the other. And when you find one that you regard as the best opportunity, that you can understand as the best opportunity, now you've got one to buy.

It's a very simple idea. It uses nothing but the most elementary ideas from economics or game theory. It's child's play as a mental process. Now, it's hard to make the business appraisals. But the mental process is a cinch.

WARREN BUFFETT: If Charlie and I were forced — told we had a choice of buying stock A, B, C or D and all 2,500 or 3,000, or whatever it may be, listed on the New York Stock Exchange, or buying a ten-year government bond and we had to hold the stock for ten years or the bond for ten years, probably in at least 80 percent of the cases, we'd take the ten-year Government, you know.

In many cases, because we didn't understand the business well enough elsewhere. Or secondly, we may understand it and still prefer the 10 percent Government.

So — but we would measure everything that way.

And I don't know, did you come up with 80 percent or where, Charlie?

Desert island, ten years. Get to fondle a stock certificate or fondle a government bond. Which one are you going to choose? (Laughter)

CHARLIE MUNGER: I think life is a whole series of opportunity costs. You know, you got to marry the best person who is convenient to find who will have you. (Laughter)

Investment is much the same sort of a process. (Buffett laughs)

WARREN BUFFETT: I knew we'd get in trouble after lunch. (Laughter)

15. Why don't more companies copy Berkshire?

WARREN BUFFETT: Zone 2. (Laughs)

AUDIENCE MEMBER: Hello. Martin Wiegand, Bethesda, Maryland, stockholder. For myself, my family and other small business owners, I want to thank you for the annual reports. They help a lot in helping us make business decisions and life decisions.

My question is, many people come here — (Applause)

Many people come here to listen to you and to copy and understand your investment philosophy. But why don't more people, in your opinion, try to copy your investment vehicle, a corporation that pays no dividends?

WARREN BUFFETT: Well, I don't really think if the right — I think there are other things that are probably better to copy about Berkshire, but they don't get copied either.

It was always interesting to me how few people — everybody read [Benjamin] Graham's — and they didn't really disagree with him. They just didn't like following him because it didn't promise enough, in a sense. I mean, people really wanted something very quickly.

In terms of not paying dividends, we don't pay dividends because we think we can turn every dollar we retain into more than a dollar of market value. I mean, the only reason for us to keep your money is if it becomes worth more by us keeping it than it would be worth if we gave it to you.

And if we can create more than a dollar of market value for every dollar we keep, you're better off, whether you want to take that dollar out by selling a little piece of your stock, or whether you continue to leave it in. That's the test.

If we come to the conclusion that we can't do that, and we could come to that conclusion sometime, then we should distribute it to you.

The interesting thing is, we're in certain businesses, for example, See's Candy being one — we don't have a way to intelligently use all of the money that See's generates within the See's Candy Company.

So if See's were a standalone company, it would pay very large dividends, not because it, you know, just had some dividend paying policy. It would be simply because we wouldn't have a way of using, in this case, $30 million a year, intelligently in expanding that business.

The Buffalo News is the same way. We don't have a way of using money within that specific business, intelligently, to use the money it generates.

We hope that in the overall Berkshire Hathaway scheme of things that we can intelligently use the money that the companies, in aggregate, generate for us.

And we think, so far, we have. And we think the prospects are reasonably good that we can continue to do that.

But dividend policy should really be determined by that criteria, also bearing in mind the possibilities of repurchase of stock, too.

But they should be determined by whether a dollar left in the business is worth more to the shareholder than a dollar paid out.

Someplace like Coca-Cola, you know, if Coca-Cola paid no dividends and simply repurchased shares and developed the bottling system and done the things that they have, the shareholders probably would've been even better off. They've been sensationally well off as it is. But they probably would've been even better off than they have been with the dividend policy they have had.

And that's true for Gillette and Disney and the companies of that sort that have got these terrific opportunities to use capital within the business, or to repurchase shares of a company that simply can't be replaced.

If — that usually is the best use of capital. It's probably better than dividends. And, you know, we have written some about that, Martin. But people usually keep doing what they've been doing. They're hard to change.

Charlie?

CHARLIE MUNGER: Well, it's interesting that you take that simple standard, you should retain money if you can make it worth more than it is by retaining it. That is not the standard thing that's taught in the corporate finance departments of our major universities.

Why do we have this simple idea and they have another one? Time after time, we find that so.

I've tried to understand why they think the way they do. And I have great difficulty with it. I've just concluded that they're wrong, and — (Laughter)

But that isn't enough. There has to be reason why so many smart people are that wrong. And — (laughter) — that's a story for another day. But there are things gravely wrong with American education that I hope that Berkshire Hathaway is slowly helping to fix.

WARREN BUFFETT: Can you imagine if the — pick any one of you here. And let's say the two of us were in a business together. You know, it was earning $100,000 a year. How would we decide whether to leave the 100,000 each year? And it'd be exactly what we've talked about here. If we thought the 100,000 would translate into a present value of more than 100,000 by some action, we'd leave it in. And if it didn't, we'd take it out. And it doesn't seem to register, generally.

And incidentally, in our own case, we'll probably go too long before we come to the conclusion that we're not really using it that effectively, because there'll be a certain — denial — we'll go through. And we'll say, "Well, that was just temporary last year."

But that will — that is our approach. And we'll do our best to apply it.

16. Corporate profits can't stay so high

WARREN BUFFETT: Zone 3?

AUDIENCE MEMBER: Mr. Buffett, Mr. Munger, my name John Shane (PH). I'm from Nashville, Tennessee.

You touched on the subject of return on equity in response to a different question. I wonder whether you might be willing to elaborate along the following line.

Right now, the Standard & Poor's 500, in aggregate, have a return on equity of about 22 percent. The average over the decades for corporate America has been more like 12 or 13 percent.

How did we get to this point of extraordinary profitability? And how likely do you think we are, over the next ten or 15 years, to revert back to the mean of the low teens?

WARREN BUFFETT: Well, I would say is, I never thought it would happen. So I start out with the fact that if you'd listened to me, you'd have been dead wrong, in terms of what the return on equity in 1996 or 1995, 1997 would be.

It does not seem to me that 22 percent returns on equity are sustainable in a world where the long-term interest rate is 7 percent, and where the capability of saving large amounts in the economy, you know, are quite dramatic.

You would just think that there would be some sort of leveling effect between 7 and the 22 you named, that as savings got directed within the economy and as the competitive forces operate that we've been taught will operate over time, would come into play.

But, you know, I've been wrong on that subject. And that's why I say these levels are not unjustified if those kinds of returns can be made.

Because let's just say that you had a 22 percent perpetual bond. And you had the ability — and let's say that a quarter of that — a third of that coupon — would be paid out. So you got a bond with a 22 percent coupon and, say, 7 percent is paid out, being the dividend payout on the S&P, we'll say. And the other 15 percent is reinvested in more 22 percent bonds with similar characteristics.

Now, what's that instrument worth on a present-value basis in a 7 percent world? It's worth a lot of money.

In fact, it's worth so much money that it becomes a mathematical fallacy at some point, because when the compound rate becomes higher than the discount rate, you get into infinite numbers, which are — or you get into infinity.

And that's a number — that's the concept we like to think about around Berkshire — (laughs) — we haven't figured out how to attain it.

There's a book called "The Petersburg Paradox" — there's an article called "The Petersburg Paradox and the Growth Stock Fallacy." I think that's the name of it, by a fellow named, I think, David Durand, written about 25 years ago. And it gets into this bit where the growth rate is higher than the discount rate. And it shouldn't work for an extended period of time. But it's sure fun while it's going on.

Charlie?

CHARLIE MUNGER: Yeah. I think a couple of things contributed to this phenomenon that we so carefully mispredicted.

Number one, it became very fashionable for corporations to buy in shares. And I think that we helped, in a very small way, bring on that enlightenment. And I think that was a plus, in terms of rational corporate decision making.

The other thing that happened is that the anti-trust administration got way more lenient in allowing people to buy competitors.

And I think those two factors helped raise returns on capital in the United States.

But that can't — you wouldn't think that can go on forever. And what 15 percent per annum compounded will do is grow way faster than the economy can grow, way faster than aggregate profits can grow, over a long pull. So, sooner or later, something has to happen. I don't think we've reached a new order of things where the laws of mathematics are somehow repealed.

WARREN BUFFETT: If real output in this country grows at, say, 3 percent a year — or real GDP grows at 3 percent a year — and the capitalized value of industry in the country grows at 10 percent a year, at some point you get into mathematical absurdities, I mean, at the low inflation rates.

You know, you can't have it — if we have an economy that's seven or eight trillion now in GDP and seven or eight trillion in equity valuation, that may or may not make sense. But if you have one that's 15 billion in GDP and 75 billion in equity valuation — 75 trillion in equity valuation — you know, you get to things that don't — can't make any sense.

So if you get these differential rates of growth among items that have some relationship, however tenuous, or at least non-specific in the short run, it doesn't work after a while. And, you know, nobody wants to think about that. They don't want to think about their own death. But I mean, it doesn't go away just because you don't want to think about it.

And we haven't gotten to any point like that. But you can project out numbers. And they just won't make any sense after a while.

CHARLIE MUNGER: Yeah. Corporate profits can't be 200 percent of GNP.

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: Indeed, they can't be 50 percent of GNP. So these high rates of compounding just go automatically into absurdity.

WARREN BUFFETT: Yeah. They really can't be 20 percent of GDP or some number like that. So if — and if you start saying you can't have a multiple of more, you get differential rates. And they just simply — you leave the tracks after a while.

CHARLIE MUNGER: And all you people should be aware of this because all the people who are professional sellers of investment advice and brokerage service, et cetera, et cetera, have an immense vested interest in believing that things that can't be true are true. (Laughter)

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: And not only that, they've been selected in a Darwinian process to have formidable sales skills and large energy. (Laughter)

And this is dangerous to the rest of us. (Laughter)

WARREN BUFFETT: Yeah. Well, you've been selected to be the recipients of their advice. (Laughs)

CHARLIE MUNGER: Right.

Furthermore, they figure out who we are and come in about 6 o'clock in the evening. (Buffett laughs)

17. "It's not share of market. It's share of mind that counts"

WARREN BUFFETT: Zone 1 again.

AUDIENCE MEMBER: Mike Assail (PH) from New York City.

Could you explain a little more about what you call the "mind of the consumer" and the "nature of the product" and explain how you actually apply these concepts to find the companies with the growing demand and the best investment potential? And thank you for being two of the greatest professors I've ever had.

WARREN BUFFETT: Thanks. (Applause)

You know, what you really — when you get into consumer products, you're really interested in finding out — or thinking about — what is in the mind of how many people throughout the world about a product now, and what is likely to be in their mind five or ten or 20 years from now?

Now, virtually every person on the globe — maybe, well, let's get it down to 75 percent of the people on the globe — have some notion in their mind about Coca-Cola. They have — the word

“Coca-Cola” means something to them. You know, RC Cola doesn’t mean anything to virtually anyone in the world, you know, it does to the guy who owns RC, you know, and the bottler.

But everybody has something in their mind about Coca-Cola. And overwhelmingly, it’s favorable. It’s associated with pleasant experiences.

Now, part of that is by design. I mean, it is where you are happy. It is at Disneyland, at Disney World. And it’s at ballparks. And it’s every place that you’re likely to have a smile on your face, including the Berkshire Hathaway meeting I might add. (Laughter)

And that position in the mind is pretty firmly established. And it’s established in close to 200 countries around the world with people.

A year from now, it will be established in more minds. And it will have a slightly, slightly, slightly different overall position. In ten years from now, the position can move just a little bit more.

It’s share of mind. It’s not share of market. It’s share of mind that counts.

Disney, same way. Disney means something to billions of people. And if you’re a parent of a couple young children and you got 50 videos in front of you that you can buy, you’re not going to sit down and preview an hour and a half of each video before deciding what one to stick in front of your kids. You know, you have got something in your mind about Disney. And you don’t have it about the ABC Video Company. Or you don’t even have it about other — you don’t have it about 20th Century. You know, you don’t have it about Paramount.

So that name, to billions of people, including lots of people outside this country, it has a meaning. And that meaning overwhelmingly is favorable. It’s reinforced by the other activities of the company.

And just think of what somebody would pay if they could actually buy that share of mind, you know, of billions of people around the world. You can’t do it. You can’t do it by a billion dollar advertising budget or a $3 billion advertising budget or hiring 20,000 super salesmen.

So you’ve got that. Now, the question is what does that stand for five or ten or 20 years from now? You know they’ll be more people. You know they’ll be more people that have heard of Disney. And you know that there will always be parents that are interested in having something for their kids to do. And you know that kids will love the same sort of things.

And, you know, that — (Munger accidentally knocks over his microphone) — what’s? (Laughter)

He emphasizes the key points when we get to those. (Laughter)

But that is what you’re trying to think about with a consumption product. That’s what Charlie and I were thinking about when we bought See’s Candy. I mean, here we were. It’s 1972. You

know, we know a fair amount about candy. I know more than when I sat down this morning. (Laughs)

I mean, I had about 20 pieces already. (Laughter)

But, you know, what — whose, you know — does their face light up on Valentine's Day, you know, when you hand them a box of candy and say, you know, it's some nondescript thing and say, "Here, honey, I took the low bid," you know, or something of the sort, and — (Laughter)

No. I mean, you want something — you know, you've got tens of millions of people — or at least many millions of people — that remember that the first time they handed that box of candy, it wasn't that much thereafter that they got kids for the first time or something.

So it's — the memories are good. The association's good.

Total process. It isn't just the candy. It's the person who takes care of you at Christmastime when they've been on their feet for eight hours, and people have been yelling at them because they've been in line with 50 people in line, and that person still smiles at them.

The delivery process. It's the shop in which they get all kinds of things, the treat we give them. It's all part of the marketing personality.

But that position in the mind is what counts with a consumer product. And that means you have a good product — a very good product — it means you may need tons of infrastructure, because you've got to have that — I had a case of Cherry Coke awaiting me at the top of the Great Wall when I got there in China. Now that — you've got to have something there so that the product is there when people want it.

And that happened — in World War II, General Eisenhower, you know, said to Mr. Woodruff that he wanted a Coca-Cola within arm's length of every American serviceman in the world. And they built a lot of bottling plants to take care of that.

That sort of positioning can be incredible. It seems to work especially well for American products. I mean, people want certain types of American products worldwide, you know, our music, our moves, our soft drinks, our fast food.

You can't imagine, at least I can't, a French firm or a German firm or a Japanese firm having that — selling 47 or 48 percent of the world's soft drinks. I mean, it just doesn't happen that way. It's part of something you could broadly call an American culture. And the world hungers for it.

And Kodak, for example, probably does not have quite the same — and George Fisher's doing a great job with the company. This goes back before that.

But Kodak probably does not have the same place in people's mind worldwide quite as it had 20 years ago. I mean, people didn't think of Fuji in those days, we'll say, as being in quite the same place.

And, then, Fuji took the Olympics, as I remember, in Los Angeles. And they just — they put them — they pushed their way to more of a parity with a Kodak. And you don't want to ever let them do that.

And that's why you can see a Coca-Cola or a Disney and companies like that doing things that you think, well, this doesn't make a hell of a lot of sense. You know, if they didn't spend this $10 million, wouldn't they still sell as much Coca-Cola?

But, you know, that — I quoted from that 1896 report of Coca-Cola and the promotion they were doing back then to spread the word. You never know which dollar's doing it. But you do know that everybody in the world, virtually, has heard of your product. Overwhelmingly, they've got a favorable impression on them and the next generation's going to get it.

So that's what you're doing with consumer products.

With See's Candy, you know, we are no better — we want — no better than the last person who's been served their candy or the last product they've been served.

But as long as we do the job on that, people can't catch us. You know, we can charge a little more for it because people are not interested in taking the low bid. And they're not interested in saving a penny a bottle on colas. Remember we've talked about in these meetings, private labels, in the past.

And private label has stalled out in the soft drink business. They want the real thing. And 900 and some odd million eight-ounce servings will be served today of Coca-Cola product around the world. Nine-hundred million, you know. And it'll go up next year, the year after. And I don't know how you displace companies like that.

I mean, if you gave me a hundred billion dollars — and I encourage if any of you are thinking about that to step forward — (laughter) — if you gave — and you told me to displace the Coca-Cola Company as the leader in the world in soft drinks, you know, I wouldn't have the faintest idea of how to do it. And those are the kind of businesses we like.

Charlie?

CHARLIE MUNGER: Yeah. I think the See's Candy example has an interesting teaching lesson for all of us.

Warren said we were — it's the first time we really stepped up for brand quality. And it was a very hard jump for us. We'd been used to buying dollar bills for fifty cents.

And the interesting thing was that if they had demanded an extra $100,000 for the See's Candy company, we wouldn't have bought it. And that was after Warren had been trained under the greatest professor of his era, and had worked 90 hours a week.

WARREN BUFFETT: And eaten a lot of chocolates, too. (Laughs)

CHARLIE MUNGER: Yeah. Absorbing everything in the world. I mean, we just didn't have minds well enough trained to make an easy decision right. And by accident, they didn't ask the extra $100,000 for it. And we did buy it. And as it succeeded, we kept learning.

I think that shows that the name of the game is continuing to learn. And even if you're very well-trained and have some natural aptitude, you still need to keep learning.

And that brings along the delicate problem people sometimes talk about: two aging executives. (Laughter)

I don't know what the hell that means as an adjective because I don't know anybody that is going in the other direction. (Laughter and applause)

But you people who hold shares are betting, for a while at least, until younger successors come along, you're betting to some extent on what we'll now tactfully continue to call "aging executives" continuing to learn.

WARREN BUFFETT: Yeah. Well, if we hadn't have bought See's, with some subsequent developments after that because that made us aware of other things, we wouldn't have bought Coca-Cola in 1988. I mean, you can give See's a significant part of the credit for the, I guess, $11 billion-plus profit we've got in Coca-Cola at the present time.

And you say, "Well, how could you be so dumb as not to be able to recognize a Coca-Cola?" Well, I don't know, but —

CHARLIE MUNGER: You were only drinking about 20 cans a day.

WARREN BUFFETT: Yeah. Right. It wasn't that I hadn't been exposed to it, or — (Laughter)

It's amazing. But it just made us start thinking more. I mean, we saw how decisions we made in relation to See's played out in a marketplace and that sort of thing.

And we saw what worked and didn't work. And it made us appreciate a lot what did work and shy away from things that didn't work. But it led — it definitely led to a Coca-Cola. And we've had the good luck to buy some businesses themselves in their entirety that taught us a lot.

You know, we bought — and it's worked in the other direction. I mean, we were in the windmill business, one time. I was. Charlie stayed out of the windmill business. But I was in the windmill business and pumps and — third-level department — or second-level — department stores.

And I just found out how tough it was and how it didn't — you could apply all kinds of energy to them. And it didn't do any good. It made a great deal of sense to figure out what pond to jump in. And what pond you jumped in was probably more important than how well you could swim.

Charlie?

CHARLIE MUNGER: I don't think it's necessary that people be as ignorant as we were, as long as we were. (Laughter)

I think American education could be better, but not in the hands of any of the people who are now teaching. (Laughter)

WARREN BUFFETT: Is there any group we've forgotten to offend? I mean — (Laughter)

18. Life advice: "You will do well in what you enjoy"

WARREN BUFFETT: OK. Zone 2.

AUDIENCE MEMBER: Yes. Good afternoon, Mr. Chairman and Mr. Vice Chairman. My name is Ha Tsin Tsu (PH) and originally from China. Now, I'm living Kansas. And it's my honor to speak to you both.

My question is, if someone like to form a company doing what you did 30 or 40 years ago, what is your suggestion to them? And would you share some of your wisdom with us? Thank you.

WARREN BUFFETT: First thing we'd suggest is they send us a royalty. (Laughter)

Charlie, you take over on that. You've thought more about starting over again than I have. (Laughter)

CHARLIE MUNGER: I want to frankly say that that's a question I ordinarily duck.

I always believe in getting the fundamental mental tools in place. And I always believe in running reality, as it comes in, preferably vicariously through the newspaper, et cetera, instead of through personal painful experience, through the filter of these sound ideas.

And I not only think that that works in life to create success, I think it makes life more fun. So I argue for sound thinking. But the exact specific techniques of turning yourself into another Warren Buffett, I leave to you. (Laughter)

WARREN BUFFETT: Well, the one thing I would advise is I would be — A, I think there's a ton of opportunity out there. And I would do something I enjoyed. I wouldn't do something because I thought it was going to get me to a life I was going to enjoy later on, because if I made a lot of money I was going to be a lot happier, or anything like that.

I've never done that. And I think that you will do well in what you enjoy. And I think it's crazy in life to endure a whole lot that — I don't mean — Charlie and I worked in a grocery story. We didn't really jump up and down over it all the time.

But in terms of making a commitment to really being a business that you're only in it for the money, I think that's crazy.

And if we were in this only for the money, you know, we'd have quit a long time ago, obviously.

It just — you ought to have fun while you're doing it. It should not be jam tomorrow and not jam today. It just doesn't make any sense to me. And I think you'll get better results that way, too.

19. Buffett rejects criticism of Disney over same-sex benefits

WARREN BUFFETT: Zone 2? Or did we just do zone 2? I think we did. Yeah. It'd be zone 3.

AUDIENCE MEMBER: Dave Youberg (PH) from Sac City, Iowa.

And I must —

I haven't heard you on the moral and ethical considerations of stocks like ABC and Disney. They are now getting more and more criticism from mainstream religious groups in this country, main — their reliance on sex and violence and their cronyism — homosexuality — and —

VOICE: Did they hear it? I couldn't hear it.

(Scattered applause)

WARREN BUFFETT: I didn't — we didn't cut anybody off there.

CHARLIE MUNGER: (Inaudible)

WARREN BUFFETT: What?

The — what I would — I would say, you know, I'm delighted to have my grandchildren exposed to the full range of Disney product. (Applause)

You know, I'd love to take them to Disneyland or Disney World or take them to Disney movies or Disney videos. You know, I think the Disney Company is being run in an absolutely first-rate way. And I have no problem whatsoever with gays being employed or receiving benefits or anything of the sort. (Applause)

20. We don't care who is buying or selling securities

WARREN BUFFETT: Zone one?

AUDIENCE MEMBER: Good afternoon, Mr. Buffett. Good afternoon, Mr. Munger. My name is Bashir Narema (PH) from Arlington, Texas.

I see in the USA Today article about the shortage of labor in the state. And I was wondering when you analyze a company, do you take that into consideration by choosing companies who are not dependent so much on labor?

The second question is, I heard you in the beginning of the meeting that so much capital coming from foreign country, you mentioned so many different country, who buy — who bought the Berkshire Hathaway. And I'm sure they buy all companies in the Dow.

Do you feel like the analyst who analyze the Dow had that into consideration that the Dow now is becoming as the Walmart of the security business in the world, where all the national different country, they bypass their market and they come in and buy in the United States.

And as a result that the idea of [Federal Reserve Chairman] Mr. [Alan] Greenspan, as far as exuberant, it's moot because if you remember how the Japanese were when they start to buy the real estate in America, they force us to pay high premium for the price. And I think that's what's going to happen in the market. And we, as Americans, who've been accustomed to low P/Es, now we're going to miss on and the price is going to continue going up.

And the third question is —

WARREN BUFFETT: Maybe we better stop at two. (Laughs)

AUDIENCE MEMBER: Alright. Thank you.

WARREN BUFFETT: OK. Thanks.

We pay very little attention — we don't pay any attention — to capital flows. In other words, we don't really care who's buying or selling any securities. Somebody is buying or selling each one.

So, obviously, there's, you know, you could focus on the buyers. You could focus on the sellers. But — you can say now that there's 20 billion a month or so going into equity funds and all.

But it doesn't make any difference to us. All we're interested is what the business is worth. And what people are paying attention to, in terms of capital flows or whatever — or market signals or whether the Fed's going to move, that all changes.

Do you remember ten years ago, it was, you know, it was M2 that everybody — every — whatever day of the week it was, you know, what's M2 this week?

I always thought of having a mystery, you know, about whatever happened to M2? (Laughter)

There's always something that people are talking about. There's so much time to fill with chatter, you know, and pages to fill, that they write about all these things that, to us, don't make much difference, because we don't care if the market closes for the next five years.

We care how much Coca-Cola has sold five years from now, and what percentage of the world market they have, and what they're charging for it, and how many shares are outstanding, and that sort of thing.

But we just — we don't care who's buying or selling it in the least, except we like it when the company's buying it.

The same way with Gillette. We care about whether people are trading up in the shaving experience.

So capital flows and all of those macro factors that people like to write about a lot just have nothing to do with what we do. We're buying businesses.

And I really think it is not a bad mindset, whenever you buy a stock to say, "Would I be happy buying this stock if the market closed for five years?" Because then you're buying a business, if you say yes to that. If you don't say yes to that, you may not be focusing on the proper thing.

By its nature, the U.S. is running a substantial trade deficit, merchandise trade deficit.

If you buy more from the rest of the world than you're selling them, which is what happens when you're running a trade deficit, you have to balance the books. I mean, they get something in exchange. And what happens is they get some sort of capital asset in exchange.

They may get a government bond. They may get a piece of the U.S. business or something. But the key thing in economics, whenever somebody makes some assertion to you about economics, you always want to say, "And then what?" In fact, it's not a bad idea to say that about everything in life. But you always have to say, "And then what?"

So when you read that the merchandise trade deficit is nine billion, what else does that mean? Well, it means that somehow we have to have created nine billion of capital assets, claims on

our production in the future, with somebody else in the world. So they have to invest. They don't have any choice.

When somebody says, "Won't it be terrible if the Japanese sell all their government bonds?" They can't sell all their government bonds without getting something else in exchange, you know, they get some other American asset in exchange because there's no other way to do it. They could sell it to the French. But then the French have the same problem.

So trace through where the transactions go anytime someone starts talking about one specific action in economics.

21. "We like a business with low labor costs"

WARREN BUFFETT: Question about labor. Generally speaking, obviously, we like a business with low labor costs. But we like a business with low costs of every kind, I mean, because the rest is profit.

So it would be true that on balance we would not be high on labor-intensive companies. But there's some very good businesses that are labor intensive.

(BREAK IN TAPE)

WARREN BUFFETT: But if you say, "Would I rather have a labor intensive business or a non-labor intensive business and everything else is equal," the answer is the less labor intensive business. Charlie, you want to comment on either one?

CHARLIE MUNGER: No. I don't think I've got anything more. (Laughter)

22. Subsidiaries make own decisions on accepting American Express

WARREN BUFFETT: Area two?

AUDIENCE MEMBER: First, I'd like to thank you both for being so generous with your time and with your ideas for us today. (Applause)

WARREN BUFFETT: Thank you.

We get paid by the hour, so — (Laughs)

AUDIENCE MEMBER: Well, I'll try and talk quickly then.

WARREN BUFFETT: Oh no. (Laughs)

AUDIENCE MEMBER: My name is Bob Costa (PH) from Evansville, Indiana. I've been a shareholder for four years.

This is my first visit to Omaha. And I went to the mega mart. And I actually bought something there. And I tried to pay for it with American Express card.

WARREN BUFFETT: Uh huh.

AUDIENCE MEMBER: And they told me, just like the ad, you can't use it here. I hope you'd both comment on that or at least one of you.

But my real question is that I just stumbled across the idea of intellectual capital and how that might be useful in valuing a business. And I was hoping that one or both of you could clarify that for me and whether that's useful to us as investors or just another academic theory that we'd be better off ignoring.

WARREN BUFFETT: Yeah. Harvey Golub, who runs American Express and has done a terrific job of running it, has written me about the Furniture Mart as well as about See's.

And we, basically, let our managers run their own businesses. So, the people at each entity — Borsheim's takes American Express. Others of our businesses do, too. We let every manager make his decisions.

As soon as I start telling the managers that they ought to, say, take American Express or not take Visa or whatever it may be, you know, at that point, they've lost some of the responsibility for their operations and, perhaps, to an extent even, you know, some of the pride that comes from running them.

Most of our managers do not need to work for a living. They run their businesses for the same reason Charlie and I run Berkshire. They love doing it. They jump out of bed in the morning because it's exciting to do.

And the one thing that would keep the two of us, or drive the two of us away from Berkshire, is if we were getting second-guessed all the time or somebody else was telling us when to swing or not to swing.

We would have no interest in running it. We'd go run — we'd do something else then. And maybe our other managers aren't as extreme as we are in that respect. But we feel they've built successful businesses. They know how to do it.

We do allocate the excess capital they generate. But aside from that, we really let them make their own decisions. So we have no companywide policy on virtually anything that I can think of, except send money to Omaha. (Laughter)

But — and, you know, we're delighted to have American Express give the Furniture Mart the reasons why the Furniture Mart will be better off using American Express. And my guess is they have some very good reasons.

But they're going to have to sell them on that, and just like any vendor of anything has to sell each operation. We wouldn't tell the people at See's who to buy the nuts from, or who to buy the container from, or anything of the sort, how to design the stores, or whatever it may be. And that's just the Berkshire philosophy on that.

Charlie, you want to comment?

23. Berkshire's intellectual capital is its managers

CHARLIE MUNGER: Yeah. Let me shift to intellectual capital.

Berkshire has a lot of intellectual capital in these very able executives in the various businesses. And we hope we've got some intellectual capital in the few hundred square feet at headquarters. (Laughter)

But we are not in the business of designing oil refineries with armies of engineers, or developing software with armies doing complicated accounting work all over the world. We just haven't drifted into that kind of a business.

And intellectual capital has gotten to be a new buzzword, because we've now developed huge businesses, like Microsoft, which really didn't exist on that scale not so very long ago.

And so people have suddenly realized, my God, there's really a lot of money in the aggregation effects and momentum effects when you get a bunch of really bright people working in the same direction. And that's what's made the concept so fashionable.

By and large, we've avoided the field. Again, it's hard for us to understand.

WARREN BUFFETT: Yeah. We look for brains and energy and integrity in people that we work with. And if you get that combination and you're in a decent business, you know, you can own the world.

And, you know, whether you call it intellectual capital or anything — you know, you can stick the names on it. And that's who we try to associate with. I mean, it's a lot easier than doing it yourself.

And when we get, in our own businesses — you saw that group there at the end of the movie — I mean, that's a huge asset to Berkshire.

They talk about getting into accounting for it. That's nonsense in my view. I mean, you don't need to do that. But you should pay for it. And you should pay for it as shareholders. You should pay for it as managers.

When we get people, you know, whether it's Tom Murphy, or Al Zeien at Gillette, or Roberto Goizueta, or Michael Eisner, I mean, those people have added billions of dollars of value.

And, it's just — you know, that's who we want to be associated with. And we don't want to be associated with the mediocre managers because the difference is just — is huge.

But we don't go through an elaborate exercise. We just recognize the people that have got those — we think we — we try to recognize the people who have got those qualities. And, then, we — and then if they're in a good business and they've got those qualities, we want to take a big bite.

CHARLIE MUNGER: But take intellectual capital. People think patents. They think copyrights. Patents and copyrights have gotten to be way more valuable, as a percentage of the investment assets of the world.

And so people are very much more interested in intellectual capital.

Think of the great drug companies and how small they were 20 years ago and how everything they have is, basically, intellectual capital. It's the few products that have — that really work that have the patents. But by and large, we're not in drug companies.

WARREN BUFFETT: No. But that's — there are different forms — as Charlie said, there's businesses you sort of think of that way as their whole being being intellectual capital.

But I would argue that when Roberto Goizueta, 15 years ago, saw how to make the future of Coke — same product — dramatic — and basically the same system, although it required some changes — but saw how to make that dramatically more valuable by doing a lot of little things over a long period of time and doing them consistently and not getting his eye off the ball.

Michael Eisner did the same thing. Disney hadn't gone anyplace, you know, in the 15 years or so after Walt died. Now, you know, we all knew who Mickey Mouse was and everything. But Michael really saw what the future should be. And he still does, you know.

And you say it's easy when it's all over. But how many people were doing something about it at the time? The place was languishing, basically, 15 years ago. They had the assets.

And, to me, that's — you know, it's different than what Bill Gates does or Andy Grove does. But it's our form of intellectual capital. And it's what we can understand better.

24. "Mistake" to not buy pharmaceutical stocks

WARREN BUFFETT: Zone, what do we have? Three.

AUDIENCE MEMBER: Mr. Buffett and Mr. Munger, my name's Will Jacks. (PH) I'm from Chicago, and I'm a happy shareholder.

I, first, want to thank both of you for the unusual privilege you give us for your time and your expertise. This is very unusual. And I think it's to be commended. (Applause)

And my question has to do with one of the major American industries that, unless I missed something in the reading, that is the pharmaceutical industry, the companies that make medicines.

I wonder under what circumstances you might consider those industries for investment by Berkshire Hathaway?

WARREN BUFFETT: Well, those industries — the pharmaceutical industry's, obviously, been a terrific industry to invest in.

We have trouble, or at least I have trouble, distinguishing among the companies, in terms of seeing which ones, ten years from now, might be the best ones to be in.

I mean, it's easy for me to figure out that Coca-Cola's the soft drink company to be in, or Gillette is the shaving company to be in, or Disney's the entertainment company to be in, than it is for me to figure out which one in the pharmaceutical.

But that — I'm not saying you can't do it. I'm just saying that that's difficult for me.

We have — we started buying one of them a couple of years ago. And we should've continued, but we didn't because it went up an eighth, and — (Laughter)

Your chairman was a little reluctant to follow it, a terrible mistake.

But I would say the biggest — and we could've bought the whole industry and done very well at various times, particularly when the threat of — what people thought was the threat of the Clinton health program cast a big cloud over the pharmaceutical industry.

That was the time you could've just bought the whole industry and done very well. We didn't do it. It was a mistake.

Charlie?

CHARLIE MUNGER: Well, it's hard to think of any industry that's done more good for consumers, generally. When you think of the way children used to die and now, they very

seldom die. And it's been a fabulous business. And it's been one of the glories of American civilization.

But it's — we've admired it. But we haven't been part of it.

WARREN BUFFETT: We've missed a lot of things. And I'm dead serious about that. And we've missed things that should not have been beyond our capacity to grasp. A lot of things that should be beyond our capacity to grasp, but there's some that haven't been. And we've just plain missed them.

25. Munger: Good general education helps investors

WARREN BUFFETT: Zone 1?

AUDIENCE MEMBER: Hello. I'm another Chicagoan, (inaudible), and a share owner.

This question is directed, first, to Mr. Munger, and then to Mr. Buffett.

Mr. Munger, I am intrigued by your marshalling of the Commodore [Cornelius Vanderbilt] and Aristotle to support your points. Very few of today's money managers would, or could, do that.

Could you elaborate on what role a study of history of civilization plays in developing a sound investment philosophy? Thanks.

CHARLIE MUNGER: Well, I don't want to praise Aristotle too much. You know, he was the one who thought that women had a different number of teeth from men — (laughter) — and never looked in his wife's mouth. (Laughter)

WARREN BUFFETT: Maybe his wife did. (Laughter)

CHARLIE MUNGER: I'm all in favor of a good general education. And I think it helps investment performance. And it helps business performance. And it helps one be a better citizen.

And some of the things people say are quite memorable. And therefore, they're helpful to the mind by the very ease of which they're remembered.

And I think you'd be surprised how many bright investment professionals could talk a lot about Aristotle, or even people I can't stand — (laughter) — like [German philosopher Georg Wilhelm Friedrich] Hegel.

WARREN BUFFETT: You want to quote a little more from anybody to reinforce your —? (Laughs)

CHARLIE MUNGER: One of my favorite quotations in the whole world is from Einstein. He says everything should be made as simple as possible, but no more simple. And I think that describes the reality that we all face.

WARREN BUFFETT: Charlie's favorite, though, is Ben Franklin. That's probably true, isn't it, Charlie?

CHARLIE MUNGER: Yeah.

WARREN BUFFETT: We get more from Ben than anybody else. "Keep thy shop and it will keep thee," that sort of thing. I mean, we're just — we're loaded with that stuff. (Laughter)

CHARLIE MUNGER: "Three removes are as good [bad] as a fire."

"It's hard for an empty sack to stand upright." (Laughter)

That's the bible around Berkshire.

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: I once heard Warren say, "The reason I'm so financially conservative is I don't want to find out how badly I might behave if I were stretched." (Laughter)

WARREN BUFFETT: I think we better cut him off here. (Laughter)

26. "Why risk losing what you need and have for what you don't need and don't have?"

WARREN BUFFETT: Zone 2.

You better cut the thumping there.

CHARLIE MUNGER: Yeah. (Laughter)

AUDIENCE MEMBER: My name is Stanley Watkins and — from Manhattan, Kansas. And I'm a shareholder. And I have two questions.

And the first one, I know the answer. So you can just say yes or no. (Laughs)

Would you consider investing in indexes such as OEX? Pure speculation, you're going to say yes.

And number two, would you encourage investors to, if they were trying to get a lot of their investment, to use LEAPS on investments such as Coca-Cola instead of buying the stock?

WARREN BUFFETT: Use what on? I missed that —

CHARLIE MUNGER: LEAPS.

WARREN BUFFETT: Leak?

CHARLIE MUNGER: LEAPS, L-E-A-P-S.

WARREN BUFFETT: Oh, I see. We're still on options.

CHARLIE MUNGER: (Inaudible)

WARREN BUFFETT: Oh yeah.

WARREN BUFFETT: Both the questions relate to futures of one sort, calls, or whatever they may be, and —

I think that investors should stick to buying ownership in businesses. It's not that you can't come up with a theoretical argument for buying, say, a —

I mean, if you think Coca-Cola's attractive, you can say, well, I'd rather buy a five-year option on Coke than buy the stock directly because it introduces leverage without the risk of going broke.

But I think that that's a dangerous path to start down, because it —

If it works well, it's so — it's dynamite to start playing with things that can expire and become worthless, or can be bought with very low margin, as the OEX options you were talking about.

Borrowed money usually — or frequently — leads to trouble. And it's not necessary.

I mean, if you had some compelling reason — if you're going — if you had to double your money by the end of the year or be shot, you know, then, I would head for the futures market because, you know, you need to do it. I mean, you have to introduce borrowed money.

But you really ought to figure out how you can be happy with the present amount of money you've got and, then, figure that everything else is, you know, all to the good as you go along, and —

I don't think people — once they start focusing on short-term price behavior, which is the nature of buying calls, or LEAPS, or speculating in index futures, once you start concentrating on that, I think you're very likely to take your eye off the main ball, which is just valuing businesses. I don't recommend it.

Charlie?

CHARLIE MUNGER: Well, this is a group of affluent investors. I don't think many of them did it in LEAPS. (Laughter)

WARREN BUFFETT: Yeah. It's certainly true. If we'd operate Berkshire with considerable borrowed money over the years, you know, it would've done very much better than it has.

But nobody knew what that amount of borrowed money would have — the appropriate level would have been.

And it wouldn't have made any difference to us. I mean, we have just as much fun doing what we've done than if we'd owned it on leverage and had it been twice as much. I mean, it just — it's just — it's not the way we approach it.

If you have X and you think you're going to be way happier when you've got 2X, it's probably not true.

You really ought to enjoy where you are at a point. And if you can make, you know, if you can make 12 or 15 percent a year, and you desire to save, and you like piling it up, you know, it'll all come in time.

And why, you know, why risk losing what you need, you know, and have, for what you don't need and don't have? It's never made a lot of sense to us.

CHARLIE MUNGER: Warren wrote a letter when they were developing the security options businesses. And he urged the civilization not to allow the new exchanges. And you can see how much attention they paid to him. (Buffett laughs)

WARREN BUFFETT: The usual amount.

CHARLIE MUNGER: Yeah, right.

27. Haven't looked at hazardous waste business, but have seen toxic waste in markets

WARREN BUFFETT: Area 3?

AUDIENCE MEMBER: Hi, my name's Greg Collart (PH), a shareholder from Calgary, Canada, the home of Bre-X Minerals. (Laughter)

My question for you is, the companies in the hazardous waste disposal industry have underperformed the market for about a decade now. Do you see any value in that area?

WARREN BUFFETT: We've never looked at that business. I'm familiar with the names of the companies. But that's been a business that I've never looked at.

And maybe Charlie knows more about it than I do. He almost has to. (Laughs)

CHARLIE MUNGER: No. We have never really looked at the hazardous waste business.

We've observed a lot of toxic waste in the securities market. (Laughter)

Maybe we'd get our fill that way. (Laughter)

28. Lesson of State Farm's improbable success story

WARREN BUFFETT: Area one.

AUDIENCE MEMBER: My name is Hugh Stephenson. I'm a shareholder from Atlanta, Georgia. My question involves GEICO.

If I remember correctly from last year, GEICO had about 2 percent of the insurance market and had approximately $4 billion in float.

My question is, as their market share expands, will the float, in your expectation, expand in a somewhat linear fashion?

And related to that, what is your guess might be the top end? Could they ultimately become as dominant as a Gillette or a Coke and their businesses?

Or is the nature of it such that, you know, they might stop at ten percent of the market or 15 percent when they start to hit a significant hurdle?

And second, to follow up on this other gentlemen's question, if you don't adjust for risk by using higher discount rates, how do you adjust for risk? Or do you?

WARREN BUFFETT: Well, the second question: we adjust by simply trying to buy it at a big discount from that present value calculated using the risk-free interest rate.

So if interest rates are 7 percent and we discount it back to flows — which Charlie says I never do anyway and he's correct — but in theory, if we discount them back at 7 percent then we would look at a substantial discount from that present value number in order to warrant buying.

The question about GEICO: the float will grow, more or less proportionately, to premium volume. There's a moderate amount of our float, a very small amount of the float, that's accounted for by some discontinued lines from the past. And, of course, that won't grow the same way.

But if we double the size of GEICO on premium volume, we'll come close to doubling the size of the float.

You know, the history of auto insurance is quite interesting. It's something that isn't studied at business schools and should be studied, because the great insurance companies of the early 1900s were, you know — whether it's Aetna, Hartford, Travelers — they had these agency forces nationwide, and wrote what was then more property business.

They wrote a lot of fire business in those days. And, of course, the automobile only came in, you know, in the early 1900s. And so their orientation was to property business.

But they had this huge agency force throughout the United States. There were property insurance agents representing these big companies in every — throughout the country. And they had lots of capital.

And now, if you look at the business in 1997, something well over 20 percent — probably close to 25 percent — of the personal, auto, and homeowners business in insurance is written by a company called State Farm.

And State Farm was started, I believe, in the '20s, by a fellow in Bloomington, Illinois with no capital to speak of, no agency force initially, and started as a mutual company, no incentive, I mean, no stock options, no capital invested where he could become a billionaire if he built the business up or anything.

So here this company starts without any of the capitalist incentives that are we are taught are essential to a business growing, and in a huge industry, becomes the dominant player — has more than twice the market share of Allstate, the second player — becomes the dominant company against these extremely entrenched competitors with great distribution systems and loads of capital.

Now I say that's — and incidentally, State Farm, on the Fortune 500 list of companies, has the third largest net worth of any company in the United States. Number three from Bloomington, Illinois with a guy with no money in it.

Now, how does that happen? Well, I would say that's a subject worth studying, you know, in business schools, because it —

You know, Darwin used to say that any time he got any evidence that flew in the face of his previous convictions, he had to write it down in the first 30 minutes or the mind was such that it would reject contrary evidence to cherished beliefs.

And certainly, there's some cherished beliefs around business schools that might, at least, find some interesting aspects in studying how a company could become the third largest company in net worth in the country with no apparent advantage going in.

There's another company down in Texas called USAA, United States —

It's for the United Services Auto Association. And it's been enormously successful, has billions of net worth, loads of satisfied policy holders, the highest renewal ratio among policy holders in the country. Nobody studies that, to my knowledge, either.

The people who started GEICO came from that company. In 1936, Leo Goodwin and his wife, who had worked for USAA, went over and started this little GEICO company with practically no capital. And, now, it's — we have about 2.7 percent of the market. And we're — we'll write probably 3 1/2 billion of voluntary auto this year.

Catching a State Farm is going to be very difficult. So I wouldn't want to predict we'd do that. I will predict that we will gain very materially in market share over the next ten years. And we'll gain materially this year. But we will — we have got a very good mousetrap.

I said in the report that 40 percent of you would save money insuring with — I didn't say a hundred percent or 80 percent or 60 percent, because there are areas and professions where somebody else is going to have a lower price than we are.

But across the country, we are going — and for all classes of citizens — we are going to have a low price — the low price — more often than anyone else.

And we've got that because we've got low costs. And our costs are going to get lower. And we've got a virtuous circle going, in terms of it feeding on itself.

So GEICO will grow a lot. But I — State Farm is plenty tough. So I'm not going to predict catching State Farm. I'm not even going to predict catching Allstate. But we'll catch somebody.

And Charlie, you want to say anything more?

CHARLIE MUNGER: Well, I love your example of State Farm. I mean, the idea of picking some extreme example and asking my favorite question, which is what in hell is going on here — (laughter) — that is the way to wisdom in this world.

And it is too bad. A lot of the mutual companies are now trying to demutualize, helped by a bunch of consultants and so forth.

And they are not looking at State Farm. They're looking at some other model, and —

Everybody can't be a State Farm. That place got some fundamental values into its operating mechanics, the way it selected personnel, the way it selected agents, the way it discarded agents. It was huge discipline, wouldn't you agree, in that operation?

WARREN BUFFETT: Yeah. Somebody would — you would say somebody had to do something very right. But the question — I don't know anybody studying what they did that was right.

You know, they don't want to because it doesn't fit the pattern. And you know, when something like a State Farm happens in this world, you should try to understand it.

When something like a GEICO happens in this world, you should try to understand it.

In 1948, I think it was two-thirds or three-quarters — I think it's two-thirds — of GEICO was for sale because the fellow that had originally backed these two people from USAA died. And so they had the stock for sale in 1948.

You couldn't sell it. That's how Ben Graham ended up buying it for Graham-Newman, because they hocked it all over for six months. They went to all the big insurance companies. And the insurance companies, who could see this company on a very, very tiny scale offering a product for way less money and making lots of money doing it, they simply couldn't shake themselves loose from the mists of the past to step up and buy it.

They could've bought it for a million-two-hundred-thousand dollars, as I remember, and owned the whole company. And instead, they've watched their own distribution system get their heads beaten in, you know, over the years. And all the time, you know, with these ideas from the past.

So you have to be very careful to look hard at what's really happening. You know, as Yogi Berra https://en.wikipedia.org/wiki/Yogi_Berra said, "You can observe a lot just by looking." (Laughter)

29. Love it when a wonderful business buys back its stock

WARREB BUFFETT: OK. Zone one?

EVERETT PUREE: I'm Everett Puree (PH) from Atlanta, Georgia. And I wanted to ask you if you could comment on the matter of intrinsic value as it applies to some of "The Inevitables," given that the overpayment risk now is high and the share repurchases that are going on there.

WARREN BUFFETT: Yeah. Well, we won't stick a price on them. We just — we tell you that they are absolutely wonderful businesses run by sensational people, and that they are selling at prices that are higher than they sold at most of the time. And then — but that — you know —

They may be — they may well be worth it and worth a lot more, even in terms of present terms. Or it may turn out they're a couple years ahead of themselves. We don't know the answer to that. We know we're very happy owning them.

Gillette does not repurchase its shares, or hasn't in any significant quantity for many years. Coke consistently repurchases its shares.

We generally like the policy of companies that have really wonderful businesses repurchasing their shares.

There aren't that many super businesses in the world. And the idea of owning more and more of a company like that over a period of time has an appeal to us, and almost an appeal regardless of price.

The problem is that most companies that repurchase their shares, you know, are so-so — are frequently — so-so businesses. And they're being done for motivations other than intensifying the interests of the shareholders in a wonderful business.

But we really know you have a wonderful business. And we think most of the ones we own are anywhere from extremely good to wonderful. We think it usually makes a lot of sense.

It's hard to do things intelligent with money in this world. And Coke has been very intelligent about using their capital to, particularly, to fortify and improve their bottler network around the world. I mean, they've done a terrific job that way. That was a neglected area for a long time. And that comes first.

But there's only so far you can go with that — and to enhance the ownership of the shareholders in a company like Coca-Cola — when we bought our first Coca-Cola in '88, we bought about 6.2 percent of the company. And at that time, they may have been 600 million servings — not any more than that — a day. So we had an interest in 36 or 37 million servings.

Now we have 8 percent of 900 million-plus. So we have an interest in 75 million or so servings a day. Seventy-five million people are drinking Berkshire Hathaway's share of Coca-Cola products today, in an eight-ounce serving. And you know, the profit's gone up a little per serving.

So that gets pretty attractive. And we'd just as soon they keep doing that.

30. Coca-Cola history lesson: "One of the dumbest contracts" ever

WARREN BUFFETT: The bottling thing's actually kind of interesting. And a fellow from Omaha — or at least lived in Omaha for a long time — Don Keough, had a lot to do with this. And Roberto had plenty to do with it, too, obviously.

But Candler — Asa Candler — back in the late 1880s, in a series of transactions — I think some of it's a little fuzzy, exactly, as to the timing of them — but he essentially bought the whole Coca-Cola Company for $2,000. And that may be the smartest purchase in the history of the world.

And, then, in 1899, I believe it was, a couple of fellows from Chattanooga came down. And in those days, soft drinks were sold over the counter to people in drug stores, primarily. But there was a little bottling going on. There already was somebody bottling in Mississippi, as I remember.

But a couple fellows came down. And they said, "You know, bottling's got a future. And you're busy on the fountain side of the business. So why don't you let us develop the bottling system?"

And I guess Mr. Candler didn't think much of bottling. So he gave them a contract, in perpetuity, for almost all of the United States, for a dollar he sold it to them, and gave them the right to buy Coca-Cola syrup at a fixed price forever.

So Asa, who had scored with his $2,000 — (laughs) — in a rather big way, managed to write what — you know, it's easy for us to look back — but certainly looks like one of the dumbest contracts in history. (Laughs)

And, of course, as the years went by, and particularly around World War II when the price of syrup was — the primary ingredient, in terms of cost, in syrup was sugar. And sugar went wild during and after World War I in price. And so here was a guy that, in effect, had contracted to sell sugar at a fixed price forever.

And he'd also given these people perpetual rights and so on. In those days, they sold the subrights to bottler contracts. And those were usually the distance that a horse could go in a day and come back. That was sort of the circle that you gave people.

And the Coca-Cola Company was faced, over the years, with a problem of having the bottling system, which soon became the dominant system for distribution of Coke, being subject to a contract where there was no price flexibility and where the contracts ran in perpetuity.

And, of course, every bottler on his death bed would call his children, his grandchildren around. And he propped himself up and croak out in his last breath, you know, "Don't let them screw with the bottling contract." You know, and then he'd croak. (Laughter)

So the Coca-Cola Company faced this for decades. And they really couldn't do much about that bottling system for a long time.

And Roberto and Don Keough and some other people spent 20 or 25 years getting that rationalized. There were lawsuits back in the '20s and some things. But it was a huge project. But it made an enormous difference over time in the value of the company.

And that's what I mean when I talk about intellectual capital, because you know you aren't going to get results on that in a day, or a week, or a month, or a year, if you set out to get that all rationalized. But they decided that to get the job done, they had to do this.

And that took capital. And they used capital to get that job done. But they used capital beyond that to repurchase shares in a big way. And it's been very smart. And I hope they keep — you know, I — they are repurchasing shares, probably, as we talk. And that's fine with me.

Charlie?

CHARLIE MUNGER: Well, I do think Coca-Cola Company is one of the most interesting cases in the history of business. And it ought to be way more studied than it is. And there's just lesson after lesson after lesson in the history of the Coca-Cola Company. But it's too long a story for today. (Buffett laughs)

31. Wesco is part of Berkshire due to "historical accident"

WARREN BUFFETT: Section two?

AUDIENCE MEMBER: I'm Jolene Crowley (PH) from San Diego. And I want to say I feel very lucky to be here today. When I tried to buy my first Baby Berkshire share last year, my stockbroker, who's a value investing devotee, tried to talk me out of it, telling me that it was overvalued. So I feel lucky to be here.

I've recently also discovered Wesco stock. And I'd like you to explain to me the ownership and management relationships between Berkshire Hathaway and Wesco, and how you use them together.

And since I may not understand the answer to that question, could you just tell me, is it possible that buying Wesco today at about $20 a share is like buying Berkshire Hathaway was 20 years ago?

CHARLIE MUNGER: Well, if you could buy Wesco today at $20 a share, you should buy all you can.

WARREN BUFFETT: (Laughs) No, no —

AUDIENCE MEMBER: Beg your pardon. Two —

WARREN BUFFETT: Two-hundred dollars a share.

AUDIENCE MEMBER: Two-hundred.

WARREN BUFFETT: Yeah. Charlie is — (laughter) — chairman of Wesco. And why don't you talk about it first, Charlie?

CHARLIE MUNGER: Wesco's 80 percent owned by Berkshire. And in terms of operating businesses now, it's got two. And it has an immense percentage of its net worth in marketable securities in its insurance subsidiary.

It's a very quiet company. And as the chairman of Wesco, I have always delighted in saying that we have way less human value in the executive staff than Berkshire Hathaway does.

It's a — it's a — what is it Daniel Webster said about Dartmouth? He says, "A small school but there are those who love her."

Well, Wesco's a small place. And it's there in Berkshire as sort of an historical accident. But the main current of Berkshire is right here in the Berkshire shares.

WARREN BUFFETT: Yeah. I don't know which one I would rather buy at present prices. I mean, I think it's — you could flip a coin.

It does not have dramatically better growth potential just because it happens to sell at $200 a share instead of 38,000 a share than Berkshire. I mean, I think the prospects, probably, are relatively close between the two.

And they're run by the same people, pretty much, in effect. Charlie may spend a little more time on Wesco than I do, but — they are — they've got the same prospects.

But one problem that Wesco would have is that if people — and this is not a huge problem — but if people want to do a share exchange deal, they're going to want to do it, probably, with Berkshire rather than Wesco.

At Wesco, we have small acquisitions in fields we knew — Wesco's a logical place to put them unless they happen to be in areas that Berkshire's already in. And for the really large things, you know, Berkshire can do them and Wesco can't.

But there's nothing — I don't think there's anything significantly superior or inferior about investment in Wesco compared to Berkshire.

CHARLIE MUNGER: Well, the long-run record of Berkshire is better.

WARREN BUFFETT: Yeah.

The one thing — It is a mistake to think that just because it's cheaper per share on a dollar price that it's got way more potential, I think, because that just isn't the case.

A very large percentage of Wesco's value is represented by its interest in Freddie Mac. And a very large percentage of Berkshire's interest is represented — Berkshire's value — is represented by an interest in Coke, for example.

So there's different emphasis between the two places. I think Wesco owns some Coke. And Berkshire owns some Freddie, but in different proportions. That's an historical accident.

We'd love to see them both do well, obviously. There's another family that's in Wesco that we like a great deal. And we would hope that Wesco would perform as well or better than Berkshire. It's performed fine over the years. But it hasn't performed quite as well as Berkshire.

32. How Buffett surpassed Benjamin Graham

WARREN BUFFETT: Area 3?

AUDIENCE MEMBER: Yes. Hi. It's Jeff Hawthorne (PH), Toronto, Canada.

Mr. Buffett and Mr. Munger, you're both a positive influence on all of us and our generations to come. There were a few significant individuals that had helped to guide your way in the beginning.

Could you please share the current percentage of impact and evolution on your investment philosophy and approach between Graham-Dodd's — Graham and Dodd's versus Philip Fisher, and comment on each please.

WARREN BUFFETT: Charlie, you want to —? If you've got it worked out there. Calibrate —

CHARLIE MUNGER: Weren't you —

WARREN BUFFETT: Do you want that to tenths of a percent or hundredths of a percent? (Laughs)

CHARLIE MUNGER: You were closer to Ben Graham.

WARREN BUFFETT: Yeah. Well, Ben — yeah — things would've happened — good things would've happened with following either party irrespective the other.

Graham, obviously, had way more influence on me than Phil. I worked for Ben. I went to school under him.

And his — what I call the three basic ideas that underlie successful investing — which is to look at stocks as businesses, and to have the proper attitude toward the market, and to operate with a margin of safety — they all come straight from Graham. I didn't think of any of those.

And Phil Fisher opened my eyes more to the idea of trying to find the wonderful business.

Charlie did more of that than Phil did, actually, so you'd have to put Charlie —

But Phil was espousing that entirely. And I read his books in the late ’50s, early ’60s. So, you know, I — Phil’s still alive as you know. And, you know, I owe Phil a lot. But I — it doesn’t compare to what I owe Graham.

And that, in no way, reflects poorly on Phil. Ben was one of a kind.

Charlie?

CHARLIE MUNGER: Ben Graham was a truly formidable mind. And he also had a clarity in writing.

And we’ve talked over and over again about the power of a few simple ideas thoroughly assimilated. And that happened with Graham’s ideas, which came to me indirectly through Warren, but also some directly from Graham.

The interesting thing for me is to watch Buffett the former protégé — and by the way, Buffett was the best student Graham had in 30 years of teaching at Columbia. And — but what happened — and since I knew both men — was that Buffett became way better than Graham.

That is a natural outcome. It’s what Newton said. He said, “If I’ve seen a little farther than other men, it’s by standing on the shoulder of giants.”

And so Warren may have stood on Ben’s shoulders, but he ended up seeing farther. And no doubt, somebody will come along in due course and do a lot better than we have.

WARREN BUFFETT: I enjoyed making money more than Ben. I mean, candidly.

With Ben, it just — it really was incidental, at least by the time I knew him. It may have been different when he was younger. But it just didn’t — the process didn’t — of the whole game did not interest him more than a dozen other things may have interested him.

With me, I just find it interesting. And therefore, you know, I’ve spent way more — a way higher percentage of my time thinking about investing and thinking about businesses. I’ve probably thought way more about businesses than Ben ever did. He had other things that interested him.

So I’ve pursued the game a little — quite a bit — differently than he did. And therefore, measuring the record is really — the two records — it’s not a proper measurement. I mean, he was doing victory laps while I still thought I was out there running against, you know, the whole field.

CHARLIE MUNGER: But Graham had some blind spots, partly of sort an ethical professorial nature. He was looking for things to teach that would work for every man, that any intelligent layman could learn and do well.

Well, if that's the limitation of what you're looking for, they'll be a lot of reality you won't go into, because it's too hard to figure out and too hard to explain.

Buffett, if there was money in it, had no such restriction. (Laughter)

WARREN BUFFETT: Yeah. Ben sort of thought it was cheating if we went out and talked to the management, because he just felt that the person who read his book, you know, living in Pocatello, Idaho, could not go out and meet the management. So he didn't — and we didn't do it. I mean, when I worked for Graham-Newman, I don't think I ever visited a management in the 21 months I was there. He just —

But, you know, he wasn't sure whether it would be useful, anyway.

But if it would be useful, you know, that meant that his book was not all that was needed, that you had to add something to it.

I found it fun to go out and talk about their businesses with people, or to check with competitors, or suppliers, or customers, and all that.

But — Ben didn't think there was anything wrong with that. He just felt that if you had to do that, then his book was not the complete answer. And he didn't really want to do anything that the reader of his book couldn't do if he was on a desert island, you know, basically, with just one line to a broker.

CHARLIE MUNGER: But if you stop to think about it, Graham was trying to play the game of "Pin the Donkey," wearing very dark glasses. And Warren, of course, would use the biggest search light he could find. (Laughter)

WARREN BUFFETT: And we still can't find any donkeys these days. (Laughter)

33. Gillette customers more loyal than McDonald's customers

WARREN BUFFETT: OK. Area 1.

AUDIENCE MEMBER: I'm Joe Nobbe (PH) from Seattle, a shareholder.

Mr. Buffett and Mr. Munger, I wonder if you could comment a little bit further on McDonald's, carrying forward your comments of this morning, but more oriented toward how McDonald's would stack up against "The Inevitables" in international-type business. What your vision would be on their growth potential in places like Germany, China, so on and so forth.

WARREN BUFFETT: Yeah. I guess I just would have to stick with my comment that you won't get the inevitability in food that you will get in a single consumer product, you know, such as blades.

I mean, if I'm using a Gillette Sensor blade today, the chances are I'll try the next generation that comes out. It'll be the Sensor Excel right now. But I will try the next one that comes out, obviously. But I will not fool around at all in between.

And a very high percentage of people that shave, including women in shaving, they're happy with the product.

You know, it's not expensive. It's 20-odd dollars a year, you know, if you're a typical user. And if you're getting a great result, you're not going to fool around.

Whereas a great many of the decisions on fast food, as to where you eat, is simply based on which one you see. I mean, convenience is a huge factor.

So if you are going by a McDonald's, or a Burger King, or a Wendy's, and you happen to be hungry at that point, if you're traveling on the road and you see one of those signs up, you're probably going to stop at — you may very well — stop at the one you see.

So there's — there is not the — there's a loyalty factor, but it's just not going to be the same in food.

People want to vary their — I don't. I mean, I'm happy to eat there every day. But most people want to vary where they eat as they go through the week, or the month, or the year.

And they don't really have any great desire to vary their soft drink the same way. It's not the same thing.

So it's no knock on McDonald's at all. It's just the nature of the kind of industry they're in.

Charlie?

CHARLIE MUNGER: I can't think of anybody else who, before McDonald's, ever did what McDonald's did to create a chain of restaurants on such a scale, that worked.

WARREN BUFFETT: Oh, Howard Johnson's tried.

CHARLIE MUNGER: Yeah. There were a lot of failures. Some of you are old enough around Omaha to remember Reed's.

WARREN BUFFETT: Harkert's.

CHARLIE MUNGER: Or Harkert's — Harkett's Hamburgers.

WARREN BUFFETT: Harkert's.

CHARLIE MUNGER: Harkert's Holsum Hamburgers.

WARREN BUFFETT: Right.

CHARLIE MUNGER: Yeah. And they came and they went, those chains, and — but the —

It is a much tougher business that McDonalds is in.

WARREN BUFFETT: It's price sensitive, too, I mean, obviously.

CHARLIE MUNGER: Part of that's comparative. You can spend a lot more money on hamburgers in the course of a year than razor blades. I mean, you can't save that much by changing razor blades.

WARREN BUFFETT: Yeah. The average person will buy 27 — in the United States — 27 Sensor Excels a year. You know, that's one every, roughly, 13 days.

And I don't know what the retail price is because they give them free to us as directors, but the — (laughter) — you know —

If they're a dollar, it's 27 bucks, I mean, and —

It makes a lot of difference. That's what's happening, of course, around the world is people that are using cheap double-edged blades, or whatever is, they keep moving up the comfort scale — the comfort ladder. And Gillette is a direct beneficiary of —

If it's a difference between having great shaves and very so-so shaves, and lots of nicks and scratches and everything, is ten bucks a year or 12 bucks a year. I mean, that is not going cause many people to change their habits, and —

Incidentally, the Sensor for women has just been a huge success. I think they've had more razors go out on that in the same period than when the original Sensor was — came out for men.

So that's been an enlargement of the market. I would not have guessed that would work that well. Before that, all the women just used the disposables, or their husband's — boyfriend's — razor. But thank God they've gotten over that. (Laughter)

34. "Invisible hand does not work perfectly"

WARREN BUFFETT: Area 2.

AUDIENCE MEMBER: Gentlemen, my name is Ted Downey. I live in Mankato, Minnesota.

Mr. Munger, your reference to Einstein, I happen to have an article called “Strange Is Our Situation Here On Earth,” which is somewhat related to my question.

This morning, you brought up the shortcomings of accountability. And I would like you to address the aspects of the environmental impact in our accounting system and how this might relate to a social screen for investment in other areas.

CHARLIE MUNGER: Well, again, that is broad enough and tough enough so that I think I should pass. (Applause)

WARREN BUFFETT: Yeah.

The — I would say the “unseen hand” — or [Adam Smith’s] “invisible hand” — you know, does not work perfectly for all aspects of an economy, so —

But in terms of accounting for it — in terms of an individual balance sheet or income account, you know, that would be way beyond me. But there are things that the “invisible hand” won’t do, and therefore, that unfettered market-driven economic action will not lead to the best result for society in my view.

I think the market works awfully well in an awfully — in a tremendous number of ways. It produces what people want in increasing quantities. And it — you know, it’s enormously beneficial to have a market-driven society. But a pure market-driven society will do things that will have anti-social consequences.

CHARLIE MUNGER: You certainly need environmental rules.

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: The pioneers died like flies because the drinking water was too near the sewage. And one of the glories of the world we live in now is that the sewage systems are so good.

And, you know, you don’t think about it much, but it’s dramatically changed our prospects and the general quality of how we live.

And there are a lot of other places where you need environmental rules.

All that said, some of the environmental stuff has gone way too far. But it’s too complicated to try and offer precise lines.

35. Aim to increase both operating earnings and investments

WARREN BUFFETT: Area 3.

AUDIENCE MEMBER: My name is Gul Asnani (PH). I'm from Allentown, Pennsylvania.

I have a question concerning page four of the annual report where you talk about the investments per shares, et cetera.

WARREN BUFFETT: Right.

AUDIENCE MEMBER: And my question is, how much claim do the operating businesses have on these marketable securities?

WARREN BUFFETT: Yeah. Well, that table's a very important table in my view. And we measure our progress, to some extent, by the figures in both columns of that table, one of which shows the investments per share. And the other shows the operating earnings from everything other than investments.

The operating businesses have first claim on anything that relates to their business. I mean, if See's is going to buy a new plant, which it probably is now — or buy an additional building, I shouldn't say a new plant — you know, that comes first. The business has grown. It'll produce some economies and all that. We do that. You know, we try and do it as intelligently as possible. But that comes first. The —

That doesn't use but a small fraction of the capital. All of those needs don't use but a small fraction of the capital that Berkshire will generate. The investments reside largely in insurance companies because that's where largely the liquid funds are.

They have to have capital strength, obviously, because they have huge promises outstanding.

But where they reside does not determine who manages them. Lou Simpson manages GEICO's portfolio specifically. But in effect, Charlie and I manage everything else.

So where they precisely reside really makes no difference. I mean, they're sitting someplace. They're not for the operating management to use in projects that are far afield from what they're doing.

But if they need money in any operating business, you know, we'll have a check there that day. FlightSafety, for example, will be a fairly capital-intensive business.

I mean, if our project with Boeing goes as we hope it goes, you know, there will be substantial money in there because there — you know, we will have many more simulators around the world, and we'll be paying our proportional cost of it.

But they don't need to keep money around to prepare for that day, which they would if they were a standalone operation. We can — money's fungible.

We can deploy it all the time. And whenever anybody needs it, we'll come up with it. But we don't leave it around awaiting the day when some specific operation needs it.

Charlie?

CHARLIE MUNGER: The odds are very good that the marketable securities will keep going up, even as the businesses expand. That's the way the game has worked in the past. And we hope it'll keep going that way.

WARREN BUFFETT: What we are doing is trying to increase the numbers in both columns. We don't have any favoritism for this over that or anything of the sort. But we're looking, all the time, for things that will do — will help both columns. And we'd be disappointed if five or 10 years from now that they both haven't increased significantly.

But which column will increase at the greater rate, we don't know.

36. "We wouldn't be surprised" if stock returns are lower

WARREN BUFFETT: Area 1?

AUDIENCE MEMBER: Good day, my name is John Semanovich (PH) from Ottawa, Canada, which, incidentally, has nothing to do with Bre-X whatsoever. (Laughter)

My question more goes back to the discussion of intellectual capital, in particular, perhaps, your intellectual reserves.

And so, speaking of "Security Analysis," the first edition in 1934, Ben Graham talked about the development of the "New Era Theory" and its consequences on the security business.

In today's terms, we see a lot of the same words and phrases being repeated by analysts on Wall Street. And with the historical returns on common stocks, dating back to the 1800s, coming in at about 7 percent, pair that together with the concept of regression to the mean in statistics, do you not think that we're in a very dangerous period?

WARREN BUFFETT: Well, the answer — we never know, I mean, we — in terms of what markets will do, we —

I don't think that the Coca-Cola Company's in a dangerous position, you know — in a dangerous era — or Gillette is in a dangerous era, or McDonald's, or Wells Fargo, or whatever, but — or See's Candy, or the businesses we own in their entire, Kirby, whatever it may be.

Whether valuations are too high gets back to the question that we said — we talked about earlier. If businesses, in aggregate, they keep earning very high returns on equity and interest rates stay where they are, we are not in an overvalued period.

If it turns out that these returns are not sustainable, or interest rates go higher, we will look back and say this was a high point, at least for a while.

But we have no notion on that. And we really don't think about it, basically, because we don't know. You know, our job is to focus on things that we can know and that make a difference.

And if something can't make a difference or we can't know it, you know, we write that one off. So we're looking for the —

CHARLIE MUNGER: But Warren, you would expect average returns from stock market index-type investing to regress somewhat down —

WARREN BUFFETT: Oh, I don't think the —

CHARLIE MUNGER: — where they've have they been the last few years?

WARREN BUFFETT: I don't think you'll get the investment result from owning the S&P over the next 10 years that you've gotten over the past 10 years.

I would — if someone wanted to put some real money on that, they would find a taker with me. That's very unlikely to happen.

CHARLIE MUNGER: That's not predicting a crash.

WARREN BUFFETT: No.

CHARLIE MUNGER: It's just saying that the guaranteed result from the next 10 years is almost certain to be less than —

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: — that of the last.

WARREN BUFFETT: It wouldn't surprise — I mean, this is no way predictive. But I mean, it wouldn't surprise us in the least if stocks averaged 4 percent a year, you know, for the next 10 years.

That doesn't mean they will. We don't know the number. But that would not be a surprising outcome. And it wouldn't bother us particularly, either.

Charlie?

CHALIE MUNGER: No.

37. “We don’t want to talk down something in order to buy it”

WARREN BUFFETT: Two.

LARRY WHITMAN: Hello. My name is Larry Whitman (PH) from Minot, North Dakota.

You have both talked today about the shrinking universe of stocks you could purchase, less margin of safety than ever, and a higher opportunity cost.

And you’ve also talked about looking to, potentially, purchase your great companies that you already have at reasonable prices.

And so I wonder if by talking so positively about some of your stocks — in particular Disney, such as in the ’95 annual report when you talked about actually telling everyone that you were buying more shares on the open market and, again, at the ’97 meeting — at their meeting — when you talked about maybe not selling the shares — those were both opportunities, maybe, when Disney may have dropped, because of such things as increased debt, or even people’s concern about the Ovitz compensation package.

And I just wondered if that may hurt your ability to buy these great companies at reasonable prices by talking so positively about them when, in fact, maybe you could buy them at lower prices when people get irrational.

WARREN BUFFETT: Yeah. You’re saying that — which I probably agree with — that if we would say the world is going to hell at Coke or Disney or Gillette — (laughs) — we might be better off, in terms of being able to buy more stock.

But, you know, I got asked the question at Disney and I answered it. And that’s my general approach, that —

I think it’s usually a bad mistake to sell your interest in wonderful businesses. I don’t think people find them that often. And I think they get hung up, if they’ve sold them at X that they want to buy them back at 90 percent of X, or 85 percent of X, so they’ll never go back in at 105 percent of X.

I think, on balance, if you are in a business that you understand and you think it’s a really outstanding business, that the presumption should be that you just hold it and don’t worry.

And if it goes down 25 percent in price or 30 percent in price, if you have more money available, buy more. And if you don’t, you know, so what? Just look at the business and judge how it’s doing.

But there's no question. I mean, we try not to talk very much about the businesses, except maybe to use them as an illustration in a teaching mode or something of the sort. We're not touting anything.

And I did try to stick those precautions in when I do talk about them as being wonderful businesses, so people don't take it as an unqualified buy recommendation or something of the sort.

But we won't try and put any spin on any — when we're talking about businesses generally.

We may not talk about them at all. You know, if we're buying something, we might be — particularly if no one knows that we've been in that stock at all — we might be somewhat quiet about the fact. But we don't want to talk down something in order to buy it.

Charlie?

CHARLIE MUNGER: Well, I always — Jerry Newman, as I understand it, didn't like Ben Graham giving all these courses explaining what Newman and Graham were doing, and —

But Graham's attitude was that he was a professor first. And if he made just slightly less money by being very accurate in what he taught, why so be it.

And I think it's fair to say that Warren has assimilated a bit of that ethos. And I think it's all to the good. And if it costs us a tiny, little bit of money from time to time, there are probably compensating benefits. And if there aren't, it's probably the right way to behave anyway.

WARREN BUFFETT: Charlie, if you were in a less charitable mood, I might point out I didn't behave that way till I got rich. (Laughter and applause)

Actually, I used to teach a course at what was then the University of Omaha. And we'd use all these current examples. And things were cheap then — (laughs) — that nobody paid any attention.

38. We don't want to "hear stories" or buy from "jerks"

WARREN BUFFETT: Area 3.

AUDIENCE MEMBER: Hello, Mr. Munger and Mr. Buffett. My name is Liza Rema (PH) from Burbank, California.

I wanted to find out — earlier, you mentioned you looked at — you used filters to look at a company. So could you elaborate on what those filters are?

WARREN BUFFETT: Charlie, you want to —?

CHARLIE MUNGER: Well, we've tried to do a good deal of that, and —

Opportunity cost is a huge filter in life. If you've got two suitors who are really eager to have you, and one is way the hell better than the other, you do not have to spend much time with the other. And that's the way we filter stock buying opportunities.

Our ideas are so simple, people keep asking us for mysteries, when all we have is the most elementary idea.

WARREN BUFFETT: Yeah. The first filter we probably put it through is whether we think — and we know instantly — whether it's a business we're going to understand, and whether it's a business that — if it passes through that, it's whether a company can have a sustainable edge, you know.

And that gets rid of a very significant percentage of the things people have —

They always want to tell you some story or anything. And I'm sure they regard me and Charlie as very arbitrary, in terms of, you know, in the middle of the first sentence saying, "Well, you know, we appreciate the call, but we're not interested."

I mean, you know, they just think if they explain something — and I get letters on this all the time.

But we really can tell, in the middle of the first sentence, usually, whether those two factors exist. And if we can't understand it, obviously, it's not going to have — we can't make a decision as to whether it has a sustainable edge.

And if we can't understand it, we, very often, can come to the conclusion that it's not the kind of the business where it will have a sustainable edge.

So 98 percent of the conversations we can end, you know, in the middle of somebody's first sentence, which, of course, goes over very big with the caller, but — (Laughter)

And then, sometimes if you're talking about an entire business, we can tell by who we're dealing with whether a deal's ever going to work out or not.

I mean, it — if there's an auction going on, we don't want to — we have no interest in talking about it. And it just isn't going, you know, it isn't going to work.

If someone is interested in, essentially, doing that with their business, you know, they're going to sit down and want to renegotiate everything with us all over again after the deal is done. And we're going to have to buy the business two or three times before we get through.

You just see all these things coming.

And on the other hand, we've had, you know, terrific experience, basically, with the people we have associated with.

So it works. It's efficient. You know, we don't want to listen to stories all day. And we don't read brokerage reports of anything of the sort. It's just — there's other things to do with your time.

Charlie?

CHARLIE MUNGER: Yeah. Another filter that Warren was eluding to is this concept of the "quality person." And, of course, most people define "quality person" as somebody very much like themselves. (Laughter) But —

WARREN BUFFETT: Identical, actually, is the word you're searching for. (Laughter)

CHARLIE MUNGER: But there's so many wonderful people out there. And there's so many awful people out there. And there's signs frequently, like flags, particularly over the awful people. And generally speaking, those people are to be avoided.

It just — the amount of misery you bring into your life by trusting some awful person and the amount of felicity that you can bring in by making the right business associations — look around this room.

And there's some wonderful people who have created some wonderful businesses. And their customers can trust them. The employees can trust them. The problems can trust them to be fairly faced and reasonably solved. And those are the kind of people you want. And people who take their promises seriously.

I had some experience, recently, with a company. And they have their brand on a particular product. And somebody invented a better product in the same field. And they're taking their brand off their product. (Laughs) If it isn't the best, they don't want their brand on it.

People who think like that frequently do very well in business. And the flags are flying.

WARREN BUFFETT: It's like they got a sign on their chest that just says, "Jerk. Jerk. Jerk." (Laughter)

And then you think you're going to buy the business and they aren't going to be a jerk, you know, anymore. I mean, it's — (Laughter)

39. Why Dr Pepper has a future

WARREN BUFFETT: OK. Area 1.

AUDIENCE MEMBER: Hi. David Winters, Mountain Lakes, New Jersey, shareholder.

I'm just wondering if there's an organizational model where you deal with a plethora of information so you can physically and intellectually organize it so you have your maximum output and retain focus.

And secondly, if I may, in the domestic soft drink business, is it winner take all? I mean, is there room for three competitors? And, honestly, does Dr Pepper have a future?

WARREN BUFFETT: Yeah. I would say Dr Pepper has a future. I'll answer the second one.

But sure, there's room for more than one. I think Coke's market share will go up pretty much year after year. But not — you know, we're talking tenths of a percent in that business. But tenths of a percent are important.

The U.S. market is what? It must be 10 billion cases. So, you know, one percent's a hundred million cases.

There will be — Dr Pepper appeals to a lot of people.

It's interesting how regional tastes can be. I mean, Dr Pepper will have a share in Texas that's, you know, far higher than it will be in Minnesota or something. But there are people who are going to prefer it.

And an interesting thing, though, is that the high percentage of people that prefer cola, for example.

Although the cola percentage has gone down a little bit, the fastest growing big beverage at Coke is Sprite. Sprite has had huge gains in sales. It does well over a billion cases a year. And it sells very well in a whole bunch of countries.

So they'll — you can make money with a soft drink company that doesn't dominate the business. You'll do a lot better with one that does dominate. But it's not a winner take all. It's not like two newspapers in a town of 100,000 or 200,000.

There are certain businesses that are winner take all, clearly, but soft drinks, not one of them.

40. "Advantage of accumulation of useful information"

WARREN BUFFETT: What was the first question? Oh, the part about organizing —

AUDIENCE MEMBER: Oh, I'm just wondering, for those of us on the other side of the table, we get barraged with information. And I'm wondering how do you both — do you just read annuals, 10-Ks, and talk to people, and ignore everything else? And how do you keep track of everything, intellectually —?

WARREN BUFFETT: Well, we don't keep track of everything. But the beauty of — to some extent — of evaluating businesses — large businesses — is that it is all cumulative. I mean, if you started doing it 40 or so years ago, you really have got a working knowledge of an awful lot of businesses.

But there aren't that many, to start with, that are, you know —

And you can get a fix. You know, how many — what are there? Seventy-five, maybe, or so important industries. And you'll get to understand how they operate.

And you don't have to start over again every day. And you don't have to consult a computer for it or anything like that, it —

So it has the advantage of accumulation of useful information over time. And, you know, you just add the incremental bit at some point.

You know, why did we decide to buy Coca-Cola in 1988? Well, it may have been, you know, just a couple small incremental bits of information. But that came into a mass that had been accumulated over decades.

And it's a very — it's a great business that way. It's why we like businesses that don't change too much, because the past is useful to us.

Charlie?

CHARLIE MUNGER: I can't add a thing to that.

41. We'd "push" to buy cheap stocks, but not enough to lose sleep

WARREN BUFFETT: OK. Over there in 2.

AUDIENCE MEMBER: I'm Barbara Morrow (PH) from Wisconsin and New York.

If you both live as long as I believe you will, it could happen that they'll be a year when you write two big checks for super-cat claims when the market is throwing away things at really silly prices.

Could you share your thinking about how much debt you would consider taking on to buy great businesses that's cheap in that kind of a situation?

WARREN BUFFETT: Well, if we had both a big hurricane in the northeast or in Florida, and we had a big quake in California in the same year, and we had a financial market — the financial markets tanked, perhaps because of those events, but perhaps for other reasons, we would be

thinking about ways — it might not be borrowing money directly — but we would be thinking to ways to buy securities if they got cheap enough.

I mean, any time securities get cheap — Charlie, you're thumping again here — (laughter) — any time securities get cheap, you know, we don't like to go to the office and not write a ticket. I mean, that, so —

We certainly would have the ability to borrow some money. We would never borrow a ton of money, relative to capital. We're just not set out that way.

We don't want to disappoint anybody in this world. We don't even want to worry about disappointing anybody in this world. So, we're not going to do that.

But we have a lot of extra firepower overall.

And I would say under almost any conditions that cause securities to get very cheap, we would find a way to buy some of them.

Charlie?

CHARLIE MUNGER: The beauty of our situation is that it has enormous flexibility built into it.

If something were large enough and cheap enough, we could stop writing super-cats. We're measuring opportunities one against the other, and we understand the way the numbers interplay.

And so we have a lot of different options.

And that's a huge advantage. There's so many places in business life where you have practically no options at all. You're just in a channel that you have to — waltz down the channel and you don't have any options to do anything else.

We have enormous options. We may not exercise them. But we have enormous flexibility.

WARREN BUFFETT: Yeah. We know they're there, and —

CHARLIE MUNGER: Yeah.

WARREN BUFFETT: — and there's no reason to push on anything now. At least, we don't have any reason to push ourselves.

But if it ever became advantageous to push somewhat, we would push, although never to a degree that, in any way, causes us to lose a minute of sleep about fulfilling every obligation we had.

1997 Letter

To the Shareholders of Berkshire Hathaway Inc.:

Our gain in net worth during 1997 was $8.0 billion, which increased the per-share book value of both our Class A and Class B stock by 34.1%. Over the last 33 years (that is, since present management took over) per-share book value has grown from $19 to $25,488, a rate of 24.1% compounded annually.[(1)]

1. All figures used in this report apply to Berkshire's A shares, the successor to the only stock that the company had outstanding before 1996. The B shares have an economic interest equal to 1/30th that of the A.

Given our gain of 34.1%, it is tempting to declare victory and move on. But last year's performance was no great triumph: *Any* investor can chalk up large returns when stocks soar, as they did in 1997. In a bull market, one must avoid the error of the preening duck that quacks boastfully after a torrential rainstorm, thinking that its paddling skills have caused it to rise in the world. A right-thinking duck would instead compare its position after the downpour to that of the other ducks on the pond.

So what's our duck rating for 1997? The table on the facing page shows that though we paddled furiously last year, passive ducks that simply invested in the S&P Index rose almost as fast as we did. Our appraisal of 1997's performance, then: Quack.

When the market booms, we tend to suffer in comparison with the S&P Index. The Index bears no tax costs, nor do mutual funds, since they pass through all tax liabilities to their owners. Last year, on the other hand, Berkshire paid or accrued $4.2 billion for federal income tax, or about 18% of our beginning net worth.

Berkshire will always have corporate taxes to pay, which means it needs to overcome their drag in order to justify its existence. Obviously, Charlie Munger, Berkshire's Vice Chairman and my partner, and I won't be able to lick that handicap every year. But we expect over time to maintain a modest advantage over the Index, and that is the yardstick against which you should measure us. We will not ask you to adopt the philosophy of the Chicago Cubs fan who reacted to a string of lackluster seasons by saying, "Why get upset? Everyone has a bad century now and then."

Gains in book value are, of course, not the bottom line at Berkshire. What truly counts are gains in per-share intrinsic business value. Ordinarily, though, the two measures tend to move roughly in tandem, and in 1997 that was the case: Led by a blow-out performance at GEICO, Berkshire's intrinsic value (which far exceeds book value) grew at nearly the same pace as book value.

For more explanation of the term, intrinsic value, you may wish to refer to our Owner's Manual, reprinted on pages 62 to 71. This manual sets forth our owner-related business principles, information that is important to all of Berkshire's shareholders.

In our last two annual reports, we furnished you a table that Charlie and I believe is central to estimating Berkshire's intrinsic value. In the updated version of that table, which follows, we trace our two key components of value. The first column lists our per-share ownership of investments (including cash and equivalents) and the second column shows our per-share earnings from Berkshire's operating businesses before taxes and purchase-accounting adjustments (discussed on pages 69 and 70), but after all interest and corporate expenses. The second column excludes all dividends, interest and capital gains that we realized from the investments presented in the first column. In effect, the columns show what Berkshire would look like were it split into two parts, with one entity holding our investments and the other operating all of our businesses and bearing all corporate costs.

Year	Investments Per Share	Pre-tax Earnings Per Share Excluding All Income from Investments
1967	$41	$1.09
1977	372	12.44
1987	3,910	108.14
1997	38,043	717.82

Pundits who ignore what our 38,000 employees contribute to the company, and instead simply view Berkshire as a de facto investment company, should study the figures in the second column. We made our first business acquisition in 1967, and since then our pre-tax operating earnings have grown from $1 million to $888 million. Furthermore, as noted, in this exercise we have assigned all of Berkshire's corporate expenses -- overhead of $6.6 million, interest of $66.9 million and shareholder contributions of $15.4 million -- to our business operations, even though a portion of these could just as well have been assigned to the investment side.

Here are the growth rates of the two segments by decade:

Decade Ending	Investments Per Share	Pre-tax Earnings Per Share Excluding All Income from Investments
1977	24.6%	27.6%
1987	26.5%	24.1%
1997	25.5%	25.5%
Annual Growth Rate, 1967-1997	25.6%	24.2%

During 1997, both parts of our business grew at a satisfactory rate, with investments increasing by $9,543 per share, or 33.5%, and operating earnings growing by $296.43 per share, or 70.3%. One important caveat: Because we were lucky in our super-cat insurance business (to be discussed later) and because GEICO's underwriting gain was well above what we can expect in most years, our 1997 operating earnings were much better than we anticipated and also more than we expect for 1998.

Our rate of progress in both investments and operations is *certain* to fall in the future. For anyone deploying capital, nothing recedes like success. My own history makes the point: Back in 1951, when I was attending Ben Graham's class at Columbia, an idea giving me a $10,000 gain improved my investment performance for the year by a full 100 percentage points. Today, an idea producing a $500 million pre-tax profit for Berkshire adds *one* percentage point to our performance. It's no wonder that my annual results in the 1950s were better by nearly thirty percentage points than my annual gains in any subsequent decade. Charlie's experience was similar. We weren't smarter then, just smaller. At our present size, any performance superiority we achieve will be minor.

We will be helped, however, by the fact that the businesses to which we have already allocated capital -- both operating subsidiaries and companies in which we are passive investors -- have splendid long-term prospects. We are also blessed with a managerial corps that is unsurpassed in ability and focus. Most of these executives are wealthy and do not need the pay they receive from Berkshire to maintain their way of life. They are motivated by the joy of accomplishment, not by fame or fortune.

Though we are delighted with what we own, we are not pleased with our prospects for committing incoming funds. Prices are high for both businesses and stocks. That does not mean that the prices of either will fall -- we have absolutely no view on that matter -- but it does mean that we get relatively little in prospective earnings when we commit fresh money.

Under these circumstances, we try to exert a Ted Williams kind of discipline. In his book *The Science of Hitting*, Ted explains that he carved the strike zone into 77 cells, each the size of a baseball. Swinging only at balls in his "best" cell, he knew, would allow him to bat .400; reaching for balls in his "worst" spot, the low outside corner of the strike zone, would reduce him to .230. In other words, waiting for the fat pitch would mean a trip to the Hall of Fame; swinging indiscriminately would mean a ticket to the minors.

If they are in the strike zone at all, the business "pitches" we now see are just catching the lower outside corner. If we swing, we will be locked into low returns. But if we let all of today's balls go by, there can be no assurance that the next ones we see will be more to our liking. Perhaps the attractive prices of the past were the aberrations, not the full prices of today. Unlike Ted, we can't be called out if we resist three pitches that are barely in the strike zone;

nevertheless, just standing there, day after day, with my bat on my shoulder is not my idea of fun.

Unconventional Commitments

When we can't find our favorite commitment -- a well-run and sensibly-priced business with fine economics -- we usually opt to put new money into very short-term instruments of the highest quality. Sometimes, however, we venture elsewhere. Obviously we believe that the alternative commitments we make are more likely to result in profit than loss. But we also realize that they do not offer the certainty of profit that exists in a wonderful business secured at an attractive price. Finding that kind of opportunity, we *know* that we are going to make money -- the only question being when. With alternative investments, we *think* that we are going to make money. But we also recognize that we will sometimes realize losses, occasionally of substantial size.

We had three non-traditional positions at yearend. The first was derivative contracts for 14.0 million barrels of oil, that being what was then left of a 45.7 million barrel position we established in 1994-95. Contracts for 31.7 million barrels were settled in 1995-97, and these supplied us with a pre-tax gain of about $61.9 million. Our remaining contracts expire during 1998 and 1999. In these, we had an unrealized gain of $11.6 million at yearend. Accounting rules require that commodity positions be carried at market value. Therefore, both our annual and quarterly financial statements reflect any unrealized gain or loss in these contracts. When we established our contracts, oil for future delivery seemed modestly underpriced. Today, though, we have no opinion as to its attractiveness.

Our second non-traditional commitment is in silver. Last year, we purchased 111.2 million ounces. Marked to market, that position produced a pre-tax gain of $97.4 million for us in 1997. In a way, this is a return to the past for me: Thirty years ago, I bought silver because I anticipated its demonetization by the U.S. Government. Ever since, I have followed the metal's fundamentals but not owned it. In recent years, bullion inventories have fallen materially, and last summer Charlie and I concluded that a higher price would be needed to establish equilibrium between supply and demand. Inflation expectations, it should be noted, play no part in our calculation of silver's value.

Finally, our largest non-traditional position at yearend was $4.6 billion, at amortized cost, of long-term zero-coupon obligations of the U.S. Treasury. These securities pay no interest. Instead,

they provide their holders a return by way of the discount at which they are purchased, a characteristic that makes their market prices move rapidly when interest rates change. If rates rise, you lose heavily with zeros, and if rates fall, you make outsized gains. Since rates fell in 1997, we ended the year with an unrealized pre-tax gain of $598.8 million in our zeros. Because we carry the securities at market value, that gain is reflected in yearend book value.

In purchasing zeros, rather than staying with cash-equivalents, we risk looking very foolish: A macro-based commitment such as this never has anything close to a 100% probability of being successful. However, you pay Charlie and me to use our best judgment -- not to avoid embarrassment -- and we will occasionally make an unconventional move when we believe the odds favor it. Try to think kindly of us when we blow one. Along with President Clinton, we will be feeling your pain: The Munger family has more than 90% of its net worth in Berkshire and the Buffetts more than 99%.

How We Think About Market Fluctuations

A short quiz: If you plan to eat hamburgers throughout your life and are not a cattle producer, should you wish for higher or lower prices for beef? Likewise, if you are going to buy a car from time to time but are not an auto manufacturer, should you prefer higher or lower car prices? These questions, of course, answer themselves.

But now for the final exam: If you expect to be a net saver during the next five years, should you hope for a higher or lower stock market during that period? Many investors get this one wrong. Even though they are going to be net buyers of stocks for many years to come, they are elated when stock prices rise and depressed when they fall. In effect, they rejoice because prices have risen for the "hamburgers" they will soon be buying. This reaction makes no sense. Only those who will be sellers of equities in the near future should be happy at seeing stocks rise. Prospective purchasers should much prefer sinking prices.

For shareholders of Berkshire who do not expect to sell, the choice is even clearer. To begin with, our owners are automatically saving even if they spend every dime they personally earn: Berkshire "saves" for them by retaining all earnings, thereafter using these savings to purchase businesses and securities. Clearly, the more cheaply we make these buys, the more profitable our owners' indirect savings program will be.

Furthermore, through Berkshire you own major positions in companies that consistently repurchase their shares. The benefits that these programs supply us grow as prices fall: When stock prices are low, the funds that an investee spends on repurchases increase our ownership of that company by a greater amount than is the case when prices are higher. For example, the repurchases that Coca-Cola, The Washington Post and Wells Fargo made in past years at very low prices benefitted Berkshire far more than do today's repurchases, made at loftier prices.

At the end of every year, about 97% of Berkshire's shares are held by the same investors who owned them at the start of the year. That makes them savers. They should therefore rejoice when markets decline and allow both us and our investees to deploy funds more advantageously.

So smile when you read a headline that says "Investors lose as market falls." Edit it in your mind to "*Dis*investors lose as market falls -- but investors gain." Though writers often forget this truism, there is a buyer for every seller and what hurts one necessarily helps the other. (As they say in golf matches: "Every putt makes *someone* happy.")

We gained enormously from the low prices placed on many equities and businesses in the 1970s and 1980s. Markets that then were hostile to investment transients were friendly to those taking up permanent residence. In recent years, the actions we took in those decades have been validated, but we have found few new opportunities. In its role as a corporate "saver," Berkshire continually looks for ways to sensibly deploy capital, but it may be some time before we find opportunities that get us truly excited.

Insurance Operations -- Overview

What does excite us, however, is our insurance business. GEICO is flying, and we expect that it will continue to do so. Before we expound on that, though, let's discuss "float" and how to measure its cost. Unless you understand this subject, it will be impossible for you to make an informed judgment about Berkshire's intrinsic value.

To begin with, float is money we hold but don't own. In an insurance operation, float arises because premiums are received before losses are paid, an interval that sometimes extends over many years. During that time, the insurer invests the money. Typically, this pleasant activity carries with it a downside: The premiums that an insurer takes in usually do not cover the losses and expenses it eventually must pay. That leaves it running an "underwriting loss," which is the

cost of float. An insurance business has value if its cost of float over time is less than the cost the company would otherwise incur to obtain funds. But the business is a lemon if its cost of float is higher than market rates for money.

A caution is appropriate here: Because loss costs must be estimated, insurers have enormous latitude in figuring their underwriting results, and that makes it very difficult for investors to calculate a company's true cost of float. Estimating errors, usually innocent but sometimes not, can be huge. The consequences of these miscalculations flow directly into earnings. An experienced observer can usually detect large-scale errors in reserving, but the general public can typically do no more than accept what's presented, and at times I have been amazed by the numbers that big-name auditors have implicitly blessed. As for Berkshire, Charlie and I attempt to be conservative in presenting its underwriting results to you, because we have found that virtually all surprises in insurance are unpleasant ones.

As the numbers in the following table show, Berkshire's insurance business has been a huge winner. For the table, we have calculated our float -- which we generate in large amounts relative to our premium volume -- by adding net loss reserves, loss adjustment reserves, funds held under reinsurance assumed and unearned premium reserves, and then subtracting agents' balances, prepaid acquisition costs, prepaid taxes and deferred charges applicable to assumed reinsurance. Our cost of float is determined by our underwriting loss or profit. In those years when we have had an underwriting profit, such as the last five, our cost of float has been negative. In effect, we have been paid for holding money.

(in $ Millions)	(1) Underwriting Loss	(2) Average Float	Approximate Cost of Funds	Yearend Yield on Long-Term Govt. Bonds
1967	Profit	$17.3	< 0	5.50%
1968	Profit	19.9	< 0	5.90%
1969	Profit	23.4	< 0	6.79%
1970	$0.37	32.4	1.14%	6.25%
1971	Profit	52.5	< 0	5.81%
1972	Profit	69.5	< 0	5.82%
1973	Profit	73.3	< 0	7.27%
1974	7.36	79.1	9.30%	8.13%
1975	11.35	87.6	12.96%	8.03%
1976	Profit	102.6	< 0	7.30%
1977	Profit	139.0	< 0	7.97%
1978	Profit	190.4	< 0	8.93%
1979	Profit	227.3	< 0	10.08%
1980	Profit	237.0	< 0	11.94%
1981	Profit	228.4	< 0	13.61%
1982	21.56	220.6	9.77%	10.64%
1983	33.87	231.3	14.64%	11.84%
1984	48.06	253.2	18.98%	11.58%
1985	44.23	390.2	11.34%	9.34%
1986	55.84	797.5	7.00%	7.60%
1987	55.43	1,266.7	4.38%	8.95%
1988	11.08	1,497.7	0.74%	9.00%
1989	24.40	1,541.3	1.58%	7.97%
1990	26.65	1,637.3	1.63%	8.24%
1991	119.6	1,895.0	6.31%	7.40%
1992	108.9	2,290.4	4.76%	7.39%
1993	Profit	2,624.7	< 0	6.35%
1994	Profit	3,056.6	< 0	7.88%
1995	Profit	3,607.2	< 0	5.95%
1996	Profit	6,702.0	< 0	6.64%
1997	Profit	7,093.1	< 0	5.92%

Since 1967, when we entered the insurance business, our float has grown at an annual compounded rate of 21.7%. Better yet, it has cost us nothing, and in fact has made us money. Therein lies an accounting irony: Though our float is shown on our balance sheet as a liability, it has had a value to Berkshire greater than an equal amount of net worth would have had.

The expiration of several large contracts will cause our float to decline during the first quarter of 1998, but we expect it to grow substantially over the long term. We also believe that our cost of float will continue to be highly favorable.

Super-Cat Insurance

Occasionally, however, the cost of our float will spike severely. That will occur because of our heavy involvement in the super-cat business, which by its nature is the most volatile of all insurance lines. In this operation, we sell policies that insurance and reinsurance companies purchase in order to limit their losses when mega-catastrophes strike. Berkshire is the preferred market for sophisticated buyers: When the "big one" hits, the financial strength of super-cat writers will be tested, and Berkshire has no peer in this respect.

Since truly major catastrophes are rare occurrences, our super-cat business can be expected to show large profits in most years -- and to record a huge loss occasionally. In other words, the attractiveness of our super-cat business will take a great many years to measure. *What you must understand, however, is that a truly terrible year in the super-cat business is not a possibility -- it's a certainty. The only question is when it will come.*

Last year, we were very lucky in our super-cat operation. The world suffered no catastrophes that caused huge amounts of insured damage, so virtually all premiums that we received dropped to the bottom line. This pleasant result has a dark side, however. Many investors who are "innocents" -- meaning that they rely on representations of salespeople rather than on underwriting knowledge of their own -- have come into the reinsurance business by means of purchasing pieces of paper that are called "catastrophe bonds." The second word in this term, though, is an Orwellian misnomer: A true bond obliges the issuer to pay; these bonds, in effect, are contracts that lay a provisional promise to pay on the *purchaser*.

This convoluted arrangement came into being because the promoters of the contracts wished to circumvent laws that prohibit the writing of insurance by entities that haven't been licensed by the state. A side benefit for the promoters is that calling the insurance contract a "bond" may also cause unsophisticated buyers to assume that these instruments involve far less risk than is actually the case.

Truly outsized risks will exist in these contracts if they are not properly priced. A pernicious aspect of catastrophe insurance, however, makes it likely that mispricing, even of a severe variety, will not be discovered for a very long time. Consider, for example, the odds of throwing a 12 with a pair of dice -- 1 out of 36. Now assume that the dice will be thrown once a year; that you, the "bond-buyer," agree to pay $50 million if a 12 appears; and that for "insuring" this risk you take in an annual "premium" of $1 million. That would mean you had significantly underpriced the risk. Nevertheless, you could go along for years thinking you were making money -- indeed, easy money. There is actually a 75.4% probability that you would go for a decade without paying out a dime. Eventually, however, you would go broke.

In this dice example, the odds are easy to figure. Calculations involving monster hurricanes and earthquakes are necessarily much fuzzier, and the best we can do at Berkshire is to estimate a range of probabilities for such events. The lack of precise data, coupled with the rarity of such catastrophes, plays into the hands of promoters, who typically employ an "expert" to advise the potential bond-buyer about the probability of losses. The expert puts no money on the table. Instead, he receives an up-front payment that is forever his no matter how inaccurate his predictions. Surprise: When the stakes are high, an expert can invariably be found who will affirm -- to return to our example -- that the chance of rolling a 12 is not 1 in 36, but more like 1 in 100. (In fairness, we should add that the expert will probably believe that his odds are correct, a fact that makes him less reprehensible -- but more dangerous.)

The influx of "investor" money into catastrophe bonds -- which may well live up to their name -- has caused super-cat prices to deteriorate materially. Therefore, we will write less business in 1998. We have some large multi-year contracts in force, however, that will mitigate the drop. The largest of these are two policies that we described in last year's report -- one covering hurricanes in Florida and the other, signed with the California Earthquake Authority, covering earthquakes in that state. Our "worst-case" loss remains about $600 million after-tax, the maximum we could lose under the CEA policy. Though this loss potential may sound large,

it is only about 1% of Berkshire's market value. Indeed, if we could get appropriate prices, we would be willing to significantly increase our "worst-case" exposure.

Our super-cat business was developed from scratch by Ajit Jain, who has contributed to Berkshire's success in a variety of other ways as well. Ajit possesses both the discipline to walk away from business that is inadequately priced and the imagination to then find other opportunities. Quite simply, he is one of Berkshire's major assets. Ajit would have been a star in whatever career he chose; fortunately for us, he enjoys insurance.

Insurance -- GEICO (1-800-555-2756) and Other Primary Operations

Last year I wrote about GEICO's Tony Nicely and his terrific management skills. If I had known then what he had in store for us in 1997, I would have searched for still greater superlatives. Tony, now 54, has been with GEICO for 36 years and last year was his best. As CEO, he has transmitted vision, energy and enthusiasm to all members of the GEICO family -- raising their sights from what *has* been achieved to what *can* be achieved.

We measure GEICO's performance by first, the net increase in its voluntary auto policies (that is, not including policies assigned us by the state) and, second, the profitability of "seasoned" auto business, meaning policies that have been with us for more than a year and are thus past the period in which acquisition costs cause them to be money-losers. In 1996, in-force business grew 10%, and I told you how pleased I was, since that rate was well above anything we had seen in two decades. Then, in 1997, growth jumped to 16%.

Below are the new business and in-force figures for the last five years:

Years	New Voluntary Auto Policies	Voluntary Auto Policies in Force
1993	354,882	2,011,055
1994	396,217	2,147,549
1995	461,608	2,310,037
1996	617,669	2,543,699
1997	913,176	2,949,439

Of course, any insurer can grow rapidly if it gets careless about underwriting. GEICO's underwriting profit for the year, though, was 8.1% of premiums, far above its average. Indeed, that percentage was higher than we wish it to be: Our goal is to pass on most of the benefits of our low-cost operation to our customers, holding ourselves to about 4% in underwriting profit. With that in mind, we reduced our average rates a bit during 1997 and may well cut them again this year. Our rate changes varied, of course, depending on the policyholder and where he lives; we strive to charge a rate that properly reflects the loss expectancy of each driver.

GEICO is not the only auto insurer obtaining favorable results these days. Last year, the industry recorded profits that were far better than it anticipated or can sustain. Intensified competition will soon squeeze margins very significantly. But this is a development we welcome: Long term, a tough market helps the low-cost operator, which is what we are and intend to remain.

Last year I told you about the record 16.9% profit-sharing contribution that GEICO's associates had earned and explained that two simple variables set the amount: policy growth and profitability of seasoned business. I further explained that 1996's performance was so extraordinary that we had to enlarge the chart delineating the possible payouts. The new configuration didn't make it through 1997: We enlarged the chart's boundaries again and awarded our 10,500 associates a profit-sharing contribution amounting to 26.9% of their base compensation, or $71 million. In addition, the same two variables -- policy growth and profitability of seasoned business -- determined the cash bonuses that we paid to dozens of top executives, starting with Tony.

At GEICO, we are paying in a way that makes sense for both our owners and our managers. We distribute merit badges, not lottery tickets: In none of Berkshire's subsidiaries do we relate

compensation to our stock price, which our associates cannot affect in any meaningful way. Instead, we tie bonuses to each unit's business performance, which is the direct product of the unit's people. When that performance is terrific -- as it has been at GEICO -- there is nothing Charlie and I enjoy more than writing a big check.

GEICO's underwriting profitability will probably fall in 1998, but the company's growth could accelerate. We're planning to step on the gas: GEICO's marketing expenditures this year will top $100 million, up 50% from 1997. Our market share today is only 3%, a level of penetration that should increase dramatically in the next decade. The auto insurance industry is huge -- it does about $115 billion of volume annually -- and there are tens of millions of drivers who would save substantial money by switching to us.

* * * * * * * * * * * *

In the 1995 report, I described the enormous debt that you and I owe to Lorimer Davidson. On a Saturday early in 1951, he patiently explained the ins and outs of both GEICO and its industry to me -- a 20-year-old stranger who'd arrived at GEICO's headquarters uninvited and unannounced. Davy later became the company's CEO and has remained my friend and teacher for 47 years. The huge rewards that GEICO has heaped on Berkshire would not have materialized had it not been for his generosity and wisdom. Indeed, had I not met Davy, I might never have grown to understand the whole field of insurance, which over the years has played such a key part in Berkshire's success.

Davy turned 95 last year, and it's difficult for him to travel. Nevertheless, Tony and I hope that we can persuade him to attend our annual meeting, so that our shareholders can properly thank him for his important contributions to Berkshire. Wish us luck.

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Though they are, of course, far smaller than GEICO, our other primary insurance operations turned in results last year that, in aggregate, were fully as stunning. National Indemnity's traditional business had an underwriting profit of 32.9% and, as usual, developed a large amount of float compared to premium volume. Over the last three years, this segment of our business,

run by Don Wurster, has had a profit of 24.3%. Our homestate operation, managed by Rod Eldred, recorded an underwriting profit of 14.1% even though it continued to absorb the expenses of geographical expansion. Rod's three-year record is an amazing 15.1%. Berkshire's workers' compensation business, run out of California by Brad Kinstler, had a modest underwriting loss in a difficult environment; its three-year underwriting record is a positive 1.5%. John Kizer, at Central States Indemnity, set a new volume record while generating good underwriting earnings. At Kansas Bankers Surety, Don Towle more than lived up to the high expectations we had when we purchased the company in 1996.

In aggregate, these five operations recorded an underwriting profit of 15.0%. The two Dons, along with Rod, Brad and John, have created significant value for Berkshire, and we believe there is more to come.

Sources of Reported Earnings

The table that follows shows the main sources of Berkshire's reported earnings. In this presentation, purchase-accounting adjustments are not assigned to the specific businesses to which they apply, but are instead aggregated and shown separately. This procedure lets you view the earnings of our businesses as they would have been reported had we not purchased them. For the reasons discussed on pages 69 and 70, this form of presentation seems to us to be more useful to investors and managers than one utilizing generally-accepted accounting principles (GAAP), which require purchase-premiums to be charged off business-by-business. The total earnings we show in the table are, of course, identical to the GAAP total in our audited financial statements.

Operating Earnings	**Pre-Tax**	**Earnings**	**Berkshire**	**Share**
(In Millions)	**1997**	**1996**	**1997**	**1996**
Insurance Group:				
Underwriting – Super-Cat	$283.0	$167.0	$182.7	$107.4
Underwriting – Other Reinsurance	(155.2)	(174.8)	(100.1)	(112.4)
Underwriting -- GEICO	280.7	171.4	181.1	110.2
Underwriting --- Other Primary	52.9	58.5	34.1	37.6
Net investment income	882.3	726.2	703.6	593.1
Buffalo News	55.9	50.4	32.7	29.5
Finance Business	28.1	23.1	18.0	14.9
FlightSafety	139.5	3.1 (1)	84.4	1.9 (1)
Home Furnishings	56.8 (2)	43.8	32.2 (2)	24.8
Jewelry	31.6	27.8	18.3	16.1
Scott Fetzer (excluding finance operations)	118.9	121.7	77.3	81.6
See's Candies	58.6	51.9	35.0	30.8
Shoe Group	48.8	61.6	32.2	41.0
Purchase-Accounting Adjustments	(104.9)	(75.7)	(97.0)	(70.5)
Interest Expense (3)	(106.6)	(94.3)	(67.1)	(56.6)
Shareholder-Designated Contributions	(15.4)	(13.3)	(9.9)	(8.5)
Other	60.7	73.0	37.0	42.2
Operating Earnings	1,715.7	1,221.4	1,194.5	883.1
Capital Gains from Investments	1,111.9	2,484.5	707.1	1,605.5
Total Earnings- All entities	**$2,827.6**	**$3,705.9**	**$1,901.6**	**$2,488.6**

(1) From date of acquisition, December 23, 1996.

(2) Includes Star Furniture from July 1, 1997.

(3) Excludes interest expense of Finance Businesses

Overall, our operating businesses continue to perform exceptionally well, far outdoing their industry norms. We are particularly pleased that profits improved at Helzberg's after a disappointing 1996. Jeff Comment, Helzberg's CEO, took decisive steps early in 1997 that enabled the company to gain real momentum by the crucial Christmas season. In the early part of this year, as well, sales remained strong.

Casual observers may not appreciate just how extraordinary the performance of many of our businesses has been: If the earnings history of, say, Buffalo News or Scott Fetzer is compared to the records of their publicly-owned peers, their performance might seem to have been unexceptional. But most public companies retain two-thirds or more of their earnings to fund their corporate growth. In contrast, those Berkshire subsidiaries have paid 100% of their earnings to us, their parent company, to fund *our* growth.

In effect, the records of the public companies reflect the cumulative benefits of the earnings they have retained, while the records of our operating subsidiaries get no such boost. Over time, however, the earnings these subsidiaries have distributed have created truly huge amounts of earning power elsewhere in Berkshire. The News, See's and Scott Fetzer have alone paid us $1.8 billion, which we have gainfully employed elsewhere. We owe their managements our gratitude for much more than the earnings that are detailed in the table.

Additional information about our various businesses is given on pages 36 - 50, where you will also find our segment earnings reported on a GAAP basis. In addition, on pages 55 - 61, we have rearranged Berkshire's financial data into four segments on a non-GAAP basis, a presentation that corresponds to the way Charlie and I think about the company. Our intent is to supply you with the financial information that we would wish you to give us if our positions were reversed.

Look-Through Earnings

Reported earnings are a poor measure of economic progress at Berkshire, in part because the numbers shown in the table presented earlier include only the dividends we receive from investees -- though these dividends typically represent only a small fraction of the earnings attributable to our ownership. Not that we mind this division of money, since on balance we regard the undistributed earnings of investees as more valuable to us than the portion paid out. The reason is simple: Our investees often have the opportunity to reinvest earnings at high rates of return. So why should we want them paid out?

To depict something closer to economic reality at Berkshire than reported earnings, though, we employ the concept of "look-through" earnings. As we calculate these, they consist of: (1) the operating earnings reported in the previous section, plus; (2) our share of the retained operating

earnings of major investees that, under GAAP accounting, are not reflected in our profits, less; (3) an allowance for the tax that would be paid by Berkshire if these retained earnings of investees had instead been distributed to us. When tabulating "operating earnings" here, we exclude purchase-accounting adjustments as well as capital gains and other major non-recurring items.

The following table sets forth our 1997 look-through earnings, though I warn you that the figures can be no more than approximate, since they are based on a number of judgment calls. (The dividends paid to us by these investees have been included in the operating earnings itemized on page 11, mostly under "Insurance Group: Net Investment Income.")

Berkshire's Major Investees (in millions)	**Berkshires Approximate Ownership at Yearend (1)**	**Berkshire's Share of Undistributed Operating Earnings (2)**
American Express Company	10.7%	$161
The Coca-Cola Company	8.1%	216
The Walt Disney Company	3.2%	65
Freddie Mac	8.6%	86
The Gillette Company	8.6%	86
The Washington Post Company	16.5%	30
Wells Fargo & Company	7.8%	103
Berkshire's share of undistributed earnings of major investees		743
Hypothetical tax on these undistributed investee earnings (3)		(105)
Reported operating earnings of Berkshire		1,292
Total look-through earnings of Bekrshire		$1,930

(1) Does not include shares allocable to minority interests

(2) Calculated on average ownership for the year

(3) The tax rate used is 14%, which is the rate Berkshire pays on the dividends it receives

Acquisitions of 1997

In 1997, we agreed to acquire Star Furniture and International Dairy Queen (a deal that closed early in 1998). Both businesses fully meet our criteria: They are understandable; possess excellent economics; and are run by outstanding people.

The Star transaction has an interesting history. Whenever we buy into an industry whose leading participants aren't known to me, I always ask our new partners, "Are there any more at home like you?" Upon our purchase of Nebraska Furniture Mart in 1983, therefore, the Blumkin family told me about three outstanding furniture retailers in other parts of the country. At the time, however, none was for sale.

Many years later, Irv Blumkin learned that Bill Child, CEO of R.C. Willey -- one of the recommended three -- might be interested in merging, and we promptly made the deal described in the 1995 report. We have been delighted with that association -- Bill is the perfect partner. Furthermore, when we asked Bill about industry standouts, he came up with the remaining two names given me by the Blumkins, one of these being Star Furniture of Houston. But time went by without there being any indication that either of the two was available.

On the Thursday before last year's annual meeting, however, Bob Denham of Salomon told me that Melvyn Wolff, the long-time controlling shareholder and CEO of Star, wanted to talk. At our invitation, Melvyn came to the meeting and spent his time in Omaha confirming his positive feelings about Berkshire. I, meanwhile, looked at Star's financials, and liked what I saw.

A few days later, Melvyn and I met in New York and made a deal in a single, two-hour session. As was the case with the Blumkins and Bill Child, I had no need to check leases, work out employment contracts, etc. I knew I was dealing with a man of integrity and that's what counted.

Though the Wolff family's association with Star dates back to 1924, the business struggled until Melvyn and his sister Shirley Toomin took over in 1962. Today Star operates 12 stores -- ten in Houston and one each in Austin and Bryan -- and will soon move into San Antonio as well. We won't be surprised if Star is many times its present size a decade from now.

Here's a story illustrating what Melvyn and Shirley are like: When they told their associates of the sale, they also announced that Star would make large, special payments to those who had helped them succeed -- and then defined that group as everyone in the business. Under the terms

of our deal, it was Melvyn and Shirley's money, not ours, that funded this distribution. Charlie and I love it when we become partners with people who behave like that.

The Star transaction closed on July 1. In the months since, we've watched Star's already-excellent sales and earnings growth accelerate further. Melvyn and Shirley will be at the annual meeting, and I hope you get a chance to meet them.

Next acquisition: International Dairy Queen. There are 5,792 Dairy Queen stores operating in 23 countries -- all but a handful run by franchisees -- and in addition IDQ franchises 409 Orange Julius operations and 43 Karmelkorn operations. In 190 locations, "treat centers" provide some combination of the three products.

For many years IDQ had a bumpy history. Then, in 1970, a Minneapolis group led by John Mooty and Rudy Luther took control. The new managers inherited a jumble of different franchising agreements, along with some unwise financing arrangements that had left the company in a precarious condition. In the years that followed, management rationalized the operation, extended food service to many more locations, and, in general, built a strong organization.

Last summer Mr. Luther died, which meant his estate needed to sell stock. A year earlier, Dick Kiphart of William Blair & Co., had introduced me to John Mooty and Mike Sullivan, IDQ's CEO, and I had been impressed with both men. So, when we got the chance to merge with IDQ, we offered a proposition patterned on our FlightSafety acquisition, extending selling shareholders the option of choosing either cash or Berkshire shares having a slightly lower immediate value. By tilting the consideration as we did, we encouraged holders to opt for cash, the type of payment we by far prefer. Even then, only 45% of IDQ shares elected cash.

Charlie and I bring a modicum of product expertise to this transaction: He has been patronizing the Dairy Queens in Cass Lake and Bemidji, Minnesota, for decades, and I have been a regular in Omaha. We have put our money where our mouth is.

A Confession

I've mentioned that we strongly prefer to use cash rather than Berkshire stock in acquisitions. A study of the record will tell you why: If you aggregate all of our stock-only mergers (excluding those we did with two affiliated companies, Diversified Retailing and Blue

Chip Stamps), you will find that our shareholders are slightly worse off than they would have been had I not done the transactions. Though it hurts me to say it, when I've issued stock, I've cost you money.

Be clear about one thing: This cost has *not* occurred because we were misled in any way by sellers or because they thereafter failed to manage with diligence and skill. On the contrary, the sellers were completely candid when we were negotiating our deals and have been energetic and effective ever since.

Instead, our problem has been that we own a truly marvelous collection of businesses, which means that trading away a portion of them for something new almost never makes sense. When we issue shares in a merger, we reduce your ownership in all of our businesses -- partly-owned companies such as Coca-Cola, Gillette and American Express, and all of our terrific operating companies as well. An example from sports will illustrate the difficulty we face: For a baseball team, acquiring a player who can be expected to bat .350 is almost always a wonderful event -- *except* when the team must trade a .380 hitter to make the deal.

Because our roster is filled with .380 hitters, we have tried to pay cash for acquisitions, and here our record has been far better. Starting with National Indemnity in 1967, and continuing with, among others, See's, Buffalo News, Scott Fetzer and GEICO, we have acquired -- for cash -- a number of large businesses that have performed incredibly well since we bought them. These acquisitions have delivered Berkshire tremendous value -- indeed, far more than I anticipated when we made our purchases.

We believe that it is almost impossible for us to "trade up" from our present businesses and managements. Our situation is the opposite of Camelot's Mordred, of whom Guenevere commented, "The one thing I can say for him is that he is bound to marry well. Everybody is above him." Marrying well is extremely difficult for Berkshire.

So you can be sure that Charlie and I will be very reluctant to issue shares in the future. In those cases when we simply must do so -- when certain shareholders of a desirable acquiree insist on getting stock -- we will include an attractive cash option in order to tempt as many of the sellers to take cash as is possible.

Merging with public companies presents a special problem for us. If we are to offer *any* premium to the acquiree, one of two conditions must be present: Either our own stock must be overvalued relative to the acquiree's, or the two companies together must be expected to

earn more than they would if operated separately. Historically, Berkshire has seldom been overvalued. In this market, moreover, undervalued acquirees are almost impossible to find. That other possibility -- synergy gains -- is usually unrealistic, since we expect acquirees to operate after we've bought them just as they did before. Joining with Berkshire does not normally raise their revenues nor cut their costs.

Indeed, their reported costs (but not their true ones) will *rise* after they are bought by Berkshire if the acquiree has been granting options as part of its compensation packages. In these cases, "earnings" of the acquiree have been overstated because they have followed the standard -- but, in our view, dead wrong -- accounting practice of ignoring the cost to a business of issuing options. When Berkshire acquires an option-issuing company, we promptly substitute a cash compensation plan having an economic value equivalent to that of the previous option plan. The acquiree's true compensation cost is thereby brought out of the closet and charged, as it should be, against earnings.

The reasoning that Berkshire applies to the merger of public companies *should* be the calculus for all buyers. Paying a takeover premium does not make sense for any acquirer unless a) its stock is overvalued relative to the acquiree's or b) the two enterprises will earn more combined than they would separately. Predictably, acquirers normally hew to the second argument because very few are willing to acknowledge that their stock is overvalued. However, voracious buyers -- the ones that issue shares as fast as they can print them -- are tacitly conceding that point. (Often, also, they are running Wall Street's version of a chain-letter scheme.)

In some mergers there truly are major synergies -- though oftentimes the acquirer pays too much to obtain them -- but at other times the cost and revenue benefits that are projected prove illusory. Of one thing, however, be certain: If a CEO is enthused about a particularly foolish acquisition, both his internal staff and his outside advisors will come up with whatever projections are needed to justify his stance. Only in fairy tales are emperors told that they are naked.

Common Stock Investments

Below we present our common stock investments. Those with a market value of more than $750 million are itemized.

Shares	Company	Cost (dollars in millions)	Market
49,456,900	American Express Company	$1,392.7	$4,414.0
200,000,000	The Coca-Cola Company	1,298.8	13,337.5
21,563,414	The Walt Disney Company	381.2	2,134.8
63,977,600	Freddie Mac	329.4	2,683.1
48,000,000	The Gillette Company	600.0	4,821.0
23,733,198	Travelers Group Inc.	604.4	1,278.6
1,727,765	The Washington Post Company	10.6	840.6
6,690,218	Wells Fargo & Company	412.6	2,270.9
	Others	2,177.1	2,177.1
	Total Common Stocks	**$2,177.1**	**$36,247.7**

***** Represents tax-basis cost which, in aggregate, is $1.8 billion less than GAAP cost.

We made net sales during the year that amounted to about 5% of our beginning portfolio. In these, we significantly reduced a few of our holdings that are below the $750 million threshold for itemization, and we also modestly trimmed a few of the larger positions that we detail. Some of the sales we made during 1997 were aimed at changing our bond-stock ratio moderately in response to the relative values that we saw in each market, a realignment we have continued in 1998.

Our reported positions, we should add, sometimes reflect the investment decisions of GEICO's Lou Simpson. Lou independently runs an equity portfolio of nearly $2 billion that may at times overlap the portfolio that I manage, and occasionally he makes moves that differ from mine.

Though we don't attempt to predict the movements of the stock market, we do try, in a very rough way, to value it. At the annual meeting last year, with the Dow at 7,071 and long-term Treasury yields at 6.89%, Charlie and I stated that we did not consider the market overvalued *if* 1) interest rates remained where they were or fell, and 2) American business continued to earn the remarkable returns on equity that it had recently recorded. So far, interest rates have fallen -- that's one requisite satisfied -- and returns on equity still remain exceptionally high. If they stay there -- and if interest rates hold near recent levels -- there is no reason to think of stocks as generally overvalued. On the other hand, returns on equity are not a sure thing to remain at, or even near, their present levels.

In the summer of 1979, when equities looked cheap to me, I wrote a *Forbes* article entitled "You pay a very high price in the stock market for a cheery consensus." At that time skepticism and disappointment prevailed, and my point was that investors should be glad of the fact, since pessimism drives down prices to truly attractive levels. Now, however, we have a very cheery consensus. That does not necessarily mean this is the wrong time to buy stocks: Corporate America is now earning far more money than it was just a few years ago, and in the presence of lower interest rates, every dollar of earnings becomes more valuable. Today's price levels, though, have materially eroded the "margin of safety" that Ben Graham identified as the cornerstone of intelligent investing.

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In last year's annual report, I discussed Coca-Cola, our largest holding. Coke continues to increase its market dominance throughout the world, but, tragically, it has lost the leader responsible for its outstanding performance. Roberto Goizueta, Coke's CEO since 1981, died in October. After his death, I read every one of the more than 100 letters and notes he had written me during the past nine years. Those messages could well serve as a guidebook for success in both business and life.

In these communications, Roberto displayed a brilliant and clear strategic vision that was always aimed at advancing the well-being of Coke shareholders. Roberto knew where he was leading the company, how he was going to get there, and why this path made the most sense for his owners -- and, equally important, he had a burning sense of urgency about reaching his goals.

An excerpt from one handwritten note he sent to me illustrates his mind-set: "By the way, I have told Olguita that what she refers to as an obsession, you call focus. I like your term much better." Like all who knew Roberto, I will miss him enormously.

Consistent with his concern for the company, Roberto prepared for a seamless succession long before it seemed necessary. Roberto knew that Doug Ivester was the right man to take over and worked with Doug over the years to ensure that no momentum would be lost when the time for change arrived. The Coca-Cola Company will be the same steamroller under Doug as it was under Roberto.

Convertible Preferreds

Two years ago, I gave you an update on the five convertible preferreds that we purchased through private placements in the 1987-1991 period. At the time of that earlier report, we had realized a small profit on the sale of our Champion International holding. The four remaining preferred commitments included two, Gillette and First Empire State, that we had converted into common stock in which we had large unrealized gains, and two others, USAir and Salomon, that had been trouble-prone. At times, the last two had me mouthing a line from a country song: "How can I miss you if you won't go away?"

Since I delivered that report, all four holdings have grown significantly in value. The common stocks of both Gillette and First Empire have risen substantially, in line with the companies' excellent performance. At yearend, the $600 million we put into Gillette in 1989 had appreciated to $4.8 billion, and the $40 million we committed to First Empire in 1991 had risen to $236 million.

Our two laggards, meanwhile, have come to life in a very major way. In a transaction that finally rewarded its long-suffering shareholders, Salomon recently merged into Travelers Group. All of Berkshire's shareholders -- including me, very personally -- owe a huge debt to Deryck Maughan and Bob Denham for, first, playing key roles in saving Salomon from extinction following its 1991 scandal and, second, restoring the vitality of the company to a level that made it an attractive acquisition for Travelers. I have often said that I wish to work with executives that I like, trust and admire. No two fit that description better than Deryck and Bob.

Berkshire's final results from its Salomon investment won't be tallied for some time, but it is

safe to say that they will be far better than I anticipated two years ago. Looking back, I think of my Salomon experience as having been both fascinating and instructional, though for a time in 1991-92 I felt like the drama critic who wrote: "I would have enjoyed the play except that I had an unfortunate seat. It faced the stage."

The resuscitation of US Airways borders on the miraculous. Those who have watched my moves in this investment know that I have compiled a record that is unblemished by success. I was wrong in originally purchasing the stock, and I was wrong later, in repeatedly trying to unload our holdings at 50 cents on the dollar.

Two changes at the company coincided with its remarkable rebound: 1) Charlie and I left the board of directors and 2) Stephen Wolf became CEO. Fortunately for our egos, the second event was the key: Stephen Wolf's accomplishments at the airline have been phenomenal.

There still is much to do at US Airways, but survival is no longer an issue. Consequently, the company made up the dividend arrearages on our preferred during 1997, adding extra payments to compensate us for the delay we suffered. The company's common stock, furthermore, has risen from a low of $4 to a recent high of $73.

Our preferred has been called for redemption on March 15. But the rise in the company's stock has given our conversion rights, which we thought worthless not long ago, great value. It is now almost certain that our US Airways shares will produce a decent profit -- that is, if my cost for Maalox is excluded -- and the gain could even prove indecent.

Next time I make a big, dumb decision, Berkshire shareholders will know what to do: *Phone Mr. Wolf*.

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In addition to the convertible preferreds, we purchased one other private placement in 1991, $300 million of American Express Percs. This security was essentially a common stock that featured a tradeoff in its first three years: We received extra dividend payments during that period, but we were also capped in the price appreciation we could realize. Despite the cap, this holding has proved extraordinarily profitable thanks to a move by your Chairman that combined luck and skill -- 110% luck, the balance skill.

Our Percs were due to convert into common stock in August 1994, and in the month before I was mulling whether to sell upon conversion. One reason to hold was Amex's outstanding CEO, Harvey Golub, who seemed likely to maximize whatever potential the company had (a supposition that has since been proved -- in spades). But the size of that potential was in question: Amex faced relentless competition from a multitude of card-issuers, led by Visa. Weighing the arguments, I leaned toward sale.

Here's where I got lucky. During that month of decision, I played golf at Prouts Neck, Maine with Frank Olson, CEO of Hertz. Frank is a brilliant manager, with intimate knowledge of the card business. So from the first tee on I was quizzing him about the industry. By the time we reached the second green, Frank had convinced me that Amex's corporate card was a terrific franchise, and I had decided not to sell. On the back nine I turned buyer, and in a few months Berkshire owned 10% of the company.

We now have a $3 billion gain in our Amex shares, and I naturally feel very grateful to Frank. But George Gillespie, our mutual friend, says that I am confused about where my gratitude should go. After all, he points out, it was he who arranged the game and assigned me to Frank's foursome.

Quarterly Reports to Shareholders

In last year's letter, I described the growing costs we incur in mailing quarterly reports and the problems we have encountered in delivering them to "street-name" shareholders. I asked for your opinion about the desirability of our continuing to print reports, given that we now publish our quarterly and annual communications on the Internet, at our site, www.berkshirehathaway.com. Relatively few shareholders responded, but it is clear that at least a small number who want the quarterly information have no interest in getting it off the Internet. Being a life-long sufferer from technophobia, I can empathize with this group.

The cost of publishing quarterlies, however, continues to balloon, and we have therefore decided to send printed versions only to shareholders who request them. If you wish the quarterlies, please complete the reply card that is bound into this report. In the meantime, be assured that *all* shareholders will continue to receive the *annual* report in printed form.

Those of you who enjoy the computer should check out our home page. It contains a large amount of current information about Berkshire and also all of our annual letters since 1977. In

addition, our website includes links to the home pages of many Berkshire subsidiaries. On these sites you can learn more about our subsidiaries' products and -- yes -- even place orders for them.

We are required to file our quarterly information with the SEC no later than 45 days after the end of each quarter. One of our goals in posting communications on the Internet is to make this material information -- in full detail and in a form unfiltered by the media -- simultaneously available to all interested parties at a time when markets are closed. Accordingly, we plan to send our 1998 quarterly information to the SEC on three Fridays, May 15, August 14, and November 13, and on those nights to post the same information on the Internet. This procedure will put all of our shareholders, whether they be direct or "street-name," on an equal footing. Similarly, we will post our 1998 annual report on the Internet on Saturday, March 13, 1999, and mail it at about the same time.

Shareholder-Designated Contributions

About 97.7% of all eligible shares participated in Berkshire's 1997 shareholder-designated contributions program. Contributions made were $15.4 million, and 3,830 charities were recipients. A full description of the program appears on pages 52 - 53.

Cumulatively, over the 17 years of the program, Berkshire has made contributions of $113.1 million pursuant to the instructions of our shareholders. The rest of Berkshire's giving is done by our subsidiaries, which stick to the philanthropic patterns that prevailed before they were acquired (except that their former owners themselves take on the responsibility for their personal charities). In aggregate, our subsidiaries made contributions of $8.1 million in 1997, including in-kind donations of $4.4 million.

Every year a few shareholders miss out on our contributions program because they don't have their shares registered in their own names on the prescribed record date or because they fail to get the designation form back to us within the 60-day period allowed. Charlie and I regret this. But if replies are received late, we have to reject them because we can't make exceptions for some shareholders while refusing to make them for others.

To participate in future programs, you must own Class A shares that are registered in the name of the actual owner, not the nominee name of a broker, bank or depository. Shares not so

registered on August 31, 1998, will be ineligible for the 1998 program. When you get the contributions form from us, return it promptly so that it does not get put aside or forgotten.

The Annual Meeting

Woodstock Weekend at Berkshire will be May 2-4 this year. The finale will be the annual meeting, which will begin at 9:30 a.m. on Monday, May 4. Last year we met at Aksarben Coliseum, and both our staff and the crowd were delighted with the venue. There was only one crisis: The night before the meeting, I lost my voice, thereby fulfilling Charlie's wildest fantasy. He was crushed when I showed up the next morning with my speech restored.

Last year about 7,500 attended the meeting. They represented all 50 states, as well as 16 countries, including Australia, Brazil, Israel, Saudi Arabia, Singapore and Greece. Taking into account several overflow rooms, we believe that we can handle more than 11,000 people, and that should put us in good shape this year even though our shareholder count has risen significantly. Parking is ample at Aksarben; acoustics are excellent; and seats are comfortable.

The doors will open at 7 a.m. on Monday and at 8:30 we will again feature the world premiere of a movie epic produced by Marc Hamburg, our CFO. The meeting will last until 3:30, with a short break at noon. This interval will permit the exhausted to leave unnoticed and allow time for the hardcore to lunch at Aksarben's concession stands. Charlie and I enjoy questions from owners, so bring up whatever is on your mind.

Berkshire products will again be *for sale* in the halls outside the meeting room. Last year -- not that I pay attention to this sort of thing -- we again set sales records, moving 2,500 pounds of See's candy, 1,350 pairs of Dexter shoes, $75,000 of World Books and related publications, and 888 sets of Quikut knives. We also took orders for a new line of apparel, featuring our Berkshire logo, and sold about 1,000 polo, sweat, and T-shirts. At this year's meeting, we will unveil our 1998 collection.

GEICO will again be on hand with a booth staffed by star associates from its regional offices. Find out whether you can save money by shifting your auto insurance to GEICO. About 40% of those who check us out learn that savings are possible. The proportion is not 100% because insurers differ in their underwriting judgments, with some favoring drivers who live in certain geographical areas and work at certain occupations more than we do. We believe,

however, that we more frequently offer the low price than does any other national carrier selling insurance to all comers. In the GEICO informational material that accompanies this report, you will see that in 38 states we now offer a special discount of as much as 8% to our shareholders. We also have applications pending that would extend this discount to drivers in other states.

An attachment to the proxy material that is enclosed with this report explains how you can obtain the card you will need for admission to the meeting. We expect a large crowd, so get plane, hotel and car reservations promptly. American Express (800-799-6634) will be happy to help you with arrangements. As usual, we will have buses at the larger hotels that will take you to and from the meeting and also deliver you to Nebraska Furniture Mart, Borsheim's and the airport after its conclusion. You are likely, however, to find a car handy.

NFM's main store, located on a 75-acre site about a mile from Aksarben, is open from 10 a.m. to 9 p.m. on weekdays, 10 a.m. to 6 p.m. on Saturdays, and noon to 6 p.m. on Sundays. During the period from May 1 to May 5, shareholders who present NFM with the coupon that will accompany their meeting ticket will be entitled to a discount that is otherwise restricted to its employees.

Borsheim's normally is closed on Sunday but will be open for shareholders from 10 a.m. to 6 p.m. on May 3rd. Last year was our second-best shareholder's day, exceeded only by 1996's. I regard this slippage as an anomaly and hope that you will prove me right this year. Charlie will be available for autographs. He smiles, however, only if the paper he signs is a Borsheim's sales ticket. Shareholders who wish to visit on Saturday (10 a.m. to 5:30 p.m.) or on Monday (10 a.m.-8 p.m.) should be sure to identify themselves as Berkshire owners so that Susan Jacques, Borsheim's CEO, can make you especially welcome. Susan, I should add, had a fabulous year in 1997. As a manager, she is everything that an owner hopes for.

On Sunday afternoon we will also have a special treat for bridge players in the mall outside of Borsheim's. There, Bob Hamman -- a legend of the game for more than three decades -- will take on all comers. Join in and dazzle Bob with your skill.

My favorite steakhouse, Gorat's, opens one Sunday a year -- for Berkshire shareholders on the night before the annual meeting. Last year the restaurant started serving at 4 p.m. and finished about 1:30 a.m, an endurance trial that was the result of taking 1,100 reservations vs. a seating capacity of 235. If you make a reservation and then can't attend, be sure to let Gorat's know promptly, since it goes to great effort to help us and we want to reciprocate. You can make

reservations beginning on April 1st (*but not before*) by calling 402-551-3733. Last year I had to leave Gorat's a little early because of my voice problem, but this year I plan to leisurely savor every bite of my rare T-bone and double order of hash browns.

After this warmup, Charlie and I will head for the Dairy Queen on 114th, just south of Dodge. There are 12 great Dairy Queens in metropolitan Omaha, but the 114th Street location is the best suited to handle the large crowd that we expect. South of the property, there are hundreds of parking spaces on both sides of the street. Also, this Dairy Queen will extend its Sunday hours to 11 p.m. in order to accommodate our shareholders.

The 114th Street operation is now run by two sisters, Coni Birge and Deb Novotny, whose grandfather put up the building in 1962 at what was then the outer edge of the city. Their mother, Jan Noble, took over in 1972, and Coni and Deb continue as third generation owner-managers. Jan, Coni and Deb will all be on hand Sunday evening, and I hope that you meet them. Enjoy one of their hamburgers if you can't get into Gorat's. And then, around eight o'clock, join me in having a Dusty Sundae for dessert. This item is a personal specialty -- the Dairy Queen will furnish you a copy of my recipe -- and will be offered only on Shareholder Sunday.

The Omaha Royals and Albuquerque Dukes will play baseball on Saturday evening, May 2nd, at Rosenblatt Stadium. As usual, your Chairman, shamelessly exploiting his 25% ownership of the team, will take the mound. But this year you will see something new.

In past games, much to the bafflement of the crowd, I have shaken off the catcher's first call. He has consistently asked for my sweeping curve, and I have just as regularly resisted. Instead, I have served up a pathetic fast ball, which on my best day was clocked at eight miles per hour (with a following wind).

There's a story behind my unwillingness to throw the curve ball. As some of you may know, Candy Cummings invented the curve in 1867 and used it to great effect in the National Association, where he never won less than 28 games in a season. The pitch, however, drew immediate criticism from the very highest of authorities, namely Charles Elliott, then president of Harvard University, who declared, "I have heard that this year we at Harvard won the baseball championship because we have a pitcher who has a fine curve ball. I am further instructed that the purpose of the curve ball is to deliberately deceive the batter. Harvard is not in the business of teaching deception." (I'm not making this up.)

Ever since I learned of President Elliott's moral teachings on this subject, I have scrupulously refrained from using my curve, however devastating its effect might have been on hapless batters. Now, however, it is time for my karma to run over Elliott's dogma and for me to quit holding back. Visit the park on Saturday night and marvel at the majestic arc of my breaking ball.

Our proxy statement includes information about obtaining tickets to the game. We will also provide an information packet describing the local hot spots, including, of course, those 12 Dairy Queens.

Come to Omaha -- the cradle of capitalism -- in May and enjoy
yourself

Morning Session - 1998 Meeting

1. Welcome

WARREN BUFFETT: Morning. Morning. I'm Warren Buffett, chairman of Berkshire, and — this is my partner. This hyperactive fellow over here is Charlie Munger. (Laughter)

And we'll do this as we've done in the past, following the Saddam Hussein school of management, we're going to go through the business meeting in a hurry, and then we're going to do questions.

And we'll do those until 3:30, with a break at noon, when we'll take off for 30 minutes or so while you can grab lunch. And those of you — there's — we're operating in an overflow room as well — so those of you who are in the overflow room now can join the main floor after the noon break, because we'll have plenty of room then.

We'll go until 3:30. We'll try to get to all the questions we can. We've got 11 zones, ten of them in this room, and we'll just make our way around them. I've got a little map here, which I'll get oriented on here in a second. And let's see.

And I think we'll get through the business meeting now. Incidentally, I don't see that movie before it's shown, but that was one of our directors singing at that final session there. (Applause)

We keep costs down at Berkshire. (Laughter)

2. Board of directors introduced

WARREN BUFFETT: OK, the meeting will now come to order. I'm Warren Buffett, chairman of the board of directors of the company and I welcome you to this 1998 annual meeting of shareholders.

I will first introduce the Berkshire Hathaway directors that are present in addition to myself.

So we have — and I can't see very well with the lights here, but if you'll stand as I name you.

Susan T. Buffett, the vocalist. (Applause)

Howard G. Buffett, the non-vocalist. (Applause)

Malcolm G. Chace. (Applause)

Charlie, you've met. And Ron Olson. (Applause)

And Walter Scott Junior. (Applause)

Also with us today are partners in the firm of Deloitte and Touche, our auditors. They are available to respond to appropriate questions you might have concerning their firm's audit of the accounts of Berkshire.

Mr. Forrest Krutter is secretary of Berkshire. He will make a written record of the proceedings.

Miss Becki Amick has been appointed inspect of elections at this meeting. She will certify to the count of votes cast in the election for directors.

The named proxy owners for this meeting are Walter Scott Junior and Marc D. Hamburg. Proxy cards have been returned through last Friday, representing 1,039,276 Class A Berkshire shares, and 1,080,509 Class B Berkshire shares to be voted by the proxy holders as indicated on the cards.

The number of shares represents a quorum and we will therefore directly proceed with the meeting.

We will conduct the business of the meeting and then adjourn the formal meeting. After that, we will entertain questions that you might have.

3. Minutes and shares outstanding

WARREN BUFFETT: First order of business will be a reading of the minutes of the last meeting of shareholders. I recognize Mr. Walter Scott Jr., who will place a motion before the meeting.

WALTER SCOTT JR.: I move the minutes — the reading — reading of the minutes of the last stockholders meeting be dispensed with.

WARREN BUFFETT: Do I hear a second? (Voices)

A lot of seconds. The motion has been moved and seconded. Are there any comments or questions? We will vote on this motion by voice vote. All those in favor say aye.

VOICES: Aye.

WARREN BUFFETT: Opposed? Motion's carried.

Does the secretary — (laughter) — have a report of the number of Berkshire shares outstanding, entitled to vote, and represented at the meeting?

FORREST KRUTTER: Yes, I do. As indicated in the proxy statement that accompanied the notice of this meeting that was sent by first-class mail to all shareholders of record on March 6, 1998, the record date for this meeting, there were 1,199,680 shares of Class A Berkshire Hathaway

common stock outstanding, with each share entitled to one vote on motions considered at this meeting.

And 1,245,081 shares of Class B Berkshire Hathaway common stock outstanding, with each share entitled to 1/200th of one vote on motions considered at the meeting.

Of that number, 1,039,276 Class A shares and 1,080,509 Class B shares are represented at this meeting by proxies returned through last Friday.

WARREN BUFFETT: Thank you, Forrest.

If a shareholder is present who wishes to withdraw a proxy previously sent in and vote in person on the election of directors, he or she may do so. Also, if any shareholder that is present has not turned in a proxy and desires a ballot in order to vote in person, you may do so.

If you wish to do this, please identify yourself to meeting officials in the aisles who will furnish a ballot to you. Those persons desiring ballots, please identify themselves so that we may distribute them.

4. Election of directors

WARREN BUFFETT: The one item of business at this meeting is to elect directors. I now recognize Mr. Walter Scott Junior to place a motion before the meeting with respect to election of directors.

WALTER SCOTT JUNIOR: I move that Warren E. Buffett, Susan T. Buffett, Howard G. Buffett, Malcolm G. Chace, Charles T. Munger, Ronald L. Olson, and Walter Scott Junior, be elected as directors.

WARREN BUFFETT: Is there a second? It's been moved and seconded that Warren E. Buffett, Susan T. Buffett, Howard G. Buffett, Malcolm G. Chace, Charles T. Munger, Ronald L. Olson, and Walter Scott Junior be elected as directors.

Are there any other nominations? Is there any discussion? Nominations are ready to be acted upon.

If there are any shareholders voting in person, they should now mark their ballots on the election of directors and allow the ballots to be delivered to the inspector of elections.

Would the proxy holders please also submit to the inspector of elections a ballot on the election of directors, voting the proxies in accordance with the instructions they have received.

Miss Amick, when you are ready you may give your report.

BECKI AMICK: My report is ready. The ballots of the proxy holder, in response to proxies that were received through last Friday, cast not less than 1,039,298 votes for each nominee. That number far exceeds the majority of the number of the total votes related to all Class A and Class B shares outstanding.

The certification required by Delaware law of the precise count of the votes, including the additional votes to be cast by the proxy holders in response to proxies delivered at this meeting, as well as those cast in person at this meeting, if any, will be given to the secretary to be placed with the minutes of this meeting.

WARREN BUFFETT: Thank you, Miss Amick.

Warren E. Buffett, Susan T. Buffett, Howard G. Buffett, Malcolm G. Chace, Charles T. Munger, Ronald L. Olson, and Walter Scott Junior have been elected as directors.

After adjournment of the business meeting, I will respond to questions that you may have that relate to the businesses of Berkshire that do not call for any action at this meeting.

Does anyone have any further business to come before this meeting before we adjourn?

5. Adjournment of formal business meeting

WARREN BUFFETT: If not, I recognize Mr. Walter Scott Junior to place a motion before the meeting.

WALTER SCOTT JUNIOR: I move this meeting be adjourned.

WARREN BUFFETT: Second? (Laughter)

Motion to adjourn has been made and seconded. We will vote by voice. Is there any discussion? If not, all in favor say aye?

VOICES: Aye.

WARREN BUFFETT: All opposed say I'm leaving. This meeting is adjourned. (Laughter and applause)

Charlie and I may not get paid much, but we work fast on an hourly basis. (Laughter)

6. Q&A session begins

WARREN BUFFETT: Now, we're going to do this by zones, and I think you can see who is manning each — yeah, I see we've got a number out there already.

And please ask just one question.

The only thing that I can think of that we won't discuss is what we're buying or selling or may be buying or selling, but we'll be glad to talk about anything that's on your mind. So let's go right to zone 1 and start in.

7. Price/earnings explanation

AUDIENCE MEMBER: Thanks for the beautiful — beautiful weekend in Omaha. I'm Mike Asale (PH) from New York City, with a question for Warren and Charlie about what makes a company's price-earnings ratio move up relative to other companies in its industry.

How can we, as investors, find companies, and even industries, that will grow their relative price-earnings ratios as well as their earnings?

And thank you for the wonderful weekend and for sharing your brilliance with the shareholders.

WARREN BUFFETT: Oh, thank you.

AUDIENCE MEMBER: Thank you. (Applause)

WARREN BUFFETT: You know, it's very simple, the price-earnings ratio — relative price-earnings ratios — move up because people expect either the industry or the company's prospects to be better relative to all other securities than they have been — than their proceeding view. And that can turn out to be justified or otherwise.

Absolute price-earnings ratios move up in respect to the earning power — or the prospective earning power of — that is viewed by the investing public of future returns on equity, and also in response to changes in interest rates.

And in the recent — well really, ever since 1982, but accentuated in recent years, you've had decreasing interest rates pushing up stocks, in aggregate.

And you've had an increase in corporate profits. Return on equity of American businesses improved dramatically recently. And that also — and people are starting to believe it, so that has pushed up absolute price-earnings ratios.

And then within that universe of all stocks, when people get more enthusiastic about a specific business or a specific industry, they will push up the relative P/E ratio for that stock or industry.

Charlie, you got anything?

8. No "degree of difficulty" bonus

CHARLIE MUNGER: Yes, I think he also asked, how do you forecast these improvements in price-earnings ratios.

WARREN BUFFETT: That's your — that's your part of the question. (Laughter)

CHARLIE MUNGER: Around here I would say that if our predictions have been a little better than other people's, it's because we tried to make fewer of them. (Laughter and applause)

WARREN BUFFETT: We also try not to do anything difficult, which ties in with that.

We really do feel that you get paid just as well — you know, this is not like Olympic diving. In Olympic diving, you know, they have a degree of difficulty factor. And if you can do some very difficult dive, the payoff is greater if you do it well than if you do some very simple dive.

That's not true in investments. You get paid just as well for the most simple dive, as long as you execute it all right. And there's no reason to try those three-and-a-halfs when you get paid just as well for just diving off the side of the pool and going in cleanly. (Laughter)

So we look for one-foot bars to step over rather than seven-foot or eight-foot bars to try and set some Olympic record by jumping over. And it's very nice, because you get paid just as well for the one-foot bars.

9. Efficient market hypothesis "contaminates" business schools

WARREN BUFFETT: OK, zone 2.

AUDIENCE MEMBER: Good morning. My name is Joe Lacey (PH). I'm from Austin, Texas.

In this era when the financial departments of the institutions of higher learning are referring to you as an anomaly, and they preach the efficient markets hypothesis, saying that you can't outperform the market, where does one go to find a mentor like you found in Ben Graham? Someone you can ask questions to regarding value investing.

WARREN BUFFETT: My understanding is that the University of Florida has instituted a couple of courses that, actually, Mason Hawkins gave them a significant amount of money to finance. And I believe they're teaching something other than efficient markets there.

There's a very good course at Columbia I know that gets a lot of visiting teachers to come in. I go there and teach occasionally, but a number of practitioners do.

So there — I think the efficient market theory is less holy writ now than it was 15 or 20 years ago in universities, but it's — there's a lot of it taught, but I think you can find more diversity in what is being offered now than ten or 20 years ago. And I'd recommend, you know, looking into those two schools.

You know, it's really quite useful. If you had a merchant shipping business, if all of your competitors believe the world is flat, you know, that is a huge edge, because they will not take on any cargo to go to places that are beyond where they think they will fall off. And so we should be encouraging the teaching of efficient market theories in universities. (Laughter)

It amazes me. But, you know, I think one time that — was it Keynes that said that most economists are most economical about ideas? That they make the ones they learned in graduate school last a lifetime. (Laughter)

And what happens is that you spend years getting your Ph.D. in finance and you learn theories with a lot of mathematics in them that the average layman can't do.

And you become sort of a high priest. And you get an enormous amount of yourself and ego, and even professional security, invested in those ideas. And it gets very hard to back off after a given point. And I think that to some extent has contaminated the teaching of investing in the universities.

Charlie?

CHARLIE MUNGER: Well, I would argue that the contamination was massive. (Laughter)

But it's waning.

WARREN BUFFETT: Yeah, it is waning.

CHARLIE MUNGER: It's waning. The good ideas eventually triumph.

WARREN BUFFETT: Yeah. The word "anomaly" I've always found interesting on that, because, you know, after a while — I mean Columbus was an anomaly, I suppose, for a while. But what it means is something that the academicians could not explain, and rather than re-examine their theories, they simply discarded any evidence of that sort as anomalous.

And I think when you find information that contradicts previously cherished beliefs, that you've got a special obligation to look at it and look at it quickly.

I think Charlie told me that one of the things Darwin did was that whenever he found anything that contradicted some previous belief, he knew that he had to write it down almost immediately because he felt that the human mind was conditioned, so conditioned to reject contradictory evidence, that unless he got it down in black and white very quickly his mind would simply push it out of existence.

Charlie knows more about Darwin than I do. Maybe he can explain that.

CHARLIE MUNGER: Well, I don't know about Darwin, but I did find it amusing. One of these extreme efficient market theorists explained Warren for many, many years as an anomaly of luck. And he got the six sigmas, six standard deviations of luck. And then people started laughing at him because six sigmas of luck is a lot. So he changed his theory. Now Warren has six or seven sigmas of skill. (Laughter)

WARREN BUFFETT: No.

CHARLIE MUNGER: So you see —

WARREN BUFFETT: I'd rather have the six sigmas of luck, actually. (Laughter)

CHARLIE MUNGER: The one thing he couldn't bear to leave was his six sigmas. (Laughter)

10. "Time is the enemy of the poor business"

WARREN BUFFETT: Let's try zone 3.

AUDIENCE MEMBER: My name is Warren Hayes (PH). I'm from Chicago, Illinois.

I understand from various publications, like Outstanding Investor Digest, that many of the best value investors are buying high-quality, multi-national Japanese companies that are trading below net-net working capital value.

Do you agree that these values exist in Japan? And would you consider a purchase of some of them?

WARREN BUFFETT: Well, Henry Emerson, who publishes the Outstanding Investor's Digest is here, so I will give a tout on it.

I read the Outstanding Investor's Digest, OID, and it's a very good publication. And I have read some of the commentary about Japanese securities.

We've looked at securities in all major markets, and we certainly looked at them in Japan, particularly in recent years when the Nikkei has so underperformed the S&P here.

We're quite a bit less enthused about those stocks as being any kind of obvious bargains than the people that you read about in OID.

The returns on equity in most areas of Japanese business, returns on equity are very low. And it's extremely difficult to get rich by owning — by being the owner of a business that earns a low return on equity. You know, we always look at what a business does in terms of what it earns on capital.

We want to be in good businesses. Where you really want to be is in businesses that are going to be good businesses and better businesses ten years from now. And we want to buy them at a reasonable price.

But many years ago we gave up what I've labeled the "cigar butt" approach to investing, which is where you try and find a really kind of pathetic company, but it sells so cheap that you think there's one good free puff left in it.

And — (laughter) — we used to pick up a lot of soggy cigar butts, you know. I mean, I had a portfolio full of them.

And there were free puffs in them. I mean, I made money out of that. But A, it doesn't work with big money anyway, and B, we don't find many cigar butts around that we would be attracted to.

But those are the companies that had low returns on equity. And if you have a business that's earning 5 or 6 percent on equity and you hold it for a long time, you are not going to do well in investing. Even if you buy it cheap to start with.

Time is the enemy of the poor business, and it's the friend of the great business. I mean if you have a business that's earning 20 or 25 percent on equity, and it does that for a long time, time is your friend.

But time is your enemy if you have your money in a low-return business. And you may be lucky enough to pick the exact moment when it gets taken over by someone else.

But we like to think when we buy a stock we're going to own it for a very long time, and therefore we have to stay away from businesses that have low returns on equity.

Charlie?

CHARLIE MUNGER: Yeah, it's not that much fun to buy a business where you really hope this sucker liquidates before it goes broke. (Laughter)

WARREN BUFFETT: We've been in a few of those, too.

CHARLIE MUNGER: Right. (Laughter)

WARREN BUFFETT: Yeah, Charlie and I, we — or at least I have, I've owned stock in an anthracite company. There are probably people in this room that don't know what anthracite is. Three railway companies. Windmill manufacturers. What other gems have we had, Charlie?

CHARLIE MUNGER: Textiles. (Laughter)

WARREN BUFFETT: Yeah, textiles. Don't even think. (Laughter)

Yeah, Berkshire was a mistake, believe it or not. I mean we went into Berkshire because it was cheap statistically just as a general investment back in the early '60s, and it was a company that in the previous ten years had earned less than nothing. I mean it had a significant net loss over the previous ten years.

It was selling well below working capital, so it was a cigar butt. And it was — I mean we could have done the things we've done subsequently from a neutral base rather than a negative base, and actually it would have worked out better, but it's been a lot of fun.

11. Munger wants "a good idea we can understand"

WARREN BUFFETT: Number four.

AUDIENCE MEMBER: Hello. My name is Martin Weigand from Bethesda, Maryland. Again, I want to thank you for your letters and principles. They're a great help for small business people running their business.

My question is, last year you said you had filters in your mind to help you quickly analyze businesses.

How do your filters take into account the very fast changes of technology and the way that businesses communicate with their customers, take orders, things like that?

WARREN BUFFETT: Well, we do have filters, and sometimes those filters are very irritating to people who check in with us about businesses, because we really can say in ten seconds or so "no" to 90 percent-plus of all the things that come in, simply because we have these filters. We have some filters in regard to people, too.

But the question of technology is very simple. That doesn't make it through our filter. I mean, so if something comes in where there's a technological component that's of significance, or where we think the future technology could hurt the business as it presently exists, we look at, you know, we look at that as something to worry about. We will — it won't make it through the filter.

We want things that we can understand, which filters out a lot of things. (Laughter)

And we want them to be good businesses, and we want the people to be people we're very comfortable with. That means ability and integrity.

And we can do that very fast. We've heard a lot of stories in our lives, and it's amazing how they — you can become quite efficient in, probably, getting 95 percent of the ideas through in a very short period of time that should get through.

Charlie?

CHARLIE MUNGER: Yeah, we have to have an idea that is A, a good idea, and B, a good idea that we can understand. It's just that simple. And so those filters are filters against consequences from our own lack of talent. (Laughter)

WARREN BUFFETT: Filters haven't changed much over the years, either. (Laughter)

12. "A lot of different talents" within Berkshire

WARREN BUFFETT: OK, area five.

AUDIENCE MEMBER: Hi. I'm Allan Maxwell. I live in the wonderful tropical island of O-maha. (Laughter)

WARREN BUFFETT: That's right up there with Aksarben. That's Nebraska spelled backwards. (Laughter)

AUDIENCE MEMBER: Everybody in this room's got to be wondering the same question. Who, in your opinion, both of you, is the next Warren Buffett?

WARREN BUFFETT: Charlie? Who's the next Charlie Munger? Well, let's try that first. That's a more difficult question. (Laughter)

CHARLIE MUNGER: There's not much demand. (Laughter)

I don't think there's only one way to succeed in life, and our successors, in due time, may be different in many ways. And they may do better.

WARREN BUFFETT: Incidentally, we have a number of people in the company, some of whom are in this room today, and the ones you saw on that screen, who are leagues ahead of Charlie and me in various kinds of abilities.

I mean a lot of different talents. We've got a fellow in this room today who's the best bridge player, probably, in the world. And Charlie and I could work night and day, and if he spent ten minutes a week working on it, he'd play better bridge than we would.

And there are all kinds of intellectual endeavors that, for some reason or another, one person's a little bit better wired for than someone else.

And we have people running our businesses that if Charlie and I were put in charge of those businesses, we couldn't do remotely as well as they do.

So there's a lot of different talents. The two that we're responsible for is, we have to be able to keep able people, who are already rich, motivated to keep working at things where they don't need to do it for financial reasons. I mean it's that simple.

And that's a problem any of you could think about, and you'd probably be quite good at it if you gave it a little thought, because you'd figure out what would cause you to work if you were already rich and didn't need the job. Why would you jump out of bed and be excited about going to work that day? And then we try to apply that to the people who work with us.

Secondly, we have to allocate capital. And these days we have to allocate a lot more capital than we had to allocate a decade ago.

That job is very tough at present. Sometimes it's very easy. And it will be easy at times in the future and it'll be difficult at times in the future. But there are other people that can allocate capital, and we have them in the company.

Charlie, you have any —?

CHARLIE MUNGER: No.

13. One of the few reasons to sell a stock

WARREN BUFFETT: OK. Number 6.

AUDIENCE MEMBER: Good morning. My name is Jad Khoury (PH). I'm from Gaithersburg, Maryland. I just want to thank you for sharing your wisdom.

And my question is, what criteria do you use to sell stock? I kind of understand how you buy it, but I'm not sure how you sell.

WARREN BUFFETT: Yeah. Well, the best thing to do is buy a stock that you don't ever want to sell. I mean — and that's what we're trying to do.

And that's true when we buy an entire business. I mean, we bought all of GEICO or we bought all of See's Candy or The Buffalo News. We're not buying those to resell.

I mean, what we're trying to do is buy a business that we will be happy with if we own it the rest of our lives, and we expect to with those.

It's the same principle applies to marketable securities. You get extra options with marketable securities. You can add to holdings. Obviously easier — we can never own more than a hundred percent of a business, but if we own 2 percent of a business and we like it at a given price, we can add and have 4 or 5 percent. So that's an advantage.

Sometimes, if we need money to move to another sector, like we did last year, we will trim some holdings, but that doesn't mean we're negative on those businesses at all. I mean, we think they're wonderful businesses or we wouldn't own them.

And we would sell A, if we needed money for other things.

The GEICO stock that I bought in 1951, I sold in 1952. And it went on to be worth a hundred or more times — before the 1976 problems — 100 or more times what I'd paid. But I didn't have the money to do something else. So you sell if you need money for something else.

You may sell if you believe the valuations between different kinds of markets are somewhat out of whack. And, you know, we have done a little trimming last year in that manner. But that could well be a mistake. I mean the real thing to do with a great business is just hang on for dear life.

Charlie?

CHARLIE MUNGER: Yes, but the sales that do happen, the ideal way is when you found something you like immensely better. Isn't that obvious that's the ideal way to sell?

WARREN BUFFETT: And incidentally, the ideal purchase is to find — is to have something that you already liked be selling at a price where you feel like buying more of it. I mean, we probably should have done more of that in the past in some situations.

But that's the beauty of marketable securities. You really do — if you're in a wonderful business, you do get a chance, periodically, maybe to double up in it, or something of the sort.

If the market — if the stock market were to sell a lot cheaper than it is now, we would probably be buying more of the businesses that we already own. They would certainly be the first ones that we would think about. They're the businesses we like the best.

Charlie?

CHARLIE MUNGER: Nothing more.

14. Make up your own mind

WARREN BUFFETT: OK. Zone 7.

AUDIENCE MEMBER: Good morning, Mr. Buffett, Mr. Munger. My name is Ron Wright (PH) from Iowa City, Iowa.

New companies have always been an interest to me. Is it reasonable to assume an Omaha-based company with only $5 billion in the bank might succeed in telecommunications?

WARREN BUFFETT: Well, I think that a new company with 5 billion in the bank is probably better off than most new companies. (Laughter)

Be like Jennifer Gates, as a newborn. (Laughter)

I think you're probably referring to a company that was created out of one of our local operations that's run by Walter Scott, one of our directors, from the Kiewit Company, Level 3.

I can tell you, it's got very able management. And I'll take your word for it that it's also got 5 billion in the bank, but you'll have to make your own judgment on the stock.

I know Charlie won't comment on that one. (Laughs)

15. Buffett jokes about Nebraska football's Tom Osborne

WARREN BUFFETT: Zone 8.

AUDIENCE MEMBER: Yes, good morning. This is Mo Stintz (PH) from Omaha, Nebraska.

In the past you've often said that the insurance operation is the most important business in Berkshire's portfolio. Is that true? And what are numbers two and three?

I'd also like to ask, is it true that Charlie chose the colors for the cover of this year's annual report?

WARREN BUFFETT: Did Charlie chose them? (Laughs)

He had nothing to do with them. I chose them. (Laughter)

They were a tribute to the Nebraska football team and Tom Osborne, who you saw. (Applause)

Tom, incidentally, has a very low-key style, and Bobby Bowden, a few years ago, was in Lincoln. And he said that on their first date that Nancy had to slap Tom three times. And somebody said, "Was he that fresh?" And she said, "No, I was just checking to be sure he was alive." (Laughter)

Tom had a fairly conservative offense for a time in the past, although it hasn't been so conservative the last few years, but somebody said at that time the most reckless thing he did was to eat some cottage cheese the day after the expiration on the carton by then. (Laughter)

But I — no, I chose the colors. Now what was the question? (Laughter)

What was the question, Charlie? Do you remember?

A memorable question, but give it to us again. (Laughter)

16. Proud not to have a strategic plan

WARREN BUFFETT: Are we back there in zone 8? Oh, the number — yeah, sure.

The question was about the insurance business, which we have said will be, by far, the most important business at Berkshire. We said that many, many years ago, and it's proven to be the case.

It obviously got a big leg up when we purchased all of GEICO. Insurance, as far as the eye can see, will be, by far, the most significant business at Berkshire.

And the question about two and three: in terms of earnings, FlightSafety is the second largest source of earnings. But we don't really think of them that way. I mean we do know our main business is insurance, but we really have a lot of fun out of all of our businesses. And I had a great time out at Borsheims yesterday, or at a Dairy Queen.

So it will be accident, to some extent, over the next ten years, what ends up being the second or third or fourth largest. That'll be determined by opportunity.

We bid on certain businesses — or negotiated on them — that could have been very large businesses if they become part of Berkshire. And that'll happen again in the future.

So we have no predetermined course of action whatsoever at Berkshire. We have no strategic planning department. We don't have any strategic plan.

We react to what we think are opportunities. And if it's a business we can understand, and particularly if it's big, you know, we would love to make it number two.

Charlie?

CHARLIE MUNGER: I also want to say proudly that we have no mission statement.

WARREN BUFFETT: No. (Laughter and applause)

It's hard to think of anything that we do have, as a matter of fact. (Laughter)

Yeah, we have never had — I mean I'm sure you all know this. We've never had a consultant. And we try to keep things pretty simple.

We still have 12 people at headquarters. We have about 40,000 people that now work for Berkshire. And we hope to grow a lot, but we don't hope to grow at headquarters. (Laughter)

17. In "good shape" to handle Y2K problem

WARREN BUFFETT: Number 9.

AUDIENCE MEMBER: Yes, my name is Patty Buffett and I'm from Albuquerque, New Mexico.

WARREN BUFFETT: I like your name. (Laughter)

AUDIENCE MEMBER: Thanks.

In your opinion, what effect will the year 2000 compliant issue have on the U.S. stock market and the global economy?

WARREN BUFFETT: Well, I get different reports on 2000, but the main report I hear — I think, you know, we — you wouldn't want to rely on me on this, but you could rely on our managers. And I think we're in good shape.

It's costing us some money but not huge amounts of money to be prepared for 2000.

With companies in which I'm a director, you know, I hear some reasonably good-sized numbers. Those numbers are in their annual reports and described as to the cost of compliance.

But what I'm told by people that know a lot more than I do, is that they think probably that the weakest link may be in governmental units. They seem to think that in terms of where they stand versus the commercial sector, in terms of reaching where they need to be by 2000, that there's some areas of both national and state and local governments, and foreign government, where they're really behind the curve.

Now, that is not an independent judgment of mine. But somebody said, "You want to be very careful about making a phone call at five seconds before midnight at the millennium because you may get charged for 100 years," you know. (Laughter)

So it'll be interesting.

I don't think it's going to affect Berkshire in any material way, and I certainly have a feeling that the world will get past it very easily. But it is turning — it is expensive for some companies, and it's going to be very expensive for governments.

Charlie?

CHARLIE MUNGER: Yeah, I find it interesting that it is such a problem. You know, it was predictable that the year 2000 would come.

WARREN BUFFETT: Yeah. (Laughter and applause)

Yeah. Yeah, we decided that back in 1985, actually. (Laughter)

We didn't welcome it, understand. That's not Berkshire's style, though. (Laughs)

It is fascinating, isn't it, when you think about it, that a whole bunch of people with 160 IQs that could build up such a problem, but here we are. And — (laughter) — that's why we stick with simple things. (Laughter)

18. Laws needed to check campaign spending "arms race"

WARREN BUFFETT: Number 10.

AUDIENCE MEMBER: My name is Kristin Cham (PH). I'm from Springfield, Illinois. And I'm a proud shareholder of Berkshire Hathaway. (Applause)

WARREN BUFFETT: We're glad to you have you here.

AUDIENCE MEMBER: I've heard a little about your thoughts on trying to control campaign spending. Could you tell us more about your thoughts and efforts on this topic? Thank you.

WARREN BUFFETT: Charlie, did you get all of that?

CHARLIE MUNGER: I think it was campaign spending.

WARREN BUFFETT: Oh, campaign spending. Yeah, I have joined something that Jerry Kohlberg — this is personal. This has nothing to do with Berkshire — that Jerry Kohlberg spearheaded.

And it's taken a position — and probably 30 or so mostly business people — taken a position against soft money, and also taken a position on very fast disclosure of campaign finance money, because I personally think that the arms race, in terms of campaign spending by businesses, you know, has just begun. It doubled in the last election.

But political influence — and I don't mean that by buying a vote, but I mean just in terms of having a (inaudible) in Washington or in other state capitols.

Political influence has been an underpriced product in the past. I mean, the government is enormously important in this country to most companies. It was amazing how cheap — cheaply — it could be — attention could be purchased.

But the price is going up, and there will be an escalation. And I don't think it's easy — if you're the manager of a business and you own 1/10th of 1 percent of it and you're in a business that's heavily affected by government, I don't think it's very easy to tell your board of directors that you're going to take a hands-off approach.

So I think legislation is needed in that arena, and there are over a hundred campaign finance reform bills that have been introduced. Everybody wants to have their name on a bill. They just don't want to have it passed. (Laughter)

And, you know, John McCain's been working hard on it. And it's something I think we have to come to grips with because it's going to be a battle of the wallets for influence.

And, like I say, if I were running some other company, and my competitors were spending money to get the attention of would-be legislators, or actual legislators, it'd be very difficult to take some high and mighty position that I wasn't going to do it myself, and my board and my shareholders might ask me why I was taking that position.

We are lucky, basically, to be in a business that's relatively unaffected by legislation, although we will — we're going to pay a lot of tax this year. I said two years ago that it would only take 2,000 entities in the whole United States — businesses, individuals, any kind of entity — to pay the same amount of taxes as Berkshire, and that would take care of the entire budget.

You'd need no Social Security taxes. You'd need no nothing.

I think we're going to be able to say that again this year. I think that if you multiply our tax by 2,000 you will more than account for the entire federal budget, including Social Security and everything else.

So you might say, "Why aren't you in Washington lobbying for a capital gains rate at corporations that's the same as individuals?" or something, but we basically haven't played that game. We feel very fortunate.

I'll say this. I would rather, in this country, be a huge taxpayer myself than be somebody who needed the other end of it, the government dispensing.

I mean, if anybody here is paying taxes and they want to — (applause)

If you'd like to shift positions with somebody in a veteran's hospital or, you know, that has a couple of children by age 19 and is getting a check from the government, you know, I don't want to shift positions. I'm happy to be paying the taxes.

19. "The secret of life is weak competition"

WARREN BUFFETT: Zone 11, please. I think 11 is probably the remote — yeah. So we're going to hear this from the overflow room. Are we there?

AUDIENCE MEMBER: Yes. Good morning, Mr. Buffett, Mr. Munger. My name is Patrick Rown (PH) from Charlotte, North Carolina.

And I've watched returns on equity for the banking sector in the U.S. go up a good bit over the last few years. And returns on tangible equity for some of the major banks that have led to consolidation have gone up a good bit more. Leads me to wonder whether these returns are sustainable over the near-term or the longer-term, five, 10 years out.

WARREN BUFFETT: Well, that's the $64 question, because the returns on equity — and particularly tangible equity, as the gentleman mentioned — and particularly tangible equity in the banking sector, even — those returns have hit numbers that are unprecedented. And then the question is, if they're unprecedented, are they unsustainable?

Charlie and I would probably think the — we would certainly prefer — we would not base our actions on the premise that they are sustainable. Twenty percent-plus returns on tangible equity — or on book equity — and much higher returns on tangible equity. In the banking field, you have a number of enterprises that on tangible equity are getting up close to the 30 percent range.

Now, can a system where the GDP in real terms is growing, maybe, 3 percent — where in nominal terms this grows 4 to 5 percent — can businesses consistently earn 20 percent on equity?

They certainly can if they retain most of their earnings, because you would have corporate profits rising as a percentage of GDP, to the point that would get ludicrous.

So under those conditions, you'd either have to have huge payouts — either by repurchases of shares or by dividends or by takeovers, actually — that would keep the level of capital reasonably consistent among industry, because you couldn't sustain — let's just say every company retained all of its earnings and they earned 20 percent on equity — you could not have corporate profits growing at 20 percent as a part of the economy year after year.

This has been a better world than we foresaw, in terms of returns, so we've been wrong before. And we're not making a prediction now, but we would not want to buy things on the basis that these returns would be sustained.

We told you last year, if these returns are sustained and interest rates stayed at these levels or fell lower, that stock prices, in aggregate, are justified. And we still believe that.

But those are two big ifs. And a particularly big if, in my view, is the one about returns on equity and on tangible assets. It goes against — it certainly goes against classic economic theory to believe that they can be sustained.

Charlie, how do you feel about it?

CHARLIE MUNGER: Well, I think a lot of the increase in return on equity has been caused by the increasing popularly of Jack Welch's idea that if you can't be a leader in a line of business, get out of it.

And if you have fewer people in the business, why, returns on equity can go up.

Then it's got more and more popular to buy in shares, even at very high prices per share. And if you keep the equity low enough by buying shares back, why, you could make return on equity whatever you want.

It would be that, to some extent, a slow revolution in corporate attitudes.

But Warren is right. You can't have massive accumulations of earnings that are retained and keep earning these rates of return on them.

WARREN BUFFETT: An interesting question is to think about, if you had 500 Jack Welches and they were running the Fortune — they're cloned — and they were running all of the Fortune 500 companies, would returns on equity for American business be higher or lower than they are presently?

I mean if you have 500 sensational competitors, they can all be rational, but that doesn't — and they will be. And they'll be smart and they'll keep trying to do all the right things. But there's a self-neutralizing effect, just like having 500 expert chess players or 500 expert bridge players. You still have a lot of losers if they get together and play in a tournament.

So it's not at all clear that if all American management were dramatically better, leaving out the competition against foreign enterprises, that returns on equity would be a lot better. They might very well drive things down.

That's what, to some extent, can easily happen in securities markets. It's way better to be in securities markets if you have a hundred IQ and everybody else operating has an 80, than if you have 140 and all the rest of them also have 140.

So the secret of life is weak competition, you know. (Laughter)

Somebody said, "How do you beat Bobby Fischer?" You play him in any game except chess, well — (Laughter)

That's how you beat Jack Welch. You play him in any game except business, although he's a very good golfer, I want to — (laughs) — point out.

He shot a 69 a few months ago when I saw him at a very tough course. Jack manages to play 70 or 80 rounds of golf a year, and come in sub-par occasionally, while still doing what he does at

GE. He's a great manager. But 500 Jack Welches, I'm not at all sure would make stocks more valuable in this country.

20. Book recommendations

WARREN BUFFETT: Zone 1.

AUDIENCE MEMBER: I'm Ben Knoll and I'm from Minneapolis. And first, I just wanted to thank you for providing your past annual letters to the shareholders, and Mr. Munger for providing your speech to the graduate students at USC a couple years ago.

Drawn a lot of insights from that, not only in investing but also in my day job as a business manager.

And I'm wondering if you could help me with my summer reading list and provide some additional suggestions for reading in the fields of investing and management, other than the standards of Graham and Fisher and so forth.

WARREN BUFFETT: Charlie?

CHARLIE MUNGER: Yeah. I have recently read a new book twice, which I very seldom do. And that book is "Guns, Germs and Steel" by Jared Diamond. And it's a marvelous book. And the way the guy's mind works would be useful in business. He's got a mind that is always asking why. Why, why, why. And he's very good at coming up with answers.

I would say it's the best work of its kind I have ever read.

WARREN BUFFETT: I read a little easier book — (laughter) — recently.

I'm not even sure of the title. I don't pay much attention to titles when I get into the book, but it's something to the effect of "The Quotable Einstein." I mean it's a lot of his commentary over the years, and it's great reading.

"The Fermat Theorem" was the book that — that isn't an exact title either — but it's the story of the discovery of the answer. That's a very interesting book. One of our shareholders from Sweden gave me a copy of that when I was in New York and I've enjoyed it.

21. Higher rates would hurt Freddie and Fannie

WARREN BUFFETT: Zone 2.

AUDIENCE MEMBER: Marc Rabinov. I'm a shareholder from Melbourne, Austria.

Gentlemen, we have large holdings in Freddie Mac and Fannie Mae, and as you both know, they were quite — well, they were hurt quite a lot when interest rates went up in the past.

I'm wondering if you think there'll be hurt again when interest rates go up in the future?

WARREN BUFFETT: Well, the question about Freddie Mac and Fannie Mae on interest rates, they are not as interest rate sensitive as people formerly thought they were.

But it would be the pattern, and I have a feeling that if interest rates got extremely low, so that there was a huge turnover in the portfolio, and then rates went up dramatically, that even though they have various ways of protecting themselves against interest rate scenarios, that that might get very tough. I think there would be some kind of squeeze there.

They may have good answers as to why that wouldn't happen, incidentally, because they certainly worry about every kind of interest rate scenario. That's their job.

But I think, in a sense, very low interest rates are more of a long-term threat, because if you get a portfolio chock full of, say, 4 percent mortgages or something of the sort, and then you had a huge move upward, that would be quite painful for some period of time, no matter what you've done in the way of hedging.

Charlie?

CHARLIE MUNGER: I've got nothing to add.

WARREN BUFFETT: Yeah. That's what happened to the savings and loans, in effect, you see, 25 years ago or whenever it was.

And Freddie and Fannie have other functions, and they've got a lot of advantages, but they have a savings and loan-type operation. They just do it on a very big scale and they get their money from — in a very different manner than from millions of depositors. But the basic economics have some similarly.

22. No worries about tough times: "It's a lot of fun"

WARREN BUFFETT: Zone 3.

AUDIENCE MEMBER: Jane Bell (PH), Des Moines. Since I became a Berkshire Hathaway shareholder I've been coming to these meetings. This is my second. (Laughter)

WARREN BUFFETT: I've been coming to these meetings ever since I've been a shareholder. (Laughter)

AUDIENCE MEMBER: Mr. Buffett, I'm a partner and owner in a consulting business, and we tell our clients and potential clients that we design solutions for what keeps them awake at night.

Mr. Buffett, from your perspective as an investor, what keeps you awake at night?

WARREN BUFFETT: Well, that's a good question. And that's one I always ask the managements of our subsidiaries, as well as any new investment. I want to know what their nightmare is.

Andy Grove, in his book "Only the Paranoid Survive," talks about the silver bullet for a competitor. So in terms of, if you only had one silver bullet, which competitor would you fire it at?

And it's not a bad question. And your question's a little broader. If you only had one worry that you could get rid of, what would it be?

I would say that, and I think I speak for Charlie — (inaudible) — but we really don't worry. You know, we will do the best we can, and when we have capital allocated, sometimes it's very easy to do. Sometimes it's almost impossible to do.

But we're not going to worry about it, because, you know, the world changes. And if we had something we were worried about in the business, we would correct it.

I'm not worried about any — I'm not really worried about — you know, we can lose a billion dollars on a California earthquake. But I'm not worried about it, although I have a sister who's in the audience that lives in California. I told her to call me quickly if the dogs start running in circles or anything like that. (Laughter)

But there's — you know, if you're worried about something, the thing to do is get it corrected and get back to sleep. And I can't think of anything I'm worried about at Berkshire. That doesn't mean that I have any good ideas as to what we should be doing with a whole lot of money that we have around.

But, you know, I can't do anything about that except keep looking for things that I might understand and do something with the money. And if they aren't there, they aren't there. And we'll see what happens tomorrow and next week and next month and next year.

Charlie, what are you worried about?

CHARLIE MUNGER: Well, in the 30-some years I've been watching you, I would say what it takes to make you not sleep at night is an illness in the family.

Short of that, Warren likes the game. I like the game. And even in the periods that look tough to other people, it's a lot of fun.

WARREN BUFFETT: It's a lot of fun.

CHARLIE MUNGER: It's a lot of fun. (Laughter)

WARREN BUFFETT: In fact it probably is the most — (applause) — it's sort of, it is the most — I mean we define tough times differently than other people would, but our idea of tough times is like now, and our idea — we don't feel it's tough times when the market's going down a lot or anything of the sort. So we are having a good time then.

I mean we don't want to sound like undertakers during a plague or anything, but — (Laughter)

But there really — you know, it makes no difference to us whether the price of Berkshire is going up or down. We're trying to figure out ways to make the company worth more money years down the road, and if we figure that out, the stock will take care of itself, so —

And usually when the stock is going down, it means other things are going down. And it's a better chance for us to deploy capital, and that's our business.

So you will not see us worrying. Maybe we should. You know, "What, me worry?" (Laughs)

23. "What is important and what is knowable?"

WARREN BUFFETT: Zone 4.

AUDIENCE MEMBER: My name is Paul Yoon (PH) from L.A., California.

Mr. Warren Buffett, Mr. Charles Munger, I am one of the persons who highly admire you both. I have two questions.

Question one: your view on the world financial business environment in the next decade.

Question two — (laughter) — U.S. position for economic competition in the next decade. Thank you.

WARREN BUFFETT: Well, you've asked two big questions, but you're going to get very small answers, I'm afraid. (Laughter)

And that's no disrespect. But we — we just — we don't have that. We don't think about those things very much.

We just are looking for decent businesses. And incidentally, our views in the past wouldn't have been any good on those subjects.

We try to think about two things. We try to think about things that are important and things that are knowable.

Now, there are things that are important that are not knowable. In our view, those two questions that you raised fall in that. There are things that are knowable but not important. We don't want to clutter our minds up with those.

So we say, "What is important and what is knowable?" And what among the things that fall within those two categories can we translate into some kind of an action that is useful for Berkshire.

And we really — there are all kinds of important subjects that Charlie and I, we don't know anything about, and therefore we don't think about them.

So we have — our view about what the world will look like over the next ten years in business or competitive situations, we're just no good.

We do think we know something about what Coca-Cola's going to look like in ten years, or what Gillette's going to look like in ten years, or what Disney's going to look like in ten years, or what some of our operating subsidiaries are going to look like in ten years.

We care a lot about that. We think a lot about that. We want to be right about that. If we're right about that, the other things get to be — you know, they're less important. And if we started focusing on those, we would miss a lot of big things.

I've used this example before, but Coca-Cola went public in, I think, it was 1919. And the first year one share cost $40. The first year it went down a little over 50 percent. At the end of the year, it was down to $19. There were some problems with bottler contracts. There's problems with sugar. Various kinds of problems.

If you'd had perfect foresight, you would have seen the world's greatest depression staring you in the face, when the social order even got questioned. You would have seen World War II. You would have seen atomic bombs and hydrogen bombs. You would have seen all kinds of things.

And you could always find a reason to postpone why you should buy that share of Coca-Cola. But the important thing wasn't to see that. The important thing was to see they were going to be selling a billion eight-ounce servings of beverages a day this year. Or some large number.

And that the person who could make people happy a billion times a day around the globe ought to make a few bucks off doing it.

And so that $40, which went down to $19, I think with dividends reinvested, has to be well over $5 million now. And if you developed a view on these other subjects that in any way forestalled

you acting on this more important, specific narrow view about the future of the company, you would have missed a great ride. So that's the kind of thing we focus on.

Charlie?

CHARLIE MUNGER: Yeah, we're predicting the currents that will come, just how some things will swim in the currents, whatever they are.

24. Praise for Value Line's "perfect snapshot"

WARREN BUFFETT: Zone 5, please.

AUDIENCE MEMBER: Good morning, Marc Gerstein from Value Line.

Mr. Buffett, considering the large amounts of demands on your time, how do you go about reviewing the entire spectrum of choices in the equity markets?

WARREN BUFFETT: Give me that last part again? I got the demands on my time and —

MARK ERSTEIN: How do you and Mr. Munger manage to review the whole spectrum of choices in the equity markets?

WARREN BUFFETT: A fat pitch coming up. (Laughter)

But I don't mind it at all, because the truth is that we get — I don't even know what we pay for Value Line. Charlie and I both get it in our respective offices, but we get incredible value out of it because it give us the quickest way to see a huge number of the key factors that tell us whether we're basically interested in the company.

And it also gives us a great way — good way — of sort of periodically keeping up-to-date. Value Line has 1,700 or so stocks they cover, and they do it every 13 weeks. So it's a good way to make sure that you haven't overlooked something if you just quickly review that.

But the snapshot it presents is an enormously efficient way for us to garner information about various businesses.

We don't care about the ratings. I mean that doesn't make any difference to us. We're not looking for opinions. We're looking for facts.

But I have yet to see a better way, including fooling around on the internet or anything, that gives me the information as quickly. I can absorb the information on — about a company — most of the key information you can get — and probably doesn't take more than 30 seconds in glancing through Value Line, and I don't have any other system that's as good. Charlie?

CHARLIE MUNGER: Well, I think the Value Line charts are a human triumph. It's hard for me to imagine a job being done any better than is done in those charts. An immense amount of information is put in very usable form. And if I were running a business school we would be teaching from Value Line charts.

WARREN BUFFETT: And when Charlie says the charts, he does not mean just the chart of the price behavior. He means all that information that really is listed under the charts that —

CHARLIE MUNGER: Oh yeah.

WARREN BUFFETT: The detailed financial information. You can run your eye across that.

The chart of the price action doesn't mean a thing to us, although it may catch our eye, just in terms of businesses that have done very well over time.

But we — price action has nothing to do with any decision we make. Price itself is all-important, but whether a stock has gone up or down, or what the volume is, or any of that sort of thing, that is — as far as we're concerned, you know, those are chicken tracks, and we pay no attention to them.

But that information that's right below the chart, in those 10 lines or so — 15 lines — if you have some understanding of business, that's a — it's a perfect snapshot to tell you very quickly what kind of a business you're looking at.

25. Insurance mergers haven't hurt GEICO

WARREN BUFFETT: Zone 6, please.

AUDIENCE MEMBER: David Winters from Mountain Lakes, New Jersey.

With the consolidation in the insurance industry, how do you think that will affect Berkshire's insurance businesses and the long-term development of the float?

And if I may, not to encourage your dogma to run over your karma, but how do you think your policy of partnership and fair dealing has enhanced or detracted from your investment returns? Thank you.

WARREN BUFFETT: Now, with the consolidation taking place in insurance, it's been taking place for some time. There have been some big mergers over the years.

It should — there are developments in insurance. We mentioned the super-cat bonds, which are not bonds at all. But that has an effect.

But I would say that there's no merger that has taken place that I regard as being detrimental, either to our GEICO business or to our reinsurance business.

That has not been a factor, and I think if there were some more mergers it would not be a factor. I see no way that any entities being put together would change the competitive situation in respect to GEICO.

GEICO operating just as it does, independently, is as competitive as can be, and it would not benefit by being part of any other organization.

And our reinsurance business is much more opportunistic. And it's not consolidation there, it's just lack of fear, generally, by competitors who can price — particularly cat business — at a rate that could be totally inadequate, as I use in an illustration in the report. But nevertheless, it could appear to be profitable for a long time.

And there's probably more of that going on now, and there'll probably be a lot more going on in that arena.

We have some sensational insurance businesses, though. I have to tell you that — I don't think you really have to worry too much about how we do in insurance in the future.

We have a number of GEICO people here today. I hope you got a chance to meet them. GEICO — and you saw Lorimer Davidson. I really was hoping he could be here, but Davy is 95 years old. I went to visit him a few months ago, and it just isn't easy for him to get around.

But he built a sensational company and it stumbled once. Jack Byrne got it back on track and Tony Nicely's got it going down the track at about a hundred miles an hour and it's getting faster all the time. So we've got a great business there.

Charlie?

CHARLIE MUNGER: Nothing to add.

26. "Wonderful companies" should buy back stock

WARREN BUFFETT: Zone 7.

AUDIENCE MEMBER: Yes. Bill Ackman from New York.

Is there a price at which it's inappropriate for a company to use its capital to buy back its stock?

WARREN BUFFETT: Give me that again?

AUDIENCE MEMBER: Example. Coca-Cola at 40 P/E. Is that a smart place for Coke to deploy capital?

WARREN BUFFETT: Well, it sounds like a very high price when you name it in terms of a P/E to buy back the stock at that sort of number. But I would say this: Coca-Cola's been around a hundred and — what, 12 years now, and there are very few times in that 112 years, if any, when it would not have been smart for Coca-Cola to be repurchasing its shares.

Coca-Cola is, in my view, among businesses that I can understand, it's the best large business in the world. I mean it is a fantastic business.

And we love it when Coke repurchases shares and our interest goes up. We owned 6.3 percent of Coca-Cola in 1988 when we bought in. We actually increased that a little bit a few years later. But if they had not repurchased shares, we probably would own about 6.7 percent or 6.8 percent of Coke now. As it is, we own a little over 8 percent, through repurchases.

There are going to be about a billion eight-ounce servings of Coke sold around the world — Coca-Cola products — sold around the world today. Eight percent of that is 80 million and 6.8 percent is 68 million. So there are 12 million extra servings for the account of Berkshire Hathaway being sold around the world. And they're making a little over a penny a serving, so, you know, that gets me kind of excited. (Laughter)

I think it — all I can tell you is, I approve of Coke repurchasing shares. I'd a lot rather have them repurchasing shares at 15 times earnings, but when I look at other ways to use capital, I still think it's a very good use of capital.

And maybe the day will come when they can buy it at 20 times earnings, and if they can I hope they go out and borrow a lot of money to ton of it at those prices, and —

I think we will be better off 20 years from now if Coke follows a consistent repurchase approach.

I do not think that is true for many companies. I mean I think that repurchases have become en vogue and done for a lot of silly reasons. And so I don't think everybody's repurchase of shares is well reasoned at all. You know, we see companies that issue options by the ton and then they repurchase shares much higher, you know —

I started reading about investments when I was six, and I think the first thing that I read was, you know, buy low, sell high. But these companies, through their options, you know, they sell low and then they buy high. And they've got a different formula than I was taught.

So there are a number that we don't approve of. When we own stock in a wonderful business, we like the idea of repurchases, even at prices that may give you nose bleeds. It generally turns out to be a pretty good policy.

Charlie?

CHARLIE MUNGER: Well, I think the answer is that in any company the stock could get to a price so high it would be foolish for the corporation to repurchase its shares.

WARREN BUFFETT: Sure.

CHARLIE MUNGER: And you can even get into gross abuse. Before the crash, the Insull utilities were madly buying their own shares as a way of promoting the stock higher. It was like a giant Ponzi scheme at the end.

So there's all kinds of excess that possible, but the really great companies that buy at high price- earnings, that can be wise.

WARREN BUFFETT: Our interest in GEICO went from 33 percent to 50 percent without us laying out a dime, because GEICO was repurchasing its shares. And we've benefitted substantially.

But we benefitted a lot more, obviously, when prices were lower. I mean we would — our interest in The Washington Post company has gone from nine and a fraction percent, to 17 and a fraction percent over the years without us buying a single share. But The Post or Coke or any number of companies don't get the bargain in repurchasing now that they used to. We still think it's probably the best use of many in many cases.

27. Berkshire insurance float has a negative cost

WARREN BUFFETT: Zone 8.

AUDIENCE MEMBER: My name is Hutch Vernon. I'm from Baltimore, Maryland.

My question has to do with float. You said in the annual, and you've said in the past, that float has had a greater value to Berkshire than an equal amount of equity.

I wondered if you could clarify that statement. Is that because the float has been generated at such a low cost relative to an imputed cost for equity, or is there something else behind that statement?

WARREN BUFFETT: No, it's because the float, which is now, we'll say, 7 billion, comes to us at a negative cost. We would not make that statement if our float was costing us a couple percent a year, even though float would then be desirable. Highly desirable.

But our float is even better than that, or it has been, and so it comes to us with a cost of less than zero. It comes to us with a profit attached.

So if we were to replace — if we were to get out of the insurance business and give up the 7 billion of float and replace it with 7 billion of equity, we would have less going for us next year than under the present situation, even though our net worth would appear to be 7 billion higher.

And I have said, if we were to make the decision — if we were offered the opportunity to go out of the insurance business, and that 7 billion liability would — as part of that decision — would evaporate from our balance sheet, so that our equity would go up 7 billion, with no tax implications, we would turn down that proposition.

So obviously we think that 7 billion, which is shown as a liability, when it's part of a — viewed as part of an insurance business, is not a liability at all in terms of real economic value. And of course, the key is not what the float is today, and not what the cost is today.

The key is what is the float going to be 10 or 15 years from now, and what is the cost going to be 10 or 15 years ago. And, you know, we will work very hard at both increasing the amount of float and keeping the costs down somewhere close to our present level.

That makes it a very attractive business when that can be done. GEICO's a big part of doing that, but we've got other things, other insurance operations, that'll be important in that, too. And we may have others besides that in the future.

Charlie?

CHARLIE MUNGER: Yeah. If the float keeps growing, that is a wonderful thing indeed.

We really have a marvelous insurance business. In addition to having this remarkable earning power, it's way less likely to get really clobbered than most insurance businesses. So I think it's safer on the downside and has a better upside.

WARREN BUFFETT: And it may sound strange, but we don't regard losing a billion dollars in a California quake as getting really clobbered. I mean that is —

CHARLIE MUNGER: No, no.

WARREN BUFFETT: — I mean that's part of the game.

There are many companies that have greater exposure than that that really aren't getting paid for it. And you don't see it specifically, but any company that has a ton of homeowners' business in Florida or Long Island or along the coast of Texas, may have exposures many times our billion, and really not even be getting paid appropriately or specifically for taking that risk.

28. Not worried Japan might "dump" U.S. bonds

WARREN BUFFETT: Zone 9.

AUDIENCE MEMBER: Hi, my name is Mary Semler (PH) from Seattle, Washington.

Japan is a major holder of U.S. Treasurys. Given the troubled Japanese economy, do you foresee Japan cashing in their U.S. investments to bail themselves out? Why or why not?

WARREN BUFFETT: Probably didn't get all that. I was busy chewing.

CHARLIE MUNGER: I didn't get that, either.

WARREN BUFFETT: I was busy chewing here and —

AUDIENCE MEMBER: Japan is a major holder of U.S. Treasurys. Given the troubled Japanese economy, do you foresee Japan cashing in their U.S. investments to bail themselves out? Why or why not?

WARREN BUFFETT: The problems with the Japanese economy and does that mean that — are you thinking particularly about them dumping Treasurys or something of the sort?

CHARLIE MUNGER: That's exactly what she's —

WARREN BUFFETT: Yeah. (Laughter)

Well, you know, it's very interesting. All the questions about what so-called foreigners do with investments.

Let's just assume the Japanese, or any other country, decides to sell some U.S. government holdings that they have. If they sell them to U.S. corporations or citizens or anything, what do they receive in exchange? They receive U.S. dollars. What do they do with the U.S. dollars? You know, I mean they can't get out of the system.

If they sell them to the French, you know, the French give them something in return. Now the French own the government securities.

But really as long as we, the United States, run a deficit — a big deficit — a trade deficit — we are accepting goods and giving something in exchange to foreigners. I mean when they send us whatever it may be — and on balance they send us more of that then we send over there — we give them something in exchange.

We give them — we may give them an IOU. We may give them a government bond. But we may give them an investment they make in the United States.

But they have to be net investors in this country as long as we're net consumers of their goods. It's a tautology.

So I don't even know quite how a foreign government dumps its government bonds without getting some other type of asset in exchange that may have an effect on a different market.

The one question you always want to ask in economics is — and not a bad idea elsewhere, too — but is, "And then what?" Because there's always a second side to a transaction.

And just ask yourself, if you are a Japanese bank and you sell a billion dollars' worth of government bonds — U.S. government bonds — what do you receive in exchange, and what do you do with it? And if you follow that through, I don't think you'll be worried about foreign governments selling U.S. bonds. It is not a threat.

Charlie?

CHARLIE MUNGER: If I owned Japan, I would want a large holding of U.S. Treasurys. You're on an island nation without much in the way of natural resources. I think their policy is quite intelligent for Japan, and I'd be very surprised if they dumped all their Treasurys.

WARREN BUFFETT: If they're a net exporter to us, though, what choice do they have? When you think about it.

If they send over more goods to us than we send to them — which has been the case — they have to get something in exchange. Now for a while they were taking movie studios in exchange, you know — (Laughter)

They were taking New York real estate in exchange.

I mean they've got a choice of assets, but they don't have a choice as to whether — if they send us more than they get from us — whether they get some investment asset in return.

I mean it's amazing to me how little discussion there is about the fact that there's two sides to an equation. But it makes for better headlines, I guess, when read the other way.

29. Mild endorsement for some Social Security money in stocks

WARREN BUFFETT: Zone 10.

AUDIENCE MEMBER: This is John Vaughan (PH) from Detroit, Michigan.

Nebraska's Senator Kerrey has proposed private investment accounts for up to two percentage points of the current payroll tax. His words were, and I quote, "People want more than just a transfer payment. They want wealth."

Do you approve this proposal? And if you do, would you recommend passive investing, i.e. index, or if you recommend active investing, would you and Charlie want to give it a shot? (Laughter)

WARREN BUFFETT: Well, I talked with Bob Kerrey about that, and Bob does like the idea of giving everybody some piece of the American economy and an interest in it. As you know, he's proposed, really, sort of small grants to the 3 1/2 million or so children born every year, and then some buildup of that account. Senator Moynihan has come up with something recently in conjunction with Kerry.

I personally would not like to see any major amount of Social Security — and Moynihan was talking about 2 percent. And actually, I suggested the idea that maybe 2 percent out of the 12 and a fraction percent, at the option of the beneficiary — Social Security participant — could be devoted to some other system, but then they would only get 5/6ths of the basic Social Security benefit.

I don't think you could drop it below that, because you wouldn't want people turning 65 — or maybe a more advanced age in the future, 70 — and not having the safety net of Social Security. So I wouldn't want to drop it below about 5/6ths of the present benefits.

I don't — I think it's a perfectly reasonable topic to discuss whether you want to take that 2 percent, then, and let people build up an account, perhaps tax-free, perhaps an IRA-type account, so they would have both wealth and the safety net. But I wouldn't want to drop the safety net very far.

And I think that I would not want to turn an army of salespeople loose on the American public with a mandatory 2 percent going in some direction. I don't think that would be particularly healthy.

Charlie?

CHARLIE MUNGER: I am much less enthusiastic than you are. (Laughter)

In other words, your negative, or conservative, attitude is way more affirmative than mine.

I think the idea of getting the government into promoting the value of equities — in Japan we have a taste of that now. The Japanese government has been using the postal savings system to buy equities massively year after year after year. I don't think we need to get the government into the equity market. (Applause)

30. Business schools "incoherent" on cost of capital

WARREN BUFFETT: We go to zone 11, please.

AUDIENCE MEMBER: I'm Dale Max from University Park, Illinois. And I've got a question for each of you. A short question for Charlie, and maybe a little longer for Warren.

My question for Charlie is, in a business school sense, what is the cost of capital for Berkshire Hathaway?

And my question for Warren is that I've been on the internet and I look at Yahoo and they give you recommendations for companies. And when I search for Berkshire Hathaway, it shows that nobody is recommending Berkshire Hathaway — (laughter) — despite the fact that there are maybe a thousand people that are wearing signs here, "I love Berkshire Hathaway." And of course I've got mine on, too.

But what seems to be the problem in lack of recommendations?

WARREN BUFFETT: Well, we're not recommending Yahoo, incidentally, either. (Laughter and applause)

But I'll let Charlie have that first question about the cost of capital, which has puzzled people for thousands of years. And then —

CHARLIE MUNGER: The way that is taught in most business schools now, I find incoherent. So I'm the one that asks that question and gets the incoherent answers. I don't have a good answer to a question I consider kind of a stupid question.

WARREN BUFFETT: That isn't —

CHARLIE MUNGER: What is the cost of capital at Berkshire Hathaway when we keep drowning in this torrent of cash which we have to reinvest?

WARREN BUFFETT: Yeah. There's really only two questions that get to that, but you don't need a mathematical answer.

The first question is, is when you have capital, is it better to keep it or return it to shareholders? It's better to return it to shareholders when you cannot create more than a dollar of value with that capital. That's test number one.

And if you pass that threshold, that you think you can achieve more than a dollar of value for every dollar retained, then you simply look around for the thing that you feel the surest about, and that promises the greatest return weighted for that certainty.

So our cost of capital is, in effect, is measured by the ability to create more than a dollar of value for every dollar retained. If we're keeping dollar bills that are worth more in your hands than in our hands, then we've exceeded the cost of capital, as far as I'm concerned.

And once we think we can do that, then the question is, is how do we do it to the best of our ability? And frankly, all the stuff I see in business schools — and I've not found any way to improve on that formula.

Now the trouble that you may have is that many managements would be reluctant to distribute money to shareholders even if they would rationalize that they would do better than they actually do. But that's — that may be a danger on it, but that won't be solved by them hiring a bunch of people to come up with some cost of capital that also justifies them keeping the money, because that's what they'll do otherwise.

31. We prefer individual shareholders

WARREN BUFFETT: The question about recommending the stock, we very seldom had stock recommendations over the years. As I think back to 1965, I can't think of a lot of brokerage reports that have recommended Berkshire.

I'm not looking for any, you know, reports at all. We are not looking to have Berkshire sell at the highest possible price, and we're not looking to try and attract people to Berkshire who are buying stocks because somebody else recommends them to them.

We prefer people who figure out for themselves why they themselves want to buy Berkshire, because they're much more likely to stick around if they enter the restaurant because they decide it's the restaurant they want to eat at, than if somebody has touted them on it. And that's our approach.

So we do nothing to encourage. But I think even if we did, we probably wouldn't generate a lot of recommendations. It's not a great stock to get rich on, if you're a broker.

CHARLIE MUNGER: Yeah, I think the reason — (Laughter and applause)

I think one of the main reasons why it's so little recommended in the institutional market is that it's perceived as hard to buy in quantity. (Laughter)

WARREN BUFFETT: We prefer — we've got some good institutions as holders, including one that's run by a very good friend of ours, but frankly it's more fun for us to have a bunch of individual shareholders.

I mean you see it — it translates — if there's money made, it translates into changes in people's lives and not some change in somebody's performance figure for one quarter.

And we think that individuals are much more likely to join us with the idea of staying with us for as long as we stay around. And, you know, that's the way we look at the business.

Very few institutions look at investments that way, and, frankly, we think they're often less rational holders than we get with individuals.

32. "The earthquake doesn't know the premium you receive"

WARREN BUFFETT: Number 1.

AUDIENCE MEMBER: Good morning. Good morning, gentlemen. I'm Hugh Stevenson (PH), a shareholder from Atlanta.

My question involves the company's super-cat reinsurance business. You've addressed some of this, but I would like for you to expound on it, please.

You've indicated that you think this is the most important business of the company. And my question is, what do you think the long-term impact of catastrophe bonds and catastrophe derivatives will be on the float and the growth in float of the company?

And I understand that the mispricing of risk in these instruments doesn't really affect the way you price your business, but I'm wondering how you think it can affect the volume of the business.

And I remember several years ago, Mr. Buffett, you talked about, you can never be smarter than your dumbest competitor.

WARREN BUFFETT: Right.

AUDIENCE MEMBER: And these are some potentially dumb competitors.

WARREN BUFFETT: You've got it. (Laughter)

I just want to put an asterisk on one thing. We say insurance will be our most important business. We've not said the super-cat business will be our most important.

Super-cat has been a significant part of our business, and may well over the years remain a significant part, but it is far less significant than GEICO. And I'll mention a word or two about that.

But the super-cat business, you can price wrong, as I illustrated in my report. You can be pricing it at half what it should be priced at.

I used an illustration in the report of how you could misprice a policy that you should be getting, say, a million and a half for, namely a $50 million policy on writing — on something that had one chance in 36 of happening, so you should get almost a million and a half for it.

I said if you price it at a million a year, you know, you would think you were making money after ten years 70-odd percent of the time. The interesting thing about that is if you price it for a dollar a year you would have thought you made money 70-odd percent of the time, because when you are selling insurance against very infrequent events, you can totally misprice them but not know about it for a long time.

Super-cat bonds open up that field wide open. I mean you've always had the problem of dumb competitors, but you have a much more chance of having dumb competitors when you have a whole bunch of people who, in the case of hedge funds who have bought some of these, where the manager gets 20 percent of the profits in a year when there are profits and there is no hurricane, and when there happens to be a hurricane or an earthquake he doesn't take the loss. His limited partners do.

So it's very likely to be a competitive factor that brings our volume down a lot. It won't change our prices.

You know, the thing to remember is the earthquake does not know the premium that you receive. (Laughter)

I mean the earthquake happens regardless.

So it doesn't say — you know, you don't have somebody out there on the San Andreas Fault that says, "Well, he only charged a 1 percent premium so we're only going to do this once every 100 years." (Laughter)

Doesn't work that way.

So we will probably do a whole lot less volume in the next few years in the super-cat business. We have these two policies that run for a couple more years. But in terms of new business, we will do a whole lot less.

GEICO is by far the most important part of our insurance business, though. GEICO in the 12 months ended April 30th had a 16.9 percent increase in policies in force. Year-end, I told you it was 16.0. A year ago, I told you it was 10. Year before that, I think it was six and a fraction.

So its growth is accelerating and it should be in a whole lot more homes around the country than it is now, you know, by a big factor. And it will be, in my view. So that will be the big part of our insurance business.

But we may be in the insurance business in some other ways too as time goes along. It's a business that if you exercise discipline you should find some ways to make money, but it won't always be the same way.

Charlie?

CHARLIE MUNGER: I've got nothing to add.

33. What Buffett wants in an annual report

WARREN BUFFETT: OK. Zone 2.

AUDIENCE MEMBER: Hello. I'm Steve Davis (PH) from San Francisco.

I'd like your advice on how to understand annual reports. What you look for, what's important, what's not important, and what you've learned over the years from reading thousands of reports? Thank you.

WARREN BUFFETT: Well, we've read a lot of reports, I will tell you that.

And we — well, we start by looking at the reports of companies that we think we can understand. So we hope to find — we hope to be reading reports — and I do read hundreds of them every year — we hope to be reading reports of businesses that are understandable to us.

And then we see from that report whether the management is telling us about the things that we would want to know about if we owned a hundred percent of the company.

And when we find a management that does tell us about those things, and that is candid in the same way that a manager of a subsidiary would be candid with us, and talks in language that we can understand, it definitely improves our feeling about investing in such a business.

And the reverse turns us off, to some extent. So if we read a bunch of public relations gobbledygook, you know, and we see lots of pictures and no facts, it has some effect on our attitude toward a business.

We want to understand the business better when we get through with the annual report than when we picked it up. And that is not difficult for a management to do if they want to do it.

If they don't want to do it, you know, we think that is a factor in whether we want to be their partners over a ten-year period or so.

But we've learned a lot from annual reports. For example, I would say that the Coca-Cola annual report over the last good many years is an enormously informative document. I mean, I can't think of any way if I'd have a conversation with Roberto Goizueta, or now Doug Ivester, and they were telling me about the business, they would not be telling me more than I get from reading that annual report.

We bought that stock based on an annual report. We did not buy it based on any conversation of any kind with the top management of Coca-Cola before we bought our interest. We simply bought it based on reading the annual report, plus our knowledge of how the business worked.

Charlie?

CHARLIE MUNGER: Yeah. I do think the — if you've got a standardized bunch of popular jargon that looks like it came out of the same consulting firm, I do think it's a big turnoff. That's not to say that some of the consulting mantras aren't right. But I think there's a lot — that for a sort of candid, simple, coherent prose — a lot to be said for it.

WARREN BUFFETT: Almost every business has problems, and we'd just as soon the manager would tell us about them.

We would like that in the businesses we run. In fact, one of the things, we give very little advice to our managers, but one thing we always do say is to tell us the bad news immediately. And I don't see why that isn't good advice for the manager of a public company.

Over time, you know, I'm positive it's the best policy. But a lot of companies, for example, have investor relations people, and they are dying just to pump out what they think is good news all the time.

And they have this attitude that, you know, you've got a bunch of animals out there to be fed. And that they're going to feed them what they want to eat all the time. And over time the animals learn.

So we've tried to stay away from businesses like that.

CHARLIE MUNGER: What you seldom see in an annual report is a sentence like this: "This is a very serious problem and we haven't quite figured out yet how to handle it." (Laughter)

But believe me, that is an accurate statement much of the time.

VOICE: — just a moment.

(Buffett leaves the table after someone tells him something in his ear.)

34. Munger goes it alone on Coke vs Pepsi

CHARLIE MUNGER: All right. Zone 3. (Laughter)

AUDIENCE MEMBER: I'm Leta Gurtz (PH) and I live in the area. And I would like to know what your prediction is for Coca-Cola's long-term growth versus Pepsi-Cola's recent efforts to increase the competitiveness with Coke?

CHARLIE MUNGER: Yeah. (Laughter)

Long-term, I would expect Coke to continue to gain versus Pepsi. (Laughter and applause)

(Buffett returns and sits down)

WARREN BUFFETT: What has he been doing while I was gone? What'd you say, Charlie? (Laughter)

I knew I was taking a chance. (Laughter)

What was the question?

CHARLIE MUNGER: I said that long-term I expected Coke to continue to gain versus Pepsi.

WARREN BUFFETT: Oh. Well. It's those kind of insights as to why we keep him on the job year after year. (Laughter)

In a moment of particular confidence, he one time told me the same thing about RC. (Laughter)

Now, that was probably zone 3 you were answering, so we'll go to 4.

What have you got there? You got peanut brittle?

CHARLIE MUNGER: Um-huh. (Laughter)

35. Ignoring asset gains at Coca-Cola

WARREN BUFFETT: Zone 4, please.

AUDIENCE MEMBER: Nat Chase (PH), Houston, Texas.

My first question's on the quality of earnings and your evaluation of quality of earnings in the U.S. right now.

And the second is, what multiples should be put on asset gains such as sale of bottling assets or reversal of merger reserves? Thanks.

WARREN BUFFETT: Yeah, well, taking the second question, for example, with Coca-Cola, the bottling transactions are incidental to a long-term strategy which, in my view, has been enormously successful to date, and which has more successes ahead of it.

But in the process of rearranging and consolidating the bottling system, and expanding to relatively undeveloped markets, there have been, and there will be, a lot of bottling transactions. And some produce large gains. Some produce small gains. I ignore those in my evaluation of Coke.

The two important elements in Coke are unit case sales and shares outstanding. And if the shares outstanding go down and the unit case sales advance at a good clip, you are going to make money over time in Coca-Cola.

There have been transactions where people have purchased rights to various drinks. Coca-Cola's purchased some of those around the world. And when you see what is paid for a million or 100 million unit cases of a business, and then you think to yourself that maybe Coke will add a billion and a half cases a year, that's a real gain in value. It's a dramatic gain in value.

And that is what counts, in terms of the Coca-Cola Company. If you think the Coca-Cola Company's going to sell some multiples of its present volume 15 or 20 years from now, and you think there'll be a lot fewer shares outstanding, you've gone about as far as you need to go. But I would pay no attention to asset gains. I would just take those out of the picture.

36. Stock options and inflated earnings

WARREN BUFFETT: Now, as to quality of earnings, Charlie and I feel that, in several respects, but in one important respect, that the quality of earnings has gone down. Not because the policy has changed, but because it's just become more significant. And that's in the case of stock options.

We have — there are certain companies that we've evaluated for possible purchase where, in our calculation of earnings, the earnings are maybe 10 percent less per year per share than reported. And that isn't necessarily the end of the world, but it is a difference in valuation that is significant and is not reported under standard accounting.

So we think the quality of earnings as reported by a company with significant stock option grants every year, we think is dramatically poorer than for one where that doesn't exist. And there are a lot of companies that fall in that category.

Coca-Cola's earnings are very easy to figure out. Just figure out what they're, you know, what they're earning per case from operations, and you'll see over the years the earnings per case go up. And the cases go up and the shares go down. And it doesn't get much more complicated than that.

Charlie?

CHARLIE MUNGER: You've said it wonderfully. (Laughter)

I just wish we had more like that.

WARREN BUFFETT: Yeah.

GEICO, the key — I mean the same way. It's policies in force and underwriting experience per policy. And that is exactly the way, as noted in the annual report, we pay people there. We pay them, from the bottom to the very top, based on what happens with those two variables.

And we don't talk about earnings per share at GEICO, and we don't talk about investment income. We don't get off the track, because there are two things that are going to determine what kind of business that GEICO is over a long period of time. And policies at GEICO are unit cases at Coca-Cola.

37. Benjamin Graham and how Buffett would teach investing

WARREN BUFFETT: Zone 5.

AUDIENCE MEMBER: Hello, Mr. Buffett and Mr. Munger. My name's James Claus (PH) from New York City. And I just wanted to ask you a question.

Both you and Mr. Munger have repeatedly said that you don't believe that business valuation is being taught correctly at our universities, and as a Ph.D. student at Columbia Business School, that troubles me, understandably, because in a couple of years I'll be joining the ranks of those teaching business valuation.

My question isn't what sources, such as Graham or Fisher or Mr. Munger's talks, you would point people that are teaching business valuation to, but do you have any counsel about the techniques of teaching business valuation?

WARREN BUFFETT: Well, I was lucky. I had a sensational teacher in Ben Graham, and we had a course there, there's at least one fellow out in the audience here that attended with me. And Ben made it terribly interesting, because what we did was we walked into that class and we valued companies.

And he had various little games he would play with us. Sometimes he would have us evaluate company A and company B with a whole bunch of figures, and then we would find out that A and B were the same company at different points in its history, for example.

And then there were a lot of little games he played to get us to think about what were the key variables and how could we go off the track.

I remember one time Ben met with Charlie and me and about nine or so other people down in San Diego in 1968 or so, when he gave all of us a little true/false test, and we all thought we were pretty smart — we all flunked. But that was his way of teaching us that a smart man playing his own game and working at fooling you could do a pretty good job at it.

But I would, you know, if I were teaching a course on investments, there would be simply one valuation study after another with the students, trying to identify the key variables in that

particular business, and evaluating how predictable they were first, because that is the first step.

If something is not very predictable, forget it. You know, you don't have to be right about every company. You have to make a few good decisions in your lifetime.

But then when you find — the important thing is to know when you find one where you really do know the key variables — which ones are important — and you do think you've got a fix on them.

Where we've been — where we've done well, Charlie and I made a dozen or so very big decisions relative to net worth, but not as big as they should have been. And we've known we were right on those going in. I mean they just weren't that complicated. And we knew we were focusing on the right variables and they were dominant.

And we knew that even though we couldn't take it out to five decimal places or anything like that, we knew that in a general way we were right about them. And that's what we look for. The fat pitch. And that's what I would be teaching — trying to teach students to do. And I would not try to teach them to think they could do the impossible.

Charlie?

CHARLIE MUNGER: Yes. If you're planning to teach business valuation, and what you hope to do is teach the way people teach real estate appraising. So you can take any company, and your students, after studying your course, will be able to give you an appraisal of that company, which will indicate, really, its future prospects compared to its market price, I think you're attempting the impossible.

WARREN BUFFETT: Yeah, probably on the final exam I would take an internet company, and I would say the final exam, the question is, "How much is this worth?" And anybody that gave me an answer I would flunk. (Laughter)

CHARLIE MUNGER: Right. Right.

WARREN BUFFETT: Make grading papers easy, too. (Laughter)

38. Munger: Wesco is a "historical accident"

WARREN BUFFETT: OK, zone 6.

AUDIENCE MEMBER: Good morning. Laurence Balter (PH), Carlsbad, California. Question for the two of you.

There was an article, I think about last year in The New York Times, that regarded Wesco as a Berkshire Class C share-type company, and I'd like to know your comments on that.

And the second question is, if I were to write you a check for the operating businesses that Berkshire owns, how much would it have to be?

WARREN BUFFETT: Big. (Laughter)

Charlie is the resident expert on Wesco, so I'm going to let him address that side. He gets very eloquent on this.

CHARLIE MUNGER: Yeah. We always say that, per unit of book value, Wesco is worth way less than Berkshire, and indeed the market is saying the same thing. It is not a clone of Berkshire. It's a historical accident. (Audience mumbling)

WARREN BUFFETT: We want it to do well, obviously, for Wesco. We own 80 percent of it and we've got strong feelings about the people who are partners there, particular the Peters family, who, in effect, invited us in 20-odd years ago and trusted us to manage a big part of their money, in effect, by letting us buy control. So we've got strong fiduciary feelings about it.

It suffers in comparison with Berkshire because for one thing, anybody that wants a tax-free merger is going to want to come to Berkshire. You know, that's just the way it is, unfortunately.

And we are looking for big ideas, primarily, and the big ideas are going to fit into Berkshire.

We would love to get ideas that fit into Wesco, and we had a very good one a couple years ago, thanks to Roy Dinsdale pointing me in the right direction. And we added Kansas Bankers Surety to Wesco, and it's a gem. And it's run by Don Towle, who's done a terrific job.

But that's the exception, unfortunately. Because if a FlightSafety comes along, it's not going to fit Wesco.

So we will do our best for Wesco, but the nature of things is that most of the opportunities that make a lot of sense are going to come to Berkshire.

Charlie, do you have anything?

CHARLIE MUNGER: Nothing more.

39. Buy Berkshire or the stocks it buys?

WARREN BUFFETT: OK. Zone 7.

AUDIENCE MEMBER: My name is Bob Swanson (PH) from Phoenix.

And I'm wondering, what are the advantages of investing in Berkshire Hathaway as opposed to investing in the stocks that Berkshire owns?

WARREN BUFFETT: Well, a lot of people do one or the other and some people do both. But you have to really make up your own mind on that.

We're not going to go to great lengths to tell you about everything that Berkshire is doing as we go along, and there could be some changes, and there will be things that can happen in Berkshire that I think you would have trouble duplicating elsewhere.

But on the other hand, you know, if you'd put all your money in Coca-Cola some years back, you might have done better than if you'd put it in Berkshire.

So we really make no recommendations as to what people do with their money. We do not seek to become investment advisors through, in effect, our portfolio actions at Berkshire.

Charlie?

CHARLIE MUNGER: Amazingly, we hate it when people following us — follow us around buying what we buy. (Laughter)

WARREN BUFFETT: Nothing personal.

CHARLIE MUNGER: No. (Laughter)

40. Shareholders get info they need to value Berkshire

CHARLIE MUNGER: By the way, the questioner before this last one asked what is the market value under the hammer of all Berkshire's operating subsidiaries, and the answer is you have to figure that out yourself. (Laughter)

WARREN BUFFETT: Mr. Nice Guy. (Laughter) Zone —

But we give you the information, incidentally, where your judgment on it should be about as good as ours. There's nothing mysterious about valuing The Buffalo News, or See's Candy, or FlightSafety, or Dairy Queen. So you really have the same information we have in that.

I mean if there's material information that we aren't giving you about any important Berkshire subsidiary, we'd like to give it to you, because we think you are entitled to have the information. It enables you to value the various pieces.

Because of the aggregate size of Berkshire now, in terms of market capitalization and some of the positions we own, the smaller subsidiaries really cannot have that much effect. We love them just as much. I enjoy all of the businesses we're in and I enjoy the people that run them.

So, we don't make a — there's not — we don't differentiate in our attitude within the company, but in terms of the actual impact on the valuation of Berkshire, there are a number that really just don't make that much difference in terms of figuring out whether Berkshire's worth X or X minus a thousand or plus a thousand, because a thousand now is over a billion dollars, in terms of valuation. A billion is still a lot of money.

41. Three factors driving the bull market

WARREN BUFFETT: Area 8, please.

AUDIENCE MEMBER: Hello, Mr. Buffett, Mr. Munger. My name is Robert McCormick, I'm from Holdrege, Nebraska.

And I would like to know how much you attribute the gains enjoyed by the stock market these past years to the baby boomer generation investing for their retirement?

WARREN BUFFETT: Yeah, I would say that, personally, I would not think that has much to do with it.

I think the two big factors are in — well, there's three big factors. One is the improved return on equity, which was a fundamental factor that pushed stock prices up.

Two is a decline in interest rates that pushed stock prices up.

And then finally, stock prices advancing, themselves, brings in buying. It doesn't go on forever, but it creates its own momentum, to some extent, if you have these underlying factors that started to push it along.

So I would say two of the three factors are fundamental and the third is a market-type factor that bull markets do feed on themselves, and I think that you've seen some evidence of that.

But I don't think that any specific — you know, the 401(k) factor or whatever it may be, was it by itself.

But I do think money is pouring into mutual funds, for example, because people have had a very favorable experience with those funds. And that does bring investors along. People want to be on the train.

Charlie?

And I think, incidentally, many of them have very unrealistic expectations.

CHARLIE MUNGER: Yeah. The general investment experience in the last, what, 18 years in common stocks has been awesomely high, I think by any past standards now, isn't that right, Warren?

WARREN BUFFETT: Right. Well you've had — since 1982 you've had roughly tenfold in the Dow, and probably similar in the S&P. With a huge amount of money and with more participants all the time.

And there are people coming into the market every day because they feel that they've missed the boat or they're coming in heavier than they came in before, simply because they've had a pleasant experience.

Past experience doesn't — does not mean much, in terms of what you should expect from your investments. You will do well in your investments because you own or bought things at the right price and the businesses behaved well from that point forward.

CHARLIE MUNGER: Well, you won't have 18 more years of 17 percent or 18 percent per annum. That I think we can virtually guarantee.

42. Buffett and Munger about equal at "goofing off"

WARREN BUFFETT: Area 9.

AUDIENCE MEMBER: Hello. I'm Tubby Stayman from Palm Beach, Florida.

I know you enjoy bridge very much. I know you play my late husband's convention.

Tell me, how often are you able to devote to this wonderful game? How many times a week do you play other than the internet?

WARREN BUFFETT: I didn't get all of that, Charlie? Did you?

CHARLIE MUNGER: How much bridge are you playing?

WARREN BUFFETT: Uh-oh.

AUDIENCE MEMBER: Yes. (Laughter)

WARREN BUFFETT: Well, this week — we should put this in the annual report, because it may be a material factor. (Laughter)

I'm probably — at least ten hours a week. Maybe a little more. I don't get any better by doing it, either, so it's rather discouraging, but it is a lot of fun. And it has to have come out of reading time.

I don't think it's hurt Berkshire yet, but that may be because we're in a slow period generally.

If the market goes down a lot, I promise to cut back on my bridge. (Laughter)

Charlie?

CHARLIE MUNGER: Yeah. Well, I probably play three or four hours a week. But I don't play on the internet.

WARREN BUFFETT: He plays a lot of golf, though. Confess Charlie.

CHARLIE MUNGER: Oh yes. (LAUGH)

WARREN BUFFETT: Yeah, we both spend about the same amount of time goofing off. I mean if you —(laughter) — want to know.

43. Defending Walt Disney-Capital Cities accounting

WARREN BUFFETT: OK. Area 10.

AUDIENCE MEMBER: Yes, my name is Cary Blecker (PH), also from West Palm Beach, Florida.

With all due respect to Mr. Eisner if he's in the audience, there's been some criticism levied recently at the Disney Company, mainly from an accounting professor at one of the state universities in New York, in reference to Disney's purchase of Capital Cities and the way they accounted for that purchase.

Basically, what this professor is saying is that Disney somehow created a slush fund and is charging the expenses to the merger to this slush fund rather than earnings.

If you're familiar with this criticism, I'm wondering what you think of it? And if you're not, are you familiar with the way Disney accounted for the purchase of Capital Cities?

WARREN BUFFETT: Yeah, I am familiar.

AUDIENCE MEMBER: Thank you.

WARREN BUFFETT: And actually, Abe Briloff, who wrote that, is a fellow who, in general, I admire.

Abe wrote me a letter not more than about three or four weeks ago and asked me to talk at a university where he teaches. And I wrote him back and I told him I wouldn't be able to do it because it's not in proximity to where I'll be.

And I told him — and he asked me about the Disney thing. And I told him I disagreed with him on —

I admire what Abe does in the attempt to have accounting reflect economic reality, but he and I don't see it exactly the same on some points, although we would agree on other points.

I think — I don't think Disney is a very complicated enterprise to evaluate. I mean there are — when Cap Cities bought ABC, there were purchase accounting adjustments, and they tend to wash through, to some extent.

I mean if you have programs that you're stuck on, you may write those down from what the previous carrying cost was. Maybe the previous management should have written them down, too, at that point. But I don't think that — I think with Disney, what you see now is what you get.

Charlie?

CHARLIE MUNGER: Yeah. I've got no great quarrel with the accounting at Disney. I think —

WARREN BUFFETT: Abe Briloff is a wonderful guy.

CHARLIE MUNGER: Yeah. He's got a good sense of humor and he generally fights the right demons, but I don't think you can criticize Disney's accounting.

WARREN BUFFETT: We certainly disagree with Abe, who, like I say, I agree with Charlie, he is a good guy.

But he — we disagree with him on amortization of intangibles entirely. So we would say that if Disney is charging, whatever it may be, probably 400 million a year for amortization of intangibles, which is not tax deductible, we would include that as a component of earnings.

So there might be some plusses and minuses that you'd make in adjustments, but I would say, by the time you add back amortization of intangibles that we would probably think the economic earnings of Disney might well be more than the reported earnings in the next few years.

44. Buffett wants accounting change

WARREN BUFFETT: I think that the intangible amortization question — which the FASB is looking at now — I think it should be changed. I mean I think it absolutely distorts economic reality, and I think that it influences whether people go to purchase, or accounting, or pooling, and they do all kinds of acrobatics to try and get pooling accounting.

And, you know, it shouldn't make that kind of difference in reported numbers, based on whether a transaction, which has exactly the same economics, is done through a purchase or pooling. But I have seen managements, some I know quite well, arrange to do things on a pooling basis that they think — where if they were private they would do it on a purchase basis.

And I think that's nuts. And I think if accounting is pushing people to doing things that are nuts, that it's time for accounting to look at itself.

I would say that — (applause) — net, the economic earnings of Disney, in our view, are somewhat higher than reported earnings.

45. I'll never know enough to buy tech stocks

WARREN BUFFETT: Zone 11, please.

AUDIENCE MEMBER: Good morning, Mr. Munger and Mr. Buffett. My name is Prakash Puram (PH) from Minneapolis.

There seem to be great values in the technology sector that meet most of your criteria and philosophy in investing, with the exception of the simplicity criterion. Names like IBM, Microsoft, HP, Intel.

Would you ever consider investing in companies in this sector in the future?

WARREN BUFFETT: Well, the answer is no, and it's probably pretty unfortunate, because I've been an admirer of Andy Grove and Bill Gates and, you know, I wish I had translated that admiration into backing it up with money.

But the truth is, I don't know where Microsoft or Intel — I don't know what that world will look like in 10 years.

And I don't want to play in a game where I think the other guys have got an advantage over me, and —

I could spend all my time thinking about technology for the next year and I wouldn't be the hundredth or the thousandth or the 10,000th smartest guy in the country in looking at those businesses.

So that is a seven or eight foot bar that I can't clear. There are people that can clear it, but I can't clear it. And no matter how I train, I can't clear it.

So, the fact that there will be a lot of money made by somebody doesn't bother me, really. And I mean there may be a lot of money made by somebody in cocoa beans, but I don't know anything about them.

And there are a whole lot of areas I don't know anything about. So, you know, more power to them.

And I think it would be a very valid criticism if Charlie and I — if it were possible that Charlie and I, by spending a year working on it, could become well enough informed so that our judgment would be better than other people's, but that wouldn't happen. And it would be a waste of time.

It's much better for us to swing at the easy pitches.

Charlie?

CHARLIE MUNGER: Whatever you think you know about technology, I think I know less. (Laughter)

WARREN BUFFETT: That's probably about true, incidentally. Charlie has a little more of — he understands some things in the physical world a lot better than I do.

46. We've "missed the boat" on share buybacks

WARREN BUFFETT: But anyway. We'll go to zone 1.

AUDIENCE MEMBER: Good morning. I'm Murray Cass from Markham, Ontario.

First off, against my dentist's advice, I'd like to thank you for the free Coke and ice cream last night. (Laughter)

Earlier this morning, Mr. Buffett, you mentioned that you liked when wonderful companies like Coke purchased their shares back.

Similarly, I own shares in a wonderful company, that's Berkshire. Should I be hoping that you buy your own shares back?

WARREN BUFFETT: Well, it's interesting, we should have — perhaps we should have bought some shares back, but usually at the time we could have bought something else that also did very well for us.

I mean maybe when we were buying Coke we could have been buying our own shares back. To some extent there hasn't been that much trading in it.

But I think it's a valid criticism to say that we have missed the boat at various times in not repurchasing shares.

We'll see what we do in the future on it. If it looks like the best thing to do with money, it's what we should be doing.

And in the past, I've probably been not optimistic enough in respect to Berkshire compared to other things we were doing with money.

Now, the money we spent buying the GEICOs and all of that has turned out to be a good use of money, too.

But we've never wanted to leverage up. That's just not our game. So we've never wanted to borrow a lot of money to repurchase shares. We might advise other people to do it, but we would — it's not our style ourselves.

We've got all our money in the company. We've got all of our friends' and our relatives' money virtually.

So we have never felt that we wanted to leverage up this company like it was just one of a portfolio of a hundred stocks.

But it's a valid criticism to say that we have not repurchased shares when we should have. And it's also a valid criticism to say that we've issued some shares we shouldn't have issued.

Charlie?

CHARLIE MUNGER: Oh, I would agree with both comments.

47. "Smile train"

WARREN BUFFETT: Area two.

AUDIENCE MEMBER: Fellow investors of Berkshire and Hathaway, Warren Buffett and Charlie Munger. I am from originally China. Now I have a company in Michigan.

I want to ask questions based on facts. I want to sell Coke, GEICO, and a little book called The Wizard of Omaha: The Investment Philosophy of Warren Buffett, in China. Through all the villages, the cities, little towns, I want to make that a reality. Cheers.

WARREN BUFFETT: Cheers. (Applause)

CHARLIE MUNGER: Cheers.

WARREN BUFFETT: Zone three. (Laughter)

AUDIENCE MEMBER: I have not asked the question.

WARREN BUFFETT: Oh, just warming up. OK. (Laughter)

AUDIENCE MEMBER: I will.

WARREN BUFFETT: They always tell me to get off the stage while you're in good shape, but I'll say it. (Laughter)

AUDIENCE MEMBER: I could (inaudible), but you missed your chance. (Laughter)

I'm a owner of Berkshire and I spent 6 percent of my net worth to be engaged to Berkshire.

WARREN BUFFETT: Wise decision. (Laughter)

AUDIENCE MEMBER: I did better than guess who? Bill Gates. I notice Bill Gates and you were traveling on a slow boat in China. I want to go home, on a fast train.

You want to cut me off?

VOICE: Do you have a question or —?

AUDIENCE MEMBER: If you want to cut off, fine. Up to the investors. (Applause)

I'll quit if you want to do that.

VOICE: Do you have a question? A question?

AUDIENCE MEMBER: I come long ways.

VOICE: OK. Ask your question.

AUDIENCE MEMBER: OK. I know I'm a problem for you. (Laughter)

VOICE: Not a problem. Just ask the question.

AUDIENCE MEMBER: But I'm here for a reason. Because I made some money, I'm go on a train. A smile train. Yesterday, or the day before, at the baseball I asked Mr. Warren Buffett, "Have you heard of the smile train?" He said, "No." I'm back here to respond. This is a smile train.

WARREN BUFFETT: OK, we thank you. But I think that's your question.

48. Why Buffett bought silver

WARREN BUFFETT: We'd better go to zone 4, I think. (Applause)

AUDIENCE MEMBER: Good morning, or afternoon, actually. My name's Matt Schwab. I'm from New York. Pound Ridge, New York.

I actually had a question about the silver purchase last year. When you announced it, you said that you believed that supply and demand fundamentals would only be established at a higher price — re-established at a higher price.

I was just wondering if you could go into more detail about what some of those fundamentals are. I mean, we've read a lot about, like, battery technology and some other things.

WARREN BUFFETT: Yeah, we have no inside information about great new uses for silver or anything of the sort. But the situation — and you can get these figures and they're not precise, but I think they're in general — they're generally accurate.

You can see from looking at the numbers that aggregate demand, primarily from photography, from industrial uses, and from ornamental jewelry-type uses, is close. Call it 800 million-plus ounces a year.

And there are 500 million or so ounces being produced of silver, annually, although there will be more coming on in the next couple of years. There's more coming on right now.

However, most of that silver is produced as a byproduct in the mining of gold or copper and lead zinc, so that since it's a byproduct, it's not responsive to — not very responsive to price changes, because obviously, if you've got a copper mine and you get a little silver out of it, you're much more interested in the price of copper than silver.

So you have 500 million ounces or so of mine production, and you have 150 million ounces or so of reclaimed silver, a large part of which relates to the uses in photography.

So there's been a gap in recent years of perhaps 150 million ounces — but none of these figures are precise — which has been filled by an inventory of bullion above ground, which may have been a billion-two, or more, ounces a few years back, but which has been depleted.

And no one knows the exact figures on this, but there's no question that the bullion inventory has been depleted significantly.

Which means that the present price for silver does not produce an equilibrium between supply, as measured by newly-mined silver plus reclaimed silver, and usage.

And that — eventually something will happen to change that picture. Now, it could be reduced usage, it could be increased supply, or it could be a change in price.

And that imbalance is sufficiently large, even though there is some new production coming on, and there's the threat of digital imaging that will reduce silver usage, perhaps, in the future in photography.

But we think that that gap is wide enough so that it will continue to deplete inventories — bullion inventories — to the point where a new price is needed to establish equilibrium.

And because of the byproduct nature, which makes the supply inelastic, and because of the nature of demand, which is relatively inelastic, that — we don't think that that price change would necessarily be minor.

It's interesting, because silver has been artificially influenced for a long time. You saw that movie about — you know, it was William Jennings Bryan, who was editor of The Omaha World-Herald and a congressman from Nebraska — and his brother was governor of Nebraska — who was the big silver man.

And they used to talk 16-to-1. The 16-to-1 ratio, I think, goes back to Isaac Newton, when he was master of the mint. Charlie will know all about that, because he's our Newtonian expert here. But that ratio had kind of a mystical significance for a while. Didn't really mean anything.

And in 1934, the government passed an act called The Silver Purchase Act of, surprisingly, 1934, which set an artificially high price for silver at that time, when production and usage was much less.

And the government, U.S. government, ended up accumulating two billion ounces of silver. Now, this was at a time when demand was a couple hundred million ounces a year, so you're talking ten years' supply.

So there was an artificially high price for a while. By the early 1960s, that became an artificially low price of $1.29, and at that time I could see the inventories of the U.S. government being depleted, somewhat akin to what inventories are being depleted now.

And despite the fact that Lyndon Johnson and the administration said they would not demonetize silver, they did demonetize it, and silver went up substantially. That was the last purpose we had of silver, but I've kept track of the figures ever since.

The Hunt brothers caused a great amount of silver to be converted into bullion form, including a lot of silver coins. So they, again, increased the supply in a very big way by their action in pushing the price way up to the point where people started melting it down.

So you had this — dislocations in silver over a 60-plus year period, which has caused the price to be affected by these huge inventory accumulations and reductions.

And we think right now that — or we thought last summer when we started buying it — that the price we bought it, that that was not an equilibrium price, and that sooner or later — and we didn't think it was imminent, because we don't wait till things are imminent.

You know, we were going to buy a lot of silver. We didn't want to buy so much as to really disrupt the market, however. We had no intention of replaying any Hunt scenario. So we wanted to be sure we didn't buy that much silver. But we liked it.

Charlie?

CHARLIE MUNGER: Well, I think this whole episode will have about as much impact on Berkshire Hathaway's future as Warren's bridge playing. (Laughter)

You've got a line of activity where once every 30 or 40 years you can do something employing 2 percent of assets. This is not a big deal for —

WARREN BUFFETT: No.

CHARLIE MUNGER: — Berkshire. The fact that it keeps Warren amused and — (Laughter)

WARREN BUFFETT: Yeah, I do like —

CHARLIE MUNGER: — and not doing counterproductive things — (Laughter)

WARREN BUFFETT: It makes me feel good about — it makes me feel better about all those pictures that people take over the weekend. (Laughs)

They all use a little bit of silver. (Laughter)

CHARLIE MUNGER: At least it shows something that teaches an interesting lesson. Think of the discipline it takes to think about something for three or four decades, waiting for a chance to employ — (laughter) — 2 percent of your assets.

I'm afraid that's the way we are. (Laughter)

It means there'll be some dull stretches.

WARREN BUFFETT: Right. Yeah, it's less than a billion dollars in silver. It's $15 billion in Coke. You know, it's a —

CHARLIE MUNGER: It's a non-event.

WARREN BUFFETT: It's 5 billion in American Express. I mean it is close to a non-event, but if you see it there — you know?

CHARLIE MUNGER: At least it shows the human personality at work. (Laughter)

Very peculiar personality, I might add. (Laughter)

WARREN BUFFETT: Reinforced by a partner.

CHARLIE MUNGER: Yes. (Laughter)

49. I only talk to students

WARREN BUFFETT: OK, let's go to area five.

AUDIENCE MEMBER: My family is a Class B shareholder. Thank you for issuing those shares.

I have one observation and one question. Your Class B share is creating a new phenomenon in this country. These "baby shares" are not only attracting my baby boomer generation, but also X generation and (inaudible) generation, your grandchildren.

My question is, this next generation would like to hear from you your investment discipline, your lifestyle, and your philosophy of contributing the wealth back to the society in a language they can understand and communicate back to their friends when they get back to school on Tuesday. Thank you.

WARREN BUFFETT: Thank you. (Applause)

Well, I appreciate that, and I would say the only speeches I give — I get a lot of requests, perhaps because I don't do them. But I get a lot of requests, including from a lot of our managers, in terms of trade conventions, all kinds of things.

I don't do — the only groups I talk to are students. And I try to talk to college and university students, although I talk to high school students, too. Whenever it fits, in terms of travel schedules.

And I just think that if you're going to spend your time with groups talking, that rather than entertain people, that it probably is better to talk to the group you talked about.

Charlie and I are never reluctant to talk, so we do it. Charlie has given a couple of talks. One I sent you a few years ago from USC, but there's been another one recently that I think everybody would profit by reading.

So, it was reprinted in the Outstanding Investor Digest, but if you write Charlie, I'm sure he'll send you a copy.

50. If forced to choose, we'd keep the operating businesses

WARREN BUFFETT: Area six, please.

AUDIENCE MEMBER: Hi, my name is David Oosterbaan. I'm from Kalamazoo, Michigan.

This is a hypothetical question about Berkshire. It's going to take a little imagination, I think.

The scenario is as follows, that the U.S. Justice Department makes a ruling that Berkshire must split into two parts immediately. You and Mr. Munger must decide which part to keep.

You can either choose your marketable securities, Coke, Gillette, Disney, et cetera, or you can choose your insurance and private businesses. Which one do you choose and why?

WARREN BUFFETT: Well, that's an easy question for me. I would choose the operating businesses anytime, because it's more fun.

And I have a good time out of the investments too, but I like being involved with real people, in terms of the businesses where they're a cohesive unit that can grow over time, and —

You know, I wished we owned all of Disney or Coca-Cola or Gillette, but we aren't going to. So if I had to give up one or the other, I'd give up the marketable securities.

But it's not going to happen, so we're going to be happen in both arenas, and I look forward to being in both arenas for the rest of my life.

Charlie?

CHARLIE MUNGER: Well, I'll be in a hell of a fix if I am not in the same arena. (Laughter)

WARREN BUFFETT: We'd both be in a hell of a fix.

CHARLIE MUNGER: Yeah, yeah.

51. We'd be fine even if our top 25 execs all dropped dead

WARREN BUFFETT: Area 7.

AUDIENCE MEMBER: Yes, hello to Mr. Munger and Mr. Buffett. My name is Jerry Gonzalez (PH) from Plantation.

My question is, what are your recommendations of Berkshire Hathaway if Charlie Munger were in charge, or your third man in charge — your third man, which I think you said, is the CEO of GEICO, what are your recommendations?

WARREN BUFFETT: I missed that.

JERRY GONZALES: If Charlie Munger were to stay in charge fully, 100 percent, or your third man, the CEO of GEICO.

CHARLIE MUNGER: Well, in due course this corporation will have a change in management. I'm afraid we have no way of fixing that. (Laughter)

But we do not — apart from making sure we've got good options and having some system in place, we are not obsessing about a future management yet.

WARREN BUFFETT: No. The directors —

CHARLIE MUNGER: Warren plans to live almost indefinitely.

WARREN BUFFETT: Absolutely. (Laughter)

Although I must say, at my last birthday somebody asked me how old I was. And I said, "Well, why don't you just count the candles on the cake?" And he said he was driven back by the heat, so — (Laughter)

But we're not going to leave willingly.

And we do — the directors know who — they have a letter that says who we think should be the ones to succeed us at both the operating aspect and the investment allocation aspect. And those letters can change over time as we keep hanging around.

But I don't worry about the fact that 99 percent-plus of my estate will be in Berkshire Hathaway stock or that a foundation will eventually receive that stock. So it doesn't bother me in the least. I can't think of a place I'd rather have it.

And that includes my appraisal of the managers that we have who can step in and do what Charlie and I do. And who knows, one of them may even understand technology. (Laughter)

CHARLIE MUNGER: I think this place would have very respectable prospects if the top 25 managers all dropped dead at once.

WARREN BUFFETT: Well, that's not an experiment we intended to pursue. (Laughter)

CHARLIE MUNGER: No, but I see no reason to think it wouldn't continue to do quite well.

WARREN BUFFETT: Right.

CHARLIE MUNGER: It's been lovingly put together to have a certain margin of safety.

WARREN BUFFETT: Right. We actually — if we have a choice, it's number three through 23, though — 25 — that we're interested in. (Laughter)

52. "Honesty will only do so much for you"

WARREN BUFFETT: OK. Area 8, please.

AUDIENCE MEMBER: This is Raul from Walnut Creek, California.

Thanks Mr. Buffett, thanks Mr. Munger, thanks for your great company. I wish I had known about it 10 years ago. You are not only the greatest but the most honest. I want to commit 99 percent of what I have to Berkshire Hathaway, and I will.

The question I want to ask is, how do you calculate the intrinsic value of the company? And based on intrinsic value, to me, Berkshire Hathaway looks a great bargain at these prices, especially based on look-through earnings. Is that true?

And one last question I want to ask, just for fun. What do you think about telecom IPOs like Qwest, (inaudible)? They seem to pop up 50 percent at opening. Does it make any sense to invest in these? Thank you very much.

WARREN BUFFETT: Charlie, you want to tackle that?

CHARLIE MUNGER: I didn't follow that all.

Intrinsic value, we give you the facts and you make your own conclusions.

I like the fact that you think we're honest, but, you know, if you people keep bidding up the price of our stock, honesty will only do so much for you in the future. (Laughter)

WARREN BUFFETT: Yeah, we've never been tested. I mean we're very lucky. We've never had anything that we needed, really, that we haven't had.

And, you know, who knows what the situation would be if your family was starving or something? So our intention is to continue the position where we'll never be tested, too, I might add.

53. Intrinsic value: "Easy to say and impossible to figure"

WARREN BUFFETT: The intrinsic value question. I mean, by definition, intrinsic value is the present value of the stream of cash that's going to be generated by any financial asset between now and doomsday.

And that's easy to say and impossible to figure, but it's the kind of thing that we're looking at when we look at a Coca-Cola, where we think it's much easier to evaluate the stream of cash that comes in the future than it is in a company such as Intel, marvelous as it may be. It's easier for us. Andy Grove may be better at figuring out Intel than Coke.

And in Berkshire, it is complicated by the fact that we have no business that naturally employs all of the capital that flows to us, so it is dependent, to some extent, on the opportunities available and the ingenuity used when that cash pours in, as it does.

Some businesses have a natural use for the cash. Actually, Intel has a good natural use for the cash over time as they've expanded in their business. And many businesses do.

But we do not have a natural use. We have some businesses that use significant amounts of cash. FlightSafety will buy a lot of — build a lot of simulators this year and they cost real money.

But in relation to the resources available, we have to come up with new uses, new ways to use cash. And that makes for a more difficult valuation job than if you've got — well, the classic case used to be a water or electric utility where the cash could be deployed and the return was more or less guaranteed within a narrow range, and it was very easy to make calculations then as to the expectable returns in the future.

But that's not the case at Berkshire. We've got very good businesses, both directly and partially owned. And those businesses are going to do well for a long, long time.

But we do have new cash coming in all the time, and sometimes we have good ideas for that cash and sometimes we don't. And that does make your job more difficult, in terms of computing intrinsic value.

We'll have — yeah, we're going to break after the next question. At that time — we break whenever Charlie and I run out of candy up here, actually. (Laughter)

We're going to let everybody — you can get something to eat, if you want to stick around, and we will be here till 3:30 when we reconvene at 12:30.

And those of you who have been with us this morning and had enough, we thank you for being here this weekend. We've had a terrific time with you, so I'm very appreciative of that.

54. "Multiple models is the game" for Munger

WARREN BUFFETT: Let's have a question from zone 9 and then we'll go to lunch.

AUDIENCE MEMBER: Good morning. My name's Frank Gurvich (PH). I'm a shareholder from London, Ontario in Canada.

My question is for Mr. Munger, and it concerns his models. And the question specifically is related to market valuation. I know I'm not going to get a prediction. That's not your bag.

What I'm curious about, is there any specific touchstone models that you reflect upon in trying to gain perspective at these markets where the historic valuations are quite high? And why do you draw on those models?

And my second question is for Mr. Buffett and it relates to taxation. If you were able to trade your portion of your portfolio, at least, in a tax-exempt fashion, like 401(k) plans, or in Canada, the RSP plans, would you possibly trade more actively?

WARREN BUFFETT: Charlie, you want to answer yours first?

CHARLIE MUNGER: Yeah. Well, the Munger system for dealing with reality is to have multiple models in the head, and then run reality against multiple models.

I think it's a perfect disaster to look at reality through just one model or two. It's —

There's an old proverb that says, "To the man with only a hammer, every problem looks pretty much like a nail." (Laughter)

And that is not our system. So I can't sit here and run through all the models in my head, even though there aren't that many. But multiple models is the game.

55. Buffett: Taxes don't bother me

WARREN BUFFETT: The question about taxation. It would not — if we were running Berkshire absent a capital gains tax, I don't think it would make much difference in what we do. I don't think it would make — certainly it wouldn't make a difference in causing us to trade actively.

We own the businesses we want to own. We don't own them because taxes have restrained us from selling them.

And as I mentioned earlier, I'm fairly sure we'll pay at least a billion dollars in income tax this year. We might not, but it looks that way to me, that we'll pay a billion dollars.

And I could do things that at least deferred, and perhaps — and I certainly could do things by doing nothing — that avoided paying that billion in tax, or a good bit of the billion, call it 800 million of the billion. But that is not a big factor with me. It's never been a big deal with me.

I paid my first income tax when I was 13, so I guess I got brainwashed at the time. And it doesn't bother me a lot to be paying taxes. I think, net, personally, I'm under-taxed in relation to what the society has delivered to me, and, you know, I don't send along any voluntary payments to I.R.S., I want you to understand. (Laughter)

But I really do. I mean, there's nobody I want to trade places with because their tax situation is better than mine. So it would not increase the activity.

56. Looking for owners who love their business more than money

WARREN BUFFETT: I've been asked to take one more question from zone 10. I'm not sure why, but maybe because they see that I still have candy up here. (Laughter)

So zone 10, please, and then we'll break.

AUDIENCE MEMBER: Mr. Buffett and Mr. Munger, my name is Sanjiv Mirchandani, shareholder from Boston.

First of all, thank you to both of you for everything. I have two questions.

For you, Mr. Buffett, you obviously have filters that you apply on selecting people as you do on stocks. Can you tell us a little bit about what those filters are?

WARREN BUFFETT: Filters on people?

AUDIENCE MEMBER: Yes, in selecting — you have an ability to motivate people who have a lot of money to keep working. What do you look for to figure out who those people are?

WARREN BUFFETT: Well, that's a key, key question, because when we buy businesses we don't have managers to put in them. I mean we are not buying them that way. We don't have a lot of MBAs around the office that we're —

CHARLIE MUNGER: Thank God.

WARREN BUFFETT: Yeah. (Laughter)

And, you know, I have not promised that they're going to have all kinds of opportunities or anything.

So as a practical matter, we need management with the businesses that we buy. And three times out of four, thereabouts, the manager is the owner and is receiving tens of millions, maybe hundreds of millions of dollars. So they don't have to work.

And we have to decide in that time when we meet them whether they love the business or love money. And we're not making a moral judgment. Charlie may, but I'm not making a moral judgment about whether it's better to love the business or love money, but it's very important for me to know which of the two is the primary motivator with them.

And we have had extremely good luck in identifying people who love their business. And so all we have to do is avoid anything that, on our part, that diminishes that love of the business or makes other conditions so intolerable that they overcome that love of the business.

And we have a number of people working for us, they have no financial need to work at all. And they probably outwork, you know, 95 percent or more of the people in the world, and they do it because they just love smacking the ball. And we almost — we virtually had no mistakes in that respect.

And we have identified a number of people, Charlie and I have, in terms of proposals to us, where we've felt that they did really — they liked the money better than the business. They were kind of tired of the business. You know?

And they might promise us that they would continue on and they would do it in good faith, but something would happen six months later or a year later and they'd say to themselves, "Why am I doing this, you know, for Berkshire Hathaway when I could be doing," whatever else they want to do?

I can't tell you exactly how we — what filter it is that we put them through mentally, but I can tell you that if you've been around a while, you can — I think you can have a pretty high batting average in coming to those conclusions. As you can about other aspects of human behavior.

I'm not saying you can take a hundred people and take a look at them and analyze their personalities or anything of the sort. But I think when you see the extreme cases, the ones that are going to cause you nothing but trouble, or the ones that are going to bring you nothing but joy, I think you can identify those pretty well.

Charlie?

CHARLIE MUNGER: Well, yeah, I think it's pretty simple. You've got integrity, intelligence, and experience, and dedication. And that's what human enterprises need to run well, and we've been very lucky in getting this marvelous group of associates to work with all these years.

It would be hard to do better, I think, than we've done on that respect.

Look around this place. I mean, and really, you young people look around this place. And look at how much gratification can come into these lives which have been mostly spent in deferring gratification. It's a very funny group of people, you shareholders. (Laughter)

Afternoon Session - 1998 Meeting

1. When is it time to buy a house?

WARREN BUFFETT: Let's settle down please and we'll —

We're going to go to — we skipped one last time so we're going to go first to zone 4.

AUDIENCE MEMBER: Hello. My name's Nelson Arata (PH), I'm from Southern California.

And I have a question. It's not really related to intrinsic value or any of that stock stuff, but more on — (laughter) — houses.

I'm still quite young, I don't have a house yet and I'm thinking about buying a house someday soon. And in order to do that I'm going to have to put a down payment, which means I might have to sell my shares.

And I was wondering if you can provide some insight on when is the best time to buy a house and how much down payment — (laughter) — you should be putting down, in relation to interest rates and also in relation to available cash and the stock market.

WARREN BUFFETT: Well, Charlie's going to give you an answer to that in a second. I'll just relay one story, which was when I got married we did have about $10,000 starting off, and I told Susie, I said, "Now, you know, there's two choices, it's up to you. We can either buy a house, which will use up all my capital and clean me out, and it'll be like a carpenter who's had his tools taken away for him. (Laughs)

"Or you can let me work on this and someday, who knows, maybe I'll even buy a little bit larger house than would otherwise be the case."

So she was very understanding on that point. And we waited until 1956. We got married in 1952.

And I decided to buy a house when it was about — when the down payment was about 10 percent or so of my net worth, because I really felt I wanted to use the capital for other purposes. But that was a way different environment in terms of what was available to buy.

In effect, if you have the house you want to buy, you know, I definitely believe in just going out and probably getting the job done. But in effect, you're probably making something in the area of a 7 or 8 percent investment, implicitly, when you do it. So you know, you'll have to figure out your own equation from that.

Charlie probably has better advice on that. He's a big homeowner — (laughter) — in both senses of the word.

CHARLIE MUNGER: I think the time to buy a house is when you need one. (Laughter)

WARREN BUFFETT: And when do you need one?

CHARLIE MUNGER: Well, I have very old-fashioned ideas on that, too. The single people, I don't care if they ever get a house. (Laughter)

WARREN BUFFETT: When do you need one if you're married, Charlie? I'll follow up for the — (Laughter)

You need one when your wife wants one.

CHARLIE MUNGER: Yeah, yes. (Laughter) I think you've got that exactly right. (Laughter)

VOICE: Mr. Buffett?

WARREN BUFFETT: Yeah.

VOICE: May I make an announcement?

WARREN BUFFETT: Sure.

VOICE: Gregory Crawford needs to go to the security office, please, for emergency message. Gregory Crawford to the security office for emergency message. Thank you.

WARREN BUFFETT: OK, hope it isn't a margin call. (Laughter)

2. Executive compensation: Buffett slams big money for mediocrity

WARREN BUFFETT: OK, we'll go to zone 1, please.

AUDIENCE MEMBER: I'm Ralph Bedford (PH) from Phoenix, Arizona.

The question I'm going to ask does not pertain to Berkshire Hathaway, but I would appreciate it if you gentlemen, if you can, explain the justification and rationalization for the exorbitant salaries, bonuses, perks, directors' fees, and other benefits that most public corporations are paying. (Applause)

WARREN BUFFETT: I would say this. In my own view, the most exorbitant are not necessarily the biggest numbers. What really bothers me is when companies pay a lot of money for mediocrity, and that happens all too often.

But we have no quarrel in our subsidiaries, for example, for paying a lot of money for outstanding performance. I mean, we get it back 10 or 20 or 50-for-1.

And similarly in public companies, we think that there have been managers — in our managers — who have taken companies to many, many, many billions of market value more than would've happened with virtually anyone else.

And they sometimes take a lot of money for that. Sometimes, as in the case of Tom Murphy at Cap Cities, you know, it just didn't make a difference to him.

I mean, he performed in a way that would justify — would have justified huge sums, but it wasn't — he would tell you that he had all the money he needed and he just didn't care to take what the market might bear.

But I am bothered by irrational pay systems. And I'm particularly bothered when average managers take really large sums.

I'm bothered when they design, or have designed for them, systems that are very costly to the company — maybe partly to make themselves look good because they want huge options themselves, so they feel if they give options widely throughout the company — so they design a system that is illogical company-wide because they want one that's illogical for them personally.

But large sums, per se, don't bother me. I'm not saying, you know, whether any individual should — might want to take them or not. But I do not mind paying a lot of money for performance.

It's done in athletics, it's done in entertainment, but in business the people who are the .200 hitters and the people who would not attract a crowd as an entertainer have worked it out so that — I mean, the system has evolved in such a way that — many of them take huge sums. And I think that's obscene, but I can tell you, there isn't much you can do about.

The system feeds on itself. And companies do look at other companies' proxy statements, every CEO does. And they say, "Well, if Joe Smith is worth X I have to be worth more." And they tell the directors that, "Certainly you wouldn't be hiring anybody that was below average, so how can you pay me below average?" And the consultants come in and ratchet up the rewards.

And it's not anything that's going to go away. It's like we were talking about campaign finance reform earlier. The people who have their hands on the switch are the beneficiaries of the system. And it's very hard to change the system when the guy whose hand is on the switch is benefitting enormously, and perhaps disproportionately, from that system.

Charlie?

CHARLIE MUNGER: Well yeah, I'd like to report that the original Vanderbilt behaved even better than the people at Berkshire Hathaway. He didn't take any salary at all. He thought it was beneath him as a significant shareholder to take a salary. That ideal, I'm afraid, died with him. (Laughter)

WARREN BUFFETT: Yeah, Charlie and I — our directors are paid $900 a year, but I tell them on an hourly basis they're making a fortune because we don't work them that hard. (Laughter)

But Charlie and I did not think through, when we established that $900 a year, is that they set our salaries, too, so — (Laughter)

We have not followed the standard procedure, which is to load it on the directors, and the directors shall load it on you.

CHARLIE MUNGER: I do think it will have pernicious effects for the country in its entirety as this thing keeps escalating, because I think you're getting a widespread perception that at the very top, corporate salaries in America are too high. And that is not a good thing for a civilization, when the leaders are regarded as not dealing fairly with the institutions that they head.

WARREN BUFFETT: Yeah. If — (Applause)

CHARLIE MUNGER: And as for the corporation consultants who advise on salaries, all I can say is that prostitution would be a step up for them. (Laughter)

WARREN BUFFETT: Put him down as undecided. (Laughter)

3. Class B stock "worked out as well as possible"

WARREN BUFFETT: Zone two, please.

AUDIENCE MEMBER: I'm Dan Blum (PH), from Seattle, Washington via Cambridge, Massachusetts.

I want to ask whether the issuance of Class B stock has achieved the objective which you announced for it, when it was created.

WARREN BUFFETT: Well, I would say this, that considering the alternatives we faced, which was the imminence of unit trusts that would've been promoted with heavy front-end commissions, with substantial annual fees, with bad tax consequences, and with, probably, a misrepresentation of the historical record in such a way that people who really didn't know much about securities would've been enticed in — with that as an alternative I think the B stock was the best thing we could've done, and I feel good about how it's worked out.

I think that, you know, we didn't set out to issue it. We don't like talking anybody into buying our stock. But I don't think in any way that the group we have here is diminished in the least by having a mix of B and A shareholders, as opposed to A only.

The B has worked out as well as possible. I hope that, you know, we haven't enticed anybody in with unreasonable expectations. That's the biggest thing that Charlie and I worry about. And it's hard not to have that happen with the historical record. I know it would've happened in a big way with the unit trust.

So, you know, it's like making the mistake originally of starting with Berkshire, I think. We enjoy things as they come along and we've gotten a good group with the B shareholders, and we're happy with the present situation.

Charlie?

CHARLIE MUNGER: Yeah, we wanted to step hard on what we regarded as a disreputable financial scheme, and that we did. And — (Laughter)

WARREN BUFFETT: And I think the way we sold the B was such as to not — as to attract the kind of people who really did look at it on a long-term basis. We did everything we could to discourage people who thought they were going to make a lot of money in a hurry.

So I think we attracted a whole new group of shareholders who are quite similar in perspective to the shareholder group that we already had, and that was our hope.

4. Berkshire's investing minimum

WARREN BUFFETT: Zone 3, please?

AUDIENCE MEMBER: My name is Alan Rank from Pittsburgh.

I first want to thank Susan Jacques for returning the cocktail yesterday, and I hope she was rewarded with good sales at Borsheims.

Question is regarding the fact that you don't report details of anything under $750 million, and with the change of the values of small-cap in relation to large-cap, would that be something that Berkshire or individuals might try to look as opportunity with the small-cap premium shrinking, as it has?

WARREN BUFFETT: We don't worry about whether a stock is small-cap or large-cap except to the extent that by now we've gotten to a point where anything below a certain level just is not of interest to us because it can't be material to our results, so —

We never think of opportunities as existing because something is small-cap, or sectors, or all that, you know, what generally gets merchandised.

So our cutoff point is set more or less at the point where we think it's material. That's not as defined by the SEC, we could have a higher limit.

But we think when you get down below 2 percent of assets or thereabouts that the reporting of positions would not affect anybody's calculation of intrinsic value or give them insights about the way we run the business, but it would be more for the people who were looking for things to piggyback on.

And so we will move the cutoff point up as we go along. Because of our size, we will never be in companies that have capitalizations that, you know, of a half a billion or a billion dollars, because we just can't put enough money in it. Occasionally we'll be in one just by accident.

But we're looking at things that we can put $500 million in ourselves, at least. At 500 million, a 5 percent position has a $10 billion market cap.

That limitation has hurt, will hurt, is hurting, our performance to some degree. You would — if Berkshire were exactly 1/100th of its present size in all respects, owning the operating businesses it did but all 1/100th the size, our prospects would be better than they are with the kind of money we have presently.

Charlie?

CHARLIE MUNGER: I've got nothing to add.

5. "Sandy Weill is a very, very good manager"

WARREN BUFFETT: OK. Zone four, please.

AUDIENCE MEMBER: OK. My name is Tom Conrad (PH), I'm from McLean, Virginia.

I just wanted to first thank you, Mr. Buffett and Mr. Munger, for each year answering our questions. I found myself at 5 a.m. standing outside the door here, and I don't do that for anyone. (Laughter)

And it's a real pleasure to hear your answers. I have two questions.

One is, with Travelers, the company Travelers, and their merger with Citibank, do you have confidence in the management of Sandy Weill?

My second question is, you said it in a few meetings ago that diversification is a protection against ignorance. And it only takes three great companies to be set for an investment lifetime. And I invested in those three companies: Coca-Cola, Gillette, and Disney.

And I went ahead and invested in a fourth company without asking you. I invested in Pfizer. And I just wonder what you think about the pharmaceutical industry, if you feel there's some great companies in that industry. Thank you very much.

WARREN BUFFETT: Yeah. Well, A) we think Sandy Weill is a very, very good manager. Sandy is — I mean, the record is clear. It is not easy to manage in Wall Street, and Sandy has done an excellent job there as well as in other allied, or somewhat allied, fields. So his record is proven.

And he has been (inaudible) ever since buying Commercial Credit from Control Data. He's built a terrific company.

And he built a terrific company in businesses that themselves aren't necessarily so terrific, so it's required real management skill.

6. Pharmaceutical stocks: "We stupidly blew that one"

WARREN BUFFETT: Pharmaceuticals, we missed. We would not have known how to pick out any single business, but we — single company — within the industry, but we certainly should've recognized — did recognize, didn't do anything about it — that the industry as a whole represented a group that would achieve good returns on equity, and where some sort of a group purchase might've made sense.

We did buy one a while back, but we didn't — it was peanuts. And it would of been — it was within our circle of competence to identify the industry as likely to enjoy very high profits over time. It would not have been within our circle of competence to try and pick a single company.

Charlie?

CHARLIE MUNGER: Yeah, we stupidly blew that one. (Laughter)

WARREN BUFFETT: We'll blow more, too. (Laughter)

7. Decentralization "just short of total abdication"

WARREN BUFFETT: Zone five.

AUDIENCE MEMBER: Yes, sir. Good afternoon. My name is Matt Lovejoy from Lexington, Kentucky. And gladly, I'm not a consultant. (Laughter)

I have a question, sir, Mr. Buffett, about your operating management style. In my opinion, the mainstream media minimizes the significance of your nonpublic operating investments.

When you consider capital allocation in these companies, do you have the managers submit annual business plans? And if so, do you formally meet with those managers to see how well you can track progress against those plans?

WARREN BUFFETT: Yeah, that's a good question. And the answer is that we may meet with some of them annually, we may meet with others semiannually, but we have no formal system whatsoever, and we will never have a formal system. We don't demand any meetings of any of our managers. We have no operating plan submitted to headquarters.

Some of the companies use operating plans themselves, some of them don't. They are all run by people who have terrific records, and they have different batting styles. And we're not about to tinker with somebody that's batting with .375 just because somebody else holds the bat a little differently or uses a different weight bat, or something of the sort.

So we believe in letting them do, currently and in the future, what has been successful for them in the past.

And different people have very different styles. I've got my own style, you know?

But we have managers that like to talk things over, we have other managers that like to go their own way. And we have managers that have a by-the-book approach which works well, we have other managers who wouldn't dream of that. We have managers that — most managers probably have monthly statements of financials. We have other managers that don't.

And that really isn't a problem. What we want to have is good managers, and there's more than one way to get to, at least, business heaven, and we have a number that have found different ways to get there.

So we have never imposed — we have certain requirements because we're a public company, and SEC requirements, and International Revenue Service coordination.

But we've never imposed anything from the top on any of the operating managements.

We have MBAs running companies, we have people who never saw a business school. And talent is the scarce commodity, and when you find talent and they've got their own way of doing things, we let it — we're delighted to have them do it. More than letting them do it — we want them to do it their way. We don't want to change them.

Charlie?

CHARLIE MUNGER: Yeah, the truth of the matter is that we have decentralized power in the operating businesses to a point just short of total abdication. (Laughter)

And we don't think our system is right for everybody. It has suited us and the kind of people that have joined us. But we don't have criticism for other people, like Emerson Electric or something, who have operating plans, and compare performance quarterly against plan and all that sort of thing. It's just not our style.

WARREN BUFFETT: Yeah, we centralize money and — (laughs) — everything else we decentralize, pretty much, but —

I don't know whether you've met him here, but for example, Al Ueltschi is here. He started FlightSafety in 1951 and he's — I don't know what he'll spend on simulators this year, but it could easily be a hundred million dollars or thereabouts.

And he — if I spent hours with him, I couldn't add 1/100th of 1 percent to his knowledge of how to allocate that money. It would be ridiculous. It'd be a waste of his time and it would be an act of arrogance on my part. And I have no worries about how Al allocates the money. And that's an unusually capital intensive business compared to most of our businesses.

There's some that I get into the details more because I just worked with the person that's running things a long time and we kind of enjoy it.

Ajit and I talk virtually every night about the reinsurance business. You know, I am not improving the quality of his decisions at all, but it's an interesting game and I like hearing about it, and he doesn't mind talking about it, so we talk them over. But that's just a matter of personal chemistry.

And as we add managers, we will adapt to them. We adapt our accounting systems, to a degree, to them. Now, we do have certain requirements that result from the SEC and IRS. But we don't — our managers know their businesses and they know how to run them.

And if they don't — this hasn't been the case — but if they didn't, we would, you know, we'd do something about the manager, we wouldn't try and build a bunch of systems.

8. Avoid the "Frozen Corporation"

WARREN BUFFETT: Zone 6, please.

AUDIENCE MEMBER: Good afternoon, gentlemen. My name is George Donner from Fort Wayne, Indiana.

My question has to do with estimating the intrinsic value of a company, in particular the capital intensive companies like you were mentioning. I'm thinking of things like McDonald's and Walgreens, but there are lots of others where you have a very healthy and growing operating cash flow, but it's marginally or completely offset by heavy expenditures on putting up new stores or restaurants, or building a new plant.

And so my question is, what do you do for your estimate of future free cash flow? And with Treasurys around — long Treasurys around 6 percent — at what rate do you discount those cash flows?

WARREN BUFFETT: Well, we discount at the long rate just to have a standard of measurement across all businesses. But we would take the company that is spending the money as it comes

in, and they don't get credit for gross cash flow, they get credit for whatever net cash is left every year.

But of course, if they're spending the money wisely, even though you have to discount it for more years, the growth in cash development should offset that or they weren't investing it wisely.

The best business is one that gives you more and more money every year without putting up anything to get it, or very little. And we've got some businesses like that.

The second-best business is a business that also gives you more and more money. It takes more money, but the rate at which you invest — reinvest — the money to get that growth is a very satisfactory rate.

The worst business of all is the one that grows a lot, and where you're forced — forced, in effect — forced to grow to stay in the game at all, and where you're reinvesting the capital at a very low rate of return. And sometimes people are in those businesses without knowing about it.

But in terms of discounting, in terms of calculating intrinsic value, you look at the cash that is expected to be generated and you discount back at — in our case, we use the long-term Treasury rate. That doesn't mean that you pay the amount that that present value calculation leads to, but it means that you use that as a common yardstick, that Treasury rate.

And that means that if somebody is reinvesting all their cash flow the next five years, they'd better have some very big figures coming in down the road. Because at some day, a financial asset has to give you back cash to justify you laying out cash for it now.

Investing is the art, essentially, of laying out cash now to get a whole lot more cash later on, and something at some point better deliver cash.

Ben Graham in his class, we used to talk about what he called the Frozen Corporation. And the Frozen Corporation was a company whose charter prohibited it from ever paying anything to its owners, or ever being liquidated, or ever being sold and —

CHARLIE MUNGER: Sort of like a Hollywood producer. (Laughter)

WARREN BUFFETT: Yeah. And the question was, what was such an enterprise worth? Well, that's sort of a theoretical question, but it forces you to think about the realities of what business is all about. And business is all about putting out money today to get back more money later on.

Charlie?

CHARLIE MUNGER: I do think there is an interesting problem that you raise, because I think there is a class of businesses where the eventual cash back part of the equation tends to be an illusion. I think there are businesses where you just keep pouring it in and pouring it in, and then all of a sudden it doesn't work, and no cash comes back.

And what makes our life interesting is trying to avoid those and get in the alternative kind that drowns you in cash. (Laughter)

WARREN BUFFETT: The one figure we regard as utter nonsense is the so-called EBITDA. I mean, the idea of looking at a figure before the cash requirements and merely staying in the same place — and there usually are — any business with significant fixed assets almost always has with it a concomitant requirement that major cash be reinvested in order simply to stay in the same place competitively and in terms of unit sales — to look at some figure that is before — that is stated before those cash requirements, is absolute folly and it's been misused by lots of people to sell lots of merchandise in recent years.

CHARLIE MUNGER: It's not to the credit of the investment banking fraternity that it has learned to speak in terms of EBITDA. I mean, the idea of using a measure that you know is nonsense, and then piling additional reasoning on that false assumption, it's not creditable intellectual performance. And then once everybody is talking in terms of nonsense, why, it gets to be standard. (Laughter)

9. Checklist for selecting stocks

WARREN BUFFETT: Zone 7, please.

AUDIENCE MEMBER: Hi. My name is Brennan Vecchio (PH) and I'm in the Academy of Finance at Northwest High School in Omaha.

Could you explain the criteria you look at when selecting your stocks?

WARREN BUFFETT: Well, we look at — I'm glad you came. I hope there's a large group. I got a note, I think from your teacher, on that. (Applause)

We look at it — the criteria for selecting a stock is really the criteria for looking at a business. We are looking for a business we can understand. That means they sell a product that we think we understand, or we understand the nature of the competition, what could go wrong with it over time.

And then when we find that business we try to figure out whether the economics of it means the earning power over the next five, or 10, or 15 years is likely to be good and getting better or poor and getting worse. But we try to evaluate that future stream.

And then we try to decide whether we're getting in with some people that we feel comfortable being in with.

And then we try to decide what's an appropriate price for what we've seen up to that point.

And as I said last year, what we do is simple but not necessarily easy.

The checklist that is going through our mind is not very complicated. Knowing what you don't know is important, and sometimes that's not easy. And knowing the future is definitely — it's impossible in many cases, in our view, and it's difficult in others. And sometimes it's relatively easy, and we're looking for the ones that are relatively easy.

And then when you get all through you have to find it at a price that's interesting to you, and that's very difficult for us now. Although there have been periods in the past where it's been a total cinch.

And that's what goes through our mind. If you were thinking of buying a service station, or a dry cleaning establish, or a convenience store in Omaha to invest your life savings in and run as a business, you'd think about the same sort of things.

You'd think about the competitive position and what it would look like five or 10 years from now, and how you were going to run it, and who was going to run it for you, and how much you had to pay.

And that's exactly what we think of when we look at a stock, because the stock is nothing other than a piece of a business.

Charlie?

10. Easy decision case study: National Cash Register

CHARLIE MUNGER: Yeah. If finance were — when finance is properly taught, it should be taught from cases where the investment decision is easy.

And the one I always cite is the early history of National Cash Register Company, and that was created by a fanatic who bought all the patents, and had the best salesforce, and the best production plants. He was a very intelligent man and passionately dedicated to the cash register business.

And of course, the cash register business was a godsend to retailing when cash registers were invented. So that was the pharmaceuticals of a former age.

If you read an early annual report prepared by Patterson, who was CEO of National Cash Register, an idiot could see that this was a talented fanatic. Very favorably located, and that, therefore, the investment decision was easy.

If I were teaching finance, I would collect a hundred cases like that. And that's the way I would teach the students.

WARREN BUFFETT: We have that annual report. What was that, 1904 or something, Charlie?

But it's really a classic report because Patterson not only tells you why his cash register is worth about 20 times what he's selling for to people, but he also — (laughs) — tells you that you're an idiot if you want to go in competition with him. It's a classic.

CHARLIE MUNGER: It is just a (inaudible). But no intelligent person can read this report and not realize — (laughs) — that this guy can't lose.

11. "Norman Rockwell frame of mind"

WARREN BUFFETT: Area 8, please.

AUDIENCE MEMBER: Good afternoon. My name is Robert Rowland (PH) from London, England.

I've been in Omaha all weekend with my wife on the first leg of my honeymoon, and I've noticed you're quite a buyer of nostalgic assets. Can I ask whether nostalgia is one of your filters? (Buffett laughs)

Are there any assets like that left in the U.S. to buy? And if not, can I suggest you come to the U.K. where all we do is sell them? (Laughter)

WARREN BUFFETT: Well, I don't want to interrupt your honeymoon. (Laughter)

But if you'd send me a list of those companies over there that are long on nostalgia, that might be to our liking. Because Charlie and I tend to operate from sort of a Norman Rockwell frame of mind. And it is true that the kind of companies we like sort of do have a homey, Norman Rockwell, Saturday Evening Post-type character to them there.

They have character. And they're the kind of companies, I think, frequently, that people, when they join them, expect to spend the rest of their lives there rather than look at it as something to stick on their resume.

And there are businesses like that. If you look at the businesses that we've bought in the last three or four years, there is real character to the businesses and to the people that build them.

And that's why the people that build them stay on and feel very strongly about running them correctly, even though they have no financial consequence to themselves whatsoever, so —

If you've got a list of those in England and you still have any strength left after your honeymoon, drop me a line. (Laughter)

12. A and B shares are nearly equivalent investment choices

WARREN BUFFETT: Zone 9, please.

AUDIENCE MEMBER: Good afternoon. Joshua Andrews (PH) from Omaha Northwest High School, Academy of Finance.

WARREN BUFFETT: Good.

AUDIENCE MEMBER: And on behalf of the Academy of Finance, we want to thank you for the tickets. There's 33 of us in attendance today.

WARREN BUFFETT: Terrific. (Applause)

AUDIENCE MEMBER: We had the opportunity to play a national game, the Investment Challenge. And on the list of the stocks there were BRK A and BRK B. Can you explain what the difference of the two stocks are?

WARREN BUFFETT: Yeah, the difference between the Berkshire A and B is simply that an A can be converted to a B at any time in the ratio of one A into 30 Bs. The B cannot be converted into the A, so it's a one-way street on conversion.

The economic value of the B is exactly 1/30th that of the A. So anytime the A ever gets any money of any kind from dividends, or liquidation, or a merger, or something of the sort, for every $30 that you get on the A you're going to get $1 on the B.

The two differences are that there is less voting power, proportionately, in the B. And the B does not participate in a designated-contributions program that Berkshire runs, simply because that would be very, very hard to administer. And when we issued the B we pointed out those two differences.

The B should never sell for more than 1/30th of the price of the A. When it sells just a tiny bit above that then arbitrage settles in as people buy the A and convert it to B, and sell the B. Occasionally the B may be at a slight discount to the A because it's not convertible the other way.

But I think as a practical matter you can treat the A and B as very equivalent investment choices. There's not enough difference to make it significant.

Charlie?

CHARLIE MUNGER: Nothing further.

13. How teenagers can prepare for the future

WARREN BUFFETT: OK. Area 10, please.

AUDIENCE MEMBER: My name is Sheena Cho (PH) from the Academy of Finance.

What recommendations would you give us as teenagers to prepare for our future and become as successful as you? (Laughter)

WARREN BUFFETT: Well, if you're interested in business, I definitely think you ought to learn all the accounting you can by the time you're in your early 20s. Accounting is the language of business.

Now, that doesn't mean it's a perfect language, so you have to know the limitations of that language, as well as all aspects of it. So I would advise you to learn accounting. And I would advise you to be — in terms of part-time employment or anything else, work at a number of businesses.

There's nothing like seeing how business operates to build your judgment in the future about businesses. You know, when you understand what kind of things are very competitive, and what kind of things are less competitive, and why that works that way, all of that adds to your knowledge.

So I would do a lot of reading. If you're interested in investments, I would — A, I would take the accounting courses.

I'd do a lot of reading about investments and I would get as much business experience. I would talk business with people that are in business to find out what they think makes their operation tick, or where they have problems and why. I just think you just kind of sop it up every place that you can.

And if it turns you on, you'll do well in it. I mean, I think that, you know, certain activities grab different people. But if business is of interest to you, my guess is you'll do well.

And if you understand business you understand investments. Investments are simply business decisions in terms of capital allocation. I wish you well on it.

Charlie?

CHARLIE MUNGER: Yeah, there's also the little matter of underspending your income year after year after year.

WARREN BUFFETT: Which we have mastered. (Laughter)

CHARLIE MUNGER: Yes. That really works if you keep at it.

WARREN BUFFETT: Yeah, I mean, Charlie and I both — Charlie started having children at a rapid rate, so — and he was lawyer when there was not big money in then.

But, I was — any money you save before you get out and start having a family is probably — any dollar — is probably worth $10 later on simply because you can save it.

The time to save is young, and you'll never have a better time to save than really, free formation of a family. Because the expenditures come along then whether you like them or not. So I —

You know, work for yourself first and put the money aside. I was lucky that way, I didn't have to pay for my own college. Probably wouldn't have gone to college if I'd had to pay for it.

But I, you know, I was able to save everything I made in my teens and those dollars got magnified quite a bit.

Whereas the money I — when I started first selling securities, I mean, the money I made then was taken up by family needs to quite an extent. So start saving early. A lot of it's habit anyway, so it's a great habit to have.

14. "We are not reluctant to invest abroad"

WARREN BUFFETT: OK, zone 1, please.

TONI: I'm Toni Ausnit (PH) from New York City, following up on the questioner from London.

In light of the current dearth of investment opportunities, do you see yourselves investing in non-U.S. companies which are well-managed, understandable, and growing?

WARREN BUFFETT: Well, if we find such companies as you describe at a price that's half attractive we're perfectly willing to buy them. So the answer to that is yes.

But we would be looking, to an extent, worldwide irrespective of market conditions in the United States. Now, market valuations in this country tend to be fairly well-matched in most of the major countries. So we don't — there's been a bull market all over the world in a huge way in the bigger markets.

And so unfortunately — I mean, it would of been nice for us if the U.S. market had tripled and other markets had stayed the same, and then we would be very likely to be finding things abroad. We're not finding them abroad, but we're certainly looking for the kind of thing you're talking about.

We are not reluctant to invest abroad.

And our two — well, all three of our largest holdings — American Express, Gillette, and Coke — and we're talking about $25 billion of market value there that we have — all three of those have major businesses abroad. And in the case of Coke and Gillette, it's a majority of their earnings from abroad.

So we're interested and there's better growth opportunities in many areas abroad than here. But we're not finding bargains as we look around the world.

Charlie?

CHARLIE MUNGER: Nothing more.

15. Philanthropy share sales won't hurt stock price

WARREN BUFFETT: OK. Area two.

AUDIENCE MEMBER: My name is Henry Allen (PH), Mamaroneck, New York.

Question I have is a little delicate, relates to my family and heirs rather than myself, because I'm a couple of decades older than you gentlemen.

You've been very candid about the succession and the estate planning, but how will the recipients of huge grants — charitable grants — get the liquidity they need without — to use the money without unduly driving the stock down?

WARREN BUFFETT: Well, I don't think that supply and demand, in terms of specific — you know, let's just say that 3 percent of Berkshire were to be added to the supply, anyway. I don't think that makes much difference.

What really makes the difference is the prospects of the business.

If my charitable foundation were operative today, it would have to sell — it would have to give away 5 percent of the value of the foundation every year. And if Berkshire paid no dividend, that means it would have to sell 5 percent of the holdings per year.

I don't think that the price of Berkshire would be materially different if there were a seller of — that would be, in this case, 2 percent of Berkshire's capitalization — I don't think it would be materially different.

If it is, it probably should be different. I mean, there should be a reasonable amount of trading that can take place annually without affecting the price of the stock materially or the price of the stock is being propped for sort of unnatural reasons.

So I wouldn't really worry about that. We had one shareholder die about a year, year and a half ago, that had 3/4 of 1 percent of the company, for example. It was sold in, I don't know, six weeks or thereabouts, and they raised, at that time, $250 million or thereabouts from the sale.

I am not worried about that. I'm worried about — I mean, I don't worry — but the key factor is what are the prospects of the businesses? If the businesses are worth money — there are all kinds of companies on the New York Stock Exchange who are perfectly decent businesses where 30 or 40 percent of the stock turns over a year.

And Berkshire's price should not be way different if 10 percent trades a year as opposed to the present 3 percent.

Charlie?

CHARLIE MUNGER: I agree with that. I don't think there'd be any problem at all at the present time if the Buffett Foundation were selling 5 percent of its holdings every year.

WARREN BUFFETT: Could be 500 shares a week or something like that. But if there isn't demand for 500 shares a week of A on a company with our capitalization, then the price probably is artificially wrong at that time.

CHARLIE MUNGER: But I just had lunch with Susie and it doesn't look to me like she's in any imminent danger of mortality. (Laughter)

WARREN BUFFETT: No. Yeah, it will — it will come into play when the survivor of the two of us dies and when the estate gets cleaned up and everything else.

So I think — I certainly hope and I think it's quite a ways away.

CHARLIE MUNGER: You people have more important things to worry about. (Laughter and applause)

16. Buffett's favorite book on his philosophy

WARREN BUFFETT: Zone 3, please.

AUDIENCE MEMBER: My name is Jim Howard (PH). I'm from Syracuse, Indiana.

My question is, does the book "Buffettology" by Mary Buffett present fairly, in all material respects, the calculations you use in evaluating a business for purchase, or did the lady just write a book?

WARREN BUFFETT: Well, it was written by two authors. But I would say that — no, I would say that in a general way, it gets at the investment philosophy.

But I wouldn't say that — it's not the book I would've written, precisely, but I have no quarrel with it, either.

I actually think by reading Berkshire's reports, you should be able to get more — I would think you'd get more of our philosophy than in any other manner.

I think Larry Cunningham, the fellow who held the symposium at the Cardozo School at Yeshiva, did the best job, actually, of sort of reconstructing the various things that have been written at Berkshire into sort of the best-organized presentation of our philosophy. So and he —

CHARLIE MUNGER: And he's selling it right here. It's a very practical —

WARREN BUFFETT: Yeah, he had it at Borsheims — in the mall outside Borsheims yesterday.

And Larry did a very good job. You know, I had nothing to do with it, but I think that that — I really think he's done a first-class job of sort of organizing by topic, I mean, all these things that I've sort of written annually and Charlie's written over time. So that would be — that would probably be my — if I were picking one thing to read, that would probably be the one.

17. Disney sale in the '60s was a "huge mistake"

WARREN BUFFETT: OK, zone 4, please.

AUDIENCE MEMBER: My name is Leigh (inaudible). I'm from Los Angeles, California.

And I want to begin by thanking you for having Bob Hamman. It was a stroke of genius. I could shop at Borsheims and my husband was entertained while I did so. (Laughter)

WARREN BUFFETT: Well, Bob is not only the best bridge player around but he is an entertaining guy, too. We —

AUDIENCE MEMBER: He's great.

WARREN BUFFETT: Yeah, he is great. I agree with you.

AUDIENCE MEMBER: My question. You owned Disney once before and sold it. You also owned advertising companies in the ’70s, I believe —

WARREN BUFFETT: Right.

AUDIENCE MEMBER: — and you sold them. Could we have some insight into your thinking as to why you sold them?

WARREN BUFFETT: I’m not sure I want to give you any insight into that thinking. (Laughs)

Well, we’ll start off with the fact that when I was 11, I bought some Cities Service preferred at 38 and it went to 200, but I sold at 40, so — (laughter) — grabbing my $2 a share of profit.

So I — everything we’ve ever sold has gone up subsequently, but some of them have gone up more painfully, subsequently, than others.

And certainly the Disney sale in the ’60s was a huge mistake. I should have been buying, forget about holding, and —

That’s happened many times. I mean, we think that anything we sell should go up subsequently, because we own good businesses and we may sell them because we need money for something else, but we still think they’re good businesses, and we think good businesses are going to be worth more over time.

So everything I sold in the past, virtually that I can think of, has gone on to sell at a lot more — for a lot more money. And I would expect that would continue to be the case.

That’s not a source of distress. But I must say that selling the Disney was a mistake, and actually the ad agencies had done very well since we sold them, too. Now, maybe some of that money went into Coca-Cola or something else, so I don’t worry about that.

I would worry, frankly, if I sold a bunch of things right at the top, because that would indicate that, in effect, I was practicing the bigger fool-type approach to investing, and I don’t think that can be practiced successfully over time.

I think the most successful investors, if they sell at all, will be selling things that end up going a lot higher, because it means that they’ve been buying into good businesses as they’ve gone along.

Charlie?

CHARLIE MUNGER: Well, I’m glad that the questioner brought this touch of humility, because it is really useful to be reminded of your errors. (Laughter)

And I think we're pretty good at that. I mean, we kind of mentally rub our own noses in our own mistakes. And that is a very good mental habit.

Warren can tell you the exact number of cents per shares that he sold at and compare it with the current price. It actually hurts him. (Laughter)

WARREN BUFFETT: It actually doesn't hurt. (Laughs)

The truth is, you know, because, you know, you just keep on doing things.

But it is instructive to look at — to do postmortems on everything and say — as long as you don't get carried away with it.

But every acquisition decision, that kind of thing, you know, there should be postmortems. Now, most companies don't like to do postmortems on their capital expenditures.

I've been a director of a lot of companies over the years and they've usually not spent a lot of time on the postmortems. They spend a lot of time on telling you how wonderful the acquisitions are going to be, or the capital expenditures, but they don't like to look so hard, necessarily, at the results.

CHARLIE MUNGER: Think of how refreshing a board of directors meeting would be if they sat down, "And now we'll spend three hours examining all our stupid blunders and how much we've blown."

WARREN BUFFETT: And then after that the compensation committee will meet. Now — (laughter) — that's not going to happen. (Laughter)

CHARLIE MUNGER: Right.

18. Phil Carret is one of Buffett's heroes

WARREN BUFFETT: OK. Area 5, please.

AUDIENCE MEMBER: My name is Keller, Harpel Keller, from Portland, Oregon.

Two questions, one of a personal nature. Obviously there are many, many people here today. And I wonder if one of the true patriarchs of the investment business is here today, Phil Carret —

WARREN BUFFETT: Well, I'll answer —

AUDIENCE MEMBER: Many of his friends and admirers would wish him well.

WARREN BUFFETT: Phil, up till a week ago was going to be here today. Phil is 101, wrote a book on investments in 1924, and I've known Phil for about 46 or '7 years.

And Phil has made all the meetings for a number of years, would be here today, and he broke a hip about five or six days ago. But he sent a message that he will definitely be here next year. (Laughter) And he will be, too. (Applause)

WARREN BUFFETT: Phil is a hero of mine. Go ahead.

19. End of Cold War isn't an investing factor

AUDIENCE MEMBER: Second question. Has to do with Ben Graham. And he changed his valuation standards as the decades progressed.

When he couldn't buy stocks below a net-net, he changed his standards because the environment changed.

Now, the world today seems to be a much different place than in 1989 when the U.S.S.R. collapsed. Even they are stumbling toward the free enterprise system. The Russian mafia is a perverse illustration of that.

Now there is only one superpower in the world, the U.S.A., and we must be extremely grateful for the men who put us on the track to the free enterprise system.

Now, the free enterprise system is out of the bottle, it's not going to get back in. It seems to be expanding and accelerating around the world. With the resulting expansion of world trade, may that lead to a reevaluation of historical measures for measuring investments?

WARREN BUFFETT: Well, my answer to that would be that I doubt it, but I, you know, I also don't know.

But I don't think that the end of the Cold War is something that I would factor into my evaluation of businesses. There are all kinds of events that happened, and their impact, in terms of being quantified, very difficult to figure over time, very difficult to isolate any single variable in a complex economic equation.

So in terms of how the world was going to work ten years from now, or the returns are going to be on equity in business, you know, I don't know what will be all the variables that impact on that.

And obviously, right now people are very bullish about the fact that those returns — or something like those returns — will continue.

But I don't — I would not rely in making such a projection on the fact that the Cold War has ended or really any political or economic development around the world.

I don't know how to predict future earnings of American business. And when I look at all of the great historic events of the past, nothing there gives me much in the way of a clue as to which ones would signal major changes in profitability of American business.

Charlie?

CHARLIE MUNGER: Well, I think you raise one very interesting question. If the rest of the world becomes very much more prosperous, as it will if it adopts the free enterprise system, which investments are likely to do best?

I would argue that the Cokes and Gillettes and so on are likely to be helped by a great increase in prosperity in what is now the Third World. And I'm not so sure that's true of a lot of other businesses.

WARREN BUFFETT: Yeah, we like the international businesses we have. And as I say, our three top holdings all have a major international aspect to them, and really, in aggregate, a dominant international aspect to them.

And there's no question in my mind that a Coke will grow faster outside of the United States than in the United States, and the same is true of Gillette, maybe the same is true of American Express. So that's built into what we — our evaluation of those businesses.

But I felt that way before 1989, too. I mean, it's very hard to evaluate how the ball is going to bounce, generally, around the world. But it is a plus to have products such as Gillette has or Coke has, that have demonstrated the fact that they travel extraordinarily well around the world, the people crave those products, and that they're going to — no one's going to find a way to do it better than those two companies in their respective fields. And they sell an inexpensive product, so all of that's going for us.

But in terms of how stocks generally sell or the profitability of American business generally is in the future, it doesn't help me much.

Charlie, any more on that?

CHARLIE MUNGER: No more.

WARREN BUFFETT: OK.

20. Subsidiary managers are never second-guessed

WARREN BUFFETT: Area 6.

AUDIENCE MEMBER: Hi. My name is Bartley Cohen (PH). I just want to thank you for a great weekend.

And my question is, after you bought Dairy Queen I heard they put Coca-Cola into all the stores, but yesterday when I went to the Nebraska Furniture Mart they said they don't take American Express. And my question is — (crowd noise) — my question is, do you encourage the subsidiaries and the companies that you have stock to use each other's products, or do you leave it up to the management of the subsidiary?

WARREN BUFFETT: Well, that's a good question. And it does tell you something about the Berkshire method of operation.

We tell each subsidiary to run their business in the way that they think is best for their operation. Borsheims takes American Express, See's takes American Express, the Furniture Mart doesn't, for example. But that'll be true in other areas, too.

If Harvey Golub at American Express — who has absolutely done a sensational job for us — if he wants to talk with — or have his representatives talk — with anybody at any of our operations, you know, we're all for that happening.

But we will never tell a subsidiary manager which vendor to patronize or anything of that sort.

Once we start making decisions for our managers in that respect then we become responsible for the operation, and they are no longer responsible for the operation.

They are responsible for their operations, and that means they get to call the decisions. And they should do what is best for their subsidiary, and it's up to any other company that wants to do business with them to prove why that is best for them. That's the Berkshire approach to things.

And I think on balance, our managers like it that way. So they're not getting second-guessed and somebody can't go over their head. I get letters all the time from people who are trying to jump over the heads of our managers, and they want us to say this advertising agency should be used or that, and that sort of thing.

It doesn't work at Berkshire. They deal with the managers of the businesses and they're not going to get around them.

Charlie? (Applause)

CHARLIE MUNGER: I love your answer. It gives Warren lots of time to read annual reports at headquarters. (Laughter)

21. Buffett smells trouble for tobacco companies in settlement

WARREN BUFFETT: Area 7.

AUDIENCE MEMBER: Hello, my name is Steve Errico (PH). I'm from New York.

What do you think is likely to happen with respect to the tobacco settlement, and what do you think should happen?

And secondly, McDonald's and Dairy Queen are similar businesses. Was there a relationship between your acquisition of Dairy Queen and the disposal of McDonald's? Thank you.

WARREN BUFFETT: Yeah, there's no connection in the second case. They have certain similarities, but there's certainly a lot of differences, too.

You know, a Burger King and McDonald's would be much more similar, or a Wendy and McDonald's. But Dairy Queen is much more of a niche and away from that.

The tobacco settlement's interesting, just in terms of watching the dynamics of it. Because one of the things in labor negotiations that's always a problem is that when you — as a manager you have a labor negotiation, at the end of the negotiation you as management are committed, and basically the union isn't, because the union is going to have a vote on it.

And that's just the way it is. I mean, you can't get away from that. But it is not fun to be in a negotiating position where you're bound and the other side is not bound.

And although that wasn't totally contractually necessarily the situation of tobacco area, it smelled like trouble to me for the tobacco companies — whether you feel they should've had that trouble or not — but it smelled like trouble to me when they were bound and you had another side that was not bound in any way, and where there were lots of political considerations, and where there was a lot of time was going to expire.

I mean, that did not smell to me like a deal that would stick.

And I don't know any of the tobacco executives that were involved in that. I don't know how much they agonized over getting in a position where they were bound and the other party wasn't. But I can tell you from labor negotiations that that's not a pleasant place to be, and it's not a great strategic place to be.

Charlie, what do you think of it?

CHARLIE MUNGER: I don't feel I've got any great expertise in this situation.

WARREN BUFFETT: Well, neither did I, but I'm — (Laughter)

22. Buffett on inheritance: "Enough to do anything, not enough to do nothing"

WARREN BUFFETT: OK, zone 8, please.

JAIME MCMAHON: Hello, I'm Jaime McMahon (PH) from Birmingham, Alabama.

And I was hoping that, Mr. Buffett and Mr. Munger, y'all would expand a little bit on your ideas of an inheritance, and the positive and negative influences that that can have on your heirs, and what you might be able to do as a businessperson, and an investor, and as a parent to sort of mitigate those negative influences.

WARREN BUFFETT: Yeah, well, I quoted — I think Kay Graham was quoting her father at the time but — some years back as saying, "If you're quite rich, probably the idea of leaving your children enough so they can do anything, but not enough so they can do nothing, is not a bad formula."

I think, if you're talking about people that aren't quite rich, I've seen — you know, socially, I wouldn't have a system that involved inheritances. But recognizing the situation that exists, I think probably at lower levels, that leaving to the children in this society is perfectly OK.

But I believe enough in a meritocracy that if I were devising the system with a consumption tax and everything, I would probably make inheritance a form of consumption that would be very heavily taxed, because I don't believe that because you happen to be the — come out of the right womb, essentially, that you are entitled to live an entirely different life than somebody who wasn't quite as lucky, in terms of womb selection. (Laughter)

But in my own case, you know, I follow the "enough so they can do anything, but not enough so they can do nothing." I think that society showered all these —

I was very lucky, I was wired the right way at the right time in history to do very well in this kind of a market economy. Whereas Bill Gates has told me if I was born some thousands of years ago, I'd been some animal's lunch. (Laughter)

You know, I don't run very fast. (Laughter)

And there are different assets that are useful at different times.

And I'll add, I'm not wired to play championship bridge, or championship chess, or not wired to be a basketball star or anything. It just so happens I'm in an area where it pays off like crazy to be good at capital allocation.

And that doesn't make me a more worthwhile human being than anybody else or anything. It just means I was lucky.

And should that luck, in effect, enable many generations of people that are good at womb selection to do nothing in this world? You know, I would have some reservations about that.

So that's my own feeling on inheritance. But Charlie has a bigger family and he can give you a better answer.

23. Munger on inheritance: Few people are "ruined by money"

CHARLIE MUNGER: Well, I feel, in a capitalist system, that there should be an inheritance tax, and that once that's been imposed and paid, what each person wants to do in his own testamentary arrangements is up to that person.

I see very few people that I regard as ruined by money. Many of the people that I see ruined who have money would have been ruined without money. (Laughter)

And I think the percentage of the people that are going to be living the life of the French aristocracy before the revolution is always going to be very small.

And there are plenty of grasping people to take the money away from the incompetents who inherit it.

I don't think we have to worry about a whole class of incompetents ruling the world as their money cascades ever higher.

So I like a fair amount of charity, and certainly some testamentary charity is OK. But I feel it's an individual choice that people have to make.

WARREN BUFFETT: They get a choice there.

24. Two conditions needed for a market that's not overvalued

WARREN BUFFETT: Number 9.

AUDIENCE MEMBER: My name is Samuel Wong from Irvine, California. I have two questions.

Question number one, do you think the U.S.A. market is overvalued today?

And question number two, would you buy Berkshire Hathaway stock today, considering the fact that they've had a nice ride up already this year?

And if yes, presuming I have a kid, 20 years old, and he has $150,000 to invest in Berkshire Hathaway, and you won't need the money until five years later, gradually, would you recommend to buy A share or B share, or the combination? Thank you.

WARREN BUFFETT: If you decide to buy Berkshire, I don't think it really makes much difference whether you buy A or B.

But we don't make any recommendations about whether people buy or sell Berkshire. We never have and that's a game we don't want to get into.

In terms of — overvalue — the question whether the market's overvalued, generally, it's simply as we said last year here in the annual report.

It's not — the general market is not overvalued if two conditions are met, which is — in our view — which is that interest rates remain at or near present levels or go lower or — and that corporate profitability in the U.S. stay at the present — or close to the present — levels, which are virtually unprecedented.

Now, those are a couple of big ifs, as we pointed out. A lot of the stories that came out after the annual report would emphasize one aspect or another but it's simply — and they say, "What does he mean by that?" Well, it means exactly what I say. If the two conditions are met, I think it's not overvalued. And if either of the conditions is breached in an important way, I think it will turn out to be overvalued.

And I don't know the answer, which is why I put it in the form that I did.

It's very tough at any given time to look forward and know what level of valuation is justified. You do know when certain dangerous things appear, and certainly if you're predicating your answer that stocks are OK at these prices — if you come to that conclusion — you have to also come to the conclusion, in our view, that corporate earnings, at present levels, are likely to be maintained. And that's a conclusion you would have to come to. I don't think it's obvious that that's the case.

25. No exact formula on retaining earnings

WARREN BUFFETT: Area 10, please.

AUDIENCE MEMBER: Good afternoon. My name's Stanley Harmon (PH) and I'm from Boston.

You say that companies should only spend a dollar on capital expenditures if it will create more than $1 of market value. I'm wondering, how do you determine this?

Is it based on A, historical returns on capital; B, a qualitative judgment of the company's competitive position; C) a quantitative projection of returns on capital; or D, something else?

WARREN BUFFETT: Yeah. Well, it's based on all of those factors you mention and more. But in the end we can say to date every dollar we've retained has been worthwhile, because on balance those dollars have produced more than a dollar of market value.

It's — actually, with a great many companies you can say that now, because things have turned out so well.

But it would be a case — the check on it is, if after three or four years, you've found that the dollars we've retained hasn't created more of that in value, then the presumption becomes very strong at that point that we should start paying out money.

But almost any management that wants to retain money is going to rationalize it by saying, "We're going to do wonderful things with the money we retain." And we think there should be checks on that, which is why in the report, in the ground rules, I suggest making checks on the validity of those projections.

Charlie and I, if you ask us today whether the single dollar we retain from the earnings today, we've got a use for today that will produce more than a dollar of value, the answer is no.

But we do think that based on history, that the prospects are better than 50 percent — well over 50 percent — that in the next few years, we would have an opportunity to do that. But there's no certainty to it.

Charlie?

CHARLIE MUNGER: Nothing more.

26. Berkshire stock tracks intrinsic value "better than most"

WARREN BUFFETT: OK. Area 1, please.

AUDIENCE MEMBER: Good afternoon. My name's Gary Bialis (PH), I'm from Southern California.

I want to thank you again for producing this Owner's Manual that you did a couple of years ago. I find it quite useful and use it quite often.

Two questions: can you tell me if the rule of thumb is still applicable regarding the statement in the Owner's Manual, that the percentage increase in the book value tracks pretty well with the percent increase in intrinsic value?

Or is the fact that you now have more owned businesses, especially ones like GEICO and FlightSafety, mean that the spread between those two has possibly narrowed?

WARREN BUFFETT: Well no, the two have tracked pretty well over the years. I mean, compared to the record of most businesses that are publicly owned, I would say that over the 33 or so year span, our market price has tracked intrinsic value more closely than, you know, 80 or 90 percent of the companies that we view, probably 90 percent.

But that doesn't mean it does it all the time. And there are times when the market price will outpace intrinsic value — the change in intrinsic value — and there are times when, obviously then, that it will lag behind. So it's far from perfect but it's better than most.

Ideally, we would like it to track it perfectly. If we ran this as a private company and we met once a year, and set a price on the stock to have it traded once a year, and Charlie and I were responsible for setting that price, we would try to set a price that was as close to intrinsic value as we could.

And that would be — to the extent that we could do it — it would be a perfect tracking. The market isn't like that, and the market responds to a lot of other things. So it's perfect. It's not getting more perfect, in our view. But we still think that Berkshire tracks it better than most companies.

Charlie, you have —

CHARLIE MUNGER: Nothing to add.

27. KKR sale of Gillette shares "means nothing to us"

WARREN BUFFETT: Area 2.

AUDIENCE MEMBER: I'm Elizabeth Cruz (PH) from New York City. I have a question about Gillette.

Another significant Gillette investor, KKR, recently sold over a billion dollars in Gillette shares, shares that they had acquired through Gillette's acquisition of Duracell.

Knowing that KKR has also been a successful investor, do you see this as a negative signal about Gillette's future prospects, particularly on the eve of the launch of the Mach 3 razor? And what do you think their plans are for the remainder of their shares?

WARREN BUFFETT: Well, I think they may have even publicly stated — I'm pretty sure they have — the Duracell shares from which the Gillette shares came were held by a specific investment fund that was formed in, I don't know what year, but a given year, and which is scheduled to disband at a certain point.

So those shares, whether they were of Duracell or whether they're of Gillette, were scheduled for disposition at some point within a given term. And I think that KKR made the decision — and they've made it with other stocks, too — is to have maybe three or so offerings between now and that terminal date for their partnership.

And why they pick any one of — any given date, you know, is up to them and their advisors.

It means nothing to us. I mean, if they didn't have that kind of a fund and they decided to sell, it wouldn't make any difference to them [us]. And I presume if we made a decision to sell, it wouldn't make any difference in their case.

So we, you know, we form our ideas of valuation independent of anybody else's thinking on it. But in the case of KKR, specifically, they have a termination date on a partnership that owned those shares, and have to dispose of them one way or another between now and the termination date, and probably decided that with the quantity of stock they had, that they were going to have several sales.

The Mach 3 is terrific, incidentally. I've been using it since October. So Henry did not decide to sell that stock based on the Mach 3. (Laughter)

28. No split means "better class of shareholders"

WARREN BUFFETT: Area 3, please.

AUDIENCE MEMBER: I am Gertrude Goodman (PH) from Palm Springs, California.

Mr. Buffett and Mr. Munger, there are many stocks that rise and eventually split. My question is, do you foresee in the near future a split for Berkshire Hathaway Class A?

WARREN BUFFETT: Well, that's an easy one. (Laughter)

No. The answer is no. We have no plans to split the A.

In effect, we let people who want to split the A split it themselves into a B. So that anybody who owns the A can have a 30-for-1 split any morning they wake up and want to have such a split. (Laughter)

Charlie, do you have any additional comment?

CHARLIE MUNGER: No, I think you said "no" perfectly. (Laughter and applause)

WARREN BUFFETT: We don't take that attitude because we're cavalier about how shareholders feel. We really think that in the long range interest of Berkshire that the policy we followed on not splitting has benefitted the company and shareholders.

Nothing dramatic about it, but I think that we have a better class of shareholders, in aggregate, in this room, than we would have if we were selling at $3 a share, or $30 a share, or maybe even $300 a share.

29. "Book value is not a factor we consider"

WARREN BUFFETT: Area 4, please.

AUDIENCE MEMBER: Good afternoon, Mr. Buffett and Mr. Munger. My name is Jack Sutton (PH) from New York City. I have two questions.

The Japanese stock market has been likened to the U.S. market in 1974. With Japanese stocks selling at very low price-to-book values, as compared to U.S. stocks, would it not make sense to invest in a basket of Japanese stocks or an index fund of Japanese stocks?

Question number two: Berkshire Hathaway tends to invest in companies with high margins and high return on common equity. Berkshire's investment in the airline business seems to have digressed widely from those principles.

Could you elaborate on why Berkshire invested in the airline industry, and would Berkshire consider new investments in the industry in the future?

WARREN BUFFETT: I'm going to the first question. The reason that — and I don't know the exact figures — that Japanese stocks would sell at a lower price-book ratio than U.S. stocks is simply because Japanese companies are earning far less on book than American companies.

And earnings are what determine value, not book value. Book value is not a factor we consider. Future earnings are a factor we consider. And as we mentioned earlier this morning, earnings have been poor for a great many Japanese companies.

Now, if you think that the return on equity of Japanese business is going to increase dramatically, then you're going to make a lot of — I mean, and you're correct, you're going to make a lot of money in Japanese stocks.

But the return on equity for Japanese businesses has been quite low, and that makes a low price-to-book ratio very appropriate because earnings are measured against book. And if a company's earning 5 percent on book value, I don't want to buy it at book value if I think it's going to keep earning 5 percent on book value. So a low price-book ratio means nothing to us. It does not intrigue us.

In fact, if anything, we are less likely to look at something that sells at a low relationship to book than something that sells at a high relationship to book, because the chances are we're looking at a poor business in the first case and a good business in the second case.

30. Airlines not "intriguing" enough to buy stock

WARREN BUFFETT: What was the other question on, Charlie?

CHARLIE MUNGER: Buying — airlines.

WARREN BUFFETT: Airlines. Yeah, I always repress everything on airlines. I don't want to — (Laughter)

No, we've never bought an airline common stock that I can remember. So what we did was we lent money to USAir for a 10-year period and we had a conversion privilege there.

It looked like it — it was a terrible mistake. I made the mistake. But we got bailed out. But we — we never made the determination — when we bought our stock, USAir was selling at $50 a share or thereabouts, the common. And we didn't have an interest in buying USAir at 50, or 40, or 30, or 20. And we got a chance to as things went along — (laughter) — all the way down to 4. (Laughter)

And we never bought it. And we've never bought American, or United, or Delta, or any other airline. It is not a business that intrigues us.

We did think it was intriguing to lend money to them with a conversion privilege and it's worked out now because we got lucky, and because Steve Wolf came along and really rescued the company from right at the brink of bankruptcy.

But we're unlikely to be in airlines, although again, we wouldn't mind lending money to a lot of businesses that we wouldn't buy common equity in. I mean, that could happen again in various industries, including the airline industry.

Charlie, do you have anything to say on either the airlines or the Japanese market?

CHARLIE MUNGER: Well, the airline experience was very unpleasant for us. The net worth just melted. It was (inaudible) a billion and a half, and it just went a hundred million, a hundred million, a hundred million, and finally the cash is running down. It is a very unpleasant experience. (Laughter)

We try and learn from those experiences but we're very slow learners. (Laughter)

31. No "good returns" on Japanese stocks unless profits increase

WARREN BUFFETT: Japanese market (inaudible)?

CHARLIE MUNGER: Oh, the Japanese market.

I suppose anything — (Laughter as Buffett reaches for box of candy)

I suppose anything could happen. After all, we bought silver. (Laughter)

But we have never made a big sector play on a country. In fact, we've almost never made a big sector play.

WARREN BUFFETT: We would have to come to the conclusion that Japanese business, instead of earning whatever it's earning on equity now, is going to earn appreciably more on equity.

I've got no basis for it — I wouldn't argue if anybody else feels that way — I wouldn't argue with them. But I have no basis for coming to that conclusion.

And unless you come to that conclusion, you're not going to make good returns. I mean, unless that happens, you're not going to make good returns from Japanese stocks.

You can not — you can't earn a lot of money from businesses that are earning 5 percent on — or 6 percent — on equity. And I look at the reports but I don't see the earning power now.

Now, maybe it'll all change. I mean, there's talk of — there's already been a small temporary tax cut, but corporate tax rates are quite high, as you know, in Japan.

And they used to be 52 percent here in the United States, now they're 35. So you could have things happen that increase corporate profits, but I don't have any special insight into that that anyone that reads the press generally would not have.

CHARLIE MUNGER: There are also readings in corporate culture that have to be made. Owning stock in a corporation where you know that if shareholders or somebody else has to suffer, the choice is likely to be that somebody else will be chosen.

That is a different kind of a company to invest in than one that thinks that the principal purpose of life is to keep some steam boiler company going in a particular community or something, no matter how much the shareholders suffer.

I think it's hard to judge corporate culture in the foreign countries as well as we can judge it in our own.

32. "We're only interested in price and value"

WARREN BUFFETT: Area five?

AUDIENCE MEMBER: Yvonne Edmonds (PH) from Cedar Mountain, North Carolina.

I have a specific question but not a trivial one. You regularly compare Berkshire Hathaway's performance to the S&P 500, which is very helpful and very interesting.

But I haven't seen a correlation coefficient between the S&P 500 daily — from day-to-day — performance — to close, say — and Berkshire Hathaway's close.

Now, it so happens for me — and I'm sure some other people in the audience — that I don't always have access to newspapers — or the internet, for that matter — newspapers that publish Berkshire Hathaway performance on a daily basis, or even a weekly basis for that matter, or a monthly basis.

It would be very helpful to know the extent of a correlation coefficient between those two variables. If you have that, would you let us know what it is? And if you don't, would you please consider calculating it in the future?

WARREN BUFFETT: Well, it could be calculated but I don't think it would have much meaning. I mean, it would be an historical correlation coefficient which, you know, I would be very reluctant to have people place any weight in.

I try to indicate even the limitations of the yearly comparison of the relative performance, because what was doable by us in the past is not doable today. I mentioned in my annual report, the best decade I ever had on comparative performance by far was the 50s.

Now, I don't think it was because I was a lot smarter then — (laughs) — unwilling to accept that.

But you know, I had some edge of — well, it's probably 40-plus points per year. But I was working with it — that has no relevance to today whatsoever. It would be misleading to publish it or make calculations based on it.

So I think that you would find — I don't know what you'd find on a specific correlation between Berkshire and the S&P.

You'd find a lot of correlation — well, you might not find so much — you'd find it in intrinsic value between that and Coke, and a few stocks like that.

But I don't really think that's particularly useful information going forward. We have no objection, anybody wants to make the calculation. But it wouldn't be something that would be of any utility to us, and if we don't think it's utility to us, we don't want to put it out for shareholders as being of possible utility.

We do think that the S&P annual calculation has some meaning because it's an alternative for people to invest. They don't need us to buy the S&P. So unless, over time, we have some advantage over that, you know, what are we contributing? What value is added by our management?

So we think that that's — people should hold us accountable even though we would prefer not to be. Because it is a tough comparison for us as a tax-paying entity against a non — pre-tax calculation on the S&P.

But we don't pay any attention to beta or any of that sort of thing. It just doesn't mean anything to us. We're only interested in price and value. And that's what we're focusing on all the time, and any kind of market movements or anything don't mean anything.

I don't know what Berkshire is selling for today and it really makes no difference. You know, it just doesn't make any difference.

What does count is where it is 10 years from now. And I can't tell you what it was selling for on May 4th, 1983, or May 4th, 1986, so I don't care what it sells for on May 4th, 1998.

I do care, you know, where it is, in general, 10 years from now, and that's where all the focus is.

Charlie?

CHARLIE MUNGER: Yeah, we're publishing data in the form where we would like it if we were the passive shareholder. And so you're getting the data and you're getting it on a time schedule based on what we would want if we were in your position. And we don't think — (laughter as Buffett holds up a Dairy Queen Dilly Bar that was just given to him) — and we don't think the correlation coefficients would help us.

WARREN BUFFETT: We don't think anything that relates either to volume, price action, relative strength, any of that sort of thing — and bear in mind, when I was in my teens I used to eat that stuff up. I mean, I was making calculations based on it all the time, and kept charts on it, even wrote an article or two on it.

But it just — it just has no place in the operation now.

CHARLIE MUNGER: One of the pleasant things about dealing with Warren all these years is he's never talked about a correlation coefficient. (Laughter)

If the correlation isn't so extreme you can see it with the naked eye, he doesn't compute it. (Laughter)

33. Beware of companies that must "spend money like crazy"

WARREN BUFFETT: OK, we're going to go to zone 6 and I'm going to have a Dilly Bar, and Charlie has got one here, too. (Laughter and applause)

These are terrific.

AUDIENCE MEMBER: My question has to do with what you mentioned earlier about how companies have to reinvest a certain amount of cash in their business every year just to stay in place.

And if one could say that the best businesses are the ones that not only throw off lots of cash, but can reinvest it in more capacity. But I suppose the paradox is that the better a company's opportunities for making expansionary capital expenditures, the worse they appear to be as consumers of cash rather than generators of cash.

What specific techniques have you used to figure out the maintenance capital expenditures that you need to do in order to figure out how much cash a company is throwing off? What techniques have you used on Gillette or other companies that you've studied?

WARREN BUFFETT: Well, if you look at a company such as Gillette or Coke, you won't find great differences between their depreciation — forget about amortization for the moment — but depreciation and sort of the required capital expenditures.

If we got into a hyperinflationary period or — I mean, you can find — you can set up cases where that wouldn't be true.

But by and large, the depreciation charge is not inappropriate in most companies to use as a proxy for required capital expenditures. Which is why we think that reported earnings plus amortization of intangibles usually gives a pretty good indication of earning power, and —

I don't — I've never given a thought to whether Gillette needs to spend a hundred million dollars more, a hundred million dollars less, than depreciation in order to maintain its competitive position. But I would guess the range is even considerably less than that versus its recorded depreciation.

Businesses you have to worry about — I mean, an airline business is a good case. In the airlines, you know, you just have to keep spending money like crazy. And you have to spend money like crazy if it's attractive to spend money, and you have to spend it the same way if it's unattractive. You just — it's part of the game.

Even in our textile business, to stay competitive we would've needed to spend substantial money without any necessary — any clear prospects of making any money when we got through spending it.

And those are real traps, those kind of businesses. And they make out one way or another, but they're dangerous. And in a See's Candy we would love to be able to spend 10 million, 100 million, $500 million and get anything like the returns we've gotten in the past.

But there aren't good ways to do it, unfortunately. We'll keep looking, but it's not a business where capital produces the profits.

At FlightSafety, capital produces the profits. You need more simulators as you go along, and more pilots are to be trained, and so capital is required to produce profits. But it's just not the case at See's.

And at Coca-Cola, particularly when new markets come along, you know, the Chinas of the world or East Germany or something of the sort, the Coca-Cola Company itself would frequently make the investments needed to build up the bottling infrastructure to rapidly capitalize on those markets, the old Soviet Union.

So those are — those are expenditures — you don't even make the calculation on them, you just know you've have to do it. You got a wonderful business, and you want to have it spread worldwide, and you want to capitalize on it to its fullest.

And you can make a return on investment calculation, but as far as I'm concerned it's a waste of time because you're going to do it anyway, and you know you want to dominate those markets over time. And eventually, you'll probably fold those investments into other bottling systems as the market gets developed. But you don't want to wait for conventional bottlers to do it, you want to be there.

One of the ironies, incidentally — and might get a kick out of it, some of the older members of the audience — that when the Berlin Wall went down and Coke was there that day with Coca-Cola for East Germany, that Coke came from the bottling plant at Dunkirk. So there was a certain poetic — (crowd noise) — irony there.

Charlie, do you have anything on this?

CHARLIE MUNGER: I've heard Warren say since very early in his life that the difference between a good business and a bad business is usually the good business just throws up one easy decision after another, whereas the bad business gives you a horrible choice where the decision is hard to make and, is this really going to work? And is it worth the money?

If you want a system for determining which is a good business and which is a bad business, just see which one is throwing the management bloopers time after time after time.

Easy decisions. It's not very hard for us to decide to open a new See's store in a new shopping center in California that's obviously going to succeed. It's a blooper.

On the other hand, there are plenty of businesses where the decisions that come across your desk are just awful. And those businesses, by and large, don't work very well.

WARREN BUFFETT: I've been on the board of Coke now for 10 years, and we've had project after project come up, and there's always an ROI. But it doesn't really make much difference to me, because in the end almost any decision you make that solidifies and extends the dominance of Coke around the world in an industry that's growing by a significant percentage, and which has great inherent underlying profitability, the decisions are going to be right and you've got people there that will execute them well.

CHARLIE MUNGER: You're saying you get blooper after blooper.

WARREN BUFFETT: Yeah. And then Charlie and I sat on USAir, and the decisions would come along, and it would be a question of, you know, do you buy the Eastern Shuttle, or whatever it may be?

And you're running out of money. And yet to play the game and to keep the traffic flow with connecting passengers, I mean, you just have to continually make these decisions — whether you spend a hundred million dollars more on some airport.

And they're agony because, again, you don't have any real choice, but you also don't have any real conviction that it's going to translate — those choices are going to — or lack of choices — are going to translate themselves into real money later on.

So one game is just forcing you to push more money in to the table with no idea of what kind of a hand you hold, and the other one you get a chance to push more money in, knowing that you've got a winning hand all the way.

Charlie? Why'd we buy USAir? (Laughter)

Could've bought more Coke.

34. Berkshire is prepared for adversity

WARREN BUFFETT: Area 7.

AUDIENCE MEMBER: My name is Bakul Patel (PH). I am from upstate New York.

And my question is, is Berkshire prepared for 1929 style of depression or, like, a prolonged bear market that exists in Japan? And would it be as successful in those situations?

WARREN BUFFETT: Well, we are probably — we don't expect what you're talking about, but we are probably about as well-prepared as any company can be for adversity, because Berkshire has been built to last.

Net, we would benefit over a 20-year period by having some periods of terrible markets periodically in that 20-year period. That doesn't mean we're wishing for them and it doesn't mean they're going to happen, but —

We make our money by allocating capital well, and the lower the general stock market would be, the better we can allocate capital. So we're well-prepared but we're not necessarily expecting.

Charlie?

CHARLIE MUNGER: Yeah, we are not going to ever sell everything and go to cash and wait for the crash so we can go back in.

On the other hand, we are structured so that I think, net, a lot of turmoil in the next 20 years will help us, not hurt us. I don't mean it'll be pleasant to go through the downcycle, but it's part of the game.

35. "We're never going to give out advice on Berkshire stock"

WARREN BUFFETT: Area 8.

AUDIENCE MEMBER: My name is Pete Banner (PH) from Boulder, Colorado. First of all, Mr. Buffett and Mr. Munger, thank you for your genuine generosity today.

Berkshire closed yesterday, the A share was about — or Friday — $69,000 and the B share was about $2,300. Do you feel that price is grossly overpriced, or grossly underpriced, or reasonably priced?

WARREN BUFFETT: Well, I'll let Charlie answer that one. (Laughter)

CHARLIE MUNGER: I'm not going to say. (Laughter)

WARREN BUFFETT: No, we're just never going to — we're never going to give out advice on Berkshire stock. There's no —

You know, that is up to people who want to buy and sell it, and anything we would say could easily get magnified, and people would be acting on it months later, and who knows all the problems that it could produce, so —

CHARLIE MUNGER: It would be quite eccentric if we were to every day put out an announcement, "Now's the time to buy, now's the time to sell," our own stock.

Eccentric we are, but that eccentric we aren't. (Laughter and applause)

36. George Burns: role model for surviving unhealthy habits

WARREN BUFFETT: Area 9.

AUDIENCE MEMBER: Irene Finster, your longtime partner from Tulsa, Oklahoma —

WARREN BUFFETT: Hi, Irene. Yeah, Irene has a soda fountain. You ought to go visit her. (Laughter)

AUDIENCE MEMBER: First I want to thank you for giving your shareholders the opportunity to select their own charities.

And second, I'm very concerned about your health due to your diet — (Laughter) — of red meat —

WARREN BUFFETT: Irene. (Applause)

Irene, these are our products that I'm eating. (Laughter)

AUDIENCE MEMBER: Red meat, candy, ice cream — (laughter) — and —

WARREN BUFFETT: And that's just what I do — that's what I do in public —

AUDIENCE MEMBER: —and Coke. (Laughter)

And I want to know what your doctor says. (Laughter)

WARREN BUFFETT: My doctor says I must be heavily relying on my genes. (Laughter)

No, I will tell you, I — I mean, Charlie and I are both very healthful. If you were in the life insurance business, you would be happy to write us at standard rates, I could assure you of that. (Laughter)

CHARLIE MUNGER: You know, they asked George Burns when he was 95, "What does your doctor say about smoking these big, black cigars?" And he said, "My doctor's dead." (Laughter and applause)

WARREN BUFFETT: Charlie and I played bridge with George when he was about 97, I'd say, at the Hillcrest Country Club. And there was a big sign behind him that said, "No smoking by anyone under 95." (Laughter)

And actually, at his 95th birthday party, he had about five very good-looking young girls that were there to greet him with a big cake and everything. And he looked them over one after another and he said, "Oh girls," he said, "I'm 95. One of you is going to have to come back tomorrow." (Laughter and applause)

We're very big on George Burns in recent years. (Laughter)

37. "We wait indefinitely"

WARREN BUFFETT: Area 10.

AUDIENCE MEMBER: My name is Hubert Vose (PH). I'm from Santa Barbara, California.

Earlier this morning, you made a comment that if the market fell you would be spending less time on the internet because you'd be very busy. And this is reinforced an impression I have had that the cash flows of Berkshire Hathaway are enormous, but that possibly in the last 12 months you've been investing less than you had previously.

And if so — if this is correct, what does that say about waiting for attractive values? How long are you willing to wait, and what does that say to the investment public in their own habits?

WARREN BUFFETT: Well, you're correct that we have not found anything to speak of in equities in a good many months, and —

The question of how long we wait, we wait indefinitely. We are not going to buy anything just to buy something. We will only buy something if we think we're getting something attractive.

And that — and incidentally, if things were 5 percent cheaper that — or 10 percent cheaper — that wouldn't change anything materially.

So we have no idea when that period ends. We have no idea whether — as I've said, it can turn out that these valuations are perfectly appropriate if returns on equity stay where they are. But even then, they aren't in the least mouthwatering, so we won't feel we've missed anything particularly if returns stay where they are.

Because if it turns out that these levels are OK, they still will not produce great returns from here, in our view. That doesn't mean you couldn't have a tremendous market in the short-term or something of the sort.

Markets can do anything. And you look at the history of markets and you just see everything under the sun.

But we will not — you know — we have no timeframe. If the money piles up, the money piles up. And when we see something that makes sense, we're willing to act very fast, very big. But we're not willing to act on anything that doesn't check out in our view.

There's no — you don't get paid for activity, you only get paid for being right.

Charlie?

CHARLIE MUNGER: Yeah. An occasional dull stretch for new buying, this is no great tragedy in an investment lifetime.

Other things may be possible in such an era, too. I mean, it isn't like we have a quiver with only one arrow.

WARREN BUFFETT: We sat through periods before. I mean, the most dramatic one being the early '70s — late '60s and early '70s.

For a long time it seemed — doesn't seem so long when you look back on it, seems long when you're going through it — but it — like having a tooth pulled or something, but it's, you know, what can you do about it?

The businesses aren't going to perform better in the future just because you got antsy and decided you had to buy something. We will wait till we find something we like.

We'll love it when we can swing in a big way, though. That's our style.

38. "Certified record of failure" in real estate

WARREN BUFFETT: Area 1.

AUDIENCE MEMBER: Larry Pekowski (PH), Millburn, New Jersey.

Berkshire seems never to have made any real, pure real estate investments, not counting facilities the operating companies might own, with the exception of Wesco's involvement in the residential project in California.

I was wondering if you've ever looked at a real estate transaction and tried to apply the same filters, meaning competitive advantages, returns on capital, that you do in operating companies.

And if not, is it a circle of competence issue, or is there something you find disinteresting about real estate?

CHARLIE MUNGER: (Inaudible)

WARREN BUFFETT: You want to take it? OK, Charlie wants to take this one.

CHARLIE MUNGER: Let me take this one, because here's an area where we have a perfect record that extends over many decades.

We have been demonstrably foolish in almost every operation that had to do with real estate we've ever touched.

Every time we had a surplus plant and didn't want to hit the bid and let some developer kind of take an unfair advantage of us, we would of been better off later if we'd hit the bid and invested the money in fields where we had the expertise.

That housing tract that I developed because I didn't want to let the zoning authorities rob me the way they wanted to. I wish I had let them. (Laughter)

We have a certified record of failure in this deal. (Laughter)

WARREN BUFFETT: And the funny thing is, we understand real estate. (Laughter)

CHARLIE MUNGER: And we're good at it. (Laughter and applause)

Right.

WARREN BUFFETT: Actually, (inaudible), we do understand real estate. And Charlie got his start in real estate.

CHARLIE MUNGER: Yeah, be we understand other things better. And so the chances that we're going to be big in real estate are low.

WARREN BUFFETT: Yeah. We've seen lots of things, and we've — the prices, you know, just don't intrigue us, in terms of what we get for our money.

I tried to buy a town when I was, what, 21 years old. The U.S. government had a town in Ohio for sale and it would of worked out very well. I'm always — there's nothing about the arena that turns us off, but we don't see great returns available.

And like Charlie says, the few things — (inaudible) old plant or something, that is not — we have not been great at working our way out of those.

Fortunately, they haven't been very important in relation to the net worth of Berkshire.

39. Nike: "We keep all of those views to ourselves"

WARREN BUFFETT: Area 2.

AUDIENCE MEMBER: Good afternoon. My name is Fred Costano (PH) from Detroit, Michigan. My question concerns Nike.

Nike is a company experiencing some short-term problems, but it's a great company with an excellent track record. Phil Knight is similar to Bill Gates in the respect that he's a marketing genius and is a very hard worker. Making sneakers is a very simple business with high margins.

How do you view Nike and what do you think of the company?

WARREN BUFFETT: Well, I think Phil Knight is a terrific operator. I think — and he's a competitor. He's got a lot of money in Nike.

But as terms of what we think of the stock, you know, we keep all of those views to ourselves pretty much.

40. Buffett doesn't expect litigation over fats in food

WARREN BUFFETT: Area 3? (Laughter)

AUDIENCE MEMBER: Hello, my name is Ed Clinton and I'm from Chicago, Illinois.

I'm wondering about the tobacco litigation. There's also — there have been some comments about fatty food.

Do you think there's going to be a new trend of fatty food litigation coming out of the tobacco problems?

WARREN BUFFETT: Well, I sign a waiver before I — (laughs) — do any of that myself.

No, I would doubt — I would — I do not see those two as being remotely similar.

But Charlie, do you have any different views on it?

CHARLIE MUNGER: Well, I think the traditional tort system is particularly ill-suited for solving what might be called the tobacco health problem. So I regard that whole thing as sort of a Mad Hatter's Tea-Party. And we sit out from afar.

41. Lots of credit to go around for strong economy

WARREN BUFFETT: Area 4.

AUDIENCE MEMBER: Yes, I'm Fred Bunch from near Tightwad, Missouri.

In light of the current —

WARREN BUFFETT: What was the name of that town? (Laughter)

AUDIENCE MEMBER: Tightwad, Missouri.

WARREN BUFFETT: Tightwad, Missouri, huh? (Laughter)

AUDIENCE MEMBER: There's a bank there.

WARREN BUFFETT: Did they name it after me or Charlie? (Laughter)

AUDIENCE MEMBER: Well, either one, really. (Buffett laughs)

You'd both fit in. (Buffett laughs)

In light of today's healthy growth and stability of the American economy at the present time and over the last five years or so, how much credit, if any, do you give the Clinton administration and why?

WARREN BUFFETT: Well, I give credit to — I give credit going back to Volcker, significant credit to Volcker.

I give credit to Reagan. I give credit to — certainly to Greenspan and to Rubin, and I give credit to Clinton on that — I think that first tax bill was very important. It carried by one vote. And I think he may listen to Rubin.

So I think there's a lot to give credit for and I think you can spread it around a fair amount.

Charlie may be less charitable here. Let's see. (Laughter)

CHARLIE MUNGER: No, I've got no great quarrel with the way the country — the economy's reformed. I think it's way better than any of us would've predicted.

42. How Phil Fisher's "scuttlebutt" method changed Buffett's life

WARREN BUFFETT: Area 5?

AUDIENCE MEMBER: My name is Travis Heath (PH). I'm from Dallas, Texas.

And my question regards what Phil Fisher referred to as "scuttlebutt." When you've identified a business that you consider to warrant further investigation — more intense investigation — how much time do you spend commonly, both in terms of total hours and in terms of the span in weeks or months that you perform that investigation over?

WARREN BUFFETT: Well, the answer to that question is that now I spend practically none because I've done it in the past. And the one advantage of allocating capital is that an awful lot of what you do is cumulative in nature, so that you do get continuing benefits out of things that you'd done earlier.

So by now, I'm probably fairly familiar with most of the businesses that might qualify for investment at Berkshire.

But when I started out, and for a long time I used to do a lot of what Phil Fisher described — I followed his scuttlebutt method. And I don't think you can do too much of it.

Now, the general premise of why you're interested in something should be 80 percent of it or thereabouts. I mean, you don't want to be chasing down every idea that way, so you should have a strong presumption.

You should be like a basketball coach who runs into a seven-footer on the street. I mean, you're interested to start with; now you have to find out if you can keep him in school, if he's coordinated, and all that sort of thing. That's the scuttlebutt aspect of it.

But I believe that as you're acquiring knowledge about industries in general, companies specifically, that there really isn't anything like first doing some reading about them, and then

getting out and talking to competitors, and customers, and suppliers, and ex-employees, and current employees, and whatever it may be.

And you will learn a lot. But it should be the last 20 percent or 10 percent. I mean, you don't want to get too impressed by that, because you really want to start with a business where you think the economics are good, where they look like seven-footers, and then you want to go out with a scuttlebutt approach to possibly reject your original hypothesis.

Or maybe, if you confirm it, maybe do it even more strongly. I did that with American Express back in the '60s and essentially the scuttlebutt approach so reinforced my feeling about it that I kept buying more and more and more as I went along.

And if you talk to a bunch of people on an industry and you ask them what competitor they fear the most, and why they fear them, and all of that sort of thing. You know, who would they use the silver bullet of Andy Grove's on and so on, you're going to learn a lot about it.

You'll probably know more about the industry than most of the people in it when you get through, because you'll bring an independent perspective to it, and you'll be listening to everything everyone says rather than coming in with these preconceived notions and just sort of listening to your own truths after a while.

I advise it. I don't really do it much anymore. I do it a little bit, and I talked in the annual report about how when we made the decision on keeping the American Express when we exchanged our Percs for common stock in 1994, I was using the scuttlebutt approach when I talked to Frank Olson.

I couldn't have talked to a better guy than Frank Olson. Frank Olson, running Hertz Corporation, lots of experience at United Airlines, and a consumer marketing guy by nature. I mean, he understands business. And when I asked him how strong the American Express card was and what were the strengths and the weaknesses of it, and who was coming along after it, and so on, I mean, he could give me an answer in five minutes that would be better than I could accomplish in hours and hours and hours or weeks of roaming around and doing other things.

So you can learn from people. And Frank was a user of it. I mean, Frank was paying X percent to American Express for his Hertz cars. And Frank doesn't like to pay out money, so why was he paying that? And if he was paying more than he was paying on Master Charge or Visa, why was he paying more? And then what could he do about it?

I mean, you just keep asking questions. And I guess Davy [Lorimer Davidson] explained that in that video we had ahead of time. I'm very grateful to him for doing that, because that was a real effort for him.

But that was really what I was doing back in 1951 when I visited him down in Washington, because I was trying to figure out why people would insure with GEICO rather than with the companies that they were already insuring with, and how permanent that advantage was.

You know, what other things could you do with that advantage? And you know, there were just a lot of questions I wanted to ask him, and he was terrific in giving me the answer. It, you know, changed my life in a major way. So I have nobody to thank but Davy on that.

But that's the scuttlebutt method and I do advise it.

Charlie?

CHARLIE MUNGER: Nothing to add.

43. "Real test is the gain in intrinsic value"

WARREN BUFFETT: Area 6.

AUDIENCE MEMBER: Hi, my name is Richard Lontok (PH) from Toronto, Canada. I have a question for both of you.

Mr. Buffett, Berkshire Hathaway's earnings in 1997 is less than that of 1996. What do you intend to do in 1998 to improve that earning. (Laughter)

And Mr. Munger, I've been watching you and Mr. Buffett eating the See's candies and drinking the Coca-Cola the whole day.

WARREN BUFFETT: Join in. (Laughter)

AUDIENCE MEMBER: Do you intend to do any commercials in the future like what Dave Thomas does with Wendy's? (Laughter and applause)

WARREN BUFFETT: Which of us do you think should do them? (Laughs)

Now you're talking.

CHARLIE MUNGER: We aren't old enough to be really good in a commercial. (Laughter)

What we would like to do is have somebody up here happily eating See's candy and answering these questions who's about 110 years old. Now, that would really be helpful.

WARREN BUFFETT: We — in terms of the earnings, the final bottom line GAAP reported earnings mean absolutely nothing at Berkshire to us.

Now, the look-through earnings which we publish do have some meaning, but even those have to be interpreted in terms of whether there was a super-cat occurrence, or whether GEICO had an unusually good year, and we try to mention those factors.

But we do hope that the look-through earnings do build at a reasonable clip over time.

But our final earnings include capital gains and we can report those in any number that we wanted to, and we pay no attention whatsoever to realized capital gains at Berkshire.

The IRS does, but — and that's why we may send them a billion or more dollars this year. But they mean nothing in terms of measuring our progress.

The look-through earnings say something about it. That table, the first couple of pages, it shows our change in book value versus the S&P says something about it, not perfect.

The real test is the gain in intrinsic value, for sure, over time. And there's no hard number for that, but so far Charlie and I judge it satisfactory, but we also judge it as non-repeatable.

Charlie, anything more —?

CHARLIE MUNGER: No.

44. "We prefer what other people call risk"

WARREN BUFFETT: Area 7, please.

KEIKO MAHALICK: Good afternoon, Mr. Buffett and Mr. Munger. My name is Keiko Mahalick (PH) and I'm an M.B.A. student at Wharton, but please don't hold that against me.

WARREN BUFFETT: We won't. (Laughter)

I never made it that far. I was an undergraduate student. (Laughs)

AUDIENCE MEMBER: Could you please explain how you differentiate between types of businesses in your cash flow valuation process, given that you use the same discount rates across companies?

For example, in valuing Coke and GEICO, how do you account for the difference in the riskiness of their cash flows?

WARREN BUFFETT: We don't worry about risk in the traditional — the way you're taught, actually, at Wharton. We — (Laughter)

But it's a good question, believe me. But we are — if we could see the future of every business perfectly, it wouldn't make any difference whether the money came from running streetcars or from selling software, because all the cash that came out, which is all we're measuring between now and judgment day, would spend the same to us.

It really — the industry that it's earned in means nothing except to the extent that it may tell you something about the ability to develop the cash. But it has no meaning on the quality of the cash once it becomes distributable.

We look at riskiness, essentially, as being sort of a go/no-go valve in terms of looking at the future businesses. In other words, if we think we simply don't know what's going to happen in the future, that doesn't mean it's necessarily risky, it just means we don't know. It means it's risky for us. It might not be risky for someone else who understands the business.

In that case, we just give up. We don't try to predict those things.

And we don't say, "Well, we don't know what's going to happen, so therefore we'll discount it at 9 percent instead of 7 percent," some number that we don't even know. That is not our way to approach it.

We feel that once it passes a threshold test of being something about which we feel quite certain, that the same discount factor tends to apply to everything. And we try to do only things about which we are quite certain when we buy into the businesses.

So we think all the capital asset pricing model-type reasoning with different rates of risk-adjusted return and all that, we tend to think it is — well, we don't tend to — we think it is nonsense.

But we do think it's also nonsense to get into situations, or to try and evaluate situations, where we don't have any conviction to speak of as to what the future is going to look like. And we don't think you can compensate for that by having a higher discount rate and saying it's riskier, so then I don't really know what's going to happen and I'll have a higher discount rate. That just is not our way of approaching things.

Charlie?

CHARLIE MUNGER: Yeah. This great emphasis on volatility in corporate finance we just regard as nonsense.

If we have a statistical probability of putting out a million and having it turn into —

Put it this way: as long as the odds are in our favor and we're not risking the whole company on one throw or anything close to it, we don't mind volatility in results. What we want is the favorable odds. We figure the volatility, over time, will take care of itself at Berkshire.

WARREN BUFFETT: If we have a business about which we're extremely confident as to the business result, we would prefer that it have high volatility than low volatility. We will make more money out of a business where we know where the endgame is going to be if it bounces around a lot.

I mean, for example, if people reacted to the monthly earnings of See's, which might lose money eight months out of the year and makes a fortune, you know, in November and December — if people reacted to that and therefore made its stock as an independent company very volatile, that would be terrific for us because we would know it was all nonsense. And we would buy in July and sell in January.

Well, obviously, things don't behave that way. But when we see a business about which we're very certain, but the world thinks that its fortunes are going up and down, and therefore it behaves volatile — with great volatility — you know, we love it. That's way better than having a lower beta.

So we think that — we actually would prefer what other people would call risk.

When we bought The Washington Post — I've used that as — it went down 50 percent in a matter of a few months. Best thing that could've happened. I mean, doesn't get any better than that.

Business was fundamentally very nonvolatile in nature. I mean, TV stations and a strong, dominant newspaper, that's a nonvolatile business, but it was a volatile stock. And you know, that is a great combination from our standpoint.

45. We want shareholders who look at Berkshire the same way we do

WARREN BUFFETT: Area 8.

AUDIENCE MEMBER: Good afternoon, and thank you for staying around to answer our questions.

I have two. First of all, would you give us what logic went into your decision to both buy and sell McDonald's?

And my second question goes to a term that you've used. You talked about the caliber of the shareholders at Berkshire Hathaway. How do you define the caliber and what difference does it really make?

WARREN BUFFETT: Well, it makes a lot of difference. Our idea of a high-caliber group is one that is just like us. (Laughter)

And that's not entirely facetious in that we basically want shareholders who look at the business the same way we do. Because we're going to be around running something, and what could be worse than having a group out there had a whole different set of expectations than we did, and evaluated us in a different way, and all of this sort of thing?

I mean, if you are going to — you're going to have a given number of shares outstanding. Let's say we have an equivalent of a million, two-hundred and some thousand A shares. Somebody's going to own every single share.

Now, would you rather have them owned by people who understand your business, who understand your objectives, who measure you the same way you do, who have similar time horizons, or would you rather have the reverse? It makes a real difference over time to be in with people that are compatible with you.

So it's a significant plus to us, the operation of the business, and it leads to a more consistent relationship between price and intrinsic value when you have a group like that, because they understand themselves and the business, and they're not likely to do silly things in either direction.

So you get a much more consistent relationship than if we had a whole bunch of people who were thinking that the most important thing in evaluating this business was next quarter's earnings.

Question about McDonald's simply is, you know, it's an outstanding business and we don't talk about it when we buy it, we don't talk about it if we sell it.

Charlie?

CHARLIE MUNGER: Yeah. The question of what difference does it make to the management who the shareholders are, well, if you are into what I call trustee capitalism, where the shareholders aren't just a faceless bunch of nothings, you feel as a kind of a hair shirt, an obligation to do as well as you can by the shareholders. Well, wouldn't you rather feel an obligation to people you liked instead of people you didn't like? (Laughter)

WARREN BUFFETT: Yeah, let's say you were running a business and — (applause) — and you had a choice of three owners.

You could have a hundred percent of it owned by whatever your favorite philanthropy is, you could have a hundred percent of it owned by the U.S. government, and you could have a hundred percent of it owned by, you know, the worst person you can think of, you know, in your hometown.

I mean, I think it would make a difference in how you felt about going to work every day.

46. “Get more quality than you’re paying for”

WARREN BUFFETT: Number 9.

AUDIENCE MEMBER: Yes, my name is Steve Jack (PH). I’m from Southern California. And my question has to deal with kind of quality versus price.

I’ve been to three annual meetings and I’ve heard great things about Coke every year. But as far as I’m aware, you have not bought any additional shares of Coke over the last three years even though the stock has done just fine.

If an investor has a relatively short timeframe, say three to five years, how much weight do you think one should give to quality versus price?

WARREN BUFFETT: Well, if your timeframe is three to five years, A) I wouldn’t advise it being that way. Because I think if you think you’re going to get out then, it gets more toward — leaning toward the bigger fool theory.

The best way to look at any investment is, how will I feel if I own it forever, you know, and put all my family’s net worth in it?

But we basically believe in buying — if you talk about quality meaning the certainty that the business will perform as you expect it to perform over a period of time, so the range of possible performance is fairly narrow — you know, that’s the kind of business we like to buy.

And all I can say is that we like to pay a comfortable price, and that depends to some extent on what interest rates are.

We haven’t found comfortable prices for the kind of businesses we like in the last year. We don’t find them uncomfortable, in the sense that we want to sell them. But they’re not prices at which we — we added to Coke one time about, I don’t know, five years ago or thereabouts, and it’s conceivable we would add again. It’s a lot more conceivable we would add than subtract.

But that’s the way we feel about most of the businesses. We did make a decision last year that we thought bonds were relatively attractive, and we trimmed certain holdings and eliminated certain small holdings in order to make a bigger commitment in bonds.

Charlie?

CHARLIE MUNGER: Yeah. You talk about quality versus price. The investment game always involves considering both quality and price. And the trick is to get more quality than you’re paying for in the price. It’s just that simple.

WARREN BUFFETT: But not easy.

CHARLIE MUNGER: No, but not easy.

47. No interest in spinning off subsidiaries

WARREN BUFFETT: Area 10.

AUDIENCE MEMBER: Gentlemen, good afternoon. Jeff Kirby from Green Village, New Jersey.

Would you comment please on tax-free spinoffs to shareholders in general, and particularly how you would feel about those were you to believe that a materially higher value would be ascribed to one of your operating companies in the public arena than as part of Berkshire Hathaway?

WARREN BUFFETT: Well, there's certainly been times in Berkshire's history when certain components of Berkshire might well have sold at higher multiples as individual companies than the amount they contributed to the whole of Berkshire, although I don't think that would be the case now.

But our reaction to spinoffs would be — even if we thought there was some immediate market advantage, it would have no interest, basically, to us.

We like the group of businesses we have as part of a single unit at Berkshire. We hope to add to that group of businesses. We will add to that group of businesses over time.

And the idea of creating a lot of little pieces because we could get a little more market value in the short term, it just doesn't mean anything to us.

Charlie?

CHARLIE MUNGER: Yeah, it would add a lot of frictional costs and overheads. We have the — I don't know anybody our size who has lower overhead than we do, and we like it that way.

WARREN BUFFETT: Yeah. (Applause)

Right now our after-tax cost of running the operation has gotten down to a half a basis point of capital value. And when you think that many mutual funds are at 125 basis points that means they have 250 times — (laughs) — the overhead ratio to capitalization that we have —

CHARLIE MUNGER: And all they've got is a bunch of marketable securities, and we got that plus businesses.

WARREN BUFFETT: Yeah. We don't need any more, incidentally —

CHARLIE MUNGER: We can get lower, Warren. (Buffett laughs)

We can get a lot lower —

WARREN BUFFETT: Yeah, I know. I know. (Laughter)

You think they'd [Berkshire's board of directors] work for $500 a year instead of $900, Charlie? (Laughter)

Groans from the front row.

48. Shareholders boost sales at Nebraska Furniture Mart and Borsheims

WARREN BUFFETT: Area 1.

AUDIENCE MEMBER: Good afternoon, Mr. Buffett and Mr. Munger.

I was kind of curious if you could tell me, do you know or can you tell us how much business Nebraska Furniture Mart and Borsheims did this weekend?

And secondly, do you have any interest in investing in the auto industry? And if not interested now, what would change your mind about this industry in the future?

WARREN BUFFETT: Well, the first question, I don't know what the Mart did but I do know they had a lot of shareholders there. Got a verbal report on that.

There would be less change in their normal — they do — you know, you're talking about a company that — at the Mart — that does $800,000 a day on average. It is a big operation.

So our shareholders have an impact, but not the relative impact that they would have at Borsheims.

Borsheims did over twice as much this year as last year, and they had a big day. (Laughter)

49. No special insights into automobile industry

WARREN BUFFETT: And what was the other question, Charlie?

AUDIENCE MEMBER: — industry. The auto industry.

WARREN BUFFETT: Oh, the auto industry. Yeah, Charlie was big in General Motors in the mid-'60s, right Charlie? It was your biggest commitment?

CHARLIE MUNGER: I had a temporary delusion. (Laughter)

Luckily, it passed. (Laughter)

WARREN BUFFETT: Yeah.

No, he made money on it.

CHARLIE MUNGER: Yes, I did.

WARREN BUFFETT: We — it's the kind of industry that's — it's interesting for us to follow.

I mean, many years ago it was the dominant factor — or overwhelming factor — in the economy. It's diminished a fair amount but it's still a very important industry.

And it's the kind of industry that anyone can follow. I mean, you have experience with the product and competing products, and you — everyone in this room understands in a general way the economic nature of the industry.

But we've never felt that we understood it better than other people. So we've seen auto companies at very low multiples sometimes and with prices that in hindsight looked very attractive, but we never really felt that we knew who among the auto companies five years from now would have gained the most ground relative to where they are now, or that gained the most ground relative to what the market might expect. It just isn't given to us, that knowledge.

Charlie?

CHARLIE MUNGER: I agree.

50. Selling on internet could help Borsheims and GEICO

WARREN BUFFETT: Area two.

SCOTT RUDD: Hi, my name is Scott Rudd from Evening Prairie, Minnesota.

And my question is this: ten years from now — and I'm referring to Borsheims as the retail part of it to the consumer, not so much the corporate division — ten years from now, what would be the three things that you would expect to change on a day-to-day operating basis, to change the most and affect your ability to be dominant in that area.

WARREN BUFFETT: Well, I think — are you talking about Borsheims specifically?

AUDIENCE MEMBER: Yes.

WARREN BUFFETT: Yeah, I think Borsheims — I won't have three things — but Borsheims may be one of a couple of our companies where the internet could be a huge — have a huge potential for us.

I don't know if that'll happen, but there's no question that we operate — and I've got a message on the internet — at considerably — very considerably — lower gross margins than does a Tiffany or publicly-held jewelry operations.

We are giving customers considerably more for their money. We've got way lower operating costs than the public companies.

And I say on the internet, our operating costs are 15 to 20 percentage points, and even more in some cases, less than publicly-owned competitors. So we've got a lot to offer.

Now, the big question people always have with jewelers is, "How do you know who to trust?" I mean, you know, it is an article that most people feel very uncomfortable buying.

And I think that the Berkshire Hathaway identification can help people feel comfortable on it. I think that the experience of customers around the country as they see it.

And I don't think that — I think it's a product — it's a high-ticket item, so saving money gets to be really important. Just like auto insurance, saving money gets to be really important.

So I think that the internet could be of significant assistance to Borsheims in terms of spreading and facilitating its nationwide reputation. So Borsheims could have a lot of growth and the internet could be a big part of it.

Our job is to get the message to people around the country that they can literally, you know, have us send a half a dozen items to them, that they can look at with no high-pressure salesmanship at all or anything of the sort, and look at the prices, decide what they want in their own homes, and they will do very well with us.

And we have a lot of people taking advantage of that now. But we could have 10, or 20, or 50 times that number as the years go by. And I think we should work very hard on that.

GEICO has possibilities through the internet, obviously, also.

Anything where you're offering a terrific deal to the consumer, but one of the problems has been how do you talk to that consumer, you know, the internet offers possibilities (inaudible). The thing is that everybody in the world is going to be there, and why should they click on you instead of somebody else?

Actually, the Berkshire Hathaway name may help a little bit on that, although GEICO's name is extremely well known. GEICO is — I said in the annual report we were going to spend a hundred million dollars in — basically in promotion this year. We'll spend more money than that.

The brand potential in GEICO is very, very big. And we intend to push and push and push on that.

Charlie?

CHARLIE MUNGER: Well all that said, if the internet helps some of our business, why certainly the CD-ROM and the personal computer combined to clobber World Book for us.

WARREN BUFFETT: Yeah, we paid our entry fee.

CHARLIE MUNGER: Yeah, we — (laughter) — it's not all plus.

WARREN BUFFETT: No.

51. McDonald's vs. Dairy Queen

WARREN BUFFETT: Area 3.

AUDIENCE MEMBER: My name is Jorge Gobbi (PH) from Zurich, Switzerland and my question refers to food businesses, mainly McDonald's and Dairy Queen.

Are there major differences in the investment territories fixed between McDonald's and Dairy Queen? And if yes, would you explain them?

WARREN BUFFETT: Yeah, there are major differences. McDonald's owns, perhaps, in the area of a third of all locations worldwide. I can't tell you the exact percentage, but if they've got 23,000 outlets, they own many, many thousands of them, and operate them. And then of the remainder, they own a very high percentage and lease them to their operators, their franchisees.

So they have a very large investment, on which they get very good returns, in physical facilities all over the world.

Dairy Queen has — counting Orange Julius— 6,000-plus operations, of which 30-odd are operated by the company. And even those, some are in joint ventures or partnerships.

So the investment in fixed assets is dramatically different between the two.

The fixed-assets investment by the franchisee, or the person — his landlord — obviously is significant at a Dairy Queen. But it's not significant to the company as the franchisor, so that the capital employed in Dairy Queen is relatively small compared to the capital employed in McDonald's.

But McDonald's also makes a lot of money out of owning those locations and receives —

Whereas Dairy Queen will, in most cases, receive 4 percent of the franchisee's sales, in terms of a royalty, at a McDonald's there's that — there's more than that percentage, plus rentals and so on.

So they're two different — very different — economic models. They both depend on the success of the franchisee in the end. I mean, you have to have a good business for the franchisee to, over time, have a good business for the parent company. Both companies have that situation to deal with.

Charlie?

CHARLIE MUNGER: I've got nothing to add. The 4 percent is not very much when you stop to think about providing a group of franchisees with a nationally recognized brand, and quality control, and all sorts of desirable business aids.

WARREN BUFFETT: No, 4 percent is at the low — if you look at the whole industry — 4 percent is in the lower part of the range. But it works fine —

CHARLIE MUNGER: Part of what attracted us was the fact that the charges to the franchisees are low at Dairy Queen.

WARREN BUFFETT: A successful franchisee can sell his operation for significantly more than he has invested in tangible assets. And we want it that way, obviously, because that means he's got a successful business, and it means that, over time, we will have a successful business.

You want — you want a franchise operation — you want the franchise operator to make money and you want him to create a capital asset that's worth more than he's put in it. That's the goal.

52. Making money with the Byrne family

WARREN BUFFETT: Area 4.

AUDIENCE MEMBER: Good afternoon, Mr. Munger and Mr. Buffett.

My name is Patrick Byrne, I'm a shareholder, and I'm here from Cincinnati, Ohio, back again this year to ask a question to see if I can get the two of you to disagree on a subject. I've picked education as an area where we might see some daylight between the two of you.

First though, on the subject of education, I'd like to offer some brief thanks.

I'm lucky in that my parents, in the late '70s, made the wise choice of buying some Berkshire stock and putting it in a college fund for my brothers and me, and that basically paid for our higher education.

I suspect there must be thousands of people like us who had our education paid for by wealth that the two of you created, and we owe you. Although we probably all have been a lot better to skip college and keep the stock. (Laughter and applause)

Well, on the subject of education, Milton Friedman has said, or has written, that if you really care about poverty in the U.S. and the disadvantage of women and minorities and so on, and you could cure one single thing in the U.S., it would be the public education system.

Mr. Buffett, of course you've been very publicly supportive and done many things, and I'm sure Mr. Munger has as well, for public education.

But I noticed last year, in this annual meeting, Mr. Munger — or both of you, of course, criticized some aspects of higher education, like business schools.

But Mr. Munger included — he was a tad critical, I would say, of the U.S. public education system.

And I wonder if you two agree with what Friedman says and what you think the importance of public education is, and what might be done to improve it.

WARREN BUFFETT: I'm going to let Charlie go in a second, but I just want to say, Patrick Byrne is the son of Jack Byrne, who made a fortune for us by resuscitating GEICO when it got into trouble in the mid-'70s.

In fact, I met Patrick's dad on a Wednesday night, about 8 o'clock at night, in Washington, when GEICO was — it was bankrupt and it was about — very close to being declared so.

And after talking with him about three hours that night, the next day I went out and bought 500 and some-thousand shares of GEICO, that Davy [Lorimer Davidson] referred to, at 2 1/8, so — which is forty cents on the stock that we paid $70 for later on.

So Patrick's dad — we may have made — (laughs) — we may have made the Byrne family more money; he made us a lot of money.

Patrick is now running Fechheimers in Cincinnati and doing a sensational job. His brother, Mark, on June 30, if we hit the target date, will be establishing a major operation in London and Bermuda that will — in which we will be a very large partner.

So he's only got one other brother left, and he's out playing golf in California. But if times get tough we're going to try and recruit him, too.

53. Fixing public education

WARREN BUFFETT: Charlie, with all that time to prepare, what do you have to say about education? (Laughs)

CHARLIE MUNGER: Well, I certainly agree with Milton Friedman, that there's — it would be hard to name one factor, if we could fix it, that would be more worthy of fixing than education in the United States, particularly the lower grades in education where the failures are so horrible, in many big cities particularly.

So yes, I think it's a terrible problem and it needs fixing.

Of course, it's a huge debate as to what the best way is to fix it. And I am skeptical, myself, of big city school systems getting fixed under their own momentums. In other words, I'm quite sympathetic to the people who say we may have to go to an alternative, like vouchers.

That the incentive structure has — (applause) — gotten so bad in some places that you can't fix it with evolution; it takes revolution.

Warren, you're more optimistic about big city public schools —

WARREN BUFFETT: Well, I'm not necessarily more optimistic. I probably feel, though, that democracy without a good public school system available to the entire population is sort of a mockery.

Because there's so much — (applause) — inequality to start with. I mean, it isn't just inequality of money. But I mean, my kids, whether they inherit any money, or your kids, whether they inherit any money, compared to the kids of somebody where both parents are struggling to keep the place going, or maybe just one parent, and living in poverty — I mean, it is so unequal to start with that if you accentuate that inequality by giving those who are generally higher up on the ladder also a far better education than you give those who have chosen the wrong womb, I think that's just — I don't think that society should tolerate that — a rich society — should tolerate it.

That doesn't mean it's easy to solve. Because I've said a lot of times that, unfortunately, it seems like a good public school system is like virginity, that it can be preserved but not restored.

And it's very hard, when you get a system that's lousy, to do much about it, because under those circumstances the wealthy people are going to all opt out of the system, and they're going to be less interested in the bond issues, they're going to be less interested in the PTA, they're going to be less interested in the outcome of the other people's children, if they have all opted out for their own system.

And to have one educational system for the rich and another for the poor, with the poor being — getting the poorer system — strikes me as doing nothing but accentuating inequality and other problems that result from that in the future.

So I don't know the answers on improving the system. You know, I read some of the experiments that take place.

But I do believe to start with that if you have a good public school system, as we do in Omaha, that you do your damndest to maintain that so that there is no incentive for the rich grandparent or the rich parent to say, you know, "I love the idea of equality, but I love my grandchildren or my child more, so I'm going to yank him from the public school system," and then you get this sort of exodus which leaves behind only those who can't afford to make that choice.

And the problem I have with the voucher system, if there were a way — the idea of competition I like, you know, and I think a good parochial system does, for example, create a better public system — and I think we've had that situation in Omaha — but I think the voucher system, if it simply amounts to giving everyone an additional amount, simply means that the rich get X dollars of the public school system subsidized, but the poor still are — whatever that differential is — remains.

I mean, you could have a golf voucher system — because I play golf — I don't play very often — but if I play at the Omaha Country Club then you could have a voucher system so that everybody in Omaha would have more access to the country club by giving everybody a thousand dollars a year to play golf.

But it just means it would reduce my bill by a thousand bucks, but it still wouldn't do the job for the guy who's on the public course because he'd still be beyond his means to move to full-scale equality with me.

I — you know, I don't think there's anything more important — and I agree with Charlie totally — I think the first eight grades, you know, you can forget it after that. If you have the first eight grades right, good things are going to flow. And if you have those wrong, you're not going to correct it as you get beyond that point.

And I think that — you know, I commend Walter Annenberg on the $500 million. I think it is very tough to see results in that arena. And if you find something that is producing results, I think it should be replicated elsewhere.

I think that, obviously — a fellow in Chicago says that the unions have caused considerable problems in getting adjustments made, but he had the political clout behind him to overcome some of those problems.

It ought to be a top national priority. We have the money to educate everybody well in this country, and the question is, can we execute? And that's something I hope good minds like Patrick's work on.

Charlie, you have anything for that?

CHARLIE MUNGER: Yeah. I think when something is demonstrably failing at performing the function to which it's assigned by a civilization, just to keep pouring more and more money into a failing modality is not the Munger system.

So I'm all for taking the worst places where there's failure and trying a new modality. And it wouldn't bother me at all to have vouchers only for the poor.

But I think we have to do something in our most troubled schools to change our techniques. I think it's insane to keep going the way we are.

WARREN BUFFETT: So you'd go for means-tested vouchers, basically?

CHARLIE MUNGER: Oh, I —

WARREN BUFFETT: I mean, I don't disagree with that idea.

CHARLIE MUNGER: All I know is we're — it is a terrible place to fail.

And part of the trouble is ideological. If you have an absolute rule there can't be any tracking by ability, no matter how much better reading can measurably be taught by systems that involve tracking, well, people that brain-blocked shouldn't have the power. You know, we should — (applause) — do what works.

WARREN BUFFETT: You know, we got plenty — I mean, in Omaha, it works. The problem is that once it gets beyond a certain point on a downhill slope, essentially you have the citizens that are able to do something about it, essentially, opt out. And that — I don't know —

CHARLIE MUNGER: I am a product of the Omaha public schools, and in my day, the people who went to private schools were those who couldn't quite hack it in the public schools. That is still the situation in Germany today. I mean, private schools are for people who aren't up to the public schools.

I'd prefer a system like that. But once a big segment of that system measurably fails then I think you have to do something. You don't just keep repeating what isn't working.

WARREN BUFFETT: Well, I agree with that.

Patrick, have you gotten your answer? (Applause)

54. “The truth is you can have the reputation that you want”

WARREN BUFFETT: Let’s go to area 5.

AUDIENCE MEMBER: My name’s Kevin Murphy, I’m from Camarillo, California.

And my question is, what do you look for when determining if a person is honest or not?

WARREN BUFFETT: Now, that’s a good question, Kevin.

You — I think, generally, Charlie and I can do pretty well with the situations we see, but we have to have some evidence of behavior in front of us. And I would say even there’s some occupations where we’re going to expect to find a higher percentage of people who behave well than in others.

But if we work with someone over a period of a few months or more, I think we’ve got — we can come up with a pretty high batting average, in terms of how they behave.

At Salomon, I think I was able to separate out the people who I felt very good about and the people I was a little more nervous about fairly quickly, among the ones I worked with actively.

But how you spot that precisely, you know — leave your lunch money on their — (laughs) — on their desk sometime, Kevin. Maybe you’ll find out in a hurry, but — (Laughter)

We like people — you know, I mean, the great example, you know, is somebody like a Tom Murphy, where they’re just bending over backwards all the time to make sure that you get the better end of the deal.

That doesn’t mean they aren’t competitive. I mean, if you play him at a golf game for money or something like that, you know, he wants to win in the worst way. But he —

But there are people that just — they don’t take credit for things that they didn’t do. In fact, they give you credit for some of the things that maybe they did. You can get a feel for it over time.

Charlie, you have any good guidelines on that?

CHARLIE MUNGER: Yes. I think that people leave track records in life. And so, somebody at your age should figure that by the time he’s 22 or ’3, well, he will have left quite a track record and the world will be able to figure you out.

So I think that track records are very important. And if you start early, trying to have a perfect record in some simple thing like honesty, you’re well on the way to success in this world. (Applause)

WARREN BUFFETT: [Italian industrialist] Gianni Agnelli one time told me, he said, “When you get older, you have the reputation you deserve.” He said you can get away —

CHARLIE MUNGER: Yeah, yeah.

CHARLIE MUNGER: — with it for a while early on. But by the time anybody gets to be 60 or so, they very probably have the reputation they deserve. And the truth is you can have the reputation that you want.

If you list all of the things that you admire in other people, you’ll find out that almost everything you list — you may not be able to kick a football 60 yards or something of that sort — but almost everything you list in the people that you admire and like, they’re qualities that you can have if you just set out to do that.

Didn’t Ben Franklin do that, Charlie?

CHARLIE MUNGER: Oh, sure. I always say that the best way to get what you want is to deserve what you want.

WARREN BUFFETT: I’ll have some more peanut brittle. (Laughter)

55. No expectations of investment problems due to Y2K

WARREN BUFFETT: Area 6.

AUDIENCE MEMBER: I’m Nancy Sill (PH) from Atlanta, Georgia.

You were asked earlier this morning a question about the year 2000 computer problem. Do you anticipate any negative financial impact to the economy or to our companies due to the millennium problem, and if so what financial strategies are you considering?

WARREN BUFFETT: Well, I don’t think there’ll be major problems for our companies. You know, there are going to be some problems — (laughs) — anytime you have something that big.

If people didn’t see it coming in 1980 or 1985, they’re not going to be perfect at solving it by 2000, you can count on that.

But I don’t think it has any investment consequences for Berkshire Hathaway that we should be considering now. And I do think you’ll see most of the problems in the governmental area.

You know, maybe they won’t find your tax return for two or three years. (Laughter) Who knows?

Charlie?

56. McDonald's will keep its real estate

WARREN BUFFETT: Area 7.

AUDIENCE MEMBER: In your description of McDonald's, you have a sense that there's a great business buried in McDonald's and two good businesses that are mixed in with it. And the problem is with the real estate and the operational business, that as the company is currently capitalized, they can't earn the same kind of returns they can earn in the franchising business.

You were, or still are, a significant shareholder of McDonald's. I guess my question is, the solution is obvious: why don't you push for a solution that creates the same opportunity to have at International Dairy Queen?

WARREN BUFFETT: Well, my guess is — I don't know the details on it — but my guess is that with 23,000 locations all over the world, I think it would be extraordinarily difficult to separate the real estate business out from the franchising business at this point.

I think they could've gone a different route. I'm not saying it would've been a better route at all. In fact, I think the odds are they followed the right route in owning and controlling so much real estate.

But I just think the problems would be horrendous. Certainly you wouldn't want to sell it and lease it back because you would not end up with more value, in my view, by doing that.

And spinning it off in a real estate trust or something, with operating in 100-plus countries, and with all of the franchise arrangements, I think it would be a huge, huge problem. I would not want to tackle it myself.

So I think that you should look at McDonald's — and I don't know anything about their plans on this — but I think you should look at McDonald's as being a very good business, but one that will continue in its present mode vis a vis the real estate. Although I think they've signaled that they're going to do less on new properties — somewhat less — in connection with ownership, than they've done to this point.

But there's 23,000 locations out there and every operator, his own arrangement is very important to him. And it just — it would be a mammoth job, and I'm not sure how much extra value would be created in the end anyway.

Charlie?

CHARLIE MUNGER: Yeah, the net returns on capital McDonald's has earned all these years are high, even though they have owned a lot of their real estate. I think it's hard to quarrel with the way they did it. They had the best record.

WARREN BUFFETT: And the multiple is not greatly different, in my view, than if the real estate were separate. You know, I mean, if you get all the real estate detached in some arrangement, you might get a little more out of it. But it doesn't strike me as a big deal.

57. Berkshire is "poorly" structured for owning securities

WARREN BUFFETT: Area 8.

AUDIENCE MEMBER: Yeah, hi. I'm Rachel White (PH) from Missoula, Montana.

And during the lunch break, I heard some people talking about double taxation and how that impacts Berkshire's investment philosophy. So I was wondering if you could talk a little bit about it. I'm not sure I understood it. And if you could explain whether that impacts your investments.

WARREN BUFFETT: Well, we are structured very poorly. And if you were looking — if you're going to start all over again and do most of the things we've done, you would probably not do it in corporate form, or precisely like we do it.

I mean, what that gentleman was talking about in connection with McDonald's applies much more to Berkshire Hathaway by far than McDonald's, in terms of de-taxing part of the income stream.

If we own Coca-Cola with a cost of a billion-two or a billion-three and a market value of 15 billion, we're not going to sell it.

But if we did sell it, we would incur a capital gains tax on the order, almost, of $5 billion.

That means that the 15 becomes 10 billion. Now, if that 10 billion is reflected in Berkshire's value and you bought your stock when we bought our Coke, then you pay a second tax, in turn, in reflection of the Coca-Cola appreciation that has taken place after tax. So it's a very disadvantageous way of owning securities, to have a corporation in between you and the securities themselves.

If we ran as a partnership that would not be the case. I ran Berkshire Hathaway — I mean, I ran Buffett Partnership for many years and we only had one tax at the individual level.

So our stockholders are — to the extent that we own marketable securities — and we own a lot of them — and to the extent that we have a lot of profits over time in those — own those securities in a disadvantageous way.

Now, we also have a float, which helps us own them, which is a big plus.

But corporate ownership of securities — if you have the option of owning them directly or through a partnership — corporate ownership is disadvantageous.

And we're stuck with it. We've had it for all these years. We've got no plans to do anything about it. We couldn't, probably, do anything about it if we wanted to.

So that is a drag on our performance, compared to what would be the situation if we operated as a partnership.

And Lloyd's syndicates, for example, didn't have that problem. Some insurance companies that operate in Bermuda may not have that problem to the same extent. Certainly partnerships don't have that problem, to the extent they own securities. But it's a fact of life with us and we're going to pay a lot of taxes.

Charlie?

CHARLIE MUNGER: Yeah, we have no cure for the corporate income tax, and it is a big disadvantage for the indirect owner of securities.

So far we've surmounted it well enough but we're carrying a load there.

WARREN BUFFETT: It's become a bigger disadvantage since the individual rate went to 20 percent with our corporate rate being 35 percent. If we make a dollar on a stock, it becomes 65 cents, and to the extent that you've owned Berkshire, that 65 cents, now 20 percent off that, becomes 52 cents. Whereas if you'd owned the stock directly, you'd have had 80 cents.

Now, when we owned GEICO and it wasn't consolidated with us, you carried that one more extreme. I mean, GEICO had capital gains and we had a capital gain proportionately in GEICO, and so on.

I mean, how you're structured does make a real difference. But usually once you get into a given structure, you're kind of stuck with it, as I indicated in the answer to the gentleman on McDonald's.

CHARLIE MUNGER: Now, to the extent we have very long holding periods at the corporate level, the real mathematical disadvantage shrinks.

WARREN BUFFETT: Yeah, and we might not have been able to get the float that we have, if we hadn't been operating it in a corporate structure, so that is a mitigating factor, too.

But we like to have the mitigating factors without anything to mitigate, if we get our choice. (Laughter)

58. Due diligence is useless and misses the point

WARREN BUFFETT: Area 9, please.

AUDIENCE MEMBER: Good afternoon. My name is Fred Strasheim (PH) and I'm from here in Omaha.

I have a question about your acquisition methodology. And I was intrigued to read in your annual report about your acquisition of Star Furniture.

And as I understand the process you followed, Mr. Buffett, you met with Mr. — or you — I'm sorry, you reviewed financials for a brief period, liked what you saw, then you met with Mr. Melvyn Wolff for two hours and struck a deal. And you wrote you had no need to check leases, work out employment contracts, et cetera.

WARREN BUFFETT: Right.

AUDIENCE MEMBER: I think that most companies, when they do acquisitions, would feel the need to do a significant amount of legal due diligence, to do things like check the leases, check into things like undisclosed environmental liability, or perhaps threatened litigation.

And I guess my question is, have you ever been burned by your approach?

WARREN BUFFETT: We've been burned by the — we've been burned only in the sense that we've made mistakes on judging the future economics of the business, which would've had nothing to do with due diligence.

We regard what people normally refer to "due diligence" as, as really sort of boilerplate in most cases.

It's a process that big companies go through. And they feel they have to go through it. And they're ignoring — oftentimes, in our view — they're ignoring what really counts, which is evaluating the people they're getting in with, and evaluating the economics of the business. That's 99 percent of the deal.

You know, you may run into an environmental liability problem, you know, one time in a hundred, or you may, you know, you may find a bad lease.

I asked Melvin about, you know, "Do you have any bad leases?" I mean, that's the easiest way to do it. And I could read them all and try and look for every clause or something, but it isn't going to — you know, that is not the problem.

We've made bad — lots of bad deals. We made a bad deal when we bought Hochschild Kohn, for example, the department store operation, back in 1966. But it had — fine people — but we were wrong on the economics of the business.

But the leases didn't make any difference. You know, that sort of thing just was not important. And I can't recall any time that what other people refer to as due diligence would've avoided a bad deal for us.

CHARLIE MUNGER: I can't either.

WARREN BUFFETT: No. That's 30-some years. And I —

The key thing — you just don't want to do — I go — I'm on various public company boards — I've been on 19 public company boards — and you know, their idea of the due diligence is to send the lawyers out and have a bunch of investment bankers come in and make presentations and all that.

And I regard that as terribly diversionary, because the board sits there, you know, entranced by all of that, and everybody reporting how wonderful this thing is and how they checked out patents and all that sort of thing. And nobody is focusing really on where the business is going to be in five or 10 years.

You know, business judgment about economics — and people to some extent — but the business economics — that is 99 percent of deal making. And the rest, people may do it for their protection. I think too often they do it as a crutch just to go through with the deal that they want to go through with anyway, and of course all the professionals know that. So believe me, they come back with the diligence, whether due or not. And — (Laughter)

We are not big fans of that. I don't know how many deals we've made over the years, but I cannot think of anything that traditional due diligence has had a thing to do with.

CHARLIE MUNGER: No, we've had surprises on the favorable side a couple of times —

WARREN BUFFETT: That is true. That is true.

The kind of people that we've generally dealt with have usually told us the bad things first and good things after we made the deal.

We made a deal with a fellow over in Rockford in 1969, Eugene Abegg, Illinois National Bank and Trust Company. I made that deal in a couple of hours and, I mean, there just wasn't any way that Gene was going to be hiding anything bad.

For the next ten years when I went over there, every time I'd go to lunch he'd point out some building in town that we owned that wasn't on the books, or some foundation we had that had money in it he hadn't told me about.

And he even gave me some bills, one of which I carry in my pocket, that he had still sitting around that were issued by the bank that were our own money which he never told me about.

We could cut them out like paper dolls. I mean, Gene was not a guy to show all his cards. (Laughter)

And those are the kind of people we've generally dealt with, and I would certainly say that Melvyn and [his sister] Shirley [Toomin] fit that description in spades.

BERKSHIRE HATHAWAY INC.

To the Shareholders of Berkshire Hathaway Inc.:

Our gain in net worth during 1998 was $25.9 billion, which increased the per-share book value of both our Class A and Class B stock by 48.3%. Over the last 34 years (that is, since present management took over) per-share book value has grown from $19 to $37,801, a rate of 24.7% compounded annually.*

Normally, a gain of 48.3% would call for handsprings — but not this year. Remember Wagner, whose music has been described as better than it sounds? Well, Berkshire's progress in 1998 — though more than satisfactory — was not as good as it looks. That's because most of that 48.3% gain came from our issuing shares in acquisitions.

To explain: Our stock sells at a large premium over book value, which means that any issuing of shares we do — whether for cash or as consideration in a merger — instantly increases our per-share book-value figure, even though we've earned not a dime. What happens is that we get more per-share book value in such transactions than we give up. These transactions, however, do not deliver us any immediate gain in per-share *intrinsic value*, because in this respect what we give and what we get are roughly equal. And, as Charlie Munger, Berkshire's Vice Chairman and my partner, and I can't tell you too often (though you may feel that we try), it's the per-share gain in intrinsic value that counts rather than the per-share gain in book value. Though Berkshire's intrinsic value grew very substantially in 1998, the gain fell well short of the 48.3% recorded for book value. Nevertheless, intrinsic value still *far* exceeds book value. (For a more extensive discussion of these terms, and other investment and accounting concepts, please refer to our Owner's Manual, on pages 56-64, in which we set forth our owner-related business principles. Intrinsic value is discussed on pages 61 and 62.)

We entered 1999 with the best collection of businesses and managers in our history. The two companies we acquired in 1998, General Re and Executive Jet, are first-class in every way — more about both later — and the performance of our operating businesses last year exceeded my hopes. GEICO, once again, simply shot the lights out. On the minus side, several of the public companies in which we have major investments experienced significant operating shortfalls that neither they nor I anticipated early in the year. Consequently, our equity portfolio did not perform nearly as well as did the S&P 500. The problems of these companies are almost certainly temporary, and Charlie and I believe that their long-term prospects are excellent.

In our last three annual reports, we furnished you a table that we regard as central to estimating Berkshire's intrinsic value. In the updated version of that table, which follows, we trace our two key components of value, including General Re on a pro-forma basis as if we had owned it throughout the year. The first column lists our per-share ownership of investments (including cash and equivalents but excluding securities held in our financial products operation) and the second column shows our per-share earnings from Berkshire's operating businesses before taxes and purchase-accounting adjustments (discussed on pages 62 and 63), but after all interest and corporate expenses. The second column excludes *all* dividends, interest and capital gains that we realized from the investments presented in the first column. In effect, the columns show how Berkshire would look if it were split into two parts, with one entity holding our investments and the other operating all of our businesses and bearing all corporate costs.

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*All figures used in this report apply to Berkshire's A shares, the successor to the only stock that the company had outstanding before 1996. The B shares have an economic interest equal to 1/30th that of the A.

Year	Investments Per Share	Pre-tax Earnings Per Share With All Income from Investments Excluded
1968	$ 53	$ 2.87
1978	465	12.85
1988	4,876	145.77
1998	47,647	474.45

Here are the growth rates of the two segments by decade:

Decade Ending	Investments Per Share	Pre-tax Earnings Per Share With All Income from Investments Excluded
1978	24.2%	16.2%
1988	26.5%	27.5%
1998	25.6%	12.5%
Annual Growth Rate, 1968-1998	25.4%	18.6%

During 1998, our investments increased by $9,604 per share, or 25.2%, but per-share operating earnings fell by 33.9%. General Re (included, as noted, on a pro-forma basis) explains both facts. This company has very large investments, and these greatly increased our per-share investment figure. But General Re also had an underwriting loss in 1998, and that hurt operating earnings. Had we not acquired General Re, per-share operating earnings would have shown a modest gain.

Though certain of our acquisitions and operating strategies may from time to time affect one column more than the other, we continually work to increase the figures in both. But one thing is certain: Our future rates of gain will fall far short of those achieved in the past. Berkshire's capital base is now simply too large to allow us to earn truly outsized returns. If you believe otherwise, you should consider a career in sales but avoid one in mathematics (bearing in mind that there are really only three kinds of people in the world: those who can count and those who can't).

Currently we are working to compound a net worth of $57.4 billion, the largest of any American corporation (though our figure will be eclipsed if the merger of Exxon and Mobil takes place). Of course, our lead in net worth does not mean that Berkshire outranks all other businesses in value: Market value is what counts for owners and General Electric and Microsoft, for example, have valuations more than three times Berkshire's. Net worth, though, measures the capital that managers must deploy, and at Berkshire that figure has indeed become huge.

Nonetheless, Charlie and I will do our best to increase intrinsic value in the future at an average rate of 15%, a result we consider to be at the very peak of possible outcomes. We may have years when we exceed 15%, but we will most certainly have other years when we fall far short of that — including years showing negative returns — and those will bring our average down. In the meantime, you should understand just what an average gain of 15% over the next five years implies: It means we will need to increase net worth by $58 billion. Earning this daunting 15% will require us to come up with big ideas: Popcorn stands just won't do. Today's markets are not friendly to our search for "elephants," but you can be sure that we will stay focused on the hunt.

Whatever the future holds, I make you one promise: I'll keep at least 99% of my net worth in Berkshire for as long as I am around. How long will that be? My model is the loyal Democrat in Fort Wayne who asked to be buried in Chicago so that he could stay active in the party. To that end, I've already selected a "power spot" at the office for my urn.

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Our financial growth has been matched by employment growth: We now have 47,566 on our payroll, with the acquisitions of 1998 bringing 7,074 employees to us and internal growth adding another 2,500. To balance this gain

of 9,500 in hands-on employees, we have enlarged the staff at world headquarters from 12 to 12.8. (The .8 doesn't refer to me or Charlie: We have a new person in accounting, working four days a week.) Despite this alarming trend toward corporate bloat, our after-tax overhead last year was about $3.5 million, or well under one basis point (.01 of 1%) of the value of the assets we manage.

Taxes

One beneficiary of our increased size has been the U.S. Treasury. The federal income taxes that Berkshire and General Re have paid, or will soon pay, in respect to 1998 earnings total $2.7 billion. That means we shouldered *all* of the U.S. Government's expenses for more than a half-day.

Follow that thought a little further: If only 625 other U.S. taxpayers had paid the Treasury as much as we and General Re did last year, no one else — neither corporations nor 270 million citizens — would have had to pay federal income taxes or any other kind of federal tax (for example, social security or estate taxes). Our shareholders can truly say that they "gave at the office."

Writing checks to the IRS that include strings of zeros does not bother Charlie or me. Berkshire as a corporation, and we as individuals, have prospered in America as we would have in no other country. Indeed, if we lived in some other part of the world and completely escaped taxes, I'm sure we would be worse off financially (and in many other ways as well). Overall, we feel extraordinarily lucky to have been dealt a hand in life that enables us to write large checks to the government rather than one requiring the government to regularly write checks to us — say, because we are disabled or unemployed.

Berkshire's tax situation is sometimes misunderstood. First, capital gains have no special attraction for us: A corporation pays a 35% rate on taxable income, whether it comes from capital gains or from ordinary operations. This means that Berkshire's tax on a long-term capital gain is fully 75% higher than what an individual would pay on an identical gain.

Some people harbor another misconception, believing that we can exclude 70% of all dividends we receive from our taxable income. Indeed, the 70% rate applies to most corporations and also applies to Berkshire in cases where we hold stocks in non-insurance subsidiaries. However, almost all of our equity investments are owned by our insurance companies, and in that case the exclusion is 59.5%. That still means a dollar of dividends is considerably more valuable to us than a dollar of ordinary income, but not to the degree often assumed.

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Berkshire truly went all out for the Treasury last year. In connection with the General Re merger, we wrote a $30 million check to the government to pay an SEC fee tied to the new shares created by the deal. We understand that this payment set an SEC record. Charlie and I are enormous admirers of what the Commission has accomplished for American investors. We would rather, however, have found another way to show our admiration.

GEICO (1-800-847-7536)

Combine a great idea with a great manager and you're certain to obtain a great result. That mix is alive and well at GEICO. The idea is low-cost auto insurance, made possible by direct-to-customer marketing, and the manager is Tony Nicely. Quite simply, there is no one in the business world who could run GEICO better than Tony does. His instincts are unerring, his energy is boundless, and his execution is flawless. While maintaining underwriting discipline, Tony is building an organization that is gaining market share at an accelerating rate.

This pace has been encouraged by our compensation policies. The direct writing of insurance — that is, without there being an agent or broker between the insurer and its policyholder — involves a substantial front-end investment. First-year business is therefore unprofitable in a major way. At GEICO, we do not wish this cost to deter our associates from the aggressive pursuit of new business — which, as it renews, will deliver significant profits — so we leave it out of our compensation formulas. What's included then? We base 50% of our associates' bonuses and profit sharing on

the earnings of our "seasoned" book, meaning policies that have been with us for more than a year. The other 50% is tied to growth in policyholders — and here we have stepped on the gas.

In 1995, the year prior to its acquisition by Berkshire, GEICO spent $33 million on marketing and had 652 telephone counselors. Last year the company spent $143 million, and the counselor count grew to 2,162. The effects that these efforts had at the company are shown by the new business and in-force figures below:

Years	New Auto Policies*	Auto Policies In-Force*
1993	354,882	2,011,055
1994	396,217	2,147,549
1995	461,608	2,310,037
1996	617,669	2,543,699
1997	913,176	2,949,439
1998	1,317,761	3,562,644

* "Voluntary" only; excludes assigned risks and the like.

In 1999, we will again increase our marketing budget, spending at least $190 million. In fact, there is no limit to what Berkshire is willing to invest in GEICO's new-business activity, as long as we can concurrently build the infrastructure the company needs to properly serve its policyholders.

Because of the first-year costs, companies that are concerned about quarterly or annual earnings would shy from similar investments, no matter how intelligent these might be in terms of building long-term value. Our calculus is different: We simply measure whether we are creating more than a dollar of value per dollar spent — and if that calculation is favorable, the more dollars we spend the happier I am.

There is far more to GEICO's success, of course, than low prices and a torrent of advertising. The handling of claims must also be fair, fast and friendly — and ours is. Here's an impartial scorecard on how we shape up: In New York, our largest-volume state, the Insurance Department recently reported that GEICO's complaint ratio in 1997 was not only the lowest of the five largest auto insurers but was also less than half the average of the other four.

GEICO's 1998 profit margin of 6.7% was better than we had anticipated — and, indeed, better than we wished. Our results reflect an industry-wide phenomenon: In recent years, both the frequency of auto accidents and their severity have unexpectedly declined. We responded by reducing rates 3.3% in 1998, and we will reduce them still more in 1999. These moves will soon bring profit margins down — at the least to 4%, which is our target, and perhaps considerably lower. Whatever the case, we believe that our margins will continue to be much better than those of the industry.

With GEICO's growth and profitability both outstanding in 1998, so also were its profit-sharing and bonus payments. Indeed, the profit-sharing payment of $103 million or 32.3% of salary — which went to all 9,313 associates who had been with us for more than a year — may well have been the highest percentage payment at any large company in the country. (In addition, associates benefit from a company-funded pension plan.)

The 32.3% may turn out to be a high-water mark, given that the profitability component in our profit-sharing calculation is almost certain to come down in the future. The growth component, though, may well increase. Overall, we expect the two benchmarks together to dictate very significant profit-sharing payments for decades to come. For our associates, growth pays off in other ways as well: Last year we promoted 4,612 people.

Impressive as the GEICO figures are, we have far more to do. Our market share improved significantly in 1998 — but only from 3% to 3½%. For every policyholder we now have, there are another ten who should be giving us their business.

Some of you who are reading this may be in that category. About 40% of those who check our rates find that they can save money by doing business with us. The proportion is not 100% because insurers differ in their underwriting judgements, with some giving more credit than we do to drivers who live in certain geographical areas or work at certain occupations. We believe, however, that we more frequently offer the low price than does any other national carrier

selling insurance to all comers. Furthermore, in 40 states we can offer a special discount — usually 8% — to our shareholders. So give us a call and check us out.

* * * * * * * * * * *

You may think that one commercial in this section is enough. But I have another to present, this one directed at managers of publicly-owned companies.

At Berkshire we feel that telling outstanding CEOs, such as Tony, how to run their companies would be the height of foolishness. Most of our managers wouldn't work for us if they got a lot of backseat driving. (Generally, they don't have to work for *anyone*, since 75% or so are independently wealthy.) Besides, they are the Mark McGwires of the business world and need no advice from us as to how to hold the bat or when to swing.

Nevertheless, Berkshire's ownership may make even the best of managers more effective. First, we eliminate all of the ritualistic and nonproductive activities that normally go with the job of CEO. Our managers are totally in charge of their personal schedules. Second, we give each a simple mission: Just run your business as if: 1) you own 100% of it; 2) it is the only asset in the world that you and your family have or will ever have; and 3) you can't sell or merge it for at least a century. As a corollary, we tell them they should not let any of their decisions be affected even slightly by accounting considerations. We want our managers to think about what counts, not how it will be counted.

Very few CEOs of public companies operate under a similar mandate, mainly because they have owners who focus on short-term prospects and reported earnings. Berkshire, however, has a shareholder base — which it will have for decades to come — that has the longest investment horizon to be found in the public-company universe. Indeed, a majority of our shares are held by investors who expect to die still holding them. We can therefore ask our CEOs to manage for maximum long-term value, rather than for next quarter's earnings. We certainly don't ignore the current results of our businesses — in most cases, they are of great importance — but we *never* want them to be achieved at the expense of our building ever-greater competitive strengths.

I believe the GEICO story demonstrates the benefits of Berkshire's approach. Charlie and I haven't taught Tony a thing — and never will — but we *have* created an environment that allows him to apply all of his talents to what's important. He does not have to devote his time or energy to board meetings, press interviews, presentations by investment bankers or talks with financial analysts. Furthermore, he need never spend a moment thinking about financing, credit ratings or "Street" expectations for earnings per share. Because of our ownership structure, he also knows that this operational framework will endure for decades to come. In this environment of freedom, both Tony and his company can convert their almost limitless potential into matching achievements.

If you are running a large, profitable business that will thrive in a GEICO-like environment, check our acquisition criteria on page 21 and give me a call. I promise a fast answer and will mention your inquiry to no one except Charlie.

Executive Jet Aviation (1-800-848-6436)

To understand the huge potential at Executive Jet Aviation (EJA), you need some understanding of its business, which is selling fractional shares of jets and operating the fleet for its many owners. Rich Santulli, CEO of EJA, created the fractional ownership industry in 1986, by visualizing an important new way of using planes. Then he combined guts and talent to turn his idea into a major business.

In a fractional ownership plan, you purchase a portion — say $^{1}/_{8}$th — of any of a wide variety of jets that EJA offers. That purchase entitles you to 100 hours of flying time annually. ("Dead-head" hours don't count against your allotment, and you are also allowed to average your hours over five years.) In addition, you pay both a monthly management fee and a fee for hours actually flown.

Then, on a few hours notice, EJA makes your plane, or another at least as good, available to you at your choice of the 5500 airports in the U.S. In effect, calling up your plane is like phoning for a taxi.

I first heard about the NetJets® program, as it is called, about four years ago from Frank Rooney, our manager at H.H. Brown. Frank had used and been delighted with the service and suggested that I meet Rich to investigate signing up for my family's use. It took Rich about 15 minutes to sell me a quarter (200 hours annually) of a Hawker 1000. Since then, my family has learned firsthand — through flying 900 hours on 300 trips — what a friendly, efficient, and safe operation EJA runs. Quite simply, they love this service. In fact, they quickly grew so enthusiastic that I did a testimonial ad for EJA long before I knew there was any possibility of our purchasing the business. I did, however, ask Rich to give me a call if he ever got interested in selling. Luckily, he phoned me last May, and we quickly made a $725 million deal, paying equal amounts of cash and stock.

EJA, which is by far the largest operator in its industry, has more than 1,000 customers and 163 aircraft (including 23 "core" aircraft that are owned or leased by EJA itself, so that it can make sure that service is first-class even during the times when demand is heaviest). Safety, of course, is the paramount issue in any flight operation, and Rich's pilots — now numbering about 650 — receive extensive training at least twice a year from FlightSafety International, another Berkshire subsidiary and the world leader in pilot training. The bottom line on our pilots: I've sold the Berkshire plane and will now do all of my business flying, as well as my personal flying, with NetJets' crews.

Being the leader in this industry is a major advantage for all concerned. Our customers gain because we have an armada of planes positioned throughout the country at all times, a blanketing that allows us to provide unmatched service. Meanwhile, we gain from the blanketing because it reduces dead-head costs. Another compelling attraction for our clients is that we offer products from Boeing, Gulfstream, Falcon, Cessna, and Raytheon, whereas our two competitors are owned by manufacturers that offer only their own planes. In effect, NetJets is like a physician who can recommend whatever medicine best fits the needs of each patient; our competitors, in contrast, are producers of a "house" brand that they must prescribe for one and all.

In many cases our clients, both corporate and individual, own fractions of several different planes and can therefore match specific planes to specific missions. For example, a client might own $^{1}/_{16}$th of three different jets (each giving it 50 hours of flying time), which in total give it a virtual fleet, obtained for a small fraction of the cost of a single plane.

Significantly, it is not only small businesses that can benefit from fractional ownership. Already, some of America's largest companies use NetJets as a supplement to their own fleet. This saves them big money in both meeting peak requirements and in flying missions that would require their wholly-owned planes to log a disproportionate amount of dead-head hours.

When a plane is slated for personal use, the clinching argument is that either the client signs up now or his children likely will later. That's an equation I explained to my wonderful Aunt Alice 40 years ago when she asked me whether she could afford a fur coat. My reply settled the issue: "Alice, *you* aren't buying it; your heirs are."

EJA's growth has been explosive: In 1997, it accounted for 31% of all corporate jets ordered in the world. Nonetheless, Rich and I believe that the potential of fractional ownership has barely been scratched. If many thousands of owners find it sensible to own 100% of a plane — which must be used 350-400 hours annually if it's to make economic sense — there must be a large multiple of that number for whom fractional ownership works.

In addition to being a terrific executive, Rich is fun. Like most of our managers, he has no economic need whatsoever to work. Rich spends his time at EJA because it's his baby — and he wants to see how far he can take it. We both already know the answer, both literally and figuratively: to the ends of the earth.

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And now a small hint to Berkshire directors: Last year I spent more than nine times my salary at Borsheim's and EJA. Just think how Berkshire's business would boom if you'd only spring for a raise.

General Re

On December 21, we completed our $22 billion acquisition of General Re Corp. In addition to owning 100% of General Reinsurance Corporation, the largest U.S. property-casualty reinsurer, the company also owns (including stock it has an arrangement to buy) 82% of the oldest reinsurance company in the world, Cologne Re. The two companies together reinsure all lines of insurance and operate in 124 countries.

For many decades, General Re's name has stood for quality, integrity and professionalism in reinsurance — and under Ron Ferguson's leadership, this reputation has been burnished still more. Berkshire can add absolutely nothing to the skills of General Re's and Cologne Re's managers. On the contrary, there is a lot that they can teach us.

Nevertheless, we believe that Berkshire's ownership will benefit General Re in important ways and that its earnings a decade from now will materially exceed those that would have been attainable absent the merger. We base this optimism on the fact that we can offer General Re's management a freedom to operate in whatever manner will best allow the company to exploit its strengths.

Let's look for a moment at the reinsurance business to understand why General Re could not on its own do what it can under Berkshire. Most of the demand for reinsurance comes from primary insurers who want to escape the wide swings in earnings that result from large and unusual losses. In effect, a reinsurer gets paid for absorbing the volatility that the client insurer wants to shed.

Ironically, though, a publicly-held reinsurer gets graded by both its owners and those who evaluate its credit on the smoothness of its own results. Wide swings in earnings hurt both credit ratings and p/e ratios, even when the business that produces such swings has an expectancy of satisfactory profits over time. This market reality sometimes causes a reinsurer to make costly moves, among them laying off a significant portion of the business it writes (in transactions that are called "retrocessions") or rejecting good business simply because it threatens to bring on too much volatility.

Berkshire, in contrast, happily accepts volatility, just as long as it carries with it the expectation of increased profits over time. Furthermore, we are a Fort Knox of capital, and that means volatile earnings can't impair our premier credit ratings. Thus we have the perfect structure for writing — and *retaining* — reinsurance in virtually any amount. In fact, we've used this strength over the past decade to build a powerful super-cat business.

What General Re gives us, however, is the distribution force, technical facilities and management that will allow us to employ our structural strength in every facet of the industry. In particular, General Re and Cologne Re can now accelerate their push into international markets, where the preponderance of industry growth will almost certainly occur. As the merger proxy statement spelled out, Berkshire also brings tax and investment benefits to General Re. But the most compelling reason for the merger is simply that General Re's outstanding management can now do what it does best, unfettered by the constraints that have limited its growth.

Berkshire is assuming responsibility for General Re's investment portfolio, though not for Cologne Re's. We will not, however, be involved in General Re's underwriting. We will simply ask the company to exercise the discipline of the past while increasing the proportion of its business that is retained, expanding its product line, and widening its geographical coverage — making these moves in recognition of Berkshire's financial strength and tolerance for wide swings in earnings. As we've long said, we prefer a lumpy 15% return to a smooth 12%.

Over time, Ron and his team will maximize General Re's new potential. He and I have known each other for many years, and each of our companies has initiated significant business that it has reinsured with the other. Indeed, General Re played a key role in the resuscitation of GEICO from its near-death status in 1976.

Both Ron and Rich Santulli plan to be at the annual meeting, and I hope you get a chance to say hello to them.

The Economics of Property-Casualty Insurance

With the acquisition of General Re — and with GEICO's business mushrooming — it becomes more important than ever that you understand how to evaluate an insurance company. The key determinants are: (1) the amount of float that the business generates; (2) its cost; and (3) most important of all, the long-term outlook for both of these factors.

To begin with, float is money we hold but don't own. In an insurance operation, float arises because premiums are received before losses are paid, an interval that sometimes extends over many years. During that time, the insurer invests the money. Typically, this pleasant activity carries with it a downside: The premiums that an insurer takes in usually do not cover the losses and expenses it eventually must pay. That leaves it running an "underwriting loss," which is the cost of float. An insurance business has value if its cost of float over time is less than the cost the company would otherwise incur to obtain funds. But the business is a lemon if its cost of float is higher than market rates for money.

A caution is appropriate here: Because loss costs must be estimated, insurers have enormous latitude in figuring their underwriting results, and that makes it very difficult for investors to calculate a company's true cost of float. Errors of estimation, usually innocent but sometimes not, can be huge. The consequences of these miscalculations flow directly into earnings. An experienced observer can usually detect large-scale errors in reserving, but the general public can typically do no more than accept what's presented, and at times I have been amazed by the numbers that big-name auditors have implicitly blessed. As for Berkshire, Charlie and I attempt to be conservative in presenting its underwriting results to you, because we have found that virtually all surprises in insurance are unpleasant ones.

The table that follows shows the float generated by Berkshire's insurance operations since we entered the business 32 years ago. The data are for every fifth year and also the last, which includes General Re's huge float. For the table we have calculated our float — which we generate in large amounts relative to our premium volume — by adding net loss reserves, loss adjustment reserves, funds held under reinsurance assumed and unearned premium reserves, and then subtracting agents balances, prepaid acquisition costs, prepaid taxes and deferred charges applicable to assumed reinsurance. (Got that?)

Year	Average Float (in $ millions)
1967	17
1972	70
1977	139
1982	221
1987	1,267
1992	2,290
1997	7,093
1998	22,762 (yearend)

Impressive as the growth in our float has been — 25.4% compounded annually — what really counts is the cost of this item. If that becomes too high, growth in float becomes a curse rather than a blessing.

At Berkshire, the news is all good: Our average cost over the 32 years has been well under zero. In aggregate, we have posted a substantial underwriting profit, which means that we have been paid for holding a large and growing amount of money. This is the best of all worlds. Indeed, though our net float is recorded on our balance sheet as a liability, it has had more economic value to us than an equal amount of net worth would have had. As long as we can continue to achieve an underwriting profit, float will continue to outrank net worth in value.

During the next few years, Berkshire's growth in float may well be modest. The reinsurance market is soft, and in this business, relationships change slowly. Therefore, General Re's float — $^{2}/_{3}$rds of our total — is unlikely to increase significantly in the near term. We do expect, however, that our cost of float will remain very attractive compared to that of other insurers.

Sources of Reported Earnings

The table that follows shows the main sources of Berkshire's reported earnings. In this presentation, purchase-accounting adjustments are not assigned to the specific businesses to which they apply, but are instead aggregated and shown separately. This procedure lets you view the earnings of our businesses as they would have been reported had we not purchased them. For the reasons discussed on pages 62 and 63, this form of presentation seems to us to be more useful to investors and managers than one utilizing generally-accepted accounting principles (GAAP), which require purchase-premiums to be charged off business-by-business. The total earnings we show in the table are, of course, identical to the GAAP total in our audited financial statements.

	(in millions)			
	Pre-Tax Earnings		*Berkshire's Share of Net Earnings (after taxes and minority interests)*	
	1998	*1997*	*1998*	*1997*
Operating Earnings:				
Insurance Group:				
Underwriting — Super-Cat	$154	$283	$100	$183
Underwriting — Other Reinsurance	(175)	(155)	(114)	(100)
Underwriting — GEICO	269	281	175	181
Underwriting — Other Primary	17	53	10	34
Net Investment Income	974	882	731	704
Buffalo News	53	56	32	33
Finance and Financial Products Businesses	205	28	133	18
Flight Services	181[1]	140	110[1]	84
Home Furnishings	72	57[2]	41	32[2]
International Dairy Queen	58	—	35	—
Jewelry	39	32	23	18
Scott Fetzer (excluding finance operation)	137	119	85	77
See's Candies	62	59	40	35
Shoe Group	33	49	23	32
General Re	26[3]	—	16[3]	—
Purchase-Accounting Adjustments	(123)	(101)	(118)	(94)
Interest Expense [4]	(100)	(107)	(63)	(67)
Shareholder-Designated Contributions	(17)	(15)	(11)	(10)
Other	34	60	29	37
Operating Earnings	1,899	1,721	1,277	1,197
Capital Gains from Investments	2,415	1,106	1,553	704
Total Earnings - All Entities	$4,314	$2,827	$ 2,830	$1,901

[1] *Includes Executive Jet from August 7, 1998 .*
[2] *Includes Star Furniture from July 1, 1997.*
[3] *From date of acquisition, December 21, 1998.*
[4] *Excludes interest expense of Finance Businesses.*

You can be proud of our operating managers. They almost invariably deliver earnings that are at the very top of what conditions in their industries allow, meanwhile fortifying their businesses' long-term competitive strengths. In aggregate, they have created many billions of dollars of value for you.

An example: In my 1994 letter, I reported on Ralph Schey's extraordinary performance at Scott Fetzer. Little did I realize that he was just warming up. Last year Scott Fetzer, operating with no leverage (except for a conservative level of debt in its finance subsidiary), earned a record $96.5 million after-tax on its $112 million net worth.

Today, Berkshire has an unusually large number of individuals, such as Ralph, who are truly legends in their industries. Many of these joined us when we purchased their companies, but in recent years we have also identified a number of strong managers internally. We further expanded our corps of all-stars in an important way when we acquired General Re and EJA.

Charlie and I have the easy jobs at Berkshire: We do very little except allocate capital. And, even then, we are not all that energetic. We have one excuse, though: In allocating capital, activity does not correlate with achievement. Indeed, in the fields of investments and acquisitions, frenetic behavior is often counterproductive. Therefore, Charlie and I mainly just wait for the phone to ring.

Our managers, however, work very hard — and it shows. Naturally, they want to be paid fairly for their efforts, but pay alone can't explain their extraordinary accomplishments. Instead, each is primarily motivated by a vision of just how far his or her business can go — and by a desire to be the one who gets it there. Charlie and I thank them on your behalf and ours.

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Additional information about our various businesses is given on pages 39-53, where you will also find our segment earnings reported on a GAAP basis. In addition, on pages 65-71, we have rearranged Berkshire's financial data into four segments on a non-GAAP basis, a presentation that corresponds to the way Charlie and I think about the company.

Normally, we follow this section with one on "Look-Through" Earnings. Because the General Re acquisition occurred near yearend, though, neither a historical nor a pro-forma calculation of a 1998 number seems relevant. We will resume the look-through calculation in next year's report.

Investments

Below we present our common stock investments. Those with a market value of more than $750 million are itemized.

		12/31/98	
Shares	*Company*	*Cost**	*Market*
		(dollars in millions)	
50,536,900	American Express Company	$1,470	$ 5,180
200,000,000	The Coca-Cola Company	1,299	13,400
51,202,242	The Walt Disney Company	281	1,536
60,298,000	Freddie Mac	308	3,885
96,000,000	The Gillette Company	600	4,590
1,727,765	The Washington Post Company	11	999
63,595,180	Wells Fargo & Company	392	2,540
	Others	2,683	5,135
	Total Common Stocks	$ 7,044	$ 37,265

* Represents tax-basis cost which, in aggregate, is $1.5 billion less than GAAP cost.

During the year, we slightly increased our holdings in American Express, one of our three largest commitments, and left the other two unchanged. However, we trimmed or substantially cut many of our smaller positions. Here, I need to make a confession (ugh): The portfolio actions I took in 1998 actually *decrease*d our gain for the year. In particular, my decision to sell McDonald's was a very big mistake. Overall, you would have been better off last year if I had regularly snuck off to the movies during market hours.

At yearend, we held more than $15 billion in cash equivalents (including high-grade securities due in less than one year). Cash never makes us happy. But it's better to have the money burning a hole in Berkshire's pocket than resting comfortably in someone else's. Charlie and I will continue our search for large equity investments or, better yet, a really major business acquisition that would absorb our liquid assets. Currently, however, we see nothing on the horizon.

Once we knew that the General Re merger would definitely take place, we asked the company to dispose of the equities that it held. (As mentioned earlier, we do not manage the Cologne Re portfolio, which includes many equities.) General Re subsequently eliminated its positions in about 250 common stocks, incurring $935 million of taxes in the process. This "clean sweep" approach reflects a basic principle that Charlie and I employ in business and investing: We don't back into decisions.

Last year I deviated from my standard practice of not disclosing our investments (other than those we are legally required to report) and told you about three unconventional investments we had made. There were several reasons behind that disclosure. First, questions about our silver position that we had received from regulatory authorities led us to believe that they wished us to publicly acknowledge this investment. Second, our holdings of zero-coupon bonds were so large that we wanted our owners to know of this investment's potential impact on Berkshire's net worth. Third, we simply wanted to alert you to the fact that we sometimes *do* make unconventional commitments.

Normally, however, as discussed in the Owner's Manual on page 61, we see no advantage in talking about specific investment actions. Therefore — unless we again take a position that is particularly large — we will not post you as to what we are doing in respect to any specific holding of an unconventional sort. We can report, however, that we have eliminated certain of the positions discussed last year and added certain others.

Our never-comment-even-if-untrue policy in regard to investments may disappoint "piggybackers" but will benefit owners: Your Berkshire shares would be worth less if we discussed what we are doing. Incidentally, we should warn you that media speculation about our investment moves continues in most cases to be incorrect. People who rely on such commentary do so at their own peril.

Accounting — Part 1

Our General Re acquisition put a spotlight on an egregious flaw in accounting procedure. Sharp-eyed shareholders reading our proxy statement probably noticed an unusual item on page 60. In the pro-forma statement of income — which detailed how the combined 1997 earnings of the two entities would have been affected by the merger — there was an item stating that compensation expense would have been increased by $63 million.

This item, we hasten to add, does not signal that either Charlie or I have experienced a major personality change. (He still travels coach and quotes Ben Franklin.) Nor does it indicate any shortcoming in General Re's accounting practices, which have followed GAAP to the letter. Instead, the pro-forma adjustment came about because we are replacing General Re's longstanding stock option plan with a cash plan that ties the incentive compensation of General Re managers to their operating achievements. Formerly what counted for these managers was General Re's stock price; now their payoff will come from the business performance they deliver.

The new plan and the terminated option arrangement have matching economics, which means that the rewards they deliver to employees should, for a given level of performance, be the same. But what these people could have formerly anticipated earning from new option grants will now be paid in cash. (Options granted in past years remain outstanding.)

Though the two plans are an economic wash, the cash plan we are putting in will produce a vastly different accounting result. This Alice-in-Wonderland outcome occurs because existing accounting principles ignore the cost of stock options when earnings are being calculated, even though options are a huge and increasing expense at a great many corporations. In effect, accounting principles offer management a choice: Pay employees in one form and count the cost, or pay them in another form and ignore the cost. Small wonder then that the use of options

has mushroomed. This lop-sided choice has a big downside for owners, however: Though options, if properly structured, can be an appropriate, *and even ideal*, way to compensate and motivate top managers, they are more often wildly capricious in their distribution of rewards, inefficient as motivators, and inordinately expensive for shareholders.

Whatever the merits of options may be, their accounting treatment is outrageous. Think for a moment of that $190 million we are going to spend for advertising at GEICO this year. Suppose that instead of paying cash for our ads, we paid the media in ten-year, at-the-market Berkshire options. Would anyone then care to argue that Berkshire had not borne a cost for advertising, or should not be charged this cost on its books?

Perhaps Bishop Berkeley — you may remember him as the philosopher who mused about trees falling in a forest when no one was around — would believe that an expense unseen by an accountant does not exist. Charlie and I, however, have trouble being philosophical about unrecorded costs. When we consider investing in an option-issuing company, we make an appropriate downward adjustment to reported earnings, simply subtracting an amount equal to what the company could have realized by publicly selling options of like quantity and structure. Similarly, if we contemplate an acquisition, we include in our evaluation the cost of replacing any option plan. Then, if we make a deal, we promptly take that cost out of hiding.

Readers who disagree with me about options will by this time be mentally quarreling with my equating the cost of options issued to employees with those that might theoretically be sold and traded publicly. It is true, to state one of these arguments, that employee options are sometimes forfeited — that lessens the damage done to shareholders — whereas publicly-offered options would not be. It is true, also, that companies receive a tax deduction when employee options are exercised; publicly-traded options deliver no such benefit. But there's an offset to these points: Options issued to employees are often repriced, a transformation that makes them much more costly than the public variety.

It's sometimes argued that a non-transferable option given to an employee is less valuable to him than would be a publicly-traded option that he could freely sell. That fact, however, does not reduce the *cost* of the non-transferable option: Giving an employee a company car that can only be used for certain purposes diminishes its value to the employee, but does not in the least diminish its cost to the employer.

The earning revisions that Charlie and I have made for options in recent years have frequently cut the reported per-share figures by 5%, with 10% not all that uncommon. On occasion, the downward adjustment has been so great that it has affected our portfolio decisions, causing us either to make a sale or to pass on a stock purchase we might otherwise have made.

A few years ago we asked three questions in these pages to which we have not yet received an answer: "If options aren't a form of compensation, what are they? If compensation isn't an expense, what is it? And, if expenses shouldn't go into the calculation of earnings, where in the world should they go?"

Accounting — Part 2

The role that managements have played in stock-option accounting has hardly been benign: A distressing number of both CEOs and auditors have in recent years bitterly fought FASB's attempts to replace option fiction with truth and virtually none have spoken out in support of FASB. Its opponents even enlisted Congress in the fight, pushing the case that inflated figures were in the national interest.

Still, I believe that the behavior of managements has been even worse when it comes to restructurings and merger accounting. Here, many managements purposefully work at manipulating numbers and deceiving investors. And, as Michael Kinsley has said about Washington: "The scandal isn't in what's done that's *illegal* but rather in what's *legal*."

It was once relatively easy to tell the good guys in accounting from the bad: The late 1960's, for example, brought on an orgy of what one charlatan dubbed "bold, imaginative accounting" (the practice of which, incidentally, made him loved for a time by Wall Street because he never missed expectations). But most investors

of that period knew who was playing games. And, to their credit, virtually all of America's most-admired companies then shunned deception.

In recent years, probity has eroded. Many major corporations still play things straight, but a significant and growing number of otherwise high-grade managers — CEOs you would be happy to have as spouses for your children or as trustees under your will — have come to the view that it's okay to manipulate earnings to satisfy what they believe are Wall Street's desires. Indeed, many CEOs think this kind of manipulation is not only okay, but actually their *duty*.

These managers start with the assumption, all too common, that their job at all times is to encourage the highest stock price possible (a premise with which we adamantly disagree). To pump the price, they strive, admirably, for operational excellence. But when operations don't produce the result hoped for, these CEOs resort to unadmirable accounting stratagems. These either manufacture the desired "earnings" or set the stage for them in the future.

Rationalizing this behavior, these managers often say that their shareholders will be hurt if their currency for doing deals — that is, their stock — is not fully-priced, and they also argue that in using accounting shenanigans to get the figures they want, they are only doing what everybody else does. Once such an everybody's-doing-it attitude takes hold, ethical misgivings vanish. Call this behavior Son of Gresham: Bad accounting drives out good.

The distortion *du jour* is the "restructuring charge," an accounting entry that can, of course, be legitimate but that too often is a device for manipulating earnings. In this bit of legerdemain, a large chunk of costs that should properly be attributed to a number of years is dumped into a single quarter, typically one already fated to disappoint investors. In some cases, the purpose of the charge is to clean up earnings misrepresentations of the past, and in others it is to prepare the ground for future misrepresentations. In either case, the size and timing of these charges is dictated by the cynical proposition that Wall Street will not mind if earnings fall short by $5 per share in a given quarter, just as long as this deficiency ensures that quarterly earnings in the future will consistently exceed expectations by five cents per share.

This dump-everything-into-one-quarter behavior suggests a corresponding "bold, imaginative" approach to — golf scores. In his first round of the season, a golfer should ignore his actual performance and simply fill his card with atrocious numbers — double, triple, quadruple bogeys — and then turn in a score of, say, 140. Having established this "reserve," he should go to the golf shop and tell his pro that he wishes to "restructure" his imperfect swing. Next, as he takes his new swing onto the course, he should count his good holes, but not the bad ones. These remnants from his old swing should be charged instead to the reserve established earlier. At the end of five rounds, then, his record will be 140, 80, 80, 80, 80 rather than 91, 94, 89, 94, 92. On Wall Street, they will ignore the 140 — which, after all, came from a "discontinued" swing — and will classify our hero as an 80 shooter (and one who *never* disappoints).

For those who prefer to cheat up front, there would be a variant of this strategy. The golfer, playing alone with a cooperative caddy-auditor, should defer the recording of bad holes, take four 80s, accept the plaudits he gets for such athleticism and consistency, and then turn in a fifth card carrying a 140 score. After rectifying his earlier scorekeeping sins with this "big bath," he may mumble a few apologies but will refrain from returning the sums he has previously collected from comparing scorecards in the clubhouse. (The caddy, need we add, will have acquired a loyal patron.)

Unfortunately, CEOs who use variations of these scoring schemes in real life tend to become addicted to the games they're playing — after all, it's easier to fiddle with the scorecard than to spend hours on the practice tee — and never muster the will to give them up. Their behavior brings to mind Voltaire's comment on sexual experimentation: "Once a philosopher, twice a pervert."

In the acquisition arena, restructuring has been raised to an art form: Managements now frequently use mergers to dishonestly rearrange the value of assets and liabilities in ways that will allow them to both smooth and swell future earnings. Indeed, at deal time, major auditing firms sometimes point out the possibilities for a little accounting magic (or for a lot). Getting this push from the pulpit, first-class people will frequently stoop

to third-class tactics. CEOs understandably do not find it easy to reject auditor-blessed strategies that lead to increased future "earnings."

An example from the property-casualty insurance industry will illuminate the possibilities. When a p-c company is acquired, the buyer sometimes simultaneously increases its loss reserves, often substantially. This boost may merely reflect the previous inadequacy of reserves — though it is uncanny how often an actuarial "revelation" of this kind coincides with the inking of a deal. In any case, the move sets up the possibility of 'earnings" flowing into income at some later date, as reserves are released.

Berkshire has kept entirely clear of these practices: If we are to disappoint you, we would rather it be with our earnings than with our accounting. In all of our acquisitions, we have left the loss reserve figures exactly as we found them. After all, we have consistently joined with insurance managers knowledgeable about their business and honest in their financial reporting. When deals occur in which liabilities are increased immediately and substantially, simple logic says that at least one of those virtues must have been lacking — or, alternatively, that the acquirer is laying the groundwork for future infusions of "earnings."

Here's a true story that illustrates an all-too-common view in corporate America. The CEOs of two large banks, one of them a man who'd made many acquisitions, were involved not long ago in a friendly merger discussion (which in the end didn't produce a deal). The veteran acquirer was expounding on the merits of the possible combination, only to be skeptically interrupted by the other CEO: "But won't that mean a huge charge," he asked, "perhaps as much as $1 billion?" The "sophisticate" wasted no words: "We'll make it bigger than that — that's why we're doing the deal."

A preliminary tally by R. G. Associates, of Baltimore, of special charges taken or announced during 1998 — that is, charges for restructuring, in-process R&D, merger-related items, and write-downs — identified no less than 1,369 of these, totaling $72.1 billion. That is a staggering amount as evidenced by this bit of perspective: The 1997 earnings of the 500 companies in Fortune's famous list totaled $324 billion.

Clearly the attitude of disrespect that many executives have today for accurate reporting is a business disgrace. And auditors, as we have already suggested, have done little on the positive side. Though auditors *should* regard the investing public as their client, they tend to kowtow instead to the managers who choose them and dole out their pay. ("Whose bread I eat, his song I sing.")

A big piece of news, however, is that the SEC, led by its chairman, Arthur Levitt, seems determined to get corporate America to clean up its act. In a landmark speech last September, Levitt called for an end to "earnings management." He correctly observed, "Too many corporate managers, auditors and analysts are participants in a game of nods and winks." And then he laid on a real indictment: "Managing may be giving way to manipulating; integrity may be losing out to illusion."

I urge you to read the Chairman's speech (you can find it on the Internet at www.sec.gov) and to support him in his efforts to get corporate America to deliver a straight story to its owners. Levitt's job will be Herculean, but it is hard to think of another more important for him to take on.

Reports to Shareholders

Berkshire's Internet site, www.berkshirehathaway.com, has become a prime source for information about the company. While we continue to send an annual report to all shareholders, we now send quarterlies only to those who request them, letting others read these at our site. In this report, we again enclose a card that can be returned by those wanting to get printed quarterlies in 1999.

Charlie and I have two simple goals in reporting: 1) We want to give you the information that we would wish you to give us if our positions were reversed; and 2) We want to make Berkshire's information accessible to all of you simultaneously. Our ability to reach that second goal is greatly helped by the Internet.

In another portion of his September speech, Arthur Levitt deplored what he called "selective disclosure." His remarks were timely: Today, many companies matter-of-factly favor Wall Street analysts and institutional

investors in a variety of ways that often skirt or cross the line of unfairness. These practices leave the great bulk of shareholders at a distinct disadvantage to a favored class.

At Berkshire, we regard the holder of one share of B stock as the equal of our large institutional investors. We, of course, warmly welcome institutions as owners and have gained a number of them through the General Re merger. We hope also that these new holders find that our owner's manual and annual reports offer them more insights and information about Berkshire than they garner about other companies from the investor relations departments that these corporations typically maintain. But if it is "earnings guidance" or the like that shareholders or analysts seek, we will simply guide them to our public documents.

This year we plan to post our quarterly reports on the Internet after the close of the market on May 14, August 13, and November 12. We also expect to put the 1999 annual report on our website on Saturday, March 11, 2000, and to mail the print version at roughly the same time.

We promptly post press releases on our website. This means that you do not need to rely on the versions of these reported by the media but can instead read the full text on your computer.

Despite the pathetic technical skills of your Chairman, I'm delighted to report that GEICO, Borsheim's, See's, and The Buffalo News are now doing substantial business via the Internet. We've also recently begun to offer annuity products on our website. This business was developed by Ajit Jain, who over the last decade has personally accounted for a significant portion of Berkshire's operating earnings. While Charlie and I sleep, Ajit keeps thinking of new ways to add value to Berkshire.

Shareholder-Designated Contributions

About 97.5% of all eligible shares participated in Berkshire's 1998 shareholder-designated contributions program, with contributions totaling $16.9 million. A full description of the program appears on pages 54-55.

Cumulatively, over the 18 years of the program, Berkshire has made contributions of $130 million pursuant to the instructions of our shareholders. The rest of Berkshire's giving is done by our subsidiaries, which stick to the philanthropic patterns that prevailed before they were acquired (except that their former owners themselves take on the responsibility for their personal charities). In aggregate, our subsidiaries made contributions of $12.5 million in 1998, including in-kind donations of $2.0 million.

To participate in future programs, you must own Class A shares that are registered in the name of the actual owner, not the nominee name of a broker, bank or depository. Shares not so registered on August 31, 1999, will be ineligible for the 1999 program. When you get the contributions form from us, return it promptly so that it does not get put aside or forgotten. Designations received after the due date will not be honored.

The Annual Meeting

This year's Woodstock for Capitalists will be held May 1-3, and we may face a problem. Last year more than 10,000 people attended our annual meeting, and our shareholders list has since doubled. So we don't quite know what attendance to expect this year. To be safe, we have booked both Aksarben Coliseum, which holds about 14,000 and the Holiday Convention Centre, which can seat an additional 5,000. Because we know that our Omaha shareholders will want to be good hosts to the out-of-towners (many of them come from outside the U.S), we plan to give those visitors first crack at the Aksarben tickets and to subsequently allocate these to greater Omaha residents on a first-come, first-served basis. If we exhaust the Aksarben tickets, we will begin distributing Holiday tickets to Omaha shareholders.

If we end up using both locations, Charlie and I will split our pre-meeting time between the two. Additionally, we will have exhibits and also the Berkshire movie, large television screens and microphones at both sites. When we break for lunch, many attendees will leave Aksarben, which means that those at Holiday can, if they wish, make the five-minute trip to Aksarben and finish out the day there. Buses will be available to transport people who don't have cars.

The doors will open at both locations at 7 a.m. on Monday, and at 8:30 we will premier the 1999 Berkshire movie epic, produced by Marc Hamburg, our CFO. The meeting will last from 9:30 until 3:30, interrupted only by the short lunch break.

An attachment to the proxy material that is enclosed with this report explains how you can obtain the badge you will need for admission to the meeting and other events. As for plane, hotel and car reservations, we have again signed up American Express (800-799-6634) to give you special help. In our normal fashion, we will run buses from the larger hotels to the meeting. After the meeting, these will make trips back to the hotels and to Nebraska Furniture Mart, Borsheim's and the airport. Even so, you are likely to find a car useful.

The full line of Berkshire products will be available at Aksarben, and the more popular items will also be at Holiday. Last year we set sales records across-the-board, moving 3,700 pounds of See's candy, 1,635 pairs of Dexter shoes, 1,150 sets of Quikut knives and 3,104 Berkshire shirts and hats. Additionally, $26,944 of World Book products were purchased as well as more than 2,000 golf balls with the Berkshire Hathaway logo. Charlie and I are pleased but not satisfied with these numbers and confidently predict new records in all categories this year. Our 1999 apparel line will be unveiled at the meeting, so please defer your designer purchases until you view our collection.

Dairy Queen will also be on hand and will again donate all proceeds to the Children's Miracle Network. Last year we sold about 4,000 Dilly® bars, fudge bars and vanilla/orange bars. Additionally, GEICO will have a booth that will be manned by a number of our top counselors from around the country, all of them ready to supply you with auto insurance quotes. In almost all cases, GEICO will be able to offer you a special shareholder's discount. Check out whether we can save you some money.

The *piece de resistance* of our one-company trade show will be a 79-foot-long, nearly 12-foot-wide, fully-outfitted cabin of a 737 Boeing Business Jet ("BBJ"), which is NetJets' newest product. This plane has a 14-hour range; is designed to carry 19 passengers; and offers a bedroom, an office, and two showers. Deliveries to fractional owners will begin in the first quarter of 2000.

The BBJ will be available for your inspection on May 1-3 near the entrance to the Aksarben hall. You should be able to minimize your wait by making your visit on Saturday or Sunday. Bring along your checkbook in case you decide to make an impulse purchase.

NFM's multi-stored complex, located on a 75-acre site about a mile from Aksarben, is open from 10 a.m. to 9 p.m. on weekdays, and 10 a.m. to 6 p.m. on Saturdays and Sundays. This operation did $300 million in business during 1998 and offers an unrivaled breadth of merchandise — furniture, electronics, appliances, carpets and computers — all at can't-be-beat prices. During the April 30th to May 4th period, shareholders presenting their meeting badge will receive a discount that is customarily given only to its employees.

Borsheim's normally is closed on Sunday but will be open for shareholders from 10 a.m. to 6 p.m. on May 2nd. On annual meeting weekend last year, the store did an incredible amount of business. Sales were double those of the previous year, and the store's volume on Sunday greatly exceeded volume for any day in Borsheim's history. Charlie attributes this record to the fact that he autographed sales tickets that day and, while I have my doubts about this proposition, we are not about to mess with a winning formula. Please give him writer's cramp. On last year's Sunday, Borsheim's wrote 2,501 tickets during the eight hours it was open. For those of you who are mathematically challenged, that is one ticket every 11½ seconds.

Shareholders who wish to avoid Sunday's crowd can visit Borsheim's on Saturday (10 a.m.-5:30 p.m.) or on Monday (10 a.m.-8 p.m.). Be sure to identify yourself as a Berkshire owner so that Susan Jacques, Borsheim's CEO, can quote you a "shareholder-weekend" price. Susan joined us in 1983 as a $4-per-hour salesperson and was made CEO in 1994. This move ranks as one of my best managerial decisions.

Bridge players can look forward to a thrill on Sunday, when Bob Hamman — the best the game has ever seen — will turn up to play with our shareholders in the mall outside of Borsheim's. Bob plays without sorting his cards — hey, maybe that's what's wrong with my game. We will also have a couple of other tables at which another expert or two will be playing.

Gorat's — my favorite steakhouse — will again be open especially for Berkshire shareholders on the Sunday night before the meeting. Though Gorat's served from 4 p.m. until about 1 a.m. last year, its crew was swamped, and some of our shareholders had an uncomfortable wait. This year fewer reservations will be accepted, and we ask that you don't come on Sunday without a reservation. In other years, many of our shareholders have chosen to visit Gorat's on Friday, Saturday or Monday. You can make reservations beginning on April 1 *(but not before)* by calling 402-551-3733. The cognoscenti will continue to order rare T-bones with double orders of hash browns.

The Omaha Golden Spikes (neé the Omaha Royals) will meet the Iowa Cubs on Saturday evening, May 1st, at Rosenblatt Stadium. Your Chairman, whose breaking ball had the crowd buzzing last year, will again take the mound. This year I plan to introduce my "flutterball." It's a real source of irritation to me that many view our annual meeting as a financial event rather than the sports classic I consider it to be. Once the world sees my flutterball, that misperception will be erased.

Our proxy statement includes instructions about obtaining tickets to the game and also a large quantity of other information that should help you to enjoy your visit. I particularly urge the 60,000 shareholders that we gained through the Gen Re merger to join us. Come and meet your fellow capitalists.

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It wouldn't be right to close without a word about the 11.8 people who work with me in Berkshire's corporate office. In addition to handling the myriad of tax, regulatory and administrative matters that come with owning dozens of businesses, this group efficiently and cheerfully manages various special projects, some of which generate hundreds of inquiries. Here's a sample of what went on in 1998:

- 6,106 shareholders designated 3,880 charities to receive contributions.
- Kelly Muchemore processed about 17,500 admission tickets for the annual meeting, along with orders and checks for 3,200 baseball tickets.
- Kelly and Marc Hamburg produced and directed the Aksarben extravaganza, a job that required them to arrange the presentations made by our subsidiaries, prepare our movie, and sometimes lend people a hand with travel and lodging.
- Debbie Bosanek satisfied the varying needs of the 46 media organizations (13 of them non-U.S.) that covered the meeting, and meanwhile, as always, skillfully assisted me in every aspect of my job.
- Debbie and Marc assembled the data for our annual report and oversaw the production and distribution of 165,000 copies. (This year the number will be 325,000.)
- Marc handled 95% of the details — and much of the substance — connected with our completing two major mergers.
- Kelly, Debbie and Deb Ray dealt efficiently with tens of thousands of requests for annual reports and financial information that came through the office.

You and I are paying for only 11.8 people, but we are getting what would at most places be the output of 100. To all of the 11.8, my thanks.

Warren E. Buffett
March 1, 1999 Chairman of the Board

Morning Session - 1999 Meeting

1. Formal business meeting begins

WARREN BUFFETT: Good morning. Really delighted we can have this many people come out for a meeting. It says something, I think, about the way you regard yourself as owners.

We're going to hustle through the business meeting. And then Charlie and I will be here for six hours or until our candy runs out — (laughter) — to answer any questions you have. We have people in a number of remote locations. And we have ways of bringing them into the questions as well.

Incidentally, if you hadn't figured it out already, this hyperkinetic bundle of energy here on my left is Charlie Munger — (laughter) — our vice-chairman. (Applause)

And we will now run through the business of the meeting.

The meeting will now come to order. I'm Warren Buffett, chairman of the board of directors of the company. I welcome you to this 1999 annual meeting of shareholders.

I will first introduce the Berkshire Hathaway directors that are present, in addition to myself. And if you'll stand up. It's a little hard for me to see — there, right down here in the front row.

We have Susan T. Buffett. You stand and remain standing, please. (Applause)

If you encourage her, she'll sing another song. (Laughter)

Howard G. Buffett. Don't encourage him to sing a song. (Laughter and applause)

Malcolm G. Chace. (Applause)

Charlie, you've already met.

Ronald L. Olson. Ron? (Applause)

And Walter Scott Jr. (Applause)

Also with us today are partners in the firm of Deloitte and Touche, our auditors. They're available to respond to appropriate questions you might have concerning their firm's audit of the accounts of Berkshire.

Mr. Forrest Krutter is secretary of Berkshire. He will make a written record of the proceedings. Miss Becki Amick has been appointed inspector of elections at this meeting. She will certify to the count of votes cast in the election for directors.

The named proxy holders for this meeting are Walter Scott Jr. and Marc D. Hamburg. Proxy cards have been returned through last Friday, representing 1,133,684 Class A Berkshire shares and 3,485,885 Class B Berkshire shares to be voted by the proxy holders, as indicated on the cards.

That number of shares represents a quorum. And we will therefore directly proceed with the meeting. We will conduct the business of the meeting and then adjourn the formal meeting. After that, we will entertain questions that you might have.

Does the secretary have a report of the number of Berkshire shares outstanding entitled to vote and represented at the meeting?

FORREST KRUTTER: Yes, I do. As indicated in the proxy statement that accompanied the notice of this meeting, that was sent by first-class mail to all shareholders of record on March 5, 1999, being the record date of this meeting, there were 1,343,592 shares of Class A Berkshire Hathaway common stock outstanding, with each share entitled to one vote on motions considered at the meeting.

And 5,266,338 shares of Class B Berkshire Hathaway common stock outstanding with each share entitled to 1/200th of one vote on motions considered at the meeting.

Of that number, 1,133,684 Class A shares and 3,485,885 Class B shares are represented at this meeting by proxies returned through last Friday.

WARREN BUFFETT: Oh, thank you Forrest.

The one item of business of this meeting is to elect directors. If a shareholder is present who wishes to withdraw a proxy previously sent in and vote in person on the election of directors, he or she may do so.

Also, if any shareholder that is present has not turned in a proxy and desires a ballot in order to vote in person, you may do so.

If you wish to do this, please identify yourself to meeting officials in the aisles who will furnish a ballot to you. Would those persons desiring ballots please identify themselves, so that we may distribute them.

2. General Re CEO Ron Ferguson declined to join board

WARREN BUFFETT: I'd like to make one comment before we proceed to the election of directors. And that's that in the General Re proxy material, material relating to the General Re merger, it was stated that the intention was to have Ron Ferguson, the CEO of General Re, join the board of Berkshire Hathaway.

And that offer was extended, and still remains open, and will remain open for his lifetime and mine, at least, for Ron to join the board.

After thinking about it, he decided that he preferred not to be on the board. And in that judgment, he concurs with my feelings, generally, about boards, in that they can restrict your — it can restrict your activities in purchase and sale of a stock.

For example, if you do it in a six-month period, then you're automatically in trouble with the — and you have to return any profit, as calculated in a rather peculiar way, to the company. It means that your compensation system is laid out for the world to see.

There may be some tax restrictions, in terms of the deductibility of salary paid. And so, Ron notified me a little bit before the proxy material went out that he preferred, at least, to defer any decision on joining the board.

3. Disadvantages of being a corporate director

WARREN BUFFETT: I can tell you that it has cost Berkshire significant money by the fact that Charlie and I have been on various boards, because your hands are tied, in many respects, even if you don't have any knowledge of anything that might be of material, plus or minus — the very fact that it might be imputed to you, can restrict actions significantly.

So, we make a point of not trying to be on very many boards. Charlie and I have only gone on boards where we have very significant investments by Berkshire.

And sometimes those have caused us to take on a job that we didn't intend originally, as that Salomon movie showed.

So, Ron — the offer is a hundred percent open to Ron at any time. And if he changes his mind in any way, he will be on the board.

But that explains the discrepancy between the actions that are being taken this morning and what was described as likely to happen in the proxy material.

4. Berkshire directors elected

WARREN BUFFETT: Now, with that explanation, I would like to recognize Walter Scott Jr. to place a motion before the meeting with respect to election of directors. Walter?

WALTER SCOTT JR.: I move that Warren E. Buffett, Susan T. Buffett, Howard G. Buffett, Malcolm G. Chace, Charles T. Munger, Ronald L. Olson, and Walter Scott Jr. be elected as directors.

WARREN BUFFETT: Is there a second? Somebody should second it.

VOICE: I second the —

WARREN BUFFETT: We got a second out there, Susan?

VOICE: I second the motion.

WARREN BUFFETT: Oh, good. OK. It has been moved and seconded that Warren E. Buffett, Susan T. Buffett, Howard G. Buffett, Malcolm G. Chace, Charles T. Munger, Ronald L. Olson, and Walter Scott Jr. be elected as directors.

Are there any other nominations?

Long enough. Is there any discussion?

Long enough. The nominations are ready to be acted upon. If there are any shareholders voting in person, they should now mark their ballots on the election of directors and allow the ballots to be delivered to the inspector of election.

Will the proxy holders please also submit to the inspector of election, a ballot on the election of directors, voting the proxies in accordance with the instructions they have received?

Miss Amick, when you are ready, you may give your report.

BECKI AMICK: My report is ready. The ballot of the proxy holders, in response to proxies that were received through last Friday, cast not less than 1,145,271 votes for each nominee.

That number far exceeds the majority of the number of the total votes related to all Class A and Class B shares outstanding.

The certification required by Delaware law of the precise count of the votes, including the additional votes to be cast by the proxy holders in response to proxies delivered at this meeting, as well as those cast in person at this meeting, if any, will be given to the secretary to be placed with the minutes of this meeting.

WARREN BUFFETT: Thank you, Miss Amick.

Warren E. Buffett, Susan T. Buffett, Howard G. Buffett, Malcolm G. Chace, Charles T. Munger, Ronald L. Olson, and Walter Scott Jr. have been elected as directors.

5. Formal business meeting adjourns

WARREN BUFFETT: After adjournment of the business meeting, I will respond to questions that you may have that relate to the business of Berkshire, but do not call for any action at this meeting.

Does anyone have any further business to come before this meeting before we adjourn?

If not, I recognize Mr. Walter Scott Jr. to place a motion before the meeting.

WALTER SCOTT JR.: I move that this meeting be adjourned.

WARREN BUFFETT: Is there a second?

VOICES: I second the motion.

WARREN BUFFETT: A motion to adjourn has been made and seconded. We will vote by voice. Is there any discussion? If not, all in favor say "aye."

AUDIENCE: Aye.

WARREN BUFFETT: All opposed say, "I'm leaving." No, say, "No," I'm sorry. (Laughter)

OK, the meeting is adjourned.

6. We buy businesses and don't predict stock moves

WARREN BUFFETT: Now, we'll move forward. (Applause) Thank you.

I ask you, was Joe Stalin ever any better, I mean? (Laughter)

We will — we have this room broken into eight zones, and then we have five more zones from various off-site locations. And we will move in order. We have microphones that you can go to, and we have a monitor at each microphone that will line people up.

We will rotate around the 13 zones. There's just one question per person. I'd ask that you identify yourself and state where you're from.

Now, you have to be a little careful on that because a lot of people will say that — who really aren't — will say that they're from Nebraska for status reasons. But — (laughter) — if you get beyond that, we will try to identify where everybody is from. And we'll start off in zone 1, which is on the right here at the front.

AUDIENCE MEMBER: My name is Tim Spear (PH). And I'm from Hertfordshire, England.

I was thinking in Ben Graham's book, "The Intelligent Investor," he spends the first couple of chapters discussing the level of the market and whether it was safe for investment. I was wondering what you think of the market today?

WARREN BUFFETT: Well, we don't — Charlie and I don't think about the market. And Ben didn't very much. I think he made a mistake to occasionally try and place a value on it.

We look at individual businesses. And we don't think of stocks as little items that wiggle around on the paper and that have charts attached to them. We think of them as parts of businesses.

And it is true that, currently, we have great trouble finding businesses that we both like and where we like the management and that they — and find them at an attractive price.

So, we do not find bargains in this market among the larger companies that are our universe.

That is not a stock market forecast in any way, shape, or form. We have no idea whether the market is going to go up today, or next week, or next month, or next year.

We do know that we will only buy things that we think make sense, in terms of the value that we receive for Berkshire. And when we can't find things, the money piles up. And when we find — when we do find things, we pile in.

But the stock market — I know of no one that has been successful at — and really made a lot of money predicting the actions of the market itself. I know a lot of people who have done well picking businesses and buying them at sensible prices. And that's what we're hoping to do.

Charlie?

CHARLIE MUNGER: How could you say it any better? (Laughter)

WARREN BUFFETT: Yeah, but the question is whether you can say it better, Charlie. (Laughter)

7. Expecting slow short-term growth of Gen Re's float

WARREN BUFFETT: OK, we'll go to zone 2. That may be all you hear from him today. (Laughter)

Get used to it.

AUDIENCE MEMBER: Good morning.

WARREN BUFFETT: Morning.

AUDIENCE MEMBER: David Winters, Mountain Lakes, New Jersey.

Could you give us a few hints about the incremental value of Gen Re's float under the Berkshire Hathaway umbrella and the potential for the growth of Gen Re's float over the long term?

WARREN BUFFETT: Yeah. Gen Re's float, which is now available to Berkshire — it's a hundred percent-owned subsidiary, although part of that float is attributable to Cologne, which is only an 83 percent-owned subsidiary of Gen Re and also Berkshire.

But that, I would say, the incremental value today, because it's under the Berkshire umbrella, is zero. Because we are bringing nothing to the party that Gen Re's own investment people would not have brought to the party.

We obviously think that there will be important incremental value over a long period of time. We — but when that value will appear or how much of it develops, is a matter that's out of our hands.

We, right now, have close to 24 billion in total invested assets at Gen Re and Cologne. Like I say, 83 percent of the Cologne part is ours and 17 percent is — belongs to somebody else.

But we are bringing nothing to that party right now, in terms of any managerial skill that is going to add value. I would hope that over time, we would.

The second question, as to the growth of float, the growth of float at General Re and Cologne will certainly be very slow in the short term. The growth of float at GEICO will be significant, percentage-wise.

The reinsurance business does not have the same potential for growth as we have at GEICO. And growth is much slower to come about, because there are longer-term contractual commitments — that people are reluctant to change reinsurers. And they should be. We agree with that.

So you — at a level of 6 billion or so of premium volume and already 14 billion of float, you won't have growth of float unless premium volume is — becomes significantly higher in the future.

I think that will happen over time. It will not happen in the short term.

Charlie? If I may interrupt your breakfast? (Laughter)

CHARLIE MUNGER: I've got nothing to add.

WARREN BUFFETT: OK. (Laughter)

8. How Berkshire's enormous bid for Long-Term Capital Management failed

WARREN BUFFETT: Zone 3. (Laughs)

You could always direct your questions to Charlie, incidentally. (Laughs)

AUDIENCE MEMBER: Good morning, Mr. Buffett and Mr. Munger. Thank you for hosting another wonderful weekend. My name is Che Wai Woo (PH). I'm a proud shareholder from right here in Omaha.

One of the most interesting financial news developments this previous year was the near collapse of the hedge fund Long-Term Capital.

I'd like to get your thoughts and Mr. Munger's thoughts about how these private partnerships operate, what your thoughts about the Long-Term Capital deal, and also the Fed's intervention to save it.

WARREN BUFFETT: Yeah, in that movie you saw, the time when Yellowstone was — when Old Faithful was performing in the background and Bill was trying to get me to watch that while I was on the phone —

A lot of that trip was spent talking to New York about making a bid for, what we'll call LTCM, Long-Term Capital Management.

And the caption on that photo, incidentally, is known as the geezer and the geyser. (Laughter)

And we were up in — we started in Alaska. And we were going down these canyons in a boat.

And the captain saying, you know, "Let's go over there and look at the sea lions." And I say, "Let's stay right where we are, where we got a satellite channel," because I was trying to talk on the phone all the time.

Charlie was in Hawaii. And we never did get a chance to talk during that whole period. I didn't want to bother him with a little thing like a bid for 100 billion-plus of securities, and I couldn't find him.

So it was — we were in an awkward place to pursue that. I think it's possible that if I'd been in New York or Charlie had been in New York during that period, that our bid might have been accepted.

There was just a report published within the last three or four days by a special committee representing the SEC, the Fed, I think, the Treasury and the CFTC — I think I'm right on those four. And it describes just a tiny bit of the events leading to the bid.

It referred, on page 14, I remember, it talked about our transaction unraveling. It didn't unravel from our side. I mean, we made a firm bid for 100 billion-plus of balance sheet assets and many hundreds of billions, in fact, over a trillion, of derivative contracts.

And, you know, this was in a market where prices were moving around very dramatically. And with that bulk of assets there, we thought we made a fairly good bid for a 45-minute or hour period. I don't think anybody else would've made the bid.

But in any event, the people at LTCM took the position that they could not accept that bid.

And therefore, the New York Fed in — had a group, largely investment banks there at the Fed. And that afternoon, faced with the prospect that LTCM could not or would not accept our bid, they arranged another takeover arrangement where additional money was put in.

9. The true first hedge fund

WARREN BUFFETT: It's interesting. If you read that report, which is put together by these four very imminent bodies, I think on the first page, it says that the first so-called hedge fund — which is a term generally applied to entities like LTCM — first hedge fund was set up in 1949.

And I probably read that or heard that 50 times in the last — particularly in the last year. And of course, that's not true at all, and I've even pointed this out once or twice before.

But Ben Graham had — and Jerry Newman — had a classical hedge fund back in the '20s. And I worked for — I worked dually for a company called Graham-Newman Corp, which was a regulated investment company and Newman and Graham, which was an investment partnership with, I think, a 20 percent participation in profits and exactly the sort of entity that, today, is called a hedge fund.

So, if you read anyplace that the hedge fund concept originated in 1949, presumably with A.W. Jones, it's a — it's not an accurate history. There are now — I ran something that would generally be called a hedge fund. I didn't like to think of it that way. I called it an investment partnership. But it would've been termed a hedge fund. Charlie ran one from about, what, 1963 to mid '70s or thereabouts.

And they have proliferated in a big way. Did he blink? (Laughter)

There are now hundreds of them. And of course, it's very enticing to any money manager to run, because if you do well, or even if you don't do so well but the market does well, you can make a lot of money running one.

This report that just came out has really nothing particularly harsh to say about the operation.

So, I think you will see hundreds and hundreds and hundreds of hedge funds. I think the current issue of Barron's may have a recap of how a large group did in the first quarter.

And there's a lot of money in those funds. And there's a huge incentive to form them. And there's a huge incentive to go out and attract more money if you run one. And when that condition exists in Wall Street, you can be sure that they won't wither away.

Charlie?

10. LTCM: Smart people's dumb risks with derivatives

CHARLIE MUNGER: Yeah, what was interesting about that one is how talented the people were. And yet, they got in so much trouble. I think it also demonstrates that — I'd say, the general system of finance in America involving derivatives is irresponsible.

There's way too much risk in all these trillions of notational value sloshing around the world. There's no clearing system, as there is in a commodities market. And I don't think it's the last convulsion we're going to see in the derivatives game.

WARREN BUFFETT: It's fascinating, in that you had 16 extremely bright — I mean, extremely bright — people at the top of that. The average IQ would probably be as high or higher than organization you could find, among their top 16 people.

They individually had decades of experience and collectively had centuries of experience in operating in these sort of securities in which the LTCM was invested. And they had a huge amount of money of their own, up. And probably a very high percentage of their net worth in almost every case, up.

So here you had superbright, extremely experienced people operating with their own money. And, in effect, on that day in September, they were broke. And to me, that is absolutely fascinating.

There was book written,"You Only Have to Get Rich Once." It's a great title. It's not a very good book. Walter Gutman wrote it, but it — many years ago. But the title is right, you only have to get rich once.

And why do people, very bright people, risk losing something that's very important to them, to gain something that's totally unimportant? The added money has no utility whatsoever.

And the money that was lost had enormous utility. And on top of that, reputation is tarnished and all of that sort of thing.

So that the gain/loss ratio, in any real sense, is just incredible. I mean, it's like playing Russian roulette.

I mean, if you hand me a revolver with six bullets — or six chambers — and one bullet and you say, “Pull it once for a million dollars,” and I say, “No.” And then you say, “What is your price?” The answer is there is no price.

And there shouldn’t be any price on taking the risk when you’re already rich, particularly, of failure and embarrassment and all of that sort of thing. But people repeatedly do it. And they do it —

Whenever a bright person, a really bright person, goes broke that has a lot of money, it’s because of leverage. It — you simply — you basically can’t — it would be almost impossible to go broke without borrowed money being in the equation.

And as you know, at Berkshire, we’ve never used any real amount of borrowed money. Now, if we’d used somewhat more, you know, we’d be really rich. But if we’d used a whole lot more, we might have gotten in trouble some times. And there’s just no upside to it, you know?

What’s two percentage points more, you know, on a given year, that year? And run the risk of real failure. But very bright people do it, and they do it consistently, and they will continue to do it.

And as long as explosive-type instruments are out there, they will gravitate toward them. And particularly, people will gravitate toward them who have very little to lose, but who are operating with other people’s money.

One of the things, for example, in the LTCM case — and Charlie mentioned it in terms of derivatives — in effect, there were ways found to get around the — and they were legal, obviously — to get around the margin requirements.

Because risk arbitrage is a business that Charlie and I have been in for 40 years in one form or another. And normally, that means putting up the money to buy the stock on the long side and then shorting something against it where you expect a merger or something to happen.

But through derivatives, people have found out how to do that, essentially putting up no money, just by writing a derivative contract on both sides. And there are margin requirements, as you know, that the Fed promulgates that, I believe, still call for 50 percent equity on stock purchases.

But those requirements do not apply if you arrange the transaction in derivative form. So that these billions of dollars of positions in equities, essentially, were being financed a hundred percent by the people who wrote the derivative contracts. And that leads to trouble.

You know, 99 percent of the time it works. But, you know, 83 and a thirds percent of the time, it works to play Russian roulette with one bullet in there and six chambers. But neither 83 1/3 percent or 99 percent is good enough when there is no gain to offset the risk of loss.

Charlie?

CHARLIE MUNGER: I would argue that there is a second factor that makes the situation dangerous. And that is that the accounting for being actively engaged in derivatives, interest rate swaps, et cetera is very weak. I think the Morgan Bank was the last holdout.

And they finally flipped to a lenient standard of accounting that's favored by people who are sharing in the profits from trading derivatives. And that's why they like liberal accounting.

So, you get an irresponsible clearing system, irresponsible accounting — this is not a good combination.

WARREN BUFFETT: JP Morgan shifted their accounting — I think — I'm not sure exactly when — around 1990. But Charlie and I, we probably became more familiar with that when we were back at Salomon.

And this is absolutely standard. You know, it's GAAP accounting. But it front-ends profits. And if you front-end profits and you pay people a percentage of the profits, you're going to get some very interesting results, sometimes.

11. "Right approach" to estimating Berkshire's intrinsic value

WARREN BUFFETT: Zone 4.

AUDIENCE MEMBER: Hi. Dan Kurs (PH) from Bonita Springs, Florida.

You've given many clues to investors to help them calculate Berkshire's intrinsic value.

I've attempted to calculate the intrinsic value of Berkshire using the discount of present value of its total look-through earnings. I've taken Berkshire's total look-through earnings and adjusted them for normalized earnings at GEICO, the super-cat business, and General Re.

Then I've assumed that Berkshire's total look-through earnings will grow at 15 percent per annum on average for 10 years, 10 years per annum for years 11 through 20. And that earnings stop growing after year 20, resulting in a coupon equaling year 20 earnings from the 21st year onward.

Lastly, I've discounted those estimated earnings stream at 10 percent to get an estimate of Berkshire's intrinsic value.

My question is, is this a sound method? Is there a risk-free interest rate, such as a 30-year Treasury, which might be the more appropriate rate to use here, given the predictable nature of your consolidated income stream? Thank you.

WARREN BUFFETT: Well, that is a very good question. Because that is the sort of way we think in terms of looking at other businesses.

Investment is the process of putting out money today to get more money back at some point in the future. And the question is, how far in the future, how much money, and what is the appropriate discount rate to take it back to the present day and determine how much you pay?

And I would say you've stated the approach — I couldn't state it better myself. The exact figures you want to use, whether you want to use 15 percent gains in earnings or 10 percent gains in the second decade, I would — you know, I have no comment on those particular numbers.

But you have the right approach. We would probably, in terms — we would probably use a lower discount factor in evaluating any business now, under present-day interest rates.

Now, that doesn't mean we would pay that figure once we use that discount number. But we would use that to establish comparability across investment alternatives.

So, if we were looking at 50 companies and making the sort of calculation that you just talked about, we would use a — we would probably use the long-term government rate to discount it back.

But we wouldn't pay that number after we discounted it back. We would look for appropriate discounts from that figure.

But it doesn't really make any difference whether you use a higher figure and then look across them or use our figure and look for the biggest discount.

You've got the right approach. And then all you have to do is stick in the right numbers.

And you mentioned, in terms of our clues, we try to give you all of information that we would find useful, ourselves, in evaluating Berkshire's intrinsic value.

In our reports, you know, I can't think of anything we leave out that, if Charlie and I had been away for a year and we were trying to figure out — look at the situation fresh, evaluate things — there's, you know, there's nothing, in my view, left out of our published materials.

Now, one important element in Berkshire, which is a secondary factor that gets into what you're talking about there, is that because we retain all earnings and because we have a growth of float over time, we have a considerable amount of money to invest.

And it really is the success with which we invest those retained earnings and growth and float that will have an important fact — that will be an important factor — in how fast our intrinsic value grows.

And to an important extent, the — what happens there is out of our control. I mean, it does depend on the markets in which we operate.

So, if our earnings, plus float, growth equals $3 billion, or something like that, in a current year — whether that $3 billion gets put to terrific use, satisfactory use, or no use at all, virtually, really depends, to a big extent, on external factors.

It also depends, to some extent, on our energy and insights and so on. But the external world makes a big difference in the reinvestment rate. And, you know, your guess is as good as ours on that.

But if we run into favorable external circumstances, your calculation of intrinsic value should — would — result in a higher number than if we run into the kind of circumstances that we've had the last 12 months.

Charlie?

CHARLIE MUNGER: Yeah. For many decades around here, we've had roughly a hundred percent — more than a hundred percent — of book net worth in marketable securities and had a lot of wonderful wholly-owned subsidiaries, to boot.

And then we've always had a very attractive place to put new money in as we generate it.

Well, we still got the wonderful businesses. But we're having trouble with the new money.

But it's not trouble, really, to have a pile of lovely money. (Laughter) This is not — I don't think there should be tears in the house. (Laughter)

WARREN BUFFETT: Have you ever run into any unlovely money, Charlie? (Laughter)

12. Internet will have a huge impact, but hard to predict winners

WARREN BUFFETT: Zone 5.

AUDIENCE MEMBER: Good morning. My name is Ronald Towell (PH). I'm from Brooklyn, New York, and very appreciative of your graciousness as a host for this wonderful weekend.

My question has to do with the — (Applause)

My question has to do with the retailing industry, particularly the department stores and mass merchants. My question has two parts.

Without resorting to comments about specific companies, may I ask your opinion as to the long-term prospects for growth and profitability of this industry group?

The second part of my question is, given the fact that it is difficult to pick up a newspaper or to be an investor without being bombarded by what is purported to be the potential for exponential growth in the internet e-business, particularly directly to consumers, which could possibly eat into the revenues of these retailers —

And even if we assume a relatively low impact of, say, 5 to 10 percent revenue reductions, and given the fact that top-line growth is critical to any business, especially the bricks and mortar retailers, with their high proportions of fixed overhead, what advice could you give to a CEO of such a company?

And in turn, based on the proceeding scenario, what would be your opinion of the medium and long-term prospects for this industry?

WARREN BUFFETT: Well, that's a good question, too.

And obviously, the internet is going to have an important impact on retailing. It will have a huge impact on some forms of retailing. Change them and maybe revolutionize them.

I think there's some other areas where it'll — the impact will be less. But anytime we buy into a business, and anytime that we've bought in for some time, we have tried to think of what that business is going to look like in five, or 10, or 15 years.

And we recognize that the internet, in many forms of retailing, is likely to pose such a threat that we simply wouldn't want to get into the business. I mean, it — not that we can measure it perfectly.

But there are a number of retailing operations that we think are threatened. And we do not think that's the case in furniture retailing. And we have three very important operations there.

We could be wrong. But so far, that, you know, that would be my judgment, that furniture retailing will not be hurt.

You've seen other forms of retailing where you're already starting to see some inroads being made. But it's just started. The internet is going to be a huge force in many arenas. But it'll certainly be a huge force in retailing.

Now, it may benefit us in certain areas. I would expect the internet to benefit Borsheims in a very big way. And you noticed in the movie that we talked about borsheims.com coming online in May. There's something up there now. But you'll see a new format within a month or so.

Now, you might say in jewelry retailing, you know, with millions of things that you can click onto, 10 years from now, you know, who is going to be important in terms of online retailing of jewelry? I would argue that two firms have an enormous advantage going in.

I would argue that Tiffany has such an advantage. We don't own any Tiffany. But I would say that because of their name — brand names are going to mean very, very much when you have literally, you know, thousands and thousands of choices.

People can't — they have to trust somebody. And I think that Tiffany has a name that people would trust.

And I think Borsheims has a name that people would trust. And Borsheims sells jewelry a whole lot cheaper than Tiffany's.

So I would say that people who are price conscious, but also want to deal with a jeweler that they trust implicitly, will find their way to Borsheims in increasing numbers, over the internet.

And I would say that people that like the blue box, you know, are going to find their way to Tiffany's, over time. And they'll pay more money.

But I don't see them going for Brand X and buying fine jewelry over the internet.

So, I think that, with the brand that Borsheims has, and with careful nurturing of that brand, I would say that the internet offers Borsheims a chance to have the advantage in cost that comes from a huge one store location. And yet, also go into the homes of people in every part of the world. And that kind of a company should prosper.

There are other of our companies, I worry about. You know, I can worry about them being hurt in various ways.

GEICO is going to be a big beneficiary of the internet. We already are developing substantial business through it.

But I — if I were to buy into any retailing business, whether I was buying a stock of it or buying a whole business, I would think very hard about what people are going to be trying to do to that business through the internet.

And you know, it affects real estate that is dedicated to retailing. If you substitute 5 percent of the retail volume via the internet, where real estate is essentially free, you know, you can have a store in every town in the world through the internet without having any rental expense.

So, I would be — I would give a lot of thought to that if I were owning a lot of retail rental space.

Charlie?

CHARLIE MUNGER: Well, I think it is tricky predicting the technological change. Either it will or won't destroy some business.

When I was young, the department stores had a bunch of, sort of, monopolistic advantages. A, they were downtown where the streetcar lines met. B, they had sort of a monopoly on extending revolving credit. And D, they had one-stop shopping in all kinds of weather. And nobody else did. And they lost all three of those advantages.

And yet, they've done well, a lot of them, for many decades since. At other times, you get a change and you just get destroyed.

Our trading stamp business was destroyed by changes in the economic world. And our World Book business has been seriously hurt by the personal computer, and the CD-ROM, and so forth.

WARREN BUFFETT: I —

CHARLIE MUNGER: We agree, it's a big risk. But it's not easy to make predictions in which you have great confidence.

WARREN BUFFETT: Yeah, if you go down to 16th and Farnam, where the streetcar tracks used to cross, that was the best real estate in town. And people signed 100-year, 50-year leases on it. And it looked like there was nothing more safe, because they weren't going to move the streetcar lines.

The only thing was that they moved the streetcars. They just took and converted them into junk. And it seemed very permanent.

The advantage of the big department store, the Marshall Field in Chicago or the Macy's in New York, was this incredible breadth of merchandise. You could go and you could find 300 different types of spools of thread, or 500 — you could see 500 different wedding dresses, or whatever.

And you had these million square-foot, and even two million square-foot, downtown stores. And they were these huge emporiums.

And then the shopping center came along. And of course, the shopping center created, in effect, a store of many stores. And so, you had millions of square feet now, but you still had this incredible variety being offered.

The internet becomes a store in your, you know, computer, and it has an incredible variety of offerings, too.

Some of them don't lend themselves very well, it seems to me, to the retailing. And, you know, and others do.

But Charlie's right. It's hard to predict exactly how it will turn out.

I would expect, you know, automobile retailing to change in some important ways. And in part — in very significant part, influenced by the internet.

But, I wouldn't — you know, I can't predict exactly how that'll happen. But I don't think it'll look the same 10 or 15 years from now.

13. Buffett praises analyst Alice Schroeder

WARREN BUFFETT: Zone 6.

AUDIENCE MEMBER: Ben Knoll, and I'm from Minneapolis. Although I'd like to enhance my status by noting that I was born and raised in Lincoln. (Laughter)

WARREN BUFFETT: You just moved up. (Laughter)

AUDIENCE MEMBER: Like, many others, I read Alice Schroeder's analysis of Berkshire Hathaway with great interest this last year. And she described her analysis as a toolkit for investors.

And I'm wondering if you see any substantial flaws in any of her toolkit. And in particular, the float-based valuation model that she put together. What are your views on that?

WARREN BUFFETT: Well, I don't want to comment on valuation.

But I can tell you that Alice is a first-class and serious analyst who spent a lot of time on Berkshire, and probably produced the first comprehensive report, at least that's been widely circulated, in the history of Berkshire.

It's kind of interesting that we got to a hundred billion dollars of market value before anybody really published a report about the company, but —

Alice understands the insurance business very well. She's an accountant, by background. So, she understands numbers. And she did a lot of work on the report. And I do recommend it to you as a toolkit. I make no comment at all about valuation.

Charlie?

CHARLIE MUNGER: Nothing to add.

14. Different compensation plans with the same goal

WARREN BUFFETT: Zone 7.

AUDIENCE MEMBER: Hello. I'm Martin Wiegand from Chevy Chase, Maryland. I want to thank you for the hospitality this weekend and the wisdom you share with us each year in your annual reports.

As a small businessman, one of trickiest jobs I have is dividing up the profits of our business between the employees who generate them.

Would you comment and share your thoughts on how you divide up the profits of the Berkshire Hathaway subsidiaries with the employees who generate them.

And the follow-up is, Mr. Munger, do you have any suggested reading on that subject?

WARREN BUFFETT: Yeah, we're glad to have you here, Martin. I went to high school and to the first couple years of college with Martin's father, who's also here today. And so, if you get a chance to meet Marty, Janie, and younger Martin, say hello to them.

In terms of the arrangements we have with compensation, they vary to an extraordinary degree among the various subsidiaries we have.

Because we have bought existing businesses. And we have tampered as little as possible with their cultures after we buy them. And some of those cultures are very different than others.

I mean, you know, you saw [Nebraska Furniture Mart's] Mrs. B earlier. You know, as you can imagine, she would leave a very strong imprint on any business with which she was involved.

And we have a number of very talented managers who have worked out the systems that they believe to be best for their companies.

Now, it is true that if we — if there's a stock option plan at a company, we will substitute a plan that is performance-based, which ties much more clearly to the performance of the business than any option plan could.

And we will have a — we will design one that has an expectable cost that's equal to the expectable cost of the option plan. So, we try to equate the cost.

And we try to make it even more — much more sensible from both the owner's standpoint and the employees' standpoint, in terms of the way it pays off based on how that business performs.

You probably read in our annual report how we put an across the board plan at GEICO that ties with our objectives. But basically, that was [CEO] Tony Nicely's work in terms of developing that plan.

I mean, he and I thought alike about what counted. And he developed a compensation grid that applied to everybody in the whole place, based on achieving the objectives that he felt were important and that we felt were important.

You will find — if you go to any Berkshire subsidiary — you will probably find that they have a compensation plan that's quite similar, with exception of options, to the plan that they had before we bought the operation. They have successful businesses.

And people get there different ways. Some people bat left-handed. Some people bat right-handed. You know, some people stand deep in the batter's box. Some crowd the plate. They all have different styles.

And the styles of our managers have proven successful in their own businesses. We keep the same managers. So, we don't try to superimpose any system from above, with the exception of what I've mentioned.

We do like the idea of paying for performance. I mean, that is kind of a fundamental tenant. Everybody says they like that. But then they design systems that payoff no matter what happens, in many cases. And we've been reluctant to do that.

Charlie?

CHARLIE MUNGER: Yeah, I think it's important for the shareholders to realize that we are probably more decentralized, in terms of personnel practices, than any company of our size, or bigger, in America. We don't have a headquarters culture that's forced on the operating businesses.

The operating businesses have their own cultures. And I think in every case I can think of, it's a wonderful culture. And we just leave them alone. It's — comes naturally to me. (Laughter)

WARREN BUFFETT: Charlie says we don't have a headquarters culture. Sometimes people think we don't have a headquarters. (Laughter)

We have no human relations department at Berkshire. We have no legal department. We have no investor relations. We have no public relations. We don't have any of that sort of thing.

We've got a bunch of all-stars, as we've put on the screen, out there running businesses. We ask them to mail the money to Omaha, but — (Laughter)

We'll even give them a stamp if they request it. (Laughter)

But beyond that, we don't really go. It would be foolish.

And what is interesting to me is how — I had a lot of preconceived ideas of what motivates people when I started out in business — but you can find certain organizations that resist paying stars on an individual basis. They like to think of themselves as a team and they'd rather have a team concept of payment.

And you can see others where they're much more individually oriented. Actually, Charlie can probably tell you that in terms of law firms. I mean, some law firms have a culture that is much more star-oriented than others. And, you know, you've seen successes in both places, haven't you, Charlie?

CHARLIE MUNGER: Absolutely.

WARREN BUFFETT: OK. (Laughter)

CHARLIE MUNGER: I can't remember a case when anybody has transferred from one operating Berkshire subsidiary to another. It's very rare.

WARREN BUFFETT: Yeah, we don't try and cross-fertilize. We just — we think we've got a good thing going in, you know, in every plot of ground and we just assume they'll do best if left to their own initiative.

15. Low-cost float generates money for investing

WARREN BUFFETT: Zone 8.

AUDIENCE MEMBER: I'm Brian Phillips (PH) from Chickamauga, Georgia.

And my question is, with regards to an insurance company, if you can use the float for cheap financing, why would you issue a fairly-priced bond?

WARREN BUFFETT: Why would we do what?

AUDIENCE MEMBER: Issue a fairly-priced bond.

WARREN BUFFETT: Yeah, well, the best form of financing for us is cheap float. Now, most insurance companies don't generate cheap float. So, I mean, there are plenty of companies in the insurance business who have a cost of float that makes it unattractive, actually, to expand their businesses.

Our insurance companies have had a terrific experience on cost of float. And we would develop it just as fast as we can.

Right now, we would have no interest in issuing a bond because we have more money around than we know what to do with. And it comes from low-cost float.

But if there came a time when things were very attractive and we had utilized all the money from our float and from retained earnings and all of that to invest, and we still saw opportunities, we might very well borrow moderate amounts of money in the market.

It would cost us more than our float was costing us. But it still, incrementally, would provide earnings.

Now, we would try to gain more float under those circumstances as well. But we would not just quit when we ran out of money from float. We would go ahead and borrow moderate amounts of money. We would never borrow huge amounts of money, though.

Charlie?

CHARLIE MUNGER: Well, I agree.

WARREN BUFFETT: OK. You can see why we've been partners a long time. (Laughter)

16. Big returns are easier with small amounts of money

WARREN BUFFETT: Now, we go to some off — some sites away from this main hall. And not sure how exactly we're going to do this. But we'll go to zone 9 and see if zone 9 comes in.

AUDIENCE MEMBER: Hello. My name is Howard Love. I'm from San Francisco. Thank you very much for this weekend in general and this meeting in particular.

Recently, at a talk at the Wharton Business School, Mr. Buffett, you indicated that — you were talking about the problems of compounding large size, which I appreciate and understand.

But you indicated — you're quoted in the local paper as saying that you are confident that if you were working with a sum closer to a million dollars, that you could compound that at a 50 percent rate.

For those of us who aren't saddled with the $100 billion problem — (laughter) — could you talk about what types of investments you'd be looking at and where in today's market you think significant inefficiencies exist? Thank you.

WARREN BUFFETT: Yeah. I think I may have been very slightly misquoted. But I certainly said something to the effect that working —

I think I talked about this group I get together every two years and how I poll that group as to what they think they can compound money at with a hundred thousand, a million, a hundred million, a billion, and other types of sums.

And I pointed out how this group of 60 or so people that I get together with every couple years — how their expectations of return would go very rapidly down this slope.

It is true. I think I can name a half a dozen people that I think could compound a million dollars — or at least they could earn 50 percent a year on a million dollars — have that as expectation, if they needed it.

I mean, they'd have to give their full attention to be working on the sum. And those people could not compound money, a hundred million or a billion, at anything remotely like that rate.

I mean, there are little tiny areas which, if you follow what I said on the screen there, on that Adam Smith's interview a few years ago.

If you start with A and you go through and you look at everything and you find small securities in your area of competence that you can understand the business, I think you — and occasionally find little arbitrage situations or little wrinkles here and there in the market —

I think, working with a very small sum, that there is an opportunity to earn very high returns. But that advantage disappears very rapidly as the money compounds. Because I, you know, from a million to 10 million, I would say it would fall off dramatically, in terms of the expectable rate.

Because there are little — you find very small things that, you know, you can make — you are almost certain to make high returns on. But you don't find very big things in that category today.

I'll leave to you the fun of finding them yourselves. Terrible to spoil the treasure hunt.

And the truth is, I don't look for them anymore. Every now and then, I'll stumble into something just by accident. But I'm not in the business of looking for them. I'm looking for things that Berkshire could put its money in, and that rules out all of that sort of thing.

Charlie?

CHARLIE MUNGER: Well, I would agree. But I would also say that what we did 40 or so years ago was, in some respects, more simple than what you're going to have to do.

WARREN BUFFETT: Right.

CHARLIE MUNGER: We had it very easy, compared to you. It can still be done. But it's harder now.

You have to know more. I mean, just sifting through the manuals until you find something that's selling at two times earnings, that won't work for you.

WARREN BUFFETT: It'll work. It's just you won't find any. (Laughter)

CHARLIE MUNGER: Yeah.

17. "Surprisingly high" return on equity

WARREN BUFFETT: Zone 10, please?

AUDIENCE MEMBER: My name is Jonathan Brandt. I'm from New York City.

Warren, you wrote in 1977 that the return on equity and growth of book value for corporate America tended towards, and averaged, about 13 percent, no matter the inflation environment.

After properly expensing options and so-called non-recurring charges and taking into account the high price-earnings ratio paid for increasingly frequent acquisitions, do you think that 13 percent figure is still roughly correct?

Also, what quantitative method would you suggest that investors use for expensing the option grants of publicly traded firms where there is no realistic prospect for the substitution of such an options program with a cash-based performance incentive plan?

In other words, how do you derive the five to 10 percent earnings dilution referred to in this year's Berkshire's annual report? And is it possible that the dilution figure could be even higher than that? Thank you.

WARREN BUFFETT: OK. Thanks, John. Just like Martin Wiegand, Jon Brandt is the son of a very good friend of mine, where we worked together for decades. And Jon is now an analyst with Ruane Cunniff and a very good one.

He also — he says it didn't happen this way. But when he was about four years old, I was at his house for dinner with the parents. And he suggested to me, after dinner, he said, "How about a game of chess?"

I looked at this four-year-old. I thought, you know, "This is the kind of guy —"

I said, "Should we play for money?" (Laughter)

And he said, "Name your stakes." So, I backed off, and — (laughter) — we sat down.

And after about 12 moves, I could see I was in mortal trouble. So, I suggested it was time for him to get to bed. (Laughter)

The question about return on equity, it's true. Back in 1977, I believe, I wrote an article for Fortune and talked about this, more or less, this figure of 12 or 13 percent that return on equity

kept coming back to, and explained why I didn't think it was affected by inflation, which was a hot topic of the day very much.

And it wasn't. But in recent — in the last few years, earnings have been reported at very high figures on the S&P, although you've had these very substantial restructuring charges, which every management likes to tell you doesn't count.

I love that, when they, you know, they say, "Well, you know, we earned a dollar a share in total last year, but look at the two dollars a share that we tell you we really earned. The other dollar a share doesn't count." And then they throw in mistakes of the past or mistakes of the future. And every three or four years, ask you to forget this as if it doesn't mean anything.

We've never had a charge like that that we've set forth in Berkshire and we never will.

It isn't that we don't have things we do that cost us money in moving around. But we do not ask you to forget about those costs.

The report — even allowing for options costs and restructuring charge and everything, return on equity has been surprisingly — to me — surprisingly high in the last few years.

And there's a real question in a capitalistic society whether if long-term rates are 5 1/2 percent, whether return on equity can be, across the board, some number like 18 or 20 percent.

There're an awful lot of companies out there that are implicitly promising you, either by what they say their growth in earnings will be, or various other ways, that they're going to earn at these rates of 20 percent-plus. And, you know, I'm dubious about those claims. But we will see.

18. Corporations hooked on "corrupt" stock option accounting

WARREN BUFFETT: The question about how we charge for stock options is very simple. If we look at what a company issues in options over, say, a five-year period and divide by fives — because the grants are irregular — or whatever's — if there's some reason why that seems inappropriate, we might use something else.

But we try to figure out what the average option issuance is going to be. And then we say to ourselves, "How much could the company have received for those options if they'd sold them as warrants to the public?"

I mean, they can sell me options on any company in the world. I'll pay some price for an option on anything.

And we would look at what the fair market value of those options would be that day if they were transferable options. Now, they aren't transferable. But they also — employees

sometimes get their options repriced downward, which you don't get if you have public options.

So, we say that the cost to the shareholder of issuing the options is about what could be received if they sold — turned those options into warrants — and sold them public or sold them as options.

And that's the cost. I mean, it's a compensation cost.

And just try going to a company that's had a lot of options grants every year and tell them you're going to quit giving the options and pay people the same amount of money. They'll say, "You took away part of my earnings."

And we say, if you've taken away part of the earnings, then let's show it in the income account and show it as a cost. Because it is a cost.

And I think, actually, a number of auditors agreed to that position many years ago. And they started receiving pressure from their clients who said, "Gee, you know, that might hurt our earnings if we reported that cost."

And the auditors caved. And they put pressure on Congress when it came up a few years ago. And I think it's a scandal. But it's happened.

We are going to — in evaluating a business, whether we're going to buy the entire business or whether we're going to buy part of it — we're going to figure out how much it's costing us to issue — and when the company issues those options every year.

And if they reprice them, we're going to figure how much that particular policy costs us. And that is coming out of our pocket as investors. And I think people are quite foolish if they ignore that.

I don't think it's going to change. It's too much in corporate America's interest to keep it out of the income account and keep issuing more and more options percentage-wise, and not have it hit the income account, and to reprice when stocks go down. But that doesn't make it right.

Charlie?

CHARLIE MUNGER: Yeah, I go so far as to say it's fundamentally wrong not to have rational, honest accounting in big American corporations.

And it's very important not to let little corruptions start, because they become big corruptions. And then you have vested interest that fight to perpetuate them.

Surely, there are a lot of wonderful companies that issue stock options. And that stock options go to a lot of wonderful employees that are really earning them. But all that said, the accounting in America is corrupt. And it is not a good idea to have corrupt accounting.

WARREN BUFFETT: You can see the problem of the creep in it, once it starts.

It's much like campaign finance reform. I mean, if you let it go for a long time, the system becomes so embedded and the participants become so dependent upon it, that there becomes a huge constituency that will fight like the very devil to prevent any change, regardless of the logic of the situation.

I mean, once you get a significant number of important players benefiting from any kind of corruption in any kind of system, you're going to have a terrible time changing it. That's why, you know, it should be changed early.

And it would've been easier to change the accounting for stock options some decades back when it was first proposed, than now. Because, you know, basically corporate America's hooked on it.

This does not mean that we are against options, per se. If Charlie and I die tonight and you had two new faces up here who didn't have the benefit of having bought a lot of Berkshire a long time ago, and they had responsibility for the whole enterprise, it would not be inappropriate to pay them in some way that was reflective of the prosperity of the whole enterprise.

I mean, they would — it would be crazy to pay the people at Dairy Queen in options of Berkshire Hathaway or pay the people at Star Furniture or any one of our operations, because they have responsibility for a given unit. And what the price of Coca-Cola stock does could swamp their efforts in either direction. It just would be inappropriate.

But it would not be inappropriate to pay somebody that's got the responsibility for all of Berkshire in a way that reflected the prosperity of all of Berkshire.

And a properly designed option system, which would be much different than the ones you see, because it'd be much more rational, could well make sense for one or two people that had the responsibility for this whole place.

Charlie and I aren't interested in that. But I think that you may be looking at two people up here, 50 years from now, I hope, where it would be appropriate.

But any option system, A, should not involve giving an option of less than the place could be sold for today, regardless of the market price. Because once management's in control, they can make that decision. And it should reflect the cost of capital. And very, very few systems reflect the cost of capital.

But if we're going to sit here and plow all the money back every year into the business and, in effect, use your earnings, interest-free, to increase our own earnings in the future, we think there has to be a cost of capital to have a properly designed option system.

People aren't interested in that. The option consultants aren't interested in that, because that isn't what their clientele wants.

Charlie, you're probably wound up a little more now on this, too?

CHARLIE MUNGER: No, I've wound up enough.

WARREN BUFFETT: OK. (Laughter)

19. Why Buffett dissolved his partnership in 1969

WARREN BUFFETT: We'll go to zone 11.

AUDIENCE MEMBER: Warren and Charlie, good morning.

WARREN BUFFETT: Good morning.

AUDIENCE MEMBER: My name is Maurus Spence from Waterloo, Nebraska.

Some 30 years ago, you disbanded your Buffett partnership saying that you felt out of step with the market and you feared a permanent loss of capital.

Given today's market and current valuations, if Berkshire Hathaway was a partnership of 100 partners, instead of a corporation, would you consider disbanding it as you did 30 years ago? And if not, why not? And was that the right decision back then?

WARREN BUFFETT: Well, if our activities were limited to marketable securities, and I had less than a hundred partners, and we were operating with this kind of money, so that there was a real limitation on what we could do, I would simply tell the partners and let them make the decision. That would be easy enough.

We're not in that position. A, we've got a number of wonderful businesses. And those businesses will grow in value. And in some cases, very significantly, in value.

And it's not a feasible way. People have their own way, if they decide that — since we're unable to find things, that they'd rather go on to something else — they have their own way of getting out. And they can get out at, certainly, a premium to the amount of money they put into the business over the years.

So, if I were running a marketable securities portfolio now and were limited to that, I would explain very carefully to my partners how limited my ability to make money in this market would be. And then I would ask them to do whatever they wish to do. Some of them might want to pull out and others might want to stay.

In the 1969 period when I closed up, A, I had a somewhat similar situation in terms of finding things.

And B, I really felt that the expectations of people had been so raised by the experience we'd had over the previous 13 years, that it made me very uncomfortable. And I felt unable to dampen those expectations.

And I really just didn't find it comfortable to operate where my partners, even though they might nod their heads understandingly and say that, "You know, we really know why you aren't making any money while everybody else is."

I didn't think I wanted to face the internal pressure that would come from that. I don't feel any such internal pressure in running Berkshire.

Charlie?

CHARLIE MUNGER: Yeah, that — I think there are some similarities between 1969-70 and the present time. But I don't think that means that 1973-4 lies right ahead of us. We can't predict that.

You can argue it worked out wonderfully for Warren to quit in '69. And then have '73-4 to come into with his powder dry. I don't think we're likely to be that quite that fortunate again.

WARREN BUFFETT: Yeah, it was a long time from '69, though, to '73. I mean, it sounds easy, looking back. But the Nifty Fifties, you may remember, sort of hit their peak in '72. So, although there was a sinking spell for a while in that '69 -70 period, the market came back very strong.

But you know, that's part of the game. I mean, it stayed cheap a long time from the '73 period on.

And you will find waves of optimism and pessimism. And they'll never be exactly like they were before. But they will come in some form or other.

That does not mean we're sitting around with a bunch of cash because we expect stocks to go down, though.

We keep looking for things. We're looking for things right now. We're talking to people right now about things where we could expend substantial sums of money. But it's much more difficult in this period.

20. Buffett's musical family

WARREN BUFFETT: Zone 12?

AUDIENCE MEMBER: Good morning. My name is Jenna (PH). I'm from Long Island, New York.

And I was reading through your annual report.

You made reference to Wagner and some country western song I never heard of.

I was just wondering what kind of music influences you. And are you planning on doing, like, a musical video? (Laughter)

WARREN BUFFETT: Well, I think with the performance I gave earlier in the movie, I don't think there's any future for me. But I do have a very musical family.

And since you asked, I will point out that my son Peter's recent CD is available at the Disney booth outside. And Peter had a very successful experience here on public television in March and will be on tour later on. And my wife is extremely musical.

But I don't think I've got much of a future in it. So far, I get — no one ever asks me to come back. (Laughter)

I mean, I've had a lot of introductory appearances, but very few encores.

I like all kinds of music. You know, I really — I've always liked music. We started out around the house singing church hymns. And in 1942, my two sisters who are here today, joined me in a 15-minute program on WOW, then the leading radio station in Omaha. And we sang "America the Beautiful."

And my dad got elected to Congress on the back of that program. (Laughter)

We liked to take credit for it. And you — see my sisters at the end of the meeting.

Charlie, what kind of music do you like?

CHARLIE MUNGER: Well, the one thing I agree with is that if we're going to star Warren, it should be in a musical. The straight acting won't do. (Laughter)

WARREN BUFFETT: It took me an hour to get that bald for "Annie," incidentally. It takes a long time to get bald — dressing room.

21. Spotting a great industry doesn't guarantee you'll make money

WARREN BUFFETT: Zone 13, please.

AUDIENCE MEMBER: Good morning, Mr. Buffett and Mr. Munger. My name is Jack Sutton (PH) from Brooklyn, New York. Thank you for hosting today's meeting.

With reference to communication stocks, because of the growth of cellular communications and the internet, certain stocks hold the prospect of substantially above-average revenue and earnings growth.

AT&T and Nokia, as an example, earn respectable margins and return on common equity and would seem to fit Berkshire's criteria from a financial perspective.

Has Berkshire reviewed stocks in the area of communications? And would you consider an investment in this area at some time in the future?

WARREN BUFFETT: Yeah, there's certainly no question amazing things have happened in communications.

It's interesting that you mention AT&T. Because AT&T's return on equity over the last 15 years has been, you know, has been very, very poor. Now, they've had special charges time after time and said, "Don't count this."

But the overall return on equity, if you calculate it for AT&T for the last 15 years, it's not been good at all. They were the, you know, they were the leader in the field. But so far, what has happened has hurt them, at least relative to their competition, far more than it's helped them.

We have a fellow on our board, Walter Scott, who's right here in the front row — I can't quite see him — who knows a lot more about this.

He used to try to explain to me these changes that were taking place. We'd ride down to football games on Saturday and Walter would patiently explain to me like he was talking to a sixth grader, what was going to happen in communications. And the problem was that he had a fourth grader in the car with him, namely me. (Laughter)

So, I never got it. But Walter did. And he's done very well in MFS and Level 3.

And I think for people who understand it, and are reasonably early, you know, they could very well be substantial money to be made. There's been an awful lot of money made in this town of Omaha by people who've participated in this. But I'm not one of them.

And I have no insights that I bring to that game that I think are in any way superior, and — in, probably, many cases, not even equal to those of other participants.

There's a lot of difference between making money and spotting a wonderful industry. You know, the two most important industries in the first half of this century in the United States — in the world, probably — were the auto industry and the airplane industry.

Here you had these two discoveries, both in the first decade — essentially in the first decade — of the century. And if you'd foreseen, in 1905 or thereabouts, what the auto would do to the world, let alone this country, or what the airplane would do, you might have thought that it was a great way to get rich.

But very, very few people got rich by being — by riding the back of that auto industry. And probably even fewer got rich by participating in the airline industry over that time.

I mean, millions of people are flying around every day. But the number of people who've made money carrying them around is very limited.

And the capital has been lost in that business, the bankruptcies. It's been a terrible business. It's been a marvelous industry.

So you do not want to necessarily equate the prospects of growth for an industry with the prospects for growth in your own net worth by participating in it.

Charlie?

CHARLIE MUNGER: Well, it reminds me of a time in World War II when — where these two aircraft officers I knew, and they didn't have anything to do at the time. And some general came in to visit. And he said to one of them, he says, "Lieutenant Jones, what do you do?" He says, "I don't do anything."

And he turned to the second one. And he says, "What do you do?" And he says, "I help Lieutenant Jones." (Laughter)

That's been my contribution on communications investments. (Laughter and applause)

WARREN BUFFETT: You can address me as Lieutenant Jones for the rest of the meeting. (Laughter)

22. Thank you, shareholders

WARREN BUFFETT: Yeah, incidentally, some people have thanked us for providing this meeting. I want to thank you because the quality — I think we have the best shareholders meeting in the country.

And the quality of the meeting is absolutely — (applause) — in direct proportion to the quality of the shareholders.

We would have nothing without this participation. And I really thank you. It's a big effort to come here for a lot of you. And I thank you for that.

Our plan, incidentally, will be to take a break at noon. They have a lot of food outside that they will sell you. (Laughter)

And then we'll come back in 30 minutes or thereabouts or 45 minutes, depending on how the lines are out there.

And then we'll reconvene for the afternoon. And those of you who are not in this main hall, if you want to come over and join the main hall, there will be enough seats for everybody in the afternoon. And then Charlie and I will continue till about 3:30.

23. Do you ever get tired of being Warren Buffett?

WARREN BUFFETT: Let's go back to zone 1, please.

AUDIENCE MEMBER: Mr. Buffett, over here. Good morning. I'm Allan Maxwell. I live in Omaha.

When you walk down the street, heads turn to watch you. Do you ever get tired of being Warren Buffett? If you could come back again, would you want to be Warren Buffett? (Laughter)

WARREN BUFFETT: I think I'd probably want to be Mrs. B. She made it to 104, so I — (Laughter)

And incidentally, I think there were three siblings at her funeral. Now, that some set of genes. You don't have to worry about the Furniture Mart.

No, you see a lot of the publicity bit here for a couple of days around the time of the meeting. But life goes on in a very normal way.

And I've had a lot fun. I have fun every day of my life. I had a lot of fun when I was 25. But I have just as much fun now. And I think, you know, if my health stays good, it'll keep being the same way.

Because, you know, I get to do what I want to do. And I get to do it with people I like and admire and trust. And it doesn't get any better than that.

Charlie? Do you want to come back as Lieutenant Jones? (Laughter)

CHARLIE MUNGER: I think there are very few people who would change their skin for somebody else's. I think we all want to play our own games.

24. Goodwill costs should stay on the books

WARREN BUFFETT: We'll go to zone 2 with those remarks. (Laughter)

AUDIENCE MEMBER: Hi.

WARREN BUFFETT: Hi.

AUDIENCE MEMBER: I'm Liam O'Connor (PH). I come from County Kerry in Ireland. And I must admit the sun shines a little bit more over here than it does on the other side of the world.

I was wondering, today, if you could shed some light on accounting for goodwill.

You reference in your report, in several aspects, including your principles — owner principles — and as well as the fact — with the current merger of General Re.

It seems to me there are several different methods that are used worldwide, through amortization, to direct write-off.

And the fact, when a merger like this is taken, it kind of skews the balance sheet. And I was wondering, in your view, what would you recommend as a more appropriate method for accounting for goodwill?

And secondly, if I could direct it to Charlie, one of the ideas — why not tie goodwill to the share price and have an intangible and a tangible part of shareholder's equity, the intangible piece being the difference between the book value and the share value of a company?

WARREN BUFFETT: OK, I'll take the first part. And it's a good question about goodwill and the treatment of goodwill for accounting purposes.

I actually wrote on that subject. I think it was in 1983 in the annual report. And if you click onto to the berkshirehathaway.com you can look at the older letters. And you will see a discussion of what I think should be the way goodwill is handled. And then we've discussed it at various other times in the Owner's Manual.

To give it to you briefly, in the U.K., for example, goodwill is written off instantly so it never appears in book value. And there's no subsequent charge for it.

If I were setting the accounting rules, I would treat all acquisitions as purchases — which is what we've done, virtually, without exception at Berkshire — I would treat all acquisitions as purchases.

I would set up the economic goodwill, because we are paying for goodwill when we buy a General Re. I mean, we are playing billions and billions of dollars for it. Or when we buy a GEICO or when we buy an Executive Jet. That is what we are buying, is economic — what I call economic goodwill.

I believe it should stay on the balance sheet as reflective of the money you've laid out to buy it. But I don't think it should be amortized. I think in cases where it is permanently impaired and clear that it's lost its value, it should be charged off at that time.

But generally speaking — in our own case, the economic goodwill that we now have far exceeds the amount that we put on the books originally. And therefore, even by a great amount, exceeds the amount that remains on the books after amortization.

I do not think an amortization charge is inappropriate — is appropriate — at Berkshire for the goodwill that we have attached to the — our businesses. Most of those businesses have increased their economic goodwill — in some cases, by dramatic amounts — since we've purchased them.

But I think the cost ought to be on the balance sheet. It's what we — it shows what we paid for them. I think it should be recorded there.

I don't think that the coming change in accounting is likely to be along the lines that I've suggested here. But I do think it's the most rational way to approach the problem.

And I think that because there is this great difference between purchase and pooling accounting, that some really stupid things are done in the corporate world.

And I have talked to managers who deplored the fact that they were using their stock in a deal and going through some — various maneuvers to get pooling accounting because they thought it was economically a dumb thing to do.

But they did it, rather than record amortization charges that would result from purchase accounting. And, you know, they're very frank about that in private. They don't say as much as about it in public.

Charlie?

CHARLIE MUNGER: Yeah, generally speaking, I think that what Warren argues for would be the best system.

Namely, set up the goodwill as an asset and don't amortize it in the ordinary case.

Or there would be plenty of cases when — the cases wouldn't be ordinary cases when amortization would be rational and, in fact, should be required.

So, I don't think there is any one easy answer to this one. And there's a lot of crazy distortion in corporate practice because of all the changes.

I mean, Australia has cowboy accounting. And Europe has this write-it-all-off-immediately accounting, which is — what would you call it? — half-cowboy accounting. And maybe mining promoter accounting.

We think the system should be better than that.

25. "We are not in the business of being white knights"

WARREN BUFFETT: Zone 3?

AUDIENCE MEMBER: Good morning.

WARREN BUFFETT: Morning.

AUDIENCE MEMBER: My name is Mike, from Omaha.

And it's been said that you're the white knight of the investment world because you rescue companies from hostile takeovers. Are there any companies you are now trying to help out? And would you please name those companies? (Laughter)

WARREN BUFFETT: You have a cell phone that you're going to place orders with? (Laughter)

No, we — what we really want to buy into are wonderful businesses, or at least extremely good businesses. And we want them to have managements we like. And we want the price to be attractive.

And we are not in the business of being white knights. We're in the business of being investors in things that look sensible to us. And I don't think I've been approached by anybody in connection with that.

We do get approached occasionally. I should say, we get approached when somebody, occasionally, when somebody has a takeover bid. And they say, "Would you like to top it or something?" To which our answer, invariably, is no.

Charlie?

CHARLIE MUNGER: Well, we're very good at saying no. (Laughter)

WARREN BUFFETT: Charlie's better than I am, even.

26. China offers opportunities, but hard to pick winners

WARREN BUFFETT: Zone 4.

AUDIENCE MEMBER: Good morning. My name is Matt Haverty (PH). I'm from Kansas City.

Twenty years ago, China unleashed capitalism within its borders. Since then, I believe it has benefited more from that economic system than any major country in history.

I also believe that this momentum, combined with China's size and demographics, will make it the most fertile economic environment in the world during the next few decades.

Nonetheless, there are many Chinese companies with easy-to-understand businesses and 20 percent per annum sales growth this decade, trading at five times or less last year's earnings.

What is your assessment of the risk/reward of investing directly in Chinese companies?

WARREN BUFFETT: Well, I don't know that much about them. But I — certainly if I could buy companies that were earning 20 percent on equity and had promises — gave promise — of being able to continue to do that while reemploying most of the capital, and they were selling at five times earnings, and I felt good about the quality of the earnings, you know, I would say that would have to be an interesting field.

My guess is that it's not a large enough field, in terms of the ones that meet those tests you named, for Berkshire to profitably participate. And whether you could buy all of those companies from the U.S., I think there'd be a lot of — there could well be a lot of problems in that.

But I would say, any time you can buy good businesses — really good businesses — which we define as businesses who earn high returns on capital at five times earnings — and you believe in the quality of the earnings, and they can reemploy a significant portion of those earnings, additionally, at the 20 percent rate, you know, you will make a lot of money if you're right in your assessment on that.

Charlie?

CHARLIE MUNGER: Yeah, I don't know much about China. (Laughter)

WARREN BUFFETT: But that is not to knock it in any way, shape or form. Because I mean, in terms of — there could well be opportunities in areas like that, if you can identify those kind of businesses. We would have trouble identifying those businesses, ourselves.

But that doesn't mean that, you know, you will have trouble or other people who are much more familiar with the economy there, would have trouble.

So, I encourage you to look at your own area of expertise in something like that. And you'll do much better.

If the conditions you describe exist and you can identify the right company, you will do much better in that than you will in American markets, in my view.

27. We prefer to buy companies, but stocks offer more bargains

WARREN BUFFETT: Zone 5.

AUDIENCE MEMBER: Good morning. My name is Fred Castano (PH), from East Point, Michigan. And I appreciate this opportunity.

With Berkshire's size becoming very large, are we to expect major future investments to be in the form of complete buyouts, such as the General Re acquisition? Or would you still consider nibbling in the stock market?

WARREN BUFFETT: Well, we don't want to nibble. But we would like to take big gulps in the stock market from time to time.

But we've always wanted to acquire entire businesses. People never seem to really believe that, back when we were buying See's Candy or the Buffalo News or National Indemnity. But that's been our number one preference right along.

It's just that we've found that much of the time we could get far for more our money, in terms of wonderful businesses, by buying pieces in the stock market, than we could by negotiated purchase.

There may have been — there may be some movement, in terms of the availability of the two, toward the negotiated purchase, although you — it's almost impossible to make a wonderful buy in a negotiated purchase.

I mean, you will never make the kind of buy in a negotiated purchase that you can in a bad — that you can make via stocks in a stock — in a weak stock market. It just isn't going to happen.

The person on the other side cares too much. Whereas, in the stock market, in a 1973 or 1974, you were dealing with the marginal seller. And whatever price they establish for the business, you could buy it.

I couldn't have bought the entire Washington Post Company for $80 million in 1974. But I could buy 10 percent of it from a bunch of people who were just operating, you know, based on calculating betas or doing something of the sort. And they were in a terrible market. And it was possible to buy a piece of it on that valuation. You never get that kind of buy in a negotiated purchase.

We always are more interested in a negotiated — large negotiated — deals than we are in stock purchases. But we are not going to find a way, probably, to use all the money that way.

And we occasionally may get chances to put big chunks of money into attractive businesses that are — which we buy through the stock market, five, 10 percent of company or something of that sort.

Charlie?

CHARLIE MUNGER: My guess is over the next five years, we'll do some of both. Both the entire business and the big gulps in the stock market.

WARREN BUFFETT: Yeah, I agree with that.

We'll keep working at both. We're not finding a lot in either arena. We might be a little more likely to find it in the negotiated business. It won't be any huge bargain. We're not going to get any huge bargain in the — in a negotiated purchase.

We are more likely to find what I would call a fair deal there under today's circumstances, than we will in the market. But I agree with Charlie. Over the next five years, I think you'll see us do both.

28. Being "wealthy" without having a lot of money

WARREN BUFFETT: Zone 6.

AUDIENCE MEMBER: Good morning, Mr. Buffett and Mr. Munger. My name is Jane Bell (PH) from Des Moines, Iowa. (Mild applause)

In response to an earlier question, you spoke of people being rich and very, very rich.

It seems to me there's a difference between being rich and being wealthy. I assume you consider yourself to be both. Which is the more important to you?

WARREN BUFFETT: Well, I think we may ask you to define. I don't want to sound like President Clinton here, too much, but we may ask you — (Laughter)

I might want — if you'd really define the "rich" and "wealthy," so that I get the distinction, then I think we can give you a better answer on it.

AUDIENCE MEMBER: Well, in my mind, being rich is having an awful lot of money. Being very, very rich is having even more. And being wealthy doesn't necessarily equate to having a lot of money.

WARREN BUFFETT: What does it equate to, then? I just want — (Laughter)

I think I know what you mean. But I still want you to clear it up before I give you an answer on it.

AUDIENCE MEMBER: Well, this, of course, is my opinion.

WARREN BUFFETT: I mean, you could be wealthy in health, for example. And I agree with you, that certainly, there'd be nothing you'd value more than good health for you, you know, yourself and your family. But I — you go ahead.

AUDIENCE MEMBER: Well, I believe you're starting to get it. (Laughter)

WARREN BUFFETT: Have patience. (Laughter)

No, there's no question about it. I mean, being — the money makes very little difference after a moderate level. I tell this to college students that I talk to.

I mean, they are basically living about the same life I'm living. (Laughter)

You know, we eat the same foods. I mean, that I can guarantee you. (Laughter)

And, you know, there's no important difference in our dress. There's no important difference at all in the car we drive. There's no difference in the television set that we sit there and, you know, watch the Super Bowl on or anything of the sort.

There's really no difference in — you know, they've got air-conditioning in summer. And I got air-conditioning and I got heat in winter. Almost everything of any importance in daily life, we equate on.

The one thing I do is I travel a lot better than they do, you know, NetJets. (Laughter)

So the travel is — travel I do a lot easier than they do.

Everything else in their lives, it just — you know, I'll switch places any time. It doesn't make any difference.

So, the — then you get down to the things of health and who loves you. I mean, that's — you know, there's nothing — if you have a minimum level of — I mean, you want to have enough so that you eat three times a day, and that you sleep in reasonably comfortable surroundings, and so on.

But everybody in this room has that. And yet, some of the people, by the definition that you've given, are obviously much more wealthy than others. And it's not measured by their net worth, if you define it that way.

I don't disagree with that definition. I might not use the term, wealth, in describing it. But I'd certainly maybe call it well-being or something of the sort.

Charlie? (Laughter)

He's thinking.

CHARLIE MUNGER: Sure, there are a lot of things in life way more important than wealth. All that said, some people do get confused. I play golf with a man. He says, "What good is health? You can't buy money with it." (Laughter)

WARREN BUFFETT: Did I ever tell you about Charlie's twin brother that he golfs a lot with? (Laughter)

No, I'll take health any time, incidentally.

CHARLIE MUNGER: So will I.

WARREN BUFFETT: The important thing, even in your work, I mean, is — to an extreme extent, it seems to me, is who you do it with.

I mean, it — you can have — if you're going to spend eight hours a day working, the most important isn't how much money you make, it's how you feel during those eight hours, in terms of the people you're interacting with, and how interesting what you're doing is, and all of that.

Well, you know, I consider myself incredibly lucky in that respect. I can't think of anything I'd rather do. And I can't think of any group of people I'd rather do it with.

And if you asked me to trade away a very significant percentage of my net worth, either for some extra years in life, or being able to do, during those years, what I want to do, you know, I'd do it in a second.

29. "We blew it" on pharmaceutical stocks

WARREN BUFFETT: Zone 7.

AUDIENCE MEMBER: Hi, my name is McCall Bang (PH). I'm from central Florida. It's nice and sunny there.

WARREN BUFFETT: Not so bad here either, now. (Laughs)

AUDIENCE MEMBER: My question was, last year somebody asked about the pharmaceutical companies and the aging baby boomers, et cetera. And you said it was difficult to single out individual companies. And I believe Mr. Munger succinctly said that we blew it on that one.

I was wondering, however, if the idea of regulation and, you know, the specter of what happened in ’92, ’93 with an unelected politician kind of dampered the whole industry for a period, there — if that plays a part in giving you a little ambivalence about investing in that area for the future.

Is that simply an unknowable? Or with all the, you know, a lot of the political — the things we see here today — if that causes you some concern about, you know, the future of that area?

I know that you’re concerned about the growth of — in companies having to spend money, in Washington with regulation, et cetera. So, I’d like to know your thoughts, specifically if you have some ambivalence because of future regulation with pharmaceutical companies?

WARREN BUFFETT: Well, if we could buy a group of leading pharmaceutical companies at a below-market multiple, I think we’d do it in a second. And we had the opportunity to do that in that 1993 period, as you mentioned. And we didn’t do it. So, we did blow it.

Because clearly, the pharmaceutical industry, as a whole, has done very well. And it has some of the threats that you enumerated, in terms of regulation and so on.

But, you know, every industry has some problems. And the pharmaceutical industry has enough going for it that the threats you named should not cause, in my view, should not cause the securities to sell at a depressed multiple, which they did.

Now, that’s no longer the circumstance. We don’t like — you know, we’re not going to buy them at present prices. But, we — at least I think they’re, you know, as a group, they’re good businesses.

I do think it’s very hard to pick out the winner. You know, so if I did buy them, I would buy them — I would buy a group of the leading companies. But I wouldn’t be buying them at these prices.

Charlie?

30. Munger defends “almost obscene amounts of money” for drug companies

CHARLIE MUNGER: Yeah. I would argue that the pharmaceutical industry has done more good for the customers than almost any other industry in America. It’s just fabulous what’s been invented in my lifetime, starting with all the antibiotics that have prevented so much death and so much family tragedy.

And I think the country has been very wise to have a system where the pharmaceutical companies can make almost obscene amounts of money. I think we’ve all been well-served by the large profits in the pharmaceutical industry.

31. Why Buffett buys small amounts of some stocks

WARREN BUFFETT: Zone 8.

AUDIENCE MEMBER: Good morning Mr. Buffett, Mr. Munger. My name is Gary Rastrum (PH) from right here in Omaha.

My question is, somewhere I thought I'd read that you buy at least one share of every company on the New York — or on the exchanges — to get the annual report. Is that true or is that a thing of the past? And if it is true, how do you keep track of all that information?

WARREN BUFFETT: Well, it's got an element of truth in it. Many years ago, I did buy one share of a great many companies. And I'd get these dividend checks for eight cents and 10 cents. (Laughter)

And I used to pay my bridge losses by endorsing these checks by the hundreds and giving them to the people who'd just won a dollar. And they — and then no one asked me to bridge games anymore. (Laughter)

So I have adopted a new program where I buy a hundred shares of a great many companies. Actually, I buy them in my foundation so I don't go crazy at income tax time. And I probably, just as a guess, would have a couple hundred companies. So, it isn't every company, by a long shot.

But there are at least several hundred companies where I want to be a registered shareholder, and — to make sure I get the mailings promptly. And I do keep those around. And I very — even after I lose interest, I very seldom sell one. So, I'll just keep buying more.

And I'll only buy a hundred shares in something I might want to keep track of, but I'll probably buy a hundred shares in all of their competitors and — so that I keep reading about those companies as well.

It does pay to have a flow of information come in over the desk.

32. Why some shareholders get the annual report sooner

And the answer to that question reminds me of a point which I'd like to bring up, briefly, here.

And that is that our shareholders — unfortunately there's no way around this — unless they go to the internet on the Saturday that we designate to read the annual report, and where it's up on our home site, berkshirehathaway.com, are going to receive their reports at significantly different times.

And the ones who have their shares in their own names are very likely to get those reports faster than the ones that have it — have their shares held in street names. And from our

standpoint, unfortunately, probably 90 percent of the shareholders we have, have their name — have their stock held in street names.

Now, what happens on that, is we print the reports up. We mail the ones to the shareholders who are of record, who have the stock in their own names. We send the balance to where their brokers or bankers tell us to send them.

About 90 percent go to one place in New Jersey, but that's out of our control. I mean, if Merrill Lynch or Charles Schwab or whomever, Fidelity, turns their list over to that firm, they are the ones that mail the reports. We truck those reports back to them.

We may, next year, try to figure out a way to get them printed closer. But it's out of our control when those reports go out. So our shareholders receive their reports on widely varying dates, which like I say, you know, I would rather not have that happen.

It means that in terms of sending in your request for tickets to this meeting, many people we had this year as late as maybe the 10th of April, still hadn't gotten their reports. And they wondered about their tickets.

So if it's convenient for you, you will — you know, it's better to have your stock in your own name. Now, that isn't convenient for many people. I understand that. But you will get our reports on a more reliable basis and a more prompt basis if you do it that way.

If you have your stock in street name, you know, I urge you to look on those dates we've laid out in the report for next year, to click onto our homepage. Because then you will have the information just as quickly as everybody — as your fellow shareholder does.

We want very much to have a level playing field. And we want everyone to have access to the information as close to simultaneously as possible and during a time when the market is not open.

We think that just makes sense. That's the way we'd do it if we were running a partnership.

But there is this problem with street name holdings of somewhat erratic distribution. And that's the reason why, when I want to keep track of, say, all of the companies in the pharmaceutical industry, I'll buy a hundred shares of each one and I'll stick them in the name of the foundation. And that mailing comes directly to me in Omaha.

33. "Deceptive accounting" at many companies

WARREN BUFFETT: So let's go onto zone 9.

AUDIENCE MEMBER: I'm Lola Wells (PH) from Florida.

You have been recently quoted in the newspapers as saying that some major corporations have used questionable practices to make their operations seem more favorable. Would you be willing to be more specific about these practices?

WARREN BUFFETT: Not until I'm on my deathbed. The — no, I have followed a policy of criticizing by practice and praising by name, and we will not —

You know, we do — Charlie and I both find certain practices very deplorable. And they aren't limited to a single, or a few, large corporations. But it would — we would probably be less effective in arguing for change if we went to a few specific examples.

A, they would not be that much different, probably, than hundreds of other, or at least dozens of other companies. And secondly, those who get critical of the world, find the world gets very critical of them, promptly.

And I think we do more good by, in a sense, hating the sin and loving the sinner. So, we will continue to point out the sin. But we will not name the sinners.

Charlie?

CHARLIE MUNGER: Warren, I think she wants you to name the practices.

WARREN BUFFETT: Oh, the practices?

CHARLIE MUNGER: Not the miscreants.

WARREN BUFFETT: Oh, well, the practices are some — (laughter) — the practices are some of the things of the things we've said.

They relate to accounting charges that are designed to throw, into a given period, a whole lot of things that should've been covered in subsequent periods in the earnings account. Or to smooth out or to inflate earnings in future accounts.

There's a lot of that being done. There's a lot that's been done. The SEC, under Arthur Levitt, who I admire enormously for his efforts on this, is making a concerted attempt to get corporate America to clean up its act on that.

But it'll only be because somebody hits them over the head. I mean, it has become totally fashionable to play games with the timing of expenses and revenues. And frankly, until the SEC got tougher, in my view, the auditors were not doing enough about it.

I think that, in terms of hiding compensation expense and not recording it, in the case of options and all of that, I think —

Companies now have the option of recording option costs in the income account. But you have not seen any great flood of people doing it.

And actually, the way they show it in the footnotes is quite deceptive, in my view, because they try to make assumptions that minimize what the income account impact would be.

But the cost to the shareholder is what counts. I mean, that is the compensation cost, as far as we're concerned. And that's been minimized.

The whole effort to engage in pooling rather than purchase accounting, I've seen a lot of — there's been a lot of deceptive accounting, in that respect. There's been deceptive accounting on purchase accounting adjustments. So those are the kind of things we're talking about.

Charlie?

CHARLIE MUNGER: Yeah, it's the big bath accounting, and the subsequent release back into earnings of taking an overly large bath, that create a lot of the abuse.

WARREN BUFFETT: We could name names. We won't. But I mean, we have seen, firsthand, managements who think they are doing — they say they're doing what everybody else does. The truth is, they are now because everybody else is doing it.

And it takes some outside force, in this case, probably the SEC — it should've been the auditors and — to clean up the act. Because once it becomes prevalent, the fellow who is — who says, "I'm going to do it fair and square," all of a sudden becomes at a disadvantage in capital markets.

He's penalized. And he says, "Why should I penalize my shareholders by doing something when, legally I can get away with doing something else?"

Charlie?

CHARLIE MUNGER: Nothing more.

34. Financial strength of our insurers is a big advantage

WARREN BUFFETT: Zone 10.

AUDIENCE MEMBER: Good morning, Mr. Buffett and Mr. Munger. My name is Robert McClure (PH), and my wife and I live in Singapore. My question concerns insurance.

In the 1994 annual report, you made the following remarks. And I quote, "A prudent insurer will want its protection against true mega-catastrophes — such as a $50 billion windstorm loss on Long Island or an earthquake of similar cost in California — to be absolutely certain.

“That same insurer knows that the disaster making it dependent on a large super-cat recovery is also the disaster that could cause many reinsurers to default. There’s not much sense in paying premiums for coverages that will evaporate precisely when they are needed.

“So the certainty that Berkshire will be both solvent and liquid after a catastrophe of unthinkable proportions is a major competitive advantage for us.” End quote. As I said, that was in the 1994 annual report. Please give us an update on those remarks.

Would you say that that competitive advantage you described is intact? Or would you go so far to say that it has been enhanced over the past five years with the merger of General Re and with what’s happened in the super-cat insurance industry?

WARREN BUFFETT: Yeah, I would say that that reputation — certainly the reputation is a stronger — oh, it’s stronger than ever.

I mean, Berkshire’s preeminent position as the reinsurer most certain to pay after any conceivable natural disaster — that reputation is stronger today than it’s ever been, and General Re’s reputation right along with it.

I would say the commercial advantage inherent in that reputation is very important. I can’t tell you exactly how it rates compared to 1994. But I can tell you that it’s important.

It tends to be more important when we’re reinsuring other very large entities, either primary insurers or large reinsurers, than it is with the smaller company. The smaller company probably focuses on that less.

But we are writing, probably this week, a very large cover for a very important reinsurer. I don’t think they’d want to buy that from almost anyone else. I mean, a couple of people, maybe, but —

They may — they could decide not to buy it from us because they might not feel they wanted to buy it. I think in this case, they will. But I don’t think they would have a list of 10 people from whom they’d buy it. They’re too smart for that. Because it’s a very high-level cover. And if that is called upon, there will be a number of people whose checks will not clear. And Berkshire’s check, undoubtedly, will clear.

So, it is a big — the reputation has never been better. The commercial advantage is significant. How much it translates into — you know, it — that can vary from year to year. But I think it’s a permanent advantage that Berkshire will have.

I mean, I think five years from now and 10 years from now and particularly after there has been a huge super-cat, it will be a great asset to Berkshire to be thought of as, essentially, as I’ve described it, as Fort Knox.

And we will pay under any circumstances. And there aren't many people in the insurance or reinsurance business that can truly say that. And when the very big cover comes along, we should have very few competitors.

Charlie?

CHARLIE MUNGER: Well, I think that's exactly right.

35. GEICO and Executive Jet boosted intrinsic value

WARREN BUFFETT: OK. Zone 11.

AUDIENCE MEMBER: Good morning.

WARREN BUFFETT: Morning.

AUDIENCE MEMBER: Richard Corry (PH) from England.

Could you please say what was the main factor which produced the very substantial gain in intrinsic value mentioned in your report?

I ask this because per share gains in portfolio and operating profits were modest. And you said that there was no (inaudible) gain from issuing shares for acquisitions.

WARREN BUFFETT: Well, we did increase the float per share very significantly last year, I mean, invested assets per share. And I would say that, in the — GEICO's business was worth far more at the end of the year than at the start of the year. And that was our largest subsidiary at the start of the year. And if anything, GEICO's competitive position continues to improve.

I would say that Executive Jet is a natural fit into Berkshire. And we paid a significant sum for it. But that it will be a very, very big company 10 or 15 years from now.

And perhaps — well, I'm almost sure it'll get there sooner as part of Berkshire, than it wouldn't gotten there otherwise. And its dominance may be even greater over the years as part of the Berkshire family than it would have independently. Although it would've done very well independently.

I mean, it had a terrific management. It had — it started early, and they had the most service-oriented company you could imagine. So, it would've done fine without us, but I think it will do even considerably better and get there faster with us.

So, I think there — I think in the aviation field, certainly in the primary insurance field, we had large gains in intrinsic value. And I think that, additionally, we had a significantly greater amount of invested asset per share to work with.

So, I feel good about what happened with intrinsic value last year. The problem is doing it year after year after year.

Charlie?

CHARLIE MUNGER: Just basically, we have a wonderful bunch of businesses. And we have a float that keeps increasing and a pretty good record of doing pretty well in marketable securities. None of that has gone away.

36. No need to "groom" potential Buffett successors

WARREN BUFFETT: Zone 12?

AUDIENCE MEMBER: Hello. My name is Elias Kanner (PH). And I am from New York City.

Mr. Buffett, thank you for this entire weekend. I met you at the ballgame on Saturday and at Gorat's yesterday. It was a great honor for me each time.

WARREN BUFFETT: Thank you.

AUDIENCE MEMBER: My question is this: Mr. Buffett, will you groom a younger man or woman as your heir apparent? If so, when might you do this?

When I say younger, I mean a person 15 to 20 years younger than yourself. Of course, I'm not complaining. You're the best in the world.

WARREN BUFFETT: Well, 15 or 20 years younger is a lot easier to do than it used to be. (Laughter)

A large percentage of the world's population is now eligible.

The — we have, today, the people to take over Berkshire. There's no problem about that at all. They have been named in letters that the directors have. And they are in place.

Exactly who will be the two people will of course — or it could be one person — will depend on when Charlie and I are out of the picture.

I mean, if we'd written the letter 10 years ago, it might have been different than today. It might be different 15 years from now.

So, our death or incapacity, the timing of it, will determine exactly who will be the current person in that letter. But we have those people in place. They don't need to be groomed from this point forward.

They exist. They're ready. They'd be ready to run Berkshire tomorrow morning.

And I think you'd be quite pleased with the job they did. And that's why I don't worry about having — I've got 99 3/4 percent of my net worth in Berkshire. And, you know, I don't want any of it sold. If I knew I was going to die next week, I would not want it sold in the coming week. And I don't want it sold after I die.

I feel comfortable with the businesses and the managers and the successor top management that we have at Berkshire. But I just don't want them to take over too early. (Laughter)

Charlie?

CHARLIE MUNGER: Yeah. I actually think that the prospects for continuity of corporate culture, to the extent we have one at Berkshire, is higher than prospects for continuity of corporate culture at most other large public companies.

I don't see Berkshire changing its way of operating, even if Warren were to expire tonight. And I think that the capital, the fresh cash, would be allocated less well. But as I've said at past shareholder meetings, well, that's too damn bad. (Laughter)

WARREN BUFFETT: That's why we don't have a public relations department.

CHARLIE MUNGER: By the way — (Laughter)

I don't think the job would be ill done, I just don't think it would be done quite as well as Warren does it.

37. One way to add Berkshire to S&P 500 without market disruption

WARREN BUFFETT: OK, Zone 13. (Laughter and applause)

AUDIENCE MEMBER: Good morning, Mr. Buffett and Mr. Munger. I'm Cary Flecker (PH) from Wellington, Florida. Thank you for stopping by the convention center before, Mr. Buffett. It's nice to see you again.

WARREN BUFFETT: My pleasure.

AUDIENCE MEMBER: Recently, much has been made of the fact that Berkshire is the largest company to not be included in the S&P 500.

Do you gentleman have an opinion as — or what is your opinion — as to whether Berkshire should be included and why? Thank you.

WARREN BUFFETT: Yeah, that's a question we've gotten asked quite often since the General Re deal was announced.

Berkshire, if you talk to the S&P people, I think they would say — I think they've even said it publicly, or at least a representative has — that we certainly qualify in every way that — except from what they might term the liquidity standpoint.

It's probable that maybe it's 6 percent, maybe 7 percent of the investment funds, the equity funds in the United States are indexed. And the number, or the amount, is going up somewhat as we go along. I saw an article to the contrary on that. But I think they had it wrong. The amount of index money is, in my view, rising month by month.

So, if you were to put Berkshire into the index tomorrow, in effect, you'd have a market order to buy 6 to 7 percent of the company, or roughly 100,000 shares a day.

That would not be good, you know, if the stock would obviously spike up dramatically as some stocks already have when they've been added. I mean, there've been some — I've looked at the list of all the companies that have been added and some have moved up substantially.

And we would have even — there'd be even more impact at Berkshire than the typical stock because our stock is fairly tightly held. Most people don't want to sell it.

There are two solutions to that. Three solutions, one of them being not to put us in the index.

But we are the most — I think, probably the most significant in the United States that isn't in the index, in terms of market value and a lot of other factors.

So, if you want to put Berkshire or a company like it in the index and not have some crazy market aberration, you could have one of two things happen. And this would be true, I think, more and more of other companies, as well, as they add them to the index and there's more money against index.

One, you could have the company agree that at the time it was added to the index that simultaneously, the company, itself, would sell an amount of stock that was about equal to the index buying that would be generated.

In other words, if we were to offer 100,000 shares, roughly, of A stock at the same as being added to the index, that would neutralize the index buying.

The only problem with that is we don't want to sell 100,000 shares or 10,000 shares or 100 shares of A stock at Berkshire unless we had some very good use for the money. It isn't going to happen. (Applause)

So we are not going to do something like that just because we want to be in an index.

The other possibility, and I believe this was used in Australia, when a very large mutual life company converted to stock. I think it was the largest company in Australia — AMP. And that would be to phase in the weighting of a stock like Berkshire.

And I think later on, I think they may have to do it for all stocks. But phase in the weighting, say, over a 12-month period. So that I was 1/12th weighted the first month, 1/12th weighted the second month and so on. That means, in effect, there would have to be a market order once a month for a half of 1 percent, roughly, of Berkshire.

Well, I don't think that would be very particularly disruptive. And I think there'd be a — once you knew that phase in was coming, there would be some anticipation so that you would not get big spikes in the stock and dips, subsequently.

I think that would be a logical way, but Standard and Poor's, to date, has not had to do that sort of thing. And they may have various reasons, and various good reasons for not wanting to do that.

Now, if indexation continues to grow as it has and you get a situation where 15 percent of the money becomes indexed, you know, I think they're going to have to come up with some approach similar to one of these two that I've named, or it will simply get too disruptive to the market.

It would be interesting. I know America Online has behaved very well since it was introduced to the S&P some time back.

But I would think that it might get to be the case that, if you simply shorted the companies that got added to the S&P after the S&P effect had been felt, that that might — you might find that those stocks would tend to underperform, as that one artificial buy order, in effect, its impact wore off.

So, I think something is going to happen. I think indexation has far exceeded what anybody anticipated, including S&P or including me or Charlie. And I think there's been a good reason for it to develop.

I think as it continues to develop it will have more and more impact on the market in ways that, probably, S&P is not that excited about, nor would the index funds be excited about.

So, there's likely to come a solution to the liquidity problem that might be particularly acute at Berkshire, but that prevails throughout the market, that occurs when stocks are added.

And I would think if they adopt some solution, that certainly, if they adopt a solution of gradual weighting, that Berkshire would be a very logical candidate for the S&P.

It really makes no difference to us what is done along that line. We would not unhappy being in the S&P, as long as it didn't have some huge market impact at the moment of putting it in.

On the other hand, you know, we love the owners we've got. And I don't see how we could improve on this group much by having the index funds.

So, it — we'll see what happens on it. It is not a big deal to us. And we want to be sure if we're ever added, it isn't too big a deal to the market.

Because I would not like — you know, the people who sold that day, might like it — but I would not like the stock to jump up, you know, $20,000 a share on one day because there's some market order for 100,000 shares, and then gradually work its way back down to where it should've been in the first place.

No one benefits from that except the people who sell in the very short-term. And that is not the group that I primarily worry about.

Charlie?

CHARLIE MUNGER: My guess is that Berkshire will eventually be in the S&P index. Somebody will figure out how to do that, sensibly. Maybe not soon. But someday.

38. What we'd need to make an international acquisition

WARREN BUFFETT: OK. Zone 1.

AUDIENCE MEMBER: My name is James Claus (PH), and I'm here from New York City.

Mr. Buffett and Mr. Munger, today we've already heard you talk about a few countries outside of the U.S., here.

And my question is, if you're directly investing in equities outside the United States, what would be your requirements for the market as a whole?

And by this, I mean things like the transparency of the accounting system, the breadth and liquidity in the market, the rights of shareholders, the stability of the currency. And it'd be nice if you'd mention a few of these countries.

Kind of just a little addendum, there, is — for the companies in these countries, how relevant do you believe the reconciliation to U.S. GAAP contained in Form 20F really is?

WARREN BUFFETT: Well, the answer is most of those points you mentioned would be of interest to us.

We'd have to rule out anything where the markets aren't big enough. I mean, we are looking to put hundreds of millions of dollars into any single investment, at a minimum. Certainly, we think in terms of 500 million as being a minimum. We make exceptions to that. And that's going to rule out a great many companies.

Transparency of accounting and accounting rules: we care about that but we can make adjustments mentally. In some respects, we may think, in certain countries, accounting is better than here.

And so, as long as we understand the accounting system, we will be looking toward the same kind of a discount model in our mind of how much cash is this business going to generate over years and how much is going to have to be put into it.

And it's the same sort of calculation that goes into our thinking here. And here, we don't follow strictly GAAP accounting in our thinking. So we don't — the accounting differences would not bother us, as long as we understood those accounting differences.

The nuances of taxes, the corporate governance that you mentioned could make a difference. If we thought corporate governance was far inferior to here, we'd have to make an adjustment for that fact.

But I would say that in most of the major countries, the countries that have stock markets that are big enough so we could take a real position, it's a possibility that we would invest in any of them.

We don't — we wouldn't rule out, you know, Japan, Germany, France, England, the major markets.

Now, it's important to recognize that in all the world's stock markets, something like 53 percent of the value is in the U.S. market. I mean, here we have 4 1/2 percent of the world's population. But 53 percent of the value of all publicly held companies in the world is represented in — with companies in the U.S. market. So, we are a big part of the pie.

But we're very willing to look at almost all of the rest of the pie as long as we're talking about markets that are big enough to let us put real money into them.

Charlie?

CHARLIE MUNGER: Well, so far, we haven't done much, as Warren has said. But we don't have a rule against it. What more can we say? (Laughter)

39. Bullish on Coca-Cola despite high P/E and dollar strength

WARREN BUFFETT: We can say, "Zone 2." (Laughter)

AUDIENCE MEMBER: Good morning, Mr. Buffett. My name is Jean-Philippe Cramers (PH), and I'm coming from London, England. I have a question regarding Coca-Cola.

The first part is, are you worried that the earnings of Coca-Cola might continue to be affected by the weakness in the emerging markets and the strength of the dollar over the next few years?

And the second part is on the P/E ratio of Coca-Cola at 35 times earnings. Are you worried about the potential rise in interest rates? And is it linked to your views on inflation that you are not worried about the rise in interest rate? Thank you.

WARREN BUFFETT: Well, in relation to the strength of the dollar, which means that profits in foreign currencies don't translate into as many dollars, we — I — we don't have any big feeling on that.

I mean, if I — if we had strong feelings about the dollar's behavior, vis-à-vis the yen, or the euro, or the pound, or whatever it might be — you know, we could give vent to those views by actually buying or selling large amounts of foreign exchange.

We don't know what — which way the dollar's going to go. So, I have no — I have nothing in my mind, in regard to any decision on buying or selling Coke, that would relate to any prediction in my mind about the course of the dollar.

The earnings of Coke have been affected by the strength of the dollar in the last few years, particularly the strength against the yen when, you know, when it went from 80-odd to 140-odd. That was a huge hit, in terms of what the — in terms of the yen translation into dollars from those profits. And the strength of the dollar generally would hurt.

But looking forward, I don't have any prediction on that.

It's in Coke's interest to have countries around the world prosperous. I mean, they will benefit from increased prosperity, increased standards of living, throughout the world. I think we'll see that over any 10 or 20-year period. I think people's preference for Coke will do nothing but grow Coca-Cola products.

So, what I am concerned about is share of market and then, what I call share of mind. In other words, what do people think about Coca-Cola now, compared to 10 years ago or 20 years ago? What are they going to think about it 10 years from now?

Coca-Cola has a marvelous share of mind around the world. Everybody in the world, almost, has something in their mind about Coca-Cola products and overwhelmingly, it's favorable.

You can't — you know, try to think of three other companies like it. I can't do it, in terms of that ubiquity of good feeling, essentially, about the product.

We measure it by unit cases sold and by shares outstanding. And we want a lot more unit cases sold. And we like the idea of fewer shares outstanding over time.

I'll give you — I'll be giving that same answer 10, or 15, or 20 years from now. And I think they'll be a lot more unit cases sold then.

It is true that the case growth slowed starting in the second half of last year and continuing through the first quarter of this year. But that's happened from time to time in the past.

In my view, you know, that is not — it's not an important item. It may be an important item in what the stock does, you know, in a six-month period or a one-year period. But we'll be around 10 years from now, and Coca-Cola will be around 10 years from now.

And right now, we own eight-point-one or two percent of Coca-Cola. And we'll probably own a larger percentage 10 years from now, because they'll have probably repurchased some stock.

The P/E ratio of Coke, like virtually every other leading company in the world strikes us as, you know, they all strike us as being quite full.

That doesn't mean they're going to go down. But it does mean that our enthusiasm for buying more of these wonderful companies is less than it was when the P/E ratios were substantially less.

Ideally, those are the kind of companies we want to buy more of over time. We understand their businesses.

And my guess is that there's a reasonable chance, at least, that sometime in the next 10 years, we buy more shares of either Coke or Gillette or American Express or some of those other wonderful companies we own.

We do not like the P/E ratios, generally. But, again, I stress that does not mean they're going down. It just means that we got spoiled in terms of how much we got for our money in the past. And we hope that we get spoiled again.

Charlie?

CHARLIE MUNGER: Yeah, I — if what matters to you is what you think Coke is going to look like 10 years out or even further out, you don't really pay much attention to short-term economic developments in this country or that, or currency rates, or any other such things.

They don't really help you in making the 10 or 15-year projection. And that's the one we're making. So, we have tuned out all this noise, as it's called and what —

WARREN BUFFETT: Sometimes.

CHARLIE MUNGER: — communication networks — tune out the noise. And if you look at the big picture, we think Coke is fine.

WARREN BUFFETT: It's hard to think of a better business in the world, among big businesses. You know, there's obviously companies that are starting from much smaller bases that could grow faster. But it's hard to think of a much more solid business.

40. Nothing to say about Berkshire's investment in silver

WARREN BUFFETT: Zone 3?

AUDIENCE MEMBER: — Newport Beach, California, Bruce Lindsay. And formerly from Omaha, Nebraska. And I have a question.

Some time ago I read that you were buying silver. I never knew the reason why you were buying silver.

WARREN BUFFETT: Well, we covered silver purchase in the 1997 annual report for a special reason. A, it was part of a group of three unconventional investments we made. And one of those investments was of sufficient size so we felt people ought to know about it, specifically.

And then we felt our shareholders ought to know that we sometimes do things that they might not have guessed that we would do, from reading past annual reports. So we named the three unconventional investments.

But in this year's report, we have stated we will not be naming those investments unless one of two things happened: one is that they become of a size that you should know about them specifically, in order to evaluate the kind of thing we do in Berkshire and the commitment of resources that has been made, or two, if regulatory authorities either — obviously, if they require us to report it, we'll report it immediately.

Or in the case of silver, a year-plus ago, an important regulatory authority indicated they would've — that they'd prefer if we report it. We weren't required to do so. But — and our desire is to cooperate on that, anyway. So, we did report it.

But we stated in this year's report that absent those factors, we will not be giving details on unconventional investments any more than we give any more details on our regular equity holdings, than we're, more or less, required to do.

We did say that we had changed certain of the unconventional investments that were described in the previous year's report. And we stated that we'd entered into several new ones.

So, we are in some things that most of you or maybe all of you don't know about. But they aren't of sufficient size so that they're going to, in any material way at all, affect your investment.

Charlie?

CHARLIE MUNGER: Nothing to add.

41. Year 2000 computer problem won't be a "big deal"

WARREN BUFFETT: Zone 4.

AUDIENCE MEMBER: Morning, Mr. Buffett. Wayne Lang (PH) from Toronto, Canada.

Last year, when you were asked about the Year 2000 computer issue, you expressed some concerns about the cost overruns and the federal government readiness.

Our two countries are in much better shape this year. But could you update us on your current thinking and what concerns you may have about the impact of the lesser readiness, internationally, on our company's revenues, supply chain, or on the stock market?

WARREN BUFFETT: Yeah, last year I think I also told you I didn't really consider myself an expert on this. And what I tell you is just what I pick up from being on audit committees or talking to people who are a lot smarter than I am in this sort of area.

But that doesn't mean they're right on it. Because they weren't talking about it 15 years ago, when they should have been talking about it.

So I — my general feeling — and all secondhand — my general feeling is that the part of the world that we have to worry about is in pretty good shape.

It's cost a lot of money in various places. It's cost us a fair amount of money. But it's — some companies, it's cost a terrific amount of money.

But I do not think it's going to be a big deal. And, I — you know, I could be wrong. And I'm less worried about it being a big deal today than I was a year ago.

You know, and Charlie, do you have anything to add?

CHARLIE MUNGER: No.

WARREN BUFFETT: Does that mean you think it's going to be less of a big deal than you thought a year ago?

CHARLIE MUNGER: No, it means I have nothing to add.

WARREN BUFFETT: OK. (Laughter)

That's probably what I should have said in the first place.

42. Japan's economic slump doesn't affect Berkshire

WARREN BUFFETT: Zone 5. (Laughter)

AUDIENCE MEMBER: Good morning. My name is Bob Brewer (PH). And I'm from down the road in Lincoln, Nebraska.

I just wanted to ask you how you think the continuing economic turmoil in Japan is likely to affect the global economy and the U.S. stock market over the next five to 10 years?

WARREN BUFFETT: Well, Charlie and I are no good on those macro questions.

But I would say this: I mean, the Japan problem has been around, now — in financial markets and banking systems — has been around for some time now. So, I see no reason why it should have more impact on the rest of world now than it has had in the last few years. And I would say it's had certainly very little effect on the U.S. in the last few years.

It's not — it's no factor in our thinking at all, in terms of what we would buy or sell tomorrow morning. I mean, if we got offered a good business tomorrow — unless it was directly involved and its primary business was in Japan — but if it was a business in this country, that's not something that we would be thinking about. We would be thinking about the specifics of that business.

We don't really get too concerned about the things that come and go. I mean, in the end, if we're right about a business over a 10 or 20-year period — take See's Candy.

We bought it in 1972. Look what happened in 1973 and 4, you know, and all the oil shocks and what this country was going through and inflation, all that sort of thing.

For us to — and let's say in 1972 somebody laid out a roadmap from 1972 to 1982, with the prime rate going to 21 1/2 percent, long-term rates going to 15 percent. And all of the things happening, the Dow going to 570 or what — or 560.

That wasn't the important thing. The important thing was that this peanut brittle tastes like it does, which is terrific. (Laughter)

And that over time, we could get a little more money for it. So, you know. See's made $4 million, pretax, in 1972, when we bought it. It made 62 million last year.

It doesn't — we don't want to be thinking about the wrong things when we're buying businesses. And that applies to marketable securities, just as much as it does as when we're buying 100 percent of the business.

If we're right about the business, the macro factors aren't going to make any difference, you know. And if we're wrong about the business, macro factors are not going to bail us out.

Charlie?

43. Munger's lesson on not allowing accounting "slop"

CHARLIE MUNGER: Yeah, what I think is interesting in Japan is interesting to one, as a citizen.

Here's a major industrial country. And we understand all about Keynesian economics and everything else. And when it starts sliding down into a big recession, it just keeps going and going, and floundering, and staying down. And year follows year, and you take the interest rates down to practically zero, and you run a big budget deficit. The economy still stays down.

I think this has been very interesting to the economists of the world. I don't think any of them would've predicted that as modern a country as Japan could contract for as long as it did.

And I think the cause is related to the extremeness of its booms in both land prices and security prices, and the corruption in its accounting practices and in its regulation of financial system, including banks.

I think it's an interesting lesson for the world, of how important it is not to let a lot of slop get into the accounting and regulatory systems. And how a lot of folly in markets doesn't help, either.

WARREN BUFFETT: Sort of fascinating to, you know — people keep saying, "Why doesn't Japan stimulate?" Well, they got short-term rates down to zero. And long-term rates at 2 percent. Well, that should stimulate me. But — (laughter) — it doesn't —

As Charlie says, it sort of defied, a little bit, some of the classical Keynesian theory on that. But in the '30s, we had the same problem in this country. We drove interest rates way down towards the latter half of the '30s, and —

CHARLIE MUNGER: And I would argue that probably the extreme prosperity in America is related to this so-called wealth effect, with stock markets going up and up. And I think people thought that was a smaller factor than maybe it is.

44. Analyst coverage won't affect Berkshire's stock

WARREN BUFFETT: Zone 6.

AUDIENCE MEMBER: Good morning, Mr. Buffett and Mr. Munger. My name is Jeff Lilly (PH) from Denver, Colorado.

My question is as follows: over the last couple of years, I've read both of you quoted as not following the stock price on a day-to-day basis, not being terribly concerned about whether Berkshire is up or down.

You now have analyst coverage. Perhaps you requested it, or perhaps you acquiesced to it.

But my question is whether this reflects any change in your attention paid to the stock price or your philosophy about investor relations, and whether you think the analyst coverage is going to have any impact on the stock price going forward?

WARREN BUFFETT: Yeah, no. It reflects no change in our attitude toward stock price. I mean, we are concerned about building the intrinsic value per share of Berkshire at the highest rate we can, consistent with a couple of other principles that we've set forth.

And we hope very much that the stock price stays in a zone that is not too wide around intrinsic value — that there's is going to be some zone of some sort, because intrinsic value itself is not precisely calculable. And in addition, you wouldn't expect it to track it penny for penny.

But we don't want it to go crazy in either direction in relation to intrinsic value.

When we made the deal with General Re, that attracted more analyst attention and institutional investor attention because General Re's shareholder base was overwhelmingly institutional.

So, institutions had to decide whether they were going to continue with their investment or clean it out. And we knew we would end up with more institutional ownership, subsequently.

Alice Schroeder asked me, prior to the merger meeting, she said there were a group of institutions that were coming to the meeting, which I liked. I mean, the fact that they were serious enough about their investment to come and see what Berkshire was all about.

And a few of them even had a requirement, I think, from their own boards that they, at least, have sat down with management. So, we spent — or I spent an hour or so with a group that she had put together and they came to Omaha.

But that's the last contact I've had with any institutional investor. And we will have no special meetings with institutional investors or anything. I mean, they are absolutely welcome to attend this meeting to get all of the information that's dispensed.

I think it's very useful, frankly, to have an analyst or two that is well-versed in Berkshire and that thinks straight and does their homework. And that's a plus, because it means we don't have to do it.

And in effect, that if institutions want to talk to somebody about it, they don't call me. Because they're not going to have much luck calling me. And they can call Alice or some other analyst that wants to do it.

And that's perfect. We have a non-paid — it is not investor relations because that's thought of somebody as sort of pumping your stock — but at least we have a information office now — a non-paid information office.

And you know, that goes along the grain of my nature. (Laughter)

And we — people say, "Do you want individual owners? You want institutional owners?" What we want are informed owners who are in sync with our objectives, our measurements, our time horizons, all of that sort of thing.

I mean, we want people that are going to be comfortable owning Berkshire, and we don't want people who are owning it for reasons different — in a way different — that are different from our reasons for owning.

We don't want people that are concerned about quarterly earnings. We don't want people who are concerned about stock splits. We don't, you know — we don't want people that need to be pumped up about the stock, periodically.

It's just not of interest to us. Because it just means we have to keep living that way in the future. And it's not the way we want to live now, it's not the way we want to live in the future.

What we really want are a bunch of people, like we have in this audience, who sit down and read, and think and understand that they're making an investment. It's not just a little ticker symbol. They're buying part of a business. They know what the business is all about.

They know how we think, they know how we measure ourselves. They're comfortable with that.

And they can come in individual or institutional form. And when we get them, we like to keep them.

So there's no change in our attitude about that. There is a change in coverage, in that we — there is some limited amount of coverage in Wall Street, which I guess for a company with a 110 or 20 billion of market value, there should be.

45. Executive Jet's advantage

WARREN BUFFETT: We'll have one more question then we'll break for lunch. We'll go to zone 7. And after this question, we'll break. We'll come back in about 45 minutes or so, and those of you — as long as we see that everybody's gotten served with food in that time — and we'll — any of those who are offsite or over at the Holiday, I think, there are buses to bring you over, you can drive over, and there'll be plenty of room here. You can also go out and tour the Boeing business jet. We'll sell you as little as 50 hours a year, I believe, on it. So, take your wallets at lunch time. Yep?

AUDIENCE MEMBER: Good morning. My name's Marc Rabinov from Melbourne, Australia.

I was wondering if you could help us out with the flight operations, which are now a large part of Berkshire. I think we're still putting a lot of capital into them.

I was wondering, you've pooled both of them together in the annual report. And I was hoping, perhaps, you could help us out with what return on equity you're expecting for each of those divisions.

WARREN BUFFETT: Yeah, the more capital intensive is the flight safety operation. Because every simulator costs real money. And we will add a number of simulators each year.

So, flight safety — you can look at their figures before we acquired them, and it's reasonable to extrapolate those numbers out on a larger basis — base as we go along.

But flight safety's return on equity is not going to move up or down by a dramatic amount. I mean, our simulator training prices are related to the cost of the simulator. And so, there's not going to be way higher returns on equity, nor should there be way lower returns on equity.

There is a growth on the equity employed in the business, because it is a growing business and we're training more and more pilots every year. But that'll be a fairly steady thing.

The Executive Jet business is in an earlier part of its development, although it's the leader in its field, by far. But we're doing substantial investment spending in a place like Europe. And we'll be doing that on an accelerated pace, if anything.

In the end, though, our customers end up owning the plane. So, we have an investment in a core fleet of planes, which supplements the customer's planes.

But by its nature, it's not a capital-intensive business. We are moving around a lot of capital every day. We'll have 140 or so customer planes now and an aggregate, you know, just to pick a figure, that those planes are certainly worth a billion and a half or more.

And we've got 7 billion of planes on order, or some number like that. But we will sell those planes to our customers. So it could be, down the line, that it will be a business with a very good return on capital.

We'll still have an investment in the core fleet and we'll have some facilities — hanger facilities and that sort of thing. But our customers will have the big capital investment.

I should point out, they'll have a whole lot less capital investment if they own their entire plane themselves. So, they will be getting a bargain as well.

Let's take off for lunch. And I'll see you back here in about 45 minutes, those of you who wish to rejoin us. Thank you. (Applause)

Afternoon Session - 1999 Meeting

1. General Re benefits won't be felt for several years

WARREN BUFFETT: OK, we're going to be ready to go in just a minute if everybody gets their seats.

VOICE: Warren? Just want to double check something. We're just going to stick in —

WARREN BUFFETT: One through eight.

VOICE: (Inaudible)

WARREN BUFFETT: One through eight.

VOICE: (inaudible)

WARREN BUFFETT: Yeah.

We've got 6 or 7000, anyway, sticking around, I think.

OK. If anyone who has questions wants to go to the microphone, we're going to start here in just a minute. And we will start — there will only be eight zones from this point forward, because we have everyone in attendance in the main hall. So we will rotate around eight zones. We'll stay until about 3:30. And we'll start in zone 1.

AUDIENCE MEMBER: My name is Charlie Sink (PH). I'm from Lexington, North Carolina, as you can tell by the accent.

My question relates to the General Re purchase. I wondered — I've read your letters through the years and I've been trying to learn a little bit investing in insurance companies.

Did you buy General Re, mostly because — I know mostly because of the float — because you think you can grow the float? I know it's not growing significantly now. Or did you buy it because you felt like you could do better with the investments?

I've read, also, that companies who seem to be trying to follow the Berkshire model are trying to get a certain amount of investments to equity — is that something that you focus on? That's my question.

WARREN BUFFETT: Yeah. The first two parts are correct. We certainly — we don't think the float will grow rapidly in the near-term future at all. The float changed, it actually declined very slightly in the first quarter.

And, at a level of 6 billion or so of premiums, the paid losses are likely to run at a rate that would cause the float to remain more or less steady. So it will take a period when premiums grow, for the float to grow.

And the premiums would have to grow fairly substantially to have any significant impact on the float. And like I say, that will not happen in the short term. We expect the float to grow over the longer term.

We expect that General Re will probably grow considerably faster in international markets than the domestic market.

We think that their reputation, which was a good as could be found, from an operational standpoint, from a technical standpoint, a managerial standpoint, will be further enhanced by Berkshire's capital strength.

So we think their reputation is likely to grow over the years and we think the premium volume will follow, but not in any major way at all for a few years, at least.

And then we addressed earlier in the meeting, we think there is the opportunity to do better with that float from time to time in the future.

But right now that is not a plus that it's in our hands, and it may not be a plus a year from now. We think at some point it will be a plus. We also pointed out in — that there are some — there could be some tax advantages to be included as part of Berkshire as well. So there's some things going for it.

But none of them will have — they will not have an impact in 1999, and they may well not have an impact in 2000.

We obviously think Berkshire, 10 years from now, will be worth more on a per share basis with General Re included than if it were — than if we had not made the deal.

We don't necessarily think that's the case on a one-year or two-year basis. But it is our judgment on a 10-year basis.

Charlie? (Laughter)

CHARLIE MUNGER: I would say that if we, in the future, do as — one-third as well with the new float that came to us with General Re as we've done on average in the past, it will work wonderfully.

If you take our past use of float in the history of this company, it would be an interesting study if anybody ever stretched it out.

2. Technological change is bad for investments

WARREN BUFFETT: Zone 2.

AUDIENCE MEMBER: Good afternoon. My name is Greg Kaza (PH) from Oakland County, Michigan. I'd like to thank both of you gentleman for your hospitality this weekend.

My question deals with price deflation. Could you please explain how technological advances and productivity increases are affecting our non-fixed income holdings, especially insurance?

WARREN BUFFETT: Well I think that, to the extent your question implies — the question, how has technology affected the inflation rate, the advances in technology? I've heard Alan Greenspan make a lot of interesting comments on that.

I think it baffles him to some extent, but he also recognizes that there's some important, very hard-to-measure factor that has caused inflation not to behave in the way that most people expected, with this drop of employment, general prosperity, et cetera.

And I think he attributes it, in some part — but again, immeasurable — to what has been happening in the information technology world.

Obviously, low inflation is good for fixed-income investments, but that's been reflected to a significant degree in a long-term rate that's at about 5 1/2 percent now.

You know, it is — it does look, at the moment, like an almost perfect world, in terms of the macroeconomic factors. And that probably is a reason why people are enthused about stocks.

And it's a reason — and it's a good reason, in terms of price inflation — it's a good reason why bonds have behaved well over the last, really, since 1982.

I don't know the answers to what it means for the future. I have to believe that it's very good for this country to have the lead in information technology that it does on the rest of the world. I mean, we —

It seems to me, as a non-expert, that we are so far ahead of the rest of the world, in terms of the leading — having the leading companies and the money flowing into it, the brainpower flowing into it, that it's hard to think of it — who's in second place.

And I think that's helped this country in some very significant way. But I don't know how to measure it.

Charlie?

CHARLIE MUNGER: Well I would say that Berkshire's businesses, on average, are less likely to be obsoleted by new technology than businesses generally. New steel-toed work shoes? I do not anticipate a significant change in the technology. (Laughter)

And I think we have more of the stuff that's sort of basic and hard to obsolete than many other corporations do.

WARREN BUFFETT: Yeah. As we mentioned in the report, we think all of that activity is very beneficial from a societal standpoint. Our own emphasis is on trying to find businesses that are predicable in a general way, as to where they'll be in 10 or 15 or 20 years.

And that means we're looking for businesses that, in general, are not going to be susceptible to very much change.

We view change as more of a threat into the investment process than an opportunity. That's quite contrary to the way most people are looking at equities now.

But we do not get enthused about — with a few exceptions — we do not get enthused about change as a way to make a lot of money.

We try to look at — we're looking for the absence of change to protect ways that are already making a lot of money and allow them to make even more in the future.

So we look at change as a threat. And whenever we look at a business and we see lots of change coming, 9 times out of 10, we're going to pass on that.

And when we see something we think is very likely to look the same 10 years from now, or 20 years from now, as it does now, we feel much more confident about predicting it.

I mean, Coca-Cola is still selling a product that is very, very similar to one that was sold 110-plus years ago. And the fundamentals of distribution and talking to the consumer, and all of that sort of thing, really haven't changed at all.

Your analysis of Coca-Cola 50 years ago can pretty well serve as an analysis now. We're more comfortable in those kind of business.

It means we miss some — a lot — of very big winners, but we would not have picked those out anyway.

It does mean also that we have very few big losers and that's quite helpful over time.

CHARLIE MUNGER: Yeah, the peanut brittle has very little technological change, too. (Laughter)

WARREN BUFFETT: They better not change it. (Laughs) We like it just the way it is.

3. Stocks can't keep growing at the same rate

WARREN BUFFETT: Zone 3.

AUDIENCE MEMBER: My name is Esther Wilson. I live in South Sioux City, Nebraska.

My husband and I will have some new money in the early 80s of our lifehood. We have a daughter, 50 years old, who will inherent anything we have.

My question is — I also have a four percent interest on a mutual fund that is non-taxable. Are there any better ways to invest our money? (Laughter)

WARREN BUFFETT: Well, those are tough questions. I mean, I — you know, I run into friends of mine all the time where they come into a lump sum at a given time.

And, you know, Charlie and I do not have great answers about investing sums of money for people who are not really active in the process.

I mean, if, as we said earlier, if we were working with small sums now, we would start looking at a whole bunch of very small situations and some things that we might know how to do on a small scale.

But for the average investor who wants to own equities over a 20 or 30-year period, we think regular investment in some kind of very low-cost pool of money, which might well be an index fund, probably makes as much sense as anything. But it's important to keep the cost down.

You know, I have close to a hundred percent of my net worth in Berkshire. I'm comfortable with it because I like the businesses we own. And — but, you know, I didn't buy it at this price either.

So I don't like to go — I never recommend anybody buy or sell it. And, Charlie, do you recommend anything?

CHARLIE MUNGER: I think it's — if there's anybody in the room who thinks it would be very easy to come up with a one-liner for a great no-brainer investment tomorrow with a great slug of new money, I wish they'd come up and tell me what it is. (Laughter)

We don't have any solution to that one. It's harder for us now than it has been at other times.

WARREN BUFFETT: Yeah, there's been a couple of times — in 1974 there was something in Forbes — in '69, the reverse of that situation. And then, I think, I wrote an article for Forbes — I can't remember exactly when it was — about how equities almost had to be more attractive than bonds at that time. And bonds weren't that unattractive.

I mean, every now and then you can say you're getting a great deal for your money in equities. Or sometimes you can say you're getting a great deal for your money in fixed-income investments.

You can't say that now, so what do you do? You know? In terms of new money, we find ourselves sitting and waiting for something and we continue to look.

But we are forced to look at bigger ideas. So if we were working with smaller funds we'd be much more likely to find something than we are in our present situation.

As Charlie says, we really don't have any great one-line advice on it. I wish we did for you. Zone 4 —

CHARLIE MUNGER: I —

WARREN BUFFETT: Go ahead.

CHARLIE MUNGER: The real long-term rate of return from saving money and investing it has to go down, from recent experience in America, particularly equity-related recent experience.

The wealth of the world can't increase at the kind of rates that people are used to in the American equity markets. And the American equity markets can't hugely outperform the growth of the wealth of the world forever.

WARREN BUFFETT: Well, you —

CHARLIE MUNGER: We ought to have reduced expectations regarding the future, generally.

WARREN BUFFETT: Yeah, dramatically reduce them, because, you know — we mentioned earlier, 53 percent of the world stock market value is in the U.S.

Well, if U.S. GDP grows at four percent, five percent a year, with one or two percent inflation, which would be a pretty — would be a very good result — I think it's very unlikely that corporate profits are going to grow at a greater rate than that.

Corporate profits, as a percent of GDP, are on the high side already and you can't constantly have corporate profits grow at a faster rate than GDP. Obviously, in the end, they'd be greater than GDP.

And that's like somebody said that New York has more lawyers than people. I mean — (laughter) — there's certain — you run into certain conflicts with terminology as you go along if you say profits can get bigger than GDP.

So, if you really have a situation where the best you can hope for in corporate profit growth over the years is four or five percent, how can it be reasonable to think that equities, which are a capitalization of that corporate — of corporate profits — can grow at 15 percent a year?

I mean, it is nonsense, frankly. And people are not going to average 15 percent or anything like it in equities. And I would almost defy them to show me, mathematically, how it can be done in aggregate.

I looked the other day at the Fortune 500. They earned $334 billion on — and had a market cap of 9.9 trillion at the end of the year, which would probably be at least 10 1/2 trillion now.

Well, the only money investors are going to make, in the long run, are what the businesses make. I mean, there is nothing added. The government doesn't throw in anything. You know, nobody's adding to the pot. People are taking out from the pot, in terms of frictional cost, investment management fees, brokerage commissions and all of that.

But the 334 million [billion] is all that — is all the investment earns. I mean, if you want to farm, the — what the farm produces is all you're going to get from the farm.

If it produces, you know, $50 an acre of net profit, you get $50 an acre of net profit. And there's nothing about it that transforms that in some miraculous form.

If you own all of American — if you own all of the Fortune 500 now, if you owned a hundred percent of it, you would be making 334 billion. And if you paid 10 1/2 trillion for that, that is not a great return on investment.

And then you say to yourself, "Can that double in 5 years?" It can't — the 334 billion — it can't double in 5 years with GDP growing at 4 percent a year, or some number like that. It would just produce things that are so out of whack, in terms of experience in the American economy, it won't happen.

So any time you get involved in these things where if you trace out the mathematics of it, you bump into absurdities, then you better change expectations somewhat.

Charlie?

CHARLIE MUNGER: There are two great sayings. One is, "If a thing can't go on forever, it will eventually stop." (Laughter)

And the other I borrow from my friend, Fred Stanback, who I think is here. "People who expect perpetual growth in real wealth in a finite earth are either mad men or economists." (Laughter)

4. "Best contribution" is low-cost goods and services

WARREN BUFFETT: Zone 4, please.

AUDIENCE MEMBER: Good evening. My name is Sharukoi Chin (PH). I'm from Des Moines, Iowa.

While we have been discussing of how much return that a company has helped us to get in the past few years, and for the future, too, though, I believe there are many people who are concerned about how much have we given to the society in return.

And gentlemen, would you please share with us about your philosophy and the company policies and how much the Berkshire has done in terms of philanthropy and charities? Thank you.

WARREN BUFFETT: Yes. There are figures in the annual report that bear on that.

One thing we did wasn't entirely voluntary, is that I think we gave about 2.6 billion to the federal government last year in — (laughter) — in income taxes. (Applause)

I'm not sure. I looked at General Electric and Microsoft and a couple of large — we may have paid more in federal income tax than any other U.S. company. I'm not — don't take my word for that, because it could be Walmart paid more. I wouldn't be surprised if Walmart paid more.

But there's — I did look at a couple of the biggest ones and we did pay more than GE or Microsoft, both of which have market caps that are three times our size.

And the shareholder-designated contribution program was 18-or-so million, as I remember, and then we detailed the contributions in the report made by the other companies.

But I would argue that to the extent that GEICO, for example, is a more efficient way of delivering personal auto insurance than, overwhelmingly, than its competitors are, and that, if 15 percent is a fair indication of how much it is saving people, that — and then, on a $4 billion of premium volume — that there is something more than $600 million that consumers save by a more efficient way of distribution, which has been honed to a fine art by the GEICO management.

Really, delivering the goods and services that people want in an economical way is a very important part, I think, of the contribution that any company makes to society, as well as the taxes they pay and their actual corporate philanthropy.

We are not big believers in giving away the money of the owner — of Berkshire acting as their representatives and giving away their money to philanthropy. We think that the shareholder should — it's their money.

And if we had a partnership of 10 people, if I were the managing partner, I would not feel I should make the decisions on philanthropy for the other 9 people. I would let them all make their own decisions.

We do not think that corporations, generally, should be passing out money to the pet charities of the CEO. And we don't do it at Berkshire.

But we do let the shareholders make those designations. And, as I say, I think our primary — (applause) — thank you.

I think that the best contribution actually we can make, this is ideal, over 10 or 15 years, is find a — is finding ways to deliver goods and services, that people want, to them at lower cost than the alternatives that were previously available to them.

Charlie?

CHARLIE MUNGER: Yeah. Well, I applaud the questioner's yearning for an answer to the question of, "Isn't there something more in this game than making and piling up money?" and "Shouldn't we be thinking about what we owe in return and what's going to go back in return?"

In the Munger case, I think a hundred percent is going to go back in return, for a reason different from that of the Buffett case. You know, there's an old saying: "How much did old Charlie leave?" And the answer is, "I believe he left it all." (Laughter)

And in essence, the — it all has to go back one way or another. You can't take it with you, that's the iron rule of the game. And I do think it's important to think about what you do for other people and what example do you set with your own life or your own corporate life.

And I do think that Berkshire stacks up pretty well in that respect. And in due course, when we get into gargantuan charities bearing the name Buffett, my guess is that'll be done pretty well, too. This is likely to be a pretty good run.

5. No "insight" on oil or silver

WARREN BUFFETT: Zone 5. (Applause)

AUDIENCE MEMBER: Hi, my name is Michael from New York. First, I'd like to address Mr. Munger.

Mr. Munger, it's so — it's such a pleasure to be here with you, as well as Mr. Buffett. And if you could just say hi —

CHARLIE MUNGER: You got those in the right order.

AUDIENCE MEMBER: — to my — (laughter) — wife for a second, her name is Jane.

Next, I understand your secrecy on unconventional investments. But Mr. Buffett and Mr. Munger, could you please tell me your insight on market conditions for oil and silver? (Laughter)

WARREN BUFFETT: He asked you, Charlie. (Laughter)

CHARLIE MUNGER: But we've already said that we're not going to comment about commodity investments.

I will cheat a little on that. Eventually the price of oil has to go way up. (Laughter)

That does not mean you can make any money from buying it now, counting the interest factor.

WARREN BUFFETT: (Laughs) Zone 6. (Laughter)

Fortunately, I don't know whether — I listened carefully when he phrased his question. He said "insights" and — (laughs) — I don't have any insights, so —

6. Cable TV systems: more promise than results so far

WARREN BUFFETT: We'll go to zone 6.

AUDIENCE MEMBER: My name is Merritt Belisle from Austin, Texas.

And the company has a large investment in the Washington Post Company, which has many cable television systems serving non-major metropolitan areas, as well as a recent investment in TCA Cable.

And so, I was hoping to get a comment about the cable television business generally.

And the other question is about your philosophy of children handling money and inheriting money.

WARREN BUFFETT: The first question about cable, the Washington Post Company does have — and we own about 17, or so, percent of the Washington Post Company, and I believe they have 700,000-plus homes. And as you say, they're in largely — in smaller areas.

It's been a good business. And as you know, cable prices have been galloping here in the last year, or thereabouts. From the standpoint of the Post that's bad news, because the Post would have been a net buyer of cable and will not be a seller.

And it's very, very much like our attitude towards stocks and stock prices. It is not good news for the Washington Post Company when cable prices go up, because the Washington Post Company's going to be investing funds. It's going to be a generator of funds over time. And if it wants to put money in cable, it's way better off if cable prices go down than up.

The TCA is not — Lou Simpson runs a separate portfolio at GEICO — equity portfolio — so I've never read an annual report of TCA Cable. I know nothing about it.

If he still has it, it's an investment of Lou's at GEICO, for GEICO, and it's not something that falls under my management at all.

It's a point I should mention, because, periodically, the press picks up some item that says that Berkshire — or sometimes it says that I am buying X, Y or Z.

And sometimes that's true, but sometimes it isn't true, because filings are made on behalf of various other entities that are associated with us, and I don't know anything about them.

I saw one here a couple of weeks ago reporting that I was — I don't know if it was me or Berkshire — I think it was me personally — it was buying some real estate investment trust with the name Omega in it. I'd never heard of it. But that story appeared various places.

Well, I can assure you, I filed no form with the federal government that said that I was buying that stock, although you would have deduced that from certain press accounts.

But various other entities, I think that there may be a subsidiary of General Re, New England Asset Management, that may have to report periodically on what they do.

And since General Re is owned by Berkshire, and New England Asset Management's a part of General Re, you know, who knows what they pick up on that.

So I do caution you, generally, to be a little careful about reports as to what is being bought or sold by me or by Berkshire Hathaway.

Now, as I remember, there was second question that I didn't like quite as well to answer. (Laughs)

Charlie, you want to tackle that one?

CHARLIE MUNGER: Well, I think there was more interest in the future of cable. (Laughter)

That is, we have demonstrated a signal lack of aptitude in correctly diagnosing the future of cable in a way that made us a lot of money.

And we've done that in spite of the fact that in retrospect it seems like a lot that was perfectly obvious was lying around.

WARREN BUFFETT: Today cable is not, I mean, cable has been here for what, 30 years or so. Cable has not made extraordinary returns on invested capital, at all.

But it's always had the promise of greater returns and it's had the promise that you wouldn't have to keep investing money in it the way that you've had to date.

But currently, people think that unusual returns will be made in cable, relative to invested capital, not relative to the purchase price of them, but relative to the invested capital in the property itself. And, as I say, that has not really been the case as — it's been the case with cable programming. Cable programming, there's been a lot of money made in relation to capital investment.

But in terms of the actual investment in cable facilities, the capital investment has been such, the expenditures in developing systems have been such, that the returns so far have not been great.

But the prices for cable systems now would indicate that people think that those returns are finally going to start flowing in, in a big way.

7. Buffett and Munger differ on influence of inherited wealth

WARREN BUFFETT: What was the second part of that question that you had?

VOICE: Children and wealth.

WARREN BUFFETT: Oh, inherited wealth and children —

AUDIENCE MEMBER: It was about kids inheriting money.

WARREN BUFFETT: Yeah. Well — (laughter) — we have a minority viewpoint down here in the front row. (Laughter and applause).

I think my views on that subject changed when I was about 18. (Laughs)

Until that point I thought it would be a great idea.

No, I am quite a believer in a meritocracy and I think a part of that is not having people start way, way ahead of other people in life, based on whether they were lucky enough to come from the right womb or not.

So I've never been big on the idea that either society benefited or, in many cases, the kids — although I think that's much more problematic, but — by the fact that great transfers of wealth will go from one generation to another, I —

You know, I would rather see the degree of talent possessed by individuals determine the resources they command in this world, and their ability to influence other people's lives and command the labor of other people, and all of that, than any divine right of the womb.

So that's — and Charlie has a somewhat different view on that.

CHARLIE MUNGER: Yeah. I am a little more willing to let the world take the succeeding generations down. It's — (Laughter)

WARREN BUFFETT: He believes in crossing it —

CHARLIE MUNGER: I don't think they need much help. (Laughter)

WARREN BUFFETT: Charlie believes in passing it along, as long as you're sure they're going to blow it. (Laughter)

OK. Zone —

CHARLIE MUNGER: If you stop —

WARREN BUFFETT: Go ahead.

CHARLIE MUNGER: If you stop to think, Warren, of the great fortunes of yore — if you go back to 1900, 1870 and, you know — name me the people that have vast power because they are in the fourth generation in that family. Some of them are living awfully well, but they are not running the world.

WARREN BUFFETT: I would say the Rockefeller family had considerably more influence than if their name had been, you know, just plain Rock. (Laughter)

CHARLIE MUNGER: Well, I think that's true, but you're picking probably the strongest, single family of the piece. And now that it's dispersed among 60 or 70 or 80 Rockefeller, it —

I think it's true there were four or five brothers there that had an unusual share of worldly influence. I must say, in that case I think they handled it very well.

8. Avoiding tech: we're "willing to trade away a big payoff for a certain payoff"

WARREN BUFFETT: Zone 7.

AUDIENCE MEMBER: My name is Alan Negan (PH) from Reston, Virginia.

I know you like to buy into success stories but you don't like to buy high tech. And it seems to me, say in the case of Microsoft, that 10 years from now they'll be doing software development, just like 10 years from now Coke will be selling sugared water.

And what I'm wondering is why you feel that way when it seems certain companies, high-tech companies, are predictable.

And it also seems that in the early '90s you were — you mentioned you were going to buy a pharmaceutical company, which also seems like high tech to me. So that's my question.

WARREN BUFFETT: Yeah. Well, we — I think we said that with the pharmaceutical companies we wouldn't have known how to pick out which one. We would have thought the industry as a group would do well.

From those levels of 1993, you cannot buy high tech companies at anything like — at levels that are commensurate with the levels that the pharmaceutical companies were selling at in '93.

You know, I would — and getting to the first part of your question, I think it's much easier to predict the relative strength that Coke will enjoy in the soft drink world than the strength — the amount of strength — that Microsoft will possess in the software world.

That's not to knock Microsoft at all. If I had to bet on anybody, I'd certainly bet on Microsoft, bet heavily if I had to bet. But I don't have to bet. And I don't see that world as clearly as I see the soft drink world.

Now somebody that has a lot of familiarity with software may very well see it that way and they're entitled to — if it's true they have superior knowledge and they act on it, they're entitled to make money from that superior knowledge. There's nothing wrong with that.

I know I don't have that kind of knowledge, and I simply — and I do think that it's — that if you have a general knowledge of business over decades, that you would regard the industry they're in as less predictable than the soft drink industry.

Now it may also be that even though it's less predictable that there's a whole lot more money to be made, so that if you're right, that the payoff is much larger.

But we are perfectly willing to trade away a big payoff for a certain payoff. And that's the way we're put together.

It does not knock the ability of other people to make those decisions. I mean, I asked — first time I met Bill Gates in 1991, I said, "If you're going to go away on a desert island for 10 years, you had to put your stock in two companies in the high-tech business, which would they be?"

And he named two very good stocks. And if I'd bought both of them, we'd have made a lot more money than we made, even buying Coca-Cola.

But he also would have said at the same time that if he went away he'd rather buy Coca-Cola, because he would have felt sure about that happening.

It's — you know, different people understand different businesses. And the important thing is to know which ones you do understand and when you're operating within what I call your "circle of competence."

And the software business is not within my circle of competence, and I don't think it's within in Charlie's.

Charlie?

CHARLIE MUNGER: Well, I certainly agree with that. I think there are interesting questions, too, about how far the whole field can go.

Take jet airplane travel below the speed of sound. It's been pretty static in terms of the technology for a long, long time. You know, the big Boeing airliner is much the same as it was 20 or 30 years ago.

And I think it's — a lot of these businesses are quite dependent on the technology continuing to gallop and do more and more for people.

Take pharmaceuticals, if they had never invented any more pharmaceuticals, it would be a terrible business.

I don't know what happens once you get unlimited bandwidth into the house and way more options, and —

Beyond a certain point, it strikes me that there might be a surfeit of anybody's interest in the field. I don't know where that point is, whether it's 20 years out or 30 years out, but it would affect me a little.

WARREN BUFFETT: The Dilly Bar is more certain — (Laughter)

CHARLIE MUNGER: Yeah.

WARREN BUFFETT: — to be here in 10 years than any software application that we know. But that's, maybe, because we understand Dilly Bars and not software.

In the whole United States, which is, you know, is by far the most prosperous country in the world — the whole United States, there are probably around 400 companies, 400 total companies, that are earning $200 million a year, after-tax.

Of those 400, you could name them. I mean, you could start, you know — if you say "bank," you can say Citigroup and Chase and Wells Fargo, and you name 10 or 15 of them. And if you name consumer goods, you're going to say Procter & Gamble and Coca-Cola and Gillette, and you can name a whole bunch of them.

You can almost, of those 400, you can probably name 350. If, five years from now, instead of 400 being on that list, there'll probably 450 on the list, maybe 475.

A lot of those will be companies that are earning between 150 and $200 million now. So there'll probably be 20 — some number like 20 — that, call it, come from nowhere.

Now if you look at the number of companies that are selling today at a price which implies 200 million or more of earnings right today, you will find dozens and dozens in the high-tech arena. And, you know, a very large percentage of those companies are not going to fulfill people's expectations.

I can't tell you which ones, but I know there won't be dozens and dozens and dozens of those companies making a couple hundred million dollars a year. And I know they are now selling at prices that require them to be making that much money or more. It just doesn't happen that often.

You know, biotech was all the rage some years back. How many of those companies are making a couple hundred million dollars a year? It just doesn't happen.

It's not that easy to make lots of money in a business in a capitalistic society.

People that are looking at what you're doing every day and trying to figure out a way to do it better and to, you know, underprice you or bring out a better product, or whatever it may be. And a few companies make it.

But here in the United States, after all of these decades and decades and decades of wonderful economic development, we've got about 400 companies that have hit the level that would be required of a company that would have a market cap of $3 billion.

And some companies are getting $3 billion of market cap the day they come out, virtually, — so.

There's some — you want to think about the math of all this.

9. Don't "dance in and out of the companies you really love"

WARREN BUFFETT: Zone 8.

AUDIENCE MEMBER: Hello. My name is Larry Whitman (PH) from Minot, North Dakota.

You've already hinted about Coke and Gillette's current valuations, and also about their great prospects for the future. But in the past year, both stocks have been down 30 to 50 percent from their highs.

How much farther would they have had to fall before your criteria of margin of safety had been satisfied and allowed you to purchase more shares?

And two, has the Disney/Cap Cities merger gone as well as you would have hoped, and has the future prospects of Disney changed in your opinion?

WARREN BUFFETT: First question, that's a good question on Coke and Gillette, because obviously, we think about the businesses that we're the most familiar with and where we're committed.

But neither one of those businesses got to the price that left us happy putting new money in. But we're quite happy, very happy, owning those businesses and will be happy owning them for a very long time to come. But they —

It's some evidence of where the market has been and is, that, even when they ran into some tougher business conditions than they anticipated, that their stocks did not go down to the prices that cause us to get excited about them.

Charlie, you want to comment on that or the second part?

CHARLIE MUNGER: No. But I do want to remind people that the Dilly Bar is a Dairy Queen product. (Laughter)

WARREN BUFFETT: And they are good. I can tell you that. (Laughter)

CHARLIE MUNGER: I wouldn't want the shareholders to believe that the commercial standards of this operation are faltering. (Laughter)

Generally speaking, trying to dance in and out of the companies you really love, on a long-term basis, has not been a good idea for most investors. And we're quite content to sent with — to sit with our best holdings.

WARREN BUFFETT: People have tried to do that with Berkshire over the years. And I've had some friends that thought it was getting a little ahead of itself from time to time. And they thought they'd sell and buy it back cheaper and everything.

It's pretty tough to do. You have to make two decisions right. You know, you have to buy — you have to sell it right first, and then you have to buy it right later on. And usually you have to pay some tax in-between.

It's — if you get into a wonderful business, best thing to do is usually is to stick with it.

Coke and Gillette both experienced disappointments to their management, below what they anticipated a year, a year and a half ago, or whenever it was, and below what we anticipated. But that will happen over time.

It happens with some of our wholly-owned business from time to time. Sometimes they do better than we anticipate, too.

But it's not the nature that everything — that things that — everything goes in a nice, straight, smooth line upward.

You mentioned Cap Cities. Parts of Cap Cities have done extraordinarily well, for example. But in the network business, if you go back 30 years and look at what network has been on top, you find that no one stays on top, or on the bottom, indefinitely there.

It's a competitive world, as I mentioned earlier. And sometimes your competitors' correct moves, your own incorrect moves, the world environment — all of those things can interrupt trend lines.

I see nothing that's happened in the last year, in terms of the long-term trend line, of the blade and razor business, which is the one I've referred to as "inevitables" at Gillette. I mean, they are in other businesses that are not in the same category as the blade and razor business.

Coke, fortunately, has virtually its entire business in soft drinks. And so it comprises almost a hundred percent of the whole there.

But I see nothing that would change my thinking about the long-term future of either the blade or — blade and razor business — or Coke's position in the soft drink business.

10. Deflation unlikely, but would be good for bondholders

WARREN BUFFETT: Number 1.

AUDIENCE MEMBER: Steve Cohn (PH) from Peoria, Illinois.

First of all, I just had my first Dilly Bar a half an hour ago, and thank you for introducing me to that.

WARREN BUFFETT: Good.

AUDIENCE MEMBER: You spoke —

WARREN BUFFETT: I'll sell you a second, too if — (Laughter)

AUDIENCE MEMBER: You spoke earlier about the threat of change. Can you comment on the threat of deflation and, if it were to occur, what its likely impact would be on the economy, Berkshire Hathaway, and personal investment decisions?

WARREN BUFFETT: Well now, displacement in what respect? I didn't —

AUDIENCE MEMBER: -flation.

WARREN BUFFETT: Oh, inflation.

AUDIENCE MEMBER and CHARLIE MUNGER: Deflation.

WARREN BUFFETT: Oh, deflation.

CHARLIE MUNGER: Deflation.

WARREN BUFFETT: Oh, I'm over — I'm getting there. (Laughter)

Well I think it's very, very unlikely, but I would — I have been wrong consistently now for a decade or more about the degree to which inflation has at least been tamed for that period.

I would have expected — if you'd showed me all the other things that were going to happen in the world in the last — if I'd seen that ahead of time 10 or 15 years ago — I would have thought we would have had more inflation, so —

I have trouble envisioning a world of — where the U.S. experiences deflation. But, you know, my record is not great on that.

And again, we don't — we do not spend a lot of time thinking about macro factors.

I mean, if you ran into deflation that means, you know, capital is appreciating, so you need much lower nominal rates of return on capital to be in the same place under deflation as would be the case if you had inflationary conditions.

So deflation, everything being equal — and it isn't equal — is good for investors because it — you know, the value of money appreciates. The buying power of money appreciates. But it would have other consequences, too.

I don't think it's likely. I'm not — I have no great record at all in macro forecasting and I — if it does happen, the truth is, I don't know what the effects would be.

Charlie.

CHARLIE MUNGER: Well, you've seen what deflation is doing in Japan, and it's been quite unpleasant for the people there. On the other hand, it hasn't been a catastrophe. I mean, nothing like the '30s in the United States.

WARREN BUFFETT: No, and actually, in Japan, if you had owned long bonds, you would have had a tremendous bonanza from deflation, because your — the value of your bonds would have gone up dramatically as interest rates came down. And then that money, in turn, would buy more.

So it would — it was a very — if you happened to be the person that owned longer bonds issued at higher coupons some years back, that's worked to your advantage.

But — and presumably that would work in this country. If we actually ran into consistent deflation, my guess is that people who owned long bonds, even bought at 5 1/2 percent, would find their position in the world dramatically improved compared to people who owned most other asset classes.

11. Markets are "fairly" efficient, but efficient market theory is "silly"

WARREN BUFFETT: Zone 2.

AUDIENCE MEMBER: Hello. I'm Murray Cass from Markham, Ontario. First off, Mr. Buffett, Mr. Munger, I'd like to thank you for being so generous with your time every year at these meetings.

Mr. Buffett, many in the academic community call you lucky, or a statistical outlier. Mr. Munger, I'm not sure what they call you. (Laughter)

WARREN BUFFETT: Well, you're free to speculate on what they call him. (Laughter)

AUDIENCE MEMBER: I know you don't like to forecast the equity markets, but maybe you would dare to forecast the evolution of the debate between proponents of the efficient market theory and value investors.

Do you think there will ever be a reconciliation? And I'm talking especially about what's taught at the business schools.

And as an addendum, are your designated successors, are they outliers as well?

WARREN BUFFETT: (Laughter) Well, we like to think they are. And then, they may be more outliers than we are.

The market is generally — you know, I — to me, it's almost self-evident if you've been around markets for any length of time, that the market is generally fairly efficient.

It's fairly efficient at pricing between asset classes, it's fairly efficient in terms of evaluating specific businesses.

But being fairly efficient does not make — does not suffice to support an efficient market theory approach to investing or to all of the offshoots that have come off of that in the academic world.

So, if you'd believed in efficient market theory, and been taught that and adapted — adopted it for your own 20 or 30 years ago, or 10 years ago — I think it probably hit its peak about 20 years ago — you know, it would have been a terrible, terrible mistake.

It would have been like learning the earth is flat. It just — you would have had the wrong start in life.

Now, it became terribly popular in the academic world. It almost became a required belief in order to hold a position.

It was what was taught in all the advanced courses. And a mathematical theory that involved other investment questions was built around it, so that, if you went to the center of it and destroyed that part of it, it really meant that people who'd spent years and years and years getting Ph.D.s found their whole world crashing around them.

I would say that it's been discredited in a fairly significant way, over the last decade or two. I mean, you don't hear people talking the same way about it as you did 15 or 20 years ago.

But the market generally is fairly efficient in most ways. I mean, it is hard to find securities that are inefficiently priced. There are times when it's relatively easy. But right now, for example, it's difficult.

There — I don't know exactly how much it's holy writ, still, in business schools.

I certainly get the impression, as I go around talking to business schools, that it is far less regarded as, you know, sort of unquestioned dogma that it — like it was 15 or 20 years ago.

The University of Florida now has some courses in valuing businesses. University of Missouri's putting in one.

And I think the high priests of efficient market theory are probably not in the same demand for speaking engagements and seminars and all of that as they were a decade or two ago.

It's hard, though — it's very interesting. It's hard to dislodge a belief that becomes sort of — becomes the dogma of a finance department.

It's so challenging to them and, you know, they have to, at age 30 or 40, to go back and say, "What I've learned up to this point, and what I've been teaching students and all of that, is silly," that doesn't come easy to people.

Charlie?

CHARLIE MUNGER: Well, you know, Max Planck, the great physicist, said that even in physics, the old guard really didn't accept the new ideas. The new ideas prevail, in due course, because the old guard fades away, clinging to the asininities of the past.

And that's what's happened to the hard-form efficient market theorists. They're an embarrassment to the scene and they will soon be gone. On the — (Laughter)

People who think the market is reasonably efficient, or roughly efficient, of course, are absolutely correct and that will stay with us for the long pull.

WARREN BUFFETT: Thinking it's roughly efficient, though, does nothing for you in academia. You can't build anything around it. I mean, that — what people want are what they call elegant theories. And it just — it doesn't work.

You know, what investment is about is valuing businesses. I mean, that is all there is to investment. You sit around and you try to figure out what a business is worth. And if it's selling below that figure you buy it.

That, to my — you can't find a course virtually in the country on how to value businesses. You can find all kinds of courses on how to, you know, how to compute beta, or whatever it may be, because that's something the instructor knows how to do. But he doesn't know how to value a business. So, the important subject doesn't get taught. And it's tough to teach.

I think Ben Graham did a good job of teaching it at Columbia, and I was very fortunate to run into him many decades ago.

But if you take the average Ph.D. in finance and ask him to value a business, he's got a problem.

And if he can't value it, I don't know how he can invest in it, so therefore, he — it's much easier to take up efficient market theory and say it doesn't make any difference because everybody knows everything about it, anyway.

And there's no sense in trying to think about valuing businesses. If the market's efficient, it's valued them all perfectly.

I never known what you talk about on the second day in that course. I mean — (Laughter)

The first — you walk in, you say, you know, "Everything's valued perfectly, and class dismissed." So, it puzzles me. But I encourage you to look for the inefficiently priced.

WARREN BUFFETT: Zone 3. Berkshire, incidentally, was inefficiently priced for a long time. And it wasn't on the radar screen of — if you asked an academic how to value it, they wouldn't have known what to look at exactly. Yep.

12. We try to grow cheap float quickly

AUDIENCE MEMBER: My name is Ken Shuvenstein (PH). I'm from New York City. First, thank you very much for this great, educational forum.

You've taught us that a key concept of Berkshire is the amount of float it has, the cost of the float, and how fast it grows.

Can you please help us understand, currently, what amount of float Berkshire has and what the goals are in the future for that growth rate over a sort of one to two-decade period, understanding that it will be a lumpy advance?

Because, looking at the historical data you've provided us for Gen Re and Berkshire, regarding the amount of float and its cost, it's grown at a great rate — high teens, lows 20s. And if you could please comment on the future expectations we should have, that would be great.

WARREN BUFFETT: Yeah. Well, it's an important question. It — but I don't know how to give you a good answer.

The — it's grown at a much faster rate, since 1967 when we went into the insurance business, than I thought it would.

I mean, I did not — I didn't anticipate it would grow that way. I didn't anticipate necessarily we would get a chance to buy GEICO. I didn't necessarily know we'd ever acquire a General Re or — so it's been very hard to forecast.

What we've tried to do is grow cheap float as fast as we could. And sometimes it's been easy, sometimes it's been impossible.

But I don't know — if you had asked me that question 30 years ago, I'd have given you an answer that really hasn't proven out very well. And I —

So, I don't know how to give you the answer now, except to tell you this: it's very much a goal of Berkshire to grow that float at as fast as it can, while maintaining a very low cost to it.

And again, you mentioned it'd be lumpy. Well, it'll be lumpy on cost. It'll be lumpy on growth rate. But, I mean, we are — it's something we think about all of the time, in both our operating decisions and perhaps some big capital commitment decision.

It's — we know that if we can solve that problem of how to grow it at — with it costing us relatively little, that we will make Berkshire a whole lot more valuable in the process.

And people, I mean — we always laid out the facts as to what we were doing, but people basically seem to ignore that.

And we have had this growth rate, which we can't maintain, the numbers are too big. But it's something that Charlie and I think about all the time.

We've got some good vehicles for growing it. But we don't have any vehicles that will grow it in aggregate at anything like the rate it's been grown in the past.

So we may have to — we may get a chance to do something that adds to our ability to do it. If we get a chance and it's at the right price, we'll add it. If we won't, we'll do as much as we can internally.

But the question you ask, the growth in intrinsic value of Berkshire over the next 10 years, will be determined, in a very significant way, by the rate at which we do grow it and if — and also the added fact of what it costs us to achieve that float.

Charlie?

CHARLIE MUNGER: Yeah. If we grow very low-cost float at the same rate that it's grown in the past for another 30 years, you can be confident of one thing: if you look to the heavens there will be a star in the east. (Laughter and applause)

13. Two reasons Berkshire isn't selling life insurance

WARREN BUFFETT: Zone 4. (Laughter)

AUDIENCE MEMBER: I'm David Levy (PH) from Newport Beach, California.

Berkshire has been investing in the property and casualty and reinsurance business.

I notice, except for annuities, you've been avoiding the life insurance business. Do you have — do you anticipate investing in the life insurance business?

Also, I have a second question, and that is the relationship of Berkshire A and Berkshire B. Last year there was a slight premium for Berkshire B over Berkshire A.

About now, Berkshire B is selling at about a 3 to 4 percent discount. I also notice that certain people are shorting Berkshire A and Berkshire B. I wonder if you could comment on that.

WARREN BUFFETT: Sure. On the life business, we have no bias against the life business, we just — we are in the life reinsurance business in a fairly significant way through General Re. As you mentioned, we've done a little on annuities.

The problem with the life business is that it isn't very profitable — and you can look at the records of the big companies on that — and that a lot of the activity in the area is, in some way, equity-related.

And Charlie and I have never wanted to get in the business of managing equities for other people. I mean, we want our sole interest on equities to be Berkshire Hathaway itself. So, we do not want to wear two hats.

We would never go into the mutual fund management business or any kind of investment management business because, if we were to be managing 20 or $30 billion in the investment management business, and we get a good idea that we can put a billion dollars in, you know, whose money do we put in it?

So, we'd rather just be wearing one hat. And that we want that hat to be Berkshire Hathaway. And we don't want to be promising other people that for, you know, half of one percent or one percent fee that they're going to get our best ideas, because those ideas belong to Berkshire and we'd be misleading people if we promised otherwise.

So, anything that involves an equity component to it — and that's a big part of what's going on in the life business now — it's just something we wouldn't be comfortable being involved with.

If you look at term life insurance, we've looked at that, in terms of putting it on the internet. It's — it is priced at rates that we find very hard, even with the absence of commissions, to make sense.

But it's a business we understand. So, we're — we'd be perfectly willing to be in the life insurance business if we thought there was — if we had a way of doing it where we thought there was reasonable profitability attached to it.

Charlie, do you want to comment on the life business before I get to the A versus B thing, or —

CHARLIE MUNGER: No.

We do those structured settlements. That is sort of like the annuity business. And the life business we're doing is mostly annuities and on a very low-cost basis.

WARREN BUFFETT: Yeah. Anyone that wants to buy a non-equity-related annuity should go to our website and find, in terms of the — weighting for the safety of the product and everything, you'll find a very, very competitive product because we —

It's a low-cost operation. And if you're buying it to get paid 30 years from now, you are certain to get paid from Berkshire and you're not necessarily certain to get paid from various other entities. So, we've got a very competitive product there, but it's not a big business.

14. Price differences between Class A and B shares

WARREN BUFFETT: On the question of A versus B, I've written something — I wrote it some months ago and stuck it up on the website — regarding my own thoughts on that.

Obviously, the most the B can be worth is 1/30th of the A, because you can always convert an A into 30 shares of B.

The B may sell a slight bit above that 1/30th price before it gets to a level where it induces arbitrage between the two. So, it can theoretically sell, and it will sell, a fraction of a percent above 1/30th of the price of the A. But if it gets above that, you know, I'll buy the A and sell you the B.

There's an arbitrage profit to be made, and probably the way markets work, most of that profit will be captured by the specialist, because he's in the best position to effectuate trades of that sort.

But the B can never be worth more than a thirtieth of the A, and it can never sell for more than slightly above 1/30th of the A.

On the other hand, B is not convertible into A stock, so it can sell at a discount.

I put on the web some months ago that I thought — just my opinion — but I thought that when the B is selling for less — selling for more — than a two percent discount, I personally would rather buy B than A under those circumstances.

If it's selling for the same price as the A — 1/30th the price of the A, but it's selling on a parity basis — and I were buying 30 shares or more of B, I would rather buy A, because you can always go one direction and you can't go the other direction.

I think, if you take the next 10 years — I would think that a fair percentage of the time, it's going to be selling right about 1/30th of the price of the A, and there will be periods of time when it sells it at a modest discount.

And I would say that when it gets in the 3 to 4 percent range, I regard that as quite a wide discount. If I didn't have a tax to pay myself, I might sell A and buy B if I was getting four percent more in the — in economic equivalent on B. It's not practical for me to do it.

Some — I know of some tax-exempt investors that have actually done that sort of thing, and —

Long range, we will always treat the B exactly as we laid it out in the prospectus. There are two differences between the A and B. One is in the voting power, relatively. And the other is in the shareholder-designated contributions program. And otherwise, in all respects, B will be treated on the same basis as the A.

We have no — even though Charlie and I own a lot of A and we don't own any B to speak of, we regard the B shareholders as being 100 percent on a parity, except for those two differences we laid out at the time of issuance, with A shareholders.

We would never — there won't be a deal ever made for Berkshire anyway — but if there would be we would always treat the A and B on a 1-for-30 basis.

We would not — we've been in situations where people haven't done that and we've never been very happy with it. So we would always treat people proportionally.

Charlie.

CHARLIE MUNGER: Well, I certainly agree with all of that.

WARREN BUFFETT: The question about shorting, it doesn't make a difference whether anybody shorts any stock or not, really.

I mean, if you were arbitraging between A and B, and the B was selling a little higher than the A, you might be buying some A and shorting some B, and you might delay conversion because you might figure the B might go to a discount. And then you'd unwind the whole transaction rather than convert.

I mean, there's a lot of techniques that Charlie and I have engaged in over the years, and other securities that apply to that sort of thing.

But shorting doesn't hurt us in any way, shape or form. I mean, it doesn't make any difference.

I don't care whether the short interest in the A is a thousand shares or 100,000 shares. You know, somebody sells it at one point and somebody buys at another point, and whether you reverse the buying and selling doesn't make any difference.

What counts is the intrinsic value of Berkshire. And if we increase the value of Berkshire at a reasonable rate, you know, the shorts will have to figure out how to eat three times a day. (Laughter)

15. Investing advice: start early and think for yourself

WARREN BUFFETT: OK. Zone 5, please.

AUDIENCE MEMBER: Good afternoon, Mr. Buffett and Mr. Munger. My name is Grant Morgan (PH), I'm here from New York City.

Earlier, you had acknowledged that it is a more difficult investment and business environment today than it was when you first started out.

My question is, if you are starting out again today in your early 30s, what would you do differently or the same in today's environment to replicate your success? In short, Mr. Buffett, how can I make $30 billion? (Laughter)

WARREN BUFFETT: Start young. (Laughter)

Charlie's always said that the big thing about it is we started building this little snowball on top of a very long hill. So we started at a very early age in rolling the snowball down.

And, of course, the snowball — the nature of compound interest is it behaves like a snowball of sticky snow. And the trick is to have a very long hill, which means either starting very young or living very — to be very old.

The — you know, I would do it exactly the same way if I were doing it in the investment world. I mean, if I were getting out of school today and I had $10,000 to invest, I'd start with the As.

I would start going right through companies. And I probably would focus on smaller companies, because that would be working with smaller sums and there's more chance that something is overlooked in that arena.

And, as Charlie has said earlier, it won't be like doing that in 1951 when you could leaf through and find all kinds of things that just leapt off the page at you. But that's the only way to do it.

I mean, you have to buy businesses and you — or little pieces of businesses called stocks — and you have to buy them at attractive prices, and you have to buy into good businesses.

And that advice will be the same a hundred years from now, in terms of investing. That's what it's all about.

And you can't expect anybody else to do it for you. I mean, people will not tell — they will not tell you about wonderful little investments. There's — it's not the way the investment business is set up.

When I first visited GEICO in January of 1951, I went back to Columbia. And I — that rest of that year, I subsequently went down to Blythe and Company and, actually, to one other firm that was a leading — Geyer & Co. — that was a leading analyst in insurance.

And, you know, I thought I'd discovered this wonderful thing and I'd see what these great investment houses that specialized in insurance stocks said. And they said I didn't know what I was talking about. You know, they — it wasn't of any interest to them.

You've got to follow your own — you know, you've got to learn what you know and what you don't know. Within the arena of what you know, you have to just — you have to pursue it very vigorously and act on it when you find it.

And you can't look around for people to agree with you. You can't look around for people to even know what you're talking about. You know, you have to think for yourself. And if you do, you'll find things.

Charlie?

CHARLIE MUNGER: Yeah. The hard part of the process for most people is the first $100,000. If you have a standing start at zero, getting together $100,000 is a long struggle for most people.

And I would argue that the people who get there relatively quickly are helped if they're passionate about being rational, very eager and opportunistic, and steadily underspend their income grossly. I think those three factors are very helpful.

16. How Buffett learned the insurance business

WARREN BUFFETT: Zone 6.

AUDIENCE MEMBER: Mr. Buffett and Mr. Munger, thank you very much for your hospitality. Excuse me, my name is Yvonne Edmonds (PH) and I'm from St. Petersburg, Florida. And thank you also for being so kind as to spend all this time answering our questions.

I have two related questions regarding insurance. The first is, I suspect that many of us know less about insurance than about equities and I wonder if you could please put some references for us on the Berkshire Hathaway website that might help us increase our knowledge about insurance.

The second question is, perhaps, related to the first, I just — the fact that I don't understand it, but The Wall Street Journal, on March 19, published an article entitled, "When Insurers Pass Trash, Some Are Left Holding the Bag." And that "some" included Berkshire Hathaway.

It focused on passing the workers comp trash to, among other groups, to Cologne Re.

And to make a long story short, the assistant general counsel for General Re, which, as I understand, now owns most of Cologne Re, said this is a classic example of an insurance company seeking growth in a very competitive market by writing business outside its area of expertise — namely within workers' comp — when their area of expertise is life reinsurance.

Mr. Graham went on to say, and then I'll stop, "Don't write business you don't understand. Second, proper controls are critical in the insurance business. Lastly, if a business opportunity appears to be too good to be true, it probably is."

If this is true, could you tell us how this came about? What measures are being taken to see that it won't happen again? And what might be the ultimate cost to Berkshire Hathaway shareholders? Because I gather that the — only the tip of the iceberg has been represented in the charge to Cologne Re.

WARREN BUFFETT: OK. Those are good questions.

And let's take the first one first about the website and having a list of reference documents, or something that would help you understand insurance. You sound like you understand it pretty well already. The — (Laughter)

I can't think of a good book that I've read on the subject. I got my knowledge of insurance by reading — well I got this huge head start by having a fellow named Lorimer Davidson, who is now 96, spend four hours or so with me one Saturday morning in January 1951, explaining to me how GEICO worked.

And I — it was a marvelous education, and it got me so interested, in not only how GEICO worked, but how its competitors worked, how the industry worked, that I just started reading a lot of other reports.

I never — I guess I took one course in school on insurance. I don't remember a thing from it. I have no idea what the text book was or anything. It had no value to me.

So I never really had any background in insurance. My — you know, nobody in the family was in the insurance business.

And until I talked to Davy, I really — it just hadn't been something that crossed my mind. The only reason I was down there was because I'd — my hero, Ben Graham, was listed in "Who's Who" as being the chairman of Government Employees Insurance. That's —

If he had been the chairman of, you know — he was also the chairman of the Market Street Railway Company in San Francisco.

Fortunately, I went down to GEICO instead of out to see the Market Street Railway Company. (Laughter) It was closer.

But I — my own education about insurance came from just reading lots of, lots of reports.

I mean, I would say that if I started the day fresh and I didn't know anything about the insurance industry to speak of, and I wanted to develop some expertise, I would probably read the reports of every property-casualty company around.

And I would go back some time and I would read — I would probably get the best manuals and look at them.

I would just do a lot of reading. I used to go down to the Department of Insurance in Lincoln and go through the convention reports and the examination reports.

I'd — they'd give me some little table someplace and I'd keep asking them — (laughs) — for these reports and they'd have to go way down in the bottom of the Capitol to get them out for me. But they didn't have much else to do so they were always happy to do it.

And that's the way I learned about it. And it happened to be a productive field to learn about it that way. And I really think that something akin to that is the best way now. I can't think of — you know, you can read some analyst reports.

I think you can learn something, frankly, by reading the Berkshire Hathaway annuals for 20 years and reading the insurance section. I think it'll teach you something about the economics of insurance. So, I would do it by reading.

And if you can find somebody that knows the business well, who's willing to spend some time talking to you about it, they can probably shorten the educational period and give you some help on that.

17. Unicover losses are "rare lapse" for General Re

WARREN BUFFETT: The second question about what's been called — what's the Unicover [Managers Inc.] affair that Cologne Re set up a 275 million — Cologne Life, I should say — set up a $275 million reserve against.

First of all, I would say for the losses to be incurred on that business, the 275 still represents the best estimate.

In other words, it may be the tip of the iceberg in terms of the loss to the industry, because no one else has acknowledged any losses. This is amazing. I mean, believe me, there are plenty of other losses out there.

We said we were going to lose 275 million. I think that's a good estimate. But I think a lot of other people are going to lose very — they have to lose significant money. Somebody has to lose some significant money besides us on that.

And so what we have reported may be the tip of the industry iceberg. I don't think it's the tip of the General Re or Berkshire Hathaway iceberg.

It's our best estimate today of what that loss will be. If that estimate changes, I will let you know through the quarterly reports or, if it was really material, we'd have some announcement. But I don't anticipate that.

But we'll report to you faithfully, I promise to you, as to how that loss develops over time.

The — what you read makes a great deal of sense about when something's too good to be true, it usually is and that sort of thing.

The distribution of the losses in the Unicover affair will, probably, not be fully settled 10 years from now.

I mean, I have seen these things before in insurance and in other areas, but particularly in insurance, where there are multitudes of parties, and there are allegations of stupidity, there's allegations of fraud, there's allegations of misrepresentation, there's allegations of everything.

There are so many people involved, there are so many factual matters to be determined. There will be lots of litigation. It will take a long, long time to sort out the litigation. In the end, the losses will get paid by somebody. Our best estimate we've put up is 275 million.

But we may find out far more in coming months and years, as to the involvement of other parties or — we can find out a great many things, because there will be lots of litigation, not necessarily involving us, but that we will, as a — even as a viewer of — we will be learning things about what took place.

Unfortunately, there have been some similar things in insurance. We were involved in something that had some similarities to this at National Indemnity, 20-odd years ago. And it was very expensive to us.

It didn't cost us that many millions of dollars, but it happened at exactly at the time that the stock market was down around the 600 on the Dow, and we did not know how big the losses would be. And therefore, it caused us to have to be more conservative in investing in equities than would have otherwise been the case, if this hadn't been hanging over our head.

So conventional accounting will never pick up the loss that we suffered in that.

It was called the Omni affair. And like I said, it had some — I'm sure it had many differences, too, but it had some similarities. And, you know, it can — it's distracting to have something like this that obviously — there was some mix of mistakes, there's some mix of misinformation. All of that will have to get sorted out.

Our best guess right now is that, when it's all done — 10 years from now, 15 years from now — the 275 million will be our loss. That most certainly won't be the exact figure. But like I say, if there's any reason to revise that number upward, we'll let you know promptly.

It is the nature of insurance that you get unpleasant surprises from time to time.

Loews Corp. bought CNA in the early 1970s. And just in the last few years, there was a fiberboard settlement on a policy, I believe, that was written in the late '50s. And there was a, as I remember, a billion and a half dollar loss on something where the premiums were a few thousand dollars.

GEICO has lost, as I remember, $60 million on a book of business that was written in the early 1980s, where the total premium was less than $200,000. You know, how much of that is stupidity, how much of it is fraud, or who knows exactly? But you can get some very unpleasant surprises in insurance.

And unfortunately, this will not be the last one. It won't occur in the same place, it won't occur exactly the same way. But the nature of insurance is that the surprises are on the unpleasant side.

It's not the kind of thing that happens when you're writing personal auto insurance or anything of the sort. But when you write business where the claims pop up 10 or 20 or 30 years later — I think we've got a claim, a small workers' comp company that we have, that goes back 20-odd years, 25 years or so, and it's just popped up to life in the last year or so. And it costs real money.

So it's a business where the surprises can come big and they can come late. And that will happen even with good management. But with good managements, you'll have fewer such surprises.

Charlie?

CHARLIE MUNGER: Well, that was a marvelous question. And imagine anybody asking a question of how to get educated — who knows how to educate people? It's the same way you educate the dog by rubbing his nose in it. (Laughter)

And generally speaking, that was a dumb error. That was an amateur's mistake.

It doesn't mean that General Re is suddenly full of amateurs. It was a rare lapse, just as at Berkshire, we think the Omni affair was a rare lapse. I don't think we've repeated it since. Have we, Warren? I can't think of a single one.

WARREN BUFFETT: But again, you know, we don't know that we've repeated it.

CHARLIE MUNGER: Well but —

WARREN BUFFETT: These things pop up later. No. No, the answer is we haven't repeated it. (Laughter)

CHARLIE MUNGER: So yes, it was a dumb, amateurish error. These things do happen. We don't think it reflects a sudden lowering of the intellectual standards of General Re, which are probably the best in the world. It's just one of those things that does happen once in a while.

And there's one good side to these things, it does make you more careful. It really refreshes your attention to get banged on the nose like that.

WARREN BUFFETT: Yeah, and it remains to be seen where the costs of that will be born. Because the entire set of facts, in terms of what was committed to and all of that, it has not been resolved yet.

In the Omni situation, we had significant disputes on the facts for some time, and we eventually recovered a fair amount of money that, for a time, it didn't look like we would recover.

So, you know, the final chapter on this is not going to be written for some time, but it was appropriate to set up $275 million as a reserve, in terms of what we know at this time. And that number could go up. It could also go down, depending on the facts that we discover.

18. Berkshire buyback unlikely

WARREN BUFFETT: Zone 7.

AUDIENCE MEMBER: My name is Mike Seeley (PH) from Summit, New Jersey.

Would you please revisit the question of share repurchase for Berkshire Hathaway?

We have heard, today, your comment about the price of Berkshire having been inefficiently priced from time to time in the past. We know that there are now more shares outstanding.

And I'm curious as to whether the buildup of cash is causing you to spend more time looking for investment situations where you're more comfortable on the 10-year outlook. Thank you.

WARREN BUFFETT: The question of repurchasing shares — and I made that comment about it being inefficiently priced at times — at those times it always seemed to us — and we were incorrect in some cases — it always seemed to us that there were other securities that were even less efficiently priced.

When Berkshire in 1974 sold at $50 a share, I might have thought it was cheap. But I also was looking at the whole Washington Post Company selling for 80 million when I thought it was clearly worth 400 million. And I did not think that Berkshire was underpriced then as the Washington Post Company was.

And that has been true at various times when — there have been times when I thought Berkshire has been underpriced, or even significantly underpriced, but at the same time I was finding other things which I felt were even more attractive.

And like I said, many times I was wrong. We would have been better off buying our own stock instead of buying the things that I was buying.

But the — if we have money around, and we think Berkshire is significantly underpriced, and we're not finding other things to do with money, it obviously makes sense for us to repurchase Berkshire shares.

I think it's difficult for most companies in this market, even though repurchases are probably at close to an all-time high, if not at an all-time high, I think it's difficult for most companies to be repurchasing — have a repurchase of shares make a whole lot of sense these days.

I mean, I do not think they're getting much for their money, because we don't want to buy those shares ourselves. And it's — and I'm talking about the stock of various companies in America.

And yet, companies are much more enthusiastic about repurchasing shares now than they were 20 years ago when they were getting far, far greater returns from repurchasing.

We will always — it's an option that we will always think about. And we're unlikely to do it unless we think it's fairly dramatically underpriced because it's simply — we would want a big margin for error in making that kind of a decision that — not want to — we would not want to buy a dollar bill for 95 cents, or 94 cents, or 93 cents.

But there is some level where we would start getting excited, if we didn't have other uses for the money. Charlie.

CHARLIE MUNGER: I've got nothing to add to that.

19. Strong reputation will help us with internet commerce

WARREN BUFFETT: Zone 8.

AUDIENCE MEMBER: Good afternoon. Wes Thurman from Stanford, California.

You mentioned earlier about the power of the brands on the internet. And I really can't think of a better brand, at least in my name, as the Berkshire Hathaway brand.

And, I guess, going forward, have you thought about ways to use that Berkshire Hathaway name, you know, further on the internet to capitalize on the reputation you've built over the past decades as a —

WARREN BUFFETT: Yeah. That's a very good point and it is something that could be of real value. It's already probably of some value to us with the brands that we're associated with.

I mean, I do think that Executive Jet or the NetJets program associated with Berkshire Hathaway, that — Borsheims associated with Berkshire Hathaway, Berkshire Hathaway Life associated with Berkshire Hathaway — I think those brands are enhanced by the association with Berkshire, as some other brands would be.

But I think that's got a long way to go. I think you're dead right on that, that the internet reinforces the necessity for trust in dealing with people.

I mean, you are getting further and further removed from the face-to-face dealing where you can go back to the store the next day or look at the person who sold it to you the next day and get an adjustment or something of the sort.

You're really having to place more and more trust in somebody you're never going to see. And I think you're right that Berkshire Hathaway, if it behaves itself properly, can get a reputation for trust that will be far greater than that possessed by the average company.

And that when we properly associate that with some of our brands that those brands will be enhanced by the association.

So I — no, I've thought a lot about what you're talking about there and so have our managers. And it's something that we intend to capitalize on in the future.

It's rather interesting, I mean, if you look at the companies that do business with people where there's no face-to-face interaction, either with the company itself or some intermediary like a retailer or anything of the sort, I mean, you've got Dell Computer, now you have Amazon.com.

But GEICO is doing business with, now, 3.7 million policy holders and it'll do — before the year is out — it'll be close to 4 1/2 million, and probably 4 billion-8 or so of business with people that have never met anyone from GEICO, they've talked to someone on the phone.

But we are one of the largest companies in the United States, in terms of doing business on a direct-to-consumer basis. We're doing it with people who on average are paying us $1,200 a year or thereabouts for a promise.

So we have a connection that people that talk about the Amazons of the world, where people are buying X dollars' worth of books, we're — have a much more direct connection with people who tend to renew with us year after year.

That is based on trust. I mean, it's not based on the neighbor next door who is — who they can go to if they have a problem. It's based on the fact they trust this company that's in — back in the District of Columbia, Washington, to perform in the future.

And that's a huge asset. And it's growing daily. I mean, we are adding policy holders every day who are signing up with us, who have never met anybody from the company. And that, already, I mean, it's a very big asset. It will be many times bigger, in my view, 10 years from now.

The Berkshire Hathaway umbrella that gets involved in one company after another like that, that people trust, I mean, we can be in an awful lot of homes over the years.

And as more and more business becomes done on an indirect basis, or a direct basis with the consumer, the power of that, in my view, should grow. And we just have to be very smart about how we maximize that growth.

Charlie?

CHARLIE MUNGER: Nothing to add.

20. Management, moats, and the certainty of future earnings

WARREN BUFFETT: OK. Zone 1.

AUDIENCE MEMBER: Hi. My name is David Zelker (PH) and I currently live in Redmond, Washington where I work for one of your good friends. So if I get into trouble for having taken a busy Monday off work, maybe if I give you a call you could put in a word for me.

WARREN BUFFETT: If it's without pay, we won't complain. (Laughter)

AUDIENCE MEMBER: It's vacation, yeah.

My question is about how you two assign value to certain intangibles that I know you look at when you value companies.

Anyone who's read your writings knows that you look for great management and economic moats, as you call them, that enable companies to raise prices and margins.

I'd like you to drill down with us and tell us what, to you, are the signs of great management and economic moats.

And furthermore, do you try to put a dollar value on those management and moats and other intangibles when you value companies? And if so, can you guide us through your thinking there?

And lastly, I'm interested in how you pick your discount rate. I'm actually a — an alma mater of yours from business school and I learned a bunch of junk about beta, too.

I read that you just assign the Treasury rate. And I'm not sure if that's right, but I'd love for you to talk about your discount rate. And I'd really appreciate as much detail about your thinking as you can give us, please.

WARREN BUFFETT: Yeah. We do — we think, in terms of the Treasury rate, but as I said earlier, that doesn't mean we think once we've discounted something at the Treasury rate, that that's the right price to pay. We use the Treasury rate just to get comparability across time and across companies.

But a dollar earned from a horseshoe company is the same as a dollar earned from an internet company, in terms of the dollar.

So it is not worth more, based on whether somebody — it comes from somebody named dot-com, you know, or somebody that — named, you know, the Old-Fashioned Horseshoe Company. The dollars are equal.

And our discount rates, they reflect different expectations about future streams of income, but they don't reflect any difference in terms of whether it comes from something that the market is all enthused about or otherwise.

The moat and the management are part of the valuation process, in that they enter into our thinking as to the degree of certainty that we attribute to the stream of income — stream of cash, actually — that we expect in the future and the amount of it.

I mean it is, you know, it is — it's an art, in terms of valuation of businesses. The formulas get simple at the end.

But if you and I were each looking at the chewing gum business — we own no Wrigley, so I use Wrigley fairly often in class — pick a figure that you would expect unit growth of chewing gum, you know, to grow in the next 10 or 20 years.

Give me your expectations on how much pricing flexibility you have, how much danger there is that Wrigley's share of market is dramatically reduced. You can go through all of that. That's what we go through.

That is — and in the — in that case, we are evaluating the moat. We are evaluating the price elasticity, which interacts with the moat in certain ways. We're evaluating the likelihood of unit demand changing in the future. We're evaluating the likelihood of the management being either very bright with the cash that they develop, or being very stupid with it.

And all of that gets into our evaluation of what that stream of money looks like over the years.

But the value of — how the investment will — works out depends on how that stream develops over the next 10 or 20 years.

We had a question earlier today that made certain suppositions about what could happen at Berkshire. And the formulation was exactly right. The question of what numbers to use is another question, but the formulation was proper. And that formulation — the moat enters into that. If you have a big enough moat, you don't need as much management.

You know, it gets back to Peter Lynch's remark that he likes to buy a business that's so good that an idiot can run it, because sooner or later one will. Well — (Laughter)

That's — I mean, he was saying the same thing. I mean, he was saying that what he really likes is a business with a terrific moat where nothing can happen to the moat. And there aren't very many businesses like that. But then — so you get involved in evaluating all these shadings.

This [a can of Coca-Cola], not the cherry version, but the regular version — this one, has a terrific moat around it. There's a moat even in this, you know, in the container.

You know, I — there was some study made as to what percentage of the people could identify blindfolded what product they were holding just by grabbing the container. And there aren't many that could score like Coca-Cola in that respect.

So here you've got a case where that product has a share of mind. If there's 6 billion people in the world — I don't know what percentage of them have something in their mind that's favorable about Coca-Cola, but it would be a huge number.

And the question is, 10 years from now is that number even larger, and is the impression just a slight bit more favorable, on average, for those billions of people that have it? And that's what the business is all about.

If that develops in that manner, you've got a great business. I think it's very likely to develop in that manner, but that's my own judgment.

I think it is a huge moat at Coca-Cola. I think it varies by different parts of the world and all of that. And I think, on top of it, it has a terrific management.

But that — there's no formula that gives you that precisely, you know, that says that the moat is 28 feet wide and 16 feet deep, you know, or anything of the sort. You have to understand the businesses.

And that's what drives the academics crazy, because they know how to calculate standard deviations and all kinds of things, but that doesn't tell them anything. And that what really tells you something is if you know how to figure out how wide the moat is and whether it's likely to widen further or shrink on you.

Charlie?

CHARLIE MUNGER: Well, you aren't sufficiently critical of the academic approach. (Laughter)

The academic approach to portfolio management, corporate finance, et cetera, et cetera, is very interesting. It's a lot like Long-Term Capital Management. How can people so smart do such silly things? And yet, that's the way it is.

WARREN BUFFETT: That's the great book that needs to be written, really, is, you know, why do smart people do dumb things?

And it's terribly important, because we've got a lot of smart people working with us and, you know, if we can just exorcise all the dumb things, you know, it's just amazing what'll happen.

And to some extent, the record of Berkshire, to the extent it's been good, has been because we — not because we've done brilliant things, but we've probably done fewer dumb things than most people.

But why smart people do things that are against their self-interest is really puzzling. Charlie, tell me why. (Laughs)

CHARLIE MUNGER: Well the — you can argue that the very worst of the academic inanity is in the liberal arts departments of the great universities.

And there, if you ask the question, what one frame of mind is likely to do an individual the most damage to his happiness, to his contribution to others — what one frame of mind will be the worst?

And the answer would be some sort of paranoid self-pity. Couldn't imagine a more destructive frame of mind. Now you have whole departments that want everyone to feel a victim. And you pay money to send your children to places where this is what they teach them.

It's amazing how these pockets of irrationality creep into these eminent places.

One of the reasons I like the Berkshire meetings is I find fewer of those silly people. (Laughter and applause)

WARREN BUFFETT: He excluded the head table from (inaudible). (Laughs)

21. Berkshire B can sell at a discount to the A shares

WARREN BUFFETT: Zone 2.

AUDIENCE MEMBER: My name is Gaylord Hanson. I'm from Santa Barbara, California.

And I'm a rookie as an investor with Berkshire Hathaway, because I only started investing last November. And if this is a typical annual meeting, I will be here every first Monday of May the rest of my life. (Laughter)

WARREN BUFFETT: And we'll be glad to have you. Thanks. (Applause)

AUDIENCE MEMBER: Now I'm very proud to have finally uncovered Berkshire Hathaway and am an investor. But I may have made a slight error in which issue to buy, A or B.

I watch my investments rather closely, and I do believe in buying and holding. I don't buy and trade at all. I buy — I've got things I bought 10, 15 years ago, and I still have them, and I've made a lot of money.

But I made an — I make an analysis, every December 31st, on my portfolio. And I looked at Hathaway A and I looked at Hathaway B on January 1st, and again on the 23rd of April. Hathaway A was up 10 percent since January 1st. Hathaway B was 5.3 percent. Now I don't like that.

Now, I must confess that I'm not inclined to buy a $77,000 stock and buy one of your 5 or 10 shares. But in this instance, because I bought a fair little bit of it, I bought the B and my increase in value, per share, is 4.7 percent less in B than in A. And I got to have that explained to me — (laughter) — by Mr. Buffett.

WARREN BUFFETT: OK. (Applause)

AUDIENCE MEMBER: Have one other — one further comment. (Laughter)

You mentioned the 30 times the B being an A value. Well, if I multiply the value on the 23rd of May — of April — of $2,474 per share by 30, I come up with 74,220 but the price of A was 77,000.

Now I want to know whether I'm stupid or some good intelligent answer from Mr. Buffett.

WARREN BUFFETT: OK. The — (Laughter)

If you read what we've got, both in the original offering on the B, as well as on the website, explaining everything, the A can always be converted into 30 shares of B.

So, it can't sell for anything other than a very tiny amount less than 30 shares of B. And if it went below that, arbitrage would occur. But it doesn't convert the other way.

So there's no question that, whereas a share of B can never be worth more than about 1/30th of A, it can be worth less, because the conversion doesn't run the other way.

Now at year-end, I didn't look at the prices, but obviously the A and B were at almost parity, or probably at parity from what you say.

And at that level we say that if you're buying at least 30 shares of B, you're better off buying the A because you can always go — you can always convert it into 30 shares of B. And without having paid any premium, you can't lose money and you can gain money if the B goes to a discount.

The B will periodically go to a discount against the A. It depends on the supply and demand of the two securities. The B will not go to a premium above the A of any significant amount because then conversion occurs. And we've had a lot of conversion occur.

I have personally said on the website, for example, that I think when the B is at more than a two percent I would rather buy the B, if it was me.

But if it's at less than a two percent discount, I'd probably buy the A, because I just think that you've always got the right to go one direction and you don't have the right to go the other direction.

I would predict, as I think I did just a little earlier, that if you take the next 10 years, you're going to find a significant number of months when the two stocks trade at parity, at 30-to-1 relationship, and you're going to find a significant number of months when the B sells at a discount.

When people who are buying smaller amounts are the more aggressive buyers of the stock, they will push the B up to the point where A gets converted into B. And that means that the B is selling at a slight, very slight, premium over the A.

And when you find times when people are, on balance, preferring their larger buyers, maybe institutional buyers, then the A will tend to sell at some premium.

I think that — you may have picked on April 23rd. My guess is it's narrowed a little bit, because I think it's a 3-and-a-fraction percent discount at the moment.

But I would sort of use that guideline I stuck on the website, although there's nothing magical about it. Those will be the prevailing facts.

I mean, if the B is selling at 2,500 and the A is selling at 75,000, a 30-to-1 relationship, and you were buying at least $75,000 worth of stock, I'd advise you to buy the A because you — the next day, if you wanted to you could convert it into 30 shares of B. And —

But you can't buy 30 shares of B and convert it into one share of A.

So, I'm not sure on the day you actually bought — if you bought B, it sounds as if you did — on the day that you actually bought B, I don't whether you were buying it at a discount or not. Most of the time last year it did not sell at a discount.

Most of the time this year it has sold at a discount. There will be times when it will sell at parity and there will be times when it sells at a discount.

Charlie?

CHARLIE MUNGER: Yeah. When you made your original decision to buy the lower priced of the two stocks, you made a mistake. (Laughter)

WARREN BUFFETT: Well, if he was buying at least 30 shares —

CHARLIE MUNGER: Yeah. Yeah. If you were buying at least 30 shares.

And now that the stock, the B stock, is down to such a discount versus the A, Warren is saying he would hold the B. What could be simpler? (Applause and laughter)

WARREN BUFFETT: We'll try and make both the A and B work out fine. (Laughs)

But it — there — you should understand the relationship of the two. And we tried to be extremely clear about that when we brought up — we had a page that — which we devoted precisely to that point.

And we have put — I put this thing up on the website because I was getting some mail that was questioning this. People clearly didn't understand it, so I put this up on the website.

And if you click on the — our homepage, you will see some reference to something else you can click that says the relative situation on the A and B. And I hope it's clear.

22. "The average insurance company is going to remain very average"

WARREN BUFFETT: Zone 3.

AUDIENCE MEMBER: Hi, my name is John Loo (PH) from New York City.

First, let me start out by thanking both of you for the incredible education that you've provided me through your annual reports and various presentations that you've given in public and in publication.

I was about to send you my tuition check last week, but instead I decided to buy more shares of your company. I hope you'll forgive me.

WARREN BUFFETT: No, you learned well. (Laughter)

AUDIENCE MEMBER: My question basically centers around the insurance industry at present.

Right now, there's excess capacity, which comes and goes, typically speaking. But there seems to be a trend towards international consolidation. And also, there seems to be a trend towards demutualization in the life insurance companies in the U.S.

I was wondering if you could give us your thoughts on what the future face of the insurance industry will look like.

WARREN BUFFETT: Yeah, I — both of those trends do exist, that you talked about.

I don't think that consolidation usually solves many problems. I mean, if you have two lousy businesses and you put them together, you've got a big, lousy business, usually. (Laughter)

And I am not a big fan of consolidation where the theory is that you're going to — you really have two very mediocre businesses and you're going to wring the costs out of one. And it doesn't — it just doesn't work that way in my experience.

But the consolidation will go on, and the demutualization of life companies will go on.

It's not inconceivable that we would play some part in one or the other in some way, although it's not high on our list. But I've learned in this business never to say never because things do happen that have caused me to want to retract some earlier statements.

The winners are going to be the people that have some franchise based on specialized talents, on terrific distribution systems, managerial know-how, even the ability to use the float effectively.

And in the case of something like GEICO, on the superior — it's combined with a franchise — a superior distribution system. We have the low-cost method of distributing personal auto insurance on a — on an all-comers basis.

USAA does a terrific job of delivering low-cost insurance to a specialized group.

GEICO actually came — in a sense — came out of USAA. Leo Goodwin and his wife, Lillian, who founded the company in 1936, were both employed by USAA. And I — Leo, as I remember, was an officer of the company.

So the idea of GEICO came out of a USAA, but they've limited it to a given class. We offer it to everybody in the country, except we can't offer it in New Jersey or Massachusetts because we can't figure out any way to make any money there.

Twentieth Century has done a terrific job of becoming a low-cost operator in a given urban area, in the greater Los Angeles area.

But in terms of an all-comers, all-geography, all-occupation-type operation, in my view, GEICO is the best operation in the United States. And better yet, consumers around the world are agreeing — around the country — are agreeing with that view.

GEICO gained, last year, 20.8 percent policy holders. This year, in the 12 months ended March 31st, it's up 22.5 percent policy owners.

These are on big numbers. The base and the growth has accelerated. So that kind of — that sort of advantage will make for a good insurance — a very good insurance business over time.

I think the average insurance company is going to remain very average, and there is a lot of capital in the industry, as you pointed out. There's more capital in the industry than there is opportunity to use it intelligently.

And nevertheless, it doesn't go away. You are not seeing consolidation that takes away a lot of the capital of the industry, you're not seeing massive repurchases or anything of the sort.

So the capital is there. It's seeking an outlet in premium volume. That actually hurts a General Re to an extent because it means that the primary companies want to retain more of the premium they generate, just so they can show some kind of growth against this capital base.

I think generally, we're very well positioned in the industry. I think the industry will be tougher in the next few years by a significant margin in the personal auto business. But frankly, I look forward to it because I think we — it may offer us the opportunity to grow even faster.

We — you know, we have the best vehicle in a very, very big industry, the auto insurance business. And we've got incredibly good management to take advantage of that. And we've got policies available as you leave at the door. (Laughter)

Charlie?

CHARLIE MUNGER: Nothing to add.

23. China: huge growth potential for Coca-Cola and Gillette

WARREN BUFFETT: Zone 4.

AUDIENCE MEMBER: Good afternoon and thank you. My name is Paul Worth. I'm from Wichita, Kansas. And my question is as follows.

For the consumer franchise companies that Berkshire owns, Coca-Cola and Gillette in particular, in which emerging markets do you see the greatest 10-year potential for unit sales growth? And what economic, political, or social changes are precipitating that growth?

Secondly, do you believe that the U.S. market cap, as a percent of the world's, at 53 percent, is near its zenith? And which countries do you believe will likely show the greatest percent growth in total market cap?

WARREN BUFFETT: Well, I wish I had the answers. The first question, though — obviously, when you're dealing with something like Coke, is raw numbers. I mean, there's huge potential in a country, you know — with the largest country in the world, and in China, where the per capita consumption is very, low but is growing very fast.

So it's very easy for me to predict, and probably be right, absent some tremendous upheaval or some real surprise, that China would be the fastest growth market among countries of any size in the world for Coke from this level.

But that's based on the fact that you've just got a huge number of people that clearly like the product, that are starting from a very low base, and where a lot more bottling infrastructure is going to be needed, but which will be supplied to facilitate that growth.

With Gillette, it's a little different. People are already shaving. What you do is you upgrade the shaving experience that they have. So you have great differences in the quality of the blades available throughout the world. They call them shaving systems when you get into the more advanced ones.

And what happens is that, as people's disposable income grows, they are — they trade up. And they get a much more enjoyable shaving experience, and they get better shaves than was the case when they were forced to rely on the lowest-priced product.

But both of those companies have tremendous opportunities as the prosperity around the world — as the standard of living grows.

And there's just no doubt in my mind that in the blade and razor business for Gillette, which is only a third of their business, but — and in the soft drink business for Coke, they're going to share in it. It'll be uneven in the years that it happens and all of that sort of thing.

But I would almost guarantee you that 10 or 20 years from now, both of those companies will be doing a lot more business in their — in those areas I named than currently.

And, you know, it — we don't fine tune it a lot more than that. I mean, I do not sit and work out — try and work out — country by country, what's going to happen with a Gillette or Coke. It would be a waste of time. I wouldn't know the answer anyway.

But I'm pretty sure the conclusion that both of them will prosper a great deal — and I would hate to be competing with either one of them — here or anywhere else in the world. I mean, they have the winning hand.

Charlie?

CHARLIE MUNGER: Well, I agree with everything you said. And I'd like to add that, if I knew for sure that the United States share of worldwide market capitalization was going to go from 53 percent down to 40 percent, I wouldn't know how to make money out of that insight by running around buying foreign securities.

WARREN BUFFETT: Yeah, we just don't operate on that basis. And, I mean, you know, a few years ago emerging markets were all the rage.

And every institution in the country was getting promoted by somebody who said, "I'm going to run an emerging markets fund." And they felt they had to participate in it and their advisors told them they had to participate.

We regard that all as nonsense. You know, in the end, you've just got to think for yourself about what you know and what you don't know and go where that leads you.

And you don't do it by buying into things with names on them, or sectors, or country funds, or that stuff. You know, that's merchandise that's designed to sell to people and it's usually sold to people at the wrong time.

CHARLIE MUNGER: Yeah. Our game is to find a few intelligent things to do. It's not to stay up on every damn thing that's going on in the whole world.

WARREN BUFFETT: Yeah.

24. Munger recommends a book about Buffett

WARREN BUFFETT: Zone 5. (Applause)

AUDIENCE MEMBER: Hello, my name is Everett Puri. I'm from Atlanta, Georgia and I've two questions.

One is for Mr. Munger in our never-ending effort to have the Munger Book Club surpass the Oprah Book Club. I was wondering if you could make some recommendations.

CHARLIE MUNGER: Yeah.

AUDIENCE MEMBER: The second is, it seems that with the pharmaceutical industry earlier, that the threat of government regulation or government appropriation of those cash flows led to a reasonable market opportunity, and the same thing with Sallie Mae.

And I'm wondering if you feel that that's going on with the tobacco industry now or if that is a larger threat to that industry, larger and permanent threat.

CHARLIE MUNGER: Well, number one, the books.

[Robert] Hagstrom sent me chapters of his latest book on Warren Buffett called, "The Buffett Portfolio." And I didn't read them because I thought his first book was a respectable book, but didn't contribute too much to human knowledge, and — (Laughter)

(Inaudible) sent me the second book, a full version, and I read it and I was flabbergasted to find it not only very well written, but a considerable contribution to the synthesis of human thought on the investment process. And I would recommend that all of you buy a copy of Hagstrom's second Buffett book.

I notice the airport was heavily promoting it. It's called, "The Warren Buffett Portfolio." It doesn't pick any stocks for you, but it does illuminate how the investment process really works, if you think about it rationally.

Another book that I liked very much this year was "Titan", the biography of the original John D. Rockefeller. That's one of the best business biographies I have ever read. And it's a very interesting family story, too.

That is was just a wonderful, wonderful book. And I don't know anybody who's read it who hasn't enjoyed it. So I would certainly recommend that latest biography of John D. Rockefeller the first.

The third book is sort of a revisitation of the subject matter of the book I recommended a year or two ago called "Guns, Germs, and Steel," which was a physiologist's view of the economic history of man. And it was a wonderful book.

And much of that same territory has now been covered by an emeritus history professor from Harvard, who just knows way more economics and science than is common for a history professor. And that gives him better insight.

And his book is a takeoff in title on Adam Smith, and the title is, “The Wealth and Poverty of Nations.” And the guy’s name is [David] Landes. So I would heartily recommend those 3 books.

25. Tobacco far more threatened than pharmaceuticals

CHARLIE MUNGER: Now what was the third question?

WARREN BUFFETT: The other question was about tobacco and pharmaceutical —

CHARLIE MUNGER: Oh, tobacco.

I don’t know about Warren, but I think the legislative threat to tobacco is serious, and I haven’t the faintest idea of how to predict it.

WARREN BUFFETT: Yeah. I would say that there’s no comparison between the threat to tobacco, currently, with the threat to pharmaceuticals in 1993 — that the problems of the tobacco companies are of a far different order than the problems of the pharmaceutical companies.

Nobody was against pharmaceuticals. They were just — had different ideas about maybe pricing, and distribution, and all of that. But tobacco’s a different story. I mean, tobacco companies — well, you can figure it out for yourself.

26. Buffett’s book recommendations

WARREN BUFFETT: The — in terms of books, I would recommend — many of you have may have read it, but this goes back more than a year, but I would — if you haven’t read Katharine Graham’s autobiography [“Personal History”], it is one terrific book.

It’s a very incredibly honest book. And it’s a fascinating story. I mean, it’s a life that’s seen all kinds of things in politics and in business and in government. So I — it’s a great read.

A book that came out just in the last few months in the investment world that I would certainly recommend to everybody is “Common Sense on Mutual Funds,” by Jack Bogle.

Jack is an honest guy, and he knows the business. And if mutual fund investors listen to him, they would save billions and billions of dollars a year. And he tells it exactly like it is. So I — he asked me for a blurb on the book, and I was delighted to provide it.

27. Expect “huge impact” from internet, but too hard to pick winners

WARREN BUFFETT: Let’s go to zone 6, please.

AUDIENCE MEMBER: Good afternoon, Mr. Buffett and good afternoon, Mr. Munger. My name is Mohnish Pabrai and I'm from the Chicago area.

Mr. Buffett, I'd like to thank you for all your insights over the years. I'm especially amazed at the pace of which you answer my letters, point by point.

I have a question for you related to circle of competence. I have a notion that both Mr. Munger and yourself understand the Kleiner Perkins model of early-stage venture capital investing and, currently, their focus in the internet space, extremely well.

My notion is that I think it is well within your circle of competence to understand what they do, just like you understand what your managers at See's Candy or Executive Jets do.

So the question is, that with the internet, I think we're seeing a change that has not been seen in the last 500 years as humans. We haven't seen something that is as dramatic and as profound that's going to come upon us.

If, let's say, a John Doerr at Kleiner Perkins approached you and said that they were starting, let's say, a billion-dollar early-stage or later-stage internet investment fund that Kleiner would manage, would you consider that — would you consider participating in that investment to be within your circle of competence, if it were offered at terms that looked attractive?

WARREN BUFFETT: I agree with the first part of what you said. I mean, I'm not sure that it'll, necessarily, will be the most important in the last 500 years in the commercial world. But it could well be. And if it isn't, it's right up there.

I mean, it is — and we talked about this last year and maybe even the year before — I mean, it is a huge development. But — and I would say that Charlie and I both understand the process of early investment/promotion probably as well as anyone.

We haven't participated in it. There are certain things we don't even like about it. But we do understand it. Right, Charlie? (Laughs)

And I would say that no, we would not have an interest in investing in the fund. It — we do not necessarily regard the internet —

There's no question, if you're in the early stages of promotion, and you — particularly if you've got a reputation as a successful in that — but in this case, it wouldn't make much difference, because the whole field has gone wild — you will make a lot of money selling to the next stage, and the next stage, and the next stage.

But, in terms of picking out businesses that are going to do wonderfully as businesses — not as stocks for a while, but as businesses — I don't think it's necessarily so easy in the internet world.

And I would say that, if you were to ask some very top names in the field to name the next five companies out of the chute, or the next 10 companies out of the chute, and predict that one of them will earn, say, the $200 million I used as a threshold, six or seven years from now, I'm not so sure, if they gave you a list, that they would name a single one.

That doesn't mean they might not make a lot of money by being early investors in them because they sell out to the next group and so on.

But in the end, they have to succeed as businesses. And a few will succeed as businesses. The internet will have a huge impact on the world. But I'm not so sure that makes it an easy investment decision.

Charlie?

CHARLIE MUNGER: Well, at least it's not an easy investment decision for us. And that's what we're looking for.

28. "We will never turn our money over to somebody else"

WARREN BUFFETT: Yeah. We will never turn our money over to somebody else. You know, if we're going to lose your money as Berkshire shareholders, we're going to lose it ourselves and we're going to come back and look you in the eye and tell you how we lost it.

We are not going to say this game is too tough, so we'll give our money to somebody else. You can give your money to somebody else, and you don't need the intermediaries of me and Charlie to do it for you.

So, we get approached all the time. I had a call, you know, within the last couple of days, on something you would know very well about participating in some fund or — they always have — it's always stage one, stage two, stage three.

And the idea is we get some more people to come in later at twice the price, and maybe the fact that our name is involved, and it will cause people to pay even more, and all of that sort of thing. We're not in that game.

And we're not going to turn the money over to someone else to manage. It's your money. You gave it to us to manage. We'll manage it. If you decide you don't want us to manage it, you decide who you give it to. We're not going to be intermediaries on it.

And if we don't understand something ourselves, we're not looking for anybody else to do it for us. It — the world doesn't work very well that way, anyway.

I mean, it — usually you end up in the hands of the promoters and not the hands of the people who really know how to make money.

Charlie? You want to? He said it.

29. Selling McDonald's was bad; postmortems are good

WARREN BUFFETT: OK. Zone 7.

AUDIENCE MEMBER: Peter Kenner from New York City. Good afternoon, Warren, Charlie.

WARREN BUFFETT: Hi, Peter.

AUDIENCE MEMBER: Good to see you. I'd like to ask you what your thought process was when you, or share with us your thoughts, when you decided to sell McDonald's.

WARREN BUFFETT: That must have been Charlie's idea, Peter. (Laughter)

Peter, incidentally, is in a family that four generations have essentially invested with us. And they're all terrific people, I might add. His dad was a wonderful guy.

The — you know, I said it was a mistake to sell it, and it was a mistake. And I just reported that in the interest of candor. And there were some reasons why I thought it was something we — I didn't think it was, obviously, that it was any great short sale, or even a great sale.

But I didn't think it belonged in the list of eight or 10 of the businesses, of the very few businesses, that we want to own in the world. And I would say that that particular decision has cost you, hmm, in the area of a billion dollars-plus.

Charlie?

CHARLIE MUNGER: You want me to rub your nose in it? You're doing a — (Laughter)

You're doing a pretty good job by yourself. (Laughter)

By the way, that's a good practice around Berkshire. We do rub our own noses in it. We don't even need the help of the Kenners. (Laughter)

WARREN BUFFETT: We believe in postmortems at Berkshire. I mean, we really do believe — one of the things I used to do when I ran the partnership is I contrasted all sale decisions versus all purchase decisions.

It wasn't enough that the purchase decisions worked out well, they had to work out better than the sale decisions. And managers tend to be reluctant to look at the results of the capital projects or the acquisitions that they proposed with great detail a year or two earlier to a board.

And they don't want to actually stick the figures up there as to how the reality worked out against the projections. And that's human nature.

But, I think you're a better doctor if you drop by the pathology department, occasionally. And I think you're a better manager or investor if you look at every one of the decisions you've made, of importance, and see which ones worked out and which ones didn't and, you know, what is your batting average.

And if your batting average gets too bad, you better hand the decision making over to someone else.

Charlie, want to rub my nose anymore?

CHARLIE MUNGER: No.

WARREN BUFFETT: No, that's OK. OK. We're —

30. Looked "a little" at health insurance partners

WARREN BUFFETT: Zone 8.

AUDIENCE MEMBER: Good afternoon. Ian Sacks from New York City.

This afternoon, through various questions and comments, we've mentioned the fact that the word "trust," which Berkshire Hathaway and the brand has. We've mentioned, basically, health, and the importance of health, and that being above everything else.

With Berkshire's competencies in the insurance industry and with the health care services sector being relatively depressed, is — although the dynamics would be different in the industry how risk is managed on an overall basis — has Berkshire looked at all, in terms of taking a position or buying a health insurance business?

WARREN BUFFETT: Charlie runs a hospital so I'm going to let him talk about this.

CHARLIE MUNGER: Sure. We've looked a little. We've looked at everything in turmoil that's important in the world. But so far it hasn't seemed to yield our particular mental approach.

WARREN BUFFETT: Yeah. I don't know who I would want to get in with in that business at the moment. That's not — I'm not condemning the people in the business, it just means I don't know. I'm not — I haven't been able to evaluate that.

And I think it would make an enormous difference, in terms of wanting to get in with a quality operation and quality people and at a sensible price. And we haven't seen that, but that doesn't mean we've canvassed the whole field either.

CHARLIE MUNGER: There is a significant percentage of schlock operators in the field who are painting the reality different than it is. That makes it harder.

31. "Journalistic process" good for learning about companies

WARREN BUFFETT: Zone 1.

AUDIENCE MEMBER: Eric Tweedie from Shavertown, Pennsylvania.

I just wanted to express our appreciation of — regarding all the operating businesses that we've visited. They've been very warm and hospitable.

In fact, when we visited Executive Jets at the airport, the tour was so impressive my wife wanted to buy an airplane. (Laughter)

WARREN BUFFETT: What's her name? What's her name? (Laughter)

AUDIENCE MEMBER: Well, I won't say that —

CHARLIE MUNGER: Spell it out!

AUDIENCE MEMBER: American Express declined the $500,000 we tried to put on my card. (Buffett laughs)

But you can thank the chairman for me next time you see him. Just kidding, but —

My question regards, basically, approach to investing. I've been investing my own money in equities for about 10 years. And my results, overall, have been relatively good.

In the process, however, I've taught myself some very painful and costly lessons. For instance, my first equity ever purchased was a share of Berkshire Hathaway for $5,500 in 1990 and I sold it 3 months later for something over $8,000 and congratulated myself for the rapid and shrewd profit. (Laughter)

And earlier this year, I repurchased the same share for $70,000. (Laughter) And I intend to own it for the rest of my life. (Laughter) So you can see I'm growing. (Laughter)

My question is, I have no formal education in accounting and finance. And I would just like some advice from you regarding an approach to educate myself and a reading list of basic texts, obviously, starting with the Berkshire Hathaway annual reports. Thank you.

WARREN BUFFETT: Thank you, particularly for your comments about the people from our operating companies, because they have just been terrific. They come out here — (Applause)

They are here at five in the morning. They — I mean, they do a tremendous amount of work over this weekend. They're cheerful. I've met with them all on Saturday at lunch and, I mean, they're just one sensational group of people, and —

You know, I'm very proud of them. And the managers should be very proud of the people they brought with us. And I hope you get a chance to thank as many of them as possible personally.

Incidentally, at the See's counter you'll find Angelica Stoner, who's been with us for 50 years and, you know — here she comes from California to help us out and sell peanut brittle, and she's having a good time doing it. (Applause)

And the question you ask is a very good one about — you know, in terms of accounting and finance — what's the best way to teach yourself?

I was always so interested in it from such a young age, that I — my approach was go to the Omaha — originally, was to go to the Omaha Public Library and just take out every book there was on the subject. And I learned a lot — (laughs) — I learned a lot that wasn't true in the process, too. I got very interested in charting and all that sort of thing and buying stocks.

But I did it by just a tremendous amount of reading, but it was easy for me because, you know, it was like going to baseball games or something of the sort.

And in terms of naming specific texts in accounting, you know, I think you may want to read some of the better, even, magazine articles that have appeared. I mean, there've been - or newspaper articles.

There have been some good commentary about accounting there.

I don't have — can you think, Charlie, of any specific texts or anything that we could recommend?

CHARLIE MUNGER: I think both of us learned more from the great business magazines than we do anywhere else. It's such an easy, shorthand way of getting a vast variety of business experience, just to riffle through issue after issue after issue, covering a great variety of businesses.

And if you get the mental habit of relating what you're reading to the basic structure of the underlying ideas being demonstrated, you gradually accumulate some wisdom about investing.

I don't think you can get to be a really good investor over a broad range without doing a massive amount of reading. I don't think there's any one book that will do it for you.

WARREN BUFFETT: Yeah. You might think about picking out five or 10 companies where you feel quite familiar with their products, maybe but not necessarily so familiar with their financials and all of that.

But pick out something, so at least you understand what — if you understand their products, you know what's going on in the business itself. And then, you know, get lots of annual reports. And, through the internet or something else, get all the magazine articles that have been written on it — on those companies for five or 10 years.

Just sort of immerse yourself as if you were either going to work for the company, or they'd hired you as the CEO, or you're going to buy the whole business. I mean, you could look at it in any those ways.

And when you get all through, ask yourself, "What do I not know that I need to know?"

And back many years ago, I would go around and I would talk to — I would talk to competitors, always. Talk to employees of the company, and ask those kinds of questions. That's, in effect, what I did with my friend Lorimer Davidson when I first met him at GEICO, except I started from ground zero. But I just kept asking him questions.

And that's what it really is. You know, one of the questions I would ask if I were interested in the ABC Company, I would go to the XYZ Company and try and learn a lot about it. Now, you know, there's spin on what you get, but you learn to discern it.

Essentially, you're being a reporter. I mean, it's very much like journalism. And if you ask enough questions — Andy Grove has in his book — he talks about the silver bullet, you know.

You talk to the competitor and you say, "If you had a silver bullet and you could only put it through the head of one of your competitors, which one would it be and why?" Well, you learn a lot if you ask questions like that over time.

And you ask somebody in the XYZ industry and you say, "If you were going to go away for 10 years and you had to put all of your money into one of your competitors — the stock of one of your competitors, not your own — which one would it be and why?" Just keep asking, and asking, and asking.

And you'll have to discount the answers you get in certain ways, but you will be getting things poured into your head that then you can use to reformulate and do your own thinking about why you evaluate this business at this or that.

The accounting, you know, you just sort of have to labor your way through that. Might — I mean, you may be able to take some courses, even, in that. But the biggest thing is to find out how businesses operate.

And, you know, who am I afraid of? If we're running GEICO, you know, who do we worry about? Why do we worry about them? Who would we like to put that silver bullet through? I'm not going to tell you. (Laughter) That the —

You know, it's — you keep asking those questions. And then you go to the guy they want to put the silver bullet through and find out who he wants to put the silver bullet through. It's like who wakes up the bugler, you know, in the Irving Berlin song?

And that's the way you approach it. You — and you'll be learning all the time.

You can talk to current employees, ex-employees, vendors, supplies, distributors, retailers, I mean, there's customers, all kinds of people and you'll learn.

But it is a — it's an investigative process. It's a journalistic process. And in the end, you want to write the story. I mean, you're doing a journalistic enterprise. And six months later, you want to say the XYZ Company is worth this amount because, and you just start in and write the story.

And some companies are easy to write stories about, and other companies are much tougher to write stories about. We try to look for the ones that are easy.

Charlie?

CHARLIE MUNGER: Yeah. For the histories of the thousand biggest corporations laid out in digest form, I think Value Line is in a class by itself. That one volume really tells a lot about the histories of our best companies.

WARREN BUFFETT: Yeah. If you just look, there's 1,700 of them. If you look at each page and you look at sort of what's happened in terms of return on equity, in terms of sales growth, (inaudible), all kinds of things.

And then you say, "Why did this happen? Who let it happen?" You know, "What's that chart going to look the next 10 years?" Because that's what you're really trying to figure out, not the price chart, but the chart about business operation.

You're trying to print the next 10 years of Value Line in your head. And there's some companies that you can do a reasonable job with, and there's others that are just too tough. But that's what the game is about.

And it can be a lot of — I mean, if you have some predilection toward it, it can be a lot of fun. I mean, the process is as much fun as the conclusion that you come to.

CHARLIE MUNGER: Of course, what he's saying there, when he talks about why — that's the most important question of all. And it doesn't apply just to investment. It applies to the whole human experience.

If you want to get smart, the question you've got to keep asking is: Why? Why? Why? Why?

And you have to relate the answers to a structure of deep theory. And you've got to know the main theories. And it's mildly laborious, but it's also a lot of fun.

32. Creating value for subsidiaries by leaving them alone

WARREN BUFFETT: Zone 2.

AUDIENCE MEMBER: Good afternoon, Mr. Buffett and Mr. Munger. I'm Patrick Wolff, formerly from Cambridge, Massachusetts and soon to be from the San Francisco area.

Like many people around the world who want to learn about business, I've read all of your letters to the shareholders. And like many people here in this room, I was so impressed that I bought a piece of the company.

But I must admit that, in studying Berkshire Hathaway, there's one element that I didn't quite understand, and I'd love it if you could please explain it. And that is the following.

How does Berkshire Hathaway add value to the various wholly-owned companies in the manufacturing services and retail division?

And the reason I ask this question is, as you yourself said earlier this morning, it's very difficult in negotiated purchase agreement to buy a company for anything other than what it's truly worth.

So if Berkshire Hathaway is going to create value by buying such fantastic companies as the Nebraska Furniture Mart, or See's Candies, or any of the other fantastic businesses we have, there must be some way in which Berkshire Hathaway adds to that value. Could you please explain how we do that?

WARREN BUFFETT: In certain specific cases, the case of General Re being the most recent example, we actually laid out in the proxy material why we thought there was at least a reasonable chance that the ownership by Berkshire would add value.

And we got into various reasons about the ability to use the float, and tax advantages, and the ability to move faster around the world, and that sort of thing. So we've actually spelled that out in that case.

I think in the case of something like Executive Jet, you might well figure that there are some reasons why association with Berkshire would put Executive Jet on the map and in the minds of people who could afford to buy fractional ownerships of planes, faster than might otherwise be the case.

But usually the situation — so there are specific cases where we bring something to the party. But the biggest thing we bring to the party on a generalized basis is what I spelled out a little bit in the annual report this year in talking about GEICO.

We enable terrific managers to spend, in many cases, to spend a greater percentage of their time and energies on what they do best, and what they like to do best, and what is the most productive for owners than would be the case without our ownership.

In other words, we give them a very rational owner who expects them to spend all of their time focused on what counts for the business and eliminates the distractions that often come with running a business, particularly a publicly-owned business.

I would guess that the CEOs of most public companies waste a third of their time, at least, in all kinds of things they do that really don't add a thing to the business — in many cases subtract, because they're trying to please various constituencies and waste their time with them, that take the company backwards.

But we eliminate all of that. So, we simply can create an ownership — we think we can create the best ownership environment, frankly, that can exist — other than maybe owning it a hundred percent yourself — for any business.

And that happens to also go along with how we like to lead our lives, because we don't want to run around and attend a lot of meetings and do all of these things that people do. And that's — that can be a significant plus.

I think that GEICO has probably grown a fair amount faster as a subsidiary of Berkshire than it would have if it had remained an independent company, although it was a hell of an independent company and would have continued to be one.

But I think billions and billions of dollars will be added to the value of GEICO, over and above what would have happened if it had reminded a public company. Not because, as I put in the report —

Now we haven't taught the management one thing about the classification of insurance risk, or how to run better ads, or anything of the sort. We've just let them spend a hundred percent of their time focused on what counts. And that is a rare occurrence in American business.

Charlie?

CHARLIE MUNGER: Yeah. Just not having a vast headquarters staff to tell the subsidiaries what to do — that helps most of the kind of subsidiaries that we buy. They are not looking for a lot of people looking over their shoulder from headquarters, and a lot of unnecessary flights back and forth, and so on.

So, I would say most of what we do, or at least a great part of what we do, is just not interfere in a counterproductive way. And that non-interference has enormous value, at least with the kind of managers and the kind of businesses that have joined us.

WARREN BUFFETT: And a great many — you have to see it to believe it — but in a great many corporate operations, the importance of a large group of people is tied to how much they meddle in the affairs of other people who are out there doing the work.

And, you know, we stay out of the way. And we're appreciative owners and we're knowledgeable owners. We know when somebody has done a good job and we know when they've done a good job when industry conditions are terribly tough.

So, we can look at our shoe operations, for example. And, you know, they are in tough industry conditions now. We've got some absolutely terrific people. And we are knowledgeable enough about that, so we don't go simply by a bunch of figures and make a determination whether people are doing the right thing.

So, we've got — we're knowledgeable owners and we have no one whose job at headquarters is to go around and tell our managers how to run their human relations departments, or how to run their legal departments, or a dozen other things.

And not only do people have more time to work on the productive things, but I think they probably actually appreciate the fact that they're left alone.

So, I think you even get more than the proportional amount of effort out of them than would be indicated simply by the amount of time you free up, because I think you get even an added enthusiasm for the job.

And I think having people in a large organization that truly are enthusiastic about what they're doing, that doesn't happen all the time. But I think it does happen to a pretty good degree at Berkshire.

Charlie?

CHARLIE MUNGER: No more.

33. Intrinsic value of marketable securities

WARREN BUFFETT: OK. Zone 3.

AUDIENCE MEMBER: Gentlemen, hi, I'm David Butler from here in Omaha. A comment and then two quick questions. Comment is regarding the annual reports.

I read a lot of annual reports for a living, and I sort of start off with the assumption that I'm going to have to spend 20 to 30 hours looking at 5 years of 10-Ks and 5 years of annuals, probably some 10-Qs and going through a lot of numbers to have any kind of idea how the company really is working.

And comparing that to Berkshire, which has basically crystal-clear clarity, it's quite refreshing to read honesty, and it's quite refreshing to see accounting that's actually presented in a clear fashion and that doesn't try to hide facts.

So as a shareholder and as an investor, I'm very grateful for the effort and for the high quality of your annual report. And I think we ought to give Mr. Buffett and Mr. Munger a hand — (applause) — for that.

OK, now that I've brown-nosed a little bit. (Laughter)

WARREN BUFFETT: Here comes the zinger, huh? (Laughter)

AUDIENCE MEMBER: Yeah. I'm nervous about the derivative operations that General Re has. Now, right now the balance sheet figure says that there's a $400 million net asset position, but there are also some really hairy derivatives, the swaps and the floors and caps.

And knowing that, in the past, you haven't used those types of leveraged derivatives, I'm wondering if that's going to change now.

And then secondly, in terms of going through an intrinsic value calculation, when you and Mr. Munger think about intrinsic value, obviously, a big part of that is the marketable securities portfolio.

Do you think of intrinsic value, in terms of the marketable securities, as what their market value is, in terms of their look-through earnings, or is there a separate intrinsic value calculation that you sort of roll into the overall Berkshire intrinsic calculation?

WARREN BUFFETT: Yeah. I'll answer the second part first. On the intrinsic value, we tend to use the market prices in the way we think about things, although there are times when we feel that we own securities that are worth far more than they're carried for.

And we've mentioned that once or twice. There was a time in the mid-1970s, if you'd look back at our 1975 annual report — I may be off by a year, one direction or other — probably 1974, because I — we valued the securities at market.

But I — in the body of the report, I said we really think these things are going to worth — be worth a hell of a lot more than they're selling for currently. That was an unusual remark for somebody, if you knew me, that would be an unusual remark for me.

And at that time, I would have said that, in looking at the intrinsic value of Berkshire, I would have said that I was quite comfortable marking these things up in my mind. I wouldn't have done it with the public, but I would have done it in my mind.

But under most circumstances, we tend to think of the market value as being representative of it, that that is the price at which we could buy or sell that day.

And if we thought they were ridiculously high in relation to intrinsic value, we'd probably do something about it. And they certainly haven't been so low that we've ever felt like marking them up in recent — in our own minds — in recent years.

34. Must look "very carefully" at derivatives accounting

WARREN BUFFETT: The question about the derivatives business, it's a good business — it's a good question — because it involves big balance sheet numbers and big off-balance sheet numbers in relation to the amount of money made, and particularly in terms — in relation to the amount of money made in terms of the capital employed.

And the credit guarantees, the long-term nature, all of that makes that something that we will want — we do want to look at always very hard.

It's a business that people can get in trouble in and they can get in trouble while the accounting sails along merrily.

I remember when Charlie and I were at Salomon, we found — we didn't find it, other people found it finally, but — mismarked derivative positions that were very substantial that had gone on for a long period of time.

And this was with paying a lot of money to auditors to look at them.

Am I right about that, Charlie, on that? Charlie was on the audit committee.

CHARLIE MUNGER: The worst glitches were that the books just got so out of control, not in the derivative department, but there were just multimillion dollar errors.

WARREN BUFFETT: But we found mismarks, as I remember —

CHARLIE MUNGER: Yes.

WARREN BUFFETT: — in the 20-odd millions on —

CHARLIE MUNGER: Yes.

WARREN BUFFETT: — positions —

CHARLIE MUNGER: Yes. Both.

WARREN BUFFETT: In some cases, because the contracts got so complicated that the people that were valuing them didn't understand them, and — at least partially didn't understand them.

There's a lot of potential for mischief when people can write down a few numbers on a piece of paper and nothing changes hands for a long time and their compensation, you know, next month and this year, depends on what numbers are attached to a bunch of things that are not really — where they don't come to fruition for a long time. And particularly when you're guaranteeing credit or anything of the sort.

So, you're very correct in observing that, when the numbers are big in relation to the amount of profits, you want to look very carefully, because if anything goes wrong, it could go wrong on a fairly big scale, and you're not getting paid a lot for running that type of risk.

35. "We don't sugarcoat things"

WARREN BUFFETT: I very much appreciate what you said about the annual reports, though. We may disappoint you in how the business performs over time. I mean, that is not totally within our control. We'll try hard, but we can make no promises.

But we shouldn't ever disappoint you in either our accounting or in the candor of the reporting. I mean, that is in our control. We may not like what we have to tell you, but there's no reason for failure — there can be no reason for failure in the accounting or candor.

I mean, that is — there's — if we fail there it's because we set out to fail.

We can fail in terms of operating performance for a lot of reasons, some within our control and some without our control. But — and that can happen. And if so, we'll tell you about it.

But we're going to try very hard to make sure that you see the business in a form exactly like we see the business, and that we don't sugarcoat things, and we don't put spin on things.

And we'll judge ourselves in a — to a significant degree by how we handle that particular part of the problem. We'll also try to do a good job in operations.

Charlie, do you have anything to add on that?

CHARLIE MUNGER: No.

BERKSHIRE HATHAWAY INC.

To the Shareholders of Berkshire Hathaway Inc.:

Our gain in net worth during 1999 was $358 million, which increased the per-share book value of both our Class A and Class B stock by 0.5%. Over the last 35 years (that is, since present management took over) per-share book value has grown from $19 to $37,987, a rate of 24.0% compounded annually.*

The numbers on the facing page show just how poor our 1999 record was. We had the worst absolute performance of my tenure and, compared to the S&P, the worst relative performance as well. Relative results are what concern us: Over time, bad relative numbers will produce unsatisfactory absolute results.

Even Inspector Clouseau could find last year's guilty party: your Chairman. My performance reminds me of the quarterback whose report card showed four Fs and a D but who nonetheless had an understanding coach. "Son," he drawled, "I think you're spending too much time on that one subject."

My "one subject" is capital allocation, and my grade for 1999 most assuredly is a D. What most hurt us during the year was the inferior performance of Berkshire's equity portfolio — and responsibility for that portfolio, leaving aside the small piece of it run by Lou Simpson of GEICO, is entirely mine. Several of our largest investees badly lagged the market in 1999 because they've had disappointing operating results. We still like these businesses and are content to have major investments in them. But their stumbles damaged our performance last year, and it's no sure thing that they will quickly regain their stride.

The fallout from our weak results in 1999 was a more-than-commensurate drop in our stock price. In 1998, to go back a bit, the stock outperformed the business. Last year the business did much better than the stock, a divergence that has continued to the date of this letter. Over time, of course, the performance of the stock *must* roughly match the performance of the business.

Despite our poor showing last year, Charlie Munger, Berkshire's Vice Chairman and my partner, and I expect that the gain in Berkshire's intrinsic value over the next decade will modestly exceed the gain from owning the S&P. We can't guarantee that, of course. But we are willing to back our conviction with our own money. To repeat a fact you've heard before, well over 99% of my net worth resides in Berkshire. Neither my wife nor I have ever sold a share of Berkshire and — unless our checks stop clearing — we have no intention of doing so.

Please note that I spoke of hoping to beat the S&P "modestly." For Berkshire, truly large superiorities over that index are a thing of the past. They existed then because we could buy both businesses and stocks at far more attractive prices than we can now, and also because we then had a much smaller capital base, a situation that allowed us to consider a much wider range of investment opportunities than are available to us today.

Our optimism about Berkshire's performance is also tempered by the expectation — indeed, in our minds, the virtual certainty — that the S&P will do far less well in the next decade or two than it has done since 1982. A recent article in Fortune expressed my views as to why this is inevitable, and I'm enclosing a copy with this report.

Our goal is to run our present businesses well — a task made easy because of the outstanding managers we have in place — and to acquire additional businesses having economic characteristics and managers comparable to those we already own. We made important progress in this respect during 1999 by acquiring Jordan's Furniture and contracting to buy a major portion of MidAmerican Energy. We will talk more about these companies later in the report but let me emphasize one point here: We bought both for cash, issuing no Berkshire shares. Deals of that kind aren't always possible, but that is the method of acquisition that Charlie and I vastly prefer.

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*All figures used in this report apply to Berkshire's A shares, the successor to the only stock that the company had outstanding before 1996. The B shares have an economic interest equal to 1/30th that of the A.

Guides to Intrinsic Value

I often talk in these pages about intrinsic value, a key, though far from precise, measurement we utilize in our acquisitions of businesses and common stocks. (For an extensive discussion of this, and other investment and accounting terms and concepts, please refer to our Owner's Manual on pages 55 - 62. Intrinsic value is discussed on page 60.)

In our last four reports, we have furnished you a table that we regard as useful in estimating Berkshire's intrinsic value. In the updated version of that table, which follows, we trace two key components of value. The first column lists our per-share ownership of investments (including cash and equivalents but excluding assets held in our financial products operation) and the second column shows our per-share earnings from Berkshire's operating businesses before taxes and purchase-accounting adjustments (discussed on page 61), but after all interest and corporate expenses. The second column excludes *all* dividends, interest and capital gains that we realized from the investments presented in the first column. In effect, the columns show how Berkshire would look if it were split into two parts, with one entity holding our investments and the other operating all of our businesses and bearing all corporate costs.

Year	Investments Per Share	Pre-tax Earnings (Loss) Per Share With All Income from Investments Excluded
1969	$ 45	$ 4.39
1979	577	13.07
1989	7,200	108.86
1999	47,339	(458.55)

Here are the growth rates of the two segments by decade:

Decade Ending	Investments Per Share	Pre-tax Earnings Per Share With All Income from Investments Excluded
1979	29.0%	11.5%
1989	28.7%	23.6%
1999	20.7%	N.A.
Annual Growth Rate, 1969-1999	25.4%	N.A.

In 1999, our per-share investments changed very little, but our operating earnings, affected by negatives that overwhelmed some strong positives, fell apart. Most of our operating managers deserve a grade of A for delivering fine results and for having widened the difference between the intrinsic value of their businesses and the value at which these are carried on our balance sheet. But, offsetting this, we had a huge — and, I believe, aberrational — underwriting loss at General Re. Additionally, GEICO's underwriting profit fell, as we had predicted it would. GEICO's overall performance, though, was terrific, outstripping my ambitious goals.

We do not expect our underwriting earnings to improve in any dramatic way this year. Though GEICO's intrinsic value should grow by a highly satisfying amount, its underwriting performance is almost certain to weaken. That's because auto insurers, as a group, will do worse in 2000, and because we will materially increase our marketing expenditures. At General Re, we are raising rates and, if there is no mega-catastrophe in 2000, the company's underwriting loss should fall considerably. It takes some time, however, for the full effect of rate increases to kick in, and General Re is therefore likely to have another unsatisfactory underwriting year.

You should be aware that one item regularly working to widen the amount by which intrinsic value exceeds book value is the annual charge against income we take for amortization of goodwill — an amount now running about $500 million. This charge reduces the amount of goodwill we show as an asset and likewise the amount that is included in our book value. This is an accounting matter having nothing to do with true economic goodwill, which increases in most years. But even if economic goodwill were to remain constant, the annual amortization charge would persistently widen the gap between intrinsic value and book value.

Though we can't give you a precise figure for Berkshire's intrinsic value, or even an approximation, Charlie and I can assure you that it far exceeds our $57.8 billion book value. Businesses such as See's and Buffalo News are now worth fifteen to twenty times the value at which they are carried on our books. Our goal is to continually widen this spread at all subsidiaries.

A Managerial Story You Will Never Read Elsewhere

Berkshire's collection of managers is unusual in several important ways. As one example, a very high percentage of these men and women are independently wealthy, having made fortunes in the businesses that they run. They work neither because they need the money nor because they are contractually obligated to — we have no contracts at Berkshire. Rather, they work long and hard because they love their businesses. And I use the word "their" advisedly, since these managers are truly in charge — there are no show-and-tell presentations in Omaha, no budgets to be approved by headquarters, no dictums issued about capital expenditures. We simply ask our managers to run their companies as if these are the sole asset of their families and will remain so for the next century.

Charlie and I try to behave with our managers just as we attempt to behave with Berkshire's shareholders, treating both groups as we would wish to be treated if our positions were reversed. Though "working" means nothing to me financially, I love doing it at Berkshire for some simple reasons: It gives me a sense of achievement, a freedom to act as I see fit and an opportunity to interact daily with people I like and trust. Why should our managers — accomplished artists at what they do — see things differently?

In their relations with Berkshire, our managers often appear to be hewing to President Kennedy's charge, "Ask not what your country can do for you; ask what you can do for your country." Here's a remarkable story from last year: It's about R. C. Willey, Utah's dominant home furnishing business, which Berkshire purchased from Bill Child and his family in 1995. Bill and most of his managers are Mormons, and for this reason R. C. Willey's stores have never operated on Sunday. This is a difficult way to do business: Sunday is the favorite shopping day for many customers. Bill, nonetheless, stuck to his principles -- and while doing so built his business from $250,000 of annual sales in 1954, when he took over, to $342 million in 1999.

Bill felt that R. C. Willey could operate successfully in markets outside of Utah and in 1997 suggested that we open a store in Boise. I was highly skeptical about taking a no-Sunday policy into a new territory where we would be up against entrenched rivals open seven days a week. Nevertheless, this was Bill's business to run. So, despite my reservations, I told him to follow both his business judgment and his religious convictions.

Bill then insisted on a truly extraordinary proposition: He would personally buy the land and build the store — for about $9 million as it turned out — and would sell it to us at his cost if it proved to be successful. On the other hand, if sales fell short of his expectations, we could exit the business without paying Bill a cent. This outcome, of course, would leave him with a huge investment in an empty building. I told him that I appreciated his offer but felt that if Berkshire was going to get the upside it should also take the downside. Bill said nothing doing: If there was to be failure because of his religious beliefs, he wanted to take the blow personally.

The store opened last August and immediately became a huge success. Bill thereupon turned the property over to us — including some extra land that had appreciated significantly — and we wrote him a check for his cost. And get this: *Bill refused to take a dime of interest on the capital he had tied up over the two years*.

If a manager has behaved similarly at some other public corporation, I haven't heard about it. You can understand why the opportunity to partner with people like Bill Child causes me to tap dance to work every morning.

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A footnote: After our "soft" opening in August, we had a grand opening of the Boise store about a month later. Naturally, I went there to cut the ribbon (your Chairman, I wish to emphasize, is good for *something*). In my talk I told the crowd how sales had far exceeded expectations, making us, by a considerable margin, the largest home furnishings store in Idaho. Then, as the speech progressed, my memory miraculously began to improve. By the end of my talk, it all had come back to me: Opening a store in Boise had been *my* idea.

The Economics of Property/Casualty Insurance

Our main business — though we have others of great importance — is insurance. To understand Berkshire, therefore, it is necessary that you understand how to evaluate an insurance company. The key determinants are: (1) the amount of float that the business generates; (2) its cost; and (3) most critical of all, the long-term outlook for both of these factors.

To begin with, float is money we hold but don't own. In an insurance operation, float arises because premiums are received before losses are paid, an interval that sometimes extends over many years. During that time, the insurer invests the money. This pleasant activity typically carries with it a downside: The premiums that an insurer takes in usually do not cover the losses and expenses it eventually must pay. That leaves it running an "underwriting loss," which is the cost of float. An insurance business has value if its cost of float over time is less than the cost the company would otherwise incur to obtain funds. But the business is a lemon if its cost of float is higher than market rates for money.

A caution is appropriate here: Because loss costs must be estimated, insurers have enormous latitude in figuring their underwriting results, and that makes it very difficult for investors to calculate a company's true cost of float. Errors of estimation, usually innocent but sometimes not, can be huge. The consequences of these miscalculations flow directly into earnings. An experienced observer can usually detect large-scale errors in reserving, but the general public can typically do no more than accept what's presented, and at times I have been amazed by the numbers that big-name auditors have implicitly blessed. In 1999 a number of insurers announced reserve adjustments that made a mockery of the "earnings" that investors had relied on earlier when making their buy and sell decisions. At Berkshire, we strive to be conservative and consistent in our reserving. Even so, we warn you that an unpleasant surprise is always possible.

The table that follows shows (at intervals) the float generated by the various segments of Berkshire's insurance operations since we entered the business 33 years ago upon acquiring National Indemnity Company (whose traditional lines are included in the segment "Other Primary"). For the table we have calculated our float — which we generate in large amounts relative to our premium volume — by adding net loss reserves, loss adjustment reserves, funds held under reinsurance assumed and unearned premium reserves, and then subtracting agents balances, prepaid acquisition costs, prepaid taxes and deferred charges applicable to assumed reinsurance. (Got that?)

Yearend Float (in $ millions)

Year	GEICO	General Re	Other Reinsurance	Other Primary	Total
1967				20	20
1977			40	131	171
1987			701	807	1,508
1997	2,917		4,014	455	7,386
1998	3,125	14,909	4,305	415	22,754
1999	3,444	15,166	6,285	403	25,298

Growth of float is important — but its cost is what's vital. Over the years we have usually recorded only a small underwriting loss — which means our cost of float was correspondingly low — or actually had an underwriting profit,

which means we were being *paid* for holding other people's money. Indeed, our cumulative result through 1998 was an underwriting profit. In 1999, however, we incurred a $1.4 billion underwriting loss that left us with float cost of 5.8%. One mildly mitigating factor: We enthusiastically welcomed $400 million of the loss because it stems from business that will deliver us exceptional float over the next decade. The balance of the loss, however, was decidedly unwelcome, and our overall result must be judged extremely poor. Absent a mega-catastrophe, we expect float cost to fall in 2000, but any decline will be tempered by our aggressive plans for GEICO, which we will discuss later.

There are a number of people who deserve credit for manufacturing so much "no-cost" float over the years. Foremost is Ajit Jain. It's simply impossible to overstate Ajit's value to Berkshire: He has from scratch built an outstanding reinsurance business, which during his tenure has earned an underwriting profit and now holds $6.3 billion of float.

In Ajit, we have an underwriter equipped with the intelligence to properly rate most risks; the realism to forget about those he can't evaluate; the courage to write huge policies when the premium is appropriate; and the discipline to reject even the smallest risk when the premium is inadequate. It is rare to find a person possessing any one of these talents. For one person to have them all is remarkable.

Since Ajit specializes in super-cat reinsurance, a line in which losses are infrequent but extremely large when they occur, his business is sure to be far more volatile than most insurance operations. To date, we have benefitted from good luck on this volatile book. Even so, Ajit's achievements are truly extraordinary.

In a smaller but nevertheless important way, our "other primary" insurance operation has also added to Berkshire's intrinsic value. This collection of insurers has delivered a $192 million underwriting profit over the past five years while supplying us with the float shown in the table. In the insurance world, results like this are uncommon, and for their feat we thank Rod Eldred, Brad Kinstler, John Kizer, Don Towle and Don Wurster.

As I mentioned earlier, the General Re operation had an exceptionally poor underwriting year in 1999 (though investment income left the company well in the black). Our business was extremely underpriced, both domestically and internationally, a condition that is improving but not yet corrected. Over time, however, the company should develop a growing amount of low-cost float. At both General Re and its Cologne subsidiary, incentive compensation plans are now directly tied to the variables of float growth and cost of float, the same variables that determine value for owners.

Even though a reinsurer may have a tightly focused and rational compensation system, it cannot count on every year coming up roses. Reinsurance is a highly volatile business, and neither General Re nor Ajit's operation is immune to bad pricing behavior in the industry. But General Re has the distribution , the underwriting skills, the culture, and — with Berkshire's backing — the financial clout to become the world's most profitable reinsurance company. Getting there will take time, energy and discipline, but we have no doubt that Ron Ferguson and his crew can make it happen.

GEICO (1-800-847-7536 or GEICO.com)

GEICO made exceptional progress in 1999. The reasons are simple: We have a terrific business idea being implemented by an extraordinary manager, Tony Nicely. When Berkshire purchased GEICO at the beginning of 1996, we handed the keys to Tony and asked him to run the operation exactly as if he owned 100% of it. He has done the rest. Take a look at his scorecard:

Years	New Auto Policies[1][2]	Auto Policies In-Force[1]
1993	346,882	2,011,055
1994	384,217	2,147,549
1995	443,539	2,310,037
1996	592,300	2,543,699
1997	868,430	2,949,439
1998	1,249,875	3,562,644
1999	1,648,095	4,328,900

[1] "Voluntary" only; excludes assigned risks and the like.
[2] Revised to exclude policies moved from one GEICO company to another.

In 1995, GEICO spent $33 million on marketing and had 652 telephone counselors. Last year the company spent $242 million, and the counselor count grew to 2,631. And we are just starting: The pace will step up materially in 2000. Indeed, we would happily commit $1 billion annually to marketing if we knew we could handle the business smoothly and if we expected the last dollar spent to produce new business at an attractive cost.

Currently two trends are affecting acquisition costs. The bad news is that it has become more expensive to develop inquiries. Media rates have risen, and we are also seeing diminishing returns — that is, as both we and our competitors step up advertising, inquiries per ad fall for all of us. These negatives are partly offset, however, by the fact that our closure ratio — the percentage of inquiries converted to sales — has steadily improved. Overall, we believe that our cost of new business, though definitely rising, is well below that of the industry. Of even greater importance, our operating costs for renewal business are the lowest among broad-based national auto insurers. Both of these major competitive advantages are sustainable. Others may copy our model, but they will be unable to replicate our economics.

The table above makes it appear that GEICO's retention of policyholders is falling, but for two reasons appearances are in this case deceiving. First, in the last few years our business mix has moved away from "preferred" policyholders, for whom industrywide retention rates are high, toward "standard" and "non-standard" policyholders for whom retention rates are much lower. (Despite the nomenclature, the three classes have similar profit prospects.) Second, retention rates for relatively new policyholders are always lower than those for long-time customers — and because of our accelerated growth, our policyholder ranks now include an increased proportion of new customers. Adjusted for these two factors, our retention rate has changed hardly at all.

We told you last year that underwriting margins for both GEICO and the industry would fall in 1999, and they did. We make a similar prediction for 2000. A few years ago margins got too wide, having enjoyed the effects of an unusual and unexpected decrease in the frequency and severity of accidents. The industry responded by reducing rates — but now is having to contend with an increase in loss costs. We would not be surprised to see the margins of auto insurers deteriorate by around three percentage points in 2000.

Two negatives besides worsening frequency and severity will hurt the industry this year. First, rate increases go into effect only slowly, both because of regulatory delay and because insurance contracts must run their course before new rates can be put in. Second, reported earnings of many auto insurers have benefitted in the last few years from reserve releases, made possible because the companies overestimated their loss costs in still-earlier years. This reservoir of redundant reserves has now largely dried up, and future boosts to earnings from this source will be minor at best.

In compensating its associates — from Tony on down — GEICO continues to use two variables, and only two, in determining what bonuses and profit-sharing contributions will be: 1) its percentage growth in policyholders and 2) the earnings of its "seasoned" business, meaning policies that have been with us for more than a year. We did outstandingly well on both fronts during 1999 and therefore made a profit-sharing payment of 28.4% of salary (in total, $113.3 million) to the great majority of our associates. Tony and I love writing those checks.

At Berkshire, we want to have compensation policies that are both easy to understand and in sync with what we wish our associates to accomplish. Writing new business is expensive (and, as mentioned, getting more expensive). If we were to include those costs in our calculation of bonuses — as managements did before our arrival at GEICO — we would be penalizing our associates for garnering new policies, even though these are very much in Berkshire's interest. So, in effect, we say to our associates that we will foot the bill for new business. Indeed, because percentage growth in policyholders is part of our compensation scheme, we *reward* our associates for producing this initially-unprofitable business. And then we reward them additionally for holding down costs on our seasoned business.

Despite the extensive advertising we do, our best source of new business is word-of-mouth recommendations from existing policyholders, who on the whole are pleased with our prices and service. An article published last year by *Kiplinger's Personal Finance Magazine* gives a good picture of where we stand in customer satisfaction: The magazine's survey of 20 state insurance departments showed that GEICO's complaint ratio was well below the ratio for most of its major competitors.

Our strong referral business means that we probably could maintain our policy count by spending as little as $50 million annually on advertising. That's a guess, of course, and we will never know whether it is accurate because Tony's foot is going to stay on the advertising pedal (and my foot will be on his). Nevertheless, I want to emphasize that a major percentage of the $300-$350 million we will spend in 2000 on advertising, as well as large additional costs

we will incur for sales counselors, communications and facilities, are optional outlays we choose to make so that we can both achieve significant growth and extend and solidify the promise of the GEICO brand in the minds of Americans.

Personally, I think these expenditures are the best investment Berkshire can make. Through its advertising, GEICO is acquiring a direct relationship with a huge number of households that, on average, will send us $1,100 year after year. That makes us — among all companies, selling whatever kind of product — one of the country's leading direct merchandisers. Also, as we build our long-term relationships with more and more families, cash is pouring in rather than going out (no Internet economics here). Last year, as GEICO increased its customer base by 766,256, it gained $590 million of cash from operating earnings and the increase in float.

In the past three years, we have increased our market share in personal auto insurance from 2.7% to 4.1%. But we rightfully belong in many more households — maybe even yours. Give us a call and find out. About 40% of those people checking our rates find that they can save money by doing business with us. The proportion is not 100% because insurers differ in their underwriting judgments, with some giving more credit than we do to drivers who live in certain geographic areas or work at certain occupations. Our closure rate indicates, however, that we more frequently offer the low price than does any other national carrier selling insurance to all comers. Furthermore, in 40 states we can offer a special discount — usually 8% — to our shareholders. Just be sure to identify yourself as a Berkshire owner so that our sales counselor can make the appropriate adjustment.

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It's with sadness that I report to you that Lorimer Davidson, GEICO's former Chairman, died last November, a few days after his 97th birthday. For GEICO, Davy was a business giant who moved the company up to the big leagues. For me, he was a friend, teacher and hero. I have told you of his lifelong kindnesses to me in past reports. Clearly, my life would have developed far differently had he not been a part of it. Tony, Lou Simpson and I visited Davy in August and marveled at his mental alertness — particularly in all matters regarding GEICO. He was the company's number one supporter right up to the end, and we will forever miss him.

Aviation Services

Our two aviation services companies — FlightSafety International ("FSI") and Executive Jet Aviation ("EJA") — are both runaway leaders in their field. EJA, which sells and manages the fractional ownership of jet aircraft, through its NetJets® program, is larger than its next two competitors combined. FSI trains pilots (as well as other transportation professionals) and is five times or so the size of its nearest competitor.

Another common characteristic of the companies is that they are still managed by their founding entrepreneurs. Al Ueltschi started FSI in 1951 with $10,000, and Rich Santulli invented the fractional-ownership industry in 1986. These men are both remarkable managers who have no financial need to work but thrive on helping their companies grow and excel.

Though these two businesses have leadership positions that are similar, they differ in their economic characteristics. FSI must lay out huge amounts of capital. A single flight simulator can cost as much as $15 million — and we have 222. Only one person at a time, furthermore, can be trained in a simulator, which means that the capital investment per dollar of revenue at FSI is exceptionally high. Operating margins must therefore also be high, if we are to earn a reasonable return on capital. Last year we made capital expenditures of $215 million at FSI and FlightSafety Boeing, its 50%-owned affiliate.

At EJA, in contrast, the customer owns the equipment, though we, of course, must invest in a core fleet of our own planes to ensure outstanding service. For example, the Sunday after Thanksgiving, EJA's busiest day of the year, strains our resources since fractions of 169 planes are owned by 1,412 customers, many of whom are bent on flying home between 3 and 6 p.m. On that day, and certain others, we need a supply of company-owned aircraft to make sure all parties get where they want, when they want.

Still, most of the planes we fly are owned by customers, which means that modest pre-tax margins in this business can produce good returns on equity. Currently, our customers own planes worth over $2 billion, and in addition we have $4.2 billion of planes on order. Indeed, the limiting factor in our business right now is the availability of planes. We

now are taking delivery of about 8% of all business jets manufactured in the world, and we wish we could get a bigger share than that. Though EJA was supply-constrained in 1999, its recurring revenues — monthly management fees plus hourly flight fees — increased 46%.

The fractional-ownership industry is still in its infancy. EJA is now building critical mass in Europe, and over time we will expand around the world. Doing that will be expensive — very expensive — but we will spend what it takes. Scale is vital to both us and our customers: The company with the most planes in the air worldwide will be able to offer its customers the best service. "Buy a fraction, get a fleet" has real meaning at EJA.

EJA enjoys another important advantage in that its two largest competitors are both subsidiaries of aircraft manufacturers and sell only the aircraft their parents make. Though these are fine planes, these competitors are severely limited in the cabin styles and mission capabilities they can offer. EJA, in contrast, offers a wide array of planes from five suppliers. Consequently, we can give the customer whatever *he* needs to buy — rather than his getting what the competitor's parent needs to sell.

Last year in this report, I described my family's delight with the one-quarter (200 flight hours annually) of a Hawker 1000 that we had owned since 1995. I got so pumped up by my own prose that shortly thereafter I signed up for one-sixteenth of a Cessna V Ultra as well. Now my annual outlays at EJA and Borsheim's, combined, total ten times my salary. Think of this as a rough guideline for your own expenditures with us.

During the past year, two of Berkshire's outside directors have also signed on with EJA. (Maybe we're paying them too much.) You should be aware that they and I are charged exactly the same price for planes and service as is any other customer: EJA follows a "most favored nations" policy, with no one getting a special deal.

And now, brace yourself. Last year, EJA passed the ultimate test: *Charlie signed up*. No other endorsement could speak more eloquently to the value of the EJA service. Give us a call at 1-800-848-6436 and ask for our "white paper" on fractional ownership.

Acquisitions of 1999

At both GEICO and Executive Jet, our best source of new customers is the happy ones we already have. Indeed, about 65% of our new owners of aircraft come as referrals from current owners who have fallen in love with the service.

Our acquisitions usually develop in the same way. At other companies, executives may devote themselves to pursuing acquisition possibilities with investment bankers, utilizing an auction process that has become standardized. In this exercise the bankers prepare a "book" that makes me think of the Superman comics of my youth. In the Wall Street version, a formerly mild-mannered company emerges from the investment banker's phone booth able to leap over competitors in a single bound and with earnings moving faster than a speeding bullet. Titillated by the book's description of the acquiree's powers, acquisition-hungry CEOs — Lois Lanes all, beneath their cool exteriors — promptly swoon.

What's particularly entertaining in these books is the precision with which earnings are projected for many years ahead. If you ask the author-banker, however, what his own firm will earn *next month*, he will go into a protective crouch and tell you that business and markets are far too uncertain for him to venture a forecast.

Here's one story I can't resist relating: In 1985, a major investment banking house undertook to sell Scott Fetzer, offering it widely — but with no success. Upon reading of this strikeout, I wrote Ralph Schey, then and now Scott Fetzer's CEO, expressing an interest in buying the business. I had never met Ralph, but within a week we had a deal. Unfortunately, Scott Fetzer's letter of engagement with the banking firm provided it a $2.5 million fee upon sale, even if it had nothing to do with finding the buyer. I guess the lead banker felt he should do something for his payment, so he graciously offered us a copy of the book on Scott Fetzer that his firm had prepared. With his customary tact, Charlie responded: "I'll pay $2.5 million *not* to read it."

At Berkshire, our carefully-crafted acquisition strategy is simply to wait for the phone to ring. Happily, it sometimes does so, usually because a manager who sold to us earlier has recommended to a friend that he think about following suit.

Which brings us to the furniture business. Two years ago I recounted how the acquisition of Nebraska Furniture Mart in 1983 and my subsequent association with the Blumkin family led to follow-on transactions with R. C. Willey (1995) and Star Furniture (1997). For me, these relationships have all been terrific. Not only did Berkshire acquire three outstanding retailers; these deals also allowed me to become friends with some of the finest people you will ever meet.

Naturally, I have persistently asked the Blumkins, Bill Child and Melvyn Wolff whether there are any more out there like you. Their invariable answer was the Tatelman brothers of New England and their remarkable furniture business, Jordan's.

I met Barry and Eliot Tatelman last year and we soon signed an agreement for Berkshire to acquire the company. Like our three previous furniture acquisitions, this business had long been in the family — in this case since 1927, when Barry and Eliot's grandfather began operations in a Boston suburb. Under the brothers' management, Jordan's has grown ever more dominant in its region, becoming the largest furniture retailer in New Hampshire as well as Massachusetts.

The Tatelmans don't just sell furniture or manage stores. They also present customers with a dazzling entertainment experience called "shoppertainment." A family visiting a store can have a terrific time, while concurrently viewing an extraordinary selection of merchandise. The business results are also extraordinary: Jordan's has the highest sales per square foot of any major furniture operation in the country. I urge you to visit one of their stores if you are in the Boston area — particularly the one at Natick, which is Jordan's newest. Bring money.

Barry and Eliot are classy people — just like their counterparts at Berkshire's three other furniture operations. When they sold to us, they elected to give each of their employees at least 50¢ for every hour that he or she had worked for Jordan's. This payment added up to $9 million, which came from the Tatelmans' own pockets, not from Berkshire's. And Barry and Eliot were thrilled to write the checks.

Each of our furniture operations is number one in its territory. We now sell more furniture than anyone else in Massachusetts, New Hampshire, Texas, Nebraska, Utah and Idaho. Last year Star's Melvyn Wolff and his sister, Shirley Toomim, scored two major successes: a move into San Antonio and a significant enlargement of Star's store in Austin.

There's no operation in the furniture retailing business remotely like the one assembled by Berkshire. It's fun for me and profitable for you. W. C. Fields once said, "It was a woman who drove me to drink, but unfortunately I never had the chance to thank her." I don't want to make that mistake. My thanks go to Louie, Ron and Irv Blumkin for getting me started in the furniture business and for unerringly guiding me as we have assembled the group we now have.

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Now, for our second acquisition deal: It came to us through my good friend, Walter Scott, Jr., chairman of Level 3 Communications and a director of Berkshire. Walter has many other business connections as well, and one of them is with MidAmerican Energy, a utility company in which he has substantial holdings and on whose board he sits. At a conference in California that we both attended last September, Walter casually asked me whether Berkshire might be interested in making a large investment in MidAmerican, and from the start the idea of being in partnership with Walter struck me as a good one. Upon returning to Omaha, I read some of MidAmerican's public reports and had two short meetings with Walter and David Sokol, MidAmerican's talented and entrepreneurial CEO. I then said that, at an appropriate price, we would indeed like to make a deal.

Acquisitions in the electric utility industry are complicated by a variety of regulations including the Public Utility Holding Company Act of 1935. Therefore, we had to structure a transaction that would avoid Berkshire gaining voting control. Instead we are purchasing an 11% fixed-income security, along with a combination of common stock and exchangeable preferred that will give Berkshire just under 10% of the voting power of MidAmerican but about 76% of the equity interest. All told, our investment will be about $2 billion.

Walter characteristically backed up his convictions with real money: He and his family will buy more MidAmerican stock for cash when the transaction closes, bringing their total investment to about $280 million. Walter will also be the controlling shareholder of the company, and I can't think of a better person to hold that post.

Though there are many regulatory constraints in the utility industry, it's possible that we will make additional commitments in the field. If we do, the amounts involved could be large.

Acquisition Accounting

Once again, I would like to make some comments about accounting, in this case about its application to acquisitions. This is currently a very contentious topic and, before the dust settles, Congress may even intervene (a truly terrible idea).

When a company is acquired, generally accepted accounting principles ("GAAP") currently condone two very different ways of recording the transaction: "purchase" and "pooling." In a pooling, stock must be the currency; in a purchase, payment can be made in either cash or stock. Whatever the currency, managements usually detest purchase accounting because it almost always requires that a "goodwill" account be established and subsequently written off — a process that saddles earnings with a large annual charge that normally persists for decades. In contrast, pooling avoids a goodwill account, which is why managements love it.

Now, the Financial Accounting Standards Board ("FASB") has proposed an end to pooling, and many CEOs are girding for battle. It will be an important fight, so we'll venture some opinions. To begin with, we agree with the many managers who argue that goodwill amortization charges are usually spurious. You'll find my thinking about this in the appendix to our 1983 annual report, which is available on our website, and in the Owner's Manual on pages 55 - 62.

For accounting rules to mandate amortization that will, in the usual case, conflict with reality is deeply troublesome: Most accounting charges *relate* to what's going on, even if they don't precisely measure it. As an example, depreciation charges can't with precision calibrate the decline in value that physical assets suffer, but these charges do at least describe something that is truly occurring: Physical assets invariably deteriorate. Correspondingly, obsolescence charges for inventories, bad debt charges for receivables and accruals for warranties are among the charges that reflect true costs. The annual charges for these expenses can't be exactly measured, but the necessity for estimating them is obvious.

In contrast, economic goodwill does not, in many cases, diminish. Indeed, in a great many instances — perhaps most — it actually grows in value over time. In character, economic goodwill is much like land: The value of both assets is sure to fluctuate, but the direction in which value is going to go is in no way ordained. At See's, for example, economic goodwill has grown, in an irregular but very substantial manner, for 78 years. And, if we run the business right, growth of that kind will probably continue for at least another 78 years.

To escape from the fiction of goodwill charges, managers embrace the fiction of pooling. This accounting convention is grounded in the poetic notion that when two rivers merge their streams become indistinguishable. Under this concept, a company that has been merged into a larger enterprise has not been "purchased" (even though it will often have received a large "sell-out" premium). Consequently, no goodwill is created, and those pesky subsequent charges to earnings are eliminated. Instead, the accounting for the ongoing entity is handled as if the businesses had forever been one unit.

So much for poetry. The reality of merging is usually far different: There is indisputably an acquirer and an acquiree, and the latter has been "purchased," no matter how the deal has been structured. If you think otherwise, just ask employees severed from their jobs which company was the conqueror and which was the conquered. You will find no confusion. So on this point the FASB is correct: In most mergers, a purchase has been made. Yes, there are some true "mergers of equals," but they are few and far between.

Charlie and I believe there's a reality-based approach that should both satisfy the FASB, which correctly wishes to record a purchase, and meet the objections of managements to nonsensical charges for diminution of goodwill. We would first have the acquiring company record its purchase price — whether paid in stock or cash — at fair value. In most cases, this procedure would create a large asset representing economic goodwill. We would then leave this asset on the books, not requiring its amortization. Later, if the economic goodwill became impaired, as it sometimes would, it would be written down just as would any other asset judged to be impaired.

If our proposed rule were to be adopted, it should be applied retroactively so that acquisition accounting would be consistent throughout America — a far cry from what exists today. One prediction: If this plan were to take effect, managements would structure acquisitions more sensibly, deciding whether to use cash or stock based on the real consequences for their shareholders rather than on the unreal consequences for their reported earnings.

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In our purchase of Jordan's, we followed a procedure that will maximize the cash produced for our shareholders but minimize the earnings we report to you. Berkshire purchased assets for cash, an approach that on our tax returns permits us to amortize the resulting goodwill over a 15-year period. Obviously, this tax deduction materially increases the amount of cash delivered by the business. In contrast, when stock, rather than assets, is purchased for cash, the resulting writeoffs of goodwill are not tax-deductible. The economic difference between these two approaches is substantial.

From the economic standpoint of the acquiring company, the worst deal of all is a stock-for-stock acquisition. Here, a huge price is often paid without there being any step-up in the tax basis of either the stock of the acquiree or its assets. If the acquired entity is subsequently sold, its owner may owe a large capital gains tax (at a 35% or greater rate), even though the sale may truly be producing a major economic loss.

We have made some deals at Berkshire that used far-from-optimal tax structures. These deals occurred because the sellers insisted on a given structure and because, overall, we still felt the acquisition made sense. We have never done an inefficiently-structured deal, however, in order to make our figures look better.

Sources of Reported Earnings

The table that follows shows the main sources of Berkshire's reported earnings. In this presentation, purchase-accounting adjustments are not assigned to the specific businesses to which they apply, but are instead aggregated and shown separately. This procedure lets you view the earnings of our businesses as they would have been reported had we not purchased them. For the reasons discussed on page 61, this form of presentation seems to us to be more useful to investors and managers than one utilizing generally accepted accounting principles (GAAP), which require purchase-premiums to be charged off business-by-business. The total earnings we show in the table are, of course, identical to the GAAP total in our audited financial statements.

	(in millions)			
	Pre-Tax Earnings		*Berkshire's Share of Net Earnings (after taxes and minority interests)*	
	1999	*1998*	*1999*	*1998*
Operating Earnings:				
Insurance Group:				
Underwriting — Reinsurance	$(1,440)	$(21)	$(927)	$(14)
Underwriting — GEICO	24	269	16	175
Underwriting — Other Primary	22	17	14	10
Net Investment Income	2,482	974	1,764	731
Buffalo News	55	53	34	32
Finance and Financial Products Businesses	125	205	86	133
Flight Services	225	181 [1]	132	110 [1]
Home Furnishings	79 [2]	72	46 [2]	41
International Dairy Queen	56	58	35	35
Jewelry	51	39	31	23
Scott Fetzer (excluding finance operation)	147	137	92	85
See's Candies	74	62	46	40
Shoe Group	17	33	11	23
Purchase-Accounting Adjustments	(739)	(123)	(648)	(118)
Interest Expense [3]	(109)	(100)	(70)	(63)
Shareholder-Designated Contributions	(17)	(17)	(11)	(11)
Other	33	60 [4]	20	45 [4]
Operating Earnings	1,085	1,899	671	1,277
Capital Gains from Investments	1,365	2,415	886	1,553
Total Earnings - All Entities	$2,450	$4,314	$1,557	$ 2,830

[1] *Includes Executive Jet from August 7, 1998 .*
[2] *Includes Jordan's Furniture from November 13, 1999.*
[3] *Excludes interest expense of Finance Businesses.*
[4] *Includes General Re operations for ten days in 1998.*

Almost all of our manufacturing, retailing and service businesses had excellent results in 1999. The exception was Dexter Shoe, and there the shortfall did not occur because of managerial problems: In skills, energy and devotion to their work, the Dexter executives are every bit the equal of our other managers. But we manufacture shoes primarily in the U.S., and it has become extremely difficult for domestic producers to compete effectively. In 1999, approximately 93% of the 1.3 billion pairs of shoes purchased in this country came from abroad, where extremely low-cost labor is the rule.

Counting both Dexter and H. H. Brown, we are currently the leading domestic manufacturer of shoes, and we are likely to continue to be. We have loyal, highly-skilled workers in our U.S. plants, and we want to retain every job here that we can. Nevertheless, in order to remain viable, we are sourcing more of our output internationally. In doing that, we have incurred significant severance and relocation costs that are included in the earnings we show in the table.

A few years back, Helzberg's, our 200-store jewelry operation, needed to make operating adjustments to restore margins to appropriate levels. Under Jeff Comment's leadership, the job was done and profits have dramatically rebounded. In the shoe business, where we have Harold Alfond, Peter Lunder, Frank Rooney and Jim Issler in charge, I believe we will see a similar improvement over the next few years.

See's Candies deserves a special comment, given that it achieved a record operating margin of 24% last year. Since we bought See's for $25 million in 1972, it has earned $857 million pre-tax. And, despite its growth, the business has required very little additional capital. Give the credit for this performance to Chuck Huggins. Charlie and I put him in charge the day of our purchase, and his fanatical insistence on both product quality and friendly service has rewarded customers, employees and owners.

Chuck gets better every year. When he took charge of See's at age 46, the company's pre-tax profit, expressed in millions, was about 10% of his age. Today he's 74, and the ratio has increased to 100%. Having discovered this mathematical relationship — let's call it Huggins' Law — Charlie and I now become giddy at the mere thought of Chuck's birthday.

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Additional information about our various businesses is given on pages 39 - 54, where you will also find our segment earnings reported on a GAAP basis. In addition, on pages 63 - 69, we have rearranged Berkshire's financial data into four segments on a non-GAAP basis, a presentation that corresponds to the way Charlie and I think about the company.

Look-Through Earnings

Reported earnings are an inadequate measure of economic progress at Berkshire, in part because the numbers shown in the table presented earlier include only the dividends we receive from investees — though these dividends typically represent only a small fraction of the earnings attributable to our ownership. Not that we mind this division of money, since on balance we regard the undistributed earnings of investees as more valuable to us than the portion paid out. The reason for our thinking is simple: Our investees often have the opportunity to reinvest earnings at high rates of return. So why should we want them paid out?

To depict something closer to economic reality at Berkshire than reported earnings, though, we employ the concept of "look-through" earnings. As we calculate these, they consist of: (1) the operating earnings reported in the previous section, plus; (2) our share of the retained operating earnings of major investees that, under GAAP accounting, are not reflected in our profits, less; (3) an allowance for the tax that would be paid by Berkshire if these retained earnings of investees had instead been distributed to us. When tabulating "operating earnings" here, we exclude purchase-accounting adjustments as well as capital gains and other major non-recurring items.

The following table sets forth our 1999 look-through earnings, though I warn you that the figures can be no more than approximate, since they are based on a number of judgment calls. (The dividends paid to us by these investees have been included in the operating earnings itemized on page 13, mostly under "Insurance Group: Net Investment Income.")

Berkshire's Major Investees	Berkshire's Approximate Ownership at Yearend[1]	Berkshire's Share of Undistributed Operating Earnings (in millions)[2]
American Express Company	11.3%	$228
The Coca-Cola Company	8.1%	144
Freddie Mac	8.6%	127
The Gillette Company	9.0%	53
M&T Bank	6.5%	17
The Washington Post Company	18.3%	30
Wells Fargo & Company	3.6%	108
Berkshire's share of undistributed earnings of major investees		707
Hypothetical tax on these undistributed investee earnings[3]		(99)
Reported operating earnings of Berkshire		1,318
Total look-through earnings of Berkshire		$ 1,926

(1) Does not include shares allocable to minority interests
(2) Calculated on average ownership for the year
(3) The tax rate used is 14%, which is the rate Berkshire pays on the dividends it receives

Investments

Below we present our common stock investments. Those that had a market value of more than $750 million at the end of 1999 are itemized.

		12/31/99	
Shares	*Company*	*Cost**	*Market*
		(dollars in millions)	
50,536,900	American Express Company	$1,470	$ 8,402
200,000,000	The Coca-Cola Company	1,299	11,650
59,559,300	Freddie Mac	294	2,803
96,000,000	The Gillette Company	600	3,954
1,727,765	The Washington Post Company	11	960
59,136,680	Wells Fargo & Company	349	2,391
	Others	4,180	6,848
	Total Common Stocks	$8,203	$37,008

* Represents tax-basis cost which, in aggregate, is $691 million less than GAAP cost.

We made few portfolio changes in 1999. As I mentioned earlier, several of the companies in which we have large investments had disappointing business results last year. Nevertheless, we believe these companies have important competitive advantages that will endure over time. This attribute, which makes for good long-term investment results, is one Charlie and I occasionally believe we can identify. More often, however, we can't — not at least with a high degree of conviction. This explains, by the way, why we don't own stocks of tech companies, even though we share the general view that our society will be transformed by their products and services. Our problem — which we can't solve by studying up — is that we have no insights into which participants in the tech field possess a truly *durable* competitive advantage.

Our lack of tech insights, we should add, does not distress us. After all, there are a great many business areas in which Charlie and I have no special capital-allocation expertise. For instance, we bring nothing to the table when it comes to evaluating patents, manufacturing processes or geological prospects. So we simply don't get into judgments in those fields.

If we have a strength, it is in recognizing when we are operating well within our circle of competence and when we are approaching the perimeter. Predicting the long-term economics of companies that operate in fast-changing industries is simply far beyond our perimeter. If others claim predictive skill in those industries — and seem to have their claims validated by the behavior of the stock market — we neither envy nor emulate them. Instead, we just stick with what we understand. If we stray, we will have done so inadvertently, not because we got restless and substituted hope for rationality. Fortunately, it's almost certain there will be opportunities from time to time for Berkshire to do well within the circle we've staked out.

Right now, the prices of the fine businesses we already own are just not that attractive. In other words, we feel much better about the businesses than their stocks. That's why we haven't added to our present holdings. Nevertheless, we haven't yet scaled back our portfolio in a major way: If the choice is between a questionable business at a comfortable price or a comfortable business at a questionable price, we much prefer the latter. What really gets our attention, however, is a comfortable business at a comfortable price.

Our reservations about the prices of securities we own apply also to the general level of equity prices. We have never attempted to forecast what the stock market is going to do in the next month or the next year, and we are not trying to do that now. But, as I point out in the enclosed article, equity investors currently seem wildly optimistic in their expectations about future returns.

We see the growth in corporate profits as being largely tied to the business done in the country (GDP), and we see GDP growing at a real rate of about 3%. In addition, we have hypothesized 2% inflation. Charlie and I have no particular conviction about the accuracy of 2%. However, it's the market's view: Treasury Inflation-Protected Securities (TIPS) yield about two percentage points less than the standard treasury bond, and if you believe inflation rates are going to be higher than that, you can profit by simply buying TIPS and shorting Governments.

If profits do indeed grow along with GDP, at about a 5% rate, the valuation placed on American business is unlikely to climb by much more than that. Add in something for dividends, and you emerge with returns from equities that are dramatically less than most investors have either experienced in the past or expect in the future. If investor expectations become more realistic — and they almost certainly will — the market adjustment is apt to be severe, particularly in sectors in which speculation has been concentrated.

Berkshire will someday have opportunities to deploy major amounts of cash in equity markets — we are confident of that. But, as the song goes, "Who knows where or when?" Meanwhile, if anyone starts explaining to you what is going on in the truly-manic portions of this "enchanted" market, you might remember still another line of song: "Fools give you reasons, wise men never try."

Share Repurchases

Recently, a number of shareholders have suggested to us that Berkshire repurchase its shares. Usually the requests were rationally based, but a few leaned on spurious logic.

There is only one combination of facts that makes it advisable for a company to repurchase its shares: First, the company has available funds — cash plus sensible borrowing capacity — beyond the near-term needs of the business and, second, finds its stock selling in the market below its intrinsic value, conservatively-calculated. To this we add a caveat: Shareholders should have been supplied all the information they need for estimating that value. Otherwise, insiders could take advantage of their uninformed partners and buy out their interests at a fraction of true worth. We have, on rare occasions, seen that happen. Usually, of course, chicanery is employed to drive stock prices up, not down.

The business "needs" that I speak of are of two kinds: First, expenditures that a company must make to maintain its competitive position (e.g., the remodeling of stores at Helzberg's) and, second, optional outlays, aimed at business growth, that management expects will produce more than a dollar of value for each dollar spent (R. C. Willey's expansion into Idaho).

When available funds exceed needs of those kinds, a company with a growth-oriented shareholder population can buy new businesses or repurchase shares. If a company's stock is selling well below intrinsic value, repurchases usually make the most sense. In the mid-1970s, the wisdom of making these was virtually screaming at managements, but few responded. In most cases, those that did made their owners much wealthier than if alternative courses of action had been

pursued. Indeed, during the 1970s (and, spasmodically, for some years thereafter) we searched for companies that were large repurchasers of their shares. This often was a tipoff that the company was both undervalued and run by a shareholder-oriented management.

That day is past. Now, repurchases are all the rage, but are all too often made for an unstated and, in our view, ignoble reason: to pump or support the stock price. The shareholder who chooses to sell today, of course, is benefitted by any buyer, whatever his origin or motives. But the *continuing* shareholder is penalized by repurchases above intrinsic value. Buying dollar bills for $1.10 is not good business for those who stick around.

Charlie and I admit that we feel confident in estimating intrinsic value for only a portion of traded equities and then only when we employ a range of values, rather than some pseudo-precise figure. Nevertheless, it appears to us that many companies now making repurchases are overpaying departing shareholders at the expense of those who stay. In defense of those companies, I would say that it is natural for CEOs to be optimistic about their own businesses. They also know a whole lot more about them than I do. However, I can't help but feel that too often today's repurchases are dictated by management's desire to "show confidence" or be in fashion rather than by a desire to enhance per-share value.

Sometimes, too, companies say they are repurchasing shares to offset the shares issued when stock options granted at much lower prices are exercised. This "buy high, sell low" strategy is one many unfortunate investors have employed — but never intentionally! Managements, however, seem to follow this perverse activity very cheerfully.

Of course, both option grants and repurchases may make sense — but if that's the case, it's not because the two activities are logically related. Rationally, a company's decision to repurchase shares or to issue them should stand on its own feet. Just because stock has been issued to satisfy options — or for any other reason — does not mean that stock should be repurchased at a price above intrinsic value. Correspondingly, a stock that sells well below intrinsic value should be repurchased whether or not stock has previously been issued (or may be because of outstanding options).

You should be aware that, at certain times in the past, I have erred in *not* making repurchases. My appraisal of Berkshire's value was then too conservative or I was too enthused about some alternative use of funds. We have therefore missed some opportunities — though Berkshire's trading volume at these points was too light for us to have done much buying, which means that the gain in our per-share value would have been minimal. (A repurchase of, say, 2% of a company's shares at a 25% discount from per-share intrinsic value produces only a ½% gain in that value at most — and even less if the funds could alternatively have been deployed in value-building moves.)

Some of the letters we've received clearly imply that the writer is unconcerned about intrinsic value considerations but instead wants us to trumpet an intention to repurchase so that the stock will rise (or quit going down). If the writer wants to sell tomorrow, his thinking makes sense — for him! — but if he intends to hold, he should instead hope the stock falls and trades in enough volume for us to buy a lot of it. That's the only way a repurchase program can have any real benefit for a continuing shareholder.

We will not repurchase shares unless we believe Berkshire stock is selling well below intrinsic value, conservatively calculated. Nor will we attempt to talk the stock up or down. (Neither publicly or privately have I ever told anyone to buy or sell Berkshire shares.) Instead we will give all shareholders — and potential shareholders — the same valuation-related information we would wish to have if our positions were reversed.

Recently, when the A shares fell below $45,000, we considered making repurchases. We decided, however, to delay buying, if indeed we elect to do *any*, until shareholders have had the chance to review this report. If we do find that repurchases make sense, we will only rarely place bids on the New York Stock Exchange ("NYSE"). Instead, we will respond to offers made directly to us at or below the NYSE bid. If you wish to offer stock, have your broker call Mark Millard at 402-346-1400. When a trade occurs, the broker can either record it in the "third market" or on the NYSE. We will favor purchase of the B shares if they are selling at more than a 2% discount to the A. We will not engage in transactions involving fewer than 10 shares of A or 50 shares of B.

Please be clear about one point: We will *never* make purchases with the intention of stemming a decline in Berkshire's price. Rather we will make them if and when we believe that they represent an attractive use of the Company's money. At best, repurchases are likely to have only a very minor effect on the future rate of gain in our stock's intrinsic value.

Shareholder-Designated Contributions

About 97.3% of all eligible shares participated in Berkshire's 1999 shareholder-designated contributions program, with contributions totaling $17.2 million. A full description of the program appears on pages 70 - 71.

Cumulatively, over the 19 years of the program, Berkshire has made contributions of $147 million pursuant to the instructions of our shareholders. The rest of Berkshire's giving is done by our subsidiaries, which stick to the philanthropic patterns that prevailed before they were acquired (except that their former owners themselves take on the responsibility for their personal charities). In aggregate, our subsidiaries made contributions of $13.8 million in 1999, including in-kind donations of $2.5 million.

To participate in future programs, you must own Class A shares that are registered in the name of the actual owner, not the nominee name of a broker, bank or depository. Shares not so registered on August 31, 2000, will be ineligible for the 2000 program. When you get the contributions form from us, return it promptly so that it does not get put aside or forgotten. Designations received after the due date will not be honored.

The Annual Meeting

This year's Woodstock Weekend for Capitalists will follow a format slightly different from that of recent years. We need to make a change because the Aksarben Coliseum, which served us well the past three years, is gradually being closed down. Therefore, we are relocating to the Civic Auditorium (which is on Capitol Avenue between 18th and 19th, behind the Doubletree Hotel), the only other facility in Omaha offering the space we require.

The Civic, however, is located in downtown Omaha, and we would create a parking and traffic nightmare if we were to meet there on a weekday. We will, therefore, convene on Saturday, April 29, with the doors opening at 7 a.m., the movie beginning at 8:30 and the meeting itself commencing at 9:30. As in the past, we will run until 3:30 with a short break at noon for food, which will be available at the Civic's concession stands.

An attachment to the proxy material that is enclosed with this report explains how you can obtain the credential you will need for admission to the meeting and other events. As for plane, hotel and car reservations, we have again signed up American Express (800-799-6634) to give you special help. In our normal fashion, we will run buses from the larger hotels to the meeting. After the meeting, the buses will make trips back to the hotels and to Nebraska Furniture Mart, Borsheim's and the airport. Even so, you are likely to find a car useful.

We have scheduled the meeting in 2002 and 2003 on the customary first Saturday in May. In 2001, however, the Civic is already booked on that Saturday, so we will meet on April 28. The Civic should fit our needs well on any weekend, since there will then be more than ample parking in nearby lots and garages as well as on streets. We will also be able to greatly enlarge the space we give exhibitors. So, overcoming my normal commercial reticence, I will see that you have a wide display of Berkshire products at the Civic that you can *purchase*. As a benchmark, in 1999 shareholders bought 3,059 pounds of See's candy, $16,155 of World Book Products, 1,928 pairs of Dexter shoes, 895 sets of Quikut knives, 1,752 golf balls with the Berkshire Hathaway logo and 3,446 items of Berkshire apparel. I know you can do better.

Last year, we also initiated the sale of at least eight fractions of Executive Jet aircraft. We will again have an array of models at the Omaha airport for your inspection on Saturday and Sunday. Ask an EJA representative at the Civic about viewing any of these planes.

Dairy Queen will also be on hand at the Civic and again will donate all proceeds to the Children's Miracle Network. Last year we sold 4,586 Dilly® bars, fudge bars and vanilla/orange bars. Additionally, GEICO will have a booth that will be staffed by a number of our top counselors from around the country, all of them ready to supply you with auto insurance quotes. In most cases, GEICO will be able to offer you a special shareholder's discount. Bring the details of your existing insurance, and check out whether we can save you some money.

Finally, Ajit Jain and his associates will be on hand to offer both no-commission annuities and a liability policy with jumbo limits of a size rarely available elsewhere. Talk to Ajit and learn how to protect yourself and your family against a $10 million judgment.

NFM's newly remodeled complex, located on a 75-acre site on 72nd Street between Dodge and Pacific, is open from 10 a.m. to 9 p.m. on weekdays and 10 a.m. to 6 p.m. on Saturdays and Sundays. This operation offers an unrivaled breadth of merchandise — furniture, electronics, appliances, carpets and computers — all at can't-be-beat prices. In 1999 NFM did more than $300 million of business at its 72nd Street location, which in a metropolitan area of 675,000 is an absolute miracle. During the Thursday, April 27 to Monday, May 1 period, any shareholder presenting his or her meeting credential will receive a discount that is customarily given only to employees. We have offered this break to shareholders the last couple of years, and sales have been amazing. In last year's five-day "Berkshire Weekend," NFM's volume was $7.98 million, an increase of 26% from 1998 and 51% from 1997.

Borsheim's — the largest jewelry store in the country except for Tiffany's Manhattan store — will have two shareholder-only events. The first will be a champagne and dessert party from 6 p.m.-10 p.m. on Friday, April 28. The second, the main gala, will be from 9 a.m. to 6 p.m. on Sunday, April 30. On that day, Charlie and I will be on hand to sign *sales tickets*. Shareholder prices will be available Thursday through Monday, so if you wish to avoid the largest crowds, which will form on Friday evening and Sunday, come at other times and identify yourself as a shareholder. On Saturday, we will be open until 7 p.m. Borsheim's operates on a gross margin that is fully twenty percentage points below that of its major rivals, so be prepared to be blown away by both our prices and selection.

In the mall outside of Borsheim's, we will again have Bob Hamman — the best bridge player the game has ever seen — available to play with our shareholders on Sunday. We will also have a few other experts playing at additional tables. In 1999, we had more demand than tables, but we will cure that problem this year.

Patrick Wolff, twice US chess champion, will again be in the mall playing blindfolded against all comers. He tells me that he has never tried to play more than four games simultaneously while handicapped this way but might try to bump that limit to five or six this year. If you're a chess fan, take Patrick on — but be sure to check his blindfold before your first move.

Gorat's — my favorite steakhouse — will again be open exclusively for Berkshire shareholders on Sunday, April 30, and will be serving from 4 p.m. until about midnight. Please remember that you can't come to Gorat's on Sunday without a reservation. To make one, call 402-551-3733 on April 3 (*but not before*). If Sunday is sold out, try Gorat's on one of the other evenings you will be in town. I make a "quality check" of Gorat's about once a week and can report that their rare T-bone (with a double order of hash browns) is still unequaled throughout the country.

The usual baseball game will be held at Rosenblatt Stadium at 7 p.m. on Saturday night. This year the Omaha Golden Spikes will play the Iowa Cubs. Come early, because that's when the real action takes place. Those who attended last year saw your Chairman pitch to Ernie Banks.

This encounter proved to be the titanic duel that the sports world had long awaited. After the first few pitches — which were not my best, but when have I ever thrown my best? — I fired a brushback at Ernie just to let him know who was in command. Ernie charged the mound, and I charged the plate. But a clash was avoided because we became exhausted before reaching each other.

Ernie was dissatisfied with his performance last year and has been studying the game films all winter. As you may know, Ernie had 512 home runs in his career as a Cub. Now that he has spotted telltale weaknesses in my delivery, he expects to get #513 on April 29. I, however, have learned new ways to disguise my "flutterball." Come and watch this matchup.

I should add that I have extracted a promise from Ernie that he will not hit a "come-backer" at me since I would never be able to duck in time to avoid it. My reflexes are like Woody Allen's, who said his were so slow that he was once hit by a car being pushed by two guys.

Our proxy statement contains instructions about obtaining tickets to the game and also a large quantity of other information that should help you enjoy your visit in Omaha. Join us at the Capitalist Caper on Capitol Avenue.

Warren E. Buffett
March 1, 2000 Chairman of the Board

Morning Session - 2000 Meeting

1. Meeting introduction and welcome

WARREN BUFFETT: Good morning.

Well, first thing I'd like to do is to thank everybody that's helped us put this on.

As you saw in the movie, I think, at the time, we may have had 45,000 or so people working with Berkshire, with 12.8 at headquarters.

We're probably up to about 60,000 now, and we still have 12.8, and they take care of putting on this whole meeting.

We get help from people in internal audit, and we get terrific help from the people at all of our companies who work very hard to put on the exhibits. And we hope that you not only visit them, but patronize them, and we'll give you ample time to do that.

As you can see, I enlisted my family for the movie, and I want to thank them. I want to particularly thank Kelly Muchemore and Marc Hamburg for their work in putting this on. It's a real project to — (Applause)

A lot of companies have a whole department that does this and, at Berkshire, Kelly processes 25,000 requests for tickets, and coordinates everything with the exhibitors, and it's a fabulous job.

Now, we'll follow our usual routine. We do have a surprise at — a small surprise — at 11:45. It's not that Charlie's going to say anything — that would be a big surprise, but — (laughter) — we'll — well, we'll have this small surprise for you at 11:45.

The plan is to go through the business part of the meeting here in just a second, and we'll run from 9:30 to 12:00. Then, after conducting the business meeting, we'll take your questions. We'll go around the room. We have 10 stations. I guess we'll probably only be using eight stations in this room.

And we have microphones everyplace that the eight stations — that you'll see, and you can step up to those. And we'll just keep answering questions.

And we'll break at 12 o'clock, and there will be food available down below, where you can also purchase things from us.

And we'll reconvene about 12:45, and then we'll stay until 3:30 and we'll try and answer whatever questions you have. And then we will have to cut it off at 3:30.

We have — we had about the same number of ticket requests as in the past, but we had a different mix this year. We — as most of you know — we had change the venue, and the time, because Ak-Sar-Ben is winding down.

And so, there's a little different rhythm to this meeting. A much higher percentage of our tickets than usual were requested by people from Omaha.

And, of course, you've heard me say before that we're a little suspicious of these figures because we know that a lot of people claim to be from Omaha that aren't, for status reasons, and so — (laughter) — we can't really give you the geographical breakdown we normally would.

2. Introduction and election of BH directors

WARREN BUFFETT: I'd like to introduce, first, our directors, and then we'll proceed into the formal business of the meeting. On my left here is the ever-animated Charlie Munger, our vice chairman. (Applause)

And if the other directors will stand up as I announce their names. We have the better voice in the movie, my wife, Susan Buffett. Susie? (Applause)

We have Howard Buffett. (Applause)

You can see we find these names in the phone book, I mean —

And Kim Chace. Kim? (Applause)

Walter Scott, the star of "How to be a Gillionaire." (Applause)

And Ron Olson. Ron? (Applause)

OK, we'll now take on the formal part of the meeting.

We're going to try to set a new record, I think, 5:38.4, but the four-minute mile has always been our ambition on this. So I will go through this and then we'll get to the questions.

The meeting will now come to order. I'm Warren Buffett, chairman of the board of directors of this company.

I welcome you to this 2000 annual meeting of shareholders. I've introduced the directors. Also with us today are partners in the firm of Deloitte & Touche, our auditors. They are available to respond to appropriate questions you might have concerning their firm's audit of the accounts of Berkshire.

Mr. Forrest Krutter is secretary of Berkshire. He will make a written record of the proceedings. Miss Becki Amick has been appointed inspector of elections at this meeting. She will certify to the count of votes cast in the election for directors.

The named proxy holders for this meeting are Walter Scott Jr. and Marc D. Hamburg.

Does the secretary have a report of the number of Berkshire shares outstanding, entitled to vote, and represented at the meeting?

FORREST KRUTTER: I do. Yes, I do. As indicated in the proxy statement that accompanied the notice of this meeting that was sent by first-class mail to all shareholders of record on March, 3, 2000, being the record date for this meeting, there are 1,341,174 shares of Class A Berkshire Hathaway common stock outstanding, with each share entitled to one vote on motions considered at the meeting, and 5,385,320 shares of Class B Berkshire Hathaway common stock outstanding, with each share entitled to 1/200th of one vote on motions considered at the meeting.

Of that number, 1,116,151 Class A shares and 4,342,959 Class B shares are represented at this meeting by proxies returned through Thursday evening, April 27th.

WARREN BUFFETT: Thank you. That number represents a quorum and we will therefore directly proceed with the meeting.

The first order of business will be a reading of the minutes of the last meeting of shareholders. I recognize Mr. Walter Scott Jr., who will place a motion before the meeting.

WALTER SCOTT JR: I move that the reading of the minutes of the last meeting of the shareholders be dispensed with.

WARREN BUFFETT: Do I hear a second?

VOICE: I second the motion.

WARREN BUFFETT: The motion has moved and seconded. Are there any comments or questions? We will vote on this question by voice vote. All those in favor say, “Aye.”

VOICES: Aye.

WARREN BUFFETT: Opposed? You can signify by saying, “I’m leaving.” The motion is carried. (Laughter)

The one item of business of this meeting is to elect directors. If a shareholder is present who wishes to withdraw a proxy previously sent in and vote in person on the election of directors, he or she may do so.

Also, if any shareholder that is present has not turned in a proxy, and desires a ballot in order to vote in person, you may do so.

If you wish to do this, please identify yourself to the meeting officials in the aisles who will furnish a ballot for you. Would those persons desiring ballots please identify themselves, so that we may distribute them?

I now recognize Mr. Walter Scott Jr. to place a motion before the meeting, with respect to election of directors.

WALTER SCOTT JR.: I move that Warren E. Buffett, Susan T. Buffett, Howard G. Buffett, Malcolm G. Chace, Charles T. Munger, Ronald L. Olson, and Walter Scott Jr. be elected as directors.

WARREN BUFFETT: Is there a second?

VOICE: I second the vote.

WARREN BUFFETT: It's been moved and seconded that Warren E. Buffett, Susan T. Buffett, Howard G. Buffett, Malcolm G. Chace, Charles T. Munger, Ronald L. Olson, and Walter Scott Jr. be elected as directors.

Are there any other nominations? Is there any discussion? The nominations are ready to be acted upon. If there are any shareholders voting in person that should — they should now mark their ballots on the election of directors and allow the ballots to be delivered to the inspector of election.

Would the proxy holders please also submit to the inspector of elections a ballot on the election of directors voting the proxies, in accordance with instructions they have received? Miss Amick, when you are ready, you may give your report.

BECKI AMICK: My report is ready. The ballot of the proxy holders, in response to proxies that were received through last Thursday evening, cast not less than 1,136,497 votes for each nominee.

That number far exceeds a majority of the number of the total votes related to all Class A and Class B shares outstanding.

The certification required by Delaware law of the precise count of the votes, including the additional votes to be cast by the proxy holders in response to proxies delivered at this meeting, as well as those cast in person at this meeting, if any, will be given to the secretary to be placed with the minutes of this meeting.

WARREN BUFFETT: Thank you, Becki. Warren E. Buffett, Susan T. Buffett, Howard G. Buffett, Malcolm G. Chace, Charles T. Munger, Ronald L. Olson, and Walter Scott Jr. have been elected as directors.

Does anyone have any further business to come before this meeting before we adjourn? If not, I recognize Mr. Walter Scott Jr. to place a motion before the meeting.

WALTER SCOTT JR: I move that this meeting be adjourned.

WARREN BUFFETT: Is there a second? A motion to adjourn has been made and seconded. We will vote by voice. Is there any discussion? If not, all in favor say, "Aye."

VOICES: Aye.

WARREN BUFFETT: All opposed, "No." This meeting's adjourned. Thank you. (Applause)

We will advise Guinness of those results, and maybe we'll get in the book.

Just want to make one more announcement and then we'll start in the questions with area 1, which I believe will be right over here.

About — I think about 3,500 of you are attending the ballgame tonight. You know what you're supposed to do, incidentally.

And we — in the past, we've had some traffic jams at — where the interstate goes off into 13th Street. So, the police, who are wonderfully cooperative throughout this whole weekend, in many ways, are going to do their darnedest to make sure that we don't have much of a jam.

But if those of you who are attending the game would like to go a little early, that will probably be quite helpful.

And I might say that we have probably got — well, we think it's probably the best zoo in the world here, thanks in very large part to our director, Walter Scott, and his wife Sue, who have really turned our zoo into a huge attraction, draws well over a million people a year.

It's right adjacent to the ballpark. So if you get out a little early, and you want to go to the zoo, and then you won't even have to move your car. You can come over to the ballpark, and then there's also food there. And we have a — we serve Coca-Cola products.

And if you don't all try to come at 6:45, it will be a help to us.

I will be pitching at 7:05, but my fastball will arrive at the plate almost instantaneously with the moment that it leaves my hand, so unless you're there, you'll miss it. And — (Laughter)

3. Aesop's investing primer: Birds in hands and bushes

WARREN BUFFETT: So look with that, let's start in area 1, and we will go around. And feel free to ask any questions. You might identify yourself and where you're from before asking your question. Area 1?

AUDIENCE MEMBER: Good morning, Mr. Buffett and Mr. Munger.

My name is Steve Yates (PH), I'm from Chicago. I'm a Berkshire shareholder and this is my sixth year coming to this meeting. I'd like to thank you for all your time and advice through the years. It's been great.

I'd also like to thank all those wonderful people who sold Berkshire this year for giving us an opportunity to purchase more of the world's greatest company for dirt-cheap prices. (Applause)

WARREN BUFFETT: We will convey your thanks. (Laughter)

AUDIENCE MEMBER: I own another stock, which sells for four times current trailing earnings. Every quarter we get a report. Earnings go up, sales go up, cash flow goes up, the equity base expands, they gain market share, and the stock goes down.

The company has a 60 percent five-year annualized growth rate and sells at four times earnings. I have two related questions.

First, is this is a growth stock or a value stock, and could you please give us your definitions of these terms?

Second, the company sells recreational vehicles. Demographic trends in the recreation and leisure areas, RVs, cruise lines, golf equipment, et cetera, seem to be quite good. Do you see any opportunities for Berkshire here? Thanks.

WARREN BUFFETT: Well, the question about growth and value, we've addressed in past annual reports. But they are not two distinct categories of business. Every business is worth the present —

If you knew what it was going to be able to disgorge in cash between now and Judgment Day, you could come to a precise figure as to what it is worth today.

Now, elements of that can be the ability to use additional capital at good rates, and most growth companies that are characterized as growth companies have that as a characteristic.

But there is no distinction in our minds between growth and value. Every business we look at as being a value proposition. The potential for growth and the likelihood of good economics being attached to that growth are part of the equation in evaluation.

But they're all value decisions. A company that pays no dividends growing a hundred percent a year, you know, is losing money. Now, that's a value decision. You have to decide how much value you're going to get.

Actually, it's very simple. The first investment primer, when would you guess it was written?

The first investment primer that I know of, and it was pretty good advice, was delivered in about 600 B.C. by Aesop. And Aesop, you'll remember, said, "A bird in the hand is worth two in the bush."

Now incidentally, Aesop did not know it was 600 BC. He was smart, but he wasn't that smart. (Laughter)

Now, Aesop was onto something, but he didn't finish it, because there's a couple of other questions that go along with that.

But it is an investment equation, a bird in the hand is worth two in the bush. He forgot to say exactly when you were going to get the two in the — from the bush — and he forgot to say what interest rates were that you had to measure this against.

But if he'd given those two factors, he would have defined investment for the next 2,600 years. Because a bird in the hand is — you know, you will trade a bird in the hand, which is investing. You lay out cash today.

And then the question is, as an investment decision, you have to evaluate how many birds are in the bush. You may think there are two birds in the bush, or three birds in the bush, and you have to decide when they're going to come out, and when you're going to acquire them.

Now, if interest rates are five percent, and you're going to get two birds from the bush in five years, we'll say, versus one now, two birds in the bush are much better than a bird in the hand now.

So you want to trade your bird in the hand and say, "I'll take two birds in the bush," because if you're going to get them in five years, that's roughly 14 percent compounded annually and interest rates are only five percent.

But if interest rates were 20 percent, you would decline to take two birds in the bush five years from now. You would say that's not good enough, because at 20 percent, if I just keep this bird in my hand and compound it, I'll have more birds than two birds in the bush in five years.

Now, what's all that got to do with growth? Well, usually growth, people associate with a lot more birds in the bush, but you still have to decide when you're going to get them.

And you have to measure that against interest rates, and you have to measure it against other bushes, and other, you know, other equations.

And that's all investing is. It's a value decision based on, you know, what it is worth, how many birds are in that bush, when you're going to get them, and what interest rates are.

Now, if you pay $500 billion — and when we buy a stock, we always think in terms of buying the whole enterprise, because it enables us to think as businessmen, rather than as stock speculators.

So let's just take a company that has marvelous prospects, is paying you nothing now, and you buy it at a valuation of 500 billion.

Now, if you feel that 10 percent is the appropriate rate of return — and you can pick your figure — that means that if it pays you nothing this year, but starts paying next year, it has to be able to pay you 55 billion in perpetuity, each year.

But if it's not going to pay until the third year, then it has to pay you 60.5 billion in perpetuity — in perpetuity — to justify the present price.

Every year that you wait to take a bird out of the bush means that you have to take out more birds. It's that simple.

And I question, in my mind, whether — sometimes, whether people who pay $500 billion implicitly for a business by buying 10 shares of stock at some price, are really thinking of the mathematical — the mathematics — implicit in what they are doing.

To deliver, let's just assume that's — there's only going to be a one-year delay before the business starts paying out to you, and you want to get a 10 percent return and you pay 500 billion. That means 55 billion of cash that they have to be able to disgorge to you year, after year, after year.

To do that, they have to make perhaps $80 billion, or close to it, pretax.

Now, you might look around at the universe of businesses in this world and see how many are earning 80 billion pretax, or 70, or 60, or 50, or 40, or 30. And you won't find any.

So it requires a rather extraordinary change in profitability to give you enough birds out of that particular bush to make it worthwhile to give up the one that you have in your hand.

Second part of your question, about whether we'd be willing to buy a wonderful business at four times earnings, I think I could get even Charlie interested in that. But let's hear it from Charlie.

CHARLIE MUNGER: I'd like to know what that is. (Laughter)

WARREN BUFFETT: He was hoping you would ask that. That fellow that's got all his net worth in this stock — (laughter) — and who has a captive audience.

Tell us what it is. You've got to tell us. We're begging you. (Laughter)

AUDIENCE MEMBER: You want the name of the company?

WARREN BUFFETT: We want the name of the company. We're dying to get the name. Wait till I get my pencil out. (Laughter)

AUDIENCE MEMBER: It's called National RV, and it's based in California, and they sell recreational vehicles.

WARREN BUFFETT: OK, well, you've got a crowd of people with — who have birds in the hand, and we will see what they do — (laughter) — in terms of National RV.

Charlie, do you have anything further on growth and value, et cetera?

Watch him carefully, folks. (Laughter)

CHARLIE MUNGER: Well, I agree that all intelligent investing is value investing. You have to acquire more than you really pay for, and that's a value judgment. But you can look for more than you're paying for in a lot of different ways.

You can use filters to sift the investment universe. And if you stick with stocks that can't possibly be wonderful to just put away in your safe deposit box for 40 years, but are underpriced, then you have to keep moving around all the time.

As they get closer to what you think the real value is, you have to sell them, and then find others. And so, it's an active kind of investing.

The investing where you find a few great companies and just sit on your ass because you've correctly predicted the future, that is what it's very nice to be good at.

WARREN BUFFETT: The movie was G-rated even though — (Laughter)

Is that it, Charlie? (Laughter)

4. Munger on internet stocks: "If you mix raisins with turds, they're still turds"

WARREN BUFFETT: OK. We will move to area 2.

AUDIENCE MEMBER: Good morning, gentlemen. Wayne Peters. And where I come from our ladies are referred to as birds. (Laughter)

And I'm sure I know a lot that would trade one in the hand for two in the bush — (laughter) — irrespective of the interest rate. (Laughter)

I have two small questions.

Firstly, with the speculation, and some would say rampant speculation, in the high tech and internet arenas, could you share your views on the potential fallout from the speculation for the general economy?

And secondly, how long did it actually take you to perfect that curveball, and are we going to see it tonight?

WARREN BUFFETT: The — I don't think I want to give anything away about my pitches tonight. (Laughter)

Ernie Banks may be in the audience, I know he's in town, and I just can't afford to do that. But you'll see it tonight, and you can describe it anyway you'd like.

The question about the high tech stocks and possible fallout, any time there have been real bursts of speculation in the market, you know that — it does get corrected, eventually.

Ben Graham was right when he said that in the short run it's a voting machine, and the long run it's a weighing machine. Sooner or later, the amount of cash that a business can disgorge in the future governs the value it has — that the stock commands — in the market. But it can take a long time.

And, I mean, it's a very interesting proposition. For example, if you take a company that, in the end, never makes any money, but trades — changes hands — representing a valuation of 10 or $20 billion for some time, there's no wealth created. There's a tremendous amount of wealth transferred.

And I think you will see, when we look back on this era, you will see this as a period of enormous amounts of wealth transfer, but in the end the only wealth creation comes about through what the business creates.

There's no magic to it. If a company that's not worth anything sells for 20 billion and 5 percent of it changes hands, somebody takes a billion dollars from somebody else. But investors as whole gain nothing.

They all feel richer. It's a very interesting phenomenon. But they can't be richer except — as a group — unless the company makes them richer.

And it's the same principle as a chain letter. If you're very early on a chain letter you can make money. There's no money created by chain letters. In fact, there's the frictional cost of envelopes, and postage, and that sort of thing.

So the net, there's some money destroyed a little bit. And there's money destroyed by the frictional cost of trading and investing, and that comes out of investor's pockets.

But the manias that periodically take place — and not just in stocks. We had a similar mania — not necessarily similar — we certainly had a mania in farmland here in Nebraska 20 years ago.

And land which couldn't produce, we'll say, more than 70 or $80 an acre would sell for 2,000 an acre at times when interest rates were 10 percent.

Well, that math will kill you. And it killed the people who bought it at those prices, and it killed a great many banks here in Nebraska who lent based on that sort of thing.

But while it was going on everybody thought it was wonderful, because every farm was selling for more than the similar farm had sold for a month earlier. And it was momentum investing in farmland.

And, in the end, valuation does count. But it can go on a long time, and when you get a huge number of participants playing with ever increasing sums, you know, it creates its own apparent truth for a — what can be for a very considerable period of time.

It doesn't go on forever. And whether it has fallout to the whole economy, like it probably did in the late '20s, or whether it's just an isolated industry where the — or sector — where the bubble bursts and it really doesn't affect other values, who knows? But five or 10 years from now, you will know.

Charlie?

CHARLIE MUNGER: Well, I think the reason we use the phrase "wretched excess" is that there are wretched consequences.

If you mix the mathematics of the chain letter or the Ponzi scheme with some legitimate development, like the development of the internet, you are mixing something which is wretched and irrational, and has bad consequences, with something that has very good consequences.

But, you know, if you mix raisins with turds, they're still turds. (Laughter)

WARREN BUFFETT: That's why they have me write the annual report. (Laughter)

5. Evaluating the internet's threat to Berkshire's businesses

WARREN BUFFETT: So, I think we better move on to sector 3. (Laughter)

Way back there.

AUDIENCE MEMBER: My name —

WARREN BUFFETT: Yeah.

AUDIENCE MEMBER: My name is Thomas Kamay (PH). I am 10 years old and I go to Bacich School in Kentfield, California. I have been a shareholder for two years. This is my third annual meeting. Here's my question.

I know you won't invest in technology companies, but are you afraid that the internet will hurt some of the companies that you do invest in, such as The Washington Post or Wells Fargo? Thank you.

WARREN BUFFETT: Well, that's an absolutely terrific question. You know, I may turn my money over to you. (Laughter and applause)

There's probably no better question we'll get.

And I hope Charlie answers in an appropriate vein considering your age. (Laughter)

We do not — we have no — you know, it's no religious belief that we don't buy into tech companies.

We just don't — we have never found one — as conventionally defined — we've never found one where we think we know enough about what the business will look like in 10 years that we can make a rational decision as to how much we pay now for that business.

In other words, we have not been able to find a business where we think we know what that bush will look like in 10 years, and how many birds will be in it, so that we know how many birds we can give up today to participate in that future.

Not any — there will be wonderful things, as Charlie so colorfully explained, that will evolve from many of these companies, but we don't know how to make that decision.

And you're absolutely right that we should be thinking all of the time about whether developments in that tech area threaten the businesses that we're in now, how you might counter those threats, how we might capitalize in opportunities because of it.

It's a very, very, very important part of business now and will become more important in the years to come, including many of our businesses.

For example, you mentioned The Washington Post. Even closer to home, we own a newspaper called The Buffalo News in Buffalo, New York. We own all of that. So we're in a position to make our own decisions of an operating nature as to what we should do in respect to the internet.

And believe me, Stan Lipsey, who's here today, who runs that paper, and I have talked many, many hours, including considerable time yesterday about what we are doing on the internet, what we should be doing, what other people are doing, how it threatens us, how we can counter those threats, all of that sort of thing.

And newspapers are a category that, in my view, are very threatened by the internet because we had an example —

The internet is terrific for delivering information. We have a product, World Book, that's terrific for delivering information. And 15 years ago, print encyclopedias were the best tool, probably, for educating not only young children, but for educating me or Charlie when we wanted to look up something on a subject.

And the World Book is a marvelous product. But it requires chopping down trees, and it requires operating paper mills, and it requires binding it and printing, and it requires a delivery of a 70 pound, you know, UPS package. And it's a —

It was put together in a way that was, for 4- or 500 years, the best technique for taking that information and moving it from those who assembled it to those who wanted to use it. And then the internet changed that in a very major way.

So we have seen firsthand, and experienced the business consequences of the improvement offered by the internet and the delivery of information.

And newspapers, although not as immediately susceptible to that problem, still face that overpowering factor.

When you eliminate the delivery cost — I mean, we pay a significant percentage of our circulation revenue to our carriers, and we pay additional money to the district managers, and we pay for the trucks to deliver the product out, and we pay for huge printing presses, and all of that sort of thing.

And people do chop down trees in order to give us the raw material to transmit information in Buffalo, you know, about what the Buffalo Bills did yesterday, on Sunday, with all the details.

And now you have the internet that has virtually no incremental unit cost to anything and can deliver the information instantaneously. So it's a big factor for newspapers.

And the newspaper world in my view will look very, very, very different in not that many years.

And I find it kind of interesting, because the people in the newspaper business are a little schizophrenic about this. They see this. They're afraid of it. They're, in almost all cases, trying to combat it on some way operationally.

But some of them, at least, continue to go out and buy papers at a price that sort of reflects the economics that used to exist 20 years ago, when it's — to me it's very clear that it doesn't exist anymore.

So they sort of have their billfold, you know, in the past, even though they see the future. And, you know, I think, probably, they're making mistakes in many cases.

All of our businesses, virtually — Coca-Cola will not be affected in any significant way by the internet, you know? The razor and blade business won't be. Although you could dream up things about distribution or so on, but I think that it's very unlikely.

But other businesses we have — our insurance business, particularly at GEICO, will be very affected by the internet. Now, that may turn out to be a big advantage to us over time. I wouldn't be surprised if it is.

But our retailing businesses are all threatened in one way or another by internet developments, and there may be some opportunities there, too. But it's a change.

It's a change in — it's going to be change in the world — how the world gets entertainment. It's going to be a change in the world — how the world gets information. And it is incredibly low cost compared to the — most of the methods of conveying entertainment and information now.

Charlie?

CHARLIE MUNGER: Well, he asked if we were afraid that the internet would hurt some of our business and I think the answer is yes. (Laughter)

WARREN BUFFETT: I'm learning to appreciate these short answers, though, more as the day goes by. (Laughter)

I want to thank you for coming to our meeting, incidentally. You're way ahead of me. I didn't buy my first stock until I was 11, and so you've got a real jump on me. And I wish you well.

6. "There's nothing magic about a one-year period"

WARREN BUFFETT: OK. Area 4.

AUDIENCE MEMBER: Warren and Charlie, good morning. This is Mo Spence (PH), Waterloo, Nebraska.

In 1999, Berkshire Hathaway managed to produce a positive gain in net worth of one-half of one percent.

That means that since present management took over 35 years ago, Berkshire Hathaway has realized a positive gain each and every year, and produced an average annual gain of 24 percent.

Including the years you ran the Buffett Limited Partnership, you have had a run of 48 consecutive years of positive gains and net worth without one single down year, producing a compounded rate of return of almost 26 percent annually.

On behalf of the long-term shareholders of Berkshire Hathaway, we want to thank you from the bottom of our pocketbooks. (Applause)

WARREN BUFFETT: Well, thank you. I hope your question isn't going to be whether we can continue that, but go — you have a question?

AUDIENCE MEMBER: My question is, don't you think you could have ended the millennium with a bigger bang than one-half of one percent? (Laughter)

WARREN BUFFETT: Well, I certainly wish we could have. But the interesting thing about those figures — and, actually, the figures go back before that, because the very best period was pre-the partnership days, because the amount I was working with was so small.

But the — there's nothing magic about a one-year period. I mean, it's the way the measurements come out. We've — if you took all the half-year periods, for example, I'm sure — well, I know that there were a number that were down, you know —

There're going to be lots of years in the future — assuming I live long enough, that — we will have plenty of down years. It's been a fluke, to some degree, that we have not had any down years in terms of underlying value.

The stock has gone up and down in ways that are not related to intrinsic value a few times, but that is totally a fluke. I mean, we're not going to be up every day. We're not going to be up every week. We're not going to be up every month, or even every year.

And it's — the fact that, you know, the Earth revolves around the sun really is not totally connected to most business activities, or the fruition of most investment ideas, or anything of the sort.

So we have to report every year, and, you know, I care about the yearly figures in that sense. I don't really care about them, totally, as a measure of what we're doing.

And, like I say, if we could've — we were — the capital allocation job that I did in 1999 was very, very poor. And it was partly because some of our main businesses did poorly.

I mean, Coca-Cola and Gillette had bad years last year. They'll have good years over time.

I wrote a few years ago — it's interesting, I called their soft drink business and their razor and blade business as "Inevitables."

And the truth is they've got a higher market share now than they've ever had in history. They're selling more units than any year in history. But certain other factors hurt their business and therefore hurt their stock performance.

But I would still call the soft drink — Coca-Cola's position in the soft drink business, and Gillette's position in the razor and blade business — I would characterize them as "inevitable," that they will gain share over time.

Gillette has over 70 percent of the blade and razor business in the world, which is — measured by value. And that's an extraordinary share.

Coke has 50 percent of the soft drink business in the world. That's well over a billion eight-ounce servings per day. A billion per day.

Eight percent of those are for the account of Berkshire, so over 80 million eight-ounce servings of soft drinks per day are being consumed by people for — where the economic benefit comes to Berkshire Hathaway.

In effect, we have over six percent of the — for Berkshire Hathaway's account — of the blade and razor business in the world. And it'll go up.

So I don't worry about the businesses in the least, long term. They will have bad years from time to time. And when they do, our performance will not look good in those years.

Charlie?

CHARLIE MUNGER: Well, it's been a very interesting stretch. One of the most interesting things about the stretch is that, during pretty much the whole period, the company has owned marketable securities in excess of its net worth.

And so you have this extraordinary liquidity in a company that has performed very well, to boot. That advantage has not gone away and, in fact, it's been augmented.

Give us reasonable opportunities and we are prepared.

WARREN BUFFETT: Well you've heard what you're supposed to do, now we'll do the rest. Just give us the opportunities.

7. We want a "mathematical edge in every transaction"

WARREN BUFFETT: Area 5.

AUDIENCE MEMBER: My name is Greg Blevins (PH) from Bargetown, Kentucky.

I have a question about intrinsic value. It comes from comments that you made in your annual report this year. In there, you describe the extraordinary skills of [Berkshire reinsurance chief] Ajit Jain in judging risk.

When I think about Berkshire and its ability to increase intrinsic value, it seems to me that judging risk has been at least as important as an ability to calculate a net present value.

So my question to each of you is, would you give us some comments on how you think about risk?

WARREN BUFFETT: Well, we think of business risk in terms of what can happen — say five, 10, 15 years from now — that will destroy, or modify, or reduce the economic strengths that we perceive currently exist in a business.

In some businesses that's very — it's impossible — to figure — at least it's impossible for us to figure — and then we just — we don't even think about it then.

We are enormously risk averse. We are not risk adverse, in terms of losing a billion dollars if there were an earthquake in California today. And we're thinking of writing a policy, for example, in the next week or so, on a primary insurance risk of over a billion dollars.

That doesn't bother us as long as the math is in our favor. But in terms of doing a group of transactions like that, we are very risk averse. In other words, we want to think that we've got a mathematical edge in every transaction.

And we think that we'll do enough transactions over a lifetime so that, no matter what the result of any single one, that the group expectancy would — gets almost to certainty.

When we look at businesses, we try to think of what can go wrong with them. We try to look [for] businesses that are good businesses now, and we think about what can go wrong with them.

If we can think of very much that can go wrong with them, we just forget it. We are not in the business of assuming a lot of risk in businesses.

That doesn't mean we don't do it inadvertently and make mistakes, because we do. But we don't intentionally, or willingly, voluntarily, go into situations where we perceive really significant risk that the business is going to change in a major way.

And that gets down to what you probably heard me talk about before, is, what kind of a moat is around the business?

Every business that we look at we think of as an economic castle. And castles are subject to marauders. And in capitalism, any castle you have, whether it's razor blades, or soft drinks, or whatever, you have to expect the —

And you want the capitalistic system to work in a way that millions of people are out there with capital thinking about ways to take your castle away from you, and appropriate it for their own use. And then the question is, what kind of a moat do you have around that castle that protects it?

See's Candy has a wonderful moat around its castle. And Chuck Huggins has taken that moat, which he took charge of in 1972, and he has widened that moat every year. He throws crocodiles, and sharks, and piranhas in the moat, and it gets harder and harder for people to swim across and attack the castle. So they don't do it.

If you look, since 1972, Forrest Mars tried with Ethel M — I don't know, 20 years ago. And I hate to think of how much money it cost him to try that. And he was a very experienced businessman.

So we think of the — we think in terms of that moat and the ability to keep its width and its impossibility of being crossed as the primary criterion of a great business.

And to our managers, we say we want the moat widened every year. You know, that does not necessarily mean that the profit is more this year than last year, because it won't be sometimes. But if the moat is widened every year, the business will do very well.

When we don't have a — when we see a moat that's tenuous in any way — getting back to your question — it's just too risky. We don't know how to valuate that, and therefore we leave it alone.

We think all of our businesses — virtually all of our businesses — have pretty darn good moats, and we think the managers are widening them.

Charlie?

CHARLIE MUNGER: How could you say it better? (Laughter)

WARREN BUFFETT: Here, have a — have some peanut brittle on that one. (Laughter)

8. Insurance "attracts chicanery" and we'll have surprises

WARREN BUFFETT: OK, 6.

AUDIENCE MEMBER: Good morning.

WARREN BUFFETT: Good mrning.

AUDIENCE MEMBER: My name is Hugh Stevenson (PH). I'm a shareholder from Atlanta.

WARREN BUFFETT (to Munger): Why don't you open that?

AUDIENCE MEMBER: My question involves the company's activities before and shortly after the Gen Re acquisition.

I remember you saying once that, in insurance, virtually all surprises are negative ones. And I'm wondering, given the company's operating experience in insurance over long period of time, could you tell us what happened in the Unicover situation?

How come in Gen — with Gen Re's experience and the company's experience, that it happened, they didn't foresee it, we didn't foresee it? What has the company done? I know they've taken a large reserve for the situation.

And how do they plan to operate in the future to prevent these things, find them out, and strengthen the company from these kind of situations in the future?

WARREN BUFFETT: Yeah, the Unicover situation was discovered in about, I don't know, February of last year, or thereabouts. And it was a mistake, I mean, it should not have been made. A lot of other people made the same mistake, but that still didn't mean that we should have made that mistake.

We set up a reserve of $275 million when the mistake was discovered, and that reserve looks like it's about right still. There have been quite a few developments at Unicover that have defined the limits of it better and resulted in the resolutions of many of the issues attached to it. Still looks like about a $275 million mistake.

Now, that's a big mistake, but we've made bigger ones. We had one in the mid-'70s that probably cost Berkshire, measuring opportunity cost and everything, because we didn't know how bad it was going to be —

I would say that Berkshire would now be worth at least 10 percent more if that mistake hadn't occurred. Wouldn't you say so, Charlie? The Omni situation?

CHARLIE MUNGER: Absolutely.

WARREN BUFFETT: Yeah, so we had a mistake whose present value would be 8 or $9 billion. It cost us at least that.

CHARLIE MUNGER: Yeah, it cost us less than 4 million at the time.

WARREN BUFFETT: Yeah. Though, it — but we didn't know it for sure it was 4 million, so it tied our hands in other respects, too.

In insurance you will get surprises. Now, the test of good management is how many surprises you get. But there's no way you'll get no surprises.

And if you look at our history, you will see some years when our float cost us a lot of money. You will also see a history where over 33 or so years that it's been a very, very attractive business.

But we have had cases, I mean, our name causes problems. I think National Indemnity — we had a fraud, as I remember, down in Texas where an agent was using our paper, which incidentally was the same problem we had, the one that cost us so much.

And some guy is out there writing bonds on — surety bonds — on construction of schools. And he says he represents National Indemnity and the contract proceeds, and of course, we've never heard of the guy.

But if you get a school district in Texas with a half-finished school, and the choice is whether the taxpayers ante up more or whether you find that this guy had apparent authority as an agent, and so on, and therefore we should pay on a policy we never heard of, written by a guy we never heard of, you know, on a school we never heard of. You know, we'll end up paying.

So the surprises are unpleasant nine times out of 10. We'll have more. We had another one last year that shouldn't have happened. But they do happen.

And General Re has a terrific record over time.

We knew last year would not be a good business in the reinsurance business. It was worse than we thought it would be. But that had nothing to do — if you told me the figures that General Re would have at the end of the year, we would have made the same deal in a moment.

And, you know, we didn't do so well with Coke and Gillette ourselves. So that the ratio of mistakes was probably fairly equal between the two organizations with me contributing our — my share.

I think insurance, which will continue to have surprises in it, will turn out to be a very, very good business for Berkshire over time. It's the best one I know about that we can do in increasing scale over time.

As a matter of fact, some of you may not have noticed but we announced another small insurance acquisition just last week.

It's a tough field. The average company is going to do poorly. We think we have some very special companies, and we really do think, over time, we will acquire and utilize float at a cost that's very, very attractive.

It won't be zero like it's been in the past. I mean, we are in some lines of business where intentionally — I mean, we would be crazy to try to hold it to zero, because it's way better to have twice as much money at one or two percent as have half as much money at 0 percent.

But we will fully acknowledge that — I mean, Unicover was a surprise. But I don't know how many surprises I've had in insurance over the 33 years or so we've been in it.

One of the surprises, incidentally, you know, worked to our incredible benefit.

GEICO has been a great, great company since I first went down to Washington, and even before that, and met Lorimer Davidson almost 50 years ago. But they made a mistake in the early '70s that really did bankrupt the company.

But fortunately, there was an insurance commissioner named Max Wallach in the District of Columbia, who saw that it could be resuscitated, and that mistake enabled us to make many, many billions of dollars. So mistakes can be useful on occasion, too.

Charlie?

CHARLIE MUNGER: All that said, it is perhaps the most irritating way to lose money there is, is to be taken by a sort of obvious lie. And — but it happens.

I don't think it's likely to happen again on that scale.

WARREN BUFFETT: Well, I wouldn't say that. (Laughs)

I would say that it's unlikely that — in any 20 year period, or anything like that, we will get a big surprise. And it will come about, very often, through one form or another of three or four methods of obvious fraud that we've observed in the past.

But they spring up again. And there are plenty of people that are, I'd have to say, "crooked," in insurance because it's a product where you deliver a piece of paper and somebody hands you money.

And that intrigues people. You know, you don't even hand them a Dilly bar, you know, or — (laughter) — or anything in exchange. They hand you a lot of money and you give them a little piece of paper.

And of course, when you get into reinsurance and all that, then you hand that little piece of paper to somebody else and try and get them to hand you money.

And all the way along the line you have brokers who are getting big chunks of money for sort of papering over some of the weaknesses in the project, and sometimes they may even be in on it.

So it's a field that attracts chicanery. And often they — the same people — come back again and again. It's amazing to me.

So, I would say that we will get a surprise or two over any 10-year period in insurance. It's almost impossible to avoid.

We should try to minimize it. We do try to minimize it, but I would not want to bet my life that we've seen the last of a Unicover-type situation.

They're always just a little bit different enough so that it doesn't get spotted, or somebody down the line doesn't get the message, but —

I don't know. Don't you think, Charlie, we'll see another one? (Laughs)

CHARLIE MUNGER: Well, perhaps so, but it was a long time from one to the other, and maybe I'll be able to get through without another. (Laughter)

One of these fraud artists, Warren caused me to meet years ago, and his proposition was that he had this perfectly marvelous business.

He says, "I — we only write fire insurance on concrete bridges that are under water." He says, — (laughter) — "It's like taking candy from babies." And —

WARREN BUFFETT: We were the babies. (Laughter)

CHARLIE MUNGER: I looked in his eye. I thought he was kidding or something. He wasn't kidding. I mean, these people believe this kind of stuff.

WARREN BUFFETT: The truth is Charlie — if Charlie and I could see everybody we dealt with, we would screen out some perfectly honest people, too. I think we could probably screen out the crooked propositions. I mean, they do have similar characteristics to them.

And what happens is you get somebody out in the field who is eager to write business or is being wooed by producers, and the intermediaries get very good at it. It's the same way lousy stocks get sold.

I mean, you'll get people who are getting paid very well to part, you know, separate you from your money. And that's worked over the years. The good salesmen find out they can make

more money, you know, selling phony products with big tickets attached to them than they can selling lollipops.

9. Rules and fees for Buffett's 1950's partnerships

WARREN BUFFETT: Number 7.

AUDIENCE MEMBER: Good morning Mr. Buffett, and good morning Mr. Munger. My name is Monish Pabrai (PH) and I'm from Long Grove, Illinois.

I have been a student and disciple of yourself, Mr. Buffett, for some time, and especially Mr. Munger. And I have adopted, quite intensely, your theories of capital allocation, in the manner in which I run my business, as well as my portfolio, and quite pleased with the results so far.

My question has to do with the original 1950s Buffett partnerships. There is some conflicting data in the various books about you pertaining to the rules of the partnership and the fees of the partnership.

What I wanted to understand is, I think some of the books allude to the principle being guaranteed — I think six percent a year being guaranteed — and then you took a fourth, and the partners got three-fourths.

In some cases they talk about four percent, and some cases they say there was no guarantee. I would just appreciate a clarification on that.

WARREN BUFFETT: OK, we'll make it short because I'm not sure how much general interest there is to that. But there was never any guarantee.

There was a guarantee that I wouldn't get a penny myself — there was none of this one percent fee and all that sort of thing that hedge funds now normally have. After a short period of time I told people I'd have all my capital in it, basically.

So there was a guarantee I would follow — have a common destiny. There was never any guarantee of principle of any sort.

Originally, the thing started by accident, so that there 11 different partnerships before they all got put together on January 1st, 1962, into Buffett Partnerships.

So with the 11 different partnerships, they had different — some different arrangements — based on the preferences of the limited partners. I offered them an option of three or four different choices, and different families made different choices.

When we put them together we settled on the 6 percent preferential with a quarter of the profits over that, with a carry forward of all deficiencies. Nobody was guaranteed anything on them.

Charlie had a much better partnership. His was a third, as I remember, wasn't it Charlie? (Laughter) ?

CHARLIE MUNGER: Yes, but we were smaller and operating specialist posts on the stock exchange. (Buffett laughs)

The facts were different.

WARREN BUFFETT: Yeah.

10. American Express isn't "inevitable" but has "huge value"

WARREN BUFFETT: OK. Let's go to 8.

AUDIENCE MEMBER: Mr. Buffett, Mr. Munger, good morning. My name is Pete Banner (PH), and I'm from Boulder, Colorado.

In the 1996 annual report, Mr. Buffett, you stated companies such as Coca-Cola and Gillette might well be labeled "The Inevitables," and you just reaffirmed your view of Coca-Cola and Gillette.

My question to you is, do you have the same view of American Express? That is, do you view American Express as, quote, "The Inevitable"?

WARREN BUFFETT: Yeah. I would like to clarify one point, too. I didn't really say I regard the companies as "Inevitables." I regarded the businesses, their dominance of soft drinks, or their competitive strength in soft drinks and in razors and blades.

And as a matter of fact, I actually pointed out in talking about that — a few paragraphs later, I pointed out the danger of having a wonderful business is the temptation to go into less wonderful businesses.

And to some extent, for example, Gillette's stumble in the last year or two has not been the product of their razor and blade business, but it has been some other businesses, which are not at all inevitable.

And that, you know, that is always a risk. And it's a risk I pointed out, that when a company with a wonderful business gets into a mediocre business, that usually the reputation of the mediocre business prevails over the supposed invincibility of the management of the wonderful business.

American Express, an interesting case study, because it does have a — we always think in terms of share of mind versus share of market because, if share of mind is there, market will follow.

People — virtually — probably 75 percent of the people in the world — have something in their mind about Coca-Cola. And overwhelmingly it's favorable. Everybody in California has something in their mind about See's Candy, and overwhelmingly it's favorable.

The job is to have it in a few more California minds — or world minds in the case of Coke — over the years, and have it even be a little more favorable as the years go by. If we have that, everything else follows. And consumer product organizations understand that.

American Express was — had a very special position in people's mind about financial integrity over the years, and ubiquity of acceptance. When the banks closed in the early '30s, American Express traveler's checks actually substituted, to some extent, for bank activity during that period.

The worldwide acceptance of this name meant that when American Express sold traveler's checks — for many years, their two primary competitors were what are now Citicorp — First National City — and the Bank of America.

And, despite the fact that American Express charged you one percent when you bought your traveler's checks, and you had two other premier organizations, Citicorp, imagine, and BofA, and — actually, Barclays had one and Thomas Cook had one.

And American Express still had two-thirds of the market after 60 or 70 years — two-thirds of the worldwide market — while charging more for the product than these other very well-known competitors charged.

Anytime you can charge more for a product and maintain or increase market share against well-entrenched, well-known competitors, you have something very special in people's minds. Same thing came about when the credit card came around.

Originally, American Express wanted the credit card because they thought they were going to get killed on traveler's checks. And they thought it was going to be a substitute, and therefore, they had to go into — it was a defensive move.

It came about because a fellow named Ralph Schneider, and Al Bloomingdale, and a couple people came up with the Diners Club idea. And the Diners Club idea was sweeping, well, initially New York, and then the country in the mid-'50s.

And American Express got very worried because they thought, you know, people are going to use these cards. Nobody had ever heard of Visa at that point, or anything of the sort.

But people were going to use these cards instead of traveler's checks. So they backed into the traveler's check business — I mean, it backed into the credit card business.

Immediately, despite the jump the Diners Club had on the — on this business — because Diners Club had the restaurants signed up already, and they already had the high rollers carrying around their card, and nobody had an American Express card.

But American Express went in and they started charging more than Diners Club for the card, and they kept taking market share away.

Well, that is a great position to be in people's minds where they are willing to — when faced with a choice — they're willing to go with the newer product, at a higher price, and leave behind the entrenched product.

And it just showed the power of American Express. American Express had a special cache. It identified you as something special.

When you pulled out your American Express, as opposed to your Diner's Club card, and as opposed to the Carte Blanche card, which was the third main competitor at the time. Visa still did not exist. And you could see this dominance prevail.

That told you what was in people's minds. It's why I bought into the stock in 1964. We bought 5 percent of the company for — a huge investment at the time for us. I was only managing $20 million at the time.

But you could see that this share of mind, this consumer franchise had not been lost.

In the — considerable period of time, American Express got into other businesses, they got into — Fireman's Fund Insurance was a very big acquisition. And, to some extent, they let the Visas of the world and all of those get established. They still had this preeminent cache position, but it was eroding.

But I would say that Harvey Golub, along with a lot of other people in the management, have done an extremely good job of reaffirming — intensifying — the cache. There will be probably $300 billion worth of charges, something in that area, put on American Express this year.

The — 300 billion, those are big numbers, even in today's world. The average discount fee is about 2.73 percent. If you look at the average discount fee on Visa, MasterCharge, you know, it's going to be a —probably, a full percentage point beneath that.

So you've got a percentage point on $300 billion, which is $3 billion of revenue that your competitor doesn't get. You can do a lot of things for your clientele.

And they've segmented the card, as you know. They've even recently gone to this black card, and — which sells for a thousand dollars. It's got a very special cache.

I would say that — I wouldn't use the word "inevitable," but I would say that nourished properly, that the American Express name has had — excuse me — has huge value and is very, very likely to get stronger and stronger as the years go by.

But I don't — I think that what they went through showed that it could take quite a beating and come back. But I don't want to — I don't think you'd want to test it that way indefinitely.

Incidentally, that's one of the things we look for in businesses, is how — you know, if you see a business take a lot of adversity and still do well, that tells you something about the underlying strength of the business.

The classic case was on that was — to me, is AOL. Four or five years ago — you know, I'm no expert on this, but I got the impression there for a period of time when they were having a lot of problems, that a very significant percentage of AOL's customers were mad at them.

But the number of customers went up every month. And that's a terrific business. I mean, if you have a business where your customers are mad at you and you're growing, you know, that has met a certain test, in my mind, of utility.

And you might argue that American Express had that, to some degree. It wasn't that bad. But they had a lot of merchant unrest and all of that. So, occasionally, you will find that an interesting test of the strength of a business.

Coca-Cola had some problems, you know, in Europe. But it comes back stronger than ever. They certainly had problems with New Coke, and they came back stronger than ever.

So you do see that underlying strength. And that's very impressive as a way of evaluating the depth and impenetrability of the moat that we talked about earlier.

Charlie?

CHARLIE MUNGER: Well, I think it would be easier to screw up American Express than it would Coke or Gillette. But it's an immensely strong business, and it's wonderful to have it.

WARREN BUFFETT: We own about 11 percent of American Express. So when there are 300 billion of charges, we're getting 33 billion of those for the account of Berkshire, and it's growing at a pretty good clip. The first quarter, it grew very substantially in both cardholders and charges.

My guess is that our 11 percent becomes more valuable over time. It's hard to think of anything that would destroy it.

CHARLIE MUNGER: The business is very interesting. They made a deal to put American Express cards into Costco. I think that is a very intelligent thing for American Express to have done. And it's a very aggressive place that does a lot of interesting things.

WARREN BUFFETT: Charlie is a director of Costco, so he's a — Costco is an absolutely fabulous organization. We should have owned a lot of Costco over the years and we — I blew it. Charlie was for it, but I blew it.

11. "We don't think in terms of absolutes"

WARREN BUFFETT: OK, we'll go to number 1 again.

AUDIENCE MEMBER: My name is Jin Xi Wan (PH) from San Diego, California.

First, I would thank both of you. My question is also about growth and value.

If you look at the business in this country, most of them, if not all of them, are cyclical to various degrees. Certain businesses are, of course, more cyclical than other businesses.

So when you buy a business or make a investment in a new stock, do you ever cut off — like if a business lose money in a downturn, we are not going to buy.

If its earning begin to decline or downturn, we're not going to buy. But if the earning growth slows down, then we can look at a business and make an investment. So do you have a cutoff, in terms of this cyclical factor?

And also, when you buy a business — in terms of the current P/E ratio, also do you have a cutoff? Let's say, if it's P/E ratio is more than 15, 16, we are not going to buy the business, no matter how much the earning will grow in the future. So basically, it's about the growth and the value.

WARREN BUFFETT: Yeah, we have — to answer your question directly — we have no cutoff, whatsoever.

We don't think in terms of absolutes that way because, again, we are trying to think of how many birds are in the bush. And sometimes the number that are currently being shown could be negative.

One of the best buys we ever made was in 1976 when we bought a significant percentage — what became through repurchases — 50 percent of GEICO at a time when the company was losing a lot of money and was destined to lose a lot of money in the immediate future.

And, you know, the fact they were losing money was not lost on us, but we thought we saw a future there that was significantly different than the current situation.

So it would not bother us in the least to buy into a business that currently was losing money for some reason that we understood, and where we thought that the future was going to be significantly different.

Similarly, if a business is making some money — there's no P/E ratio that we have in mind as being a cutoff point at all. There are businesses — I mean, you could have some business making a sliver of money on which you would pay a very, very high P/E ratio. But it's basically —

We look at all of these as businesses. We're, for example, in — at Executive Jet — NetJets — we're losing money in Europe. Well, we expect to lose money in Europe getting established.

So does that mean it's a bad thing to buy a hundred percent of, if you own the whole company, or three percent of, if Executive Jet was a public company and you were buying into? No. I mean, it —

There are all kinds of decisions that involve the future looking different, in some important way, than the present. Most of our decisions relate to things where we expect the future not to change much.

But you get this — well, American Express was a good example. And when we bought it in 1964, a fellow named Tino DeAngelis had caused them incredible trouble. You know, it was one of those decisions that looked, for a time, as if it could break the company.

So, we knew — if you'd been charging for what Tino had stolen from the company against the income account that year, or the legal costs that were going to be attached to it, you were looking at a significant loss.

But the question was, what was American Express going to look like 10 or 20 years later? And we felt very good about that.

So there are no arbitrary cutoff points. But there is that focus on, how much cash will this business deliver, you know, between now and Kingdom Come? Now as a practical matter, if you estimate it for 20 years or so, the terminal values get less important.

So — but you do want to have, in your mind, a stream of cash that will be thrown off over, say, a 20-year period, that makes sense discounted at a proper interest rate, compared to what you're paying today. And that's what investment's all about.

Charlie?

CHARLIE MUNGER: Yeah, the answer is almost the exact reverse of what you were pointing toward. A business with something glorious underneath, disguised by terrible numbers that cause cutoff points in other people's minds, is ideal for us, if we can figure it out.

WARREN BUFFETT: And we've had a couple of those in our history that have made us a lot of money. I mean, we don't want to wish anybody ill, but —

CHARLIE MUNGER: Oh, I wouldn't go that far —

WARREN BUFFETT: OK, well Charlie — (Laughter)

I think he's speaking for both of us. (Laughter)

12. Speculate a bit in tech? Not if we don't understand it

WARREN BUFFETT: OK, we'll move on to number 2.

AUDIENCE MEMBER: Mr. Buffett, I would like to start my question by giving you and Charlie 10 lashes with a wet noodle, not because of 1999 and what happened to your net worth or our net worth, but because you have spoiled your shareholders into expecting 25 percent growth every year, since 1965.

And then comes the bad, bad 199[9] and it hits all of us. But by my calculations, you personally, Mr. Buffett, have lost over 10 billion dollar — not million — billion dollars during 1999.

So I don't think we should get too mad at you because probably all of us have, at this point in our life, increased our net worth and made a lot of money. So you don't get a wet noodle today. (Laughter)

WARREN BUFFETT: Hmm.

AUDIENCE MEMBER: And the shareholders have, I'm sure, lost thousands. And some have lost millions of dollars during the year 1999.

Now after reading your biography in November of 1998 — unfortunately I didn't know about you earlier — I started investing on November the 24th of '98. And of course, I'm a poor little investor, so I bought your B stock at 23.08.

Then, because the market dropped, I bought some more on the 4th of December at 22.29. And then I bought, on January the 24th of 2000 at 16.89, so I do believe in dollar-cost averaging and I've been doing that for probably 30 years of my life.

My January investment, I'm happy to say, is up 15 percent, so the worst may be over.

Now, I read your annual report and I want to compliment you that that is the easiest and most entertaining annual report I think created in the whole world. And your — and I hope you continue that kind of a report. (Applause)

WARREN BUFFETT: Thank you.

VOICE: (Inaudible) Your name and —

AUDIENCE MEMBER: Oh!

VOICE: — where you're from

AUDIENCE MEMBER: I'm sorry. I was just told that I should have said who I am. My name is Gaylord Hanson and I'm from Santa Barbara, California — where investor Munger puts his big, multimillion-dollar boat in the water. (Laughter)

WARREN BUFFETT: I'm not going to make any comment on that.

AUDIENCE MEMBER: Please don't. (Laughter)

Now, with technology, computers, electronics, and software transforming our entire world — not just here — the world, I must admit that I personally invested in four technology computer software and aggressive growth mutual funds and made up all of my 1999 losses on Berkshire Hathaway. (Laughter and applause)

Are we asking too much as shareholders of Berkshire Hathaway for you men to put your brains to work and possibly speculate a little bit, maybe 10 percent of our money, into the only play in town, which seems to be technology, electronic?

And I read your report, and I understand a lot of your reasoning that it's difficult — and it is difficult — to project earnings of a lot — people are going to be a little bankrupt. Are they going to out of business?

But isn't there enough left in your brainpower to maybe pick a few and — (laughter) — see what's going on? Because I made over a hundred percent profit in 1999 on my aggressive position in the technology field, so that's —

WARREN BUFFETT: OK, well —

AUDIENCE MEMBER: — my question.

WARREN BUFFETT: The answer is we will never buy anything we don't think we understand. And our definition of understanding is thinking that we have a reasonable probability of being able to asses where the business will be in 10 years.

But, you know, we'd be delighted — we have a man here who's done very well. And if he has any business cards, you know, you could always invest with him, and — (Laughter)

And we'd welcome — you know — you can — we'll give you a booth in our exhibitor's section. And anybody that wants to do that is perfectly — obviously — free to do it with you or through any other — through anybody else that they select.

Now, you have a whole bunch of people out there that say they can do this. And maybe they can and maybe they can't and maybe you can spot which ones can and can't. The only way we know how to make money is to try and evaluate businesses.

And if we can't evaluate a carbon steel company, we don't buy it. It doesn't mean it isn't a good buy. It doesn't mean it isn't selling for a fraction of its worth. It just means that we don't know how to evaluate it.

If we can't evaluate the sensibilities of putting in a chemical plant or something in Brazil, we don't do it. If somebody else knows how to do it, you know, more power to them.

There are all kinds of people that know how to make money in ways that we don't. But, you know, it's a free world and everybody can invest in those sort of things. But they would be making a mistake, a big mistake, to do it through us.

I mean, why pick a couple of guys like Charlie and me to do something like that with — when you can pick all kinds of other people that say they know how to do it.

I would say this. Incidentally, you mentioned a point earlier, which is how the popular press tends to think of things. But we don't consider ourselves — Charlie and I don't — richer or poorer based on what the stock does. We do feel richer or poorer based on what the business does.

So we look at the business as to how much we're worth. And we do not look at the stock price, because the stock price doesn't mean a thing to us. I mean, it doesn't for a variety of reasons, but beyond that, imagine trying to sell hundreds of thousands of shares at the stock price.

We can always sell the business — we're not going to do it — but we could always sell it for what the business is worth. We can't sell our stock for what the — necessarily — what the stock price is. So we look at the business, entirely, in terms of evaluating our net worth.

We figure our net worth went up very, very, slightly — very slightly — in 1999. And we would figure that no matter what the stock was selling for — it just doesn't make any difference — because we do look at the businesses.

We really look at it as if there wasn't any quote on the stock. Because we don't know what the stock is going to do.

If we do — if the business gets worth more at a reasonable rate, the stock will follow, over time. But it won't necessarily follow week by week, or month by month, or year by year.

We had a lousy year in 1999, but the stock price did not calibrate with that in any perfect, or close to perfect, manner.

And we've had good years other times, when the stock price is way overpriced or over-described what happened during the year.

So we really measure all the time by the business. We think of it as a private business, basically, for which there's a quotation. And if it's handy to use that quotation, either in buying more stock or something of the sort, we may do it. But it does not govern our ideas of value.

Charlie?

CHARLIE MUNGER: Yeah. Generally, I would say that if you have a lot of lovely wealth in a form that makes you comfortable, and somebody down the street has found a way to make money a lot faster, in a way you don't understand, you should not be made miserable by that process.

There are worse things in life than being left behind in possession of a lot of lovely money. I mean — (Laughter)

WARREN BUFFETT: Would you want to name a couple? (Laughter)

No, Charlie made — I mean, when farmland was — went from — farmland probably tripled here in the late '70s, without any real change in yields per acre or the price of the commodity.

You know, are we going to sit around and stew because, you know, they — we didn't buy farmland at the start?

You know, are we going to stew because all kinds of stuff — uranium stocks in the '50s — or you can go back — all kinds of things that have — the conglomerates in the late '60s, the leasing companies, I mean, you can just go down the line.

And it just doesn't make any — we're not in that game.

We would know how to create a chain letter, believe me. I mean, we've seen it down some many times. You know, we know the game. But it just isn't our game.

Charlie? (Applause)

13. Currencies are "important but not knowable"

WARREN BUFFETT: Number 3?

AUDIENCE MEMBER: Good morning Mr. Buffett, Mr. Munger. My name is Stacey Braverman (PH). I'm 15 years old, and I'm from South Setauket, New York. It was very nice meeting you Mr. Buffett, yesterday.

WARREN BUFFETT: Thank you.

AUDIENCE MEMBER: I especially appreciated your internet stock tips. (Laughter)

WARREN BUFFETT: (Laughs) Yeah, keep it — keep it to yourself now, Stacey. That's our deal. (Laughs)

AUDIENCE MEMBER: I bought the B shares two years ago, when I decided that I needed to save some money for college. When the share price dipped below 1,500 I decided to investigate correspondence courses. (Laughter)

WARREN BUFFETT: Maybe you can get a scholarship. (Laughs)

AUDIENCE MEMBER: So I'm glad to see that things are back on track now.

My question is, a lot of the companies that you invest in, like Coca-Cola and Gillette, seem to do better when the dollar is weak and interest rates are falling. That seems to be the opposite of what's happening now.

So how is Berkshire positioning itself to take advantage of the current economic position, with that assessment in mind?

WARREN BUFFETT: Yeah, well, that's a good question. But if we thought we knew what the dollar was going to do, or interest rates were going to do, we would — we won't do it — but we would just engage in transactions involving those commodities, in effect, or futures directly.

In other words, it would not be — if we thought that the dollar was going to weaken dramatically — and we won't get those kind of thoughts — but if we did, you know, we would buy other currencies.

And it would be — it might benefit Coke, in dollar terms, if that happened.

But it would be so much more efficient, directly, to pursue a currency play or an interest rate play than an indirect way through companies that have big international exposure. We would probably do it directly.

We don't really think much about that. Because — just take currency. If you look at what the yen has traded at, you know over the last — well, since World War II, you know. From — what was it? Three-sixty down to — what? Seventy-some, Charlie? At lowest?

CHARLIE MUNGER: Uh-huh.

WARREN BUFFETT: And, you know, back up to 140-some. And now, I don't know, 105, or wherever it may be. I mean, those moves are huge.

But, in the end, we're really more interested in whether more people in Japan are going to drink Coca-Cola. And, over time, we're better at predicting that than we are at predicting what the yen will do.

And if Coca-Cola satisfies people's needs — liquid needs — for more and more people, we will probably get a reasonable percentage of their purchasing power of those people around the world for their right to drink Coca-Cola, or for shaving, or whatever it may be.

So, if the world's standard of living improves, bit by bit over time, in an irregular fashion, and we supply something the world wants, we will get our share in dollars, eventually.

And what it — quarter-to-quarter or year-to-year — how that moves around, because of currency moves, really doesn't make any difference to us.

It makes a difference to reported earnings in that quarter or — but in terms of where Coca-Cola's going to be 10 or 20 years from now, it would be a big mistake, I think, to focus on currency moves as opposed to focusing on the product itself.

And Japan offers a good example of that because you had this — I mean, you really had a move from 360, or whatever it was, to the high 70s or thereabouts. I mean, that is an incredible move in currency, and it can overshadow in the short run, even, what's happening in the business.

But long-range, what's really made Coca-Cola strong in Japan is the fact that the Japanese people have accepted their products in a big way. And Coca-Cola's built this tremendous, for example, vending machine presence.

And the Japanese market is very different than all the rest of the markets in the world, virtually, in that such a high percentage flows through vending machines.

And my memory is that, you know, we may have something like 900-and-some thousand, out of something over 2 million, vending machines in the country.

So we've got this tremendously dominant position. It's a little like billboards might be in this country. Plus, we have this terrific product, Georgia Coffee, which is huge over there.

And that's the sort of thing we focus on, because that's something we understand.

We don't understand what currencies are going to do week-to-week or month-to-month or year-to-year. And we always try to figure on what — focus on what's knowable and what's important.

Now, currency might be important, but we don't think it's knowable. Other things are unimportant, but knowable. But what really counts is what's knowable and important.

And what's knowable and important about Coca-Cola is the fact that more and more people are going to consume soft drinks around the world, and have been doing so year after year after year, and that Coca-Cola's going to gain share, and that the product is extraordinarily inexpensive relative to the pleasure it brings to people.

Coca-Cola — in the '30s, when I was kid, I bought, you know, for — six for a quarter and sold them for a nickel each. That was a 6 1/2 ounce bottle for a nickel, at Coke.

And you can buy a 12-ounce can now at — pick a supermarket sale — for not much more than twice per ounce what it was selling for in the '30s. You won't find many products where that kind of value proposition has developed over the years.

So that's the kind of thing we focus on. And interest rates and foreign exchange rates, important as they may be in the short term, really are not going to determine whether we get rich over time.

The best time to buy stocks, actually was, in recent years, you know, has been when interest rates were sky high and it looked like a very safe thing to do to put your money into Treasury bills at — well, actually the primary got up to 21 1/2 percent — but you could put out money at huge rates in the early '80s.

And, as attractive as that appeared, it was exactly the wrong thing to be doing. It was better to be buying equities at that time, because when interest rates changed, their values changed even much more.

Charlie?

CHARLIE MUNGER: Yeah, we have a willful agnosticism on all kinds of things. And that makes us concentrate on certain other things. This is a very good way to think, if you're as lazy as we are. (Laughter)

14. We'll "probably" own M&T Bank stock 10 years from now

WARREN BUFFETT: We'll go to 4, please.

AUDIENCE MEMBER: Jerry Zucker, Los Angeles, California. Good morning, boss. (Laughter)

Calling your attention to the annual report and major investments, I'd appreciate your comments on two companies.

Number one, M&T Bank, a new name to that list, but not exactly a household name, at least on the West Coast.

And company number two, definitely a household name, but missing from the list this year, the Walt Disney Corporation.

WARREN BUFFETT: Well, we don't comment much on our holdings, particularly as to purchases or sales, but we do have the CEO — longtime CEO — of M&T here today, Bob Wilmers. Bob, would you stand up? He should be up here somewhere. There he is. (Applause)

Bob is a terrific businessman, a terrific banker, and a terrific citizen. I've known him a long time. A good friend of Stan Lipsey, our publisher in Buffalo. Bob runs the kind of a bank that allows Charlie and me to sleep very comfortably.

Someone once said there are more banks than bankers, which is something worth thinking about a little bit. But believe me, Bob is a banker and he's done a lot for Buffalo.

And he runs — he's got a — he has a very big ownership position, which he achieved, at least in very large part, through purchase with his own money, as opposed to having options.

He's got one of the largest ownership positions, probably, among the hundred largest banks in the United States.

And it's just a very attractive business for us to be in, and we're very comfortable with it. And 10 years from now, Bob will be here, and I hope I'm here. We will — we'll probably own M&T.

The Disney Company, our ownership in that fell below the threshold level which we used, although we had ownership. And we think Disney is a terrific business. Michael Eisner's done a great job there.

We have — as we put in the annual report — we have mildly reduced equities as prices began to — generally — began to get more and more full.

We do not think the general ownership of equities is going to be very exciting over the next 10 or 15 years, so we would like to buy businesses.

We bought a few last year. We had this one we announced last week in the insurance field. We got another small acquisition where we've got an agreement with somebody. It's very small.

But we would love it if those were 10 times that size or 20 times that size, because — you will see more of that, relative to marketable securities, as we go along.

Charlie?

CHARLIE MUNGER: Yeah, regarding equities generally, I think that Fortune article, which was sent out to the Berkshire shareholders this year, should be absolutely must-reading for everybody. In fact, it would be a good thing to read two or three times.

The ideas there sound so simple, that — you know, people have the theory that they must understand it. But I think the world is more complicated than that. I think we are in for reduced expectations eventually, with respect to the kind of returns people have had from investing in stocks.

WARREN BUFFETT: You want to offer any thoughts as to what — that might — what the corollary might be?

CHARLIE MUNGER: Well, I think if you have very unreasonable expectations of life, it makes life much more miserable. Much better to get your expectations within reason.

It's much easier to reduce expectations to some reasonable level than it is to get superhuman achievements.

WARREN BUFFETT: That's why my kids were almost delirious when they heard that announcement I was going to give them $300 each and they — (Laughter)

How to be — do you want to be a zillionaire, or whatever it was.

Incidentally, that was terrific of Regis Philbin to do something like that. I mean, all of those appearances [in the video shown to shareholders] are nonpaid, I can assure you. (Laughter)

And those people are good — very, very, good sports. And I thank them.

15. We'll "never have a conventional dividend policy"

WARREN BUFFETT: OK, we'll go to zone 5.

AUDIENCE MEMBER: My name is Monty Leffoltz (PH) from Omaha, Nebraska.

I have a two-part question. What is Berkshire's philosophy on paying dividends and under what circumstances would Berkshire pay a dividend in the future?

WARREN BUFFETT: Well, that's a good question. We paid a dividend in — what, 1969, Charlie? At 10 cents a share. The — I can't remember it, but it's in the records.

We would pay — we would be very likely to pay either very large dividends or none at all, because our test is whether we think we can use money at a rate — in a way — that it creates more than a dollar of market value for every dollar we retain.

Obviously, if we can keep a dollar and it becomes, on a present-value basis, worth more than a dollar, it's foolish to pay it out.

Forget all about taxes. Assume it's a tax-free society. We would have exactly the same dividend policy up to this point, whether there was any tax on dividends, capital gains, or anything else, or whether we were entirely tax-free.

Because we have retained money because, to date, we have felt that if we keep a dollar and use it in buying other businesses, or whatever it may be, that it becomes worth more than a dollar on a present-value basis — I mean, not that it's going to be worth a dollar-ten four years from now — but that it's worth more than a dollar when we look at what it'll be four years from now.

That's subjective, but any given decision like that is subjective. Over time, you get an objective test as whether that's met by — whether we do indeed create more value than — each dollar retained earnings, we create an extra dollar-plus of value.

If that changed — and it could change — then we would give the money to the shareholders. And it might be done through repurchases or it might be done through dividends, but we would — there's no reason to keep a dollar in the business that's worth 90 cents if you keep it in the business.

And there are companies that do that, but they don't — they're not necessarily intentionally doing it. They may have higher aspirations as they go along, but they're not realized.

We, I think, would be fairly objective about trying to figure out whether we are indeed creating value or destroying value by retaining earnings.

We would never have a conventional dividend policy. I mean, the idea of paying out 20 percent of your earnings, or 10 percent, or 30 percent of earnings in dividends strikes us as nuts. I mean, you may get yourself in a position where you have to do it because you build these expectations in people's minds, but it is — there is no logic to it whatsoever.

The logic is basic. If you create more than a dollar value for a dollar retained, why in the world would you pay it out, because the people who want to get that dollar as a dividend can instead get a dollar-ten by selling the stock for — or whatever it may be — a dollar-twenty— for the value that was maintained — or retained.

So, that — it's a very simple dividend philosophy, and one, I think, that's in one of the past annual reports. We explain the logic of it. And I see no — nothing that would change, in terms of the principles of it.

Evaluating whether that's the case — I mean, obviously we aren't going to make a decision every week based on whether we can employ money that week at a higher rate of return, or every month.

But in terms of a reasonable expectancy over a couple-year period, whether we think we can use retained earnings advantageously, that's our yardstick.

Charlie?

CHARLIE MUNGER: Yeah, what's interesting about what Warren is saying about logical dividend policy is that if you went to all the leading business schools of the United States, all the leading economics departments, all the professors of corporate finance — this wasn't — wouldn't be the way they teach the subject.

In other words, we're basically saying we're right and all the rest of academia is wrong. (Laughter)

WARREN BUFFETT: We love it when we do that. (Laughter)

16. We never sell a business and rarely sell a stock

WARREN BUFFETT: OK, we'll go to 6.

AUDIENCE MEMBER: I'm Mark Chere (PH) from Hong Kong.

And Mr. Buffett, I'd like to ask you a couple of questions. The first one is how many insurance companies does Berkshire Hathaway own?

WARREN BUFFETT: Let me —

AUDIENCE MEMBER: I can't figure out the total.

WARREN BUFFETT: Let me answer that and then you go on to your second one.

We have a great number of companies because, in many cases, a given strategy or a given operation operates through multiple companies.

The company we announced the purchase of the other day is really one business, but it has three companies.

I wouldn't be surprised — I've never looked at the number — but it wouldn't surprise me if we have 20 insurance companies or something. Maybe 25 or 30, who knows?

We have about nine or 10 basic insurance operations for which a given management has responsibility, but there's a lot of state laws applicable to insurance companies and different regulations.

It's often advantageous to have a number of companies operating under one management to achieve one operational goal.

The big operations are General Re, and GEICO, and the National Indemnity reinsurance operation run by Ajit [Jain].

And then we have a group of about five different operations that are all very decent businesses, but are not as big as the three I mentioned. Go ahead.

AUDIENCE MEMBER: Thank you. Yeah, my main question is this. Much has been written by you, and a lot more by other people, about your criteria, or the criteria you use when you make a purchase of a company, either in full or in part.

But almost nothing has been written by you, at any rate as far as I can tell, on your criteria for selling a company that you have already — you have previously purchased.

And I wonder if you could outline the criteria you might apply today to a sale of a company, and whether you would go — well, the simplest way to put it is this: Would you agree with Philip Fisher, who said there were two reasons to sell a company — or a stock?

One was when you'd discovered you've made a mistake in your analysis and the company was not what you thought it was.

And the second when — was when the — something within the company had changed, the management had changed or so on, so it no longer met your original criteria.

Would you — are those the principles that you apply or would you say there are different ones or others? Thank you.

WARREN BUFFETT: I'm glad you brought up Phil Fisher, because he is a terrific mind and investor. He's probably in his 90s now, and — but his —

A couple of books he wrote in the early '60s are classics and I advise everybody here who's really interested in investments to read those two books from the earlier '60s.

And he's a nice man. I went out to — 40 years ago, I dropped into his office in San Francisco, a tiny office. And he was kind enough to spend some time with me. And I'm a huge admirer of his.

The criteria that we use for selling a business that we own control of are articulated in the annual report, under the ground rules.

So in terms of businesses that we own, we have set forth — and I direct you there — we've written those same ground rules every year since 1983. And actually, we had those in our head for decades before that.

And we have this quirk, which you should understand, and we want our shareholders to understand it, that even though we got offered a price that was far above its economic value, as we might calculate it going in — but if we got offered a price for that for a business that we have now, we have no interest in selling it.

You know, we just — we don't break off the relationships that we develop simply because we get offered a fancy price for something. And we've had a chance to do that sometimes.

That may help us, actually, in acquiring businesses, because both of the companies that I've committed to buy in the last few weeks, both of them are very concerned about whether they have found a permanent home or not.

And people who build their businesses lovingly over 30, or 40, or 50 years, frequently care about that. A lot of people don't care about that.

And that's one of the things we evaluate when buying a business. We look at the owner, and we say, "Do you love the — " in effect, we ask ourselves, "Does he love the business or does he love the money?"

Nothing wrong with liking the money. In fact, we'd be a little disappointed if most of them didn't like the money. But in terms of whether the primacy is loving the money or loving the business, that's very important to us.

And when we find somebody that loves their business — and likes the money — but loves their business, we are a very, very desirable home for them, because we're just about the only people that they can deal with, of size, where we can commit that they are going to be part of this operation, really, forever, and be able to deliver on that promise.

I tell sellers that the only person that can double-cross them is me. I can double-cross them. But there's never going to be a takeover of Berkshire. There's never going to be a management consultant come in and say, "I think you'd better do this."

There's never going to be a response to Wall Street saying, "Why aren't you a pure play on this or that and therefore you ought to spin this off the—?" None of that's going to happen.

And we can tell them, with a hundred percent assuredness, that for a very long time — that if they make a decision to come with Berkshire, they — that decision will be the final decision as to where their company resides.

So, unless those couple conditions, which are extremely unusual, that are described in the ground rules prevail, we will not be selling operating businesses, even though someone might offer us far more than, logically, they're worth.

The question about stocks is, we're not quite with Phil Fisher on that, but we're very close. We love buying stocks where we think the businesses are so solid, have such economic advantage, that we can essentially ride with them forever.

But you've heard me talk about newspapers earlier today. We would have thought newspapers — 20, 25 years ago, I think Charlie and I probably thought a daily newspaper, you know, in a single newspaper town — which practically all are — is probably about the solidest investment you could find.

We might have thought a network TV-affiliated station was about as solid as you could find. And they were very solid.

But events have, over the last 20 or 25 years, have certainly changed that to some degree and maybe to a very, very big degree.

So we will occasionally reevaluate the economic characteristics that we see 10 years out from the ones that we saw 10 years ago and maybe come to a somewhat different conclusion.

The first 20 years of investing for me — or maybe more — my decision to sell almost always was based on the fact that I found something else I was dying to buy.

I mean, I sold stocks at — you know, at three times earnings to buy stocks at two times earnings 45 years ago, because I was always running out of money. Now, I run out of ideas. I've got a lot of money but no ideas, and —. (Laughter)

You know, I'd — I'm not sure which is better. What do you think, Charlie? (Laughter)

CHARLIE MUNGER: I think you were way better off when you had 50 years ahead of you — (laughter) — and less money.

WARREN BUFFETT: I still think I have 50 years ahead of me, Charlie. (Laughter)

You want to elaborate any more on selling?

CHARLIE MUNGER: Yeah. We almost never sell an operating business. And when it does happen, it's usually because we've got some trouble we can't fix.

17. Compensation based on stock price is a "lottery ticket"

WARREN BUFFETT: OK, number 7.

AUDIENCE MEMBER: Hello, I'm Martin Wiegand from Chevy Chase, Maryland.

And, though you've given yourself a D in capital allocation, on behalf of the shareholders, we would like to give you an A-plus in honesty and accounting, temperament for a long-term investing view, and hosting an annual meeting.

WARREN BUFFETT: Thanks. (Applause)

I went to school with Martin's father. Good to see you here.

AUDIENCE MEMBER: Thank you. Now my question. Do General Re's competitors pay their employees with a rational incentive plan aimed at growing float and reducing its cost, or do they use something similar to General Re's old plan, and is this a new, sustainable, competitive advantage for General Re?

WARREN BUFFETT: Well, I think a rational compensation plan — and I think we have rational compensation plans — we certainly aim at that, and we don't care what convention is.

Over time, we'll select for people who are rational themselves, who have confidence in their abilities to deliver under a rational plan, and who really appreciate operating in that kind of an environment.

Now, who wouldn't want a lottery ticket, you know? I mean, if anybody here wants to buy a few lottery tickets at the lunch break and come up and present them to me, I'll be glad to take them.

I don't think it will have anything to do with, you know, my performance at Berkshire Hathaway or anything in the future.

And so, we try to make plans that are very rational. And incidentally, we've never had any real problems at all in working with managements to do just that.

The two operations that I've just recently agreed to buy, we will have rational compensation plans at those places. And they'll be somewhat different, perhaps, than the ones they've had in the past, although not much different, as I think about it.

I think it's been a huge advantage at GEICO to have a plan that is far more rational than the one that preceded it. And I think that advantage will do nothing but grow stronger over time because, in effect, compensation is our way of speaking to employees, generally.

And with a place as large as GEICO, you can't speak to them all directly. But it speaks to them all the time. It says what we think the rational measurement of productivity and performance in the business is.

And over time, that gets absorbed by thousands and thousands of people. And it's the best way to get them to buy into their goals.

Whereas, if you use as your test what the stock market is going to do, people, I think, inherently know they got a lottery ticket. I mean, you've seen that in a lot of tech stocks in the last three or four months.

You will find all kinds of options being repriced, or issued in great abundance at lower prices without repricing them because they don't want to have the accounting consequences. Those people know they're getting lottery tickets, basically.

And, you know, the market's attitude toward tech stocks is what's going to determine results far more than their own individual results.

So, it's silly to think of somebody working very hard at some very small job at Berkshire, with our aggregate market value of 90 billion, thinking that their efforts are going to move the stock.

But their efforts may very well move the number of policy holders we gain or the satisfaction of policy holders. And if we can find ways to pay them based on that, we are far more in sync with what they can do. And they know it makes more sense.

So, I hope our competitors do all kinds of crazy things on comp and everything else. I mean, the more dumb things they do, the better life is for us. And I think that —

Well, we've had incredible success at keeping managers. I don't think there's probably any company in the United States of size that has had better luck on that than Berkshire.

And partly, it's because we appreciate, in terms of the comp plan, and partly because we just appreciate, generally, managers that do a terrific job for us. And we've got the best group in the world.

Charlie?

CHARLIE MUNGER: Yeah, here again, we're very much out of step with the conventions of the world.

When I read annual reports, and I read a lot of them, I'm very frequently irritated by the presence of things that are totally absent from the Berkshire Hathaway annual report.

I think promising people free medical care forever, between age 60 and the grave, and maybe for a younger spouse after the grave, but the first one, regardless of what's invented and regardless of what it cost, I don't see how anybody who cared about the shareholders would be making promises like that.

There's a lot of insanity in conventional corporate conduct on the pay front. And — but if convention determined what was sane and what was insane, we're the oddballs. I mean, we're the unusual example.

WARREN BUFFETT: I think per — and I think it's very subconscious, but I think, sometimes, that the desires of the top person to get an outrageous amount gets pyramided through the organization.

Because if they're going to have some scheme that rewards them based on a lottery ticket, they feel they have to give lottery tickets to everybody else, although on a much-reduced scale.

And they really do. I mean, it's just — it becomes accepted in the course. And then you hire consultants who come around and say, "Well, you're getting more lottery tickets at someplace else. And we've got some added new schemes." It becomes very, very reinforcing.

But what has happened at the top level is really unbelievable. I mean, it — if an executive said to his company, "I want an option on 300 — just for working here — I want an option on $300 million worth of S&P futures for the next 10 years," you know, people would regard that as outrageous. They'd say, "What have you got to do with that?"

But in effect, if they get one on their own stock and it goes up based on the fact the S&P appreciates over 10 years, they think that that's perfectly acceptable to have that kind of a ride.

So I would say that, you know, there's been a lot of talk about the huge gap between, you know — that exists in pay. But it seems to me that the primary gap that is eating at American CEOs is the gap between the rich and the super-rich. That seems to be motivating the adoption of many plans.

It's really — it's gotten out of hand, but it isn't going to change. The CEO has his hand on the switch as a practical matter. I know people, and I've been on them myself, but on comp committees. And as a practical matter, you don't stand a chance.

CHARLIE MUNGER: Yeah, a lot of the corporate compensation plans of the modern era worked just about the way things would work for a farmer or if you put a rat colony in the grainery. It — (Laughter)

WARREN BUFFETT: Put him down as undecided. (Laughter)

Good to see you, Martin.

18. We ignore book value for our stock investments

WARREN BUFFETT: OK, let's go to 8.

AUDIENCE MEMBER: Good morning Mr. Buffett and Mr. Munger. My name is Ram Tarecard (PH) from Sugar Land, Texas.

I've been a Berkshire shareholder since 1987 and always battling with the idea of what really is the intrinsic value for the company.

We have seen that, over time, a change in book value is a big indicator of the change in intrinsic value of Berkshire. Although in absolute terms, you have said again and again, that intrinsic value far exceeds book value.

In calculating the book value of Berkshire, our partly-owned businesses, like Coke and Gillette, are valued at their market value. This component of book value fluctuates, often irrationally, depending on the mood of the market.

Do you think that using a look-through book value, just like you used look-through earnings, is a superior measure for tracking changes in intrinsic value?

In fact, I had written a letter to you last August and I was very pleased to get a response from you personally saying that this approach makes sense.

My question is, does this approach really give you a better measure for tracking intrinsic value? And if so, would you consider publishing it in the annual report? Thank you.

WARREN BUFFETT: Yeah, thanks for the question. I would say that — I'm not sure how you phrased it when you wrote me and how I phrased it going back, but look-through book value would not mean much, actually.

The very best businesses, the really wonderful businesses, require no book value. They — and we are — we want to buy businesses, really, that will deliver more and more cash and not need to retain cash, which is what builds up book value over time.

Admittedly, the prices of marketable securities, at any given time, are not a great indication of their intrinsic value. They are far better, though, than the book value of those companies in indicating intrinsic value.

Berkshire's book — Berkshire's intrinsic value, in a very general way, and trends in it, are better reflected in book value than is the case at a very high percentage of companies. It's still a very — it's not a great proxy.

It's the best — it's a proxy that is useful in terms of direction, in terms of degree, in a general way over time. But it's not a substitute for intrinsic value.

It — in our case, when we started with Berkshire, intrinsic value was below book value. Our company was not worth book value in early 1965. You could not have sold the assets for that price that they were carried on the books, you could not have — no one could make a calculation, in terms of future cash flows that would indicate that those assets were worth their carrying value.

Now it is true that our businesses are worth a great deal more than book value. And that's occurred gradually over time. So obviously, there are a number of years when our intrinsic value grew greater than our book value to get where we are today.

Book value is not a bad starting point in the case of Berkshire. It's far from the finishing point. It's no starting point at all of any kind in — you know, whether it's The Washington Post or Coca-Cola or Gillette.

It's a factor we ignore. We do look at what a company is able to earn on invested assets and what it can earn on incremental invested assets. But the book value, we do not give a thought to.

Charlie?

CHARLIE MUNGER: Well, I think that's obviously correct. (Laughter)

WARREN BUFFETT: Oh. He'll come back next year.

19. Markets: "Wild things create their own truth for a while"

WARREN BUFFETT: Number 1. (Laughter)

AUDIENCE MEMBER: Hello, gentleman. My name's Dan Sheehan. I'm from Toronto, Canada.

First of all, I'd like to thank you for this weekend. It's become more and more important to me as it's become more and more difficult to find a rational discussion about the stock market. And this weekend really is a breath of fresh air for most of us, I think.

One of the places I refer to a lot is Benjamin Graham. And what worries me now is what he referred to — is a period in 1929, in the early '30s — as a lab experiment that — where normal intrinsic values and margins of safety broke down, or seemed to, anyway.

And I wonder how much you think that might happen now or in the next few years, and how much you worry about that with the investments you're making.

WARREN BUFFETT: Well, we generally believe you can just see anything in markets. I mean, just extraordinary what happens in markets over time. It gets sorted out, you know, eventually.

But, I mean, we have seen companies sell for tens of billion dollars that are worthless. And at times, we have seen things sell for 20 percent — a number of things, not hard to find, perfectly decent running them — sell for literally 20 percent or 25 percent of what they were worth.

So we have seen and will continue to see everything. It's just the nature of markets. They produce wild, wild things over time.

And the trick is, occasionally, to take advantage of one of those wild things and not to get carried away when other wild things happen.

Because the wild things create their own truth for a while and you have to — you know, you — that's the reason they're happening, and people are getting pleasant experiences and all that. You'll see everything if you're around markets for a reasonable period of time.

We don't see any great cases of dramatic undervaluation by this market. So it isn't like we're seeing — because there's this — perhaps this speculative mania in a particular area of the market, we do not see that creating incredible undervaluation other places.

What's happening there may lead to undervaluation, you know, a few years from now. Or it may not, I don't know that, but we're —

It isn't like you can find things that are worth double or thereabouts what you're paying because, frankly, there's so much money sloshing around that if you found such a thing, it would be very likely corrected by some buyout types.

I mean, we would love to find businesses that are selling for half of what they're intrinsically worth. We don't find that. We do find a lot of cases where we think the evaluations on the high side are just — are unbelievable.

We have been in periods in the past where we felt almost everything was being given away, too. So you'll get those extremes. Most of the time the market's in a position where there's a little of both, but every now and then, it gets into a position where there's a lot of one or the other.

And we would — you know, we would love it if we could find a lot of reasonable-sized companies that were selling at what we thought were half of the intrinsic value. We're not finding them.

Charlie?

CHARLIE MUNGER: Well, I do think that the present time is a very unusual period. It's hard to think of a time when residential real estate, and common stocks, and so on, rose so rapidly in price and there was so much easy money floating around. I mean, this is a very unusual period.

WARREN BUFFETT: What's fascinating — and I'm sure you've thought of it — is that you can now have a business — we saw a few of them, you know, earlier this year we'll say — that might've been selling for $10 billion where the business itself could not have borrowed, probably, a hundred million dollars in debt, with an equity evaluation of 10 billion.

But the business itself would not — as a private business — would not have been able to borrow a hundred million. But the owners of that business, because it's public, can borrow many billions of dollars on their little pieces of paper, because they have this market valuation.

If it's a private business, the company itself couldn't borrow one-twentieth or so of what individuals could borrow.

That's happened, to a degree, before. But this has probably been as extreme as anything that's happened, probably, including the '20s. That doesn't mean there's a parallel to it, but it's been pretty extreme.

Charlie?

CHARLIE MUNGER: I think it probably is the most extreme that has happened in modern capitalism. In my lifetime, I would say the '30s were the — it created the worst recession in the English-speaking world in 600 years.

And it was very extreme. You could buy a "all-you-can-eat" in Omaha through the '30s for a quarter from Henderson's Cafeteria.

And now we're seeing the other face of what capitalism can do. And this is almost as extreme as the '30s were, but in a different direction.

It's zero unemployment, rampant speculation, et cetera, et cetera. It's an amazing period.

WARREN BUFFETT: That does not make it easy to predict, however, the outcome.

It says to us, though, certain things we want to stay away from. I mean, basically that's — it's precautionary to us. It does not spell opportunity.

Although, there's no question that the — in the last year, the ability to monetize shareholder ignorance has never been exceeded, I think. Wouldn't you say so, Charlie? (Laughter)

20. “It’s so easy to copy in the internet”

WARREN BUFFETT: OK, number 2.

AUDIENCE MEMBER: Good morning, gentleman. David Winters, Mountain Lakes, New Jersey.

Thanks again for Berkshire Fest 2000 and having it on Saturday, for those of us who tap dance to work on Monday. (Buffett laughs)

You know, over the previous 30 years or so, Berkshire has been a tactical participant in the insurance business. With the acquisition of Gen Re and the broadening of GEICO’s scope, the company’s been transformed into a mainstream activity.

How will this transformation result in growth and low cost float over time? I.e., how do you avoid becoming average?

And to follow on with the very perceptive 10-year-old from California’s question, will Berkshire’s newspaper interest be able to make the successful transformation to the new electronic world, especially the unique content of the Washington Post? Thank you.

WARREN BUFFETT: Those are both good questions. I think, to answer your second one, I think the Buffalo News will do just as well as, if you take the top 50 papers in the country, in making a transition. How well the top 50 will do is really an open question.

And — but there is — you know, the industry factors will, in my view, just overwhelm any specific strategy. Because any strategy is —

It’s so easy to copy in the internet. That’s one of the problems of the internet. It’s one of the problems of capitalism.

I mean, if you open a restaurant that’s successful, somebody’s going to come in and figure out what your menu is and how — you know, the whole thing. And then they’re going to try to do it in a little bit better location, or at a lower price, or whatever. That’s what capitalism’s all about and it’s terrific for consumers.

The internet accentuates that process. I mean, it gives everybody in the world real estate. You know, there are no prime locations to speak of. I mean, I can give you the argument for how you develop one and all of that, but it really changes the world in a big way.

You know, if you were at 16th and Farnam in Omaha in the ’20s, with Woolworth — that’s the place where the streetcar tracks crossed, you know, and a whole bunch of them were going north/south there and east/west — and there wasn’t any better real estate in town.

I'm not sure if that's worth as much now in nominal dollars as it was in the 1920s. But — and that looked permanent, incidentally. Who was going to rip up the streetcar tracks or — in 1910 or whenever it was?

So now, you rip up the tracks every day. You know, and so the fluidity is incredible, in terms of moving economic resources around compared to what it was.

The newspaper industry is going to try and figure out how to be a very important information source in a new medium. And it may solve that problem, to a degree, and still have lousy economics. That's — you know, that's — unfortunately, the newspaper industry's always —

Historically, the way the industry structure worked, once you got into the majority of households and everything, somebody else could bring out a way better paper, but it wasn't going to go any place against you.

I mean, you had such structural advantages that you could, you know — you could put your idiot nephew in and he would do fine — wonderfully — you know. And nothing could happen to him except when this different medium came along.

Now you can put in a genius and whether that will make any difference is an open question. I would say that it's quite doubtful. If you own a newspaper, you want to do everything that you can think of and, fortunately, everything anybody else can think of, because you can copy them so fast.

And it may work in terms of product and it may not work in terms of product. And it may work in terms of product and still not work in terms of economics very well. And I don't know the answer to that question.

I know that we will play it out — at the Buffalo News, for example — as strongly as we can. I don't think other people are going to get way better results than we are. I don't know what the other people are — what their results are going to be and how it will work.

It would be crazy to sit on the sidelines and simply ignore what's going on. So we will do our darnedest to have good economics when this is all through. But nobody knows how it's going to play out, in my view.

21. "Average is going be terrible in insurance"

WARREN BUFFETT: The question about insurance, about whether we become average — average is not going to be good insurance. Average is going be terrible in insurance over time. It's not —

It's a commodity businesss, in many respects. And if you are average, you're going to have a very poor business. You may limp along because you got a lot of capital that's supporting the lousy business, but it's not — it won't be a good business, per se.

But I think in GEICO, and in General Re, and some — and our other operations as well — we do not have average businesses, and there is nothing about the way the industry is going that would force us or lead us to have average operations.

I mean, we have special things we bring to the party in both cases I've named, and actually, in other cases as well. We have things we bring to the party that should make us considerably better than average.

It'll show more in some periods than others, and it'll be different in the way it is applied at GEICO or at General Re or at National Indemnity's reinsurance operation. But none of those, in my view, will be average.

But average — and there will be a lot of average, by definition — average is not going to be good.

The other problem about it is average is not going to go away, either. So that is an anchoring effect, to some extent, on what even the skillful operator can achieve. I think insurance will be a very good business for us over time.

Charlie?

CHARLIE MUNGER: Yeah. Every once in a while, we have a business sort of die under us. Trading stamps is now off 99 3/4 percent from its peak volume, and we were able to do nothing to prevent that except wring all the money out and multiply it by about 100. (Laughter)

WARREN BUFFETT: We actually did about, what, 120 million, in the late '60s, per year in trading stamps, far more dominant in our area than S&H was nationally.

And we have — by skillful management, Charlie and my constant attention to detail — have taken that business from 120 million a year down to, what, about 300,000 a year or so?

CHARLIE MUNGER: Oh, way less than that. (Laughter)

WARREN BUFFETT: We thought of having the sales chart here and turning it upside down to impress you, but it wouldn't have worked very well.

CHARLIE MUNGER: I think it's the nature of things that some businesses die. It's also in the nature of things that, in some cases, you shouldn't fight it. There is no logical answer, in some cases, except to wring the money out and go elsewhere.

WARREN BUFFETT: Yeah, and that's very tough for managements, too. In fact, they almost never face up to that. It's very, very rare.

And it's logical that it'd be rare. In a private business, you can understand why people face up to it. In a public company, if you take the equation of the manager, he or she may be far better off ignoring that reality than accepting it.

22. Competitive advantage is more important than short-term profits

WARREN BUFFETT: Let's go to number 3.

AUDIENCE MEMBER: Good morning, gentleman. My name's Marc Rabinov from Melbourne, Australia.

You've emphasized the importance of the moat around a business, or the sustainable competitive advantage. My question really relates to learning more about that.

Professor Michael Porter at Harvard has made a detailed study of this. Did you find his work useful and can you recommend any other sources of information on this?

WARREN BUFFETT: Yeah, I've never really read Porter, although I've read enough about him to know that we think alike, in a general way. So I can't refer you to specific books or anything. But my guess is that what he writes would be very useful for an investor to read.

I mean, I — again, I've never — I've just seen him referred to in some commentary. But I think he talks about durable or sustainable competitive advantage as being the core of any business. And I can tell you that that is exactly the way we think.

I mean, that — in the end, you — if you are evaluating a business year-to-year, you want to — the number one question you want to ask yourself is whether the — could the competitive advantage have been made stronger and more durable before — and that's more important than the P&L for a given year.

So I would suggest that you read anything that you find that's helpful or —

Actually, the best way to do it is study the people that have achieved that and ask yourself how they did it and why they did it. I mean, why is it that in razor blades, which could —

I mean, everybody grows up in business school hearing that as a great example of a product that's very profitable and why —

With it obvious that there's going to be no reduction in demand for the next hundred years for the product, why are there no new entrants into the field? What it is that gives you that moat around the razor blade business?

Normally, if you've got a profitable business, you know, a dozen people want to go into it. If you've got a dress shop here in town and it looks like it's doing well, you know, a couple of other people are going to want to open up a shop next door to it.

And here's a worldwide business, nothing can go wrong with the demand, to speak of. And yet, people don't go into it.

So, we like to ask ourselves questions like that. We like to ourselves, "Why was State Farm successful, you know, against people that had incredible agency plants and lots of capital?"

And here's some farmer out in Bloomington, Illinois named George Mecherle , you know, who's in his forties. And he sets up a company that defies capitalistic imperatives.

I mean, it has no stock, it has no stock options, it has no big rewards. It's, you know, it's kind of half socialistic. And all it does is take 25 percent of the market away from all of these companies that had all these characteristics.

We believe you should study things like that. We think you should study things like Mrs. B out at the Nebraska Furniture Mart, who takes $500 and turns it, you know, over time, into the largest home furnishing store in the world. There has to be some lessons in things like that. What gives you that kind of a result and that kind of competitive advantage over time?

And that is the key to investing. I mean, if you can spot that — particularly if you can spot it when others don't spot it so well — you're on the — you know, you will do very well. And we focus on that.

Charlie?

CHARLIE MUNGER: Yeah, it — these factors — every business tries to turn this year's success into next year's greater success. And they all use pretty much every advantage they have in every direction from this year to make next year's better.

Microsoft did exactly that, year after year after year and happened to win big.

And it's hard to see — for me at least — to see why Microsoft is sinful because they tried to improve the products all the time and make next year's business position stronger than last year's business position. (Applause)

If that's a sin, every subsidiary at Berkshire is a sinner, I hope. (Laughter)

WARREN BUFFETT: Yeah, yeah, yeah. We declare ourselves for sin. (Laughter)

23. Promo for See's Candies Barbie doll

WARREN BUFFETT: At this moment, I think we have a small interruption in the program here.

Charlie, on your left. (Laughs)

It's just a sample of what it's like to be an officer at Berkshire. (Laughter)

Oh, OK.

This is the new See's Barbie doll. And — never before seen, it will be in the exhibitors section, lower level.

And believe it or not, we've come up with three more just like this young woman. And they will be down there to take your orders. We can't ship them now, we won't charge your credit card until they — until they're available for shipment, which will probably be, I guess, around September or so.

But we wanted our shareholders to be the first ones to have a shot at this new product, and —

The model is not included in the — (laughter) — delivered price.

Afternoon Session - 2000 Meeting

1. Most companies hide the true cost of stock options

WARREN BUFFETT: OK, if area one is ready, we're ready to start answering.

AUDIENCE MEMBER: Hi.

WARREN BUFFETT: Hi.

AUDIENCE MEMBER: My name is Steve Check. I'm from Costa Mesa, California.

My question is regarding stock options. I've taken your suggestion and have been attempting to subtract stock option compensation from reported income when evaluating companies. When I read annual reports, I usually find companies estimating option costs using the Black-Scholes model.

However, the assumptions going into the Black-Scholes model seem quite different from company to company. These assumptions, of course, are what is used for risk-free interest rates — quote unquote, "risk-free" interest rates, expected option lives — even though options have stated lives, and expected volatility.

Help me out a little bit. What is the best way to calculate option costs? Do you think Black-Scholes is appropriate? If so, how should we normalize the assumptions?

And just one short follow-up: how can we possibly estimate future earnings for companies, when companies, such as even Microsoft last week, in response to a lower stock price, simply reissue a bunch of new options?

WARREN BUFFETT: Yeah, the — I can tell you, from some personal experience, that companies attempt to use the lowest figure they can, even though it doesn't hit the income account.

So they like to make fairly short assumptions as to the life of the options, even though they're granted on a ten-year basis. Because they'll make certain assumptions about exercise date or forfeiture and so on.

I think the most appropriate way, when you've got a pattern, which you have at many companies, of what they do on options, is simply to make an educated guess as to the average option issuance that they're going to incur, or they're going to elect to do over time.

And, generally, what you really want to — if you were to be precise — you would try to figure out what they could've sold those options for in the open market. Because that's the opportunity cost of giving them to the employees instead of selling the same option in the market.

I think you'll find, generally, that if you take a value of about a third, for a ten-year option, if you take a value of about a third — obviously, it depends on dividend rate and volatility and a whole bunch of things — but about a third of the market value, strike price, at the time they're issued, that's the expectable cost.

We believe in using the expectable cost versus the actual cost. I mean, that is how we would look at it.

If we were issuing options at Berkshire, and we issued options on $100 million worth of stock a year, we would figure it was costing us, probably in our case, with no dividend, at least $35 million a year to issue those options.

And we would figure that if we gave people $35 million in some other form of result-oriented compensation, that it would be a wash. And that is not the way most managements, of course, figure. At least that's my experience.

And we would figure we could use that 35 million in a more shareholder-oriented way and one where the employee (who) was productive would be sure of getting results, as opposed to having it be at the whims of the market.

And I think you'll see a lot of option repricing. Everybody says they won't reprice their options, until they do it. And, you'll see that with a lot of schemes.

It would be interesting to see whether CONSICO is willing to bankrupt all the executives who made loans to buy the stock and had those loans guaranteed by the company.

And the company initially said they would enforce those loans. And we'll see whether they do it. I would say, in many cases, they won't. I don't know what CONSICO will do.

But, a lot of things that are said in connection with executive option schemes and that sort of thing are what they'll do if it works in their favor. And then they'll do something else if it doesn't work in their favor. And that's not spelled out in the initial approval that's granted.

Charlie, you have anything to add?

CHARLIE MUNGER: Well, Warren's somewhat critical attitude is very understated compared to mine. (Laughter)

WARREN BUFFETT: We're going to leave raisins out of this particular — (laughter) — analysis. Let's go to area 2.

We do believe, incidentally, if a company is going to end up giving out 10 percent of the, company over a 10-year period or 15 percent on options, that is like buying an apartment house and letting the seller keep a 10 or 15 percent interest in the upside.

Or it's like buying an oil field and giving somebody a 10 or 15 percent interest-free override. It changes the value of the property. Make no mistake about it.

It is a — it has a huge economic impact on the value of a property. And just go out and try and sell your house and say, "I want to keep 15 percent of the appreciation in it," and ask the buyer whether he's going to pay the same price for the house.

Options subtract value the moment they are granted. And, like I say, unless companies — some companies follow a practice of making a mega-grant every three or four or five years. A lot of them just issue a fairly constant amount annually. And you can figure out the cost.

And, you know, they don't want to tell the shareholders there's a cost. And that's why they fought through Congress and everything else in order to prevent it from being the truth. But, you know, Galileo had that problem many years ago and finally won out. So maybe we will, too. (Laughs)

2. Moody's moat has "poisonous characters"

WARREN BUFFETT: Yeah, area 2.

AUDIENCE MEMBER: My name is Dennis Jean-Jacques from Chatham, New Jersey. I first would like to thank you personally for taking the time out of your busy schedule to visit MBA students throughout the country on a regular basis.

In fact, I consider your visit to the Harvard Business School campus many years ago my personal rational awakening.

My question is in regard to Dun & Bradstreet. Many academics would argue that two of the many factors that determine a firm's sustainable competitive advantage are the threat of new interest through imitation, and the threat of substitution through technological advances, such as, you know, the internet and things of that nature.

My question is, how deep is the moat around Moody's and the operating company?

WARREN BUFFETT: Yeah, we don't want to go into too much detail about our marketable investments.

But I would say that the moat is, just in our view, is far wider, deeper, and infested with far more poisonous characters, in the case of Moody's, than in the case of the operating company.

We've had experience — just in terms of making decisions about how you either obtain credit information, in the case of the operating company, or if you want to obtain ratings on securities or something — I think you'd conclude that Moody's is a much stronger franchise than the operating company.

Doesn't mean the operating company can't turn out to be a better business. It might have more upside under certain circumstances, too.

But if you're really thinking of, you know, what bad can happen to you, I think that you would regard Moody's as a considerably stronger franchise than the operating company.

Charlie?

CHARLIE MUNGER: Well, I'd certainly agree. The —

Moody's is a little like Harvard. It's a self-fulfilling prophecy. (Laughter)

You know, I hate to think of how much you could mismanage Harvard now and still have it work out pretty well.

3. Harvard Business School isn't affected by supply and demand

WARREN BUFFETT: If you cut the price of the admission to the Harvard Business School by $10,000 a year, you would have less demand, in all probability, than an increase in demand.

I mean, it's totally counterintuitive in that respect. Because the cachet of the school, in that case, is not only reinforced, it almost makes it necessary, that it be priced toward the top.

So, it — you can throw away the demand and supply curves that they teach you in Economics 101 on something like that.

I — frequently, I have a little fun with — when I attend business schools. Because I ask them, you know, what the definition of a wonderful business is, and we go through all this stuff.

And then I say, you know, I tell them that — really — the best business I've seen is the Harvard Business School or the Stanford Business School, because the more they increase the price, the more people want to get in, and the more people think the product is worth.

And that is a marvelous position to be in. (Laughter)

And I thank you for your comments on the — you know, I was lucky enough to have a great, great teacher in Ben Graham at Columbia. And Ben didn't need to go up to Columbia once a week, on Thursday afternoon, to talk to a bunch of us.

So it — I really feel it's — I enjoy, sort of, passing that along. I haven't had any original ideas in this field at all. But I, you know, I had a terrific teacher. And it's fun to talk to students.

If you talk to a bunch of guys my age, nothing happens. I mean, they just want to be entertained. (Laughter)

But they want predictions always and that sort of thing. So I don't do any of that at all. I'd rather talk to students. And I thank you for coming.

4. Energy and transportation need a lot of capital

WARREN BUFFETT: Let's go to number 3.

AUDIENCE MEMBER: My name's Jared Placeler (PH). I'm 15 from St. Louis.

Are you considering investing in energy and transportation companies, such as ones that deal with fuel cell and environmentally friendly energy resources?

And if you are, will you thus be replacing any other energy-based investments you may currently hold, such as your newly acquired holdings in MidAmerican Energy?

WARREN BUFFETT: Yeah. I would say that energy and transportation, in the very broad sense, are both things that we've at least got a chance of understanding. So those are the kind of areas in which, we would think about making investments.

We would probably think about it less in connection with new technology. We might expect the people who run MidAmerican Energy to be thinking about that all the time.

But Charlie would be better at it than I am, because he has a different background and thinks better about that, anyway, in terms of evaluating newer technologies. I wouldn't be very good at it at all.

But those fields are, they're big, in terms of capital investment, for one thing. So they're very big fields.

And then secondly, we would probably think we were capable of evaluating the potential, some years down the road, of many companies in energy and transportation.

So those would be fields we would consider. And of course, as you mentioned, we made an investment in MidAmerican Energy.

I doubt if the technology changes dramatically in any near term as to the product that they're delivering.

But if there were changes on the horizon, I think we've got the management there that would be very good at spotting that ahead of time and capitalizing on it in a proper way.

I wouldn't take that function on myself.

Charlie?

CHARLIE MUNGER: Well, historically, we've done very little in either field. And mostly, the past is a pretty good guide to the future.

WARREN BUFFETT: Historically, the transportation field, I mean, it's been a terrible place to have money, and, whether it's been in airlines or in the rails. If you — we've mentioned Value Line from here — from time to time.

If you go to the rail transportation section and just run your eye across on the revenues and look at the capital investment, the amount of capital required to produce incremental revenues is just — is horrible.

And on the other hand, there's not much alternative here in the game to doing that. So there — many railroads will spend hundreds and hundreds and hundreds of millions of dollars. And it will not move the top line hardly at all. The ones where the top line has changed is where there's been acquisitions or mergers.

Airlines, you'll see just the opposite. You'll see this great movement in the top line, but again, a disastrous amount of capital investment and very little in the way of returns. So, it hasn't been a great field.

Most fields that require heavy capital investment, most of the time, they don't turn out very well over time. There are plenty of exceptions to that.

But if you find a business that has to keep adding up huge sums of money every year, there always will be a reason why they're doing it. But the net result, after five or 10 or 20 years usually isn't very good.

Charlie, got anything?

5. Buffett defends Coca-Cola CEO Doug Ivester's big exit package

WARREN BUFFETT: Area 4?

AUDIENCE MEMBER: Good afternoon, Mr. Buffett and Mr. Munger. My name is Bob Odem (PH) from Seattle, Washington.

I'd like to say, first of all, how nice it is to come out to Omaha, and how I am made to feel comfortable by its people. I hope you both are as enthusiastic about the meeting as you seem to be in years to come. Mr. Munger, by the way, I am looking forward to your book coming out.

My question has to do with Doug Ivester's severance package and what justifies it, considering he had a very short tenure as CEO and that he took the reins from some very strong performance from Goizueta and to be relieved of his dismal performance by Doug Daft.

My brother, still in the bottling and distribution business of Coke, cut this article from Bottlers' World Magazine concerning the severance package. He said he also would retire, if he were offered this — (laughter) — 97.4 million in stock, 3 million per year for 2000 to 2002, 2 million per year, 2002 to 2007, 1.4 million per year from 2007 for the rest of his life.

Anyway, I don't see how — or here, car and cell phone, he gets that. That's a Mercury Grand Marquis and mobile telephones, laptop computer, and the like. I don't know why he'd need that. (Laughter)

Anyway, I have been wondering how you voted on this, whether you supported it or not, or what degree, considering executive pay at Berkshire hasn't risen except, perhaps, for the CFO who last got a raise, I believe, in 1997.

WARREN BUFFETT: You asked — no, CFO's gotten a raise every year.

But the — you asked whether I supported it. Yeah, I can tell you, I supported it. Because with my 35 percent interest in 8 percent of Coca-Cola, I paid almost 3 percent of it myself, personally.

I probably paid more severance pay than any man in the history of the world, personally. (Laughter)

I was not on the comp committee. But I will say this. Doug Ivester did all kinds of really wonderful things for the Coca-Cola Company, over time.

He was — for many, many years, when Roberto was running things, Doug — working with Don Keough, too, and I had this first hand from both of them. I wasn't in Atlanta. But there was no question that he was a huge, huge asset and conceived and carried out many of the things that other people may have gotten even more credit for.

Most of what you described, not the little things at the end, but most of what you described was contractually in place at the time that he left. I mean, those were deals that were made, restricted stock and all of that, that really occurred, in significant part, when Roberto was the chief executive officer and at Roberto's recommendation.

Doug's devotion to Coke, his knowledge of Coke, I mean, he lived and ate and breathed Coke. But in my opinion, Doug Daft was the man for the job. And a change was made.

But it was not because of any lack of attention by Doug Ivester. It was not because he hadn't done great things as CFO of the company.

But I think he was not the right man at the time he took over as CEO. He took over, as you know, when Roberto died quite suddenly. And there wasn't any real option in terms of the —

He was Roberto's hand-picked successor. It's almost inconceivable that somebody else would've been chosen at that time.

And we made a decision, within a couple of years, that the company would move faster and better with Doug Daft in charge. And we made a deal in severance which was about 80 percent, or some very high percentage, embedded.

And like I say, I paid more of it than anybody else. So it isn't like it was all academic.

And I think, considering some other factors, which maybe I'll put in a book sometime, that entered into it, it was definitely the right decision for the Coca-Cola Company.

Whether the computer should've been included or the car or anything, I can't — I would not want to defend small item by small item. But I can — I think the Coca-Cola shareholders are going to be many billions of dollars ahead over time by what was done then. And it wasn't easy to do.

We'll go to 5 — Charlie, do you have anything to add on that? You paid a fair amount, too.

6. Excessive CEO pay creates "hostility" to corporations

CHARLIE MUNGER: Generally speaking, I think it's a mistake for corporate America to create as much hostility as it does, which is based on the way it compensates principal officers of corporations.

It is simply maddening to add a little clause that the corporation will scratch the guy's back for just tiny, little bits of stuff that looks terrible. To me, that is extremely stupid.

And I see it where the corporation helps him prepare his tax return for 10 years after he leaves and so forth.

I think that makes a terrible impression on shareholders, generally. And I think corporate America's crazy to do it. They get sold this stuff by these damn consultants. (Laughter)

WARREN BUFFETT: I agree with Charlie. And what — it is true — (applause) — what Charlie says.

We don't have a contract, at least that I can think of, at Berkshire. It's perfectly easy to run a company without them.

We've got wonderful managers. You know, we've got things that might be called contracts. I mean, we've got deals with them, in terms of we work out compensation arrangements and all that.

But I can't remember a case of anybody that's been with us that ever has called in a lawyer or anything of the sort, or where we even had to reduce things to writing, basically. And it works fine.

And it is a little maddening, as Charlie says, to have a CEO, you know, show up with a lawyer with a 20-page contract. It's become standard operating procedure.

And once you get a big, public company with committees, consultants to the committees, consultants who, usually, are picked by the officers of the company, they look around at what everybody else is doing and say, "Well, that's the way the other guy does it. So I'll do it."

I think you can — I think the proxy statements of the last 20 years, what that's induced in the way of behavior by people at somewhat comparable companies that look at the proxy statements of their competitors and then say to their lawyer, "Well, Joe Blow got this. Why shouldn't I have it?"

It just escalates and escalates and escalates. And it ratchets. And it won't stop. I have never seen a compensation consultant come into a public company and suggest a plan that, net, reduces the cost of compensation.

At — and I see all kinds of people leave companies with — who have made tremendous amounts of money. And nobody wants to hire them at half the price, or a quarter of the price, or a tenth of the price. I mean, it's not a market system.

CEO compensation is not a market system. And it's not subject to market tests. And I don't know what you do about that, particularly. But I — it doesn't seem to bother shareholders very much. The ones that could change it —

CHARLIE MUNGER: Oh, I think it bothers them a lot, Warren. It's just they feel powerless.

WARREN BUFFETT: Yeah, but institutional shareholders could change that. My guess is that the top 30 institutions, probably, control — what — two-thirds of the big companies in the country. And they don't seem to care that much.

They — actually, they spend their time on what I regard as peripheral issues, usually. They talk about other things. They get involved in rituals of corporate governance that, frankly, don't mean a damn in terms of how the company performs. And they seem to ignore these other issues.

But, you know, there's — we've got enough to do running Berkshire. So we can't reform the world on that.

We will run Berkshire in a rational manner. And we have yet to hire a compensation consultant. And we've yet to lose an important manager.

7. Buffett: Economists aren't needed

WARREN BUFFETT: OK, we'll go to number 5. (Applause)

AUDIENCE MEMBER: Hello.

WARREN BUFFETT: Hi.

AUDIENCE MEMBER: I am Diane Ryan (PH) from Prairie Village, Kansas. This is the fourth year I've attended the stockholder meeting. And I'd like to say, every year, I feel like I've learned a little bit more.

This year, my question is, do you see a deflationary trend in the global economy? And if so, what is your investment advice?

WARREN BUFFETT: Well, Diane, I'm no good on the macro questions. And I've proven that by being way too worried about inflation for, probably, the last 20 years. Fortunately, it hasn't made much difference, the fact that I've been wrong on that.

So I don't really think my judgment is any better than yours, at all, in terms of assessing what's going to happen to global prices over time. My opinion would be that the world is not going in a deflationary situation.

But, you know, I've not earned any stars for my past economic predictions. And the good thing about my economic predictions, even if I do make them, is that I pay no attention to them myself, so. (Laughter)

I really — and the way we pick our investments is we just don't get into the macro factors. I can't recall a time when Charlie and I have looked at a business, either buying it in its entirety or buying pieces of it through the stock market.

I just — macro conclusions are — just never enter into the discussion. I mean, I'll pick up the phone. We've had these two in recent months. And I'll tell Charlie about it. And, you know, we talk about a few things. But we don't talk about anything remotely macro. And that's really the way it'll stay.

You know, I've seen a lot of bank mergers recently. And one of the things they do, because they want to cut the costs and justify a merger, which they're dying to do, I mean, that's the reason — so they cut costs they wouldn't have cut if they weren't dying to do the merger in the first place and get bigger.

But frequently — I know one in particular that I'm thinking of — you know, they'll cut out the economics department. You know, I always wondered why the hell they had it in the first place. (Laughter)

You know, because what do they do? You know, I mean —the guy comes in and says, “I think GDP will be 4.6 this year instead of 4.3.” So what?

You know, I mean, you’re still trying to make every good loan you can make. You’re still trying to take in deposits as cheap as you can. And you should be trying to cut costs wherever you can. It’s got nothing to do with running the business.

But, you know, it’s fashionable. And every bank had its economist and economics department. And when a big client would come in, they’d take him to lunch. And it just — it always has struck me as just a lot of nonsense.

So if we ever get an economics department at Berkshire, sell the stock short. (Laughter)

WARREN BUFFETT: Number 6, please. Oh, Charlie, I didn’t —

CHARLIE MUNGER: (Inaudible)

WARREN BUFFETT: Oh, OK. (Laughter) He’d rather eat peanut brittle.

8. “Take on the qualities of other people you admire”

AUDIENCE MEMBER: Hello, Mr. Buffett —

WARREN BUFFETT: Hi.

AUDIENCE MEMBER — Mr. Munger. My name is Aaron Wexler (PH). And I’m from Santa Maria, California.

I have — my question has two parts. The first part is, when you and Bill Gates had a television show some time ago, you were asked about the people who were — had different role models.

And you said, “Well, if I know a person’s role model, I can pretty well tell the kind of a person he is and what kind of a future he has.”

Mr. Buffett, my role model is Warren Buffett. Do you think I have a chance? (Laughter)

WARREN BUFFETT: Well, I hope you’re choosing me on the basis you hope to expect to live to an advanced age. I like to think that that’s what I bring to the party.

It does pay to have the right models. I mean, I was very lucky, early, very early in life, that I had certain heroes — and I’ve continued to develop a few more, as I’ve gone along — and they’ve been terrific. And they never let me down. And it takes you through a lot.

And I think that, you know, it just stands to reason that you copy, very much, the people that you do look up to, and particularly if you do it at an early enough age.

So I think, if you can influence the model — the role models — of a 5-year-old or an 8-year-old or a 10-year-old, you know, it's going to have a huge impact.

And of course, everybody, virtually, starts out with their initial models being their parents. So they are the ones that are going to have a huge effect on them. And if that parent turns out to be a great model, I think it's going to be a huge plus for the child.

I think that it beats a whole lot of other things in life to have the right models around. And I have — like I say, even as I've gotten older, I've picked up a few more. And it influences your behavior. I'm convinced of that.

And if you — you will want to be a little more, or a lot more, depending on your personality, like the person that you admire.

And I tell the students in classes, I tell them, you know, "Just pick out the person you admire the most in the class and sit down and write the reasons out why you admire them. And then try and figure out why you can't have those same qualities."

Because they're not the ability to throw a football 60 yards, or run the 100 in ten flat, or something like that. They're qualities of personality, character, temperament, that are — can be emulated. But you've got to start early. It's very tough to change behavior later on.

And you can apply the reverse of it. Following Charlie's theory, you can find the people that you don't like — (laughter) — and say, "What don't I like about these people?"

And then you can look — if, you know, it takes a little strength of character. But you can look inward and say, you know, "Have I got some of that in me?" and —

It's not complicated. Ben Graham did it. Ben Franklin did it.

And it's not complicated. Nothing could be more simple than to try and figure out what you find admirable and then decide, you know, that the person you really would like to admire is yourself. And the only way you're going to do it is take on the qualities of other people you admire.

Anyway, that's a two-minute answer on something Bill and I did talk a little bit about.

Charlie? (Applause)

CHARLIE MUNGER: Yeah. There is no reason, also, to look only for living models. The eminent dead are the — are, in the nature of things, some of the best models around.

And, if it's a model is all you want, you're really better off not limiting yourself to the living. Some of the very best models are — have been dead for a long time. (Laughter)

WARREN BUFFETT: Charlie has probably read more biography than any three people in this room put together. So he has put this into practice. And, as somebody mentioned earlier, Janet Lowe has a biography of Charlie coming out here in — later this year. So you can read all the secrets of Charlie's life. (Applause)

9. Buffett and Munger have no interest in running the Federal Reserve

WARREN BUFFETT: OK, number 7.

AUDIENCE MEMBER: Good afternoon, gentlemen. My name is Gary Bradstrom (PH) from here in Omaha, Nebraska.

And my question is, if Alan Greenspan just decided to retire, and that job was offered, to either of you, would you take it?

WARREN BUFFETT: Well, I can tell you my answer is no, in a hurry. (Laughter)

I think Charlie will give you his answer.

CHARLIE MUNGER: I would say "no" more quickly. (Laughter)

WARREN BUFFETT: You notice, we gave you very unequivocal answers. And of course, that alone would disqualify us from the job at the Fed. (Laughter)

I think it was Alan that said to one senator, he said, "Since you, you know, since you've seem to have stated my remarks so accurately, you must've misunderstood them." (Laughter)

I don't think you could find a job in public life that would entice either one of us.

And the truth is, we're having too much fun. I mean, this — we've got the best job in the world. We get to work with people we like and admire and trust every day of the year. We get to do what we want to do the way we want to do it.

We should pay, and this is true of some other CEOs, too, but we should pay to have this job.

I mean, it is really interesting. I've often thought, if you could get, you know, you had a sealed envelope, and you got — and you had the compensation committee say what they would pay to have the job filled, but then you had the chief executive also say what he would do before he would leave, there would be a huge, huge gap.

And I mean, it's — there are all kinds of — I mean, it's a lot of fun to start with interesting problems you come up with, interesting things to do, something different every day. You can't beat the job. And to get paid for it is just the frosting on the cake.

And I don't see any jobs like that in public life, myself.

Charlie, have you got anything to add? Charlie takes on these public jobs. He runs a hospital and a few things. And he can tell you the wonders of it. Charlie?

CHARLIE MUNGER: Oh, yeah. There's an old saying that, "He lied like a finance minister on the eve of a devaluation." I never wanted to have a job where lying was a required part of the activity. (Laughter and applause)

10. Berkshire is the "Metropolitan Museum of businesses"

WARREN BUFFETT: Number 8.

AUDIENCE MEMBER: Mr. Buffett, Mr. Munger, my name is Norman Rentrop. I'm from Bonn, Germany. I want to thank you very much for so patiently listening and answering and sharing yesterday and today. And I'm a shareholder since 1992. And this is my first meeting.

I came here being inspired by Robert Miles' book, "101 Reasons to Own Berkshire Hathaway." And I was very careful, listening to you, the reasons how you pick good people, that it's love for the business and not so much love for the money.

And I'd like to hear a little bit more on your philosophies, now that Berkshire Hathaway is more and more buying companies. On this, how you make sure that it's true love and how you pick people.

WARREN BUFFETT: It's a terrific question. I don't know exactly how to answer. Maybe Charlie will think of it while I'm stumbling around, but —

I really — I think I can do that quite well. But I don't know of any way to give somebody else a set of questions to ask, or, you know — I don't know how to tell someone else how to select managers using those criteria: do they love the business or do they love the money?

It's very, very important. I mean, it's crucial. Because it — well, we see it all the time. I mean, you've got people around who love the money. And you see them in public companies and doing things that we wouldn't want to have associated with us.

And on the other hand, if they love the business, and we'll tell — I'll tell an owner this. I will say to them, "You built this business lovingly for 50 years, and maybe your parents before you, maybe even your grandparents." One of these businesses we're buying is fourth generation.

And the clincher, in fact, I used it with Jack Ringwalt back in 1967. I said to Jack, who had built it over a long period of time, “Do you want to sell this? You know, do you want to dispose of this, the most — you know, your creation, your painting? Or do you want some 26-year-old trust officer to do it the day after you die?”

And the thought of who was going to handle this masterpiece, which he’d created himself, was important to him. And I tell him, If they want to put it in our museum, we will make sure, A, it doesn’t get resold, that it gets the proper respect, and that you can keep painting it.

We won’t come in and tell you to use reds instead of yellows or anything like that. So even though it’s a masterpiece now, you can keep adding to it.

So we like to think that we’re the Metropolitan Museum of businesses and that we can get really outstanding creations to reside in our museum. But it — we’ve got to deliver the kind of museum to these painters of businesses, in effect, that we would want, if we were doing the same sort of thing.

To some people, that doesn’t mean a damn thing. I mean, all they want to do is auction their business, you know. And they probably cheat on their figures a little in the last year or two before they sell it to dress it up. And they do all kinds of things.

And they employ some investment banker who pretends that he’s getting bids from other people to jack it up some more. And that’s standard procedure for a lot of people.

We have no interest in buying in with them at any price because we don’t want to be on the other side of the table for the rest of our lives with somebody that’s going to do that.

If somebody loves their business — and I love Berkshire, I mean, you create something over a period of time — it means something to you.

Some people get it out of how they decorate their home, or some people get it out of all kinds of different things, their golf game or whatever. But some of us get it out of building a business. And it has to be enormously important, what kind of a home it finds.

And there comes a time, in many situations, for estate taxes, or because the kids don’t get along, or whatever the hell it may be, why people need to do something with that business. But they don’t want it auctioned off. And we get — we have a good home for that.

I think I can tell pretty well what people’s motivations are when they come in with a business. And so far, we’ve batted pretty well.

We’ve made mistakes. There’s no question about that. But in a sense, I think they’ve gotten fewer over the years.

And we have — our disappointments with people have been very, very few. We've been wrong about the economics of the business sometimes. But that's our mistake, not theirs. We've seldom been wrong about the people.

And I wish I could give you a checklist that you could go down, and you could say, "Well, this guy loves the money. So he's going to be gone in six months. And this one loves the business. So as long as I leave him alone to do his job and appreciate what he does, be fair with him, that he's going to stay around here as long as he can."

Charlie, have you got any thoughts on how you separate these people out?

CHARLIE MUNGER: I think our culture is very old fashioned. In other words, I think it's Ben Franklin and Andrew Carnegie. It's very old fashioned.

And what I think is amazing about Berkshire is how well these very old-fashioned ideas still work.

Can you imagine Andrew Carnegie calling in a compensation consultant or — (laughter) — an investment banker to tell him whether he should buy another steel mill? Or —

We don't get imitated much. We're imitating the behavior of a period that has been gone for a long time. But, I don't see — a lot of the businesses we buy are kind of cranky like us and old fashioned. And I hope we continue it that way.

WARREN BUFFETT: They're sitting out there, Charlie. (Laughter)

CHARLIE MUNGER: Yeah, yeah. Well, but I think the businesses do have standards. See's has standards. It has its own personality. But it's — but maintaining standards is a huge part of it.

WARREN BUFFETT: Charlie hit on one thing. The idea of asking investment bankers or somebody to evaluate the businesses you're going to buy, I mean, that strikes us as idiocy. If you don't know enough about a business to decide whether to buy it yourself, you'd better forget it.

It does not make sense. (Applause) You bring in somebody who's going to get a very large check if you buy it, and a very small check if you don't, that displays a faith in human nature that would strain Charlie and me. (Laughter)

It's a key point, which you raise. And frankly, if I think there's anything we're good at, I think we're pretty good at what you're talking about there.

It's an important part of capital allocation. Because we do not — we are not in a position to manage the businesses ourselves.

And we want management as well as the business. And we've gotten it. And we've gotten it in spades from people that stay on and have done a terrific job for us. And it makes life a lot easier, too.

11. What Buffett means when he can't "understand" a business

WARREN BUFFETT: Let's go to number 1 again.

AUDIENCE MEMBER: Hello, Warren. Hello, Charlie. My name is Doug Paterson. I'm from here in Omaha.

I teach down the road at the University of Nebraska at Omaha. And I teach in theater, which is also the greatest job in the world. And I have to say that I enjoy the theater that you provide every year. Thanks so much.

WARREN BUFFETT: Thank you.

AUDIENCE MEMBER: Just sitting here, there are so many questions that come to those of us who have been sitting here for three or four hours. I've got three very disconnected questions.

WARREN BUFFETT: OK, we'll do them one at a time.

AUDIENCE MEMBER: Cool. In terms of these tech stocks, you say that you don't understand them. Can you say if you think — I can't imagine you not understanding something.

WARREN BUFFETT: Oh, we understand the product. We understand what it does for people. We just don't know the economics of it 10 years from now.

That, I mean, you can understand all kinds — you can understand steel. You can understand home building. But if you look at a home builder and try and think where it's going to be in five or 10 years, the economics of it, that's another question.

I mean, it's not a question of understanding the product they turn out or the means they use to distribute it, all of those sort of things. It's the predictability of the economics of the situation 10 years out. And that — that's our problem.

AUDIENCE MEMBER: Right, and I'm not trying to provoke you into doing it. I'm glad you haven't. Because I probably would've gone into cardiac arrest this last couple of months.

WARREN BUFFETT: Well, so would we.

AUDIENCE MEMBER: Yeah. So your projection is that you are not going to try to make an attempt to understand it. You think it's — is it not comprehensible? Is that it, it's not comprehensible?

WARREN BUFFETT: Yeah. Every business I look at, I think about its economics. It's built into me. It's built into Charlie.

So it isn't like, when some — if I'm with Andy Grove, or actually, I knew Bob Noyce back at Grinnell in 1968 and '69, when they were starting Intel.

I — when he talked to me about starting Intel, or anybody talks to me about a business, I think about its economics. I'll think about the economics of UNO, you know, if we talk for three or four minutes.

But — I — so it isn't that we shut off the valve. It's just that we don't get anyplace. We don't know what it'll look like. And it's, you know, there are a lot of things in life that, you can — they're just beyond comprehension for many of us. And —

AUDIENCE MEMBER: So you'd say that like, nobody, really, probably, can understand this, where it'll be in 10 years. Nobody could understand it.

WARREN BUFFETT: We would be very skeptical about it. I would say that — and incidentally, my friend, Bill Gates, would say the same thing. And actually, Bob Noyce would've, and Bob died some years ago, but — or Andy Grove — they would say the same thing. I've taken long walks with Andy.

And they would not want to put down on paper their predictions about where 10 companies you would choose in the tech field would be in 10 years, in terms of their economics. They would say, "That's too hard."

12. Buffett: Berkshire will be fine if I'm hit by a truck

AUDIENCE MEMBER: Cool. A second question, again, not related. But I've heard this question several times today. And it comes up every year.

I'd like to couch it in sort of a different phrase. Let's say that you stepped outside of this building and were hit by a bus.

WARREN BUFFETT: Yeah. We've got one fellow who objects to that here who's a shareholder. It's normally a truck.

AUDIENCE MEMBER: A truck, OK.

WARREN BUFFETT: And he happened to be in the trucking business, so he —

AUDIENCE MEMBER: Or, given —

WARREN BUFFETT: Just so it isn't a GEICO driver. But — (Laughter)

AUDIENCE MEMBER: Given Omaha, it could be a road grader.

What kind, I mean, that would be a sudden — maybe you'd come out of it with a great fastball. Maybe that's it. But you wouldn't have your facility at stocks.

What kind of advice would you give people that hold Berkshire Hathaway at a moment such as that?

WARREN BUFFETT: Well, it's — I've got the ultimate test on that. Because my estate, at that point, would be 99 3/4 percent invested in Berkshire. And I feel totally comfortable, considering the arrangements that have been made, and the businesses we own, and the managers we have in place, in terms of that.

But no one will be more affected, financially, let alone in other manners, by that truck than me. (Laughter)

So it's a thought that's crossed my mind.

And it's a more important question to me than to anybody else. And I've answered it to my satisfaction. The directors have some of my thoughts on the subject. But the world will go on. The businesses will go on. And I think you'll have terrific management in place.

AUDIENCE MEMBER: Thank you. I appreciate that. And thank you for taking all three of these. They're so disconnected.

WARREN BUFFETT: OK, thank you.

13. Buffett: No interest in buying the Omaha World-Herald newspaper

AUDIENCE MEMBER: Given your comments about newspapers, may we assume that you are probably not going to buy the Omaha World-Herald?

WARREN BUFFETT: I think that's a fair assumption. But that would probably be true regardless of my thoughts about newspapers. Because they're not going to sell.

Charlie, have you got anything to add on any of those?

CHARLIE MUNGER: Well, that story about the World-Herald is interesting. The truth of the matter is that, if Warren had been offered the Omaha World-Herald 20 or 25 years ago, he would've cheerfully bought it. And now he doesn't want it. And that isn't because of the economics.

WARREN BUFFETT: That's true. Yeah, I mean, there's no question — I have not been offered it, never will be offered it. And all — the ownership's all set. But what Charlie said is true.

If it were still owned by an individual, and they offered it to me, for economic reasons, I wouldn't want to buy it. And for other reasons, I wouldn't want to buy it.

CHARLIE MUNGER: But you wouldn't want to buy it now, because your life would be less congenial afterward than before. There'd be more people after you.

WARREN BUFFETT: There'd be no plus in life to owning the World-Herald, at all. Yeah. (Laughter)

And, as Charlie said, that's probably not the way we would've thought 30 years ago.

CHARLIE MUNGER: Not at all.

WARREN BUFFETT: I think we're right now.

14. Internet is good for society, bad for businesses

WARREN BUFFETT: Number 2.

AUDIENCE MEMBER: Hi, Howard Winston (PH) from Chicago, Illinois. I wanted to thank Charlie and you for your hospitality.

My question is, Berkshire has benefitted enormously over the years from the low cost of its float. Do you think the internet will make the insurance business more competitive and, therefore, raise the cost of your float?

WARREN BUFFETT: Well, that's a good question. I would say that the internet, from what I see now, is unlikely to increase the cost of Berkshire's float.

It will have different effects on different aspects of our insurance business. And it will change the insurance industry in some ways, not — and I can't tell you exactly what. But I —

You know that any system of distribution is going to be affected by something that changes the economics of distribution as much as the internet does. So there's no question it'll have an impact.

I think in the end, the competitive advantages we have among our group of insurance companies, net, will not be hurt by the internet. But I could be wrong on that. And therefore, I don't think that our cost of float will be changed much.

I don't think industry economics, in aggregate, for insurance companies, are going to be changed very much. The economics haven't been that good. I think they'll be about, you know, in that same range.

And I don't think our competitive advantage will be cut. So therefore, I think our cost of float, in the future, is going to be higher than it has been in the past. But that's for reasons other than the internet. I still think we'll have an attractive cost of funds over time on float.

It's a good business for us. I don't think it's necessarily a good business for the average company.

Charlie?

CHARLIE MUNGER: Well, there's a marvelous issue buried in your question. Will the internet, by making competition so much more efficient, make business generally harder for American corporations, meaning more competitive, lower returns on capital? And my guess would be yes.

WARREN BUFFETT: Yeah. My guess would be yes, too. I would say that, on balance, for society, the internet is a wonderful thing. And for capitalists, it's probably a net negative.

CHARLIE MUNGER: So all of you can be happy that the progress of the species will affect your economic futures for the worse. (Laughter)

WARREN BUFFETT: A sacrifice, at which our ages, we're willing to do. But we wouldn't be at your age. (Laughter)

That — incidentally, that — there's plenty to think about there.

The internet, I mean, if you analyze it, you have to think it's much more likely that it will reduce the profitability of American business and improve it.

It will improve the efficiency of American business. But all kinds of things improve the efficiency of American business without making it more profitable.

And I think that the internet is likely to fall into that category. So far, it's improved the monetized value of American business.

But that will eventually follow the underlying economics of what the internet does. And I think it's way more likely to make American business, in aggregate, worth less than compared to what it would've been otherwise.

CHARLIE MUNGER: By the way, that's perfectly obvious and very little understood. (Laughter)

WARREN BUFFETT: So there. (Laughter)

15. Egos and proxy statements fuel excessive CEO pay

WARREN BUFFETT: OK, number 3.

AUDIENCE MEMBER: Yes, good afternoon. My name is Tom Gayner from Richmond, Virginia.

And in the current environment, it seems that the attacks on the moats of wonderful businesses are coming from inside the castle, in the form of option-based compensation, just as much as from outside competitors.

One of your role models, Ben Franklin, said, “Even a small hole can sink a great ship.” It seems like the holes are getting bigger.

Can you discuss what, if any, forces may cause this to change? Is it a problem that will get worse or get better?

My second is specifically, in your role as directors of companies like Coke and Gillette, are you seeking to change these practices? And what kinds of success do you expect there? Do they let you on the comp committee?

And three, if these compensation practices are irrational, does Berkshire benefit from this irrationality? Thank you.

WARREN BUFFETT: Well, to carry the castle analogy further, we not only look for a great economic castle, but we look for a great knight in charge of that castle. Because that’s important. He’s the one that throws the crocodiles into the moat and widens the moat over time.

And of course, the question is, you know, how much does the knight get of the castle for doing that? And I think, generally speaking, at Berkshire, you get a very fair deal in terms of the amount that —

We’ve got a lot of castles around. And we try to pay people fairly. But I don’t think that the division of — is unfair between the owners of the castle and the knights that are around there, protecting the moat.

The — it’s hard for me to imagine how the compensation practices — the question of how much the knight gets of the castle — how that changes in favor of the owners of the castle over time. The ratcheting effect is just unbelievable.

No one, no compensation committee in America, will be listening to a consultant who walks in and says, “I think your management should have an arrangement that ends up in them being in the lower half.”

And if no one wants to be in the lower half, believe me, the median is going to move up.

I mean, there is no way around that. I mean, these people meet yearly or more often. And they sit there with a proxy statement of every other company in their business. You know, and they pick out the ones that have the biggest numbers in them.

And they say, “Well, gee, we need a management at least as good as this. And how are we going to attract people?” and all this other stuff.

And it’ll only ratchet upward. And I think that’s a fact of life. And I think that it’s important for shareholders to understand that.

I’ve been on the board of 19 companies, not counting any Berkshire subsidiaries or anything like that. The last comp committee I was on was at Salomon. And I was chairman of the comp committee, I think. I may be wrong on that. There were three of us. And the other two guys were terrific guys.

And the earnings came in one year, $100 million or so — I think it was 1990 — below the previous year. And comp was up a fair amount.

And I’d found that there had been some earlier issues involved and so on. I just said, I couldn’t swallow it anymore. And I voted against it.

I can’t remember whether I was chairman or not. But in any event, it was two to one against me. And I think it would’ve been two to one against me if I’d been chairman.

And the other two fellows were perfectly rational. They said, “How do we keep these people? And, you know, how can we repudiate our management?” All the sort of things you get.

So as a practical — I’ve got one friend, terribly well-regarded businessman — and he’s been — they don’t throw you off the comp committee. They just don’t re-nominate you.

And he’s been bounced from two of them simply by raising some questions that — about things you would find outrageous.

I’m not on the comp committee. I’ve been on only one comp committee. And they saw what I did. So that was the end of it.

People say, “We love your ideas,” And, you know, “You think creatively. We don’t want to hear about your thoughts on compensation.” And that, you know, it’s understandable.

You know, and every — and you run into some terrific cases of people. I mean, the fellow who runs Fastenal, for example, they are just outstanding. And there are a number of cases where people behave very well.

But most of them, I think some — I don't think it's money so much, sometimes. I just think it's ego. They just can't stand to see some guy that they think is batting .280, and they're batting .300, and he's getting paid more money. And, you know, and that process is endless.

And that, I, you know, that's understandable. It's like who gets top billing in a movie or something of the sort. People care about, you know, where their name is compared to somebody else's. And their name, in this case, is compensation. And it — I doubt if it reverses itself.

Charlie?

CHARLIE MUNGER: No, I think we can confidently expect that the situation will get worse. And I think we can confidently expect that that is bad for Berkshire Hathaway to the extent that it's a passive shareholder in big corporations.

There is one place where we get an advantage: our own culture and attitude being so different, it does attract some of these people that own wonderful businesses.

I mean, we literally, on occasion, find people for whom we're the only acceptable buyer. They don't like this culture of other big corporations any better than you do. And that does give us an advantage.

WARREN BUFFETT: Yeah. You asked us a question, also, about the — how active we might be in saying this. We're not going to ever sit here and tell you what we say in other boardrooms, because it would reduce any effectiveness we might have. And we probably don't have that much effectiveness anyway. But —

You can only belch so many times at the dinner table and get invited back. And — (laughter) — we've probably done enough of our share of that. And you — we try to run Berkshire in a way that we find admirable. And we try to spell out our reasoning on it and everything else. And we hope that maybe somebody latches onto that as a model someplace.

But going around condemning people by name does not work. And so we, you know, we hate the sin and love the sinner and all that sort of thing. And it doesn't have much effect.

16. Hard to predict how demographics will affect markets

WARREN BUFFETT: Number 4.

AUDIENCE MEMBER: Good afternoon, Warren and Charlie. My name is Erras (PH). I'm from Winnipeg, Manitoba, Canada. And my first time in Nebraska, in Omaha, first time hearing you guys live.

And there's a big ice cream man behind you.

WARREN BUFFETT: Hmm. There we go!

FEMALE VOICE: Here you go.

CHARLIE MUNGER: Oh, thank you.

WARREN BUFFETT: And you think there are no management perks at Berkshire.

AUDIENCE MEMBER: Oh, boy. (Laughter) All right, let's get down to business.

WARREN BUFFETT: OK.

AUDIENCE MEMBER: My question is in reference to your article in Fortune magazine last November, where you talked about corporate earnings and what the market — are you guys listening? Or…

WARREN BUFFETT: I'm listening. (Laughter)

We can chew gum and listen at the same time.

AUDIENCE MEMBER: All right, all right, all right. As I was saying —

WARREN BUFFETT: But if we had —

AUDIENCE MEMBER: — the point in your article in Fortune about corporate earnings and what the market is paying for them, painting a pretty gloomy picture for equities and market levels going forward.

Now, as you may know, there exists a very strong trend in demographics. We see, in Canada and the United States, the aging of the population and, more importantly, the bulk of this population reaching their peak savings years, all at the same time.

WARREN BUFFETT: You're getting a little rude. But go ahead. (Laughter)

AUDIENCE MEMBER: I can't believe this. Warren actually called me rude.

WARREN BUFFETT: I wanted to prove to you I was listening. Go ahead. (Laughter)

AUDIENCE MEMBER: Anyways, OK, so there's a major retirement crisis as a majority of Canadians and Americans between the ages of, especially between 22 and 55, are worried that they won't have enough money to fund their retirement or let alone, last.

So for this reason, I mean, this population is expected to invest in equities, as opposed to fixed-income instruments, to get the necessary long-term rates of return to fund their nest egg for retirement.

And therefore, many are calling for massive amounts of money to flow into the markets over the next five, 10, 15 years through stocks and mutual funds and, consequently, fueling market prices and market levels. Many predicting the biggest growth ever in the stock markets.

So what is your opinion on this potential trend, separately or in conjunction with what you said in that article in Fortune? Thanks very much.

WARREN BUFFETT: Good. To be, I'm not being rude here, but we don't think it means a thing, frankly. (Laughter)

The savings rate, the private savings rate, you know, is not high now. It doesn't need to be high.

What really determines how the people who are either aged or very young, because either way, the people who are in their nonproductive years depends, in aggregate, on aggregate production of goods and services, and then the division between those who are in their productive years and in their nonproductive years. And that's what Social Security argument's about and everything.

The biggest single thing working for people in their nonproductive years on both ends, young and old, is the fact that the pie keeps growing. And that makes it easier to attack the problems of the nonproductive.

And when I say, "nonproductive," there's obviously no — nothing derogatory about that term. It just relates to who's in the employable age and who isn't.

And our society is going to do extremely well in terms of being able to take care of the people in their nonproductive years.

If there — there is a shift, obviously, as people live longer. And of course, there should be a shift, perhaps, in defining — I think there should be — in defining what's productive, because 65 was decided back in the '30s. And I think that's changed.

But the fact that the pie keeps growing is what makes it — it makes the problem easy. And — not easy — but it'll be easier 30 or 40 years from now, in my view, you know, than it was 30 or 40 years ago.

Because there'll be so much more in the way of goods and services produced per capita that the productive can take care of the nonproductive and the — or the aged — in a way that will be easier for them to sustain than it was in the past. When —

It's low amounts of output that strains society. I mean, when you get very small amounts of output, or huge disparities in the division of that, that you put real strains on a society.

But a society whose output is growing 3 percent a year and whose population is growing 1 percent a year is going to have way less in the way of strains than existed 20, 30, 50, 100 years ago. The —

But, you know, we will need no big boom in savings or anything of the sort. The present savings rate will do — will just do fine for the world. In the United States, I mean, I'm not speaking to the — I shouldn't speak to the whole world on that.

Charlie?

CHARLIE MUNGER: Well, generally, you can say that stocks are valued in two different ways.

One, they're valued much the way wheat is valued, in terms of its perceived practical utility to the user of the wheat.

And there's a second way that stocks are valued, which is the way Rembrandts are valued.

And to some extent, Rembrandts are valued high, because in the past, they've gone up in price.

And once you get a lot of Rembrandt element into the stock market, and you fuel the stock market with massive retirement system purchases, you can get stocks selling at very high prices by past historical standards. And that can go on for a long, long time.

That's what makes life so interesting. It isn't at all clear how it's going to work out. It isn't even clear what the level of interest rates is going to be.

And nobody in this room ever expects to see 3 percent interest rates continue for a long time again. But that could happen. That would have an enormous effect on the price of equities.

You live in a world where you can't really predict these macroeconomic changes.

WARREN BUFFETT: No, you can argue that increases in savings will drive down the returns on capital. The more capital is around, that the lower the returns will be on capital.

But I don't think you'll — I don't think it will help you make any decisions about businesses, you know, over your lifetime by — actually by thinking about matters like that. We're a little biased on that. But you'll find all kinds of guys that will tell you. I mean, that's what books are written about. Because everybody likes predictions and books. So, you could all —

Go ahead.

CHARLIE MUNGER: In addressing this question, you can see that we have acted much as one of my old Harvard Law professors acted. He used to say, “Let me know what your problem is. And I’ll try and make it more difficult for you.” (Laughter)

17. Buffett: The best book on how I invest

WARREN BUFFETT: Area 5, please.

AUDIENCE MEMBER: My name is Eric Tweedie from Shavertown, Pennsylvania. Thanks again for another great meeting.

During last year’s meeting, my wife picked up a copy of a book called “Buffettology” at one of the shops around town that is written by Mr. Buffett’s former daughter-in-law, a very well-written book, very interesting. And it attempts to outline the Warren Buffett approach to investing.

My question is, I don’t know if either of you gentlemen are familiar with the content or have read it. And if so, if you could comment on if you think it is a good outline of that type of investing.

My second question related to that, I wonder if you — if Mr. Buffett could comment on why you bought the original textile mill in Massachusetts, and if that represented an earlier phase, when you were more of a strictly Graham-style, value investor, versus your current investing style.

WARREN BUFFETT: Probably the best, I would say, the most representative book on my views is the one that Larry Cunningham has put together, because he essentially has taken my words and rearranged them in a more orderly — he’s taken from a number of years. And what he has put together there best represents my views.

We’ve got 20 years of annual reports or so, or more, on the internet, plus articles in Fortune, all kinds of things.

So it’s probably a bias I have. But I would — I like to think that I laid out those views better than somebody who’s rewriting them. But that’s — I’ll let you make that decision.

But I do think Larry’s done a very good job of taking a number of those reports and rearranging them by topic in a way that makes it a lot easier to read than trying to go through year after year.

And actually, you’ll have this book about Charlie, pretty soon, to read, too.

We’ve said what — we’ve said in these meetings, we’ve said in the annual reports, we’ve said exactly what we do.

And some of the books, I would say, try to take that and — because people are looking for mechanistic things or formulas or whatever it may be. They try to hold — they may try to hold out that there's some secret beyond that. But I don't think there probably is.

Charlie? You've read the books.

CHARLIE MUNGER: Oh, I skimmed that book. The —

I think what we have done all these years is, it wasn't all that hard to do. And it's not that hard to explain. All that said and done, I think a lot of people just don't get it. (Laughter)

As Samuel Johnson said, famously, "I can give you an argument, but I can't give you an understanding." (Laughter)

18. Buying Berkshire Hathaway was a "terrible mistake"

WARREN BUFFETT: What was the second part again?

AUDIENCE MEMBER: I just asked you if you could maybe comment on why you bought the original —

WARREN BUFFETT: Oh.

AUDIENCE MEMBER: — Berkshire textile mill.

WARREN BUFFETT: That's why I didn't remember. (Laughter)

AUDIENCE MEMBER: If I could say —

WARREN BUFFETT: It was —

AUDIENCE MEMBER: — one of the things, someone tapped me on the shoulder and asked me for you not to forget to give the current year's recommended books.

WARREN BUFFETT: It's — I've got to recommend the book on Charlie. But I'll let Charlie recommend one, too.

The original purchase of Berkshire was a terrible mistake and my mistake. No one pushed me into it.

It was — I bought it, because it was what we used to call the cigar —

It was a cigar butt approach to investing, where we would look around for something with a free puff left in it. You know, it was soggy and kind of disgusting and everything. But it was free. (Laughter)

And Berkshire was selling below working capital, had a history of repurchasing shares periodically on tender offers. And it was selling, the first purchase was, I think, at $7 1/2 a share. In fact, I've got the broker's ticket up in the office, 2,000 shares.

And they — it looked to me like they were going to have a tender offer periodically. And it would probably be at some figure closer to working — net working capital — which might've been 11 or $12 a share, some such number.

And we would sell on the tender. And that was — we had other securities we owned that way. And we bought some that way.

And then, actually, I met Seabury Stanton one time, who was running Berkshire. And he told me and made me an insider, so I couldn't do anything, but he said he was thinking of having a tender. And he wondered what price we'd tender at.

And I — as I remember, I may be wrong on this, I could look back on it, but I think I said, "11 3/8." And he said again to me, "Well, if we have a tender at 11 3/8, will you tender?" And I said, "Yes, I will."

And then I was frozen out, obviously, of doing anything with the stock for a little while. But then he came along with the tender offer.

And as I remember, I opened the envelope, and it was 11 1/4. I may be wrong. It may have been 11 1/2, 11 3/8. But it was 1/8 below what he had said to me and what I had agreed to.

So I found that kind of irritating. And I didn't tender. And then I bought a lot of stock.

Kim Chace was a director. His father had some members of the family, not his direct family, but related family, that wanted to sell a block. And we bought several blocks. And before long, we controlled the company.

So at an eighth of a point difference, we wouldn't have bought it, the company, if they'd actually tendered at that price.

We had a somewhat similar thing happen with Blue Chip, actually, later on, too.

We would've been much better off, if we hadn't bought it. Because then things like National Indemnity and all of that, instead of buying it into a public company with a great many other shareholders, we would've bought it privately in the partnership. And our partners would've had a greater interest.

So Berkshire was exactly the wrong vehicle to use for buying a bunch of wonderful companies over time. But I sort of stumbled into it. And we kept moving along.

And when I disbanded the partnership, I distributed out to Berkshire. Because it seemed like the easiest and best thing to do. And I followed through. And I enjoyed it enormously. I'm glad it all worked out this way.

It did not work out the best way, economically, in all probability. It was the wrong base to use to build an enterprise around. But maybe, in a way, that's made it more fun.

Charlie, do you have anything to add on that? You can tell them about the Blue Chip story. (Laughs)

CHARLIE MUNGER: No, one such story is enough. (Buffett laughs)

But it is interesting that a wrong decision has been made to work out so well.

We've done a lot of that, scrambled out of wrong decisions. I'd argue that's a big part of having a reasonable record in life.

You can't avoid the wrong decisions. But if you recognize them promptly and do something about them, you can frequently turn the lemon into lemonade, which is what happened here.

Warren twisted a lot of capital out of the textile business and invested it wisely. And that's why we're all here.

WARREN BUFFETT: But Berkshire comes from three companies that came together: Diversified Retailing, Blue Chip Stamps, and Berkshire. Those were the three base companies.

And Diversified started when we bought a company called Hochschild Kohn in Baltimore in 1966, a department store. And that company disappeared over time.

Fortunately, in 19 — I think — 70, we sold it to Supermarkets General. Blue Chip, we've told you about the record of that.

So, we started out with three disasters, and put them all together. (Laughter)

And it's worked out pretty well.

But it was a mistake to be working from that kind of a base. Don't follow our example in that respect. Start out with a good business and then keep adding on good businesses.

CHARLIE MUNGER: But the example of quickly identifying the mistakes and taking action, there, our example is a good one.

WARREN BUFFETT: Yeah.

19. Buffett would never trade Berkshire stock for gold

WARREN BUFFETT: OK, number 6.

AUDIENCE MEMBER: Good afternoon, Mr. Buffett, Mr. Munger. Kathleen Lane (PH) from New York.

I have a question out of left field for you. You say you like to be entertained? This question will entertain you. It's also a serious question.

I know you don't like to speculate about the future. You won't do so. I appreciate that.

But some people do. For example, Edgar Cayce was one. He didn't pick stocks or investments. But if he had, he would've probably gone for that farmland that you were talking about earlier this morning.

Because he had a dream that in the year 2158, Omaha would be located on the west coast of the United States. And you know how beachfront property goes. So it would be a good bet.

WARREN BUFFETT: It will be good for our super catastrophe business, if that happens. (Laughter)

AUDIENCE MEMBER: As you both said earlier, we're living in an extraordinary time, financially especially.

You can't help but to hear disaster scenarios concerning the impending collapse of worldwide financial markets, about major physical changes in the world as we know it, about a future when the world's resources will be better measured by their prospects for ensuring our basic survival than their value as speculative commodities. That's where that farmland would come in again.

Nobody does better what you two do. But even if your investment acumen wasn't what it is, I would invest with you, because you're honest.

In short, I came here to ask you, what would you tell a single mother to exchange her Berkshire share hold for gold coins? When, under what circumstances?

WARREN BUFFETT: Well, I can't imagine ever exchanging any of my shares for gold coins. But —

I would rather trust in the intrinsic value of a bunch of really fine businesses run by good managers selling products that people like to buy and have liked to buy for a long time, and then exchanging their future efforts, the money that comes from their wages, for See's Candy

or Coca-Cola or whatever, than take some piece of metal that people dig out of the ground in South Africa and then put back in the ground at Fort Knox, you know, after transporting it and insuring it and everything else. (Laughter)

I've never been able to get real excited about gold. Now, my dad was a huge enthusiast for a gold standard. So I grew up in a family where gold was revered, if not possessed. And I would — I gave it its full chance.

But I've never understood what the intrinsic value of gold is. And, you know, we'll sell you some at Borsheims, but I would never exchange —

The idea of exchanging a producing asset for a nonproducing asset would be pretty foreign to me.

20. Why Buffett ignores predictions

WARREN BUFFETT: And I would say this: in terms of the predictions, and I know the spirit in which you asked the question, but in terms — there's a market out there all the time.

And people love to hear predictions. If I said I was going to offer a bunch of predictions today, we would have a million people here. I mean, they're dying to have predictions and speeches at rotary clubs or trade associations or whatever. That's — they just plain love it.

And that's what a whole industry is built upon, you know, the people coming out of Washington to talk about political predictions and the — I don't read those in the paper at all. Because it's just — it's space fillers, basically.

And, you mentioned Edgar Cayce. Ben Graham knew Edgar Cayce pretty well. But I just have never seen any utility to any of that at all.

There will be some huge surprises in the world. There's no question about that. But I don't think that betting on any specific one is a very smart policy.

In fact, our — we usually bet against them, in terms of super catastrophes. We know there will be a 7.0 or greater quake in California in the next 50 years. We don't know where it'll be or when it'll be or anything like that. We are willing to pay out a lot of money if it happens tomorrow.

And because people do worry about catastrophes. And in this case, it's perfectly proper, with insured values. But it just isn't any way, in our view, to get through economic life.

Charlie?

CHARLIE MUNGER: Well, I suppose the one time when a single mother might want to own gold compared to anything else is if she faced conditions like a Jew in Vienna in 1939, or —

I mean, there are conditions you can imagine where some form of transportable wealth would be useful, compared to anything else.

But absent those extreme conditions, I think it's for the birds. Now, silver… (Laughter)

WARREN BUFFETT: It's hard to think of anything other than fleeing the country. And Charlie and I don't give a lot of thought to fleeing the country.

21. Buffett: "I'm a little crazy, I don't mind paying taxes"

WARREN BUFFETT: Although, I must say that the one thing I really find reprehensible is the people that make a lot of money in this country and then leave to, you know, to get another tax jurisdiction or something like this. I really — I don't —

But I'm a little crazy. I don't mind paying taxes. (Applause)

WARREN BUFFETT: Let's go to 7.

There are plenty of reasons, I think, perfectly valid reasons — I mean, people may want to live someplace else — but the ones who carefully arrange it so that they actually live here as much as they can.

I think one of them wanted to be appointed — he wanted to go to some very small entity, where there was no tax. And then he wanted to be appointed an ambassador to the United States, so that he could enjoy living here but enjoy the taxes of something else.

And, you know, that is not my role model. Yup.

22. Costs vary for Berkshire's float

AUDIENCE MEMBER: Hello, Warren. Hi, Charlie. Two questions. First, was anybody dumb enough to sell you Berkshire at less than 45,000 a share?

WARREN BUFFETT: We did not repurchase any shares.

AUDIENCE MEMBER: My second question concerns float. The float has been low cost most years for Berkshire and probably zero cost in many years, except last year, possibly.

When you think about float in terms of intrinsic value, do you have an idea in mind when you add new float for how much it will increase the intrinsic value of Berkshire?

WARREN BUFFETT: Well we add — that's a good question — but we consciously add float sometimes at a given cost. And then we, other times, add float at no cost. So we have different layers of float, if you will, that we've entered into.

We've entered in some transactions in the last month or two, where we will take on some float, which will not have zero cost. But it's acceptable to us. And we couldn't get it at zero cost, although we're also creating float which, I think, will be close to zero cost or better.

So, we would be willing to take on float, obviously, at costs only modestly below the Treasury rate, if that was the only way we could get that float, and it didn't impede our ability to get other float, you know, at zero cost or something.

We don't want to raise the cost overall by a single transaction that would have an effect on other transactions.

But float, if you look at our historical record, and our future record can't be as good, but it's not —it's the cost of float, and it's the amount of growth of float.

I mean, if you told me I could add $50 billion of float and have a 3 percent cost to that, you know, I would take that any day over adding 10 billion at zero cost.

So there are a lot of different ways, in the insurance business, that we can and will think about developing float.

And usually, one doesn't preclude another. Occasionally, one bumps into another. But usually, one doesn't preclude another.

And believe me, we spend a lot of time thinking about that. And we'll continue to as long as we run Berkshire. It's a big part of our strategy.

Charlie?

CHARLIE MUNGER: Well, I've been amazed how well we've done with the float. And I've been watching it from the inside for a long, long time.

It is a very wonderful thing to generate millions and millions, and then billions and billions, of dollars of float at a cost way below the Treasury rate. There are people who would kill for such opportunities.

WARREN BUFFETT: Yeah. And of course, that makes it competitive. We do — we — there are plenty of other people that are thinking about it in a similar vein and probably observed what we do and all of that. So like everything else in capitalism, it's competitive.

We think we've got an edge in several very important respects. And we think that edge is sustainable for quite a — as far as we can see. And we intend to push it as hard as we can. And then we'll see where it leads.

I would've had no idea, 10 or 20 years ago, that we would have the present situation. But we do find, if you just show up every day, like Woody Allen said, and you answer the phone and read the paper, every now and then, you see something that makes sense to do.

And we do find them occasionally. The hard part is finding them where they are material relative to our present size. If we were running a very small business, we would find plenty of things that would make good sense.

We find a few things that make good sense now, relative to our size. And there's really no answer for that except to shrink dramatically, which is not a action we're contemplating.

23. Munger on Wesco succession

WARREN BUFFETT: Number 8.

AUDIENCE MEMBER: James Pan (PH) from New York City.

I really have a question on Wesco, which is your 80 percent-held subsidiary, just a couple questions dealing with that.

First question is, last time I checked, that was trading below intrinsic value.

And given that most of Wesco's assets are tied up in Freddie Mac, and Freddie Mac will arguably grow intrinsic value in the low teens for the next couple of years, how are you guys going to manage the, I guess, how would you manage the gap between intrinsic value, and what — the current price, and what intrinsic value will be two or three years from now?

And also, is there a succession plan at Wesco or some kind of roll-up plan at Wesco eventually?

WARREN BUFFETT: Charlie is the boss at Wesco. So —

CHARLIE MUNGER: Yes. We have paid almost no attention to the price of Wesco stock. So the chance to make any meaningful gain for the Wesco shareholders by buying in a few shares of Wesco stock is so tiny that we don't really bother thinking about it very much. The —

As to succession, we are gradually making me so useless that I won't be missed. (Laughter)

WARREN BUFFETT: Yeah, incidentally, you talked about Wesco being significantly undervalued compared to intrinsic value. I'm not sure that's the case. Charlie, would — you're more of an expert on that than I am.

CHARLIE MUNGER: Well, there's certainly no huge gap.

And, we don't spend a lot of time thinking about things that will make, practically, no money. (Laughter)

24. Munger: EVA valuation is "twaddle" and "medieval theology"

WARREN BUFFETT: Number 1.

AUDIENCE MEMBER: Hi, my name is Jason Tang (PH) from Traverse City, Michigan. Before I ask my question, I want to know that it's true that you guys are going to be here tomorrow at 9:30 to answer more questions. (Laughter)

My question, I just recently read the book, "Quest for Value," by — I think the author is Bennett Stewart, from Stern Stewart consulting firm.

And I want to talk to you a bit about — just ask you about different valuation methodologies, and EVA in particular, and how that may or may not be more valid than, let's say, other benchmarks of value, like P/E, or price-to-book, or price-to-sales.

Is that something closer? I noticed that the language that was used in this book was real similar to the type of language you guys use in your writings. So I'd like you to talk a little bit about EVA, if you could.

WARREN BUFFETT: Charlie, why don't you take EVA?

CHARLIE MUNGER: I think there's an awful lot of twaddle and bullshit. (Laughter)

WARREN BUFFETT: I knew that's what he was going to say. And I thought it deserved it, so I — and I didn't want to say it myself.

CHARLIE MUNGER: In EVA, we keep stating, over and over again, that the game is to turn the retained dollars into something more than dollars.

And EVA tends to incorporate cost of capital ideas that just make no sense at all. They make it sound very fashionable.

And, God knows, it's correct that a corporation that earns a huge return on capital and keeps retaining it for a long time has a great record in terms of EVA. But the mental system, as a whole, does not work. It's like medieval theology. (Laughter)

WARREN BUFFETT: I like that second term better than the earlier one. (Laughter)

25. How Buffett became friends with Bill Gates

WARREN BUFFETT: Number 2.

AUDIENCE MEMBER: Good afternoon. My — excuse me — my name is Stewart Hartman from Sioux City, Iowa.

First, I'd like to thank you both for allowing a couple of Berkshire employees to migrate north to Sioux City. I work with Corey Wrenn and Mark Sisley (PH). They're both great guys. You did a terrific job training them.

Mr. Buffett, you've known Bill Gates for several years and probably spent more time with him than any of us in this room. Would you feel —?

WARREN BUFFETT: That isn't the case, if Jeff Raikes is here. I don't know. Is Jeff here?

Anyway, go ahead. But we did have a local fellow who comes from 30 miles from here, Jeff Raikes, who's a key Microsoft employee. And I think he's in town this weekend. I thought he was in the meeting.

AUDIENCE MEMBER: I didn't mean to make the broad generalization to be argumentative. (Laughter)

WARREN BUFFETT: I just didn't want to think Jeff — I was trying to muscle him out.

AUDIENCE MEMBER: Sure, sure. That being said, I guess, here's a way I'll rephrase this. Would you feel comfortable sharing with us how your relationship began and how it evolved with Mr. Gates?

And with regard to his spirit and competitive nature, how vigorous do you expect him to defend his company's position against the government and state's current antitrust suit?

And then for both of you, Mr. Munger included, what, in your opinion, are the odds that the government and the states will prevail and split his company into pieces?

And then since Mr. Munger mentioned, I guess I'd ask, could we have an update on the company's silver position and its future as an investment, as well? (Laughter) Thank you for opening that door.

WARREN BUFFETT: OK, well, he can close them, too. (Laughter)

Yeah, I really don't feel comfortable speaking for Bill at all in terms of what he's going to do. In fact, I think they've been quite outspoken, he and Steve Ballmer both, about what Microsoft will do.

So I don't want to try and rephrase that or modify it or do anything else. Because they know what they're saying when they say it. And I would take them at their word. And I really shouldn't be adding anything to it.

I met Bill, because a very good friend of mine, Meg Greenfield, was the editorial page editor at the Post. She called me one time, 10 or more years ago. And — she said, "Warren," — she loved the state of Washington and had grown up out there. So she said, "Can I afford to buy a second home?"

She was living in Washington, D.C. now. And so she says, "Can I afford to buy a second home in Washington?" And I said — and she said, "I'll send you all my financial information."

I said, "Meg, you don't need to." Anybody that asks me whether they can afford something can afford it. It's the people that don't ask me that never can afford it. So I said, "Just go do it." And, "It'll make you happy." And so she did.

And, then a year or two later, she wanted to have me come out and see what she'd done with my mild encouragement. And so I went out there and visited. It was the July 4th weekend in 1991. And they had this parade on this island and everything she wanted me to see. And she had a few other people out, too.

And then, she was a friend of the — of Bill's parents. And so we went down there, to the Hood Canal, to visit them when I was back there, to meet the parents. And I think Bill didn't want to come. But Kay Graham was coming. And he wanted to meet her. He didn't want to meet me.

And, so he came in. And then we hit it off immediately. We had a great time. And, I mean, he had this chimpanzee, to whom he was going to try and explain this technical stuff. But it was a — I was kind of an interesting chimpanzee to him. So, we — and he's a terrific teacher.

So, we spent a number of hours. And we just plain hit it off. And, I found it very interesting, what he had to say. And, we've had a good time good time ever since.

And we play bridge together and golf together. So I can tell you that he's quite competitive in those games. But I, can't tell you anything about Microsoft or anything. I don't know that much about it. And it wouldn't be right, if I didn't know anything personal, to be talking about it. Charlie, you know Bill.

CHARLIE MUNGER: Yeah. Well, I don't want to speak for anybody else, either. I happen to be quite sympathetic to the Microsoft side of the pending antitrust case. But — (Applause)

And regarding silver, all I can say is, so far, it's been a dull ride. (Laughter)

26. Buffett and Munger on the antitrust case against Microsoft

WARREN BUFFETT: I would say this about the Microsoft case. That — and I've expressed this to a couple news organizations who asked the question earlier.

Twenty years ago, this country really had sort of an inferiority complex about its place in the world economic order.

And we talked about having a country of hamburger flippers. And, we thought we were going to lose our steel industry and our auto industry. And we really didn't quite see how America fit into the world where it looked like the Japanese and the Germans, to some extent, and all those, were eating our lunch.

And that — there are many of you are too young to remember that. But there are many of you in this room who will remember that. And we were very depressed about our economic situation in this country.

And then this, whatever you want to call it, information age or whatever, came along, fueled by technology. And we've just swept the world aside. I mean, it — we are so far number one that it's difficult to think who's number two. So here we have —

And it's changed — in some way, it's contributed to a change, I should say — in the national mood. And it — whether — what part of our prosperity is accounted for by it, no one knows. But I think everybody in the room would agree that it's significant.

And that age is going to get — and that development — is going to get more and more important in the years to come. It's going to be fueling much of what happens in the world and for this country to be the world leader. And like I say, you can't even see who's in second place, and moving faster, even, to increase that lead, with all the benefits that brings, you know, I think that —

I think we've got something working very well that probably doesn't make a lot of sense to tinker with too much. So I would not want to go in with a meat axe into something that is pulling this country along, in my view, in a huge way.

And I just, I don't like to tinker with success. And it's an important success. It's really an important success.

Charlie and I may not understand how to play that, in terms of buying the companies that are going to do well 10 or 15 years from now. But we know some companies will do well. And we certainly know it'll have a huge benefit to society, even if it makes business less profitable but makes the society more efficient.

I mean, that is a huge edge to have. I would love to have the most efficient industry in the world in this country, even though it might pull down returns on capital against the less-efficient system.

So we — I think neither one of us would be inclined to go in there and mess around with something that's working.

CHARLIE MUNGER: I think — (Applause)

If you look at the big picture, in patriotic terms, having lost totally in radios, stereos, television sets, et cetera, and in many other places, and having lost position in other major industries to the Japanese and others, we finally get huge leadership in a new and wonderful field — software — that's needed all over the Earth.

And somebody who's drawing a salary from the United States government gets the bright idea that they should dramatically weaken the one place where we're winning big. (Applause)

And he actually goes home at night and is proud of himself. (Laughter)

27. GEICO benefits from smaller industry-wide profit margins

WARREN BUFFETT: OK, number 3.

AUDIENCE MEMBER: Good afternoon. Joe Levinson (PH) from New York.

You mentioned, in this year's annual report, that the operating environment that GEICO is facing, especially with regard to pricing, is going to get even tougher this year.

I'm wondering if this tough environment that GEICO's been facing over the last few years, is it something cyclical? Or is there something more structural going on here that we should be concerned about?

WARREN BUFFETT: Well, actually, what has happened is that it's been unduly benign the last few years. So I would regard this as much more a return to normalcy, what's happening.

The profits in auto insurance, industrywide, have been far higher than, I think, are sustainable and higher than I would've predicted, five years ago, would've occurred.

So the industry got very, very lucky for a while. That wasn't necessarily good for us, incidentally.

We made more money than we would've otherwise made. But there was a big umbrella over the industry, too, so that less-efficient competitors still did very well.

We do not find the environment, which is going to be lower profits, we do not find that undesirable at all. We do not like having a huge umbrella over an industry. We want the most efficient to be the ones that do well and the less-efficient ones to have plenty of problems.

So, we are not unhappy about the fact that margins in the auto insurance business are going down. We think they should go down.

We will — as long as we feel that we are adding policyholders at a cost that's less than their net value to us over time, we will continue to do it. We'll love to do it.

But we won't be making the kind of money, in the year 2000, that we made in 1999, which was not as good as 1998. But that doesn't — that's — as far as we're concerned, that's fine. Because we will be the low-cost producer, over time or will — that is our goal. And I think we've got a lot of things going in our direction to enable us to do that.

The low-cost producer in a huge industry is going to do very well over time.

And then question is just — is, it costs money to sign up people and bring them into our fold. Then we have to keep them in our fold. And we lose some every year. It's an hourglass problem, to a degree.

But that's all part of the equation. And the GEICO equation is fundamentally good. It's not as good as it was a couple of years ago, just in terms of overall profitability, because there isn't this big umbrella over the whole industry.

But that umbrella was going to go away. And it doesn't hurt us to have it go away at all.

The second thing is that we are, as I pointed out in the report, it is costing us more to develop inquiries than it did a couple of years ago. We knew that would be the case. It's going to cost more three years from now than it costs now.

So we believe in pouring it on. And we think that we can attract business at a lower cost and then run it at a lower cost than most of the competition, if not all. And we intend to plow ahead with that.

We will write — I said, in the annual report, I ventured that the industry might write at three points worse than last year. Well, three points on 120 billion of volume is $3.6 billion difference in the profitability, if that forecast happens to be correct.

That bothers us not at all. In fact, we will not only take that three points of industry worsening, but on top of that, we will spend even more money to bring in business, which will make our figures, specifically, look that much worse in the near term.

But that, you know — in the end, it is so much more attractive to bring in that kind of business, we'll say, than some e-retailer, who is losing cash by the ton, bringing in customers who are spending far, far less than our customers spend with us, and where the retention rate, I would venture to say, will be lower than our kind of retention rate.

We've got a very good business model. It's not as good as it was a couple of years ago. It's probably better than it will be a couple of years from now. But it's still far superior, I think, to the business model of most of the competition.

We've got a great machine at GEICO. And we've got a sensational man running it in Tony Nicely. He is the best in the world at running that business.

And he's been there since he was 18 years old. And he knows it every way from Sunday, in terms of how to run that business.

I've known Tony for a good many years. I've never heard him say anything that didn't make sense. It's really interesting.

If you take a whole bunch of people with 140 IQs, it's a very uneven performance in what they actually do. Some of them say all kinds of things that make a lot of sense about 90 percent of the time. And then 10 percent of the time, they go crazy.

And Tony is — everything Tony says and does makes sense. And he is a huge, huge asset to Berkshire. And he's working with a business model that — that's very, very powerful.

Charlie?

CHARLIE MUNGER: Nothing to add.

28. MidAmerican Energy: "Decent" but not "extraordinary" returns

WARREN BUFFETT: OK, number 4.

AUDIENCE MEMBER: Good afternoon, Mr. Buffett, Mr. Munger. My name is Andrew Sole. And I'm from New York City.

I was hoping, if you wouldn't mind, turning your attention to MidAmerican Energy. You've spoken about how much you respect the management of that company.

But if you could elaborate upon what you see are the long-term competitive advantages of MidAmerican Energy, where you see the company 10 years from now, and is it your hope or your intention to make MidAmerican Energy the lowest-cost provider of electricity in the United States?

WARREN BUFFETT: Well, you — you're not going to do a great deal about the embedded cost that you have in generation. I mean, if you have a group of plants, they are, in the United States, they're relatively low-cost generation.

But if somebody else has a hydro plant or something that has built-in advantages that are going to enable them to turn out electricity cheaper than we can do it in Iowa with coal, so be it. I mean, it —

So it is relatively well positioned as a generator, but we have nothing we could do there to specifically, dramatically change the cost of generation compared to other competitors.

But — and you shouldn't expect to make extraordinary profits in a business that is selling an essential, like electricity, to virtually every consumer in the country.

The whole idea behind the utility industry is not to allow extraordinary profits. But we think it's a very good business.

We do think that Dave Sokol has demonstrated ability, in the time he has been running that, to come up with a lot of ideas about doing various things that have made sense, various projects.

Not everything works. But his batting average is very high. And a good mind like that, we will expect that he'll produce more ideas over time.

But, it's not the sort of thing you get fireworks in. It's conceivable that, you know, we would get a chance to do something very big in that field at some time, just because it's a big field. It is the kind of field where you can write a $5 billion check. So it's not the jelly bean business.

But whether we do or not depends on a lot of things, including regulatory restraints. Because there are a lot of rules in that business, starting with the Public Utility Holding Company Act of 1935.

But there may be ways to do some very big things. And we've got the right management to do it. We've got the financial wherewithal to do it. And we'll see what happens.

I think MidAmerican is a very — we'll get, in my view, we're very likely to get a very decent return on it. But we shouldn't get an extraordinary return, because it isn't that kind of business.

Charlie?

CHARLIE MUNGER: Nothing to add.

29. We can do almost anything with insurance float

WARREN BUFFETT: OK, number 5.

AUDIENCE MEMBER: Mr. Buffett, my name is John Shayne (PH) from Nashville, Tennessee. I want to join the other shareholders and thank you for the results you've achieved, but also for the example that you've set for business, generally.

My question is about float proceeds and whether they can go into common stocks. You've been asked that question before in prior years. Once, I asked you something on that. And I think at least one other shareholder has.

But I'm wondering if you might go into a little more detail. If I've understood you in the past, you've said, "Yes, you can — the float's available to go into common stocks."

I think it's an important question because it affects the intrinsic value of that float. If that float is locked into fixed income, it's worth one thing. If it could go into stocks at one point, it's obviously worth quite a bit more.

What I've had trouble understanding is, I think you must have some way that you can guarantee that the policyholders will be protected. Obviously, you can invest everything in a low market, and the market goes even lower.

Is it simply the size of the capital you've got that you think that'd be extraordinarily unlikely? Or do you use future insurance revenues, premium revenues, to pay off claims? Would you borrow to pay off claims?

If you could give some detail on that, maybe we could get some comfort as to how you're thinking about that.

WARREN BUFFETT: Yeah. The float, in no way, is limited to fixed-income securities. The float is really available for anything that we feel is the most intelligent at any given time.

And the reason we can say that, and other insurance companies can't say that, is because we have an incredible abundance of capital, plus other streams of earning power which are unrelated to the insurance business.

So we could have the float entirely in equities. And we have had that, in the past, or tantamount to that. And we could have a lot of it in operating businesses. We can have it anyplace it makes the most sense.

But the only reason we can do that is because we have extraordinary capital. And we don't have much debt.

We run the business differently than, or think about it differently, than probably 90 percent of managements do.

We look at the assets on a consolidated basis with a few little exceptions. We look at the asset and the liability side — completely absent any linkage for specific assets and liabilities.

So our job at Berkshire is to get the liabilities as cheaply as possible. We want all the liabilities we can get and not have any worries about fulfilling as cheap as we can, plus a lot of capital. And then we want all the assets to be employed as intelligently as possible.

And we don't match up, you know, a billion dollars of assets on the asset side against a billion of specific liabilities on the right-hand side. There's one or two exceptions to that, but that's — where we're required to — but that's the basic approach.

So, when Charlie and I think about Berkshire, we're thinking about, how do we get as much money as we can as cheap as we can without, in any way, endangering our ability, ever, to pay anybody, under any circumstances?

And then, how do we put it out in a way that we feel the most comfortable on the asset side, at the best returns? And frequently, that will be equities. And it has been, over the past. Sometimes, we — it won't be. We can't find them. But that's the goal.

And float is available just like — in virtually all cases — just like common equity. We don't distinguish those in our mind.

And that gives us — that flexibility gives us some edge and, perhaps, quite an edge, at times, over other — over our competitors.

Charlie?

CHARLIE MUNGER: Well, yeah, you can see that in the results to date. We have used that edge in the past. And we hope to use it in the future.

30. Liz Claiborne and Jones Apparel investments

WARREN BUFFETT: Number 6.

AUDIENCE MEMBER: Hi, I am Kevin Pilon (PH) from Simsbury, Connecticut.

Let me just say, quickly, that I'm really looking forward to Charlie's book. And I hope it expands on the talks he gave that were reported in (inaudible) with regard to having a certain number of models that you need to understand and prosper in life.

I have two questions. And I'll ask them quickly, in succession. Because you may want to punt on the first one.

The first question is, I'm interested in any comments you might have that would expand on your general interest in the branded apparel companies, Liz Claiborne and Jones.

And the second question is, I wonder if you would comment on the future of Freddie Mac with all the current brouhaha.

Every year, there's new brouhaha, as you know, with the buyback of the 30-year bond and the search for a new benchmark and the Treasury saying that, perhaps, the agency securities were not backed by the full faith and credit of the government.

WARREN BUFFETT: Yeah, we — we're not going to be able to help you too much on some of those. Because we may have some views, but they may be things that we don't really want to talk about.

The Liz Claiborne and the Jones Apparel investments you're talking about, the Jones Apparel is a decision that was made by Lou Simpson at GEICO.

Lou runs a separate portfolio of equities for Berkshire. They're held in GEICO. But obviously, they're for the account of Berkshire. And that portfolio is well over 2 billion. And to some extent, it can be expanded or contracted based on what Lou would like to do.

And he runs that 100 percent on his own. And he's compensated based on how that portfolio does. He makes decisions, buying and selling, without talking to me at all, which is the way we like it.

Sometimes, there's an overlap in our decisions. But when I, for example, when I first found out about Jones Apparel, I'd never read an annual report of the company. I didn't know what they did or anything.

But that's Lou's baby. And he's very good at managing money. And he's a fellow that has 100 percent of my trust.

So I know his general criteria for investing, which is quite similar to mine, not identical, but quite similar to mine. And he's got a familiarity with businesses that, again, is quite similar to mine but not identical.

And he runs a good portfolio. And it makes life a little easier for me, not to have that two and a fraction billion added to all the rest that I'm having trouble investing.

Liz Claiborne came about a little differently. I got a call one weekend, actually, on purchasing a large block that someone was going to sell. And we bought that on a Monday morning in London, as I remember.

It was never reported on any exchange. I'm not quite sure even how it happened. But the broker that handled it arranged the trade over there.

And, you know, they've had a very, very decent record. They buy in their shares. I like the business that they run.

It's not a Coca-Cola-type business or a Gillette-type business or even an American Express business. But we were offered that stock at a very attractive price. And it's worked out fine.

The Freddie question, I'd rather not get into it, frankly. Because there's a lot of political overtones to that. But Charlie?

CHARLIE MUNGER: I can pass as well as you can.

WARREN BUFFETT: OK. (Laughter)

31. Berkshire's next CEO won't be a "caretaker"

WARREN BUFFETT: Number 7.

AUDIENCE MEMBER: Garesh Paku (PH) from Croton, New York. First, regarding — I just have a couple of questions.

First, regarding the succession issue. I just can't imagine that you would allow someone else to paint over your picture afterwards, I guess, post-truck.

So I was wondering, would the — is your — is the nature of your succession plans more of a caretaker role of the museum? Or is it more active? That's the —

WARREN BUFFETT: It would be more active. No, the last thing in the world I would want would be a caretaker. That would be — no, that would not — I would not want that to be my legacy.

32. Potential impacts of inflation on GEICO

AUDIENCE MEMBER: And the second question is regarding inflation. While I appreciate your focus on the specific businesses and your insistence that you not try to predict it, we've been very fortunate by successively lower rates of inflation.

And I'm wondering, with all of the money sloshing around and between real estate and stocks and all the other places, whether you are concerned about inflation, what effect that would have on the insurance businesses at Berkshire, and what you can do to guard against those risks.

WARREN BUFFETT: My record is just terrible, in terms of predicting the inflation rate. So, it is not something that enters into our decision making.

The big danger in — a speed-up of inflation would lead to more dollar volume in the insurance business. And more dollar volume is basically good for us, even though there might be a lag in pricing, that would eventually catch up and all that.

So, absent the next factor I'm going to mention, inflation is not necessarily harmful at all to something like a GEICO.

As you get into longer-tail liability lines, such as a General Re might have, inflation has this effect of hitting liabilities that were created four, five, 10 years earlier, maybe, and they get resettled in current dollars. And obviously, that ratchets up the cost of settling those liabilities, in kind of an unpredictable way.

The danger in inflation to something like GEICO would be that people get, during inflation, they get irritated about the price of everything going up.

And there are some things they can do something about. And there's others they can't. And then there are some they think they can, even though they can't. And one of those might be the cost of insurance.

So the people might get very upset with the system of auto insurance, when they see a very significant part of their annual budget. Because an auto insurance policy, on average, is significant to people, and virtually every consumer in the country.

And there could be a lot of pressure on legislatures to do a variety of things that might change the system in a major way.

It wouldn't reduce the number of cars that crashed into each other or the injuries that were done or anything else. But it would be a way of striking out against higher rates.

And people would be unhappy about those rates. And that also might reflect itself in difficulty getting the increases that were required to take care of the costs that were ratcheting up fast.

So net, I think, inflation is bad for the auto insurance business. Although, you can argue that, you know, GEICO —

I think when I first got interested in GEICO, they had about a — it was in 1951, I wrote it up in "Security I Like Best." I think they had about 175,000 policies. And I think they were writing about 7 million of business, which would be about 40 bucks a policy.

Now, if we were getting $40 a policy now, you know, our premium volume would — the company would be a whole lot less valuable than it is.

And so one way or another, it ended up going from that period of $40 an average policy to 12 — or $1,100 an average policy without the roof caving in on it.

And it has been made more valuable, in dollar terms, by a combination of inflation and a great business model, without it getting destroyed in the process.

Nevertheless, I would prefer a noninflationary environment. It's better for the whole world, over time. And that the way our hope goes.

And then we have this, so far, unwarranted fear that the kind of conditions that have existed over the last 15 years might cause a re-ignition of inflation, which to date, it hasn't.

I don't know any more about what's going to happen than you do on that.

Charlie?

CHARLIE MUNGER: I don't know anything, either. (Laughter)

33. International expansion: interesting but not easy

WARREN BUFFETT: Number 8.

AUDIENCE MEMBER: Good afternoon, gentlemen. My name is Zeke Turner, and currently finishing up my senior year at Taylor University in Indiana. So four more weeks, and I'm out of there. (Buffett laughs)

As someone studying finance, I do appreciate your comments as to the teaching of investment in academia. It certainly has some development it can make there. I do say that with hope that very few grad school admissions officers are listening right now.

But I do want to say a special thank you quickly, if I could, to all those professors who do have the intelligence and the guts to actually teach value investing on that level and go away from efficient market theories. I do kind of wish Benjamin Graham were still teaching.

Many questions have been asked as far as technology and its development into the business model. I think the greatest effect of this will probably be in the globalization of the economy. This has had, and will continue to have, a significant impact on the business model as we know it today.

Now, except for certain growth opportunities, this may have a smaller effect on companies such as See's Candy or Nebraska Furniture Mart, but has had and probably will continue to have a dramatic effect on companies like Gillette, Coke, who have significant international presence.

My question is, how does your approach change, if at all, in light of the international expansion?

I'm particularly interested in the introduction of greater difficulty in understanding the business models, in the understanding of the economic future and the economic risk associated with the international scene. In addition, do you actively search for a global scene for investment opportunities?

WARREN BUFFETT: Yeah. The answer is that we obviously like businesses that are good businesses at present volume and that have the chances to expand significantly with similar economics.

And with any business that's been around the United States a long time, there's probably more opportunity, potentially anyway, around the rest of the world than here.

And Coke has grown faster. Oh, it's grown well here. But it's grown faster around the world than here. And that's been true at Gillette, also, just because we were a more mature market.

So we love the idea of products that will travel. Some travel well. Some don't. I mean, it's an incredible world that way.

Candy bars don't seem to travel so well, you know. Soft drinks travel terrifically. And razor blades travel terrifically. But the Cadbury bars sell in England. And, you know, and the Hershey bars sell here. And it's very hard, with some items, to try —

In fact, within this country, it's amazing to me. We talk about having a mobile society. And people are moving all the time. And we're all watching the same television and everything else.

And the supermarket share of Dr. Pepper in Dallas is 18 and a fraction percent. And in Boston, it's six-tenths of one percent. I mean, 18 to 0.6, 30 times the market share.

Dr. Pepper's been around forever. You know, people move back and forth and everything. And how can you have that sort of a differential in this country?

Royal Crown Cola, 3 percent in Chicago, one-tenth of a percent, you know, maybe, in Detroit, a couple hundred miles away, same kind of people, all that sort of thing. And Royal Crown's been around for 75 years or whatever it may be, 50 years, at least.

And you get these incredible differences in what people do, even within this country. So it's not easy to predict how — if you can't predict how Dr. Pepper — if you can't figure out how to make Dr. —

If I owned Dr. Pepper and was selling 18 percent of the market in the supermarkets of Dallas, it would drive me crazy, you know, I was getting six-tenths of a percent in Boston. Or, I think it's five-tenths, maybe, in Detroit. That would drive me crazy, although maybe I should just be grateful that I've got 18 percent in Dallas.

It just — it's very hard to predict how products will travel. With See's Candy, you know, we have this incredible penetration in the West and particularly in California. We know it's the best candy.

Now, boxed chocolates just do not sell big in this country. The annual consumption is low. But it still seems that, if we can make a lot of money in California, we ought to be able to make some money in New York or Pennsylvania.

But we haven't figure out how to do it. And we've tried a lot of things.

So, the answer is we're always interested in geographical expansion, whether it's even in the United States or, going beyond that, into other countries.

It's not as easy as it looks. But when the chance to do it comes, then you ought to just pound and pound and pound.

And we occasionally have bought stocks in other countries. I wrote a fellow the other day that I read about in Germany about his business. I've never met him or anything else. But it sounded like he had a pretty good business. And it sounded like he might be my type of guy.

So I just wrote him a letter. Haven't heard back, either. But I may. The odds are against it. But it sounded to me like I'd buy his business, if he chose to write back and wanted to do something.

And we're very willing to do business, you know, in any country in the world, where we think we understand the nuances of the corporate governance system and taxation and that sort of thing.

We don't understand all 200 countries, by a long shot. But there's plenty we'd love to be in business in.

We looked at a very significant company in Japan a couple years ago. And some other fellow I know bought it and has done very well. It would've made sense for us. And we missed it.

We will continue to look at things, internationally. It makes a lot of sense. And we've got a lot of capital to employ.

We're more likely, by some margin, to find things here. But we may find a big one outside of this country.

Charlie?

CHARLIE MUNGER: Nothing to add.

34. Spending to expand GEICO's business

WARREN BUFFETT: OK. Number 1.

AUDIENCE MEMBER: I'm John Bailey (PH) from Boston, Massachusetts.

You commented, in the annual report, that only part of GEICO's marketing expense last year was required to maintain the business.

This seems to get to the heart of owner earnings, where, in the first part, you can value the existing business very well through this observation. And you get a direct measure of the dollars invested in new business.

And it seems that you should be able to make similar observations about other businesses that you may be interested in investing in.

So could you use this as a jumping off point to describe examples, perhaps, of how you contemplate companies' marginal investment opportunities or their return on marginal capital?

And how much weight do you give to the value of the existing business in your investment decisions or the value of the, so to speak, in-force book?

WARREN BUFFETT: Well, we, as we explained earlier, are looking for ways to create more than a dollar of value per dollar we lay out.

We'd love to create $3 of value or $4 of value. But we'll settle for $1.10, if that's all we can get.

We don't consciously make decisions that are 90-cent decisions for a dollar laid out. None of this is that precise, when you get into the application of it.

What we do know, is that there is enough of a margin at, say, a GEICO expansion effort, that it's pretty compelling that it makes sense. Part of the limitation there, as I explained in the report, too, is a question of infrastructure and all of that.

So, it isn't solely a question of saying, you know, "Can we lay out another dollar?" and "Will that have a value of $1.10?" because if we strain the organization beyond its ability to service people, we may be hurting the business already on the books.

I used the GEICO example in the report, because it's big enough, so it's meaningful to shareholders. I mean, we're doing things all the time that cost us money in the short run that we think will more that produce a commensurate value over time, but not on the scale that we're doing it at GEICO currently. And we may step up that scale even.

So, I thought it important to lay out those figures, even though I can't be precise. When I say, you know, that it might be $50 million to maintain, I don't know that figure. It could be 70. It could be 30. Maybe I'm off even more than that.

But that's my best guess. And I think the shareholders are entitled to my best guess. And they're entitled to know how much we are spending, beyond that maintenance cost, to build the business for the future, which we don't, obviously, capitalize on the balance sheet.

So those — GEICO's, by far, the most dramatic. And we don't have comparable expenditures like that going on elsewhere.

But we are spending significant money, for example, to take NetJets to Europe. And we'll be spending it this year and next year.

And then as soon as that starts looking good, we'll be going to Asia and spending more money. I mean, all of those decisions are made that way. They're not on the scale of the GEICO decision, though, at all.

We want to give you the information in the report that, related to the size of the enterprise, would be material to Charlie or me, if we were reading the report and not involved in the business, in trying to figure out what our investment was all about.

That's the goal in what we write and then to keep it to a size that doesn't have to be sent UPS.

35. Problems with Berkshire annual report distribution

WARREN BUFFETT: Incidentally, I'm glad I got wandering along on that line. Because we did have a lot of shareholders this year that got their reports even later than they received them in past years.

Now, they were delivered — the reports that go to registered holders were put in the mail a few days after we go up on the internet here in Omaha. And they seem to get delivered OK.

Street-name holders, which are ten times in number what the registered holders are, so we're really talking about nine out of ten shareholders, get their reports from a firm in New Jersey that is designated, by their broker, to take the reports from us and re-mail them. And we pay those people a fair amount of money to do that.

We know when we deliver those reports to them, which is promptly. And we know when they tell us that they send them out. And we inquire every day, or more than once a day, to find out whether they've gone out.

And we got a lot of complaints this year that people hadn't received them at a time when you would've thought they would've received them.

So, we can either — we know when the designated mailer received them. We don't know for sure when they got them out. And we don't know for sure what happens at the post office.

But we were — the mailing went out about the same as in previous years. But the receipt, apparently, was somewhat later. And all we can say is that we apologize, but we don't have any better system.

The people that have them in their own name will always get them dropped in the mail a couple of days after the report appears on the internet. We can assure you of that.

We can't assure you of when the street-name holders will get their reports, because that is a mailing that we don't handle. And no other companies handle them, to my knowledge.

There is a firm that seems to do about 95 percent of that and is designated by the specific broker with whom you have your shares.

Charlie, you got anything to add?

36. The internet's effect on GEICO and auto insurance pricing

WARREN BUFFETT: OK, number 2.

AUDIENCE MEMBER: Hi, Mr. Buffett and Mr. Munger. My name is Will Obendorf (PH). I'm from San Francisco, California, and I'm 11 years old. I have been a shareholder for six years at Berkshire Hathaway.

My questions are, what are GEICO's sustainable competitive advantages? And my other one is, what are the implications of the internet on pricing for the auto insurance industry?

WARREN BUFFETT: Well, we — we're going to get your name and send it to human relations or whatever they call those departments. We want to hire you. (Laughter)

The sustainable competitive advantage at GEICO is to be the low-cost producer providing very good service.

And there will be a number of companies that provide good services. So that does not distinguish us from a great many competitors.

Having the low cost is crucial. There are companies that specialize in given groups of policyholders, but smaller groups, such as USAA, that have very good costs. So they are very, very competitive with us in their chosen area.

There's another company in Los Angeles that, geographically, called 21st Century Insurance, that has costs like ours. And so they are extremely competitive within that geographic area.

I don't think anybody is any better than us who operates nationwide. We don't operate in Massachusetts or New Jersey. But in the other 48 states, we will have a quote for about anyone.

So, in terms of a broad-based insurance — auto insurance competitor — our competitive advantage has to be low cost over time.

Now, we also have to be as good at distinguishing among the risks posed by different kinds of drivers as other people. In other words, we have to be able to select people who are going to be better-than-average drivers. And we have to be able to understand who is likely to be a poorer-than-average driver.

But — and the ability to do that, to distinguish those people, would be a competitive advantage. I think that many companies tend to be fairly equal on that point. So it's really at this cost level.

And we care very much about cost, the same way that Charlie mentioned a company called Costco does, you know, in terms of retailing. They figure their expense ratios out to hundredths of a percent. And that is important.

So that is the competitive advantage. Now when you get — and we have to sustain and widen that, if possible.

The question of the internet, it's going to be very important. It already is important to GEICO. It will be more and more important. It will be important to the insurance industry.

Because when you have the internet, you have a situation where somebody thinking about insuring a car can click to one place, find out what that rate will be. They can click to someplace else and find out what that rate will be.

So, in effect, they can shop all around without going from place to place to place and driving all over town or calling lots of agencies. They can just do it right there in their den. And that makes it very important, again, that we be the low-cost company.

I think it's going to be an advantage for us, over time. For one thing, I think it makes brand very important. Because we want people to be thinking of GEICO as one of the possibilities to call.

And if you've got the XYZ Company that nobody's ever heard of, nobody's going to think about clicking on them.

And GEICO's brand is becoming extremely familiar to people throughout the country, and we're spending a lot of money to make it even more familiar.

So you've asked two very good questions. And I think we're in pretty good shape on both of them. Thank you.

Charlie?

37. We'll do real estate deals, but only at the right price

WARREN BUFFETT: Number 3.

AUDIENCE MEMBER: Good afternoon, Mr. Berkshire and Mr. Hathaway. (Laughter)

My name's Anthony Priest. I'm from Washington, D.C.

A couple months ago, I saw an ad in the "Wall Street Journal," where it said, "Berkshire Hathaway wants to see real estate finance opportunities in excess of $100 million."

I was curious about your thoughts in this area, the real estate field, some of your goals, if you can talk about any of the deals you may have made, and if Donald Trump has given you a call yet. (Laughter)

WARREN BUFFETT: I don't think Donald Trump will give us a call.

We have got about, what, three deals that we've put on in the last couple of years in real estate. And they are in this $100-million-and-up category.

And we're willing to put billions and billions of dollars in, if we can find the right sort of opportunities. Or nothing may happen, depending on — just depending on the market. We don't have —

Most — a lot of places have a mortgage department, or they have a real estate department. And they sort of have a budget. And they put money out based on using up the budget. And they have a whole bunch of people that don't have a job, unless they do that.

That's not the way we operate at Berkshire. We're willing — if the deals are right, you know, we'll do many billions. If the deals aren't right, we don't have anybody whose job is dependent on keeping busy in a field like that. So, we look at the deals when they come in.

Mike Goldberg is in charge of that operation. And we kick things around. He's in the office right next to mine. So, if he hears about a deal, you know, we'll discuss it for three minutes. And we'll sort of know whether it passes the first threshold. And then we'll go on to the second and the third.

But we don't waste a lot of time on things. And we don't care whether we make another deal or not. We'd like to, if the terms are right. And that ad produced some inquiries, not from Donald Trump.

And, you know, one or — there's one or two of — a couple of them are alive at the present time. And we'll see whether they work out.

Real estate deals, by their nature, take longer to put to bed than the kind of thing we normally do. In fact, I can buy a business faster than we can make a real estate deal, usually. That's just the way they work. But we could end up with a —

We're very happy with the three deals that we've got. They're good uses of money. And I hope we find a lot more. But if we don't, I won't be upset.

Charlie, do you have anything to add? Charlie's our real estate expert.

CHARLIE MUNGER: Hardly.

WARREN BUFFETT: We are not financing Charlie's boat, incidentally, despite the rumors. (Laughter)

38. Berkshire is not a "fund"

WARREN BUFFETT: Number 4.

AUDIENCE MEMBER: Hi, my name is Joel. I'm an undergraduate student at the University of Virginia. Just — I have two questions.

My first question is, how important do you think the structure of your fund is to its long-term success?

And by that, I mean, in the last couple weeks, some other legendary investors, like Julian Robertson, Stanley Druckenmiller, have been forced to either close or restructure their funds as a result of a kind of vicious cycle of underperformance and subsequent redemptions and then even worse performance.

Do you think that the structure of your fund, as a publically-traded company, as opposed to a private partnership, like Tiger and Quantum, has protected your business from a similar fate?

Or phrased a different way, do you think that, if Tiger or Quantum were structured the way that Berkshire Hathaway is, that they might still be in business in the same way today?

WARREN BUFFETT: Yeah, we don't consider ourselves in remotely the same business as Tiger. I mean, they are managing a securities operation. And we aren't doing anything like what they do. So that — they have —

Thirty years ago, when I had the partnership, it was much more along their lines, although still far from what they do. But it was structured much more like what they did.

And I — and, although we had bought control of businesses and all that, we were functioning much more — or, focusing much more on securities.

We don't care whether we own a stock or a bond. We will over the next 20 years. But that's not what we're about. We're not a fund. We are an operating business that generates a lot of capital and uses that to buy other businesses in whole or part.

And we prefer in whole. But we sometimes do it in part.

But I would — I don't consider — which is a reason why I don't consider book value that important, although it — it's got the importance I attributed to it earlier.

But, we could easily have 90 percent of the value of Berkshire, ten years from now, be represented by businesses that we own and 10 percent by securities. Or we could very easily have 60 or 70 percent represented by securities, depending on how markets develop.

I hope it develops in the former way. But I'm perfectly willing to go the other way, too. But it just has no relationship to the kind of funds you talk about. They —

We are structured poorly, from a tax standpoint, compared to those fellows, and compared to what I used to have in the '60s.

But that's, you know, that's a decision we made. And we're stuck with it, more or less.

It's not a great tax structure, if you're going to own securities. But we may not own that many securities over time.

Charlie?

CHARLIE MUNGER: Well, I do think that the people in the relative performance game, who are trying to attract so-called hot money, are living in a totally different world from ours.

I mean, Soros, in the end, was not willing to have a lot of people make a lot of money in high-tech stocks and not be part of that game. And they got killed.

We're perfectly willing to let something we don't understand very well rage on while a lot of other people make a lot of money we don't.

WARREN BUFFETT: Yeah, we — it's just not a securities operation that we have. We own a lot of securities at present. And we'll probably own a lot five or 10 years from now. But it's not what Berkshire is necessarily about.

Ideally, you know, I would love it if we could move all the money in securities into businesses that we liked. But that's — that isn't going to happen, in all probability.

It's too tough, because we can't find multi-billion-dollar businesses to buy right and left. We find a few. But they tend to be small.

39. We wouldn't buy a company that lies to itself

WARREN BUFFETT: Number 5?

AUDIENCE MEMBER: My name is Paul Tomasik from Chicago. My question is about intellectual honesty and your incredible ability of rising intellectual honesty in organizations.

In particular, you look at General Re, a large, well-managed, publically-traded firm. And if you think about it, if you raise the intellectual honesty in an organization like that, initially, you're going to have an aberration, as you called it.

In particular, Berkshire Hathaway was the first company to write-down the Uni — what is it — Unicover write-down, whereas Aon pushed it on into the year 2000.

Can you comment, give us some hints, on how you raise the intellectual honesty in an organization?

And somebody whispered in my ear, they wanted to know Charlie's reading list. I guess they finished "Guns, Germs, and Steel." Thank you.

WARREN BUFFETT: We really don't want to buy into any organization that we felt would be lacking that quality, in the first place. Because we really don't believe in buying into organizations to change them.

We may, you know, we may change the comp system a little or something of the sort.

But, I'm not going to name names, but there are a whole lot of organizations that, if we bought into them, we wouldn't move their needle one point in terms of how they operate. And we wouldn't be comfortable with how they operated.

So, we try to buy into organizations that we think are very much like ours, at bedrock. And General Re would've recognized that Unicover loss just as quickly if we hadn't owned it, as we had.

Now, that was not true of some other people. But they didn't need any prodding from us in order to realize something like that.

We want people joining us who already are the type that face reality and that tell us, basically, tell us the truth but tell themselves the truth, which is even more important.

And once you get an organization that lies to itself, and there are plenty that do, I just think you get into all kinds of problems.

And people know it throughout the organization. And they adopt the norms of what they think is happening up above them.

And particularly in a financial organization — really in any organization — but particularly in a financial organization, you know, that is death over time. And we wouldn't buy into something that we felt had that problem, with the idea that we would correct it. Because we wouldn't.

You know, it — Charlie and I have had a little experience with some organizations that have had that sort of problem. And it's not correctable, at least, you know, based on the lifespan of humans. It's too much to commit to.

Charlie?

CHARLIE MUNGER: Well, I think you're totally right about General Re. We didn't improve behavior at General Re. They already had a behavior just like ours.

And regarding a reading list, by the mischances of life, I didn't read one book last year that I thought was a lollapalooza. Therefore, I didn't make any recommendations to that bookstore at the airport.

WARREN BUFFETT: Charlie, how many books do you think you've read, though? He reads a lot.

CHARLIE MUNGER: Well, I don't count. And some of them, I skim through pretty fast. But there was no lollapalooza. A book like "Guns, Germs, and Steel" doesn't come along every year.

WARREN BUFFET: OK —

CHARLIE MUNGER: And by the way, that guy was a little nuts in one way.

WARREN BUFFETT: It's hard to get an A from Charlie. (Laughter)

40. Berkshire's competitive advantages in reinsurance

WARREN BUFFETT: OK, is it 6 we're going to?

AUDIENCE MEMBER: Hello. My name's James Armstrong (PH) from Pittsburgh, Pennsylvania. Thanks for having us.

I'd like you to comment, please, on the reinsurance business and how it might look over the next 10 or 20 years.

At Berkshire, we've usually bought businesses that are insulated to some degree from easy entry by new competitors and from commodity-type pricing. We want businesses that possess defensible franchises, few substitutes, resistance to cyclical factors, et cetera.

The reinsurance business carries a lot of characteristics that are the opposite of what we usually look for. There's a lot of excess capacity. We're hindered by irrational and unwise pricing decisions by competitors.

For GenRe to prove out as an investment for us, we need better underwriting. And we also need prices to harden.

But in a world with great global liquidity, where capital moves very rapidly from place to place, why wouldn't the reinsurance business gradually evolve into a poor business, where all excess returns are competed away, where price is never firm for very long because a new entrant arises and throws capital at the business?

So I'd like you to comment on how GenRe could be made to work. And also, give us a broad view of how the reinsurance business might unfold in the next 10 or 20 years. Thanks.

WARREN BUFFETT: OK. You made some good points. And, I — we have been, actually, in the reinsurance business, at Berkshire Hathaway, for 30 years.

So it's a business, obviously, that we've paid a lot of attention to. And we've gotten some scars from it at times. But overall, we've done extremely well.

And the reason we've done extremely well is because we've had an absolutely sensational manager in Ajit Jain, who I wrote about, running that business.

But Ajit is a good example of what somebody with brains and energy and discipline and the right temperament and some capital behind him can do in a business.

It's not the world's most efficient business. And it never will be the world's most efficient business, because it's not strictly actuarial. It —

All excess returns will not be competed away. There will be people that will earn very subnormal returns in the business. There will be people who get killed in the business. And that means there will be quite a deviation from the mean in terms of the results of individual insurers.

And we think that both at National Indemnity, under Ajit, and at General Re, that we have advantages, so that our returns will be significantly better than average.

But both of our businesses are subject to getting killed in any single year, will get killed in specific years, but also, in our view, will do better than average and more than satisfactory, in terms of Berkshire Hathaway's results.

You know, I can't prove that to you now. I can show you what's happened over the past years.

I don't think the situation in reinsurance is way different than some years back. There's always dumb competitors. There's always a lot of capital in the business.

In the '85, 1985, 1986 period, people felt very poor. But it wasn't really a lack of financial capital. It was psychological capital that disappeared. People were just plain scared. And that was the best of times to be writing business, obviously. You know we like to —

Prices are somewhat better now. But there are always people that misevaluate risk. And when they misevaluate risk, it's our job to let them have the business.

That's easier to do with Ajit's business in National Indemnity than it is with General Re, because General Re has long-term relationships with many accounts.

And the question of what you do when your competitor offers a price that's a little too low, with somebody you've been doing business with for 50 years, is a very tough decision to make.

And so sometimes, they probably do some business that might be labeled as "necessarily evil." And Charlie always says that he doesn't mind an occasional transaction like that, as long as you underline evil and not necessary.

The nature of people in the business, usually, particularly the frontline guy, who was calling on the account, is to underline necessary. And as owners, our tendency is to underline evil.

GenRe has done a terrific job, over the years, of balancing the necessity of continuing a relationship so long with the discipline of making sure they get paid enough.

That was not done perfectly last year. And the conditions were very difficult for doing it perfectly, I might add, too.

But I think that, both at Ajit's operation and at General Re, we have two businesses that will do very well, in terms of what we get out of them and very well compared to their competition, but occasionally will have a very bad year.

I mean, we could have something happen tomorrow, you know, a Tokyo earthquake. Or, I can name a bunch of them that would result in a very bad year. And that's what we're getting paid for.

And if we price with discipline, our 20-year results can't be bad, no matter what any one year produces. And if we don't price with discipline, we'll get killed over time.

Charlie?

CHARLIE MUNGER: Yeah. I don't think the reinsurance business is quite as much of a commodity business as might first appear. It's not like an execution transaction when you sell government bonds or something, where one broker is roughly just as good as another.

There's such a huge time lag between the time the premium is paid and the time the performance is given that you're making a — the customer is making a big prediction about the insurer's, A, willingness to pay what it really owes and, B, its ability to pay what it really owes.

I think we have a huge edge in reputation and actuality, with reference to both those two factors.

WARREN BUFFETT: Yeah, we have a reputational advantage. And I think that, in actuality, it's even stronger than the reputational advantage. I mean, I can't think of a case where there's been any problem with having Berkshire or General Re write a check very promptly for anything it owed.

I mean, we've, you know, we have never been subject to people suing us and getting money later on or anything like that after fighting us out in courts. It just — it's not the nature, it's not the attitude we bring toward the reinsurance transaction.

And we have a reputational advantage. But like I said, I don't think it's quite as wide as it should be in some cases, even.

And then we have a huge attitudinal advantage in that we have no need, none, to write more business, or the same amount of business, or even something close to the amount of business, next year that we wrote this year.

We — there is no — there are no volume goals at Berkshire Hathaway at all. And that is not true at most insurance organizations.

We report the results as they come in and as we see them, which also, I think, gives us an advantage in being realistic about all aspects of our business.

We have huge amounts of capital behind us. So we can take large pieces of attractive business and keep them all for our own accounts.

So we have a lot of advantages in the business. And they will translate into something better than the rest of the world gets.

I don’t know how much better. And I don’t know how much the rest of the world will get. But it’s not insignificant, the advantages we have in the business.

Note: The following table appears in the printed Annual Report on the facing page of the Chairman's Letter and is referred to in that letter.

Berkshire's Corporate Performance vs. the S&P 500

Year	Annual Percentage Change in Per-Share Book Value of Berkshire (1)	Annual Percentage Change in S&P 500 with Dividends Included (2)	Relative Results (1)-(2)
1965	23.8	10.0	13.8
1966	20.3	(11.7)	32.0
1967	11.0	30.9	(19.9)
1968	19.0	11.0	8.0
1969	16.2	(8.4)	24.6
1970	12.0	3.9	8.1
1971	16.4	14.6	1.8
1972	21.7	18.9	2.8
1973	4.7	(14.8)	19.5
1974	5.5	(26.4)	31.9
1975	21.9	37.2	(15.3)
1976	59.3	23.6	35.7
1977	31.9	(7.4)	39.3
1978	24.0	6.4	17.6
1979	35.7	18.2	17.5
1980	19.3	32.3	(13.0)
1981	31.4	(5.0)	36.4
1982	40.0	21.4	18.6
1983	32.3	22.4	9.9
1984	13.6	6.1	7.5
1985	48.2	31.6	16.6
1986	26.1	18.6	7.5
1987	19.5	5.1	14.4
1988	20.1	16.6	3.5
1989	44.4	31.7	12.7
1990	7.4	(3.1)	10.5
1991	39.6	30.5	9.1
1992	20.3	7.6	12.7
1993	14.3	10.1	4.2
1994	13.9	1.3	12.6
1995	43.1	37.6	5.5
1996	31.8	23.0	8.8
1997	34.1	33.4	.7
1998	48.3	28.6	19.7
1999	.5	21.0	(20.5)
2000	6.5	(9.1)	15.6
Average Annual Gain – 1965-2000	23.6%	11.8%	11.8%
Overall Gain – 1964-2000	207,821%	5,383%	202,438%

Notes: Data are for calendar years with these exceptions: 1965 and 1966, year ended 9/30; 1967, 15 months ended 12/31.

Starting in 1979, accounting rules required insurance companies to value the equity securities they hold at market rather than at the lower of cost or market, which was previously the requirement. In this table, Berkshire's results through 1978 have been restated to conform to the changed rules. In all other respects, the results are calculated using the numbers originally reported.

The S&P 500 numbers are **pre-tax** whereas the Berkshire numbers are **after-tax**. If a corporation such as Berkshire were simply to have owned the S&P 500 and accrued the appropriate taxes, its results would have lagged the S&P 500 in years when that index showed a positive return, but would have exceeded the S&P in years when the index showed a negative return. Over the years, the tax costs would have caused the aggregate lag to be substantial.

BERKSHIRE HATHAWAY INC.

To the Shareholders of Berkshire Hathaway Inc.:

Our gain in net worth during 2000 was $3.96 billion, which increased the per-share book value of both our Class A and Class B stock by 6.5%. Over the last 36 years (that is, since present management took over) per-share book value has grown from $19 to $40,442, a gain of 23.6% compounded annually.*

Overall, we had a decent year, our book-value gain having outpaced the performance of the S&P 500. And, though this judgment is necessarily subjective, we believe Berkshire's gain in per-share intrinsic value moderately exceeded its gain in book value. (Intrinsic value, as well as other key investment and accounting terms and concepts, are explained in our Owner's Manual on pages 59-66. Intrinsic value is discussed on page 64.)

Furthermore, we completed two significant acquisitions that we negotiated in 1999 and initiated six more. All told, these purchases have cost us about $8 billion, with 97% of that amount paid in cash and 3% in stock. The eight businesses we've acquired have aggregate sales of about $13 billion and employ 58,000 people. Still, we incurred no debt in making these purchases, and our shares outstanding have increased only $^1/_3$ of 1%. Better yet, we remain awash in liquid assets and are both eager and ready for even larger acquisitions.

I will detail our purchases in the next section of the report. But I will tell you now that we have embraced the 21st century by entering such cutting-edge industries as brick, carpet, insulation and paint. Try to control your excitement.

On the minus side, policyholder growth at GEICO slowed to a halt as the year progressed. It has become much more expensive to obtain new business. I told you last year that we would get our money's worth from stepped-up advertising at GEICO in 2000, but I was wrong. We'll examine the reasons later in the report.

Another negative — which has persisted for several years — is that we see our equity portfolio as only mildly attractive. We own stocks of some excellent businesses, but most of our holdings are fully priced and are unlikely to deliver more than moderate returns in the future. We're not alone in facing this problem: The long-term prospect for equities in general is far from exciting.

Finally, there is the negative that recurs annually: Charlie Munger, Berkshire's Vice Chairman and my partner, and I are a year older than when we last reported to you. Mitigating this adverse development is the indisputable fact that the age of your top managers is increasing at a considerably lower rate — *percentage-wise* — than is the case at almost all other major corporations. Better yet, this differential will widen in the future.

Charlie and I continue to aim at increasing Berkshire's per-share value at a rate that, over time, will modestly exceed the gain from owning the S&P 500. As the table on the facing page shows, a small annual advantage in our favor can, if sustained, produce an anything-but-small long-term advantage. To reach our goal we will need to add a few good businesses to Berkshire's stable each year, have the businesses we own generally gain in value, and avoid any material increase in our outstanding shares. We are confident about meeting the last two objectives; the first will require some luck.

It's appropriate here to thank two groups that made my job both easy and fun last year — just as they do every year. First, our operating managers continue to run their businesses in splendid fashion, which allows me to spend my time allocating capital rather than supervising them. (I wouldn't be good at that anyway.)

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*All figures used in this report apply to Berkshire's A shares, the successor to the only stock that the company had outstanding before 1996. The B shares have an economic interest equal to 1/30th that of the A.

Our managers are a very special breed. At most large companies, the truly talented divisional managers seldom have the job they really want. Instead they yearn to become CEOs, either at their present employer or elsewhere. Indeed, if they stay put, they and their colleagues are likely to feel they have failed.

At Berkshire, our all-stars have *exactly* the jobs they want, ones that they hope and expect to keep throughout their business lifetimes. They therefore concentrate solely on maximizing the long-term value of the businesses that they "own" and love. If the businesses succeed, they have succeeded. And they stick with us: In our last 36 years, Berkshire has never had a manager of a significant subsidiary voluntarily leave to join another business.

The other group to which I owe enormous thanks is the home-office staff. After the eight acquisitions more than doubled our worldwide workforce to about 112,000, Charlie and I went soft last year and added one more person at headquarters. (Charlie, bless him, never lets me forget Ben Franklin's advice: "A small leak can sink a great ship.") Now we have 13.8 people.

This tiny band works miracles. In 2000 it handled all of the details connected with our eight acquisitions, processed extensive regulatory and tax filings (our tax return covers 4,896 pages), smoothly produced an annual meeting to which 25,000 tickets were issued, and accurately dispensed checks to 3,660 charities designated by our shareholders. In addition, the group dealt with all the routine tasks served up by a company with a revenue run-rate of $40 billion and more than 300,000 owners. And, to add to all of this, the other 12.8 are a delight to be around.

I should pay to have my job.

Acquisitions of 2000

Our acquisition technique at Berkshire is simplicity itself: We answer the phone. I'm also glad to report that it rings a bit more often now, because owners and/or managers increasingly wish to join their companies with Berkshire. Our acquisition criteria are set forth on page 23, and the number to call is 402-346-1400.

Let me tell you a bit about the businesses we have purchased during the past 14 months, starting with the two transactions that were initiated in 1999, but closed in 2000. (This list excludes some smaller purchases that were made by the managers of our subsidiaries and that, in most cases, will be integrated into their operations.)

- I described the first purchase — 76% of **MidAmerican Energy** — in last year's report. Because of regulatory constraints on our voting privileges, we perform only a "one-line" consolidation of MidAmerican's earnings and equity in our financial statements. If we instead fully consolidated the company's figures, our revenues in 2000 would have been $5 billion greater than we reported, though net income would remain the same.

- On November 23, 1999, I received a one-page fax from Bruce Cort that appended a *Washington Post* article describing an aborted buyout of **CORT Business Services**. Despite his name, Bruce has no connection with CORT. Rather, he is an airplane broker who had sold Berkshire a jet in 1986 and who, before the fax, had not been in touch with me for about ten years.

  I knew nothing about CORT, but I immediately printed out its SEC filings and liked what I saw. That same day I told Bruce I had a possible interest and asked him to arrange a meeting with Paul Arnold, CORT's CEO. Paul and I got together on November 29, and I knew at once that we had the right ingredients for a purchase: a fine though unglamorous business, an outstanding manager, and a price (going by that on the failed deal) that made sense.

  Operating out of 117 showrooms, CORT is the national leader in "rent-to-rent" furniture, primarily used in offices but also by temporary occupants of apartments. This business, it should be noted, has no similarity to "rent-to-own" operations, which usually involve the sale of home furnishings and electronics to people having limited income and poor credit.

We quickly purchased CORT for Wesco, our 80%-owned subsidiary, paying about $386 million in cash. You will find more details about CORT's operations in Wesco's 1999 and 2000 annual reports. Both Charlie and I enjoy working with Paul, and CORT looks like a good bet to beat our original expectations.

- Early last year, Ron Ferguson of General Re put me in contact with Bob Berry, whose family had owned **U.S. Liability** for 49 years. This insurer, along with two sister companies, is a medium-sized, highly-respected writer of unusual risks — "excess and surplus lines" in insurance jargon. After Bob and I got in touch, we agreed by phone on a half-stock, half-cash deal.

  In recent years, Tom Nerney has managed the operation for the Berry family and has achieved a rare combination of excellent growth and unusual profitability. Tom is a powerhouse in other ways as well. In addition to having four adopted children (two from Russia), he has an extended family: the Philadelphia Belles, a young-teen girls basketball team that Tom coaches. The team had a 62-4 record last year and finished second in the AAU national tournament.

  Few property-casualty companies are outstanding businesses. We have far more than our share, and U.S. Liability adds luster to the collection.

- **Ben Bridge Jeweler** was another purchase we made by phone, prior to any face-to-face meeting between me and the management. Ed Bridge, who with his cousin, Jon, manages this 65-store West Coast retailer, is a friend of Barnett Helzberg, from whom we bought Helzberg Diamonds in 1995. Upon learning that the Bridge family proposed to sell its company, Barnett gave Berkshire a strong recommendation. Ed then called and explained his business to me, also sending some figures, and we made a deal, again half for cash and half for stock.

  Ed and Jon are fourth generation owner-managers of a business started 89 years ago in Seattle. Both the business and the family— including Herb and Bob, the fathers of Jon and Ed — enjoy extraordinary reputations. Same-store sales have increased by 9%, 11%, 13%, 10%, 12%, 21% and 7% over the past seven years, a truly remarkable record.

  It was vital to the family that the company operate in the future as in the past. No one wanted another jewelry chain to come in and decimate the organization with ideas about synergy and cost saving (which, though they would never work, were certain to be tried). I told Ed and Jon that they would be in charge, and they knew I could be believed: After all, it's obvious that your Chairman would be a disaster at actually running a store or selling jewelry (though there are members of his family who have earned black belts as purchasers).

  In their typically classy way, the Bridges allocated a substantial portion of the proceeds from their sale to the hundreds of co-workers who had helped the company achieve its success. We're proud to be associated with both the family and the company.

- In July we acquired **Justin Industries**, the leading maker of Western boots — including the Justin, Tony Lama, Nocona, and Chippewa brands — and the premier producer of brick in Texas and five neighboring states.

  Here again, our acquisition involved serendipity. On May 4th, I received a fax from Mark Jones, a stranger to me, proposing that Berkshire join a group to acquire an unnamed company. I faxed him back, explaining that with rare exceptions we don't invest with others, but would happily pay him a commission if he sent details and we later made a purchase. He replied that the "mystery company" was Justin. I then went to Fort Worth to meet John Roach, chairman of the company and John Justin, who had built the business and was its major shareholder. Soon after, we bought Justin for $570 million in cash.

  John Justin loved Justin Industries but had been forced to retire because of severe health problems (which sadly led to his death in late February). John was a class act — as a citizen, businessman and human being. Fortunately, he had groomed two outstanding managers, Harrold Melton at Acme and Randy Watson at Justin Boot, each of whom runs his company autonomously.

Acme, the larger of the two operations, produces more than one billion bricks per year at its 22 plants, about 11.7% of the industry's national output. The brick business, however, is necessarily regional, and in its territory Acme enjoys unquestioned leadership. When Texans are asked to name a brand of brick, 75% respond Acme, compared to 16% for the runner-up. (Before our purchase, I couldn't have named a brand of brick. Could you have?) This brand recognition is not only due to Acme's product quality, but also reflects many decades of extraordinary community service by both the company and John Justin.

I can't resist pointing out that Berkshire — whose top management has long been mired in the 19th century — is now one of the very few authentic "clicks-and-bricks" businesses around. We went into 2000 with GEICO doing significant business on the Internet, and then we added Acme. You can bet this move by Berkshire is making them *sweat* in Silicon Valley.

- In June, Bob Shaw, CEO of **Shaw Industries**, the world's largest carpet manufacturer, came to see me with his partner, Julian Saul, and the CEO of a second company with which Shaw was mulling a merger. The potential partner, however, faced huge asbestos liabilities from past activities, and any deal depended on these being eliminated through insurance.

  The executives visiting me wanted Berkshire to provide a policy that would pay *all* future asbestos costs. I explained that though we could write an exceptionally large policy — far larger than any other insurer would ever think of offering — we would never issue a policy that lacked a cap.

  Bob and Julian decided that if we didn't want to bet the ranch on the extent of the acquiree's liability, neither did they. So their deal died. But my interest in Shaw was sparked, and a few months later Charlie and I met with Bob to work out a purchase by Berkshire. A key feature of the deal was that both Bob and Julian were to continue owning at least 5% of Shaw. This leaves us associated with the best in the business as shown by Bob and Julian's record: Each built a large, successful carpet business before joining forces in 1998.

  Shaw has annual sales of about $4 billion, and we own 87.3% of the company. Leaving aside our insurance operation, Shaw is by far our largest business. Now, if people walk all over us, we won't mind.

- In July, Bob Mundheim, a director of **Benjamin Moore Paint**, called to ask if Berkshire might be interested in acquiring it. I knew Bob from Salomon, where he was general counsel during some difficult times, and held him in very high regard. So my answer was "Tell me more."

  In late August, Charlie and I met with Richard Roob and Yvan Dupuy, past and present CEOs of Benjamin Moore. We liked them; we liked the business; and we made a $1 billion cash offer on the spot. In October, their board approved the transaction, and we completed it in December. Benjamin Moore has been making paint for 117 years and has thousands of independent dealers that are a vital asset to its business. Make sure you specify our product for your next paint job.

- Finally, in late December, we agreed to buy **Johns Manville Corp.** for about $1.8 billion. This company's incredible odyssey over the last few decades — too multifaceted to be chronicled here — was shaped by its long history as a manufacturer of asbestos products. The much-publicized health problems that affected many people exposed to asbestos led to JM's declaring bankruptcy in 1982.

  Subsequently, the bankruptcy court established a trust for victims, the major asset of which was a controlling interest in JM. The trust, which sensibly wanted to diversify its assets, agreed last June to sell the business to an LBO buyer. In the end, though, the LBO group was unable to obtain financing.

Consequently, the deal was called off on Friday, December 8th. The following Monday, Charlie and I called Bob Felise, chairman of the trust, and made an all-cash offer with no financing contingencies. The next day the trustees voted tentatively to accept our offer, and a week later we signed a contract.

JM is the nation's leading producer of commercial and industrial insulation and also has major positions in roofing systems and a variety of engineered products. The company's sales exceed $2 billion and the business has earned good, if cyclical, returns. Jerry Henry, JM's CEO, had announced his retirement plans a year ago, but I'm happy to report that Charlie and I have convinced him to stick around.

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Two economic factors probably contributed to the rush of acquisition activity we experienced last year. First, many managers and owners foresaw near-term slowdowns in their businesses — and, in fact, we purchased several companies whose earnings will almost certainly decline this year from peaks they reached in 1999 or 2000. The declines make no difference to us, given that we expect all of our businesses to now and then have ups and downs. (Only in the sales presentations of investment banks do earnings move forever upward.) We don't care about the bumps; what matters are the overall results. But the decisions of other people are sometimes affected by the near-term outlook, which can both spur sellers and temper the enthusiasm of purchasers who might otherwise compete with us.

A second factor that helped us in 2000 was that the market for junk bonds dried up as the year progressed. In the two preceding years, junk bond purchasers had relaxed their standards, buying the obligations of ever-weaker issuers at inappropriate prices. The effects of this laxity were felt last year in a ballooning of defaults. In this environment, "financial" buyers of businesses — those who wish to buy using only a sliver of equity — became unable to borrow all they thought they needed. What they could still borrow, moreover, came at a high price. Consequently, LBO operators became less aggressive in their bidding when businesses came up for sale last year. Because we analyze purchases on an all-equity basis, our evaluations did not change, which means we became considerably more competitive.

Aside from the economic factors that benefited us, we now enjoy a major and growing advantage in making acquisitions in that we are often the buyer of choice for the seller. That fact, of course, doesn't assure a deal — sellers have to like our price, and we have to like their business and management — but it does help.

We find it meaningful when an owner *cares* about whom he sells to. We like to do business with someone who loves his company, not just the money that a sale will bring him (though we certainly understand why he likes that as well). When this emotional attachment exists, it signals that important qualities will likely be found within the business: honest accounting, pride of product, respect for customers, and a loyal group of associates having a strong sense of direction. The reverse is apt to be true, also. When an owner auctions off his business, exhibiting a total lack of interest in what follows, you will frequently find that it has been dressed up for sale, particularly when the seller is a "financial owner." And if owners behave with little regard for their business and its people, their conduct will often contaminate attitudes and practices throughout the company.

When a business masterpiece has been created by a lifetime — or several lifetimes — of unstinting care and exceptional talent, it should be important to the owner what corporation is entrusted to carry on its history. Charlie and I believe Berkshire provides an almost unique home. We take our obligations to the people who created a business very seriously, and Berkshire's ownership structure ensures that we can fulfill our promises. When we tell John Justin that his business will remain headquartered in Fort Worth, or assure the Bridge family that its operation will not be merged with another jeweler, these sellers can take those promises to the bank.

How much better it is for the "painter" of a business Rembrandt to personally select its permanent home than to have a trust officer or uninterested heirs auction it off. Throughout the years we have had great experiences with those who recognize that truth and apply it to their business creations. We'll leave the auctions to others.

The Economics of Property/Casualty Insurance

Our main business — though we have others of great importance — is insurance. To understand Berkshire, therefore, it is necessary that you understand how to evaluate an insurance company. The key determinants are: (1) the amount of float that the business generates; (2) its cost; and (3) most critical of all, the long-term outlook for both of these factors.

To begin with, float is money we hold but don't own. In an insurance operation, float arises because premiums are received before losses are paid, an interval that sometimes extends over many years. During that time, the insurer invests the money. This pleasant activity typically carries with it a downside: The premiums that an insurer takes in usually do not cover the losses and expenses it eventually must pay. That leaves it running an "underwriting loss," which is the cost of float. An insurance business has value if its cost of float over time is less than the cost the company would otherwise incur to obtain funds. But the business is a lemon if its cost of float is higher than market rates for money.

A caution is appropriate here: Because loss costs must be estimated, insurers have enormous latitude in figuring their underwriting results, and that makes it very difficult for investors to calculate a company's true cost of float. Errors of estimation, usually innocent but sometimes not, can be huge. The consequences of these miscalculations flow directly into earnings. An experienced observer can usually detect large-scale errors in reserving, but the general public can typically do no more than accept what's presented, and at times I have been amazed by the numbers that big-name auditors have implicitly blessed. Both the income statements and balance sheets of insurers can be minefields.

At Berkshire, we strive to be both consistent and conservative in our reserving. But we will make mistakes. And we warn you that there is nothing symmetrical about surprises in the insurance business: They almost always are unpleasant.

The table that follows shows (at intervals) the float generated by the various segments of Berkshire's insurance operations since we entered the business 34 years ago upon acquiring National Indemnity Company (whose traditional lines are included in the segment "Other Primary"). For the table we have calculated our float — which we generate in large amounts relative to our premium volume — by adding net loss reserves, loss adjustment reserves, funds held under reinsurance assumed and unearned premium reserves, and then subtracting insurance-related receivables, prepaid acquisition costs, prepaid taxes and deferred charges applicable to assumed reinsurance. (Don't panic, there won't be a quiz.)

Yearend Float (in $ millions)

Year	GEICO	General Re	Other Reinsurance	Other Primary	Total
1967				20	20
1977			40	131	171
1987			701	807	1,508
1997	2,917		4,014	455	7,386
1998	3,125	14,909	4,305	415	22,754
1999	3,444	15,166	6,285	403	25,298
2000	3,943	15,525	7,805	598	27,871

We're pleased by the growth in our float during 2000 but not happy with its cost. Over the years, our cost of float has been very close to zero, with the underwriting profits realized in most years offsetting the occasional terrible year such as 1984, when our cost was a staggering 19%. In 2000, however, we had an underwriting loss of $1.6 billion, which gave us a float cost of 6%. Absent a mega-catastrophe, we expect our float cost to fall in 2001 — perhaps substantially — in large part because of corrections in pricing at General Re that should increasingly be felt as the year progresses. On a smaller scale, GEICO may experience the same improving trend.

There are two factors affecting our cost of float that are very rare at other insurers but that now loom large at Berkshire. First, a few insurers that are currently experiencing large losses have offloaded a significant portion of

these on us in a manner that penalizes our current earnings but gives us float we can use for many years to come. After the loss that we incur in the first year of the policy, there are *no* further costs attached to this business.

When these policies are properly priced, we welcome the pain-today, gain-tomorrow effects they have. In 1999, $400 million of our underwriting loss (about 27.8% of the total) came from business of this kind and in 2000 the figure was $482 million (34.4% of our loss). We have no way of predicting how much similar business we will write in the future, but what we do get will typically be in large chunks. Because these transactions can materially distort our figures, we will tell you about them as they occur.

Other reinsurers have little taste for this insurance. They simply can't stomach what huge underwriting losses do to their reported results, even though these losses are produced by policies whose overall economics are certain to be favorable. You should be careful, therefore, in comparing our underwriting results with those of other insurers.

An even more significant item in our numbers — which, again, you won't find much of elsewhere — arises from transactions in which we assume *past* losses of a company that wants to put its troubles behind it. To illustrate, the XYZ insurance company might have last year bought a policy obligating us to pay the first $1 billion of losses and loss adjustment expenses from events that happened in, say, 1995 and earlier years. These contracts can be very large, though we always require a cap on our exposure. We entered into a number of such transactions in 2000 and expect to close several more in 2001.

Under GAAP accounting, this "retroactive" insurance neither benefits nor penalizes our current earnings. Instead, we set up an asset called "deferred charges applicable to assumed reinsurance," in an amount reflecting the difference between the premium we receive and the (higher) losses we expect to pay (for which reserves are immediately established). We then amortize this asset by making annual charges to earnings that create equivalent underwriting losses. You will find the amount of the loss that we incur from these transactions in both our quarterly and annual management discussion. By their nature, these losses will continue for many years, often stretching into decades. As an offset, though, we have the use of float — lots of it.

Clearly, float carrying an annual cost of this kind is not as desirable as float we generate from policies that are expected to produce an underwriting profit (of which we have plenty). Nevertheless, this retroactive insurance should be decent business for us.

The net of all this is that a) I expect our cost of float to be very attractive in the future but b) rarely to return to a "no-cost" mode because of the annual charge that retroactive reinsurance will lay on us. Also — obviously — the ultimate benefits that we derive from float will depend not only on its cost but, fully as important, how effectively we deploy it.

Our retroactive business is almost single-handedly the work of Ajit Jain, whose praises I sing annually. It is impossible to overstate how valuable Ajit is to Berkshire. Don't worry about my health; worry about his.

Last year, Ajit brought home a $2.4 billion reinsurance premium, perhaps the largest in history, from a policy that retroactively covers a major U.K. company. Subsequently, he wrote a large policy protecting the Texas Rangers from the possibility that Alex Rodriguez will become permanently disabled. As sports fans know, "A-Rod" was signed for $252 million, a record, and we think that our policy probably also set a record for disability insurance. We cover many other sports figures as well.

In another example of his versatility, Ajit last fall negotiated a very interesting deal with Grab.com, an Internet company whose goal was to attract millions of people to its site and there to extract information from them that would be useful to marketers. To lure these people, Grab.com held out the possibility of a $1 billion prize (having a $170 million present value) and we insured its payment. A message on the site explained that the chance of anyone winning the prize was low, and indeed no one won. But the possibility of a win was far from nil.

Writing such a policy, we receive a modest premium, face the possibility of a huge loss, and get good odds. Very few insurers like that equation. And they're unable to cure their unhappiness by reinsurance. Because each policy has unusual — and sometimes unique — characteristics, insurers can't lay off the occasional shock loss

through their standard reinsurance arrangements. Therefore, any insurance CEO doing a piece of business like this must run the small, but real, risk of a horrible quarterly earnings number, one that he would not enjoy explaining to his board or shareholders. Charlie and I, however, like any proposition that makes compelling mathematical sense, regardless of its effect on reported earnings.

At General Re, the news has turned considerably better: Ron Ferguson, along with Joe Brandon, Tad Montross, and a talented supporting cast took many actions during 2000 to bring that company's profitability back to past standards. Though our pricing is not fully corrected, we have significantly repriced business that was severely unprofitable or dropped it altogether. If there's no mega-catastrophe in 2001, General Re's float cost should fall materially.

The last couple of years haven't been any fun for Ron and his crew. But they have stepped up to tough decisions, and Charlie and I applaud them for these. General Re has several important and enduring business advantages. Better yet, it has managers who will make the most of them.

In aggregate, our smaller insurance operations produced an excellent underwriting profit in 2000 while generating significant float — just as they have done for more than a decade. If these companies were a single and separate operation, people would consider it an outstanding insurer. Because the companies instead reside in an enterprise as large as Berkshire, the world may not appreciate their accomplishments — but I sure do. Last year I thanked Rod Eldred, John Kizer, Don Towle and Don Wurster, and I again do so. In addition, we now also owe thanks to Tom Nerney at U.S. Liability and Michael Stearns, the new head of Cypress.

You may notice that Brad Kinstler, who *was* CEO of Cypress and whose praises I've sung in the past, is no longer in the list above. That's because we needed a new manager at Fechheimer Bros., our Cincinnati-based uniform company, and called on Brad. We seldom move Berkshire managers from one enterprise to another, but maybe we should try it more often: Brad is hitting home runs in his new job, just as he always did at Cypress.

GEICO (1-800-847-7536 or GEICO.com)

We show below the usual table detailing GEICO's growth. Last year I enthusiastically told you that we would step up our expenditures on advertising in 2000 and that the added dollars were the best investment that GEICO could make. I was wrong: The extra money we spent did not produce a commensurate increase in inquiries. Additionally, the percentage of inquiries that we converted into sales fell for the first time in many years. These negative developments combined to produce a sharp increase in our per-policy acquisition cost.

Years	New Auto Policies[1]	Auto Policies In-Force[1]
1993	346,882	2,011,055
1994	384,217	2,147,549
1995	443,539	2,310,037
1996	592,300	2,543,699
1997	868,430	2,949,439
1998	1,249,875	3,562,644
1999	1,648,095	4,328,900
2000	1,472,853	4,696,842

[1] "Voluntary" only; excludes assigned risks and the like.

Agonizing over errors is a mistake. But acknowledging and analyzing them can be useful, though that practice is rare in corporate boardrooms. There, Charlie and I have almost never witnessed a candid post-mortem of a failed decision, *particularly one involving an acquisition*. A notable exception to this never-look-back approach is that of The Washington Post Company, which unfailingly and objectively reviews its acquisitions three years after they are made. Elsewhere, triumphs are trumpeted, but dumb decisions either get no follow-up or are rationalized.

The financial consequences of these boners are regularly dumped into massive restructuring charges or write-offs that are casually waved off as "nonrecurring." Managements just love these. Indeed, in recent years it has seemed that no earnings statement is complete without them. The origins of these charges, though, are never explored. When it comes to corporate blunders, CEOs invoke the concept of the Virgin Birth.

To get back to our examination of GEICO: There are at least four factors that could account for the increased costs we experienced in obtaining new business last year, and all probably contributed in some manner.

First, in our advertising we have pushed "frequency" very hard, and we probably overstepped in certain media. We've always known that increasing the number of messages through any medium would eventually produce diminishing returns. The third ad in an hour on a given cable channel is simply not going to be as effective as the first.

Second, we may have already picked much of the low-hanging fruit. Clearly, the willingness to do business with a direct marketer of insurance varies widely among individuals: Indeed, some percentage of Americans — particularly older ones — are reluctant to make direct purchases of any kind. Over the years, however, this reluctance will ebb. A new generation with new habits will find the savings from direct purchase of their auto insurance too compelling to ignore.

Another factor that surely decreased the conversion of inquiries into sales was stricter underwriting by GEICO. Both the frequency and severity of losses increased during the year, and rates in certain areas became inadequate, in some cases substantially so. In these instances, we necessarily tightened our underwriting standards. This tightening, as well as the many rate increases we put in during the year, made our offerings less attractive to some prospects.

A high percentage of callers, it should be emphasized, can still save money by insuring with us. Understandably, however, some prospects will switch to save $200 per year but will not switch to save $50. Therefore, rate increases that bring our prices closer to those of our competitors will hurt our acceptance rate, even when we continue to offer the best deal.

Finally, the competitive picture changed in at least one important respect: State Farm — by far the largest personal auto insurer, with about 19% of the market — has been very slow to raise prices. Its costs, however, are clearly increasing right along with those of the rest of the industry. Consequently, State Farm had an underwriting loss last year from auto insurance (including rebates to policyholders) of 18% of premiums, compared to 4% at GEICO. Our loss produced a float cost for us of 6.1%, an unsatisfactory result. (Indeed, at GEICO we expect float, over time, to be free.) But we estimate that State Farm's float cost in 2000 was about 23%. The willingness of the largest player in the industry to tolerate such a cost makes the economics difficult for other participants.

That does not take away from the fact that State Farm is one of America's greatest business stories. I've urged that the company be studied at business schools because it has achieved fabulous success while following a path that in many ways defies the dogma of those institutions. Studying counter-evidence is a highly useful activity, though not one always greeted with enthusiasm at citadels of learning.

State Farm was launched in 1922, by a 45-year-old, semi-retired Illinois farmer, to compete with long-established insurers — haughty institutions in New York, Philadelphia and Hartford — that possessed overwhelming advantages in capital, reputation, and distribution. Because State Farm is a mutual company, its board members and managers could not be owners, and it had no access to capital markets during its years of fast growth. Similarly, the business never had the stock options or lavish salaries that many people think vital if an American enterprise is to attract able managers and thrive.

In the end, however, State Farm eclipsed all its competitors. In fact, by 1999 the company had amassed a tangible net worth exceeding that of all but four American businesses. If you want to read how this happened, get a copy of *The Farmer from Merna*.

Despite State Farm's strengths, however, GEICO has much the better business model, one that embodies significantly lower operating costs. And, when a company is selling a product with commodity-like economic characteristics, being the low-cost producer is all-important. This enduring competitive advantage of GEICO — one it possessed in 1951 when, as a 20-year-old student, I first became enamored with its stock — is the reason that over time it will inevitably increase its market share significantly while simultaneously achieving excellent profits. Our growth will be slow, however, if State Farm elects to continue bearing the underwriting losses that it is now suffering.

Tony Nicely, GEICO's CEO, remains an owner's dream. Everything he does makes sense. He never engages in wishful thinking or otherwise distorts reality, as so many managers do when the unexpected happens. As 2000 unfolded, Tony cut back on advertising that was not cost-effective, and he will continue to do that in 2001 if cutbacks are called for (though we will always maintain a *massive* media presence). Tony has also aggressively filed for price increases where we need them. He looks at the loss reports every day and is never behind the curve. To steal a line from a competitor, we are in good hands with Tony.

I've told you about our profit-sharing arrangement at GEICO that targets only two variables — growth in policies and the underwriting results of seasoned business. Despite the headwinds of 2000, we still had a performance that produced an 8.8% profit-sharing payment, amounting to $40.7 million.

GEICO will be a huge part of Berkshire's future. Because of its rock-bottom operating costs, it offers a great many Americans the cheapest way to purchase a high-ticket product that they *must* buy. The company then couples this bargain with service that consistently ranks high in independent surveys. That's a combination inevitably producing growth and profitability.

In just the last few years, *far* more drivers have learned to associate the GEICO brand with saving money on their insurance. We will pound that theme relentlessly until all Americans are aware of the value that we offer.

Investments

Below we present our common stock investments. Those that had a market value of more than $1 billion at the end of 2000 are itemized.

		12/31/00	
Shares	*Company*	*Cost*	*Market*
		(dollars in millions)	
151,610,700	American Express Company	$1,470	$ 8,329
200,000,000	The Coca-Cola Company	1,299	12,188
96,000,000	The Gillette Company	600	3,468
1,727,765	The Washington Post Company	11	1,066
55,071,380	Wells Fargo & Company	319	3,067
	Others	6,703	9,501
	Total Common Stocks	$10,402	$ 37,619

In 2000, we sold nearly all of our Freddie Mac and Fannie Mae shares, established 15% positions in several mid-sized companies, bought the high-yield bonds of a few issuers (very few — the category is not labeled junk without reason) and added to our holdings of high-grade, mortgage-backed securities. There are no "bargains" among our current holdings: We're content with what we own but far from excited by it.

Many people assume that marketable securities are Berkshire's first choice when allocating capital, but that's not true: Ever since we first published our economic principles in 1983, we have consistently stated that we would rather purchase businesses than stocks. (See number 4 on page 60.) One reason for that preference is personal, in that I love working with our managers. They are high-grade, talented and loyal. And, frankly, I find their business behavior to be more rational and owner-oriented than that prevailing at many public companies.

But there's also a powerful financial reason behind the preference, and that has to do with taxes. The tax code makes Berkshire's owning 80% or more of a business far more profitable for us, proportionately, than our owning a smaller share. When a company we own all of earns $1 million after tax, the entire amount inures to our benefit. If the $1 million is upstreamed to Berkshire, we owe no tax on the dividend. And, if the earnings are retained and we were to sell the subsidiary — not likely at Berkshire! — for $1million more than we paid for it, we would owe no capital gains tax. That's because our "tax cost" upon sale would include both what we paid for the business and all earnings it subsequently retained.

Contrast that situation to what happens when we own an investment in a marketable security. There, if we own a 10% stake in a business earning $10 million after tax, our $1 million share of the earnings is subject to *additional* state and federal taxes of (1) about $140,000 if it is distributed to us (our tax rate on most dividends is 14%); or (2) no less than $350,000 if the $1 million is retained and subsequently captured by us in the form of a capital gain (on which our tax rate is usually about 35%, though it sometimes approaches 40%). We may defer paying the $350,000 by not immediately realizing our gain, but eventually we must pay the tax. In effect, the government is our "partner" twice when we own part of a business through a stock investment, but only once when we own at least 80%.

Leaving aside tax factors, the formula we use for evaluating stocks and businesses is identical. Indeed, the formula for valuing *all* assets that are purchased for financial gain has been unchanged since it was first laid out by a very smart man in about 600 B.C. (though he wasn't smart enough to know it was 600 B.C.).

The oracle was Aesop and his enduring, though somewhat incomplete, investment insight was "a bird in the hand is worth two in the bush." To flesh out this principle, you must answer only three questions. How certain are you that there are indeed birds in the bush? When will they emerge and how many will there be? What is the risk-free interest rate (which we consider to be the yield on long-term U.S. bonds)? If you can answer these three questions, you will know the maximum value of the bush — and the maximum number of the birds you now possess that should be offered for it. And, of course, don't literally think birds. Think dollars.

Aesop's investment axiom, thus expanded and converted into dollars, is immutable. It applies to outlays for farms, oil royalties, bonds, stocks, lottery tickets, and manufacturing plants. And neither the advent of the steam engine, the harnessing of electricity nor the creation of the automobile changed the formula one iota — nor will the Internet. Just insert the correct numbers, and you can rank the attractiveness of all possible uses of capital throughout the universe.

Common yardsticks such as dividend yield, the ratio of price to earnings or to book value, and even growth rates have *nothing* to do with valuation except to the extent they provide clues to the amount and timing of cash flows into and from the business. Indeed, growth can destroy value if it requires cash inputs in the early years of a project or enterprise that exceed the discounted value of the cash that those assets will generate in later years. Market commentators and investment managers who glibly refer to "growth" and "value" styles as contrasting approaches to investment are displaying their ignorance, not their sophistication. Growth is simply a component — usually a plus, sometimes a minus — in the value equation.

Alas, though Aesop's proposition and the third variable — that is, interest rates — are simple, plugging in numbers for the other two variables is a difficult task. Using precise numbers is, in fact, foolish; working with a range of possibilities is the better approach.

Usually, the range must be so wide that no useful conclusion can be reached. Occasionally, though, even very conservative estimates about the future emergence of birds reveal that the price quoted is startlingly low in relation to value. (Let's call this phenomenon the IBT — Inefficient Bush Theory.) To be sure, an investor needs some general understanding of business economics as well as the ability to think independently to reach a well-founded positive conclusion. But the investor does not need brilliance nor blinding insights.

At the other extreme, there are many times when the *most* brilliant of investors can't muster a conviction about the birds to emerge, not even when a very broad range of estimates is employed. This kind of uncertainty frequently occurs when new businesses and rapidly changing industries are under examination. In cases of this sort, *any* capital commitment must be labeled speculative.

Now, speculation — in which the focus is not on what an asset will produce but rather on what the next fellow will pay for it — is neither illegal, immoral nor un-American. But it is not a game in which Charlie and I wish to play. We bring nothing to the party, so why should we expect to take anything home?

The line separating investment and speculation, which is never bright and clear, becomes blurred still further when most market participants have recently enjoyed triumphs. Nothing sedates rationality like large doses of effortless money. After a heady experience of that kind, normally sensible people drift into behavior akin to that of Cinderella at the ball. They know that overstaying the festivities — that is, continuing to speculate in companies that have gigantic valuations relative to the cash they are likely to generate in the future — will eventually bring on pumpkins and mice. But they nevertheless hate to miss a single minute of what is one helluva party. Therefore, the giddy participants all plan to leave just seconds before midnight. There's a problem, though: They are dancing in a room in which the clocks have no hands.

Last year, we commented on the exuberance — and, yes, it was irrational — that prevailed, noting that investor expectations had grown to be several multiples of probable returns. One piece of evidence came from a Paine Webber-Gallup survey of investors conducted in December 1999, in which the participants were asked their opinion about the annual returns investors could expect to realize over the decade ahead. Their answers averaged 19%. That, for sure, was an irrational expectation: For American business as a whole, there couldn't possibly be enough birds in the 2009 bush to deliver such a return.

Far more irrational still were the huge valuations that market participants were then putting on businesses almost certain to end up being of modest or no value. Yet investors, mesmerized by soaring stock prices and ignoring all else, piled into these enterprises. It was as if some virus, racing wildly among investment professionals as well as amateurs, induced hallucinations in which the values of stocks in certain sectors became decoupled from the values of the businesses that underlay them.

This surreal scene was accompanied by much loose talk about "value creation." We readily acknowledge that there has been a huge amount of true value created in the past decade by new or young businesses, and that there is much more to come. But value is destroyed, not created, by any business that loses money over its lifetime, no matter how high its interim valuation may get.

What actually occurs in these cases is wealth *transfer*, often on a massive scale. By shamelessly merchandising birdless bushes, promoters have in recent years moved billions of dollars from the pockets of the public to their own purses (and to those of their friends and associates). The fact is that a bubble market has allowed the creation of bubble companies, entities designed more with an eye to making money *off* investors rather than *for* them. Too often, an IPO, not profits, was the primary goal of a company's promoters. At bottom, the "business model" for these companies has been the old-fashioned chain letter, for which many fee-hungry investment bankers acted as eager postmen.

But a pin lies in wait for every bubble. And when the two eventually meet, a new wave of investors learns some very old lessons: First, many in Wall Street — a community in which quality control is not prized — will sell investors anything they will buy. Second, speculation is most dangerous when it looks easiest.

At Berkshire, we make *no* attempt to pick the few winners that will emerge from an ocean of unproven enterprises. We're not smart enough to do that, and we know it. Instead, we try to apply Aesop's 2,600-year-old equation to opportunities in which we have reasonable confidence as to how many birds are in the bush and when they will emerge (a formulation that my grandsons would probably update to "A girl in a convertible is worth five in the phonebook."). Obviously, we can never precisely predict the timing of cash flows in and out of a business or their exact amount. We try, therefore, to keep our estimates conservative and to focus on industries where business surprises are unlikely to wreak havoc on owners. Even so, we make many mistakes: I'm the fellow, remember, who thought he understood the future economics of trading stamps, textiles, shoes and second-tier department stores.

Lately, the most promising "bushes" have been negotiated transactions for entire businesses, and that pleases us. You should clearly understand, however, that these acquisitions will at best provide us only reasonable returns. Really juicy results from negotiated deals can be anticipated only when capital markets are severely constrained and the whole business world is pessimistic. We are 180 degrees from that point.

Sources of Reported Earnings

The table that follows shows the main sources of Berkshire's reported earnings. In this presentation, purchase-accounting adjustments are not assigned to the specific businesses to which they apply, but are instead aggregated and shown separately. This procedure lets you view the earnings of our businesses as they would have been reported had we not purchased them. For the reasons discussed on page 65, this form of presentation seems to us to be more useful to investors and managers than one utilizing generally accepted accounting principles (GAAP), which require purchase-premiums to be charged off business-by-business. The total net earnings we show in the table are, of course, identical to the GAAP total in our audited financial statements.

	(in millions)			
	Pre-Tax Earnings		*Berkshire's Share of Net Earnings (after taxes and minority interests)*	
	2000	*1999*	*2000*	*1999*
Operating Earnings:				
Insurance Group:				
Underwriting – Reinsurance	$(1,399)	$(1,440)	$(899)	$(927)
Underwriting – GEICO	(224)	24	(146)	16
Underwriting – Other Primary	38	22	24	14
Net Investment Income	2,747	2,482	1,929	1,764
Finance and Financial Products Business	556	125	360	86
Flight Services	213	225	126	132
MidAmerican Energy (76% owned)	197	--	109	--
Retail Operations	175	130	104	77
Scott Fetzer (excluding finance operation)	122	147	80	92
Other Businesses	225	210	134	131
Purchase-Accounting Adjustments	(881)	(739)	(843)	(648)
Corporate Interest Expense	(92)	(109)	(61)	(70)
Shareholder-Designated Contributions	(17)	(17)	(11)	(11)
Other	39	25	30	15
Operating Earnings	1,699	1,085	936	671
Capital Gains from Investments	3,955	1,365	2,392	886
Total Earnings – All Entities	$5,654	$2,450	$3,328	$1,557

Most of our manufacturing, retailing and service businesses did at least reasonably well last year.

The exception was shoes, particularly at Dexter. In our shoe businesses generally, our attempt to keep the bulk of our production in domestic factories has cost us dearly. We face another very tough year in 2001 also, as we make significant changes in how we do business.

I clearly made a mistake in paying what I did for Dexter in 1993. Furthermore, I compounded that mistake in a huge way by using Berkshire shares in payment. Last year, to recognize my error, we charged off all the remaining accounting goodwill that was attributable to the Dexter transaction. We may regain some economic goodwill at Dexter in the future, but we clearly have none at present.

The managers of our shoe businesses are first-class from both a business and human perspective. They are working very hard at a tough — and often terribly painful — job, even though their personal financial circumstances don't require them to do so. They have my admiration and thanks.

On a more pleasant note, we continue to be the undisputed leader in two branches of Aircraft Services — pilot training at FlightSafety (FSI) and fractional ownership of business jets at Executive Jet (EJA). Both companies are run by their remarkable founders.

Al Ueltschi at FSI is now 83 and continues to operate at full throttle. Though I am not a fan of stock splits, I am planning to split Al's age 2-for-1 when he hits 100. (If it works, guess who's next.)

We spent $272 million on flight simulators in 2000, and we'll spend a similar amount this year. Anyone who thinks that the annual charges for depreciation don't reflect a real cost — every bit as real as payroll or raw materials — should get an internship at a simulator company. Every year we spend amounts equal to our depreciation charge simply to stay in the same economic place — and then spend additional sums to grow. And growth is in prospect for FSI as far as the eye can see.

Even faster growth awaits EJA (whose fractional-ownership program is called NetJets®). Rich Santulli is the dynamo behind this business.

Last year I told you that EJA's recurring revenue from monthly management fees and hourly usage grew by 46% in 1999. In 2000 the growth was 49%. I also told you that this was a low-margin business, in which survivors will be few. Margins were indeed slim at EJA last year, in part because of the major costs we are incurring in developing our business in Europe.

Regardless of the cost, you can be sure that EJA's spending on safety will be whatever is needed. Obviously, we would follow this policy under any circumstances, but there's some self-interest here as well: I, my wife, my children, my sisters, my 94-year-old aunt, all but one of our directors, and at least nine Berkshire managers regularly fly in the NetJets program. Given that cargo, I applaud Rich's insistence on unusually high amounts of pilot training (an average of 23 days a year). In addition, our pilots cement their skills by flying 800 or so hours a year. Finally, each flies only one model of aircraft, which means our crews do no switching around among planes with different cockpit and flight characteristics.

EJA's business continues to be constrained by the availability of new aircraft. Still, our customers will take delivery of more than 50 new jets in 2001, 7% of world output. We are confident we will remain the world leader in fractional ownership, in respect to number of planes flying, quality of service, and standards of safety.

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Additional information about our various businesses is given on pages 42-58, where you will also find our segment earnings reported on a GAAP basis. In addition, on pages 67-73, we have rearranged Berkshire's financial data into four segments on a non-GAAP basis, a presentation that corresponds to the way Charlie and I think about the company.

Look-Through Earnings

Reported earnings are an inadequate measure of economic progress at Berkshire, in part because the numbers shown in the table on page 15 include only the dividends we receive from investees — though these dividends typically represent only a small fraction of the earnings attributable to our ownership. To depict something closer to economic reality at Berkshire than reported earnings, though, we employ the concept of "look-through" earnings. As we calculate these, they consist of: (1) the operating earnings reported on page 15; plus; (2) our share of the retained operating earnings of major investees that, under GAAP accounting, are not reflected in our profits, less; (3) an allowance for the tax that would be paid by Berkshire if these retained earnings of investees had instead been distributed to us. When tabulating "operating earnings" here, we exclude purchase-accounting adjustments as well as capital gains and other major non-recurring items.

The following table sets forth our 2000 look-through earnings, though I warn you that the figures can be no more than approximate, since they are based on a number of judgment calls. (The dividends paid to us by these investees have been included in the operating earnings itemized on page 15, mostly under "Insurance Group: Net Investment Income.")

Berkshire's Major Investees	Berkshire's Approximate Ownership at Yearend[1]	Berkshire's Share of Undistributed Operating Earnings (in millions)[2]
American Express Company	11.4%	$265
The Coca-Cola Company	8.1%	160
Freddie Mac	0.3%	106
The Gillette Company	9.1%	51
M&T Bank	7.2%	23
The Washington Post Company	18.3%	18
Wells Fargo & Company	3.2%	117
Berkshire's share of undistributed earnings of major investees		740
Hypothetical tax on these undistributed investee earnings[3]		(104)
Reported operating earnings of Berkshire		1,779
Total look-through earnings of Berkshire		$ 2,415

(1) Does not include shares allocable to minority interests
(2) Calculated on average ownership for the year
(3) The tax rate used is 14%, which is the rate Berkshire pays on most dividends it receives

Full and Fair Reporting

At Berkshire, full reporting means giving you the information that we would wish you to give to us if our positions were reversed. What Charlie and I would want under that circumstance would be all the important facts about current operations as well as the CEO's frank view of the long-term economic characteristics of the business. We would expect both a lot of financial details and a discussion of any significant data we would need to interpret what was presented.

When Charlie and I read reports, we have no interest in pictures of personnel, plants or products. References to EBITDA make us shudder — does management think the tooth fairy pays for capital expenditures? We're very suspicious of accounting methodology that is vague or unclear, since too often that means management wishes to hide something. And we don't want to read messages that a public relations department or consultant has turned out. Instead, we expect a company's CEO to explain in his or her own words what's happening.

For us, fair reporting means getting information to our 300,000 "partners" simultaneously, or as close to that mark as possible. We therefore put our annual and quarterly financials on the Internet between the close of the market on a Friday and the following morning. By our doing that, shareholders and other interested investors have timely access to these important releases and also have a reasonable amount of time to digest the information they include before the markets open on Monday. This year our quarterly information will be available on the Saturdays of May 12, August 11, and November 10. The 2001 annual report will be posted on March 9.

We applaud the work that Arthur Levitt, Jr., until recently Chairman of the SEC, has done in cracking down on the corporate practice of "selective disclosure" that had spread like cancer in recent years. Indeed, it had become virtually standard practice for major corporations to "guide" analysts or large holders to earnings expectations that were intended either to be on the nose or a tiny bit below what the company truly expected to earn. Through the selectively dispersed hints, winks and nods that companies engaged in, speculatively-minded institutions and advisors were given an information edge over investment-oriented individuals. This was corrupt behavior, unfortunately embraced by both Wall Street and corporate America.

Thanks to Chairman Levitt, whose general efforts on behalf of investors were both tireless and effective, corporations are now required to treat all of their owners equally. The fact that this reform came about because of coercion rather than conscience should be a matter of shame for CEOs and their investor relations departments.

One further thought while I'm on my soapbox: Charlie and I think it is both deceptive and dangerous for CEOs to predict growth rates for their companies. They are, of course, frequently egged on to do so by both analysts and their own investor relations departments. They should resist, however, because too often these predictions lead to trouble.

It's fine for a CEO to have his own internal goals and, in our view, it's even appropriate for the CEO to publicly express some hopes about the future, if these expectations are accompanied by sensible caveats. But for a major corporation to predict that its per-share earnings will grow over the long term at, say, 15% annually is to court trouble.

That's true because a growth rate of that magnitude can only be maintained by a very small percentage of large businesses. Here's a test: Examine the record of, say, the 200 highest earning companies from 1970 or 1980 and tabulate how many have increased per-share earnings by 15% annually since those dates. You will find that only a handful have. I would wager you a very significant sum that fewer than 10 of the 200 most profitable companies in 2000 will attain 15% annual growth in earnings-per-share over the next 20 years.

The problem arising from lofty predictions is not just that they spread unwarranted optimism. Even more troublesome is the fact that they corrode CEO behavior. Over the years, Charlie and I have observed many instances in which CEOs engaged in uneconomic operating maneuvers so that they could meet earnings targets they had announced. Worse still, after exhausting all that operating acrobatics would do, they sometimes played a wide variety of accounting games to "make the numbers." These accounting shenanigans have a way of snowballing: Once a company moves earnings from one period to another, operating shortfalls that occur thereafter require it to engage in further accounting maneuvers that must be even more "heroic." These can turn fudging into fraud. (More money, it has been noted, has been stolen with the point of a pen than at the point of a gun.)

Charlie and I tend to be leery of companies run by CEOs who woo investors with fancy predictions. A few of these managers will prove prophetic — but others will turn out to be congenital optimists, or even charlatans. Unfortunately, it's not easy for investors to know in advance which species they are dealing with.

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I've warned you in the past that you should not believe everything you read or hear about Berkshire — even when it is published or broadcast by a prestigious news organization. Indeed, erroneous reports are particularly dangerous when they are circulated by highly-respected members of the media, simply because most readers and listeners know these outlets to be generally credible and therefore believe what they say.

An example is a glaring error about Berkshire's activities that appeared in the December 29 issue of *The Wall Street Journal*, a generally excellent paper that I have for all of my life found useful. On the front page (and above the fold, as they say) *The Journal* published a news brief that said, in unequivocal terms, that we were buying bonds of Conseco and Finova. This item directed the reader to the lead story of the Money and Investing section. There, in the second paragraph of the story, *The Journal* reported, *again without any qualification*, that Berkshire was buying Conseco and Finova bonds, adding that Berkshire had invested "several hundred million dollars" in each. Only in the 18th paragraph of the story (which by that point had jumped to an inside page) did the paper hedge a bit, saying that our Conseco purchases had been disclosed by "people familiar with the matter."

Well, not *that* familiar. True, we had purchased bonds and bank debt of Finova — though the report was wildly inaccurate as to the amount. But to this day neither Berkshire nor I have *ever* bought a share of stock or a bond of Conseco.

Berkshire is normally covered by a *Journal* reporter in Chicago who is both accurate and conscientious. In this case, however, the "scoop" was the product of a New York reporter for the paper. Indeed, the 29th was a busy day for him: By early afternoon, he had repeated the story on CNBC. Immediately, in lemming-like manner, other respected news organizations, relying solely on the *Journal*, began relating the same "facts." The result: Conseco stock advanced sharply during the day on exceptional volume that placed it ninth on the NYSE most-active list.

During all of the story's iterations, I never heard or read the word "rumor." Apparently reporters and editors, who generally pride themselves on their careful use of language, just can't bring themselves to attach this word to their accounts. But what description would fit more precisely? Certainly not the usual "sources say" or "it has been reported."

A column entitled "Today's Rumors," however, would not equate with the self-image of the many news organizations that think themselves above such stuff. These members of the media would feel that publishing such acknowledged fluff would be akin to *L'Osservatore Romano* initiating a gossip column. But rumors are what these organizations often publish and broadcast, whatever euphemism they duck behind. At a minimum, readers deserve honest terminology — a warning label that will protect their financial health in the same way that smokers whose physical health is at risk are given a warning.

The Constitution's First Amendment allows the media to print or say almost anything. Journalism's First Principle should require that the media be scrupulous in deciding what that will be.

Miscellaneous

In last year's report we examined the battle then raging over the use of "pooling" in accounting for mergers. It seemed to us that both sides were voicing arguments that were strong in certain respects and seriously flawed in others. We are pleased that the Financial Accounting Standards Board has since gone to an alternative approach that strikes us as very sound.

If the proposed rule becomes final, we will no longer incur a large annual charge for amortization of intangibles. Consequently, our reported earnings will more closely reflect economic reality. (See page 65.) None of this will have an effect on Berkshire's intrinsic value. Your Chairman, however, will personally benefit in that there will be one less item to explain in these letters.

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I'm enclosing a report — generously supplied by *Outstanding Investor Digest* — of Charlie's remarks at last May's Wesco annual meeting. Charlie thinks about business economics and investment matters better than anyone I know, and I've learned a lot over the years by listening to him. Reading his comments will improve your understanding of Berkshire.

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In 1985, we purchased Scott Fetzer, acquiring not only a fine business but the services of Ralph Schey, a truly outstanding CEO, as well. Ralph was then 61. Most companies, focused on the calendar rather than ability, would have benefited from Ralph's talents for only a few years.

At Berkshire, in contrast, Ralph ran Scott Fetzer for 15 years until his retirement at the end of 2000. Under his leadership, the company distributed $1.03 billion to Berkshire against our net purchase price of $230 million. We used these funds, in turn, to purchase other businesses. All told, Ralph's contributions to Berkshire's present value extend well into the billions of dollars.

As a manager, Ralph belongs in Berkshire's Hall of Fame, and Charlie and I welcome him to it.

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A bit of nostalgia: It was exactly 50 years ago that I entered Ben Graham's class at Columbia. During the decade before, I had enjoyed — make that *loved* ¾ analyzing, buying and selling stocks. But my results were no better than average.

Beginning in 1951 my performance improved. No, I hadn't changed my diet or taken up exercise. The only new ingredient was Ben's ideas. Quite simply, a few hours spent at the feet of the master proved far more valuable to me than had ten years of supposedly original thinking.

In addition to being a great teacher, Ben was a wonderful friend. My debt to him is incalculable.

Shareholder-Designated Contributions

About 97% of all eligible shares participated in Berkshire's 2000 shareholder-designated contributions program, with contributions totaling $16.9 million. A full description of the program appears on pages 74-75.

Cumulatively, over the 20 years of the program, Berkshire has made contributions of $164 million pursuant to the instructions of our shareholders. The rest of Berkshire's giving is done by our subsidiaries, which stick to the philanthropic patterns that prevailed before they were acquired (except that their former owners themselves take on the responsibility for their personal charities). In aggregate, our subsidiaries made contributions of $18.3 million in 2000, including in-kind donations of $3 million.

To participate in future programs, you must own Class A shares that are registered in the name of the actual owner, not the nominee name of a broker, bank or depository. Shares not so registered on August 31, 2001 will be ineligible for the 2001 program. When you get the contributions form from us, return it promptly so that it does not get put aside or forgotten. Designations received after the due date will not be honored.

The Annual Meeting

Last year we moved the annual meeting to the Civic Auditorium, and it worked very well for us. We will meet there again on Saturday, April 28. The doors will open at 7 a.m., the movie will begin at 8:30, and the meeting itself will commence at 9:30. There will be a short break at noon for food, with sandwiches available at the Civic's concession stands. Except for that interlude, Charlie and I will answer questions until 3:30.

For the next couple of years, the Civic is our only choice. We must therefore hold the meeting on either Saturday or Sunday to avoid the traffic and parking nightmare that would occur on a weekday. Shortly, however, Omaha will have a new Convention Center with ample parking. Assuming that the Center is then available to us, I will poll shareholders to see whether you wish to return to a Monday meeting. We will decide that vote based on the wishes of a majority of shareholders, not shares.

An attachment to the proxy material that is enclosed with this report explains how you can obtain the credential you will need for admission to this year's meeting and other events. As for plane, hotel and car reservations, we have again signed up American Express (800-799-6634) to give you special help. In our normal fashion, we will run buses from the larger hotels to the meeting. After the meeting, the buses will make trips back to the hotels and to Nebraska Furniture Mart, Borsheim's and the airport. Even so, you are likely to find a car useful.

We have added so many new companies to Berkshire this year that I'm not going to detail all of the products that we will be *selling* at the meeting. But come prepared to carry home everything from bricks to candy. One new product, however, deserves special note: Bob Shaw has designed a 3 x 5 rug featuring an excellent likeness of Charlie. Obviously, it would be embarrassing for Charlie — make that humiliating — if slow sales forced us to slash the rug's price, so step up and do your part.

GEICO will have a booth staffed by a number of its top counselors from around the country, all of them ready to supply you with auto insurance quotes. In most cases, GEICO will be able to offer you a special shareholder's discount (usually 8%). Bring the details of your existing insurance and check out whether we can save you some money.

At the Omaha airport on Saturday, we will have the usual array of aircraft from Executive Jet available for your inspection. Just ask an EJA representative at the Civic about viewing any of these planes. If you buy what we consider an appropriate number of items during the weekend, you may well need your own plane to take them home.

At Nebraska Furniture Mart, located on a 75-acre site on 72nd Street between Dodge and Pacific, we will again be having "Berkshire Weekend" pricing, which means we will be offering our shareholders a discount that is customarily given only to employees. We initiated this special pricing at NFM four years ago and sales during the "Weekend" grew from $5.3 million in 1997 to $9.1 million in 2000.

To get the discount, you must make your purchases between Wednesday, April 25 and Monday, April 30 and also present your meeting credential. The period's special pricing will even apply to the products of several prestige manufacturers that normally have ironclad rules against discounting but that, in the spirit of our shareholder weekend, have made an exception for you. We appreciate their cooperation. NFM is open from 10 a.m. to 9 p.m. on weekdays and 10 a.m. to 6 p.m. on Saturdays and Sundays.

Borsheim's — the largest jewelry store in the country except for Tiffany's Manhattan store — will have two shareholder-only events. The first will be a cocktail reception from 6 p.m. to 10 p.m. on Friday, April 27. The second, the main gala, will be from 9 a.m. to 5 p.m. on Sunday, April 29. Shareholder prices will be available Thursday through Monday, so if you wish to avoid the large crowds that will assemble on Friday evening and Sunday, come at other times and identify yourself as a shareholder. On Saturday, we will be open until 6 p.m. Borsheim's operates on a gross margin that is fully twenty percentage points below that of its major rivals, so the more you buy, the more you save (or at least that's what my family always tells me).

In the mall outside of Borsheim's, we will have local bridge experts available to play with our shareholders on Sunday. Bob Hamman, who normally is with us, will be in Africa this year. He has promised, however, to be on hand in 2002. Patrick Wolff, twice U.S. chess champion, will also be in the mall, taking on all comers — blindfolded! Last year, Patrick played as many as six games simultaneously — with his blindfold securely in place — and demolished his opponents.

As if all this isn't enough to test your skills, our Borsheim's Olympiad this year will also include Bill Robertie, one of only two players to twice win the backgammon world championship. Backgammon can be a big money game, so bring along your stock certificates.

Gorat's — my favorite steakhouse — will again be open exclusively for Berkshire shareholders on Sunday, April 29, and will be serving from 4 p.m. until 10 p.m. Please remember that you can't come to Gorat's on Sunday without a reservation. To make one, call 402-551-3733 on April 2 (*but not before*). If Sunday is sold out, try Gorat's on one of the other evenings you will be in town. If you order a rare T-bone with a double order of hash browns, you will establish your credentials as an epicure.

The usual baseball game will be held at Rosenblatt Stadium at 7 p.m. on Saturday night. This year the Omaha Golden Spikes will play the New Orleans Zephyrs. Ernie Banks is again going to be on hand to — bravely — face my fastball (once clocked at 95 mpm — miles per month).

My performance last year was not my best: It took me five pitches to throw anything resembling a strike. And, believe me, it gets lonely on the mound when you can't find the plate. Finally, I got one over, and Ernie lashed a line drive to left field. After I was yanked from the game, the many sports writers present asked what I had served up to Ernie. I quoted what Warren Spahn said after Willie Mays hit one of his pitches for a home run (Willie's first in the majors): "It was a helluva pitch for the first sixty feet."

It will be a different story this year. I don't want to tip my hand, so let's just say Ernie will have to deal with a pitch he has never seen before.

Our proxy statement contains instructions about obtaining tickets to the game and also a large quantity of other information that should help you enjoy your visit in Omaha. There will be plenty of action in town. So come for Woodstock Weekend and join our Celebration of Capitalism at the Civic.

Warren E. Buffett
February 28, 2001 Chairman of the Board

Morning Session - 2001 Meeting

1. Formal business meeting

(Video recording begins with meeting already in progress)

WARREN BUFFETT: And — (laughter) — Andy [Heyward], if you're here, you could stand up, I think the crowd would like to say thanks. (Applause)

We have one other guest, too. After doing an incredible job for all Berkshire shareholders and particularly for Charlie and me, Ralph Schey retired this year. But Ralph and Luci, I believe, are here. And [if] Ralph and Luci would stand up, the shareholders and I would like to say thanks. (Applause)

Scott Fetzer was one of the best acquisitions we ever made, but the reason it was among the very best was Ralph. And a great many of the other companies that we own now, our ownership was made possible because of the profit that Ralph delivered over the years. So, thanks very much, Ralph.

Now we will come to order. I will go through this fast. I'm Warren Buffett, chairman of the board of directors of the company, and I welcome you to this 2001 annual meeting of shareholders.

I will first introduce the Berkshire Hathaway directors that are present in addition to myself.

First of all, of course, is Charlie, on my left. And if you'll — the directors will stand when I give your name.

Howard Buffett, Susan Buffett — she was the voice on the songs, the ones that were sang — sung well — Malcolm G. Chace, Ronald L. Olson, and Walter Scott Jr.

Also with us today are partners in the firm of Deloitte and Touche, our auditors. They are available to respond to appropriate questions you might have concerning their firm's audit of the accounts of Berkshire.

Mr. Forrest Krutter is secretary of Berkshire, and he will make a written record of the proceedings. Miss Becki Amick has been appointed inspector of elections at this meeting. She will certify to the count of votes cast in the election for directors.

The named proxy holders for this meeting are Walter Scott Jr. and Marc D. Hamburg. We will conduct the business of the meeting, and then adjourn the formal meeting. After that, we will entertain questions that you might have.

Does the secretary have a report of the number of Berkshire shares outstanding, entitled to vote, and represented at the meeting?

FORREST KRUTTER: Yes, I do. As indicated in the proxy statement that accompanied the notice of this meeting, that was sent by First-Class Mail to all shareholders of record, on March 2, 2001, being the record date for this meeting, there were 1,343,041 shares of Class A Berkshire Hathaway common stock outstanding, with each share entitled to one vote on motions considered at the meeting and 5,505,791 shares of Class B Berkshire Hathaway common stock outstanding, with each share entitled to 1/200th of one vote on motions considered at the meeting.

Of that number, 1,116,384 Class A shares, and 4,507,896 Class B shares are represented at this meeting by proxies returned through Thursday evening, April 26.

WARREN BUFFETT: Thank you. That number represents a quorum, and we will therefore directly proceed with the meeting.

First of order of business will be a reading of the minutes of the last meeting of shareholders. I recognize Mr. Walter Scott Jr. who will place a motion before the meeting.

WALTER SCOTT JR.: I move that the reading of the minutes of the last meeting of the shareholders be dispensed with.

WARREN BUFFETT: Do I hear a second?

VOICES: Aye.

WARREN BUFFETT: The motion has been moved and seconded. Are there any comments or questions? We will vote on this motion by voice vote. All those in favor, say, “Aye.”

VOICES: Aye.

WARREN BUFFETT: Opposed, say, “Bye, I’m leaving.” (Laughter)

The motion is carried. The first item of business of this meeting is to elect directors. If a shareholder is present who wishes to withdraw a proxy previously sent in and vote in person on the election of directors, he or she may do so.

Also, if any shareholder that is present has not turned in a proxy, and desires a ballot in order to vote in person, you may do so. If you wish to do this, please identify yourself to meeting officials in the aisles, who will furnish a ballot to you. Would those persons desiring ballots please identify themselves, so that we may distribute them?

I now recognize Mr. Walter Scott Jr. to place a motion before the meeting with respect to election of directors.

WALTER SCOTT JR.: I move that Warren E. Buffett, Susan T. Buffett, Howard G. Buffett, Malcolm G. Chace, Charles T. Munger, Ronald L. Olson, and Walter Scott Jr. be elected as directors.

VOICE: I second the motion.

WARREN BUFFETT: It has been moved and seconded that Warren E. Buffett, Susan T. Buffett, Howard G. Buffett, Malcolm G. Chace, Charles T. Munger, Ronald L. Olson, and Walter Scott Jr. be elected as directors. Are there any other nominations? Is there any discussion?

The nominations are ready to be acted upon. If there are any shareholders voting in person, they should now mark their ballots on the election of directors and allow the ballots to be delivered to the inspector of election.

Would the proxy holders please also submit to the inspector of elections a ballot on the election of directors, voting the proxies in accordance with the instructions they have received?

Miss Amick, when you are ready, you may give your report.

BECKI AMICK: My report is ready. The ballot of the proxy holders, in response to the proxies that were received through last Thursday evening, cast not less 1,126,480 votes for each nominee.

That number far exceeds a majority of the number of the total votes related to all Class A and Class B shares outstanding.

The certification required by Delaware law of the precise count of the votes, including the additional votes to be cast by the proxy holders, in response to proxies delivered at this meeting, as well as those cast in person at this meeting, if any, will be given to the secretary to be placed with the minutes of this meeting.

WARREN BUFFETT: Thank you, Miss Amick.

Warren E. Buffett, Susan T. Buffett, Howard G. Buffett, Malcolm G. Chace, Charles T. Munger, Ronald L. Olson, and Walter Scott Jr. have been elected as directors.

The next item of business was scheduled to be a proposal put forth by Berkshire shareholder Bartlett Naylor. On April 20th, 2001, Mr. Naylor advised us he was withdrawing his proposal. Accordingly, we will not have the proposal presented at this meeting.

At the adjournment of the business meeting, I will respond to questions you may have that relate to the business of Berkshire, but do not call for any action at this meeting.

Does anyone have any further business to come before this meeting, before we adjourn? If not, I recognize Mr. Walter Scott Jr. to place a motion for the meeting.

WALTER SCOTT JR.: I move this meeting be adjourned.

WARREN BUFFETT: Motion to adjourn has made and seconded. We will vote by voice. Is there any discussion? If not, all in favor say, “Aye.”

VOICES: Aye.

WARREN BUFFETT: Opposed say, “No.” Meeting’s adjourned. (Applause)

I ask you, am I getting slower in my old age? No, I’m — (Laughter)

Now, the first — we’re going to go —

We have eight microphones strategically placed. We have the first two on my right. Far back, three and four, and over to this back area, over here, and then up front for the seven and eight.

And if you have a question, just go to the microphone, and queue up at the microphone, and we’ll keep rotating, like I say, until noon. Then we’ll have a break, and then we’ll start again around 12:30, or thereabouts, and go until 3:30.

2. Four-year-old and Buffett look ahead to Berkshire’s future

WARREN BUFFETT: Now, first question in area 1, we have a special guest.

I received a letter from Mark Perkins on April 5th, telling me about his daughter, who has been a shareholder since she was 6 months old.

And she’s going to be 4 in November, and she would like — Marietta would like to ask the first question.

And frankly, I take all the questions from 4-year-olds, and Charlie handles them from anybody — (laughter) — that’s been around a little longer.

So Marietta, if you’ve got the microphone there, would you ask your question, please?

VOICE: Ask him. (Inaudible)

MARIETTA: (Inaudible)

VOICE: I’m Marietta.

MARIETTA: Marietta.

VOICE: I’m three. Speak up.

MARIETTA: I'm three.

VOICE: Berkshire Hathaway fistful of dollars.

MARIETTA: (Inaudible) dollars. (Laughter)

VOICE: Her — actually, her question was, she said she was three, and she says, "Berkshire Hathaway fistful of dollars," and she says, "What should we invest in now" so that she'll be ready when she goes to college?

WARREN BUFFETT: What should she invest in, or what should Berkshire invest in?

MOTHER: What should Berkshire invest in?

WARREN BUFFETT: Well, Berkshire would like very much to buy businesses of the same quality, and with managements of the same quality, and at prices consistent with the eight businesses that we've bought over the last 16 or 18 months.

Our first preference is, and has been for many decades — although I would say most observers didn't seem to realize it — but our first preference has always to been — to be buying outstanding operating businesses. And we've had a little more luck in that respect lately.

We also own lots of marketable securities. We've bought many of those, for example, in the mid-'70s, that did very well for us. But the climate has not been as friendly toward making money out of marketable securities.

And we, frankly, prefer — we prefer the activities associated with owning and operating businesses over time.

So what we hope to do, Marietta, is by the time you're ready to go to college, I would hope that

well, first of all, I'd hope I'm still around. (Laughter)

But beyond that, I would hope that we would have — you'll be ready in about 14 years or so. I would hope that we would have another, maybe, 40 businesses or so that would be added. And I would hope that we would have every business that we have now.

And I would hope we would not have more shares outstanding, or any — at least any appreciable number of more shares outstanding.

If we can get all that done, I think you'll probably be able to afford college.

Charlie, do you have anything to add?

CHARLIE MUNGER: No. (Laughter)

WARREN BUFFETT: And there's some things in life, Marietta, you can really count on. (Laughter)

3. Tech sector not comparable to pharmaceuticals

WARREN BUFFETT: OK, let's go to microphone number 2.

AUDIENCE MEMBER: Good morning, Mr. Buffett, Mr. Munger.

VOICE: (Inaudible)

AUDIENCE MEMBER: Oh, sorry. OK.

If you want to trade a share of Berkshire A for 30 shares of Berkshire B, as you had mentioned before, a personal stock split, or vice versa, is this considered a wash sale for tax purposes?

Also, I'd like to ask you a question which you've heard before, but in a slightly different context. A few years ago, you said you had made a mistake by not buying shares of the major pharmaceutical companies around 1993.

You cited their value to society, as well as their terrific growth, high profit margins, and great potential. You said that while you didn't know which companies would do the best, you could've made some kind of sector play, because the entire sector had been decimated.

These exact same words, including those about not knowing which businesses will dominate over time, can also be used to describe another industry, which has recently been decimated.

This is industry is, of course, technology. How do you see these two investment ideas, pharmaceuticals in '93 and technology now, and what difference in the two situations makes the first a good opportunity for Berkshire, and the second not one?

WARREN BUFFETT: Well, Charlie answers all the questions about mistakes, so I will turn the second question over to him. (Laughter)

CHARLIE MUNGER: Personally, I think that the future of the pharmaceutical industry was easier to predict than the future of the high-technology sector.

In the pharmaceutical sector, almost everybody did well, and some companies did extremely well. In the other sector, why, there are many permanent casualties in the high-tech sector.

WARREN BUFFETT: Yeah, I would say that there's certainly nothing obvious to us about the fact that the tech sector — as a group — viewed in aggregate — would be a good buy or be undervalued.

Whereas we should have had enough sense to recognize that the pharmaceutical industry, as a group, was undervalued.

But the pharmaceutical industry has a far, far better record of returns on large amounts of equity over time, and with a high percentage of the participants having those returns, than the tech industry. I wouldn't regard those two as comparable at all.

4. Tax implications for exchanging Berkshire share classes

WARREN BUFFETT: Your first question about exchanging and whether you have a wash sale, and I think you indicated exchanging from B into A.

If you actually, physically, have a share of A, and turn it in for 30 shares of B, that is not a taxable transaction, so there is no sale under such a circumstance. If you —

There would be no reason, unless the B was at a significant discount, to actually sell the A and buy the B, but I — and I'm not giving tax advice on this — but I would think that they — I think the tax code refers to "substantially identical" securities when they talk about wash sales.

And I would think that you — that the IRS would be entitled to, at least, raise the question if you had an A share you were selling at a loss, and replacing it with 30 shares of B.

You'd have a better argument than if you bought a share of A back the next day, if you were establishing a loss. If you were establishing a gain, you'd have no reason — you know, they're not worried about wash sales in that respect.

You can't go from B to A by exchange, but you could go by selling 30 shares of B in the market, and buying a share of A.

Again, if that were being done at a loss, I think the IRS could well argue that they were substantially identical, but you could argue otherwise.

Charlie?

CHARLIE MUNGER: No, no, I think the IRS would win.

WARREN BUFFETT: Yeah. (Laughter)

Charlie might even go state's evidence, you know, if there was a (inaudible).

5. Berkshire isn't hindered by state insurance regulators

WARREN BUFFETT: OK, let's go to zone 3.

AUDIENCE MEMBER: I'm Dan Blum (PH) from Seattle, Washington.

As an insurance holding company, Berkshire Hathaway is subject to regulation by insurance departments in every state in which GEICO or your other insurance subsidiaries do business.

Has that handicapped or affected your operations in any way? And do you have any trenchant or wise observations to make about governmental regulation in that context?

WARREN BUFFETT: Yeah, we've really not been impeded in any way by the fact that — Berkshire Hathaway itself is not an insurance company, but it owns various insurance companies. Of course, it owns a lot of other companies, too.

But being the holding company of insurance companies, which indeed are regulated by the states in which they're admitted, it really has not slowed down any acquisition.

They are not — whereas with the Public Utility Holding Company Act, under that statute, the authorities are directed to be concerned with the activities of the holding company. And in the banking business, to some extent, they are.

In the insurance business, there's relatively little in the way of regulation or oversight that extends up to the holding company. So, it has not slowed us down in that business, but it's been reported recently in the electric utility business.

There's a statute from 1935, the Public Utility Holding Company Act, the acronym is that euphonious term, PUHCA. (Laughter)

The Public Utility Holding Company Act has a lot of rules about what the parent company could do. And that act was put on the books because the holding companies of the '20s, most particularly ones held by — formed by — Sam Insull, but there were others.

There were many abuses, and a good many of those abuses involved what took place at the holding company. So it was quite understandable that that act was passed in the '30s. And it achieved a pro-social purpose at the time.

I don't think there's anything, frankly, pro-social about limiting Berkshire's ability to buy into other utilities. We can buy up to five percent of the stock. But we might well, in the last year or two, have bought an entire utility business if it were not — if that statute weren't present.

So we're handicapped by the utility holding company statute, we are not handicapped, in my view, by any state insurance statutes.

Charlie?

CHARLIE MUNGER: Nothing to add. (Laughter)

6. “Pain today, gain tomorrow” insurance transactions

WARREN BUFFETT: Zone 4?

AUDIENCE MEMBER: Good morning.

WARREN BUFFETT: Good morning.

AUDIENCE MEMBER: Steve Bloomberg, from Chicago. I have two questions regarding the insurance operations.

With regard to the reinsurance contracts, which were written at what some consider and call “good losses,” you’ve discussed those insurance contracts in your report, indicating that it’s generated 482 million of losses in the year 2000.

Do we need an annual schedule disclosing the aggregate amortized charges of all current and past such deals, to make our adjustments, to reflect economic reality?

WARREN BUFFETT: Well, there are two unusual-type deals, and you referred to one type, what I call the “pain today, gain tomorrow,” or good losses-type deals.

And under the deals you’re describing, we record a usually quite significant loss in the current year, and then we have the use of float for many years to come, and there are no subsequent charges against that.

So in respect to those contracts, the important thing is that we tell you — and we should tell you — really, every quarter if they’re significant, and certainly yearly, any significant items that fall in that category.

And as you mentioned, you know, we had over 400 million last year. We had a significant amount the year before.

We have not had a significant amount this year. I think, in the first quarter, there may have been a 12 million charge for one of those.

If they’re significant, we’re going to tell you about them.

It’s a one-time adjustment in your mind that, in effect, should — you should regard as different than any other type of underwriting loss that we experience, because we willingly enter into these.

We take the hit the first year, and accounting calls for that. And over the life of the contract, we expect to make money. And our experience would be that we do make money.

But we'll tell you about any significant item of that sort, so that you will be able to make an adjusted cost to float. I reported our cost to float last year at 6 percent, which is high. It's not unbearable, but it's high, very high.

And included in that 6 percent cost was — about a quarter of it came from these transactions that distorted the current year figure. And therefore, our cost of float, if we hadn't willingly engaged in those transactions, would've been about 4 1/2 percent.

I should mention to you that I expect that our cost of float — I said in the annual report — that absent a mega-catastrophe — and I might define a mega-catastrophe as insured losses, we'll say, of 20 billion or more, or something on that order — absent a mega-catastrophe, we expected our cost of float to come down this year, and I said perhaps substantially.

In the first quarter, our cost of float will probably run just a touch under 3 percent, and — on an annualized basis.

And I think that — I think the trend is in that direction, absent a mega-catastrophe. I would expect the cost of float, actually, to come down substantially this year.

But if we were to take on some of these "pain today, gain tomorrow" transactions — and we don't have any in the works at the moment — but if we were to take those on, then it would be reflected in our cost of float, and we would lay out the impact of that sort of transaction.

Charlie?

CHARLIE MUNGER: Yeah, I think almost all good businesses have occasions where they're making today look a little worse than today would otherwise be, to help tomorrow. So I regard these transactions as very much the friends of the shareholders.

WARREN BUFFETT: We have a second type of transaction, just to complete, which we also described in the report, which also creates a large amount of float, but where accounting rules spread the cost of that transaction over the life of the float.

And those do not distort the current-year figures, but they do create an annual charge that exists throughout the life of float. And that charge with us is running something over $300 million a year.

But there again, it's a transaction that we willingly and enthusiastically engaged in. And that has this annual cost attached to it.

So when you see our cost to float at 3 percent, annualized, in the first quarter, it includes, probably, a $80 million charge or so, relative to those retroactive insurance contracts, which were the second kind described in the report.

I recognize this accounting is, you know — and even the transactions — are somewhat Greek to some of you. But they are important, in respect to Berkshire, so we do want to lay them out in the annual report for those who want to do their own calculations of intrinsic value.

7. "What really costs … are the blown opportunities"

WARREN BUFFETT: Zone 5?

AUDIENCE MEMBER: Good morning, gentlemen, my name is Jay Parker. I'm from Washington State. And this question regards mistakes. So that being the case, it should probably be directed to Mr. Munger.

Mr. Munger, I know you're fond of evoking humility to promote rational thought. So my question is, what's the most recent business mistake that you've made, Mr. Munger, and why did it occur? (Laughter)

WARREN BUFFETT: I'm going to take notes on this one. (Laughter)

CHARLIE MUNGER: The mistakes that have been most extreme in Berkshire's history are mistakes of omission. They don't show up in our figures. They show up in opportunity costs.

In other words, we have opportunities, we almost do it. In retrospect, we can tell that we were very much mistaken not to do it.

In terms of the shareholders, those are the ones in our history that it really cost the most. And very few managements do much thinking or talking about opportunity costs. But Warren, we have blown —

WARREN BUFFETT: Billions and billions and billions. I might as well say it. (Laughter)

CHARLIE MUNGER: Right, right. And we keep doing it. (Laughter)

WARREN BUFFETT: Some might say we're getting better at it. (Laughter)

CHARLIE MUNGER: I don't like mentioning the specific companies, because the — you know, we may, in due course, want to buy them again and have an opportunity to do so at our price.

But practically everywhere in life, and in corporate life, too, what really costs, in comparison with what easily might have been, are the blown opportunities. I mean, it just — it's an awesome amount of money.

When I was somewhat younger, I was offered 300 shares of Belridge Oil. Any idiot could've told there was no possibility of losing money, and a large possibility of making money. I bought it.

The guy called me back three days later, and offered me 1,500 more shares. But this time, I had to sell something to buy the damn Belridge Oil. That mistake, if you traced it through, has cost me $200 million.

And I — it was all because I had to go to a slight inconvenience and sell something. Berkshire does that kind of thing, too. We never get over it. (Laughter)

WARREN BUFFETT: Yeah. I might add that when we speak of errors of omission, of which we've had plenty, and some very big ones, we don't mean not buying some stock where we — a friend runs it, or we know the name and it went from one to 100. That doesn't mean anything. It's only —

We only regard errors as being things that are within our circle of competence. So if somebody knows how to make money in cocoa beans, or they know how to make money in a software company or anything, and we miss that, that is not an error, as far as we're concerned.

What's an error is when it's something we understand, and we stand there and stare at it, and we don't do anything. Or worse yet, what really gets me is when we do something very small with it. We do an eyedropper's worth of it, when we could do it very big.

Charlie refers to that elegantly when I do that sort of thing as when I'm sucking my thumb. (Laughter)

And there really — I mean, we have been thumbsuckers at times with businesses that we understood well. And it may have been because we started buying, and the price moved up a little, and we waited around hoping we would get more at the price we originally started — there could be a lot of things.

But those are huge mistakes. Conventional accounting, of course, does not pick those up at all. But they're in our scorebook.

8. Not worried "at all" about product liability involving sugar

WARREN BUFFETT: Zone 6, please.

AUDIENCE MEMBER: My name is Joseph Lapray. I'm from Minneapolis, Minnesota.

In recent years, tobacco companies have been compelled to pay large damages for marketing their unhealthy, but discretionary, products. My question has two parts.

First, does the potential for similar damage liabilities reduce the intrinsic value of Coca-Cola, See's Candies, Dairy Queen, or any other business, which sells discretionary products of questionable healthfulness? Not that I don't like these products.

And second, are either of you concerned that a possible erosion in the principle of caveat emptor is undermining the legal basis of contracts, in general? Thank you for taking my question.

WARREN BUFFETT: Well, the products you described, I've been living on for 70 years, so — (laughter) — they'll probably haul me in as a witness if I — that they don't do much damage.

No, I think, if — you know, if you're opposed to sugar and the — I think the average human being eats something like 550 pounds dry weight of food a year. And I think 125 pounds, or thereabouts — I'd have to look at it — it consists of sugar in one form or another.

I mean, it's in practically every product that you have, and happens to be in Coca-Cola, it happens to be in See's Candy, but it's in practically everything you're — I mean, it's over 20 percent of what Americans are consuming, one way or another.

And, you know, the average lifespan of Americans keeps going up. So, I would not be worried at all about product liability in connection with those companies.

But product liability, generally, is an area that is a fertile field for the plaintiff's bar. And it's — we are conscious in buying into businesses, and we have passed up some businesses, because we were worried about the product liability potential.

Unless there is some legislative solution, I think you will see more and more of the GDP going into liability awards. And whether there will be any change by legislation, I don't know. But, you know, it's a big field.

And the lottery ticket aspect of it is so attractive. Because if an attorney can gamble a modest amount of time, or even a reasonable amount of time, and have a potential payoff of 10, or 20, or maybe, in some cases, hundreds of millions of dollars, you know, that's a decent lottery ticket. Who knows what 12 people, you know, are going to be on the jury?

As one of my friends who's a lawyer said, you know, he said, "Lincoln said, 'You can fool all of the people some of the time, and all of the — some of the people all of the time, and all of the people some of the time, but not all of them all the time.'" He says, "I'm just looking for 12 that you can fool all of the time." You know, and — (Laughter)

You know, and all you have to do is get an award. And the odds are fairly favorable in a nation where lots of zeros have sort of lost meaning to people. So it's a very real concern in any business we get into, in terms of trying to evaluate product liability.

Charlie?

CHARLIE MUNGER: What's particularly pernicious is the increasing political power of the plaintiff's contingency, the bar.

If you're on a state Supreme Court, for — in most places, you're on for life. If you — at least, you're on for life if you want to stay for life.

And the one thing that could get you off the court would be to really irritate some important group. And I think that greatly helps a lot of abusive conduct in the courts.

I think the judges of the country haven't been nearly as tough as they should be on junk science, junk economic testimony, trashy lawyers. And I don't see — (applause) — and I don't see many signs that it's getting better.

In Texas, they actually improved the Supreme Court of Texas, which really needed it. So, there are occasional glimmers of life.

WARREN BUFFETT: We make our decisions in insurance and in buying businesses with a very pessimistic attitude toward the chances of that particular ill that Charlie described being even moderated.

I mean, we think if — we would project out that the trend would accelerate, but that's just our natural way of building in a margin of safety in decisions.

Don't worry about eating the See's candy, or the Dairy Queen, or the Coke.

You know, if you read the papers long — I use a lot of salt, and, you know, I was always being warned about that. And then, you know, few years ago they started saying, "You know, you can't get enough salt" and all that. I don't know what the answer is, but I feel terrific. (Laughter)

9. We don't "have cash around just to have cash"

WARREN BUFFETT: Zone 7. (Applause)

AUDIENCE MEMBER: Good morning. I'm Murray Cass from Markham, Ontario.

The financial community relies heavily on the P/E ratio when evaluating prospective investments.

When you buy a company, you must certainly consider not just the future stream of earnings but also the company's financial condition, among other things. By financial condition, I'm speaking mainly of cash and debt.

But the P/E doesn't take into consideration either cash or debt. Occasionally, you see a company with consistently positive free cash flow trading just over cash value, effectively giving away the future earnings. In cases like this, the P/E looks terribly overstated unless adjusted for cash and debt.

I've always preferred companies with oodles of cash to those burdened with lots of debt. And then I read Phil Fisher's book, "Conservative Investors Sleep Well."

Well, I haven't slept well since. He really confused me when he commented that "hoarding cash was evil." He wrote that instead, "Companies should either put the cash to good use or distribute it to shareholders." Can I get your thoughts on this?

WARREN BUFFETT: Well, there are times when we're awash in cash. And there have been plenty of times when we didn't have enough cash.

Charlie and I, I remember in the late '60s, we were — when bank credit was very difficult — we were looking for money over in the Middle East. You remember that, Charlie?

CHARLIE MUNGER: Yes, I do.

WARREN BUFFETT: Yeah, and —

CHARLIE MUNGER: They wanted us to repay it in dinars.

WARREN BUFFETT: Yes, and the guy that wanted us to repaint it — repay him — in dinars — or "deeners," or whatever the hell they call them — (laughter) — was also the guy that determined the value of those things.

So, we — (laughter) — were not terribly excited about meeting up with him on payday and having him decide the exchange rate on that date. (Laughter)

But we, obviously, are looking every day for ways to deploy cash.

And we would never have cash around just to have cash. I mean, we would never think that we should have a cash position of X percent. And I — frankly, I think these asset allocation things that tacticians in Wall Street put out, you know, about 60 percent stocks and 30 — we think that's total nonsense.

So, we want to have all our money — (applause) — working in decent businesses. But sometimes we can't find them, or sometimes cash comes in (un)expectedly, or sometimes we sell something, and we have more cash around than we would like.

And more cash around than we would like means that we have 10 or 15 cents around. Because we want money employed, but we'll never employ it just to employ it. And in recent years, we've tended to be cash heavy, but not because we wanted cash per se.

In the mid-'70s, you know, we were scraping around for every dime we could find to buy things. We don't like lots of leverage, and we never will. We'll never borrow lots of money at Berkshire. It's just not our style.

But you will find us quite unhappy over time if cash just keeps building up. And I think, one way or another, we'll find ways to use it.

Charlie?

CHARLIE MUNGER: I can't add anything to that.

10. Costs vary by type of business

WARREN BUFFETT: Zone 8.

AUDIENCE MEMBER: Good morning. My name is Mark Dickson (PH) from Sarasota, Florida. And I'd like to thank you for providing this forum for all of us. It's wonderful.

In past years, you've been very specific about some of the numbers related to Coca-Cola, Wells Fargo, Rockwood — specifically like with Coca-Cola — cost of aluminum, and sugar, and all that. It goes into the bottom line of Coca-Cola.

Can you provide some of the specific numbers that go into some of your more recent purchases over the last couple years?

WARREN BUFFETT: Well, they have such different characteristics. That's very difficult. I mean, we have service businesses such as FlightSafety, and Executive Jet is a service business.

And, you know, in many of those companies, the big cost is personnel. I mean, we need people with — at a FlightSafety, we've got a lot of money invested in simulators. We'll put over $200 million into simulators this year, just as we did last year.

So we have a big capital cost in that business, and then we have a big people cost because we are training pilots. And that's very person-on-person intensive. NetJets, part of Executive Jet, very people-intensive. I mean, we are absolutely no better than the people that interact with our clientele.

You get into something like the carpet business, and maybe only 15 percent of your revenues will be accounted for by employment costs. And you're a very heavy raw material buyer. I mean, you're buying lots of fiber.

So it varies enormously by the kind of business you're in.

I mean, when we're in the insurance business, you know, we're in the business of paying future claims. And that's our big cost. And that's — obviously, involves estimates because sometimes we're going to pay the claim five, 10, or 20 years later. We're not going to know about it sometimes till 20 years later.

So, it's very hard to generalize among the businesses.

If you're in the retail business, which we are in the furniture and jewelry in a significant way, purchased goods are very — obviously — very important. We don't manufacture our own goods to any extent in those businesses.

And then, the second cost, of course, is labor in a business like that.

But we don't have any notions as to what we want to buy based on how their costs are segmented. What we really are looking for is an enduring competitive advantage. I mean, that's what's going through our mind all the time.

And then we want, obviously, top-notch people running the place, because we're not going to run them ourselves. So those are the two factors we look at.

We want to understand the cost structure, but Charlie and I can understand the cost structure of many companies — there's many we can't — but we can understand a good many companies.

And we don't really care whether we're buying into a people-intensive business, a raw material-intensive business, a rent-intensive business. We do want to understand it and understand why it's got an edge against its competitors.

Charlie?

CHARLIE MUNGER: Yeah, basically, to some extent we're like the hedgehog that knows one big thing. If you generate float at 3 percent per annum and buy businesses that earn 13 percent per annum with the proceeds of the float, we have actually figured out that that's a pretty good position to be in. (Laughter)

WARREN BUFFETT: It took us a long time. (Laughter)

Incidentally, I would hope that we would — and actually expect that — absent a mega-catastrophe — that 3 percent figure will come down over the next, well, in the near future.

But a mega-catastrophe could change all of that. I mean, if you had a $50 billion insured catastrophe — Tokyo earthquake, California earthquake, Florida hurricane — I mean, those — we're in the business of taking those risks.

We're the largest insurer, as you may know, of the California Earthquake Authority. I have a sister here who is from Carmel, and she used to call me when the dogs and cats start running in circles. (Laughter)

So we're exposed to some things that could change.

But absent a mega-catastrophe, experience is going in the right way at both — at really at all of our insurance companies. And I would expect that to continue for a while. And then at some point I'd expect it to reverse itself. Isn't that helpful? (Laughter)

11. Airlines must keep costs in line with competitors

WARREN BUFFETT: Area 1, please.

AUDIENCE MEMBER: Good morning. I'm Martin Wiegand from Chevy Chase, Maryland.

WARREN BUFFETT: Good to have you here, Martin. (Laughs)

AUDIENCE MEMBER: Thank you. Thank you for the wonderful shareholder weekend, and thank you for the leadership and education you give your shareholders and the general public.

My question. Large airlines are in the news negotiating labor contracts. They claim they can't pass along rising labor costs to their customers.

In the annual report, you say Executive Jet is growing fast and doing great. Executive Jet seems to be able to pass along its rising labor cost to its customers.

Is this because Executive Jet has a rational compensation plan that keeps employee salaries in line with billable services? If not, why does Executive Jet do well while the airlines experience troubles?

WARREN BUFFETT: Well, the big problem with the airlines is not so much what their aggregate payments will be. The real problem is when you're in the airline business and your wage rates are out of line with your competitors.

When you get right down to it, the figure to look at with an airline — among a lot of other things — but you start with the cost per available seat mile. And then you work that through based on the capacity utilization to get to the revenue per — or the cost per — occupied seat mile.

And the — you could have labor costs or any other costs. You certainly have fuel costs up dramatically for the airlines from a couple of years ago.

As long as you're more efficient than your competitor, and your costs are not higher than your competitor, people will continue to fly.

It's when you get your costs out of line with your competitor, which was the situation that — where Charlie and I were directors of USAir a few years back — and our costs per seat mile were far higher than competitors.

And that was fine where we didn't have competitors on some — many of the short routes in the East. But as the Southwest Airlines would move into our territory — and they had costs, we'll say, of — and this is from memory — but they might have had costs below eight cents a seat mile. And our cost might have been 12 cents a seat mile.

You know, that is a — you're going to get killed, eventually. They may not get to this route this year, but they'll get there next year or the year after.

So if you're running a big airline at Delta or United or whatever, if your costs are on parity or less — labor costs — than your other major competitors, that is much more important to you than the absolute level.

And the NetJets service is not really designed to be competitive with United Airlines or an American or something of that sort. It has a different group of competitors.

And I think we have a absolutely terrific pilot force there. And we want them to be happy. But there's a lot of other ways. I mean, you want to pay them fairly. But with our pilots for example, it's extremely important to them, in many cases, to be able to live where they want to and to work the kind of shifts that we can offer. So we attract them in many other ways than bidding against United Airlines or American Airlines.

Big thing in — you just can't take labor costs that are materially higher than your competitor in a business that has commodity-like characteristics such as airline seats. You just can't do it over time.

And you can get away with it for a while. But sooner or later, the nature of a capitalist society is that the guy with the lower cost comes in and kills you.

Charlie?

CHARLIE MUNGER: The airline unions are really tough. And it's interesting to see a group of people that are paid as well as airline pilots with such a brutally tough union structure. That really makes it hard in a commodity-style business.

And no individual airline can take a long shutdown without having considerable effects on habit patterns and future prospects. It's just a very tough business by its nature.

Passenger rail travel, even in a previous era, was a pretty tough way to make a buck. And nothing is all that different with the airline travel.

We hope that our services are preferred by customers more than one airline seat is preferred compared to another.

WARREN BUFFETT: Yes, fractional ownership is not a commodity business. I mean, the people care enormously about service and the assurance of safety. And I don't think that, you know, I don't think if you were buying a parachute you'd want to take the — necessarily take the low bid, and —

CHARLIE MUNGER: Yeah. (Laughter)

WARREN BUFFETT: Now with the big commercial airlines with millions and millions of passengers, people, I think probably correctly assume, that there's quite a similarity in both service and safety.

But if you're in a business that cannot take a long strike, you're basically playing a game of chicken, you know, with your labor unions. Because they're going to lose their jobs, too, if you close down. So you're playing a game of chicken periodically.

And it has a lot — there's a lot of game theory that gets involved.

To some extent, you know, the weaker you are, the better your bargaining position is. Because if you're extremely weak, even a very short strike will put you out of business. And the people who are on the other side of the negotiating table understand that. Whereas, if you have a fair amount of strength, they can push you harder.

But it is of — it is no fun being in a business where you cannot take a strike. We faced that one time back in the early '80s when there were — we were in kind of a death struggle in Buffalo with The Courier-Express.

And when I bought The Buffalo News — actually Charlie did. He was stranded there during a snowstorm, and he got bored. So, he called me and said, "What should I do?" I said, "Well, you might as well buy the paper." (Laughter)

And so we were in this struggle. And — but when we bought the Buffalo News, we had two questions of the management, and one of them I can't tell you.

But the second one was, we wanted to meet with the key union leaders, and we wanted to tell them, "Lookit, if you ever strike us for any length of — significant length of time — we're out of business.

"You know, you can make our investment valueless. So we really want to look you in the eye and see what kind of people you are before we write this check." And we felt quite good about the people, and they were good people.

And we had one situation in 1981, or thereabouts, where a very, very small union, I think, less than 2 percent of our employees, struck over an issue that the other 10 or 11 unions really didn't agree with them that much on.

But they struck, and the other unions observed the picket line, which you would expect them to do in a strongly pro-union town, such as Buffalo.

And I think, as I remember, they struck on a Monday. And I remember leaders of some of the other unions actually with tears in their eyes over this, because they could see it was going to put us out of business.

And frankly, I just took the position then, I said, "Lookit, if you come back in a day, I know we're competitive. If you come back in a year, I know we will not be competitive.

"And if you're smart enough to figure out where exactly the point is that you can push us to and still come back and we have a business and you have jobs, I said, you're smarter than I am. So, you know, go home and figure it out."

And they came back in on Thursday, and we became very competitive again. But they could've — I mean, it was out of my hands. I couldn't make them work, and if they decided they were going to stay out long enough, we were not going to have a newspaper.

And that's the kind of situation, occasionally, you find yourself in. And I would say the airline industry is a good example of people — where people find themselves in that position periodically.

Charlie, anything you want —

CHARLIE MUNGER: Well. The shareholders may be interested to know, vis-à-vis competitive advantages in our NetJets program, that the day that other charter plane crashed in Aspen, NetJets refused to fly into Aspen at all. People remember that kind of thing.

WARREN BUFFETT: Yeah.

12. Berkshire's advantages, and one big disadvantage

WARREN BUFFETT: Zone 2?

AUDIENCE MEMBER: Good morning, gentlemen. David Winters from Mountain Lakes, New Jersey. Thank you for hosting "Woodstock for Capitalists." (Laughter)

Berkshire seems to have an enormous long-term advantage in spite of its large size and high equity prices.

The structure of the company's activities, non-callable capital, substantial free cash flow, and improving insurance fundamentals, permit Berkshire to capitalize on potential asset price declines and dislocations in financial markets, while most investors would not either have the money or the cool minds to buy.

Am I on the right track here?

WARREN BUFFETT: Well I think, in certain ways, you are. But we do have disadvantages, too.

But we have some significant advantages in buying businesses over time. We would be the preferred purchaser, I think, for a reasonable number of private companies and public companies as well.

And we — our checks clear. So we — (laughter) — we will always have the money. People know that when we make a deal, it will get done, and it will get done as fast as anybody can do it. It won't be subject to any kind of second thoughts or financing difficulties.

And we bought, as you know, we bought Johns Manville because the other group had financing difficulties.

People know they will get to run their businesses as they've run them before, if they care about that, and a lot of people do. Others don't.

We have an ownership structure that is probably more stable than any company our size, or anywhere near our size, in the country. And that's attractive to people, so —

And we are under no pressure to do anything dumb. You know, if we do things dumb, it's because we do things dumb. And it's not — but it's not because anybody's making us do it.

So those are significant advantages. And the disadvantage, the biggest disadvantage we have is size.

I mean, it is harder to double the market value of a hundred billion dollar company than a $1 billion company, using our — what we have in our arsenal.

And that isn't — I hope it isn't going to go away. I mean, I hope we don't become a billion dollar company and enjoy all the benefits of those. (Laughter)

And I hope, in fact, we have the agony of becoming, you know, a much larger company.

So, you are on the right track. Whether we can deliver or not is another question. But we go into combat every day armed with those advantages.

Charlie?

CHARLIE MUNGER: Yeah. This is not a hog heaven period for Berkshire. The investment game is getting more and more competitive. And I see no sign that that is going to change.

WARREN BUFFETT: But people will do stupid things in the future. Even — there's no question. I mean, I will guarantee you sometime in the next 20 years that people will do some exceptionally stupid things in equity markets.

And then the question is, you know, are we in a position to do something about that when that happens?

But we do — we continue to prefer to buy businesses, though. That's what we really enjoy.

When Charlie mentioned hog heaven, I thought we ought to open the peanut brittle here, which I recommend heartily. (Laughter)

13. "There is no such thing as growth stocks or value stocks"

WARREN BUFFETT: Zone 3.

AUDIENCE MEMBER: Good morning. Mo Spence (PH) from Waterloo, Nebraska.

You've often stated that value and growth are opposite sides of the same coin.

Would you care to elaborate on that? And do you prefer a growth company that is selling cheap or a value company with moderate or better growth prospects?

WARREN BUFFETT: Well, actually I think you're — you may be misquoting me. But I really said that growth and value, they're indistinguishable. They're part of the same equation. Or really, growth is part of the value equation.

So, our position is that there is no such thing as growth stocks or value stocks, the way Wall Street generally portrays them as being contrasting asset classes.

Growth, usually, is a chance to — growth, usually, is a positive for value, but only when it means that by adding capital now, you add more cash availability later on, at a rate that's considerably higher than the current rate of interest.

So, there is no — we don't — we calculate into any business we buy what we expect to have happen, in terms of the cash that's going to come out of it, or the cash that's going to go into it.

As I mentioned at FlightSafety, we're going to buy $200 million worth of simulators this year. Our depreciation will probably be in the area of $70 million or thereabouts. So we're putting $130 million above depreciation into that business.

Now that can be good or bad. I mean, it's growth. There's no question about it. We'll have a lot more simulators at the end of the year. But whether that's good or bad depends on what we earn on that incremental $130 million over time.

So if you tell me that you own a business that's going to grow to the sky, and isn't that wonderful, I don't know whether it's wonderful or not until I know what the economics are of that growth. How much you have to put in today, and how much you will reap from putting that in today, later on.

And the classic case, again, is the airline business. The airline business has been a growth business ever since, well, you know, Orville [Wright] took off. But the growth has been the worst thing that happened to it.

It's been great for the American public. But growth has been a curse in the airline business because more and more capital has been put into the business at inadequate returns.

Now, growth is wonderful at See's Candy, because it requires relatively little incremental investment to sell more pounds of candy.

So, its — growth, and I've discussed this in some of the annual reports — growth is part of the equation, but anybody that tells you, "You ought to have your money in growth stocks or value stocks," really does not understand investing. Other than that, they're terrific people. (Laughter)

Charlie?

CHARLIE MUNGER: Well, I think it's fair to say that Berkshire, with a very limited headquarters staff — and that staff pretty old — (laughter) — we are especially partial to laying out large sums of money under circumstances where we won't have to be smart again.

In other words, if we buy good businesses run by good people at reasonable prices, there's a good chance that you people will prosper us for many decades without more intelligence at headquarters. And you can say, in a sense, that's growth stock investing.

WARREN BUFFETT: Yeah, if you had asked Wall Street to classify Berkshire since 1965, year-by-year, is this a growth business or a value business — a growth stock or value stock — you know, who knows what they would have said.

But, you know, the real point is that we're trying to put out capital now to get more capital — or money — we're trying to put out cash now to get more cash back later on. And if you do that, the business grows, obviously. And you can call that value or you can call it growth. But they're not two different categories.

And I just cringe when I hear people talk about, "Now it's time to move from growth stocks to value stocks," or something like that, because it just doesn't make any sense.

14. Advice to young people: Invest in yourself

WARREN BUFFETT: Zone 4?

AUDIENCE MEMBER: Hi. My name is Steven Kampf (PH) from Irvine, California. I'm 10 years old and this is my fourth consecutive year here.

WARREN BUFFETT: Terrific.

AUDIENCE MEMBER: How I got —

WARREN BUFFETT: We're glad to have you here.

AUDIENCE MEMBER: Thanks. This is my fourth consecutive year here, and how I got to owning stock is my dad taught me to start my own business. And I bought Berkshire Hathaway stock with my profits.

In school, they don't teach you how to make and save money, not in high school or college. So my question is, how would you propose to educate kids in this area?

WARREN BUFFETT: Well, that's a good question. Sounds to me like — (Applause)

Sounds to me like you could do a good job yourself, too. And, you know, at 10, you're way ahead of me. Unfortunately, I didn't buy my first stock until I was 11, so I got a very slow start. And — (Laughter)

It's, you know, what it takes really is — and you find it in some classrooms and you don't in others — but it takes teachers who can explain the subject. Charlie would say Ben Franklin was the best teacher of all in that respect.

But, you know, it looks like you either got it from your parents — an education on that — and parents can do more education, really, in that respect, even, than teachers.

But it's, you know, I get a chance to talk to students from time to time. And, you know, one of the things I tell them is, you know, what a valuable asset they have themselves.

I mean, I would pay any bright student probably $50,000 for 10 percent of his future earnings the rest of his life. So he's a $500,000 asset just standing there. And what you do with that $500,000 asset, in terms of developing your mind and your talents, is hugely important.

The best investment you can make, at an early age, is in yourself. And it sounds to me like you're doing very well in that respect. I congratulate you on it.

I don't have any great sweeping program for doing it throughout the schools though. We have — here in Nebraska — we have an annual get-together of students from all the high schools

throughout the state. And it's a day or two of economic education. I think it's a very good program.

But I think if you just keep doing what you're doing, you may be an example to other students.

Charlie?

CHARLIE MUNGER: Well, I'd like to interject a word of caution. You sound like somebody who's likely to succeed at what you're trying to do. And that's not always a good idea.

If all you succeed in doing in your life is to get early rich from passive holding of little bits of paper, and you get better and better at only that for all your life, it's a failed life.

Life is more — (applause) — than being shrewd at passive wealth accumulation. (Applause)

WARREN BUFFETT: I think he's going to do well in both.

15. Internet "was a chance for people to monetize the hopes of others"

WARREN BUFFETT: Zone 5?

AUDIENCE MEMBER: Good morning. My name is Thomas Kamay (PH). I am 11 years old and from Kentfield, California. This is my fourth annual meeting.

Last year, I asked how the internet might affect some of your holdings. Since a lot of the internet companies have gone out of business, how are — has your view of internet changed?

WARREN BUFFETT: Well, that's a good question. I think that the internet probably looks to most retailers like less of a competitive threat than it did a couple of years ago.

For example, if you look at the jewelers who have been on the internet and, in many cases — in several cases, at least, had very large valuations a couple of years ago, so the world was betting that they would be very effective competitors against brick and mortar jewelry retailers.

I think that that threat has diminished substantially. I think that's been true in the furniture business. In both of those industries, very prominent dot-coms that had aggregate valuations in the hundreds of millions have vanished in short order.

So I would say that we think the internet is huge opportunity for certain of our businesses. I mean, GEICO continues to grow in a — at a significant rate in internet business.

See's Candies' internet business is up 40 percent this year. Last year it was up a much larger percent from the year before, and it grows and it will continue to grow.

So the internet's an opportunity, but I think the idea that you could take almost any business idea and turn it into wealth on the internet — many were turned into wealth by promoting them to the public. But very few have been turned into wealth by actually producing cash results over time.

So I think there's been a significant change in the degree to which I perceive the internet as a possible threat to our retail businesses. There's been no change in the degree to which I regard it as an opportunity for other of our businesses.

Charlie?

CHARLIE MUNGER: Well, Warren, you and I were once engaged in the credit and delivery grocery business. And it was a terrible business. It barely supported one family for a hundred years with all of them working 90 hours a week.

And somebody actually got the idea that was the wave of the future and turned it into a great internet idea. That can only be described as mania. And it sucked in a lot of intelligent people.

WARREN BUFFETT: Yes, Charlie is talking about the infamous Buffett & Son Grocery Store, which did barely support the family for a hundred years. And, only then did we support the family by hiring guys like Charlie for slave wages. (Laughter)

But I used to go out on those delivery trucks, and it was pretty damned inefficient. You know, people would phone their orders in. And now it's true we took them down with a pencil and an order pad instead of punching them into a computer.

But when we started driving around the trucks and hauling the stuff off and everything, you know, we ran into the same costs that Webvan is running into now.

What the internet offered was a chance for people to monetize the hopes of others, in effect. I mean, you are able to capture the greed and dreams of millions of people and turn that into instant cash, in effect, through venture capital and the markets.

And there was a lot of money transferred in the process, from the gullible to the promoters. But there's been very little money created by pure internet businesses so far. It's been a huge trap for the public.

Charlie?

CHARLIE MUNGER: Nothing more.

16. "We don't have a master plan"

WARREN BUFFETT: Zone 6.

AUDIENCE MEMBER: Thank you for taking my question. My name is Frank Gurvich (PH). I'm from London, Ontario. It's great to see all the young people asking questions. I even have my own 11-year-old here, Matthew, this year.

I first want to start by passing on a message from my wife to you, Mr. Buffett. And that is, "Thank you, Mr. Buffett for your autograph that Frank brought back last year. However, quite frankly, the ring in the Borsheims box you autographed was far more precious."

WARREN BUFFETT: You can repeat that if you'd like. (Laughter)

AUDIENCE MEMBER: My question relates to the future of Berkshire. Back in 1994, there was a PBS video interview of you at the Flagler Business School. And I believe you said Berkshire was not an insurance company.

It appears that's not quite the case as much anymore, and I suppose insurance acquisitions will provide the financial fuel and the stability the Johns Mansvilles and MidAmerica types of acquisitions will need for their future growth.

But I'm hoping that you and Charlie can describe for us an anticipated future look at, say, 20 years out, of how Berkshire might be different and — from how it is today — and perhaps a couple of the not so obvious problems that Berkshire will need to contend with.

And thank you for all the apparently wonderful acquisitions you've made on our behalf in the last year.

WARREN BUFFETT: Well, thank you. I think you ought to take your wife another ring, too. (Laughter) But thank you.

We actually, as long ago as — I don't remember whether it was in the 1980 annual report, but at least 20 years ago, we did say that we thought insurance would be our most significant business over time.

We had no idea that it would get to be as significant as it is. But we've always felt that that was — we would be in many businesses — but that insurance was likely to be our largest business.

Right now, it's not our largest business in terms of employment. It's our largest business in terms of revenue. And we would hope it gets a lot bigger over time. We don't have anything in the works that would make that happen, although we will have natural growth in what we already own.

But we will just keep acquiring things. And sometimes — some years we'll, you know, we'll make a big acquisition. Some years we'll make a few small acquisitions.

We'll do whatever comes down the pike. I mean, if there's a phone call waiting when this meeting is over and it's an interesting acquisition, it'll get done.

We don't have a master plan. We don't — Charlie and I do not sit around and strategize or talk about the future of various industries or do anything of that sort. It just doesn't happen. We don't have any reports. We don't have any staff. We don't have any of that.

We try to look at what comes in — we try to survey the whole financial field. We try to look at what comes in and look for things we understand, where we think they have a durable, competitive advantage, where we like the management, and where the price is sensible.

And, you know, we had no idea two or three years ago, you know, that we would be the 87 percent owner of the largest carpet company — broadloom carpet company — in the world.

You know, we just don't — we don't plan these things. But I would tell you in a general way that 20 or so years from now, we will own a lot more businesses.

I would still think it likely — I mean, I think it's certain that insurance will be a bigger business for us in 20 years than it is now. Probably much bigger. But I think it's — and I think it's also likely it will be our biggest business still. But that could change.

I mean, we could get a deal offered to us tomorrow that, you know, was a 15- or $20 billion deal, and then we've got a lot of money in that industry at that point.

So it's — we have no more master plan now than we had back in 1965 when we bought the textile mill, really.

I mean, we had a lousy business. I didn't realize it was as lousy as it was when I got into it. And we had to, you know, we just had to start trying to deploy capital in an intelligent way.

But we've been deploying capital, you know, since I was 11. And I mean, that's our business and we enjoy it. And we get opportunities to do it. But the bigger you are, the fewer the opportunities you're likely to get.

Charlie?

CHARLIE MUNGER: Well, I think it's almost a sure thing that 20 years from now there'll be way more strength and value behind each Berkshire share. I also think it is an absolutely sure thing that the annual percentage rate of progress will go way down from what it has been in the past.

WARREN BUFFETT: No question about it.

17. Buffett's cholesterol level

WARREN BUFFETT: On that happy note, we move to zone 7. (Laughter)

AUDIENCE MEMBER: Good morning, Mr. Buffett, Mr. Munger. My name is Gary Radstrom (PH) from right here in River City [Omaha]. I've been a shareholder since '93, and have loved every minute of it.

Recently, there's been medication available to reduce cholesterol. My doctor even gave it to me since mine is kind of high.

Every time I hear what you like to eat, Warren, it makes me wonder what your cholesterol level is — (Laughter) — or if you even worry about it. I think everyone here wants you to be with us for a long time, so have you considered taking this new medication to reduce your cholesterol level? (Laughter)

WARREN BUFFETT: I do know the number, and I don't remember it. My doctor tells me, "It's a little high," but if he says it's a little high, it means it isn't that high, or he would — because he always tries to push me into making a few changes in my life.

But he — I've got a wonderful doctor. And I was lucky last year, because I hadn't been in to see him for about five years. And — (laughter) — due to — those guys cost a lot of money, I mean. (Laughter)

And due to purely an accident, a reaction to some other medicine I was given when I was out of the city, he got a hold of me, and then he shamed me into having a physical. And it was extremely lucky, because I had a polyp in the colon that would have probably caused trouble, you know, within a couple of years.

I would say that if you ask my doctor, he would want me to make a few changes, but he would also say that my life expectancy is probably a lot better than the average person of 70.

You know, I have no stress whatsoever. Zero. You know, I mean, I get to do what I love to do every day. You know, and I'm surrounded by people that are terrific. So that problem in life just doesn't exist for me. You know, and I don't smoke or drink or, well, we'll end it right there. (Laughter)

And so, you know, if you were an underwriter for a life company, you would rate me considerably better than the average. You'd rate Charlie better than average, too.

And I'm sure that, you know, I could change it slightly, perhaps, on the probabilities, you know, if I change my diet dramatically or something. But it's very unlikely to happen.

Actually, when my mother got to be 80 — you know, the most important thing in life, in terms of how long you live, is how long your parents live. So I got her an exercise bike when she got to be 80. (Laughter)

She put 40,000 miles on it. And I told her to watch her diet and do all these things. And I mean, she lived to be 92, so you know, she did her share, and I helped her do it by giving her the exercise bicycle. So, I think that improved my odds at that point.

Charlie?

CHARLIE MUNGER: Yeah. I have a book recommendation which will be very helpful to all shareholders that worry about Warren's health and longevity.

And that's this book called "Genome" by Matt Ridley, who was, for years, the science editor of The Economist magazine. And if Ridley is right, Warren has a very long life expectancy.

There are very interesting correlations between people who cause stress to others instead of suffering it themselves. (Laughter and applause)

And Warren has been in that position ever since I've known him. (Laughter)

And the figures that Ridley quotes are awesomely interesting. It is a fabulous book.

Of course, I'm recommending a bestseller, but they're selling it in the airport. It's called "Genome," and you'll feel very good about Warren's future if you agree with the science of the book.

18. Unrealistic investment expectations for pension funds

WARREN BUFFETT: Zone 8.

AUDIENCE MEMBER: My name is Charlie Sink (PH). I'm from North Carolina.

Mr. Buffett, your article last year in Fortune Magazine was excellent.

I'm thinking — well, I'm wondering what your thoughts are on American business profit margins and return on equity in the future. I also would like your thoughts about the — some businesses today with their huge inventory write-offs, what your thoughts about those are.

WARREN BUFFETT: Yeah, well, in that article I talked about the unlikelihood of corporate profits in the United States getting much larger than 6 percent of GDP. And historically, the band has been between 4 and 6 percent. And we've been up at 6 percent recently.

So, unless you think that profits, as a part of the whole country's economic output, are going to become a bigger slice of the pie — and bear in mind, they can only become a bigger slice of the pie if other slices get diminished to some extent, and you're talking about personal income and items like that.

So, I think it's perfectly rational and reasonable that in a capitalistic society the corporate profits are something like 6 percent of GDP.

That does not strike me as outlandish in either direction. It attracts massive amounts of capital, because returns on equity will be very good if you earn that sort of money.

And on the other hand, I think it would be very difficult in the society to get where they'd be 10 percent or 12 percent, or something of the sort because it just — it would look like an unfair division of the pie to the populace.

So, I don't see any reason for corporate profits — they're going to be down in the near future as a percentage of GDP from recently, but then they'll go back up at some point. So I think 10 years from now, you'll be looking at a very similar picture.

Now, if that's your assumption and you're already capitalizing those profits at a pretty good multiple, then you have to say that you have to come to the conclusion that the value of American business will grow at a relationship that's not much greater than the growth in GDP.

And most of you would estimate that probably to be, you know, maybe 5 percent a year, if you expect a couple percent a year of inflation.

So, I wouldn't change my thoughts about the profitability of American business over time. And I wouldn't change my thoughts much about the relationship of stock prices over time to those profits. So, I — you know, I would come down very similarly.

Now, interestingly enough, some of those same relationships prevailed decades ago, but you were buying stocks that were yielding you perhaps 5 percent or something like that, so that you were getting 5 percent in your pocket, plus that growth as you went along.

And of course, now if you buy stocks you get 1 1/2 percent, if you're the American public, before the frictional cost. So that the same rate of growth produces a way smaller aggregate return. And some —

You know, I think stocks are a perfectly decent way to make 6 or 7 percent a year over the next 15 or 20 years. But I think anybody that expects to make 15 percent per year, or expects their broker or investment advisor to make that kind of money, is living in a dream world.

And it's particularly interesting to me that back when the prospects for stocks were far better — I even wrote something about this in the late '70s — pension funds were using investment rate assumptions that were often in the 6 percent or thereabout range.

And now when the prospects are way poorer, most pension funds are using — building into their calculations — returns of 9 percent or better on investments. I don't know how they're going to get 9 percent or better on investments.

But I also know that they change the investment assumption down, it will change the charge to earnings substantially. And they don't want to do that.

So, they continue to use investment assumptions which I think are quite unrealistic. And with companies with a big pension component in their financial situation, and therefore in their income statement, that can be quite significant.

It will be interesting to me to see whether in the next couple years where pension funds are experiencing significant shortfalls from their assumptions, how quickly they change the assumptions.

And the consulting firms are not pushing them to do that at all. It's very interesting. The consulting firms are telling them what they want to hear, which is hardly news to any of us. But it's what's taking place.

The second question about inventory write-offs. You know, that gets into the category entirely of big-bath charges, which are the tendencies of management, when some bad news is coming along, to try and put all the bad news that's happened into a single quarter or a single year — and even to put the bad news that they are worried about happening in the future into that year.

And it's — it leads to real deception in accounting. The SEC has tried to get quite tough on that, but my experience has been that managements that want to do it usually can find some ways to do it.

And managements, frequently, are more conscious of what numbers they want to report than they are of what has actually transpired in a given quarter or a given year.

Charlie?

CHARLIE MUNGER: Yeah, pension fund accounting is drifting into scandal by making these unreasonable investment assumptions. It's — evidently, it's part of the human condition that people extrapolate the recent past.

And so, since returns from common stocks have been high for quite a long period, they extrapolate that they will continue to be very high into the future. And that creates a lot of reported earnings, in terms of pension benefits, that aren't available in cash and are likely not to be available at all.

And this is not a good idea, and it's interesting how few corporate managements have just responded like Sam Goldwyn: "Include me out."

You'd think more people would just say, "This is a scummy way to keep the books, and I will not participate." Instead, everybody just drifts along with the tide, assisted by all these wonderful consultants.

WARREN BUFFETT: Yeah, I don't think — I don't know of any case in the United States right now, and I'm sure there are some, but except for the pension funds that we take over, I don't know of any case where people are reducing their assumed investment return.

Now you'd think if interest rates drifted down several percentage points that that might affect what you would think would be earned with money. It certainly is to bond holders or to us with float or something of the sort.

But most major corporations, I believe, are using an investment return assumption of 9 percent or higher. And that's with long-term governments below 6 percent, you know, and maybe high-grade corporates at 7.

They don't know how to get it in the bond market. They don't know how to get it in the mortgage market. I don't think they know how to get it in the stock market. But it would cause their earnings to go down if they change their investment assumption.

And, like I say, I don't know of a major company that's thinking about it. And I don't know of a major actuarial consultant that's suggesting it to the managements. It just — they'd rather not think about it.

CHARLIE MUNGER: The way they're doing things would be like living right on an earthquake fault that was building up stress every year and projecting that the longer it's been without an earthquake the less likely an earthquake is to occur.

That is a dumb way to write earthquake insurance. (Laughter)

And the current practice is a dumb way to do pension fund planning and accounting.

WARREN BUFFETT: If you talk —

CHARLIE MUNGER: Dumb and improper.

WARREN BUFFETT: If you talk to a management or board of directors about that, you get absolutely no place.

CHARLIE MUNGER: No, they — their eyes would glaze over before the hostility came. (Laughter)

19. Executive Jet won't be a "mature" business "for decades"

WARREN BUFFETT: Area 1.

AUDIENCE MEMBER: Good morning, gentlemen. Marc Rabinov from Melbourne, Australia. I had a question on two of our key operating businesses.

Firstly, Executive Jet. Once this becomes a mature business, would it be fair to say that its net margin should be about 5 percent?

And secondly, would it be fair to say that our current insurance businesses are likely to grow aggregate float at about 10 percent over time?

WARREN BUFFETT: Well, it's really anybody's guess. I mean, I don't expect Executive Jet to become a mature business for decades. I mean, it — there's a whole world out there on that one.

And we have something over 2,000 customers in the United States at the current time. We have a little over a hundred, but in Europe.

But there are tens and tens and tens of thousands, and perhaps hundreds of thousands, of people or businesses where it does make sense over time. So it's going to be long time.

I mean, there are only 700, roughly, jets a year being produced. And of course, up until a few years ago that was limited to people who wanted to buy single planes.

But you won't change that output much in the next five years. But — so, you couldn't really take on —

We can take on about 600 customers a year, just in terms of the delivery schedule that we have built into our business. And we couldn't change that — we couldn't double that — because the planes simply aren't available in the next year or two, although we have orders further out.

But I would say it will be a long time until Executive Jet is a mature business, and I would say that — a long, long time.

I mean, we're going to, when we get Europe — as we make progress in Europe, we'll move to Asia. We'll move to Latin America over time. And so we're going to be, I think, growing that business significantly for a very long time.

When it becomes mature, or close to it, you know, if you're talking 5 percent after-tax margins, I'd say that that's probably a reasonable figure. But we're so far away from even thinking about that, that, you know, it's pure speculation.

20. "There's an unlimited market for dumb insurance policies"

WARREN BUFFETT: In our insurance business, we've grown our float and then we've purchased businesses to add to the float.

This year, I would certainly expect, unless one — a big transaction would fall through or something — I would certainly expect our float to grow at least 2 1/2 billion. And that is close to 10 percent of the beginning of the year float.

That's a rational expectation. But whether it can grow 10 percent a year, you know, how far you can do that — I would say the total float of the property-casualty industry in the United States is — I'm pulling this out from making some other calculations in my head as I talk — but it wouldn't be much more than 300 billion.

So, we are close to 10 percent of the entire U.S. float now, and I don't think the U.S. float — the aggregate float — you know, is going to grow at a 10 percent rate.

So when you're as big a part of the pie as we are, it may be difficult to sustain a 10 percent rate. But we're doing everything possible that makes sense to grow float. I mean, that is a major, major objective. But the even bigger objective is to keep it low-cost.

I don't think you can see — unless the world changes in some way — I don't think you can see 10 percent growth over 25 years. But we'll do our darnedest to get it, you know, at the rate you suggest for at least the near future.

Charlie?

CHARLIE MUNGER: Well, I certainly agree that long term, it's not going to happen. Good, but not that good. (Buffett laughs)

WARREN BUFFETT: But we've been surprised at what's happened. I mean, there's no — I mean, when we bought Jack Ringwalt's company in 1967, you know, my memory is Jack had a float of, you know, less than 15 million.

And would we have ever guessed that we might hit something close to 30 billion this year? We never dreamt of it. But we just kept doing things, and we'll keep doing things.

But it can't be at huge rates for a long period of time, because we're too big a part of the pie now. We were nothing initially, and we kept grabbing a little more of the pie as we've gone along. And we like that, but it can't go on forever.

CHARLIE MUNGER: Yeah. That's what I call really low-cost float. If it ever should be advantageous for us to go into what I would call higher-cost float, that might change the figures upward, in terms of growth of float.

WARREN BUFFETT: Yeah. Although, that won't be — I mean, it could happen that we could take on incrementally some higher-cost float under very special circumstances if we saw unusually good ways to use it, but that — we don't even like to think about that.

We certainly don't want the people running our businesses to think about that. Because keeping it low- cost, you know, that is the big end of the game.

Anybody can generate float. I mean, if we gave our managers a goal of generating 5 billion of float next year, they could do it in a minute, you know, and we would be paying the price for decades to come.

You can write dumb insurance policies, you know. There's an unlimited market for dumb insurance policies. And they're very pleasant, because the first day the premium comes in and that's the last time you see any new money. From then on, it's all going out. And that's not our aim in life.

21. GEICO focusing on U.S. instead of global expansion

WARREN BUFFETT: Zone 2?

AUDIENCE MEMBER: My name is Kjell Hagan (PH). I'm a Norwegian working in Tokyo in Japan.

I'm very satisfied to have more than 95 percent of our family's savings in Berkshire. I have two questions.

In my work, I've seen a lot of insurance companies in Europe and Japan. And I think that GEICO's business model is quite superior to most primary insurance companies in Europe and Japan.

And I think that GEICO would be very successful in Europe and Asia. So I'd like to hear what are the views and plans for GEICO doing business in Europe and Asia.

Second, regarding Coca-Cola — living in Japan, I notice that Coke has a relatively low presence in advertising, although they are the largest player with 30 percent market share versus 15 for the number two. I think Coke is being too cheap on advertising, thus hurting the long-term position.

I wonder if advertising strategy internationally is a high enough priority of Coke's management, and if aggressiveness is sufficient. I'd like to hear if you have any comments on this.

Also I'd just like to thank you very much for this experience and for the wonderful company you have created.

WARREN BUFFETT: Well, thank you very much.

Clearly when you've got a business model that works as well as GEICO has in this country and it continues to work well, and has that fundamental advantage of being a low-cost operator, we think about every possible way that we can take that idea and extend it.

It's been remarkably hard to do it. I mean, the management has tried various things, ever since Leo Goodwin started the company in 1936, to take it into other areas, and those efforts have been modestly successful at certain things like life insurance, but then they got out of it, and various other things.

But it's an idea still. We have — you know, we have 4 percent or so of the market in the United States. This market is so huge. And as we look at the drain on human resources involved in extending it into other countries, and we've looked at it a lot, and it may be something we'll do at some time.

But we've never felt that the possible gain, considering the rigidities of these other — both in Europe and in Asia — of breaking in — it's not easy to get into those markets. And the cost, the time, we just felt that it would be better to concentrate those same resources in this country.

It's not a question of capital at all. I mean, we'd put the money in in a second. And we're doing it in something like NetJets in Europe. I mean, we — there's a human cost to it, there's a financial cost to it.

Financial cost bothers us not at all. Human cost is a real question, because it gets back to Charlie's opportunity cost.

We have talented managers, but we have a finite number of them. And I would rather have Tony Nicely and Bill Roberts and their crew focusing on how to gain additional market share in this country at the right rates than I would starting in a project in Europe or Asia now.

But that's — it's a very good question. It's something I can guarantee you we think about all the time and will continue to think about.

We've tried to extend geography. Coke has been the most successful company in the world in extending geography.

We've tried to do it with See's Candy, and it's had limited — very limited — success. I mean, we've tried 50 different ways, because the trials are relatively cheap to do.

And we think it should work, we just haven't been able to make it work. But that — it's a very good question.

22. Coca-Cola advertising in Japan

WARREN BUFFETT: The question about Coke's advertising in Japan. As you know, Coke has a terrific presence in Japan.

Japan's an interesting market, because the percentage of soft drinks sold through vending machines is just far, far higher than any place in the world. And the United States is a very

distant second. And then, the rest of the world, there's very little done in the way of vending machines.

I don't know the specifics of the advertising in Japan, but of course, Doug Daft who now is the CEO of Coke, comes with a huge background in Asia. I mean, that was his territory for much of his career.

And Doug — we have a new major — very major — advertising campaign coming up. And you probably read that Coke is going to spend 300 million-plus additional on marketing beyond the normal spend, which is huge.

And I can't tell you the specific markets in which that will be, but I would be surprised if Japan isn't a big part of it, because Japan is an enormous market for Coca-Cola.

Charlie?

CHARLIE MUNGER: I have nothing to add.

23. Berkshire's asbestos exposure

WARREN BUFFETT: Zone 3, please.

AUDIENCE MEMBER: Hi. My name is Steve Rosenberg (PH). I'm from Ann Arbor, Michigan.

First, I just want to thank both of you for being two phenomenal role models. I've really looked up to you both for a long time.

My first question is about reinsurance. I believe that you're willing to write larger policies in reinsurance than anyone else, but that you still insist on the amount of your liability being capped.

I'm wondering, with your investments in companies with — that have exposure to asbestos, have you somehow capped that? Or is that unlimited, especially given joint and several liability?

My second question involves auto insurance. And I was wondering, does State Farm's structure as a mutual insurance company compensate it — or help it compensate — for having a higher cost structure because, over the long term, it need only remain solvent and not provide an adequate return on capital to its investors?

WARREN BUFFETT: The first question, on asbestos. We have not put any significant money, to our knowledge, in any company that has any asbestos exposure now.

You know, we have a small amount of money in USG, where the subsidiary, United States Gypsum, has a major asbestos exposure. But that's a very, very minor investment. The — and that would be the only one that I can think of.

We've walked away from several deals that were quite attractive in every respect except asbestos. But that's like saying to a 120-year-old, you know, "You're in good health except for the fact that you're dead." (Laughter)

So we don't go near asbestos.

Now, in terms of our retroactive insurance policies, we are taking over the liabilities of companies that have lots of asbestos exposure. And in that case, we assume that those exposure — that those contracts — will be paid in full.

I mean, we make no assumption of any reduction in asbestos costs, but we do cap them.

There's a couple things you can't cap in insurance. You can't cap workers' compensation losses. I mean, they —you can as a reinsurer, but I mean, the primary insurer can't do that.

I believe in auto, for example, in the U.K., that it's uncapped. And I think that nobody thought that was very serious until they had a recent accident that caused — I think it involved a car doing something that — an auto doing something to a train that was unbelievable.

So they — there are a few areas where insurance is written on an uncapped basis. And in our case, we write some auto insurance in the U.K. and we write some workers' compensation, primarily in California.

But generally, in the reinsurance business, you are capping the liabilities you take on.

I mean, obviously, when we bought General Re, they had asbestos liabilities from reinsurance contracts they had written. But the reinsurance companies are pretty careful about writing unlimited policies.

We write huge limits. We're the biggest — you know, if somebody wants to write a huge limit, or an unusual limit, they should call us. Because there's no one else in the world that will act as big or as promptly as we will. But we don't write things that are unlimited.

Now, the interesting thing is that the biggest exposures, in our view, are the people that write a lot of primary business and don't have the catastrophe cover they need.

I mean, if you write 10 percent of all the business in homeowners on — or 15 percent — on Long Island or in Florida, I mean, you are writing a catastrophe cover that would blow your mind.

If you're Freddie Mac or Fannie Mae and you're guaranteeing mortgages, you know, for millions of people in areas like that, and they don't have insurance — earthquake in California or property insurance in Florida — they'd be less likely to have earthquakes someplace — you are taking on enormous risks.

I mean, huge risks, far beyond what we would ever take on. They just — but you don't get paid for them, unfortunately.

I mean, just take the New Madrid section of Missouri, down in the corner. That was the area of three of the greatest quakes, that are sort of related in time, in the — certainly in the recorded history, they were the three greatest quakes in the United States.

You know, how much homeowners' business, how much commercial property business, does somebody have in that huge territory, which you know, supposedly caused church bells to ring in Boston when it happened back in whenever it was — 1807, or '9, or something like that?

So, there are all kinds of risks that can aggregate in huge ways that companies are not thinking about at all.

I mean, I don't know whether Freddie Mac or Fannie Mae, for example, is demanding that all of the homes they insure in the, you know, 300-miles radius of New Madrid, have earthquake insurance.

But, you know, it — that sort of thing never comes to mind until the unthinkable happens. But in insurance, the unthinkable always happens.

24. Praise for State Farm

WARREN BUFFETT: State Farm, as a competitor, is a mutual company, and it has a huge amount of net worth.

You referred to them as a higher-cost — a high-cost operator or higher cost — but they're really a relatively low-cost operator. But they're not anywhere near as low-cost as GEICO. But they're a low-cost operator compared to many people in the insurance business.

And it's certainly true that they do not have the demands for profitability, partly because they've done such a great job in the past and built up so much surplus.

I have nothing but basically good things to say about what State Farm has done over the years.

They do not need — they can subsidize, to some extent, current auto policy holders with the profits that were derived from auto policy holders of the past. But that's always true when a stock company competes with a mutual company. And, you know, we know that when we go in the business.

And that's true of — there are a lot of other mutual companies out there that operate without the demands of earning a high return on capital. But if I were State Farm, I'd, you know, I'd probably be doing what they're doing. I don't criticize them at all.

Charlie?

CHARLIE MUNGER: Well, I don't criticize State Farm, either. State Farm is one of the most interesting business stories in the United States.

The idea that it could get as big as it is and has as good a distribution system as it does, it's a thoroughly admirable company. In fact, Berkshire has bought insurance from State Farm. Not auto insurance. (Laughter)

WARREN BUFFETT: GEICO still has a lower cost structure. I mean, it is a great business operation. And we have invested significantly to build that, because it is so attractive.

And, as I pointed out in the annual report, the incremental investment we made last year did not produce the same results as incremental investments in previous years.

So we are finding it hard to grow the business under current circumstances on a basis that we would like to.

But it's a wonderful business, and it has, you know, it has a business model that I wouldn't, you know, I wouldn't trade for anything.

25. "Nobody's going to catch" NetJets

WARREN BUFFETT: Zone 4?

AUDIENCE MEMBER: Hi, Mr. Buffett, Mr. Munger. My name's Dan Sheehan from Oakville, Canada.

Following up on your discussion about GEICO, you've often talked about their advantages as a direct seller and investor of float.

My question is, how do you control claim costs versus your competitors, other than through good underwriting?

Some may have advantages in terms of economies of scale or cutting corners you won't do. And this might allow them to eliminate some of the advantages you've gained on the other side of the combined ratio.

And my second question is, you've said, "It's hard to be smarter than your dumbest competitor." And along that line, what are your thoughts about a recent Wall Street Journal article about a major airline getting into the fractional jet business? Thank you.

WARREN BUFFETT: I don't worry about the dumbest competitor in a business that's service. The customer will figure that out over time.

And we have a huge advantage in the fractional ownership business. I mean, we have 265 planes flying around now, and you can get one on four hours' notice at any one of 5,500 airports. We have planes in Europe for our American customers. We have planes here for our European customers. And nobody's going to catch us, in my view, in fractional ownership.

And we've had some dumb competitors in the past in that business. And, you know, they bleed. And to the extent, you know, we've got more blood than they have.

26. Buffett on the "trick" of good underwriting

WARREN BUFFETT: In the question of GEICO and underwriting, you know, that — it's a fascinating business because there are — in this audience — there are people with hugely different propensities to have an accident. And of course, most people figure they're better than average.

Now, part of the propensity to have an accident will depend on how many miles you drive. Obviously, somebody who never takes the car out of the garage is — no matter what their driving skills might be — is not going to have an accident.

They drive 10 miles a year, you know, you're pretty safe with almost anybody. But — so there's a relationship to miles driven. But there's a relationship to all kinds of other things.

And the trick, in insurance, is being able to figure out the variables and not have them too many, because you still have to get people to fill out a form, and you don't want something that has practically no significance.

But the trick is to find out what questions you need to ask to determine in which category to place people as to their propensity to have an accident.

Now, in the life insurance business, you know, even Charlie and I figured out that the older you get, the more likely you are to die in a given year.

Now that's not the only factor, but everybody understands that. That the older you are, the mortality risks go up. And they've learned a few other things. They've learned that females live longer than males.

Now that doesn't get into a judgment as to why or anything else. You just know it. So, you build that in if you're pricing the product. And then you know a whole bunch of other things.

You may even know that cholesterol's bad — you know, that makes a difference in terms of predicting mortality.

But in the auto insurance business, there are lots of variables that correlate with the frequency with which a person will have an accident per mile driven.

And the more experience you have with a large body of people whom you've asked a lot of questions about and can draw conclusions there from, the better off you are.

State Farm has got a wonderful body of information. I mean, their actuarial judgments should be better than anybody else's, because they've got more experience with more cars and drivers.

But our experience with close to five million policy holders enables us, I think, to underwrite quite intelligently. But every day, you know, we're looking for some variable that will tell us more.

People with a good credit history are better drivers by a significant margin than people with a lousy credit history.

Why? We don't care too much why, because it wouldn't help. What we really need to know is that the two factors correlate. And we're looking for correlations all the time, and we're trying to avoid spurious correlations, which you can have.

And it's, you know, it's a moving target. You keep working on it all the time. But we're better at it than we were five years ago and we'll be better at it five years from now than we are now.

When we go into a new state, we will have a very small body of policy holders. And some of the factors, obviously, prevail over all states, but there's certain things that you learn, actually, only if you're in a given state for a while.

You know, you're more likely to have an accident if you're a — everything else being equal — if you're an urban driver — city driver in a big city — than if you're driving in an area that's very rural where the density of other cars is very low.

If you're the only guy in the county with a car, you know, you're not going to have a lot of two-car accidents.

So, the underwriting question is all important. And fast, fair settlement of claims is very important, because people who really weren't injured start feeling worse and worse as they talk to more and more lawyers.

So, you know, the claims delivery is a vital part of running a good property-casualty operation. And all I can tell you is, at GEICO, that we think very hard about those things, but we'll be thinking about them tomorrow as well as today.

Charlie?

27. Challenges for United's fractional jet venture

CHARLIE MUNGER: Well, vis-à-vis the fractional jet ownership program, which has been announced for United Airlines, I find that very interesting.

A senior United Airlines pilot now makes about $300,000 a year plus fancy fringes, including pension. And what he does is work a very limited hour — number of hours a month. And about half of that he spends sleeping in a comfortable bunk on long ocean flights.

That is not a culture that will work well in fractional jet ownership. Maybe they think they'll get some advantage in recruiting new pilots or something. I don't know why they're doing it. I would not have done it.

WARREN BUFFETT: Well, they haven't done it yet, either, but the — many of the airlines have organized second companies to take care of commuter flights and all of that.

And, you know, that does produce problems when the pilots of the subsidiaries start comparing their benefits to the pilots, you know, of the parent, and all that. I mean, they try to get lower cost structures by doing that.

But I would guess that if you were wanting to set up a fractional ownership company, that — and you were — you would probably not think about trying to align yourself with somebody that has extremely high costs in other areas.

And the advertising campaign will be kind of interesting, too. You know, "Give up first class travel. Start traveling right," you know, or something. It'll be interesting.

But I would tell you that we have competitors in the fractional ownership business, the two largest being companies that are part of plane manufacturers. And you can understand why they went into it, but it is not an easy business. And we've got the best hand, frankly.

28. Calling it a "hedge fund" doesn't make you any smarter

WARREN BUFFETT: Zone 5?

AUDIENCE MEMBER: Michael Wong (PH), San Diego, California. First of all, I would like to thank both of you.

My question is, when you started your business, why you started an investment partnership instead of a mutual fund?

And also, can you recommend a good book, or books, regarding how to start an investment partnership fund and how to service clients, et cetera?

WARREN BUFFETT: Yeah, I don't know of any books on starting partnerships or hedge funds. Do you know, Charlie?

CHARLIE MUNGER: No, but people seem to manage to create them without the books. (Laughter)

The incentives are awesome.

WARREN BUFFETT: Yes. And the one thing, I mean, it's always interesting to both of us how you get certain things that are fashionable. And people think that by naming something a given name, that somehow that makes everybody smarter or able to make money in it.

I mean, there is no magic to private equity funds, international investing, hedge funds — all of the baloney that gets promoted in Wall Street.

What happens is that certain things become very promotable, usually because there's been recent successes by other people, and that the new entrants extrapolate the successes of a few people in the past to promote new money from people currently.

So, they adopt titles that, you know, that they think will attract money and they — but it doesn't make anybody any smarter if they hang out a shingle in front of their house that says, "hedge fund" or they have a shingle that says "asset allocation firm" or something of the sort. The form doesn't create talent.

I backed into the business. I mean, I'd worked for a mutual fund — closed-end investment company. In fact, there's a fellow here today who's a friend of mine that — the two of us worked there, and we were 40 percent of the whole company because there were three other people, all of whom outranked us considerably. And that firm was Graham-Newman Corp, from 1954 to 1956.

And it was a regulated investment company. It was about $6 million in assets, which seemed like a big deal at the time. And Ben Graham was one of the best known investors in the world, and he had $6 million in his fund.

There was a sister partnership called Newman and Graham, which operated in what would, today, be called "hedge fund style," as far as a partnership split of the profits and so on.

And when I left there in ’56 and I came back here, we had seven people, a couple of whom are here in the room, who said, “Do you want to manage money?” And I said, “Well, here’s what I learned at Graham-Newman,” that Newman and Graham is a better way to do it than Graham-Newman.

So I formed a little partnership, and then I met Charlie a few years later. And he figured, if I was making money doing it, he’d make a lot more. So — (laughter) — he formed one. And that was the carefully calculated strategy of how we both became involved in the partnership business.

Charlie? (Laughs)

CHARLIE MUNGER: Yeah, it is amazing how big the hedge fund industry has become. They have conventions on the subject now. And in the late ’20s, you could take a course on how to run a crooked security pool.

And these things come in great waves. I’m not suggesting the hedge funds are crooked, but I am suggesting that you get these waves of fashion that go to great extremes. The amount of money, what is it now, Warren, in hedge funds?

WARREN BUFFETT: It’s very big, although it’s a little less in a few quarters than it used to be. (Laughs)

But I would be willing to put a lot of money up that if you take the aggregate experience of all the hedge funds — as starting right today and going for the next 15 years — I would bet a lot of money it will not hit 10 percent, in terms of return to partners. And I would, if you push me, I would bet at a lower figure than that.

CHARLIE MUNGER: Then you have Bernie Cornfeld’s idea, the Fund of Funds. There are people who want to get paid for selecting hedge funds for other people. And that didn’t work very well for Bernie Cornfeld.

WARREN BUFFETT: Well, it worked pretty well for Bernie for a while, but it didn’t work so well for his investors, actually. (Laughter)

Yeah. That result was probably something Bernie had in mind at the start maybe.

29. Investing small amounts allows bigger opportunities

WARREN BUFFETT: Zone 6.

AUDIENCE MEMBER: I’m Michael Zenga from Danvers, Massachusetts. That’s a town whose band Mr. Buffett so generously sent to the Rose Bowl parade last year, so you’re a very popular guy in my town.

Good morning, Mr. Buffett and Mr. Munger.

Mr. Buffett, I wanted to ask you this question last week when I ran into you after Gillette's annual meeting, but I choked. So now that there's no pressure, here goes. (Laughter)

In the years from — from my reading — in the years from 1956 through '69, you achieved the best results of your career quantitatively. Twenty-nine percent annually against only 7 percent for the Dow.

Your approach then was different than now. You looked for lots of undervalued stocks with less attention to competitive advantage or favorable economics and sold them rather quickly.

As your capital base grew, you switched your approach to buying undervalued excellent companies with favorable long-term economics.

My question is, if you were investing a small sum today, which approach would you use?

WARREN BUFFETT: Well, I would use the approach that I think I'm using now of trying to search out businesses that — where I think they're selling at the lowest price relative to the discounted cash they would produce in the future.

But if I were working with a small amount of money, the universe would be huge compared to the universe of possible ideas I work with now.

You mentioned that '56 to '69 was the best period. Actually, my best period was before that. It was from right after I met Ben Graham in 19 — early 1951 — but from the end of 1950 through the next 10 years, actually, returns averaged about 50 percent a year. And I think they were 37 points better than the Dow per year, something like that. But that — I was working with a tiny, tiny, tiny amount of money.

And so, I would pour through volumes of businesses and I would find one or two that I could put $10,000 into or $15,000 into that just were — they were ridiculously cheap. And obviously, as the money increased, the universe of possible ideas started shrinking dramatically.

The times were also better for doing it in that time.

But I think that, if you're working with a small amount of money, with exactly the same background that Charlie and I have, and same ideas, same whatever ability we have — you know, I think you can make very significant sums.

But you — but as soon as you start getting the money up into the millions — many millions — the curve on expectable results falls off just dramatically. But that's the nature of it.

You've got to — you know, when you get up to things you could put millions of dollars into, you've got a lot of competition looking at that. And they're not looking as I did when I started. When I started, I went through the pages of the manuals page by page.

I mean, I probably went through 20,000 pages in the Moody's industrial, transportation, banks and finance manuals. And I did it twice. And I actually, you know, looked at every business. I didn't look very hard at some.

Well, that's not a practical way to invest tens or hundreds of millions of dollars. So I would say, if you're working with a small sum of money and you're really interested in the business and willing to do the work, you can — you will find something.

There's no question about it in my mind. You will find some things that promise very large returns compared to what we will be able to deliver with large sums of money.

Charlie?

CHARLIE MUNGER: Well, yeah, I think that's right. A brilliant man who can't get any money from other people, and is working with a very small sum, probably should work in very obscure stocks searching out unusual mispriced opportunities.

But, you know, you could — it's such a small world. It may be a way for one person to come up, but it's a long slog.

30. Promotion, not performance, is Wall Street's biggest money maker

WARREN BUFFETT: Yeah, most smart people, unfortunately, in Wall Street figure that they can make a lot more money a lot easier just by, one way or another, you know, getting an override on other people's money or delivering services in some way that people —

And the monetization of hope and greed, you know, is a way to make a huge amount of money. And right now, it's very — just take hedge funds.

I mean, it's — I've had calls from a couple of friends in the last month that don't know anything about investing money. They've been unsuccessful and everything else. And, you know, one of them called me the other day and said, "Well, I'm forming a small hedge fund." A hundred and twenty-five million he was talking about.

Like, the thought that since it was only 125 million, maybe we ought to put in 10 million or something of the sort.

I mean, if you looked at this fellow's Schedule D on his 1040 for the last 20 years, you know, you'd think he ought to be mowing lawns. (Laughter)

But he may get his 125 million. I mean, you know, it's just astounding to me how willing people are, during a bull market, just to toss money around, because, you know, they think it's easy.

And of course, that's what they felt about internet stocks a few years ago. They'll think it about something else next year, too.

But the biggest money made, you know, in Wall Street in recent years, has not been made by great performance, but it's been made by great promotion, basically.

Charlie, do you have anything?

CHARLIE MUNGER: Well, I would state it even more strongly. I think the current scene is obscene. I think there's too much mania. There's too much chasing after easy money. There's too much misleading sales material about investments. There's too much on the television emphasizing speculation in stocks.

31. Powerful forces don't want to expense stock options

WARREN BUFFETT: Zone 7.

AUDIENCE MEMBER: Robert Piton from Chicago. The Honorable Warren Buffett and the Honorable Charlie Munger, I felt it would be appropriate to address you both in a manner that reflects the tremendous amount of value that the two of you have been instrumental in unleashing for your shareholders, your employees, and the good of society. (Applause)

The area that I'd like to inquire about is stock options. As you are aware and have written about in the past reports, companies have been taking advantage of, and contributing to, FASB's inadequate rules regarding stock options.

In particular, the lack of having to expense them on the income statement and the lack of having to report them as a liability on the balance sheet.

My question is, are either one of you doing anything to help FASB's current stance on the issue?

If not, have either one of you ever considered establishing a, quote, "real," end quote, independent body of accountants that would actually try to make companies produce accounting statements that reflect economic reality?

WARREN BUFFETT: Charlie, I'll let you. You have the history on it.

CHARLIE MUNGER: Well, we don't like the accounting, which we've called "corrupt," or at least I have. And I don't think that's too strong a word. I think it's corrupt to have false accounting because you like a certain outcome better than another.

All that said, I don't think either of us spends a lot of time fighting with FASB or trying to create a better one.

It's like splitting your lance against stone or something. You can get a lot of back pressure from the butt of the lance. And we can't be expected to cure all the ills of the world.

WARREN BUFFETT: We've written about it and talked about it. Obviously, you've picked up on it. And when it was an active issue whenever it was, about, I don't know, four years ago or so, Senator [Carl] Levin of Michigan was one of those who felt as we did. And, of course, FASB felt as we did.

But the pressure was incredible that American business brought on, on Congress. They weren't getting — they tried to put pressure on FASB and they weren't getting a result, so they just said, "Well, we're not going to let FASB set the accounting rules, we'll have Congress set the accounting rules."

And I thought that was a bad idea, per se, but I thought in this — and, but they got plenty of supporters. Got a huge number of supporters. I mean, they —

And at the time, I compared it, I think — there was a bill introduced in the Indiana legislature in the 1890s, I believe. And the bill was to change the value of the mathematical term "pi" to three even, instead of 3.1415... (Laughter)

And the legislator who introduced it said that it was too difficult for the school children of Indiana to work with this terribly long, unending term. And it would be so much easier if pi was just three. And he thought they ought to enact that.

Well, I thought that was quite rational compared to, you know, what the Congress of the United States was going to do in telling people that, since it — one of the arguments was that, "It makes it very tough for startup companies if they have to expense this."

Well, it makes tough if they have to pay their electricity bill, too. But, I mean, but those were the kind of arguments you got.

And my memory is, Charlie is better on this than I am probably, but I think the accounting firms 40 years ago or 50 years ago were in accord with our position.

But every client would put pressure on, you know, and they don't want to report expenses. They particularly don't want to report expenses that are paid to them, and that could be huge, and that might prove obnoxious if recorded by conventional accounting. But if it's sort of lost in a table in the proxy statement, people don't pay much attention.

So, the only way it will get changed — we wrote about it and I even talked to a few senators at the time — the only way it will get changed is — and this is the only way corporate governance

problems generally will get changed — if 15 or 20 large institutional investors would band together in some way on this.

But some of them have the same problem because they're getting paid extraordinary sums for doing something that, you know, is really not adding that much value.

So, they're not really inclined to call attention, in many cases, to what Charlie would refer to as "obscenities" in other people's compensation.

So, I think it's going to go on. I mean, it's a fascinating subject. But the institutional investors seem to focus very much on matters of form and not substance.

I mean, you get a lot of — they, you know, they cluck a lot about little things that don't have anything to do with their economic return over time, whereas on stock options they're something that's terribly important. They're the ones that are paying the costs, and the costs are there whether they get recorded or not.

But American management will not change its position on that voluntarily. Consultants will never change their position. They're getting paid to encourage people to look at other companies, and it just keeps ratcheting up. So, I don't think you're going to see change unless institutional investors do it.

As I say, I get these questionnaires, you know, about the composition of the board or a nominating committee. None of that makes any difference in terms of how a business performs.

I got one form that said they wanted a list of directors broken down by sex. And I said, "None that I know of." (Laughter)

But it just is not germane.

Charlie?

CHARLIE MUNGER: Well, I can't top that one. (Laughter)

32. No company should predict 15 percent annual growth

WARREN BUFFETT: Zone 8, please.

AUDIENCE MEMBER: Steve Casbell (PH) from Atlanta.

My question concerns Gillette. Do you think their goal of trying to grow earnings at 15-plus percent kind of got them into their current inventory problems at the trade?

And as well, the Duracell acquisition. I know at the time, neither one of you were the biggest fans of the deal. I just want to know how you feel about it now.

WARREN BUFFETT: Well, I would say it's a mistake. And I've said it. I think it's a mistake for any company to predict 15 percent a year growth. But plenty of them do.

For one thing, you know, unless the U.S. economy grows at 15 percent a year, eventually any 15 percent number catches up with you. It just, it doesn't make sense.

Very, very few large companies can compound their earnings at 15 percent. It isn't going to happen.

You can look at the Fortune 500, and if you want to pick 10 names on there that will compound their growth from — other than some extraordinarily depressed year, I mean, if they had a year where they just broke even so the number's practically zero.

But if you pick any company on there that currently has record earnings, and you want to pick out 10 of them that over the next 20 years will average 15 percent or greater, I will, you know, I will bet you that more than half of your list will not make it.

So, I think it's a mistake, and as I've said in the annual report, I think it leads people to stretch on accounting. I think it tends to make them change trade practices.

And you know, I'm not singling out Gillette in the least, but I can tell you that if you look at the companies that have done it, you will find plenty of examples of people who have made those sort of mistakes.

And I think that, in connection with Duracell — I mean, obviously, Duracell has not turned out the way that the management of Gillette, at the time, hoped that it was going to do. And the investment bankers who came in and made the presentations, those presentations would look pretty silly now.

Charlie?

CHARLIE MUNGER: I think that kind of stuff happens all the time. It will continue to happen. It's just built into the system.

I see more predictions of future earnings growth at a high rate, not less. I mean, a few people have sort of taken an abstinence pledge, but it's very few. It's what the analysts want to hear.

WARREN BUFFETT: It's what the investor relations departments want the managements to say. It makes their life easier, you know. But they don't have to be there five years from now or 10 years from now doing the same thing. It's —

If we predicted 15 percent from Berkshire, you know, 15 percent means that — assuming the same multiples — I mean, that means in five years, 200 billion. In 10 years, 400 billion. You know, 15 years, 800 billion. A trillion-six in 20 years. And the values get to be crazy.

And you know, if you have a business with a market value of 4- or 500 billion — and you had a few of those not so long ago — just think of what it takes to deliver, in the way of future cash, at a 15 percent discount rate to justify that.

If you've got a business that's delivering you no cash today and it's selling for $500 billion, you know, to give you 15 percent on your money, it would have to be giving you 75 billion this year.

But if it doesn't give you 75 billion this year, you know, it has to be giving you 86 and a quarter billion next year. And if it doesn't do it next year, it has to be giving you almost a hundred billion in the third year.

It just — those numbers are staggering. I mean, the implications involved in certain market valuations really, you know, belong in "Gulliver's Travels" or something. But people take them very seriously.

I mean, people were valuing businesses at $500 billion a year, a year-and-a-half ago, and there's just no mathematical — almost no mathematical calculation you could make that would — if you demanded something like 15 percent on your money — there's almost no mathematical calculation you could make that would — could possibly lead you to justify those valuations.

Charlie, have any more?

CHARLIE MUNGER: You know, I said on another occasion that, to some extent, stocks sell like Rembrandts. They don't sell based on the value that people are going to get from looking at the picture.

They sell based on the fact that Rembrandts have gone up in value in the past. And when you get that kind of valuation in the stocks, some crazy things can happen.

Bonds are way more rational, because nobody can believe that a bond paying a fixed rate of modest interest can go to the sky, but with stocks they behave partly like Rembrandts.

And I said, suppose you filled every pension fund in America with nothing but Rembrandts? Of course, Rembrandts would keep going up and up as people bought more and more Rembrandts, or pieces of Rembrandts, at higher and higher prices.

I said, "Wouldn't that create a hell of a mess after 20 years of buying Rembrandts?" And to the extent that stock prices generally become sort of irrational, isn't it sort of like filling half the pension funds with Rembrandts? I think those are good questions.

WARREN BUFFETT: Once it gets going, though, people have an enormous interest in pushing Rembrandts. I mean, it creates its own constituency.

33. "It's stupid the way people are extrapolating the past"

WARREN BUFFETT: Zone 1?

AUDIENCE MEMBER: Mr. Buffett, Mr. Munger, my name is Joe Schulman (PH). I'm a shareholder from Oxford, Maryland. Thank you for a wonderful meeting.

In order for Berkshire to have an opportunity to hopefully grow its earnings by about 15 percent per year, if we can do that, at least for the next few years, it's obvious that because of the redeployment of earnings and float, the existing businesses do not need to grow at 15 percent.

At what rate would you expect the existing businesses to grow to achieve an aggregate rate close to what I'm describing? And what do you think the probability is of achieving that?

WARREN BUFFETT: Yes. Well, I think the probability of us achieving 15 percent growth in earnings over an extended period of years is so close to zero, it's not worth calculating.

I mean, we'll do our best, and we have a lot of fun doing it. So it is not something where we have to come down and do things that are boring to us or anything of the sort.

I mean, our inclination is to — very much — to do everything we can, legitimately, to add to Berkshire's earnings in things we can understand. But it can't happen, over time. You know, we will have years when we do it, but —

And you're quite correct in pointing out we don't need to do it from the present businesses — we will add things all the time — any more than we needed to do it from the current business back in 1965 with the textile business.

I mean, we have to improvise as we go along. And we will. And the businesses we have are good businesses, in aggregate. They will do well.

They won't do anything like 15 percent growth per annum, but we will take a good rate of progress from those businesses, and we will superimpose upon that acquisitions which will add to that.

But we can't do 15 over a period of time, and — nor, incidentally, do we think any large company in the United States is likely to do.

There will be a couple that do it for a long period of time, but to predict which of the Fortune 500 will end up being the one or two or three, would be very hard to do.

And it won't be more than a couple out of 500, if you take large companies not working from a deflated base year.

I think our method is a pretty good one. I mean, I think the idea of having a group of good businesses to throw off cash in aggregate, in a big way, that themselves grow, that are run by terrific people, and then adding onto those, sometimes at a slow rate, but every now and then at a good clip, more businesses of the same kind, and not increasing the outstanding shares, I think that's about as good a business model as you can have for a company our size. But what it produces, we'll have to see.

Charlie?

CHARLIE MUNGER: I certainly agree that the chances of this 15 percent per annum progress extrapolated way forward is virtually impossible. I think, generally, the shareholding class in America should reduce its expectations a lot.

WARREN BUFFETT: Including the pension funds.

CHARLIE MUNGER: Yeah, including the pension funds, you bet.

It's stupid the way people are extrapolating the past. Not slightly stupid, massively stupid. (Laughter)

WARREN BUFFETT: And this is a message, incidentally, if you think about it. I mean, nobody has any interest in saying this — a financial interest in saying it — whereas people have all kinds of financial interest in saying just the opposite.

I mean, so you do not get an information flow — if you listen to the financial world or read the financial press — you do not get an information flow that is balanced in any way, in terms of looking at the problem, because the money is in believing something different.

And money is what, you know, it's what causes people to become prominent, or it flows from becoming prominent in the investment world in terms of whether you go on television shows, or whether you manage money, or are trying to attract it through funds, or whatever it may be.

I don't think if you were an actuarial consultant and you insisted that the companies that you gave your actuarial report to use a 6 percent investment rate, I don't think you'd have a client.

So, it's almost impossible for the advisors, in effect, in my view, to be intellectually honest on it. Don't you think so, Charlie?

CHARLIE MUNGER: Yeah. There was a very smart — there is a very smart investment advisor in my town, and he said that, "Years ago, some risk arbitrage firm would tell his clients, 'We know how to make 15 percent per annum year in and year out.'"

And he said, “Years ago, everybody said, ‘That’s impossible.’” He says, “Now in this climate, they say, ‘So what?’” You know, who’s interested in a lousy 15 percent?

WARREN BUFFETT: And it was easier in the earlier climate, obviously, because the money hadn’t been attracted into it.

CHARLIE MUNGER: Generally speaking, there’s more felicity to be gained by — from reducing expectations than in any other way. It is simply crazy for this group to have very high expectations. Moderate expectations will do fine for all of us.

34. No comment on USG investment

WARREN BUFFETT: OK. We’ll take one more before we go — we break for lunch. We’ll go to number 2.

AUDIENCE MEMBER: Good morning. My name is Ken Goldberg from Sharon, Massachusetts.

A few questions ago, you mentioned the company’s investment in USG. I was wondering how the company — how you got comfortable with that as an investment, in light of the asbestos exposure?

Do you view the company — the stock — as cheap enough and the asbestos exposure as manageable enough over time, so that the investment is justified?

Or do you view it as, in a worst-case scenario, if the subsidiary with asbestos exposure blows up, the rest of the solid businesses are insulated from that and are alone worth the price of the investment?

CHARLIE MUNGER: Let me answer that. I don’t think we want to comment. (Buffett laughs)

WARREN BUFFETT: Yeah. It’s one-tenth of one percent of Berkshire, roughly. I mean, but as Charlie says, that gets too close to giving stock advice.

But I will tell you their asbestos problems are serious, and they would be the first to tell you that.

Afternoon Session - 2001 Meeting

1. "Insurance float has been a huge asset to Berkshire"

WARREN BUFFETT: OK.

I hope you've all had a cholesterol free lunch. And — (laughter) — we will move on. And when we stopped, we were about to go to zone 3.

AUDIENCE MEMBER: Hi, my name is Jason Tank from Traverse City, Michigan.

I've got one kind of quick question that I'm sure you can answer relatively quickly, if you're not interested.

I know that Walter Scott's on the board of directors and he's also on the board of directors of a company called Level 3 Communications that is in an industry that's — well, there's been a lot of change happening and stock prices have been plummeting. I wonder if you've ever —

You've probably spoken to him at great length about the economics of that business. And have you ever expressed any interest that business, especially at the prices today?

That's the first question. The second question is — if you look at Berkshire Hathaway as a portfolio, you've got wholly owned subsidiaries as operating businesses, marketable securities, common stocks and bonds. If you strip out — and if my premise is wrong, just please tell me.

If you strip out the leverage effect of the cost of the float being, you know, nearly zero or negative throughout the years — if you look at the portfolio minus that leverage piece, how fast do you think your book value would've grown over the last 30-plus years? Are we talking about 5 percent or 6 percent due to just the leverage piece on the insurance float?

WARREN BUFFETT: I don't think it would run as much as 5 or 6 percentage points, but the float has been very useful to us. And actually, I've never made the calculation.

So you could well be correct that if it was 5 or 6 points, that would be a quarter of our book value gain over the years being attributable to insurance float.

And I think that's probably maybe on the high side but — and you can't make it —

We don't look at insurance float 100 percent the same as we would look at equity, but we've looked at it a good bit, you know. It's largely tantamount to equity because we've had so much equity, we could afford to do it that way. So I — you'll have to make that calculation yourself.

We think insurance float has been a huge asset to Berkshire. We think it'll continue to be a huge asset. And we look for every way possible to increase the amount of low-cost float.

On a small scale, we added US Liability last year, an excess surplus lines carrier based in Philadelphia. And so far, that's working out extremely well. Got a terrific guy running it. And, you know, in a small way, we add float there. I just looked at the first quarter on it, and we had a significant underwriting profit and we had float added. And, you know, that's the best of all worlds.

So we'll keep working on it, and it will add — it's a big asset that Berkshire has that a great many companies — I mean, virtually no other company has it to the degree that we have that also invests in other businesses and uses it as a source of money to invest in other businesses.

The question about Level 3, I obviously can't answer. I just — I can tell you that you have two enormously smart and high-grade guys in Walter Scott and Jim Crowe in that business. But it's not a business I know a lot about. And if I did, I wouldn't talk about it.

Charlie?

CHARLIE MUNGER: I cannot talk just as well as you can. (Laughter)

WARREN BUFFETT: Not always. (Laughter)

2. Accounting "shenanigans" and "gamesmanship"

WARREN BUFFETT: OK. Section 4.

AUDIENCE MEMBER: John Golob from Kansas City.

I have a follow-up question to your comments about how financial statements can be distorted by making over-optimistic assumptions about returns for the pension portfolio.

If you believe accounting statements, as published in annual reports, returns on equity for U.S. businesses are amazingly high — higher than in Europe, higher than they've been historically, higher than Japan.

Are these highs, do you think, completely attributable to accounting shenanigans? Or are there any fundamental reasons in addition that might make returns in the U.S. higher than in Europe or higher than they've been historically?

WARREN BUFFETT: Well, I would say that they certainly — to the extent that American returns have been higher than those around the world, at least in developed countries, I would say that they are not solely due at all to accounting shenanigans.

I think that the absence of honest accounting for option costs and — has been a factor. But American business has done very well, excluding — very well — excluding any accounting activities that Charlie and I might differ with.

You know, I'm no expert on exactly what returns have been around the world in developed countries, but my impression definitely is that American business is well above averaged — average — for the developed world, in terms of profitability.

And, you know, I don't have the answers as to why that's occurred. I think that American business, and I think the whole American system, has reflected more of a meritocracy than exists in many countries.

And I think that a meritocracy works best. I think — and I think that mobility between classes, which is the flip side of a meritocracy, you know, does tend to get the Jack Welches into positions of — whether they run a General Electric or an Andy Grove or an Intel or, you know, go with Sam Walton at Walmart.

I think if you'd taken those same individuals and dropped them down in most countries, they would've done very well. But I don't think they would've done quite as well as here. And I think that what they have done well has spilled over, in a big way, to benefit the American economy.

So I would not lay it all on the accounting shenanigans.

And the pension funds accounting, that applies very heavily at some companies. And, of course, most newer companies don't have pensions.

Companies that have started in the last 20 or 30 years are much more inclined to have various kinds of profit sharing or 401(k)s.

The older industries that took on pensions spurred, to a great degree, I think, by World War II, when you got excess profits taxes that ran to 90 percent. And there was a huge incentive to start pension plans and fund them heavily because the government, in effect, was funding 90 percent of your pension obligation.

So there was a great boon — boom period in the inauguration of pension funds. And, of course, that meant steel and auto and all of those big industries of that time.

Charlie?

CHARLIE MUNGER: Yeah. It isn't so much accounting shenanigans as it is deliberate financial practice. Take General Electric.

There's been a deliberate increase in financial leverage, which was made possible by the wonderful and deserved reputation. There's been a deliberate increase in repurchase of stock, which General Electric has done even when they're paying huge multiples of book value.

That sort of thing does wonders for returns on equity as reported, as does the process of writing off everything in sight and various extraordinary charges, removing the burden of past costs from future earnings.

You put all those things together, and American returns on equity are higher partly because the management has deliberately set out to paint the company as unusually efficient in its use of capital, meaning that it earns a high return on shareholders' equity.

Think of how high we could drive our return on equity at Berkshire. I mean, we could make it almost any number you want if we just used enough leverage.

WARREN BUFFETT: Yeah, we could run it with no (inaudible).

CHARLIE MUNGER: We could run Berkshire with no equity. And then people could say, "Gosh, these guys have finally learned how to manage the damn thing." (Laughter)

It's not been an objective around here to reduce the equity to zero. But at other places, in order to make the reported return on equity good, they deliberately pound on the net worth as much as they can.

WARREN BUFFETT: Yeah. The questioner may have seen — if you look at the S&P figures of the last 15 years, they report them both before special charges and after special charges. And there's been a very significant difference between those two figures.

American business likes to frequently write off things and say that doesn't count. And, of course, that takes the equity down. And it actually frequently benefits future earnings because you remove costs that would otherwise hit the income statement in future years.

CHARLIE MUNGER: The truth of the matter is you have — part of this is shrewd and correct management of the companies' financial structure and operations. And part of it can drift into gamesmanship.

3. Save money in your teen years and be very curious

WARREN BUFFETT: Region 5.

AUDIENCE MEMBER: Hi, Mr. Buffett. My name is Mallory Marshall (PH). I am 11 years old and I am from Kearney, Nebraska. I have 2 questions.

First, my dad would like to know if you have any grandsons my age. (Laughter)

WARREN BUFFETT: Any what her age?

CHARLIE MUNGER: She wants to know if you have any grandsons her age.

WARREN BUFFETT: How many shares of stock do you have? And I'll tell you. (Laughter)

AUDIENCE MEMBER: Also, what investment advice do you have for young people of my generation?

WARREN BUFFETT: Yeah. Well, I've got a grandson fairly close to your age and he probably would go for a younger woman anyway, so — (laughter) — I will mention him to you. Mention you to him.

The — well, if you're interested in financial matters, A, you've got to have something to work with. I mean, I was fortunate in that respect because my dad paid for my education. If he hadn't, I probably wouldn't have become educated if I had to pay for it myself, but —

So I was able to save $10,000 by the time I was 21. And, you know, that was a huge, huge head start. If I hadn't have been able to do that and, you know, my first child came along when I was 22.

So it's much easier to save in those teenage years if you're lucky enough to be in a family where you don't have — where your parents are taking care of your financial obligations. Every dollar then is, you know, worth making $10 or $20 later on.

And, so if you are interested in financial matters, getting a stake early is very useful, and getting knowledge early is very useful.

So, you know, I would say you're well on the way if, at 11, you're even interested in coming to a meeting like this.

And I would — if that interest is maintained, you know, I would read financial publications. I would read whatever was of interest to me. I'd be curious about how the businesses around the town of Kearney operated.

I would — to the extent that you can get people to talk to you — and people usually like to talk, you know — learn about who's got good businesses in Kearney and why they're good businesses. And learn about the businesses that went out of business and why they went out of business.

And just keep accumulating knowledge. That's one of the beauties of the business that Charlie and I are in, is that everything is cumulative. The stuff I learned when I was 20 is useful today. Not in necessarily the same way and not necessarily every day. But it's useful.

So you're building a database in your mind that is going to pay off over time. But you have to have a little money to work with. So there's nothing like getting a few dollars ahead. Stay away from credit cards. And you can have a lot of fun, if your mind goes along that track as you get older.

Charlie?

CHARLIE MUNGER: Well, I'm glad to see somebody that has, so early, shown an interest in getting ahead. There's nothing wrong with getting ahead. (Laughter)

WARREN BUFFETT: And actually, she may have the best idea about getting ahead by learning the name of my grandson, too. (Laughter)

CHARLIE MUNGER: Well, there, I can give the young lady some advice. Before your feelings totally take over, you should look carefully at both parents and all four grandparents. (Laughter)

WARREN BUFFETT: Write Charlie and let us know how it works out. (Laughter)

4. GEICO policy retention rates

WARREN BUFFETT: Area 6.

AUDIENCE MEMBER: I'm Jack Hurst (PH), Philadelphia, Pennsylvania. Three notes of thanks. First, for American Express for the terrific job they've done the last three times in scheduling reservations for me.

The second is thanks for the care you take with your annual report. There is nothing more accessible than the statistics in that report, and the text is just absolutely marvelous.

The third one is the care and feeding you give to troubled businesses like World Book, which I'm glad has survived, and Dexter Shoes.

They're closing the plant in Milo, Maine, which is advantageous for the shareholders. But they gave the people enough time that, because of the additional — Jackson Labs expanded, they're hiring, and Fidelity brought 6,000 jobs into the area. So those people will have better chance for jobs than they had to — if they were kicked out right away.

The second point is a question about GEICO. You have a wonderful table in your annual report showing the number of policies issued and the policies in force at the end of each year, for the last seven or eight years.

In general, at the end of one year, the policies in force are equal to 95 percent of the policies in force at the beginning of the year, plus 60 percent of those that have been issued in the year.

And that's been constant, up until this last year, when the amount in force at the end of 2000 is 24 percent of the policies issued in 2000 and 95 percent of those that were in force at the end of 1999.

I'm curious if Mr. Nicely has asked, first, "Why is there such a large difference in lapse between the first year policies and the renewal policies?" and, "Why is there such a discontinuity in the year 2000?"

WARREN BUFFETT: The — I'll answer the last one first, about GEICO. The retention rate is affected overwhelmingly by two factors.

One is the mix between the below-standard business, the standard business, and the better business, in terms of risk. In other words, we have — just making a calculation here — we have 75 percent or so of our business, plus, in the preferred category.

But we have grown faster up till the last year or so — in the last three or four years before that — up till the last year in the standard and the non-standard business. Those latter two categories have far greater lapse — or non-retention ratios — or lapse ratios — than the preferred business.

They're two different businesses almost. So any change in the mix between preferred and the other two categories will change the aggregate retention ratio very substantially.

The second thing is that the first year has a much higher retention — lapse ratio — than the second year of a policy. And, in turn, than the third, and so on.

In other words, if you get to preferred business that's been with you five or more years, you have a very, very high retention ratio.

In the last few years, we've added more new business than we were adding in the years before that. So we have had a higher percentage of new business and we've had a higher percentage of non-preferred business, both of which would make the aggregate lapse ratio look higher, even though the lapse ratio, when categorized by class of business and age of business, really hadn't changed very much.

Now, it's true, however, our retention ratio in the preferred business has fallen by a point or so.

But that's the big difference. And now, unfortunately, you know, our new business is not as strong. So you'll actually see, and — but, our preferred business is running stronger than our standard and non-standard.

So you are seeing the mix go back in the other direction, right now. I mean, currently, that's going on.

Through right to date this year, our preferred business is up in aggregate policy holders. And our standard and non-standard is down.

So what you've deduced from those figures reflects changes in mix and age of business far more than it does retention ratio, although there was a minor change in the retention ratio. And that will be true. And maybe I should explain that better in the annual reports in the future.

I touched on it once a year ago, but we can make that clearer in future reports.

What you said about the American Express people, I echo. I mean, they have just done a fabulous job with people.

We sort of turned the problem over to them of how people get here and where they stay and all of that. And we've had wonderful help from the local American Express office.

And frankly, they've been so good, we don't even think about it. We just refer people on to American Express. And I congratulate them for the job they've done. Thank you. (Applause)

5. "True synergy" between General Re and Berkshire's reinsurance operations

WARREN BUFFETT: Area 7, please.

AUDIENCE MEMBER: I'm Chip Mann (PH) from Minneapolis, Minnesota. Thanks again for this open format and your direct answers to our questions.

You've talked a bit about the super-cat class level of risk that you write. Could you share your thoughts about expanding the competitive advantage and the scale advantages at General Re, referring more to their traditional or historical franchise and the type of contracts they would write?

WARREN BUFFETT: Yeah. General Re was a — is a — and General Re and Cologne are a very different operation than the historical reinsurance business of National Indemnity.

National Indemnity had nothing like their distribution system. And they have a — and a knowledge base for a whole different form of reinsurance than we could ever accumulate at National Indemnity.

General Re did not — nor Cologne — did not take —retain — as much risk as we're quite willing to retain because their financial profile was different before they joined Berkshire.

So it's an opportunity for us, for two reasons, to make more money in that respect than General Re might've made on its own.

One is we can retain much bigger portions of what they would write in the first place, and which they've been writing over the years, but which they've laid off with other companies in what has the fancy name of retrocessionals.

And a second point is that they have a distribution capacity that may well have the ability to deliver to us a lot of big risks that we might not otherwise see. And that, in the past, they might not otherwise have had a good outlet for.

So there is — there's really true — I hate the word — but there's really true synergy in General Re Cologne being married to Berkshire Hathaway. And you've put your finger on, really, one point that has two aspects to it.

And we haven't fully exploited that. We probably won't fully exploit it, you know, 10 years from now.

But it's very much in my mind and the minds of the managers at General Re and Cologne that we have expanded opportunities, simply because Berkshire is willing to take on more risk than just about anybody in the world knowingly takes on.

Although we think some other people take on a lot more risk, unknowingly.

But in terms of writing a specific contract, we are both bigger and faster, I think, than anybody in the world. In effect, we have some of the abilities that used to be associated with going to a Lloyd's of London.

I mean we can — now, I don't know how true all that was over the years, because I wasn't around there then. But we really can give an answer on something in an hour that other companies wouldn't know what to do with in a month. And that should be a plus for us in the world.

Charlie?

CHARLIE MUNGER: Nothing to add.

6. Why Buffett doesn't like to buy a new car

WARREN BUFFETT: OK. Zone 8.

AUDIENCE MEMBER: My name is Ethan Berg. I'm from Cambridge, Massachusetts and I'd like to thank you for the education you've provided, particularly with the annual reports. I've got three brief questions.

Years ago, you wrote to your friend Jerry Orans that you were applying to Columbia's Business School because they had a pretty good finance department and a couple of hot shots in Graham and Dodd.

If you were considering graduate or business school today, with which individuals or professors would you want to study?

The second question is, a friend who wants to know your thoughts on the concrete, cement and aggregates business.

And the third question is from my wife. You mentioned earlier if someone were buying a parachute, they wouldn't buy based on lowest bid. We saw you tooling around in a car this week that, were it to be bought today, could probably be bought at a relatively low bid.

As someone interested in your health, she's wondering whether you've considered a newer automobile, possibly one with lots of airbags. (Laughter)

WARREN BUFFETT: Actually, I picked out the car I have based on the fact that it had airbags on both sides. So that was a factor. It may be the first car of its type ever made with airbags.

But I think my car actually — it's both heavy and has airbags, and those are two primary factors in safety. I don't think any — I don't think a safer car is necessarily being made. It might be safer to drive around in a big, heavy duty truck or something but I'm not ready for that.

Incidentally, on a car, I look at that like anything else. It would take me, probably, a half a day to go through, you know, the exercise of buying a car and reading the owner's manual and all that. And that's just a half a day I don't want to give up in my life for no benefit.

You know, if I could write a check in 30 seconds and be in the same position I'm in now with a newer car, I'd be glad to do it this afternoon. But I don't like to trade away when there's really no benefit to me at all. I'm totally happy with the car.

I just don't want to trade away the amount of time I'd have to spend fooling around to get familiar with and get title to and do all the rest of the things, pick one out, so a new car. But if there's a safer car made, you know, I'll be driving in it.

7. Concrete, cement, and aggregates are understandable

WARREN BUFFETT: The aggregates business, concrete, all of that, those are businesses that — and Charlie probably knows more about them than I do. We've looked at businesses like that.

In fact, we've even owned a few shares at one time or another, because it's an understandable business. And it's a business that — particularly if you get into concrete, cement, I mean, you know, there have been periods of substantial overcapacity, particularly on a regional basis.

But those are fundamental businesses. And at a price, you know, for low-cost capacity and advantageously located raw materials and so on, you know, we would do it. In fact, Charlie and I talked about one probably 10 or 15 years ago —

CHARLIE MUNGER: Yes.

WARREN BUFFETT: — quite a bit. And he's had a fair amount of familiarity with it. And what was the other one? I jotted it down here. Let's see.

8. Business schools are "pathetic" at teaching how to invest

CHARLIE MUNGER: He wanted to know what business school a young man should —

WARREN BUFFETT: Oh, business schools.

CHARLIE MUNGER: — go to.

WARREN BUFFETT: Yeah. Well, I would say this, that I think Bruce Greenwald's class at Columbia is very good. He gets in a lot of people that are practitioners. So there's a lot of practicality to the course.

And I think Bruce is good. He's got a new book coming out probably within the next six months or so that will deal with that.

And then there also has been endowed, at the University of Florida, certain courses relating to value investing. And I think there's been one at the University of Missouri.

So I would suggest you at least check out the curriculum at the University of Missouri and Columbia and Florida. And do a little comparison and maybe check with a few graduates — recent graduates — as to what kind of experience they had.

If you can find them, I think that's the best system for evaluating a place. But those three, at least, have courses that, based on the catalogue, sound like they might be of interest to you.

Charlie?

CHARLIE MUNGER: Yeah. A huge majority of the business school teaching on the field of investment of (inaudible) portfolios of securities is not what we believe and not what Warren was taught years ago by Ben Graham. There're just little pockets of our attitude left. There's one at Stanford. Jack McDonald?

WARREN BUFFETT: Yeah, sure. Yeah, that's graduate school. But yeah.

CHARLIE MUNGER: It's graduate school. And what's interesting about that is I think it's the most popular course in the whole Stanford Business School. They've got some kind of a bidding system. And yet, I asked Jack how he felt and he said he felt lonely.

He's got the most popular course, but in the whole professoriate, dealing with investment matters, the Jack McDonalds are a little clan of their own in a side pocket, so to speak.

Now, they're right. And they can take whatever consolation they get from that. But mostly, if you go to business school you will learn a lot of things we don't believe. (Laughter)

WARREN BUFFETT: Jack — Bob Kirby comes in and works with Jack sometimes, too. And Bob has got a terrific mind, in terms of investment. I mean, there's no question about that.

You know, it's not the easiest school in the world to get into and it is at the graduate level. But there are these occasional little anomalies, as they would say, in the teaching world.

I mean, what you really want a course on investing to be is how to value a business. That's what the game is about. I mean, if you don't know how to value a business, you don't know how to value a stock.

And if you look at what is being taught, I think you'll see very little of how to value a business.

And the rest of it is playing around, maybe, with numbers or, you know, Greek symbols or something of the sort. But it doesn't do you any good. I mean, in the end, you have to decide, you know, whether you're going to value a business at $400 million or $600 million or $800 million.

And then you compare that with the price. And that's what investing is. And I don't know any other kind of investing, you know, basically to do.

And there — that just isn't taught. And the reason it isn't taught is because there aren't teachers around, you know, who know how to teach it.

I mean, they don't know themselves. And since they don't know themselves, they teach something that says, "Nobody knows anything," which is the efficiency market theory. (Laughter)

And if I didn't know how to do it — and if I ever teach physics, I'm going to come up with a theory that nobody knows anything, because it's the only way I can get through the day, you know? But — (Laughter)

It's fascinating to me how, you know, the really great universities operate in this respect.

If you get a sacred writ, I mean, you get in the finance department because you sign on, you know, to whatever the present group thinks. And if they think the world is flat, you'd better think the world is flat too, you know? And your students better answer that the world's flat when they get it on exams.

I would say investment — finance — teaching in this country, in general, is kind of pathetic.

CHARLIE MUNGER: Well, I think the business schools do a pretty good job when it comes to accounting —

WARREN BUFFETT: Oh, accounting, sure, sure.

CHARLIE MUNGER: — or personnel management, or — there're a whole lot of subjects I think they do quite well with. But they miss one enormous opportunity.

If you learn to think intelligently about how to invest successfully in businesses, you'll become a much better business manager than you will if you aren't good at understanding what's required for successful investment.

So they're missing a huge opportunity to improve the management profession by doing such a lousy job in teaching investment.

WARREN BUFFETT: Yeah, see, Charlie and I see CEOs all the time who, in a sense, don't know how to think about the value of businesses they're acquiring. And then, you know, so they go out and hire investment bankers.

And guess what? The investment banker tells them what to do, tells them to do it because they get 20X if they do it and X if they don't do it. And guess how the advice comes out.

So it's a — when a manager of a business feels helpless, which he won't say out loud, but inwardly feels helpless in the question of asset allocation, you know, you've got a real problem.

And there aren't — they have not gone to business schools that have given them any real help, I think, in terms of learning how to think about valuation in businesses. And, you know, that's one of the reasons that we write and talk about it some, because there's a gap there.

9. Credit card advice: "It's crazy to get in debt

WARREN BUFFETT: OK. Number 1.

AUDIENCE MEMBER: My name is Martin Mitchell (PH). I'm from Bakersfield, California.

My question, a two-part question, is concerning debt. We know that individual debt can be devastating.

Do you — are you concerned that the American consumer is so far in debt, as a whole, as to be a problem?

And part two is, do you feel that our trade deficit with other countries is of concern to you?

WARREN BUFFETT: Well, the first question about debt, I think it's very hard to answer about the consumer as a whole. I get letters every day from people who have problems in life. And they revolve — I mean, they're either health or debt. And usually — frequently — the debt is connected with health, you know?

But they — it's been very easy for them to borrow money, and they're in over their heads, and it's all over then.

And there's no question that the American consumer is somewhat more indebted, in aggregate.

But it's a very hard thing, I think, to come into conclusions about whether it poses a serious problem. You know, most people have had assets, directly or indirectly, that have gained in value enormously, particularly in real estate and some in securities.

So there's a greater capacity to carry debt as earning power increases and assets held increases. I don't — I can't give you a useful answer, in terms of the world as a whole.

But I constantly give advice to young people, and those are the only people I talk to, aside from our shareholder group: just don't start out behind the eight ball.

I mean, it's crazy to get in debt because it's so hard to get out of debt. And, I mean, the idea of having credit card debt — and we issue credit cards in all our businesses and, you know, so does every other retailer.

But the idea of trying to borrow money at 18 percent, you know, and thinking you're going to get ahead in life, it isn't going to work.

And I urge people — they can use their credit card, but I urge them to pay it off before it starts revolving because it's just — it's too expensive.

Charlie and I can't make money with 18 percent money. I mean, we're looking around for float because we don't want to pay 5 percent for money.

And, so I'm very sympathetic to people get in debt. But once you get in it, it is hell to get out.

I mean, Charlie will have a few Ben Franklinisms to quote on that subject.

In fact, you want to give a few from Ben now? (Laughter)

CHARLIE MUNGER: Oh, no.

WARREN BUFFETT: He'd love to, but I led him into it the wrong way.

10. Long-term trade deficit is "a significant minus for the country"

WARREN BUFFETT: And the second question about the trade deficit, that's a very interesting thing. Because when you run a trade deficit, what you're doing is you're trading assets of one sort or another for goods, beyond what you're sending abroad.

So in effect, you are selling off a tiny bit of the farm so that the country can consume more than it's producing. If you run a net trade deficit, the country, in aggregate, is consuming less than — or consuming more — than it's producing.

And if you're a very rich country, you can't even see it because if you run a trade deficit of a few hundred billion dollars, you know, compared to an economy that's maybe worth, what, 40 trillion or something like that, you don't see it.

But you're trading off a tiny bit of the farm every year to live a little bit better than if you just lived off the produce of the farm that year.

And you can do it with IOUs if you've got a good record. You can't do it with IOUs if you're a country that's got a terrible record.

So they have to denominate their debt in dollars. And, of course, they don't have the ability to denominate a lot of dollars, and people don't want to accept a weak currency. So a weak country can't get away with doing that, unless it's getting special-type loans from agencies set up to do that.

We can do almost anything we want in this country, because we don't confiscate property and we don't — we haven't destroyed a currency that the people have accepted, in terms of payment for their goods, over the years.

But I basically think a significant trade deficit over a long enough time is a significant minus for the country. You won't see it though, day-by-day, or week-by-week, or month-by-month.

But eventually, if you trade for trinkets or whatever you're getting beyond what you're sending, and you trade away your assets —

Fortunately, some of the assets we traded not that many years ago, like movie studios and some of those things, the other people got the short end of the bargain on.

But by and large, it's not a good policy for the country to run large trade deficits year after year.

Charlie?

CHARLIE MUNGER: Well, it's — that's certainly true if what you're trading for is trinkets, or consumer goods, or something. But, of course, a developing country that ran a trade deficit to

put in power plants and what have, that might be a very smart thing to do. In fact, the United States once did that.

WARREN BUFFETT: Yeah, we did it with railroads in a huge way, you know, and —

CHARLIE MUNGER: But under modern conditions, do we look like a twosome that would love a big trade deficit? (Laughter)

WARREN BUFFETT: No. It's one thing to build railroads with the process, but it's another thing, you know, to buy radios and television sets. I mean, it depends what you're getting.

But by and large, we run a trade deficit on consumption goods. And that's not a big plus over time.

11. Satisfied sellers are a "recruiting force"

WARREN BUFFETT: Area 2.

AUDIENCE MEMBER: Good afternoon. I'm Jim Hays (PH) from Alexandria, Virginia. I'd like to thank you and Mr. Justin for bringing his masterpiece into the Berkshire family.

But the question arises, will you soon run out of privately-held firms that meet the criteria for acquisitions of sufficient size to continue the returns to Berkshire?

WARREN BUFFETT: Well, that's a good question because people who sell to us have the option of —private business — selling elsewhere or going public.

There seem to be enough people that have built businesses lovingly over 50 or 100 years, and their parents before them and grandparents, that really do care about the eventual disposition of them in some way beyond getting the last dollar that day, that we have a supply from time to time of those businesses. And I think we'll continue to see them.

You do raise an interesting question. How many businesses like that are worth, you know, a billion dollars or more in the whole economy? There seem to be — you know, I wish there were more, but there are enough. So I think we will probably buy, on average, maybe two a year, something of that sort.

The really big ones — I mean, what we'd love to make is a 10- or $15 billion acquisition. And there would be very few private companies that would be in that category.

And then, from the ones that are in that category, you have to find somebody that is not going to conduct an auction.

We don't — we just are not interested in auctions. If somebody wants to auction their business, we're not that excited about getting in with them because we need people to run it after we buy it.

And, if that's the way they look at their business, we may get more unpleasant surprises than we've tended to get in the past with the kind of criteria we've used.

Charlie?

CHARLIE MUNGER: Yeah. There're two aspects of that situation. One is, are there going to be enough businesses? And two, how much competition are we going to get from other buyers?

One thing we do have going for us is that if you are the kind of a business owner that likes the culture that's in this room today, there isn't anybody else like us. Everybody else is off on a different path with a different culture. (Applause)

So — and look at all you. I mean, this culture is popular, at least with a certain group. And surely, there'll be other people who like this culture in the future, as in the past, and will feel right about joining it with their companies.

WARREN BUFFETT: We haven't had any luck internationally so far, but we would hope that that could change.

I was over in Europe about a month ago and I got asked the question a lot of times about whether we would be a prospect for businesses in Europe, for example.

The answer is yes. And then they say, "Well, you know, why haven't you bought anything?" And I said, "The phone's never rung." I don't know whether they thought that was a brilliant answer or not, but they — (Laughter)

But I left my phone number a lot of places, you know? Every time I got a chance, I gave that answer. And maybe the phone will ring.

I've got to believe that, if we were on the radar screen the same way in Europe over the last five years that we have been in the United States, we would've bought a couple of companies.

It's just, they don't think of us. And a lot of people don't think of us in the United States, either, but more do now than did five or 10 years ago.

And we have, actually — a reasonable percentage of our acquisitions come, directly or indirectly, because we've made another acquisition in the past where the seller was happy. It's very hard to find anybody that's been unhappy dealing with us.

And they're friends with other people in their industry, or whatever it may be. So, we hear about things now more often, because we actually have what you might call a recruiting force out there of people that have already done business.

It's very much like NetJets that way. I mean, we spend a lot of money advertising at Executive Jet, the NetJet service. But still, 70 percent or so of our business comes from owners who are with us. They're, by far, the best salespeople we have.

And incidentally, that's the way I was introduced to the business. Frank Rooney, who's in this room today, told me about his good experience with NetJets back in January or so of 1995. And that's when I joined in. And if Frank hadn't told me, I might — six years later, I might not have ever looked into it. I mean, you know, I might've just turned the pages past the ads and —

But when Frank said, "You ought to look into this," I did. Well, that's what we hope we have going for us on the acquisition front. And I think we do, to some degree. But we'd like it to be greater, and we would like it to be more widespread, geographically, than it is.

CHARLIE MUNGER: When I was a lawyer, I used to say, "The best business getter any lawyer has is the work that's already on his desk."

And similarly, probably the best business getter that Berkshire Hathaway has is the business practice that's already on our desk. That's what's driving the new businesses in, right, Warren?

WARREN BUFFETT: Sure. Sure.

CHARLIE MUNGER: So it's a very old-fashioned idea. You just do well with what you already have and more of the same comes in.

12. Why Berkshire sold its Freddie Mac and Fannie Mae stakes

WARREN BUFFETT: Zone 3, please.

AUDIENCE MEMBER: My name is Steve Sondheimer. I live in Chicago and I'm 14 years old. I'm a third generation shareholder and my question is, I noticed that you sold our position in Freddie Mac. What risks do you see in that industry?

WARREN BUFFETT: Are you Joe's granddaughter?

AUDIENCE MEMBER: Yeah.

WARREN BUFFETT: Oh, good. We have an amazing number of second and third and even fourth generation shareholders, which I'm delighted with. I mean, I don't think lots of companies — big companies on the stock exchange — are in that position.

It is true, we sold the Freddie Mac stock last year. And there were certain aspects of the business that we felt less comfortable with as they unfolded — and Fannie Mae, too.

And the consequences of what we saw may not hurt the companies, I mean, at all. But they made us less comfortable than we were earlier, when, actually, those practices or activities didn't exist.

We did not — I would stress — we did not sell because we were worried about more government regulation of Freddie and Fannie. If anything, just the opposite, so —

It was not — it was not — Wall Street occasionally will react negatively to the prospect of more government regulation and the stocks will react sometimes short-term for that reason. But that was not our reason. We were — we felt the risk profile had changed somewhat.

Charlie?

CHARLIE MUNGER: Yeah, but that may be a peculiarity of ours. We are especially prone to get uncomfortable around financial institutions.

WARREN BUFFETT: We're quite sensitive to —

CHARLIE MUNGER: Yeah.

WARREN BUFFETT: — risk in — whether it's in banks, insurance companies or in what they call GSEs here, in the case of Freddie and Fannie.

We feel there's so much about a financial institution that you don't know by looking at just figures, that if anything bothers us a little bit, we're never sure whether it's an iceberg situation or not.

And that doesn't mean it is an iceberg situation, in the least, at banks or insurance companies that we pass.

But we have seen enough of what happens with financial institutions that push one way or another, that if we get some feeling that that's going on, we just figure we'll never see it until it's too late anyway.

So we bid adieu without — and wish them the best — without any implication that they're doing anything wrong. It's just that we can't be 100 percent sure of the fact they're doing things that we like.

And when we get to that situation, it's different than buying into a company with a product or something, or a retail operation. You could spot troubles usually fairly early in those businesses. You spot troubles in financial institutions late. It's just the nature of the beast.

Charlie?

CHARLIE MUNGER: Yeah. Financial institutions tend to make us nervous when they're trying to do well. (Laughter)

That sounds paradoxical, but that's the way it is.

WARREN BUFFETT: Financial institutions don't get in trouble by running out of cash in most cases. Other businesses, you can spot that way.

But a financial institution can go beyond the point — and we had banks 10 years ago that did that, en masse — but they can go beyond the point of solvency even while they still have plenty of money around.

13. Debating whether it's good moats are harder to find

WARREN BUFFETT: Area 4, please.

AUDIENCE MEMBER: Good afternoon, Mr. Buffett, Mr. Munger. My name is George Brumley from Durham, North Carolina.

We often consider evaluating companies in the context of Michael Porter's model of position relative to competitors, customers, suppliers, substitute products. You state that much more simply when you say you seek for companies with the protection of wide and deep moats.

To complete the valuation of a company, we all seek to choose the appropriate future cash flow coupons. A qualitative assessment of the protected competitive position is required to precisely forecast those future coupons.

In your opinion, are the dynamic changes in the nature of competition, distribution systems, technology, and even changes in customers, making it more difficult to accurately forecast those future cash flow coupons?

Are good, protected businesses going to be more rare going forward in — than they have been in the past? And if so, does that make the few that do exist more valuable?

WARREN BUFFETT: Well, you've really described the investment process well. I can't see from here, but which George are you? Are you the — are you Fred's brother-in-law or are you one generation down?

AUDIENCE MEMBER: George III. My father is here as well.

WARREN BUFFETT: OK, good. The questions you ask are right on the mark. And we do think, to the extent I understand what — or have read what Porter has written, we think alike, basically, in terms of businesses.

And we do call it a moat. And he makes it all into a book, but that's the difference between the businesses we're in. (Laughter)

I — and Charlie may have a different view on this. I don't think that the quantity or sustainability of moats in American business has changed that dramatically in 30 or 40 years.

Now, you can say that Sears and General Motors and people like that thought there were some very wide moats around their businesses, and it turned out otherwise when, in the case of Sears, Walmart, for example, came along.

But, I think — the businesses we think about, I think the moats that I see now seem as sustainable to me as the moats that I saw 30 years ago.

But I think there are many businesses — industries where it's very hard to evaluate moats. There — those are the businesses of rapid change.

And are there fewer businesses around where change is going to be relatively slow than previously? I don't think so, but maybe Charlie does.

Charlie?

CHARLIE MUNGER: No, I would argue that the old moats, some of them are getting filled in. And the new moats are harder to predict than some of the old moats. No, I would say it's getting harder.

WARREN BUFFETT: Well, there you have it. (Laughter)

Unanimity at Berkshire. OK.

I think it's a very good question. And I really don't — you know, Charlie may be right, I may be right. I think it's a very tough one to figure.

But regardless of whether there are fewer or that — harder to find, that's still what we're trying to do at Berkshire. I mean, that is what it's all about.

Our instructions to our managers — we don't have budgets and we don't have all kinds of reporting systems or anything else. But we do tell them to try and not only protect, but enlarge, the moat. And if you enlarge the moat, everything else follows.

14. How derivatives become "potential dynamite"

WARREN BUFFETT: Area 5?

AUDIENCE MEMBER: Bill Graham (PH) from Los Angeles.

Warren, you've made it possible for outside shareholders to understand Berkshire's financial businesses.

But there is one that seems, to me, anyway, hard to understand, which is the financial products business, which I guess, involves trading of derivatives.

And for the same — given the same kind of concerns that you and Charlie voiced in relation to financial businesses, can you help us out on that and why you're comfortable with it?

WARREN BUFFETT: Well, I think you put your finger on it, Bill.

It is a hard business to understand. And it's a hard business to understand if you own it, let alone read about it in somebody else's annual report.

And I would guess that most people who own complicated or extensive derivatives businesses, I would say that most of the CEOs probably don't understand it. And how many of them stay awake at nights over that, I don't know.

Actually, in financial products, what you see on that one line of income on that, and also what you see in the balance sheet items, is a combination of several things. It's General Re Securities, which used to be GRFP, General Re Financial Products. It's — and it's a couple of other operations.

It actually had our — it has our — structured settlement business in it, which is quite predictable and a very easy business to understand.

And it actually has some trading business that I do that falls in there. It's not our normal investment business, but it may involve, what I think are — it tends to be fixed-income related.

It might involve arbitrage or semi-arbitrage of various types of fixed-income securities. It wouldn't involve any equity arbitrage. That would not be in there.

But I would say that it would be a fair criticism to say that neither Charlie nor I know fully, or even in large part, what goes on in the derivatives business.

Now, we have a fellow who is both smart and trustworthy running that in Mark Byrne. So we feel very good about the individual.

We do not feel the instinctive understanding of everything that's going on that we do, probably, in most of the businesses that we're in. I think we've probably got 17,000 outstanding tickets at General Re Securities. And those interplay in all kinds of ways.

And I don't think that Charlie or I have my mind — our minds — around that book of products. That means we want to be very comfortable with the fellow whose job it is to have his mind around those products. And I will tell you that, you know, there's nobody that I'd feel more comfortable with than Mark Byrne.

But it is — it's not a natural-type business for us.

The other things in that area, and we made a fair amount of money in some things that aren't related to the derivative business last year. And those are under my direct control. So I feel OK about that.

The structured settlement business is a minor profit area. But it's made us some money. And right now, it's not attractive. But it could be again in the future.

And there could be other financial-type things we would stick in there. But if we stuck in anything, it would be something that I would be running.

Charlie?

CHARLIE MUNGER: Yeah, that mix includes what I would call oddball pastimes of Warren Buffett — (laughter) — outside —

WARREN BUFFETT: The ones that are publishable. (Laughter)

CHARLIE MUNGER: — outside the common stock field. That I'm quite comfortable with, although I'm sure the results will be irregular.

The rest of it — and I think we also have what might be called oddball personal ideas of Mark Byrne, and I'm quite comfortable with those.

As you get away from that, into what might be called more standardized derivative trading businesses, I think it's fair to say I like them less than most of the people do who are in them.

WARREN BUFFETT: Quite a bit less. (Laughter)

CHARLIE MUNGER: Yeah.

WARREN BUFFETT: Yeah, we regard that area as potentially being dynamite because if you get a group — a large group — of people that, in many cases in that business — although we've tried to go away from it ourselves — but in many cases in that business are getting paid based

on front-ending potential profits, you can get — I mean, that's a dangerous situation to place a hundred people in. You're going to find people who will crack under that, in terms of what they will do.

You know, they had — we had a case of it, actually, in the electric utility industry a year or two ago, when Edison in California, through a subsidiary, compensated people based on projecting the profitability of the business they were putting on the books that day.

That's Wall Street practice and it was brought to the utility industry. And it produced I'd say predictable results.

So it's dangerous to pay people to make deals where you won't know the outcome for 15 or 20 years and give them a lot of money upfront for doing it.

And that's fairly standard practice in the business. I mean, it was standard practice at Salomon when I was there. And as I say, people occasionally crack under that.

It isn't exactly analogous, but it's worth reading Roger Lowenstein's book entitled "When Genius Failed," because it touches on some of the problems we've described that Charlie and I are apprehensive about.

CHARLIE MUNGER: Yeah, the derivatives business has the very significant problem that the accounting profession sold out. The accounting is improper. It front-ends way too much income.

It's irrationally optimistic because that's the way the denizens of the field want it because it creates bigger compensation. This is intrinsically an irresponsible system. And it's another case where the accounting profession has failed the wider civilization.

WARREN BUFFETT: We found — Charlie was on the audit committee at Salomon — and we found positons — single positions — mismarked by close to $20 million, for example, didn't we, Charlie?

CHARLIE MUNGER: Oh, yeah. But deliberate mismarkings was not the main problem. The main problem is the whole system of accounting is wrong. The whole system of accounting is too optimistic. It would be like going into the taxi cab business with a 30-year depreciation rate.

WARREN BUFFETT: Yeah. Or it'd be like writing long, very long-tail insurance, and paying a big commission upfront based on the expected profit of that insurance over a 10-year period or something, with that prepared by the guy who wrote the policy.

There are certain activities that are really just dangerous in the financial world. And when you get close to that kind of situation, you just have to be very careful.

Now you — actually, Mark has been implementing a system that compensates — that accounts for this — significantly differently than occurs at many institutions. So, you know, you can try to attack it. But it's also hard to get too far away from industry norms and still do business. I mean —

CHARLIE MUNGER: Yeah. Our accounting is way more conservative than the standard derivative accounting of the country, thank God.

15. GEICO's Lou Simpson manages "autonomously"

WARREN BUFFETT: OK. Area 6.

AUDIENCE MEMBER: My name is Scott Tilson (PH). I'm from Owings Mills, Maryland.

Gentlemen, you have stated many times that Lou Simpson manages the GEICO investment portfolio on an independent and autonomous basis.

What unique or superior qualities does Mr. Simpson possess as an investor that has earned him this tremendous vote of confidence?

Secondly, Berkshire invests in privately-held businesses as well as publicly-traded securities. While the skillset required to value public and private businesses may be the same, does Mr. Simpson also have the additional experience and skills necessary to negotiate a private transaction, if called upon to do so?

WARREN BUFFETT: Yeah, I think he could. But I hope he doesn't get called on to very soon. (Laughter)

Lou is smart, and careful, and high-grade, and experienced.

So he does manage a couple billion dollars autonomously. He will buy things. I won't know about them until I either look at a monthly sheet or sometimes read it in the paper. And that's fine, you know? He doesn't know what I'm doing. I don't know what he's doing.

Every now and then, we're in the same security, so we try and coordinate if we're buying or selling under those circumstances.

And incidentally, you will occasionally read a headline, not a very big headline, but in the financial press that says, "Buffett buying X, Y, Z." Well, sometimes it should say, "Simpson buying X, Y, Z."

They — the reports we file would not necessarily tell the reader which one of us made the decision, because even if the reports show that something was bought in GEICO, that could be bought in — by me and placed in GEICO for various reasons.

Or conceivably, Lou can buy something and place it in National Indemnity or some other Berkshire company also for perfectly good reasons. But some of what gets reported as done by Berkshire is done by Lou entirely independent of me.

And most of it, in terms of dollars, is done by me. But Lou's record is just as good as mine, so.

And Lou would know how to evaluate businesses, whether private negotiations or public securities, and — but I'm in no hurry to turn it over. (Laughs)

16. Berkshire's investment in Finova

WARREN BUFFETT: Seven.

AUDIENCE MEMBER: Good afternoon. My name is Scott Croy (PH). I'm from Chicago, Illinois.

Mr. Buffett, could you please describe the situation — the extent, if any, of Berkshire Hathaway's investment in Finova Group earlier this year? Finova's back appears to be against the wall.

WARREN BUFFETT: Yeah. It's worse than against the wall. They're in Chapter 11. (Laughter)

But that was all contemplated, obviously.

Finova is the old Greyhound leasing company, and grew to about 13 or $14 billion in assets. And then just about a year ago, now, ran into funding difficulties.

And when you run a highly leveraged finance business and you run into funding difficulties, they compound on you very quickly.

You know, confidence is a real coward. I mean, it runs when it sees trouble.

And in a finance business, you're constantly faced with refinancing old obligations, and you have commercial paper out and all of that. So there's no honeymoon period when you get in trouble in the finance business.

And we've even seen big ones in the past, like Chrysler Financial and all of that. I mean, it can strike anywhere when confidence disappears.

And so that hit Finova about a year ago. And it became clear not that many months later that Finova would have to either be sold or reorganized.

And I think there were attempts made to sell the company to other finance companies, and even a couple of little portions of the portfolio were sold. But they didn't make a sale.

And when the bonds started selling down to prices that I thought were very attractive, in the fall or whenever it was of last year — and by attractive, I mean, I thought that if they went into bankruptcy that the assets were considerably greater in relationship to the liabilities than indicated by the market — we started buying bonds.

And we bought — we publicly announced it. We bought $1,428,000,000 face amount of bonds or bank debt. So we, out of 11 billion of aggregate debt at Finova, we own $1,428,000,000 face value. And we bought those at prices that looked attractive then and look attractive now.

And it became clear — it was somewhat — it was clear all along that they were either going to sell or go into bankruptcy. And it became clearer that they weren't finding a buyer as time went by. And so it became very likely that they would declare bankruptcy sometime earlier this year.

One of the reasons being is they didn't want to use the available cash to pay out the creditors whose money was coming due tomorrow, and thereby shortchange creditors whose claims were due at later dates.

We thought, perhaps, somebody would come in with a plan of reorganization. And it got very close to where they —in our view — they were going to default. And so we jointly, with Leucadia, in a joint venture called Berkadia, put forth our own plan and made a — and arranged a transaction.

But they are now in Chapter 11, and there will be plans presented to the — a plan or plans — presented to the court in short order. And then the court will determine —

I'm not — Charlie may know more about exactly how bankruptcy works than I do, although I don't think he's had any personal experience — that a plan gets submitted to creditors for approval.

And we will have a plan, which will be — which has been outlined in the press, and will be submitted to the court, almost certainly within a week, and when you can read about it at that time.

And then we will see whether anything else happens. I mean, it may be that somebody else comes in with a plan. It may be that our plan is approved.

And if our plan is approved, it involves a significant additional investment so that an initial payment can be made to the present debt holders. And then we'll see what happens.

We feel very good about Berkadia. I — we think Berkadia — well, we think the Leucadia part of Berkadia brings a lot to the party, in terms of efficiently managing the assets that are there. It makes it — when an entity gets in bankruptcy, it makes a lot of difference how it's handled.

I mean it, you can — there can be a lot of wastage of assets in bankruptcy. Or there could be a reasonably efficient way of handling it.

We think that the Berkadia arrangement will maximize the value of the assets. And we think that's important. But we'll see what happens. I think our position is going to work out fine.

Charlie?

CHARLIE MUNGER: Yeah. I think it's —

WARREN BUFFETT: Microphone.

CHARLIE MUNGER: — a very interesting transaction. And you would hope there would be more of it.

WARREN BUFFETT: There will be. (Laughter)

CHARLIE MUNGER: No, I mean, not more bankruptcy, but more cures of bankruptcy following this model. I think it's a very intelligent model and a very clean, simple, prompt way of cleaning up a corporate mess.

And I hope the rest of the world feels about it the way I do, and that the judge and other people concerned will say, "Thank God," and we want this one to go through and we want more like it to happen.

WARREN BUFFETT: That's what we tried to do in Salomon, incidentally. I mean, we tried to behave in a somewhat different way, in terms of a corporate crisis, than typical.

And we hoped that if that got a good result, that that might become a model that people might gravitate toward in future problems, because there will be future problems.

We are the largest creditor of Finova now. So we have more money on the line than anybody else, and we don't have an interest —

You know, our interest is not primarily in getting fees or extending the bankruptcy or, you know, any of that sort of thing. We want to get the greatest realization of assets as possible. And the swing in that between doing it right and doing it wrong, you know, could be measured in the billions.

17. GEICO's Lou Simpson bought Berkshire's Gap shares

WARREN BUFFETT: Area 8.

AUDIENCE MEMBER: Good afternoon. I'm Claudia Fenner (PH) from Long Island, New York and I have two questions.

The first is, as a big fan of the Gap, I'd like to know why at this time you feel that the Gap is undervalued.

And the second question, if you could direct your answer to my husband, as a shareholder, would you agree that buying a large present at Borsheims this afternoon is like taking money out of one pocket and putting it back in another? (Laughter and applause)

WARREN BUFFETT: I'll let Charlie handle the second one. (Laughter)

He's our expert on consumption at Berkshire.

The Gap is a good illustration of what I talked about earlier, because I think the world assumes that I made a decision to buy Gap at Berkshire. And actually, that's totally, 100 percent a Lou Simpson portfolio investment.

I don't think I've read the annual report of the — I know — I haven't read the annual report of the Gap ever. And I don't know anything about it. I mean, you probably know a lot more about it than I do, and I hope Lou knows a lot more about it than I do. (Laughter)

It's not a company I've ever looked at.

And Lou operates — and he has people that help him — Lou operates in somewhat — he can look at smaller securities, in terms of aggregate market caps, than I can, because I'm investing $2 billion. He can work with $200 million positions or even $100 million positions sometimes.

And I will do that occasionally, just because I happen to bump into them, in effect. But I'm really looking for things that we can put a billion or 2 billion or more in. And Lou's universe of possible candidates for purchase is a bigger universe than mine.

And that may be a good thing, I mean, having two of us in there. Because he just is going to see things that I'm not going to see. So you'll have to ask Lou about the Gap.

18. Buffett's never regretted buying jewelry

WARREN BUFFETT: But, well, Charlie, give her a little advice on Borsheim's. (Laughter)

CHARLIE MUNGER: Well, I think when you're buying jewelry for the lady you love, it probably shouldn't get too much financial calculation into it. (Laughter and applause)

WARREN BUFFETT: I will say this. And this is true. And you're talking to a guy who does not normally go down this path, but I would say this:

I've never bought a piece of jewelry that I've regretted, in terms of what has happened subsequently, so it — (Laughter)

Well, if that isn't a sales pitch, I don't know what is. (Laughter)

19. Why GEICO can't give everyone a better deal

WARREN BUFFETT: Zone 1.

AUDIENCE MEMBER: You're a tough act to follow.

I'm Matt Richards. I'm from Parkton, Maryland.

Last year at this meeting, a gentleman stood up and implored you, Mr. Buffett, to invest in some technology stocks to juice our returns. I would like to this year thank you for having not done that. (Applause)

My question is regarding GEICO. I've been a USAA preferred risk customer for something like 15 years now.

WARREN BUFFETT: Yeah. You'll do very well with USAA. They're a perfect —

AUDIENCE MEMBER: Yes, well —

WARREN BUFFETT: — company.

AUDIENCE MEMBER: — I'd prefer to be a customer of the company that I own part of. Unfortunately, due to an accident and two speeding tickets in the last five years, they will not accept me as a preferred risk.

And I wonder if this isn't an untapped group of people who are preferred risks with their own company.

Couldn't GEICO possibly take their current preferred risk status into account when determining whether to accept them as a customer?

WARREN BUFFETT: Yeah, I would — USAA, incidentally, is a terrific company.

And Leo Goodwin, who started GEICO, which was then called Government Employees Insurance Company in 1936 — Leo actually was a key employee of USAA, as was his wife, Lillian. They both came from USAA.

And, they felt that — I mean, USAA as you know, limits its clientele — at that time, they limited their clientele to the officers in the armed services. And Leo wanted to extend — and that was a preferred class, and history has shown it to be a preferred class.

Leo wanted to extend that to other classes that he felt also had similar characteristics that USAA was not interested in. And that's the reason he formed Government Employees Insurance.

He felt that the preferred characteristic that could be determined by employment in that area as to their propensity for accidents would extend beyond the officer ranks of the armed services. And he was right. It's a fascinating story.

And there's a good book about USAA that came out about two or three years ago, tells the whole story.

It's hard for us to take away the preferred customers of USAA. It's hard for them to take away our preferred customers, too.

But USAA has some of the same qualities that we have talked about in terms of State Farm. It has, as I remember, maybe a $6 billion, maybe larger now, surplus.

It's slightly different than State Farm. It's not a true mutual. It's a reciprocal, as I remember. But, it's tantamount to a mutual.

So the 6 billion that has been accumulated over the years is working for present policy holders, which is a terrific asset for them.

And the fact that they keep you as a preferred risk probably means you are a preferred risk. I mean, their underwriting judgment is very good.

You know, we have various categories that relate to speeding tickets or accidents and all of that sort of thing. And in aggregate, they are a good predictor of future accident potential. But it's only in aggregate.

I mean, it's like saying, you know, "Because I'm 70, that I have X percent chance of dying," but it doesn't say what's going to happen to me specifically. But it does mean if you're insuring 100,000 70-year-olds, you'd better get this sort of price.

We have these predictors, too. And past driving history is an important predictor. But you've got this long history with USAA. And they, probably for very good reason on that total history, keep you in the preferred class.

And we, based on criteria that are developed from looking at 5 million policy holders, we can't make the determination — we can't come out and actually observe you driving, or anything of the sort.

We have to look at the information that comes to us, which if it says speeding tickets or accident, it does result in various scores being applied. So I really can't offer you a better deal. I'd like to. I have a feeling you'd be a good client. If USAA ever gets mad at you, come over and see us.

20. "We regard volatility as a measure of risk to be nuts"

WARREN BUFFETT: Area 2.

AUDIENCE MEMBER: I'm Bob Kline (PH) from Los Angeles.

Wall Street often evaluates the riskiness of a particular security by the volatility of its quarterly or annual results. And likewise, evaluates money managers by their volatility — measures their risk by volatility, I should say.

And I know you guys don't agree with that approach. I wonder if you could give us some detail about how you come at the concept of risk, how you measure it, and just in general how you approach risk.

WARREN BUFFETT: Yeah, we regard volatility as a measure of risk to be nuts.

And the reason it's used is because the people that are teaching want to talk about risk. And the truth is, they don't know how to measure it in business.

I mean, that would be part of our course on how to value a business. It would also be, how risky is the business? And we think about that in terms of every business we buy. And risk with us relates to —

Well, it relates to several possibilities. One is the risk of permanent capital loss. And then the other risk is just an inadequate return on the kind of capital we put in. It does not relate to volatility at all.

Our See's Candy business will lose money — and it depends on when Easter falls — but it'll lose money in two quarters of the four quarters of the year. So it has a huge volatility of earnings within the year.

It's one of the least risky businesses I know.

You can find all kinds of, you know, wonderful businesses that have great volatility and results. But it does not make them bad businesses. And you can find some very — you can find some terrible businesses that are very smooth.

I mean, you could have a business that did nothing, you know? And its results would not vary from quarter to quarter, right? So it just doesn't make any sense to translate — (laughter) — volatility into risk.

And Charlie, you want to add anything on that?

CHARLIE MUNGER: Well, it raises an interesting question, which is how can a professoriate that is so smart come up with such silly ideas and spread them all over the country? (Laughter)

It is a — it's a very interesting question. If all of us felt that — (Laughter)

WARREN BUFFETT: Charlie, your Dilly Bar's arrived.

CHARLIE MUNGER: Oh, good.

WARREN BUFFETT: Yeah. You've heard of getting a second wind.

CHARLIE MUNGER: Oh, fine.

WARREN BUFFETT: Thank you. (Laughter and applause)

You tip him. (Laughter)

I didn't think our cracks were that funny. (Laughter)

CHARLIE MUNGER: Right, right. But I've been waiting for this craziness to pass for several decades now. I do think it's getting dented some. But it's not passing.

WARREN BUFFETT: If somebody starts talking to you about beta, you know, zip up your pocketbook. (Laughter)

21. Zen Buddhism and the value of low expectations

WARREN BUFFETT: Area 3.

AUDIENCE MEMBER: Brian Zen (PH) from China.

As a Coke addict myself, I'm excited to report to you — (laughter) — our worldwide promoter-in-chief, that the Cokes in Beijing taste just as wonderful as in Omaha.

As a ex-Zen monk, today I feel like visiting the Buddha of the financial world. (Laughter)

We have an investment club, but with a name that ends in .com, believe it or not, which tells you that the frenzy — .com frenzy — even seduced Zen monks when we tried to follow you.

We find that Mrs. Susan Buffett used to send Zen Buddhism books to her sorority sisters. That's probably why she always has a peaceful smile due to her low expectation of life which, according to Buddha, is full of sufferings.

But Mr. Munger would tell me that Susan's smile is because you, as the husband, exceeded her low expectations.

CHARLIE MUNGER: That's right. (Laughter)

WARREN BUFFETT: Yeah. And her father's even lower expectations. (Laughter)

CHARLIE MUNGER: Right, right.

AUDIENCE MEMBER: Anyway, my question is, did Susan also send those Zen books to your office or your bedroom?

And if you have read those books, what are the key ideas that contributed to your investment tao, which even made sense to secluded, narrow-minded Zen monks like me? Thanks for the financial enlightenments you've given us today.

WARREN BUFFETT: Thank you. I sent those books on to Charlie so I'll let him answer. (Applause)

CHARLIE MUNGER: Actually, I tend to be a follower of Confucius. (Laughter)

And I think this room is full of Confucian values, you know? If the first law of Confucianism is filial piety, particularly toward elderly males, you can see why I like that system. (Laughter)

22. Capital and opportunity costs

WARREN BUFFETT: Area 4. (Laughter)

AUDIENCE MEMBER: Good afternoon, Mr. Buffett and Mr. Munger. My name is Kevin Truitt (PH) from Chicago. I have three questions for you.

Mr. Munger, at last year's shareholder meeting, you stated that you didn't feel that the concept of the cost of capital made true economic sense. Would you explain why you felt this way and what you would do to replace it with anything?

My second question is to Mr. Buffett. You've stated the importance of an occasional big idea. How were you able to, in fact, tell when you had a big idea?

And my third question, Mr. Buffett, you have talked about the importance of the franchise and sustainable competitive advantage.

Companies like Kellogg and Campbell's Soup are companies that most people would have said had those qualities. However, over time, those qualities were lost as a result of a change in consumer taste.

What gives you confidence that the same things won't happen to Coke or Gillette?

WARREN BUFFETT: Charlie?

CHARLIE MUNGER: Well —

WARREN BUFFETT: Cost of capital.

CHARLIE MUNGER: Cost of capital, first.

Obviously, considerations of cost are important in business. And obviously, opportunity costs, which is a doctrine of economics, really a doctrine of lifesmanship, are also very important. And we've always had that kind of basic thinking.

Of course, capital isn't free. And, of course, you could figure cost of capital when you're borrowing money. Or at least you can figure cost of loans. But the theorists had to develop some theory for what equity cost. And there, they just went bonkers.

They said if you earned a hundred percent on capital because you had some marvelous business, your cost of capital was a hundred percent. And therefore, you shouldn't look at any opportunity that delivered a lousy 80 percent.

That is the kind of thinking, which came out of the capital assets pricing models and so forth, that I've always considered inanity.

What is Berkshire's cost of capital? We have this damn capital. It just keeps multiplying and multiplying. What is its cost? You have perfectly good, old-fashioned doctrines like opportunity cost, you know?

At any given time when we consider an investment, we have to compare it to the best alternative investment we have at that time. We have perfectly good, old-fashioned ideas that are very basic to use, but they weren't good enough for these modern theorists.

So they invented all this ridiculous mathematics, which concluded that the companies that made the most money had the highest costs of capital.

Well, all I can say is, it's not for us.

Now, the other half of that question I leave for Mr. Buffett.

WARREN BUFFETT: Yeah, what you find, of course, is that the cost of capital is about a quarter percent below the return promised by any deal that the CEO wants to do. It's — (laughter) — very simple.

You know, we have three questions on capital — with capital, throughout — leaving aside whether we want to borrow money, which we generally don't want to do.

And one is, does it make more sense to pay it out to the shareholders than to keep it within the company? A sub-question on that is if we pay it out, is it better off to do it via repurchases or via dividend?

The test for whether we pay it out in dividends is, can we create more than a dollar of value within the company with that dollar than paying it out? And you never know the answer to that. But so far, the answer as judged by results is yes, we can.

And we think that prospectively, we can. But, that's a — you know, that's a hope on our part. And it's justified to some extent by past history, but it's not a certainty.

Once we've crossed that threshold, then do we repurchase stock? Well, obviously, if you can buy your stock at a significant discount from conservatively calculated intrinsic value, and you could buy it in reasonable quantity, that's a use for capital.

Beyond that, then the question becomes, if you have the capital, you think you can create more than a dollar, how do you create the most with the least risk? And that gets to business risk. It doesn't get to any calculation of the volatility.

I don't know the risk in See's Candy as measured by its stock volatility because the stock hasn't been outstanding since 1972. Does that mean I can't determine how risky a business See's is, because we don't have a daily quote on it?

No. I can determine it by looking at the business, and the competitive environment in which it operates, and so on.

So once we cross the threshold of deciding that we can deploy capital so as to create more than a dollar of present value for every dollar retained, then it's just a question of doing the most intelligent thing that you can find. And, you know, that is —

The cost of every deal we do is measured by the second best deal that's around at a given time, including more — doing more of some of the things we're already in.

And I have listened to cost of capital discussions at all kinds of corporate board meetings and everything else. And, you know, I've never found anything that made very much sense in it

except for the fact that it's what they learned in business school and that's what the consultants talked about.

And most of the board members would nod their head without knowing what the hell was going on. And that's been my history with the cost of capital.

23. How Buffett knows when he's had a "big idea"

WARREN BUFFETT: Now, moving onto the big ideas, you know when you've got a big idea. And I can't tell you, you know, exactly what happens within your nervous system or brain at that time.

But we've had relatively few big ideas, good ideas, over the years. I don't know how many you think we've had in aggregate, probably, career, maybe 25 each or something?

CHARLIE MUNGER: If you took the top 15 out of Berkshire Hathaway, most of you people wouldn't be here. (Laughter)

So, roughly one every two years.

WARREN BUFFETT: Yeah, one every year or two. And sometimes there'll be a bunch of them, like in 1973 and -4. But the problem is, for us is that big, now, really means big. I mean, it has to be billions of dollars to move the needle very much at Berkshire.

But I would say that when I would turn those pages, 50 years ago in the Moody's Manuals, I would know when I hit a big idea. I've got half a dozen of them that I keep the Xeroxes from those reports around from 50 years ago just because it was so obvious that they just — they were incredible. And that happens every now and then.

When I met Lorimer Davidson, you know, in end of January, 1951, and he spent four hours or five hours with me explaining GEICO, I knew it was a big idea.

Eight months later, no, probably 10 months later, I wrote an article for The Commercial and Financial Chronicle on "The Security I Like Best." It was a big idea.

When I found Western Insurance Securities, I knew it was a big idea.

I couldn't put billion — millions — of dollars into it, but I didn't have millions so it didn't make any difference.

And I — we've seen things subsequently. And we'll see, you know. If we have a normal lifespan, we'll see a few more before we get done, but I can't tell you that —exactly how —

I can't tell you exactly what transpires in my mind that says, you know, flashes a neon sign up that says, "This is a big idea."

What happens with you, Charlie?

(Laughter)

Actually, one of my — I've have a real system. (Laughter)

My idea of a truly big idea is, one I get it and I call Charlie and he only says no, rather than, "That's the worst idea I've ever heard of." But if he just says no, it's a hell of an idea.

CHARLIE MUNGER: You know, the game in our kind of life is being able to recognize a good idea when you rarely get it, and — or when it rarely is presented to you. And I think that's something you have to prepare for over a long period.

What is the old saying? That opportunity comes to the prepared mind? And I don't think you can teach people in two minutes how to have a prepared mind. But that's the game.

WARREN BUFFETT: Things we learned 40 years ago, though, will help and recognize the next big idea.

CHARLIE MUNGER: And on opportunity costs, going back to that, the current freshman economics text, which is sweeping the country, has right in practically the first page. And it says, "All intelligent people should think primarily in terms of opportunity cost." And that's obviously correct.

But it's very hard to teach business based on opportunity cost. It's much easier to teach the capital assets pricing model where you could just punch in numbers and out come numbers. And therefore, people teach what is easy to teach, instead of what is correct to teach.

It reminds me of Einstein's famous saying. He says, "Everything should be made as simple as possible, but no more simple."

WARREN BUFFETT: Write that down. (Laughter)

24. Big retailers are attacking big brand-name moats

You asked an interesting question about franchises, too, and mentioned Campbell's Soup and Kellogg.

And, you know, I'm no expert on that but I would say that, just based on my general observation over the years, is that the problems there came from two different things.

I think that the problems with cereal — ready-to-eat cereal — were not so much changes in taste or consumption patterns. But I think they maybe just pushed their pricing too far to the point that they lost market share without getting — without having — the moat that they thought they had, as opposed to the General Mills cereals, and the General Food cereals, and all of that sort of thing.

I mean, if you're pricing really gets out of whack and people regard Wheaties or Grape-Nuts in the same category as they regard Kellogg's Corn Flakes, you know, you're going to lose share. And once you start losing share, it's hard to get back.

The problems with soup I think relate more to lifestyle. I think it's become — it's a little less — it fits in a little less well with current lifestyles, maybe, than 40 years ago.

Soft drinks, — the consumption of soft drinks — I don't have the figures here, but I would wager that in 110 years, the per capita of soft drinks has gone up virtually every year throughout that history.

I mean, it's now 30 — close to 30 percent — of U.S. consumption of liquids. So, if the average American has about 64 ounces of liquids a day, you're talking about, say, 18 ounces of that being soft drinks and 43 percent of that 18, or almost 8 ounces a day, of being Coca-Cola products.

In other words, 1/8th of all the liquid man, woman and child in the United States take in comes from Coca-Cola products. But that has gone up, virtually — well, throughout the world it's gone up on a per capita basis, you know, almost since soft drinks were discovered.

I would say that that trend is almost impossible to reverse on a worldwide basis. I mean, there's so much potential in countries where per capita consumption is like — well, I think it's, you know, maybe 8 per capita, which is — 8-ounce servings they talk in terms — 64 ounces a year.

So you have 1/50th of the consumption, per capita, on Coke products in many — in some important countries — that you have here. I don't — I just don't see it as being —

Now, you can push pricing too far. I mean, there comes a point — it depends on the country in which you're doing it, but that depends even on areas within the country in which you do it.

But if you establish too wide a differential between Coke and a private label product, you will change consumption patterns somewhat. Not huge, but enough so that you don't want to do it. But I don't think you'll see —

It's interesting. Coffee's gone down every year. People talk about Starbucks and all that, but if you look at coffee consumption in this country, if you look at milk consumption in this country, you know, per capita, it just goes down, down, down, down, year, after year, after year, after year.

And I think it's pretty clear what people like to drink once they get used to it, and with the price right.

Interesting thing about Coca-Cola is, when I was born in 1930, a 6 1/2-ounce Coke cost a nickel and you put a two cent deposit on the bottle. But forget about that, just take the nickel.

Now you buy a 12-ounce can or a larger product, and you're paying, if you buy it on the weekends in the supermarket special or something, you're paying maybe a little more than twice per ounce what you were paying in 1930, 70 years ago.

And compare that to the price behavior of almost any product, you know, that you can find except raw commodities. But compare it to cars, housing, anything. And there's been very, very little price inflation in it.

And I think that's a contributor, of course, to the growth in per capitas over time.

Charlie, how about cereals and soup?

CHARLIE MUNGER: Well, I think those are examples where the moats got less hostile for the competitors.

Part of the trouble was the buying power got more concentrated and tougher.

I mean, the big grocery chains now have a lot of clout. And then you add the Walmarts and the Costcos and the Sam's and the — it's a different world faced by the Kelloggs than the one they had 30 or 40 years ago.

WARREN BUFFETT: Yeah, there will be a battle, always, between brands and retailers, because the retailer would like his name to be the brand.

And, to the extent that people trust Costco or Walmart more than they — or as much as — they trust the brand, then the value of having the brand moves over to the retailer from the product itself.

And that's gone on for a long, long time. You know, the first — I would — cases I know about in any real quantity were back with A&P in the '30s. And A&P, I believe, was the largest food retailer in this country. And they were also a big promoter of private labels. Ann Page I think was a big private label with them, for example.

And they felt they could convince the consumer in the '30s that their brand meant more than having Del Monte on it or Campbell's or whatever it might be in the different categories. And people thought they were going to win that war for a while.

And who knows? I mean, I don't know all the variables that went into A&P's decline, but it was dramatic. I mean, it was one of — it was a great American success story for a while, and then it was a great American failure.

Charlie, you —?

CHARLIE MUNGER: The muscle power of the Sam's Clubs and the Costcos has gotten very extreme. A little earlier this morning, when I was autographing books, a very good looking woman came up to me and said she wanted to thank me.

And I said, "For what?" And she said, "You told me to buy this pantyhose I'm wearing from Costco."

And I'd evidently made some previous comment about how amazing it was that Costco could get Hanes, of all people, to allow a co-branded pantyhose, Hanes-dash-Kirkland, in the Costco stores. That wouldn't have happened 20 years ago.

WARREN BUFFETT: She must've been pretty desperate if she was consulting with you on where to buy pantyhose, Charlie. (Laughter)

25. Selling short is "tempting" but "very painful"

WARREN BUFFETT: OK, let's move to area 5.

CHARLIE MUNGER: Yeah, right.

AUDIENCE MEMBER: Hi, I'm Dave Staples from Hanover, New Hampshire and I've got two questions for you.

First, I'd like to hear your thoughts on selling securities short and what your experience has been recently and over the course of your career.

The second question I'd like to ask is how you go about building a position in a security you've identified.

Using USG as a recent example, I believe you bought most of your shares at between 14 and $15 a share. But certainly, you must've thought it was a reasonable investment at 18 or 19.

Why was 14 and 15 the magic number? And now that it's dropped to around 12, do you continue to build your position? How do you decide what your ultimate position is going to be?

WARREN BUFFETT: Well, we can't talk about any specific security, so — our buying techniques depend very much on the kind of security we're dealing in. Sometimes, it's a security that might

take many, many months to acquire. And other times, you can do it very quickly. And sometimes, it may pay to pay up. And other times, it doesn't.

And the truth is, you never know exactly what the right technique is to use as you're doing it, but you just use your best judgment based on past purchases. But we can't discuss any specific one.

Short selling, it's an interesting item to study because it's, I mean, it's ruined a lot of people. It is the sort of thing that you can go broke doing.

Bob Wilson, there're famous stories about him and Resorts International. He didn't go broke doing it. In fact, he's done very well subsequently.

But being short something where your loss is unlimited is quite different than being long something that you've already paid for.

And it's tempting. You see way more stocks that are dramatically overvalued in your career than you will see stocks that are dramatically undervalued.

I mean there — it's the nature of securities markets to occasionally promote various things to the sky, so that securities will frequently sell for five or 10 times what they're worth, and they will very, very seldom sell for 20 percent or 10 percent of what they're worth.

So, therefore, you see these much greater discrepancies between price and value on the overvaluation side. So you might think it's easier to make money on short selling. And all I can say is, it hasn't been for me. I don't think it's been for Charlie.

It is a very, very tough business because of the fact that you face unlimited losses, and because of the fact that people that have overvalued stocks — very overvalued stocks — are frequently on some scale between promoter and crook. And that's why they get there. And once there —

And they also know how to use that very valuation to bootstrap value into the business, because if you have a stock that's selling at 100 that's worth 10, obviously it's to your interest to go out and issue a whole lot of shares. And if you do that, when you get all through, the value can be 50.

In fact, there's a lot of chain letter-type stock promotions that are sort of based on the implicit assumption that the management will keep doing that.

And if they do it once and build it to 50 by issuing a lot of shares at 100 when it's worth 10, now the value is 50 and people say, "Well, these guys are so good at that. Let's pay 200 for it or 300," and then they could do it again and so on.

It's not usually that — quite that clear in their minds. But that's the basic principle underlying a lot of stock promotions. And if you get caught up in one of those that is successful, you know, you can run out of money before the promoter runs out of ideas.

In the end, they almost always work. I mean, I would say that, of the things that we have felt like shorting over the years, the batting average is very high in terms of eventual — that they would work out very well eventually if you held them through.

But it is very painful and it's — in my experience, it was a whole lot easier to make money on the long side.

I had one situation, actually, an arbitrage situation when I was in — well, it was when I moved to New York in 1954, so it would've been about June or July of 1954 — that involved a surefire-type transaction, an arbitrage transaction that had to work.

But there was a technical wrinkle in it and I was short something. And I felt like a — for a short period of time — I felt like Finova was feeling last fall. I mean, it was very unpleasant.

It — you can't make — in my view, you can't make really big money doing it because you can't expose yourself to the loss that would be there if you did do it on a big scale.

And Charlie, how about you?

CHARLIE MUNGER: Well, Ben Franklin said, "If you want to be miserable, you know, during Easter or something like that," he says, "borrow a lot of money to be repaid at Lent," or something to that effect.

And similarly, being short something, which keeps going up because somebody is promoting it in a half-crooked way, and you keep losing, and they call on you for more margin — it just isn't worth it to have that much irritation in your life.

It isn't that hard to make money somewhere else with less irritation.

WARREN BUFFETT: It would never work on a Berkshire scale anyway. I mean, you could never do it for the kind of money that would be necessary to do it with in order to have a real effect on Berkshire's overall value. So it's not something we think about.

It's interesting though. I mean, I've got a copy of The New York Times from the day of the Northern Pacific Corner. And that was a case where two opposing business titans each owned over 50 percent of the Northern Pacific Company —the Northern Pacific Railroad.

And when two people each own over 50 percent of something, you know, it's going to be interesting. And — (laughter) — Northern Pacific, on that day, went from 170 to a thousand.

And it was selling for cash, because you had to actually have the certificates that day, rather than the normal settlement date.

And on the front page of The New York Times — which, incidentally, sold for a penny in those days. It's had a little more inflation than Coca-Cola — front page of The New York Times, right next to the story about it, it told about a brewer in Newark, New Jersey who had gotten a margin call that day because of this.

And he jumped into a vat of hot beer and died. And that's really never appealed to me as, you know, the ending — (laughter) — of a financial career.

And who knows? You know, when they had a corner in Piggly Wiggly, they had a corner in Auburn Motors in the 1920s. I mean, there were corners. That was part of the game back when it was played in kind of a footloose manner. And it did not pay to be short.

Actually, during that period — you might find it interesting — in the current issue of The New Yorker, maybe one issue ago, the one that has the interesting story about Ted Turner, there's also a story about Hetty Green.

And Hetty Green was one of the original incorporators of Hathaway Manufacturing, half of our Berkshire Hathaway operation, back in the 1880s. And Hetty Green was just piling up money. She was the richest woman in the — maybe in the world. Certainly in the United States. Maybe some queen was richer abroad.

But Hetty Green just made it by the slow, old-fashioned way. I doubt if Hetty was ever short anything.

So as a spiritual descendent of Hetty Green, we're going to stay away from shorts at Berkshire.

OK, area 6.

Hetty, incidentally — this story, it's a very interesting story. As I read the story, it's almost conclusively clear to me that she forged a will to try and collect some significant money from, I believe, her aunt.

And it was a very, very famous trial back in whenever it was, 1860 or '70. And they found against Hetty when it got all through, but she still managed to become the richest woman in the country.

26. The value of Berkshire's "loyalty effect"

WARREN BUFFETT: Area 6.

AUDIENCE MEMBER: Yeah, hi. I'm James Halperin from Dallas, Texas. And I've been a shareholder since 1995. And I feel great about it, so thank you.

This question has to do with Berkshire's so-called permanent holdings and whether, when making investment decisions, you somehow mathematically calculate a value to Berkshire's reputation for loyalty to its public investees.

Let's say you are confident enough that Pepsi or Procter and Gamble would grow cash flow faster than Coke or Gillette would. And that the replacement value of the stock was less expensive enough to more than make up for the taxes.

Would you then sell Coke, for example, to buy Pepsi? And if not, why not? And how do you value this reputation for loyalty aspect in those decisions?

WARREN BUFFETT: Well, I think that's a very good question.

I don't think we would ever — I think it's very unlikely we would come to the conclusion that we were that certain that — you mentioned P&G and Pepsi versus the ones — but that some major consumer products company would do better than the ones we're in.

We might very well decide that some other one is going to do quite well and buy that additionally.

As a practical matter, if I'm on the board of a company, or Charlie were to be, representing Berkshire, it's very difficult — I would say it's almost impossible for us to trade in their securities.

It just — it creates too many problems. People would think we knew something we didn't. Or, you know, particularly if we were selling it, you know, we would have people questioning very much whether we had detected something within the company that was not available to the rest of the world.

So we really give up an enormous amount of investment mobility when we go on a board.

And so I don't even think about doing what you're suggesting, although I might very well if I were just a money manager running the business.

We certainly, and we've laid it out in the ground rules in the back of the — in our Owner's Manual back in the annual report — we've certainly said, in terms of businesses we buy control of, that they just aren't for sale. And a fancy price will not tempt us.

And that we lay out that exception relating to businesses where we think there's a permanent loss of cash for as far as the eye can see, or businesses where we have labor troubles, which we — I described earlier in the day, we might've had at The Buffalo News at that one period.

But otherwise, simply because we can use the money better someplace else, we're not interested in it.

You know, I can't really dig into my psyche and tell you how much of that is because I think that will help us buy businesses in the future if we behave that way, or how much is just my natural inclination that when I make a deal with somebody and I'm happy with how they behave with me, that I want to stick with them. It's probably both, you know?

And I wouldn't want to try and weight the two. I'm happy, you know, with the results of the first and I'm happy with the way I feel, essentially, about the second.

I just think it's crazy — I know if I owned all of Berkshire myself, I wouldn't dream of trading around businesses with people that have trusted in me and that I like and have been more than fair with me.

I wouldn't dream of trading around businesses so that my estate was 105 percent of some very large number instead of 100 percent of some large number. I just would regard that as a crazy way to live.

And I don't want the fact I run a public company to cause me to behave in a way that I would be uncomfortable behaving if we were a private company.

But I also feel that you, as shareholders, are entitled to know that that's an idiosyncrasy of mine. And therefore, I lay it out, and have laid it out for 20 years, as something that you should understand, as an investor or before you become an investor.

I'm sure it helps us in acquisitions over time. But whether that in any way compensations the opportunity costs that Charlie talks about of making an occasional advantageous disposal, I don't know and it's something I'll never calculate.

Charlie?

CHARLIE MUNGER: Well, I do tend to calculate it, at least roughly. And so far, I think that the loyalty effect is a plus in our life.

WARREN BUFFETT: Would you regard that as true though in both public — I mean, both marketable securities and owned businesses?

CHARLIE MUNGER: Oh, no. I don't think the loyalty effect in lots of public companies is nearly as important as it is with the private companies.

WARREN BUFFETT: You can say it's a mistake for us to be directors of companies, because we give up huge amount of flexibility in investment because we are directors. I — and there's no question that we do.

It's — if you're thinking solely of making money, you do not want to be a director of any company. So there's just no question about that.

27. Confidence that Berkshire's culture will endure

WARREN BUFFETT: Area 7.

AUDIENCE MEMBER: Tom Harrison (PH) from Claremore, Oklahoma. Good afternoon, gentlemen. And thanks for a wonderful weekend.

This question's for Mr. Buffett. Being somewhat pessimistic by nature, I have a recurrent nightmare of a Wall Street Journal headline proclaiming, "Buffett kicks bucket."

WARREN BUFFETT: They may phrase it a little more elegantly than that — (laughter) — but someday, the headline will be there. (Laughter)

AUDIENCE MEMBER: And, of course, Charlie's no spring chicken either. (Laughter)

In light of these concerns, could you please go into a little more detail than that presented in your annual report regarding the succession issue? And my apologies for the morbid nature of the question.

WARREN BUFFETT: Oh, there's no reason to apologize. I mean, it's a question I ask our managers, incidentally, every couple of years.

I — about every two years, I send them a letter and I say, you know, "If you die tonight, what will you — what will I wish you had told me tomorrow morning?" You know, because I have to make that same decision and I'm not conversing with them every night.

So I want them to put in writing to me, once every couple of years, what they think about the subject, who they think should succeed them, or whether there are several candidates, or what the strengths and weaknesses are. And I have that information available.

And, you know, you're entitled to the same sort of answer about succession. It's a part of buying into this business.

And it — I can tell you that no one has more of an interest in it than I do. And Charlie has a similar interest, because, we have a very high percentage of our net worth in the business.

Plus, we've got a lifetime of effort in the business. And we want it to succeed for both, in our cases probably, at least my case, the ultimate reward, the foundation I have.

But also because we just want — we like what's happened so far and we want to prove that it can — it's not dependent upon a couple of guys like us, but that it can be institutionalized, in effect.

And we have, and Charlie and I, we know who will succeed me in what are likely to be two jobs, one marketable securities and one business operations.

We want to be very sure that the culture is maintained. And I think it's so strong that I think it'd be very hard to change it.

But in addition, the stock ownership situation with me is such that it can — if there were any inclination to change it, it can be prevented from happening. I don't think it would, anyway.

Now, in terms of who succeeds me, that depends when I die. I — and there's no sense telling you who it would be today. There'd be no plus to that, and it might not be the same 20 years from now.

I mean, 20 years ago, it would've been Charlie, obviously. But it won't be Charlie now because of his age. And it'll be somebody else.

But 20 years from now or 15 years from now it might be some third party. But we've got —we feel very good about the succession situation.

We feel very good about the stability of the organization, in terms of the stock ownership situation, because that is insured for a very, very long time to come. We couldn't feel better about the managers we have in place and the culture we have in place. And, you know, the individual will be named.

I think I've mentioned, though, that when they open that envelope — all of the contents of that envelope are already known to the key people — but when they open that envelope, the first instruction is, you know, take my pulse again. (Laughter)

But if I flunk that test, there will be somebody very good in place.

Charlie?

CHARLIE MUNGER: The main defense, of course, is to have assets that will do well, more or less, automatically. And we have a lot of those.

And to the extent you improve that further by having very good managers in place and very good individualized systems for bringing new managers into the places, there's a lot of momentum here that would go on very nicely with the present management gone.

And now, I don't think our successors are going to be as good as Warren at actually — (applause) — allocating the money. (Louder applause and laughter)

WARREN BUFFETT: No, we ran a little test case 10 years ago because for nine months and four days, I took another job at Salomon. And things went fine at Berkshire.

We've got — the managers don't need me. We have to allocate capital. We have to make sure they're treated fairly. And —

But we are not making decisions around the place, except in the allocation of capital. And that will be important. But some of that is semiautomatic. And others, you know, it does require, you know, some imagination sometime or something of the sort.

But for nine months and four days in 1991, you know, Salomon was primarily on my mind and Berkshire wasn't. And everything went on just as before. And we are far, far, far stronger now than we were 10 years ago.

So I'm very comfortable with 99 percent of my estate being in Berkshire shares. And I think it's an intelligent holding, eventually, for the foundation. And knowing that, you know, I won't be around at some point before the foundation gets it.

28. "We don't want to talk about silver"

WARREN BUFFETT: OK, area 8.

AUDIENCE MEMBER: Hello, Mr. Buffett, Mr. Munger. My name's Matt Ahner (PH). I'm from Tucson, Arizona. It's a tremendous pleasure to be here today.

This question probably falls into Charlie Munger's realm of oddball investment activities.

But considering Berkshire's previous experience in silver, what are your thoughts on the silver market today? How do you analyze this market? Have you determined an equilibrium price for silver? And if so, would you share that price, or explain to us how you determined it?

CHARLIE MUNGER: The short answer is we don't want to talk about silver. (Laughter)

WARREN BUFFETT: Yeah. We're not going to comment, you know, on oil or the prices of anything in terms of making any forecasts about it.

The equilibrium price though I can tell you is whatever it's selling for today. But there will be a different equilibrium price a year from now or five years from now. But we can't tell you what it'll be.

29. Electricity deregulation led to damaging shortages

WARREN BUFFETT: Area 1.

AUDIENCE MEMBER: Hello, Mr. Buffett, Mr. Munger. My name's Bob Odem (PH) from Seattle, Washington.

Considering the political climate, and what seems to be a more regulated environment than not in the electric utilities market, and politicians that seem to be pacifying their constituents rather than the common sense of price and quantity —

Is it not a risky venture to participate in these markets more than what has already been done with MidAmerican, considering that, even with a possible repeal of the PUHCA laws, that they may be reinstated some years later, with the addition or subtraction of any other legislation that a politician may dream up, and then put the investment at risk?

WARREN BUFFETT: Charlie, you're a resident of California. (Laughs)

CHARLIE MUNGER: Well, the production of electricity, of course, is an enormous business. And it's not going away.

And the thought that there might be something additional that we might do in that field is not at all inconceivable. It's a very fundamental business.

Now, you're certainly right in that we have an unholy mess, in California, in terms of electricity.

And again, it reflects, I would say, a fundamental flaw in the education system of the country, that is many smart people of all kinds, utility executives, governors, legislators, journalistic leaders, they have difficulty recognizing that the most important thing with a power system is to have a surplus of capacity.

Is that a very difficult concept? (Laughter)

You know, everybody understands that if you're building a bridge, you don't want a bridge that will handle exactly 20,000 pounds and no more.

You want a bridge that'll handle a lot more than the maximum likely load. And that margin of safety is enormously important in bridge building.

Well, a power system is a similar thing. Now, why do all these intelligent people, you know, ignore the single most obvious and important factor and just screw it up to a fare-thee-well?

So I'm giving you a response which is, of course, another question. As the — my old professor used to say, "Let me know what your problem is and I'll try and make it more difficult for you." (Laughter)

WARREN BUFFETT: Well, to me, the interesting thing is that you had a system — I mean, Charlie's obviously right in that you've got about three goals in terms of — from a societal standpoint — you've got perhaps three goals in what you would like your electric utility business to be.

One is you would like it to be reasonably efficiently operated.

Secondly, since it does tend to have, in many situations, monopoly characteristics, you would want something that produced a fair return, but not a great return for capital. But enough to attract capital.

And then third, you'd want this margin of safety, this ample supply.

Now, when you've got a long lead time to creation of supply, which is the nature of putting on generation capacity, you have to have a system that rewards people for fulfilling that obligation to have extra capacity around.

A regulated system does that. If you give people a return on the capital employed, if they keep a little too much capital employed so that they have this margin of safety on generation, and they get paid for it, they stay ahead of the curve. They always have 15 or 20 percent more generating capacity than needed.

And one of the disadvantages of that regulation and the monopoly nature is that it doesn't have the spur to efficiency. They try to build it in various ways, but it's difficult to have a spur to great efficiency if somebody can get a return on any capital they spend.

So utility regulators have always been worried about somebody just building any damn thing and getting whatever the state-allowed return is.

But I would say that the problems that would arise from, say, a little bit of sloppy management are nothing compared to the problems that arise from inadequate generation.

So here you have in California — my view as an outsider — you had a situation under regulation where the utilities had the incentive to have a little extra generating capacity because they got allowed to earn a decent return on it, a return that would attract capital.

Then you had, I think, the forced sell-off of half of their generating capacity or something like that. And they sold it at multiples of book value to a bunch of people who were now just generators who were deregulated.

They've got — they don't have an interest in having too much supply. They've got an interest in having too little supply.

So you've totally changed the equation because the fellow that now has the deregulated asset, for which he paid three times book, now has to earn a return on a three times book what the fellow was formally earning under the regulated environment at one times book.

And so, he is not going to build extra generating capacity. That — all that does is it brings down the price of electricity. You know, he hopes things are tight.

So you've created, in my view, a situation where the interests of the companies in the business have diverged in a significant way from the interests of society. And I — it just doesn't make any sense to me. And I really think that the old system made more societal sense.

Let people earn a good return, not a great return, but a return that attracts capital, on an investment that has built into it the incentives to keep ahead of the game on capacity because you can't fine tune it that carefully. And you do have this long lead time, so.

Now, what you do with the scrambled eggs now, you know, is something. And with all the political forces back and forth, I think that you'd better have a system that encourages building extra capacity.

Because you don't know how much rainfall there will be in the Pacific Northwest and, therefore, how much hydro will be available. And you don't know what natural gas prices will do. And therefore, you know, whether it's advantageous for a gas-fired turbine to be operating.

And it — the old system really strikes me as somewhat better than this semi-deregulated environment that we've more or less stumbled into.

But Charlie, what do you think on that?

CHARLIE MUNGER: Of course, even the old system got in some troubles in that since everybody had the NIMBY syndrome — "Not In My Back Yard" — everybody wanted any new power plant to be anyplace not near me.

And if everybody feels that way, and if the political system means that the obstructionists are always going to rule, which is true in some places in terms of zoning and other matters, you get in deep trouble.

If you let the unreasonable, self-centered people make all the decisions of that kind, you may well get so you just run out of power. That was a mistake.

And we may make that mistake with oil refineries. It is — you know, we haven't had many new, big oil refineries in the last, well, period. So you may get to do this all over again.

WARREN BUFFETT: All of that being said, there will be need for more generation capacity. I mean, the electric utility industry will be — will grow. It will need lots of capital.

And there should be ways to participate in that where we get reasonable returns on capital. We would not expect to get great returns on capital. But we would, you know, we would be happy to do that. We generate a lot of capital and we would be comfortable in that business.

We would not feel the risks were undue, as long as we didn't go around paying incredible prices for somebody else's capacity and then have people get very upset at what that meant in terms of their electric rates. You can't go out and —

If you've got a utility plant in this country that was put in place at X and then you go out and encourage entrepreneurs to buy in at 3X, you cannot expect utility prices — electricity prices — to fall. And that was, in my view, a very basic mistake. I may not understand it fully.

30. Can a good business make up for bad management?

WARREN BUFFETT: Area 2.

AUDIENCE MEMBER: Good afternoon. My name is Pavel Begun. I am from Minsk, Belarus. And I have two questions.

And before I'll have questions for you, I'd like to say thank you for recommending to read "Intelligent Investor." It's a terrific book and it reshaped me tremendously, literally, overnight. So I'd like to thank you for that.

And now the question. Say I'm an owner of the business. And the business has a durable competitive advantage and superior business model and is run by able people.

And then, you know, I start noticing that, basically, management starts doing things which are far from intelligent.

So what should I do as an owner, as an investor? Should I try to tell them how they should run the business? Or should I just sit back and do nothing because superior business model should overcome poor management? That's the first question.

And the second question is, how important is nominal experience in the business of investing? And by saying nominal, I mean the number of — the actual time you've been in the business, as opposed to real experience that also includes experience you acquire from, say, Ben Graham, or you, or Peter Lynch, when you read books? So those are the questions.

WARREN BUFFETT: On your first question, did you assume that you had control of the business, or you just owned a marketable security?

AUDIENCE MEMBER: Yes, if I own, say, 20 percent of marketable securities.

WARREN BUFFETT: All right. Well, the situation you described is not hypothetical, in the first case. (Laughter)

And I would say that the history that Charlie and I have had of persuading decent, intelligent people, who we thought were doing unintelligent things, to change their course of action has been poor.

Would you agree with that, Charlie, or no?

CHARLIE MUNGER: Worse than poor.

WARREN BUFFETT: Yeah. (Laughter)

So I would say that if you really think you're in with people that have got a good business, but they're going to keep doing dumb things with your money, you'll probably do better to get out and get in with people who've got a good business and you think they're going to do sensible things with it. I mean, you've got that option.

Now, you also have the option of trying to persuade them to change their mind. But it's just very, very difficult. I mean it is, you know, that's been something we've faced for 50 years.

And initially, we faced it from a position where nobody even knew who the hell we were, or anything of the sort.

So we've acquired a certain stature over time, perhaps in talking on the subject. And we've written on the subject. And we still don't get very far. I mean, when people want to do something, they want to do something.

And they didn't rise to become the CEO of a company to have some shareholder tell them that their most recent idea is dumb. I mean, that is just not the type that gets to the top.

So I would say that, as a matter of investment technique, and maybe as a matter of, you know, avoiding stress in your life and all of that sort of thing, that it's — and dealing with smaller quantities of stock so it's easier to sell and buy and all that sort of thing — I would say that it's better to be in with a management you're simpatico with, than simply to be in a great business with a management that's bent on doing things that don't make much sense to you.

Charlie?

CHARLIE MUNGER: Well, I certainly agree with that.

31. Having "your head screwed on right in the first place"

WARREN BUFFETT: Second question — (laughs) — I gather is, sort of, how much does our actual business experience versus book experience help us?

AUDIENCE MEMBER: Well, it's, you know, if you look at a person who has just made two years of being in the business of investing, versus a person who has been for 10 years in the business of investing.

And say the person who has been for two years, you know, has read a lot about, you know, Ben Graham's techniques, and your techniques, and, say, Peter Lynch's techniques. So would you say that the person who has only two years of experience may do much better than the second person?

WARREN BUFFETT: Well, if everything else is equal, I mean, everything else is equal, except the amount of experience you have, I think the experience is probably useful. But it isn't going to be equal. And I don't think that — I don't think that the —

I think it's way more important what you've thought about for two years than what you've practiced for 10 years. If you're — if the direction — if there's a divergence in techniques applied, I would rather be with the one that I'm philosophically in sync with.

If I'm philosophically in sync with both and one's had 10 years of experience, the chances are they will know a little bit more about more businesses if they've been around for 10 years, looking at them, than if they've been around for two years.

But the biggest thing is that, you know, basically they've got their head screwed on right in the first place, in terms of how they value businesses and how they look at stocks.

Whether they look at them as pieces of businesses or whether they look at them as little things that move around, and that you can tell a lot by looking at charts or listening to strategists on or something of the sort.

We have — Charlie and I have learned a lot about a lot of businesses over 40 or 50 years. But I would say that, in terms of the new things that would come to us, at the end of the second year, we were probably about as good judges of them as we would be today.

But I think there's a little plus to having seen — more in terms of human behavior and that sort of thing — than knowing about the specifics of a given business model.

Charlie?

CHARLIE MUNGER: Yeah, I think that — I've watched Warren for a long time now, and I would say he's actually getting better as he gets older. Not at golf or — (Buffett laughs) — many other activities, but —

WARREN BUFFETT: Stay with generalities.

CHARLIE MUNGER: — as an investor, he's better — (laughter) — which I think's remarkable. It shows that scale of experience matters.

WARREN BUFFETT: Yeah, it helps somewhat to have seen a lot of business situation — I mean, Charlie talks about models and you construct your models as you go along based on observation.

And your models will — if you're paying attention, your models will be somewhat better the more years you've spent really observing and not just trying to make everything fit into what you saw the first few years.

32. Berkshire stock recommendations would be "big mistake"

WARREN BUFFETT: Area 3.

AUDIENCE MEMBER: Hi, my name is Richard Marvel (PH) from Washington, D.C. And my question has to do with the intrinsic value of Berkshire Hathaway.

You've stated several times that you would prefer the stock to be neither overvalued nor undervalued so that the time people spend owning the security represents a gain from what the security — the results during that period of time.

However, it's a very difficult security to value because of the disparate pieces.

And, as we saw last year, when you provide a little bit of guidance — in last year's annual report you said that when the stock price hit $45,000 a share, you considered buying, but thought it was unfair until the annual report came out so everyone had the same information.

And while I also realize that you don't feel there is a particular quote-unquote "correct" number, would you ever consider giving any guidance in this direction?

WARREN BUFFETT: Yeah. The answer is we really wouldn't. I mean, to the extent that we were going to repurchase shares, you could certainly interpret that as indicating that we thought it was attractive from the standpoint of remaining shareholders to do so.

And we certainly wouldn't be paying over intrinsic value, at least in our judgment, and benefiting the exiting shareholders to the disadvantage of the continuing shareholders. So you might draw that conclusion at that point.

But other than that, we've — you know, we would prefer Berkshire's shares to fluctuate far less than they do. Because we would like the — ideally — we would like the experience of every

investor during the time they held the shares to be exactly proportionate to the progress, or lack thereof, of the business.

And I think we've come, over the years, reasonably close to that, compared to most companies. But the nature of markets is such that reasonably close is as, you know, probably as good as it's going to get.

We don't know the exact intrinsic value of Berkshire, obviously. And if you looked at the figures, we — if we had written down secret figures over the — ever since 1965 — they would — some of them would look silly now, in terms of what has actually transpired.

But we try to give you — I think Berkshire is easier to value than most businesses, actually, because we give you all the information that, at least, is important to us in valuing it.

And then the biggest judgment you have to make is how well capital will be deployed in the future.

Because it's easy — it's relatively easy — to figure out the present value of most of our businesses, but the question becomes, "What do we do with the money, as it comes in?"

And that will have a huge impact on the value 10 years from now. And that will depend a lot on the environment in which we operate over the next 10 years. There'll be a lot of luck in it.

I think — you know, I think there's a reasonable chance of good luck. But who knows?

It would be a mistake for us to do anything — I mean, a big mistake — to ever recommend buying or selling the stock. I mean, how would you tell everybody to do it at once? You know, you would negate your own advice.

You're certainly not going to tell one person, you know, to the advantage or the disadvantage of somebody else.

So there's really no way for us to ever talk about whether we think the stock — whether we think it's a buy or a sale, except to the extent, like I say, on repurchases where there's obviously an implicit judgment being given the shareholders.

Charlie?

CHARLIE MUNGER: Yeah. I rather like the way it's worked out.

If you average out the period that we've been through, we've come within hailing distance of the objective of having our stock track its intrinsic value. It gets a little ahead sometimes and a little behind other times, but averaged out, it's worked pretty well.

33. Would Benjamin Graham's "cigar butt" strategy work now?

WARREN BUFFETT: Area 4.

AUDIENCE MEMBER: Good afternoon. My name is Martin O'Leary (PH) and I'm from Houston, Texas. My question to you is this.

In your annual report this year, in the letter to the shareholders, you indicated that it was 50 years ago that you met Benjamin Graham, and that he had a major impact in your life, especially in your investment success.

Moreover, you've stated in the past that "The Intelligent Investor" is, by far, the greatest book ever written on investing.

One of the central tenants in the book was that if you bought a group of stocks, say, 10 or 20, that traded at two-thirds or less than net current assets, that you would be assured of a margin of safety, coupled with a satisfactory rate of return.

Today, if you were to find 10 or 20 stocks that trade at two-thirds of net current assets, would you be inclined to purchase those stocks for your own personal portfolio, not for Berkshire Hathaway?

And the second question, since I've mentioned the book, I was wondering which books that you and Mr. Munger have been reading lately and would recommend. Thank you.

WARREN BUFFETT: Yeah, in respect to your first question, you could probably — if you found a group like that — and you won't, I don't think — you'd probably do all right buying the group.

But not because the businesses themselves worked out that well over time, but because there would probably be a reasonable amount of corporate activity in a group like that, either in terms of the managements taking them private, or takeovers, or that sort of thing.

But those sub-working capital stocks are just almost impossible to find now. And if you got into a market where a lot of them existed, you'd probably find wonderful businesses selling a lot cheaper, too. And our inclination would be to go with a cheap, wonderful business.

I don't think you'll get — in a high market or something close to it — I don't think you'll get a lot of sub- working capital stocks anymore. There's just too much money around to promote deals before they really get to that point.

But that was a technique. It was 50 years ago.

And is Walter Schloss here still? Walter, are you here? Stand up if you're here.

I met Walter 50 years ago when I met Ben Graham. I know Walter's — came out this year, but he already knows everything I've been talking about, so he may have left.

But Walter, actually, has practiced in securities, much closer to the original — he's run a partnership now for 46 years, I guess it is. And he's done it much more with the type of stocks that Ben was talking about in those days.

And he has a record that is absolutely sensational, that is far better than people who get promoted and go on television shows and do all of that sort of thing.

And he's done it in, you know, what I tend to call cigar butt companies. You know, you get one free puff and that's about it, but they don't cost anything.

And that's — that was the sub-working capital type situations. Walter's had to extend that somewhat, but it's been a great, great record over a considerable — I mean, 46 years — a very considerable period of time.

So I think, if you found that kind of a group and did it as a group operation, and Ben always emphasized a group operation because when you're dealing with lousy companies but you expect a certain number to be taken over and all that, you'd better have a group of them.

Whereas if you deal with wonderful companies, you only need a couple. But I think, if you see that period again, we'll be very active. But it won't be in those kind of securities.

Charlie?

CHARLIE MUNGER: Yeah. And there's another change. In the old days, if the business stopped working, you could take the working capital and stick it in the shareholders' pockets.

And nowadays, as you can tell from all the restructuring charges, when things really go to hell in a bucket, somebody else owns a lot of the working capital. The whole culture has changed.

If you have a little business in France and you get tired of it, as Marks & Spencer has, the French say, "What the hell do you mean trying to take your capital back from France? There're French workers in this business."

And they don't care. They don't say, "It's your working capital. Take it back," when the business no longer works for you. They say, "It's our working capital." The whole culture has changed on that one.

Not completely, but a lot from Ben Graham's day. There're a lot of reasons why the investment idiosyncrasies of one era don't translate that perfectly into another.

WARREN BUFFETT: That list that was published, I forget whether it was published in the 1951 edition of “Security Analysis” or the ’49 edition of “Intelligent Investor,” but there were a list of companies.

There was Saco-Lowell, there was Marshall-Wells, there was Cleveland Worsted Mills, there was Foster Wheeler, and all those companies were sub-working capital companies selling at three or four times earnings.

And there was a — if you bought a group of stocks like that, you were going to do well. But, you know, I — you certainly don’t see that in companies of any size today.

And I’ve seen a few lists of tech companies selling below cash. But they’re determined to use that cash. And it may not be there in a year or two.

It was a different breed of animal, to some extent, in Ben’s list at that time.

34. Book recommendations

WARREN BUFFETT: Did you ask a second question?

CHARLIE MUNGER: Books you’ve read.

WARREN BUFFETT: Oh, books I’ve read.

Well, tell him what books you’ve read, Charlie. (Laughter)

CHARLIE MUNGER: Well, I mentioned that one book “Genome.” I have a hell of a time putting the accent on the first syllable. But that is a marvelous book.

And some shareholder sent me a book that not many of you will like, by Herb Simon I think, “Models of My Life.” And it’s a very interesting book for a certain academic type.

But that “Genome,” you know, which is the history of a species in 23 chapters, and it’s a perfectly amazing book, and very interesting.

WARREN BUFFETT: I may have recommended it before, but if you haven’t read “Personal History” by Katharine Graham, I think you’d find that it’s a fascinating story. And more amazing yet, it’s an honest story.

You know, if I ever write my autobiography, I’m going to look like Arnold Schwarzenegger, but — (Laughter)

But she is compulsively honest about what’s happened. And it’s really quite a saga.

CHARLIE MUNGER: It is a good book.

That Janet Lowe book about me I find has had a very interesting sub-chapter, so to speak, in its distribution.

I notice a considerable number of people buying that book and sending one copy to each descendant.

They believe that if they just do that, the descendants will behave more like the parents. It'll be interesting to see if that works. If it does, it's going to outsell the Bible. (Laughter)

WARREN BUFFETT: Hold your breath — (Laughter)

35. Congress should loosen capital restrictions for utilities

WARREN BUFFETT: Area 5.

AUDIENCE MEMBER: Good afternoon. I'm Laura Rittenhouse (PH) from New York City. And I want to say it's a great pleasure to be here. You talked earlier about companies that monetize greed. And it's great to be with people and with leaders who monetize values.

You — a couple years ago, you spoke very passionately about campaign finance reform, and I wondered if you could comment on your views of this, given recent developments related to another question in Washington.

What's your expectation for the passage of the repeal of PUHCA? I know there was some recent activity in a Senate sub-committee.

And lastly, a question for Charlie. How would you, or do you, apply the principles of intrinsic investing to real estate?

WARREN BUFFETT: OK. In respect to PUHCA, it's hard for me to — you know, I have no great record of handicapping legislative action.

But I would say that the awareness of the public problems in the electric utility industry under current circumstances, you know, has mushroomed. I mean, it's ballooned.

And so I think that — I think it's likely that Congress is more receptive to the idea that they need to do something that ensures that the power supply is adequate.

And I think that there's probably a number of them that would think that PUHCA is a barrier to capital entering the industry from a lot of sources where capital is available. And that it's going to take capital to solve this problem.

Now, they don't have to solve it by letting Berkshire do more things. But it's not a crazy approach to say that if Berkshire has billions of dollars to invest, that it might be a net plus for the availability of electricity down the road.

So I think that certainly the chances of repeal or major change are far higher now than they were a couple of years ago. And, I mean, politicians do not like to face major brownouts.

I mean, they can try and blame it on someone else and they may well be accurate in blaming it on someone else.

But the public is going to at least partially blame political leaders if this country runs out of electricity, because it hasn't run out of the ability to build generators.

You know, we could create all the generators we needed to have plenty of electricity. And we could create the transmission lines and all of that.

But you do need a flow of capital to the industry. And PUHCA restricts that flow to quite a degree, I would say.

36. More regulation needed for campaign contributions

WARREN BUFFETT: Campaign finance reform, you've read about it as much as I have. You know, I happen to admire enormously what McCain and Feingold have done.

I don't think it's a panacea. I mean, money is going to find its way into trying to buy political influence one way or another.

But the present situation, in my view, has gotten totally out of control and, incidentally, totally out of sync with what the American Congress, even, as well as the public, intended, because in 1907, Congress said, and it's never been changed, that corporations shall not contribute money to federal elections.

And in 1947, they said the same thing about labor unions. And then they enacted campaign legislation in the early '70s which, when later interpreted by the Federal Election Commission, enabled corporations and unions to do on an unlimited scale, what Congress had said they shouldn't do at all.

And politicians did not really understand the potential in that, initially. I remember the first guy that called me, Senate candidate, called me for a soft money contribution probably in 1985, or so.

And he was kind of embarrassed about it and sort of danced around the subject about how this money was going to find its way into his campaign and everything. And he was asking me for an amount of money that was illegal under the law, except if I did it via soft money.

And that has developed to the point where I have literally had people, where I have firsthand knowledge, of requesting million dollar contributions or larger, which would never be reported. We'd never be required to report it. And I regard that as a perversion of the system.

But I think we're going to get some significant improvement. I think it was only possible because of the credibility that McCain built up with the public and the fact that he just wouldn't let go of this issue.

So I'm — but I'm not hopeful about it changing the whole course of American democracy or anything of the sort.

But I am hopeful that the system of government where access is sold to the highest bidder, and where the bidding starts at a higher level, by a material amount, in every election cycle, will at least be checked for a while.

Charlie, she had a question for you.

CHARLIE MUNGER: Well, my trouble with campaign finance reform is that I fear career politicians just staying on and on just about as much as I fear special interests protecting themselves with money. And I never know exactly how the reform is going to work.

When I came to California, we had sort of a semi-corrupt, part-time legislature dominated by race tracks and saloons and liquor distributors, and so on.

And people went up and entertained the legislators with prostitutes and what have you. And I really sort of prefer that government, in retrospect — (laughter) — to the full-time legislators I have now.

So I just am more skeptical about my ability to predict which reform I'm going to like the results of and which I would like to trade back in for my former evils.

37. Munger has moved on from real estate investing

WARREN BUFFETT: Laura, you had one more, did you on —? Was it for Charlie?

AUDIENCE MEMBER: It was a question about the principles of intrinsic value investing applied to real estate.

CHARLIE MUNGER: Oh, that period of my life involved the remote past. And I much prefer business investment to real estate investment.

38. Q&A concludes

WARREN BUFFETT: OK. It's 3:30. We're going to have a directors meeting here, we do that once a year, following this meeting. And so I'll ask the directors to stick around.

Note: The following table appears in the printed Annual Report on the facing page of the Chairman's Letter and is referred to in that letter.

Berkshire's Corporate Performance vs. the S&P 500

Year	Annual Percentage Change in Per-Share Book Value of Berkshire (1)	Annual Percentage Change in S&P 500 with Dividends Included (2)	Relative Results (1)-(2)
1965	23.8	10.0	13.8
1966	20.3	(11.7)	32.0
1967	11.0	30.9	(19.9)
1968	19.0	11.0	8.0
1969	16.2	(8.4)	24.6
1970	12.0	3.9	8.1
1971	16.4	14.6	1.8
1972	21.7	18.9	2.8
1973	4.7	(14.8)	19.5
1974	5.5	(26.4)	31.9
1975	21.9	37.2	(15.3)
1976	59.3	23.6	35.7
1977	31.9	(7.4)	39.3
1978	24.0	6.4	17.6
1979	35.7	18.2	17.5
1980	19.3	32.3	(13.0)
1981	31.4	(5.0)	36.4
1982	40.0	21.4	18.6
1983	32.3	22.4	9.9
1984	13.6	6.1	7.5
1985	48.2	31.6	16.6
1986	26.1	18.6	7.5
1987	19.5	5.1	14.4
1988	20.1	16.6	3.5
1989	44.4	31.7	12.7
1990	7.4	(3.1)	10.5
1991	39.6	30.5	9.1
1992	20.3	7.6	12.7
1993	14.3	10.1	4.2
1994	13.9	1.3	12.6
1995	43.1	37.6	5.5
1996	31.8	23.0	8.8
1997	34.1	33.4	.7
1998	48.3	28.6	19.7
1999	.5	21.0	(20.5)
2000	6.5	(9.1)	15.6
2001	(6.2)	(11.9)	5.7
Average Annual Gain – 1965-2001	22.6%	11.0%	11.6%
Overall Gain – 1964-2001	194,936%	4,742%	190,194%

Notes: Data are for calendar years with these exceptions: 1965 and 1966, year ended 9/30; 1967, 15 months ended 12/31.

Starting in 1979, accounting rules required insurance companies to value the equity securities they hold at market rather than at the lower of cost or market, which was previously the requirement. In this table, Berkshire's results through 1978 have been restated to conform to the changed rules. In all other respects, the results are calculated using the numbers originally reported.

The S&P 500 numbers are **pre-tax** whereas the Berkshire numbers are **after-tax**. If a corporation such as Berkshire were simply to have owned the S&P 500 and accrued the appropriate taxes, its results would have lagged the S&P 500 in years when that index showed a positive return, but would have exceeded the S&P in years when the index showed a negative return. Over the years, the tax costs would have caused the aggregate lag to be substantial.

BERKSHIRE HATHAWAY INC.

To the Shareholders of Berkshire Hathaway Inc.:

Berkshire's *loss* in net worth during 2001 was $3.77 billion, which decreased the per-share book value of both our Class A and Class B stock by 6.2%. Over the last 37 years (that is, since present management took over) per-share book value has grown from $19 to $37,920, a rate of 22.6% compounded annually.*

Per-share intrinsic grew somewhat faster than book value during these 37 years, and in 2001 it probably decreased a bit less. We explain intrinsic value in our Owner's Manual, which begins on page 62. I urge new shareholders to read this manual to become familiar with Berkshire's key economic principles.

Two years ago, reporting on 1999, I said that we had experienced both the worst absolute and relative performance in our history. I added that "relative results are what concern us," a viewpoint I've had since forming my first investment partnership on May 5, 1956. Meeting with my seven founding limited partners that evening, I gave them a short paper titled "The Ground Rules" that included this sentence: "Whether we do a good job or a poor job is to be measured against the general experience in securities." We initially used the Dow Jones Industrials as our benchmark, but shifted to the S&P 500 when that index became widely used. Our comparative record since 1965 is chronicled on the facing page; last year Berkshire's advantage was 5.7 percentage points.

Some people disagree with our focus on relative figures, arguing that "you can't eat relative performance." But if you expect – as Charlie Munger, Berkshire's Vice Chairman, and I do – that owning the S&P 500 will produce reasonably satisfactory results over time, it follows that, for long-term investors, gaining small advantages annually over that index *must* prove rewarding. Just as you can eat well throughout the year if you own a profitable, but highly seasonal, business such as See's (which loses considerable money during the summer months) so, too, can you regularly feast on investment returns that beat the averages, however variable the absolute numbers may be.

Though our corporate performance last year was satisfactory, *my* performance was anything but. I manage most of Berkshire's equity portfolio, and my results were poor, just as they have been for several years. Of even more importance, I allowed General Re to take on business without a safeguard I knew was important, and on September 11th, this error caught up with us. I'll tell you more about my mistake later and what we are doing to correct it.

Another of my 1956 Ground Rules remains applicable: "I cannot promise results to partners." But Charlie and I *can* promise that your economic result from Berkshire will parallel ours during the period of your ownership: We will not take cash compensation, restricted stock or option grants that would make our results superior to yours.

Additionally, I will keep well over 99% of my net worth in Berkshire. My wife and I have never sold a share nor do we intend to. Charlie and I are disgusted by the situation, so common in the last few years, in which shareholders have suffered billions in losses while the CEOs, promoters, and other higher-ups who fathered these disasters have walked away with extraordinary wealth. Indeed, many of these people were urging investors to buy shares while concurrently dumping their own, sometimes using methods that hid their actions. To their shame, these business leaders view shareholders as patsies, not partners.

Though Enron has become the symbol for shareholder abuse, there is no shortage of egregious conduct elsewhere in corporate America. One story I've heard illustrates the all-too-common attitude of managers toward

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*All figures used in this report apply to Berkshire's A shares, the successor to the only stock that the company had outstanding before 1996. The B shares have an ec onomic interest equal to 1/30th that of the A.

owners: A gorgeous woman slinks up to a CEO at a party and through moist lips purrs, "I'll do anything – *anything* – you want. Just tell me what you would like." With no hesitation, he replies, "Reprice my options."

One final thought about Berkshire: In the future we won't come close to replicating our past record. To be sure, Charlie and I will strive for above-average performance and will not be satisfied with less. But two conditions at Berkshire are far different from what they once were: Then, we could often buy businesses and securities at much lower valuations than now prevail; and more important, we were then working with far less money than we now have. Some years back, a good $10 million idea could do wonders for us (witness our investment in Washington Post in 1973 or GEICO in 1976). Today, the combination of *ten* such ideas and a triple in the value of *each* would increase the net worth of Berkshire by only ¼ of 1%. We need "elephants" to make significant gains now – and they are hard to find.

On the positive side, we have as fine an array of operating managers as exists at any company. (You can read about many of them in a new book by Robert P. Miles: *The Warren Buffett CEO*.) In large part, moreover, they are running businesses with economic characteristics ranging from good to superb. The ability, energy and loyalty of these managers is simply extraordinary. We now have completed 37 Berkshire years without having a CEO of an operating business elect to leave us to work elsewhere.

Our star-studded group grew in 2001. First, we completed the purchases of two businesses that we had agreed to buy in 2000 – Shaw and Johns Manville. Then we acquired two others, MiTek and XTRA, and contracted to buy two more: Larson-Juhl, an acquisition that has just closed, and Fruit of the Loom, which will close shortly if creditors approve our offer. All of these businesses are led by smart, seasoned and trustworthy CEOs.

Additionally, all of our purchases last year were for cash, which means our shareholders became owners of these additional businesses without relinquishing any interest in the fine companies they already owned. We will continue to follow our familiar formula, striving to increase the value of the excellent businesses we have, adding new businesses of similar quality, and issuing shares only grudgingly.

Acquisitions of 2001

A few days before last year's annual meeting, I received a heavy package from St. Louis, containing an unprepossessing chunk of metal whose function I couldn't imagine. There was a letter in the package, though, from Gene Toombs, CEO of a company called MiTek. He explained that MiTek is the world's leading producer of this thing I'd received, a "connector plate," which is used in making roofing trusses. Gene also said that the U.K. parent of MiTek wished to sell the company and that Berkshire seemed to him the ideal buyer. Liking the sound of his letter, I gave Gene a call. It took me only a minute to realize that he was our kind of manager and MiTek our kind of business. We made a cash offer to the U.K. owner and before long had a deal.

Gene's managerial crew is exceptionally enthusiastic about the company and wanted to participate in the purchase. Therefore, we arranged for 55 members of the MiTek team to buy 10% of the company, with each putting up a minimum of $100,000 in cash. Many borrowed money so they could participate.

As they would *not* be if they had options, all of these managers are true *owners*. They face the downside of decisions as well as the upside. They incur a cost of capital. And they can't "reprice" their stakes: What they paid is what they live with.

Charlie and I love the high-grade, truly entrepreneurial attitude that exists at MiTek, and we predict it will be a winner for all involved.

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In early 2000, my friend, Julian Robertson, announced that he would terminate his investment partnership, Tiger Fund, and that he would liquidate it entirely except for four large holdings. One of these was XTRA, a leading lessor of truck trailers. I then called Julian, asking whether he might consider selling his XTRA block or whether, for that matter, the company's management might entertain an offer for the entire company. Julian referred me to Lew Rubin, XTRA's CEO. He and I had a nice conversation, but it was apparent that no deal was to be done.

Then in June 2001, Julian called to say that he had decided to sell his XTRA shares, and I resumed conversations with Lew. The XTRA board accepted a proposal we made, which was to be effectuated through a tender offer expiring on September 11th. The tender conditions included the usual "out," allowing us to withdraw if

the stock market were to close before the offer's expiration. Throughout much of the 11th, Lew went through a particularly wrenching experience: First, he had a son-in-law working in the World Trade Center who couldn't be located; and second, he knew we had the option of backing away from our purchase. The story ended happily: Lew's son-in-law escaped serious harm, and Berkshire completed the transaction.

Trailer leasing is a cyclical business but one in which we should earn decent returns over time. Lew brings a new talent to Berkshire, and we hope to expand in leasing.

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On December 3rd, I received a call from Craig Ponzio, owner of Larson-Juhl, the U.S. leader in custom-made picture frames. Craig had bought the company in 1981 (after first working at its manufacturing plant while attending college) and thereafter increased its sales from $3 million to $300 million. Though I had never heard of Larson-Juhl before Craig's call, a few minutes talk with him made me think we would strike a deal. He was straightforward in describing the business, cared about who bought it, and was realistic as to price. Two days later, Craig and Steve McKenzie, his CEO, came to Omaha and in ninety minutes we reached an agreement. In ten days we had signed a contract.

Larson-Juhl serves about 18,000 framing shops in the U.S. and is also the industry leader in Canada and much of Europe. We expect to see opportunities for making complementary acquisitions in the future.

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As I write this letter, creditors are considering an offer we have made for Fruit of the Loom. The company entered bankruptcy a few years back, a victim both of too much debt and poor management. And, a good many years before that, I had some Fruit of the Loom experience of my own.

In August 1955, I was one of five employees, including two secretaries, working for the three managers of Graham-Newman Corporation, a New York investment company. Graham-Newman controlled Philadelphia and Reading Coal and Iron ("P&R"), an anthracite producer that had excess cash, a tax loss carryforward, and a declining business. At the time, I had a significant portion of my limited net worth invested in P&R shares, reflecting my faith in the business talents of my bosses, Ben Graham, Jerry Newman and Howard (Micky) Newman.

This faith was rewarded when P&R purchased the Union Underwear Company from Jack Goldfarb for $15 million. Union (though it was then only a licensee of the name) produced Fruit of the Loom underwear. The company possessed $5 million in cash – $2.5 million of which P&R used for the purchase – and was earning about $3 million pre-tax, earnings that could be sheltered by the tax position of P&R. And, oh yes: Fully $9 million of the remaining $12.5 million due was satisfied by non-interest-bearing notes, payable from 50% of any earnings Union had in excess of $1 million. (*Those* were the days; I get goosebumps just thinking about such deals.)

Subsequently, Union bought the licensor of the Fruit of the Loom name and, along with P&R, was merged into Northwest Industries. Fruit went on to achieve annual pre-tax earnings exceeding $200 million.

John Holland was responsible for Fruit's operations in its most bountiful years. In 1996, however, John retired, and management loaded the company with debt, in part to make a series of acquisitions that proved disappointing. Bankruptcy followed. John was then rehired, and he undertook a major reworking of operations. Before John's return, deliveries were chaotic, costs soared and relations with key customers deteriorated. While correcting these problems, John also reduced employment from a bloated 40,000 to 23,000. In short, he's been restoring the old Fruit of the Loom, albeit in a much more competitive environment.

Stepping into Fruit's bankruptcy proceedings, we made a proposal to creditors to which we attached no financing conditions, even though our offer had to remain outstanding for many months. We did, however, insist on a very unusual proviso: John had to be available to continue serving as CEO after we took over. To us, John and the brand are Fruit's key assets.

I was helped in this transaction by my friend and former boss, Micky Newman, now 81. What goes around truly does come around.

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Our operating companies made several "bolt-on" acquisitions during the year, and I can't resist telling you about one. In December, Frank Rooney called to tell me H.H. Brown was buying the inventory and trademarks of Acme Boot for $700,000.

That sounds like small potatoes. But – would you believe it? – Acme was the second purchase of P&R, an acquisition that took place just before I left Graham-Newman in the spring of 1956. The price was $3.2 million, part of it again paid with non-interest bearing notes, for a business with sales of $7 million.

After P&R merged with Northwest, Acme grew to be the world's largest bootmaker, delivering annual profits many multiples of what the company had cost P&R. But the business eventually hit the skids and never recovered, and that resulted in our purchasing Acme's remnants.

In the frontispiece to *Security Analysis*, Ben Graham and Dave Dodd quoted Horace: "Many shall be restored that now are fallen and many shall fall that are now in honor." Fifty-two years after I first read those lines, my appreciation for what they say about business and investments continues to grow.

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In addition to bolt-on acquisitions, our managers continually look for ways to grow internally. In that regard, here's a postscript to a story I told you two years ago about R.C. Willey's move to Boise. As you may remember, Bill Child, R.C. Willey's chairman, wanted to extend his home-furnishings operation beyond Utah, a state in which his company does more than $300 million of business (up, it should be noted, from $250,000 when Bill took over 48 years ago). The company achieved this dominant position, moreover, with a "closed on Sunday" policy that defied conventional retailing wisdom. I was skeptical that this policy could succeed in Boise or, for that matter, anyplace outside of Utah. After all, Sunday is the day many consumers most like to shop.

Bill then insisted on something extraordinary: He would invest $11 million of his own money to build the Boise store and would sell it to Berkshire at cost (without interest!) if the venture succeeded. If it failed, Bill would keep the store and eat the loss on its disposal. As I told you in the 1999 annual report, the store immediately became a huge success — and it has since grown.

Shortly after the Boise opening, Bill suggested we try Las Vegas, and this time I was even more skeptical. How could we do business in a metropolis of that size and be closed on Sundays, a day that all of our competitors would be exploiting? Buoyed by the Boise experience, however, we proceeded to locate in Henderson, a mushrooming city adjacent to Las Vegas.

The result: This store outsells all others in the R.C. Willey chain, doing a volume of business that far exceeds the volume of any competitor and that is twice what I had anticipated. I cut the ribbon at the grand opening in October – this was after a "soft" opening and a few weeks of exceptional sales – and, just as I did at Boise, I suggested to the crowd that the new store was my idea.

It didn't work. Today, when I pontificate about retailing, Berkshire people just say, "What does Bill think?" (I'm going to draw the line, however, if he suggests that we also close on Saturdays.)

The Economics of Property/Casualty Insurance

Our main business — though we have others of great importance — is insurance. To understand Berkshire, therefore, it is necessary that you understand how to evaluate an insurance company. The key determinants are: (1) the amount of float that the business generates; (2) its cost; and (3) most critical of all, the long-term outlook for both of these factors.

To begin with, float is money we hold but don't own. In an insurance operation, float arises because premiums are received before losses are paid, an interval that sometimes extends over many years. During that time, the insurer invests the money. This pleasant activity typically carries with it a downside: The premiums that an insurer takes in usually do not cover the losses and expenses it eventually must pay. That leaves it running an "underwriting loss," which is the cost of float. An insurance business has value if its cost of float over time is less than the cost the company would otherwise incur to obtain funds. But the business is a lemon if its cost of float is higher than market rates for money.

Historically, Berkshire has obtained its float at a very low cost. Indeed, our cost has been less than zero in about half of the years in which we've operated; that is, we've actually been paid for holding other people's money. Over the last few years, however, our cost has been too high, and in 2001 it was terrible.

The table that follows shows (at intervals) the float generated by the various segments of Berkshire's insurance operations since we entered the business 35 years ago upon acquiring National Indemnity Company (whose traditional lines are included in the segment "Other Primary"). For the table we have calculated our float — which we generate in large amounts relative to our premium volume — by adding net loss reserves, loss adjustment reserves, funds held under reinsurance assumed and unearned premium reserves, and then subtracting insurance-related receivables, prepaid acquisition costs, prepaid taxes and deferred charges applicable to assumed reinsurance. (Got that?)

Yearend Float (in $ millions)

Year	GEICO	General Re	Other Reinsurance	Other Primary	Total
1967				20	20
1977			40	131	171
1987			701	807	1,508
1997	2,917		4,014	455	7,386
1998	3,125	14,909	4,305	415	22,754
1999	3,444	15,166	6,285	403	25,298
2000	3,943	15,525	7,805	598	27,871
2001	4,251	19,310	11,262	685	35,508

Last year I told you that, barring a mega-catastrophe, our cost of float would probably drop from its 2000 level of 6%. I had in mind natural catastrophes when I said that, but instead we were hit by a man-made catastrophe on September 11th – an event that delivered the insurance industry its largest loss in history. Our float cost therefore came in at a staggering 12.8%. It was our worst year in float cost since 1984, and a result that to a significant degree, as I will explain in the next section, we brought upon ourselves.

If no mega-catastrophe occurs, I – once again – expect the cost of our float to be low in the coming year. We will indeed need a low cost, as will *all* insurers. Some years back, float costing, say, 4% was tolerable because government bonds yielded twice as much, and stocks prospectively offered still loftier returns. Today, fat returns are nowhere to be found (at least *we* can't find them) and short-term funds earn less than 2%. Under these conditions, each of our insurance operations, save one, must deliver an underwriting profit if it is to be judged a good business. The exception is our retroactive reinsurance operation (a business we explained in last year's annual report), which has desirable economics even though it currently hits us with an annual underwriting loss of about $425 million.

Principles of Insurance Underwriting

When property/casualty companies are judged by their cost of float, very few stack up as satisfactory businesses. And interestingly – unlike the situation prevailing in many other industries – neither size nor brand name determines an insurer's profitability. Indeed, many of the biggest and best-known companies regularly deliver mediocre results. What counts in this business is underwriting discipline. The winners are those that unfailingly stick to three key principles:

1. *They accept only those risks that they are able to properly evaluate (staying within their circle of competence) and that, after they have evaluated all relevant factors including remote loss scenarios, carry the expectancy of profit. These insurers ignore market-share considerations and are sanguine about losing business to competitors that are offering foolish prices or policy conditions.*

2. *They limit the business they accept in a manner that guarantees they will suffer no aggregation of losses from a single event or from related events that will threaten their solvency. They ceaselessly search for possible correlation among seemingly-unrelated risks.*

3. *They avoid business involving moral risk: No matter what the rate, trying to write good contracts with bad people doesn't work. While most policyholders and clients are honorable and ethical, doing business with the few exceptions is usually expensive, sometimes extraordinarily so.*

The events of September 11th made it clear that our implementation of rules 1 and 2 at General Re had been dangerously weak. In setting prices and also in evaluating aggregation risk, we had either overlooked or dismissed the possibility of large-scale terrorism losses. That was a relevant underwriting factor, and we ignored it.

In pricing property coverages, for example, we had looked to the past and taken into account only costs we might expect to incur from windstorm, fire, explosion and earthquake. But what will be the largest insured property loss in history (after adding related business-interruption claims) originated from none of these forces. In short, all of us in the industry made a fundamental underwriting mistake by focusing on experience, rather than exposure, thereby assuming a huge terrorism risk for which we received no premium.

Experience, of course, is a highly useful starting point in underwriting most coverages. For example, it's important for insurers writing California earthquake policies to know how many quakes in the state during the past century have registered 6.0 or greater on the Richter scale. This information will not tell you the exact probability of a big quake next year, or where in the state it might happen. But the statistic has utility, particularly if you are writing a huge statewide policy, as National Indemnity has done in recent years.

At certain times, however, using experience as a guide to pricing is not only useless, but actually dangerous. Late in a bull market, for example, large losses from directors and officers liability insurance ("D&O") are likely to be relatively rare. When stocks are rising, there are a scarcity of targets to sue, and both questionable accounting and management chicanery often go undetected. At that juncture, experience on high-limit D&O may look great.

But that's just when *exposure* is likely to be exploding, by way of ridiculous public offerings, earnings manipulation, chain-letter-like stock promotions and a potpourri of other unsavory activities. When stocks fall, these sins surface, hammering investors with losses that can run into the hundreds of billions. Juries deciding whether those losses should be borne by small investors or big insurance companies can be expected to hit insurers with verdicts that bear little relation to those delivered in bull-market days. Even one jumbo judgment, moreover, can cause settlement costs in later cases to mushroom. Consequently, the correct rate for D&O "excess" (meaning the insurer or reinsurer will pay losses above a high threshold) might well, if based on *exposure*, be five or more times the premium dictated by *experience*.

Insurers have always found it costly to ignore new exposures. Doing that in the case of terrorism, however, could literally bankrupt the industry. No one knows the probability of a nuclear detonation in a major metropolis this year (or even multiple detonations, given that a terrorist organization able to construct one bomb might not stop there). Nor can anyone, with assurance, assess the probability in this year, or another, of deadly biological or chemical agents being introduced simultaneously (say, through ventilation systems) into multiple office buildings and manufacturing plants. An attack like that would produce astronomical workers' compensation claims.

Here's what we *do* know:

(a) The probability of such mind-boggling disasters, though likely very low at present, is not zero.

(b) The probabilities are increasing, in an irregular and immeasurable manner, as knowledge and materials become available to those who wish us ill. Fear may recede with time, but the danger won't – the war against terrorism can never be won. The best the nation can achieve is a long succession of stalemates. There can be no checkmate against hydra-headed foes.

(c) Until now, insurers and reinsurers have blithely assumed the financial consequences from the incalculable risks I have described.

(d) Under a "close-to-worst-case" scenario, which could conceivably involve $1 trillion of damage, the insurance industry would be destroyed unless it manages in some manner to dramatically limit its assumption of terrorism risks. Only the U.S. Government has the resources to absorb such a blow. If it is unwilling to do so on a prospective basis, the general citizenry must bear its own risks and count on the Government to come to its rescue after a disaster occurs.

Why, you might ask, didn't I recognize the above facts *before* September 11th? The answer, sadly, is that I did – but I didn't convert thought into action. I violated the Noah rule: Predicting rain doesn't count; building arks does. I consequently let Berkshire operate with a dangerous level of risk – at General Re in particular. I'm sorry to say that much risk for which we haven't been compensated remains on our books, but it is running off by the day.

At Berkshire, it should be noted, we have for some years been willing to assume more risk than any other insurer has *knowingly* taken on. That's still the case. We are perfectly willing to lose $2 billion to $2½ billion in a single event (as we did on September 11th) if we have been paid properly for assuming the risk that caused the loss (which on that occasion we weren't).

Indeed, we have a major competitive advantage because of our tolerance for huge losses. Berkshire has massive liquid resources, substantial non-insurance earnings, a favorable tax position and a knowledgeable shareholder constituency willing to accept volatility in earnings. This unique combination enables us to assume risks that far exceed the appetite of even our largest competitors. Over time, insuring these jumbo risks should be profitable, though periodically they will bring on a terrible year.

The bottom-line today is that we will write some coverage for terrorist-related losses, including a few non-correlated policies with very large limits. But we will not knowingly expose Berkshire to losses beyond what we can comfortably handle. We will control our total exposure, no matter what the competition does.

Insurance Operations in 2001

Over the years, our insurance business has provided ever-growing, low-cost funds that have fueled much of Berkshire's growth. Charlie and I believe this will continue to be the case. But we stumbled in a big way in 2001, largely because of underwriting losses at General Re.

In the past I have assured you that General Re was underwriting with discipline – and I have been proven wrong. Though its managers' intentions were good, the company broke each of the three underwriting rules I set forth in the last section and has paid a huge price for doing so. One obvious cause for its failure is that it did not reserve correctly – more about this in the next section – and therefore severely miscalculated the cost of the product it was selling. Not knowing your costs will cause problems in any business. In long-tail reinsurance, where years of unawareness will promote and prolong severe underpricing, ignorance of true costs is dynamite.

Additionally, General Re was overly-competitive in going after, and retaining, business. While all concerned may intend to underwrite with care, it is nonetheless difficult for able, hard-driving professionals to curb their urge to prevail over competitors. If "winning," however, is equated with market share rather than profits, trouble awaits. "No" must be an important part of any underwriter's vocabulary.

At the risk of sounding Pollyannaish, I now assure you that underwriting discipline is being restored at General Re (and its Cologne Re subsidiary) with appropriate urgency. Joe Brandon was appointed General Re's CEO in September and, along with Tad Montross, its new president, is committed to producing underwriting profits. Last fall, Charlie and I read Jack Welch's terrific book, *Jack, Straight from the Gut* (get a copy!). In discussing it, we agreed that Joe has many of Jack's characteristics: He is smart, energetic, hands-on, and expects much of both himself and his organization.

When it was an independent company, General Re often shone, and now it also has the considerable strengths Berkshire brings to the table. With that added advantage and with underwriting discipline restored, General Re should be a huge asset for Berkshire. I predict that Joe and Tad will make it so.

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At the National Indemnity reinsurance operation, Ajit Jain continues to add enormous value to Berkshire. Working with only 18 associates, Ajit manages one of the world's largest reinsurance operations measured by assets, and *the* largest, based upon the size of individual risks assumed.

I have known the details of almost every policy that Ajit has written since he came with us in 1986, and never on even a single occasion have I seen him break any of our three underwriting rules. His extraordinary discipline, of course, does not eliminate losses; it does, however, prevent foolish losses. And that's the key: Just as is the case in investing, insurers produce outstanding long-term results primarily by avoiding dumb decisions, rather than by making brilliant ones.

Since September 11th, Ajit has been particularly busy. Among the policies we have written and retained entirely for our own account are (1) $578 million of property coverage for a South American refinery once a loss there exceeds $1 billion; (2) $1 billion of non-cancelable third-party liability coverage for losses arising from acts of terrorism at several large international airlines; (3) £500 million of property coverage on a large North Sea oil platform, covering losses from terrorism and sabotage, above £600 million that the insured retained or reinsured elsewhere; and (4) significant coverage on the Sears Tower, including losses caused by terrorism, above a $500 million threshold. We have written many other jumbo risks as well, such as protection for the World Cup Soccer Tournament and the 2002 Winter Olympics. In all cases, however, we have attempted to avoid writing groups of policies from which losses might seriously aggregate. We will not, for example, write coverages on a large number of office and apartment towers in a single metropolis without excluding losses from both a nuclear explosion and the fires that would follow it.

No one can match the speed with which Ajit can offer huge policies. After September 11th, his quickness to respond, always important, has become a major competitive advantage. So, too, has our unsurpassed financial strength. Some reinsurers – particularly those who, in turn, are accustomed to laying off much of their business on a second layer of reinsurers known as retrocessionaires – are in a weakened condition and would have difficulty surviving a second mega-cat. When a daisy chain of retrocessionaires exists, a single weak link can pose trouble for all. In assessing the soundness of their reinsurance protection, insurers must therefore apply a stress test to all participants in the chain, and must contemplate a catastrophe loss occurring during a very unfavorable economic environment. After all, you only find out who is swimming naked when the tide goes out. At Berkshire, we retain our risks and depend on no one. And whatever the world's problems, our checks will clear.

Ajit's business will ebb and flow – but his underwriting principles won't waver. It's impossible to overstate his value to Berkshire.

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GEICO, by far our largest primary insurer, made major progress in 2001, thanks to Tony Nicely, its CEO, and his associates. Quite simply, Tony is an owner's dream.

GEICO's premium volume grew 6.6% last year, its float grew $308 million, and it achieved an underwriting profit of $221 million. This means we were actually paid that amount last year to hold the $4.25 billion in float, which of course doesn't belong to Berkshire but can be used by us for investment.

The only disappointment at GEICO in 2001 – and it's an important one – was our inability to add policyholders. Our preferred customers (81% of our total) grew by 1.6% but our standard and non-standard policies fell by 10.1%. Overall, policies in force fell .8%.

New business has improved in recent months. Our closure rate from telephone inquiries has climbed, and our Internet business continues its steady growth. We, therefore, expect at least a modest gain in policy count during 2002. Tony and I are eager to commit much more to marketing than the $219 million we spent last year, but at the moment we cannot see how to do so effectively. In the meantime, our operating costs are low and far below those of our major competitors; our prices are attractive; and our float is cost-free and growing.

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Our other primary insurers delivered their usual fine results last year. These operations, run by Rod Eldred, John Kizer, Tom Nerney, Michael Stearns, Don Towle and Don Wurster had combined premium volume of $579 million, up 40% over 2000. Their float increased 14.5% to $685 million, and they recorded an underwriting profit of $30 million. In aggregate, these companies are one of the finest insurance operations in the country, and their 2002 prospects look excellent.

"Loss Development" and Insurance Accounting

Bad terminology is the enemy of good thinking. When companies or investment professionals use terms such as "EBITDA" and "pro forma," they want you to unthinkingly accept concepts that are dangerously flawed. (In golf, my score is frequently below par on a *pro forma* basis: I have firm plans to "restructure" my putting stroke and therefore only count the swings I take before reaching the green.)

In insurance reporting, "loss development" is a widely used term – and one that is seriously misleading. First, a definition: Loss reserves at an insurer are not funds tucked away for a rainy day, but rather a liability account. If properly calculated, the liability states the amount that an insurer will have to pay for *all* losses (including associated costs) that have occurred prior to the reporting date but have not yet been paid. When calculating the reserve, the insurer will have been notified of many of the losses it is destined to pay, but others will not yet have been reported to it. These losses are called IBNR, for incurred but not reported. Indeed, in some cases (involving, say, product liability or embezzlement) the insured itself will not yet be aware that a loss has occurred.

It's clearly difficult for an insurer to put a figure on the ultimate cost of all such reported and unreported events. But the ability to do so with reasonable accuracy is vital. Otherwise the insurer's managers won't know what its actual loss costs are and how these compare to the premiums being charged. GEICO got into huge trouble in the early 1970s because for several years it severely underreserved, and therefore believed its product (insurance protection) was costing considerably less than was truly the case. Consequently, the company sailed blissfully along, underpricing its product and selling more and more policies at ever-larger losses.

When it becomes evident that reserves at past reporting dates understated the liability that truly existed at the time, companies speak of "loss development." In the year discovered, these shortfalls penalize reported earnings because the "catch-up" costs from prior years must be added to current-year costs when results are calculated. This is what happened at General Re in 2001: a staggering $800 million of loss costs that actually occurred in earlier years, but that were not then recorded, were belatedly recognized last year and charged against current earnings. The mistake was an honest one, I can assure you of that. Nevertheless, for several years, this underreserving caused us to believe that our costs were much lower than they truly were, an error that contributed to woefully inadequate pricing. Additionally, the overstated profit figures led us to pay substantial incentive compensation that we should not have and to incur income taxes far earlier than was necessary.

We recommend scrapping the term "loss development" and its equally ugly twin, "reserve strengthening." (Can you imagine an insurer, upon finding its reserves excessive, describing the reduction that follows as "reserve weakening"?) "Loss development" suggests to investors that some natural, uncontrollable event has occurred in the current year, and "reserve strengthening" implies that adequate amounts have been further buttressed. The truth, however, is that management made an error in estimation that in turn produced an error in the earnings previously reported. The losses didn't "develop" – they were there all along. What developed was management's understanding of the losses (or, in the instances of chicanery, management's willingness to finally fess up).

A more forthright label for the phenomenon at issue would be "loss costs we failed to recognize when they occurred" (or maybe just "oops"). Underreserving, it should be noted, is a common – and serious – problem throughout the property/casualty insurance industry. At Berkshire we told you of our own problems with underestimation in 1984 and 1986. Generally, however, our reserving has been conservative.

Major underreserving is common in cases of companies struggling for survival. In effect, insurance accounting is a self-graded exam, in that the insurer gives some figures to its auditing firm and generally doesn't get an argument. (What the *auditor* gets, however, is a letter from management that is designed to take his firm off the hook if the numbers later look silly.) A company experiencing financial difficulties – of a kind that, if truly faced, could put it out of business – seldom proves to be a tough grader. Who, after all, wants to prepare his own execution papers?

Even when companies have the best of intentions, it's not easy to reserve properly. I've told the story in the past about the fellow traveling abroad whose sister called to tell him that their dad had died. The brother replied that it was impossible for him to get home for the funeral; he volunteered, however, to shoulder its cost. Upon returning, the brother received a bill from the mortuary for $4,500, which he promptly paid. A month later, and a month after that also, he paid $10 pursuant to an add-on invoice. When a third $10 invoice came, he called his sister for an explanation. "Oh," she replied, "I forgot to tell you. We buried dad in a rented suit."

There are a lot of "rented suits" buried in the past operations of insurance companies. Sometimes the problems they signify lie dormant for decades, as was the case with asbestos liability, before virulently manifesting themselves. Difficult as the job may be, it's management's responsibility to adequately account for *all* possibilities. Conservatism is essential. When a claims manager walks into the CEO's office and says "Guess what just happened," his boss, if a veteran, does not expect to hear it's good news. Surprises in the insurance world have been far from symmetrical in their effect on earnings.

Because of this one-sided experience, it is folly to suggest, as some are doing, that all property/casualty insurance reserves be *discounted*, an approach reflecting the fact that they will be paid in the future and that therefore their present value is less than the stated liability for them. Discounting might be acceptable *if* reserves could be precisely established. They can't, however, because a myriad of forces – judicial broadening of policy language and medical inflation, to name just two chronic problems – are constantly working to make reserves inadequate. Discounting would exacerbate this already-serious situation and, additionally, would provide a new tool for the companies that are inclined to fudge.

I'd say that the effects from telling a profit-challenged insurance CEO to lower reserves through discounting would be comparable to those that would ensue if a father told his 16-year-old son to have a normal sex life. Neither party needs that kind of push.

Sources of Reported Earnings

The table that follows shows the main sources of Berkshire's reported earnings. In this presentation, purchase-accounting adjustments (primarily relating to "goodwill") are not assigned to the specific businesses to which they apply, but are instead aggregated and shown separately. This procedure lets you view the earnings of our businesses as they would have been reported had we not purchased them. In recent years, our "expense" for goodwill amortization has been large. Going forward, generally accepted accounting principles ("GAAP") will no longer require amortization of goodwill. This change will increase our reported earnings (though not our true economic earnings) and simplify this section of the report.

	(in millions)			
	Pre-Tax Earnings		*Berkshire's Share of Net Earnings (after taxes and Minority interests)*	
	2001	*2000*	*2001*	*2000*
Operating Earnings:				
Insurance Group:				
Underwriting – Reinsurance	$(4,318)	$(1,416)	$(2,824)	$(911)
Underwriting – GEICO	221	(224)	144	(146)
Underwriting – Other Primary	30	25	18	16
Net Investment Income	2,824	2,773	1,968	1,946
Building Products[1]	461	34	287	21
Finance and Financial Products Business	519	530	336	343
Flight Services	186	213	105	126
MidAmerican Energy (76% owned)	600	197	230	109
Retail Operations	175	175	101	104
Scott Fetzer (excluding finance operation)	129	122	83	80
Shaw Industries[2]	292	--	156	--
Other Businesses	179	221	103	133
Purchase-Accounting Adjustments	(726)	(881)	(699)	(843)
Corporate Interest Expense	(92)	(92)	(60)	(61)
Shareholder-Designated Contributions	(17)	(17)	(11)	(11)
Other	25	39	16	30
Operating Earnings	488	1,699	(47)	936
Capital Gains from Investments	1,320	3,955	842	2,392
Total Earnings – All Entities	$1,808	$5,654	$ 795	$3,328

[1] *Includes Acme Brick from August 1, 2000; Benjamin Moore from December 18, 2000; Johns Manville from February 27, 2001; and MiTek from July 31, 2001.*

[2] *From date of acquisition, January 8, 2001.*

Here are some highlights (and lowlights) from 2001 relating to our non-insurance activities:

- Our shoe operations (included in "other businesses") lost $46.2 million pre-tax, with profits at H.H. Brown and Justin swamped by losses at Dexter.

  I've made three decisions relating to Dexter that have hurt you in a major way: (1) buying it in the first place; (2) paying for it with stock and (3) procrastinating when the need for changes in its operations was obvious. I would like to lay these mistakes on Charlie (or anyone else, for that matter) but they were mine. Dexter, prior to our purchase – and indeed for a few years after – prospered despite low-cost foreign competition that was brutal. I concluded that Dexter could continue to cope with that problem, and I was wrong.

  We have now placed the Dexter operation – which is still substantial in size – under the management of Frank Rooney and Jim Issler at H.H. Brown. These men have performed outstandingly for Berkshire, skillfully contending with the extraordinary changes that have bedeviled the footwear industry. During part of 2002, Dexter will be hurt by unprofitable sales commitments it made last year. After that, we believe our shoe business will be reasonably profitable.

- MidAmerican Energy, of which we own 76% on a fully-diluted basis, had a good year in 2001. Its reported earnings should also increase considerably in 2002 given that the company has been shouldering a large charge for the amortization of goodwill and that this "cost" will disappear under the new GAAP rules.

  Last year MidAmerican swapped some properties in England, adding Yorkshire Electric, with its 2.1 million customers. We are now serving 3.6 million customers in the U.K. and are its 2nd largest electric utility. We have an equally important operation in Iowa as well as major generating facilities in California and the Philippines.

  At MidAmerican – this may surprise you – we also own the second-largest residential real estate brokerage business in the country. We are market-share leaders in a number of large cities, primarily in the Midwest, and have recently acquired important firms in Atlanta and Southern California. Last year, operating under various names that are locally familiar, we handled about 106,000 transactions involving properties worth nearly $20 billion. Ron Peltier has built this business for us, and it's likely he will make more acquisitions in 2002 and the years to come.

- Considering the recessionary environment plaguing them, our retailing operations did well in 2001. In jewelry, same-store sales fell 7.6% and pre-tax margins were 8.9% versus 10.7% in 2000. Return on invested capital remains high.

  Same-store sales at our home-furnishings retailers were unchanged and so was the margin – 9.1% pre-tax – these operations earned. Here, too, return on invested capital is excellent.

  We continue to expand in both jewelry and home-furnishings. Of particular note, Nebraska Furniture Mart is constructing a mammoth 450,000 square foot store that will serve the greater Kansas City area beginning in the fall of 2003. Despite Bill Child's counter-successes, we will keep this store open on Sundays.

- The large acquisitions we initiated in late 2000 – Shaw, Johns Manville and Benjamin Moore – all came through their first year with us in great fashion. Charlie and I knew at the time of our purchases that we were in good hands with Bob Shaw, Jerry Henry and Yvan Dupuy, respectively – and we admire their work even more now. Together these businesses earned about $659 million pre-tax.

  Shortly after yearend we exchanged 4,740 Berkshire A shares (or their equivalent in B shares) for the 12.7% minority interest in Shaw, which means we now own 100% of the company. Shaw is our largest non-insurance operation and will play a big part in Berkshire's future.

- All of the income shown for Flight Services in 2001 – and a bit more – came from FlightSafety, our pilot-training subsidiary. Its earnings increased 2.5%, though return on invested capital fell slightly because of the $258 million investment we made last year in simulators and other fixed assets. My 84-year-old friend, Al Ueltschi, continues to run FlightSafety with the same enthusiasm and competitive spirit that he has exhibited since 1951, when he invested $10,000 to start the company. If I line Al up with a bunch of 60-year-olds at the annual meeting, you will not be able to pick him out.

After September 11th, training for commercial airlines fell, and today it remains depressed. However, training for business and general aviation, our main activity, is at near-normal levels and should continue to grow. In 2002, we expect to spend $162 million for 27 simulators, a sum far in excess of our annual depreciation charge of $95 million. Those who believe that EBITDA is in any way equivalent to true earnings are welcome to pick up the tab.

Our NetJets® fractional ownership program sold a record number of planes last year and also showed a gain of 21.9% in service income from management fees and hourly charges. Nevertheless, it operated at a small loss, versus a small profit in 2000. We made a little money in the U.S., but these earnings were more than offset by European losses. Measured by the value of our customers' planes, NetJets accounts for about half of the industry. We believe the other participants, in aggregate, lost significant money.

Maintaining a premier level of safety, security and service was always expensive, and the cost of sticking to those standards was exacerbated by September 11th. No matter how much the cost, we will continue to be the industry leader in all three respects. An uncompromising insistence on delivering only the best to his customers is embedded in the DNA of Rich Santulli, CEO of the company and the inventor of fractional ownership. I'm delighted with his fanaticism on these matters for both the company's sake and my family's: I believe the Buffetts fly more fractional-ownership hours – we log in excess of 800 annually – than does any other family. In case you're wondering, we use exactly the same planes and crews that serve NetJet's other customers.

NetJets experienced a spurt in new orders shortly after September 11th, but its sales pace has since returned to normal. Per-customer usage declined somewhat during the year, probably because of the recession.

Both we and our customers derive significant operational benefits from our being the runaway leader in the fractional ownership business. We have more than 300 planes constantly on the go in the U.S. and can therefore be wherever a customer needs us on very short notice. The ubiquity of our fleet also reduces our "positioning" costs below those incurred by operators with smaller fleets.

These advantages of scale, and others we have, give NetJets a significant economic edge over competition. Under the competitive conditions likely to prevail for a few years, however, our advantage will at best produce modest profits.

- Our finance and financial products line of business now includes XTRA, General Re Securities (which is in a run-off mode that will continue for an extended period) and a few other relatively small operations. The bulk of the assets and liabilities in this segment, however, arise from a few fixed-income strategies, involving highly-liquid AAA securities, that I manage. This activity, which only makes sense when certain market relationships exist, has produced good returns in the past and has reasonable prospects for continuing to do so over the next year or two.

Investments

Below we present our common stock investments. Those that had a market value of more than $500 million at the end of 2001 are itemized.

		12/31/01	
Shares	*Company*	*Cost*	*Market*
		(dollars in millions)	
151,610,700	American Express Company	$ 1,470	$ 5,410
200,000,000	The Coca-Cola Company	1,299	9,430
96,000,000	The Gillette Company	600	3,206
15,999,200	H&R Block, Inc.	255	715
24,000,000	Moody's Corporation	499	957
1,727,765	The Washington Post Company	11	916
53,265,080	Wells Fargo & Company	306	2,315
	Others	4,103	5,726
	Total Common Stocks	$8,543	$28,675

We made few changes in our portfolio during 2001. As a group, our larger holdings have performed poorly in the last few years, some because of disappointing operating results. Charlie and I still like the basic businesses of all the companies we own. But we do not believe Berkshire's equity holdings as a group are undervalued.

Our restrained enthusiasm for these securities is matched by decidedly lukewarm feelings about the prospects for stocks in general over the next decade or so. I expressed my views about equity returns in a speech I gave at an Allen and Company meeting in July (which was a follow-up to a similar presentation I had made two years earlier) and an edited version of my comments appeared in a December 10th *Fortune* article. I'm enclosing a copy of that article. You can also view the *Fortune* version of my 1999 talk at our website www.berkshirehathaway.com.

Charlie and I believe that American business will do fine over time but think that today's equity prices presage only moderate returns for investors. The market outperformed business for a very long period, and that phenomenon had to end. A market that no more than parallels business progress, however, is likely to leave many investors disappointed, particularly those relatively new to the game.

Here's one for those who enjoy an odd coincidence: The Great Bubble ended on March 10, 2000 (though we didn't realize that fact until some months later). On that day, the NASDAQ (recently 1,731) hit its all-time high of 5,132. That same day, Berkshire shares traded at $40,800, their lowest price since mid-1997.

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During 2001, we were somewhat more active than usual in "junk" bonds. These are not, we should emphasize, suitable investments for the general public, because too often these securities live up to their name. We have *never* purchased a newly-issued junk bond, which is the only kind most investors are urged to buy. When losses occur in this field, furthermore, they are often disastrous: Many issues end up at a small fraction of their original offering price and some become entirely worthless.

Despite these dangers, we periodically find a few – a *very* few – junk securities that are interesting to us. And, so far, our 50-year experience in distressed debt has proven rewarding. In our 1984 annual report, we described our purchases of Washington Public Power System bonds when that issuer fell into disrepute. We've also, over the years, stepped into other apparent calamities such as Chrysler Financial, Texaco and RJR Nabisco – all of which returned to grace. Still, if we stay active in junk bonds, you can expect us to have losses from time to time.

Occasionally, a purchase of distressed bonds leads us into something bigger. Early in the Fruit of the Loom bankruptcy, we purchased the company's public and bank debt at about 50% of face value. This was an unusual bankruptcy in that interest payments on senior debt were continued without interruption, which meant we earned about a 15% current return. Our holdings grew to 10% of Fruit's senior debt, which will probably end up returning us about 70% of face value. Through this investment, we indirectly reduced our purchase price for the whole company by a small amount.

In late 2000, we began purchasing the obligations of FINOVA Group, a troubled finance company, and that, too, led to our making a major transaction. FINOVA then had about $11 billion of debt outstanding, of which we purchased 13% at about two-thirds of face value. We expected the company to go into bankruptcy, but believed that liquidation of its assets would produce a payoff for creditors that would be well above our cost. As default loomed in early 2001, we joined forces with Leucadia National Corporation to present the company with a prepackaged plan for bankruptcy.

The plan as subsequently modified (and I'm simplifying here) provided that creditors would be paid 70% of face value (along with full interest) and that they would receive a newly-issued 7½% note for the 30% of their claims not satisfied by cash. To fund FINOVA's 70% distribution, Leucadia and Berkshire formed a jointly-owned entity – mellifluently christened Berkadia – that borrowed $5.6 billion through FleetBoston and, in turn, re-lent this sum to FINOVA, concurrently obtaining a priority claim on its assets. Berkshire guaranteed 90% of the Berkadia borrowing and also has a secondary guarantee on the 10% for which Leucadia has primary responsibility. (Did I mention that I am simplifying?).

There is a spread of about two percentage points between what Berkadia pays on its borrowing and what it receives from FINOVA, with this spread flowing 90% to Berkshire and 10% to Leucadia. As I write this, each loan has been paid down to $3.9 billion.

As part of the bankruptcy plan, which was approved on August 10, 2001, Berkshire also agreed to offer 70% of face value for up to $500 million principal amount of the $3.25 billion of new 7½% bonds that were issued by FINOVA. (Of these, we had already received $426.8 million in principal amount because of our 13% ownership of the original debt.) Our offer, which was to run until September 26, 2001, could be withdrawn under a variety of conditions, one of which became operative if the New York Stock Exchange closed during the offering period. When that indeed occurred in the week of September 11th, we promptly terminated the offer.

Many of FINOVA's loans involve aircraft assets whose values were significantly diminished by the events of September 11th. Other receivables held by the company also were imperiled by the economic consequences of the attack that day. FINOVA's prospects, therefore, are not as good as when we made our proposal to the bankruptcy court. Nevertheless we feel that overall the transaction will prove satisfactory for Berkshire. Leucadia has day-to-day operating responsibility for FINOVA, and we have long been impressed with the business acumen and managerial talent of its key executives.

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It's déjà vu time again: In early 1965, when the investment partnership I ran took control of Berkshire, that company had its main banking relationships with First National Bank of Boston and a large New York City bank. Previously, I had done no business with either.

Fast forward to 1969, when I wanted Berkshire to buy the Illinois National Bank and Trust of Rockford. We needed $10 million, and I contacted both banks. There was no response from New York. However, two representatives of the Boston bank immediately came to Omaha. They told me they would supply the money for our purchase and that we would work out the details later.

For the next three decades, we borrowed almost nothing from banks. (Debt is a four-letter word around Berkshire.) Then, in February, when we were structuring the FINOVA transaction, I again called Boston, where First National had morphed into FleetBoston. Chad Gifford, the company's president, responded just as Bill Brown and Ira Stepanian had back in 1969 – "you've got the money and we'll work out the details later."

And that's just what happened. FleetBoston syndicated a loan for $6 billion (as it turned out, we didn't need $400 million of it), and it was quickly oversubscribed by 17 banks throughout the world. Sooooo . . . if you ever need $6 billion, just give Chad a call – assuming, that is, your credit is AAA.

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One more point about our investments: The media often report that "Buffett is buying" this or that security, having picked up the "fact" from reports that Berkshire files. These accounts are sometimes correct, but at other times the transactions Berkshire reports are actually being made by Lou Simpson, who runs a $2 billion portfolio for GEICO that is quite independent of me. Normally, Lou does not tell me what he is buying or selling, and I learn of his activities only when I look at a GEICO portfolio summary that I receive a few days after the end of each month. Lou's thinking, of course, is quite similar to mine, but we usually end up in different securities. That's largely because he's working with less money and can therefore invest in smaller companies than I. Oh, yes, there's also another minor difference between us: In recent years, Lou's performance has been far better than mine.

Charitable Contributions

Berkshire follows a highly unusual policy in respect to charitable contributions – but it's one that Charlie and I believe is both rational and fair to owners.

First, we let our operating subsidiaries make their own charitable decisions, requesting only that the owners/managers who once ran these as independent companies make all donations to their *personal* charities from their own funds, instead of using company money. When our managers are using company funds, we trust them to make gifts in a manner that delivers commensurate tangible or intangible benefits to the operations they manage. Last year contributions from Berkshire subsidiaries totaled $19.2 million.

At the parent company level, we make no contributions except those designated by shareholders. We do not match contributions made by directors or employees, nor do we give to the favorite charities of the Buffetts or the Mungers. However, prior to our purchasing them, a few of our subsidiaries had employee-match programs and we feel fine about their continuing them: It's not our style to tamper with successful business cultures.

To implement our *owners'* charitable desires, each year we notify registered holders of A shares (A's represent 86.6% of our equity capital) of a per-share amount that they can instruct us to contribute to as many as three charities. Shareholders name the charity; Berkshire writes the check. Any organization that qualifies under the Internal Revenue Code can be designated by shareholders. Last year Berkshire made contributions of $16.7 million at the direction of 5,700 shareholders, who named 3,550 charities as recipients. Since we started this program, our shareholders' gifts have totaled $181 million.

Most public corporations eschew gifts to religious institutions. These, however, are favorite charities of our shareholders, who last year named 437 churches and synagogues to receive gifts. Additionally, 790 schools were recipients. A few of our larger shareholders, including Charlie and me, designate their personal foundations to get gifts, so that those entities can, in turn, disburse their funds widely.

I get a few letters every week criticizing Berkshire for contributing to Planned Parenthood. These letters are usually prompted by an organization that wishes to see boycotts of Berkshire products. The letters are invariably polite and sincere, but their writers are unaware of a key point: It's not Berkshire, but rather its owners who are making charitable decisions – and these owners are about as diverse in their opinions as you can imagine. For example, they are probably on both sides of the abortion issue in roughly the same proportion as the American population. We'll follow their instructions, whether they designate Planned Parenthood or Metro Right to Life, just as long as the charity possesses 501(c)(3) status. It's as if we paid a dividend, which the shareholder then donated. Our form of disbursement, however, is more tax-efficient.

In neither the purchase of goods nor the hiring of personnel, do we ever consider the religious views, the gender, the race or the sexual orientation of the persons we are dealing with. It would not only be wrong to do so, it would be idiotic. We need all of the talent we can find, and we have learned that able and trustworthy managers, employees and suppliers come from a very wide spectrum of humanity.

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To participate in our future charitable contribution programs, you must own Class A shares that are registered in the name of the actual owner, not the nominee name of a broker, bank or depository. Shares not so registered on August 31, 2002 will be ineligible for the 2002 program. When you get the contributions form from us, return it promptly. Designations received after the due date will not be honored.

The Annual Meeting

This year's annual meeting will be on Saturday, May 4, and we will again be at the Civic Auditorium. The doors will open at 7 a.m., the movie will begin at 8:30, and the meeting itself will commence at 9:30. There will be a short break at noon for food. (Sandwiches can be bought at the Civic's concession stands.) Except for that interlude, Charlie and I will answer questions until 3:30. Give us your best shot.

For at least the next year, the Civic, located downtown, is the only site available to us. We must therefore hold the meeting on either Saturday or Sunday to avoid the traffic and parking nightmare sure to occur on a weekday. Shortly, however, Omaha will have a new Convention Center with plenty of parking facilities. Assuming that we then head for the Center, I will poll shareholders to see whether you wish to return to the Monday meeting that was standard until 2000. We will decide that vote based on a count of shareholders, not shares. (This is *not* a system, however, we will ever institute to decide who should be CEO.)

An attachment to the proxy material that is enclosed with this report explains how you can obtain the credential you will need for admission to the meeting and other events. As for plane, hotel and car reservations, we have again signed up American Express (800-799-6634) to give you special help. They do a terrific job for us each year, and I thank them for it.

In our usual fashion, we will run buses from the larger hotels to the meeting. Afterwards, the buses will make trips back to the hotels and to Nebraska Furniture Mart, Borsheim's and the airport. Even so, you are likely to find a car useful.

We have added so many new companies to Berkshire this year that I'm not going to detail all of the products that we will be *selling* at the meeting. But come prepared to carry home everything from bricks to candy. And underwear, of course. Assuming our Fruit of the Loom purchase has closed by May 4, we will be selling Fruit's latest styles, which will make you your neighborhood's fashion leader. Buy a lifetime supply.

GEICO will have a booth staffed by a number of its top counselors from around the country, all of them ready to supply you with auto insurance quotes. In most cases, GEICO will be able to give you a special shareholder discount (usually 8%). This special offer is permitted by 41 of the 49 jurisdictions in which we operate. Bring the details of your existing insurance and check out whether we can save you money.

At the Omaha airport on Saturday, we will have the usual array of aircraft from NetJets® available for your inspection. Just ask a representative at the Civic about viewing any of these planes. If you buy what we consider an appropriate number of items during the weekend, you may well need your own plane to take them home. And, if you buy a fraction of a plane, we might even throw in a three-pack of briefs or boxers.

At Nebraska Furniture Mart, located on a 75-acre site on 72nd Street between Dodge and Pacific, we will again be having "Berkshire Weekend" pricing, which means we will be offering our shareholders a discount that is customarily given only to employees. We initiated this special pricing at NFM five years ago, and sales during the "Weekend" grew from $5.3 million in 1997 to $11.5 million in 2001.

To get the discount, you must make your purchases on Thursday, May 2 through Monday, May 6 and also present your meeting credential. The period's special pricing will even apply to the products of several prestigious manufacturers that normally have ironclad rules against discounting but that, in the spirit of our shareholder weekend, have made an exception for you. We appreciate their cooperation. NFM is open from 10 a.m. to 9 p.m. on weekdays and 10 a.m. to 6 p.m. on Saturdays and Sundays.

Borsheim's — the largest jewelry store in the country except for Tiffany's Manhattan store — will have two shareholder-only events. The first will be a cocktail reception from 6 p.m. to 10 p.m. on Friday, May 3. The second, the main gala, will be from 9 a.m. to 5 p.m. on Sunday, May 5. Shareholder prices will be available Thursday through Monday, so if you wish to avoid the large crowds that will assemble on Friday evening and Sunday, come at other times and identify yourself as a shareholder. On Saturday, we will be open until 6 p.m. Borsheim's operates on a gross margin that is fully twenty percentage points below that of its major rivals, so the more you buy, the more you save (or at least that's what my wife and daughter tell me). Come by and let us perform a walletectomy on you.

In the mall outside of Borsheim's, we will have some of the world's top bridge experts available to play with our shareholders on Sunday afternoon. We expect Bob and Petra Hamman along with Sharon Osberg to host tables. Patrick Wolff, twice U.S. chess champion, will also be in the mall, taking on all comers — blindfolded!

Last year, Patrick played as many as six games simultaneously — with his blindfold securely in place — and this year will try for seven. Finally, Bill Robertie, one of only two players who have twice won the backgammon world championship, will be on hand to test your skill at that game. Come to the mall on Sunday for the Mensa Olympics.

Gorat's — my favorite steakhouse — will again be open exclusively for Berkshire shareholders on Sunday, May 5, and will be serving from 4 p.m. until 10 p.m. Please remember that to come to Gorat's on Sunday, you must have a reservation. To make one, call 402-551-3733 on April 1 (*but not before*). If Sunday is sold out, try Gorat's on one of the other evenings you will be in town. Show your sophistication by ordering a rare T-bone with a double order of hash browns.

The usual baseball game will be held at Rosenblatt Stadium at 7 p.m. on Saturday night. This year the Omaha Royals will play the Oklahoma RedHawks. Last year, in an attempt to emulate the career switch of Babe Ruth, I gave up pitching and tried batting. Bob Gibson, an Omaha native, was on the mound and I was terrified, fearing Bob's famous brush-back pitch. Instead, he delivered a fast ball in the strike zone, and with a Mark McGwire-like swing, I managed to connect for a hard grounder, which inexplicably died in the infield. I didn't run it out: At my age, I get winded playing a hand of bridge.

I'm not sure what will take place at the ballpark this year, but come out and be surprised. Our proxy statement contains instructions for obtaining tickets to the game. Those people ordering tickets to the annual meeting will receive a booklet containing all manner of information that should help you enjoy your visit in Omaha. There will be plenty of action in town. So come for Woodstock Weekend and join our Celebration of Capitalism at the Civic.

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Finally, I would like to thank the wonderful and incredibly productive crew at World Headquarters (all 5,246.5 square feet of it) who make my job so easy. Berkshire added about 40,000 employees last year, bringing our workforce to 110,000. At headquarters we added one employee and now have 14.8. (I've tried in vain to get JoEllen Rieck to change her workweek from four days to five; I think she likes the national recognition she gains by being .8.)

The smooth handling of the array of duties that come with our current size and scope – as well as some additional activities almost unique to Berkshire, such as our shareholder gala and designated-gifts program – takes a very special group of people. And that we most definitely have.

Warren E. Buffett
February 28, 2002 Chairman of the Board

Morning Session - 2002 Meeting

1. Formal business meeting begins

(Video recording begins after meeting has started)

WARREN BUFFETT: … second or anybody would like to speak to that motion, might now work their way over to the microphone in zone 1. Could we have a spotlight on where that is? In that way, when we get to that point of the program —

If anybody that would like to speak to the motion that was in the proxy statement, if you'll work your way over to the microphone there then we'll be ready at the time — you can be ready at the time when it will be appropriate to talk about it.

And so we'll get there in just a minute and if you'll all wander over there that are interested.

Also with us today are partners in the firm of Deloitte & Touche, our auditors. They're available to respond to appropriate questions you might have concerning their firm's audit of the accounts of Berkshire.

Mr. Forrest Krutter, the secretary of Berkshire. He will make a written record of the proceedings.

Miss Becki Amick has been appointed inspector of elections at this meeting. She will certify to the count of votes cast in the election for directors.

The named proxy holders for the meeting are Walter Scott Jr. and Marc D. Hamburg.

We will conduct the business of the meeting and then adjourn the formal meeting. After that, we will entertain questions that you might have.

2. Berkshire's shares outstanding

WARREN BUFFETT: Does the secretary have a report of the number of Berkshire shares outstanding entitled to vote and represented at the meeting?

FORREST KRUTTER: Yes, I do.

As indicated in the proxy statement that accompanied the notice of this meeting that was sent by first class mail to all shareholders of record on March 6, 2002, being the record date for this meeting, there were 1,323,707 shares of Class A Berkshire Hathaway common stock outstanding, with each share entitled to one vote on motions considered at the meeting and 6,290,415 shares of Class B Berkshire Hathaway common stock outstanding, with each share entitled to 1/200th of one vote on motions considered at the meeting.

Of that number, 1,103,455 Class A shares and 5,260,231 Class B shares are represented at this meeting by proxies returned through Thursday evening, May 2nd.

WARREN BUFFETT: Thank you. That number represents a quorum and we will therefore directly proceed with the meeting.

3. Previous meeting's minutes approved

WARREN BUFFETT: First order of business will be a reading of the minutes of the last meeting of shareholders. I recognize Mr. Walter Scott who will place a motion before the meeting.

WALTER SCOTT: I move that the reading of the minutes of the last meeting of the shareholders be dispensed with and the minutes be approved.

WARREN BUFFETT: Do I hear a second? The motion has been moved and seconded.

Are there any comments or questions? Three second pause. We will vote on this motion by voice vote.

All those in favor say aye. Opposed? The motion's carried.

4. Susie Buffett "leads the ticket"

WARREN BUFFETT: The first item of business of this meeting is to elect directors. The shareholders present who wishes to withdraw a proxy previously sent in and vote in person on the election of directors here, he or she may do so.

Also, if any shareholder that is present and has not turned in a proxy and desires a ballot in order to vote in person, you may do so.

If you wish to do this, please identify yourself to meeting officials in the aisles who will furnish a ballot to you.

Would those persons desiring ballots please identify themselves so that we may distribute these?

I now recognize Mr. Walter Scott to place a motion before the meeting with respect to election of directors.

WALTER SCOTT: I move that Warren E. Buffett, Charles T. Munger, Susan T. Buffett, Howard G. Buffett, Malcolm G. Chace, Ronald L. Olson and Walter Scott Jr. be elected as directors.

WARREN BUFFETT: Is there a second?

It has been moved and seconded that Warren E. Buffett, Charles T. Munger, Susan T. Buffett, Howard G. Buffett, Malcolm G. Chace, Ronald L. Olson and Walter Scott Jr be elected as directors. Sounds like a hell of a slate to me.

Are there any other nominations? Is there any discussion?

Nominations are ready to be acted upon. If there are any shareholders voting in person, they should now mark their ballots on the election of directors and allow the ballots to be delivered to the inspector of elections.

The proxy holders please all submit to the inspector of elections a ballot on the election of directors, voting the proxies in accordance with the instructions they have received.

I will have to say at this point, deviating from my script, that — in the spirt of disclosure which now permeates the corporate world — I have a tally here from yesterday as to the number of votes each director has received.

And the — I won't give the affirmative votes, but the total — basically negative vote is a withhold vote — Charlie and I and Howie came in last, by a significant margin.

Susie did the best. She only had 1,000 votes against her, but Charlie and I had 16,000-some votes against us.

So, I really suspect that Susie voted against us so that she could lead the ticket, but who knows? (Laughter)

Miss Amick, when you're ready you may give your report.

BECKI AMICK: My report is ready.

The ballot of the proxy holders in response to proxies that were received through last Thursday evening has not less than 1,139,672 votes for each nomine.

That number far exceeds a majority of the number of the total vote related to all Class A and Class B shares outstanding.

The certification required by Delaware law of the precise count of the vote, including the additional votes to be cast by the proxy holders in response to proxies delivered at this meeting, as well as any cast in person at this meeting, will be given to the secretary to be placed with the minutes of this meeting.

WARREN BUFFETT: Thank you, Miss Amick.

Warren E. Buffett, Susan T. Buffett, Howard G. Buffett, Malcolm G. Chace, Charles T. Munger, Ronald L. Olson, and Walter Scott Jr. have been elected as directors.

Next — (Applause)

5. Shareholder proposal on charitable contributions, abortion, and overpopulation

The next item of business is the proposal put forth by a Berkshire shareholder, Gloria Jay Patrick, the owner of two Class B shares.

Miss Patrick's motion is set forth in the proxy statement and provides that the shareholders request the company to refrain from making charitable contributions.

The directors have recommended that the shareholders vote against this proposal.

We will now open the floor to recognize Miss Patrick or her designee to present her proposal.

And I believe we have Mr. Mosher at the microphone in area one to speak to — to make the proposal and speak to it. Would you go ahead please, sir?

STEVEN MOSHER: Thank you, Chairman Buffett. I apologize if this is a little loud. I was told I would have to really project but I think you can hear me up there on the stage and I hope you can hear me up in the rafters.

My name is Steven Mosher. I'm the chairman of the Population Research Institute, a nonprofit organization dedicated to making the case for people as the ultimate resource, the one resource that we, as investors, cannot do without, and to debunking the hype about overpopulation, what the New York Times has called, and I quote, "One of the myths of the 20th century." Of course, we're now living in the 21st century.

I've written about the coming depopulation — that's right, I said depopulation — in the Wall Street Journal and other publications.

I say all this to explain why Gloria Patrick, a Berkshire Hathaway shareholder, has asked me to present her action at this meeting, the following proposal.

And I do have one other qualification: I have nine children.

Now when people gasp at this, I remind them that my children will be paying their Social Security one day. Of course, if you invest in Berkshire Hathaway stock, you won't need Social Security.

I will present the proposal and then, with the chairman's indulgence, spend a couple of minutes explaining why it's necessary.

Here is the resolution:

Whereas, charitable contributions should serve to enhance shareholder value.

Whereas, the company has given money to groups involved in controversial activities like population control and abortion.

Whereas, our company is dependent on people to buy the products and services of the various companies we own.

Whereas, our company is being boycotted by Life Decisions International and investment-related groups like Pro Vita Advisors because of these contributions.

Resolved: The shareholders request the company to refrain from making charitable contributions.

Let me take these very quickly, point by point.

You all know shareholder money is entrusted to the board of directors to be invested in a prudent manner for the shareholders.

I think you will all agree, as the resolution states, that charitable contributions should serve to enhance shareholder value.

Indeed, this is already Berkshire Hathaway policy with regard to its operating subsidiaries.

As Chairman Buffett explained in his Chairman's Letter of last year, quote, "We trust our managers to make gifts in a manner that delivers commensurate tangible or intangible benefits to the operations they manage. We did not invest money in this company so it could be given to someone else's favorite charity."

I think you will also likewise agree that activities like population control and abortion are controversial.

In fact, some of the charitable money has been given to Planned Parenthood, a group that is responsible for almost 200,000 abortions a year in the United States — (applause) — and in countless more through its population control programs worldwide.

Now, we believe abortion is the taking of a human life, but even if you disagree on this fundamental point, you must concur that these ongoing boycotts of Berkshire Hathaway company products are not a good thing.

Next, it should be self-evident that Berkshire Hathaway, like the economy as a whole, is dependent upon people. It is people who produce the products and services of the various companies we own, and it is people who buy them.

Now, you may think that there is the superabundance of people in the world and that we will never run short, but this is not true.

Half of the countries of the world, including countries in Latin America, Africa, and Asia, now have birthrates below replacement.

Europe and Japan are literally dying, filling more coffins than cradles each year.

Dying populations may shrink the economic pie. We already see this happening in Japan and some European countries.

How much of Japan's continuing economic malaise can be directly traced to a lack of young people to power the economy?

Dying populations may also make economic development nearly impossible. Russia is having trouble finding its feet economically. Why? Because of its ongoing demographic collapse, losing a million people a year.

These problems will spread to many more countries in the near future.

Charitable contributions to simple-minded population control programs, in which governments impose restrictions on childbearing, are not in Berkshire Hathaway's interest.

Such programs are not investing in humanity's future, they are compromising humanity's future and putting a roadblock in the way of future economic growth.

There is no global share buyback in store for those who fund population control programs, because such programs will rob the world of future consumers and producers and threaten to shrink the economic pie.

Let me give you a concrete example of what I mean. Berkshire Hathaway owns Dairy Queen.

Now, there are 103 Dairy Queens in Thailand. But Thailand, due to a massive population control campaign, now has a birthrate that is below replacement and falling.

This means that its cohorts of young children are shrinking. There will be fewer and fewer families in the years to come and its population will eventually fall.

Now, you may think Thailand has too many children. But is it possible for there to be too many children for Dairy Queen?

According to Dairy Queen, the Dairy Queen concept especially appeals to, quote, “young families.” But there will be fewer young families in Thailand’s future and Dairy Queen’s future because of population control.

So I urge you to vote yes on this resolution: let it be resolved that this company refrain from making charitable contributions.

One final point. Should you, on the other hand, both continue the current practice of making charitable contributions based on shareholder designations, I would urge you all to designate 501(c)(3)s, like the Population Research Institute, which are attempting to help the poor become the agents of their own development and not simply try to reduce their number through population control.

Thank you, Mr. Chairman for this opportunity to speak. (Applause)

WARREN BUFFETT: Thank you.

Do we have a — do we have a second to the motion?

Ok, we have.

And is there are any further discussion? Is there anyone there at the microphone that would like to talk?

OK. If there’s no further discussion, we’ll have Miss Amick report on the votes cast on that.

If anybody wishes to cast a vote in person, they can raise their hand and submit that, but we’ll have a preliminary report from Miss Amick.

BECKI AMICK: My report is ready.

The ballot of the proxy holders in response to the proxies that were received through last Thursday evening cast 28,452 votes for the motion, and 1,014,353 votes against the motion. (Applause)

As the number of votes against the motion exceeds a majority of the number of votes related to all Class A and Class B shares outstanding, the motion has failed.

The certification required by Delaware law of the precise count of the vote will be given to the secretary and placed with the minutes of this meeting.

WARREN BUFFETT: Thank you, Ms. Amick. The proposal failed.

6. Formal meeting adjourned

WARREN BUFFETT: After adjournment of the business meeting, I will respond to questions that you may have that relate to the businesses of Berkshire but do not call for any action at this meeting.

Does anyone have any further business to come before this meeting before we adjourn?

If not, I recognize Mr. Walter Scott to place a motion before the meeting.

WALTER SCOTT: I move that this meeting be adjourned.

WARREN BUFFETT: Is there a second?

Motion to adjourn has been made and seconded. We will vote by voice.

Is there any discussion? If not, all in favor say aye. All say no? The meeting's adjourned. Thank you. (Applause)

7. Mickey Newman introduced

WARREN BUFFETT: Now, before we get on to the questions, and when we get to the questions we will move through various zones sequentially, there are just a few special guests that I would like to recognize, and because of the crowd, I've not had an opportunity to make sure all of these special guests are here, but we will find out here shortly.

The first guest, and I hope very much he's here. He was planning to be here. It was — let's see — 40 — 48 years ago this July or so — well about June — I got a letter from Ben Graham who I had been pestering for a job for about three years and getting no place, and then said the next time you're in New York, come in and talk to me.

So, I was there about ten hours later. I didn't have a NetJets plane, so it took a little longer.

And I went in to see Ben and he offered me a job and I took it on the spot. I didn't ask what the salary was, or anything else, and a month or two later the family joined me.

I had — my daughter was already born and Susie was pregnant with Howie. And we moved back there and I went to work for Graham-Newman Corp.

And, one of my three bosses — I had three bosses that — Ben Graham, Jerry Newman, and Mickey Newman. And Mickey was exactly ten years older than I was at that time and he's exactly ten years older now.

And Mickey was a major factor in a hugely successful — he ran the place — company that was not quite that successful yet in 1954 when I went back there: the Philadelphia and Reading Coal and Iron Company, as it was called then.

And after I'd been there maybe a year — Mickey was in charge of Philadelphia and Reading — and a fellow named Jack Goldfarb came into the office, and I really didn't know what was going on.

I had a good bit of my net worth in Philadelphia and Reading, so I was interested, but Jack Goldfarb and Mickey were behind closed doors, largely.

But when they emerged, the Philadelphia and Reading Company, which was controlled by Graham-Newman, had bought Union Underwear, which was the manufacturer of Fruit of the Loom product under a license at that time.

And, as I told in the annual report, was a very, very attractive buy, and Mickey made a number of good buys.

And when — Mickey and I have talked and seen each other over the years, some, not a lot, but we would see each other.

And when Fruit of the Loom entered bankruptcy a few years ago, Mickey called me and sort of said, what are you going to do about it? You should do something.

And he was very helpful, particularly helpful, in introducing me to John Holland, who runs Fruit of the Loom, and who is a tremendous asset to the company. And, Mickey gave me lots of insights on that.

And when I got discouraged with the bankruptcy procedure — and it is discouraging to try and buy a company out of bankruptcy — Mickey would gently prod me along.

And so I believe, today, we have with us Mickey Newman and his son, who I last saw when he was a little red-headed kid, Bill.

Mickey and Bill, if you're here, if you'd stand up, it'd be great. Now, let's see if they made it.

There they are. Let's have a spotlight on them. (Applause)

I can't see very well from here whether Bill is still redheaded.

But Mickey is 81, believe it or not. You won't believe it if you meet him.

And he's been a tremendous help and a great friend over the years.

And he accomplished much for us in the past year. We — I don't think we would have Fruit of the Loom if it hadn't been for Mickey, particularly nudging me along as we went through the process.

8. Scott and Fetzer's Ralph Schey introduced

WARREN BUFFETT: I also hope we have today with us, and again, I didn't get a chance to see them before the meeting, but are Ralph and Luci Schey here? Ralph and Luci? Did they — were they able to make it or not?

Yeah, there they are. (Applause)

Ralph is in the Berkshire Hathaway Hall of Fame. I mean, this is like being at Cooperstown, you know, and introducing Bob Gibson or Sandy Koufax.

Ralph, for a great many years, added tremendous value to Berkshire at Scott and Fetzer.

We wouldn't be able to buy some of the things, like Fruit of the Loom, if it hadn't been for the profits developed under Ralph's management at Scott Fetzer.

So I'm delighted that he and Luci can join us. (Applause)

9. Larry and Dolores Brandon introduced

WARREN BUFFETT: I believe, and I hope we have Larry and Dolores Brandon. Are they here?

Show your — there they are. Let's have a spotlight on them. (Applause)

Delores is also known as "Dutchy" but we call her "Saint Dutchy" at Berkshire headquarters because she gave birth some years ago to Joe Brandon, and Joe has been doing a fabulous job for us at General Re. He took over early in September.

It's really going to be our number one asset. There're been a lot happened since those days in September when Joe took over. I think you're going to see some terrific results throughout our insurance business, but particularly at General Re.

I wrote Dutchy a letter and I said, you know, it's terrific what you've done for us, but — you know, I was a little like the farmer that went into the henhouse, and I, you know, pulled out an ostrich egg, and said to the hens, you know, I don't like to complain, but this is just a sample of what the competition's doing. (Laughter)

Well, I berated her a little bit for not having twins, because if she just had a twin for Joe, we'd own the world.

But she tells me that — and she wrote me back and said — she really had done her best. I mean, she'd had seven children, five of whom are in the insurance business, and she has 19 grandchildren.

So, we have people out on the road trying to sign up these grandchildren now and — (Laughter)

If you get a chance, you know, tell her her productive years are not over. (Laughter)

10. Andy Heyward introduced

WARREN BUFFETT: And finally, we have with us today the fellow who put together that terrific cartoon.

Anybody that can — even takes on the job of making me look like James Bond is a very brave person.

And, Andy Heyward has a company called DiC Entertainment, which is a leading producer of children's programming. When you turn on the television on Saturday morning, you will be seeing his output.

And Andy puts this product together. He sends people to Omaha. He does it all.

It's his script, it's his production. He does it on his own time, on his own nickel, he just — it's his contribution to the Berkshire meeting. And it, I mean, it's absolutely fabulous.

And I have to tell you that this fall, Andy is going to have a series of 40 episodes that are called — I think it's called "Liberty's Kids."

It will be on public broadcasting at 4:30, five days a week. And it's really the story of America.

It's told — Charlie will like this — Charlie doesn't know about this — it will be told through the eyes of three young apprentices in Ben Franklin's print shop.

And it will view the evolving of the American democracy and the Constitution, and all with Andy's creative characters, but it will use the voices of various other people.

And I'm flattered. I get to be James Madison in this. And we have Sylvester Stallone, we have Billy Crystal, we have Whoopi Goldberg.

And Charlie will be crushed to find — I think its Walter Cronkite is going to be Ben Franklin.

I mean, I think Charlie held out for too much money or something. (Laughter)

But, it's going to be a fabulous series. I mean, I am looking forward to this. It will run all this year, starting in the fall, and then it will run again in the following year. And it will be a great, great, piece for American children and American adults.

I plan on watching it myself. And it will just be the story of how this country came about, through the eyes of these three young apprentices of Ben Franklin.

So, Andy is here with his son Michael, and if Andy and Michael would stand up, I'd like to give them a hand myself. Andy, where are you? (Applause)

They're here someplace. (Applause continues)

11. Berkshire managers praised

WARREN BUFFETT: We've got a lot of other special guests, but they're up here in our managers' section. You saw them up on the screen. They're the people who make this place work.

We have a larger and better cast this year than we've had even in the past, and it will grow in the future.

This is a company of managers. And, you know, we confess to how little we do around headquarters, as you saw in the movie.

And we now have, I think — I'm not sure of the exact number, whether we have 130,000 now, or something like that — people working all over the world in all kinds of occupations.

And, I think they get a sense when they come here that they're working for real people on this side, too.

I mean, they get to see people who are actual owners. We have some institution holders, but we have 350,000 individual owners now, and I think — I believe — it's correct to say that our stock turns over — less turnover — in the shares of Berkshire than in any other company of major size in the country.

Which means, in effect, we have more what I would call real owners, people who want to be in partnership with the kind of managers we have. And Charlie and I are very proud of them.

12. Q1 insurance update

WARREN BUFFETT: Now we're going to get to the questions in just one second.

I thought I would give you a little update on, particularly, the insurance aspects of the first quarter, because insurance cost us a lot of money last year.

It's our main business. It's always going to be our main business. It's a very, very big business, and it's going to get bigger.

And, there were some special events of last year, and there were some mistakes of our own that made it a bad year for insurance last year.

Our float last year cost us almost 13 percent, and that's a lot to pay for money.

It's not our record. We had a period in the '80s when we ran into even more difficulties.

But I think there's been — well, I know there's been — there's been a change in the market. There's been a change, to a degree, in the culture at a very important unit.

And, I think that, barring some really mega-catastrophe, and we'll talk about those later — possibility — that we are — I think we're doing pretty well.

And if we could have the first chart that I — yeah — the first chart, which I can't see myself here, but I think it will be the insurance underwriting results for the first quarter.

And you will see that two good things happened in the first quarter.

One is our float increased by $1.8 billion. That's a lot of money to take in, net. I don't think there's any company, probably in the world, that had a gain in float that was even close to that.

And we actually achieved that with a small underwriting profit. So the float not only cost of nothing in the first quarter, but we had a gain of a billion-eight in it. And all units contributed to that. (Applause)

Our goal is to obtain more and more float at minimal or no cost. And there have been a number of years in the past when we've run an underwriting profit, which means that the use of that money is essentially free, or even better than free.

And we've had one very bad year, and a couple of so-so years before that.

But I think our cost of float over the next few years, unless we get into an extraordinary catastrophe, I think it should be pretty satisfactory.

Now, you'll notice there's a note down at the bottom that's slightly technical, but it's an important enough item in Berkshire, and in understanding our cost of float, that I thought I'd just devote a minute to it.

If you find this uninteresting, you can live a happy life without understanding what I'm about to explain next. You may even lead a happier life if you don't understand it. (Laughter)

As I look at the people that understand it and don't understand it, I'm not sure which group is happier. (Laughter)

When we write — we write a good bit — and have written a good bit, I should say — of retroactive insurance.

Now, in retroactive insurance, a company may come to us that's merging with another company, and they want to put a cap on their liabilities, or define them better, from past incidents.

So they may come to us and say, we want you to pick up all the losses that are going to be paid from things that happened prior to, say, 1990.

And we think that we owe $1 billion — have yet to be paid in losses from that period — but we want to protect ourselves up to, say, $2 billion, or some number like that.

So they write us a check and we take over — this is called retroactive insurance — we take over their losses from the past for a specific period and for a specific amount.

And, when we do that, the accounting — it's not accounting you run into every day — we've explained it in the past — but it creates a charge which will occur over time in the future.

And, as you can see, in the first quarter, the 20 million of underwriting profit we made was after a total of 112 million for the amortization of this charge that is set up.

So, if a company comes in and says, for example, we want you to protect us up to a billion-and-a-half for losses that occurred in the past, and we'll give you a billion dollars for it, we will debit cash for a billion dollars and we'll debit this deferred charge for half a billion and we'll set up a liability for a billion-and-a-half.

And that 500 million we set up as a deferred charge, we amortize over a period of time as we expect to pay the claims.

Now, there would be a lot of room for judgement — there is a lot of room for judgement — in terms of how fast we amortize that.

We try to be conservative. We make an estimate of when we will pay those claims and how much we will pay, and we try to amortize it over a reasonable period.

I've got another slide that shows how those amortization charges will work over time.

And we're going to put these slides on the internet, because we feel that our shareholders should understand the impact of these charges that will come against underwriting profits.

In the year 2002, we will have a 400 million-plus charge for this. It's built into the figures now.

And if we do 20 billion of premium volume, that's about a 2 percent charge.

So, to have our float be cost free, we have to make 400-plus million on underwriting elsewhere, in order to offset that.

And as you can see, we did that the first quarter and we'll find out whether we do it for the full year.

It's a — not many companies do this kind of business and it's a big item with us, so I really want all the shareholders to understand it, and for that reason, we'll put it on the internet.

I should emphasize that in all of these contracts, we cap our liability. So a lot of these contracts apply to liabilities that primarily — or not primarily — but in a significant way, and often primarily, arise from asbestos.

But when you read about asbestos claims accelerating and all of that, the numbers are capped in our case, in all of these contracts. So really don't care whether we pay it on an asbestos claim or whether we pay it on an old auto liability claim, or whatever.

The question is whether we've been correct in estimating the speed at which we will pay. And in some cases, we may pay even less than our maximum amount.

So, anyway, that's available for those of you who have previously were unhappy not understanding this and now are thrilled to know how it all works. (Laughter)

13. GEICO growth resumes

WARREN BUFFETT: Now the final item, which is a little easier to understand, is — we talked in the annual report about how we expected growth to resume at GEICO.

And I put up — again I can't see what's up there — but I assume that we have the GEICO policies in force figure and the increase by — Charlie hasn't seen these, as a factor of fact, so I'll give him the slide.

And as you can see, growth, not at the rates of a couple of years ago, but quite a turnaround from last year. Growth has resumed at GEICO in a reasonable way.

We figure each policyholder of a preferred nature is worth $1000 to us, at least, and so if we had 40,000 policyholders in a month, we've created, in our view, $40 million of value.

And, of course, we have the earnings in the float, and so on, that goes with it.

You'll notice on the first slide, GEICO operated at a significant underwriting profit in the first quarter, so all of its float was free and its float has continued to grow.

We are — you saw one of our little squirrel ads there which I like — we are getting — we are not getting a whole lot more inquiries than a year ago, but we're closing a significantly higher percentage of those that call. So our growth has been — has been picking up because our closure rate has increased quite substantially, and our retention rate of old policyholders, also, is increasing month by month.

So we've got two trends that are quite favorable, in terms of adding business.

And the third one of adding more inquiries is something that we are working on, and we're delighted to spend a lot of money on it, if we can figure out the way to spend it intelligently.

But, the increase in the retention ratio, the increase in the closure ratio, is resulting in very decent growth at GEICO.

And it's growth in all of our categories, in the preferred class, and the standard class, and the nonstandard class of business, whereas last year, the latter two fell.

Well, that's enough about the formal presentation.

14. How Buffett decides when to sell stocks

WARREN BUFFETT: Now, we're going to go in the various zones.

I promised a young shareholder in zone one that he would get to ask the first question and we're ready for zone 1.

AUDIENCE MEMBER: Hello Mr. Buffett and Mr. Munger. My name is David Klein-Rodick from Lincolnshire, Illinois. Thank you for letting me ask the first question.

I wanted to say I am sorry for the loss of your friend Mrs. Graham last year.

My question is: you have said that your favorite time to own a stock is forever.

Yet, you sold McDonald's and Disney after not owning them for long.

How do you do decide when to hold forever and when to sell?

And also, are you and Mr. Munger wearing Fruit of the Loom? (Laughter and applause)

WARREN BUFFETT: Charlie? (Laughter)

I think I better answer the question. I can answer unequivocally. I am wearing Fruit of the Loom.

I'm not sure whether Charlie wears underwear. Do you? (Laughter)

CHARLIE MUNGER: I haven't bought any new underwear in a long time and therefore I'm inappropriately attired. (Laughter)

WARREN BUFFETT: He's waiting for a discount, don't let him kid you. (Laughter)

Well, the answer — it's a very good question about selling. I mean, we — it's not our natural inclination to sell.

And on the other hand — and we have held the Washington Post stock since 1973. I've never sold a share of Berkshire, having bought the first shares in 1962.

And we've held Coke stock since 1988. We've held Gillette stock since 1989. Held American Express stock since 1991.

We had actually previously been in American Express in the '60s and Disney.

So, there are companies we are familiar with.

We generally sell by — we would sell if we needed money for something else — but that has not been the problem the last 10 or 15 years.

Forty years ago my sales were all because I found something that I liked even better. I hated to sell what I sold, but I also didn't want to borrow money, so I would reluctantly sell something that I thought was terribly cheap to buy something that was even cheaper.

Those were the times when I had more ideas than money. Now I've got more money than ideas, and that's a different equation.

So now we sell — really when we think that we've — when we're reevaluating the economic characteristics of the business.

In other words, if you take the — don't want to name names — but take a stock we've sold, of some sort.

We probably had one view of the long-term competitive advantage of the company at the time we bought it, and we may have modified that.

That doesn't mean we think that the company is going into some disastrous period or anything remotely like that. We think McDonald's has a fine future. We think Disney has a fine future. And there are others.

But we probably don't think that their competitive advantage is as strong as we might have thought — as we thought it was — when we initially made the decision.

That may mean that we were wrong when we made the decision originally. It may mean that we're wrong now, and that their strengths are every bit as what they were before.

But, for one reason or another, we think that the strengths may have been eroded to some degree.

A classic case on that would be the newspaper industry, generally, for example.

I mean, in 1970, Charlie and I were looking at the newspaper business. We felt it was about as impregnable a franchise as could be found.

We still think it's quite a business, but we do not think the franchise in 2002 is the same as it was in 1970.

We do not think the franchise of a network television station in 2002 is the same as it was in 1965.

And those beliefs change quite gradually. And who knows whether they're precise — you know, whether they're right, even.

But that is the reason, in general, that we sell now.

If we got into some terribly cheap market, we might sell some things that we thought were cheap to buy something even cheaper, after we'd bought lots and lots of equities. But that's not the occasion right now.

Charlie?

CHARLIE MUNGER: Nothing to add.

WARREN BUFFETT: He's been practicing for weeks. (Laughter)

15. Cost of float is more important than its size

WARREN BUFFETT: OK, let's go to zone 2.

AUDIENCE MEMBER: I'm John Bailey from Boston, Massachusetts and I hope I'm not asking you to repeat your insurance presentation, but I have a question about the growth of our float.

There's an increasingly popular piece of analysis out there where people project the growth of float for a large number of years into the future in order to determine the value of our business here.

But I wanted to ask more fundamentally, the existing float that we have runs off annually at a pretty considerable rate.

In order to maintain that, we have to replace it through our operations.

And then going the next step, to achieve the growth, we have more than replace it.

And so I wanted to ask you to address the characteristics of the — maybe the non-GEICO insurance businesses — that should give us the confidence to expect large amounts of replacement and growth float, at reasonable costs, going forward?

WARREN BUFFETT: Yeah, in a sense, float is somewhat similar to being in the oil business. I mean, you know, every day, some goes out as you pay claims, and the question is, did you find more oil than you produced that day? And it's very relevant.

It's a good question to, you know, what is the permanence of the float? What is the cost of the float? What's the likelihood of it growing? Could it actually run off?

As you saw up on the slide, we have $37 billion-plus of float. I think we have more float in our property-casualty business. A little bit of that float is in General Re's life and health business, but very small.

So, basically you're looking at property-casualty float when you look at that 37 billion.

I believe that's more than any company has in the United States and it's possible — I haven't checked Swiss Re and Munich — but it's even possible it's larger than anybody in the world.

Now, if you go to 30th and Harney Street, here in Omaha, you'll see National Indemnity building. It's the same building that was there when we bought the company in 1967 from Jack Ringwalt, when it had, maybe, 12 million of float.

And I had no idea that that 12 million, or whatever the number was, would turn into 37 billion. I mean, sometimes I can't really quite figure out how it happened.

But in any event, it did, and it's — we don't want people focusing on growth in our insurance business. I mean, we want them focusing on intelligent growth when we can do it at a GEICO or whatever it may be.

But I think it's suicide, from a business standpoint, to tell a bunch of insurance managers to go out and grow a lot.

So, you can say, well, with that lack of push from the home office, you know, how is that 37 1/2 billion going to grow? And I would say, just as I would have said to you for the last, you know, 30-odd years, I don't know.

But I think that — well, I can tell you this, that our float would have less natural runoff than the float from just about any company in the world.

I mean, we have a longer duration to our float because it arises from these retroactive contracts and from reinsurance, long-tail reinsurance, and that sort of thing.

So, our float has less natural erosion than any — just about any — that I know of in the world, but it erodes. It is a long-lived oil field, but it — we're pumping it every day.

You know, if I had to bet my life on whether the float would be higher or lower three years from now, or five years from now, I would certainly bet it would be higher.

And it's turned out, over the decades, that it's grown at a very significant rate. But I don't want to push anybody to do it. It grew at $1,800,000,000 the first quarter.

Now, there are a few special transactions in that, but we seem to attract special transactions.

There's nothing more important to Berkshire than to — to have that float, at least, be maintained, but I would say grow. And it will grow, I think. And to have it be obtained at low cost.

That float did us no good last year at all. That float was — lost us a lot of money in the year 2001, because it cost us, I think, 12.8 percent. And we didn't have a way to make money with 12.8 percent money.

We will make a lot of money if we can obtain a float at no cost, as we did in the first quarter.

The answer to your question is that without knowing any specifics that — without being able to promise you any specifics — you know, I think the float is more likely to grow than to erode.

I said last year at this meeting that there — you know, that the float of the American property-casualty business was 300-and-some billion, and I thought we were sneaking up on 10 percent of it.

I was corrected later on. Ferguson pointed out to me that — he sent me the figures. The float of the American property-casualty business is well over 400 billion.

But even at that, you know, we are 8 or 9 percent, or some figure like that, of the float of the whole country.

And, obviously, we can't grow at the same percentage rate starting from that kind of a base as we could when we started back in 1967.

But I still think we can grow it.

Charlie?

CHARLIE MUNGER: Yeah, I think the questioner realizes that growing float at a good clip, with very low costs, is extremely difficult.

It is. It's almost impossible. But we intend to do it anyway. (Laughter)

WARREN BUFFETT: See, of the two variables, though, that the most important thing to do is to focus at getting it at a very low cost. If we get $37 billion at no cost, or very low cost, you know, then if we don't do — if we don't make money with that, shame on us.

I mean, the troops have delivered and then it's up to Charlie and me to figure out ways to use that money.

So the important thing is the cost of the float and not the size of the float, although, obviously, we would like it to grow and we will do what we can to make sure that happens.

16. Asbestos liability risks and opportunities

WARREN BUFFETT: Area 3.

AUDIENCE MEMBER: Good morning, gentlemen. My name is Hugh Stephenson. I'm a shareholder from Atlanta.

My question is on asbestos liability tort cases. It seems like this is growing to be a bigger and bigger problem, including more and more companies, including a number of companies in the Dow Jones 30 industrials.

What do you see for Berkshire as the risks and opportunities in the operating and insurance businesses?

And, if you two were in charge of writing or structuring a settlement for the whole problem, how would you do it?

WARREN BUFFETT: OK, I'm going to let Charlie tackle most of that, because he's — we've both done a lot of thinking on it. I think Charlie's thinking is — I know — it's better, and it may even be more extensive.

Asbestos, as I mentioned in some of these retroactive contracts, is a big part of the liability, but it really doesn't make any difference, unless — it's much more dependent on the speed of payments than the amount of payment.

We are capped on all those types of contracts.

So, there's a figure in the annual report about aggregate asbestos and environmental liability. And that number may look quite big compared to some other insurance companies — but most of that, there's a limit on.

And, it's a good thing, because asbestos continues to explode. It's just — we talked about it last year at this meeting, and I said no matter how bad you thought it was, it was going to be worse. And it has been worse. And it will be worse.

And you make a very good point when you bring up the fact that many companies that are thought to be, or have been thought to have been, insulated from the asbestos litigation have now been dragged in one way or another. And that won't stop, either.

Ironically, it's not impossible that that asbestos litigation actually produces some opportunities for Berkshire, in terms of buying companies out of bankruptcy, free of their asbestos liabilities.

We did that — although it occurred much earlier in the — but we bought Johns Manville, which was the, in my memory, was the first major company, really big company, to go into bankruptcy and be forced there by asbestos liability. That happened back in the early '80s.

And that subsequently, they were cleansed of their liability by, in effect, giving a very high percentage of the company and its debt to the plaintiffs. And their lawyers, I might add.

And when we came along a year ago, I mean, that was all past history. But we probably wouldn't own the Johns Manville company if it hadn't been for some asbestos litigation that started 20 years ago or more.

We may see, actually, more companies that end up in Berkshire that have been forced into bankruptcy through asbestos.

But it is a — it's really a cancer on the American corporate world. And it's one that growing. And I think I'll let Charlie talk about it.

CHARLIE MUNGER: Well, the asbestos liability situation in the country is morphed into a very disadvantageous situation where there's an enormous amount of fraud.

And the wrong people are getting money, and there are vast profits for people who are arranging the fraud. And so it isn't a good situation.

There's also real liability to people who have serious injuries, and some of those people are being deprived because the meritless claims are taking so much of the money that there isn't adequate money for the people who had the worst injuries.

The Supreme Court has practically invited Congress to please step in and create a solution, but, deterred by the plaintiffs contingency fee bar, Congress has refused to do anything.

This is not a good situation, and if you can do anything about it, why, I would encourage you to do so.

WARREN BUFFETT: What do you think it will look like in five years, Charlie?

CHARLIE MUNGER: I would be surprised if there were a constructive solution. I think we'll have more of the mess we have now.

WARREN BUFFETT: It's huge, too. I mean, you — there are companies that some of you may own stock in that had huge potential liabilities.

They didn't think they had those liabilities, even, maybe, a few years ago. But, they're finding ways to drag in almost anyone.

And, you know, it's a concern when we buy businesses, because we are a deep pocket. And a tiny — a smaller — company may not have been worth people investing lots of hours on a speculative idea that they could create some kind of a connection with, you know, the ABC Company and hundreds of thousands of people that are claimed to be sick.

But, it gets more interesting if Berkshire — it could get more interesting — if Berkshire's involved.

So, it's a real problem for corporate America and they have not been able, in effect, to come up with a solution.

There was a solution, as I remember, and the Supreme Court didn't allow it. Isn't that right, Charlie?

CHARLIE MUNGER: That's right.

WARREN BUFFETT: Yep.

We will be very careful, both in our insurance operations, but just as importantly, in our acquisitions and all of that, in terms of avoiding unnecessary exposure to asbestos liability.

I'm not terrified at all about our insurance operation, in terms of what's there from the past.

I'm not saying that I know with any precision what the amounts will be, but I — that is not at the top of my list.

But, essentially you will have a plaintiffs bar that, going beyond asbestos, will try to turn any kind of human adversity into a claim against somebody that's got a lot of money.

And that's going on with mold. I mean, you may have seen Ed McMahon is suing his insurer for $20 million for the mold in his house. I just wish I could get some of that mold. I mean — (laughs) —

CHARLIE MUNGER: You probably have it.

WARREN BUFFETT: Yeah. (Laughter)

I hope you're referring to the house. (Laughter)

17. How to pick a stock index fund

WARREN BUFFETT: OK. Area 4.

AUDIENCE MEMBER: Good morning. My name is Tedd Friedman. I'm from Cincinnati, Ohio.

You said in the 1996 annual report that most investors will find that the best way to own common stocks is in an index fund that charges minimal fees.

Two questions. First: there are a lot of different index funds that hold different baskets of stocks. What criteria would you use, or recommend, to select an appropriate index fund?

Second: The price-to-earnings ratio of the S&P 500 is significantly higher than its historical average. What benchmark should an investor use in purchasing this index?

WARREN BUFFETT: Yeah, I would say that in terms of the index fund, I would just take a very broad index. I would take the S&P 500, as long as I wasn't putting all my money in at one time.

If I were going to put money into an index fund in relatively equal amounts over a 20 or 30-year period, I would pick a fund — and I know Vanguard has very low costs. I'm sure there are a whole bunch of others that do. I just haven't looked at the field.

But I would be very careful about the costs involved, because all they're doing for you is buying that index. I think that the people who buy those index funds, on average, will get better results than the people that buy funds that have higher costs attached to them, because it's just a matter of math.

If you have a very high percentage of funds being institutionally managed, and a great many institutions charge a lot of money for doing it and others charge a little, they're going to get very similar growth results but different net results.

And I recommend to all of you reading — John Bogle's written a couple of books in the last five years, and I can't give you the titles but they're very good books, and anybody investing in

funds should read those books before investing, or if you've already invested, you still should read the books. And it's all you need to know, really, about fund investing.

So I would pick a broad index, but I wouldn't toss a chunk in at any one time. I would do it over a period of time, because the very nature of index funds is that you are saying, I think America's business is going to do well over a — reasonably well — over a long period of time, but I don't know enough to pick the winners and I don't know enough to pick the winning times.

There's nothing wrong with that. I don't know enough to pick the winning times. Occasionally, I think I know enough to pick a winner, but not very often.

And I certainly can't pick winners by going down through the whole list and saying, this is a winner and this isn't and so on.

So, the important thing to do, if you have an overall feeling that business is a reasonable place to have your money over a long period of time, is to invest over a long period of time, and not make any bet, implicitly, by putting a big chunk in at a given time.

As to the criteria as to when you should or shouldn't, I don't think there are great criteria on that.

I don't think price-earnings ratios, you know, determine things. I don't think price-book ratios, price-sales ratios — I don't think any — there's no single metric I can give you, or that anybody else can give you, in my view, that will tell you this is a great time to buy stocks or not to buy stocks or anything of the sort.

It just isn't that easy. That's why you go to an index fund, and that's why you buy over a period of time. It isn't that easy.

You can't get it by reading a magazine. You can't get it by, you know, watching television. You can't — you'd love to have something that said, you know, if P/Es are 12 or below or some number, you buy, and if they're 25 or above, you sell.

It doesn't work that way. It's a more complex business than that. It couldn't be that easy when you think about it.

So, if you are buying an index fund, you are protecting yourself against the fact that you don't know the answers to those questions but that you think you can do well over time without knowing the answers to those questions, as long as you consciously recognize that fact.

And, you know, I would — if you're a young person and you intend to save a portion of your income over time, I'd just say, just pick out a very broad index — I would probably use the S&P 500.

But I think if you start getting beyond that — starting to think you should be in small caps this time and large caps that time, or this foreign stock — and as soon as you do that, you know, you're in a game you don't know — you know, you're not equipped to play, in all candor.

That would be my recommendation.

Charlie?

CHARLIE MUNGER: I think his second worry is that common stocks could become so high-priced that if you bought index funds, you wouldn't expect to do very well.

I didn't think I'd live long enough to think that was likely to happen, but now I think that may happen.

WARREN BUFFETT: But, probably what you're saying there is they could get to a level and be at — they'd have to be at a sustained level like that for a long time.

CHARLIE MUNGER: They could be there and stay there for a long time.

WARREN BUFFETT: In which case, you might make 3 or 4 percent.

But would there be any way better than that around, under those circumstances, anyway? And pass the peanut brittle, please. (Laughs)

CHARLIE MUNGER: Well, in Japan, where something like this happened, the returns from owning a nice index over the last 13 years or so is negative.

Can something as horrible as that happen here? I mean, is it conceivable? I think the answer is yes.

WARREN BUFFETT: But the option in Japan, of course, is to have deposits in a bank, or own Japanese bonds, at somewhere between 0 and 1 or 1 1/2 percent.

So, if rates on everything get very low, which means stocks sell very high, you know, then it just means that you live in a different world than existed 20 or 30 years ago when, generally, capital got paid better.

CHARLIE MUNGER: I must say that we have very good packaging.

WARREN BUFFETT: Yeah. (Laughs)

Normally he does this in a less formal manner, but he's on his good behavior today.

CHARLIE MUNGER: We're protecting the integrity of the peanut brittle.

WARREN BUFFETT: That is true. The package — the nature of anything with butter in it, you know, is that it starts going downhill from the moment you make it. And therefore, the packing has to be extraordinary in order to meet the quality standards that Charlie and I insist on. (Laughter)

18. Effect of 9/11 on insurance underwriting

WARREN BUFFETT: OK, we'll go to zone 5.

AUDIENCE MEMBER: Mr. Buffett and Mr. Munger, my name is Thomas May (PH). I am 12 years old. I live in Kentfield, California. This is my fifth annual meeting.

I know you lost a lot of money as a result of 9/11. But I would like to know how 9/11 changed your life and your investment strategy?

WARREN BUFFETT: Well, I think it, in a sense, is changing — good question.

And, it made everybody, I think, in the country aware, I mean, we've gone through world wars and all of that, and essentially felt quite protected within these borders.

And I have been quite worried about — Charlie can attest to — you know, the possibility, particularly of some kind of nuclear device in this country, by — probably more likely by terrorists than by some, at least, declared act of war by another state.

And 9/11 made everybody realize that as humans have not progressed, particularly, in terms of how they behave with each other over the years, they have progressed enormously in their ability to inflict damage on those they hate for one reason or another.

And that has increased, you know, for a long time. In the world, if you didn't like somebody, the most you could do was throw a rock at them.

And that went on for millennia, and then it moved into what you might characterize, ironically, as more advanced states. And in the last 50 years, it's increased exponentially.

And so now people who are megalomaniacs, or psychotics, or religious fanatics, or whatever, and who hate others in some unreasonable way, now have means at their disposal to inflict a whole lot more damage, incredibly more damage, than they had not too many decades ago.

And 9/11 brought that home to everybody, something they probably understood subconsciously and didn't think about very often, to something they thought about much more intensely and it's become much more real to them.

It hasn't really changed my view about — I mean, in the sense that I — you know, there are millions and millions and millions of people in the world that hate us. And most of them can't do anything about it.

But, a few have always tried to do something about it, and now the instruments they can use, in the most extreme, in a sense, being the human bombs that have appeared in the Middle East, but there's more ability to — incredibly more ability — for the deranged who want to inflict harm to do harm. And that's the reality.

In terms of the business aspects of it, in your question, obviously the area at Berkshire that it effects most significantly, by miles, is insurance.

And prior to 9/11, even though we recognized that there could be huge monetary damages that flowed from the activities of what I would call deranged people, we hadn't really written the contracts in such a way as to either get paid for taking that risk or to exclude the risk. In other words, we were throwing it in for nothing.

We had excluded risk for war. I mean, we knew that we'd seen what had happened in England in the 40s, and so we had taken account of something that some of us had seen with our own eyes, but we didn't take account of something that we knew is possible, but we just hadn't seen. And that's, you know, that's the human condition, to some degree.

Since September 11th, everybody in the insurance business recognizes that they had exposures that they weren't charging for, and they either had to exclude those exposure or they had to charge for them.

We have written — first thing we had to do, of course, is we had lots of policies on the books that left us exposed to this, and most of those policies ran for a year, starting at different points. Those have run off to a great degree, but they're not entirely run off.

The other thing we did was on new policies. We have sold a fair amount, quite a large amount, of terrorism insurance that excludes what we call NCB, nuclear, chemical, and biological, as well as fire following nuclear.

And, we can take a fair amount of exposure to that sort of terrorism, because it doesn't — it won't aggregate. It aggregated at the Twin Towers in a way that — World Trade Center — in a way that just about was as extreme as you could get for non-NCB-type activities.

I mean, that was a huge amount of damage done without nuclear, chemical, or biological.

But we can have tens of billions of dollars with NCB excluded throughout a greater New York area, or something, but we can't have hundreds of billions of exposure that would be exposed, say, to, nuclear activities, because there an act or two, or three, coordinated, could cause damage that would destroy the insurance industry.

And if we had coverage on that, it would destroy us as well. So, we write very little — we do write a little, because we can take —we can lose a billion or two billion dollars, and if we got paid appropriately for taking the risk, you know, that's a business we're in.

But we can't lose 50 or 100 billion dollars. And, so we take a little bit — we take a few risks that involve nuclear, chemical, or biological, but, generally speaking, the terrorism insurance that we're writing, and we've written a fair amount of it, excludes those particular risks.

You can say, you know, take biological. How could that be something significant from an insurance standpoint?

Well, many people don't realize it, but the World Trade Center loss was, by a huge margin, the largest workers' compensation loss in history.

We think of it as property damage, but, in the end, close to 3000 people had died who were working at the time they died, and therefore, covered by workers' compensation.

If the same thing had happened at Yankee Stadium while they were all watching a baseball game, or some other place, they wouldn't have been covered by workers' compensation. So it was happenstance, to some degree.

But that was — became the largest workers' compensation loss in history by a huge margin.

Now, if you were trying to cause huge damage in this country, and you could figure out something in the way of a biological agent — and there are people working on this — that could be injected into the ventilation systems, or whatever, of large plants, large office buildings, you could create workers' compensation losses that, you know, would just totally boggle your mind.

And anybody that was working on such a thing, you have to expect they would — if they thought they had perfected it — would try to do something close to simultaneously in areas where there would be thousands and thousands of people working. And it could make the World Trade Center loss look like nothing.

So, we have to be, basically, vigilant, in how much risk we let aggregate in something of that sort.

People have always been vigilant about how many houses they'll insure along a shoreline, or, in terms of physical risk, you know, they don't want too many homes or factories on the San Andreas Fault, or something of the sort, because they recognize that as having aggregation possibilities.

But now you have to think about things that man may plan in the way of catastrophes that will have aggregation possibilities, and that is something that's pretty much been introduced into the insurance world's thinking since September 11.

And I can tell you, you know, we think a lot about it. But — I mean, the social consequences are far worse than insurance, but we have to think about how we'd pay our claims, because if we ever do anything really foolish and endanger — take an aggregation — that would cause us to lose the net worth of Berkshire, we would not only not be able to pay the claims of the people in that disaster, but there are other people that suffered injuries 15 years ago, paraplegics and all that, that we're making payments to for the rest of their lifetime. And we wouldn't be able to make those payments. And we're not going to run our business that way.

Charlie?

CHARLIE MUNGER: Yeah. To the extent that September 11th has caused us to be less weak, foolish, and sloppy, as we plainly were in facing some plain reality, it's a plus.

We regret, of course, what happened, but we should not regret at all that we now face reality with more intelligence.

This inconvenience that we all have, this tightening of immigration procedures, etc., should have been done years ago.

WARREN BUFFETT: The most important thing in investments is not having a high IQ, thank God.

I mean, the important thing is realism and discipline. And you don't need to be extraordinarily bright to do well in investments, if you are realistic and disciplined.

And the same thing applies in insurance underwriting. It is not some arcane science that, you know, the ability to which to do successfully is given only to a few, or which requires the ability to do — mathematics have very little to do with it.

There's an understanding of probabilities and all that, a kind of gut understanding, that's important. But it does not require the ability to manipulate figures — does not — you know, you can do it without calculus, you can do it — you can really do it with a good understanding of arithmetic and an inherent sense of probabilities.

As Charlie says, to the extent that — I think we've always, from the investment standpoint, you know, if we've had any distinguishing characteristics, it would be that, in terms of realism and discipline.

And generally that means finding what you don't know.

In insurance underwriting, it's the same thing. You have to have — you have to be realistic about what you can understand and what you can't understand, and therefore, what you can insure and what you can't insure.

And you have to be disciplined about turning down all kinds of offerings where you're not getting paid appropriately.

And September 11th drove home those lessons and probably redefined getting paid appropriately in certain cases.

19. All banks aren't the same

WARREN BUFFETT: Area 6?

AUDIENCE MEMBER: Hello. My name is Everett Puri (PH). I'm from Atlanta.

I wanted to ask you to comment on the relative P/E multiples of bank stocks versus the S&P.

They seem to be at 30, 35 to 50-year year relative lows to the S&P, and I was wondering if that's the result of the market — a change in the market's perception of the forward growth rates of banks or if the market has perceived that there's a change in risk there.

WARREN BUFFETT: You're asking about the performance of what group compared to the S&P?

AUDIENCE MEMBER: Banks.

WARREN BUFFETT: Banks? Well, and what was your assertion about the performance, historically?

AUDIENCE MEMBER: Well —the relative multiple of bank stocks versus the S&P.

Back in the '40s — '40s, '50s, '60s, they commonly traded at, say, one times the S&P multiple and now they're maybe half that level.

WARREN BUFFETT: Yeah. Harry Keith (PH) used to have a lot of figures on this.

I don't really think about them. I mean, the appropriate multiple for a business, relative to the S&P, will depend on what you expect that business to achieve in terms of returns on equity, and incremental returns on incremental equity, versus that S&P.

I mean, if you've got two types of businesses, and we'll say the S&P earns X on equity, and can deploy an additional amount of capital at Y, and then you compare that with any other business, and that's how you determine which one is cheaper.

I would not characterize all banks as the same. I mean, we have in this room John Forlines, who runs the Bank of Granite — Granite, North Carolina — and they've earned 2 percent on assets without taking any real risks for decades. It's a tremendous record.

And then you have other banks that have been run by people that took them right into the ground.

I mean, whether it was First Pennsylvania, going back 30 years ago, I think it was John Bunting, and they — they're not a homogeneous group.

We own a couple of — stock — in a couple of banks. We own stock in M&T, that has an exhibit downstairs today. We own stock in Wells Fargo. And we think those institutions are somewhat different than other businesses.

So, I don't think there's — it goes back to that earlier question.

People always want a formula. You know, they — I mean, they go to the Intelligent Investor and they think, you know, somewhere they're going to give me a little formula and then I can plug this in and I know I'll make lots of money. And it really doesn't work that way.

What you're trying to do is look at all the cash a business will produce between now and judgment day, and discount it back at a rate that's appropriate, and then buy it a lot cheaper than that.

And, whether the money comes from a bank, whether it comes from an internet company, or whether it comes from a brick company, the money all spends the same.

Now the question is, what are the economic characteristics of the internet company or the bank or the brick company that tell you how much cash they're going to generate over long periods in the future.

And I would come to a very different answers, you know, on M&T Bank versus some other bank.

So, I wouldn't want to have a single yardstick, or a, you know, relative P/E that I went by.

I think that banks have sold — a good many banks have sold — at very reasonable prices.

We bought all of a bank in 1969. We bought a bank in Rockford, Illinois.

Charlie and I went and looked — we must have looked at a half a dozen banks at that — you know, in a two or three-year period.

CHARLIE MUNGER: Absolutely.

WARREN BUFFETT: Yeah. We trudged around and we found some very oddball banks that we liked.

And they were characterized by very little risk on the asset side and very cheap money on the deposit side. And even Charlie and I can understand that. And low prices, incidentally, too.

And then they passed the Bank Holding Company Act in 1969, and they killed off our chances to do anything further in buying all of banks.

So, we look at banks. We will own bank stocks from time to time in the future. We'll probably buy stocks in other banks.

We've also seen all kinds of banks ruined. I think it was, what was the fellow? M.A. Schapiro, who came up with the statement, he said, "There are more banks than bankers."

And if you think about that a bit, you'll see what I mean. (Laughter)

There have been — you know, there have been a lot of people that have run banks in a very injudicious manner, but that's made for opportunities for other people.

A lot of banks have disappeared over time. I mean, up in Buffalo, where Bob Wilmers runs M&T, there were some other very prestigious institutions that went right down the tubes. And a lot of that happened in the early '90s or late '80s.

I wouldn't look for a single metric like relative P/Es to determine what — how — to invest money.

You really want to look for things you understand, and where you think you can see out for a good many years, in a general way, as to the cash that can be generated from the business.

And then, if you can buy it at a cheap enough price compared to that cash, it doesn't make any difference what the name attached to the cash is.

Charlie?

CHARLIE MUNGER: Yeah, I think the questioner is, maybe, even asking the wrong people that question.

I would argue that Warren and I have failed to properly diagnose banking. I think we underestimated the general good results that would happen because we were so afraid of what non-bankers might do when they were in charge of banks.

WARREN BUFFETT: There are a number of banks, that over the last five or six years, on tangible net worth, the number net of goodwill, but on tangible net worth have earned over 20 percent on equity.

You would think that would be difficult for an industry to do dealing in a commodity like money, and, of course, the banks will argue it's not a commodity — but it's got a lot of commodity-like characteristics —and you would think those kind of returns in a world of 6 percent long-term interest rates and much lower, you would think that would be very hard — well, you would have though it wouldn't have occurred, you'd think it would be hard to sustain.

We been wrong in the sense that banks have earned a lot more money on tangible equity than Charlie and I would have thought possible.

Now, I think, to some extent, they've done because they stretched out equity much further than was the case 20 or 30 years ago.

I mean, they operate with more dollars working per dollar of equity than people thought was prudent 30 or 40 years ago.

But, however they've done it, they've earned — a number of banks have earned — very high returns on equity in recent years.

And, if you earn high enough returns on equity and you can keep employing more of that equity at the same rate — that's also difficult to do — you know, the world compounds very fast.

You know, banking as a whole has earned at rates that are well beyond, on tangible equity, you know, well beyond, I think, what much more glamorous businesses have earned in recent years.

Charlie, you have any further thoughts on that?

CHARLIE MUNGER: No, I say again, we didn't diagnose it as it actually turned out and, even worse than that, we haven't changed. (Laughter)

WARREN BUFFETT: And even worse than that, we won't. (Laughter)

20. Detecting fraud and the evils of EBITDA

WARREN BUFFETT: Area 7.

AUDIENCE MEMBER: Good morning, Mr. Buffett and Mr. Munger. My name is Andrew Sole, and I'm a shareholder from New York City.

I have two questions. The first one, I'd like to direct to Mr. Munger.

Pertaining to cash flow analysis, given the practices of numerous corporations of deliberately fabricating cash flow numbers, which occurred in some of the telcos, where they characterized like-kind exchanges as product sales.

How do you ferret out this type of fraud? What do you recommend a shareholder, an individual investor, to do, short of obtaining a degree in forensic accounting to uncover this type of fraud?

And the second question is, on a lighter note, what books would either of you gentlemen recommend to shareholders that you read this year that you liked?

CHARLIE MUNGER: Yeah. I think you're asking for a lot if you want some simple way of not being taken in by the frauds of the world.

If you stop to think about it, enormously talented people deliberately go into fraud, drift gradually into it because the culture carries them there, and the frauds get very sophisticated and they're very slickly done.

I think it's part of the business of getting wisdom in life that you avoid getting taken by the frauds.

And so I think you're asking a very good question, but I don't think there is any short answer.

I think there are whole fields that you can just quit playing because it looks like there's too much fraud in it.

And I think we do a lot of that, don't we, Warren?

WARREN BUFFETT: Yeah. How many times have we been defrauded in the last 20 years?

CHARLIE MUNGER: Well, damn little that we can — it's amazing how little.

WARREN BUFFETT: Yep.

CHARLIE MUNGER: And I've always said that the guy who takes us is going to have a modest little office and a modest demeanor and —

WARREN BUFFETT: He'll carry around Ben Franklin's autobiography, I can —

CHARLIE MUNGER: The kind of people who defraud us are not going to be the kind of people who are defrauding everybody else.

WARREN BUFFETT: Yeah. I mean, it's a very good question. It's tough to answer.

But I will tell you that we haven't, and we won't get defrauded often. Now, that may mean we pass up a whole lot of other opportunities, too.

But, for example, you raised the question about cash flow. I would say the number of times we're going to buy into a company, whether it's through stocks or through the entire company, where people are talking about EBITDA, is going to be about zero.

I mean, we start out with — if somebody's talking about EBITDA, you know — if we take all the people in the world that talk about EBITDA and all the people in the world who haven't talked about EBITDA, there are more frauds in the first group, percentage-wise, by a substantial margin. Very substantial. I mean, it is, you know, it's just a start.

Now, that isn't — you know, that — it's very interesting to me. If you look at some enormously successful companies, Walmart, General Electric, Microsoft, I don't think that term has ever appeared in their annual reports.

I mean, they just — so when people start talking about that sort of thing, either they're trying to con you in some way, or they've conned themselves, to a great degree. I mean —

CHARLIE MUNGER: Or both.

WARREN BUFFETT: Yeah. Well, that often happens. I mean, if you set out to con somebody, after a while you con yourself, which is why some of the people in the internet stocks, you know, stayed with them.

It's — if somebody is — if they think you're focusing on EBITDA, they may arrange things so that that number looks bigger than it really is.

It's bigger than it really is, anyway. I mean, the implication of that number is it has great meaning.

You take telecoms, they're spending every dime that comes in, I mean, in many cases.

There isn't — it isn't cash flow. I mean, the cash is flowing out. But it — you know, you can look at the statement and there's billions of dollars, supposedly, in depreciation and so on. But there — you know, interest is an expense.

Actually, taxes are going to be an expense. Anybody that tells us that making a lot of money before taxes, in terms of EBITDA, is meaningful — you know, you get depreciation by laying out money ahead of time. It's the worst kind of expense.

We look for float, where we get the money and then pay out later on. But depreciation occurs because you buy an asset first and then you get the deduction later on. It's the worst kind of expense there is.

And you start paying taxes when you actually make money, and when the depreciation runs out at some point.

So these — it just amazes me how widespread the usage of EBITDA has become, and I would say there have been people who have tried to dress up financial statements in a way to appeal to people who are impressed by such a number.

Charlie and I have found, actually, that — at least to us — many of the crooks look like crooks.

Now, we have spotted — we haven't shorted them — but we have spotted a lot of frauds over the years in public companies. And years before, you know, that the roof fell in.

And they usually are people that tell you things that are too good to be true, for one thing.

I mean, they, you know, they tell you very mediocre businesses are wonderful businesses for one reason or another. Or they — they just have a smell about them, you know, in effect.

Wouldn't you say that's true, Charlie?

CHARLIE MUNGER: Well, sometimes it's amazingly obvious. Maxwell, of England, his nickname was the "bouncing Czech."

And three weeks before he went under, Salomon —

WARREN BUFFETT: (Inaudible)

CHARLIE MUNGER: — Salomon was aggressively seeking more business from him, with both Warren and I on the board. It shows how much influence outside directors often have.

WARREN BUFFETT: Yeah. Wall Street is —

CHARLIE MUNGER: Imagine extending credit to a guy whose nickname is the "bouncing Czech." You'd think it — if you wrote it as satire, people would say it was too extreme to be funny. (Laughter)

WARREN BUFFETT: We have read — I mean, Charlie and I have — it's a hobby keeping track of the Maxwells of the world, and the —

They get — there's a syndrome. I mean, they give off a lot of the same messages.

I mean, Maxwell was a classic case, but there — time after time — Wall Street has no filter against them. Wall Street loves them, as long as, you know, as long as they're pushing out securities and the commissions are there.

Charlie and I could not have stopped Salomon from making a deal with Maxwell, you know, right to the last 30 seconds before he sunk, you know, under the ocean.

CHARLIE MUNGER: We didn't stop First Normandy with Lou Simpson and Warren Buffett and Charlie Munger on the board.

WARREN BUFFETT: Yeah. First Normandy was a case of some guy that manufactured a record out in California that he claimed was from owning a bunch of securities, including Berkshire Hathaway.

And, he was going to go public and Salomon was courting him. And this — the record was, you know, it was total baloney.

And I think they actually went public for a day or so and then the SEC pulled it back.

CHARLIE MUNGER: Absolutely. They had the offering and then they canceled it before the money changed hands.

But it was a very embarrassing episode. And we remonstrated against this obvious insanity, they told us the underwriting committee had approved it.

WARREN BUFFETT: I don't think they changed underwriting committees, either. (Laughs)

21. Quick decision to buy Larson-Juhl

WARREN BUFFETT: OK. Zone 8.

WARREN BUFFETT: We're a cheery group up here, aren't we, on the human condition?

AUDIENCE MEMBER: Good evening from Germany. My name is Norman Reinzhoff (PH). I'm a shareholder for about 10 years. And I want to thank you gentlemen for your long-term performance.

I brought you two of my favorite German chocolates. One for you, Mr. Buffett. One for you, Mr. Munger. And I will give them to you tomorrow at the steak house.

WARREN BUFFETT: How much do they sell for a pound? I'm just curious. (Laughter)

AUDIENCE MEMBER: Well, by the way, this is not the chocolate company you wrote to two years ago.

WARREN BUFFETT: Oh.

AUDIENCE MEMBER: They were sold about a week ago for a very low price.

WARREN BUFFETT: Is that —

AUDIENCE MEMBER: This can still be fixed. (Laughter)

My question is concerning that what you were just describing as smelling.

And, I mean, you told us in former shareholder meetings that if management loves money, do not invest.

If they love what they do, preferably if they come tap dancing to the office every day, and all other things are right, then invest.

That resonated to me very good with the biblical truth that not money itself, but love for money, is the root of all evil.

As a principal that once made once made Prussia the largest of all kingdoms, namely the ethos of doing a job for its own sake.

You tell us in this year's report that you buy a company after talking to the owners for no more than 90 minutes.

I'm wondering what kind of — is it the wisdom of experience, just like you described it, or do you do more background work before talking to the owners for 90 minutes?

What's the process like? Do you do background checks or do you talk to competitors?

Do the other people in headquarters do that work for you? How does this whole thing work?

WARREN BUFFETT: Well, it's a very good question. And all of the things you suggest might well make sense. I mean, talking to competitors, talking to ex-employees, talking to current employees, talking to customers, talking to suppliers, all of those things Phil Fisher laid out in a book over 40 years ago, and we have done a fair amount of that over the years.

But, Charlie would have behaved exactly the same way I did on the company you're referring to.

I got a call from Craig Ponzio in December, on a Monday. It was about a company that made custom picture frames.

I'd never heard of the company before. I'd never heard of Craig before.

I didn't talk to him on the phone much more than 15 minutes. He's a very — he'd be here today but his wife became seriously ill, at least we hope it's not serious, but at least there was a

problem last night — but Craig talked to me, maybe 20 minutes. And, you can tell when — I mean, it's just all the difference in the world.

And he laid out what the custom frame — how the — custom frame picture business works, and it's not complicated.

I hadn't thought about it for 10 seconds in my whole life up till then, you know. I'd had some pictures framed — you know, I get around (laughs)

But it's not hard — I mean, if you think about it for 30 seconds, you — the economics of the industry will sort of make themselves manifest to you.

There are 18,000 or so framers in the country. It's a small business. So you're dealing with thousands of people.

Now, what's important to those thousands of people that you're dealing to? They're doing 250 thousand, or 300, or 400 thousand dollars of business a year, and they have customers who come in periodically — like I come in once every three months, or every six months, and say, here, I'd like a frame, and they may ask me about what kind of frame I want or I may leave it up to them.

It's a service operation to a very great degree. And Craig built something starting with, in 1980 or so, with 3 million of sales, he built an organization that became enormously responsive to these 18,000 or so framers.

They call on those people five or six times a year. They get 85 percent of the frames to those people the next day when they order them. That's what counts in that kind of a business.

You know, you're not supplying the Big Three with auto parts. You're not — there's all kinds of things that give it a distinctive economic character.

So Craig told me about that, like I say, in not more than 20 minutes. And he told me the price and he told me the capital that was employed and he gave me some — a few figures.

I knew in talking to him that he had a deal that made sense, you know, and I said, when can you come in? That was on a Monday. He said, I'll be there Wednesday morning. And he came with Steve McKenzie, who is here today, and who I encourage you to meet, and I think they got there at nine and they left at 10:30, and we'd shaken hands.

I was hoping to see Craig at the — today — or tomorrow — but I won't because of this illness.

But, I haven't seen Craig since, you know. I mean, we made — he got this money, he knew he was making a deal, he had a reason why he wanted — he wanted to sell it to somebody that

would be sure to close, that would be a good owner, where the people who worked there wouldn't be worried because he was leaving.

He was leaving with a lot of money, and, you know, people — he wanted to be sure — a lot of people leave with a lot of money and they leave the employees behind and they don't care what happens. But this guy cared. And I could tell that, and that's a big plus with me.

So, you know, I have not been to their headquarters yet. I plan to be at their headquarters. Steve, I apologize.

But I understand what the business is about. And you can — most good businesses, you can understand what they're about in a very few minutes, unless they're a kind of business that you can never understand what they're about.

I mean, there are other businesses, if you spent years on them you still wouldn't understand what the hell is going on.

I don't know which one of — which American auto company is going to the best 10 years from now. And if I spent all year talking to dealers for Ford and Chrysler and General Motors, and I talked to suppliers, and I talked to people who are driving their cars, I still wouldn't know anything about what it's going to look like five or 10 years from now.

But I know that you can't crack our custom picture frame business. I mean, you cannot figure out a way to call on those 18,000 people that are in that business and figure out a way to divert their business to you when you can't offer a frame as good as ours and you can't offer service remotely like ours. So it's a good business.

And Craig was 100 percent up — I mean, he told me exactly what he wanted to receive for the business. He wanted cash. You know, that fits us.

And there's nothing complicated about it. I mean, you can drag it out for a long time. But what would be the sense of it? I mean, if you're going to make a deal, you're going to make a deal.

Charlie?

CHARLIE MUNGER: Yeah. If you stop to think about it, the ordinary result when a big publicly-held corporation buys another corporation is that, maybe two-thirds of the time, it's a terrible deal for the buying corporation and yet the people have taken an enormous time doing it.

And we've bought all these businesses taking practically no time in doing it, and on average they've worked out wonderfully.

Why is that? That's a good question. The answer is we wait for the no-brainers. We're not trying to do the difficult things.

WARREN BUFFETT: We're for those.

CHARLIE MUNGER: Yeah. And we have the patience to wait. And then we're so peculiar that there actually are a good number of businesses in America where they prefer selling to us than to other people. That's very helpful.

WARREN BUFFETT: I just saw a review of a major company. Made 10 acquisitions in a recent five-year period.

Every one of those 10 acquisitions was preceded by due diligence and all the baloney they go through, and they probably had an investment banker's book and everything.

Not one of the 10 in 2001 lived up — or was even close — to the expectations of the presentation that was made at the time of purchase.

In aggregate, the 10 earned one-quarter of what they were projected to earn in 2001. In other words, the projections were for four times the actual earnings.

And these were companies with strategic — this is a company with a strategic, you know, acquisition department with loads of people to go over the due diligence with investment bankers, quote, "helping them," end quote, all along the way.

And, you know, and 10 out of 10 failed miserably. And, you know, you have to ask yourself, how can you produce that? Because the world didn't go to hell during that period, either. I mean, that was not a time when we went into a great depression or anything of the sort.

It's — they were getting — they were buying what was getting sold to them, and it was fulfilling some things that the management — myths — that the management had about itself. And managements have many myths about themselves.

And it isn't that complicated if you just wait for the fat pitch. And the fat pitch doesn't have to be somebody else doing something dumb or anything like that, because people don't do that.

People come to us, come for a good reason. I mean, they usually want a transaction that a) they want one they're sure to close. They want —if a deal is made — and they want one that will leave the people happy, that are at the business.

When it was announced at Johns Manville, I believe, that Berkshire was the buyer, I understand there was a standing ovation. And I've seen it at, you know, whether it's Jordan's or Star Furniture.

People are concerned. If you've been working at a company for 20 years and you know that the owning family is getting older and has some problems to take care of, believe me, they talk in the hallways about that.

What's going to happen when, you know, the family sells the place? And people worry about that.

And to have an answer for them, so that they all sleep the night that it's announced that the business has changed hands, means some —a lot — to some owners. And it doesn't mean anything to other owners.

I don't think we've ever bought a business from a financial operator. Can you think of any, Charlie?

CHARLIE MUNGER: I can't think of one.

The — you know, somebody once defined hell, in a legal system, as a place with endless due process and no justice. And we're getting close.

And similarly, in the corporate world, if you have endless due diligence and no horse sense, you've just described a corporate hell, at least for the people who own the business.

22. Buffett shows little interest in cryonic suspension

WARREN BUFFETT: Go back to zone 1.

Oh, I'm sorry. Excuse me one second. We have — we have — Mark, do we have a number of people in the music hall that —

Pardon me?

VOICE: Yes.

WARREN BUFFETT: Do we have somebody at zone nine?

VOICE: Yes.

WARREN BUFFETT: OK.

AUDIENCE MEMBER: Mr. Buffett, my name is Luke Nosek from Palo Alto in California.

The first thing I'd like is just to thank you for saving my shirt from the internet stocks for the last few years.

And, actually, it's not quite true. I lost my shirt but you did save my underpants. I bought the stock in late 2000.

And, it's actually not just been about the stock. It's about — been about — learning from you and your investment philosophy and your character.

It's been very inspiring at the beginning of my professional life to have a mentor like that.

And I would love to — (Applause)

I think it's been very inspiring for all of us for, I guess, it's been almost 50 years of your investment professional life that's been continuing to go over the top.

I'd love that — for that — to continue for a long time. I'd love to see the next 50 years.

And, I don't know if that's possible, given current medical technology, but I have some friends in biotech who have been involved in companies that do something called cryonic suspension.

And I'm curious if you've heard of it. It's the process of — or looked into it — the process of freezing people as they're dying, and —

WARREN BUFFETT: Just don't do it too early with me. (Laughter)

AUDIENCE MEMBER: It's, actually, legally, after pass away.

But even if the risks are — even if the chances of it working are very small and the discount rate is huge over a long period of time, I wonder if you'd looked into it?

What — if you would consider or think about that possibility?

And again, thank you for your service and all the lessons for the last 50 years (inaudible)?

WARREN BUFFETT: Well, I appreciate the suggestion and there probably isn't much downside to it. (Laughter)

CHARLIE MUNGER: It takes a lot of electricity to keep you frozen for all eternity. (Laughter)

WARREN BUFFETT: That's all right. We get our electricity wholesale at MidAmerican. (Laughter)

We're for anything that extends our productive years.

I must say, at 71, I can't recall ever having any more fun than I'm having now. And I think Charlie seems to be in pretty good spirits too, so it —

We are lucky to be in the business we're in. I mean, just imagine, you know, if we'd been in — been halfway athletic, or anything like that, where you're, you know, you — essentially you're limited by age.

But, there's really no — there are no problems in this business. I mean, as long as I can kind of lift the phone up (laughs) and hear Craig on the other end, or if I can't hear him, I get him to tell to Charlie and he can relay it on to me.

It's a very easy business to conduct throughout your life. And we're fortunate that way.

23. Fruit of the Loom: good management for good company

WARREN BUFFETT: Zone 10, do we have anybody?

AUDIENCE MEMBER: Good morning. My name is Pamela Harrington and I live here in Omaha, Nebraska.

And my question concerns your investment in Fruit of the Loom.

Could you tell us about how that investment fits in with your philosophy about turnaround situations and your preference for businesses that have barriers to entrance? Thank you.

WARREN BUFFETT: Yeah. Well, Fruit of the Loom got in trouble for two reasons.

One is they borrowed too much money. They borrowed about a billion, 200-million, and actually it went something beyond that because they were engaged in some other transactions that were off balance sheet and so on.

So, it was a company that, in a financial sense, was out of control. Simultaneously with that, they had a lot of operating problems, too.

But we were not going to inherit the capital structure and we were not going to inherit the management that had caused the operating problems.

But, much to our pleasure, we were going to inherit a management that had done an incredible job in running the business for a long time prior to the sins of the recent period.

And, we made a condition — I don't think there'd probably ever been a condition made to a bankruptcy court proposal — where we said our offer is not contingent on financing, it's not contingent on, you know, if war breaks out, our offer is still good and everything else.

But John — but we did make it contingent on John Holland being available to run the business, because John had done a sensational job of running the business before the difficulties of the excess leverage and operating insanities. And he was willing to come back, which was very important to us.

And Fruit of the Loom has, I don't know, between 40 and 45 percent of the men's and boy's market. It's a product that has a deserved quality image.

It's accepted in a big way by very important retailers who were disturbed by things that took place prior to, and early in, the bankruptcy, but who loved the idea of having a product like Fruit of the Loom in their stores.

And it's a very low-cost producer of a very basic product.

So, it fits us very well. And now the management can simply worry about building the brand and running plants as efficiently as possible.

And there's been some rearrangement of plants, as has happened throughout to many things connected with textiles.

But it's an absolutely first-class business. And, you know, we'd like to get a little more share in the women's market. We'd like to get a little more share in the men's and boy's market, too.

But it's made to order for us. But it's only made to order with the present management.

If we had to take on the management that was there for a few years, you know, we wouldn't have bought it for a dollar. It would have been a disaster. And it was a disaster for a while.

But fortunately, it's a little like GEICO in the mid '70s. I mean, GEICO was a marvelous company that got mismanaged in a big way for a while.

But its fundamental advantages were there throughout the period, and what you had to do was get rid of the mismanagement and get back to the basics.

Charlie?

24. Three book recommendations

CHARLIE MUNGER: Yeah, I don't have anything on that subject, but I neglected to answer the question about what books would we recommend.

The two books that I recommend this year were both sent to me by Berkshire shareholders who thought I might like them, and boy were they right.

The first is called "Ice Age," which is a description of the past history of glaciation in the last few hundred-thousand years and how they figured out what had happened and why it had happened.

And I think it's the best book of scientific explanation I have ever read. It's been published in England and it's going to be published in the United States this fall. And the airport has like 20 copies — PD Waterhouse — which they did by scrounging all of Canada.

And so, I recommend that book to you, but a lot of you are going to have to wait for the fall, I think.

The other book was "How the Scots Have Helped Create the Modern World." That's a subject that's always interested me, how a tiny, poor, little population of Celtic people had such a huge favorable impact on the world, starting from poverty.

And, of course, it's related to the Irish, who were a similar ethnic strain with a different religion.

And, it was marvelous book. And I forget the author's name, but I recommend both of those books to all of you.

WARREN BUFFETT: Yeah. I'll recommend a book which may sound a little self-serving, but it nevertheless — I think — I think this group, many of you would enjoy reading about the Berkshire managers.

And Bob Miles has brought out a book and it tells about the people who are handling your capital. And, I don't think you could have a — well, I know you couldn't have a better group.

And so therefore, if you feel like reading about them, I would — Bob has done a good job of interviewing — and I would encourage you to read about them.

And I think you'll like your investment better after you read about the managers than if you just read what Charlie and I write.

25. How to make the "right" friends

WARREN BUFFETT: Let's go back to zone 1.

We're going to break at noon, incidentally, and we'll probably break for 30 minutes or thereabouts and then we'll come back. Go ahead.

AUDIENCE MEMBER: Hello, Mr. Buffett and Mr. Munger. My name is Jesse Spong (PH) and I am 12 years old, from California.

This is my second consecutive year in attendance. My parents brought me here to learn from you.

My question is not about money. It's about friendship.

How do you remain friends and business partners for so long? And what advice do you have for young people like me in selecting true friends and future business partners? Thank you. (Applause)

WARREN BUFFETT: Well, when Charlie and I met in 1959 we were introduced by the Davis family, and they predicted that within 30 minutes we would either not be able to stand each other or we would get along terrifically.

And that was a fairly insightful analysis, actually, by the Davises, because you had two personalities that both had some tendencies toward dominance in certain situations.

But we hit it off. We have disagreed, but we have never had an argument that I can remember at all in 43 years.

And yet we both have strong opinions and they aren't the same strong opinions at times.

But the truth is we've had an enormous amount of fun together, we continue to have an enormous amount of fun, and nothing will change that, basically.

It may have worked better because he's in California and I'm in Omaha, I don't know. (Laughs)

I'll let Charlie comment on it.

CHARLIE MUNGER: Well, that's a wonderful question you've asked, because Warren and I both know some very successful businessmen who have not one true friend on earth. And rightly so. (Laughter)

WARREN BUFFETT: That's true.

CHARLIE MUNGER: And that is no way to live a life. And if by asking that question, you're asking how do I get the right friends, you are really onto the right question.

And when you get with the right friends, if you've worked hard at becoming the right sort of fellow, I think you'll recognize what you have and then all you have to do is hang on.

WARREN BUFFETT: The real question — what is — the question is what do you like in other people? I mean, what do you want from a friend?

And if you'll think about it, there are certain qualities that you admire in other people, that you find likeable, and that cause you to want to be around certain people.

And then look at those qualities and say to yourself, "Which of these is it physically or mentally impossible for me to have?" And the answer will be none, you know.

I mean, you — it's only reasonable that if certain things that attract you to other people that, if you possess those, they will attract other people to you.

And secondarily, if you find certain things repulsive in other people, whether they brag or they're dishonest or whatever it may be, if that turns you off, it's going to turn other people off if you possess those qualities. And those are choices.

You know, very few of those things, you know, are in your DNA. They are choices.

And they are also habits. I mean, if you have habits that attract people early on, you'll have them later on.

And if you have habits that repel people, you're not going to cure it when you're 60 or 70.

So it's not a complicated equation. And, as I remember, Ben Franklin did something like that one time. Didn't he list the qualities he admired, and then just set out to acquire them?

CHARLIE MUNGER: Absolutely. He went at it the way you've gone after acquiring money. (Laughter)

WARREN BUFFETT: They're not mutually exclusive.

CHARLIE MUNGER: No.

26. One thing you don't need for investing

WARREN BUFFETT: Area 2.

AUDIENCE MEMBER: Hello, Mr. Buffett and Mr. Munger. My name is Kevin Hewitt (PH) and I'm a shareholder from Chicago, Illinois. This question is for you, Mr. Buffett, and Mr. Munger.

Mr. Buffett, I've followed your career since I first read about you in the first edition of the Forbes 400 that came out in '82.

Reading your profile also led me to Ben Graham's book, The Intelligent Investor.

Since that time, I've followed the careers of — I've also followed the careers of other successful investors, such as Walter Schloss, Bill Ruane, Richard Rainwater, Robert Bass, and Edward Lampert.

In following your career, and the careers of these other highly successful investors, it's my observation and my firm belief that despite their obvious high level of intelligence and some of them having gone to some of the best schools in the country, none of these people, including yourself, were born great investors.

Every one of these, including yourself, learned to be a great investor. Graham learned from his experience. You, Bill Ruane, Walter Schloss, learned from Graham.

Richard Rainwater learned from you, Bill Fisher, and Charlie Allen, and from reading Graham.

Robert Bass and Ed Lampert learned from Richard Rainwater and, most likely, from reading Graham and Fisher as well.

These observations lead me to the conclusion that despite intellectual brilliance, although that probably helps, I've come to the conclusion that great investors are made, not born.

Do you and Mr. Munger agree with this conclusion? If so, why? If not, why not?

And if you do agree, what things would you recommend that someone do if they wanted to become a great investor?

Also, what mental attributes do you think a person should have if they want to try to become a great investor? Thank you very much.

WARREN BUFFETT: Yeah, I'd largely agree with what you said.

I would say that there — I don't know to what extent — an ability to detach yourself from the crowd, for example — I don't know to what extent that's innate or to what extent that's learned — but that's a quality you need.

I would agree totally with you that a great IQ is not needed. I mean, you do not have to be terrifically smart to do well as an investor, at all.

I would say you're 100 percent right that I learned from Graham first in a very, very big way, and I learned something additionally from Bill Fisher, and I learned a lot from Charlie.

And the proof is in my record, actually. From 11 to 19, I was reading Garfield Drew, and Edwards and Magee, and all kinds of — I mean, I read every book — Gerald M. Loeb — I mean, I read every book there was on investments, and I didn't do well at all.

And I had no real investment philosophy. I had a lot of things I tried. I was having a lot of fun. I wasn't making any money.

And I read Ben's book in 1949 when I was at University of Nebraska, and that actually just changed my whole view of investing. And it really did, basically, told me to think about a stock as a part of a business.

Now, that seems so obvious. You can say, you know, that why should you regard that as the Rosetta Stone? But it is a Rosetta Stone, in a sense.

Once you crank into your mental apparatus that you're not looking at things that wiggle up and down on charts, or that people send you little missives on, you know, saying buy this because

it's going up next week, or it's going to split, or the dividend's going to get increased, or whatever, but instead you're buying a business.

You've now set a foundation for going on and thinking rationally about investing. And there's no reason why you need a high IQ to do that. There's no reason why you have to be born in some way.

I do think there's certain matters of temperament that may be innate, they may be learned, they may be intensified by experience as you go on, partially innate, but then reinforced in various ways by your experience as you go through life, but that's enormously important.

I mean, you have to be realistic. You have to just define your circle of competence accurately. You have to know what you don't know and not get enticed by it.

You can't be — you've got to have an interest in money, I think, or you won't be good in investing. But I think if you're very greedy, it'll be a disaster, because that will overcome rationality.

But I think the same books I read had really molded what I — how I — thought about businesses and investing. I think that they're just as valid now.

I mean, I haven't seen anything in the last 25 years, and I read — I glance through — most of the books. I've seen nothing to improve on Graham and Fisher in terms of the basic approach of going about investing, which is to think about stocks as businesses, and then think about what makes a good business.

And really, that's all there is to investing, and having a margin of safety, which Ben talks about, and so on.

It's not a complicated process, but it definitely requires a discipline.

It requires insulating yourself from popular opinion. You just simply cannot — you can't pay any attention to it. It doesn't mean anything.

So you can't — the idea of listening to lots of people tell you things, it's just a waste of time, you know. You'd be better off just sitting and thinking a little bit.

I mean, there were no analyst reports on custom frame makers, you know. It just doesn't — and they wouldn't have been any good anyway.

You just have to think, but you have to think about them in terms of their business characteristics and what they can earn on capital employed, and that sort of thing.

I would just read the, you know, I would read the Graham and the Phil Fisher books. And then read lots of annual reports, think about businesses, and try and think about which businesses you understand and which you don't understand.

And you don't have to understand them all. Just forget about the ones that you don't understand.

Charlie?

CHARLIE MUNGER: Yeah, I have a deeper level of generality.

If you have a passionate interest in knowing why things are happening, you always are trying to figure out the world in terms of why is this happening or why is this not happening, that cast of mind, kept over long periods, gradually improves your ability to cope with reality.

And if you don't have that cast of mind, I think you're destined, probably, for failure, even if you've got a pretty high IQ.

WARREN BUFFETT: I would say we've seen relatively little correlation between investment results and IQ.

I mean, not that there are a whole bunch of people out there with 80 IQs that are knocking, you know, the cover off the ball, but there are all kinds of people with high IQs that get no place.

And, yet, it's probably, in a sense, it's more interesting to look at why people with high IQs don't succeed, and then sort of cast out those factors, see if you can cast them out in yourself, and leave a residual that will work.

Because it's like Charlie always says, "All I want to know is where I'm going to die, so I'll never go there." (Laughter)

If you study the people who die financially, you know, with high IQs and say why do they die, you know, you'll see certain overwhelming characteristics that are present in most of the cases.

And you've just got to make sure that either you don't possess them, or if you do possess them, that you can get rid of them or control them in some manner.

27. Coca-Cola's domestic marketing

WARREN BUFFETT: Area 3?

AUDIENCE MEMBER: Yes. Steve Pattice (PH), shareholder from Los Angeles. Good morning, Warren and Charlie.

I'd like to address the domestic Coke business.

It seems to me that Coke has been pulling back from what former great CEO Roberto Goizueta often said, and I paraphrase, we can't control what soft drinks people buy at retail. But in public venues, including food service, we can control that.

We've all heard about the marquee lawsuits that Coca-Cola has had, such as the NFL, United Airlines, and emerging restaurant brands like Baja Fresh Mexican Grill.

But they're also losing contracts with major — or minor — league baseball, college, and high school vendors.

Furthermore, it's my understanding that our competitor PepsiCo has been the fastest-growing domestic beverage company for three consecutive years.

My question is has Coke's vision changed, and is my perception that the domestic fountain division has lost their way correct?

WARREN BUFFETT: No, I would not say that's correct, but I understand the reason for the question. Because there is the question, always, of the marquee-type accounts.

I mean, the truth is, either of the two major colas that are going to be sold and associated with, say, the Olympics or Disney World, or whatever it is, is going to lose a lot of money, if only directly thought of in terms of those contracts.

But there is that association over years. I mean, Coke wants to be where people are happy, and they want that in people's minds.

And that tends to be, you know, sporting events, it's the Disneylands, Disney Worlds, of the world.

But, in the end, can you have a determination to be at every one of them at any price? And the answer, obviously, is no.

It was sort of interesting, about five years ago, or thereabouts, Coke took Venezuela, essentially, away from Pepsi.

Pepsi — Venezuela was one of the few countries in the world in which Pepsi was the leader, and that was because the Cisneros family had developed the business down there very early.

So, Pepsi had 70 percent or 80 percent of the business. And in sort of a midnight raid, Coke bought the Cisneros operation, converted it all to Coke overnight, flew 747s in because they didn't want to have — they wanted it to be a surprise, and they just reversed the whole situation in Venezuela.

And, it actually — whether that is going to turn out to be smart or not is another question, because they paid a lot of money to do it.

But in any event, Pepsi was very upset.

And so, the University of Nebraska pouring rights came up, very shortly thereafter. And the universities, as you know, bid out these things to give sort of an exclusive to a given university.

And Pepsi came in and bid about twice as much for the Nebraska pouring — the University of Nebraska — pouring rights, as was the sort of the standard, in terms of per-student at universities throughout the country, at Penn State or something.

And I like to think that they were trying to stick it in the eye of Coke by doing that in Nebraska. And I feel that the University of Nebraska really should give me credit for about 5 million a year of contribution to the university, because I don't think Pepsi would have done it if it hadn't been Nebraska.

Now, the question is, people at Coke called me, and they said, you know, "Do you want us to go up against this?" And I said, you know, no.

I mean, it's nice to have everybody at University of Nebraska drinking Coke, but if we've got everybody at Penn State drinking Coke, I mean, it's probably worth as much, as potential Coke customers.

So, there is this bit where one organization or the other, particularly if they've lost one in the immediate past, may overbid a little for the next one.

And you know, for United Airlines, the question is how far do you let United, or whomever it is, drive you, in terms of making that specific deal.

I would say that in something like the Olympics, you know, I think Eastman Kodak made a huge mistake when they let Fuji take away the Los Angeles Olympics 20 years ago or so, because it allowed Fuji to get put on a mental parity, to a degree, with Kodak, whereas Kodak had always owned that.

And now Fuji was there with Coca-Cola and IBM and a few premier companies. And it was a mistake.

So, in the end you end up overpaying, in any kind of an objective quantitative sense, for most of these marquee properties. But you can't — it'd be foolish to think that you had to have them all.

Coca-Cola, actually Pepsi-Cola — colas have generally declined, somewhat, as a percentage of per capita consumption in the United States. And Pepsi-Cola has lost considerably more than Coke.

What has kept Pepsi doing well, basically, is Mountain Dew. Mountain Dew has been a very successful product for Pepsi, and that has gained share in carbonated soft drinks.

Carbonated soft drinks — the average person in this room drinks 64 ounces of liquid a year. Carbonated soft drinks are just under 30 percent of that. And beer and milk are each about 11 or 12 percent. They're both down from 10 years ago. Carbonated soft drinks are up substantially.

Bottled water is up somewhat, but the only two categories that are really up are carbonated soft drinks, from ten years ago, and bottled water.

Coffee is down significantly. You think Starbucks has done a lot, but coffee just keeps going down and down and down.

If you look at Coke, of the almost 30 percent of the liquids consumed in the United States, they have about 43 percent of the 30, in their arenas.

So you're talking 13 percent of all liquids, you know, tap water, everything else that the American water — the American people — drink, is a Coca-Cola product.

And it's off a couple tenths of 1 percent from the high, but it's higher than five years ago, it's higher than 10 years ago. And, actually, in the first quarter, it did quite well, too.

So, I think there's been no — I mean, I'm sure there's been no loss of marketing vigor.

Doug Daft is a marketer at heart. He's a, you know, he comes from the same — he's put together the same way as — along the same lines — as Don Keough. There'll never be another Don Keough.

But Doug is the same type of guy. He's in tune with the product.

And I would — if I had to bet, I would bet the market share of Coke, in terms of both carbonated soft drinks and in terms — actually in terms of water.

I mean, the Dasani — the gains in Dasani last year were like 95 percent, in the first quarter they were about 60 percent. Those were huge gains. And Pepsi got an earlier start with Aquafina. But Coke has almost closed that gap.

Coke is a very, very powerful marketing organization. So 18, I think, point-seven billion cases, there's nothing like it in the world.

And I do not think they've lost their focus or drive in any way whatsoever.

Charlie?

CHARLIE MUNGER: I've got nothing to add.

WARREN BUFFETT: You might try Vanilla Coke, too. It'll be out next month.

28. How long does it take to dig a moat?

WARREN BUFFETT: Area 4.

AUDIENCE MEMBER: Good morning, Mr. Buffett, Mr. Munger. My name is Jerry McLaughlin. I'm from San Mateo, California.

First, I just want to thank you for all the effort you put into the annual reports, the letters, and these conversations.

I've learned a lot, and they're terrific, which is why I'm here from half a country away. (Applause)

You know, you've said that great companies are those that have an economic moat, and I understand that phrase to mean a sustainable competitive advantage.

Do businesses begin their lives with sustainable competitive advantages, or must that be developed over a very long time?

And then, what are the fundamental bases upon which you've seen companies successfully develop sustainable competitive advantages?

Of those, which do you think is the most enduring and which is the least?

WARREN BUFFETT: Well, sometimes they can develop it very quickly.

I mean, I would say that Microsoft, in terms of the operating system, you know, that was a relatively quick development. But that was an industry that was exploding, and things were changing very fast.

On the other hand, if you go back to See's Candy, which started in 1921, you know, there was no way you could build a sustainable competitive advantage, at least that would be recognizable, in times measured shorter than decades.

I mean, you opened up one shop at a time, and nobody'd heard of you originally, and then a few people did.

And boxed chocolates were something that, you know, people may have bought once or twice a year for a holiday occasion or whatever.

So, you weren't going to embed yourself in the minds of Californians in one or two or five years just because you were turning out, you know, outstanding box of chocolates.

So it depends on the way the industry itself is developing.

Walmart has done a fabulous job in a — an incredible job — in quite a short period of time. But even they, you know, they took it in the small towns, and they progressed along, and refined their techniques as they went.

But I would say that there could be things in new industries.

I would say with NetJets, we have a sustainable competitive advantage. And that's an industry that was only originated in 1986 when Rich Santulli got the idea, and it was in its infancy — I mean total infancy — for a good many years after that.

But what he has built, and is building and fortifying, is that sustainable competitive advantage.

But it depends very much on the industry you're in.

And I mean, Coca-Cola, 1886, Jacobs Pharmacy, Atlanta, Georgia, you know, John Pemberton came up with a product. And did he have a sustainable competitive advantage that day? If he did, he blew it because he sold the place for 2,000 bucks to Asa Candler.

He did — and it took decades, thousands of competitors over that time, and — you know, but they were painting one barn at a time and designing one Saturday Evening Post ad at a time, and all of that.

And — and pebbles — you know, around the world in World War II, General Eisenhower went to Mr. Woodruff and he said, "I want a Coke within the arm's length of every American serviceman." He said, "I want something to remind them of home."

And so he built a lot of bottling plants for Coke around the world. And that was a huge impetus.

But that was, what, 60 years or so after the product was invented. So it takes — it takes a long time in certain kinds of products, but I could see certain areas of the world where a huge competitive advantage is built in a very short period of time.

I would say that probably, in terms of animated feature-length films, for example, Walt Disney did that.

And after “Snow White” and a few more, it took him a while until he could cash in on it, but he — it became Disney and nobody else in that field for quite a while, and fairly quickly.

Charlie?

CHARLIE MUNGER: Yeah, there are a lot of different models that create a sustainable competitive advantage. And there are also some models of where you can lose it very fast.

Just ask Arthur Andersen. That was a very good name in America not very long ago.

And I think it would be harder to lose the good name of Wrigley’s gum than the good name of Arthur Andersen.

I think there’s some perfectly remarkable competitive advantages that people have gotten over time.

And the great trouble with the investment process is that they’re so damned obvious that the stocks sell at very high prices.

WARREN BUFFETT: Snickers has been the number one candy bar for probably 30 or 40 years now.

CHARLIE MUNGER: Yeah, and —

WARREN BUFFETT: Well —

CHARLIE MUNGER: — in Russia, it turns out that everybody likes Snickers.

WARREN BUFFETT: What — how do you really knock it off?

You know, I mean, we make candy, we would love to displace Snickers, but it’s hard to think of ways to knock them from the number one spot.

I mean, my guess is that they’ll be number one in, you know, 10 years from now in candy bars, and the list doesn’t change much in that field because — if you think about the nature of how you make that choice as to what candy bar —

If you were chewing Spearmint chewing gum five years ago, and you buy a pack of some chewing gum today, it’s likely to be Spearmint.

I mean, there’s just things that you experiment a lot with, and there’re things that you don’t fool around with once you’re happy.

And, you know, you can understand that if you observe your own habits and people's habits around you.

But there's other — usually if something can gain competitive advantage very quickly, you have to worry about them losing it quickly, too.

I mean, when an industry is in flux, there are a lot of people that think they're the survivors, or the ones that are going to prosper, where it turns out otherwise.

29. Bullish on Coca-Cola & Gillette

WARREN BUFFETT: Area 5.

AUDIENCE MEMBER: Mr. Buffett, my name is Pete Danner (PH) from Boulder, Colorado. And I would also like to thank you two for what you bring to the game.

I heard your response to the Coke — to the question regarding Coca-Cola.

In the annual report a few years back, you described Coca-Cola and Gillette as the two "invincibles."

With Pepsi as a strong competitor today, do you still continue to view Coca-Cola as the "invincible?"

Additionally, with respect to American Express Company, with last year's financial results at American Express, how do you now view American Express?

WARREN BUFFETT: Yeah, I think the term I used was "inevitables," actually, but it's very close to the same thing.

And I would — and I think when I made that statement, I said Coca-Cola in soft drinks or Gillette in blades and razors. I mean, I did not extend them to the entire corporate portfolio, particularly in the case of Gillette, but to the blade and razor business.

Gillette now has 71 percent, by value, of the blade and razor business in the world. Just think of that. I mean, 71 percent.

Here's a product that everybody knows what it does, they know how to — you know, they know where it's sold, they know that it's a high-margin business. I mean, it isn't like the world — the capitalist world — is unaware of the money that could be made if they could knock off Gillette.

But they can't knock off Gillette, and it's 71 percent. And that's a little higher percentage than when I wrote about it.

Actually, Coca-Cola's worldwide market share is a little higher now than it was when I wrote that five years ago.

And I would say that five or 10 years from now I would be amazed if Gillette or Coca-Cola has lost market share in their respective fields.

Coca-Cola sells half, roughly, of the soft drinks in the world, and soft drink consumption per capita goes up, basically, every year, and the per capitas go up — I mean the capitas — go up every year, also.

So you get these gains, maybe they're 3 percent or 5 percent in units, or 4 percent, 5 percent in the first quarter, but it was poorer than that. I think it was 3 percent last year.

But when you have half the world, and the world's population is growing at a little under 2 percent and you're getting 3 percent or 4 percent from something as pervasive as soft drinks, you know, you are doing all right.

And it was crazy, in my view, for people to think that earnings can grow 15 or 18 percent a year in a business where units — we had half the world's business, and units are going to grow fine — but they're not going to grow anything like 15 or 12 percent or 10 percent.

The Coca-Cola business has done fine. People went crazy, in terms of valuing some of these businesses a few years back, and I think we had some cautionary language in there, generally, about the valuations at which the businesses sold.

But the businesses — at 71 percent in blades and razors, that is a — there's some countries where it's 90. In the U.S., it's also about 70 percent.

Those are huge market shares of something people use every day. In this country, you know, it's a little over eight ounces per day, more like — well ,actually more like 9 1/2 ounces per day — for every man, woman, and child in the United States, out of the 64 ounces they drink.

Well, you're not going to have galloping percentage increases from that arena. But the company's made, basically, good progress.

People got carried away from the stock — with the stock — and I would argue that they may have gotten encouraged a little bit too much by, not only Wall Street, but even by company pronouncements, in terms of attainable — possibly attainable — gains.

There aren't large companies —you know, there may be one someplace, somehow, very large now that will grow at 15 or 18 percent a year — but it just isn't in the cards in the world.

And we don't want anybody to think Berkshire can do that either, because we can't do it from a very large base. The world doesn't allow that.

But it does allow making reasonable progress, and certainly Coke and Gillette, in those areas where I said they were inevitable, have done very well.

They haven't — Gillette has not done as well with acquisitions, which is clear.

I mean, the Duracell — the Gillette acquisition of Duracell — resulted in giving 20-odd percent of the business for another business, and that business has not done nearly as well as either the management or the investment bankers thought it was going to do at the time the deal was made.

Charlie?

CHARLIE MUNGER: Well, I would say, regarding that last instance, that that's the normal result.

When you try and — you've got a wonderful business and you issue shares in it to buy another business, I'd say at least two times out of three, it's a terrible idea.

WARREN BUFFETT: Well, GEICO is a great example. GEICO is a wonderful business. Absolutely wonderful, gets more wonderful by the day, has the world's best manager, Tony Nicely, running it.

GEICO, in the last 20 years, went into three — at least three — other insurance businesses I can think of.

They went into Resolute Insurance, which was a reinsurance operation started in the mid-80s. It was a disaster.

They went into two others, Southern something or other, and another one that started with an M.

I don't know why in the hell they would go into them. I mean, they had a great, great insurance business, and there aren't that many great insurance businesses. And neither one of those amounted to anything. I think, you know, they sold them off at some point.

But why would you have an absolutely wonderful business and start one and buy two others that are obviously mediocre, where you bring nothing to the party?

But managements — it's very human to want to do that. It's no great sin that the GEICO management did it, because we see it happen time after time after time.

I can tell you this: Charlie and I have no urges like that. I mean, we want to buy easy things. We do not have to prove our manhood by doing something terribly difficult.

And I think a lot of managements feel that necessity. They've got a wonderful business —

The cigarette companies did that. Cigarette companies had these great businesses, and, you know — it irritated them that they — they liked to think they're business geniuses, so they would go out and buy other things and those other businesses, generally, did not do that well.

I'm not saying they should've been in the cigarette business in the first place, but they were not business geniuses because they made a lot of money selling an addictive, you know, product.

That did not make them business geniuses, and so they wanted to prove it other ways, and they bought businesses and fell on their face, in many cases.

Charlie, do you have any more to add on cigarette companies?

CHARLIE MUNGER: No, but I think a lot of people rise to the top in publicly-held corporations, who come up in sales or, you know, engineering, or drug development, or what have you.

It's natural to assume once you're sitting in the top chair that now you know pretty much everything.

Or at least, how to get wisdom out of this wonderful staff and all these outside advisors that are now available to you.

And so I think it's very natural that perfectly terrible acquisition decisions get made, I'd say, more often than not.

30. Staying rational and avoiding confirmation bias

WARREN BUFFETT: Area 6.

We have a break in about five minutes. In fact, we'll do this question and then we'll break.

AUDIENCE MEMBER: OK. My name's Paul Tomasik from Illinois.

I'd like to talk about your thinking, if you don't mind.

In the "Fortune" magazine article that you sent to all the shareholders, you referenced a practice by Darwin that when he found something that was contrary to his established conclusions, he quickly wrote it down because the mind would've pushed it out.

And if you read "The Origin of Species," Darwin's very careful to avoid fooling himself. He very carefully asks and answers the hard questions.

It's a feedback mechanism, and you've picked up on one of his feedback mechanisms to avoid fooling yourself.

So the two questions are this:

If you look — model — how you think, Charlie thinks, how physicists think, how mathematicians think, you see the same pattern.

You want to use logic. You're dedicated to logic. But logic's not enough. You have to avoid fooling yourself, so you build feedback mechanisms.

So the first question is, do you see it that way? That you're thinking just like mathematicians, physicists, and some of the other exceptional businessmen, by being logical and being careful to have feedback mechanisms?

And the second question is about other feedback mechanisms.

Your partnership — sitting next to you is a great feedback mechanism. Hard to fool yourself when you partner with Charlie Munger.

WARREN BUFFETT: Right.

AUDIENCE MEMBER: This meeting's a feedback —

WARREN BUFFETT: Hard to fool him, too. (Laughter)

AUDIENCE MEMBER: But that's not an accident.

The meeting is one level of feedback mechanism, the way you attack the annual report letter is a feedback mechanism.

So you could comment, both of you, on other feedback mechanisms you developed? Thank you.

WARREN BUFFETT: Well, you've come up with two very good ones. I mean, there's no question that Charlie will not accept anything I say because I say it, whereas a lot of other people will.

You know, I mean, it's just the way the world works.

And it's terrific to have a partner who will say, you know, you're not thinking straight.

CHARLIE MUNGER: It doesn't happen very often.

WARREN BUFFETT: There's no question, the human mind — what the human being is best at doing is interpreting all new information so that their prior conclusions remain intact. I mean, that is a talent everyone seems to have mastered.

And how do we guard ourselves against it? Well, we don't achieve it perfectly.

I mean, Charlie and I have made big mistakes because, in effect, we have been unwilling to look afresh at something.

You know, that happens.

But we do have — I think the annual report is a good feedback mechanism. I think that reporting on yourself, and giving the report honestly, whether you do it through an annual report or do it through some other mechanism, is very useful.

But there — I would say a partner, who is not subservient, and who himself is extremely logical, you know, is probably the best mechanism you can have.

I would say that on the contrary, to get back to looking things you have to be sure you don't fall into, I would say the typical corporate organization is designed so that the CEO opinions and biases and previous beliefs are reinforced in every possible way.

I mean, having staff surround you that know what you want to do, you are not going to get a lot of — you're not going to get a lot of contrary thinking.

I mean, most staffs, if they know you want to buy a company, you're going to get a recommendation.

Whatever your hurdle rate, if it's 15 percent internal rate of return, which very few deals ever work out at, you know, or 12 or — they're going to come back, and they're going to come back with whatever they feel that you want.

And if you arrange your organization so that you basically have a bunch of, you know, sycophants who are cloaked in other, you know, titles, you're not going to get — you are going to leave your prior conclusions intact, and you're going to get whatever you go in with your biases wanting.

And the board is not going to be much of a check on that. I've seen very, very few boards that can stand up to the CEO on something that's important to the CEO and just say, you know, "You're not going to get it."

You've hit on a terribly important point. All of us in this room want to read new information and have it confirm our cherished beliefs. I mean, it is just built into the human system.

And that can be very expensive in the investment and business world.

And, like I say, I think we've got a pretty good system. And I think that most of the systems aren't very good, that exist in corporate America, to avoid falling into the trap you're talking about.

Charlie?

CHARLIE MUNGER: Yeah, I think it also helps to be willing to reverse course even when it's quite painful.

As we sit here, I think Berkshire is the only big corporation in America that is running off a derivative book.

And we originally made the decision to allow the General Re derivative book to continue, and it's a very unpleasant thing to do to reverse that decision, yet we're perfectly willing to do it.

Nobody else is doing it, and yet it's perfectly obvious, at least to me, that to say that derivative accounting in America is a sewer is an insult to sewage. (Laughter)

WARREN BUFFETT: I would second that. I might not have chosen those exact words, and we may not even use those words in describing why we got out of it, but —

Yeah. And in the first quarter of this year, we'll show quite a bit of income — and anything we say here, we ought to put on the internet, Marc — but I think we'll show, what, 100 and, I don't know, 60 million or something like that of financial — maybe it's 140, I'll take a look here.

Well, you'll have 160-odd million of income in that funny little line we have from financials income.

But that will be after an $88 million loss, in terms of getting — the first steps — of getting out of the General Re — what used to be called General Re Financial Products — derivative book.

You know, those losses were there. I mean, some of that is a shutdown loss, 30-odd, 30 million or thereabouts is severance pay and that sort of thing.

But the truth is that derivative accounting is absolutely terrible in this country, and there are a lot of companies that will not want to face up to what would be involved if they actually got out.

Now you're seeing derivative accounting unwound at Enron, in a very major way. And believe me, it's not being unwound at a profit, except to the extent that the bankruptcy court lets them disaffirm certain contracts.

I mean, it is — there was no place where there was as much potential for phonying numbers at a place like Enron than the derivative kind of data.

They were marking-to-model, they were doing all these things.

You give a whole bunch of traders the ability to create income by putting little numbers down on a piece of paper that nobody can really check, and it, you know, it can get out of control. It will get out of control.

And so we decided, finally, to bite the bullet on it, and we'd get out of it.

And it would — incidentally, we would not have reported $88 million of loss if we'd stayed in it. Might have reported a tiny profit or something, but, in the end, you know, the loss was there.

And there will be — it could well be — some more to come in that, because once you get into derivatives — I think our longest contract may run 40 years or something like that.

The guy who put the 40-year contract on the book probably got paid, you know, that week for putting it on, virtually. And, you know, we've got a bunch of assumptions as to how it's all going to work out over 40 years. You couldn't devise a worse system.

And, in the end, you know, we didn't want to be in the business when we got in it, and we are now in the process of getting out.

But you don't get out of fast — out fast — in something like this.

I mean, it's, you know, it's a little like hell. It's easy to get into, and it's hard — very hard — to get out of. (Laughs)

Afternoon Session - 2002 Meeting

1. Blue Chip Stamps plunges under Buffett and Munger

WARREN BUFFETT: You've heard us talk here about the importance of our managers. However, occasionally, Charlie and I get involved in management ourselves. And we would normally be too modest to claim any great accomplishments.

But we have had one rather incredible performance which, since Charlie participated in it as well I do — I think if we put up the slide on the company that Charlie and I have managed personally, you'll see that this entity — you can't — Charlie, here it is, right here.

It's one where we took over 30-odd years ago. And as you can see, the 46,000 became — what?

VOICE: That's the wrong slide.

WARREN BUFFETT: Oh. Excuse me. Are you sure? Oh.

VOICE: Oh, yeah.

WARREN BUFFETT: OK. Well, I guess we better put up the next slide.

We — (laughter) — they got that first one — they got it reversed. We were doing 120 million when we took over, and we're now doing $46,000 a year. But we may get a bounce one of these years. (Laughter)

That was a company that also had a lot of float — (laughs) that we were attracted to. And the interesting thing is, you know, this was Blue Chip Stamps.

Although Blue Chip was a copy, of a sort, of Sperry & Hutchinson, which really was the main inventor of trading stamps on any large scale in the country, and they go back to the 19th century.

But if you think about it, S&H Stamps — Green Stamps — or Blue Chip Stamps, had many similarities to frequent flyer miles. You know, the only difference being that, you know, you got them a lot at, like, grocery stores and all of that and then you had to lick them and put them in a book. Whereas now, it's all done electronically.

But the basic underlying business was very similar to frequent flyer miles, which have this incredible hold on the American public. But somehow, we were not able to make the transfer.

We haven't yet made the transformation, let's put it that way, from the lick-it stamp to something that the public will accept.

But we've still got $47,000 of revenue annually from the entire state of California, so we're building a base. (Laughter)

Charlie and I continue to spend most of our time working on this one.

2. Shareholders share the wealth through philanthropy

WARREN BUFFETT: Let's go to area 7. I think we stopped in area 6 last time, and we'll go from there.

AUDIENCE MEMBER: Yes, my name is Mort November. I'm from Cleveland, Ohio. I'm here with my wife, Iris, who in 1986 founded the Statue of Liberty Collectors' Club.

I wanted to tell you personally what Berkshire Hathaway has meant for me. By owning it, we have become philanthropists in Cleveland. And the way it happened is we sold all our other stock. It was never any fun owning it, and I could never understand that my stock went down and the CEO's bonuses went up.

So, I got rid of that, and we took all of that money and we're doing things for children in Cleveland. On May 16th, we're sending a group — (applause) — thank you.

On May 16th, for the tenth year in a row, we're sending a group of children from Cleveland Municipal Schools, who win the trip by doing good work in their class and good work in the community, to Dearborn, Michigan, Henry Ford Museum, Greenfield Village. It's a lot of fun for them and it's really a lot of fun for us.

We invested in a building in the Cuyahoga National Park for campers, and hopefully we'll be able to help put up an addition to a library in East Cleveland, Ohio, which really needs all the help it can get.

So, my wish for you gentlemen is that you have many, many more years of good health and that we have the opportunity to see you on this stage, or any stage, for as many years as you want. I salute you both.

WARREN BUFFETT: Thank you. (Applause)

It's terrific what a number — a large number — of Berkshire shareholders, particularly the ones, perhaps — well maybe not particularly — but in the Omaha area, because they go way back to the partnership, and a number of them are in their mid-seventies or thereabouts.

But there have been a lot of things that have come out of the stock. In fact, there's been a suggestion that somebody may do a book on some of the things that have flowed from various Berkshire shareholders.

And I'm sure many of you know about the case of Don and Mid Othmer. Don went to Central High, here in Omaha. Mid Othmer's mother, Mattie Topp, was a wonderful woman, who was a customer when I started selling securities when I was 20 or 21, and she ran a dress shop.

And they, you know, they left about $750 million to a group of mainly 4 or 5 charities, one of which was the University of Nebraska.

But there have been all kinds of things. And there may actually be something done on that at some point, but I'm glad to hear what you're doing in Cleveland.

3. Hard to pick pharmaceutical winners

WARREN BUFFETT: Let's hear from area 8, please.

AUDIENCE MEMBER: Hi, my name is Jennifer Pearlman from Toronto, Canada.

Mr. Buffett, in 1998, you were asked to comment on the pharmaceutical industry, and at that time your answer was that you considered it a mistake not to have taken a basket approach to the industry.

I was wondering if you could revisit the issue, now that valuations have contracted so dramatically.

And also, considering that health care spending is outpacing inflation, and that there are significant moats in the industry, I was wondering if you could share with us your thoughts on the health care industry at large.

WARREN BUFFETT: Charlie may be better equipped on that than I am, but it certainly — it's been, as an industry, a very, very good business over time. And if you take the aggregate capital in it and what it's earned over time, it's been a very good business.

And we did make a mistake, your memory's 100 percent accurate, in we'd — in what we said in earlier meetings, because we should have taken a package approach. We actually did buy a tiny, tiny bit, but that's worse than buying none almost. I mean, it's just aggravating — back there in '93.

It's certainly the — they're certainly the kind of businesses that, as an industry, we can understand. We would not have great insights on specific companies. So, if we did something, we would be more inclined to do it on an industry-wide basis.

It's hard to evaluate the individual companies. As you know, Bristol-Myers has recently had a big stumble, and even Merck has fallen back. And so, it's hard to pick the winners.

But that's no reason not to have a basket approach to the industry. And at some valuation level, it would be something we would think very hard about. And it's something where we could put quite a bit of money if it happened, which is another plus to us.

Charlie?

CHARLIE MUNGER: Well, I mean, failed to get it right the last time. We'll probably fail to get it right the next time. (Laughter)

WARREN BUFFETT: I don't know what he had for lunch. (Laughter)

4. Accounting at Coca-Cola and its bottlers

WARREN BUFFETT: OK, we'll go to number 1. Well, wait a second, is there anybody at number 9? Probably not, now.

AUDIENCE MEMBER: Yes, there is.

WARREN BUFFETT: OK, good enough. Nine.

AUDIENCE MEMBER: Phil McCaw (PH), from Greenwich, Connecticut.

Could you discuss if and how you take into account the individual balance sheets of the Coca-Cola bottlers to the Coca-Cola Company, and if you view various regulatory control issues as a potential problem for Coca-Cola?

WARREN BUFFETT: Yeah, well, certain Coca-Cola bottlers became quite leveraged, the ones that were, in general, acquiring companies. Coca-Cola Enterprises certainly became very leveraged over — it started out fairly leveraged, and it became more leveraged in recent times.

And they have a business that's a solid, steady business, but it's not one with abnormal profitability. So, it can take leverage, in the sense that it won't be subject to huge dips, but it also is a business where it's very tough to increase margins significantly.

So, if most of the money goes to debt service, you know, that is something that you have to take into account when you value the equity.

It's a fairly capital-intensive business, the bottling business. On average, you'll probably spend between 5 and 6 percent of revenues on capital expenditures just to stay in the same place.

And in a business that, before depreciation, makes — and interest and taxes — makes maybe 15 cents on the dollar, having 5 or 6 cents on the dollar go to capital expenditures is a pretty healthy percentage of that. That's true at the Pepsi-Cola bottling company, too.

It's just the nature of the bottling business. It's a reason why I like, basically, the syrup business better than the bottling business. It's less capital-intensive.

And I think that the bottling business is a perfectly decent business. It isn't a wonderful business because the — it's very competitive out there.

I mean, on any given weekend, the big supermarket in town, or the Walmart, or whatever, is going to be featuring one or the other of the colas, and they're going to — it's going to be based on price. And you're going to read ads saying, you know, 12 for something or other, or 6 for something or other.

And it has become something where a lot of people will switch from one to another, based on price, on that weekend. And that makes it a tough business for bottlers. But it's a decent business.

But it doesn't, in terms of the Coca-Cola Company, itself, its bottlers are going to do perfectly OK over time. And they've got to earn enough money to be able to sustain that kind of capital expenditure and earn a cost of capital.

And if they get in trouble, it's because, if they pay too much for another bottler, it gets tough to make the math work.

Was there a second question about Coca-Cola then, too?

AUDIENCE MEMBER: Well, I was curious if you concern yourself, when you see FASB-type issues come out about control —

WARREN BUFFETT: No. Yeah, no, I understand. I'm talking —

AUDIENCE MEMBER: Combining all the balance sheets, type of thing.

WARREN BUFFETT: Yeah, that really doesn't make any difference to us. I mean, in the end, the Coca-Cola Company, there's no question about it in my mind, the Coca-Cola Company needs a successful bottling group in order to prosper as a syrup manufacturer.

But the profitability of bottling will allow that. And the capital requirements at the — at Big Coke, as it's called — are relatively minor, so most of the money they make can either be used as dividends or share repurchases.

But nobody's going to run out of money at Coca-Cola, nor are their bottlers, basically, going to run out of money. So, it is not a big balance sheet issue at all. And whether the figures are consolidated or otherwise, the economics are basically the same.

I mean, you have a, you know, there's not going to be a capital crunch of any kind. It would show different ratios if you consolidated and if you didn't, but it really wouldn't change the basic economics any.

Charlie?

AUDIENCE MEMBER: Thank you.

CHARLIE MUNGER: Yeah, I don't think it changes anything on a basic level. But ideally, in the world, you wouldn't have capitalization structures that are designed partly for appearance's sake.

AUDIENCE MEMBER: Thank you.

WARREN BUFFETT: We — thank you.

5. Accounting is a starting point, but it doesn't always reflect reality

WARREN BUFFETT: We pay a lot of attention to what we regard as the reality of the balance sheets and economic conditions and cash situation, all of that of a business. And sometimes we think accounting reflects reality, and sometimes we don't.

It's a good starting point for us always, but I mean, there are companies in the United — there's at least one company, at least last year, that was using a 12 percent investment return assumption on its pension plan, and there are other companies that use, I think, even below six, certainly six.

And in the end, should we look at the figures the same of one company, particularly if the pension fund's a big element, that uses 12 and six? No, we look at what it says they're using.

But, in our minds, we don't think the company that's using a 12 percent assumption is likely to do any better with their pension fund than one of the one's that's using six. In fact, we might even think the one that's using six is likely to do better because we might think they're more realistic about the world.

So, we start with the figures of the companies we look at, but we've got our own model in mind as to what they will look like. It's true of the businesses we own a hundred percent of. Some of them have some debt in them, some of them don't, partly that situation's inherited.

In the end, we've got the same metrics that apply to them, whether they happen to have some debt on their own particular balance sheet or not, because in the end, we're not going to be willing to have very much debt at all at Berkshire.

And where it's placed doesn't really make any difference because we're going to pay everything we owe, no matter where it is. And it's almost an accident whether company A or company B has a little debt attached to it.

6. New goodwill accounting is "making sense"

WARREN BUFFETT: Area 10, is there anybody there?

AUDIENCE MEMBER: Yes, sir. My name Adam Chud. I'm from Columbus, Ohio. I attend the Ohio State University.

My question is, your comments on the new standards for the accounting of goodwill?

WARREN BUFFETT: Yeah, the question about the new standards for goodwill.

Actually, if you read, I think, the annual report — maybe the 2000 annual report, and maybe even earlier.

But we prescribed — we said what we thought would be the preferable system for how goodwill was handled, namely, that it would not be amortized, and that combinations of companies be accounted for as purchases. And it pretty well is what ended up coming out of the accounting profession.

So, the goodwill rules now are in accord with what we believe they should be. And for a long time, they weren't.

You might argue that it was against our interests to have what we think proper accounting has put in, because some people were averse to buying businesses because of a goodwill charge they would incur, whereas it didn't make — it made no difference to us whatsoever. We just looked at the underlying economics.

So we may have a little more competition, even, on buying businesses simply because now, competitive buyers are not faced with a goodwill charge which may have bothered them but didn't bother us. I regard the present goodwill rules as making sense.

Charlie?

CHARLIE MUNGER: Well, I agree.

WARREN BUFFETT: OK.

AUDIENCE MEMBER: Thank you.

7. I used a hearse to pick up your aunt for a date

WARREN BUFFETT: Area 1.

AUDIENCE MEMBER: My name is Martin Wiegand, from Bethesda, Maryland.

Thank you for hosting this wonderful and formative shareholder meeting. Thank you also for running Berkshire in a manner that is an example to corporate America and the world. You make us proud to be shareholders.

My question, you touched on just before the lunch break. Did the compensation plans at Berkshire and its competitors have anything to do with the mispriced insurance policies they issued?

And if so, has Berkshire or its competitors changed their compensation plans to correctly price those policies?

WARREN BUFFETT: Incidentally, I asked you this last year, I think, but are you my Martin's son or grandson?

AUDIENCE MEMBER: Son.

WARREN BUFFETT: Son, OK. Good enough. It — Martin's father and I went to high school together. Matter of fact, your Aunt Barbara and I went to high school together also.

And she went out on one date with me, and that was the end. (Laughter)

It was not because I didn't ask her out again. (Laughter)

I picked her up in a hearse. I think that kind of put the — (Laughter)

8. General Re's "cultural drift"

I think compensation plans lead to a lot of silly things, but I would say that, at Berkshire's insurance companies, I don't think our problems resulted from compensation plans at all.

I think we had an — and we're talking about General Re here basically, because that's where we had the problem.

I think General Re had an enormously successful operation, which went on for a long time. And I think that there was some drift away, perhaps because competitors were drifting away in a big way, too, from certain disciplines, and we paid a price for that.

But I don't think the comp plans entered in at — in any significant way, if at all, into the fact that we did drift away for a while.

I think it — I think you want to have rational comp plans. I think we've got a rational comp plan at General Re, but — and it's quite similar to what we had before. And I just don't think that was the problem.

It's very difficult, it's difficult in the investment world, when other people are doing things that look like they're working very well, you know, and they get sillier and sillier. It's — it could be difficult for many people to not succumb and do the same things.

And that happens in investments, but it also happens in insurance. And it was, you know, it's a competitive world, and your people are out there every day, and they're competing against Swiss Re, and Munich Re, and Employers Re, and all of these people.

And you've worked hard to get clients, and the client says, "I want to stay with you, but the competitor says if I go with him, I don't have to do this or that, or I can get it a little cheaper," or whatever. You know, it's tough to walk away. And it may even be a mistake to walk away in certain cases.

So, I just think that there was a — what you might call a cultural drift. I don't think it was a shift, but it was a drift. And I think it was produced, in part, by the environment in which the company was operating. And it took a jolt to get it back. And I think that it is back.

I think it's probably stronger than ever in terms of what we have now, but I would not attribute it much to the compensation system.

But I have seen a great many compensation systems that are abominations and lead to all kinds of behavior that I would regard not as in the interest of shareholders. But I don't think we've had much of that at Berkshire.

Charlie?

9. "Demented" and "immoral" stock options

CHARLIE MUNGER: Yeah, I think if you talk generally about stock option plans in America, you see a lot of terrible behavior caused. And, no doubt, they do a lot of good at other places. But whether they do more good than harm overall, I wouldn't know.

I think, in particular, if you have a corporation where a man has risen to be CEO, and he now has hundreds of millions of dollars in the stock of the company.

He's been loyal to the company and the company's been loyal to him for decades, and he has his directors vote him a great stock option annually to preserve his loyalty to the company, and his enthusiasm to the business when he's already old, I think it's demented.

WARREN BUFFETT: How about when they grant options as he leaves the company?

CHARLIE MUNGER: I — and I also think it's immoral. I think that there comes a time when — (Applause)

I don't think you would improve the behavior of the surgeons at the Mayo Clinic, or the partners of Cravath, Swaine & Moore, if you gave the top people stock options in their sixties.

I mean, by that time, you ought to have settled loyalties, and you ought to be thinking more about the right example for the company than whether you take another hundred million for yourself.

WARREN BUFFETT: Yeah, well, we had a case — (Applause)

We've inherited some option plans because the companies we merged with had them. And in some cases they got settled for cash at the time, in some cases they continued on, depending on the situation.

But more money has been made from options at Berkshire by accident, and that, you know, this is not — it just happened that way, but more money was made by people that had options on General Re stock during a period when General Re contributed to a decrease in value of Berkshire.

So we had all of the other managers essentially, in a great many cases, turning in fine results, and we had a bad result at General Re, and yet more money, by a significant margin, was made under options at General Re than had been made probably by all other entities combined.

But it was an accident, but that's the point, it leads — it can lead to extremely capricious compensation results that have no bearing on the performance of the people that, in some cases get great benefits, and in other cases people did great jobs and were — their efforts were negated by results elsewhere.

So, it's — it would be very capricious at Berkshire — you can argue that at Berkshire, for those that succeed me and Charlie, that anybody that is in the very top position at Berkshire has got the job of allocating resources for the whole place.

There could be a logically constructed option plan for that person, and it would make some sense because they are responsible for what takes place overall.

But a logically constructed plan would have a cost of capital built into it for every year. We don't pay out any dividends, so why should we get money from you free?

We could put it in a savings account and it would grow in value without us doing anything. And a fixed-price option over 10 years would accrue dramatic value to whoever was running the place, if they had a large option, for putting the money in a savings account or in government bonds.

So, there has to be a cost of capital factor in to make options equitable, in my view, that there can be cases where they make sense. They should not be granted at below the intrinsic value of the company.

I mean, the market — a CEO who says, you know, my stock is ridiculously low when a merger — when somebody comes around and wants to buy the company, but then grants himself an option at a price that he's just gotten through saying is ridiculously low, that bothers me.

So if somebody says, you know, I wouldn't — we don't want to sell this company for less than $30 this year because it's going to be worth a lot more later on, you know, my notion is that the option should be at $30 even if the stock is 15.

You know, otherwise you have a — actually a premium built in of — for having a low stock price in relation to value. And I've never gotten too excited about that.

Charlie, you have any further thoughts on options?

CHARLIE MUNGER: Well, we've been — we're so different from the rest of corporate America on this subject that, you know, we can sound like a couple of Johnny One Notes, but I don't think we ever quite tire of the subject. (Laughter)

A lot is horribly wrong in corporate compensation in America. And the system of using stock options on the theory they really don't cost anything has contributed to a lot of gross excess. And that excess is not good for the country.

You know, Aristotle said that systems work better when people look at the different outcomes and basically appraise them as fair. And when large percentages of people look at corporate compensation practices and think of them as unfair, it's not good for the country. (Applause)

WARREN BUFFETT: It will be hard to change though, because basically, the corporate CEOs have their hands on the switch. I mean, they control the process.

You can have comp committees and all of that, but as a practical matter — I've been on 19 public boards, Charlie's been on a lot of them.

And in the end, the CEOs tend to get pretty much what they want. And what they want tends to go up every year because they see other people getting more every year. And there's a ratcheting effect, and the consultants fan the flames. And it's very difficult to get changed.

And right now, you've got corporate CEOs descending upon Washington, doing everything from trying to persuade to threaten your elected representatives to not have options expensed. And it's — I think it's kind of shameful, actually.

Because it, you know, this group, who is getting fed very well under the system does not want to have those — what clearly is a compensation expense recorded because they know they won't get as much. I mean, it's that simple. And it's not based on anything much more complicated. (Applause)

10. Float size isn't limiting investments

WARREN BUFFETT: Area 2?

AUDIENCE MEMBER: Good afternoon. David Winters, Mountain Lakes, New Jersey.

Mr. Buffett and Mr. Munger, thank you for hosting "Woodstock for Capitalists." I know it's a lot of fun for everybody, and I think a lot of fun for you, too.

Assuming growth of low-cost float and the sins of the past do not impede progress, does the sheer size of the float create constraints that change the allocation of future investments to more high-quality fixed-income obligations rather than equity coupons or workouts that can grow over time?

It seems otherwise Berkshire is incredibly well positioned if valuations ever decline.

WARREN BUFFETT: Well, I think the answer is we probably are pretty well positioned if valuations decline.

And it's a good question. If you have 37 billion of float, are you going to be more constrained to conventional investments than if you were working with a half a billion or a billion, as we were not so long ago?

As long as you have a huge capital position, which we have and will continue to have, and as long as you have a lot of outside earning power, which we have and will continue to have, I don't think we're constrained very much.

I mean, that — we'll always want to have a significant level of liquidity, relative to any kind of payment pattern that we see for a good length of time.

But we will probably be operating with so much capital and with so much earning power, independent of the insurance business, and with so much liquidity, that we really will be able to make decisions as to where — as to how — the assets should be deployed, in terms of, simply, where we see the best returns and virtually no risk.

And sometimes we see virtually no risk in equities when they're extremely cheap. We don't see that situation now, but we could see it again. And I don't think we'll be much — I don't think we'll be very constrained when the time comes.

Charlie?

CHARLIE MUNGER: Yeah, our constraint doesn't come from structure, it comes from a lack of enthusiasm for stocks generally. The bonds are held as a default option.

11. Price of gold not a factor in valuing a business

WARREN BUFFETT: Area 3.

AUDIENCE MEMBER: Dear Mr. Buffett and Mr. Munger, my name is Adrian Chur (PH), and I'm a shareholder from Hong Kong.

Thank you for your leadership and inspiration, as always. It's wonderful, always, listening to you. If I may, I would like to ask of you both gentlemen, a question in two parts.

Perhaps I can ask the second part after you've answered the first part. The first part of the question relates to the Fortune article dated 10th of December you included in our shareholder materials.

In this article, you mentioned that one couldn't explain the remarkable divergence in markets by differences in the growth of GNP. However, one could explain the divergence by interest rates.

The first question I have is this: I wonder, sir, if you were to look at the price of gold during the two periods of times you mentioned, that is to say 1948-'64 and '64-'81, if the explanation could be even more clear?

Thus, the logical reason would be why the Dow in '48 was 177 was because — and half the level of 1929, of 381 index points — is because of the 71 percent devaluation of the American dollar from 20.5 cents an ounce to 35 cents an ounce, which would put the fair value of the Dow at 166, after factoring in the record 50 percent per capita gain of the 1940s that you had mentioned.

WARREN BUFFETT: Yeah, I grew up in a household — and my sisters are here — where gold was talked about frequently. So I've been exposed to a lot of thinking on that over the years.

I don't really think gold has really — the price of gold, I should say — has anything, really, to do with the valuation of businesses.

It may reflect certain things that are going on in prices attached to those businesses at given times.

But I would not regard — I mean, the price of gold does not enter into my thinking in any way, shape, or form, in terms of how I value a business today, a year ago, 10 years ago, or tomorrow.

When we look at Larson-Juhl, the custom picture frame operation, you know, I'm not thinking against — I'm not thinking of that and relating it in any way to what gold has done.

So, I — it's just not a factor with us, any more than other commodities would be. I mean, you know, whether it's wheat, whether it's cocoa beans or whatever.

It has — you know, it has a certain hold on some people and they — but we don't look at it as an interesting investment and we don't look at it as a yardstick for valuing other investments.

Charlie?

CHARLIE MUNGER: Yeah, Warren is right when he says that interest rates are very important in determining the value of stocks, generally. And I think he's also right when he says gold is very unimportant.

12. Warning: Speculating is not investing

WARREN BUFFETT: And the second part of the question?

AUDIENCE MEMBER: Thank you, sir. The second part of my question is this: given your assumptions on gold, if you were to factor a significant decline in the value of the dollar against gold, let's say 40 percent or more, and given the correlation of 1929-'48 and '64-'81 eras positively to the decline of the dollar, and the negative correlation in the other two areas that you had studied, would you care to adjust the 7 percent total annual return you were quoted as expecting for common equity in the coming decade?

And in conjunction with that, would you care to comment on your expected rate or return on all other major asset classes, perhaps like bonds, real estates? And which would you believe offers the best value for investors? Thank you very much.

WARREN BUFFETT: Yeah. Well, except under unusual circumstances, my expected rate — my expectancy on something like bonds is what bonds are producing at a given time. I don't think I'm smarter than the bond market.

Now, you can say, when they — when those rates swing all over, does that mean I swing all over? The answer is pretty close to yes. I mean, that — I don't know what the right rate for bonds is. I think that if there's —

I'm very leery of economic correlations. I mean, I spent years fooling around with that sort of thing, and I mean, I correlated stock prices with everything in the world. And the — and you know, the problem was when I found a correlation.

I mean, it's — (laughs) — you know, you've seen these things on whether the AFC or the NFL wins the Super Bowl and all of that sort of thing. You can find something that correlates with something else.

But in the end, a business or any economic asset is going to be worth what it produces in the way of cash over its lifetime.

And if you own a — if you own an oil field, if you own a farm, if you own an apartment house, you know, with the oil field, it's the life of the oil field and what you can get out of it. And maybe you get secondary recovery, maybe you get tertiary recovery.

But whatever it may be, it's worth the discounted value of the oil that's going to come out. And then you have to make an estimate as to volume and as to price.

With a farm, you might make an estimate as to crop yield, and cost, and crop prices.

And the apartment house, you make an estimate as to rentals, and operating expenses, and how long it'll last, and when people will build other new apartment houses that potential renters in the future will find preferable, and so on.

But all investment is, is laying out some money now to get more money back in the future. Now, there's two ways of looking at the getting the money back. One is from what the asset itself will produce. That's investment.

One is from what somebody else will pay you for it later on, irrespective of what the asset produces, and I call that speculation.

So, if you are looking to the asset itself, you don't care about the quote because the asset is going to produce the money for you. And that's how — that's what society, as a whole, is going to get from investing in that asset.

Then there's the other way of looking at it, is what somebody will pay you tomorrow for it, even if it's valueless. And that's speculation. And of course, society gets nothing out of that eventually, but one group profits at the expense of another.

And of course, you had that operate in a huge way in the bubble of a few years ago. You had all kinds of things that were going to produce nothing, but where you had great amounts of wealth transfer in the short term.

As investments, you know, they were a disaster. As means of wealth transfer, they were terrific for certain people. And they were, for the other people that were on the other side of the wealth transfer, they were disasters.

We look solely — we don't care whether something's quoted because we're not — we don't buy it with the idea of selling it to somebody. We look at what the business itself will produce.

We bought See's Candy in 1972. The success of that has been because of the cash it's produced subsequently.

It's not based on the fact that I call up somebody at a brokerage house every day and say, "What's my See's Candy stock worth?" And that is our approach to anything.

On interest rates, I'm no good. I bought some REITs a couple of years ago because I thought they were undervalued. Why did I think they were undervalued?

Because I thought they could produce 11 or 12 percent, in terms of the assets that those companies had. And I thought an 11 or 12 percent return was attractive.

Now the REITs are selling at higher prices and, you know, they're not as attractive as they were then.

But you just look at — every asset class, every business, every farm, every REIT, whatever it may be, and say, "What is this thing likely to produce over time?" and that's what it's worth.

It may sell at vastly different prices from time to time, but that just means one person is profiting against another, and that's not our game.

Charlie?

13. Hard to predict when a bubble will burst

CHARLIE MUNGER: Yeah, what makes common stock prices so hard to predict is that a general liquid market for common stocks creates, from time to time, either in sectors of the market or in the whole market, a Ponzi scheme.

In other words, you have an automatic process where people get sucked in and other people come in because it worked last month or last year. And it can build to perfectly ridiculous levels, and the levels can last for considerable periods.

Trying to predict that kind of thing, sort of a Ponzi scheme which is, if you will, accidentally thrown into the valuation of common stocks by just the forces of life, by definition that's going to be very, very hard to predict. But that's what makes it so dangerous to short stocks, even when they're grossly overvalued.

It's hard to know just how overvalued they can become in addition to the overvaluation that exists. And I don't think you're going to predict the Ponzi scheme effect in markets by looking at the price of gold or any other correlation.

WARREN BUFFETT: Charlie and I probably — I mean, I'm pulling a figure out of the air — we have probably agreed on at least a hundred companies, maybe more, that we felt were frauds, you know, bubble-type things.

And if we had acted on shorting those over the years, we might be broke now, but we were right on probably just about a hundred out of a hundred. It's very hard to predict how far what Charlie calls the Ponzi scheme will go.

It's not exactly a scheme in the sense that it isn't concocted, for most cases, by one person. It's sort of a natural phenomenon that seems to — nursed along by promoters and investment bankers and venture capitalists and so on. But they don't all sit in a room and work it out.

It just — it plays on human nature in certain ways and it creates its own momentum, and eventually it pops, you know. And nobody knows when it's going to pop, and that's why you can't short, at least we don't find it makes good sense to short those things.

But they are — it is recognizable. You know when you're dealing with those kind of crazy things, but you don't know when the — how high they'll go or when it'll end or anything else.

And people who think they do, you know, sometimes play in it. And other people know how to take advantage of it, I mean there's no question about that.

You do not have to have a 200 IQ to see a period like that and figure out how to have a big wealth transfer from somebody else to you, you know. And that was done on a huge scale, you know, in recent years. It's not the, you know — it's not the most admirable aspect of capitalism.

14. Stock options as compensation isn't sinful, but …

WARREN BUFFETT: Area 4.

AUDIENCE MEMBER: Yes, good afternoon, Mr. Buffett and Mr. Munger. My name is Ho Nam (PH), and I'm from San Francisco, California.

I have a question related to an issue you touched on a few moments ago on the debate over whether or not stock options should be expensed and reflected on the income statement of companies.

With the current system, shareholders are incurring the burden of stock options since exercised options dilute earnings per share.

As a shareholder of companies that issue stock options, I think I'm OK with that, especially in entrepreneurial companies that may not have enough cash to attract talent from larger competitors, or in cases where you have younger employees or lower-level employees who do not have the cash to purchase stock without the use of options.

I have a two-part question. If companies are required to expense stock options and it hits — impacts the P&L, does it — would that lead to double-counting the impact of stock options?

And the second part is, if the use of stock options are largely eliminated, might that impact the competitiveness of entrepreneurial companies which help drive innovation and growth and create more of a dividing line between shareholders and employees?

WARREN BUFFETT: Yeah, the first question is that there really isn't the double-counting necessarily.

For example, let's just take a company with a million shares of stock outstanding, selling at a hundred dollars a share.

And let's say that options are granted for 9 million shares — we'll make it extreme — at a hundred dollars a share. At that moment, you've given 90 percent of the upside to the management. We're taking a very extreme example. That's been a huge cost to the shareholders.

Now, interestingly enough, if the stock was selling at $100 a share, the fully diluted earnings are exactly the same as the basic earnings in that year, because the dilution is not counted at all unless the stock is selling above, and then only by the difference in the market value and what it costs to repurchase the optioned shares. So, there is not double-counting.

And you can — you could issue — the very fact that you issued that million, the options on 9 million more shares at 100, would undoubtedly cause the price to actually fall well below 100 and there would be no dilution shown in terms of the way GAAP reports diluted earnings.

The second question, as to whether, if you expense the options, it would discourage the option use.

Well, the argument, you know, that is made when there — people issue options is that it's doing more for the company than giving people cash compensation. It may be more convenient than cash compensation, too, for young and upcoming companies.

But the fact that you are doing something in terms of paying people in a way that you say is even more effective than paying them in cash, to say that therefore you shouldn't have to record the payment, I've never really followed.

I don't have any objection to options under some conditions. I've never taken a blanket position that options are sinful or anything of the sort. I just say they are an expense.

And to be truthful with people about what you're earning, you should record the expense. And if a company can't afford to be truthful, you know, I have trouble with that.

And we will take, as we've said, you can pay your insurance premium to me in options. There'd be lots of companies I'd be happy to take options in and give them credit.

I'd take options above the market. Give me a 10-year option 50 percent above the market in many companies, and we will take that — appropriate number of shares — and take that in lieu of cash.

But that means we simply like, you know, the value of what we're getting better than the equivalent amount of cash and we think the company that gives it to us has incurred an expense.

We've received something of value, they've given something of value up, and that's income to us and expense to them.

And I think all of the opposition, at bottom, to the — to expensing of options comes from people who know they're not going to get as many options if they're expensed. And you know, they would like cash not to be expensed, but they can't get away with that, you know. I mean —

CHARLIE MUNGER: Yeah. (Laughter)

WARREN BUFFETT: If you had an accounting rule that said the CEO's salary should not be counted in cash, believe me, the CEOs would be in there fighting to have that rule maintained.

I mean, because no one would — they would feel that they were going to get more cash if it wasn't expensed, and options are the same way.

It's another argument I get a kick out of, I was just reading it the other day, where they say, "Well, options are too tough to value."

Well, I've answered that in various forms, but I notice that — what is it, Dell Computer, you know, has a great number of put options out, and it's going to cost them a lot of money on the put options they have out.

And for a company to say, "We can't figure out the value of options, and therefore we can't expense them," and then at the same time be dealing in billions of dollars' worth of options, they are saying, "We are out buying or selling options in the billions of dollars, but we don't know how to value these things." That strikes me as a little bit specious — a little disconnected, cognitive dissonance, as they say.

Charlie?

CHARLIE MUNGER: Yeah, I'm not at all against stock options in venture capital, for instance. But the argument that prominent venture capitalists have made, that not expensing stock options is

appropriate because if you expense them it would be counting the stock options double, that's an insane argument.

The stock option is both an expense and a dilution, and both factors should be taken into account in proper accounting.

John Doerr, the venture capitalist, as he argues to the contrary, is taking a public position that, "Were it offered to me as part of my employment, I would rather make my living playing a piano in a whorehouse." (Laughter)

WARREN BUFFETT: We always get to the good stuff in the afternoon. (Laughter)

I hope the children are in bed.

15. Hard to predict what happens after a bubble bursts

WARREN BUFFETT: Number 5.

AUDIENCE MEMBER: Good afternoon. My name is Bob Baden (PH), from Rochester, New York.

Mr. Munger, this morning, while discussing index funds, you used the example of Japan as a real example of poor performance of a major index over a long period.

Indeed, the S&P 500 index declined over 60 percent, in real terms, from the early '60s through the mid-'70s.

Could you discuss the mental models you use to consider the impact of inflation or deflation on your investment decisions and the likelihood of either occurring over the next decade?

CHARLIE MUNGER: Well, that's partly easy and partly tough.

If interest rates are going to go way up, you can obviously have a lot of deflation of stock prices. And a lot of that happened in the American period you're talking about.

What's interesting about Japan is that I don't think anybody thought that a major modern Keynesian democracy, pervaded by a good culture in terms of engineering, product quality, product innovation, and so forth, could have a period where you would have negative returns over 13 years without major depression either.

WARREN BUFFETT: (Inaudible)

CHARLIE MUNGER: I think — and that it would occur while interest rates were going down, not up. I think that was so novel that the models of the past totally failed to predict it.

But I think these anomalies are always very interesting, and I think it's crazy for Americans to assume that what's happening in Argentina, what has happened in Japan, are totally inconceivable forever in America. They are not totally inconceivable.

WARREN BUFFETT: You had a huge bubble in equity prices in Japan, and now you've had interest rates go to virtually nothing.

You've had the passage of time, the country hasn't disappeared. People are going to work every day, and you've had this — the Nikkei, you know, now at a third of what it sold for not that many years ago. It's an interesting phenomenon.

CHARLIE MUNGER: And huge fiscal stimulus in the whole period from the government.

WARREN BUFFETT: Post-bubble periods, I think, depending on how big the bubble is and how many were participating in it, but post-bubble periods, I think, can produce fallout that not everyone will be terribly good at predicting.

16. Ben Graham and the long/short model

WARREN BUFFETT: Six?

AUDIENCE MEMBER: Hi, I'm Steve Rosenberg (PH). I'm 22, from Ann Arbor, Michigan. It's a privilege to be here.

First, I'd just like to thank you both for serving as a hero and positive role model for me and many others. Much more than your success, itself, I respect your unparalleled integrity.

I have three quick questions for you. The first is how a youngster like myself would develop and define their circle of competence.

The second involves the role of creative accounting in the stories of tremendous growth and success over many years. GE, Tyco, and IBM immediately come to mind for me, but I was hoping you could also discuss that issue in relation to Coke.

Some people have said that their decision to lay off much of the capital in the system onto the bottlers, who earn low returns on capital, is a form of creative accounting.

On the flip side, others counter that Coke's valuation, at first glance on, say, a price-to-book metric, is actually less richly valued than it seems because they earn basically all the economic rents in the entire system.

My final question is, if you could comment on the A.W. Jones model, the long/short equity model. I understand that it doesn't make sense for capital the size of Berkshire's to take that type of a strategy.

But it just seems to me that playing the short side in combination also seems incredibly compelling, even giving the inherent structural and mathematical disadvantages of shorting. And I was wondering if you could talk a little bit more about why you would have lost money on your basket of a hundred frauds.

WARREN BUFFETT: Yeah, it's an interesting question. And we'll start — we'll go in reverse order.

Many people think of A.W. Jones, who was a Fortune writer at one time, and who developed the best-known hedge fund, whenever it was, in the early '60s or thereabouts, maybe the late '50s even.

And for some of the audience, the idea originally with A.W. Jones is that they would go long and short more or less equal amounts and have a market-neutral fund so that it didn't make any difference which way the market went.

They didn't really stick with that over time. And I'm not even sure whether A.W. Jones said that they would. But they, you know, sometimes they'd be 140 percent long and 80 percent short, so they'd have a 60 percent net long, or whatever it might be.

They were not market-neutral throughout the period, but they did operate on the theory of being long stocks that seemed underpriced and short stocks that were overpriced.

Even the Federal Reserve, in a report they made on the Long-Term Capital Management situation a few years ago, credited A.W. Jones with being sort of the father of this theory of hedge funds.

As Mickey Newman, if he's still here, knows, I think it was in 1924 that Ben Graham set up the Benjamin Graham Fund, which was designed exactly along those lines, and which even used paired securities.

In other words, he would look at General Motors and Chrysler and decide which he thought was undervalued relative to the other, and go long one and short the other.

So, the idea — and he was paid a percentage of the profits. And it had all of the attributes of today's hedge funds, except it was started in 1924.

And I don't know that Ben was the first on that, but I know that he was 30 years ahead of the one that the Federal Reserve credited with being the first, and that many people still talk about as being the first, A.W. Jones.

Ben did not find that particularly successful. And he even wrote about it some in his — in terms of the problems he encountered with that approach.

And my memory is that a quite high percentage of the paired investments worked out well. He was right. The undervalued one went up and the overvalued — or the spread between the two narrowed.

But the one time out of four, or whatever it was, that he was wrong lost a lot more money than the average of the three that he was right on.

And you know, all I can say is that I've shorted stocks in my life, and had one particularly harrowing experience in 1954. And I have — I can't — I can hardly think of a situation where I was wrong, if viewed from 10 years later.

But I can think of some ones where I was certainly wrong from the view of 10 weeks later, which happened to be the relevant period, and during which my net worth was evaporating and my liquid assets were getting less liquid, and so on. So, it's — all I can tell you is it's very difficult.

And the interesting thing about it, of course, is A.W. Jones was a darling of the late 1960's. And Carol Loomis is here, and she wrote an article called "The Jones Nobody Keeps Up With." And it's a very interesting article, but nobody's writing articles — nobody was writing articles about A.W. Jones in 1979.

I mean, something went wrong, and there were spin-offs from his operation. Carl Jones spun off from his operation, Dick Radcliffe spun off from his operation. There were — you can go down the list.

And out of many, many, many that left, they — a very high percentage of them bit the dust, including suicides, cab drivers, subsequent employment — the whole thing. And these people were —

There was a book written in the late '60s, it had a lot of pictures in it. I don't remember the name of it, but it showed all these portraits of all these people that were highly successful in the hedge fund business, but they didn't bring out a second edition. So, it's just tough.

Logically, it should work well, but the math of only — you can't short a lot of something. You can buy till the cows come home if you've got the money. You can buy the whole company if need be, but you can't short the whole company.

A fellow named Robert Wilson, there's some interesting stories about him. He's a very, very smart guy, and he took a trip to Asia one time, being short, I think it was Resorts International or maybe it's Mary Carter Paint, it was still called in those days.

And he lost a lot of money before he got back to this country. He's a very smart guy, and he made a lot of money shorting stocks, but it just takes one to kill you.

And you need more and more money as the stock goes up. You don't need more and more money when a stock goes down, if you paid for it originally and didn't buy it on margin. You just sit and find out whether you were right or not.

But you can't necessarily sit and find out whether you're right on being short a stock.

I think I'll let Charlie comment on that before I go to your other two questions.

17. "Creative accounting is an absolute curse"

CHARLIE MUNGER: Well, he asked about creative accounting and he named certain companies. I wouldn't agree that all those companies were plainly sinful, although I'm sure there are significant sins in the group as a whole.

Creative accounting is an absolute curse to a civilization. You can argue that one of the great inventions of man was double-entry bookkeeping, where we could keep our economic affairs under better control.

And it was a north Italian development, spread by a monk. And anything that sort of undoes the monk's work by turning this great system into kind of a tool for fraud and folly, I think, does enormous damage to the country.

Now, I think a democracy is ordinarily set up so it takes a big scandal to cause much reform. And there may be some favorable fallout from Enron because that was certainly the most disgusting example of a business culture gone wrong that any of us has seen in a long, long time.

And what was particularly interesting was it took in, eventually, a lot of nice people that you wouldn't have expected to sink into the whirlpool.

And I think we'll always get Enron-type behavior, but it may be moderated some in the next few years.

WARREN BUFFETT: A question of accounting and the economic profits to be gathered in the bottling system versus the production of the syrup, Coke. I've just gotten through reading the annual reports of Coca-Cola FEMSA and Panamco, which are two big Latin American bottlers.

And I mean, they make pretty decent money, quite significant money. And there is more money in owning the trademark. It isn't the plants that make the syrup or anything to sell. The trademark is where a huge amount of value is.

The trademark is where a huge amount of value is in See's Candy. You know, those are big, big assets.

And I would say that you can make good money as a bottler. A lot of bottlers have become rich over the years. If I had a choice between owning the trademark and owning a bottling business, I'd rather own the trademark, but that doesn't mean the bottling business is a bad business at all.

And it's riding on the back of a trademark. I mean, that is why a bottling system is valuable, is because it has the right to sell a trademarked product, which hundreds of millions of people every day are going to go in and ask for by name. And the right to distribute that product is worth good money.

And it really — I don't see any accounting questions in that sort of thing. In other words, if the Coca-Cola Company did not own a share in any of its bottlers, and for many years it either owned a hundred percent of a bottler, or a large part, or — and very few of those — or none of it.

But if they owned no interest in their bottlers, I think the economics would be very, very similar to what they are now.

I mean, the bottlers would still be able to borrow a lot of money because they would have contracts with the Coca-Cola Company, and that were important, and that would allow them to make decent money distributing the product.

But they don't make the kind of money that you make if you own the trademark. That's just the way it works.

18. How to stay in your "circle of competence"

WARREN BUFFETT: What was the first question again that —

AUDIENCE MEMBER: It was how a youngster like myself would define and develop a circle of competence.

WARREN BUFFETT: Oh, yeah, that's a good question. And I'm — you know. I'd — I would say this, if you have doubts about something being into your circle of competence, it isn't.

You know, I mean, in other words, I would look down the list of businesses and I would bet you that you can — I mean, you can understand a Coke bottler. You can understand the Coca-Cola Company. You can understand McDonald's.

You can understand, you know, you can understand, in a general way, General Motors. You may not be able to value it.

But there are all kinds of businesses. You can certainly understand Walmart. That doesn't mean whether you decide whether the price — what the price should be — but you understand Walmart. You can understand Costco.

And if you get to something that your friend is buying, or that everybody says a lot of money's going to be made, and you don't — you're not sure whether you understand it or not, you don't.

You know, I mean, and it's better to be well within the circle than to be trying to tiptoe along the line.

And you'll find plenty of things within the circle. I mean, it's not terrible to have a small circle of competence. I'd say my circle of competence is pretty small, but it's big enough. You know, I can find a few things.

And when somebody calls me with a Larson-Juhl, that is within my circle of competence. I hadn't even thought about it before, but I know it's within it. I mean, I can evaluate a business like that.

And if I get called — I got called the other day on a very large finance company. I understand what they do, but I don't understand everything that's going on within it, and I don't understand that — whether I can continually fund it, you know, on a basis, independent from using Berkshire's credit, and so on.

So, even though I could understand every individual transaction they did, I don't regard the whole enterprise, or the operation of it, necessarily as being within my circle of competence.

Charlie?

CHARLIE MUNGER: Yeah, I think that if you have competence, you almost automatically have a feeling of where the edge of the competence is. Because after all, it wouldn't be much of a competence if you didn't know its boundary. And so, I think you've asked a question that almost answers itself.

And my guess is you do know what you're perfectly competent to do, you know, all kinds of areas. And you do have all kinds of other areas where you know you'd be over your depth.

I mean, you're not trying to play chess against Bobby Fischer or do stunts on the high trapeze if you've had no training for it.

And my guess is you know pretty well where the boundaries of your competence lies. And I think you also probably know pretty well where you want to stretch the boundary. And you've got to stretch the boundary by working at it, including practice.

WARREN BUFFETT: And one of the drawbacks to Berkshire, of course, is that Charlie and I, our circles largely overlap, so you don't get two big complete circles at all, but that's just the way it is. And it's probably why we get along so well, too.

19. Population growth and "carrying capacity"

WARREN BUFFETT: Number 7.

AUDIENCE MEMBER: Good afternoon, gentlemen. Wayne Peters is my name, and I'm from Sydney, Australia.

WARREN BUFFETT: I'd have never guessed.

AUDIENCE MEMBER: No. (Laughter)

I'll speak a little slower so my accent doesn't throw you.

WARREN BUFFETT: Good.

AUDIENCE MEMBER: My question goes further to the resolution on population control raised this morning. Firstly, can I just say I voted against it, and I guess that's just the beauty of the democratic society?

Of concern, however, was the gentleman's implication that the world's population has decreased, or is decreasing.

Having read the book Charlie recommended last year, by Garrett Hardin, called "Living Within Limits," I've got a reasonable feel and understand the population grew by about 1.7 percent last year, which is approximately 67 million people.

In my terms, I'd relate that to approximately 4 times the population of Australia, clearly an alarming rate over the long term if you're talking, you know, 500 or a thousand years.

Reading between the lines, my guess is that the issue of population growth is likely to be a key focus of the Buffett Foundation.

My question to you this afternoon is, how do you currently see this critical issue being tackled?

WARREN BUFFETT: Yeah, well, population projections are just that, they're projections. And they've been notoriously inaccurate over the years. And the gentleman that made the motion referred to a recent New York Times story.

And there are some — there are projections that, based on fertility rates and what happens to them in different countries, under different economic conditions and all that, I mean, you can come up with all kinds of projections.

I don't know the answer on it. Nobody does at any given time. And the carrying capacity of the Earth has turned out to be a lot greater than people have thought in the past, but there is some amount that does relate to the carrying capacity. It may have been expandable, but it's not infinitely expandable.

And I would suggest that the errors of being on the low side, in terms of population relative to estimated carrying capacity, the danger from those errors is far, far less than the dangers from overshooting, in terms of population compared to carrying capacity.

And since we don't know what carrying capacity is or will be a hundred years from now, I think that, generally, that mankind has an interest in making sure it doesn't overshoot, in terms of population. And if it — there's no great penalties attached to undershooting at all that I see.

And it's very, you know, it's the old analogy. If you were going to go on a spaceship for a hundred years and you knew in the back of the spaceship there were provisions — there were a lot of provisions, but you didn't know exactly how much — in terms of filling the front of the spaceship with a given number of people, you would probably err on the low side.

I mean, you would — and if you thought maybe it could handle 300, in terms of the provisions, I don't think you'd put 300 people in there. I think you'd put about 150 or 200.

And you'd figure that you just didn't know, you know, for sure, the spaceship would get back in a hundred years. You wouldn't know how much was in the back. And you would be careful, in terms of not overshooting the carrying capacity of whatever the vehicle you were in.

And we are in a vehicle called Earth. We don't know its carrying capacity. We have learned that it's a lot larger than might have been thought by Malthus or somebody a few hundred years ago, but that doesn't mean it's infinite at all.

And I don't — the one thing I will assure you is that the projections that were run in the New York Times, you know, a few weeks ago, are not going to be the ones that are going to be run 50 years from now, or 30 years from now.

And it's not the sort of thing that is cured after the fact. I mean, you're not going to go around trying to intentionally reduce the population. It's much better to prevent population growth than to try and correct afterwards. And Garrett Hardin has got some interesting stuff on that.

Charlie?

CHARLIE MUNGER: Yeah, I will say that the whole controversy has been interesting in the way both sides don't understand the other side's model.

But by and large, on the population alarm side, the ecology side, they've always underestimated the capacity of modern civilization to increase carrying capacity.

And the more they underestimate, why the least — the less they seem to learn. That is not to the credit.

And the other side has equal folly. I think it's — I think you're just talking about the human condition.

It's a complicated, controversial subject and people feel strongly about it, and they learn slowly. And I just think that's the way it's going to be as far ahead as you can see.

WARREN BUFFETT: I think the chances of a world inhabited by 15 billion people having behavior, on average, better than if the world were inhabited by 5 billion people is low, but you know, that is — we'll never find a way to test that. But that's my instinct on it.

20. Expect "satisfactory" results

WARREN BUFFETT: Number 8.

AUDIENCE MEMBER: My name is Bert Flossbach. I'm from Cologne, in Germany. And first of all, I would like you gentlemen, for all the monitoring you have done and the pristine investment philosophy, which is more and more followed in Germany as well.

My question refers to the importance of realism. If the dim prospects of the — on the stock market Mr. Munger made earlier become true, and given that the size of Berkshire Hathaway diminishes the impact of small investments, what do you think would be the realistic return on the float over the next 10 years or 20 years?

WARREN BUFFETT: Well, I wish I knew. The only thing I can tell you is it'll be less than it's been in the last 20 years.

But I think it'll be satisfactory, compared to most alternatives. But I don't know whether the alternatives are going to produce 4 percent a year or 8 percent a year. I don't think they're going to produce 15 percent a year.

And I would think that if we obtain very low-cost float, which I think we should and I think we will, and we keep getting chances to buy businesses on reasonable terms, not sensational terms, and we get occasional market — which we've even had a few occasions of things we've done in the bond market the last few years. We haven't made huge amounts of money, but we've made a pretty good amount of money. And we'll see some things to do on equities.

I think overall, we can have a return that we won't be ashamed of, but we won't come close to a return that you might think, looking back, we could achieve, but —

We don't think the returns on equities are going to be terrible over the next 20 years. We just think that people whose expectations were built by 1982 to 1999 are going to be very disappointed.

But there's nothing wrong with earning 6 or 7 percent on your money. I mean, there — it's — in a world of relatively low inflation, you know, how much more is capital entitled to than that? I mean, it has to come out of somebody.

And to keep doing it on increasing amounts of money, if you earned much higher returns than that, you would have a whole shift in the national income stream over time.

So, I think we'll get chances to do things that will leave us satisfied, but the question is whether they leave you satisfied.

Charlie?

CHARLIE MUNGER: Well, I certainly can't improve on that, but it won't stop me from trying to say something. (Laughter) The —

I think one of the smartest things that a person can do under present conditions is just dampen the expectations way down from the investment achievements of the past, including, of course, with reference to Berkshire stock. I think that's maturity and good sense.

All that said, I like our model and I like what we have in place, and I like what's been coming in recently.

And I think we've had a lot of fun in the past, and some achievement, and my guess is we'll continue to do that.

And I'm just up here, most of the time, to indicate to the rest of you that maybe you've got 10 more tolerable years coming out of Warren — (laughter) — and I'm doing the best I can at that. (Applause)

21. Discipline is more important than location

WARREN BUFFETT: Number 9, please.

AUDIENCE MEMBER: Good afternoon. I'd like to get back to the basics and talk about the insurance side, which is the core of Berkshire.

In ’98, when we bought Gen Re, they had a Lloyd’s syndicate, DP Mann, now known as Faraday. In addition, in 2000, we bought the Marlborough Agency.

I’d like to get your perspective on what you see is happening at Lloyd’s and their future, as well as our commitment to the Lloyd’s market.

WARREN BUFFETT: Yeah, well, we do have what is now known as the Faraday syndicate. And actually, our takedown of their capacity, which I think was maybe, I don’t know, in the area of 30 percent a few years back, is now well into the mid-90s percent.

So, we, in effect, have a much larger commitment, through Faraday, to the London market. And I would think we would do pretty well with that commitment.

But in the end it really doesn’t make any difference whether you’re in London or whether you’re in Washington, as GEICO is, or whether you’re in — I mean, actually, for a while, Ajit lived here in Omaha, or whether, you know, you — it really depends —because you’re — it’s a worldwide market.

You’re going to see things — assuming that you have a reputation for paying claims and for having the capital to do things, and being willing to act — you’re going to see things every place in the world.

It’s really like investing. I mean, you can invest, whether you’re in London or Omaha or New York. It doesn’t make any difference where you’re located.

What counts is the ability to, and the discipline, to look at thousands of different things and select from them a group to do, because you can do anything in the world in insurance.

I mean, we could write tens of billions of premiums in, you know, in a month if we just opened the floodgates, but it’s out there.

There’s lots of business out there. There’s lots of investment opportunities — or investment choices — out there. And the question is, is what you say yes to and what you say no to.

And that should be determined by what you are able to evaluate and, in the case of insurance, even if they’re attractive, preventing an aggregation risk that could cause you major embarrassment at some time.

But we don’t have any — we don’t specifically think the London market is better than the U.S. — being domiciled in the U.S. — or vice versa. And as you know, we have an operation domiciled in Germany. And that isn’t the key to it.

You know, the key is having people making decisions daily where they accept risks they understand and that are properly priced, and avoiding undue aggregation, and the occasional problem, in terms of dealing with people that are less than honest.

But the first two items are the important ones day in and day out. And that can be done at Lloyd's, it can be done at Omaha.

I mean, National Indemnity did not have any great geographical advantage in sitting at 30th and Harney, but it's done very well, just in its primary business, ever since Jack Ringwalt founded it in 1941, or whatever year it was.

I mean, it — and Jack Ringwalt — some of you here may have known him — Jack Ringwalt — a very good friend of mine — but Jack Ringwalt was not an insurance genius.

And he never, you know, my guess is he never looked at an actuarial book in his life or even thought about it. But he just was an intelligent fellow who had enough sense to do — to stick with what he understood in virtually all cases, and to make sure that he got paid appropriately for the risk he was taking.

And he beat the pants off, you know, people that had been around for a hundred years in Hartford, who you know, had vast agency organizations and huge amounts of capital and actuaries and all kinds, you know, all kinds of data and everything.

But they didn't have the discipline that he had. And that's what it's all about.

So, I don't really relate it to geography. I would like to be exposed to as much business in the world as possible and have that exposure be manifested through people that have the disciplines I talked about.

And if we can see everything that takes place in the world, and people want to come to us for one reason or another, often because of our capital position or our willingness to take on volatility —

If those people come to us, wherever they come to us, and the people that they — who represent us use the guidelines we've talked about, we'll do very well.

And you know, the more places they have to intersect with us, as far as I'm concerned, as long as that intersection takes place with people who have that discipline.

Charlie?

CHARLIE MUNGER: Yeah, the insurance business is a lot like the investment business at Berkshire.

If you combine a vast exposure with a vast decline rate, you have an opportunity to make quite a few good decisions.

WARREN BUFFETT: And I think we're making them now. You can check on me next year on that.

22. Life advice: take care of your most important asset

WARREN BUFFETT: Number 10.

AUDIENCE MEMBER: I'm Lowell Chrisman (PH), from Phoenix, Arizona. I am retired and teaching in — seniors in high school. I wish they could be here to hear you today.

I'm teaching these people an investment course part-time. And the first class I went to, they asked me to teach them how to prepare for retirement.

I would like to know what the two or three things are that you would suggest that I include in this course.

WARREN BUFFETT: Well —

CHARLIE MUNGER: What the hell does Warren know about retirement? (Laughter)

WARREN BUFFETT: Yeah. We haven't even thought about it.

Now, let me give you one suggestion for that group. I use this sometimes when I talk to high school — a bunch of high school seniors down in Nebraska Wesleyan, a few weeks ago.

Tell the youngsters in the class, they're probably around 16 or 17, and if they're like I was when I was 16, you know, I was only thinking of two things.

And Martin's Aunt Barbara wasn't going out with me, so I was down to cars. (Laughter)

I tried hearses, but that didn't work. The —

And let's assume, and I use this with — let's assume a genie appeared to you when you turned 16, and the genie said, "You get any car you want tomorrow morning, tied up in a big pink ribbon, anything you name. And it can be a Rolls Royce, it can be a Jaguar, it can be a Lexus, you name it, and that car will be there and you don't owe me a penny."

And having heard the genie stories before, you say to the genie, "What's the catch?" And of course, the genie says, "Well, there's just one. That car, which you're going to get tomorrow morning, the car of your dreams, is the only car you're ever going to get. So you can pick one, but that's it."

And you still name whatever the car of your dreams is, and the next morning you receive that car.

Now, what do you do, knowing that's the only car you're going to have for the rest of your life? Well, you read the owner's manual about 10 times before you put the key in the ignition, and you keep it garaged.

You know, you change the oil twice as often as they tell you to do. You keep the tires inflated properly. If you get a little nick, you fix it that day so it doesn't rust on you.

In other words, you make sure that this car of your dreams at age 16 is going to still be the car of your dreams at age 50 or 60, because you treat it as the only one you'll ever get in your lifetime.

And then I would suggest to your students in Phoenix that they are going to get exactly one mind and one body, and that's the mind and body they're going to have at age 40 and 50 and 60.

And it isn't so much a question of preparing for retirement, precisely, at those ages, it's a question of preparing for life at those ages.

And that they should treat the importance of taking care and maximizing that mind, and taking care of that body in a way, that when they get to be 50 or 60 or 70, they've got a real asset instead of something that's rusted and been ignored over the years.

And it will be too late to think about that when they're 60 or 70. You can't repair the car back into the shape it was. You can maintain it. And in the case of a mind, you can enhance it in a very big way over time.

But the most important asset your students have is themselves.

You know, I will take a person graduating from college, and assuming they're in normal shape and everything, I will be glad to pay them, you know, probably $50,000 for 10 percent of all their earnings for the rest of their lives.

Well, I'm willing to pay them 10 percent for — $50,000 for 10 percent — that means they're worth $500,000 if they haven't got a dime in their pocket, as long as they've got a good mind and a good body.

Now that asset is far, far more important than any other asset they've got, unless they've been very lucky in terms of inheritance or something, but overwhelmingly their main asset is themselves. And they ought to treat their main asset as they would any other asset that was divorced from themselves.

And if they do that, and they start thinking about it now, and they develop the habits that maintain and enhance the asset, you know, they will have a very good car, mind, and body when they get to be 60. And if they don't, they'll have a wreck.

Charlie? (Applause)

23. Why Berkshire won't be providing guards to airports

WARREN BUFFETT: Number 1?

AUDIENCE MEMBER: Good afternoon, Mr. Buffett and Mr. Munger. I'm George Brumley, from Durham, North Carolina.

It's been reasonably argued that the most critical factor in evaluating a business is establishing the sustainability of a competitive advantage.

Let's assume that we have knowledge in hand about a few truly unique companies that possess sufficient strengths to out-duel the competition, and that we can therefore estimate future cash flows with relative certainty.

I admit that getting this far is far from easy, moreover it seems that the wild card of an unchecked tort system has grave potential to turn even such sound analysis on its head.

Predicted cash flows and reasonably estimated terminal values can be effectively driven to zero for business owners via a transfer to both litigants and litigators.

My question is, how should intelligent investors attempt to factor such uncertainty into their valuations of potential investment opportunities?

WARREN BUFFETT: Charlie's the lawyer, so I'll tell him how — I'll have him tell you how to protect yourself from his brethren.

AUDIENCE MEMBER: And I have quick follow-up.

CHARLIE MUNGER: I think it is entirely fair, as an investor, to just quitclaim certain areas of business as having too many problems.

I almost feel that way about workman's compensation insurance in California.

In other words, the system morphs into something that is so unfair and so crazy that I'm willing to pretty much, at least, leave it behind. And I think there are all kinds of areas like that.

Another fellow and I once controlled a company that invented a better policeman's helmet. And we told them not to make it. We told them to sell it to somebody else who was judgment-proof or — we wanted the policemen to have the helmet, but we didn't want to make it.

I think there are whole areas of activity where, for the already rich, the tort system makes participation foolish. And I think you can sort of figure out where those are and avoid them. I don't think the tort system is going to be fixed quickly.

WARREN BUFFETT: Yeah, George — actually, George Gillespie is, I think, here today. And he and I were directors of Pinkerton 20 years ago. And in fact, we owned a very significant percentage of Pinkertons, although it was controlled by the family foundation.

But one of the interesting problems then was a question of whether we would want to supply guards, for example, at airports.

And if you think about it, Berkshire, itself — well, forget about Pinkerton — would be absolutely crazy to go into the business of supplying guards to airports.

We might be more responsible, in terms of selecting the guards. But if we were to have a guard, say, at that Portland airport from which a plane took off — or where from what the original boarding was of the people that took off from Logan — or we are the guards at Logan or wherever — we might have been held liable for billions and billions of dollars.

You know that people would have gone after us because we would have had deep pockets and we would have had an employee of ours, and people would have said that if it hadn't for your employee, these people wouldn't have all died, and everything else wouldn't have happened.

And for us to be in a business, like Charlie and the helmet business, I mean, for us to be in a business like that would be madness when some other guy operating out of his basement can have guards and if, you know, if they blow up the whole airport it doesn't make any difference because he's judgment-proof.

So, it actually is a system that may discourage, perhaps, more responsible people from ever even dreaming of being in that kind of business.

And unfortunately, I would say that the range of businesses, since 1980, when we were thinking about that sort of thing at Pinkertons, the range of businesses to whom such reasoning might apply has probably enlarged to a significant degree.

There's just a lot of things that a rich corporation shouldn't do because they will pay a price if they are wrong, or if even somebody maybe suspects they were wrong, that would be incredibly disproportionate to what somebody in different economic circumstances would bear.

It's absolutely a selection by the tort system of people that are going to provide certain services and products. And I don't know any answer for that except to avoid it.

24. Finova deal won't be as profitable as expected

WARREN BUFFETT: Now, you had another question, George?

AUDIENCE MEMBER: Yes, just briefly, if you could give us an update on the economics of the Finova deal?

WARREN BUFFETT: Well, the Finova deal is about like — well, it is like when we wrote the annual report.

And actually, Finova's annual report deals with this, too. I think most of you know the terms of it.

We guaranteed what was originally going to be a $6 billion loan that enabled creditors to be paid a large percentage of their claim in the Finova bankruptcy. And we only took down 5.6 billion of the 6 billion because there had been payments made faster at Finova.

Finova was a failed finance company, a very big one, and we were in partnership with Leucadia in this operation. And they have management responsibility, and they're doing a fine job.

That loan of 5.6 billion, on which, in effect, we make roughly a 2 percent override on 90 percent of the loan. So, if it had been 6 billion, we would have had a carry of 108 million a year, although it was going to come down.

Now the loan is down to 3.2 billion, I believe. There was a bulk sale of some franchise receivables for about 500 million to GE Credit here not so long ago.

So the exposure's down to 3.2 billion, but of course the 2 percent override is down to 2 percent on 3.2 billion.

We feel — well, after September 11th, many of the assets at Finova were aircraft. And they were not the latest of aircraft, and they were not to the greatest of lessees in many cases.

So there was a big hit to the aircraft portfolio, and there was — there were other receivables relating to resort properties and that sort of thing, which were also hit by anything that impacted travel and that sort of thing.

So the portfolio was worth less — appreciably less — on September 12th than it was on September 10th. And that will not, in my view — our 3.2 billion, as far as I'm concerned, we've guaranteed it, but I think that is very close to 100 percent OK.

And then there's a group of bonds underneath it which are the residual bonds, you might say, of the ones that existed in the bankruptcy, because 70 percent got paid off and 30 percent didn't. And we own that means of that residual — we own 13 percent or so.

Those bonds are going to be worth a lot less than we thought they were going to be worth the summer of last year.

We bought our position at 67 cents on the dollar, and we've already — we got 70 cents on the dollar, plus these bonds, plus we get the override on the Berkadia loan.

So we got all our money back, and then some, on the bonds that we bought, and we get the override on the Berkadia, so we will, in all likelihood, almost certainly, I would say — although, who knows? I mean, I didn't know about September 11th — but we will almost — we're very, very likely — to make a significant amount of money on the whole transaction, but not as much money as we thought we were going to make last summer.

And we feel very pleased with the way Leucadia's handling things, but there is not as much value in that portfolio today because of the events of September 11th.

Charlie?

CHARLIE MUNGER: Yeah, it's an interesting example of Ben Graham's margin of safety principle. A whole lot has gone wrong that we didn't predict, and yet we're coming out fine.

WARREN BUFFETT: Yeah, we should make some hundreds of millions in aggregate over time on it, but a lot went wrong. But we, as Charlie said, we had a margin of safety when we bought into it, and we felt we had a margin of safety, and it turns out we needed it.

AUDIENCE MEMBER: Thank you.

25. "Hard to find real estate that's really mispriced"

WARREN BUFFETT: Number 2.

AUDIENCE MEMBER: I'm Bob Kline (PH), from Los Angeles.

I wonder if you could give us a glimpse into your investment process, the way you approach looking at a particular industry. And I wonder if you could use real estate as an example.

I know real estate hasn't been a big, huge part of Berkshire's portfolio over the years. And I wonder if that's because you view real estate as a commodity business or if, maybe, the cash flows from real estate tend to be more predictable than, perhaps, from some other industries, and thus, it tends to be less likely to be mispriced, and therefore less likely to find terrific bargains in real estate. So —

WARREN BUFFETT: Yeah, you're — go ahead.

AUDIENCE MEMBER: So, just wondering if we could — if we were watching a discussion between you and Charlie hashing out the merits of real estate,[tell us] how it would go.

WARREN BUFFETT: Well, it would go like all our other conversations. He would say no for about 15 minutes — (laughter) — and I would gauge by the degree to which he — the emotion he put into his 'no's as to whether he really liked the deal or not. (Laughter) But the —

We've both had a fair amount of experience in real estate, and Charlie made his early money in real estate. The second point is the more important point.

Real estate is not a commodity, but I think it tends to be more accurately priced — particularly developed real estate — more accurately priced most of the time.

Now, during the RTC period, when you had huge amounts of transactions and you had an owner that didn't want to be an owner in a very big way, and they didn't know what the hell they owned, and all of that sort of thing, I mean, you had a lot of mispricing then. And I know a few people in this room that made a lot of money off of that.

But under most conditions, it's hard to find real estate that's really mispriced.

I mean, when I look at the transactions that REITs engage in currently — and you get a lot of information on that sort of thing — you know, they're very similar. But it's a competitive world and, you know, they all know about what a class A office building in, you know, in Chicago or wherever it may be, is going to produce.

So at least they have — they may all be wrong, as it turns out, because of some unusual events, but it's hard to argue with the current conventional wisdom, most of the time, in the real estate world.

But occasionally there have been some, you know, there could be big opportunities in the field. But if they exist, it will certainly be because there's a — there'll probably be a lot of chaos in real estate financing for one reason or another.

We've done some real estate financing and you have to have the money shut off to quite a degree, probably, to get any big mispricing across the board.

Charlie?

CHARLIE MUNGER: Yeah, we don't have any competitive advantage over experienced real estate investors in the field, and we wouldn't have if were operating with our own money as a partnership.

And if you operate as a corporation such as ours, which is taxable under Chapter C of the Internal Revenue Code, you've got a whole layer of corporate taxes between the real estate income and the use of the income by the people who own the real estate.

So, by its nature, real estate tends to be a very lousy investment for people who are taxed under Subchapter C of the code relating to corporations.

So, the combination of having it generally allows the activity for people with our tax structure, and having no special competence in the field means that we spend almost no time thinking about anything in real estate.

And then such real estate as we've actually done, like holding surplus real estate and trying to sell it off, I'd say we have a poor record at.

WARREN BUFFETT: Yeah, C corps really, it doesn't make any sense. I mean, I know there are C corps around that are in real estate, but there are other structures that are more attractive.

There really aren't other structures — I mean, Lloyd's is an attempt at it, to some degree — but there aren't other structures that work well for big insurance companies, or —

I mean, you can't have a Walmart very well that does not exist in a C corp. So, they are not subject to S corp, or partnership competition, that determines the returns on capital in the discount store field.

But if you're competing with S — the equivalent of S corps — REITs or partnerships or individuals, you've just got an economic disadvantage as a C corp, which is, for those of you who don't love reading the Internal Revenue Code, is just the standard vanilla corporation that you think of — all of the Dow Jones companies, all of the S&P companies, and so on.

And as Charlie says, it's unlikely that the disadvantage of our structure, combined with the competitive nature of people with better structures buying those kinds of assets, will ever lead to anything really interesting.

Although, I would say that we missed the boat, to some extent, during the RTC days. I mean, it was a sufficiently inefficient market at that time, and there was a lack of financing that— we could have made a lot of money if we were — had been geared up for it at that time.

We actually had a few transactions that were pretty interesting, but not — but nothing that was significant in relation to our total capital.

CHARLIE MUNGER: We thought significantly about buying the Irvine Corporation —

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: — when it became available. So, but that's the only big one I can remember that we seriously thought about.

WARREN BUFFETT: Yeah, and that was in 1977 or so, as I remember?

CHARLIE MUNGER: Way back.

WARREN BUFFETT: Yeah, Mobil Oil was interested, and you know, Don Bren ended up putting together a group for it.

And that kind of thing could conceivably happen, but it's unlikely.

26. The problem with how Black-Scholes values options

WARREN BUFFETT: Number 3?

AUDIENCE MEMBER: Hello, my name is Joseph Lepre (PH). I'm a shareholder from Minneapolis, Minnesota, and I'd like to thank you for this opportunity to ask a question.

Mr. Buffett, you mentioned earlier today that you'd be willing to sell insurance in exchange for stock options. If possible, could you please describe a methodology for the valuation of stock options, particularly in cases where there is no market pricing data available for the option being valued?

WARREN BUFFETT: Yeah, I would — I could figure out what I would pay for an option on a private business. I could figure out what I could pay for an option on a public business. It might be a little easier. I could figure out what I'd pay for an option on an apartment house or a farm.

I had a friend, I mean, when I was 20 years old, we developed a big plan and we were going to go out and option out — option farms, you know, outside of what were then the city limits of Omaha.

And we figured that if we offered a farmer a modest amount, which would be annual income to him, to option his farm at double the price it was bringing then, that it would, you know, he would be happy to sell for double the price that year, and maybe we could do something. And it might have worked out OK.

Every option has value. You know, I've got a house worth X. If you offer me a few dollars to give you an option at 2X for 10 years, I'm not going to take it, because there are all kinds of possibilities in terms of inflation.

All options have value. And people that get options usually understand that better than people that give options. I'm not talking about stock options now, but in other arenas.

So we would be happy, you know. I mean, what I could get — let's say — we'll just pull one out of the air. Let's take an untraded company like Mars, Inc.

Would I be happy to have an option, a 10-year option on a piece of Mars, Inc. at some given price?

Sure, I would. And there's an amount I would take for that — I would take in lieu of getting cash if I was writing a big insurance policy with Mars, Inc. They're not going to do this with me, but that —

And I would be happy, you know, instead of if you buy homeowner's insurance from me, if you want to give me an option on your house for 10 years, I'll take that in lieu of the premium.

I'll make my own calculation as to value. It won't be Black-Scholes, although that might be the best arrangement under many circumstances, but I would probably crank into — in my own case.

We've bought and sold options some. And as a matter of fact, on June 3rd, Berkshire Hathaway will receive $60 million if the S&P 500 closes at 1150-something or below.

And two years ago, when the S&P was 14-something, we agreed for — on that June 3rd option, or whatever it was — $400 million nominal value, where, in effect the counter party would get the profit above 2,000 and something, 42 percent up from the current cash price. And we got the profit between 5 and 20 percent on the downside on a put.

People who were calculating the values of options at that time, under traditional methods, felt that that was a cashless transaction — that the value of the call that we gave was equal to the value of the put that we received. You know, I decided differently.

So, we don't accept, blindly, option values as determined by the calculations of people who win Nobel Prizes. Instead, you know, we actually put an aspect of judgment into some.

There would be businesses that would come out with identical Black-Scholes values on options for 10 years, and we would pay a different amount for one than the other, maybe a significantly different amount.

But we would pay something for just about any option. And you know, it is the nature of prices in this world to change, and economic conditions to change. And an option is a chance to participate in a change without giving up anything other than that original premium you pay.

Many people just don't seem to grasp that, but believe me, the people who are getting options on stock do grasp that.

And the people who are giving them, which are the shareholders, you know, represented by a group like this, who don't have any real voice in giving it, but they sometimes don't fully realize what's being given away.

Imagine, you know, going up a few miles away from here and having two farms for sale. And you say to the guy, "How much do you want for them?" and they both say a thousand dollars an acre, but the one guy says, "But every year, I want you to option, you know, I want you to give me 2 percent of the place back at a thousand. So, you know, at the end of 10 years, 20 percent of the upside belongs to me, but you've got all the downside." I mean, which farm are you going to buy? The one without the options or the one with the options? It's not very complicated.

And we will — we are dead serious when we say we will take options in lieu of cash. Incidentally, the company that gives us those options in lieu of cash for an insurance premium has to record the expense in terms of the fair value of the option they've given us.

The only item for which they don't have to record that as expense is compensation. But if they give it to us for their light bill, or if they give it to us for their insurance premium, or they give it to us for their rent, they have to call it a cost.

But only when it comes to the CEO's compensation, and other people like it, do they not have to record it as a cost, and that's because they've been able to get Congress to bow to their will and to their campaign contributions.

Charlie?

CHARLIE MUNGER: Yeah, the Black-Scholes crowd really did get a Nobel Prize for inventing this formula to value options, not executive stock options, but just options generally.

And if you don't know anything about the company, except the past price history of stock transactions —

WARREN BUFFETT: And dividends.

CHARLIE MUNGER: — and if it's — and the dividend being paid — and if the option is over a very short term, it's a very good way of approximating the value of the option.

But if it's a long-term option and you think you know something, it's an insane way to value the option.

And Wall Street is full of people with IQs of 150 that are using Black-Scholes to value options that shouldn't be tortured into the model.

And all of corporate — of America is using Black-Scholes to price stock options in the footnotes of the accounting statements, and they do that because it comes up with the lowest cost number.

WARREN BUFFETT: Well, they not only do that, but they assume the term is less than the actual term of the option. And I mean, they'll do everything they can, and I've been in on these discussions. They'll do everything they can to make the number look as low as possible. It's that simple.

CHARLIE MUNGER: And they're using a phony process to determine the number in the first place. So, it's a Mad Hatter's tea party, and the only thing that's consisting — consistent — in it is that the whole thing is disgusting. (Laughter and applause)

27. Investment bankers are "in the lucky part of society"

WARREN BUFFETT: Number 4, please.

AUDIENCE MEMBER: I'm John Golob, from Kansas City. I'm mostly retired, but also teach a course on financial markets at the University of Missouri in Kansas City.

I always tell my students that I learned much more about investing at Berkshire Hathaway meetings than I ever did from my professors at the Wharton School. (Applause)

I have a general question about investment banks. Now, given your connection with Salomon, I'm always surprised at sort of the attitude you represent to this industry. Somehow I get the idea that you view them as just their main social value is charging very high fees for unnecessary churning.

I'm wondering if you have any perspective on the general influence of investment banks in U.S. finance that is — rising or falling.

I hate to be a Pollyanna, but I might hope that Enron-like debacles would reduce, maybe, the influence of investment banks, that people wouldn't necessarily trust, you know, some of the advice they're giving.

WARREN BUFFETT: I think Enron is bound to have some favorable fallout in various areas. I mean, it — to the extent that it causes people to look more carefully at how various entities behave and that sort of thing. No, I think Enron was a plus for the American economy.

And the truth is our capital system, you know, despite all kinds of excesses and errors and everything else, you know, one way or another, we've come up in this country with 50-odd-percent of the world's market value for 4 1/2 percent of the world's population.

So, you know, I'm not negative on how the American capital system has developed. I do get negative about how certain people behave within that system, but you know, they would behave badly in any system. So, you know, it's the human condition.

But that is, you know, Charlie and I still think we should criticize things that we think are improper, but we don't criticize the whole system in any way, shape, or form. It's — you know, it's been a tremendous economic machine in this country.

But I would say that a market system, and I don't have anything better than — in fact, I think a market system is responsible in a material way for the prosperity of this country. So, I have no substitute in mind for the market system.

I do think it produces extraordinarily inequitable results, in terms of some overall view of humanity, and that that should be largely corrected by a tax system.

I don't think it should be any comparable worth system or anything like that. I just — the idea of the government trying to — (laughs) — assign all that just strikes me as wild.

But the market system lets a fellow like me, you know, make so much money because I know how to allocate capital, you know, compared to a great teacher, or nurses, cancer — whatever. I mean, it just showers rewards on somebody that has this particular skill at this particular time.

And that's great for me, but it should — there — in a really prosperous society, that should — there should be some corrective aspects to that.

Because it really strikes me as inappropriate that the spread of prosperity in a hugely prosperous economy should be decided totally by the quirks of skills that come into play and get rewarded so hugely from the market system.

So, I — but I, you know, I believe that — that's why I believe in a progressive tax system, and so on.

I would say, in terms of investment banking particularly — I mean — (laughs) — I was standing one time with an investment banker, and he was looking out the window, and he said, "Just look." He says, "As far as you can see, nobody's producing anything." And I said, "Yeah, that seems to be a mandate they take pretty seriously, too." (Laughter)

But it — you know, there is a huge amount of money in a system, you know, with 14 trillion, or whatever it may be, of market values, and where people are spending other people's money, and corporations, and where the more you spend for something, sometimes you get — gets equated with value as in fairness opinions, and all of that sort of thing.

It's quite disproportionate to what I really think the ultimate contribution to the country is of various people, but I don't have a better system — (laughter) — to substitute for it. I don't want anybody to think — come away thinking that I think we ought to tinker with that very much.

I think that the — I think your tax system should be the way that you distribute the prosperity in a somewhat better way.

When we ask people to go to war, you know, or that sort of thing, we don't take the person who's made the most money and say, "Well, they benefited the most from society, so we'll send them and put them in the front lines," or anything like that.

I mean, we — there's various aspects of being a citizen in this country that I think should make sure the people that don't get the great tickets for — that make them prosper in a market setting, they still should do pretty darn well, as far as I'm concerned.

And really, people like me shouldn't, you know —

It doesn't make any sense to compensate me the way this world has. And it wouldn't have happened if I'd been born in Bangladesh, or it wouldn't have happened if I had been born 200 years ago.

You know, somebody — another one of those genie stories. Imagine, you know, when I was — 24 hours before I was born and there had been some guy with exactly my DNA right next to me, who was also going to be born in 24 hours. And the genie had come to the two of us and said, "We're now going to have a bidding contest.

"And the one that bids the most of their future income gets to be born in the United States, and the one that loses in this is born in Bangladesh. And what percent of your future income will you give to be born in the United States?"

I'd have gone pretty high in the bidding. (Laughs)

You know, I mean, that would have been an interesting test of how important I thought my own abilities were compared to the soil in which I was going to be planted.

So, I, you know, I feel I'm lucky, and I am lucky, I mean, obviously. But I think we ought to figure out ways to take care of the people that are less lucky.

And I think that investment bankers should consider themselves in the lucky part of society.

And you know, there's nothing wrong with what they do. Raising capital for American business is a fine thing and all that. I just think that they are paid, in relation to the talent and that sort of thing they bring to the game, I think they are paid obscenely high, but I think that's true of me, too.

Charlie?

CHARLIE MUNGER: Yeah, the — but I would argue that the general culture of investment banking has deteriorated over the last 30 or 40 years. And it — remember, we issued a little bond issue, Warren, way back?

WARREN BUFFETT: Yeah, 6 million.

CHARLIE MUNGER: Diversified Retailing. And we had this very high-grade investment bankers from Omaha and Lincoln. And they cared terribly whether their customers, whom they knew, were going to get their money back.

WARREN BUFFETT: Yep.

CHARLIE MUNGER: And they fussed over every clause in the indenture, and they talked about whether we were really OK. And so, that was a very admirable process that we were put through.

WARREN BUFFETT: Yeah, we were screened in that.

CHARLIE MUNGER: We were screened, and intelligently screened. And it may not have been too intelligent to let us through, but it was an intelligent process.

And I'd say the culture on Wall Street lately has drifted more and more to anything that can be sold at a profit will be sold at a profit.

WARREN BUFFETT: Yeah. Can you sell it? That's the question.

CHARLIE MUNGER: Can you sell it is the moral test. That is not an adequate test for investment banking. And —

WARREN BUFFETT: And there used to be two classes of investment bankers, too, really. I mean, there were the ones that did the screening and all of that.

And then there was a really low-class element that essentially merchandised securities no matter what they were. And there were clean lines, but the lines have disappeared.

CHARLIE MUNGER: Yeah, so it hasn't been good to have this deterioration of standards in high finance.

And will it ever swing back? You would certainly hope so.

WARREN BUFFETT: You can see why were so popular at Salomon. (Laughter)

CHARLIE MUNGER: But in fairness, we had a very effective investment banking service from Salomon.

WARREN BUFFETT: That is true. That is true. And we — when we sold the B stock, for example, now we set the rules. And they wouldn't have done it that way necessarily, but they did a very good job of doing it the way we asked them to do it.

And so, we said we don't want people hyped into the stock. We want a very low commission and we're going to issue as much as the market takes so that nobody gets excited about the after-market behavior and buys because they think it's a hot issue.

I mean, we set a bunch of rules we thought were rational, and Salomon did a terrific job of following through on that and doing exactly what we asked them to. And it was successful by our standards.

So, no, I would say they did a terrific job in that case.

CHARLIE MUNGER: And they thoroughly enjoyed doing it, the people working on the job.

WARREN BUFFETT: That's true.

CHARLIE MUNGER: They'd never done one like it before.

WARREN BUFFETT: That's true. Yeah.

We've changed our whole opinion here in a matter of seconds. (Laughter)

CHARLIE MUNGER: Well, but there's a lesson in that.

Certain kinds of clients get higher quality service than other kinds of clients. In fact, there are many clients who should never be accepted at all at investment banking houses, yet they are.

WARREN BUFFETT: Are you thinking of the fellow at Normandy? (Laughter)

CHARLIE MUNGER: Yeah.

WARREN BUFFETT: I mean, can I you imagine that guy even getting in the door? I mean, it just — it blows your mind. I mean, he went to jail subsequently. He should have.

CHARLIE MUNGER: He was married to his high school teacher, who was at least two decades older than he was.

WARREN BUFFETT: Charlie has more opinions on this kind of thing than I do, but go ahead. (Laughter)

CHARLIE MUNGER: There were enough peculiarities in the situation. (Laughter)

I wouldn't have thought it so peculiar, except that he was a man and she was a woman.

28. Dexter Shoe acquisition was a mistake

WARREN BUFFETT: OK, number 5. (Laughter)

AUDIENCE MEMBER: Good afternoon. Mike Envine (PH) from Chelmsford, Massachusetts.

I noticed in the annual report that you took a charge-off for Dexter and put it under the management of H.H. Brown.

And I was thinking back, I believe in 1985 you wrote about the process you went through in closing the textile business. And I was wondering if you could elaborate how this situation is different.

I believe you indicated, in the textile business, that despite excellent management, it wasn't possible to earn an economic return on the assets.

WARREN BUFFETT: Yeah. Did you say that we took a charge-off on H.H. Brown?

AUDIENCE MEMBER: No, I meant to say we took a charge-off on Dexter.

WARREN BUFFETT: Oh, Dexter, yeah, absolutely. We lost a very significant amount of money on Dexter, thanks to a dumb decision that I made, and maybe several dumb decisions.

And I mean, that is a business that went offshore in a huge way. They're close to 1,200,000,000 pairs of shoes made in — or used in this country. I never can figure out how they get to that number. I mean, I use a pair — (laughs) — about every five years. But four for every man, woman, and child. I don't know, but that's the number.

And you know, I don't know whether it's 5 percent now, but it's something in that area, are made in this country, and hundreds of thousands of jobs have gone offshore with that.

The textile business, as you know, has gotten almost destroyed in this country. And when you have somebody like Burlington go into bankruptcy, you know, a wonderful company, spent lots of money on keeping their plants up to date and all of that sort of thing.

But in the end, you know, if you're paying 10 times as much per hour for labor as somebody else, it's awfully hard to be that good.

And that's going on in furniture manufacturing now, too. We have a number of furniture retailers and, you know, Bill Child, or Irv Blumkin will go over to the Orient fairly frequently

now. We'll buy — we buy a lot — a lot of furniture comes from there. And that trend is moving in that direction in a very significant way.

And your question is — was your question why Fruit of the Loom would be different?

AUDIENCE MEMBER: No, I was just wondering if there's any hope for Dexter, or if it's going down the same path as with textiles?

WARREN BUFFETT: Oh, no, well, Dexter is now part of H.H. Brown, and it's selling product which, overwhelmingly, is produced abroad. And H.H. Brown sells a very significant amount of product that's produced outside the United States, although they still produce a lot of product in the United States.

But — no, the Dexter — we will have a significant shoe business. The shoe business — we had some contracts on the books from Dexter that were unprofitable, and they will run for another quarter. But we made a fair amount of money in the shoe business in the first quarter. Justin made money.

I think our shoe business will be OK. It won't be a bonanza over time, but I think our shoe business — we've got very good management in there. We've got good management at H.H. Brown, and we've got good management at Justin.

And I would expect that we would have a substantial and a reasonably profitable shoe business in the future, but we will not be able to do it with a hundred percent or 90 percent or 80 percent domestic-produced shoes.

And in that respect, I was very wrong in paying what I did, and paying it in the manner I did, which was stock in the case of Dexter, for a domestic shoe manufacturer.

Charlie?

CHARLIE MUNGER: Yeah, that shows, which is important to show, that no matter how hard you work at having systems for avoiding error and practices of trying to stay within your circle of competency, et cetera, et cetera, you still make mistakes. And I think I can confidently promise that it won't be our last mistake.

WARREN BUFFETT: OK, here's our Blue Chip Stamps. (Laughter)

But you know, you might think about this a bit, too. We had a lot of workers up in Dexter, Maine, and we've had a lot of workers at some of the H.H. Brown plants.

And you know, we take a little hit financially and we make it up by some trading strategy in government bonds or something like that, that requires, you know, no effort and not really too much brain power.

And when you think of the consequences to the people that have spent a lifetime learning one trade, you know, and who live in those areas, and through no fault of their own — none, I mean they've done a good job — they've done a great job — working.

They're productive, but in the end, you know, their cost was 10 times or more, and they weren't getting paid that well, but 10 times what it could get done for elsewhere in the world.

So, we haven't really paid the price for that change in economic conditions. I mean, it's the people who work there, the people who work at Burlington, or wherever, where the jobs disappear.

And that's no argument for huge tariffs or anything of the sort. But retraining doesn't do much good if you've worked in our textile mill, as many people did years ago, and you're 60 years old and you only speak Portuguese.

Or if you work in Dexter, Maine, and you're 58. I mean, retraining, it gets kind of meaningless. So, we're the lucky ones, you know, basically in these situations.

And it is tough when you know one trade, particularly if you live in a small town, not lots of other employment opportunities or anything. So, you know, we have a charge-off and they have a huge change in their lives, basically.

29. Contrarian shareholder thinks annual report is too short

WARREN BUFFETT: Number 6.

AUDIENCE MEMBER: Jack Hurst (PH), Philadelphia. I have 3 questions, or 3 points.

The first is, I want to thank you for the pleasure it is to shop at Borsheims or Nebraska Furniture Mart, or even Benjamin Moore.

You have terrific people working there, and I've never been as satisfied with products as with what I've bought at those firms.

WARREN BUFFETT: Oh, well, thank you for that. And I thank you on behalf of the managements. They are terrific people that work at those companies.

AUDIENCE MEMBER: I agree with that.

You've dropped quite a bit from the annual report. There must be some God-given decree that it be limited to 72 pages.

But I wondered if you could put that in an internet message, such as that wonderful table about GEICO, its renewal policies and new policies, and the four pages at the end of the report about

the business categories, where you separate the insurance from the finance from the manufacturing, and also that discussion that you had of look-through earnings. I think that it's invaluable for looking at the company.

WARREN BUFFETT: OK, well, I appreciate the suggestions. And I —

AUDIENCE MEMBER: I have a third point. Oh, go ahead.

WARREN BUFFETT: But we do go through a — I mean, I don't know whether 72 pages is the magic number, or when I get to about 11,000 words, but occasionally, you know, we do make an editorial decision.

The look-through earnings, for example, didn't seem that important, and they're fairly easy to roughly calculate, for anybody that's interested. But you know, they are something that if I wrote for 15,000 words, I would have included.

So, I appreciate the suggestion on it, and I don't think anybody's accused me of writing too short a report — (laughter) — yet. But I'll take —

It's certainly on the — it's possible on the internet to put up anything, and we'll put up any material we've given you here before the opening on Monday morning so that nobody has a jump on any information.

We try to make it — I mean, I really want to cover the things that would be important to me if I were hearing about them on the other end. And we try to keep it to some number of pages, but I'm glad you want more. (Laughs)

30. Simplicity helps keep audit fees low

AUDIENCE MEMBER: OK, the third point is — the first of March, the Wall Street Journal analyzed — or compared — the auditing fees by the fees related to audit services and other audit services for the 30 stocks in the Dow Jones Industrial Average.

And there seems to be an inverse relation between the amount of non-audit fees with respect to market capitalization, an inverse correlation with that factor to the five-year compound growth of earnings, or the five-year total return for the companies.

And for the top — for the companies with the lowest ratio of non-audit fees to market capitalization, the increase in earnings was 10 percent annually. The total return was 18 percent annually.

For the other — for the total — it was 5.2 percent return annually on increase in earnings, and 11 percent increase in total return.

Is it because these non-audit fees are non-productive that it has this result? Or is it a chance — just a spurious fluctuation? Or is there something to the relation?

WARREN BUFFETT: I don't know the answer to that. And I hadn't seen what you are referring to. But it doesn't totally surprise me, because we like places that care about expenses.

And you know, I've never — I think Jack Welch had something in his book about no, you know, no company ever getting — going broke from cutting expenses too rapidly.

And when you see managements that are pretty lavish in what they toss around, you know, I think on balance that group doesn't do as well for shareholders as the other, but I have no statistical way of proving that.

And I don't know a way that — I don't know how you would set up a sample that would really be valid in terms of one kind versus the other kind.

But what you say doesn't shock me. We try to watch all expenses around Berkshire.

And I think that, at our subsidiaries, we — generally speaking — we have managers that are very, very good about that.

And I think that our audit costs, relative to the size of the enterprise and all of that, I think, are fairly low, although they're not as low as they were a few years back. But it's something that we care about, I can assure you of that.

I don't know how to — I wouldn't want to buy stocks, though, or sell stocks, based on any kind of statistical measure like that, even though that it looks good on what they call a backtest.

Charlie?

CHARLIE MUNGER: Well, one of the reasons our audit costs are so low is we have this passion for keeping everything simple. We don't want to be difficult to audit. And we prefer activities that are simple.

If you take the See's Candy company, the whole company goes to cash at the end of December every year, as if it were a farm where the crop came in and was sold in December.

I mean, an idiot could audit the See's Candy company without getting into trouble. (Laughter)

And there's a lot in Berkshire that's like the See's Candy company. It would be really hard to screw up.

31. Arthur Andersen as Enron's collateral damage

WARREN BUFFETT: We don't like complicated accounting. I mean, it — we really do like things that produce cash.

And Enron is a good example. Enron's grotesque in what happened. But there's no question in my mind that auditors have been unduly compliant to client wishes over the last few decades, and more so as they went along, even to the point where they started suggesting what I would consider quite dubious accounting to people in mergers and so on, so as to make their figures look better later on. And I've seen it firsthand.

So, I just — I think that although the auditors are supposed to work for the shareholders, that they got too much so they were working for management.

But I think that Enron may push them back significantly, even in the other direction. So, I think Enron will have a distinct beneficial effect on auditing, and it was needed.

CHARLIE MUNGER: Well, it's going to have a distinct beneficial effect on one fewer auditors. (Laughter)

WARREN BUFFETT: Yeah, although — (applause) — you know, it's an interesting question, and Charlie and I may differ on this. I mean — I don't think that — I don't know how many people Andersen employed, but it was a huge number.

And I certainly — it's clear that the weaknesses and culpability at Andersen goes far beyond anything remotely we saw at Salomon.

But it would have been a shame for Salomon, with 8,000 people, to have, actually, the bad acts of one guy, and the lapse in terms of reporting and all of that — which was a big mistake, but by a few other people — cause 8,000 people to get dislocated in their lives and lose their jobs.

I don't know, how do you feel, Charlie, about, you know, the bottom 40,000 people at Andersen who really didn't have a damn thing to do with shredding or the Houston office or anything of the sort? I mean, their lives are really getting changed in many cases.

CHARLIE MUNGER: I regard it as very unfair and totally undeserved in all those cases. Yet even so, I think that capitalism without failure, as somebody once said, it's like religion without sin or —

WARREN BUFFETT: Religion without hell.

CHARLIE MUNGER: — religion without hell.

I think when it gets this bad, and the lack of adequate control mechanisms throughout the system, I mean, Andersen plainly didn't have a good total system of control.

And I think that it may be that capitalism should just accept this kind of unfairness in all these individual cases and let the firms go down.

WARREN BUFFETT: Well, let's say you and I did something really terrible, Charlie, at Berkshire. How do you feel about the 130,000 people then? I mean, should they —

CHARLIE MUNGER: You'd feel terrible about them, and there's no question about it.

And — but I'll tell you something, they wouldn't go down. The way we're organized, they wouldn't go down.

Warren, there's nothing you can do that is going to destroy the value of the subsidiaries — (applause) — and the careers within the subsidiaries.

You can blow your own reputation, you can blow the reputation at the holding company level, but you can't destroy their livelihood. I — that is a good —

WARREN BUFFETT: Well, we can mess up —

CHARLIE MUNGER: — way to be organized.

WARREN BUFFETT: We can mess up their lives though, I mean, if they lost their funding. Or yeah, I mean, I agree with you about their —

CHARLIE MUNGER: Not very much.

WARREN BUFFETT: — viability, but you know —

CHARLIE MUNGER: Not very — Andersen was particularly vulnerable, being a professional partnership.

But maybe you should be extraordinarily careful if you're a professional partnership, with what clients you take on and how far you go for them.

The law firms that I admire most have fairly strict cultures of risk control. I think it's crazy, in the kind of world we inhabit, to operate in any other way.

32. No formula to pick out great investors

WARREN BUFFETT: OK, number 7. (Applause)

AUDIENCE MEMBER: My name is Rheon Martins (PH), from Cape Town, South Africa, and I became a big fan and avid reader of your ideas about 10 years ago.

In 1999, I did an MBA and was nicknamed Warren Buffett, because I quoted you in all the classroom discussions.

All I wanted to learn was how to value a stock and think about the stock prices, but sadly I was rather disappointed to find out that our MBA did not really teach that.

Mr. Buffett and Mr. Munger, my question is this: if you had to predict who would be the superior investors from a group of young, bright people, who share your investment philosophy and possess the realism and discipline you referred to earlier, which characteristics or work habits would you like to know about the individuals in the group?

And what weighting would you place on each factor to ensure the greatest probability of your prediction being correct?

WARREN BUFFETT: Well, that's too easy a question for me, so I'll let Charlie answer that. (Laughter)

CHARLIE MUNGER: I think the fair answer to that one is that I'm not capable of answering it.

WARREN BUFFETT: No, but I do — I think this: I think that's exactly right. I mean, if you ask me what should — how should you pick a wife, you know, 18 percent to humor, 12 percent to looks, you know, 17 percent, you know, to parents.

I can't give you the formula, but I think you'll make the right decision, you know — (laughter) — when you get —

And I think if Charlie and I were around a dozen very bright MBAs with good records and all of that, and we spent some time with them, I think we'd have a reasonable chance of picking somebody from that group that might not necessarily be number one, but they would be in the upper quartile, in terms of how they actually turned out.

And I — but I can't tell you how to, you know, I can't write out a software program or anything that will enable you to do that.

It — you know, I had that problem exactly at Salomon that went — on that Saturday morning, whatever it was, August 17th, and I had to pick a guy to run the place.

And there were a dozen or so people that all thought that they were the ones, or a number of them thought they were the ones to run it.

And they all had high IQs, and they all had lots of experience in investment banking and everything, and I — you know, in the end, I had to pick one.

And I did pick the right one, I will say that. And you know, was I — could I be a hundred percent sure at that time it was the right one? Well, probably not, but I felt pretty sure I had the right one.

And I can't tell you — I've had people say to me, "Well, what did you ask them? And how did you evaluate it?" and all, because I only had about three hours to do it.

And, I don't know. I mean, I can't write you out a set of questions that you should ask somebody.

And, you know, some of it may be body language and different things of that sort. There are a lot of variables in it.

But I think, in the end, you would have picked the same person I picked if you'd been in that spot.

You'd had to pick somebody in the three hours. And it — but quantifying it for you, I just — I can't do it.

Charlie, have you got —

CHARLIE MUNGER: Yeah, well, when multiple factors are causing success, you get these anomalies. You have two people who are going to be equally successful, and one is terribly good at A and terrible at Z, and the other is terribly good at Z — is very good at Z — and terrible at A.

They're equal. Which factor is most important? The answer, it doesn't matter in that case. When you've got multiple factors, great strength in one will compensate some for weakness in another.

And the factors can be quite different. I think the investment world is full of people who are succeeding based on quite different sorts of talent.

WARREN BUFFETT: We'll try to do better next year.

33. Why See's won't be sold at Costco

WARREN BUFFETT: Number 8.

AUDIENCE MEMBER: Good afternoon. My name is Catherine Dorr (PH), from Minneapolis, Minnesota. This is my first time here. Thank you for hosting this meeting today.

With the political and financial and corporate developments since September 11th, I am thankful every day that persons of your integrity and the managers that you have are still managing my inheritance money.

And I believe that the character and integrity is the most important criteria. I can sleep well at night.

I have two questions. The first one is for Mr. Munger.

When will there be a permanent store location, not a cart, of See's Candies at the Mall of America in Bloomington, Minnesota? (Laughter)

This is the largest indoor shopping mall, I believe, in the country, and hosts thousands of domestic and foreign visitors each year. A hint, you can sell See's Candies to other nationalities when they visit us.

Also, is it possible for Costco stores to sell See's Candies, since Mr. Munger has a shareholder interest in Costco? I would be interested in his answer. We could sell related products in our system. And I'll wait for his answer to ask the second question to Mr. Buffett.

CHARLIE MUNGER: The — the short answer to your questions is that, under our decentralized system, decisions of that kind go, rightly, to the person in charge of See's, who's here, Chuck Huggins.

And he may not be here through this afternoon session. He may have some limited interest, but Chuck can answer those questions. He knows a lot about candy.

WARREN BUFFETT: We had a Helzberg — we do have a Helzberg's at the Mall of America though, incidentally.

CHARLIE MUNGER: We have a what?

WARREN BUFFETT: We have a Helzberg's operation at Mall of America which does fine.

And I would add, we have not done as well moving away from the West as Charlie and I might have — well, certainly as well as we hoped for when we originally bought See's.

I mean, we've done way, way better in terms of the overall result, but it has been interesting to us.

Now, bear in mind, no one really makes any money with boxed chocolates through retail — through their own retail outlets in the United States, except for See's.

I mean, it — there's only one pound per capita of boxed chocolates, roughly, sold in the United States. I'm told I gave the wrong figure on — I said 64 ounces per year on people drinking. You really don't look like you only drink 64 ounces of liquid a year, it was a day.

But on this one, it is one pound per capita per year on boxed chocolates. So, it is not a big business. It's not a business — well, the truth is hundreds and hundreds of firms, including some that were a lot larger than See's, have failed. And there really is no one making any money elsewhere.

Russell Stover makes very good money selling through a distribution channel that is different, but nobody's found a way to do it in stores. We've found a way to do it in the West. We have not found a way to do it elsewhere.

And it's very irritating to me, and to Chuck, as far as that's concerned, that we can't figure out a way, because it's so successful when it works, as it does in the West.

But the answer is you can look at Archibald Candy, you know, the bonds are selling for 50. They own Fanny Farmer and Fannie May and Laura Secord up in Canada.

It is a very tough business in this country, because Americans just don't buy much boxed chocolate.

They're always happy to get it as a gift. Everybody in this room would love to get a gift of it, and they may buy it when they're here, but you don't normally walk down the street and — or walk in a mall and buy it for yourself. It's usually a gift or it's usually at holiday time.

So we don't do as well as you might think we would when we get to very successful malls that are located in other parts of the country.

We have opened holiday shops, kiosks really, at 50 stores at Christmastime, around the country, away from our natural territory. And we make some money out of that, but we wouldn't make money if we were there year-round.

And we've been thinking about it, I'll guarantee you, for 30 years because it's a terrific business where it works.

And it's a very good question you ask, because you would think, I mean and the Mall of America is an obvious example.

Simon would be tough to deal with, the landlord, but we could figure out a way to do that.

And the — but you would think we could make money at a Mall of America.

And we do fine with Helzberg's there, but I'm not positive a candy store would work. But we may try one, just because you asked the question. We'll — I'll talk to Chuck about it. (Laughter)

AUDIENCE MEMBER: OK —

WARREN BUFFETT: How about Costco?

AUDIENCE MEMBER: My second question —

CHARLIE MUNGER: Oh, Costco —

AUDIENCE MEBER: Oh, I'm sorry.

CHARLIE MUNGER: Costco makes its own decisions, and so does See's. And I wouldn't think of getting into that one.

AUDIENCE MEMBER: Oh.

WARREN BUFFETT: Well, I'll get into it. (Laughter)

We don't want people discounting our candy, it's very simple, any more than Rolex wants somebody discounting their watches.

And we will not — we're not going to go through any distribution channel at See's. We're already getting a bargain at our retail prices — (laughs) — and we're not going to go through any other distribution channel — any distribution channel at See's that's going to discount.

And Costco has no interest, and I don't blame them. I mean, they are based on giving people special prices. And that's fine, and God bless them, and, you know, we'll buy things from Costco, but we're not going to sell a product where the price is part of the integrity of the product — we're not going to sell it through a distribution system that — where discounting is basic to their whole approach.

Costco is a wonderful operation, and See's is a wonderful operation, and never the twain shall meet. (Laughter)

AUDIENCE MEMBER: Very logical.

34. Why Berkshire issued its B shares

AUDIENCE MEMBER: My second question is to Mr. Buffett.

Since I am a new shareholder, and because this is my first attendance here, I am not sure if this question has been asked before or not. And if it is addressed in your publications, I may have overlooked it, so please bear with me.

This is on the relationship between the A and the B shares. On page one of the booklet it states, quote, "Each share of Class A stock is entitled to one vote per share, and each class of — each share of Class B stock is entitled to 1/200th of one vote per share," close quote.

Calculating the voting weight per share would therefore be 200 Class B shares equaling one vote equally weighted of one Class A share. However, the Class B share price is 1/30th, traditionally, of a Class A share.

Given that the B share owners are purchasing into the same corporation and assets as the A share owners, and the cash is just as green no matter which share you buy, therefore it would be logical that the voting weight and price relationship of the shares be proportional all around, either 1/30th or 1/200th of pricing and voting weight, respectively.

The question, therefore, is why are the B shares not given voting weight of 1/30th instead of 1/200th? Or conversely why the B shares are not priced at 1/200th of an A share?

This may or may not be popular depending on with share you own. And I would appreciate your insight on that.

WARREN BUFFETT: Yeah, thank you. It's a good question. I — you may not be aware of the history of the issuance, but we issued the B shares — there were no — I mean, they're just a common share, so we renamed the old shares A shares. But we issued the B shares, whatever it was, what, seven or eight years ago, Charlie? Something like that.

And we did that in response to some people, particularly a fellow in Philadelphia, who we felt was going to induce people who really didn't understand Berkshire at all into a terribly expensive way of owning tiny pieces of Berkshire, probably sold on the basis of an historical record that we did not think was representative of what could be incurred in the future.

In other words, we were disturbed by somebody who saw a chance to make a lot of money off of people who were really uninformed, using our stock as the vehicle.

And we were going to reap the unhappiness of those people subsequently. They're going to run into tax problems and various administrative cost problems, and so on.

So, to ward that off, and only to ward that off, I mean, we issued the B stock, which effectively put that fellow out of business, because it was a better vehicle for doing what he was going to try and get people to do, at great profit for himself.

And when we issued it, it had not existed before, and we made — we put two differences in it from the A stock.

A, we wanted to create a lower value per share, so we did it on a 1/30th basis. At the time, it was around $1,100 or thereabouts because the A was selling for in the low 30,000.

But we put on the prospectus, which is a very unusual prospectus in other respects, we put on there we were going to differentiate the stock in only two ways, but we were going to differentiate it in those two ways.

And one was the voting power, because we didn't want to issue the stock and we didn't want to change the voting situation much.

And the second way was in terms of the designated charitable contributions, which we — the A was going to continue to enjoy and the B would not participate in.

And the reason the B wasn't going to participate in it is because the amounts would have gotten to the point where it would have been an administrative nightmare. I mean, this year, we designated $18 on the A shares. We've got a lot of one-share B holders, which would be 60 cents. And it just — it does not make any sense.

And we saw that, so we just said if you buy the B shares, you're buying into an instrument which economically is equal to 1/30th of an A. In voting, it is not equal to 1/30th of an A because we don't want to change the voting that much.

And it does not — it has a slight economic difference in terms of the fact it doesn't get to participate in the charitable contributions program, which is a very small item relative to the whole capitalization, but it's still — it's something.

But we do not — you'll notice our A and B, compared to other companies that have different voting arrangements — I was just looking at one the other day where the premium for the voting stock is 10 or 12 percent, or something like that, relative to the economic interests.

That's because people assume that if, you know, if the company's ever sold, or anything like that, the guy that owns the A will get treated better than the B. And Charlie and I have been in a situation where we got somewhat taken because of a situation — because of a relationship like that.

We will treat the B exactly as the A, except for those two things, which, at the time of issuance, we set out as being differences. We set — and those two items, everybody saw coming into the picture, and they're going to stay — they will stay as part of the picture.

Actually, you know, in terms of when the meeting will be held two years from now, you know, we aren't even going to vote by votes in a sense.

I mean, I'm going to get a sense of what people want to do, but I regard, in that respect, I think that it ought to be the most convenient for the most people, not for the most number of shares.

A will not vote any different than B or anything because, you know, you're all individual people and I want whatever works best for the most.

But in terms of those two other items, they were set out that way and they'll stay that way.

If — you know, if we'd set out a different — we would not change the relationship once the — of the two stocks once they were issued. We would not benefit one relative to the other, but those are the terms of the two.

Charlie?

CHARLIE MUNGER: Yeah, we had to issue the B stock to frustrate the ambitions of this jerk promoter. And — (laughter) — yet, we didn't want to split the A stock down into — all of it — down to tiny little fractions, which would have frustrated him, but forced us to have a stock split we didn't want.

So, we created a vehicle which was — had these two slight disadvantages, and that kept most of our capitalization in its traditional A-stock and also frustrated the promoter. It's an historical quirk. It's an accident of life.

WARREN BUFFETT: And the B is sold at a remarkably consistent relationship to the A. If the discount got as low as — or as high, I should say, as — I think it was over 4 percent for a small period of time — but it's, generally speaking, the B is sold at parity to slightly, very slightly, below parity.

And indeed, A shares get converted to B, and that would not happen unless the B were at parity. So, it — I think it's worked out pretty well. I mean, we didn't — we backed into it, but I don't think anybody's been disadvantaged by it.

35. Leasing of silver doesn't affect its price

WARREN BUFFETT: Number 9?

AUDIENCE MEMBER: I'm reading the question of Mark Rescigno (PH), from New York. "I've idolized you since I first heard of you 10 years ago. My only regret so far is that both of my children are girls, so I couldn't name them Warren."

WARREN BUFFETT: How about Warrenella? (Laughter)

AUDIENCE MEMBER: That might work.

Is there any merit to the argument that leasing of silver is suppressing the price of the metal, and thereby not allowing it to reflect the fundamentals?

WARREN BUFFETT: Oh, you hear that all the time. I don't think so. And in the end, the question of where it'll sell will be affected by how much there is around and how much there isn't.

And people get upset with shorts and they get upset with forward sales by producers, and they get upset with leasing, and all of that sort of thing. But in the end, if silver gets tight, it will go up in price. And if it isn't tight, it really doesn't make much difference whether it's leased or not.

It's like companies that get upset about the short position of their stock. I've even had a few people write me because there'd be some —

I don't care whether there's a thousand shares short of Berkshire or 300,000 shares short, it really doesn't make any difference, because someday, the people that are short have to buy and, you know, it's part of markets.

So the leasing of silver takes place because somebody's got some silver around, would rather get a small amount of income by leasing it to somebody that needs to use it for one reason or another.

But it's because the silver was sitting around in the first place that it's available for lease. And it really doesn't make much difference, I don't think, in terms of pricing over time.

Charlie?

CHARLIE MUNGER: I have nothing to say.

WARREN BUFFETT: Oh. (Laughter)

36. Buffett criticizes ABC News report on Kirby vacuums

WARREN BUFFETT: OK. It's — we've got time for one more question from number 10, and that will complete the cycle, also. So, shoot.

AUDIENCE MEMBER: My name is Jerry Miller (PH), Highland Park, Illinois, shareholder. I don't want to end this meeting on a down note, although I'm going to do it. (Laughter)

Before I say that, I would like to make a positive statement, one of many, but I'll hold it to one.

I have —since I've been retired, I've gone to quite a few shareholders meetings. And I only wish there was some way I could force most of the CEOs to attend.

They may not understand what's going on, but I would just like them to see how a shareholders meeting should be handled.

And now for the down — (applause) — a little bit.

I'm downstairs. I can hear some good results.

The — if you're going to sit behind the desk that says the $37 billion buck stops here, you're going to have to handle all questions. The one that I was really surprised I didn't hear, and I — today from anybody, including you — the two of you — would —

Although they've taken the 'E' word away from us, and the 'AA' word away from us, I don't want them to take the Berkshire Hathaway 'K' word away from us.

Do you understand that? If you do, just wave a finger. And if not, I'll explain it.

WARREN BUFFETT: Well, you're 0 for 2 at the head table. So, you better explain it. (Laughter)

AUDIENCE MEMBER: This morning, I had to chide some of the fellows down the stairs at the Kirby. A couple of weeks ago, there was a stain — or a tarnish — appeared on the Berkshire Hathaway name, and a little crack appeared in the charisma. Did you happen to see the program?

WARREN BUFFETT: Yeah, I saw the program. And it was interesting because it was focusing on the sales practices — or alleged sales practices — of some people that don't work for us, but work for distributors, just like salesmen work for Ford dealers or something of the sort.

And particularly, it was talking about them selling to older people. And interestingly enough, over 10 years ago, we put in a policy, which to my knowledge is the only one like it in the country, in that anybody, anybody over 65 who buys a Kirby vacuum and is unhappy for any reason, any time, up to a year, 11 months and 29 days later, can tell us so and they get their money back without question.

And I don't know of another consumer durable sold like that in the country. And one of the interesting things was that the fellow they interviewed, who talked about his mother having bought one and being terribly unhappy about it, had actually used the product for eight or nine months and gotten a full refund.

And that fact was not mentioned on the program, nor was the fact even that we had this policy. And I really regard that as rather extraordinary journalism.

AUDIENCE MEMBER: I trust you're not dusting off — (applause) — your Salomon notes then to read to the Kirby people.

WARREN BUFFETT: No, I can understand your reaction to the program, because it was pointed out to ABC News several times prior to the program, that this policy existed, that 300-and-some people in the previous year, and if they gave us a trade-in on the — on it and we — and they decided to call it off 11 months later, we gave them their money back, plus a machine equal to the — or better than the machine they gave us. And not a word was said about that in the program.

So, it — I do not regard it as a great moment in ABC journalism.

AUDIENCE MEMBER: Anyway, thanks for (Inaudible) —

Note: The following table appears in the printed Annual Report on the facing page of the Chairman's Letter and is referred to in that letter.

Berkshire's Corporate Performance vs. the S&P 500

Year	Annual Percentage Change in Per-Share Book Value of Berkshire (1)	Annual Percentage Change in S&P 500 with Dividends Included (2)	Relative Results (1)-(2)
1965	23.8	10.0	13.8
1966	20.3	(11.7)	32.0
1967	11.0	30.9	(19.9)
1968	19.0	11.0	8.0
1969	16.2	(8.4)	24.6
1970	12.0	3.9	8.1
1971	16.4	14.6	1.8
1972	21.7	18.9	2.8
1973	4.7	(14.8)	19.5
1974	5.5	(26.4)	31.9
1975	21.9	37.2	(15.3)
1976	59.3	23.6	35.7
1977	31.9	(7.4)	39.3
1978	24.0	6.4	17.6
1979	35.7	18.2	17.5
1980	19.3	32.3	(13.0)
1981	31.4	(5.0)	36.4
1982	40.0	21.4	18.6
1983	32.3	22.4	9.9
1984	13.6	6.1	7.5
1985	48.2	31.6	16.6
1986	26.1	18.6	7.5
1987	19.5	5.1	14.4
1988	20.1	16.6	3.5
1989	44.4	31.7	12.7
1990	7.4	(3.1)	10.5
1991	39.6	30.5	9.1
1992	20.3	7.6	12.7
1993	14.3	10.1	4.2
1994	13.9	1.3	12.6
1995	43.1	37.6	5.5
1996	31.8	23.0	8.8
1997	34.1	33.4	.7
1998	48.3	28.6	19.7
1999	.5	21.0	(20.5)
2000	6.5	(9.1)	15.6
2001	(6.2)	(11.9)	5.7
2002	10.0	(22.1)	32.1
Average Annual Gain — 1965-2002	22.2	10.0	12.2
Overall Gain — 1964-2002	214,433	3,663	

Notes: Data are for calendar years with these exceptions: 1965 and 1966, year ended 9/30; 1967, 15 months ended 12/31.

Starting in 1979, accounting rules required insurance companies to value the equity securities they hold at market rather than at the lower of cost or market, which was previously the requirement. In this table, Berkshire's results through 1978 have been restated to conform to the changed rules. In all other respects, the results are calculated using the numbers originally reported.

The S&P 500 numbers are **pre-tax** whereas the Berkshire numbers are **after-tax**. If a corporation such as Berkshire were simply to have owned the S&P 500 and accrued the appropriate taxes, its results would have lagged the S&P 500 in years when that index showed a positive return, but would have exceeded the S&P in years when the index showed a negative return. Over the years, the tax costs would have caused the aggregate lag to be substantial.

BERKSHIRE HATHAWAY INC.

To the Shareholders of Berkshire Hathaway Inc.:

Our gain in net worth during 2002 was $6.1 billion, which increased the per-share book value of both our Class A and Class B stock by 10.0%. Over the last 38 years (that is, since present management took over) per-share book value has grown from $19 to $41,727, a rate of 22.2% compounded annually.*

In all respects 2002 was a banner year. I'll provide details later, but here's a summary:

- Our various non-insurance operations performed exceptionally well, despite a sluggish economy. A decade ago Berkshire's annual pre-tax earnings from our non-insurance businesses was $272 million. Now, from our ever-expanding collection of manufacturing, retailing, service and finance businesses, we earn that sum *monthly*.
- Our insurance group increased its float to $41.2 billion, a hefty gain of $5.7 billion. Better yet, the use of these funds in 2002 cost us only 1%. Getting back to low-cost float feels good, particularly after our poor results during the three previous years. Berkshire's reinsurance division and GEICO shot the lights out in 2002, and underwriting discipline was restored at General Re.
- Berkshire acquired some important new businesses – with economic characteristics ranging from good to great, run by managers ranging from great to great. Those attributes are two legs of our "entrance" strategy, the third being a sensible purchase price. Unlike LBO operators and private equity firms, we have no "exit" strategy – we buy to keep. That's one reason why Berkshire is usually the first – and sometimes the only – choice for sellers and their managers.
- Our marketable securities outperformed most indices. For Lou Simpson, who manages equities at GEICO, this was old stuff. But, for me, it was a welcome change from the last few years, during which my investment record was dismal.

The confluence of these favorable factors in 2002 caused our book-value gain to outstrip the performance of the S&P 500 by 32.1 percentage points. This result is aberrational: Charlie Munger, Berkshire's vice chairman and my partner, and I hope to achieve – *at most* – an average annual advantage of a few points. In the future, there will be years in which the S&P soundly trounces us. That will in fact almost certainly happen during a strong bull market, because the portion of our assets committed to common stocks has significantly declined. This change, of course, helps our relative performance in down markets such as we had in 2002.

I have another caveat to mention about last year's results. If you've been a reader of financial reports in recent years, you've seen a flood of "pro-forma" earnings statements – tabulations in which managers invariably show "earnings" far in excess of those allowed by their auditors. In these presentations, the CEO tells his owners "don't count this, don't count that – just count what makes earnings fat." Often, a forget-all-this-bad-stuff message is delivered year after year without management so much as blushing.

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*All figures used in this report apply to Berkshire's A shares, the successor to the only stock that the company had outstanding before 1996. The B shares have an economic interest equal to 1/30th that of the A.

We've yet to see a pro-forma presentation disclosing that audited earnings were somewhat high. So let's make a little history: Last year, on a pro-forma basis, Berkshire had *lower* earnings than those we actually reported.

That is true because two favorable factors aided our reported figures. First, in 2002 there was no megacatastrophe, which means that Berkshire (and other insurers as well) earned more from insurance than if losses had been normal. In years when the reverse is true – because of a blockbuster hurricane, earthquake or man-made disaster – many insurers like to report that they would have earned X "except for" the unusual event. The implication is that since such megacats are infrequent, they shouldn't be counted when "true" earnings are calculated. That is deceptive nonsense. "Except for" losses will forever be part of the insurance business, and they will forever be paid with shareholders' money.

Nonetheless, for the purposes of this exercise, we'll take a page from the industry's book. For last year, when we didn't have any truly major disasters, a downward adjustment is appropriate if you wish to "normalize" our underwriting result.

Secondly, the bond market in 2002 favored certain strategies we employed in our finance and financial products business. Gains from those strategies will certainly diminish within a year or two – and may well disappear.

Soooo . . . "except for" a couple of favorable breaks, our pre-tax earnings last year would have been about $500 million less than we actually reported. We're happy, nevertheless, to bank the excess. As Jack Benny once said upon receiving an award: "I don't deserve this honor – but, then, I have arthritis, and I don't deserve that either."

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We continue to be blessed with an extraordinary group of managers, many of whom haven't the slightest financial need to work. They stick around, though: In 38 years, we've never had a single CEO of a subsidiary elect to leave Berkshire to work elsewhere. Counting Charlie, we now have six managers over 75, and I hope that in four years that number increases by at least two (Bob Shaw and I are both 72). Our rationale: "It's hard to teach a new dog old tricks."

Berkshire's operating CEOs are masters of their crafts and run their businesses as if they were their own. My job is to stay out of their way and allocate whatever excess capital their businesses generate. It's easy work.

My managerial model is Eddie Bennett, who was a batboy. In 1919, at age 19, Eddie began his work with the Chicago White Sox, who that year went to the World Series. The next year, Eddie switched to the Brooklyn Dodgers, and they, too, won their league title. Our hero, however, smelled trouble. Changing boroughs, he joined the Yankees in 1921, and they promptly won their first pennant in history. Now Eddie settled in, shrewdly seeing what was coming. In the next seven years, the Yankees won five American League titles.

What does this have to do with management? It's simple – to be a winner, work with winners. In 1927, for example, Eddie received $700 for the 1/8th World Series share voted him by the legendary Yankee team of Ruth and Gehrig. This sum, which Eddie earned by working only four days (because New York swept the Series) was roughly equal to the full-year pay then earned by batboys who worked with ordinary associates.

Eddie understood that how he lugged bats was unimportant; what counted instead was hooking up with the cream of those on the playing field. I've learned from Eddie. At Berkshire, I regularly hand bats to many of the heaviest hitters in American business.

Acquisitions

We added some sluggers to our lineup last year. Two acquisitions pending at yearend 2001 were completed: Albecca (which operates under the name Larson-Juhl), the U.S. leader in custom-made picture frames; and Fruit of the Loom, the producer of about 33.3% of the men's and boy's underwear sold in the U.S. and of other apparel as well.

Both companies came with outstanding CEOs: Steve McKenzie at Albecca and John Holland at Fruit. John, who had retired from Fruit in 1996, rejoined it three years ago and rescued the company from the disastrous path it had gone down after he'd left. He's now 70, and I am trying to convince him to make his next retirement coincident with mine (presently scheduled for five years after my death – a date subject, however, to extension).

We initiated and completed two other acquisitions last year that were somewhat below our normal size threshold. In aggregate, however, these businesses earn more than $60 million pre-tax annually. Both operate in industries characterized by tough economics, but both also have important competitive strengths that enable them to earn decent returns on capital.

The newcomers are:

(a) CTB, a worldwide leader in equipment for the poultry, hog, egg production and grain industries; and

(b) Garan, a manufacturer of children's apparel, whose largest and best-known line is Garanimals®.

These two companies came with the managers responsible for their impressive records: Vic Mancinelli at CTB and Seymour Lichtenstein at Garan.

The largest acquisition we initiated in 2002 was The Pampered Chef, a company with a fascinating history dating back to 1980. Doris Christopher was then a 34-year-old suburban Chicago home economics teacher with a husband, two little girls, and absolutely no business background. Wanting, however, to supplement her family's modest income, she turned to thinking about what she knew best – food preparation. Why not, she wondered, make a business out of marketing kitchenware, focusing on the items she herself had found most useful?

To get started, Doris borrowed $3,000 against her life insurance policy – all the money *ever* injected into the company – and went to the Merchandise Mart on a buying expedition. There, she picked up a dozen each of this and that, and then went home to set up operations in her basement.

Her plan was to conduct in-home presentations to small groups of women, gathered at the homes of their friends. While driving to her first presentation, though, Doris almost talked herself into returning home, convinced she was doomed to fail.

But the women she faced that evening loved her and her products, purchased $175 of goods, and TPC was underway. Working with her husband, Jay, Doris did $50,000 of business in the first year. Today – only 22 years later – TPC does more than $700 million of business annually, working through 67,000 kitchen consultants.

I've been to a TPC party, and it's easy to see why the business is a success. The company's products, in large part proprietary, are well-styled and highly useful, and the consultants are knowledgeable and enthusiastic. Everyone has a good time. Hurry to pamperedchef.com on the Internet to find where to attend a party near you.

Two years ago, Doris brought in Sheila O'Connell Cooper, now CEO, to share the management load, and in August they met with me in Omaha. It took me about ten seconds to decide that these were two managers with whom I wished to partner, and we promptly made a deal. Berkshire shareholders couldn't be luckier than to be associated with Doris and Sheila.

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Berkshire also made some important acquisitions last year through MidAmerican Energy Holdings (MEHC), a company in which our equity interest is 80.2%. Because the Public Utility Holding Company Act (PUHCA) limits us to 9.9% voting control, however, we are unable to fully consolidate MEHC's financial statements.

Despite the voting-control limitation – and the somewhat strange capital structure at MEHC it has engendered – the company is a key part of Berkshire. Already it has $18 billion of assets and delivers our largest stream of non-insurance earnings. It could well grow to be huge.

Last year MEHC acquired two important gas pipelines. The first, Kern River, extends from Southwest Wyoming to Southern California. This line moves about 900 million cubic feet of gas a day and is undergoing a $1.2 billion expansion that will double throughput by this fall. At that point, the line will carry enough gas to generate electricity for ten million homes.

The second acquisition, Northern Natural Gas, is a 16,600 mile line extending from the Southwest to a wide range of Midwestern locations. This purchase completes a corporate odyssey of particular interest to Omahans.

From its beginnings in the 1930s, Northern Natural was one of Omaha's premier businesses, run by CEOs who regularly distinguished themselves as community leaders. Then, in July, 1985, the company – which in 1980 had been renamed InterNorth – merged with Houston Natural Gas, a business less than half its size. The companies announced that the enlarged operation would be headquartered in Omaha, with InterNorth's CEO continuing in that job.

Within a year, those promises were broken. By then, the former CEO of Houston Natural had taken over the top job at InterNorth, the company had been renamed, and the headquarters had been moved to Houston. These switches were orchestrated by the new CEO – Ken Lay – and the name he chose was Enron.

Fast forward 15 years to late 2001. Enron ran into the troubles we've heard so much about and borrowed money from Dynegy, putting up the Northern Natural pipeline operation as collateral. The two companies quickly had a falling out, and the pipeline's ownership moved to Dynegy. That company, in turn, soon encountered severe financial problems of its own.

MEHC received a call on Friday, July 26, from Dynegy, which was looking for a quick and certain cash sale of the pipeline. Dynegy phoned the right party: On July 29, we signed a contract, and shortly thereafter Northern Natural returned home.

When 2001 began, Charlie and I had no idea that Berkshire would be moving into the pipeline business. But upon completion of the Kern River expansion, MEHC will transport about 8% of all gas used in the U.S. We continue to look for large energy-related assets, though in the electric utility field PUHCA constrains what we can do.

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A few years ago, and somewhat by accident, MEHC found itself in the residential real estate brokerage business. It is no accident, however, that we have dramatically expanded the operation. Moreover, we are likely to keep on expanding in the future.

We call this business HomeServices of America. In the various communities it serves, though, it operates under the names of the businesses it has acquired, such as CBS in Omaha, Edina Realty in Minneapolis and Iowa Realty in Des Moines. In most metropolitan areas in which we operate, we are the clear market leader.

HomeServices is now the second largest residential brokerage business in the country. On one side or the other (or both), we participated in $37 billion of transactions last year, up 100% from 2001.

Most of our growth came from three acquisitions we made during 2002, the largest of which was Prudential California Realty. Last year, this company, the leading realtor in a territory consisting of Los Angeles, Orange and San Diego Counties, participated in $16 billion of closings.

In a very short period, Ron Peltier, the company's CEO, has increased HomeServices' revenues – and profits – dramatically. Though this business will always be cyclical, it's one we like and in which we continue to have an appetite for sensible acquisitions.

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Dave Sokol, MEHC's CEO, and Greg Abel, his key associate, are huge assets for Berkshire. They are dealmakers, and they are managers. Berkshire stands ready to inject massive amounts of money into MEHC – and it will be fun to watch how far Dave and Greg can take the business.

The Economics of Property/Casualty Insurance

Our core business — though we have others of great importance — is insurance. To understand Berkshire, therefore, it is necessary that you understand how to evaluate an insurance company. The key determinants are: (1) the amount of float that the business generates; (2) its cost; and (3) most critical of all, the long-term outlook for both of these factors.

To begin with, float is money we hold but don't own. In an insurance operation, float arises because premiums are received before losses are paid, an interval that sometimes extends over many years. During that time, the insurer invests the money. This pleasant activity typically carries with it a downside: The premiums that an insurer takes in usually do not cover the losses and expenses it eventually must pay. That leaves it running an "underwriting loss," which is the cost of float. An insurance business has value if its cost of float over time is less than the cost the company would otherwise incur to obtain funds. But the business is a lemon if its cost of float is higher than market rates for money. Moreover, the downward trend of interest rates in recent years has transformed underwriting losses that formerly were tolerable into burdens that move insurance businesses deeply into the lemon category.

Historically, Berkshire has obtained its float at a very low cost. Indeed, our cost has been less than zero in many years; that is, we've actually been paid for holding other people's money. In 2001, however, our cost was terrible, coming in at 12.8%, about half of which was attributable to World Trade Center losses. Back in 1983-84, we had years that were even worse. There's nothing automatic about cheap float.

The table that follows shows (at intervals) the float generated by the various segments of Berkshire's insurance operations since we entered the business 36 years ago upon acquiring National Indemnity Company (whose traditional lines are included in the segment "Other Primary"). For the table we have calculated our float — which we generate in large amounts relative to our premium volume — by adding net loss reserves, loss adjustment reserves, funds held under reinsurance assumed and unearned premium reserves, and then subtracting insurance-related receivables, prepaid acquisition costs, prepaid taxes and deferred charges applicable to assumed reinsurance. (Got that?)

Yearend Float (in $ millions)

Year	GEICO	General Re	Other Reinsurance	Other Primary	Total
1967				20	20
1977			40	131	171
1987			701	807	1,508
1997	2,917		4,014	455	7,386
1998	3,125	14,909	4,305	415	22,754
1999	3,444	15,166	6,285	403	25,298
2000	3,943	15,525	7,805	598	27,871
2001	4,251	19,310	11,262	685	35,508
2002	4,678	22,207	13,396	943	41,224

Last year our cost of float was 1%. As I mentioned earlier, you should temper your enthusiasm about this favorable result given that no megacatastrophe occurred in 2002. We're certain to get one of these disasters periodically, and when we do our float-cost will spike.

Our 2002 results were hurt by 1) a painful charge at General Re for losses that should have been recorded as costs in earlier years, and 2) a "desirable" charge we incur annually for retroactive insurance (see the next section for more about these items). These costs totaled $1.75 billion, or about 4.6% of float. Fortunately, our overall underwriting experience on 2002 business was excellent, which allowed us, even after the charges noted, to approach a no-cost result.

Absent a megacatastrophe, I expect our cost of float in 2003 to again be very low – perhaps even less than zero. In the rundown of our insurance operations that follows, you will see why I'm optimistic that, over time, our underwriting results will both surpass those achieved by the industry and deliver us investable funds at minimal cost.

Insurance Operations

If our insurance operations are to generate low-cost float over time, they must: (a) underwrite with unwavering discipline; (b) reserve conservatively; and (c) avoid an aggregation of exposures that would allow a supposedly "impossible" incident to threaten their solvency. All of our major insurance businesses, with one exception, have regularly met those tests.

The exception is General Re, and there was much to do at that company last year to get it up to snuff. I'm delighted to report that under Joe Brandon's leadership, and with yeoman assistance by Tad Montross, enormous progress has been made on each of the fronts described.

When I agreed in 1998 to merge Berkshire with Gen Re, I thought that company stuck to the three rules I've enumerated. I had studied the operation for decades and had observed underwriting discipline that was consistent and reserving that was conservative. At merger time, I detected no slippage in Gen Re's standards.

I was dead wrong. Gen Re's culture and practices had substantially changed and unbeknownst to management – and to me – the company was grossly mispricing its current business. In addition, Gen Re had accumulated an aggregation of risks that would have been fatal had, say, terrorists detonated several large-scale nuclear bombs in an attack on the U.S. A disaster of that scope was highly improbable, of course, but it is up to insurers to limit their risks in a manner that leaves their finances rock-solid if the "impossible" happens. Indeed, had Gen Re remained independent, the World Trade Center attack alone would have threatened the company's existence.

When the WTC disaster occurred, it exposed weaknesses in Gen Re's operations that I should have detected earlier. But I was lucky: Joe and Tad were on hand, freshly endowed with increased authority and eager to rapidly correct the errors of the past. They knew what to do – and they did it.

It takes time for insurance policies to run off, however, and 2002 was well along before we managed to reduce our aggregation of nuclear, chemical and biological risk (NCB) to a tolerable level. That problem is now behind us.

On another front, Gen Re's underwriting attitude has been dramatically altered: The entire organization now understands that we wish to write only properly-priced business, whatever the effect on volume. Joe and Tad judge themselves *only* by Gen Re's underwriting profitability. Size simply doesn't count.

Finally, we are making every effort to get our reserving right. If we fail at that, we can't know our true costs. And any insurer that has no idea what its costs are is heading for big trouble.

At yearend 2001, General Re attempted to reserve adequately for all losses that had occurred prior to that date and were not yet paid – but we failed badly. Therefore the company's 2002 underwriting results were penalized by an additional $1.31 billion that we recorded to correct the estimation mistakes of earlier years. When I review the reserving errors that have been uncovered at General Re, a line from a country song seems apt: "I wish I didn't know now what I didn't know then."

I can promise you that our top priority going forward is to avoid inadequate reserving. But I can't guarantee success. The natural tendency of most casualty-insurance managers is to underreserve, and they must have a particular mindset – which, it may surprise you, has nothing to do with actuarial expertise – if they are to overcome this devastating bias. Additionally, a reinsurer faces far more difficulties in reserving properly than does a primary insurer. Nevertheless, at Berkshire, we have generally been successful in our reserving, and we are determined to be at General Re as well.

In summary, I believe General Re is now well positioned to deliver huge amounts of no-cost float to Berkshire and that its sink-the-ship catastrophe risk has been eliminated. The company still possesses the important competitive strengths that I've outlined in the past. And it gained another highly significant advantage last year when each of its three largest worldwide competitors, previously rated AAA, was demoted by at least one rating agency. Among the giants, General Re, rated AAA across-the-board, is now in a class by itself in respect to financial strength.

No attribute is more important. Recently, in contrast, one of the world's largest reinsurers – a company regularly recommended to primary insurers by leading brokers – has all but ceased paying claims, including those both valid and due. This company owes many billions of dollars to hundreds of primary insurers who now face massive write-offs. "Cheap" reinsurance is a fool's bargain: When an insurer lays out money today in exchange for a reinsurer's promise to pay a decade or two later, it's dangerous – and possibly life-threatening – for the insurer to deal with any but the strongest reinsurer around.

Berkshire shareholders owe Joe and Tad a huge thank you for their accomplishments in 2002. They worked harder during the year than I would wish for anyone – and it is paying off.

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At GEICO, everything went so well in 2002 that we should pinch ourselves. Growth was substantial, profits were outstanding, policyholder retention was up and sales productivity jumped significantly. These trends continue in early 2003.

Thank Tony Nicely for all of this. As anyone who knows him will attest, Tony has been in love with GEICO for 41 years – ever since he went to work for the company at 18 – and his results reflect this passion. He is proud of the money we save policyholders – about $1 billion annually versus what other insurers, on average, would have charged them. He is proud of the service we provide these policyholders: In a key industry survey, GEICO was recently ranked above all major competitors. He is proud of his 19,162 associates, who last year were awarded profit-sharing payments equal to 19% of their base salary because of the splendid results they achieved. And he is proud of the growing profits he delivers to Berkshire shareholders.

GEICO took in $2.9 billion in premiums when Berkshire acquired full ownership in 1996. Last year, its volume was $6.9 billion, with plenty of growth to come. Particularly promising is the company's Internet operation, whose new business grew by 75% last year. Check us out at GEICO.com (or call 800-847-7536). In most states, shareholders get a special 8% discount.

Here's one footnote to GEICO's 2002 earnings that underscores the need for insurers to do business with only the strongest of reinsurers. In 1981-1983, the managers then running GEICO decided to try their hand at writing commercial umbrella and product liability insurance. The risks seemed modest: the company took in only $3,051,000 from this line and used almost all of it – $2,979,000 – to buy reinsurance in order to limit its losses. GEICO was left with a paltry $72,000 as compensation for the minor portion of the risk that it retained. But this small bite of the apple was more than enough to make the experience memorable. GEICO's losses from this venture now total a breathtaking $94.1 *million* or about 130,000% of the net premium it received. Of the total loss, uncollectable receivables from deadbeat reinsurers account for no less than $90.3 million (including $19 million charged in 2002). So much for "cheap" reinsurance.

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Ajit Jain's reinsurance division was the major reason our float cost us so little last year. If we ever put a photo in a Berkshire annual report, it will be of Ajit. In color!

Ajit's operation has amassed $13.4 billion of float, more than all but a handful of insurers have ever built up. He accomplished this from a standing start in 1986, and even now has a workforce numbering only 20. And, most important, he has produced underwriting profits.

His profits are particularly remarkable if you factor in some accounting arcana that I am about to lay on you. So prepare to eat your spinach (or, alternatively, if debits and credits aren't your thing, skip the next two paragraphs).

Ajit's 2002 underwriting profit of $534 million came *after* his operation recognized a charge of $428 million attributable to "retroactive" insurance he has written over the years. In this line of business, we assume from another insurer the obligation to pay up to a specified amount for losses they have already incurred – often for events that took place decades earlier – but that are yet to be paid (for example, because a worker hurt in 1980 will receive monthly payments for life). In these arrangements, an insurer pays us a large upfront premium, but one that is less than the losses we expect to pay. We willingly accept this differential because a) our payments are capped, and b) we get to use the money until loss payments are actually made, with these often stretching out over a decade or more. About 80% of the $6.6 billion in asbestos and environmental loss reserves that we carry arises from capped contracts, whose costs consequently can't skyrocket.

When we write a retroactive policy, we immediately record both the premium and a reserve for the expected losses. The difference between the two is entered as an asset entitled "deferred charges – reinsurance assumed." This is no small item: at yearend, for all retroactive policies, it was $3.4 billion. We then amortize this asset downward by charges to income over the expected life of each policy. These charges – $440 million in 2002, including charges at Gen Re – create an underwriting loss, but one that is intentional and desirable. And even after this drag on reported results, Ajit achieved a large underwriting gain last year.

We want to emphasize, however, that we assume risks in Ajit's operation that are huge – *far* larger than those retained by any other insurer in the world. Therefore, a single event could cause a major swing in Ajit's results in any given quarter or year. That bothers us not at all: As long as we are paid appropriately, we love taking on short-term volatility that others wish to shed. At Berkshire, we would rather earn a lumpy 15% over time than a smooth 12%.

If you see Ajit at our annual meeting, bow deeply.

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Berkshire's smaller insurers had an outstanding year. Their aggregate float grew by 38%, and they realized an underwriting profit of $32 million, or 4.5% of premiums. Collectively, these operations would make one of the finest insurance companies in the country.

Included in these figures, however, were terrible results in our California workers' compensation operation. There, we have work to do. There, too, our reserving severely missed the mark. Until we figure out how to get this business right, we will keep it small.

For the fabulous year they had in 2002, we thank Rod Eldred, John Kizer, Tom Nerney, Don Towle and Don Wurster. They added a lot of value to your Berkshire investment.

Sources of Reported Earnings

The table that follows shows the main sources of Berkshire's reported earnings. You will notice that "Purchase-Accounting Adjustments" dropped sharply in 2002, the reason being that GAAP rules changed then, no longer requiring the amortization of goodwill. This change increases our reported earnings, but has no effect on our economic earnings.

	(in millions)			
	Pre-Tax Earnings		*Berkshire's Share of Net Earnings (after taxes and Minority interests)*	
	2002	*2001*	*2002*	*2001*
Operating Earnings:				
Insurance Group:				
Underwriting – General Re	$(1,393)	$(3,671)	$(930)	$(2,391)
Underwriting – Berkshire Group	534	(647)	347	(433)
Underwriting – GEICO	416	221	271	144
Underwriting – Other Primary	32	30	20	18
Net Investment Income	3,050	2,824	2,096	1,968
Apparel[1]	229	(33)	156	(28)
Building Products[2]	516	461	313	287
Finance and Financial Products Business	1,016	519	659	336
Flight Services	225	186	133	105
MidAmerican Energy (80% owned)	613	565	359	230
Retail Operations	166	175	97	101
Scott Fetzer (excluding finance operation)	129	129	83	83
Shaw Industries[3]	424	292	258	156
Other Businesses	256	212	160	131
Purchase-Accounting Adjustments	(119)	(726)	(65)	(699)
Corporate Interest Expense	(86)	(92)	(55)	(60)
Shareholder-Designated Contributions	(17)	(17)	(11)	(11)
Other	19	25	12	16
Operating Earnings	6,010	453	3,903	(47)
Capital Gains from Investments	603	1,320	383	842
Total Earnings – All Entities	$6,613	$1,773	$4,286	$ 795

[1] *Includes Fruit of the Loom from April 30, 2002 and Garan from September 4, 2002.*

[2] *Includes Johns Manville from February 27, 2001 and MiTek from July 31, 2001.*

[3] *From date of acquisition, January 8, 2001.*

Here's a summary of major developments at our non-insurance businesses:

- MidAmerican Energy's earnings grew in 2002 and will likely do so again this year. Most of the increase, both present and expected, results from the acquisitions described earlier. To fund these, Berkshire purchased $1,273 million of MidAmerican junior debt (bringing our total holdings of these 11% obligations to $1,728 million) and also invested $402 million in a "common-equivalent" stock. We now own (on a fully-diluted basis) 80.2% of MidAmerican's equity. MidAmerican's financial statements are presented in detail on page 37.

- Last year I told you of the problems at Dexter that led to a huge loss in our shoe business. Thanks to Frank Rooney and Jim Issler of H.H. Brown, the Dexter operation has been turned around. Despite the cost of unwinding our problems there, we earned $24 million in shoes last year, an upward swing of $70 million from 2001.

  Randy Watson at Justin also contributed to this improvement, increasing margins significantly while trimming invested capital. Shoes are a tough business, but we have terrific managers and believe that in the future we will earn reasonable returns on the capital we employ in this operation.

- In a so-so year for home-furnishing and jewelry retailers, our operations did well. Among our eight retailing operations, the best performer was Homemaker's in Des Moines. There, the talented Merschman family achieved outstanding gains in both sales and profits.

  Nebraska Furniture Mart will open a new blockbuster store in metropolitan Kansas City in August. With 450,000 square feet of retail space, it could well produce the second largest volume of any furniture store in the country – the Omaha operation being the national champion. I hope Berkshire shareholders in the Kansas City area will come out for the opening (and keep coming).

- Our home and construction-related businesses – Acme Brick, Benjamin Moore Paint, Johns-Manville, MiTek and Shaw – delivered $941 million of pre-tax earnings last year. Of particular significance was Shaw's gain from $292 million in 2001 to $424 million. Bob Shaw and Julian Saul are terrific operators. Carpet prices increased only 1% last year, but Shaw's productivity gains and excellent expense control delivered significantly improved margins.

  We cherish cost-consciousness at Berkshire. Our model is the widow who went to the local newspaper to place an obituary notice. Told there was a 25-cents-a-word charge, she requested "Fred Brown died." She was then informed there was a seven-word minimum. "Okay" the bereaved woman replied, "make it 'Fred Brown died, golf clubs for sale'."

- Earnings from flight services increased last year – but only because we realized a special pre-tax gain of $60 million from the sale of our 50% interest in FlightSafety Boeing. Without this gain, earnings from our training business would have fallen slightly in concert with the slowdown in business-aviation activity. FlightSafety training continues to be the gold standard for the industry, and we expect growth in the years to come.

  At NetJets, our fractional-ownership operation, we are the runaway leader of the four-company field. FAA records indicate that our industry share in 2002 was 75%, meaning that clients purchased or leased planes from us that were valued at triple those recorded by our three competitors *combined*. Last year, our fleet flew 132.7 million nautical miles, taking clients to 130 countries.

  Our preeminence is directly attributable to Rich Santulli, NetJets' CEO. He invented the business in 1986 and ever since has exhibited an unbending devotion to the highest levels of service, safety and security. Rich, Charlie and I insist on planes (and personnel) worthy of carrying our own families – because they regularly do.

  Though NetJets revenues set a record in 2002, the company again lost money. A small profit in the U.S. was more than offset by losses in Europe. Overall, the fractional-ownership industry lost significant sums last year, and that is almost certain to be the outcome in 2003 as well. The bald fact is that airplanes are costly to operate.

  Over time, this economic reality should work to our advantage, given that for a great many companies, private aircraft are an essential business tool. And for most of these companies, NetJets makes compelling sense as either a primary or supplementary supplier of the aircraft they need.

  Many businesses could save millions of dollars annually by flying with us. Indeed, the yearly savings at some large companies could exceed $10 million. Equally important, these companies would actually increase their operational capabilities by using us. A fractional ownership of a single NetJets plane allows a client to have several planes in the air simultaneously. Additionally, through the interchange arrangement we make available, an owner of an interest in one plane can fly any of 12 other models, using whatever plane makes most sense for a mission. (One of my sisters owns a fraction of a Falcon 2000, which she uses for trips to Hawaii, but – exhibiting the Buffett gene – she interchanges to a more economical Citation Excel for short trips in the U.S.)

  The roster of NetJets users confirms the advantages we offer major businesses. Take General Electric, for example. It has a large fleet of its own but also has an unsurpassed knowledge of how to utilize aircraft effectively and economically. And it is our largest customer.

- Our finance and financial products line covers a variety of operations, among them certain activities in high-grade fixed-income securities that proved highly profitable in 2002. Earnings in this arena will probably continue for a while, but are certain to decrease – and perhaps disappear – in time.

This category also includes a highly satisfactory – but rapidly diminishing – income stream from our Berkadia investment in Finova (described in last year's report). Our partner, Leucadia National Corp., has managed this operation with great skill, willingly doing far more than its share of the heavy lifting. I like this division of labor and hope to join with Leucadia in future transactions.

On the minus side, the Finance line also includes the operations of General Re Securities, a derivatives and trading business. This entity lost $173 million pre-tax last year, a result that, in part, is a belated acknowledgment of faulty, albeit standard, accounting it used in earlier periods. Derivatives, in fact, deserve an extensive look, both in respect to the accounting their users employ and to the problems they may pose for both individual companies and our economy.

Derivatives

Charlie and I are of one mind in how we feel about derivatives and the trading activities that go with them: We view them as time bombs, both for the parties that deal in them and the economic system.

Having delivered that thought, which I'll get back to, let me retreat to explaining derivatives, though the explanation must be general because the word covers an extraordinarily wide range of financial contracts. Essentially, these instruments call for money to change hands at some future date, with the amount to be determined by one or more reference items, such as interest rates, stock prices or currency values. If, for example, you are either long or short an S&P 500 futures contract, you are a party to a very simple derivatives transaction – with your gain or loss *derived* from movements in the index. Derivatives contracts are of varying duration (running sometimes to 20 or more years) and their value is often tied to several variables.

Unless derivatives contracts are collateralized or guaranteed, their ultimate value also depends on the creditworthiness of the counterparties to them. In the meantime, though, before a contract is settled, the counterparties record profits and losses – often huge in amount – in their current earnings statements without so much as a penny changing hands.

The range of derivatives contracts is limited only by the imagination of man (or sometimes, so it seems, madmen). At Enron, for example, newsprint and broadband derivatives, due to be settled many years in the future, were put on the books. Or say you want to write a contract speculating on the number of twins to be born in Nebraska in 2020. No problem – at a price, you will easily find an obliging counterparty.

When we purchased Gen Re, it came with General Re Securities, a derivatives dealer that Charlie and I didn't want, judging it to be dangerous. We failed in our attempts to sell the operation, however, and are now terminating it.

But closing down a derivatives business is easier said than done. It will be a great many years before we are totally out of this operation (though we reduce our exposure daily). In fact, the reinsurance and derivatives businesses are similar: Like Hell, both are easy to enter and almost impossible to exit. In either industry, once you write a contract – which may require a large payment decades later – you are usually stuck with it. True, there are methods by which the risk can be laid off with others. But most strategies of that kind leave you with residual liability.

Another commonality of reinsurance and derivatives is that both generate reported earnings that are often wildly overstated. That's true because today's earnings are in a significant way based on estimates whose inaccuracy may not be exposed for many years.

Errors will usually be honest, reflecting only the human tendency to take an optimistic view of one's commitments. But the parties to derivatives also have enormous incentives to cheat in accounting for them. Those who trade derivatives are usually paid (in whole or part) on "earnings" calculated by mark-to-market accounting. But often there is no real market (think about our contract involving twins) and "mark-to-model" is utilized. This substitution can bring on large-scale mischief. As a general rule, contracts involving multiple reference items and distant settlement dates increase the opportunities for counterparties to use fanciful assumptions. In the twins scenario, for example, the two parties to the contract might well use differing models allowing *both* to show substantial profits for many years. In extreme cases, mark-to-model degenerates into what I would call mark-to-myth.

Of course, both internal and outside auditors review the numbers, but that's no easy job. For example, General Re Securities at yearend (after ten months of winding down its operation) had 14,384

contracts outstanding, involving 672 counterparties around the world. Each contract had a plus or minus value derived from one or more reference items, including some of mind-boggling complexity. Valuing a portfolio like that, expert auditors could easily and honestly have widely varying opinions.

The valuation problem is far from academic: In recent years, some huge-scale frauds and near-frauds have been facilitated by derivatives trades. In the energy and electric utility sectors, for example, companies used derivatives and trading activities to report great "earnings" – until the roof fell in when they actually tried to convert the derivatives-related receivables on their balance sheets into cash. "Mark-to-market" then turned out to be truly "mark-to-myth."

I can assure you that the marking errors in the derivatives business have not been symmetrical. Almost invariably, they have favored either the trader who was eyeing a multi-million dollar bonus or the CEO who wanted to report impressive "earnings" (or both). The bonuses were paid, and the CEO profited from his options. Only much later did shareholders learn that the reported earnings were a sham.

Another problem about derivatives is that they can exacerbate trouble that a corporation has run into for completely unrelated reasons. This pile-on effect occurs because many derivatives contracts require that a company suffering a credit downgrade immediately supply collateral to counterparties. Imagine, then, that a company is downgraded because of general adversity and that its derivatives instantly kick in with *their* requirement, imposing an unexpected and enormous demand for cash collateral on the company. The need to meet this demand can then throw the company into a liquidity crisis that may, in some cases, trigger still more downgrades. It all becomes a spiral that can lead to a corporate meltdown.

Derivatives also create a daisy-chain risk that is akin to the risk run by insurers or reinsurers that lay off much of their business with others. In both cases, huge receivables from many counterparties tend to build up over time. (At Gen Re Securities, we still have $6.5 billion of receivables, though we've been in a liquidation mode for nearly a year.) A participant may see himself as prudent, believing his large credit exposures to be diversified and therefore not dangerous. Under certain circumstances, though, an exogenous event that causes the receivable from Company A to go bad will also affect those from Companies B through Z. History teaches us that a crisis often causes problems to correlate in a manner undreamed of in more tranquil times.

In banking, the recognition of a "linkage" problem was one of the reasons for the formation of the Federal Reserve System. Before the Fed was established, the failure of weak banks would sometimes put sudden and unanticipated liquidity demands on previously-strong banks, causing them to fail in turn. The Fed now insulates the strong from the troubles of the weak. But there is no central bank assigned to the job of preventing the dominoes toppling in insurance or derivatives. In these industries, firms that are fundamentally solid can become troubled simply because of the travails of other firms further down the chain. When a "chain reaction" threat exists within an industry, it pays to minimize links of any kind. That's how we conduct our reinsurance business, and it's one reason we are exiting derivatives.

Many people argue that derivatives reduce systemic problems, in that participants who can't bear certain risks are able to transfer them to stronger hands. These people believe that derivatives act to stabilize the economy, facilitate trade, and eliminate bumps for individual participants. And, on a micro level, what they say is often true. Indeed, at Berkshire, I sometimes engage in large-scale derivatives transactions in order to facilitate certain investment strategies.

Charlie and I believe, however, that the macro picture is dangerous and getting more so. Large amounts of risk, particularly credit risk, have become concentrated in the hands of relatively few derivatives dealers, who in addition trade extensively with one other. The troubles of one could quickly infect the others. On top of that, these dealers are owed huge amounts by non-dealer counterparties. Some of these counterparties, as I've mentioned, are linked in ways that could cause them to contemporaneously run into a problem because of a single event (such as the implosion of the telecom industry or the precipitous decline in the value of merchant power projects). Linkage, when it suddenly surfaces, can trigger serious systemic problems.

Indeed, in 1998, the leveraged and derivatives-heavy activities of a single hedge fund, Long-Term Capital Management, caused the Federal Reserve anxieties so severe that it hastily orchestrated a rescue effort. In later Congressional testimony, Fed officials acknowledged that, had they not intervened, the outstanding trades of LTCM – a firm unknown to the general public and employing only a few hundred

people – could well have posed a serious threat to the stability of American markets. In other words, the Fed acted because its leaders were fearful of what might have happened to other financial institutions had the LTCM domino toppled. And this affair, though it paralyzed many parts of the fixed-income market for weeks, was far from a worst-case scenario.

One of the derivatives instruments that LTCM used was total-return swaps, contracts that facilitate 100% leverage in various markets, including stocks. For example, Party A to a contract, usually a bank, puts up all of the money for the purchase of a stock while Party B, without putting up any capital, agrees that at a future date it will receive any gain or pay any loss that the bank realizes.

Total-return swaps of this type make a joke of margin requirements. Beyond that, other types of derivatives severely curtail the ability of regulators to curb leverage and generally get their arms around the risk profiles of banks, insurers and other financial institutions. Similarly, even experienced investors and analysts encounter major problems in analyzing the financial condition of firms that are heavily involved with derivatives contracts. When Charlie and I finish reading the long footnotes detailing the derivatives activities of major banks, the only thing we understand is that we *don't* understand how much risk the institution is running.

The derivatives genie is now well out of the bottle, and these instruments will almost certainly multiply in variety and number until some event makes their toxicity clear. Knowledge of how dangerous they are has already permeated the electricity and gas businesses, in which the eruption of major troubles caused the use of derivatives to diminish dramatically. Elsewhere, however, the derivatives business continues to expand unchecked. Central banks and governments have so far found no effective way to control, or even monitor, the risks posed by these contracts.

Charlie and I believe Berkshire should be a fortress of financial strength – for the sake of our owners, creditors, policyholders and employees. We try to be alert to any sort of megacatastrophe risk, and that posture may make us unduly apprehensive about the burgeoning quantities of long-term derivatives contracts and the massive amount of uncollateralized receivables that are growing alongside. In our view, however, derivatives are financial weapons of mass destruction, carrying dangers that, while now latent, are potentially lethal.

Investments

Below we show our common stock investments. Those that had a market value of more than $500 million at the end of 2002 are itemized.

		12/31/02	
Shares	*Company*	*Cost*	*Market*
		(dollars in millions)	
151,610,700	American Express Company	$ 1,470	$ 5,359
200,000,000	The Coca-Cola Company	1,299	8,768
96,000,000	The Gillette Company	600	2,915
15,999,200	H&R Block, Inc.	255	643
6,708,760	M&T Bank	103	532
24,000,000	Moody's Corporation	499	991
1,727,765	The Washington Post Company	11	1,275
53,265,080	Wells Fargo & Company	306	2,497
	Others	4,621	5,383
	Total Common Stocks	$9,164	$28,363

We continue to do little in equities. Charlie and I are increasingly comfortable with our holdings in Berkshire's major investees because most of them have increased their earnings while their valuations have decreased. But we are not inclined to add to them. Though these enterprises have good prospects, we don't yet believe their shares are undervalued.

In our view, the same conclusion fits stocks generally. Despite three years of falling prices, which have significantly improved the attractiveness of common stocks, we still find *very* few that even mildly

interest us. That dismal fact is testimony to the insanity of valuations reached during The Great Bubble. Unfortunately, the hangover may prove to be proportional to the binge.

The aversion to equities that Charlie and I exhibit today is far from congenital. We love owning common stocks – if they can be purchased at attractive prices. In my 61 years of investing, 50 or so years have offered that kind of opportunity. There will be years like that again. Unless, however, we see a very high probability of at least 10% pre-tax returns (which translate to 6½-7% after corporate tax), we will sit on the sidelines. With short-term money returning less than 1% after-tax, sitting it out is no fun. But occasionally successful investing requires inactivity.

Last year we were, however, able to make sensible investments in a few "junk" bonds and loans. Overall, our commitments in this sector sextupled, reaching $8.3 billion by yearend.

Investing in junk bonds and investing in stocks are alike in certain ways: Both activities require us to make a price-value calculation and also to scan hundreds of securities to find the very few that have attractive reward/risk ratios. But there are important differences between the two disciplines as well. In stocks, we expect every commitment to work out well because we concentrate on conservatively financed businesses with strong competitive strengths, run by able and honest people. If we buy into these companies at sensible prices, losses should be rare. Indeed, during the 38 years we have run the company's affairs, gains from the equities we manage at Berkshire (that is, excluding those managed at General Re and GEICO) have exceeded losses by a ratio of about 100 to one.

Purchasing junk bonds, we are dealing with enterprises that are far more marginal. These businesses are usually overloaded with debt and often operate in industries characterized by low returns on capital. Additionally, the quality of management is sometimes questionable. Management may even have interests that are directly counter to those of debtholders. Therefore, we expect that we will have occasional large losses in junk issues. So far, however, we have done reasonably well in this field.

Corporate Governance

Both the ability and fidelity of managers have long needed monitoring. Indeed, nearly 2,000 years ago, Jesus Christ addressed this subject, speaking (Luke 16:2) approvingly of "a certain rich man" who told his manager, "Give an account of thy stewardship; for thou mayest no longer be steward."

Accountability and stewardship withered in the last decade, becoming qualities deemed of little importance by those caught up in the Great Bubble. As stock prices went up, the behavioral norms of managers went down. By the late '90s, as a result, CEOs who traveled the high road did not encounter heavy traffic.

Most CEOs, it should be noted, are men and women you would be happy to have as trustees for your children's assets or as next-door neighbors. Too many of these people, however, have in recent years behaved badly at the office, fudging numbers and drawing obscene pay for mediocre business achievements. These otherwise decent people simply followed the career path of Mae West: "I was Snow White but I drifted."

In theory, corporate boards should have prevented this deterioration of conduct. I last wrote about the responsibilities of directors in the 1993 annual report. (We will send you a copy of this discussion on request, or you may read it on the Internet in the Corporate Governance section of the 1993 letter.) There, I said that directors "should behave as if there was a single absentee owner, whose long-term interest they should try to further in all proper ways." This means that directors must get rid of a manager who is mediocre or worse, no matter how likable he may be. Directors must react as did the chorus-girl bride of an 85-year-old multimillionaire when he asked whether she would love him if he lost his money. "Of course," the young beauty replied, "I would miss you, but I would still love you."

In the 1993 annual report, I also said directors had another job: "If able but greedy managers over-reach and try to dip too deeply into the shareholders' pockets, directors must slap their hands." Since I wrote that, over-reaching has become common but few hands have been slapped.

Why have intelligent and decent directors failed so miserably? The answer lies not in inadequate laws – it's always been clear that directors are obligated to represent the interests of shareholders – but rather in what I'd call "boardroom atmosphere."

It's almost impossible, for example, in a boardroom populated by well-mannered people, to raise the question of whether the CEO should be replaced. It's equally awkward to question a proposed acquisition that has been endorsed by the CEO, particularly when his inside staff and outside advisors are present and unanimously support his decision. (They wouldn't be in the room if they didn't.) Finally, when the compensation committee – armed, as always, with support from a high-paid consultant – reports on a megagrant of options to the CEO, it would be like belching at the dinner table for a director to suggest that the committee reconsider.

These "social" difficulties argue for outside directors regularly meeting without the CEO – a reform that is being instituted and that I enthusiastically endorse. I doubt, however, that most of the other new governance rules and recommendations will provide benefits commensurate with the monetary and other costs they impose.

The current cry is for "independent" directors. It is certainly true that it is desirable to have directors who think and speak independently – but they must also be business-savvy, interested and shareholder-oriented. In my 1993 commentary, those are the three qualities I described as essential.

Over a span of 40 years, I have been on 19 public-company boards (excluding Berkshire's) and have interacted with perhaps 250 directors. Most of them were "independent" as defined by today's rules. But the great majority of these directors lacked at least one of the three qualities I value. As a result, their contribution to shareholder well-being was minimal at best and, too often, negative. These people, decent and intelligent though they were, simply did not know enough about business and/or care enough about shareholders to question foolish acquisitions or egregious compensation. My own behavior, I must ruefully add, frequently fell short as well: Too often I was silent when management made proposals that I judged to be counter to the interests of shareholders. In those cases, collegiality trumped independence.

So that we may further see the failings of "independence," let's look at a 62-year case study covering thousands of companies. Since 1940, federal law has mandated that a large proportion of the directors of investment companies (most of these mutual funds) be independent. The requirement was originally 40% and now it is 50%. In any case, the typical fund has long operated with a majority of directors who qualify as independent.

These directors and the entire board have many perfunctory duties, but in actuality have only two important responsibilities: obtaining the best possible investment manager and negotiating with that manager for the lowest possible fee. When you are seeking investment help yourself, those two goals are the only ones that count, and directors acting for other investors should have exactly the same priorities. Yet when it comes to independent directors pursuing either goal, their record has been absolutely pathetic.

Many thousands of investment-company boards meet annually to carry out the vital job of selecting who will manage the savings of the millions of owners they represent. Year after year the directors of Fund A select manager A, Fund B directors select manager B, etc. … in a zombie-like process that makes a mockery of stewardship. Very occasionally, a board will revolt. But for the most part, a monkey will type out a Shakespeare play before an "independent" mutual-fund director will suggest that his fund look at other managers, even if the incumbent manager has persistently delivered substandard performance. When they are handling their own money, of course, directors will look to alternative advisors – but it never enters their minds to do so when they are acting as fiduciaries for others.

The hypocrisy permeating the system is vividly exposed when a fund management company – call it "A" – is sold for a huge sum to Manager "B". Now the "independent" directors experience a "counter-revelation" and decide that Manager B is the best that can be found – even though B was available (and ignored) in previous years. Not so incidentally, B also could formerly have been hired at a far lower rate than is possible now that it has bought Manager A. That's because B has laid out a fortune to acquire A, and B must now recoup that cost through fees paid by the A shareholders who were "delivered" as part of the deal. (For a terrific discussion of the mutual fund business, read John Bogle's *Common Sense on Mutual Funds*.)

A few years ago, my daughter was asked to become a director of a family of funds managed by a major institution. The fees she would have received as a director were very substantial, enough to have increased her annual income by about 50% (a boost, she will tell you, she could use!). Legally, she would have been an independent director. But did the fund manager who approached her think there was *any* chance that she would think independently as to what advisor the fund should employ? Of course not. I am

proud to say that she showed *real* independence by turning down the offer. The fund, however, had no trouble filling the slot (and – surprise – the fund has not changed managers).

Investment company directors have failed as well in negotiating management fees (just as compensation committees of many American companies have failed to hold the compensation of their CEOs to sensible levels). If you or I were empowered, I can assure you that we could easily negotiate materially lower management fees with the incumbent managers of most mutual funds. And, believe me, if directors were promised a portion of any fee savings they realized, the skies would be filled with falling fees. Under the current system, though, reductions mean nothing to "independent" directors while meaning everything to managers. So guess who wins?

Having the right money manager, of course, is far more important to a fund than reducing the manager's fee. Both tasks are nonetheless the job of directors. And in stepping up to these all-important responsibilities, tens of thousands of "independent" directors, over more than six decades, have failed miserably. (They've succeeded, however, in taking care of themselves; their fees from serving on multiple boards of a single "family" of funds often run well into six figures.)

When the manager cares deeply and the directors don't, what's needed is a powerful countervailing force – and that's the missing element in today's corporate governance. Getting rid of mediocre CEOs and eliminating overreaching by the able ones requires action by owners – big owners. The logistics aren't that tough: The ownership of stock has grown increasingly concentrated in recent decades, and today it would be easy for institutional managers to exert their will on problem situations. Twenty, or even fewer, of the largest institutions, acting together, could effectively reform corporate governance at a given company, simply by withholding their votes for directors who were tolerating odious behavior. In my view, this kind of concerted action is the only way that corporate stewardship can be meaningfully improved.

Unfortunately, certain major investing institutions have "glass house" problems in arguing for better governance elsewhere; they would shudder, for example, at the thought of their own performance and fees being closely inspected by their own boards. But Jack Bogle of Vanguard fame, Chris Davis of Davis Advisors, and Bill Miller of Legg Mason are now offering leadership in getting CEOs to treat their owners properly. Pension funds, as well as other fiduciaries, will reap better investment returns in the future if they support these men.

The acid test for reform will be CEO compensation. Managers will cheerfully agree to board "diversity," attest to SEC filings and adopt meaningless proposals relating to process. What many will fight, however, is a hard look at their own pay and perks.

In recent years compensation committees too often have been tail-wagging puppy dogs meekly following recommendations by consultants, a breed not known for allegiance to the faceless shareholders who pay their fees. (If you can't tell whose side someone is on, they are *not* on yours.) True, each committee is required by the SEC to state its reasoning about pay in the proxy. But the words are usually boilerplate written by the company's lawyers or its human-relations department.

This costly charade should cease. Directors should not serve on compensation committees unless they are *themselves* capable of negotiating on behalf of owners. They should explain both how they think about pay and how they measure performance. Dealing with shareholders' money, moreover, they should behave as they would were it their own.

In the 1890s, Samuel Gompers described the goal of organized labor as "More!" In the 1990s, America's CEOs adopted his battle cry. The upshot is that CEOs have often amassed riches while their shareholders have experienced financial disasters.

Directors should stop such piracy. There's nothing wrong with paying well for truly exceptional business performance. But, for anything short of that, it's time for directors to shout "Less!" It would be a travesty if the bloated pay of recent years became a baseline for future compensation. Compensation committees should go back to the drawing boards.

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Rules that have been proposed and that are almost certain to go into effect will require changes in Berkshire's board, obliging us to add directors who meet the codified requirements for "independence."

Doing so, we will add a test that we believe is important, but far from determinative, in fostering independence: We will select directors who have huge and true ownership interests (that is, stock that they or their family have *purchased*, not been given by Berkshire or received via options), expecting those interests to influence their actions to a degree that dwarfs other considerations such as prestige and board fees.

That gets to an often-overlooked point about directors' compensation, which at public companies averages perhaps $50,000 annually. It baffles me how the many directors who look to these dollars for perhaps 20% or more of their annual income can be considered independent when Ron Olson, for example, who is on our board, may be deemed not independent because he receives a tiny percentage of his very large income from Berkshire legal fees. As the investment company saga suggests, a director whose moderate income is heavily dependent on directors' fees – and who hopes mightily to be invited to join other boards in order to earn more fees – is highly unlikely to offend a CEO or fellow directors, who in a major way will determine his reputation in corporate circles. If regulators believe that "significant" money taints independence (and it certainly can), they have overlooked a massive class of possible offenders.

At Berkshire, wanting our fees to be meaningless to our directors, we pay them only a pittance. Additionally, not wanting to insulate our directors from any corporate disaster we might have, we don't provide them with officers' and directors' liability insurance (an unorthodoxy that, not so incidentally, has saved our shareholders many millions of dollars over the years). Basically, we want the behavior of our directors to be driven by the effect their decisions will have on their family's net worth, not by their compensation. That's the equation for Charlie and me as managers, and we think it's the right one for Berkshire directors as well.

To find new directors, we will look through our shareholders list for people who directly, or in their family, have had large Berkshire holdings – in the millions of dollars – for a long time. Individuals making that cut should automatically meet two of our tests, namely that they be interested in Berkshire and shareholder-oriented. In our third test, we will look for business savvy, a competence that is far from commonplace.

Finally, we will continue to have members of the Buffett family on the board. They are not there to run the business after I die, nor will they then receive compensation of any kind. Their purpose is to ensure, for both our shareholders and managers, that Berkshire's special culture will be nurtured when I'm succeeded by other CEOs.

Any change we make in the composition of our board will not alter the way Charlie and I run Berkshire. We will continue to emphasize substance over form in our work and waste as little time as possible during board meetings in show-and-tell and perfunctory activities. The most important job of our board is likely to be the selection of successors to Charlie and me, and that is a matter upon which it will focus.

The board we have had up to now has overseen a shareholder-oriented business, consistently run in accord with the economic principles set forth on pages 68-74 (which I urge all new shareholders to read). Our goal is to obtain new directors who are equally devoted to those principles.

The Audit Committee

Audit committees can't audit. Only a company's outside auditor can determine whether the earnings that a management purports to have made are suspect. Reforms that ignore this reality and that instead focus on the structure and charter of the audit committee will accomplish little.

As we've discussed, far too many managers have fudged their company's numbers in recent years, using both accounting and operational techniques that are typically legal but that nevertheless materially mislead investors. Frequently, auditors knew about these deceptions. Too often, however, they remained silent. The key job of the audit committee is simply to get the auditors to divulge what they know.

To do this job, the committee must make sure that the auditors worry more about misleading its members than about offending management. In recent years auditors have not felt that way. They have instead generally viewed the CEO, rather than the shareholders or directors, as their client. That has been a natural result of day-to-day working relationships and also of the auditors' understanding that, no matter what the book says, the CEO and CFO pay their fees and determine whether they are retained for both auditing and other work. The rules that have been recently instituted won't materially change this reality. What *will* break

this cozy relationship is audit committees unequivocally putting auditors on the spot, making them understand they will become liable for major monetary penalties if they don't come forth with what they know or suspect.

In my opinion, audit committees can accomplish this goal by asking four questions of auditors, the answers to which should be recorded and reported to shareholders. These questions are:

1. If the auditor were solely responsible for preparation of the company's financial statements, would they have in any way been prepared differently from the manner selected by management? This question should cover both material and nonmaterial differences. If the auditor would have done something differently, both management's argument and the auditor's response should be disclosed. The audit committee should then evaluate the facts.

2. If the auditor were an investor, would he have received – in plain English – the information essential to his understanding the company's financial performance during the reporting period?

3. Is the company following the same internal audit procedure that would be followed if the auditor himself were CEO? If not, what are the differences and why?

4. Is the auditor aware of any actions – either accounting or operational – that have had the purpose and effect of moving revenues or expenses from one reporting period to another?

If the audit committee asks these questions, its composition – the focus of most reforms – is of minor importance. In addition, the procedure will save time and expense. When auditors are put on the spot, they will do their duty. If they are not put on the spot . . . well, we have seen the results of that.

The questions we have enumerated should be asked at least a week before an earnings report is released to the public. That timing will allow differences between the auditors and management to be aired with the committee and resolved. If the timing is tighter – if an earnings release is imminent when the auditors and committee interact – the committee will feel pressure to rubberstamp the prepared figures. Haste is the enemy of accuracy. My thinking, in fact, is that the SEC's recent shortening of reporting deadlines will hurt the quality of information that shareholders receive. Charlie and I believe that rule is a mistake and should be rescinded.

The primary advantage of our four questions is that they will act as a prophylactic. Once the auditors know that the audit committee will require them to affirmatively endorse, rather than merely acquiesce to, management's actions, they will resist misdoings early in the process, well before specious figures become embedded in the company's books. Fear of the plaintiff's bar will see to that.

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The Chicago Tribune ran a four-part series on Arthur Andersen last September that did a great job of illuminating how accounting standards and audit quality have eroded in recent years. A few decades ago, an Arthur Andersen audit opinion was the gold standard of the profession. Within the firm, an elite Professional Standards Group (PSG) insisted on honest reporting, no matter what pressures were applied by the client. Sticking to these principles, the PSG took a stand in 1992 that the cost of stock options should be recorded as the expense it clearly was. The PSG's position was reversed, however, by the "rainmaking" partners of Andersen who knew what their clients wanted – higher reported earnings no matter what the reality. Many CEOs also fought expensing because they knew that the obscene megagrants of options they craved would be slashed if the true costs of these had to be recorded.

Soon after the Andersen reversal, the independent accounting standards board (FASB) voted 7-0 for expensing options. Predictably, the major auditing firms and an army of CEOs stormed Washington to pressure the Senate – what better institution to decide accounting questions? – into castrating the FASB. The voices of the protesters were amplified by their large political contributions, usually made with corporate money belonging to the very owners about to be bamboozled. It was not a sight for a civics class.

To its shame, the Senate voted 88-9 against expensing. Several prominent Senators even called for the demise of the FASB if it didn't abandon its position. (So much for independence.) Arthur Levitt, Jr., then Chairman of the SEC – and generally a vigilant champion of shareholders – has since described his reluctant

bowing to Congressional and corporate pressures as the act of his chairmanship that he most regrets. (The details of this sordid affair are related in Levitt's excellent book, *Take on the Street*.)

With the Senate in its pocket and the SEC outgunned, corporate America knew that it was now boss when it came to accounting. With that, a new era of anything-goes earnings reports – blessed and, in some cases, encouraged by big-name auditors – was launched. The licentious behavior that followed quickly became an air pump for The Great Bubble.

After being threatened by the Senate, FASB backed off its original position and adopted an "honor system" approach, declaring expensing to be preferable but also allowing companies to ignore the cost if they wished. The disheartening result: Of the 500 companies in the S&P, 498 adopted the method deemed less desirable, which of course let them report higher "earnings." Compensation-hungry CEOs loved this outcome: Let FASB have the honor; *they* had the system.

In our 1992 annual report, discussing the unseemly and self-serving behavior of so many CEOs, I said "the business elite risks losing its credibility on issues of significance to society – about which it may have much of value to say – when it advocates the incredible on issues of significance to itself."

That loss of credibility has occurred. The job of CEOs is now to regain America's trust – and for the country's sake it's important that they do so. They will not succeed in this endeavor, however, by way of fatuous ads, meaningless policy statements, or structural changes of boards and committees. Instead, CEOs must embrace stewardship as a way of life and treat their owners as partners, not patsies. It's time for CEOs to walk the walk.

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Three suggestions for investors: First, beware of companies displaying weak accounting. If a company still does not expense options, or if its pension assumptions are fanciful, watch out. When managements take the low road in aspects that are visible, it is likely they are following a similar path behind the scenes. There is seldom just one cockroach in the kitchen.

Trumpeting EBITDA (earnings before interest, taxes, depreciation and amortization) is a particularly pernicious practice. Doing so implies that depreciation is not truly an expense, given that it is a "non-cash" charge. That's nonsense. In truth, depreciation is a particularly unattractive expense because the cash outlay it represents is paid up front, before the asset acquired has delivered any benefits to the business. Imagine, if you will, that at the beginning of this year a company paid all of its employees for the next ten years of their service (in the way they would lay out cash for a fixed asset to be useful for ten years). In the following nine years, compensation would be a "non-cash" expense – a reduction of a prepaid compensation asset established this year. Would anyone care to argue that the recording of the expense in years two through ten would be simply a bookkeeping formality?

Second, unintelligible footnotes usually indicate untrustworthy management. If you can't understand a footnote or other managerial explanation, it's usually because the CEO doesn't want you to. Enron's descriptions of certain transactions *still* baffle me.

Finally, be suspicious of companies that trumpet earnings projections and growth expectations. Businesses seldom operate in a tranquil, no-surprise environment, and earnings simply don't advance smoothly (except, of course, in the offering books of investment bankers).

Charlie and I not only don't know today what our businesses will earn *next year* – we don't even know what they will earn *next quarter*. We are suspicious of those CEOs who regularly claim they do know the future – and we become downright incredulous if they consistently reach their declared targets. Managers that always promise to "make the numbers" will at some point be tempted to *make up* the numbers.

Shareholder-Designated Contributions

About 97.3% of all eligible shares participated in Berkshire's 2002 shareholder-designated contributions program, with contributions totaling $16.5 million.

Cumulatively, over the 22 years of the program, Berkshire has made contributions of $197 million pursuant to the instructions of our shareholders. The rest of Berkshire's giving is done by our subsidiaries, which stick to the philanthropic patterns that prevailed before they were acquired (except that their former

owners themselves take on the responsibility for their personal charities). In aggregate, our subsidiaries made contributions of $24 million in 2002, including in-kind donations of $4 million.

To participate in future programs, you must own Class A shares that are registered in the name of the actual owner, not the nominee name of a broker, bank or depository. Shares not so registered on August 31, 2003 will be ineligible for the 2003 program. When you get the contributions form from us, return it promptly so that it does not get put aside or forgotten. Designations received after the due date will not be honored.

The Annual Meeting

This year's annual meeting will be held on Saturday, May 3, and once again we will be at the Civic Auditorium. The doors will open at 7 a.m., the movie will begin at 8:30, and the meeting itself will commence at 9:30. There will be a short break at noon for food. (Sandwiches will be available at the Civic's concession stands.) That interlude aside, Charlie and I will answer questions until 3:30. Give us your best shot.

An attachment to the proxy material that is enclosed with this report explains how you can obtain the credential you will need for admission to the meeting and other events. As for plane, hotel and car reservations, we have again signed up American Express (800-799-6634) to give you special help. They do a terrific job for us each year, and I thank them for it.

In our usual fashion, we will run vans from the larger hotels to the meeting. Afterwards, the vans will make trips back to the hotels and to Nebraska Furniture Mart, Borsheim's and the airport. Even so, you are likely to find a car useful.

Our exhibit area for Berkshire goods and services will be bigger and better than ever this year. So be prepared to *spend*. I think you will particularly enjoy visiting The Pampered Chef display, where you may run into Doris and Sheila.

GEICO will have a booth staffed by a number of its top counselors from around the country, all of them ready to supply you with auto insurance quotes. In most cases, GEICO will be able to give you a special shareholder discount (usually 8%). This special offer is permitted by 41 of the 49 jurisdictions in which we operate. Bring the details of your existing insurance and check out whether we can save you money.

On Saturday, at the Omaha airport, we will have the usual array of aircraft from NetJets® available for your inspection. Just ask a representative at the Civic about viewing any of these planes. If you buy what we consider an appropriate number of items during the weekend, you may well need your own plane to take them home. Furthermore, if you buy a fraction of a plane, I'll personally see that you get a three-pack of briefs from Fruit of the Loom.

At Nebraska Furniture Mart, located on a 77-acre site on 72nd Street between Dodge and Pacific, we will again be having "Berkshire Weekend" pricing, which means we will be offering our shareholders a discount that is customarily given only to employees. We initiated this special pricing at NFM six years ago, and sales during the "Weekend" grew from $5.3 million in 1997 to $14.2 million in 2002.

To get the discount, you must make your purchases during the Thursday, May 1 through Monday, May 5 period and also present your meeting credential. The period's special pricing will even apply to the products of several prestigious manufacturers that normally have ironclad rules against discounting but that, in the spirit of our shareholder weekend, have made an exception for you. We appreciate their cooperation. NFM is open from 10 a.m. to 9 p.m. on weekdays and 10 a.m. to 6 p.m. on Sundays. On Saturday this year, from 6 p.m. to 10 p.m., we are having a special affair for shareholders only. I'll be there, eating hot dogs and drinking Coke.

Borsheim's — the largest jewelry store in the country except for Tiffany's Manhattan store — will have two shareholder-only events. The first will be a cocktail reception from 6 p.m. to 10 p.m. on Friday, May 2. The second, the main gala, will be from 9 a.m. to 5 p.m. on Sunday, May 4. Ask Charlie to autograph your *sales ticket*.

Shareholder prices will be available Thursday through Monday, so if you wish to avoid the large crowds that will assemble on Friday evening and Sunday, come at other times and identify yourself as a

shareholder. On Saturday, we will be open until 6 p.m. Borsheim's operates on a gross margin that is fully twenty percentage points below that of its major rivals, so the more you buy, the more you save (or at least that's what my wife and daughter tell me).

In the mall outside of Borsheim's, we will have some of the world's top bridge experts available to play with our shareholders on Sunday afternoon. We expect Bob Hamman, Sharon Osberg, Fred Gitelman and Sheri Winestock to host tables. Patrick Wolff, twice U.S. chess champion, will also be in the mall, taking on all comers — blindfolded! Last year, Patrick played six games *simultaneously* — with his blindfold securely in place — and for the first time suffered a loss. (He won the other five games, however.) He's been training overtime ever since and is planning to start a new streak this year.

Additionally, Bill Robertie, one of only two players who have twice won the backgammon world championship, will be on hand to test your skill at that game. Finally, we will have a newcomer: Peter Morris, the winner of the World Scrabble Championship in 1991. Peter will play on five boards simultaneously (no blindfold for him, however) and will also allow his challengers to consult a Scrabble dictionary.

We are also going to test your vocal chords at the mall. My friend, Al Oehrle of Philadelphia, will be at the piano to play any song in any key. Susie and I will lead the singing. *She* is good.

Gorat's — my favorite steakhouse — will again be open exclusively for Berkshire shareholders on Sunday, May 4, and will be serving from 4 p.m. until 10 p.m. Please remember that to come to Gorat's on Sunday, you must have a reservation. To make one, call 402-551-3733 on April 1 (*but not before*). If Sunday is sold out, try Gorat's on one of the other evenings you will be in town. Show your sophistication by ordering a rare T-bone with a double order of hash browns.

There won't be a ball game this year. After my fastball was clocked at 5 mph last year, I decided to hang up my spikes. So I'll see you on Saturday night at NFM instead.

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Next year our meeting will be held at Omaha's new convention center. This switch in locations will allow us to hold the event on either Saturday or Monday, whichever the majority of you prefer. Using the enclosed special ballot, please vote for your preference – *but only if you are likely to attend in the future*.

We will make the Saturday/Monday decision based upon a count of shareholders, not shares. That is, a Class B shareholder owning one share will have a vote equal to that of a Class A shareholder owning many shares. If the vote is close, we will go with the preference of out-of-towners.

Again, please vote only if there is a reasonable chance that you will be attending some meetings in the future.

Warren E. Buffett
February 21, 2003 Chairman of the Board

Morning Session - 2003 Meeting

1. Buffett welcomes "real shareholders"

WARREN BUFFETT: (Applause) Thank you. We promise not to sing. (Laughter)

Good morning, and we're delighted to have you all here.

One of the things that makes it fun to run Berkshire is that we see real shareholders. We have — we probably have a larger proportion of our shares held by individuals and not by institutions than virtually any large company in America. And that's the way we like it.

We love it when you come, we get to see you, you buy our products. You know, there's still a few things left downstairs so — (laughter) — feel free to leave anytime during the meeting when Charlie's talking — (laughter) — to go down and make a few purchases.

2. Andy Heyward and "Liberty's Kids"

WARREN BUFFETT: Now, we're going to do as we've always done.

First of all, I'd like to — I would like to give very special thanks to Andy Heyward. Andy, would you stand up if you will please? (Applause) Andy is the man that — there he is. (Applause)

Andy does those cartoons, he recruits Walter Cronkite and Bill Gates, and he does the script. He gets Charlie and me to do recordings. And it's just wonderful the production he's put on.

And for those of you — last year I mentioned a program that's on public broadcasting called "Liberty's Kids."

It's running in — consecutively. There's, I think, 40 episodes. It tells the story, really, of the founding of the country, and it's a marvelous way to learn history.

I've watched a number of the sessions myself, and it kind of comes back to me from my early days, grade school and high school.

And Andy's done, I think, the parents of America and the country, a real service in producing this. And I will predict that a hundred years from now, people will be watching "Liberty's Kids."

So I really salute Andy Heyward, and be sure to catch it on public broadcasting. And Andy, thanks for a wonderful production. (Applause)

3. Day's agenda

WARREN BUFFETT: Now, we're going to follow our usual procedure of leisurely proceeding through the formal part of the business in three or four minutes. And — (laughter) — then we will —

I'll have a few comments, actually, on our business, and then — and a couple of acquisitions — and then we will spend the rest of the day, until 3:30 with a break for lunch, we will spend here to answer any questions you have.

We have microphones in various zones, and we will proceed around and try to get every — any subject that's on your mind, fire away and I'll answer the easy ones and Charlie will answer the tough ones. (Laughter)

4. Calibrating Munger's answers

WARREN BUFFETT: So now we will go through the formal part of the business, they've written a little script for me and I will go through this. The meeting will now come to order.

Oh, I should introduce Charlie over here, not that he needs an introduction. But Charlie — (Applause)

Charlie and I have been partners of one sort or another since 1959. We both grew up a good bit here in Omaha, but we didn't know each other at the time.

We both worked at the same grocery store. We had a similar experience, we found that neither one of us liked hard work. (Laughter)

And if you go down to the Western Heritage Museum, they just opened an exhibit of that grocery store. It's a permanent exhibit, and actually, I loved it. Charlie worked there a few years before I did in the past, but we didn't actually meet until I was 28 or 29, and Charlie was a few years older, as he still is.

And — (laughter) — we have worked together now for — in one way or another — for 44 years. We've never had an argument. And we disagree sometimes on things.

He — you have to learn to calibrate Charlie's answers. He — when I ask him whether he likes something, if he says, "No," that means we put all our money in it. I mean, that is a huge — (Laughter)

If he says, "That's the dumbest idea I've ever heard," that's a more moderate investment that we make. And then you have to calibrate his answers, but once you learn to do that you get a lot of wisdom.

5. Berkshire directors introduced

WARREN BUFFETT: We have our directors with us, and I'll introduce them. We have, if you'll stand please as I call your name and then you can — it'll be hard to do — but you can withhold your applause till they're all standing.

Susan T. Buffett, Howard G. Buffett, Malcolm G. Chace, Ronald L. Olson, and Walter Scott Jr., in addition to Charlie. Those are the directors of Berkshire Hathaway. (Applause)

As we mentioned in the annual report, we will be adding some directors who meet the four tests that I laid out in the report. We'll be adding some of those, probably within the next year. When we're required — whenever we're required to do so, we will be doing it.

And we will have people who have a lot of their own money on the line, just like you do, in Berkshire. And they will prosper or suffer in relation to how Berkshire does, and not in relation to their directors' fees or other things.

So they will be selected for business savvy, which they will have.

They will be selected for interest in the company, which is almost guaranteed by their holdings.

They will be selected by their shareholder orientation, which, again, I think that their holdings will produce. And we will have those people on board, probably by our next meeting.

6. Formal business meeting begins

WARREN BUFFETT: Also with us today are partners in the firm of Deloitte and Touche, our auditors. They're available to respond to appropriate questions you might have concerning their firm's audit of the accounts of Berkshire. And I might say that almost any question would be appropriate.

Mr. Forrest Krutter, secretary of Berkshire, he will make a written record of the proceedings. Miss Becki Amick has been appointed inspector of elections at this meeting, and she will certify to the count of votes cast in the election for directors.

The named proxy holders for this meeting are Walter Scott Jr. and Marc D. Hamburg. We will conduct the business of the meeting and then adjourn to the — adjourn the formal meeting. After that we will entertain questions that you might have.

WARREN BUFFETT: Does the secretary have a report of the number of Berkshire shares outstanding, entitled to vote, and represented at the meeting?

FORREST KRUTTER: Yes, I do. As indicated in the proxy statement that accompanied the notice of this meeting that was sent to all shareholders of record on March 5, 2003, being the record date for this meeting, there were 1,309,423 shares of Class A Berkshire Hathaway common stock outstanding, with each share entitled to one vote on motions considered at the meeting.

And 6,763,493 shares of Class B Berkshire Hathaway common stock outstanding, with each share entitled to 1/200th of one vote on motions considered at the meeting.

Of that number 1,071,967 Class A shares and 5,228,705 Class B shares are represented at this meeting by proxies returned through Thursday evening, May 1.

WARREN BUFFETT: Thank you. That number represents a quorum and we will therefore directly proceed with the meeting.

First order of business will be a reading of the minutes of the last meeting of shareholders. I recognize Mr. Walter Scott who will place a motion before the meeting.

WALTER SCOTT: I move that the reading of the minutes of the last meeting of the shareholders be dispensed with and the minutes approved.

WARREN BUFFETT: Do I hear a second? Motion has been moved and seconded. Are there any comments or questions? We will vote on this motion by voice vote. All those in favor say "aye."

VOICES: Aye.

WARREN BUFFETT: Opposed? You can signify by saying, "I'm leaving." (Laughter)

The motion is carried.

7. Berkshire directors elected

WARREN BUFFETT: The first item of business at the meeting is to elect directors. If a shareholder is present who wishes to withdraw a proxy previously sent in and vote in person on the election of directors, he or she may do so.

Also, if any shareholder that is present has not turned in a proxy and desires a ballot in order to vote in person, you may do so. If you wish to do this, please identify yourself to meeting officials in the aisles who will furnish a ballot to you.

Will those persons desiring ballots please identify themselves so we may distribute them?

I now recognize Mr. Walter Scott to place a motion before the meeting with respect to election of directors.

WALTER SCOTT: I move that Warren E. Buffett, Charles T. Munger, Susan T. Buffett, Howard G. Buffett, Malcolm G. Chace, Ronald L. Olson, and Walter Scott Jr., be elected as directors.

WARREN BUFFETT: Sounds good to me.

It has been moved and seconded that Warren E. Buffett, Charles T. Munger, Susan T. Buffett, Howard G. Buffett, Malcolm G. Chace, Ronald L. Olson, and Walter Scott Jr., be elected as directors.

Are there any other nominations? Is there any discussion?

The nominations are ready to be acted upon. If there are any shareholders voting in person, they should now mark their ballots on the election of directors and allow the ballots to be delivered to the inspector of elections.

Would the proxy holders please also submit to the inspector of elections a ballot on the election of directors voting and proxies in accordance with the instructions they have received?

Miss Amick, when you're ready you may give your report.

BECKI AMICK: My report is ready. The ballot of the proxy holders, in response to proxies that were received through last Thursday evening, cast not less than 1,058,098 votes for each nominee.

That number far exceeds a majority of the number of the total votes related to all Class A and Class B shares outstanding.

The certification required by Delaware law of the precise count of the votes, including the additional votes to be cast by the proxy holders in response to proxies delivered at this meeting, as well as any cast in person at this meeting, will be given to the secretary to be placed with the minutes of this meeting.

WARREN BUFFETT: Thank you, Miss. Amick. Warren E. Buffett, Susan T. Buffett, Howard G. Buffett, Malcolm G. Chace, Charles T. Munger, Ronald L. Olson, and Walter Scott Jr., have been elected as directors.

8. Proposal to include Class B shares in charity program

WARREN BUFFETT: The next item of business is a proposal put forth by Berkshire shareholder Christopher J. Fried, the owner of two Class B shares.

Mr. Fried's motion is set forth in the proxy statement, and provides that the shareholders request the company allows Class B shareholders who own at least seven registered shares of Class B stock to become eligible to participate in the shareholder-designated contributions program.

The directors recommended that the shareholders vote against this proposal.

We will now open the floor to recognize Mr. Fried, or his designee, to present his proposal.

CHRIS FRIED: Thank you, Mr. Buffett. Good morning, my fellow shareholders.

My name is Chris Fried, and I am here to present a shareholder proposal.

This proposal is designed to extend the shareholder-designated contribution program to include Class B shareholders.

Let me first start off by saying in our shareholder's "Owner Manual," there is a statement that I'd like to quote at this time.

"Although our forum is corporate, our attitude is partnership. Charles Munger and I think of our shareholders as owner-partners, and of ourselves as managing partners.

"We do not view the company, itself, as the ultimate owner of our business assets, but instead view the company as a conduit through which our shareholders own the assets."

With that in mind, I present the following proposal for a vote.

This proposal would extend the shareholder contribution program to Class B shareholders who own at least seven registered shares of Class B stock. Under my proposal, each Class B stock would be allocated 1/30th the value to Class A donation rate.

Currently the Class A rate is $18 which translates to 60 cents per Class B share. The required minimum seven registered shares results in no less than $4.20 being donated by a Class B shareholder.

This figure is important, for when inflation is taken into account, the donation rate will be on par with the original 1981 donation level when the shareholder — proposal — designated program was initiated.

I do understand that there are certain perks involved with owning a Class A share. However, those perks should only be limited to voting rights and the ability to convert Class A shares to Class B shares.

Therefore, I believe that is an appropriate — to extend the shareholder-designated program to Class B shareholders.

If Berkshire Hathaway is to truly follow — truly follow what it preaches about this firm being a partnership among all of its shareholders, then Class B shareholders must have the right to at least have the option to take part in the shareholder-designated contribution program.

Thus, I ask my fellow Berkshire Hathaway shareholders to vote in affirmative on this matter. Thank you for your time.

WARREN BUFFETT: Thank you, Mr. Fried. And you're absolutely right that Charlie and I do regard our shareholders as partners, and we have ever since we really started.

In fact, Berkshire, in a sense, evolved out of a couple of partnerships. Charlie had a partnership, I had a partnership, we made an investment in certain things. And a lot of our original partners are still with us as shareholders.

The partnership — but partnerships have partnership agreements, and when we set forth — or when we issued the Class B shares some years ago, we set forth the relative terms of the partners. And the Class A and the Class B are quite similar in economic terms, but they're not identical.

And at the time we issued those shares to a new group of partners, Class B partners, we explained, quite clearly I believe, exactly what differences there were.

There was a difference in voting rights, there was a difference in that the Class A could be converted to B, but not the reverse. And there was a difference in the shareholder-designated contribution program.

Ever since we issued those shares, I don't know, maybe six or seven years ago, we, in effect, have had a compact with both the A and B shareholders that they — that we would treat the two classes in a way consistent with what was explained at the time of issuance.

So if we were to change the vote, the conversion ratio, or the shareholder-designated contribution program, we would, in effect, be changing a deal that was made, and that has been recognized as having been made, ever since the B shares were issued.

People have bought the A shares in preference to B because of certain reasons. People have bought the B shares for other reasons. But they have relied on the fact that we would abide by what we said we would do at the time we issued those shares.

We'll not take anything away from the B, we'll not take anything away from the A. We'll run things just as they are.

And in the future, you know, I happen to have shares — my holdings — concentrated in A shares.

But the A will never get any advantage over the B except for the ones we laid out at the time of issuance of the B.

It would actually be unfair to A shareholders, and particularly to A shareholders who have bought since the B was issued, to tell them that the economic relationship between the A and B was being changed, even though only in a slight way, to the benefit of the A — benefit of the B — and the detriment of the A.

We wouldn't do that in either direction, so that's why we recommended to vote against it.

Charlie, do you want to add anything?

CHARLIE MUNGER: Well, not only is all of that true, but the cost of getting down to all of B would — it would be a very inefficient process.

WARREN BUFFETT: Yeah, well of course — and that's the reason, back when we issued the B, I mean, we anticipated that.

So it seemed like something that would offer very little value to the B at a significant cost to the company, and therefore we spelled it out quite clearly, I believe, in the original prospectus, and it's been spelled out in every annual report subsequently.

So it's the deal, and the deal is that — is also that we never change things to benefit the A in any way over the B, except as originally explained in the original prospectus, and subsequently in all the annual reports.

Is there a second to Mr. Fried's motion?

What do we do if we don't get a second, Charlie?

CHARLIE MUNGER: It dies.

WARREN BUFFETT: OK. I guess it just died. (Laughter)

But, there's nothing inappropriate about bringing something like that up (inaudible).

I mean, I understand exactly, you know, what you're thinking about. But I think you have to think of fairness to both classes.

Moving right along — figuring out where we are.

9. Formal business meeting adjourned

WARREN BUFFETT: I guess we're moving along to adjournment of the meeting. And after that we will have the questions we talked about, and I'll also tell you a little bit about the business, since the annual report come out — came out.

Walter Scott, do you have a motion to put before the meeting?

WALTER SCOTT: I move we adjourn the meeting.

WARREN BUFFETT: Do we have a second?

VOICE: I second.

WARREN BUFFETT: Motion to adjourn has been made and seconded. We will vote by voice. Is there any discussion? If not, all in favor say, “aye.”

VOICES: Aye.

WARREN BUFFETT: All opposed say, “No.” The meeting’s adjourned. (Laughter and applause)

10. Microphones for questions

WARREN BUFFETT: Now, I’d like to bring you up to date on a couple of things, and then we will proceed with questions.

We have eight microphones placed around the auditorium here, and we will proceed regularly around and just keep going around, and around.

And Marc, do we have anything in the — any microphones in the Music Hall or not? I’m not aware. Maybe if Marc could come up and inform me whether there’s (inaudible) Music Hall or not, we can —

VOICE: There’s two in there.

WARREN BUFFETT: There’s two microphones in the Music —

VOICE: Yes, nine and 10.

WARREN BUFFETT: Nine and 10 are in the Music Hall. And are there quite a few people there?

VOICE: Yeah, it’s full. It’s full.

WARREN BUFFETT: It’s full?

VOICE: Yeah.

WARREN BUFFETT: Oh OK.

We haven’t put microphones out on the sidewalks yet, but we’ll get to that someday. (Laughter)

11. McLane acquired from Walmart

WARREN BUFFETT: We’ve made — we’ve contracted to make — two acquisitions this year.

You just read about one, perhaps, in this morning's paper, but it went on the tape at 7:45 yesterday morning, Central Time, and that involved the contract to buy McLane's from the Walmart company.

McLane's is the very large wholesaler to all kinds of institutions, but convenience stores, quick-serve restaurants, the Walmart operation itself, theaters, restaurants.

And this year we'll probably do something like 22 billion of business. So it's a very substantial enterprise, with distribution centers around the country, with much in the way of transportation equipment.

Walmart had owned McLane's since about, I believe, 1990. It grew substantially while they owned it. It's been run by a terrific manager who's here with us today, Grady Rosier, and Grady took the business from 3 billion to 22 billion, or thereabouts.

Walmart, for very good reasons, wants to specialize in what they do extremely well, and through Goldman Sachs and Company, we were approached by them a little while back about the possibilities of buying the business.

It's a — it really makes sense for both sides, because Walmart knows what to do with the capital very, very well in their own business, and has lots of opportunities. And this was something of a sideline to them.

On the other hand, their ownership of McLane's resulted in certain people that would be logical customers of McLane's not wanting to do business because they didn't want to do business with a competitor.

And we plan to see all those people very soon, and explain to them that that's no longer the case, and they can sleep well at night doing business with us and not worry about benefiting their competitor, Walmart.

So this deal — a representative of Walmart came up last Thursday to Omaha, a week ago this past Thursday, a CFO. And we made a deal in, maybe, an hour or two and shook hands. And when you shake hands with Walmart, you have a deal.

And so the time remaining until yesterday morning, a contract was put together and it must go through the Hart-Scott-Rodino process in — to be cleared. But there's obviously no conflict, so we fully expect that, in just a few weeks, that McLane's will become part of Berkshire.

It serves, presently, about 36,000 of the 125,000 or so, convenience stores. If you take the 50 largest convenience store chains in the country, it does 58 percent of the business with those companies. Sells each convenience store an average of, perhaps, 300,000 or a slight bit more of product a year, which those convenience stores then resell to the consumer.

It also serves about 18,000 quick-serve restaurants, primarily those operated by Yum! Brands: the Taco Bell, and Pizza Hut, and Kentucky Fried Chicken group.

And it will have opportunities to serve many more as we go along. So we're delighted.

If any of you get a chance to see Grady, or better yet, if any of you own a convenience store, step forward and we'll be glad to give you our card. (Laughter)

It's really — you know, Walmart knows that we will be a good owner, they know we'll be good for the people that work at McLane's.

They know our check will clear, that we won't, you know, make a proposition and then run into financing difficulties, or try to jiggle around the contract later on.

And it's just an ideal way to do business, and we're delighted to add McLane's to the Berkshire group of companies.

It's a very narrow-margin business, obviously. I mean, when you get up to 22 billion of sales and you've got Hershey, and Mars, and people like that on one side, and you've got buyers like 7-Eleven and Walmart on the other side, they're not going to leave a lot in between.

But you have to perform a valuable service for them in order to earn, you know, say, one cent on the dollar, pre-tax.

But McLane's knows how to do it. It's a very efficient operation, and it will continue to deliver value to both their vendors and their customers.

12. Clayton Homes purchase

WARREN BUFFETT: The other acquisition that is in the works is Clayton Homes. Clayton is the class of the manufactured home industry, and the acquisition came about in kind of an interesting way.

Every year for the last five years, a group of about 40 finance students from the University of Tennessee in Knoxville would come up to Omaha, and they would have a lot of fun in Omaha. They'd go to the Furniture Mart.

And then in the afternoon they'd come to Kiewit Plaza and the 40 students or so, with their professor, Al Auxier, would have a session with me. We'd just have a classroom session for a couple of hours, and wonderful group of students.

And generally at the end of the session they would give me a football, or a basketball, they've got a great women's basketball team at the University of Tennessee, and so we'd have a good time together.

And, matter of fact, a year ago, when they came up, Bill Gates, by chance, was in town. So I presented him as a substitute teacher, which is a post he's always wanted. (Laughter) And students got quite a surprise.

This year when they came, 40 or so students, we had a good session together, a couple of hours at Kiewit Plaza. And when they got through, they gave me a book. And it was the autobiography of Jim Clayton, who started and ran Clayton Homes, and built it into a huge success.

And he'd written a nice inscription inside, and I mentioned to the students and the professor that the — that I was an admirer of Clayton. I'd followed the manufactured home industry in other ways, not always so successfully, and I'd seen what Clayton had done.

And so I said I look forward to reading the book, which I did. And then I called Kevin Clayton, Jim Clayton's son, and Kevin is the CEO of the company. And I told him how I'd enjoyed his dad's book.

And I said we still had a little money left in Omaha — (laughter) — and, if they ever decided to do anything, you know, we would be interested. And I suggested at what price we might be interested in.

A phone call or two later, a couple of phone calls, we made a deal.

And I had not been to Knoxville. You know, I checked out a few manufactured homes. Suggested that my family buy a repo. (Laughter)

But that deal came about in that manner. And that's the way things tend to happen at Berkshire.

It, you know, the phone rings or we pick up the phone, in this particular case. And the manufactured home industry got into significant trouble, very significant trouble, because credit terms — well, they went crazy on credit four or five years ago.

And when you go crazy on credit, you suffer in a very big way, and that's what happened to that industry.

Conseco, that some of you may have read about, ended up holding — or servicing I should say — $20 billion worth of manufactured home credit and they got in big trouble, for that and other reasons.

And Oakwood, where we own some junk bonds, went into bankruptcy. They're a big operation in the country, most of the — couple of the other biggest players in the industry are losing significant money.

Manufactured home companies have lost the ability to securitize the receivables they get when they sell these — when they sell homes. And so the industry's been in the tank.

This year, or this past year, there were maybe 160,000 new manufactured homes sold, but there were also about 90,000 repos came back and that depresses the market enormously. And like I say, financing sources have dried up. A lot of people that lent money have left the field.

So for the strong, as Clayton is, and particularly with the financial backer like Berkshire, it should be a good field. Twenty percent or so of all the new single-family homes are manufactured homes in this country.

I mean, you can — we can put you in one for about $30 a square foot, and if you compare that to a site-built home, it's quite a deal. I mean, I was amazed.

They have 2,500 square foot homes, two stories, I mean, it's changed a lot over the last 30 or 40 years.

And we've got an operation that is, even the competitors would admit, it's clearly the class of the field.

But even for Clayton, financing was getting more difficult. I mean, the lending community got burned very badly in manufactured homes, and people have sworn off them, from the lending standpoint.

And Clayton did securitize an issue in February this year, but they had to keep more of the bottom layers of the securitization themselves.

So it's a good marriage, and it's one where we will be useful to them. And we should do very well together in the future.

13. Earnings get insurance boost

WARREN BUFFETT: The first quarter, I'll just — I don't have final figures yet, and we'll put this — what I say today — we'll put it on the website so that everyone has the information before the opening on Monday.

But the economy, as you know, has been quite sluggish. It's really been sluggish for a very long time.

It's interesting, I wrote in a letter that's also on the website, right after September 11th, I put something up there.

And I said that we were in — we had been in a recession, which was not something that was generally acknowledged at that time, and I thought would be longer and deeper than most people anticipated.

And what has happened is that, really since late 2000, housing and autos have done quite well, but the rest of the economy has just been plain sluggish. And it continues.

During that time we've dropped the federal funds rate dramatically down to 1 1/4 percent. Charlie and I weren't — probably wouldn't have predicted that we might ever see that in our lifetime, and maybe it'll even go lower.

And we're running a huge budget deficit now, but business continues to be sluggish.

So our non-insurance businesses generally did not do great in the first quarter.

Our insurance businesses did extraordinarily well. And we will show — when the first quarter report is published — we will show an underwriting profit of about 290 million pre-tax, which is after about 140 million of charges for retroactive insurance, the acquisition costs on that — which I'm sure many of you that don't love accounting — all I can tell you is that it's a charge that many companies don't bear but that we willingly bear because it gives us benefits.

But our $290 million is after that charge.

Our float grew by, probably, at least 1.3 billion, so we're up to 42 1/2 billion or so of float. And people — that means people have — are letting us use that money.

And as I said in the first quarter, did it not only cost us nothing to use the money, but, in effect, people paid us to use the money, which we would like them to continue to do. (Laughter)

And I don't see our float growing much from this point. Charlie said last time that it was impossible for it to grow, but it probably would. I don't know whether he'll change his opinion on that, but I think — I really think our insurance businesses are in exceptionally good shape.

We have some of the best insurance businesses in the world.

GEICO's premium volume was up a little over 16 percent in the first quarter, and in April it was up just right at 17 percent. It had a 6 percent, roughly, underwriting profit in the first quarter.

Gen Re, thanks to an incredible job by Joe Brandon and Tad Montross, has turned the corner in a big, big way, and it showed an underwriting profit in the first quarter.

Ajit Jain made so much money I don't want to even tell you about it. (Applause)

Some of our primary operations — yeah, you should give him a hand. I mean, that — (Applause)

When you get Charlie to clap, you know he's made us a lot of money. (Laughter)

And our primary businesses, particularly U.S. Liability and National Indemnity primary operations, and our Homestate Company, they've all done — they're all doing remarkably well. And I —

You never know what's going to happen in insurance. I mean, there could be an 8.0 earthquake in California or Tokyo, or there could be one in New Madrid, Missouri, as there was a couple hundred years ago. And it could happen tomorrow, there could be huge hurricanes this summer, whatever.

But I can't imagine having a much better group of companies or managers than we have, and they're all working well now.

For a while, Gen Re was a drag, but that's not true now. And I think that we have an excellent chance of having very low cost, and perhaps even no-cost or negative cost float over the next five years or so, or really as far as the eye can see.

Now, that doesn't mean it won't fluctuate around. But if you average it out, I think we will have our float at a very cheap price. And it's — you know, as [TV personality] Martha [Stewart] would say, "Having 42 1/2 billion for nothing is a good thing." (Laughter)

Now, with that, I think we've covered — the first quarter was a good quarter. Overall, it's the best operating earnings we've ever had. Now, we've got more capital now than we've ever had, but nevertheless it will be a good quarter.

And I would estimate, I think it's fair to say, Marc [Hamburg], that from operating earnings we will have something like 1.7 — in the range of 1.7 billion. We had some securities gains too, but I don't count those because they can do anything from quarter to quarter. We don't pay any attention to the timing of those.

But we — from a straight operating standpoint, 1.7 billion or so after-tax. Am I safe with that number, Marc? Or — OK. What could he say? (Laughter)

We don't change numbers at Berkshire, I promise you that. There are — a lot of companies do, but fewer now than did a few years ago. (Laughter)

So, we're going to get the questions in. Charlie, do you have anything to add about acquisitions or operations, or anything else you'd care to say?

CHARLIE MUNGER: Well, I hate to be an optimist, but — (Laughter)

WARREN BUFFETT: Does he ever. (Laughs)

CHARLIE MUNGER: We really added a lot of wonderful businesses to Berkshire in the last few years. It's been some delightful business.

WARREN BUFFETT: That's all you're going to get out of him, folks. (Laughter and applause)

14. Bright future for NetJets but no profit this year

WARREN BUFFETT: OK we're going to start around and we — as we've added two microphones to the Music Hall — and let's start with zone 1, which is over on my right. And do we have the first question?

AUDIENCE MEMBER: Good morning. I'm George Brumley from Durham, North Carolina.

My first question is related to Executive Jet. It's been almost five years since the acquisition of Executive Jet, a purchase in a much different economic and geopolitical environment.

What business metrics do you use to measure success in an industry with as much flux as this one, and what has changed in those metrics since the time of acquisition?

What are the prospects for Europe, and have those prospects changed?

While none of the competitors approach Executive Jet in terms of scale and scope, what impact are they having on the competitive environment?

And lastly, would you please explain the long-term aspect of the business model, as many of the jets age out of the program?

WARREN BUFFETT: OK George, I got through college answering fewer questions than that. (Laughter)

But George's uncle [Fred Stanback] was best man in my wedding, so he gets all he wants.

The — NetJets, as you will see in the first quarter, had a significant loss. A large portion of that loss was caused by the write-down of planes because there — of —

I love it, they call it in the trade, they call them pre-owned planes. I call them used planes. But the — they did the same thing in manufactured homes, so they call them pre-owned homes instead of used homes.

But in any event, putting aside the euphemisms, there — the used plane market, well the entire business aircraft market, is very soft. The used plane market has far more planes for sale than, say, three or four or five years ago.

That's going to affect the production of new planes — already has. And it affects pricing in used planes, and we have bought back planes from people leaving the programs, which we do and will continue to do.

But we have bought during a declining market, some of those, and we have had write-downs in connection with those planes. And you will see in our first quarter report, I believe that that's probably the only operation we have that's losing money.

And we have — it's a popular product, it's a growing business, it's going to be a very big business in my opinion over the years. And we see it every day. I mean, we write a lot of business, and customers are joining us.

There are three main competitors. I think it's fair to say that they're losing significant money from operations, forgetting about any markdowns they might have on their own inventories.

Our market share, we get figures from the FAA as to registrations and as to people that are selling their planes.

And our share of market, which was always the largest, has gone up dramatically in the last couple of years. It's gone up to roughly 75 percent, in terms of value of planes. And we're talking 75 percent of the four-company market. It's gone up even higher than that, in terms of net planes. In other words, new planes sold, less planes coming back.

But the pricing we are receiving does not — in the U.S. it would be — absent this one write-down — it would be very, very modestly profitable.

In Europe, we have lost and we are losing significant amounts of money. Business jets in Europe, the total is about one — and I'm not talking about ours, I'm talking about all — are about roughly 1/10th the number as in the United States, even though the population is similar.

So we have grown from a small base quite rapidly over there. Nobody else will be taking us on. It's part of a service that will be part of a very big business worldwide, in my view, over the years. I don't think anybody else can come in after us.

So I think it's integral, and it is integral, to our operation. Half the — roughly half the miles flown in Europe arise from American owners. And that will just do nothing but get bigger over the years, because our number of — every month our number of owners goes up, goes up significantly.

We have people here from Marquis, who have essentially — they've become a customer of ours, and then they resell cards for 25 hours. And they have added 40 or 50 customers a month in recent months. So it's a popular service, it will be a much bigger business.

I think there will be a shakeout at some point, and maybe fairly soon. You can look at the Raytheon prospectus and — or the Raytheon 10K, and you will find some interesting information about their operation. And you can — it's not hard to figure out what's going on.

I don't know the answer as to when the shakeout will occur. But I can assure you that we will not be one of the shook. (Laughter)

Charlie, do you want to comment on it?

CHARLIE MUNGER: No. (Laughter)

WARREN BUFFETT: He'll comment on the profitable operations. He gives me the one —

The long-term business model is that, basically, we believe that, you know, perhaps 10 times the number of people that are now flying with us will be flying with us some years in the future.

That having the best service, the best record, and the best policies for safety and security, will leave us very dominant in the field, and that people will pay an appropriate price for the service.

And we see all kinds of evidence of that. But we do not see a profit this year, in my view, at NetJets.

15. "What we really want is cost-free float"

WARREN BUFFETT: Let's go to number 2.

AUDIENCE MEMBER: Good morning. I'm Marc Rabinov from Melbourne, Australia.

I had two related questions for you gentlemen, basically both related to float.

Float, as you indicated, has become a very large part of our asset base. Assuming our policy holders continue to renew with us and we keep control of our combined ratio, can we count the float as pseudo equity when calculating the intrinsic value of Berkshire?

And the related question was, can we not expect the float to keep growing at, say, 10 percent per annum for the next five to 10 years given that we're still really a minority player in this segment? Thank you.

WARREN BUFFETT: Well, I wish it would grow at 10 percent or so, at least if it were profitable, which I do have a belief that it's likely to be.

Our float is 42 1/2 billion on March 31st, roughly.

I think the entire float of the American property-casualty industry, you know, could be something in the — roughly — in the area of 500 billion. So we may be some figure like, you know, 8 percent or a little bit more, maybe even 9 percent, somewhere in that range.

Of the total P-C float in the United States — now, it's true we have a little outside the country, too, but the big part of the world P-C market is in the United States.

When we started out in 1967, I think maybe we had 10 million of float. So to go from 10 million to 42 billion, frankly, surprises me. But it also — it's going to be much harder to grow at significant percentage rates in the future.

And our goal — we love the idea of growing — but what we really want is cost-free float. I mean, that is the goal, and growth is not a — not at the top of the list at all. I mean, I hold our managers responsible, not for delivering more float. I hold them responsible for delivering profitable float.

And that is key in our mind at all the time. If it comes along, we love it. But we will find out whether it comes along or not.

The first part of your question, if indeed 42 1/2 billion can be obtained at no cost, or even better yet at a profit, its utility to us is like equity.

Now, you couldn't realize it upon liquidation, necessarily. Oh you wouldn't realize it on liquidation. And you couldn't necessarily realize it on sale, that would depend. So I'm not telling you how to count it as in terms — whether you count it in terms of intrinsic value, you have to make that decision.

But it has the utility to us of 42 1/2 million — 42 1/2 billion — of funds derived from equity without issuing common shares. And that's one of the reasons we've always been so enthused about it now for, what, 35 or 36 years. It's a great business for us.

And every now and then we got off the track. You know, we got off the track in the early '80s, we had a problem or two in the mid '70s, and we had a problem with Gen Re for a few years.

So it — there's nothing automatic about it, and I will say this: I think, for most companies in the P-C business, that — the P-C business is not a great business. It's a commodity business to too big a degree.

So I do not think most companies in the P-C business will get float at an attractive cost. We have to be an exception.

But we have some exceptional companies and some exceptional managers, and I truly believe that we will obtain our float at considerably less cost than the industry. And that is the goal.

GEICO, if it would continue to grow at 16 percent, for example, this year, that adds a billion of premium volume. Well that doesn't generate as much float at GEICO as it generates at Gen Re, but it generates float. So GEICO's float will grow. I would, you know, I'd bet my life on that.

But certain of our other transactions are more opportunistic in nature, and that float could even shrink.

And if the float shrinks, you know, that is fine with me as long as we produce underwriting profits. We'll go wherever it goes.

Charlie?

CHARLIE MUNGER: Yeah, with interest rates as low as they are now, this float we have so laboriously built up isn't worth so much to us on a short-term basis. After all, what — if — what do we have, $16 billion of cash on hand earning a very low rate of return?

So the incremental dollar of float doesn't look all that advantageous now. But we have a more long-term view than that. We figure that eventually, we'll do a hell of a lot better than 2 percent.

WARREN BUFFETT: We're not getting 2 percent on that 16 billion, Charlie. (Laughs)

We have — we do have, incidentally on March 31st, we have roughly 16 billion in cash, not counting any cash in the finance operation, because that's a little bit phony in terms of its utility. I mean, it's offset by borrowed money.

But it — other than the finance operation, we have right at 16 billion in cash and cash equivalents, and we also have a lot of bonds and things of that sort.

On that 16 billion, you know, we are probably getting about 7/10ths of 1 percent, three-quarters of 1 percent, call it, after-tax on $16 billion, which does not make us salivate.

But — (laughter) — we would rather, you know, avoid salivation than to encounter problems. And we will use — Walmart put out the figure yesterday of roughly 1 1/2 billion for a combination of a small trucking company, plus what they sold us.

And we will, you know, we will use money, but money keeps coming in, too. If we earn a billion-seven in the first quarter, that billion-seven is pretty much all cash. And then on top of that we had the billion — billion-three or so float increase.

So float increase plus retained earnings, not counting securities gains, maybe $3 billion. Now we're not going to keep that up, but there's a lot of money coming in.

And — but we are getting some chances to deploy it. And if we deploy — if we get it at less than — at zero or less cost, it has —it's very close to, in our — it has the utility of equity in a very big way.

16. Black-Scholes option pricing model is "insane"

WARREN BUFFETT: Let's go to number 3.

AUDIENCE MEMBER: Good morning, gentleman. My name is Hugh Stephenson (PH). I'm a shareholder from Atlanta.

You had indicated in the past that you did not think that the volatility base to Black-Scholes models for options pricing was correct.

Would you share with us how you would evaluate those options as you use them in the business or see them in the marketplace?

And also if you would update us on your thoughts on the asbestos tort situation, given the recent development of national settlement trusts, et cetera?

WARREN BUFFETT: Yeah, we — Charlie and I have thought about options all our life. I mean, my guess is Charlie was thinking about that in grade school.

And — (laughter) — you know, and I — you have to understand— you don't have to understand Black-Scholes at all — but you have to understand the utility and, in a general sense, the value of options. And you have to understand the cost of issuing options, which is very unpopular subject in certain quarters.

Any option has value. I mean, I bought a house in 1958 for $31,500. And let's assume the seller of that house had said to me, "I'd like an option on it, good in perpetuity, at $200,000." Well, that wouldn't have seemed like it'd cost me much if I'd give it to him, but an option has value.

Any option has value, and that's why some people who are, you know, kind of slick in business matters sometimes get options for very little or for nothing. I'm not talking about stock options. I'm just talking about an option to purchase anything.

They get options for far less than, really, a market value would be. Black-Scholes is an attempt to measure the market value of options, and it cranks in certain variables.

But the most important variable it cranks in that might be subject — well, might be a case where if you had differing views you could make some money — but it's based upon the past volatility of the asset involved. And past volatilities are not the best judge of value.

I mean, if you had looked at a five-year option at — on Berkshire stock — at various times Berkshire stock's had a fairly low beta, as they call it. Beta is a measure that — people in academia always like to give Greek names to things that are fairly simple, and so that they have sort of a priesthood. (Laughter)

You know, it's — so it's like priests talking in Latin or something. I mean, it kind of cows the laity.

But they — beta is a measure of past volatility. Berkshire's had a low volatility, but that didn't mean that the option value of it, to anybody that really understood the business, was lower than a stock with a higher beta.

And I think Charlie — what Charlie said is that — last year, is that for over — that for longer-term options in particular, Black-Scholes can give some silly results.

I mean, it misprices things, but it's a mechanical system. And any mechanical system in securities markets is going to misprice things from time to time, and that's —

We made one — as I mentioned last year — we made one large commitment that basically was — had somebody on the other side of it using Black-Scholes and using market prices — took the other side of it and we made $120 million last year.

And we love the idea of other people using mechanistic formulas to price things, because they may be right 99 times out of 100 but we don't have to play those 99 times. We just play the one time when we have a differing view.

Charlie, do you want to comment on —?

CHARLIE MUNGER: Yeah, Black-Scholes is a — what I would call a know-nothing value system.

If you don't know anything at all about value compared with price — in other words, if price is teaching you all that can be known — then Black-Scholes, on a very short-term basis, is a pretty good guess, you know, for what a 90-day option may be worth in some stock or another.

The minute you get into longer-term options, or you don't have the know-nothing factor so extreme, it's crazy to use Black-Scholes. People use it just because they want some kind of a mechanical system.

But at Costco, for instance, within a fairly short period, we issued stock options at 30, and we also issued stock options at 60. And Black-Scholes valued the options we issued at 60 as the strike price way higher than the options we issued at 30. Well, this is insane.

WARREN BUFFETT: But we like a certain amount of insanity. (Laughter)

CHARLIE MUNGER: Yeah, well, it's good for Warren who picked up this extra $120 million. But —

WARREN BUFFETT: I mean —

CHARLIE MUNGER: — so he's fonder of this kind of insanity than I am. (Laughter)

WARREN BUFFETT: No, we will pay you real money if you will deliver to our offices at Kiewit Plaza somebody who wants to use the Black-Scholes model and is willing to price 100 options for three years, willing to — using the Black-Scholes model — and letting us pick and choose among those.

Because, as Charlie says, it's a know-nothing affair. And we are know-nothing guys, in respect to an awful lot of things, but every now and then we find something where we think we know something, and anybody that's using a mechanistic formula is going to get in trouble in that situation.

But options have value. I mean, we issued options, in a sense, last year when we when we sold those — the 400 million of bonds. And we know what we're giving up when we sell those bonds.

I mean, we may have gotten, what — a negative coupon of sorts, but that's because we gave up option value. And it, you know, it wasn't — it isn't truly a negative cost instrument at all, because options have value.

17. Buffett recalls sneaking out to race tracks with high school golf coach

WARREN BUFFETT: Let's go to number 4.

AUDIENCE MEMBER: Hello, my name is Martin Wiegand from Bethesda, Maryland. And first I'd like to thank you, and all the folks working here at the microphones and staffing the booths, for hosting this wonderful shareholders' weekend. We enjoy your efforts. (Applause)

WARREN BUFFETT: Thanks, Martin.

AUDIENCE MEMBER: My question is about a company getting its employee compensation aligned with shareholder interest.

Charlie Munger, in one of his "Outstanding Investor Digest" interviews, cites the case of FedEx getting it right.

In the newspapers, we've all just read about American Airlines, Bethlehem Steel, and a lot of other companies getting it wrong. I find precious little written about compensation systems.

Would you share with us how you get it right at Berkshire companies?

Also, your old golf coach and racetrack friend, Bob Dwyer, asked me if you would like to share with us your pick in the Kentucky Derby. (Laughter)

WARREN BUFFETT: Is Bob back there with you, Martin?

AUDIENCE MEMBER: No, in the middle.

WARREN BUFFETT: Oh. Bob and I did spend a lot of time at the racetrack in high school. He was not only the basketball coach at Woodrow Wilson High, but he was also the golf coach.

And whenever I wanted to go the races he would write an excuse to my other teachers saying that we had to go out for the golf team. (Laughter)

And then we would head off to Charles Town, or Havre de Grace, or Pimlico or someplace.

And he cleaned up his act subsequently. (Laughter)

It's good to have Bob with us. He was known for his famous three-iron shots. He was known as "Trolley Wire" Dwyer in those days.

18. "Crazy" to use stock options as compensation

WARREN BUFFETT: Charlie, do you want to talk about comp a little?

CHARLIE MUNGER: Well, as the shareholders know, our system is different from that of most big corporations. We think it's less capricious.

The stock option system will give extraordinarily liberal awards sort of by accident to some people. And it'll deny other people any reward at all at some different time, in spite of great contributions made by the people who are getting nothing.

So except where we inherit it, we just don't use it. But we must be in a minority — far less than 1 percent, right?

WARREN BUFFETT: It's where we like to be, right.

It's interesting, we inherited some stock options at Berkshire, primarily in the General Re transaction. And, not through any failing of anybody or — there's no aspersions to be cast at all, but those options turned out to be quite valuable.

They would not have been valuable if General Re had been left alone as a standalone company. They were — they profited from the fact that other parts of Berkshire did well, and the money

went to the people that had these options who delivered nothing to the performance of Berkshire for a while.

Now, that's — that is not an indictment of anybody, in the least, at Gen Re. It's an indictment of an options system which represents a lottery ticket, and also a royalty on the passage of time.

Because as you know, an option holder has benefits from retained earnings and benefits not at all from dividends. And that puts his interest, maybe, quite contrary to that of the shareholders.

So we believe in paying for performance, but we believe in tying performance to what is actually under the reasonable control of the person that's being measured.

And we — to give a lottery ticket on the overall results of Berkshire Hathaway to someone who is running a business that's 1 percent of the whole is really crazy.

And I would say that you have seen probably more misdirected compensation throughout the corporate system — corporate America — in the last five years, you know, than in the hundred years before that. It's been extraordinary.

There was wealth creation in the '90s, just like in the '80s, in the '70s, in the '60s, in the '50s. But there was a wealth transfer like had never been experienced before.

And, you know, you can't blame people for wanting to cash in on it. You know, if anybody wants to walk up and hand me a half a dozen lottery tickets for the Nebraska lottery, you know, I'll accept them. But it will have nothing to do with how I do in terms of running Berkshire.

Actually, Charlie and I think a properly designed options system, which includes cost of capital and some other factors, and ties it to the performance of the people involved, we think that can make sense, when we've used various incentive programs that are similar to that.

But the idea of just passing them out and telling people that for 10 years they get a free ride and then repricing — you know, if your stock goes down, their stock doesn't go down, their option price goes down. You know, that is not our idea of a great compensation system.

CHARLIE MUNGER: Yeah, if we are right with our general approach, it has considerably important implications.

Because the natural implication is that more than 99 percent of corporate compensation systems are more than a little crazy in America.

And I want to emphasize that Berkshire is not illiberal. I mean, we've got various incentive systems out where people make tens of millions and may make hundreds of millions.

And so, we're not against rewards for people who make vast contributions.

But a system that's basically capricious, and which doesn't tailor the results per person and per activity very well, we just think it's crazy.

WARREN BUFFETT: We love to see people that are associated with Berkshire making money, as long as they're making money for you at the same time. It's very simple.

And — but we don't want them to get a free ride off your money. (Applause)

Compensation's an interesting subject and I'm going to write about it next year, some. But, you know, it's not a market system. You can read all you want. I mean, you know, the PR people will tell you, you know, that "Joe Smith's compensation was determined by a market system and he's just like a baseball player," anything of the sort.

But he's not just like a baseball player. You know, the baseball player negotiates with somebody who's spending his money to hire the baseball player, and making a calculation whether he's better off laying out the money out of his own pocket — the owner of the team — to get that player.

But when you get a comp committee at a large American corporation, you have somebody with an enormous interest in the amount of comp on one side of the table.

And you've got somebody on the other side of the table, who was not picked because they were the Doberman of the board, believe me — and who is dealing with what — many times is what my friend, Tom Murphy, used to call "play money."

I mean, you know, it's almost meaningless to the person on one side of the table whether somebody gets 100,000 shares of restricted stock or a million shares of restricted stock, and it's not meaningless to the guy on the other side of the table.

Almost every other negotiation in American business, you have some parity of concern. But you do not have a parity of concern, you know, in terms of the — in terms of comp at the top levels.

You have a parity of concern when you get down to labor unions. I mean, the management wants to keep down the prices and the union wants to get more money. And that's a real negotiation.

And you have, you know, you have lots of other real negotiations in American business, but the compensation in many companies — not all, obviously — but in many, many companies has not been a real negotiation at all.

And the management has hired comp consultants to come in, and I have never seen a comp consultant come in and say, "We ought to reduce this guy's salary."

I've also never seen a comp consultant come in and say, "Why don't you get rid of this bozo?" You know, I mean — (laughter) — they can't all be wonderful.

But — you know, can you imagine a comp consultant doing that and ever getting another assignment? It wouldn't happen.

So it's a bad system, and it needs improvement. And it may be getting a little improvement. And as I wrote in the annual report this year, what happens with comp is the acid test of corporate reform.

Because frankly, the CEOs of America, they don't care whether their boards are diverse, or not diverse, or anything of the sort. They care about how much money they make, in a great many cases.

And you, the owners, and big owners in particular, you know, have to provide some countervailing force, or you'll have what you've had in the last 20 years, which is an enormous disparity in the rates of compensation of people at the top compared to people at the bottom.

And also a disconnect between the comp of people running businesses and the results of the owners who gave them the money. So arise, (inaudible) shareholder. (Applause)

19. Low inflation helps investors, but keep expectations low

WARREN BUFFETT: Let's go to number 5.

AUDIENCE MEMBER: Good morning. Good morning, my name is Matt Sauer and I'm from Durham, North Carolina.

In a 1977 Fortune magazine article titled "How Inflation Swindles the Equity Investor," you argued that corporate earnings in aggregate acted like a bond coupon, and thus, were negatively impacted by high inflation.

Due to high inflation at the time, you posited a world where a 12 percent return on corporate equity would —was reduced to 7 percent after taxes, and netted out to 0 percent in real terms.

You have been sounding downcast about the prospects for equities for several years, much of which we assume relates to extreme starting valuations.

If inflation was decidingly bad for investors in 1977, isn't the relative lack of it in today's economy at least one mark in the plus column for equity owners?

Is there also a future inflation expectation component in your warnings that investors are likely to be disappointed by equity results?

WARREN BUFFETT: Well, I would — there's no question that the lack of inflation is a plus for owners. I mean, the real return you will obtain, in my view, from owning American business — if purchased at similar prices — the real return will be higher if we have long periods of lower or close to no inflation, than if we had long periods of high inflation.

I don't think there's any question about that. Because that article went onto explain how you got taxed on nominal returns and fictitious returns in real terms.

So your question about which period is better for investors — a low inflation period over any long period is better for investors.

And the problem, as you pointed out also, was the starting point, in terms of predicting modest returns for equity investors.

The returns weren't necessarily so modest, I predicted. They were just modest compared to what people had begun to think returns would be during that long bull market from 1982 to 1999.

There were polls taken by Gallup working with, I think, PaineWebber at the time — now they've moved it over to UBS Warburg — that showed the expectancy of people in the stock market. And those returns that people expected got up to 14 or 15 percent, as I remember.

And they were thinking they were going to get 14 or 15 percent in a low-inflation environment.

Well that, you know, that was dreaming. And there's nothing wrong, in a low-inflation environment, at all, in earning, you know, 6 or 7 percent. That's probably as well —

Well, it is as good as will happen, because in a low inflation environment how much is GDP going to grow? Well, GDP, you know, if you have a 2 percent inflation and even 3 percent real growth, you're talking about 5 percent, in nominal terms, GDP growing.

If GDP grows at that rate, over time corporate profits will grow at — more or less, at that rate.

And if corporate profits grow at 5 percent a year, the value of those corporate profits, the capitalized value, will probably grow at something like that over any long term with sort of a normal starting point.

And add that to dividends and, you know, you will get 6 or 7 percent before frictional costs. Investors incur a lot of frictional cost. They don't have to, but they do. And that often is 1 1/2, 2 percent of their investment.

So the math isn't bad, it's just bad for those people that got used to, or expected, very high returns based on looking in the rearview mirror back in 1998 or 1999.

Charlie?

CHARLIE MUNGER: My general attitude is just slightly more negative than Warren's. (Laughter)

WARREN BUFFETT: You've heard it, folks. (Laughter)

That isn't the end of the world. I mean, in effect, if the people who own American business get 5 to 6 percent of the pie — $10 trillion economy now, someday a $20 trillion economy.

But if we get 5 or 6 percent of the pie, those of us who put our capital out to produce goods and services for American business — for American consumers, American population — is that a, you know, I don't know whether that's — you know, that's exactly what somebody who designed the universe would come up with.

But it doesn't strike me as crazy in either direction. You know, I think that — that's a lot of goods and services to go to people that put up the capital, but you — and you've got, you know, a hundred million-plus people in the working force that are working to turn that out for you, using your capital.

And it provides a — what I would regard as a pretty decent real return if you have low inflation.

If you get into high inflation, as I wrote about back in '77, you could easily have the real return, to investors, get to a very, very low number, and perhaps negative.

I mean, inflation can swindle the equity investor, as I wrote back then, and I used 7,000 words to explain why, and will be glad to send you a copy of that article if anyone's still interested.

But inflation is the one thing that, over a long period of time, can turn investors' results, in aggregate, into a negative figure. And it's the investors' enemy.

Charlie, does that bring forth any further thoughts?

CHARLIE MUNGER: I don't think you'll get perfect help on these subjects from the economics profession, either. They have certain standard formulas.

To an economist, when a manufacturing job goes to China, that's just so much productivity increase. And if you ask one, well suppose all of the manufacturing jobs in America went to China. Wouldn't that be a little too much efficiency increase?

And the answer would be no. And people actually get paid for thinking like this in major universities. (Laughter and applause)

WARREN BUFFETT: Yeah, if — what would get across the point, of course, is if all the teaching of economics got exported to China, in which — (laughter) — at that point a new insight would appear.

20. Managers decide whether to come to annual meeting

WARREN BUFFETT: Number 6.

AUDIENCE MEMBER: Jack Hurst (PH), Philadelphia. I have a question about the managers, and a comment and a question about the insurance operation.

These meetings are a lot more fun with more subsidiaries and more managers. I also think more educational, because you get to interact with them.

Is there any feed — do you get any feedback from the managers that they enjoy coming here and they get anything out of the meeting?

WARREN BUFFETT: Well, we have a number of our managers here and I — but we don't require anybody to come. I mean, we have managers that, very, very seldom have come to a meeting.

And I don't keep names, I can't even tell you which ones they are. But you know, if they enjoy it, they come.

Many of them, of course, have operations down below, selling you things, and some of them come to help out in that respect. But we've got a — you know, we have a sensational group of managers.

They run their own businesses, they're extraordinary at doing what they do and we don't get in their way. We don't demand that, virtually, that they do anything, except work for the owners.

But you will — I hope you meet some of them here today because they — you know, the ones that are here, obviously, enjoy interacting with the shareholders.

And it's fun to put faces to functions. I mean, it — I enjoy it, I think a lot of them enjoy coming here.

And the people that are working downstairs, you know, they volunteer to come. And they enjoy seeing the shareholders, and they enjoy bragging about their companies, and they've got a lot to brag about.

And I hope you thank them when you see them because, you know, it's a lot of effort for them.

I got here at six o'clock this morning, but there were people that were here a lot earlier than that, and they were working yesterday to get ready for this. And I want to thank them myself.

Charlie? (Applause)

CHARLIE MUNGER: I don't think our managers who come to this meeting are picking up new tricks. Most of our managers know all the tricks that are related to their businesses.

But this is a very interesting place, and it gets more interesting every year. And part of what makes it interesting is not discreditable, and I think people like being part of it.

WARREN BUFFETT: Yeah, our managers — in a few respects, we'll occasionally work together.

Sometimes a manager of subsidiary A will check with some of the others, not through Omaha, directly themselves. And they will say, you know, "What are you paying for software?" or "What are you paying for UPS?" or whatever it is, and "Can we make a better deal if we pool our efforts?"

There are times when we have saved money, sometimes pretty real money. But that has never been instituted by Omaha, it's never been overseen by Omaha.

It's because manager A decides to call manager B. And you know, they like each other and they can make their own operation better, sometimes by combining purchasing power, and occasionally by just having an idea here or there. But there's no organized way of going at that in Berkshire and nobody has to play.

21. Decisions not based on "sweeping future projections"

WARREN BUFFETT: Number 7.

AUDIENCE MEMBER: I'm John Bailey (PH) from Boston.

I'd like to ask about our consumer businesses, which means that I have to ask about the consumer in general.

The situation, as I understand it, is that over the last 30 years or so the median consumer has seen his income rise only a little faster than inflation, and much slower than GDP, overall.

Income inequality is at a 400-year high. The present value of lifetime income for the median person has improved slowly. Yet the size of his lifetime liabilities, such as health care, housing, education, and retirement, has ballooned.

The economic net worth, then, of the consumer may be poorer than they think.

To cope, the median guy has put his wife to work, borrowed against the house, and also the credit cards.

So I think this may have some implications for the sustainability of consumer businesses. And seeing that we've been buying a number of them recently, how do we think about this problem? And are there any non-obvious risks that we should be considering?

WARREN BUFFETT: The American consumer, overall, is better, but not dramatically better off than 10 years ago. Even somewhat better off than 20 years ago. But you're quite right in that there's been considerable inequality, in terms of the progress of people financially during that period.

We don't have broad ideas about — I mean, we don't make decisions on what business we buy based on some sweeping future projections about things.

We think America will do pretty well over time. In fact, we'd — we're quite sure it will do pretty well over time and that our kids will live better than we live. My kids would say that wouldn't be so difficult. (Laughter)

But the — and the grandchildren will live better. You know, that has been the history of the American economy. The real income per capita grew sevenfold, I believe, in the 20th century. That is huge.

You know, it cost $18, as I remember, to make a three-minute station-to-station call from New York to San Francisco 40 years after the telephone was invented. And at the time the $18 was more than the average weekly wage in the United States.

You know, think if some little kid had picked up the phone on the other end and there went the whole weekly wage while you tried to get, you know, your daughter on the phone, or whatever.

So it — people will be better off in this country decade after decade. But we don't — we're not big on being futurologists or anything at Berkshire.

I will tell you this, in terms of our consumer businesses, right now, they're very soft.

Our furniture and jewelry businesses generally — candy business, businesses dealing with the consumer day by day — are soft, and the first quarter the earnings were down.

22. "Desirable" GDP shows how economy affects households

WARREN BUFFETT: One of the things you have to think about — and people don't — they don't focus on this very much. But you read about GDP, and this is one reason I think — I really think we've been in a recession now — not a huge one, but — or not a violent one — but for over two years.

When the government talks about GDP, A, they talk about GDP, we'll say, going up 2 percent. But of course, the population of the country, you know, goes up something over 1 percent per year. So it's per capita GDP that counts. And that has gone very close to no place.

But the more important factor, to some extent, is that GDP counts the people that, you know, have you take off your shoes when you go to get on an airplane. You know, it counts extra police. It counts all of these things that don't really translate into — they translate into goods and services that the country wants, but they are not goods and services — I mean, they're goods and services we wish we didn't want. And they — all of that counts the same way.

If there's a — 20 guards at the airport instead of three guards, that goes into GDP. But does it make you feel any better about how you're spending your paycheck every month? Probably not.

And when you get into a war, for example, if you drop planes into the ocean, you know, that's part of GDP, the cost of manufacturing those planes. But it doesn't do anything for you at your house.

So in terms of what I would call "desirable GDP," I think my guess is that, on a per capita basis, that has gone no place in the last few years as we've diverted resources to other things that don't really translate to what goes into your house or onto your table.

And the quality of GDP is something that is not really talked about very much when you pick up the economic reports every day.

Charlie?

CHARLIE MUNGER: Yeah, and the type of figures you gave us about inequality tend to obscure a basic and important fact. If the same families were permanently at the top of the economic heap there would be huge resentments about current inequality.

But when the coupon clippers and the DuPont family go down, and somebody creates something like Pampered Chef and comes up, in a real sense, something wonderful is happening in terms of equality, even though at the end it looks like there's been no progress.

That much churn makes people think the whole system is fairer. (Applause)

WARREN BUFFETT: We prefer not to be part of the churn, though, actually, at this point, I think. (Laughter)

We were much more in favor of churn 30 or 40 years ago. (Laughter)

23. Buffett didn't learn accounting from books

WARREN BUFFETT: Number 8, please.

AUDIENCE MEMBER: My name is Johann Freudenberg (PH). I come from Germany.

I would like to know the accounting book you like best. Thank you. (Laughter)

WARREN BUFFETT: Well, it's been a long time since I've read an accounting book. I read Finney back when I was in college, I remember that. And I always liked accounting. And for any of you in business, you know, you basically can't get enough accounting.

But I don't — you know, I am not really up to date on accounting books. Maybe Charlie's been reading some of those lately.

I would hope, actually, that if you read the Berkshire reports over time that you get certain, perhaps, lessons on accounting.

But I think you learn more accounting, probably, in terms of — well I mean, once you know the basics of it, by reading good business articles that deal with accounting issues, accounting scandals, that sort of thing.

I mean, what you really need to know is you need to know how the figures are put together, the underlying principles of it, and then you have to know what can be done with those.

And — you start with the accounting figures as the raw material of understanding a business, but you have to bring something additional to that.

And I can't think of any good books on that subject. I think I've read a lot of good magazine articles that contributed to my knowledge over the years.

And I've just, you know, I've read a lot of annual reports, and seen what people can do with accounting.

And as I've said before, if I don't understand it, I figure it's probably because the management doesn't want me to understand it.

And if the management doesn't want me to understand it, there's probably something wrong going on. I mean, people don't obfuscate with numbers, usually, without a purpose. And when you run into that the best thing to do is you stay away.

Charlie?

CHARLIE MUNGER: Yeah, asking Warren, you know, what good books he knows about accounting would be — it's like asking him what good books does he have about breathing. (Laughter)

The — and — (applause) — what the implication of that is, is that you start by learning the basic rules of bookkeeping, which are sort of like the basic rules of addition and subtraction. And then you have to spend a lot of time before that accounting gets related to the larger reality, and that's a lifelong process.

24. Many credit insurers "don't really know what they're doing"

WARREN BUFFETT: OK, we're going to try to go to the Music Hall. Number 9. Is this working?

AUDIENCE MEMBER: I believe so.

WARREN BUFFETT: OK, good.

AUDIENCE MEMBER: Bill Ackman from New York City, and my question is as follows:

Insurance companies — could you comment on insurance companies taking on credit risk through the sale of credit derivatives, the adequacy of the accounting for these derivatives?

And finally, could you explain why the financial guarantee insurers, who are the primary sellers of these derivatives, have the same triple-A rating Berkshire has, despite their more than 140-to-one leverage, and the correlated nature of the risks that they take on?

WARREN BUFFETT: Well, I think you should go to work for Standard and Poor's or Moody's.

The question about credit insurance or credit guarantees of one sort or another, you know, that's become very popular.

And it's become — actually, popular with, sort of, the standard insurance, property-casualty insurance, companies in recent years.

And I would say that, in many cases, the people participating in that business don't really know what they're doing.

It's so easy in the insurance business — it's the curse of the insurance business — it's also one of the benefits of it — is that people hand you a lot of money for writing out a little piece of paper.

And what you put on that piece of paper is enormously important. But the money that's coming in that seems so easy can tempt you into doing very, very foolish things.

We had a situation here in Omaha 15 or 20 years ago in the mid-'80s where Mutual of Omaha — largest health and accident association in the world, at least at one point — and they decided to go into the reinsurance — property-casualty reinsurance business.

And in a very, very, very short time they wrote not very many contracts, and it resulted in wiping out half of the net worth of everything that had built up over many, many decades.

If you are willing to do dumb things in insurance, the world will find you.

I mean, you do not — (Laughter)

You can be in a rowboat in the middle of the Atlantic and just whisper out, "I'm willing to write this," and then name a dumb price, and you will have brokers swimming to you, you know — (laughter) — with their fins showing, incidentally. (Laughter)

It is brutal. I mean, if you are willing to do dumb things, there are people out there, and it's understandable. But they will find you, and you will get the cash up front.

You will see a lot of cash and you won't see any losses, and you'll keep doing it because you won't see any losses for a little while. So you'll keep taking on more and more of this, you know, and then the roof will fall in.

And I mentioned in the annual report how GEICO had taken in, you know, 70-odd thousand dollars — $70,000 — of premiums in the early '80s for a few policies, and they thought they were just picking cherries at the time, and they reinsured a lot of it. And so far we've lost $93 million.

Now, the most we could make was 70-odd thousand, and I don't know what the most we can lose is. But I know that 93 million has gotten my attention. (Laughter)

When you're playing in a game like that, you can't afford to make a mistake. I mean, it's — the mistake — a single mistake or a few mistakes that are correlated, as you've mentioned — because these things do correlate — a few mistakes will overcome a lifetime of savings.

I mean, it is — you will make a few cents on the dollar when you're right, and you will lose incredible sums when you're wrong.

And in credit insurance, when you go around — a lot of people went around guaranteeing credits based on ratings.

And they said, well, we'll guarantee a whole bunch of single-A ratings, or we'll create these structured arrangements that involve A-rated credits.

And they would use a lot of studies that would show that X percent of A-rated credits defaulted per year, and you go back to the '30s, and all these back-tested arrangements.

But the problem with that is that what the questioner mentioned is correlation. And when things go bad, all kinds of things correlate that no one ever dreamed correlated.

And what you had, of course, in the debt field was you had a whole bunch of, say, telecoms or energy companies, that were all rated similarly. But they were correlated in a huge way and you weren't getting a diversification. You were getting a concentration that would — you didn't realize.

And there's nothing more deadly than unrecognized concentrations of risk, but it happens all the time.

So I would say we see a B-double-A credit enhanced to a triple-A credit by somebody guaranteeing it, and they may guarantee it for 10 or 15 basis points. And yet the spread in market yield might be 100 basis points.

That does not strike us as smart.

And I would say this about the triple-A rating. They have a triple-A rating for claims paying, but they don't carry, I don't think, general triple-A.

There's only, I think, eight or nine triple-As left in the United States. Berkshire Hathaway's one of them. But I believe there's only one other insurance company, which is AIG, and then there's a half a dozen other companies.

So those companies are not in the same class, credit-wise, as Berkshire, nor are they recognized as being in the same class.

But I would say you could get into a lot of trouble at 140-to-one — at some point — insuring credits.

Charlie?

CHARLIE MUNGER: Yeah, he also asked about the quality of accounting. And in my view, at least, the quality of accounting in America for derivative transactions is still terrible. And it's terrible in that it's too optimistic.

And one of the places where it's most terrible is when you talk about guaranteeing future credits way, way out — years ahead.

That sort of thing just lends itself to people getting very optimistic in their assumptions and in their audited figures.

And people pay attention to the audited figures, not the underlying reality. So therefore, if the accounting is lousy, the business decisions are lousy. And I think that's going on mightily as we sit here.

WARREN BUFFETT: Yeah, there are dozens of insurance organizations or trading organizations in the country that have written credit guarantee contracts in derivative form in the last few years, in fact, on a huge scale.

I will guarantee you, virtually, that every single one of those contracts that was written, in the first week, whoever wrote it, you know, recognized some sort of an income account or an income entry, and that somebody got paid a little bit of money for writing each one of them.

And you know that many of those are going to go bad, and maybe, as a category, that it's going to be a terrible category. But nobody ever wrote a contract and recorded a loss at the time they wrote it. I mean, they just don't do it.

And I will tell you that there are a lot of those contracts that if somebody wrote them for me, 10 seconds later I would've paid somebody to take them off my hands, so that I would've regarded them as having a built-in loss. Nobody ever records a built-in loss on a derivative contract.

In fact, I find it extraordinary that you have two derivative dealers, and dealer A and dealer B write a ticket, and dealer A records a profit and dealer B records a profit, you know, particularly if it's a 20-year contract, you know? I mean, that is the kind of world I'd love to live in, but I haven't found it yet.

25. We try to look "a long way into the future"

WARREN BUFFETT: Number 10.

AUDIENCE MEMBER: Hey, good morning, Charlie, Warren. Jerry McLaughlin from San Mateo checking in from the Music Hall.

You should see yourselves over here. We're about 12 feet from wall-size images of both of you, which is interesting, but the See's Candy box is so big, I understand what Tantalus went through now.

WARREN BUFFETT: How many people do you have in the Music Hall?

AUDIENCE MEMBER: We probably want to get a cop to estimate, but I'd say it's a couple of thousand.

Anyway, moving right along — hoping I can get a twofer here.

One is, at Branders, small company we run, we're seeing — we're spending a lot more on employee benefits anymore.

Health insurance in particular is going up and up again. And lots of times, in the press years ago and now again a little bit, you're hearing the drumbeat of a health care crisis and what it costs employers to provide health insurance.

I got to figure that's on the minds of a lot of Berkshire operating company managers. I'm wondering whether both of you feel — I mean, is crisis the right word, with respect to cost?

Looks like bigger percentages of our GDP are going to health care. Is that because we think we're getting better health care, or is it really just sort of inflationary?

Second thing is, at the risk of you thinking we're all a bunch of kooks over here, a couple of people over on this side of the hall have asked me to ask you, Warren, whether you're seriously considering being cryogenically frozen at some point — (laughter) — I think, hopefully, in the distant, distant future.

WARREN BUFFETT: What —?

CHARLIE MUNGER: Cryogenically frozen.

WARREN BUFFETT: Oh, we had that last year.

AUDIENCE MEMBER: Yeah, and the guy who asked the question last year has put me up to a follow-up for him.

Hey, and finally, unrelated to those two —

WARREN BUFFETT: Do I look like I'm closer to where I need it? (Laughter)

AUDIENCE MEMBER: Last thing is, when you guys look at companies and you're thinking about earnings into the future, just do you have any rule of thumb? How far in the future do you think you can look, typically, with a company you believe in, you think you understand the business?

Is it five years, 10 years? Do you really think you've got, you know, sort of the perpetual, into infinity income stream to calculate the value on? Thanks.

WARREN BUFFETT: Yeah, well we don't project as far out as we might have to if we thought we could be successfully frozen. (Laughter).

But we really — you know, we're going to own these businesses forever. So, we want a business that we think is going to have, if run well, some kind of competitive advantage — over many decades.

I mean, we're not going to resell them. And we better have something that is not only good now but that's going to stay good.

So we don't buy hula-hoop companies or pet rock companies, and we don't buy companies in industries that we think will have great explosions in demand, but where we don't know who the winners will be.

So we look a long — we try — we like to think we're looking a long way into the future.

26. Munger: 15 percent of GDP for health care is "not crazy"

WARREN BUFFETT: On health care costs — the only company-wide managers meeting — and we had far fewer managers then — but we had a meeting of most of the then-smaller number of managers 15 or 20 years ago where we did talk about what the various companies were doing on health costs, because they were then the fastest increasing part of our cost structure.

And today, workers' compensation costs would probably be — and some other insurance costs unrelated to health would be also — would, at least in the last couple of years, have moved up even more dramatically than health costs.

But health costs are huge for us. In many cases, you know, running 6- or $7,000 per employee, but moving up at a fast rate.

And you know, that is an inflationary part of the U.S. economy that we can't solve and our employees can't solve. And it becomes a big part of the kind of cost — it's a raw material cost — we had higher energy costs in the first quarter.

But health costs are the ones that are going to just keep coming and coming, in my view, and I don't have any great answers for it.

Charlie runs a hospital and knows a lot more about the health system than I do, so we'll see what he has to say.

CHARLIE MUNGER: Well, I would argue that the quality of the medical care delivered, including that from the pharmaceutical industry, has gone up enormously. And, of course, the cost has, too, but it's a much richer country.

And I don't think it's crazy if the United States wants to spend 15 percent of GDP on health care. If it went to 16 or 17, I wouldn't consider it the end of the world.

Eventually, of course, there would be a place where it wouldn't be smart to spend so much.

WARREN BUFFETT: Do you think, if we're spending 13 or 14 percent and other countries that seem to have fairly good systems are spending 7 or 8 percent, that we're getting our money's worth, relative to them?

CHARLIE MUNGER: Well, certainly they're getting more value per dollar out of their 7 percent than we're getting out of our 15. But does that mean that it's crazy for us to spend 15? I don't know.

I would guess not. But I don't see any sign from anything I see that it isn't continuing to go up.

WARREN BUFFETT: It's a — I don't know how much we — we never aggregate figures around Berkshire from the various companies because it wouldn't mean anything. But we spend a lot of money on health care.

And certain states, it's far higher than others. It makes a lot of difference where you're located.

27. Buffett: Giving and getting love is true success

WARREN BUFFETT: Number 1?

AUDIENCE MEMBER: Hello, Mr. Buffett and Mr. Munger. My name is Justin Fung (PH). I am 13 years old, from California. This is my third consecutive year in attendance.

First of all, I would like to wish you the best of health so we can continue to come to Omaha for many years to come. (Applause)

WARREN BUFFETT: Thank you.

AUDIENCE MEMBER: Thank you for answering my question on friendship last year. My question this year is, how do you define success and happiness? Are they related? And how would one achieve that? Thank you.

WARREN BUFFETT: Well, I tell college students that when you get to be my age, you will be successful if the people that you would hope to have love you, do love you.

I mean, you — if — Charlie and I know a few people that have got a lot of money, and they get testimonial dinners, and they get their names on buildings, and the truth is, nobody loves them.

And you know, not their family, not the people who name the buildings after them. You know, it's sad.

And it's — unfortunately, you know, it's something you can't buy. I mean, Charlie and I have talked a lot of times, if we could just buy a million dollars' worth of love, you know, I mean? It would be so much more satisfactory than to try and be lovable. (Laughter)

But it doesn't work that way, you know?

The only way to be loved is to be lovable. It's — and I hate to tell you that at 13, and — but the nice thing about it, of course, is that, you know, you always get back more than you give.

I don't know whether it was Oscar Hammerstein or who said, you know, "A bell's not a bell till you ring it, a song's not a song till you sing it. Love in the heart isn't put there to stay. Love isn't love till you give it away." And basically you'll always get back more than you give away.

And if you don't give any, you don't get any. It's very simple.

I don't know anybody my age that is loved by a lot of people — we had a dinner the other night, Don Keough was there — everybody loves Don Keough, you know, and for good reason.

And there is nobody I know that has — that commands the love of people around them, people they work with, their family, and their neighbors— that is other than a success or feels other than a success.

I don't know how the people feel that — where they know that nobody loves them, but I can't believe they feel very good.

So it's very simple. You can't get rid of love. If you try to give it out, you get it back more than you've given. And it's the best thing.

Charlie, what do you speak for? (Laughter)

CHARLIE MUNGER: Well, you don't want to be like the motion picture executive in California, and they said the funeral was so large because everybody wanted to make sure he was dead. (Laughter)

And there's a similar story about the minister saying at the funeral, "Won't anybody stand up and say a good word for the deceased?" And there was this long silence, and finally one guy stood up and he said, "Well," he said, "his brother was worse." (Laughter)

WARREN BUFFETT: Look, I would say this. Look around at, you know, people older than you are, look around at, you know, your older relatives or whatever, and you will not see a — an unhappy person who is loved by those around them.

I mean it — and it's — most people in this room are going to do very well financially. Most of the college students I talk to are going to do well financially.

And some of them are going to have very few friends — real friends — as they get older, and others, people won't be able to do enough for.

And I see it around me all the time. So that's our advice for the day on that.

28. Buffett doesn't remember giving advice to Richard Rainwater

WARREN BUFFETT: Number 2. (Applause)

AUDIENCE MEMBER: Hello, my name is Kevin Truitt (PH) and I'm a shareholder from Chicago, Illinois.

Mr. Buffett and Mr. Munger, thank you for putting on this marvelous event for your shareholders and partners. I thoroughly enjoy and love coming here.

I get so much education from this, in that the people here are just wonderful.

I have three, hopefully short, questions. The first two questions are for you and Mr. Munger, and the third question is for you.

My first question is, Mr. Munger, you are largely credited with moving Warren away from the cigar-butt approach to investing, as it was practiced by Ben Graham. It's been stated that it was the purchase of See's Candy that taught you this important lesson of buying good businesses.

At what point did you realize that this concept of buying good businesses was a better long-term investment strategy? And what was it in your discussions with Warren that allowed you to persuade him to move in that direction?

Mr. Buffett, what was it in Mr. Munger's arguments for buying good businesses that persuaded you to abandon the cigar-butt approach and move in his direction?

My second question is, in both your experience have you or Mr. Munger ever known of a company that has regained or replaced its competitive advantage once it was lost?

My third question for you, Mr. Buffett, is, early in his career Richard Rainwater sought you out and asked you what it took to become a successful investor. Can you tell us what he asked you and what you told him? Thank you. (Applause)

WARREN BUFFETT: The last question, I don't remember at all. I mean, Rainwater called me a couple of times, but I don't really remember the conversation.

That was a lot of years ago and I probably said the same — I would have said the same thing to his as if I got a question asked in this meeting.

So I've really had no contact with Richard Rainwater over the years. Like I say, I think I met him once, I believe, and he called a couple of times, so —

29. See's Candies lesson: listen to criticism

WARREN BUFFETT: Charlie, do you want to answer the first question about how you —

CHARLIE MUNGER: Yeah, well, I think there's some mythology in this idea that I've been this great enlightener of Warren Buffett. (Laughter)

Warren hasn't needed much enlightenment, but we both kept learning all the time, so that the man we were five years earlier was less sensible than the man who ultimately was there.

And See's Candy did teach us both a wonderful lesson. And it'll teach you a lesson if I tell you the full story.

If See's Candy had asked $100,000 more, Warren and I would've walked. That's how dumb we were at that time.

WARREN BUFFETT: Ten-thousand more. (Laughter)

CHARLIE MUNGER: And one of the reasons we didn't walk is while we were making this wonderful decision we weren't going to pay a dime more, Ira Marshall said to us, "You guys are crazy. There are some things you should pay up for," quality of business — quality, and so forth. "You're underestimating quality."

Well, Warren and I instead of behaving the way they do in a lot of places, we listened to the criticism. We changed our mind.

And that is a very good lesson for anyone. The ability to take criticism constructively is — well, think of all the money we made from accepting that one criticism.

And if you count the indirect effects from what we learned from buying See's, you can say that Berkshire's been built, partly, by learning from criticism. Now, we don't want any more today. (Laughter)

WARREN BUFFETT: We also like the peanut brittle, too. (Laughter)

30. From "cigar butts" to high-quality companies

WARREN BUFFETT: The — Charlie explained, I had learned investment, and got enormous benefit out of that learning, from a fellow who concentrated on the quantitative aspects, Ben Graham.

And who didn't dismiss the qualitative aspects, but he said you could make enough money focusing on quantitative aspects, which were a more sure way of going at things and would enable you to identify the cigar butts.

He would say that the qualitative is harder to teach, it's harder to write about, it may require more insight than the quantitative. And besides, the quantitative works fine, so why try harder?

And on a small scale, you know, there was a very good point to that.

But Charlie really did — it wasn't just Ira Marshall — but Charlie emphasized the qualitative much more than I did when I started.

He had a different background to some extent than did, and I was enormously impressed by a terrific teacher, and for good reason.

But it makes more sense, as we pointed out, to buy a wonderful business at a fair price, than a fair business at a wonderful price.

And we've changed our — or I've changed my focus anyway, and Charlie already had it — over the years in that direction. And then of course, we have learned by what we've seen.

I mean, we — it's not hard when you watch businesses for 50 years, you know, to learn a few things about them, as to where the big money can be made.

Now, you say when did it happen? It's very interesting on that. Because what happens, even when you're getting a new, important idea, is that the old ideas are still there. So there's this flickering in and out of things. I mean, there was not a strong, bright red line of demarcation where we went from cigar butts to wonderful companies.

And it — but we moved in that direction, occasionally moved back, because there is money made in cigar butts.

But overall, we've kept moving in the direction of better and better companies, and now we've got a collection of wonderful companies.

31. Hard to regain a lost competitive advantage

WARREN BUFFETT: In terms of competitive advantage and then regain — lost and then regained — there aren't many examples of that. In the property-casualty company, I've got a friend who always wants to buy lousy companies with the idea he's going to change them into wonderful companies.

And I just ask him, you know, "Where in the last hundred years have you seen it happen?"

I mean, GEICO got into trouble in the early '70s, but it had a wonderful business model. It did get off the tracks, but it wasn't because the model went astray, it's because they'd started reserving incorrectly and went crazy on growth, and a few things like that. But the basic model was still underlying it.

You might argue that one company that lost its competitive position and then came back in a different way, actually, was Pepsi-Cola. I mean, they were "Twice as much for a nickel, too."

They were selling on a quantitative basis, the fact that you got to guzzle more of the stuff for a nickel — twice as much, as the slogan went — and they lost that edge, post-World War II, when costs went up a lot.

And so they basically changed their marketing approach successfully, and that's very, very seldom done. But you have to give them credit for that.

To some extent, Gillette lost its competitive position somewhat in the '30s, lost market share against what they called penny blades and all that, and then regained it in a very big way in the next 10 or so years when their market share went up enormously.

But generally speaking, if you lose your competitive position — the Packard Motor Company had the premier car in the mid-'30s. The Cadillac was not the premier — it was the Packard.

And then they went downscale one year and they never came back. They jumped their sales that one year because everybody wanted to own a Packard, and now you could own one a little cheaper. But they never regained that upscale image again.

And certain department stores have done that, too. They've had a upscale image. And you can always juice up your sales, particularly if you've got a great upscale image, by having, you know, this sale or that sale, and going downmarket.

It's very hard to back upmarket again, and you've seen some great department stores that have had that — or specialty stores — that had that problem.

Charlie, you got any thoughts on that?

CHARLIE MUNGER: No more.

WARREN BUFFETT: OK.

32. "Fretful disposition" will hurt your long-term performance

WARREN BUFFETT: Number 3.

AUDIENCE MEMBER: Hi. I'm Bruce Gilbert (PH), a stockholder from New York City.

And about four or five years ago, I put most of my family's portfolio — actually all of it — into Berkshire Hathaway.

And over the past four or five years, the stock price has remained rather steady, and I've withstood the year 2000, when friends were making 50 percent and I was losing 50 percent on my investment.

But I have to admit, when I read your Fortune article last year and you referred to the stock price as expensive, I felt badly.

Now I spend my days sometimes having fun, figuring out the value of Berkshire Hathaway.

But at night after that comment I could also wake up in worry and fret. And I realize you talked, recently, a lot about the qualitative and quantitative aspects of things.

And I guess I would like you, with your self-reflective position, and knowing that I'm asking you to do something like maybe talking about your breathing, what went into that comment to call the stock price expensive, in terms of your weights and measures?

What price, what value? What do you think about the company and its stock price when you say it's expensive?

WARREN BUFFETT: I think if you — I don't remember the exact wording of that article, but I'm quite sure that I told the author of that article, and I'm almost positive it was in the article, that said I thought it was more attractive than owning the general market or the S&P.

So I was saying that I preferred it to the general market. I'm certainly happy having 99 and a large fraction percent of my net worth in it. I've never sold a share, I am not the least bit uncomfortable about holding it until the day I die, and quite a bit thereafter. (Laughter)

But I have not thought stocks were cheap at all for some time. And I've never wanted to encourage anybody, particularly in the last few years, to buy Berkshire or any other stock because — the market — I felt that the — you know, I felt we had a great bubble.

And you know, I think Berkshire's value has improved — I think Charlie does, too, fairly significantly — in recent years.

And I would — if I had a chance to swap, tax-free, my Berkshire for the S&P 500, or for any mutual fund or anything, you know, I wouldn't even give it a thought. But that does not mean I think, you know, either Berkshire or stocks are cheap.

Charlie?

CHARLIE MUNGER: I've got nothing to add to that.

WARREN BUFFETT: I don't think we've ever recommended the purchase or sale of Berkshire, that I can remember. We did say at one time we would repurchase shares, which has a certain underlying message to it.

And we said at other times we wouldn't buy shares. That doesn't mean we'd sell shares at all, but we wouldn't have bought them under the prevailing conditions.

But we have stayed away from recommending, actually not only the purchase or sale, not only of Berkshire, but just of any other specific shares.

We've only given our views, occasionally, on what we think about the level of the stock market, generally.

But I do think, if you go back and look at that article — I wish I had it here. But I think you'll find that I said I preferred it to equities, generally. It —

CHARLIE MUNGER: I do think that there's a lot to be said for developing a temperament that can own securities without fretting. I think that the fretful disposition is the — it's an enemy of long-term performance.

WARREN BUFFETT: Well, it's almost — I think it's almost impossible if you're — to do well in equities over a period of time if you go to bed every night thinking about the price of them. I mean, Charlie and I, we think about the value of them.

But we would be happy, just as in that movie — if they closed the Stock Exchange tomorrow, you know, Dick Grasso wouldn't be happy and Jimmy Maguire, our specialist, wouldn't be happy.

It wouldn't bother me and Charlie, at all. We would keep selling bricks, selling Dilly Bars, selling candy, writing insurance. You know, a lot of people have private companies and they never get a quote on them.

You know, we bought See's Candy in 1972. We haven't had a quote on it since. Does that make us wonder about how we're doing with See's Candy? No, we looked at the company results.

So you — there's nothing wrong with focusing on company results. Focusing on the price of a stock is dynamite, because it really means that you think that the stock market knows more than you do.

Now if the stock market may know more than you do, but then you shouldn't be in stocks. I mean, you should have — the stock market is there to serve you and not to instruct you.

So you need to formulate your ideas on price and value, and if the price gets cheaper and you have funds, you know, logically, you should buy more, if — and we do that all the time.

Where we make our mistakes, frankly, is where we focus on price and value and we start buying, and the price goes up a little and we quit, you know, like Charlie referred to, we might have done on See's Candy.

A mistake like that cost us $8 billion in the case of Walmart stock a few years ago, because it went up in price. And you know, we are not happy when things we're buying go up in price.

We want them to go down, and down, and down. And we'll keep buying more and — hopefully we won't run out of money. Of course, that's a different story.

Charlie?

CHARLIE: No.

33. Triple-A rating won't "cause us to do anything stupid"

WARREN BUFFETT: Number 4.

AUDIENCE MEMBER: Hi. David Anglin (PH) from St. Louis, Missouri. Thanks for the weekend, it's very nice. It's always entertaining here.

According to an article in The Economist, the triple-A rating is very important quality for reinsurance to have. Swiss Re, Munich Re have lost their triple-A ratings. Gerling is out of the ballpark.

Will the reinsurance business at Berkshire become unintentionally exposed to higher risk because it is now a major reinsurer still holding a triple-A rating, even though it practices a very severe underwriting discipline?

WARREN BUFFETT: No, the triple-A can't increase our risk, because it should not affect what we do.

It may affect what gets offered to us. I mean, logically we should get business offered to us first, and last. I mean, we are the reinsurer that's going to pay for sure, five years from now, 10 years from now.

So when — I mean, we have contracts, we have structured settlements with paraplegics that are counting on us to make a payment to them 50 years from now.

And those people are in wheelchairs, they may be on — you know, they may be on oxygen, all kinds of things. And they are depending on a little piece of paper that has our name on it, and it says we're going to pay them for the rest of their life. And it's very, very important to them whose name is on it.

But that shouldn't cause us to do — it shouldn't cause us to do anything at all stupid. It just means that people that care about security of future promises should come to us.

But there's no reason at all, because Munich or Swiss Re loses their triple-A, that we should underwrite in any way differently than we do now. It just should mean that we have more to choose from.

And I can assure you that, as these companies lose their triple-A — and a number have in the last year or year and a half — we have been tightening our underwriting very materially at Gen Re.

Now, it needed tightening — but we are now, in my view — we have the right — we have a great underwriting culture at Gen Re, and historically it had it most of the years. It drifted away from that, but I think it's back in spades now. So I don't think you have to worry about that.

Charlie?

CHARLIE MUNGER: Well, I certainly hope we are better underwriters than Munich Re.

WARREN BUFFETT: Well, let's not name names. (Laughter)

No, no, Munich is a fine company. (Laughter)

The rule at Berkshire is we praise by name and we criticize by category. (Laughter)

And I do think Munich is a fine company, but they lost their triple-A, frankly, because they probably had — they were too exposed on the equity side — on the asset side — in equities, relative to net worth, and I think they probably agree with that.

But they have a very strong and important position in insurance. And we do a lot of business with Munich Re, and will continue to do so. But there are others we won't do business with, incidentally.

I mean, there are some very weak reinsurers in the world and if there were to be a major natural catastrophe, or if there were to be a major financial catastrophe, there are a number of reinsurers, in my view, that would not pay. And we conduct our affairs so we'll always be able to pay.

34. Planned all along to exercise Cologne Re buy option

WARREN BUFFETT: Number 5?

AUDIENCE MEMBER: Good morning, gentlemen. My name is Olaf Heine (PH) from Germany. And not surprisingly, I have a question concerning the German reinsurance market, fitting nicely in the context of the questions before.

When you acquired General Re, I believe you inherited, also, a substantial stake in Cologne Re. Now in your last letter to your shareholders, you hinted that a major reinsurance company might be in trouble, widely believed to be Gerling Re, just mentioned.

You also mentioned, about an hour ago, that Germany was kind of a drag insurance-wise — (laughs) — if you are — if I understand you correctly.

WARREN BUFFETT: I don't — I mean, I don't believe I — I didn't mean to say that.

AUDIENCE MEMBER: OK, but it helps to formulate the question. (Laughter)

WARREN BUFFETT: OK, well, for the purpose of your question we'll assume I said it — (laughter) — yeah. But I didn't say it.

AUDIENCE MEMBER: So now Gen Re decided to exercise a call option on the remaining shares of Cologne Re, another German reinsurance company. And my question simply is, what motivated you to do so?

WARREN BUFFETT: Yeah, that's a good question. And it was mis — it was sort of somewhat misreported in the press, what happened on that.

What really happened is that Gen Re — I don't know whether it would be about six or seven years ago now — acquired a significant position in Cologne from the controlling shareholder, with a put and call arrangement for the remainder.

I don't even know the history, exactly, of why they went for this two-step transaction, but basically it was a two-step purchase.

So that all along we have accounted for Cologne as if we were going to exercise the option. Because, in effect, if we didn't exercise, they would exercise. And it was fait accompli that we would buy that stock right from the start.

So we made no affirmative — we made an affirmative decision six or seven years ago to buy a very significant percentage of Cologne. We now have — will have about 89 percent when the option's exercised.

But there's nothing new in the fact that we are now doing it. The put and call arrangement, as I remember, became effective, essentially, this year.

So this was the year that something had to be done, and was planned to be done all along. And it reflected no new judgment, no new decision about Cologne in the year 2003.

It reflects a decision that was made in 1996 or ’97, whenever the original purchase was made.

And Cologne is an integral part of General Re. I mean, we knew all along that we would own 89 percent of it, pursuant to this contract. And it — that’s always been in our thinking, from the moment we sat down with the Gen Re management to make a deal some years ago.

So the press has sort of implied that there’s something new in this transaction that’s occurring this year, and there really isn’t.

35. Berkshire buyback is possible, but not likely

WARREN BUFFETT: Number 6. Charlie, you don’t have anything on that? No.

AUDIENCE MEMBER: Good morning — Mr. Buffett. This is Abhishek Dalmia coming from the land of Mr. Ajit Jain, (inaudible) India. The question is —

WARREN BUFFETT: If you have any more like Ajit over there, send them. We need them. (Laughter)

AUDIENCE MEMBER: Right. My question pertains to the allocation of a company’s free cash. And the question is, under what circumstances would Berkshire consider parting with its money for a share buyback program, as opposed to retaining it for future acquisitions? Thank you.

WARREN BUFFETT: Yeah, that’s a good question and we addressed that a bit back a couple of years ago. In fact, I think our annual report for 1999 came out on March 12th — I believe it was March 12th — on a Friday night or a Saturday morning.

That was the day the NASDAQ hit its high and Berkshire hit its low, on that exact day. And we said we would — the next morning, on the internet — on a Saturday morning — we said we would repurchase, but we wanted you to have the annual report first, but we might repurchase at those levels.

And the NASDAQ never saw its level of 5100 again, and Berkshire never saw its level of whatever it was, 41,000 or thereabouts.

Our preference — and we stated this 20 years ago, even to — is to buy businesses. We are — we want to add businesses of a quality with managers of a quality equal to those we already own, at prices that make sense. And that’s our number one preference.

If we thought Berkshire was significantly undervalued and we thought the likelihood of using the money to buy businesses — the probability was low — we would be buying stock in — we

probably wouldn't be able to buy a lot of stock in, but we would only buy stock in if we thought the stock was selling significantly below intrinsic value.

And there's no magic figure for intrinsic value. Intrinsic value is a range. Charlie would name a different number than I would name, but our ranges would be quite similar, if we were to write them down on a piece of paper now. But they wouldn't be identical.

So we leave a — we would leave a significant margin of safety and would want to buy at a — what would be a clear-cut, to us, discount from the lower levels of intrinsic value we might calculate.

It's not our number one preference. We would rather add — we love it when we add good businesses to Berkshire.

But we would have to — if the stock — if we could add intrinsic value per share by repurchasing, and we've given all the shareholders relevant information about the value so that we weren't putting anything over on them, that they had the same information we had, we would buy in stock.

I think it's unlikely that happens, that we don't find other opportunities to do things at a time like that. But it could happen, and it almost happened in March of 2000, and then things turned around very, very abruptly.

Charlie?

CHARLIE MUNGER: I've got nothing to add.

36. MidAmerican will grow, even if utilities law isn't repealed

WARREN BUFFETT: Number 7.

AUDIENCE MEMBER: Good morning. My name is Ken Goldberg (PH) from Sharon, Massachusetts.

What is your long-term vision for MidAmerican Energy?

And specifically, assuming the repeal of the Public Utility Holding Company Act, what is the nature of the type of assets that you would be interested in acquiring, be they generation, transmission, distribution-type properties?

WARREN BUFFETT: Yeah, MidAmerican already is a big part of Berkshire. I would say it's likely to become much bigger. It will be easier to have it become much bigger if the Public Utility Holding Company Act, which was enacted in 1935 — if it were repealed.

Public Utility Holding Company Act, which is a melodiously named — called PUHCA — (laughter) — was enacted in 1935 in a reaction to what Sam Insull and people like that had done in the 1920s. It was very understandable.

But I really think it is quite outdated now. I mean, it is now 68 years later.

And I think we bring something to the utility field. In fact, I think we brought it in the last year.

There might well be a couple of companies that wouldn't — would be in bankruptcy now if we hadn't been in a position to act very quickly on certain things.

So — but with or without the repeal — and I think there's a reasonable chance it'll be repealed. But with or without repeal, MidAmerican, which is big now, will become quite a bit bigger. And it could become a whole lot bigger.

Now, in terms of what kind of assets we'll buy, we don't have a —any clear-cut preference, for example, as to whether it would be a natural gas pipeline, or whether it would be a domestic utility, or conceivably, a utility, even, in some country that we felt good about.

We will look at things as they come along. We're always ready to act. I would say that it's certain we'll look at a few big deals this year. Whether we get one done or not depends on competition, depends on the sellers, and some things like that.

But something will happen with MidAmerican — over — you know, whether it's this year, or next year, or the year after, we'll get a shot at doing something significant.

And the nature of the energy field is you're talking big money, always. I mean, these are not lemonade stands. And you know, we're talking in the billions, frequently, on the kind of assets involved.

So it will be a — we've got a fabulous management — we've got two people running that in Dave Sokol and Greg Abel, who are — they're terrific businesspeople.

You know, they — and, incidentally — I should mention this publicly — they have done things that have made Berkshire significant money that had nothing to do with MidAmerican.

In other words, they have spent their time and energy, weekends, putting together a couple of things that MidAmerican itself could not do, but Berkshire could. And they didn't get paid a dime for that and MidAmerican did not get paid a dime for that.

So they have contributed to Berkshire's welfare beyond what they've contributed simply as managers of MidAmerican.

So it's a terrific asset. We love the idea of pouring money — (applause) — behind them, and you'll see something happen.

Charlie?

CHARLIE MUNGER: Well, I — the really interesting thing about it is the fact that the field is so big. I mean, you're talking about an enormous field.

One thing a modern civilization needs is energy, so we'll be very disappointed if there aren't more activities.

37. Why Buffett doesn't get a performance fee

WARREN BUFFETT: Number 8.

When we get through with number 10 we're going to break for lunch, and then we'll come back and start all over again after 30 or 40 minutes. But I'd like to get through 8, 9, and 10.

Eight.

AUDIENCE MEMBER: I'm Norman Rentrop from Bonn, Germany.

Mr. Buffett and Mr. Munger, I have a thank you and a question for you. Thank you for allowing us shareholders to invest with you on equal terms, with almost no management fee and no performance fee. (Applause)

I came to fully appreciate it when I compared my 10 years of holding Berkshire Hathaway to a private equity fund, which over the same 10 years earned 19.8 percent before fees, and 11.2 percent after fees. — (Buffett laughs)

Now my question. Back in the 1950s and 1960s when you had a partnership, Mr. Buffett, you asked for and got a performance fee of 25 percent of what was earned above 6 percent a year.

WARREN BUFFETT: Correct.

AUDIENCE MEMBER: What caused you to switch from that performance fee to that no fees we are enjoying today? Was it the wisdom that to give is better than to receive? (Laughter)

WARREN BUFFETT: Try again. (Laughter)

AUDIENCE MEMBER: And do you feel that this switch from performance fee to no performance fee, that that is fully appreciated? And what did it mean to you personally?

WARREN BUFFETT: Well, I appreciate what you had to say, and I will — I would pay to have this job I have. I would pay a lot of money. And I hope I don't get tested on that, but you know, it's —

Why in the world — if I can work with people I like, and get the same result they have, and end up with all kinds of money, you know, why do I need to make some further override on them?

I was changing my position in life significantly when I started that partnership in 1956. A couple of the people that — well I guess, yeah, [Buffett's sister] Doris may be the only original partner here. But Doris, would you stand up? She joined on May 5th, 1956, wherever she is.

And the — you know, those people gave me their money but I wasn't — I needed some money then, too. And I did get an override, which I thought was fair.

I got no management fee at all, though. I never charged — today, most of the people who run hedge funds charge 1 percent a year, and then some percentage of the profits. I did not do that.

And I did have all my money in after 1962, so that the downside would be equal to the upside.

But I've always felt about the people as partners. And when we got into Berkshire — originally we got into Berkshire, Berkshire was owned by the partnership. So if I had taken a salary then I would've been double-dipping, in effect, by getting money out of Berkshire before, in turn, the partnership participated.

And frankly, by the time I got — where I was running Berkshire I had all the money I needed. And you know, I'd rather get the same result as my partners than have me get a different result. And it can't make any difference.

I mean, it'll make a difference in the size of my foundation someday, perhaps. You know, but so what? I like living the way I live.

Charlie?

CHARLIE MUNGER: Well, you raise a very interesting question, and it has parallels, if you go back.

[Andrew] Carnegie was always very proud that the bulk of his fortune had been earned where he took no salary at all from Carnegie Steel. John D. Rockefeller the First took practically nothing in salary.

Over the years — the original Vanderbilt prided himself on living on his dividends and taking no salary.

It was a common culture in a different era. And you realize that all those people had the psychology of being the founder, and maybe that's what influenced Warren.

WARREN BUFFETT: What influenced you, Charlie?

Charlie doesn't take anything either, so —

CHARLIE MUNGER: I was delighted to get rid of the psychological pressure brought by — brought on me by getting fees based on performance. I think Warren was, too.

If you're highly conscientious in your relations with other people, and you hate to disappoint, you're going to suffer more if you are liberally rewarded with performance fees.

So I think there was an enormous advantage to us, so I guess we should be thanking you.

WARREN BUFFETT: I should — (Applause)

Bill Gates has never taken an option at Microsoft, and takes a very small salary. And you'll find it interesting. The only reason he takes the small salary is if there — he feels that, if there's a bad year at some time in the future, he wants to be able to take a cut in salary at the same time he's asking other people to cut back.

And that is the reason. I mean, he takes peanuts as it is, but he just figures that — Bill is a very conservative guy, and he figures that some year there'll be a bad year. And he wants — if he's asking other people to take a 5 percent cut, he wants to be able to take a 90 percent cut, or something, himself.

But he's never taken an option, and I don't believe [Microsoft CEO] Steve Ballmer has either. They have gotten rich with their shareholders and not off their shareholders, and that's an attitude we admire.

38. "Mild wakeup call" on derivatives

WARREN BUFFETT: Number 9? (Applause)

AUDIENCE MEMBER: Good morning. I'm Whitney Tilson, a shareholder from New York City.

There was a lot of talk among the Berkshire faithful when you took what I believe was the unprecedented step of pre-releasing a portion of your annual letter, published in Fortune, which focused primarily on the dangers of derivatives — which you called "financial weapons of mass destruction."

I have two questions related to this — the first to you, Mr. Buffett.

Could you tell us the story of how the Fortune article came about? Were you trying to draw extra attention to something that you feel strongly is a great risk to our financial system?

And the second question to both of you, since you're warning about derivatives, there's been a huge rally in the credit markets, in general. Does this reflect investors' lack of concern for these systemic risks or is it caused by other factors?

WARREN BUFFETT: The first question, my friend [Fortune Magazine journalist] Carol Loomis is the editor of the Berkshire report. And we wouldn't get out the report without her. I mean, she is the world's greatest editor, in addition to being the world's greatest business writer.

So when I gave the report to her to edit — and it did not come back unmarked, I might add — she and I talked about — I mean, I was interested in having the section on derivatives because I thought it had a broader — I hoped it would have a broader audience than just the Berkshire annual report.

And I felt that publishing it, which had no relationship to the Berkshire business, basically, except the history of Gen Re's involvement, would not be, in any way, compromising fair disclosure, in terms of Berkshire's results itself.

So the primary reason for having it in Fortune was I hoped for a wider audience, basically, by having it in Fortune.

And you know, Charlie and I think there is a low, but not insignificant, probability — and low — that sometime, maybe in three years, maybe in five years, maybe in 20 years, and very possibly never, that derivatives could accentuate, in a major way, a systemic problem that might even arise from some other phenomenon.

And we think that's inadequately recognized. We think the problem grows as derivatives get more complex and as their usage increases.

So it was a call — what we hope was a mild wakeup call — to the financial world that these things could be very troublesome.

And of course, we saw it in the energy field in the last two years. It almost destroyed, or destroyed certain institutions that never should have been destroyed.

And the — we also saw, in 1998, the whole financial system almost become paralyzed, particularly in the credit markets, you know, by the action of a firm, which was not solely based on derivatives, but would not have gotten into as much trouble as it did without derivatives.

So it's a subject that no one quite knows what to do with. Charlie and I would not know how to regulate it, but we think we have had some experience in seeing both the firm's specific

dangers in that field, and we think we have some insight into the systemic problems that could arise.

And you know, that people really — they don't want to think about it until it happens. But there are some things in the financial world that are better thought of before they happen, even if they're low probabilities.

And we're thinking about low probabilities all the time, in terms of Berkshire. I mean, we don't want anything to go wrong in a big way at Berkshire. And we therefore, I think, think about things that a good many people don't think about — simply because we worry about that.

And when we get our social hats on we think about it in terms of something like derivatives for financial systems of the world. And we have had some experience at both Salomon and at Gen Re.

And Charlie was on the audit committee at Salomon, and he saw some things in the audit committee in relationship to trading itself, and derivatives in particularly, that made him wonder why in the world people were doing these sort of things. I'll let Charlie expand on that.

CHARLIE MUNGER: Yeah, in engineering, people put big margins of safety into systems — atomic power plants being the extreme example. And in the financial world, in derivatives, it's as though nobody gave a damn about safety.

And they just let it balloon, and balloon, and balloon in usage, and number of trades, and size of trades.

And that ballooning is aided by this false accounting, where people are pretending to make money they're not really making.

I regard that as very dangerous, and I'm more negative than Warren in the sense that I'll be amazed, if I live another five or 10 years, if we don't have some significant blow-up.

WARREN BUFFETT: They've been advertised, and sometimes in a fairly prominent way — they've been advertised as shedding risk for participants in the system, and reducing risk for the system.

And I would say that I think they have long crossed the point where they decrease risk to the system, and now they enhance risk. Because you have — the truth is, the Coca-Cola Company couldn't bear the foreign exchange risk that they run, or the interest rate risk that they run, and all of that sort of thing.

But when the Coca-Cola Company starts laying those off, and every other company in the world — major company — does with just a relatively few players, you have now intensified the risk that exists in the system.

You have not shed risk at all, you have transferred it, and you have transferred it to very few players. And those players have huge interdependencies with each other, and to some extent, central banks and all of those similar institutions are vulnerable to the weaknesses of those institutions.

When Charlie and I were at Salomon, you know, they hated it if we brought up — and so therefore, we didn't do it — that we were too big to fail.

But the truth was that if Salomon failed at that time, the problems for the rest of the system could well have been significant. They might've been — who knows exactly what they would have been? But they could have been quite significant.

And when you start concentrating risks in institutions which are highly leveraged, and who intersect with a few other institutions like that — all bearing same risks, all having the same motivations in the trading departments — to take on more and more esoteric things because they can book more and more immediate profits, you are courting danger.

And that's why I wrote about it this time. And I — it's not a prediction, it's a warning.

39. Do managers love the business or the money?

WARREN BUFFETT: Number 10, and then we will break for lunch right after this.

AUDIENCE MEMBER: Good morning, my name is Ho Nam from San Francisco, California. I have a two-part question regarding how you evaluate your managers.

In your annual report, you wrote that Berkshire Hathaway owns "good to great" businesses and employs "great to great" managers, and we're thankful for that.

When you hire a manager, or are evaluating the management team of a business you're thinking about buying, what are the qualities you look for?

And some of your managers were entrepreneurs who started their businesses from scratch when their business models were unproven, and some of them took over businesses that were already performing well when they took charge.

What are the qualities of a great entrepreneur that might be different from those of a manager who can be great at running a company that's established, but may not be able to start a business from scratch and tinker around with a business model and figure out how to make it successful?

WARREN BUFFETT: Yeah, well we love managers that have a passion for their business. And when we're buying a business we have to ask ourselves, "Do they love the money or do they love the business?"

If they love the money, there's nothing wrong with that, but they probably wouldn't be running the business for us a year or two down the road.

I think one difference is that people that create their own businesses, the entrepreneurs, probably, on average would have a significantly greater degree of passion for those businesses than somebody that was just brought in a few years ago and sees themselves as making a profit in a few years on reselling the business and leaving.

I — you'll find exceptions in both camps. But we've had terrific luck with the entrepreneurs who basically love their businesses the way I love Berkshire. I mean, they are not going to let anything happen to their businesses.

They can — you know, they'll tell me to butt out if I'm going to screw up something in their operations, and they don't regard them — I mean, in a certain sense, I mean, they know they're part of Berkshire.

But they regard them in a certain jealousy, almost, as being their businesses, and we love it that way.

And you know, we can spot it when we see it. And we also can avoid it.

We have never — I just got one in the other day, something from an investment banker on somebody that wants to resell a business they bought a few years ago.

Well you know, the chances that they haven't doctored up the figures in some way or are trying to sell, I mean, you know, they're — it's a piece of meat to them. And if it's a piece of meat to them, you know, what am I going to do with it?

So we — if we make the proper judgment about the passion they have for their business, they're going to keep running — they may have a lot of money in the bank — but they're going to keep running the businesses for us, because they love those businesses.

And they really are motivated the same way I am. You know, it wouldn't make any difference what I get paid, you know. I'm identified, in my own mind, with how Berkshire does.

I really don't care how the rest of the world thinks about how Berkshire's doing. I mean, in other words, when we looked like we were out of step a few years ago, that really doesn't make any difference to me, as long as I feel OK about how Berkshire is doing.

But I do — you know, that's how I measure what I'm doing every day — not by the price of the stock, but by what's going on in the business. And that's what — we have a group of managers like that, and there —

I don't think there's — well, there can't be a company in the country, in my view, that, if you could figure out some way to measure the passion involved, in terms of running their business, I don't think there's anybody that could come close to matching the quantity that we have managed to marshal together at Berkshire.

It's been accidental over time, but it's really almost unique. I think it is unique.

Charlie?

CHARLIE MUNGER: Well, it's very interesting to think about what matters most, the passion or the competence that was borne in?

Certainly Berkshire is full of people who have a peculiar amount of passion in their love for their own business. And I would argue that probably the passion is more important than the brainpower.

WARREN BUFFETT: Yeah, and by the time they get to us, if they were passionate but incompetent, they don't get to us.

I mean, they're not going to be there unless they're competent, but the question is whether they had a passion for money or a passion for their business, to some degree.

And they all like money, and the reason — and they like it, partly, because it enables them to build the business they love.

But they don't — we're not going to see an incompetent, but passionate, manager by the time we start laying out a lot of money for a business.

They got weeded out a long time ago. So I don't have to weed those out, but I do have to weed out the ones who want to cash a big paycheck and go off and do something else at some time. And like I say, we've had great luck at that.

But we have literally — I mean, we see lots and lots of businesses owned by — usually owned — by financial operator types, where it's absolutely clear that, you know, they have come in, they've leveraged it up, they've played games with the accounting.

They — that has about run out, you know, and they want to sell it. And interestingly enough, fairly often, those are built by — bought by — other financial operators who think they're going to play the game a second time.

Afternoon Session - 2003 Meeting

1. Pretax operating profits clarification

WARREN BUFFETT: OK. We have no afternoon movie, so we'll get to business in a second. And if everybody will just find their seats, please.

I've been advised by [Berkshire CFO] Marc Hamburg to make sure I make clear what I may not have made clear earlier.

In terms of the figures we gave you about the first quarter: A, I think I said we had 16 billion of cash or cash equivalents, which is correct. We had a $290 million pretax underwriting profit. I think I said that.

What possibly I may have misstated, we had a billion-seven-hundred million, pretax operational gain. We had actually also, by coincidence, very close to a billion-seven of after-tax, counting securities gains. But our operating gain, excluding security gains, was about a billion-seven, pretax.

2. Read everything, ignore management, wait for "fat pitch"

WARREN BUFFETT: Let's start right in at number 1.

AUDIENCE MEMBER: Yes. My name is Oliver Graussa (PH), and I'm from Vienna, Austria.

And my question has two parts. And so, the first part is, how do you get a few excellent investment ideas to be so successful? Do you read any special newspapers or industry magazines? Or do you visit the headquarters or any subsidiaries of companies?

And which sources of information, like books, for example, Value Line, Standard and Poor's, Moody's, databases like Reuters, Bloomberg, DataStream, annual reports, internet, and so on, do you use to get the right impression of a company?

And the second part, if you (crowd noise) think that a company like The Washington Post, GEICO, or Gillette has a very competitive product, what are the steps before you ultimately decide to invest in the company?

Which publications do you read to get the best knowledge of the product? And how important is the balance sheet and profit and loss account statement of the company? Thank you very much.

WARREN BUFFETT: Thank you.

The answer to the first part is sort of — and maybe the second part — is sort of all of the above. I mean we — (laughter) — read a lot. And we read daily publications, we read weekly or monthly periodicals, we read annual reports, we read 10-Ks, we read 10-Qs.

And fortunately, the investment business is a business where knowledge cumulates. I mean, everything you learn when you're 20 or 30 — you may tweak some as you go along, but it all kind of builds into a knowledge base that's useful forever.

And we — at least, you know, I read. Charlie used to read. May still read a fair amount.

But I read a lot of 10-Ks, read a lot of annual reports. Forty or 50 years ago I did a lot of talking to managements. I used to go out and take a trip every now and then and really drop in on maybe 15 or 20 companies. I haven't done that for a long, long time.

I find — everything we do, pretty much, I find through public documents.

When I made an offer for Clayton Homes, I'd never visited the business. I'd never met the people. I'd done it over the phone. I'd read Jim Clayton's book. I looked at the 10-Ks. I knew every company in the industry. I look at competitors.

And I try to understand the business and not have any preconceived notions. And there is adequate information out there to evaluate a great many businesses.

We do not find it particularly helpful to talk to managements. Managements frequently want to come to Omaha and talk to me, and they usually have a variety of reasons that they say they want to talk to me, but what they're really hoping is we get interested in their stock. That never works.

You know, managements are not the best reporting parties in most cases. The figures tell us more than a management does. So we do not spend any real amount of time talking to management.

When we buy a business, we look at the record to determine what the management's like, and then we want to size them up, personally, as I said earlier, whether they will keep working.

But we don't give a hoot about anybody's projections. We don't even want to hear about them, in terms of what they're going to do in the future. We've never found any value in anything like that.

But just a general business knowledge, you know, what we've seen work, what we've seen has not worked. There's a lot you absorb over time. Charlie?

CHARLIE MUNGER: Yeah. The more basic knowledge you have, I think the less new knowledge you have to get.

And the game is a lot like that fellow that plays chess blindfolded. He's got a memory of the board and everything that happened before. And that enables him to do the next move in a way he never could if you just showed him the board midgame, cold.

And so there — and in terms of what publications, I don't know, Warren. I would hate to give up The Wall Street Journal.

WARREN BUFFETT: Oh, you'd also hate to give up The Buffalo News.

CHARLIE MUNGER: Yeah. (Laughter)

WARREN BUFFETT: But you could — well, you want to read lots of financial material as it comes along.

And actually, The New York Times has a far better business section than they had 25 years ago.

But you want to read Fortune, you know. You want to read lots of annual reports. You really want to have a database in your mind so that you can tell what kind of a business you're looking at, in general, by looking at the figures.

It's far overrated — we never look at any analyst reports. I mean I don't think I've, you know, if I read one it was because the funny papers weren't available, you know — (Laughter)

It just isn't — I mean, it — I don't understand why people do it.

But there's a lot of data out there. And, you know, the beauty of it is — it's really what makes the investment game great — is you don't have to be right on everything.

You don't have to be right on 20 percent of the companies in the world or 10 percent of the companies in the world or 5 percent. You only have to get one good idea every year or two.

So it's not something — you know, when — I used to be very interested in horse handicapping, and the old story was — and I hope Bob Dwyer is still here — that, you know, you could beat a race but you can't beat the races. And you can come up with a very profitable decision on a single company.

I would hate to be measured — if somebody gave me all 500 stocks in the S&P and I had to make some prediction about how they would behave relative to the market over the next couple years, I don't know how I would do.

But maybe I can find one in there where I think I'm 9 in 10, 90 percent, in being right.

It's an enormous advantage in stocks, is that you only have to be right on a very, very few things in your lifetime as long as you never make any big mistakes.

CHARLIE MUNGER: What's interesting is that at least 90 percent of the professional investment management operations don't think the way we do at all.

They just think, if they hire enough people, they can be better at determining whether Pfizer or Merck is going to do better over the next 20 years.

And they can do that, stock by stock, all through the 500 and have wide diversification. And at the end of 10 years they'll be way ahead of other people, and, of course, they won't.

Very few people have this idea of searching for just a few opportunities.

WARREN BUFFETT: Yeah. You wait for the fat pitch. Ted Williams wrote about that in a book called "The Science of Hitting." He said the most important thing in being a good hitter, you know, is to wait for the pitch in the sweet spot, basically.

But, you know, I've always said that the way to get a reputation for being a good businessman is to buy a good business. You know? (Laughter)

It's much easier than taking a lousy business, you know, and showing how wonderful you are at it, because I haven't seen that done very often.

3. "We do our best to explain" Berkshire

WARREN BUFFETT: Number 2.

AUDIENCE MEMBER: Good afternoon. David Winters. Mountain Lakes, New Jersey. Thank you again for hosting the Berkshire weekend. It's just great.

Interest rates are the lowest they've been in, I think, two generations. Equity values, in aggregate, are still high. Berkshire has meaningful free cash flow, a short-duration bond portfolio, and you're a buyer of low-multiple, high-quality private businesses, and a few stocks.

Assuming that the stimulative economic policies to deal with the recession eventually cause interest rates to go up and, maybe, equity values to come down, Berkshire seems very well positioned to benefit. Would you comment?

And also, are there any concerns on both of your parts about investors inadequately understanding the conglomerate structure of Berkshire and, therefore, improperly pricing the shares?

WARREN BUFFETT: Well, to answer the second question first, we hope the latter wouldn't be true, because we do our best to explain it. I mean I used 14,000 words in the last annual report, which caused certain members of my family to ask whether I was getting paid by the word. (Laughter)

The — we want you to understand Berkshire, and I hope that comes through. That's why we have these kind of meetings. That's why we spend a lot of time writing an annual report. We try to tell you what we would like if the position was reversed — if our positions were reversed.

And we think that the information in the annual report, if read by somebody that — they have to have some understanding of business and accounting, but if they don't, you know, nothing is going to help, really, in terms of helping them with the business.

But we think if they have some understanding of it, we have given them the information that Charlie and I would need in order to come up with our rough ideas of a valuation of Berkshire, and we hope we get across what it's all about.

You know, there are a lot of companies in Berkshire, but it's not important that you understand the nuances of every single one. Looking at what happens in aggregate, in many cases, will be sufficient.

4. "Strange things happen" in markets

WARREN BUFFETT: In terms of how we're positioned, you know, we have 16 billion of cash, not because we want 16 billion of cash, or because we expect interest rates to go up, or because we expect equities to go down.

We have 16 billion in cash because we don't see anything that makes us want to part with that cash where we feel we're getting enough for our money.

But we would spend — we spent a Monday morning on the right sort of business, or even if we could find equities that we liked, or if we could find — like last year we found some junk bonds we liked. We're not finding them this year at all, because prices have changed dramatically.

So, we're not really ever positioning ourselves. We're simply trying to do the smartest thing we can every day when we come to the office. And if there's nothing smart to do, cash is the default option.

Charlie?

CHARLIE MUNGER: In terms of future opportunities, the issue is, is it at all likely that there'll be an opportunity like 1973-4, or 1982, even, when equities generally are just mouthwatering?

I think there's a very excellent chance that neither Warren or I will live to see either of those occasions again.

If so, Berkshire's not going to have a lot of no-brainer opportunities. We're going to have to grind ahead the way we've been doing it recently, which is not all bad.

WARREN BUFFETT: It's not impossible, though, we'll get some mouthwatering opportunities. I mean you just don't know in markets. It's unbelievable what markets do over time.

And since you brought up interest rates, you know, in Japan the 10-year bond is selling to yield 5/8ths of 1 percent. Five-eighths of 1 percent.

I don't think there's anybody in our annual meeting of 20 years ago, certainly including Charlie and myself, who would have dreamt that a 10-year bond of a country, you know, running a significant deficit would be selling at 5/8ths of 1 percent.

I mean would you say so, Charlie? (Laughs)

CHARLIE MUNGER: Would I ever. But strange things happen.

WARREN BUFFETT: Strange things happen.

CHARLIE MUNGER: But if that could happen in Japan, something much less horrible for the investing class could happen in the United States. It's not unthinkable.

I mean we could be in for a considerable period when the average intelligent, diversified investor in common stocks, using fancy paid advisors, just doesn't do very well.

WARREN BUFFETT: But you could argue that if what we warned against, and hope doesn't happen, with derivatives should happen, it might create enormous opportunities for us in some arena. I mean, you know, but we — wouldn't be good for society, but it might very well turn out to be good for us.

If you get chaotic markets — you had a somewhat disorganized market in junk bonds last year, because there were a lot of them created much faster than the funds available to absorb them were coming in.

Now, this year you have just the opposite situation. You have money pouring in to junk bond funds. Billion dollars a week, roughly, and that's changed the whole price situation. The world hasn't changed that much. It's just that the chaos has left the market for those instruments.

5. "Intrinsic value is terribly important and very fuzzy"

WARREN BUFFETT: Number 3.

AUDIENCE MEMBER: Yes. Hello. Paul Tomasik. Thornton, Illinois.

Ben Graham and the model of value investing — I'd like to bring the discussion back to that.

And what's interesting and exceptional about you, and Charlie, and Ben Graham, is the self-discipline. The incredible self-discipline.

And if you look at the model and try to think how to present it to teach others that self-discipline, I think you have to make a little tweak to it in two areas. And that's what I'd like you to comment on.

One, intrinsic value. It's always discussed that you calculate intrinsic value. But in practice, I think you find a number that is guaranteed — 99 percent likely — to be less than intrinsic value.

Classic example was in 2000 when you said you'd buy shares back at 45,000. You weren't saying that Berkshire Hathaway's intrinsic value was 45,000. You were saying it was significantly more. And anyone who bought it for less than 45,000 is grateful to you.

The other area is the hidden assumption in the model. And that is, it's assumed that once you find a value stock and you buy it, that the intrinsic value isn't going to go down. And that's a second part of the analysis that has to be part of the discipline.

So even though you found a value stock, you still haven't done all the work. You have to analyze, is the intrinsic value going to go down. In particular, companies throw away intrinsic value is the most common. Management gives it away.

That hasn't happened at Berkshire Hathaway, although I don't want to give an unqualified comment on that, since I see you're remodeling the offices, so we don't know how much intrinsic value's been thrown away there.

So, if you could comment on the two things. Do you calculate intrinsic value, or a number that's absolutely positivity under intrinsic value, that's the number you put in the equation?

And even when you find a stock selling for less than this lower bound of intrinsic value, do you still do the homework on the second part and analyze, will the intrinsic value go down in the future? Thank you.

WARREN BUFFETT: Yeah, I would feel somewhat better qualified to speak on self-discipline if I weighed about 20 pounds less, but — (laughter) — for the moment we'll ignore that.

The second part of your question, relating to intrinsic value going down. Actually, if you compute intrinsic value as reflecting the discounted value of future cash flows, that should have, built into it, a calculation that allows for the fact that certain businesses are going to earn less in the future than now.

It isn't that their intrinsic value goes down then, because you should build it into your calculation right now.

But, you know, as we point out many times in the past, intrinsic value is terribly important and very fuzzy, and we do our best to work with — in the kind of businesses where we think that we have the highest probabilities — where our predictions are of a fairly highly probable nature. And that leaves out all kinds of companies.

It's pretty good. We'll say it's something like a natural gas pipeline. I mean the chances of big surprises in a pipeline should be relatively small. That doesn't mean they're zero, but they're relatively small.

Now, let's assume that you had a gas pipeline, which some have, where either the supply of gas is going to run down or where there are competitive pipelines that may be trying to take away your contracts that you wrote 10 years ago and expire in two years and you're going to have to cut prices.

I would say that two years from now, when you have to cut prices, the intrinsic value hasn't gone down from today, if you properly calculate it today and build in the fact that profit margins in the future will be lower than today.

We looked at a pipeline recently where we think they are going to be vulnerable to competitive price pressures because of alternate ways of getting gas to market through other pipelines.

And the calculation is entirely different — the calculation isn't different — the results are different, in terms of that pipeline versus the pipeline that is the low-cost way of delivering gas from one market to another, and will remain the low-cost producer.

But it isn't — if properly calculated, you build in the prediction of decline in future operating years. You don't wait till you get there to anticipate it.

You know, Charlie's famous for saying that all he wants to know is where he's going to die so he'll never go there. (Laughter)

Well, that's part of predicting in business. I mean, there — I love the — I really have never seen an investment banker's book. I hope to see one someday, and I hope I can survive the shock when I do see it, where the earnings of the business being offered go down.

Lots of businesses' earnings go down. And they're going to go down. And I get all this nonsense, you know, where they project it out for 10 years and it always goes up. It just isn't the real world.

And you have to analyze businesses — some businesses are going to be subjected to enormous competitive pressures that aren't extant today.

And we made that mistake, for example, at Dexter Shoe. I mean we bought a business that was earning $40 million, or so, pretax. And we assumed that the future would be as good as the past, and we couldn't have been more — I couldn't have been more wrong.

So that was a case of projecting into the future, conditions which were not going to exist in the future — competitive conditions. That's part of, you know, that's part of business.

And I will tell you that, you know, 20 percent of the Fortune 500 — but I don't know which 20 percent — are going to be earning, you know, significantly less money probably five years from now than they are today.

And that's what the game is all about. Figuring out what those future cash flows are likely to be. And when you can't — when you feel you can't come up with reasonable estimates in that respect, you move onto the next one.

Charlie?

CHARLIE MUNGER: Yeah. We have this simple, old-fashioned discipline, which Warren likens to Ted Williams waiting for a fat pitch.

I don't know about Warren, but if you said to me, "Charlie, you can go into the business of managing money the way other people do, where you're measured against indexes and you got consultants choosing consultants that are reviewing you to committees," I would just hate it.

I would regard it as being put into shackles. And shackles where the very system was preventing me from delivering value. Warren, how would you feel about that —

WARREN BUFFETT: Yeah, we wouldn't

CHARLIE MUNGER: —chore?

WARREN BUFFETT: — do it. We wouldn't do it. We never did do it, as a matter of fact.

And one of the, you know, the initial — when we formed the partnership on May 5th, 1956, I passed out to the seven limited partners something called the "ground rules."

And, you know, I said, "Here's what I can do and here's what I can't do. And here's some things I don't know whether I can do or not, maybe." It was fairly short.

But the idea of setting out to do something that you know you can't do, that can't be — you know, that's got to lead to problems.

I mean, if somebody tells me I have to high jump seven feet, and we could even move that down to four feet now — (laughter) — you know, between now and sundown or I'll be shot, you know, I will go out and buy a bulletproof vest. (Laughter)

CHARLIE MUNGER: Yeah, the general system for money management requires people to pretend that they can do something that they can't do, and to pretend to like it when they really don't. And I think that's a terrible way to spend your life, but it's very well paid. (Laughter)

6. Freddie Mac, Fannie Mae, and systemic derivatives risk

WARREN BUFFETT: Number 4.

AUDIENCE MEMBER: Hi. I'm John Golob from Kansas City. I have a follow up question on derivatives.

After the press zeroed in on the comments in your annual letter, the head of Fannie Mae got up and said, well, Mr. Buffett's criticisms don't apply to Fannie because, number 1, we have simple vanilla derivatives that are priced in the market. And secondly, we need derivatives to protect against interest rate risk.

And I guess, given what happened to the savings and loan industry back in the '80s, that seems reasonable.

So my first question is what is your rejoinder to Mr. Raines?

And the second part of my question gets to your concern about the connection between derivatives and systemic risk. And that is, do Fannie and Freddie play a particularly prominent role in this concern? Thank you.

WARREN BUFFETT: Yeah. I have a lot of respect for Frank Raines. I think he's done a good job at Fannie Mae. I don't know the situation intimately.

The problem, as you mention, is that an operation like Fannie Mae or Freddie Mac, or savings and loans in the past, had this problem, which is inherent in the mortgage instrument, in matching — or coming close to matching — assets and liabilities.

And the reason they had that terrible problem, which did in many institutions, was the optionality in a mortgage instrument.

And in a mortgage instrument, particularly as the years have progressed, you buy a — you know, if you buy a mortgage — or somebody else takes out the mortgage, you own it — you have a 30-year instrument if it's a bad deal and you have about a 30-minute instrument if it's a good deal.

The buyer — the person who takes out the mortgage — can call off the deal at any time at relatively low cost. And the public has been sensitized to that more and more as time has gone by, so they've been quicker to refinance for very small differentials.

Now, many years ago, they had what they called due-on-sale clauses in California. I think — were they invalidated, Charlie, or what happened with those? So that there were ways of shortening up the mortgage expected maturities.

But it's a fundamental problem when you are operating on borrowed money in a very big way, which is what S&Ls did and what Fannie does, and Freddie, that you have this very long-term instrument, and it — but it can be very short-term if it becomes advantageous to you, and rates go down and you want to keep it. Or it becomes very long-term if rates go up and nobody wants to refinance.

And under those circumstances, if you run a huge institution, or even a smaller one, but that has a high — highly leveraged, you are going to look for one way or another to try to match the duration of your liabilities as close as you can to the duration of your assets, and have various methods to protect yourself against the optionality that exists with the counterparty, in effect, your asset.

That's not easy to do. And Fannie, and Freddie, and other institutions, attempt to do that through various types of derivative instruments, as well as other things, in terms of the kind of debt they issue themselves and so on.

And they're very smart, and they do it — you know, my guess is they do a better job than Charlie and I could do at it, but it can't, by its nature, be perfect.

And under some circumstances, where you get large gaps — the thing you worry about in financial markets, and it doesn't happen very often, but your — the thing that really destroys people are what the academics would call six-sigma, or five-sigma, or seven-sigma events, which are things that are never supposed to happen, basically.

And sigma is a method of describing the probabilities that they will happen in any given period — the number of sigmas.

Financial markets don't lend themselves well to modeling based on that. You know, they do most of the time, until it doesn't work. And when it doesn't work, you know, chaos reigns.

And there are more six-sigma events that happen in financial markets — or theoretical six-sigma events — than any study of probability curves would ever come up with.

And that's — when you have gaps or discontinuities, when markets close, whatever it may be, those are what cause institutions to go out of business.

And derivatives, in my view, anyway, accentuate the possibility of it happening and the extent of the damage, if and when it should happen.

Again, we don't think we mathematically can tell you what the probabilities are of something like that, and we think anybody that does tell you, you know, is kidding you.

And I've had managers of hedge funds sit down with me and tell me that they had, you know, a 28 percent probability of returns between 30 and 40 percent. Come up with all these exact figures. Anybody comes up with exact figures in finance, watch out.

So, I would say that if I were running Fannie or Freddie, I would be terribly conscious of what was happening in there, and I would understand this basic problem I have, which I can guarantee you, Frank Raines understands extremely well, of the optionality built into his assets.

And I would try to come as close to matching that. And if I did it through derivative instruments or whatever, I would try to match — I would try to reduce the troubles that could be produced by that optionality to a minimum.

And then I would get very worried about who the counterparties were, because anytime somebody promises to pay you a lot of money if something terrible happens to you, you better be very sure that they can and will pay, because the terrible thing that's happening to you may be presenting terrible things to them.

You know, that will happen in the insurance industry from time to time. And that's why reinsurance recoverables are a dangerous asset to have.

It will happen in the derivative markets.

When LTCM had troubles with one type of asset, they had troubles with a lot of types of assets, and everybody else they were doing business with was having a lot of troubles with those same things.

And that's why the Federal Reserve stepped into something they never dreamt they would have stepped into. They stepped in to force, essentially, a solution, which may have been the right thing to do, incidentally.

But they — for some obscure hedge fund that nobody in the world virtually had heard of, until that point, and had started threatening the U.S. — the stability of the U.S. financial system.

Charlie?

CHARLIE MUNGER: Well, I think you're right to point to this creditworthiness of the counterparty risk.

My guess is that both Fannie and Freddie have been pretty intelligent at thinking through a whole lot of different scenarios where they'll be OK, or close to OK, if all the counterparties pay.

And I would bet a lot of money that they weight the possibility that counterparties won't pay a lot lower than we do.

I think a lot of the counterparties are behaving in a lot more dangerous way than Fannie and Freddie are, and that — and the counterparties can get in trouble because of that. And they can translate that trouble to people who assume that they're hedged.

WARREN BUFFETT: And that's true of the mortgage guarantee institutions that take part of the risk away.

Fannie and Freddie are very sophisticated institutions. Very, very sophisticated institutions.

But if you depend too much on other people, there can be periods in financial history where all the sophistication in the world may not save you. The best thing to do is to be able to count on your own resources.

And at Berkshire that's basically the way we operate. And it may be safer than necessary, but, you know, Charlie and I are rich enough already. We do not need to stay up at night.

7. "We do not run a big currency risk"

WARREN BUFFETT: Number 5.

AUDIENCE MEMBER: My name is Joseph Lapray (PH). I'm a shareholder from Minneapolis, Minnesota. Thank you for this opportunity to present a question.

At last year's meeting, I believe that Mr. Munger made a comment to the effect that it was not inconceivable that the U.S. dollar could someday suffer a collapse in value, similar to that which had recently befallen the currency of Argentina.

I am concerned that in the event of a collapse in the value of the dollar relative to foreign currencies, that Berkshire Hathaway's insurance operations may find themselves having to pay for replacing property whose cost is denominated in sharply-appreciated foreign currency.

I have two specific questions. First, does Berkshire Hathaway have any way to protect itself from the effects of inflation induced by a possible currency collapse?

And second, do you have any ideas about how individual investors can protect themselves from currency risk? Thank you.

WARREN BUFFETT: Yeah. I'll ask Charlie first to comment on whether he said exactly what the gentleman said last year.

CHARLIE MUNGER: Well, I don't — I wasn't predicting that the United States would go to hell as much as Argentina has. (Laughter)

What I was predicting is that all kinds of things could happen here that are unthinkable, based on past recent experience. And Berkshire, Warren, by and large, our liabilities are denominated in dollars.

WARREN BUFFETT: Right.

CHARLIE MUNGER: We don't have a huge foreign currency exposure at all.

WARREN BUFFETT: No, well, we have — you know, we may have — we have a few billion dollars, at least, denominated in liabilities in other currencies, but we also have assets in those currencies, pretty much.

So, we don't think about it day by day in terms of matching euro assets against euro liabilities. But in a general way, we don't get way out of whack, either.

I mean, we do not have lots of liabilities around the world in other currencies which are only matched by assets in U.S. dollars. Most of our assets and liabilities, overwhelmingly, are going to be in U.S. dollars.

But we'll have a — you know, we will have, maybe at the present time, a couple of billion that — of liabilities, primarily in euros, and we have at least that much in the way of assets.

So, we don't run big — we do not run a big currency risk at Berkshire.

Now, if you talk about the value of the dollar declining dramatically, you know, we all face that risk if we have a lot of dollar assets. I personally don't worry about the American currency getting worth far less, relative to other currencies, as much as I worry — I don't really worry about it.

But I think there's a probability that sometime in the next 20 or 30 years that you could have rampant inflation in this country again. You'll have probably have it around the world. And it's probably more likely in a good many other countries than it is in the United States.

But inflation is always a latent danger to an economy. I mean I always think of inflation as being in remission at all times, because it's something that has a cause that will recur, in terms of human behavior, from time to time, I think, in terms of how legislatures behave and governments behave.

So, I think that the probability of high inflation at some point during the next, say, 20 or 30 years is — it's not a low probability. I hope it doesn't happen.

Charlie, do you have anything?

CHARLIE MUNGER: Well, in the long-term practically all currencies go to hell. In other words, it's a product, like the Roman — what was it, denarius or something?

You take the British pound, you take the American dollar, so far.

And if you want to go out 200 years, will some politicians in the United States ruin the currency? I think the answer is yes. But I wouldn't anticipate some horrible event in the near future. And —

But if things really went to hell, Argentina started confiscating property of shareholders. And if that starts happening and the government is doing it, we probably won't be able to protect you. (Laughter)

WARREN BUFFETT: That sounds like kind of a nervous laugh to me. (Laughter)

8. Acquisition opportunities growing like a rolling snowball

WARREN BUFFETT: Number 6.

AUDIENCE MEMBER: Yeah, hi. I'm Gautam Dalmia (PH) from India.

Sirs, if I would take you back to the start of your investing careers, I assume it would have been harder for potential acquisition opportunities to come by.

The question I would like to ask you sirs is, how did you ensure then that you had good enough deal flows coming to you to be able to choose from?

I have one more question. The Berkshire subsidiaries do not have a retirement policy. What are the implications of this on retaining and motivating employees who are potential successors to senior management?

WARREN BUFFETT: First question about deal flow. It's a term I actually don't like very much, because we don't think of them as deals, exactly. That has a little too much of the connotation of something to be bought, and then again something to be sold.

But we do like acquisition opportunities. And really that's just achieving that so that we get the calls when we should get the calls. And there aren't lots of those, because we're talking about good-sized businesses. We're talking about owners that love their businesses.

And it's going to happen occasionally, but it's going to happen a few times a year, probably.

I think in the U.S. now, that we get a pretty reasonable percentage of the calls that we should get, and that was not true 20 or 30 years ago. We didn't hear from anybody 20 or 30 years ago, to speak of, because we were looked at much more as being a marketable securities operation. And we just weren't as well known.

It feeds on itself, obviously. If we acquire companies, and the people from whom we acquire them are happy about the deal, you know, we're going to hear from more people.

We bought our first furniture operation in 1983. That really led to four other transactions, because the people in the first one were happy and they talked to us about the second one. And the people in the second one were happy and so on.

So, you know, it's like — Charlie always describes compound interest as being like, you know, being at the top of a very large hill with wet snow and starting with a snowball and getting it rolling downhill. And that's a little bit like the acquisition situation works.

We've been on a — by being around 38 years, it's been a long — it's been a high mountain, in terms of the length the snowball is going. By now, it's going at a pretty good clip, and it's a pretty good size, and it attracts a lot of snow. And that's good for us.

Outside the United States we do not seem to be on the radar screen, so we don't seem to hear about those as much. But we're hearing about enough in the United States.

It's not a flow, in the sense of — I don't hear about one a week. You know, I don't, probably, hear about one a month.

But the ones we want to hear about, most of them, I think, we're getting the calls now. I think we're getting a higher percentage of the calls now than ever in our history we would have gotten.

And, you know, that's all to the good. And if we can do the same thing outside this country, that would be a plus, too. But this country's a big market and we'll just try and spread the word further.

And Charlie, what was that other question?

CHARLIE MUNGER: Well, he talked some about deal flow, and there's a general assumption that it must be easy to somehow arrange things that you just sat behind a desk and people brought in one wonderful opportunity after another, and you finally selected two out of 100 and it would be a virtual cinch.

That was the attitude in venture capital until the last two or three years.

We didn't have any of that in the early days, right, Warren?

WARREN BUFFETT: No, that's right.

CHARLIE MUNGER: We were finding our own securities. And we were just looking at the public markets to see what was available in securities.

And when we started buying companies, there must have been 20 years when we didn't buy more than one or two a year.

WARREN BUFFETT: Yeah. They were fairly few and far between. And we didn't have the money to buy very big ones, either.

I mean it was a big deal when we bought Associated Cotton Shops for what, in effect, was 4 million, or when we bought Hochschild Kohn when we had to come up with 6 million of equity, as I remember, for that deal.

And National Indemnity, itself, was 7 million for National Indemnity, and I think a million-4, a million-7 for National Fire Marine. And I mean that was all we could handle in those days.

So the snowball has, you know, it's built up as it's gone down the mountain. And we hope there's a lot of mountain left and a lot of wet snow, and we're looking for it.

CHARLIE MUNGER: But it's fair to say that we were rooting around for those opportunities. We weren't sitting behind our desks and waiting for some commission salesman to come in and present us with opportunities to sign our name. I can't think of anything we bought in the early days that way.

WARREN BUFFETT: No, no.

CHARLIE MUNGER: Warren, you chased down Jack Ringwalt. Didn't you go to him?

9. Buffett tells how he didn't let Jack Ringwalt wriggle out of National Indemnity deal

WARREN BUFFETT: Well, Jack Ringwalt, who ran National Indemnity, and some of you here in the room knew, Jack was a very interesting guy and a friend.

And Jack, for 15 minutes every year, would want to sell National Indemnity. Something would make him mad. A claim would come in or something of the sort. (Laughs)

So, for 15 minutes every year he would want to sell. And a friend of mine, Charlie Heider — who may be here today — and I had discussed this phenomenon of Jack being in heat once a year for 15 minutes. (Laughter)

And I told Charlie if you ever caught him in this particular phase to let me know.

And there was a day that Charlie called and said, “You know, Jack’s ready.” And I said — (laughter) —“Well, get him over here.” So, he came about 11:30 and we made a deal in that 15-minute zone. (Laughter)

And this is absolutely true. It’s a fascinating story, because Jack, having made the deal — and we really did make it in 15 minutes — Jack, having made the deal, really didn’t want to do it, and — but he was — he wouldn’t have backed out of a deal.

But he said to me after we’d shaken hands, he said, “Well,” he says, “I suppose you’ll want audited financial statements.” And if I’d said yes, he would’ve said, “Well, that’s too bad then. We can’t have a deal.” (Laughter)

So, I said, “I wouldn’t dream of looking at audited financial statements. They’re the worst kind,” you know. (Laughter)

And then Jack said to me, he says, “I suppose you’ll want me to sell my agencies,“ and, “— to you as well.” And I said, “Jack, I wouldn’t buy those agencies under any circumstances.”

If I’d said yes to that, he would have — that I wanted him to sell the agencies — he’d say, “Well, yeah, I wouldn’t be able to do it, Warren. We must have misunderstood each other.”

So, we went through about three or four of those. And finally, Jack gave up and sold me the business.

He was an honorable guy, because he really, I don’t think, wanted to do it, but we met down at Charlie’s office at 19th, I think, and Douglas, and Jack was about 10 minutes late picking up this 7 million for National Indemnity.

He was about 10 minutes late, because he was looking for a parking meter with a few minutes left on it. (Laughter)

And that’s when I knew he was my kind of guy. (Laughter)

CHARLIE MUNGER: But at any rate, this process is not easy, and practically anything where you sit behind that desk and this wonderful deal flow is just coming by, you’re in a very dangerous seat.

10. No telecom stocks, but maybe junk bonds

WARREN BUFFETT: Number 7.

AUDIENCE MEMBER: Gentlemen, my name is Jim Maxwell (PH). I am from Omaha, Nebraska.

You put your toe in the water, so to speak, with Level 3 when you gave a deal, or, you know, got involved in that deal with them.

And I'm wondering if there's anything — any area — in the telecommunications industry that appeals to you now, or any specific company that appeals to you?

Much more importantly, I want to ask about Global Crossing. They're in bankruptcy court right now. The U.S. military uses them for communications. Data, telecommunications, or something like that.

There are two companies that want to buy their assets out of the bankruptcy court. One is a Chinese company. One is a company from Singapore. The U.S. says, "No way, José." They don't want China to get control of the assets of Global Crossing, mainly because of the military security.

In the last week, the Chinese company has backed out. The Singapore company has come in and said, "We will buy the 80 percent stake and — that is now available." But still, if that sale goes through Global Crossing will not be in U.S. hands.

Part of my concern is, if these two companies were in a relationship that was friendly, they were willing to be together, I could see the possibility that they would — the Singapore company would sell, later, its portion to the Chinese company.

Have you ever considered — and if not, why not — buying the assets out of the bankruptcy court, which would be a fire sale? I think that would be good for Berkshire Hathaway.

In addition, it would be good for the United States and for future generations. I would suggest that would be your civic duty, gentlemen. (Laughter)

WARREN BUFFETT: Well, I hope I don't get arrested for leaving without doing this. (Laughter)

I, frankly, don't have the faintest idea how to evaluate telecommunications companies down the road. That doesn't mean I don't understand, at all, what they do. I probably understand a little bit of what they do.

But in terms of figuring out the future economics in that business, what they're going to — this player or that player is going to look like five or 10 years down the road, I simply don't know.

And I think it's — it looks like the people who thought they knew three or four years ago didn't know either, I might add, but that's another question.

Charlie, what do you know about the telecommunications business?

CHARLIE MUNGER: A little less than you do. (Laughter)

WARREN BUFFETT: He's in trouble. (Laughs)

We don't have any idea. You know, if you take — pull out a name, BellSouth, Verizon, I have no idea how that all comes together five or 10 years from now.

I mean, I know people are going to be chewing Wrigley's chewing gum or eating Hershey bars or Snickers bars five, or 10, or 15, or 20 years from now.

They're going to be using Gillette blades, they'll be drinking Coca-Cola, you know. And I have some idea what the profitability of each one of those will be over time and all of that.

I don't have any idea how telecommunications shakes out. And I wouldn't believe anybody in the business that told me they knew because, you know, what would they have been telling me five years ago? So, it's just a game I don't understand.

That isn't — there's all kinds of things I don't understand. I don't know what cocoa beans are going to do next year. You know? I mean, it'd be a lot easier if I did. I could just make all my money on cocoa beans and be much simpler than trying to run a whole bunch of businesses out of Berkshire.

But there's — I don't worry about what I don't know. I worry about being sure about what I do know. And telecommunications doesn't fall within that group.

CHARLIE MUNGER: Mostly, Berkshire, in its history, has bought common stocks that practically couldn't fail.

But occasionally, Berkshire just makes an intelligent gamble where there's plenty of chance of failure, but there's enough chance of success so the gamble is worth taking. And I think it's fair to say that telecommunications falls in that so far.

WARREN BUFFETT: Yeah. We might buy some junk bonds in that business. In fact, we have in several areas.

But as I put in the annual report, we expect losses in junk bonds. We expect, over all the probabilities, we'll have a decent result — maybe better than decent.

But we do expect losses, because we are dealing with institutions that have demonstrated that they don't have large margins of safety in their operations. Sometimes — not at all in Level 3, but sometimes, we're dealing with managements that are quite suspect.

And I would say that in the history of Global Crossing you had that, although that doesn't attach itself to the assets now.

But very often in the field, when people get highly leveraged, sometimes they get tempted to do things that they wouldn't be tempted to do otherwise. And that's happened in the junk bond field, obviously, and always will happen.

But that's the reason we expect to have significant losses, and actually we've — they haven't been that significant.

We've had losses. And — but they — we haven't seen our biggest loss yet, believe me, in junk bonds. But we'll make a lot of money out of some of them, too.

It's a different field. It's like being an insurer of substandard risks. You'll have more accidents, but you can charge a premium that makes it work out.

But our business — in general, when we buy businesses, we want to buy superior risks.

We don't want to buy a hundred businesses for operation by ourselves, with the idea that 15 of them are going to be train wrecks and that the other 85 will take care of it. That's not our approach to building Berkshire.

Charlie, got anymore?

CHARLIE MUNGER: No.

11. Nobody can "successfully dethrone Coca-Cola"

WARREN BUFFETT: Number 8.

AUDIENCE MEMBER: Yes. My name is Pete Banner (PH) from Boulder, Colorado.

First of all, Mr. Buffett and Mr. Munger, most of us consider you fellows our heroes, and thank you for that. (Applause)

WARREN BUFFETT: Well, thank you.

AUDIENCE MEMBER: Yes. On a lighter note, versus the chaos —

WARREN BUFFETT: You can stay on the same note. It doesn't bother us. (Laughter)

AUDIENCE MEMBER: I wanted to ask what prompted you — considering your general aversion to technology — what prompted you to invest $100 million in Level 3 Communications convertible bonds?

And if I get a twofer, I'd like to know, do you still consider Coca-Cola as you once described as "The Inevitable."

WARREN BUFFETT: Yeah. The answer to the second one first.

The — Coca-Cola I think has — ever since I described it that way, in terms of the — I talked about in terms of the probabilities that they would dominate the soft drink market and not lose market share in any way. That they would grow over time.

You know, it's happening year after year. I don't think the global market share of Coca-Cola products has ever been higher than it is now, and I don't see anything that changes that in the future.

I mean, it is a huge distribution system that has been getting into the minds of more and more consumers since 1886, when John Pemberton, you know, Jacob's Pharmacy in Atlanta, first served up the first one.

It is in the minds of people, the product, all over the world, and it — there'll be more people and it will be in their minds more firmly. And over time, they should make a little more per drink.

So, I don't know how in the world anybody would successfully dethrone Coca-Cola.

12. Buying Level 3 bonds is a "bet on the people"

WARREN BUFFETT: In terms of Level 3, we like the people. We think they're smart people, and they owed too much money, you know. And they recognized it. And they've done some very intelligent things, in the way of attacking that problem, and, you know, we bet on the people.

Charlie knows way more about the physical world than I do, but, you know, I have yet to see an electron. And I just have no working relationship with them at all. I can't identify with them. So, I do not know a lot about the technology. I never would.

I mean you could explain it to me and I could probably regurgitate it on some test or something, but I wouldn't really understand it.

But I think I understand the people involved, and we were quite willing to make that bet. It's of a different sort than we usually do, but we did it and we're happy we did it.

Charlie?

CHARLIE MUNGER: Nothing more to say.

13. Why Berkshire invested in Mark Byrne's hedge fund, Value Capital

WARREN BUFFETT: Number 9, please.

AUDIENCE MEMBER: Hi, this is Steve Rosenberg (PH) from West Bloomfield, Michigan, now living in New York.

Mr. Buffett, the values that you and Charlie stand for and your supreme integrity are an inspiration. Thank you both for serving as such exceptional role models.

I have three quick questions for you. The first involves Value Capital — (applause) — L.P. Your preliminary FIN 46 disclosure appears to indicate leverage employed of roughly 20 billion in assets, 60 million in equity, or 30 to 35 times.

Without revealing any proprietary strategies, how do you derive comfort from this investment given your aversion to risk, other highly-levered partnership blowups, your enthusiasm in shutting down Gen Re Securities' black box activities as soon as possible, and all of this, aside from the fact that it's less than 1 percent of Berkshire's equity, and that Mark Byrne is running it?

My second question involves manufactured housing. Can you comment some more on your enthusiasm for the underlying economics of the business, given what appears to be a commodity product with a high level of seller fragmentation, over-capacity, and large blowups on the financing side?

And what advantage — even if Berkshire's advantage is in the financing, why not stick only to the financing and not the manufacturing?

And my final question involves the gains on securitization that you see in that segment.

Does the preponderance of gains reported indicate a mispricing of credit risk somewhere in the chain, perhaps analogous to the disconnect you were talking about between triple-B and triple-A spreads in the synthetic market and in the bond market? Thank you.

WARREN BUFFETT: Why don't you elaborate on that third point on securitizations just a bit more? I'm not sure I totally have your point on that.

AUDIENCE MEMBER: Just the fact that usually you see gains rather than losses on securitization —

WARREN BUFFETT: Oh yeah.

AUDIENCE MEMBER: — all the time. Does that indicate that somewhere, when you're slicing and dicing it, someone is paying too much, not taking the credit risk into — not valuing it properly.

WARREN BUFFETT: Yeah. OK. Three questions.

Value Capital is run by Mark Byrne, as you mentioned.

We've made a lot of money with the Byrne family. We made money with Jack, and we like Mark and Patrick, who we know — Charlie and I know very well.

And Mark is a very, very bright guy who runs what is, in effect, a hedge fund specializing in fixed income-type securities around the world.

And Mark and his family have significant money of their own in Value Capital, but we have 95, or so, percent of the capital in there. And we do not in any way guarantee their obligations.

Mark operates with a degree of leverage that is less than most people that operate in that field, but it's a lot compared to the way we operate at Berkshire.

And that's OK with us. We wouldn't do it with a hundred percent of our money. We wouldn't do it with 50 percent of our money. But we think it's a reasonable business, as run by Mark, as long as he's got a lot of money on the downside as well as the upside, which he does.

And he's a very decent guy, in addition to being a very smart guy. So, we're comfortable with that. It may have to get — the figures may have to get consolidated in our balance sheet.

We disclose them all now in our first quarter report. You will see them set out. And, in effect, we've got 600 and some million, a couple hundred million of retained earnings that Mark has earned for us, and we feel quite comfortable with that as an investment.

We do not regard it as a business part of Berkshire. The consolidated financial statements may make it look like we do, but it is not. We are a limited partner. We have a corporation in between. We have no guarantees of anything they do.

And we're very happy with Mark running that piece of money, even though he does it, as you say, in fixed-income strategies that involve a lot of — they involve derivatives, they involve borrowed money. But I've looked at the positions and they all make sense to me.

And they would make sense, because Mark is a very smart guy, and the money means a lot more to him than it does to us. So, we feel OK with that.

We don't like the idea of consolidating, in the sense that we don't think it will make — we think it makes our figures less representative of what's really going on than the way we handle it presently, but the rules are the rules and we'll do what they say.

The second point. Charlie, do you want to comment on Value Capital at all?

CHARLIE MUNGER: No.

14. Clayton Homes is “class player” in manufactured homes industry

WARREN BUFFETT: OK. (Laughter)

The second. Manufactured housing. You know, it is — I mean practically everybody in manufactured housing is losing money now, and Clayton is making money.

They’ve had much sounder policies, in terms of how they’ve operated over the years.

One of the things they do — most of their houses are sold through their own retail units. They have about, I think, 297 or so retail outlets of their own. And those managers are on a 50/50 profit split, basically, as I remember it, with Clayton. And they’re responsible for all of the paper they generate.

So, unlike what was going on a few years ago in manufactured housing, where a manufacturer would sell a house, maybe a floor plan, to a dealer. And then that dealer could borrow, maybe — if I he got some kind of a purchaser on the note, maybe 125 or 130 percent of invoice price, if he could just create a warm body out there someplace that would give him some apparent down payment. That situation was just built for disaster.

But at Clayton, the profit or loss off that person who buys the product goes till the obligation is fully paid for.

So if a dealer takes inadequate down payments or sells to people he shouldn’t be selling to, it’s going to be his problem, and he’s going to get the repo back. He’s going to have to sell it himself. He’s going to get the loss on the paper charged to him. And that produces an entirely different kind of behavior at the retail level than occurred with many of the other manufactured housing manufacturers.

But it’s not an easy business. It’s — Clayton does it the right way. And in fact, if you read Jim Clayton’s book, he will — he tells in there about the time he bought his first home in Indiana. And he tells about a little of the funny business that went in, in terms of how the manufacturer behaved.

And he described some of the systems that people use to gain the financing. And those activities are coming home to roost in a huge way for both the manufactured housing companies and for the people that finance the retail paper.

Clayton did it right, basically, and they’ll continue to do it right. Even so, there is such a stain over the whole manufactured housing industry, in terms of financing, that even — Clayton is the only one that has — is able to securitize.

And, as I said earlier, they cannot securitize to the extent — without us — they wouldn’t be able to securitize to the extent that they could have a year ago.

It's an industry in big trouble. I think we'll do fine in it, because I think we're in with a class player. I think they've got these systems in place that have the right incentives, which you need all the way through the system. And I think Berkshire will make them even stronger, because we will not securitize. We'll keep it for the portfolio.

The gains on securitization — the point you made is essentially correct, that some of the — when you see a company with lots of gains on securitization, you ought to get a little suspicious. I don't want to get into more detail than that because it's an accounting question.

Charlie?

CHARLIE MUNGER: I've got nothing to add to that, either.

15. Goodwill impairment charge not needed for Gen Re

WARREN BUFFETT: Number 10.

AUDIENCE MEMBER: Phil McCaw (PH), Warren, from Connecticut.

Could you comment on Gen Re and goodwill impairment charges since you purchased it, and how it's evolved in your thinking, and if it even became a part of your thinking?

WARREN BUFFETT: Sure. The question is — relates to the fact that, if you buy a business at a price over tangible assets, that you set up a goodwill account.

And if at any time in the future that that goodwill becomes impaired, you should, and must, if the accounting is proper, run a charge to reduce that goodwill item. You run a charge through the income account.

We have a large goodwill item for Gen Re, because it was the biggest acquisition we ever made. We paid substantially more than book. And the question is whether that goodwill is impaired.

And certainly, if the operations of Gen Re of the last couple of years — not including this year — but of the years '98 through 2001, more or less, were representative of the future, you would say that there has to be a big goodwill charge there, and I would agree with you.

I think that as Gen Re is operating now, and had the capacity to operate — and it's being realized now, thanks to a couple of great managers we've got there — I think that — I personally think that Gen Re is worth more now today than at the time we bought it. And I think you will — its float has increased substantially, and I think that you will see the float turn out to be cost-free over time.

One thing I should have mentioned, actually, is — and I looked at a draft of our 10-Q. We have to — I think we should put this in there. We — Gen Re, up until this year, was discounting

worker's comp reserves at 4 1/2 percent, which was not conservative. That — we inherited that situation.

But we have changed that to discounting comp reserves going forward at 1 percent. So the accounting is more conservative going forward now — 2003 — by a fair margin, than it was in prior years and in a method we inherited.

So that the figures you see would be somewhat better if we had continued the old discounting at 4 1/2, rather than go to the new discount rate. And in the draft I saw, the 10-Q, that wasn't in there. I think we should get that in there, [Berkshire CFO] Marc [Hamburg], while I think of this.

Charlie?

16. We "deplore solving operating problems by accounting maneuvers"

CHARLIE MUNGER: Yeah. That accounting issue is of a type that is very common within Berkshire. We are so horrified by the terrible business decisions we see made all around us by people who are relying on over-optimistic accounting, that we tend to almost reach for opportunities to make our accounting very conservative. Way more than other people.

We think it protects our business decision-making, as well as our financial integrity.

I don't know why we ever got into this business of trying to get the accounting result as close to the chalk as we could possibly get it. What is wrong with the world when everything is a little bit under-reported? I mean —

WARREN BUFFETT: Yeah, generally people think that reporting, you know, and transparency and all that, has improved over the years. And I felt much better working with the financial statements in 1960 than I feel working with financial statements in 2000.

And, frankly, in many ways I thought they taught me more about what the company was really about than the current ones do, even though there was far less detail.

And what we really deplore is solving operating problems by accounting maneuvers.

And, you know, Gen Re had some problems in the mid-'80s, when everybody did, and they went to discounting their worker's comp reserves. And they — you know, it was a quick fix, but it's like heroin. And you get on it and it's not easy to get off.

And we — Charlie and I have seen that time and time again. People that think, you know, trade loading, whatever it may have been, they think they're going to solve something by paying accounting games.

And they're encouraged by their CFOs sometimes and frequently they were encouraged by their big-name auditors, in one way or another, to really play with the numbers.

And it catches up with you. You might as well face reality immediately, and take whatever operating steps are necessary to solve problems. Or, if you can't solve them, just give up on them.

But whatever you do, playing with the numbers, it never works, although I guess if you're 64 1/2 and you're going to retire at 65, it might get kind of tempting. (Laughs)

17. Munger on recognizing "bullshit earnings"

WARREN BUFFETT: Number 1.

AUDIENCE MEMBER: Good afternoon, gentlemen. Andy Marino of Chapel Hill, by way of Boston.

You have argued against the use of alternate measures of profitability, such as earnings before interest, tax, depreciation, and amortization, as measures of business performance.

At the same time, you have frequently cited the incompleteness of generally accepted accounting in reflecting economic reality for some businesses, implying that there are some necessary and proper adjustments.

Beyond what you recently described in the annual report as the folly of omitting depreciation, could you elaborate on your thoughts on other pitfalls of alternative financial presentations?

Is EBITDA, in your view, just too often used as a shorthand for cash flow, or is the entire concept of recasting accounting data a suspect exercise?

And which revisions might be appropriate, if any? And what might be viewed as red flags? And does it matter to you who is making those adjustments? Analysts, investors for their own purposes, or company managements, in terms of how that information should be viewed?

WARREN BUFFETT: Yeah. We regularly told you, for some years before the accounting change was made here a year or so ago — we told you, you should not count goodwill amortization.

You know, it was required under GAAP, and we, obviously, complied with GAAP, but we told you every year, virtually, that I can remember, we said, "This is not really an economic expense."

And we ignore it in our own calculations of earnings, in terms of what we will pay for businesses. We don't care whether there's a goodwill item or not, because it's immaterial to economic reality.

So, we have been quite willing, at Berkshire, to tell our own owners to ignore certain things. And if they disagreed with us, they could look at the GAAP figures. But we felt they were getting misled by looking at the amortization of intangibles.

That doesn't mean we think all intangibles were good, but we just — we did feel that that was a — that was an arbitrary decision that didn't make any sense at all.

And we felt — obviously, as we've talked about — we felt the crazy pension assumptions have caused people to record phantom earnings, in many cases.

So we're willing to tell you when we think there is data that is more important in economic analysis than GAAP figures. We'll talk to you about it.

Not thinking of depreciation as an expense, though, strikes us as absolutely crazy.

I can think of very few businesses — I can think of a couple — but I think of very few businesses where depreciation is not a real expense.

Even at our gas pipelines, I mean, you know, at some point, A, they'll need repairs, but beyond that, at some point they become obsolete. I mean there won't be gas there 200 years from now, we know that.

So, it — depreciation is real, and it's the worst kind of expense. It's reverse float. You know, you lay out the money before you get revenue. And you are out cash with nothing coming in.

And depreciation — any management that doesn't regard depreciation as an expense, you know, is living in a dream world, but of course they're encouraged to do that, you know, by investment bankers who talk to them about EBITDA.

And then, you know, certain people have built fortunes on misleading investors by convincing them that EBITDA was a big deal.

And when we see companies that say, "Hey, we don't pay any taxes, you know, because we don't have any earnings for tax purposes, and don't count depreciation and all of that," you know, that's coming — in our view, many times that's coming very close to a flimflam game.

You know, I get these people that show me — you know, they want to send me books with EBITDA in it, and I just tell them, you know, "I'll look at that figure when you tell me you'll make all the capital expenditures."

If I'm going to make the capital expenditures, there's very few businesses where I think I can spend a whole lot less than depreciation year after year and maintain the economic strength of the business.

So I think the EBITDA has been a term that has cost a lot of investors a lot of money.

You saw it in the telecom field. I mean the idea — they were spending money so damn fast, you know, I mean they couldn't have it coming in the door fast enough from investors.

And then they pretended the depreciation was not a real expense. That's nonsense. I mean it couldn't be worse. And a generation of investors where sort of brought up to believe in that.

We, at Berkshire, will spend more than our depreciation this year. We spent more than our depreciation last year. We spent more than our depreciation the year before that. You know, depreciation is a real expense, just as much as, you know, the expenditure for lights.

It's not a non-cash expense. It's a cash expense. You just spend it first, you know. I mean the cash is gone, and it's a delayed recording of cash. How anybody can turn that into something they use as a metric that talks about earnings is beyond me.

Charlie?

CHARLIE MUNGER: Yeah, I think you would understand any presentation using the word EBITDA, if every time you saw that word you just substituted the phrase, "bullshit earnings." (Laughter and applause)

WARREN BUFFETT: I knew he'd do it sooner or later, folks.

CHARLIE MUNGER: And the man —

WARREN BUFFETT: He made it through the morning, but never all day. (Laughter)

CHARLIE MUNGER: And the man asked the question also, says, "What remaining big accounting troubles exist?"

The real lollapalooza is pension fund accounting, and, to some extent, post-retirement medical liabilities. Those are horribly understated now in America, and they're very big numbers.

WARREN BUFFETT: I've looked at financial statements, and you've seen them too in the last few months, where companies are recording pension income in the hundreds of millions, while at the same time being underfunded in their pension plan in the many billions.

And, you know, they just aren't facing up to reality at all, and they don't want to because they want to take the hit. And they're this — you know, it's the same mentality as stock option expenses.

And they are paying people with stock options. But, you know, we pay people with cash bonuses, and I suppose, you know — well, it isn't really true, but we might like it if we didn't have to record cash bonuses as an expense. I mean it's a way we pay people.

And you can say, "Well, why don't you put it in the footnotes and leave it out of the income account like they do with option expenses," which is a form of compensation, too.

But the — you know, the answer is that a bunch of people who cared very much about having their stocks float to unreasonable prices, at least in our view, found they could do it a lot easier if they didn't count compensation expenses.

And, you know, why not put all expenses in footnotes? Just have an item there that says "sales" and then have the same figure for net profit. And then just have all the — (laughter) — expenses in the footnotes, you know.

And people with a straight face, you know, say, "Well, it's in the footnotes, so therefore everybody knows about it and we don't have to count it — put it in the income account."

It's amazing what people with high IQs will do to rationalize their own, you know, their own pocketbooks.

And Charlie has another explanation for why there's been this denial of the reality of expense — option expense — in terms of people's ego getting involved with their own records.

You want to elaborate on that, Charlie? Don't name names. (Laughter)

CHARLIE MUNGER: No, I'm so tiresome on this subject, and I've been on it for so many decades.

It's such a rotten way to run a civilization. To make the basic accounting wrong is very much like making the engineering wrong when you're building a bridge.

And when I see reputable people making these perfectly ridiculous arguments to the effect that it's unthinkable that options be expensed.

WARREN BUFFETT: Or it's too difficult to value them.

CHARLIE MUNGER: Well, because it's too difficult to value, or God knows what reason.

And a lot of them are people you'd be glad to have marry your daughter. (Laughter)

WARREN BUFFETT: Yeah, because they're rich, for one thing. (Laughter)

CHARLIE MUNGER: Yet, the truth of the matter is they're somewhere between crazy and crooked. (Laughter)

WARREN BUFFETT: Put him down as undecided. (Laughter)

It's really astounding. The interesting thing is, of course, now, is that the four auditing firms left, what they call the Final Four now in the auditing — (Laughter)

They have now — and listen, I'm glad they did it, too. And I tip my hat to them for doing it. But they've now said that they really do think options are an expense. So this is —

You know, it kind of reminds of you what happened during the Reformation, isn't it? You know, when you'd have these places sway back and forward, you know, as they get carried by one argument or the other.

In fact, I think there was that famous vicar of Bray who would swing from Catholicism to Luther, back and forth, as this little town went back and forth in Germany.

And finally, the townspeople gathered and they said to the vicar — they said, "It's understandable that we're confused by all that's going on in theology, and we really don't know much about it, and so we swing back and forth."

But they said, "We find it a little disgusting that you, a man of the cloth, would also keep swaying back and forth." And they said, "Have you no principle?" "And he said, "Yes, I have one principle." He says, "It's to remain the vicar of Bray." (Laughter)

I think we've seen a little of that in the auditing profession, but I think they've actually found the true religion now, so I don't want to sit here and criticize them.

But, you know, you now have four firms that lobbied against options being counted as an expense in 1993 that have written the FASB and say that options should be an expense.

And I don't know how in the world something could have not been an expense in 1993 and be an expense in 2003.

Certainly didn't apply to utility bills or, you know, raw materials or anything of the sort. But that's the human condition.

18. No comment on "opportunistic" bond strategies

WARREN BUFFETT: Number 2.

AUDIENCE MEMBER: Yes, hi. Sam Kidston. I'm a shareholder from Cambridge, Massachusetts. I have a couple of quick questions for you guys.

First of all, other than your general criteria for investing in any company, what are your criteria for investing in banks? And has your general view toward investing in banks changed over time?

Second question would be, in terms of a discount rate, do you feel it's appropriate to use your cost of capital at the current risk-free rate?

And then in the past, you've mentioned that you do some sort of pseudo-bond arbitrage, and would you please specify what types of trades you do in this area?

WARREN BUFFETT: Oh, you would like our buys and sells for Monday morning? (Laughs)

We don't — we're not going to talk about specific strategies that, you know — we obviously they're profitable or we wouldn't be doing them, and we think other people might copy them if we talked about them, so —

And we have pointed out, incidentally, and we will continue to point it out, that there's not a long life to these bond strategies. That doesn't mean we might not reemploy them when circumstances called for it later on.

But they're not like earning money out of See's Candy or, you know, out of Fruit of the Loom or something. They're opportunistic situations that we're pretty well positioned to engage in at certain times.

19. Banks can be "surprisingly" profitable

WARREN BUFFETT: The question about banking, you know, banking — if you can just stay away from following the fads, and really making a lot of bad loans, banking has been a remarkably good business in this country.

Certainly, ever since World War II, it's — the returns on equity from — for banks that have stayed out of trouble has really been terrific.

And there are many — there are certain banks, I should say — in this country that are quite large that are earning, you know, maybe 20 percent on tangible equity.

And when you think you're dealing in a commodity like money, that's fairly surprising to me.

So, I would say that I guess I've been surprised by the degree to which margins in banking have not been competed away in something as fundamental as money.

How about you, Charlie?

CHARLIE MUNGER: Well, what you're saying, in fair implication, is that we sort of screwed up the predictions, because banking was a way better business than we figured out in advance.

We actually made quite a few billions of dollars, really, out of banking, and more in American Express. But basically that was while we were misappraising it.

We did not figure it was going to be as good as it actually turned out to be. And my only prediction is that we'll continue to make failures like that. (Laughter)

WARREN BUFFETT: It's fairly extraordinary, in a world of — particularly a world of low interest rates, that you'd find financial institutions basically doing pretty much the same thing, you know, where A competes with B, and B competes with C, without great competitive advantage, and having them all earn really high returns on tangible capital.

Now, part of it is that they push — they have pushed the loan-to-capital ratios higher than 30 or 40 years ago, but that — nevertheless they earn high rates of returns. They earn much higher rates of returns on assets alone, and then they have greater leverage of assets-to-capital so that produces returns on capital that really are pretty extraordinary.

And, you know, banks — certain banks — get into trouble because they make big mistakes in lending, but it's not required of you, in that business, to get into trouble. I mean you can — if you keep your head about you, it can be a pretty good business.

20. Look at opportunity costs, not "cost of capital"

WARREN BUFFETT: The question about a discount rate, when you talk about our cost of capital, that's worth bringing up, because Charlie and I don't have the faintest idea what our cost of capital is at Berkshire, and we think the whole concept is a little crazy, frankly.

But it's something that's taught in the business schools, and you have to be able to answer the questions or you don't get out of business school.

But we have a very simple arrangement in terms of what we do with money. And, you know, we look for the most intelligent thing we can find to do.

If we've got money around or — if we look — we don't buy and sell businesses this way, but in terms of securities we would — if we find something that's at 50 percent of value, and we own something else at 90 percent of value, we might very well move from one to another. We will do the most intelligent thing we can with the capital we have.

And so, we measure alternatives against each other, and we measure alternatives against dividends, and we measure alternatives against repurchase of shares.

But I have never seen a cost of capital calculation that made sense to me.

How about you, Charlie?

CHARLIE MUNGER: Never.

And this is a very interesting thing that's happened. If you take the most powerful freshman text in economics, which is by [Greg] Mankiw of Harvard, and he says on practically the first page that "intelligent people make their decisions based on opportunity cost."

In other words, it's your alternatives that are competing for the use of your time or money, that matter in judging whether you take action or not.

And of course, those vary greatly from time to time and from company to company. And we tend to make all of our financial decisions based on our opportunity costs, just as like they teach in freshman economics.

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: And the rest of the world has gone off on some crazy kick where they can create a standard formula, and that's cost. They even get a cost of equity capital for some business that's old and filthy rich. It's a perfectly amazing mental malfunction.

WARREN BUFFETT: Yeah, it's a — (Laughter)

21. PetroChina investment not a "big deal"

WARREN BUFFETT: Number 3. Is there anybody we've forgotten to offend? (Laughter)

AUDIENCE MEMBER: Hi. My name is Karen Kalish. I'm from St. Louis. And I think I'm the first woman to ask a question today. (Applause)

WARREN BUFFETT: We're all for that.

AUDIENCE MEMBER: My late uncle, Bill Shield at Robert W. Baird, first bought Berkshire for our family when it was $337.

And I'm very grateful to you two, because I've been able to start a foundation in St. Louis and give money away. And I give it to reading and literacy programs.

But I'm very curious about the Buffett-Munger philosophy and practice of philanthropy.

And my second question has to do with China. You made an acquisition recently, PetroChina, and I'm curious of what you think about China.

WARREN BUFFETT: Well, the second question, we have about — I think — about five equity investments in companies that are domiciled and that operate primarily, or entirely, outside the United States.

We don't list all our investments. We listed, I believe, last year, all those above $500 million. And we have never had — I think maybe since Guinness some years back — I don't think we've ever had one hit the threshold of reporting in the Berkshire report, although we've owned some.

And the Hong Kong stock exchange has just recently changed their requirements so that you have to report 5 percent of the holding of any company listed on the Hong Kong stock exchange.

And our PetroChina holdings, actually, are now, whatever it is, 13 percent, but they're only 13 percent of something called the H shares.

The Chinese government owns 90 percent of the company. The H shares own 10 percent. They sold that to the public a few years back. So we own 13 percent of a very small percentage. And it's kind of a fluke of reporting that we're required to report that particular holding. And like I say, we own four or so others in international securities.

We don't make any great judgment about China. You probably know more about China than I do. We simply look at investments around the world and we try to buy into things that we think offer the most value.

And if they're in the United — we might prefer, slightly, that they be in the United States, and we might have strong preferences against — or strong biases against certain countries.

We would regard the United States as number one because we understand the game the best here. We understand the tax laws and all that sort of thing, and the corporate cultures and so on. But we would regard a number of other countries as virtually equivalent to the U.S.

And there's others that would have been marked down some, and then we'd have a whole bunch we wouldn't go into under any circumstances because we just don't understand them well enough.

But, you know, we think we understand something like the oil business in China reasonably well. And at a price relative to what we think the future cash generation is, we would make a decision on something like that.

But it's not a big deal. It's a big — it became reportable because of this peculiarity of the law, where if you own a certain percentage of something that's only 10 percent of the whole pie, you still have to report it.

The Chinese government is firmly in control of PetroChina. I mean, if we vote with the Chinese government, the two of us will control PetroChina. (Laughter)

22. Why we're giving money "back to society"

WARREN BUFFETT: The question about philanthropy. Charlie, you want to swing at that one first?

CHARLIE MUNGER: I think it's fair to say that both of us feel that the very fortunate owe a duty to the general civilization, and even to the country of which he's a member.

Whether you give as you go along or have the Buffett system of moderate giving as you go along and immense giving in due course, I regard as a matter of personal taste.

I would understand the second position in that I would hate to spend all my time every day having people ask me for money. And I don't think Warren could stand it. Is that right, Warren?

WARREN BUFFETT: Let's not even try. Let's not even try, Charlie. (Laughter)

No, we — I mean, it's a matter of record, and it hasn't changed for, I don't know, 25 years, probably, but basically everything I have at the date of the later of the death of myself or my wife, goes to charity.

I mean 99 and a significant fraction. And since my children are here, I'm not going to carry it out to 8 decimal places. But — (laughter) — you know, why not? It —

Think of it this way. Here's — let's just assume that, instead of being born as I was in a single birth, that I were in the womb and there was an identical twin next to me. Same DNA. Same everything. Personality. Propensity to work. Propensity to say — whatever. Identical twin. Wasn't Charlie. Might look like him, but — (Laughter)

And there we are, the two of us. And a genie appeared. And the genie said, "I've got a proposition for the two of you. You're going to be born in 24 hours. Same talents. Everything identical. And one of you is going to be born in Omaha, and one of you is going to be born in Bangladesh.

"And I'm going to let you two decide which one gets to be born in Bangladesh and which one gets to be born in Omaha. And I've got this system. And I'm going to — the way I'm going to work it is that we start the bidding, and whichever one of you bids the highest proportion of your estate to go to society when you die, gets to go — be born in the United States." I think you'd bet a hundred percent, you know.

You hear all of this about, you know, grit and pluck and all of these things, and how, you know, you have applied yourself working all your life, and you've done all these wonderful things.

Well, just imagine if I'd been born in Bangladesh. You know, and I'd walked down Main Street and said, you know, "I allocate capital." You know? "Let me show my stuff." (Laughter)

I'd have died of malnutrition. I mean, it would — I wouldn't have made it through the first few months.

The society that Charlie and I work in, I mean we were luckier than hell. I mean when we were born, the odds were 50-to-1 against us being born in the United States. So we hit the jackpot.

And basically, it — you know, we've had all of the fun of working with this and working with good people. And money, obviously, opens lots of doors in life to interesting things.

And it goes back to society. Like Charlie says, it can go back on the installment system through life. It can go back in a lump sum at death.

I've mixed the two to some extent, but I weight heavily the lump sum.

But, you know, that's where it belongs. I mean, it — there's no reason why little — generations of little Buffetts, now and the next one, you know, and a hundred years from now, should all be commanding the resources of society just because they came out of the right womb. You know, what sort of justice is that?

So basically, it's going back to society. (Applause)

Were my children applauding there? Did we check that out? (Laughter)

23. Many great businesses can't boost profits by spending more capital

WARREN BUFFETT: Number 4.

AUDIENCE MEMBER: Hi there. My name is Alex Rubalcava. I am a shareholder from Los Angeles.

I have a question about the financial characteristics of the businesses that you like to acquire and invest in.

In your reports and other writings, Mr. Buffett, you state that you like to acquire businesses that can employ a large amount of capital to high returns.

And in reading the writings and speeches of yourself, Mr. Munger, I've seen you say in Outstanding Investor Digest and other publications, that you enjoy investing in companies that require very little capital.

And I was wondering if these statements are at odds, or if they are two sides of the same coin? And if you could elaborate using Berkshire companies, that would be great.

WARREN BUFFETT: Sure. It's a good question.

The ideal business is one that earns very high returns on capital and could keep using lots of capital at those high returns. I mean that becomes a compounding machine.

So if you have your choice, if you could put a hundred million dollars into a business that earns 20 percent on that capital — say 20 million — ideally, it would be able to earn 20 percent on 120 million the following year, and 144 million the following year and so on. That you could keep redeploying capital at these same returns over time.

But there are very, very, very few businesses like that. The really — unfortunately, the good businesses, you know, take a Coca-Cola or a See's Candy, they don't require much capital.

And incremental capital doesn't produce anything like the returns that this fundamental return that's produced by some great intangible.

So we would love the business that earn — that could keep deploying, in fact, even well beyond the earnings. I mean we'd love to have a business that could earn 20 percent on a hundred million now. And if we put a billion more in it, it would earn 20 percent more on that billion.

But like I say, those businesses are so rare. There are a lot of promises of those businesses, but we've practically never seen one. There've been a few.

Most of the great businesses generate lots of money. They do not generate lots of opportunities to earn high returns on incremental capital.

You know, we can deploy X at See's and earn a lot of money, but if we put 5X in we don't earn any more money to speak of. We can earn high returns on X at The Buffalo News, but if we try to make it 5X we don't earn any more money.

They just don't have the opportunities to use incremental capital. We look for them, but they don't.

So, the great — you've seen — I mean, we will talk theoretically about the businesses that can earn more and more money with incremental capital at high returns.

But what you've seen is that we've bought businesses, largely, that earn good returns on capital, but in many cases, have limited opportunities to earn anything like the returns they earn on their basic business with incremental capital.

Now, the one good thing about our structure at Berkshire is that we can take those businesses that earn good returns in their business but don't have the opportunity for returns of those similar magnitude on incremental money, and we can move that money around to buy more businesses.

Normally, if you're in the — take the newspaper publishing business, which has been a fantastic business over the years — you earned terrific returns on your own invested capital.

But if you went out to buy other newspapers, you had to pay a very fancy price, and you didn't get great returns on incremental capital.

But the people in that business felt that the only thing they knew was newspaper publishing or media of one sort or another, so they felt that their options were limited.

We can move money anyplace that it makes sense, and that's an advantage of our structure. Now, whether we do a good job of it or not's another question, but the structure is enormously advantageous in that respect.

We can take the good business, the See's Candy — See's has produced probably a billion dollars pretax for us since Charlie and I wouldn't have gone up 100,000, you know, back in 1972.

If we tried to employ that in the candy business we'd have gotten terrible returns over time. We would have gotten anything to speak of. But because we moved it around it enabled us to buy some other businesses over time, and that's an advantage of our structure.

Charlie?

CHARLIE MUNGER: Yeah. And if you take a business that is a good business, but not a fabulous business, they tend to fall into two categories.

One is the business where the whole reported profit just sits there in surplus cash at the end of the year. And you can take it out of the business and the business will do just as well without it as it would if it stayed in the business.

The second business is one that reports the 12 percent on capital but there's never any cash. It reminds me of the used construction equipment business of my old friend, John Anderson. And he used to say, "In my business, every year you make a profit, and there it is, sitting in the yard."

And there are an awful lot of businesses like that, where just to keep going, to stay in place, there's never any cash.

Now, that business doesn't enable headquarters to drag out all the cash and invest it elsewhere. We hate that kind of a business. Don't you think that's a fair statement?

WARREN BUFFETT: Yeah, that's a fair statement. We like to be able to move cash around and have it find its best use. And, you know — but that's our job. And sometimes we find good uses.

It would be terrific if every one of our great businesses, and we've got a lot of great businesses, had ways to deploy additional capital at great rates, but we don't see it.

And, frankly, you know, it doesn't happen — I mean Gillette has a great razor and blade business, I mean, fabulous.

There's no way they can deploy the money they make in the razor and blade business to keep putting more money in that kind of business. It just doesn't take that kind of capital. They have to deploy some money of it, but it's peanuts compared to the profits.

And the temptation then is to go out and buy other businesses, and of course that's what Charlie and I do when we face that, but we don't think that, overall, the batting average of American industry in redeploying capital has been great. Nevertheless, it's what we try and do every day.

In a sense, we sort of knock the very procedure that has gotten us to where we are. Is that a fair statement, Charlie? (Laughs)

CHARLIE MUNGER: Absolutely. And that has always worried me. I don't like being an example of an activity where most people who try and follow it will get terrible results. And we try and avoid that by making these negative comments. (Laughter)

WARREN BUFFETT: We'd make negative comments anyway. (Laughs)

Number 5. It's more fun.

24. Buffett: I don't ask my friends for favors

AUDIENCE MEMBER: I'm Will Graves from Winter Park, Florida. I'm a graduate instructor with Webster University. And I'd like to address two questions to Mr. Buffett.

I appreciate the accessibility of Mr. Buffett. He makes us feel so warm here. Could I call you Dad?

WARREN BUFFETT: Yeah. (Laughter)

AUDIENCE MEMBER: I've got one question regarding a National Treasury situation and one considering a national treasure.

Back in September 11, you appeared on "60 Minutes" and performed a national service, taking your valuable time and giving up your private life for a few moments by speaking about the general stock market, and how people should not be getting too excited, and they shouldn't be worried about investing for the long-term.

And what I was wondering is, if you would ever consider making another appearance on “60 Minutes” at the time when whoever the president is at the time brings up the Social Security debate.

I spend a lot of time with non-profit organizations, and the outrage that you hear from the working poor is that we talk about the tech turnaround, the tech profits of the last few years.

They’ve gone through a whole cycle where people became multimillionaires at a time when the working poor never even got a minimum wage increase.

And if you think of people like this who have a net worth of a thousand dollars or less, just as an example, and just imagine what it’s like for them to be forced, in the future, to be horrible investors because the U.S. government forces them to have something called Social Security, which they can’t get out of, and they get a lousy return.

What I’m wondering is, if you would consider, when we have a candidate, whoever it might be at the time, say that you don’t want to put a small portion of Social Security into the long-term stock market because it’s a risky proposition? If you would take your track record on “60 Minutes” and say, “I don’t think so.” That’s the first question.

And number two, while I’m asking you to volunteer for something, I found myself being thrust into something in the last three weeks.

I went to Cypress Gardens the last day with about 20,000 people there. And the lady was handing out 15,000 fliers. Several weeks from now I’ll be before Governor [Jeb] Bush with the Friends of Cypress Gardens. We have a website, FriendsOfCypressGardens.org, trying to keep a developer from clear-cutting the trees in Cypress Gardens, a national treasure.

And my question is, would you consider contacting your cousin, [musician] Jimmy Buffett, about possibly helping us in some way? Doesn’t have to be money. It might be an appearance. Just might be some connections, where you might be able to help us in our efforts.

WARREN BUFFETT: I get asked to contact — probably the one I get asked to get contact the most is Bill Gates, but I get asked to contact all kinds of people.

And I mean, everybody is slipping me envelopes with letters in them, sending things to the office and saying, “Won’t you get this person?” and all they can say is no. I don’t do — I don’t make requests of my friends, basically, for anything.

And I just — I would spend the rest of my life doing it. They would feel — I would never know — (applause) — you know, what they were doing — you know, I would never know what they were doing because I was asking, versus what they really felt. I mean it’s an impossible — from my standpoint at least — that’s an impossible game to get into, in terms of that.

I mean when [Washington Post publisher] Kay Graham was alive, everybody, you know, wanted her for one reason or another. And they've all got causes.

And, frankly, they, you know, they want to use me to get her, or Jimmy Buffett, or whomever, to say yes to something that they're saying yes to, partially because they feel they don't want to say no to me.

And I, you know, that — I just don't want to use my friendship for that purpose, frankly. And I don't do it, even for things that I strongly believe in, myself. I do them — they may know what I'm doing, and if they want to pick up on it, fine.

But I have never — I can't remember ever requesting anybody to make a contribution or do anything myself. I mean what I do is a matter of record, and, you know, if other people want to pick up on it, fine.

But I've never had one of those honorary dinners where they send out, you know, to all the suppliers to Berkshire and everything and start leaning on them and saying, you know, "We're honoring Warren."

Well, hell, if they want to honor me they can honor me without soliciting all my friends for money. I mean, I don't consider that much of an honor if the reason they picked me was because I got rich friends. So, I just don't do that.

25. "There's something unattractive about a very rich guy that pops off on everything"

WARREN BUFFETT: On the public policy question, what I did on September 11th, when [former General Electric CEO] Jack Welch and [former Treasury Secretary] Bob Rubin and I went on there, you know, I will do those things occasionally. I've written some op-ed pieces.

I think — and I get tempted very often, in fact I've written some that I haven't sent in.

But I do think that there's something unattractive about a very rich guy that pops off on everything. And you may think, by listening to us today that you've got two guys up here that do like to pop off on everything. And we do have opinions on almost everything.

But I just think there are some things I get — you know, I wrote on campaign finance reform, and I've written on taxes. And I will do more of that, but I do try to hold myself in check, somewhat, because there's a little bit of, you know, this, "I'm rich, therefore I'm right"- type stuff that I don't think sits very well.

And I know when I see it in other people I don't like it that, you know, "I'm a celebrity therefore, you know, you got to listen to me on everything that I say." It just — it turns me off at some point.

But like I say, I have done it, and there could be occasions — and there will be occasions — I'm sure, when I'll cross my threshold level and figure I really want to say something and people can ignore it or otherwise.

And — but I think there's some danger of overexposure on that sort of thing, and I think you've seen it with certain people.

Charlie?

26. Keep Social Security money out of stocks

CHARLIE MUNGER: Warren, would you agree or disagree that forcing a certain part of Social Security into common stocks is a good idea?

WARREN BUFFETT: No, I would not. Actually, I would not agree with the one that the gentleman suggested.

I think that, actually, Social Security has been a tremendous thing for the working people of this country. It's been an intergenerational pact. It's not insurance.

It simply says, like a family might say, except it extends the concept of family to the whole United States, that if you produce for this country when you're between the ages of — and I think the upper age limit should be extended — but between the ages of X and 65, that society will provide some base level of income for you for the rest of your life.

And I think a rich society should do that. So, I think the when you have a $10 trillion society, you know — (applause) — we should do that.

CHARLIE MUNGER: I would agree. I think Social Security, you can argue, is one of the most successful governmental programs we have. And people treat it as a pure disaster coming or something like that.

That's not my view at all, and I wouldn't put it in common stocks, either. I think Social Security works pretty well just about the way we're doing it.

WARREN BUFFETT: Yeah, we will give a base income to every — and we should in this country — to everybody that leads a reasonably productive life. And they don't have to worry about how long — you know — whether they live to be 90 or 100.

And people do worry in their old age. And we don't need a bunch of people who, you know, go off to war when we need to defend, you know, the rights of our country, and act in every way as good citizens, but they just don't happen to have the ability to make a lot of money, you know, well, like maybe Charlie and I can.

I think they need a base level, and I think that an intergenerational compact like we have — it's really a magnificent idea. And I think the country's a lot better off for it.

I think that telling them that they can save 500 bucks or a thousand bucks and put it into stocks and have everybody lobbying Washington about, you know, who will handle it. You know, everybody thought it was a great idea a few years ago, and I think it's a very bad idea, frankly.

Charlie? (Applause)

CHARLIE MUNGER: I like it a lot less than you do. (Laughter)

27. Simple compensation plans and no consultants

WARREN BUFFETT: Number 6.

AUDIENCE MEMBER: Good afternoon. My name is Ravi Gilani. I come from New Delhi, India.

I have questions regarding management policies. Since you follow quite different management policies, I would like to know the impact of them on the management CEO's motivation.

Mr. Munger has mentioned that where capital is unimportant in a business, you tend to give the CEO a part of the earnings. You have also mentioned that you do not greet good work by raising the bar. Clearly, static earnings over a period of time may become successively less valuable.

My question is in, now, four parts. Bearing the above in mind, could you give us an example of compensation policy in Berkshire subsidiaries which illustrate your thinking on the subject of executive compensation?

Number two, though you do change — charge — subsidiaries for using capital, and believe in linking rewards to bottom line performance, Mr. Munger does not respect economic valued added as a concept. Could we have your thinking on EVA as a tool to monitor and reward corporate performance?

Number three, do you restrict yourself to setting compensation policy for the CEO, or do you involve yourself in larger part of the organization?

And finally, you do not have any retirement age for the CEO. Does it impact the morale, motivation, of the people below the CEO?

WARREN BUFFETT: Charlie? (Laughter)

He knew that was coming.

CHARLIE MUNGER: Well, one, you're right. Where a business requires practically no capital, we tend to reward the management based on the earnings. The minute the business starts requiring capital we tend to put a capital factor into this compensation system.

We don't have any one standard system. They're all different, based on accidents of history and circumstances.

But where capital's an important factor, of course, we take it into account.

As far as the effects on morale, as far as I've ever been able to see, the morale's pretty good in the Berkshire subsidiaries. And the Berkshire managers practically never leave. And my guess is we have about as low a turnover rate as any place around. Is that right, Warren?

WARREN BUFFETT: Oh, I'm sure of that. And besides, the "no retirement policy" is wonderful for my morale. (Laughter)

And Charlie's.

The — you also asked about EVA. We would not dream of using something like that, although I think actually a few of our subsidiaries may use it in some way.

So, the subsidiaries set their policies for the pay of the people below the CEO, and the — all — they have all kinds of systems, because we have all kinds of businesses.

And, frankly, we've never had big problems with compensation because, I think, our arrangements are rational.

When capital is an important part of the business, we stick a charge for capital in. If it's an unimportant part of the business, we don't stick it in. We don't believe in making things more complex than needed.

So, we don't try for little — all kinds of little refinements — which a compensation consultant would come in and tell you was needed, because that's how he would justify a large bill. And he would also come in and tinker with it a little the following year, and the following year, and so on.

We have very simple systems on comp. But some of our businesses are terrific businesses, and so we have very high standards of performance before people get performance bonuses.

Some of our businesses are very tough businesses, and the threshold is much lower, but the managerial talent needed to reach that threshold is just as much as in the — with the higher threshold in other businesses.

It's not a — compensation is not rocket science. I mean, people will want you to think it is, and you read these proxy statements and it blows your mind, what they get into. I mean, the proxy statements are thicker than the annual reports because they're talking about the compensation of people.

And it is not that complicated. We've had — in 38 years, we have never had a CEO leave us to go to another business, except a few we've — where we've made the decision ourselves, but very few.

And it is — you know, I see all of the time and effort put in because, frankly, it pays off for the CEO to do it. And then they create a whole department that spends all their time attending conferences about, you know, compensation methods, and they have consultants in, and it becomes an industry.

And it isn't going to break itself up. I mean you — when you get those — when you get a huge bureaucracy involved in making all kinds of pay determinations and everything, it's never going to go away unless you do something about it. But that's true of any bureaucracy we run into. We don't have much bureaucracy at Berkshire done.

I think that there's no question that our "no retirement policy" means that somebody who's just itching to be the CEO of a business, and they see that the CEO is 65, and then 70, and then 75, above them at some of our companies, is probably not going to stick around.

I mean we don't develop, naturally, lots of number twos because we can't promise them that number one is going to go out the door. But as long as number one doesn't go out the door, from our standpoint, that's just fine.

And we occasionally have to replace managements, but it's very occasional. I mean if — on an expectancy basis, you know, even with all the subsidiaries we have, you know, we may face one management succession problem, perhaps, every 18 months or something of the sort. And we've got all kinds of other businesses. So it's not a big deal at Berkshire.

CHARLIE MUNGER: Yeah. And on EVA, there are ideas implicit in that that we use. For instance, hurdle rates by — based on opportunity costs. Perfectly reasonable concept.

But to us, that system, with all its labels and lingo, has a lot of baggage that we don't need. We just use the implicit, simple stuff that's buried in EVA.

WARREN BUFFETT: Yeah. We could spend a million bucks a year on consultants to get an answer we can get in five minutes, frankly. I mean it is — it just isn't that complicated.

But can you imagine a consultant coming around and saying, "I've got a one-paragraph compensation arrangement for you?"

Are they going to be able to send you a large bill for, you know, their consultancy? Of course not. So, they've got to make things complicated, and we don't believe in that. We want things that are very easy to understand, and we've just never had a problem with it.

And we get good results out of our managers.

The main reason we get good results out of our managers is that, you know, they like hitting .400. They like hitting .400 and being fairly paid, but they — the fact that they batted .400 is the biggest thing to them, in life.

And it's, you know, it's sort of the way we feel. If we get a good batting average in our business performance, the pay is incidental.

Now, it shouldn't be incidental to our managers. It's got to be fair or they're going to — nobody wants to work in an environment where they feel they're being treated unfairly, but —

That is not a complicated procedure. And we do make them very specific to the enterprise that's under their control. We do not pay the people of See's Candy based on how The Buffalo News does or vice versa.

And I can show you a lot of crazy compensation systems in corporate America where that really is the ultimate effect of what's happening.

28. Buffett OK with large brokerages holding his stocks

WARREN BUFFETT: Number 7.

AUDIENCE MEMBER: Good afternoon. This is — I'm Paul Butterfield from Clarksville, Maryland.

You wrote in the annual report about the dangers — the systemic dangers — of derivatives and the growth in derivatives.

An example would be a six-sigma event that would cause domino effect and dangers to the solvency and operations of, maybe, financial institutions and other firms, possibly including brokerage firms.

Would this — do you think this recommends to an individual investor that we might consider not holding stocks in street name?

WARREN BUFFETT: Charlie, how do you — they addressed that, somewhat.

There were some domino effects in the very early '70s in Wall Street. I think, certainly, the failures of some brokerage firms, in part, led to failures of others.

It wasn't a classic domino situation, and of course we had domino effects in banks if you go back a hundred years in this country.

Anytime you have financial institutions that interrelate in many ways, and have big receivables and payables, balances with everything, you've always got the danger of domino effects.

And that's a factor in the insurance business. It's a factor in banking business. I think it'd be less in the brokerage business.

I would think, if you owned securities in a cash account with any large stock exchange firm, you know, it wouldn't worry me.

We've got lots of — I've got lots of personal securities, you know, sitting with a very large stock exchange firm, and that does not bother me. But I mean, obviously, there have been little firms that have been fly-by-night types.

And I don't even know all the rules on margin accounts. But if somebody has got the right to repledge your securities and they get in trouble themselves, I don't know any more what the SIPC — there's a SIPC protection, but I'm —

CHARLIE MUNGER: It's not unlimited. You're liable.

WARREN BUFFETT: Yeah, I think that's true.

And no, I would think twice between having all my securities rehypothecated by somebody else.

A cash account. I think the cash accounts are segregated, aren't they, Charlie?

CHARLIE MUNGER: Yes.

WARREN BUFFETT: Yeah.

29. States shouldn't buy stocks with taxpayer money

WARREN BUFFETT: Number 8.

AUDIENCE MEMBER: Good afternoon, Mr. Buffett and Mr. Munger. My name is John Norwood and I hail from Des Moines. Thank you for providing this opportunity to speak today.

I have two questions, one as an individual investor and one as a state resident.

The first has to do with intrinsic value. Can you provide some additional Cliff Notes for working with the Berkshire Hathaway annual report and calculating an intrinsic value for the stock? I'm a little bit hazy.

And the second question has to do with public sector investing. As an example, the state of Iowa is considering the creation of a $1 billion Values Fund.

What sorts of guidelines, strategies, and advice would you employ if you were responsible for investing this money on behalf of the general public?

Are there any significant differences when representing shareholders versus the general public? Thank you.

WARREN BUFFETT: Yeah, elaborate if you will just a second, because I am not familiar with that billion dollar — is the state of Iowa literally creating a billion dollar fund to invest in equities on behalf of the people?

AUDIENCE MEMBER: That's what's being proposed.

WARREN BUFFETT: Is that right? Oh.

Charlie, what do you think about that? That's a new one to me.

CHARLIE MUNGER: I think it's a pretty dumb idea. (Laughter and applause)

WARREN BUFFETT: Yeah. He lives in California. That's why I had him answer. I live right on the border here, so I — (Laughs)

Yeah, I would — I mean, I guess Iowa doesn't have any bonded debt, so I'm not sure what — they probably wouldn't be creating a margin account.

But I would think that most states or municipalities would want to let the citizenry invest on its own and would not want to be taxing people in order to set up an equity fund. So that strikes me as a pretty novel idea. Charlie —

CHARLIE MUNGER: In California, certainly the — of the investment management partnerships — use all kinds of political contributions to finagle their way into managing state pension funds, et cetera, et cetera. It's not a pretty scene.

To the extent that Iowa can dampen it down, why, I think they're better off.

30. Intrinsic value: "fuzzy," but essential

WARREN BUFFETT: The question on intrinsic value — you know, we've written about it in reports. I don't think there's much additional to say.

I mean, the intrinsic value of any financial asset, you know, is the stream of cash that it'll produce between now and Judgment Day, discounted by an interest rate that equates between all the different possible assets.

That's true of an oil royalty, a farm, an apartment house, an equity, a business operation, you know, a lemonade stand. And that — you have to decide what sort of businesses that you think you can understand well enough to make a — some kind of reasonable calculation.

It's not scientific, but it is the intrinsic value. I mean the fact that it's fuzzy to calculate doesn't mean that it's not the proper way to think about it.

And at Berkshire, you've got two questions. You've got the question of what the businesses we own now are worth. And then, since we redeploy all the capital they generate, you have to figure out what you're willing to assume about what we do with the capital.

And you can look back and say that, 35 years ago or so, that people perhaps underestimated what would be done with the capital that was generated, so that it looks very cheap if you look back on it now. But we're in a whole different game now with huge amounts of capital.

And you have to make a decision as to whether the billions and billions and billions of dollars we generate will be deployed in a way that creates lots more cash later on. And it's what Charlie and I think about, but we can't give any prediction on it.

Charlie?

CHARLIE MUNGER: Yeah, I think our reporting, considering the complexity of the enterprise as now constituted, is better than that of any similar enterprise I know, in terms of enabling a shareholder to calculate intrinsic value.

So, I think we've done better than anybody else, and we do it conscientiously. And if you ask, "Will we improve from here?" I don't think so.

WARREN BUFFETT: We've worked hard at doing what you're talking about, and it — but even working hard at it, I mean, we've given you the data we would want ourselves. We don't know the answer, but we do know it's what you have to think about.

And we do it when we buy McLane's, when we buy Clayton Homes. When we buy anything, we are attempting to look out into the economic future and say, "What kind of cash can this business generate over time? How sure do we feel about it? And how does the purchase price compare with that?"

And if we feel we're getting a — we have to feel fairly good about our projections. Won't feel perfect, because we — no one knows the answer precisely. We have to feel pretty good about our projections, and then we have to have a purchase price that's rational in relation to those.

And we get some surprises in both directions. Actually, if you go way back, we've had more pleasant surprises than we would have expected. But we won't get them from this point, mostly because of size, and also because the world's a little more competitive.

Charlie?

CHARLIE MUNGER: Nothing more.

31. Munger: Tort lawsuit system is "crazy"

WARREN BUFFETT: Number 9.

AUDIENCE MEMBER: My name is Vic Cunningham. I'm a shareholder from Wilton, Connecticut.

I heard your comments earlier about popping off. But actually, I find it admirable the way you guys, the two of you, have leveraged your clout as investors to be advocates for change.

You know, your outspoken comments on expensing stock options promoted, you know, productive discussions, in not only corporate boardrooms throughout this country, but more importantly on Capitol Hill.

Currently, tort spending in this country continues to rise as a percentage of GDP, and I would argue a lot of that's unproductive spending.

Is there a point — and it seems like right now that, you know, they're trying to stretch their tentacles, not only from, you know, tobacco companies but to consumer product companies like McDonald's and possibly even Coca-Cola.

Is there a point where you would use your considerable clout to try to guilt Congress into moving towards some kind of comprehensive tort reform for this country?

WARREN BUFFETT: Well, I'm sympathetic to the — what you're saying. I would say that our considerable clout is nothing compared to the clout of the plaintiffs' lawyers.

There's no question that — in a certain way, it's appalling when you look at the frictional costs to society of the tort system we have.

But Charlie is a lawyer. He can probably speak much more intelligently than I can as to how you could modify this, because there are plenty of things wrong, too.

I've — I mean it's sort of infuriating to see specious shareholder suits raised on, you know, any kind of a deal, just because there's a lot of DO — D&O insurance — and they know people will pay off rather than go through the nuisance of a suit.

And we never — we don't pay off — but corporate America does. And so, it's a game.

And the people that pursue that activity, you know, are not pursuing it, I think in many cases, because of a great pursuit of justice, but because it's a damn profitable sort of game.

And, you know, the people that are paying. It usually doesn't come out of their own pocket, so it gets back to that — the lack of parity in the interest of the people on both sides.

But then, when I look at some of the things that have happened in corporate America, I certainly don't want to get rid of the plaintiffs' lawyers either — entirely — because I think some terrible things have happened and I think people should pay.

I just wish the people paid rather than the D&O carriers, because when a D&O carrier pays, or when a company pays, it — the costs get socialized, and the people that did the wrong things seldom pay out of their own pockets.

I — Charlie, what — tell me, how do we improve the tort system?

CHARLIE MUNGER: Well, if you define the tort system to include the workmen's compensation system, which I would, you get terrible abuses.

In California, Costco has about one-third of its employees and two-thirds of its workmen's compensation expense.

California is an institutionalized fraud. Fraudulent chiropractors, fraudulent lawyers, fraudulent what have you. And they put this enormous burden on business. And of course, eventually the jobs will leave.

I had a friend who took a plant away from Texas where he had workmen's compensation expense of 30-odd percent, and took it to Ogden, Utah, where it went to 2 percent.

So fraud, allowed to run, builds on itself. And then you've got all these lawyers and lobbyists who like the fraud. And chiropractors and God knows what.

And so, it's a major problem. And in California, it's gotten so bad that my guess is there will be some reform, even with the two-thirds Democratic legislature.

WARREN BUFFETT: What would you change, in terms of the shareholder situation?

CHARLIE MUNGER: Well, that's harder, because if you take the worst of the plaintiffs' lawyers, half the time they're suing somebody that's behaved terribly.

Now, they're suing in a process where a lot of money is paid out, as you say, on a socialized basis, and doesn't really go to the people that were hurt. So, they're like a public scold that gets paid an enormous sum out of the public.

But certainly, a lot of the defendants in these cases that are screaming about the plaintiffs' bar have done some very regrettable things. So, I think that gets very hard to figure out what should be done.

The present system is crazy, and I don't know how I'd improve it. You could easily improve it if you could count on government being rational and fair, but how do you do that?

WARREN BUFFETT: Would you do anything toward making the people who are defendants in D&O situations pay any portion of it themselves or not?

CHARLIE MUNGER: I think there would be a great improvement, net, in Omaha — in America — if there were no D&O insurance. Zero. I think people — (applause) — would behave a lot better.

The counterargument is you'd never get anybody with any money who was willing to serve on a board. But my guess is that, net, even after taking into account that little problem, the system would work better than the present one.

32. "It's tough to buy things out of bankruptcy"

WARREN BUFFETT: Number 10.

AUDIENCE MEMBER: John Goss (PH), Key West, Florida.

You mentioned last year your frustration with buying companies out of bankruptcy. Were you surprised, from your past experience, that the court would not allow a breakup fee regarding your Burlington bid?

WARREN BUFFETT: That's a good question. We submitted a bid to the court. The management agreed to our offer and we submitted a bid in the bankruptcy of Burlington Industries. And our bid was 500-and-some million dollars.

And we provided a — what's called a breakup fee. I'll get to that in a second, but I think it was $14 million.

Now really, when we submit that bid of 500-and-some-odd million, our bid has to remain outstanding for a good many months. So in effect, by making that bid, I get back to the earlier statements I made about option value.

For $14 million, we were telling the creditors of Burlington that, for a period of maybe four months or five months, that they could sell us that business for our number or, for a considerable period, they could get more money for it.

Now that is a very low price, in my view, for a put. In fact, it's an inadequate price, but it's become sort of a customary percentage in terms of bankruptcy proceedings.

The court said that that was too much to charge as a breakup fee, or what I would call a put fee, and so they have set up a new procedure, which will result in Burlington getting sold some months from now to people who follow this new procedure.

I think that — I frankly think 14 million is inadequate, but it's roughly in the range of what has been allowed in many cases.

But we would never agree to that sort of a sum for that sort of exposure, outside of bankruptcy. It just doesn't make any sense. The world changes too much.

If you look at the value of businesses, as measured on the New York Stock Exchange, you'll see fluctuations of a hundred percent in a year. And for 2 or 3 percent, to commit 500-and-some million dollars at a fixed price for a business in a tough industry, I mean that's — that does not make a lot of sense.

I did it, so — but it got rejected. We would not — we will not participate in a procedure where we're going to bid hundreds of millions of dollars and where our bid has to remain outstanding.

And if the — you know, if there's a twin — if there's a World Trade Center disaster, or there's an earthquake in California, or there's a suspension of trading on the stock exchange, or all kinds of things, that our bid sits out there and we've gotten paid $5 million or something for it.

It just doesn't make any sense to me.

So, it's tough to buy things out of bankruptcy, although we've done it twice now. And both situations have worked out well.

But then we tried it a third time with Burlington, and we spent a considerable amount of time and money generating that bid. Weeks and weeks and a good many dollars, and it wasn't accepted.

So, you know, when I look at these experiences, I say to myself it's a lot easier to make a deal with Walmart, where I talk with them for an hour and we shake hands and we got a deal.

Or the other deals we've made in the last year where we buy Northern Natural in a day or two, or where we buy Kern River Pipeline in a few days, or the various businesses we've bought.

And bankruptcy, I think it's probably a necessary part of the procedure. I mean you have to comply with bankruptcy laws. But I would say it's a very awkward way to buy a business.

And if we have to submit bids that will remain outstanding for many months when people can top us, and only have a 1 percent fee for giving that sort of a put, we will not be making many bids.

Charlie?

CHARLIE MUNGER: Well, we know it was unreasonable, from our point of view, to have a transaction that didn't have that modest 2 percent commitment fee in it. The court had a different view, and he thought that the figure should have been different. And who knows. We'll see how it all works out.

33. "We like to go in heavy" when buying a stock

WARREN BUFFETT: Number 1.

AUDIENCE MEMBER: Gentlemen, Wayne Peters from Sydney, Australia.

My question goes to stock reweightings. Could you describe your thought process in, firstly, determining your commitment weighting level in a new investment? Now, marketable securities is what I'm referring to.

And secondly, your thoughts on potential reweighting. Your record, and clearly in the earlier days as opposed to now, would indicate that on average, you're either in a stock or out of it, though on occasion you've topped up and lightened up.

WARREN BUFFETT: Charlie? I'll let you have one. (Laughs)

CHARLIE MUNGER: I didn't fully understand that question.

AUDIENCE MEMBER: Charlie, I was just referring to how you make an initial commitment to a marketable security investment, in regards to making it maybe a 5, 10, 15 percent commitment. How heavy you decide to go into a position, initially.

CHARLIE MUNGER: Well, we ordinarily don't like small positions.

WARREN BUFFETT: Yeah, we like to go in heavy. I mean, if we want to invest in a business through the stock market, we want to put a lot of money in. You know, we do not believe in a little of this and a little of that.

So, at our present size, we're limited primarily by the availability of the quantity we want, rather than restricting ourselves based on some percentage of a total portfolio.

I can't — it's very hard for me to think of a stock we quit on, in terms of buying, except because we were going to run into some 10 percent limit where we would get liable for short-swing profits or become insiders or that sort of thing. But we almost never want to quit. Isn't that right, Charlie?

CHARLIE MUNGER: Well, not unless the price goes up.

WARREN BUFFETT: Yeah. And of course that's where we made our big mistakes. I mean we have — or I've made the big mistakes, actually. I —

There have been a couple of things that we knew enough to buy, that were in our circle of competence, where we could have bought lots of stock, except it went up a little bit and then we faded because of price.

We didn't fade because we didn't want to put more than X dollars in. If we find an idea that we want to put $500 million in, we probably would be even happier if we could put 3 or 4 billion in.

Good ideas are too scarce to be parsimonious with once you find them.

CHARLIE MUNGER: Yeah, having narrowly averted the mistake of being unwilling to pay up at See's Capital [Candies], we've gone on and made the same damn mistake several times, with respect to marketable securities. We evidently learn very slowly. (Laughter)

WARREN BUFFETT: It's cost us many, many, many billions of dollars, too.

CHARLIE MUNGER: Those are opportunity cost billions. They don't show up on the financial statements, but the amount of money that's been blown by dumb decisions at headquarters at Berkshire Hathaway is awesome. (Laughter)

WARREN BUFFETT: Well said.

CHARLIE MUNGER: Yeah. (Laughter)

34. Short-term rates don't affect investment decisions

WARREN BUFFETT: Number 2.

AUDIENCE MEMBER: Hi, I'm Steve Casbell (PH) from Atlanta. My question involves interest rates.

When you calculate the intrinsic value of a business in a period of low interest rates, like we have currently, do you use a higher discount rate to factor in higher rates in the future?

And also, when — do you ever look at a company's free cash flow yield relative to current rates?

And if I could also get your thoughts on the dividend tax cut. If, by some miracle, the politicians think logically and get rid of the dividend taxes, would Berkshire ever pay a dividend?

WARREN BUFFETT: The question on discount rates, we use the same discount — I mean in theory — we would use the same discount rate across all securities, because if you really knew the cash they were going to produce, you know, that would take care of it.

We may be more conservative in estimating the returns of cash from some, but the discount rate we would use is a constant.

Now, in terms of where we commit, you know, we don't want to use the fact that short-term rates are 1 1/4 percent to think that something that yields us 3 percent or 4 percent is a good deal.

So we sort of have a minimum threshold in our mind about which we're — below which — we're unwilling to commit money. And we're unwilling to commit it whether interest rates are 6 or 7 percent, or whether they're 3 or 4 percent, or whether they're, on a short-term basis, 1 percent.

We just — we don't want to get hooked into long-term investments at low rates just because they're a little bit better than short rates would be or low Government rates would be. So, we have minimum thresholds in our mind.

I can't tell you precisely what they are, but they're a whole lot higher than present Government rates would be.

And at other times, we'd be very happy owning Governments, just because we feel that they offer attractive enough rates.

I would — when we're looking at a business, we're looking at holding it forever. And we want to be sure we're getting an adequate return on capital. We don't regard what we can get on short-term rates now as adequate, but we'll still sit in — rather than bend a little bit and start settling for lower rates for 30 years because rates for 30 days are so low, we would rather just sit it out and wait a while.

35. Dividends should be taxed

WARREN BUFFETT: The tax on dividends — you know, I've used this illustration before, but I'm paying about the same percentage of my income to the federal government as my secretary does.

Now, I pay more in income tax rates than she does. I pay a higher marginal tax rate, by some margin, than she does.

But she pays way more in Social Security taxes than I do, because I only pay on the first whatever it is, 70,000 or 80,000 of income. And so, she is paying, between what we pay at the company for her and what she pays, we're paying 12 percent or 13 percent or whatever it is of that.

So, we both end up paying fairly similar percentages of our income to the federal government every year.

If Berkshire were to declare a billion-dollar dividend, and my share of it was 330 million, and it were tax-free as the Bush people originally suggested — and it would be tax-free. I mean, we have lots of taxable earnings at Berkshire.

You know, I might be paying 1/10th of the rate to the federal government of my income that she would be.

Now, I can make the argument about the fact that structure shouldn't govern tax rates. That Subchapter S, and Subchapter C, and partnerships, and all of these things, that the tax codes should be neutral between them. And I've made those kind of arguments in the past.

But I can make no argument in my mind that says that I, with everything that — you know, all the luck I've had in life, you know, I was wired a certain way at birth that enabled me to make a lot of money.

And, frankly, it was better to be born a boy than a girl, in terms of money-making possibilities, in 1930. And probably still is, but not to the same degree.

I mean the fact that I would send 1/10th the portion of my income in a year to the federal government that my secretary would, I — it just — it screams at injustice to me, in terms of what the society gives back to me. (Applause)

So I am not for the Bush plan. Charlie?

CHARLIE MUNGER: Well, I agree with you. Even if you assume that the whole economy would work better if we'd never gotten into this double-taxation system on corporate earnings, which I don't think is a clear thing anyway.

But even if you assume that, I think when you live in a democracy where there's lots of envy and resentment and what have you, to have the absolutely most fortunate people paying practically no income taxes, I just think it's unacceptable.

I think there has to be some fairness in some of these arrangements, even if there's some theoretical argument that the economy might work a little better some other way.

WARREN BUFFETT: Yeah, there are IRAs now, obviously, that work very well for people with modest amounts of dividends. That they — they're getting tax deferred for a very long period of time, which has huge benefits.

The big benefits of exempting dividends would go to fellows like me and Charlie, you know. And that's not going to stimulate the economy. It's going to stimulate us, but — (Laughter)

And it's going to result in us sending a very small percentage of the income — of our income — to Washington compared to what the people, you know, working in our shoe factories send.

And that — you know, when somebody says, you know, "What did you do during the war, Grandpa?" I'm not sure that's what I want to explain to them.

36. Why Berkshire wants at least a 10 percent return

WARREN BUFFETT: Number 3.

AUDIENCE MEMBER: Good afternoon. I'm Patrick Wolff from Arlington, Virginia.

Charlie, I can't resist telling you that I'm actually the fellow who plays the chess games blindfolded.

WARREN BUFFETT: Yeah.

AUDIENCE MEMBER: So, I look forward to not seeing you there tomorrow. (Laughter)

CHARLIE MUNGER: Right.

AUDIENCE MEMBER: I actually have a two-part question. I'd like to ask you to elaborate a bit how you think about opportunity costs. And I'm — I think I'm going to be elaborating very much on the very last question that was asked.

First of all, in the annual report you say explicitly that you look for a 10 percent pretax return on equity, in looking at common stocks. And I think you talked earlier about how you built up from that for 5 to 6 percent after-tax return, and then you layer on inflation, and then layer on taxes.

My first question would be, how do you adjust that required rate of return across periods of time? So, for example, when interest rates are higher. And do you look for a different equity premium return over different periods of time?

My second question would be, Warren, you just said that you actually would apply the same discount rate across the stocks.

And I'm sure you know that modern finance actually suggests that you should not do that — that you should be thinking about the timing of cash flows and, in particular, the covariance with the general market.

Now, you've made a point of emphasizing that when you think of risk, you think of risk primarily in terms of, will you get the cash flows that you predict you will get over time?

Sort of numerator risk, if you think in terms of discounted cash flow, which I think everyone here will have to acknowledge — your results speak for themselves — has probably been a very effective way of thinking about risk.

But there is a true economic cost to think about the timing of cash flows as well. And it may be a much smaller cost, but it is still a real cost.

I might, for example, suggest you think about somebody deciding between two jobs. The jobs are completely identical and the person expects to make the same amount of money from each job, but there's one difference. And the difference is one job will pay him more when the economy's in the tank, and the other job will pay him more when the economy's going gangbusters.

Now, if he asked you which job was actually worth more, my guess is you would tell him that the one that would pay him more when the economy's in the tank. And the reason is, if he wanted to make more money by moonlighting or doing something else, it'd be much easier when the economy's doing better.

That's the essential logic behind the idea that you look at the covariance of when cash flows come in with the overall market.

It's a real cost, even though it is difficult to measure, and even if it is a smaller risk than numerator risk, the risk of getting the actual cash flows, since it's a real cost, I imagine you must think about it.

And so, my second question to you would be how do you think about it? And if you decide not to, why?

WARREN BUFFETT: Now, first of all, I would like to say, Patrick, we appreciate you coming out, because Patrick — now, I don't know how many years it's been, but it's been a number, has volunteered on Sunday to play.

Now, I think he's playing six people or so, blindfolded, simultaneously, and after hearing that question you can understand how he does it. (Laughter)

But Patrick, as well as [champion bridge player] Bob Hamman, and then this year, [champion Scrabble player] Peter Morris and [champion backgammon player] Bill Robertie, all come out. And on Sunday they — we've got these extraordinary talents out there. And for people who like the various games they play, they devote an afternoon for it and ask nothing in return.

So, I — we really appreciate it, Patrick, and I'll look forward to seeing if you're peeking out of your blindfold tomorrow. (Laughter)

The question on opportunity costs and the 10 percent we mention. You know, basically that's the figure we quit on. And we quit on buying — we don't want to buy equities where our real expectancy is below 10 percent.

Now, that's true whether short rates are 6 percent or whether short rates are 1 percent. We just feel that it would get very sloppy to start dipping below that.

And we would add, we feel also, obviously, that we will get opportunities that are at least at that level, and perhaps substantially above.

So, there's just a point at which we drop out of the game. And it's arbitrary. There's no — we have no scientific studies or anything.

But I will bet you that a lot of years in the future we, or you, will be able to find equities that you understand, or we understand, and that have the probability of returns at 10 percent or greater.

Now, once you find a group of equities in that range, and leaving aside the problem of huge sums of money, which we have, then we just buy the most attractive. That usually means the ones we feel the surest about, I mean, as a practical matter.

There's just some businesses that possess economic characteristics that make their future prospects, far out, far more predictable than others. There's all kinds of businesses that you just can't remotely predict what they'll earn, and you just have to forget about them.

But when we get — so, we have, over time, gotten very partial to the businesses where we think the predictability is high. But we still want a threshold return of 10 percent, which is not that great after-tax, anyway.

Charlie, do you want to comment on that portion of that question first?

CHARLIE MUNGER: Yeah. The — I think in the last analysis, everything we do comes back to opportunity cost. But it, to some extent — in fact, to some considerable extent — we are guessing at our future opportunity cost.

Warren is basically saying that he's guessing that he'll have opportunities in due course to put out money at pretty attractive rates of return, and therefore, he's not going to waste a lot of firepower now at lower returns. But that's an opportunity cost calculation.

And if interest rates were to more or less permanently settle at 1 percent or something like that, and Warren were to reappraise his notions of future opportunity cost, he would change the numbers.

It's like [economist John Maynard] Keynes said, "What do you do when you change your view of the facts? Well, you change your conduct." But so far at least, we have hurdles in our mind which are basically — well, they involve, implicitly, future opportunity cost.

WARREN BUFFETT: Right now, with our 16 billion that's getting 1 1/4 percent pretax, that's $200 million a year. We could very easily buy Governments due in 20 years and get roughly 5 percent. So, we could change that 200 million a year to 800 million a year of income.

And we're making a decision, as Charlie says, that it's better to take 200 million for a while, on the theory that we'll find something that gives us 10 percent or better, than to commit to the 800 million a year and then find that, in a year or thereabouts, when the better opportunities came along, that what we had committed to had a big principal loss in it.

But that's — you know that's not — it's not terribly scientific. But it — all I can tell you is, in practice, it seems to work pretty well. People —

CHARLIE MUNGER: Years ago, when Warren ran a partnership, and to some extent the partnership that I ran was the — operated in the same way — we implicitly did what you're suggesting, in that part of the partnership funds were in so-called event arbitrage investments.

And those tended to generate returns, occasionally, when the market, generally, was in the tank. And alternative investments would more mimic the general market. So, we were doing what this academic theory prescribes, you know, 40 years ago. And — but we didn't use the modern lingo.

WARREN BUFFETT: Yeah, we've got some preferences for having a lot of money coming in all the time.

But we do go into insurance transactions with huge volatility, which could mean that a big chunk of money could go out at one time, or in a very short period of time.

And we won't give up a lot in expectable return for smoothness, but if you give us a choice of having money come in every week and the same present value of money coming in in very lumpy ways that we wouldn't know about, we would choose the smooth.

But if you give us a choice of a higher present value for the lumpiness, we will take the lumpiness. And that's usually the choice that's — I mean that's usually — we get offered that choice. And other people value smoothness so highly that we do get a spread, in our view, for lumpy returns.

37. Berkshire insures $1B Pepsi contest

WARREN BUFFETT: We are writing — and then we're going to close this up — but you will read a lot, or you may hear a lot, maybe you've heard it already, Pepsi-Cola's having a contest. They're going to have a drawing in September.

The contest goes through a lot of little phases, but in the end, there's going to be one person who's going to have one chance in a thousand of winning a billion dollars. That billion dollars will have a present value of maybe 250 million.

If whoever gets to that position hits the number, we will pay it. And we don't mind paying out $250 million as long as we get paid appropriately for us. And that would create bad cash flow that particular week. We're willing to — maybe even for two weeks. (Laughter)

We're willing to assume that for a payment, and very, very few people in the world are. Even those that can afford it. We would even assume it for 2 1/2 billion, present value.

We'd want more proportionally to assume it for that, but Charlie and I, I think, would agree that we would take that on if we got paid well enough for it.

We wouldn't do it for 25 billion, but we will do things, and therefore, you know, we get the calls on that sort of thing. And that is more profitable business, over time, than bread and butter business.

It also can, you know — it can lead you having an intense interest in watching the television show when the drawing takes place — (laughter) — making sure who draws the number, too.

Charlie, you have anything to add? Then we'll —

CHARLIE MUNGER: Yeah, once you're talking about opportunity cost that's personal to yourself and your own situation and your own abilities, you've departed from modern finance, totally. And that's what we've done.

We're intelligently making these guesses, as best we can, based on our own circumstances and our own abilities. I think it's crazy to do it based on somebody else's circumstances and somebody else's abilities.

Note: The following table appears in the printed Annual Report on the facing page of the Chairman's Letter and is referred to in that letter.

Berkshire's Corporate Performance vs. the S&P 500

Year	Annual Percentage Change in Per-Share Book Value of Berkshire (1)	Annual Percentage Change in S&P 500 with Dividends Included (2)	Relative Results (1)-(2)
1965	23.8	10.0	13.8
1966	20.3	(11.7)	32.0
1967	11.0	30.9	(19.9)
1968	19.0	11.0	8.0
1969	16.2	(8.4)	24.6
1970	12.0	3.9	8.1
1971	16.4	14.6	1.8
1972	21.7	18.9	2.8
1973	4.7	(14.8)	19.5
1974	5.5	(26.4)	31.9
1975	21.9	37.2	(15.3)
1976	59.3	23.6	35.7
1977	31.9	(7.4)	39.3
1978	24.0	6.4	17.6
1979	35.7	18.2	17.5
1980	19.3	32.3	(13.0)
1981	31.4	(5.0)	36.4
1982	40.0	21.4	18.6
1983	32.3	22.4	9.9
1984	13.6	6.1	7.5
1985	48.2	31.6	16.6
1986	26.1	18.6	7.5
1987	19.5	5.1	14.4
1988	20.1	16.6	3.5
1989	44.4	31.7	12.7
1990	7.4	(3.1)	10.5
1991	39.6	30.5	9.1
1992	20.3	7.6	12.7
1993	14.3	10.1	4.2
1994	13.9	1.3	12.6
1995	43.1	37.6	5.5
1996	31.8	23.0	8.8
1997	34.1	33.4	.7
1998	48.3	28.6	19.7
1999	.5	21.0	(20.5)
2000	6.5	(9.1)	15.6
2001	(6.2)	(11.9)	5.7
2002	10.0	(22.1)	32.1
2003	21.0	28.7	(7.7)
Average Annual Gain — 1965-2003	22.2	10.4	11.8
Overall Gain — 1964-2003	259,485	4,743	

Notes: Data are for calendar years with these exceptions: 1965 and 1966, year ended 9/30; 1967, 15 months ended 12/31.

Starting in 1979, accounting rules required insurance companies to value the equity securities they hold at market rather than at the lower of cost or market, which was previously the requirement. In this table, Berkshire's results through 1978 have been restated to conform to the changed rules. In all other respects, the results are calculated using the numbers originally reported.

The S&P 500 numbers are **pre-tax** whereas the Berkshire numbers are **after-tax**. If a corporation such as Berkshire were simply to have owned the S&P 500 and accrued the appropriate taxes, its results would have lagged the S&P 500 in years when that index showed a positive return, but would have exceeded the S&P in years when the index showed a negative return. Over the years, the tax costs would have caused the aggregate lag to be substantial.

BERKSHIRE HATHAWAY INC.

To the Shareholders of Berkshire Hathaway Inc.:

Our gain in net worth during 2003 was $13.6 billion, which increased the per-share book value of both our Class A and Class B stock by 21%. Over the last 39 years (that is, since present management took over) per-share book value has grown from $19 to $50,498, a rate of 22.2% compounded annually.*

It's per-share intrinsic value that counts, however, not book value. Here, the news is good: Between 1964 and 2003, Berkshire morphed from a struggling northern textile business whose intrinsic value was less than book into a widely diversified enterprise worth far more than book. Our 39-year gain in intrinsic value has therefore somewhat exceeded our 22.2% gain in book. (For a better understanding of intrinsic value and the economic principles that guide Charlie Munger, my partner and Berkshire's vice-chairman, and me in running Berkshire, please read our Owner's Manual, beginning on page 69.)

Despite their shortcomings, book value calculations are useful at Berkshire as a slightly understated gauge for measuring the *long-term* rate of increase in our intrinsic value. The calculation is less relevant, however, than it once was in rating any single year's performance versus the S&P 500 index (a comparison we display on the facing page). Our equity holdings, including convertible preferreds, have fallen considerably as a percentage of our net worth, from an average of 114% in the 1980s, for example, to an average of 50% in 2000-03. Therefore, yearly movements in the stock market now affect a much smaller portion of our net worth than was once the case.

Nonetheless, Berkshire's long-term performance versus the S&P remains all-important. Our shareholders can buy the S&P through an index fund at very low cost. Unless we achieve gains in per-share intrinsic value in the future that outdo the S&P's performance, Charlie and I will be adding nothing to what you can accomplish on your own.

If we fail, we will have no excuses. Charlie and I operate in an ideal environment. To begin with, we are supported by an incredible group of men and women who run our operating units. If there were a Corporate Cooperstown, its roster would surely include many of our CEOs. Any shortfall in Berkshire's results will not be caused by our managers.

Additionally, we enjoy a rare sort of managerial freedom. Most companies are saddled with institutional constraints. A company's history, for example, may commit it to an industry that now offers limited opportunity. A more common problem is a shareholder constituency that pressures its manager to dance to Wall Street's tune. Many CEOs resist, but others give in and adopt operating and capital-allocation policies far different from those they would choose if left to themselves.

At Berkshire, neither history nor the demands of owners impede intelligent decision-making. When Charlie and I make mistakes, they are – in tennis parlance – unforced errors.

*****All figures used in this report apply to Berkshire's A shares, the successor to the only stock that the company had outstanding before 1996. The B shares have an economic interest equal to 1/30th that of the A.

Operating Earnings

When valuations are similar, we strongly prefer owning businesses to owning stocks. During most of our years of operation, however, stocks were much the cheaper choice. We therefore sharply tilted our asset allocation in those years toward equities, as illustrated by the percentages cited earlier.

In recent years, however, we've found it hard to find significantly undervalued stocks, a difficulty greatly accentuated by the mushrooming of the funds we must deploy. Today, the number of stocks that can be purchased in large enough quantities to move the performance needle at Berkshire is a small fraction of the number that existed a decade ago. (Investment managers often profit far more from piling up assets than from handling those assets well. So when one tells you that increased funds won't hurt his investment performance, step back: His nose is about to grow.)

The shortage of attractively-priced stocks in which we can put large sums doesn't bother us, *providing* we can find companies to purchase that (1) have favorable and enduring economic characteristics; (2) are run by talented and honest managers and (3) are available at a sensible price. We have purchased a number of such businesses in recent years, though not enough to fully employ the gusher of cash that has come our way. In buying businesses, I've made some terrible mistakes, both of commission and omission. Overall, however, our acquisitions have led to decent gains in per-share earnings.

Below is a table that quantifies that point. But first we need to warn you that growth-rate presentations can be significantly distorted by a calculated selection of either initial or terminal dates. For example, if earnings are tiny in a beginning year, a long-term performance that was only mediocre can be made to appear sensational. That kind of distortion can come about because the company at issue was minuscule in the base year – which means that only a handful of insiders actually benefited from the touted performance – or because a larger company was then operating at just above breakeven. Picking a terminal year that is particularly buoyant will also favorably bias a calculation of growth.

The Berkshire Hathaway that present management assumed control of in 1965 had long been sizable. But in 1964, it earned only $175,586 or 15 cents per share, so close to breakeven that any calculation of earnings growth from that base would be meaningless. At the time, however, even those meager earnings looked good: Over the decade following the 1955 merger of Berkshire Fine Spinning Associates and Hathaway Manufacturing, the combined operation had lost $10.1 million and many thousands of employees had been let go. It was not a marriage made in heaven.

Against this background, we give you a picture of Berkshire's earnings growth that begins in 1968, but also includes subsequent base years spaced five years apart. A series of calculations is presented so that you can decide for yourself which period is most meaningful. I've started with 1968 because it was the first full year we operated National Indemnity, the initial acquisition we made as we began to expand Berkshire's business.

I don't believe that using 2003 as the terminal year distorts our calculations. It was a terrific year for our insurance business, but the big boost that gave to earnings was largely offset by the pathetically low interest rates we earned on our large holdings of cash equivalents (a condition that will not last). All figures shown below, it should be noted, *exclude* capital gains.

Year	*Operating Earnings in $ millions*	*Operating Earnings Per Share in $*	*Subsequent Compounded Growth Rate of Per-Share Earnings*
1964	.2	.15	Not meaningful (1964-2003)
1968	2.7	2.69	22.8% (1968-2003)
1973	11.9	12.18	20.8% (1973-2003)
1978	30.0	29.15	21.1% (1978-2003)
1983	48.6	45.60	24.3% (1983-2003)
1988	313.4	273.37	18.6% (1988-2003)
1993	477.8	413.19	23.9% (1993-2003)
1998	1,277.0	1,020.49	28.2% (1998-2003)
2003	5,422.0	3,531.32	

We will continue the capital allocation practices we have used in the past. If stocks become significantly cheaper than entire businesses, we will buy them aggressively. If selected bonds become attractive, as they did in 2002, we will again load up on these securities. Under *any* market or economic conditions, we will be happy to buy businesses that meet our standards. And, for those that do, the bigger the better. Our capital is underutilized now, but that will happen periodically. It's a painful condition to be in – but not as painful as doing something stupid. (I speak from experience.)

Overall, we are certain Berkshire's performance in the future will fall *far* short of what it has been in the past. Nonetheless, Charlie and I remain hopeful that we can deliver results that are modestly above average. That's what we're being paid for.

Acquisitions

As regular readers know, our acquisitions have often come about in strange ways. None, however, had a more unusual genesis than our purchase last year of Clayton Homes.

The unlikely source was a group of finance students from the University of Tennessee, and their teacher, Dr. Al Auxier. For the past five years, Al has brought his class to Omaha, where the group tours Nebraska Furniture Mart and Borsheim's, eats at Gorat's and then comes to Kiewit Plaza for a session with me. Usually about 40 students participate.

After two hours of give-and-take, the group traditionally presents me with a thank-you gift. (The doors stay locked until they do.) In past years it's been items such as a football signed by Phil Fulmer and a basketball from Tennessee's famous women's team.

This past February, the group opted for a book – which, luckily for me, was the recently-published autobiography of Jim Clayton, founder of Clayton Homes. I already knew the company to be the class act of the manufactured housing industry, knowledge I acquired after earlier making the mistake of buying some distressed junk debt of Oakwood Homes, one of the industry's largest companies. At the time of that purchase, I did not understand how atrocious consumer-financing practices had become throughout most of the manufactured housing industry. But I learned: Oakwood rather promptly went bankrupt.

Manufactured housing, it should be emphasized, can deliver very good value to home purchasers. Indeed, for decades, the industry has accounted for more than 15% of the homes built in the U.S. During those years, moreover, both the quality and variety of manufactured houses consistently improved.

Progress in design and construction was not matched, however, by progress in distribution and financing. Instead, as the years went by, the industry's business model increasingly centered on the ability of both the retailer and manufacturer to unload terrible loans on naive lenders. When "securitization" then became popular in the 1990s, further distancing the supplier of funds from the lending transaction, the industry's conduct went from bad to worse. Much of its volume a few years back came from buyers who shouldn't have bought, financed by lenders who shouldn't have lent. The consequence has been huge numbers of repossessions and pitifully low recoveries on the units repossessed.

Oakwood participated fully in the insanity. But Clayton, though it could not isolate itself from industry practices, behaved considerably better than its major competitors.

Upon receiving Jim Clayton's book, I told the students how much I admired his record and they took that message back to Knoxville, home of both the University of Tennessee and Clayton Homes. Al then suggested that I call Kevin Clayton, Jim's son and the CEO, to express my views directly. As I talked with Kevin, it became clear that he was both able and a straight-shooter.

Soon thereafter, I made an offer for the business based solely on Jim's book, my evaluation of Kevin, the public financials of Clayton and what I had learned from the Oakwood experience. Clayton's board was receptive, since it understood that the large-scale financing Clayton would need in the future might be hard to get. Lenders had fled the industry and securitizations, when possible at all, carried far

more expensive and restrictive terms than was previously the case. This tightening was particularly serious for Clayton, whose earnings significantly depended on securitizations.

Today, the manufactured housing industry remains awash in problems. Delinquencies continue high, repossessed units still abound and the number of retailers has been halved. A different business model is required, one that eliminates the ability of the retailer and salesman to pocket substantial money up front by making sales financed by loans that are destined to default. Such transactions cause hardship to both buyer and lender and lead to a flood of repossessions that then undercut the sale of new units. Under a proper model – one requiring significant down payments and shorter-term loans – the industry will likely remain much smaller than it was in the 90s. But it will deliver to home buyers an asset in which they will have equity, rather than disappointment, upon resale.

In the "full circle" department, Clayton has agreed to buy the assets of Oakwood. When the transaction closes, Clayton's manufacturing capacity, geographical reach and sales outlets will be substantially increased. As a byproduct, the debt of Oakwood that we own, which we bought at a deep discount, will probably return a small profit to us.

And the students? In October, we had a surprise "graduation" ceremony in Knoxville for the 40 who sparked my interest in Clayton. I donned a mortarboard and presented each student with both a PhD (for phenomenal, hard-working dealmaker) from Berkshire and a B share. Al got an A share. If you meet some of the new Tennessee shareholders at our annual meeting, give them your thanks. And ask them if they've read any good books lately.

* * * * * * * * * * *

In early spring, Byron Trott, a Managing Director of Goldman Sachs, told me that Wal-Mart wished to sell its McLane subsidiary. McLane distributes groceries and nonfood items to convenience stores, drug stores, wholesale clubs, mass merchandisers, quick service restaurants, theaters and others. It's a good business, but one not in the mainstream of Wal-Mart's future. It's made to order, however, for us.

McLane has sales of about $23 billion, but operates on paper-thin margins – about 1% pre-tax – and will swell Berkshire's sales figures far more than our income. In the past, some retailers had shunned McLane because it was owned by their major competitor. Grady Rosier, McLane's superb CEO, has already landed some of these accounts – he was in full stride the day the deal closed – and more will come.

For several years, I have given my vote to Wal-Mart in the balloting for Fortune Magazine's "Most Admired" list. Our McLane transaction reinforced my opinion. To make the McLane deal, I had a single meeting of about two hours with Tom Schoewe, Wal-Mart's CFO, and we then shook hands. (He did, however, first call Bentonville). Twenty-nine days later Wal-Mart had its money. We did no "due diligence." We knew everything would be exactly as Wal-Mart said it would be – and it was.

I should add that Byron has now been instrumental in three Berkshire acquisitions. He understands Berkshire far better than any investment banker with whom we have talked and – it hurts me to say this – earns his fee. I'm looking forward to deal number four (as, I am sure, is he).

Taxes

On May 20, 2003, The Washington Post ran an op-ed piece by me that was critical of the Bush tax proposals. Thirteen days later, Pamela Olson, Assistant Secretary for Tax Policy at the U.S. Treasury, delivered a speech about the new tax legislation saying, "That means a certain midwestern oracle, who, it must be noted, has played the tax code like a fiddle, is still safe retaining all his earnings." I think she was talking about me.

Alas, my "fiddle playing" will not get me to Carnegie Hall – or even to a high school recital. Berkshire, on your behalf and mine, will send the Treasury $3.3 billion for tax on its 2003 income, a sum equaling 2½% of the total income tax paid by *all* U.S. corporations in fiscal 2003. (In contrast, Berkshire's market valuation is about 1% of the value of all American corporations.) Our payment will almost

certainly place us among our country's top ten taxpayers. Indeed, if only 540 taxpayers paid the amount Berkshire will pay, no other individual or corporation would have to pay *anything* to Uncle Sam. That's right: 290 million Americans and all other businesses would not have to pay a dime in income, social security, excise or estate taxes to the federal government. (Here's the math: Federal tax receipts, including social security receipts, in fiscal 2003 totaled $1.782 trillion and 540 "Berkshires," each paying $3.3 billion, would deliver the same $1.782 trillion.)

Our federal tax return for 2002 (2003 is not finalized), when we paid $1.75 billion, covered a mere 8,905 pages. As is required, we dutifully filed two copies of this return, creating a pile of paper seven feet tall. At World Headquarters, our small band of 15.8, though exhausted, momentarily flushed with pride: Berkshire, we felt, was surely pulling its share of our country's fiscal load.

But Ms. Olson sees things otherwise. And if that means Charlie and I need to try harder, we are ready to do so.

I do wish, however, that Ms. Olson would give me *some* credit for the progress I've already made. In 1944, I filed my first 1040, reporting my income as a thirteen-year-old newspaper carrier. The return covered three pages. After I claimed the appropriate business deductions, such as $35 for a bicycle, my tax bill was $7. I sent my check to the Treasury and it – without comment – promptly cashed it. We lived in peace.

* * * * * * * * * * * *

I can understand why the Treasury is now frustrated with Corporate America and prone to outbursts. But it should look to Congress and the Administration for redress, not to Berkshire.

Corporate income taxes in fiscal 2003 accounted for 7.4% of all federal tax receipts, down from a post-war peak of 32% in 1952. With one exception (1983), last year's percentage is the lowest recorded since data was first published in 1934.

Even so, tax breaks for corporations (and their investors, particularly large ones) were a major part of the Administration's 2002 and 2003 initiatives. If class warfare is being waged in America, my class is clearly winning. Today, many large corporations – run by CEOs whose fiddle-playing talents make your Chairman look like he is all thumbs – pay nothing close to the stated federal tax rate of 35%.

In 1985, Berkshire paid $132 million in federal income taxes, and all corporations paid $61 billion. The comparable amounts in 1995 were $286 million and $157 billion respectively. And, as mentioned, we will pay about $3.3 billion for 2003, a year when all corporations paid $132 billion. We hope our taxes continue to rise in the future – it will mean we are prospering – but we also hope that the rest of Corporate America antes up along with us. This might be a project for Ms. Olson to work on.

Corporate Governance

In judging whether Corporate America is serious about reforming itself, CEO pay remains the acid test. To date, the results aren't encouraging. A few CEOs, such as Jeff Immelt of General Electric, have led the way in initiating programs that are fair to managers and shareholders alike. Generally, however, his example has been more admired than followed.

It's understandable how pay got out of hand. When management hires employees, or when companies bargain with a vendor, the intensity of interest is equal on both sides of the table. One party's gain is the other party's loss, and the money involved has real meaning to both. The result is an honest-to-God negotiation.

But when CEOs (or their representatives) have met with compensation committees, too often one side – the CEO's – has cared far more than the other about what bargain is struck. A CEO, for example, will always regard the difference between receiving options for 100,000 shares or for 500,000 as monumental. To a comp committee, however, the difference may seem unimportant – particularly if, as

has been the case at most companies, neither grant will have any effect on reported earnings. Under these conditions, the negotiation often has a "play-money" quality.

Overreaching by CEOs greatly accelerated in the 1990s as compensation packages gained by the most avaricious– a title for which there was vigorous competition – were promptly replicated elsewhere. The couriers for this epidemic of greed were usually consultants and human relations departments, which had no trouble perceiving who buttered their bread. As one compensation consultant commented: "There are two classes of clients you don't want to offend – actual and potential."

In proposals for reforming this malfunctioning system, the cry has been for "independent" directors. But the question of what truly motivates independence has largely been neglected.

In last year's report, I took a look at how "independent" directors – as defined by statute – had performed in the mutual fund field. The Investment Company Act of 1940 mandated such directors, and that means we've had an extended test of what statutory standards produce. In our examination last year, we looked at the record of fund directors in respect to the two key tasks board members should perform – whether at a mutual fund business or any other. These two all-important functions are, first, to obtain (or retain) an able and honest manager and then to compensate that manager fairly.

Our survey was not encouraging. Year after year, at literally thousands of funds, directors had routinely rehired the incumbent management company, however pathetic its performance had been. Just as routinely, the directors had mindlessly approved fees that in many cases far exceeded those that could have been negotiated. Then, when a management company was sold – invariably at a huge price relative to tangible assets – the directors experienced a "counter-revelation" and immediately signed on with the new manager and accepted its fee schedule. In effect, the directors decided that whoever would pay the most for the old management company was the party that should manage the shareholders' money in the future.

Despite the lapdog behavior of independent fund directors, we did not conclude that they are bad people. They're not. But sadly, "boardroom atmosphere" almost invariably sedates their fiduciary genes.

On May 22, 2003, not long after Berkshire's report appeared, the Chairman of the Investment Company Institute addressed its membership about "The State of our Industry." Responding to those who have "weighed in about our perceived failings," he mused, "It makes me wonder what life would be like if we'd actually done something wrong."

Be careful what you wish for.

Within a few months, the world began to learn that many fund-management companies had followed policies that hurt the owners of the funds they managed, while simultaneously boosting the fees of the managers. Prior to their transgressions, it should be noted, these management companies were earning profit margins and returns on tangible equity that were the envy of Corporate America. Yet to swell profits further, they trampled on the interests of fund shareholders in an appalling manner.

So what are the directors of these looted funds doing? As I write this, I have seen none that have terminated the contract of the offending management company (though naturally that entity has often fired some of its employees). Can you imagine directors who had been personally defrauded taking such a boys-will-be-boys attitude?

To top it all off, at least one miscreant management company has put itself up for sale, undoubtedly hoping to receive a huge sum for "delivering" the mutual funds it has managed to the highest bidder among other managers. This is a travesty. Why in the world don't the directors of those funds simply select whomever they think is best among the bidding organizations and sign up with that party directly? The winner would consequently be spared a huge "payoff" to the former manager who, having flouted the principles of stewardship, deserves not a dime. Not having to bear that acquisition cost, the winner could surely manage the funds in question for a far lower ongoing fee than would otherwise have been the case. Any truly independent director should insist on this approach to obtaining a new manager.

The reality is that neither the decades-old rules regulating investment company directors nor the new rules bearing down on Corporate America foster the election of truly independent directors. In both instances, an individual who is receiving 100% of his income from director fees – and who may wish to enhance his income through election to other boards – is deemed independent. That is nonsense. The same rules say that Berkshire director and lawyer Ron Olson, who receives from us perhaps 3% of his very large income, does not qualify as independent because that 3% comes from legal fees Berkshire pays his firm rather than from fees he earns as a Berkshire director. Rest assured, 3% from any source would not torpedo Ron's independence. But getting 20%, 30% or 50% of their income from director fees might well temper the independence of many individuals, particularly if their overall income is not large. Indeed, I think it's clear that at mutual funds, it has.

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Let me make a small suggestion to "independent" mutual fund directors. Why not simply affirm in each annual report that "(1) We have looked at other management companies and believe the one we have retained for the upcoming year is among the better operations in the field; and (2) we have negotiated a fee with our managers comparable to what other clients with equivalent funds would negotiate."

It does not seem unreasonable for shareholders to expect fund directors – who are often receiving fees that exceed $100,000 annually – to declare themselves on these points. Certainly these directors would satisfy themselves on both matters were they handing over a large chunk of their own money to the manager. If directors are unwilling to make these two declarations, shareholders should heed the maxim "If you don't know whose side someone is on, he's probably not on yours."

Finally, a disclaimer. A great many funds have been run well and conscientiously despite the opportunities for malfeasance that exist. The shareholders of these funds have benefited, and their managers have earned their pay. Indeed, if I were a director of certain funds, including some that charge above-average fees, I would enthusiastically make the two declarations I have suggested. Additionally, those index funds that are very low-cost (such as Vanguard's) are investor-friendly by definition and are the best selection for most of those who wish to own equities.

I am on my soapbox now only because the blatant wrongdoing that has occurred has betrayed the trust of so many millions of shareholders. Hundreds of industry insiders had to know what was going on, yet none publicly said a word. It took Eliot Spitzer, and the whistleblowers who aided him, to initiate a housecleaning. We urge fund directors to continue the job. Like directors throughout Corporate America, these fiduciaries must now decide whether their job is to work for owners or for managers.

Berkshire Governance

True independence – meaning the willingness to challenge a forceful CEO when something is wrong or foolish – is an enormously valuable trait in a director. It is also rare. The place to look for it is among high-grade people whose interests are in line with those of rank-and-file shareholders – *and are in line in a very big way*.

We've made that search at Berkshire. We now have eleven directors and *each* of them, combined with members of their families, owns more than $4 million of Berkshire stock. Moreover, all have held major stakes in Berkshire for many years. In the case of six of the eleven, family ownership amounts to at least hundreds of millions and dates back at least three decades. All eleven directors purchased their holdings in the market just as you did; we've never passed out options or restricted shares. Charlie and I love such honest-to-God ownership. After all, who ever washes a rental car?

In addition, director fees at Berkshire are nominal (as my son, Howard, periodically reminds me). Thus, the upside from Berkshire for all eleven is proportionately the same as the upside for any Berkshire shareholder. And it always will be.

The downside for Berkshire directors is actually worse than yours because we carry *no* directors and officers liability insurance. Therefore, if something really catastrophic happens on our directors' watch, they are exposed to losses that will far exceed yours.

The bottom line for our directors: You win, they win big; you lose, they lose big. Our approach might be called owner-capitalism. We know of no better way to engender true independence. (This structure does not guarantee perfect behavior, however: I've sat on boards of companies in which Berkshire had huge stakes and remained silent as questionable proposals were rubber-stamped.)

In addition to being independent, directors should have business savvy, a shareholder orientation and a genuine interest in the company. The rarest of these qualities is business savvy – and if it is lacking, the other two are of little help. Many people who are smart, articulate and admired have no real understanding of business. That's no sin; they may shine elsewhere. But they don't belong on corporate boards. Similarly, I would be useless on a medical or scientific board (though I would likely be welcomed by a chairman who wanted to run things his way). My name would dress up the list of directors, but I wouldn't know enough to critically evaluate proposals. Moreover, to cloak my ignorance, I would keep my mouth shut (if you can imagine that). In effect, I could be replaced, without loss, by a potted plant.

Last year, as we moved to change our board, I asked for self-nominations from shareholders who believed they had the requisite qualities to be a Berkshire director. Despite the lack of either liability insurance or meaningful compensation, we received more than twenty applications. Most were good, coming from owner-oriented individuals having family holdings of Berkshire worth well over $1 million. After considering them, Charlie and I – with the concurrence of our incumbent directors – asked four shareholders who did not nominate themselves to join the board: David Gottesman, Charlotte Guyman, Don Keough and Tom Murphy. These four people are all friends of mine, and I know their strengths well. They bring an extraordinary amount of business talent to Berkshire's board.

The primary job of our directors is to select my successor, either upon my death or disability, or when I begin to lose my marbles. (David Ogilvy had it right when he said: "Develop your eccentricities when young. That way, when you get older, people won't think you are going gaga." Charlie's family and mine feel that we overreacted to David's advice.)

At our directors' meetings we cover the usual run of housekeeping matters. But the real discussion – both with me in the room and absent – centers on the strengths and weaknesses of the four internal candidates to replace me.

Our board knows that the ultimate scorecard on its performance will be determined by the record of my successor. He or she will need to maintain Berkshire's culture, allocate capital and keep a group of America's best managers happy in their jobs. This isn't the toughest task in the world – the train is already moving at a good clip down the track – and I'm totally comfortable about it being done well by any of the four candidates we have identified. I have more than 99% of my net worth in Berkshire and will be happy to have my wife or foundation (depending on the order in which she and I die) continue this concentration.

Sector Results

As managers, Charlie and I want to give our owners the financial information and commentary we would wish to receive if our roles were reversed. To do this with both clarity and reasonable brevity becomes more difficult as Berkshire's scope widens. Some of our businesses have vastly different economic characteristics from others, which means that our consolidated statements, with their jumble of figures, make useful analysis almost impossible.

On the following pages, therefore, we will present some balance sheet and earnings figures from our four major categories of businesses along with commentary about each. We particularly want you to understand the limited circumstances under which we will use debt, since typically we shun it. We will not, however, inundate you with data that has no real value in calculating Berkshire's intrinsic value. Doing so would likely obfuscate the most important facts. One warning: When analyzing Berkshire, be

sure to remember that the company should be viewed as an unfolding movie, not as a still photograph. Those who focused in the past on only the snapshot of the day sometimes reached erroneous conclusions.

Insurance

Let's start with insurance – since that's where the money is.

The fountain of funds we enjoy in our insurance operations comes from "float," which is money that doesn't belong to us but that we temporarily hold. Most of our float arises because (1) premiums are paid upfront though the service we provide – insurance protection – is delivered over a period that usually covers a year and; (2) loss events that occur today do not always result in our immediately paying claims, since it sometimes takes years for losses to be reported (think asbestos), negotiated and settled.

Float is wonderful – *if* it doesn't come at a high price. The cost of float is determined by underwriting results, meaning how losses and expenses paid compare with premiums received. The property-casualty industry as a whole regularly operates at a substantial underwriting loss, and therefore often has a cost of float that is unattractive.

Overall, our results have been good. True, we've had five terrible years in which float cost us more than 10%. But in 18 of the 37 years Berkshire has been in the insurance business, we have operated at an underwriting profit, meaning we were actually *paid* for holding money. And the quantity of this cheap money has grown far beyond what I dreamed it could when we entered the business in 1967.

	Yearend Float (in $ millions)				
Year	*GEICO*	*General Re*	*Other Reinsurance*	*Other Primary*	*Total*
1967				20	20
1977			40	131	171
1987			701	807	1,508
1997	2,917		4,014	455	7,386
1998	3,125	14,909	4,305	415	22,754
1999	3,444	15,166	6,285	403	25,298
2000	3,943	15,525	7,805	598	27,871
2001	4,251	19,310	11,262	685	35,508
2002	4,678	22,207	13,396	943	41,224
2003	5,287	23,654	13,948	1,331	44,220

Last year was a standout. Float reached record levels and it came without cost as all major segments contributed to Berkshire's $1.7 billion pre-tax underwriting profit.

Our results have been exceptional for one reason: We have truly exceptional managers. Insurers sell a non-proprietary piece of paper containing a non-proprietary promise. Anyone can copy anyone else's product. No installed base, key patents, critical real estate or natural resource position protects an insurer's competitive position. Typically, brands do not mean much either.

The critical variables, therefore, are managerial brains, discipline and integrity. Our managers have all of these attributes – in spades. Let's take a look at these all-stars and their operations.

- General Re had been Berkshire's problem child in the years following our acquisition of it in 1998. Unfortunately, it was a 400-pound child, and its negative impact on our overall performance was large.

  That's behind us: Gen Re is fixed. Thank Joe Brandon, its CEO, and his partner, Tad Montross, for that. When I wrote you last year, I thought that discipline had been restored to both underwriting and reserving, and events during 2003 solidified my view.

That does not mean we will never have setbacks. Reinsurance is a business that is certain to deliver blows from time to time. But, under Joe and Tad, this operation will be a powerful engine driving Berkshire's future profitability.

Gen Re's financial strength, unmatched among reinsurers even as we started 2003, further improved during the year. Many of the company's competitors suffered credit downgrades last year, leaving Gen Re, and its sister operation at National Indemnity, as the only AAA-rated companies among the world's major reinsurers.

When insurers purchase reinsurance, they buy only a promise – one whose validity may not be tested for decades – and there are no promises in the reinsurance world equaling those offered by Gen Re and National Indemnity. Furthermore, unlike most reinsurers, we retain virtually all of the risks we assume. Therefore, our ability to pay is not dependent on the ability or willingness of others to reimburse us. This *independent* financial strength could be enormously important when the industry experiences the mega-catastrophe it surely will.

- Regular readers of our annual reports know of Ajit Jain's incredible contributions to Berkshire's prosperity over the past 18 years. He continued to pour it on in 2003. With a staff of only 23, Ajit runs one of the world's largest reinsurance operations, specializing in mammoth and unusual risks.

  Often, these involve assuming catastrophe risks – say, the threat of a large California earthquake – of a size far greater than any other reinsurer will accept. This means Ajit's results (and Berkshire's) will be lumpy. You should, therefore, expect his operation to have an occasional horrible year. Over time, however, you can be confident of a terrific result from this one-of-a-kind manager.

  Ajit writes some very unusual policies. Last year, for example, PepsiCo promoted a drawing that offered participants a chance to win a $1 billion prize. Understandably, Pepsi wished to lay off this risk, and we were the logical party to assume it. So we wrote a $1 billion policy, retaining the risk entirely for our own account. Because the prize, if won, was payable over time, our exposure in present-value terms was $250 million. (I helpfully suggested that any winner be paid $1 a year for a billion years, but that proposal didn't fly.) The drawing was held on September 14. Ajit and I held our breath, as did the finalist in the contest, and we left happier than he. PepsiCo has renewed for a repeat contest in 2004.

- GEICO was a fine insurance company when Tony Nicely took over as CEO in 1992. Now it is a great one. During his tenure, premium volume has increased from $2.2 billion to $8.1 billion, and our share of the personal-auto market has grown from 2.1% to 5.0%. More important, GEICO has paired these gains with outstanding underwriting performance.

  (We now pause for a commercial)

  It's been 67 years since Leo Goodwin created a great business idea at GEICO, one designed to save policyholders significant money. Go to Geico.com or call 1-800-847-7536 to see what we can do for you.

  (End of commercial)

  In 2003, both the number of inquiries coming into GEICO and its closure rate on these increased significantly. As a result our preferred policyholder count grew 8.2%, and our standard and non-standard policies grew 21.4%.

  GEICO's business growth creates a never-ending need for more employees and facilities. Our most recent expansion, announced in December, is a customer service center in – I'm delighted to say – Buffalo. Stan Lipsey, the publisher of our Buffalo News, was instrumental in bringing the city and GEICO together.

The key figure in this matter, however, was Governor George Pataki. His leadership and tenacity are why Buffalo will have 2,500 new jobs when our expansion is fully rolled out. Stan, Tony, and I – along with Buffalo – thank him for his help.

- Berkshire's smaller insurers had another terrific year. This group, run by Rod Eldred, John Kizer, Tom Nerney, Don Towle and Don Wurster, increased its float by 41%, while delivering an excellent underwriting profit. These men, though operating in unexciting ways, produce truly exciting results.

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We should point out again that in any given year a company writing long-tail insurance (coverages giving rise to claims that are often settled many years after the loss-causing event takes place) can report almost any earnings that the CEO desires. Too often the industry has reported wildly inaccurate figures by misstating liabilities. Most of the mistakes have been innocent. Sometimes, however, they have been intentional, their object being to fool investors and regulators. Auditors and actuaries have usually failed to prevent both varieties of misstatement.

I have failed on occasion too, particularly in not spotting Gen Re's unwitting underreserving a few years back. Not only did that mean we reported inaccurate figures to you, but the error also resulted in our paying very substantial taxes earlier than was necessary. Aaarrrggghh. I told you last year, however, that I thought our current reserving was at appropriate levels. So far, that judgment is holding up.

Here are Berkshire's pre-tax underwriting results by segment:

	Gain (Loss) in $ millions	
	2003	*2002*
Gen Re	$ 145	$(1,393)
Ajit's business excluding retroactive contracts	1,434	980
Ajit's retroactive contracts*	(387)	(433)
GEICO	452	416
Other Primary	74	32
Total	$1,718	$ (398)

*These contracts were explained on page 10 of the 2002 annual report, available on the Internet at www.berkshirehathaway.com. In brief, this segment consists of a few jumbo policies that are likely to produce underwriting losses (which are capped) but also provide unusually large amounts of float.

Regulated Utility Businesses

Through MidAmerican Energy Holdings, we own an 80.5% (fully diluted) interest in a wide variety of utility operations. The largest are (1) Yorkshire Electricity and Northern Electric, whose 3.7 million electric customers make it the third largest distributor of electricity in the U.K.; (2) MidAmerican Energy, which serves 689,000 electric customers in Iowa and; (3) Kern River and Northern Natural pipelines, which carry 7.8% of the natural gas transported in the United States.

Berkshire has three partners, who own the remaining 19.5%: Dave Sokol and Greg Abel, the brilliant managers of the business, and Walter Scott, a long-time friend of mine who introduced me to the company. Because MidAmerican is subject to the Public Utility Holding Company Act ("PUHCA"), Berkshire's voting interest is limited to 9.9%. Walter has the controlling vote.

Our limited voting interest forces us to account for MidAmerican in our financial statements in an abbreviated manner. Instead of our fully including its assets, liabilities, revenues and expenses in our statements, we record only a one-line entry in both our balance sheet and income account. It's likely that

some day, perhaps soon, either PUHCA will be repealed or accounting rules will change. Berkshire's consolidated figures would then take in all of MidAmerican, including the substantial debt it utilizes.

The size of this debt (which is not now, nor will it be, an obligation of Berkshire) is entirely appropriate. MidAmerican's diverse and stable utility operations assure that, even under harsh economic conditions, aggregate earnings will be ample to very comfortably service all debt.

At yearend, $1.578 billion of MidAmerican's most junior debt was payable to Berkshire. This debt has allowed acquisitions to be financed without our three partners needing to increase their already substantial investments in MidAmerican. By charging 11% interest, Berkshire is compensated fairly for putting up the funds needed for purchases, while our partners are spared dilution of their equity interests.

MidAmerican also owns a significant non-utility business, Home Services of America, the second largest real estate broker in the country. Unlike our utility operations, this business is highly cyclical, but nevertheless one we view enthusiastically. We have an exceptional manager, Ron Peltier, who, through both his acquisition and operational skills, is building a brokerage powerhouse.

Last year, Home Services participated in $48.6 billion of transactions, a gain of $11.7 billion from 2002. About 23% of the increase came from four acquisitions made during the year. Through our 16 brokerage firms – all of which retain their local identities – we employ 16,343 brokers in 16 states. Home Services is almost certain to grow substantially in the next decade as we continue to acquire leading localized operations.

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Here's a tidbit for fans of free enterprise. On March 31, 1990, the day electric utilities in the U.K. were denationalized, Northern and Yorkshire had 6,800 employees in functions these companies continue today to perform. Now they employ 2,539. Yet the companies are serving about the same number of customers as when they were government owned and are distributing more electricity.

This is not, it should be noted, a triumph of deregulation. Prices and earnings continue to be regulated in a fair manner by the government, just as they should be. It is a victory, however, for those who believe that profit-motivated managers, even though they recognize that the benefits will largely flow to customers, will find efficiencies that government never will.

Here are some key figures on MidAmerican's operations:

	Earnings (in $ millions)	
	2003	*2002*
U.K. Utilities	$ 289	$ 267
Iowa	269	241
Pipelines	261	104
Home Services	113	70
Other (Net)	144	108
Earnings before corporate interest and tax	1,076	790
Corporate Interest, other than to Berkshire	(225)	(192)
Interest Payments to Berkshire	(184)	(118)
Tax	(251)	(100)
Net Earnings	$ 416	$ 380
Earnings Applicable to Berkshire*	$ 429	$ 359
Debt Owed to Others	10,296	10,286
Debt Owed to Berkshire	1,578	1,728

*Includes interest paid to Berkshire (net of related income taxes) of $118 in 2003 and $75 in 2002.

Finance and Financial Products

This sector includes a wide-ranging group of activities. Here's some commentary on the most important.

- I manage a few opportunistic strategies in AAA fixed-income securities that have been quite profitable in the last few years. These opportunities come and go – and at present, they are going. We sped their departure somewhat last year, thereby realizing 24% of the capital gains we show in the table that follows.

  Though far from foolproof, these transactions involve no credit risk and are conducted in exceptionally liquid securities. We therefore finance the positions almost entirely with borrowed money. As the assets are reduced, so also are the borrowings. The smaller portfolio we now have means that in the near future our earnings in this category will decline significantly. It was fun while it lasted, and at some point we'll get another turn at bat.

- A far less pleasant unwinding operation is taking place at Gen Re Securities, the trading and derivatives operation we inherited when we purchased General Reinsurance.

  When we began to liquidate Gen Re Securities in early 2002, it had 23,218 outstanding tickets with 884 counterparties (some having names I couldn't pronounce, much less creditworthiness I could evaluate). Since then, the unit's managers have been skillful and diligent in unwinding positions. Yet, at yearend – nearly two years later – we still had 7,580 tickets outstanding with 453 counterparties. (As the country song laments, "How can I miss you if you won't go away?")

  The shrinking of this business has been costly. We've had pre-tax losses of $173 million in 2002 and $99 million in 2003. These losses, it should be noted, came from a portfolio of contracts that – in full compliance with GAAP – had been regularly marked-to-market with standard allowances for future credit-loss and administrative costs. Moreover, our liquidation has taken place both in a benign market – we've had no credit losses of significance – and in an orderly manner. This is just the opposite of what might be expected if a financial crisis forced a number of derivatives dealers to cease operations simultaneously.

  If our derivatives experience – and the Freddie Mac shenanigans of mind-blowing size and audacity that were revealed last year – makes you suspicious of accounting in this arena, consider yourself wised up. No matter how financially sophisticated you are, you can't possibly learn from reading the disclosure documents of a derivatives-intensive company what risks lurk in its positions. Indeed, the more you know about derivatives, the less you will feel you can learn from the disclosures normally proffered you. In Darwin's words, "Ignorance more frequently begets confidence than does knowledge."

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  And now it's confession time: I'm sure I could have saved you $100 million or so, pre-tax, if I had acted more promptly to shut down Gen Re Securities. Both Charlie and I knew at the time of the General Reinsurance merger that its derivatives business was unattractive. Reported profits struck us as illusory, and we felt that the business carried sizable risks that could not effectively be measured or limited. Moreover, we knew that any major problems the operation might experience would likely correlate with troubles in the financial or insurance world that would affect Berkshire elsewhere. In other words, if the derivatives business were ever to need shoring up, it would commandeer the capital and credit of Berkshire at just the time we could otherwise deploy those resources to huge advantage. (A historical note: We had just such an experience in 1974 when we were the victim of a major insurance fraud. We could not determine for some time how much the fraud would ultimately cost us and therefore kept more funds in cash-equivalents than we normally would have.

Absent this precaution, we would have made larger purchases of stocks that were then extraordinarily cheap.)

Charlie would have moved swiftly to close down Gen Re Securities – no question about that. I, however, dithered. As a consequence, our shareholders are paying a far higher price than was necessary to exit this business.

- Though we include Gen Re's sizable life and health reinsurance business in the "insurance" sector, we show the results for Ajit Jain's life and annuity business in this section. That's because this business, in large part, involves arbitraging money. Our annuities range from a retail product sold directly on the Internet to structured settlements that require us to make payments for 70 years or more to people severely injured in accidents.

  We've realized some extra income in this business because of accelerated principal payments we received from certain fixed-income securities we had purchased at discounts. This phenomenon has ended, and earnings are therefore likely to be lower in this segment during the next few years.

- We have a $604 million investment in Value Capital, a partnership run by Mark Byrne, a member of a family that has helped Berkshire over the years in many ways. Berkshire is a limited partner in, and has no say in the management of, Mark's enterprise, which specializes in highly-hedged fixed-income opportunities. Mark is smart and honest and, along with his family, has a significant investment in Value.

  Because of accounting abuses at Enron and elsewhere, rules will soon be instituted that are likely to require that Value's assets and liabilities be consolidated on Berkshire's balance sheet. We regard this requirement as inappropriate, given that Value's liabilities – which usually are above $20 billion – are in no way ours. Over time, other investors will join us as partners in Value. When enough do, the need for us to consolidate Value will disappear.

- We have told you in the past about Berkadia, the partnership we formed three years ago with Leucadia to finance and manage the wind-down of Finova, a bankrupt lending operation. The plan was that we would supply most of the capital and Leucadia would supply most of the brains. And that's the way it has worked. Indeed, Joe Steinberg and Ian Cumming, who together run Leucadia, have done such a fine job in liquidating Finova's portfolio that the $5.6 billion guarantee we took on in connection with the transaction has been extinguished. The unfortunate byproduct of this fast payoff is that our future income will be much reduced. Overall, Berkadia has made excellent money for us, and Joe and Ian have been terrific partners.

- Our leasing businesses are XTRA (transportation equipment) and CORT (office furniture). Both operations have had poor earnings during the past two years as the recession caused demand to drop considerably more than was anticipated. They remain leaders in their fields, and I expect at least a modest improvement in their earnings this year.

- Through our Clayton purchase, we acquired a significant manufactured-housing finance operation. Clayton, like others in this business, had traditionally securitized the loans it originated. The practice relieved stress on Clayton's balance sheet, but a by-product was the "front-ending" of income (a result dictated by GAAP).

  We are in no hurry to record income, have enormous balance-sheet strength, and believe that over the long-term the economics of holding our consumer paper are superior to what we can now realize through securitization. So Clayton has begun to retain its loans.

  We believe it's appropriate to finance a soundly-selected book of interest-bearing receivables almost entirely with debt (just as a bank would). Therefore, Berkshire will borrow money to finance Clayton's portfolio and re-lend these funds to Clayton at our cost plus one percentage

point. This markup fairly compensates Berkshire for putting its exceptional creditworthiness to work, but it still delivers money to Clayton at an attractive price.

In 2003, Berkshire did $2 billion of such borrowing and re-lending, with Clayton using much of this money to fund several large purchases of portfolios from lenders exiting the business. A portion of our loans to Clayton also provided "catch-up" funding for paper it had generated earlier in the year from its own operation and had found difficult to securitize.

You may wonder why we borrow money while sitting on a mountain of cash. It's because of our "every tub on its own bottom" philosophy. We believe that any subsidiary lending money should pay an appropriate rate for the funds needed to carry its receivables and should not be subsidized by its parent. Otherwise, having a rich daddy can lead to sloppy decisions. Meanwhile, the cash we accumulate at Berkshire is destined for business acquisitions or for the purchase of securities that offer opportunities for significant profit. Clayton's loan portfolio will likely grow to at least $5 billion in not too many years and, with sensible credit standards in place, should deliver significant earnings.

For simplicity's sake, we include all of Clayton's earnings in this sector, though a sizable portion is derived from areas other than consumer finance.

	(in $ millions)			
	Pre-Tax Earnings		*Interest-bearing Liabilities*	
	2003	*2002*	*2003*	*2002*
Trading – Ordinary Income	$ 379	$ 553	$7,826	$13,762
Gen Re Securities	(99)	(173)	8,041*	10,631*
Life and annuity operation	99	83	2,331	1,568
Value Capital	31	61	18,238*	20,359*
Berkadia	101	115	525	2,175
Leasing operations	34	34	482	503
Manufactured housing finance (Clayton)	37**	—	2,032	—
Other	84	102	618	630
Income before capital gains	666	775		
Trading – Capital Gains	1,215	578	N.A.	N.A.
Total	$1,881	$1,353		

* Includes all liabilities
** From date of acquisition, August 7, 2003

Manufacturing, Service and Retailing Operations

Our activities in this category cover the waterfront. But let's look at a simplified balance sheet and earnings statement consolidating the entire group.

Balance Sheet 12/31/03 (in $ millions)

Assets		*Liabilities and Equity*	
Cash and equivalents	$ 1,250	Notes payable	$ 1,593
Accounts and notes receivable	2,796	Other current liabilities	4,300
Inventory	3,656	Total current liabilities	5,893
Other current assets	262		
Total current assets	7,964		
Goodwill and other intangibles	8,351	Deferred taxes	105
Fixed assets	5,898	Term debt and other liabilities	1,890
Other assets	1,054	Equity	15,379
	$23,267		$23,267

Earnings Statement (in $ millions)

	2003	2002
Revenues	$32,106	$16,970
Operating expenses (including depreciation of $605 in 2003 and $477 in 2002)	29,885	14,921
Interest expense (net)	64	108
Pre-tax income	2,157	1,941
Income taxes	813	743
Net income	$ 1,344	$ 1,198

This eclectic group, which sells products ranging from Dilly Bars to B-737s, earned a hefty 20.7% on average tangible net worth last year. However, we purchased these businesses at substantial premiums to net worth – that fact is reflected in the goodwill item shown on the balance sheet – and that reduces the earnings on our average *carrying* value to 9.2%.

Here are the pre-tax earnings for the larger categories or units.

	Pre-Tax Earnings (in $ millions)	
	2003	2002
Building Products	$ 559	$ 516
Shaw Industries	436	424
Apparel	289	229
Retail Operations	224	219
Flight Services	72	225
McLane *	150	—
Other businesses	427	328
	$2,157	$1,941

* From date of acquisition, May 23, 2003.

- Three of our building-materials businesses – Acme Brick, Benjamin Moore and MiTek – had record operating earnings last year. And earnings at Johns Manville, the fourth, were trending upward at yearend. Collectively, these companies earned 21.0% on tangible net worth.

- Shaw Industries, the world's largest manufacturer of broadloom carpet, also had a record year. Led by Bob Shaw, who built this huge enterprise from a standing start, the company will likely set another earnings record in 2004. In November, Shaw acquired various carpet operations from Dixie Group, which should add about $240 million to sales this year, boosting Shaw's volume to nearly $5 billion.

- Within the apparel group, Fruit of the Loom is our largest operation. Fruit has three major assets: a 148-year-old universally-recognized brand, a low-cost manufacturing operation, and John Holland, its CEO. In 2003, Fruit accounted for 42.3% of the men's and boys' underwear that was sold by mass marketers (Wal-Mart, Target, K-Mart, etc.) and increased its share of the women's and girls' business in that channel to 13.9%, up from 11.3% in 2002.

- In retailing, our furniture group earned $106 million pre-tax, our jewelers $59 million and See's, which is both a manufacturer and retailer, $59 million.

  Both R.C. Willey and Nebraska Furniture Mart ("NFM") opened hugely successful stores last year, Willey in Las Vegas and NFM in Kansas City, Kansas. Indeed, we believe the Kansas City store is the country's largest-volume home-furnishings store. (Our Omaha operation, while located on a single plot of land, consists of three units.)

NFM was founded by Rose Blumkin ("Mrs. B") in 1937 with $500. She worked until she was 103 (hmmm . . . not a bad idea). One piece of wisdom she imparted to the generations following her was, "If you have the lowest price, customers will find you at the bottom of a river." Our store serving greater Kansas City, which is located in one of the area's more sparsely populated parts, has proved Mrs. B's point. Though we have more than 25 acres of parking, the lot has at times overflowed.

"Victory," President Kennedy told us after the Bay of Pigs disaster, "has a thousand fathers, but defeat is an orphan." At NFM, we knew we had a winner a month after the boffo opening in Kansas City, when our new store attracted an unexpected paternity claim. A speaker there, referring to the Blumkin family, asserted, "They had enough confidence and the policies of the Administration were working such that they were able to provide work for 1,000 of our fellow citizens." The proud papa at the podium? President George W. Bush.

- In flight services, FlightSafety, our training operation, experienced a drop in "normal" operating earnings from $183 million to $150 million. (The abnormals: In 2002 we had a $60 million pre-tax gain from the sale of a partnership interest to Boeing, and in 2003 we recognized a $37 million loss stemming from the premature obsolescence of simulators.) The corporate aviation business has slowed significantly in the past few years, and this fact has hurt FlightSafety's results. The company continues, however, to be far and away the leader in its field. Its simulators have an original cost of $1.2 billion, which is more than triple the cost of those operated by our closest competitor.

  NetJets, our fractional-ownership operation lost $41 million pre-tax in 2003. The company had a modest operating profit in the U.S., but this was more than offset by a $32 million loss on aircraft inventory and by continued losses in Europe.

  NetJets continues to dominate the fractional-ownership field, and its lead is increasing: Prospects overwhelmingly turn to us rather than to our three major competitors. Last year, among the four of us, we accounted for 70% of net sales (measured by value).

  An example of what sets NetJets apart from competitors is our Mayo Clinic Executive Travel Response program, a free benefit enjoyed by all of our owners. On land or in the air, anywhere in the world and at any hour of any day, our owners and their families have an immediate link to Mayo. Should an emergency occur while they are traveling here or abroad, Mayo will instantly direct them to an appropriate doctor or hospital. Any baseline data about the patient that Mayo possesses is simultaneously made available to the treating physician. Many owners have already found this service invaluable, including one who needed emergency brain surgery in Eastern Europe.

  The $32 million inventory write-down we took in 2003 occurred because of falling prices for used aircraft early in the year. Specifically, we bought back fractions from withdrawing owners at prevailing prices, and these fell in value before we were able to remarket them. Prices are now stable.

  The European loss is painful. But any company that forsakes Europe, as all of our competitors have done, is destined for second-tier status. Many of our U.S. owners fly extensively in Europe and want the safety and security assured by a NetJets plane and pilots. Despite a slow start, furthermore, we are now adding European customers at a good pace. During the years 2001 through 2003, we had gains of 88%, 61% and 77% in European management-and-flying revenues. We have not, however, yet succeeded in stemming the flow of red ink.

  Rich Santulli, NetJets' extraordinary CEO, and I expect our European loss to diminish in 2004 and also anticipate that it will be more than offset by U.S. profits. Overwhelmingly, our owners love the NetJets experience. Once a customer has tried us, going back to commercial aviation is like going back to holding hands. NetJets will become a very big business over time and will be one in which we are preeminent in both customer satisfaction and profits. Rich will see to that.

Investments

The table that follows shows our common stock investments. Those that had a market value of more than $500 million at the end of 2003 are itemized.

Shares	*Company*	*Percentage of Company Owned*	*12/31/03 Cost*	*Market*
			(in $ millions)	
151,610,700	American Express Company	11.8	$ 1,470	$ 7,312
200,000,000	The Coca-Cola Company	8.2	1,299	10,150
96,000,000	The Gillette Company	9.5	600	3,526
14,610,900	H&R Block, Inc.	8.2	227	809
15,476,500	HCA Inc.	3.1	492	665
6,708,760	M&T Bank Corporation	5.6	103	659
24,000,000	Moody's Corporation	16.1	499	1,453
2,338,961,000	PetroChina Company Limited	1.3	488	1,340
1,727,765	The Washington Post Company	18.1	11	1,367
56,448,380	Wells Fargo & Company	3.3	463	3,324
	Others		2,863	4,682
	Total Common Stocks		$ 8,515	$35,287

We bought some Wells Fargo shares last year. Otherwise, among our six largest holdings, we last changed our position in Coca-Cola in 1994, American Express in 1998, Gillette in 1989, Washington Post in 1973, and Moody's in 2000. Brokers don't love us.

We are neither enthusiastic nor negative about the portfolio we hold. We own pieces of excellent businesses – all of which had good gains in intrinsic value last year – but their current prices reflect their excellence. The unpleasant corollary to this conclusion is that I made a big mistake in not selling several of our larger holdings during The Great Bubble. If these stocks are fully priced now, you may wonder what I was thinking four years ago when their intrinsic value was lower and their prices far higher. So do I.

In 2002, junk bonds became very cheap, and we purchased about $8 billion of these. The pendulum swung quickly though, and this sector now looks decidedly unattractive to us. Yesterday's weeds are today being priced as flowers.

We've repeatedly emphasized that realized gains at Berkshire are meaningless for analytical purposes. We have a huge amount of unrealized gains on our books, and our thinking about when, and if, to cash them depends not at all on a desire to report earnings at one specific time or another. Nevertheless, to see the diversity of our investment activities, you may be interested in the following table, categorizing the gains we reported during 2003:

Category	*Pre-Tax Gain (in $ million)*
Common Stocks	$ 448
U.S. Government Bonds	1,485
Junk Bonds	1,138
Foreign Exchange Contracts	825
Other	233
	$4,129

The common stock profits occurred around the edges of our portfolio – not, as we already mentioned, from our selling down our major positions. The profits in governments arose from our

liquidation of long-term strips (the most volatile of government securities) and from certain strategies I follow within our finance and financial products division. We retained most of our junk portfolio, selling only a few issues. Calls and maturing bonds accounted for the rest of the gains in the junk category.

During 2002 we entered the foreign currency market for the first time in my life, and in 2003 we enlarged our position, as I became increasingly bearish on the dollar. I should note that the cemetery for seers has a huge section set aside for macro forecasters. We have in fact made few macro forecasts at Berkshire, and we have seldom seen others make them with sustained success.

We have – and will continue to have – the bulk of Berkshire's net worth in U.S. assets. But in recent years our country's trade deficit has been force-feeding huge amounts of claims on, and ownership in, America to the rest of the world. For a time, foreign appetite for these assets readily absorbed the supply. Late in 2002, however, the world started choking on this diet, and the dollar's value began to slide against major currencies. Even so, prevailing exchange rates will not lead to a material letup in our trade deficit. So whether foreign investors like it or not, they will continue to be flooded with dollars. The consequences of this are anybody's guess. They could, however, be troublesome – and reach, in fact, well beyond currency markets.

As an American, I hope there is a benign ending to this problem. I myself suggested one possible solution – which, incidentally, leaves Charlie cold – in a November 10, 2003 article in Fortune Magazine. Then again, perhaps the alarms I have raised will prove needless: Our country's dynamism and resiliency have repeatedly made fools of naysayers. But Berkshire holds many billions of cash-equivalents denominated in dollars. So I feel more comfortable owning foreign-exchange contracts that are at least a partial offset to that position.

These contracts are subject to accounting rules that require changes in their value to be contemporaneously included in capital gains or losses, even though the contracts have not been closed. We show these changes each quarter in the Finance and Financial Products segment of our earnings statement. At yearend, our open foreign exchange contracts totaled about $12 billion at market values and were spread among five currencies. Also, when we were purchasing junk bonds in 2002, we tried when possible to buy issues denominated in Euros. Today, we own about $1 billion of these.

When we can't find anything exciting in which to invest, our "default" position is U.S. Treasuries, both bills and repos. No matter how low the yields on these instruments go, we never "reach" for a little more income by dropping our credit standards or by extending maturities. Charlie and I detest taking even small risks unless we feel we are being adequately compensated for doing so. About as far as we will go down that path is to occasionally eat cottage cheese a day after the expiration date on the carton.

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A 2003 book that investors can learn much from is *Bull!* by Maggie Mahar. Two other books I'd recommend are *The Smartest Guys in the Room* by Bethany McLean and Peter Elkind, and *In an Uncertain World* by Bob Rubin. All three are well-reported and well-written. Additionally, Jason Zweig last year did a first-class job in revising *The Intelligent Investor*, my favorite book on investing.

Designated Gifts Program

From 1981 through 2002, Berkshire administered a program whereby shareholders could direct Berkshire to make gifts to their favorite charitable organizations. Over the years we disbursed $197 million pursuant to this program. Churches were the most frequently named designees, and many thousands of other organizations benefited as well. We were the only major public company that offered such a program to shareholders, and Charlie and I were proud of it.

We reluctantly terminated the program in 2003 because of controversy over the abortion issue. Over the years numerous organizations on both sides of this issue had been designated by our shareholders to receive contributions. As a result, we regularly received some objections to the gifts designated for pro-choice operations. A few of these came from people and organizations that proceeded to boycott products

of our subsidiaries. That did not concern us. We refused all requests to limit the right of our owners to make whatever gifts they chose (as long as the recipients had 501(c)(3) status).

In 2003, however, many *independent* associates of The Pampered Chef began to feel the boycotts. This development meant that people who trusted us – but who were neither employees of ours nor had a voice in Berkshire decision-making – suffered serious losses of income.

For our shareholders, there was some modest tax efficiency in Berkshire doing the giving rather than their making their gifts directly. Additionally, the program was consistent with our "partnership" approach, the first principle set forth in our Owner's Manual. But these advantages paled when they were measured against damage done loyal associates who had with great personal effort built businesses of their own. Indeed, Charlie and I see nothing charitable in harming decent, hard-working people just so we and other shareholders can gain some minor tax efficiencies.

Berkshire now makes no contributions at the parent company level. Our various subsidiaries follow philanthropic policies consistent with their practices prior to their acquisition by Berkshire, except that any personal contributions that former owners had earlier made from their corporate pocketbook are now funded by them personally.

The Annual Meeting

Last year, I asked you to vote as to whether you wished our annual meeting to be held on Saturday or Monday. I was hoping for Monday. Saturday won by 2 to 1. It will be a while before shareholder democracy resurfaces at Berkshire.

But you have spoken, and we will hold this year's annual meeting on Saturday, May 1 at the new Qwest Center in downtown Omaha. The Qwest offers us 194,000 square feet for exhibition by our subsidiaries (up from 65,000 square feet last year) and much more seating capacity as well. The Qwest's doors will open at 7 a.m., the movie will begin at 8:30, and the meeting itself will commence at 9:30. There will be a short break at noon for food. (Sandwiches will be available at the Qwest's concession stands.) That interlude aside, Charlie and I will answer questions until 3:30. We will tell you everything we know . . . and, at least in my case, more.

An attachment to the proxy material that is enclosed with this report explains how you can obtain the credential you will need for admission to the meeting and other events. As for plane, hotel and car reservations, we have again signed up American Express (800-799-6634) to give you special help. They do a terrific job for us each year, and I thank them for it.

In our usual fashion, we will run vans from the larger hotels to the meeting. Afterwards, the vans will make trips back to the hotels and to Nebraska Furniture Mart, Borsheim's and the airport. Even so, you are likely to find a car useful.

Our exhibition of Berkshire goods and services will blow you away this year. On the floor, for example, will be a 1,600 square foot Clayton home (featuring Acme brick, Shaw carpet, Johns-Manville insulation, MiTek fasteners, Carefree awnings, and outfitted with NFM furniture). You'll find it a far cry from the mobile-home stereotype of a few decades ago.

GEICO will have a booth staffed by a number of its top counselors from around the country, all of them ready to supply you with auto insurance quotes. In most cases, GEICO will be able to give you a special shareholder discount (usually 8%). This special offer is permitted by 41 of the 49 jurisdictions in which we operate. Bring the details of your existing insurance and check out whether we can save you money.

On Saturday, at the Omaha airport, we will have the usual array of aircraft from NetJets® available for your inspection. Stop by the NetJets booth at the Qwest to learn about viewing these planes. If you buy what we consider an appropriate number of items during the weekend, you may well need your own plane to take them home.

At Nebraska Furniture Mart, located on a 77-acre site on 72nd Street between Dodge and Pacific, we will again be having "Berkshire Weekend" pricing, which means we will be offering our shareholders a discount that is customarily given only to employees. We initiated this special pricing at NFM seven years ago, and sales during the "Weekend" grew from $5.3 million in 1997 to $17.3 million in 2003. Every year has set a new record.

To get the discount, you must make your purchases between Thursday, April 29 and Monday, May 3 inclusive, and also present your meeting credential. The period's special pricing will even apply to the products of several prestigious manufacturers that normally have ironclad rules against discounting but that, in the spirit of our shareholder weekend, have made an exception for you. We appreciate their cooperation. NFM is open from 10 a.m. to 9 p.m. Monday through Saturday, and 10 a.m. to 6 p.m. on Sunday. On Saturday this year, from 5:30 p.m. to 8 p.m., we are having a special affair for shareholders only. I'll be there, eating barbeque and drinking Coke.

Borsheim's — the largest jewelry store in the country except for Tiffany's Manhattan store — will have two shareholder-only events. The first will be a cocktail reception from 6 p.m. to 10 p.m. on Friday, April 30. The second, the main gala, will be from 9 a.m. to 4 p.m. on Sunday, May 2. Ask Charlie to autograph your *sales ticket*.

Shareholder prices will be available Thursday through Monday, so if you wish to avoid the large crowds that will assemble on Friday evening and Sunday, come at other times and identify yourself as a shareholder. On Saturday, we will be open until 6 p.m. Borsheim's operates on a gross margin that is fully twenty percentage points below that of its major rivals, so the more you buy, the more you save – at least that's what my wife and daughter tell me. (Both were impressed early in life by the story of the boy who, after missing a street car, walked home and proudly announced that he had saved 5¢ by doing so. His father was irate: "Why didn't you miss a cab and save 85¢?")

In the mall outside of Borsheim's, we will have Bob Hamman and Sharon Osberg, two of the world's top bridge experts, available to play with our shareholders on Sunday afternoon. Additionally, Patrick Wolff, twice U.S. chess champion, will be in the mall, taking on all comers — blindfolded! I've watched, and he doesn't peek.

Gorat's — my favorite steakhouse — will again be open exclusively for Berkshire shareholders on Sunday, May 2, and will be serving from 4 p.m. until 10 p.m. Please remember that to come to Gorat's on Sunday, you must have a reservation. To make one, call 402-551-3733 on April 1 (*but not before*). If Sunday is sold out, try Gorat's on one of the other evenings you will be in town. Flaunt your mastery of fine dining by ordering, as I do, a rare T-bone with a double order of hash browns.

We will have a special reception on Saturday afternoon from 4:00 to 5:00 for shareholders who come from outside of North America. Every year our meeting draws many people from around the globe, and Charlie and I want to be sure we personally meet those who have come so far. Any shareholder who comes from other than the U.S. or Canada will be given special credentials and instructions for attending this function.

Charlie and I have a great time at the annual meeting. And you will, too. So join us at the Qwest for our annual Woodstock for Capitalists.

Warren E. Buffett
February 27, 2004 Chairman of the Board

Morning Session - 2004 Meeting

1. Welcome

WARREN BUFFETT: (Applause) Thank you.

Good morning. Some of you may have noticed a stunt man was used in that [video shown before the meeting]. (Laughter)

Arnold [Schwarzenegger] just couldn't handle some of those scenes. (Laughter)

Before we get started, I'd especially like to thank Andy Heyward, who's here today and if we can — I don't know whether we can find him out in the crowd, it's a little hard to see from up here.

But Andy runs DiC Productions. He does that cartoon for us and let's give him a big hand. (Applause)

Andy has produced a really extraordinary series telling the story of the beginning of this country called "Liberty's Kids." It's been on public broadcasting the last couple of years. It's great for kids but it's great for adults, too. I've watched a number of sessions myself.

And this summer, in July, it will go on sale at Walmart, a very special celebration. And for those of you who want to pick out something good for your children or your grandchildren, I can't think of a better series to have them watching. And thanks again Andy.

And thanks also to Kelly Muchemore who puts this whole production on. (Applause)

This is Kelly's show.

She, along with that dog Dudley, who you saw in the movie — Dudley is a regular at Berkshire Hathaway. We don't count him in the 15.8 [employees at headquarters], but she, along with Dudley, handle everything. I don't even give a thought to what's going to happen here, as might become evident during the meeting. (Laughter)

She is responsible for putting up that whole exhibition arrangement and really the whole thing. So, Kelly, I don't know where you are exactly, but in any event, thank you very much. (Applause)

2. Formal business meeting begins

WARREN BUFFETT: Now, we'll go through the business part of the meeting. And it may take a little longer than usual, but please be patient.

And I'd like to start out by calling the meeting to order. I'm Warren Buffett, chairman of the board of Berkshire Hathaway, and I welcome you to this meeting.

This hyperkinetic fellow next to me is Charlie Munger — (laughter) — the vice chairman. And we will have a good time, and I hope you do, too.

We work together because he can hear and I can see. I mean, it's — (laughter) — there are times where we can't remember each other's name, but we have a lot of fun together.

Now, any shareholder who wishes to speak regarding the shareholder proposal expected to be presented by Human Life International, or any other matters germane to the shareholder's meeting, should now go to microphone zone 1, which is in section 121 over on my right.

Or section 2, which is at section 221, I believe that's higher up on my right. And — let me see if I have that right. Yeah, or go to section 7, which is — or section 105 — which is microphone 7 on my left. Or to section 205, which is microphone 8.

If you'll go to — if you're going to want to talk about anything concerning the business of the meeting, not the questions afterwards, but just that relates to the matters germane to the meeting, please go there now, because I'm not going to be able to spot people in a crowd this size.

And when it comes time to do the business, we're going to ask anybody that cares to speak up on the business to be at those microphones. And that will be in just a couple of minutes.

Now after adjournment of the business meeting, I'll respond to questions that you may have that relate to the businesses of Berkshire but that don't call for any action at the meeting.

We had some complaints after last year that some people were asking six or seven-part questions. At least, that's the reason I'm giving that we're eliminating those.

The bigger reason is Charlie and I can't remember the first part by the time you get to the fifth part. (Laughter)

So, we are asking you to ask only one question. And don't try to get too clever about working three or four into a single question. And that will give more people a chance to get their questions asked. Only one question at a time and we will go around from microphone to microphone and get as many in as we can.

Now, we're going to do this until noon and then we'll take a break for lunch and we'll come back about one and we'll continue until 3:30. And anything goes on the questions. We'll answer almost anything, except questions about what we may be buying or selling.

You're free, of course, to wander around, go over and buy things. You know, we have a lot of things for sale over there.

It's — as I've pointed out in the past, it's better form to leave while Charlie is speaking than when I'm speaking, but you can — (laughter) — use your own judgment on that.

Now, I do want to remind you that any audio or video recording of this meeting is prohibited. That if anybody's seen recording the proceedings, we will have to ask you to leave. So, if you see anybody doing that, we would appreciate it if you would just inform one of the staff personnel around.

Because there's certain copyrighted material that we use and people, like Judge Judy, give us permission to use a segment like that. But it's not intended to be used in any commercial way. So, we do ask that no recording take place.

3. Directors introduced

WARREN BUFFETT: Now, I'll first introduce the Berkshire Hathaway directors that are present, in addition to myself and Charlie. Now, I'll ask the directors to stand as their names are read and ask that you withhold applause, if any — (laughter) — until all are introduced.

We have — I don't know whether we have anybody here from CalPERS, but they can register their own views as we go along. (Laughter)

And it is difficult to see from here, so if you'll just stand as I mention your name and remain standing until the end, when we will see whether you get any applause.

Susan T. Buffett. Howard G. Buffett. Malcolm G. Chace. David S. Gottesman — Sandy had a conflict today. There's a bat mitzvah, I believe, for a granddaughter, so he's coming in tomorrow for our director's meeting on Monday.

Charlotte Guyman. Donald R. Keough. Thomas S. Murphy. Ronald L. Olson, and Walter Scott Jr. And now you can go crazy. (Applause)

4. Four questions for the auditors

WARREN BUFFETT: Also with us today are partners in the firm of Deloitte & Touche, our auditors. They are available to respond to appropriate questions you might have concerning their firm's audit of the accounts of Berkshire.

In that regard, I wish to report that at Berkshire's audit committee meeting held on March 2nd, 2004, Deloitte & Touche responded to the four questions I suggested be asked to the independent accountants by all audit committees. And we're going to put these up in just a second.

With respect to Berkshire, the questions and the auditors' responses will be shown on the following slides.

And I might mention that I really do think these questions should be asked of all auditors, at least annually, perhaps even quarterly.

And I really think that, if such a procedure had been followed over the years — don't eat them all Charlie. (Laughter)

If such procedures had been followed over the years, there would have been a lot less trouble in corporate America.

I mean, for many years, particularly in the '90s, I think there was a weakening, frankly, in auditor vigilance. And the trick, as I've said, is really to have the auditors more worried about the audit committee than they are worried about the management.

And it's quite natural when they're, essentially, hired by the management and when they see the management regularly and they only see the audit committee infrequently, that it's tempting to listen a little bit more to management than the audit committee.

But these questions, if asked, in my view — and if the answers are put on the record — I think it would have a very helpful effect on behavior. Because once on the record, it means the auditors — it means they're on the line.

And I've been on a lot of boards of directors and I've seen, in retrospect, things go by that I wish had been called to my attention by the auditors.

So we have these four questions. And if we'll put up the first one — and I'd like to explain one item. Do we have those up? Yeah.

You can read the question and these are the responses, as we go along, that the auditors have given to these questions.

Now you'll notice on the first one that there is one item that — and incidentally, we owe a shareholder, who I think is going to speak later — it was his suggestion that we actually present these at the meeting. And I think it's a good suggestion. And I think if more companies did it, it would be a good idea. So I thank him for the suggestion.

The major item, which is not material, as auditors define it, but the major item in which we disagree and use a method which I will explain further — actually, it's been changed — but concerns the purchase of life insurance policies, or the reinsurance of people who are purchasing life insurance policies, their so-called viatical settlements.

And we have had a business, of sorts, in that. And it's likely to even be a larger business in the future.

And what takes place there is that somebody, usually elderly, has a life insurance policy and they'd rather have the money themselves than have their heirs get it later on. So, they want to cash out early.

And as you know, a life insurance policy typically has a cash surrender value. And sometimes those cash surrender values are quite low in relation to the actuarial value of the policy. So sometimes those people wish to sell a policy.

We had a case the other day where a 79-year-old woman had an insurance policy amounting to some $75 million. I've never met her, but she must be quite a woman, but — (Laughter)

The cash surrender value of that policy was $2 million. Clearly, for even a 79-year-old in the best of health, that was an inadequate sum for her to receive. But yet she wished to have the cash herself rather than eventually die and leave it to her heirs.

So, we paid — or we actually reinsured a transaction where somebody else did it, and we took only 50 percent of it, but I'm going to use a hundred percent figures.

We reinsured — we bought that policy for $10 million. And under accounting rules — GAAP accounting — we — it is recommended that we write that policy down immediately to the cash surrender value of 2 million. Well obviously, we think it's worth 10 million or we wouldn't have paid 10 million for it today.

But the rules, as they become more clear, say write it down immediately. I happen to think that rule is wrong. But last year, at the end of the year, there had been a total of $73 million applicable to such policies that reflected our purchase price as opposed to the cash surrender value.

In the first quarter of 2004, our activity has stepped up in this field some — the people we reinsure have stepped up their activities, so we get our 50 percent. And that amounts to — it's going to amount in the first quarter to about 30 million.

So, we have adopted — even though we think it's in incorrect — we have adopted the GAAP accounting. And you will see in the first quarter report of Berkshire the charge for the 73 million of last year plus the 30 million in the first quarter this year.

And that gets charged, believe it or not, to realized capital gains. And so, by buying these policies for X on one day and immediately writing them down substantially, that becomes a realized capital loss on our book. Now later on, we expect to get a perfectly satisfactory return from these policies. But that is the main item that is referred to in the auditor's answer on question one.

Now, if we'll go to number 2. You have time to read that.

I like the idea of this question being asked. I've read many reports where the footnotes are such that even if I reread them several times, I still don't know what's happened. And we try to write everything in plain English at Berkshire, and we try to explain things within the body of the letter that might give people the wrong impression if they simply looked at the figures, or that they might not be able to discern.

Because Berkshire's gotten so large that we — there are all kinds of things that are lumped together in the consolidated statements, that I think it's more helpful if we look at separately.

We're going to work at — annually — at trying to disaggregate numbers and information in a way that makes it most useful without turning out something as long as the World Book.

Third item is very simple.

And the fourth item relates to something that became very prevalent in corporate America in the 1990s, which was moving around numbers from one quarter to another or moving them for one year to another.

And I have seen a lot of that. It's deceptive. I like the statement that the two fellows at Google made the other day where they essentially said that if numbers are lumpy or peculiar when they get to them, they're going to be lumpy or peculiar when they get to the public.

And if there's some reason that requires explanation as to why they're lumpy, that the management should explain them. But the one thing they shouldn't do is start playing games from quarter to quarter or year to year in terms of moving numbers around.

And that became very fashionable. I hope it's on the way to being moderated and we will continue to — each year, we will give you these questions at the meeting and we will report on the auditor's answers.

5. Election of directors

WARREN BUFFETT: Mr. Forrest Krutter is secretary of Berkshire. He will make a written record of the proceedings. Miss Becki Amick has been appointed inspector of elections at the meeting. She will certify to the count of votes cast in the election for directors. The named proxy holders for this meeting are Walter Scott Jr. and Marc D. Hamburg.

Does the secretary have a report of the number of Berkshire shares outstanding, entitled to vote, and represented at the meeting?

FORREST KRUTTER: Yes, I do. As indicated in the proxy statement that accompanied the notice of this meeting that was sent to all shareholders of record on March 3rd, 2004, being the record

date for this meeting, there were 1,278,436 shares of Class A Berkshire Hathaway common stock outstanding with each share entitled to one vote on motions considered at the meeting, and 7,766,293 shares of Class B Berkshire Hathaway common stock outstanding, with each share entitled to 1/200th of one vote on motions considered at the meeting.

Of that number, 1,121,231 Class A shares and 6,473,904 Class B shares are represented at this meeting by proxies returned through Thursday evening, April 29th.

WARREN BUFFETT: Thank you. That number represents a quorum and we will therefore directly proceed with the meeting.

First order of business will be a reading of the minutes of the last meeting of shareholders. I recognize Mr. Walter Scott, who will place a motion before the meeting.

WALTER SCOTT: I move that the reading of the minutes of the last meeting of shareholders be dispensed with and the minutes be approved.

WARREN BUFFETT: Do I hear a second?

VOICE: Seconded.

WARREN BUFFETTT: Motion has been moved and seconded. Are there any comments or questions?

We will vote on this motion by voice vote. All those in favor say “aye.”

VOICES: Aye.

WARREN BUFFETT: Opposed? Motion’s carried.

First item of business at this meeting is to elect directors. If a shareholder is present who wishes to withdraw a proxy previously sent in and vote in person on the election of directors, he and she may do so. Also, if any shareholder that is present has not turned in a proxy and desires a ballot in order to vote in person, you may do so.

If you wish to do this, please identify yourself to meeting officials in the aisles who will furnish a ballot to you.

Would those persons desiring ballots please identify themselves so that we may distribute them? And I now recognize Mr. Walter Scott to place a motion before the meeting with a respect to election of directions.

WALTER SCOTT: I move that Warren E. Buffett, Charles T. Munger, Susan T. Buffett, Howard G. Buffett, Malcolm G. Chace, David S. Gottesman, Charlotte Guyman, Donald R. Keough, Thomas S. Murphy, Ronald L. Olson, and Walter Scott Jr. be elected directors.

WARREN BUFFETT: Is there a second?

It's been moved and seconded that Warren E. Buffett, Charles T. Munger, Susan T. Buffett, Howard G. Buffett, Malcolm G. Chace, David S. Gottesman, Charlotte Guyman, Donald R. Keough, Thomas S. Murphy, Ronald L. Olson, and Walter Scott Jr. be elected as directors.

Are there any other nominations? Is there any discussion? Is there anybody that is at the microphones that would —

AUDIENCE MEMBER: Yes. Paul Tomasik, Thornton in Illinois.

I like the idea of inside directors. I think they're necessary. However, I think we should have the best available. In particular, I'd like you to consider the CEOs of the Berkshire subsidiaries.

If you compare their qualifications to Susan Buffett's and Howard Buffett's, I think you'll find that the CEOs have superior qualifications, particularly, business savvy and the ability to stand up to a forceful CEO.

I'd like to point out that we'll hear how many of these CEOs are independently wealthy and could easily say, "Take this job and shove it." So this is why I am withholding my votes for the directors. Thank you.

WARREN BUFFETT: Thank you. Charlie, do you have any thoughts on that?

CHARLIE MUNGER: I think we should go on to the next item. (Laughter and applause).

WARREN BUFFETT: The nominations are ready to be acted upon. If there are any shareholders voting in person, they should now mark their ballots on the election of directors and allow the ballots to be delivered to the inspector of election.

Would the proxy holders please also submit to the inspectors of elections a ballot on the election of directors voting the proxies in accordance with the instructions they have received.

Miss Amick, when you are ready, you may give your report.

BECKI AMICK: My report is ready. The ballot of the proxy holders, in response to proxies that were received through last Thursday evening, cast not less than 1,123,189 votes for each nominee. That number far exceeds a majority of the number of the total votes related to all Class A and Class B shares outstanding.

The certification required by the Delaware law of the precise count of the votes, including the additional votes to be cast by the proxy holders in response to the proxies delivered at this meeting, as well as any cast in person at this meeting, will be given to the secretary to be placed with the minutes of this meeting.

WARREN BUFFETT: Thank you, Miss Amick. Warren E. Buffett, Susan T. Buffett, Howard G. Buffett, Malcolm G. Chase, David S. Gottesman, Charlotte Guyman, Donald R. Keough, Thomas S. Murphy, Charles T. Munger, Ronald L. Olson, and Walter Scott, Jr. have been elected as directors.

6. Proposal to publish political contributions

WARREN BUFFETT: The next item is business is a proposal put forth by Berkshire shareholder Human Life International, the owner of one Class B share.

Human Life International's motion is set forth in the proxy statement and provides that the company be required to publish annually a detailed statement of each contribution made by the company and its subsidiaries in various political causes.

The directors have recommended the shareholders vote against the proposal. We will now open the floor to recognize the appointed representative of Human Life International to present their proposal. Is someone here to present that?

TOM STROBHAR: Yes, Mr. Buffett. My name is Tom Strobhar and I do represent Human Life International. And I'm here to present the shareholder resolution regarding political contributions.

But before I do, I'd like to give you a little background. Some of you may remember, two years ago, there was a resolution asking the company to end its charitable giving program.

The resolution said corporate charitable contributions should help, not hinder, the company and suggested certain contributions, especially those related to abortion and population control, were doing just that.

This proposal was soundly defeated by the shareholders, receiving less than 3 percent of the vote. Oddly enough, a little over one year later, Mr. Buffett, in his wisdom, did terminate this program citing the adverse impact his philanthropic interests were having on the livelihoods of some employees at the Pampered Chefs division.

At the time of the resolution, we first learned that Mr. Buffett and Mr. Munger were directing their money to their personal foundations rather than more recognized public charities.

While previous chairman's letters extolled the high participation levels among eligible shareholders, no mention was made that Mr. Buffett, who accounted for 31 percent of the equity of the company, was giving away almost 55 percent of the charitable gifts.

Why all of you B shareholders, who probably comprise a majority of the people in this audience, were excluded from giving, and whose vote on this proposal was dramatically diluted down to 1/200th of the value of an A share — which obviously is not quite democratic.

I refer you to the 1983 Chairman's Letter. In addressing why he wouldn't split the stock, Mr. Buffett describes something he calls "shareholder eugenics."

Mr. Buffett laments how it's impossible to screen entering members of the shareholder "club" for quotes, "intellectual capacity, emotional stability, moral sensibility, or acceptable dress."

Splitting the stock and lowering the price of admission to the club — Class B shareholders take note — "would attract an entering class of buyers inferior to the existing class" and "downgrade the quality of our present shareholder group," end quote.

All told, Mr. Buffett gave to his private foundation almost $100 million, much of it other shareholders' money. This money, in turn, was devoted almost exclusively to population control seeking to lessen the number of people at a time when Western nations, especially those in Europe and Japan, face economic calamity from a baby bust.

How do charitable contributions relate to political contributions? It wasn't until there was a resolution on charitable contributions that we received some disclosure. So too, with the resolution I'm about to present, did we find out the company gave a very modest $200,000 to various political candidates or causes.

While the charitable contributions may have been too much, the political contributions may be too little. Not necessarily from the company, but from other shareholders. If there are politicians or causes in which there is legitimate business interest in supporting, why not give the shareholders the opportunity to help them also?

By publishing the list, the word goes out to our thousands of shareholders who may wish to do the same with their own money. It costs little to publish, provides for transparency, checks any personal abuse, and sets an example to the rest of corporate America.

It also provides an opportunity for all the members of our shareholder club, even B shareholders, to get involved and help this company and help their investment.

And with that, I'd like to read the actual resolution, which I'm required to do.

"Within one month, after approval by the shareholders of this proposal, management shall publish in The Buffalo News a detailed statement of each contribution made by the company or

of any of its subsidiaries, either directly or indirectly, within preceding fiscal year, in the respect of any political campaign, political party, referendum or citizen's imitative, or attempts to influence legislation, specifying the date and amount of each contribution and the person or organization to whom the contribution was made.

"Subsequent to this initial disclosure, management shall cause like data to be included in each succeeding report to the shareholders. If no such disbursements were made, to have the facts so noted in the annual report."

This proposal, if adopted, will require the management to advise its shareholders how many corporate dollars are being spent for political purposes, and to specify what politicians or political causes the management seeks to promote with these funds.

Political contributions are made with the dollars that belong to the shareholders of the group and they are entitled to know where their dollars are being spent. A vote for this proposal is a vote for full disclosure. Thank you.

WARREN BUFFETT: Is there anyone else that would care to speak on the motion?

Charlie, do you have any comment?

CHARLIE MUNGER: Well, I preferred our old charitable giving program to the way most corporations do it in America — (applause) — where the controlling officers decide. However, it's a dead horse. It's gone and there's no point beating on the corpse. (Laughter)

WARREN BUFFETT: The dead horse will now speak. (Laughter)

I just want to add one point, because it a little different than occurs at many other corporations. To my knowledge or memory, I don't believe Charlie and I have ever asked any employee or any vendor to Berkshire — any employee of Berkshire or a vendor to Berkshire — for either political contributions or charitable contributions.

There's been no — there's been no use of our positions to, in effect, extract money for our own personal causes, either in the charitable area or the political area. Is that correct, Charlie?

CHARLIE MUNGER: Yeah, but we don't deserve too much credit for not asking other people for charitable contributions. (Buffett laughs)

Think what the reciprocity implications would be.

WARREN BUFFETT: Yeah. (Laughter)

But it's a fairly common activity.

So here we are. We'll — if any shareholder's voting in person, they should now mark their ballots in the — on the motion and allow the ballots to be delivered to the inspector of elections.

Would the proxy holders please also submit to the inspector of elections a ballot on the proposal, voting of proxies in accordance with the instructions they have received? Miss Amick, when you are ready, you may give your report.

BECKI AMICK: My report is ready. The ballet of the proxy holders, in response to proxies that were received through last Thursday evening, cast 27,287.605 votes for the motion and 936,045.815 votes against the motion.

As the number of votes against the motion exceeds a majority of the number of votes related to all Class A and Class B shares outstanding, the motion has failed. The certification required by Delaware law of the precise count of the votes will be given to the secretary to be placed with the minutes of this meeting.

WARREN BUFFETT: Thank you, Miss Amick. The proposal fails.

7. Shareholder proposal to "tell us the rules" on motions

WARREN BUFFETT: Does anyone have any further business to come before this meeting before we adjourn? If so —

AUDIENCE MEMBER: Yes.

WARREN BUFFETT: —they should approach microphone 1 to be recognized. I believe we have someone.

AUDIENCE MEMBER: Yes. Paul Tomasik, Thornton in Illinois.

I have a proposal to put written rules for this meeting, the formal part, on the web, in order that this meeting can be conducted fairly and with good faith.

Would you like a little more comment?

WARREN BUFFETT: No.

CHARLIE MUNGER: No.

WARREN BUFFETT: The faster you can make it, the better. But go to it. (Applause)

AUDIENCE MEMBER: Well, that's it —

WARREN BUFFETT: That's it.

AUDIENCE MEMBER: — on that one.

WARREN BUFFETT: OK.

(To person sitting next to him) Is that a motion?

WARREN BUFFETT: Well, do you want to — would you place all — if you have more motions, would you place them, or is that it?

AUDIENCE MEMBER: No, certainly. The other three motions are to put the bylaws and the articles of incorporation up on the website, to write it into the bylaws how shareholders should present motions, and the fourth, to write it into the bylaws how shareholders can make director nominations.

To sum up, what these motions ask for is just tell us the rules. We'll follow them. That's it. Thank you.

WARREN BUFFETT: OK, thank you.

I actually think you came up with a very good suggestion on the audit committee report, which we've incorporated. I don't really think this would add much, but if there are any shareholders voting in person, they should now mark their ballots in the motion — on the motion — and allow the ballots to be delivered to the inspector of elections.

Would the proxy holders please also submit to the inspector of elections a ballot on the proposal, voting the proxies in accordance with the instructions they've received.

Miss Amick, when you are ready, you may give your report.

BECKI AMICK: My report is ready. The ballot of the proxy holders cast 1,153,600.52 votes against the motion. As the number of votes against the motion exceeds a majority of the number of votes related to all Class A and Class B shares outstanding, the motion has failed. The certification required by Delaware law of the precise count of the votes will be given to the secretary to be placed with the minutes of this meeting.

WARREN BUFFETT: Thank, Miss Amick. The proposal fails.

I now recognize Mr. Walter Scott to place a motion before the meeting.

WALTER SCOTT: I move the meeting be adjourned.

WARREN BUFFETT: Is there a second?

VOICE: I second.

WARREN BUFFETT: A motion to adjourn has been made and seconded. We will vote by voice. Is there any discussion? If not, all in favor say "aye."

VOICES: Aye.

WARREN BUFFETT: All opposed say "no." The meeting's adjourned. OK, now we're — (Applause)

8. Rebuttal of calls for Buffett to leave Coca-Cola's board

WARREN BUFFETT: Now we're going to move into the questions and answers, at least questions. And just ask one as we spelled out before. And we will start with microphone 1, which is in section, what, 121 on my right. And we'll keep moving 1 through 12 until we get till noon. Microphone 1.

AUDIENCE MEMBER: Jonathan Mills (PH) from London, England.

I wondered if you could comment on the views of those people who have stated that, because of so-called conflicts of interest, you should leave the board of Coca-Cola and whether you had any intention of doing so.

WARREN BUFFETT: That we should do what with the board?

AUDIENCE MEMBER: Leave the board. That you personally should leave the board of Coke.

WARREN BUFFETT: I would say that whoever suggested that should do 500 sit-ups. (Laughter)

Actually, Charlie and I — certainly I have — well, I'll Charlie speak for himself — we like the idea and we've encouraged the idea of shareholders behaving like owners. I mean, shareholders have too often behaved like sheep in this country and they got shorn, in many cases.

And big institutional shareholders have sat on the sidelines while some things that might possibly have been corrected, had they gotten active, took place. So we have — we actually applaud the idea of shareholders behaving like owners.

The question is whether they, you know, can behave like intelligent owners. And I think that in the last year or two, as they've sort of woken up, they've searched for checklists of one sort or another to determine whether directors are appropriate in a given company or not.

And frankly, checklists are no substitute for thinking. The real job of the directors is to come up with the right CEO for a company and prevent him or her for overreaching. If they do that job well, the rest takes care of itself.

And you have to think some to determine whether that's taking place. You can't solve it by just running down a little checklist.

I think it was Bertrand Russell who said, "Most men would rather die than think. Many do." (Laughter)

And I think we've seen a little bit of what he was thinking about in some of the voting. I think it's absolutely silly, frankly, if Berkshire Hathaway owns 200 million shares of Coca-Cola, $10 billion worth, to not be able — it's a little silly not to think that the interest that Berkshire Hathaway has in selling some hours of training at FlightSafety would cause me to do something counter to the interests of the shareholders, when we have $10 billion riding on that side of the table. I mean, it's almost absurd, and somebody doesn't understand proportionality at all when they come to that sort of conclusion.

I also think it's absolutely foolish if — just to use Coca-Cola as an example. I think the directors of Coca-Cola haven't even looked, but I think we probably received something like $100,000 a year.

And if we were to go out into the welfare line and pick somebody out who has no income and say, "We'd like you to become a director," and that person would get $100,000 a year, which would be their entire income, and to say that person would be independent — you know, while they would be 100 percent dependent on their income — that person would be independent. Whereas Berkshire Hathaway, or myself representing Berkshire Hathaway with 10 billion of stock — and receiving the same $100,000 a year — is not regarded as independent.

So I encourage — I encourage institutional shareholders to — and large owners — to behave like owners. But I also encourage them to really think logically, as owners should think, in determining what causes they take on and how they vote.

Charlie? (Applause)

CHARLIE MUNGER: Yeah, I think that they, corporate America, needs a fair amount of reform. But the cause of reform is hurt, not helped, when an activist makes an idiotic suggestion — (laughter) — like the one that — (applause) — having Warren Buffett on the board of the Coca-Cola Company is contrary to the interest of the Coca-Cola Company. Nutty activities do not help the cause for which the person speaks.

WARREN BUFFETT: It's a little bit like having a slicing machine in an orchard where you're gathering together apples but you're also picking up a lot of rocks in the process and sticks and stones. So you have a slicing machine with a conveyer belt. And the slicing machine is programmed so that every time something is red and round comes down the line, it slices and comes down, but it doesn't come down on the rocks and everything and ruin the blades.

And, of course, that's fine until a red balloon comes down the line and then you get a big pop and the machine has followed its little guidelines but it's not slicing apples anymore.

And I think — I just — actually, institutions are coming new to really thinking about how they behave as owners. And you would hope that, in the evolutionary nature of learning — that not too many years distance — distant — they would actually think about what's good for the shareholders of the company.

9. Surviving inflation

WARREN BUFFETT: Let's go to microphone number 2, please.

AUDIENCE MEMBER: Mr. Buffett, Mr. Munger, good morning. My name is Zachys Sarris (PH) and I am from Athens, Greece.

There is a widespread perception that we're heading towards an inflationary environment. What advice would you give to investors who need to preserve their capital and their purchasing power in such an environment?

WARREN BUFFETT: The best thing is to have a lot of earning power of your own. If you're the best brain surgeon in town, or even the best lawyer in town, you will retain purchasing power, in terms of your income, no matter what happens, you know, whether people are using seashells for money, or whatever as time goes by.

In the investment world, it's tougher. But Charlie and I think the best answer is to own fine businesses that will be able to price in inflationary terms and will not have huge capital investment that is required to handle the larger dollar volume of sales.

Some years ago, I used See's Candy in our — in the annual report — as an example of the kind of business that, more or less, can handle an inflationary world and maintain investment and value, no matter what happens to the currency.

Unfortunately, most businesses will not come out well in real terms during inflation. Their earnings may go up a fair amount over time, but they're compelled to put more and more dollars into the business just to stay in the same place.

You know, the worst kind of a business is one that's — makes you put more money on the table all the time and doesn't give you greater earnings. So you really want a business that can have pricing that reflects inflation and does not have very much capital investment that reflects inflation. But inflation is the enemy of the investor, in terms of real returns.

As you know, there are, in this country as well as a half a dozen other countries, there are what they call "inflation protected bonds" — we call them TIPS in the United States — where the income is adjusted — or, the principle amount is adjusted — to inflation. And that's not a bad

investment for people that have worries about inflation heating up. And I think, incidentally, we're starting to see it heat up in this country.

Charlie?

CHARLIE MUNGER: Yeah, most people are going to get a very small real return from investment after considering inflation and taxes. I think that's an iron law of the world and if, for a brief period, some of us do better than that, we ought to be very thankful.

One of the great defenses to being worried about inflation is not having a lot of silly needs in your life. In other words, if you haven't created a lot of artificial demand to drown in consumer goods, why, you have a considerable defense against the vicissitudes of life.

WARREN BUFFETT: Charlie, we're selling consumer goods in the other room. (Laughter)

It's OK to talk that way at home, but — (Laughter)

CHARLIE MUNGER: It doesn't do any good there. (Laughter)

WARREN BUFFETT: I know the feeling. (Laughter)

10. Reluctance to hold special meetings for analysts

WARREN BUFFETT: Let's go to microphone 3.

AUDIENCE MEMBER: Good morning, gentleman. My name is Larry Coats, from Durham, North Carolina.

Mr. Buffett, after last year's meeting, my longtime friend and business partner George Brumley [III] sent you a letter addressing several issues. Having participated in the preparation of that letter and on his behalf, I thank you for your response.

WARREN BUFFETT: Thank you.

AUDIENCE MEMBER: In such, you suggested that many of those issues would be appropriately addressed in this forum. In his honor, I'd ask you to address just one of those, and that is the ultimate generational transfer of Berkshire away from its current base of long-term, self-selected, and well-informed shareholders, and the potential of instituting a series of analyst meetings to address the relative lack of interest in, and ownership, and understanding of, Berkshire by institutional shareholders and investors. Thank you and good morning.

WARREN BUFFETT: Well, thank you. I mean, George was a wonderful man. A great analyst and a friend.

I have some problem with having meetings with subgroups of investors, such as institutional investors. If we had something like that, I think we would want it to be open to everybody. And, you know, that gets to be quite a production.

But I can understand, you know, why A) you'd like to see our managers and hear what they have to say about their businesses. We try to convey a lot about the businesses in the report, but —

Charlie, do you have any thoughts on that?

CHARLIE MUNGER: I don't think it fits our temperament at all well. Many corporations have a huge amount of effort spent in talking to groups of analysts. One of Berkshire's strengths has been that we don't spend time in that way.

That's a very time-consuming process. And it does give some shareholders some advantage over others. We try and be more egalitarian in events like this and the way we write the annual report, et cetera.

WARREN BUFFETT: Yeah, we really like the group of shareholders we have. I mean, we're not about enticing new people into it. But I know your point also is that the present shareholders could better understand Berkshire if they would listen to Bob Shaw talk about Shaw Carpet or Rich Santulli talk about NetJets. And the truth is, it is fun to listen to those people.

But one of the things we promise managers when they join up with us, too, is they that they don't have to listen to bankers, they don't have listen to investment analysts. They just get to run their businesses. They can devote a hundred percent of their time to it. And people like that, and they're more productive because of it.

I mean, we really place no impediments in the way of our managers doing what they do best and what they like to do best, which is run their businesses.

And frankly, a number of them have expressed to me that they're very happy because they existed in a different mode before. And in that mode, they would spend maybe 25 percent of their time on activities that they didn't enjoy and they didn't feel were very productive.

So we want to get across the information about our businesses to you. And believe me, when I write the report and Charlie looks at it, we say to ourselves, "Are we telling you what we would want to know about if our positions were reversed, if we were on the receiving end?" And we really try to put in the report everything that's germane to evaluation.

Now, if you have a market cap of 130 billion, you know, it's really not too important to get keen insights into some business that's making a relative small amount of money. But anything that counts — and really, you have to look at them in aggregates — we want to get across to you.

So, you know, it's — I'm very respectful of your suggestion. It's conceivable to do it.

The Washington Post has a shareholder day, because their annual meeting is turned into a farce often because it's largely dominated by people who are complaining about this story or that story. But the shareholder day is very useful and they do have their managers there and talk about it.

But I really think if we spend six hours here answering your questions about the business and we do a half-way decent job of writing the annual report, we should get across the essential information.

And we're really not trying to get across — we're not trying to talk to an audience that is trying to get some special insight into what next quarter or next year is going to look like.

We're really looking for owners who join us in what we regard as kind of a lifelong investment. And I would say that certainly analysts, like your group, have exactly the same objective we do and want to understand the business that way.

But my experience, you know, in talking to hundreds of them, is that there are relatively few that are actually thinking about, "What do we buy and put away forever?" Like, we'd buy a farm or an apartment house or something. So we'll consider it, but I don't want to make any promises.

11. Compensation plans: specific to the business, simple, and generous

WARREN BUFFETT: Go to number 4, please.

AUDIENCE MEMBER: Good morning, gentleman. My name is Matt Sauer and I'm from Durham, North Carolina.

Regarding compensation, you have commented along the lines of people willing to bet big on their (inaudible) usually have a lot of bet on.

A MidAmerican regulatory filing indicated some attractive prospective compensation possibilities for its senior executive team, subject, of course, to meeting profitability milestones.

Perhaps you might provide some details on the thought process that went into crafting that compensation structure, and in doing so, use this specific example as a reminder about Berkshire's compensation philosophy, related to pay for performance versus the more popular approaches.

If it's easier to figure out and administer, better for owners, and can still attract talented people, why don't more companies adopt such practices?

WARREN BUFFETT: Yeah, we — you could make a lot of money working for Berkshire. Not if you're chairman or vice chairman, but there's a chance to make a lot of money. But it will relate to performance. No one is going to make lots of money at Berkshire for average performance.

And you mentioned the MidAmerican situation. We've got some extraordinary management at MidAmerican. And it's — in terms of how that compensation arrangement was worked out, I was thinking one day about what would be appropriate for the two individuals who are key to the success of MidAmerican. And I took a yellow pad and I spent about three minutes sketching out a proposal.

And I went to Walter Scott, who is our partner in the business and now actually heads the comp committee. And I said, "Walter this is an idea I have, what do you think of it?" And he looked at it and he said, "It looks fine to me."

And we talked to the two managers about it and actually, as we presented it, we had it so that something over 50 percent went to the CEO, Dave Sokol and something under 50 percent went to the number two man, Greg Abel, who's enormously well named.

And when we gave it to David, he said, "Let's just" — he said, "I like it fine, but let's make it 50/50." That's the extent of it.

As you have commented, that's wildly different than the approach at companies. I mean, most companies go through very elaborate procedures in working out executive compensation. I don't think that Charlie and I have spent ever, maybe five minutes, on thinking about any.

We have an arrangement at See's Candy with Chuck Huggins. We worked it out in 1972. It's still in force now.

John Holland took over Fruit of the Loom a couple of years ago. I met with him for a couple of minutes, suggested something, takes up a paragraph or two. And that's what we'll have with John the rest of his life.

It's not highly complex. You have to understand the businesses. There is no one formula we could use at Berkshire that would fit across our businesses, that's asinine.

You don't want them complicated. We don't have anything that goes on for pages and pages. It's not needed. It establishes a relationship between us and the manager that's not good.

So all of our stuff is very, very simple.

At GEICO we have two variables and they're what count, you know. So we make — from Tony Nicely on down, we have everybody participating based on that. We worked that out whenever we took over at GEICO and it's worked fine since and it'll keep working.

But we do not bring in compensation consultants. We don't have a human relations department. We don't have — at the headquarters, as you could see, we don't have any human relations department. We don't have a legal department. We don't have a public relations department. We don't have an investor relations department.

We don't have those things because they make life way more complicated and everybody gets a vested interest in going to conferences and calling on other consultants and it takes on a life of its own.

In the typical large corporation, there's a comp committee. And, as I pointed out in the past, they don't put Dobermans on the comp committees, usually. They — they look for Chihuahuas that have been sedated and — (Laughter)

I've been on 19 boards. They put me on one committee once, and I was chairman and I got outvoted. Do you remember that, Charlie? (Laughs)

CHARLIE MUNGER: I certainly do.

WARREN BUFFETT: Yeah. The —

CHARLIE MUNGER: By two very fine guys.

WARREN BUFFETT: Yeah, terrific guys, actually. And they — you know, the nature of it is that now, particularly with Sarbanes-Oxley, there's lot of committee meetings. The directors meetings are filled up with process.

And you have on one side of the table, some people that usually are spending an hour or two and getting presented with a bunch of material by the human relations department and some outside consultants.

And I've never seen the head of a human relations department or a consultant come in and say, "This bozo you've got is only worth about half what you've been paying him." This just isn't going to happen.

So it's, you know — it's a situation where the intensity of interest on both sides is seldom equal. The directors are often dealing with something my friend Tom Murphy in the past has called, "play money," and the CEO is dealing with something very dear to his heart.

So you've got to expect a situation like that to get gamed over time. Not over time, promptly, actually.

And there is some change in that that's taking place. But it's not being — in large part, it's not being led by CEOs and it's difficult for directors to do — to get a lot done.

They get handed a sheet of paper that shows them comparables elsewhere, and everybody thinks their CEO is in the top 25 percent or something. And so there's a ratcheting effect that takes place.

And now stock options are coming out of favor, so restricted stock comes in. But the idea is to keep the pie very large for CEOs. And if I needed the money, I'd probably be doing the same thing.

Charlie?

CHARLIE MUNGER: Well, I would rather throw a viper down my shirtfront than hire a compensation consultant. (Laughter and applause)

WARREN BUFFETT: Tell me which kind of consultants you actually like, Charlie? (Laughter)

He's not going to answer that.

12. We don't think about investing "categories"

WARREN BUFFETT: We'll go to number 5. (Laughter)

AUDIENCE MEMBER: Warren and Charlie, good morning. My name is Mo Spence from Waterloo, Nebraska.

Years ago, you listed the four or five investment vehicles you considered appropriate for Berkshire, including, I believe, common stocks, long-term debt, and arbitrage opportunities.

In light of your comments in this year's annual report, I was wondering if you could review that list, in order of preference, and specifically comment on them, including the current environment for arbitrage.

WARREN BUFFETT: Yeah. Well, the items you name — and you could break that down by high-grade bonds, you know, versus junk bonds.

The items you mention are all alternatives. You know, Charlie and I sit around and think about what's the best thing to do with Berkshire's money. It's a fairly simple proposition.

And we have a number of things that we feel competent to make judgments on, and we have a number of things that we're not competent to make judgments on. So we narrow — we hope to narrow the field to investments that we think we can understand. And there are a reasonable number of those, although there are a lot that we can't understand.

Anything I would say today, you know, can change tomorrow. We don't think about the categories by themselves.

Now, in a period like summer to mid-fall of 2002, when junk bonds became very attractive, we bought a lot of them. But we didn't make some great decision to buy junk bonds, we just started seeing things, individual items, that started screaming at us, you know, "buy, buy, buy." And then that came to an end.

And so we don't go to the office in the morning thinking what category — how do we prioritize our categories. You know, we have an open mind and whatever we see that day that overcomes, or that crosses the threshold to where we take money out of short-term cash and move into it.

It could be arbitrage — it's unlikely to be arbitrage now, because that's a game that, to play on a scale that would have a meaningful effect at Berkshire, is hard to do.

I mean, take very big deals, and it's something we've done successfully in the past. We've made a lot of money over the years in arbitrage and quite consistently sometimes in the past.

But we don't — Charlie and I do not have a checklist that we talk about every day, or every month, or every year, in terms of prioritizing categories.

We just hope — I hope he gets a good idea, he hopes I get a good idea. And when we get one, we move in a big way.

They have to be big now and that's a limiting factor in terms of what's available for us.

As you know, if you read the annual report, you know, we took a significant position in currencies. We're buying viatical settlements, in terms of the transaction I mentioned a little earlier.

We're open to anything we can understand. Charlie?

CHARLIE MUNGER: Yeah, you really asked us to determine an order of precedency among two or three activities we don't have much interest in at the moment. And that's not something we spend a lot of time at.

In other words, we have all this cash because we don't much like any of those fields at the moment. And spending all the time thinking about orders of precedency among things you clearly are not going to do is pretty fruitless for us.

WARREN BUFFETT: Yeah, I thought I had a slide here but I don't. But it — when we were buying junk bonds in the summer to fall of 2002, we were literally buying securities — and we limited it to the kind of junk bonds we can understand, which is far from the whole universe — but we were literally buying things on a 30, 35, 40 percent yield to maturity basis.

Now, we buy those with a mental attitude of buying common stocks.

Interestingly enough, within 12 months, some of those same securities that were yielding 30 or 35 percent went to prices where they yielded only 6 percent. I mean, that is truly remarkable when you think about that happening in a country that was not in the throes of depression or anything.

I mean, prices do amazing things in securities markets. And when they do something that strikes us as amazing in our direction, you know, we will act.

But we do not know today what we're going to be doing tomorrow. We have — you know, we have some things — a few things we may be doing. They're likely — It's likely we're doing them tomorrow, but there's — we don't hold any committee meetings on this.

And there's, you know, this business where somebody says, "You should have 50 percent of your money in bonds and 35 percent, you know, in equities, and 15 —." We don't go through anything like that. I mean, we regard that as nonsense.

Any further thoughts, Charlie?

No further thoughts, evidently. (Laughter)

13. "Very dangerous to project out high growth rates"

WARREN BUFFETT: Microphone 6.

AUDIENCE MEMBER: Good morning, gentleman. My name is Tony Ado (PH) and I come from New Jersey.

Mr. Buffett, my question is on business valuation and growth. In one of your letters, you mentioned the discounting formula on earnings divided by the difference between the discount and the growth rate.

But if the growth rate is larger than the discount rate and if we use this formula, then we get a negative number. And one way around this — let's call it method A — is to have two growth stages, one with a high growth and the second stage with a low growth.

And the second way, method B, would be to estimate how much the earnings is on the third year for the company and then multiply this by the average price-to-earning ratio to get the price in the tenth year.

I don't know if you use the method A or method B, but if not, I would like to ask, Mr. Buffett, how do you estimate how much a company is worth if the growth rate is larger than the discount rate?

WARREN BUFFETT: Well, you put your finger on an interesting mathematical relationship. Because if you're using a present value discount formula and you put in a growth rate that is higher than the discount rate, as you have postulated, the answer, of course, will be infinity.

And there are a lot of managements around who like to think their stocks are worth infinity, but we — (laughs) — haven't found one yet.

That precise subject was covered in a paper called "The St. Petersburg Paradox" by a fellow named [David] Durand probably 30 years ago. And somewhere, we probably have a copy at our office. My guess, if you go to Google and you put in the name Durand and you put in St. Petersburg, you may be able to call up that article, although they aren't necessarily terrific on old articles.

So if you'd like it, we would — if you'll let somebody know in our office, we'll look around a little and see if we can find that.

It gets very dangerous to project out high growth rates because you get into this paradox. If you say the growth rate of a company is going to be 9 percent between now and judgment day and you use a 7 percent discount rate, it goes off, you know, you get into infinity. And that's where people get in a lot of trouble.

The idea of projecting out extremely high growth rates for very long periods of time has caused investors to lose, you know, very, very large sums of money.

There aren't many companies — just take a look at the Fortune 500, go back 50 years — they're commemorating that — and look at the companies that were there and how many have really maintained rates much above 10 percent. It's not an easy hurdle. And when you get up to 15, you know, you're in the atmosphere and rarified atmosphere.

So that's — there's a real danger in projecting out high growth rates. And Charlie and I will very seldom — virtually never — get up into high digits. You can lose a lot of money doing that.

You may miss an opportunity some time, but I haven't seen people who have been consistently successful doing that. And you do run into this paradox you mentioned.

Charlie?

CHARLIE MUNGER: Well, you're obviously right, when you get a mathematical result that is infinity, to back off and realize that can't happen. And, of course, what people do is they project that the growth rate will reduce and, indeed, eventually stop. And then you get more realistic numbers. What else could anyone do?

14. NYSE specialist system has "worked pretty well"

WARREN BUFFETT: OK, we'll go to microphone 7. I believe that's over here.

AUDIENCE MEMBER: Yes, My name is Jack Oneil (PH). I'm from New Brighton, Minnesota. Thank you for the opportunity to ask questions here and for the opportunity to learn from you and Charlie.

I had a two-part question and I'm striking the first part, which dealt with my concern over how long the country can continue with this ballooning national debt.

My second — my question then is, what is your opinion of the need for specialists on the New York Stock Exchange? Thank you.

WARREN BUFFETT: Charlie, you want to tackle that one? (Laughs)

CHARLIE MUNGER: Well, thank you, Warren. (Laughter)

Generally speaking, I think the specialist system has worked pretty well over the years. There may have been a few troubles lately, but averaged out, it's worked pretty well for a long time. And I'm not all that horrified that some people who stand there all day make a fair amount of money.

WARREN BUFFETT: Charlie actually had a specialist firm, you should know that. That's why I turned the question over to him, despite his snide remark. (Laughter)

How long were you and Jack [Wheeler] the specialists in General Motors on the Pacific Coast Stock Exchange?

CHARLIE MUNGER: About 13 years.

WARREN BUFFETT: Yeah —

CHARLIE MUNGER: Yeah.

WARREN BUFFETT: You're looking at an experienced specialist.

15. Buffett predicts "big problems" from derivatives

WARREN BUFFETT: Let's go to number 8.

AUDIENCE MEMBER: Good morning, gentleman. I'm Neil Steinhoff from Phoenix, Arizona.

Thanks for the tips on TIPS. Also thanks for the information in the newsletter — your annual letter — about the books. I particularly enjoyed "Bull!" by Maggie Mahar, I think it was.

I'm concerned about the future for a number of different reasons, in America. The debt, both accumulated by the government and personally, the stock buybacks, which are benefiting the top five executives, continues. The insanity of derivatives and the overpriced market with a P/E, which is also insane. Any comments?

WARREN BUFFETT: Well, which one do you want us to comment on? You only get one question. (Laughter)

AUDIENCE MEMBER: Derivatives.

WARREN BUFFETT: Derivatives.

Well, Charlie and I have expressed ourselves on derivatives. You know, we don't think the probability, in any given year, is necessarily very high, that derivatives will either lead to or greatly accentuate some financial trauma. But we think it's there.

And I think it's fascinating to look at something like Freddie Mac, where you had an institution that perhaps even hundreds of financial analysts were looking at — certainly many, many dozens of financial analysts were looking at. You had an oversight office. You had a creature that was created by Congress, presumably with committees that would be interested in their activities.

You had on the board two of the smartest and highest-grade people that you could have, in terms of fixed income markets, in Marty Leibowitz and Henry Kaufman, and you had a bunch of other very good directors, too.

And, with an auditor present, they managed to misstate earnings by some $6 billion in a fairly short period of time.

Now, all of that wasn't accounted for by derivatives, but a very large portion of it — 6 billion, that, you know, that is real money even — well, in any place. A large part of that was facilitated by activities and derivative instruments.

Now you can look at the Freddie Mac annual report for 2000, whatever it is, '2 or 2001. And you can read the footnotes and you can read the auditor's certificate. And you can look at bunch of high-class, very smart directors.

And you can be comforted by the fact that dozens of people in Wall Street, who are paid just to follow relatively few stocks, were studying this, and that they had conference calls all of the time.

And in the end, what happened? It was 6 billion. It probably could have been 12 billion if they'd wanted.

A lot of mischief can happen with derivatives. And as we've pointed out, Charlie and I have seen it happen.

When there's a derivative transaction, particularly a complicated one — the plain vanilla ones, probably people will not get in big trouble on — but when you have a complicated derivative transaction, and the trader at investment house A is on one side and a trader on investment house B is on the other side, and they record a transaction — which has to be a zero-sum game between the two of them — and both put on the books a profit that day — I've never seen one where they both put on a loss that day — it lends itself to mischief. And the scale is absolutely huge and getting larger all the time.

And I will tell you that I know the managements of some of the companies that have big derivative activities, and they do not have their minds around what is happening.

We didn't have our mind around what was happening at Gen Re Securities. We couldn't. We tried to get our mind around it. We couldn't do it. And that was far from, you know, the most extensive or complicated derivative operation around.

We had the same experience at Salomon. But whatever the figures were at Salomon, they would be a great multiple today. And there was a Sunday in 1991 when we were preparing — or we had the lawyers preparing — bankruptcy papers at Salomon.

And if the Treasury hadn't reversed itself, we would have found a judge some place in Manhattan. He probably would have been watching baseball, eating popcorn. And we would've walked up to his door and said, "You know, here is a situation with Salomon. There's these 1.2 trillion of derivative contracts that the guy on the other side thinks is good and they're not going to be any good," and a lot of other things, and, you know, "It's your baby."

A lot of things correlate in the securities world that people don't expect to correlate. And there are people following similar strategies all over the world, as happened when Long-Term Capital had its problems.

And the world — the financial world — operates on a hair trigger, to some extent. People want to jump the gun and move just ahead of the other fellow.

And when you get huge amounts of transactions, which many people only vaguely understand, you are creating a potential huge problem that may come about because of some other exogenous event that triggers defaults on a huge scale. And that can be very disruptive to financial markets.

So we think they're dangerous as used in society. We use them ourselves, incidentally. You know, we get them collaterized. We've made money off of them.

But I would predict that sometime, in the next 10 years, that you will have some very big problems that will either be caused by, or accentuated in a big way, by people's activities in derivatives.

Charlie?

CHARLIE MUNGER: Yeah, I think part of the trouble in — you were talking about — came because people didn't think enough about the consequences of the consequences.

That's a common error. You start trying to hedge against interest rate changes, which is a very complicated thing to do when you've got a mortgage portfolio where people have options to pay the mortgages off early.

And then, under the accounting conventions, the hedges started making the quarterly results lumpy instead of nice and regular, the way all the institutional analysts like them. So then they gave us another bunch of derivatives to smooth out the returns. Well, now you've morphed into lying.

Well, it's complicated enough to start with. But when you add lying to the process, it's a Mad Hatter's Tea-Party.

And yet, this happens with eminent directors of vast financial sophistication sitting on the board. It shows that the sophistication won't save you. Somebody has to have the common sense to say, "We're just not going there." It's too tough.

WARREN BUFFETT: Charlie was on the audit committee at Salomon and changed it into, you know, six and seven hours meetings. I think you found mismarks that were in the tens of millions of dollars on a single contract with a place with many — you know, tens of thousands of contracts. Isn't that correct?

CHARLIE MUNGER: I think it's fair to say that it was bonkers and that the accountants sold out.

WARREN BUFFETT: Uh-huh. (Laughter)

It's interesting stuff. You might — if you feel in kind of a nasty mood, you might go to a shareholders meeting of some company that has very large positions in derivatives and grill the CEO a little bit about some of the more esoteric transactions.

They get very, very complicated. They get mind-boggling, in terms of trying to figure out the consequences.

And the one thing you can be sure of is that the trader that puts them on will certainly want to mark them at a profit, either immediately or within a year or two, because he gets his bonus

too often based on the figures for that year, and will be done in 20 years, because some of these are very long-dated. Will be gone — when the consequences fall to the firm.

Anytime you have incentives, with people who are quite smart, to mismark things, you're going to get mismarks, or temptations to take on risk in an inappropriate manner.

Originally with derivatives, the argument was made that it would disperse risk. That, you know, the Coca-Cola Company faced foreign exchange risk, or some bank faced, you know, interest rate risk.

And the theory was that you would use these derivatives to spread risk around the system. And indeed, there are many people that make that argument now.

I would say that that may work in that manner a great percentage of the time. But the time that counts is when the system has intensified risk and placed enormous credit risk on very, very few institutions.

Believe me, the Coca-Cola Company is in a better position to accept foreign exchange or interest rate risk in a year than some derivatives dealer who has tons of positions on.

And I think, actually, there is much more risk in the system because of derivatives than the proponents of derivatives would say has been dispersed because of the activities.

16. Bill Gates as next Berkshire chairman?

WARREN BUFFETT: Microphone 9, please?

AUDIENCE MEMBER: Good morning. Robert Piton (PH) from Chicago, Illinois. Thank you very much for your countless insights about investing, and life, for that matter.

My question has to do with Bill Gates. You've gone on record stating that Bill Gates is the smartest person you've probably met in your life. Charlie, sorry to break it to you.

WARREN BUFFETT: No, and I haven't said that quite — but you're close. (Laughs)

AUDIENCE MEMBER: I'm close. And you've also mentioned that he can do your job, but you probably could not do his.

WARREN BUFFETT: That's entirely correct.

AUDIENCE MEMBER: OK. So that being the case, given his aptitude, his accomplishments, his ability to keep great people together within Microsoft, would you consider having him become the future chairman of Berkshire in one of two ways.

Either a merger — and if a merger doesn't make sense because it's a technology company and you don't understand it, so you don't want anything to do with Microsoft.

With the second being he resign his post as chairman of Microsoft in order to keep the masterpiece that you've assembled together, as well as keep these very talented managers of all the Berkshire Hathaway companies together, with a leader that you so respect because of his accomplishments and aptitude.

WARREN BUFFETT: Did Bill put you up to this? (Laughter)

AUDIENCE MEMBER: He did not.

WARREN BUFFETT: No, I know that.

You know, it's not a crazy suggestion, but we've got a better answer.

Bill could do my job very well. And I could not do his job. But we also have at least four people within the Berkshire organization that, in many respects, could do my job better than I do. And probably in one or two respects, they might not be as good at certain parts of it. But they would be terrific successors.

We're more blessed in that situation than we've ever been in the history of Berkshire. If you go back 15 years, we did not have four.

And as we add businesses, it's not inconceivable that more potential future leaders come with those businesses. So we're well-equipped.

And we would — we will — barring something terribly unusual — we will have a leader that succeeds me that comes from within Berkshire and has been around for a long time.

One advantage of that — and this would not be necessarily a disadvantage if it were Bill — but one advantage to that is that we really like the culture at Berkshire. And having someone that has operated in that culture for a number of years, I think, is a plus.

Plus, you know, we've seen how they work and we know their pluses and minuses. We are very well-equipped now.

And Bill, I think — to the extent that he spends less time at Microsoft and he will probably be — you know, the Gates foundation will take up, perhaps, more of his time — I don't really think he is looking for my job, although he may salivate at the pay level that's available. (Laughter)

Charlie?

CHARLIE MUNGER: I've got nothing to add.

17. Reading list for improving investment knowledge

WARREN BUFFETT: OK, we'll go to number 10.

AUDIENCE MEMBER: My name is Oliver Graussa (PH) and I'm Vienna, Austria.

I have studied economics and I've read about 40 books about investing and want to be such a successful investor as you have been.

Mr. Buffett and Mr. Munger, when both of you were younger and had much less capital for investing, how many — which publications were the best to get a few excellent investment ideas to be so successful? And how many hours per week, on average, did you spend with reading about companies? Thank you.

WARREN BUFFETT: Well, when we were younger, we spent — probably Charlie, compared to now, spent a lot more time — I spent a fair amount more time — looking at companies.

But we would — if we were doing it over again, we would do it over again pretty much the same way.

We would look at everything in sight that we thought we could understand. And it — the world hasn't changed in that respect. There may be some more people doing it, but there are a lot more companies to look at now.

And we would — we would read everything in sight about the businesses and the industries we thought we could understand.

We would look for things that jumped out at us as being very cheap in relation to the value. And we would have one enormous advantage because we would be working with far less capital, which means the universe of potential ideas would be far greater.

But there's no — there's nothing different, in my view, about analyzing securities now than there was 50 years ago.

Charlie?

CHARLIE MUNGER: Yeah, we read a lot and we thought a lot. I don't know anybody who is wise who doesn't read a lot.

On the other hand, that alone won't do it. You have to have a temperament, really, which grabs the correct ideas and does something with those ideas. And I think most people who read a lot don't have the necessary temperament, and they grab the ideas or they're simply confused by the mass of material. And, of course, that won't work.

WARREN BUFFETT: Yeah, there's probably something — Phil Carret used to talk about having a "money mind," and I would call it a "business mind." And, you know, there are people that are better with, you know, identical IQs, that are better adapted for one than the other. And the temperament is all important.

I mean, if you can't control yourself, no matter what the intellect you bring to the process, you know, you're going to have disasters. And Charlie and have seen one after another that —

It's not a business that requires extraordinary intellect. It does require extraordinary discipline.

That shouldn't be so difficult. But as I look around the world sometimes, apparently it is quite difficult. I mean, the whole world went a little mad a few years back in terms of investments.

And you say to yourself, "How could that happen? Don't they learn anything for the earlier ones?" But, you know, what we learn from history is that people don't learn from history. And you certainly see that in financial markets all the time.

Incidentally, you mentioned books. Charlie, you didn't recommend any books this year?

CHARLIE MUNGER: Well, one book I really like I couldn't buy because it's published only in England. But it'll get here in due course. And that's called "Deep Simplicity" by John Gribbin. It's a perfectly marvelous book. And of course, that's a great title: "Deep Simplicity." That's what we're all looking for.

WARREN BUFFETT: I've been reading "A Short History of Nearly Everything." It's very impressive to — you know, to read about people pondering how to figure out the weight of the Earth or something in the 18th century.

And you would think that minds that would do that would do very well in financial matters. But, you know, if you remember, Isaac Newton spent a significant part of his life trying to turn lead into gold. And he might have made a good stockbroker. (Laughter)

But it didn't do much for him financially. Charlie knows more about Isaac than I do, so —

CHARLIE MUNGER: Well, and he lost an enormous —

WARREN BUFFETT: Yeah, in the bubble —

CHARLIE MUNGER: —chunk of his net worth in the South Sea Bubble. So he invested in an absolute crooked mania. And here was the smartest man in the world. So just IQ points alone won't do it.

18. Admiration for Treasury's crack down on tax shelters

WARREN BUFFETT: Microphone 11, please.

AUDIENCE MEMBER: My name is Martin Wiegand from Bethesda, Maryland. Thank you for hosting this wonderful, educational, and fun weekend. We —

WARREN BUFFETT: Well, thanks for coming —

AUDIENCE MEMBER: —appreciate it.

WARREN BUFFETT: —Martin, yeah. (Applause)

AUDIENCE MEMBER: In this year's annual report, you defended Berkshire's tax payment record against criticism from certain newspaper columnists and Assistant Secretary [for Tax Policy at the U.S. Treasury] Pamela Olson.

Compared to other large corporations, particularly insurance companies, does Berkshire pay its fair share so we can our Berkshire Activewear with the American flag on it with pride?

WARREN BUFFETT: Incidentally, Pamela Olson is here today. I don't know whether she can stand up. But I owe her an apology.

She's done a great job as a public servant and I teased her a little bit in the annual report. But she actually has worked actively at the Treasury in cracking down on tax shelters and some things that Charlie and I think shouldn't exist. So Pamela has my admiration. And, like I say, if she's here and can stand up, we'll give her hand. (Applause).

Some of the tax shelter proposals — I met with her yesterday — and she told me of some things that I've sort of seen myself. But some of the things that have been done and, in some cases, sponsored by the most prominent auditing firms, you know, are absolutely disgusting, and are the reason why, in my view at least, the middle class probably pays a lot more than they should be in terms of raising the total funds that are needed to sustain the government.

Berkshire, as we noted in the report, is a heavy contributor to the Treasury. As I mentioned, if only 540 entities in the country paid what we pay in income tax, no one else would have to pay anything, no Social Security, no nothing.

We have not — I mean, we may own tax-exempt bonds. We own dividends, which receive a dividend receive credit. But we pay on a very, very high percentage of our income — including capital gains — we pay at the full 34 percent corporate rate.

So go out and buy the Fruit of the Loom underwear with the flag on it, you're entitled to wear it. (Laughs)

Charlie?

CHARLIE MUNGER: I've got nothing to add. But you understate the evil that crept into our leading accounts — accounting firms — when they started selling these fraudulent tax shelters in exchange for contingent fees.

One of them actually explained to me that they were an ethical seller of fraudulent tax shelters. (Laughter)

He said, "The other firms just sold these to anybody. And we just sold them to our 20 most important clients so they were more likely to stay secret."

WARREN BUFFETT: Yeah. And of course, the lawyers would write the opinions so that, if they did get caught with these things that they hoped that no one even picked up because they were so obscure, convoluted, the lawyers wrote the opinions so that the — they could walk — you know, when the IRS came around, they could wave that letter and say, "Well, gee, we're sorry we made a mistake, but we did it on the advice of counsel and therefore you shouldn't assess fraud penalties or anything." I mean, they would — we don't want to leave the lawyers out of this, Charlie. (Laughs)

We had people come to our office. Not the auditing firm that we use, I want to make that clear. But we had people come to our office from the top auditing firms with these propositions which they said we had to sign away a given percentage of the amount we saved. And then they would give us these proprietary methods, you know, which would usually involve about 20 off-shore trusts and partnerships around the world and all kinds of things.

Many of — part of the design being to have so many entities involved so that the numbers that popped up here or there on the return, that no agent could figure out what the totality of the transaction was.

You know, it's — those are — the people who don't pay taxes because of that, increase the taxes of the people in this room. So we — I applaud Pamela for her efforts on that and a lot more are needed.

19. "If you're innumerate, you're going to be a klutz"

WARREN BUFFETT: We will go to number 12, please.

AUDIENCE MEMBER: Good morning. My name is Johann Freudenberg (PH) from Germany.

Mr. Munger, you said in a speech that scientific reality is often only revealed by math, as if math, it's a language of God. Could you elaborate on that, and especially tell us the reason why math often reflects reality? Thank you.

CHARLIE MUNGER: It's just the way it is. (Laughter)

If you — it's as though God made the world so that only people fluent in math could understand it.

I think you can handle an ordinary human activity pretty well. But if you want to understand, say, science, you can't do it without math. That's just the way it is. And in business, if you're innumerate, you're going to be a klutz.

WARREN BUFFETT: Keep talking, I'm chewing. (Laughter) We'll go back — go ahead.

CHARLIE MUNGER: The good thing about business is you don't have to know any high math.

WARREN BUFFETT: It may be a disadvantage to know high math, Charlie.

CHARLIE MUNGER: Yes, I think it is. Because you look for opportunities to use this marvelous, complicated tool. And by and large, that doesn't work nearly as well as just using the simple math.

WARREN BUFFETT: Yeah. When my mother sang me songs about compound interest, there really wasn't any need to go further. (Laughter)

20. Buffett's $10 billion Walmart mistake

WARREN BUFFETT: Let's go back to number 1.

AUDIENCE MEMBER: My name is David Farlow (PH) from Minnesota, Minneapolis. Thank you, Warren and Charlie.

A few minutes ago you mentioned the importance of learning from history. What have you learned from the investments you did not make over the last few years that you now regret refraining from?

WARREN BUFFETT: Well, the mistakes we made, and we made them — some of them big time — are of two kinds. One is when we didn't invest at all in something that we understood that was cheap, maybe because we weren't even working hard enough at looking at the whole list, or because, for one reason or another, we just didn't — we didn't take action.

And the second was starting in on something that could have been a very large investment and not maximizing it.

Charlie is a huge believer in the idea that you don't sit around sucking your thumb when you can — when something comes along that should be done that you pour into it.

And that's generally what we've tried to do. But there have been times — and it's usually happened when I've started buying something at X and it went up to X plus an eighth or some

intolerable amount like that — and I quit or waited for it to come back. And we've missed, in some cases, billions of dollars of profit because of the fact that I'd gotten anchored, in effect, to some initial price when I could have paid more subsequently and it really was inconsequential.

CHARLIE MUNGER: Do you have anything worse to confess than Walmart?

WARREN BUFFETT: No, Walmart — I cost us about — it's up to 10 billion now. (Laughter)

I cost us about 10 billion. I set out to buy 100 million shares of Walmart, pre-split, at about 23. And Charlie said it didn't sound like the worst idea ever came up with, which is — from him, I mean, it was just ungodly praise. (Laughter)

And then, you know, we bought a little and then it moved up a little bit. And I thought, "Well, you know, maybe it will come back" or what —

Who knows what I thought? I mean, you know, only my psychiatrist can tell me. And that thumb sucking, reluctance to pay a little more — the current cost is in the area of 10 billion.

And there have been other examples, too. And there will probably be more examples in the future, unfortunately.

But that is — that's — on the other hand, it doesn't bother us. I mean, you know, it's maybe instructional to talk about it just a little and I'm glad to respond to the question.

But in the end, we're going to make a lot of mistakes at Berkshire. And we've made them in the past, we'll make them in the future.

You know, if every shot you hit in golf was a hole-in-one, it wouldn't be — you know, the game would soon lose interest. So you have to hit a few in the woods occasionally just to make it a little more interesting.

We'll try not to do that too often. But those will be the kind of mistakes we make. We probably won't make the kind of mistakes — although we have — we made one with Dexter Shoe — but we probably won't make the kind that cost us a ton of money. They'll be much more of omission than commission, I think, you'll find in the future.

Charlie, you want to add any more?

CHARLIE MUNGER: Yeah. At least we are constantly thinking about the past occasions when we blew opportunities. Since those don't hit financial reports, the opportunities you had but didn't accept, most people don't bother thinking about them very much. At least that is a mistake we don't make. We rub our own noses in our mistakes in blowing opportunities, as we just did.

21. Very hard to find a good, honest stock advisor

WARREN BUFFETT: OK, number 2.

AUDIENCE MEMBER: Warren and Charlie, my name is Peter Brotchie from Beverly, Massachusetts. And I would like to thank you both for helping me become a better businessman and a better investor. Perhaps more importantly, you have created, by example, a kind of true north on the moral compass for me to steer by.

While the education has been fantastic, I have found that the demands of owning a successful business and having a large family do not leave time to apply the research stance I have become so wonderfully accustomed to by being a member of this cult.

Please imagine, for a moment, that you are 30 years younger, and have only —

WARREN BUFFETT: I like him.

AUDIENCE MEMBER: — a few holes left in your investment punch card. If you were in my situation, to the extent that you would diversify your holdings beyond Berkshire Hathaway, given this environment, how would you choose the investment managers? Or as Charlie has just discussed when addressing foundations, would you hunt for two more great companies to invest in via common stocks?

WARREN BUFFETT: Charlie, why don't you take a swing at that?

CHARLIE MUNGER: Well, of course you're hunting, that's part of the fun of life. And — but I would say that the chief lesson would be that you're unlikely to find very many in a whole lifetime. And when you find one in which you really have thought it out and have confidence, for God's sakes, don't do it in a niggardly fashion.

The idea that very smart people with investment skills should have hugely diversified portfolios is madness. It's a very conventional madness. And it's taught in all the business schools. But they're wrong. (Applause)

WARREN BUFFETT: The question of finding other advisers is a tough one. I mean, when I wound up my partnership in 19 — at the end of 1969 — and I had all these partners that had counted on me and I was going to mail them back a lot of money, you know, I felt an obligation to at least suggest some alternatives for them.

And I recommended two people who I knew were exceptionally good and exceptionally honest. We put one of them on the board not long ago and reaffirmed it today — Sandy Gottesman. The other one was Bill Ruane.

Now, I'd been around the investment world for a long time at that point, and those were the two I knew, but they were more or less contemporaries of mine. And I'd gotten to know them over the years and I'd seen them for a long time.

So I not only knew their results, but I knew how they'd accomplished their results, which is terribly important. I don't know that generation of managers now. But the fact that, with the number of people I knew, that I could only come up with two, at a time when I was very active, says something about the difficulties of finding managers.

The one thing I can almost guarantee to you is that the promotional types going around to solicit the institutional investors are very unlikely to meet any long-term tests of ability, and sometimes, integrity.

It's not an easy job spotting an investor. I think it's probably easier, depending on the amount of time — you know, you mention having children and a business and the amount of time you can spend on. Every now and then you do — if you're conscious of the investment world and you have some kind of sort of grounding knowledge about what's going on, and you can see something, you know, as we did in junk bonds a couple of years ago, or as we did with all kinds of things, some years back, when stocks were cheaper.

You will occasionally see something that you should load up on. And, as Charlie says, that's what you really have to do. I mean, some of the people in this room loaded up on Berkshire many years ago. And the truth was, they didn't need diversification, you know. I loaded up on it. Charlie did. And you'll see opportunities occasionally but you're not going to see them every day or every week.

If you think you're going to see an opportunity every week, you're going to lose a lot of money because people will come around and tell you that they've got them, and they may not be quite as flagrant as that fellow we had in the movie — (laughs) — but they're a version of them.

Charlie?

CHARLIE MUNGER: The business of selecting investment managers was recently shown to be even harder than I had previously thought it was. A significant fraction of the institutional investment managers who run the nation's mutual funds actually accepted propositions to take bribes for betraying their own shareholders.

It was as if a man came to you and said, "I have a wonderful proposition. Why don't I kill your mother and we'll split the insurance money?" And it was that ridiculous. And yet, a significant number of the people said, "Gee, I would like some insurance money." And they just went right ahead.

WARREN BUFFETT: And they were already rich beforehand.

CHARLIE MUNGER: Yes. And they've destroyed themselves, many of them, by making this insane decision. And I think many of them will probably think the outcome is unjust.

WARREN BUFFETT: And the —

CHARLIE MUNGER: I mean the downfall they've had.

WARREN BUFFETT: And the interesting thing about it, of course, is that here is a huge industry that — where the people who weren't doing it have a great interest in having that reputation of the industry not get stained. And a number of them had to know what was going on.

I mean, this was — I don't — it's hard for me to imagine that people at most large mutual funds, even the ones that didn't — that are mutual fund management companies — even the ones that weren't engaging in the activities mentioned weren't aware of it. I mean, you just — if you're in an industry like that, you're going to hear what's going on.

And the Investment Company Institute was busy patting itself on the back, you know, at one meeting after another and becoming very cozy with legislators.

And there wasn't one thing done until a whistleblower when to [New York State Attorney General] Eliot Spitzer and he got active in a very strong way with a very limited staff.

And he uncovered, and put on the front pages, what was taking place. But the industry itself, with hundreds and hundreds and hundreds of people that most have known what was going on — and it went on for a long time. Never said a word. It's — you know, it makes you wonder a little bit.

22. Asset allocation models are "pure nonsense"

WARREN BUFFETT: Number 3?

AUDIENCE MEMBER: Hi, I'm Bob Klein (PH) from Los Angeles.

You've touched on the issue of asset allocation — capital allocation — in response to previous questions. But I wonder if you could elaborate from a risk management perspective. Wall Street and financial planning firms charge a lot of money for their asset allocation models, say, 50 percent stocks, 40 percent bonds, et cetera.

I know you take a more opportunistic approach to building your portfolio and managing risk, as you mentioned by — as you illustrated — by your junk bond example.

And so I just want you to hammer out how you use price and value as a tool of risk management and asset allocation as opposed to coming at it with a pre-conceived idea of how much should be allocated to each asset class.

WARREN BUFFETT: Yeah, we think the best way to minimize risk is to think. (Laughter)

And the idea that you have — you know, you say, “I’ve got 60 percent in stocks and 40 percent in bonds,” and then have a big announcement, now we’re moving it to 65/35, as some strategists or whatever they call them in Wall Street do.

I mean, that has to be pure nonsense. I mean, 60/40 or 65/30 — it just doesn’t make any sense.

What you ought to do is have — your default position is always short-term instruments. And whenever you see anything intelligent to do, you should do it. And you shouldn’t be trying to match up with some goal like that.

I found it entertaining — I was just reading yesterday in an article, I think it was, about the two fellows at Google and all of the problems they’re going to have because they’re each going to get a few billion dollars. I mean, it was — I want to send a sympathy card. I almost went down to Hallmark store because this article went on — they’ve got this terrible problem and that terrible problem and they’re going to need lawyers, and they’re going to need financial — they don’t need anybody.

Those guys are smarter than the people that are coming to them. And they do not have a big problem, and they are very capable of thinking it through themselves.

The people that have the problem are the people who want to sell their services to them and are going to have to convince them that they have a problem.

But so much of what you see when you talk about asset allocation — it’s just merchandising. It’s a way to make you think that if you don’t know how to determine whether it should be 60/40 or 65/35, that you need these people. And you don’t need them at all in investing.

Most of the professionals that tell you that you’re going to get in great trouble unless you listen to them and sign up for their services, you know, they’re good at selling, but —

It’s what my brother-in-law — former brother-in-law — that worked at the stockyards used to say was that people would bring in cattle or something. And I’d say to him, you know, “How do get the farmer to employ you to sell to Swift or Armour or Cudahy instead of the guy right next to you. I mean, you know, a cow is a cow and Armour’s going to buy it the same way.”

And he gave me this disgusted look and he said, “Warren, it’s not how you sell them, it’s how you tell them.” Well, there’s a lot of that in Wall Street.

Charlie?

CHARLIE MUNGER: Yeah, people have always had this craving to know the future. You know, the king used to hire the magician or the forecaster and he’d look in sheep guts or something for an answer as to how to handle the next war. And so there’s always been a market for people who purported to know the future based on their expertise.

And there's a lot of that still going on. It's just as crazy as when the king was hiring the forecaster who looked at the sheep guts.

And people have an economic incentive to sell some nostrum. It can be sold over and over and over again.

The really interesting figures are when you combine the underperformance of the market, say, by the mutual fund industry, which is probably a couple of points per annum. And that understates it.

Now, if you take all of the investors in the mutual funds who are constantly whipsawing from one fund to another by a bunch of brokers who want commissions, now you take a sub-normal performance and it goes on another three or four percentages points due to the shuffling of the mutual fund investments.

So the poor guy in the general public is getting a terrible result from contacting the experts. And these guys are hitting the Scout troop and the Community Chest drive and are locally reputable people.

I think it's disgusting. It's much better to make a living by being part of system that delivers value to the people who are buying the product. But nobody refrains from creating gambling casinos or something, on my theory.

If it'll work to make money, why, we tend to do it in this country.

23. Workers' compensation insurance fraud

WARREN BUFFETT: Microphone 4.

AUDIENCE MEMBER: Good morning Mr. Buffett and Mr. Munger. My name is Steven West and I am a framed art manufacturer in Morganton, North Carolina.

I feel especially tied to Berkshire Hathaway as I am both a vendor to Nebraska Furniture Mart, Star Furniture, and RC Willey, and also a customer of Larson Jewel.

My question relates to workers' compensation fraud being committed by workers' compensation carriers on manufacturers such as myself, a scandal which I believe is far greater than the scandals that have been mentioned heretofore at this meeting.

As an example, in 1998, when I was trying to figure out why my experience mods were going way out of whack, I received a loss run and I believe, mistakenly, also a check run from my insurance carrier.

It was shocking. Four losses for $152,000 they claimed to the state of North Carolina actually amounted to less than $6,000. And one claim, which they claim they spent $70,072 on, they actually only spent $86.88.

Now naturally, this threw my company into the high-risk pool. It's cost me hundreds of thousands of dollars.

And my question is, are they trying to pull the same stunt on Berkshire Hathaway companies, especially in labor intensive operations, such as Dairy Queen. Because I have not, in the intervening years, been able to get one single copy of a negotiated check out of these insurance company. They will not give it up, even under subpoena, and their behavior is entirely consistent with criminal fraud.

Now, my question relating to the Berkshire Hathaway problems — or companies — is, are your managers attuned to this and are they receiving the actual copies of the negotiated checks that the insurance companies claim that they're spending to settle workers' compensation injury cases? Thank you.

WARREN BUFFETT: Yup. Well, I would say that there's plenty of fraud in various aspects of insurance.

In auto insurance, for example, I mean, obviously, we have fraud units, but I know you're directing your question more to the insurance carriers than actually what takes place with policy holders and doctors and lawyers and various other parties.

But we find that for every dollar we spend on fraud prevention or detection, I think we get back well over $10.

In the comp field, workers comp, you know — we have lost more money in workers' compensation insurance, I would guess — I may be wrong on this, but I would guess than just about any line.

Not necessarily as a percentage of premiums, but in terms of aggregate dollars. It's been a very tough period.

So from the standpoint of — we have one small workers' compensation direct operation in California called Cypress. And then Gen Re had — has written a lot of workers' comp reinsurance and it's been a bit of a blood bath. The rates have not covered the losses.

And I would say that there is a fair amount of fraud that enters into the losses we've experienced, or at least the industry's experienced, particularly at the direct level.

But I — in terms of your dispute with an insurance company, I don't know what company that would be, but I would say that most — many companies that have been in the workers'

compensation business, particularly in California in recent years, wish they hadn't been in the business. I mean, they have not been making a lot of money off of defrauding policy holders that I know about.

But Charlie, do you have anything to say on that?

CHARLIE MUNGER: Well, the experience may be related. If a company gets into a lot of trouble from fraud practiced on it by lawyers, doctors, and claimants, and its own affairs are disrupted by fear and agony, that company is likely to start behaving badly with its own policy holders in order to lay the troubles off on somebody. I think that's just human nature.

But I don't think the main fraud in workman's comp is by the carriers against the small businessmen. It's by the claimants, the attorneys, and the doctors, against the whole system. (Applause)

WARREN BUFFETT: That really would be our experience.

As a sidelight, I noticed you were from Morganton, North Carolina. We have a business there, Carolina Shoe. We make work boots. And I give a talk at University of North Carolina some time ago. In fact, I think they have a tape of it still.

And afterwards — I had mentioned in the talk that we had this business in Morganton. And one of students came up to me afterwards. And there were a number of them, and I shook his hand and, making idle conversation, I said, "Where are you from?" And he said, "I'm from Morganton."

And I said, "Oh," I said, "Do you know Carolina Shoe?" And he thought a second, he said, "I don't know her, but I think I know her family." (Laughter)

Never forgotten that fellow.

24. Utility law repeal would help MidAmerican, but no bonanza

WARREN BUFFETT: Number 5.

AUDIENCE MEMBER: Good morning. Andrew Sole from New York City.

I just want to preface my question by saying that I have a deep admiration and affection for both of you men. And in that spirit, I had got a Golden Retriever puppy a few months ago, and he's been proudly named "Munger."

WARREN BUFFETT: Is he housebroken? (Laughter)

AUDIENCE MEMBER: And Charlie, you'd be very proud. He's just like you. I bring him to Central Park and hundreds of women flock over to pet him.

CHARLIE MUNGER: Really?

WARREN BUFFETT: He's well-named. He's well named. (Laughter)

AUDIENCE MEMBER: That's serious, but this is also serious.

My question has to do with the Public Utility Holdings Company Act, which obviously affects MidAmerica's businesses.

You've spoken that, if it were repealed, you'd be able to commit billions of dollars into the energy infrastructure for the country.

And despite the fact that there was a massive blackout in this country over the last summer, the act has not been repealed. And I'm curious as to what effect it might have if PUHCA wasn't repealed for MidAmerica.

WARREN BUFFETT: Yeah. The Public Utility Holding Company Act was passed in 1935. It was a reaction, and a justified reaction, to some real wild antics that had taken place in the '20s in the public utility field that were most dramatic in the case of Sam Insull, but occurred with a lot of other companies, Associated Gas and Electric and various other companies.

And there was pyramiding of the utility capital structure. And there were a lot of things that were wrong that were addressed in that act. And in our view, that act is long outmoded. And I think that — I mean, the SEC, which has responsibility for administering it, I think there's a lot of feeling there that it's long been unneeded.

And I think that there've been various energy bills that have included the repeal of it. But there was no energy bill passed in the last year. So we live with the Public Utility Holding Company Act. And it does restrict what we do.

It's an interesting question, though, if it were repealed, whether that necessarily would open up lots of opportunities. Because if it were repealed, it's quite conceivable that a number of other companies would also be competing with us, in terms of possibly buying utilities that might have been difficult for us to acquire, or for them to acquire, back when the law was in existence.

So I don't want you to think that, if it gets repealed, that Berkshire Hathaway is necessarily worth a lot more money.

But I do think it should be — I mean, I think it's logical. It's — there are lots of — there's plenty of appropriate regulation in the public utility field and there are advantages to having strong

companies like Berkshire Hathaway pouring money — energy requires enormous sums of money. And to the extent we can use capital advantageously in that business, we're ready to do it. And it should not be impeded by the act.

If I had to bet, that act will probably go off the books at some time. But it doesn't seem to be, you know, in the immediate future. It will not necessarily mean we get a lot richer.

Charlie?

CHARLIE MUNGER: Yeah, but if we had a wonderful opportunity in the field now, we would find a way to do it. Probably through MidAmerican, right?

WARREN BUFFETT: Well, we'd find a way to do it. Yeah.

There's been nothing that's been presented to us that we couldn't get done so far. Now it might involve a more awkward structure, but we have not — you know, there's been nothing that we wish we could have done and when we got to the finish line, or a yard from the finish line, we said, "Well, we can't do this because of the Public Utility Holding Company Act."

Now, there might have been other things presented if that act hadn't been on the books.

But it will be no bonanza for us at all if it goes away. It may make life simpler on some very large transaction.

25. Berkshire real estate business will grow

WARREN BUFFETT: Number 7? I'm sorry, number 6. I skipped 6. Number 6.

AUDIENCE MEMBER: Good morning. My name is Andy Lewis Charles from Miami. I think I speak for everyone when I wish both of you gentleman continued health. I would wish you continued wealth, but I think you have that covered.

WARREN BUFFETT: We could use more. (Laughter)

Of each.

AUDIENCE MEMBER: Speaking of MidAmerican Energy, a unit company underneath it, HomeServices, I see as a great opportunity. I would love to see and hear your thoughts about the future growth potential for it, especially against large consolidators like Cendant Corporation. Thank you.

WARREN BUFFETT: Yeah, HomeServices will grow. HomeServices, as you know, owns a number — I can't recall how many, but probably in the area of 15 or 16 maybe — controls a number of local real estate firms. And they retain all of their local identity.

In that way, it's somewhat akin to the whole Berkshire Hathaway model, where we leave our subsidiary companies quite autonomous and they operate as if they were — the managers operate as if they own them themselves.

Well, HomeServices is somewhat along the same line in that we have no national identity, where Cendant works under a couple of big names.

We've acquired one company in North Carolina here in the last month or 6 weeks, Prudential of North Carolina. And we will end up — unquestionably, in my view — we'll end up buying either a few or a whole lot of additional companies over the next 10 years.

We will — we've got great management. We like the business. We hear about opportunities from time to time.

Last year, you know, we participated in roughly $50 billion of transactions. And I think — I'm really vague on this one, but — I better not give you a percentage of the national total that is, but it's a very small percentage. It's a lot of transactions, a couple hundred-thousand transactions.

We're very big in Southern California, for example. We're very big in Minnesota. We're very big in Iowa. Very big right here in Omaha and in Lincoln. But there's an awful lot of places where we aren't at all.

We like to buy leading firms as we go around. And we sometimes like to buy more than one in a community.

It's a good business. It's a very cyclical business. Right now, it's very good. We will go through periods in the next five years. I'm sure we'll go through a period where it's very slow. But we'll keep buying. We'll buy when business is slow, we'll buy when business is good, depending on the price of the institution and the kind of business we're buying.

I don't know how big it can become. It will become bigger than it is now. Relative to Berkshire's total market value, it may not be that — a huge factor. But it's conceivable as we buy more operations, we'll find other things to do with them, too.

I mean, the purchase of a home is a big deal to people. You know, often they're buying furniture at the same time and maybe we can make a suggestion or two.

Charlie?

CHARLIE MUNGER: I've got nothing to add about that business.

26. Charity program reluctantly dropped after anti-abortion boycott

WARREN BUFFETT: Number 7.

AUDIENCE MEMBER: Good morning. I'm Jim Hayes (PH) from Alexandria, Virginia.

I hate to beat a dead horse, but I really like the charitable plan. Suppose you brought it back and then personally opted out and then we floated you a bonus equal to what you might otherwise be entitled. Would you consider that?

WARREN BUFFETT: Are you talking about renewing the shareholder-designated contribution program?

CHARLIE MUNGER: Yeah.

AUDIENCE MEMBER: Yes. And then personally opting out, and then we could have a shareholders' vote to grant you an option bonus or some kind of tax-advantaged bonus.

WARREN BUFFETT: Yeah, I think that might get a little complicated.

Additionally, I wasn't the only one giving money at all, nor was Charlie, to organizations, primarily pro-choice organizations, in fact over — I don't know of any other than pro-choice organizations — that the people that were causing harm to the Pampered Chef representatives. We had dozens and dozens, maybe even hundreds, giving money on both sides of the issue.

I mean, if you looked at one class — well, the largest classification of gifts went to churches. Probably the largest classification in that, I'm (inaudible) positive, were Catholic churches.

And we had people giving money to everything in the world, which is exactly the way we wanted it. I mean, whatever — it's the shareholders' money.

So even if you had the two of us opt out, we would have organizations that would get violent about the fact that some money was going to pro-choice organizations. And rather than take it out on us, whom they can't hurt, they've taken it out on some very innocent people.

And neither Charlie nor I like the idea of somebody — you know, some woman that's developed a living, you know, in Dubuque, Iowa or in Casper, Wyoming, having her livelihood destroyed because of what we're doing.

So reluctantly, we gave up the practice. I mean, we — actually, I received a letter one time from somebody — some organization was monitoring — said they didn't give — they didn't care if we were giving $10 million to pro-life organizations and $1 to pro-choice organizations, they were still going to boycott our people.

Well, boycotts don't bother me. We had some of that right along, always on a small scale. But — because they can't — they basically can't hurt us in any significant way.

But they can hurt individuals very badly and we're not going to have something around Berkshire that's hurting a bunch of people that have devoted their lives to working with us. So we reluctantly gave it up.

Charlie?

CHARLIE MUNGER: Well, as I said, it's a dead horse and I miss it, too.

27. Buffett family and Berkshire managers will protect the company

WARREN BUFFETT: Number 8, please.

AUDIENCE MEMBER: Good morning. I'm Jay Leiber (PH) from Houston, Texas.

Mr. Buffett, since I'm older than you and maybe even as old, or older, than Charlie, I feel like I can ask this question. And I'll ask it as delicately as possible.

When the time comes that you, I, and Charlie have gone to that big stock market in the sky, I understand that you planned — or at least, I have read — that you plan to give the bulk of your Berkshire Hathaway stock to your charitable foundation, along with your 30 percent of the votes of the company.

If this is correct — and if it's not correct, this question is moot — but if so, what assurance do the Berkshire Hathaway shareholders have that the company will continue to be run as honestly and straightforward as it is now, such as only 15.8 employees or so at headquarters and no —

WARREN BUFFETT: Yeah, the —

AUDIENCE MEMBER: — huge salaries or other ridiculous giveaways to dilute and weaken the equity of the shareholders at that time.

WARREN BUFFETT: Well, for a short while there'll only be 14.8, actually. (Laughter)

But it's a good question — a very good question. Since you're older than I, apparently, I hope we don't go at the same time. The —

There's one slight twist to the estate plans we have. If I die first, all of my Berkshire goes to my wife. And if we died simultaneously, it would all go to the foundation.

But all of the stock will end up in the foundation. In fact, if I died first, she might put my stock in the foundation before her death, but that would be up to her. But it will end up in the foundation — all of the stock.

As you mention, it has 30-odd percent of the votes, although under the tax law, once it's in the foundation, within five years, it would have to either convert to be some of it — it would have to get down to 20 percent of the vote. That's required under foundation law.

In terms of how it would be run in the future, I think it has a far better chance than any company — any major company I know in the country — of maintaining the culture, because it has — it will have people running it who have grown up in the culture.

Earlier, it was — the criticism was made about my wife and my son being on the board, but they are guardians of the culture. They are not there to profit themselves, they are there to profit as the shareholders profit, but also to keep the company in the same way as previously.

One great example of that, of course, has been at Walmart where, when Sam Walton died, a not too dissimilar amount of stock was left among the family. And essentially the Walton family has, in my opinion, done a magnificent job, not only of selecting successors to run the place, but having successors who, if anything, reinforced the culture of Walmart. And it's been an enormously successful arrangement.

The Waltons are there, in case anything goes wrong, to make a change if needed, but they're not there to run the business. And that's exactly the pattern that we hope to have at Berkshire. And I think we have it.

I think I — you know, I can't give you a hundred percent guarantee, but I would far rather bet on the integrity of the family that succeeds me, plus the managers that succeed me, at Berkshire remaining true than I would any other company in — for a long, long time — any other company I can think of.

Charlie?

CHARLIE MUNGER: Well, I would have a reason to fret about this subject, just as you would. And I, of course, have known the members of the Buffett family that would be here after Warren is gone for decades. Don't worry about it. You should be so lucky. (Laughter and applause)

WARREN BUFFETT: It's a question we don't wish to have an instant answer for, though, however. (Laughter)

28. Profits as GDP percentage won't be moved by technology

WARREN BUFFETT: Number 9, please.

AUDIENCE MEMBER: Good morning. James Easterlin (PH) from Durham, North Carolina.

My question — statement is, you have often written in reference to average corporate profitability remaining fairly consistent in the long run, such that return on equities are in the 12 percent range for U.S. companies, and after-tax profits as a percentage of GDP is sticky in the 4 to 6 1/2 percent range.

And the question is, given the advances in technology that brought the inventory-to-sales ratios down to historic lows, given the widespread adoption of the EVA principles by companies, might you think that might change over time?

WARREN BUFFETT: Yeah, I don't think any of the factors that you mentioned will act to move corporate profitability out of the range that has historically existed.

It's going to bob around, obviously, some, but I certainly don't think EVA will do a thing for American corporations in terms of making them receive a greater share of GDP in profits.

Technology, that's just as likely to reduce profits as to increase profits. I mean, as the economic machine of the United States works better and better over time, the main beneficiaries are going to be consumers.

If you took whoever you think is the best business manager in the United States and you put a clone of that person in charge of each one of the Fortune 500, the profits of the Fortune 500 would not necessarily go up, because there's this competitive nature to capitalism where the improvement you get one day, your competitor gets the next day.

And it very much tends to work to the benefit of consumers but not to increase overall profitability.

We see that in the industries we're in. Every — we were in the textile business for a long time and various new products — various new machinery — would come along and it would promise to deliver a 40 percent internal rate of return and get rid of 43 employees or something like that.

And, you know, we just did one after another of those, and when we got all through we didn't make any money, because the other guy was doing the same thing.

And I liken it to everybody at a parade — you know, a huge crowd watching it and somebody stands up on tiptoes and, you know, 10 seconds later, everybody in the crowd is up on tiptoes and they're not seeing any better and their legs hurt. Well, that was the textile business.

And there's an awful lot of self-neutralizing things in capitalism. So I don't really expect any of the factors you named, or any other factors that I can think of, that will move profits up as a percentage of GDP.

And indeed, I think that if you're looking at GDP as being the national pie and profits being what investors get out of it, and the rest belonging to people who are out there working for a living every day, I don't think the relative — the proportions — are inappropriate.

Charlie?

CHARLIE MUNGER: I've got nothing to add to that.

29. Method for estimating a company's future growth and establishing a margin of safety

WARREN BUFFETT: Number 10.

AUDIENCE MEMBER: Good morning. I'm Marc Rabinov from Melbourne, Australia.

Mr. Buffett and Mr. Munger, I'd like to ask you, when you assess a business and derive its intrinsic value, how do you estimate the future growth of the business, and how do you decide what margin of safety to use? Thank you.

WARREN BUFFETT: It was the future growth and what, Charlie?

CHARLIE MUNGER: Well — I have difficulty understanding that question fully. He's talking about how do we combine our estimates of future growth with our passion for having a margin of safety. Surely, you can handle that. (Laughter)

WARREN BUFFETT: Well, I can certainly handle it as well as you can. (Laughter)

Every time he laterals them off to me, you know, he calls those audibles. (Laughter)

You calculate — I think you take all of the variables and calculate them reasonably conservatively. But you don't try and put too much windage in at every level.

And then when you get all through, you apply the margin of safety. So I would say, don't focus too much on taking it on each variable in terms of the discount rate and the growth rate and so on. But try to be as realistic as you can on those numbers, but with any errors being on the conservative side. And then when you get all through, you apply the margin of safety.

Ben Graham had a very simple formula he used for just the most obvious situations, which was to take working capital — net working capital — and try and buy it at a third off working capital. And overall, that worked for him. But that method sort of ran out of steam when the sub-working capital stocks disappeared.

But it's the same thing we do in insurance. I mean, if we're trying to figure out what we should charge for, we'll just say, the chances of a 6.0 earthquake in California, well, we know that in the last century, I think that there have been 26 or so 6.0 or greater quakes in California.

And let's forget about whether they occur in remote areas, let's just say we were writing a policy that paid off on a 6.0 or greater quake in California, regardless of whether it occurred in a desert and did no damage or anything.

Well, we would look at the history and we'd say, "Well, there've been 26 in the last century." And we would probably assume a little higher number in the next century, that'd just be our nature. But we wouldn't assume 50. If we did, we wouldn't write any business.

So we would — we might assume a little higher. I would, if I was pricing it myself, I'd probably say, "Well, I'll assume there are going to be 30, or maybe 32, or something like that."

Then when I get all through, I'll want to price the — I'll want to put a premium on it that now puts in a margin of safety. In other words, if I figured the proper rate for 32 is a million dollars, I would probably want to charge something more than a million dollars to build in that margin of safety.

But I don't want to hit it at — I want to be conservative at all the levels and then I want to have that significant margin of safety at the end.

And I guess that, as I understand the question, that'd be my answer. And Charlie, do you want to add to that?

CHARLIE MUNGER: Yeah, that book, "Deep Simplicity," that I recommended to you says that you can predict out of those 26 earthquakes how the size will be likely to be allocated.

In other words, there's a standard power law that will tell you the likelihood of earthquakes of varying sizes. And of course the big earthquakes are way less likely than the small ones.

So you count the math and you know the applicable power law and you guess as to how much damage is going to — it's not that difficult.

WARREN BUFFETT: It becomes more difficult if somebody said they really want protect against a 9.0 or something like that. You know, is it one in 300 years? Is it one in a thousand years? You know, when you get really off the data points.

But that is not what you're looking at in investments. You don't want to look at the things that are that — you don't want to come up with the companies where you make the assumptions that get that extreme.

And you don't have to, that's the beauty about investments. You only have to look at the ones that you feel capable of evaluating and you skip all rest.

30. No single formula for regulatory impact on businesses

WARREN BUFFETT: Number 11?

AUDIENCE MEMBER: Good afternoon. It's James Tarkenton of Durham, North Carolina.

Current examples, including discussion of media ownership rules, FCC regulation of the telecom industry, and proposed oversight changes for mortgage giants Fannie Mae and Freddie Mac are all examples of the legislative, regulatory, and lobbying process as an influence in shaping and reshaping economic moats.

We would be interested in your comments on these and other examples of how competitive advantages are shaped by government.

In general, how do you incorporate the impact of regulation on the size and ferocity of economic moats for various businesses?

WARREN BUFFETT: Well, that varies enormously by the business. I mean, there're some businesses that we think that it's not a very big factor, and there's other businesses we're in — the energy business, the insurance business — where regulatory change could have a huge impact.

You know, we don't have any one-size-fits-all type arrangement. We just try to think intelligently about any business we're in. And if it's — when we bought GEICO in 1995, or bought that last half of it or whichever year it was, the question, you know, whether the regulatory climate would change in some major way, you nationalize auto-insurance — well, all of those things go through our mind and we evaluate them.

But there is no — there's no formula. You know, if we're — if we're in furniture retailing, you know, that is not something we're going to worry about. We're going to worry about plenty of things, in terms of competition, but there are different variables that apply with different intensity to each business we're in. And it's up to Charlie and me to try and think about any of the variables that might hit those businesses, and to weigh them appropriately, and to crank that into our evaluation.

Charlie?

CHARLIE MUNGER: I think it would be fair to say that in our early days, we tended to overestimate the difficulties from regulation. We refrained from buying television station stocks for a long, long time because it seemed like such a peculiar asset when anybody could just ask to have your license jerked away from you each year and they could ask a government agency to do it. And — but it turned out, the way the system evolved, that almost never happened.

WARREN BUFFETT: Yeah, Tom Murphy figured that one out before we did. (Laughs)

CHARLIE MUNGER: Yeah, and we had it — we were slow on the learning curve. Murphy was way better at it than we were.

31. Buy Berkshire or low-cost index fund?

WARREN BUFFETT: Microphone 12, please.

AUDIENCE MEMBER: Hello, gentleman. My name is Vivian Pine and I'm from Tarzana, California.

And my question is, for a new investor buying stocks today, would you recommend that they buy a low-cost S&P index fund or Berkshire Hathaway, and why?

WARREN BUFFETT: Well, we never recommend buying or selling Berkshire. But I would say that, among the various propositions offered you, a very low-cost index fund where you don't put all your money in at one time.

I mean, if you accumulate a low-cost index fund over 10 years with fairly regular sums, I think you will probably do better than 90 percent of the people around you that take up investing at a similar time.

Charlie?

CHARLIE MUNGER: I would agree with that, totally. It's awkward for us sitting here at these annual meetings where we have a sampling of some of the most honorable and skillful stockbrokers around who've done a wonderful job for their own clients and families. But the stockbroking fraternity, in toto, can be guaranteed to do so poorly that the index fund is a better option.

32. Leverage can prevent you from playing out a winning hand

WARREN BUFFETT: We'll go to number 1 again.

AUDIENCE MEMBER: John Bailey from Boston.

As of last week, my house is almost totally covered with Benjamin Moore now. (Laughter)

But more seriously, you spent a fair amount of time talking about the low-probability transformative events. I recall a discussion on the probability of a nuclear event not occurring in any given year for, say, 50 years, at which point it begins to look like, over the time period, it's pretty darn likely and therefore the expected value is a pretty big negative.

There are some other things that could be happening that somebody might expect. For instance, perhaps there is, in fact, a ceiling on consumer debt coverage ratios. If they quit falling, there — that could be a big change.

If you even listen to the United States Geological Survey, they're now saying that sometime in the next 50 years, there could be a fall in the production of oil.

And so, I'd like you to address how you conceive of the portfolio of businesses in the context of these possible transformative events, especially given that over this same time period of maybe the next 50 years, at some point, you're not going to be able to personally revise the portfolio.

WARREN BUFFETT: Yeah, I think it's a fair statement that over the next 50 years at some point, Charlie and I will not personally be able to — (laughs) — participate in portfolio revisions. The —

Well, you're quite correct that people tend to underestimate low-probability events when they haven't happened recently and overestimate them when they have happened recently.

That is the nature of the human animal. You know, Noah ran into that some years back. But he looked pretty good after 40 days. The —

What you mention on the nuclear question, it's a matter — you can do the math easily. What you don't know is whether you're using the right assumptions. But it —

For example, if there is a 10 percent chance in any given year of a major nuclear event, the chance that you'll get through 50 years without it happening, if the 10 percent is correct, is a half of 1 percent.

I mean, 99 1/2 percent of the time a 10 percent event per year will catch up with you in 50 years. If you can reduce that to 1 percent, there's a 60 percent chance you get through the next 50 years without it happening.

That's a good argument for trying to reduce the chances of it happening.

In terms of our businesses, I think Charlie and I are — I mean, we think about low-probability events. In fact, in insurance, we probably think about low-probability events more than most people who have been insurance executives throughout their years. It's just our nature to think about that sort of thing.

But I would say, if you talk about transforming events, or really talk about major events that could have huge consequences that are low probability, they're more likely to be in the financial arena than in the natural phenomena arena. But we'll think about them in both cases.

But we do spend a lot of time thinking about things that can go wrong in a very big and very unexpected way.

And financial markets are — they have vulnerabilities to that, you know, we try to think of and we try to build in ways to protect us against it and perhaps even build in some capabilities where we think we might profit in a huge way from it.

Charlie?

CHARLIE MUNGER: Yeah, that temporary collapse in the junk bonds, where they got down, many of them, to 35 and 40 percent yields, that's a strange thing. And to have all those things pop back — you know, quadrupling in a short time. There was absolute chaos at the bottom tick of that.

And that isn't as much chaos as you could have. And of course, it can happen in common stocks instead of junk bonds.

So I think if you're talking about the next 50 years, we all have to conduct ourselves so that we — it won't be all that awful if a real financial crunch of some kind could come along. Either inflationary or a typical deflationary crunch of the time [kind] that people used to have a great many decades ago.

WARREN BUFFETT: Probably the most dramatic way in which we are — give evidence of our — of your worries, is we just don't believe in a lot of leverage. I mean, you could have thought junk bonds were wonderful at 15 percent because they eventually did go to 6 percent, you would have made a lot of money.

But if you owed a lot of money against them in between, you know, you wouldn't have been around for the party at the end.

So we believe almost anything can happen in financial markets. And the only way smart people can get clobbered, really, is through leverage. If you can hold them, you have no real problems.

So we have a great aversion to leverage and we would predict that a very high percentage of the smart people operating in Wall Street, at one time or another, are likely to get clobbered through the use of leverage.

It's the one thing that forces you — it's the one thing that ends — or can prevent you from playing out your hand. And all of the hands we enter into look pretty good to us. But you do have to be able to play them out.

And the fascinating thing to me is that — just take the junk bond situation. In 2002, you had people with terrific IQ — tens of thousands of them operating in Wall Street. You had the — money was available. They all had a desire to make money.

And then you see these extraordinary things happen in markets and you say to yourself, you know, can these be the same individuals that two years later or two years earlier were buying these things at prices that were double or triple or quadruple what they sunk to in between? And did they all go on vacation? You know, did they lose their ability to raise money?

No, the money was — you know, Wall Street was awash in money, and it was awash in talent, and yet you get these absolutely extraordinary swings.

I mean, it doesn't happen with apartment houses in Omaha or, you know, with McDonald's franchises or farms or something. But it's just astounding what can happen in the marketable securities department.

And the big thing you want to do is, at a minimum, you want to protect yourself against that sort of insanity wiping you out.

And better yet, you want to be prepared to take advantage of it when I happens.

Now it's about noon, so we will come back and begin at microphone 2 about, say, a quarter of one.

Afternoon Session - 2004 Meeting

1. Difficulties of judging whether a company has ethics

(Note: Video recording begins with meeting already in progress.)

AUDIENCE MEMBER: After reading this story on Enron, I would like to ask you the following question.

How does an entry-level employee in a large company find out if her employer operates with a long-term perspective, and with honesty and integrity?

WARREN BUFFETT: Well, that's a very good question. I'm not sure I'm going to have an equally good answer. It —

You know, you pick up signals — or frequently, you can pick up some signals — about what is going on at the top of a business if you're at a lower level. But I would say it would be very easy to be fooled on that subject.

Charlie and I would tend to be looking at things that they do in public in relation to their investors and the promises they make, and all of that sort of thing. But I think that might be tough for people, and it wouldn't always give you a great guide.

I've — we've been suspicious of companies, for example, that place a whole lot of emphasis on the price of their stock.

I mean, when we see the price of a stock posted in the lobby of the headquarters or something, you know, things like that make us nervous. But I'm not so sure that's, you know, that that would be enormously helpful.

So I guess you just have to sort of pick up from coworkers, publications, pronouncements of the leaders, the sort of culture that was being presented to them and the world, and, you know, you might get suspicious about it.

But I don't think I have a really good answer for that, do you Charlie?

CHARLIE MUNGER: No, it's obviously easy when you've got a caricature of a person like Bernie Ebbers or Kenny Lay. I think it's easy to say that you've got almost a psychopath — (laughter) — in charge.

But what fools you is a place like Royal Dutch. If I'd been asked to guess —

WARREN BUFFETT: Ah!

CHARLIE MUNGER: — major companies with sound, long-term cultures, and a good engineering values, and so forth, Royal Dutch would have been near the top of my list.

And to have the oil reserves phonied for years, and internal reports of people who were tired of lying.

If it can happen at Royal Dutch, believe me, it can happen a lot of other places.

WARREN BUFFETT: Yeah, Charlie and I would not have spotted it at Royal Dutch by any of the means that we normally use.

In fact, we — as Charlie said, we might have used that as an example of some place that was almost certainly above reproach. And then you do read the emails and all that.

CHARLIE MUNGER: But we don't learn, because I would still expect that Exxon's figures were fair.

WARREN BUFFETT: Yeah.

I think you — what was — what transpired in the 1990s, you know, was this gradual — and later on, not so gradual — embracing at the top of the feeling that anything goes.

You know, I don't — I'm not going to speculate as to the motives at the top of Shell.

But there was so much going on where people saw the fellows — in most cases fellows, unfortunately — that were at their clubs, that they saw at other corporate meetings, were respected business leaders, they saw just one after another that were really cutting corners in one way or another.

And, you know, situational ethics can take over in that. People do, I think, they sink faster to a lower prevailing morality than they rise to a higher prevailing morality.

But they do move in the direction of what they perceive to be the prevailing morality of those around them, in many cases. And certainly the corporate world in the late 1990s, particularly, it was extreme on that.

2. Congress shouldn't make (immoral) accounting rules

And that leads me into — I ran into a friend at the lunch break who's involved in these matters. And he suggested, and I'm delighted to put in a plug to encourage all of you to write your congressman and senators to give your views on whether stock options should be expensed, or whether indeed, whether Congress has got any business legislating on the question of what proper accounting is.

It was a disgrace some 10 years ago when the United States Senate essentially threatened the accounting standards board with extinction and bludgeoned Arthur Levitt, then running the SEC, at the behest of a lot of rich contributors, to declare that — to override the accounting standards board's pronouncement that options should be treated as expense.

And it was — and I think in a very significant way, it accelerated the "anything goes" mentality of 1990s.

At that point, when Congress says it's more important to have stock prices go up than it is to tell the truth, and they voted 88 to 9 in order to do it, as I remember, I think there was a shift in morality among many corporate executives.

You may remember that the FASB then backed off, but still said that expensing was preferable. And having said it was preferable, 498 out of the 500 companies in the S&P took the less preferable method.

All of the big auditing firms at that time endorsed their big clients' views, in order to report higher earnings. Now, all four accounting firms say you should count them as expenses.

Well, they're right, now, but it just shows what was going on in that period when, on a question of accounting principles, and when really nothing has changed, when what were then five — the Big Five —have shifted 100 percent to where the Big Four are now, and, now, they say options should be expensed.

So, if you are inclined to write your congressman or senator, tell him you really think the FASB knows more about accounting than they do. And I think you'll be right.

If you want to have some fun, go to Google and type in two words. Type in the word "Indiana," and type in the word "pi," that's the mathematical symbol pi. And when you do that, you'll see a number of stories come up.

And they relayed how in 1897, at the instigation of one legislator who was responding to a constituent, the House in Indiana voted almost unanimously, it may have even been unanimously, it says what it was on Google, to change the value of pi. (Laughter)

I'm, you know, I'm not making this up. It's checkable.

And it seems that there was a fellow that thought he'd discovered some new relationship between circumference and diameter, and area, and a few things. And it came out to 3.20 if you worked through his formula.

And he offered to give this royalty-free, as he put it, to the State of Indiana to teach its children so that they would have not only the truth, but they'd have an easier number to work with than the long decimal that heretofore had been thought of as pi.

Well, that passed the Indiana legislature. And it passed the House. By the time it got to the Senate, there were a few people that were still clinging to the old values who managed to shoot it down.

But I would submit that in the — in 1993, that the U.S. Senate cleansed the record of the Indiana legislature by outdoing them in attempting to change the rules on something, on a subject, they knew nothing about.

And I think some of the excesses of the 1990s that followed came about through the fact that they knew 88 senators were willing to declare the world was flat if constituents who had contributed enough money to them wanted it thus.

Let's — we pause now, go back to our schedule here.

Number 3. Oh, Charlie, do you have anything to say about the Indiana legislature?

CHARLIE MUNGER: Well, I — the current members of Congress that want to retain the former abusive accounting, which are probably a majority of the House of Representatives, are way worse than the people who wanted to round pi to an even number.

Those people were stupid. (Laughter)

These people are mostly not stupid, but dishonorable. I mean, they know it's wrong, and they want to do it anyway. (Applause)

3. "Too many conflicts" for a Berkshire fund management company

WARREN BUFFETT: Let's go to number 3.

AUDIENCE MEMBER: Hi, my name is Nate Anthony (PH), from Hinsdale, Illinois.

First, I would like to venture a response to an earlier question about the future of Berkshire.

I believe it is our responsibility as shareholders to think for ourselves and ensure that Berkshire is run as respectably in the future it has been until now.

You both have had a lot to say, both today and in the past, about how mutual funds should be run. But to my knowledge, we do not directly have a fund management business.

What do you think about putting your words in action, and offering to have a Berkshire company manage the assets of funds where the directors are dissatisfied with present management?

WARREN BUFFETT: Yeah, the problem would be, there would be too many conflicts.

You know, we're managing so much of our own money at Berkshire that to take on the responsibility for managing another group of people to whom we would owe our best efforts, and handling that situation of wearing two hats ethically, I wouldn't know how to do it.

I certainly wouldn't want to start a fund management company and be prorating all purchases between Berkshire and that fund management company, or the funds that it managed.

I — we've thought about it plenty. I mean, we've had all kinds of propositions put to us.

And obviously, we could sell it big time. But when we got through selling it, then we'd have the problem of administering it fairly. And I don't know how we would do it. Charlie, do you?

CHARLIE MUNGER: No, that's why we don't do it. But — (laughter) — I must say it's an attitude that doesn't seem to bother many other people. (Laughter)

4. New Omaha convention center allows more people to attend

WARREN BUFFETT: Microphone 4, please.

AUDIENCE MEMBER: Norman Rentrop from Bonn, Germany.

Two thanks and one question. My thanks go to both of you for allowing us investors to participate on equal terms with you.

No management fees, no performance fees, no transaction fees. (Applause)

My thanks also go to the people of Omaha for building this very fine new convention center. (Applause)

WARREN BUFFETT: Our thanks, too.

I'll interrupt you for just one second. We wouldn't be able to hold this meeting if we'd been limited to the facilities we had last year.

Last year we had the biggest facility in town. And I was told that we have at least 19,500 people here. And that would have been many, many thousands beyond what we could have had last year. And this is, — (applause) — this facility really does the job.

Incidentally it's known as the Qwest Center. If you read about it in the paper, they have a — they seem to have some unwritten rule — or maybe it's a written rule — that they can't use the name. So you will not see that name in the paper for reasons that absolutely baffle me.

But this is the Qwest Center, and they've done a wonderful job with it. And Omaha has 19,500 people here today that otherwise might have to go to Kansas City. So, thank you for thanking them, and now, your question, please. (Applause)

5. "I'm the only one that can double-cross you"

AUDIENCE MEMBER: My question is your outlook on buying companies. You have taught us when stocks are priced high, and companies are priced low, then buy companies.

In the 1960s and '70s, we did see the rise of the conglomerates. Then came in the pure industry plays. Now, we see a huge amount of money in private equity. And somehow private equity is competing for buying companies.

So my question is, what is your outlook on the future of the buyout and the buying company industry?

WARREN BUFFETT: Yeah, you're absolutely correct that the private equity funds are a form of competition with Berkshire in buying businesses.

We don't really seek to buy businesses cheap, because you're not going to get the chance to do that. We haven't been able to do that.

We do get occasional chances to buy them at what we would regard as fair value. You'll never buy companies as cheap as stocks sometimes get. I mean, sometimes stocks sell for very low valuations compared to intrinsic value.

Businesses just don't do it. I mean, the reason is the prices of stocks, like those junk bonds we talked about earlier, are set in an auction market, and that market can do extreme things. But businesses are sold in a negotiated transaction, and that doesn't get as extreme.

Nevertheless, our preference — our strong preference — is that we would rather buy businesses at fair prices than stocks even a little cheaper. And the private equity funds are our competition.

On the other hand, we have bought a reasonable number of businesses in recent years, and we'll buy more in the future.

If somebody wants what we are offering, you know, we are somewhat one of a kind, in that we can — we will buy a business, and the people that sold it to us, if they built that business, are really able to run it as if it's their own indefinitely in the future. So they —

If they have a tax reason, if they have a family situation, or whatever, where they want to sell some business they love, and they don't want to auction it off like a piece of meat, and they

don't want some guy buying it and then leveraging it up, and then reselling a couple years after changing the accounting or something of the sort, they come to us.

And they know they'll get the result they want. And that happens periodically.

It doesn't enable us to buy super bargains or anything like that. It just doesn't work that way. But it does let us put the money to work at a sensible rate.

There will be more people like that. Unfortunately, we need big businesses, and, you know, they don't come along every day. But as I've said, when they — if you find that kind of owner —

If I owned a business that was big, and maybe my father had started, my grandfather had started, and I worked a long time for it but for one reason or another I had to monetize it, you know, I would sell to Berkshire.

It's very simple, because I wouldn't regard the carving up of it to get perhaps the highest — a higher price — which might or not — might not be higher — but I wouldn't regard that as the ultimate goal in life.

I think it's kind of crazy, you know, to spend — I think it'd be kind of silly to auction off your daughter to whatever, you know, whatever man is willing to pay the most for her. And I feel the same way about a business you've created lovingly over decades, and decades, and decades.

And we will buy some more. It's a matter of luck whether it happens in any given quarter, or even any given year.

But there's really no one else can quite make the promises that we can make. I mean, the degree of ownership that I have in Berkshire, and the way I've got it set up for the future, where none has to be sold, you know, my promises will probably be about as good as you can get in that arena.

Most big companies simply can't do that. If their board of directors, you know, decides they wanted to have a pure play, as you put it, in something. You know, what can be done about it?

I tell perspective sellers basically, "I'm the only one that can double-cross you." I mean — and I can double-cross them. I mean, if I, the next day, want to pull something on them, I — it's not contractual, what I've said to them, in all probability.

But nobody else can. We're not going to get some management consultants in, and they say you ought to rearrange the business, or we're not going to get Wall Street dictating to us.

And that's, I think, a significant advantage over time. I think it'll enable us to buy businesses, but we do have a lot of competition, as you point out.

Charlie?

CHARLIE MUNGER: Yeah, it's been interesting, though, that we've had this private equity competition for a long time, and one way or another we've managed to buy a few things. (Laughter)

6. David Sokol defends MidAmerican's environmental record

WARREN BUFFETT: OK, we'll go to number 5.

AUDIENCE MEMBER: Hello, my name is Dan Cunningham, and I'm from Boston, Massachusetts, home of the 2004 world champion Boston Red Sox. (Applause and laughter)

Thank you, Warren and Charlie, for providing this forum, and teaching over the years. It's much appreciated.

In a recent New York Times magazine cover story titled, "Up in Smoke," David Sokol, who runs Berkshire's MidAmerican Energy business was cited as a prominent CEO actively working to roll back the United States Clean Air Act, which 80 percent of Americans view as crucial to our public health.

MidAmerican, itself, was cited as a major mercury polluter, among other things.

With this in mind, could you see a role for a type of independent oversight committee charged with the purpose of auditing for shareholders the social responsibility of Berkshire's businesses?

This committee would monitor costs that Berkshire's businesses incur for our society, but do not show up anywhere in an income statement. Maybe in Berkshire's case, this would be a fraction of a person instead of a committee. Thank you.

WARREN BUFFETT: Yeah. Is Dave here? I can't, it's hard for me to see here. Do you see Dave? Marc [Hamburg], is David here?

We'll go to a — yeah, he might —

I'd like to have David respond to that, because, you know, I have seen MidAmerican actually lauded in many — a great many respects.

I did not see that particular article, but I know that if there were anything being done, that had been judged wrong, I would have heard about it. So maybe David can address that, if he will.

Well, he can — there's a mic. Either come up here, or go to the microphone that's nearest.

DAVID SOKOL: Yeah, Warren, this is David.

WARREN BUFFETT: Yeah, OK, uh-huh.

DAVID SOKOL: The article actually does not criticize MidAmerican for any air emissions. It criticized me for two years ago being a "Ranger" in President [George W.] Bush's election.

For what it's worth, I'm no longer a Ranger, but that was the — the focus of the article was energy CEOs trying to influence legislation.

That's not why I was a Ranger, and frankly, MidAmerican's environmental policies, I think, rank among the best in the industry.

WARREN BUFFETT: Thanks, David. Yeah, I've never seen any criticism of MidAmerican. And matter of fact — (applause) — David, could you tell them what happened with that J.D. Edwards study just recently?

DAVID SOKOL: Yeah, we were ranked nationally number two in the country for environmental reliability, availability, and customer satisfaction — number one in the Midwest out of 55 utility companies.

WARREN BUFFETT: Thanks, Dave. (Applause)

7. U.S. has "certainly benefited enormously" by immigration

WARREN BUFFETT: Number 6, please.

AUDIENCE MEMBER: Good afternoon, Mr. Buffett and Mr. Munger. My name is Van Argyrakis. I'm from Omaha.

Many U.S. multi-national corporations depend on the importation of foreign workers.

What is your opinion on the current state of U.S. immigration law as it applies to the employment of highly-skilled permanent workers?

WARREN BUFFETT: Charlie, you want to comment on that?

CHARLIE MUNGER: Well, of course, that's a subject on which reasonable minds disagree.

My personal view is that I'm almost always glad to have very talented people come into the United States, and I'm almost never pleased when the very bottom of the mental barrel comes in. (Laughter)

WARREN BUFFETT: Yeah. We may differ just a bit on that one. (Laughter)

The — this country has certainly benefited enormously over the decades, you know, by immigration.

We started out with 4 million people in 1790. China had 290 million at that time, just about what we have now. Europe had well over 75 million.

So you had 70 times as many people in China. You had, probably, 20 times as many people in Europe. We had the same degree of intelligence in China, or in Europe, as we had here. We had similar natural resources. And now this country has well over 30 percent of the GDP of the world.

So it's a pretty remarkable story. And how to attribute — or how to quantify the various components that entered into that is very difficult, but we've certainly been a country characterized by lots of immigration.

And whether that is responsible in any way for the incredible record of this country, I don't know. But I suspect that it was. And I think what Charlie would like to do is perhaps be the admitting officer. And — (laughs) — it would work —

CHARLIE MUNGER: You're right.

WARREN BUFFETT: It would work pretty well if Charlie was, but in the absence of that I think — I don't think, net, this country has been hurt by immigration over time.

8. Why we don't split Berkshire's stock

WARREN BUFFETT: Number 7?

AUDIENCE MEMBER: Good afternoon, Mr. Buffett and Mr. Munger. I would like to thank you for being here.

Well, my question pertains to price discovery and liquidity. It is a common perception that, unless there is adequate liquidity, price discovery is hurt.

Now if liquidity helps price discovery, then does it make sense to split the stock of a company which has a low liquidity problem? As a corollary, why do you consider stock splits and bonus issues to be bad for shareholders in the long run? Thank you.

WARREN BUFFETT: Stock splits, and what else Charlie?

CHARLIE MUNGER: Bonus issues.

WARREN BUFFETT: And what's the relation, I don't get it.

CHARLIE MUNGER: He didn't indicate a relation —

WARREN BUFFETT: Oh.

CHARLIE MUNGER: He just asked you to describe —

WARREN BUFFETT: It's just two —

CHARLIE MUNGER: — what's wrong with both.

WARREN BUFFETT: It's two questions, then. (Laughter)

Yeah, well, our — we have explained how we think about stock splits. There's no religious view against them. We don't think companies that do them are evil or anything of the sort.

We do think we've got the best group of shareholders in the world, and I think that a meeting like this, to some extent, is evidence of it.

We've got people that are more in sync, I think, with the policies of the company. We certainly have people who are more long-term in their view of Berkshire — or their intentions — regarding Berkshire.

I think we have people that understand their investment in Berkshire better than — well, really better than other large American corporation. We've got the lowest turnover of any large American corporation. Now, why is that?

Well, people can buy stock in any company they want to. I mean, you could have bought stock in Berkshire, or something else. But there's this self-selection process of who comes in, and there's a self-selection process of the people that just say, you know, that company doesn't interest me.

And I would say that people who say they aren't interested in a stock that sells in the thousands of dollars a share simply because it sells in the thousands of dollars a share, are not — would not as a group be as intelligent, and informed, and long-term in their outlook, and as in sync with the policies of management, as this group.

It's not a killer of a thing, obviously. But it's a sign — it's a symptom — of people with a somewhat different attitude toward the stocks they own. Now, somebody is going to —

If we have a million and a half Class A equivalent shares — we have a little more than that — outstanding, somebody's going to own them all. So it's just a question of who is attracted and who is repelled to your — from your shares.

And I think not splitting, and some other things we do at Berkshire — a number of other things we do at Berkshire — has attracted a group of shareholders that really come the closest to an investment-oriented group, as is almost possible in a widely traded, widely available company.

And we like the group we've got. We're not looking for the people who think it would be a more attractive stock if, instead of selling at 90,000 a share, it sold at $9 a share. Nothing wrong with those people, but they are —

If we were choosing partners, we would choose the group we have over the people who think a $9 stock is a wonderful thing.

Charlie?

9. Munger: liquidity is not a "great contributor to capitalism"

CHARLIE MUNGER: Yeah, and on the second part of that question, I think the notion, which is taught in so much of modern academia, that liquidity is this — of tradable common stock — is a great contributor to capitalism — I think that is mostly twaddle.

The GNP of the United States grew at very good rates long before we had highly-liquid markets for common stock.

I don't know where people got that silly notion. I think the liquidity gives us these crazy booms, which have many problems as well as virtues.

And in England, if you'll remember, after the South Sea Bubble, England banned tradable common stocks for decades. It was absolutely illegal to have a company so widely held you got a liquid market in the shares, and England did fine during that period when you didn't have a stock market.

So, if you think that liquidity is a great contributor to civilization, why then you probably believe that all the real estate in America, which is relatively illiquid, hasn't been developed properly.

WARREN BUFFETT: The kings actually commented on the perversions brought about by liquidity. But of course, the truth is that Berkshire trades on average $50 million or so of stock a day. So there's very few people that are going to have any problem with Berkshire, the liquidity in the stock.

CHARLIE MUNGER: But we're trying to create more of them.

WARREN BUFFETT: Uh-huh.

CHARLIE MUNGER: More people who have this big liquidity problem, because they own so much stock.

10. Buffett's moral distinction between owning a company or a stock

WARREN BUFFETT: Let's go on to number 8, please.

AUDIENCE MEMBER: Hello, there. This is Michael Angelo (PH) from San Francisco.

My general question is about how ethical concerns enter into your asset allocation decisions.

So, for example, I think there's some strong arguments that can be made that, say, Classic Coke should never be part of anyone's diet.

If such an argument could be made, and you were convinced of it, would that change the way that you viewed Coca-Cola Company as part of your portfolio?

WARREN BUFFETT: Well, I think that's a hypothetical that simply wouldn't happen. I mean, I've been drinking five of them a day, you know, and maybe it's the combination of that and peanut brittle, you know, that does the job. But I just feel terrific. The — (Laughter and applause)

We passed one time on the chance to buy an extraordinarily profitable company, because Charlie and I met the people that ran it. And they were perfectly decent people, too.

And we went down in the lobby of the hotel that we met them in, and we just decided that in the end we didn't want to be involved in that.

On the other hand, I would have bought stock, as a publicly traded stock, in the same company. Charlie will give you his view on that later.

So, I do not have a problem buying stock in companies — marketable securities — the bonds of companies in the market — that engage in activities that I wouldn't probably endorse myself.

I would have trouble owning outright, and actually directing the activities, of some of those companies.

But, you know, the — any major retailer in this country is — virtually — is going to be selling cigarettes, for example. And if they're not declared illegal, it does not bother me to own — it would not bother me to own those retailers outright — or it does not bother me to own the stock.

CHARLIE MUNGER: Yeah, but you wouldn't buy a company that made the tobacco and concocted the advertisements.

WARREN BUFFETT: No, we — and, you know, I can't tell you perfectly why that, I mean, I can't tell you that's the perfect line, or I can't tell you precisely why that's where I draw it. But I will tell you that is where I draw it.

We would not be in the manufacture of it, but I — we owned stock at one time in R.J. Reynolds. Before it had the LBO, we owned bonds in it. And, you know, I would still be doing it if I liked either the bonds or the stock.

We would not buy the manufacturer. And like I say, we walked on one that — and we went down to the hotel to talk about it though, too. (Laughs)

So we'd have to say that we were thinking about it, but we decided not to do it.

Charlie?

CHARLIE MUNGER: We didn't think very long. The — (Laughter)

We don't claim to have some kind of perfect morals. You can draw these lines where you wish. But at least we've got a huge area of things which is perfectly legal to do, that we think beneath us. So we won't do them.

And we see more and more in America, a culture where just anything that's unlikely to send you to prison, which looks like it'll make money, is OK. And that is a very bad development.

WARREN BUFFETT: Yeah, but I think it's a little crazy myself — (applause) — to say that it's terrible if people eat hamburgers, or eat — or drink Coca-Cola, or eat candy, or anything like that, because they're likely to gain weight. That is a perfectly optional decision.

And who knows whether somebody has lived a happier life, that lives to 75, and they're overweight condition causes them to die a little sooner than if they lived to 85 and lived on carrots and broccoli, you know, has lived a better life. I know which one I prefer. (Laughter)

11. Give Buffett a salary bump for his retirement

WARREN BUFFETT: OK, number 9, please.

AUDIENCE MEMBER: Hi, Mr. Buffett. I'm Allan Maxwell. My wife and I are shareholders from Omaha. I'm going to keep things simple so you can understand them.

WARREN BUFFETT: Good. (Laughter)

Allan's a friend of mine, so he can get away with that.

AUDIENCE MEMBER: Thank you, Colonel.

Excluding the Buffett's stake, I'm going to combine A and B shares. And there are approximately 1 million A shares outstanding, correct?

WARREN BUFFETT: That'd be about right, uh-huh .

AUDIENCE MEMBER: OK, about. Your salary is approximately — or is — $100,000 a year.

WARREN BUFFETT: It's been stuck there for a while. We'll talk about the board. (Laughter)

AUDIENCE MEMBER: Well, you'll be happy with my question.

WARREN BUFFETT: You can make it a motion —

AUDIENCE MEMBER: In other words —

WARREN BUFFETT: — if you're heading where I think you are. (Laughter)

AUDIENCE MEMBER: In other words, we're paying you 10 cents a share to manage a $90,000 investment. That's remarkable in today's corporate culture. Thank you, Mr. Buffett, thank you. (Applause)

WARREN BUFFETT: Yeah, thanks. Allan, thank you. But I have to tell you, as I did last year, I would pay to have this job. I mean, it doesn't get any better than this.

AUDIENCE MEMBER: Well, rather than you doing something for us, I would like to suggest that we, the shareholders, do something for you. As a shareholder, I would be willing to pay you 25 cents an A share. (Laughter)

That way you could save a little extra money for your retirement. (Laughter)

Would you support such an idea?

WARREN BUFFETT: Allan, I'm getting Social Security now. (Laughter)

And that really pretty well takes care of things. My family would go crazy if I made any more money. (Laughter)

AUDIENCE MEMBER: This would help you —

WARREN BUFFETT: But I appreciate the offer, however.

AUDIENCE MEMBER: My heart's with you, thank you.

WARREN BUFFETT: OK, thanks, Allan. (Applause)

12. Why Berkshire's insurance companies never have layoffs

WARREN BUFFETT: Let's go to number 10, and see if we can get 50 cents. (Laughter)

AUDIENCE MEMBER: How about a dollar? (Laughter)

David Winters, Mountain Lakes, New Jersey. Thank you, Warren and Charlie, for a fabulous weekend and for the discussion about governance in the mutual fund industry in the shareholder letter.

Specifically, have you altered the compensation potential for the insurance underwriters to make sure, as Charlie has described, the incentive-caused bias creates an environment that encourages writing new policies that, when the tide goes out again in the property and casualty business, Berkshire Hathaway minimizes losses, maximizes float, while compensating underwriters for not writing business?

WARREN BUFFETT: Well, thank you, that feeds into an interesting set of slides I've got, if I can find them here to tell the projector what to put up, because that's a very important point you raise.

I mean, we are very big in insurance, and having the wrong incentives in place could be very harmful.

So let's put up a couple of slides. Let's put up slide number one, if we would, please.

Slide number one is the situation at Berkshire, and Shirley, I'll give you one of these, but that's the situation at Berkshire shortly before we bought National Indemnity.

There's our balance sheet there. And as you'll notice, we just had a few million dollars extra. We had about $20 million tied up in the textile business.

And then I heard that Jack Ringwalt wanted to sell his company. Some of you here in the audience know him. He — for 15 minutes every year, Jack would feel like selling his company. He would get mad at something or other.

And so my friend Charlie Heider knew Jack pretty well, and I'd said to Charlie, "Charlie, next time Jack is in heat, have him, you know, get him over here." (Laughter)

And so Jack, early in 1967, came by 11:30, 11:45 in the morning, and said he'd had it with insurance, and with the insurance regulators and everything, he'd like to sell. So we bought it.

Now, we bought, that was the — made a major — that's when we really embarked on what has happened subsequently.

As you can see from that slide, the following year the textile business made all of $55,000. So sticking with textiles would not have been a great idea. We spent $8 1/2 million to buy National Indemnity.

Now, on the next slide, slide two, you will see a record like has never been, I don't think there's another insurance company in the world that has a record like this. That's the premium volume of National Indemnity's traditional business.

And you will see a company that went from 79 million in that first year of premiums — if you go all the way back to the time we bought it — it was 16 million, but by 1980 we were up to 79 million.

And you will see that in what was known as the "hard market" of the mid-'80s, we got up to 366 million.

And then we took it down — not intentionally, but just because the business became less attractive — all the way from 366 million down to 55 million. And now the market became more attractive in the last few years, and it soared up to almost $600 million.

I don't think there's a public company in America that would feel they could survive a record of volume going down like that, year after year after year after year.

But that was the culture of National Indemnity. It was the culture started by Jack Ringwalt, and it was the culture all the way through several other managers, Phil Liesche, and Rolly [Roland] Miller, to Don Wurster, who has done a fabulous job. And we don't worry about premium volume.

But if you're not going to worry about premium volume, then you have to take a look at slide three. Because if the silent message had gone out to our employees that unless you write a lot of business, you're going to lose your job, they would have written a lot of business. You could —

National Indemnity can write a billion dollars' worth of business in any month it wanted to, all it has to do is offer silly prices. If you offer a silly price, brokers will find you in the middle of the ocean at four in the morning. I mean, you cannot afford to do that.

So what we have always told people in our insurance businesses generally, specifically at National Indemnity, is that if they write no business, their job is not in jeopardy.

We cannot afford to have our unspoken message to employees, that you write business, or your job, or the guy sitting next to you's, you know, may be lost.

So when we bulged up to 366 million, we — employment went up modestly, and when we went all the way down, you'll see it trickle downward, but that was all by attrition. We never had a layoff during that period. Other people would have, but we didn't.

And now we're going back up some, and we'll go back down again at some time in the future.

Now, if you go to the next slide, you'll see that that created an expense ratio that went up dramatically, up as high as 41 percent in 1999, as volume shrunk back. And when we were writing a lot of business, our expense ratio was as low as 25.9.

Now, some companies would feel that was intolerable, but what we feel is intolerable is writing bad business. And again, we can take an expense ratio that's out of line, but we can't afford to write bad business. For one thing, if you get a culture of writing bad business, it's almost important to get rid of.

So we would rather suffer of having too much overhead, than we would want to teach our employees that to retain their jobs, they needed to write any damn thing that came along, because that's a very hard habit to get rid of once you get hooked on it.

Now, move on to slide number five, you will see what the result has been of that policy. And it's been that we had a few years, bad years, in the early '80s — that's what led to that hard market. But even with a high expense ratio, you'll see that we made money underwriting in virtually every year.

You'll see the year 2001 at 108.4, but that will, in my view, that will come down. I think that will turn out to be quite a good year. These are the — that year is not fully developed yet.

Now, you'll see in 1980 — in '86 — we had this incredible year, when we wrote at 69.3, that's a 30 percent underwriting margin. And the nice thing about it is, we did it with the most volume we ever had to that point, 366 million.

So we coined money when we wrote huge amounts of business, and we made a little money when we wrote small amounts of business.

So it's absolutely imperative in our view, and I think we're almost the only insurance company like this — certainly public — in the world that sends the absolutely unequivocal message to the people that are associated with us, that they will never be laid off because of lack of volume, and therefore, we don't want them to write one bit of bad business.

And we'll make mistakes, and we'll have a high expense ratio when business is slow, but we'll win the game. And that's what National Indemnity has done over a period of time.

National Indemnity was a no-name company 30 years ago operating through a general agency system which everybody said was obsolete.

It had no patents, no real estate, no copyrights, no nothing, that distinguished it, essentially, from other insurance — dozens of other insurance companies could do the same thing. But they have a record almost like no one else's because they had discipline. You know, they really knew what they were about.

And they've stayed with that. In fact they've intensified it over time. And their record has left, you know, other people in the dust.

It wouldn't be a record you would point to Wall Street, you know, if you went to Wall Street with that record alone in 1990 or 1995, they'd say, "What's wrong with you?"

But the answer's nothing's wrong with it. And you put your finger on having the incentives in place to write the right kind of business for the shareholders at Berkshire. And we try to think those things through.

I mean, you can't run a — you can't run an auto company without having layoffs. You know, you can't run a steel company that's this way. But this is the right way to run an insurance company.

And that's why these cookie-cutter approaches to employment practices, or bonuses, and all that are nonsense. You have to think through the situation that faces you in a given industry with its given competitive conditions, and its own economic characteristics.

Charlie, you want to comment on that?

CHARLIE MUNGER: Well, the main thing is that practically nobody else does it. And yet to me it's obvious it's the way to go.

There's a lot in Berkshire that is like that. It's just a little different from the way other people do it, partly the luxury of having a controlling shareholder of strong opinions.

That accounts for this. It would be hard for a committee, including a lot of employees, to come up with these decisions.

13. "PetroChina was both cheaper and had less risk"

WARREN BUFFETT: We go to number 11. (Applause)

AUDIENCE MEMBER: Good afternoon, my name is Andy Peake, and I'm from Weston, Connecticut.

As a keen China watcher, I was very interested in your PetroChina investment.

Could you please tell us more about your thought process on investing in a complicated, opaque country like China, and PetroChina?

WARREN BUFFETT: Yeah, PetroChina itself is not a complicated or opaque company. You know, the country, you know, has obviously, different characteristics in many respects than the United States.

But the company is very similar to big oil companies in the world. I — and I — PetroChina may have been the fourth largest — fourth most profitable — oil company in the world last year. I may be wrong on that.

But they produce 80 or 85 percent as much crude daily as Exxon does, as I remember. And it's a big, big company. And it's not complicated.

I mean, you know, obviously, a company with half a million employees, and all of that. But a big integrated oil company, it's fairly easy to get your mind around the economic characteristics that will exist in the business.

And in terms of being opaque, actually their annual report may well tell you more about that business, you know, than you will find from reading the reports of other oil giants.

And they do one thing that I particularly like, which other oil companies don't, at least to my knowledge, is that they tell you they will pay out X percent, I think it's 45 percent of their earnings, absent some change in policy.

But I like the idea of knowing in a big enterprise like that that 45 percent of what they earn is going to come to Berkshire, and the remainder will be plowed back.

It was bought not because it was in China, but it was bought simply because it was very, very cheap in relation to earnings, in relation to reserves, in relation to daily oil production, and relation to refining capacity.

Whatever metric you wanted to use, it was far cheaper than Exxon, or BP, or Shell, or companies like that.

Now, you can say it should be cheaper, because you don't what'll happen with it 90 percent owned by the government in China, and that's obviously a factor that what — you stick in valuation. But I did not think that was a factor that accounted for the huge differential in the price at which it could be bought.

And, you know, so far it looks OK on that basis.

We weren't — we aren't there because it's China, but we're not avoiding it because it's China, either. We just — we stick in a fairly appropriate number.

But if you read the annual report of PetroChina, I think that there's no — you will have as good an understanding of the company as you would if you read the annual report of any of the other big oil majors.

And then you would factor in your own thinking about whether there could be some huge disruption in Chinese-American relationships or something of the sort, where you would lose

for reasons other than what happened in terms of world oil prices, and that sort of thing. But we're happy with it.

Charlie?

CHARLIE MUNGER: I've got nothing to add.

If a thing is cheap enough, obviously you can afford a little more country risk, or regulatory risk, or whatever. This is not complicated.

WARREN BUFFETT: Yeah, you can — Yukos, as you know, is a very big Russian oil company. And in evaluating Russia versus China, in terms of country risk, you know, you can make your own judgments.

But in our view, something like PetroChina was both cheaper and had less risk. But other people might see that differently.

14. Dubious asbestos claims are taking compensation from true victims

WARREN BUFFETT: We'll go to number 12.

AUDIENCE MEMBER: Good afternoon, gentlemen. My name is Hugh Stephenson. I'm a shareholder from Atlanta, Georgia. This question is for both of you.

If you would both comment on the subject of tort reform, specifically asbestos tort. And if you could construct an optimal solution, how would you construct it, balancing the interest of legitimate plaintiffs versus the attorneys, versus the opportunists?

WARREN BUFFETT: OK, Charlie's the lawyer, so he's going to get to answer this one.

CHARLIE MUNGER: As a matter of fact, that is an easy question.

What's happened in asbestos is that a given group of people get mesothelioma, that came — which is a terrible form of lung cancer that kills people — really only from asbestos. And those people got it from somebody's asbestos. And that's one group of claimants.

Then there's another group of claimants, and these are people who've smoked two packs a day of cigarettes most of their lives, and they've got one little spot here or there, in an elderly lung.

And God knows what the spot is, but an enterprising lawyer can get an enterprising physician, who just happens to find that every damn spot in any lung must be asbestos-caused.

And once you've got one expert witness whom you can bribe, in effect, to say that, you've got a claim that can be filed.

And so you get millions of claims on behalf of people who have no symptoms, and who say that I'm worried about getting cancer from this spot that my attorney's doctor says was caused as asbestos.

There isn't enough in the companies that made the asbestos to pay off everybody. And what happens is that a huge percentage of the money does not go to the people that got the cancer, or another group of people who got terrible lung impairment that is obvious.

But that's another small group relative to these people who just have one little spot and are — and now say they are worried about getting cancer.

And they can file those cases where they say they're worried in some state, usually a southern state, where they've got a jury pool that just hates all big corporations.

And so you've got an industry — and of course the lawyers who are representing the people that aren't hurt are really stealing money from the people who are hurt.

And the guy who gets mesothelioma doesn't get as much as he should. And all these other people are getting money they're not entitled to.

It's a bonkers system. But with federalism the way it is, there's just no way to stop it.

And the United States courts — United States Supreme Court — refused to enter it, and just grab hold and make a decision. And so it just goes on, and on, and on, and the claims come in.

I think the Manville Trust had more new claims come in last year than in any year in history.

WARREN BUFFETT: That's correct.

CHARLIE MUNGER: And they have mined and sold asbestos for the last time, what 35 years ago, or —?

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: And it just never stops.

The people who are trying to buy these people off, it's like trying to douse a fire by pouring gasoline on it, because word processing machines can grind out these phony claims, and the doctors can ground up — grind out these phony opinions.

And so, a huge proportion of all the money that's available to pay people who've suffered from asbestos goes to lawyers, experts, doctors, contingent fees to the lawyers, defense lawyers.

I think — is it something like 20, 25 percent of the money is flowing through to people who were injured? So it's a total national disgrace.

The only people who have the power to fix it would either be the Supreme Court of the United States or Congress.

The Supreme Court — some people would say rightly, other people would say in too chicken a fashion — ducked the issue. That means the only party that has the power to fix it is Congress. And Congress so far, given the politics, has not fixed it.

Once you get wrongdoers so rich, they get this enormous political power to prevent change in the laws that are enriching them.

I mean, it means that we should all be more vigilant about stepping on these wrongs when they're small. Because when they get large, they're very hard to stop.

But it would be easy to fix this. The right way to fix it, we just are not going to pay off on these tiny claims.

WARREN BUFFETT: But Johns Manville — we own Johns Manville. They went bankrupt. They were the first, at least big one, that asbestos took into bankruptcy, and probably on the history of things, they somewhat deserved it, I think, Charlie. Isn't that right?

CHARLIE MUNGER: Their behavior was among the worst in the history of American corporations.

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: They knew this stuff was causing terrible injury, and they deliberately covered it up, time after time, and year after year, to make more money. There's no doubt about the guilt of the original management at Johns Manville.

WARREN BUFFETT: So they went bankrupt in the early '80s, and out of that bankruptcy was formed something, as Charlie mentioned, called the Manville Personal Injury Trust. We've got — have no connection with that.

I mean, this is a new company that we bought a few years ago, and this company has no connection with that except the historical — history.

The — but the Manville Personal Injury Trust was established, and had over time — had a couple billion dollars in it.

And as Charlie said, last year — it's been around now for almost, I would say, close to 20 years — and last year they had a record number of claims introduced.

They didn't have a record number because of the incidents of asbestos compared to the ones that were prevailing at the time it was established, or something of the sort. It's just that it's become a honey pot.

And as a result, the Mansville Personal Injury Trust is now paying out five percent because their 2 billion will only go so far. They're paying five percent of claims.

So as Charlie says, the guy that's got a — that has really been drastically injured by asbestos gets this tiny fraction, and the tens of thousands of claimants for whom it's a gleam in the eye, or rather a gleam in their lawyer's eye, perhaps, also get their five percent.

And it's, you know, it's not the right way to do it, but it's very hard to correct.

We've observed the asbestos legislation over the — proposed legislation — over the last year. And in the end, what they came up with, we did not support because it didn't get the answer that's needed.

And it was Charlie's and, you know, my view that the Supreme Court, when they ducked it, I mean, they left open a can of worms which will be around for decades, and decades, and decades. And the right people will not get compensated.

CHARLIE MUNGER: And those of you who want to be cynical ought to look into it, and see the perjury.

What's happened, of course, is that all the really horrible people pretty well are broke and gone, and maybe there's some money left in a trust here or there. But by and large, there isn't enough money.

But now, there're, like, three solvent people left. And you've got some little spot, or something or other. And by a strange coincidence, every one of those people can only remember three names of products that —

WARREN BUFFETT: Might've caused it?

CHARLIE MUNGER: — somehow saw, that might've caused it. And it's an amazing coincidence, the three that are left solvent are the only names he can remember.

And so you — it's obvious you have a vast amount of perjury being suborned by practicing lawyers. It's not a pretty picture.

15. Dividends vs stock buybacks

WARREN BUFFETT: OK, let's go to microphone 1.

AUDIENCE MEMBER: Hi, my name's Charlie Rice, and I'm a stockholder in from St. Louis, Missouri.

I'd appreciate hearing your comments on publicly-held companies using their cash for dividends versus stock buybacks?

WARREN BUFFETT: Well, we — the equation is pretty simple, but the practice doesn't necessarily follow logic. The —

It's obviously — as long as you're telling the truth to your shareholders about what's going on so that you aren't manipulating the stock downward or something — when a stock can be bought well below its business value, that probably is the best use of cash.

It's something The Washington Post did on a huge scale back in the 1970s. Teledyne may have bought 90 percent, or something, or close to it, of their stock back.

And that was the reason a very significant percentage of companies bought stock back in the past, because they actually thought it was selling for less than it was worth.

Like I say, that that can be abused if you do various things to bury your stock in one way or another, but that wasn't the usual case.

Stock repurchases were relatively unpopular in those days. They've become quite popular now.

And to the extent that I've been around a good number of them, and been able to pick up on what I thought was the underlying rationale, if not the professed rationale, you know, I think it's often done for people that are hoping that it causes their stock price not to go down, and their — and often done at prices that don't really make a lot of sense for continuing shareholders.

If we wanted to return a bunch of cash to shareholders, we would — if our stock was undervalued — we would go to the shareholders, and say, "We think it's cheap, and we think that this cash can be better used by you than by us.

"And we will, therefore, have — be repurchasing at what we think is a discount intrinsic value." And the people that remain will be better off, and the people that get out will get out at a little bit better price than they would otherwise.

In terms of dividends, you get into an expectational situation. And for most companies that follow a — that pay a cash dividend — it doesn't make sense to bounce around the dividend from year to year, although private companies frequently do that.

And we do it ourselves with our subsidiaries. They — some subsidiary can pay us a lot of money one year, and not so much money the next year.

But with public companies, people do — a lot of people do buy stocks to obtain dividends, and they hope for regularity, and that there's a signally aspect to it and everything.

So I would say that once you establish a dividend policy with a public company, you should think a long time before you change that policy in a material way.

But I think the best use of cash, if you don't have a good use for it in the business, if the stock is underpriced, is to repurchase it. And if it's overpriced, you got no business buying in a single share. But a lot of companies do it.

Charlie?

CHARLIE MUNGER: Yeah, dividends are a very interesting subject. If you count the unnecessary stock trading, and the cost of investment advice, and the cost of making a lot of errors, and the trading costs in and out, I don't think we'd be too extreme to say that now the total amount that's paid out in dividends is roughly equal to the amount that is wasted in all this trading and investment advice.

So that the net dividends that come to the shareholders are approximately zero. This is a very peculiar way to run a republic. And very few people comment about it.

WARREN BUFFETT: Yeah, actually I did in an article, some time ago in Fortune. The frictional costs to American shareholders in sort of changing chairs for all American business as a whole, those frictional costs, are probably not much different than the entire amount paid out by American corporations.

So — but getting to the individual corporation level, a company that expects to regularly earn more than it can profitably employ in its business, should be paying out dividends.

Take a subsidiary of ours like See's Candy. We would love to expand See's Candy to double or triple its present size, but it doesn't work. We've tried it a lot of different ways. So it should be paying out its earnings.

If it was a public company, and it was at one time, you know, you could argue that something approaching a 100 percent payout would make sense there.

But most managements worrying about earnings falling off at some time in the future would rather establish a lower level, and therefore, ensure regularity of dividends by going with a conservative level. I — you know, we —

It's obviously something we think about at Berkshire when we have 30-odd billion dollars around. If we can't figure out a way to employ that over time, you know, it's a mistake to keep it in corporate form.

But we have this expectation, and I think it's a reasonable expectation, that we get the — put it to work.

If we ever came to a different conclusion, if our stock — we thought our stock was significantly undervalued, we'd probably figure in terms of disbursing it through repurchases, particularly where now dividends and capitals gains are neutral for individuals.

And if our stock was not underpriced, and we fell, we would probably do something by a dividend.

It's not going to happen soon, however. (Laughs)

16. GEICO and Dell: the low cost is going to win

WARREN BUFFETT: Number 2.

AUDIENCE MEMBER: Good afternoon. My name is J.P., as in justice of peace, or Jell-O pudding.

My last name is Tan, as in suntan. I flew in from the suntan city of Orlando, Florida where an elderly man told me, "J.P. Tan stands for just 'perfect tan.'"

Mr. Buffett, allow me to give you a big thank you before I ask my question. Some time ago I sent you my business analysis of your investment in Scott Fetzer Company.

I was not sure if you even bothered to read it. Yet you were very kind to write me that my analysis of Scott Fetzer Company is very much on the money.

You also invited me to my first annual meeting where I had the privilege of meeting Mr. Andrew Kilpatrick, who was kind enough to include my analysis of Scott Fetzer Company in his book, "Of Permanent Value: The Story of Warren Buffett." I want to thank you for making this possible.

Here comes my question. Mr. Buffett, you have said that the nine most important words ever written about investing are these nine words: "Investment is most intelligent when it is most businesslike."

Mary Buffett said that you have built your entire business success upon these nine words. Investment is most intelligent when it is most businesslike.

For this reason, I started businesslike.com, looking up to guide GEICO and Dell as direct marketing models, since they have the lowest cost structure.

Please kindly share with us in elaborate details the direct marketing methods of GEICO and your friend, Michael Dell? (Laughter)

WARREN BUFFETT (to Munger): What?

CHARLIE MUNGER: He wants you to analyze the marketing methods of GEICO — the direct-marketing methods of GEICO — and Dell.

WARREN BUFFETT: Yeah, well, I'm not as familiar with Dell as I am with GEICO.

The idea of direct marketing in auto insurance at GEICO came from Leo Goodwin, who — and his wife Lillian — who had come from USAA.

And USAA was set up some years — and GEICO was set up in 1936 — USAA was set up, I believe, in the early '20s, because military personnel moved around a lot, and they had trouble getting auto insurance. And a great organization was established.

Leo Goodwin took that idea, and decided to broaden it beyond the officer ranks of the military. And first went to government employees generally, and now that's been extended dramatically over the years to the American public as a whole. It's a better system.

You know, if you go back a hundred years, auto insurance when the auto first came in, was sold by the casualty affiliates of the big fire companies. That's where — that — in the 1800s, the major insurance companies were fire companies, and casualty insurance was something that came along later.

And it was sold through a system whereby the agent got large commissions, where there was sort of cartel-like rates established through something called a "bureau." And that system prevailed for several decades.

And then State Farm came along, formed in the early 1920s. A farmer from Merna, Illinois in his 40s. No background in insurance, no capital, but he came in with the idea of having a captive insurance — agency force. And that brought down costs somewhat.

And State Farm, in time, became the largest auto insurer in the country. And Allstate, which followed that system, became the second largest. And that was a better system, a better mouse trap.

And then USAA, followed by Leo Goodwin at GEICO, came along what a direct-marketing operation that bypassed the agent and brought down costs further.

Now, every American family, virtually, wants to have a car. They don't want to have insurance, but they can't drive their car without insurance. So they're a buying a product they really don't like very well. It cost them a significant part of their family budget. And cost, therefore, becomes very important.

It's not a luxury item, it's a mandatory item, virtually. And saving significant money makes a real difference in a lot of household budgets. So the low cost is going to win.

And our direct operation — Progressive has a wonderful direct operation competing with us — we're the two that will be slugging it out over the years — is a better system, and better systems win over time.

Now, I — again, I'm not that familiar with Dell, but I have the impression that Dell is a very low-cost operation, enormously efficient. You know, very low amounts of inventory.

And, you know, I would hate to compete with them. The — if they can — if they turn out a decent competitive product at the best price, you know, that system will win.

You know, Charlie is a director of Costco, and Costco and Walmart figured out ways to do things at lesser costs that people needed — where people spent money in big quantity. And those two companies are winning.

So, we have a terrific marketing operation, and a terrific insurance operation in GEICO. And in my view it will grow very, very substantially.

And we have a very tough competitor in Progressive, because they've seen how well our model works, and they, in effect, have shifted over. I mean, they're not totally shifted over, but they've moved towards a direct operation, and away from an agency operation.

It's always a good idea to go with a low-cost producer over time. I mean, you could mess it up in other ways, but being a low-cost producer of something that's essential to people, it's going to be a very good business usually.

Charlie?

CHARLIE MUNGER: Yeah, you've chosen a wonderful field. And if you fail in it, it's your own fault. (Laughter)

WARREN BUFFETT: I should say also that that — those nine words, they came from Ben Graham, they didn't come from me. But Ben said those, and they are very important words, although they tie in with some others that he said. But they are very important words.

CHARLIE MUNGER: Warren, I want make an apology, too, because last night I said that some of our modern business tycoons — and I remembered particularly Armand Hammer — were the type that, when they were talking, they were lying. And when they were quiet they were stealing. (Laughter)

And some people got the impression that that was my witticism. That was said a great many decades ago about one of the robber barons.

WARREN BUFFETT: Well, if we start confessing here to the number of quotations we've stolen, we'll be here all afternoon. (Laughter)

17. Praise for Google's co-founders and their owner's manual

WARREN BUFFETT: So let's go on to microphone 3.

AUDIENCE MEMBER: Good afternoon. My name is Matt Lynch, and I'm from Palo Alto, California.

Mr. Buffett, a couple of times today you alluded to Google and its co-founders.

I was hoping you could share with us your thoughts and reactions to the owner's manual the co-founders included in Google's S-1 filed last week, especially in light of the similarities and differences between it and that of Berkshire Hathaway?

WARREN BUFFETT: Well, that's a real softball for me. The obviously —

AUDIENCE MEMBER: You're welcome.

WARREN BUFFETT: I'm very pleased that the Google — the fellows at Google decided — and they say they, it was, I think they used the word "inspired" by the Berkshire Owner's Manual.

And, you know, it obviously pleases us enormously that other people think that it's a good idea to talk to their owners — or in their case, their prospective owners — in a very straight-forward manner.

If you buy into Google, having read their owner's manual, you know, you will — I think you'll know the kind of people you're associating with. You'll know what they will do and won't do.

It's the kind of thing that one person would say to another if you were setting up a partnership. And were — you said, you know, "I'd like you to join me in a partnership. I need your money. And here's the way we're going to do business."

And I think more companies — obviously, I think more companies ought to do it.

It's been simple for us at Berkshire. We've had these principles in mind for a long time. And we really want people to understand those principles before they join with us.

And the Google fellows, in a very straightforward manner, you know, I liked their prose. You know, it doesn't mean I agree with every idea they have, but, you know, I do know what ideas they do have. And I hope more companies sign on for that sort of thing.

Charlie?

CHARLIE MUNGER: Well, you know, most of the world does not, in any way, imitate Berkshire Hathaway. This is a quirky few. It may look — there may be 19,500 of you that came — but it's still a quirky few by the standards of the country.

And what's interesting about Google is those two guys who created that are two of the smartest young men in the whole country. And it's much more fun to be copied by people that smart, than — (Laughter)

WARREN BUFFETT: Hey, we even think they are smarter than we thought they were last week. (Laughter)

CHARLIE MUNGER: And we now think they're a lot smarter, yeah. (Laughter)

WARREN BUFFETT: It's going to be a lot of fun to watch that. I — and my guess is that their annual reports are going to make very good reading. They're actually going to alternate the two of them in writing the reports. And I think you'll know a lot about them, and a lot about their business if you read it.

Although they had an interesting — as I remember, they had an interesting sentence of two in there, which I admired also, where they said that, you know, certain of the things that might affect their business prospects really would be better left unsaid, in terms of competition, and so on. And if so, they weren't going to tell you. (Laughter)

CHARLIE MUNGER: Yeah.

WARREN BUFFETT: I kind of enjoyed that.

18. Buffett doesn't see big changes for how homes are sold

WARREN BUFFETT: Number 4, please.

AUDIENCE MEMBER: Thanks, Warren, thanks. My question — my name is Chad Bliss (PH), Lincoln, Nebraska.

My question pertains to MidAmerican Energy and the Home Service division. You said earlier that you would continue buying, you know, companies in the real estate industry.

Given the growth in "for sale by owners," discount brokers, also maybe even banks now, do you think the current business model of home services is sustainable, or do you think commissions need to be lowered?

WARREN BUFFETT: Yeah, I really do think it's sustainable. It's a good question. In fact, I forget where I saw the article a few weeks ago, maybe in the Sunday New York Times, about Barry Diller's interest, I think through Lending Tree, on the internet.

And there've been a lot of real estate sales-related operations that have been on the internet. And the internet is a threat to any business, including real estate brokerage.

But, you know, when I think about the process of buying a home, and the degree of personal involvement involved in that, you know, the "for sale by owner." They call them FSBOs in the business.

I remember talking with my friend, Chuck Peterson about that 50 years ago, and FSBOs were with us then, and FSBOs are with us now.

But my guess is that a very significant percentage of home transactions 30 years from now will be done through a pipeline, and through a distribution mechanism, or brokerage mechanism, like exists now.

I do not see it changing dramatically, although there are people that are going to try and change it dramatically. So you've got competitors. But I love the idea of expanding Home Services.

Charlie?

CHARLIE MUNGER: Well, you tried to change it once yourself dramatically, right here in Omaha, and you fell on your ass. (Laughter)

He tried to —

WARREN BUFFETT: His memory's better than mine.

CHARLIE MUNGER: He tried to take away the — a good part of the home advertising business from the World-Herald to, you know, your then-little newspaper —

WARREN BUFFETT: Oh, right, it was very thin, yeah. (Laughs)

CHARLIE MUNGER: Yeah, yeah. And it didn't work worth a damn.

WARREN BUFFETT: Yeah. (Laughter)

And that's the last time I call on him. The — (Laughter)

19. Remembering Phil Fisher

WARREN BUFFETT: Let's go to number 5.

AUDIENCE MEMBER: Mr. Buffett, Mr. Munger, I'm Tim Medley from Jackson, Mississippi.

Recently Mr. Philip Fisher died.

At this meeting many years ago, you, Mr. Buffett, mentioned your fondness for chapters 8 and 20 of "The Intelligent Investor," the first edition of "Security Analysis," and you said, "Phil Fisher's first two books."

And you Mr. Munger, have also been complimentary of Mr. Fisher's writings and investment approach.

I wonder if the two of you would tell us of your experiences with Mr. Fisher, the circumstances of your meeting, et cetera.

And did his writings, or your discussions with him, start you thinking about the idea of the great business, or the franchise company, or was it simply an affirmation of thoughts which you had already begun to have? And anything else you would like to say about Mr. Fisher.

WARREN BUFFETT: Yeah, Phil Fisher was a great man. He died maybe a month ago, or thereabouts, and well into his 90s.

His first book, and I believe it was "Common Stocks and Uncommon Profits," it was written in 1958. And the second book was written a few years later, those two books were terrific books.

And as with Ben Graham, you could really get it all by reading the books. I met Phil Fisher just once, and it was great. I enjoyed it, I loved it. He was nice to me.

But similarly, actually, to my experiences with Ben Graham, I worked for him, I took his class and everything else — it was in the books.

I mean, they were such good writers, and their thoughts were so clear, that you didn't need to meet them personally. I enjoyed meeting them personally, obviously. But they got it across in words.

And the only time I met Phil was some time after that 1962 book, or whatever it was, '61 or '62. And I was in San Francisco, I think it was in the Russ Building, I may be wrong on that. And I just went there.

I used to do that all the time when I was younger. I'd go to New York, and I'd just drop in on all kinds of people. And I guess they thought because I was from Omaha that, you know, one time and they'd be rid of me. So — (Laughs)

And I would usually get in to see them. And Phil — I did that with Phil. And he was extraordinarily nice to me. But it wasn't that I gained new ideas though, however, by meeting him, because I'd already read it in his books.

And Charlie actually, I met Charlie in 1959, and Charlie was sort of preaching the Fisher doctrine, also, to me. Little different form, but his ideas paralleled those of Phil. So I was sort of getting it from both sides. It made a lot of sense to me. I don't know what Charlie's experiences were with Phil.

CHARLIE MUNGER: Well, I always like it when somebody who's attractive to me, agrees with me. And therefore, I've got very fond memories of Phil Fisher.

The basic idea of that it was hard to find good stocks, and it was hard to find good investments, and that you wanted to be in good investments. And therefore, you just find a few of them that you knew a lot about, and concentrate on those, it seemed to me such an obviously good idea.

And indeed, it's proved to be an obviously good idea. Yet, 98 percent of the investing world doesn't follow it. That's been good for us. It's been good for you.

20. "No single yardstick" for compensation and incentive systems

WARREN BUFFETT: We'll go to number 6, please.

AUDIENCE MEMBER: Good afternoon, my name is Stan Leopard, and I'm from Menlo Park, California. I'm very pleased to be here, Warren and Charlie.

I first heard about you, Warren, in the late '80s, and began reading your writings. Unfortunately I didn't invest until the late '90s.

You have shaped my business thinking, and as I listen to you, and as I continue to read what you write, and the things you recommend to read, it continues to shape my thinking.

My question's about compensation. And I've seen your writing, and I heard the earlier comments today. And they still leave me, as a guy who is a business owner, not quite sure how to act to design compensation for managers.

For most of my career, I've been the senior manager in my businesses, but now I'm in a situation where I'm looking to own a majority interest of businesses that I don't manage every day directly, and I'm very concerned with this compensation issue.

When I think about things, like, return on equity, or growth, or risk, or like that, but if you could speak a little more towards the specific of how you approach the getting it to the right things to measure and incent, I'd appreciate that.

WARREN BUFFETT: Yeah. It's a very good question, and it's — you know, there is no formula that applies across all industries or businesses.

You take something like return on equity. You know, if you pay way too much for the business that you buy, the person who runs it is going to get a lousy return on your equity.

And they may get a good return on the tangible assets employed in the business, but your purchase price may defeat them, in terms of earning good returns.

If you base the — on earnings on tangible equity, you know, there are businesses like a network television station where, you know, if you have an idiot nephew, you can put him in charge, and they'll earn huge returns on equity as long as they manage to stay away from the office. So it's —

And there are other businesses where you have to be a genius to earn 7 or 8 percent returns on equities. So there is no single yardstick.

To have a fair compensation system, both you and the manager have to really understand the economics of the business. In some businesses, the amount of capital employed is all-important. In some businesses, the amount of capital employed doesn't mean anything.

So we have certain businesses where we have charges for capital and all of that, and where we have other businesses where that would just be an exercise to go through, and it wouldn't really change any results, anyway.

We have a great preference for making them simple. I mean, we concentrate on the variables that count to us, and then we try to put that against the backdrop of the competitive nature, or the economic — the true economics — of the business they're in, and really reward where they're adding value, even if that value is from a very low base in a lousy business. And we make it — the base — very high if they're in a very easy business.

And it hasn't been a problem. But I would say it would've been an enormous problem if we'd brought in some compensation consultants, because they would have wanted something that would spread across the whole group, and it would have had all kinds of variables.

And they particularly would've wanted something that would've to come in every year and redo in some way, so that they would have a continuing stream of income.

You know, if I knew what kind of a business you were looking at it, it's easier to talk about what kind of a system to have.

If you had a group of television stations, just to pick an example — let's say they were network television stations, all of a reasonable size.

You know, you would probably figure that a chimpanzee could run the place, and have 35 percent pretax margins. And you might want to pay for performance above some number like that.

But there's — it's silly to have something that starts at 10 percent or 15 percent, when you do that. And a lousy manager will always suggest an arrangement like that.

Charlie and I have seen all kinds of compensation arrangements where, basically, you get paid for showing up. But they try to make it look, by constructing some mathematics around it, like, you really had to achieve something.

But in the end, if you get a great manager, you want to pay him very well.

You know, we've got great managers, for example, at a place like MidAmerican. And somebody mentioned that there's a big carrot out there for them if they achieve the results that we've set out. And that'll be a check I'll be very happy to write.

Charlie?

CHARLIE MUNGER: Yeah, if you want to read one book that will demonstrate really shrewd compensation systems in a whole chain of small businesses, read the autobiography of Les Schwab, who had a bunch of tire shops — has a bunch of tire shops — all over the Northwest.

And he made a huge fortune in one of the world's really difficult businesses by having shrewd systems. And he can tell you a lot better than we can.

WARREN BUFFETT: Yeah, and he worked that out himself. I mean, it's an interesting book, and, you know, selling tires, how do you make any money doing that? And —

CHARLIE MUNGER: Hundreds of millions selling tires.

WARREN BUFFETT: Yeah, yeah. It's a — and people like Sam Walton. I mean, the compensation system, I will guarantee you, at Walmart, or Charlie's involved in Costco, they're going to be rational because you had very rational people running them.

And they wanted to get the best — they wanted to attract good managers, and they wanted to get the best out of them. And they had no use in paying for mediocrity.

But that does require a knowledge of the business. I mean, you don't want to let — if you don't understand a business, you know, you're going to have a problem with both the manager and the consultant in terms of getting film-flamed on how you pay people.

21. Easier to find bargains among stocks than IPOs

WARREN BUFFETT: Number 7.

AUDIENCE MEMBER: Good day. My name is Martin Krawitz. I'm a shareholder from Sydney, Australia. (Applause)

And thank you so much for some of your wonderful hospitality here. We've had a chance to get on some of Omaha's 65 golf courses, and it's just great being in the second-best country in the world. (Laughter)

My question to you, sir, is regarding two IPOs. We had one of the authors about a book on yourself visit us in Sydney last year, and apparently you dislike IPOs.

My question is, there are some really poor businesses that try and get passed off, but there are some good ones. There's some government privatizations, or decentralizations, the demographics of baby boomers, and we have some friends wanted to exit some really good businesses.

Could we as investors, and Berkshire Hathaway, not apply some of your disciplines to look at investing in some of these?

And finally, would your answer be different in its applicability to Berkshire Hathaway as a company, as opposed to us as investors? Thank you, sir.

WARREN BUFFETT: Charlie?

CHARLIE MUNGER: Well, the first question, is it entirely possible that you could use our mental models to find good things to buy among IPOs, the answer is sure.

There are a zillion IPOs every year. And buried in those IPOs, I'm sure there are a few cinches that a really intelligent person could find and pounce on. So, welcome. On the —

But the average person buying IPOs is going to get creamed.

So if you're talented enough, why sure, that will work. The second question, I forget.

WARREN BUFFETT: About the government offering (inaudible).

CHARLIE MUNGER: About government spin-offs?

WARREN BUFFETT: Give him the spotlight again. There he is.

CHARLIE MUNGER: What was the second question?

AUDIENCE MEMBER: It was just would the attitude of Berkshire Hathaway be different if it was opposed to investors?

WARREN BUFFETT: Oh.

AUDIENCE MEMBER: Thank you.

CHARLIE MUNGER: Yeah, because the IPOs are normally small enough, so that they won't work for us, or they're high tech, where we couldn't understand them. And so, by and large, if Warren is looking at them, why, I don't know about it. (Laughter)

WARREN BUFFETT: Yeah, I mentioned earlier how you — an auction market, prevailing in the stock market, will offer up extraordinary bargains sometimes, because somebody will sell a half a percent, or one percent of a company at a price that may be a quarter of what it's worth, whereas in negotiated deals, you don't get that.

An IPO situation more closely approximates a negotiated deal. I mean, the seller decides when to come to market in most cases. And they don't pick a time necessarily that's good for you. So, it has —

I think it's way less likely that, in scanning a list of a hundred securities that are trading in the auction market, well, in the — a hundred IPOs, if you scan a hundred IPOs, you're going to come up with something cheaper than scanning a hundred companies that are already trading in the auction market.

It is more of a negotiated sale. And negotiated transactions are very hard to get bargains. If you take the houses in Omaha, you know, somebody that lives next door to somebody who sold their house for 80,000 or — dollars, and their house is more or less comparable, they're not going to sell it for 50.

It just doesn't happen. People are — it's too important an asset, and they're cognizant of what it brings — what is being brought for similar properties. That's what happens in negotiated sales.

Now if, on the other hand, there were some — a whole bunch of entities that owned one percent of each house in Omaha, and you had an auction market on those one percentage points, they might sell at damn near anything. And occasionally, they sell at crazy prices.

So you're way — in my view — you're way more likely to get incredible bargains in the — in an auction market. It's just the nature of things.

And the IPO is closer — sometimes there will be IPOs in terrible markets, and they may come very cheap. But by and large, that is not when IPOs come. They come when the seller thinks that the market is ready for them.

And they come with an informed seller thinking it's a pretty good time to go public. And, you know, you'll make better buys, in my view, in an auction market.

22. Buffett and Munger don't shop at Whole Foods

WARREN BUFFETT: Number 8.

AUDIENCE MEMBER: Good afternoon Mr. Buffett, Mr. Munger. My name is Mark Stender (PH) from San Francisco.

My question involves, if you live in California, which I understand you do some time of the year, it's almost mandatory that you shop at Whole Foods Markets.

They sell a lot of organic foods there. And I was wondering if anyone ever tried to feed you organic food, or organic food stock?

WARREN BUFFETT: I've never been near the place, but — (laughter) — Charlie, who I've never thought of as a health nut, but he may have some comment to make on this, being a Californian.

CHARLIE MUNGER: No, my idea of a good place to shop is Costco. (Laughter)

Costco has these heavily marbled filet steaks in the — (laughter) — finest grade. And the idea of eating a little whole grain whatever and washing it down with some carrot juice has just never appealed to me. (Laughter)

WARREN BUFFETT: We don't have a lot of arguments between the two of us about where to eat. (Laughter)

23. American business "has never let investors down"

WARREN BUFFETT: Number 9.

AUDIENCE MEMBER: Hello, thank you. I'm Sherman Silber from St. Louis. I'm a fertility doctor in St. Louis. We kind of view ourselves as the Berkshire Hathaway of infertility treatment.

We don't know anything, really, about business. We're doctors and scientists.

And so, first I'd just like to say, I really appreciate the people that you have on your board, and would like to keep it that way. Because we do know a lot about character, and I'm happy to have our savings safe with you and the people of character that represent the company. (Applause)

I just had an opportunity a couple of weeks ago, I was talking to one of the former managers of the Fidelity Magellan Fund, managed huge amounts of money, and he never really met you. And I was saying, I may have a chance to ask Warren Buffett and Charlie Munger a question. What would that question be? I wanted to have some idea of something intelligent I could ask business-wise.

And he thought if he had the opportunity to talk to you, the best thing is to give you what would sound like a softball question, because you could maybe bring more profoundness to this than we hear, usually. What —

In view of the Iraq war, consumer debt that's increasing, declining job growth, declining pay in the jobs that are growing, prospects of increased interest rates, he has this view that the next five to 10 years are going to be very difficult.

What would your view be about this — the investment future — for the next five to 10 years, in view of all these negative factors going on?

CHARLIE MUNGER: That's too soft for me. I think Warren should take that. (Laughter)

WARREN BUFFETT: Well, I would say that at any given point in history, including when stocks were their cheapest, you could find an equally impressive number of negative factors.

I mean, you can — you could've sat down in 1974 when stocks were screaming bargains, and you could've written down all kinds of things that would've caused you to say, you know, the future is just going to be terrible.

And similarly, at the top, you know, or anytime, you can write down a large list of things that would be quite on the bullish side.

We don't pay — we really don't pay any attention to that sort of thing. I mean, we have —

You might say that our underlying premise — and I think it's a pretty sound underlying premise — is that this country will do very well, and in particularly, it will do well for business. Business has done very well.

You know, the Dow went from 66 to 10,000-plus in the hundred years of the 20th century. And we had two world wars, and nuclear bombs, and flu epidemics, and you name it, Cold War.

There's always — there are always — there's always problems in the future, there are always opportunities in the future. And in this country the opportunities have won out over the problems over time.

And I think they will continue to do so, absent weapons of mass destruction, which is another question. And business won't make much difference if anything really drastic happens along that line. So we don't — I don't —

I can't remember any discussions Charlie and I have had, ever, going back to 1959, that where we would've come to the conclusion at the end of them that we would've passed on a great business opportunity — a business to buy — because of external conditions.

Nor did we ever buy anything that we thought was mediocre simply because we thought the world was going to be wonderful. The —

It won't be the American economy, in my view, that does in investors over a five, or 10, or 20-year period. It will be the investors themselves.

If you look at the record of the 20th century, you'd say how can anybody have missed, you know, in owning equities during that time? And yet, you know, we had all kinds of people wiped out, you know, in the '29-'32 period. We had all kinds of things that were bad.

But if you had just owned stocks right straight through, didn't leverage them, you know, you would — you'd have gotten a perfectly decent return.

So we are unaffected, in essence, by the variables you mentioned. Just show us a good business tomorrow, and we'll jump at the hook.

Charlie?

CHARLIE MUNGER: Yeah, I think, but it's also true that both of us have said at various times over the last three years that we wouldn't be at all surprised if professionally invested money in America had a pretty modest result over a fairly extended period in the future, compared to the very dramatically high returns that it had achieved up to about three years ago.

And so far that's been proved out to be pretty much right.

WARREN BUFFETT: Yeah, our —

CHARLIE MUNGER: Certain stretches are easier than other stretches.

WARREN BUFFETT: Yeah, our expectations were more modest than most people's a few years ago. We didn't say the world was coming to an end or anything. We just said that people have gone crazy in certain sectors.

And that anybody that thought that you could, you know, sit at home and day trade, and make double-digit returns over time, or do anything, or that you were entitled to that, you know, by just sticking a little money in your 401(k) or something, was really living in a fool's paradise.

But that was never accompanied by any predictions of disaster for the American economy as a whole, or for American business as a whole. It's —

People get crazy notions from time to time in financial markets. I commented on this earlier, but they just believe things that there's — it's hard to understand how they can believe.

Now, to some extent they get sold that by other people. But American business, really, has never let investors down as a group, but investors have done themselves in quite frequently.

24. "Demented" derivatives aren't like insurance

WARREN BUFFETT: Number 10.

AUDIENCE MEMBER: Sam Kidston, from Cambridge, Massachusetts.

I'd like you to ask to discuss the similars and differences between what you do in your reinsurance operations, and what Gen Re did in its securities division, as it would seem that reinsurance is often a form of weather derivative.

I would also like to ask you, why you are so comfortable writing what appears to be one type of derivative, and so uncomfortable writing another? Thank you.

WARREN BUFFETT: Yeah, the derivatives contracts that Gen Re wrote in Gen Re Securities, I would say bore very little relation to the insurance businesses we see.

I mean, we are insuring against events that people either can't or aren't willing to take on the risk themselves.

In the derivatives business, a lot of that was speculative activity of one sort or another. The more complex the arrangements were, the easier it was to claim that large profits were being made, when maybe large losses really awaited you over time.

They were created transactions without much economic necessity. In a great many cases, they were just facilitating speculation.

Insurance deals with taking on risks that people incur in their business or personal life, that they don't want to bear themselves, or that they're unable to bear themselves. There was very little connection between the business. I think that in going into the business, they dreamt up a lot of reasons for it.

You know, they said they're both in the risk business, and their clients were going to demand it and everything.

But when people want to go into a business, they always dream up reasons. In our view, it made no sense whatsoever. And I really see very little connection between them.

Do you, Charlie?

CHARLIE MUNGER: They're radically different. The derivatives business is chock full of clauses saying that if one party's credit gets downgraded by a rating agency, they have to start posting collateral. And that's just like a margin account.

And when you sign pieces of paper like that, you can go absolutely broke, into default and catastrophe, and having other people liquidating your positions under distress conditions, et cetera, et cetera. So there's a lot of irresponsible mechanics.

In attempting to protect themselves, they've introduced this enormous instability into the system, through all these clauses about collateral posting. And nobody seems to recognize what a disaster of a system they've created in an attempt to make each party feel safer.

It's a demented system. And you don't get properly paid in most cases for playing the game. And therefore, we're not in it.

WARREN BUFFETT: Absent the ability to raise new capital at the time, and who knows whether that would've been — they'd been able to or not — Gen Re, which had been rated triple-A — it still is because Berkshire's involved — but it had been rated triple-A — could well have run into really terrible financial difficulty post-September 11th, particularly if they'd fully recognized the liabilities that they'd already incurred, but not fully recognized, at that time.

Because their capital would've shrunk, they would've had way more in equities, which would have shrunk further. And who knows how far, you know, at the time, how far it would have gone?

Plus they would have had, in my view, they would have been downgraded quite significantly, and that might well have triggered things in their derivatives activities, which would have required coming up with loads of cash.

It was not built to last. And it is now built to last. But I would say that that threat exists with other financial institutions as well.

But I think many of the CEOs — or some of them anyway, I should say — don't really fully comprehend that.

When you get margin calls for huge amounts of money, you know, it only has to be one day when you can't meet it. That almost happened.

If you go back to October of 1987, there was a large wire transfer that didn't make it to the — for a while — it didn't make it to the clearing house at the — in Chicago. And that came close to halting the whole system at the time, and we were very close to closing the exchange.

And a lot of things would have unraveled. The money finally showed up. But it's dangerous to have a system where people are depending on billions of dollars coming in from other people.

Well, we had that on Salomon, on that Sunday in 1991.

If Salomon had gone bankrupt, the next day you would have had people on the other side of 1.2 trillion of notional amount of — something like that — of derivatives, who would have had a contract with a party where they would have been dealing with a bankruptcy court.

You would have had all kinds of security settlements that wouldn't necessarily have settled. You would have all kinds of confusion.

And believe me, it would have been huge at that time, between what was going on in Japan, what was going on in the U.K., and what was going on in the United States, because the accounts were all intermingled.

As a matter of fact, Salomon was a — was banking — was running a bank in Germany where — which took on large amounts of deposits from individuals, and just loaned it all to Salomon.

So it would have had a receivable from a bankrupt company and owed money to I don't know how many German depositors. There are all kinds of things that would have come out at that time. And who knows what the effect would be on the system?

You don't need to put more and more of those kind of linkages and strains on an economic system that already is pretty damn leveraged.

Charlie, got any further thoughts? We love talking about disasters, so don't stop us. (Laughs)

25. Salomon and Robert Maxwell, "The Bouncing Czech"

CHARLIE MUNGER: It's simply amazing what goes in these seemingly rational places. Salomon was at least as disciplined, and honorable, and rational as the other leading investment banks.

And yet, toward the end of our pleasant period, Salomon was begging for new investment banking business from [Robert] Maxwell. And his nickname was "The Bouncing Czech." (Laughter)

Now, and of course it wasn't very much after that that he committed suicide after massive embezzlements of pension funds, and a huge collapse.

Now, you'd think if a guy's nickname was "The Bouncing Czech," you wouldn't be madly seeking his investment banking business. But all the leading investment banks were.

WARREN BUFFETT: Yeah, I'm fuzzy it on now, but actually the morning, or the day he was discovered to be bobbing around in the ocean, the —

I think at Salomon, we had transferred a bunch of money to somebody over in Germany or Switzerland, and we were supposed to get some more money back that afternoon.

This is basically correct — I may be a little bit off on the details — but the money that got sent, got sent. But the money was to be received, did not get received. And then we went over to England and tried to collect it from his sons, and we got stiff-armed in one way or another.

I mean, we got what we deserved, frankly, in a transaction like that. But to the investment banker involved, his earnings that year was — were going to be affected in a significant way by whether he wrote a ticket or two more with Maxwell. And, you know, in the end, that carried the day.

And it's very hard to control people when their income depends on bringing in dubious people into the door. They care enormously about it, and you've got this big system that doesn't quite pick up on it.

And Charlie's mentioned before, you know, one of the underwriting clients that came forth, that Salomon took on, that professed to be doing wonderful things with money, and it turned out to be a huge fraud.

Well, it's tough to stop. You've got dozens and dozens of people running around out there all thinking about how big their bonus is going to be at the end of the year. And, you know, they are not inclined to run morality checks on who they do business with.

CHARLIE MUNGER: That was a wonderful experience. Warren and I, and Lou Simpson are all directors of a company, and we are by far the biggest shareholder. And we all said we should not be doing business with this guy. This is a very dangerous transaction.

And they told us it had been approved by the underwriting committee. And of course that settled matters. And —

WARREN BUFFETT: This guy had a neon sign that sign that said "Crook" on him, as far as we were concerned.

CHARLIE MUNGER: And he was waving it vigorously, yeah. (Buffett laughs)

But it had been through the underwriting committee. They — the transaction closed, but not financially. I mean, they had the underwriting, but they hadn't had the financial closing.

WARREN BUFFETT: Yeah, they caught him on the way to the bank. (Laughs)

CHARLIE MUNGER: You're right, they pulled back just from the edge of the precipice, from this big, fraudulent — and of course they got egg all over their faces.

That phrase reminds me of one of the leading lawyers of yore, and he said, “Captain of my soul,” he says, “Or captain of my fate,” he says, “Hell, I don’t even pull an oar.”

I mean, here we are — (laughs) — with all three of us on the board, you know, the biggest shareholder, and we can’t even stop one stupid little underwriting.

WARREN BUFFETT: He did go to jail, though, I think, didn’t he?

CHARLIE MUNGER: Yes.

WARREN BUFFETT: He claimed, incidentally, to be a huge shareholder of Berkshire Hathaway. And had made all this money. And I went to the shareholder’s list, and admittedly he could have it in a street name someplace.

But it was a big quantity, he claimed. Though we — I couldn’t find any record in any place. But he did have some kind of a little from an accounting firm that —

CHARLIE MUNGER: Yeah.

WARREN BUFFETT: — was backing him up. Didn’t back him up all the way, though, it turned out. (Laughs)

26. Hedge funds are a fad with huge fees

WARREN BUFFETT: Number 11, please.

AUDIENCE MEMBER: Good afternoon, I’m Manuel Fernandez, from Mexico City, Mexico. And I want to thank you for your valuable lessons on how to be good partners, you — and for exporting some good ideas and principles to the world for free.

My simple question is, do you think it makes sense for individual investors to invest a part of their capital in hedge funds, or a fund of hedge funds, somewhat like the $600 million investment Berkshire made in Value Capital?

WARREN BUFFETT: Yeah, I would say that people that are now investing in hedge funds, in aggregate, are going to be disappointed.

You don’t get smarter because you’re running something called a hedge fund, or something called private equity, or something, you know, called anything — an LBO fund.

But what you do gain periodically is the ability to merchandise those things. I mean, there are fads in Wall Street, and Wall Street will sell what it can sell, just remember that. You know, that may be as good as what the fellow quoted up in the upper levels there.

And the hedge fund right now is in the midst of a fad. It's distinguished not by the ability to make more money. It's distinguished by the extraordinary amount of fees that are collected.

And believe me, if the world on $600 billion of money, is paying 2 percent fees, and a percentage of the profits, and the losers go out of existence, and the winners continue for a while, and take money off the table, it is not going to be a great experience, in aggregate, for investors.

Obviously, there are a few smart, honest people out there running funds, and they can — they will do quite well. But if you buy them across the board, in my view, you're going to get a bad result.

Charlie?

CHARLIE MUNGER: Yeah, why would you want to invest with a guy whose basic thought process runs something like this, "If a second layer of fees on top of a first layer of substantial fees is good for an investor, then a third layer of fees must be better yet?" (Laughter)

Why would you invest with somebody with a proposition like that?

WARREN BUFFETT: It — just the idea of taking two percent, you know, plus percentages on top of that, that reflects — you know, it may be what the traffic can bear, you know, Collis P. Huntington style, but that reflects an attitude toward people that we tend to regard as partners, investors — I just think it's a basically unfair type of arrangement.

And I don't like getting in — in general, I think it's a mistake to get in with people who propose unfair arrangements.

You know, in effect they're getting — probably getting four times standard fees to begin with. And then on top of that, they say we want part of the action. And I would guess in many of those cases, that they don't have all of their own money in the fund themselves. Maybe they have a substantial sum outside.

Charlie and I both run — ran — partnerships in the '60s, and '50s with me, and into the '70s with him, that would generally be classified as hedge funds. They had the compensation arrangement somewhat similar, although not like they are now. And we did some —

They had some similarities, but I don't think we had quite the attitude toward the people who were trying to — that were asking to join us — that the present managers have. It's —

As Charlie said, the fund-to-funds type stuff, I mean, it's really sort of unbelievable just piling on layer after layer on costs. It doesn't make the companies that are underlying these stocks they buy any better. I mean, it —

And believe me, people don't become a genius just because you walk into some office, and it says "hedge funds" on the door. I mean they are — what they may be very good at is marketing. In fact, if they're good at marketing, they don't have to be good at anything else.

27. Basic principles and "uncommon sense"

WARREN BUFFETT: Number 12.

AUDIENCE MEMBER: My name's Arturo Brulenborg (PH). I'm from Washington, D.C. I'll be graduating from Harvard College in June and beginning a career in value investing, so I sure hope we're all right in thinking that this century will be just as good as the last for value investors.

You've been doing this since you were my age, if not younger. So I'm wondering what habit, or habits have contributed most to your ability to continue learning and improving your investment decisions in a changing business and financial environment?

WARREN BUFFETT: I would say that, at least in my case, I haven't been continually learning, in terms of the basic principles. You always learn a little more about given techniques, or we learn — you know, I learn more about some industries over time, and therefore, maybe I've widened the universe in which I can operate, although more funds narrows it back down, unfortunately.

But I know more about businesses than I knew 20 years ago, or 40 years ago. I haven't really changed the principles.

The last change — the basic principles are still Ben Graham. They were affected in a significant way by Charlie and Phil Fisher, in terms of looking at the better businesses. But they — but I didn't leave any of — I didn't leave Graham behind on that.

And I really haven't learned any new fundamental principles. But I may have learned a little bit more about how business operates over time.

And there's really nothing — I mean, you ought to get an investment framework that comes straight from, in my view, from "The Intelligent Investor," and from Phil Fisher, more from "The Intelligent Investor," actually.

And then I think you ought to learn everything you can about industries and businesses that — where you think you have the ability to get your mind around them if you work at them. And with that arsenal, you'll do very well, and if you've got the temperament for the business.

Charlie?

CHARLIE MUNGER: Yeah, well, of course I've watched Warren all these decades, and he's learned a hell of a lot, even the last 20 or 30 years. So it's a game of continuing to learn. And he

can denigrate this little frou-frou that enables him to pick the biggest oil company in China, or this or that.

But those basic principles alone, that he knew a long time ago, wouldn't have given him the ability to make the recent investment decisions as well as he's made them. It's a life-long game, and it you don't keep learning, other people will pass you by.

WARREN BUFFETT: I would say temperament, though, still is the most important, wouldn't you, Charlie?

CHARLIE MUNGER: Yes, of course.

WARREN BUFFETT: Yeah, yeah.

CHARLIE MUNGER: But temperament alone won't do it.

WARREN BUFFETT: No, temperament alone won't do it.

CHARLIE MUNGER: You have to have the temperament, and the right basic idea. And then you have to keep at it with a lot of curiosity for a long, long time.

WARREN BUFFETT: But you don't have to be blindingly, and have any blinding insights, or have a high IQ to look at a PetroChina for example, and —

CHARLIE MUNGER: No.

WARREN BUFFETT: You know, it, I mean, it's a — when you get, you know, a company that is doing 2 1/2 million barrels a day, that's 3 1/2 percent of the — or 3 percent — of the world's oil production.

You know, and they're selling based on U.S. prices using WTI — you know, as West Texas Intermediate — as a base price, and where they have a significant part of the marketing and refining in a country, the tax rate's 30 percent.

They say they're going to pay out 45 percent to you in dividends. Don't have unusual amounts of leverage.

If you're buying something like that at well under half what — or maybe a third — of what comparable oil companies are selling for, that's not high-level stuff.

I mean, you have to read some — you have to be willing to read the reports. But I enjoy doing that. But you wouldn't say that requires any high-level insights or anything, Charlie?

CHARLIE MUNGER: Well, when you were buying that block of stock, nobody else to speak of was buying. So —

WARREN BUFFETT: Thank heavens.

CHARLIE MUNGER: The insights can't have been all that common.

No, I think that takes a certain amount of what an old Omaha friend used to call "uncommon sense." He used to say, "There is no common sense. When people say common sense, they mean uncommon sense."

Part of it, I think, is being able to tune out folly as distinguished from recognizing wisdom. And if you just got whole categories of things you just bat away, so your brain isn't cluttered with them, then you're better able to pick up a few sensible things to do.

WARREN BUFFETT: Yeah, we don't consider many stupid things. You know, we get rid of them fast.

And in fact, people get irritated with us, because they'll call us, and when they're in the middle of the first sentence, we'll just tell them "forget it." You know, and we don't — we can see it coming.

And, you know, that's the way, actually, the mind works. There was a great article in The New Yorker magazine 30 years ago or so — little more than that. It was when the Fischer-Spassky chess matches were going on. And it got into this speculation of would the humans be able to take on computers in chess.

And, you know, here were these computers doing hundreds of thousands of calculations a second. And they said, "How can the human mind, when all you're really looking at is the future, you know, the results from various moves in the future, how can a human mind deal with a computer that's thinking it at speeds that are unbelievable?"

And of course, they examined the subject some. And a mind, like — well, in fact, all minds, but some much better than others — but a Fischer or Spassky, essentially, was eliminating about 99.99 percent of the possibilities without even thinking about it.

So it wasn't that they could outthink the computer in terms of speed, but they had this ability in what you might call grouping, or exclusion, where, essentially, they just got right down to the few possibilities out of the zillions of possibilities that really had any chance of success.

And getting rid of the nonsense, I mean, just figuring that, you know, people start calling you and say, "I've got this great, wonderful idea." Don't spend 10 minutes, you know, once you know in the first sentence that it isn't a great, wonderful idea.

Don't be polite, go through the whole process. And Charlie and I pretty good at that. We can hang up very fast, right? (Laughter)

CHARLIE MUNGER: Well, there you have it. All you've got to do is go at it in the way that Vasily Smyslov did when he was the world champion, and — of chess — and just do the same thing in investments. (Laughter)

28. Estimating intrinsic value

WARREN BUFFETT: OK, microphone 1. (Laughs)

AUDIENCE MEMBER: Good afternoon, Mr. Buffett, Mr. Munger. My name is Richard Azar. I'm from Trinidad in the West Indies.

You guys have been very generous with your intellect over the years. It's been a huge help to me in my personal and financial life.

I wondered if it was appropriate for me to describe the methodology in which I'm trying to determine the range of Berkshire's intrinsic value, and if you can guide me on if my methodology is flawed, or is reasonably accurate.

WARREN BUFFETT: If it doesn't take too long, we'll be glad to, although I think I know the answer already. (Laughs)

AUDIENCE MEMBER: OK. We ended 2003 with about 5.422 billion of operating earnings. I estimated our look-through earnings to be approximately 915 million. So in total, that was about 6.337 billion of estimated look-through earnings.

I knew that we spent a billion-two on CAPEX, and our net depreciation on tangible assets was 829 million. So, there was a difference there of 173 million. And we spent more on CAPEX over the appreciation, over the last few years.

But in extrapolating out 20 years, I thought I might be kidding myself to ascertaining the differences between CAPEX and depreciation. And I'm using look-through earnings as a rough proxy for distributable earnings.

And I've assumed that Berkshire can grow its look-through earnings at 15 percent per annum, from years one to five, and at 10 percent per annum, from years six to 20. And the business will stop growing after year 20, resulting in a 7 percent coupon from year 21 onwards.

I discounted the cumulative flows in years one to 20 by 7 percent, and I discounted the terminal value by 7 percent. I added the two together, to get what I thought was the intrinsic value of Berkshire's cash stream.

I knocked off 103 billion of liabilities and minority interests. I divided by 1,537,000 shares, to arrive at what I thought was a conservative calculation of the range of Berkshire's intrinsic value.

Am I off the mark, or is that the sort of methodology you might use yourself?

WARREN BUFFETT: Well — (Laughter and applause) — well, you've done your homework. (Laughter)

The line of thinking is correct, it just depends on what variables you plug in. And we might have different ideas on variables, and neither one of us knows.

But the approach, in general, the approach of trying to figure out distributable cash over a period of time. The business today is worth, the present value at some number — you're using 7 percent, but the question of what number to use —

But it's worth the present value of all the cash it can distribute between now and Judgment Day. And if cash can be retained, and it's at a rate higher — it produces — at a rate higher than your discount rate, obviously, you'll get some benefit from that retention.

But, you know, I would say that your assumptions about CAPEX, and related to depreciation, I would expect CAPEX to be, on average, a little more than depreciation unless we run into highly inflationary times.

But of course, we have to keep buying businesses, and using the capital in the business that we retain. If we retain those earnings, we have to use that to buy more businesses. And then the question is, what kind of returns can we expect on those?

I don't quarrel with the approach you're using, but, you know, everybody has to do their own equation and plug in some numbers.

And I think we might settle for lower numbers on earnings gains than you postulated because we're very large, and it's — it gets harder all the time to deploy the kind of funds that keep flowing into Omaha.

Charlie?

CHARLIE MUNGER: Yeah, and you shouldn't necessarily get overly excited about last year, as Warren said, that was a very unusual year when everything worked together pretty darn well.

WARREN BUFFETT: Except interest rates on —

CHARLIE MUNGER: Yeah, well, but a lot worked together very well.

The interesting thing about Berkshire's present valuation is how much cash, and cash equivalents it has to do something.

And that is a very interesting question. How well are we going to do with this massive amount of investable cash and cash equivalents?

WARREN BUFFETT: Yeah, we should be out working now. I mean — (laughter) — that is the test.

I mean, we've got a bunch of good businesses. We've got a lot of money that we'd like to use to buy more good businesses. We may get lucky and deploy that quite rapidly. We may wait a long time.

Cash may pile up faster than we can use it, in which case we'll have to rethink the whole game.

But our hope is — and so far we feel OK about what's happened in that — our hope is that we can deploy the money that flows in at — in businesses that come close to being as good as the ones that we've bought over the years.

29. Timing of Berkshire earning reports

WARREN BUFFETT: Number 2.

AUDIENCE MEMBER: Hi, Mr. Buffett, Mr. Munger, Whitney Tilson, a shareholder from New York City.

It's past three o'clock, and we've heard almost nothing about how these great businesses are doing right now, or at least in the first quarter.

And I recall at last year's annual meeting, you took the fairly unusual step, at least from my recollection, of putting up slides and actually giving us a preview of how phenomenally the businesses were doing.

And I can imagine that if you had the wind to your back a year ago, the situations in the first quarter of this year, you must really, really have the wind at your back. And I was wondering if you can share with us what you can?

WARREN BUFFETT: Well, we can't give you the speed of the wind.

The — we're going to have the 10-Q out when, Marc? Well, it's going to be out in a few days.

And if we throw out any numbers now, or make any commentary, we'd have to put that up on the website, and perhaps even try to cover the nuances in my voice. So I think you'll just have to wait a few days, and they'll go up, the figures will go up, at that time.

And if there are any surprises, they will be surprises then, and everybody will get them at the same time.

Incidentally, we're going to have a little more trouble in the next year or two, because the —

We like to publish everything — all the figures — or anything important if we can do it — we like to do that on Friday night after the close, or Saturday morning, so that everybody has an opportunity to look at them, and have a maximum amount of time to digest them before trading begins.

And the SEC is shortening up reporting times so that we're going to be scrambling just to meet whatever day of the month it is that recording requirements are met. And so we may not —

We won't have the luxury — although we'll try to do it when we can — we won't have the luxury of picking the Saturday before the due date, and targeting that as our release date.

You know, when we had 45 days, or what was it, yeah, 45 days to report, we could pick the Saturday before the 45 days.

If that gets down to 30 days, you know, if the 30th day is on a Tuesday, we're going to be hard put probably to get it done by that Tuesday. So we'll obviously put it out after the close, so people have between four o'clock and the next morning to digest it.

But we won't be able to follow the procedure that we've followed to date, which we regard as the best procedure of all, giving people close to two days to digest whatever is in the figures.

But I can't help you, Whitney, on how the first quarter looks. And Charlie, I don't think you'll want to add anything on that, will you? (Laughs)

30. Advice to young people: avoid credit card debt and hang out with people better than you

WARREN BUFFETT: OK, number 3.

AUDIENCE MEMBER: Hello, Mr. Buffett, and Mr. Munger. My name is Justin Fong. I am 14 years old, from California. This is my fourth consecutive meeting attendance.

I read in a book that you prefer talking to young people about life and financial concepts because we still have time to implement them. Can you please share some of the concepts with us? Thank you.

WARREN BUFFETT: I didn't catch the last part.

CHARLIE MUNGER: I didn't. It's something about sharing concepts. You want to repeat it?

AUDIENCE MEMBER: Can you please share the life and financial concepts that you prefer talking to young people about?

CHARLIE MUNGER: Share — he wants to know your life concepts, and financial concepts, that are useful to young people.

WARREN BUFFETT: (Laughs) — well, that's a fairly broad question. But I think the financial concepts, you know, we've obviously spelled out in the reports. Charlie's probably better on the life concepts than I am.

It is true, that I do believe in spending the time that I spend giving talks, or answering questions, doing it with young people. I do, I'm sure, well over a dozen a year.

And I just think that, obviously, young people are more receptive to change, or to actually at even forming habits that are going to be useful in life.

And I think that people underestimate — until they get older — they underestimate just how important habits are, and how difficult they are to change when you're 45 or 50, and how important it is that you form the right ones when you're young.

But Charlie, what do you have to say on that?

CHARLIE MUNGER: Well, all the trite stuff is what works. I mean, you avoid doing the really dumb things, like, racing moving trains to the crossing — (laughter) — experimenting with cocaine — (laughter) — risking getting AIDS or other unfortunate ailments.

There are just a lot of standard things that take people down. And you just give those a wide berth.

And then you want to develop a good character, and good mental habits, and you want to learn from your mistakes, every single one, as you go along. It's pretty obvious, isn't it? (Laughter)

WARREN BUFFETT: Yeah, we would say even though we issue lots of credit cards and everything, we'd say, probably, if I had one piece of advice to give to young people, you know, across the board, it would be just to don't get in debt. It —

The game plays a lot easier if you're a little bit ahead of the game than if you're behind the game. And Ben Franklin said that long ago in better terms, which Charlie can recite.

But there's a real difference. I get letters every day from people that are in all kinds of financial trouble. And often it's health related, which is tragic. But very often it's — it relates to debt. I mean, they get behind the game, and they're never going to catch up.

And often — it may surprise you — but often, I write these people — they're very decent people, they've just made mistakes — and I just tell them the best course is bankruptcy.

I mean, they are not going to catch up. And they should start all over again, and they should never look at a credit card the rest of their life.

And — but it would have been better if they'd gotten that advice a little earlier. But it's very tempting to spend more than you earn. I mean, I — you know, it's very understandable. But it's not a good idea.

CHARLIE MUNGER: And of course you particularly want to avoid evil, or seriously irrational people, particularly if they are attractive members of the opposite sex. That can — (Laughter)

WARREN BUFFETT: Charlie knows more about this —

CHARLIE MUNGER: It can lead to a lot of trouble.

WARREN BUFFETT: The expert. The — yeah, the — you know —

It's better to hang out with people better than you. I found that very easy to do over the years. (Laughs)

But if you're picking associates, pick out those whose behavior is somewhat better than yours, and you'll drift in that direction.

And similarly if you hang out with a bad bunch, you're very likely to find your own behavior worse over time.

But all — like Charlie says, the trite advice which Ben Franklin was handing out a few hundred years ago, really works.

You know, just — we've said it, but look at the people you like to associate with. You know, what qualities do they have that you can have if you want to?

Look at the people that you can't stand to be around. What qualities do you have that they have? Can you get rid of them? You can do all of that a young age. It gets harder as you go along. It's not very complicated.

CHARLIE MUNGER: And my final word of advice would be, if this gives you a little temporary unpopularity in your peer group, the hell with them. (Laughter and applause)

WARREN BUFFETT: And as advice a little more applicable to me and Charlie, I was reading about a woman that was 103, and they said, "What do you like about being 103?" And she says, "No peer pressure." (Laughter)

31. Buffett: Major commodity markets aren't rigged

WARREN BUFFETT: We'll go to number 4.

AUDIENCE MEMBER: Good afternoon. My name is Mike McGowan. I'm from Pasadena, California.

Everything you just said seems to apply to precious metals, specifically silver —

WARREN BUFFETT: Applies to what? I'm sorry I missed that.

AUDIENCE MEMBER: Precious metals.

WARREN BUFFETT: Oh, sure.

AUDIENCE MEMBER: Specifically, silver. As I recall, Berkshire Hathaway bought 129 1/2 million ounces of silver. And at the time, you said supply/demand fundamentals were good, you saw inflation kicking back, and lots of other reasons. I'm assuming you still own at least 90 million ounces of that.

The problem would be the pricing mechanism. Apparently the COMEX, or at least certain of the managers of the silver price on the COMEX, are in debt. The New York banks and financial institutions are short 400-plus million ounces. And it doesn't look as if they really want the price to go anywhere.

So given that Berkshire has all of this silver, do you see the price of silver actually trading in a free market at some point, or would you look at shares instead of the physical metal?

And otherwise, we're kind of at the point, I guess, where John Maynard Keynes said, "The market can remain irrational a lot longer than we can remain solvent."

WARREN BUFFETT: The — we have no comment at all to make on our present position in silver, if any, we may — we could own more, we could own the same, we could own less, we could own none. So — and we won't comment.

We commented one time because the Bank of England asked us to comment. And since it was the only time the Bank of England had ever talked to me, I felt quite flattered. (Laughter) The —

But I would say this. I would disagree very much with your thoughts that the market is in some way rigged, or something of the sort. The — there's —

I find that most of the people that write — or many of the people that write — on gold and silver tend to have various theories, some of which are conspiratorial, and there's always, you know, the selling forwards is doing this and that to the market, or that somebody's short.

You know, the answer is that there's plenty of silver above ground. Whether there's more or less than there was a few years ago, in terms of the supply-demand since then, I'm not a hundred percent sure. It's tough to figure out what goes on in China in a lot of things.

But I — there's nothing flawed, in my view, about the market for silver, or copper, or gold, or really any commodity that I can think of that trades in real quantity.

Charlie?

CHARLIE MUNGER: Yeah, I think it also should be pointed out that you're asking for the opinions of people who have not particularly distinguished themselves in this arena. (Laughter)

WARREN BUFFETT: He was pointing at me. (Laughter)

With good reason.

32. Buffett doesn't see Wells Fargo as a "big player" in derivatives

WARREN BUFFETT: We'll go to number 5.

AUDIENCE MEMBER: Good afternoon, Travis Keith (PH), from Dallas, Texas.

The OCC's quarterly report on bank derivatives shows that Wells Fargo has one of the largest derivatives portfolios of any U.S. bank.

In spite of your high-profile criticism of derivatives, Berkshire added to its position in Wells Fargo last year.

What about Wells Fargo's derivatives portfolio did you find less objectionable, and what disclosure did you examine in considering the risks of Wells Fargo's derivatives portfolio?

WARREN BUFFETT: I don't have their report here, but without looking at it, I would be willing to bet that JPMorgan Chase has a derivatives portfolio that's far, far greater than Wells.

I do not think of Wells, and I may be wrong, I do not think of Wells as being a big player.

Now, all the big banks have various derivative positions. But I do not — I don't think of Wells as being a big player in the derivative game. And I — you can't —

There is no perfect measurement of the size of a derivative position. I mean, you hear all these huge numbers thrown around, and they sound great, but they tend to exaggerate things in a huge — in a very dramatic way, in terms of trillions of this or that. But so —

You know, there can be — you could talk about a billion dollar notional amount of one kind of derivative, and it could have less danger in it than a $50 million position of — in some other type.

But I really don't think you'll find that Wells, particularly compared to a JPMorgan Chase, or a Citibank, or something of the sort, is a really big derivatives player.

And Charlie and I — at least I — and think Charlie'll agree — Wells, I think, is an extraordinarily well-managed bank.

I disagree with them violently on expensing of stock options. I mean, Dick Kovacevich, who runs that, and I would have entirely different opinion. He's written about it in the last couple of annual reports. And much as I — and I really admire the management. I think he's done a great job — but much as I admire the management, I voted the other — our Berkshire stock — the other way, and for expensing options. And I noticed that 57 percent of the stock at this meeting just the other day voted to expense options.

But even though I disagree with him on that particular accounting point, Wells has a — an absolutely terrific record. Dick is a terrific businessperson.

And I think in terms of taking risk, or handling the risk that he necessarily takes, I think that I would rank him very way up there in terms of bank managers.

Charlie?

CHARLIE MUNGER: I've got nothing to add to that.

33. Leverage is the biggest danger to investors

WARREN BUFFETT: OK, we're going to take one more from number 6.

AUDIENCE MEMBER: Thank you very much, Mr. Munger and Mr. Buffett.

My question regards — well, I'm Michael Stofski (PH) from New York.

My question regards financial institutions and the potential of collapses.

And how is Berkshire protected, and how can the individual investor protect themselves against potential bank failures, stock brokerage failures, and things like that?

WARREN BUFFETT: Well, I think as a depositor with large banks, or as somebody that leaves their securities with large brokerage firms, I really don't think you to worry very much.

We have a “too big to fail” doctrine operating in this country, relative to what you might call the innocent parties in big financial institution failures. We don’t have it in respect to the equity holders, nor should we have it.

But I would not — I don’t worry about leaving my securities — my personal securities — or for that matter, Berkshire securities — with the large securities firms. I don’t worry about my bank accounts at big banks, so —

CHARLIE MUNGER: But you’re talking cash accounts?

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: Yeah.

WARREN BUFFETT: Yeah, cash accounts.

CHARLIE MUNGER: Not margin.

WARREN BUFFETT: Yeah. And the — but if you, in terms of owning the equities of companies like that, or in terms of the fallout, the big thing that will —

Really, the only way a smart person that’s reasonably disciplined in how they look at investments can get in trouble is through leverage. I mean, if somebody else can pull the plug on you during the worst moment of some kind of general financial disaster, you go broke. And Charlie and I both have friends that have — where that’s happened to them.

But absent leverage, and absent just kind of going crazy in terms of valuation on things, the world won’t hurt you over time in securities.

And, I mean, you won’t be subject to the financial cataclysms that — they don’t need to do you in. If you have any more money during periods like that, you buy.

Berkshire, I think, is in an extraordinarily strong position in respect to any kind of a financial cataclysm. I think we would be definitely the last man standing, and then some.

And while we don’t go around, you know, like undertakers looking for a plague or anything like that, you know, we would probably do very, very well in the end.

And that’s happened a couple of times, actually, in the past, where we’ve had cash, and we’ve had courage when the world was panicking, and it’s — we’ve done reasonably well during that period.

And we’ve never gotten hurt by what was happening in the world around us, at least in the last 30 or 40 years.

Charlie?

CHARLIE MUNGER: Well, I think that’s plainly right.

Note: The following table appears in the printed Annual Report on the facing page of the Chairman's Letter and is referred to in that letter.

Berkshire's Corporate Performance vs. the S&P 500

Year	Annual Percentage Change in Per-Share Book Value of Berkshire (1)	Annual Percentage Change in S&P 500 with Dividends Included (2)	Relative Results (1)-(2)
1965	23.8	10.0	13.8
1966	20.3	(11.7)	32.0
1967	11.0	30.9	(19.9)
1968	19.0	11.0	8.0
1969	16.2	(8.4)	24.6
1970	12.0	3.9	8.1
1971	16.4	14.6	1.8
1972	21.7	18.9	2.8
1973	4.7	(14.8)	19.5
1974	5.5	(26.4)	31.9
1975	21.9	37.2	(15.3)
1976	59.3	23.6	35.7
1977	31.9	(7.4)	39.3
1978	24.0	6.4	17.6
1979	35.7	18.2	17.5
1980	19.3	32.3	(13.0)
1981	31.4	(5.0)	36.4
1982	40.0	21.4	18.6
1983	32.3	22.4	9.9
1984	13.6	6.1	7.5
1985	48.2	31.6	16.6
1986	26.1	18.6	7.5
1987	19.5	5.1	14.4
1988	20.1	16.6	3.5
1989	44.4	31.7	12.7
1990	7.4	(3.1)	10.5
1991	39.6	30.5	9.1
1992	20.3	7.6	12.7
1993	14.3	10.1	4.2
1994	13.9	1.3	12.6
1995	43.1	37.6	5.5
1996	31.8	23.0	8.8
1997	34.1	33.4	.7
1998	48.3	28.6	19.7
1999	.5	21.0	(20.5)
2000	6.5	(9.1)	15.6
2001	(6.2)	(11.9)	5.7
2002	10.0	(22.1)	32.1
2003	21.0	28.7	(7.7)
2004	10.5	10.9	(.4)
Average Annual Gain — 1965-2004	21.9	10.4	11.5
Overall Gain — 1964-2004	286,865	5,318	

Notes: Data are for calendar years with these exceptions: 1965 and 1966, year ended 9/30; 1967, 15 months ended 12/31.

Starting in 1979, accounting rules required insurance companies to value the equity securities they hold at market rather than at the lower of cost or market, which was previously the requirement. In this table, Berkshire's results through 1978 have been restated to conform to the changed rules. In all other respects, the results are calculated using the numbers originally reported.

The S&P 500 numbers are **pre-tax** whereas the Berkshire numbers are **after-tax**. If a corporation such as Berkshire were simply to have owned the S&P 500 and accrued the appropriate taxes, its results would have lagged the S&P 500 in years when that index showed a positive return, but would have exceeded the S&P in years when the index showed a negative return. Over the years, the tax costs would have caused the aggregate lag to be substantial.

BERKSHIRE HATHAWAY INC.

To the Shareholders of Berkshire Hathaway Inc.:

Our gain in net worth during 2004 was $8.3 billion, which increased the per-share book value of both our Class A and Class B stock by 10.5%. Over the last 40 years (that is, since present management took over) book value has grown from $19 to $55,824, a rate of 21.9% compounded annually.*

It's per-share intrinsic value that counts, however, not book value. Here, the news is good: Between 1964 and 2004, Berkshire morphed from a struggling northern textile business whose intrinsic value was less than book into a diversified enterprise worth far more than book. Our 40-year gain in intrinsic value has therefore somewhat exceeded our 21.9% gain in book. (For an explanation of intrinsic value and the economic principles that guide Charlie Munger, my partner and Berkshire's vice-chairman, and me in running Berkshire, please read our Owner's Manual, beginning on page 73.)

Despite their shortcomings, yearly calculations of book value are useful at Berkshire as a slightly understated gauge for measuring the *long-term* rate of increase in our intrinsic value. The calculations are less relevant, however, than they once were in rating any single year's performance versus the S&P 500 index (a comparison we display on the facing page). Our equity holdings (including convertible preferreds) have fallen considerably as a percentage of our net worth, from an average of 114% in the 1980s, for example, to less than 50% in recent years. Therefore, yearly movements in the stock market now affect a much smaller portion of our net worth than was once the case, a fact that will normally cause us to underperform in years when stocks rise substantially and overperform in years when they fall.

However the yearly comparisons work out, Berkshire's long-term performance versus the S&P remains all-important. Our shareholders can buy the S&P through an index fund at very low cost. Unless we achieve gains in per-share intrinsic value in the future that outdo the S&P, Charlie and I will be adding nothing to what you can accomplish on your own.

Last year, Berkshire's book-value gain of 10.5% fell short of the index's 10.9% return. Our lackluster performance was not due to any stumbles by the CEOs of our operating businesses: As always, they pulled more than their share of the load. My message to them is simple: Run your business as if it were the only asset your family will own over the next hundred years. Almost invariably they do just that and, after taking care of the needs of their business, send excess cash to Omaha for me to deploy.

I didn't do that job very well last year. My hope was to make several multi-billion dollar acquisitions that would add new and significant streams of earnings to the many we already have. But I struck out. Additionally, I found very few attractive securities to buy. Berkshire therefore ended the year with $43 billion of cash equivalents, not a happy position. Charlie and I will work to translate some of this hoard into more interesting assets during 2005, though we can't promise success.

In one respect, 2004 was a remarkable year for the stock market, a fact buried in the maze of numbers on page 2. If you examine the 35 years since the 1960s ended, you will find that an investor's return, including dividends, from owning the S&P has averaged 11.2% annually (well above what we expect future returns to be). But if you look for years with returns anywhere close to that 11.2% – say, between 8% and 14% – you will find only *one* before 2004. In other words, last year's "normal" return is anything but.

*****All figures used in this report apply to Berkshire's A shares, the successor to the only stock that the company had outstanding before 1996. The B shares have an economic interest equal to 1/30th that of the A.

Over the 35 years, American business has delivered terrific results. It should therefore have been easy for investors to earn juicy returns: All they had to do was piggyback Corporate America in a diversified, low-expense way. An index fund that they never touched would have done the job. Instead many investors have had experiences ranging from mediocre to disastrous.

There have been three primary causes: first, high costs, usually because investors traded excessively or spent far too much on investment management; second, portfolio decisions based on tips and fads rather than on thoughtful, quantified evaluation of businesses; and third, a start-and-stop approach to the market marked by untimely entries (after an advance has been long underway) and exits (after periods of stagnation or decline). Investors should remember that excitement and expenses are their enemies. And if they insist on trying to time their participation in equities, they should try to be fearful when others are greedy and greedy only when others are fearful.

Sector Results

As managers, Charlie and I want to give our owners the financial information and commentary we would wish to receive if our roles were reversed. To do this with both clarity and reasonable brevity becomes more difficult as Berkshire's scope widens. Some of our businesses have vastly different economic characteristics from others, which means that our consolidated statements, with their jumble of figures, make useful analysis almost impossible.

On the following pages, therefore, we will present some balance sheet and earnings figures from our four major categories of businesses along with commentary about each. We particularly want you to understand the limited circumstances under which we will use debt, given that we typically shun it. We will not, however, inundate you with data that has no real value in estimating Berkshire's intrinsic value. Doing so would tend to obfuscate the facts that count.

Regulated Utility Businesses

We have an 80.5% (fully diluted) interest in MidAmerican Energy Holdings, which owns a wide variety of utility operations. The largest of these are (1) Yorkshire Electricity and Northern Electric, whose 3.7 million electric customers make it the third largest distributor of electricity in the U.K.; (2) MidAmerican Energy, which serves 698,000 electric customers, primarily in Iowa; and (3) Kern River and Northern Natural pipelines, which carry 7.9% of the natural gas consumed in the U.S.

The remaining 19.5% of MidAmerican is owned by three partners of ours: Dave Sokol and Greg Abel, the brilliant managers of these businesses, and Walter Scott, a long-time friend of mine who introduced me to the company. Because MidAmerican is subject to the Public Utility Holding Company Act ("PUHCA"), Berkshire's voting interest is limited to 9.9%. Voting control rests with Walter.

Our limited voting interest forces us to account for MidAmerican in an abbreviated manner. Instead of our fully incorporating the company's assets, liabilities, revenues and expenses into Berkshire's statements, we make one-line entries only in both our balance sheet and income account. It's likely, though, that PUHCA will someday – perhaps soon – be repealed or that accounting rules will change. Berkshire's consolidated figures would then incorporate all of MidAmerican, including the substantial debt it utilizes (though this debt is not now, nor will it ever be, an obligation of Berkshire).

At yearend, $1.478 billion of MidAmerican's junior debt was payable to Berkshire. This debt has allowed acquisitions to be financed without our partners needing to increase their already substantial investments in MidAmerican. By charging 11% interest, Berkshire is compensated fairly for putting up the funds needed for purchases, while our partners are spared dilution of their equity interests. Because MidAmerican made no large acquisitions last year, it paid down $100 million of what it owes us.

MidAmerican also owns a significant non-utility business, HomeServices of America, the second largest real estate broker in the country. Unlike our utility operations, this business is highly cyclical, but nevertheless one we view enthusiastically. We have an exceptional manager, Ron Peltier, who through both his acquisition and operational skills is building a brokerage powerhouse.

HomeServices participated in $59.8 billion of transactions in 2004, a gain of $11.2 billion from 2003. About 24% of the increase came from six acquisitions made during the year. Through our 17 brokerage firms – all of which retain their local identities – we employ more than 18,000 brokers in 18 states. HomeServices is almost certain to grow substantially in the next decade as we continue to acquire leading localized operations.

Last year MidAmerican wrote off a major investment in a zinc recovery project that was initiated in 1998 and became operational in 2002. Large quantities of zinc are present in the brine produced by our California geothermal operations, and we believed we could profitably extract the metal. For many months, it appeared that commercially-viable recoveries were imminent. But in mining, just as in oil exploration, prospects have a way of "teasing" their developers, and every time one problem was solved, another popped up. In September, we threw in the towel.

Our failure here illustrates the importance of a guideline – *stay with simple propositions* – that we usually apply in investments as well as operations. If only one variable is key to a decision, and the variable has a 90% chance of going your way, the chance for a successful outcome is obviously 90%. But if ten independent variables need to break favorably for a successful result, and each has a 90% probability of success, the likelihood of having a winner is only 35%. In our zinc venture, we solved most of the problems. But one proved intractable, and that was one too many. Since a chain is no stronger than its weakest link, it makes sense to look for – if you'll excuse an oxymoron – mono-linked chains.

A breakdown of MidAmerican's results follows. In 2004, the "other" category includes a $72.2 million profit from sale of an Enron receivable that was thrown in when we purchased Northern Natural two years earlier. Walter, Dave and I, as natives of Omaha, view this unanticipated gain as war reparations – partial compensation for the loss our city suffered in 1986 when Ken Lay moved Northern to Houston, after promising to leave the company here. (For details, see Berkshire's 2002 annual report.)

Here are some key figures on MidAmerican's operations:

	Earnings (in $ millions)	
	2004	*2003*
U.K. utilities	$ 326	$ 289
Iowa utility	268	269
Pipelines	288	261
HomeServices	130	113
Other (net)	172	190
Loss from zinc project	(579)	(46)
Earnings before corporate interest and taxes	605	1,076
Interest, other than to Berkshire	(212)	(225)
Interest on Berkshire junior debt	(170)	(184)
Income tax	(53)	(251)
Net earnings	$ 170	$ 416
Earnings applicable to Berkshire*	$ 237	$ 429
Debt owed to others	10,528	10,296
Debt owed to Berkshire	1,478	1,578

*Includes interest earned by Berkshire (net of related income taxes) of $110 in 2004 and $118 in 2003.

Insurance

Since Berkshire purchased National Indemnity ("NICO") in 1967, property-casualty insurance has been our core business and the propellant of our growth. Insurance has provided a fountain of funds with which we've acquired the securities and businesses that now give us an ever-widening variety of earnings streams. So in this section, I will be spending a little time telling you how we got where we are.

The source of our insurance funds is "float," which is money that doesn't belong to us but that we temporarily hold. Most of our float arises because (1) premiums are paid upfront though the service we provide – insurance protection – is delivered over a period that usually covers a year and; (2) loss events that occur today do not always result in our immediately paying claims, because it sometimes takes many years for losses to be reported (asbestos losses would be an example), negotiated and settled. The $20 million of float that came with our 1967 purchase has now increased – both by way of internal growth and acquisitions – to $46.1 billion.

Float is wonderful – *if* it doesn't come at a high price. Its cost is determined by underwriting results, meaning how the expenses and losses we will ultimately pay compare with the premiums we have received. When an underwriting profit is achieved – as has been the case at Berkshire in about half of the 38 years we have been in the insurance business – float is better than free. In such years, we are actually paid for holding other people's money. For most insurers, however, life has been far more difficult: In aggregate, the property-casualty industry almost invariably operates at an underwriting loss. When that loss is large, float becomes expensive, sometimes devastatingly so.

Insurers have generally earned poor returns for a simple reason: They sell a commodity-like product. Policy forms are standard, and the product is available from many suppliers, some of whom are mutual companies ("owned" by policyholders rather than stockholders) with profit goals that are limited. Moreover, most insureds don't care from whom they buy. Customers by the millions say "I need some Gillette blades" or "I'll have a Coke" but we wait in vain for "I'd like a National Indemnity policy, please." Consequently, price competition in insurance is usually fierce. Think airline seats.

So, you may ask, how do Berkshire's insurance operations overcome the dismal economics of the industry and achieve some measure of enduring competitive advantage? We've attacked that problem in several ways. Let's look first at NICO's strategy.

When we purchased the company – a specialist in commercial auto and general liability insurance – it did not appear to have any attributes that would overcome the industry's chronic troubles. It was not well-known, had no informational advantage (the company has never had an actuary), was not a low-cost operator, and sold through general agents, a method many people thought outdated. Nevertheless, for almost all of the past 38 years, NICO has been a star performer. Indeed, had we not made this acquisition, Berkshire would be lucky to be worth half of what it is today.

What we've had going for us is a managerial mindset that most insurers find impossible to replicate. Take a look at the facing page. Can you imagine *any* public company embracing a business model that would lead to the decline in revenue that we experienced from 1986 through 1999? That colossal slide, it should be emphasized, did not occur because business was unobtainable. Many billions of premium dollars were readily available to NICO had we only been willing to cut prices. But we instead consistently priced to make a profit, not to match our most optimistic competitor. We never left customers – but they left us.

Most American businesses harbor an "institutional imperative" that rejects extended decreases in volume. What CEO wants to report to his shareholders that not only did business contract last year but that it will continue to drop? In insurance, the urge to keep writing business is also intensified because the consequences of foolishly-priced policies may not become apparent for some time. If an insurer is optimistic in its reserving, reported earnings will be overstated, and years may pass before true loss costs are revealed (a form of self-deception that nearly destroyed GEICO in the early 1970s).

Portrait of a Disciplined Underwriter

National Indemnity Company

Year		Written Premium (In $ millions)	No. of Employees at Year-End	Ratio of Operating Expenses to Written Premium	Underwriting Profit (Loss) as a Percentage of Premiums (Calculated as of year end 2004)*
1980	.....	$79.6	372	32.3%	8.2%
1981	.....	59.9	353	36.1%	(.8%)
1982	.....	52.5	323	36.7%	(15.3%)
1983	.....	58.2	308	35.6%	(18.7%)
1984	.....	62.2	342	35.5%	(17.0%)
1985	.....	160.7	380	28.0%	1.9%
1986	.....	366.2	403	25.9%	30.7%
1987	.....	232.3	368	29.5%	27.3%
1988	.....	139.9	347	31.7%	24.8%
1989	.....	98.4	320	35.9%	14.8%
1990	.....	87.8	289	37.4%	7.0%
1991	.....	88.3	284	35.7%	13.0%
1992	.....	82.7	277	37.9%	5.2%
1993	.....	86.8	279	36.1%	11.3%
1994	.....	85.9	263	34.6%	4.6%
1995	.....	78.0	258	36.6%	9.2%
1996	.....	74.0	243	36.5%	6.8%
1997	.....	65.3	240	40.4%	6.2%
1998	.....	56.8	231	40.4%	9.4%
1999	.....	54.5	222	41.2%	4.5%
2000	.....	68.1	230	38.4%	2.9%
2001	.....	161.3	254	28.8%	(11.6%)
2002	.....	343.5	313	24.0%	16.8%
2003	.....	594.5	337	22.2%	18.1%
2004	.....	605.6	340	22.5%	5.1%

*It takes a long time to learn the true profitability of any given year. First, many claims are received after the end of the year, and we must estimate how many of these there will be and what they will cost. (In insurance jargon, these claims are termed IBNR – incurred but not reported.) Second, claims often take years, or even decades, to settle, which means there can be many surprises along the way.

For these reasons, the results in this column simply represent our best estimate at the end of 2004 as to how we have done in prior years. Profit margins for the years through 1999 are probably close to correct because these years are "mature," in the sense that they have few claims still outstanding. The more recent the year, the more guesswork is involved. In particular, the results shown for 2003 and 2004 are apt to change significantly.

Finally, there is a fear factor at work, in that a shrinking business usually leads to layoffs. To avoid pink slips, employees will rationalize inadequate pricing, telling themselves that poorly-priced business must be tolerated in order to keep the organization intact and the distribution system happy. If this course isn't followed, these employees will argue, the company will not participate in the recovery that they invariably feel is just around the corner.

To combat employees' natural tendency to save their own skins, we have always promised NICO's workforce that *no one* will be fired because of declining volume, however severe the contraction. (This is not Donald Trump's sort of place.) NICO is not labor-intensive, and, as the table suggests, can live with excess overhead. It can't live, however, with underpriced business and the breakdown in underwriting discipline that accompanies it. An insurance organization that doesn't care deeply about underwriting at a profit *this* year is unlikely to care *next* year either.

Naturally, a business that follows a no-layoff policy must be especially careful to avoid overstaffing when times are good. Thirty years ago Tom Murphy, then CEO of Cap Cities, drove this point home to me with a hypothetical tale about an employee who asked his boss for permission to hire an assistant. The employee assumed that adding $20,000 to the annual payroll would be inconsequential. But his boss told him the proposal should be evaluated as a $3 million decision, given that an additional person would probably cost at least that amount over his lifetime, factoring in raises, benefits and other expenses (more people, more toilet paper). And unless the company fell on very hard times, the employee added would be unlikely to be dismissed, however marginal his contribution to the business.

It takes real fortitude – embedded deep within a company's culture – to operate as NICO does. Anyone examining the table can scan the years from 1986 to 1999 quickly. But living day after day with dwindling volume – while competitors are boasting of growth and reaping Wall Street's applause – is an experience few managers can tolerate. NICO, however, has had four CEOs since its formation in 1940 and *none* have bent. (It should be noted that only one of the four graduated from college. Our experience tells us that extraordinary business ability is largely innate.)

The current managerial star – make that superstar – at NICO is Don Wurster (yes, he's "the graduate"), who has been running things since 1989. His slugging percentage is right up there with Barry Bonds' because, like Barry, Don will accept a walk rather than swing at a bad pitch. Don has now amassed $950 million of float at NICO that over time is almost certain to be proved the negative-cost kind. Because insurance prices are falling, Don's volume will soon decline very significantly and, as it does, Charlie and I will applaud him ever more loudly.

* * * * * * * * * * * *

Another way to prosper in a commodity-type business is to be the low-cost operator. Among auto insurers operating on a broad scale, GEICO holds that cherished title. For NICO, as we have seen, an ebb-and-flow business model makes sense. But a company holding a low-cost advantage must pursue an unrelenting foot-to-the-floor strategy. And that's just what we do at GEICO.

A century ago, when autos first appeared, the property-casualty industry operated as a cartel. The major companies, most of which were based in the Northeast, established "bureau" rates and that was it. No one cut prices to attract business. Instead, insurers competed for strong, well-regarded agents, a focus that produced high commissions for agents and high prices for consumers.

In 1922, State Farm was formed by George Mecherle, a farmer from Merna, Illinois, who aimed to take advantage of the pricing umbrella maintained by the high-cost giants of the industry. State Farm employed a "captive" agency force, a system keeping its acquisition costs lower than those incurred by the bureau insurers (whose "independent" agents successfully played off one company against another). With its low-cost structure, State Farm eventually captured about 25% of the personal lines (auto and homeowners) business, far outdistancing its once-mighty competitors. Allstate, formed in 1931, put a similar distribution system into place and soon became the runner-up in personal lines to State Farm. Capitalism had worked its magic, and these low-cost operations looked unstoppable.

But a man named Leo Goodwin had an idea for an even more efficient auto insurer and, with a skimpy $200,000, started GEICO in 1936. Goodwin's plan was to eliminate the agent entirely and to deal instead directly with the auto owner. Why, he asked himself, should there be any unnecessary and expensive links in the distribution mechanism when the product, auto insurance, was both mandatory and costly. Purchasers of business insurance, he reasoned, might well require professional advice, but most consumers knew what they needed in an auto policy. That was a powerful insight.

Originally, GEICO mailed its low-cost message to a limited audience of government employees. Later, it widened its horizons and shifted its marketing emphasis to the phone, working inquiries that came from broadcast and print advertising. And today the Internet is coming on strong.

Between 1936 and 1975, GEICO grew from a standing start to a 4% market share, becoming the country's fourth largest auto insurer. During most of this period, the company was superbly managed, achieving both excellent volume gains and high profits. It looked unstoppable. But after my friend and hero Lorimer Davidson retired as CEO in 1970, his successors soon made a huge mistake by under-reserving for losses. This produced faulty cost information, which in turn produced inadequate pricing. By 1976, GEICO was on the brink of failure.

Jack Byrne then joined GEICO as CEO and, almost single-handedly, saved the company by heroic efforts that included major price increases. Though GEICO's survival required these, policyholders fled the company, and by 1980 its market share had fallen to 1.8%. Subsequently, the company embarked on some unwise diversification moves. This shift of emphasis away from its extraordinary core business stunted GEICO's growth, and by 1993 its market share had grown only fractionally, to 1.9%. Then Tony Nicely took charge.

And what a difference that's made: In 2005 GEICO will probably secure a 6% market share. Better yet, Tony has matched growth with profitability. Indeed, GEICO delivers all of its constituents major benefits: In 2004 its customers saved $1 billion or so compared to what they would otherwise have paid for coverage, its associates earned a $191 million profit-sharing bonus that averaged 24.3% of salary, and its owner – that's us – enjoyed excellent financial returns.

There's more good news. When Jack Byrne was rescuing the company in 1976, New Jersey refused to grant him the rates he needed to operate profitably. He therefore promptly – and properly – withdrew from the state. Subsequently, GEICO avoided both New Jersey and Massachusetts, recognizing them as two jurisdictions in which insurers were destined to struggle.

In 2003, however, New Jersey took a new look at its chronic auto-insurance problems and enacted legislation that would curb fraud and allow insurers a fair playing field. Even so, one might have expected the state's bureaucracy to make change slow and difficult.

But just the opposite occurred. Holly Bakke, the New Jersey insurance commissioner, who would be a success in *any* line of work, was determined to turn the law's intent into reality. With her staff's cooperation, GEICO ironed out the details for re-entering the state and was licensed last August. Since then, we've received a response from New Jersey drivers that is multiples of my expectations.

We are now serving 140,000 policyholders – about 4% of the New Jersey market – and saving them substantial sums (as we do drivers everywhere). Word-of-mouth recommendations within the state are causing inquiries to pour in. And once we hear from a New Jersey prospect, our closure rate – the percentage of policies issued to inquiries received – is far higher in the state than it is nationally.

We make no claim, of course, that we can save *everyone* money. Some companies, using rating systems that are different from ours, will offer certain classes of drivers a lower rate than we do. But we believe GEICO offers the lowest price more often than any other national company that serves all segments of the public. In addition, in most states, including New Jersey, Berkshire shareholders receive an 8% discount. So gamble fifteen minutes of your time and go to GEICO.com – or call 800-847-7536 – to see

whether you can save big money (which you might want to use, of course, to buy other Berkshire products).

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Reinsurance – insurance sold to other insurers who wish to lay off part of the risks they have assumed – should *not* be a commodity product. At bottom, any insurance policy is simply a promise, and as everyone knows, promises vary enormously in their quality.

At the primary insurance level, nevertheless, just who makes the promise is often of minor importance. In personal-lines insurance, for example, states levy assessments on solvent companies to pay the policyholders of companies that go broke. In the business-insurance field, the same arrangement applies to workers' compensation policies. "Protected" policies of these types account for about 60% of the property-casualty industry's volume. Prudently-run insurers are irritated by the need to subsidize poor or reckless management elsewhere, but that's the way it is.

Other forms of business insurance at the primary level involve promises that carry greater risks for the insured. When Reliance Insurance and Home Insurance were run into the ground, for example, their promises proved to be worthless. Consequently, many holders of their business policies (other than those covering workers' compensation) suffered painful losses.

The solvency risk in primary policies, however, pales in comparison to that lurking in reinsurance policies. When a reinsurer goes broke, staggering losses almost always strike the primary companies it has dealt with. This risk is far from minor: GEICO has suffered tens of millions in losses from its careless selection of reinsurers in the early 1980s.

Were a true mega-catastrophe to occur in the next decade or two – and that's a real possibility – some reinsurers would not survive. The largest insured loss to date is the World Trade Center disaster, which cost the insurance industry an estimated $35 billion. Hurricane Andrew cost insurers about $15.5 billion in 1992 (though that loss would be far higher in today's dollars). Both events rocked the insurance and reinsurance world. But a $100 billion event, or even a larger catastrophe, remains a possibility if either a particularly severe earthquake or hurricane hits just the wrong place. Four significant hurricanes struck Florida during 2004, causing an aggregate of $25 billion or so in insured losses. Two of these – Charley and Ivan – could have done at least three times the damage they did had they entered the U.S. not far from their actual landing points.

Many insurers regard a $100 billion industry loss as "unthinkable" and won't even plan for it. But at Berkshire, we are fully prepared. Our share of the loss would probably be 3% to 5%, and earnings from our investments and other businesses would comfortably exceed that cost. When "the day after" arrives, Berkshire's checks will clear.

Though the hurricanes hit us with a $1.25 billion loss, our reinsurance operations did well last year. At General Re, Joe Brandon has restored a long-admired culture of underwriting discipline that, for a time, had lost its way. The excellent results he realized in 2004 on current business, however, were offset by adverse developments from the years before he took the helm. At NICO's reinsurance operation, Ajit Jain continues to successfully underwrite huge risks that no other reinsurer is willing or able to accept. Ajit's value to Berkshire is enormous.

* * * * * * * * * * * *

Our insurance managers, maximizing the competitive strengths I've mentioned in this section, again delivered first-class underwriting results last year. As a consequence, our float was better than costless. Here's the scorecard:

	(in $ millions)		
	Underwriting Profit	*Yearend Float*	
Insurance Operations	*2004*	*2004*	*2003*
General Re	$ 3	$23,120	$23,654
B-H Reinsurance.....	417	15,278	13,948
GEICO	970	5,960	5,287
Other Primary*.....	161	1,736	1,331
Total	$1,551	$46,094	$44,220

*Includes, in addition to National Indemnity, a variety of other exceptional insurance businesses, run by Rod Eldred, John Kizer, Tom Nerney and Don Towle.

Berkshire's float increased $1.9 billion in 2004, even though a few insureds opted to commute (that is, unwind) certain reinsurance contracts. We agree to such commutations only when we believe the economics are favorable to us (after giving due weight to what we might earn in the future on the money we are returning).

To summarize, last year we were paid more than $1.5 billion to hold an average of about $45.2 billion. In 2005 pricing will be less attractive than it has been. Nevertheless, absent a mega-catastrophe, we have a decent chance of achieving no-cost float again this year.

Finance and Finance Products

Last year in this section we discussed a potpourri of activities. In this report, we'll skip over several that are now of lesser importance: Berkadia is down to tag ends; Value Capital has added other investors, negating our expectation that we would need to consolidate its financials into ours; and the trading operation that I run continues to shrink.

- Both of Berkshire's leasing operations rebounded last year. At CORT (office furniture), earnings remain inadequate, but are trending upward. XTRA disposed of its container and intermodal businesses in order to concentrate on trailer leasing, long its strong suit. Overhead has been reduced, asset utilization is up and decent profits are now being achieved under Bill Franz, the company's new CEO.

- The wind-down of Gen Re Securities continues. We decided to exit this derivative operation three years ago, but getting out is easier said than done. Though derivative instruments are purported to be highly liquid – and though we have had the benefit of a benign market while liquidating ours – we still had 2,890 contracts outstanding at yearend, down from 23,218 at the peak. Like Hell, derivative trading is easy to enter but difficult to leave. (Other similarities come to mind as well.)

  Gen Re's derivative contracts have always been required to be marked to market, and I believe the company's management conscientiously tried to make realistic "marks." The market prices of derivatives, however, can be very fuzzy in a world in which settlement of a transaction is sometimes decades away and often involves multiple variables as well. In the interim the marks influence the managerial and trading bonuses that are paid annually. It's small wonder that phantom profits are often recorded.

  Investors should understand that in all types of financial institutions, rapid growth sometimes masks major underlying problems (and occasionally fraud). The real test of the earning power of a derivatives operation is what it achieves after operating for an extended period in a no-growth mode. You only learn who has been swimming naked when the tide goes out.

- After 40 years, we've finally generated a little synergy at Berkshire: Clayton Homes is doing well and that's in part due to its association with Berkshire. The manufactured home industry

continues to reside in the intensive care unit of Corporate America, having sold less than 135,000 new homes last year, about the same as in 2003. Volume in these years was the lowest since 1962, and it was also only about 40% of annual sales during the years 1995-99. That era, characterized by irresponsible financing and naïve funders, was a fool's paradise for the industry.

Because one major lender after another has fled the field, financing continues to bedevil manufacturers, retailers and purchasers of manufactured homes. Here Berkshire's support has proven valuable to Clayton. We stand ready to fund whatever makes sense, and last year Clayton's management found much that qualified.

As we explained in our 2003 report, we believe in using borrowed money to support profitable, interest-bearing receivables. At the beginning of last year, we had borrowed $2 billion to relend to Clayton (at a one percentage-point markup) and by January 2005 the total was $7.35 billion. Most of the dollars added were borrowed by us on January 4, 2005, to finance a seasoned portfolio that Clayton purchased on December 30, 2004 from a bank exiting the business.

We now have two additional portfolio purchases in the works, totaling about $1.6 billion, but it's quite unlikely that we will secure others of any significance. Therefore, Clayton's receivables (in which originations will roughly offset payoffs) will probably hover around $9 billion for some time and should deliver steady earnings. This pattern will be far different from that of the past, in which Clayton, like all major players in its industry, "securitized" its receivables, causing earnings to be front-ended. In the last two years, the securitization market has dried up. The limited funds available today come only at higher cost and with harsh terms. Had Clayton remained independent in this period, it would have had mediocre earnings as it struggled with financing.

In April, Clayton completed the acquisition of Oakwood Homes and is now the industry's largest producer and retailer of manufactured homes. We love putting more assets in the hands of Kevin Clayton, the company's CEO. He is a prototype Berkshire manager. Today, Clayton has 11,837 employees, up from 7,136 when we purchased it, and Charlie and I are pleased that Berkshire has been useful in facilitating this growth.

For simplicity's sake, we include all of Clayton's earnings in this sector, though a sizable portion of these are derived from areas other than consumer finance.

	(in $ millions)			
	Pre-Tax Earnings		*Interest-Bearing Liabilities*	
	2004	*2003*	*2004*	*2003*
Trading – ordinary income	$ 264	$ 355	$5,751	$7,826
Gen Re Securities	(44)	(99)	5,437*	8,041*
Life and annuity operation	(57)	85	2,467	2,331
Value Capital	30	31	N/A	N/A
Berkadia	1	101	—	525
Leasing operations	92	34	391	482
Manufactured housing finance (Clayton)	220	37**	3,636	2,032
Other	78	75	N/A	N/A
Income before capital gains	584	619		
Trading – capital gains	1,750	1,215		
Total	$2,334	$1,834		

* Includes all liabilities

** From date of acquisition, August 7, 2003

Manufacturing, Service and Retailing Operations

Our activities in this category cover the waterfront. But let's look at a summary balance sheet and earnings statement consolidating the entire group.

Balance Sheet 12/31/04 (in $ millions)

Assets		*Liabilities and Equity*	
Cash and equivalents	$ 899	Notes payable	$ 1,143
Accounts and notes receivable	3,074	Other current liabilities	4,685
Inventory	3,842	Total current liabilities	5,828
Other current assets	254		
Total current assets	8,069		
Goodwill and other intangibles	8,362	Deferred taxes	248
Fixed assets	6,161	Term debt and other liabilities	1,965
Other assets	1,044	Equity	15,595
	$23,636		$23,636

Earnings Statement (in $ millions)

	2004	*2003*
Revenues	$44,142	$32,106
Operating expenses (including depreciation of $676 in 2004 and $605 in 2003)	41,604	29,885
Interest expense (net)	57	64
Pre-tax earnings	2,481	2,157
Income taxes	941	813
Net income	$ 1,540	$ 1,344

This eclectic group, which sells products ranging from Dilly Bars to fractional interests in Boeing 737s, earned a very respectable 21.7% on average tangible net worth last year, compared to 20.7% in 2003. It's noteworthy that these operations used only minor financial leverage in achieving these returns. Clearly, we own some very good businesses. We purchased many of them, however, at substantial premiums to net worth – a matter that is reflected in the goodwill item shown on the balance sheet – and that fact reduces the earnings on our average *carrying* value to 9.9%.

Here are the pre-tax earnings for the larger categories or units.

	Pre-Tax Earnings (in $ millions)	
	2004	*2003*
Building Products	$ 643	$ 559
Shaw Industries	466	436
Apparel & Footwear	325	289
Retailing of Jewelry, Home Furnishings and Candy	215	224
Flight Services	191	72
McLane	228	150*
Other businesses	413	427
	$2,481	$2,157

* From date of acquisition, May 23, 2003.

- In the building-products sector and at Shaw, we've experienced staggering cost increases for both raw-materials and energy. By December, for example, steel costs at MiTek (whose primary business is connectors for roof trusses) were running 100% over a year earlier. And MiTek uses 665 million pounds of steel every year. Nevertheless, the company continues to be an outstanding performer.

Since we purchased MiTek in 2001, Gene Toombs, its CEO, has made some brilliant "bolt-on" acquisitions and is on his way to creating a mini-Berkshire.

Shaw fielded a barrage of price increases in its main fiber materials during the year, a hit that added more than $300 million to its costs. (When you walk on carpet you are, in effect, stepping on processed oil.) Though we followed these hikes in costs with price increases of our own, there was an inevitable lag. Therefore, margins narrowed as the year progressed and remain under pressure today. Despite these roadblocks, Shaw, led by Bob Shaw and Julian Saul, earned an outstanding 25.6% on tangible equity in 2004. The company is a powerhouse and has a bright future.

- In apparel, Fruit of the Loom increased unit sales by 10 million dozen, or 14%, with shipments of intimate apparel for women and girls growing by 31%. Charlie, who is far more knowledgeable than I am on this subject, assures me that women are *not* wearing more underwear. With this expert input, I can only conclude that our market share in the women's category must be growing rapidly. Thanks to John Holland, Fruit is on the move.

  A smaller operation, Garan, also had an excellent year. Led by Seymour Lichtenstein and Jerry Kamiel, this company manufactures the popular Garanimals line for children. Next time you are in a Wal-Mart, check out this imaginative product.

- Among our retailers, Ben Bridge (jewelry) and R. C. Willey (home furnishings) were particular standouts last year.

  At Ben Bridge same-store sales grew 11.4%, the best gain among the publicly-held jewelers whose reports I have seen. Additionally, the company's profit margin widened. Last year was not a fluke: During the past decade, the same-store sales gains of the company have averaged 8.8%.

  Ed and Jon Bridge are fourth-generation managers and run the business exactly as if it were their own – which it is in every respect except for Berkshire's name on the stock certificates. The Bridges have expanded successfully by securing the right locations and, more importantly, by staffing these stores with enthusiastic and knowledgeable associates. We will move into Minneapolis-St. Paul this year.

  At Utah-based R. C. Willey, the gains from expansion have been even more dramatic, with 41.9% of 2004 sales coming from out-of-state stores that didn't exist before 1999. The company also improved its profit margin in 2004, propelled by its two new stores in Las Vegas.

  I would like to tell you that these stores were my idea. In truth, I thought they were mistakes. I knew, of course, how brilliantly Bill Child had run the R. C. Willey operation in Utah, where its market share had long been huge. But I felt our closed-on-Sunday policy would prove disastrous away from home. Even our first out-of-state store in Boise, which was highly successful, left me unconvinced. I kept asking whether Las Vegas residents, conditioned to seven-day-a-week retailers, would adjust to us. Our first Las Vegas store, opened in 2001, answered this question in a resounding manner, immediately becoming our number one unit.

  Bill and Scott Hymas, his successor as CEO, then proposed a second Las Vegas store, only about 20 minutes away. I felt this expansion would cannibalize the first unit, adding significant costs but only modest sales. The result? Each store is now doing about 26% more volume than any other store in the chain and is consistently showing large year-over-year gains.

  R. C. Willey will soon open in Reno. Before making this commitment, Bill and Scott again asked for my advice. Initially, I was pretty puffed up about the fact that they were consulting me. But then it dawned on me that the opinion of someone who is *always* wrong has its own special utility to decision-makers.

- Earnings improved in flight services. At FlightSafety, the world's leader in pilot training, profits rose as corporate aviation rebounded and our business with regional airlines increased. We now operate 283 simulators with an original cost of $1.2 billion. Pilots are trained one at a time on this expensive equipment. This means that as much as $3.50 of capital investment is required to produce $1 of annual revenue. With this level of capital intensity, FlightSafety requires very high operating margins in order to obtain reasonable returns on capital, which means that utilization rates are all-important. Last year, FlightSafety's return on tangible equity improved to 15.1% from 8.4% in 2003.

  In another 2004 event, Al Ueltschi, who founded FlightSafety in 1951 with $10,000, turned over the CEO position to Bruce Whitman, a 43-year veteran at the company. (But Al's not going anywhere; I won't let him.) Bruce shares Al's conviction that flying an aircraft is a privilege to be extended only to people who regularly receive the highest quality of training and are undeniably competent. A few years ago, Charlie was asked to intervene with Al on behalf of a tycoon friend whom FlightSafety had flunked. Al's reply to Charlie: "Tell your pal he belongs in the back of the plane, not the cockpit."

  FlightSafety's number one customer is NetJets, our aircraft fractional-ownership subsidiary. Its 2,100 pilots spend an average of 18 days a year in training. Additionally, these pilots fly only one aircraft type whereas many flight operations juggle pilots among several types. NetJets' high standards on both fronts are two of the reasons I signed up with the company years before Berkshire bought it.

  Fully as important in my decisions to both use and buy NetJets, however, was the fact that the company was managed by Rich Santulli, the creator of the fractional-ownership industry and a fanatic about safety and service. I viewed the selection of a flight provider as akin to picking a brain surgeon: you simply want the best. (Let someone else experiment with the low bidder.)

  Last year NetJets again gained about 70% of the net new business (measured by dollar value) going to the four companies that dominate the industry. A portion of our growth came from the 25-hour card offered by Marquis Jet Partners. Marquis is not owned by NetJets, but is instead a customer that repackages the purchases it makes from us into smaller packages that it sells through its card. Marquis deals exclusively with NetJets, utilizing the power of our reputation in its marketing.

  Our U.S. contracts, including Marquis customers, grew from 3,877 to 4,967 in 2004 (versus approximately 1,200 contracts when Berkshire bought NetJets in 1998). Some clients (including me) enter into multiple contracts because they wish to use more than one type of aircraft, selecting for any given trip whichever type best fits the mission at hand.

  NetJets earned a modest amount in the U.S. last year. But what we earned domestically was largely offset by losses in Europe. We are now, however, generating real momentum abroad. Contracts (including 25-hour cards that we ourselves market in Europe) increased from 364 to 693 during the year. We will again have a very significant European loss in 2005, but domestic earnings will likely put us in the black overall.

  Europe has been expensive for NetJets – far more expensive than I anticipated – but it is essential to building a flight operation that will forever be in a class by itself. Our U.S. owners already want a quality service wherever they travel and their wish for flight hours abroad is certain to grow dramatically in the decades ahead. Last year, U.S. owners made 2,003 flights in Europe, up 22% from the previous year and 137% from 2000. Just as important, our European owners made 1,067 flights in the U.S., up 65% from 2003 and 239% from 2000.

Investments

We show below our common stock investments. Those that had a market value of more than $600 million at the end of 2004 are itemized.

			12/31/04	
Shares	*Company*	*Percentage of Company Owned*	*Cost**	*Market*
			(in $ millions)	
151,610,700	American Express Company	12.1	$1,470	$ 8,546
200,000,000	The Coca-Cola Company	8.3	1,299	8,328
96,000,000	The Gillette Company	9.7	600	4,299
14,350,600	H&R Block, Inc.	8.7	223	703
6,708,760	M&T Bank Corporation	5.8	103	723
24,000,000	Moody's Corporation	16.2	499	2,084
2,338,961,000	PetroChina "H" shares (or equivalents)	1.3	488	1,249
1,727,765	The Washington Post Company	18.1	11	1,698
56,448,380	Wells Fargo & Company	3.3	463	3,508
1,724,200	White Mountains Insurance	16.0	369	1,114
	Others		3,531	5,465
	Total Common Stocks		$9,056	$37,717

*This is our actual purchase price and also our tax basis; GAAP "cost" differs in a few cases because of write-ups or write-downs that have been required.

Some people may look at this table and view it as a list of stocks to be bought and sold based upon chart patterns, brokers' opinions, or estimates of near-term earnings. Charlie and I ignore such distractions and instead view our holdings as fractional ownerships in businesses. This is an important distinction. Indeed, this thinking has been the cornerstone of my investment behavior since I was 19. At that time I read Ben Graham's *The Intelligent Investor*, and the scales fell from my eyes. (Previously, I had been entranced by the stock market, but didn't have a clue about how to invest.)

Let's look at how the *businesses* of our "Big Four" – American Express, Coca-Cola, Gillette and Wells Fargo – have fared since we bought into these companies. As the table shows, we invested $3.83 billion in the four, by way of multiple transactions between May 1988 and October 2003. On a composite basis, our dollar-weighted purchase date is July 1992. By yearend 2004, therefore, we had held these "business interests," on a weighted basis, about 12½ years.

In 2004, Berkshire's share of the group's earnings amounted to $1.2 billion. These earnings might legitimately be considered "normal." True, they were swelled because Gillette and Wells Fargo omitted option costs in their presentation of earnings; but on the other hand they were reduced because Coke had a non-recurring write-off.

Our share of the earnings of these four companies has grown almost every year, and now amounts to about 31.3% of our cost. Their cash distributions to us have also grown consistently, totaling $434 million in 2004, or about 11.3% of cost. All in all, the Big Four have delivered us a satisfactory, though far from spectacular, business result.

That's true as well of our experience in the market with the group. Since our original purchases, valuation gains have somewhat exceeded earnings growth because price/earnings ratios have increased. On a year-to-year basis, however, the business and market performances have often diverged, sometimes to an extraordinary degree. During The Great Bubble, market-value gains far outstripped the performance of the businesses. In the aftermath of the Bubble, the reverse was true.

Clearly, Berkshire's results would have been far better if I had caught this swing of the pendulum. That may seem easy to do when one looks through an always-clean, rear-view mirror. Unfortunately, however, it's the windshield through which investors must peer, and that glass is invariably fogged. Our huge positions add to the difficulty of our nimbly dancing in and out of holdings as valuations swing.

Nevertheless, I can properly be criticized for merely clucking about nose-bleed valuations during the Bubble rather than acting on my views. Though I said at the time that certain of the stocks we held were priced ahead of themselves, I underestimated just how severe the overvaluation was. I talked when I should have walked.

What Charlie and I would like is a little action now. We don't enjoy sitting on $43 billion of cash equivalents that are earning paltry returns. Instead, we yearn to buy more fractional interests similar to those we now own or – better still – more large businesses outright. We will do either, however, only when purchases can be made at prices that offer us the prospect of a reasonable return on our investment.

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We've repeatedly emphasized that the "realized" gains that we report quarterly or annually are meaningless for analytical purposes. We have a huge amount of unrealized gains on our books, and our thinking about when, and if, to cash them depends not at all on a desire to report earnings at one specific time or another. A further complication in our reported gains occurs because GAAP requires that foreign exchange contracts be marked to market, a stipulation that causes unrealized gains or losses in these holdings to flow through our published earnings as if we had sold our positions.

Despite the problems enumerated, you may be interested in a breakdown of the gains we reported in 2003 and 2004. The data reflect actual sales except in the case of currency gains, which are a combination of sales and marks to market.

Category	*Pre-Tax Gain (in $ millions)*	
	2004	*2003*
Common Stocks	$ 870	$ 448
U.S. Government Bonds	104	1,485
Junk Bonds	730	1,138
Foreign Exchange Contracts	1,839	825
Other	(47)	233
Total	$3,496	$4,129

The junk bond profits include a foreign exchange component. When we bought these bonds in 2001 and 2002, we focused first, of course, on the credit quality of the issuers, all of which were American corporations. Some of these companies, however, had issued bonds denominated in foreign currencies. Because of our views on the dollar, we favored these for purchase when they were available.

As an example, we bought €254 million of Level 3 bonds (10 ¾% of 2008) in 2001 at 51.7% of par, and sold these at 85% of par in December 2004. This issue was traded in Euros that cost us 88¢ at the time of purchase but that brought $1.29 when we sold. Thus, of our $163 million overall gain, about $85 million came from the market's revised opinion about Level 3's credit quality, with the remaining $78 million resulting from the appreciation of the Euro. (In addition, we received cash interest during our holding period that amounted to about 25% annually on our dollar cost.)

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The media continue to report that "Buffett buys" this or that stock. Statements like these are almost always based on filings Berkshire makes with the SEC and are therefore wrong. As I've said before, the stories should say "*Berkshire* buys."

Portrait of a Disciplined Investor

Lou Simpson

Year		*Return from GEICO Equities*	*S&P Return*	*Relative Results*
1980	.....	23.7%	32.3%	(8.6%)
1981	.....	5.4%	(5.0%)	10.4%
1982	.....	45.8%	21.4%	24.4%
1983	.....	36.0%	22.4%	13.6%
1984	.....	21.8%	6.1%	15.7%
1985	.....	45.8%	31.6%	14.2%
1986	.....	38.7%	18.6%	20.1%
1987	.....	(10.0%)	5.1%	(15.1%)
1988	.....	30.0%	16.6%	13.4%
1989	.....	36.1%	31.7%	4.4%
1990	.....	(9.9%)	(3.1%)	(6.8%)
1991	.....	56.5%	30.5%	26.0%
1992	.....	10.8%	7.6%	3.2%
1993	.....	4.6%	10.1%	(5.5%)
1994	.....	13.4%	1.3%	12.1%
1995	.....	39.8%	37.6%	2.2%
1996	.....	29.2%	23.0%	6.2%
1997	.....	24.6%	33.4%	(8.8%)
1998	.....	18.6%	28.6%	(10.0%)
1999	.....	7.2%	21.0%	(13.8%)
2000	.....	20.9%	(9.1%)	30.0%
2001	.....	5.2%	(11.9%)	17.1%
2002	.....	(8.1%)	(22.1%)	14.0%
2003	.....	38.3%	28.7%	9.6%
2004	.....	16.9%	10.9%	6.0%
Average Annual Gain 1980-2004		20.3%	13.5%	6.8%

Even then, it is typically not I who make the buying decisions. Lou Simpson manages about $2½ billion of equities that are held by GEICO, and it is his transactions that Berkshire is usually reporting. Customarily his purchases are in the $200-$300 million range and are in companies that are smaller than the ones I focus on. Take a look at the facing page to see why Lou is a cinch to be inducted into the investment Hall of Fame.

You may be surprised to learn that Lou does not necessarily inform me about what he is doing. When Charlie and I assign responsibility, we truly hand over the baton – and we give it to Lou just as we do to our operating managers. Therefore, I typically learn of Lou's transactions about ten days after the end of each month. Sometimes, it should be added, I silently disagree with his decisions. But he's usually right.

Foreign Currencies

Berkshire owned about $21.4 billion of foreign exchange contracts at yearend, spread among 12 currencies. As I mentioned last year, holdings of this kind are a decided change for us. Before March 2002, neither Berkshire nor I had *ever* traded in currencies. But the evidence grows that our trade policies will put unremitting pressure on the dollar for many years to come – so since 2002 we've heeded that warning in setting our investment course. (As W.C. Fields once said when asked for a handout: "Sorry, son, all my money's tied up in currency.")

Be clear on one point: In no way does our thinking about currencies rest on doubts about America. We live in an extraordinarily rich country, the product of a system that values market economics, the rule of law and equality of opportunity. Our economy is far and away the strongest in the world and will continue to be. We are lucky to live here.

But as I argued in a November 10, 2003 article in *Fortune*, (available at berkshirehathaway.com), our country's trade practices are weighing down the dollar. The decline in its value has already been substantial, but is nevertheless likely to continue. Without policy changes, currency markets could even become disorderly and generate spillover effects, both political and financial. No one knows whether these problems will materialize. But such a scenario is a far-from-remote possibility that policymakers should be considering *now*. Their bent, however, is to lean toward not-so-benign neglect: A 318-page Congressional study of the consequences of unremitting trade deficits was published in November 2000 and has been gathering dust ever since. The study was ordered after the deficit hit a then-alarming $263 billion in 1999; by last year it had risen to $618 billion.

Charlie and I, it should be emphasized, believe that true trade – that is, the exchange of goods and services with other countries – is enormously beneficial for both us and them. Last year we had $1.15 trillion of such honest-to-God trade and the more of this, the better. But, as noted, our country also purchased an additional $618 billion in goods and services from the rest of the world that was unreciprocated. That is a staggering figure and one that has important consequences.

The balancing item to this one-way pseudo-trade — in economics there is always an offset — is a transfer of wealth from the U.S. to the rest of the world. The transfer may materialize in the form of IOUs our private or governmental institutions give to foreigners, or by way of their assuming ownership of our assets, such as stocks and real estate. In either case, Americans end up owning a reduced portion of our country while non-Americans own a greater part. This force-feeding of American wealth to the rest of the world is now proceeding at the rate of $1.8 billion daily, an increase of 20% since I wrote you last year. Consequently, other countries and their citizens now own a net of about $3 trillion of the U.S. A decade ago their net ownership was negligible.

The mention of trillions numbs most brains. A further source of confusion is that the current account deficit (the sum of three items, the most important by far being the trade deficit) and our national budget deficit are often lumped as "twins." They are anything but. They have different causes and different consequences.

A budget deficit in no way reduces the portion of the national pie that goes to Americans. As long as other countries and their citizens have no net ownership of the U.S., 100% of our country's output belongs to our citizens under *any* budget scenario, even one involving a huge deficit.

As a rich "family" awash in goods, Americans will argue through their legislators as to how government should redistribute the national output – that is who pays taxes and who receives governmental benefits. If "entitlement" promises from an earlier day have to be reexamined, "family members" will angrily debate among themselves as to who feels the pain. Maybe taxes will go up; maybe promises will be modified; maybe more internal debt will be issued. But when the fight is finished, *all* of the family's huge pie remains available for its members, however it is divided. No slice must be sent abroad.

Large and persisting current account deficits produce an entirely different result. As time passes, and as claims against us grow, we own less and less of what we produce. In effect, the rest of the world enjoys an ever-growing royalty on American output. Here, we are like a family that consistently overspends its income. As time passes, the family finds that it is working more and more for the "finance company" and less for itself.

Should we continue to run current account deficits comparable to those now prevailing**,** the net ownership of the U.S. by other countries and their citizens a decade from now will amount to roughly $11 trillion. And, if foreign investors were to earn only 5% on that net holding, we would need to send a net of $.55 trillion of goods and services abroad *every year* merely to service the U.S. investments then held by foreigners. At that date, a decade out, our GDP would probably total about $18 trillion (assuming low inflation, which is far from a sure thing). Therefore, our U.S. "family" would then be delivering 3% of its annual output to the rest of the world simply as tribute for the overindulgences of the past. In this case, unlike that involving budget deficits, the sons would truly pay for the sins of their fathers.

This annual royalty paid the world – which would not disappear unless the U.S. massively underconsumed and began to run consistent and large trade surpluses – would undoubtedly produce significant political unrest in the U.S. Americans would still be living very well, indeed better than now because of the growth in our economy. But they would chafe at the idea of perpetually paying tribute to their creditors and owners abroad. A country that is now aspiring to an "Ownership Society" will not find happiness in – and I'll use hyperbole here for emphasis – a "Sharecropper's Society." But that's precisely where our trade policies, supported by Republicans and Democrats alike, are taking us.

Many prominent U.S. financial figures, both in and out of government, have stated that our current-account deficits cannot persist. For instance, the minutes of the Federal Reserve Open Market Committee of June 29-30, 2004 say: "The staff noted that outsized external deficits could not be sustained indefinitely." But, despite the constant handwringing by luminaries, they offer no substantive suggestions to tame the burgeoning imbalance.

In the article I wrote for *Fortune* 16 months ago, I warned that "a gently declining dollar would not provide the answer." And so far it hasn't. Yet policymakers continue to hope for a "soft landing," meanwhile counseling other countries to stimulate (read "inflate") their economies and Americans to save more. In my view these admonitions miss the mark: There are deep-rooted structural problems that will cause America to continue to run a huge current-account deficit unless trade policies either change materially or the dollar declines by a degree that could prove unsettling to financial markets.

Proponents of the trade status quo are fond of quoting Adam Smith: "What is prudence in the conduct of every family can scarce be folly in that of a great kingdom. If a foreign country can supply us with a commodity cheaper than we ourselves can make it, better buy it of them with some part of the produce of our own industry, employed in a way in which we have some advantage."

I agree. Note, however, that Mr. Smith's statement refers to trade of *product* for product, not of *wealth* for product as our country is doing to the tune of $.6 trillion annually. Moreover, I am sure that he would never have suggested that "prudence" consisted of his "family" selling off part of its farm every day

in order to finance its overconsumption. Yet that is just what the "great kingdom" called the United States is doing.

If the U.S. was running a $.6 trillion current-account *surplus*, commentators worldwide would violently condemn our policy, viewing it as an extreme form of "mercantilism" – a long-discredited economic strategy under which countries fostered exports, discouraged imports, and piled up treasure. I would condemn such a policy as well. But, in effect if not in intent, the rest of the world is practicing mercantilism in respect to the U.S., an act made possible by our vast store of assets and our pristine credit history. Indeed, the world would never let any other country use a credit card denominated in its own currency to the insatiable extent we are employing ours. Presently, most foreign investors are sanguine: they may view us as spending junkies, but they know we are *rich* junkies as well.

Our spendthrift behavior won't, however, be tolerated indefinitely. And though it's impossible to forecast just when and how the trade problem will be resolved, it's improbable that the resolution will foster an *increase* in the value of our currency relative to that of our trading partners.

We hope the U.S. adopts policies that will quickly and substantially reduce the current-account deficit. True, a prompt solution would likely cause Berkshire to record losses on its foreign-exchange contracts. But Berkshire's resources remain heavily concentrated in dollar-based assets, and both a strong dollar and a low-inflation environment are very much in our interest.

If you wish to keep abreast of trade and currency matters, read *The Financial Times*. This London-based paper has long been the leading source for daily international financial news and now has an excellent American edition. Both its reporting and commentary on trade are first-class.

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And, again, our usual caveat: macro-economics is a tough game in which few people, Charlie and I included, have demonstrated skill. We may well turn out to be wrong in our currency judgments. (Indeed, the fact that so many pundits now predict weakness for the dollar makes us uneasy.) If so**,** our mistake will be very public. The irony is that if we chose the opposite course, leaving all of Berkshire's assets in dollars even as they declined significantly in value, no one would notice our mistake.

John Maynard Keynes said in his masterful *The General Theory*: "Worldly wisdom teaches that it is better for reputation to fail conventionally than to succeed unconventionally." (Or, to put it in less elegant terms, lemmings as a class may be derided but never does an *individual* lemming get criticized.) From a reputational standpoint, Charlie and I run a clear risk with our foreign-exchange commitment. But we believe in managing Berkshire as if we owned 100% of it ourselves. And, were that the case, we would not be following a dollar-only policy.

Miscellaneous

- Last year I told you about a group of University of Tennessee finance students who played a key role in our $1.7 billion acquisition of Clayton Homes. Earlier, they had been brought to Omaha by their professor, Al Auxier – he brings a class every year – to tour Nebraska Furniture Mart and Borsheim's, eat at Gorat's and have a Q&A session with me at Kiewit Plaza. These visitors, like those who come for our annual meeting, leave impressed by both the city and its friendly residents.

  Other colleges and universities have now come calling. This school year we will have visiting classes, ranging in size from 30 to 100 students, from Chicago, Dartmouth (Tuck), Delaware State, Florida State, Indiana, Iowa, Iowa State, Maryland, Nebraska, Northwest Nazarene, Pennsylvania (Wharton), Stanford, Tennessee, Texas, Texas A&M, Toronto (Rotman), Union and Utah. Most of the students are MBA candidates, and I've been impressed by their quality. They are keenly interested in business and investments, but their questions indicate that they also have more on their minds than simply making money. I always feel good after meeting them.

At our sessions, I tell the newcomers the story of the Tennessee group and its spotting of Clayton Homes. I do this in the spirit of the farmer who enters his hen house with an ostrich egg and admonishes the flock: "I don't like to complain, girls, but this is just a small sample of what the competition is doing." To date, our new scouts have not brought us deals. But their mission in life has been made clear to them.

- You should be aware of an accounting rule that mildly distorts our financial statements in a pain-today, gain-tomorrow manner. Berkshire purchases life insurance policies from individuals and corporations who would otherwise surrender them for cash. As the new holder of the policies, we pay any premiums that become due and ultimately – when the original holder dies – collect the face value of the policies.

  The original policyholder is usually in good health when we purchase the policy. Still, the price we pay for it is always well above its cash surrender value ("CSV"). Sometimes the original policyholder has borrowed against the CSV to make premium payments. In that case, the remaining CSV will be tiny and our purchase price will be a large multiple of what the original policyholder would have received, had he cashed out by surrendering it.

  Under accounting rules, we must immediately charge as a realized capital loss the excess over CSV that we pay upon purchasing the policy. We also must make additional charges each year for the amount by which the premium we pay to keep the policy in force exceeds the increase in CSV. But obviously, we don't think these bookkeeping charges represent economic losses. If we did, we wouldn't buy the policies.

  During 2004, we recorded net "losses" from the purchase of policies (and from the premium payments required to maintain them) totaling $207 million, which was charged against realized investment gains in our earnings statement (included in "other" in the table on page 17). When the proceeds from these policies are received in the future, we will record as realized investment gain the excess over the then-CSV.

- Two post-bubble governance reforms have been particularly useful at Berkshire, and I fault myself for not putting them in place many years ago. The first involves regular meetings of directors without the CEO present. I've sat on 19 boards, and on many occasions this process would have led to dubious plans being examined more thoroughly. In a few cases, CEO changes that were needed would also have been made more promptly. There is no downside to this process, and there are many possible benefits.

  The second reform concerns the "whistleblower line," an arrangement through which employees can send information to me and the board's audit committee without fear of reprisal. Berkshire's extreme decentralization makes this system particularly valuable both to me and the committee. (In a sprawling "city" of 180,000 – Berkshire's current employee count – not every sparrow that falls will be noticed at headquarters.) Most of the complaints we have received are of "the guy next to me has bad breath" variety, but on occasion I have learned of important problems at our subsidiaries that I otherwise would have missed. The issues raised are usually not of a type discoverable by audit, but relate instead to personnel and business practices. Berkshire would be more valuable today if I had put in a whistleblower line decades ago.

- Charlie and I love the idea of shareholders thinking and behaving like owners. Sometimes that requires them to be pro-active. And in this arena large institutional owners should lead the way.

  So far, however, the moves made by institutions have been less than awe-inspiring. Usually, they've focused on minutiae and ignored the three questions that truly count. First, does the company have the right CEO? Second, is he/she overreaching in terms of compensation? Third, are proposed acquisitions more likely to create or destroy per-share value?

On such questions, the interests of the CEO may well differ from those of the shareholders. Directors, moreover, sometimes lack the knowledge or gumption to overrule the CEO. Therefore, it's vital that large owners focus on these three questions and speak up when necessary.

Instead many simply follow a "checklist" approach to the issue *du jour*. Last year I was on the receiving end of a judgment reached in that manner. Several institutional shareholders and their advisors decided I lacked "independence" in my role as a director of Coca-Cola. One group wanted me removed from the board and another simply wanted me booted from the audit committee.

My first impulse was to secretly fund the group behind the second idea. Why anyone would wish to be on an audit committee is beyond me. But since directors must be assigned to one committee or another, and since no CEO wants me on his compensation committee, it's often been my lot to get an audit committee assignment. As it turned out, the institutions that opposed me failed and I was re-elected to the audit job. (I fought off the urge to ask for a recount.)

Some institutions questioned my "independence" because, among other things, McLane and Dairy Queen buy lots of Coke products. (Do they want us to favor Pepsi?) But independence is defined in Webster's as "not subject to control by others." I'm puzzled how anyone could conclude that our Coke purchases would "control" my decision-making when the counterweight is the well-being of $8 billion of Coke stock held by Berkshire. Assuming I'm even marginally rational, elementary arithmetic should make it clear that my heart and mind belong to the owners of Coke, not to its management.

I can't resist mentioning that Jesus understood the calibration of independence far more clearly than do the protesting institutions. In Matthew 6:21 He observed: "For where your treasure is, there will your heart be also." Even to an institutional investor, $8 billion should qualify as "treasure" that dwarfs any profits Berkshire might earn on its routine transactions with Coke.

Measured by the biblical standard, the Berkshire board is a model: (a) *every* director is a member of a family owning at least $4 million of stock; (b) *none* of these shares were acquired from Berkshire via options or grants; (c) *no* directors receive committee, consulting or board fees from the company that are more than a tiny portion of their annual income; and (d) although we have a standard corporate indemnity arrangement, we carry no liability insurance for directors.

At Berkshire, board members travel the same road as shareholders.

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Charlie and I have seen much behavior confirming the Bible's "treasure" point. In our view, based on our considerable boardroom experience, the *least* independent directors are likely to be those who receive an important fraction of their annual income from the fees they receive for board service (and who hope as well to be recommended for election to other boards and thereby to boost their income further). Yet these are the very board members most often classed as "independent."

Most directors of this type are decent people and do a first-class job. But they wouldn't be human if they weren't tempted to thwart actions that would threaten their livelihood. Some may go on to succumb to such temptations.

Let's look at an example based upon circumstantial evidence. I have first-hand knowledge of a recent acquisition proposal (not from Berkshire) that was favored by management, blessed by the company's investment banker and slated to go forward at a price above the level at which the stock had sold for some years (or now sells for). In addition, a number of directors favored the transaction and wanted it proposed to shareholders.

Several of their brethren, however, each of whom received board and committee fees totaling about $100,000 annually, scuttled the proposal, which meant that shareholders never learned of this multi-billion offer. Non-management directors owned little stock except for shares they had received from the company. Their open-market purchases in recent years had meanwhile been nominal, even though the stock had sold far below the acquisition price proposed. In other words, these directors didn't want the shareholders to be offered X even though they had consistently declined the opportunity to buy stock for their own account at a fraction of X.

I don't know which directors opposed letting shareholders see the offer. But I do know that $100,000 is an important portion of the annual income of some of those deemed "independent," clearly meeting the Matthew 6:21 definition of "treasure." If the deal had gone through, these fees would have ended.

Neither the shareholders nor I will ever know what motivated the dissenters. Indeed they themselves will not likely know, given that self-interest inevitably blurs introspection. We do know one thing, though: At the same meeting at which the deal was rejected, the board voted itself a significant increase in directors' fees.

- While we are on the subject of self-interest, let's turn again to the most important accounting mechanism still available to CEOs who wish to overstate earnings: the non-expensing of stock options. The accomplices in perpetuating this absurdity have been many members of Congress who have defied the arguments put forth by all Big Four auditors, all members of the Financial Accounting Standards Board and virtually all investment professionals.

  I'm enclosing an op-ed piece I wrote for *The Washington Post* describing a truly breathtaking bill that was passed 312-111 by the House last summer. Thanks to Senator Richard Shelby, the Senate didn't ratify the House's foolishness. And, to his great credit, Bill Donaldson, the investor-minded Chairman of the SEC, has stood firm against massive political pressure, generated by the check-waving CEOs who first muscled Congress in 1993 about the issue of option accounting and then repeated the tactic last year.

  Because the attempts to obfuscate the stock-option issue continue, it's worth pointing out that no one – neither the FASB, nor investors generally, nor I – are talking about restricting the use of options in any way. Indeed, my successor at Berkshire may well receive much of his pay via options, albeit logically-structured ones in respect to 1) an appropriate strike price, 2) an escalation in price that reflects the retention of earnings, and 3) a ban on his quickly disposing of any shares purchased through options. We cheer arrangements that motivate managers, whether these be cash bonuses or options. And if a company is truly receiving value for the options it issues, we see no reason why recording their cost should cut down on their use.

  The simple fact is that certain CEOs know their own compensation would be far more rationally determined if options were expensed. They also suspect that their stock would sell at a lower price if realistic accounting were employed, meaning that they would reap less in the market when they unloaded their personal holdings. To these CEOs such unpleasant prospects are a fate to be fought with all the resources they have at hand – even though the funds they use in that fight normally don't belong to them, but are instead put up by their shareholders.

  Option-expensing is scheduled to become mandatory on June 15th. You can therefore expect intensified efforts to stall or emasculate this rule between now and then. Let your Congressman and Senators know what you think on this issue.

The Annual Meeting

There are two changes this year concerning the annual meeting. First, we have scheduled the meeting for the last Saturday in April (the 30th), rather than the usual first Saturday in May. This year Mother's Day falls on May 8, and it would be unfair to ask the employees of Borsheim's and Gorat's to take care of us at that special time – so we've moved everything up a week. Next year we'll return to our regular timing, holding the meeting on May 6, 2006.

Additionally, we are changing the sequence of events on meeting day, April 30. Just as always, the doors will open at the Qwest Center at 7 a.m. and the movie will be shown at 8:30. At 9:30, however, we will go directly to the question and answer period, which (allowing for lunch at the Qwest's stands) will last until 3:00. Then, after a short recess, Charlie and I will convene the annual meeting at 3:15.

We have made this change because a number of shareholders complained last year about the time consumed by two speakers who advocated proposals of limited interest to the majority of the audience – and who were no doubt relishing their chance to talk to a captive group of about 19,500. With our new procedure, those shareholders who wish to hear it all can stick around for the formal meeting and those who don't can leave – or better yet shop.

There will be plenty of opportunity for that pastime in the vast exhibition hall that adjoins the meeting area. Kelly Muchemore, the Flo Ziegfeld of Berkshire, put on a magnificent shopping extravaganza last year, and she says that was just a warm-up for this year. (Kelly, I am delighted to report, is getting married in October. I'm giving her away and suggested that she make a little history by holding the wedding at the annual meeting. She balked, however, when Charlie insisted that he be the ringbearer.)

Again we will showcase a 2,100 square foot Clayton home (featuring Acme brick, Shaw carpet, Johns Manville insulation, MiTek fasteners, Carefree awnings and NFM furniture). Take a tour through the home. Better yet, buy it.

GEICO will have a booth staffed by a number of its top counselors from around the country, all of them ready to supply you with auto insurance quotes. In most cases, GEICO will be able to give you a special shareholder discount (usually 8%). This special offer is permitted by 45 of the 50 jurisdictions in which we operate. Bring the details of your existing insurance and check out whether we can save you money.

On Saturday, at the Omaha airport, we will have the usual array of aircraft from NetJets® available for your inspection. Stop by the NetJets booth at the Qwest to learn about viewing these planes. Come to Omaha by bus; leave in your new plane.

The Bookworm shop did a terrific business last year selling Berkshire-related books. Displaying 18 titles, they sold 2,920 copies for $61,000. Since we charge the shop no rent (I must be getting soft), it gives shareholders a 20% discount. This year I've asked The Bookworm to add Graham Allison's *Nuclear Terrorism: The Ultimate Preventable Catastrophe*, a must-read for those concerned with the safety of our country. In addition, the shop will premiere *Poor Charlie's Almanack*, a book compiled by Peter Kaufman. Scholars have for too long debated whether Charlie is the reincarnation of Ben Franklin. This book should settle the question.

An attachment to the proxy material that is enclosed with this report explains how you can obtain the credential you will need for admission to the meeting and other events. As for plane, hotel and car reservations, we have again signed up American Express (800-799-6634) to give you special help. They do a terrific job for us each year, and I thank them for it.

At Nebraska Furniture Mart, located on a 77-acre site on 72nd Street between Dodge and Pacific, we will again be having "Berkshire Weekend" pricing. We initiated this special event at NFM eight years ago, and sales during the "Weekend" grew from $5.3 million in 1997 to $25.1 million in 2004 (up 45%

from a year earlier). Every year has set a new record, and on Saturday of last year, we had the largest single-day sales in NFM's history – $6.1 million.

To get the discount, you must make your purchases between Thursday, April 28 and Monday, May 2 inclusive, and also present your meeting credential. The period's special pricing will even apply to the products of several prestigious manufacturers that normally have ironclad rules against discounting but that, in the spirit of our shareholder weekend, have made an exception for you. We appreciate their cooperation. NFM is open from 10 a.m. to 9 p.m. Monday through Saturday, and 10 a.m. to 6 p.m. on Sunday. On Saturday this year, from 5:30 p.m. to 8 p.m. we are having a special affair for shareholders only. I'll be there, eating barbeque and drinking Coke.

Borsheim's – the largest jewelry store in the country except for Tiffany's Manhattan store – will have two shareholder-only events. The first will be a cocktail reception from 6 p.m. to 10 p.m. on Friday, April 29. The second, the main gala, will be from 9 a.m. to 4 p.m. on Sunday, May 1. On Saturday, we will be open until 6 p.m.

We will have huge crowds at Borsheim's throughout the weekend. For your convenience, therefore, shareholder prices will be available from Monday, April 25 through Saturday, May 7. During that period, just identify yourself as a shareholder through your meeting credentials or a brokerage statement.

Borsheim's operates on a gross margin that is fully twenty percentage points below that of its major rivals, even before the shareholders' discount. Last year, business over the weekend increased 73% from 2003, setting a record that will be tough to beat. Show me it can be done.

In a tent outside of Borsheim's, Patrick Wolff, twice U.S. chess champion, will take on all comers in groups of six – blindfolded. Additionally, we will have Bob Hamman and Sharon Osberg, two of the world's top bridge experts, available to play with our shareholders on Sunday afternoon. They plan to keep their eyes *open* – but Bob never sorts his cards, even when playing for a national championship.

Gorat's – my favorite steakhouse – will again be open exclusively for Berkshire shareholders on Sunday, May 1, and will be serving from 4 p.m. until 10 p.m. Please remember that to come to Gorat's on that day, you must have a reservation. To make one, call 402-551-3733 on April 1 (*but not before*). If Sunday is sold out, try Gorat's on one of the other evenings you will be in town. Enhance your reputation as an epicure by ordering, as I do, a rare T-bone with a double helping of hash browns.

We will again have a special reception from 4:00 to 5:30 on Saturday afternoon for shareholders who have come from outside of North America. Every year our meeting draws many people from around the globe, and Charlie and I want to be sure we personally greet those who have come so far. Last year we enjoyed meeting more than 400 of you including at least 100 from Australia. Any shareholder who comes from other than the U.S. or Canada will be given a special credential and instructions for attending this function.

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Charlie and I are lucky. We have jobs that we love and are helped every day in a myriad of ways by talented and cheerful associates. No wonder we tap-dance to work. But nothing is more fun for us than getting together with our shareholder-partners at Berkshire's annual meeting. So join us on April 30th at the Qwest for our annual Woodstock for Capitalists.

February 28, 2005

Warren E. Buffett
Chairman of the Board

Morning Session - 2005 Meeting

1. Welcome

WARREN BUFFETT: Morning. I'm Warren, he's Charlie. We work together. We really don't have any choice because he can hear and I can see. (Laughter)

I want to first thank a few people. That cartoon was done by Andy Heyward who's done them now for a number of years. Andy writes them. He goes around the country and gets voices dubbed in. It's a labor of love. We don't pay him a dime. He comes up with the ideas every year. He's just a terrific guy.

He's unable to be here today because his daughter is having a Bat Mitzvah. But he's a very, very creative fellow.

He did something a few years ago called "Liberty's Kids." And if you have a child or a grandchild that wants to learn American history around the time of the Revolution, it's a magnificent series.

I think it's maybe as many as 40 or so half-hour segments and it's appeared on public broadcasting. It will be appearing again. You can get it and video form.

And, like I say, it's just a wonderful way to — I've watched a number of segments myself. It's a wonderful way to get American history.

The only flaw in it is that the part of Ben Franklin is handled by [former CBS News anchor] Walter Cronkite, and Charlie is thinking of suing. A little bit upsetting when Charlie is available.

Incidentally, we have "Poor Charlie's Almanack" next door in the exhibition hall. And it's an absolutely terrific book that Peter Kaufman has put together. And I think it's going to be a seller, a huge seller, long after most books have been forgotten.

It's Charlie at his best. And Charlie's at his best most of the time, but it's a real gem.

I want to thank Kelly Muchemore, who puts all of this together. I don't give it a thought. Kelly takes charge of this. She works with over 200 people from our various companies that come in and help make this a success. She does it flawlessly.

As I mentioned in the annual report, Kelly's getting married in October. So this is just a warmup. I mean, we're expecting a much bigger event than this come October.

2. Where daughter Suze draws the line

WARREN BUFFETT: I want to thank my daughter Suze, who does millions of things for me. She puts together that movie.

She does draw the line, occasionally.

A few years ago — we have a dinner at [Omaha steakhouse] Gorat's the day after the meeting. And we were in having — the whole family was there — having dinner. The place was packed and there was a big line that had formed outside.

Be sure not to go to Gorat's unless you have a reservation tomorrow, because they're sold out.

But the big line had formed and it started raining cats and dogs. And the waitress came to me. We were eating. Waitress said, "I got to tell you," she said. "It's raining like crazy outside and there's a long line and [Walt Disney CEO] Michael Eisner is standing out there getting soaked."

So I turn to Suze — and Michael and Jane [Eisner] are friends of my mine, good friends — and I said to Suze, "Why don't you go out there and help them out before they get drenched."

And she looked at me and said, "I waited in line at Disneyland." (Laughter)

That seems to strike a responsive chord.

3. Day's agenda

WARREN BUFFETT: We've flipped things this year. We're going to have the business session at about 3:15.

The plan is to have questions and answers. We have 12 microphones here.

We have an overflow room that's filled also, so we got another few thousand people there.

We'll break at noon and when we break at noon — and anybody that's been in the overflow room that wants to come in here, they'll be, I'm sure, plenty of seats in the afternoon session.

We will start the questioning as soon as I get through with a few preliminary remarks. We'll go to noon. We'll take a break, you'll have lunch.

Many people find that it helps the digestion to shop while you eat. And we have thoughtfully arranged a few things next door that you can participate in while you eat your lunch. Even if it doesn't help your digestion, it will help my digestion if you shop during that period.

4. Buffett on what he won't talk about

WARREN BUFFETT: During the question period, we can talk about anything that's on your mind. Just, there's 2 1/2 subjects that we can't talk about.

We can't talk about last year's Nebraska football season. We'll correct that next year. But that's off limits.

We can't talk about what we're buying and selling. I wish we were doing more of it, but we're doing a little, and I'll make reference to something on that a little later.

And finally, in connection with the investigation into the insurance industry practices that's taking place, there are broad aspects of it we can talk about.

I can't talk about anything that I or other people associated with Berkshire have disclosed to the investigators.

And there's a very simple reason for that: to protect the integrity of any investigation like this, they do not, the investigators, do not want one witness talking with other witnesses, because people could tailor their stories or do various things.

And so, witnesses are not supposed to talk to each other and, of course, if you talk — we don't do that.

And then beyond that, if we were to talk in a public forum, that could be a way of signaling people as to what you've said and then they could adapt accordingly.

So investigators, one thing they like to do, is they like to work fast if they can because they don't want people collaborating on stories .

And they — and to protect the integrity of the investigation, we won't get into anything that's specific to something that I or people associated with Berkshire may have told the authorities.

But there may be some broader questions that that we can talk about.

5. Preliminary Q1 earnings

WARREN BUFFETT: I can give you a little preliminary view of the first quarter with certain caveats attached. These figures — our 10-K — or 10-Q — will be filed in the end of next week.

And I caution you that, particularly in insurance underwriting, it's been a better quarter than — considerably better quarter — than I would normally anticipate.

One of the reasons for that is that our business actually does have some — the insurance business has some — seasonal aspect.

Now, it doesn't have a seasonal aspect, particularly, at GEICO or at National Indemnity primary business.

But when you get into writing catastrophe business, and we're a big writer of catastrophe business, the third quarter — the biggest risk we write in big cat area is hurricanes. And those are concentrated — they're actually concentrated in the month of September.

In this part of the world, 50 percent of the hurricanes, roughly, occur in September and about maybe 17 and-a-half percent in October and August, and the balance, maybe, in November and July.

But there's a concentration in the third quarter. So when we write an earthquake — I mean when we write a hurricane policy, for example — we may be required to bring the earnings in monthly on the premiums. But all of the risk really occurs — or a very great percentage of it — late in the third quarter, and we don't have any risk in the first quarter of hurricanes.

So we earn some premium during that quarter that really has no loss exposure. And then we get that in spades come September.

Even allowing for that we had an unusually good quarter. And I would still stick by the prediction I made in the annual report where I said that if we don't have any really mega catastrophes, I think we've got a decent chance of our float costing us zero or less this year, which means, in effect, we have 45 billion or so of free money.

In the first quarter, our insurance underwriting income — and all of these figures are pretax — our insurance underwriting income came to almost $500 million, which was about 200 million better than a year ago.

And GEICO had a very good quarter for growth. We added 245,000 policyholders, which is almost 4 percent, in one quarter to our base.

We were helped very much by this huge reception we're getting in New Jersey, because we weren't in there a year ago, so we're getting very good-sized gains there.

We're not getting 4 percent in a quarter from around the country, but the boost from New Jersey took us up to that.

And GEICO actually wrote at a 13 percent underwriting profit in the first quarter, which is considerably better than we expect over the full year. And we've reduced rates some places. And it's been an extraordinary period for auto insurers, generally.

But all of our companies in the insurance business did well in the first quarter.

Our investment income was up something over 100 million pretax.

Our finance business income was up, maybe, $50 million pretax. MidAmerican was about the same.

And all of our other businesses, combined, were up about — close to $50 million pretax, led by Johns Manville, had the biggest increase. That businesses is very strong, currently.

So if you take all of our businesses before investment gains, which I want to explain, if you take them all before investment gains, our pretax earnings were up 400 million or a little more.

Now, investment gains or losses: we don't give a thought as to the timing of those. We take all investment actions based on what we think makes the most economic sense, and whether it results in a gain or a loss for quarter is just totally meaningless to us.

A further complicating factor, slightly complicating factor, is that certain unrealized investment gains or losses go through the income statement, whereas others don't. That's just the way the accounting rules are.

Our foreign exchange contracts are valued at market, really, every day, but you see it at quarter end.

And those foreign exchange contracts, which total about 21 billion now, a little more than 21 billion, had a mark-to-market loss of a little over 300 million in the first quarter.

And they bob up and down. I mean, sometimes they bob as much as 200 million or more in a single day.

And those mark-to-market quotations run through our profit and loss statement. Whereas if we own some Coca-Cola stock and it goes up or down, that does not run through our income statement. But with foreign exchange contracts, it does.

So there's a $310 million mark- to-market — it shows as realized, it actually isn't — investment loss on that.

And overall, the investment losses, including that 310, came to about 120. In other words, there was 190 million, or something like that, in other gains.

As I say, that means — at least to us — that means nothing.

And to underscore that point, if later in the year the Procter and Gamble-Gillette merger takes place, we are required under accounting rules, when we exchange our Gillette for Procter and Gamble stock, we are required under accounting rules to show that as a realized gain. Now that will show up as, probably, four-and-a-fraction billion dollars.

We haven't realized any gain at that time, in my view. I mean, we've just swapped our Gillette stock for Procter and Gamble stock, which we expect to hold for a very long time.

So it's no different, in our view, than if we'd kept our Gillette stock. But the accounting rules will require that.

So if in the third quarter of this year the P&G-Gillette merger goes through, you will see this very large supposed capital gain recorded in our figures at that time.

And I want to assure you that it's meaningless and you should ignore that as having any significance, in terms of Berkshire's performance.

So, first quarter has gone by. We've got a good start on operating earnings this year. We won't earn at the rate of the first quarter throughout the year, in my view. I think it would be very unlikely, in terms of operating earnings. But the businesses are performing, generally, very well.

6. Insurance acquisition coming

WARREN BUFFETT: One other thing I should mention, and then we'll get on to the questions, that we can't announce the name, because it isn't quite complete in terms of the other party, but we will probably announce, very soon, an acquisition that is a little less — somewhat less — than a billion dollars, so it's a huge deal, in reference to Berkshire's size

But it is in the insurance field. I mean, we love the insurance business. It's been very good to us. We have some terrific managers in that field.

You'll see it in the first quarter figures, but you'll also see how we feel about the business by the fact that this acquisition, which I would say is almost certain to go through, will probably get announced in the next few weeks.

We're looking for bigger acquisitions. We would love to buy something that cost us 5 or $10 billion. Our check would clear, I assure you.

I think we ended the quarter with about 44 billion of cash, not counting the cash in the finance operations. So, at the moment, we've got more money than brains and hope to do something about that.

7. Q&A begins

WARREN BUFFETT: Now we're going to go around the hall here. We've got 12 microphones and — get oriented here — and we'll turn the spotlight on the microphone that is live.

People can line up to get their questions asked. I think we've got two microphones, also, in the overflow room.

And like I say, after lunch everybody should come in here because there's enough people that get so enthralled with shopping that they don't return. They'd rather shop than listen to me and Charlie, and we'll have plenty of seats for everybody in this main hall after lunch.

And so, with that, let's go to — have I forgotten anything, Charlie?

CHARLIE MUNGER: No.

WARREN BUFFETT: OK. (Laughter)

That may be the last you hear from him. You never can tell.

8. What Buffett looks for in managers

WARREN BUFFETT: We'll go to microphone number 1, please.

AUDIENCE MEMBER: Simon Denison-Smith from London.

You talk a lot about the importance of selecting terrific managers.

I'd just like to understand what your three most important criteria are for selecting them, and how quickly you can assess that.

WARREN BUFFETT: Yeah. I'll give you two different answers.

The most important factor, subject to this one caveat I'm going to give in a second, is a passion for their business.

We are frequently buying businesses from people who we wish to have continue manage than them and where we are, in effect, monetizing a lifetime of work for them.

I mean, they've built this business over the years. They're already rich but they may not be rich in the liquid sense. They may have all their money, or a good bit of it, tied up in the business, so they're monetizing it. They may be doing it for estate reasons or tax reasons or family reasons, whatever.

But we really want to buy from somebody who doesn't want to sell. And they certainly don't want to leave the business.

So we are looking for people that have a passion that extends beyond their paycheck every week or every month for their business.

Because if we hand somebody a hundred million or a billion dollars for their business, they have no financial need to work. They have to want to work. And we can't stand there with a whip. We don't have any contracts at Berkshire. They don't work, as far as I'm concerned.

So we hope that they love their business and then we do everything possible to avoid extinguishing, or in any way dampening, that love.

I tell students that what we're looking for when we hire somebody, beyond this passion, we're looking for intelligence. We're looking for energy. And we're looking for integrity.

And we tell them, if they don't have the last, the first two will kill you.

Because if you hire somebody without integrity, you really want them to be dumb and lazy, don't you? I mean, the last thing in the world you want is that they are smart energetic. So we look for those qualities.

But, we have generally — when we buy businesses, it's clear to us that those businesses are coming with managers with those qualities in them. Then we need to look into their eyes and say, do they love the money or do they love the business?

And if they love — there's nothing wrong with liking the money. But if — what it's really all about is that they built this business so they can sell out and cash their chips and go someplace else, we have a problem, because right now we only have 16 people at headquarters and we don't have anybody to go out and run those businesses.

So we — it's necessary that they have this passion and then it's necessary that we do nothing to, in effect, dampen that passion. Charlie?

CHARLIE MUNGER: Yeah. The interesting thing is how well it's worked over a great many decades and how few people copy it. (Laughter and applause)

9. Buffett on beer industry and its history

WARREN BUFFETT: Go to microphone 2, please.

AUDIENCE MEMBER: Good morning, Warren and Charlie. My name is Walter Chang and I'm from Houston, Texas.

Can you describe how you made your investment decision to invest in Anheuser-Busch and how you estimated its intrinsic value? How long did it take you to make this decision?

And is Budweiser inevitable, like Coca-Cola?

WARREN BUFFETT: I'm still drinking Coca-Cola.

The meeting might get a little exciting if I we were drinking Bud here. (Laughter)

We don't get into much in the way of description of things we might be buying or selling, but the decision takes about two seconds.

But I bought 100 shares of Anheuser about — I haven't looked it up — but I would say, maybe, 25 years ago when I bought 100 shares of a whole lot of other things .

And I do that so I can get the reports promptly and directly. You can get them to your brokerage firm, but I've found that it's a little more reliable to put the stock in a direct name.

So I've been reading the reports for at least 25 years and I observe, just generally, consumer habits, and at a point — currently, the beer industry sales are very flat.

Wine and spirits have gained in that general category at the expense of beer. So if you look at the industry figures, they're not going anywhere.

Miller's has been rejuvenated to some degree. So Anheuser, which has had a string of earnings gains that have been quite substantial over the years and market share gains, is experiencing, as they've described — and they just had a conference call the other day — is experiencing very flat earnings, having to spend more money to maintain share, in some cases, having promotional pricing.

So they are going through a period that is certainly less fun for them than was the case a few years ago.

And it's a fairly easy-to-understand product and consumer behavior is fairly easy to understand. It's a very, very — exceptionally strong business.

In fact, what's happened in the beer industry over the last 50 years has been fascinating to me and to Charlie because this is a brewing town that we grew up in, and Charlie knew the members of the Storz family, a number of them, well.

Storz had over 50 percent of the Omaha market in beer post-World War II and then basically disappeared as the national brands took over. So it's an interesting phenomenon.

Beer business is not going to grow significantly in the U.S.

Worldwide, beer is popular in a great many places, and Anheuser will have a very strong position in it. But I would not expect the earnings to do much for some time, but that's fine with us.

Charlie?

CHARLIE MUNGER: Yeah. At our scale of operation now, if we're ever going to buy into a terribly well-regarded company, we almost need a little patch of unpleasantness. (Laughter)

WARREN BUFFETT: That's been the best time to buy Berkshire, incidentally, too. I mean, we do —

What we're looking for is businesses with a durable competitive advantage. I don't think there's any question that Anheuser has a very, very strong consumer position. Now, as I said, Miller has been rejuvenated to some degree.

But the other thing about it is, of course, in beer you do not see the prevalence of private labels or generic products that you see in a great many consumer products that are being — that had strong positions over the years, that are being attacked . That's a small plus.

But beer consumption per capita is going no place. And there's nothing that will change that.

Interestingly enough, the average person in this climate drinks about 64 ounces of liquid a year. And I think it's roughly 27 percent of that will be carbonated soft drinks.

So almost — and, of course, of that Coca-Cola will be about — Coca-Cola products — will be 40-odd percent.

So, of the 64 ounces of liquid that Americans are drinking every day, you can figure something like 11 ounces of that, man, woman, and child, will be a Coca-Cola product.

Beer, as I remember — I could be wrong on this — but I think beer is about 10 percent of all liquids. So, one out of every 10 ounces that's consumed by Americans of any kind of liquid is, I believe, is beer.

Coffee, incidentally, despite what you read about — you know, the popularity of Starbucks, which is very real, of course, — but coffee has just gone down and down and down over the last 30 or 40 years.

Charlie, you have any thoughts about your consumption habits? That you can talk about? (Laughter)

CHARLIE MUNGER: Well, there are people here that may remember Metz beer.

In this country, we had more breweries — there were hundreds — and small places would have two or three brands. And this trend toward concentration into a few giants is, I think, permanent.

WARREN BUFFETT: Yes. Schlitz was number one, as I remember, after World War II, for a while. I think Anheuser was number four at that time.

There's an interesting book, if you're a beer enthusiast, it came out a few years — a few months — ago, maybe a little longer than that, by a Wall Street Journal reporter that sort of toured the country sampling beers. I don't know how it affected his writing. But it's a pretty good book, if you like reading about the history of beer.

10. Competition from hedge funds

WARREN BUFFETT: Let's go to number 3.

AUDIENCE MEMBER: Greetings from Bonn, Germany. I'm (inaudible). Thank you for another great year added to your track record of investing. And thank you again for allowing us to be partners at these favorable terms.

This year, I want to ask you another question about how you see Berkshire positioned versus others.

Last year, I asked you how you see the increased competition for buying companies through the rise of the private equity industry and how that affects Berkshire's ability to buy great businesses at fair prices, and you basically said that there are still enough business owners who would rather sell to Berkshire versus a private equity fund.

This year, I would like to hear your views on the hedge fund industry.

We see hedge funds going into all investment strategies. We know that you have spoken about the fees of the hedge fund industries, but I would like to hear from you how you see Berkshire positioned.

Are returns in strategies like merger arbitrage, like convertible bonds — are returns going down because of the increased competition? And are there other factors where Berkshire can be unique versus the hedge funds?

WARREN BUFFETT: Well, that's a great question. It's the $64 question.

There's no doubt about it that there is far more money looking at deals now than five years ago, and they're willing to pay out more for the good, but mundane, businesses that we've been successful at buying in the past.

And you mentioned the private equity firms and they're bigger than ever.

The hedge funds have gotten into the game, to some degree. And if someone is auctioning off a business today — this has changed just very slightly in the last four or five weeks because of some change in the junk bond market, but not in any significant degree — there were people lined up to bid on almost anything.

In fact, you have private equity firms selling their businesses to other private equity firms.

And there are a lot of companies that are being sold, that are being sold to someone who's buying them to resell in a fairly short period of time.

We can't compete in that field and that's, you know, that's a source of distress to us. But that's the way it is.

We will — it won't go on forever, in our view. We still occasionally, as this deal I mentioned to you, the party on the other side and we just — we made a deal that did not go through an auction process. And we see that occasionally, but we don't see it anything like we saw it four or five years ago.

So, in terms of the near-term outlook for Berkshire, in terms of doing what it's important that we do, do successfully, which is buy businesses and keep adding to this collection, we are not positioned favorably at all for that.

And we do find it extraordinary, both Charlie and I have over the decades, just how fast things can change.

There have been at least three times, maybe more, where it's looked to me in my own career, where it looked like there was so much money sloshing around that it would be impossible to do intelligent things with money.

And I actually terminated a partnership back at the end of 1969 because I felt that that the money was coming out, you know, of the woodwork. There were all kinds of people that wanted to use it and compete, and I just didn't feel we could do intelligent things.

Within four years, I saw the greatest opportunities that I've ever seen in my lifetime. And we've had several experiences like that.

You know, in 1998, when Long-Term Capital Management got in trouble in the fall of 1998 and other things were happening, you had incredible opportunities available in the investment world.

Now, people were just as smart then. They had all these people with 150 IQs running around, and they actually had money. But the world became paralyzed for a short period.

And you literally had so-called "on- the-run" Governments, which were the most recent issue, and "off-the-run" Governments, which were issued by the same government, the United States government, payable in dollars. You had a 30-basis point differential between the 30-year and the 29-and-a-half year.

Both bonds issued by the U.S. government, you know, one a half-year shorter. Both quite liquid, but the "on-the-run" being more liquid. And a 30-basis point differential in yield means about a three-point difference in price.

Well, you wouldn't believe that could happen in the United States of America in 1998, but it did happen.

And I think I have a slide here. Mark, if it — if we can put that up — that shows what high-yield bonds —the situation in those, just really less than three years ago.

In the fall of — yeah, there it is —I n the fall of 19 — in the fall of 2002, you had all these high IQ people in the financial world. You had lots of money.

And I don't know how easy it is to read those figures, but you'll see that a bunch of high-yield bonds — this actually is a table that involves a friend of mine, but we were doing pretty much the same thing.

And you can see that he was buying bonds at anywhere from a 25 percent to 60 or 70 percent yield basis, and within 12 or 14 months had sold these same bonds on a 6 percent yield basis.

You don't need to do that very many times in a lifetime.

But that was two-and-a-half years ago after all these people had graduated with MBAs, and studied modern finance theory, and had money coming out of their ears, and all had a desire to make money, and yet conditions like that could exist.

We bought about seven billion of junk bonds during that period, because it was a fairly short period.

But things do happen that change the landscape dramatically, I mean really dramatically, in financial markets from time to time.

But right now, we are positioned very badly in terms of buying businesses, and it's a big negative.

And your Berkshire stock will not do as well under these conditions as it would do if the conditions of five years ago or 20 years ago existed.

And I don't have any magic solution for that except just to tell you what the facts are.

Charlie?

CHARLIE MUNGER: Yeah. A lot of the buying by private equity funds in both real estate and stocks, and for companies, is fee-motivated.

In other words, the investment manager will rationalize any price paid because he likes the extra fees for managing the extra assets.

I have a friend that tried to buy warehouses with a lot of family money and he just stopped. Whatever he bid was always topped by some professional manager, managing other people's money on a fee basis.

So this is a very peculiar era where all these asset classes have been driven to very high valuations, by all historical standards.

Some investment operations are very ethical in this (inaubible).

I think Howard Marks is here today. He sent a lot of money back, and stopped soliciting money from his clients in certain activities where the opportunities went away.

That's the right way to behave, but it's not normal.

WARREN BUFFETT: Yeah, I don't think he'll mind — I didn't know Howard was here today — but those actually are Howard's figures for one of his funds.

And like I say, we were doing similar things. We didn't know it at the time but we found out we had some similar positions later on.

About five or six years ago, when the terms of these deals were somewhat different, I actually had a fellow call me, whose name most of you would recognize, and he started asking me questions about the reinsurance business because he was in — he said he was thinking about buying a given company, which got sold, and he didn't really know much about the business, but that unless he spent these x dollars, he was going to have to give it back to his investors in a few months because the term of the initial sign up period expired at that point, and any unexpended funds were to be returned.

And he was going to get 2 percent a year on those funds regardless of how they did. So he was looking at businesses that he didn't understand with the hope that he can place the money.

Charlie and I are at a disadvantage in buying businesses because we have almost all of our net worth in the downside as well as the upside.

You know, if we had a 2 percent fee and 20 percent of the profits and a goodbye kiss for the losses, you know, that's a different equation than exists at Berkshire.

We run it as if it's 100 percent our money, which it is close to 100 percent of our net worth.

And we will own the downside. And we don't get paid for spending the money, we get paid for making money.

And it's tough — competing right now is tough and likely to be relatively futile, although we have one or two things that could happen that could involve the expenditure of real money.

CHARLIE MUNGER: I don't think any of the businesses that have sold to us over the years, which are run by the kind of people we like being associated with, would have wanted to sell to a hedge fund.

So there exists a class of assets out there that doesn't want to deal with hedge funds or private equity funds.

Thank God. (Laughter)

WARREN BUFFETT: Yeah, we've seen no deal anybody else has made the last year that we wish we had made.

Now that was not the case 15 or 20 years ago when there used to be plenty of deals made with other people that we would have liked to have made if they'd come to us .

But I have seen nothing that — I've seen nothing that if it sold for 10 percent less than the advertised price that we would have had any interest in buying. So we are in a different world right now.

11. Buffett's early interest in stocks

WARREN BUFFETT: Number 4.

AUDIENCE MEMBER: I'm Dudley Shorter (PH) from Council Bluffs, Iowa.

When you were younger, what first sparked your interest in investing, and what advice would you give a younger person if they wanted to invest in the stock market? Thank you.

WARREN BUFFETT: Well, I'm not exactly — I got interested probably when I was, maybe, seven or thereabouts. I wasted my time before that. (Laughter)

It's a little like W.C. Fields. When he inherited some money, somebody asked him what he did with it and he said he spent half of it on whiskey and the rest he wasted. (Laughter)

So there I was, dawdling around. But I got — my dad [Howard H. Buffett] was in the business, so I would go down to his office, and I would see these interesting books, and I would read them and I would go down — he was on the fourth floor of what's now known as the Omaha Building at 17th and Farnam, and on the second floor was Harris Supplement Company, and they had a board, and I would go down there.

The market was open on Saturdays in those days, so I could — for two hours — so I could go down on Saturday, and I saw all these interesting things going across the tape.

And I just read a lot. I probably took every book in the Omaha Public Library, every book they had on investing — or the stock market — basically.

I was very interested in the New York Stock Exchange. I thought maybe I'd want to become a specialist when I grew up and maybe I still will.

But the — I took all the books out. I read them. And finally, when I was 11, I bought three shares of stock and I didn't know — I was fascinated by the subject.

My dad got elected to Congress, so now the library became even bigger, and I took all the books I could out of there on markets. And I used a chart and do all that sort of thing.

And then, finally, I read [Benjamin] Graham's book when I was at the University of Nebraska, "The Intelligent Investor," when I was 19, and that just changed my whole framework.

But the advice I would give is to read everything in sight.

And to start very young. It's a huge advantage in almost any field to start young.

If that's where your interest lies, and you start young, and you read a lot, you're going to you're going to do well.

I mean there are no secrets in this business that only the priesthood knows. I mean, you know, we do not go into temples and look at tablets that are only available to those who have passed earlier tests or anything.

It's all out there in black and white. It's a simple business.

It's not — it requires qualities of temperament way more than it requires qualities of intellect. I mean, if you've got more than 125 IQ, you can throw away the rest of the points or give them to your other members of the family or do something because you don't need it in investing.

But you do need a certain temperament that enables you to think for yourself. And then you have to develop a framework — and I developed it from reading Ben Graham, I didn't come up with it myself — very simple framework.

And then you have to look for opportunities that fit within that framework as you go through life, and you can't do something every day. You know, you can learn every day, but you can't act every day.

And I talked about reading the annual reports of Anheuser-Busch for 25 years, but I've read the reports of Coca-Cola and Gillette and all kinds of companies long before we invested in them.

And if you enjoy the game, you know, you'll find that like playing bridge or playing baseball or whatever, if you don't enjoy it you probably won't do well on it.

But I would advise you to start early. Read everything in sight. Look for the successful framework that's been successful for people, and there's nothing like Graham's, in my view, and you'll have a lot of fun and you'll probably make a lot of money.

Charlie?

CHARLIE MUNGER: Well, I'm at a little disadvantage here. Warren has made himself into kind of a dean of investors, starting as a boy, and he has a greater respect for the process than I do.

I have a good bit of [economist John Maynard] Keynes' attitude that money management is sort of a low calling, compared to being a surgeon or a lot of other things.

12. CEOs should know more about investing

CHARLIE MUNGER: I think the corporate types — the corporate managers — ought to study investing better because they'd be better managers.

And I think that everyone who thinks through the investment process learns more about how the world really works. And I think that's very worth having.

But I do not like as big a percentage of GDP as we now have going to money management and its attendant frictions.

And I don't like the percentage of the nation's brainpower that is now in all of these different forms of highly-compensated money management.

I don't think it's a good thing for the country, and I hate the fact that we've contributed to it by our own predilections.

WARREN BUFFETT: Charlie is only sitting up here next to me as part of his outreach program, actually. (Laughter)

Please don't take any pictures that you could blackmail him with, being associated with me.

Charlie made a very good point there about how managers would do better if they understood investments.

I find it absolutely fascinating, and I've seen this throughout my life, I've seen it close up.

I will have friends who are CEOs of companies and they'll have somebody else handle their money.

If you say to them, you know, should you buy Coca-Cola or Gillette or something like that, they'll say that's much too tough. I don't understand that sort of thing. What do I know about investing?

And then some investment banker walks in the next day with the idea they buy a $3 billion company, which is just buying a lot of shares of stock in one company, and they'll run through some little two-hour presentation and turn it over to a strategic planning group and think that they are then the ones that should make that decision as to whether to buy multibillion-dollar businesses when they really don't feel they're qualified to make $10,000 decisions with their own money.

And it's extraordinary what you see in corporate America and the acquisition activity.

It's a little like they say about making sausage and making laws, it's better unobserved.

Charlie, you have any further thoughts on that? You've seen a lot of it with me. (Laughs)

CHARLIE MUNGER: Well, I do think that the present era has no comparable precedent in the past history of capitalism.

I think we have a higher percentage of the attention of our intelligent classes into buying little pieces of paper and getting — trying to get rich doing it, and in promotional activities with big profit sharing fees.

I can recall no past era which had a similar concentration of this type of activity. Can you, Warren?

WARREN BUFFETT: No, but I think you would say, probably, too, that we've seen sort of baby versions of this, something subsequently happened, that —

CHARLIE MUNGER: Oh, yes. If you want to talk about what are the future implications, a lot that I see now kind of reminds me of Sodom and Gomorrah, and —

WARREN BUFFETT: We weren't there, incidentally. I mean — (Laughter)

CHARLIE MUNGER: No, but there's a published account. (Laughter)

And I think when you get as much sort of regrettable activity going on and sort of feeding on itself in frenzies of envy and imitation, that — it has happened in the past that there came bad consequences.

13. PetroChina investment

WARREN BUFFETT: On that cheery note, we'll move to number 5.

AUDIENCE MEMBER: Good morning. My name is Molly Fanner (PH). I'm 11-years-old and I'm from Long Island, New York.

I have two questions today and I have put them in the form of a poem.

Mr. Buffett, Mr. Munger, to get here we had to fly.

I came to hear your thoughts if PetroChina was at an all-time high.

My second regards a job that I know is just right for me.

To be a See's Candy taster, my sisters and I would work for free.

(Laughter)

WARREN BUFFETT: Well, if you come up front, I'll put you to work.

AUDIENCE MEMBER: Borsheims was for my mom.

And my father loves his stock.

I have a future tasting chocolate.

This weekend has really rocked.

Thank you very much.

And really, what is your view on PetroChina? (Laughter)

WARREN BUFFETT: If you come up at the break, Charlie and I will have taken all the pieces out of here that we like best, and you will get the rest. (Laughter)

Charlie, do you have anything to add to that?

CHARLIE MUNGER: She wants to know what you think about PetroChina. (Laughter)

WARREN BUFFETT: It's funny. I saw her out there in the shopping area and I knew that she had PetroChina on her mind. (Laughter)

We bought PetroChina a few years ago, again, after reading the annual report. And fortunately it was in English.

It was the first stock — Chinese stock — and really the last.

I mean, it won't necessarily be the last, but it's the only one that we've owned so far. We put about $400 million into it.

At the time, and still, it produces about 3 percent of the world's oil, which is a lot of oil. It produces, probably, 80 percent or so as much as Exxon Mobil will produce. And it's a huge company.

Last year it earned $12 billion. Now, if you look at the Fortune 500 list, my guess is you won't find more than about five companies in the United States that earn $12 billion or more. So it's a major company.

At the time we bought it, the total market value was 35 billion. So we bought it at about three times what it earned last year. It does not have unusual amounts of leverage.

It — in the annual report, they say something which very, very few companies do say, but which I think is actually fairly important. They say they will pay out about 45 percent of the amount they earn.

So, if you can buy it at three-times earnings, what turned out to be three times earnings, and you get 45 percent of 33 percent, you know, you're getting a 15 percent yield on your — cash yield — on your investment.

It's a very good annual report. Chinese government owns 90 percent of the company. We own 1.3 percent. If we vote with them, the two of us control the business. (Laughter)

It's a thought that hasn't occurred to them, but I'll keep pointing it out. (Laughter)

But it's, you know, it's a very major business and a very, very attractive — at what was a very attractive price.

Unfortunately, the government shares and our shares have the same economic interest but they are classified differently, so that the government's 90 percent are called one thing and the 10 percent with the public are called A-shares.

And we have to report in Hong Kong when we own 10 percent of a company — or we did then — 10 percent of a company shares, so unfortunately the 10 percent applied only to the 10 percent of A-shares and so we had to reveal our ownership when we only had 1 percent of the economic interest in the company.

So, we would have bought more but the price jumped up, and we are happy to have our 1.3 percent or whatever it is, and we think that they've done a good job in running the business.

They've got large gas reserves, which they're starting to develop now.

But it's a very major enterprise. Employs almost 500,000 people.

And the interesting thing was, a few years ago relatively few people in the investment world probably even thought about the fact that PetroChina was over there and was a much larger business than most of the — well, just about any oil company in the world, except for BP and Exxon Mobil.

Charlie, do you have thoughts?

CHARLIE MUNGER: Yeah. It would be nice if this sort of thing happened all the time, but that hasn't been true in recent years.

WARREN BUFFETT: But we never — I should emphasize — I mean, the annual report of PetroChina, which, like I say, it's easy to read. Understandable. They declare their policies. Anybody could get it. You can read it.

We did not — we did not go over and — we never had any contact with the management before we bought the stock. We'd never attended an investor presentation or anything of the sort.

I mean, it's right there in black and white, in a report that anybody can get.

And we just sit in the office and read those things, and we were able to put 400 million out that's now worth about a billion-two or something like that.

It was interesting. At the time — I think I'm right on this — at the time, Yukos, which is the big oil company in Russia, was probably far better known among the investment community in the United States than PetroChina.

And I compared the two. At the time, thought to myself, would I rather have the money in Russia or in China? PetroChina, in my view, was far cheaper. And I felt that the economic climate was likely to be better in China, you know.

Would I have — if it had been selling at the same multiple as a U.S. domestic company, would I have regarded it as more attractive? No.

I mean, there's some disadvantages, always, to being in a culture that you don't perfectly understand, or where tax laws can change, your ownership rules can change.

But the discount at which PetroChina was selling, compared to other international oil companies, was, in my view at the time, ridiculous. So, that's why we bought it.

And we will have the candy available for you at the break.

14. Profit margins squeezed by rising commodity prices

WARREN BUFFETT: Number 6.

AUDIENCE MEMBER: Good morning, gentlemen. My name is Matt Sauer (PH) and I'm from Durham, North Carolina.

Many businesses are reporting rising costs and surcharges on such inputs as fuel, metals, and wood. They are often unable to pass along these costs to their consumers.

If commodities stabilize at price levels above those of the past decade, will corporate margins be compromised into the future?

WARREN BUFFETT: Well, it's a great question. I would say that that would depend very much on the industry you're talking about.

But, in our carpet business [Shaw Industries], for example, we've just been hit time after time, as I mentioned in the annual report, with raw material increases, because there's a big petroleum derivative factor there.

And we have lagged in terms of being able to put through those increases to our customers, simply because we want to protect the Nebraska Furniture Marts, or those that have ordered, for a reasonable period of time. And that squeezed margins in carpet.

We use lots of natural gas at Johns Manville, use lots of natural gas at Acme Brick, and that's tended to squeeze margins some.

I think, over time — I think there has been a lot more inflation in these basic materials. Steel has been off the chart.

I think, over time the businesses with strong competitive positions manage to pass through increases in raw material costs, just as they passed through increases in labor costs.

But you get these temporary situations where, sometimes, the costs are increasing faster.

I don't think — I don't think the American industry — I mean, a higher cost for oil, when we import 10 million barrels a day or more of oil, if we're paying $20-or-so more per barrel than we were a year or two ago, that's $200 million a day, is a tax, but it's more of a tax on the American consumer, probably, than on American business. The American business will probably be able to pass through most of those raw material cost increases.

It is worth pointing out that corporate profits, as a percentage of GDP, are right at the all-time high, leaving out a few aberrational periods.

And I would — you know, if I had to bet on the direction of corporate profits, as a percentage of GDP, over the next five years, I would bet they would go down somewhat. But that's because they're right at this very high level.

Interestingly enough, while corporate profits, as a percentage of GDP, are at this very high level, corporate taxes, as a percentage of total taxes raised in America, are very close to an all-time low.

So, American businesses managed to pull off a situation where they're making extremely good profits and paying a very small percentage of the total tax bill, as measured in this country historically.

And I'm not sure whether that could, or should, or will continue, but it's a very, very favorable period right now for corporate America.

But that's nothing to get bullish about, because you might expect something of a reversion to the mean.

Charlie?

CHARLIE MUNGER: Well, I can't add to that but I can restate it.

It's hard to know just which companies can pass through the increases in costs that come from higher commodity prices. And it's also important to know.

WARREN BUFFETT: We like buying businesses where we feel that there's some untapped pricing power.

We haven't been able to do much of that lately. But back in 1972, when we bought See's Candy, I think it was either — was it $1.95 a pound?

CHARLIE MUNGER: Something like that.

WARREN BUFFETT: Yeah. And they were selling 16 million pounds of candy a year, making four million pretax, with about 25 million purchase price, which I would have very foolishly refused to budge on, and in history have cost us a lot of money.

But one of the questions we asked ourselves, and we thought the answer was obvious, was, you know, if we raised the price 10 cents a pound, would sales fall off a cliff?

And of course, the answer, in our view at least, was that no, there was some untapped pricing power in the product.

And it's not a great business when you have to have a prayer session before you raise your prices a penny. I mean, you were in a tough business then.

And I would say you can almost measure the strength of a business over time by the agony they go through in determining whether a price increase can be sustained.

And frankly, a good example of that is the newspaper business right now. Because 30 years ago, when the — whatever the local daily would be had an absolute lock on the economics of the community, because it had the megaphone through which merchants had to talk if they were going to get their message across to their audience — at that time, rate increases, both circulation and advertising, were something that were almost a big yawn to most publishers.

They did it annually. They did not worry about the fact that Sears or Walmart or Penney's or whomever would pull their advertising. They did not worry that people would drop their subscriptions to the paper.

And they went merrily along, increasing prices, and they increased them when newsprint went up and they increased them when newsprint went down, and it worked.

And you got these very fat profit margins. And it looked like about as strong a business as you can imagine.

Now publishers find themselves in a position where they agonize over rate increases, both in advertising and in circulation, because they're worried about driving away advertisers into other media.

And they're worried about people, when they get a 20 cent increase, you know, per month, or whatever it may be, in their circulation prices, deciding, well, I think I'll just drop it. And when they drop it they don't usually take it up again.

So, that world has changed. And you could recognize the change in that world, simply, if you could get inside the mind of the publisher, in terms of how they felt about price increases.

You can learn a lot about — you learn a lot about the durability of the economics of a business by observing the behavior of — the price behavior.

I mean, you're seeing that — talk about the beer business. Beer has moved up in price every year, but there have been some rollbacks in certain areas in the last year, which means that, you know, it's getting a little bit more difficult to increase prices, even though they increase them at rates below inflation.

And those are not — that's not a good economic sign.

Charlie?

CHARLIE MUNGER: I have nothing to add to that.

15. Tax rate not a factor in Berkshire dividend calculus

WARREN BUFFETT: OK, we'll go to number 7.

AUDIENCE MEMBER: My name is Pete Banner (PH) from Boulder, Colorado.

First of all, Mr. Buffett, Mr. Munger, we shareholders consider you our heroes. We appreciate and very much value who you are and what you do in the world. So, thank you.

WARREN BUFFETT: Well, thank you, Pete.

And I will say in return that we think we've got the best group of shareholders in the world. And to some extent, it's evidenced by the fact we have the lowest turnover, and, I think, the most knowledgeable group, incidentally, too, of shareholders.

So, with that our mutual love affair can go on. (Laughter)

AUDIENCE MEMBER: Thank you very much.

Secondly, with taxes as they are today, 15 percent on dividends, how do you feel about declaring a dividend?

WARREN BUFFETT: Oh, you were setting me up. (Laughter)

No, there's no question about the fact that dividends are lightly treated now for taxation purposes.

But we have always said, and it's been true, that if there were no tax on dividends, to this point at least, we would have followed an identical dividend policy, because the test with us is whether we think we can retain a dollar, and in turn — and have it worth, in present value terms, more than a dollar.

If we can't do that, we should distribute any money that we can't — we can't utilize on that basis.

Now, when the cash piles up, like currently — it has currently — you can say it's pretty dumb to hold, you know, billions of dollars at — last year the rates were less than 1 percent after-tax — and, you know, what are you doing for shareholders with that?

And I would say that the burden of proof will certainly shift if, within a few years, we can't use a lot more money intelligently than we are now.

But, if we were — at the time at which we feel that the present value of the earnings we retain is not greater than a dollar comes, and it could come, and it's more likely to come when you get large like we are, then we should have a — not only a, you know, dividend policy that's X percent of earnings, we should pay out very substantial sums.

The test is whether the money can be used effectively within the business. So far, it has been.

That doesn't mean it was yesterday or the day before, but so far, it's produced more than a dollar's worth of market value for every dollar retained.

But that will be discussed — our directors meet Monday — that will be discussed then, and you are certainly — if we sit here a couple of years from now and we have not successfully deployed more cash, then I think that the burden of proof has shifted dramatically to us to explain why we would be retaining earnings at that point.

Charlie?

CHARLIE MUNGER: I've got nothing to add to that, too.

16. U.S. trade deficit's economic threat

WARREN BUFFETT: Number 8?

AUDIENCE MEMBER: My name is Ola Larson (PH), from Salt Lake City, originally from Sweden.

I read your annual report where you mentioned how the current account deficit, or a trade deficit, has to eventually come to an end.

And in the report, you were reluctant to give views, a forecast of how this would come down from $2 billion a day.

Would you, nevertheless, be willing to share some thought on what — how it might come down, if you have any views on this?

WARREN BUFFETT: Well, that really is the $64 question, because, we are, in my view — and Charlie doesn't — he's not as on board on this as I am, so it's important that you listen to him on this, too.

The — it does seem to me that a $618 billion trade deficit and a larger current account deficit, rich as we are, strong as this country is, that something will happen that will change that in a

major way at some point, and that the longer that it goes before changing, the more likely it is that something fairly significant happens.

But most economists — most observers — would still say that some kind of a soft landing is possible. Or they would say it's likely. They never, to my mind, they never quite explain, you know, what the soft landing is.

They just say it's, you know, it's likely to be a soft landing but it could be something different but we still think it will be a soft landing.

But I don't know what a soft landing is, exactly, in the sense of how the numbers come down quite significantly, and if they don't come down, the current account surplus — or deficit — means that we are transferring more and more wealth abroad and that we will, in addition to our trade deficit, we will, at some point, have a very significant deficit in terms of the net investment position that the rest of the world holds on us. So it becomes a compounding effect.

I do recommend — there was an op-ed piece in The Washington Post on April 10 by [former Federal Reserve Chairman] Paul Volcker, and he has expressed himself some on this, and he gets into the question of whether it can be a soft landing or not. But I think he certainly expresses some real apprehension about whether a soft landing will be the likely result.

In the kind of world we live in, with so much of the assets of the world, whether they be foreign exchange or whether contracts or whether they be stocks or bonds or junk bonds or whatever, I think as high a percentage is on what I would call a hair trigger now as has ever existed.

In other words, I think there are more people that go to bed at night with a position in foreign exchange, or bonds, or a carry trade, or stocks, or whatever, that some event that could happen overnight would cause them to want to change that position in the next 24 hours. I think that's the highest, perhaps in history.

Somebody [economist Thomas Friedman] has referred to it as the "electronic herd," that it's out there.

I mean people can with — they can give vent to decisions involving billions and billions and billions of dollars, you know, with the press of a key, virtually. And that electric — I think that electronic herd is at an all-time high.

I think that some exogenous event — it was almost Long-Term Capital Management in 1998 — but some exogenous event — and we will have them — will cause it — I think it could very well cause some kind of stampede by that herd.

You can't get rid — if you're the rest of the world — you can't get rid of dollars.

I mean, if you're sitting in Japan, China, or someplace, and you own a lot of U.S. government bonds, if you sell them to somebody in the United States you get U.S. dollars. So you still have U.S. assets. If you sell them to somebody in France, you've now got euros but they've got the [debt.]

You can't you can't get rid of those assets. But you can have people trying to head for the door very quickly with them, under certain circumstances.

Volcker said, in this thing, he said in the second paragraph, "Yet, under the placid surface there are disturbing trends: huge imbalances, disequilibria, risks — call them what you will. Altogether the circumstances seem to me as dangerous and intractable," and I emphasize intractable, "as any I can remember, and I can remember quite a lot."

Well, Paul Volcker can remember quite a lot.

And I agree with that. I don't — I have no idea — I have no idea on timing, whatsoever. In economics, it's far easier to tell what will happen than when it will happen.

I mean, you can see bubbles develop and things, but you do not know how big the bubble will get. For example, you know, this happened five years ago in the market.

So you — predicting timing is — I've just never been successful at it nor do I try to do it.

Predicting what will happen, I think, is a much easier sort of thing. And I would say that what is going on, in terms of trade policy, is going to have very important consequences.

It was not addressed in the last presidential campaign by either candidate in any meaningful way at all.

Now, I'm not sure if, you know, you were standing up in front of the American people, and somebody is giving you three minutes to explain this whole situation, when 90 percent of your audience couldn't define current account, you know, it's not an easy game. But it's an important one.

Now, Charlie is less enthusiastic about our foreign exchange position, somewhat, than I am, so I want to yield the floor here for a significant period of time while he gives you the other view.

CHARLIE MUNGER: Well, I'm, if anything, a little more repelled than you are by the lack of virtue in the way our nation uses consumer credit and the way we run the public finances.

And I have a feeling that eventually a lack of virtue is going to hurt one.

Where we differ is that I agree with [18th century Scottish economist] Adam Smith that a great civilization has a lot of ruin in that, meaning it will bear a lot of abuse.

And so I think there are dangers in the current situation that make it unwise for anybody to swing for the fences. But I don't think that we have a certainty that the system won't stand a lot more of the kind of abuse it's getting now.

WARREN BUFFETT: What do you think the end will be?

CHARLIE MUNGER: Bad. (Laughter)

WARREN BUFFETT: I knew I could count on him. (Laughs)

No, we are truly, in this country, like an incredibly, I mean incredibly, rich family that owns, we'll say metaphorically, millions of acres of land. They can't see, they can't travel to the outer reaches of their domain.

But, nevertheless, they sit on the front porch and wait for the produce to come in from this vast holding, and when they get it all they still want to consume about 6 percent more than everything that's been produced on the farm.

And they have the ability to do that by simply selling off a little piece of the farm every day, and every year, that they can't even see. So they don't feel any poorer at the end of the day or the end of the year, because it's still, as far as their eyesight can see, they own everything that God ever created.

And they can sell that little piece or they can mortgage it. They can send IOUs to these people that are giving them the extra goods to consume.

And we are very, very, very rich family. And we produce a whole lot and we consume a little bit more than we produce.

And we trade away a little bit of the farm or put a little bit of a mortgage on every day and the rest of the world is happy to take a little piece of our farm or take a mortgage on it because it's such a terrific asset and we've behaved so well over the years.

And so they're willing to work a little harder to send us something so that we can consume a little bit more than we produce.

It's been going on a while. It's accelerated a lot in the last few years. And more and more the rest of the world is owning part of us and we're going to have to service that ownership, either through interest if they took it in IOUs, or in some other way.

And it can go on a long time. But if it goes on a long time, the world will own a good bit of us and our children will be paying, one way or another, for the fact that we got to consume more than we produced.

It could happen — you could have — you've obviously had some less interest in the rest of the world accepting dollars by the fact that the dollar has declined somewhat in value in the last few years.

In other words, the investment in us is always going to be equal to the overconsumption. I mean, it's an equation.

But if people get a little less excited about one — enthused about one side of the equation — it reflects itself in the pricing mechanism.

And the world has demonstrated a diminishing enthusiasm for dollars in the last few years as they get flooded with them. We send $2 billion out every day, whether we like it or not and whether they like it or not.

Now, the question is, does that reach some tipping point at some point or does some exogenous event come about that causes people to want to rush for exits? Who knows?

I have a hard time thinking of any outcome from this that involves an appreciating dollar, but, as Charlie will point out in just a second, there have been times when we've been surprised.

Charlie?

CHARLIE MUNGER: Yeah, the counter-argument is that, what does it matter if the foreigners own 10 percent more of the United States, if, at that time, the total wealth of the United States is 30 percent higher than it is now.

And so, people who have that point of view just roll with it.

And some of them think that if we didn't manufacture anything in the United States and just sat here running hedge funds, we would have a wonderful economy because it comports with Republican principles.

WARREN BUFFETT: We could cut each other's hair, too, actually, I mean —

But back in the late 18th century, obviously, the idea of taxation without representation caused a certain amount of trouble, and ownership of the rest of the world — by the rest of the world of this country would be seen as a form of taxation, I think, 20 years from now, by the people who resided here.

If we — if, instead of fighting the Revolutionary War, we'd simply made a deal with England and said we'll give you three percent or five percent of our national product forever and you let us be free and we'll just mail it — send the royalty over every day — that might have looked like a good alternative to war in, you know, in 1776.

But I don't think that subsequent generations would have reacted well. I mean, something would have happened over time.

And I have a feeling that the idea of America paying tribute to the rest of the world because of the overconsumption patterns of a previous generation seems to be — I don't think that's a particularly stable scenario.

But that's why we have only 21 billion in foreign exchange contracts.

Charlie might have a little less, or maybe none, if he were running it entirely, and I might have somewhat more, if I didn't know I'd have him sitting up here next to me next year. (Laughs)

17. Housing market bubbles and irrationality

WARREN BUFFETT: Let's go to number 9.

AUDIENCE MEMBER: Hello. My name is Johann Freudenberg (PH) from Germany.

What do you think would be the consequences of a strong decline of the housing market for sales of carpet retailers and manufacturers? Thank you.

WARREN BUFFETT: Well, if there's a strong decline in the housing market, my guess is that whatever we lose in carpet we'll be making up for somewhere else, because it would — a lot of the psychological well-being, as well as the financial well-being, of the American people is tied up with the fact — or comes from the fact that they feel so good about what has happened with their home ownership over the years. And with many people it's been, by far, the best-behaving asset that they've had.

So, if there is indeed some kind of a bubble and it's pricked at some point, my guess is that we would feel that in various ways in our operating businesses, but that in terms of what we could do with our capital, the net effect to Berkshire might well be quite positive.

We're not big on macro forecasts. I mean, this foreign exchange thing is quite different than what we've done over time and the way we've made money.

So, we are — it isn't like we've got some great track record predicting macro factors and have made a lot of money doing that.

We've made money by looking at things like PetroChina, or whatever it may be, and just deciding that here is a very good business that's selling at a very cheap price.

Certainly at the high end of the real estate market in some areas, I mean, you've seen some extraordinary movement.

And I've referred to this before, but 25 years ago or so we saw the same thing in farmland in Nebraska and Iowa and surrounding areas. We had people running from cash — "cash is trash" — and people wouldn't, you know — they were worried about the fact that inflation was out of control in the late '70s, and before [former Federal Reserve Chairman Paul] Volcker did his stuff, people were fleeing from cash.

And one of the ways they gave vent to that fear was to rush into farmland. There was a farm about 30 miles north of here that sold for about $2000 an acre in, roughly, 1980. And a few years later, I bought it from the FDIC for $600 an acre.

And you can say, how can you go crazy about farmland? It's going to produce about 45 bushels an acre of soybeans, about 120 bushels an acre of corn. And there's no way you could dream about a tripling, or the internet causing, you know, cornmeals to go up or something of the sort.

But people went crazy on it. And the consequences were huge, in terms of banks failing, lots of banks failing in this area, banks that had gone through the Great Depression. But the people went — they just want a little crazy.

People go crazy in economics, periodically, in all different kinds of ways.

And, you know, you had the Resolution Trust Corp. come out of the savings and loan nuttiness that took place in real estate, where they finance everything that was put before them.

And, you know, I will not — I don't know where we stand in terms of the residential housing cycle in that it has different behavior characteristics, simply because people live in the houses in many, a great many cases. So it will not behave, necessarily, the same as other markets.

But when you get prices increasing at far, far greater rates than construction costs or inflationary factors, sometimes there can be some pretty serious consequences.

Charlie?

CHARLIE MUNGER: Yeah. It's — in a place like Omaha, there's not much of a housing price bubble, is there, Warren?

WARREN BUFFETT: No, there's not been a bubble, but I would say that residential real estate, probably, has increased in price at a rate quite a bit faster than the general inflation rate.

CHARLIE MUNGER: Yeah, but if you get to Laguna, California or Montecito, California, or the better suburbs of Washington, D.C., you have a real asset price bubble.

I have a relative that, to move to a good school district in the suburbs of Virginia, she had to pay four times as much as she can get from selling her nice Omaha house.

WARREN BUFFETT: Yeah. Well, I sold —

CHARLIE MUNGER: So that's a price bubble.

WARREN BUFFETT: I sold a house a few months ago in Laguna for $3 1/2 million. Now it sold the first day, so I probably listed it too cheap. So don't count on me for residential real estate advice.

But that house, the physical house, would probably cost a half a million or thereabouts. So, in effect, the land went for $3 million, implicitly, and the land is probably on the area of 2000 square feet, which is a little less than one-twentieth of an acre. Now, you've got streets and all that sort of thing involved.

But basically, I think that land sold for about $60 million an acre, which that fellow that you saw in the farm outfit in the movie finds like — sounds like a pretty, pretty fancy price for almost any kind of land.

Charlie, you've witnessed it firsthand, though, out there.

CHARLIE MUNGER: Well, yeah. There's — one of the Berkshire directors lives adjacent to what I regard as a pretty modest little house, which sold for $27 million recently.

Now these are houses that look right at the ocean, and there isn't a great deal of available shoreline in California, and there are a lot of people.

But you have some very extreme housing-price bubbles going on. And you would think there might be a real possibility that it could go in the other direction someday.

WARREN BUFFETT: At $27 million, I'd rather stare at my bath tub. (Laughter)

18. Catastrophe insurance: "everything correlates"

WARREN BUFFETT: Number 10.

AUDIENCE MEMBER: David Winters, Mountain Lakes, New Jersey.

How do you try to manage risk at Gen Re and National Indemnity to be comfortable and maximize returns? Especially, how do you prevent a catastrophic loss or unexpected correlation? Thank you.

WARREN BUFFETT: Yeah, well, that's a very good question because we are doing things in different parts of our insurance operation where there is correlation.

And there's not only correlation among the insurance risks.

I mean, just, you know, take a major, really major, earthquake in California, in the wrong place. There have been about 25 6.0s or larger in the last hundred years, but most of them don't occur where a lot of people are.

But if you get the wrong one in the wrong place, it would not only hit National Indemnity and General Re, as you mention, but it might very well have a severe effect on See's Candy. It might very well have a severe effect on Wells Fargo.

We don't own Freddie [Mac] or Fannie [Mae] now, but we owned Freddie at one time. It could have had a severe effect on Freddie. It can have all kinds of secondary and tertiary effects that you might not think of initially.

So, we find when there's trouble, everything correlates. And it's — part of my job is to have at least a general idea of the sort of risk that the various enterprises might be running operationally, and then integrate that into my own notion of the risk that we run, in terms of investments, in terms of all kinds of things. And, you know, that is my job.

The most likely mega-cat, at any time, is a hurricane. But we have more exposure to that.

On the other hand, if you're talking 25 billion and up, maybe 100 billion and up, insured catastrophes, you know, a quake might be just as likely as some Force 5 hurricane that would come in at the wrong place.

But that — my job is to think absolutely in terms of worst case. And to know enough about what's going on, in both investments and operations, to make sure that no matter what happens, you know, I don't lose sleep that night, you know, over what can, you know, whether there's a 9.0 quake someplace or whether there's a Force 5 hurricane that actually goes up the East Coast and enters at places that very seldom does it enter.

Long Island, for example: huge amount of exposure. How often is Long Island going to, you know, really have a major hurricane? Not very often. I think there was one back in the '30s, but there were potato fields there in the '30s and now there's all kinds of insured value.

Everything will — everything that can happen, will happen.

I mean, in terms of our — what we know of history in this country, last three or four-hundred years, and then with the most severe quake, by far, was at New Madrid, Missouri.

And who would have guessed, you know, that that quake would happen? And there were two subsequent quakes that were far enough apart so that didn't exactly seem like aftershocks.

All three of those were higher than 8 on the Richter scale. Nobody thinks about that, but they've had them in Charleston, South Carolina.

They've had, I mean, it's — you will see things, maybe not in your lifetime, but if you take the centuries, some extraordinary things can happen. And it's Berkshire's job to be prepared, absolutely, for the very worst.

And, by and large, I would think hurricanes and quakes are the biggest thing now, but a few years ago we did not have nuclear, chemical, and biological risks excluded in policies, and we had huge exposure, subsequently gotten rid of.

But we take on large risks. I'll give you a couple of examples.

Just the other day — and nobody else will write this stuff, basically, because they would want to reinsure it with somebody else and they're not set up to do it — but one large airport, one large international airport, came to us and we wrote a policy for $500 million, excess of 2 1/2 billion, from any action that was not caused by nuclear, chemical, or biological sources.

So, if that airport is taken out in some way, but not by nuclear, chemical, or biological activities, the first 2 1/2 billion, somebody else worries about, and we get the next half-billion. There's a — sublimit is only a billion-six can be counted for business interruption. So you would need — and that airport would have to be out for a couple of years to have a billion-six of business interruption. So you need 900 million of physical damage on top of that.

But somebody is willing to buy that policy and there is a real risk.

We insured the NCAA Final Four down in St. Louis against being canceled, not postponed, or having the games, those final four games, moved to another city. But if it was canceled totally, and again, not through nuclear, chemical, or biological, we would have paid $75 million. Same thing at the Grammys.

I mean, we take on risks that very few people want to write. But in the end, we're willing to lose a lot of money in one day, but we're not willing to do anything that causes us any discomfort, in terms of writing checks the following morning.

Incidentally, while I'm on the nuclear — while we're talking about the pleasant subjects — I recommended in the annual report that book, "Nuclear Terrorism."

And if you go to lastbestchance.org, you can obtain, or will soon be able to obtain, a tape, free, that the Nuclear Threat Initiative has sponsored, which has a dramatization of something that is now fictional, but it's not fanciful. It's something that could happen, and which the Nuclear Threat Initiative is working to minimize the chances of.

And on that program, in addition to this dramatization of what could happen in that field, you have [former Senator] Sam Nunn and Senator [Richard] Lugar with [NBC News anchor] Tom Brokaw, discussing the subject.

It's an important subject. It didn't get a lot of attention, again, in this last campaign, although I think both candidates fully recognize the importance.

But we would regard ourselves as vulnerable to extinction, as a company, if we did not have nuclear, chemical, and biological risks excluded from virtually all of our policies, although we intentionally take on the risk periodically, but only in an amount that we feel we can handle.

We do not write it and give it away for free. And we do not want to write it promiscuously, because there could be events happen that would make it impossible for our checks to clear the next day, and we're not going to get ourselves in that position.

Charlie?

CHARLIE MUNGER: Yeah. We're likely to do better than most other people in dealing with what concerns you. We care more about it, that kind of correlation.

We just naturally have minds that think about tidal waves in California, where they've never had one in modern California civilization.

Can you imagine what a 60-foot tidal wave would do in California? There's nothing physically impossible in having a 60-foot tidal wave in an earthquake zone, which California is in. But it's never happened in modern history. But it's the kind of thing that we do think about.

And you think any other company has as much, as rigorous, nuclear and so on, exclusion as we do?

WARREN BUFFETT: Well, nobody's attacked it any more vigorously than we've attacked, I would say.

I mean, what you have here is, individually, we probably worry more about the downside than that just about any manager you can find. And collectively, you know, it's Armageddon around here every day. (Laughs)

But that's — you know, we care about that. We've never used a lot of borrowed money. Back when I started out, I mean, I had $10,000. But I just didn't want to borrow any significant amount of money.

There's no reason to. You know, we're living fine. We were living fine when I had $10,000.

And the idea that you risk what you need and is important to you for something that you don't need and it is unimportant, is just craziness. And we try to run Berkshire that way.

And you know, I had a 98- year-old aunt, my Aunt Katie [Buffett], that died last year. She had everything she had in Berkshire.

And the idea that I should be doing something to try and add a few dollars to my net worth, or a few percentage points to the record, and be risking the fact that she would go back to Social Security, is, you know — I just think that's kind of crazy for a manager.

But, you know, maybe if I had a two-and-twenty percent arrangement with my Aunt Katie, I'd be — differently, but I hope not. (Laughs)

19. Public education reform

WARREN BUFFETT: Number 11.

AUDIENCE MEMBER: Hello. My name is Martin Wiegand from Chevy Chase, Maryland.

On behalf of the assembled shareholders, we appreciate you and the Berkshire staff hosting this weekend and would like to thank you for building this community of shareholders.

WARREN BUFFETT: Martin, thank you. (Applause)

I should point out that I dated Martin's aunt, but she only went out with me once. Maybe you could explain that, Martin. (Laughs)

AUDIENCE MEMBER: New board member Bill Gates has been talking about education reform in America, and columnist George Will quoted you in an article about Patrick Byrne's efforts to reform education in America.

Could you share with us some of your thoughts about these two efforts, or your efforts, to reform education? Thank you.

WARREN BUFFETT: Well, interestingly enough, we just dedicated a school here in Omaha yesterday which is named after my Aunt Alice, who taught in the Omaha public schools.

And we've — I think we've maintained quite an excellent public school system in Omaha. We also have an outstanding parochial school system here.

You know, it takes the interests of parents and, frankly, it takes the interests of the well-to-do in the school system to keep a first-class school system.

I've said that, to some extent, a public — a good public school system is a lot like virginity. It can be preserved but not restored.

In Omaha, we preserved it, but you preserve it by having the parents interested and involved in the public school system.

And Patrick's got an ingenious idea to make sure that more of the money goes to teaching and less to administration and overhead.

There's a variety of ideas around about how to correct a system where it's broken. And Charlie, as a big Ben Franklin enthusiast, has always said that an ounce of prevention is worth a pound of cure, and I think we've been spending that ounce of prevention, or providing it, here in Omaha.

I think it's a — you know, Charlie will have a lot more to say on this.

I admire the fact that people like Patrick and Bill Gates and a lot of other people, John Walton and Teddy Forstmann, all kinds of people — Bob Wilmers, up in Buffalo — are attacking the problem.

It's probably the — next to the nuclear, chemical, and biological problem — I mean, it's the number one problem of the country is making sure that the educational system is the best in the world.

We've got the resources and we're not providing it, we're not delivering it.

So, it's very complicated when you operate through thousands and thousands of school districts and you work with many, many unions, and you've had, to a great extent in many areas, the rich opt out of the system and set up a separate system.

You know, I am not as concerned about the public golf courses in Omaha as I might be if I played them every day instead of playing at a country club.

And if you have a two-tier school system, one for the rich and one for the poor, it's going to be hard to pass bond issues that benefit the people that don't have the money to send their kids to private schools.

I'm a big believer in the public school system, though, in terms of equality of opportunity in this country. (Applause)

Charlie's thought about education. He's actually come close to running a school. Cares about it enormously, so I'll turn it over to him.

CHARLIE MUNGER: Well I learned something rather interesting about Omaha public schools on my way to this meeting.

I stopped to sign some books in a warehouse in South Omaha, and one of the very nice people in the warehouse was married to an eighth grade teacher in the Omaha public schools. And we got to talking about "No Child Left Behind."

And he said his wife, this eighth grade teacher, had a very interesting system. For the numerous children who couldn't read, she records "books on tape," speaking slowly in her own voice.

And when some children are reading the books, other children are listening to the tapes, and that way the children who listen to the tapes are not left out when they ask questions about what went on in the books

Well, this is "No Child Left Behind," in a sense, but it's also a failure, in a sense. And I think it's very hard for a civilization to fix the situation once somebody is in the eighth grade and can't read.

So I think there's a lot of failure, even in relatively advantaged places like Omaha. And it's very serious failure. We never should have allowed it to happen.

WARREN BUFFETT: Yep. My friend Bill Ruane, who is here — I believe he's here — is doing something extraordinary, in terms of a program he has teaching kids to read. In fact, journalists who are here should seek out Bill and learn something about the story of what he's done in the last 10 years, in terms of moving reading abilities, and kids' enthusiasm for reading, which is more important because it's, you know — I talked about our managers and the important thing is that they have a passion for their business.

Well, passion for reading can be developed and Bill has shown that in programs that he — I think he first started them in Harlem. He sort of adopted a block up there and went from there. And he would be a very interesting fellow to get some views from on this subject.

You know, we've had this great success story in this country and a lot of it is because of people have had something closer to equality of opportunity in the United States than they've had in most parts of the world.

And you do not have equality of opportunity when my kids get to go to some school where I can attract outstanding teachers and where they're in the company of other kids that are also motivated and they're getting encouraged at home and all sorts of other things, and somebody else, who is born into a less advantageous family, really doesn't have a chance.

They go into something that's close, maybe, to an armed camp where the teachers are just sort of pushing them through. And there's no stimulus from the other kids except to do things that are counter to the interests of society.

And that just isn't a situation that really should be allowed to exist in a country where the GDP is almost $40,000 per capita

20. Bill Gates tops Churchill, Jesus, and Napoleon in survey

WARREN BUFFETT: Let's go on to number 12.

Oh, incidentally, I have to make one —

It was mentioned about Bill Gates being a director and I did — I got a little survey here that came out. Pricewaterhouse and the Financial Times cooperated on the survey.

And they asked CEOs around the world to choose — if they could pick anybody to choose from history or today to join their company's board, who would they choose?

And I'm happy to report that Bill came in number two. And, actually, number three was Winston Churchill. [Auto executive] Carlos Ghosn came in fourth. Jesus Christ came in fifth. Napoleon Bonaparte was sixth. And I won't give you the rest of the list but —

CHARLIE MUNGER: Who was one?

WARREN BUFFETT: Well, one was [former General Electric CEO] Jack Welch. I knew you'd ask. (Laughs)

But we didn't ask Jack, we asked Bill.

So, actually, I thought this quite an interesting list because I think many of the CEOs of the world would prefer people that are dead to be on their board. (Laughter and applause)

VOICE: It's too funny.

21. Zero-down mortgages fueling housing price bubble

WARREN BUFFETT: Now let's see. Where were we? We were going to number 12.

AUDIENCE MEMBER: Hello, my name is Robert Piton (PH) from Chicago, Illinois.

And on that note, maybe a merger of some sorts between Berkshire and Microsoft is in the works.

WARREN BUFFETT: I keep hinting but it doesn't do any good. (Laughs)

AUIDENCE MEMBER: The question that I have is, do you think the shift in the banking system during the '90s to finance home purchases with zero percent down impacted the overall savings rate, as home purchases are the largest investment most people make, and the overall rise of home prices driven by these marginal buyers?

If so, how would you suggest that we correct the problem.

WARREN BUFFETT: Yeah. Of course, any time a home is constructed, it represents somebody's savings.

I mean, the home buyer may buy it for nothing down, but that means he's borrowing 100 percent of the mortgage through a mortgage that somebody else has saved somewhere, maybe intermediated three or four times or something of the sort.

But home construction comes about through savings.

Now there's no question that terms have become easier and easier, and I've talked to certain mortgage bankers about this subject, but terms have become easier and easier as prices have increased.

Now, that is absolutely counter to, you know, how people think about lending in general. Generally, the more the asset class becomes inflated, the less a prudent banker will lend.

But of course, in this country, now you have mortgages intermediated in a way that the person buying the mortgage, in the case of — I'm thinking of Freddie [Mac] and Fannie [Mae] and other forms like that, so we're talking about the lower-priced houses — but the mortgage buyer does not need to care about what kind of mortgage — what kind of a financial transaction the purchase is.

All they have to do is look at the guarantee, and they look at that rather than whether somebody's put any money down, or anything of the sort.

So I think you've had easy financing facilitating a boom in real estate prices, even at the higher levels. And I think that that that, which has occurred in other asset classes in the past — I mean, that farm bubble I talked about was facilitated by the fact that banks in small towns, who generally had been very conservative in lending, went crazy around 1980 and they lent amounts that the farm itself could never repay.

They started saying a farm was an asset appreciation investment, not an income investment.

And once you talk about something that's an asset appreciation investment, ignoring the underlying economics of what you're lending on, you're really talking about the bigger-fool game.

You're saying, you know, this is a silly price but there'll be a bigger fool that comes along. And that actually can be a profitable game for a while. But it's nothing that bankers should engage in.

So I would say that easy lending, obviously, does contribute to, overall in the country, to a lower savings rate. But, in effect, somebody has to save for somebody else to borrow.

And what is happening now is the rest of the world is saving. So then in the U.S. — in global terms, I'm talking — but the rest of the world is saving.

And they're sending us $2 billion — I mean, we're sending them, in effect, claims for ownership of $2 billion — they're investing $2 billion a day in the United States.

But they — a lot of economists will say, well, that's what's really going on. The world loves our assets so much and they have so much confidence in America that the present current account deficit is driven by the fact they want to invest.

I don't believe that at all. I think it's just silly, frankly, to make that argument. They are investing because they have to, because of our consumption habits, and not because they want to. And I think the declining dollar is evidence of that.

Charlie?

CHARLIE MUNGER: I've got nothing to add to that. It's obvious that the easy lending on houses causes more houses to be built and causes housing prices to be higher, probably, in the new field.

Eventually, of course, if you construct enough of new anything, you can have a countervailing effect.

If you build way too many houses, you'd eventually cause a price decline

WARREN BUFFETT: I'll give you a fanciful illustration.

Let's just assume that Omaha had a totally constant population. No one was allowed to leave. No one entered. Birth rate equals death rate, all of that sort of thing.

So the population was constant, and nobody could build any more houses. We just passed a city ordinance to that effect.

But every year, everybody sold their house to their neighbor. So, first year, everybody sold their $100,000 house to their neighbor, and they both switched houses, and that was fine.

And then the next year, they agreed we were going to do it at 150,000. And you'd say, well, how could that be?

Well, we would all go to Freddie or Fannie and get our mortgages guaranteed for a larger amount, and somebody in New York or Tokyo or someplace would buy the Freddie or Fannie paper.

And we'd have an influx of $50,000 per household. We'd all have the same number of houses. We'd all be living one house to a family. And we'd have marked up our houses, and we now have a bigger mortgage, but we'd have $50,000 more of income that year, just to service a little higher mortgage.

And we'd do the same thing the following year for 200,000, and so on.

Now, that would be very transparent, and people might catch on to the fact there was something funny going on in Omaha.

But you can have an accidental aggregation of behavior that somewhat leads to the same effect.

I mean, if you keep marking up something, and in the process, the payment for the marked up price comes from someone else who feels they are bearing no risk because they've got the government guarantee in between, the money can just flood in and everybody feels very happy for a long time.

And we don't have anything like the fanciful thing I've set forth, in terms of Omaha. But we have certain aspects of that, I think, going on in the economy.

Charlie, would you — I'm throwing this one at you. Would you agree or not?

CHARLIE MUNGER: Yeah, I do agree with that.

You have varied Ponzi effects in various parts of any modern economy. And they're very important and they're very little studied in economics.

22. "Not enthused" about gold

WARREN BUFFETT: Let's try number 13. I think, maybe, that's in the other room and we'll see whether we get a response and if not we'll —

AUDIENCE MEMBER: Good morning, Mr. Buffett and Mr. Munger My name is Martin O'Leary (PH) and I'm from Austin, Texas.

Mr. Buffett, given your past essays concerning the U.S. dollar and foreign exchange forward contract holdings that you have, and many countries' economic policies that have a tendency to debase their currencies, do you think that gold can be considered a viable investment alternative to paper currencies?

WARREN BUFFETT: Yeah, we're not enthused about gold.

People, historically, have felt that was the first refuge from a currency that was going to be — decline in value.

But, you know, so is a barrel of oil. So is an acre of land. So is a piece of Coca-Cola. So is See's Candy.

See's candy — if the dollar goes down 50 percent, we will be selling See's candy for double the present price. We'll be getting the same real price for See's candy.

People will work the same number of minutes or hours per week in order to buy a pound or two-pound box of the candy.

So we would much prefer a — some asset that is going to be useful whether the currency is worth what it is today, or 10 percent of what it is today, or whether people are using seashells in order to transact business.

Because people will go on eating and they'll go on drinking and doing various things. And their preferences will translate, in real dollars, into more or less the same economics for us.

And we would not trade the ownership of those kind of assets for us for a hunk of yellow metal, which has very little real utility except for people who are looking to flee from the dollar and, in our view, really haven't thought through the consequences of what fleeing would — where they should flee.

Charlie?

CHARLIE MUNGER: Yeah. If you have the opportunities of Berkshire Hathaway, averaged out, gold is a dumb investment.

WARREN BUFFETT: My dad [Howard G. Buffett] was a huge gold enthusiast. So I sat around the dinner table — my two sisters are here, too. They will testify to it.

We sat around listening to the virtues of gold, and that was in, we'll say, 1940. And gold, at that time, was $35 an ounce. And we would've had some storage and insurance costs.

And, you know, here it is, 65 years later. World wars, nuclear bombs, all kinds of things. And the compound rate from $35 to a little over $400, less those expenses, is not something that causes me to salivate.

23. The danger of earnings expectations

WARREN BUFFETT: Number 14.

Do we have a second microphone in the overflow room? Oh, there's only one in there. OK, then we'll go back to number one.

AUDIENCE MEMBER: Andrew Noble (PH) from England.

Apart from the catastrophic insurance events or Armageddon scenarios that you've been talking about earlier, in relation to the operations of Berkshire Hathaway, what are your greatest fears?

WARREN BUFFETT: Well, the greatest, I would say — we don't worry about the economics of the businesses we have.

We've got a very diverse group. By and large, they're very good businesses. By and large, they're run by some of the best managers in the country. But we worry about something going wrong.

I mean, you know, you heard about the Salomon [Brothers] thing in the movie. And, I mean, we've got 180,000 people out there, and I'll guarantee you something is going wrong someplace, as we talk. That's just the nature of it.

But, what you hope is that it's relatively unimportant or that we catch it. And — but that's, you know, that is something that we know will happen.

We try to have a culture that minimizes that. And I think we do have a culture that minimizes that.

We — it's very important, in our view, to have the right incentives. And many places, we think, have incentives that aren't so good.

I mean, when I get on an airplane, and we own the company, like NetJets, the last thing in the world I want to tell the pilot is that I'm running late and I hope we can get to New York a little faster.

I mean, that is dumb, to incent a pilot, who may be worried that, you know, somehow you affect his job or something, to get in a hurry about the takeoff or the checklist or whatever it may be.

And companies do that time after time in their compensation plans or things that they incent people, in our view at least, some of the wrong things.

That doesn't mean nothing wrong will happen under any circumstances. But you should not have a system that causes people to, for example, worry about quarterly earnings.

None of our — our managers do not submit budgets into Omaha. I have no idea what we're going to earn next quarter.

And I have no implicit body language out there, or anything of the sort, to our managers that I'm hoping to earn X dollars per share in the quarter.

Because in the insurance business particularly, you can report any numbers, basically, that you want to, if you write long-tail business for a short period of time.

And, you know, we've got 45 billion of loss reserves. Well, who knows whether the right figure is 45 billion or 46 or 44?

And if the desire is to report some given number in a given quarter, instead of saying 45 billion, you say 44-and-three-quarters billion, or something of the sort.

So we have no incentives, in terms of how people are paid, or in terms of the fact they just don't want to let me down.

Let's assume at the start of the year I asked everybody to submit budgets and then I went on Wall Street and preached a bunch of numbers.

Even if their compensation didn't depend on it, the managers would feel, you know, we don't want to let Warren down on this. So, you know, we'll take an optimistic view of reserves, and that's easy to do, at the end of the quarter and we won't let him down and then he won't look like a jerk in front of Wall Street.

So we try to avoid that sort of thing. But even then, that is what we worry about.

We don't worry about this place making money. I mean, we'll make money. And if we don't, it's my fault. That's not that's not the problem.

The problem right now, in addition to the one we just talked about, the problem is deploying capital, and that's my job, too.

And, you know, I haven't done a very good job of that recently, but with a little luck, you know, we will — and a different kind of market situation — we will get a chance to do that.

Charlie?

CHARLIE MUNGER: Yeah. Well, if you stop to think about it, the history of much of which we don't like in modern corporate capitalism comes from an unreasonable expectation, communicated from headquarters, that earnings have to go up with no volatility and great regularity — corporate earnings, I mean.

That kind of an expectation from headquarters is not just the kissing cousin of evil. It's the blood brother of evil.

And we just don't need that blood brother in our headquarters.

WARREN BUFFETT: Businesses do not meet expectations quarter after quarter and year after year. It just isn't in the nature of running businesses.

And, in our view, people that predict precisely what the future will be are either kidding investors, or they're kidding themselves, or they're kidding both.

Charlie and I have been around the culture, sometimes on the board, where the ego of the CEO became very involved in meeting predictions which were impossible, really, over time.

And everybody in the organization knew, because they were very public about it, what these predictions were and they knew that their CEO was going to look bad if they weren't met. And that can lead to a lot of bad things.

You get enough bad things, anyway, I mean. But setting up a system that either exerts financial or psychological pressure on the people around you to do things that they probably really don't even want to do, in order to avoid disappointing you, I mean, I just think that that's — it's a terrible mistake. And, you know, we'll try to avoid it.

24. We look for managers with great track records

(Gap in video recording resumes in middle of question)

AUDIENCE MEMBER: — quality is largely innate.

So if these characteristics are inherent and you were to attempt to consistently identify future great managers or entrepreneurs before there's a track record, how would you go about doing it?

And in particular, could there be a way to know that — before someone's made a lot of money, before they built the business that they love and feel passionate about, that they will develop those types of qualities later in life?

WARREN BUFFETT: That's a terrific question. And we have dodged it, largely, over the years by actually buying businesses from people where we've seen the record.

In other words, I'm not sure I can go — in fact, I'm quite sure I can't go — to an MBA class of 50 and sit down and talk with each one, examine their grades, examine their extracurricular activities, and whatever, talk to their parents, I'm not sure I could rank those 50 very well in terms of their potential for future business success. And, of course, some of it would depend on what areas they entered into in business.

So, I think it's tough. I think it's tough to go out to the practice tee, where people are not actually hitting balls but just taking practice swings, and say which one is, you know, is a 2 handicap and which one's a 15 handicap, and which ones, you know, can make it on the tour

I think I can tell a little bit, maybe, but not — but it's very hard to calibrate.

And I don't think we've had much success, but we also haven't tried very much, to identify people before they've had a record, to try and identify the ones that are superstars.

Instead, we've taken the easy way, and we go — and if somebody comes to us with a business that's done phenomenally for 10 or 15 or 20 years, or maybe for 50 years, and we've seen how — what their batting average is — we've actually seen they batted .350, or whatever it may be, in the major leagues. And we just make the assumption that we won't screw it up by hiring them.

And we also make the assumption that they'll live to be 100 or 120 or something and we buy the business.

And that's far easier — it is far easier to tell the great baseball batters after you've seen a couple seasons of their batting than it is to go to a college — in college baseball teams or high school baseball teams — and pick out the superstars.

The one interesting thing, and I wish I could remember where I saw this study and it may not even be a valid study, but I do remember seeing something many, many years ago where they tried to correlate business success with various variables.

And they took grades in school and whether they got MBAs and all that sort of thing, and they found that the best correlation was with the age at which they started their own business first.

The people that got very interested in starting a lemonade stands, or whatever, tended to have better — it tended to correlate better with business success than other variables.

We have found ourselves — we've got a lot of MBAs running businesses for us, but they ran them for a long time before we hired them or before we made the deal. And we've got others that never set foot in a business school.

And I do think there's a lot to wiring. I think there's also a lot to working with the wiring you have and developing it over time.

I don't think that it's all innate, and I don't think you can't improve. I know you can improve on what you're given at birth, but I do think an awful lot of it is wiring, more so than I would have thought 30 or 40 years ago.

I've certainly seen it in business. I can — there are people, no formal business train — Charlie never went to business school, I mean, but he thought about it. I mean, I never heard him — Charlie say anything dumb about business yet, except when he disagrees with me. (Laughs)

The truth is I've never heard him say anything dumb about business, period.

And there are other people. I've never heard [GEICO CEO] Tony Nicely say anything dumb about business, ever.

They just — they're wired so that they — that the, you know — it doesn't flicker. I mean, they get the answers. It doesn't mean they can — you know, they'd be a great ballroom dancer or a great baseball player, you know, or a great politician, but they are wired for business.

Charlie?

CHARLIE MUNGER: Yeah. Part of it is intelligence and part of it is temperament.

I don't know if Bill Ginn is in the audience, but by the time I was 14 years of age, I knew Bill Ginn would be rich.

He was a classmate of mine in high school, and a very intelligent man, and he wanted to be rich. And he was sensible in the way he handled life.

I think sensible people with the right temperament and the right intelligence, if they live long enough in our system, will get rich. But temperament is, I think to some extent, inherited, too. Don't you?

WARREN BUFFETT: Yeah.

His daughter, incidentally, is a partner with my daughter in a knit shop, which I hope you patronize while you're — (Laughs)

We've united the Ginn and the Buffett family. (Laughs)

Charlie, when did you first think business was something of interest to you?

CHARLIE MUNGER: Very early. (Laughter)

I loved games of chance and I love trying to learn how to win at them.

WARREN BUFFETT: Yeah. It's interesting for me, you know, simply to think about the question of whether the Final Four of the NCAA will be will be canceled, as opposed to postponed or transferred in locale, and decide if we're going to pay out $75 million the next day if it is canceled, and how much we want to receive in today to take care of that.

And that probably wouldn't interest — all kinds of people that wouldn't be interesting to. And since my dad wouldn't let me become a bookmaker, I went into investments. (Laughter)

25. Cologne Re stake

WARREN BUFFETT: Number 3.

AUDIENCE MEMBER: Good morning. Jens (PH) from Germany.

After buying almost all of Cologne Re, how happy are you about the progress, and what are the plans for the remaining minority shareholders?

WARREN BUFFETT: Yeah. General Re, at the time we bought it in 1998, owned something in the 80s of Cologne Re, a large German company that they bought this 80-odd percent in, a few years earlier.

It's actually slightly more complicated than that because there was an arrangement where a certain purchase was deferred, but as a practical matter they owned in the 80s.

Right now, Gen Re owns about 91 percent of Cologne Re.

That's a subject that, obviously, it's not pressing with us, because we've owned it for seven years without taking our interest up, except periodically through small purchases.

And there's no particular reason to — why 100 would be better than 91 percent.

But if the price is attractive and shares are offered to us, we will always contemplate buying it. But it's not key to any strategy.

26. Munger defends AIG

WARREN BUFFETT: Number 4.

AUDIENCE MEMBER: I'm Christian Tukenberger (PH) from Switzerland, Europe.

What do you think of the two insurance — reinsurance, AIG and Converium, from Switzerland? Thank you.

WARREN BUFFETT: Well, I'm going to give you a chance at a second question because I don't really think I should comment on AIG.

There's, you know, they have said that they're going to have their 10-K. They hope to have it by, I guess, today.

I haven't received any late word whether it's been filed but they have — there'll be more disclosure on the situation at AIG, and I really don't know anything about what will be in that statement, and I'll just — I'll wait to read it. I'll read it with interest. But I — I have no particular insights on that.

Converium has had troubles in the United States, has been announced, but they also raised additional money. But again, I don't really have any specific commentary on those two companies.

Charlie?

CHARLIE MUNGER: Well, I'll be bold enough to make one comment about AIG. (Laughter)

I think whatever comes along, people are going to find that a lot that was very right was done over the years by AIG. There's a lot of ability in that place.

WARREN BUFFETT: Oh yeah. Extraordinary. I mean, Hank Greenberg was — he was the number one man in insurance. I mean, he developed an extraordinary company, in his lifetime.

It wasn't that much when it was handed to him. And he became the most important factor, I would say, by some margin, in the property-casualty business.

But in terms of evaluating where it stands now and what will be revealed when the 10-K comes out, I just have no idea.

27. Fannie Mae, Freddie Mac, and the home mortgage mess

WARREN BUFFETT: Number 5.

AUDIENCE MEMBER: Good morning. My name's Mike Nolan. I'm here from Montclair, New Jersey with my 18-year-old son Brian, who's experiencing his first Berkshire annual meeting.

My question, and you touched on it a little bit in a couple of earlier questions, deals with the current regulatory environment in Washington, which appears to be growing much more negative on Fannie Mae, Freddie Mac, Farmer Mac, and so forth.

What might the implications for the U.S. consumer specifically, and the U.S. economy generally, be if the GSEs are effectively bridled or significantly restricted from their past charters?

Could this prick what you earlier referred, and some private economists are calling, a real estate bubble and what will be the fallout?

WARREN BUFFETT: Yeah. The GSEs, in effect, expanded their original charter and reason for being.

The thought, originally, was that they would guarantee mortgages and they had this very limited, I think, two-and-a-quarter billion dollar line of credit from the Treasury.

But they were they were brought in, to an extent, to do what FHA and VA had done for mortgages in their arena, was to give people confidence in borrowing money — or in lending money — far away from their own geographical location.

I mean, when the local — when I borrowed money on my house in 19 — bought it 1958 — I mean, I went down to see Mr. Brownlee (PH) at the Occidental Building and Loan, and he, you know, he knew something about me, and he knew something about my parents, and he knew where the house was and all of that.

But as the mortgage market became more institutionalized and it became more — the source of funds became geographically far more distant from the user of the funds, in order to have a market in which — which would be efficient, the GSEs were a very logical development.

And the GSEs came in, Freddie and Fannie, and the idea was that for a fee, which used to average about 25 basis points, they would guarantee these mortgages so somebody living 3000 miles away could buy them through securities and not worry about the individual property.

And then, the portfolio operations developed over the following years and, of course, they enabled the GSEs to earn high rates of return on capital, because, in effect, the GSEs were looked at as government guaranteed so that people would lend them money without worrying about the degree of leverage employed.

And, in effect, the GSEs became huge — they hugely developed what might be called the carry trade, using the government's credit, in effect, and the spread between what they paid on their money and what they got on mortgages.

So that became the dominant source of their earnings. They got very carried away with delivering promised rates of growth.

I remember reading in the Freddie Mac report some years ago, where they talked about delivering in the mid-teens or low-teens or something like that.

And I thought to myself, you know, that this is madness, because you can't do that when you're running a big carry trade operation. Interest rate — the slope of the curve will develop.

There's no way to lend money for 30 years to somebody who can pay you off 30 seconds later, to actually match assets and liabilities in a way that's risk-free.

The only way you could do it would be to issue a 30-year bond of your own, which you could call 30 seconds later, and people don't buy those bonds.

So, as a practical matter, you could not perfectly handle the risk of significant interest rate changes.

But the GSEs got caught up with delivering increasing earnings all the time to Wall Street.

So they first enlarged their portfolios and later, as we've seen, they got involved in some accounting shenanigans, which really sort of boggle the mind when you think of two of the most important institutions in the country, with all kinds of financial experts on the board and top-named auditors and everything, and turning out that billions and billions and billions of dollars were misreported.

It shows you what can happen in a system.

Now Congress is reacting, administration is reacting, [Federal Reserve Chairman] Alan Greenspan is reacting, in terms of saying that, you know, what have we created?

What is this — the situation where these two companies have a trillion-and-a half or more of mortgages they own, and people really think the federal government is on the hook, and the federal government does — wants to say it isn't on the hook.

But the truth is, it is on the hook. And institutions worldwide own the credit — own the securities — based on this implied promise. And it was all being done just because, basically, these companies wanted earnings per share to go up.

Now, they say they did it to maintain an orderly market, and all that stuff, in the mortgages. But they were really set up to guarantee mortgage credit.

And there's going to be reaction in Congress. It will be a huge fight.

Both of those institutions have been heavy supporters of various legislators over the years. They've got lots of clout. Not as much clout as they had a year ago, but they've got lots of clout in Congress.

And on the other hand, people have lost faith, to some degree, in what they've done.

And they've also seen that the consequences of the government issuing a blank check to two institutions that are trying to produce annual gains in earnings per share of 15 percent, and doing it by accounting means when they ran out of the ability to do it by other means.

So it's something that Congress should be giving a lot of attention to. They can't cut them off, in my view and, I think, most people's view. They can't say get rid of your portfolios or anything like that.

So my guess is that some kind of a curtailment comes in, some kind of tougher accounting requirements come in, sometimes it may be tougher capital ratios. And that over a long period of time, the government tries to figure out something that sort of eases them out of this

position, where they were basically backing two entities that, at times, acted like the two biggest hedge funds in history.

Charlie?

CHARLIE MUNGER: Yeah. Well, he was asking, partly, is what happens if the government reins these two institutions in and forces a big reduction in asset base.

WARREN BUFFETT: I don't think they'll — I don't think the government is going to do something worse, they sell off hundreds of billions of dollars of mortgages, at all.

But if they curtail it — let's just say they say that from now on you got to operate in a runoff mode for a few years. There are plenty of people out there to buy mortgages.

They're already buying the securities of Fannie Mae and Freddie that are financing the mortgages. So it isn't like Fannie and Freddie, independently, were coming up with the funds to finance these mortgages.

They got them from somebody else and that somebody else can leave Freddie and Fannie out of the picture and buy the mortgages through some other form.

It would not be the end of the world, at all, if Freddie and Fannie no longer had new portfolio purchases. I don't think it would change things in any significant way, in terms of the cost of homeownership or anything else.

How about you, Charlie?

CHARLIE MUNGER: Well, I agree. I don't think it would have enormous macro effects if future growth were curtailed.

I do think a lot of the troubles that came, came from a large use of derivative books, and from Fannie and Freddie both believing a lot of silver-tongue salesmanship from derivative traders.

And, as many of you know, I think there is much wrong with derivative accounting and derivative trading operations in the United States, and I don't think the full penalties have yet been paid.

WARREN BUFFETT: When you can have a $5 billion mismark in one direction at one of these — and bear in mind these are among the most scrutinized companies in the world, and with outstanding people on their boards, in terms of financial expertise — if you can have a $5 billion mismark in one direction, while at the same time the other one has a 9 billion mismark in the other direction, you know, I would say we've come a long way from Jimmy Stewart and "It's a Wonderful Life." (Laughs)

CHARLIE MUNGER: Yeah.

28. UK reporting requirements are a deterrent

WARREN BUFFETT: Number 6.

AUDIENCE MEMBER: Hi, this is Peter Webb from London, U.K.

The question I wanted to ask you: I've been an investor for many years and done very well following a similar sort of style to yourself. So thank you for that.

The big question I have is —

WARREN BUFFETT: Would you want to quantify that? You can always send us a check. (Laughs)

AUDIENCE MEMBER: But if there's a deal to be had, maybe we can speak afterwards.

WARREN BUFFETT: OK. (Laughs)

AUIDENCE MEMBER: The question that I have for yourself and Charlie is, over the time I've bought many different companies in the U.K. and Europe, and I've seen many American value funds buying the same companies, but I see very little activity from Berkshire and its subsidiaries.

And I didn't know whether that was a reflection on your views on U.K., Europe, and the world. Whether you just see a lack of investment opportunity? Is it outside your sphere of competence? Or is there some other reason that I see less activity from you in Europe?

WARREN BUFFETT: Yeah, it's a good question. We own, of course, as you know, 80 percent or so of MidAmerican Energy, which has a very large business in the U.K., but that's an operating business.

As you know, in the U.K. there's a rule that requires reporting when you own three percent of a company's stock. And actually, there's some conditions under which the ownership will be reported even sooner than that three percent.

There's a provision that — I think if there is an inquiry or anything, that it has to be responded to.

So, if you take a company with a market cap of, you know, £5 billion, if we bought £150 million of it, we would have to report, and that tends to mess up subsequent purchases.

So, we bought stock — we own stock in Diageo, which was Guinness at the time. We've owned stock in some other U.K. companies.

But we've thought twice before going over three percent, because of the reporting requirements, and then we'd have to report if we were selling, and all of that.

So that's a deterrent, but it's not an overwhelming deterrent. And if we, you know, if we get a chance to buy a significant piece of something that we think is cheap, particularly if we could buy it in one purchase. But there's a lot of special rules that kick in, over in the U.K., that do not in the United States.

Incidentally, there was something in the Journal the other day that said that we had to report if we bought over five percent of a company within 10 business days in the U.S.

That is not true. That was a mistake in the report. But it is the case in the U.K. that at 3 percent, reporting is triggered.

But there — we would feel very comfortable with lots of U.K. businesses. And, you know, they'd have — it'd be the same criteria we applied over here: a durable competitive advantage, and a management that we like and trust, and a reasonable price.

And we have seen some of those. There was an insurance company in the U.K., a year or so back, that I would very much have liked to have bought, but we couldn't come to terms on price.

But we have no bias whatsoever against buying businesses in the U.K. And as I say, we've — at Yorkshire and Northern Electric, you know, we have a business that, shows in our report, made close to $300 million after-tax.

And actually, considering my views on currency, you know, I would have — I'd give a slight edge to buying something where the earnings would be in sterling in the future, rather than in dollars.

Charlie?

CHARLIE MUNGER: Well, I regard it as kind of amusing that we ended up preferring the currencies of Europe when it's so much more socialized than the United States is. That's a queer occurrence.

WARREN BUFFETT: You actually prefer them or not, Charlie? (Laughs)

CHARLIE MUNGER: Well, certainly in recent — over a considerable period of recent months — we've actually preferred the currencies of socialized Europe to our own currency.

I just regard that as an odd occurrence for both of us. That wouldn't have happened.

WARREN BUFFETT: No. Up till three years ago, if I came back from Europe and I had a euro in my pocket I couldn't wait to run to the bank or someplace. I was afraid it would depreciate before I could get rid of it. But I changed my views a few years ago.

We hope to buy businesses, and stocks, other places in the world. And Charlie mentions the difference in political climate.

One thing: you read about slow growth in Europe and Japan and all those, and it's true. But usually — but the growth figures that you see are usually not on a per capita basis. And since the population of Europe has been, generally, very little changed, whereas the population of the United States grows one or one- and-a-half percent a year, if you look at growth figures in the United States and somebody says three- and-a-fraction percent, that's not on a per capita basis.

I mean, you've got to — you have to deflate that by the growth in population. Whereas, if you read about the growth in Europe, generally, you're dealing with a population base that hasn't changed.

So the differences in growth rate on a per capita basis are not as wide as the headlines would suggest.

29. Legal liability for someone else's accounting?

WARREN BUFFETT: Number 7.

AUDIENCE MEMBER: Gentlemen, my name's Mike McCloskey. I'm from Toronto, Canada.

My question is: what obligation does a financial intermediary, or a party to a transaction, have to ensure that the other party to the transaction properly accounts for it.

WARREN BUFFETT: Well, that question may come up in a very real sense. (Laughs)

But, you know, we have lots of reinsurance transactions, obviously. Banks have lots of transactions with people.

Certainly, if you knowingly are doing something that causes a company that are participating in it, you know, you may have very serious obligations on that.

But on the other hand, if you're — I mean, we reinsure hundreds of companies. They have legal departments. They have auditors.

And there could be somebody out there today — well, they could be doing anything with their accounting. It probably wouldn't be limited to the contract they had with us. It might well be other things.

But it really gets down to whether there's knowing participation, I would say. Isn't that right, Charlie?

CHARLIE MUNGER: Well, as you say, it's a subject rife with ambiguities and different issues.

You have had some bartender liability, if you serve a drink to somebody that's already inebriated, why, some people say the bartender is liable.

On the other hand, radio stations are allowed, in America, to sell advertising time to people that use it for perfectly obvious fraud, and nobody ever sues the radio station.

It's very hard to predict what things are going to get legally shifted around so a supplier gets liability for its customer's behavior.

30. Invest in yourself and ignore asset allocation

WARREN BUFFETT: Number 8.

AUDIENCE MEMBER: My name is (UNINTEL). I live in Sacramento, California.

My question is related to the issue of U.S. trade deficit again and its implications on the future value of the dollar.

Do you think an individual or a business owner here in U.S. should be concerned about the purchasing power of his future dollar earnings or savings, and diversify his or her investments in non-dollar-based securities?

WARREN BUFFETT: I think it's very tough for individuals to either select individual stocks, select individual times to enter the market, select currencies.

I mean, I just think that's a game that they tend to get interested in at the wrong time. There's some adverse selection, in terms of when people who do not follow stocks carefully get interested in stocks.

I think that, you know, the best investment you can have, for most people, is in your own abilities.

I mean, when I talk to students, you know, I would pay a student — in many cases, I would be glad to, you know, pay them $100,000, cash up front, for 10 percent of all their future earnings.

So, I'm willing to pay 100,000 for 10 percent of them, I'm valuing the whole person at a million dollars, just capital value standing there in front of me.

And those — anything you do to develop your own abilities is probably going to be — or your own business — is probably going to be more productive for you than starting to think about individually making commitments into foreign exchange.

If you have a good business in this country earning money in dollars, you'll do ok. I mean, you may live in a world 20 years from now where a couple percent of the GDP is going to service the debts and the ownership that we've created now by running these deficits.

But you'll do fine in America. So, I wouldn't worry about that much.

Charlie?

CHARLIE MUNGER: Well, if you look at Berkshire, you will find that it really doesn't do much of conventional asset allocation to categories.

We are looking for opportunities and we don't much care what category they're in, and we certainly don't want to have our search for opportunities governed by some predetermined artificial bunch of categories.

In this sense, we're totally out of step with modern investment management, but we think they're wrong.

WARREN BUFFETT: Yeah. And incidentally, we have 80 percent of our money, or more — well over 80 percent — tied to this country and to the dollar. So it's not like, you know, we've left the country or anything of the sort.

CHARLIE MUNGER: When have you done a big asset allocation strategy?

WARREN BUFFETT: Never.

CHARLIE MUNGER: Yeah.

WARREN BUFFETT: Yeah.

We end up with peculiar asset mixes. I mean, if the junk bond thing had gone on a little longer, instead of having 7 billion in there, we might have had 30 billion in.

But we were doing that simply based on the fact that it was screaming at us.

And we do the same thing with equities. I mean, back — for many years, we had more than the net worth of Berkshire in equity positions. But they were cheap.

CHARLIE MUNGER: And I want you to remember one of my favorite sayings as you do this asset allocation. "If a thing's not worth doing at all, it's not worth doing well." (Laughter)

WARREN BUFFETT: You can see why Ben Franklin turned the mantle over to Charlie. (Laughter)

31. Lunch break

WARREN BUFFETT: We're going to take a break now, so you can all go out there and enjoy yourself in the adjoining room, and have lunch, and we'll be back here at 12:45.

And those in the other room might come back to this area because I think we'll have enough seats for everybody after lunch.

Afternoon Session - 2005 Meeting

1. Q&A resumes

WARREN BUFFETT: OK, we're going to start in just a minute or two, if you have a chance to sit down.

OK, let's go to station 9. And I've — I'll — we will go till 3 o'clock. We'll break until 3:15, when we'll convene the business meeting. No one has submitted any proposals for that meeting, so it may be relatively short.

At 4 o'clock, Charlie and I will meet in another room here — I'm not sure where — with any of those of you from outside North America that are here. We would like to especially thank you for coming this long distance.

2. We'll "do pretty well" when inflation is high

WARREN BUFFETT: So, with that, we'll go to area 9.

AUDIENCE MEMBER: Good afternoon. My name is Ken Goldberg from Sharon, Massachusetts — Massachusetts, having the distinction of being the birthplace of Benjamin Franklin.

And, thanks to New Jersey, the only state in the Union where one cannot buy GEICO auto insurance. (Laughter)

Earlier this morning, you discussed policies that have eroded, and that threaten to continue to erode, the U.S. dollar.

In some of your earlier letters to shareholders, you warned about the dangers of inflation and cautioned that shareholders should fully take inflation into account when evaluating the performance of a business.

To what degree do you expect a large decline in the value of the dollar to trigger inflation that would adversely impact Berkshire's equity holdings and its businesses?

And to what extent should we calibrate Berkshire's overall performance against the backdrop of a weakening dollar?

WARREN BUFFETT: Well, we think, by and large, we have businesses that will do pretty well in inflation. But inflation destroys value, but it destroys it very unequally.

The best business to have during inflation is one that retains its earning power in real dollars without commensurate investment to, in effect, fund the inflation-produced nominal growth.

The worst kind of business is where you have to keep putting more and more money into a lousy business.

In effect, the airlines have been hurt by inflation over the last 40 years, because now they have to put a whole lot of money in a lousy investment, which is a plane, compared to 30 or 40 years ago.

And they have to stay in the game. They have to keep buying new planes. And the new planes cost far more now, and the returns continue to be inadequate.

So the best protection is a very good business that does not require big capital investment.

And, you know, the best investment at all — of all — I mean, if you're the leading brain surgeon in town or the leading lawyer in town or the — whatever it may be — you don't have to keep re-educating yourself to be that in current terms.

You bought your expertise when you went to medical school or law school in old dollars, and you don't have to keep reinvesting. And you retain your earning power in current dollars.

We — Charlie and I are always suspicious that inflation will regain some of the momentum it had a couple of decades ago. We always think it's in sort of remission.

We thought the talk about deflation was total nonsense. And certainly, the trade picture is one that you would think would accentuate any inflationary trends that might otherwise be experienced. I mean, obviously, the price of oil in euros has gone up far less than the price has gone up in dollars.

And you and I are buying gasoline in dollars, so we have seen a bigger increase in our fuel costs because of the decline of the dollar than we would've seen if we lived in Europe, or some other — or Australia, for that matter.

So, it's — inflation is always a factor in calculating the kind of investment, the kind of business, that we want to buy. But it doesn't — it isn't like it crowds out all other factors. I mean, it's always been with us. We'll think about it always.

See's Candy has done fine during an inflationary period because it does not have huge capital investments that have to be made in current dollars.

Other businesses we have, you know, if we're — the public utility business, for example — it costs a lot more money to maintain capital expenditures now in dollar terms than it would've 30 years ago.

So you have to keep putting more and more money into a public utility. And you'd better hope that the rate of return allowed is commensurate in times of high inflation the same way that it might have been in low inflation with a lower rate of return.

Charlie?

CHARLIE MUNGER: Yeah. Well, so far, the facts that are driving the dollar down in relation to other currencies have been restraining inflation in the United States.

In other words, it's the competitive export advantages of the other people that are — that have so far restrained inflation here. So, it's —

WARREN BUFFETT: Yeah, you're paying less for shoes. You know, we got killed in the — in parts of our shoe business.

And 30 years ago, of the billion-plus pairs of shoes used in the United States, a very high percentage were made here. And now, virtually none are. But if they were all being made here, you would be paying more for shoes. There's no question about that.

CHARLIE MUNGER: Yeah.

3. Buffett: Don't bet against America

WARREN BUFFETT: Number 10.

AUDIENCE MEMBER: I'm a physician from St. Louis. And I want to thank you and everyone here, because I'm one of these doctors that really doesn't know anything about money or finance. The money comes in, but I don't know what to do with it.

I'm not able to really evaluate the financial strength of a company, but I can evaluate the ethical strength of a company. And that's why I feel real comfortable — I think most of us here — having our savings in Berkshire Hathaway. And the —

WARREN BUFFETT: Thank you. (Applause)

AUDIENCE MEMBER: This question has probably been asked in different ways already, but several years ago, a fellow I know who was — had been manager of Magellan Fund — warned that we were going to have a terrible decade or so in the stock market because of all the things people have brought up so far.

The increasing interest rates, and runaway spending, and decreasing dollar, and stagflation may be right around the corner, Social Security problems.

And even what Charlie Munger referred to, is that most of our best and brightest graduates, I find, are going into money management rather than — they're not becoming doctors or molecular biologists or Ph.D.s in chemical engineering.

And so, in view of the fact that a year or two ago, people — there was still an ebullience of emotion about the stock market going up and making everyone rich just by having their money in the stock market — it seems like that ebulliences dropped, and I'm hearing, in anticipation of a bear market.

And you wrote, I think several years ago, that it's hard to make money in a bull market. And the real opportunities come in a bear market.

So, I'm wondering if you would give us a clue as to what your strategies are going to be, if it's really true that the market gets dismal over the next few years.

WARREN BUFFETT: Well, if the market gets cheaper, we will have many more opportunities to do intelligent things with money. Now whether we will blow on the money in the meantime or something is another question.

But, you know, we are going to be buying things — one thing or another — operating businesses, stocks, high-yield bonds, whatever — we're going to be buying things for as long as I live, just like I'm going to be buying groceries —

CHARLIE MUNGER: Longer than that, Warren.

WARREN BUFFETT: Yeah. (Laughter)

Yeah. Charlie's just waiting to take over after I'm — (Laughter)

And I'm going to be buying groceries the rest of life. Now, would I rather have grocery prices go up or down if I'm going to be buying groceries tomorrow and next week and next month and next year? And the answer is obviously, if I'm a net buyer, I would — I will do better if prices are lower.

We have no — we're not good at forecasting markets. I mean, we, in a general way, knew that we were getting enormous bargains in the mid-'70s. We knew that the market went crazy to some extent in the late '90s.

But we don't have much — we don't spend any time — Charlie and I spend no time — thinking or talking about what the stock market is going to do, because we don't know.

We do know, sometimes, that we're getting very good value for our money when we buy some stocks or some bonds, as it may be. But we are not operating on the basis of any kind of macro forecast about stocks.

And there's always a list of reasons — you gave a few — there's always a list of reasons why the country will have problems tomorrow. But there's always a list of opportunities which don't get mentioned quite as often.

So, we don't sit down and make a list of the bad things that are happening in the economy and the good things that are happening, and therefore expecting the stock market —

It might not — it doesn't behave that way even if you could correctly forecast some of the bad things or good things.

Overall, I'm an enormous bull on the country. I mean, over time — I mean, this is the most remarkable success story in the history of the world, if you think about it. I mean, in 1790 we had less than four million people in this country.

We had — there were 290 million people in China. There were 100 million people in Europe. You know, and they all had the same intellect we had. They're in the same general climate. They had lots of natural resources.

And 215 years later, those 3.9 million people, I think, actually, you know, have 30 percent or so of the world's GDP. So, it does not make sense to bet against America.

That doesn't mean all our policies are smart or anything, but I would not — I do not get pessimistic on the country. You know, I worry about the — I mean, the big worry is what can be done by either terrorists or governments that have access to nuclear, chemical, or biological weapons.

But, in terms of the basic economics of the country, your children are going to live better than you live. And your grandchildren are going to live better than your children live. And we do not focus on macro factors.

Charlie?

CHARLIE MUNGER: Well, I agree with you that the economics of the country are probably going to increase for a considerable period ahead. But I suspect that, in very important ways, we are at or near the apex of a great civilization. (Laughter)

WARREN BUFFETT: You heard it here first, folks. (Laughter)

If you leave the NCB — nuclear, chemical, biological — out of it, I do not feel that way. But, you'll get to see which one of us is right 20 or 30 years from now.

It — I have seen more people pass up opportunities because they get focused on a single economic variable or a single problem that the country faces, and they forget about the good things.

I mean, if you can buy very good businesses at attractive prices, it's crazy to say, "I think I'll sit this out because it might get a little cheaper next year," or something of the sort, and because the world's going to go to hell.

We just — we've never operated that — we've never decided not to buy a business we liked because of a macro view. Have we?

CHARLIE MUNGER: Not yet.

WARREN BUFFETT: OK. (Laughter)

It's hard to get him to really agree with you. (Laughter)

I've been working on it for years.

4. GM and Ford haunted by past commitments

WARREN BUFFETT: Number 11.

AUDIENCE MEMBER: Hello. My name is Randall Bellows. I'm from Chicago. And many years ago, Lauren, my wife, did a portrait of you drinking a can of Coke. Next year I'll bring one, drinking a can of Bud.

WARREN BUFFETT: I think you'd better stick with Coke. (Laughs)

AUDIENCE MEMBER: Oh, OK. I would like you to speculate on a couple of questions.

The first is, given the competitive disadvantage of General Motors and Ford with their huge health care liability costs for their employees and retirees, what do you think might happen there? Do you think there might be a bankruptcy to get rid of the liabilities or a government bailout?

And along that line, Charlie, you spoke several years ago about tort issues.

Do you feel there's anything coming in the way of asbestos reform or correction for those issues and the insurance companies that have been paying those billions? Thank you.

WARREN BUFFETT: Well, I would say that Rick Wagoner at General Motors and Bill Ford at Ford, both have been handed, by managers of the past, extremely difficult hands to play.

They're not the consequences of their own doing at all, but they have walked into what people call legacy situations.

But they have inherited a cost structure brought about by contracts that were put in place, maybe decades ago, that make it very difficult for them to be competitive in today's world.

I mean, just imagine if Ford or General Motors had signed contracts that made them pay several thousand dollars a ton more for steel than their competitors did. I mean, it would — people would immediately feel that was untenable.

So, General Motors and Ford are in the position of having commitments, which are, in strong contractual terms, to pay sums for retired, particularly, workers in both the annuity field and in the health field that are staggeringly high compared to some of their competitors.

And their competitors can buy steel at the same price, and they can buy aluminum at the same price, they can buy rubber at the same price.

And when you get all through with it, if they have huge advantages on the health care and the annuity side, it's not going to be a fair fight.

And those contracts, to some day — to some extent — go back to when General Motors had, for example, 50 percent-plus of the U.S. auto market. And now it has 25 percent. But I think even if it had 50 percent today it would be having trouble.

So, it's a very, very tough situation. I'm not sure what I would do if you put me in charge of — I mean, as Bill Buckley said many years ago when he ran for mayor of New York, they said, "What's the first thing you're going to do if you get elected?" He said, "I'll ask for a recount." (Laughter)

Well, that's a little the way I would feel if I got elected CEO of General Motors.

From the standpoint of the UAW, you know, they have a contract, they made a deal. And they've got $90 billion in the pension fund.

It's kind of interesting. The pension fund of General Motors possesses roughly $90 billion. The health care fund has a little more, too, another 20-some billion as I remember.

The whole equity of General Motors is selling for about 14 billion. So after all these years, there's 90 billion set aside for the retirees, and there's 14 billion of equity value that's been heading south for the owners.

And, it would seem that if General Motors had a steel contract that called for — let's say there's a ton of steel in every car — and I'm not saying there is — and if they were paying $2,000 a ton over market — or what their competitors were paying — people would say that that is not a viable situation for the long term.

But they're in a similar situation because the contracts they voluntarily signed.

And part of the reason they signed those — and undoubtedly — was that they bore no accounting consequences at the time.

It's a terrible mistake for managers not to think in terms of reality rather than the accounting numbers.

But back in the '60s, you did not have to account for pensions on an accrual basis. And up till the '90s, you didn't have to account for health care — or the late '80s, whenever it was — on an accrual basis.

And so people said, "Well, if we don't have to count it, it isn't real." Well, believe me, it's real. And the managers today are facing the consequences of that.

So, you know, they've got very tough hands to play.

And, you know, I read about it in the papers. I don't know what's going on there necessarily, but something will have to — in my view — something will have to give in that matter.

And before you answer the asbestos thing, Charlie, what do you think about them?

CHARLIE MUNGER: Warren gave a very optimistic prognosis — (laughter) — in my view.

I think — just because it hasn't happened yet doesn't mean that the problem isn't real.

If you jump out of the window on the 42nd floor, and you're still doing fine on the way down as you pass the 20th — (laughter) — it doesn't mean you don't have a serious problem. (Laughter)

If I were the governor of Michigan, or the president of the United States, or a director of General Motors or Ford, or a family member of Ford, I would want to address the problem right now.

I do not think it's getting better or that Yehuda is going to come over the mountain with a magic wand and make it go away. I think it would be better faced.

WARREN BUFFETT: You want to try the asbestos? (Laughter)

Give us another cheery — (Laughter)

Around the office he's known as Pollyanna. (Laughter)

5. Munger: "Terrible" and "gutless" behavior led to asbestos problem

CHARLIE MUNGER: Well, the asbestos thing has involved terrible behavior by some lying doctors, terrible behavior by a bunch of lawyers who suborned perjury, and gutless behavior by

certain important courts, and even more gutless behavior by politicians who take care of themselves first, naturally.

And it's — these are the forces that are bearing on the problem. It's obviously not going to be handled very well. So, it's a perfectly terrible situation. You keep hoping that it will be so obviously bad that it will finally be addressed.

Some of that happened in California. The workmen's comp system in California had immense fraud in it, particularly egregious fraud by lots of doctors and lots of lawyers and lots of claimants. And it was so awful that it affected the whole employment prospects in California.

And with the [California Governor Arnold] Schwarzenegger revolution, that was partly corrected — I would say maybe 15 percent corrected. And, but it took —

WARREN BUFFETT: Five hundred pushups, Charlie.

CHARLIE MUNGER: What?

WARREN BUFFETT: Five hundred pushups unless it's 100 percent. (Laughter)

CHARLIE MUNGER: So, I think that if it gets bad enough, there is some possibility there will be more correction.

In a sense, it's totally crazy for a court system to be paying tons of money to people that have smoked two packs of cigarettes all their life and have one little spot on a lung that no honest doctor would know what the hell it caused.

And they aren't yet sick, and they're nearly dead anyway from their other behaviors and longevity.

And it's just, it never should have been allowed.

But once you get a powerful political force, even judges fear consequences. And it's very easy just to drift along with an evil system.

Luckily, we aren't using this particular — there are two kinds of asbestos, one of which is virtually harmless and the other which caused all this damage. And we stopped using the damaging asbestos.

And eventually the asbestos problem will go away. But how many people it will leave in some kind of financial wreckage before the storm is over, I can't tell.

I don't think the last Indian has bit the dust, do you, Warren?

WARREN BUFFETT: No, I'm — no.

CHARLIE MUNGER: I think the — but the behavior is so terrible. It's that kind of behavior that makes me talk about apexes of the civilization.

6. Our successors will provide the "same wonderful lack of oversight"

WARREN BUFFETT: Number 12.

AUDIENCE MEMBER: Now, Mr. Buffett and Mr. Munger, my name is Marc Rabinov from Melbourne, Australia.

I think it's rare for diverse collections of businesses to be successful. And I believe an important part of Berkshire's success has been your skillful oversight of the wholly-owned subsidiaries.

My question is, what advice would you give to your successor in managing our diverse portfolio of businesses?

WARREN BUFFETT: Yeah, well, it's a very good point that Charlie and I have been known to rail a bit about companies that go and buy this business and that business. And, of course, that's exactly what we've done ourselves over the years.

I think the motivations have been somewhat different, perhaps, than in many of the cases. And then I think the way we've approached it has been different.

We've — we have been reasonably successful although we've had some notable failures. But we've been reasonably successful in creating a climate where the people who built the businesses continue to run them with the same enthusiasm and energy after they sell to us that they possessed early on.

And I think that you can find all kinds of illustrations in the histories of businesses that are diversified. I mean, Gillette bought 20-some businesses. I remember, back in the '60s, Coke bought all kinds of businesses.

And certainly the cigarette companies did, all kinds of people. The oil companies for a while were doing it. And generally, the experiences were not very good when they got outside of their own fields.

But I think when those companies bought businesses, they really thought they were going to take them over and run them themselves. And Charlie and I are under no illusions that we can run the businesses that we buy as well as, or nearly as well as, the people that have been running them over time.

And, we don't have group vice presidents that — in Omaha — we don't have a whole bunch of directives going out. We don't have companies that were run one way and then we're going to run them entirely differently, and have them reporting in all kinds of special ways to us, and have a human relations department and a public relations department, then the legal department — all kinds of things in Omaha — telling them how to run their businesses.

We think that destroys — can destroy — many good businesses — certainly can destroy the incentive of the people that have already gotten rich to stay around and make us rich in turn. So, I think that has been an important difference.

I think it's been demonstrated well enough to all of those around Berkshire that it's been a very good place, generally, I think, for people, in terms of how they feel about working there. And I think they recognize it works.

So, the successor, to me, will come from within Berkshire. They will have seen how it worked. They will believe in it. They will be surrounded by people who have worked in this manner. And I don't think it will be the most difficult job in the world to keep that engine going down the tracks at 90 miles an hour.

I mean, it isn't like they have to create the system. They will inherit a system.

And I would be amazed if any of the three successors that we will talk about with the directors on Monday, if any of them would not recognize the inherent special values in the system as it now works and take up one of these other models that clearly has been disastrous for one company after another that's diversified.

Charlie?

CHARLIE MUNGER: Yeah. I don't agree with you that the success at Berkshire has come from our oversight of the subsidiary —

WARREN BUFFETT: No.

CHARLIE MUNGER: — companies. It's come from our lack of oversight of the subsidiary companies. And I think our successors will be able to provide the same wonderful lack of oversight — (laughter) — that we have provided.

And if you're not going to use a lot of oversight, you've got to be very careful in what you bring into your corporate family. And you've got to be very careful in treating, honorably and well, the people who are running the businesses over which you're not giving any oversight to speak of.

And I think our system is — it's very different from a General Electric system. And I think their system works very well for them, but I don't think it's the only system in the world that works in corporate capitalism. And I think the Berkshire system will work very well after we're gone.

WARREN BUFFETT: It's a very simple system. I mean, GE works exceptionally well. But when I go back to some of the conglomerates — and that's not a term that I shrink from, but most people do because they think it brings down their P/E or something — but we are a conglomerate. And I hope we become more of a conglomerate.

The — we don't — we haven't succeeded because we had great complicated systems or some magic formulas we apply or anything. We've succeeded because we don't have — we have simplicity itself.

We take people that know how to play their game very well, and we let them play the game. And it's just worked in one field after another. And every now and then we make a mistake. And we'll — you know, there'll be more mistakes made.

But overwhelmingly, it works. And it doesn't require some great business insight or anything like that, in terms of whoever's running this place, to keep that kind of machine in motion. I mean, it is not complicated.

The bigger worry would be that the culture would get tampered with in some way and people would try to oversteer, basically.

But that won't happen. Our board won't let it happen. And the ownership won't let it happen.

And I think we've got something that'll work for a very, very, very long time. And that's why I'm comfortable with the fact that every share I have will go to a foundation that I care about having — getting good financial results in the future.

And I'm quite happy to have them have 100 percent of their money in Berkshire.

7. Berkshire's best-ever investments: GEICO and Ajit Jain

WARREN BUFFETT: Number 1.

AUDIENCE MEMBER: Jonathan Mills (PH) from London, England.

What has been the single best investment of your careers? And why do you consider it to be the best, excluding Berkshire Hathaway itself?

WARREN BUFFETT: Yeah, well probably the best investment, if you're talking about business, was getting Charlie as a partner. And he works cheap, too. (Laughs)

The — we've had — you can't measure it by dollar terms because, obviously, we're doing bigger things now than early on.

I mean, See's was an enormously important part of our success. It doesn't contribute a huge percentage of our net income now, but it provided income that let us buy other things in the past. It taught us a lot of lessons about business, all kinds of things.

So, we've — probably, in terms of what it's done already and where it's going to go over time, probably the single best investment was the first half of GEICO, which we purchased for $40 million. Now the second half cost us 2 billion. I'm glad I didn't buy it in thirds. (Laughter)

But, you know, that 40 million will — for half the company — will turn out very well.

But GEICO — some of our businesses have growth potential, some don't. And we don't require growth potential as part of a business.

If a business makes good money and we can use it to buy other businesses, one of the advantages of the Berkshire system is we have a tax efficient and kind of frictionless way of moving money to the best opportunities. And GEICO, internally, has still enormous possibilities for growth.

Incidentally, we've — you know, I watched that movie and I kept touting the American Express card. But here is our GEICO card, which I'm sure all of you are eligible for.

And I don't advise people using credit cards to revolve. But the truth is that people do, so use a GEICO card if you're going to behave in — if you're going to charge anything.

I still advise you to pay off your account before it starts revolving. And I think it's a terrible mistake for people to get hooked on revolving credit at high interest rates.

And I — that's the first thing I tell students is that, if they don't remember anything else I say, just, you know, don't fool around with charge cards and run up balances that keep getting larger and larger.

But GEICO — GEICO has well over six million customers now. As was mentioned, we entered New Jersey last year. We're adding very rapidly there. It's a great, great business model.

And it's run by a superb human being and businessman, Tony Nicely. And I think it's got a huge potential. But I love them all.

CHARLIE MUNGER: Well, but GEICO, after all, cost $2 billion for the second half and —

WARREN BUFFETT: Right.

CHARLIE MUNGER: — a significant number of tens of millions for the first half.

Now the search expenses that brought us Ajit Jain, now there was an investment that really paid a dividend. I can think of no higher return investment that we've ever made that was better than that one. (Applause)

And I think that's a good life lesson. In other words, getting the right people into your system can frequently be more important than anything else.

8. NYSE should not being trying to earn a profit

WARREN BUFFETT: OK. Let's try number 2.

AUDIENCE MEMBER: I'm Maggie Gilliam (PH) from New York City.

As someone who visited the New York Stock Exchange at a very early age and have been touting its merits over the years, could you comment a little bit about what you think of the shenanigans going on currently?

WARREN BUFFETT: Well —

CHARLIE MUNGER: Where?

WARREN BUFFETT: At the exchange.

CHARLIE MUNGER: Oh.

Warren, you're so good at this. (Laughter)

WARREN BUFFETT: You mean at shenanigans or —

I personally think it would be better if the New York Stock Exchange remained as a neutral — and it's not strictly a non-profit, it'll earn some money — but as a not-for-big-profit, we'll put it, institution.

I mean, the exchange has done a very good job over centuries. It's one of the most important institutions in the world. And the enemy of investment performance is activity. And the creator of profit in a profit-minded exchange is activity.

So, I personally would rather not have an exchange which is trying to increase its earnings per share annually, and thereby wanting to encourage people to trade more actively and create more income for itself.

That will not be, in my view, good for the American investor. So, I think that the exchange of yesterday may be better for the American investor than what looks like it may be the exchange of the tomorrow.

Now there may be all kinds of reasons that are — people find compelling why they want to turn it into a for-profit exchange.

But I know the American investor will not be better off if volume doubles on the New York Stock Exchange.

And I know that the New York Stock Exchange as a for-profit institution would be trying to figure out ways to have that volume increase and to perhaps even charge more money one way or the other.

I mean, you know, the profit of an exchange, the profit of the people working on them, in a sense that's the frictional cost of capitalism. That's coming out of the earnings of the businesses.

And, you know, IBM or General Motors or General Electric will not earn more money because their stock turns over more frequently.

But a for-profit exchange will earn more money. And I do not like the idea of the exchange getting on the side that's against the long-term interest of investors.

Charlie?

CHARLIE MUNGER: Well, I feel, on this one, the same as you do with — much more strongly.

I think we have lost our way when people like the governors of the stock exchange and the CEO fail to realize that they had a duty to the rest of us to act as exemplars, there was — of the right behaviors.

Once your activity is that freighted with public significance, I think you've got a duty to create the right appearances. You have a duty as an exemplar.

I mean, you do not want your first grade school teacher to be fornicating on the floor or drinking booze in the classroom or —

And similarly, you — I don't think you want your stock exchange to be all over the headlines with wretched excess. And I certainly don't think you want to turn the major stock exchange of the country into even more of a casino than it is already.

I think we have totally lost our way on this stuff. And I agree with Warren that it ought to be — (applause) — a public institution that cares deeply about its duties as exemplar.

WARREN BUFFETT: I wish I'd gone to first grade where he did. (Laughter)

CHARLIE MUNGER: I didn't hear that.

WARREN BUFFETT: I said I wish I'd gone to first grade where you did.

9. Buffett (D) and Munger (R) both endorse Social Security

WARREN BUFFETT: Number 3. (Laughter)

AUDIENCE MEMBER: Good afternoon, gentlemen. My name is Glen Strong (PH). I'm from Canton, Ohio. I want to extend a warm thank you to Warren's daughter, Susan, for the fine introduction that she provided for this gathering.

WARREN BUFFETT: Thank you. (Applause)

AUDIENCE MEMBER: Also, a special thank you to your wife, Susan. I thank her for the contributions that she made to the company and for the outstanding example that she obviously set for her husband and the many people that she must have come into contact with. (Applause)

Today, I'm asking for your opinion on Social Security. Shall we call it the government-sponsored Ponzi scheme for retirees?

I am interested in your views on private accounts, age adjustments for retirees, and tax adjustments for the employees. What would you promote if you were in the Oval Office? Thank you.

WARREN BUFFETT: Yeah, the Social Security was introduced in the, what, '36 or '37. My grandfather used to have Charlie bring two pennies to work at the Buffett & Son Grocery Store on Saturday in order to pay his share of Social Security.

Didn't want Charlie getting any false ideas that there was a free lunch in this world. And he gave him a half-hour lecture on the evils of socialism. So, we've had a lot of exposure to Social Security, the various arguments on it.

It was proposed, of course, as insurance, because basically that was the only way [President Franklin] Roosevelt could get it passed. The idea of transfer payments did not — would not have washed in the '30s, certainly.

You know, and I think the first woman that received a Social Security check paid in a total of $22 or something and got 2,400. So, it wasn't insurance. It wasn't insurance at all.

And the transfer payment by the people who are in their productive years to the people who are past their productive years — and we'll get into definitial require — terms as to whether it's 65 or 67 now, you're past productive years — but essentially it's a transfer payment.

I basically believe that anything that would take Social Security payments below their present guaranteed level is a mistake.

I think that in this country — extraordinarily rich country — that the people in their productive years can take care of those outside in both areas, even though the ratio of productive to non-productive has changed and is changing.

But we take care of our young. And a rich country takes care of its young and it takes care of its old.

And incidentally, taking care of its young, when we educate five children in the family, we don't expect that family to pay, you know, five times the tax or something like that.

We recognize that in taking care of the young, that it should not be based on a per capita basis or based on the size of the family. We provide good school — we try to provide good schools — and health and everything for the young overall as part of our overall responsibility.

I believe that a rich country should be doing the same for the older people. There are — you know, Charlie and I came into this world wired in a way that enables us to get very, very, very rich — rich far beyond any possible needs that we could have. And not everybody's wired the same way.

Now if you come into this world wired with an I.Q. of 85 or something of the sort, or disabled or whatever it may be, you know, you are not going to do as well in a market economy, remotely as well, as we do.

But you still provide much of what makes Charlie and I very rich. And, you know, and when it comes to fighting in Iraq or something of the sort, you know, then that becomes an equal opportunity type thing. But when it comes to making a lot of money, it's not equal opportunity in this country.

So I believe that a rich country like ours should not give lower benefits than what takes place now. And I certainly don't think that — and we've got all kinds of mechanisms for saving that are extremely good.

We have 401(k)s in the country. We have taxes on dividends and capital gains at 15 percent, so the money I earn gets taxed at a lower rate than the money that a receptionist in our office may earn.

And I would not be doing so well if I were stuck over in Bangladesh or someplace. So this society is providing huge benefits to me that other societies would not.

And I think that the obligation for the people who do well in this society is to provide a reasonable level of sustenance for those beyond their productive years.

We've got the capability to do it. You know, right now we quit taxing for Social Security at $90,000. But — and that means that everybody in my office is paying — or most of them — are paying 12.4 — 12.2 or 12.4 percent, counting what the company contributes, toward this.

People talk about double taxation of dividends; they're getting taxed for Social Security and they're getting taxed for income on their income. And they're paying a higher rate, or an equal rate overall, in many cases, to the same rate — compared to the rate that I pay. And I think that's sort of nonsense in this society.

So, I don't want to do anything — anything — that hurts the level of the bottom 20 or 30 percent, in terms of their income.

I see people living with fear about health care or living with fear about running out of money in their old age. And I think a society should try to minimize the fear that their inhabitants experience.

And that doesn't mean just fear of getting mugged or something. It means fear that the last 25 years of their life, they're not going to have much income.

So, I would — and the degree to which the administration or other people are worrying about the deficit in Social Security 25 years out, when they have a $500 billion deficit excluding the Social Security surplus now, I mean, just strikes me as nonsense. (Applause)

Here we are deploring something that's going to happen in 20 years that's a fraction of what is happening right now while they're cheering, you know, basically, and talking about further favoritism in the tax laws.

So, I have great trouble with people that say, you know, that this system can't sustain — right now, 4 and a fraction percent of our GDP goes to Social Security.

Fifty years from now, 6 percent — no, 6 and a fraction percent — well, believe me, our GDP will be far larger 50 years from now. And going from 4 percent to 6 percent does not strike me as a terrible prospect.

If you ask me what I would do to change it now, I would means test it. I would lift the $90,000 way up. In fact, I might apply it, you know, on all income. Then you'd really get people's attention.

But — and I would gradually — and we're in the process of doing this — but I would certainly increase the retirement age. I mean, the world in 2005 is much different than the world in 1937, in terms of longevity prospects and the ability to function productively.

Charlie, what do you say?

CHARLIE MUNGER: Well, that's the view from Berkshire's Democratic chairman. (Laughter and applause)

And the odd part of Berkshire on this issue is that the right-wing Republican who is speaking feels more strongly than Warren that the Republicans are out of their cotton-picking minds to be — (applause) — taking on this issue right now.

I do not — If the country is going to get richer at 1 or 2 percent per annum for a long time ahead, and it's going to have more old people who are living longer and spending money on medical care, the idea that eventually a higher share of GDP would be going through Social Security to retirees and so on than we now have is not anathema to me.

It's exactly — it's an exactly logical way to be spending money under different circumstances.

And if the government runs out a little short of money as it gets more Social Security obligations, I see nothing wrong with having some consumption taxes or whatever to pay in a reasonable way for what is a very reasonable expenditure.

Social Security is very successful. Apart from the disability element, which is relatively small, there's practically no fraud. It's hard to fake being dead. (Laughter)

And furthermore, it's a reward for work. All kinds of people are working in this country because they want to eventually qualify for Social Security, just as many people are doing dangerous military service because they want the pension that will come eventually.

So, Social Security is a very capitalistic institution with profoundly good effects. It's one of the most successful things the government has ever done in terms of efficiency and good effects.

And a Republican administration that may shortly have to do something really unpleasant, like face down North Korea or Iran over atom bombs, is wasting its good will over some twaddle that a bunch of economists that haven't thought it through properly devoutly believe? It's a very sad occurrence. (Applause)

10. Don't blame the ratings agencies

WARREN BUFFETT: Number 4.

AUDIENCE MEMBER: Thank you. Bill Ackman from New York, New York.

Four of the handful of triple-A rated companies — AIG, Fannie Mae, Freddie Mac and MBIA — are under formal investigation for accounting shenanigans and are in the process of restating their financials.

Like Charlie said before, I think of a triple-A rated company as an exemplar, a company that should behave with the highest accounting and ethical standards.

My questions this leads me to are, how can investors comfortably invest in any financial service company when even — when a decent percentage of the triple-A rated companies have false and misleading financials?

And I guess the follow-up question is, why don't the rating agencies do some independent due diligence from an accounting standpoint so that they can help serve as a watch on this issue?

WARREN BUFFETT: Well, financial companies are more difficult to analyze than many companies.

I mean, the — it is more — if you take the insurance business, you know, the biggest single element that is very difficult to evaluate, even if you own the company, is the loss and loss adjustment expense reserve.

And that has a huge impact on reported earnings of any given period. And the shorter the period, the more the impact can be from just small changes in assumptions.

You know, we carry, we'll say 45 billion of loss reserves. But, you know, if I had to bet my life on whether 45 billion turned out to be a little over or a little under, I mean, it'd be a — I'd think a long time.

And you could just as easily have a figure of 45 1/2 billion or 44 1/2 billion. And if you were concerned about reporting given earnings in a given period, that would be an easy game to play.

In a bank, you know, it basically is whether the loans are any good. And I've been on the boards of banks. And that's — you know, I've gotten surprises. It's tough to tell.

It's — financial companies — if you're analyzing something like WD-40, you know, or See's Candy, or our brick business, or whatever, you know, they may have good or bad prospects but you're not likely to be fooling yourself much about what's going on currently. But with financial institutions, it's much tougher.

Then you add — throw in derivatives on top of it, and, you know, it's — no one probably knows, you know, perfectly, what some of the — or even within a reasonable range — the exact condition of some of the biggest, you know, banks in the world.

And — but that brings you back to the due diligence question of the agencies. You had very high-grade, very smart — financially smart — people on the boards of both Freddie and Fannie. And yet, you know, one was five billion and one was apparently nine billion.

Those are big numbers. And I don't think those people were negligent. And it's just, it's very, very tough to know precisely what's going on in a financial institution.

Charlie and I were directors of Salomon [Brothers]. And Charlie was on the audit committee. And I forget the size of a few of those things that you found. But, you know, what wasn't found — and that doesn't mean that people below are crooks or anything like that.

It just means that it's very tough with thousands and thousands and thousands of complicated transactions, sometimes involving — the computations involving — multiple variables, it can be very hard to figure out where things stand at any given moment.

And, of course, when the numbers get huge on both sides, and you get small changes in these huge numbers, they have this incredible effect on quarterly or yearly figures because it all comes lumped in — those adjustments — come lumped in a short period of time.

So I just think you have to accept the fact that insurance, banking, finance companies — we've seen all kinds of finance company — both frauds and just big mistakes over time — of just one after another over the years.

And the — it's just a more dangerous field to analyze. It doesn't mean you can't make money in it. We've made a lot of money on it. But it's difficult.

Now, obviously a GEICO, where you're insuring pretty much the same thing — auto drivers — and you get — your statistics are much more valid in something like that than they will be if you're taking something that — like asbestos liability — you're subject to far greater errors in estimation.

Doesn't mean that people aren't operating in good faith. But, you know, I would take — just take the asbestos estimates of the 20 largest insurance companies. I will bet you they're way off, but I don't know in which direction. And that's sort of the nature of financial companies.

I wouldn't fault the rating agencies in terms of not being able to dig into the financials and find things that —

You know, all of the companies that you've talked about have had big name auditors. And our auditors at Berkshire, how many hours did they spend last year?

You know, I don't know whether — what it would be, probably 60, 70,000 hours. And I'm sure at other — you know, if you take major banks, they're spending more than that. But, you know, can they be certain of the numbers? I doubt it.

Charlie?

CHARLIE MUNGER: Yeah. Warren is obviously correct that where you've got complexity, which by its very nature provides better opportunities to be mistaken and not have it come to notice, or to be fraudulent and have it not be found out, you're going to get more fraud and mistakes than you are if you're selling a business where you shovel sand out of the river and sell it by the truckload.

And just as a business that sells natural gas is going to have more explosions than a business that sells sand, a business like these major financial institutions, by its nature, is going to have way more problems.

And that will always be true. And it's true when the financial institutions are owned by governments.

In fact, some of the worst financial reporting in the world is done by governments and governments — institutions like government banks in China, et cetera.

So, if you don't like the lack of perfect accounting in financial institutions, you're in the wrong world.

11. We like our stocks but aren't buying more now

WARREN BUFFETT: Number 5?

AUDIENCE MEMBER: Good afternoon, Mr. Buffett, Mr. Munger. Thank you very much for your wisdom and all your investment advice. I'm Adrian Sherr (PH) and I'm from Hong Kong.

Back in the old days in Hong Kong when somebody turned 100, they got to have tea at Buckingham Palace with the queen. I don't know what you have here in America, but I hope that in 2030 we come back to watch you do 50 pushups at the White House. (Laughter)

CHARLIE MUNGER: It's not the way to bet.

WARREN BUFFETT: Will you settle for 10? (Laughter)

AUDIENCE MEMBER: My question comes in two parts.

Firstly, in 1968-69, you liquidated all your partnerships. And I guess, aside from your holdings in Berkshire Hathaway, you got completely out of the market and stayed out.

In 2000-2001, you mentioned to us that in the coming decade the markets would go, at best, nowhere.

However, despite $50 billion in cash, you and therefore us, remain substantially invested in the market.

So my first question was, how and why is the investment climate different today than in 1968-69 that makes you comfortable remaining substantially invested?

WARREN BUFFETT: Yeah, well, we do own certain securities which we wouldn't — we probably wouldn't — buy at these prices. Some of them we would. Some of them we wouldn't.

We're not unhappy with anything we own. We're not happy with putting more money in, so we're in a zone in some of those securities that — where we wouldn't buy and we wouldn't sell.

Now part of it — that decision relates to the kind of quantities that we deal in. I mean, if we owned 100 shares of each one of the stocks that we own, you know, many billions of dollars' worth, it would be an easier decision to go in and out.

But we would face significant costs — including taxes, but on top of taxes — in trying to go in and out of the big positions we have. And basically we like the businesses.

So, we are not unhappy. We may feel like we wouldn't want to buy more here. But we are not unhappy about being in the businesses in which we have big equity holdings.

Now notwithstanding all of that, a lower percentage of our intrinsic value is represented by the common stocks we own than just about at any time of our history, with the exception of a couple — well, the period right there at the end of 1969 when we liquidated the partnership.

So, we have not made any big statement by purchases of stocks or the ownership of stocks that says we — in any way — says that we think that this is a particularly attractive time to own them.

But we are not unhappy with Coca-Cola. We are not unhappy with American Express. We are not unhappy with — we are not unhappy with Wells Fargo or Moody's. Those are very, very good businesses that we own.

Would we be buying them at today's prices if we, you know — well, the answer is we're not. You know, we've got money. And we may buy more later on. We're more likely to buy more later on than to sell those sort of investments.

But there is a zone, which because of size, because of taxes, where we would neither be a buyer nor a seller.

And we do not see lots of attractive stocks, but we also don't think that there's as much silliness in the market, by far, as there was 5 years ago roughly.

Charlie?

CHARLIE MUNGER: Yeah. One of the things that's interesting about Berkshire lately is that if you take the last four or five things we did in the stock market, with a goodly number of millions, but — billions, really — but small in relation to Berkshire's overall size — our record is much like it used to be in some of the best days.

Where we were able to move around with small amounts of money, the results were quite respectable. But where we were facing the problems of being enormously rich the way we were prevented from the nimble moneymaking record of the past, I don't think that's a permanent state of affairs, but it's never going away either. But it —

WARREN BUFFETT: Explain that one. (Laughter)

CHARLIE MUNGER: Well, I mean, it's that I think we may be able to deploy large amounts —

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: — of money eventually at very satisfactory rates. Whereas in recent times, we have deployed small amounts of money at very satisfactory rates.

And better small than nil. And small is still billions. (Laughter)

12. "I don't see gold as a store of value"

WARREN BUFFETT: Number 6. (Laughter)

AUDIENCE MEMBER: Good afternoon. My name is Mike McGowan (PH) and I'm from Pasadena, California.

I had a pretty good question on Prop 13, but after watching the movie I don't think I'll ask it.

WARREN BUFFETT: Good. (Laughter)

AUDIENCE MEMBER: What I'd like to ask about, I guess, is one quibble and then a question. The question being about financial education, or a study of financial history, that might help people in handling these markets or in — just dealing with investing at or near the apex of Western civilization.

When you mentioned your dad's lectures about "buy gold" back in the 1930s, and then saying, "Well, 60 years later, it hasn't done very well," gold was pretty much pegged at a set price back in the '30s for years and they didn't really let it loose until 1971.

And then it caught up. And then it's kind of bounced around. If you looked at gold maybe now, and derivatives and real estate bubbles and lots of other things, maybe gold wouldn't be such a bad investment, looked at in current terms.

So, my question would be, do you consider that you have some sort of an obligation or duty as financial exemplars to maybe pay a little attention to that classical kind of gold is the benchmark or the bedrock of a financial system, to some extent?

And that it might be nice to talk about it, in your — at least your annual letter to your stockholders — about how people might protect themselves in what's a fairly bubbleous kind of environment from, really, the decline in purchasing power or problems caused by the financial domination that we have today? Thanks.

WARREN BUFFETT: Yeah. I would say that gold would be way down on my list as a store of value. I mean, I would much prefer owning a hundred acres of land near here in Nebraska, or an apartment house, or an index fund.

Gold, we'll say, was freed up 30-odd years ago. But it adjusted to a market that still, if you go back to 1900, you know, you were talking $20 gold. Well, you take 20 to 400 in a hundred years.

The Dow went from 60 to, what, 12- or 13,000 — 12,000 or whatever it might have been — in that same period, and paid you dividends during the time you owned it.

It was 66, I think, at the start of the century. And I forget where it ended, but it's 11- or 12,000. And like I say, it was paying you something every quarter during that period.

And if you owned gold, you paid $20 in 1900 or thereabouts. And then you — we'll say you had $400 a hundred years later. And in the meantime, you paid insurance and perhaps some storage cost.

It really is not — it's not a store of value. And it's — I'm not arguing for paper money, but if you're worried about paper money —

And I think, you know, it makes a lot of sense to worry about paper money over long periods of time — but it's just about — you know, it's just about the last thing I would want to own under those circumstances.

You know, it has — a farm has utility, an apartment house has utility, a business, you know, will produce earnings. And some businesses will produce them in real terms as they go along.

You know, I'd rather have the ability to sell people a pound of candy 20 years from now. And if they're dealing in seashells, I'll get an appropriate number of seashells instead of paper money for it.

But I — it — I just don't — I don't see gold as a store of value. And it's — the truth is, it hasn't worked very well.

But forget about whether it's worked well the last hundred years or the last 50 years or the last 10 years, I see no reason, you know, why it would work well in the future.

I forget whether we're turning about three- or four-thousand tons of gold a year. And, you know, we take it out of the ground in South Africa and we put it in the ground at Fort Knox or someplace, you know, or in the New York Fed. I mean, and it doesn't do much along the way, for anybody.

So, I —

Charlie, how do you feel about gold?

CHARLIE MUNGER: Well, I think gold was — and similar items — that was a great thing to have if you were a well-to-do Jewish family in Vienna in 1935, because you had hazards where that gold had enormous utility to you. But for Berkshire Hathaway sitting here in 2005, it just doesn't interest us at all.

13. No stock bubble right now, but no bargains, either

WARREN BUFFETT: Number 7.

AUDIENCE MEMBER: My name is Al Henderson (PH) from Minnesota. I'd like to thank you both of you for being yourselves and doing so much for all of us and to help enrich ourselves and everyone else.

My question I have is — actually, you already referred to it — that you devote very little time to looking at the total market and look for individual opportunities most.

But I was wondering, in the past you made some excellent presentation on points to consider in projecting reasonable 10-year returns for the stock market and had to devise reduced expectations.

Where do we stand now on your stock market and economic measurements and expected 10-year returns?

WARREN BUFFETT: Yeah. Every now and then — I mean, and I agree — very infrequently, you probably can say something intelligent about markets as a whole.

I mean, that you do see circumstances that are extreme enough that you can make a statement that is likely to look reasonably intelligent five or 10 years later.

And I've seen a few of those times in my lifetime. I mean, I — and I've spoken out a couple of times. And I did in '69 and '74 and a few times. Most of the time, you know, you're in some in between zone.

Obviously, you get more for your money in equities now than you got, say, in the summer of 1999, which is when I delivered a talk out of Sun Valley that later got turned into an article for Fortune.

But that was an — I spoke out then because it was extreme. I mean, I knew in a general way that I was going to be right, particularly in certain aspects of the market, but I didn't know when, and then I didn't know how right or anything of the sort. And you could've done the same thing in the other direction back in the mid-'70s.

I think that if you had to make a choice between owning long-term bonds, which are now yielding — the Treasury — only a little over 4 1/2 percent, or owning equities for the next 20 years, and you couldn't make — change that decision, I would certainly prefer equities.

But I think people that have expectations that they can earn more than 6 or 7 percent in equities, and certainly when they start expecting double digits, I think the degree to what they have expectations, they can do that or that they can find somebody else to do it for them, I think they're making a big mistake.

But 6 or 7 percent is not the end of the world at all. In fact, it — and it gets treated better tax-wise right now than it has almost any — well, really anytime in my lifetime.

So — I don't think we're in bubble-type, at all, valuations in equities. And I don't think we're anywhere close to — remotely close to bargain valuations. And I don't think it's an extreme enough period that you can speak out in some very definitive way about the outlook.

But if you told me I had to go away for 20 years and choose between what's obtainable in an index fund of equities or be committed to long-term bonds, I would rather take equities.

But I think you will get a chance to do something that is more screamingly intelligent in not too many years — and maybe a lot shorter — than the alternatives that you're offered now.

Charlie?

CHARLIE MUNGER: Well, I can't improve on that at all.

14. "Bubble valuation problems" for real estate

WARREN BUFFETT: Well then we'll go to number 8. (Laughter)

AUDIENCE MEMBER: Hello. My name is Hamid Rezapour. I'm from Orinda, California. I had a question about real estate.

And I know this question was asked in previous shareholder meetings about, "How come Berkshire doesn't invest in real estate?" And I believe the answer was that, "We like operating business." So I want to make my question a little bit more specific towards commercial real estate.

So, considering the characteristics of larger-size commercial real estate investments like REITs that can have the behavior and financial returns of an operating business, why not invest in real estate?

Is it because you just don't like the returns? Or the business is just not attractive?

WARREN BUFFETT: Yeah, well, Charlie got his start in real estate. Right, Charlie?

CHARLIE MUNGER: Yeah. I would say, number one, that in a corporation like Berkshire, that's taxable under subchapter C of the Internal Revenue Code, owning real estate is grossly disadvantaged compared to owning it directly by individuals such as yourself. That's number one.

And number two, real estate — investment real estate — is having bubble valuation problems of its own right now.

All my rich friends who own real estate are selling their worst properties. And they're getting bids that come in higher than their highest expectations. And people are competing to take these things off their hands.

I do not find it exciting. And it certainly doesn't fit Berkshire. Name me a lot of C corporations that have been passive holders in real estate and have done well over a whole lot of years. It's almost a null class.

WARREN BUFFETT: Yeah, Charlie and I — I mean, both — more Charlie than I — we've had certain personal real estate investments over time. And it — you know, it's a field that, in general, we understand.

We don't bring that much special to the game, but we understand it. We've made money in it.

And actually, at the time that the NASDAQ about hit its high, REITs were quite cheap in my view. And I have less than 1 percent of my net worth outside of Berkshire, but basically I had that portion all in REITs. They were all small ones at that time.

And — but they were selling at discounts. At that time they were selling at discounts to the values of properties. And those values of properties were much more conservatively figured than today.

Today, you have very fancy prices on real estate. And on top of that, you have the REITs often selling at a premium, though. So, I regard REITs as quite unattractive now, certainly compared to five or six years ago. But that's a group of —

CHARLIE MUNGER: That's for an individual, you regard them as unattractive?

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: And for a corporation, that much more so?

WARREN BUFFETT: Yeah, right. Right. It — the situation changed dramatically from five or six years ago. I mean, the stock market, in many respects, from the 1999-2000 period, is down significantly. REITs are up significantly.

REITs were very unpopular five or six years ago. Now they're popular.

It's better to pay attention to something that is being scorned than something that's being championed. And there's really been a big change in the REIT situation in the last five or six years.

CHARLIE MUNGER: And the REITs have phony accounting.

WARREN BUFFETT: Otherwise, we love them.

CHARLIE MUNGER: Yeah. (Laughter)

WARREN BUFFETT: You don't want to bring up anything in these meetings. (Laughter)

15. Global prosperity helps the U.S.

WARREN BUFFETT: Number 9.

AUDIENCE MEMBER: Good afternoon. My name is Carlos Lock (PH). I'm from Lawrence, Kansas.

The U.S. has had a dominant role in the world economy for about a hundred years. This dominance resembles that of an economic monopoly.

Would you say that the U.S. is a quote- unquote, "a castle with a moat?" And if so, how can we make the moat any bigger? Thank you.

WARREN BUFFETT: Yeah, well, the U.S. has been pretty remarkable, as I indicated in my earlier comment. I mean, you know, essentially, the same population pool pretty much, and they've garnered over this 215-year period, a remarkable share of the world's wealth.

And it's an interesting question as to just why this group of people here have been able to do so much better than the rest of the world, considering we're not any smarter or anything of the sort.

It's not an economic castle anymore. I wouldn't call it that.

What we do is no secret. And I think that the relative importance of America — I mean, we have been a dominant factor in the world, and post-World War II — and I think it will decline somewhat, although I'm not an alarmist on that.

But I think to some extent, the rest of the world, or much of the rest — or some of the rest of the world — is catching on and adopting, you know, sort of best practices, as they say in industry.

And our castle will grow in size, but there will be more castles around it. And I basically think that's a very good thing for the world.

I think the more prosperous, generally, the rest of the world is, you know, the better, generally, it will be for us. And, you know, I've talked about our trade problems. The more trade we have, the better.

We had 1.1 trillion of real trade last year in the country. We would've — with the world — and then we had another 600 billion — 6/10ths of a trillion — that, unilaterally, we bought.

Well, I would love to see the 1.1 trillion grow and grow and grow. It'd be good for us and good for the rest of the world. But I don't think that our prosperity will come — in the future will come at the expense of the rest of the world at all.

I do think that there were parts of the world that will grow economically from a lower base, but much faster than the U.S. And basically, I think that's a good thing.

I mean, there are six billion people in this world, and a lot of them don't live very well. And I would hope that 20 or 50 years from now that it's a higher percentage of them would live well and that — but I don't think it comes out of our hide at all.

Charlie?

CHARLIE MUNGER: Well, I don't think it comes out of our hide in that sense, but if we are now the richest and most powerful nation in the world and 50 or a hundred years from now we're a

poor third to some country in Asia, sure, we're richer, but it's a peculiar type of richness where you've lost your relative position in the world.

It's not all — I think if I had to bet, I would bet that the part of the world that does best is Asia, in terms of percentage gains per annum.

And I think it might do amazingly well if it doesn't blow up in some way. And if it does amazingly well, it will eventually be a much richer place than ours.

WARREN BUFFETT: Mm-hmm.

16. "Unwise" economic policies, but no "Armageddon"

WARREN BUFFETT: Number 10.

AUDIENCE MEMBER: Good afternoon, gentlemen. I'm Thorsten Kramer (PH) from Cologne, Germany.

You've criticized the extraordinary large stake that the financial sector in the United States is currently representing in relation to GDP, which is also reflected in a total credit volume exceeding GDP by roughly 250 percent, significantly up from the level we've seen a decade ago.

A current account deficit and budget deficit running at 6 percent of GDP, in combination with a still accommodating easy money policy, and high asset prices, will have to be consolidated sooner or later.

How do you think the adjustment will take place? What are your two most likely scenarios how these huge imbalances might be consolidated? And is the dollar devaluation scenario your most favorite one?

WARREN BUFFETT: Well, as I said earlier, I don't see how the situation resolves itself with a stronger dollar.

Most people still seem fairly sanguine about the fact that there won't be anything terribly bumpy about it, that there'll be this so-called soft landing.

And I don't know whether that'll be the case or not. But I would say that we're running the risk of having markets that could get chaotic if certain events converged, superimposed upon those factors that you just listed.

But I don't — I'm not an Armageddon type at all on the economy. I mean, the things you named are important factors.

I think that absent something happening in the terrorism field, I think that, you know, the citizens of the United States, on balance, will be living better ten years from now than now, and 20 years from now than now.

But I do think that we're following policies that are unwise. But we've done that plenty of times over history. I mean, [investor] Peter Lynch has always said, you know, "Buy a business that's so good that an idiot can run it, because sooner or later one will." (Laughter)

We've got a country that's so good that we can have policies that are counterproductive — (applause) — and we'll still come out OK.

Just think of what we've had over the years. I mean, you know, Warren Harding, Chester Arthur?

I mean, we've had a lot of things in this country. We had the Civil War. We had all kinds of things over the years.

But the society has marched forward, with some fits and starts, but still at a very significant clip.

The real GDP per capita is seven times, in the U.S., what it was a hundred years ago. Just think of that. One century in the human pageant, and a sevenfold increase in GDP per capita. It's remarkable.

So, I acknowledge, you know, consumer debt doing what it's done and the trade deficit being what it is. And I think that those things — particularly the trade deficit — should be addressed, and promptly. But I don't think they pull down the whole place.

They may create, you know, very severe dislocations in financial markets from time to time. But that's been the history of this country. I mean, we have had very dramatic things happen in financial markets over the years. And the country survives despite that.

And sometimes there's great opportunity in those dislocations. There's likely to be.

So I'm not pessimistic about the U.S. at all. You know, I can't imagine anyplace that I would rather be.

But whether — when you say the two most likely outcomes, I think the eventual outcome is that the country does fine. But I think a — there's a significant possibility that you do have some chaotic financial markets at one time or another. But we've had them historically.

Charlie?

CHARLIE MUNGER: Yeah, we don't have any great record as macroeconomic predictors. And I don't see any reason why we should really start now.

Obviously, there are more chances for convulsion now. I mean, everybody from [former Federal Reserve Chairman] Paul Volcker on has looked at the current figures and said we could have some kind of convulsion as a consequence of (inaudible). Apart from knowing that, we have no contribution to make.

WARREN BUFFETT: Yeah, I do think, as I mentioned earlier, that far greater sums, relatively, in one asset class after another, are held by people who — where it's really on a hair-trigger type mechanism.

So, the creation of lots of new financial instruments, the piling up of huge amounts by intermediaries or agency activities in terms of money management, I think they lend themselves to more explosive outcomes on any given day than might have been the case some years back when I was selling utility stocks to people, a hundred shares at a time in Omaha.

I mean, those — that money was not on a hair-trigger basis. But as you turn it over to fund managers who think their job is to beat the S&P in — on a short-term basis — you are getting very short time horizons on huge amounts of money.

And those people may think they are operating independently in one sense. But they're responding to the same stimuli. And they can, as they did in the fall of 1998, they can all head for the exits — or try to head for the exits — at one time.

And the thing about financial instruments is there is no exit. I mean, the only way that you get rid of a financial — the only way you leave your seat in a burning theatre in financial markets is to find somebody else to take the seat. And that is not always easy.

CHARLIE MUNGER: I think it —

WARREN BUFFETT: However — go ahead.

CHARLIE MUNGER: — I think it's also true that the amount of credit being used, not only by hedge funds but by ordinary investors, is way heavier than most people realize.

It wasn't even controversial in this country when we came to introduce single-stock futures and what — you know, commonly traded puts and calls.

And ordinary people got in trouble. If I'd been running the country, I never would have allowed that. I don't know what good it does for the country to have a wonderful — a lot of trading in puts and calls.

One of my children knew a nice man who had a $2 1/2 million house and $5 million worth of wonderful securities.

But he couldn't live as comfortably — he never worked — as he liked to live on the income from his $5 million of securities. And he got in the habit of picking up easy money with the credit systems of the world. He kept selling naked puts secured by his account, including puts on a whole lot of internet stocks.

And in due time, he didn't have the $5 million of securities, and he didn't have the house, and he now works in a restaurant.

That kind of self-destruction wasn't possible before we created all these wonderful trading opportunities involving credit.

It was not a smart thing for this country to do, to legalize gambling everywhere and to bring it in a more facile form into our investment practices. (Applause)

WARREN BUFFETT: Is there anyone we've forgotten to offend? I mean, we — (Laughter)

CHARLIE MUNGER: Yeah.

WARREN BUFFETT: — we don't want to miss anyone. (Laughter)

17. Why Berkshire's board is better

WARREN BUFFETT: Number 11, please.

AUDIENCE MEMBER: Good afternoon, Mr. Chairman, Mr. Vice Chairman. My name is Andy Peake. I'm from Weston, Connecticut.

Recently, we've seen a number of corporate boards take forceful action — Hewlett-Packard and Boeing, for example. We have also seen board members from WorldCom pay large amounts to personally settle lawsuits.

Today we see Morgan Stanley embroiled in a bitter battle, largely based on divergent views of how to govern the firm.

What responsibilities do directors have in this new environment? And what do you look for in your directors?

WARREN BUFFETT: Charlie, why don't you take that one first?

CHARLIE MUNGER: Well, we are completely out of step with modern practices with directors.

The modern practice is to have one from each diversity category, and to have a whole lot of people who need, more or less, the 100,000 or $200,000 per year that they're paid for being a director. And people think this makes the system better.

At Berkshire, all the directors are rich and they own a lot of stock in Berkshire. And they're all very smart. And they don't get any liability insurance provided by Berkshire.

So, we've been waiting for our system to spread, but it — we seem to be losing. (Laughter)

WARREN BUFFETT: Yeah, it's a tough job, at times, to be a director.

The real problem that you can face, and may often face, is when you're dealing with mediocrity.

I mean, if you have a baseball team and you have a .240 hitter in the majors, a .240 hitter in the majors is still a pretty good baseball player. But if your job is to have a winning team, you get rid of him. And you find somebody that can bat .280 or .290 and field just as well.

In business, the tough part is to get rid of something a notch or two above mediocrity, but not the best one that could be found.

And when people meet every couple of months, and they come from different parts of the country, and they have the normal social instincts — they don't like to have rump meetings or to sort of talk behind people's backs — it's very difficult for a group, and particularly if it's a group like Charlie described where a significant number of them, the directors' fees they earn are important to their well-being, and they like — they'd love to be recommended for another board and add another $100,000 a year to their income.

It's very difficult for somebody to lead a charge and all of a sudden start at the meeting or trying to arrange a rump meeting of some sort to say, you know, "We really think this guy at the head of the table's no good."

And changing — dealing with mediocrity is — or, like I say, a notch above it, is a difficult problem if you're a board member.

And we believe that, you know, independence is — it's a state of mind. I mean, it — and it's a willingness, but not the eagerness, to challenge the ideas of others.

And to — if you see a merger that doesn't make sense — and Charlie and I have seen a lot of them, and we've been on the boards, and sometimes we've spoken up and sometimes we haven't spoken up — to be able to — you know, you can — the group around you, in terms of social behavior, can only tolerate a certain amount of obnoxiousness on the part of yourself.

You have to sort of ration it out. And so you save yourself for big ones. And then, it's not necessarily an easy equation.

And certainly, I would say, of the things I've seen proposed in the way of major acquisitions and — a significant percentage of them I wouldn't do myself. But would I overrule somebody else?

I wouldn't get the votes probably anyway. And it's a very difficult thing to do. You could occasionally fire a bullet if you think it's important enough, and usually it doesn't do any good.

So, I — we have a group that has — every one of them has significant money invested in Berkshire. They all bought it in the market just like you did. I mean, nobody — I mean, I've been on all these boards and they keep handing me things.

And, you know, I had shares of this one and that one are given to me, or options or whatever, matching charitable contributions, all kinds of things.

But we have real owners on our board. And what they make for being board members is really inconsequential, as I get reminded occasionally — (laughter) — compared to their investment. And they're friends of mine.

They're smart. They're very smart. I mean, they are hand-picked, in terms of business brainpower and quality of a human being. And I really think that, you know, we have the best board in the country.

But the people that want — who make their evaluations by checklist, you know, whether — either in terms of diversity or in terms of supposed independence — although I don't know how anybody that's getting half their income from board memberships can be independent — you know, we don't — we may not stack up so well.

But it's the kind of board that I want to have, knowing that if I die tonight that virtually everything I have goes to a foundation. I want that foundation to have as much money over the years to spend as possible.

And there's no group of people I'd rather have in charge of the decision subsequent to my death than the people that we've got on our —

18. Short gap due to tape change at time of recording

Text on screen: "Tape Change"

19. Gates is smart but we must stock to our "circle of competence"

WARREN BUFFETT: (Laughter) No, the answer is that Charlie and I, in managing Berkshire, try to do things — put money in things — that we understand.

And when I mean understand, I mean, that we — where we think we know, in a reasonable way, what the economics will look like in five or 10 or 20 years.

And Bill [Gates] is a lot smarter about a whole lot of things than I am. But it's still Charlie and I that have the responsibility for managing the money.

And we'll stick in what we consider to be our circle of competence. And the fact that somebody else's circle is wider or different, you know, that's the way the world is.

I'll listen to any idea Bill has. Believe me, I will listen to him. I mean, he is a — he's not only a smart manager, but he's a smart investor. And I think, actually our ideas on investment overlap to quite an extent.

But I still wish I'd bought a little Microsoft when I first met him. (Laughs)

Charlie?

20. If corporate directors need the money, they're not independent

CHARLIE MUNGER: I think what has happened at Berkshire is just wonderfully for the good. And I do think we have a perfectly marvelous board. What makes me sad, as I said earlier, is I don't see more of the same practice followed elsewhere.

A director getting $150,000 a year from a company, who needs it, is not an independent director. That director automatically becomes an inside director. And so it's a typical government intervention. It's just — it says it's doing one thing and it does another.

WARREN BUFFETT: Yeah, I have never — I've been on 19 boards — I have never seen a director, where the directors' fees were important to them, object to an acquisition proposal, object to a compensation arrangement of the CEO. It's just never happened, you know — in my experience.

And you know, they do not — they frequently do not — behave as they would if they owned the place. And basically we want people that behave as if they own the place.

CHARLIE MUNGER: The correct system is the Elihu Root system. Elihu Root, who had three different cabinet appointments, if I remember right, said no man was fit to hold public office who wasn't perfectly willing to leave it at any time.

And if Elihu Root didn't approve of something the government asked him to do, he could always go back and be the most sought after lawyer in the world. He had an identity to go back to and he didn't need the government's salary.

And I think that ought to be more the test in corporate directorships. Is a man really fit to make tough calls who isn't perfectly willing to leave the office at any time? My answer is no.

WARREN BUFFETT: Yeah, we have one of our directors who was — who's been removed twice from compensation committees of other corporations because he had the temerity to actually question whether the compensation arrangement being suggested was the appropriate one.

I mean, it — the — it's not — being put on the comp committee of American corporations, as I've said, they're not — they're looking for Chihuahuas, and not Great Danes and Dobermans and —

CHARLIE MUNGER: Yeah.

WARREN BUFFETT: Yeah. And I hope I'm not insulting any of my friends that are on comp committees. (Laughs)

CHARLIE MUNGER: You're insulting the dogs. (Laughter and applause)

21. Why we keep companies despite disappointing results

WARREN BUFFETT: OK, number 1. (Laughter)

AUDIENCE MEMBER: Hello. I'm Rory Johnson (PH). I'm from Suffolk in the U.K.

Do you have, or are there, any appropriate criteria, beyond purely financial returns, in assessing the success or otherwise of your investments?

WARREN BUFFETT: Well, I would say that the financial returns, achieved in a way that we want them to be achieved, are the determinant of whether we've made an intelligent commitment.

Now, we don't get rid of companies that don't meet our original expectations. There's a section in the back of our annual report on the economic principles. And I forget which one it is. It's toward the end.

But we say that Charlie and I have this quirk, which business schools would teach is a mistake, in that if we have a business that's underperforming and we could sell it and put — and achieve greater returns someplace else, we don't do it.

We say that if a business is going to permanently lose money, we'll get rid of it. If it has major labor problems over a period of time, we might get rid of it. But we are not going to engage in what we call gin-rummy type management where we pick up one card and discard another.

And so we will not — if a business has been disappointing to us, but we like the people there and we're not having — not because of labor problems — and we're not going to have to put money in incessantly, we will stay with it when business school theory and management theory would say get rid of it and do something else.

We don't disagree with the people that do it that way. It's just that we don't want to live our lives that way. And if we owned 100 percent of Berkshire we wouldn't do it that way.

And we don't — we just — we want the shareholders to know that we have this mindset that may produce slightly suboptimal returns because of our attitude. But that's the way we're going to play it, and we tell people ahead of time that that's the way we're going to play it.

We like being associated with the managers that we are, even the ones that are in — facing headwinds. I mean, but in a sense you almost identify more with the ones that are facing headwinds because they're doing a hell of a job under very tough conditions.

And every business decision or investment decision isn't going to work out perfectly. And some businesses are going to run into unexpected surprises.

But the people that have gone in with us have stuck with us in times like that. And our attitude is we'll stick with them.

So to the — I would say that how the people behave with us after we buy the business is an important part of how we feel about, you know, the whole relationship as well as the returns achieved.

Charlie?

22. Moral distinction between buying a stock and a company

CHARLIE MUNGER: Yeah. I think he's asking in part, are there some businesses we won't have as subsidiaries in Berkshire even though they're wonderful businesses? So, are we rejecting some business opportunities on moral grounds?

WARREN BUFFETT: Yeah, well we've referred in past meetings to one we did on that basis. We will own stocks of companies where we wouldn't want to own the whole business. I mean, you know, you can —

I'm not sure that the logic is perfect on that, but we would not have trouble owning stock in a cigarette company. We wouldn't want to manufacture cigarettes, you know. We might own a retail company that sells cigarettes. I mean, there's all kinds of gradations.

But we do not — there are things we don't want to own and be responsible for their businesses, where we have no problem owning their stocks or bonds. And some years back, Charlie and I went down to, where, Memphis?

CHARLIE MUNGER: Yeah.

WARREN BUFFETT: Yeah, we looked at a — and we were invited down, and we looked at a company that made a product that — perfectly legal — probably one of the best businesses I've ever seen, in terms of the economics of it.

CHARLIE MUNGER: Absolutely.

WARREN BUFFETT: Still doing very well. And we met in the room with — we went to a hotel. We met in the room with the people that had the business. And people were perfectly decent people. And they described the business to us. And we went down in the lobby.

And as I remember, we sat down in the lobby and just decided that we didn't want to be in that business. And, you know, the lines are not perfect on this sort of thing.

I mean, it — I'm sure that there may be ads in the Buffalo News that are selling some investment service or something that I would cringe at if I knew the people involved or what they were selling.

And it — if you own a big retail establishment, a retailer, general merchandise, you know, you're probably going to be selling cigarettes when you don't think that you should smoke yourself or that your children should smoke. And it's — they're not perfect.

But we have turned down some — the most dramatic being that one because we went — took us a trip of 1,000 miles or so to finally face up to the fact that we didn't want to own it.

Charlie, you have anything to add on it?

CHARLIE MUNGER: No, but that was interesting because we were young and poor then by modern standards. And, you know, we're very human. And we could see it was just, like, putting $100 million in a bushel basket and setting it on fire as we walked away. And — (Laughter)

WARREN BUFFETT: You're making me feel bad. (Laughter)

CHARLIE MUNGER: We made the decision all right and with no difficulty. But there was a certain twinge. (Laughter)

23. Munger's collected wisdom

WARREN BUFFETT: Number 2.

AUDIENCE MEMBER: My name is J Dwight. I'm from a small town in Maine called Wilton, Maine. My question comes more of a request.

And could Charlie Munger create a curriculum, or a list of reading and experiences, which he believes would lead to his concept of worldly wisdom? This would serve two great — three great purposes.

One, it would pass on the most valuable possession — that is your knowledge and experience — to us and to others in the future.

Two, it would preserve and enhance that wealth beyond the material riches endowed on future generations.

And three, it would begin to remedy the stunted educations of those like — Mr. Munger — are plunging along with ordinary will, with time to improve ourselves. Thank you.

CHARLIE MUNGER: Well, of course, Peter Kaufman has tried to do that in that book that he stitched together out of my old speeches plus a lot else.

And I didn't want to do it. And he went and saw Warren, and Warren got enthusiastic. And Warren suggested this ridiculous name, "Poor Charlie's Almanack." (Laughter)

And between the two of them, they really got me to do it. But the whole idea of doing it is with just the motivation you're talking about.

I think if you assimilate everything in that simple book, you will know a lot more than about 95 percent of your compatriots.

And it's not that hard to do. So, Peter Kaufman has made it easy for you.

WARREN BUFFETT: Yeah, I couldn't be more enthusiastic about what you suggested. And it's been done. And it's a sensational book. And anybody that reads it is going to learn a whole, whole lot about life.

And you'll learn even — to get you to read it, I'll tell you you'll even learn something about making money. The — and it's right next door here, they haven't sold out.

24. Future of pharmaceuticals is "too hard"

WARREN BUFFETT: Number 3, please?

AUDIENCE MEMBER: Good afternoon. Scott Jeffords (PH) from Davidson, North Carolina.

The major pharmaceutical companies have faced a myriad of fundamental and legal challenges in recent years.

With that in mind, and given the apparent ongoing nature of those obstacles, how should investors be thinking about the long-term prospects for this very important industry?

WARREN BUFFETT: Well, my answer is, I don't know. But maybe Charlie will. And it's — you know, it's a terrific question.

It's just that — that industry is in a state of flux now. It does very important things for mankind. It's historically earned good returns — very good returns — on invested capital.

But it's going — it could well be that the world will unfold differently for those companies in the future than the past. It may — that may not be the case.

And I'm — I don't think I'm really qualified to give you a good answer on that because much of it is in the political realm. And my judgment about the — what politicians will do is probably not better than yours.

Charlie?

CHARLIE MUNGER: I share Warren's agnosticism on the subject. We just throw some decisions into the "too hard" pile and go on to others. (Laughter)

25. No "degree of difficulty" adjustment for investing

WARREN BUFFETT: Incidentally, there's a lot of wisdom in that remark. I mean, there are things in life that you don't have to make a decision on and that are too hard.

And many years ago on one of the reports, I said one of the interesting things about investment is that there's no degree of difficulty factor.

I mean, if you're going to go diving in the Olympics and try to win a gold medal, you get paid more, in effect, for certain kinds of dives than others because they're more difficult. And they properly adjust for that factor.

But in terms of investing, there is no degree of difficulty. If something is staring you right in the face and the easiest decision in the world, the payoff, can be huge. And we get paid, not for jumping over 7-foot bars, but for stepping over 1-foot bars.

And the biggest thing we have to do is decide which ones are the 1-foot bars and which ones are the 7-foot bars so when we go to step we don't bump into the bar. And that is something that I think we're reasonably good at.

Now maybe we cast out too many things as being too hard and thereby narrow our universe. But I'd rather have the narrow — the universe be a little too — interpret it as being a little too — a little smaller than it really is, than being interpreted as larger than it is.

Charlie?

CHARLIE MUNGER: Obviously.

26. Avoiding emotional investment traps

WARREN BUFFETT: 4. (Laughter)

AUDIENCE MEMBER: Good afternoon. I'm Whitney Tilson, a shareholder from New York City.

And one of the things I find most refreshing and admirable about you, as corporate leaders, is that you're very candid about making mistakes, and — as you put it last year, Mr. Munger — rubbing your noses in it.

Last year, Mr. Buffett, you talked about the $10 billion mistake of starting to buy Walmart and then stopping after it had ticked up a little bit.

Today, you seem to allude to a somewhat similar mistake. You bought a stake in PetroChina. Then after it was disclosed that you owned it, it popped up a bit. And obviously in hindsight, you could have made a lot of money had you continued buying it.

If these emotional traps — I think you called it "anchoring" at last year's annual meeting — are the traps that even people as experienced as you gentlemen are, occasionally fall into, I sort of wonder what hope do the rest of us have?

So, my question is, is how do you — what are the mental tricks you have? Or how do you overcome these behavioral and emotional traps like anchoring? And what advice do you have for us?

WARREN BUFFETT: Well, that's a good question. And, of course, it first — the first step is in recognition of the fact that they can be traps and that you will be affected by them. And you will make some mistakes because of them.

But Charlie in his — in "Poor Charlie's Almanack," which I probably do take credit for the name of, and the — he talks about the various psychological traps that people fall into. And simply reading that section, you will come away wiser than before you started on it.

We will — our personalities are such that Charlie and I probably are a little less prone to some of those mistakes than other people are. But as our record clearly indicates, we still are prone to them. And we make them and we'll make them again.

We're probably a little less inclined to make some of them than we were 30 or 40 years ago. But, you know, the nice thing about it is, though, is that if you make fewer of those mistakes than others, you know, they will continue making their share and you'll get very rich.

Charlie?

CHARLIE MUNGER: Yeah. You don't have to have perfect wisdom to get very rich. All you've got to do is have slightly more than other people, on average, over a long time. (Applause)

WARREN BUFFETT: You know, it's the old story about the guy outrunning the bear. I mean, I don't have to outrun the bear. I just have to outrun that other fellow. And — (Laughter)

27. Low Treasury yields are a mystery

WARREN BUFFETT: Number 5.

AUDIENCE MEMBER: Hi, I'm Steve Casbell (PH) from Atlanta.

With signs of inflation, you know, in commodities and oil, why do you think the 10-year is still — you know, the yield is 4.2 percent? And, you know, is it that the market sees signs of deflation coming in the future?

And in addition to that, if you thought rates would stay at this level for an extended period, would you have a more favorable view of the market?

WARREN BUFFETT: Well, the answer to the second part is yes. I mean, if somebody guaranteed me that the 10-year rate would never go above 4.2 percent for the next 50 years, we would have to readjust, recalibrate every decision we make around Berkshire.

I think it was [Federal Reserve Chairman] Alan Greenspan, I don't know whether he's talking about the 10-year or what is the closest thing now to the 30-year — we don't issue 30-years anymore — but the — he referred to it as a conundrum.

And after I looked it up, I decided I agreed with him. (Laughter)

I don't understand it. And — but that's OK. There's a lot of things in financial markets I don't understand. And that doesn't mean I have to make a decision.

I don't have to either go long or go short, the 10-year. Although by keeping as much money as we do short, we are in effect at least making the decision that we don't want to be long, long bonds.

That doesn't mean we think it necessarily would be smart to be short them. But we do not want to be long, longer bonds. And I —

If you'd told me two years ago that every move that the Fed would make in the last two years, and you told me all the other variables that would take place, and you'd asked me what the 10-year rate would be at this time, I would have been very wrong.

So, you know, it's not a game I've excelled at so far. I'm puzzled by it. And we'll see where it is next year when we meet.

Charlie?

CHARLIE MUNGER: Yeah, I think the one thing you can confidently predict is there won't be some automatic and rational correlation between inflation and interest rates. There will be weird diversions.

WARREN BUFFETT: Do you want to elaborate on how these weird things will manifest themselves?

CHARLIE MUNGER: No, no. All I know is it happens.

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: Frequently very surprising.

WARREN BUFFETT: Well, it surprised us on this so far, didn't it?

CHARLIE MUNGER: Sure.

WARREN BUFFETT: Yeah.

28. "Finite" insurance

WARREN BUFFETT: Number 6.

AUDIENCE MEMBER: Hi. Glenn Tongue from New York City. I hope this does not overstate your ground rules.

I've read what you have written about finance reinsurance in the annual report. There's been much erroneous stuff written recently about finite reinsurance. Can you simply explain the product and its importance to Berkshire?

WARREN BUFFETT: Yeah, well it's a good question because the term has been used, "finite reinsurance." And, you know, basically almost all insurance is finite.

I mean, if you have a $200,000 homeowner's policy, or if you have a 100/300 auto liability, that's a finite policy. The insurance company will pay you that much and pay you no more.

And with the exception of workers' comp, and maybe there's something else I'm forgetting about, but basically all insurance is denominated in some amount with a limit.

That 500 million we wrote on that airport, I mean, we can lose 500 million but I don't think we can lose 501 million. And so the — I think the term finite has gotten — it's gotten to be convenient to use without anybody totally describing it well.

Actually, when the SEC sent out its first request for information, I think they called it non-traditional insurance. And I think that may be a better term to use in terms of what's being looked at.

And there is nothing wrong — I mean, there's nothing wrong at all with finite insurance. We're issuing finite insurance policies every day at our — on our auto policies and everything else.

And there's nothing wrong, in my view, at all with retroactive contracts. For example, we wrote — a few years back we wrote a — and this is very rough, but it'd been in the press, so that I'm not violating any confidences of clients —

We wrote a contract as I remember — and I may be just a little off on this — that to pay, when INA was being sold to ACE, we — to pay 2 1/2 billion of claims from the past. And I think we got a premium around 1 1/4 billion on it.

Now, we were making an estimate or a guess as to whether the whole 2 1/2 billion would be paid, how fast it would be paid, and a lot of things.

And ACE, on the other hand, was getting rid of 2 1/2 billion of potential liabilities, and they did not have the capital strength of Berkshire.

And that contract went before the Pennsylvania Insurance Department. It was improved. I mean, it had value to both parties. It had — you can argue it had value to the public in that Berkshire was a stronger insurer.

Actually, in the first quarter of last year in our 10-Q, you will see that we recorded a loss of $100 million because the payment pattern on that contract turned out to be faster than we anticipated.

I mean, there was risk involved. But it was all retroactive and a perfectly proper contract, in my view, or I think anybody's view. And we would do more of that business. In fact, we looked at a very, very big one here recently.

What I think the — and understandably — the authorities are looking for is that contracts that had no purpose and that were possibly misused by some party in accounting. And the facts on that remain to be seen.

But I think calling it finite, it just isn't the right descriptive word. I think that, like I say, non-traditional — we can have a lot of non — we issue non-traditional products all the time.

I mean, I talked last year about the billion-dollar thing for PepsiCo. That certainly isn't traditional. But it's real insurance.

And the question is whether risk is transferred. But the risk on the ACE contract, for example, was several.

One is, we had a risk as to whether the whole 2 1/2 billion would be paid. Second, was how fast it would be paid. And the third risk is what you can do with the money in between. And money hasn't been worth very much to us lately. So, there was risk in that. And that's what insurance is all about.

Charlie?

CHARLIE MUNGER: Well, I certainly agree with you about the word finite reinsurance. It's — absolutely — you could hardly not invent a worse word to use to describe a new class of insurance. It's just a meaningless rubric.

And, of course, non-traditional is imperfect, too, because we have traditionally issued non-traditional insurance. (Laughter)

And — but we have to use some words to describe what's happening.

There's no question about the fact that the corporate world has gotten more and more interested over the last 10 years in having regularity in earnings reports. And they've turned to a huge variety of ways to try and do that.

And reinsurance is a very minor part of the whole picture. But there has been more reinsurance sought because people were more anti-volatility, in terms of reported results.

WARREN BUFFETT: But, of course, insurance is a way to reduce volatility, and a perfectly proper way. I mean, if you pay $1,000 a year on your auto premiums for the next 30 years, it isn't —

You are going to have a more regular income stream than if you wait and have one $25,000 accident one year and don't pay the premiums in the other years.

So, I mean, people have bought insurance to reduce the volatility in their own personal results and their own business results. So, reducing volatility, per se, is not bad at all. It's the reason —

CHARLIE MUNGER: No.

WARREN BUFFETT: — there are $400 billion worth of insurance premiums paid in this country every year. But that doesn't — you know, you can also get into abuses of that. And that's what they're — the people are looking to find and see what the real situation is.

29. Buffett: I make mistakes but don't agonize over decisions

WARREN BUFFETT: Number 7?

AUDIENCE MEMBER: Wow, this more nerve-wracking than I thought it would be. Hello, Warren, Charlie. My name is Aki Progakis. I'm from Montreal, Canada.

Warren, I wrote a letter back in January. I wrote a letter to you recommending a beautiful Canadian retail company in which I described my analysis to you.

I'd like to thank you for taking the time to respond to me. You said some nice kind words. That meant a lot to me. And I think you're an amazing individual. My question go — (audio dropout) — people, what is the single most difficult decision you've had to make in your lifetime, whether it be business or personal?

WARREN BUFFETT: I think I'm going to let Charlie answer that one first. (Laughter)

CHARLIE MUNGER: Yeah. I would argue that that may be one that you shouldn't ask. (Laughter and applause)

Or let's put it this way, I think you should answer it with several interesting examples before you ask us to answer it. (Laughter)

WARREN BUFFETT: That's a (Inaudible). (Laughter)

It's interesting. As Charlie was talking, I was — I have — I can't think of a lot of difficult — I can think of a lot of wrong decisions I've made. But I certainly can't think of anything I agonized over making for any long period of time.

Like I say, that isn't — you know, I mean, it's calling balls and strikes. I mean, you got a second there and if you don't do it in that — you're no longer an umpire.

So, I've made plenty of wrong decisions. I'm going to make plenty more. That's just part of living.

But I don't think in terms of being difficult as measured by the time it took me to do it or the — not a lot of them pop to mind. And if they do I'll probably give you the same answer as Charlie.

Charlie, have you thought of any more there while we were talking?

CHARLIE MUNGER: No. Let's go on to another.

WARREN BUFFETT: OK. (Laughter) That was not a bad decision.

30. Real estate brokerage will get a "lot bigger"

WARREN BUFFETT: Number 8. (Laughter) But thank you.

AUDIENCE MEMBER: Good afternoon. My name is Franklin Grin (PH). I'm from Philadelphia. And I'm interested in real estate.

You've already covered many different areas today about real estate, such as the real estate bubble, the long-run performance most people have obtained in their personal holdings of real estate, the GSEs, the REITs.

But one of the things that appears in today's newspaper is quoting Mr. Buffett about building a brokerage powerhouse. And that seems to say that you envision changes in the way in which people buy and sell their houses and other kinds of related things.

So, I was wondering if you could tell me a little bit more about that area of where you envision Berkshire Hathaway going.

WARREN BUFFETT: Yeah, I'll be glad to. But the — we are hoping to build a powerhouse that's built very much on the model of today. In other words, we do not envision big changes in residential real estate brokerage, which is what we're in.

We — as we put in — they talk about sides in real estate, the buy side and the sell side. We participated in sides that totaled $50-odd billion last year. And we are the second largest residential real estate brokerage firm in the country.

But we expect that business really to be conducted quite similarly in the future to how it has been in the past. Now there are people that disagree with that and think that way more will happen via the internet.

But, you know, the purchase of a home is the single most important transaction for most people in their lifetimes. It's — it can be partly emotional. It's partly something that they appreciate people guiding them through.

It's something where I think one-on-one will be very important in the future as it has been so far.

And in this country, there are going to be millions and millions and millions of homes that get sold every year. It's — just in terms of people moving and dying and moving up in their economic potential.

So, there — the real estate brokerage business is going to be a very, very big business. And I think it will tend to be a very local business.

And we have bought leading local firms in a number of markets. And they have retained their individual identity. We have not gone for a Century 21 or something approach, where we put them all under the umbrella of a single brand.

Rather we have these individual brands in given communities. And they're usually very strong brands in each community. But we've only scratched the surface.

And I would expect — and it has nothing to do with the potential for real estate or anything. It just relates to the fact that tens and tens and tens of millions of people own their own homes. And some are going to move around every year.

And there's — I think that they're going to continue to have a real estate broker involved in most of the transactions. And we would like to be very big in that business. We already are big, but we're going to —

I would think it's almost certain that we will be a lot bigger in that business five or 10 years from now — I mean, a lot bigger — than we are now. And it's a question of acquiring these firms.

Generally, they're — you know, they're proprietorships. They're owned by a single individual or a family. And they come up periodically because of the family circumstances or the individual circumstances of somebody.

But there's a lot of them out there. And we're a logical buyer. And we've been found to be a good owner. So I think it's going to be a good-sized field for us over time.

Charlie?

CHARLIE MUNGER: Yeah, we voted by buying the brokerage operation instead of the real estate. Obviously, we regard it as having better economics than the underlying real estate which Berkshire could buy.

31. Munger: "Stupid and dishonorable accountants"

WARREN BUFFETT: Number 9.

AUDIENCE MEMBER: Hello. My name is Martin White. I'm in the insurance business in London. And quite separately, together with other volunteers, I also help to run the only independent lobby group for private shareholders in the U.K.

I would like to ask you your thoughts on two aspects of worldwide solvency and how assets and liabilities are recognized in everyone's accounts. I suppose both are about whether the regulators have the bottle to do the right thing in spite of possible complaints from companies.

One aspect is about how insurance liabilities and assets are valued for solvency purposes and the discussions that are going on to develop new accounting standards worldwide. The other aspect is about derivatives, the potential "weapons of financial mass destruction."

For those derivatives which don't have quotes, I suspect we could find out how big a black hole there might be if the regulators around the world required everyone to report at the same date for each derivative they have, their current recognized asset or negative assets, and most importantly, who the counterparty was.

So, the regulators, sharing information collected from both sides, could see what the worldwide aggregate misstatement was.

On insurance solvency, if we started with a fair attempt at mean discounted liabilities, and then added a large chunk for safety, and for reinsurance assets, did the same, discounted, but this time the safety chunk was deducted, life would be a lot simpler and there would be a lot more consistency and, I suspect, safety, than under the current undiscounted regime.

I think both problems need regulatory attention. What are your thoughts?

WARREN BUFFETT: Well, on a subject of discounting reserves — which essentially means taking what you expect to pay in the future and then taking in the appropriate interest rate and carrying at some lower figure now, because you don't have to pay now, but later —

You know, I can certainly make the purist argument — or the argument of the purist — for the fact that that might be the most accurate way. And certainly, of course, in the life insurance field, it is prevalent.

But I would say there has been such a tendency of managements to understate reserves worldwide, and in some cases by extraordinary amounts, that I think anything that pushes in the direction of carrying those reserves at even lower amounts —

And I realize you stuck in that part about the healthy bumping of them, too — but I think anything that — any accounting that lets — gives people a rationale for making reserves even lower than they have been, on balance, is dangerous.

There is such a tendency on what they call long-tail business — or business where you don't expect to actually make the payments for a few years or more — I think there's such a tendency to view those with optimism, particularly when somebody's going to retire in a couple years or their options are about to run out or whatever it may be, that I don't like giving them the extra leeway of discounting on top of that.

The derivatives question you raise is really interesting, but it would be mind-boggling to implement.

I mean, it's always fascinating to me how people can write a derivative contract, you know. And both sides of it — the trader will be, perhaps at least, showing a profit on it, you know, by the end of the month or something of the sort, that — you know, usually the contracts aren't that

precisely matched because you have all kinds of other contracts that bear on the one you're doing.

But I would say that the trader's estimate, and maybe the auditor's estimate, of the value of all derivatives contracts outstanding in the world, would end up with — quite a large positive sum for something that essentially will wash out as a zero sum.

And I can tell you from the fact that I inherited a book of 23,000 contracts that's far, far, far from the largest or the second largest or the third largest in the world.

And the complexity of those contracts, and the complexity of unwinding them now where we're three years into it — and we've done an awful lot of it, but we've been operating in a benign environment —

I don't think any regulator, and I'm not sure any auditor, when you get up to really extensive derivative books, in effect, can get their minds around evaluation.

I know that, you know, as I pointed out in our report, ours were supposedly marked to market. And people think of that as something that you just go out and hit bids and, you know, within a few days wind up something.

And if you're trading government bonds, you know, you can do that. And if you're trading actually active equities, you can do it. But when you start trading derivatives, it's unbelievable what you can find. And I've had a couple of experiences with them.

Charlie, what are your thoughts?

CHARLIE MUNGER: Well, my thoughts are that stupid and dishonorable accountants allowed the genie of totally improper accounting to come out of the bottle and descend in the derivative books of the world.

Once that has happened and people have used it to create masses of assets and masses of earnings reports and bonuses and status and so on and so on and so on, getting the genie back in the bottle is no small task because you have these huge vested interests who are fighting you.

And what ordinary housewife, as she puts the toast in in the morning, is thinking, "My god, I've got to do something about derivatives?" You know? (Laughter)

So the people that are — have vested interest in the current system are powerful. And the rest of the people don't care. And so this evil genie stays out of the bottle and does more and more mischief with each passing day.

If you're trying to fix this, you are going to have a very interesting life. (Laughter)

32. Q&A ends

WARREN BUFFETT: It's 3 o'clock now. If you haven't had enough, [TV journalist] Charlie Rose has a show on, on Channel 12 tonight at 8 o'clock where there's another hour and a half of interviews he did with me and with Bill Gates and various people.

Note: The following table appears in the printed Annual Report on the facing page of the Chairman's Letter

Berkshire's Corporate Performance vs. the S&P 500

Year	Annual Percentage Change in Per-Share Book Value of Berkshire (1)	Annual Percentage Change in S&P 500 with Dividends Included (2)	Relative Results (1)-(2)
1965	23.8	10.0	13.8
1966	20.3	(11.7)	32.0
1967	11.0	30.9	(19.9)
1968	19.0	11.0	8.0
1969	16.2	(8.4)	24.6
1970	12.0	3.9	8.1
1971	16.4	14.6	1.8
1972	21.7	18.9	2.8
1973	4.7	(14.8)	19.5
1974	5.5	(26.4)	31.9
1975	21.9	37.2	(15.3)
1976	59.3	23.6	35.7
1977	31.9	(7.4)	39.3
1978	24.0	6.4	17.6
1979	35.7	18.2	17.5
1980	19.3	32.3	(13.0)
1981	31.4	(5.0)	36.4
1982	40.0	21.4	18.6
1983	32.3	22.4	9.9
1984	13.6	6.1	7.5
1985	48.2	31.6	16.6
1986	26.1	18.6	7.5
1987	19.5	5.1	14.4
1988	20.1	16.6	3.5
1989	44.4	31.7	12.7
1990	7.4	(3.1)	10.5
1991	39.6	30.5	9.1
1992	20.3	7.6	12.7
1993	14.3	10.1	4.2
1994	13.9	1.3	12.6
1995	43.1	37.6	5.5
1996	31.8	23.0	8.8
1997	34.1	33.4	.7
1998	48.3	28.6	19.7
1999	.5	21.0	(20.5)
2000	6.5	(9.1)	15.6
2001	(6.2)	(11.9)	5.7
2002	10.0	(22.1)	32.1
2003	21.0	28.7	(7.7)
2004	10.5	10.9	(.4)
2005	6.4	4.9	1.5
Average Annual Gain — 1965-2005	21.5	10.3	11.2
Overall Gain — 1964-2005	305,134	5,583	

Notes: Data are for calendar years with these exceptions: 1965 and 1966, year ended 9/30; 1967, 15 months ended 12/31.

Starting in 1979, accounting rules required insurance companies to value the equity securities they hold at market rather than at the lower of cost or market, which was previously the requirement. In this table, Berkshire's results through 1978 have been restated to conform to the changed rules. In all other respects, the results are calculated using the numbers originally reported.

The S&P 500 numbers are **pre-tax** whereas the Berkshire numbers are **after-tax**. If a corporation such as Berkshire were simply to have owned the S&P 500 and accrued the appropriate taxes, its results would have lagged the S&P 500 in years when that index showed a positive return, but would have exceeded the S&P 500 in years when the index showed a negative return. Over the years, the tax costs would have caused the aggregate lag to be substantial.

BERKSHIRE HATHAWAY INC.

To the Shareholders of Berkshire Hathaway Inc.:

Our gain in net worth during 2005 was $5.6 billion, which increased the per-share book value of both our Class A and Class B stock by 6.4%. Over the last 41 years (that is, since present management took over) book value has grown from $19 to $59,377, a rate of 21.5% compounded annually.*

Berkshire had a decent year in 2005. We initiated five acquisitions (two of which have yet to close) and most of our operating subsidiaries prospered. Even our insurance business in its entirety did well, though Hurricane Katrina inflicted record losses on both Berkshire and the industry. We estimate our loss from Katrina at $2.5 billion – and her ugly sisters, Rita and Wilma, cost us an additional $.9 billion.

Credit GEICO – and its brilliant CEO, Tony Nicely – for our stellar insurance results in a disaster-ridden year. One statistic stands out: In just two years, GEICO improved its productivity by *32%*. Remarkably, employment fell by 4% even as policy count grew by 26% – and more gains are in store. When we drive unit costs down in such a dramatic manner, we can offer ever-greater value to our customers. The payoff: Last year, GEICO gained market-share, earned commendable profits and strengthened its brand. If you have a new son or grandson in 2006, name him Tony.

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My goal in writing this report is to give you the information you need to estimate Berkshire's intrinsic value. I say "estimate" because calculations of intrinsic value, though all-important, are necessarily imprecise and often seriously wrong. The more uncertain the future of a business, the more possibility there is that the calculation will be wildly off-base. (For an explanation of intrinsic value, see pages 77 – 78.) Here Berkshire has some advantages: a wide variety of relatively-stable earnings streams, combined with great liquidity and minimum debt. These factors mean that Berkshire's intrinsic value can be more precisely calculated than can the intrinsic value of most companies.

Yet if precision is aided by Berkshire's financial characteristics, the job of calculating intrinsic value has been made more complex by the mere presence of so many earnings streams. Back in 1965, when we owned only a small textile operation, the task of calculating intrinsic value was a snap. Now we own 68 distinct businesses with widely disparate operating and financial characteristics. This array of unrelated enterprises, coupled with our massive investment holdings, makes it impossible for you to simply examine our consolidated financial statements and arrive at an informed estimate of intrinsic value.

We have attempted to ease this problem by clustering our businesses into four logical groups, each of which we discuss later in this report. In these discussions, we will provide the key figures for both the group and its important components. Of course, the value of Berkshire may be either greater or less than the sum of these four parts. The outcome depends on whether our many units function better or worse by being part of a larger enterprise and whether capital allocation improves or deteriorates when it is under the direction of a holding company. In other words, does Berkshire ownership bring anything to the party, or would our shareholders be better off if they directly owned shares in each of our 68 businesses? These are important questions but ones that you will have to answer for yourself.

Before we look at our individual businesses, however, let's review two sets of figures that show where we've come from and where we are now. The first set is the amount of investments (including cash and cash-equivalents) we own on a per-share basis. In making this calculation, we exclude investments held in our finance operation because these are largely offset by borrowings:

*****All figures used in this report apply to Berkshire's A shares, the successor to the only stock that the company had outstanding before 1996. The B shares have an economic interest equal to 1/30th that of the A.

Year	Per-Share Investments*
1965	$ 4
1975	159
1985	2,407
1995	21,817
2005	$74,129
Compound Growth Rate 1965-2005	28.0%
Compound Growth Rate 1995-2005	13.0%

*Net of minority interests

In addition to these marketable securities, which with minor exceptions are held in our insurance companies, we own a wide variety of non-insurance businesses. Below, we show the pre-tax earnings (excluding goodwill amortization) of these businesses, again on a per-share basis:

Year	Per-Share Earnings*
1965	$ 4
1975	4
1985	52
1995	175
2005	$2,441
Compound Growth Rate 1965-2005	17.2%
Compound Growth Rate 1995-2005	30.2%

*Pre-tax and net of minority interests

When growth rates are under discussion, it will pay you to be suspicious as to why the beginning and terminal years have been selected. If either year was aberrational, any calculation of growth will be distorted. In particular, a base year in which earnings were poor can produce a breathtaking, but meaningless, growth rate. In the table above, however, the base year of 1965 was abnormally *good*; Berkshire earned more money in that year than it did in all but one of the previous ten.

As you can see from the two tables, the comparative growth rates of Berkshire's two elements of value have changed in the last decade, a result reflecting our ever-increasing emphasis on business acquisitions. Nevertheless, Charlie Munger, Berkshire's Vice Chairman and my partner, and I want to increase the figures in *both* tables. In this ambition, we hope – metaphorically – to avoid the fate of the elderly couple who had been romantically challenged for some time. As they finished dinner on their 50th anniversary, however, the wife – stimulated by soft music, wine and candlelight – felt a long-absent tickle and demurely suggested to her husband that they go upstairs and make love. He agonized for a moment and then replied, "I can do one or the other, but not both."

Acquisitions

Over the years, our current businesses, in aggregate, should deliver modest growth in operating earnings. But they will not in themselves produce truly satisfactory gains. We will need major acquisitions to get that job done.

In this quest, 2005 was encouraging. We agreed to five purchases: two that were completed last year, one that closed after yearend and two others that we expect to close soon. None of the deals involve the issuance of Berkshire shares. That's a crucial, but often ignored, point: When a management proudly acquires another company for stock, the shareholders of the acquirer are concurrently selling part of their interest in everything they own. I've made this kind of deal a few times myself – and, on balance, my actions have cost you money.

Here are last year's purchases:

- On June 30 we bought Medical Protective Company ("MedPro"), a 106-year-old medical malpractice insurer based in Fort Wayne. Malpractice insurance is tough to underwrite and has proved to be a graveyard for many insurers. MedPro nevertheless should do well. It will have the attitudinal advantage that all Berkshire insurers share, wherein underwriting discipline trumps all other goals. Additionally, as part of Berkshire, MedPro has financial strength far exceeding that of its competitors, a quality assuring doctors that long-to-settle claims will not end up back on their doorstep because their insurer failed. Finally, the company has a smart and energetic CEO, Tim Kenesey, who instinctively thinks like a Berkshire manager.

- Forest River, our second acquisition, closed on August 31. A couple of months earlier, on June 21, I received a two-page fax telling me – point by point – why Forest River met the acquisition criteria we set forth on page 25 of this report. I had not before heard of the company, a recreational vehicle manufacturer with $1.6 billion of sales, nor of Pete Liegl, its owner and manager. But the fax made sense, and I immediately asked for more figures. These came the next morning, and that afternoon I made Pete an offer. On June 28, we shook hands on a deal.

  Pete is a remarkable entrepreneur. Some years back, he sold his business, then far smaller than today, to an LBO operator who promptly began telling him how to run the place. Before long, Pete left, and the business soon sunk into bankruptcy. Pete then repurchased it. You can be sure that *I* won't be telling Pete how to manage his operation.

  Forest River has 60 plants, 5,400 employees and has consistently gained share in the RV business, while also expanding into other areas such as boats. Pete is 61 – and definitely in an acceleration mode. Read the piece from *RV Business* that accompanies this report, and you'll see why Pete and Berkshire are made for each other.

- On November 12, 2005, an article ran in The Wall Street Journal dealing with Berkshire's unusual acquisition and managerial practices. In it Pete declared, "It was easier to sell my business than to renew my driver's license."

  In New York, Cathy Baron Tamraz read the article, and it struck a chord. On November 21, she sent me a letter that began, "As president of Business Wire, I'd like to introduce you to my company, as I believe it fits the profile of Berkshire Hathaway subsidiary companies as detailed in a recent Wall Street Journal article."

  By the time I finished Cathy's two-page letter, I felt Business Wire and Berkshire were a fit. I particularly liked her penultimate paragraph: "We run a tight ship and keep unnecessary spending under wraps. No secretaries or management layers here. Yet we'll invest big dollars to gain a technological advantage and move the business forward."

  I promptly gave Cathy a call, and before long Berkshire had reached agreement with Business Wire's controlling shareholder, Lorry Lokey, who founded the company in 1961 (and who had just made Cathy CEO). I love success stories like Lorry's. Today 78, he has built a company that disseminates information in 150 countries for 25,000 clients. His story, like those of many entrepreneurs who have selected Berkshire as a home for their life's work, is an example of what can happen when a good idea, a talented individual and hard work converge.

- In December we agreed to buy 81% of Applied Underwriters, a company that offers a combination of payroll services and workers' compensation insurance to small businesses. A majority of Applied's customers are located in California.

In 1998, though, when the company had 12 employees, it acquired an Omaha-based operation with 24 employees that offered a somewhat-similar service. Sid Ferenc and Steve Menzies, who have built Applied's remarkable business, concluded that Omaha had many advantages as an operational base – a brilliant insight, I might add – and today 400 of the company's 479 employees are located here.

Less than a year ago, Applied entered into a large reinsurance contract with Ajit Jain, the extraordinary manager of National Indemnity's reinsurance division. Ajit was impressed by Sid and Steve, and they liked Berkshire's method of operation. So we decided to join forces. We are pleased that Sid and Steve retain 19% of Applied. They started on a shoestring only 12 years ago, and it will be fun to see what they can accomplish with Berkshire's backing.

- Last spring, MidAmerican Energy, our 80.5% owned subsidiary, agreed to buy PacifiCorp, a major electric utility serving six Western states. An acquisition of this sort requires many regulatory approvals, but we've now obtained these and expect to close this transaction soon. Berkshire will then buy $3.4 billion of MidAmerican's common stock, which MidAmerican will supplement with $1.7 billion of borrowing to complete the purchase. You can't expect to earn outsized profits in regulated utilities, but the industry offers owners the opportunity to deploy large sums at fair returns – and therefore, it makes good sense for Berkshire. A few years back, I said that we hoped to make some very large purchases in the utility field. Note the plural – we'll be looking for more.

In addition to buying these new operations, we continue to make "bolt-on" acquisitions. Some aren't so small: Shaw, our carpet operation, spent about $550 million last year on two purchases that furthered its vertical integration and should improve its profit margin in the future. XTRA and Clayton Homes also made value-enhancing acquisitions.

Unlike many business buyers, Berkshire has no "exit strategy." We buy to keep. We do, though, have an entrance strategy, looking for businesses in this country or abroad that meet our six criteria and are available at a price that will produce a reasonable return. If you have a business that fits, give me a call. Like a hopeful teenage girl, I'll be waiting by the phone.

Insurance

Let's now talk about our four sectors and start with insurance, our core business. What counts here is the amount of "float" and its cost over time.

For new readers, let me explain. "Float" is money that doesn't belong to us but that we temporarily hold. Most of our float arises because (1) premiums are paid upfront though the service we provide – insurance protection – is delivered over a period that usually covers a year and; (2) loss events that occur today do not always result in our immediately paying claims, because it sometimes takes many years for losses to be reported (asbestos losses would be an example), negotiated and settled. The $20 million of float that came with our 1967 entry into insurance has now increased – both by way of internal growth and acquisitions – to $49 billion.

Float is wonderful – *if* it doesn't come at a high price. Its cost is determined by underwriting results, meaning how the expenses and losses we will ultimately pay compare with the premiums we have received. When an insurer earns an underwriting profit – as has been the case at Berkshire in about half of the 39 years we have been in the insurance business – float is better than free. In such years, we are actually paid for holding other people's money. For most insurers, however, life has been far more difficult: In aggregate, the property-casualty industry almost invariably operates at an underwriting loss. When that loss is large, float becomes expensive, sometimes devastatingly so.

In 2004 our float cost us less than nothing, and I told you that we had a chance – absent a mega-catastrophe – of no-cost float in 2005. But we *had* the mega-cat, and as a specialist in that coverage, Berkshire suffered hurricane losses of $3.4 billion. Nevertheless, our float was costless in 2005 because of the superb results we had in our other insurance activities, particularly at GEICO.

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Auto policies in force grew by 12.1% at GEICO, a gain increasing its market share of U.S. private passenger auto business from about 5.6% to about 6.1%. Auto insurance is a big business: Each share-point equates to $1.6 billion in sales.

While our brand strength is not quantifiable, I believe it also grew significantly. When Berkshire acquired control of GEICO in 1996, its annual advertising expenditures were $31 million. Last year we were up to $502 million. And I can't wait to spend more.

Our advertising works because we have a great story to tell: More people can save money by insuring with us than is the case with any other national carrier offering policies to all comers. (Some specialized auto insurers do particularly well for applicants fitting into their niches; also, because our national competitors use rating systems that differ from ours, they will sometimes beat our price.) Last year, we achieved by far the highest conversion rate – the percentage of internet and phone quotes turned into sales – in our history. This is powerful evidence that our prices are more attractive relative to the competition than ever before. Test us by going to GEICO.com or by calling 800-847-7536. Be sure to indicate you are a shareholder because that fact will often qualify you for a discount.

I told you last year about GEICO's entry into New Jersey in August, 2004. Drivers in that state love us. Our retention rate there for new policyholders is running higher than in any other state, and by sometime in 2007, GEICO is likely to become the third largest auto insurer in New Jersey. There, as elsewhere, our low costs allow low prices that lead to steady gains in profitable business.

That simple formula immediately impressed me 55 years ago when I first discovered GEICO. Indeed, at age 21, I wrote an article about the company – it's reproduced on page 24 – when its market value was $7 million. As you can see, I called GEICO "The Security I Like Best." And that's what I still call it.

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We have major reinsurance operations at General Re and National Indemnity. The former is run by Joe Brandon and Tad Montross, the latter by Ajit Jain. Both units performed well in 2005 considering the extraordinary hurricane losses that battered the industry.

It's an open question whether atmospheric, oceanic or other causal factors have dramatically changed the frequency or intensity of hurricanes. Recent experience is worrisome. We know, for instance, that in the 100 years before 2004, about 59 hurricanes of Category 3 strength, or greater, hit the Southeastern and Gulf Coast states, and that only three of these were Category 5s. We further know that in 2004 there were three Category 3 storms that hammered those areas and that these were followed by four more in 2005, one of them, Katrina, the most destructive hurricane in industry history. Moreover, there were three Category 5s near the coast last year that fortunately weakened before landfall.

Was this onslaught of more frequent and more intense storms merely an anomaly? Or was it caused by changes in climate, water temperature or other variables we don't fully understand? And could these factors be developing in a manner that will soon produce disasters dwarfing Katrina?

Joe, Ajit and I don't know the answer to these all-important questions. What we do know is that our ignorance means we must follow the course prescribed by Pascal in his famous wager about the existence of God. As you may recall, he concluded that since he didn't know the answer, his personal gain/loss ratio dictated an affirmative conclusion.

So guided, we've concluded that we should now write mega-cat policies only at prices far higher than prevailed last year – and then only with an aggregate exposure that would not cause us distress if shifts in some important variable produce far more costly storms in the near future. To a lesser degree, we felt this way after 2004 – and cut back our writings when prices didn't move. Now our caution has intensified. If prices seem appropriate, however, we continue to have both the ability and the appetite to be the largest writer of mega-cat coverage in the world.

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Our smaller insurers, with MedPro added to the fold, delivered truly outstanding results last year. However, what you see in the table below does not do full justice to their performance. That's because we increased the loss reserves of MedPro by about $125 million immediately after our purchase.

No one knows with any precision what amount will be required to pay the claims we inherited. Medical malpractice insurance is a "long-tail" line, meaning that claims often take many years to settle. In addition, there are other losses that have occurred, but that we won't even hear about for some time. One thing, though, we have learned – the hard way – after many years in the business: Surprises in insurance are far from symmetrical. You are lucky if you get one that is pleasant for every ten that go the other way. Too often, however, insurers react to looming loss problems with optimism. They behave like the fellow in a switchblade fight who, after his opponent has taken a mighty swipe at his throat, exclaimed, "You never touched me." His adversary's reply: "Just wait until you try to shake your head."

Excluding the reserves we added for prior periods, MedPro wrote at an underwriting profit. And our other primary companies, in aggregate, had an underwriting profit of $324 million on $1,270 million of volume. This is an extraordinary result, and our thanks go to Rod Eldred of Berkshire Hathaway Homestate Companies, John Kizer of Central States Indemnity, Tom Nerney of U. S. Liability, Don Towle of Kansas Bankers Surety and Don Wurster of National Indemnity.

Here's the overall tally on our underwriting and float for each major sector of insurance:

(in $ millions)

	Underwriting Profit (Loss)		*Yearend Float*	
Insurance Operations	*2005*	*2004*	*2005*	*2004*
General Re	$(334)	$ 3	$22,920	$23,120
B-H Reinsurance	(1,069)	417	16,233	15,278
GEICO	1,221	970	6,692	5,960
Other Primary	235*	161	3,442	1,736
Total	$ 53	$1,551	$49,287	$46,094

*Includes MedPro from June 30, 2005.

Regulated Utility Business

We have an 80.5% (fully diluted) interest in MidAmerican Energy Holdings, which owns a wide variety of utility operations. The largest of these are (1) Yorkshire Electricity and Northern Electric, whose 3.7 million electric customers make it the third largest distributor of electricity in the U.K.; (2) MidAmerican Energy, which serves 706,000 electric customers, primarily in Iowa; and (3) Kern River and Northern Natural pipelines, which carry 7.8% of the natural gas consumed in the U.S. When our PacifiCorp acquisition closes, we will add 1.6 million electric customers in six Western states, with Oregon and Utah providing us the most business. This transaction will increase MidAmerican's revenues by $3.3 billion and its assets by $14.1 billion.

The Public Utility Holding Company Act ("PUHCA") was repealed on August 8, 2005, a milestone that allowed Berkshire to convert its MidAmerican preferred stock into voting common shares on February 9, 2006. This conversion ended a convoluted corporate arrangement that PUHCA had forced upon us. Now we have 83.4% of both the common stock and the votes at MidAmerican, which allows us to consolidate the company's income for financial accounting and tax purposes. Our true economic interest, however, is the aforementioned 80.5%, since there are options outstanding that are sure to be exercised within a few years and that upon exercise will dilute our ownership.

Though our voting power has increased dramatically, the dynamics of our four-party ownership have not changed at all. We view MidAmerican as a partnership among Berkshire, Walter Scott, and two terrific managers, Dave Sokol and Greg Abel. It's unimportant how many votes each party has; we will make major moves only when we are unanimous in thinking them wise. Five years of working with Dave, Greg and Walter have underscored my original belief: Berkshire couldn't have better partners.

You will notice that this year we have provided you with two balance sheets, one representing our actual figures per GAAP on December 31, 2005 (which does *not* consolidate MidAmerican) and one that reflects the subsequent conversion of our preferred. All future financial reports of Berkshire will include MidAmerican's figures.

Somewhat incongruously, MidAmerican owns the second largest real estate brokerage firm in the U.S. And it's a gem. The parent company's name is HomeServices of America, but our 19,200 agents operate through 18 locally-branded firms. Aided by three small acquisitions, we participated in $64 billion of transactions last year, up 6.5% from 2004.

Currently, the white-hot market in residential real estate of recent years is cooling down, and that should lead to additional acquisition possibilities for us. Both we and Ron Peltier, the company's CEO, expect HomeServices to be far larger a decade from now.

Here are some key figures on MidAmerican's operations:

	Earnings (in $ millions)	
	2005	*2004*
U.K. utilities	$ 308	$ 326
Iowa utility	288	268
Pipelines	309	288
HomeServices	148	130
Other (net)	107	172
Income (loss) from discontinued zinc project	8	(579)
Earnings before corporate interest and taxes	1,168	605
Interest, other than to Berkshire	(200)	(212)
Interest on Berkshire junior debt	(157)	(170)
Income tax	(248)	(53)
Net earnings	$ 563	$ 170
Earnings applicable to Berkshire*	$ 523	$ 237
Debt owed to others	10,296	10,528
Debt owed to Berkshire	1,289	1,478

*Includes interest earned by Berkshire (net of related income taxes) of $102 in 2005 and $110 in 2004.

Finance and Financial Products

The star of our finance sector is Clayton Homes, masterfully run by Kevin Clayton. He does not owe his brilliant record to a rising tide: The manufactured-housing business has been disappointing since Berkshire purchased Clayton in 2003. Industry sales have stagnated at 40-year lows, and the recent uptick from Katrina-related demand will almost certainly be short-lived. In recent years, many industry participants have suffered losses, and only Clayton has earned significant money.

In this brutal environment Clayton has bought a large amount of manufactured-housing loans from major banks that found them unprofitable and difficult to service. Clayton's operating expertise and Berkshire's financial resources have made this an excellent business for us and one in which we are preeminent. We presently service $17 billion of loans, compared to $5.4 billon at the time of our purchase. Moreover, Clayton now owns $9.6 billion of its servicing portfolio, a position built up almost entirely since Berkshire entered the picture.

To finance this portfolio, Clayton borrows money from Berkshire, which in turn borrows the same amount publicly. For the use of its credit, Berkshire charges Clayton a one percentage-point markup on its borrowing cost. In 2005, the cost to Clayton for this arrangement was $83 million. That amount is included in "Other" income in the table on the facing page, and Clayton's earnings of $416 million are after deducting this payment.

On the manufacturing side, Clayton has also been active. To its original base of twenty plants, it first added twelve more in 2004 by way of the bankruptcy purchase of Oakwood, which just a few years earlier was one of the largest companies in the business. Then in 2005 Clayton purchased Karsten, a four-plant operation that greatly strengthens Clayton's position on the West Coast.

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Long ago, Mark Twain said: "A man who tries to carry a cat home by its tail will learn a lesson that can be learned in no other way." If Twain were around now, he might try winding up a derivatives business. After a few days, he would opt for cats.

We lost $104 million pre-tax last year in our continuing attempt to exit Gen Re's derivative operation. Our aggregate losses since we began this endeavor total $404 million.

Originally we had 23,218 contracts outstanding. By the start of 2005 we were down to 2,890. You might expect that our losses would have been stemmed by this point, but the blood has kept flowing. Reducing our inventory to 741 contracts last year cost us the $104 million mentioned above.

Remember that the rationale for establishing this unit in 1990 was Gen Re's wish to meet the needs of insurance clients. Yet one of the contracts we liquidated in 2005 had a term of 100 years! It's difficult to imagine what "need" such a contract could fulfill except, perhaps, the need of a compensation-conscious trader to have a long-dated contract on his books. Long contracts, or alternatively those with multiple variables, are the most difficult to mark to market (the standard procedure used in accounting for derivatives) and provide the most opportunity for "imagination" when traders are estimating their value. Small wonder that traders promote them.

A business in which huge amounts of compensation flow from assumed numbers is obviously fraught with danger. When two traders execute a transaction that has several, sometimes esoteric, variables and a far-off settlement date, their respective firms must subsequently value these contracts whenever they calculate their earnings. A given contract may be valued at one price by Firm A and at another by Firm B. You can bet that the valuation differences – and I'm personally familiar with several that were *huge* – tend to be tilted in a direction favoring higher earnings at each firm. It's a strange world in which two parties can carry out a paper transaction that each can promptly report as profitable.

I dwell on our experience in derivatives each year for two reasons. One is personal and unpleasant. The hard fact is that I have cost you a lot of money by not moving immediately to close down

Gen Re's trading operation. Both Charlie and I knew at the time of the Gen Re purchase that it was a problem and told its management that we wanted to exit the business. It was my responsibility to make sure that happened. Rather than address the situation head on, however, I wasted several years while we attempted to sell the operation. That was a doomed endeavor because no realistic solution could have extricated us from the maze of liabilities that was going to exist for decades. Our obligations were particularly worrisome because their potential to explode could not be measured. Moreover, if severe trouble occurred, we knew it was likely to correlate with problems elsewhere in financial markets.

So I failed in my attempt to exit painlessly, and in the meantime more trades were put on the books. Fault me for dithering. (Charlie calls it thumb-sucking.) When a problem exists, whether in personnel or in business operations, the time to act is *now*.

The second reason I regularly describe our problems in this area lies in the hope that our experiences may prove instructive for managers, auditors and regulators. In a sense, we are a canary in this business coal mine and should sing a song of warning as we expire. The number and value of derivative contracts outstanding in the world continues to mushroom and is now a multiple of what existed in 1998, the last time that financial chaos erupted.

Our experience should be particularly sobering because we were a better-than-average candidate to exit gracefully. Gen Re was a relatively minor operator in the derivatives field. It has had the good fortune to unwind its supposedly liquid positions in a benign market, all the while free of financial or other pressures that might have forced it to conduct the liquidation in a less-than-efficient manner. Our accounting in the past was conventional and actually thought to be conservative. Additionally, we know of no bad behavior by anyone involved.

It could be a different story for others in the future. Imagine, if you will, one or more firms (troubles often spread) with positions that are many multiples of ours attempting to liquidate in chaotic markets and under extreme, and well-publicized, pressures. This is a scenario to which much attention should be given now rather than after the fact. The time to have considered – and improved – the reliability of New Orleans' levees was *before* Katrina.

When we finally wind up Gen Re Securities, my feelings about its departure will be akin to those expressed in a country song, "My wife ran away with my best friend, and I sure miss him a lot."

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Below are the results of our various finance and financial products activities:

	(in $ millions)			
	Pre-Tax Earnings		*Interest-Bearing Liabilities*	
	2005	*2004*	*2005*	*2004*
Trading – ordinary income	$ 200	$ 264	$1,061	$5,751
Gen Re Securities (loss)	(104)	(44)	2,617*	5,437*
Life and annuity operation	11	(57)	2,461	2,467
Value Capital (loss)	(33)	30	N/A	N/A
Leasing operations	173	92	370	391
Manufactured-housing finance (Clayton)	416	192	9,299	3,636
Other	159	107	N/A	N/A
Income before capital gains	822	584		
Trading – capital gains (losses)	(234)	1,750		
Total	$ 588	$2,334		

*Includes all liabilities

Manufacturing, Service and Retailing Operations

Our activities in this part of Berkshire cover the waterfront. Let's look, though, at a summary balance sheet and earnings statement for the entire group.

Balance Sheet 12/31/05 (in $ millions)

Assets		*Liabilities and Equity*	
Cash and equivalents	$ 1,004	Notes payable	$ 1,469
Accounts and notes receivable	3,287	Other current liabilities	5,371
Inventory	4,143	Total current liabilities	6,840
Other current assets	342		
Total current assets	8,776		
Goodwill and other intangibles	9,260	Deferred taxes	338
Fixed assets	7,148	Term debt and other liabilities	2,188
Other assets	1,021	Equity	16,839
	$26,205		$26,205

Earnings Statement (in $ millions)

	2005	*2004*	*2003*
Revenues	$46,896	$44,142	$32,106
Operating expenses (including depreciation of $699 in 2005, $676 in 2004 and $605 in 2003)	44,190	41,604	29,885
Interest expense (net)	83	57	64
Pre-tax earnings	2,623	2,481	2,157
Income taxes	977	941	813
Net income	$ 1,646	$ 1,540	$ 1,344

This eclectic collection, which sells products ranging from Dilly Bars to fractional interests in Boeing 737s, earned a very respectable 22.2% on average tangible net worth last year. It's noteworthy also that these operations used only minor financial leverage in achieving that return. Clearly, we own some terrific businesses. We purchased many of them, however, at substantial premiums to net worth – a point reflected in the goodwill item shown on the balance sheet – and that fact reduces the earnings on our average *carrying* value to 10.1%.

Here are the pre-tax earnings for the larger categories or units.

	Pre-Tax Earnings (in $ millions)	
	2005	*2004*
Building Products	$ 751	$ 643
Shaw Industries	485	466
Apparel & Footwear	348	325
Retailing of Jewelry, Home Furnishings and Candy	257	215
Flight Services	120	191
McLane	217	228
Other businesses	445	413
	$2,623	$2,481

- In both our building-products companies and at Shaw, we continue to be hit by rising costs for raw materials and energy. Most of these operations are significant users of oil (or more specifically, petrochemicals) and natural gas. And prices for these commodities have soared.

  We, likewise, have raised prices on many products, but there are often lags before increases become effective. Nevertheless, both our building-products operations and Shaw delivered respectable results in 2005, a fact attributable to their strong business franchises and able managements.

- In apparel, our largest unit, Fruit of the Loom, again increased earnings and market-share. You know, of course, of our leadership position in men's and boys' underwear, in which we account for about 48.7% of the sales recorded by mass-marketers (Wal-Mart, Target, etc.). That's up from 44.2% in 2002, when we acquired the company. Operating from a smaller base, we have made still greater gains in intimate apparel for women and girls that is sold by the mass-marketers, climbing from 13.7% of their sales in 2002 to 24.7% in 2005. A gain like that in a major category doesn't come easy. Thank John Holland, Fruit's extraordinary CEO, for making this happen.

- I told you last year that Ben Bridge (jewelry) and R. C. Willey (home furnishings) had same-store sales gains far above the average of their industries. You might think that blow-out figures in one year would make comparisons difficult in the following year. But Ed and Jon Bridge at their operation and Scott Hymas at R. C. Willey were more than up to this challenge. Ben Bridge had a 6.6% same-store gain in 2005, and R. C. Willey came in at 9.9%.

  Our never-on-Sunday approach at R. C. Willey continues to overwhelm seven-day competitors as we roll out stores in new markets. The Boise store, about which I was such a skeptic a few years back, had a 21% gain in 2005, coming off a 10% gain in 2004. Our new Reno store, opened in November, broke out of the gate fast with sales that exceeded Boise's early pace, and we will begin business in Sacramento in June. If this store succeeds as I expect it to, Californians will see many more R. C. Willey stores in the years to come.

- In flight services, earnings improved at FlightSafety as corporate aviation continued its rebound. To support growth, we invest heavily in new simulators. Our most recent expansion, bringing us to 42 training centers, is a major facility at Farnborough, England that opened in September. When it is fully built out in 2007, we will have invested more than $100 million in the building and its 15 simulators. Bruce Whitman, FlightSafety's able CEO, makes sure that no competitor comes close to offering the breadth and depth of services that we do.

  Operating results at NetJets were a different story. I said last year that this business would earn money in 2005 – and I was dead wrong.

  Our European operation, it should be noted, showed both excellent growth and a reduced loss. Customer contracts there increased by 37%. We are the only fractional-ownership operation of any size in Europe, and our now-pervasive presence there is a key factor in making NetJets the worldwide leader in this industry.

  Despite a large increase in customers, however, our U.S. operation dipped far into the red. Its efficiency fell, and costs soared. We believe that our three largest competitors suffered similar problems, but each is owned by aircraft manufacturers that may think differently than we do about the necessity of making adequate profits. The *combined* value of the fleets managed by these three competitors, in any case, continues to be less valuable than the fleet that we operate.

  Rich Santulli, one of the most dynamic managers I've ever met, will solve our revenue/expense problem. He won't do it, however, in a manner that impairs the quality of the NetJets experience. Both he and I are committed to a level of service, security and safety that can't be matched by others.

- Our retailing category includes See's Candies, a company we bought early in 1972 (a date making it our oldest non-insurance business). At that time, Charlie and I immediately decided to put Chuck Huggins, then 46, in charge. Though we were new at the game of selecting managers, Charlie and I hit a home run with this appointment. Chuck's love for the customer and the brand permeated the organization, which in his 34-year tenure produced a more-than-tenfold increase in profits. This gain was achieved in an industry growing at best slowly and perhaps not at all. (Volume figures in this industry are hard to pin down.)

  At yearend, Chuck turned the reins at See's over to Brad Kinstler, who previously had served Berkshire well while running Cypress Insurance and Fechheimer's. It's unusual for us to move managers around, but Brad's record made him an obvious choice for the See's job. I hope Chuck and his wife, Donna, are at the annual meeting. If they are, shareholders can join Charlie and me in giving America's number one candy maker a richly-deserved round of applause.

* * * * * * * * * * * *

Every day, in countless ways, the competitive position of each of our businesses grows either weaker or stronger. If we are delighting customers, eliminating unnecessary costs and improving our products and services, we gain strength. But if we treat customers with indifference or tolerate bloat, our businesses will wither. On a daily basis, the effects of our actions are imperceptible; cumulatively, though, their consequences are enormous.

When our long-term competitive position improves as a result of these almost unnoticeable actions, we describe the phenomenon as "widening the moat." And doing that is essential if we are to have the kind of business we want a decade or two from now. We always, of course, hope to earn more money in the short-term. But when short-term and long-term conflict, widening the moat *must* take precedence. If a management makes bad decisions in order to hit short-term earnings targets, and consequently gets behind the eight-ball in terms of costs, customer satisfaction or brand strength, no amount of subsequent brilliance will overcome the damage that has been inflicted. Take a look at the dilemmas of managers in the auto and airline industries today as they struggle with the huge problems handed them by their predecessors. Charlie is fond of quoting Ben Franklin's "An ounce of prevention is worth a pound of cure." But sometimes no amount of cure will overcome the mistakes of the past.

Our managers focus on moat-widening – and are brilliant at it. Quite simply, they are passionate about their businesses. Usually, they were running those long before we came along; our only function since has been to stay out of the way. If you see these heroes – and our four heroines as well – at the annual meeting, thank them for the job they do for you.

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The attitude of our managers vividly contrasts with that of the young man who married a tycoon's only child, a decidedly homely and dull lass. Relieved, the father called in his new son-in-law after the wedding and began to discuss the future:

> "Son, you're the boy I always wanted and never had. Here's a stock certificate for 50% of the company. You're my equal partner from now on."
>
> "Thanks, dad."
>
> "Now, what would you like to run? How about sales?"
>
> "I'm afraid I couldn't sell water to a man crawling in the Sahara."
>
> "Well then, how about heading human relations?"
>
> "I really don't care for people."
>
> "No problem, we have lots of other spots in the business. What would you like to do?"
>
> "Actually, nothing appeals to me. Why don't you just buy me out?"

Investments

We show below our common stock investments. Those that had a market value of more than $700 million at the end of 2005 are itemized.

			12/31/05	
Shares	*Company*	*Percentage of Company Owned*	*Cost**	*Market*
			(in $ millions)	
151,610,700	American Express Company	12.2	$1,287	$ 7,802
30,322,137	Ameriprise Financial, Inc.	12.1	183	1,243
43,854,200	Anheuser-Busch Cos., Inc.	5.6	2,133	1,884
200,000,000	The Coca-Cola Company	8.4	1,299	8,062
6,708,760	M&T Bank Corporation	6.0	103	732
48,000,000	Moody's Corporation	16.2	499	2,948
2,338,961,000	PetroChina "H" shares (or equivalents)	1.3	488	1,915
100,000,000	The Procter & Gamble Company	3.0	940	5,788
19,944,300	Wal-Mart Stores, Inc.	0.5	944	933
1,727,765	The Washington Post Company	18.0	11	1,322
95,092,200	Wells Fargo & Company	5.7	2,754	5,975
1,724,200	White Mountains Insurance	16.0	369	963
	Others		4,937	7,154
	Total Common Stocks		$15,947	$46,721

*This is our actual purchase price and also our tax basis; GAAP "cost" differs in a few cases because of write-ups or write-downs that have been required.

A couple of last year's changes in our portfolio occurred because of corporate events: Gillette was merged into Procter & Gamble, and American Express spun off Ameriprise. In addition, we substantially increased our holdings in Wells Fargo, a company that Dick Kovacevich runs brilliantly, and established positions in Anheuser-Busch and Wal-Mart.

Expect no miracles from our equity portfolio. Though we own major interests in a number of strong, highly-profitable businesses, they are not selling at anything like bargain prices. As a group, they may double in value in ten years. The likelihood is that their per-share earnings, in aggregate, will grow 6-8% per year over the decade and that their stock prices will more or less match that growth. (Their managers, of course, think my expectations are too modest – and I hope they're right.)

* * * * * * * * * * * *

The P&G-Gillette merger, closing in the fourth quarter of 2005, required Berkshire to record a $5.0 billion pre-tax capital gain. This bookkeeping entry, dictated by GAAP, is meaningless from an economic standpoint, and you should ignore it when you are evaluating Berkshire's 2005 earnings. We didn't intend to sell our Gillette shares before the merger; we don't intend to sell our P&G shares now; and we incurred no tax when the merger took place.

It's hard to overemphasize the importance of who is CEO of a company. Before Jim Kilts arrived at Gillette in 2001, the company was struggling, having particularly suffered from capital-allocation blunders. In the major example, Gillette's acquisition of Duracell cost Gillette shareholders billions of dollars, a loss never made visible by conventional accounting. Quite simply, what Gillette received in business value in this acquisition was not equivalent to what it gave up. (Amazingly, this most fundamental of yardsticks is almost always ignored by both managements and their investment bankers when acquisitions are under discussion.)

Upon taking office at Gillette, Jim quickly instilled fiscal discipline, tightened operations and energized marketing, moves that dramatically increased the intrinsic value of the company. Gillette's merger with P&G then expanded the potential of both companies. For his accomplishments, Jim was paid very well – but he earned every penny. (This is no academic evaluation: As a 9.7% owner of Gillette, Berkshire in effect paid that proportion of his compensation.) Indeed, it's difficult to overpay the *truly* extraordinary CEO of a giant enterprise. But this species is rare.

Too often, executive compensation in the U.S. is ridiculously out of line with performance. That won't change, moreover, because the deck is stacked against investors when it comes to the CEO's pay. The upshot is that a mediocre-or-worse CEO – aided by his handpicked VP of human relations and a consultant from the ever-accommodating firm of Ratchet, Ratchet and Bingo – all too often receives gobs of money from an ill-designed compensation arrangement.

Take, for instance, ten year, fixed-price options (and who wouldn't?). If Fred Futile, CEO of Stagnant, Inc., receives a bundle of these – let's say enough to give him an option on 1% of the company – his self-interest is clear: He should skip dividends entirely and instead use all of the company's earnings to repurchase stock.

Let's assume that under Fred's leadership Stagnant lives up to its name. In each of the ten years after the option grant, it earns $1 billion on $10 billion of net worth, which initially comes to $10 per share on the 100 million shares then outstanding. Fred eschews dividends and regularly uses all earnings to repurchase shares. If the stock constantly sells at ten times earnings per share, it will have appreciated 158% by the end of the option period. That's because repurchases would reduce the number of shares to 38.7 million by that time, and earnings per share would thereby increase to $25.80. Simply by withholding earnings from owners, Fred gets very rich, making a cool $158 million, despite the business itself improving not at all. Astonishingly, Fred could have made more than $100 million if Stagnant's earnings had *declined* by 20% during the ten-year period.

Fred can also get a splendid result for himself by paying no dividends and deploying the earnings he withholds from shareholders into a variety of disappointing projects and acquisitions. Even if these initiatives deliver a paltry 5% return, Fred will still make a bundle. Specifically – with Stagnant's p/e ratio remaining unchanged at ten – Fred's option will deliver him $63 million. Meanwhile, his shareholders will wonder what happened to the "alignment of interests" that was supposed to occur when Fred was issued options.

A "normal" dividend policy, of course – one-third of earnings paid out, for example – produces less extreme results but still can provide lush rewards for managers who achieve nothing.

CEOs understand this math and know that every dime paid out in dividends reduces the value of all outstanding options. I've never, however, seen this manager-owner conflict referenced in proxy materials that request approval of a fixed-priced option plan. Though CEOs invariably preach *internally* that capital comes at a cost, they somehow forget to tell shareholders that fixed-price options give them capital that is free.

It doesn't have to be this way: It's child's play for a board to design options that give effect to the automatic build-up in value that occurs when earnings are retained. But – surprise, surprise – options of that kind are almost never issued. Indeed, the very thought of options with strike prices that are adjusted for retained earnings seems foreign to compensation "experts," who are nevertheless encyclopedic about every management-friendly plan that exists. ("Whose bread I eat, his song I sing.")

Getting fired can produce a particularly bountiful payday for a CEO. Indeed, he can "earn" more in that single day, while cleaning out his desk, than an American worker earns in a lifetime of cleaning toilets. Forget the old maxim about nothing succeeding like success: Today, in the executive suite, the all-too-prevalent rule is that nothing succeeds like *failure*.

Huge severance payments, lavish perks and outsized payments for ho-hum performance often occur because comp committees have become slaves to comparative data. The drill is simple: Three or so directors – *not chosen by chance* – are bombarded for a few hours before a board meeting with pay statistics that perpetually ratchet upwards. Additionally, the committee is told about new perks that other managers are receiving. In this manner, outlandish "goodies" are showered upon CEOs simply because of a corporate version of the argument we all used when children: "But, Mom, all the other kids have one." When comp committees follow this "logic," yesterday's most egregious excess becomes today's baseline.

Comp committees should adopt the attitude of Hank Greenberg, the Detroit slugger and a boyhood hero of mine. Hank's son, Steve, at one time was a player's agent. Representing an outfielder in negotiations with a major league club, Steve sounded out his dad about the size of the signing bonus he should ask for. Hank, a true pay-for-performance guy, got straight to the point, "What did he hit last year?" When Steve answered ".246," Hank's comeback was immediate: "Ask for a uniform."

(Let me pause for a brief confession: In criticizing comp committee behavior, I don't speak as a true insider. Though I have served as a director of twenty public companies, only one CEO has put me on his comp committee. Hmmmm . . .)

* * * * * * * * * * * *

My views on America's long-term problem in respect to trade imbalances, which I have laid out in previous reports, remain unchanged. My conviction, however, cost Berkshire $955 million pre-tax in 2005. That amount is included in our earnings statement, a fact that illustrates the differing ways in which GAAP treats gains and losses. When we have a long-term position in stocks or bonds, year-to-year changes in value are reflected in our balance sheet but, as long as the asset is not sold, are rarely reflected in earnings. For example, our Coca-Cola holdings went from $1 billion in value early on to $13.4 billion at yearend 1998 and have since declined to $8.1 billion – with none of these moves affecting our earnings statement. Long-term currency positions, however, are daily marked to market and therefore have an effect on earnings in every reporting period. From the date we first entered into currency contracts, we are $2.0 billion in the black.

We reduced our direct position in currencies somewhat during 2005. We partially offset this change, however, by purchasing equities whose prices are denominated in a variety of foreign currencies and that earn a large part of their profits internationally. Charlie and I prefer this method of acquiring non-dollar exposure. That's largely because of changes in interest rates: As U.S. rates have risen relative to those of the rest of the world, holding most foreign currencies now involves a significant negative "carry." The carry aspect of our direct currency position indeed cost us money in 2005 and is likely to do so again in 2006. In contrast, the ownership of foreign equities is likely, over time, to create a positive carry – perhaps a substantial one.

The underlying factors affecting the U.S. current account deficit continue to worsen, and no letup is in sight. Not only did our trade deficit – the largest and most familiar item in the current account – hit an all-time high in 2005, but we also can expect a second item – the balance of investment income – to soon turn negative. As foreigners increase their ownership of U.S. assets (or of claims against us) relative to U.S. investments abroad, these investors will begin earning more on their holdings than we do on ours. Finally, the third component of the current account, unilateral transfers, is always negative.

The U.S., it should be emphasized, is extraordinarily rich and will get richer. As a result, the huge imbalances in its current account may continue for a long time without their having noticeable deleterious effects on the U.S. economy or on markets. I doubt, however, that the situation will forever remain benign. Either Americans address the problem soon in a way we select, or at some point the problem will likely address us in an unpleasant way of its own.

How to Minimize Investment Returns

It's been an easy matter for Berkshire and other owners of American equities to prosper over the years. Between December 31, 1899 and December 31, 1999, to give a really long-term example, the Dow rose from 66 to 11,497. (Guess what annual growth rate is required to produce this result; the surprising answer is at the end of this section.) This huge rise came about for a simple reason: Over the century American businesses did extraordinarily well and investors rode the wave of their prosperity. Businesses continue to do well. But now shareholders, through a series of self-inflicted wounds, are in a major way cutting the returns they will realize from their investments.

The explanation of how this is happening begins with a fundamental truth: With unimportant exceptions, such as bankruptcies in which some of a company's losses are borne by creditors, *the most that owners in aggregate can earn between now and Judgment Day is what their businesses in aggregate earn.* True, by buying and selling that is clever or lucky, investor A may take more than his share of the pie at the expense of investor B. And, yes, all investors *feel* richer when stocks soar. But an owner can exit only by having someone take his place. If one investor sells high, another must buy high. For owners as a whole, there is simply no magic – no shower of money from outer space – that will enable them to extract wealth from their companies beyond that created by the companies themselves.

Indeed, owners must earn less than their businesses earn because of "frictional" costs. And that's my point: These costs are now being incurred in amounts that will cause shareholders to earn *far* less than they historically have.

To understand how this toll has ballooned, imagine for a moment that all American corporations are, and always will be, owned by a single family. We'll call them the Gotrocks. After paying taxes on dividends, this family – generation after generation – becomes richer by the aggregate amount earned by its companies. Today that amount is about $700 billion annually. Naturally, the family spends some of these dollars. But the portion it saves steadily compounds for its benefit. In the Gotrocks household everyone grows wealthier at the same pace, and all is harmonious.

But let's now assume that a few fast-talking Helpers approach the family and persuade each of its members to try to outsmart his relatives by buying certain of their holdings and selling them certain others. The Helpers – for a fee, of course – obligingly agree to handle these transactions. The Gotrocks still own all of corporate America; the trades just rearrange who owns what. So the family's annual gain in wealth diminishes, equaling the earnings of American business *minus* commissions paid. The more that family members trade, the smaller their share of the pie and the larger the slice received by the Helpers. This fact is not lost upon these broker-Helpers: Activity is their friend and, in a wide variety of ways, they urge it on.

After a while, most of the family members realize that they are not doing so well at this new "beat-my-brother" game. Enter another set of Helpers. These newcomers explain to each member of the Gotrocks clan that by himself he'll never outsmart the rest of the family. The suggested cure: "Hire a manager – yes, us – and get the job done professionally." These manager-Helpers continue to use the broker-Helpers to execute trades; the managers may even increase their activity so as to permit the brokers to prosper still more. Overall, a bigger slice of the pie now goes to the two classes of Helpers.

The family's disappointment grows. Each of its members is now employing professionals. Yet overall, the group's finances have taken a turn for the worse. The solution? More help, of course.

It arrives in the form of financial planners and institutional consultants, who weigh in to advise the Gotrocks on selecting manager-Helpers. The befuddled family welcomes this assistance. By now its members know they can pick neither the right stocks nor the right stock-pickers. Why, one might ask, should they expect success in picking the right consultant? But this question does not occur to the Gotrocks, and the consultant-Helpers certainly don't suggest it to them.

The Gotrocks, now supporting three classes of expensive Helpers, find that their results get worse, and they sink into despair. But just as hope seems lost, a fourth group – we'll call them the hyper-Helpers – appears. These friendly folk explain to the Gotrocks that their unsatisfactory results are occurring because the existing Helpers – brokers, managers, consultants – are not sufficiently motivated and are simply going through the motions. "What," the new Helpers ask, "can you expect from such a bunch of zombies?"

The new arrivals offer a breathtakingly simple solution: *Pay more money*. Brimming with self-confidence, the hyper-Helpers assert that huge contingent payments – in addition to stiff fixed fees – are what each family member must fork over in order to *really* outmaneuver his relatives.

The more observant members of the family see that some of the hyper-Helpers are really just manager-Helpers wearing new uniforms, bearing sewn-on sexy names like HEDGE FUND or PRIVATE EQUITY. The new Helpers, however, assure the Gotrocks that this change of clothing is all-important, bestowing on its wearers magical powers similar to those acquired by mild-mannered Clark Kent when he changed into his Superman costume. Calmed by this explanation, the family decides to pay up.

And that's where we are today: A record portion of the earnings that would go in their entirety to owners – if they all just stayed in their rocking chairs – is now going to a swelling army of Helpers. Particularly expensive is the recent pandemic of profit arrangements under which Helpers receive large portions of the winnings when they are smart or lucky, and leave family members with all of the losses – and large fixed fees to boot – when the Helpers are dumb or unlucky (or occasionally crooked).

A sufficient number of arrangements like this – heads, the Helper takes much of the winnings; tails, the Gotrocks lose and pay dearly for the privilege of doing so – may make it more accurate to call the family the Hadrocks. Today, in fact, the family's frictional costs of all sorts may well amount to 20% of the earnings of American business. In other words, the burden of paying Helpers may cause American equity investors, overall, to earn only 80% or so of what they would earn if they just sat still and listened to no one.

Long ago, Sir Isaac Newton gave us three laws of motion, which were the work of genius. But Sir Isaac's talents didn't extend to investing: He lost a bundle in the South Sea Bubble, explaining later, "I can calculate the movement of the stars, but not the madness of men." If he had not been traumatized by this loss, Sir Isaac might well have gone on to discover the Fourth Law of Motion*: For investors as a whole, returns decrease as motion increases.*

* * * * * * * * * * * *

Here's the answer to the question posed at the beginning of this section: To get very specific, the Dow increased from 65.73 to 11,497.12 in the 20th century, and that amounts to a gain of 5.3% compounded annually. (Investors would also have received dividends, of course.) To achieve an equal rate of gain in the 21st century, the Dow will have to rise by December 31, 2099 to – brace yourself – precisely 2,011,011.23. But I'm willing to settle for 2,000,000; six years into this century, the Dow has gained not at all.

Debt and Risk

As we consolidate MidAmerican, our new balance sheet may suggest that Berkshire has expanded its tolerance for borrowing. But that's not so. Except for token amounts, we shun debt, turning to it for only three purposes:

1) We occasionally use repos as a part of certain short-term investing strategies that incorporate ownership of U.S. government (or agency) securities. Purchases of this kind are highly opportunistic and involve only the most liquid of securities. A few years ago, we entered into several interesting transactions that have since been unwound or are running off. The offsetting debt has likewise been cut substantially and before long may be gone.

2) We borrow money against portfolios of interest-bearing receivables whose risk characteristics we understand. We did this in 2001 when we guaranteed $5.6 billion of bank debt to take over, in partnership with Leucadia, a bankrupt Finova (which held a broad range of receivables). All of that debt has been repaid. More recently, we have borrowed to finance a widely-diversified, predictably-performing portfolio of manufactured-home receivables managed by Clayton. Alternatively, we could "securitize" – that is, sell – these receivables, but retain the servicing of them. If we followed this procedure, which is common in the industry, we would not show the debt that we do on our balance sheet, and we would also accelerate the earnings we report. In the end, however, we would earn less money. Were market variables to change so as to favor securitization (an unlikely event), we could sell part of our portfolio and eliminate the related debt. Until then, we prefer better profits to better cosmetics.

3) At MidAmerican, we have substantial debt, but it is that company's obligation only. Though it will appear on our consolidated balance sheet, Berkshire does *not* guarantee it.

   Even so, this debt is unquestionably secure because it is serviced by MidAmerican's diversified stream of highly-stable utility earnings. If there were to be some bolt from the blue that hurt one of MidAmerican's utility properties, earnings from the others would still be more than ample to cover all debt requirements. Moreover, MidAmerican retains all of its earnings, an equity-building practice that is rare in the utility field.

   From a risk standpoint, it is far safer to have earnings from ten diverse and uncorrelated utility operations that cover interest charges by, say, a 2:1 ratio than it is to have far greater coverage provided by a single utility. A catastrophic event can render a single utility insolvent – witness what Katrina did to the local electric utility in New Orleans – no matter how conservative its debt policy. A geographical disaster – say, an earthquake in a Western state – can't have the same effect on MidAmerican. And even a worrier like Charlie can't think of an event that would systemically decrease utility earnings in any major way. Because of MidAmerican's ever-widening diversity of regulated earnings, it will always utilize major amounts of debt.

And that's about it. We are not interested in incurring any significant debt at Berkshire for acquisitions or operating purposes. Conventional business wisdom, of course, would argue that we are being too conservative and that there are added profits that could be safely earned if we injected moderate leverage into our balance sheet.

Maybe so. But many of Berkshire's hundreds of thousands of investors have a large portion of their net worth in our stock (among them, it should be emphasized, a large number of our board and key managers) and a disaster for the company would be a disaster for them. Moreover, there are people who have been permanently injured to whom we owe insurance payments that stretch out for fifty years or more. To these and other constituencies we have promised total security, whatever comes: financial panics, stock-exchange closures (an extended one occurred in 1914) or even domestic nuclear, chemical or biological attacks.

We are quite willing to accept huge risks. Indeed, more than any other insurer, we write high-limit policies that are tied to single catastrophic events. We also own a large investment portfolio whose market value could fall dramatically and quickly under certain conditions (as happened on October 19, 1987). Whatever occurs, though, Berkshire will have the net worth, the earnings streams and the liquidity to handle the problem with ease.

Any other approach is dangerous. Over the years, a number of very smart people have learned the hard way that a long string of impressive numbers multiplied by a single zero always equals zero. That is not an equation whose effects I would like to experience personally, and I would like even less to be responsible for imposing its penalties upon others.

Management Succession

As owners, you are naturally concerned about whether I will insist on continuing as CEO after I begin to fade and, if so, how the board will handle that problem. You also want to know what happens if I should die tonight.

That second question is easy to answer. Most of our many businesses have strong market positions, significant momentum, and terrific managers. The special Berkshire culture is deeply ingrained throughout our subsidiaries, and these operations won't miss a beat when I die.

Moreover, we have three managers at Berkshire who are reasonably young and fully capable of being CEO. Any of the three would be much better at certain management aspects of my job than I. On the minus side, none has my crossover experience that allows me to be comfortable making decisions in either the business arena or in investments. That problem will be solved by having another person in the organization handle marketable securities. That's an interesting job at Berkshire, and the new CEO will have no problem in hiring a talented individual to do it. Indeed, that's what we have done at GEICO for 26 years, and our results have been terrific.

Berkshire's board has fully discussed each of the three CEO candidates and has unanimously agreed on the person who should succeed me if a replacement were needed today. The directors stay updated on this subject and could alter their view as circumstances change – new managerial stars may emerge and present ones will age. The important point is that the directors know now – and will always know in the future – exactly what they will do when the need arises.

The other question that must be addressed is whether the Board will be prepared to make a change if that need should arise not from my death but rather from my decay, particularly if this decay is accompanied by my delusionally thinking that I am reaching new peaks of managerial brilliance. That problem would not be unique to me. Charlie and I have faced this situation from time to time at Berkshire's subsidiaries. Humans age at greatly varying rates – but sooner or later their talents and vigor decline. Some managers remain effective well into their 80s – Charlie is a wonder at 82 – and others noticeably fade in their 60s. When their abilities ebb, so usually do their powers of self-assessment. Someone else often needs to blow the whistle.

When that time comes for me, our board will have to step up to the job. From a financial standpoint, its members are unusually motivated to do so. I know of no other board in the country in which the financial interests of directors are so completely aligned with those of shareholders. Few boards even come close. On a personal level, however, it is extraordinarily difficult for most people to tell someone, particularly a friend, that he or she is no longer capable.

If I become a candidate for that message, however, our board will be doing me a favor by delivering it. *Every* share of Berkshire that I own is destined to go to philanthropies, and I want society to reap the maximum good from these gifts and bequests. It would be a tragedy if the philanthropic potential of my holdings was diminished because my associates shirked their responsibility to (tenderly, I hope) show me the door. But don't worry about this. We have an outstanding group of directors, and they will always do what's right for shareholders.

And while we are on the subject, I feel terrific.

The Annual Meeting

Our meeting this year will be on Saturday, May 6. As always, the doors will open at the Qwest Center at 7 a.m., and the latest Berkshire movie will be shown at 8:30. At 9:30 we will go directly to the question-and-answer period, which (with a break for lunch at the Qwest's stands) will last until 3:00. Then, after a short recess, Charlie and I will convene the annual meeting at 3:15. This schedule worked well last year, because it let those who wanted to attend the formal session to do so, while freeing others to *shop*.

You certainly did your share in this respect last year. The 194,300 square foot hall adjoining the meeting area was filled with the products of Berkshire subsidiaries, and the 21,000 people who came to the meeting allowed every location to rack up sales records. Kelly Broz (neé Muchemore), the Flo Ziegfeld of Berkshire, orchestrates both this magnificent shopping extravaganza and the meeting itself. The exhibitors love her, and so do I. Kelly got married in October, and I gave her away. She asked me how I wanted to be listed in the wedding program. I replied "envious of the groom," and that's the way it went to press.

This year we will showcase two Clayton homes (featuring Acme brick, Shaw carpet, Johns Manville insulation, MiTek fasteners, Carefree awnings and NFM furniture). You will find that these homes, priced at $79,000 and $89,000, deliver excellent value. In fact, three shareholders came so firmly to that conclusion last year that they bought the $119,000 model we then showcased. Flanking the Clayton homes on the exhibition floor will be RVs from Forest River.

GEICO will have a booth staffed by a number of its top counselors from around the country, all of them ready to supply you with auto insurance quotes. In most cases, GEICO will be able to give you a special shareholder discount (usually 8%). This special offer is permitted by 45 of the 50 jurisdictions in which we operate. (One supplemental point: The discount is not additive if you qualify for another, such as that given certain groups.) Bring the details of your existing insurance and check out whether we can save you money. For at least 50% of you, I believe we can. And while you're at it, sign up for the new GEICO credit card. It's the one I now use.

On Saturday, at the Omaha airport, we will have the usual array of aircraft from NetJets® available for your inspection. Stop by the NetJets booth at the Qwest to learn about viewing these planes. Come to Omaha by bus; leave in your new plane.

The Bookworm boutique at the Qwest broke all records last year selling Berkshire-related books. An amazing 3,500 of these were *Poor Charlie's Almanack*, the collected wisdom of my partner. This means that a copy was sold every 9 seconds. And for good reason: You will never find a book with more useful ideas. Word-of-mouth recommendations have caused Charlie's first printing of 20,500 copies to sell out, and we will therefore have a revised and expanded edition on sale at our meeting. Among the other 22 titles and DVDs available last year at the Bookworm, 4,597 copies were sold for $84,746. Our shareholders are a bookseller's dream.

An attachment to the proxy material that is enclosed with this report explains how you can obtain the credential you will need for admission to the meeting and other events. As for plane, hotel and car reservations, we have again signed up American Express (800-799-6634) to give you special help. Carol Pedersen, who handles these matters, does a terrific job for us each year, and I thank her for it.

At Nebraska Furniture Mart, located on a 77-acre site on 72nd Street between Dodge and Pacific, we will again be having "Berkshire Weekend" pricing. We initiated this special event at NFM nine years ago, and sales during the "Weekend" grew from $5.3 million in 1997 to $27.4 million in 2005 (up 9% from a year earlier). I get goose bumps just thinking about this volume.

To obtain the discount, you must make your purchases between Thursday, May 4 and Monday, May 8 inclusive, and also present your meeting credential. The period's special pricing will even apply to the products of several prestigious manufacturers that normally have ironclad rules against discounting but that, in the spirit of our shareholder weekend, have made an exception for you. We appreciate their cooperation. NFM is open from 10 a.m. to 9 p.m. Monday through Saturday, and 10 a.m. to 6 p.m. on Sunday. On Saturday this year, from 5:30 p.m. to 8 p.m., we are having a special affair for shareholders only. I'll be there, eating barbeque, drinking Coke, and counting sales.

Borsheim's again will have two shareholder-only events. The first will be a cocktail reception from 6 p.m. to 10 p.m. on Friday, May 5. The second, the main gala, will be from 9 a.m. to 4 p.m. on Sunday, May 7. On Saturday, we will be open until 6 p.m.

We will have huge crowds at Borsheim's throughout the weekend. For your convenience, therefore, shareholder prices will be available from Monday, May 1 through Saturday, May 13. During that period, just identify yourself as a shareholder through your meeting credentials or a brokerage statement.

Borsheim's operates on a gross margin that, even before the shareholders' discount, is fully twenty percentage points below that of its major rivals. Last year, our shareholder-period business increased 9% from 2004, which came on top of a 73% gain the year before. The store sold 5,000 Berkshire Monopoly games – and then ran out. We've learned: Plenty will be in stock this year.

In a tent outside of Borsheim's, Patrick Wolff, twice U.S. chess champion, will take on all comers in groups of six – blindfolded. Additionally, we will have Bob Hamman and Sharon Osberg, two of the world's top bridge experts, available to play with our shareholders on Sunday afternoon. They plan to keep their eyes *open* – but Bob never sorts his cards, even when playing for a national championship.

Gorat's – my favorite steakhouse – will again be open exclusively for Berkshire shareholders on Sunday, May 7, and will be serving from 4 p.m. until 10 p.m. Please remember that to come to Gorat's on that day, you must have a reservation. To make one, call 402-551-3733 on April 1 (*but not before*).

In this school year, about 35 university classes will come to Omaha for sessions with me. I take almost all – in aggregate, perhaps 2,000 students – to lunch at Gorat's. And they love it. To learn why, come join us on Sunday.

We will again have a special reception from 4:00 to 5:30 on Saturday afternoon for shareholders who have come from outside of North America. Every year our meeting draws many people from around the globe, and Charlie and I want to be sure we personally greet those who have come so far. Last year we enjoyed meeting more than 400 of you from many dozens of countries. Any shareholder who comes from other than the U.S. or Canada will be given a special credential and instructions for attending this function.

* * * * * * * * * * * *

Charlie and I are extraordinarily lucky. We were born in America; had terrific parents who saw that we got good educations; have enjoyed wonderful families and great health; and came equipped with a "business" gene that allows us to prosper in a manner hugely disproportionate to other people who contribute as much or more to our society's well-being. Moreover, we have long had jobs that we love, in which we are helped every day in countless ways by talented and cheerful associates. No wonder we tap-dance to work. But nothing is more fun for us than getting together with our shareholder-partners at Berkshire's annual meeting. So join us on May 6th at the Qwest for our annual Woodstock for Capitalists. We'll see you there.

February 28, 2006

Warren E. Buffett
Chairman of the Board

Morning Session - 2006 Meeting

1. Welcome

WARREN BUFFETT: Good morning. I'm Warren; he's Charlie.

There's one thing I should probably clear up first because I know it's puzzling you. In the movie, he always gets the girl.

Now, that's hard to figure out, isn't it? But I've — Charlie — but I finally understand what the — what's happening.

It's something called the "Anna Nicole Smith Rule." That's when choosing between two old rich guys, pick the older one. (Laughter)

Now, in a few minutes we're going to open this up to your questions. We have a number of zones, and we'll just proceed around zone by zone.

But before we do that, there are a few people I would like to thank, and then there's a couple of short announcements I'd like to make.

First of all, if can we get the spotlight up there on Andy Heyward, Andy does that cartoon for us every year. He travels around. He gets the voices in there. Andy, where are you? (Applause)

He comes up with the ideas.

Andy is the — runs DiC Entertainment. DiC is the one I've told you about in the past that produced "Liberty's Kids," which I think is probably the best way not only for youngsters to learn American history, but for people my age as well.

I mean, it's a terrific series of young kids — a couple of young ones in the time of the American Revolution. And I watched several of those episodes, and I'd forgotten a lot of American history since I was in school. It's just a really — it's a wonderful series.

It appeared on PBS over time. And if you're looking to learn American history or have your children or grandchildren learn it, you couldn't do better.

And in the months ahead, he's working on the — what do we call it? — it's the "Secret Millionaires Club."

But it's going to be a program that's designed to teach young people some of the very basic lessons of — about money. How to avoid getting into trouble with it, how to use it effectively, and what your attitude should be toward it.

So, we're looking forward to getting that out early next year. I'll guarantee you that it will be a terrific program for teaching children and your grandchildren something about the subject of money.

I also want to thank Bob Iger. Bob is up there. Bob runs Disney. He's doing a terrific job, and — (Applause)

I thought we could originally entice the "Desperate Housewives" into appearing simply by the chance to appear with Charlie. But after we made that appeal, we then went to Bob Iger and said, "See what you can do for us, Bob." So thank you, Bob.

Also in that section, I'd like to have a special introduction for the man that first taught Charlie and me something about the value of franchises and the advisability of buying great businesses instead of cheap businesses.

Prior to the purchase of See's Candies in 1972, I intended to look primarily at financial measures in buying businesses and buying things that were cheap in relation to book value, and we always tried to get a lot of tangible assets in relation to our money.

But we found out that the intangible assets, if properly nourished and if properly identified, you can make a whole lot more money with than buying a lot of tangible assets cheap.

And in 1972 — early in '72, Charlie and I went to See's Candy, which had been in the hands of the See family for many decades, and we bought it.

And, of course, Charlie and I didn't know a thing about making candy — we were pretty good at eating it — and we needed someone to run the place.

We met a young fellow there. It was clear to both of us that he was the ideal person to run See's Candy, and in just a few minutes we made a deal with him that's lasted a lifetime.

And if Chuck Huggins and his wife, Donna, would stand up, I'd love to have you give them a real well-deserved round of applause. (Applause)

As you notice, my daughter Susie produced that movie. She does every year.

She works hard on it, and we don't pay her anything, although she does remind me occasionally when I'm out at Borsheims that she worked very hard on the movie — (Laughter) — and I'll see her there on Sunday.

And, Suz, if you would take a bow, please. (Applause)

And the impresario of this event, I just turn it over to her every year and forget about it.

But she puts on this show. She brings all the exhibitors in. She arranges everything. She moves into the hotel across the street a few days ahead of time, or a week ahead of time, and makes sure everything hums.

And Charlie and I just come down on the day of the meeting and take a bow. And that's Kelly Muchmore-Broz.

Kelly, are you here? Where's Kelly? There she is. Give her a big hand. (Applause)

We wouldn't be having this without her.

2. Berkshire directors introduced

WARREN BUFFETT: Now I'd like to introduce our directors. We're going to get to the business meeting at 3:15. We do the Q&A first, and we get to that later on.

But for those of you who won't be around — and a lot of people tend to leave at lunchtime — I'd like to introduce the various directors. You've met Charlie and myself.

If you'll just stand individually, we can withhold the applause, if any, until the end. (Laughter)

That way that embarrassing applause meter that we had on the Omaha Idol Show will not cause anyone distress.

Howard Buffett — Howie — Malcolm Chace, Bill Gates, David Gottesman, Charlotte Guyman, Don Keough, Tom Murphy, Ron Olson, and Walter Scott, Jr. It's a terrific group of directors. (Applause)

I know of — I literally know of no directors of any large, publicly-owned companies that have, universally, as significant a percentage of their net worth in the company, purchased in the open market, as that group. Do you, Charlie?

CHARLIE MUNGER: None.

WARREN BUFFETT: None. OK. (Laughter)

That may be all you hear from him, folks — (Laughter) — so kind of savor a little bit.

3. Jamie Lee Curtis

WARREN BUFFETT: I also would particularly like to thank Jamie Lee Curtis, even though she came up with the wrong guy at the end.

Jamie cooperated on this. We're going to have, as a thank you — Jamie is very interested in the Park Century School. One of her sons goes to that school. It's for gifted, but learning-challenged students.

They're having an auction tonight, but it will continue subsequently. And Bill Gates and I have autographed a Monopoly set, and we will personally inscribe it to whoever the winner of that auction is.

So if you want to go to eBay and check that out, we promise that we will not similarly autograph anything else. So I hope that Jamie Lee and the school have a big success on that.

4. Berkshire's Q1 earnings

WARREN BUFFETT: We have two announcements, one relatively unimportant but, nevertheless, pleasant, and that is that we released our earnings yesterday after the close.

And I think we can put those up on the screen. Having any luck on that? Did we withdraw those earnings, Marc? Oh, they still have another six hours of audit or so.

And, as you can see, we don't pay any attention to realized gains or losses. We had some gains this year; we had some losses in the first quarter of last year.

So — but that's meaningless in the short term. Over time, obviously, it makes a difference.

But the — you know, we do not pick anything to buy or sell in any given quarter or any given year in the way of securities based on the effect it will have on our income account for that period. It's totally immaterial.

In fact, we'd rather sell things that we have a loss in, just from a tax standpoint.

If we have some high-tax cost stocks and some low-tax cost stock, we'll sell the high one and record the loss because we would get a better tax result that way for the short term. So we ignore that.

But if you look at the operating earnings, you'll see that in those main divisions that I take in the annual report — I show our four major businesses and then investment income is aside of it — things worked out pretty well in the first quarter for all of them.

I would caution you that, in our insurance underwriting, our worst quarter would normally be expected to be our third quarter. You're not going to have hurricanes in this hemisphere in the first quarter.

The real exposure — the worst exposure — is in the third quarter, and then there's a lesser exposure in the fourth quarter.

We write a lot of catastrophe insurance business.

Earthquakes, as far as we know, don't have any particular seasonal aspect to them, but hurricanes definitely do.

And the interesting thing is that under standard accounting, if we write a hurricane policy for the calendar year 2006 and we receive a million dollars of premium, we would earn a quarter of a million in the first quarter and a quarter of a million in the second quarter and so on.

We would earn a pro rata throughout the year. And that, in our view, actually is not proper accounting, but it's required accounting.

The real exposure to loss is primarily in the third quarter.

So you can't take our insurance underwriting results in any way for a rather benign quarter, like the first quarter, and extrapolate them for the year. But, nevertheless, it was a very good year — a very good quarter.

GEICO had excellent growth, I believe that our — well, I'm almost certain that our growth in the first quarter was better than any of our main competitors, and, actually, by — probably by some margin — the underwriting was very good. Our reinsurance underwriting was very good.

Gen Re had a good quarter. Our smaller companies had a good quarter.

So things, generally, have been working very well in all four sectors.

And that's nice, but that's not terribly important. I mean, five years from now, nobody will remember whether the first quarter or the second quarter was good at Berkshire Hathaway.

5. Acquisition of "really extraordinary" ISCAR

WARREN BUFFETT: But what did happen, and which we announced last night — which was very important — the acquisition of a large, extremely well-managed, profitable, really extraordinary company called ISCAR.

And up until October of last year, I knew nothing of ISCAR. I did not know about their extraordinary management.

But I got a letter, and I got a letter from Eitan Wertheimer, and — maybe a page and a half, page and a quarter — and he told me something about this business.

And sometimes character and talents sort of just jump off the page at me, and this was one of those letters, and it came from Israel. And I expressed an interest, after reading this letter, in getting together with Eitan.

And not long thereafter, I met not only Eitan, but his CEO and president, a remarkable man named Jacob Harpaz; Danny Goldman, the CFO. And we met in Omaha. They subsequently met Charlie.

And this all came to fruition yesterday when we signed a contract. Now we have — well, before I go on to this, maybe Charlie would like to say a word or two about ISCAR.

He's the — hard as it is for you to believe, he is not only — he's as enthusiastic about this as I am.

Now, have you ever seen that before, I'd ask you? Charlie likes this one extraordinarily well. Charlie?

CHARLIE MUNGER: Well, this is a company that, from very modest beginnings, grows to be the best company in its field in the world. It's not yet the biggest, but that leaves them something to do.

The average quality of the people in this company is not only extraordinary, it's off the chart. And the beauty of this, as you look at the two of us, is they're all young.

No, this is a real quality enterprise, and these people know how to do some things that we don't know how to do. A lot.

So, of course we're enthusiastic about the company. I'm always enthusiastic when I get to deal with some of the best people in the world.

I would like if we could get the spotlight down there. They're right down here in front. I would like, individually, three managers to stand up.

And then Eitan is going to talk to us a bit, and then we have a — I think we've got it arranged so that we can have a short movie that will tell you something about ISCAR.

But, first of all, if Eitan Wertheimer would stand up and we can get the spotlight on him? Over there. OK.

Eitan, let me introduce the other two, and then can we have you speak to the group?

Jacob Harpaz is the president and the CEO. (Applause)

Take a good look at these people because they're going to make you — they're going to do very, very well for you.

And Danny Goldman. Danny, would you stand up? (Applause)

Thank you. And if you'll give the microphone to Eitan, I think Eitan would like to talk to the group just a bit.

EITAN WERTHEIMER: Good morning, everybody. It's Omaha. It's spring. The fields are green. The days get longer. And we bring a big family into a new home.

I'm standing here before you representing 5,869 people, not only the people, but the families, their past and their future.

It took us three years to look what to do next. We are successful. We still have a lot of mistakes ahead of us to do.

Until we found one day somebody came to us and asked, "Have you heard about Berkshire Hathaway and Mr. Buffett?" We said, "Yes, we heard, but we never thought about it."

And when we started studying about the company, we understood that this is the right combination for us, a family company with a strong culture and a culture we'd love to keep, a young group of people that will love to work, maybe not for very long, but not less than 20, 25 years from today.

And we decided, let's try it. And we had a very interesting lesson from Warren, we had a very interesting lesson from Charlie, and we survived both of them. (Laughter)

I'm very happy that I represent here, not only the people that make the products and go to the customers, I also in a way represent the big family of customers that make — manufacture things.

They make cars go faster and safer. They'll make airplanes fly. They will make the mold to make the bottles for the Coca-Cola. They'll make a washing machine. They'll make the tools to make a carpet.

They'll make many things. And many times the people that manufacture are a little bit in the shade.

And I'm very proud to stand as a manufacturing guy, and say I'm standing for all of them, all our customers, which I must thank them every morning, not only for buying, but also for trying new ideas that we bring and working very hard to stay competitive.

Whoever will stay competitive will be there long-term. And this is also our goal.

Here is Mr. Harpaz, Jacob. In reality, my job is not to disturb. He, in a very gentle way, fired me ten years ago.

He performed and did better things than I could do, and it didn't make sense that I'll disturb him; so I went on to do other things. We've been in the company only 34 years, and the real job is done by Jacob and many, many other people.

I'm sure that you have seen the film "In 80 Days Around the World." And we prepared for you, "In 61 Companies Around the World." And I hope you enjoy it.

We definitely have to fulfill a lot of expectations. We definitely have to work very hard to make everybody very proud that we joined the family, also our people and for sure everybody in this room.

So let's hope we'll all be successful, and let's look into the future. And I'm looking forward to come every spring, to Omaha, where the fields are green and the days get longer. Thank you. (Applause)

ON TAPE, ANNOUNCER: IMC presents "Better Solutions for a Better World."

In 1889, the appearance of the first automobiles brought with it the need for sophisticated solutions in metal processing. Such were the beginnings of a new company, launched by engineers in the U.S.: Ingersoll.

In the decades to follow, another plant was set up in Germany. Since its creation, Ingersoll has established strong ties with industry, which has placed it firmly in a leadership position.

For over a century, time after time, Ingersoll has proved that the best solutions begin with the best engineers.

In 1999, Ingersoll joined the IMC Group and discovered that the sky is not the limit but only the starting point.

Meantime, at the turn of the 20th century, another metal processing plant was established on the other side of the world in South Korea: TaeguTec. In joining the IMC Group in 1997, TaeguTec reinforced its position as the main supplier of cutting tools for industry in the Far East.

Today TaeguTec has achieved unparalleled success, penetrating new markets, streamlining production process, and showing that precise global thinking can cancel distances.

In the middle of the 20th century, in the north of Israel, Stef Wertheimer had predicted, from his little shack in Nahariya, the global need for more advanced cutting tools. "The new world demands better solutions," said Wertheimer, and established ISCAR.

In a relatively short time, ISCAR has become the second largest cutting tool manufacturer in the world, a leader in the area of metal removal.

ISCAR has revolutionized every aspect of machining. Its mission: to apply innovation, quality, and automation on the highest technological level.

Among ISCAR's groundbreaking achievements are the revolution in cutoff applications; development of SELF-GRIP in the '70s; the pioneering triumphs in milling; the HELIMILL in the '80s; the CHAMDRILL; the revolution in drilling in the '90s and tangential positive milling; the innovative TANGMILL.

These innovations and more have reinforced ISCAR's position as the world's leader in development of cutting tools.

The combination of Ingersoll, TaeguTec, and ISCAR has given rise to the IMC Group, taking the best of all worlds and creating the world's best tools.

Today's rapidly advancing world demands that we constantly elevate standards, apply ourselves more and more to provide ever-smarter and precise solutions, pushes us to advance to improve ourselves, to lead.

ON TAPE, EITAN WERTHEIMER: You have to be a full line supplier. To be a global company means to be local in many countries, in many places around the world."

ON TAPE, ANNOUNCER: Other IMC Group companies:

IT.TE.DI Italy, designers and manufacturers of PCD diamond tools for high-precision aluminum machining in the automotive and aerospace industry;

UOP Italy, producers of high-quality solid carbide and high-speed steel standard tools and special tailor-made designs for applications in the aerospace and dye and mold industries;

Outiltec France, expert creative solutions in extra-long gun drills for deep drilling and applications that require unique geometries;

Unitac Japan, deep-drilling BTA-style tools with brazed and indexable heads;

And Wertec Italy, design and manufacturer of unique counterboring tools for deep and complicated boring applications.

ON TAPE, JACOB HARPAZ: If you look outside and you see some cars over there, be aware that in each car at least one part is manufactured by one of the IMC companies, for sure.

ON TAPE, ANNOUNCER: Automotive.

ON TAPE, EITAN WERTHEIMER: Before you have a product line, the geography spread, the people that understand the language, you cannot start thinking, “May I try or may I not try to become automotive supplier?”

ON TAPE, ANNOUNCER: We at IMC have made the automotive industry the foremost objective for all the factories of the group. All the Ingersoll vessels connect to contribute massively to the work of the automotive industry in North America.

At the same time, on the other side of the globe, TaeguTec cutting tools joins the momentum of the rapidly-developing Japanese and Korean automotive industries.

The alliance between ISCAR’s developments and the IMC Group has led to comprehensive solutions, which contribute to the efficiency of global automotive production and pave the way for production cost savings.

ON TAPE, JACOB HARPAZ: We’re not only selling tools, we are selling technology. We are selling the customer a better way to make profit. And we believe, by giving a solution, it can increase its productivity. And the bottom line for the productivity, making more profit for his company.

ON TAPE, ANNOUNCER: Heavy industry.

The power of IMC comes clearly to the fore in heavy industry. The unique combination of the three main manufacturing plants creates new opportunities.

The geographic location of Ingersoll and TaeguTec has led the companies to develop specific heavy industry specialization. The innovative geometries developed by ISCAR, together with the design and production of tools made to conform to the special requirements of this industry, places IMC at the forefront of this important industry.

Aerospace.

The blend and precision and inventiveness ought to go far.

If you want to reach far and high, you must be on top of the game in technology, in understanding materials, (inaudible).

The aerospace industry demands machining solutions for exotic and difficult-to-process materials, proficiency in lightweight materials, such as aluminum, and the ability to machine parts that require massive processing capabilities.

The grouping of the three plants and the profound understanding of cutting materials and complex cutting geometries, along with the expertise and building large-size tools, make IMC the strategic partner for the aerospace industry.

General engineering.

All this vast engineering experience accumulated in every field, in every industry, and in every corner of the world, has paved the way for the development of new, groundbreaking tools, which streamline production processes, shorten machining time, and reduce costs for every customer in the world of general engineering.

ON TAPE, JACOB HARPAZ: After releasing the product into the market, we put another team — our own team — and they'll now compete against the release of the product.

ON TAPE, EITAN WERTHEIMER: In exhibitions, we are recognized as a very, very innovative company. Many times the sentence is, "Let's go there because they must have something new. They always have something new." That's a big compliment, and innovation will make the difference.

ON TAPE, STEF WERTHEIMER: I believe that, in a way, industry is an art in itself. It's art. It's creation. You create something.

ON TAPE, ANNOUNCER: You can see it immediately upon entering an IMC branch or factory. The house of IMC is, first and foremost, a home for employees and customers as one. Years of experience have taught us that this is a vital element for success.

ON TAPE, EITAN WERTHEIMER: Many companies have buildings and machines and a lot of real estate, but it's only people that have a chance to make any difference.

ON TAPE, JACOB HARPAZ: I believe with the ambition of the people, with the hard work of the people, we are going to reach the position of being number 1.

ON TAPE, ANNOUNCER: The world demands better solutions. That is why we're here. IMC. (Applause)

WARREN BUFFETT: This is an important acquisition, as we paid $4 billion for 80 percent of the company. The family remains in partnership with us. They retained 20 percent.

It's the first business we've purchased that is based outside the United States. We have others that have operations there.

I think you'll look back on this in five or ten years as being a very significant event in Berkshire's history.

And it's interesting. In this world, in which many businesses get auctioned off, figures get dressed up before they sell them and leveraged up and so on, we continue to hear from people periodically who consider their business as too important to auction.

And we've never really bought one at auction — have we, Charlie — that I can remember?

CHARLIE MUNGER: I can't remember one either.

WARREN BUFFETT: Yeah. So there's a benefit in that.

Because, in effect, the people that pass through that filter of caring enough about their business that they don't simply put it up like a piece of meat at an auction are also the people, in our view, that make the best managers and make the best partners over time.

There is something going on in their brain that says this business is so important, and the people that are here are so important, and the customers we take care of are so important, that we actually care about the home in which these businesses reside.

And I think that filter works very much to our benefit. We've bought a number of businesses in the last 15 or 18 months where people have felt that way, and I think the crowning one here is ISCAR.

So, I welcome our new friends from Israel. I'm going to go over there and visit in September to see if there are any more girls out there like you, see if we can drum up a little more business.

6. Questions and answers

WARREN BUFFETT: And with that, let's go on to the question period.

And we will do this until noon, at which time we'll break for 45 minutes or so and come back, and then we'll continue until about 3 o'clock.

Then we'll break for about 15 minutes, have the formal business meeting from 3:15 to 3:16. (Laughter)

And then at 4 o'clock, Charlie and I are meeting with all of the people who came from outside of North America.

This year we had about 550 requests for tickets from countries outside of North America, as opposed to about 380 last year. So we're looking forward to meeting all of you that have come a long way to attend this meeting.

7. We can "easily handle" Social Security

WARREN BUFFET: Now, we've got a dozen zones in here, and we'll start off with zone number 1.

AUDIENCE MEMBER: Yeah. My name is Edward Jannig (PH) from Denver, Colorado.

First, I want to thank Charlie and Peter Kaufman for their wonderful book. I think Benjamin Franklin would be very proud.

My question is, last year when asked about Social Security, you said that a country as rich as the U.S. should take care of their old people.

This year I read Pete Peterson's book, "Running on Empty," and I was wondering, from the standpoint that is the greatest benefit to society, where should you draw the line on entitlement spending?

And I was wondering if you gentlemen disagree on the subject at all.

WARREN BUFFETT: Now, you always have the question in every society — whether it's formalized or not — you have the question of how you take care of the old and the young.

You know, you have people in their productive years turning out goods and services, and you have people that are too young to participate in the turning out of those goods and services but that, nevertheless, need them, and you have people that are old in the same position.

And starting in 1935, I believe, we statutorily formalized that idea. We'd always felt that way about the young, that school should be there for them when they couldn't pay for them themselves, and that the society owed a duty to both classes. But in 1935, we took up the idea that the government would provide this base limit.

Now, I think there's some merit to the argument that the 65 became outmoded as longevity improved. And that is now being changed, to some degree, and I think there's probably some more change needed.

But this country has an output of almost $40,000 of GDP per person. And some people, like Charlie and myself, are very lucky to be wired in a way that in a market system we get enormously wealthy.

And other people are not so wired, and they come out and they, in a market system, do not necessarily do so well, and they're fairly lucky if they provide for themselves during their working years and they do not have the ability to earn at a rate that takes care of them in later years.

And society has taken that on. Our country can easily handle the Social Security question.

I mean, it — and it's kind of astounding to me that a government that is quite happy to run a 3- or $400 billion deficit now worries a lot about the fact they're going to have a $100 billion deficit or something in Social Security 30 years from now. I mean, there's a little bit of irony in that. (Applause)

It is true that, if we maintain the present age brackets, that eventually you have one person in the older years for every two that are producing in the younger years.

But we produce more every year as we go along. And there will always be a struggle in a representative society, in a democratic society, between how you divide up that pie.

But we have a huge pie. We have a growing pie. And we can very easily take care of people, in a manner at least as well as we take care of them now, in the future from that growing pie without the people in their productive years not — also having a gain in their standard of living.

CHARLIE MUNGER: Yeah. I think the world of Pete Peterson, but I don't come to the same conclusion.

Of course, if we didn't tinker with Social Security, it would eventually run low on funds.

But if the country is going to grow at 2 or 3 percent per annum for decades ahead, it's child's play to take a little larger share of the pie and divert it to the people who are older.

It would be crazy, I think, to think you would always freeze the share of money going to the old at exactly the same sum no matter how rich you got.

It's a perfectly reasonable thing to do to pay a little more in the future to support what I regard as one of the most successful programs in the history of our country.

Social Security has a low overhead and does a world of good. It's a very reasonable promise to make, and I wish my own party would wise up a little on how little an issue it is. (Applause)

WARREN BUFFETT: This is what happens when you ask a couple of guys our age how you feel about treating older people. (Laughter)

Incidentally, the — currently — and everybody likes to talk about the unified budget — you didn't hear talk about the unified budget 30 years ago on the national level.

But the unified budget means that the Social Security surplus now gets counted toward reducing the overall budget. So they're very happy at present to take the Social Security surplus and trumpet the number that is after that.

But then when they start talking about a Social Security deficit out 20 or 30 years, they tend to get — they want to separate that off and get very panicky about it. So I think there's a lot of hypocrisy in the argument.

8. Different businesses, different compensation

WARREN BUFFETT: Let's go to number 2.

AUDIENCE MEMBER: Good morning. My name is Phil Rafton (PH), shareholder from Orinda, California.

My question for you: How would you design a compensation system in a very cyclical industry that can swing from boom to bust?

You want to tie compensation to results in some way, but this can lead to huge swings in pay. And, for example, today in booming industries, like energy and mining, profits are large as a result of the boom in the industry and not necessarily the results of management skill.

Conversely, when the industry is down, profits are low due to no fault of management.

So, again, my question: How do you design a compensation package to best reward management performance?

WARREN BUFFETT: Yeah. That's a terrific question. Because if you're running a copper company now with copper at 3.50 a pound, you can coin money even if you happen to be the village idiot, you know.

And, similarly, when copper was 80 or 90 cents a pound, which has been most of our adult lifetime, in that general — there were fairly sparse times in mining much of the time.

And we design compensation systems at Berkshire. We have dozens and dozens of companies. Some of them are capital-intensive. Some of them are cyclical. Some of them don't require much capital.

Some of them are terrific businesses if no one runs them. Some of them are very difficult businesses, even if the best of management comes.

And we have a wide variety of compensation systems. You're wise when you say, "How do you design one for that kind of a situation?" Because so often people come in with, sort of, standardized systems or whatever the highest system they see is, and then apply it to their own benefits.

Most people, if left to select their own compensation systems, will come up with the appropriate, from their standpoint, comparable arrangement.

If we owned a copper mining company in its entirety, we would measure it, probably, more by cost of production than we would by whether copper was selling for $2.00 a pound or a dollar a pound.

I mean, they — the management has control — depending on the kind of ore bodies and everything — but they certainly have control over operating conditions. They do not have control over market prices.

And we would have something, I think, that would not fluctuate a lot in a business like that, the bonus available, but it would probably tie to what we thought was under the control of the individual who's managing the business. That's what we try to measure.

We try to understand the industry in which they operate, and we try to understand the things that the manager can have an impact on, and how well they're doing in that.

We measure, at GEICO, for example, we measure by two unit measures: one is growth — unit growth — and one is the profitability of seasoned business.

New business costs money. We want new business; so we don't charge that against the manager or the 20,000 other employees who share in it.

We do not want to pay for anything that is not under their control. We do not want to pay for the wrong things.

And I would say, in a cyclical business, that you — you know, if oil is $70 a barrel, I don't think any particular management deserves credit for it. In fact, they all sort of deny that they've got anything to do with it when they get called before Congress.

But I would not give them credit for the fact that oil is $70 a barrel or $40 a barrel. I would give them credit for low finding costs for — over time.

I mean, what you really want to do, if you have a producing oil company, is you want a management that, over a five- or ten-year period, discovers and develops oil at lower-than-average unit cost.

There's been a huge difference in performance in that among even the major companies, and I would pay the people that did that well. I would pay them very well, because they're creating wealth for me.

And I would not pay the guy a lot of money that simply is cashing in on $70 oil and that really has got a terrible record in finding it at reasonable prices. Charlie?

CHARLIE MUNGER: Yeah. It's easy to have a fair compensation system like we have at Berkshire.

And a lot of other publicly-traded corporations also have fair compensation systems, but about half of them have grossly unfair systems in which the top people get paid too much.

We know how to fix Berkshire, but our ability to influence the half of American industry where the compensation systems are unfair has so far been about zero.

WARREN BUFFETT: Yeah. One thing you may find interesting, we have — I don't know — 68 operating companies. We probably have — I probably have responsibility for the compensation

system of, perhaps, 40 managers or thereabouts, because some of them have businesses grouped under them.

I can't think — again, I can't think of anyone we have lost over a 40-year period because of differences in views on compensation.

I also — we've never had a compensation consultant come into Berkshire. They may have had them at the subsidiaries, but they're smart enough not to tell me. (Laughter)

They — it's never happened. I mean, we do not — and we do not have lots of meetings. We don't spend a lot of time on it. It is not rocket science.

It's made more complicated than it needs to be, more confusing than it needs to be, because having a system that is complicated and confusing serves the needs of some who want to get paid a whole lot more than their worth.

And the system won't change because it's working to the advantage of the people that have their hand on the switch, the people that pick the human relations consultants and pick the people who are on the comp committee.

I was put on one comp committee, and Charlie can tell you what happened. (Laughter) He was there.

CHARLIE MUNGER: Yeah. We were the biggest shareholder at Solomon. Two of us were on the board, and Warren was on the comp committee.

And in that frenzy of envy, which characterizes compensation in investment banking, Warren remonstrated, softly, I thought, towards a slightly more rational result, and he was outvoted.

WARREN BUFFETT: Charlie used the term "envy" rather than "greed," which is interesting, because that's been our experience, is that envy is probably a bigger motivation, in terms of people wanting to be in that top quartile, or whatever it may be, than greed.

It's a very interesting phenomenon that you can hand somebody a $2 million bonus, and they're fine until they find out that the person next to them got 2-million-1, and then they're sick for the next year. (Laughter)

Charlie has pointed out — you know, of the seven deadly sins — that envy is kind of the silliest because you don't feel better. You know, I mean, if you get envious of somebody, you feel worse the whole time.

Now, you know, gluttony — you know, I've had some of my best times while being gluttonous. (Laughter)

There's a real upside to gluttony. (Laughter)

We won't get into lust. (Laughter)

But I've heard that there are upsides to that, occasionally.

But envy, you know, all you do is sit around and make yourself sick and can't get to sleep. But that's — it's part of the human psyche, and you see it big time and you get this irony.

The SEC wants even more transparency on pay, which I think, you know, basically is a good idea except for the fact that it becomes a shopping list for every other CEO when they see that somebody is getting their haircuts paid for by the company.

They decide that they, too, need their haircuts paid for by the company, and they suddenly become big tippers.

9. Our managers are "trained" by our culture

WARREN BUFFETT: Let's move on to number 3.

AUDIENCE MEMBER: Greetings to all of you from the Midwest of Europe. I'm Norman Wintrop (PH) from Bonn, Germany.

Thank you very much for writing your shareholder letter in such a way that we feel treated as partners.

Warren, in the shareholder letter, you ended with your thoughts on managing Berkshire Hathaway in the future.

May I ask you, how do you train your successors? What do you tell them? How do you summarize to them what is important to you?

And how, if you are able to do so, how would you measure whether or not they have lived up to your expectations?

WARREN BUFFETT: Well, that's a good question.

And, I think, actually, in reading that letter — you know, that's part of the — part of the reason it's written — is to convey, not only to our partners, our shareholders, but also to our managers and anybody else in the public, you know, what Berkshire is all about.

This meeting, you know, in terms of what we do is intended to give a personality and a character to Berkshire. And we don't say it's better than anybody else's, necessarily, but we do think it's us.

And we think — we want managers to join us who believe in the sort of operation we have, a partnership with shareholders, a lifetime commitment to the businesses. We want those people to join us.

We want what they see after they join us to underscore the values we have. So everything we do we hope is consistent with what most people would call a "culture" at Berkshire.

So the written word, what they see, what they hear, what they observe. And that is training in itself.

It's the same sort of training you get as a child. I mean, you — when you are in the home and you're learning something every day by the behavior of these terribly important people, these big people that are around you.

And a home has a culture. A business has a culture. To some extent, a country can have a culture. And we try to do everything that's consistent with that. We try to do nothing that is inconsistent with that.

And, believe me, if you're a bright Berkshire manager — and they are bright — you know, they buy into it to start with, they see that it works, you know, and it doesn't require formal lessons or mentoring or anything of the sort.

I mean, if you talk to our Berkshire managers, you would find that they think consistently with how, in effect, Charlie and I think.

There are plenty of people that don't, and they don't join us.

I mean, you know, we hear all the time from people — I've got one coming in a little while, actually, that, you know, nothing is going to come of it because this guy — I mean, his brain processes things different than mine does.

And I'm kind of interested in learning about his business, so we'll get together, but it wouldn't fit. You know, it would just not — it would be a mismatch.

And the nice thing about it is our culture is so well-defined that there aren't many mistakes, in terms of people entering it or behaving in a way inconsistent with it. So I think that — I don't think there's any formal training necessary.

I mention in the annual report the fact that, if I die tonight, there are three obvious candidates to take my place.

Now, the board knows which one of them they would agree on tonight. Might be different three years from now, but any of those three would not miss a beat in terms of stepping into the culture that I hope we have here, because it's theirs too.

Charlie?

CHARLIE MUNGER: Well, you know, if Warren has kept the faith until he's 75 years old in maintaining a certain kind of culture and a certain way of thinking, do you really think he's going to blow the job of passing the faith on?

What could be more important, in terms of his duties in life? You all have something — (Applause)

You all have something more important to do than worry about the fact that the candle is going to go out at Berkshire just because some people die.

This is a place where the faith is going to go on for a long time.

Of course, at headquarters, we aren't training executives. We find them. And they're not hard to find.

You know, if a mountain stands up like Everest, you don't have to be genius to recognize that it's a high mountain. (Laughter)

10. Irrational pricing of closed-end funds

WARREN BUFFETT: OK. Number 4?

AUDIENCE MEMBER: My name is Yuen Gunn (PH), and I'm from Whitehaven in England.

Actually, the last time I was this nervous asking a question, I'd just presented my wife with an engagement ring from Borsheims. (Laughter)

WARREN BUFFETT: Well, I hope you get nervous again. (Laughter)

AUDIENCE MEMBER: My question for you is, with the enthusiasm at the moment for emerging markets, many closed-end funds which contain emerging market stocks are trading at significant premiums to their net asset values, even when open-ended funds can be used to acquire similar portfolios of stocks for the net asset values.

This doesn't seem very rational to me. Why do these premiums persist, and do you agree that it's irrational?

WARREN BUFFETT: Yeah. I would say it would tend to be. I don't know anything about the specifics that you're referring to on emerging market funds. I haven't looked at the size of the premiums.

But, history would certainly show that most closed-end funds — just about all closed-end funds — eventually go to discounts.

I actually worked — well, I'll skip that analogy. But the — overwhelmingly, closed-end funds have gone to discounts.

You know, initially, if they're sold with a 6 percent commission, of course, the initial people are getting 94 cents of net asset value by paying the dollar, but I know I — if I saw two — if I had an interest in buying into emerging markets through other people's management and I could buy an open-end fund at X, or an asset value, and I had to pay 120 percent of X for some closed-end fund, you'd have to convince me very strongly that the management of the closed-end fund was better.

So I think you're right. I don't — again, I don't know the — if the premium is a few percent, it doesn't really make much difference.

But occasionally, Charlie and I have witnessed in the past closed-end funds that have sold even at 30 or 40 percent premiums over asset value.

Overseas Securities was a tiny fund that used to do that for years and baffled everybody. But eventually they will come back down to earth.

Charlie?

CHARLIE MUNGER: I've got nothing to add. (Laughter)

WARREN BUFFETT: He's hitting his stride now. (Laughter)

11. Corporate boards should think like owners

WARREN BUFFETT: Number 5?

AUDIENCE MEMBER: Warren and Charlie, I want to thank you for putting a once obscure Midwestern city on the map last year with your acquisition of Pete Liegl's company, Forest River.

I'm Frank Martin (PH) from Elkhart, Indiana, the RV capital of the world. I also want to thank —

WARREN BUFFETT: Glad to have you here, Frank.

Frank has just brought out a book, incidentally, that's a history of some of his annual letters. It's a good book, and I recommend you get it.

AUDIENCE MEMBER: Thank you, Warren.

I also want to thank you for your influence over Robin Williams and other Hollywood stars. Those of you who have seen the movie "RV" realize that Warren will go to no ends to promote the products of the companies he acquires. (Laughter)

WARREN BUFFETT: A few people have already noticed that, actually, Frank. (Laughter)

AUDIENCE MEMBER: On a more serious note, there's a small but growing trend in American business governance to move from plurality voting for directors to majority voting, long the standard in Great Britain.

What do you see as the upside and downside of majority voting, as it relates to raising the standard of ethics in the corporate boardroom?

WARREN BUFFETT: Charlie, you want to take a swing at that?

CHARLIE MUNGER: I don't think it'll have any effect at all on ethics in the corporate boardroom.

There get to be fashions in the governance subject. I think that the troubles in American corporations are not going to be fixed by something like that.

All these reforms have to be considered in the light of the kind of people that are likely to be activist in using new powers, and that crowd is a mixed crowd, to put it gently.

WARREN BUFFETT: The question in the boardroom is to what extent — and you have to understand, it's partly a business situation; it's partly a social situation.

The question is to what extent do the people that are participating there think like owners, and whether they know enough about business so that even if they're trying to think like owners, that their decisions will be any good.

And Charlie and I have been on boards of companies with dual voting. Berkshire has that, although it's so minor that it doesn't really make any difference. But we've been on other boards.

I have never really seen any difference in behavior based on the nature of the votes that got them into the boardroom.

But there's an enormous difference — I think you'd be blown away if you watched boardrooms over the years — there's just an enormous difference in terms of, really, the business savvy of the people in the room, the degree to which they are thinking like owners as they go along.

And I've seen no — I don't know that dual voting or the lack of dual voting really is going to have very much to do with that.

The key — I've mentioned it in the past — there's all these fashions, as Charlie says, in corporate governance.

But the job of the board is to get the right CEO, to prevent that CEO from overreaching. Because sometimes you have some people that are very able, but they still want to take it all for themselves.

But if they take nothing and they're the wrong CEO, they're still a disaster. So low pay itself is not the criteria.

So you want the right CEO. You do not want them overreaching.

And then I think the board needs to exercise independent judgment on important acquisitions, because I think CEOs — even smart CEOs — are motivated, frequently, in acquisitions by other than rational reasons.

And in those three areas, you know, American directors have — I don't think they've given a tremendous account of themselves in recent years, whether at dual system places or otherwise.

The only cure to better corporate governance, in my view, is that the very large shareholders start really zeroing in on whether those questions I just mentioned are being addressed properly.

If they go on to all these peripheral issues, you know, they have a lot of fun and they get in the papers. You know, they have little checklists and they can issue grades and all that. It isn't going to do anything in terms of making American business work any better.

But if the eight or ten largest shareholder groups, if the really large institutional investors say, you know, "This compensation plan doesn't make any sense and we're not voting for the directors, and here's why we're not voting for the directors," you'd get change. But so far, they've been unwilling to do that.

It takes the big shareholders. It's not going to be done by any coalition of small shareholders or people sticking things on ballots. But the big shareholders of this country, you know, basically they — some of them farmed out their voting, even.

I was amazed to find that out, that a number of very large institutional investors have actually just turned their voting process over to somebody else. They don't want to think like owners. And, you know, they bear — we all bear — the penalty for that.

12. Tech is still in the "too hard" pile

WARREN BUFFET: Number 6?

AUDIENCE MEMBER: Hello. My name is Andy Pollen (PH) from Adrian, Michigan. Thank you, once again, for having me to Omaha.

My question is for Warren, but, Charlie, please add your thoughts as well.

Warren, I've heard you say many times that you don't understand technology and that you rely on Bill for that, and that's fine. And I see from this year's movie that you're learning, so that's good.

WARREN BUFFETT: Slowly.

AUDIENCE MEMBER: I'm also curious to hear what you've learned so far about the other information technology companies, such as IBM, Sun Microsystems, Oracle, Dell, EMC, and Intel.

WARREN BUFFETT: I know — what I've learned is I know enough not — to know that I don't know enough to make an investment decision.

The — Charlie and I have circles of competence that extend to evaluating a number of types of businesses, and there are a whole lot of businesses that we won't be able to evaluate.

Some of them, I don't think — I think very few people can evaluate.

I mean, you get outside of — you just get into businesses that — where the future is so likely to be different than the present that maybe there's a few people that have great insights on it, but we sure don't.

We are best at the businesses where we can come to a judgment that they're going to look a good bit like they do now five years from now, ten years from now. They'll be bigger. They'll be doing different things, but the fundamentals will be the same.

ISCAR will be a bigger company five years from now. It may be a much bigger company, and we may get a chance to do interesting acquisitions.

But what you saw there, the fundamentals, won't change. The way the people think won't change.

I can name a number of businesses that are bound to change dramatically. I mean, when you think of how much the telecom business, for example, has changed over the last 15 or 20 years, it's startling.

Even with hindsight, it's a little hard to figure out, you know, who was going to make all the money and so on. There's just — there's just games that are too tough.

Charlie says, you know, “We’ve got three boxes at the company: in, out, and too hard.” (Laughter)

And a lot of things end up in the “too hard” pile, and it doesn’t bother us. You know, we don’t have to be able to do everything well.

If you go to the Olympics, you know, if you run the hundred meter well, you don’t have to throw the shotput. You know, some other guy can throw the shotput and you’ll still get a gold ribbon, you know, if you run the hundred meter fast enough.

So, we try to stay within the circle of competence.

Tom Watson, Sr. — I think it was Senior — yeah, Tom Watson, Sr. — many years ago said, “I’m no genius, but I’m smart in spots, and I stay around those spots.”

Well, that was pretty damn smart, you know. And we have found a lot of our managers who don’t think, you know, they can solve every problem in the world, but they run their businesses extraordinarily well.

You do not want to — Frank Martin mentioned Forest River. You do not want to go and compete with Pete Liegl and his business. He’s going to kill you. He’s very, very, very good.

But he doesn’t come around and try and tell us how to run the insurance business, because that’s not his game.

We look for people that are very good at things they understand. And we don’t get any inferiority complex at all about the fact that — well, I — you mentioned Intel, I believe.

I was virtually there at the birth of Intel because I was on the board of Grinnell, and Bob Noyce was the chairman of the board of Grinnell. And we bought — at Grinnell — we bought $300,000 worth of their original debentures.

And, you know, I knew Bob was always a very, very smart guy, but I wouldn’t have had the faintest idea how to evaluate the future of Intel then, and I really don’t have it now, you know.

And I think they probably had a few surprises themselves in the last few years with AMD and what’s been happening in their business.

But what that’s going to look like in five years, I don’t have any idea. And I’m not so sure, if you’re in the industry, you’d know exactly what it was going to look like in five years. Some businesses just are very, very hard to predict.

Charlie?

CHARLIE MUNGER: Yeah. One of the foreign correspondents last year, after looking at us carefully, said, in effect, “You guys don’t seem smart enough to do so much better than other people as you’re doing.” (Laughter)

WARREN BUFFETT: Were they looking at me or you, Charlie?

CHARLIE MUNGER: Both. (Laughter)

“Have you got an explanation?” And we said, “We know the edge of our competency better than most people do.”

It’s a very useful thing to know the edge of your competency. And I always say it’s not a competency if you don’t know the edge of it.

WARREN BUFFETT: I’ll have to think about that a little bit. (Laughter)

Bill will explain it to me later.

13. Too many tax breaks for the rich

WARREN BUFFET: Area 7, please.

AUDIENCE MEMBER: I am John Bailey (PH) from Boston, Massachusetts.

I wanted to ask, Warren and Charlie, if you could consider three hypothetical securities for a long-term investment.

The first would be, like, a share in median family income for the United States. The background there that, in real terms, median family income has been stagnant for approximately 30 years.

The second security would be a share in all corporate income in the United States. The background there that corporate income has been taking an ever larger slice of GDP for several years.

And, finally, a bit more abstract, a share in all capital assets in the United States, and I would like to include all intangible capital assets, if possible.

So would any of these be of interest for a long-term holding, perhaps 20 years or so? And, if not, why not?

WARREN BUFFETT: Well, I think I’d rather buy ISCAR. (Laughter)

The corporate profits, as you point out, have been close to their highs, except for a very few years post- World War II, as a percentage of GDP. It’s hard to imagine being much larger.

It's interesting. While corporate profits is reported — you take S&Ps, percentage of book, percentage of sales, put on the line, they're all on the high end.

Corporate income taxes, really, are not that high relative to the total revenues of the country. So you can see that there's been a little disconnect there in some manner.

But median family income is something that Charlie and I have never even considered. We're not shooting for that.

It is certainly true that, in the last five to ten years, that the disparity in income has widened significantly and that the tax breaks for the wealthy have been extraordinary.

I've pointed out in the past that most of the members of the Forbes 400, myself included, pay a lower percentage of their income to the U.S. government, counting Social Security taxes, than does the receptionist that works in their office.

That was not true 30 years ago, and I don't think it's something that should be true in a rich society, but it has happened.

And I just computed my 2005 return. In 2004 — and I have no tax shelters. I don't have a tax adviser. I just do things, and at the end of the year I add it all up.

In 2004, my rate was the lowest of the 15 or 16 people in the office, and in 2005, my rate was even lower.

And that's courtesy of the U.S. government. It's not courtesy of a lot of tax write-offs or anything of the sort.

And I think that's — I think it's crazy, and I don't think the American people understand it very well. And I think that if they did understand it, they should, and would, be quite unhappy about it.

So I think that — I think that the lower incomes, median — and the medium — people making medium amounts of income, have not shared in the prosperity of the last decade or so in a way that's all proportional to the way the wealthy participate in it.

The last point you mentioned was too esoteric for me, so I'll pass it over to Charlie.

CHARLIE MUNGER: Yeah. The main figure that matters to all of us, including the people at the median, is how does GDP per capita grow? And those figures have been very good.

And so, I wouldn't get too wild on the subject of median income. It isn't like we're all permanently in some status from nobody moving from status A to status B.

There's a huge flux, both up and down. And what's really important is that the pie keep growing at a decent clip.

All that said, I think that Warren is right, that some of those tax changes were a little crazy. I mean, they caused more envy than we needed. But I don't think it's all that important.

WARREN BUFFETT: Yeah. We might think it was more important if we were working at the median income, Charlie. (Laughter)

14. Munger: Ethanol is "stupid"

WARREN BUFFET: Let's go to Number 8.

AUDIENCE MEMBER: Good morning. I'm Diane Ryan (PH) from Kansas City.

My question is, what is your opinion on the economics of ethanol and as — just as a fuel additive?

And, as a potential investor, should I be looking at that industry?

WARREN BUFFETT: Well, I don't know enough to answer the latter part. I know we don't — Charlie and I would not know enough to evaluate ethanol projects.

We've been approached on them. And, of course, they're quite popular now.

But in terms of figuring out what an ethanol plant is going to be earning on capital five or ten years from now, it's far easier for us to figure out whether people will be drinking Coca-Cola, or even eating See's Candy, which I highly recommend. (Laughter)

So, you know, it will depend on government policy. It will depend on a lot of variables that we're not particularly good at predicting.

It's easy to raise money for it now. I mean, it's a popular item. You know, it's hot.

And our general experience is that we don't look at things very much that are hot at any given time.

I know nothing about the — you know, the biochemistry or anything of the sort.

I have a son who was a head of the ethanol board in Nebraska. And if I notice that he suddenly starts getting richer than I am, you know, I will suspect that I should start looking at ethanol very hard.

But so far, I haven't seen tangible evidence of that.

There's no question ethanol usage is going to grow. I mean, that we will see.

Generally speaking, ag processing — agriculture processing — businesses have not earned high returns on capital. I mean, if you look at Cargill, you look at ADM, you look at the big processers, that has not been a great business.

Ethanol could prove an exception, but I'm not sure how you gain a significant competitive advantage over time, you know, with any given ethanol plant.

And if you get too many of them around, you know, it will not be a good thing when you're turning out a commodity.

Charlie?

CHARLIE MUNGER: Well, my attitude is even more hostile than Warren's.

I have just enough glimmers of thermodynamics left in me to suspect that it takes more fossil fuel energy to create ethanol than you can get out of the ethanol you've created.

If so, that's a very stupid way to try and solve an energy problem. (Applause)

WARREN BUFFETT: Well, considering my family situation, I would say I have friends who like ethanol, and I have friends who don't like ethanol.

And I want my position to be perfectly clear: I'm for my friends. (Laughter)

15. Watch out for speculative commodity bubbles

WARREN BUFFETT: Let's go to number 9.

AUDIENCE MEMBER: Hello. My name is Johann Freudenberg (PH) from Hanover, Germany.

Do you think we are in a commodity bubble? Thank you.

WARREN BUFFETT: Well, certainly — not in agriculture commodities, they haven't done anything, if you're talking about wheat or corn or soybeans or something.

But if you get into the metals, oil, there's been a terrific move. The most extreme, probably, has been copper, I would say.

Oil, if you go back a few years to when it was $10 a barrel — it's been more extreme than copper — but you were undoubtedly — it's like most trends. At the beginning, it's driven by fundamentals, and at some point, speculation takes over.

The very fact that — the fundamentals cause something that people looked at for years without getting excited about. Fundamentals change the picture in some way.

Copper does get a little short, you know, or people get a little worried about currency and, maybe, gold goes up or whatever it may be.

But, you know, it's that old story of what the wise man does in the beginning, the fool does in the end.

And with any asset class that has a big move, that's based initially on fundamentals, is going to attract speculative participation at some point, and that speculative participation can become dominant as time goes by.

And, you know, famous case always being tulip bulbs. I mean, tulips may have been more attractive than dandelions or something, so people paid a little more money for them.

But once a price history develops that causes people to start looking at an asset that they never looked at before and to get envious of the fact that their neighbor made a lot of money without any apparent effort because he saw this early and so on, that takes over.

And my guess is that we're seeing some of that in the commodity area. And, of course, I think we've seen some of it in the housing area, too.

How far it goes, you never know. I mean, it just — some things go on to just unbelievable heights, and then, you know, silver went back and that was manipulation, to some extent, but it got up to $50 an ounce very briefly back in the early '80s.

But the eyes of the world that never looked at silver when it was $1.60 or — or $1.30 back in the '60s, you know, everybody in the world was looking at it. And some were shorting and some were buying, but it becomes a speculative football.

And my guess is that an awful lot of the activity in something like copper now is speculative on both sides of the market.

If — you know, if it goes to $5 a pound, who knows? But it — you are looking at a market that is responding more to speculative forces now than to fundamental forces, in my view.

Charlie?

CHARLIE MUNGER: Well, I think we've demonstrated how little we know about commodity prices by our very skillful operations in silver.

WARREN BUFFETT: I think you can change that from "our" to — it's mine, actually.

I bought it very early. I sold it very early. Other than that, everything I did was perfect. (Laughter)

We managed to minimize things there with great efficiency, or I managed to. Charlie didn't have anything to do with that. I was the silver king there for a while.

We did make a few dollars on it. But we're not good at the game of, when it gets into the speculative area, figuring out how far a speculative boom will go.

If the fundamentals are attractive, we think we're getting a lot for our money, buying equities or whatever it may be, we'll make some money.

We will — we may not make as much money — remotely as much money — as somebody who is, you know, plays out the last 30 days or 30 weeks of a real wild orgy.

I mean, these things, they tend to be the wildest toward the end.

But that gets back to the question, you know, of Cinderella at the ball. I mean, you know, you're there. You're having a wonderful time. The punch bowl is flowing and the dance partners are getting prettier all the time.

And you know at midnight, it's going to turn to pumpkins and mice.

And, you know, you look around the room and you think, "Just one more dance, one more good-looking guy," you know, "one more glass of champagne."

And you think you're going to get out of there at midnight, and, of course, everybody else thinks they're going to get out of there at midnight, too. And in the end, it does turn to pumpkins and mice.

And in this game, as I've said — you know, Adam Smith said it many years ago — a fellow named Jerry Goodman wrote under the pseudonym of Adam Smith — says the problem with that particular dance for Cinderella is that there are no clocks on the wall.

You know, and in the markets — if you're talking copper now, if you're talking Internet stocks in 1999, if you're talking uranium stocks in the 1950s — there are no clocks on the wall.

And the party does get to be more fun, you know, minute after minute, hour after hour, and then it does turn to pumpkins and mice.

16. "Brazil would not be off limits"

WARREN BUFFETT: Number 10?

AUDIENCE MEMBER: My name is Luisa Loredo (PH). I'm a student at University of Kansas, and I'm originally from Brasilia, Brazil.

My question is for both Mr. Buffett and Mr. Munger.

The stock market in South America has been growing quickly in the last few years. What do you think about investment opportunities in South America, given the political environment and underlying risks?

WARREN BUFFETT: Yeah. We would — our problem in many markets is that we have to put a lot of money to work to move the needle at Berkshire. We've got a market value of 135 billion or something like that.

So we are looking to put out hundreds and hundreds of millions of dollars at a minimum when we look at marketable securities. And that really narrows the field in terms of countries or in terms of businesses within those countries.

But, you know, we made an investment about three years ago in PetroChina. Now, PetroChina is one — probably one of the — well, it is one of the five largest oil companies in the world — and, yet, we were only able to — even there — to get 400 and some million dollars into it, which fortunately is worth a couple of billion now.

But here it's a country the size of China, largest company in that country, and even there we only got 400-and-some million dollars in, although we would have liked to have gotten more.

But we weren't afraid to go into China. We wanted to get paid more for going into China, and we did, because we don't know the game as well there. We would feel the same way in Brazil.

I mean, we — a great beer company down there that a friend of mine ran, and, you know, we should have been in that. We knew he was a great manager, and he was going to do a great job with it.

So, Brazil would not be off limits at all, but we'd have to be able to get a lot of money into a business we understood at an attractive price.

We would want it to be cheaper than if it were in the United States. We wouldn't understand the tax laws as well, the nuances of governance, a whole bunch of things. But after allowing for that, at a price, we would do it.

We're unlikely to put a lot of money into — Brazil is a big country, but we're unlikely to put a lot of money into really small economies because we can't get enough money into them. Charlie?

CHARLIE MUNGER: No more.

17. Outlook for Clayton and manufactured homes

WARREN BUFFETT: Number 11?

AUDIENCE MEMBER: My name is Jeff Bingham (PH). I'm from Chicago, Illinois.

I have a question regarding the manufactured housing industry. What is your outlook on demand for the industry? And, correspondingly, in your opinion, will lending increase in a meaningful way over the next few years?

And are the homes priced attractively relative to competitive products, like stick-built housing and apartments, in the face of continued site rent increases at the community level and, in some cases, lenders requiring shorter maturities on mortgages?

WARREN BUFFETT: It's been kind of an interesting history on manufactured housing. If you go back — you have to go back 30 or 40 years — 40 years, I think, almost, to have — find volume as low as it's been in the last couple of years. And the houses are better than — by far better — than they were then.

There have been years when 20 percent of the housing — the new housing product in the United States — was manufactured housing. One out of every five.

Last year, leaving out FEMA demand, you know, we were bumping along for the third year, I believe, just a tiny bit over the 130,000 level, you know, which is like 6 or 7 percent — probably 7 percent — of new housing starts.

So, the percentage of the total new housing stock that has been manufactured housing in recent years has really been very low, while the houses are better — considerably better — quality than in the earlier years.

You can look at the house. We've got two houses out there on the exhibition floor, around $45 a square foot. You know, that's good value.

There's a lot of resistance, through local zoning laws and that sort of thing by the local builders, to the influx of manufactured housing. We've made progress on that in some areas. We're actually developing subdivisions in that business.

The houses were mis-sold four or five years ago in huge quantity because you had manufactured housing retailers selling the properties, getting any kind of a down payment, taking the loans — selling to people that shouldn't be buying them — taking the loans, securitizing them, so somebody in some insurance company someplace lost significant sums of money.

So you had, really, an abuse of credit in the field. And there's a hangover from that, and it's taken a long time for that hangover to work its way through.

I think Clayton Homes, which we own, has done a terrific job in both the financing — they should be financed on shorter terms, incidentally.

I'm — if you put them on owned land, that's one thing, but financing them for 30 years, in my view, was a mistake.

But the terms got very lax for a while, and, you know, we're bearing the consequences of that now.

But I think the market will get bigger, but I do not think it will get bigger this year. I see a year that, counting some FEMA demand and some hurricane-induced demand, maybe 150,000 units, 145,000 units. And by industry standards, that's down a lot.

Now, the number of plants is down a lot and the number of retailers are down a lot.

Clayton's position is very strong. And their record is so much better than anybody in the industry that you have to look very hard to find number two.

Charlie?

CHARLIE MUNGER: Yeah. You asked about stick-built housing and how competitive it was. That's been one of the troubles of the manufactured housing game is that the stick-built housing has gotten so efficient.

But there the system is aided greatly by Berkshire's subsidiary MiTek. So — and stick-built housing is amazingly efficient when it's done in big quantity with systems like MiTek provides.

And if it weren't for that, there would be a lot more manufactured housing.

Personally, I think manufactured housing is going to get a lot better and take a lot more of the market. It may take a considerable period, but that is so logical that I think it will eventually happen.

WARREN BUFFETT: Yeah. Somewhere down the road, you would expect 200,000-plus units for the industry. But I don't think you'll see it in the next year or two.

The industry has to think through — and they have, they've made a lot of progress on this — but they have to think through what's the logical way of financing these things, and what's the way to make sure that the person who buys it really has an asset that's in excess of their loan value five and ten years down the road.

And, really, very little consideration was given to that five years ago. It was just a question of put together the papers, sell it on Wall Street, and let somebody else worry about it later on.

Clayton did a way better job than other companies in that respect, but those were the industry conditions that existed then.

But I think Clayton will be — Clayton could easily be — the largest homebuilder in the United States in future years because we will be a big part of an industry that, as Charlie says, should be doing more volume.

CHARLIE MUNGER: I also think that some of the sin that was in the manufactured housing finance a few years ago has shifted into the finance of the stick-built houses.

There is a lot of ridiculous credit being extended in America in the housing field. And it had a horrible aftermath in the manufactured housing sector, and my guess is there will be some trouble in the stick-built sector in due course.

WARREN BUFFETT: Well, dumb lending always has its consequences and usually on a big scale, but you don't see it for quite a while. So, therefore, it's like a disease that doesn't manifest itself for, you know, a few weeks.

And you can have an epidemic of something like that, and by the time you know you have an epidemic, you're very well into it. Well, that's what happens in dumb financing.

And you had that — you periodically — you certainly had it in commercial financing in the '80s, and you had the RTC and the savings and loan crisis and all of that because, literally, one dumb project was put up after another.

A developer will develop anything he can borrow the money against. It's that simple. And when the lending institutions pour the money out for something, it will get built.

And that happened in manufacturing housing. It happened in commercial real estate in the '80s. I think it's happened in conventional housing here in recent years.

And if you look at the 10-Qs that are getting filed for the first quarter of some lending institutions, and 10-Ks that were last year, and you look at the balances increasing on loans for interest that's accrued but was not paid because people had adjustable mortgages, but they're only adjustable so far, but the lending institutions are taking in the income as if it were paid, you'll see some very interesting statistics.

CHARLIE MUNGER: Yes. And some of this dumb lending is being facilitated by contemptible accounting. The accounting profession has not stopped compromising its way into terrible behavior.

WARREN BUFFETT: Our auditing bill just went up.

18. No interest in investing in Russia

WARREN BUFFETT: Number 12? (Laughter)

AUDIENCE MEMBER: My name is Elliott Samuels (PH). I'm from New York City.

Thanks to high energy prices and other factors, Russia has been one of the best performing markets recently. The country's financial condition has stabilized since the 1990s.

A fledging middle class is taking shape as personal incomes grow. And there are also risks — political, legal — risks to minority investors.

But there are also potentially great values among second tier companies there.

I was wondering, what needs to happen in Russia for you to invest there, whether for Berkshire or for yourself, and what kind of companies would interest you there?

WARREN BUFFETT: Sounds like you may own a few Russian stocks yourself. The — I would — as you know, in 1998, Walter Wriston said sovereign governments don't default.

In 1998, in Russia, at least, he was proven wrong. And Charlie and I were — inherited a business at Salomon that was in the oil business big time-out in the — in Siberia.

And there came a time when — we got to dig the holes. We sent the money in. And as long as we were drilling, we were welcome. And then when we wanted to start taking the oil out, after our money had been used to drill the holes, they weren't quite as friendly. In fact, it was really kind of extreme what took place with us.

So, having had a few experiences like that, it might take us quite a while before we wanted to sink a lot of money into Russia. It may be different now, but I don't think it's any certainty.

I had breakfast in Sun Valley three years ago this July, I believe it was, with [Mikhail] Khodorkovsky, and we had a translator there. And he talked to me about whether — he was thinking about listing Yukos on the New York Stock Exchange, but he said, you know, it would require registering with the SEC or something, and he wasn't sure whether that would be too dangerous.

Well, I don't think he listed it there, but he went back to Russia, and he's been in jail now for — well, just about ever since.

And Yukos was put into bankruptcy with tax claims, and, you know, it — I don't — I just think it's a little hard to develop a lot of confidence that the world has changed permanently there in terms of its attitude toward capital, and particularly toward outside capital.

Charlie, what are your thoughts?

CHARLIE MUNGER: Yeah. The situation reminds me a little of POLY Petroleum, which, years ago, was much traded in Los Angeles.

The saying always was, "If they ever do find any oil, that old man will steal it." And I'm afraid we have some of that problem in many of the countries in which we're seeking for oil.

WARREN BUFFETT: Didn't we really have the livelihood of our guys threatened over there, Charlie?

I think we sent in some people to get out the equipment, and they said if we sent in the people to get out the equipment, not only would the equipment not get out, but the people wouldn't get out.

So we understood the situation. That was not that long ago.

CHARLIE MUNGER: No.

19. Hottest real estate markets are cooling off

WARREN BUFFETT: Number 1 again.

AUDIENCE MEMBER: I'm Lori Gold (PH) from San Francisco, California.

My question is, what are your thoughts about the residential real estate market in the U.S., where it's headed? And how is California different, if so?

WARREN BUFFETT: Well, Charlie is our California expert. We've managed one time to develop a great piece of property in California. We spent about 20 years or so developing it, Charlie, or —

CHARLIE MUNGER: Yes. And we got our money back with interest.

WARREN BUFFETT: Barely. (Laughter)

CHARLIE MUNGER: Barely, yeah.

WARREN BUFFETT: We finished it at just the wrong time. We — the land value that we nurtured — that was a terrific piece of land. Charlie lives there. And I don't think it's an exaggeration to say we spent 20 years —

CHARLIE MUNGER: No.

WARREN BUFFETT: — working on developing the land. And the land value, which, in effect, we cashed out for, what, 5 or $6 million, now would have an — the implicit land value — would be what?

CHARLIE MUNGER: Maybe a hundred million dollars.

WARREN BUFFETT: Yeah. But we finished it at the wrong time.

So, you know, it's a wonderful — the climate is wonderful. Everything is wonderful about this property.

It's just that, from time to time, even in great localities — you've seen it happen in New York a couple of times, you know, in the last 30 years, where the swing in property values has just been huge.

And what we see in our residential brokerage business — and we're in, I don't know how many different states — is we see a slowdown every place.

Now, we see it most dramatically in some of the — what have been the hottest markets.

In the markets where you're going to — in my view — you're likely to see the greatest fall-off and where you've had the biggest bubble are the ones — they tend to be the high-end market, and they tend to be ones where people have bought for investment or speculation, rather than use.

People will pay $300,000 for a house and mortgage it for 270,000, and if the value goes to 250, if they have a job and everything, they won't move out.

I mean, you don't lose a lot of money even though the market value on a given day is less than the loan value when families stay together and employment is present and all that.

But when you have investment-type holdings, speculation-type holdings, when you, in effect, have had the day traders, you know, of the Internet move into the day trading of condos, then you — then you get — then you get a market that can move in a big way.

First it sort of stops, and then it kind of reopens. Real estate is different than stocks. If you own a hundred shares of General Motors, it's going to trade on Monday and that's what it's worth and you can't kid yourself about it.

But if you own real estate, you know, there's a great tendency to think about the one that sold down the street a few months ago. And there's a great tendency to think, you know, you only

need one buyer who hasn't gotten the word that things have slowed down and you'll make your sale.

I can tell you that in Dade and Broward County, for example, in Florida, where the average condo is about 500,000, if you go back to December of 2004, there were less than 9,000 condos listed for sale, and I think 2,900 of them sold in the month so you were — turnover one every three months, less than that.

Now, the listings are up to 30,000, and the sales are down to under 2,000 a month. Well, 30,000 is $15 billion worth of properties. And you are — very likely, you can get real discontinuities in a market like that, where all of a sudden people realize that the whole supply-demand situation has changed.

So I think we've had a bubble, to some degree, and it's very hard to measure that degree until after it's all over.

But I would be surprised if there aren't some significant downward adjustments from the peak, particularly in the higher-end properties.

CHARLIE MUNGER: Yeah. The man is right that the bubbles came in Manhattan and in certain places in California. In Omaha, housing prices are quite reasonable. So it's — the country is not all the same, at all.

20. Attendance estimate and Furniture Mart sales

WARREN BUFFETT: We just got an estimate of the attendance at 24,000, which was about what it looked like from the tickets we had gotten. I thank you all for coming, on that note. (Applause)

Even better, the Furniture Mart, which had sales in 1997 of 5-and-a-fraction million, 2003 sales of 17 million, sales last year of 27 million, is up so far 2 1/2 million, with the best yet to come.

So we're — I would say we're likely to do over 30 million at the Furniture Mart. And that, incidentally, is about equal to a normal monthly volume for the store. So you're doing your part. Thank you. (Applause)

21. Don't like excess cash, but we hate dumb deals

WARREN BUFFETT: Number 2?

But you can do more. (Laughter)

AUDIENCE MEMBER: Good morning. My name is John Norwood (PH) from Des Moines, Iowa.

I have a two-year rule for my closet. If I don't wear a particular pair of pants or a shirt within two years, I give it away to Goodwill so that someone else can put it to better use.

With 40 billion in cash, I'm wondering whether Berkshire Hathaway should have a similar closet rule for deployment of surplus shareholder cash.

WARREN BUFFETT: It won't go to Goodwill, I promise you that. (Laughter)

AUDIENCE MEMBER: Thank you. And wouldn't it be better if you had a smaller budget and fewer gifts you needed to — you and Charlie needed to shop for? Wouldn't you have more time for the beach and a better chance of hitting some home runs?

WARREN BUFFETT: Yeah. I don't think we'll hit any home runs, under any circumstances. But the — you might consider a normal level of cash at Berkshire as being about 10 billion, although we — you know, there could be circumstances where we'd go below that.

But because of the catastrophe insurance business we're in and all of that, we do not — you know, we do not scrape the bottom of the barrel, but we don't need anything like 40 billion.

I think you'll see in the 10-Q that we have — I think it was about 37 billion at the end of March — double check that — and I'm not counting the cash and the finance business — yeah, 37-something — and we're spending 4 billion on ISCAR.

We've spent — we're spending some money on some other things as well.

But we would be happier — much happier — if we had 10 billion of cash and all the balance in things that we liked very much.

And we work toward that end at all times. But there is nothing even about the way businesses come to us.

We've got one idea at present, low probability, but that would take — could take — as much as 15 billion or close to 15 billion of cash. And whether it comes to fruition or not, who knows, but we do work on them.

And, what we care more — we don't like having excess cash around. We like even less doing dumb deals because we do them forever.

I mean, if we make a dumb deal, it just sits there. We don't resell it three months later by having an IPO of it or something of the sort.

So you're right to say that we should be very uncomfortable about the fact that we've got the cash. But it's also important that we not be so uncomfortable that we go out and do something just to be doing something.

I would say it's likely, but far from certain, that three years from now we have significantly less cash and, I hope, significantly more earning power. But the goal of that cash is to be translated into permanent earning power over time.

Like I say, with the 4 billion that we've just committed on ISCAR, you know, we love having that 4 billion employed there instead of sitting around in short-term securities.

And that's our job. Charlie and I don't do anything else, except appear in movies and that sort of thing.

But the — you know, you're right to keep jabbing us on that because — but we jab ourselves. You know, we — neither one of us is — basically likes cash.

We always want to have adequate cash and we always will have adequate cash. And we are the biggest player in the world in cat insurance, and people come to us because they know we're going to run a place that's very strong financially. But it doesn't have to be as liquid as we are now.

We spent 5 billion — well, we didn't spend that much. At the Berkshire level, we spent about 3 1/2 billion on PacifiCorp.

You know, we contracted (inaudible) earlier, but we will get more chances, I think, in that field, but you never can tell when they'll come.

So come back next year, and I hope we have less cash.

OK. We'll go to 13 now.

OK. Charlie, would you like to add anything on that?

CHARLIE MUNGER: Yeah. I think you may get some perspective on what bothers you if you go back to the annual report of Berkshire ten years ago and then compare that report with the last one.

Despite the great difficulties of deploying cash, we managed to put an awful lot of wonderful stuff into Berkshire in the last ten years. So, we aren't altogether gloomy about that process continuing. (Applause)

22. Should have sold Coca-Cola at "silly" price

WARREN BUFFETT: I neglected to go to the adjacent room, which has a number of people in it as well. So I'm going to go to No. 13 now, which will come from the ballroom.

AUDIENCE MEMBER: This is Phil McCaw (PH) from Connecticut.

I wonder — it's been some time since you've commented on Coca-Cola. And now that you're off the board, I wonder if you feel free to comment on it?

WARREN BUFFETT: Yeah. Well, I won't make particularly different comments than from when I was on the board.

But Coca-Cola is a fabulous company. Coca-Cola will sell over 21 billion cases of various products — more Coke than anything else — around the world this year, and it goes up every year.

It's interesting. The stock in, what, 1997 or '98, whenever it was, sold over $80 a share when the earnings were — I don't remember whether they were $1.50 a share, or something like that — and the earnings then were not as good quality as the earnings are now when, you know, they were $2.17 or something like that.

And every year the — you know, they have — they account for a little greater share of the liquids consumed by people in the world.

They make fabulous returns on invested capital. You know, it's a business that has — exclude the bottling part of it — has 5 or 6 billion of tangible assets and makes a similar amount.

So, there are not lots of big businesses in the world that earn 100 percent pretax on tangible assets.

And it will be a great business, and it's been a great business.

The stock got to what, in retrospect, clearly was a ridiculous level, but you can't hold the present management, Neville Isdell, responsible for that.

And he — you know, if the company sells 4 or 5 percent more units this year than last year, and the population of the world goes up 2 percent, it just means that more people are putting that particular source of liquid down their throats than the year before, and that's been going on ever since 1886.

So it strikes us as a really wonderful business that sold at a very silly price some years back.

And you can definitely fault me for not selling the stock. I always thought it was a wonderful business, but clearly, at 50 times earnings, it was a silly price on the stock.

So we like it. We'll own it ten years from now, in my view. Charlie?

CHARLIE MUNGER: No more.

WARREN BUFFETT: This peanut brittle gets caught occasionally, but it's worth it. It's worth it, definitely.

CHARLIE MUNGER: Why don't you share with me?

WARREN BUFFETT: What? Oh, you want some, huh? Get your own box next time. (Laughter)

23. Reinsurance rate variations

WARREN BUFFETT: Now, do you want us to go to 14 or not? Yes. OK. Number 14.

AUDIENCE MEMBER: My name is John Gosh (PH) from Key West.

Have insurance rates hardened as much as you anticipated, and have you seen a significant flight to quality in the last few years?

WARREN BUFFETT: Yeah. I think you're probably asking more about reinsurance rates.

Actually, in auto insurance, you can figure it out. Our policies are up more than our premium volume. So the average premium in auto insurance, which, after all, is close to 40 percent of the whole market for insurance — the average premium in auto insurance is actually down a little bit.

But in reinsurance, in which we are a big player, you will — there's great variances.

If you take insurance for marine risks in the Gulf Coast — drilling rigs and offshore platforms and that sort of thing — those prices are up very dramatically, but they should be.

I think in the last couple of years, there's been, like, 2 1/2 billion of premium in the Gulf Coast and 15 billion in losses. So if you paid out 15 billion and took in 2 1/2 billion, the more astute of you would figure that you needed a little more money for that particular risk.

We have been, historically — at least in recent years — the largest writer of cat — catastrophe — mega catastrophe insurance in world, and I think we will be this year. In fact, I'm almost sure we will be this year.

Our mix has changed some. Prices are up a lot, but what we don't know is whether exposures are up even more.

We don't know whether the experience of the last two years, we'll say, with hurricanes in this hemisphere, is more to be relied upon than the experience of the last hundred years.

You can take the hundred-year experience and it tells you one thing, and you can take the last couple years and it tells you something else. And which is more meaningful? We don't know the answer to that.

We do know that it would be kind of silly to assume that the 100-year experience is the relevant criteria when conditions — we know certain atmospheric conditions have changed. We know water temperature's changed.

But we do not know all of the variables that are into the propensity of hurricanes to occur and the degree to how intense they may be if they do occur. We don't know the answer to that. We don't think anybody else knows the answer to it, either.

So we are getting more money for hurricane insurance. We're getting appreciably more money.

If the last two years are the relevant years, we're not getting enough. If the last hundred years are the relevant years, we're getting plenty. And we will know more as time unfolds.

The really scary possibility is that variables are changing in some way so that the change is continuous and that what we've seen the last two years is not a worst-case example at all.

And, of course, you get into chaos-type theory with some of these variables where the outcome is not a linear relationship to the input, and you can dream up some pretty scary scenarios on this.

I don't know whether they're true and nobody knows.

We are willing to write certain areas, certain coverages, because we believe the prices are adequate, and we can sustain the losses.

We're willing to lose many billions of dollars in a given catastrophe if we think we've been paid appropriately for it.

But it is not like figuring out the odds on flipping coins or rolling dice or something like that. You are dealing with changing variables, and you — the worst thing you could have would be a 100-year history book in making those judgments.

The third quarter, we will have a lot of exposure for wind. We don't have as much exposure now — well, we may. I'd say we're getting there. But we don't have as much — certainly as much as we had a couple of years ago.

Prices — question about prices hardening. Prices are getting — are hardening — in that particular area. And if they get to what the — where we really feel they're appropriate — you know, we might take on a fair — we will take on — a fair amount more risk.

If they don't get there, even though they're higher than last year, we won't write — you know, we're not interested in writing it, because it's a dangerous business.

And we don't believe in modelers at all. I read all this stuff about modeling. I wrote about that a few years ago. It's silly. You know, the modelers don't know a thing, in my view, about what's going to happen.

And we get paid for making guesses on it. If, over a lifetime, the guesses are decent, we will know that, you know, we were doing the right thing.

But if this year goes by and nothing happens, we still don't know whether we were right on the prices.

Because if you get a 25 percent rate for something and it doesn't happen in a year, that does not mean that you didn't need 40 percent or 50 percent. It just means that if you do it enough times, you will find out whether, overall, your judgments are any good.

It's still a business we like. We bring a lot to the party. Everybody knows we can pay. You get into the question of creditworthiness.

If there is some super, super catastrophe — and I regard, sort of, the outer limits of that being a $250 billion insured loss — for reference, Katrina was a — presently estimated — was about a $60 billion loss.

So, if something comes along that's four times Katrina, which could happen, you know, we can pay, and we can comfortably pay. We would probably have about 4 percent of that, maybe 10 billion.

A very large percent of the industry would be in very, very serious trouble.

So, we can play bigger than others, and we can survive better than others if something bad comes along. And we will see, over a five- or ten-year period, how we do. You can't judge it by any one year.

Charlie?

CHARLIE MUNGER: The record of the past, if you average it out, has been quite respectable.

And why shouldn't we use our capital strength to get into volatile stuff that makes other people frightened?

24. NetJets losses and retroactive policies

WARREN BUFFETT: Do we go back to number — to here? One more. Number 15?

AUDIENCE MEMBER: Hello?

WARREN BUFFETT: Yeah.

AUDIENCE MEMBER: I'm Marc Rabinov from Melbourne, Australia. I had a two-part question on the 2005 annual report.

Firstly, NetJets is a substantial part of our operations. Unfortunately, its value is obscured by losses in recent years, and I can't estimate its value from the report. I was hoping you might be able to help me on that.

The second thing, how do I value the Berkshire Hathaway reinsurance group in light of the deferred charges on retroactive policies? Thank you.

WARREN BUFFETT: The second question, that — about the — we have an item that's about $2 billion on the asset side.

I think I'm addressing the question of deferred charges on retroactive policies. That reflects the fact that those retroactive policies, where we insure — we reinsure, in effect — the losses that somebody has already incurred, although they may not know how much they've incurred, and we have limits on these.

But we set up a factor that, essentially, recognizes the fact that we will have that money for a considerable period of time. We set up an asset, and that gets amortized over the length of time we have that asset.

That number, which I think has gotten as high as 3 billion over the years, since we haven't done any of those — any big contracts recently, is down around 2 billion.

There's nothing magic about that. It means that we're going to amortize that 2 billion over the lifetime of the use of the funds, and we think we'll make money, net, during that time.

But we misguessed on one a couple years ago and took a $100 million charge, for example, in the first quarter of — I think it was the year before last.

The other question was about NetJets, wasn't it, Charlie?

CHARLIE MUNGER: Yeah.

WARREN BUFFETT: And I didn't get it all. I love the Australian accent of our gecko, but I didn't pick up the exact nuances of what you asked.

But my guess is you asked about the earnings and operation of NetJets.

And NetJets has grown rapidly, and so far, our expenses have grown faster than our revenue.

We've got the top service in the world. We've got, really, the only worldwide service. We have a very strong position, particularly in larger airplanes.

But I'd have to tell you that I did not anticipate — I thought we would have economies of scale, to some degree, and so far you can almost argue that we've had diseconomies of scale.

And our expenses, particularly last year, you know, basically got out of hand. And there are various reasons I could give you for that. All I can tell you is, it's being addressed.

Rich Santulli, who runs that operation, you could not have a better operator. He loves NetJets. He works at it 16 hours a day. He's — there's nobody in the world I would have run that except for Rich.

I think it's an important service. It's tough to make money with airplanes. They're capital-intensive. We've had fuel do what it has, although that's a pass-through to people, but it still affects the business.

And I would — I had expected we would be profitable last year, and as I put in the annual report, I was dead wrong.

I think we will be profitable before long, but you should take my prediction there with — probably with — a certain amount of skepticism until it actually happens because I, like I say, I've been wrong.

We've got a good business in that almost anybody looking for a large plane on a fractional jet program comes to us. We are able to get full price for our service. But there were a variety of inefficiencies last year which added up to a lot of dollars.

And you know, you're entitled to hold me accountable for the fact that we paid a lot of money for the business many years ago, and we haven't earned any money since.

And we've got a much bigger business now, probably five times or so the size of the business we bought. That may be some solace to — I looked at Raytheon's figures the other day. They lost a lot of money, and they have the second largest operation.

They sell their — they sell airplanes too, so they may not feel it the way I do.

But if I had to bet one way or the other, I would bet we will be making money before long, but I've lost that bet in the past.

Charlie?

CHARLIE MUNGER: Yeah. The product integrity is so extreme between flight safety and NetJets. The pilots are subjected to real oxygen withdrawal in the course of the safety training so they will recognize the subtle sensation that you get, and not everybody does that. It's an expensive, difficult thing to do.

In place after place after place, that system is very obsessive about product integrity, and it's my guess that that obsession, in due course, will be rewarded.

25. Why Buffett bought, and sold, silver

WARREN BUFFETT: OK. We'll go to Number 3.

AUDIENCE MEMBER: Dear Warren and Charlie, I'm Oliver Couchet (PH) from Frankfurt in Germany.

Here's a question to the Silver King: Some commodity investors give you as a reference as one of the largest owner of physical silver. Could you please clarify what kind of exposure you or Berkshire currently have in silver?

And, further, could you please help us to understand how you determine the value of a noninterest-bearing precious metal?

WARREN BUFFETT: Do you have any silver on you, Charlie? We had a lot of silver at one time, but we don't have it now.

The original decision — my decision — was that the production of silver and the reclamation of silver — I don't remember the numbers exactly now — but they were running, perhaps, 100 million ounces or thereabouts, less than the consumption.

And, now, a lot of consumption has gone down in photography, but that's where the reclamation was, too, so that those tended more to balance each other out.

I haven't looked at the figures for the last year or so, but silver was out of balance.

Now, on the other hand, there were enormous quantities of silver aboveground, and there were huge quantities of silver that could possibly be removed from other uses, perhaps, you know, in jewelry and all kinds of things, that could conceivably add to supply as they did in the early 1980s when the Hunt Brothers thing took place.

But, overall, silver was being produced and reclaimed at a lesser rate than it was being consumed.

And added to that was the fact that there are relatively few pure silver mines. Silver is largely produced as a by-product of copper and lead and zinc, and so that it was not easy to bring on added production.

So, all of that added up to the fact that I thought that silver would get tight at some point.

And, as I said, I was very — I was early in that conclusion, and I was early in selling.

So we have no silver now, and we did not make much money on it.

And you're right that it doesn't earn anything. So you sit with it. It's not like sitting with a stock where, in most cases, earnings are piling up for you.

You have to hope that it — you have to hope that a commodity moves in price, because it is not producing anything as it sits there looking at you. And that's one of the drawbacks of commodities.

Charlie?

CHARLIE MUNGER: We didn't get where we are by owning noninterest-bearing commodities. I don't think it's a big issue around here.

WARREN BUFFETT: We actually owned oil at one time too, didn't we? But we didn't make much money on it. We made a little money.

CHARLIE MUNGER: No. You made quite a bit out of oil.

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: But, you know, it's a good habit to trumpet your failures and be quiet about your successes. (Laughter)

WARREN BUFFETT: Yeah. We have more to trumpet than we have to be quiet about. (Laughter)

26. "We don't play big trends"

WARREN BUFFETT: How about number 4?

AUDIENCE MEMBER: Good morning. My name is Bill Gurn (PH). I've traveled from the United Kingdom.

And I would like to ask if you think it's a good investment strategy to invest in regions of high resources per capita?

In particular, I should like to ask if you think that the analysis per capita should lead to higher growth for businesses in that region, plus the bonus of a relative exchange rate growth? Thank you.

WARREN BUFFETT: I'm not sure about the per capita part, Charlie.

CHARLIE MUNGER: My understanding is he was talking about investing in a region with high resources per capita. I think he means natural resources.

WARREN BUFFETT: Yeah. Are you thinking of places like Canada or something of the sort where the —

AUDIENCE MEMBER: I can clarify. Yes, high natural resources, but also good infrastructure. Thank you.

WARREN BUFFETT: And whether there would be relative currency strength in those as well and —

CHARLIE MUNGER: No. Whether it's a good area for us to be operating in.

WARREN BUFFETT: Well, that would be a little macro for us. We really just zero in on, you know, whether people will keep eating candy and whether we can charge a little more for it next year.

We don't play big trends. You know, we don't think about demographic trends or anything of the sort. We think about our own age as getting older.

But other — big trends, they just don't mean that much. There's too much money to be made from year to year to think about things that take decades to manifest themselves.

So I can't recall of a decision we've ever made on a purchase of a business or a stock or a junk bond or a currency or anything else based on a macro.

CHARLIE MUNGER: Not only that, we've recently failed to profit much from one of the biggest commodity booms in history.

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: And we'll probably continue to fail in the same way. (Laughter)

WARREN BUFFETT: But we'll search for new ways to fail. I mean, we're not trying to limit ourselves. (Laughter)

It's probably true, incidentally, in a country like Canada, where you've got, probably, millions of barrels of oil of — millions of barrels a day — of oil production coming on and where there's, you know, relatively few people and where there's already a surplus.

When they're running a significant current account surplus, that — you know, it's not strange that their currency should be strong relative to a country like ours where we're running a huge current account deficit and we don't have that same natural — the gain in natural exports coming on that they do.

But that — there's so many more important factors that are going to hit us immediately that that's what we really think about day-to-day.

27. Nuclear threat is "ultimate problem of mankind"

WARREN BUFFETT: Number 5?

AUDIENCE MEMBER: Good morning. My name is Glen Strong (PH). I'm from Canton, Ohio.

I'm an optimistic person, and I'm sure it would be more enjoyable to discuss the Chicago Cubs' march to the World Series.

WARREN BUFFETT: You are optimistic. (Laughter)

But everybody has a bad century now and then, as somebody said about the Cubs. (Laughter)

AUDIENCE MEMBER: However — (Laughter) — I have an information deficit on a certain topic that I hope you can fix. Please gaze into your crystal ball.

As an investor, I want to know how to address the risk of nuclear terrorism in the United States.

Consider a scenario where terrorists have detonated a nuclear device in a major U.S. city. I know there would be a terrible cost in human lives.

Gentlemen, what would happen to our economy? How would it respond? How resilient would it be? Thank you.

WARREN BUFFETT: Well, it would certainly depend on the extent of it.

But, if you're asking how to profit from that, there's probably some dealer that will sell you mortality derivatives. But I'm not sure that's what we would be thinking about then.

No. I agree with you. I couldn't agree with you more about that being the ultimate problem of mankind, not necessarily a terrorist-type usage, but a state-sponsored usage of weapons of mass destruction.

And it will happen someday. The extent to which it will happen, where it will happen, who knows. But we've always had evil people. We've always had people who wish evil on others.

And, you know, thousands of years ago, if you were psychotic or a religious fanatic or a malcontent and you wished evil on your neighbor, you picked up a rock and threw it at them, and that was about the damage you could do. But we went on to bows and arrows and cannons and a few things.

But since 1945, it's — the potential for inflicting enormous harm on incredible numbers of people has increased, you know, at a geometric pace.

So it is the problem of mankind. It may happen here. It may happen someplace else.

People say it's a — sometimes they say, "Well, you know, if we'd solve poverty, we'd solve this." Well, I will just remind you that nuclear weapons have only been used twice, and those were by the richest country in the world, the United States, in 1945.

So, people will justify their use under some circumstances, if they feel threatened. They will justify them for religious reasons. They will do all kinds of crazy things.

And the — what holds it in check is the degree to which the lack of knowledge of how to do it is controlled, and the degree to which the materials are controlled, and which the deliverability is circumscribed.

And we're losing ground on all of those fronts. The knowledge is more widespread. The possibility of getting your hands on materials — you know, the Dr. Khans [Pakistani nuclear scientist] of the world and so on, has increased.

And it will be a — it's a real problem, but we won't be thinking about what Berkshire did that day in the stock market.

And I don't know how money attacks that. I mean, I've always saw that as the top priority, I think should be the top priority for philanthropy, in my particular case.

But it's a difficult — it's a very difficult — it's a worst-case problem. You know, you have 6 billion people in the world, and you have a certain percentage of them who are, one way or another, a little crazy, or very crazy, and some of whom in that craziness would manifest itself by trying to do great harm to a lot of people.

And it's — only one of them has to succeed.

I don't know how many we've intercepted over the years. I'm sure we've intercepted a lot of incipient ones.

But it is a worst-case problem, and one will succeed at some point. And it may be state-sponsored; it may be terrorists.

But, you know, Berkshire is better set to survive than anybody else, but it won't make much difference.

Charlie?

CHARLIE MUNGER: Well, I think that the chances we'll have another 60 or 70 years with no nuclear devices used on purpose is pretty close to zero.

So, I think you're right to worry about it, but I don't, myself, think there's much that any of us can do about it, except be as sensible as we can and take the consequences as they come.

WARREN BUFFETT: The only thing you can do about it — but you only have one vote — is to elect leaders who are terribly conscious of the product — problem — and who devote a significant part, you know, of their thought and energy into minimizing it.

You can't eliminate it. You know, the genie is out of the bottle. And you would like to have the leading — the leaders — of the major countries of the world regarding it as their primary — as a primary — focus.

Actually, in the 2004 campaign, I think that both candidates said it was the major problem of our time. But, you know, they probably suffer from the same feeling that I do, that it's very hard to address.

28. A Berkshire stock buyback won't be a secret

WARREN BUFFETT: Number 6?

AUDIENCE MEMBER: Hello, Mr. Buffett, Mr. Munger. My name is William Schooler (PH), and I'm a shareholder visiting from Spicewood, Texas.

I would like to thank you both for being so generous to the public with your ideas.

Last year, I read "Poor Charlie's Almanack" and came across a passage on share repurchases.

It reads, quote: "When Berkshire has gotten cheap, we've found other even cheaper stocks to buy. I'd always prefer this. It's no fun to have the company so lacking in repute that we can make money for some shareholders by buying out others," end quote.

Last year, you bought stock in some great businesses trading at fair prices, such as Walmart and Budweiser, but did not attempt to buy our own shares.

Would shareholders be correct to infer from this decision that you both felt Walmart and Budweiser were trading at a deeper discount to their intrinsic values than Berkshire was?

And would it be possible to buy as much Berkshire in the open market as you did Walmart without running up the share price?

WARREN BUFFETT: Most of the time, we would not be able to buy an amount that would be material, in terms of increasing the value of the remaining Berkshire shares. But that doesn't mean it would never happen.

But it — if you look at the trading volume on Berkshire — and, [CFO] Marc [Hamburg], you might put that up, if we can, in a second — we probably have less opportunity than most companies if our stock is selling — should be selling — below intrinsic value to have anything meaningful happen.

We would also have — if we regarded some other company as worth X, a good business, and we could buy it at 90 percent of X, we might be doing that now, whereas we wouldn't have done it many years ago.

But we might require a somewhat greater margin, in terms of buying Berkshire shares, simply because our view on that might be less — we probably have more knowledge on it, but we might be less objective than on some other things.

We think that when we buy — if we were to buy in Berkshire shares — and, if you remember, four or five years ago I announced we would if the price stayed the same — that the case ought to really be compelling, and if it's compelling, we ought to do it. It was compelling at that time.

But simply the act of writing about it — you know, a little bit of a Heisenberg principle — the act of writing about it, in effect, eliminated the opportunity to do it, which is fine.

Because we do not — we are not looking to make money off of buying from shareholders at a depressed price.

On the other hand, if the price is sufficiently depressed, we will announce again that we intend to do it, and then we'll see whether we actually get a chance to do it. Charlie?

CHARLIE MUNGER: Yeah. The whole climate in the country is different now.

It used to be that almost every company that bought in shares was buying them in at an obvious bargain price. Now I think a lot of share buying is designed to, sort of, prop the stock price.

In other words, it's not bargain-seeking. It's more like Sam Insull.

WARREN BUFFETT: Yeah. Forty years ago, 30 years ago, it was a very fertile field for making money to look at companies that were aggressively buying in their shares, the most extreme case probably being Teledyne.

But those people were buying overwhelmingly — Gurdon Wattles was doing it at the companies he controlled — those people were motivated simply by the fact they wanted to buy the stock below what it was really worth and — significantly below — and you could make money with that group, and we did a little of that at the time.

I would say in recent years, that motivation has been swamped by people who either think it's fashionable to buy in shares, or by people who really like the idea of trying to prop their stock up somewhat.

And the SEC has certain rules, in terms of the way you conduct your repurchases to prevent daily, sort of, propping up.

But I think there's a lot of motivation that our stock has got to be cheaper than other people's stock, and we've got a wonderful company, and we're just going to buy the stock come hell or high water, and that is not the way we would go about repurchasing shares.

We've got — well, we had up there, I think — some figures that showed the turnover of Berkshire shares compared — in a year — compared with a few others I picked out.

I think Berkshire has the lowest turnover, by some margin, of any major company in the United States.

And I put Walmart up there because the Walton family owns about the same — in fact, they own more — of Walmart than I do of Berkshire.

So, this is not a function of simply the fact that we've got concentrated holdings with the Buffett family.

This is a reflection of the fact that we've got a really unusual shareholder body in that they think of themselves as owners and not as people who are moving around with little pieces of paper every week or month.

We have the most — in my view — we have the most what I would call honest-to-God ownership attitude among our 400,000 or so shareholders of any company — of any big traded company — in the United States.

People buy Berkshire to own it, and hold it, and that's reflected in our turnover. That does mean if, for some reason, the stock gets cheap — real cheap — that we would not be able to buy a lot of stock in.

But we don't want — we are not looking to buy out our partners at a discount. If it sells there and we tell them we're going to buy it, we'll buy it. But that's not a way that we're trying to make money.

Charlie, any more?

CHARLIE MUNGER: No. I've said my piece.

29. Advice to young investment professionals

WARREN BUFFETT: Number 7?

AUDIENCE MEMBER: Good morning. My name is David Saber (PH), shareholder from Minneapolis, Minnesota. Looking for some advice you might give the young professionals here.

I could be classified as one of those helpers you describe in your annual report. In fact, most of my friends are helpers, and some could be classified as super helpers.

Most would love to step out and explore some of their more innovative ideas, innovative business models, strategies, and things of that nature.

But the risk of giving up a significant salary, health insurance, flights, other ridiculous corporate perks some of us young professionals earn.

What advice would you have for us in pursuing those dreams?

WARREN BUFFETT: Charlie, what do you think?

CHARLIE MUNGER: Well, there's certainly a lot more helpers in the economy than there used to be, and the ones that come here tend to be the very best of the helper class.

So, I don't think you should judge the helper class by those you meet here. We get the best of them.

And as to what the young helpers ought to do so that they'll eventually be like Warren Buffett, I would say the best thing you can do is reduce your expectations. (Laughter and applause)

WARREN BUFFETT: I think I've heard that before.

Well, you know, as I wrote about — and I — trying to tweak the system a little bit — but it is an interesting business in that the activities of the professionals are self-neutralizing.

And if you're going to — if your wife is going to have a baby — you're going to be better off if you call an obstetrician, probably, than if you do it yourself. You know, and if your plumbing pipes are clogged or something, you're probably better off calling a plumber.

Most professions have value added to them above what the laymen can accomplish themselves. In aggregate, the investment profession does not do that.

So you have a huge group of people making — I put the estimate as $140 billion a year — that, in aggregate, are, and can, only accomplish what somebody can do, you know, in ten minutes a year by themselves.

And it's hard to think of another business like that, Charlie.

CHARLIE MUNGER: I can't think of any.

WARREN BUFFETT: No.

But it's become a bigger and bigger business.

And, as I've pointed out in the report, the main thing that's been learned is that the more you charge, at least temporarily, the more money you bring in, that people have this idea that price equals value.

It's useful to get into a business like that.

Sometimes, if I'm talking to the people at a business school and I ask them what the — what a great — to name me a great business — and, of course, one of the great businesses is a business school because, basically, the more you charge, the more your prestige is, to some extent.

And people think that a business school that charges 50,000 a year tuition is going to be better than one that charges 10,000 a year of tuition.

So there's some of that that — well, there's a lot of that that's gotten into the investment field recently, and you now have large — certain large — portions of investment management that are charging fees that, in aggregate, cannot work out for investors.

Now, obviously some do, you know. But you cannot be paying people 2 percent and 20 percent where they get up it in the good years, and they fold their partnerships and start another one if they have a bad year and that sort of thing.

You can't have that coming out of an economy that's only going to produce, we'll say, you know, 7 percent or something like that a year for investors, and have people net better off. It isn't going to work.

And then the question that you will have is, “How do I pick out the few exceptions?” And everyone that calls upon you to sell you this will tell you that they are an exception.

And, I am willing to bet a significant sum of money, we’ll put it up, to anybody who wants to name ten partnerships that are $500 million or more of management and pit those, after fees, against the S&P over a ten-year period.

It — you know, it gets away from the survivorship bias and all that kind of a thing. And it isn’t going to happen.

But a few will do well. They’re bound to do well.

And, actually, I think I do know how to pick a few that will do well. I mean, I did it in the past.

When I wound up my own partnership in 1969, I told people to go to either Bill Ruane or Sandy Gottesman, and that would have been a very good decision, whichever place they went.

So, if you know enough about the person, know enough how they’ve done it in the past, know enough about their personality, honesty, and a whole bunch of things, I think that occasionally you can make a very intelligent choice in picking an investment manager.

But I don’t think you can do it if you’re sitting running a pension fund in some state and you have 50 people calling on you.

You’re going to go with the ones that are the best salespeople and not the ones that are the best investors. Charlie?

CHARLIE MUNGER: Yeah. On that state pension fund investment subject, I think it ought to be a crime to entertain, in any way, a state pension fund official, and I think it ought to be a crime, if you are a state pension fund official, to accept the entertainment.

It’s not a pretty scene, a lot of investment management, in America now. And, human nature being what it is and the amounts of money being what they are, I don’t think much is going to be improved.

30. Break for lunch

WARREN BUFFETT: Well, we wanted to leave you in a good mood for lunch. So — (laughter) — we will break now, and we’ll come back in about 45 minutes or so.

And those of you who are in the other rooms, by then the crowd thins, for some explainable reason, and you can all join us here in the main room. And we’ll be back in about 45 minutes.

Afternoon Session - 2006 Meeting

BACK TO TOP

1. Buffett favors path to citizenship for some illegal immigrants

WARREN BUFFETT: OK. We'll go to zone 8.

AUDIENCE MEMBER: Where's the light?

Good afternoon, Mr. Buffett. First of all, I want to thank you for responding to all my letters throughout the years. I will always treasure them.

Last week, demonstrations in many cities across the United States took place on the subject of illegal immigration. Many companies want to stay in the U.S. but have grown dependent on cheap, illegal labor as a way to remain globally competitive.

A recent Businessweek article describes Shaw's competitor, Mohawk Carpets, and their employment of illegal immigrants. If illegal immigration reform were to occur, how would you see this affecting Shaw, Clayton, and other Berkshire subsidiaries?

WARREN BUFFETT: Yeah. I didn't read that, and I don't know much about the Mohawk situation. I don't — I don't know anything about it.

I'm sure in Nebraska, you know, there are very substantial numbers of illegal immigrants employed. Meatpacking has been an area that a number have gone into.

And I actually was down at the Omaha airport about 2 years ago, and there was a very large plane there, and I saw these — well over 100 people that were in shackles that were being put on that plane.

I kind of wondered what they did, if they ever had some kind of emergency on the plane. But they were being deported. So there's a lot of it goes on in Nebraska.

You know, I think it's a problem that should be addressed and addressed promptly. I don't believe in shipping 11 million people back away from the United States. Whatever acceptable way that the country can handle giving those people citizenship, I, basically, would support.

I think we ought to enforce the rules in the future. I think they ought to be liberal rules, but I think they ought to be enforced.

But I don't think it would make dramatic differences. I mean, if one meatpacking plant employs people at subpar wages, you know, the rest of them are going to do the same thing.

You may end up paying a little bit more for meat in the end, but I do not think it would have a dramatic effect on the economy or even on specific industries, except to change, maybe, relative prices a bit.

But I don't think it would have a dramatic effect on the economy if the people that are here illegally became legal in some manner.

You know, who's to say if Charlie and I had been born into some terrible situation in some other country, we wouldn't have tried to get into this place ourselves.

So it's a — I'm pretty empathetic with it, but I believe that we do need to have laws that are enforced in the future. I don't think we should send 11 million people back.

Charlie?

CHARLIE MUNGER: If you don't like the results, I think you should get used to it because we never seem to have the will to enforce the immigration laws. I just think that what you've seen is what you're going to get.

WARREN BUFFETT: I don't — in terms of the carpet industry specifically — you mentioned Clayton Homes. I wouldn't — I would think the mobile manufactured housing industry — I'd be surprised if there was any unusual number at all of illegal immigrants, but I — the answer is, I don't know that for sure.

But I don't see any change in those industries.

2. Business schools have improved "considerably"

WARREN BUFFETT: Number 9?

AUDIENCE MEMBER: Hi, Warren. Hi, Charlie. My name is Jeremy Cleaver (PH), and I come from Lawrence, Kansas. I'm a Jayhawk.

And what do believe is the best finance program in the U.S.? (Buffett laughs)

Also, I will be graduating in a year. Could you compare and contrast the financing opportunities now and when you graduated college?

WARREN BUFFETT: He comes from a school that has set some classes up in the last couple years that are absolutely terrific.

I've had — I will have in this school year, probably close to 40 schools where the students come out. And now I usually double up schools, because 20 of these a year is about all I can handle.

And we've had some terrific groups come out. And I would say that the teaching in finance departments, based on what I've seen, has improved quite a bit over 20 years ago. But that was from a very, very low base.

The orthodoxy of 20 or so years ago where, really, you know, the flat Earth was being embraced, has improved considerably.

And one particular place is KU. Professor Hirschey has done a great job. (Applause)

Missouri, Florida, Columbia, a lot of good schools — Stanford — have got people in those departments that are doing a very good job.

And 25 years ago, you'd have had a tough job getting a position at a finance department, and you certainly would have had your advancement stifled, unless you went along with the orthodoxy: efficient markets and modern portfolio theory and a lot of stuff that, not only wouldn't do you any good, but might get you in trouble.

And that has — that's improved a lot. And I enjoy seeing these groups of students as they come out, because it's quite encouraging. Now, they all think they're going to get rich by, sort of, copying what Charlie and I did many, many years ago. I wish them well.

It's — the amount of brain power going into money management gets a little distressing, particularly to Charlie. But I would — you know, it's a great time to be 22 or 23 or 25 and getting out of school.

So, you can look ahead to a very — I think a very interesting future in this country, even though you may find that the method of using the talents you have in investing get used in a somewhat different manner than where they — where they're used presently.

I mean, right now an awful lot of the students that come to visit Omaha say private equity or hedge fund, and it's hard to imagine a world where everybody is running a hedge fund. I'm not sure exactly what we would do for food and clothing, and a few things like that.

But I am encouraged by the kind of students I meet. When the KU group comes up — we had a great time. They put on various skits. They tried to sell me companies. I'm hoping they succeed.

We haven't had any luck yet, but they keep coming up with good ideas, and I'll keep pursuing them. And one of these days, every one of those students will get — I've offered them two B shares, and that's a limited-time offer to try to spur extra activity.

And I hear from a lot of students later, and I think a lot of them have their heads screwed on right. Charlie?

CHARLIE MUNGER: Well, I've heard that something like half of the business school graduates in the elite eastern schools want to go into private equity or hedge funds.

And those whom I bump into seem to judge their progress in life as to whether or not they're keeping up with their age cohort at Goldman Sachs. That appears to be the minimum standard by which progress of life is measured, and this can't possibly end well. (Laughter)

WARREN BUFFETT: You can see why they come —

CHARLIE MUNGER: — in terms of satisfying all these expectations.

WARREN BUFFETT: That's why they come to see me instead of Charlie. (Laughter)

He'd give them better advice, don't misunderstand me, but go away with very long faces.

3. New CEO will go through a "media probation-type affair"

WARREN BUFFETT: Number 10?

AUDIENCE MEMBER: My namaste and good afternoon to Swamiji and respected Charlie Munger. Yes, I did say "Swamiji." I see your inner dress crowned by your truth, by your humbleness, by your simplicity.

But your outer dress — I mean your wealth — is for the needy, at large. So you look upon us, your children, your friends, and your partners.

My name is Shekhar Agarwal. I'm from Sugarland, Texas, suburb of Houston.

Since May '99, I got interested in Berkshire Hathaway. And I have read a lot of what you have written. So, I can judge a little about you.

By the way, I bought B shares March 3, 2000, at 1410 before they hit the low on March 10, and it became at that time 40 percent of my portfolio, and I still own all those shares and many more.

As you tell the students who come to Omaha to run a portfolio with real money to have a real feeling and real learning, I had the same experience with you.

You know, three years back, I had a chance, with my wife, my daughter, and my 6-year-old son, who is with me today, to spend a few minutes with you when you came to Houston during the opening of a new Star Furniture store.

As we were posing for a family picture with you, my 6-year little one was standing just beside you, while you were sitting on a high-bar chair. And you said to this stranger, "Son" — you said

— “Son, you come and sit in my lap.” Sir, Swamiji, that is your simplicity. That is your humbleness.

And you talk about the contribution of Ajit Jain and ask us to bend really down if we see him, or name our children Tony to honor his contribution. Well, 40 years of selfless services to this corporation and to the humanity, you rightly deserve this distinction or this title of ”Swamiji.”

There is a beautiful, beautiful — (Applause) — beautiful prayer in the Holy Vedas that says “tvam jīvehiṁ śaddhā-śataṁ.” It means, “The Almighty God says, ‘Oh, my child, may you live hundred and longer peacefully.’”

So that’s my wish. That’s my prayer on your 75th birthday. And, Swamiji, I’m waiting for my chance to touch your feet and get your blessings. (Applause)

WARREN BUFFETT: Thank you.

AUDIENCE MEMBER: Let me finish, please. Swamiji, I have a question anyway. (Laughter)

A lot of business people have a great amount of respect and trust for this 75-years-young teenager girl who is sitting by the phone waiting for it to ring, and now and then that phone rings.

I have no concern about the next CEO of Berkshire Hathaway to take this company forward, but I do wonder about this phone. It may not ring as often as it does now, until the new CEO earns the respect and the trust of these phone dialers.

Do you see that a concern? And do you think it is a good idea that you may become the only chairman, and let someone else become the CEO, and let him earn the respect and trust under your umbrella while you are still young and healthy? Thank you very much.

WARREN BUFFETT: Yeah. Thank you. (Applause)

I don’t think there’s any question, but — that my successor, you know, will go through, sort of, a media probation-type affair for a year or so.

And people will, understandably, wonder whether the culture is going to be different under the successor than it’s been at this point.

That’s going to happen. It won’t be the end of the world. It will mean that the phone will — it — the phone probably won’t ring less, it will just be a different kind of suitor that is calling.

The investment bankers will all try out this guy to see if he’s softer than I am and wants to participate in auctions and all of that sort of thing.

But I think it will become evident — and it will take a year, two years, maybe — I think it will become evident that the culture is the same, that the yardsticks, the metrics, the attitude towards shareholders, the whole thing, will not change, the board will not change.

But I think there will be a hiatus of sorts where people do not have the same feeling immediately that joining Berkshire is going to be the same experience as it — with our companies — as its been in the past. But it won't last long.

I can tell you that the successors that the board has in mind — you know, they're very smart. They understand. They've bought into the whole corporate personality we have.

And they will develop — be somewhat different in style, but they will — they will develop the confidence of the world that — and to possible sellers of businesses — they will develop the confidence that it's going to be the same Berkshire going forward.

But it's a good question. And there will be — there will be a period when the phone won't ring for a while until people realize that Berkshire is, sort of, one-of-a-kind, and it's continuing to be one-of-a-kind.

I don't think it would work well, you know — but it's the kind of the thing we talk over with the board, though — but I don't think it works well to have, sort of, a half-and-half arrangement.

I mean, you could say that I could handle, or encourage the handling, of the deals and somebody else could, sort of, be the operating guy. But the truth is, we don't need an operating guy.

You know, we've got people running the businesses that are running them, and they're very good at it. And the main thing to do is to not destroy or damage the spirit they bring to it and the fact that they like this method of operation.

So it would — I'm not sure what a chief operating officer would do at Berkshire except expose the fact that I wasn't doing anything. (Laughter)

And as long as I'm around, they're not going to get the calls on the deals. I mean, people are going to want to talk to me. I mean, that's not a handoff that would work.

So I think we'll go along in this mode. And, you know, you will have a period, everybody — there will be stories a year after I die that, you know, says one year later and what's happened and all that sort of thing, but that will fade out.

And my successor will put his own particular stamp on the place, but he won't mess with the culture. They're too smart. They've seen it work too well. So that — the calls will start coming in again after a while.

We will still represent, sort of, a one-of-a-kind place for the owner that really cares about the future of his business.

For one reason or another — tax reasons, family division of shares or something — you know, they have to — they have to solve the ownership problem.

But they want to solve it in a way that really doesn't change the psychic ownership of the place and the management of the place. And they can't find that elsewhere, and they'll continue to find it at Berkshire.

Charlie?

CHARLIE MUNGER: Well, speaking for the Munger heirs, I would rather the current method of operation continue to wring the last drop of good out of Warren. (Laughter)

WARREN BUFFETT: At low pay.

CHARLIE MUNGER: Yes, yes.

WARREN BUFFETT: Part of Charlie's instructions under all circumstances.

No, if we — if we thought there was some better way to make this place function better or to even make the transition easier to the next person, you know, we'd be delighted.

But I really think it's going to work pretty darn well. If I die tonight, the person who will take over tomorrow will not get as many phone calls for a while, perhaps, but very, very smart people. Know the business. You know, they know a lot about all businesses. They've got a general business knowledge.

I use "they" because there's three candidates, but there would be one specific one in mind. They know how to make deals. These people are plenty deal-savvy, and they know how to avoid other kinds of deals, which is equally important.

And the world would not fully grasp that for a year, maybe even two years. But once it happened, you can argue that it would be even stronger than before because at that point people would realize that it was institutionalized and not just a person.

You've got a — kind of a hat — I mean, I don't want to compare myself because it's not in the same league, but, you know, everybody, when Sam Walton died in, I think, 1991 or something, wondered whether Walmart would continue in the same tradition.

Well, the fact that it did has made that place a lot stronger than if it had just depended on the guy in the pickup truck. I mean, it was not — it was the creation of one person at Walmart, but

it was not required for the continuation at all. And we're not in the same league, but it's the same idea.

4. Go with your gut when picking a charity

WARREN BUFFETT: Number 11.

AUDIENCE MEMBER: My name is Martin Wiegand from Chevy Chase, Maryland. Mr. Buffett and Mr. Munger, on behalf of the assembled shareholders, we thank you and all the Berkshire staff who put so much work and thought into making this weekend such a wonderful community-building event. (Applause)

WARREN BUFFETT: Martin, is Janie (PH) with you?

AUDIENCE MEMBER: Yes, sir.

WARREN BUFFETT: OK. Well, she sent me some great sweetbreads the other day. I love them. Keep them coming. Thank you. (Laughter)

AUDIENCE MEMBER: Through the years, you have generously helped us thinking through capital allocation decisions for funding our businesses and feeding our families.

Would you please help us think through the capital allocation decisions we face when it comes to charitable giving, particularly as it concerns how we pick effective charities? Thank you.

WARREN BUFFETT: You know, it's tough to give other people advice on that. But, you know, you have to pick the things that are important to you. And, you know, many people — majority in the United States — it's their church. You know, there's more money given to churches than anything else.

Many people — very many people — it's their school, or schools generally. You know, I think, to a great extent, you should pick whatever gives you the most satisfaction, and that will probably be something that you know, something you've, maybe, benefited from yourself.

I look at it a little differently. The amount of funds are different, too, but I like to think of things that are important but that don't have natural funding constituencies.

But that isn't something, you know, for millions of people to be following as an example or something. Nothing wrong with doing something that gives you plenty of personal satisfaction and does some good for other people in the process.

So I would not be reluctant — I would not feel I had to be as objective about that, necessarily, as I was about buying securities or something of the sort. I would, kind of, go where my gut led me and make it something you participate in.

And, like I say, I think if you're doing it with large sums, you may have some reason, maybe even some obligation, to try and think about where really large sums can have an important impact on a societal problem that might not get attention otherwise. And, you know, that's, sort of, where my own thinking leads me.

But I would — I would go with something where I felt I knew where the money was going to go and I knew some good was going to come out of it. And maybe, by observing what took place, I could make the next gift more efficient than the last gift and more beneficial.

Charlie?

CHARLIE MUNGER: I've got nothing to add. But I have a question: would you pour me a cup of coffee? (Laughter)

WARREN BUFFETT: We don't sell coffee, Charlie. We sell Coke. (Laughter)

We get the profit on one out of every 12 Cokes. So I don't care whether you drink them, just open the can. (Laughter)

5. We like the regulated utility business the way it is

WARREN BUFFETT: Number 12.

AUDIENCE MEMBER: Good afternoon. My name is Robert Piton (PH) from Chicago, Illinois.

And my question is, did the possible future deployment of telecommunications services over power lines factor into Berkshire's decision to invest in the utility space? Thank you.

WARREN BUFFETT: Yeah. The answer is no. We're in the utility business — the regulated utility business — because we like the business as is.

Where it leads, you know, will be determined — well, in specific states — by what they want us to do and maybe by technological changes, generally.

But we're going to earn a return on capital employed if we do an efficient job, keep consumers happy, whether we transmit it the old way or, you know, some new processes come along.

So it's a business where we're trying to be efficient, which means serving our customers while keeping their costs down as much as possible. And we will — even in terms of what generating sources we use — we are following the will of the people in the states in which we operate.

There are different costs associated with different forms of generation. And we feel that if people want to elect a more expensive way to generate electricity but one that they're more

comfortable with in terms of the environment, you know, that's the decision of the people whose state in which we operate.

And we — so I do not see us — I don't see any large developments that change the economics of what we're doing. And we're certainly not going in — we're not buying an electric utility because we expect it to generate revenues from activities other than that.

Charlie?

CHARLIE MUNGER: Nothing to add.

6. "Media businesses do not have a great outlook"

WARREN BUFFETT: Number 1.

AUDIENCE MEMBER: OK. First, my name is Egil Dahl. I'm a retailer from Norway. I would like first to thank you gentlemen for the opportunity to come here and ask two of the best businessmen in the world a question.

My question is regarding the media and entertainment business. Do you think that the nature of newspapers, magazine, television, and maybe movie and music business as well, are about to change permanently and become less predictable because of new technology and internet?

And the second part is, if not so, do you think that some of these businesses represent good purchases at the moment because the market thinks so? Thank you.

WARREN BUFFETT: Well, people are always going to want to be entertained and they're going to want to be informed and some mix thereof. But, you know, we only have two eyeballs, and we only have 24 hours a day.

So if you go back 50 or 60 years and think about how people got informed or entertained then, the choices were far fewer. You had the local movie theater, and you had the radio, and you had newspapers.

And as the years have gone by, what technology has done is opened up a huge variety of ways of being informed faster, certainly. And whether it's better or not depends on who you ask.

And certainly entertained in way many more forms, many that are free. And it hasn't expanded the time you have for entertainment or for acquiring knowledge.

And any time you get more and more people competing in any given area, generally, the economics deteriorate.

And the economics have deteriorated for newspapers, although they're still enormously profitable in relation to tangible equity employed, but they do not have the same economic prospects, if you look at the future stream of earnings, that it looked like they had 20 or 30 or 40 years ago.

And television, again, the margins have been maintained surprisingly well, but the audience keeps going down and — for any given means of distribution.

So, that has to erode economics over time. Cable was thought to operate pretty much all by itself, and the telecoms come in.

And very few businesses get better because of more competition. They like to talk about it, you know, but it — you know, the idea —

I had one friend in the newspaper business. And I think Charlie used to tease her a bit by saying that her idea of a competitor was a corpse laid out on a slab with a toe twitching, you know. And the — it is not a better business when more people compete.

So I think that, generally speaking, the economics of media businesses do not have a great outlook, I mean, compared to — like I say, they're enormously profitable now, in returns on tangible assets.

I mean, it's a business — you know, a license from the federal government became a royalty stream on huge amounts of money.

I mean, there were only three highways between — electronic highways — between Procter & Gamble and Ford Motor and the eyeballs of several hundred million people, and those three highways could make a lot of money when there were only three highways.

But you keep building more ways to — for the P&Gs, or the Gillettes, or whomever it might be, or Ford Motor, or General Motors — to get to those eyeballs, and you decrease the value of the highways. It's not complicated.

So, I think you will see — it's hard to imagine those businesses having great prospects in aggregate.

We owned the World Book. We still own the World Book. We were selling 300,000 sets a year or something like that in the mid '80s. It's a very valuable product. It sold for $600 or thereabouts, and it was worth it.

But the problem became that you could get that same information, or a good bit of the same information, you know, very, very cheap through the internet.

And you didn't have to cut down trees. And you didn't have to run paper mills. And you didn't have to hire United Parcel Service to deliver a very bulky package.

And it isn't that the product we have isn't worth the money; it's that people have lots of other alternatives. And that's true in information and entertainment in a big, big way, and it won't stop, in my view.

Charlie?

CHARLIE MUNGER: Yeah. It's simplicity itself. It will be a rare business that doesn't have a way worse future than it had a past.

WARREN BUFFETT: Give them the bad news, Charlie. (Laughter)

The thing to do was to buy the NFL originally or something like that.

I mean, you know, there still is only — you know, there are certain primary events, but it's the people who transmit them — there's more ways to transmit those events, and so the value gets extracted in a much different way.

7. "Significant consequences" from U.S. trade imbalance

WARREN BUFFETT: Area 2?

AUDIENCE MEMBER: Good afternoon. My name is Yuji Siamoto (PH) from New York City.

I would like to ask Mr. Buffett regarding your views in respect to currency: the renminbi, the yen, and the euro, in particular.

During the visit by Hu Jintao, this issue of the currency level had become a big issue. And increasingly, this is becoming a very, very important issue for economic health of this country.

United States is becoming highly dependent on very cheap, underpriced Chinese exports in all consumer goods. You go to Walmart, and most of the high product — high-end product electronics — or most of the — any value-added products — are manufactured in China.

U.S. is almost addicted to very low-priced Chinese goods, thanks to artificially maintained currency level. At the same time, U.S. is becoming addicted to very cheap capital from China and Japan, as they provide infusion of capital to U.S. Treasury markets, thus keeping the interest rate low for mortgage rates.

I see a great danger if this is maintained for long time, as U.S. becomes addicted to this cheap Chinese or Asian exports for all our consumption, and also for all of our cheap mortgage rates.

And this is almost like being addicted to opium, as Chinese were addicted to opium during Opium Wars.

And should government try harder to break this vicious cycle? And, if so, what would you think about the currency level?

And you have — previously, you have held very strong views about the dollar, but what are your views now, and are you capitalizing on your views on the currency?

WARREN BUFFETT: Yeah. Well, my views — and Charlie may disagree — but my views are strong as ever, perhaps a bit stronger. The — we are doing less directly in currency futures because the — as I explained in the annual report — the carry cost has gone from being positive to quite negative.

So there are better ways, in my view — considerably better ways — of mitigating the consequences of the dollar becoming a lot weaker in the future.

We like the idea of developing earning power in other currencies around the world, and, in effect, in ISCAR itself, the — a large portion of the earnings are not in dollars, and we're doing it in other areas as well. We will hold less in currency futures unless the carry picture changes.

But the fundamental picture, what, in my view, is almost — you never say "certain," but a very high probability of happening, is that the U.S. currency weakens over time.

No idea about the next 6 months or year or anything, but over a long period of time, weakens against other currencies because we are following policies that don't seem much — don't seem to leave much alternative.

Here is a quote referring to running a large current account deficit that was given on February 28, 2002. The quote is, "Countries that have gone down this path invariably have run into trouble, and so would we. Eventually the current account deficit will have to be restrained."

Now, that was said by a very smart fellow whose name was Alan Greenspan. And at that time, the current account deficit was 385 billion, and it will be more than double that now.

So here, 4 years later, we have gone down that path, which he talked about, and we've gone faster and faster down the path. And he says, invariably, it runs into trouble.

Now, in his later years as Fed chairman, he did not emphasize this view as much. He never repudiated it, but he sort of talked about other things more.

But it — it's going to lead to something, and it — in my view, it's likely to be something significant. And people talk about a soft landing, but they never explain to me exactly how it's going to take place.

And Chairman Bernanke recently gave a talk where he said the probabilities were that the ending would be good but that he couldn't rule out the possibility otherwise.

I think you will see significant consequences at some point. We will have, at Berkshire, a fair amount of our earning power coming from other countries with other currencies, but we will always be primarily in the United States.

And, you know, we may — one consequence certainly seems possible is significantly higher inflation as the years go by.

Because as you owe more and more money as a country, it gets more and more tempting to devalue what you owe by paying in a cheaper currency than in the one in which the debts were incurred.

Charlie, what do you have to say on this?

CHARLIE MUNGER: Well, I don't feel I have any special capacity to predict whether the euro was exactly priced right, right now. I don't consider it a big deal that Berkshire has had the position it's had.

In effect, about half of our surplus cash was stashed short-term in currencies other than the dollar. I regard that as almost a nonevent. Now, as it happened —

WARREN BUFFETT: Well, we made a couple billion dollars off it. (Laughter)

CHARLIE MUNGER: Yeah. I was — as I was about to say, that as it's happened so far, it's been a very profitable nonevent, but... (Laughter) Generally —

WARREN BUFFETT: If it doesn't mean anything to him, he can always give his share to me. (Laughs)

CHARLIE MUNGER: Yeah. Generally speaking, it can't be good to be running a big current account deficit and a big fiscal deficit and have them both growing.

I mean, a great civilization may be able to stand something like that for a way longer period than you might have thought at the outset.

But you think that in the end, there would be a comeuppance and that we would have to change policies, perhaps painfully. In fact, I would say almost surely painfully. Wouldn't you, Warren?

WARREN BUFFETT: Yeah, I would. And it's interesting because I think almost everybody says it's unsustainable, and then they never explain how it doesn't keep being sustained until something comes — very unpleasant comes along.

But then they also say that there will be a soft landing, and I don't always get from A to B to C when I listen to them. The —

Certainly the longer it goes on, the greater the credit — the greater the net debtor position the United States is in, the more people see that we are, sort of, addicted to this kind of behavior, the more chance there is at some point, probably brought about by some other extraneous affair, that currency doesn't —

There aren't some big adjustments that take place and, perhaps, some chaotic markets in which currency adjustments play a part. But knowing when or exactly how, it's impossible to say that sort of thing — predict that sort of thing.

Charlie and I, in the 1980s, saw something called "portfolio insurance" — and that was a very popular term then — catch on with institutions.

And what happened was that a group was around selling the idea that this was a sophisticated, superior way for large institutions to manage money. And they charged appreciable sums for people — to people — to set up mechanistic procedures for dealing with stock market fluctuations.

They did this with pension funds and various big guys. And it was very popular, and the academic literature was full of it, and people were teaching about it in the schools.

And then October 19, 1987, came along, and a relatively small portion of American money invested — American investments — were being guided by this portfolio insurance doctrine.

But just that small amount of money was a leading factor in producing a 22 percent change in the value of American stocks in one day.

Every one of these people individually thought what they were doing was intelligent, but, when aggregated, and having to follow a given signal, in effect, you created a doomsday machine. It was out of control, and some really chaotic things happened then.

I would say the potential for that sort of thing — not that exact thing at all, but that sort of thing to happen in the world ahead is — it's probably magnified quite a bit from what existed in the '80s.

And currency enters into it, but it's not — who knows where it starts or exactly why somebody yells "fire." But when "fire" is yelled, there will be — the currency markets will play a part in the rush for the door.

8. "CPI has understated inflation"

WARREN BUFFETT: Number 3.

AUDIENCE MEMBER: Hi, there. Alex Rubalcava from Los Angeles.

Warren, you just brought up the topic of inflation, and so I wanted to ask, do you believe — or do you believe that the Consumer Price Index is a good and true and accurate measure of inflation?

WARREN BUFFETT: Well, that's a good question. Bill Gross has written a little bit about that in some of his PIMCO methods and — messages. And, you know, if you go out to the Furniture Mart and construct a price index, it hasn't moved very much.

I mean, it makes it very tough for comparable store sales when you were selling DVD players at X few years ago, and now you're selling them at a quarter of X. So there's certain areas that there have been a huge — in effect, deflationary aspects.

But I do think the CPI — and, like I said, Gross has written about this — but the CPI is not particularly a good index.

I always get a kick out of when they talk about the core CPI, and then they — and they say that excludes food and energy.

You know, food and energy strike me as pretty core to anything, in terms of the average — I can't think of anything that's much more core.

The CPI, as you may or may not know, many, many years ago had housing figured in directly.

There is no — the CPI now has a rental — which is an imputed rental type computation. It's still a large portion of the CPI, but it does not reflect the new housing prices, or —

And rentals — the rental factor has lagged, in my view, significantly below what housing costs really are for an American family. And since housing is a big portion, I don't think it picks it up well.

So I would say that the CPI has understated inflation for a great many people.

Now, if you're older and you own your own house — I mean, everybody has their own way of living.

And, I mean, if all you do is drink Coca-Cola all day, you know, Coca-Cola hasn't gone up in price enough, in my view, and you — my CPI has not changed very much.

But for somebody buying a new house versus 6 or 8 years ago and driving 30 or 40 miles to work or having a lot of driving in the family, the CPI has gone up a lot more than the government figures would indicate.

Charlie?

CHARLIE MUNGER: Yeah. I see it at Costco where there's been almost no inflation in the composite product that flows through Costco, and, yet, in other places you get these dramatic rising figures.

I don't feel sorry for the people that pay $27 million for an 8,000-foot condo in Manhattan. You know, if they've had little inflation, I guess it doesn't matter to the rest of us.

But it's almost weird the way the situation works in terms of how it's —

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: — it comes in just a few places.

WARREN BUFFETT: If you look at the Costco annual report or the Walmart annual report — these are huge enterprises — and you'll see their LIFO adjustment is just peanuts.

CHARLIE MUNGER: Almost nothing.

WARREN BUFFETT: Yeah. Just peanuts — is Costco on LIFO for —

CHARLIE MUNGER: Sure.

WARREN BUFFETT: — for fuel? I know they're on LIFO generally. Are they on it for gasoline or not?

CHARLIE MUNGER: I think so. I can't imagine they're not.

WARREN BUFFETT: Yeah. But they wouldn't have a large inventory relative to —

CHARLIE MUNGER: No.

WARREN BUFFETT: — their sales volume. But they — at Walmart, it's inconsequential. I just got through reading their annual report, and the LIFO adjustment isn't worth a hiccup, you know, basically.

And you're dealing with 300 billion — well, in the United States a little less than that — but $200-and-some billion worth of sales, and the LIFO adjustment would have picked up changes in prices of that mix overall relative to their inventory level.

So in jewelry, you know, because of gold and some things, we had some big LIFO adjustments last year.

Steel, we've had big LIFO adjustments. We have a steel service center in Chicago and we buy a lot of steel at MiTek and there's a big LIFO adjustment. So it's very uneven.

Carpet went no place for 20 years, but because it's petrochemical-based, there have been substantial price changes in the carpet business in the last couple years.

And our LIFO — we had a LIFO net — a minus LIFO figure, in effect — 3 years ago, and now we have 100 million or so of LIFO adjustments. So there's been a significant price change there.

I think overall, though, for a typical young family, that the CPI probably underestimates the burden they have faced, in terms of their own living situation.

9. Why we don't "do deals" with investment banks

WARREN BUFFETT: Number 4.

AUDIENCE MEMBER: Hi. I'm Mike Kelly (PH) from Iowa City.

We've heard a bit about ISCAR today. Could you tell us some things about some of the other acquisitions of the past year?

WARREN BUFFETT: What would you like to know, Mike? (Laughter)

AUDIENCE MEMBER: Um.

WARREN BUFFETT: I mean, we described it a bit in the annual report, but —

AUDIENCE MEMBER: Right. Well, I believe since the annual report, there have been a couple others. Russell, for instance.

WARREN BUFFETT: Yeah. Russell is in the works. There's just been a proxy statement that isn't out yet, but it's been filed with the SEC. You can get a copy of the filing. But that is one in process and is probably a couple months off from actual completion.

You know, we — I described the Business Wire situation in the annual report where I got a letter from Cathy after reading — reading a Wall Street Journal article. And, you know, these — they just all sort of pop up.

Medical protective, I think I suggested to Jeff Immelt at GE, that if — I knew they were interested in doing things with their insurance assets, and I suggested that was one portion of their insurance assets that Berkshire would have an interest in. And he and I met one time and we made a deal on that one.

PacifiCorp — that originated with Dave Sokol and the people at Scottish Power. I'm not even exactly sure what the sequence was.

But the one thing we haven't done is we haven't participated in any auctions.

I get books occasionally on various businesses, and the projections are just plain silly in these books. I mean, it's a — I would — maybe that's why they don't sign their names in the books, the people that write them, because they'd be embarrassed about the projections they put forth.

I would just love to meet the people that write those investment banking books and make them a bet on the earnings that they project four years out. I would win a lot of money over time. They wouldn't be met.

But we get the calls, occasionally, from the people that care about where their businesses end up.

We're going to close on Applied Underwriters in just probably a few days, and those are two terrific guys, built it up from absolutely nothing.

Actually, I bought a tiny business here in Omaha — as I explained in the report — that's why it's here.

But they wanted to come with Berkshire. They think their own — they're keeping 19 percent of the company. They think their own future will be the best in many ways, including financially, I'm sure, of being associated with us. They feel it's the best place for the people, have the most opportunity to grow. And, you know, they came to us directly.

You know, I don't know how many stories you read about a $4 billion deal, as appeared today in connection with ISCAR, where it doesn't say anything about an investment banker, on either side.

But you'll see more of those, I think, with Berkshire over the years.

Charlie, do you have anything in particular to add on our acquisitions recently?

CHARLIE MUNGER: Well, the interesting thing about it to me is the mindset. With all of these new helpers in the world, they talk about doing deals. That is not the mindset at Berkshire. We are trying to welcome partners. It's a total different mindset.

The guy who's doing a deal, he wants to do the deal and unwind the deal and — not too far ahead and make a large profit, et cetera, and that's not our mindset at all.

We like the things that we can buy and that never leave us, and we like the relationships that last and are fruitful, not just for us, but for the people working there and the customers and everybody else.

I think our system is going to work better, long term, than flipping a lot of deals. And we have so many new deal flippers in the game that I think they're going to get in one another's way.

In other words, I don't think there's enough money out there to have all this new class make all the money they expect to make on a permanent basis just flipping, flipping, flipping, flipping.

WARREN BUFFETT: They'll make it on fees, fees, fees, fees. (Laughs)

CHARLIE MUNGER: Warren reminds me, once I asked a man who just left a large investment bank — and I said, "How does your firm make its money?" He said, "Off the top, off the bottom, off both sides, and in the middle." (Laughter)

WARREN BUFFETT: I know which firm he's talking about, too. (Laughter)

CHARLIE MUNGER: That's not our culture. And a lot of you have been here so long, you can see that's not our culture. But in the end, it may be that Omaha will do better than Wall Street.

10. Salomon's 1991 reprieve prevented "absolute chaos"

WARREN BUFFETT: Number 5. (Applause)

AUDIENCE MEMBER: Hi. Steve Rosenberg (PH) from Michigan, originally. First, I'd just like to thank you both very much for continuing to serve as role models for integrity and common sense.

Can you describe a little bit more specifically — (Applause) — how a derivatives meltdown might progress and, ultimately, get resolved after it's been precipitated, and is there a plausible way to resolve it without some sort of a major bailout that would exacerbate a too-big-to-fail moral hazard problem?

WARREN BUFFETT: It's really hard to tell. I mean, it — you know, it — what will cause people to yell "fire," what will — how many people will rush for the exits, what they'll do when they get there — it happens occasionally.

You know, with LTCM — Long-Term Capital Management — in 1998, you know, it affected the financial world in a big way. It didn't affect it in the biggest way. I mean, the feds stepped in. But there were some pretty — pretty strange things happened during that period, in markets.

What happened in the junk bond market in 2002? I mean, it closed for a while almost, and it was chaos. So it's very hard to know exactly what would happen. I'll give Charlie a question here.

In 1991, when we were in Salomon — it was in August, middle of August — and on a Sunday we were within, probably, a half an hour of seeking out a federal judge to turn over the keys to the place to him and go into bankruptcy.

And, fortunately, the Treasury reversed itself, and we got out of that particular predicament. But the law firm was drawing up the papers for bankruptcy.

Now, that was on a Sunday. What would have happened Monday — and we had a good — we had, for those days, a good-sized derivative book. It would be peanuts now, but it was — it looked big at the time. We had a lot of security settlements due the next day.

Now, it happened to be the same day that Gorbachev was spirited away, and the Dow opened down a couple hundred points the next day off of a much lower Dow.

Now, if you had superimposed upon that the fact that Salomon failed in Japan starting at 7 o'clock or so the previous night and that it was — if you were delivering securities to them against payment the next day, you weren't going to get paid.

And if you were expecting securities from them, you weren't going to get those securities. And, by the way, you had a — I think a 6- or $700 billion derivative book.

And people who had traded off those derivatives had to try and figure out where they stood and scrambled around and whether their counterparties were any good.

What do you think would've happened on that Monday, Charlie?

CHARLIE MUNGER: Well, it could have been absolute chaos. That was a very interesting story with an interesting moral. Nick Brady really prevented that bankruptcy.

And he knew about Berkshire Hathaway from having been a family shareholder with the Chaces way, way back. And that had caused him to follow the matter with interest, particularly since he'd sold his own stock and watched his relatives, the Chaces, hold theirs.

So he knew about us, and I think he trusted you, Warren. And I think that mattered that day. So these old-fashioned reputational —

WARREN BUFFETT: Well, what would have happened the next day? I —

CHARLIE MUNGER: Well —

WARREN BUFFETT: It was terrifying. I'll put it that way.

CHARLIE MUNGER: Yeah, it was terrifying. And — but there was an element of personal reputation in the avoidance of finding out what would have happened that next day.

WARREN BUFFETT: Kim Chace, who I introduced you to earlier, his father actually introduced me to Nick Brady many, many years earlier, mid '60s, when Nick was working — was at Dillon Read and Malcom Chace said, "I'd like you to meet" — I guess he was a nephew or grandnephew.

In any event, I went over to Dillon Read and — I would have been in my 30s then — and Nick was a few years older — and we had a good time talking.

And then in 1991, he was secretary of the Treasury. And the Treasury had issued a death sentence to us at 10 o'clock in the morning on Sunday, and, fortunately, Nick, reversed that about 2:30 in the afternoon.

And if he hadn't, I don't know what would have happened. But that would have been kind of a pilot case for a mild derivatives daisy-chain-type panic. But that would be nothing compared to something now.

If — now, there's way more of the stuff that is collateralized these days than formerly, but it would not be a — it's not an experiment you would want to voluntarily conduct, I'll put it that way.

11. We love reading them, but newspapers are in trouble

WARREN BUFFETT: Number 6.

AUDIENCE MEMBER: Hi. My name is Jeremy from San Diego. And, first of all, I want to thank you all for the tremendous impact that you've had on my career as a professional investor.

My question is also about the newspaper industry that the gentleman earlier touched on.

And for some of those same points that you brought up, some of the largest newspaper stocks seem to earn incredible return on invested capital as compared to a lot of the businesses in the S&P 500.

My question is more specifically related to valuation. If either of you were looking at a newspaper stock today and watching them fall, as some people may categorize falling knives, what would you use to determine — or how would you determine a very comfortable margin of safety to protect yourself against the deteriorating aspects of the newspaper industry?

WARREN BUFFETT: Yeah. Well, the question is what multiple you — what multiple should you pay for a business that's earning $100 million a year — call it pretax — whose earnings are going to go down 5 percent a year compared to what you should pay for a business with a — that's earning $100 million a year whose earnings are going to go up 5 percent a year.

And I would say that — I'm not saying that those are percentages I predict on newspaper companies — but certainly newspaper companies face the prospect of their newspaper earnings eroding.

And we've seen some of it already. We see every trend pointing in that direction. We own a newspaper ourselves.

And, you know, I do not think the circulation of our paper will be larger in five years, and I don't think the advertising pages will be greater.

And I think that's true even of newspapers that operate in more prosperous — or, actually, more growing, I should say — areas of the country than we do.

So — but I don't think — I don't think most owners of papers still have quite gotten to the point where they start projecting out declining earnings.

Certainly multiples on newspaper stocks are unattractively high if you would see some decline, like 5 or 6 percent a year on earnings, occurring to this point. They just — they're not cheap enough to compensate for that sort of erosion in earning power.

And then you face the added risk that they may have, sort of, a perception lag and that they may continue to use some of that money to buy other newspapers at prices which, again, don't make much sense.

It's pretty hard in a declining business to buy things cheap enough to compensate for the decline.

People in the business always tend to think that they're seeing the first robin, you know, or something, and that it's going to get better. And I would say in the newspaper business, the decline, if anything, is accelerated somewhat. I —

You know, when they take — when they take people out to the cemetery, they're taking newspaper readers, and when people graduate from school, they're not gaining newspaper readers.

And that may not change things overnight, but it goes in the wrong direction. And the less the readers, the less the readership, the less compelling argument to have to advertisers.

So that virtuous circle where everybody read a paper because every ad was in it, and every ad was in it because everybody read a paper, that virtuous cycle is going in the other direction now. And I don't think present prices for papers compensate for that.

And you are now hearing from a couple of guys that just love newspapers.

We think newspapers are indispensable, but we don't have a lot of — we have less company in that view. We love — I read five newspapers every day. Charlie probably does about the same.

CHARLIE MUNGER: Four.

WARREN BUFFETT: Yeah, he's — well, it shows too. The — (Laughter)

The — we couldn't live without them. But a lot of people can, and more people can every day. And though we started out — we love the idea of buying newspapers. We traveled to Cincinnati, cheap hotels, all kinds of things, to buy newspapers.

But — and we thought, incidentally, we loved them as products, and we thought they were the greatest of businesses, the ultimate bulletproof franchise. But it became apparent we were wrong.

You know, we still love them as news — as products, but we were wrong about the bulletproof franchise. And, you know, we've got to believe our eyes, in terms of what we're seeing in that world.

Charlie?

CHARLIE MUNGER: Yeah. I have an even greater sin to admit to. I once thought General Motors was a bulletproof franchise. And — but we have a wonderful way of coping with a lot of these things. We have this "too hard" pile.

I don't know if Warren is buying General Motors or not, but I have a good guess.

And it's just too hard. If something is too hard to do, we look for something that isn't too hard to do. (Laughter)

What could be more obvious than that? (Laughter)

WARREN BUFFETT: It may mean that we don't do very much. (Laughter)

CHARLIE MUNGER: Yeah. Yeah.

WARREN BUFFETT: We won't get into specifics. The news — it's — I don't think anybody has watched the newspaper business much more carefully than Charlie and I have for, really, 50 years.

We used to — we always talked about every paper in the country, and the potential for buying it and, all that sort of thing.

And it was a — it was easily understood. I mean, it was about as easy an economic — a business economics problem — as you could imagine. And we slowly woke up to the change on it.

Actually, I wrote in the 1991 annual report, the newspaper — the very — the preprints of the world, you know, started turning the newspaper into a wrapper. It contained a whole bunch of things that could have been contained in some other package.

Now, your newspaper wasn't reproducible in some other package, but this thing was carrying around a bunch of preprints. Now, the question is there a bunch — is there — are there easier ways to carry around those preprints?

But there was nothing magical about the paper except it got inside the house and brought the preprints inside the house. And as the newspaper lost penetration, it became a somewhat less efficient way of getting things into the house and other ways became more efficient at getting things into the house.

So these things — it's not a hard business to understand. And it has been interesting to me to watch both owners — direct owners — and investors in the business sort of resist seeing what's right in front of them, you know?

It just — it went so long the other way that you couldn't make a mistake buying a monopoly newspaper. Nobody ever made a mistake buying one, you know, until, what, 1975 or '80 or something like that.

CHARLIE MUNGER: Yeah. If the technology had not changed, they'd still be impregnable franchises. But the technology did change. Fortunately, carbide cutting tools appear to have no good substitute. (Laughter)

WARREN BUFFETT: It's a lot better business over time, if you have the right management. Now, it takes very good management. Nice thing about the newspaper business 30 or 40 years ago, it took no management at all.

I mean, if you had an idiot nephew, you know, you — that would be a perfect — or a network television station. I mean, they were going to make money no matter what happened.

They were going to make more money if they were under good management. I mean, if Tom Murphy was running your television stations, you were going to do much better than if you had your nephew doing it, but the nephew would have done all right. (Laughs)

12. Don't let your fear overcome your logic

WARREN BUFFETT: Number 7.

AUDIENCE MEMBER: Hello, Warren, Charlie. My name is Matt Peterson (PH). I'm a shareholder from Seattle, Washington, and it is a true pleasure being here today. My question for you is simple.

The two of you have had a — many great opportunities throughout your years to work with many fine mentors and teachers.

And I'm wondering if you could provide us with a few names of some present-day mentors that we may look to for advice and our own ways to approach problems and situations, people similar to the Grahams and the Fishers of the present day?

WARREN BUFFETT: Well, the interesting thing, you don't have to look at the present-day ones, necessarily.

I mean, if you wanted to look at great business careers, you could look at Tom Murphy or Don Keough on our board.

And you can learn everything you could learn about being an outstanding businessperson by just studying them. And you don't have to study somebody that is 55 and currently in some executive position. Their lessons are timeless.

And there's going to be a study — I think the Harvard Business — somebody sent it to me from the Harvard Business School, you know, on Cap Cities.

But there's been others in the past. And, you know, if you learn the lessons of Tom Murphy, you don't need to learn any other lessons in terms of business.

And I would say if you learn the lessons of certain investors in the past, you know, you don't need to worry about a contemporary example.

Charlie?

CHARLIE MUNGER: Well, I think it's also true that Warren and I are not following very well the 40-year-old investment professionals. Isn't that right? (Laughter) Are you hiding something from me?

WARREN BUFFETT: I didn't know there were any 40-year-olds. (Laughs)

I thought they're all 25 now.

CHARLIE MUNGER: Yeah.

WARREN BUFFETT: The — investing is not that — is really not complicated. I mean, the basic framework for it is simple. Now, then, you — you have to work at it some to find the best pockets of undervaluation, maybe, or something.

But you didn't have to have a — you didn't have to have a high IQ. You didn't have to have lots of investment smarts to buy junk bonds in 2002 or even to do some of the stuff that was available when LTCM got in trouble.

You really had to have, sort of, the courage of your convictions. You had to have the willingness to do something when everybody else was petrified.

And — but that was true in 1974 when, you know, we were buying stocks at very, very low multiples of earnings. It wasn't that anybody didn't know that they were cheap.

They were just paralyzed for one reason or another. And, you know, that — the lesson of following logic rather than emotion, you know, is something that — it's obvious. And some people have great trouble with it, and others have less trouble.

Charlie, can you give them any more?

CHARLIE MUNGER: Well, I think this is different. When we were young, we had way less competition than you people have now.

There weren't very many smart people in the investment management field. (Laughter) There really weren't. And you should have seen the people who were in the bank trust departments. (Laughter)

I mean — so, now we've got armies of brilliant young people and all these private partnerships and all these proprietary desks in all the big investment banks. It's a — and we've got a vast amount of talent in the investment management business.

So — and there's a lot of competition. Now, if there were suddenly a crisis now, there would be 500 firms that would be studying it intensely, each having capital that they could commit on a hair trigger. In our day, we would frequently be all alone.

WARREN BUFFETT: But in 2002 —

CHARLIE MUNGER: We'd be the only buyer.

WARREN BUFFETT: But in 2002, Charlie, there were tons of people that had investment experience and high IQs and lots of money was around. It wasn't a question about money, it's just they were terrified of that particular arena.

CHARLIE MUNGER: Well, when you have a huge convulsion, which is like a big fire in this auditorium right now, you know, you get a lot of weird behavior. (Laughter) And if you — (Laughter) — and if you can —

WARREN BUFFETT: Particularly at the head table. (Laughter)

CHARLIE MUNGER: — and if you can be wise when everybody else is going crazy, sure, there will still be opportunities. But that may give you long, dull stretches, if that's your strategy.

WARREN BUFFETT: Three years ago — two — three years ago you could find a number of securities in Korea, population 50 million, advanced society, strong balance sheets, strong industry positions, at three or so times earnings. Now —

CHARLIE MUNGER: But that took a convulsion to create that, a real — a big convulsion.

WARREN BUFFETT: Yeah. But the convulsion happened three or four years earlier —

CHARLIE MUNGER: Yeah.

WARREN BUFFETT: — five years earlier. And plenty of smart people in Korea in the investment business, plenty of smart people here scouring — the information was all available.

You can go to the internet and get information about Korean companies that's just as good as you get it from the SEC. And there they were, dozens of companies at very, very, very cheap prices. Now, where —

CHARLIE MUNGER: It did —

WARREN BUFFETT: — were all these smart people with all this money —

CHARLIE MUNGER: It did happen. But if I asked you to name 20 more like it, you would have great difficulty.

WARREN BUFFETT: Well, if I have 20 more like it, I'm not going to name them. (Laughter)

13. If we were starting out again …

WARREN BUFFETT: Number 8.

AUDIENCE MEMBER: My name is Simon Denison-Smith from the UK.

My question is this: if you were starting out today with a million dollars, with a vision of building a business with 20 percent average growth in value over 40 years, what type of investments and investment strategy would you look to make in the first five years?

WARREN BUFFETT: Well, it's somewhat interesting that we formed the first partnership 50 years ago last — 2 days ago, Thursday, May 4, 1956, which was 105,000. (Applause) That's my sister clapping. She was in the partnership. (Laughter)

The — we would — if Charlie and I were starting all over again and we were in this, Charlie would say we shouldn't be doing this. (Laughter)

But if we were to succumb to Satan and engage in the same kind of activity, we would, I think, be doing something very similarly. If we were investing in securities, we would look around the world, and we would look at a Korea.

And Charlie says you can't find 20 of them, but you don't have to find 20 of them; you only have to find one, really. You do not have to have tons of good ideas in this business, you just have a good idea that's worth a ton, occasionally.

And in securities, we would be doing the same thing, which would probably mean smaller stocks — it would mean smaller stocks — because we would find things that could have an impact on a small portfolio that will have no impact on a portfolio the size of Berkshire.

If we were trying to buy businesses, we'd have a tough time. We would have no reputation, so people would not be coming to us. We'd be too small a player, if you're talking about a million dollars. So we would not have much success, I don't think, with small amounts, buying businesses.

Charlie started out, you know, in real estate development because it took very, very little capital, and you could magnify brain power and energy — or, I should say, brain power and energy could magnify small amounts of capital in a huge way that was not true in securities.

You know, my natural inclination was to look at securities and just kind of do it one foot in front of the other over time. But the basic principles wouldn't be different.

You know, I think if I'd been running a partnership a couple of years ago with a small amount of money, I think I'd have probably been 100 percent in Korea.

And, you know, I would be looking around for something that was very mispriced and which — and that I understood. And every now and then, that's going to happen.

Charlie?

CHARLIE MUNGER: Well, I agree with that. The concept that you're likely to find just one thing where it will make 20 percent per annum and you just sit back for the next 40 years, that tends to be dreamland.

And in the real world, you have to find something that you can understand that's the best you have available. And once you've found the best thing, then you measure everything against that because it's your opportunity cost.

That's the way small sums of money should be invested. And the trick, of course, is getting enough expertise that your opportunity cost — meaning your default option, which is still pretty good — is very high.

And so, the game hasn't changed at all in terms of its basic arithmetic. That's why modern portfolio theory is so asinine. (Laughter)

WARREN BUFFETT: It really is, folks.

CHARLIE MUNGER: Yeah. When Warren said he would have been all in one country, that's pretty close to right. He wouldn't have quite done that when he had the partnership, but he would have been way more concentrated than is conventional if you listen to modern portfolio theory.

Most people aren't going to find thousands of things that are equally good; they're going to find a few things where one or two of them are way better than anything else they know. And the right way to think about investing is to act thinking about your best opportunity cost.

WARREN BUFFETT: Number 9.

CHARLIE MUNGER: By the way, that's in the freshman course in economics everywhere in the basic textbook; it just hasn't made its way into modern portfolio theory.

WARREN BUFFETT: We don't get asked to do book reviews. (Laughter)

14. Munger thinks Prof. Jeremy Siegel is "demented"

AUDIENCE MEMBER: It's Anvayas Vegar (PH) from Munich, Germany. Thank you very much for the open discussion that you had with us.

Actually, I'd like to ask a question on a book, so I'll come back to the book review.

Jeremy Siegel had some ideas in his second book, and I would like to understand what — how this would impact your investment strategies, if there are any changes from his ideas, and how you react to these recommendations that he makes? Thank you.

WARREN BUFFETT: This is which book? Jeremy Spiegel?

AUDIENCE MEMBER: Jeremy Siegel, the second book, “Why the Tried and the True Triumph Over the Bold and the New.”

WARREN BUFFETT: That — it’s had no effect on us.

Charlie?

CHARLIE MUNGER: No, is that the fellow who’s very optimistic about common stock investment over long periods of time?

WARREN BUFFETT: The University of Pennsylvania. Yeah.

CHARLIE MUNGER: Yeah. Well, I think he’s demented. (Laughter)

WARREN BUFFETT: Well, he’s a very nice guy, Charlie. But — (Laughter)

CHARLIE MUNGER: Well, he may well be a very nice guy, but he’s comparing apples against elephants and trying to make accurate projections. (Laughter)

15. “Things are really screwed up if you’re getting calls on Sunday”

WARREN BUFFETT: Number 10. (Laughter)

AUDIENCE MEMBER: I’m Bob Klein (PH) from Los Angeles. You so eloquently stated that you can’t see who’s swimming naked until the tide goes out.

Could you discuss the issue of trying to employ a rational decision-making process in investing, or in business generally, as opposed to focusing on outcomes or results of just a few instances or over a short period of time?

For example, it may not be a good idea to underwrite some insurance policies if competition has lowered the premiums too far. And, likewise, in the stock market, momentum investors may get good results for a while. But buying high and trying to sell higher isn’t a good long-term strategy.

So I’d just like to hear you guys provide some detail on the importance of using an effective decision-making process, even though it may lead to some bad outcomes and underperformance in the short run.

WARREN BUFFETT: Yeah. Well, Ben Graham said long ago that you’re neither right nor wrong because people agree with you or disagree with you.

In other words, being contrarian has no special virtue over being a trend follower.

You're right because your facts and reasoning are right. So all you do is you try to make sure that the facts you have are correct. And that's usually pretty easy to do in this country. I mean, information is available on all kinds of things. Internet makes it even easier.

And then once you have the facts, you've got to think through what they mean. And you don't take a public opinion survey. You don't pay attention to things that are unimportant. I mean, what you're looking for is something — things that are important and knowable.

If something's important but unknowable, forget it. I mean, it may be important, you know, whether somebody's going to drop a nuclear weapon tomorrow but it's unknowable. It may be all kinds of things. So you — and there are all kinds of things are that knowable but are unimportant.

In focusing on business and investment decisions, you try to think — you narrow it down to the things that are knowable and important, and then you decide whether you have information of sufficient value that — you know, compared to price and all that — that will cause you to act.

What others are doing means nothing. It's what Graham writes in Chapter 8 of "The Intelligent Investor," that the market is there to serve you and not to instruct you. That's of enormous importance.

When people talk about momentum in stocks or charting or any kind of things like that, they're saying that the market is instructing you. The market doesn't instruct us; the market is there to serve us.

If it does something silly, we get a chance to do something because it's doing something silly. We do it. But it doesn't tell us anything. It just tells us prices.

And if the price is out of line where the facts and reasoning lead you, then you — then action is called for. And if it doesn't, you forget it and go play bridge that day and the next day, see whether there's something new. And the nice thing is there always is something new.

I mentioned the LTCM crisis. We were getting calls on Sunday from people that had portfolios that were in trouble. Now, I will tell you that if — you can make a lot of money on Sunday.

You may not get a chance very often, but any calls you get on Sunday you're probably going to make money on. (Laughter)

Things are really screwed up if you're getting calls on Sunday. And all you have to do is make sure that you're the callee and not the caller — (laughs) on Sunday.

But if you get those calls — you get a call on a Sunday and somebody says that the off-the-run is trading 30 basis points away from the on-the-run, you know, all you have to do is decide whether — how you handle that particular piece of information — whether it's correct in the first place — but how you handle that piece of information, whether you can play out your hand.

You never get in a position, obviously, where the other fellow can call your tune. You have to be able to play out your hand under all circumstances. But if you can play out your hand, and you've got the right facts, and you reason by yourself, and you let the market serve you and not instruct you, you can't miss.

Charlie?

CHARLIE MUNGER: Well, I would say some of you probably can miss. (Laughter)

WARREN BUFFETT: I would say Charlie can't miss. I'll put it that way. He'll agree with that.

Do you have anything further to add?

CHARLIE MUNGER: No.

WARREN BUFFETT: OK. (Laughter) At least I've got him off that previous subject.

16. How to read Berkshire's annual report

WARREN BUFFETT: Number 11. (Laughter)

AUDIENCE MEMBER: Hello. I'm Randall Bellows from Maryland. I would like to know how you would look at the Berkshire annual report.

What numbers in the balance sheet or the cash flows would tell you that Berkshire is underpriced? And what numbers would you look at to determine if Berkshire is overpriced? Thank you.

WARREN BUFFETT: We try to — and we take it very seriously — we try to put everything in that report that we would want to know if the positions were reversed.

If I were sitting with all of my net worth in Berkshire and had been on a desert island for a year and I — and the manager was reporting to me about the business, we'd try to have that same information that I would want from him. And we would try to present it to you in a way that's understandable.

And we don't leave out things that we think are important. We try not to put — I mean, there's — it runs about 76, I think, or maybe even 80 pages this year. I mean, there's — you can drown people in information that really doesn't make much difference.

But we've tried to organize it in a way by talking about these different groups of businesses. We try to explain how we think about it, in terms of things like the amount of operating earnings we've generated and the investments we have.

It's really as if it's a report that I was making to Charlie or Charlie would be making to me if one of us were inactive in the business and the other was running it.

And so I think — I mean, it may take a few hours to do it, but I think if you regard yourself as a serious owner of Berkshire, it's really worth reading the whole report.

Thinking about: what is there? What are these guys going to do with it? What are they trying to attempt? What are the odds they're going to be successful in that attempt? What are they —?

You know, what is it worth if they don't succeed very well in deploying additional capital? What might be the case if they were successful in deploying excess capital and incremental capital?

But I can tell you that, obviously, we think it's very important.

What counts is the kind of businesses we have, the kind of managers we have running those businesses, what those businesses are likely to earn over time — and we've expressed ourselves a little on that —

And then what are the resources that are available to keep adding to that collection of businesses? What are the kind of businesses we are looking to add?

And I think — you know, I think you'll find the information that you need to evaluate Berkshire, and it's not a — you know, you don't carry it out to four decimal places.

Charlie and I, if we had to stick a number down on a piece of paper right now as to some pinpoint number — we wouldn't do it because we know that's impossible. But if we had to stick a number down, it would be a different number between the two of us.

It would be a different number if I did it today from tomorrow, probably. But we'd be in the same ballpark, and we'd be looking at the same things. And the things we would be looking at we report to you in that report.

I would focus — you know, the real question of what Berkshire is going to be worth 10 years from now will depend on the — earnings that we have developed — annual earnings that we've developed by that time, the quality of those earnings, the possibilities going forward from that point of those businesses, and the liquid assets we have.

And we've worked on increasing both of those elements over the years, and we'll keep working on it. And it's a lot tougher, in terms of percentage gains, from this point forward than it was in the past.

There's no way in the world that we can replicate what's happened in the past. It just won't happen. The question is whether we can do a reasonable job or not.

Charlie?

CHARLIE MUNGER: Yeah. I generally try and approach a complex task, like the one you presented, by quickly disposing of what I call the no-brainer decisions and — meaning the easy ones.

I think, if you go through all the operating insurance that don't involve surplus cash, and the insurance operations, that that's the easiest valuation process in Berkshire.

And the insurance operation is very interesting, and so is the process by which the huge amounts of excess cash are continually redeployed. But I would go at it in that sequence: taking the no-brainers first.

17. Buffett's key insurance question

WARREN BUFFETT: Number 12.

AUDIENCE MEMBER: David Winters, Mountain Lakes, New Jersey.

Would you please discuss how your underwriting standards have changed as the weather patterns seem to become more severe, the challenges of global terrorism seem to escalate, and unforeseen super-cat events, such as earthquakes and pandemics, go into your thinking, and just what the prospects are for the development of the float?

WARREN BUFFETT: Well, the development of the float is a different question. That really depends on how much business we write in the future and the nature of the business, whether it's long-tail or short-tail.

I think it will be very hard to increase our float of 48 or -9 billion at a big clip in the future. I mean, I've been amazed as what's happened in the past. And it's done way better than Charlie and I ever would've dreamt.

But, you know, we have — we're getting to where we're close to 10 percent of the float of the entire American insurance — property-casualty insurance industry — and some of it's abroad that we have.

But it just can't — it can't grow at very rapid rates. But it can be very attractive, and so far, it has been.

In terms of the questions about underwriting in terms of pandemics or terrorism and all of that, I mean, you know, I'm aware of them. You're aware of them.

We get propositions offered to us virtually every day, and in the end I — mostly Ajit, I mean, in this particular case, in terms of big-type contracts — financial-type contracts I would evaluate. He would —

But we talk about what we think the probabilities are of $50 billion events and up, or $20 billion events and up. And, he's the fellow that does most of — he applies it, but we kick around the possibilities.

But that's all there is to it. I mean, it's a question of making judgments about whether you're getting paid enough. And if we have a lot of money, you know, 30 years from now, it will mean that our judgments overall were decent.

And if we have a big loss on one this year, it does not mean that our judgment's wrong because it — it's going to lead to peaks and valleys. But there's no magic to it.

There's probably — I would feel that the earthquake experience of the last 100 or 200 years has more validity than the windstorm or the hurricane experience of the last hundred or 200 years. I don't know that for sure, but I would bet real money that way, and we have.

What is — what will hurricane experience be like 10 years from now, in terms of the number of those that hit the United States and the ferocity of the ones that do hit? You know, I don't know. But I'll keep thinking about it every day.

Charlie?

CHARLIE MUNGER: Well, I think the laws of thermodynamics are such that if the oceans get warmer — I think they are getting warmer — the weather is going to be — have more high-energy uproar in it.

So I think we'd be out of our minds if we wrote weather-related insurance on the theory that global warming would have no effect at all. And the natural reaction is to raise your prices, as the risks go up.

And whether you've raised them enough, and carefully controlled your risks enough, that's the art of the business.

WARREN BUFFETT: Yeah. And you have this possibility that, you know, 1 percent changes or 2 percent changes in something can produce 100 percent of probabilistic changes in cost.

It's an explosive sort of equation that you're dealing with. And, you know, but that's the game we're in, and we don't have to play it ever.

If we don't like what we're being offered — and we didn't like what we were being offered a while back in many areas — somebody else can take our place in line. We'll be happy to have them.

18. Health care is in Berkshire's "too hard" pile

WARREN BUFFETT: Number 1.

AUDIENCE MEMBER: Dear Warren and Charlie, my name is Dr. Rashad Patel (PH). I'm a family physician from Taunton, Massachusetts. Two years ago I wrote you a letter; you responded with me back quickly. Thank you for that.

My question is, what are the criteria or principles to find a person like you in health care? It seems that a person moves up the ladder in this ethical business, they are more prone to become more unethical, get more options, sell shares, open a shop next door.

How do you find those checkpoints? Can you please express your view, on this soon $2 trillion economy, how to find the leaders so we don't get a surprise in dog-eat-dog world?

WARREN BUFFETT: Charlie, did you get that? (Laughter)

CHARLIE MUNGER: Well, I will try that. I'm not sure I understood the whole — I think she's asking about the health care business —

WARREN BUFFETT: That part I got.

CHARLIE MUNGER: — and whether or not, with the — much bad ethics being present — we have anything to contribute about doing well in that sector. Is that about right?

AUDIENCE MEMBER: Yes.

CHARLIE MUNGER: Yeah. Oh no.

WARREN BUFFETT: Now I understand the question, I still —it's still yours. (Laughter)

I'd be glad to answer it, but I'm eating candy at the moment. (Laughter)

CHARLIE MUNGER: That has tended to go into the too hard pile — (laughter) — at Berkshire. (Applause)

A lot of people have made a lot of money writing health insurance. And I've watched the behavior of some of those people, wearing my hat as the chairman of a big central city hospital.

And you are right, there's a lot of bad ethics in health care. There's also a lot of good ethics. It's a very, very complex field with a lot of change, a lot of technological differences.

And in terms of investments, I think the policy has generally been that it all goes into the too hard pile. We don't — unless Warren has something he's keeping secret from me.

WARREN BUFFETT: No. We have not owned much in health care. My only expertise is in diet. (Laughter)

But I appreciate the seriousness of the question. You know, there — it is just — it is a very, very tough problem on which I have no particular insights.

CHARLIE MUNGER: And you're right. The worst of the ethics is really bad.

19. "A complicated bankruptcy can offer opportunities for profit"

WARREN BUFFETT: Number 2.

AUDIENCE MEMBER: Hello. My name is Barry Steinhart (PH), shareholder from New York. My question relates to the Chapter 11 bankruptcy process.

I know you have been active in the past in some activity in the bankruptcy court. And if you had thoughts on possible reforms in that area, if you believe that any reforms are necessary?

WARREN BUFFETT: Well, that's a good question. Charlie is probably better qualified to answer than I am. I mean, we have bought Fruit of the Loom out of bankruptcy.

And we have had some involvement in owning junk bonds. You know, we get — we think about the bankruptcy process. But in terms of the practicalities of improving on it, what do you think, Charlie?

CHARLIE MUNGER: Well, I think much of that is pretty horrible.

You have a competition there, where the courts themselves have gone into bidding contests to get bankruptcy business attracted. Meaning that the —

There are various courts that can handle bankruptcy cases. And they have found that if they develop a culture where they overpay a lot of people egregiously, they can attract more business: lawyers, trustees, consultants, et cetera, et cetera.

I find it so unpleasant to watch that I don't pay as much attention to bankruptcy as I probably should. You know, I'm an old man, and I don't like to have an upset stomach. (Laughter)

WARREN BUFFETT: But we will — we look at — at least I do, I'm not sure about Charlie — but he — you know, bankruptcies will be something that we will — one way or another, over the next 20 years — we'll have various ways of participating.

And we have bought — well, we bought certain of the bonds, for example, of Enron after they entered bankruptcy — we bought something called the Ospreys.

And a complicated bankruptcy can offer opportunities for profit. Now, there's so many people looking at bankruptcies currently, or potential bankruptcies, it's a field that I would say does not have a lot of promise right now, but it has had promise in the past.

We actually, in the Fruit of the Loom situation, I first went into that just by buying some Fruit of the Loom bonds, but — when I had no notion that we might conceivably end up with the company. But, you know, I knew enough about it to buy the bonds.

And Enron comes along, and it's a big mess. The Penn Central came along 20-odd years ago, and it was a big mess, and there was a lot of money made in the Penn Central, simply because it was such a complicated mess.

So anytime there's something big, complicated, there's certainly a good chance of mispricing. Now, lately the mispricing may be more on the high side than on the low side. But, over time, you're going to find some — there will be some attractive things to do in bankruptcy situations.

We've had other bankruptcy situations where we've gotten involved in the process and then been outbid. It happened at Burlington and it happened at Seitel. And — but we owned all the bonds at Seitel, so we came out fine.

It's something to understand if you're in the business of buying investments or businesses. And I would say that, you know, if we're around for another 10 or 15 years that we'll do something or other, maybe substantial, in the bankruptcy field.

The Enrons — the payment is still being made in various ways. But the Ospreys, which were kind of a complicated situation — the whole thing was complicated.

But, you know, we didn't buy at the bottom or anything like that. But, you know, we considerably more than tripled our money in something that you could have put a fair amount of money in. So they can be interesting.

Charlie, do you want to —

CHARLIE MUNGER: Well, I remember the Eastern Airlines bankruptcy, where there were a lot of employees that would've — and communities that would've been affected. And the courts in that case, I would say, abused the senior creditors horribly.

And so you could have read a law book and reached one conclusion, and if you'd bought the wrong securities, why, you would have found out you'd guessed wrong. It's a very interesting field.

WARREN BUFFETT: Yeah. It — and it can be very unpredictable. In the Penn Central case, you had an incredible variety of claims. I mean, you had leased lines and you had all kinds of first and second liens and everything.

And the judge, as I remember — I may be wrong a little bit on this on the details — but as I remember, the judge just looked at this incredible — probably the most complicated bankruptcy that had come down the pike in the history of bankruptcy to that point — and he just said, "This is just too damn complicated. I'm just, sort of, going to ignore the various priorities and all this. I'm just going to" — perhaps you might call it substantive consolidation, or something — "I'm just going to put this all together, and I'm going to give you a quick, fast solution."

And I think it was a very smart way to handle things, because otherwise I think Penn Central might still be going. But it wasn't what the book said would be done at —

Judges can determine things in a very big way. I remember when we were in Cincinnati on that newspaper case I mentioned earlier, I said to Charlie — a judge had stayed an order, I think, for a week or something like that.

And I said to Charlie — I said, "How much power does a federal judge have?" And Charlie says, "Well, for a while, as much as he thinks he has." (Laughter)

I learned a lot out of that.

20. Buffett endorses Procter & Gamble-Gillette merger

WARREN BUFFETT: Number 3.

AUDIENCE MEMBER: Good afternoon, gentlemen. Long-time listener, first-time caller here. This is my first shareholder meeting. Thanks for hosting. You guys do a great job. I'm looking forward to coming back for several more years.

My name is Craig Beachler. I'm from Cincinnati, where my paychecks are signed by Uncle Procter and Mr. Gamble.

Thinking about that, I know that when the P&G-Gillette merger was announced, you called it a, quote, “dream deal.”

Considering that P&G is primarily thought of as a consumer products company, what are your thoughts on the short- and long-term fit for P&G’s pharmaceutical business?

WARREN BUFFETT: For just the pharmaceutical business or, did you say, or —

AUDIENCE MEMBER: Long-term growth of P&G as a whole.

WARREN BUFFETT: As a whole. Yeah. Well, you know, I think it’s clear that P&G is a consumer powerhouse of sorts. And I think Gillette — in its field, they have just about as strong a consumer position as anybody will ever have.

And when you get into blades and razors, stronger than the — most of the P&G brands, strong as they may be. And I do think that the big retailers are becoming — and more so all the time — brands of their own. And they are become — and there’s more and more concentration going on.

So I think the struggle between the manufacturers of brands and retailers will go on and on and on and become more intensified. So I would think, if I were on either side of that equation, I would want to be strengthening my hand.

And I think that — I think the future of both Gillette and P&G are better as a combined enterprise than they would have been as a separate enterprise.

And I think that’s particularly true because of the strengths of the Walmarts and the Costcos and — you name it — around the world. I don’t know.

How do you see it, Charlie?

CHARLIE MUNGER: He also wants you to tell him how P&G will be affected by its pharmaceutical business.

WARREN BUFFETT: I don’t know a thing about that.

CHARLIE MUNGER: That makes two of us. (Laughter)

WARREN BUFFETT: I really don’t. I’d help if I could, but I can’t.

21. “A strategic buyer is some guy that pays too much”

WARREN BUFFETT: Number 4?

AUDIENCE MEMBER: Hi. My name is Andy Von Dorn (PH), and I'm here from Omaha.

I'm currently employed by Oriental Trading Company, and they just announced that they were putting themselves up for sale.

I was just wondering if Berkshire would have any interest in a company like Oriental Trading Company as an acquisition.

WARREN BUFFETT: That's interesting, and I didn't know they put themselves up for sale. But I looked at it — whenever it was — four or five years ago when Terry Watanabe sold it.

And I haven't really followed it since then, but just from listening to what you say — and I have no knowledge of it at all — but it sounds to me as if some private group bought it and now they're reselling it.

And we get approached on that sort of thing all the time, where a financial group has bought the business and then wants to resell it fairly quickly. And they almost — well, they invariably, I would say — auction the business.

They seek what they call a strategic buyer. A strategic buyer is some guy that pays too much. (Laughter) Because — you know, and he wants to justify it, so he says it's strategic. I mean, I have never understood being a strategic buyer.

Every time somebody calls me up and says, you know, "We think, maybe, you're the logical strategic buyer for that," you know, I hang up faster than Charlie would. (Laughter)

The — and I'm not talking to the specifics of this one at all because I really don't know on Oriental Trading.

But the idea that we're going to find a business to buy from some guy who, from the moment he bought it a few years ago, has been thinking, "How do I get out of this thing?"

You know, "What do I do to make it earn — have those figures for a couple years look a certain way so that I can get the maximum amount in a couple years?" You know, that — we're just not going to make any attractive buys there. We won't trust the figures.

You know, we — it just — it's — what we like is a business that — where the guy before was running with the idea of running it a hundred years, and taking care of the business in every way possible and was not contemplating sale, but, for one reason or another, finally needs to monetize the company.

We won't — we will not get any sensible buys, really, from the resellers.

Some of the — it's amazing to me what's going on. Some of these things, literally, you know, Fund A is selling to Fund B to Fund C.

I mean, I've seen some that have changed hands three or four times. They're just marking them up, and everybody's getting two — they're getting 20 percent of the profit so they mark it up.

And probably Fund C or Fund D may be owned by the same pension funds that own Fund A, except that everybody's just taking a big 20 percent slice out of it every time they move it from one place to another.

We're not buyers of anything the financial buyers have been in in recent — you know, and currently own.

Charlie?

CHARLIE MUNGER: In the 1930s there was a stretch when certain kinds of real estate — when with certain kinds of real estate — you could borrow more against the real estate than you could sell it for.

And I think that's happened in some of these private equity deals, and it's weird. It's weird. This is not our field. (Laughter)

22. Looking for bright spots in U.S. trade imbalance

WARREN BUFFETT: Number 5?

AUDIENCE MEMBER: Hi. I'm John Golob from Kansas City.

I'd like to get you back to the current account deficit. I was looking for reasons not to despair, so I have a couple of factoids I'd like to throw at you and see how you react.

If you add up all of the current account deficits over the last couple of decades, you get about $4 1/2 trillion. Now, you'd think that means our net indebtedness to a foreign investor should be minus 4 1/2 trillion, but it's not.

It's only 2 1/2 trillion because capital gains for domestic investors has exceeded those for foreign investors. So, essentially, $2 trillion of our current account deficit has been financed by cap gains.

Now, the other factoid is that if you look at the income on assets, the U.S. investors are still in a net positive position. That is —

WARREN BUFFETT: They went negative in the last quarter, actually.

AUDIENCE MEMBER: Oh, excuse me. So it's been close. So I guess my question is, do these facts influence your concern or maybe mitigate your concern about the current account deficit?

And the second part of the question is, do you have any cultural reasons why the U.S. should earn more on investments abroad than foreign investors earn on domestic investments?

And, of course, the dollars explain a little bit of it because we're not paying any interest on those dollars. But I'd like your comments.

WARREN BUFFETT: Yeah. Well, those are a couple interesting points. But, we have earned more on American assets owned outside this country than people outside this country have earned on assets in this country. I mentioned that in the annual report this year.

It did flip. The net balance flipped in the other direction in the most recent quarter, and my guess is it keeps going in that direction. There are a lot of reasons for that.

One important reason a year or two ago was the fact that foreigners owning our Treasury bonds were getting as little as — you know, a little over 1 percent.

So if the rest of the world owned a trillion of our bonds and got 1 percent, that was 10 billion, and if we owned a trillion of their bonds and got 4 percent, you know, that would have been 40 billion.

And the higher — the lower interest rates in this country, the higher interest rates abroad — just simply meant that you got paid — that you were going to have — with a balance of investment — you were going to have a favorable net balance in interest income in this year. We were earning more on our assets abroad than they were earning here.

That is turning somewhat. I mean, our interest rates have been increased.

Now, they didn't all own short maturities or anything of the short — sort. And it may well be that our direct investment — as opposed to our marketable securities investment — our direct investment abroad was made in earlier times and returning higher returns. But, over time, it's going against us.

Now, when you get into the net debtor position that we're in, which you — is now over 3 trillion, that varies with what the dollar is doing.

Because, say, in recent weeks, the dollar has weakened, and that means that brings down, actually, our net debtor position. That's why inflation could be something that becomes a real attractive possibility to politicians in the future.

But I wouldn't — it's not a huge factor. I know what you're talking about in terms of those year-to-year variances in the net debtor position.

They're affected much more by the actual currency that's — change that's been made — because they're expressed in dollars. And if the dollar gets weaker, it makes us look better for the time being.

Overall, that will not be what determines the consequences three, five, or 10 years from now, in terms of the current account problems, or in terms of the possibility of them — of currency — exacerbating some other kind of chaos in markets.

Charlie?

CHARLIE MUNGER: This is not a field to which I've devoted the same attention as Warren. And — but I do share his general pessimism that, eventually, there will be a price to pay for the course we're on.

Where I've disagreed a little with Warren is I've always feel there's more ruinous behavior that could be tolerated in a great place, probably, than he does.

It's just amazing how much ruinous behavior you can get by with if you're a successful governor — government.

Now, if you start with a lousy reputation as a government, it doesn't work that well. But when you start with the reputation the United States had, the people who expected instant calamity, I think, were wrong. It —

WARREN BUFFETT: Yeah. If you landed from Mars, you'd probably still rather land in the United States than anyplace else.

CHARLIE MUNGER: If you stop to think about this subject, do you want to invest in Europe where, you know, 10 or 12 percent of the young people are unemployed because of their crazy employee security policies?

And a lot of 28-year-olds are living at home and going to university because it's a fairly comfortable way to, kind of, while away the time with the state paying for most of it?

Do you want to go into a place with fabulous assets, like Brazil, with a lot of political instability that you fear, or Venezuela?

So it isn't as through all the other options look wonderful compared to us. And so, I don't think it's just totally irrational that everybody still likes the United States in spite of its faults.

And so that gives me some feeling that what happened with regard to fiscal misbehavior on our part could go on quite a long time without paying the due price.

WARREN BUFFETT: Yeah. And I agree with that, although there's always the potential, when you're doing something dangerous, that it can get accelerated.

Generally speaking, if you had to bet on anybody to get away with misbehavior fiscally for a long time, you'd bet on the United States.

And we still think it's by far the best place to be, and we have a majority of our assets in it. We just recognize certain things going on that could cause significant problems, particularly in markets.

23. Key distinction between insurance and gambling

WARREN BUFFETT: Number 6.

AUDIENCE MEMBER: Hi. It's Peter Webb here from London, UK.

Your views on gambling are well-known, and I think most people would agree that gambling is for the fiscally challenged.

But when I look at the insurance industry, what I see is an industry — I can't even say it — I see an industry that's based upon probabilities, and people not knowing those true probabilities, and money being made for the house in the same way as you see in a gambling market.

So the question I have for you is, how do you reconcile your views with gambling versus the insurance industry, and is the insurance industry for the fiscally challenged?

WARREN BUFFETT: Well, gambling, I think — I think the distinction that usually is made is that gambling involves creating risks that don't need to be created.

I mean, if the — you want to go out and gamble on where a little ball is going to fall on a wheel that's revolving, that is not something that — that is a created risk.

Whereas, if you've got a home or a business, you know, on a coastal area, the risk is there.

It wasn't created intentionally — I mean, you say you built in that place, but — and then the question is who bears it. So there's a transfer of — in the case of cat coverage — large existing risks as opposed to the creation of a risk that is not required.

I mean, you can watch a football game without betting on it. But you can't live in a house, you know, on a Florida coast without having a risk that your entire investment disappears.

So that's the distinction, basically. I hope you're right that the house wins in both cases. (Laughter)

Charlie?

CHARLIE MUNGER: Well, I don't think I can add to that either. The whole concept of house advantage is a very interesting one in modern commerce.

A lot of the investment management operations, which were not ordinarily spoken of in the past in croupier terms — but the terms of a lot of private equity investment now —

I think the proprietors of the partnerships are taking a house edge that looks a lot like the rake of the croupier in Monte Carlo, except it's bigger. (Laughter)

WARREN BUFFETT: Is there anyone we've forgotten to insult? (Laughter)

Want to make sure we don't miss anyone here. (Laughs)

24. Selling short isn't unethical, but it's tough to make money

WARREN BUFFETT: Number 7.

AUDIENCE MEMBER: I'm Tom Nelson (PH) from North Oaks, Minnesota.

What are your thoughts on the issue of illegal naked short selling?

WARREN BUFFETT: Well, as you know, I — you may know — I have a friend that's been fairly outspoken on that. And we — from our standpoint — we have no objection to anybody selling Berkshire short at all.

The more shorts, the better, because they have to buy the stock later on. And some of our shareholders may make some money lending — we — Charlie and I can't do it, but there's nothing I would love better, if it were legal, than to lend my stock to shorts and have them pay me something for doing it.

I might want to get prepaid, in certain cases. The — (Laughter)

There's nothing evil, per se, about — in my view — about selling things short.

I would say that it's a very, very tough way to make a living.

It's not only often painful financially, it's very painful emotionally because it — a stock that you sell short — a stock that you buy at 20 can go down 20 points, and a stock that you sell short at 20 can go up an infinite amount.

And you don't think about that until you've gone short and it goes up 10 or 15 points, and then you don't sleep very well. So it's a very tough way to make a living.

There are people on the short side that have done, and that do things, to try to make stocks go down, some of which are appropriate and some of which are inappropriate. There are people on the long side that have done the same exact — the same sort of things go on.

So I don't see any — I have no ax to grind in the least against short sellers.

And in terms of — it's called naked shorting, which you — which means that you don't have the stock lined up to be borrowed and maybe you have a whole bunch of fails-to-deliver and that sort of thing.

I don't have a great problem with that. If anybody wants to do that with Berkshire, you know, they — more power to them.

Short sellers — the situations in which there have been huge short interests very often — very often have been later revealed to be frauds or semi-frauds. Now, the one my friend runs is not at all.

But the — the batting average — I mean, I've — over the years, I've probably had a hundred ideas of things that should be shorted, and I would say that almost every one of them have turned out to be correct.

And I'll bet if I'd tried to do it and make money out of it, I probably would have lost money, I would have had no fun, and the opportunity cost, as Charlie said, would have been enormous.

Because if somebody's running something that's semi-fraudulent, they're probably pretty good at it and they're working full time at it and they've succeeded for a while and they may keep succeeding.

And if they succeed and you go in at X and it goes to 5X, you know, all you're hoping after a while it that it goes back to X again or something of the sort.

It's a very tough psychological game to play. Few people may be well-suited for it.

I would never put any money with a short fund, but not because I would think it would be ethically wrong. I just think they're unlikely to make money.

Charlie, do you have any thoughts on short selling or naked short selling?

CHARLIE MUNGER: Well, I think you're absolutely right there — in the sense that it's — that would be one of the most irritating experiences in the world, to figure out something is crooked and foolish and so forth and then short it at X and have it go to 3X.

Now you're watching all these happy crooks splashing around in your money while you're meeting margin calls. (Laughter)

Why would you want to go in hailing distance of an experience like that?

WARREN BUFFETT: Well, we've hit 3 o'clock. We're going to adjourn until 3:15. We will then have the business meeting of Berkshire. And you're all welcome to stay, you're all welcome to shop, you're all welcome to enjoy Omaha, and thanks for coming. (Applause)

25. Berkshire formal business meeting

WARREN BUFFETT: OK. We'll now convene the business part of the meeting. I introduced the directors to you before.

Also with us today are partners in the firm of Deloitte & Touche, our auditors. They're available to respond to appropriate questions you may have concerning the firm — their firm's — audit of the accounts of Berkshire.

Mr. Forrest Krutter, the secretary of Berkshire, will make a written record of the proceedings. Miss Becki Amick has been appointed inspector of elections at this meeting. She will certify to the count of votes cast in the election for directors.

The named proxy holders for this meeting are Walter Scott and Marc Hamburg.

Does the secretary have a report of the number of Berkshire shares outstanding, entitled to vote, and represented at this meeting?

FORREST KRUTTER: Yes, I do. As indicated in the proxy statement that accompanied the notice of this meeting that was sent to all shareholders of record on March 8, 2006 — being the record date for this meeting — there were 1,260,704 shares of Class A Berkshire Hathaway common stock outstanding, with each share entitled to one vote on motions considered at the meeting, and 8,407,392 shares of Class B Berkshire Hathaway stock outstanding, with each share entitled to 1/200th of one vote on motions considered at the meeting.

Of that number, 1,096,383 are represented at this meeting by proxies returned through Thursday evening, May 4.

WARREN BUFFETT: Thank you. That number represents a quorum, and we will therefore directly proceed with the meeting.

First order of the meeting will be a reading of the minutes of the last meeting of shareholders. I recognize Mr. Walter Scott, who will place a motion before the meeting.

WALTER SCOTT: I move that the reading of the minutes of the last meeting of shareholders be dispensed with and the minutes be approved.

WARREN BUFFETT: Do I hear a second?

VOICE: I second the motion.

WARREN BUFFETT: Motion has been moved and seconded. Are there any comments and questions?

We will vote on this motion by voice vote. All those in favor, say “aye.”

VOICES: Aye.

WARREN BUFFETT: Opposed? Motion is carried.

26. Election of Berkshire directors

WARREN BUFFETT: The only item of business before this meeting is to elect directors.

If a shareholder is present who wishes to withdraw a proxy previously sent in and vote in person on the election of directors, he or she may do so.

Also, if any shareholder that is present has not turned in a proxy and desires a ballot in order to vote in person, you may do so. If you wish to do this, please identify yourself to meeting officials in the aisle, who will furnish a ballot to you.

Those persons desiring ballots, please identify themselves so that we may distribute them.

I now recognize Mr. Walter Scott to place a motion before the meeting with respect to election of directors.

WARREN BUFFETT: I move that Warren Buffett, Charles Munger, Howard Buffett, Malcolm Chace, William Gates, David Gottesman, Charlotte Guyman, Don Keough, Thomas Murphy, Ron Olson, and Walter Scott be elected as directors.

VOICE: Second the motion.

WARREN BUFFETT: It’s been moved and seconded that Warren Buffett, Charles Munger, Howard Buffett, Malcolm Chace, William Gates, David Gottesman, Charlotte Guyman, Donald Keough, Thomas Murphy, Ronald Olson, and Walter Scott be elected as directors.

Are there any other nomination? Is there any discussion?

Nominations are ready to be acted upon. If there are any shareholders voting in person, they should now mark their ballots on the election of directors and allow the ballots to be delivered to the inspector of elections.

Would the proxy holders please also submit to the inspector of elections the ballot on the election of directors voting and the proxies in accordance with the instructions they have received.

Miss Amick, when you are ready, you may give your report.

BECKI AMICK: My report is ready. The ballots of the proxy holders in response to proxies that were received through last Thursday evening cast not less than 1,125,034 votes for each nominee.

That number far exceeds the majority of the number of the total votes related to all Class A and Class B shares outstanding.

The certification required by Delaware law of the precise count of the votes, including the additional votes to be cast by the proxy holders in response to proxies delivered at this meeting, as well as any cast in person at this meeting, will be given to the secretary to be placed with the minutes of this meeting.

WARREN BUFFETT: Thank you, Miss Amick.

Warren Buffett, Charles Munger, Howard Buffett, Malcolm Chace, William Gates, David Gottesman, Charlotte Guyman, Donald Keough, Thomas Murphy, Ronald Olson, and Walter Scott have been elected as directors.

27. Formal business meeting adjourns

WARREN BUFFETT: Does anyone have any further business to come before this meeting before we adjourn? If not, I recognize Mr. Scott to place a motion before the meeting.

WALTER SCOTT: I move that this meeting be adjourned.

VOICE: Second.

WARREN BUFFETT: Motion to adjourn has been made and seconded. We will vote by voice. Is there any discussion? If not, all in favor say “aye.”

VOICES: Aye.

WARREN BUFFETT: All opposed say “no.” The meeting is adjourned. Thank you. (Applause)

Note: The following table appears in the printed Annual Report on the facing page of the Chairman's Letter and is referred to in that letter.

Berkshire's Corporate Performance vs. the S&P 500

Year	Annual Percentage Change in Per-Share Book Value of Berkshire (1)	Annual Percentage Change in S&P 500 with Dividends Included (2)	Relative Results (1)-(2)
1965	23.8	10.0	13.8
1966	20.3	(11.7)	32.0
1967	11.0	30.9	(19.9)
1968	19.0	11.0	8.0
1969	16.2	(8.4)	24.6
1970	12.0	3.9	8.1
1971	16.4	14.6	1.8
1972	21.7	18.9	2.8
1973	4.7	(14.8)	19.5
1974	5.5	(26.4)	31.9
1975	21.9	37.2	(15.3)
1976	59.3	23.6	35.7
1977	31.9	(7.4)	39.3
1978	24.0	6.4	17.6
1979	35.7	18.2	17.5
1980	19.3	32.3	(13.0)
1981	31.4	(5.0)	36.4
1982	40.0	21.4	18.6
1983	32.3	22.4	9.9
1984	13.6	6.1	7.5
1985	48.2	31.6	16.6
1986	26.1	18.6	7.5
1987	19.5	5.1	14.4
1988	20.1	16.6	3.5
1989	44.4	31.7	12.7
1990	7.4	(3.1)	10.5
1991	39.6	30.5	9.1
1992	20.3	7.6	12.7
1993	14.3	10.1	4.2
1994	13.9	1.3	12.6
1995	43.1	37.6	5.5
1996	31.8	23.0	8.8
1997	34.1	33.4	.7
1998	48.3	28.6	19.7
1999	.5	21.0	(20.5)
2000	6.5	(9.1)	15.6
2001	(6.2)	(11.9)	5.7
2002	10.0	(22.1)	32.1
2003	21.0	28.7	(7.7)
2004	10.5	10.9	(.4)
2005	6.4	4.9	1.5
2006	18.4	15.8	2.6
Compounded Annual Gain – 1965-2006	21.4%	10.4%	11.0
Overall Gain – 1964-2006	361,156%	6,479%	

Notes: Data are for calendar years with these exceptions: 1965 and 1966, year ended 9/30; 1967, 15 months ended 12/31.

Starting in 1979, accounting rules required insurance companies to value the equity securities they hold at market rather than at the lower of cost or market, which was previously the requirement. In this table, Berkshire's results through 1978 have been restated to conform to the changed rules. In all other respects, the results are calculated using the numbers originally reported.

The S&P 500 numbers are **pre-tax** whereas the Berkshire numbers are **after-tax**. If a corporation such as Berkshire were simply to have owned the S&P 500 and accrued the appropriate taxes, its results would have lagged the S&P 500 in years when that index showed a positive return, but would have exceeded the S&P 500 in years when the index showed a negative return. Over the years, the tax costs would have caused the aggregate lag to be substantial.

BERKSHIRE HATHAWAY INC.

To the Shareholders of Berkshire Hathaway Inc.:

Our gain in net worth during 2006 was $16.9 billion, which increased the per-share book value of both our Class A and Class B stock by 18.4%. Over the last 42 years (that is, since present management took over) book value has grown from $19 to $70,281, a rate of 21.4% compounded annually.*

We believe that $16.9 billion is a record for a one-year gain in net worth – more than has ever been booked by *any* American business, leaving aside boosts that have occurred because of mergers (e.g., AOL's purchase of Time Warner). Of course, Exxon Mobil and other companies earn far more than Berkshire, but their earnings largely go to dividends and/or repurchases, rather than to building net worth.

All that said, a confession about our 2006 gain is in order. Our most important business, insurance, benefited from a large dose of luck: Mother Nature, bless her heart, went on vacation. After hammering us with hurricanes in 2004 and 2005 – storms that caused us to lose a bundle on super-cat insurance – she just vanished. Last year, the red ink from this activity turned black – *very* black.

In addition, the great majority of our 73 businesses did outstandingly well in 2006. Let me focus for a moment on one of our largest operations, GEICO. What management accomplished there was simply extraordinary.

As I've told you before, Tony Nicely, GEICO's CEO, went to work at the company 45 years ago, two months after turning 18. He became CEO in 1992, and from then on the company's growth exploded. In addition, Tony has delivered staggering productivity gains in recent years. Between yearend 2003 and yearend 2006, the number of GEICO policies increased from 5.7 million to 8.1 million, a jump of 42%. Yet during that same period, the company's employees (measured on a fulltime-equivalent basis) *fell* 3.5%. So productivity grew 47%. And GEICO didn't start fat.

That remarkable gain has allowed GEICO to maintain its all-important position as a low-cost producer, even though it has dramatically increased advertising expenditures. Last year GEICO spent $631 million on ads, up from $238 million in 2003 (and up from $31 million in 1995, when Berkshire took control). Today, GEICO spends far more on ads than any of its competitors, even those much larger. We will continue to raise the bar.

Last year I told you that if you had a new son or grandson to be sure to name him Tony. But Don Keough, a Berkshire director, recently had a better idea. After reviewing GEICO's performance in 2006, he wrote me, "Forget births. Tell the shareholders to immediately change the names of their *present* children to Tony or Antoinette." Don signed his letter "Tony."

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Charlie Munger – my partner and Berkshire's vice chairman – and I run what has turned out to be a big business, one with 217,000 employees and annual revenues approaching $100 billion. We certainly didn't plan it that way. Charlie began as a lawyer, and I thought of myself as a security analyst. Sitting in those seats, we both grew skeptical about the ability of big entities of any type to function well. Size seems to make many organizations slow-thinking, resistant to change and smug. In Churchill's words: "We shape our buildings, and afterwards our buildings shape us." Here's a telling fact: Of the ten non-oil companies having the largest market capitalization in 1965 – titans such as General Motors, Sears, DuPont and Eastman Kodak – only one made the 2006 list.

*****All per-share figures used in this report apply to Berkshire's A shares. Figures for the B shares are 1/30th of those shown for the A.

In fairness, we've seen plenty of successes as well, some truly outstanding. There are many giant-company managers whom I greatly admire; Ken Chenault of American Express, Jeff Immelt of G.E. and Dick Kovacevich of Wells Fargo come quickly to mind. But I don't think I could do the management job they do. And I know I wouldn't enjoy many of the duties that come with their positions – meetings, speeches, foreign travel, the charity circuit and governmental relations. For me, Ronald Reagan had it right: "It's probably true that hard work never killed anyone – but why take the chance?"

So I've taken the easy route, just sitting back and working through great managers who run their own shows. My only tasks are to cheer them on, sculpt and harden our corporate culture, and make major capital-allocation decisions. Our managers have returned this trust by working hard and effectively.

For their performance over the last 42 years – and particularly for 2006 – Charlie and I thank them.

Yardsticks

Charlie and I measure Berkshire's progress and evaluate its intrinsic value in a number of ways. No single criterion is effective in doing these jobs, and even an avalanche of statistics will not capture some factors that are important. For example, it's essential that we have managers much younger than I available to succeed me. Berkshire has never been in better shape in this regard – but I can't prove it to you with numbers.

There are two statistics, however, that are of real importance. The first is the amount of investments (including cash and cash-equivalents) that we own on a per-share basis. Arriving at this figure, we exclude investments held in our finance operation because these are largely offset by borrowings. Here's the record since present management acquired control of Berkshire:

Year	Per-Share Investments*
1965	$ 4
1975	159
1985	2,407
1995	21,817
2006	$80,636
Compound Growth Rate 1965-2006	27.5%
Compound Growth Rate 1995-2006	12.6%

*Net of minority interests

In our early years we put most of our retained earnings and insurance float into investments in marketable securities. Because of this emphasis, and because the securities we purchased generally did well, our growth rate in investments was for a long time quite high.

Over the years, however, we have focused more and more on the acquisition of operating businesses. Using our funds for these purchases has both slowed our growth in investments and accelerated our gains in pre-tax earnings from non-insurance businesses, the second yardstick we use. Here's how those earnings have looked:

Year	Pre-Tax Earnings Per Share*
1965	$ 4
1975	4
1985	52
1995	175
2006	$3,625
Compound Growth Rate 1965-2006	17.9%
Compound Growth Rate 1995-2006	31.7%

*Excluding purchase-accounting adjustments and net of minority interests

Last year we had a good increase in non-insurance earnings – 38%. Large gains from here on in, though, will come only if we are able to make major, *and sensible*, acquisitions. That will not be easy. We do, however, have one advantage: More and more, Berkshire has become "the buyer of choice" for business owners and managers. Initially, we were viewed that way only in the U.S. (and more often than not by private companies). We've long wanted, nonetheless, to extend Berkshire's appeal beyond U.S. borders. And last year, our globe-trotting finally got underway.

Acquisitions

We began 2006 by completing the three acquisitions pending at yearend 2005, spending about $6 billion for PacifiCorp, Business Wire and Applied Underwriters. All are performing very well.

The highlight of the year, however, was our July 5th acquisition of most of ISCAR, an Israeli company, and our new association with its chairman, Eitan Wertheimer, and CEO, Jacob Harpaz. The story here began on October 25, 2005, when I received a 1¼-page letter from Eitan, of whom I then knew nothing. The letter began, "I am writing to introduce you to ISCAR," and proceeded to describe a cutting-tool business carried on in 61 countries. Then Eitan wrote, "We have for some time considered the issues of generational transfer and ownership that are typical for large family enterprises, and have given much thought to ISCAR's future. Our conclusion is that Berkshire Hathaway would be the ideal home for ISCAR. We believe that ISCAR would continue to thrive as a part of your portfolio of businesses."

Overall, Eitan's letter made the quality of the company and the character of its management leap off the page. It also made me want to learn more, and in November, Eitan, Jacob and ISCAR's CFO, Danny Goldman, came to Omaha. A few hours with them convinced me that if we were to make a deal, we would be teaming up with extraordinarily talented managers who could be trusted to run the business after a sale with all of the energy and dedication that they had exhibited previously. However, having never bought a business based outside of the U.S. (though I had bought a number of foreign stocks), I needed to get educated on some tax and jurisdictional matters. With that task completed, Berkshire purchased 80% of ISCAR for $4 billion. The remaining 20% stays in the hands of the Wertheimer family, making it our valued partner.

ISCAR's products are small, consumable cutting tools that are used in conjunction with large and expensive machine tools. It's a business without magic except for that imparted by the people who run it. But Eitan, Jacob and their associates are true managerial magicians who constantly develop tools that make their customers' machines more productive. The result: ISCAR makes money because it enables its customers to make *more* money. There is no better recipe for continued success.

In September, Charlie and I, along with five Berkshire associates, visited ISCAR in Israel. We – and I mean every one of us – have never been more impressed with any operation. At ISCAR, as throughout Israel, brains and energy are ubiquitous. Berkshire shareholders are lucky to have joined with Eitan, Jacob, Danny and their talented associates.

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A few months later, Berkshire again became "the buyer of choice" in a deal brought to us by my friend, John Roach, of Fort Worth. John, many of you will remember, was Chairman of Justin Industries, which we bought in 2000. At that time John was helping John Justin, who was terminally ill, find a permanent home for his company. John Justin died soon after we bought Justin Industries, but it has since been run exactly as we promised him it would be.

Visiting me in November, John Roach brought along Paul Andrews, Jr., owner of about 80% of TTI, a Fort Worth distributor of electronic components. Over a 35-year period, Paul built TTI from $112,000 of sales to $1.3 billion. He is a remarkable entrepreneur and operator.

Paul, 64, loves running his business. But not long ago he happened to witness how disruptive the death of a founder can be both to a private company's employees and the owner's family. What starts out as disruptive, furthermore, often evolves into destructive. About a year ago, therefore, Paul began to think about selling TTI. His goal was to put his business in the hands of an owner he had carefully chosen, rather than allowing a trust officer or lawyer to conduct an auction after his death.

Paul rejected the idea of a "strategic" buyer, knowing that in the pursuit of "synergies," an owner of that type would be apt to dismantle what he had so carefully built, a move that would uproot hundreds of his associates (and perhaps wound TTI's business in the process). He also ruled out a private equity firm, which would very likely load the company with debt and then flip it as soon as possible.

That left Berkshire. Paul and I met on the morning of November 15th and made a deal before lunch. Later he wrote me: "After our meeting, I am confident that Berkshire is the right owner for TTI . . . I am proud of our past and excited about our future." And so are Charlie and I.

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We also made some "tuck-in" acquisitions during 2006 at Fruit of the Loom ("Fruit"), MiTek, CTB, Shaw and Clayton. Fruit made the largest purchases. First, it bought Russell Corp., a leading producer of athletic apparel and uniforms for about $1.2 billion (including assumed debt) and in December it agreed to buy the intimate apparel business of VF Corp. Together, these acquisitions add about $2.2 billion to Fruit's sales and bring with them about 23,000 employees.

Charlie and I love it when we can acquire businesses that can be placed under managers, such as John Holland at Fruit, who have already shown their stuff at Berkshire. MiTek, for example, has made 14 acquisitions since we purchased it in 2001, and Gene Toombs has delivered results from these deals far in excess of what he had predicted. In effect, we leverage the managerial talent already with us by these tuck-in deals. We will make many more.

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We continue, however, to need "elephants" in order for us to use Berkshire's flood of incoming cash. Charlie and I must therefore ignore the pursuit of mice and focus our acquisition efforts on much bigger game.

Our exemplar is the older man who crashed his grocery cart into that of a much younger fellow while both were shopping. The elderly man explained apologetically that he had lost track of his wife and was preoccupied searching for her. His new acquaintance said that by coincidence his wife had also wandered off and suggested that it might be more efficient if they jointly looked for the two women. Agreeing, the older man asked his new companion what his wife looked like. "She's a gorgeous blonde," the fellow answered, "with a body that would cause a bishop to go through a stained glass window, and she's wearing tight white shorts. How about yours?" The senior citizen wasted no words: "Forget her, we'll look for yours."

What *we* are looking for is described on page 25. If you have an acquisition candidate that fits, call me – day or night. And then watch me shatter a stained glass window.

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Now, let's examine the four major operating sectors of Berkshire. Lumping their financial figures together impedes analysis. So we'll look at them as four separate businesses, starting with the all–important insurance group.

Insurance

Next month marks the 40th anniversary of our entrance into the insurance business. It was on March 9, 1967, that Berkshire purchased National Indemnity and its companion company, National Fire & Marine, from Jack Ringwalt for $8.6 million.

Jack was a long-time friend of mine and an excellent, but somewhat eccentric, businessman. For about ten minutes every year he would get the urge to sell his company. But those moods – perhaps brought on by a tiff with regulators or an unfavorable jury verdict – quickly vanished.

In the mid-1960s, I asked investment banker Charlie Heider, a mutual friend of mine and Jack's, to alert me the next time Jack was "in heat." When Charlie's call came, I sped to meet Jack. We made a deal in a few minutes, with me waiving an audit, "due diligence" or anything else that would give Jack an opportunity to reconsider. We just shook hands, and that was that.

When we were due to close the purchase at Charlie's office, Jack was late. Finally arriving, he explained that he had been driving around looking for a parking meter with some unexpired time. That was a magic moment for me. I knew then that Jack was going to be my kind of manager.

When Berkshire purchased Jack's two insurers, they had "float" of $17 million. We've regularly offered a long explanation of float in earlier reports, which you can read on our website. Simply put, float is money we hold that is not ours but which we get to invest.

At the end of 2006, our float had grown to $50.9 billion, and we have since written a huge retroactive reinsurance contract with Equitas – which I will describe in the next section – that boosts float by another $7 billion. Much of the gain we've made has come through our acquisition of other insurers, but we've also had outstanding internal growth, particularly at Ajit Jain's amazing reinsurance operation. Naturally, I had no notion in 1967 that our float would develop as it has. There's much to be said for just putting one foot in front of the other every day.

The float from retroactive reinsurance contracts, of which we have many, automatically drifts down over time. Therefore, it will be difficult for us to increase float in the future unless we make new acquisitions in the insurance field. Whatever its size, however, the all-important *cost* of Berkshire's float over time is likely to be significantly below that of the industry, perhaps even falling to less than zero. Note the words "over time." There will be bad years periodically. You can be sure of that.

In 2006, though, everything went right in insurance – *really* right. Our managers – Tony Nicely (GEICO), Ajit Jain (B-H Reinsurance), Joe Brandon and Tad Montross (General Re), Don Wurster (National Indemnity Primary), Tom Nerney (U.S. Liability), Tim Kenesey (Medical Protective), Rod Eldred (Homestate Companies and Cypress), Sid Ferenc and Steve Menzies (Applied Underwriters), John Kizer (Central States) and Don Towle (Kansas Bankers Surety) – simply shot the lights out. When I recite their names, I feel as if I'm at Cooperstown, reading from the Hall of Fame roster. Of course, the overall insurance industry also had a terrific year in 2006. But our managers delivered results generally superior to those of their competitors.

Below is the tally on our underwriting and float for each major sector of insurance. Enjoy the view, because you won't soon see another like it.

	(in $ millions)			
	Underwriting Profit (Loss)		*Yearend Float*	
Insurance Operations	*2006*	*2005*	*2006*	*2005*
General Re	$ 526	$(334)	$22,827	$22,920
B-H Reinsurance	1,658	(1,069)	16,860	16,233
GEICO	1,314	1,221	7,171	6,692
Other Primary.....	340**	235*	4,029	3,442
Total	$3,838	$ 53	$50,887	$49,287

* Includes MedPro from June 30, 2005.
** Includes Applied Underwriters from May 19, 2006.

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In 2007, our results from the bread-and-butter lines of insurance will deteriorate, though I think they will remain satisfactory. The big unknown is super-cat insurance. Were the terrible hurricane seasons of 2004-05 aberrations? Or were they our planet's first warning that the climate of the 21st Century will differ materially from what we've seen in the past? If the answer to the second question is yes, 2006 will soon be perceived as a misleading period of calm preceding a series of devastating storms. These could rock the insurance industry. It's naïve to think of Katrina as anything close to a worst-case event.

Neither Ajit Jain, who manages our super-cat operation, nor I know what lies ahead. We do know that it would be a huge mistake to bet that evolving atmospheric changes are benign in their implications for insurers.

Don't think, however, that we have lost our taste for risk. We remain prepared to lose $6 billion in a single event, *if* we have been paid appropriately for assuming that risk. We are not willing, though, to take on even very small exposures at prices that don't reflect our evaluation of loss probabilities. Appropriate prices don't guarantee profits in any given year, but inappropriate prices most certainly guarantee eventual losses. Rates have recently fallen because a flood of capital has entered the super-cat field. We have therefore sharply reduced our wind exposures. Our behavior here parallels that which we employ in financial markets: Be fearful when others are greedy, and be greedy when others are fearful.

Lloyd's, Equitas and Retroactive Reinsurance

Last year – we are getting now to Equitas – Berkshire agreed to enter into a huge retroactive reinsurance contract, a policy that protects an insurer against losses that have already happened, but whose cost is not yet known. I'll give you details of the agreement shortly. But let's first take a journey through insurance history, following the route that led to our deal.

Our tale begins around 1688, when Edward Lloyd opened a small coffee house in London. Though no Starbucks, his shop was destined to achieve worldwide fame because of the commercial activities of its clientele – shipowners, merchants and venturesome British capitalists. As these parties sipped Edward's brew, they began to write contracts transferring the risk of a disaster at sea from the owners of ships and their cargo to the capitalists, who wagered that a given voyage would be completed without incident. These capitalists eventually became known as "underwriters at Lloyd's."

Though many people believe Lloyd's to be an insurance company, that is not the case. It is instead a *place* where many member-insurers transact business, just as they did centuries ago.

Over time, the underwriters solicited passive investors to join in syndicates. Additionally, the business broadened beyond marine risks into every imaginable form of insurance, including exotic coverages that spread the fame of Lloyd's far and wide. The underwriters left the coffee house, found grander quarters and formalized some rules of association. And those persons who passively backed the underwriters became known as "names."

Eventually, the names came to include many thousands of people from around the world, who joined expecting to pick up some extra change without effort or serious risk. True, prospective names were always solemnly told that they would have unlimited and everlasting liability for the consequences of their syndicate's underwriting – "down to the last cufflink," as the quaint description went. But that warning came to be viewed as perfunctory. Three hundred years of retained cufflinks acted as a powerful sedative to the names poised to sign up.

Then came asbestos. When its prospective costs were added to the tidal wave of environmental and product claims that surfaced in the 1980s, Lloyd's began to implode. Policies written decades earlier – and largely forgotten about – were developing huge losses. No one could intelligently estimate their total, but it was certain to be many tens of billions of dollars. The specter of unending and unlimited losses terrified existing names and scared away prospects. Many names opted for bankruptcy; some even chose suicide.

From these shambles, there came a desperate effort to resuscitate Lloyd's. In 1996, the powers that be at the institution allotted £11.1 billion to a new company, Equitas, and made it responsible for paying all claims on policies written before 1993. In effect, this plan pooled the misery of the many syndicates in trouble. Of course, the money allotted could prove to be insufficient – and if that happened, the names remained liable for the shortfall.

But the new plan, by concentrating all of the liabilities in one place, had the advantage of eliminating much of the costly intramural squabbling that went on among syndicates. Moreover, the pooling allowed claims evaluation, negotiation and litigation to be handled more intelligently than had been the case previously. Equitas embraced Ben Franklin's thinking: "We must all hang together, or assuredly we shall hang separately."

From the start, many people predicted Equitas would eventually fail. But as Ajit and I reviewed the facts in the spring of 2006 – 13 years after the last exposed policy had been written and after the payment of £11.3 billion in claims – we concluded that the patient was likely to survive. And so we decided to offer a huge reinsurance policy to Equitas.

Because plenty of imponderables continue to exist, Berkshire could not provide Equitas, and its 27,972 names, unlimited protection. But we said – and I'm simplifying – that if Equitas would give us $7.12 billion in cash and securities (this is the float I spoke about), we would pay all of its future claims and expenses up to $13.9 billion. That amount was $5.7 billion above what Equitas had recently guessed its ultimate liabilities to be. Thus the names received a huge – and almost certainly sufficient – amount of future protection against unpleasant surprises. Indeed the protection is so large that Equitas plans a cash payment to its thousands of names, an event few of them had ever dreamed possible.

And how will Berkshire fare? That depends on how much "known" claims will end up costing us, how many yet-to-be-presented claims will surface and what they will cost, how soon claim payments will be made and how much we earn on the cash we receive before it must be paid out. Ajit and I think the odds are in our favor. And should we be wrong, Berkshire can handle it.

Scott Moser, the CEO of Equitas, summarized the transaction neatly: "Names wanted to sleep easy at night, and we think we've just bought them the world's best mattress."

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Warning: It's time to eat your broccoli – I am now going to talk about accounting matters. I owe this to those Berkshire shareholders who love reading about debits and credits. I hope both of you find this discussion helpful. All others can skip this section; there will be no quiz.

Berkshire has done many retroactive transactions – in both number and amount a multiple of such policies entered into by any other insurer. We are the reinsurer of choice for these coverages because the obligations that are transferred to us – for example, lifetime indemnity and medical payments to be made to injured workers – may not be fully satisfied for 50 years or more. No other company can offer the certainty

that Berkshire can, in terms of guaranteeing the full and fair settlement of these obligations. This fact is important to the original insurer, policyholders and regulators.

The accounting procedure for retroactive transactions is neither well known nor intuitive. The best way for shareholders to understand it, therefore, is for us to simply lay out the debits and credits. Charlie and I would like to see this done more often. We sometimes encounter accounting footnotes about important transactions that leave us baffled, and we go away suspicious that the reporting company wished it that way. (For example, try comprehending transactions "described" in the old 10-Ks of Enron, even after you *know* how the movie ended.)

So let us summarize our accounting for the Equitas transaction. The major debits will be to Cash and Investments, Reinsurance Recoverable, and Deferred Charges for Reinsurance Assumed ("DCRA"). The major credit will be to Reserve for Losses and Loss Adjustment Expense. No profit or loss will be recorded at the inception of the transaction, but underwriting losses will thereafter be incurred annually as the DCRA asset is amortized downward. The amount of the annual amortization charge will be primarily determined by how our end-of-the-year estimates as to the timing and amount of future loss payments compare to the estimates made at the beginning of the year. Eventually, when the last claim has been paid, the DCRA account will be reduced to zero. That day is 50 years or more away.

What's important to remember is that retroactive insurance contracts always produce underwriting losses for us. Whether these losses are worth experiencing depends on whether the cash we have received produces investment income that exceeds the losses. Recently our DCRA charges have annually delivered $300 million or so of underwriting losses, which have been more than offset by the income we have realized through use of the cash we received as a premium. Absent new retroactive contracts, the amount of the annual charge would normally decline over time. After the Equitas transaction, however, the annual DCRA cost will initially increase to about $450 million a year. This means that our other insurance operations must generate at least that much underwriting gain for our overall float to be cost-free. That amount is quite a hurdle but one that I believe we will clear in many, if not most, years.

Aren't you glad that I promised you there would be no quiz?

Manufacturing, Service and Retailing Operations

Our activities in this part of Berkshire cover the waterfront. Let's look, though, at a summary balance sheet and earnings statement for the entire group.

Balance Sheet 12/31/06 (in millions)

Assets		*Liabilities and Equity*	
Cash and equivalents	$ 1,543	Notes payable	$ 1,468
Accounts and notes receivable	3,793	Other current liabilities	6,635
Inventory	5,257	Total current liabilities	8,103
Other current assets	363		
Total current assets	10,956		
Goodwill and other intangibles	13,314	Deferred taxes	540
Fixed assets	8,934	Term debt and other liabilities	3,014
Other assets	1,168	Equity	22,715
	$34,372		$34,372

Earnings Statement (in millions)

	2006	*2005*	*2004*
Revenues	$52,660	$46,896	$44,142
Operating expenses (including depreciation of $823 in 2006, $699 in 2005 and $676 in 2004)	49,002	44,190	41,604
Interest expense	132	83	57
Pre-tax earnings	3,526*	2,623*	2,481*
Income taxes and minority interests	1,395	977	941
Net income	$ 2,131	$ 1,646	$ 1,540

*Does not include purchase-accounting adjustments.

This motley group, which sells products ranging from lollipops to motor homes, earned a pleasing 25% on average tangible net worth last year. It's noteworthy also that these operations used only minor financial leverage in achieving that return. Clearly we own some terrific businesses. We purchased many of them, however, at large premiums to net worth – a point reflected in the goodwill item shown on the balance sheet – and that fact reduces the earnings on our average *carrying* value to 10.8%.

Here are a few newsworthy items about companies in this sector:

- Bob Shaw, a remarkable entrepreneur who from a standing start built Shaw Industries into the country's largest carpet producer, elected last year, at age 75, to retire. To succeed him, Bob recommended Vance Bell, a 31-year veteran at Shaw, and Bob, as usual, made the right call. Weakness in housing has caused the carpet business to slow. Shaw, however, remains a powerhouse and a major contributor to Berkshire's earnings.

- MiTek, a manufacturer of connectors for roof trusses at the time we purchased it in 2001, is developing into a mini-conglomerate. At the rate it is growing, in fact, "mini" may soon be inappropriate. In purchasing MiTek for $420 million, we lent the company $200 million at 9% and bought $198 million of stock, priced at $10,000 per share. Additionally, 55 employees bought 2,200 shares for $22 million. Each employee paid *exactly* the same price that we did, in most cases borrowing money to do so.

  And are they ever glad they did! Five years later, MiTek's sales have tripled and the stock is valued at $71,699 per share. Despite its making 14 acquisitions, at a cost of $291 million, MiTek has paid off its debt to Berkshire and holds $35 million of cash. We celebrated the fifth anniversary of our purchase with a party in July. I told the group that it would be embarrassing if MiTek's stock price soared beyond that of Berkshire "A" shares. Don't be surprised, however, if that happens (though Charlie and I will try to make our shares a moving target).

- Not all of our businesses are destined to increase profits. When an industry's underlying economics are crumbling, talented management may slow the rate of decline. Eventually, though, eroding fundamentals will overwhelm managerial brilliance. (As a wise friend told me long ago, "If you want to get a reputation as a good businessman, be sure to get into a good business.") And fundamentals are definitely eroding in the newspaper industry, a trend that has caused the profits of our Buffalo News to decline. The skid will almost certainly continue.

  When Charlie and I were young, the newspaper business was as easy a way to make huge returns as existed in America. As one not-too-bright publisher famously said, "I owe my fortune to two great American institutions: monopoly and nepotism." No paper in a one-paper city, however bad the product or however inept the management, could avoid gushing profits.

  The industry's staggering returns could be simply explained. For most of the 20th Century, newspapers were the primary source of information for the American public. Whether the subject was sports, finance, or politics, newspapers reigned supreme. Just as important, their ads were the easiest way to find job opportunities or to learn the price of groceries at your town's supermarkets.

The great majority of families therefore felt the need for a paper every day, but understandably most didn't wish to pay for two. Advertisers preferred the paper with the most circulation, and readers tended to want the paper with the most ads and news pages. This circularity led to a law of the newspaper jungle: Survival of the Fattest.

Thus, when two or more papers existed in a major city (which was almost universally the case a century ago), the one that pulled ahead usually emerged as the stand-alone winner. After competition disappeared, the paper's pricing power in both advertising and circulation was unleashed. Typically, rates for both advertisers and readers would be raised annually – and the profits rolled in. For owners this was economic heaven. (Interestingly, though papers regularly – and often in a disapproving way – reported on the profitability of, say, the auto or steel industries, they never enlightened readers about their own Midas-like situation. Hmmm . . .)

As long ago as my 1991 letter to shareholders, I nonetheless asserted that this insulated world was changing, writing that "the media businesses . . . will prove considerably less marvelous than I, the industry, or lenders thought would be the case only a few years ago." Some publishers took umbrage at both this remark and other warnings from me that followed. Newspaper properties, moreover, continued to sell as if they were indestructible slot machines. In fact, many intelligent newspaper executives who regularly chronicled and analyzed important worldwide events were either blind or indifferent to what was going on under their noses.

Now, however, almost all newspaper owners realize that they are constantly losing ground in the battle for eyeballs. Simply put, if cable and satellite broadcasting, as well as the internet, had come along first, newspapers as we know them probably would never have existed.

In Berkshire's world, Stan Lipsey does a terrific job running the Buffalo News, and I am enormously proud of its editor, Margaret Sullivan. The News' penetration of its market is the highest among that of this country's large newspapers. We also do better financially than most metropolitan newspapers, even though Buffalo's population and business trends are not good. Nevertheless, this operation faces unrelenting pressures that will cause profit margins to slide.

True, we have the leading online news operation in Buffalo, and it will continue to attract more viewers and ads. However, the economic potential of a newspaper internet site – given the many alternative sources of information and entertainment that are free and only a click away – is at best a small fraction of that existing in the past for a print newspaper facing no competition.

For a local resident, ownership of a city's paper, like ownership of a sports team, still produces instant prominence. With it typically comes power and influence. These are ruboffs that appeal to many people with money. Beyond that, civic-minded, wealthy individuals may feel that local ownership will serve their community well. That's why Peter Kiewit bought the Omaha paper more than 40 years ago.

We are likely therefore to see non-economic individual buyers of newspapers emerge, just as we have seen such buyers acquire major sports franchises. Aspiring press lords should be careful, however: There's no rule that says a newspaper's revenues can't fall below its expenses and that losses can't mushroom. Fixed costs are high in the newspaper business, and that's bad news when unit volume heads south. As the importance of newspapers diminishes, moreover, the "psychic" value of possessing one will wane, whereas owning a sports franchise will likely retain its cachet.

Unless we face an irreversible cash drain, we will stick with the News, just as we've said that we would. (Read economic principle 11, on page 76.) Charlie and I love newspapers – we each read five a day – and believe that a free and energetic press is a key ingredient for maintaining a great democracy. We hope that some combination of print and online will ward off economic doomsday for newspapers, and we will work hard in Buffalo to develop a sustainable business model. I think we will be successful. But the days of lush profits from our newspaper are over.

- A *much* improved situation is emerging at NetJets, which sells and manages fractionally-owned aircraft. This company has never had a problem growing: Revenues from flight operations have increased 596% since our purchase in 1998. But profits had been erratic.

  Our move to Europe, which began in 1996, was particularly expensive. After five years of operation there, we had acquired only 80 customers. And by mid-year 2006 our cumulative pre-tax loss had risen to $212 million. But European demand has now exploded, with a net of 589 customers having been added in 2005-2006. Under Mark Booth's brilliant leadership, NetJets is now operating profitably in Europe, and we expect the positive trend to continue.

  Our U.S. operation also had a good year in 2006, which led to worldwide pre-tax earnings of $143 million at NetJets last year. We made this profit even though we suffered a loss of $19 million in the first quarter.

  Credit Rich Santulli, along with Mark, for this turnaround. Rich, like many of our managers, has no financial need to work. But you'd never know it. He's absolutely tireless – monitoring operations, making sales, and traveling the globe to constantly widen the already-enormous lead that NetJets enjoys over its competitors. Today, the value of the fleet we manage is far greater than that managed by our three largest competitors *combined*.

  There's a reason NetJets is the runaway leader: It offers the ultimate in safety and service. At Berkshire, and at a number of our subsidiaries, NetJets aircraft are an indispensable business tool. I also have a contract for personal use with NetJets and so do members of my family and most Berkshire directors. (None of us, I should add, gets a discount.) Once you've flown NetJets, returning to commercial flights is like going back to holding hands.

Regulated Utility Business

Berkshire has an 86.6% (fully diluted) interest in MidAmerican Energy Holdings, which owns a wide variety of utility operations. The largest of these are (1) Yorkshire Electricity and Northern Electric, whose 3.7 million electric customers make it the third largest distributor of electricity in the U.K.; (2) MidAmerican Energy, which serves 706,000 electric customers, primarily in Iowa; (3) Pacific Power and Rocky Mountain Power, serving about 1.7 million electric customers in six western states; and (4) Kern River and Northern Natural pipelines, which carry about 8% of the natural gas consumed in the U.S.

Our partners in ownership of MidAmerican are Walter Scott, and its two terrific managers, Dave Sokol and Greg Abel. It's unimportant how many votes each party has; we will make major moves only when we are unanimous in thinking them wise. Six years of working with Dave, Greg and Walter have underscored my original belief: Berkshire couldn't have better partners.

Somewhat incongruously, MidAmerican owns the second largest real estate brokerage firm in the U.S., HomeServices of America. This company operates through 20 locally-branded firms with 20,300 agents. Despite HomeServices' purchase of two operations last year, the company's overall volume fell 9% to $58 billion, and profits fell 50%.

The slowdown in residential real estate activity stems in part from the weakened lending practices of recent years. The "optional" contracts and "teaser" rates that have been popular have allowed borrowers to make payments in the early years of their mortgages that fall far short of covering normal interest costs. Naturally, there are few defaults when virtually nothing is required of a borrower. As a cynic has said, "A rolling loan gathers no loss." But payments *not* made add to principal, and borrowers who can't afford normal monthly payments early on are hit later with *above-normal* monthly obligations. This is the Scarlett O'Hara scenario: "I'll think about that tomorrow." For many home owners, "tomorrow" has now arrived. Consequently there is a huge overhang of offerings in several of HomeServices' markets.

Nevertheless, we will be seeking to purchase additional brokerage operations. A decade from now, HomeServices will almost certainly be much larger.

Here are some key figures on MidAmerican's operations:

	Earnings (in $ millions)	
	2006	*2005*
U.K. utilities	$ 338	$ 308
Iowa utility	348	288
Western utilities (acquired March 21, 2006)	356	N/A
Pipelines	376	309
HomeServices	74	148
Other (net)	226	115
Earnings before corporate interest and taxes	1,718	1,168
Interest, other than to Berkshire	(261)	(200)
Interest on Berkshire junior debt	(134)	(157)
Income tax	(407)	(248)
Net earnings	$ 916	$ 563
Earnings applicable to Berkshire*	$ 885	$ 523
Debt owed to others	16,946	10,296
Debt owed to Berkshire	1,055	1,289

*Includes interest earned by Berkshire (net of related income taxes) of $87 in 2006 and $102 in 2005.

Finance and Financial Products

You will be happy to hear – and I'm even happier – that this will be my last discussion of the losses at Gen Re's derivative operation. When we started to wind this business down early in 2002, we had 23,218 contracts outstanding. Now we have 197. Our cumulative pre-tax loss from this operation totals $409 million, but only $5 million occurred in 2006. Charlie says that if we had properly classified the $409 million on our 2001 balance sheet, it would have been labeled "Good Until Reached For." In any event, a Shakespearean thought – slightly modified – seems appropriate for the tombstone of this derivative business: "All's well that ends."

We've also wound up our investment in Value Capital. So earnings or losses from these two lines of business are making their final appearance in the table that annually appears in this section.

Clayton Homes remains an anomaly in the manufactured-housing industry, which last year recorded its lowest unit sales since 1962. Indeed, the industry's volume last year was only about one-third that of 1999. Outside of Clayton, I doubt if the industry, overall, made *any* money in 2006.

Yet Clayton earned $513 million pre-tax and paid Berkshire an additional $86 million as a fee for our obtaining the funds to finance Clayton's $10 billion portfolio of installment receivables. Berkshire's financial strength has clearly been of huge help to Clayton. But the driving force behind the company's success is Kevin Clayton. Kevin knows the business forward and backward, is a rational decision-maker and a joy to work with. Because of acquisitions, Clayton now employs 14,787 people, compared to 6,661 at the time of our purchase.

We have two leasing operations: CORT (furniture), run by Paul Arnold, and XTRA (truck trailers), run by Bill Franz. CORT's earnings improved significantly last year, and XTRA's remained at the high level attained in 2005. We continue to look for tuck-in acquisitions to be run by Paul or Bill, and also are open to ideas for new leasing opportunities.

Here's a breakdown of earnings in this sector:

	(in millions)			
	Pre-Tax Earnings		*Interest-Bearing Liabilities*	
	2006	*2005*	*2006*	*2005*
Trading – ordinary income	$ 274	$ 200	$ 600	$1,061
Gen Re Securities (loss)	(5)	(104)	1,204*	2,617*
Life and annuity operation	29	11	2,459	2,461
Value Capital (loss)	6	(33)	N/A	N/A
Leasing operations	182	173	261	370
Manufactured-housing finance (Clayton)	513	416	10,498	9,299
Other	158	159	N/A	N/A
Income before capital gains	1,157	822		
Trading – capital gains (losses)	938	(234)		
Total	$ 2,095	$ 588		

*Includes all liabilities

Investments

We show below our common stock investments. With two exceptions, those that had a market value of more than $700 million at the end of 2006 are itemized. We don't itemize the two securities referred to, which have a market value of $1.9 billion, because we continue to buy them. I could, of course, tell you their names. But then I would have to kill you.

			12/31/06	
Shares	*Company*	*Percentage of Company Owned*	*Cost**	*Market*
			(in millions)	
151,610,700	American Express Company	12.6	$ 1,287	$ 9,198
36,417,400	Anheuser-Busch Cos., Inc.	4.7	1,761	1,792
200,000,000	The Coca-Cola Company	8.6	1,299	9,650
17,938,100	Conoco Phillips	1.1	1,066	1,291
21,334,900	Johnson & Johnson	0.7	1,250	1,409
6,708,760	M&T Bank Corporation	6.1	103	820
48,000,000	Moody's Corporation	17.2	499	3,315
2,338,961,000	PetroChina "H" shares (or equivalents)	1.3	488	3,313
3,486,006	POSCO	4.0	572	1,158
100,000,000	The Procter & Gamble Company	3.2	940	6,427
229,707,000	Tesco	2.9	1,340	1,820
31,033,800	US Bancorp	1.8	969	1,123
17,072,192	USG Corp	19.0	536	936
19,944,300	Wal-Mart Stores, Inc.	0.5	942	921
1,727,765	The Washington Post Company	18.0	11	1,288
218,169,300	Wells Fargo & Company	6.5	3,697	7,758
1,724,200	White Mountains Insurance	16.0	369	999
	Others		5,866	8,315
	Total Common Stocks		$22,995	$61,533

*This is our actual purchase price and also our tax basis; GAAP "cost" differs in a few cases because of write-ups or write-downs that have been required.

We are delighted by the 2006 business performance of virtually all of our investees. Last year, we told you that our expectation was that these companies, in aggregate, would increase their earnings by 6% to 8% annually, a rate that would double their earnings every ten years or so. In 2006 American Express,

Coca-Cola, Procter & Gamble and Wells Fargo, our largest holdings, increased per-share earnings by 18%, 9%, 8% and 11%. These are stellar results, and we thank their CEOs.

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We've come close to eliminating our direct foreign-exchange position, from which we realized about $186 million in pre-tax profits in 2006 (earnings that were included in the Finance and Financial Products table shown earlier). That brought our total gain since inception of this position in 2002 to $2.2 billion. Here's a breakdown by currency:

Total Gain (Loss) in Millions

Australian dollar	$247.1	Mexican peso	$106.1
British pound	287.2	New Zealand dollar	102.6
Canadian dollar	398.3	Singapore dollar	(2.6)
Chinese yuan	(12.7)	South Korean won	261.3
Euro	839.2	Swiss franc	9.6
Hong Kong dollar	(2.5)	Taiwan dollar	(45.3)
Japanese yen	1.9	Miscellaneous options	22.9

We've made large indirect currency profits as well, though I've never tallied the precise amount. For example, in 2002-2003 we spent about $82 million buying – of all things – Enron bonds, some of which were denominated in Euros. Already we've received distributions of $179 million from these bonds, and our remaining stake is worth $173 million. That means our overall gain is $270 million, part of which came from the appreciation of the Euro that took place after our bond purchase.

When we first began making foreign exchange purchases, interest-rate differentials between the U.S. and most foreign countries favored a direct currency position. But that spread turned negative in 2005. We therefore looked for other ways to gain foreign-currency exposure, such as the ownership of foreign equities or of U.S. stocks with major earnings abroad. The currency factor, we should emphasize, is not dominant in our selection of equities, but is merely one of many considerations.

As our U.S. trade problems worsen, the probability that the dollar will weaken over time continues to be high. I fervently believe in *real* trade – the more the better for both us and the world. We had about $1.44 trillion of this honest-to-God trade in 2006. But the U.S. also had $.76 trillion of *pseudo*-trade last year – imports for which we exchanged no goods or services. (Ponder, for a moment, how commentators would describe the situation if our imports were $.76 trillion – a full 6% of GDP – and we had *no* exports.) Making these purchases that weren't reciprocated by sales, the U.S. necessarily transferred ownership of its assets or IOUs to the rest of the world. Like a very wealthy but self-indulgent family, we peeled off a bit of what we owned in order to consume more than we produced.

The U.S. can do a lot of this because we are an extraordinarily rich country that has behaved responsibly in the past. The world is therefore willing to accept our bonds, real estate, stocks and businesses. And we have a vast store of these to hand over.

These transfers will have consequences, however. Already the prediction I made last year about one fall-out from our spending binge has come true: The "investment income" account of our country – positive in every previous year since *1915* – turned negative in 2006. Foreigners now earn more on their U.S. investments than we do on our investments abroad. In effect, we've used up our bank account and turned to our credit card. And, like everyone who gets in hock, the U.S. will now experience "reverse compounding" as we pay ever-increasing amounts of interest on interest.

I want to emphasize that even though our course is unwise, Americans will live better ten or twenty years from now than they do today. Per-capita wealth will increase. But our citizens will also be forced every year to ship a significant portion of their current production abroad merely to service the cost of our huge debtor position. It won't be pleasant to work part of each day to pay for the over-consumption

of your ancestors. I believe that at some point in the future U.S. workers and voters will find this annual "tribute" so onerous that there will be a severe political backlash. How that will play out in markets is impossible to predict – but to expect a "soft landing" seems like wishful thinking.

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I should mention that all of the direct currency profits we have realized have come from forward contracts, which are derivatives, and that we have entered into other types of derivatives contracts as well. That may seem odd, since you know of our expensive experience in unwinding the derivatives book at Gen Re and also have heard me talk of the systemic problems that could result from the enormous growth in the use of derivatives. Why, you may wonder, are we fooling around with such potentially toxic material?

The answer is that derivatives, just like stocks and bonds, are sometimes wildly mispriced. For many years, accordingly, we have selectively written derivative contracts – few in number but sometimes for large dollar amounts. We currently have 62 contracts outstanding. I manage them personally, and they are free of counterparty credit risk. So far, these derivative contracts have worked out well for us, producing pre-tax profits in the hundreds of millions of dollars (above and beyond the gains I've itemized from forward foreign-exchange contracts). Though we will experience losses from time to time, we are likely to continue to earn – overall – significant profits from mispriced derivatives.

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I have told you that Berkshire has three outstanding candidates to replace me as CEO and that the Board knows exactly who should take over if I should die tonight. Each of the three is much younger than I. The directors believe it's important that my successor have the prospect of a long tenure.

Frankly, we are not as well-prepared on the investment side of our business. There's a history here: At one time, Charlie was my potential replacement for investing, and more recently Lou Simpson has filled that slot. Lou is a top-notch investor with an outstanding long-term record of managing GEICO's equity portfolio. But he is only six years younger than I. If I were to die soon, he would fill in magnificently for a short period. For the long-term, though, we need a different answer.

At our October board meeting, we discussed that subject fully. And we emerged with a plan, which I will carry out with the help of Charlie and Lou.

Under this plan, I intend to hire a younger man or woman with the potential to manage a very large portfolio, who we hope will succeed me as Berkshire's chief investment officer when the need for someone to do that arises. As part of the selection process, we may in fact take on several candidates.

Picking the right person(s) will not be an easy task. It's not hard, of course, to find smart people, among them individuals who have impressive investment records. But there is far more to successful long-term investing than brains and performance that has recently been good.

Over time, markets will do extraordinary, even bizarre, things. A single, big mistake could wipe out a long string of successes. We therefore need someone genetically programmed to recognize and avoid serious risks, *including those never before encountered*. Certain perils that lurk in investment strategies cannot be spotted by use of the models commonly employed today by financial institutions.

Temperament is also important. Independent thinking, emotional stability, and a keen understanding of both human and institutional behavior is vital to long-term investment success. I've seen a lot of very smart people who have lacked these virtues.

Finally, we have a special problem to consider: our ability to keep the person we hire. Being able to list Berkshire on a resume would materially enhance the marketability of an investment manager. We will need, therefore, to be sure we can retain our choice, even though he or she could leave and make much more money elsewhere.

There are surely people who fit what we need, but they may be hard to identify. In 1979, Jack Byrne and I felt we had found such a person in Lou Simpson. We then made an arrangement with him whereby he would be paid well for sustained overperformance. Under this deal, he has earned large amounts. Lou, however, could have left us long ago to manage far greater sums on more advantageous terms. If money alone had been the object, that's exactly what he would have done. But Lou never considered such a move. We need to find a younger person or two made of the same stuff.

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The good news: At 76, I feel terrific and, according to all measurable indicators, am in excellent health. It's amazing what Cherry Coke and hamburgers will do for a fellow.

Some Changes on Berkshire's Board

The composition of our board will change in two ways this spring. One change will involve the Chace family, which has been connected to Berkshire and its predecessor companies for more than a century. In 1929, the first Malcolm G. Chace played an important role in merging four New England textile operations into Berkshire Fine Spinning Associates. That company merged with Hathaway Manufacturing in 1955 to form Berkshire Hathaway, and Malcolm G. Chace, Jr. became its chairman.

Early in 1965, Malcolm arranged for Buffett Partnership Ltd. to buy a key block of Berkshire shares and welcomed us as the new controlling shareholder of the company. Malcolm continued as non-executive chairman until 1969. He was both a wonderful gentleman and helpful partner.

That description also fits his son, Malcolm "Kim" Chace, who succeeded his father on Berkshire's board in 1992. But last year Kim, now actively and successfully running a community bank that he founded in 1996, suggested that we find a younger person to replace him on our board. We have done so, and Kim will step down as a director at the annual meeting. I owe much to the Chaces and wish to thank Kim for his many years of service to Berkshire.

In selecting a new director, we were guided by our long-standing criteria, which are that board members be owner-oriented, business-savvy, interested and truly independent. I say "truly" because many directors who are now deemed independent by various authorities and observers are far from that, relying heavily as they do on directors' fees to maintain their standard of living. These payments, which come in many forms, often range between $150,000 and $250,000 annually, compensation that may approach or even exceed all other income of the "independent" director. And – surprise, surprise – director compensation has soared in recent years, pushed up by recommendations from corporate America's favorite consultant, Ratchet, Ratchet and Bingo. (The name may be phony, but the action it conveys is not.)

Charlie and I believe our four criteria are essential if directors are to do their job – which, by law, is to faithfully represent *owners*. Yet these criteria are usually ignored. Instead, consultants and CEOs seeking board candidates will often say, "We're looking for a woman," or "a Hispanic," or "someone from abroad," or what have you. It sometimes sounds as if the mission is to stock Noah's ark. Over the years I've been queried many times about potential directors and have yet to hear *anyone* ask, "Does he think like an intelligent owner?"

The questions I instead get would sound ridiculous to someone seeking candidates for, say, a football team, or an arbitration panel or a military command. In those cases, the selectors would look for people who had the specific talents and attitudes that were required for a specialized job. At Berkshire, we are in the specialized activity of running a business well, and therefore we seek *business* judgment.

That's exactly what we've found in Susan Decker, CFO of Yahoo!, who will join our board at the annual meeting. We are lucky to have her: She scores very high on our four criteria and additionally, at 44, is young – an attribute, as you may have noticed, that your Chairman has long lacked. We will seek more young directors in the future, but never by slighting the four qualities that we insist upon.

This and That

Berkshire will pay about $4.4 billion in federal income tax on its 2006 earnings. In its last fiscal year the U.S. Government spent $2.6 trillion, or about $7 billion per day. Thus, for more than half of one day, Berkshire picked up the tab for *all* federal expenditures, ranging from Social Security and Medicare payments to the cost of our armed services. Had there been only 600 taxpayers like Berkshire, no one else in America would have needed to pay *any* federal income or payroll taxes.

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Our federal return last year, we should add, ran to 9,386 pages. To handle this filing, state and foreign tax returns, a myriad of SEC requirements, and all of the other matters involved in running Berkshire, we have gone all the way up to 19 employees at World Headquarters.

This crew occupies 9,708 square feet of space, and Charlie – at World Headquarters West in Los Angeles – uses another 655 square feet. Our home-office payroll, including benefits and counting both locations, totaled $3,531,978 last year. We're careful when spending your money.

Corporate bigwigs often complain about government spending, criticizing bureaucrats who they say spend taxpayers' money differently from how they would if it were their own. But sometimes the financial behavior of executives will also vary based on whose wallet is getting depleted. Here's an illustrative tale from my days at Salomon. In the 1980s the company had a barber, Jimmy by name, who came in weekly to give free haircuts to the top brass. A manicurist was also on tap. Then, because of a cost-cutting drive, patrons were told to pay their own way. One top executive (not the CEO) who had previously visited Jimmy weekly went immediately to a once-every-three-weeks schedule.

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Every now and then Charlie and I catch on early to a tide-like trend, one brimming over with commercial promise. For example, though American Airlines (with its "miles") and American Express (with credit card points) are credited as being trailblazers in granting customers "rewards," Charlie and I were far ahead of them in spotting the appeal of this powerful idea. Excited by our insight, the two of us jumped into the reward business way back in 1970 by buying control of a trading stamp operation, Blue Chip Stamps. In that year, Blue Chip had sales of $126 million, and its stamps papered California.

In 1970, indeed, about 60 *billion* of our stamps were licked by savers, pasted into books, and taken to Blue Chip redemption stores. Our catalog of rewards was 116 pages thick and chock full of tantalizing items. When I was told that even certain brothels and mortuaries gave stamps to their patrons, I felt I had finally found a sure thing.

Well, not quite. From the day Charlie and I stepped into the Blue Chip picture, the business went straight downhill. By 1980, sales had fallen to $19.4 million. And, by 1990, sales were bumping along at $1.5 million. No quitter, I redoubled my managerial efforts.

Sales then fell another 98%. Last year, in Berkshire's $98 billion of revenues, all of $25,920 (*no* zeros omitted) came from Blue Chip. Ever hopeful, Charlie and I soldier on.

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I mentioned last year that in my service on 19 corporate boards (not counting Berkshire or other controlled companies), I have been the Typhoid Mary of compensation committees. At only one company was I assigned to comp committee duty, and then I was promptly outvoted on the most crucial decision that we faced. My ostracism has been peculiar, considering that I certainly haven't lacked experience in setting CEO pay. At Berkshire, after all, I am a one-man compensation committee who determines the salaries and incentives for the CEOs of around 40 significant operating businesses.

How much time does this aspect of my job take? Virtually none. How many CEOs have voluntarily left us for other jobs in our 42-year history? Precisely none.

Berkshire employs many different incentive arrangements, with their terms depending on such elements as the economic potential or capital intensity of a CEO's business. Whatever the compensation arrangement, though, I try to keep it both simple and fair.

When we use incentives – and these can be large – they are always tied to the operating results for which a given CEO has authority. We issue no lottery tickets that carry payoffs unrelated to business performance. If a CEO bats .300, he gets paid for being a .300 hitter, even if circumstances outside of his control cause Berkshire to perform poorly. And if he bats .150, he doesn't get a payoff just because the successes of others have enabled Berkshire to prosper mightily. An example: We now own $61 billion of equities at Berkshire, whose value can easily rise or fall by 10% in a given year. Why in the world should the pay of our operating executives be affected by such $6 billion swings, however important the gain or loss may be for shareholders?

You've read loads about CEOs who have received astronomical compensation for mediocre results. Much less well-advertised is the fact that America's CEOs also generally live the good life. Many, it should be emphasized, are exceptionally able, and almost all work far more than 40 hours a week. But they are usually treated like royalty in the process. (And we're certainly going to keep it that way at Berkshire. Though Charlie still favors sackcloth and ashes, I prefer to be spoiled rotten. Berkshire owns The Pampered Chef; our wonderful office group has made me The Pampered Chief.)

CEO perks at one company are quickly copied elsewhere. "All the other kids have one" may seem a thought too juvenile to use as a rationale in the boardroom. But consultants employ precisely this argument, phrased more elegantly of course, when they make recommendations to comp committees.

Irrational and excessive comp practices will not be materially changed by disclosure or by "independent" comp committee members. Indeed, I think it's likely that the reason I was rejected for service on so many comp committees was that I was regarded as *too* independent. Compensation reform will only occur if the largest institutional shareholders – it would only take a few – demand a *fresh* look at the whole system. The consultants' present drill of deftly selecting "peer" companies to compare with their clients will only perpetuate present excesses.

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Last year I arranged for the bulk of my Berkshire holdings to go to five charitable foundations, thus carrying out part of my lifelong plan to eventually use all of my shares for philanthropic purposes. Details of the commitments I made, as well as the rationale for them, are posted on our website, www.berkshirehathaway.com. Taxes, I should note, had nothing to do with my decision or its timing. My federal and state income taxes in 2006 were exactly what they would have been had I not made my first contributions last summer, and the same point will apply to my 2007 contributions.

In my will I've stipulated that the proceeds from all Berkshire shares I still own at death are to be used for philanthropic purposes within ten years after my estate is closed. Because my affairs are not complicated, it should take three years at most for this closing to occur. Adding this 13-year period to my expected lifespan of about 12 years (though, naturally, I'm aiming for more) means that proceeds from *all* of my Berkshire shares will likely be distributed for societal purposes over the next 25 years or so.

I've set this schedule because I want the money to be spent relatively promptly by people I *know* to be capable, vigorous and motivated. These managerial attributes sometimes wane as institutions – particularly those that are exempt from market forces – age. Today, there are terrific people in charge at the five foundations. So at my death, why should they not move with dispatch to judiciously spend the money that remains?

Those people favoring perpetual foundations argue that in the future there will most certainly be large and important societal problems that philanthropy will need to address. I agree. But there will then also be many super-rich individuals and families whose wealth will exceed that of today's Americans and to whom philanthropic organizations can make their case for funding. These funders can *then* judge firsthand which operations have both the vitality and the focus to best address the major societal problems that *then* exist. In this way, a market test of ideas and effectiveness can be applied. Some organizations will deserve major support while others will have outlived their usefulness. Even if the people above ground make their decisions imperfectly, they should be able to allocate funds more rationally than a decedent six feet under will have ordained decades earlier. Wills, of course, can always be rewritten, but it's very unlikely that my thinking will change in a material way.

A few shareholders have expressed concern that sales of Berkshire by the foundations receiving shares will depress the stock. These fears are unwarranted. The annual trading volume of many stocks exceeds 100% of the outstanding shares, but nevertheless these stocks usually sell at prices approximating their intrinsic value. Berkshire also tends to sell at an appropriate price, but with annual volume that is only 15% of shares outstanding. At most, sales by the foundations receiving my shares will add three percentage points to annual trading volume, which will still leave Berkshire with a turnover ratio that is the lowest around.

Overall, Berkshire's business performance will determine the price of our stock, and most of the time it will sell in a zone of reasonableness. It's important that the foundations receive appropriate prices as they periodically sell Berkshire shares, but it's also important that incoming shareholders don't overpay. (See economic principle 14 on page 77.) By both our policies and shareholder communications, Charlie and I will do our best to ensure that Berkshire sells at neither a large discount nor large premium to intrinsic value.

The existence of foundation ownership will in no way influence our board's decisions about dividends, repurchases, or the issuance of shares. We will follow exactly the same rule that has guided us in the past: What action will be likely to deliver the best result for shareholders over time?

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In last year's report I allegorically described the Gotrocks family – a clan that owned all of America's businesses and that counterproductively attempted to increase its investment returns by paying ever-greater commissions and fees to "helpers." Sad to say, the "family" continued its self-destructive ways in 2006.

In part the family persists in this folly because it harbors unrealistic expectations about obtainable returns. Sometimes these delusions are self-serving. For example, private pension plans can temporarily overstate their earnings, and public pension plans can defer the need for increased taxes, by using investment assumptions that are likely to be out of reach. Actuaries and auditors go along with these tactics, and it can be decades before the chickens come home to roost (at which point the CEO or public official who misled the world is apt to be gone).

Meanwhile, Wall Street's Pied Pipers of Performance will have encouraged the futile hopes of the family. The hapless Gotrocks will be assured that they *all* can achieve above-average investment performance – but only by paying ever-higher fees. Call this promise the adult version of Lake Woebegon.

In 2006, promises and fees hit new highs. A flood of money went from institutional investors to the 2-and-20 crowd. For those innocent of this arrangement, let me explain: It's a lopsided system whereby 2% of your *principal* is paid each year to the manager even if he accomplishes nothing – or, for that matter, loses you a bundle – and, additionally, 20% of your profit is paid to him if he succeeds, even if his success is due simply to a rising tide. For example, a manager who achieves a gross return of 10% in a year will keep 3.6 percentage points – two points off the top plus 20% of the residual 8 points – leaving only 6.4 percentage points for his investors. On a $3 billion fund, this 6.4% net "performance" will deliver the manager a cool $108 million. He will receive this bonanza even though an index fund might have returned 15% to investors in the same period and charged them only a token fee.

The inexorable math of this grotesque arrangement is certain to make the Gotrocks family poorer over time than it would have been had it never heard of these "hyper-helpers." Even so, the 2-and-20 action spreads. Its effects bring to mind the old adage: When someone with experience proposes a deal to someone with money, too often the fellow with money ends up with the experience, and the fellow with experience ends up with the money.

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Let me end this section by telling you about one of the good guys of Wall Street, my long-time friend Walter Schloss, who last year turned 90. From 1956 to 2002, Walter managed a remarkably successful investment partnership, from which he took not a dime unless his investors made money. My admiration for Walter, it should be noted, is not based on hindsight. A full fifty years ago, Walter was my sole recommendation to a St. Louis family who wanted an honest and able investment manager.

Walter did not go to business school, or for that matter, college. His office contained one file cabinet in 1956; the number mushroomed to four by 2002. Walter worked without a secretary, clerk or bookkeeper, his only associate being his son, Edwin, a graduate of the North Carolina School of the Arts. Walter and Edwin never came within a mile of inside information. Indeed, they used "outside" information only sparingly, generally selecting securities by certain simple statistical methods Walter learned while working for Ben Graham. When Walter and Edwin were asked in 1989 by *Outstanding Investors Digest*, "How would you summarize your approach?" Edwin replied, "We try to buy stocks cheap." So much for Modern Portfolio Theory, technical analysis, macroeconomic thoughts and complex algorithms.

Following a strategy that involved no real risk – defined as permanent loss of capital – Walter produced results over his 47 partnership years that dramatically surpassed those of the S&P 500. It's particularly noteworthy that he built this record by investing in about 1,000 securities, mostly of a lackluster type. A few big winners did not account for his success. It's safe to say that had millions of investment managers made trades by a) drawing stock names from a hat; b) purchasing these stocks in comparable amounts when Walter made a purchase; and then c) selling when Walter sold his pick, the *luckiest* of them would not have come close to equaling his record. There is simply *no* possibility that what Walter achieved over 47 years was due to chance.

I first publicly discussed Walter's remarkable record in 1984. At that time "efficient market theory" (EMT) was the centerpiece of investment instruction at most major business schools. This theory, as then most commonly taught, held that the price of any stock at any moment is not demonstrably mispriced, which means that no investor can be *expected* to overperform the stock market averages using only publicly-available information (though some will do so by luck). When I talked about Walter 23 years ago, his record forcefully contradicted this dogma.

And what did members of the academic community do when they were exposed to this new and important evidence? Unfortunately, they reacted in all-too-human fashion: Rather than opening their minds, they closed their eyes. To my knowledge *no* business school teaching EMT made any attempt to study Walter's performance and what it meant for the school's cherished theory.

Instead, the faculties of the schools went merrily on their way presenting EMT as having the certainty of scripture. Typically, a finance instructor who had the nerve to question EMT had about as much chance of major promotion as Galileo had of being named Pope.

Tens of thousands of students were therefore sent out into life believing that on every day the price of every stock was "right" (or, more accurately, not demonstrably wrong) and that attempts to evaluate businesses – that is, stocks – were useless. Walter meanwhile went on overperforming, his job made easier by the misguided instructions that had been given to those young minds. After all, if you are in the shipping business, it's helpful to have all of your potential competitors be taught that the earth is flat.

Maybe it was a good thing for his investors that Walter didn't go to college.

The Annual Meeting

Our meeting this year will be held on Saturday, May 5th. As always, the doors will open at the Qwest Center at 7 a.m., and a new Berkshire movie will be shown at 8:30. At 9:30 we will go directly to the question-and-answer period, which (with a break for lunch at the Qwest's stands) will last until 3:00. Then, after a short recess, Charlie and I will convene the annual meeting at 3:15. If you decide to leave during the day's question periods, please do so while *Charlie* is talking.

The best reason to exit, of course is to *shop*. We will help you do that by filling the 194,300 square foot hall that adjoins the meeting area with the products of Berkshire subsidiaries. Last year, the 24,000 people who came to the meeting did their part, and almost every location racked up record sales. But records are made to be broken, and I know you can do better.

This year we will again showcase a Clayton home (featuring Acme brick, Shaw carpet, Johns Manville insulation, MiTek fasteners, Carefree awnings and NFM furniture). You will find that the home, priced at $139,900, delivers excellent value. Last year, a helper at the Qwest bought one of two homes on display well before we opened the doors to shareholders. Flanking the Clayton home on the exhibition floor this year will be an RV and pontoon boat from Forest River.

GEICO will have a booth staffed by a number of its top counselors from around the country, all of them ready to supply you with auto insurance quotes. In most cases, GEICO will be able to give you a special shareholder discount (usually 8%). This special offer is permitted by 45 of the 50 jurisdictions in which we operate. (One supplemental point: The discount is not additive if you qualify for another, such as that given certain groups.) Bring the details of your existing insurance and check out whether we can save you money. For at least 50% of you, I believe we can. And while you're at it, sign up for the new GEICO credit card. It's the one I now use (sparingly, of course).

On Saturday, at the Omaha airport, we will have the usual array of aircraft from NetJets available for your inspection. Stop by the NetJets booth at the Qwest to learn about viewing these planes. Come to Omaha by bus; leave in your new plane. And take all the hair gel that you wish on board with you.

In the Bookworm's corner of our bazaar, there will be about 25 books and DVDs – all discounted – led again by *Poor Charlie's Almanack*. (One hapless soul last year asked Charlie what he should do if he didn't enjoy the book. Back came a Mungerism: "No problem – just give it to someone more intelligent.") We've added a few titles this year. Among them are *Seeking Wisdom: From Darwin to Munger* by Peter Bevelin, a long-time Swedish shareholder of Berkshire, and Fred Schwed's classic, *Where are the Customers' Yachts?* This book was first published in 1940 and is now in its 4th edition. The funniest book ever written about investing, it lightly delivers many truly important messages on the subject.

An attachment to the proxy material that is enclosed with this report explains how you can obtain the credential you will need for admission to the meeting and other events. As for plane, hotel and car reservations, we have again signed up American Express (800-799-6634) to give you special help. Carol Pedersen, who handles these matters, does a terrific job for us each year, and I thank her for it. Hotel rooms can be hard to find, but work with Carol and you will get one.

At Nebraska Furniture Mart, located on a 77-acre site on 72nd Street between Dodge and Pacific, we will again be having "Berkshire Weekend" discount pricing. We initiated this special event at NFM ten years ago, and sales during the "Weekend" grew from $5.3 million in 1997 to $30 million in 2006. I get goose bumps just thinking about this volume.

To obtain the Berkshire discount, you must make your purchases between Thursday, May 3rd and Monday, May 7th inclusive, and also present your meeting credential. The period's special pricing will even apply to the products of several prestigious manufacturers that normally have ironclad rules against discounting but which, in the spirit of our shareholder weekend, have made an exception for you. We appreciate their cooperation. NFM is open from 10 a.m. to 9 p.m. Monday through Saturday, and 10 a.m.

to 6 p.m. on Sunday. On Saturday this year, from 5:30 p.m. to 8 p.m., NFM is having a special shareholder picnic featuring chicken and beef tacos (and hamburgers for traditionalists like me).

At a remodeled and expanded Borsheim's, we will again have two shareholder-only events. The first will be a cocktail reception from 6 p.m. to 10 p.m. on Friday, May 4th. The second, the main gala, will be held on Sunday, May 6th, from 9 a.m. to 4 p.m. On Saturday, we will be open until 6 p.m.

We will have huge crowds at Borsheim's throughout the weekend. For your convenience, therefore, shareholder prices will be available from Monday, April 30th through Saturday, May 12th. During that period, please identify yourself as a shareholder by presenting your meeting credentials or a brokerage statement that shows you are a Berkshire holder.

On Sunday, in a tent outside of Borsheim's, a blindfolded Patrick Wolff, twice U.S. chess champion, will take on all comers – who will have their eyes wide open – in groups of six. Last year I carried on a conversation with Patrick while he played in this manner. Nearby, Norman Beck, a remarkable magician from Dallas, will bewilder onlookers. Additionally, we will have Bob Hamman and Sharon Osberg, two of the world's top bridge experts, available to play bridge with our shareholders on Sunday afternoon.

To add to the Sunday fun at Borsheim's, Ariel Hsing will play table tennis (ping-pong to the uninitiated) from 1 p.m. to 4 p.m. against anyone brave enough to take her on. Ariel, though only 11, is ranked number one among girls under 16 in the U.S. (and number 1 among both boys and girls under 12). The week I turned 75 I played Ariel, then 9 and barely tall enough to see across the table, thinking I would take it easy on her so as not to crush her young spirit. Instead she crushed me. I've since devised a plan that will give me a chance against her. At 1 p.m. on Sunday, I will initiate play with a *2-point* game against Ariel. If I somehow win the first point, I will then feign injury and claim victory. After this strenuous encounter wears Ariel down, our shareholders can then try their luck against her.

Gorat's will again be open exclusively for Berkshire shareholders on Sunday, May 6th, and will be serving from 4 p.m. until 10 p.m. Please remember that to come to Gorat's on that day, you must have a reservation. To make one, call 402-551-3733 on April 1st (*but not before*).

In the 2006-2007 school year, 35 university classes, including one from IBMEC in Brazil, will come to Omaha for sessions with me. I take almost all – in aggregate, more than 2,000 students – to lunch at Gorat's. And they love it. To learn why, come join us on Sunday.

We will again have a reception at 4 p.m. on Saturday afternoon for shareholders who have come from outside of North America. Every year our meeting draws many people from around the globe, and Charlie and I want to be sure we personally greet those who have come so far. Last year we enjoyed meeting more than 400 of you from many dozens of countries. Any shareholder who comes from other than the U.S. or Canada will be given a special credential and instructions for attending this function.

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Charlie and I are extraordinarily lucky. We were born in America; had terrific parents who saw that we got good educations; have enjoyed wonderful families and great health; and came equipped with a "business" gene that allows us to prosper in a manner hugely disproportionate to other people who contribute as much or more to our society's well-being. Moreover, we have long had jobs that we love, in which we are helped every day in countless ways by talented and cheerful associates. No wonder we tap-dance to work. But nothing is more fun for us than getting together with our shareholder-partners at Berkshire's annual meeting. So join us on May 5th at the Qwest for our annual Woodstock for Capitalists. We'll see you there.

February 28, 2007

Warren E. Buffett
Chairman of the Board

Morning Session - 2007 Meeting

1. Jimmy Buffett sings "Berkshire Hathaway-ville"

ANNOUNCER: And now, please welcome the charming, insightful, witty, rather brilliant, debonair, influential, well-heeled yet down-to-earth, talented, surprisingly modest, handsome, and refined exemplar of unflappable character, Mr. Buffett.

(Applause and cheers as musician Jimmy Buffett comes on stage with a guitar)

JIMMY BUFFET: Who were you expecting? My junior partner? (Laughter)

For those of you who don't know, I'm the distant cousin, Jimmy Buffett.

This would be a good day to rob a bank in Omaha. Everybody's here, you know, so — (Applause)

I couldn't be around for the game with LeBron James. I was busy working on my wardrobe for this surprise appearance.

This is my first time in the Qwest Center, so I feel very at home in large spaces like this. It's great to be back in Omaha. (Applause)

That's the good news.

The disturbing news is, as a long-time Berkshire Hathaway stockholder and shareholder, the big question is, you know, those guys are getting up in age, you know, Charlie and Warren.

Who are they going to leave it to?

Well — (laughter) — I got news for you. We did a genetic test, Warren and I did. You won't see that in your program or in the shareholders report. And somewhere back about 6,000 years ago, in some ancient village in Scandinavia, they were trading Buffett genes, and I got the talent. He got the business.

So, later on in life, after Doris [Buffett, Warren's sister] introduced us — I don't know, 30 years ago — I started figuring out, so I better get that business thing going as well.

So, since blood is thicker than water, I am your new chairman. So, I hope you like that. (Applause)

Don't run out to sell. I'm keeping my mine. (Laughter)

So, on the way out here on the plane, I figured — it was an interesting day, if you read The New York Times business section yesterday. There was a lot going on.

So, I thought I would — this song has done very well for me, so I thought I would bring this for my first appearance in Omaha at the Qwest Center — I would rewrite a little "Margaritaville" with a little Berkshire — well, actually we're wasting away in Berkshire Hathaway-ville this — today.

I've never sung this early in the morning, except on the [NBC] "Today" show, so you're not paying, so don't worry about it, so — (Laughter)

Don't worry, I'm a semi-professional. This is OK.

I will be looking at these notes. As you can tell, Warren gave me a really big budget for a teleprompter here. (Laughter)

All right. So, you can sing along if — but you will not know — you'll know a few of the words to these songs. But then I'll try to do this slowly, and I have my bifocals, so I think we're in good shape here, so —

We'll start the morning off with a little hymn.

(Singing to the melody of "Margaritaville")

Nibblin' on sponge cake,

And Omaha beef steak,

Watchin' you stockholders buying the rounds.

The Qwest Center's rockin',

The press is all blockin'.

There isn't a doubt

Warren's big in this town.

Wastin' away in Berkshire Hathaway-a-ville,

Searchin' for my lost box of See's.

Some people claim that Charlie Munger's to blame,

And you know, Rupert Murdoch is peeved.

From World Books to sofas,

Jet planes, diamonds, and (inaubible),

(Inaudible) in euros,

Let’s not forget euros.

(Spoken)

Uh oh. I made a mistake here. All right. Hold on.

You won’t pay for that, OK?

Are you going anywhere? We’ll start again.

From — from —

Let me get these bifocals off here.

(Singing)

From World Books to sofas,

(Inaudible) and (inaubible),

Jet planes, diamonds, and underwear cover the floor.

(Spoken)

It was the Fruit of the Loom that got me.

(Singing)

Tool books (inaudible).

Let’s don’t forget euro,

Make all those —

(Spoken)

Oh, this is a good line. I got to —

(Singing)

Make all those hedge funders

Want to go and buy stores.

Wastin' away again in Berkshire Hathaway-ville,

Searchin' for some good companies to buy.

Some people claim privatization's to blame,

But we know, this holding company's on fire.

So, who was the wizard,

Who thought up the lizard,

To sell car insurance to humans while making some jokes?

Projects we'll surmount,

But I still want that discount.

Can someone show me where they're sitting those rich Geico bulbs?

Wastin' away again in Berkshire Hathaway-ville,

Searchin' for my lost shaker of salt.

And some people claim that Doris Buffett's to blame,

But I know this is all Warren's fault.

And some people claim that ukulele's to blame,

If there's a God, he'll turn that thing into (inaubible).

(Applause)

(Spoken)

All right.

So you thought I was kidding about that running the company stuff, didn't you?

So — I was. (Laughs)

That's a big relief there. So, with a great bit of pride and admiration, please welcome my junior partners, Warren and Charlie. (Applause)

WARREN BUFFETT: Separated at birth. Separated at birth. (Laughs)

Thanks, Jimmy.

JIMMY BUFFETT: All right.

WARREN BUFFETT: OK.

I actually had asked Charlie to do that number — (Laughs)

2. Opening remarks

WARREN BUFFETT: Got a lot of people to thank, starting off with Jimmy. Wonderful.

We hid him out — came in last night kind of late and we — to be sure it was a surprise, we stashed him away over at the Hilton, and I just want to say thanks to him.

We both got the commercial gene, but unfortunately, he got the singing gene. I got this voice you're hearing.

We — the movie, as we mentioned, we get a lot of help from a lot of people. They all do it just for the fun of it.

I particularly want to thank Andy Heyward of DIC who did that cartoon. He's done them now for a number of years. They come back here to get my voice recorded and to get Bill's [Gates] voice and Charlie's voice. They do it all themselves just to participate in the movie.

Andy and I — I'm working with Andy on a cartoon series that will be out pretty soon, which we're aiming toward younger people to try and work a little financial education into a good time on Saturday morning for kids.

And we'll see how that all comes out. But Andy is wonderful to work with. It's been — (Applause)

WARREN BUFFETT: My daughter Suze puts that movie together. It's a lot of work and it's a labor of love. She does a terrific job, and I just want to thank her for — as usual. (Applause) Thank you.

WARREN BUFFETT: Then finally I want to particularly thank the grand impresario of this whole affair is Kelly Broz.

And Kelly puts this all together, the exhibition hall. I just turn it over to her. I forget about it, and Charlie and I just show up on Saturday morning.

And Kelly is having her 50th birthday tomorrow. So, Kelly, would you stand up and take a bow, please. Yeah.

(Singing) Happy birthday to you. Happy birthday to you. Happy birthday, dear Kelly. Happy birthday to you.

For Kelly. (Applause)

WARREN BUFFETT: Now, today we're going to follow the usual format. We have a number of microphones placed around this room and we have overflow rooms. We will go from one station to the other, keep going until about noon or thereabouts, and then we'll break for 30 or 45 minutes for lunch.

We'll come back here, and we will then go until about 3 o'clock, continuing the same routine.

We don't prescreen the questions or the questioners. It's whoever got in line first for the microphones.

At 3 we will take a break for a few minutes. We will reconvene at 3:15 for the official business meeting.

We have an item of business — normally we take care of business in about five minutes, re-elect the directors. But today we have an item on the proxy relative to our holdings of PetroChina.

We were not required to put that on the ballot. The SEC told us we didn't have to, but we really thought it would be a good idea to do it so that all of you that are interested can hear about our reasoning and the reasoning of the people who disagree with us. We'll give them plenty of time to tell you why they think we're wrong and we'll respond.

And I hope anybody that's interested at all on the subject, I hope you stay right until 4 o'clock when we will adjourn, because Charlie and I are then going to greet, perhaps, as many as 600 shareholders who have come from outside of North America.

We have a record number. I think we have a hundred or so from Australia, and we have close to that number from South Africa.

We have shareholders from all over the world. So we feel if they come all the way to Omaha, Charlie and I would at least like to shake their hands, and we have that from about 4 till 6:00 o'clock, and then we'll be doing some other things this evening.

But that is the drill for this meeting. We won't elect the directors until the regular meeting, which commences at 3:15, but I would like to introduce them at this time and we have a few special announcements in that connection.

3. Berkshire directors introduced

WARREN BUFFETT: But we start off — this is Charlie, this fellow that's been making all the noise over here. (Laughter)

He's quite hyperkinetic. But we seem — I think he's on his medicine. (Laughter)

Charlie, incidentally, can hear quite well and I can see, so we work together. I have a little — I thought I was doing pretty well when I remembered his name, actually.

But our combined ages are 159 for those of you who can't work with big numbers.

So Charlie. And then we have — and if you'll stand as I read your name — Howard Buffett. (Applause)

Bill Gates. (Applause)

Sandy Gottesman. (Applause)

Charlotte Guyman. (Applause)

A former Omahan, Don Keough. (Applause)

Tom Murphy. (Applause)

Ron Olson. (Applause)

And a lifetime Omahan, Walter Scott. (Applause)

Now, in addition, we have with us a director whose family has been involved with Berkshire Hathaway and its predecessor companies for over a hundred years. His father played a very key role in Buffett partnership obtaining control of Berkshire Hathaway in 1965.

He was supportive in every possible way, as his father, and now his son. And Kim Chace has been on our board for a great number of years. He's been a — just like his father before him, he's been a wonderful director.

He's been a great friend. He will be leaving the board this year, but Kim is here with his family and, Kim and the family, if you would stand up, I'd like the shareholders to recognize you. (Applause)

WARREN BUFFETT: And then finally we will have a new director get elected, and I've got the votes in my pocket so there's no question about it, and that is Sue Decker. And, Sue, if you will, please stand. (Applause)

4. Q1 earnings are "good"

WARREN BUFFETT: Just one or two items of business the — before we start the questioning.

We did report our earnings yesterday after the close, and I can't see the — are they up on the monitor?

But it was a good first quarter. We had a good year last year. The insurance earnings are going to go down. There's no question about that. How much they go down depends on Mother Nature and a few other factors.

But it's been an extraordinary period for insurance. I mean, nothing bad happened last year, and the same was true in the first quarter.

As you might expect, that favorable experience has caused people to lower prices in some areas quite dramatically. And the nature of insurance, if you write a one-year contract, say, six months ago, you were still getting premium at the old rate, if you write at a one-year policy, for another six months.

So there's a lag effect when things are getting either better or worse. And the lag effect from this point forward, we will — our insurance rates results will show the effect of lower prices.

They will probably show — certainly we have the most benign hurricane season imaginable last year. We have less hurricane exposure that we've written this year but, nevertheless, as natural catastrophes occur we will be paying out lots of money if and when they occur.

It couldn't get any better than it was last year from our standpoint. So things in the insurance world, our insurance earnings, underwriting earnings, are bound to decrease.

Now, what we really hope over time is more or less to break even on the underwriting of insurance. So when you see a significant profit like last year or underwriting profit this year, just look at that as kind of the good side of what will later be an offset to it in a way of an underwriting loss.

But if we break even in insurance on underwriting, we do very, very well because we generate lots of float and we earn money on that float and our float is at an all-time high.

So this is really the frosting on the cake when we have an underwriting profit, and it's not to be expected to necessarily — well, it won't occur year after year. Ever since we've been in the insurance business, about half the years we've made money underwriting and half we haven't.

I think our mix of business now is such that we'll even maybe do a touch better than that in the future, but we won't do anything like what we did in the last year and in the first quarter this year.

There's one unusual item in our balance sheet that you should be aware of. March 31, you'll see our receivables went up by about $7 billion. That was because of the Equitas transaction I described in the annual report.

On March 31st, the deal, basically, was closed at the end of the quarter. So we had a receivable of 7 billion, and then a couple of days later we were given 7 billion of cash and securities. So that receivable very quickly turned into liquid assets, cash.

And we sold all those securities we got. So we had 7 billion transferred from receivables to cash very early in April.

Other than that, most of our noninsurance businesses did fine. The residential construction-related businesses are getting hit, in some cases getting hit very hard, and in some cases getting just — but still reflecting decreases in their business.

And my guess is that that continues, perhaps, for quite a while. So you will see lower earnings coming from the companies that are related to residential construction such as Shaw, Johns Manville, ACME Brick, and that group.

But overall, compared to the companies they compete with, our managers continue to do an absolutely sensational job.

We have the greatest group of managers and, for that matter, we've got the greatest group of stockholders, of any company I know of in the world, and Charlie and I are very grateful.

You saw in the movie Charlie and I going over there to give the fellows in Israel a lot of advice on how to run their operation better.

And Charlie might want to — you might want to comment on ISCAR.

CHARLIE MUNGER: Well, that was a great experience, and ISCAR is a very great company. I have never seen anything as automated as that ISCAR operation. I think they regard it as a disgrace if any human hand has to do anything.

WARREN BUFFETT: We bought it without looking at it, but after we looked at it, we really liked it. (Laughter)

For those of you who won't be around for the 3:15 — and I hope everybody that's interested sticks around for that — it will be an interesting discussion.

But we do have a preliminary vote. Again, I can't see the vote up there. But, [CFO] Marc [Hamburg], is the vote up there? Unable to hear anything there, but I assume it.

The — basically, I can't see it from here, but it's about 2 percent are in favor of the resolution and about 98 percent opposed. And that was true of both the A and the B stock.

So there really wasn't any great difference in the way people voted on the proposal. And even if you leave out my personal vote, which was against, it's about a 25-to-one margin that voted in opposition to it.

And anybody that wishes to vote in person or to change their vote, be sure and stay for the meeting at 3:15, and I think you'll find the discussion very interesting if you care to stay.

5. Buffett sees no private equity "bubble" about to burst

WARREN BUFFETT: Let's get a map here. Here we are. We will start with area 1, which I think is over here, and there we are and we have a questioner.

AUDIENCE MEMBER: Good morning, Mr. Buffett and Mr. Munger. My name is Kevin Truitt (PH) from Chicago, Illinois.

Thank you both for, again, hosting this "Woodstock for Capitalists" for your shareholders and fellow capitalists. I have two questions. My first question is for both Mr. Buffett and Mr. Munger.

WARREN BUFFETT: I don't like to interrupt you, but we're only letting everybody do one question, so pick whichever one you feel the strongest about getting an answer for, please.

AUDIENCE MEMBER: OK. First, given the ocean of equity money that is out there — private equity money — that is out there today chasing deals, and with the quality of the deals continually diminishing as the quantity of good deals continues to go down, and given the fact that these private equity funds are getting their equity portion of the money from pension funds and college endowments and using very high levels of borrowed money from the banks, this has the look, feel, and smell of a bubble that is about to burst and is likely to end badly for many of the deal-makers and the investors.

What events, in your opinion, could cause this bubble to burst, and how do you think this is likely to all end?

WARREN BUFFETT: Well, as you were reading off that list, we are competing with those people, so I started to cry as you — (laughs) — explained the difficulty we have in finding things to buy.

The nature of the private equity activity is such that it really isn't a bubble that bursts.

Because if you're running a large private equity fund and you lock up $20 billion for five or longer years and you buy businesses which are not priced daily, as a practical matter, the plug will not — even if you do a poor job, it's going to take many years before the score is put up on the score board, and it takes many years, in most cases, for people to get out of the private equity fund even if they wished to earlier.

So it does not — it's not like a lot of leverage can lead to in-marketable securities or something there. And the investors can't leave and the scorecard is lacking for a long time.

What will slow down the activity — or what could slow down the activity — is if yields on junk bonds became much higher than yields on high-grade bonds.

Right now the spread between yields on junk bonds and high-grade bonds is down to a very low level, and history has shown that periodically that spread widens quite dramatically.

That will slow down the deals, but it won't cause the investors to get their money back.

There's one other aspect, of course, that — of this frenzied activity, you might say, in private equity is that if you have a $20 billion fund and you're getting a 2 percent fee on it or $400 million a year, which seems like chump change to those that are managing them but sounds like real money in Omaha — if you're getting 400 million a year from that $20 billion fund, you can't start another fund with a straight face until you get that money pretty well invested.

It's very hard to go back to your investors and say, well, I've got 18 billion uninvested and I'd like you to give me money for another fund.

So there's a great compulsion to invest very quickly because it's the way to get another fund and another bunch of fees coming in.

And those are not competitors for businesses that Charlie and I are going to be particularly effective in competing with.

I mean, they — we are going to own anything we buy forever. The math has to make sense to us. We're not given to optimistic assumptions, and we don't get paid based on activity.

But I think it will be quite some time before — it's likely to be quite some time — before disillusionment sets in and the money quits flowing to these people that are promoting these. And whether they can continue to make deals will depend on whether people will give them lots of financing at what I would regard as quite low rates.

Charlie?

CHARLIE MUNGER: Yeah. It can continue to go on a long time after you're in a state of total revulsion.

WARREN BUFFETT: The voice of optimism has spoken. (Laughter.)

6. I didn't do enough to "sell" Berkshire internationally

WARREN BUFFETT: We'll go on to 2. And I should have mentioned at the start. We really only take one question per person because there's a lot of people waiting and some people get very talented about rolling four or five into one, but we — we've gotten more talented about unraveling them, so try to keep it to one. Area 2, please.

AUDIENCE MEMBER: Greetings to all of you from the Midwest of Europe from the city of Bonn in Germany.

My name is Norman Rentrop. I'm a shareholder in Berkshire since 1992, as well as a shareholder in Wesco and Cologne Re.

I'm a great admirer of both of you and want to thank you again for sharing your wisdom with us and for continuing to stay humble by managing Berkshire for the benefit of all of us without any big 2 and 20 percent fees, without stock option plans. (Applause)

WARREN BUFFETT: Be careful. You're giving Charlie ideas here. (Laughter)

AUDIENCE MEMBER: And I want to applaud you in setting another great example by donating most of your wealth to charity and for donating — (applause) — and for donating it in a very intelligent and selfless — that it's not your name on the foundation — way.

Now, I'm a little disturbed by the remarks from another great investor, from John Templeton, who continues to say that you are narrow-sighted in not investing more overseas.

You do focus on the U.S. with relatively little, so far, internationally. You explained that it doesn't really matter whether a company is headquartered in the U.S. or London or Munich or Paris, and that you would pay almost as high an amount for such companies as for similar U.S. companies.

You were audacious to invest your petty cash in South Korean stocks.

Coca-Cola went totally global many years ago; whereas, Hershey's missed the opportunity to go global, leaving the chocolate globalization to Swiss-based Lindt & Sprungli.

Now, what would it take you to go totally global with Berkshire by investing internationally in a big way?

WARREN BUFFETT: Well, that's a very good question. And I would say that I know I probably bought my first stock outside the United States at least 50 years ago.

It is not that we have not looked in the marketable securities field beyond this country, and we've made some investments there.

It really wouldn't make any difference to us if Coca-Cola was based in Amsterdam or Munich or Atlanta as long as they had the business they had.

So we're very involved in international business, but the hard fact is that in terms of buying entire businesses, we were simply not on the radar screen to the same extent — close to the same extend —outside the United States as we became in the United States.

When we started in the United States, really, nobody knew anything about Berkshire, either, so we had — we had a selling job to do here, but we did not do the selling job — or I did not do the selling job — well abroad.

And thanks to Eitan Wertheimer, he found us. And I think has contributed in a very significant way to getting us better known.

We have no bias against buying either marketable securities or entire businesses outside the United States.

Eitan is even planning a little procedure to get us even better known — get Berkshire even better known — outside the United States, and I'm going to participate in that with him within the next six or eight months.

But we can be very validly criticized for not being a better effort to get on that radar screen.

I think we're — I think it's improving. We own a number of non-U.S. securities. We own stock in — just stock, marketable securities — we own two that are based in Germany, and we own others — as it's been pointed out — we own, for example, 4 percent of POSCO, which is based in South Korea. That's over a billion-dollar investment at current market.

And we have — I can think of a half a dozen or so marketable securities investments outside the United States.

We don't have to report those in the 13F — I believe I'm right on this, [CFO] Marc [Hamburg] — so they don't necessarily get picked up the same way as do our domestic investments by reports we make to the SEC.

There's a problem — for example, in Germany we have to report our holdings in Germany if our holdings exceed 3 percent.

Well, if you're talking about a company with 10 billion in market value, that means at $300 million we have to tell the world what we're buying, and telling the world what we're buying is not the favorite activity of Charlie and myself.

So — and it tends to screw up future buying. So that 3 percent threshold, which exists in the UK, exists in Germany, is a real minus to us, in terms of accumulating shares.

But I can assure you that the entire world is definitely on our radar screen, and we hope to be on its.

Charlie?

CHARLIE MUNGER: Well yes. I'd say that John Templeton made a fortune going into Japan very early and having the Japanese stocks go up to 30 or 40 times earnings.

And that was a very admirable piece of investment. But, you know, we did all right in the same period. (Applause)

7. CEO compensation is a "joke"

WARREN BUFFETT: Let's go to station 3, please.

AUDIENCE MEMBER: Hi. (Inaudible). I lived most of my life in India, but now in Hoboken, New Jersey.

Warren, first thank you for replying to my letter. I misspelled your name, and where I come from if I did the same thing, the reply would have been, more on, get my name correct before asking a question. So thank you once again.

Investment managers nowadays are benefiting a lot more at the expense of the investors and the (inaudible).

My question is both to you and Charlie is, what do you think is the best structure/fees that managers should have that will give him an opportunity to maximize the time (inaudible) and money (inaudible) over the next few decades and being fair to the profession — the investors and himself? Thank you.

WARREN BUFFETT: Before I answer that, I think I should tell you a very short story. It's a little embarrassing, but I got worried a few years ago about Charlie's hearing.

But I mean, the guy's been my pal for 45 or 50 years. I didn't really want to confront him with this apparent evidence of old age.

So I went to a doctor and I said, "You know, I got this good pal. I don't think he's hearing so well. I really don't want to confront him with it, so what do you suggest I do to check this out?"

He said, "Well, stand across the room, talk in a normal tone of voice, see what happens."

So the next time I was with Charlie, I got across the room and I said, “Charlie, I think we ought to buy General Motors at 30. Do you agree?” Not a flicker. Not a flicker.

I went halfway across the room. I said, “Charlie, I think we ought to buy General Motors at 30. Do you agree?” Nothing changes.

Get right next to him, put my voice in his ear and said, “Charlie, I think we ought to buy General Motors at 30. Do you agree?”

Charlie said, “For the third time, yes.” (Laughter)

So, Charlie, would you like to address that question? (Laughter)

CHARLIE MUNGER: Yes. The question addressed the problem of unfairness of executive compensation and the effects of that unfairness on investors. And now that you know the question, you can solve the problem. (Laughter)

WARREN BUFFETT: Well, Charlie and I have plenty to say about compensation, and some of it makes our stomach turn.

I will say this, though. There are more problems with having the wrong manager than with having the wrong compensation system.

I mean, it is enormously important who runs — you name the company — Proctor & Gamble, Coca-Cola, American Express — and any compensation sins are generally of minor importance compared to the sin of having somebody that’s mediocre running a huge company.

That said, Charlie and I think that compensation has — there’s a natural tendency — because of ratcheting, because of the publicity of what other people get, and because of the lack of intensity in the bargaining process.

I mean, you read about labor contracts, you know, where impasses go on for weeks and where they negotiate till 3 in the morning and, you know, both sides take their case to the press and everything.

I ask you, when have you heard of a comp committee, you know, working until 4 in the morning, declaring an impasse for a week, not being able to make a deal?

It just doesn’t happen because the CEO cares enormously how he or she is paid, and to the comp committee — and they’re doing, perhaps, a little better job now — but it’s basically play money.

And, of course, as I’ve pointed out in the past, I’ve been on 19 boards. They put me on one comp committee and they regretted it subsequently.

You know, they are looking for cocker spaniels with their tails wagging to put on comp committees and, you know, they're not looking for Dobermans.

And I try to pretend I'm a cocker spaniel just to get on one, but it doesn't work. (Laughter)

But it is not — there is not a parity of intensity in the bargaining process. One guy cares enormously and the others don't.

And as Charlie has pointed out in the past, what really drives a lot of this ratcheting impact is envy.

I saw that on Wall Street. You can talk about greed, but if you paid somebody $2 million, they might be quite happy until they found out the guy next to them made 2 million-one, and then they were miserable.

And Charlie has also pointed out that envy, of the seven deadly sins, is probably the dumbest, because if you're envious of somebody, you feel terrible and, you know, the other guy isn't bothered at all.

So all you get out of envy is this miserable grinding in your stomach and all that sort of thing.

You know, compare that to some of the other sins like gluttony, which we are about to engage in. (Laughter)

You know, there's some upside to gluttony. I'm told there's upside to lust, but I'll leave that to Charlie to explain. (Laughter)

But envy, where the hell is the upside, you know? But it does produce this ratcheting effect in pay.

The comp committee sits down. The human relations person comes in. The human relations person knows what the CEO thinks of them is going to determine their future, and the human relations department recommends some comp consultant. The comp consultant knows that his recommendation to other firms is dependent on what these people say about him.

So under those circumstances, you know, can you imagine that it's anything like a fair fight? It's a joke.

Charlie?

CHARLIE MUNGER: Yes. The process is contributed to by a wonderful bunch of people called compensation consultants.

And that reminds me of the old story where the mother asked the child why she told the census taker that the man of the house was in prison for embezzlement. And the child said, “I didn’t want to admit he was a compensation consultant.” (Laughter)

WARREN BUFFETT: We’ll get around to the rest of you later on, too. Don’t feel smug because we haven’t attacked your —

I just had a note handed to me. We do have about 27,000 people here. The overflow rooms are full, and we will have a whole bunch in the exhibition hall as well. (Applause)

8. Corporate jets can be good

WARREN BUFFETT: Let’s go to number 4.

AUDIENCE MEMBER: Yes. Good morning. I’m Rob (inaudible). I’m from the UK, and I traveled from Switzerland to be here today.

This is a question that Charlie will like. There’s a study by David Yermack that companies with private jets underperform their peers by 4 percent.

What is the yardstick that you use to judge whether people are good stewards of money — management?

WARREN BUFFETT: Did he direct that to you, Charlie?

CHARLIE MUNGER: Well, he referred to private jets being a possible indication of executive excess.

I want to report that we’re solidly in favor of private jets. (Laughter)

WARREN BUFFETT: We even pay for them ourselves. (Laughs)

Charlie used to only — he traveled on the bus, and only then when they offered a senior citizen’s discount.

But in recent years I’ve shamed him into getting his own NetJets share — I have my own — I have two NetJets shares.

Actually, Berkshire is significantly better off in a number of its businesses, and including at the corporate level, because we use corporate jets.

I don’t know which deals wouldn’t have been made, but I do know that — excuse me — I would not have had the same enthusiasm for traveling thousands of miles to go after deal after deal and so on.

And I see what it produces at our — a number of our other businesses. So it has been a valuable business tool.

It can be misused like anything else. I remember many, many years ago, we owned stock in a public company, and the CEO stopped off in Omaha on the way to see me, and he explained that they use some grocery chain in Idaho or something to be sort of their test case on all new products.

And they would go visit it because they also had this lodge out there. I mean, you can abuse any system. But properly used, I would say that corporate jets have been a real asset to Berkshire.

I would go back to this comp question just one second, too.

I mean, comp is not rocket science. I mean, we have very simple systems that compensate those people whose pictures you saw during the movie.

They're terrific people. We compensate them based on things that are under their control and that we care about. And we don't make it complicated, and we don't pay them for things that are happening that they have nothing to do with.

I mean, we talked last year about what you do in a commodity business like copper, oil. I mean, if oil goes from $30 to $60 a barrel, there's no reason in the world why oil executives should get paid more for what's going on. They didn't get it to $60 a barrel.

If they have low finding costs, which is under their control, and which is important, I would pay like crazy for that, because a person who finds oil and develops reserves at $6 a barrel is worth a lot more than somebody that finds and develops them at $10 a barrel, assuming they're similar quality reserves.

That is the job that you hire the person for. But the price of oil, they've got nothing to do with it, and to hand them huge checks because oil goes up or to cut them back because it goes down — if oil went down and somebody had the lowest finding costs that was working for us, we would pay them like crazy.

Charlie?

CHARLIE MUNGER: Yeah. Well, I'd like to go back to that corporate jet thing.

If the trappings of power are greatly abused, I think you would find a correlation that some of those companies would be disappointing to investors.

And, you know, man has known for a long time that getting too enchanted with the trappings of power is counterproductive.

The Roman emperor that's most remembered as presiding over a period of great felicity was Marcus Aurelius, who was totally against the trappings of power even though he had them all — he had all the power.

So I think all these things can be abused, and I think the best way to tackle a subject is to provide examples of contrary behavior.

WARREN BUFFETT: Charlie, have a (inaudible) —

CHARLIE MUNGER: I think I'll go over here.

WARREN BUFFETT: This is our idea of corporate benefits up here, lots of fudge, lots of peanut brittle. I recommend the diet to everyone.

9. "Extraordinary" things can happen when people panic

WARREN BUFFETT: Let's go to number 5.

AUDIENCE MEMBER: David Winters, Mountain Lakes, New Jersey.

Could you please explain what you believe the impact and, hopefully benefit, of a credit contraction would be on Berkshire Hathaway, and maybe higher interest rates as well?

WARREN BUFFETT: Well, we do benefit when others suffer.

That doesn't mean we enjoy their suffering, but times of chaos in financial markets, the situation that existed in junk bonds in 2002, the situation that existed in equities, you know, back in 1974.

So I don't think you'll necessarily see a contraction in credit. That — I think most authorities are very reluctant to really step on the brakes. You know, it's too easy to figure out who did step on the brakes.

But you could very well see some exogenous event that starts feeding on itself in markets.

In fact, I think it's much more prone to feed on itself in markets than in most periods in the past, if you really got a shock to the system.

And that would result in a huge widening of credit spreads, cheaper equity prices, all kinds of things that actually are helpful to Berkshire because we usually have at least some money around to do something at times like that.

There will be periods like that. If you go back 30 or 40 years, when credit contracted, it just really wasn't available.

Charlie and I went through a couple periods like that. We were trying to buy a bank in Chicago 40 — 40 or so years ago, and the only people that would lend it to us in the world — because banks weren't lending for acquisitions — we found some people over in Kuwait who said they'd lend it to us in dinars.

And we thought, you know, it might be fine to borrow it, but when it came time to pay them back the dinars, they would probably be telling us what the dinar was worth, so we passed on that particular deal.

But you had real credit contractions then. And, of course, the whole reason — not — I would say the major reason the Federal Reserve was established was the huge contractions in credit that were felt, particularly here in places like the Midwest where they were dependent on correspondent banks in the larger cities, and when those banks had problems, the banks here got shut off.

And we really needed a system that would not have that happen except by design. And I would say the Fed, by design, is probably not going to produce any credit crunches.

Charlie?

CHARLIE MUNGER: Well, the last time we had that credit contraction, we made, what, a quick 3 or $4 billion? And we were acting with vigor.

The whole investment world is more and more competitive, and if you talk about a real credit contraction, which gums up the whole civilization, no one would welcome that.

And I would predict that if we ever had a really big credit contraction after a period like the one we're in with all this excess, which is causing so much envy and resentment, that we would get legislation that most of us wouldn't like.

WARREN BUFFETT: There's a book by Jonathan Alter that came out about a year ago that talks about the first hundred days after [President Franklin] Roosevelt took over [in 1933], and by the nature of the book it tells about some of the days before that, too.

But if you want to get an example of — I mean, this country was close to the brink at that point, and, basically, Roosevelt got anything passed he wanted, just as fast as they could write the bills there, initially. And that was a good thing, you know, with banks closing and people dealing in scrip and that sort of thing.

So nobody wants that to come back, and we've learned a lot more about that sort of thing since the Great Depression.

I don't think you'll see an orchestrated credit contraction.

Now, you had in 1998, in the fall, when Long-Term Capital Management got in trouble, you had a seize up of the credit markets.

It wasn't an orchestrated by the Fed-type contraction. You simply had people panicked about even the most — even the safest of instruments and credit spreads doing things that they'd never done before.

And that's rather an interesting example, because that was not a hundred years ago. It was less than ten years ago. You had all kinds of people with high IQs in Wall Street. You had all kinds of people with cash available.

And you had some really extraordinary things happen in credit markets simply because people panicked and they felt other people were going to panic. And you get these second- and third-degree type reactions in markets.

We will see that sort of thing again. It won't be the same but, you know, as Mark Twain said, history doesn't repeat itself but it rhymes. And we will have something that rhymes with 1998.

10. Munger reminds people "too much of John Adams"

WARREN BUFFETT: Number 6.

AUDIENCE MEMBER: Hello. My name is Andrew Paullin (PH), a former Michigander now from Woburn, Massachusetts.

My question is for Charlie, though Warren, please add your thoughts as well.

Charlie, you were quoted in "Poor Charlie's Almanack" as saying, quote, "Ben Franklin was a very good ambassador and whatever was wrong with him from John Adams' point of view probably helped him with the French," end quote.

If you are willing, I'm curious to hear your additional thoughts regarding John Adams and his wife, Abigail Adams.

CHARLIE MUNGER: Well, of course, they were wonderful people, both of them. And —

WARREN BUFFETT: Did you know them personally, Charlie? (Laughter)

CHARLIE MUNGER: No. No.

But if you wanted to have a really jolly evening, I would have taken Franklin every time. And the French love Franklin.

I think I remind many people too much of John Adams and too little of Ben Franklin. (Laughter)

WARREN BUFFETT: He does pretty well in respect to Ben Franklin, too

11. Corporate profits can't stay at record highs

WARREN BUFFETT: Let's go to number 7.

AUDIENCE MEMBER: My name Takashi Ito (PH) from Japan.

In addition to the global excess liquidity, corporate profits are very high compared to the share of labor. Does that make it extra challenging for you to find investment opportunities? Thank you.

WARREN BUFFETT: Yes, corporate profits in the United States are — except for just a very few years — are record, in terms of GDP.

I've been amazed that after being in a range between 4 and 6 percent of GDP, they have jumped upward. And — (coughs) — you would not think this would be sustainable over time.

Excuse me just one second. Charlie, want to talk for a second? (Laughter)

You've just heard him on the subject.

But corporate profits, when they get up to 8 percent plus of GDP, you know, that is very high. And so far it has caused no reaction.

One reaction could be higher corporate taxes. You have lots and lots of businesses in this country earning 20 or 25 percent on tangible equity in a world where long-term bond rates are 4 3/4 percent — government bond rates.

That's extraordinary. If you'd read an economics book 40 years ago and it talked about that kind of a situation persisting, you wouldn't have found a book like that.

I mean, that does not make sense under pure economic theory, but it's been occurring for some period of time and, as a matter of fact, it's gotten more extreme.

Corporate profits continue to rise as a percentage of GDP. That means somebody else's share of GDP is going down.

And you're quite correct that the labor component of GDP has actually fallen fairly significantly.

Whether that becomes a political issue — maybe in the next campaign — whether it becomes something that Congress does something about — Congress has the power to change that ratio very quickly.

Corporate tax rates not that long ago were 52 percent and now they're 35 percent and a whole lot of companies get by with paying 20 percent or less.

So I would say that, at the moment, corporate America is kind of living in the best of all worlds, and history has shown that those conditions don't persist indefinitely.

What brings it to an end, when it happens, I don't know. But I would not expect corporate profits to be eight-and-a-fraction percent of GDP, on average, in the future.

Charlie?

CHARLIE MUNGER: Yeah. Of course, a lot of the profits are not in the manufacturing sector or the retailing sector, either. A lot of them are in this financial sector.

And so we've had a huge flow of profit to banks and investment banks and investment management groups of all kinds, including various kinds of private equity.

And that has, I think, no precedent. I don't think it's ever been as extreme as it is now. Do you agree with that?

WARREN BUFFETT: Yeah. And Charlie and I would have said 20 years ago — and we've done things in banking from time to time, including owning a bank.

But if you had said to us, in a world of 4 3/4 percent long-term governments, will one major bank after another be earning more than 20 percent on tangible equity, dealing in what is basically a commodity — money — we would have said that that condition just wouldn't persist.

Now, part of that is because the banks are geared up more. So if you earn 1 1/2 percent on deposits, you know, and you have — or 1 1/2 percent on assets — and you have assets of 15 times equity, you're going to be earning 22 1/2 percent on equity. And by gearing up more, it does improve the return on equity.

But you still would think that would be self-neutralizing. You'd think that after one guy did it, another guy would do it, and then instead of earning 1 1/2 percent on assets, you'd earn, you know, 9/10 of a percent or 1 percent on assets, but it hasn't happened. It's gone on for a long time.

And, you know, we are living — I'd have to look at a chart on it, but there may have been a year or two post-World War II, but I don't think that — I would bet there haven't been more than two or three years in the last 75 when corporate profits, as a percentage of GDP, have been this high.

CHARLIE MUNGER: Some of this has come from consumer credit, which I think has been pushed to extremes that we've never before seen in the history of this country.

Some other countries that pushed consumer credit very hard had enormous collapses. Korea had one, for instance, that caused chaos for, what, two or three years? Maybe longer. So I don't think this is a time to just swing for the fences.

WARREN BUFFETT: And the chaos in 1997 and 1998 when the IMF stepped in, I mean, it was bad in Korea for a while.

It produced some of the most ridiculously low stock prices that I've ever seen in my life.

In fact, I mean, you could go back to 1932 in this country and you wouldn't have seen things any cheaper. And in the meantime, the companies rebuilt their balance sheets and their earning power.

So things do turn around in financial markets. You will — if you're young enough, you will see everything and then some.

I mention in the annual report, in looking for an investment manager to succeed me, that we care enormously about finding somebody who's not cognizant of everything risky that's already happened, but that also can envision things that have not yet been experienced.

That's our job in the insurance business, and it's our job in the investment business.

And there are a lot of people that just don't seem to — they're not — they're very smart, but they just — they're just not wired to think about troubles that they haven't actually witnessed before.

But, you know, that's the problem Noah had. You know, the first 40 days, it was tough sledding for Noah, but he got revenge eventually.

12. We welcome short-sellers betting against us

WARREN BUFFETT: Let's go to number 8.

AUDIENCE MEMBER: Hello. My name is Brian Bowalk (PH), Fremont, Nebraska.

With the growing number of fail-to-deliver trades happening in our stock markets, including investors' cash accounts, Roth IRAs, and other retirement accounts, it seems like the problem is getting worse.

With some companies being on the Regulation SHO list for hundreds of days, what can be done to make Wall Street deliver stock that they have sold but never delivered? Thank you.

WARREN BUFFETT: Yeah. The so-called fail to deliver and naked shorting, I think is the question. I don't know exact — I've never been in a position where I've asked a broker from whom I bought stock to give me the certificate and have them decline it for any period of time.

I would think that you might have some action against them. But I've never — I do not see the problem at all with people shorting stocks.

I mean, I would welcome people shorting Berkshire Hathaway. I mean, it — if you own stock, and they need to borrow from you, you can get some extra income from your stock. And the one sure buyer of your stock eventually is somebody who shorted it. I mean, that guy is going to buy it someday.

And I have no problem with shorts. If there's some kind of a game that's played — and I've read about it — I've never seen it happen to anything that we've owned.

Like I say, if anybody wants to naked short Berkshire Hathaway, they can do it until the cows come home, and we'll be happy to. We'll have a special meeting for them.

But — and I would say this: the shorts generally have the tougher time of it in this world. I mean, there are more people bowling stocks for phony reasons than there are burying stocks for phony reasons.

So I do not see shorts as any great threat to the world. If enough people shorted Berkshire stock, they would have to borrow it and they would pay you to borrow your stock and that's found money.

We did that on USG. When USG got hammered after they went into bankruptcy — or maybe just before — one large brokerage firm came to us and they wanted us to lend them millions of shares and they paid us a lot of money.

And we happily lent them the stock. We wished they borrowed more. In fact, we insisted that they borrow it for a given length of time just so that we could collect a large premium.

And I don't know how many — I'd have to look it up but — I don't know whether it's in the hundred thousands or, maybe, low millions, but we were better off.

And they didn't do too well shorting USG at $4 a share either, but it was immaterial to us.

So I do not regard — I do not regard shorts as — it's a tough way to make a living.

It's very easy to spot phony stocks and promoted stocks, but it's very hard to tell when that will turn around.

And somebody that's promoted a stock to five times what it's worth, may very well promote it to ten times what it's worth, and if you're short, that can get very painful.

Charlie, do you have any thoughts on shorting?

CHARLIE MUNGER: Well, not on shorting. But those delays in delivering sometimes reflect a tremendous slop in the clearance process, and it is not good for a civilization to have huge slop in the clearance processes for its security trades.

That would be sort of like having a lot of slop in the management of your atomic power plants. It's not a good idea to have slop that causes a lot of financial exposure that people are ignoring.

WARREN BUFFETT: Charlie, reach back into your law practice. If I buy a thousand shares of General Motors, and my broker doesn't deliver it to me, and I ask him to deliver it and he doesn't deliver it to me after a week or two weeks or three weeks, what's the situation?

CHARLIE MUNGER: Well, if you're a private customer, you may wait a while. And a lot of the other trades — the clearance systems do cause people to put up collateral and so on.

But a lot of — take derivative trading. There's a lot of slop in derivative trading. And the clearance problem would be awful if a lot of people wanted to do something at once.

WARREN BUFFETT: But if I demand delivery after three weeks, can I walk into court and say I want my stock, I've given you the money?

CHARLIE MUNGER: I don't think there's any court that can issue you a stock certificate just because you want it.

No, the clearance system is failing you. Why, you can scream a lot, and you may have some ultimate remedy, but there's —

WARREN BUFFETT: I'll get somebody else to represent me. (Laughter)

13. "Gambling is a tax on ignorance"

WARREN BUFFETT: Number 9.

AUDIENCE MEMBER: Hello, hello. My name is Johann Fortenberg (PH) from Hanover, Germany.

Do you think gambling companies will have a great future? Thank you.

WARREN BUFFETT: What kind of company?

CHARLIE MUNGER: Gambling companies.

WARREN BUFFETT: Gambling companies. Gambling companies will have a terrific future, if they're legal.

You know, which ones or anything, I don't know anything about that.

But the desire of people to gamble and to gamble in stocks, incidentally, too. Day trading, I would say, very often was — came very close to gambling as defined —.

But people like to gamble, you know. I mean, it's a — if the Super Bowl is on — better yet, if a terribly boring football game is on but you don't have anything to do, and you're sitting there with somebody else, you're probably going to enjoy the game more if you bet a few bucks on it one way or the other.

As you know, I mean, we insure hurricanes, so I watch the Weather Channel. But that's a — (Laughter)

It can be exciting. (Laughter)

But people — the human propensity to gamble is huge. Now, when it was legalized only in — pretty much in Nevada — you had to go to some distance, or break some laws, to do any serious gambling.

But as the states learned to — you know, what a great source of revenue it was, they gradually made it easier and easier and easier for people to gamble.

And, believe me, the easier it's made, the more people will gamble.

I mean, when I was — my children are here, and 40 years ago I bought a slot machine and I put it up on our third floor, and I could give me kids any allowance they wanted as long as it was in dimes. I mean, I had it all back by nightfall. (Laughter)

I thought it would be a good lesson for them. Now they weren't going to Las Vegas to do it, but believe me when it was on the third floor, they could find it, you know.

And my payout ratio was terrible, too, but that's the kind of father I was. (Laughter)

The — but gambling, you know, people are always going to want to do it.

And for that reason, I particularly think that access — you know, in terms of friendly gambling or anything like that, I'm not a prude about it, but I do think that to quite an extent, gambling is a tax on ignorance.

I mean, if you want to tax the ignorant, people who will do things with the odds against them, you know, you just put it in and guys like me don't have to pay taxes.

I really don't — I find that — I find it kind of socially revolting when a government preys on the weaknesses of its citizenry rather than acts to serve them. And, believe me, when a government — (Applause)

WARREN BUFFETT: When a government makes it easy for people to take their Social Security checks and start pulling handles or participating in lotteries or whatever it may be, it's a pretty cynical act.

It works. It's a pretty cynical act. And it relieves taxes on those, you know, who don't fall for those or who don't — who aren't dreaming about having a car instead of actually having a car or dreaming about a color TV instead of having one.

So it's not government at its best, and I think other things flow from that over time, too.

Charlie?

CHARLIE MUNGER: You know, I would argue that the gambling casinos use clever psychological tricks to cause people to hurt themselves.

There is undoubtedly a lot of harmless amusement in the casinos, but there's also a lot of grievous injury that is deliberately caused by the casinos.

It's a dirty business, and I don't think you'll find a casino soon in Berkshire Hathaway. (Applause)

14. How to be a better investor

WARREN BUFFETT: Number 10, please.

AUDIENCE MEMBER: Good morning. I'm Thomas Gamay (PH) from San Francisco. I'm 17-years-old and this is my tenth consecutive annual meeting. (Applause)

WARREN BUFFETT: You must be a Ph.D. by now at least.

AUDIENCE MEMBER: Mr. Buffett and Mr. Munger, I'm curious about what you think is the best way to become a better investor.

Should I get an MBA? Get more work experience? Read more Charlie Munger almanacs or merely is it genetic and out of my hands?

WARREN BUFFETT: Well, I think you should read everything you can.

I can tell you in my own case, I think by the time I was — well, I know by the time I was ten — I'd read every book in the Omaha Public Library that had anything to do with investing, and many of them I'd read twice.

So I don't think there's anything like reading, and not just as limited to investing at all. But you've just got to fill up your mind with various competing thoughts and sort them out as to what really makes sense over time.

And then once you've done a lot of that, I think you have to jump in the water, because investing on paper and doing — you know, and investing with real money, you know, is like the difference between reading a romance novel and doing something else. (Laughter)

There is nothing like actually having a little experience in investing. And you soon find out whether you like it. If you like it, if it turns you on, you know, you're probably going to do well on it.

And the earlier you start, the better, in terms of reading. But, you know, I read a book at age 19 that formed my framework for thinking about investments ever since.

I mean, what I'm doing today at 76 is running things through the same thought pattern that I got from a book I read when I was 19.

And I read all the other books, too, but if you — and you have to read a lot of them to know which ones really do jump out at you and which ideas jump out at you over time.

So I would say that read and then, on a small scale in a way that can't hurt you financially, do some of it yourself.

Charlie?

CHARLIE MUNGER: Well, Sandy Gottesman, who is a Berkshire director, runs a large and successful investment operation, and you can tell what he thinks causes people to learn to be good investors by noticing his employment practices.

When a young man comes to Sandy, he asks a very simple question, no matter how young the man is. He says, "What do you own and why do you own it?" And if you haven't been interested enough in the subject to have that involvement already, why, he'd rather you go somewhere else.

WARREN BUFFETT: Yeah. It's very — that whole idea that you own a business, you know, is vital to the investment process.

If you were going to buy a farm, you'd say, I'm buying this 160-acre farm because I expect that the farm will produce 120 bushels an acre of corn or 45 bushels an acre of soybeans and I can buy — you know, you go through the whole process.

It'd be a quantitative decision and it would be based on pretty solid stuff. It would not be based on, you know, what you saw on television that day. It would not be based on, you know, what your neighbor said to you or anything of the sort.

It's the same thing with stocks. I used to always recommend to my students that they take a yellow pad like this and if they're buying a hundred shares of General Motors at 30 and General Motors has whatever it has out, 600 million shares or a little less, that they say, "I'm going to buy the General Motors company for $18 billion, and here's why."

And if they can't give a good essay on that subject, they've got no business buying 100 shares or ten shares or one share at $30 per share because they are not subjecting it to business tests.

And to get in the habit of thinking that way, you know, Sandy would have followed it up with the questions, based on how you answered the first two questions, that made you defend exactly why you thought that business was cheap at the price at which you are buying it. And any other answer, you'd flunk.

15. When you don't need a huge margin of safety

WARREN BUFFETT: Number 11.

AUDIENCE MEMBER: Mr. Buffett and Mr. Munger, I'm Marc Rabinov from Melbourne, Australia.

I just wanted to ask you, how do you judge the right margin of safety to use when investing in various common stocks?

For example, in a dominant, long-standing, stable business, would you demand a 10 percent margin of safety and, if so, how would you increase this in a weaker business? Thank you.

WARREN BUFFETT: We favor the businesses where we really think we know the answer.

And, therefore, if a business gets to the point where we think the industry in which it operates, the competitive position or anything is so chancy that we can't really come up with a figure, we don't really try to compensate for that sort of thing by having some extra large margin of safety.

We really want to try to go on to something that we understand better. So if we buy something like — See's Candy as a business or Coca-Cola as a stock, we don't think we need a huge margin

of safety because we don't think we're going to be wrong about our assumptions in any material way.

What we really want to do is buy a business that's a great business, which means that business is going to earn a high return on capital employed for a very long period of time, and where we think the management will treat us right.

We don't have to mark those down a lot when we find those factors. We'd love to find them when they're selling at 40 cents on the dollar but we will buy those as much closer to a dollar on the dollar. We don't like to pay a dollar on the dollar, but we'll pay something close.

And if we really get to something — you know, when we see a great business, it's like if you see some — somebody walk in the door, you don't know whether they weigh 300 pounds or 325 pounds. You still know they're fat, right, you know?

And so if we see something we know it's fat, financially, we don't worry about being precise. And if we can come in, in that particular example, at the equivalent of 270 pounds, we'll feel good.

But if we find something where the competitive aspects are — it's just the nature of the business that you really can't see out five or 10 or 20 years because that's what investing is, is seeing out.

You don't get paid for what's already happened. You only get paid for what's going to happen in the future. The past is only useful to you in the extent to which it gives you insights into the future, and sometimes the past doesn't give you any insights into the future.

And in other cases, like the stable business that you postulated, it probably does give you a pretty good guideline as to what's going to happen in the future, and you don't need a huge margin of safety.

You should have something that — you always should feel you're getting a little more than what it's worth, and there are times when we've been able to buy wonderful businesses at a quarter of what they're worth, but we haven't seen those — well, we saw it in Korea here recently — but you don't see those sort of things very often.

And does that mean you should sit around and hope they come back for 10 or — you know, wait 10 or 15 years? That's not the way we do it. If we can buy good businesses at a reasonable valuation, we're going to keep doing it.

Charlie?

CHARLIE MUNGER: Yeah. You're — that margin of safety concept boils down to getting more value than you're paying. And that value can exist in a lot of different forms.

If you're paid four-to-one on something that's an even money proposition, why, that's a value proposition, too.

It's high school algebra. And people who don't know how to use high school algebra should take up some other activity.

16. Health care is too tough for Berkshire

WARREN BUFFETT: Number 12.

AUDIENCE MEMBER: — morning. Good morning.

WARREN BUFFETT: Morning.

AUDIENCE MEMBER: My name is Mike Klein, and I'm a general surgeon from Salinas, California.

Given your resources and experience in underwriting insurance, do you have any thoughts of entering into, or helping to solve, our health care mess?

Time is right for a new approach with Berkshire's clarity brought to the formula. Let's acknowledge the stakes are huge with implication for our economy and our future as a country.

CHARLIE MUNGER: Let me try that one. It's too tough.

WARREN BUFFETT: I would —

CHARLIE MUNGER: Warren and I can't solve that.

WARREN BUFFETT: Yeah, we can't solve that one.

We try to look for easy problems because those are the ones we find we have the answers for. And you can do that in investments. We don't really try tough things.

Now, sometimes life hands you a problem, not in the financial area in our case, usually, but it will hand you a problem that is very tough and that you have to wrestle with.

But we don't go around looking for tough problems. I would say this: we do very, very little in health insurance. You know, if we were to have — if we were looking for a solution through the private sector, we would be looking for something with very, very low distribution costs.

I mean, you do not want a lot of the revenue soaked up in frictional costs between the benefits paid and the premiums received.

I don't know how to do that, and I haven't seen anybody else that's very good at doing it, and you can say if you're paying close to 15 percent of GDP for health costs, you know, somebody ought to be able to figure out something, but I haven't heard it.

Maybe we'll hear it in the upcoming political campaign but Charlie's views reflect mine at the present.

17. Munger on what's driven Berkshire's "extreme" success

WARREN BUFFETT: Now we're going to go to the grand ballroom. We have these two overflow rooms that are full — or more or less full — and the grand ballroom is number. 13. Would they come in, please?

AUDIENCE MEMBER: This is Phil McCall (PH) from Connecticut.

I wondered if you could comment on a subject I don't think you like to talk about very much, which is intrinsic value, and the evolution over the past 10 or 12 years of going to — off and on — but giving us investments and then giving us the operating income and suggesting that might be a good guide to us.

I find it extremely helpful. I'm not sure other people do when looking out the 20 years you're talking about, looking ahead on both those two parts. Any comments you might have, I'd surely appreciate.

WARREN BUFFETT: Yeah. Well, the intrinsic value of Berkshire, like any other businesses, is based on the future amount of cash that can be expected to be delivered by the business between now and judgment day, discounted back at the proper rate.

Now, that's pretty nebulous. Another way of looking at it is to try and figure out the value of the businesses we own presently, and we try to give you the information that will enable you to make a reasonably close estimate at that.

We own lots of marketable securities. It's probably safe to say that they're worth more or less what they are carried for. And then we own a number of operating businesses, and we try to give you the figures on those businesses that are the figures that we use in making our own judgments about the value of those businesses.

Now, that tells you what we have today and more or less what it's worth. But since Berkshire retains all of its earnings, it becomes very important to evaluate what will be done with those earnings over time.

I mean, it is not only a question what the present businesses are worth. It's a judgment on the efficiency or the effectiveness with which retained earnings will be used.

If you had looked at the intrinsic value of Berkshire in 1965, we had a textile business that was probably worth about $12 a share. But that was not the only part of the equation, because we intended to use any cash generated to try and buy into better businesses than we had, and we were fortunate to be able to buy in the insurance business in 1967 and build on that.

So it was not only a combination of the business we had, but the skill with which retained earnings would be used, that determined what the present value actually should have been at Berkshire going back that far.

It's the same situation today. We will put to work billions and billions of dollars this year and next year and the year after. If we put that to work effectively, each dollar has a greater present value than a dollar has simply in cash or distributed. If we do ineffectively, it has a value of something less.

The businesses today, you know, we have whatever the figure is in the annual report — roughly $80,000 in marketable securities.

If our insurance business breaks even, that $80,000 is free to us, in terms of using it. And we have a group of operating businesses and we show their earnings in the report and we're going to try to add to those and they'll try to add to their earnings.

But if Charlie and I were each right now to write down on a piece of paper what we think the intrinsic value of Berkshire is, our figures would not be the same. They'd be reasonably close.

And I think with that, I'll turn it over to Charlie.

CHARLIE MUNGER: Yeah. What's hard to judge at Berkshire is the likelihood that you'll have anything like the past to look forward to in the future.

Berkshire has gotten very extreme, in terms of investment results. In fact, it's gotten so extreme that it's hard to think of another similar precedent in the history of the world.

And the balance sheet is gross, considering the small beginnings of the place. Now, what on earth has caused this extreme record to go on for such a very long time?

I would argue that the young man who was reading everything he could read when he was 10-years-old became a learning machine, and he got a lot of power early, and then he got a very long run when he kept learning.

If Warren had not been learning all the while, I'm telling you having watched the process closely, the record would be a pale shadow of what it is. And Warren has improved since he passed the retirement age of man.

In other words, in this field, at least, you can improve when you're old.

Now, most people don't even try and create that kind of a record. They pass power from one 65-year-old to one 59-year-old and then do it over and over again. But you get an enormous advantage from practice in this field.

And so what happened accidentally in the case of Warren has helped you shareholders greatly because you had this long run with power extremely concentrated, and with the man holding the power being a ferocious learner.

Our system ought to be more copied than it is. (Applause)

This idea of passing the power from one old codger to another, in a settled way, is not necessarily the right system at all.

WARREN BUFFETT: We have a very strong culture now of rationality, of being owner-oriented, that will go on long after I'm not around. And we have a talent on the operating side in place to do a lot of wonderful things over time.

We will need, in capital allocation, to keep doing intelligent things. We won't get to do brilliant things because you don't get to do brilliant things with the kind of sums we're talking about. Maybe once in a blue moon or something, you know, you'll get a chance.

But we will need somebody that never does — basically doesn't do any dumb things, and occasionally does something that's reasonably good. That can be done.

And we have — we're on that road already. It does not — fitting into this organization as an investment officer or a capital allocator, you're getting in the right vehicle. It has the right standards. It will reject ideas that really are irrational.

I've been on a lot of boards. Charlie's been on a lot of boards. You would be amazed at the number of things that are responding to "animal spirits" rather than to rationality that take place. And we have our animal spirits but we devote them to other areas.

18. "Deficient" auditing of derivatives will cause problems

WARREN BUFFETT: Let's go on to number 14. That's in — that's in the junior ballroom.

AUDIENCE MEMBER: Yes. Hi, Mr. Buffett and Mr. Munger. This is Whitney Tilson, a shareholder from New York.

For many years both of you have been warning about the dangers of derivatives, at one point calling them "financial weapons of mass destruction."

Yet every year, tens of trillions of dollars of derivatives are bought and sold. It just seems to be getting bigger and bigger and almost certainly improperly accounted for.

And so I was wondering if you could comment, and, specifically, if you have any thoughts on how much longer this might go on.

Do you see anything imminent that could derail this ever inflating bubble? What might trigger it? And who should be doing what to try and mitigate this looming danger?

WARREN BUFFETT: Well, we've tried to do a little to mitigate it ourselves by talking about it, but the — you're right, the — and it isn't the derivative itself. I mean, there's nothing evil about a derivative instrument.

As I mentioned, we have 60-some of them at Berkshire, and on Monday I'll go over with the directors — I'll go over all 60-some and, believe me, we'll make money out of those particular instruments.

But they — usage of them on an expanding basis, more and more imaginative ways of using them, introduces, essentially, more and more leverage into the system.

And it's an invisible — or largely invisible — sort of leverage. If you go back to the 1920s, after the crash, the United States government held hearings.

They decided that leverage — margin, in those days, as they called it — leverage contributed to, perhaps, the crash itself and certainly to the extent of the crash. And it was like pouring gasoline on a fire was — when people's holdings got tripped, you know, when stocks went down 10 percent people had to sell, another 10 percent, more people had to sell and so on.

Leverage was regarded as dangerous and the United States government empowered the Federal Reserve to regulate margin requirements, regulate leverage, and that was taken very seriously.

And for decades it was a source of real attention. I mean, if you went to a bank and tried to borrow money on a stock, they made you sign certain papers as to — that you weren't in violation of the margin requirements, and they policed it.

And it was taken quite seriously when the Fed increased or decreased margin requirements. It was a signal of how they felt about the level of speculation.

Well, the introduction of derivatives and index futures, all that sort of thing, has just totally made any regulation of margin requirements a joke.

They still exist and, you know, it's an anachronism.

So I believe — I think Charlie probably agrees with me — that we may not know where, exactly, the danger begins and where — and at what point it becomes a superdanger and so on.

We certainly don't know what will end it, precisely. We don't know when it will end, precisely.

But we probably — at least I believe — that it will go on and increase to the point where at some point there will be some very unpleasant things happen in markets because of it.

You saw one example of what can happen under forced sales back in October 19, 1987, when you had so-called portfolio insurance.

Now, portfolio insurance — and you ought to go back and read the literature for the couple years preceding that. I mean, this was something that came out of academia and it was regarded as a great advance in financial theories and everything.

It was a joke. It was a bunch of stop-loss orders which, you know, go back 150 years or something, except that they were done automatically and in large scale by institutions and they were merchandise.

People paid a lot of money to people to teach them how to put in a stop-loss order. And what happened, of course, was that if you have a whole series of stop-loss orders by very big institutions, you are pouring gasoline on fire.

And when October 19th came along, you had a 22 percent shrink in the value of American business, caused, essentially, by a doomsday machine. A dead hand was selling as each level got hit. And three weeks earlier, you know, people were proclaiming the beauty of this.

Well, that is nothing compared — it was a formal arrangement to have these — this dynamic hedging or portfolio insurance — sell things.

But you have the same thing existing when you have fund operators operating with billions in aggregate, trillions of dollars, leveraged, who will respond to the same stimulus.

They have what we would call a "crowded trade," but they don't know it. It's not a formal crowded trade.

It's just that they're all ready to sell if a certain given signal or a certain given activity occurs. And when you get that, coupled with extreme leverage which derivatives allow, you will someday get a very, very chaotic situation.

I have no idea when. I have no idea what the exogenous factor — I didn't know that shooting some archduke, you know, would start World War I, and I have no idea what will cause this kind of a thing, but it will happen.

Charlie?

CHARLIE MUNGER: Yeah. And, of course, the accounting being deficient enormously contributes to the risks.

If you get paid enormous bonuses based on reporting profits that don't exist, you're going to keep doing whatever causes those phony profits to keep appearing on the books.

And what makes that so difficult is that most of the accounting profession doesn't even recognize how stupidly it is behaving.

And one of the people in charge of accounting standards said to me, "Well, this is better, this derivative accounting, because it's mark-to-market, and don't we want current information?"

And I said, "Yes. But if you mark-to-model, and you create the models, and your accountants trust your models, and you can just report whatever profit you want as long as you keep expanding the positions bigger and bigger and bigger, the way human nature is, that will cause terrible results and terrible behavior."

And this person said to me, "Well, you just don't understand accounting." (Laughter.)

WARREN BUFFETT: If four years ago, or whenever it was, when we started to liquidate Gen Re's portfolio, we had reserves set up for in the hundreds and millions and all sorts of things.

And our auditor — and I emphasize any other of the Big Four auditors absolutely would have attested to the fact that our stuff was mark-to-market.

You know, I just wish I'd sold the portfolio to the auditors that day. (Laughs) I'd be 400 million better off.

So it's a real problem. Now there's one thing that's really quite interesting to me. If I owe you, on my dry cleaning bill or something, $15, and they're auditing the dry cleaners, they check with me and they find out that I owe you $15 and it's all fine.

If they're auditing me, they find out I owe the dry cleaner 15 bucks. There are only four big auditing firms, you know, basically in this country.

And I will — so in many cases, if they're auditing my side of the derivative transaction, you know, what I'm valuing it at, the same firm may often be valuing — or attesting to the value of the mark by the person on the other side of the contract.

I will guarantee you that if you add up the marks on both sides, they don't equate out to zero.

We have 60-some contracts, and I will bet that people are valuing them differently on the other side than we value themselves, and it won't be to the disadvantage of the trader on the other side.

I don't get paid based on how ours are valued, so I have no reason to want to game the system. But there are people out on the other side that do have reasons to game the system.

So if I'm valuing some contract at plus a million dollars for Berkshire, that contract on the other side, it's just one piece of paper, should be valued at a minus 1 million by somebody else.

But I think you probably have cases — and this is — I'm not talking about our auditors, I'm talking about all four of the firms — but they have many cases where they are attesting to values that — of the exact same piece of paper — where the numbers are widely different on both sides.

Do you have any thoughts on that, Charlie?

CHARLIE MUNGER: Well, I — as sure as God made little green apples, this is going to cause a lot of trouble in due course.

As long as it keeps expanding and ballooning and so on and the convulsions are minor, it can just go on and on. But eventually there will be a big denouement.

19. Dangers of short-term investing and advanced mathematics

WARREN BUFFETT: Let's go back to number one.

AUDIENCE MEMBER: Hi. I'm Stanley Ku from Hong Kong. My question is about a proliferation of short-term mindset to investing.

As more and more money is being placed under absolute return mandate, these managers, as you just said, responded the same response, and tried to trade issues.

So with credit spread on — I should say, risk premium — on various products declining across the board and correlation across markets increasing, can we read into it and say what is healthy or not healthy for the economy or the markets? And can we arguably say the portfolio insurance dynamics is already in place today?

WARREN BUFFETT: Well, I think you put your finger on it. And, you know, we do think it's unhealthy.

Obviously, if you take — and no way of precisely measuring this, but I'm quite certain I'm right — if you take the degree to which, say, either bonds or stocks, the percentage of them that are held by people who could change their minds tomorrow morning based on a given stimulus, whether it be something the Fed does or whether it be some kind of an accident in financial markets, the percentage is far higher.

There is an electronic herd of people around the world managing huge amounts of money who think that a decision on everything in their portfolio should be made, basically, daily or hourly or by the minute.

And that has increased turnover on the New York Stock Exchange — and I don't know the exact figures — but I think it was down around the 15 or 20 percent range 40 years ago and it's increased it to a hundred percent, I believe, plus, now.

So — and certainly in the bond market, the turnover of bonds has increased dramatically. People used to buy bonds to own them and they'd buy bonds to trade them.

And there's nothing evil about that, but it just means that the participants are playing a different game, and that different game can have different consequences than in a buy-and-hold environment.

And I do think it means that if you're trying to beat the other fellow on a day-to-day basis, you're watching news events very carefully or watching the other fellow very carefully.

If you think he's about to hit that key, you know, you're going to try to hit the key faster, if that's the game you're playing and if you're getting measured on results weekly.

So I think that you describe the conditions that will lead to a result that we've been talking about expecting at some point.

It's not new to markets, though. I mean, markets will do crazy things over time. Every time — when Charlie and I were at Salomon, they'd always talk to us about five sigma events or six sigma events, and that's fine if you're talking about flipping coins, but it doesn't mean anything when you get human behavior involved.

And people do things that — and intelligent people do things — very intelligent, educated people do things — that are totally irrational, and they do them en masse.

And you saw it in 1998. You saw it in 2002. And you'll see it again. And you'll see it — it's more likely to happen when you have people trying to beat currency, bond, stock markets, day by day.

It's — I think it's a fool's game. But — you know, it may be what's required to attract money.

When I set up my partnership, I told the partners, you know, you'll hear from me once a year.

And I even thought — in 1962 I put the partnerships together and in May of 1962 the market got terrible — and I actually thought of sending all my partners a letter, and then sending it down to Brazil to have it reshipped back up, just to sort of test them out, but — how they felt about things.

But, you know, I had a few with bad hearts. I decided it wasn't worthwhile.

Charlie?

CHARLIE MUNGER: Yeah. When people talk about sigmas, in terms of disaster potentialities in markets, they're all crazy.

They got the idea that bad results in markets would be predicted by Gaussian distributions. And the way they decided on that outcome was it made everything so easy to compute.

They don't follow Gaussian distributions. You have to believe in the Tooth Fairy to believe that.

And the disasters are bigger and more irritating than [German mathematician Carl Friedrich] Gauss would have predicted.

WARREN BUFFETT: It was easier to teach as well.

CHARLIE MUNGER: It's easier to teach, too.

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: I once asked a distinguished medical school professor why he was still doing an obsolete procedure, and he said, "It's so wonderful to teach." (Laughter)

WARREN BUFFETT: There's more of that in finance departments than you might think.

It's very discouraging to learn advanced mathematics and, you know, how to do things that none but the priesthood can do in your field, and then find out it doesn't have any meaning, you know.

And what you do when confronted with that knowledge, after you've invested these years to get your Ph.D., you know, and you've maybe written a textbook and a paper or two, having a revelation that that stuff has no utility at all, and really has counter-utility, I'm not sure, you know, too many people can handle it well. And I think they just generally keep on teaching.

20. Quantitative approach to intrinsic value and investments

WARREN BUFFETT: Number 2.

AUDIENCE MEMBER: Hello. Burkhardt Whittick (PH) from Munich in Germany.

I would like to get some more transparency on how you make investment decisions, particularly how you determine intrinsic value.

You mentioned that the theoretically correct method is discounted cash flow, but at the same time you point out the inherent difficulties of the methodology.

From other books, I see that you use multiples on operating earnings, or (inaudible) multiples. Your [former] daughter [in law] Mary, in one of her books, describes another methodology where you apply compounding economics to the value of the equity.

Could you give us a bit more transparency which quantitative approach you use and how many years out you try to quantify the results of the investments you're interested in?

WARREN BUFFETT: I understand the question, but I'm going to pretend I don't and let Charlie answer first. (Laughs)

I really do.

CHARLIE MUNGER: Yeah. When you're trying to determine something like intrinsic value and margin of safety and so on, there's no one easy method that could be simply mechanically applied by, say, a computer and make anybody who could punch the buttons rich.

By definition, this is going to be a game which you play with multiple techniques and multiple models, and a lot of experience is very helpful.

I don't think you can become a great investor very rapidly any more than you could become a great bone tumor pathologist very rapidly. It takes some experience and that's why it's helpful to get a very early start.

WARREN BUFFETT: But if you're — let's just say that we all decided we're going to buy a — or think about — buying a farm.

And we go up 30-miles north of here and we find out that a farm up there can produce 120 bushels of corn, and it can produce 45 bushels of soybean per acre, and we know what fertilizer costs, and we know what the property taxes cost, and we know what we'll have to pay the farmer to actually do the work involved, and we'll get some number that we can make per acre, using fairly conservative assumptions.

And let's just assume that when you get through making those calculations that it turns out to be that you can make $70 an acre to the owner without working at it.

Then the question is how much do you pay for the $70? Do you assume that agriculture will get a little bit better over the years so that your yields will be a little higher?

Do you assume that prices will work a little higher over time? They haven't done much of that, although recently, it's been good with corn and soybeans. But over the years agriculture prices have not done too much. So you would be conservative in your assumptions, then.

And you might decide that for $70 an acre, you know, you would want a — if you decided you wanted a 7 percent return, you'd pay a thousand dollars an acre.

You know, if farmland is selling for 900, you know you're going to have a buy signal. And if it's selling for 1200, you're going to look at something else. That's what we do in businesses.

We are trying to figure out what those corporate farms that we're looking at are going to produce. And to do that we have to understand their competitive position. We have to understand the dynamics of the business.

We have to be able to look out in the future. And like I've said earlier, some businesses you can't look out very far at.

But the mathematics of investment were set out by Aesop in 600BC. And he said, "A bird in the hand is worth two in the bush."

Now our question is, when do we get the two? How long do we wait? How sure are we that there are two in the bush? Could there be more, you know? What's the right discount rate?

And we measure one against the other that way. I mean, we are looking at a whole bunch of businesses, how many birds are they going to give us, when are they going to give them to us, and we try to decide which ones — basically, which bushes — we want to buy out in the future.

It's all about evaluating future — the future ability — to distribute cash, or to reinvest cash at high rates if it isn't distributed.

Berkshire has never distributed any cash, but it's grown in its cash producing abilities, and we retain it because we think we can create more than a dollar present value by retaining it. But it's the ability to distribute cash that gives Berkshire its value.

And we try to increase that ability to distribute cash year by year by year and then we try to keep it and invest it in a way so that a dollar bill is worth more than a dollar.

You may have an insight into very few businesses. I mean, if we left here and walked by a McDonald's stand, you know, and you decided, would you pay a million dollars for that McDonald's stand, or a million-three, or 900,000, you'd think about how likely it was there would be more competition, whether McDonald's could change the franchise arrangement on you, whether people are going to keep eating hamburgers, you know, all kinds of things.

And you actually would say to yourself this McDonald's stand will make X — X plus 5 percent — maybe in a couple years because over time prices will increase a little.

And that's all investing is. But you have to know when you know what you're doing, and you have to know when you're getting outside of what I call your circle of competency, you don't have the faintest idea.

Charlie.

CHARLIE MUNGER: Yeah. The other thing, you've got to recognize that we've never had any system for being able to make correct judgments on the values of all businesses.

We throw almost all decisions into the too hard pile, and we just sift for a few decisions that we can make that are easy. And that's a comparative process.

And if you're looking for an ability to correctly value all investments at all times, we can't help you.

WARREN BUFFETT: No. We know how to step over one-foot bars. We don't know how to jump over seven-foot bars.

But we do know how to recognize, occasionally, what is a one-foot bar. And we know enough to stay away from the seven-foot bars, too.

21. What Buffett wants as he hires portfolio managers

WARREN BUFFETT: Number 3.

AUDIENCE MEMBER: John Stevo (PH), shareholder from Chicago. Mr. Buffett — Mr. Buffett, Mr. Munger, thank you for the great weekend.

In your annual shareholders letter, you stated that you're looking for someone younger to possibly work at Berkshire, and I was wondering if you could expand on that, and how would I apply for that job? (Laughter)

WARREN BUFFETT: I think you just did. (Laughter)

The — we're looking for one or more. I mean, I would — I don't think it's at all impossible we might even find three or four that we would decide to have run some money and to take a closer look.

We're not looking for someone to teach. I probably didn't make that clear enough in the annual report. We're not — we're not going to be mentors or teachers or anything of the sort.

We're looking for somebody that we think knows how to do it. And there are people like that out there. We've heard from 6- or 700.

I did hear — I heard from one that had a four-year-old son. I thought that was quite a compliment that — I mean, I knew a caveman could do my job, but a four-year-old? (Laughter)

The — but we're looking — and we've heard from a number of very intelligent people. We have heard from a number of people that have had good investment records for — in recent years, and in some cases some time.

The biggest problem we have is whether they would scale up, because it's a different job to run a hundred billion than it is to run a hundred million.

And incidentally — and you can't do as well running a hundred billion as a hundred million, in terms of returns. You can't come close to doing it. That doesn't bother us.

But we do want to find somebody that we think can run large sums of money mildly better than the general performance in securities. And I emphasize mildly.

There's no way in the world somebody's going to beat the S&P by 10 percentage points a year with a hundred billion dollars. It isn't going to happen.

But we think maybe we can find somebody or some group, several of them, that can maybe be a couple percentage points better, but we really are interested in being sure that we have somebody that, under conditions that people haven't even seen yet, will not blow it.

You know, anything times zero is zero. And I don't care how many wonderful figures are in between.

So we are looking for somebody that's wired in a way that they see risks that other people don't see that haven't occurred, and they're plenty cognizant of the risks that have occurred.

And those people are fairly rare. Charlie and I have seen a lot of very smart people go broke, or end up with very mediocre records where, you know, 99 out of the 100 things they did were intelligent but the hundredth did them in.

So our job is to filter through these hundreds and hundreds of applications, find a couple of them that we think can do the job who are much younger, perhaps give them a chunk — two, three, five billion — have them manage it for some time, have them manage it in the kind of securities that they would scale up to a larger portfolio because — and then either one or more of them will get the job turned over to them at some point.

Charlie?

CHARLIE MUNGER: Yeah. Our situation in looking for this help reminds me of an apocryphal tail about Mozart. And a young man of 25 or so once asked to see Mozart and he said, "I'm thinking of starting to write symphonies, and I'd like to get your advice."

And Mozart said, “Well, you’re too young to write symphonies.” And the guy says, “But you were writing them when you were ten-years-old.” And Mozart says, “Yes, but I wasn’t asking anybody else for advice how to do it.” (Laughter.)

CHARLIE MUNGER: And so if you remind yourself of young Mozart, why, you’re the man for us.

WARREN BUFFETT: We will come up with, probably, a couple of people. And, you know, it’s — I’ve known people over the years.

I’ve been in the job before. I mean, in 1969 I wound up my partnership, and I had a lot of people that trusted me, and I wasn’t going to just mail the money back to them and, you know, say good-bye, because they would have been sort of adrift, most of them.

And so I had the job of finding somebody to replace me. And there were three absolutely stand-out candidates. Any one of the three would have been a great choice.

Charlie was one of them. Sandy Gottesman was one of them. And Bill Ruane was one of them.

Charlie wasn’t interested in having more partners.

Sandy was interested in individual accounts and took on the accounts of some of my partners and they were very, very happy and they’re still happy that he did it.

And Bill Ruane set up a separate mutual fund called Sequoia Fund to take care of all of the partners, whether they had small amounts or not. And he did a sensational job.

So I really identified three people in 1969 that were not only superior money managers, but that were also the kind that could never get you a terrible result and that were terrific stewards of capital.

Now, they were about my age at the time so it was a universe that I was familiar with, and now I have the problem that at — the people I know that are even close to my age, we don’t want anyway, and besides, most of them are already rich. They don’t care about having a job.

So I have to look into an age cohort where I don’t really know lots of people, but it can be done.

And like I say, we did it successfully with three people in 1969. And it was done successfully in 1979 with Lou Simpson for GEICO.

And I never knew Lou Simpson before I met him down at the airport here, and I spent a few hours with him, and it was clear that he was a steward of capital. He was going to get an above-average result, and there was no chance he was going to get a bad result.

And he’s been managing money for GEICO now for 28 years, roughly.

So it's doable. It's a little more work than I like to do. I've been kind of spoiled. But I'll — I've got a job to do on it, and I'll do it.

22. Buffett and Munger differ on climate change

WARREN BUFFETT: Number 4?

AUDIENCE MEMBER: Good morning. I'm Glen Strong (PH) from Canton, Ohio.

Please tell us where you stand on the global warming debate or where your managers at General Re stand.

In particular, perhaps you can give us your thoughts on the science of global warming and how serious you believe it is, and whether warming is actually more harmful than helpful. Thank you.

WARREN BUFFETT: Yep. Well, I believe the odds are good that it is serious. I'm not enough of a — I can't say that with 100 percent certainty or 90 percent certainty, but I think that there's enough evidence that it would be very foolish to say that it's 100 percent certain or 90 percent certain that it isn't a problem.

And since it's — if it is a problem, it's a problem that once it manifests itself to a very significant degree, it's a little too late to do something about it.

In other words, you really have to build the ark before the rains come, in this case. I think if you make a mistake, in terms of a social decision, you should, what I call err, on the side of the planet.

In other words, you should build a margin of safety into your thinking about the future of the only planet we've got a hundred years from now.

So I think — I take it seriously. In terms of our own businesses, you mentioned General Re. Gen Re writes less — way less business — that would be subject to the annual increments in global warming that would have an effect on their results than the reinsurance division of National Indemnity, where we write far more of the catastrophe business.

It's not going to affect, you know, in any measurable degree at all, you know, excess casualty insurance, property insurance. You're thinking much more of whether it's going to produce atmospheric changes that change materially the probabilities of really — of catastrophes, both their frequency and their intensity.

In my own mind, and in the minds of the people that run National Indemnity's reinsurance division, we crank — we think the exposure goes up every year because of what's going on in the atmosphere, even though we don't understand very well what goes on in the atmosphere.

And the relationship between damage caused and the causal factors is not linear at all. I mean, it can be explosive.

So if temperatures in the waters of the Atlantic or something change by relatively small amounts, or what seem like small amounts, it could increase the expectable losses from a given hurricane season by a factor of two, three, four or five.

So we're plenty cautious about it. It's not something that keeps me up, in terms of our financial prospects, at all at Berkshire. But it's something that I think every citizen ought to be very cognizant of and make a decision on.

Charlie?

CHARLIE MUNGER: Well, of course carbon dioxide is what plants eat. And so — and generally speaking, I think it's a little more comfortable to have it a little warmer instead of a little colder. (Laughter)

WARREN BUFFETT: I hope you don't get a chance to test that after death, Charlie. (Laughs)

CHARLIE MUNGER: It isn't as though there's a vast flood of people trying to move to North Dakota from southern California.

And so you're talking about dislocation. It's not at all clear to me that, net, it would be worse for mankind in general to have the planet a little hotter.

But the dislocations would cause agonies for a great many places, particularly those that would soon find themselves underwater.

WARREN BUFFETT: Yeah. I was going to ask you. How do you feel about the sea level being 15 or 20 feet higher? (Laughs)

CHARLIE MUNGER: Well, that's very unfortunate, but — (Laughter)

Holland lives with what, 25 percent of the nation below sea level? With enough time and enough capital, why, these things can be adjusted, too.

I don't think it's an utter calamity for man that threatens the whole human race or anything like that. You know, you'd have to be a pot-smoking journalism student or something to — (Applause)

CHARLIE MUNGER: — believe that.

WARREN BUFFETT: We're finally unleashing him, folks. (Laughter)

Well, we'll continue to have people in charge of insurance who are plenty worried about global warming, I promise you.

But it — we don't know — we do know that 2004 and 2005, there was a frequency, and more particularly, there was an intensity of hurricanes that would not be expected at all by looking at the previous century.

And we were spared — even though we had Katrina — we were spared what could have been a far worse case by a couple of Category Fives that didn't hit the mainland.

So I do not regard Katrina as being anywhere near a worst-case scenario.

And, like I say, I don't know whether — how much of — I don't know whether the water is a half a degree or 1 degree Fahrenheit warmer than 30 years ago, but I don't know — and I don't know all the factors that go into hurricanes.

I mean, I know that, obviously, the water temperature, you know, contributes to energy and all that sort. But there could be 50 variables.

All I know is, on balance, I think they're probably getting more negative for us and I know we ought to be very careful about it. And I know that it would be crazy to write insurance in 2007 at the same rates that it was being written a few years ago, in relation to catastrophes.

And since we're in the catastrophe business, that is something I think about, and the people that actually write the policies think about it as well. So it's a factor with us.

23. Bank problems don't mean China will collapse

WARREN BUFFETT: Five.

AUDIENCE MEMBER: Hi. I'm John Golob from Kansas City.

I have a question about the Chinese economy. Some observers have suggested that the Chinese banking system looks a little like Japan back in the 1990s.

Are you concerned that China could experience similar disruptions as Japan in '90 or is China possibly — with different institutions — possibly more resistant to economic disruptions?

WARREN BUFFETT: I would have to say I don't know the answer to that. I mean, it's a very interesting question. It's a very important question.

But, you know, I didn't necessarily understand what was going to happen in Japan before it happened, and my insight into Chinese banks is about zero.

We've been offered chances to buy into various Chinese banks and, again, because I don't know anything about them, I pass. It's no judgment that there's anything bad.

It just means that sitting in Omaha, Nebraska, not knowing what some item of loans and advances — what composes it or anything about the real operation of the place — that I can make a decision whether it's worth X, half of X, 2X, a quarter of X, I just don't know.

And I really don't know — I just have no notion as to the answer to your question, but maybe Charlie does.

CHARLIE MUNGER: Well, if you stop to think about it, all of the remarkable economic progress that we've seen in China in the last 15 years has been accompanied by practices in their government banks that would make you shutter if you compared them to normal banking standards.

So everything you see in terms of progress has occurred despite — the banks were almost doling out money for aid as distinguished from doing normal banking.

So I'd be very leery of predicting that that's sure to cause a huge economic collapse in Japan — in China.

They've been doing it for a long time, and they may actually be getting better now.

WARREN BUFFETT: Yeah. We've had our share of banking troubles in this country. I mean, it wasn't that long ago in terms of the savings and loan crisis and all kinds of things.

And strong economies come through those things. So, you know, if ahead of time you'd seen all the problems with foreign loans that the commercial banks got into and all the problems with real estate loans that the savings and loans got into, you could have said, you know, it's going to be terrible for the American economy, and it did produce a lot of dislocations and all of that.

But if you look at the regular American economy, it's come through all kinds of financial crises with the real output per capita rising at a very substantial rate just decade after decade.

I don't know what will happen in China, but I think it's pretty amazing in terms of the gains that have been made.

And I think they'll be — I think they'll continue to be made, and I don't know what will happen with the banking system, though.

24. Easy decision: stocks over bonds

WARREN BUFFETT: Number 6.

AUDIENCE MEMBER: Good morning, Warren and Charlie. My name is Frank Martin from Elkhart, Indiana. I'm a shareholder.

WARREN BUFFETT: Yeah. You've written a good book too, Frank. (Laughs)

AUDIENCE MEMBER: Thanks, Warren. I'll do my best to be succinct with this question. As you know, my long suit is not brevity in the written word.

Recently, I sequentially read everything that you and Charlie have written, or that has been written about you, since 1999, including your help wanted ad in the annual report, which sought not a Ted Williams, but the consummate defensive player in your forcefully worded quotations in last Monday's Wall Street journal.

When contemplating the chronology, I sensed a gradual but unmistakable sea change in your perspective on the investment environment for marketable securities.

The intensification of your preoccupation with managing risk is conspicuous by its absence among the other biggest players at the margin — hedge funds, private equity, mutual funds — who are shamefully mute both about what are likely to be anemic prospective returns and the unconscionable risks assumed to achieve them, all the while charging a king's ransom for such low value-added services.

When I give free rein to my intuition, the post-1999 Warren Buffett reminds me of the Warren Buffett of post-1969.

Back then, when Berkshire was a small fraction of its current size, you spoke of the difficulty in playing a game you did not understand, that there was little margin of safety in the equity markets in general.

You weren't forecasting what in its own time became the bear market of '73-'74, but you were surely intuitively aware of what [former Federal Reserve Chairman Alan] Greenspan years later has repeatedly warned: the inevitable day of reckoning that follows long periods of low equity risk premium.

Imagine yourself, if you are willing, cast overnight into a new role with a clean slate as head of the investment committee of a $10 billion pension fund.

Today, would your decisions reflect the same risk-averse mindset that dominated your behavior in the post-1969 period? And might you anticipate that following all of this might appear opportunities that were as mouthwatering as appeared in '73-'74?

Please explain, and I hope Charlie will weigh in on the subject as well. Thank you.

WARREN BUFFETT: Yeah Frank, when I closed up to the partnership, if I'd had an endowment fund to run then, the prospective return — and actually, I wrote this in a letter to my partners that I'd be glad to send you a copy of — the prospective return — and I was looking at them as individuals on an after-tax basis — was about the same, I felt, from equities and from municipal bonds over the next decade, and it turned out to be more or less the case.

I would say that I do not regard that as being the same situation now. If I were managing a very large endowment fund, for one thing it would either be a hundred percent in stocks or a hundred percent in long bonds or a hundred percent in short-term bonds.

I mean, I don't believe in layering things and saying I'm going to have 60 percent of this and 30 percent of that. Why do I have the 30 percent if I think the 60 percent makes more sense?

So — and if you told me I had to invest a fund for 20 years and I had a choice between buying the index, the 500, or a 20-year bond, you know, I would buy stocks.

You know, that doesn't mean they won't go down a lot. But if you — I would rather a have an equity investment — I wouldn't rather have an equity investment where I paid a ton of money to somebody else that took my stock return down dramatically.

But simply buying an index fund for 20 years of equities or buying a 20-year bond, I would — it would not be a close decision with me.

I would buy the equities. I'd rather buy them cheaper, you know, but I'd rather buy the bond with a bigger yield, too. But in terms of what's offered to me today, that's the way I would come down.

Charlie?

CHARLIE MUNGER: Yeah. I don't think that was the answer that was expected, but that's the answer. (Laughter)

WARREN BUFFETT: It doesn't have a thing to do with what we think stocks — we don't think at all — but where stocks could be or bonds could be.

We don't have the faintest idea where the S&P will be in three years, or where the long-term bond will be in three years, but we do know which we would rather own on a 20-year basis.

CHARLIE MUNGER: Warren, we'd also expect that the current scene will cause some real disruption, not too many years ahead.

WARREN BUFFETT: That's true, but if you go back a hundred years, you could almost say that, you know, in almost any period, you will get disruptions from time to time, and it's very nice if you have a lot of cash then and you have the guts to do something with it.

But predicting them or waiting around for them, that sort of thing, is not our game. And I mean, we bought $5 billion worth of equities in the first quarter, something like that.

And, you know, we don't think they're anything like — well, they aren't — they're not — it would be a joke to even compare them to 1974 or a whole bunch of other periods. But we decided we would rather have them than cash, or we would rather have them than sit around and hope that things get a lot cheaper.

We don't spend a lot of time doing that. It — you can freeze yourself out indefinitely.

So any time we find something — what we think is intelligent to do, we just do it, and we hope we can do it big.

25. Buffett bought and sold silver early: "Other than that, a perfect trade"

WARREN BUFFETT: Number 7.

AUDIENCE MEMBER: My name is Nathan Narusis from Vancouver, Canada.

Mr. Buffett, Mr. Munger, my question concerns your previous silver bullion investment. I'm curious to hear more about why you sold when you did.

More specifically, whether you sold your bullion to the organizers of the silver exchange-traded fund in return for cash plus, perhaps, important noncash consideration in order to keep silver markets from either rising or falling sharply.

Thank you very much for anything you would care to share with us.

WARREN BUFFETT: I'm not sure who we sold it to, but whoever we sold it to was a lot smarter than I was. (Laughs)

I bought it too early. I sold it too early. Other than that, it was a perfect trade. (Laughter)

Charlie, do you have anything to add? Charlie had nothing to do with the silver decision, so that one falls entirely on me.

CHARLIE MUNGER: I think we demonstrated how much we know about silver.

WARREN BUFFETT: Yeah. (Laughter)

The very fact you asked us a question on silver flatters us because nobody asks us about silver anymore. (Laughs)

But we'll come up with something else at some point.

You know, the last part of your question, there was a small implication, I think, of perhaps a silver conspiracy.

We — as soon as we started — it got known that we bought silver, we started getting all these letters in the mail from people who had all these different theories about the fact that hedging was killing things or these kind of traders were doing something.

In the end, silver responds as supply and demand just like oil responds to supply and demand. Oil is — the price of oil at 60 or $65 is not a product of a bunch of oil executives conspiring or anything of the sort. It's supply and demand on a huge commodity.

Silver is a small commodity, but on any kind of commodity like that, supply and demand is what determines prices over time. Although the Hunt brothers, I must admit, for a short period there, in a few years, managed to change the equation and they forever wished they hadn't.

26. Why Buffett "outsourced" his philanthropy

WARREN BUFFETT: Number 8.

AUDIENCE MEMBER: Hello, Mr. Buffett. Eben Pagan, Santa Monica, California.

You seem amazing at keeping your composure in tough situations. I would be very interested to know what your thought process was when you were in that incredibly stressful situation, you knew the world was watching, and you went head-to-head with LeBron James. (Laughter)

WARREN BUFFETT: The game was rigged. (Laughter)

He was the one that had a problem. (Laughs)

AUDIENCE MEMBER: What I'd really like to know is, I'm a real big fan of you and Mr. Gates and your philosophy of channeling all the value you've created back into the world.

And I have a successful business, and I'd like to do the same, but maybe in 20 or 30 or 40 years, and with a time horizon like that, I'd love to know what advice you'd give someone like me.

WARREN BUFFETT: Well, there's nothing wrong with your time horizon, in my view, as long as you're going — as long as you plan to give it back, I mean, A) the decision is yours entirely, anyway, whether you want to do it.

But assuming you want to give it back, or give it to society in some way, if you're compounding your money at a rate greater than people generally do, you are, in effect, an endowment fund for society.

And, you know, all kinds of organizations in the nonprofit area have endowment funds, and they think it's wise to have it, and they do that in order to get standard returns, usually.

And if you can compound it more and you're going to give it back later on, let someone else take care of current giving, and you can take care of giving in 20 or 30 years. But, you know, I regard that as a personal decision.

I always felt that I would compound money at a rate higher than average, and it would have been foolish to give away a significant portion of my capital to somebody who would spend it within, you know, months, when there could be a really much larger amount later on.

And, on the other hand, the time had come, I'd really thought my wife would be doing that, and when that didn't work out, the time had come to do something with it.

And, fortunately, I had some great options available, and I get to keep on doing what I love doing and I let some — I farm out all the work.

But, you know, when my wife had a baby, we hired an obstetrician. I didn't try and do it myself. I mean, when a tooth hurts, you know, I don't have Charlie fix it. I go to a dentist.

So when I have money to give away, I believe in turning it over to people who are — and I've got five different organizations, including my three kids — and I believe in turning it over to people who are energized, working hard at it, smart, you know, doing it with their own money, the whole thing.

And I get to keep doing what I like doing. So as far as I'm concerned, I haven't given away a penny.

Charlie?

CHARLIE MUNGER: Well, I think it's wonderful for the shareholders that somebody else is giving away the money. (Laughter)

I tell you, if all Warren wanted to talk about was interfacing with applicants for donations, we would have a different life. And we wouldn't be very well adapted to it, either.

WARREN BUFFETT: Yeah. You know, actually on the smaller ones I send them all to my sister Doris, and she does a great job with it, and enjoys it, spends lots of time on it, good at it, and I'm glad she does it and I don't.

You know, the truth is, I haven't given away anything in a practical matter. I have everything in life I want. You know, there's no way I can sleep better, I can eat better. Other people might think I could eat better. (Laughter)

I haven't given up anything.

Now, if you think about it, you know, somebody that gives up having an evening out, somebody that, you know, gives up their time working on something, somebody that doesn't take their kids to Disneyland this year because they've, you know, they've given the money instead to their church, I mean, those people are changing their lives in some way with what they give.

I haven't changed my life at all. I don't want to change my life. I'm having a lot of fun doing what I do. And, you know, it's just a bunch of stock certificates that one way or another they're going to go someplace.

And what I really want to do is keep doing what I enjoy doing, and feel that the claim checks that I accumulate that comes about for this, are going to get used effectively for the same general purposes that I would want to use them for if I really had the energy and the interest in doing the job myself.

But somebody else can keep doing the work.

27. You can always earn big returns with small amounts of money

WARREN BUFFETT: Number 9.

AUDIENCE MEMBER: Hi. I'm Eric Schline (PH) from Larchmont, New York.

My question is directed at Mr. Buffett. Mr. Buffett, you claim you can do 50 percent a year.

If you had to start over with a small portfolio, would you still be doing buy and hold, buying quality companies at a good price, or would you be doing arbitrage and really getting down to the nitty-gritty Benjamin Graham cigar butts that you did in the Buffett Partnership?

WARREN BUFFETT: Yeah. If I were working with a very small sum — and you should all hope I'm not — (laughs) — if I were working with a very small sum, I would be doing entirely — almost entirely — different things than I do.

I mean, there's — your universe expands. I mean, if you're looking, there's thousands and thousands and thousands of times as many options to think about if you're investing $10,000 than if you're investing a hundred billion.

And, obviously, if you have that many — you've got all the options you got with a hundred billion, except buying entire businesses, and you've got all of these other options.

So you can earn very high returns with very small amounts of money, and it will always be such.

I don't mean that everybody can do it, but if you know something about values and investments, you will find opportunities with small sums, and it will not be with a portfolio that Berkshire itself owns.

We can't earn phenomenal returns putting 3 billion, 4 billion, 5 billion in a stock. It won't work that way. It won't even come close to working that way.

But if Charlie or I were in a position of working with a million dollars or $500,000 or 2 million, we would find little things here and there — and it wouldn't always be stocks — where we would earn very high returns on capital.

Charlie?

CHARLIE MUNGER: Yeah. But it's — there's no point our thinking about that now. (Laughter)

WARREN BUFFETT: But he's thinking about it, Charlie. (Laughter)

28. Subprime mortgage defaults won't be "huge anchor"

WARREN BUFFETT: OK. We'll take one more, and then we will go to lunch and then we'll — after that we'll come back. So we'll go to number 10 now.

Is the microphone open on 10?

AUDIENCE MEMBER: Hello? Hello?

WARREN BUFFETT: Do we have a problem here?

AUDIENCE MEMBER: Warren and Charlie, my question is, what's your opinion regarding the subprime market relative to the foreign national market?

CHARLIE MUNGER: We can't hear that.

WARREN BUFFETT: We can't hear that.

AUDIENCE MEMBER: What's your opinion regarding the subprime market relative to the foreign national market? Sorry. My name is Calvin Chong (PH). I'm from New York.

WARREN BUFFETT: Well, the subprime market, encouraged by both lenders, intermediaries, and borrowers themselves, resulted in a lot of people buying a lot of houses that they really didn't want to own or that they can't make payments on for once the normal payments were required.

And the people, the institutions, in some cases the intermediaries, are going to suffer in various degrees.

Now, the question is whether it spills over and starts affecting the general economy to a big degree, and I would — my guess would be — it's quite severe some places.

But my guess would be that if unemployment doesn't rise significantly, and interest rates don't move up dramatically, that it will be a — it will be a very big problem for those involved, and some people are very involved. Some institutions are very involved.

But I don't see it — I think it's unlikely that that factor alone triggers anything of a massive nature in the general economy.

I think it — you know, I've looked at several financial institutions. I've looked at their 10-Qs and 10-Ks, and I've seen that a very high percentage of the loans they made in the last few years allowed people to make very tiny payments on the mortgages, but, of course, those subnormal payments increased principal so that they had to make above average payments later on at some point.

And I think that's dumb lending, and I think it's dumb borrowing, because somebody that can only make 20 or 30 percent of their normal mortgage payments the first year is very unlikely to be able to make 110 percent of their normal mortgage payments a few years later.

Those people and those institutions were largely betting on the fact that house prices would just keep going up, and it really didn't make any difference whether they could make the payments.

And that worked for a while until it didn't work. And when it doesn't work, you have an abnormal supply of housing coming on the market, similar to what happened in manufactured housing, the business we're in, six or seven years ago, and that changes the whole equation.

From people on the demand side, you no longer have people thinking they're buying something that's bound to go up, and then you have the supply coming on from the people who were anticipating that before and really don't want to hold the asset unless it's going to go up.

So you'll see plenty of misery in that field. You've already seen some. And I don't think — I don't think it's going to be any huge anchor to the economy.

Charlie?

CHARLIE MUNGER: Yeah. A lot of what went on was a combination of sin and folly, and a lot of it happened because the accountants allowed the lending institutions to show profits on loans where nobody in his right mind would have showed any profit until the loan had matured into a better condition.

And, once again, if the accountants lay down on their basic job, why, huge excess and folly is going to come inevitably, and that happened here.

The national experience with low-interest starter home loans to what I would call the deserving poor, has been very good. But the minute you pay a bunch of people high commissions to make loans to the undeserving poor, or the overstretched rich, you can get loan losses that are staggering.

And I don't see how the people did it and still shaved in the morning, because looking back at them was a face that was evil and stupid.

WARREN BUFFETT: Yeah. (Applause)

WARREN BUFFETT: You've seen some very interesting figures in the last few months on the number — on the percentage — of loans where people didn't even make the first or second payment. And there's really — that shouldn't happen.

That happened, incidentally — you had a prelude to this in the manufactured housing industry.

I mean, in the late 1990s — and securitization accentuated the problem, because once you had somebody in Grand Island, Nebraska, selling a mobile home — or a manufactured home — to someone and they needed a $3,000 down payment and the salesman was going to get a $6,000 commission, believe me, you start getting some very strange things going on.

Now, if the person doing that had to borrow the money in Grand Island, the chances are the local banker would have seen what was happening and said, you know, we don't want any of this where the salesman fakes the down payment and all that.

But once you just package those things and securitize them so they get sold through major investment banking houses and sliced up in various tranches and so on, you know, the old — the discipline leaves the system.

And securitization really accentuates that, and we have had that in subprime loans, just as we had it in manufactured housing six or seven years ago.

And, like I say, that has not all worked its way through the system, but I don't think it's going to cause huge troubles.

Now, we do see certain areas of the country where it will be at least a couple of years before real estate recovers.

I mean, the overhang is huge compared to normal monthly volume in certain sections. And the people that were counting on flipping things there are going to get flipped, but in a different way.

Afternoon Session - 2007 Meeting

1. "Areas don't make opportunities, brains make opportunities"

WARREN BUFFETT: OK. If you're ready, we are.

We're going to keep going in the same order because there's people in the other rooms that have been waiting. So we will go to number 11.

AUDIENCE MEMBER: Hi. My name is Christian Baha from Superfund. I have a question for you, Mr. Buffett.

What do you think about managed futures funds?

WARREN BUFFETT: About which fund?

CHARLIE MUNGER: I didn't quite get that. What kind of fund?

AUDIENCE MEMBER: Managed futures funds.

CHARLIE MUNGER: Oh, managed —

AUDIENCE MEMBER: Like a very diversified portfolio in stocks and bonds going long and short, all the different markets, based on the most natural human behavior, trying following a herd behavior?

CHARLIE MUNGER: Managed futures funds.

WARREN BUFFETT: Well, I would say that we think the most logical fund is the one we have at Berkshire where, essentially, we can do anything that makes sense and are not compelled to do anything that we don't think makes sense.

So any entity that is devoted to a limited segment of the financial market we would regard as being at a disadvantage to one that has total authority if you have the right person in charge.

But you — that's an assumption you're going to make under any fund. So we would not want to devote our funds to something that was only going to buy bonds, something that was only going to buy futures, or anything of the sort.

We would — we buy futures at Berkshire. We buy bonds at Berkshire. We've bought — we buy currencies. We buy businesses.

So I think it's a mistake to shrink the universe of possibilities. Ours is shrunk simply by size, but we don't try to — we don't set out to circumscribe our actions in any way.

But in the end, there's no form that produces investment results.

Hedge funds don't produce investment results. Private equity doesn't produce investment results. Mutual funds don't produce it.

If it was simply a matter of form, we'd all call ourselves, you know, whatever that form happened to be.

What really makes the difference is whether the person that's running it knows what their limitations are, knows where their strengths are, plays when they have the opportunity to play advantageously, and stays out when they don't see any opportunities.

Charlie?

CHARLIE MUNGER: Yeah. I'd go further. I'd say averaged out, I would expect that the return per dollar per year in managed futures funds would be somewhere between lousy and negative. (Laughter)

WARREN BUFFETT: And I would agree with that. Yeah.

Usually those are sales tools. I mean, people find out something that will sell, and it can be — you know, it can be bond funds at some point, it could be — but when they find something to sell, it will get sold to the public. That will be — it will sell until it stops selling.

And that means lots of money comes in and lots of competition for a limited number of opportunities.

And I think it's a mistake to get sold something on the basis that here is a great area of opportunity.

Areas don't make opportunities; brains make opportunities, basically.

2. Read a lot, look for opportunities, avoid catastrophes

WARREN BUFFETT: Number 12.

AUDIENCE MEMBER: Matthew Monahan (PH) from Palo Alto, California.

Mr. Buffett, Mr. Munger, first of all, I want to thank both of you for so freely sharing your wisdom and knowledge over the years.

Even though we've never met in person, I consider you both to be close personal mentors and attribute your teachings and philosophies to any success I've had in business so far. So thank you.

Here's my question: for a 23-year-old with high ambitions, some initial working capital, and a genetic wiring, as you call it, for disciplines like investments, mathematics, and technology, what do you foresee as the significant areas of opportunity over the next 50, even 100, years?

And, if you were in my shoes, what would be your approach and methodology for really learning, tackling, and mastering these areas of opportunity for the purpose of massive value creation?

WARREN BUFFETT: Well, I remain very big on the idea of reading everything in sight.

And, frankly, when you get the chance to talk to somebody like Lorimer Davidson, as I did when I was 20 years old — I probably learned more from Lorimer Davidson in those four or five hours than I learned in college, with the exception of learning some accounting and one or two subjects like that.

So you just want to soak it up. If you have those qualities you talked about, you'll see the areas as you go along. I mean, we have — Charlie and I probably — you know, we've made money in a lot of different ways, some of which we didn't anticipate, you know, when we were — 30 or 40 years ago.

But we did have the ability to recognize some; we didn't have the ability to recognize others. But we did know when we knew what we were doing and when we didn't, and we just kept looking.

We had a curiosity about things. You would know at a time like the Long-Term Capital Management crisis, for example, that there were going to be ways to make money.

I mean, they were going to be out there, and all you had to do was just read and think eight or ten hours a day and you were going to cover a lot of possibilities, probably a very high percentage of them good, and some of them sensational.

So you can't really lay it out ahead of time. You can't have a defined roadmap. But you can have a reservoir of thinking, looking at different kinds of businesses, looking at different kinds of securities, looking at markets in different places, and you will then spot a reasonable number of things that come along.

You won't spot every one of them. We've missed all kinds of things.

But the biggest thing, too, is to have something in the way you're programmed so that you don't ever do anything where you can lose a lot.

I mean, we — our best ideas have not been better than other people's best ideas, but we've never had a lot of things that pulled us way back.

So we never went two steps forward and one step back. We probably went two steps forward and a fraction of a step back.

But avoiding the catastrophes is a very important thing, and it will be important in the future. I mean, you will have your chance to participate in catastrophes.

Charlie?

CHARLIE MUNGER: Yeah. And, of course, the place to look when you're young is in the inefficient markets.

You shouldn't be trying to guess whether, you know, one drug company has a better drug pipeline than another. You want to go, when you're young, someplace that's very inefficient.

WARREN BUFFETT: And you shouldn't be trying to guess whether the stock market is going to go up or whether long-term bonds are going to change in yield.

I mean, you don't have anything going in that kind of a game, but you can have a lot going in games that very few people are playing, and maybe where they've even got their heads screwed on wrong, in terms of how they're thinking about the subject.

The RTC was a great example of a chance to make a lot of money.

I mean, here was a seller of hundreds of billions of dollars' worth of real estate where the people that were selling it had no economic interest in it, were eager to wind up the thing, you know, and they were selling at a terrible time when the people who had been venturesome in lending were no longer lending, the people who had been venturesome in the equity end of real estate had gotten cleaned out.

So you had a great background of environment, and then you had an imbalance of intensity, in terms of analyzing situations between the seller, which was the government, with a bunch of people who had no economic interest in it and were probably eager to wind up the job, and buyers on the other side who were of the generally cautious type. Because the more venturesome type had taken themselves out of action. And there were huge amounts of property.

So you get these opportunities, and you'll get more. I mean, there won't be any scarcity of opportunities in your life, although there will be days when you feel that way.

3. Politics and catastrophe insurance

WARREN BUFFETT: OK. Let's go to the other rooms now. They've been waiting. Number 13.

AUDIENCE MEMBER: John Goss (PH), Key West, Florida.

Katrina created litigation that resulted in some rulings that combined flood damage and wind damage where the insurance companies thought they covered wind only.

As a result, some insurance companies are significantly reducing coverage in those states.

Florida recently empowered their insurance company called Citizens to be more aggressive not only with wind storms, but also with homeowners, while at the same time not allowing requested rate increases of other insurance companies.

The result is that some solid insurance companies have announced reducing their coverage or pulling out of Florida.

Is this type of government interference a random fluctuation in insurance or a major cause of concern for the future?

WARREN BUFFETT: Well, that's an easy one to understand both sides of the question on.

I mean, the average homeowner is not going to sit there and read line-by-line what is in his insurance policy, and a lot of times the agent is not going to explain it carefully to them.

So when something comes along and he thinks it's insured and it turns out that he bought a policy where it wasn't insured, he's going to feel very unhappy about it.

And when tens of thousands of people feel unhappy about it, you're very likely to get some kind of governmental interference, and probably an inflation by judicial degree or by threats of the government to, in effect, extend the terms of the policy beyond what the insurance company thought it was insuring.

Now, an insurance company that's had that kind of experience is going to be very reluctant to write insurance policies in the future, if they don't think that the words will be adhered to.

And, on the other hand, I can fully understand some guy who's had his house blown away in a storm and a lot of it was water damage and a lot of it was wind damage, thinking that, you know, he's been wiped out and the insurance company comes around waving a policy that's got a lot of small print in it, you know, he's going to be unhappy.

So it's a real tussle on that. And, you know, I guess I would — if I were writing policies, I would put the exclusions in very big type and very easy to understand.

But I still would expect that if thousands of people suffered losses, that courts and legislators would probably seek to stretch the terms, or even abrogate the terms of the contract, in order to take care of their own constituents and figure that guys like me or institutional investors who own insurance companies can afford it better than the homeowner.

When you get into the question of whether you should, in effect, have all of the people in the country pay premiums for, we'll say, hurricanes, in a way, subsidize it through policies in Nebraska or Minnesota or someplace, for hurricanes in Florida, that gets very tough.

I mean, it can be very expensive to insure against hurricanes if hurricanes become more frequent and more intense. In fact, it can become so expensive that people really will not want to bear the cost of insurance, and they'll want to socialize it some way.

And, of course, the guy in Nebraska says, "Look it. You went down there to live on the ocean and you thought it was wonderful, and we're back here with these terrible winters, but why should we pay a portion of your insurance?"

So you're going to have that tussle go on, and you'll really have that tussle go on if you get a hundred billion dollar or $150 billion insured loss in Florida.

Because that will mean a huge change in taxation if the State of Florida steps in to compensate people. There will be calls for Washington to pay for it.

But, you know, it's how much people who are not exposed to a risk should pay for the people who have elected to be exposed to the risk is — you know, it becomes a political question.

And my guess is that sometime in the next five or 10 years, you'll see a struggle on that subject that exceeds — far exceeds — what we saw on Katrina. Charlie?

CHARLIE MUNGER: I've got nothing to add.

4. We're still looking for a big acquisition

WARREN BUFFETT: Number 14?

AUDIENCE MEMBER: Hi. My name is Glenn Tongue, and I'm a shareholder from New York.

I'd like to congratulate you on Berkshire's newest director. Sue is a terrific addition. My question is —

WARREN BUFFETT: We agree with you.

AUDIENCE MEMBER: My question is, according to the 10-Q filed yesterday, you purchased about 5.3 billion in shares in the first quarter.

This acceleration in activity is occurring while the general market levels are getting more expensive.

Does this indicate some shift in your thinking about hurdle rates of return for your ever-growing asset base and/or your prospects for an elephant-sized acquisition?

WARREN BUFFETT: Well, that's a good question. I would — incidentally, I would say in the first quarter, actually, stocks didn't rise. But they've risen a lot in April.

But they didn't go down, either. I mean, they were pretty much flat. And we did invest 5 billion or so in equities.

Did we change our standards? You know, I don't think so. But, you know, you can't be a hundred percent sure that you have — you know, if you haven't had a date for a month, you know, you may say that was a girl you would have dated the first day, but who knows. (Laughter)

So, I don't know for sure the answer, but I think we would have dated that girl the first day.

And the second question, in terms — does it reflect giving up on finding an elephant to acquire in terms of a business? The answer to that is no. We've got plenty of money available.

And we would sell stocks if we really — I mean, that would not be a problem — if we really needed to, to buy a really big business.

So we're as prepared as we've ever been prepared to buy a big business outright. We hope we do. We hope we buy relatively small ones if they're attractive.

We bought a very attractive business, TTI, run by Paul Andrews — terrific business — in the first quarter.

And, you know, I wish it was five times the size, but maybe it will be some day. But we know that we're in with the kind of person we want and the kind of business we want. And if we find larger ones, one way or another, we'll swing them.

Charlie?

CHARLIE MUNGER: Yeah. The one thing I think we can promise you is that we won't make returns, on average, in the kind of stuff we're buying now like those that we made 10 or 15 years ago.

WARREN BUFFETT: Yeah. We won't come close, no.

CHARLIE MUNGER: No. It's a different world with more modest expectations.

WARREN BUFFETT: And we hope you share them.

5. Buffett defends Planned Parenthood

WARREN BUFFETT: Let's go to number 1.

AUDIENCE MEMBER: Hello, Charlie, Warren. Bill Paparella (PH) from St. James, New York.

Warren, I brought my ten-year-old daughter, Gina, with me. She asked me last summer, "How do I get rich?"

So I gave her your letters, writings, even gave her "Charlie's Almanack."

So she's been reading it ever since, asking me a lot of questions. So I said, "Maybe we'll go to our first meeting together."

WARREN BUFFETT: Is she married? I mean, she's the kind of girl I want my granddaughter — or grandson — to meet. (Laughs)

AUDIENCE MEMBER: So we're learning together.

Warren, my question for you is in regards to your recent charitable gifts. And if I could start by saying that I mean no disrespect. You're my hero. So — and nor is it political.

WARREN BUFFETT: You're doing fine so far. (Laughter)

AUDIENCE MEMBER: OK. I am, as a father of five daughters, perplexed and upset that one — or I've read — that one or more of these foundations is a big supporter of Planned Parenthood and abortion rights. (Scattered applause)

If you were to go on the Planned Parenthood website, you would see a website that promotes promiscuity, goes out of its way to support internet porn — (audience noises)

WARREN BUFFETT: Yeah. Let's get to the question, please. Do you have a question?

AUDIENCE MEMBER: The question is, Warren, I was hoping that you could speak to the billions of dollars that's been allocated with an agency as Planned Parenthood that is very well-funded.

It just doesn't seem to jive with the hero that I study, and I was hoping that you could speak to it.

WARREN BUFFETT: Yeah. Well, I'll be glad to speak to it. I think it's a terrific organization. (Applause with some boos)

And I really think it's too bad that for millennia, you know, women, not only in the United States, but all over the world, you know, have had involuntary bearing of babies forced upon them, and usually by a government run by men. (Applause)

So I don't think we want to get into a — we don't want to get into a cheering contest here — but, you know, I think that it's a very important issue.

I think it tends to have a small natural funding constituency because it isn't a popular-type thing where it's like sticking your name on a hospital or something like that.

But I would say that if we'd had a Supreme Court with nine women on it starting when the country became the United States, that by now I don't think a question like yours would even be being raised.

You know, men set the rules for a lot of years — (applause) — and I think it's wonderful that a woman can make reproductive choices.

But, you know, I've got a lot of people that disagree with me on that. I've got a lot of people that agree with me on it. And I hope you'll respect my opinion as I do yours. Thank you. (Applause)

6. "Volatility is not a measure of risk"

WARREN BUFFETT: Number 2, please.

AUDIENCE MEMBER: Hi. I'm Bob Kline (PH) from Los Angeles.

Pursuing your earlier comments on sigmas from a different angle, the conventional wisdom in the investment world is that an investment risk can be measured by the volatility of the price of the investment in the marketplace.

To me, this approach has it backwards. Since changes in price are determined by the changes in the opinions of investors in the marketplace, why would a rational investor substitute the opinions of the marketplace, as reflected in the volatility of the price, for his own assessment of the risk of the investment?

And consultants take this idea further by tracking the volatility of a portfolio manager's results in an attempt to measure risk. So could you guys expand on your thoughts on this?

WARREN BUFFETT: Yes. Volatility is not a measure of risk.

And the problem is that the people who have written and taught about volatility do not know how to measure — or, I mean, taught about risk — do not know how to measure risk.

And the nice thing about beta, which is a measure of volatility, is that it's nice and mathematical and wrong in terms of measuring risk. It's a measure of volatility, but past volatility does not determine the risk of investing.

I mean, actually, take it with farmland. Here in 1980, or in the early 1980s, farms that sold for $2,000 an acre went to $600 an acre. I bought one of them when the banking and farm crash took place.

And the beta of farms shot way up. And, according to standard economic theory or market theory, I was buying a much more risky asset at $600 an acre than the same farm was at 2,000 an acre.

Now, people, because farmland doesn't trade often and prices don't get recorded, you know, they would regard that as nonsense, that my purchase at $600 an acre of the same farm that sold for 2,000 an acre a few years ago was riskier.

But in stocks, because the prices jiggle around every minute, and because it lets the people who teach finance use the mathematics they've learned, they have — in effect, they would explain this a way a little more technically — but they have, in effect, translated volatility into all kinds of — past volatility — in terms of all kinds of measures of risk.

And it's nonsense. Risk comes from the nature of certain kinds of businesses. It can be risky to be in some businesses just by the simple economics of the type of business you're in, and it comes from not knowing what you're doing.

And, you know, if you understand the economics of the business in which you are engaged, and you know the people with whom you're doing business, and you know the price you pay is sensible, you don't run any real risk.

And I don't think Charlie and I — certainly Berkshire — I don't think we've ever had a permanent loss in marketable securities that was, what, 1 percent, maybe, half a percent of net worth.

I made a terrible mistake in buying Dexter Shoe, which cost us significantly more than 1 percent of net worth where I bought an entire business then.

But I was wrong about the business. It had nothing to do with the volatility of shoe prices or leather or anything else. It just was wrong.

But in terms of marketable securities, I cannot recall a case where we've lost that kind of — I mean, we've done a lot of things in things — in securities — that had a very high beta. We've dealt with a lot of things in securities that had a low beta.

It's just the whole development of volatility as a measure of risk, it has really occurred in my lifetime. And it's been very useful for people who wanted a career in teaching, but it is not — we've never found a way for it to be useful to us.

Charlie?

CHARLIE MUNGER: Well, it's been amazing that both corporate finance and investment management courses, as taught in the major universities — we would argue it's at least 50 percent twaddle, and yet these people have very high IQs.

One of the reasons we've been able to do pretty well is that we early recognized that very smart people do very dumb things, and we tried to figure out why, and also wanted to know, who so we could avoid them. And — (Laughter)

WARREN BUFFETT: We will not run big risks at Berkshire. Now, we will be willing to lose, as I put in the annual report, $6 billion in a given catastrophe, but our catastrophe business, run over many years, is not risky.

You know, a roulette wheel will occasionally pay off at 35-to-1, and that sounds like you're paying out an awful lot of money compared to the amount bet on one number, but I would love to own a lot of roulette wheels.

7. What an annual report tells you about the CEO

WARREN BUFFETT: Number 3.

AUDIENCE MEMBER: Hi. My name is Stuart Kaye, and I'm from New York City.

Warren and Charlie, you spend a lot of time evaluating the management quality and integrity of the companies that you may invest in.

In my current job, I do not have the opportunity to do that. As I read through annual reports and financial statements, what do you suggest I focus on to help me to determine the quality and integrity of management?

WARREN BUFFETT: Well, you can — we've spent many, many years — and we've bought many things. I mean, I — without meeting managements at all, having any entree to them.

The stocks — the 5 billion of stocks — that we may have bought in the first quarter, most of those were companies I never met the management, never talked to them.

We read a lot. We read annual reports. We read about competitors. We read about the industries they're in.

In terms of sizing up managements — obviously if we're going to buy the whole business, that's a different question. Then you — because you — we're going to buy it, be in bed with them, they're going to run them, and we care very much about whether they're going to behave in the future as they have in the past once we own the business. And we've had very good luck on that.

But in terms of marketable securities, we read the reports. Now, Charlie and I were just talking about one the other day where we read an annual report of a large oil company.

And the company — you know, hundred pages, public relations people, lots of pictures — spent a fortune on it. And you can't find in that report what their finding cost per McF or per barrel of oil was last year. That's the most important figure in an oil and gas company over a period of years, but every year counts.

The fact it wouldn't even be discussed — the reason it wasn't discussed, it was absolutely terrible — but the fact it wouldn't even be discussed — and to the extent it was touched on, it was done in a dishonest manner.

When we read things where we basically are getting dishonest messages from the management, it makes a difference to us.

You know, like I say, in marketable securities we can solve that by selling the stock, and it's not the same thing as buying the entire business.

But I think you can learn a lot by reading the annual letters. I mean, for one thing, if it's clearly the product of some investor relations department or outside consultant or something of the sort, you know, that tells you something about the individual.

If he's not willing to talk once a year through a few pages to the people that gave him their money to invest, I mean, that — I've really got — I've got some questions about people like that.

So I like that feeling that I'm hearing directly from somebody who regards me as a partner.

And you may not get it all the way, but when I get it 0 percent of the way, I don't like it.

I've still bought — we've still bought into some — in marketable securities — we've bought into some extremely good businesses where we thought they were run by people we didn't really like very well, because we didn't feel they could screw them up.

Charlie?

CHARLIE MUNGER: Yeah. I think that's exactly right. There are two things: the quality of the business and the quality of the management.

And if the business is good enough, it will carry a lousy manager. And the converse case, where a really good manager gets in a really lousy business, he'll ordinarily have a very imperfect record.

In other words, it's a rare person that can take over a textile business, totally doomed, which is what Warren did in his youthful folly —

WARREN BUFFETT: Right.

CHARLIE MUNGER: — and turn it into what's happened here. You should not be looking for other Warrens on the theory they're under every bush.

WARREN BUFFETT: I figured it out in 20 years, though. I'll have to say that for myself. (Laughs)

Twenty years, and I finally figured out I was in the wrong business.

But there are businesses — if you gave me first draft pick of all the CEOs in America and said it's your job to run Ford Motor now or, you know, pick a company that's in a terribly tough business, you know, I wouldn't do it.

I mean, that it's just too tough. They may get it solved, you know, if they get cooperation from unions and a whole bunch of things, but it will not be solely in the control of the CEO who has that job.

He is dependent on too many good things happening outside to say that he alone can get the job, even if he's the best in the world.

8. Stocks over bonds, but with modest expectations

WARREN BUFFETT: Number 4.

AUDIENCE MEMBER: Hi, Warren. Hi, Charlie. I'm Walter Chang (PH) from San Jose, California. My wife and I are expecting our first baby boy in July, and we're going to name him Warren after you. (Laughter)

WARREN BUFFETT: You're trying to get into my will again.

AUDIENCE MEMBER: Charlie, I'm rooting for you, for the next one.

WARREN BUFFETT: I'd move him further down the line, maybe to number five. (Laughter)

AUDIENCE MEMBER: Warren and Charlie — Warren, if you were writing a follow-up to the very prescient Fortune magazine article from November 1999 in which you were talking about the lean and fat 17-year periods, what would you be writing?

And since we're halfway through the third 17-year period, how is it turning out, based on your expectations from back in 1999?

WARREN BUFFETT: Yeah. The 17 years, of course, I had a little fun with because of the fact there were two 17-year periods and there are also 17-year locusts. So I stretched it a little from a literary standpoint.

But there's nothing magic about given spans of time. There was something very different between the first 17 years of that 34-year period and the second 17, and I used that for kind of a dramatic contrast.

If I were writing something now, I would say what I said just a little earlier in response to Frank Martin's question, that it is — if I had to own long bonds or long-term position equities, I'd rather have equities. But I would not have high expectations for them, but I would have expectations beyond 4 3/4 percent.

How much beyond, I'm not sure, but something enough beyond four 3/4 percent that I would rather own equities than bonds.

I did not feel — I felt, in 1999, that people were extrapolating the experience of the previous 17 years and assuming there was something magic about owning equities.

And expectations of the people were bound to be — that they were — people were bound to be disappointed. They simply had an unrealistic view by extrapolation, and that was the main purpose of that article.

But if I were writing something now, I would not have high expectations for equities, but I would have better expectations for equities than for bonds.

Charlie?

CHARLIE MUNGER: Yeah. And I would say that since that article was written, the results from owning equities have been pretty lean, at least compared to what happened in the glorious 17 years that preceded.

So Warren has been right so far, and he's probably right now when he says modest expectations.

WARREN BUFFETT: Yeah. You really don't have — in markets you can't say something terribly important or intelligent every day or every week or every month.

That's one of the problems of — if you went on television too often or had to write weekly letters or something of the sort.

Every now and then you get something extreme. I mean, I did close down the partnership in 1969, and an article appeared. I did give an interview in ’74. I gave another interview in ‘81 or ’2.

I mean, every now and then, things really get out of whack. But the gradations in between, they’re too tough.

But the nice thing about it is you don’t have to have an opinion every day or every week or every month. If you own some good businesses and you bought them at the right price, if they get to a silly price, you probably should sell them.

And if you find that everything is extremely cheap, like in ’74, you should put every available dime into equities. And that’s what we’ve tried to do.

9. PacifiCorp and the Klamath Dams controversy

WARREN BUFFETT: Number 5.

AUDIENCE MEMBER: Yes. Thank you, gentlemen, for this opportunity to ask you a question. My name is Ronnie Pellagreen (PH), and this is my 14-year-old daughter, Mikayla (PH).

We are here representing hundreds of ocean, commercial, hook-and-line salmon fishermen, and their families from the West Coast. They are barely hanging on to their livelihoods because of the Klamath River crisis.

My husband is a fourth-generation hook-and-line commercial fisherman from Eureka, California. His family has fished for the last 100 years.

Last year, our commercial salmon season was completely shut down because of the crisis in the Klamath River. It is caused by the four lower hydroelectric dams owned by your subsidiary PacifiCorp.

We personally took a 95 percent hit in our income — excuse me — and we had no way to make up that loss. We have used our savings and were forced to take out a Small Business Administration disaster loan to meet our financial needs.

Our daughters were so upset after overhearing my husband and I last Christmas, they came to us wanting to give us all the money in their bank accounts.

I am telling you this, gentlemen and shareholders, because you and the shareholders can help.

Under Klamath Dam relicensing, it is shown that this dam removal makes economic sense for PacifiCorp and MidAmerican.

You are a great businessman who has built an incredible empire. We sure could use your creativity and expertise in solving this crisis situation so the Indian people along the river, and we, in the coastal communities, can continue our long and proud heritage.

People back home are eagerly waiting for me to bring a response back from you.

My question is, what can I tell them is your position on removing the outdated Klamath dams?

WARREN BUFFETT: Yes. Our position on it is quite simple.

The FERC and several of the regulatory commissions have before them 27 different proposals or positions by various interest groups.

Some want — some like hydropower, which is what comes from the dams, because it does not generate the emissions that come from coal or gas-fired generation.

Some like the fact that hydropower is cheaper, several hundred thousand consumers. Some people have been hurt by what you describe in terms of the fish.

And you have a public policy question which will not be determined by PacifiCorp. It will be determined by FERC because they are — they represent the public. In fact, the secretary of Interior has advised FERC that it's a very tough question.

FERC will be having hearings. They will listen to the positions. The Oregon and Utah, California, perhaps, public utility commissions will be listening to the arguments.

And, in the end, we are a public utility responding to public policy. Public policy, weighing both your interests and the interests of others in the matter, will come to a determination, and PacifiCorp will do exactly what they say.

We are responsive to the people that regulate us, just as people have been in that position since the first dam was put in in 1906. So that is entirely a question for FERC and the state commissions.

10. No opinion on NYSE and Euronext merger

WARREN BUFETT: Number 6.

AUDIENCE MEMBER: Good afternoon, Mr. Buffett and Mr. Munger. Thank you for taking my question.

This is my second time at the Berkshire Hathaway meeting that I have attended. My name is Cameron Sparrow (PH). I am 13-years-old and from Boulder, Colorado.

My question is for Mr. Buffett. Mr. Buffett, what is your opinion about the merger of the New York Stock Exchange with the Euronext?

Do you think that the merger will have a positive or negative effect on the market?

WARREN BUFFETT: Well, I really don't know the answer to that. My guess is that — I mean, both of those institutions were very large institutions beforehand, and we would judge a positive effect in terms of narrowness of spreads, as an investor, in terms of costs of execution and that sort of thing.

Both places have been very efficient in the past. I mean, we pay quite low payments. Although my broker is here. We probably should be paying even less.

But the New York Stock Exchange has gotten far more efficient in terms of costs from 30 or — from the days of fixed commissions back in the early '70s and before that. I mean, it's a fraction of the cost.

And the real test from our standpoint is, you know, do we get better executions and less costly executions. And, like I say, both institutions were big, effective institutions before.

And if they get a little more efficient, I hope it gets passed on to the customers, but it may just result in larger profit.

But we're pretty satisfied with — quite satisfied, actually — with the functioning of the New York Stock Exchange where we do most of our business.

But we've done business — we've been buying international stocks, and we've had generally good executions throughout the world. So it's not a source of either concern or enthusiasm to me.

Charlie?

CHARLIE MUNGER: I don't know anything about it. (Laughter)

WARREN BUFFETT: I don't either, but I took longer to say so. (Laughter)

11. Beware when someone says "it's so easy"

WARREN BUFFETT: Number 7, please.

AUDIENCE MEMBER: Mr. Buffett and Mr. Munger, thanks for hosting this wonderful meeting. My name is Chander Chavla (PH), and I'm visiting from Seattle, Washington.

And I think Berkshire Hathaway can contribute to the reduction of global warming if, for next year shareholder's meeting, Mr. Gates and I fly on the same plane. (Laughter)

My question is, I have made a few mistakes in business by trusting the wrong people. So in — and I don't know where to learn how to trust the right people.

They don't teach you that in business school, and the people who are supposed to teach you in the corporate world sometimes betray you.

So how can I learn who to trust and who not to trust?

WARREN BUFFETT: Boy, that's a great question. But you probably have about as good a chance of getting a good answer from me on that as you have on getting on Bill Gates' plane next year. (Laughter)

I get letters all the time, and I hear from people who have been taken advantage of in financial transactions. And, you know, it really is — it's sad. And a lot of it isn't even — it's not fraud or anything.

For one thing, I mean, just the charges involved, the frictional costs and the baloney that is presented is tough.

Charlie and I have had very good luck in terms of buying businesses and putting our trust in people. It's been just overwhelmingly good.

But we filter out a lot of people. And then you say, "Well, how do you filter them out?"

I would say — I think Charlie will agree with this — people give themselves away fairly often. And maybe it does help to have been around as long as we have in seeing the various ways they give themselves away.

They — when somebody comes to me with a business — and I probably shouldn't tell this publicly because they'll probably tailor their approach subsequently — but when they come, just the very things they talk about, what they regard as important and not important, there are a lot of clues that come as to subsequent behavior.

And, like I say, we've really had a batting average I wouldn't have thought we would have had in the people that we've joined with.

But it hasn't been a hundred percent. It's been well above 90. And I get asked that, you know, I mean, "How do you make those judgments?" And I don't know.

Charlie, can you articulate the way we do it?

CHARLIE MUNGER: Well, partly we're deeply suspicious when the proposition is too good to be true.

Warren once introduced me to a gentleman promoter who wanted to inveigle us into an insurance program. And he said, "We only write fire insurance on concrete bridges that are covered by water." He says, "It's like taking candy from babies." We are able to filter out propositions like that.

WARREN BUFFETT: Yeah. Anybody that, implicit in their comments or what they kind of laugh about or — all kinds of things in terms of the fact — you know, it's so easy and — it ain't that easy, you know, and we get suspicious very quickly.

And the truth is, we rule out 90 percent of the times. And we may be wrong about a fair number that we're ruling out. The important thing is whether the ones we're ruling in we're right about.

And so we don't mind — we're looking for the obvious cases of people you can trust.

I mean, go back to 1969 again. When I was thinking about who to turn my partners over to, all kinds of people with great records. That was a hedge fund — that was the first hay-day of hedge funds. And there were books written about it, "New Breed on Wall Street" and some of those. You can look them up.

And dozens and dozens and dozens of people with good records. And when I sat down and thought about, I'm going to write my partners and tell them who to turn over all their money to — because most of them had a hundred percent or close to it with me — you know, Charlie, Sandy, Bill Ruane.

I couldn't have told you which of the three was going to do the best. And, you know, I couldn't even tell you those three would done better than five others that somebody else might pick.

But the one thing I was sure of is that they were going to be sensational stewards of money.

They were going to care more about those people — the people that were turned over to them — in getting the best result possible than they were going to care about, you know, whether they made X or 2X this year in terms of commissions or fees or any of that sort of thing.

Anytime I find somebody with a — what I regard as an unfair fee structure, and saying, "Well, I can get it," well, you know, I rule them out.

And I may rule out some of the wrong people. But the ones that are left in, I feel very good about. And I wish I could give you better advice than that, but that's all I can do.

12. Pay attention to opportunity costs

WARREN BUFFETT: Eight.

AUDIENCE MEMBER: Yes. Mr. Buffett, Mr. Munger, thank you again for being so generous with your time with us every year.

I'd like to follow up on the question from the gentleman from Australia and from Munich on valuation.

The gentleman from Australia asked about margin of safety, and you replied that a superior business may not require that much of a margin of safety.

And my follow-up would be, does that suggest market rate of returns going forward for superior businesses?

And then on the Munich valuation, in which you cited a farm example on discounted cash flows, I'm very curious how you come up with your discount rate and how you might adjust that discount rate based upon various businesses.

You might want to discuss your discount rates used for Coca-Cola, J&J, or some of your past investments. Thank you.

WARREN BUFFETT: Yeah. We don't formally have discount rates. I mean, every time I start talking about all this stuff, Charlie reminds me that I've never prepared a spreadsheet. But, in effect, in my mind I do.

But we are going to want to get a significantly higher return, obviously — in terms of cash produced relative to the amount we're outlaying now for a business — than we are from a government bond.

I mean, we — you know, we are going to — that has to be the yardstick at a base. And how much more do we want?

Well, if government bond rates were 2 percent, we're not going to buy a business to earn 3 or 3 1/2 percent expectancy over the years. We just don't want to commit our money that way. We'd rather sit around and wait a little while.

If they're 4 3/4 percent, you know, what do we hope to get over time? Well, we want to get a fair amount more than that.

But I can't tell you that we sit down every morning and I call Charlie in Los Angeles and say, "What's our hurdle rate today?" I mean, we've never used the term.

You know, it's a little bit of the — we want enough so that we feel very comfortable if they closed down on the stock market for a couple of years, if interest rates go up another hundred basis points or 200 basis points, we're still happy with what we've bought.

And above that, I really — I know it sounds kind of fuzzy, but it is fuzzy.

Charlie?

CHARLIE MUNGER: Yeah. The concept of a hurdle rate makes nothing but sense, and yet a lot of terrible errors are made by people who are talking about hurdle rates.

Just because you can measure something and guess it, doesn't mean that it's the controlling variable in what you're dealing with in a messy world.

And I don't think there's any substitute for thinking about a whole lot of investment options and thinking about why one is better than another and what the likely returns are from each, et cetera, et cetera.

And the trouble with the hurdle rate concept — not that we don't have one, in a sense — is it doesn't work as well as a system of comparing things.

In other words, if I have something available that I think will give me 8 percent for sure and I can buy all I want of it, and you've got a perfectly good investment that I think will earn 7, I don't have to waste 5 minutes with you.

You're like the mail order service offering the bride through the mail and she's got AIDS. You know, I can go on to some different subject.

And so this — the concept of opportunity cost is — it's so little taught in investment. They teach it in the freshman course in economics in all the major universities, but when you get to the corporate finance departments and so forth, it doesn't lend itself with the kind of mathematics they want to use, so they ignore it.

But in the real world, your opportunity costs are what you want to make your decisions based on.

WARREN BUFFETT: Yeah. And even if you had something you were really familiar with and were very sure on the 8 percent, 8 1/2 wouldn't tempt you if somebody came along, as a practical matter.

CHARLIE MUNGER: Sure.

WARREN BUFFETT: As I mentioned, I've been on 19 corporate boards. I would say that of the presentations I've seen — and I've seen a lot of them — and every one of them had a

calculation of internal rate of return, if they'd burned them all, the boards would have been better off.

I mean, there's so much nonsense presented, because the presenters, essentially, know what the listeners are desirous of hearing, and what is needed in order to get through something the CEO wants to do anyway — you just get nonsense figures.

And, you know, we may get nonsense figures, too, but they're ours, and we — (Laughs)

CHARLIE MUNGER: Let me give you an example of that. I have a young friend who sells private partnership interests to investors. And he's in a really tough field where it's hard to get decent returns.

And I said, "What return do you tell them you're aiming for?" And he said, "20 percent." And I said, "How did you pick that number?" And he said, "If I chose any lower number, they wouldn't give me the money." (Laughter)

WARREN BUFFETT: And there's no one in the world we think can earn 20 percent with big money. I mean, it just — so anybody making a promise like that, basically, we're going to write off immediately.

It's amazing to me what — you know, in a sense, how gullible big investors are, pension funds and so on, in that they have people come around and promise them the Holy Grail.

And they want it so badly, you know, that they're willing to believe things that just have to be nonsense.

13. Some problems are too important to be "too difficult"

WARREN BUFFETT: Let's go to number 9.

AUDIENCE MEMBER: Good afternoon, Mr. Buffett, Mr. Munger. My name is Robert Piton (PH), and I'm from Chicago, Illinois.

Over your careers, has there been any question, either personally or professionally, that you haven't been able to get a comfortable answer to that you cannot simply put in your "too difficult" pile? Thank you.

WARREN BUFFETT: Charlie?

CHARLIE MUNGER: Well, sure. You get —

WARREN BUFFETT: You may have just asked one. (Laughter)

CHARLIE MUNGER: Sure. If you've got a child dying of some horrible disease, you have a problem you can't just put in a "too difficult" pile.

So there are lots of things in life that come to you that you — where you have no option to not consider the issue.

But where it's voluntary, like choosing one investment from many, then the "too difficult" pile is a marvelous way of sifting your daily grist.

WARREN BUFFETT: Yeah. I have a file on my desk — Laura Graham gave it to me — that's entitled "too hard." And, as Charlie said, if something is optional and it's too hard, you just throw it in there.

If you've got the problems of weapons of mass destruction, it is too hard, but you have to keep wrestling with it. Because if you even reduce the probabilities a tiny bit, you know, you're doing something. But you're never going to solve it.

You just have to keep working at certain types of problems, and you hope you don't have too many like that.

14. We're thinking all the time

WARREN BUFFETT: Ten.

AUDIENCE MEMBER: Many greetings from Germany. I am Bernard Yaadan (PH) from (inaudible), a little town close to the Black Forest, and I'm the mayor of it.

My question to Mr. Buffett and Mr. Munger is, how often do you review each single position in your portfolio?

Some look at their stocks every day, sometimes more, some only once a year. What is your frequency? Thank you.

WARREN BUFFETT: Well, that sort of breaks down into two periods in my life. When I had more ideas than money, I was thinking about everyone all the time because I was thinking about buying the next one and which one I would have to sell in order to buy something even more attractive.

So my opportunity cost, as Charlie would put it, then, was the least attractive stock which I would give up to buy something more attractive.

So I — literally, if I had $100,000 and it was all invested and I wanted to put $10,000 or 20,000 into something I felt was more attractive, I would be thinking all the time of which one of these do I unload.

Now our situation is such that we have more money than ideas, and that means that we really aren't re-examining something every minute, because the option is cash and not doing something that we really are excited about.

We still think about the businesses we're in — whether they're wholly owned or whether they're partially owned through stocks — we think about them all the time.

I mean, we've got a lot of information filed away in our minds. And you keep getting little incremental bits about that company or the competition or other things going on.

So it's — you know, it is a continuous process, but it's not a continuous process with the idea that daily activity, or weekly activity, or monthly activity, is going to result.

It's just we want to just keep adding to our thinking and knowledge, refining it further about every business that we're in.

If we needed some money for a very big deal, for example — let's say we needed 20 or 30 or $40 billion and we had to decide to sell 10 billion of equities, just to pick a figure, you know, we would use the information we've been collecting daily, which hasn't really meant much as we've gone along, and we would come to a decision about where we raise that $10 billion.

Charlie?

CHARLIE MUNGER: Yeah. But even in Warren's salad days when he had way more ideas than he had money, he did not spend a lot of time thinking about his number one choice. You know, he could put that aside and devote his efforts to other subjects.

15. It's hard to buy billions of dollars of stock

WARREN BUFFETT: Number 11.

AUDIENCE MEMBER: Good afternoon. Charles Fisher (PH) from New York.

In the last 18 months, the company has allocated at least $1 billion to four or five publicly traded companies.

Berkshire has an abundance of capital and a scarcity of ideas. Since these stocks investments were made in large cap companies in which we could have probably made $5 billion investments, have you thought about allocating more capital to each stock investment?

WARREN BUFFETT: Yeah, we do think about that, obviously. And there's certain ones that we have added billions of dollars to that we already had substantial positions in a couple years ago.

Obviously, when we add to the present list, we think we're adding to the ones either that look the most attractive to us, or to the ones that we can just buy. I mean, there's some things where we can't put that much money in, or where we will have reporting thresholds that will cause a problem.

If we own over 10 percent of a company, you know, we can't sell a share of it, then, for six months without it being — if there's a profit — it being recaptured pursuant to a short-swing rule.

So there's some technical things that enter into whether we cross certain thresholds of ownership size.

But if you look at — you know, if you look at the portfolio at the end of 2007, you're going to see that certain positions in there from 2006, there will probably be an increase by billions of dollars.

And that's always something that I'm considering and Charlie is considering.

We like to add to present positions. I mean, those are companies we know, understand, obviously like to some degree.

And if the price gets reasonably attractive and we've got money around, we will add. If we can find a good business to buy, you know, we will sell the least attractive.

Charlie?

CHARLIE MUNGER: Yeah. It isn't as easy as it looks to buy these big positions. When we were buying Coca-Cola, we were buying every share we could. We bought, what, 30 or 40 percent of the daily trading?

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: And it took us a long, long time to get our position. And so there are huge difficulties to managing great, big, common stock portfolios.

We like it way better when we have those problems now than we liked it when we didn't have them early, but it does make it much harder. We have no easy way of moving these elephants around.

WARREN BUFFETT: In general, we think we usually can buy something like 20 percent of the daily trading volume and feel that we're not causing the price to be violently different than it would have been if we hadn't been participating in the market.

So that means if we're going to buy $5 billion worth of something, $25 billion worth of it is going to have to trade, and that's a lot for many stocks.

So we are a big ocean liner, and that has its disadvantages compared to being a smaller boat.

16. Buffett responds to concerns about Klamath Dams

WARREN BUFFETT: Number 12?

AUDIENCE MEMBER: Heya hamalio (PH). My name is Wendy George, and I am from the Hoopa Indian Reservation in northern California. I'm here with the Yurok and Karuk indigenous people who live along —

WARREN BUFFETT: I don't know if the microphone isn't working or not, but we want to make sure it is working.

AUDIENCE MEMBER: — who live along the Klamath River. My people are river people. Our entire culture, religion, and subsistence is centered around the river.

Your subsidiary company PacifiCorp owns dams on our river. Mr. Buffett, I know you care very much about humanity and ethical business. We also understand that you cannot exercise direct control over PacifiCorp's operations.

However, there are things you can do to help us. So we are here to ask you if you would be willing to meet with the tribal representatives, learn more about our issues, and explore ways to help save our salmon?

WARREN BUFFETT: Are you complete? Just take your time here.

AUDIENCE MEMBER: Complete.

WARREN BUFFETT: OK. As I said earlier, we will not make the determination in the end. It will be made by FERC.

It's the same way as if we're going to put in a coal generation plant or a gas generation plant or more wind-powered.

For example, we put in a lot of wind power in Iowa, but that was decided, essentially, by the utility commission in Iowa, that they wished to make that decision.

And, incidentally, sometimes people are unhappy when we put in wind because they don't want the transmission lines that are going to be involved.

They're usually happy to give us the plots on which to put the wind turbines because they get paid very well for it, but they're not happy to have the transmission lines.

Anytime you get into the public utility field, there are people happy and unhappy with decisions. Nobody wants a generating plant built near them, and that's the nature of it.

The world does want electricity. And because it wants electricity, and it wants more electricity, it essentially has to decide the public policy issues through regulatory authorities.

And we will do exactly what FERC, finally — and with the consent of the state commissions — what they finally decide on it.

And all of the arguments will be presented to them. As I say, there are 27 groups, I believe. And then they go and then they get the opinion of the secretary of the interior and so on and a lot of other groups.

And somehow they come out with a decision on public policy, and we will follow it.

It takes a lot of time, too, I must say. Anytime you've got an issue that's got 27 different views and more than one authority, it's going to take significant time.

I'm in a peculiar position on this. Because when we bought PacifiCorp, we had to — Walter Scott and I both signed affidavits. As part of the acquisition of PacifiCorp, the Oregon Public Utility Commission required that we submit these affidavits.

And I'll read to you from this. I don't want you to think I'm ducking behind this, but this was executed several years ago.

And it says, "I agree I will not exercise any control, directly or indirectly, on matters that pertain to PacifiCorp, except for relating to PacifiCorp that are ministerial in nature."

And then, "I agree, as a MidAmerican Holding Company and Berkshire Hathaway director, I will recuse myself from voting on MidAmerican Holding Corp. or Berkshire Hathaway board of director matters concerning PacifiCorp activities or operations."

This is part of the order that came down that allowed MidAmerican to buy PacifiCorp.

I must say, too, that in terms of the Oregon Commission and the five other states, that our application went through in almost record time because MidAmerican does have such a good record in terms of being responsive to the public utility commissions under which it's operated, and we will continue to be responsive.

WARREN BUFFETT: But I appreciate your point. Thank you.

17. Florida's public-sector hurricane insurance

WARREN BUFFETT: Number 13, please.

AUDIENCE MEMBER: Peter Vanden Broeck (PH), Cleveland, Ohio. Mr. Buffett and Mr. Munger, thank you for so eloquently answering some of these tough questions. I know of no other public company that would allow a forum such as this. You're doing a great job. (Applause)

WARREN BUFFETT: Thank you.

AUDIENCE MEMBER: My question is a follow-up question to the Katrina aftermath situation regarding policyholders with insurance companies and the tussle between coverage and what's the proper remedy for those that suffered after such a storm.

Part of that tussle, or one of the results of that tussle, was some legislation that was passed in the state of Florida.

Could you please explain that legislation, as you understand it, to shareholders? And what effect, if any, does that have on Berkshire's insurance subsidiaries? Thank you.

WARREN BUFFETT: Yeah. I can't tell you with precision what the Florida — I don't know whether Joe Brandon, or Ajit [Jain], or Tad Montross — if they're in the managers' group, if somebody could pass the microphone over to them.

Essentially — I should let them explain it — but the state of Florida has gotten more into the business of insuring the citizens by a considerable margin than it did before, but there are some significant limitations on that.

And I think, if we've got a microphone with one of the three of them, they could answer that question better than I.

Do we have somebody over there? Are they all out writing insurance, or — (Laughter)

CHARLIE MUNGER: More likely buying jewelry. (Laughter)

VOICE: Check, one, two.

WARREN BUFFETT: Who do we have?

It's impossible for me to see over there with the lights.

VOICE: I'm getting a mic.

WARREN BUFFETT: What are they yelling?

CHARLIE MUNGER: Seven.

JOE BRANDON: Hello.

WARREN BUFFETT: Ah.

JOE BRANDON: Warren, it's Joe.

WARREN BUFFETT: OK.

JOE BRANDON: Took me a little time to get here.

WARREN BUFFETT: OK. Fine.

JOE BRANDON: I was looking for Ajit. What was the specific question?

WARREN BUFFETT: I think the questioner wanted to know what has really happened in Florida in the last three or four months, in terms of the state getting involved in the homeowner's insurance business.

JOE BRANDON: Well, back in mid-January, the Florida legislature met in a special session and passed legislation, at the urging of the governor, that expanded the reinsurance fund and ultimately is moving a lot of risk, both personal lines and commercial lines, from the private market to the public market.

You know, this is going to, and has manifested itself, in lower prices for wind risks in Florida and has freed up capacity that was dedicated to Florida for other markets.

So ultimately it's going to have a depressing effect on the insurance industry.

Longer term, you know, there is no free lunch, and the state and the citizens of Florida are taking a tremendous amount of risk.

And it will all work out if the wind doesn't blow, but the odds are eventually it will, and Florida is going to have a large public policy issue to deal with.

WARREN BUFFETT: Are they — Joe, are they explicitly taking on about 30 billion and then sort of leaving it in the laps of the gods above that? I'm not sure myself, but —

JOE BRANDON: Yeah. I believe they take out about 30 billion. It's about — the increase was 12 to 16 billion. So they previously had taken about 18 billion out, and they took an additional 12 to 16.

WARREN BUFFETT: Yeah. The real problem will be if there turns out to be a $100 billion insured loss.

And then the — you know, the state may decide to issue 60 or 70 billion of bonds. They may decide to go to the federal government and say, "This really isn't our fault, and therefore the entire country should pay, in some form."

Who knows what will happen? And the truth is, you know, it's very unlikely that a $100 billion storm occurs. The biggest one was Hurricane Andrew, which trended, through inflation to present day, probably wouldn't quite hit 30 billion.

But if that same storm come through as a Category 5 about 20 miles north of where it came — where it hit — you would have — or you could easily have something like $100 billion storm.

So, you know, you're going to have to stay tuned on that. And if they don't have any hurricanes in the next couple of years, the whole matter will die down — big hurricanes.

And if they have a $100 billion storm, they will probably go to Washington, and we will find out whether the whole country has been insuring hurricanes in Florida or whether the federal government will throw it back to the State of Florida, and the State of Florida will, presumably, issue a lot of bonds, and taxes would go up.

And, in effect, you would distribute insurance — insured losses — in relation to the proportion people pay of the general tax revenues of a state like Florida.

It's tough to be where the wind blows a lot, but it's also a very nice place to live, apparently. So we will find out how it plays out.

18. "Associate with people who are better than you are"

WARREN BUFFETT: Number 14, please.

AUDIENCE MEMBER: Steve Rosenberg (PH), originally from Michigan. Thank you very much for continuing to serve as excellent role models and for the values that you continue to teach by example.

I'm curious to know who are your present-day role models. And I know that your prior heroes included your father, Ben Graham, and Davy [former GEICO CEO Lorimer Davidson], but would be curious to know who in addition to those three. Thank you.

WARREN BUFFETT: Well, I've had a number of them. And I'm not sure I want to name them because the ones you don't name might feel a little left out.

But the one thing I've been very lucky on is that the ones I've had have never let me down. So I've never had that experience where you've looked up enormously to somebody and then had that person let you down in some way, which would be a terrible experience and very hard to get over it.

And, you know, I'm sure some people have had that in marriage, and they've had it in business.

And the worse situation, of course, is if you have it with your parents, but that did not happen.

In fact, the reverse happened with me. So I can just tell you that choosing your heroes is very important. I tell that to the students when they come. Because you are going to gravitate toward the behavior of those around you.

I tell people to be sure and associate with people who are better than you are. Marry up and hope you find somebody that doesn't mind marrying down. (Laughter)

And it will do wonders for you. It was a huge help to me. I can tell you that.

Charlie?

CHARLIE MUNGER: Yeah. I would say that you're not restricted to living people when picking your mentors. Some of the very best people are dead. (Laughter and applause)

19. "I have my resume screen-printed on my shirt"

WARREN BUFFETT: Well, with that, we better go to number 1. (Laughter)

AUDIENCE MEMBER: Hello, everyone. My name is Kendall Brubaker (PH). I'm a senior from Purdue University in West Lafayette, Indiana.

I have my resume screen-printed on my shirt. Charlie and Warren, I brought a shirt for each of you, as well as one for (inaudible), who is responsible for my presence today.

Additionally, I have a strong interest in social entrepreneurship and the Gates Foundation and would love to offer a shirt to Bill, if he is willing to accept.

Now, I had an overly technical question about the historic rate of economic growth and why it's 3 percent as opposed to 2 or 5.

However, given my circumstances, I feel it is more appropriate to ask if I made a sound economic decision to make this trip to Omaha to display my own intrinsic value, and to turn down the $500 that the man just offered me for my spot in line to 27,000 people and to learn from you, or if I would have been better off charging the equivalent amount to my American Express card on See's Candy and Coca-Cola?

Thank you. And, again, my name is Kendall Brubaker. (Applause)

WARREN BUFFETT: Thank you. I thought your question was going to be what shirt size we wore, but — (Laughter)

CHARLIE MUNGER: Mine is small. (Laughter)

20. Munger: Running cars on corn is "dumb"

WARREN BUFFETT: I think we'll move on to number 2. (Laughter)

AUDIENCE MEMBER: Tom Nelson (PH), North Oaks, Minnesota.

This one is for Charlie. What are your current views on the costs and benefits of ethanol production in this country?

CHARLIE MUNGER: Well, you know, even [Sen. John] McCain has had a counter revelation lately. He's decided that ethanol is wonderful now that he realizes that's the way they think in Iowa.

I'm somewhat in his position here, but I won't allow that to stop me. (Laughter)

I think the idea of running automobiles on corn is one of the dumbest ideas — (applause) — that has gotten widespread acceptance that I have ever seen.

But in a government with a lot of political pressures, weird decisions get made. But that has to be about as crazy a decision as was ever made.

You want a social safety net under people, and the most basic safety net of all is food. And you're going to raise the cost of food so you can run these automobiles around? And you use up just about as much hydrocarbons making the corn as you get out of the ethanol.

I would say that — and you don't count in the cost of the ethanol, the cost of the topsoil that goes away forever when you — it's a — I love Nebraska. I'm a Nebraskan to my core. But this was not my home state's finest moment.

WARREN BUFFETT: We're going to try to smuggle him out of town tonight. (Laughter)

21. "Supermoney" book available for purchase

WARREN BUFFETT: I should make one announcement.

In terms of the books at the Bookworm outside, Jerry Goodman, a friend of mine from way back, wrote a book many years ago called “Supermoney,” which he just brought out a new addition.

They actually flew those in. They arrived here at the auditorium about 9 or 10 — 10 or 11 o’clock — I guess, this morning. And the new revised issue of “Supermoney” is now out there, in addition to all the other titles.

And I would feel remiss, after all the trouble they went to, if I didn’t mention that to this group.

It’s a very good book. Jerry was a great writer. He wrote “The Money Game,” which was a classic. And “Supermoney” is a good book, too.

22. Best hedge against inflation

WARREN BUFFETT: Let’s go to number three.

AUDIENCE MEMBER: Good afternoon, gentlemen. Paul Wigdor (PH) from Montclair, New Jersey.

What are you doing to protect our company’s portfolio against the perils of inflation? Specifically, are you looking at further currency investing and metals investing?

WARREN BUFFETT: Well, we would not necessarily look at metals investing as being any protection against inflation at all.

But we are — the best protection for inflation is your own earning power. I mean, somebody that is a first-class surgeon, or lawyer, or teacher, or salesperson, or anything else, whether the currency is seashells, or paper money, or whatever, will do all right in terms of commanding the resources of other people.

So your own earning power is your best — is the best hedge against inflation.

The second best hedge is to own a wonderful business, not a metals business, necessarily, not a raw material business, not a minerals business, but a wonderful business.

And the truth is, if you own Coca-Cola, if you own Snickers bars, if you own Hershey bars, if you own anything that people are going to want to give a portion of their current income to keep getting, and it has relatively low capital investment attached to it so that you don’t have to keep plowing tremendous amounts of money in just to meet inflationary demands, that’s the best investment you can probably have in an inflationary world.

But inflation is bad news for investors under almost any circumstances.

You can argue that if you own some business that required very little capital investment and had real flexibility of price during an inflationary period so that people would continue to give up a half an hour of work — of their own work — every month to buy your product, and you leveraged it, then you might even beat inflation to some extent.

But leverage is not our game, but we try to own good businesses.

I think that the Berkshire would not do as well during high rates of inflation at all as it does — in real terms — as it does in periods of low inflation, but I think we would do better than a good many companies.

Charlie?

CHARLIE MUNGER: I've got nothing to add.

23. Railroad business is better but won't be "sensational"

WARREN BUFFETT: Number 4.

AUDIENCE MEMBER: Hello, Warren and Charlie. My name is Felton Jenkins. I'm from Savannah, Georgia.

I've been a shareholder for a number of years. This is my third annual meeting. Thanks to you guys, and thanks to your managers and all your employees for the great job.

Just briefly follow up on one thing. It's been published in the Washington Post, LA Times, a number of media outlets, that the FERC, the California Regulatory Commission, the Department of Interior, have determined that it would save between 100 to $200 million to decommission the dams and find alternative power versus doing the capital retrofit.

But, anyway, my question is, what can you tell us about your views on the future profitability of the railroad industry? And what might make that more exciting going forward versus what it's done historically? Thank you.

WARREN BUFFETT: Yeah. Thank you.

I don't think it will be a lot more exciting. But the relative — the competitive position of the rails has improved somewhat from, really, not a very good competitive position 20 or 25 years ago.

There's been a lot of progress made on the labor front. They benefit in their competitive position vis-a-vis trucking as oil prices go up.

Higher diesel fuel, obviously, raises costs for rails, but it raises costs for their competitors, the truckers, by probably a factor of close to four compared to how it hurts them. And there isn't a whole lot of new capacity being created in the rail industry.

So what was a terrible business 30 years ago, and it was operating under regulation — it's still under — operates under the threat of reregulation, which has a tempering effect on their pricing power — but it's a better business now.

It will never be a sensational business. It's a very capital-intensive business. And when you put tons of capital out every year, it's very hard to earn really extraordinary returns on capital.

But if they earn a decent return on capital, it can be a good business over time, and it can be a lot better business than it was in the past.

Charlie?

CHARLIE MUNGER: I've got nothing to add to that one, either.

24. Best ways a 10-year-old can earn money

WARREN BUFFETT: Number 5.

AUDIENCE MEMBER: Hello, Mr. Buffett and Mr. Munger. My name is Marie Blevins, and I am from Bardstown, Kentucky. This is my first shareholder meeting.

My question is, what do you think are the best ways a 10-year-old can earn money? (Laughter and applause)

WARREN BUFFETT: Well, I must say that was a subject I gave a lot of thought to when I was 10 — (laughs) — more than I gave to school and some other things.

You know, you have to — you're probably a little young to deliver papers. That was always my favorite. And I got about half the capital I started with by delivering papers, and I always liked it because I could sort of do it by myself.

I don't know the situation and the town in which you live, but, like I say, 10 is probably a little young, but 12 or 13 would not be.

And almost any — there can be a lot of — I tried to — I must have tried 20 different businesses by the time I got out of high school.

The best one was a pinball machine business, but I'm not sure I want to recommend that you get into that.

When I did it, it was a much purer business where you put a nickel in, and that was about it.

But it is interesting — I read a study a long time ago — I wish I could get my hands on it because I've quoted it a lot but I never quoted it as authoritatively as I would be able to if I could actually find the damn thing that I read 30 years ago.

But it correlated business success with certain variables.

And, you know, they tried grades in school, and they tried what your parents did, and they tried whether you went to business school, all those kind of things.

And they found it correlated best with the age at which you started your first business, got into business, that the younger you were when you did your first piece of business seemed to correlate best with later business success.

And to some extent, that's sort of natural. It's probably true that — that when you see it in athletics, you see it in music and that sort of thing.

So whatever you can figure out that other people will pay you to do that they don't want to do themselves or that they'd like done for them — I advise you to look around the neighborhood and talk to your parents, talk to your friends, see what other people have done that have been 10 or 11 or 12 years old that's worked for them and copy it.

But if you can get a good paper route when you're 12 or 13, that's a sure way to save some money.

I've often wondered about people that are having trouble being in debt, you know, that have a normal eight-hour job.

If they added a route in the morning and just put that aside, you know, it could be the way out of being behind the game instead of being — and getting ahead of the game — and take another hour and a half out of their day, but not too many people seem to do it.

Charlie used to sell — didn't you used to sell yourself the best hour of the day or something, Charlie?

CHARLIE MUNGER: You bet.

WARREN BUFFETT: Yeah. Tell them what you did.

CHARLIE MUNGER: Well, when I was young, I read that savings bank thing, "The Richest Man in Babylon," which taught the joys of underspending your income and investing the difference and how wonderfully it would work over time.

And, lo and behold, I did exactly what this little pamphlet suggested, and it worked. And the other idea — and then so I got the idea that — I had a mental compound interest thing, too.

And so I finally decided I was going to give the best hour of the day to improving my own mind, and then the world could buy the rest of the time. And that may have been a very selfish thing to do, but it worked.

WARREN BUFFETT: Yeah. Charlie was selling his time — I don't know. What you were getting per hour as a lawyer?

CHARLIE MUNGER: Not much.

WARREN BUFFETT: Yeah. He just decided to sell himself the best hour, and not a crazy thing to do.

CHARLIE MUNGER: But I would tell that little girl if you make yourself a very reliable person and stay reliable all your life, faithfully doing whatever you engage to do, it will be very hard for you to fail at anything you want. (Applause)

25. Global competitors matter, not global trends

WARREN BUFFETT: Number 6.

AUDIENCE MEMBER: Good afternoon, everyone. My name is Dennis Batrowski (PH). My hometown is West Point, Nebraska, and I now live in Omaha with my family.

WARREN BUFFETT: As you may know, my mother came from West Point.

AUDIENCE MEMBER: Yes. Thank you, Warren and Charlie, for your incredible education, generosity in this great meeting. I've attended every meeting since 1994.

Warren and Charlie, assuming a necessary margin of safety in the future cash flow estimates and proper adjustments in discount rates, would you discuss which trends of global economic growth that you think will be sustainable, given our holdings in railroads, steel, materials, and energy, with our modest expectations, enormous trade deficit, tight credit spreads, low risk premiums, and explosive growth in emerging economies? Thank you.

WARREN BUFFETT: Yeah. We think we're — we think we're in a pretty good group of businesses for the world we face. You know, we don't know which ones will turn out to be the best. There's a few that we think are real superwinners, and we think a significant number of them will do OK.

And we don't try to buy our businesses with thoughts much of world trends. We certainly think in terms of international — foreign competition.

I mean, we do not want to buy into a business that has a very high labor content and that has a product that can be shipped in from abroad very easily.

Because, sooner or later, that will probably be trouble, just like Charlie and I — really, I bought into an airline — he came along and tried to rescue me — some years ago that had very high seat mile costs and it had protected routes — US Airways — so it was able to operate with 12 cents a seat mile of cost because Southwest hadn't gotten there yet with their 8 cent costs.

But they get there. And you do not want to have something whose competitive position is going to erode over time. But I think most of our businesses have got pretty strong competitive positions.

And, really, the variables you name don't bother us. You know, we will play the hand as well as we can, and we're playing it with terrific people in very good businesses, and we're dealing from strength all the time. You know, we've always got a loaded gun.

And we think we've got the right values with our managers, the people. Think we've got a culture that's owner-oriented.

We've got a lot of things going for us, and they won't produce huge returns, but they're likely to work OK.

Charlie?

CHARLIE MUNGER: Well, we learned about foreign labor competition in our shoe business. And in that, it reminds me of Will Rogers, who didn't think man should have to learn these easy lessons in such a hard fashion.

Will Rogers believed that you should learn not to pee on an electrified fence without actually trying it. (Laughter)

WARREN BUFFETT: Will told Charlie a lot of things he didn't tell me. (Laughter)

26. It's all relative with currencies

WARREN BUFFETT: Number 7.

AUDIENCE MEMBER: Hello, Mr. Buffett and Mr. Munger. I'm Shinydaz Guynadewa (PH) from Fort Lauderdale, Florida.

First of all, I want to thank you for your efforts in making investors aware of the high transaction cost involved with several investments, and I got lot of personal benefit by reading your articles.

My question today is in reference to the declining value of dollars compared to all other major currencies. In last three years, dollar declined as high as 25 to 30 percent.

So I want to understand how it is going to impact individual investors and the how big is the threat? Thank you?

WARREN BUFFETT: The question is about the declining dollar but I didn't get all the —

CHARLIE MUNGER: He asked you for — what do we think about it, what are we going to do about it.

WARREN BUFFETT: We think it — we think the dollar over time is — unless policies are changed in a major way — is likely to decline somewhat more against most major currencies.

And we originally backed that opinion up with transactions that got as high as 21 or -2 billion in the ownership of foreign currencies.

And then the carry on that, the difference between interest rates in the various countries, made that quite an expensive way to express that belief.

So we have focused much more on buying into companies that earn lots of money in other currencies, on the thought that they will be somewhat favored over companies earning just U.S.

But that's not — as I mention in the report — that is not a huge determination of what we buy. It's a factor, but it's not — it's not 50 percent of the decision or anything like that.

We are following policies in this country that are likely to cause the dollar to decline in value against many major currencies. And who knows what speed, whether it happens this year or next year. We don't have any idea on that sort of thing.

But the fundamental forces are fairly strong.

We actually only own one currency now — trade — which would surprise you, actually. We'll tell you about it next year.

Charlie?

CHARLIE MUNGER: Yeah. So far, something peculiar has happened. During this exact period of maximum dollar decline in value versus other currencies, the dollar prices at Costco have showed an inflation factor of approximately zero.

So what really matters, of course, is how things are working in your own country, and it's been perfectly amazing how well we've gotten by so far with the decline of the dollar.

WARREN BUFFETT: Yeah. As Charlie says, you know, we reference everything in terms of our own country.

If you look at oil, for example, which we'll say has gone from roughly $30 a barrel to $60 a barrel over the last few years, you know, during that same time the euro has gone from, like, 83 cents to a $1.35.

So the price of oil, if you're a European, has gone up very little. I mean, we think oil has run wild. But in terms of anybody that's using the euro, the price of oil has gone up about 25 percent, and we feel the price has gone up a hundred percent.

So you do have this anchoring of thought to your own currency, which is understandable.

I do think you'll need to think about currency matters more than Americans traditionally have. I was struck 20, 30, 40 years ago, when I would travel elsewhere, how much more sophisticated most people in Europe and the UK, wherever, were about currency than the United States.

We never really had to think about it. Everything was dollar-based, and an American didn't have to be smart about currency or even think too much about it in terms of their business. But that world has changed.

27. Corporate directors aren't doing their job

WARREN BUFFETT: Number 8.

AUDIENCE MEMBER: John Norwood from Des Moines, Iowa. A quick question — a quick comment and then a question.

The comment, following on Charlie's comments on ethanol, I would ask him at least to look at the environmental benefits of ethanol as a fuel blend — octane boosters superior to other types of chemical additives, such as MTBE, which has been so damaging to groundwater.

My question is for Mr. Buffett. And I'm hoping you might be able to tell us a little bit more about your interactions with the board of directors and the types of ideas and idea exchange and, perhaps, a model for how you believe a board of directors is supposed to function with management. Thank you.

WARREN BUFFETT: Yeah. I would say that most writers and most shareholders probably have a little bit of a distorted version, at least, how most corporations — large corporations — have operated over the years.

Usually — for a long time I would say that directors, generally, were sort of potted plants. I mean, you sat there and the management had its agenda and didn't really want input on major matters.

And Charlie and I can certainly testify to the fact that we have had great lack of success, even when we were the largest shareholder of a company, in terms of talking about things that really count.

I mean, if somebody spends their whole lifetime— 25, 30 years — rising to the position of CEO, you know, they want to be boss, and you can't blame them, and the only thing in their way is the board of directors.

So they look for people who are big names and they look for ways to keep them happy, but they don't really want them getting into the business very much.

There's a lot more process now that's been imposed by the recent rules. But I would say still, in terms of the reality of the guts of business and the discussions that take place and all that, I think you might be surprised at the level overall of that throughout corporate America.

As I've written in the report, overwhelmingly, the job of the board of directors is to have the right CEO. I mean, if you've got the right CEO, 90 percent of it takes care of itself. If you were the director of Cap Cities and you had Tom Murphy as the CEO, you know, case closed. It was all you needed.

And if you have that CEO, I think you have an obligation on the board to make sure that there's not overreaching by the CEO, because the CEO can have different interests.

And I think the third thing that the board does — should do — is they really should bring some independent judgment in on major acquisitions. Because there is a natural tendency for people with, usually, big egos, big motors, who get to be CEOs that like to do big things and to become bigger spending other people's money.

And normally, when big deals come along, you know, the management — by the time it gets there, they've made the deal anyway. They have investment bankers there who go through a little ritual. I've never seen one come in and make a presentation that says it's a dumb idea. I mean, they know what the answer is supposed to be, and it just becomes kind of a little game.

So I think in those three respects, a good director will first make an affirmative decision. You've got a very good CEO — not the best in the whole world, not everybody can do that — but a very good CEO.

That that CEO is not overreaching.

And when significant deals come along, that they get a chance to weigh in, and that you really get a balanced discussion about the real economics of what you're doing.

And I would say in that latter point, what I've seen over the years has really been pretty bad. But I can understand it because the CEO wouldn't bring in the deal unless he wants it done.

And once he brings it in, he's going to stack the deck and make the presentation in such a way that it's almost impossible to exercise independent judgment.

Charlie, do you have any thoughts on —

CHARLIE MUNGER: I think big, big deals, on average, in America, are contrary to the shareholders' interest. That's the way to bet. On the acquirer's side, usually the shareholders are worse off.

WARREN BUFFETT: Most stock deals, they think about what they're getting and they don't think about what they're giving.

I mean, I have been involved time after time where people are giving a significant percentage of the business, which they wouldn't sell at the current market price. If somebody came along with a tender offer 20 percent higher, they would say that's inadequate.

But they hand away a piece of the business because they want to own something else. And there's nothing wrong with that, but you just have to be sure that you're getting as much as you're giving.

I have very seldom heard a discussion — in fact, I don't think I've virtually ever heard of a discussion — of weighing what you were actually giving away on a stock deal versus what you're getting.

I've heard a lot of discussion about dilution and when dilution will be overcome and all that sort of thing, but that is not the question.

The real question is are you — if more value is being created, how is it being whacked up between the two companies?

And if not extra value is being created, are you getting more than you're giving?

When I gave away 2 percent of Berkshire Hathaway to acquire Dexter Shoe, that was one of the dumbest deals in the history of the world.

And I did it all by myself. Charlie didn't participate in that one. I wish he had.

But, you know, it was dumb. I mean, here's — it wasn't 2 percent of what I had then at Berkshire, it's 2 percent of the present Berkshire Hathaway company.

You'd all be 2 percent richer — a little more than 2 percent richer — but you'd be a full 2 percent richer if I hadn't done that.

CHARLIE MUNGER: Fortunately, you've made some better decisions.

WARREN BUFFETT: Yeah. Well, I have to, or we wouldn't be here. (Laughs)

CHARLIE MUNGER: Yeah.

WARREN BUFFETT: But, you know, the point is that doesn't show up under conventional accounting at all. You know, it gets brushed under the rug.

At Gillette, literally, we had ten deals in a row that never met — came close to meeting — the case that was presented at the time they were presented to the board. Was that ever mentioned to shareholders? Did it show up in our financial report?

Never. It never will. And that goes on all the time in corporate America.

And, unfortunately, shareholders, to the extent they get unhappy with managements, are complaining about whether they've got diversity on the board or something like that.

But when you're blowing away the company, I mean, that, to me, is a whole lot more important.

Charlie, you want to —

CHARLIE MUNGER: Yeah. The self-serving delusional nature of even some very good minds, in terms of IQ points, is amazing.

I had a friend who sold a business to a government-controlled business in a socialized Scandinavian country.

And my friend had a very nice business, and the people on the other side, after they had bought it for stock in their government corporations, said, "This was such a marvelous deal. We got your whole business, and we didn't have to give anything."

WARREN BUFFETT: Well, we owned stock in the Third National Bank one time down in Nashville. And they got the ability — and they're wonderful people — really wonderful people — but they got the ability to acquire other banks where they formerly had been limited in that ability.

And they went out to some very small bank, and the guy at the very small bank said, "I want stock." And he says, "My stock is worth private market value, and your stock is worth market price."

Well, market price happened to be half of — but he says, "All I'm getting is whatever the market is, so I want you to value your stock at market and value mine at this huge premium."

And he said, “And there’s one other condition.” He said, “Since I’m going to be putting my whole net worth in your stock,” he says, “I want you to promise you’ll never do a deal this dumb in the future.” (Laughter)

Do you remember that one, Charlie?

CHARLIE MUNGER: Yeah, I remember.

WARREN BUFFETT: Yeah. And that fellow was just being a little — was just getting a little more out in the open than is typically the case.

I’ve been on some terrific boards. There was a local one here called Data Documents that really functioned with everybody on the board thinking about the business, understanding the business, making decisions as owners.

Every one of them had a significant percentage of their net worth in the business, and probably the best board I’ve ever been on. I mean, every decision there was made for business reasons.

The worst decisions — at least they have the potential for being the worst — but it’s standard procedure now when an acquisition comes up to trot in the, you know, investment bankers and the lawyers, and the momentum is just totally to get the deal done. And, like I say, there will be a lot of slides presented.

And I can — I don’t need to look at the slides. I know what the answer is going to be. At the end they’re going to say it’s a great deal, you know, and there will be nobody arguing the other side.

They’re just — you know, it is not like something where you would make a decision and you’d have somebody give pro and con. It just doesn’t work that way. I don’t know how to improve that a lot.

I think we’ve got a sensational group at Berkshire. You have a group with almost everybody on the board having a significant percentage of their net worth — Bill’s is so big we can’t get him to a significant percentage, but that’s — he’s got hundreds of millions of dollars in it.

We’ve got a board that is in exactly the same position as the shareholders. They don’t have directors’ and officers’ insurance. They’ve got the downside as well as the upside. They bought their stock in the open market, so it hasn’t been given to them. It is a real owners’ board, and I like it that way.

I think it’s a terrific group, and I’m glad I can get them to work cheap. (Applause)

28. Why Berkshire avoids deals with partners

WARREN BUFFETT: Number 9, please.

AUDIENCE MEMBER: My name is Eid (PH) and I'm from Kuwait. In response to earlier comment about borrowing from Kuwait, I can tell you that after 40 years we now lend in dollars, and you are always welcome in Kuwait. (Laughter)

My question is, if you would pick your partners to invest with you in big deals, what would be your criteria for choosing partners?

WARREN BUFFETT: Yeah. We — is that — are you complete on that?

AUDIENCE MEMBER: I'm complete.

WARREN BUFFETT: Yeah. We normally don't want to do deals with partners. If we like a deal, we want to own it all.

And we usually have the money to do it all, so almost — in very few cases would there be a need for a money partner.

And then there's a question for a knowledge partner. And we really wouldn't want to be going into something, in most cases, where we were relying on somebody else to be the brains of the deal. We've made exceptions on that, but very seldom.

So we — by our nature, we would like to have a hundred percent of any deal for the benefit of our shareholders. If we're going to spend our time on it, we just as soon get a hundred percent of the rewards. We don't mind taking a hundred percent of the downside.

And we ought to understand it well enough so we don't need a partner.

Charlie?

CHARLIE MUNGER: I've got nothing to add to that one, either.

WARREN BUFFETT: Number 10. Wait, I'm just trying to think. Have we done any big partnership deals?

CHARLIE MUNGER: Well, you made that partnership deal with Leucadia, but they brought you the deal.

WARREN BUFFETT: That is true. We made a very good partnership deal with Leucadia. They did way more than their share, but they brought us the deal. And so they asked us to participate in their deal.

Now, in effect, we own less than a hundred percent of some of our businesses, and we're in partnership with the management. But that's perfect. I mean, we've had some great experiences with that, and we'll continue to have great experiences.

But, you know, they came — they're in on the same terms we are, and they're owners.

All of our managers think like owners. But in certain cases, they are real owners directly in those businesses as well.

But just some outside party as a partner, we really haven't done, although I would do another deal with Leucadia if they came to me and I liked the deal. I mean, that was a very good experience.

29. No opinion on commodity prices

WARREN BUFFETT: Number 10.

AUDIENCE MEMBER: Good afternoon, ladies and gentlemen. My name is Ari Jahja. I'm a junior from Baruch College, New York City.

And on behalf of the Portfolio Management Club, I would like to thank you, Mr. Buffett, for inviting us to this wonderful event.

And my question is that, first of all, speaking about Berkshire's portfolio, there's an increasing exposure of your investments toward commodities, such as to oil through PetroChina, to steel through POSCO, and to coal and agriculture through the rail stocks that you recently purchased.

So my question is that what is your long-term view on commodities, and how does it impact your view on the geopolitical state of the world in the future? Thank you.

WARREN BUFFETT: Yeah. I — and, to my knowledge, Charlie — we'll hear from him — but we have no opinion on commodities.

We — if we were in an oil stock, it's because we think it offers a lot of value at this price, but it does not mean that we think the price of oil is going up. If we thought oil was going up, we could buy oil futures, which we actually did once.

But very seldom — very, very seldom would we have any opinion on what any given commodity would do.

Owning POSCO, we just think it's one of the — well, it is probably the best steel company in the world and — remarkable record.

When we bought that stock, we were buying it at four or five times earnings, with a debt-free balance sheet, one of the lowest-cost producers around. I mean, it's a fabulous company.

And in addition, it was a play on the Korean won, and we made 20 percent on the won by being invested through a won-denominated security.

So we may occasionally be in those kind of businesses.

We, basically, like best the businesses that require very little capital, because they're the only ones that have a chance of earning really high returns on capital.

You can't have a business that has huge capital expenditures year after year, and end up with a high- return business. It just doesn't work in this world.

But you can find some businesses that really require relatively minimal capital investment.

Here's the case. This is a small one. But See's Candy is not going to require a huge capital investment.

It requires some capital investment, but it's a wonderful business. It's a small business, but it's a wonderful business. And it's far better business, relative to size — adjusted for size — it's a far better business than any steel business is going to be or any oil business is going to be.

It's just that it's not very big. We'd love to have it bigger. And we'll do our share in every way we can, as you may have noticed up here.

But we do not have any — we do not have a bias toward — at all — toward businesses involved in commodities. And if we had any bias, it would be against.

Charlie?

CHARLIE MUNGER: Yeah. We're going to be investors in businesses, not commodities, by and large. And that has to work better over time.

30. Dual class shares at the New York Times

WARREN BUFFETT: Number 11.

AUDIENCE MEMBER: Good afternoon. My name is Andy Peake from Weston, Connecticut.

Recently the newspapers have been in the news: the [Rupert] Murdoch bid for Dow Jones, Morgan Stanley's Hassan Elmasry's push to eliminate the New York Times dual-class share.

Given you are both experts in the dual-class share and newspapers, what advice would you give to the long-suffering New York Times shareholders, and what advice do you have for Arthur Sulzberger, the besieged CEO of the New York Times and head of the family that owns the newspaper?

WARREN BUFFETT: Well, I think the “long suffering,” as you put it, shareholder of the New York Times has probably made a mistake — I don’t think I’d necessarily blame the Sulzbergers for the woes of the newspaper business.

I mean, we have said for a good many years that we thought — in effect, we thought newspapers were overpriced because they reflected a valuation based on looking in the rearview mirror rather than through the window.

And we — it’s interesting. We have this dual-class structure at Berkshire. But because I converted a whole bunch of shares to B, I own about the same percentage of the B as the A, because I converted about six or seven times as much as I needed for present gifts.

I only go down to my safe deposit box when I have to, and I didn’t want to go down every year to convert stocks, so I just converted a bunch of stock early on.

And now I own about 30 percent of each. So it has no effect, in terms of voting power at Berkshire.

But the woes of the newspaper business are not connected with the difference in voting structure at the Times or other places. The newspaper business has just gotten a lot tougher.

And if you think about it — I mean, let’s assume that Mr. [Johannes] Gutenberg, back there in the 15th century, instead of wasting his time developing movable type and all of those kinds of things, decided to become a day trader or hedge fund operator and really made something of himself, so that we never had print.

But along came the internet, along came cable TV, all kinds of other things. And then now this year, you know, Johannes Gutenberg the 28th or something, came along and said, “I’ve got this wonderful idea. We’re going to chop trees down. We’re going to haul them great distances.

“And then we’re going to put them through expensive newsprint machines. And then we’re going to send them down to someplace where they’ve got expensive presses.

“And we’ll run these things all night. And then we’ll send delivery trucks out through the snow to get these little pieces of paper out to people where they can read about what happened yesterday.”

Well, I don’t think we would be backing him, you know.

Now, it happened, you know. The other one came along first, and people’s habits don’t change immediately, and, you know, the world doesn’t turn over.

But, in effect, you know, the position of newspapers today still reflects the fact that they have inertia and momentum on their side from the past.

And I don't care how smart you are. You know, there was a fellow that came into the LA Times a few years back. He was going to take the circulation up to a million- five, as I remember, Charlie. And the circulation is now 800-and-some thousand of the LA Times, and it's gone down every week.

And I don't know that — you know, I don't know that Joseph Pulitzer or William Randolph Hearst or E.W. Scripps or anybody who were geniuses in their day, maybe, at building circulation, could do much about that.

The truth is that the world has changed in a significant way. We used to sell 300,000 World Books a year. It was a good value. You know, and we sell 22,000 sets or something like that now.

And it isn't because the World Book isn't worth what it sells for. It's just not worth what it sells to for most people who can go on the internet and get an awful lot of that information free.

So I don't think I would blame the dual-class structure on anybody's investment losses in the New York Times.

The companies that have not had dual-class structures — I mean, we own the Buffalo News. And the Buffalo News earnings have been — they're certainly down over 40 percent from the peak.

We have terrific management. We've got a paper that has among the highest penetration in circulation of any large metropolitan paper in the country. But we are — our earnings are going down, and it's a fact of life.

Charlie?

CHARLIE MUNGER: Yeah. He was talking about that dual-class structure as being intrinsically wrong, but I would argue that the Sulzbergers set it up that way when they went public, and so that was in the basic contract.

And once a contract has been made, the idea that you can just stamp your foot and take away the contract strikes me as a — kind of an immature idea.

WARREN BUFFETT: I would add, too, that the Sulzbergers from the start — anybody that bought the New York Times knew that they would not try to maximize earnings in a given quarter or try to minimize the downturn by slashing costs or something of the sort.

They didn't build the New York Times by doing that. It did not have a reputation which allows it, perhaps, to have a decent future on the internet. It did not get to where it is by a policy of, you know, Management 101 as taught as some business school.

And, yet, following that differing course, you know, I don't know how many papers in New York disappeared. But whether it's The Herald Tribune or The Sun or The World-Telegram or you name it, the world — they had a different management approach, and they all fell by the wayside, and the Times is still around.

So I — I'm not sure 10 years from now or 15 years from now that people will regard the Times' playing of their hand as being, necessarily, an inferior one.

They may have a better position going into the internet than almost any newspaper around. Certainly a lot better than, you know, the Philadelphia Inquirer or the LA Times has.

You know, the LA Times will have more trouble monetizing their reputation on the internet than the New York Times will, if there's a national game to be played in that. So we'll see how it plays out.

31. Annual meeting is running out of space

WARREN BUFFETT: Number 12.

AUDIENCE MEMBER: My name is Betty Stuart Rodgers Jeffreys, and I live in Barrington Hills, Illinois, 35 miles northwest of Chicago.

This is the first time I've ever been to your annual meeting, and I want to thank you both for giving us so much time to answer our questions and give us such words of wisdom.

I would also like to thank you for giving us a wonderful weekend of lunches, brunches, cocktail parties, time at Gorat's and Borsheims.

The problem is that when I told my two adult daughters that I was going to have such a wonderful weekend, they both made me promise to bring them next year.

And if 25,000 people bring two people next year, where are we going to meet?

WARREN BUFFETT: Well, I would — if you get the answer to that, I'm really waiting to hear it. Because we — it's about 27,000, and we are just about maxed out here. We're just about maxed out in terms of hotel rooms. I think we're going to have four new hotels in Omaha —

AUDIENCE MEMBER: Oh, good.

WARREN BUFFETT: — before next year. But, you know, that's a couple thousand people. And, you know, based on the growth, at some point we sort of hit the wall, and I haven't figured out how to handle that.

If anybody has any suggestions, I'll appreciate hearing about them.

But I'm delighted you're having a good time here. I hope you've all had a good time here.

AUDIENCE MEMBER: Thank you.

WARREN BUFFETT: We're now going to take a ten-minute recess, and then we'll reconvene. Thank you.

32. Formal business meeting begins

WARREN BUFFETT: OK.

If you'll please take your seats? We want to finish by 4, so we'd like to move quickly through the rest of the business, and we'll get on to the PetroChina question.

And let's see. Here we are. The meeting will now come to order. I'm Warren Buffett, chairman of the board of directors of the company. I welcome you to this 2007 annual meeting of shareholders.

I will first introduce the Berkshire directors — I've already done that.

So, also today with us are partners in the firm of Deloitte & Touche, our auditors. They are available to respond to appropriate questions you might have concerning the firm's audit of the accounts of Berkshire.

Mr. Forrest Krutter is secretary of Berkshire. He will make a written record of the proceedings.

Miss Becki Amick has been appointed inspector of elections at this meeting. She will certify to the count of votes cast in the election for directors.

The named proxy holders for this meeting are Walter Scott and Marc Hamburg.

Does the secretary have a report of the number of Berkshire shares outstanding, entitled to vote, and represented at this meeting? Forrest?

FORREST KRUTTER: Yes, I do. As indicated in the proxy statement that accompanied the notice of this meeting that was sent to all shareholders of record on March 6, 2007, being the record date of this meeting, there were 1,113,240 shares of Class A Berkshire stock outstanding, with each share entitled to one vote on motions considered at the meeting, and 12,888,424 shares of Class B Berkshire Hathaway common stock outstanding, with each share entitled to one two-hundredth of one vote on motions considered at the meeting.

Of that number, 955,276 Class A shares, and enough — 11,301,274 Class B shares are represented at this meeting by proxies returned through Thursday, May 3rd.

WARREN BUFFETT: Thank you. That number represents a quorum, and we will therefore directly proceed with the meeting.

The first order of business will be a reading of the minutes of the last meeting of shareholders. I recognize Mr. Walter Scott, who will place a motion before the meeting.

WALTER SCOTT: I move that the reading of the minutes of the last meeting of the shareholders be dispensed with and the minutes be approved.

WARREN BUFFETT: Do I hear a second?

I guess I heard a second.

The motion has been moved and seconded. Are there any comments or questions? We will vote on this question by voice vote. All those in favor say "aye."

VOICES: Aye.

WARREN BUFFETT: Opposed? The motion is carried.

33. Berkshire directors elected

WARREN BUFFETT: The first item of business is to elect directors.

If a shareholder is present who wishes to withdraw a proxy previously sent in and vote in person on the election of directors, he or she may do so.

Also, if any shareholder that is present has not turned in a proxy and desires a ballot in order to vote in person, you may do so.

If you wish to do this, please identify yourself to meeting officials in the aisles, and we'll furnish a ballot to you.

Would those persons desiring ballots please identify themselves so that we may distribute them.

I now recognize Mr. Walter Scott to place a motion before the meeting with respect to election of directors.

WARREN BUFFETT: I move that Warren Buffett, Charles Munger, Howard Buffett, Susan Decker, William Gates, David Gottesman, Charlotte Guyman, Don Keough, Tom Murphy, Ron Olson, and Walter Scott be elected as directors.

WARREN BUFFETT: Is there a second?

VOICE: Second.

WARREN BUFFETT: It's been moved and seconded that Warren Buffett, Charles Munger, Howard Buffett, Susan Decker, William Gates, David Gottesman, Charlotte Guyman, Donald Keough, Thomas Murphy, Ronald Olson, and Walter Scott be elected as directors.

Are there any other nominations? Is there any discussion?

The nominations are ready to be acted upon. If there are any shareholders voting in person, they should now mark their ballots on the election of directors and allow the ballots to be delivered to the inspector of elections.

Would the proxy holders please also submit to the inspector of elections a ballot on the election of directors voting the proxies in accordance with the instructions they have received.

Miss Amick, when you are ready, you may give your report.

REBECCA AMICK: My report is ready. The ballot of the proxy holders in response to proxies that were received through last Thursday evening cast not less than 1,008,564 votes for each nominee.

That number far exceeds a majority of the number of the total votes related to all Class A and Class B shares outstanding.

The certification required by Delaware law of the precise count of the votes, including the additional votes to be cast by the proxy holders in response to proxies delivered at this meeting, as well as any cast in person at is this meeting, will be given to the secretary to be placed with the minutes of this meeting.

WARREN BUFFETT: Thank you, Miss Amick. Warren Buffett, Charles Munger, Howard Buffett, Susan Decker, William Gates, David Gottesman, Charlotte Guyman, Donald Keough, Thomas Murphy, Ronald Olson, and Walter Scott have been elected as directors.

34. Shareholder proposal to divest PetroChina shares

WARREN BUFFETT: Now, the next item of business we'll spend more time on, and that is a proposal put by — forth by Berkshire shareholder Judith Porter, the owner of ten Class B shares.

Miss Porter's motion, as set forth in the proxy statement, provides that Berkshire Hathaway not invest in the securities of any foreign corporation, or subsidiary thereof, that engages in activities that would be prohibited for U.S. corporations by executive order of the President of the United States.

The directors have recommended that the shareholders vote against the proposal.

The microphones at zone 1 and 7 are available for those wishing to speak for or against Miss Porter's motion.

These are the only microphone zones in operation; so I ask that you go to either 1 or 7 if you'd like to talk on this.

I ask that you confine your remarks solely to Miss Porter's motion.

Now, we have a number of shareholders who want to the talk about this, and we will let shareholders speak.

If there's sufficient time at the end of that — and we're willing to — certainly willing to — have them speak for half an hour, and Charlie and I will give them, maybe, a couple minutes' response after that.

But you've got a half an hour. Different shareholders can speak. I hope you tailor the length of your remarks, the early ones, so that it gives other people a chance.

And if we have time after the shareholders have spoken and there are other people that are in attendance as visitors that wish to speak, we'll have them also.

But if the shareholders use up the full time until almost 4 o'clock, then we'll have to finish at that time.

So, Miss Porter, if you're available — if we can turn the light on there at station 1 — to speak, you have the floor.

JUDITH PORTER: Thank you. Mr. Buffett, my name is Judith Porter, and I'm the shareholder who introduced the proxy resolution involving Berkshire Hathaway's divestment of PetroChina.

PetroChina is implicated in the genocide in Darfur, Sudan.

I want to thank you for allowing us to speak to this resolution. In many countries it would be impossible for us to do so, but we are indeed fortunate to live in a country where we can express our opinion without fear or without recrimination.

Before my husband formally presents the resolution, I want to explain to you why I have introduced it.

My family is no stranger to genocide. My grandparents were murdered in 1941 in the Nazi genocide, as were other members of my family.

I will never forget the despair my father expressed when my aunt, who was released from Bergen-Belsen concentration camp, sent him a letter telling him what happened to his family.

It deeply affected him for the rest of his life. And I was raised to believe that genocide should never, ever again happen, never again.

The world was silent when my grandparents were murdered. But genocide has continued.

In the genocide in Cambodia, the world was silent. In the genocide in Bosnia, the world was silent until late in the slaughter. The world was again silent in the horrible genocide in Rwanda.

How many times must we say, “Never again?”

Now, there’s the first genocide of the 21st century in Darfur. Two and a half million civilians have been driven from their homes. More than 400,000 have been killed, and 1,600 villages have been destroyed.

Berkshire Hathaway can play a role in ending this slaughter by divesting in PetroChina, as we’ll shortly describe. As an exemplar of both business ethics and personal integrity, your support of divestment will send a signal to China and to the Sudan that there are costs to continuing this destruction, and it will lead other corporations to follow your ethical actions.

Genocide is never a good investment. I can think of no greater tribute to my grandparents than introducing this resolution. As Elie Wiesel said in his Nobel Peace Prize speech, “We must take sides. Neutrality helps the oppressor, never the victim. Silence encourages the tormenter, never the tormented. Sometimes, sometimes we must interfere.”

My husband will now present the proxy resolution. He will be followed by Jason Miller, who will speak about the relationship between CNPC and PetroChina. Abdul Makjid (PH), who is from Sudan, will speak about the genocide taking place. And Bob Edgar, Secretary General of the National Council of Churches, will conclude our discussion of this resolution. Thank you.

GERALD PORTER: Thank you. Mr. Buffett. Since you’ve read the resolution, I will not repeat the resolution. I will speak about the resolution, though.

On November 3rd, 1997, President Bill Clinton issued Executive Order 13067, which imposed a trade embargo prohibiting most American businesses from operating in the Sudan.

This executive order was expanded on April 27th, 2006, by President George W. Bush. While it is true that American companies cannot do business in the Sudan, Americans can invest in Asian and European companies that do business in the Sudan.

Such investments do not violate the letter of this law, but they certainly do violate the spirit of the law and are counter to the stated policy of the United States.

We believe there is general agreement that the Chinese National Petroleum Company, CNPC, plays a major role in funding the genocide, in providing weapons to the Sudanese, in cooperating with the Sudanese military, in forcibly displacing local populations, and in myriad other ways, facilitating the killing of hundreds of thousands of Darfuris.

CNPC is the largest foreign investor in Sudan's oil industry, and fully 70 percent of the revenues Khartoum generates from CNPC's operations go to its military, which, in turn, conducts the genocide in Darfur.

We are here today because Berkshire Hathaway is the major non-Chinese investor in CNPC's subsidiary, PetroChina.

You, Mr. Buffett, have stated that you believe that we are wrong, both in our analysis of PetroChina's connection to the genocide and the belief that divesting the company's PetroChina holdings would in any way have a beneficial effect on Sudanese behavior.

We disagree. You are correct in stating that PetroChina does not do business in the Sudan. However, as you agree, its parent company, CNPC, is a major investor in the Sudan, and funds from that relationship help provide the instrumentalities of genocide.

Managements claim that the relationship between PetroChina and CNPC is similar to that between Fannie Mae and the U.S. government. That argument is fallacious.

The Harvard University Advisory Committee on Social Responsibility examined the management of the two companies. The results of that review were striking.

There was almost total management overlap between the two companies. Andrew Leonard, writing for Salon.com commented, "To declare that a subsidiary has no ability to control the policies of the parent when the two entities are run by exactly the same people is an exercise in specious obfuscation."

In short, PetroChina is an artifact created for the sole purpose of allowing some shareholders to distance themselves from the action of its parents, CNPC.

In China, the companies share the same brand name and the same logo. If you look at a coin, the images on the two sides are different, but the coin is a unity. You cannot spend one side of a dime or own one side of a quarter.

It's the same with PetroChina and with CNPC. They look different, but they are simply two faces of the same corporation.

Two U.S. presidents have stated clearly that it's against the national interests of the United States for U.S. companies to do business in Sudan.

It is the position of the U.S. government that a targeted economic boycott of the Sudan will help end the genocide in Darfur.

For a U.S. company to invest in a subsidiary of a foreign company, such as PetroChina, that engages in business in the Sudan is a circumvention of Executive Order 13067 and weakens the U.S. sanctions.

Economic sanctions against the Sudan have worked in the past. For example, Talisman Oil's sale of its assets in the Sudan helped bring about the end of the civil war in the Sudan.

Sudan's main protector in the United Nations is the government of China. China will be hosting the 2008 Olympics and is very sensitive about negative publicity that could be aimed at that event.

In response to the recent criticism of the Chinese support of Sudan by Mia Farrow and Steven Spielberg, a senior Chinese official traveled to Sudan to push the Sudanese government to accept a United Nations peacekeeping force.

You and the company are viewed as exemplars of ethical behavior. If Berkshire were to take the lead and divest, others would follow. If Mia Farrow can cause change to occur, then so, too, can Warren Buffett.

No one divestment in South Africa brought about the end of apartheid. But if we all act together, we have tremendous power to bring pressure on the Sudanese government to stop the killing of innocent people.

During the last two decades, beginning with the tearing down of the Berlin Wall in October 1989, we have seen events that no person could ever have anticipated: The breakup of the Soviet Union, the democratization of Eastern Europe, and an unbelievable transition in South Africa.

What we have learned is that all things are possible. There are important issues in our society that desperately need our attention. Remember the words of Hillel: "If I am not for myself, who will be for me? If I am for myself alone, what am I? If not now, when?"

Thank you. And I'm pleased to introduce Jason Miller. (Applause.)

JASON MILLER: I'm Jason Miller, the National Policy Director for the Sudan Divestment Task Force and also an owner of three shares of Berkshire Class B stock.

I'd like to echo the Porters' comments that CNPC is by far and away the most irresponsible and abusive oil operator in Sudan.

They've participated with the government in forced displacements and other human rights violations, and 70 percent of the revenue that they provide to Sudan gets funneled into the military that prosecutes the genocide at Darfur. But what does that have to do with PetroChina?

Currently, the chairman of PetroChina's board is the immediate past president of CNPC. The president of CNPC is the president of PetroChina and vice chair of the PetroChina board. The CFO of CNPC is the CFO of PetroChina. The chairman of the PetroChina supervisory board is the chief of discipline and inspection at CNPC.

Eight of the nine PetroChina directors have a current or immediate past connection to CNPC. Four of the five PetroChina supervisors have a current or immediate past connection to CNPC. All PetroChina senior executives are currently or formerly connected to CNPC.

We've also documented a slew of other management irregularities. Furthermore, asset transfers between the two are fluid and often cross-subsidized. After PetroChina's IPO, it took on $15 billion in debt from CNPC, which freed up cash flows for CNPC to spend on Sudan.

Ten percent of IPO revenue from PetroChina went to CNPC's operations in Sudan. Fifty percent of CNPC's profits come from PetroChina dividends.

PetroChina, in 2005, provided $3.15 billion in cash for CNPC's finance arm to provide to other CNPC subsidiaries like those in Sudan. And 64 percent of CNPC's assets are represented by PetroChina stock.

If this isn't management overlap and two manifestations of the same entity, I would challenge people to find one that is more overlapping.

As a result, and because of the huge magnitude of the atrocities in Darfur, even a whiff of this type of overlap between PetroChina and CNPC, and the lack of strong corporate governing structures there, would suggest that engagement with PetroChina by Berkshire Hathaway is a minimum requirement in order to investigate these connections and their potential contributions to the Darfur genocide.

I'd very quickly also like to mention the important question that Berkshire Hathaway was asked, which is what's next? If we engage PetroChina, ask them about these questions, what happens?

The answer by unanimous consent with all foreign policy experts we interact with and those international organizations working in Sudan is that China would change its behavior in Sudan.

Sudan is too important to China as an energy policy for China for it to abdicate those assets. And, as a result, we've already seen changes in China's behavior.

And taking leadership from the queues of Berkshire Hathaway would be one more in the line of Mia Farrows and Steven Spielbergs that could help catalyze the important sea change that's necessary to bring an end to the genocide. (Applause)

JASON MILLER: I'd now like to introduce a Darfurian who's from Des Moines and would like to speak —

WARREN BUFFETT: I would — I would —

Is he a shareholder or not? I want to be sure all the shareholders have a —

GERALD PORTER: He has the proxy of Etta and James Friend, who are the shareholders of three shares —

WARREN BUFFETT: I just want to make sure. Are there other shareholders at 7 that want to talk too or not? I want to make sure that all the time isn't taken.

AUDIENCE MEMBER: We will not take all the time.

WARREN BUFFETT: OK. That's fine. I just want to make sure that the shareholders aren't shut up.

AUDIENCE MEMBER: Good afternoon, and thank you for inviting me to speak about Darfur. My name is Abdamide Jusef (PH), and I am speaking today as a proxy of Etta, Freta, and James Friend, who are the holder of four shares of Class B stocks.

I am from western Darfur, and my parents still live in Darfur. I fled from Sudan to Egypt in September 2002 after being expelled from Sudan University in Khartoum for speaking out in (inaudible) of Darfur.

We are detained for a few week and we suffered from abuse physically and psychologically every day until they released and told us we are not allowed to go to any university and we had to stay away from any activity for that student association. I get refugee status in the United States, and I move to Des Moines, Iowa, on March 2005.

The Janjaweed attack my family — my family's home — in Darfur in January 8, 2007. Four Arab men from the Janjaweed attack our home in the early morning.

At that time, there was a guest in my family home. The Janjaweed left him without attention; so he run away to get help from our neighbors. The Janjaweed started by taking all the money and jewelry from my family.

When the Janjaweed found out that someone had run to get help, they left my family, but they promised them they were going to come back.

Even that my family escaped injury, my neighbor (inaudible) and his entire family of five were murdered by the Janjaweed. The Janjaweed also took their horses, and these activities were ongoing in my town for a while.

And everybody in my community or someone was murdered, have someone was murdered and raided by the Janjaweed. My mom told me everybody wake up every day, and the first thing they do is check their neighbor and their relative to see if they are alive or not, and so do I.

The Janjaweed are stealing my town. Now they work as gangs who kill and rape. Every family is affected, and nobody can stop them.

Even though I live in safety and peace there — here in United States, I still worry about my family back home in Darfur.

Please try to do anything to help my family and all people in Darfur. I need your help. If you do the simple thing like tell your friend about the genocide in Darfur or join an organization, or talk or send letters to your member of Congress, or don't invest in any companies that's helped genocide in Darfur.

Please, Mr. Buffett and Berkshire Hathaway shareholders, get involved to bring the hope and peace to the children and women and all of us in Darfur. Whatever you do to stop the genocide in Darfur is saving life of human being.

Thank you for listening, and now I would like to introduce Bob Edgar, the General Secretary of the National Council of the Church. Thank you.

BOB EDGAR: As we close, I'm Bob Edgar, General Secretary of the National Council of Churches and a former member of the United States Congress. I'm here in support of the resolution and a proxy for Doris Gluck, who holds ten shares in the company Class B stock.

In February of 1968, I had the privilege of meeting Dr. Martin Luther King five weeks before he was assassinated. Later, as a member of Congress, I served on the Select Committee on Assassinations, looking into both the death of Dr. King and John F. Kennedy. I come here today in honor of the kind of dream that Dr. King had.

He said this: "Our lives begin and end the day we have become silent about the things that matter. We will not be silent."

I am here today representing millions of faithful Americans — Christians, Jews, Muslims, and others — who have stood up and said no to this genocide. Just 11 or 12 or 13 years ago, 800,000 people were killed in Rwanda in 90 days, and we were silent. We will be silent no more.

Mr. Buffett, this morning you said a great thing, and I quote, “I find it reprehensible when a government preys on the weaknesses of its citizens rather than protecting them.” I wholeheartedly agree. You were talking about gambling. We urge you to think the same way about genocide.

On the document in opposition to this resolution, you said this: “Proponents of the Chinese government’s divesting should ask the most important question in economics, ‘And then what?’”

We are prepared to answer that question, “And then what? And then what?” Then the world will finally focus on the issue of genocide in Darfur.

Then the international investors all over the world in many companies would follow the ethical actions of Berkshire Hathaway’s moral leadership, moral leadership, and call for all governments of the world to stop the genocide.

“And then what?” Children would be saved, women would not be raped, fathers would not be killed, and we would find our way in this human family to care for one another.

Jesus said, “We should love our neighbors as ourselves.” I think he meant, “We should probably try every means available to stop those neighbors from being killed.” This is just one way we can follow those words of Jesus.

And, finally, the former pope, John Paul, said, “I dream of a world where none will be so poor they have nothing to give and none will be so rich they have nothing to receive.” I urge support of this resolution. (Applause.)

WARREN BUFFETT: Are there other shareholders that would like to talk before we respond?

AUDIENCE MEMBER: Mr. Buffett, my name is Aaron Frank. Thank you for hearing us on this matter. I’m from Atlanta, Georgia. And along with being a — along with being a Berkshire shareholder, I also independently own shares of PetroChina.

And this issue is something I’ve struggled with for years, in terms of whether to divest or not. What I’ve done personally is given the dividends that I receive from PetroChina to organizations that help in Darfur, but this is mostly symbolic.

What is clear to me is if I had the opportunity to engage the management of PetroChina in a meaningful way as I do with you here today, that I would be compelled to do so ethically.

As owners of Berkshire Hathaway, we have a unique opportunity to engage the management of PetroChina in a way that will be heard not only by the management of PetroChina but by CNPC, China, and the international community due to your standing.

That's a unique opportunity, and this is an incredibly — this is an incredibly important matter. I think we have an ethical obligation to do so. Thank you for listening.

WARREN BUFFETT: OK. Thank you. (Applause.)

WARREN BUFFETT: Is there anyone —

AUDIENCE MEMBER: Yes.

WARREN BUFFETT: Yeah.

AUDIENCE MEMBER: My name is Bill Rosenfeld from Lexington, Massachusetts. In your web posting you claim that a subsidiary can't control the actions of its parent, so actions against PetroChina will have no impact on CNPC.

Suppose that millions of Americans boycotted GEICO Insurance or other Berkshire companies because of a policy at Berkshire Hathaway. Wouldn't that make you reconsider that policy even though your subsidiaries are voiceless in Berkshire Hathaway management?

How does targeting PetroChina to influence CNPC differ from this situation? (Applause.)

WARREN BUFFETT: Well, I actually would say it's quite different. If a shareholder of Wesco — you might — Marc, you might put up the chart that shows the flow of ownership both with China and with —

MARK HAMBURG: It's up.

WARREN BUFFETT: OK. Wesco does not control Berkshire Hathaway. We can have all the — we can have lots of overlap in management and everything.

Berkshire Hathaway controls Wesco. If a shareholder of Wesco were to complain to the management of Wesco, which is analogous to PetroChina, about the fact that, let's say, that Berkshire bought ISCAR or any other activity or anything I was doing personally, they would have no ability to control me.

If somebody controlled — complained to Berkshire about something that was going on at Wesco, we could certainly introduce action. So the — it flows downward.

The overlap means nothing. I mean, obviously the Chinese government controls PetroChina. They own 88 percent of the stock. We control MiTek. We own 90 percent of the stock. We control Wesco. We own 80 percent of the stock. We can tell MiTek what to do. We can tell Wesco what to do. But MiTek and Wesco cannot tell Berkshire what to do.

I think there's a fundamental misunderstanding on that. The Chinese government controls 20 — 32 of the largest 33 publicly-owned companies in China. And the Chinese government, in effect, is in charge of all of those companies.

The Chinese government does business with the Sudan. PetroChina does not. PetroChina in no way tells the Chinese government what to do. And we've seen evidence of that in a lot of ways.

So it seems to me it's backwards. If it was PetroChina following a policy that the Chinese government disagreed with, believe me, there would be a change in a hurry.

We have no disagreement at all about what's going on in Darfur. There's two questions.

One is PetroChina influence the Chinese government. And, secondly, if we don't agree with what the Chinese government is doing, should we sell our stock in PetroChina?

The people here who are come, who own stock in Berkshire Hathaway, have obviously made the choice, even though they disagree with what our policy is, to continue as shareholders.

And I agree with them — with that — a hundred percent. And we, in turn, elect to continue to hold our shares in PetroChina because we have no disagreement with what PetroChina is doing.

If there's a disagreement, it may be with what the Chinese government is doing. Now, in terms of what the Chinese government is doing, you know, we've heard talk about divesture by China.

If the Chinese left the Sudan tomorrow, 400,000 barrels of oil would be being produced, a good bit with the money that China has invested in the Sudan.

You can't take the assets. You can't the refinery. You can't take pipelines. You can't take the oil out of it.

They can sell their interest. They can sell it to other people who are doing business in the Sudan. They can sell it to the Sudanese government.

But, believe me, they would probably sell it very cheap. The Sudanese government would get a bargain, or the Sudanese government might very well renegotiate terms in their favor, if they allowed a third party to buy.

Believe me, you know, they would be in a position if they — assuming they could affect the transfer — and I think there's a lack of understanding of what really would happen if China said tomorrow, "We're going to get — we're going to take our interest away from our activities in Sudan."

They would have to sell them or they'd have to give them up one way or the other. And, like I say, I think the Sudanese government would probably end up better off financially if they had a half-decent adviser in the question than they are presently.

I might mention one other thing which is kind of interesting in this. We buy about — currently about $250 billion worth more of goods from China than we sell to them, and we give them little pieces of paper in exchange.

And we say to them, "We want your goods, and you should work hard and send us your goods, and we'll send you these little piece of paper called American dollars."

Two years ago, China wanted to use some of those American dollar — we'd use their goods — to want to buy a company called Unocal. Unocal was a (inaudible) U.S. company.

The majority of their production of oil and gas came from outside the United States — a substantial majority — came from places like Thailand, Indonesia.

And the Chinese wanted to buy that company, and by a vote of 395 to 18, the U.S. House of Representatives sent their message to President Bush that it would be against the national interest to let this company be sold, which, as I say, produced very little oil and gas in the United States. Got most of it from the rest of the world.

So, in effect, we snubbed the Chinese in a big way on something important to them: energy.

And I might mention that we import perhaps four times as much energy from all the countries around the world as the Chinese do, even though they have four times the population.

So we have, in a sense, told the Chinese a couple of years ago "Don't even think about buying the small U.S. company with a lot of production — fair amount of production — abroad to satisfy your energy needs."

And I think it's understandable to some extent that the Chinese are looking for energy around the world just as we have for the last century. They are buying significant amounts of oil from Sudan. They put money in there, and the — they are going to buy four or — they are going to buy that 400,000 — they're not taking the whole 400,000 barrels a day from the Sudan, but they're taking significant amounts.

They're going to buy that oil in the world market. That oil is going to get produced. Revenue is going to flow to the Sudan. The question is how much the Sudanese keep themselves and how much gets disbursed to the Chinese because of the investment they've made.

So I see no effect whatsoever in Berkshire Hathaway trying to tell the Chinese government how to conduct their business.

I agree a hundred percent with the fact that what is happening in the Sudan should not be happening, and I — there are other parts of the world where say some — that same situation may exist, although not to the same degree.

But I don't think you can — I don't think it's proper for us to divest our shares in PetroChina. They would be sold to somebody else. I think the proponents of the motion probably would like the idea that the price of the stock would go down.

But we don't sell stocks, you know, basically to try and drive them down in price. We might sell PetroChina if it went up enough, but we would not be selling it to try and drive down the price, because all that would be doing is giving a bargain to somebody else who is buying the stock of PetroChina.

It doesn't change the funds available to them at all.

One of the speakers mentioned the amount of money that goes from PetroChina up to its parent. Well, money from Wesco comes up to Berkshire from our subsidiaries. You know, that's the nature of having a major ownership in a subsidiary is that you get money from MiTek, you get money from Nebraska Furniture Mart, which we own 80 percent of.

But that really has nothing to do — in my view, at least — it has nothing to do with the fact that it is China that has a policy in respect to being partners in Sudan, and it is not PetroChina at all. Selling our stock would not change one thing.

If we would have any communications, as a practical matter, the communications should be with Chinese government — and actually people here have had a chance because we have a lot of media here — they've had a chance to express their views to the Chinese government.

Believe me, unless the opinions get expressed to the Chinese government, expressing them to PetroChina means nothing.

I mean, PetroChina is controlled by the Chinese government, and they are not — if you were an official of PetroChina, you are not going to tell the Chinese government what to do. They are going to tell you what to do.

Charlie?

CHARLIE MUNGER: Well, the issue also is China is a rapidly rising nuclear power, and who should decide how the federal government — or how the Americans — should react to China?

There's a lot to be said for letting the policy flow through the U.S. government instead of sort of a vigilante effort of various citizens.

Now, I would also point out that there's a lot wrong all over the Earth, and there's a lot of cruelty and there always has been, and there will always be a lot of oil produced in a lot of lands with a lot of cruelty.

And nobody is in favor of cruelty, but there's a limit to how much you can fix. And so I'm very skeptical of the idea that Berkshire should become an instrument of telling — of setting United States policies vis-a-vis China. (Applause)

WARREN BUFFETT: Yeah. Charlie and I have our own views, for example, on reproductive freedom, but we don't have a Berkshire Hathaway policy on reproductive freedom nor do we finance from Berkshire Hathaway funds — the funds of our shareholders — we do not finance any activities that relate to our personal beliefs, although we may, obviously, fund them by ourselves or speak out on them by themselves, but we do not have a Berkshire Hathaway funding just because we believe that women should have the right to choose or questions of that sort.

CHARLIE MUNGER: I think reasonable minds can disagree on these subjects.

At Berkshire, there's all kinds of businesses we won't buy and control individually, but we're willing to own stock in the same businesses.

Is that the correct moral line to draw? I don't know. We do our best, and we make the decisions, and we make the calls.

WARREN BUFFETT: I would say — I wonder really whether when the Unocal question was being determined here, were the Chinese to whom we'd given lots of little tickets in exchange for taking their goods, and they came along with a perfectly decent offer to the shareholders of Unocal, 18 1/2 billion dollars.

They wanted to buy a little more oil and gas production around the world. And the U.S. Congress overwhelmingly said this is a terrible thing and we want the United States to oppose it and we want it sold to Chevron for less money.

And I really don't recall a lot of people speaking up on behalf of the Chinese right to buy oil companies over here, just like we've bought oil companies around the world for many decades.

So to the extent that they may feel themselves somewhat alienated from the rest of the world in this respect, I think we've actually contributed our share.

Charlie?

CHARLIE MUNGER: Another thing in the complexity of life, the woman who lost her family to the Holocaust, we clobbered the people that committed that genocide by joining genocidal Joe Stalin. These issues are complicated.

WARREN BUFFETT: OK. If there are any shareholders that want to vote in person in this — on this — matter or to change their proxies, we have monitors. If you just raise your hand.

And if there are none of those, Miss Amick, are you ready to give your report?

BECKI AMICK: My report is ready. The ballot of the proxy holders in response to proxies that were received through last Thursday evening cast 15,740 votes for the motion and 830,598 votes against the motion.

As the number of votes against the motion exceeds a majority of the number of votes related to all Class A and Class B shares outstanding, the motion has failed.

Certification required by Delaware law of the precise count of the votes will be given to the secretary to be placed with the minutes of this meeting.

WARREN BUFFETT: Thank you, Ms. Amick. The proposal fails.

35. Formal meeting adjourns

WARREN BUFFETT: Does anyone have any further business to come before this meeting before we adjourn?

If not, I recognize Mr. Scott to place a motion before the meeting.

WALTER SCOTT: I move this meeting be adjourned.

WARREN BUFFETT: Is there a second?

VOICE: Second.

WARREN BUFFETT: All those in favor say “aye.”

VOICES: Aye.

Note: The following table appears in the printed Annual Report on the facing page of the Chairman's Letter and is referred to in that letter.

Berkshire's Corporate Performance vs. the S&P 500

Year	Annual Percentage Change in Per-Share Book Value of Berkshire (1)	Annual Percentage Change in S&P 500 with Dividends Included (2)	Relative Results (1)-(2)
1965	23.8	10.0	13.8
1966	20.3	(11.7)	32.0
1967	11.0	30.9	(19.9)
1968	19.0	11.0	8.0
1969	16.2	(8.4)	24.6
1970	12.0	3.9	8.1
1971	16.4	14.6	1.8
1972	21.7	18.9	2.8
1973	4.7	(14.8)	19.5
1974	5.5	(26.4)	31.9
1975	21.9	37.2	(15.3)
1976	59.3	23.6	35.7
1977	31.9	(7.4)	39.3
1978	24.0	6.4	17.6
1979	35.7	18.2	17.5
1980	19.3	32.3	(13.0)
1981	31.4	(5.0)	36.4
1982	40.0	21.4	18.6
1983	32.3	22.4	9.9
1984	13.6	6.1	7.5
1985	48.2	31.6	16.6
1986	26.1	18.6	7.5
1987	19.5	5.1	14.4
1988	20.1	16.6	3.5
1989	44.4	31.7	12.7
1990	7.4	(3.1)	10.5
1991	39.6	30.5	9.1
1992	20.3	7.6	12.7
1993	14.3	10.1	4.2
1994	13.9	1.3	12.6
1995	43.1	37.6	5.5
1996	31.8	23.0	8.8
1997	34.1	33.4	.7
1998	48.3	28.6	19.7
1999	.5	21.0	(20.5)
2000	6.5	(9.1)	15.6
2001	(6.2)	(11.9)	5.7
2002	10.0	(22.1)	32.1
2003	21.0	28.7	(7.7)
2004	10.5	10.9	(.4)
2005	6.4	4.9	1.5
2006	18.4	15.8	2.6
2007	11.0	5.5	5.5
Compounded Annual Gain – 1965-2007	21.1%	10.3%	10.8
Overall Gain – 1964-2007	400,863%	6,840%	

Notes: Data are for calendar years with these exceptions: 1965 and 1966, year ended 9/30; 1967, 15 months ended 12/31.

Starting in 1979, accounting rules required insurance companies to value the equity securities they hold at market rather than at the lower of cost or market, which was previously the requirement. In this table, Berkshire's results through 1978 have been restated to conform to the changed rules. In all other respects, the results are calculated using the numbers originally reported.

The S&P 500 numbers are **pre-tax** whereas the Berkshire numbers are **after-tax**. If a corporation such as Berkshire were simply to have owned the S&P 500 and accrued the appropriate taxes, its results would have lagged the S&P 500 in years when that index showed a positive return, but would have exceeded the S&P 500 in years when the index showed a negative return. Over the years, the tax costs would have caused the aggregate lag to be substantial.

BERKSHIRE HATHAWAY INC.

To the Shareholders of Berkshire Hathaway Inc.:

Our gain in net worth during 2007 was $12.3 billion, which increased the per-share book value of both our Class A and Class B stock by 11%. Over the last 43 years (that is, since present management took over) book value has grown from $19 to $78,008, a rate of 21.1% compounded annually.*

Overall, our 76 operating businesses did well last year. The few that had problems were primarily those linked to housing, among them our brick, carpet and real estate brokerage operations. Their setbacks are minor and temporary. Our competitive position in these businesses remains strong, and we have first-class CEOs who run them right, in good times or bad.

Some major financial institutions have, however, experienced staggering problems because they engaged in the "weakened lending practices" I described in last year's letter. John Stumpf, CEO of Wells Fargo, aptly dissected the recent behavior of many lenders: "It is interesting that the industry has invented new ways to lose money when the old ways seemed to work just fine."

You may recall a 2003 Silicon Valley bumper sticker that implored, "Please, God, Just One More Bubble." Unfortunately, this wish was promptly granted, as just about all Americans came to believe that house prices would forever rise. That conviction made a borrower's income and cash equity seem unimportant to lenders, who shoveled out money, confident that HPA – house price appreciation – would cure all problems. Today, our country is experiencing widespread pain because of that erroneous belief. As house prices fall, a huge amount of financial folly is being exposed. You only learn who has been swimming naked when the tide goes out – and what we are witnessing at some of our largest financial institutions is an ugly sight.

Turning to happier thoughts, we can report that Berkshire's newest acquisitions of size, TTI and Iscar, led by their CEOs, Paul Andrews and Jacob Harpaz respectively, performed magnificently in 2007. Iscar is as impressive a manufacturing operation as I've seen, a view I reported last year and that was confirmed by a visit I made in the fall to its extraordinary plant in Korea.

Finally, our insurance business – the cornerstone of Berkshire – had an excellent year. Part of the reason is that we have the best collection of insurance managers in the business – more about them later. But we also were very lucky in 2007, the second year in a row free of major insured catastrophes.

That party is over. It's a *certainty* that insurance-industry profit margins, including ours, will fall significantly in 2008. Prices are down, and exposures inexorably rise. Even if the U.S. has its third consecutive catastrophe-light year, industry profit margins will probably shrink by four percentage points or so. If the winds roar or the earth trembles, results could be *far* worse. So be prepared for lower insurance earnings during the next few years.

Yardsticks

Berkshire has two major areas of value. The first is our investments: stocks, bonds and cash equivalents. At yearend these totaled $141 billion (not counting those in our finance or utility operations, which we assign to our second bucket of value).

*****All per-share figures used in this report apply to Berkshire's A shares. Figures for the B shares are 1/30th of those shown for the A.

Insurance float – money we temporarily hold in our insurance operations that does not belong to us – funds $59 billion of our investments. This float is "free" as long as insurance underwriting breaks even, meaning that the premiums we receive equal the losses and expenses we incur. Of course, insurance underwriting is volatile, swinging erratically between profits and losses. Over our entire history, however, we've been profitable, and I expect we will average breakeven results or better in the future. If we do that, our investments can be viewed as an unencumbered source of value for Berkshire shareholders.

Berkshire's second component of value is earnings that come from sources other than investments and insurance. These earnings are delivered by our 66 non-insurance companies, itemized on page 76. In our early years, we focused on the investment side. During the past two decades, however, we have put ever more emphasis on the development of earnings from non-insurance businesses.

The following tables illustrate this shift. In the first we tabulate per-share investments at 14-year intervals. We exclude those applicable to minority interests.

Year	*Per-Share Investments*	*Years*	*Compounded Annual Gain in Per-Share Investments*
1965	$ 4		
1979	577	1965-1979	42.8%
1993	13,961	1979-1993	25.6%
2007	90,343	1993-2007	14.3%

For the entire 42 years, our compounded annual gain in per-share investments was 27.1%. But the trend has been downward as we increasingly used our available funds to buy operating businesses.

Here's the record on how earnings of our non-insurance businesses have grown, again on a per-share basis and after applicable minority interests.

Year	*Per Share Pre-Tax Earnings*	*Years*	*Compounded Annual Gain in Per-Share Pre-Tax Earnings*
1965	$ 4		
1979	18	1965-1979	11.1%
1993	212	1979-1993	19.1%
2007	4,093	1993-2007	23.5%

For the entire period, the compounded annual gain was 17.8%, with gains accelerating as our focus shifted.

Though these tables may help you gain historical perspective and be useful in valuation, they are completely misleading in predicting future possibilities. *Berkshire's past record can't be duplicated or even approached. Our base of assets and earnings is now far too large for us to make outsized gains in the future.*

Charlie Munger, my partner at Berkshire, and I will continue to measure our progress by the two yardsticks I have just described and will regularly update you on the results. Though we can't come close to duplicating the past, we will do our best to make sure the future is not disappointing.

* * * * * * * * * * * *

In our efforts, we will be aided enormously by the managers who have joined Berkshire. This is an unusual group in several ways. First, most of them have no financial need to work. Many sold us their businesses for large sums and run them because they love doing so, not because they need the money. Naturally they wish to be paid fairly, but money alone is not the reason they work hard and productively.

A second, somewhat related, point about these managers is that they have exactly the job they want for the rest of their working years. At almost any other company, key managers below the top aspire to keep climbing the pyramid. For them, the subsidiary or division they manage today is a way station – or so they hope. Indeed, if they are in their present positions five years from now, they may well feel like failures.

Conversely, our CEOs' scorecards for success are not whether they obtain my job but instead are the long-term performances of their businesses. Their decisions flow from a here-today, here-forever mindset. I think our rare and hard-to-replicate managerial structure gives Berkshire a real advantage.

Acquisitions

Though our managers may be the best, we will need large and sensible acquisitions to get the growth in operating earnings we wish. Here, we made little progress in 2007 until very late in the year. Then, on Christmas day, Charlie and I finally earned our paychecks by contracting for the largest cash purchase in Berkshire's history.

The seeds of this transaction were planted in 1954. That fall, only three months into a new job, I was sent by my employers, Ben Graham and Jerry Newman, to a shareholders' meeting of Rockwood Chocolate in Brooklyn. A young fellow had recently taken control of this company, a manufacturer of assorted cocoa-based items. He had then initiated a one-of-a-kind tender, offering 80 pounds of cocoa beans for each share of Rockwood stock. I described this transaction in a section of the 1988 annual report that explained arbitrage. I also told you that Jay Pritzker – the young fellow mentioned above – was the business genius behind this tax-efficient idea, the possibilities for which had escaped all the other experts who had thought about buying Rockwood, including my bosses, Ben and Jerry.

At the meeting, Jay was friendly and gave me an education on the 1954 tax code. I came away very impressed. Thereafter, I avidly followed Jay's business dealings, which were many and brilliant. His valued partner was his brother, Bob, who for nearly 50 years ran Marmon Group, the home for most of the Pritzker businesses.

Jay died in 1999, and Bob retired early in 2002. Around then, the Pritzker family decided to gradually sell or reorganize certain of its holdings, including Marmon, a company operating 125 businesses, managed through nine sectors. Marmon's largest operation is Union Tank Car, which together with a Canadian counterpart owns 94,000 rail cars that are leased to various shippers. The original cost of this fleet is $5.1 billion. All told, Marmon has $7 billion in sales and about 20,000 employees.

We will soon purchase 60% of Marmon and will acquire virtually all of the balance within six years. Our initial outlay will be $4.5 billion, and the price of our later purchases will be based on a formula tied to earnings. Prior to our entry into the picture, the Pritzker family received substantial consideration from Marmon's distribution of cash, investments and certain businesses.

This deal was done in the way Jay would have liked. We arrived at a price using only Marmon's financial statements, employing no advisors and engaging in no nit-picking. I knew that the business would be exactly as the Pritzkers represented, and they knew that we would close on the dot, however chaotic financial markets might be. During the past year, many large deals have been renegotiated or killed entirely. With the Pritzkers, as with Berkshire, a deal is a deal.

Marmon's CEO, Frank Ptak, works closely with a long-time associate, John Nichols. John was formerly the highly successful CEO of Illinois Tool Works (ITW), where he teamed with Frank to run a mix of industrial businesses. Take a look at their ITW record; you'll be impressed.

Byron Trott of Goldman Sachs – whose praises I sang in the 2003 report – facilitated the Marmon transaction. Byron is the rare investment banker who puts himself in his client's shoes. Charlie and I trust him completely.

You'll like the code name that Goldman Sachs assigned the deal. Marmon entered the auto business in 1902 and exited it in 1933. Along the way it manufactured the Wasp, a car that won the first Indianapolis 500 race, held in 1911. So this deal was labeled "Indy 500."

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In May 2006, I spoke at a lunch at Ben Bridge, our Seattle-based jewelry chain. The audience was a number of its vendors, among them Dennis Ulrich, owner of a company that manufactured gold jewelry.

In January 2007, Dennis called me, suggesting that with Berkshire's support he could build a large jewelry supplier. We soon made a deal for his business, simultaneously purchasing a supplier of about equal size. The new company, Richline Group, has since made two smaller acquisitions. Even with those, Richline is far below the earnings threshold we normally require for purchases. I'm willing to bet, however, that Dennis – with the help of his partner, Dave Meleski – will build a large operation, earning good returns on capital employed.

Businesses – The Great, the Good and the Gruesome

Let's take a look at what kind of businesses turn us on. And while we're at it, let's also discuss what we wish to avoid.

Charlie and I look for companies that have a) a business we understand; b) favorable long-term economics; c) able and trustworthy management; and d) a sensible price tag. We like to buy the whole business or, if management is our partner, at least 80%. When control-type purchases of quality aren't available, though, we are also happy to simply buy small portions of great businesses by way of stock-market purchases. It's better to have a part interest in the Hope Diamond than to own all of a rhinestone.

A truly great business must have an enduring "moat" that protects excellent returns on invested capital. The dynamics of capitalism guarantee that competitors will repeatedly assault any business "castle" that is earning high returns. Therefore a formidable barrier such as a company's being the low-cost producer (GEICO, Costco) or possessing a powerful world-wide brand (Coca-Cola, Gillette, American Express) is essential for sustained success. Business history is filled with "Roman Candles," companies whose moats proved illusory and were soon crossed.

Our criterion of "enduring" causes us to rule out companies in industries prone to rapid and continuous change. Though capitalism's "creative destruction" is highly beneficial for society, it precludes investment certainty. A moat that must be continuously rebuilt will eventually be no moat at all.

Additionally, this criterion eliminates the business whose success *depends* on having a great manager. Of course, a terrific CEO is a huge asset for any enterprise, and at Berkshire we have an abundance of these managers. Their abilities have created billions of dollars of value that would never have materialized if typical CEOs had been running their businesses.

But if a business *requires* a superstar to produce great results, the business itself cannot be deemed great. A medical partnership led by your area's premier brain surgeon may enjoy outsized and growing earnings, but that tells little about its future. The partnership's moat will go when the surgeon goes. You can count, though, on the moat of the Mayo Clinic to endure, even though you can't name its CEO.

Long-term competitive advantage in a stable industry is what we seek in a business. If that comes with rapid organic growth, great. But even without organic growth, such a business is rewarding. We will simply take the lush earnings of the business and use them to buy similar businesses elsewhere. There's no rule that you have to invest money where you've earned it. Indeed, it's often a mistake to do so: Truly great businesses, earning huge returns on tangible assets, *can't* for any extended period reinvest a large portion of their earnings internally at high rates of return.

Let's look at the prototype of a dream business, our own See's Candy. The boxed-chocolates industry in which it operates is unexciting: Per-capita consumption in the U.S. is extremely low and doesn't grow. Many once-important brands have disappeared, and only three companies have earned more than token profits over the last forty years. Indeed, I believe that See's, though it obtains the bulk of its revenues from only a few states, accounts for nearly half of the entire industry's earnings.

At See's, annual sales were 16 million pounds of candy when Blue Chip Stamps purchased the company in 1972. (Charlie and I controlled Blue Chip at the time and later merged it into Berkshire.) Last year See's sold 31 million pounds, a growth rate of only 2% annually. Yet its durable competitive advantage, built by the See's family over a 50-year period, and strengthened subsequently by Chuck Huggins and Brad Kinstler, has produced extraordinary results for Berkshire.

We bought See's for $25 million when its sales were $30 million and pre-tax earnings were less than $5 million. The capital then required to conduct the business was $8 million. (Modest seasonal debt was also needed for a few months each year.) Consequently, the company was earning 60% pre-tax on invested capital. Two factors helped to minimize the funds required for operations. First, the product was sold for cash, and that eliminated accounts receivable. Second, the production and distribution cycle was short, which minimized inventories.

Last year See's sales were $383 million, and pre-tax profits were $82 million. The capital now required to run the business is $40 million. This means we have had to reinvest only $32 million since 1972 to handle the modest physical growth – and somewhat immodest financial growth – of the business. In the meantime pre-tax earnings have totaled $1.35 billion. *All of that*, except for the $32 million, has been sent to Berkshire (or, in the early years, to Blue Chip). After paying corporate taxes on the profits, we have used the rest to buy other attractive businesses. Just as Adam and Eve kick-started an activity that led to six billion humans, See's has given birth to multiple new streams of cash for us. (The biblical command to "be fruitful and multiply" is one we take seriously at Berkshire.)

There aren't many See's in Corporate America. Typically, companies that increase their earnings from $5 million to $82 million require, say, $400 million or so of capital investment to finance their growth. That's because growing businesses have both working capital needs that increase in proportion to sales growth and significant requirements for fixed asset investments.

A company that needs large increases in capital to engender its growth may well prove to be a satisfactory investment. There is, to follow through on our example, nothing shabby about earning $82 million pre-tax on $400 million of net tangible assets. But that equation for the owner is vastly different from the See's situation. It's far better to have an ever-increasing stream of earnings with virtually no major capital requirements. Ask Microsoft or Google.

One example of good, but far from sensational, business economics is our own FlightSafety. This company delivers benefits to its customers that are the equal of those delivered by any business that I know of. It also possesses a durable competitive advantage: Going to any other flight-training provider than the best is like taking the low bid on a surgical procedure.

Nevertheless, this business requires a significant reinvestment of earnings if it is to grow. When we purchased FlightSafety in 1996, its pre-tax operating earnings were $111 million, and its net investment in fixed assets was $570 million. Since our purchase, depreciation charges have totaled $923 million. But capital expenditures have totaled $1.635 billion, most of that for simulators to match the new airplane models that are constantly being introduced. (A simulator can cost us more than $12 million, and we have 273 of them.) Our fixed assets, after depreciation, now amount to $1.079 billion. Pre-tax operating earnings in 2007 were $270 million, a gain of $159 million since 1996. That gain gave us a good, but far from See's-like, return on our incremental investment of $509 million.

Consequently, if measured only by economic returns, FlightSafety is an excellent but not extraordinary business. Its put-up-more-to-earn-more experience is that faced by most corporations. For example, our large investment in regulated utilities falls squarely in this category. We will earn considerably more money in this business ten years from now, but we will invest many billions to make it.

Now let's move to the gruesome. The worst sort of business is one that grows rapidly, requires significant capital to engender the growth, and then earns little or no money. Think airlines. Here a *durable* competitive advantage has proven elusive ever since the days of the Wright Brothers. Indeed, if a farsighted capitalist had been present at Kitty Hawk, he would have done his successors a huge favor by shooting Orville down.

The airline industry's demand for capital ever since that first flight has been insatiable. Investors have poured money into a bottomless pit, attracted by growth when they should have been repelled by it. And I, to my shame, participated in this foolishness when I had Berkshire buy U.S. Air preferred stock in 1989. As the ink was drying on our check, the company went into a tailspin, and before long our preferred dividend was no longer being paid. But we then got very lucky. In one of the recurrent, but always misguided, bursts of optimism for airlines, we were actually able to sell our shares in 1998 for a hefty gain. In the decade following our sale, the company went bankrupt. Twice.

To sum up, think of three types of "savings accounts." The great one pays an extraordinarily high interest rate that will rise as the years pass. The good one pays an attractive rate of interest that will be earned also on deposits that are added. Finally, the gruesome account both pays an inadequate interest rate and requires you to keep adding money at those disappointing returns.

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And now it's confession time. It should be noted that no consultant, board of directors or investment banker pushed me into the mistakes I will describe. In tennis parlance, they were all unforced errors.

To begin with, I almost blew the See's purchase. The seller was asking $30 million, and I was adamant about not going above $25 million. Fortunately, he caved. Otherwise I would have balked, and that $1.35 billion would have gone to somebody else.

About the time of the See's purchase, Tom Murphy, then running Capital Cities Broadcasting, called and offered me the Dallas-Fort Worth NBC station for $35 million. The station came with the Fort Worth paper that Capital Cities was buying, and under the "cross-ownership" rules Murph had to divest it. I knew that TV stations were See's-like businesses that required virtually no capital investment and had excellent prospects for growth. They were simple to run and showered cash on their owners.

Moreover, Murph, then as now, was a close friend, a man I admired as an extraordinary manager and outstanding human being. He knew the television business forward and backward and would not have called me unless he felt a purchase was certain to work. In effect Murph whispered "buy" into my ear. But I didn't listen.

In 2006, the station earned $73 million pre-tax, bringing its total earnings since I turned down the deal to at least $1 billion – almost all available to its owner for other purposes. Moreover, the property now has a capital value of about $800 million. Why did I say "no"? The only explanation is that my brain had gone on vacation and forgot to notify me. (My behavior resembled that of a politician Molly Ivins once described: "If his I.Q. was any lower, you would have to water him twice a day.")

Finally, I made an even worse mistake when I said "yes" to Dexter, a shoe business I bought in 1993 for $433 million in Berkshire stock (25,203 shares of A). What I had assessed as durable competitive advantage vanished within a few years. But that's just the beginning: By using Berkshire stock, I compounded this error hugely. That move made the cost to Berkshire shareholders not $400 million, but rather $3.5 billion. In essence, I gave away 1.6% of a wonderful business – one now valued at $220 billion – to buy a worthless business.

To date, Dexter is the worst deal that I've made. But I'll make more mistakes in the future – you can bet on that. A line from Bobby Bare's country song explains what too often happens with acquisitions: "I've never gone to bed with an ugly woman, but I've sure woke up with a few."

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Now, let's examine the four major operating sectors of Berkshire. Each sector has vastly different balance sheet and income account characteristics. Therefore, lumping them together impedes analysis. So we'll present them as four separate businesses, which is how Charlie and I view them.

Insurance

The best anecdote I've heard during the current presidential campaign came from Mitt Romney, who asked his wife, Ann, "When we were young, did you ever in your wildest dreams think I might be president?" To which she replied, "Honey, you weren't *in* my wildest dreams."

When we first entered the property/casualty insurance business in 1967, my wildest dreams did not envision our current operation. Here's how we did in the first five years after purchasing National Indemnity:

Year	*Underwriting Profit (Loss)*	*Float*
	(in millions)	
1967	$ 0.4	$18.5
1968	0.6	21.3
1969	0.1	25.4
1970	(0.4)	39.4
1971	1.4	65.6

To put it charitably, we were a slow starter. But things changed. Here's the record of the last five years:

Year	*Underwriting Profit (Loss)*	*Float*
	(in millions)	
2003	$1,718	$44,220
2004	1,551	46,094
2005	53	49,287
2006	3,838	50,887
2007	3,374	58,698

This metamorphosis has been accomplished by some extraordinary managers. Let's look at what each has achieved.

- GEICO possesses the widest moat of any of our insurers, one carefully protected and expanded by Tony Nicely, its CEO. Last year – again – GEICO had the best growth record among major auto insurers, increasing its market share to 7.2%. When Berkshire acquired control in 1995, that share was 2.5%. Not coincidentally, annual ad expenditures by GEICO have increased from $31 million to $751 million during the same period.

  Tony, now 64, joined GEICO at 18. Every day since, he has been passionate about the company – proud of how it could both save money for its customers and provide growth opportunities for its associates. Even now, with sales at $12 billion, Tony feels GEICO is just getting started. So do I.

  Here's some evidence. In the last three years, GEICO has increased its share of the motorcycle market from 2.1% to 6%. We've also recently begun writing policies on ATVs and RVs. And in November we wrote our first *commercial* auto policy. GEICO and National Indemnity are working together in the commercial field, and early results are very encouraging.

  Even in aggregate, these lines will remain a small fraction of our personal auto volume. Nevertheless, they should deliver a growing stream of underwriting profits and float.

- General Re, our international reinsurer, is by far our largest source of "home-grown" float – $23 billion at yearend. This operation is now a huge asset for Berkshire. Our ownership, however, had a shaky start.

  For decades, General Re was the Tiffany of reinsurers, admired by all for its underwriting skills and discipline. This reputation, unfortunately, outlived its factual underpinnings, a flaw that I completely missed when I made the decision in 1998 to merge with General Re. The General Re of 1998 was not operated as the General Re of 1968 or 1978.

  Now, thanks to Joe Brandon, General Re's CEO, and his partner, Tad Montross, the luster of the company has been restored. Joe and Tad have been running the business for six years and have been doing first-class business in a first-class way, to use the words of J. P. Morgan. They have restored discipline to underwriting, reserving and the selection of clients.

  Their job was made more difficult by costly and time-consuming legacy problems, both in the U.S. and abroad. Despite that diversion, Joe and Tad have delivered excellent underwriting results while skillfully repositioning the company for the future.

- Since joining Berkshire in 1986, Ajit Jain has built a truly great specialty reinsurance operation from scratch. For one-of-a-kind mammoth transactions, the world now turns to him.

  Last year I told you in detail about the Equitas transfer of huge, but capped, liabilities to Berkshire for a single premium of $7.1 billion. At this very early date, our experience has been good. But this doesn't tell us much because it's just one straw in a fifty-year-or-more wind. What we know for sure, however, is that the London team who joined us, headed by Scott Moser, is first-rate and has become a valuable asset for our insurance business.

- Finally, we have our smaller operations, which serve specialized segments of the insurance market. In aggregate, these companies have performed extraordinarily well, earning above-average underwriting profits and delivering valuable float for investment.

  Last year BoatU.S., headed by Bill Oakerson, was added to the group. This company manages an association of about 650,000 boat owners, providing them services similar to those offered by AAA auto clubs to drivers. Among the association's offerings is boat insurance. Learn more about this operation by visiting its display at the annual meeting.

Below we show the record of our four categories of property/casualty insurance.

	Underwriting Profit		*Yearend Float*	
	(in millions)			
Insurance Operations	*2007*	*2006*	*2007*	*2006*
General Re	$ 555	$ 526	$23,009	$22,827
BH Reinsurance	1,427	1,658	23,692	16,860
GEICO	1,113	1,314	7,768	7,171
Other Primary	279	340*	4,229	4,029*
	$3,374	$3,838	$58,698	$50,887

* Includes Applied Underwriters from May 19, 2006.

Regulated Utility Business

Berkshire has an 87.4% (diluted) interest in MidAmerican Energy Holdings, which owns a wide variety of utility operations. The largest of these are (1) Yorkshire Electricity and Northern Electric, whose 3.8 million electric customers make it the third largest distributor of electricity in the U.K.; (2) MidAmerican Energy, which serves 720,000 electric customers, primarily in Iowa; (3) Pacific Power and Rocky Mountain Power, serving about 1.7 million electric customers in six western states; and (4) Kern River and Northern Natural pipelines, which carry about 8% of the natural gas consumed in the U.S.

Our partners in ownership of MidAmerican are Walter Scott, and its two terrific managers, Dave Sokol and Greg Abel. It's unimportant how many votes each party has; we make major moves only when we are unanimous in thinking them wise. Eight years of working with Dave, Greg and Walter have underscored my original belief: Berkshire couldn't have better partners.

Somewhat incongruously, MidAmerican also owns the second largest real estate brokerage firm in the U.S., HomeServices of America. This company operates through 20 locally-branded firms with 18,800 agents. Last year was a slow year for residential sales, and 2008 will probably be slower. We will continue, however, to acquire quality brokerage operations when they are available at sensible prices.

Here are some key figures on MidAmerican's operation:

	Earnings (in millions)	
	2007	*2006*
U.K. utilities	$ 337	$ 338
Iowa utility	412	348
Western utilities (acquired March 21, 2006)	692	356
Pipelines	473	376
HomeServices	42	74
Other (net)	130	245
Earnings before corporate interest and taxes	2,086	1,737
Interest, other than to Berkshire	(312)	(261)
Interest on Berkshire junior debt	(108)	(134)
Income tax	(477)	(426)
Net earnings	$ 1,189	$ 916
Earnings applicable to Berkshire*	$ 1,114	$ 885
Debt owed to others	19,002	16,946
Debt owed to Berkshire	821	1,055

*Includes interest earned by Berkshire (net of related income taxes) of $70 in 2007 and $87 in 2006.

We agreed to purchase 35,464,337 shares of MidAmerican at $35.05 per share in 1999, a year in which its per-share earnings were $2.59. Why the odd figure of $35.05? I originally decided the business was worth $35.00 per share to Berkshire. Now, I'm a "one-price" guy (remember See's?) and for several days the investment bankers representing MidAmerican had no luck in getting me to increase Berkshire's offer. But, finally, they caught me in a moment of weakness, and I caved, telling them I would go to $35.05. With that, I explained, they could tell their client they had wrung the last nickel out of me. At the time, it hurt.

Later on, in 2002, Berkshire purchased 6,700,000 shares at $60 to help finance the acquisition of one of our pipelines. Lastly, in 2006, when MidAmerican bought PacifiCorp, we purchased 23,268,793 shares at $145 per share.

In 2007, MidAmerican earned $15.78 per share. However, 77¢ of that was non-recurring – a reduction in deferred tax at our British utility, resulting from a lowering of the U.K. corporate tax rate. So call normalized earnings $15.01 per share. And yes, I'm glad I wilted and offered the extra nickel.

Manufacturing, Service and Retailing Operations

Our activities in this part of Berkshire cover the waterfront. Let's look, though, at a summary balance sheet and earnings statement for the entire group.

Balance Sheet 12/31/07 (in millions)

Assets		*Liabilities and Equity*	
Cash and equivalents	$ 2,080	Notes payable	$ 1,278
Accounts and notes receivable	4,488	Other current liabilities	7,652
Inventory	5,793	Total current liabilities	8,930
Other current assets	470		
Total current assets	12,831		
Goodwill and other intangibles	14,201	Deferred taxes	828
Fixed assets	9,605	Term debt and other liabilities	3,079
Other assets	1,685	Equity	25,485
	$38,322		$38,322

Earnings Statement (in millions)

	2007	*2006*	*2005*
Revenues	$59,100	$52,660	$46,896
Operating expenses (including depreciation of $955 in 2007, $823 in 2006 and $699 in 2005)	55,026	49,002	44,190
Interest expense	127	132	83
Pre-tax earnings	3,947*	3,526*	2,623*
Income taxes and minority interests	1,594	1,395	977
Net income	$ 2,353	$ 2,131	$ 1,646

*Does not include purchase-accounting adjustments.

This motley group, which sells products ranging from lollipops to motor homes, earned a pleasing 23% on average tangible net worth last year. It's noteworthy also that these operations used only minor financial leverage in achieving that return. Clearly we own some terrific businesses. We purchased many of them, however, at large premiums to net worth – a point reflected in the goodwill item shown on the balance sheet – and that fact reduces the earnings on our average *carrying* value to 9.8%.

Here are a few newsworthy items about companies in this sector:

- Shaw, Acme Brick, Johns Manville and MiTek were all hurt in 2007 by the sharp housing downturn, with their pre-tax earnings declining 27%, 41%, 38%, and 9% respectively. Overall, these companies earned $941 million pre-tax compared to $1.296 billion in 2006.

  Last year, Shaw, MiTek and Acme contracted for tuck-in acquisitions that will help future earnings. You can be sure they will be looking for more of these.

- In a tough year for retailing, our standouts were See's, Borsheims and Nebraska Furniture Mart.

  Two years ago Brad Kinstler was made CEO of See's. We very seldom move managers from one industry to another at Berkshire. But we made an exception with Brad, who had previously run our uniform company, Fechheimer, and Cypress Insurance. The move could not have worked out better. In his two years, profits at See's have increased more than 50%.

  At Borsheims, sales increased 15.1%, helped by a 27% gain during Shareholder Weekend. Two years ago, Susan Jacques suggested that we remodel and expand the store. I was skeptical, but Susan was right.

  Susan came to Borsheims 25 years ago as a $4-an-hour saleswoman. Though she lacked a managerial background, I did not hesitate to make her CEO in 1994. She's smart, she loves the business, and she loves her associates. That beats having an MBA degree any time.

  (An aside: Charlie and I are not big fans of resumes. Instead, we focus on brains, passion and integrity. Another of our great managers is Cathy Baron Tamraz, who has significantly increased Business Wire's earnings since we purchased it early in 2006. She is an owner's dream. It is positively *dangerous* to stand between Cathy and a business prospect. Cathy, it should be noted, began her career as a cab driver.)

  Finally, at Nebraska Furniture Mart, earnings hit a record as our Omaha and Kansas City stores each had sales of about $400 million. These, by some margin, are the two top home furnishings stores in the country. In a disastrous year for many furniture retailers, sales at Kansas City increased 8%, while in Omaha the gain was 6%.

  Credit the remarkable Blumkin brothers, Ron and Irv, for this performance. Both are close personal friends of mine and great businessmen.

- Iscar continues its wondrous ways. Its products are small carbide cutting tools that make large and very expensive machine tools more productive. The raw material for carbide is tungsten, mined in China. For many decades, Iscar moved tungsten to Israel, where brains turned it into something far more valuable. Late in 2007, Iscar opened a large plant in Dalian, China. In effect, we've now moved the brains to the tungsten. Major opportunities for growth await Iscar. Its management team, led by Eitan Wertheimer, Jacob Harpaz, and Danny Goldman, is certain to make the most of them.

- Flight services set a record in 2007 with pre-tax earnings increasing 49% to $547 million. Corporate aviation had an extraordinary year worldwide, and both of our companies – as runaway leaders in their fields – fully participated.

  FlightSafety, our pilot training business, gained 14% in revenues and 20% in pre-tax earnings. We estimate that we train about 58% of U.S. corporate pilots. Bruce Whitman, the company's CEO, inherited this leadership position in 2003 from Al Ueltschi, the father of advanced flight training, and has proved to be a worthy successor.

At NetJets, the inventor of fractional-ownership of jets, we also remain the unchallenged leader. We now operate 487 planes in the U.S. and 135 in Europe, a fleet more than twice the size of that operated by our three major competitors *combined*. Because our share of the large-cabin market is near 90%, our lead in value terms is far greater.

The NetJets brand – with its promise of safety, service and security – grows stronger every year. Behind this is the passion of one man, Richard Santulli. If you were to pick someone to join you in a foxhole, you couldn't do better than Rich. No matter what the obstacles, he just doesn't stop.

Europe is the best example of how Rich's tenacity leads to success. For the first ten years we made little financial progress there, actually running up cumulative losses of $212 million. After Rich brought Mark Booth on board to run Europe, however, we began to gain traction. Now we have real momentum, and last year earnings tripled.

In November, our directors met at NetJets headquarters in Columbus and got a look at the sophisticated operation there. It is responsible for 1,000 or so flights a day in all kinds of weather, with customers expecting top-notch service. Our directors came away impressed by the facility and its capabilities – but even more impressed by Rich and his associates.

Finance and Finance Products

Our major operation in this category is Clayton Homes, the largest U.S. manufacturer and marketer of manufactured homes. Clayton's market share hit a record 31% last year. But industry volume continues to shrink: Last year, manufactured home sales were 96,000, down from 131,000 in 2003, the year we bought Clayton. (At the time, it should be remembered, some commentators criticized its directors for selling at a cyclical bottom.)

Though Clayton earns money from both manufacturing and retailing its homes, most of its earnings come from an $11 billion loan portfolio, covering 300,000 borrowers. That's why we include Clayton's operation in this finance section. Despite the many problems that surfaced during 2007 in real estate finance, the Clayton portfolio is performing well. Delinquencies, foreclosures and losses during the year were at rates similar to those we experienced in our previous years of ownership.

Clayton's loan portfolio is financed by Berkshire. For this funding, we charge Clayton one percentage point over Berkshire's borrowing cost – a fee that amounted to $85 million last year. Clayton's 2007 pre-tax earnings of $526 million are *after* its paying this fee. The flip side of this transaction is that Berkshire recorded $85 million as income, which is included in "other" in the following table.

	Pre-Tax Earnings (in millions)	
	2007	*2006*
Trading – ordinary income	$ 272	$ 274
Life and annuity operation	(60)	29
Leasing operations	111	182
Manufactured-housing finance (Clayton)	526	513
Other	157	159
Income before capital gains	1,006	1,157
Trading – capital gains	105	938
	$1,111	$2,095

The leasing operations tabulated are XTRA, which rents trailers, and CORT, which rents furniture. Utilization of trailers was down considerably in 2007 and that led to a drop in earnings at XTRA. That company also borrowed $400 million last year and distributed the proceeds to Berkshire. The resulting higher interest it is now paying further reduced XTRA's earnings.

Clayton, XTRA and CORT are all good businesses, very ably run by Kevin Clayton, Bill Franz and Paul Arnold. Each has made tuck-in acquisitions during Berkshire's ownership. More will come.

Investments

We show below our common stock investments at yearend, itemizing those with a market value of at least $600 million.

			12/31/07	
Shares	*Company*	*Percentage of Company Owned*	*Cost**	*Market*
			(in millions)	
151,610,700	American Express Company	13.1	$ 1,287	$ 7,887
35,563,200	Anheuser-Busch Companies, Inc.	4.8	1,718	1,861
60,828,818	Burlington Northern Santa Fe	17.5	4,731	5,063
200,000,000	The Coca-Cola Company	8.6	1,299	12,274
17,508,700	Conoco Phillips	1.1	1,039	1,546
64,271,948	Johnson & Johnson	2.2	3,943	4,287
124,393,800	Kraft Foods Inc.	8.1	4,152	4,059
48,000,000	Moody's Corporation	19.1	499	1,714
3,486,006	POSCO	4.5	572	2,136
101,472,000	The Procter & Gamble Company	3.3	1,030	7,450
17,170,953	Sanofi-Aventis	1.3	1,466	1,575
227,307,000	Tesco plc	2.9	1,326	2,156
75,176,026	U.S. Bancorp	4.4	2,417	2,386
17,072,192	USG Corp	17.2	536	611
19,944,300	Wal-Mart Stores, Inc.	0.5	942	948
1,727,765	The Washington Post Company	18.2	11	1,367
303,407,068	Wells Fargo & Company	9.2	6,677	9,160
1,724,200	White Mountains Insurance Group Ltd.	16.3	369	886
	Others		5,238	7,633
	Total Common Stocks		$39,252	$74,999

*This is our actual purchase price and also our tax basis; GAAP "cost" differs in a few cases because of write-ups or write-downs that have been required.

Overall, we are delighted by the business performance of our investees. In 2007, American Express, Coca-Cola and Procter & Gamble, three of our four largest holdings, increased per-share earnings by 12%, 14% and 14%. The fourth, Wells Fargo, had a small decline in earnings because of the popping of the real estate bubble. Nevertheless, I believe its intrinsic value increased, even if only by a minor amount.

In the strange world department, note that American Express and Wells Fargo were both organized by Henry Wells and William Fargo, Amex in 1850 and Wells in 1852. P&G and Coke began business in 1837 and 1886 respectively. Start-ups are not our game.

I should emphasize that we do not measure the progress of our investments by what their market prices do during any given year. Rather, we evaluate their performance by the two methods we apply to the businesses we own. The first test is improvement in earnings, with our making due allowance for industry conditions. The second test, more subjective, is whether their "moats" – a metaphor for the superiorities they possess that make life difficult for their competitors – have widened during the year. All of the "big four" scored positively on that test.

We made one large sale last year. In 2002 and 2003 Berkshire bought 1.3% of PetroChina for $488 million, a price that valued the entire business at about $37 billion. Charlie and I then felt that the company was worth about $100 billion. By 2007, two factors had materially increased its value: the price of oil had climbed significantly, and PetroChina's management had done a great job in building oil and gas reserves. In the second half of last year, the market value of the company rose to $275 billion, about what we thought it was worth compared to other giant oil companies. So we sold our holdings for $4 billion.

A footnote: We paid the IRS tax of $1.2 billion on our PetroChina gain. This sum paid *all* costs of the U.S. government – defense, social security, you name it – for about four hours.

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Last year I told you that Berkshire had 62 derivative contracts that I manage. (We also have a few left in the General Re runoff book.) Today, we have 94 of these, and they fall into two categories.

First, we have written 54 contracts that require us to make payments if certain bonds that are included in various high-yield indices default. These contracts expire at various times from 2009 to 2013. At yearend we had received $3.2 billion in premiums on these contracts; had paid $472 million in losses; and in the worst case (though it is extremely unlikely to occur) could be required to pay an additional $4.7 billion.

We are certain to make many more payments. But I believe that on premium revenues alone, these contracts will prove profitable, leaving aside what we can earn on the large sums we hold. Our yearend liability for this exposure was recorded at $1.8 billion and is included in "Derivative Contract Liabilities" on our balance sheet.

The second category of contracts involves various put options we have sold on four stock indices (the S&P 500 plus three foreign indices). These puts had original terms of either 15 or 20 years and were struck at the market. We have received premiums of $4.5 billion, and we recorded a liability at yearend of $4.6 billion. The puts in these contracts are exercisable *only* at their expiration dates, which occur between 2019 and 2027, and Berkshire will then need to make a payment only if the index in question is quoted at a level below that existing on the day that the put was written. Again, I believe these contracts, in aggregate, will be profitable and that we will, in addition, receive substantial income from our investment of the premiums we hold during the 15- or 20-year period.

Two aspects of our derivative contracts are particularly important. First, in all cases we hold the money, which means that we have *no* counterparty risk.

Second, accounting rules for our derivative contracts differ from those applying to our investment portfolio. In that portfolio, changes in value are applied to the net worth shown on Berkshire's balance sheet, but do not affect earnings unless we sell (or write down) a holding. Changes in the value of a derivative contract, however, must be applied each quarter to earnings.

Thus, our derivative positions will sometimes cause large swings in reported earnings, even though Charlie and I might believe the intrinsic value of these positions has changed little. He and I will not be bothered by these swings – even though they could easily amount to $1 billion or more in a quarter – and we hope you won't be either. You will recall that in our catastrophe insurance business, we are always ready to trade increased volatility in reported earnings in the short run for greater gains in net worth in the long run. That is our philosophy in derivatives as well.

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The U.S. dollar weakened further in 2007 against major currencies, and it's no mystery why: Americans like buying products made elsewhere more than the rest of the world likes buying products made in the U.S. Inevitably, that causes America to ship about $2 billion of IOUs and assets *daily* to the rest of the world. And over time, that puts pressure on the dollar.

When the dollar falls, it both makes our products cheaper for foreigners to buy and their products more expensive for U.S. citizens. That's why a falling currency is supposed to cure a trade deficit. Indeed, the U.S. deficit has undoubtedly been tempered by the large drop in the dollar. But ponder this: In 2002 when the Euro averaged 94.6¢, our trade deficit with Germany (the fifth largest of our trading partners) was $36 billion, whereas in 2007, with the Euro averaging $1.37, our deficit with Germany was up to $45 billion. Similarly, the Canadian dollar averaged 64¢ in 2002 and 93¢ in 2007. Yet our trade deficit with Canada rose as well, from $50 billion in 2002 to $64 billion in 2007. So far, at least, a plunging dollar has not done much to bring our trade activity into balance.

There's been much talk recently of sovereign wealth funds and how they are buying large pieces of American businesses. This is *our* doing, not some nefarious plot by foreign governments. Our trade equation guarantees massive foreign investment in the U.S. When we force-feed $2 billion daily to the rest of the world, they must invest in *something* here. Why should we complain when they choose stocks over bonds?

Our country's weakening currency is not the fault of OPEC, China, etc. Other developed countries rely on imported oil and compete against Chinese imports just as we do. In developing a sensible trade policy, the U.S. should not single out countries to punish or industries to protect. Nor should we take actions likely to evoke retaliatory behavior that will reduce America's exports, true trade that benefits both our country and the rest of the world.

Our legislators should recognize, however, that the current imbalances are unsustainable and should therefore adopt policies that will materially reduce them sooner rather than later. Otherwise our $2 billion daily of force-fed dollars to the rest of the world may produce global indigestion of an unpleasant sort. (For other comments about the unsustainability of our trade deficits, see Alan Greenspan's comments on November 19, 2004, the Federal Open Market Committee's minutes of June 29, 2004, and Ben Bernanke's statement on September 11, 2007.)

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At Berkshire we held only one direct currency position during 2007. That was in – hold your breath – the Brazilian real. Not long ago, swapping dollars for reals would have been unthinkable. After all, during the past century *five* versions of Brazilian currency have, in effect, turned into confetti. As has been true in many countries whose currencies have periodically withered and died, wealthy Brazilians sometimes stashed large sums in the U.S. to preserve their wealth.

But any Brazilian who followed this apparently prudent course would have lost *half* his net worth over the past five years. Here's the year-by-year record (indexed) of the real versus the dollar from the end of 2002 to yearend 2007: 100; 122; 133; 152; 166; 199. Every year the real went up and the dollar fell. Moreover, during much of this period the Brazilian government was actually holding down the value of the real and supporting *our* currency by buying dollars in the market.

Our direct currency positions have yielded $2.3 billion of pre-tax profits over the past five years, and in addition we have profited by holding bonds of U.S. companies that are denominated in other currencies. For example, in 2001 and 2002 we purchased €310 million Amazon.com, Inc. 6 7/8 of 2010 at 57% of par. At the time, Amazon bonds were priced as "junk" credits, though they were anything but. (Yes, Virginia, you can occasionally find markets that are ridiculously inefficient – or at least you can find them anywhere except at the finance departments of some leading business schools.)

The Euro denomination of the Amazon bonds was a further, and important, attraction for us. The Euro was at 95¢ when we bought in 2002. Therefore, our cost in dollars came to only $169 million. Now the bonds sell at 102% of par and the Euro is worth $1.47. In 2005 and 2006 some of our bonds were called and we received $253 million for them. Our remaining bonds were valued at $162 million at yearend. Of our $246 million of realized and unrealized gain, about $118 million is attributable to the fall in the dollar. Currencies do matter.

At Berkshire, we will attempt to further increase our stream of direct and indirect foreign earnings. Even if we are successful, however, our assets and earnings will always be concentrated in the U.S. Despite our country's many imperfections and unrelenting problems of one sort or another, America's rule of law, market-responsive economic system, and belief in meritocracy are almost certain to produce ever-growing prosperity for its citizens.

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As I have told you before, we have for some time been well-prepared for CEO succession because we have three outstanding internal candidates. The board knows exactly whom it would pick if I were to become unavailable, either because of death or diminishing abilities. And that would still leave the board with two backups.

Last year I told you that we would also promptly complete a succession plan for the investment job at Berkshire, and we have indeed now identified four candidates who could succeed me in managing investments. All manage substantial sums currently, and all have indicated a strong interest in coming to Berkshire if called. The board knows the strengths of the four and would expect to hire one or more if the need arises. The candidates are young to middle-aged, well-to-do to rich, and all wish to work for Berkshire for reasons that go beyond compensation.

(I've reluctantly discarded the notion of my continuing to manage the portfolio after my death – abandoning my hope to give new meaning to the term "thinking outside the box.")

Fanciful Figures – How Public Companies Juice Earnings

Former Senator Alan Simpson famously said: "Those who travel the high road in Washington need not fear heavy traffic." If he had sought truly deserted streets, however, the Senator should have looked to Corporate America's accounting.

An important referendum on which road businesses prefer occurred in 1994. America's CEOs had just strong-armed the U.S. Senate into ordering the Financial Accounting Standards Board to shut up, by a vote that was 88-9. Before that rebuke the FASB had shown the audacity – by unanimous agreement, no less – to tell corporate chieftains that the stock options they were being awarded represented a form of compensation and that their value should be recorded as an expense.

After the senators voted, the FASB – now educated on accounting principles by the Senate's 88 closet CPAs – decreed that companies could choose between two methods of reporting on options. The *preferred* treatment would be to expense their value, but it would also be allowable for companies to ignore the expense as long as their options were issued at market value.

A moment of truth had now arrived for America's CEOs, and their reaction was not a pretty sight. During the next six years, exactly *two* of the 500 companies in the S&P chose the preferred route. CEOs of the rest opted for the low road, thereby ignoring a large and obvious expense in order to report higher "earnings." I'm sure some of them also felt that if they opted for expensing, their directors might in future years think twice before approving the mega-grants the managers longed for.

It turned out that for many CEOs even the low road wasn't good enough. Under the weakened rule, there remained earnings consequences if options were issued with a strike price below market value. No problem. To avoid that bothersome rule, a number of companies surreptitiously backdated options to falsely indicate that they were granted at current market prices, when in fact they were dished out at prices well below market.

Decades of option-accounting nonsense have now been put to rest, but other accounting choices remain – important among these the investment-return assumption a company uses in calculating pension expense. It will come as no surprise that many companies continue to choose an assumption that allows them to report less-than-solid "earnings." For the 363 companies in the S&P that have pension plans, this assumption in 2006 averaged 8%. Let's look at the chances of that being achieved.

The average holdings of bonds and cash for all pension funds is about 28%, and on these assets returns can be expected to be no more than 5%. Higher yields, of course, are obtainable but they carry with them a risk of commensurate (or greater) loss.

This means that the remaining 72% of assets – which are mostly in equities, either held directly or through vehicles such as hedge funds or private-equity investments – must earn 9.2% in order for the fund overall to achieve the postulated 8%. And that return must be delivered *after* all fees, which are now far higher than they have ever been.

How realistic is this expectation? Let's revisit some data I mentioned two years ago: During the 20th Century, the Dow advanced from 66 to 11,497. This gain, though it appears huge, shrinks to 5.3% when compounded annually. An investor who owned the Dow throughout the century would also have received generous dividends for much of the period, but only about 2% or so in the final years. It was a wonderful century.

Think now about *this* century. For investors to merely match that 5.3% market-value gain, the Dow – recently below 13,000 – would need to close at about *2,000,000* on December 31, 2099. We are now eight years into this century, and we have racked up less than 2,000 of the 1,988,000 Dow points the market needed to travel in this hundred years to equal the 5.3% of the last.

It's amusing that commentators regularly hyperventilate at the prospect of the Dow crossing an even number of thousands, such as 14,000 or 15,000. If they keep reacting that way, a 5.3% annual gain for the century will mean they experience at least 1,986 seizures during the next 92 years. While anything is possible, does anyone really believe this is the most likely outcome?

Dividends continue to run about 2%. Even if stocks were to average the 5.3% annual appreciation of the 1900s, the equity portion of plan assets – allowing for expenses of .5% – would produce no more than 7% or so. And .5% may well understate costs, given the presence of layers of consultants and high-priced managers ("helpers").

Naturally, everyone expects to be above average. And those helpers – bless their hearts – will certainly encourage their clients in this belief. But, as a class, the helper-aided group must be *below* average. The reason is simple: 1) Investors, overall, will necessarily earn an average return, minus costs they incur; 2) Passive and index investors, through their very inactivity, will earn that average minus costs that are very low; 3) With that group earning average returns, so must the remaining group – the active investors. But this group will incur high transaction, management, and advisory costs. Therefore, the active investors will have their returns diminished by a far greater percentage than will their inactive brethren. That means that the passive group – the "know-nothings" – must win.

I should mention that people who expect to earn 10% annually from equities during this century – envisioning that 2% of that will come from dividends and 8% from price appreciation – are implicitly forecasting a level of about *24,000,000* on the Dow by 2100. If your adviser talks to you about double-digit returns from equities, explain this math to him – not that it will faze him. Many helpers are apparently direct descendants of the queen in Alice in Wonderland, who said: "Why, sometimes I've believed as many as six impossible things before breakfast." Beware the glib helper who fills your head with fantasies while he fills his pockets with fees.

Some companies have pension plans in Europe as well as in the U.S. and, in their accounting, almost all assume that the U.S. plans will earn more than the non-U.S. plans. This discrepancy is puzzling: Why should these companies not put their U.S. managers in charge of the non-U.S. pension assets and let them work their magic on these assets as well? I've never seen this puzzle explained. But the auditors and actuaries who are charged with vetting the return assumptions seem to have no problem with it.

What is no puzzle, however, is why CEOs opt for a high investment assumption: It lets them report higher earnings. And if they are wrong, as I believe they are, the chickens won't come home to roost until long after they retire.

After decades of pushing the envelope – or worse – in its attempt to report the highest number possible for current earnings, Corporate America should ease up. It should listen to my partner, Charlie: "If you've hit three balls out of bounds to the left, aim a little to the right on the next swing."

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Whatever pension-cost surprises are in store for shareholders down the road, these jolts will be surpassed many times over by those experienced by taxpayers. Public pension promises are huge and, in many cases, funding is woefully inadequate. Because the fuse on this time bomb is long, politicians flinch from inflicting tax pain, given that problems will only become apparent long after these officials have departed. Promises involving very early retirement – sometimes to those in their low 40s – and generous cost-of-living adjustments are easy for these officials to make. In a world where people are living longer and inflation is certain, those promises will be anything but easy to keep.

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Having laid out the failures of an "honor system" in American accounting, I need to point out that this is exactly the system existing at Berkshire for a truly huge balance-sheet item. In every report we make to you, we must guesstimate the loss reserves for our insurance units. If our estimate is wrong, it means that both our balance sheet and our earnings statement will be wrong. So naturally we do our best to make these guesses accurate. *Nevertheless, in every report our estimate is sure to be wrong*.

At yearend 2007, we show an insurance liability of $56 billion that represents our guess as to what we will eventually pay for all loss events that occurred before yearend (except for about $3 billion of the reserve that has been discounted to present value). We know of many thousands of events and have put a dollar value on each that reflects what we believe we will pay, including the associated costs (such as attorney's fees) that we will incur in the payment process. In some cases, among them claims for certain serious injuries covered by worker's compensation, payments will be made for 50 years or more.

We also include a large reserve for losses that occurred before yearend but that we have yet to hear about. Sometimes, the insured itself does not know that a loss has occurred. (Think of an embezzlement that remains undiscovered for years.) We sometimes hear about losses from policies that covered our insured many decades ago.

A story I told you some years back illustrates our problem in accurately estimating our loss liability: A fellow was on an important business trip in Europe when his sister called to tell him that their dad had died. Her brother explained that he couldn't get back but said to spare nothing on the funeral, whose cost he would cover. When he returned, his sister told him that the service had been beautiful and presented him with bills totaling $8,000. He paid up but a month later received a bill from the mortuary for $10. He paid that, too – and still another $10 charge he received a month later. When a third $10 invoice was sent to him the following month, the perplexed man called his sister to ask what was going on. "Oh," she replied, "I forgot to tell you. We buried Dad in a rented suit."

At our insurance companies we have an unknown, but most certainly large, number of "rented suits" buried around the world. We try to estimate the bill for them accurately. In ten or twenty years, we will even be able to make a good guess as to how inaccurate our present guess is. But even *that* guess will be subject to surprises. I personally believe our stated reserves are adequate, but I've been wrong several times in the past.

The Annual Meeting

Our meeting this year will be held on Saturday, May 3rd. As always, the doors will open at the Qwest Center at 7 a.m., and a new Berkshire movie will be shown at 8:30. At 9:30 we will go directly to the question-and-answer period, which (with a break for lunch at the Qwest's stands) will last until 3:00. Then, after a short recess, Charlie and I will convene the annual meeting at 3:15. If you decide to leave during the day's question periods, please do so while *Charlie* is talking.

The best reason to exit, of course is to *shop*. We will help you do that by filling the 194,300-square-foot hall that adjoins the meeting area with the products of Berkshire subsidiaries. Last year, the 27,000 people who came to the meeting did their part, and almost every location racked up record sales. But you can do better. (If necessary, I'll lock the doors.)

This year we will again showcase a Clayton home (featuring Acme brick, Shaw carpet, Johns Manville insulation, MiTek fasteners, Carefree awnings and NFM furniture). You will find that this 1,550-square-foot home, priced at $69,500, delivers exceptional value. And after you purchase the house, consider also acquiring the Forest River RV and pontoon boat on display nearby.

GEICO will have a booth staffed by a number of its top counselors from around the country, all of them ready to supply you with auto insurance quotes. In most cases, GEICO will be able to give you a special shareholder discount (usually 8%). This special offer is permitted by 45 of the 50 jurisdictions in which we operate. (One supplemental point: The discount is not additive if you qualify for another, such as that given certain groups.) Bring the details of your existing insurance and check out whether we can save you money. For at least 50% of you, I believe we can.

On Saturday, at the Omaha airport, we will have the usual array of aircraft from NetJets available for your inspection. Stop by the NetJets booth at the Qwest to learn about viewing these planes. Come to Omaha by bus; leave in your new plane. And take all the hair gel and scissors that you wish on board with you.

Next, if you have any money left, visit the Bookworm, where you will find about 25 books and DVDs – all discounted – led again by *Poor Charlie's Almanack*. Without any advertising or bookstore placement, Charlie's book has now remarkably sold nearly 50,000 copies. For those of you who can't make the meeting, go to poorcharliesalmanack.com to order a copy.

An attachment to the proxy material that is enclosed with this report explains how you can obtain the credential you will need for admission to the meeting and other events. As for plane, hotel and car reservations, we have again signed up American Express (800-799-6634) to give you special help. Carol Pedersen, who handles these matters, does a terrific job for us each year, and I thank her for it. Hotel rooms can be hard to find, but work with Carol and you will get one.

At Nebraska Furniture Mart, located on a 77-acre site on 72nd Street between Dodge and Pacific, we will again be having "Berkshire Weekend" discount pricing. We initiated this special event at NFM eleven years ago, and sales during the "Weekend" grew from $5.3 million in 1997 to $30.9 million in 2007. This is more volume than most furniture stores register in a year.

To obtain the Berkshire discount, you must make your purchases between Thursday, May 1st and Monday, May 5th inclusive, and also present your meeting credential. The period's special pricing will even apply to the products of several prestigious manufacturers that normally have ironclad rules against discounting but which, in the spirit of our shareholder weekend, have made an exception for you. We appreciate their cooperation. NFM is open from 10 a.m. to 9 p.m. Monday through Saturday, and 10 a.m. to 6 p.m. on Sunday. On Saturday this year, from 5:30 p.m. to 8 p.m., NFM is having a Baja Beach Bash featuring beef and chicken tacos.

At Borsheims, we will again have two shareholder-only events. The first will be a cocktail reception from 6 p.m. to 10 p.m. on Friday, May 2nd. The second, the main gala, will be held on Sunday, May 4th, from 9 a.m. to 4 p.m. On Saturday, we will be open until 6 p.m.

We will have huge crowds at Borsheims throughout the weekend. For your convenience, therefore, shareholder prices will be available from Monday, April 28th through Saturday, May 10th. During that period, please identify yourself as a shareholder by presenting your meeting credentials or a brokerage statement that shows you are a Berkshire holder.

On Sunday, in a tent outside of Borsheims, a blindfolded Patrick Wolff, twice U.S. chess champion, will take on all comers – who will have their eyes wide open – in groups of six. Nearby, Norman Beck, a remarkable magician from Dallas, will bewilder onlookers. Additionally, we will have Bob Hamman and Sharon Osberg, two of the world's top bridge experts, available to play bridge with our shareholders on Sunday afternoon.

Gorat's will again be open exclusively for Berkshire shareholders on Sunday, May 4th, and will be serving from 4 p.m. until 10 p.m. Last year Gorat's, which seats 240, served 915 dinners on Shareholder Sunday. The three-day total was 2,487 including 656 T-bone steaks, the entrée preferred by the *cognoscenti*. Please remember that to come to Gorat's on that day, you must have a reservation. To make one, call 402-551-3733 on April 1st (*but not before*).

We will again have a reception at 4 p.m. on Saturday afternoon for shareholders who have come from outside of North America. Every year our meeting draws many people from around the globe, and Charlie and I want to be sure we personally greet those who have come so far. Last year we enjoyed meeting more than 400 of you from many dozens of countries. Any shareholder who comes from other than the U.S. or Canada will be given a special credential and instructions for attending this function.

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At 84 and 77, Charlie and I remain lucky beyond our dreams. We were born in America; had terrific parents who saw that we got good educations; have enjoyed wonderful families and great health; and came equipped with a "business" gene that allows us to prosper in a manner hugely disproportionate to that experienced by many people who contribute as much or more to our society's well-being. Moreover, we have long had jobs that we love, in which we are helped in countless ways by talented and cheerful associates. Every day is exciting to us; no wonder we tap-dance to work. But nothing is more fun for us than getting together with our shareholder-partners at Berkshire's annual meeting. So join us on May 3rd at the Qwest for our annual Woodstock for Capitalists. We'll see you there.

February 2008

Warren E. Buffett
Chairman of the Board

Morning Session - 2008 Meeting

1. TV soap star Susan Lucci trades jobs with Buffett

NEWS ANCHOR (CNBC's Becky Quick, on tape): Folks, this just in. It appears that Warren Buffett has struck a deal to trade jobs with daytime soap opera diva Susan Lucci.

Buffett has reportedly negotiated a permanent spot on the cast of All My Children. Apparently, Ms. Lucci is en route to Omaha as the new CEO of Berkshire. (Applause.)

CHARLIE MUNGER: Where could he be? (Laughter and applause as actress Susan Lucci comes on stage)

SUSAN LUCCI: Do you mean Warren, Charlie? He's been detained at the TV studio. (Laughter)

CHARLIE MUNGER: Really?

SUSAN LUCCI: Hi, Charlie. I'm Susan Lucci. Oh, haven't you heard about the deal between Warren and me? He's going to be a big star in All My Children, and I'm going to be taking over Berkshire Hathaway.

CHARLIE MUNGER: Well, you've certainly got some important qualities that Warren lacks. (Laughter)

SUSAN LUCCI: Well, thank you, Charlie. And you can relax now, you dear man. You just make yourself at home because I'll take it from here, thank you.

I've been wanting to talk to our shareholders for quite some time now. There's some changes I really think we need to make around here.

The first thing we need to look at is our dividend policy. (Laughter)

I have never heard of anything so cheap and so unfair to our wonderful shareholders. We need to change it. (Applause)

CHARLIE MUNGER: Sounds good to me. (Laughter)

SUSAN LUCCI: And, second, we need to look at giving guidance on earnings. And we need to do that every single week. (Laughter)

CHARLIE MUNGER: Sounds good to me. (Laughter)

SUSAN LUCCI: And, third, we need to pay our directors more than $900 a year. (Cheers and applause)

WARREN BUFFETT: Just one minute. (Applause.)

SUSAN LUCCI: Hi, Warren. Warren, I thought you were at the All My Children studio.

WARREN BUFFETT: What's that talk about dividends that I hear?

SUSAN LUCCI: Oh, nothing important, Warren. You just concentrate on your role on the show.

WARREN BUFFETT: Susan, my show is Berkshire Hathaway. And my role is to run it. (Takes paper out of jacket pocket and rips it up)

SUSAN LUCCI: Warren, you can't do that.

WARREN BUFFETT: I just did it. All My Children can't do without you, and I can't do without Berkshire. (Applause.)

SUSAN LUCCI: Oh, Warren. So you mean the deal is off?

WARREN BUFFETT: The deal is off. I really want to thank you. You've brought me to my senses. You can go back to All My Children. I'll stay here at Berkshire.

But I am so grateful to you Susan, that I want you to go out to Berkshire — not to Berkshire — to Borsheims and I want you to pick out anything you would like, and charge it to Charlie. (Laughter)

SUSAN LUCCI: Oh, Warren, you are darling. Thank you. (Applause.)

SUSAN LUCCI (to MUNGER): And you're a darling, too.

WARREN BUFFETT: Now, wait a second.

SUSAN LUCCI: Thank you. (Applause)

2. Welcome

WARREN BUFFETT: OK. Charlie, let's get this show on the road. (Laughter)

The — she spent more time with him than she did with me, but — (Laughter)

The — we're going to follow the usual procedure.

The business meeting will start at 3:15. But between now and then, with a break for lunch, we're going to answer your questions. We don't screen them ahead of time, as you know — based on who gets lined up at the microphone first.

And we'll go around from sections to sections and then go to the overflow rooms. My understanding is that our best estimate is that we have about 31,000 people here today. (Applause.)

WARREN BUFFETT: Somewhere I have a map here. Marc, do we have that?

Pardon me? Can't hear a thing up here. But in any event — on the yellow pad. OK. We'll just mark them off as we go along.

The — I would like, before we start — I heard Ron Olson laughing there. I think he made it. I'm glad to hear it.

Let me introduce our directors. I really wasn't sure whether to go through with this part of the show after they showed that rousing applause for things like dividends and raising their — but we have up here — we have Charlie Munger on my left. He's the one that can hear; I can see. We work together for that reason. (Applause.)

WARREN BUFFETT: And if the rest of you will just stand as I give your name. And if you'll hold your applause to the end — or even longer if you would like — (laughter) — I will introduce them.

It's Howard Buffett, Susan Decker, Bill Gates, David Gottesman, Charlotte Guyman, Don Keough, Tom Murphy, Ron Olson, and Walter Scott. The best directors in America. (Applause.)

WARREN BUFFETT: Charlie and I will take a break at noon because we will probably, by that time, have finished all of the things we have up here to eat, and we'll need to have lunch.

I'd appreciate it if you would limit your questions to one question, and that means not embodying a three-parter or a four-parter or something like that.

And there's no need to make a long introductory statement because we'll get more questions answered that way, and we want to cover as many people as we can.

3. How NOT to be a lemming

WARREN BUFFETT: So with that, we'll go right over to post number 1 and start in with the first question.

AUDIENCE MEMBER: Very good morning to Mr. Buffett and Mr. Munger. My name is Rajesh Furor (PH) from Bombay, India.

I have been learning a lot from letters of yours. It's been a great insight into investment philosophy that I haven't learned from anywhere else. Great job.

That's on the mind side. But on the heart side, what touches me the most is what you have achieved all these years is through a hundred percent honesty, and I salute to that. Thanks.

WARREN BUFFETT: Thank you.

AUDIENCE MEMBER: Now, my question is on what key steps would you recommend to correct the mind set of typical investor like me, which is what you noted as lemmings-like, the crowd mindset?

WARREN BUFFETT: What would we recommend — we got the question being repeated here — about the mindset of an investor? Is that —?

CHARLIE MUNGER: He wants you to advise him as to how he can become less like a lemming. (Laughter)

WARREN BUFFETT: Well, since you repeated the question, I'm going to let you give the first answer to that, Charlie. (Laughter)

Until he eats about a thousand calories, it — (Laughter)

CHARLIE MUNGER: He wants to invest less like a lemming.

WARREN BUFFETT: Oh, I understand that. I was giving you the first shot at it. Well, I will tell you what changed my own life on investing.

I started investing when I was 11. I first started reading about it — I believe in reading everything in sight. And I first started reading about it when I was probably six or seven years old.

But for about eight years I wandered around with technical analysis and doing all kinds of things, and then I read a book called "The Intelligent Investor." And I did that when I was 19 down at the University of Nebraska.

And I would say that if you absorb the lessons of "The Intelligent Investor", mainly in — I wrote a forward and I recommended particularly Chapters 8 and 20 — that you will not behave like a lemming and you may do very well compared to the lemmings.

We have here in the Bookworm, copies of "The Intelligent Investor", and I think it's as great a book now as I did when I read it early, I guess, in 1950.

You will never — you can't get a bad result if you follow the lessons of — Ben Graham taught in that book.

I should mention that there's a book out there also that I did not know it would be completed by this time.

My cousin, Bill Buffett, has written a book about our grandfather's grocery store called "Foods You Will Enjoy." And Bill will be out there. He's signing books.

I just got my first copy a couple days ago. Read it, and I enjoyed it a lot.

Charlie worked at the same grocery store — how many years ago? Probably a good 70 years ago in Charlie's case. Neither one of us was very good. (Laughter)

But my grandfather — you don't want to pay much attention to his advice on stocks. He wrote a lot of letters, and he was very negative on the stock market and big on hard work at the grocery store.

So we quit listening to him. (Laughter)

Instead, read The Intelligent Investor. That's the book that gave me the philosophy that has taken me now for a lot of years.

And there's three big lessons in there which relate to your attitude towards stocks generally, which is that you think of them as parts of a business; and your attitude toward the market, which is that you use it to serve you and not to instruct you; and then the idea of a margin of safety, of always leaving some extra room and things.

But the people in this room, I think, have learned that important first lesson. I mean, I think most people that own Berkshire do not see themselves as owning something with a little ticker symbol or something that may have a favorable or unfavorable earnings surprise or something of the sort, but they'd rather think of themselves as owning a group of those businesses that are out there in the other room.

And that's the way to look at stocks. You'll never be a lemming if you do that.

4. Buffett will handle Cologne Re's investment portfolio

WARREN BUFFETT: Let's go to Number two.

AUDIENCE MEMBER: Good morning, Warren. Good morning, Charlie. My name is George Iscis (PH) from Cologne, Germany.

My question: how is the operational integration of the Cologne Re progressing? Thank you very much.

WARREN BUFFETT: Cologne Re, for those of you who are not familiar with it, is a 95 percent-owned subsidiary of General Re, of which Berkshire Hathaway owns 100 percent.

And Cologne Re, I believe, is the oldest reinsurance company in the world. It's done a magnificent job for us as part of, first Gen Re, and then Berkshire Hathaway.

And we have a process in place that will, before too long, result in us owning a hundred percent of Cologne.

One difference, then — there won't be any difference in operation. It runs magnificently the way it's being run. But at that point — up until this point, they have run their own investment portfolio. That portfolio and the equity portfolio of GEICO are the only two that I don't run.

But when we own a hundred percent of Cologne, then I will take the responsibility for Cologne's investment portfolio. Otherwise it would be hard to improve on the operation of the management of Cologne.

So there will be — you will not see any other changes except we will consolidate in 100 percent of the earnings of Cologne rather than 95 percent.

5. "Forget about the word 'stock'"

WARREN BUFFETT: Area 3.

AUDIENCE MEMBER: Good morning, Mr. Buffett, Mr. Munger. My name is Sam Reiner (PH) from Fort Lee, New Jersey, and my question concerns your comment this week about the recession, and the stock market going up so significantly in April.

Can you expand on where the market is going from here? (Laughter)

WARREN BUFFETT: Hah. Well, I can expand, but I couldn't answer. (Laughter)

Charlie and I haven't the faintest idea where the stock market is going to go next week, next month, or next year. We never talk about it. You know, it never comes up.

Our directors will tell you that they've never been to a directors meeting where the subject of the direction of the stock market is — we are not in that business. We don't know how to be in that business.

Obviously, if we could guess successfully a high percentage of the time where the stock market was going to go, we would do nothing but play the S&P futures market. There wouldn't be any reason to look at businesses and stocks. So it's just not our game.

We don't think — what we see when we look at the stock market is we see thousands and thousands and thousands of companies priced every day, and we ignore 99.9 percent of what we see, although we run our eyes over them.

And then every now and then we see something that looks like it's attractively priced to us, as a business. Forget about the word "stock."

So when we buy a stock, we would be happy with that stock if they told us the market was going to close for a couple years. We look to the business.

It's exactly the same way as if you were going to buy a farm a few miles here outside of Omaha. You would not get a price on it every day, and you wouldn't ask, you know, whether the yield was a little above expectation this year or down a little bit.

You'd look at what the farm was going to produce over time. You'd look at expected yields. You'd look at expected prices, the taxes, the cost of fertilizer, and you would evaluate the intelligence of your purchase based on what the farm produced relative to your purchase price.

Quotes would have nothing to do with it. That's exactly the way we look at stocks. We look at them as businesses. We make judgments about what the future of those businesses will be. And if we're right about — in those judgments, the stocks will take care of themselves.

Charlie?

CHARLIE MUNGER: Nothing to add. (Laughter)

WARREN BUFFETT: He's been practicing for weeks. (Laughter)

6. We don't cultivate great managers, we keep them

WARREN BUFFETT: Let's go to area 4.

AUDIENCE MEMBER: Good morning, Mr. Buffett and Mr. Munger. My name is Chander Chavla (PH), and I am from Seattle, Washington.

Berkshire Hathaway has some of the best managers in the world, and I am very bad at hiring good managers. The — some of the decisions that I've made, which were without any phone calls from Jamie Lee Curtis, I look back and I see — you know, what was I thinking.

What can you advise on, how in one hour you can assess the capability of a person to be a good manager?

WARREN BUFFETT: Well, you have to understand that we cheat. (Laughs)

We buy businesses with good managers. So if you give me a hundred MBAs — and I have these classes come out all the time to Omaha. I've had about 30 schools this year, and usually there's 75 or a hundred men and women in the classes.

I no more could take those hundred and spend a few hours and rank them from number one to a hundred in terms of their future achievements as managers, you know, than I could pick them — you know, it would be impossible for me.

But what we do is we buy businesses with great managers in place. We've seen those people perform for, in many cases, decades. We've seen their record, and they come with the business.

Now, our job is not so much to select great managers, because we do have this proven record that they come with. Our job is to retain them.

And many of the managers — a majority of the managers that work at Berkshire — are independently wealthy. We hand them checks, sometimes, in the billions, often in the hundreds of millions. So they do not have a monetary reason to work, in many cases.

So our job — we are dependent on them, incidentally. I mean, we have 19 or so people at headquarters, and we have 250,000 working for Berkshire around the world, and we can't run their businesses.

And our job is to make sure that they have the same enthusiasm, excitement, passion, for their job after the stock certificate changes hands, than they had before.

Now, that requires some judgment on our part as to whether these people love the business or love the money. They all like money, but many of them — well, our managers in particular — they love their businesses. I mean, they've worked at them — they're a work of art to them, and they've been in the family sometimes as many as four generations.

So we have to see the passion in their eyes, and if we see that, then we have to behave in a way that that passion remains.

Can't be done by contract. We don't have contracts. It won't — that doesn't work.

But we can try to create an environment — and Berkshire, frankly, is the ideal environment — it's even an ideal environment because of events like this.

Our managers feel appreciated. And they are appreciated. They're not just appreciated by me and Charlie; they're appreciated by you. And we want to give you a chance to applaud them. (Applause.)

WARREN BUFFETT: So I can't be of enormous help. And if you're looking at a group of MBAs, you know, it's not easy. I mean, they know — they sort of learn by that point in life how to fool you, in terms of what answers you want to hear and all of that sort of thing.

I would look for the person with passion for the job. I mean, the person that is always doing more than their share. You look for people that are goods communicators and all of that sort of thing.

But I like my way better. It's a lot easier just to take somebody that's been batting .400 in baseball and say, "I think I'll stick them in the lineup."

And the nice thing about our game is that, you know, in baseball, unless you're Nolan Ryan or somebody, you have to hang up things at 40 or thereabouts, but in our game, they go on and on and on.

I mean, I use as an example — we had a famous Mrs. B from the Furniture Mart, and she worked for us until she was 103, and then she left and she died the next year. And that is a lesson to our managers that — (Laughter)

Charlie?

CHARLIE MUNGER: Well, that was very useful advice. It reminds me very much of the late Howard Ahmanson.

And a young and starving business student once asked him for advice as to how to get ahead, and Howard said, "Well, I always keep a few million dollars laying around in case a good opportunity suddenly turns up." (Laughter)

7. Teaching option pricing is "totally nonsense"

WARREN BUFFETT: Well, let's go to number 5. (Laughter)

AUDIENCE MEMBER: Good morning. I'm Joe Hutchin (PH), a shareholder from Culver, Indiana.

Could you please comment on how you use stock options when trying to enter or exit a position in a public company?

WARREN BUFFETT: Yeah. We've — I think there's one time we sold a put on Coca-Cola with the idea that, if it got exercised, we were very happy to own more Coca-Cola. It didn't get exercised. We would have been better off if we had just bought the stock.

Usually, if you want to buy or sell a stock, you should buy or sell the stock.

And using an option technique to buy a call on a stock instead of buying the stock outright with the idea that you get it a little cheaper that way means that about four times out of five you'll be right and the fifth time the stock will have moved earlier and you'll have missed, you know, the transaction you wanted to have.

And so we virtually have never used options as a way to enter a position or exit a position, and I would doubt very much if we do.

We've used — we've sold these equity — long-term equity put options that were described in the press release yesterday and were described in the annual report, but that's a different sort of thing.

If we want to buy something, we'll just start buying it. And if we want to get out of it, we'll start selling it. And we won't get involved in any fancy techniques.

Charlie?

CHARLIE MUNGER: Well, if I remember right, you wrote a letter when the public authorities were deciding whether we should have option exchanges for stocks. And Warren was all alone at that time, and he wrote a letter saying that he didn't think it would do any good at all for the country to throw out the margin rules in this fashion.

I've always thought that Warren was totally right. We — it's — the idea of turning financial markets into gambling parlors so the croupiers can make more money has never been very attractive to us.

WARREN BUFFETT: Yeah. (Applause.)

WARREN BUFFETT: Yeah. It's very interesting to me when I talk to these MBA students. One of them from the University of Chicago, the very first question I got a few years ago, he says, "What are we being taught that's wrong?"

I love questions like that. I have to plant them in the future.

The amount of time spent at business schools — maybe it's a little less now — but teaching things like option pricing and that sort of thing, it's totally nonsense.

I mean, you need two courses in a business school: one is how to value a business, and — from the standpoint of investments — how to value a business and how to think about stock market fluctuations.

But the idea that you would spend all of this time with formulas — but the problem, of course, is that the instructors know the formulas, and you don't when they come, and so they've got something to fill the time explaining to you.

And, you know, it is no fun if you — I mean, if you were teaching Biblical studies, you know, and you could read three or four of the most important religious tomes forward and backward in five different languages, you would hate to tell somebody that it comes down to the Ten Commandments. I mean, any damn fool can do that.

So there's a great desire of the priesthood in finance to want to teach the things that they know and you don't know and that they spent a long time learning and that maybe requires a fair amount of mathematics.

And it really has nothing to do with investment success. Investment success depends on buying into the right businesses at the right price. And you have to know how to value businesses, and you have to have an attitude that divorces you from being influenced by the market.

You want the market there, not to influence you, you want it there to serve you. And that requires a mindset, which goes back to an earlier question, and it's a mindset that's described quite well in Chapter 8 of "The Intelligent Investor."

8. Buffett praises sister Doris for her "retail" charity

WARREN BUFFETT: Let's go to number 6.

AUDIENCE MEMBER: Hi. I'm Irene from Bonn, Germany. Both of you are very generous person. What is your joy of giving, and what are the potential pits when donating money — pitfalls when donating money? I'm sorry.

WARREN BUFFETT: The joys and giving and the pitfalls of donating money, huh. The — I know personally I've never given up anything in my life that made a difference in my life.

I mean, there are people that will go to church this Sunday and they will drop money in a collection plate, and it will make the difference about where they take their family, or whether they take their family, in terms of where they eat, whether they go to a movie, whether they get an extra present at Christmas, whatever it may be.

I mean, they are giving some money that makes a difference in their lives. I've never given a penny that way, and I never will.

I mean, I get to do everything I want to do in life. But because I've lived a long time — which gives you an enormous advantage in terms of accumulating money — and most of the things I want in life don't come from the expenditure of money.

So it accumulates, and basically I'm giving away excess. I'm not giving away anything from necessity.

So I really — you know, I think what I'm doing is useful with the money, but I don't think it's on a par at all with the actions of somebody that's giving money that really makes a difference in how they or their children live.

Those are really charitable people. I think my sister Doris is here. She has given away money that made a difference in her life. She gives away time, too. She gives away eight or ten hours a day, in terms of actually looking into the real needs of people, and giving them things beyond the money — giving them help and advice and somebody to talk to.

And, you know, that's real giving. And I admire her for it. I'm not emulating her. I mean, she is in the retail business of giving; I like wholesale much better.

In terms of the pitfalls, you know, you can make mistakes in any area. But if you — you should give to things that you personally have an interest in and believe in, and that can be anything. I don't — I'm not going to prioritize what should be done with gifts.

Something you're involved in. Something you want to give your time to as well as money. But beyond that, I'll let Charlie carry on.

CHARLIE MUNGER: Yeah. Regarding pitfalls, I would predict that, if you have an extreme political ideology, whether of the left or the right, you're very likely to make a lot of dumb charitable gifts. (Laughter and applause)

WARREN BUFFETT: If you hang around Charlie like I do, you get the sunny side of life. I mean — (laughter)

We ought to have that playing, "The Sunny Side of the Street."

9. We don't "tell the world how to run their business"

WARREN BUFFETT: Let's go to number 7.

AUDIENCE MEMBER: Good morning. My name is Okosh Vajay (PH), and I'm from India. I worship Mr. Buffett for his philanthropy, and I do hope to serve the Gates Foundation someday.

My question to Mr. Buffett is, what's your level of involvement when one of your companies is faced with an ethical dilemma? For example, Fruit of the Loom's competitors have sweatshops in Central America. So what do you do to ensure that you don't fall into the same trap?

WARREN BUFFETT: Yeah. Well, we let our managers run their businesses. And we've got some terrific managers, not only in terms of ability, but I would say that what we have seen of the ethical standards of our managers has been extraordinary over the years.

That doesn't mean there isn't — there aren't slip ups here or there. But taken as a group, over decades, I think that I'm very happy, in effect, turning over the keys, not only to the financial performance of the business, but in terms of how they behave.

And I would say that I think you're quite wrong in terms of — Fruit of the Loom's operations are conducted in absolutely terrific standards. John Holland is here. I'd be glad to have you meet with him later.

But we — we're proud of our businesses and how they operate.

We do not give them elaborate guidelines. I write them a letter every two years, roughly, and I ask them to send me a letter telling who they think should be the successor if anything happened to them that night. I keep those letters around. Fortunately, they don't come into play very often.

But I also tell them we've got all the money we need. It's nice to have more money, but we're not going to lack for money at Berkshire Hathaway.

We don't have a shred of reputation more than we need, and we never want to trade away reputation for money.

So we give them that same message that was given in the movie, in terms of the Salomon situation, which is that not only do they behave in a way that conforms with the laws, but that they behave in a way where, if a story were written by an unfriendly but intelligent reporter, the next morning, in their local paper, they would have no problem with their neighbors, their family reading it.

And we run that in the movie every year, just because we like the managers to keep getting that message all of the time. There is no pressure from Berkshire's corporate office to report X dollars per — of earnings in any quarter. They don't give me budgets, so they don't — there's no feeling that they have to come through with given numbers or I'll be embarrassed in public in terms of publishing earnings or anything of the sort.

We have no incentives to cause people to do anything that would go against their conscience or play games or cut corners or anything of the sort.

And, overall, I think it's worked pretty well. It isn't perfect. You can't have 250,000 people in the city without having something going on at some point. And we do have 250,000 people working. But I'm not unhappy with our batting average.

Charlie?

CHARLIE MUNGER: Yeah. And, of course, Fruit of the Loom does have foreign plants, and we have no rule against that at all. We've got quite a few foreign plants now.

We don't favor foreign plants. We just do whatever makes sense under the circumstances.

WARREN BUFFETT: Yeah, we had a shoe business I've written about in Maine, and we had wonderful, wonderful workers there. They were more productive than workers around the world.

But the United States was producing, 20 years ago, roughly a billion pairs of shoes a year, and we were a nation of Imelda Marcoses. I mean, it was wild.

And Brockton, Massachusetts, and you name the towns, revolved around the shoe business, as did a town called Dexter, Maine.

And we bought that business. And we tried to compete. We had a good brand name. We had great workmanship. And we found out that it just plain wouldn't work against — competing against — shoes produced in China.

So now of the — it's over a billion pairs of shoes a year used in this country. Basically they all come from outside the borders. And you're going to see that.

And factories in China, factories in Central America — they do not have exactly the norms that we have in this country. And, you know, that's going to be the situation.

We are — we will not — we are not going to tell the world how to run their business in any great way.

We — obviously we have some standards that have to be met, but we are not — they are not exactly the situation you are going to find in the United States.

10. Buffett dismisses higher raw material costs

WARREN BUFFETT: Number 8.

AUDIENCE MEMBER: Good morning. My name is Mike McGowan (PH). I'm from Pasadena, California. I'm a shareholder in both Berkshire and Wesco. I run a website called FinancialFoghorn.com, and I write about precious metals and things.

And I've asked you questions in the past about silver, and I didn't really get them answered. So I thought I'd ask about a different commodity this time.

I read about the Chinese raising the price of tungsten, and I think about your comment last year in buying ISCAR.

Will commodity price increases in things like tungsten affect the profitability of ISCAR? And would that be the reason you're locating a plant in China to build machine tools? Thanks.

WARREN BUFFETT: Yeah. The reason the plant was built in China was to serve the Chinese market, which is large and growing. And we opened in Dalian late last fall.

It's nicer to be closer to the raw material, but it really had nothing to do with changes in the price of tungsten.

Generally speaking, if you're creating a higher value-added product, as ISCAR is doing, from a raw material, there may be three months, six months, of adjustment to changes in raw material prices. And obviously, with some commodities, if it gets high enough you get into substitutes.

But there isn't going to be any substitute for tungsten in the cutting tools, and there won't be — you know, we tried some substitutes for crude oil in terms of gasoline or — not so — heating oil but then the substitutes like natural gas go up in price, too.

So I think largely, in our businesses, raw materials get passed through.

Now, we're having a tough time, for example, in the carpet business in passing through the cost increases that we experience in oil-based raw materials. But we would be having trouble — we probably would be having trouble in the carpet business regardless now because of the slowdown in residential housing. It does make it tougher.

But over a period of time, our businesses are going to reflect raw material costs. You know, the candy here I have, this fudge, which I can hardly wait to get into, you know, it's going to reflect sugar and cocoa and things like that over time.

And if you're running an airline, it's going to reflect the cost of fuel. So you can have little squeezes here and there, but it's not a big deal, and it certainly isn't the reason that we went to China to locate the ISCAR facility.

That facility — incidentally ISCAR — we have a number of people here from ISCAR, and families in some cases.

That is — I had very high expectations for that when we bought it. It's exceeded it in every way. It's exceeded in terms of financial performance. It's exceeded in terms of the human relations we've developed with the people.

I mean, it was — I told you it was a terrific acquisition a few years ago. It's been a dream acquisition, and I know Charlie wants to add to that. (Applause)

CHARLIE MUNGER: Yeah. I would say that the short answer is that, while we don't like inflation because it's bad for our country and our civilization, that we will probably make more money over time because there is inflation.

11. Lots of work to find a better buy than Berkshire

WARREN BUFFETT: Go to number 9.

AUDIENCE MEMBER: Good morning. My name is Marc Rabinov from Melbourne, Australia.

My question is, Berkshire has bought a lot of shares over the last 12 months in listed companies. Do you expect the return on these investments to be between 7 and 10 percent per annum over many years, which is, I would say, well below what Berkshire has achieved in the past?

WARREN BUFFETT: The answer to that is yes. (Laughs)

The — we would be very happy if we could buy common stocks where our expectation over a long period, pretax, from a combination of dividends and capital gains — we'd be very happy if we thought it was going to be 10 percent, and we would probably settle for a little less than that.

And there's no question — absolutely no question — that returns from owning Berkshire will be less in the future than they have been in the past.

There's no question that we will not do as well with the common stocks at Berkshire that we own in the future as we have over the last, really, 40 years or thereabouts.

We operate now in a universe of marketable stocks that — where we're talking about companies with market caps of at least 10 billion but really, in most cases, to have a meaningful impact on Berkshire, we're talking much bigger than that, maybe 50 billion and up.

Well, that universe is not as profitable a universe to operate in as if you have the entire universe of thousands and thousands of companies.

So we — if we — just take an example. If we find a company with a market cap of 10 billion and we can buy 5 percent of it — and usually that's what we can buy without disturbing things — we can have a $500 million investment.

Let's say it doubles over a period of time. That's 500 million. You pay a 35 percent tax. You have 325 million. That's less than two-tenths of 1 percent in terms of Berkshire performance.

So our universe has shrunk enormously, and we will not do as well in that universe — remotely as well — as we would if we were the operating in a much wider universe and could do all kinds of things.

We've found little things to do from time to time where we've made some money. I may refer to them a little later, a couple things. And they're nice, but they don't move the needle very much at Berkshire.

So anyone that expects us to come close to replicating the past should sell their stock. I mean, because it isn't — it isn't going to happen.

And, you know, I think we're going to get decent results over time, but we're not going to get indecent results. And in this field we prefer indecent, but we're not going to get them.

Charlie?

CHARLIE MUNGER: I think you can take Warren's promises to the bank.

We are very happy making money at a rate in the future that is way less than the rate at which we made money in the past. And I suggest that you adopt the same attitude. (Laughter)

WARREN BUFFETT: Well, I wouldn't condemn them to that. I think if you're working with small amounts of money — I've talked —

CHARLIE MUNGER: Oh, yeah.

WARREN BUFFETT: Yeah. Then you may have something very much better to do with your money than to buy Berkshire.

I mean, if you're working with small amounts of money, and you want to put in significant amounts of time, and examine thousands of securities, you will find things that are more intelligent to buy than Berkshire.

You know, we still think Berkshire is an attractive investment over a long period of time. We think that it stacks up reasonably well with other very large companies.

We don't think it's the most attractive investment in the world, in terms of what you can find if you're willing to go through those thousands of possibilities, which is what Charlie and I used to do many years ago. It's not feasible for us to do it now and wouldn't have any impact on Berkshire.

What we really like at Berkshire is buying good-sized to very large first-class businesses with first-class management and just sitting there. Because the nice thing about that is you don't have go from flower to flower. You can just sit there and watch them produce more and more every year and give you capital and you can buy more businesses.

That's a nice formula. It's a formula that will work, I think, for us. It won't produce returns like the past.

12. PacifiCorp will follow regulators on Klamath River dam

WARREN BUFFETT: Number 10.

AUDIENCE MEMBER: (Inaudible). My name is Chu Chu (Inaudible), and I come here from the Klamath River, and I come here with a heavy heart.

And I know this is a pretty light-hearted event, but I came here last year with a heavy heart, too. And I fasted for ten days driving over here to speak with you.

And, you know, we really were disrespected last year, because one of your subsidiaries, PacifiCorp, has dams on the Klamath River that are creating toxic algae blooms, along with multiple other things. I won't go into it too far.

But I just come here today with a principle agreement between you and I, that you will sit down at the table and help us figure this out, help us make PacifiCorp accountable.

And being that I'm an indigenous American, and you're a guest in my home as a European American, that you would do that in front of all your shareholders today in good faith, that you care, you know, as a philanthropist and you care about, you know, helping, you know, third-world countries, you know, fight poverty, disease, when you're helping create it right here in the United States.

WARREN BUFFETT: You may not — you may not — last year we read the order under which we acquired PacifiCorp.

And, actually, as you may know, I'm prohibited from actually making decisions in that — in the area of PacifiCorp. That was part of the public utility commission ruling when we bought it.

But we have Dave Sokol here who can speak to that. I think the first dam was built in 1907, and we bought PacifiCorp a couple of years ago.

But David — if Dave could go to a microphone, I think that — I think he could address the issues that you brought up. I don't think we meant in any way to be disrespectful last year.

Those of you who were here last year, we may have a difference of opinion on this, and incidentally there are strong differences of opinion, as I understand it, in your area about what should be done.

And — well, I think I should have Dave make the explanation on it. Dave? Somebody want to put a spotlight on the —

DAVE SOKOL: Thanks, Warren. As you stated first, it would be inappropriate for Mr. Buffett to respond in any detail on this issue, because it's part of the acquisition in 2006 of PacifiCorp.

He specifically agreed in writing not to interfere with any decisions of our regulated assets within PacifiCorp. So having said that, these four dams that we operate on the Klamath River were built over the last 100 years.

There are a whole series of issues in the Federal Energy Regulatory Commission relicensing process as to what should occur.

These decisions, through that regulatory process, have been ongoing for eight years, and they won't culminate for probably another six.

Having said that, there are 28 various parties from federal, state, and local agencies, Native Americans, fishery folks, local landowners, that are party to a discussion as to what should or should not happen with these assets — and I left out the irrigators.

Of those 28 parties, other than PacifiCorp, there are at least four different directions in which people think this process should go.

From our perspective, we will be pleased to find a resolution when the 28 parties agree as to how that resolution should go forward, how it would be funded, et cetera.

Fundamentally, it's up to the Federal Energy Regulatory Commission, state and federal regulators, in addition to them, and then our specific regulators in each of the six states that PacifiCorp operates in.

So if public policy moves in a direction of dam removal, fish ladders, or maintaining the existing status quo, that would be the process in which we would go forward.

We are working constructively with each of the various parties. We've met numerous times with each of the four tribes. And it's a complicated situation and one that hopefully, over time, a cooperative resolution can be met. (Applause.)

13. Eat what you want and love what you're doing

WARREN BUFFETT: Area 11, please.

AUDIENCE MEMBER: Good morning. I'm (inaudible) from Walnut Creek, California. Well, we learned something from the comic movie, but could you please expand on how do you maintain your good mental and physical health? (Laughter)

WARREN BUFFETT: Well, you start with a balanced diet. (Laughter)

Some Wrigley's, some Mars, some See's, some Coke.

Basically it — if Charlie and I can't have a decent mental attitude, who can? I mean, we get to do what we love doing every day. We do it with people that are not only cheerful about it and like us, but they do their jobs extraordinarily — they like their jobs too.

We're forced to do virtually nothing we don't want to. I have a trainer that comes three times a week. She — I think she's probably here. And she may think I'm a little begrudging in that particular activity, but that's only 45 minutes, three times a week.

The rest of the time I am doing almost — well, I'm doing whatever I love, you know, day by day by day by day. And I do it, you know, in air-conditioned offices and, you know, with all kinds of help and it — I mean, how could you be sour about life, you know, being blessed in so many ways?

And then the amazing thing is that Charlie is 84; I'm 77. And we've slowed down, I'm sure, in a lot of ways, but we pretend we haven't, and it doesn't seem to bother us. (Laughs) We get along fine.

Great partners, great managers, you know, great families. I — there's just no reason to look at any minuses in life and to focus on that. It would be crazy.

So we really do count our blessings because they've been many and they continue to come forth, and we'll enjoy it as long as we can. There's not much more to it than that.

Charlie?

CHARLIE MUNGER: Well, I wish we were poster boys for the benefits of running marathons and maintaining a very slim bodily state and so forth.

But as nearly as I can tell, neither of us pays much attention to any health habits or dietary rules — (laughter) — and it seems to have worked pretty well so far. I don't think we can recommend it to everybody, but I, for one, don't plan to change. (Laughter and applause)

WARREN BUFFETT: Really, from the moment we get up to when we go to bed at night, we get to do all kinds of things.

We get to — associating with wonderful people is about as good as it gets. And, you know, we live — we're biased, obviously — but we think we live in the best country in the world and have all kinds of good things. I mean, just imagine — (Applause.)

WARREN BUFFETT: We could have stayed in my grandfather's grocery store, and it would have been hell. (Laughter)

CHARLIE MUNGER: By the way, this relates to the subject of corporate compensation.

You're in a job which you would pay to have, if that were the only way to get it, and you're supposed to be an exemplar from other people — for other people. There's a lot to be said for not paying yourself very well. (Applause.)

WARREN BUFFETT: He points that out to me regularly. (Laughs)

Well, if you think about it, you know, the idea that CEO compensation represents a market system and that you have to pay some guy a $10 million retention bonus or something to stay around in the job that, you know, he's been fighting to keep and stacking the board and everything so they keep him around.

I mean, it's — I don't know of a CEO in America — I'm sure there are a few — but I don't know of any that wouldn't gladly do the job at half the price or a quarter of the price.

And I've seen some that have left jobs paying them eight figures and nobody's offered them anything, you know, a year later or two years later. I wonder where that wonderful market system is that is supposed to have all these bidders for their services. It's really sort of ridiculous, I think. (Applause.)

14. Follow your passion and marry the right spouse

WARREN BUFFETT: Let's go onto 12.

AUDIENCE MEMBER: Hi. I'm Richard Rentrop from Bonn, Germany.

At the moment I attend high school and would like your wisdom on how to approach the question of what to do with the rest of my life. So — (Laughter)

WARREN BUFFETT: We prefer things a little more difficult than that if you're got a — (Laughter)

AUDIENCE MEMBER: So, Mr. Buffett and Mr. Munger, if you were about to start all over again, what profession would you choose and why?

WARREN BUFFETT: Well, I would choose what I do because, A, I have fun at it. I'm reasonably good at it. You know, I meet a lot of interesting people through it. No heavy lifting. You know, it — it's — it fits me.

It doesn't — but that — that's not advice for you. I mean, you have to find out what really — what's your passion in life?

You know, it's a terrible mistake to kind of sleepwalk through your life, because unless Shirley MacLaine is right, you know, it's the only one you're going to have.

And the — so I've — I was very lucky in that I found my passion early. I mean, I — that's not easy. You know, that takes some luck.

It just so happened my dad was in a business at a very small office and he had a bunch of books down there. And when I would go down there on Saturday or after school, I would start reading those books, and it turned me on.

And this was before Playboy actually existed. (Laughter)

And so, you know, that was just plain lucky, you know. If he'd been a minister, I'm not so sure I would have been quite so enthused about visiting the office. (Laughter)

But that's the way to go. And I can't prescribe that for you. But I can tell you that if you're going through the motions in life, you're doing something — now, obviously, if you need the job you have and you can't make a change and your kids have to eat and all of that, you deal with realities like that.

But when you're in a position to make choices, you know, I always tell the kids that come visit me, I tell them, "Go to work for an organization you admire or an individual you admire."

That means many of them become self-employed, but they — (Laughter)

The idea — you know, you can't get a bad result. I went to work for Ben Graham when I was 24. I only worked for him for less than two years, but I jumped out of bed every day in the morning.

I was excited about what I was going to do. I was learning things. I was with a man I admired. I never asked my salary when I took that job. I moved to New York City and found out what my salary was when I got the check.

So just be sure you — and be sure and get the right spouse. That's enormously important.

You know, as Charlie says, the problem, you know, is that we talk about that fellow that spent 20 years looking for the perfect woman, and then he found her, and unfortunately she was looking for the perfect man. So you may have a problem in that respect. (Laughter)

But it's enormously important who you marry. I mean, it's a huge, huge, huge decision.

And, you know, if you're lucky in a couple things like that, you're going to have a happy life.

And you're going to behave better as you go along. I mean, it's a lot easier to behave well when things are going your way and you are enjoying your work and you like the — you're thinking about things every day that are the kind of things that you like to think about.

And Charlie has a lot better advice than I have about it. Go to it.

CHARLIE MUNGER: Well, of course, you'll do better if you develop a passion for something in which you have a considerable aptitude. I think if Warren had gone into the ballet — (laughter) - nobody would have ever heard of him.

WARREN BUFFETT: Oh, I think they'd have heard of me, just in a different way, Charlie. (Laughter)

Well, the chances are, if you find something that turns you on, you probably do have some talent for it. I mean, it — I never — I don't think I could have gotten turned on by ballet. (Laughs)

15. How Buffett overcame his fear of public speaking

WARREN BUFFETT: Let's go — we're going to go now to 13, which is in an adjacent ballroom.

We have multiple overflow rooms, which is how we're handling the 31,000. The grand ballroom is the only one we've got a microphone in. So let's go to number 13. Somebody there?

AUDIENCE MEMBER: I'm Nancy Ancowitz. I'm from New York City, and I teach at New York University.

Mr. Buffett, I'd love to get your advice on something that's a little off the investing path but that taps into your business experience and wisdom.

I'm writing a book to help people of a more introverted nature get the recognition they deserve.

What advice would you give to the quieter half of the population to help them raise their visibility in their careers?

WARREN BUFFETT: Well, that's a very good question. And I sort of faced that at one time.

I was absolutely, throughout high school and college, terrified of public speaking.

And I would have — I avoided any classes, signing up for them, that would require it. I would get physically ill if I even thought about having to do it, let alone doing it.

And I took a Dale — well, I've — first of all, I signed up — I went down to a Dale Carnegie course when I was at Columbia, and signed up for it, gave him a check for a hundred dollars, went back to my room and stopped payment on the check. (Laughter)

This is a real man of courage you're looking at up here. (Laughter)

And then I came out to Omaha, and I saw a similar ad. It was at the Rome Hotel, for you old-timers in Omaha, on 16th Street.

And I went down there, and this time I took a hundred dollars in cash and gave it to Wally Keenan, who some of you may know. He died some years ago. First time I'd met him.

And I took that course, and when I finished that course, I went right out to the University of Omaha and volunteered to start teaching, knowing that I had to get up in front of people.

I think the ability to communicate, both in writing and orally, is of enormous importance, under taught.

Most graduate business schools, they wouldn't find an instructor to do it because it would sort of be beneath them to do something so supposedly simple.

But if you can communicate well, you have an enormous advantage. And to you, who are talking to the group of introverted people — and, believe me, I was in certain ways quite introverted — it — you know, it's important to get out there and do it while you're young.

If you wait until you're 50 it's probably too late. But if you do it while you're young, just force yourself into situations where you have to develop those abilities.

And I think the best way to do that is to get in with a whole bunch of other people who are having equal problems, because then you find you're not alone, and you don't feel quite as silly.

And, of course, that's what they did at the Dale Carnegie course. I mean, we would get up in front of 30 other people who could hardly give their own name, and after a while we'd find that we could actually pronounce our own name in front of a group.

But we would stand on tables and do all kinds of silly things, just to get outside of ourselves.

You may have thought — by this point you may think it went too far in my particular case, but that's another problem. (Laughs)

But you're doing something very worthwhile if you're helping introverted people get outside of themselves. And working with them in groups, where they see other people have the same problem and they don't feel quite as silly themselves, I think is — I think you're doing a lot for some human beings when you help them do that.

Charlie?

CHARLIE MUNGER: Yeah. It's a real pleasure to have an educator come who is working to do something simple and important instead of something foolish and unimportant. (Applause)

WARREN BUFFETT: I hope he's not going to name names. (Laughter)

16. Klamath River dam economics

WARREN BUFFETT: OK. Let's go back to number 1.

AUDIENCE MEMBER: Hi, Mr. Buffett. My name is Regina Chichizola, and I'm the Klamath Riverkeeper.

I came here today with many of the other people from the Klamath that came here, and I thank you for having us, and I thank the shareholders for being a lot nicer to us this year than they were last year.

So my question is, I'm sure you're familiar with the severe pollution issues in the Klamath River, such as the toxic algae problem that is 4,000 times allowable recreation levels, and that the fish are also now toxic due to the Klamath dams.

I was wondering if you were familiar with the finances behind the Klamath dams? Many economic studies have shown that removing the Klamath dams would be up to hundreds of millions of dollars cheaper than relicensing them.

So my question is, what would you do if PacifiCorp decided to keep these dams, even though it would mean that your shareholders would lose money in the long run and that PacifiCorp's ratepayers would also be losing money?

WARREN BUFFETT: Well, I think the question about the ratepayers will be addressed by the public utility commissions.

I mean, it is their job to represent the citizens of Oregon, and weigh a number of different considerations — for example, clean energy. Do you want to replace hydro energy with a — what you're talking about — with coal, which emits carbons into the atmosphere? There are enormous tradeoffs.

Anytime the government gets involved in eminent domain — we have that with wind farms, for example, in Iowa — there's some people that are unhappy with us using the land for wind farms. But, on the other hand, you get clean energy that way.

There are tradeoffs involved in government policy. You get into that with the question of eminent domain, all of that sort of thing.

But I think I'm going to let Dave talk to the more technical questions you get into.

But I would say, overall, you have people with widely different interests. Obviously, a big interest is the cost of electricity.

And to some extent, every public utility commission that makes a decision on gas versus coal versus wind versus solar is making a decision based partly on the economics to their ratepayers, partly on their feelings about what is the best for society, and those commissions are appointed state by state to make those decisions.

Now, in addition, in this case we have the FERC as it's called, the Federal Energy Regulation Commission, that will also have to rule on it.

They will listen to everybody. They'll listen to you. They'll listen to the 28 others that Dave mentioned. In the end we will do exactly what they say.

I mean, as a public utility, if they tell us to put up — not put up coal, we will not put up coal. If they tell us to put up wind, assuming that there is a place where there is wind, we will put up wind. We follow the dictates of the regulatory bodies that tell us what to do.

And in the end they give us a fair return on the assets employed, and we will get that return whatever the assets may be. If they tell us to put in coal assets, we'll get a return out of that.

So from our standpoint, from the standpoint of profitability, it's neutral.

From the standpoint of society, weighing all these different things, that's a decision society will make.

But, Dave, let's — do you want to talk to the algae question?

DAVE SOKOL: Sure. First, it's important, the Karuk tribe did do a study and found bioaccumulation of microcystins, or blue-green algae, in the perch and the fresh water mussels in the Klamath River.

What's important to understand about that — and by the way, we disseminated that report immediately to state and federal health agencies because they should know about it.

Microcystin is not unique to the Klamath River. There are 27 other lakes in the state of Oregon that have blue-green algae, 70 different countries, every province in Canada, and 27 of the U.S. states have lakes that have blue-green algae.

It is created from lakes that have a high abundance of nutrients and naturally-forming algae. And at the head of the Klamath River is a lake known as Upper Klamath Lake, which is actually a Bureau of Reclamation reservoir — it's a shallow, large reservoir, that is known as being hypereutrophic, which means a great abundance of algaes and various nutrients.

Those nutrients then flow down the river and do pass through or, in cases, get backed up by the four reservoirs down below the Bureau of Reclamation-linked dam.

The important issue is those things are, in fact, taken into account by the Federal Energy Regulatory Commission. They issued their environmental impact statement last November, which endorsed various fish passage methods on the dams but do not call for removal of the dams.

But, again, those are decisions that all the state, federal, agencies, and the various involved parties will either have to come to agreement with or let them run their course through the FERC process.

17. Long-short strategy wasn't a big money maker

WARREN BUFFETT: Thank you. Number 2.

AUDIENCE MEMBER: Hi. My name is Henry Pattener (PH). I'm hailing from Singapore, most recently.

In one of your older letters, you — your older partnership letters in 1964 — you introduced a fourth investment method called "Generals — Relatively Undervalued."

In your description you say, "We have recently begun to implement a technique which gives promise of very substantially reducing the risk from an overall change in valuation standards.

"We buy something at 12 times earnings when comparables or poor-quality companies sell at 20 times earnings, but then a major revaluation takes place so that the latter only sell at ten times."

Is this technique pair trading and, if so, how did you think about and calculate the ratio of longs to shorts?

WARREN BUFFETT: Yeah. I didn't remember we started as early as '64, but certainly in the '60s we did some of what, in a very general way, would be called pair trading now, which is a technique that's used by a number of hedge funds, and perhaps others, that go long one security and short another, and often they try to keep them in the same industry or something.

They say that British Petroleum is relatively attractive compared to Chevron or vice versa, so they long one and short the other.

And actually that technique was employed first by Ben Graham in the mid-1920s when he had a hedge fund, oftentimes — I read articles all the time that credit A.W. Jones with originating the hedge fund concept in the late '40s, but Ben Graham had one in the mid-1920s — and he actually engaged in pairs trading.

And he found out it worked modestly — very modestly — well because he was right about four times out of five but the time he was wrong tended to kill him on the other four.

We did — we shorted out the general market for about five years in the partnership, to a degree. We borrowed stocks directly from some major universities. I think we were probably quite early in that.

We went to Columbia and Harvard and Chicago and different places and actually arranged for direct borrowing. They weren't — it wasn't as easy to facilitate in those days as it is now.

And so we would take their portfolios and we would just say, "Give us any of the stocks you want, and then we'll return them to you after a while and we'll pay you a little fee."

And then we went long things that we thought were attractive. We did not go short things that we thought were unattractive; we just shorted out the market generally.

It was always kind of interesting to me, when I would visit the treasurer of Columbia or something like and I'd say, "We'd like to borrow your stocks to short," and, you know, he thought his stocks were pretty good at that point.

And he'd say, "Which ones do you want?" And I said, "Just give me any of them — (laughs) — I'm happy to short your whole damn portfolio." (Laughter)

I needed the Dale Carnegie course to get me through that kind of thing, you know.

We didn't have any specific ratios in mind. We were always limited by the number of institutions that would give us the stocks to short.

So it was not a big deal, but we probably made some extra money on it in the '60s. It's not something that would fit our — what we do these days at all.

And, generally speaking, I think if you've got some very good ideas on businesses that are undervalued, it's really unnecessary to do any shorting out of the market.

There's a — for those of you who are in the field — I mean, there's a — kind of a popular proposal — money managers always have some popular proposal that's being sold to the potential investors — and now there's something called 130-30, where you're long 130 percent long, short 30 percent.

That stuff is all basically a bunch of stuff just to try and sell you the idea of the day. It doesn't really have any great statistical merit.

But the fish bite, as Charlie says. Charlie can elaborate on that.

CHARLIE MUNGER: Yeah. We made our money by being long some wonderful businesses. We didn't make it by a long-short strategy.

18. Big opportunities often don't last long

WARREN BUFFETT: Number 3.

AUDIENCE MEMBER: Dear Mr. Buffett, dear Mr. Munger. My name is Oliver Krautscheid from Frankfurt in Germany.

The subprime crisis has led to inconsistent pricing in capital markets. Credits are trading at large discounts, and at the same time, the equities do not reflect this.

My question is, when will this be over, and how do you take advantage of market dislocations?

WARREN BUFFETT: Well, when there are market dislocations, there are always ways to take advantage of it, but we'll leave for you the joy of searching for those.

But there have been some really important dislocations. And I brought along, just for your amusement, a few figures on something that we've done recently. But it doesn't have any big significance for Berkshire. I mean, Berkshire will make some extra money out of this.

It doesn't take any time to think about. But it does illustrate just how dramatic the changes were. And the ones I brought along relate to the tax-exempt money market funds.

There were 330 billion of these. That's a lot of money — 330 billion. And they relied on repricing of — really, in almost all cases — first-grade municipal bonds.

Every seven days they have these auctions, and it was all set up very elaborately so that people could have their money, more or less, in their minds, instantly available and something that was tax exempt, and they were marketed extensively.

And I brought along — for example, here's one that related to the — they were backed by various municipal issues. This one happens to be one by the LA County Museum of Art. Just pulled that out.

And on January 24, it was marketed at 3.15 percent; January 31, 4.0; February 7, 3.5; February 14, 8 percent.

Now, how can a tax-exempt bond of short-term nature be selling at a 3 1/2 percent rate one week, and one week later on Valentine's Day be at 8 percent, and one week after that be at 10 percent?

It's now back to 4.2 percent. Now, those are huge dislocations in markets. That's crazy.

It would be one thing to be some little obscure item, but this happened with billions and billions and billions of dollars of securities.

It even happened — we get these bid sheets every day, and this happens to be a bid sheet, I think, from Citigroup. And they were repricing these every seven days.

And what you would find on these — you'll see there's lots of issues involved — the same issue would appear on several different pages, because it would represent some different auction, although handled by the same broker at the same time.

On one page you would find an issue — we would bid all these — we happened to bid these at 11.3 percent.

On one page, we bought them at 11.3 percent. On another page, the same issue, we bid the 11.3 percent and somebody else bid 6 percent.

So you have the same issue with the same broker at the same time being sold at 11.3 percent and 6 percent. Those are marks of extreme dislocation, and you find those occasionally.

You found that after the Long-Term Capital Management crisis is 1998. You found the equivalent of it in the stock market in 1974, and so on.

And those are great times to make unusual amounts of money. And if you — there's certain things we can't figure out.

I see — in the Wall Street Journal — I see advertisements these days of auctions taking place in some esoteric mortgage securities. If you had enough time, you could probably figure out some of those that were very mispriced. We don't fool around with that. We just don't have the time.

We were able to do four — we have about 4 billion in this right now. When we get all through, we'll have made some extra money for a couple of months.

It won't be significant, in relation to Berkshire's size, but it's something that's very easy to do.

You may be able to find — by working very, very hard on some smaller issues — you might be able to find in this mess in mortgages — and it's gone beyond subprime. It's gone into Alt-As and it's gone into Option ARMs and that sort of thing.

There very well could be some great opportunities out there that Charlie and I will no longer spot because we just can't be looking at that many things.

Charlie?

CHARLIE MUNGER: Yeah. What is interesting is that — how brief these opportunities to take advantage of dislocations frequently are.

Some idiot hedge fund bought unlimited municipal bonds at, you know, incredible margins. I think they bought 20 times more municipal bonds than they could afford with their own money, borrowing all the rest.

And when those things were dumped on margin calls, municipal bonds suddenly got mispriced in America. But the dislocation was very brief. So you —

WARREN BUFFETT: But very extreme.

CHARLIE MUNGER: But very extreme.

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: So if you can't think fast and act resolutely, it does you no good.

So you're like a man standing by a stream trying to spear a fish and the fish just comes by once a week or once a month or once every ten years. And you've got to be there to throw that spear fast before the fish swims on. It's a pretty demanding business if you do it right.

WARREN BUFFETT: But there have been times. I mean, in the junk bond market, there was a three- or four-month period in 2002 where some really incredible things happened and they happened on a large scale. So —

CHARLIE MUNGER: Yeah. It happens about twice a century.

WARREN BUFFETT: Yeah. (Laughter)

Which means he and I have only had four or five times when we could do it. (Laughter)

19. "Automatic formula for getting ahead"

WARREN BUFFETT: Let's go to number 4.

AUDIENCE MEMBER: Hello, Mr. Buffett and Mr. Munger. My name is Svinneyvaz Canadival (PH). I'm from Fort Lauderdale, Florida.

I read all your letters and annual reports multiple times, and every time I get a different insight. So thanks for doing it.

My question is about converting the successful small businesses into large enterprise. I have a good and successful small business from the last few years, and I'm unable to grow it to the next level. It seems like there are some components are missing, so I wanted to take your advice on it.

WARREN BUFFETT: Well, Berkshire was a small business at one time. I mean, it just takes time. I mean, it's the nature of compound interest. You know, you can't build it in one day or one week.

So Charlie and I — you know, we've never tried to do in some master stroke — convert Berkshire into something four times as large. People have done that sometimes in business.

But we've sort of felt that if we kept doing what we understood, and did it consistently, and had fun while we were doing it, that it would be something quite large at some point.

But there's nothing magic — it would be nice to attract a whole bunch of money into some great idea and have it — you know, multiply it manyfold in a few weeks or something of the sort. But that has really not been our approach.

We have just — we have done — in a general way, we've done the same thing. Now, we do little variations of it, but we kept doing the same thing for years and we'll keep doing it.

You know, we will have more businesses a few years from now than we have now. And we'll have all the ones we have presently. Most of them will do better. Some won't. And we will have added something.

And that's an automatic formula for getting ahead, but it's not an automatic formula for galloping ahead.

But we don't really feel — we're not unhappy because we're not galloping. We're not happy if we're not moving at all.

But, you know, we've got 76 or so, in most cases, pretty darn wonderful businesses. And, like I say, we'll have more as we go along. So it's a very simple formula.

Gypsy Rose Lee said once — she said, "I have everything I had five years ago. It's all that it's 2-inches lower," you know.

Well, what we want to have five years from now is a whole bunch of businesses we had before that are 2-inches higher, plus some more businesses. And that's the formula.

Charlie?

CHARLIE MUNGER: Yeah. You've got to remember that it's the nature of things that most small businesses will never be big businesses.

It's also in the nature of things that most small — most big businesses — eventually fall into mediocrity or worse. So it's a tough game out there.

In addition, the players of the game all have to die, and that is — those are just the rule of the game, and you have to get used to it.

We've only created from scratch one small business that became a huge business that I can think of, and that's the reinsurance department.

And there, Warren and Ajit and others have created a great and valuable business out of air. But can you think of anything other that's large that we've done in all these decades?

WARREN BUFFETT: No. No.

CHARLIE MUNGER: We've only done it once, so we're a one-trick pony.

WARREN BUFFETT: Yeah. We were lucky on that one, too. (Laughter)

Yeah, and incidentally, without Ajit we wouldn't have done it at all.

CHARLIE MUNGER: Right, right.

WARREN BUFFETT: It isn't that we did it. Ajit did it. We just sat there cheering.

CHARLIE MUNGER: Somebody asked us once what was the best investment we ever made, and I answered the fee we paid to the executive recruiter to find Ajit Jain. (Applause.)

20. Bond insurance business off to strong start

WARREN BUFFETT: In that connection, I'd like to give you a little report.

We went into the municipal bond insurance business a few months ago, and naturally, we did it through Ajit. And he got our companies up, licensed, and running.

And in the first quarter of 2008 — I don't have the figures for all the other people — but our premium volume came to over $400 million.

And I think — now, that was overwhelmingly written in the secondary market, but I think our premium volume was not only larger than any other municipal bond insurer in the United States, I wouldn't be surprised if it's as large as all of the rest of them combined.

And this was from a standing start that Ajit accomplished this. And I have here a list of, what, 300 and — this is the end of the quarter — 278, I believe it is, transactions.

Now, that's all done out of an office with 29 or 30 people who are doing a lot of other things, too. I mean, it's a remarkable, remarkable place.

One of the interesting things about this is that almost all of this business — although not all the premium volume — all of — almost all of this business was — came from people who came to us with municipal bonds asking us to insure them, and in every case, except two or three, they already had insurance from the other bond insurance, most of whom are rated triple-A.

So they were paying us a fee which was higher to write insurance which would only be paid, not only if the municipality didn't pay, but the original bond insurer didn't pay.

So we were writing business at an average rate of two and a fraction percent for the quarter, and the original insurer had charged, perhaps, an average of 1 percent. And they had to pay and they — in fact, the only way we're going to pay is if they went broke.

So it tells you something about the meaning of triple-A in the reinsurance — in the bond insurance — field in the first quarter of 2008.

Ajit has done a remarkable job in this arena. And Berkshire wrote a couple of primary policies for the Detroit Sewer District and the Detroit Water District that — each about 370 or 380 million — and people have found our insured bonds trading in the secondary market at a more attractive yield to the issuer. In other words, at lower yields than from any other bond insurer.

So this whole company has been built, just in a matter of a couple of months, by Ajit in his small office in Connecticut. It's pretty remarkable, and I congratulate him for it. (Applause.)

21. We prefer "the business which drowns in cash"

WARREN BUFFETT: Let's go to area 5, please.

AUDIENCE MEMBER: Hello. My name is Stuart Kaye, and I'm from New York City.

I wanted to know, if you could not talk with management, could not read an annual report, and did not know the stock price of a company, but were only allowed to look at the financial statements of a company, what metric would you look at to help you determine whether you should buy the company?

WARREN BUFFETT: Well, what we're doing in investment, and what everybody is doing in investment, is they're laying out money now to get more money back later on.

Now, let's leave the market aspect of the asset out. I mean, when you buy a farm, you really aren't thinking about what the market on it's going to be tomorrow or next week or next month.

You're thinking about how many — what the — how many bushels of beans per acre can you get or corn per acre and what the price is likely to be. You're looking to the asset itself.

In the case you lay out, the first question you'd have to make is do I understand enough about this business so that the financial statements will tell me the information that's useful to me in making a judgment about what the future financial statements are going to look like.

And in many cases, the answer would be no. Probably in a great majority of the cases it would be no.

But I've actually bought stocks the way you're describing many times, and they were in businesses that I thought I understood where, if I knew enough about the financial past, it would tell me enough about the financial future that I could buy.

Now, I couldn't say the stock was worth X or 105 percent of X or 95 percent of X, but if I could buy it at 40 percent of X, I would feel that I had this margin of safety that Graham would talk about, and I could make a decision.

Most times I wouldn't be able to make it. I wouldn't know — if you hand me a bunch of financial statements and you don't tell me what the business is, there's no way I could make a judgment as to what's going to happen. It could have been a hula hoop business; it could have been a pet rock business. You know, on the other hand it could have been Microsoft early on.

So unless I know the nature of the business, the financial statements aren't going to tell me much, you know. If I know the nature of the business and I see the financial statements, you know, if I see the financial statements on Wrigley, I know something about the business. Now I have to know something about the product before I can make that judgment.

But we've bought lots and lots of securities. The majority of the securities Charlie and I bought, we've never met the management and never talked to them, but we have primarily worked off financial statements, our general understanding of business, and some specific understanding of the industry in the business we're buying.

Charlie?

CHARLIE MUNGER: Yeah. I think there's one metric that catches a lot of people. We tend to prefer the business which drowns in cash. It just makes so much money that the main — one of the main — principles of owning it is you have all this cash coming in.

There are other businesses, like the construction equipment business of my old friend John Anderson. And he used to say about his business "You work hard all year, and at the end of the year there's your profit sitting in the yard."

There was never any cash. Just more used construction equipment.

We tend to hate businesses like that.

WARREN BUFFETT: Yeah. It's a lot easier to understand a business that's mailing you a check every month. But that's what an apartment house — you know, if you own — you can probably value an apartment property pretty well if you know anything about, you know, the city in which it's in.

And if you have the financial statements, you could make a reasonable guess as to what the future earnings are likely to be. But that's because it is a business that gives you cash. Now, you can — there can be surprises in that arena as well.

But I've bought a lot of things off financial statements. There are a lot of things that I wouldn't buy, you know, if I knew the — actually, there are a lot of businesses I wouldn't buy if I thought the management was the most wonderful in the world because, if they were in the wrong business, it really doesn't make much difference.

22. Pollution in Klamath River

WARREN BUFFETT: Number six?

AUDIENCE MEMBER: Good morning. My name is Mike Palmateer (PH), fisheries supervisor for Karuk Fisheries.

Mr. Buffett, you grew up and still live in the banks of the Missouri River. I, too, live on a river called the Klamath. My family has lived there since time immemorial.

In 2002, 68,000 fish died at the mouth of the Klamath River due to disease and bad water quality. These fish are also my relations.

If another company polluted your river and killed all the fish and made the river unswimable and unfishable, how would you approach this problem? Thank you.

WARREN BUFFETT: Well, I think society would — as a whole — should approach that problem by looking at the net benefits from whatever is taking place in that situation and what the costs of electricity would be and what the farmer's situation would be if he went to a different form of water distribution.

I mean, there are a lot of competing ideas and desires in a large society, and it's up to government, basically, to sort out those.

We're sorting it out — right now, we're building coal plants in the country. We're building gas plants. We're doing various things.

People are coming to different conclusions about what kind of tradeoffs they want to make, and generally these are being made at the state level, although you could have a national energy policy that would override individual states' decisions.

We're responsive to national policy on that. We're responsive to local policy. The Oregon Public Utility Commission, I'm sure, is aware of exactly what you've discussed and they have to consider that, but they have to consider a lot of other things in determining what is the best way to generate the electricity required for the citizens of Oregon.

And, Dave, would you want to add anything to that?

DAVE SOKOL: Warren, just one comment. And not in any way to be disrespectful of the fishermen, but it — we are not polluting the river.

We're not doing — adding — anything to the water that isn't coming out of Upper Klamath River, and we do recognize the different views as to whether the irrigation is a good thing or a bad thing, whether renewable power such as hydro is better than returning the river to its prior 1907 date.

But the one thing that — just to be clear — is that PacifiCorp is not adding anything. The water is flowing through penstocks, creating electricity, and coming out the rear end, and it did so under a 50-year FERC license.

Again, we understand the varying concerns, and hopefully, over the next six years a societal answer that balances all those concerns will be reached.

WARREN BUFFETT: Thank you. (Applause.)

CHARLIE MUNGER: I'd like to — I'd like to point out how refreshing it is to have people addressing a pollution problem which has nothing to do with burning carbon. (Applause.)

23. Buffett's advice to a 12-year-old

WARREN BUFFETT: Number 7.

AUDIENCE MEMBER: Hey. I'm Jack Range (PH). I'm from Philadelphia. I'm in seventh grade, and I'm 12-years-old.

I just wanted to ask, what kind of things should I be reading, like, in my grade? 'Cause I know there are a lot of things that they don't teach you in school that you should know, but what things should I be looking into? (Applause.)

WARREN BUFFETT: Well, I would get in the habit, if you don't have it already — but you sound like you very well may — of reading a daily newspaper, which is not the most popular thing in the world among younger people these days.

But you want to learn as much as you can about the world around you. And Bill Gates, I think, quit at the letter P in the World Book. Doesn't seem to have hurt him too much to quit there.

But you can have a set of World Books. You can read the newspapers. You should just sop it up. And you'll find out what's the most interesting to you.

I mean, you know, there's a certain point where the sports pages were most interesting to me, then the finance pages. I happen to be a political junkie. But you just can't learn enough in life.

And I think the fact — what you'll find is the more you learn, the more you want to learn. I mean, it is fun, and — but you sound to me like a young person that's going to do a lot of that on their own.

Do you have any suggestions, Charlie? You'd probably suggest reading Ben Franklin.

CHARLIE MUNGER: My suggestion would be that the young person that just spoke has already figured out how to succeed in life. You've got it made. (Applause)

24. "We never urge people to sell good businesses"

WARREN BUFFETT: Number 8.

AUDIENCE MEMBER: Greetings to all of you from the Midwest of Europe, from Bonn, Germany, on the Rhine River. I'm Norman Rentrop. I'm a shareholder in Berkshire, Wesco, and Cologne Re.

I want to thank you and Eitan Wertheimer to take the initiative and the time to come to four cities in Europe, and potentially throughout the world, to tell owners of family businesses what great alternative Berkshire Hathaway is to selling their businesses to buyout funds.

Now, my question regarding the chocolate industry. I'm challenged since I cannot buy See's Candy in my hometown, Bonn, Germany. You gave that great example of the great business, the good business, and the gruesome business.

See's Candy, you cited, having sent, like, $1.3 billion in cash profits to Omaha. There's another company called Lindt and Sprungli.

Now, while See's Candy achieves more than 20 percent profit on sales, you describe that their growth has been "OK." Lindt and Sprungli does only 14 percent on sales, but they did go almost global.

WARREN BUFFETT: Yeah. Could you get to the question, please, on this? (Laughs)

AUDIENCE MEMBER: Yeah. The question is in — whether you want to have a company with high profitability but OK growth versus a company going global but lower profits? What are your considerations?

WARREN BUFFETT: It really makes no difference to us. We evaluate all kinds of businesses.

And what we do want is we want a business with a durable competitive advantage, which both of the companies you named do.

And we want something we understand. And we want a management that we like and trust. And then we want a price that makes sense.

And we try to look at — we probably looked at every confectionary business, you know, for 20 years that was publicly owned where we got the figures. And sometimes we find something where we can take action, and most of the time we don't.

When they're private businesses, we don't determine — a really good private business — I always tell the manager, the best thing to do if you've got a wonderful private business is just keep it. It's going to be worth more next year and the year after.

So there's no reason to sell a wonderful business except for kind of extraneous factors. It may be family situations. It may be taxes. It may be that there isn't another potential heir or whatever it may be.

But there's no need — if you've got a business worth a billion dollars, you don't need the billion dollars — you've got a business that's worth a billion dollars — any more than if you've got a farm that's worth a million dollars. You've already got the million dollars. You just happen to have it in the farm. And if you like farming, you keep it.

So we never urge people to sell good businesses. We urge them to keep them.

But there comes times when they do want to sell for one reason or another — maybe once every 20 or 50 years — and we do think if they have a business that they're enormously proud of — it's a really fine business — that they can keep more of the attributes that they love in that business by selling it to Berkshire than they can, by far, selling it to anyone else.

So we are the logical buyer. As you mention, I'm going to Europe — Eitan, who's been wonderful about setting this up — and we're going to make presentations, not to try to get anybody to sell us their business now, because most people shouldn't sell us their business now.

But we do want them to think of us when the time comes when an event occurs that does cause them to think about selling. And we want to be on their radar screen.

And we're more on the radar screen in the United States than we are in Europe, and we're going to try to correct that.

But if you take a firm like you name, a Lindt, you know, there's a price at which we would buy stock in Lindt. There's a price at which we'd buy the whole business. But it's unlikely to be selling there.

You know, the — if you think about hundreds and hundreds of wonderful companies — I get all these managers that — just got a CEO yesterday who called me — and they want to tell me about their business, and they imply their businesses — or they think — their business is the most attractive investment in the world.

It isn't the most attractive investment in the world. There are thousands of possible investments. And, you know, the idea that all these managers are saying "Our stock is the most wonderful in the world" is crazy.

But it's our job to look at hundreds of things and, in terms of marketable securities, buy what we think are the most attractive ones, among the ones we understand and like as a businesses.

And then occasionally we get the chance to buy an entire business. We never do that at a bargain price. It just doesn't happen. People don't do that. The stock market gives you bargain prices; individual owners won't. But when we get a chance to do that at a fair price, we like doing it.

We love building Berkshire with a bunch of businesses with favorable long-term economic characteristics.

But the chance that any one of them — you know, we aren't going to look for a given confectionary company and say, "Regardless of price, we're going to do this," because we don't do anything when the phrase "regardless of price" enters into the sentence.

Charlie?

CHARLIE MUNGER: Yeah. I watched a man build up a business in southern California, which was a wonderful business. And the time came to sell it — and he devoted his whole life to creating it — he sold it to a known crook who was obviously going to ruin the business just because he could get a slightly higher price.

I think that's an insane way to live a life if you own a prosperous business. I think the better course is to sell to somebody you know is going to be a good steward of what you've created. (Applause.)

25. Dollar will probably weaken over time

WARREN BUFFETT: Let's go to number 9, please.

AUDIENCE MEMBER: Hi. My name is Johann Freudenberg (Ph) from Germany.

How would you, as a European investor that invests in U.S. equities, hedge the U.S. dollar risk? Thank you.

WARREN BUFFETT: How would I what?

CHARLIE MUNGER: How do you hedge the U.S. dollar?

WARREN BUFFETT: Oh. Well, whether you're thinking about starting in Germany and hedging the dollar risk of investing here or vice versa, we are happy to invest in businesses that earn their money in euros in Germany, or whether it's there, or France, or Italy, or earn their money in sterling in the UK, because we do not have a feeling — at least I don't have a feeling — that those currencies are likely to depreciate in a big way against the U.S. dollar.

That would be how we would get hurt. We could offset that by borrowing the money in those countries and borrowing in their currency to make the purchases.

But, overall, I think that the U.S. is going to continue to follow some policies that have made the dollar weaker in recent years.

So if I had to bet my life one way or another over 10 years, I would probably bet that the dollar would weaken against other major currencies, and, therefore, I feel no need — if we buy companies whose earnings primarily arise elsewhere in major countries — I feel no need to try and hedge those purchases.

I mean, if I landed from Mars today with a billion of Mars dollars or whatever they call them on Mars, and I was thinking about where to put my money, you know, I went to the local — wherever my UFO landed — and went to the bank and said, "I've got this billion of Mars currency," and they said, "Well, what would you like to exchange here?" I don't think I'd put all the billion in U.S. dollars.

So it doesn't bother me to buy businesses around the world, unhedged in terms of their currency, and have a fair amount of our earnings coming from earnings that originate in other currencies and which I will convert at current rates to dollars at some time in the future.

If you take Coca-Cola — we own 200 million shares of Coca-Cola. And if their earnings are roughly $3 a share, that means our share of the earnings of Coca-Cola are $600 million a year.

And of those earnings of 600 million, you know, maybe close to 500 million will be from around the world — all different kinds of currencies.

Basically I like that. I think that that will be a net plus to us over time, and it certainly has been a net plus to us in recent years.

So we are not in the business of hedging currencies, basically. We do not have a lot of hedges set up.

Charlie?

CHARLIE MUNGER: Nothing to add.

26. Small stocks and mispriced bonds offer opportunities

WARREN BUFFETT: Number 10.

AUDIENCE MEMBER: Hey. How you doing? I'm Eric Schline (PH) from Larchmont, New York.

This is actually a follow-up question from a question that I asked last year at the meeting. I'd asked you guys, you know, what you would do with small sums of money since — you know, I run a small portfolio, under a million dollars.

And I asked you if you'd be doing things, you know, like the net-nets that Benjamin Graham used to talk about and, you know, liquidation arbitrage. You know, a lot of things you used to do at the Buffett Partnership.

And you acknowledged that you wouldn't be just a buy-and-hold investor, that you — as you are today — but we would be doing a lot of those transactions.

And, Mr. Buffett, you also talked about how a lot of the investments you would do with under a million dollars would have nothing to do with stocks and would be with other types of securities, and you really don't elaborate — neither of you really elaborated any more than that.

So I guess I was wondering if you could elaborate a little bit more on how your investment strategy, you know, back then, you know, in reference to non-stock investments, would be different than your buy- and-hold strategy today?

So what kind of stuff would you be doing? Maybe you could give me a past example that you did in the '50s and the '60s. That would be great. Thank you. Appreciate it.

WARREN BUFFETT: Well, if I work with small sums of money — and I'd be happy doing that — it would just open up thousands of possibilities to me.

And you might very well — certainly we found very mispriced bonds, where we could come nowhere near buying a position of enough size in Berkshire to make a difference, but where it would have made a difference if you were working with a million dollars.

But it would be bonds. It would be stocks of both in the United States and elsewhere. We found them in Korea a few years ago that were ridiculously cheap.

You know, you basically had to make very significant returns, but you couldn't put big money on it.

So it could be in stocks. It could be in bonds. It wouldn't be in currencies with small amounts.

But, you know, I had a friend who used to buy tax liens — you know, Tom Knapp, he's got some relatives here. An enterprising person can find a lot of different ways to make money.

You'll find most of them will be in small stocks. If you're working with small money, they'll be in small stocks or in some specialized bond situations. Wouldn't you say that, Charlie?

CHARLIE MUNGER: Sure. (Laughter)

27. Pandering politicians behave better in office

WARREN BUFFETT: Number 11, please.

AUDIENCE MEMBER: Hi. I'm Dr. Silber from the Infertility Center of St. Louis. And we feel that by making many, many babies, we're doing the best we can to help salvage the solvency of Social Security. (Laughs)

WARREN BUFFETT: We won't pursue the logic of that too far. (Laughter)

AUDIENCE MEMBER: We need someone to pay into the system, and with the demographic implosion that we're facing and the current anti-immigration feeling, that this is the real cause of the Social Security dilemma that we're facing. And it's true in most of the developed world.

But my question is, everybody is looking very closely at what you and Charlie are going to say at this meeting because there's just a huge amount of confusion since the credit crisis, and I guess you've been through many, many years and decades of confusion.

But everybody really wants to know what you think, because we have three candidates, one of whom I like, which I won't mention, but all three of whom seem to be pandering to voters and not really demonstrating a profound understanding of economics.

And we're going to decrease interest rates to help the credit crisis, and we're going to inject $180 billion as free gifts into the economy, and yet our dollar is down 50 percent, and we certainly don't want a recession and all the misery that would bring.

But aren't we going to eventually have a gigantic inflation here in the U.S.?

And so — in China, which is our major partner in this, the stock market has gone down and people are losing money because they're worried about the U.S.

So I'm wondering if you could just shed some words of wisdom on, if you were the presidential candidate — which I would like to see happen — what would be your position or your policy?

WARREN BUFFETT: Well, I think it was Bill Buckley that ran for mayor of New York, you know, 40 years ago or something like that, and they asked him what the first thing he would do if he were elected. He said, "I'd ask for a recount." (Laughter)

It's not an easy game. I think we have — just personally— I think we have three pretty good candidates this time — quite good candidates.

But I think that your comments about the pandering and all that, I'm afraid that's just part of — if you have a very long political process, and you have people only generally willing to listen to ideas in fairly short form, and you're trying to make the other candidates look bad one way or another — I think that the truth is you do get a lot of pandering in the policies that are proposed.

I think you have candidates that are pretty smart about economics. I happen to think two of the three are maybe a little smarter about economics than the third, but the third may be just as smart, too. They may just be forced into a different position.

You know, a political process is something that doesn't lend itself to Douglas-Lincoln debates on the fine points of policy, and it's a tough game.

And I don't — the one thing I think is I think they will behave better in office than on the stump. I think that's true of all three of them, and I think — but I think that's just built into the system.

We — you know, we have a country that works awfully well. You know, whether Warren Harding is in office or Franklin Pierce, or whatever it may be over the years.

And it gets back to that saying I've said many times that you want to buy stock in a business that's so good that an idiot can run it because sooner or later one will. (Laughter)

And we live in a country, frankly, that is so good that your children and grandchildren will live a lot better than you live, even though an idiot or two runs it from time to time in between.

But we've got a lot better than idiots running. Believe me. I think we've got three very good candidates, and I wish — whichever one of them wins, I wish them well.

You know, it's the toughest job in the world, the most important job in the world, and I think the motivations of the people running it are a lot better sometimes than their proclamations as they go along in the political process.

I think it's very hard to run in Iowa without being for ethanol. You know, it may be — you may win some badge for courage or something in the end, but you won't win the presidency.

Charlie?

CHARLIE MUNGER: Well, I'd like to address the recent turmoil and its relation to politics.

After Enron totally shocked the nation with the gross amount of folly and misbehavior, our politicians passed Sarbanes-Oxley, and it has now turned out that they were shooting at an elephant with a pea shooter.

And low and behold, we have a convulsion that makes Enron look like a tea party.

And I confidently predict that we will have changes in regulation and that they won't work perfectly. (Laughter)

Human nature always has these incentives to rationalize and misbehave, and the learned professions very often fail in their basic responsibility to be learned. And we're going to have this turmoil as far ahead as you can see.

WARREN BUFFETT: But look at it this way: I have a job here I love. You know, I'd gladly pay to have this job.

Now, I have enough stock so that I'm reasonably assured of keeping the job, but let's just assume for the moment that there are three other candidates out there, and none of us had any stock, and we were all up here making a pitch to you.

My answers might have been a little different today, you know, in terms of what Berkshire's prospects would be under me and all that sort of thing going forward. It's a corrupting process.

Now, you know, it works pretty well, but the process itself has to be corrupting.

Just take the boom in commodity prices we've had. We've had a boom in the price of oil, but we've had a boom in the price of corn and soybeans.

Now, I've heard no political candidate say you've had this huge increase in the price of corn and soybeans. That means all these poor people throughout the country, they'll be paying more for food, so we ought to put an excess profits tax on farmers. That is not something you're going to hear.

On the other hand, when it happens in oil and it happens to be Exxon, you know, people will propose occasionally we ought to put a terrible tax on Exxon because the price of oil has gone up.

There's a lot of situational ethics, or situational policymaking, that depends on how many voters there are in any given category and what state you happen to be in and all that. But I don't think I'd behave any better.

If my ambition were to be President of the United States, you know, I would — I'm sure it would affect my — what I talked about and my behavior. You know, we're all human beings.

So I don't condemn the people for the fact that when they, you know, are working 18 hours a day and the other guy is shooting at them and they start exaggerating things a little, I just don't think you should expect more of human beings than — and I think that they will tend — I think any one of the three candidates — will tend to behave quite well in the White House.

They'll succumb to all the things that presidents do in terms of having to — certain groups that helped them get there and all that sort of thing. But I think, on balance, they will end up doing what they think is best for the country, and I think they're all smart people.

28. "There will be no gap after my death"

WARREN BUFFETT: Number 12?

AUDIENCE MEMBER: My name is John Ebert (PH). I'm from Bremerton, Washington. I'm very pleased to see that both you and Charlie look so healthy, and I'm also glad to know that your goal is to work to at least 102 before you retire.

I think your secret must be the Cherry Coke and the See's Candy by evidence of what you're doing on the screen there.

My question, obviously, deals with succession. At last year's meeting, you spoke about your plan for your chief financial officer. Could you please update us on where you stand on succession?

WARREN BUFFETT: Yeah. And we've said, on the CEO front, we have three that any one of which could step in and do a better job than I do in many respects.

And the board is unanimous, I believe, in terms of knowing which one it would be if it were tomorrow morning, but that might be different two or three years from now.

I think in any event, when the time comes, they'll want to pick somebody reasonably young, because I think, on balance, it's good idea to have a long run at this job, and I think it aids in acquisition and being able to make promises to people about how their businesses will be treated and so on.

In terms of the investment officer, the board has four names. We've discussed the four. Any one or all of the four would be good at doing my job, probably better in some ways, and — but they all have good jobs now. They're happy where they are now.

They would — I think any one of the four would be here tomorrow if I died tonight and they were offered the job by the board. They're all reasonably young. They're all very well to do or rich, and compensation would not be a major factor with them.

I think any of the four would take the job at less money than they're making now, but there's no reason for them to come now.

I would still end up making the decisions, and they would probably chafe at the idea of not being able to make the decisions.

I actually worked for Ben Graham for a few years. And I loved the man enormously. I learned an amount from him. I named my older son, middle name, is after him.

But in the end, I wanted to make decisions, and I — if Ben Graham made them differently — you know, I actually prefer to make my own decisions. And anybody that manages money well is going to feel that way.

So it's just better in this case. It can happen tomorrow. It could happen five years from now. But whenever I'm not around to make the decisions, the board will decide whether to have one, two, three, or four of these people.

They'll decide — you know, they may decide to have four and divide it up four ways. They may decide to have only one. They will probably be heavily influenced by how the incoming CEO feels about exactly how he wants to work with a group or with one.

And they'll come. So there will not — there will be no — there will be no gap after my death in terms of having somebody managing the money, and they'll probably be a lot more energetic than I am now.

And they'll — they could very easily have a much better record. Some of them have a much better recent record than I do.

Charlie?

CHARLIE MUNGER: Well, you know, we still have a rising young man here named Warren Buffett. And having — (Applause)

WARREN BUFFETT: That's the advantage of working with a guy 84. You always look young. (Laughter)

CHARLIE MUNGER: And I think we want to encourage this rising young man to reach his full potential. (Laughter and applause)

WARREN BUFFETT: One thing I should point out, with our average age being 80, people talk about aging managements. We haven't found a management that isn't aging. If we ever find them, we want to start eating what they eat.

And what I can point out about your management, since our average age is 80, we're only aging at the age of 1 1/4 percent a year, and that is the lowest rate of aging that I know of in corporate America.

I mean, some of these companies have 50-year-olds, and they're aging at 2 percent a year, and just think how much riskier that is. (Laughter)

29. "Diversification is for the know-nothing investor"

WARREN BUFFETT: Let's go to 13.

AUDIENCE MEMBER: I'm Isaac Dimitrovski (PH) from New York City. Mr. Buffett, it's great to be here.

I've read that there were several times in your investing career when you were confident enough in one idea to put a lot of your money into it — say, 25 percent or more.

I believe a couple of those cases were American Express and the Washington Post in the '70s. And I've heard you discuss your thinking on those.

But could you talk about any of the other times you've been confident enough to make such a big investment and what your thinking was in those cases?

WARREN BUFFETT: Charlie and I have been confident enough — if we were only running our own net worth — I'm certain a very significant number of times, if you go over 50 years, there have been a lot of times when you would have put at least 75 percent of your net worth into an idea. Wouldn't there, Charlie?

CHARLIE MUNGER: Well, but 75 percent of your worth outside Berkshire has never been a very significant amount.

WARREN BUFFETT: No. Well, I'm going back — let's just assume it was. (Laughter)

Let's just assume you didn't have Berkshire in the picture. There have been times — I mean, we've seen all kinds of ideas we would have put 75 percent of our net worth in.

CHARLIE MUNGER: Warren, there have been times in my life when I've had more than a hundred percent of my net worth invested in things.

WARREN BUFFETT: That's because you had a friendly banker; I didn't. (Laughter)

That — there have been times — well, initially, I had 70 — several times I had 75 percent of my net worth in one situation.

There are situations you will see over a long period of time. I mean, you will see things that it would be a mistake — if you're working with smaller sums — it would be a mistake not to have half your net worth in.

I mean, there — you really do, sometimes in securities, see things that are lead-pipe cinches. And you're not going to see them often and they're not going to be talking about them on television or anything of the sort, but there will be some extraordinary things happen in a lifetime where you can put 75 percent of your net worth or something like that in a given situation.

The problem has been the guys that have put 500 percent of their net worth in. You know, I mean, if you look at — just take LTCM. Very smart guys. Very decent guys. Some friends of mine. High grade. Knew their business.

But they put, you know, maybe 25 times their net worth into things that were a cinch, if they hadn't have gone in that heavily. I mean, they were in things that had to converge, but they didn't get to play out the hand.

But if they'd have had a hundred percent of their net worth in them, it would have worked out fine. If they would have had 200 percent of their net worth in it, it would have worked out fine. But they instead went to, you know, maybe 2500 percent or something like that.

So there are stocks — I mean, actually, there's quite a few people in this room that have close to a hundred percent of their net worth in Berkshire, and some of them have had it for 40 or more years.

Berkshire was not in a cinch category. It was in the strong probability category, I think.

But I saw things in 2002 in the junk bond field. I saw things in the equity markets.

If you could have bought Cap Cities with Tom Murphy running it in the early — in 1974, it was selling at a third or a fourth what the properties were worth and you had the best manager in the world running the place and you had a business that was pretty damn good even if the manager wasn't.

You could have put a hundred percent of your net worth in there and not worry. You could put a hundred percent of your net worth in Coca-Cola, earlier than when we bought it, but certainly around the time we bought it, and that would not have been a dangerous position.

It would be far more dangerous to do a whole bunch of other things that brokers were recommending to people.

Charlie, do you want to —?

CHARLIE MUNGER: Yeah. If you — students of America go to these elite business schools and law schools and they learn corporate finance the way it's now taught and investment management the way it's now taught.

And some of these people write articles in the newspaper and other places and they say, "Well, the whole secret of investment is diversification." That's the mantra.

They've got it exactly back-ass-ward. The whole secret of investment is to find places where it's safe and wise to non-diversify. It's just that simple.

Diversification is for the know-nothing investor; it's not for the professional.

WARREN BUFFETT: And there's nothing wrong with the know-nothing investor practicing it. It's exactly what they should practice. It's exactly what a good professional investor should not practice. But that's — you know, there's no contradiction in that.

It — a know-nothing investor will get decent results as long as they know they're a know-nothing investor, diversify as to time they purchase their equities, and as to the equities they purchase. That's crazy for somebody that really knows what they're doing.

And you will find opportunities that, if you put 20 percent of your net worth in it, you'll have wasted the opportunity of a lifetime, you know, in terms of not really loading up.

And we've had the chance to do that, way, way in our past, when we were working with small sums of money. We'll never get a chance to do that working with the kinds of money that Berkshire does.

We try to load up on things. And there will be markets when we get a chance to from time to time, but very seldom do we get to buy as much of any good idea as we would like to.

30. Parents Television Council and appropriate ads

WARREN BUFFETT: Go to number 1.

AUDIENCE MEMBER: Good morning, Mr. Chairman and Charlie. I'm Father Val Peter.

For 25 years I was lucky to be head of Boys Town. Expanded across the whole country. Warren was very kind to me, very helpful, over long periods of time.

What I represent today is Parents Television Council, where 1.2 million folks across the country, and our concern is to help keep toxicity off television programs — excessive violence, et cetera.

And I was very surprised, being on a parents television council board, when I read a report — I hope it's not true, but it might be — that says that of the best and most troublesome advertisers, Berkshire Hathaway, is near the bottom at 444 out of 452. I hope that's not true.

But my point is this: when I was head of Boys Town and somebody said something like that, I'd say, "Go find out. Correct it." My question is would you be kind enough to say, "Go find out," if it's necessary, "Correct it." Thank you.

WARREN BUFFETT: Yeah. I would say this: I don't know where the rankings come from. I mean, I see the — certainly by far our biggest advertiser would be GEICO.

We spend over $700 million a year on advertising. I see their ads all over the place, and, you know, I don't regard them as offensive or inducing antisocial behavior or anything like that.

But I would be glad for you to contact Tony Nicely because I can't think of any other company at Berkshire that does, remotely, the amount of advertising. And Tony is an easy fellow — he's here now, actually, but you could write him at GEICO or you could find him at the GEICO booth, probably, later in the day and just talk to him about that. I'd be glad to have you do that, Father Peter.

31. Diversification, IRAs, and brokerage accounts

WARREN BUFFETT: Number 2.

AUDIENCE MEMBER: Good morning Mr. Buffett, Mr. Munger. My name is Deb Caviello, (PH) and I'm from Windsor, New Jersey.

I'm 45-years-old and have achieved financial independence in that I'm able to manage the money of my spouse and myself full time. And that goes to marrying well, part of that. I was —

WARREN BUFFETT: That can be a big part of it. (Laughter)

AUDIENCE MEMBER: Marrying well in the sense that I received the encouragement and the confidence to pursue that.

WARREN BUFFETT: That's terrific.

AUDIENCE MEMBER: I was going to ask you a question more along the lines of diversification, but I think I will put it this way. I'll skew it a little differently.

Each of us has a traditional IRA, a Roth IRA, and together we have a brokerage account. Should the assets in those accounts be separated or better managed as a whole pile?

In other words, have overlapping securities in each account or different types of securities relegated to a specific account?

WARREN BUFFETT: Yeah. Well, I would say your marriage sounds like it's going to last, so I think you should think of yourself and your husband as a unit.

And I would — you should — in my view, you should look at your overall financial condition and not worry about where the location of the assets will be.

So if you have a net worth of X and you have 20 percent of it in a 401(k) and 30 percent outright and so on like that, just look at the whole picture and decide what mix of assets, what type of assets you want, and don't treat them as being in separate pots.

I mean, at Berkshire, you know, we own stocks in a whole bunch of different — our insurance companies own stocks in separate portfolios and we even have a portfolio in Cologne as mentioned earlier.

I don't even think about what entity anything is in. You know, it's all working for Berkshire, and I think you should — the way to think about your situation is to think about it all working for your family.

Now, if you're — you strike me as having a very solid marriage, and I think your husband would be crazy if he split with you. But the — if you're just starting out, you may want to keep your money separate for a while until you see how it plays out, because a significant percentage do end up in divorce.

Listen, I don't get into marriage counseling very often. (Laughter)

But I can feel the ground sort of disappearing between my feet here. But I will turn it over, therefore, to our marital expert, Charlie Munger. (Laughter)

CHARLIE MUNGER: Yeah. Occasionally, you'll find an investment that is going to produce a huge amount of taxable income. It's a junk bond paying a high yield that's taxable or something.

So some items are more suitable for those retirement accounts that get tax-deferral benefits. But apart from that, it's all one pot. Sure.

32. Eventually power will have to come from the sun

WARREN BUFFETT: Number 3.

AUDIENCE MEMBER: Hi, Warren. I'm Doug Hicks (PH) from Akron, Ohio. And you hear on the news lately a lot of people say that oil will run out during this century.

Considering the U.S. policy is to do nothing until the very last second, how do you think the end of oil will play out?

For example, do you think that this would, unfortunately, result in World War III? Or do you think alternative energy will be available, the day that oil runs out, to take its place?

And maybe, do you think these oil companies' value will go to zero when oil runs out?

WARREN BUFFETT: Yeah. Oil won't run out. It doesn't work that way.

What oil will do at some point — who knows when — people predict a lot of different things — oil at some point, daily productive capacity throughout the world will first level off and then start declining very gradually.

The nature of oil extraction is such that wells don't — with rare exceptions — they don't go to a given point producing a hundred barrels a day and then all of a sudden quit or anything like that. So you run into this depletion aspect and get into decline curves and that sort of thing.

So we won't — we're producing in the world, 86 or 87 million barrels a day of oil, which is more than we've ever produced before.

We are closer — by at least my calculations — we are very much closer to producing almost as much as our productive ability is in the world, with fields in their current stage of development, than we've ever been.

I mean, our surplus capacity, I think, is less than, well, any time I can remember. And it's quite a bit less than most periods.

So we don't have the ability to crank up, in any short period of time, the 86 or 7 to a hundred million barrels a day.

But whatever that peak will be, and whether we hit it five years from now or 50 years from now, and then it will just gradually taper down, and the world will adjust to it, and hopefully we'll be thinking about it, you know, well before it happens, and various adjustments will be made in the world that will cause the demand to somewhat taper down as the available supply.

But we will be producing oil far beyond this century. It's just — the question is whether we're producing 50 million barrels a day, or 75 million, or 25 million barrels a day. I don't know the answer to that.

There's a lot of oil in place in the world. We've messed up the recovery of a lot of the oil. I mean, we never recovered the, you know, the total potential of fields. And some fields we've mis-engineered in ways so that we will recover a very small percentage. Now, maybe there will be better engineering, tertiary recovery, and that sort of thing in the future.

It's nothing like an on and off switch, though, in terms of the world producing oil or adjusting to reduced capacity or anything like that.

You may still have enormous political considerations to — access to the available oil — because it's going to be so darn important to our society for so long.

There's nothing we can do, in any short period of time, that will wean the world off of oil. You know, that is a fact of life.

Charlie?

CHARLIE MUNGER: Well, if we get another 200 years of economic growth pretty well disbursed over the world, while the population of the world also goes up, all of the oil, coal, natural gas, and uranium reserves of the world are like nothing.

So eventually, of course, you have to use the sun. There is no other alternative. And I think we can confidently predict that there will be some pain in this process of adjusting to a different world.

Personally, I think it's extremely stupid to use up the hydrocarbon reserves of the world as fast as we are.

I don't think we've got any good substitutes for those things as chemical feed stocks, and I think it's perfectly crazy to use up something so precious for which you have no alternative that's sure to be available.

And if you look at it backwards, what should we have done? Hell, we should have bought all the oil in the '30s in the Middle East and take it over here by tankers and put it in our own ground.

I mean, it's obvious to see what should have been done in the past.

Even though that's obvious, are we doing the equivalent of that now? And the answer is, basically, no.

So I think the governmental policy tends to be way behind in terms of rationality. And I think we'll just have to soldier through. But eventually the — if we're going to have a prosperous civilization — we have no other alternative than the sun.

WARREN BUFFETT: What's your over-under figure for 25 years from now, world production oil per day?

CHARLIE MUNGER: Down.

WARREN BUFFETT: Yeah. (Laughter)

That's not an insignificant prediction. I mean, it — believe me. If oil production is down 25 years from now, it will be a different world.

I mean, you — China's going to sell over 10 million cars this year. I mean, the demand is going to keep — even at these prices — it's hard for me to imagine demand falling off a lot. So if production falls off, you'll have some interesting consequences.

33. Higher taxes for the superrich under Pres. Buffett

WARREN BUFFETT: Number 4.

AUDIENCE MEMBER: Mr. Buffett and Mr. Munger, my name is Guy Pope, and I'm from Portland, Oregon.

I enjoyed the cartoon this morning, and I'd like to expand on that.

I, too, like the idea of both of you serving as a single term as the President of the United States. During — hypothetically, let's say, Mr. Buffett, you served the first term; Mr. Munger, you served a second term.

WARREN BUFFETT: I think the other way around is better, but go ahead. (Laughter)

AUDIENCE MEMBER: Each of you please name three difficult policy decisions you would implement during your term to better the country.

WARREN BUFFETT: Well, Charlie is going to serve the first term, so I'm going to let him name his three.

CHARLIE MUNGER: I think that one takes us so far afield that I think it's asking too much. Three perfect solutions to the major problem of mankind from each of us in a few minutes?

We've just barely managed to stagger through life as well as we have, and I don't think we're quite up to it. (Laughter)

WARREN BUFFETT: We'd probably have a massive federal program for retirement homes, actually. (Laughter)

I would probably do something about the tax system that would change things so that the superrich paid a little more and the middle class paid a little less, but — (Applause.)

WARREN BUFFETT: That might be why you'd prefer to have Charlie serve first.

34. Munger: Ethanol is "monstrously dumb"

WARREN BUFFETT: Number 5.

AUDIENCE MEMBER: Hi. I'm Ryan Johnson (PH) from Arizona, and I wanted to ask what you think about the food shortages in the world and what trends you see in the next decade or two?

WARREN BUFFETT: Well, again, I'm no expert on that. Charlie?

CHARLIE MUNGER: Well, I said last year that I thought that the policy of turning American corn into motor fuel was one of the dumbest ideas, in terms of the future of the world — (applause) — that I'd ever seen.

I came out here with the head of an academic institution, and he called the idea stunningly stupid.

Now, I'm here in Nebraska where I like Nebraskans to prosper. But this idea was so monstrously dumb that I think it's probably on its way out.

35. Amateurs should stick with low-cost index funds

WARREN BUFFETT: We've now — oh, no. We've got time for a couple more. Let's go to number 6.

AUDIENCE MEMBER: Hi. My name is Timothy Ferriss. I am a guest lecturer at Princeton University twice a year. And I'd like to touch on an earlier question about investing with small sums of money.

I'd like to ask both of you, if you were 30-years-old again and had your first million in the bank, how would you invest it, assuming you're not a full-time investor, you have another full-time job, you can cover your expenses with other savings for about 18 months, no dependents, and it would be really helpful for my students, for myself and others here, if you could be as specific as possible about asset classes, percentages, whatever you're willing to offer. (Crowd noises)

WARREN BUFFETT: Well, I'll be very simple: I — under the conditions you name, I'd probably have it all in a very low-cost index fund, and it would probably be — you know might be Vanguard — somebody I knew was reliable, somebody where the cost was low.

And because you postulated that you're not going to become a professional investor, I would recognize the fact that I'm an amateur investor, and I would feel that a — unless bought during a strong bull market, which this hasn't been — I would feel that that was going to outperform, to a degree, bonds, under current conditions over a long period of time, and then I'd forget it and go back to work.

Charlie?

CHARLIE MUNGER: Yeah. It's in the nature of things that you aren't going to have a whole lot of screamingly successful professional investors.

You've got a great horde of professionals taking croupiers profits out of the system, most of them by pretending to be professional investors, and that is in the nature of things, too.

But if you don't have any rational prospects of being a very skilled professional investor, of course you should compromise on some simple thing like an index fund.

WARREN BUFFETT: Yeah. And that — you will not get that advice from anybody because nobody gets paid to give you that advice.

So you will have all kinds of people telling you how much better they can do for you than that, and how if you just give them a wrap fee, or give them commissions, or whatever it may be, that they will do better, but they won't do better.

On average, you know, if a thousand other people like you do the same thing, that group of a thousand will do worse if they listen to the people that make pitches at them.

And in the end, why should you expect — I mean, you've got a very perfectly decent return over a 30- or 40-year period by doing what I suggest.

And why should you expect more than that when you don't bring anything to the party? The salesman will tell you that you'll get it, but you won't.

CHARLIE MUNGER: I would give you another word of warning: do not judge stockbrokers generally by the ones you meet at this meeting. We attract some of the most honorable, intelligent stockbrokers in the world. They are not representative of the class.

WARREN BUFFETT: (Laughs) The politician in him just came out

36. No "extreme frugality" but don't spend more than you make

WARREN BUFFETT: OK. We'll do one more, and then we'll break for lunch. Number 7.

AUDIENCE MEMBER: Good morning. My name is Tim Fam (PH). I'm from Austin, Texas.

For my children, I would like to hear from both of you as far as the temptation to keeping up with the Joneses.

And can you give them advice that they can live by with respect to frugality, debt, and work ethic?

WARREN BUFFETT: Yeah. Just tell them to keep up with the Buffetts. (Laughter)

Well, Charlie and I have always been big fans of living within your income, and if you do that, you'll have a whole lot more income later on.

And, you know, it — I think they will, to a considerable extent, not a perfect extent, they will follow the example of their parents.

I mean, if their parents are coveting, you know, every possession of their neighbor, you know, or trying to figure out ways to increase their cost of living without necessarily their standard of living, the kids are likely to pick up on it.

But now you can get the reverse effect. If you get too tough with them, they go crazy later on. (Laughs)

But the — it's — people make that election.

Incidentally, there are people — there are plenty of people that I don't advise to save.

I mean, the real — if you're struggling along and making a reasonable income and you have a job with a 401(k) being put aside for you, and you have Social Security, who's to say whether it's better to defer a dollar of expenditure on your family on a trip to Disneyland or something that they'll get enormous enjoyment out of so that when you're 75 you can have a, you know, 30-foot boat instead of a 20-foot boat?

I mean, there are choices and there are advantages to spending money in various forms for your family when it's young, and giving them various forms of enjoyment or education or whatever it may be.

So I don't — I don't advocate — I may practice — but I don't advocate extreme frugality.

The — and I don't say that it's always better to be saving 10 percent of your income instead of 5 percent of your income.

I think it's crazy to be spending 105 percent of your income, and I think that leads to all kinds of problems, and I get letters from people every day that have experienced those problems.

But, you know, in the end you want to have an internal score card. I mean, you are not a better person or a worse person because you live a different kind of life than your neighbor. Live a life that, you know, is true to yourself.

Charlie?

CHARLIE MUNGER: Yeah. It's obviously the best method to train your children to provide the proper example.

(A person in the audience is shouting)

WARREN BUFFETT: I think we're hearing a child that didn't get that advice. (Laughter)

CHARLIE MUNGER: But of course, even if you do provide the proper example, it's likely not to work —

WARREN BUFFETT: It's noon.

CHARLIE MUNGER: — some of the time anyway.

WARREN BUFFETT: It's noon now. We'll take about a 30 to 40-minute break. We'll come back. Some of those who are in the other room — we always have some openings here after lunch so you might be able to move into the main room.

We'll reconvene, we'll say, at 12:45. We'll go to 3 o'clock.

Afternoon Session - 2008 Meeting

1. No more Klamath Dam questions

WARREN BUFFETT: OK. We're going to go back to work here. We broke off at area seven last time.

I have asked — just so everybody's aware of it — we've had three questions relating to the Klamath situation, and I think that's more than proportional to the interest of the crowd. (Applause)

So we'll skip any more like that. I think the position is known.

2. "Too big to fail" banks can't have "too much risk to manage"

WARREN BUFFETT: And we'll go onto number 8.

AUDIENCE MEMBER: My name is Ola Larson (PH). I live in Salt Lake City. And I think — on Lou Rukeyser, Wall Street Week, 1981 or something. So you must really have impressed me, Warren.

What I'd like to ask you is that looking at the future, have the business practices of the investment banks become so complex that it is not possible for the head of the investment bank to be aware of the exposures to financial risks day-to-day or week-to-week?

WARREN BUFFETT: Yeah. That's an exceptionally good question, and I think the answer, probably, is yes, at least in some places, although there's a few investment bank heads I've got enormous respect for their ability to sort of get their minds around risk.

But I decided, for example, when we bought Gen Re, it had about 23,000 derivative contracts, and I think I could have spent full time on that and not really been able to get my mind around how much risk we could — we were running — under some fairly extreme conditions that I did not think were impossible, but that the people who were running the operation might have thought were impossible, or that might not have cared about it that much because their own incentive compensation was such that if they made a lot of money one year on something, it would work 99 years out of a hundred, they would feel the chances of something going wrong big were very slim.

But I don't want to have it slim. I want to have it none. So I regard myself as the Chief Risk Officer at Berkshire.

If something goes wrong at Berkshire because of — in terms of risk — of the way we run the place, there's no way I can assign that to a risk committee or have some mathematicians come in and make a bunch of calculations and tell me I'm only running a risk that will happen once in the history of the universe or something of the sort.

I think the big investment banks, a number of them — and big commercial banks — I think they're almost too big to manage effectively from a risk standpoint in the way they've elected to conduct their business.

And it's going to work most of the time. So you don't see the risk in a way that — I mean, you don't — if you have a 1 in 50-year risk that a place will go broke, it may not be in the interest of a 62-year-old executive that's going to retire at 65 to worry too much about that.

I worry about everything at Berkshire. So I would say they're too — they're very hard to manage, very hard to have your mind around. I mean, clearly, you've seen cases in the last year where very big institutions, if the CEO knew what was going on, he certainly hasn't admitted it subsequent to what's happened.

It's embarrassing either way, but it's less embarrassing to say I didn't know what was going on than to acknowledge that you knew these kind of activities were going on and you let them go on.

It's — I've been asked for advice on regulation sometimes, and we've seen an extraordinary example, which somehow the press really hasn't picked up on much.

But you had an organization called OFHEO whose sole job was to supervise two big companies, and these big companies were Fannie Mae and Freddie Mac.

And they had a large element of public purpose in them, and they were chartered by the federal government, and they had — their activities had overtones for the whole mortgage and securities markets.

So Congress said, "If we're going to give you all this 'too big to fail'-type protection, in terms of the federal government stepping in and giving you special privileges, we want to keep an eye on you."

So they formed OFHEO and they had 200 people going to work, I presume at 9 o'clock every morning, and going home at 5, and their sole job was to see what these two places were doing. And they turned out to be two of the biggest accounting misrepresentations in the history of the world.

So they were two for two with the only things they had to examine. And I fear that if you tried to do the same thing with the biggest commercial banks or the biggest investment banks, I'm not sure you can keep track of it.

What you need is somebody at the top whose DNA is very, very much programmed against risk. And he is going to have to resist the entreaties of those who work beneath him who say everybody else is doing it, and if they can do it over there and make all this money doing it, why can't we be doing it here?

And that's not easy to do. When you've got a bunch of high-powered people who are used to making in seven figures every year, and they want to do things and they say, "If you don't do them here, we're going to go elsewhere," it's a very tough system to be.

So I would say that, in many ways, there are firms that, in terms of risk, are simply — they are conducting themselves in a way that they're too big to manage.

And if at the same time the government says they're too big to fail, that has some very interesting policy implications.

Charlie?

CHARLIE MUNGER: Well, I would argue that you say that very well. It does have interesting policy implications.

It's crazy to have people get so big and so important that you can't allow them to fail, and allow them to be run with as much knavery and stupidity as permeated the major investment banks.

It's not that Berkshire hasn't had wonderful service from investment banking all these years, because we have. It's just that, as an industry, this crazy culture of greed and overreaching and overconfidence in trading algorithms and so on creeps in.

I would argue it's quite counterproductive for the country, and it ought to be reigned way back.

These institutions are too big to fail, and it was demented to allow derivative trading to end up the way it's ended up and with the current risks that are embedded in the present system.

And it's amazing how few people spoke against it as it was happening. There was just so much easy money to be reported.

A lot of the money that was reported as being earned wasn't really being earned. It was in that wonderful category of assets that I call "good until reached for."

They sit there on the balance sheet, and when you reach for it, it just fades away like — (laughter)

WARREN BUFFETT: He's not kidding.

CHARLIE MUNGER: — mist.

WARREN BUFFETT: He's not kidding.

CHARLIE MUNGER: We had 400 million of that "good until reached for" assets we got with General Re.

WARREN BUFFETT: And they were behaving honorably.

CHARLIE MUNGER: Yes. But at any rate, people pushed it way too far.

In the drug business, they say, “Prove that this works” before they certify the drug.

On Wall Street, they start believing in the tooth fairy, and if one guy is reporting a lot of money, why, everybody else is asking, “Why aren’t we betting on the tooth fairy?”

It’s a crazy culture, and to some extent it’s an evil culture, and it needs a huge reigning in.

And the accounting profession utterly failed us. The worst behaving were the people who set the accounting practice standards. And they’re very bureaucratic and take forever, and they don’t want to do anything real difficult that displeases people.

This is not a combination of wonderful qualities when your job is to set accounting standards, which ought to be dealt with sort of like engineering standards. And they don’t even have the right approach. So there’s a lot wrong.

WARREN BUFFETT: When Charlie and I first got to Salomon, we noticed that they were trading with Marc Rich, who had fled the country. And we suggest — well, we told them — we wanted to quit trading with Marc.

And they said, well, they were making money doing it one way or another, and they said, what the hell did we know about crude oil trading, and they wanted to keep trading with him.

And only by just total directive could we stop our own employees from trading with Marc Rich.

Now, if you can’t stop your people trading with Marc Rich, you know, when you’re focusing on it, just imagine what goes on, you know, in those trading rooms elsewhere.

It’s — if Bear Stearns — I think the Fed did the right thing by stepping in on Bear Stearns.

If Bear Stearns had failed on Sunday night — and it would have — they would have walked over to a federal judge and handed him a bankruptcy petition, I guess, a little after 6 o’clock Midwest time, because that’s when Tokyo opened.

If they had failed, the next day, as I understand it, they had about 14 1/2 trillion — which isn’t as bad as it sounds — but 14 1/2 trillion of derivative contracts.

Now, the parties that had those contracts that had a claim against Bear Stearns would have been required, I think, almost by the contracts they signed, but they would have been required to undo those contracts very promptly to establish the damages they would have against the bankrupt estate.

Just imagine thousands of counterparties around the world, you know, trying to undo contracts, everybody knowing they had to undo contracts in a very, very short period of time.

The 400 million we tried to reach for and didn't find — we had the luxury of spending about four or five years unwinding those contracts. These people would have had four or five hours to do the same thing with everybody else doing it simultaneously.

It would have been a spectacle that would have been of, I think, of unprecedented proportions, and, of course, it would have resulted, in my view, of another investment bank or two going down, you know, within a matter of days.

Because nobody has to lend you money. In fact, that was one of the interesting things that was said at the testimony when they called them down to the Senate Finance Committee.

They — I think two of the witnesses said, we didn't understand — we understood we couldn't borrow money unsecured, if people started looking at us with askance, but they said, we didn't dream we couldn't borrow money secured.

Well, we'd found that out at Salomon that we were having money borrowing money secured 17 years earlier.

When the world doesn't want to lend you money, ten basis points doesn't do much, you know, or 20 basis points, or 50 basis points much, or a bigger haircut on collateral.

If they (don't) want to lend you money, they don't want to lend you money. And if your dependent on borrowed money every day, you have to wake up in the morning hoping the world thinks well of you.

And there was a period there a few months ago when I think every investment bank in the United States was plenty worried about whether people were going to think well of them the next morning.

3. Why we don't do 'due diligence' for even the biggest deals

WARREN BUFFETT: Well, let's go on to number 9.

AUDIENCE MEMBER: Harry Beguy (PH), San Francisco.

Mr. Buffett, I was reading recently in Fortune magazine that when you invested $500 million in PetroChina back in 2001 or 2002, all you did was read the annual report.

Now, I was thinking that most professional investors with the kind of resources that you have would have liked to have done a lot more research and talked to management, maybe regulators, et cetera, et cetera.

The question I have is, how — what is it that you look for when you're reading an annual report like that? How is it that you were able to, and did, make an investment purely on the back of reading that report?

WARREN BUFFETT: Yeah. Well, it was in 2002 and 2003, and the report came out in the spring, and I read it. And that's the only thing I ever did. I never contacted any management. I never got a brokerage report. I never asked for anybody's opinion.

But what I did do is I came to the conclusion that the company — and it's not hard to understand crude oil production and refining and marketing and the chemical operation they have. I mean, you can do the same thing with Exxon or BP or any of them, and I do that with all — I look at them.

And I came to the conclusion it was worth a hundred billion, and then I checked the price and it was selling for 35 billion, roughly.

What's the sense of talking to management? I mean, basically, if you talk to management of almost every company, they'll say they think their stock is a wonderful buy, and they'll give you all the good stuff and skip over things that — it just doesn't make any difference.

Now, if I thought the company was worth 40 billion and had been selling for 35 billion, then at that point you have to start trying to refine your analysis more. But there's no reason to refine your analysis.

I mean, I didn't need to know whether it was worth 97 billion or 103 billion if I was buying it at 35 billion.

So any further refining of analysis would be a waste of time when what I should be doing is buying the stock.

So we really like things that you don't have to carry out to three decimal places, you know.

If you have to carry it out to three decimal places, it's not a good idea. And, you know, it — with something like PetroChina — it's like if somebody walked in the door here and they weighed somewhere between 300 and 350 pounds. I might not know how much they weigh, but I would know they were fat. (Laughter)

That's all I'm looking for, is something that's financially fat. And whether PetroChina weighed 95 billion dollars or 105 billion didn't make much difference. It was selling for 35 billion. If it had been selling for 90, it would have made a difference.

So if you can't make a decision on something like PetroChina off the figures, forget about going further, and that's basically what we did. It's a straightforward report, just like reading another — just like reading Chevron's or ConocoPhillips or something like that. Just as informative.

And you weren't going to learn more, you know, by going out and deciding whether you thought — they've got one huge field in China where the life of it was 13 years or 14 years or something of the sort. They should hit you between the eyes.

Charlie?

CHARLIE MUNGER: Yeah. I would argue that we have lower due diligence expenses than anybody else in America — (laughter) — and that we have had less trouble because we had less expense.

I know of an investment operation in America that pays over $200 billion a year that —

WARREN BUFFETT: Two-hundred million.

CHARLIE MUNGER: 200.

WARREN BUFFETT: Million.

CHARLIE MUNGER: Yes. 200 million. Pardon me.

WARREN BUFFETT: Uh-huh.

CHARLIE MUNGER: — every year to its accountants, a lot to help them with due diligence.

And I think our operation is safer because we think like engineers. We want these margins of reliability. And they're trying to do something really difficult, which is to have fine-grain judgments in very complex areas, and rely on other people to do it who are getting paid fees.

It's a very dicey process to do that. I think it's much safer to do our way.

WARREN BUFFETT: If you think the auditors know more about making an acquisition than you do, you ought to take up auditing and let them run the business, as far as we are concerned.

We are not — I mean, when we get a call on something like the Mars-Wrigley situation, if we don't know enough about Mars and Wrigley by this point so that we have to go out — I still like to go out, of course, and sample all the bars.

So we have a 15 — I mean, I feel I owe that to the Berkshire shareholders (Laughter)

But I'm not going to look at their labor contracts or their leases or anything like that.

If the value of Wrigley depends on a specific lease someplace or a specific commitment to this or that, you know, or a given environmental problem, forget it, you know.

The — there are these overriding considerations that are enormously important, and then there's a whole lot of trivia that doesn't mean anything.

We have never made a — we've made plenty of big investment — I've made plenty of big investment mistakes. I've never made one, in my view, that would have been avoided by conventional due diligence.

And we would have spent a lot of money, and we would have wasted a lot of time and, in some cases, we would have missed deals, simply because we wouldn't have committed fast enough.

We have a significant advantage, and it gets bigger as we get bigger, because, in terms of big deals, people rely more and more often on process, in that when people want to get a deal done, they want to know it's going to be done, they will come to us.

I mean, the Mars people wanted to deal — in terms of this financing aspect of the Wrigley situation — they only wanted to deal with Berkshire because they knew we didn't have any lawyers involved. I'll admit to this group we didn't even have any directors involved.

We just — you know, we got a call, it made sense, and we said yes. And when we say yes, we don't say yes with a material adverse change clause. We don't say yes, if financing is available. We just say yes.

So I can tell people when we make a deal that, if we're going to have 6 1/2 billion available, it's going to be available, you know, whether there's a nuclear bomb goes off in New York City, or whether there's a flu epidemic, or whether Ben Bernanke runs off to South America with Paris Hilton. (Laughter)

The check is going to clear.

And if you're making a deal, you know, the guy that wants the 6 1/2 billion, that assurance is worth something. And you really can't get anyplace — they say, "Well, I'll do it, but I've got to have a due diligence team check this out and do all of that." So it's a real advantage to us, and I don't think there's any disadvantage to us.

4. Buffett on religion: "I'm a true agnostic"

WARREN BUFFETT: Number 10.

AUDIENCE MEMBER: Hi, Mr. Buffett. My name is Matthew Millard (PH). I'm from Norman, Oklahoma, and —

WARREN BUFFETT: We'll forgive that as Nebraskans. (Laughter)

AUDIENCE MEMBER: That's OK. Thank you.

I've been a long-time Berkshire shareholder since I was 16. Really like the company. Really like your investment style, buy and hold forever, kind of beyond the grave.

But my question actually had to do with, do you know and believe in Jesus Christ and have a personal relationship with him.

WARREN BUFFETT: No. I'm an agnostic. And I grew up in a religious household. And if you'd have asked that question of my mother and father, you'd have gotten a different answer.

And I'm a true agnostic. I'm not closer to either a theist or an atheist. I simply don't know, and maybe someday I'll know and maybe someday I won't, but that's the nature of being an agnostic.

Charlie?

CHARLIE MUNGER: I don't want to talk about my religion.

WARREN BUFFETT: OK. Well — (Applause.)

WARREN BUFFETT: Being an agnostic, I don't have to talk about religion. It's very simple. (Laughter)

I don't — obviously I have no opinion on anybody else's religion because that's the nature of being an agnostic.

I wish everybody well on their own.

5. Berkshire takeover after Buffett dies is "very unlikely"

WARREN BUFFETT: Number 11.

AUDIENCE MEMBER: Hello. Good afternoon, Warren and Charlie. I want to thank you for hosting this annual meeting.

My name is James (inaudible) from East Brunswick, New Jersey.

I don't want to sound morbid, but my question is, once you two are gone and Warren's stock is placed in trust and slowly forced to be sold over the years, what safeguards are in place to prevent a hedge fund or LBO shops from joining together and acquiring Berkshire Hathaway, and putting in play and breaking up this wonderful company and endangering the culture of this company?

WARREN BUFFETT: Well, my stock would be sold over about a 12-year period after my death.

During the time of settling the estate, it gets disposed of in the same manner as presently, and then it gets on a time clock.

So that takes a lot of time. I may live a little longer, even, than now, but even if that started now, you would be dealing, I hope, with a company that had a market value much larger than even we presently have, and you'd still have large blocks of stocks held by institutions or people that certainly had a similar philosophy.

There's no guarantee that if somebody wanted to try a 6- or $700 billion takeover — and it might be, you know, a lot larger than that if you go out a ways — that it can't be done.

But I think it would be about as unlikely to happen in the case of Berkshire as any company I can think of in the world.

It can't happen at all, in effect, until sometime after I die. There will be a lot of votes concentrated until that period.

And like Charlie says, I've told — there's this period after I die before this 10-year distribution period kicks in — so I've told my lawyer to make sure that my estate lasts for quite a while. And he says that's like telling your teenage son to have a normal sex life, when you tell a lawyer that.

But it will be a long time. And like I say, if we do anything in the way of decent rates of compounding, you really are talking, you know, one of the very largest companies in the United States.

And I don't think anybody's going — I don't think there's going to be an LBO of General Electric or Exxon, and I think it would be equally difficult with Berkshire. There's no 100 percent guarantee, however.

Charlie?

CHARLIE MUNGER: Yeah. And, besides, Warren doesn't plan to leave very early.

I've heard him say several times when people ask him what he wants said at his funeral. And he always gives the same answer. He says he wants people to say, "That's the oldest-looking corpse I ever saw." (Laughter)

WARREN BUFFETT: And I'm unlikely to change my views on that subject. (Laughs)

But thanks for asking. (Laughs)

6. It's hard to challenge a well-established, popular brand

WARREN BUFFETT: Number 12?

AUDIENCE MEMBER: Hello. My name is Harold Yulean (PH). I'm from Chicago, Illinois.

I'd like you to describe the economic characteristics of the Kraft Corporation, why you feel this is a good business.

WARREN BUFFETT: Well, I would say most of the big food companies are good businesses in that they earn good returns on tangible assets.

And I don't want to get into — particularly into specifics on Kraft — but if you own important, branded products in this country, whether it's Wrigley's or Mars or Coca-Cola, or a number of the Kraft brands, or See's Candy, you have good assets.

It's not easy to take on those products. Just imagine, you know, taking on — Coca-Cola will sell a billion and a half eight-ounce servings of its product around the world today.

There's something in everybody person's mind virtually in the globe about Coca-Cola. It's a product of — since 1886 has been associated with happiness and good value in terms of refreshment and all that.

It's just about impossible, you know, to, in my mind, anyway, to take on a product like that. It's clearly satisfies people in a huge way, you know, everywhere on the globe.

And, you know, it may not be the same — Kraft, for example, has Kool-Aid in the powdered soft drink business. You know, I don't think I'd want to take on Kool-Aid. I'd rather have Coca-Cola. But it's a tough product.

And to get implanted — just think of — to get implanted in people's mind RC Cola around the world. And RC Cola has been around a long, long time. You know, it isn't going to go anyplace. I mean, that is very, very difficult.

And actually, Richard Branson came over to this country — you know, they say that a brand is a promise. I mean, there's a promise involved in picking up a Milky Way, or picking up a Coca-Cola, as to what it's going to deliver to you.

Richard Branson came over seven or eight years ago, 10 years ago, you know, a fellow with a famous airline and all of that, and he came out with something called Virgin Cola. And I thought that was kind of an unusual promise to have in a product. (Laughter)

Never could quite figure that one out, what the promise was. But whatever it was, it didn't work.

And there have been — I don't know how many — Don Keough would know — but there have been hundreds of colas over the years. But in the end, who is going to, you know, buy some substitute cola for a penny a can less, or two cents a can less, than Coca-Cola, or the same thing with See's Candy, or the same thing with Kool-Aid, or whatever it may be.

So we feel pretty good about branded products when they're runaway leaders in their field. And there's nothing unusual about Kraft in their position versus Kellogg or some other people like that.

So there's — the specifics of which one we buy may depend a little bit how we feel about the price. It certainly will make a difference how we feel about the price, the management, and some other factors.

But if you buy in with good branded products and you don't pay too much, you're probably going to do OK.

On the other hand, you're not going to get super rich because the attributes that I've just laid out are pretty well recognized.

Charlie?

CHARLIE MUNGER: I've got nothing to add.

WARREN BUFFETT: OK.

7. Avoid low-probability problems that could destroy the company

WARREN BUFFETT: I don't — do we need to go to the other room or not? Well, let's just go to number 1. If I'm skipping the other room and there are still people in there, somebody can let me know, and we'll go back for them. Number 1.

AUDIENCE MEMBER: Hello, Mr. Buffett, Mr. Munger. My name is Kevin Truitt (PH) from Chicago, Illinois.

My question is this: you have identified four investment professionals who will at some point in time be running the portfolio for Berkshire Hathaway.

What was the criteria that you used to select the four people and what will be the criteria for evaluating them going forward?

WARREN BUFFETT: Yeah. The criteria for selecting, I think, we laid out pretty well in the 2006 annual report.

We obviously look for people that have had pretty good records, but that criteria alone is nowhere near sufficient to come up with the candidates we want.

I mean, we care enormously about human qualities, and we think we can make that judgment in some cases, and in some cases we can't.

I mean — and it's no negative vote on people we skipped over. We just decided we didn't know whether they would be the right kind of person.

We made an affirmative judgment on four, as to both their ability and their integrity.

And I would like to — there was one other item in here, I believe, which I think achieved a little added relevance in the last year. I said, "We therefore need someone genetically programmed to recognize and avoid serious risks," and then I put in italics, "including those never before experienced."

And then I said, "Certain perils that lurk in investment strategies cannot be spotted by one of the models — by use of the models — commonly employed today by financial institutions."

Well, I think that proved to be somewhat prophetic of what happened last year. All of these places had models. I mean, the major banks, the major investment banks.

They would meet weekly at a risk committee, probably, and go over their models, and all of the statistics would be printed in nice columns and everything. And they didn't have the faintest idea what risk they were involved.

You really need, in the investment world, someone very solid, someone you trust, reasonable analytical skills.

But you also need someone that actually can contemplate problems that haven't popped up yet but which are starting to become possibilities, in terms of new financial instruments or new behaviors in markets and that sort of thing.

And that's a rare quality. I mean, that inability to envision something that doesn't show up in your past model, you know, can be fatal.

And Charlie and I spend a lot of time thinking about things that could hit us out of the blue that other people don't include in their thinking.

And we may miss some opportunities because of that, but we feel it's essential when managing other people's money or, for that matter, managing our own money.

So I would say that you might go back and read the 2006 annual report again, but those are the criteria we're looking for and we have identified as being met by the four people we're thinking about.

Charlie?

CHARLIE MUNGER: Yeah. You can see how risk averse Berkshire is. In the first place, we try and behave in a way so that no rational person is going to worry about our credit.

And after we've done that, and done it for many years, we also behave in a way that, if the world suddenly didn't like our credit, we wouldn't even notice it for months, because we have such liquidity and are so unlikely to be — unable to be — pressured by anybody.

That double layering of protection against risk is like breathing around Berkshire. It's just part of the culture.

And the alternative culture is just the opposite. You call a man the Chief Risk Officer, but often he is functioning as a guy that makes you feel good while you do dumb things. (Laughter)

So he's like the Delphic oracle that convinced the Persian king to attack somebody or other. I mean, it's — he's just a dumb soothsayer.

And how can a guy be dumb when he's got a Ph.D. and he can do all this advanced math?

WARREN BUFFETT: Easy.

CHARLIE MUNGER: You can — (laughter) — but you can. It's very — all you've got to do is crave system and computation so much that you torture reality into fitting some model — mathematical model — which really doesn't match, particularly, under extreme conditions.

And then, because of this work that you're putting into everything and these computations about daily trading, risk, and so forth, you feel confident that you've clobbered the risk, but you haven't. You're just clobbered up your own head. (Laughter)

WARREN BUFFETT: Yeah. We really want to run Berkshire, you know — (Applause.)

WARREN BUFFETT: I'll even applaud that one. (Laughs)

We really want to run Berkshire so that if the world isn't working tomorrow the way it's working today and it's working in a way nobody expected, that we don't have a problem.

We do not want to be dependent on anybody or anything else. And yet we want to keep doing things.

So, we've found a way to do it — we think we found a way — to do that. It may give up some of the — well, obviously gives up earning higher returns 99 percent of the time, and maybe 99.9 percent of the time.

Obviously, we could have run Berkshire with more leverage over the years than we have. But we wouldn't have slept as well, and we wouldn't feel comfortable — we'd have a lot of people in this room that have almost all their net worth in Berkshire, including me — and we wouldn't feel comfortable running a business that way.

Why do it? I mean, it doesn't — it just doesn't make any sense to us to be exposed to ruin and disgrace and embarrassment and — for something that's not that meaningful.

If we can earn a decent return on capital, you know, what's an extra percentage point? It just isn't that important.

So we will always try to behave in a way that, A, is not dependent on anybody else evaluating the risk except for us. It cannot be farmed out.

And you've seen what happened to some institutions where the management thought they were farming it out. And, you know, if that means a reasonable return instead of a slightly unreasonable return, we just accept it.

8. "If we can't make a decision in five minutes, we can't make it in five months"

WARREN BUFFETT: Number 2. (Applause)

AUDIENCE MEMBER: Hello, Mr. Buffett. Hello, Mr. Munger. My name is (inaudible) (PH), and I'm from Munich, Germany.

I would like to get back to your point that, as a professional investor, one should be able to act quickly and decisively. That means being able to know what the intrinsic value is and to act within a day or within an hour if the market offers an opportunity.

My question is, how large is the universe of companies which you have in your head whose intrinsic value you know, where you would be able to act within a day or two if the market offered an attractive price to you?

And, secondly, how come you suddenly invest in southern Korea or China?

WARREN BUFFETT: Yeah. We can act — our immediate decision is whether we can figure the — what's being offered out to us or not. I mean, there's a go/no-go signal.

And Charlie and I are often thought to be rude when we think we're just being polite and not wasting the other person's time. So as they start mid-sentence in their first conversation with us, we just say, "Forget it." And Charlie is pretty good at that, and I'm picking it up. (Laughter)

It's — we know very, very, very early in a conversation whether somebody's talking about something that there's any chance is actionable by us.

And we don't worry about the ones we miss. We want to make sure that we don't waste any time thinking about things that, when we get all through thinking about them, we're not going to know enough to make the decision on. So we just rule those out. And that rules a lot of things out.

But then, if it gets through a couple of these filters and makes it into an area where it says this is something that we know enough about to make a decision on, we're ready to move right then.

So we make decisions — we can make a decision in five minutes very easily. I mean, it just is not that complicated.

Now, we know about a number of businesses and industries, and there's a lot of businesses and industries we don't know anything about.

We know a lot of things about certain kinds of bonds, and we know — there's a variety of things we know about, and it's nice if we can expand that universe of knowledge. But the most important thing is that anything that gets through is in an area of knowledge.

And the truth is, if we can't make a decision in five minutes, we can't make it in five months. You know, we're not going to learn enough in the followings five months to make up for the fact that we went in deficient in the first place.

So it's just not a problem around Berkshire. If we get a call and somebody says either they've got a business for sale or — that's what we're going to get on the calls — or if I'm reading a paper, or a magazine, or an annual report, or a 10-K, and I look at a price and there's a significant differential between price and value, we move right then.

And Charlie and I don't need to talk to each other about it. I mean, we both think the same way, and we have generally similar spheres of knowledge.

Charlie?

CHARLIE MUNGER: It's — the answer to your question is, we could make a lot of decisions about a lot of things very fast and very easily.

And the — and we're unusual in that respect. And the reason we're able to do that is there's such an enormous other lot of things that we won't allow ourselves to think about at all.

It's just that simple. I mean, I have a little phrase when people make pitches to me, and about halfway through the first sentence, I say, "We don't do startups." They don't exist.

Well, if you blot out startups, there's a whole layer of complexity that goes out of your life. And we've got other little blotter-out systems. And using those, we finally find out that what remains is still a pretty large territory that we can handle. You think that's fair, Warren?

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: Yeah.

WARREN BUFFETT: And an awful lot of giveaways that people, in the first sentence or two, throw out that, you know, we just know we aren't — you know, it isn't going to work. (Laughs)

And we waste very — I would say — we waste a lot of time, but we waste it on things we want to waste our time on. (Laughs)

We're very selective about that, and then we're good at it. We waste a lot of time. But we're not going to waste it on things we don't want to waste it on.

9. No thoughts on Mexican billionaire Carlos Slim

WARREN BUFFETT: Number 3.

AUDIENCE MEMBER: Mr. Buffett, Mr. Munger, thank you very much for this wonderful rite. Coming — my name is Jorge Garza (PH), and I'm coming from Mexico City.

Coming from there, you have been occasionally compared to — or rather Carlos Slim has been occasionally compared to you, for other reasons than your love of the game of baseball. Can you please share your thoughts on him?

WARREN BUFFETT: Well, I — he came up once with two of his boys, and we had lunch. But that was probably 15 years ago. So I really have no special — I mean, you probably know a lot more about Carlos Slim than what I do.

I read the news stories and all of that. And we had a perfectly pleasant lunch. But that was a long time ago.

And, Charlie, do you have anything?

CHARLIE MUNGER: No. I think you speak for the total knowledge of both of us about Carlos Slim. (Laughter)

WARREN BUFFETT: We'll go down the rest of the Forbes 400 for you, too, if you would like. (Laughter)

10. Human rights issues shouldn't keep a country out of the Olympics

WARREN BUFFETT: OK. Number 4.

AUDIENCE MEMBER: Hello. My name is Andre Stalty (PH). I come from New York City, and I'm thrilled to be here. I'm greatly inspired by you. We follow you in our analyze business class in New York City, a small group of small investors. And my —

VOICE SHOTING: There are human rights violations in the Klamath.

AUDIENCE MEMBER: My question is, would you, or have you, considered asking Coca-Cola to withdraw sponsorship from the Beijing Olympics in light of the immense human rights violations in Tibet, possibly inspiring a new business model that would value humanitarian interest as well as monetary interest?

WARREN BUFFETT: Yeah. I personally — you know, I personally think that the Olympics — and I hope they are — you know, conducted forever with everybody participating.

I think that, personally, it's a mistake to start deciding whether this country should be allowed and this country shouldn't be allowed. (Applause.)

WARREN BUFFETT: I think it's very hard to grade a couple hundred countries that might be participating, according to how their behavior was.

I mean, we didn't let women vote in the United States, you know, until 1920. So we went 140 or so, 130 years, and I would say that was a great human rights violation, but I would have hated to see the United States banned from the Olympics, you know, in the years prior to that because of that.

So I just think it's a terrible mistake to try to get into — the Olympics have a wonderful event. I think the more people participate in them, the better. And I think that, on balance, they contribute to a better world over time.

So I would not start getting punitive about it. But I understand your motives on it. Thank you.

Charlie?

CHARLIE MUNGER: Well, Warren understates my position. (Laughter)

WARREN BUFFETT: I usually understate his position. This is a man of strong opinion.

CHARLIE MUNGER: And I would say to you people who are distressed by imperfections in China, ask yourself your question — the question — is China more, or less, imperfect as the decades have gone by?

And the answer is China is moving in the right direction. And as long as that's happening, I think it's a grave mistake to just pick the worst thing about somebody you don't like and obsess about it.

WARREN BUFFETT: Yeah. The U.S. has moved in the right direction over years. (Applause.)

WARREN BUFFETT: Our Constitution said blacks were three-fifths of a person, you know. We've moved a long way, and we're far from perfection.

But I think you do better with people that you're working with to — if they're going in the right direction, largely, to encourage them.

You may want to nudge them a bit, but I don't think the Olympics is the right way to do it.

11. We'll reduce our reliance on coal, but not soon

WARREN BUFFETT: Let's go to number 5.

AUDIENCE MEMBER: Hi. My name is Jessica Helmers (PH), and I'm from Scottsdale, Arizona.

My question is, what future trends do you see in the coal industry? Do you think its cost advantage will outweigh its environmental impact?

WARREN BUFFETT: Well, I think in the short-term the world is going to use more coal, you know, and I think that there's no question that there's an environmental disadvantage to it.

And as the — I think the world will slowly — maybe more rapidly than that — but we will figure out better ways to do the things that coal does, that will be more environmentally friendly over time, but it isn't going to happen fast.

I mean, if you shut down the coal-generated utilities in the United States, you know, this — we would not be able to hold this meeting in a room with the lights on.

So it's a very tough problem to solve, or to even make big inroads on in a short period of time.

Now, we — at MidAmerican — we've put in a lot of wind capacity in the last five years or so — probably about as much as anybody has.

But we are dependent a lot on coal. It's cleaner coal than it was 20 years ago, but — and we will be dependent on it for a long time.

And, you know, it's a worldwide problem, obviously. The Chinese are building coal plants at a very rapid rate.

It's going to require cooperation and leadership on a worldwide scale. And, frankly, the United States is not in a great position in terms of leadership because, you know, per capita, we've done as much to this planet of a negative nature as any country in the world.

So we — it's a little tough for us to go around preaching to people, but we will need a leader, in my view, that can sort of transcend our record of the past and get cooperation from major countries around the world.

I don't think it's going to be — but I don't think it's going to be fast. Charlie is less pessimistic on this than I am.

Charlie?

CHARLIE MUNGER: Well, I think the people who are very against the use of coal should reflect: which one they'd rather use up fast — the hydrocarbons, the oil and natural gas, or the coal?

I would rather use up the coal because it's less desirable as a chemical feed stock for what we need to feed the world.

And so I would argue that there's an environmental reason, in terms of human kind, for being very pro-coal use.

Most people don't think that way, but I do. (Laughter)

WARREN BUFFETT: Charlie does not find comfort in numbers.

CHARLIE MUNGER: No.

12. Don't lump regional banks together

WARREN BUFFETT: Number 6.

AUDIENCE MEMBER: My name is Rosat Bastar (PH). I live in Sacramento, California.

The stock prices of most small, regional banks have become more attractive in the past one year. Do you have any opinions about regional banks as investments? And if you were going to purchase shares, what are the areas that you would carefully examine?

WARREN BUFFETT: Yeah. I don't think you should make a categorical decision about something like — however you define them — small, mid cap, whatever, regional, or national banks for that matter.

So much depends on the character of the institution, which will probably be a reflection, to a great degree, of the type of CEO you have.

And I — a bank can mean anything. It can — you know, it can mean an institution that's doing all kinds of crazy things.

It can — there was one called the Bank of the Commonwealth up in Detroit many years ago that went to extremes, and it was very popular on Wall Street for a while.

It could mean the soundest of institutions. We had one — we owned a bank — the only bank Berkshire's ever owned in its entirety — in Rockford, Illinois, run by a fellow named Gene Abegg.

And, you know, it wouldn't make any difference whether it was a super-regional or a regional or a small or a mid-cap bank, there's no way Gene Abegg could run anything other than a super-sound bank.

So I don't think you should — I think you should know something about the culture of the management and the institution to make a firm buy decision on a bank, and that's hard to do for 99 percent of the banks.

We own stock, as you know — it's in our report — Wells Fargo and U.S. Bank and M&T up in Buffalo. And in all three cases, I think I understand quite well the DNA of the institution, in terms of how it behaves.

That doesn't mean those places are immune from problems, because they'll have problems. But it means — but it does mean — they're immune, in my view, from what I would call institutional stupidity. And I would not say that all banks are immune from that.

As a matter of fact, there was a very wise man named — I think it was Morris Cohen (Morris Schapiro) — that said, "There are more banks than bankers," and if you think about that awhile, you'll get my point. (Laughs)

Charlie?

CHARLIE MUNGER: Well, I think the questioner is onto something.

So many of our very large banks, both here and in Europe, have sort of cast a pall of disgrace over the whole industry, and that is undoubtedly pounded down the stocks of some small banks that there's nothing at all wrong with.

So I think you're prospecting in a likely territory.

WARREN BUFFETT: Yeah, but you can find a few big banks —

CHARLIE MUNGER: Yes. (Crosstalk)

WARREN BUFFETT: And it — I don't know if you took the 20 smallest banks in Florida and the 20 largest banks in Florida which group would be in better shape, in terms of the Florida real estate situation.

CHARLIE MUNGER: It's a territory that has some promise. (Laughter)

WARREN BUFFETT: That is a wildly bullish statement from Charlie. (Laughter)

13. Nuclear proliferation is the "primary problem of mankind"

WARREN BUFFETT: Number 7. I'm going to go out and buy that stuff as soon as we get out of here. (Laughter)

AUDIENCE MEMBER: Good afternoon. My name is Matt Thurman (PH), Chicago, Illinois.

Mr. Buffett, Mr. Munger, what are your thoughts on preventing further nuclear proliferation, given recent events in Syria, Iran, North Korea, and other countries? Thank you.

WARREN BUFFETT: Yeah. Well, it's the great problem of mankind, along with proliferation or the spread of other weapons of mass destruction in the chemical and biological field.

The genie is out of the bottle on nuclear knowledge, and more and more people are going to know how to do enormous damage to the rest of the human race as the years go by.

You'll have a given percentage of the population that are psychotics or megalomaniacs or religious fanatics or whatever, and will wish ill on their neighbors.

And the choke point will be — presumably — will be materials, and to a degree, deliverability.

I think there — people generally associate weapons of mass destruction threats these days with terrorists and rogue organizations of some sort and not so much with nations.

But I regard both as being enormous threats to the future of mankind, and we have not made much progress in that respect to — we should be doing everything possible to reduce access to materials — and I've even had a few thoughts on that which you can look up on the Nuclear Threat Initiative, probably on the website.

And we've got a proposal, actually, that might reduce by a tiny bit the rationale, at least, for all kinds of nations having highly-enriched uranium and that sort of thing.

But it's the — it is the primary problem of mankind. If you've got 6 1/2 billion people, you're probably going to have — in the world — you're probably going to have close to twice the number of people who wish ill on their neighbor than you had when you had 3 billion people.

And for a long time, if you were a psychotic or something, you could pick up a stone and throw it at the guy in the next cave, and you moved onto bows and arrows and rifles and cannon. But for millennia, the ability to inflict massive damage was quite limited, no matter how crazy you were.

And since 1945, when Einstein said that the atomic bomb, as they called it then, "has changed everything in the world except how men think." That was a comment made shortly after Hiroshima.

We live in a world where exponentially — has experienced exponential growth — in the ability to inflict harm on somebody else, and we haven't gotten rid of the nuts or the people who want to do it.

And it is — whether it's, you know, Iran or you name it, or whether it's terrorist organizations or whatever, you know, we live in a very, very, very dangerous world on that that is getting more dangerous as we go along.

And we've been very lucky since 1945, you know, when the Cuban missile crisis came along in the '60s, you know, it might have been 50-50, and I think we were lucky we were dealing with Khrushchev and we were lucky that Kennedy behaved the way he did. But we were lucky, and Charlie and I talked a lot about it in the '60s at the time.

But it won't go away. And you would hope, at least in the United States, that we have an administration, whether it's Republican or Democrat, where that's at the top of the agenda, trying to figure out a way to minimize that risk.

You can't eliminate it. It is out of the bottle. But we've got to — it should be paramount to minimize the risk that we really get into something that involves, you know, deaths on a scale that nobody's ever contemplated before.

Charlie?

CHARLIE MUNGER: Yeah. Well, you talk about deaths on a scale that people have never contemplated before.

People have recently figured out that the population of Mexico probably had a population decline of 95 percent caused by European man bringing in his pathogens. And it was a pretty big civilization that went through that little knothole.

These things can happen and have happened. And look at Mexico today. I don't think it's going to wipe out the species.

WARREN BUFFETT: Well, that's —

CHARLIE MUNGER: I hope that cheers you up. (Laughter)

WARREN BUFFETT: The cockroaches will survive.

It's a very good question. I wish I knew a better answer.

14. Buffett's advice for young people

WARREN BUFFETT: Number 8.

AUDIENCE MEMBER: Good afternoon. I'm (inaudible) from Apopka, Florida. I would like to thank you for this wonderful opportunity to learn so much more about finances and, at the same time, have a wonderful time. It's been fun.

WARREN BUFFETT: That's great.

AUDIENCE MEMBER: I teach at Valencia Community College in Orlando, Florida. I teach office administration and business.

I applaud my students for investing in themselves by enrolling in college. I also want to stress financial independence and financial freedom. I do this by telling them that slow and steady wins the race; also, good, sound financial management; and then the law of reciprocity.

I have them track every expense over a period of time. Also they buy, theoretically, one stock and track that, too, over a period of time. We keep track of the current financial news, current news, and also they have research papers. (Applause.)

AUDIENCE MEMBER: Thank you. (Laughter)

They research FICO scores, the credit reports, Clark Howard, Suze Orman, the top ten billionaires, not because — (Applause)

WARREN BUFFETT: I think —

Could you move onto your question, then, please? (Laughter)

AUDIENCE MEMBER: Yes.

WARREN BUFFETT: But thank you.

AUDIENCE MEMBER: OK. What else should I be doing to lead them — (laughter) — to make sound financial decisions and to have happy, sound financial life?

WARREN BUFFETT: I'm ready to hire your entire class right now. (Laughter)

Well, I think you're telling — you're giving them some very good advice. I think that the most important investment you can make is in yourself.

I mean, very, very, very few people get anything like their potential horsepower translated into the actual horsepower of their output in life.

And potential exceeds realization to just an enormous factor with so many people.

And I — one illustration you might try with your class — I tell them this when I talk to high school groups — just imagine that you're 16 and I was going to give you a car of your choice today, any car you wanted to pick, and — but there was one catch attached to it — it was the only car you were going to get in the rest of your life, so you had to make it last there. You can pick out the fanciest you want, a Maserati, whatever it might be.

How would you treat it? Well, of course you would read the owner's manual about five times before you turn the key in the ignition. You'd keep it garaged. Any little rust, you would get taken care of immediately. You'd change the oil twice as often as you were supposed to, because you know it has to last a lifetime.

And then I tell the students, you get one body and one mind, and it's going to have to last you a lifetime, and you better treat it the same way, and you better start treating it right now, because it doesn't do you any good to start worrying about that when you're 50 or 60 and the rust — that little speck of rust — has turned into something big.

So anything your students do to invest in their mind and body — particularly your mind — we didn't work too hard on the bodies around here, but — (laughter) — you know, it pays off. It pays off in an extraordinary way.

Your best asset is your own self. And you can become, to an enormous degree, the person you want to be.

When I get classes in universities, I just ask them to imagine they were going to buy one of their classmates to own 10 percent of for the rest of their life. Which one would they pick?

They wouldn't pick the one with the highest IQ, or necessarily the one with the highest grades. They'd pick the person that's going to be effective.

And the reason people are effective is because other people want to work with them. They want to be around them. And other people they don't want to be around.

And those are qualities than an individual picks up — being generous, being humorous, being on time, not claiming credit for more than you do but rather less than you do, helping out other people — all kinds of human qualities that turn other people on, and then there's things that turn other people off.

And those are habits, and they're the habits that you pick up when they're the age of your students. The habits they have today will follow them throughout life, so why not have good ones? So that's the only message I would give your students. (Applause)

CHARLIE MUNGER: Well, I've got a specific suggestion that answers your specific question. I would add to that extensive repertoire of yours by teaching them to avoid being manipulated to their disadvantage by vendors and by lenders using the standard tricks of the vendor and lender trade.

And you couldn't start with a better book than Cialdini's "Influence," and I think Bob Cialdini, who is a shareholder, is here somewhere in this audience.

And so I have a new textbook to — I suggest you add to your class — which is Cialdini's "Influence." And he's just got a new book that's coming out and for sale in Omaha today, I think, for the first time, and that's called "Yes."

So here's two books that I suggest you add to your class.

WARREN BUFFETT: OK. (Applause.)

15. Buffett on owning sports teams

WARREN BUFFETT: Let's go to number 9.

AUDIENCE MEMBER: I'm Andrew (inaudible) from Chicago, Illinois, and I'm nine years old, and I'm a big baseball fan. I know you like baseball, and my favorite team is the Chicago Cubs.

Would you like to buy the Chicago Cubs from Sam Zell? (Laughter)

And my question is, do you think buying baseball teams is a good investment? (Applause)

WARREN BUFFETT: Well, it's been a good investment. It's been a good investment. It's not been a good investment necessarily because the earnings have gone up so much, although cable television multiplied the value in a big way.

In effect, television expanded the stadium. Wrigley Field, I think, probably seats less than 40,000, maybe.

So you had 40,000 seats available when I went there for my first major league baseball game in 1939. But then along came television, and then cable television, and pay — in effect, pay-cable television for baseball or sports networks, and that multiplied the seats in a huge way.

Now, a lot of that went to the players, but some of it stuck to the owners.

I am not a — when I was your age, I would have thought if I made a lot of money, I would have bought a team.

But there were a lot of things I thought I would do then — (laughter) — I haven't done subsequently.

So, I don't think — if the Cubs sell for 700 million, and you've got a percentage of that in your bank account — now, I don't think I would buy in at that price.

There's a psychic income to many people in owning sports teams. I mean, it makes them famous. Maybe not in the way they anticipated when they bought the team, but the — you know, it is a way to instant celebrity and recognition and all that.

And as long as we live in a society where people have loads and loads of money, a certain percentage of people are going to want to become known for the fact that they have done very well in life, and a sports team is certainly one way of doing it. That isn't the only reason people buy them, obviously.

But I will say this, you are not the first one that's asked me about buying the Cubs. (Laughs)

I've had calls — not from Sam — but from other people, and it's — I think I'll leave that to you.

Charlie? You know anything about buying a sports team? He would be a tougher sell than I would. I might do something kind of stupid like that, but —

CHARLIE MUNGER: Well, you've already done it once.

WARREN BUFFETT: Yeah. (Laughter) Touche.

16. U.S. may be so rich it doesn't need to save

WARREN BUFFETT: Number 10.

AUDIENCE MEMBER: Mr. Chairman, Mr. Vice Chairman, my name is Andy Peake (PH), and I'm from Weston, Connecticut.

Americans at the individual, municipal, state, and federal levels, historically, do not save.

On the other hand, Asians save approximately 40 percent of their income. Living beyond one's means is an American way that obviously cannot continue.

First, why is it that Americans do not save, and, secondly, what can we do to correct this long-term problem? Thank you.

WARREN BUFFETT: Yeah, well certainly the savings rate in this country is — has fallen significantly and may even be negative, although it does seem to me that the value of the country, in real terms, I think, does increase quite significantly decade to decade.

So I'm not sure exactly how it happens without savings, but it does seem to me that this country, as a whole, is worth considerably more than it was 10 or 20 or 30 or 40 years ago, in real terms. So something good has happened.

But the propensity to save, that almost seems innate, in at least the great majority of cases. I mean, we've got our friend from Florida teaching children to save, and I think that has some impact.

And I should have thanked Andy Heyward for that terrific cartoon this morning, and he's got a program that I'm participating in that we think — in cartoon form — might influence a few younger people towards saving.

If you own Berkshire stock, you're automatically saving, because we retain earnings, and you're indirect interest in those retained earnings is a form of saving.

So you can spend every dollar of your income that comes in the other way, and if you own Berkshire, you are, net, saving, which is a practice I have now been following for 40 years. Sometimes to my family's consternation.

I don't know that the — you know, the savings rate is based on calculations made on consumption and imports and so on. We are importing $700 billion more of goods and services than we're exporting. And that means that somebody else is doing our savings for us, basically, as we export ownership and claims against America.

I think that's going to have consequences over time, but we are so rich that it may not be really apparent.

I think the average American's standard of living is going to improve, in real terms, although I think it may be very, very, very disproportionate, the extent to which the — particularly the super-rich — benefit compared to those in the middle class.

But, net, I think the country will be — even with our present policies, the net — in net real terms, the value on a per capita basis of the country will increase from decade to decade.

But nothing like it will, in places like a China or Korea percentage-wise, where the savings rate is very high.

This country may not save very much because it may not need to save very much. We have $47,000 of GDP per capita. It may not be distributed very well, but we are one very, very, very rich country.

And a very rich country may not need to save as much as a country that's trying to reach its potential.

Charlie?

CHARLIE MUNGER: I've got nothing to add to that.

17. Why Buffett is going to Germany

WARREN BUFFETT: OK. Number 11.

AUDIENCE MEMBER: Mr. Buffett, Mr. Munger —

WARREN BUFFETT: This sounds serious.

AUDIENCE MEMBER: My name is — (Laughter)

I'm used to that. My name is Uta Bauda (PH) from Munich. Again, a guy from Germany.

We're going to meet in around about 14 days' time again in Germany, in Frankfurt at the Union Club. May I ask you a little bit ahead of the others, what your reasons for coming to Germany? Thank you.

WARREN BUFFETT: Yeah. It's very simple. We want more — not that there have been hardly any so far — but we would like more family owners of German businesses — in some cases in the family, maybe a hundred years, maybe 20 years, whatever it might be — we want more owners who, when they feel some need to monetize their business, think of Berkshire Hathaway.

We want to be on their radar screen. We want to be in the same position — we want them to be in the same position that the Wertheimer family was or Paul Andrews' family was here not so long ago, or the Pritzker family was.

When they have some reason — could be a variety of them — that they wanted to convert a — the ownership of a good — very good — company about which they care a great deal — translated into money, to think about calling us. And if they care about their business, we are their best call.

And I don't think we're anywhere near as prominent on the radar screen in Germany as we are in the United States, and it's something I probably should have done more about earlier, but now I'm going to hit four countries in Europe in a few weeks.

And when we leave, I think we'll be somewhat better known — what we're looking for, what we can do for those companies, why they should give us a call — I think we'll be better known a month from now than we are now.

Charlie?

CHARLIE MUNGER: Yeah. And Germany is a particularly advanced civilization, in terms of inventiveness and engineering.

You go into an American printing plant now, and the names on the machines are all German — not all, but mostly.

Now, some of the German names are Germans that came over here to America and formed printing equipment businesses. But it's just amazing the influence that the Germans have had on field after field in America. It's a very logical place for us to be looking.

WARREN BUFFETT: Sounds like maybe Charlie should go. (Laughter)

18. Munger on housing: A "particularly foolish mess"

WARREN BUFFETT: Number 12.

AUDIENCE MEMBER: My name is Len Yaffe. My wife, Ruth, and I live in Tiburon, California.

I was wondering if the current economic stresses remind you of any prior period in U.S., or any other nation's, history, and, if so, is there anything we can learn from the prior period that might help us manage the current period better?

WARREN BUFFETT: Well, they're all a little different and they all have similarities. But this one, obviously, had more of its origins in the mortgage field and in terms of the residential real estate bubble.

But the troubles that begin in one area have a way of spreading to other areas.

But I would say that, in my lifetime, it's been — I can't remember one where this particular residential real estate bubble has sent out the shock waves and the exposure of other practices elsewhere to — as to their weaknesses — like this one.

But I don't think there's any magic to the analysis or anything like that. I think that some stupid things were done that won't be done soon again, and they won't be done exactly the same again, but variations of them will pop up at some point.

Because humans are what lead to stupidity in behavior, and there are these sort of primal urges that — in terms of getting rich and using leverage and all of that sort of thing, and wanting to believe in the tooth fairy — that pop up from time to time in human behavior, and sometimes they pop up on a very big scale.

The — in terms of having any great insights on solutions or anything of the sort, I don't have them.

Charlie?

CHARLIE MUNGER: No. It was a particularly foolish mess. Now, at earlier meetings we talked about some idiot that decided that a credit delivery grocery business, like the old Buffett store —

WARREN BUFFETT: Webvan.

CHARLIE MUNGER: Yeah, Webvan. You know, internet-based delivery service for groceries. A really asinine idea. (Laughter)

And, of course, it met an ignominious failure.

That was smarter than what the people did in this mortgage field. (Laughter)

It was a lot smarter. I just wish we had those brilliant people back that gave us Webvan. (Laughter)

Which, by the way, reminds me of my general attitude toward political developments.

I have a rule and it's as follows: the politicians are never so bad you don't live to want them back. (Laughter)

WARREN BUFFETT: Pollyanna. (Laughs)

19. Financial crisis-era assets should be valued at market

WARREN BUFFETT: Number 1.

AUDIENCE MEMBER: I'm Bob Kline (PH) from Los Angeles.

Following up on the last question, can you speak to the accuracy of the financial statements of the world's major financial institutions?

What should be done to properly value their assets, like mortgages, leverage loans, CDOs, and other assets that are, as Charlie says, as good until reached for?

Since the leverage at these banks and brokerage firms is generally 15 to 20 times their tangible net worth, there isn't much margin for error. So what can be done to improve the integrity of financial statements?

WARREN BUFFETT: Well, it's a very tough thing.

I still lean strongly — there's a lot of controversy now about whether you should use fair value, however that may be determined. In many cases, it's very hard to determine.

But whether you should use that or some other figure like cost because people say that the present values are unrepresentative and so on.

I think that you get into more troubles as a society when you start openly valuing things at prices that make no sense in terms of what's going on, than whether you do your best to estimate them, even though those estimates may prove, many cases, optimistic later on, and certainly inaccurate in some respects.

So I would stick with financial institutions at least having to attempt to report their assets on a fair value basis.

But when you get into instruments — I've used this illustration before — but when you get into a CDO-Squared, if you read a standard mortgage — residential mortgage-backed certificate — security — it may consist of thousands of mortgages backing up this instrument.

And then that instrument may be traunched into 30 or so different traunches where each party has a different claim on the waterfall of funds received.

Now, that instrument itself can be kind of difficult to understand. But then you take that and you create a CDO by taking some of the lower junior tranches of a bunch of these RMBSs, maybe 50 of them, and then you create a CDO out of this.

So now you create, out of a whole bunch of junior — and perhaps — and very correlated — and perhaps kind of lousy instruments — and then you put them in a CDO and say that because you

put them all together and diversified, in theory, you've got a lot of triple-A traunches of that — was a big error to start with.

And then when you took the lower tranches of a bunch of CDOs and stuck them into a CDO-Squared, that was nuttiness squared.

And if a residential mortgage-backed security had a 300 page prospectus and you had to read 50 of those to understand a CDO, you're up to 15,000 pages.

And if you had to read 50 more CDO prospectuses, and the material behind that, to evaluate a CDO-Squared, you had to read 750,000 pages, presumably, to evaluate one security, and that was madness.

To let people value that sort of thing, because they say the market at ten cents on the dollar is unrepresentative, so instead of using that, I'll use the hundred cents I paid, I think would be an abomination.

And I think that the discipline, mild as it may be, of telling managements that you're going to have to value this stuff at market may keep them from doing things that they would otherwise do that would be very stupid if they think they can get away with valuing them at some fictitious — or at cost — which would be fictitious, in terms of markets.

I lean toward the market value approach. I don't know — when you get into really complex instruments — I just don't know how you value them.

Charlie was on the audit committee at Salomon, and they would spend hours and hours and hours — and I think you found one that was mismarked by 20 million or something like that, back when 20 million was real money.

CHARLIE MUNGER: It was a floating plug.

WARREN BUFFETT: Well, we had the floating plug, too, yeah.

CHARLIE MUNGER: No. I — there's a lot that goes on in the bowels of American industry that is not pretty. (Laughter)

WARREN BUFFETT: So you can add sausage and laws — maybe you should add accounting practices to the things that people shouldn't have to witness the making of. (Laughs)

CHARLIE MUNGER: I think that part of the trouble comes from some prominent members of my own Republican Party.

Some of these people overdosed on Ayn Rand and what they learned in Economics 101, and they sort of got to thinking that if anything happened as a natural response of human nature in

a free market system, even if it was an ax murder, it was a desirable development and part of a wise distribution of risk.

I don't know why grown-ups get these silly ideas, but they do. And one of them headed the Federal Reserve. I think Alan Greenspan did a very good job, averaged out, but he did overdose a little on Ayn Rand, and he had this tendency to believe that, if it happened in a free market, it had to be all right.

I think there's some things that should be forbidden. And I think that the world would have worked better if a lot of things that were described as follows: this is a financial innovation which will diversify risk — if that phrase had been banned from all discourse, the country would have worked better. (Applause.)

20. Plea from audience to read the U.S. Constitution

WARREN BUFFETT: Area 2.

AUDIENCE MEMBER: I'm Larry Tidrick (PH) from Elk Grove Village, Illinois.

My question is really more a plea. Get out your copies of the U.S. Constitution, read over Article 1, Section 8, the enumerated powers; the Ninth Amendment; the Tenth Amendment; and give Roger Pilon a call at the Cato Institute.

I think everything that's gone on today, regarding finance and economics, has to do with our Constitution, which was really based upon property rights and contract rights.

WARREN BUFFETT: Do you have a question, though, or not?

AUDIENCE MEMBER: Yes, sir.

WARREN BUFFETT: OK.

AUDIENCE MEMBER: Well, no, I don't. (Laughter)

WARREN BUFFETT: I sort of suspected that.

AUDIENCE MEMBER: I made — yeah. I made the plea and —

WARREN BUFFETT: OK.

AUDIENCE MEMBER: — that's really it.

WARREN BUFFETT: OK. Well, thank you.

21. American's distaste for mass transit won't change soon

WARREN BUFFETT: We'll go on to number 3.

AUDIENCE MEMBER: Yes. My name is Dan Schmidt (PH) from Burnsville, Minnesota.

And I'd like your opinion on the future of mass transit and how it relates to railroads, and will these transit systems and railroads be expanding in the future?

WARREN BUFFETT: In terms of passenger traffic?

AUDIENCE MEMBER: Correct.

WARREN BUFFETT: Yeah. The American public, basically, doesn't like mass transit. I mean, it endures it when it needs to, but there — the American love affair with the car, which translates to aversion to mass transit, is sort of overwhelming.

I used to be involved in bus companies. And, you know, you can make all kinds of rational arguments to people about the use of mass transit, but one person to a car seems to be an enormously popular method of moving around.

And I think it's unlikely that we see a large expansion in mass transit in this country. I think the American public is, for one reason or another, whether they're trained to it or whether it's just something in their genetic makeup, they do not like going out and waiting for buses or whatever it may be or trams.

And they want to get in their car. And even with gas at close to $4 a gallon, they want to go someplace and pay a lot of money to park, and they don't want to double up in the cars very much.

And that just seems to be human nature. Maybe it will change, but I never like to bet on something that has gone in one direction for a long time reversing unless the evidence is pretty strong.

Charlie?

CHARLIE MUNGER: You have a more optimistic view of it than I have. (Laughter)

22. Munger's in "awkward position of agreeing with Al Gore"

WARREN BUFFETT: Number 4.

AUDIENCE MEMBER: Hi. I'm Tom Nelson (PH) from North Oaks, Minnesota.

My question is for Charlie. If you were in charge of this country, how would you handle Al Gore's alleged climate crisis?

CHARLIE MUNGER: Well, of course, I'm in the awkward position of agreeing with Al Gore that we shouldn't be burning up so many hydrocarbons. (Applause)

I've just got a different reason. His brain doesn't work the way mine does, and you'll have to judge for yourself which you prefer. (Laughter)

WARREN BUFFETT: We'll have a vote a little later. (Laughter)

23. Disagreement on danger of CDOs

WARREN BUFFETT: Number 5.

AUDIENCE MEMBER: Good afternoon, Warren and Charlie. This is Frank Martin from Elkhart, Indiana.

WARREN BUFFETT: Nice to have you here, Frank.

AUDIENCE MEMBER: Thanks, Warren. One of my favorite aphorisms from you is, "To win, first you must not lose." The excerpt that you read a few moments ago from the 2006 annual report contemporized that aphorism, and I think was both prescient and prophetic. Notice I said "prophetic" and not "pathetic."

WARREN BUFFETT: I noticed.

AUDIENCE MEMBER: Yeah, thank you. (Laughter)

On several of occasions disagreeing with Alan Greenspan, you have called derivatives "weapons of financial mass destruction." We both have our own record as believing the country is currently in recession.

If corporate default rates, which are currently benign, escalate — should the recession deepen and we get back to default rates common in 2002 or back in the early 1990s — will the credit default swap problem materialize as a serious threat to financial stability?

I respect you as one of the all-time great pricers of risk. You and Charlie must consider selling insurance without reserves, without really understanding pricing risk, to be an abomination.

Is there a chance, in your judgment, that the CDS market may eclipse the subprime mortgage market as the next element of the financial meltdown?

WARREN BUFFETT: The credit default swap market — you can see these figures — and I'm repeating them, but I'm not validating them — but the last number that came out was over 60 trillion.

Now, there's lots of double counting in these things and all that sort of thing. But there's no question there's a lot of money on both sides of the credit default market. They call them credit default swaps.

You can think of it as insurance against a company going bankrupt. And actually, we have written two types of derivatives on a big scale. We explained them in the annual report. We explained them again in the press release that was issued yesterday.

And we have insured in the — we've written insurance that pays off to somebody else in the event of default by companies listed on given indices.

There's a high-yield two, a high-yield three, and so on, through high-yield nine. And we've written various traunches of risk on those things, and I think we're going to make significant money, although we could lose money, too. It will depend on credit experience in the next few years.

I think there's no question that the corporate default rate will rise. That's been cranked into the calculations I make in writing this insurance.

The question of whether the credit default swap — the size of that market — will lead to any kind of chaos in the financial markets, I think probably not.

Although if a Bear Stearns had failed, for example, you would have had a huge unwinding of contracts by counterparties who had to establish their claims and all that.

So you would have had rather chaotic conditions. Any time — a credit default swap is merely a payment by one party to another. So it's a negative-sum item. When somebody loses money on a subprime loan, on a mortgage loan, they've lost real money.

Now, somebody may be buying the house later on cheaper than they would have bought it earlier on, but there is not an equivalent swap of dollars at the time that a subprime loan goes bad.

With the credit default swaps, there is a swap of dollars. So as long as the counterparties pay, if A is up a million dollars, B is down a million dollars.

And the question is, is if you get a Bear Stearns-type situation that didn't get interrupted by the Fed, whether counterparties would fail and you get a lot of trip hammer effects, I don't think that's going to happen, and I think the chances of it happening were reduced significantly by what happened — by the fact that the Fed stepped in at Bear Stearns.

We've had enormous payments from one party to another, in terms of credit default swaps. Just — there's a firm called Fairfax Financial that made — a relatively small firm — that made, as I remember, well over a billion dollars in credit default swaps.

Well, somebody else lost the billion, but it didn't pose a threat to the system. It posed a threat to the guy that lost the billion, but he had to keep up putting up collateral, presumably, as he went along. So it wasn't like he was called overnight for the billion.

So even though credit defaults — they've been the most volatile of instruments in the last 18 months. There's been nothing that's swung as much — maybe there's some subprime index that has — but virtually it's credit default swaps.

And that really hasn't created a problem in the system. So I do not think — particularly if the Fed is going to step in when they see investment banks that they regard as too big to fail, or banks too big to fail — I don't think that that will probably be the cause of the problem.

It may be a cause of enormous losses to some institutions, but those will be matched by enormous gains by other institutions.

I do think there's that — the problem of the overnight disruption in the system, which Bear Stearns, I think, would have produced.

But maybe something else could produce it — a nuclear bomb going off in Manhattan, you know, or something of the sort. That kind of thing — where there's a discontinuity, where the collateral posted the previous day was totally inadequate in terms of the kind of movement that occurred — certainly at that time something like having a large amount of CDSs out there, it could cause a — it could exacerbate — the chaos to a considerable degree.

Charlie?

CHARLIE MUNGER: Well, I think the answer to your question is — could we have a big-time mess out of credit default swaps — is yes, we certainly could.

I think the stupidity, while it's extreme, is not as bad as sweeping bums off skid row to give them mortgages to buy houses, but it's pretty bad.

One of the things that's interesting about credit default swaps, which isn't much commented on, is, let's say you're insuring against the outcome that people will lose money on a hundred million dollar bond issue.

And the credit default swaps, instead of amounting to a hundred million, amount to 3 billion. Now you've got people with $3 billion worth of contracts that really have a big incentive in having somebody fail.

And, of course, they may manipulate, in some fraudulent or extreme way, with the little loss in order to make the big collection.

It was insane for the regulators to allow this outcome to occur in America. It used to be illegal for people who had no insurable interest just to buy life insurance on people they didn't know, because society was afraid that people would do that and then kill the person.

And that happened in Los Angeles. We had sweet, little, old ladies that got bums off skid row. They'd take out life insurance on them. And when two years went past, they murdered them with fake hit-run accidents.

So human nature is up to this kind of venality where you have big payoffs. And why we wanted these enormous bets to be made, in relatively unregulated markets, where the bets are 10, 20 times the size of the original bond issue, it's crazy.

If I did this as a satire, you'd say I was overstating. I'm understating. We have a major nut case bunch of regulators and proprietors in this field. (Applause.)

WARREN BUFFETT: Charlie, one; invisible hand, zero.

24. Buffett's test on when to pay a dividend

WARREN BUFFETT: Let's go to number 6.

AUDIENCE MEMBER: Hi, Mr. Buffett and Mr. Munger. My name is Neharick Aneela (PH), and I'm from Houston, Texas. I'm a seventh grader, and I'm 12 years old.

I was wondering why you do not believe in dividends, Mr. Buffett, when your mentor, Ben Graham, believed in dividends?

He influenced you in so many ways, but why weren't you influenced into believing in dividends? Thank you.

WARREN BUFFETT: Well, I had to show a little individuality in some respect. (Laughter)

Well, the answer is I do believe in dividends in a great many situations, including many of the ones at companies in which we own stock.

The test about whether to pay dividends is whether you can continue to create more than one dollar of value for every dollar you retain.

And there are many businesses — take See's Candy, which we own. See's Candy has paid everything, virtually, out to us that they earn because they do not have the ability within See's Candy to use large sums, which they earn, intelligently in their business.

So it would be an enormous mistake for See's Candy to retain money. So they distribute to Berkshire, and we hope that we move that around in some other area where that dollar becomes worth $1.10, or $2.10, in terms of present value terms.

If we do that, the shareholder — whether they're taxable or whether they're not taxable, whether they're a foundation or whether they're living on income, even — they are better off if we retain the money.

Because if they were going to get a dollar in dividends and it became worth $1.10 or $1.20 in market value immediately on a present value basis, they're better off selling a small percentage of their stock and realizing the required amount that way, and they will have more money when they get all through doing that than if we paid it in dividends.

But if the time comes — and it will come someday — when the — if the time comes when we don't think we can use the money effectively to create more than a dollar of market value per dollar retained, then it should be paid out.

And, like I say, we do that individually within Berkshire. But because we have this ability to redistribute money in a tax-efficient way within the company, we probably had more — we had more reason — to retain all of our earnings.

If See's Candy were a standalone company, we would simply pay out a lot of the earnings, practically all of the earnings, in dividends. Just like we do now, except it goes to Berkshire.

We like our — we like the companies in which we have investments to pay to us the money they can't use efficiently in their own business.

In some cases that's a hundred percent of what they earn; in some cases it's 0 percent of what they earn. We own some stocks that don't pay any dividends.

Costco paid a very small — did they pay any dividend for a while, Charlie, or —?

CHARLIE MUNGER: They — while they were growing very rapidly, they paid no dividend. And finally they are paying one.

Berkshire's policy is much the same. Warren has always planned on paying large dividends out of Berkshire, and he does it in the mode of Saint Augustine when he said, "God give me chastity, but not yet."

WARREN BUFFETT: Right. I've always admired that.

25. Electricity in the Southwest

WARREN BUFFETT: Number 7.

AUDIENCE MEMBER: Good afternoon, Mr. Warren Buffett, Charlie Munger, shareholders. My name is Richard Meyers (PH). I'm from (inaudible), California.

In respect to your opinion earlier, I will go down to southern California, Arizona, and ask a question: if you have knowledge or interest of the corridor for electricity coming in from Arizona into California, or is it going from California back into Arizona?

As California is known as a sunny state, we should be able to have our own solar systems.

I have one more. I have saved $20 by staying in line since 2:30 this morning, and I would like to know which one of these books that I could buy that would do me the most good and my tribe. Thank you.

WARREN BUFFETT: Well, tell us about the books. You mean the whole list?

AUDIENCE MEMBER: Which one I can buy for $20. (Laughter)

WARREN BUFFETT: Probably the ones that haven't sold very well today. (Laughter)

Yeah, I'm not that familiar with the prices of the books. We try to have a good selection in there.

I'm a little partial to Larry Cunningham's books because — Larry Cunningham's book — because it consists of a rewriting of all my own stuff. (Laughs)

But, no, we — I think the whole collection is fine. I wouldn't want to recommend one over the other.

And I know nothing about that first subject. Charlie, do you?

CHARLIE MUNGER: Well, I know a little. You know, California did cause coal plants to be built near the Grand Canyon because California didn't want the pollution and it needed the electricity and they were nearer the coal mines.

And eventually that caused huge uproar, a lot like we heard about the Klamath River. And the Grand Canyon, that started having some visibility problems.

And I think those things are, maybe, decommissioned, or about to be decommissioned, so it's a very complicated subject. And I'm glad to (inaudible) it back to you.

26. Berkshire's international ambitions

WARREN BUFFETT: OK. Number 8.

AUDIENCE MEMBER: Good afternoon, Mr. Buffett and Mr. Munger. My name is Argin Row (PH).

I am in the eighth grade and live in Pearland, Texas. I ask everybody to call me Tony after reading your 2006 annual report. (Buffett laughs)

My question is, do you foresee Berkshire buying any businesses in either India or China in the near future?

WARREN BUFFETT: Well, Tony, I — (laughter) — we would like to. The odds are somewhat against us buying in any major country except the United States, if you'd name any specific one.

I would hope in the next three years that we might get a chance to buy one or two companies of size. We're always buying little companies that fit in with our present operations.

Right now, MiTek has several possibilities outside the United States. But in terms of major businesses that Berkshire would buy, you know, if we get lucky, we'll buy one or two in the next three or four years that's based outside the United States. We're trying to increase our chances of doing that.

Whether it turns out to be China or India or Germany or the UK or Japan, who knows? There's a lot of luck in that, just in terms of specific families thinking of us specifically. But we certainly wouldn't rule it out.

We've looked into developing an insurance company in some countries. Both India and China restrict the percentage ownership that Berkshire could have in any domestic insurance company.

They both have laws that would keep us — I know it's 25 percent in China, and I think it's 25 percent, but it may have been changed in the last year or so, in India.

We do not probably want to go into a country to own 25 percent of a company like that. We would want the laws to allow us to do more than that to make it worth our while.

But I hope we own something. You know, certainly at your age, you will see the day that Berkshire owns businesses — in my view, you'll see the day — that they own — we own — businesses in both countries.

Charlie?

CHARLIE MUNGER: Nothing to add.

27. Parents, spouses, and books are the best teachers

WARREN BUFFETT: OK. Number 9.

AUDIENCE MEMBER: Gentlemen, my name is Jim James (PH) from Minnesota, actually Minneapolis.

And clearly you've inspired 38,000 people here today. Books have been written about you, not solely for your financial prowess, but because of the people you are.

Could you share two or three influences on you — those kinds of people, educators, who have shaped your thinking on life and on investing? Thank you.

WARREN BUFFETT: Well, I think the biggest educator — certainly in my case — initially was my father. I think probably Charlie would say the same thing.

And I think— it's very, very, very important who you marry, and I've been lucky there, and those are great teachers.

And, of course, I had Ben Graham. I had Dave Dodd. I've learned from all kinds of people who have written books over the years. I've just devoured those and picking up things here and there.

Charlie learned a lot from Ben Franklin, obviously. (Laughter)

Many people think Ben Franklin learned a lot from Charlie but — (laughter) — we both learned a few things from my grandfather at the grocery store.

But your parents — I tell the students, you know, the most important job you have, you know, is being the teacher to your children.

I mean, you're the ultimate teacher. You're this big — great big thing. You provide warmth and food and everything else, and they're learning about the world, and they're not going to change a lot of that when they get into graduate school or sometime.

So it's — and you don't get any rewind button. You don't get to do it twice. So you have to do your best as a teacher, and you teach by what you do, not by what you say, with these young things.

And by the time they've got to a place where they're entering a formal school, they probably learned more from you than they're ever going to learn from anybody else.

Charlie?

CHARLIE MUNGER: Well, I would argue that differing people learn in differing ways.

With me, I was put together by nature to learn from reading. If some guy's talking to me, he's telling me something I don't know, I don't want to know, I already know, or he's doing it too slow or too fast.

In reading, I can learn what I want at the speed that works. So, to me, reading is the — is what works for my nature. And to all of you who are at all like me, I say welcome. It's a nice fraternity.

WARREN BUFFETT: You probably learn more from your father than you learned from all the reading you did, don't you think? In terms of actually forming you?

CHARLIE MUNGER: Well, yes. And my father was the type that always did more than his share of the work and took more of his share of the risk.

All that kind of example was, of course, very helpful, and you learn it better from a person close to you.

But in terms of the conceptual stuff, I'd say I learned it from books.

Now, those are fathers in a difference sense.

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: The people who wrote the books.

WARREN BUFFETT: Yeah, well, one book, obviously, changed my whole financial life when I — you know, by happenstance, probably, I picked it up. I can't even remember why I bought it back when I was in school.

But if you just keep picking up enough books, you'll find some — you'll learn a lot. And I used to go through the Omaha Public Library and just go down the shelves.

It's kind of an inefficient way, maybe, of doing it, but I — if you read 20 books on a subject you've got an interest in, you're going to learn one hell of a lot. You don't know which one you're going to learn it in, though.

So I would take having — if you get the right parents, you're very, very lucky, and it's better than going to the right school or anything of the sort. And to get the right spouse, you've just doubled down.

28. Big institutional shareholders should take stand on CEO pay

WARREN BUFFETT: Number 10.

AUDIENCE MEMBER: Gentlemen, my name is Mark Slaybe (PH). I'm from Chicago. I probably am going to be one of the last guys speaking today or asking a question, so on behalf of 31,000 people, I'm going to thank you —

WARREN BUFFETT: Thank you.

AUDIENCE MEMBER: — for the respect and the common courtesy that you've exhibited to the shareholders today.

WARREN BUFFETT: Thank you. (Applause.)

AUDIENCE MEMBER: My question is this: I work for a fairly large computer company that's a competitor of Mr. Gates up there.

And I'm curious. As a common, ordinary person and a common shareholder, what can we do, 31,000-some odd folks here do, about the outrageous salaries, bonuses, perks, of these enormous corporations that we will never have a chance at, a shot at, you know, working with them and that amount of wealth?

What would you advise us as common shareholders that we can do to get this country going the right way and get this issue going the right way? (Scattered applause)

WARREN BUFFETT: Well, I would say that, particularly on the compensation part, you can't do much. But there are a relatively few people that could do a lot.

If the half a dozen or so largest institutional owners took a position on extreme cases — I don't advise them trying to go after each one — but when they see something egregious, if they would simply withhold their votes and issue a short statement as to why they're doing it, that has an effect on — particularly on boards of directors.

Big shots don't like to be embarrassed. You know, they don't — that gets their attention.

The press is an enormous factor. Press is more of a factor in changing corporate behavior than regulations or Sarbanes-Oxley or that sort of thing.

You want a good press. But the press needs the material, and material — the raw material — for that could be — I won't name the organizations — but if you take the half a dozen largest investment organizations, I think it would have a lot of impact if they would — if they could get together on short statements when they felt pay was really egregious.

And I don't know what you individually can do about that, and I don't know how you create the incentives for the big institutions to do that. I mean, it doesn't really do that much for them personally.

I don't think — I think the — a lot of the checklists that institutions use as determining whether they approve of corporate practices are asinine. I mean, they — you know, they get sort of the "issue du jure" and they get — and they get people recommending how they vote their proxies, which is kind of silly. I don't know why they can't make up their minds themselves as to what they think is proper or not proper.

And Ben Graham, many years ago, bemoaned investors as a bunch of sheep. And with big institutions, I haven't seen much difference.

But it wouldn't take many of them. It would take — just take a few of the biggest ones and the willingness to speak out. And the press would do the rest and boards would respond to that. But they're not going to respond to you. I mean, I have to be, you know, totally candid about that.

A small shareholder can write the most persuasive arguments in the world, and I've been on the board where they've received those kind of letters. And basically they turn them over to the corporate secretary and say, "Take care of this," or something of the sort.

It takes real effective pressure to change behavior where the behavior is in the self-interest of that person. People do not give up self-interest easily.

Charlie?

CHARLIE MUNGER: It's an old question. In England, where they had a lot of class warfare, they at one time got the income taxes up to, like, 90 percent, so there just wasn't any possibility of having a large earned income except, you know, by not reporting it. The tax rate got that high.

That was quite counterproductive for England. And so you can get a politics of envy that sort of ruins the economic system because of the natural resentments and jealousies and so forth involved in excessive compensation.

I think the people taking the compensation have a moral duty not to take it. I would argue that, when you rise high enough in American business, you get a moral duty to be underpaid, not to get all you can, but to actually be underpaid.

If people are going to be generals and archbishops and everything else at low pay, I don't see why leaders of great big enterprise can't take less than the last dollar. (Applause.)

WARREN BUFFETT: Do you have any suggestions on how to implement those sentiments? (Laughs)

CHARLIE MUNGER: It's very difficult.

WARREN BUFFETT: Yeah. Charlie has always said that envy is — strikes him — as the silliest of the seven deadly sins, because when you're envious of somebody, you feel worse, and they don't feel any — they feel fine. In fact, maybe they even feel better because you're envious.

So it's such a counterproductive type of thing. So we — rule out as envy as part of your repertoire. And gluttony — (laughs) — I mean, that has some upside to it. (Laughter)

Maybe temporary, may have some side effects, but, you know, there's something to gluttony. And so lust, of course, I'll let Charlie speak to. (Laughter)

29. It's OK to buy pharmaceuticals as a group

WARREN BUFFETT: Number 11.

AUDIENCE MEMBER: Hello. I'm Clemmon Low (PH) from Toronto, Canada. I want to thank you for the wonderful meeting, and I think I've learned a lot more here in a few hours than many, many more hours during university days.

My question is, you have invested in drug companies such as Johnson & Johnson and Sanofi. How do you evaluate the pipeline of these companies and know if their competitive advantage is, indeed, enduring?

WARREN BUFFETT: Well, that's a good question. And unlike many businesses, when we invest in something like pharma, we don't know the answer on the pipeline. It will be a different pipeline anyway five years from now.

So we don't know whether Pfizer or Merck, you know, or you name it — Johnson & Johnson — we don't know which of those will come up with a blockbuster commercial drug three or four years from now, and we don't try to assess it.

What we do feel is, if we have a group of those companies bought at reasonable prices, that, overall, pharma will do well. Maybe not quite as well as they have in the past, but they're doing something enormously important. They're doing something that should offer chances for decent profits over time.

And we do not pick one by one. I could not tell you what's the number one potential in the pipeline of a J&J or Sanofi — whatever which one you want to name.

So I think in that area, actually, a group approach makes sense, which is not the way we would go at the banks or something of that sort.

I do think if you buy pharma stocks at a reasonable multiple, a group of them, you know, you'll probably do OK five or 10 years from now. I would not know how to pick the specific winner.

Charlie?

CHARLIE MUNGER: Well, you speak from a position where you have a monopoly of our joint knowledge about pharmacology. (Laughter)

30. Why Berkshire sold PetroChina

WARREN BUFFETT: We will move on to number 12. (Laughter)

He gets cranky later in the day. (Laughter)

And we're just about to the end, but we can take a couple more.

AUDIENCE MEMBER: Thank you. My name is Chow (PH). I'm coming from Woshi, China. Thank you, Mr. Buffett and Mr. Munger, for your unbiased opinion on China and Olympics.

To support your (inaudible), we have a group of chairmen and CEOs from Chinese public companies to come to Omaha and try to learn from the best of how public companies should be run. (Applause.)

WARREN BUFFETT: Thank you.

AUDIENCE MEMBER: Quick question. We observed that you made a quick trade on PetroChina, not a typical buy and hold approach you do on investment.

Our question is, when it's come to selling PetroChina, what comes to your mind, and what suggestions you may have to these group of executives?

There are positive forces in China, and we welcome everyone to our Olympics.

WARREN BUFFETT: Thank you. (Applause.)

And I met Dr. Guo from the China Investment Corp here a few months ago. Was very impressed by him, had lunch with him here in Omaha.

The PetroChina decision, just as we made it to buy it at a valuation overall of 35 to 40 billion when we thought it was worth a hundred billion, when oil was at $70 a barrel, roughly, 75, I figured the value was about 275 or 300 billion and we could sell it at that price.

And we no longer felt it was undervalued compared to other oil companies, so we sold our stock. Now, incidentally, right after we sold it, it went up dramatically because, as you know, they issued A shares in in China, and it became very popular.

And at one time, PetroChina became the most valuable company in the world, measured by market value, which would have come as enormous surprise to investors seven or eight years earlier. So they've done a terrific job.

And if it went down to a price that we thought was a discount — a significant discount — to its valuation, we would buy PetroChina again. The — in terms of — I'm not so sure we don't have a lot to learn from the Chinese in terms of business currently, more than they have to learn from us. I'm not sure we would want some of our practices to spread to China.

It's a remarkable society, what's going on there now. And I did go to Dalian not long ago, and I must have traveled for 45 minutes from the center of town out to our plant there. And I just saw, really, hundreds of plants that — factories that had developed in recent years.

The economy is — the Chinese people are starting to realize their potential. I mean, what it amounted to is you had — for centuries — you had people of lots of ability but a system that did not unleash their potential.

And now it's starting to be unleashed, and that's why you're getting very substantial GDP growth per capita, and I think it will continue.

I would just look for the best practices in American industry as you see them and copy them, and I would discard the rest. And I think it's — you know, it's how you learn about human behavior. You try to — if you look at an effective individual, you try to figure out why they're effective.

You know, why is Don Keough, why are Tom Murphy — why are they so effective? Why do people want to be around them? Why are they leaders? Why do people love them? And you see certain human qualities, and you should copy those qualities.

And when you see some guy that should have everything going for him and everybody in town hates him, you know, you want to make sure you don't have any of those qualities.

Well, I would do the same thing in terms of looking at businesses in this country, and try to look for what I admire and emulate it, and make sure that — try very hard — not to let the things that you find over here that are distasteful to you creep into your own system.

Charlie?

CHARLIE MUNGER: Well, I hope you'll go back to China and tell them that you met at least one fellow that really approves the Confucius emphasis on reverence for elderly males. (Laughter)

WARREN BUFFETT: I think you should dig yourself out of that by including females too, Charlie. (Laughs)

CHARLIE MUNGER: That wasn't Confucius's idea.

WARREN BUFFETT: Oh, OK. No reason why you can't modify it. (Laughs)

31. Future hopes for Berkshire

WARREN BUFFETT: OK. We'll have one more, and then we'll take a break and come back for the business meeting in a few minutes. Number 1.

AUDIENCE MEMBER: Mr. Buffett and Mr. Munger, my name is Cynthia Beeman (PH), and I'm from Atherton, California.

This is my question: what is your fondest hope for Berkshire Hathaway moving forward in time?

WARREN BUFFETT: Well, in a general way, I hope for two things — obviously, I hope for decent performance, and I hope that the culture we have is maintained, which is both shareholder-oriented and manager-oriented, and that we are regarding as the best home in the world for large, wonderful, family businesses.

And I think the performance and those two goals will be intertwined, in a way.

And I not only hope, but I fully expect, that what we've tried to build into Berkshire lives far beyond, you know, my tenure as CEO. And I think it will because, A, we've got the right candidates to succeed me.

And, beyond that, we have a board, we have a bunch of managers, that have all seen how well the system works. So I think that we have about as strong a culture as you could find in this country among American businesses.

And if that's continued, as I'm really sure it will be for a long, long, long time, I think we will get decent results. We won't get great results, because you can't get them from our size base.

But that's my hope — that people 20 years from now, if they have a fine business they've spent a couple of generations building, and they immediately think — if they have to sell it for some reason — they think Berkshire Hathaway is the place where we want the ownership of this business and we want — as managers, we want to continue working at that company for the rest of their lives.

And if we can achieve that, we'll have something fine for shareholders, and we'll have something fine for managers and owners of those businesses we buy.

Charlie?

CHARLIE MUNGER: Yeah. I would say that I would like to see Berkshire even more deserved to be an exemplar, and I would like to see it have more actual influence on changes in other corporations.

I think there are things that have happened here that will be useful to others.

WARREN BUFFETT: We'd also like it to have the oldest living managers, but that's a minor point. (Applause.)

WARREN BUFFETT: Thank you. Thank you. Thank you. Thanks.

32. Break before formal business meeting

WARREN BUFFETT: The — now what we'll do is we'll just break for five or so minutes, and then we'll reconvene and have the formal business meeting.

After that, at 4 o'clock, for the international visitors, those from outside of North America, we will — Charlie and I — will meet with them personally.

And I thank you all for coming. I hope you come back next year and bring your friends. Thank you. (Applause)

33. Formal business meeting

WARREN BUFFETT (in progress): — appropriate questions you may have concerning their firm's audit or the accounts at Berkshire.

Mr. Forrest Krutter, our secretary at Berkshire, he will make a written record of the proceedings.

Miss Becki Amick has been appointed inspector of elections at this meeting. She will certify to the count of votes cast in the election for directors.

The named proxy holders for this meeting are Walter Scott and Marc Hamburg.

Does the secretary have a report of the number of Berkshire shares outstanding, entitled to vote, and representative at the meeting?

FORREST KRUTTER: Yes, I do. As indicated in the proxy statement that accompanied the notice of this meeting that was sent to all shareholders of record on March 5, 2008, being the record date for this meeting, there 1,081,013 shares of Class A Berkshire Hathaway common stock outstanding with each share entitled to one vote on motions considered at the meeting, and 14,033,343 shares of Class B Berkshire Hathaway common stock outstanding with each share entitled to 1/200th of one vote on motions considered at the meeting.

Of that number, 883,428 Class A shares and 10,921,716 Class B shares are represented at this meeting by proxies returned through Thursday evening, May 1.

WARREN BUFFETT: Thank you. That number represents a quorum, and we'll therefore directly proceed with the meeting.

First order of business will be a reading of the minutes of the last meeting of shareholders. I recognize Mr. Walter Scott who will place a motion before the meeting.

WALTER SCOTT: I move that the reading of the minutes of the last meeting of the shareholders be dispensed with and the minutes be approved.

WARREN BUFFETT: Do I hear a second?

Barely, I hear a second. The motion has been moved and seconded. Are there any comments or questions? We will vote on this motion by voice vote. All those in favor say "aye."

VOICES: Aye.

WARREN BUFFETT: Opposed? The motion is carried.

34. Election of board of directors

WARREN BUFFETT: First item of business is to elect directors.

If a shareholder is present and wishes to withdraw a proxy previously sent in and vote in person on the election of directors, he or she may do so.

Also, if any shareholders are present who not turned in a proxy and desires a ballot in order to vote in person, you may do so.

If you wish to do this, please identify yourself to meeting officials in the aisles who will furnish a ballot to you. Would those persons desiring ballots please identify themselves so that we may distribute them.

I now recognize Mr. Walter Scott to place a motion before the meeting with respect to election of directors.

WALTER SCOTT: I move that Warren Buffett, Charles Munger, Howard Buffett, Susan Decker, William Gates, David Gottesman, Charlotte Guyman, Don Keough, Tom Murphy, Ron Olson, and Walter Scott be elected as directors.

WARREN BUFFETT: Is there a second to the motion? Somebody second the motion.

VOICE: Second.

WARREN BUFFETT: OK. It has been moved and seconded that Warren Buffett, Charles Munger, Howard Buffett, Susan Decker, William Gates, David Gottesman, Charlotte Guyman, Don Keough, Thomas Murphy, Ronald Olson, Walter Scott be elected as directors.

Are there any other nomination? Is there any discussion? The nominations are ready to be voted upon.

If there are any shareholders voting in person, they should now mark their ballots on the election of directors and allow the ballots to be delivered to the inspector of elections.

Would the proxy holders please also submit to the inspector of elections a ballot on the election of directors voting the proxies in accordance with the instructions they've received.

Miss Amick, when you're ready, you may give your report.

BECKI AMICK: My report is ready. The ballot of the proxy holders in response to proxies that were received through last Thursday evening cast not less than 935,155 votes for each nominee.

That number far exceeds a majority of the number of the total votes related to all Class A and Class B shares outstanding.

The certification required by Delaware law of the precise count of the votes, including the additional votes to be cast by the proxy holders in response to proxies delivered at this meeting, as well as any cast in person at this meeting, will be given to the secretary to be placed with the minutes of this meeting.

WARREN BUFFETT: Thank you, Miss Amick. Warren Buffett, Charles Munger, Howard Buffett, Susan Decker, William Gates, David Gottesman, Charlotte Guyman, Donald Keogh, Tom Murphy, Ronald Olson, Walter Scott have been elected as directors.

35. Formal business meeting adjourns

WARREN BUFFETT: Does anyone have any further business to come before this meeting before we adjourn?

If not, I recognize Mr. Scott to place a motion before the meeting.

WALTER SCOTT: I move this meeting be adjourned.

WARREN BUFFETT: Is there a second?

VOICES: Second.

WARREN BUFFETT: A motion to adjourn has been made and seconded. We will vote by voice. Is there any discussion? If not, all in favor, say “aye.”

VOICES: Aye.

Berkshire's Corporate Performance vs. the S&P 500

Year	Annual Percentage Change in Per-Share Book Value of Berkshire (1)	Annual Percentage Change in S&P 500 with Dividends Included (2)	Relative Results (1)-(2)
1965	23.8	10.0	13.8
1966	20.3	(11.7)	32.0
1967	11.0	30.9	(19.9)
1968	19.0	11.0	8.0
1969	16.2	(8.4)	24.6
1970	12.0	3.9	8.1
1971	16.4	14.6	1.8
1972	21.7	18.9	2.8
1973	4.7	(14.8)	19.5
1974	5.5	(26.4)	31.9
1975	21.9	37.2	(15.3)
1976	59.3	23.6	35.7
1977	31.9	(7.4)	39.3
1978	24.0	6.4	17.6
1979	35.7	18.2	17.5
1980	19.3	32.3	(13.0)
1981	31.4	(5.0)	36.4
1982	40.0	21.4	18.6
1983	32.3	22.4	9.9
1984	13.6	6.1	7.5
1985	48.2	31.6	16.6
1986	26.1	18.6	7.5
1987	19.5	5.1	14.4
1988	20.1	16.6	3.5
1989	44.4	31.7	12.7
1990	7.4	(3.1)	10.5
1991	39.6	30.5	9.1
1992	20.3	7.6	12.7
1993	14.3	10.1	4.2
1994	13.9	1.3	12.6
1995	43.1	37.6	5.5
1996	31.8	23.0	8.8
1997	34.1	33.4	.7
1998	48.3	28.6	19.7
1999	.5	21.0	(20.5)
2000	6.5	(9.1)	15.6
2001	(6.2)	(11.9)	5.7
2002	10.0	(22.1)	32.1
2003	21.0	28.7	(7.7)
2004	10.5	10.9	(.4)
2005	6.4	4.9	1.5
2006	18.4	15.8	2.6
2007	11.0	5.5	5.5
2008	(9.6)	(37.0)	27.4
Compounded Annual Gain – 1965-2008	20.3%	8.9%	11.4
Overall Gain – 1964-2008	362,319%	4,276%	

Notes: Data are for calendar years with these exceptions: 1965 and 1966, year ended 9/30; 1967, 15 months ended 12/31.

Starting in 1979, accounting rules required insurance companies to value the equity securities they hold at market rather than at the lower of cost or market, which was previously the requirement. In this table, Berkshire's results through 1978 have been restated to conform to the changed rules. In all other respects, the results are calculated using the numbers originally reported.

The S&P 500 numbers are **pre-tax** whereas the Berkshire numbers are **after-tax**. If a corporation such as Berkshire were simply to have owned the S&P 500 and accrued the appropriate taxes, its results would have lagged the S&P 500 in years when that index showed a positive return, but would have exceeded the S&P 500 in years when the index showed a negative return. Over the years, the tax costs would have caused the aggregate lag to be substantial.

BERKSHIRE HATHAWAY INC.

To the Shareholders of Berkshire Hathaway Inc.:

Our *decrease* in net worth during 2008 was $11.5 billion, which reduced the per-share book value of both our Class A and Class B stock by 9.6%. Over the last 44 years (that is, since present management took over) book value has grown from $19 to $70,530, a rate of 20.3% compounded annually.*

The table on the preceding page, recording both the 44-year performance of Berkshire's book value and the S&P 500 index, shows that 2008 was the worst year for each. The period was devastating as well for corporate and municipal bonds, real estate and commodities. By yearend, investors of all stripes were bloodied and confused, much as if they were small birds that had strayed into a badminton game.

As the year progressed, a series of life-threatening problems within many of the world's great financial institutions was unveiled. This led to a dysfunctional credit market that in important respects soon turned non-functional. The watchword throughout the country became the creed I saw on restaurant walls when I was young: "In God we trust; all others pay cash."

By the fourth quarter, the credit crisis, coupled with tumbling home and stock prices, had produced a paralyzing fear that engulfed the country. A freefall in business activity ensued, accelerating at a pace that I have never before witnessed. The U.S. – and much of the world – became trapped in a vicious negative-feedback cycle. Fear led to business contraction, and that in turn led to even greater fear.

This debilitating spiral has spurred our government to take massive action. In poker terms, the Treasury and the Fed have gone "all in." Economic medicine that was previously meted out by the cupful has recently been dispensed by the barrel. These once-unthinkable dosages will almost certainly bring on unwelcome aftereffects. Their precise nature is anyone's guess, though one likely consequence is an onslaught of inflation. Moreover, major industries have become dependent on Federal assistance, and they will be followed by cities and states bearing mind-boggling requests. Weaning these entities from the public teat will be a political challenge. They won't leave willingly.

Whatever the downsides may be, strong and immediate action by government was essential last year if the financial system was to avoid a total breakdown. Had one occurred, the consequences for every area of our economy would have been cataclysmic. Like it or not, the inhabitants of Wall Street, Main Street and the various Side Streets of America were all in the same boat.

Amid this bad news, however, never forget that our country has faced far worse travails in the past. In the 20th Century alone, we dealt with two great wars (one of which we initially appeared to be losing); a dozen or so panics and recessions; virulent inflation that led to a 21½% prime rate in 1980; and the Great Depression of the 1930s, when unemployment ranged between 15% and 25% for many years. America has had no shortage of challenges.

Without fail, however, we've overcome them. In the face of those obstacles – and many others – the real standard of living for Americans improved nearly *seven*-fold during the 1900s, while the Dow Jones Industrials rose from 66 to 11,497. Compare the record of this period with the dozens of centuries during which humans secured only tiny gains, if any, in how they lived. Though the path has not been smooth, our economic system has worked extraordinarily well over time. It has unleashed human potential as no other system has, and it will continue to do so. America's best days lie ahead.

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*All per-share figures used in this report apply to Berkshire's A shares. Figures for the B shares are 1/30th of those shown for A.

Take a look again at the 44-year table on page 2. In 75% of those years, the S&P stocks recorded a gain. I would guess that a roughly similar percentage of years will be positive in the next 44. But neither Charlie Munger, my partner in running Berkshire, nor I can predict the winning and losing years in advance. (In our usual opinionated view, we don't think anyone else can either.) We're certain, for example, that the economy will be in shambles throughout 2009 – and, for that matter, probably well beyond – but that conclusion does not tell us whether the stock market will rise or fall.

In good years and bad, Charlie and I simply focus on four goals:

(1) maintaining Berkshire's Gibraltar-like financial position, which features huge amounts of excess liquidity, near-term obligations that are modest, and dozens of sources of earnings and cash;

(2) widening the "moats" around our operating businesses that give them durable competitive advantages;

(3) acquiring and developing new and varied streams of earnings;

(4) expanding and nurturing the cadre of outstanding operating managers who, over the years, have delivered Berkshire exceptional results.

Berkshire in 2008

Most of the Berkshire businesses whose results are significantly affected by the economy earned below their potential last year, and that will be true in 2009 as well. Our retailers were hit particularly hard, as were our operations tied to residential construction. In aggregate, however, our manufacturing, service and retail businesses earned substantial sums and most of them – particularly the larger ones – continue to strengthen their competitive positions. Moreover, we are fortunate that Berkshire's two most important businesses – our insurance and utility groups – produce earnings that are not correlated to those of the general economy. Both businesses delivered outstanding results in 2008 and have excellent prospects.

As predicted in last year's report, the exceptional underwriting profits that our insurance businesses realized in 2007 were not repeated in 2008. Nevertheless, the insurance group delivered an underwriting gain for the sixth consecutive year. This means that our $58.5 billion of insurance "float" – money that doesn't belong to us but that we hold and invest for our own benefit – cost us less than zero. In fact, we were *paid* $2.8 billion to hold our float during 2008. Charlie and I find this enjoyable.

Over time, most insurers experience a substantial underwriting loss, which makes their economics far different from ours. Of course, we too will experience underwriting losses in some years. But we have the best group of managers in the insurance business, and in most cases they oversee entrenched and valuable franchises. Considering these strengths, I believe that we will earn an underwriting profit over the years and that our float will therefore cost us nothing. Our insurance operation, the core business of Berkshire, is an economic powerhouse.

Charlie and I are equally enthusiastic about our utility business, which had record earnings last year and is poised for future gains. Dave Sokol and Greg Abel, the managers of this operation, have achieved results unmatched elsewhere in the utility industry. I love it when they come up with new projects because in this capital-intensive business these ventures are often large. Such projects offer Berkshire the opportunity to put out substantial sums at decent returns.

Things also went well on the capital-allocation front last year. Berkshire is always a buyer of both businesses and securities, and the disarray in markets gave us a tailwind in our purchases. When investing, pessimism is your friend, euphoria the enemy.

In our insurance portfolios, we made three large investments on terms that would be unavailable in normal markets. These should add about $1½ billion pre-tax to Berkshire's annual earnings and offer possibilities for capital gains as well. We also closed on our Marmon acquisition (we own 64% of the company now and will purchase its remaining stock over the next six years). Additionally, certain of our subsidiaries made "tuck-in" acquisitions that will strengthen their competitive positions and earnings.

That's the good news. But there's another less pleasant reality: During 2008 I did some dumb things in investments. I made at least one major mistake of commission and several lesser ones that also hurt. I will tell you more about these later. Furthermore, I made some errors of omission, sucking my thumb when new facts came in that should have caused me to re-examine my thinking and promptly take action.

Additionally, the market value of the bonds and stocks that we continue to hold suffered a significant decline along with the general market. This does not bother Charlie and me. Indeed, we enjoy such price declines if we have funds available to increase our positions. Long ago, Ben Graham taught me that "Price is what you pay; value is what you get." Whether we're talking about socks or stocks, I like buying quality merchandise when it is marked down.

Yardsticks

Berkshire has two major areas of value. The first is our investments: stocks, bonds and cash equivalents. At yearend those totaled $122 billion (not counting the investments held by our finance and utility operations, which we assign to our second bucket of value). About $58.5 billion of that total is funded by our insurance float.

Berkshire's second component of value is earnings that come from sources other than investments and insurance. These earnings are delivered by our 67 non-insurance companies, itemized on page 96. We exclude our insurance earnings from this calculation because the value of our insurance operation comes from the investable funds it generates, and we have already included this factor in our first bucket.

In 2008, our investments fell from $90,343 per share of Berkshire (after minority interest) to $77,793, a decrease that was caused by a decline in market prices, not by net sales of stocks or bonds. Our second segment of value fell from pre-tax earnings of $4,093 per Berkshire share to $3,921 (again after minority interest).

Both of these performances are unsatisfactory. Over time, we need to make decent gains in each area if we are to increase Berkshire's intrinsic value at an acceptable rate. Going forward, however, our focus will be on the earnings segment, just as it has been for several decades. We like buying underpriced securities, but we like buying fairly-priced operating businesses even more.

Now, let's take a look at the four major operating sectors of Berkshire. Each of these has vastly different balance sheet and income account characteristics. Therefore, lumping them together, as is done in standard financial statements, impedes analysis. So we'll present them as four separate businesses, which is how Charlie and I view them.

Regulated Utility Business

Berkshire has an 87.4% (diluted) interest in MidAmerican Energy Holdings, which owns a wide variety of utility operations. The largest of these are (1) Yorkshire Electricity and Northern Electric, whose 3.8 million end users make it the U.K.'s third largest distributor of electricity; (2) MidAmerican Energy, which serves 723,000 electric customers, primarily in Iowa; (3) Pacific Power and Rocky Mountain Power, serving about 1.7 million electric customers in six western states; and (4) Kern River and Northern Natural pipelines, which carry about 9% of the natural gas consumed in the U.S.

Our partners in ownership of MidAmerican are its two terrific managers, Dave Sokol and Greg Abel, and my long-time friend, Walter Scott. It's unimportant how many votes each party has; we make major moves only when we are unanimous in thinking them wise. Nine years of working with Dave, Greg and Walter have reinforced my original belief: Berkshire couldn't have better partners.

Somewhat incongruously, MidAmerican also owns the second largest real estate brokerage firm in the U.S., HomeServices of America. This company operates through 21 locally-branded firms that have 16,000 agents. Last year was a terrible year for home sales, and 2009 looks no better. We will continue, however, to acquire quality brokerage operations when they are available at sensible prices.

Here are some key figures on MidAmerican's operations:

	Earnings (in millions)	
	2008	*2007*
U.K. utilities	$ 339	$ 337
Iowa utility	425	412
Western utilities	703	692
Pipelines	595	473
HomeServices	(45)	42
Other (net)	186	130
Operating earnings before corporate interest and taxes	2,203	2,086
Constellation Energy*	1,092	–
Interest, other than to Berkshire	(332)	(312)
Interest on Berkshire junior debt	(111)	(108)
Income tax	(1,002)	(477)
Net earnings	$ 1,850	$ 1,189
Earnings applicable to Berkshire**	$ 1,704	$ 1,114
Debt owed to others	19,145	19,002
Debt owed to Berkshire	1,087	821

*Consists of a breakup fee of $175 million and a profit on our investment of $917 million.
**Includes interest earned by Berkshire (net of related income taxes) of $72 in 2008 and $70 in 2007.

MidAmerican's record in operating its regulated electric utilities and natural gas pipelines is truly outstanding. Here's some backup for that claim.

Our two pipelines, Kern River and Northern Natural, were both acquired in 2002. A firm called Mastio regularly ranks pipelines for customer satisfaction. Among the 44 rated, Kern River came in 9th when we purchased it and Northern Natural ranked 39th. There was work to do.

In Mastio's 2009 report, Kern River ranked 1st and Northern Natural 3rd. Charlie and I couldn't be more proud of this performance. It came about because hundreds of people at each operation committed themselves to a new culture and then delivered on their commitment.

Achievements at our electric utilities have been equally impressive. In 1995, MidAmerican became the major provider of electricity in Iowa. By judicious planning and a zeal for efficiency, the company has kept electric prices unchanged since our purchase and has promised to hold them steady through 2013.

MidAmerican has maintained this extraordinary price stability while making Iowa number one among all states in the percentage of its generation capacity that comes from wind. Since our purchase, MidAmerican's wind-based facilities have grown from zero to almost 20% of total capacity.

Similarly, when we purchased PacifiCorp in 2006, we moved aggressively to expand wind generation. Wind capacity was then 33 megawatts. It's now 794, with more coming. (Arriving at PacifiCorp, we found "wind" of a different sort: The company had 98 committees that met frequently. Now there are 28. Meanwhile, we generate and deliver considerably more electricity, doing so with 2% fewer employees.)

In 2008 alone, MidAmerican spent $1.8 billion on wind generation at our two operations, and today the company is number one in the nation among regulated utilities in ownership of wind capacity. By the way, compare that $1.8 billion to the $1.1 billion of pre-tax earnings of PacifiCorp (shown in the table as "Western") and Iowa. In our utility business, we spend all we earn, and then some, in order to fulfill the needs of our service areas. Indeed, MidAmerican has not paid a dividend since Berkshire bought into the company in early 2000. Its earnings have instead been reinvested to develop the utility systems our customers require and deserve. In exchange, we have been allowed to earn a fair return on the huge sums we have invested. It's a great partnership for all concerned.

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Our long-avowed goal is to be the "buyer of choice" for businesses – particularly those built and owned by families. The way to achieve this goal is to deserve it. That means we must keep our promises; avoid leveraging up acquired businesses; grant unusual autonomy to our managers; and hold the purchased companies through thick and thin (though we prefer thick and thicker).

Our record matches our rhetoric. Most buyers competing against us, however, follow a different path. For them, acquisitions are "merchandise." Before the ink dries on their purchase contracts, these operators are contemplating "exit strategies." We have a decided advantage, therefore, when we encounter sellers who truly care about the future of their businesses.

Some years back our competitors were known as "leveraged-buyout operators." But LBO became a bad name. So in Orwellian fashion, the buyout firms decided to change their moniker. What they did not change, though, were the essential ingredients of their previous operations, including their cherished fee structures and love of leverage.

Their new label became "private equity," a name that turns the facts upside-down: A purchase of a business by these firms almost invariably results in dramatic *reductions* in the equity portion of the acquiree's capital structure compared to that previously existing. A number of these acquirees, purchased only two to three years ago, are now in mortal danger because of the debt piled on them by their private-equity buyers. Much of the bank debt is selling below 70¢ on the dollar, and the public debt has taken a far greater beating. The private-equity firms, it should be noted, are not rushing in to inject the equity their wards now desperately need. Instead, they're keeping their remaining funds *very* private.

In the regulated utility field there are no large family-owned businesses. Here, Berkshire hopes to be the "buyer of choice" of *regulators*. It is they, rather than selling shareholders, who judge the fitness of purchasers when transactions are proposed.

There is no hiding your history when you stand before these regulators. They can – and do – call their counterparts in other states where you operate and ask how you have behaved in respect to all aspects of the business, including a willingness to commit adequate equity capital.

When MidAmerican proposed its purchase of PacifiCorp in 2005, regulators in the six new states we would be serving immediately checked our record in Iowa. They also carefully evaluated our financing plans and capabilities. We passed this examination, just as we expect to pass future ones.

There are two reasons for our confidence. First, Dave Sokol and Greg Abel are going to run any businesses with which they are associated in a first-class manner. They don't know of any other way to operate. Beyond that is the fact that we hope to buy more regulated utilities in the future – and we know that our business behavior in jurisdictions where we are operating today will determine how we are welcomed by new jurisdictions tomorrow.

Insurance

Our insurance group has propelled Berkshire's growth since we first entered the business in 1967. This happy result has not been due to general prosperity in the industry. During the 25 years ending in 2007, return on net worth for insurers averaged 8.5% versus 14.0% for the Fortune 500. Clearly our insurance CEOs have not had the wind at their back. Yet these managers have excelled to a degree Charlie and I never dreamed possible in the early days. Why do I love them? Let me count the ways.

At GEICO, Tony Nicely – now in his 48th year at the company after joining it when he was 18 – continues to gobble up market share while maintaining disciplined underwriting. When Tony became CEO in 1993, GEICO had 2.0% of the auto insurance market, a level at which the company had long been stuck. Now we have a 7.7% share, up from 7.2% in 2007.

The combination of new business gains and an improvement in the renewal rate on existing business has moved GEICO into the number three position among auto insurers. In 1995, when Berkshire purchased control, GEICO was number seven. Now we trail only State Farm and Allstate.

GEICO grows because it saves money for motorists. No one *likes* to buy auto insurance. But virtually everyone likes to drive. So, sensibly, drivers look for the lowest-cost insurance consistent with first-class service. Efficiency is the key to low cost, and efficiency is Tony's specialty. Five years ago the number of policies per employee was 299. In 2008, the number was 439, a huge increase in productivity.

As we view GEICO's current opportunities, Tony and I feel like two hungry mosquitoes in a nudist camp. Juicy targets are everywhere. First, and most important, our new business in auto insurance is now exploding. Americans are focused on saving money as never before, and they are flocking to GEICO. In January 2009, we set a monthly record – by a wide margin – for growth in policyholders. That record will last exactly 28 days: As we go to press, it's clear February's gain will be even better.

Beyond this, we are gaining ground in allied lines. Last year, our motorcycle policies increased by 23.4%, which raised our market share from about 6% to more than 7%. Our RV and ATV businesses are also growing rapidly, albeit from a small base. And, finally, we recently began insuring commercial autos, a big market that offers real promise.

GEICO is now saving money for millions of Americans. Go to GEICO.com or call 1-800-847-7536 and see if we can save you money as well.

General Re, our large international reinsurer, also had an outstanding year in 2008. Some time back, the company had serious problems (which I totally failed to detect when we purchased it in late 1998). By 2001, when Joe Brandon took over as CEO, assisted by his partner, Tad Montross, General Re's culture had further deteriorated, exhibiting a loss of discipline in underwriting, reserving and expenses. After Joe and Tad took charge, these problems were decisively and successfully addressed. Today General Re has regained its luster. Last spring Joe stepped down, and Tad became CEO. Charlie and I are grateful to Joe for righting the ship and are certain that, with Tad, General Re's future is in the best of hands.

Reinsurance is a business of long-term promises, sometimes extending for fifty years or more. This past year has retaught clients a crucial principle: A promise is no better than the person or institution making it. That's where General Re excels: It is the *only* reinsurer that is backed by an AAA corporation. Ben Franklin once said, "It's difficult for an empty sack to stand upright." That's no worry for General Re clients.

Our third major insurance operation is Ajit Jain's reinsurance division, headquartered in Stamford and staffed by only 31 employees. This may be one of the most remarkable businesses in the world, hard to characterize but easy to admire.

From year to year, Ajit's business is never the same. It features very large transactions, incredible speed of execution and a willingness to quote on policies that leave others scratching their heads. When there is a huge and unusual risk to be insured, Ajit is almost certain to be called.

Ajit came to Berkshire in 1986. Very quickly, I realized that we had acquired an extraordinary talent. So I did the logical thing: I wrote his parents in New Delhi and asked if they had another one like him at home. Of course, I knew the answer before writing. There *isn't* anyone like Ajit.

Our smaller insurers are just as outstanding in their own way as the "big three," regularly delivering valuable float to us at a negative cost. We aggregate their results below under "Other Primary." For space reasons, we don't discuss these insurers individually. But be assured that Charlie and I appreciate the contribution of each.

Here is the record for the four legs to our insurance stool. The underwriting profits signify that all four provided funds to Berkshire last year without cost, just as they did in 2007. And in both years our underwriting profitability was considerably better than that achieved by the industry. Of course, we ourselves will periodically have a terrible year in insurance. But, overall, I expect us to *average* an underwriting profit. If so, we will be using free funds of large size for the indefinite future.

	Underwriting Profit		*Yearend Float*	
	(in millions)			
Insurance Operations	*2008*	*2007*	*2008*	*2007*
General Re	$ 342	$ 555	$21,074	$23,009
BH Reinsurance	1,324	1,427	24,221	23,692
GEICO	916	1,113	8,454	7,768
Other Primary	210	279	4,739	4,229
	$2,792	$3,374	$58,488	$58,698

Manufacturing, Service and Retailing Operations

Our activities in this part of Berkshire cover the waterfront. Let's look, though, at a summary balance sheet and earnings statement for the entire group.

Balance Sheet 12/31/08 (in millions)

Assets		*Liabilities and Equity*	
Cash and equivalents	$ 2,497	Notes payable	$ 2,212
Accounts and notes receivable	5,047	Other current liabilities	8,087
Inventory	7,500	Total current liabilities	10,299
Other current assets	752		
Total current assets	15,796		
Goodwill and other intangibles	16,515	Deferred taxes	2,786
Fixed assets	16,338	Term debt and other liabilities	6,033
Other assets	1,248	Equity	30,779
	$49,897		$49,897

Earnings Statement (in millions)

	2008	*2007*	*2006*
Revenues	$66,099	$59,100	$52,660
Operating expenses (including depreciation of $1,280 in 2008, $955 in 2007 and $823 in 2006)	61,937	55,026	49,002
Interest expense	139	127	132
Pre-tax earnings	4,023*	3,947*	3,526*
Income taxes and minority interests	1,740	1,594	1,395
Net income	$ 2,283	$ 2,353	$ 2,131

*Does not include purchase-accounting adjustments.

This motley group, which sells products ranging from lollipops to motor homes, earned an impressive 17.9% on average tangible net worth last year. It's also noteworthy that these operations used only minor financial leverage in achieving that return. Clearly we own some terrific businesses. We purchased many of them, however, at large premiums to net worth – a point reflected in the goodwill item shown on our balance sheet – and that fact reduces the earnings on our average *carrying* value to 8.1%.

Though the full-year result was satisfactory, earnings of many of the businesses in this group hit the skids in last year's fourth quarter. Prospects for 2009 look worse. Nevertheless, the group retains strong earning power even under today's conditions and will continue to deliver significant cash to the parent company. Overall, these companies improved their competitive positions last year, partly because our financial strength let us make advantageous tuck-in acquisitions. In contrast, many competitors were treading water (or sinking).

The most noteworthy of these acquisitions was Iscar's late-November purchase of Tungaloy, a leading Japanese producer of small tools. Charlie and I continue to look with astonishment – and appreciation! – at the accomplishments of Iscar's management. To secure one manager like Eitan Wertheimer, Jacob Harpaz or Danny Goldman when we acquire a company is a blessing. Getting three is like winning the Triple Crown. Iscar's growth since our purchase has exceeded our expectations – which were high – and the addition of Tungaloy will move performance to the next level.

MiTek, Benjamin Moore, Acme Brick, Forest River, Marmon and CTB also made one or more acquisitions during the year. CTB, which operates worldwide in the agriculture equipment field, has now picked up six small firms since we purchased it in 2002. At that time, we paid $140 million for the company. Last year its pre-tax earnings were $89 million. Vic Mancinelli, its CEO, followed Berkshire-like operating principles long before our arrival. He focuses on blocking and tackling, day by day doing the little things right and never getting off course. Ten years from now, Vic will be running a much larger operation and, more important, will be earning excellent returns on invested capital.

Finance and Financial Products

I will write here at some length about the mortgage operation of Clayton Homes and skip any financial commentary, which is summarized in the table at the end of this section. I do this because Clayton's recent experience may be useful in the public-policy debate about housing and mortgages. But first a little background.

Clayton is the largest company in the manufactured home industry, delivering 27,499 units last year. This came to about 34% of the industry's 81,889 total. Our share will likely grow in 2009, partly because much of the rest of the industry is in acute distress. Industrywide, units sold have steadily declined since they hit a peak of 372,843 in 1998.

At that time, much of the industry employed sales practices that were atrocious. Writing about the period somewhat later, I described it as involving "borrowers who shouldn't have borrowed being financed by lenders who shouldn't have lent."

To begin with, the need for meaningful down payments was frequently ignored. Sometimes fakery was involved. ("That certainly looks like a $2,000 cat to me" says the salesman who will receive a $3,000 commission if the loan goes through.) Moreover, impossible-to-meet monthly payments were being agreed to by borrowers who signed up because they had nothing to lose. The resulting mortgages were usually packaged ("securitized") and sold by Wall Street firms to unsuspecting investors. This chain of folly had to end badly, and it did.

Clayton, it should be emphasized, followed far more sensible practices in its own lending throughout that time. Indeed, no purchaser of the mortgages it originated and then securitized has ever lost a dime of principal or interest. But Clayton was the exception; industry losses were staggering. And the hangover continues to this day.

This 1997-2000 fiasco should have served as a canary-in-the-coal-mine warning for the far-larger conventional housing market. But investors, government and rating agencies learned exactly nothing from the manufactured-home debacle. Instead, in an eerie rerun of that disaster, the same mistakes were repeated with conventional homes in the 2004-07 period: Lenders happily made loans that borrowers couldn't repay out of their incomes, and borrowers just as happily signed up to meet those payments. Both parties counted on "house-price appreciation" to make this otherwise impossible arrangement work. It was Scarlett O'Hara all over again: "I'll think about it tomorrow." The consequences of this behavior are now reverberating through every corner of our economy.

Clayton's 198,888 borrowers, however, have continued to pay normally throughout the housing crash, handing us no unexpected losses. This is *not* because these borrowers are unusually creditworthy, a point proved by FICO scores (a standard measure of credit risk). Their median FICO score is 644, compared to a national median of 723, and about 35% are below 620, the segment usually designated "sub-prime." Many disastrous pools of mortgages on conventional homes are populated by borrowers with far better credit, as measured by FICO scores.

Yet at yearend, our delinquency rate on loans we have originated was 3.6%, up only modestly from 2.9% in 2006 and 2.9% in 2004. (In addition to our originated loans, we've also bought bulk portfolios of various types from other financial institutions.) Clayton's foreclosures during 2008 were 3.0% of originated loans compared to 3.8% in 2006 and 5.3% in 2004.

Why are our borrowers – characteristically people with modest incomes and far-from-great credit scores – performing so well? The answer is elementary, going right back to Lending 101. Our borrowers simply looked at how full-bore mortgage payments would compare with their actual – not hoped-for – income and then decided whether they could live with that commitment. Simply put, they took out a mortgage with the intention of paying it off, whatever the course of home prices.

Just as important is what our borrowers did *not* do. They did not count on making their loan payments by means of refinancing. They did not sign up for "teaser" rates that upon reset were outsized relative to their income. And they did not assume that they could always sell their home at a profit if their mortgage payments became onerous. Jimmy Stewart would have loved these folks.

Of course, a number of our borrowers will run into trouble. They generally have no more than minor savings to tide them over if adversity hits. The major cause of delinquency or foreclosure is the loss of a job, but death, divorce and medical expenses all cause problems. If unemployment rates rise – as they surely will in 2009 – more of Clayton's borrowers will have troubles, and we will have larger, though still manageable, losses. But our problems will not be driven to any extent by the trend of home prices.

Commentary about the current housing crisis often ignores the crucial fact that most foreclosures do *not* occur because a house is worth less than its mortgage (so-called "upside-down" loans). Rather, foreclosures take place because borrowers can't pay the monthly payment that they agreed to pay. Homeowners who have made a meaningful down-payment – derived from savings and not from other borrowing – seldom walk away from a primary residence simply because its value today is less than the mortgage. Instead, they walk when they can't make the monthly payments.

Home ownership is a wonderful thing. My family and I have enjoyed my present home for 50 years, with more to come. But enjoyment and utility should be the primary motives for purchase, not profit or refi possibilities. And the home purchased ought to fit the income of the purchaser.

The present housing debacle should teach home buyers, lenders, brokers and government some simple lessons that will ensure stability in the future. Home purchases should involve an honest-to-God down payment of at least 10% and monthly payments that can be comfortably handled by the borrower's income. That income should be carefully verified.

Putting people into homes, though a desirable goal, shouldn't be our country's primary objective. Keeping them in their homes should be the ambition.

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Clayton's lending operation, though not damaged by the performance of its borrowers, is nevertheless threatened by an element of the credit crisis. Funders that have access to any sort of government guarantee – banks with FDIC-insured deposits, large entities with commercial paper now backed by the Federal Reserve, and others who are using imaginative methods (or lobbying skills) to come under the government's umbrella – have money costs that are minimal. Conversely, highly-rated companies, such as Berkshire, are experiencing borrowing costs that, in relation to Treasury rates, are at record levels. Moreover, funds are abundant for the government-guaranteed borrower but often scarce for others, no matter how creditworthy they may be.

This unprecedented "spread" in the cost of money makes it unprofitable for any lender who doesn't enjoy government-guaranteed funds to go up against those with a favored status. Government is determining the "haves" and "have-nots." That is why companies are rushing to convert to bank holding companies, not a course feasible for Berkshire.

Though Berkshire's credit is pristine – we are one of only seven AAA corporations in the country – our cost of borrowing is now *far* higher than competitors with shaky balance sheets but government backing. At the moment, it is much better to be a financial cripple with a government guarantee than a Gibraltar without one.

Today's extreme conditions may soon end. At worst, we believe we will find at least a partial solution that will allow us to continue much of Clayton's lending. Clayton's earnings, however, will surely suffer if we are forced to compete for long against government-favored lenders.

	Pre-Tax Earnings *(in millions)*	
	2008	*2007*
Net investment income	$330	$ 272
Life and annuity operation	23	(60)
Leasing operations	87	111
Manufactured-housing finance (Clayton)	206	526
Other*	141	157
Income before investment and derivatives gains or losses	$787	$1,006

*Includes $92 million in 2008 and $85 million in 2007 of fees that Berkshire charges Clayton for the use of Berkshire's credit.

Tax-Exempt Bond Insurance

Early in 2008, we activated Berkshire Hathaway Assurance Company ("BHAC") as an insurer of the tax-exempt bonds issued by states, cities and other local entities. BHAC insures these securities for issuers both at the time their bonds are sold to the public (primary transactions) and later, when the bonds are already owned by investors (secondary transactions).

By yearend 2007, the half dozen or so companies that had been the major players in this business had all fallen into big trouble. The cause of their problems was captured long ago by Mae West: "I was Snow White, but I drifted."

The monolines (as the bond insurers are called) initially insured only tax-exempt bonds that were low-risk. But over the years competition for this business intensified, and rates fell. Faced with the prospect of stagnating or declining earnings, the monoline managers turned to ever-riskier propositions. Some of these involved the insuring of residential mortgage obligations. When housing prices plummeted, the monoline industry quickly became a basket case.

Early in the year, Berkshire offered to assume all of the insurance issued on tax-exempts that was on the books of the three largest monolines. These companies were all in life-threatening trouble (though they said otherwise.) We would have charged a 1½% rate to take over the guarantees on about $822 billion of bonds. If our offer had been accepted, we would have been required to pay any losses suffered by investors who owned these bonds – a guarantee stretching for 40 years in some cases. Ours was not a frivolous proposal: For reasons we will come to later, it involved substantial risk for Berkshire.

The monolines summarily rejected our offer, in some cases appending an insult or two. In the end, though, the turndowns proved to be *very* good news for us, because it became apparent that I had severely underpriced our offer.

Thereafter, we wrote about $15.6 billion of insurance in the secondary market. And here's the punch line: About 77% of this business was on bonds that were already insured, largely by the three aforementioned monolines. In these agreements, we have to pay for defaults *only* if the original insurer is financially unable to do so.

We wrote this "second-to-pay" insurance for rates averaging 3.3%. That's right; we have been paid far more for becoming the second to pay than the 1.5% we would have earlier charged to be the first to pay. In one extreme case, we actually agreed to be *fourth* to pay, nonetheless receiving about three times the 1% premium charged by the monoline that remains *first* to pay. In other words, three other monolines have to first go broke before we need to write a check.

Two of the three monolines to which we made our initial bulk offer later raised substantial capital. This, of course, directly helps *us*, since it makes it less likely that we will have to pay, at least in the near term, any claims on our second-to-pay insurance because these two monolines fail. In addition to our book of secondary business, we have also written $3.7 billion of primary business for a premium of $96 million. In primary business, of course, we are first to pay if the issuer gets in trouble.

We have a great many more multiples of capital behind the insurance we write than does any other monoline. Consequently, our guarantee is far more valuable than theirs. This explains why many sophisticated investors have bought second-to-pay insurance from us even though they were already insured by another monoline. BHAC has become not only the insurer of preference, but in many cases the *sole* insurer acceptable to bondholders.

Nevertheless, we remain very cautious about the business we write and regard it as far from a sure thing that this insurance will ultimately be profitable for us. The reason is simple, though I have never seen even a passing reference to it by any financial analyst, rating agency or monoline CEO.

The rationale behind very low premium rates for insuring tax-exempts has been that defaults have historically been few. But that record largely reflects the experience of entities that issued *uninsured* bonds. Insurance of tax-exempt bonds didn't exist before 1971, and even after that most bonds remained uninsured.

A universe of tax-exempts fully covered by insurance would be certain to have a somewhat different loss experience from a group of uninsured, but otherwise similar bonds, the only question being *how* different. To understand why, let's go back to 1975 when New York City was on the edge of bankruptcy. At the time its bonds – virtually all uninsured – were heavily held by the city's wealthier residents as well as by New York banks and other institutions. These local bondholders deeply desired to solve the city's fiscal problems. So before long, concessions and cooperation from a host of involved constituencies produced a solution. Without one, it was apparent to all that New York's citizens and businesses would have experienced widespread and severe financial losses from their bond holdings.

Now, imagine that all of the city's bonds had instead been insured by Berkshire. Would similar belt-tightening, tax increases, labor concessions, etc. have been forthcoming? Of course not. At a minimum, Berkshire would have been asked to "share" in the required sacrifices. And, considering our deep pockets, the required contribution would most certainly have been substantial.

Local governments are going to face *far* tougher fiscal problems in the future than they have to date. The pension liabilities I talked about in last year's report will be a huge contributor to these woes. Many cities and states were surely horrified when they inspected the status of their funding at yearend 2008. The gap between assets and a realistic actuarial valuation of present liabilities is simply staggering.

When faced with large revenue shortfalls, communities that have all of their bonds insured will be more prone to develop "solutions" less favorable to bondholders than those communities that have uninsured bonds held by local banks and residents. Losses in the tax-exempt arena, when they come, are also likely to be highly correlated among issuers. If a few communities stiff their creditors and get away with it, the chance that others will follow in their footsteps will grow. What mayor or city council is going to choose pain to local citizens in the form of major tax increases over pain to a far-away bond insurer?

Insuring tax-exempts, therefore, has the look today of a dangerous business – one with similarities, in fact, to the insuring of natural catastrophes. In both cases, a string of loss-free years can be followed by a devastating experience that more than wipes out all earlier profits. We will try, therefore, to proceed carefully in this business, eschewing many classes of bonds that other monolines regularly embrace.

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The type of fallacy involved in projecting loss experience from a universe of non-insured bonds onto a deceptively-similar universe in which many bonds are insured pops up in other areas of finance. "Back-tested" models of many kinds are susceptible to this sort of error. Nevertheless, they are frequently touted in financial markets as guides to future action. (If merely looking up past financial data would tell you what the future holds, the Forbes 400 would consist of librarians.)

Indeed, the stupefying losses in mortgage-related securities came in large part because of flawed, history-based models used by salesmen, rating agencies and investors. These parties looked at loss experience over periods when home prices rose only moderately and speculation in houses was negligible. They then made this experience a yardstick for evaluating future losses. They blissfully ignored the fact that house prices had recently skyrocketed, loan practices had deteriorated and many buyers had opted for houses they couldn't afford. In short, universe "past" and universe "current" had very different characteristics. But lenders, government and media largely failed to recognize this all-important fact.

Investors should be skeptical of history-based models. Constructed by a nerdy-sounding priesthood using esoteric terms such as beta, gamma, sigma and the like, these models tend to look impressive. Too often, though, investors forget to examine the assumptions behind the symbols. Our advice: Beware of geeks bearing formulas.

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A final post-script on BHAC: Who, you may wonder, runs this operation? While I help set policy, all of the heavy lifting is done by Ajit and his crew. Sure, they were already generating $24 billion of float along with hundreds of millions of underwriting profit annually. But how busy can that keep a 31-person group? Charlie and I decided it was high time for them to start doing a full day's work.

Investments

Because of accounting rules, we divide our large holdings of common stocks this year into two categories. The table below, presenting the first category, itemizes investments that are carried on our balance sheet at market value and that had a yearend value of more than $500 million.

			12/31/08	
Shares	*Company*	*Percentage of Company Owned*	*Cost**	*Market*
			(in millions)	
151,610,700	American Express Company	13.1	$ 1,287	$ 2,812
200,000,000	The Coca-Cola Company	8.6	1,299	9,054
84,896,273	ConocoPhillips	5.7	7,008	4,398
30,009,591	Johnson & Johnson	1.1	1,847	1,795
130,272,500	Kraft Foods Inc.	8.9	4,330	3,498
3,947,554	POSCO	5.2	768	1,191
91,941,010	The Procter & Gamble Company	3.1	643	5,684
22,111,966	Sanofi-Aventis	1.7	1,827	1,404
11,262,000	Swiss Re	3.2	773	530
227,307,000	Tesco plc	2.9	1,326	1,193
75,145,426	U.S. Bancorp	4.3	2,337	1,879
19,944,300	Wal-Mart Stores, Inc.	0.5	942	1,118
1,727,765	The Washington Post Company	18.4	11	674
304,392,068	Wells Fargo & Company	7.2	6,702	8,973
	Others		6,035	4,870
	Total Common Stocks Carried at Market		$37,135	$49,073

*This is our actual purchase price and also our tax basis; GAAP "cost" differs in a few cases because of write-ups or write-downs that have been required.

In addition, we have holdings in Moody's and Burlington Northern Santa Fe that we now carry at "equity value" – our cost plus retained earnings since our purchase, minus the tax that would be paid if those earnings were paid to us as dividends. This accounting treatment is usually required when ownership of an investee company reaches 20%.

We purchased 15% of Moody's some years ago and have not since bought a share. Moody's, though, has repurchased its own shares and, by late 2008, those repurchases reduced its outstanding shares to the point that our holdings rose above 20%. Burlington Northern has also repurchased shares, but our increase to 20% primarily occurred because we continued to buy this stock.

Unless facts or rules change, you will see these holdings reflected in our balance sheet at "equity accounting" values, whatever their market prices. You will also see our share of their earnings (less applicable taxes) regularly included in our quarterly and annual earnings.

I told you in an earlier part of this report that last year I made a major mistake of commission (and maybe more; this one sticks out). Without urging from Charlie or anyone else, I bought a large amount of ConocoPhillips stock when oil and gas prices were near their peak. I in no way anticipated the dramatic fall in energy prices that occurred in the last half of the year. I still believe the odds are good that oil sells far higher in the future than the current $40-$50 price. But so far I have been dead wrong. Even if prices should rise, moreover, the terrible timing of my purchase has cost Berkshire several billion dollars.

I made some other already-recognizable errors as well. They were smaller, but unfortunately not *that* small. During 2008, I spent $244 million for shares of two Irish banks that appeared cheap to me. At yearend we wrote these holdings down to market: $27 million, for an 89% loss. Since then, the two stocks have declined even further. The tennis crowd would call my mistakes "unforced errors."

On the plus side last year, we made purchases totaling $14.5 billion in fixed-income securities issued by Wrigley, Goldman Sachs and General Electric. We very much like these commitments, which carry high current yields that, in themselves, make the investments more than satisfactory. But in each of these three purchases, we also acquired a substantial equity participation as a bonus. To fund these large purchases, I had to sell portions of some holdings that I would have preferred to keep (primarily Johnson & Johnson, Procter & Gamble and ConocoPhillips). However, I have pledged – to you, the rating agencies and myself – to always run Berkshire with more than ample cash. We never want to count on the kindness of strangers in order to meet tomorrow's obligations. When forced to choose, I will not trade even a night's sleep for the chance of extra profits.

The investment world has gone from underpricing risk to overpricing it. This change has not been minor; the pendulum has covered an extraordinary arc. A few years ago, it would have seemed unthinkable that yields like today's could have been obtained on good-grade municipal or corporate bonds even while risk-free governments offered near-zero returns on short-term bonds and no better than a pittance on long-terms. When the financial history of this decade is written, it will surely speak of the Internet bubble of the late 1990s and the housing bubble of the early 2000s. But the U.S. Treasury bond bubble of late 2008 may be regarded as almost equally extraordinary.

Clinging to cash equivalents or long-term government bonds at present yields is almost certainly a terrible policy if continued for long. Holders of these instruments, of course, have felt increasingly comfortable – in fact, almost smug – in following this policy as financial turmoil has mounted. They regard their judgment confirmed when they hear commentators proclaim "cash is king," even though that wonderful cash is earning close to nothing and will surely find its purchasing power eroded over time.

Approval, though, is not the goal of investing. In fact, approval is often counter-productive because it sedates the brain and makes it less receptive to new facts or a re-examination of conclusions formed earlier. Beware the investment activity that produces applause; the great moves are usually greeted by yawns.

Derivatives

Derivatives are dangerous. They have dramatically increased the leverage and risks in our financial system. They have made it almost impossible for investors to understand and analyze our largest commercial banks and investment banks. They allowed Fannie Mae and Freddie Mac to engage in massive misstatements of earnings for years. So indecipherable were Freddie and Fannie that their federal regulator, OFHEO, whose more than 100 employees had no job except the oversight of these two institutions, totally missed their cooking of the books.

Indeed, recent events demonstrate that certain big-name CEOs (or former CEOs) at major financial institutions were simply incapable of managing a business with a huge, complex book of derivatives. Include Charlie and me in this hapless group: When Berkshire purchased General Re in 1998, we knew we could not get our minds around its book of 23,218 derivatives contracts, made with 884 counterparties (many of which we had never heard of). So we decided to close up shop. Though we were under no pressure and were operating in benign markets as we exited, it took us five years and more than $400 million in losses to largely complete the task. Upon leaving, our feelings about the business mirrored a line in a country song: "I liked you better before I got to know you so well."

Improved "transparency" – a favorite remedy of politicians, commentators and financial regulators for averting future train wrecks – won't cure the problems that derivatives pose. I know of no reporting mechanism that would come close to describing and measuring the risks in a huge and complex portfolio of derivatives. Auditors can't audit these contracts, and regulators can't regulate them. When I read the pages of "disclosure" in 10-Ks of companies that are entangled with these instruments, all I end up knowing is that I *don't* know what is going on in their portfolios (and then I reach for some aspirin).

For a case study on regulatory effectiveness, let's look harder at the Freddie and Fannie example. These giant institutions were created by Congress, which retained control over them, dictating what they could and could not do. To aid its oversight, Congress created OFHEO in 1992, admonishing it to make sure the two behemoths were behaving themselves. With that move, Fannie and Freddie became the most intensely-regulated companies of which I am aware, as measured by manpower assigned to the task.

On June 15, 2003, OFHEO (whose annual reports are available on the Internet) sent its 2002 report to Congress – specifically to its four bosses in the Senate and House, among them none other than Messrs. Sarbanes and Oxley. The report's 127 pages included a self-congratulatory cover-line: "Celebrating 10 Years of Excellence." The transmittal letter and report were delivered nine days *after* the CEO and CFO of Freddie had resigned in disgrace and the COO had been fired. No mention of their departures was made in the letter, even while the report concluded, as it always did, that "Both Enterprises were financially sound and well managed."

In truth, both enterprises had engaged in massive accounting shenanigans for some time. Finally, in 2006, OFHEO issued a 340-page scathing chronicle of the sins of Fannie that, more or less, blamed the fiasco on every party but – you guessed it – Congress and OFHEO.

The Bear Stearns collapse highlights the counterparty problem embedded in derivatives transactions, a time bomb I first discussed in Berkshire's 2002 report. On April 3, 2008, Tim Geithner, then the able president of the New York Fed, explained the need for a rescue: "The sudden discovery by Bear's derivative counterparties that important financial positions they had put in place to protect themselves from financial risk were no longer operative would have triggered substantial further dislocation in markets. This would have precipitated a rush by Bear's counterparties to liquidate the collateral they held against those positions and to attempt to replicate those positions in already very fragile markets." This is Fedspeak for "We stepped in to avoid a financial chain reaction of unpredictable magnitude." In my opinion, the Fed was right to do so.

A normal stock or bond trade is completed in a few days with one party getting its cash, the other its securities. Counterparty risk therefore quickly disappears, which means credit problems can't accumulate. This rapid settlement process is key to maintaining the integrity of markets. That, in fact, is a reason for NYSE and NASDAQ *shortening* the settlement period from five days to three days in 1995.

Derivatives contracts, in contrast, often go unsettled for years, or even decades, with counterparties building up huge claims against each other. "Paper" assets and liabilities – often hard to quantify – become important parts of financial statements though these items will not be validated for many years. Additionally, a frightening web of mutual dependence develops among huge financial institutions. Receivables and payables by the billions become concentrated in the hands of a few large dealers who are apt to be highly-leveraged in other ways as well. Participants seeking to dodge troubles face the same problem as someone seeking to avoid venereal disease: It's not just whom *you* sleep with, but also whom *they* are sleeping with.

Sleeping around, to continue our metaphor, can actually be useful for large derivatives dealers because it assures them government aid if trouble hits. In other words, only companies having problems that can infect the entire neighborhood – I won't mention names – are certain to become a concern of the state (an outcome, I'm sad to say, that is proper). From this irritating reality comes *The First Law of Corporate Survival* for ambitious CEOs who pile on leverage and run large and unfathomable derivatives books: Modest incompetence simply won't do; it's mindboggling screw-ups that are required.

Considering the ruin I've pictured, you may wonder why Berkshire is a party to 251 derivatives contracts (other than those used for operational purposes at MidAmerican and the few left over at Gen Re). The answer is simple: I believe each contract we own was mispriced at inception, sometimes dramatically so. I both initiated these positions and monitor them, a set of responsibilities consistent with my belief that the CEO of any large financial organization *must* be the Chief Risk Officer as well. If we lose money on our derivatives, it will be my fault.

Our derivatives dealings require our counterparties to make payments to us when contracts are initiated. Berkshire therefore always holds the money, which leaves us assuming no meaningful counterparty risk. As of yearend, the payments made to us less losses we have paid – our derivatives "float," so to speak – totaled $8.1 billion. This float is similar to insurance float: If we break even on an underlying transaction, we will have enjoyed the use of free money for a long time. Our expectation, though it is far from a sure thing, is that we will do better than break even and that the substantial investment income we earn on the funds will be frosting on the cake.

Only a small percentage of our contracts call for any posting of collateral when the market moves against us. Even under the chaotic conditions existing in last year's fourth quarter, we had to post less than 1% of our securities portfolio. (When we post collateral, we deposit it with third parties, meanwhile retaining the investment earnings on the deposited securities.) In our 2002 annual report, we warned of the lethal threat that posting requirements create, real-life illustrations of which we witnessed last year at a variety of financial institutions (and, for that matter, at Constellation Energy, which was within hours of bankruptcy when MidAmerican arrived to effect a rescue).

Our contracts fall into four major categories. With apologies to those who are not fascinated by financial instruments, I will explain them in excruciating detail.

- We have added modestly to the "equity put" portfolio I described in last year's report. Some of our contracts come due in 15 years, others in 20. We must make a payment to our counterparty at maturity if the reference index to which the put is tied is then below what it was at the inception of the contract. Neither party can elect to settle early; it's only the price on the final day that counts.

  To illustrate, we might sell a $1 billion 15-year put contract on the S&P 500 when that index is at, say, 1300. If the index is at 1170 – down 10% – on the day of maturity, we would pay $100 million. If it is above 1300, we owe nothing. For us to lose $1 billion, the index would have to go to zero. In the meantime, the sale of the put would have delivered us a premium – perhaps $100 million to $150 million – that we would be free to invest as we wish.

  Our put contracts total $37.1 billion (at current exchange rates) and are spread among four major indices: the S&P 500 in the U.S., the FTSE 100 in the U.K., the Euro Stoxx 50 in Europe, and the Nikkei 225 in Japan. Our first contract comes due on September 9, 2019 and our last on January 24, 2028. We have received premiums of $4.9 billion, money we have invested. We, meanwhile, have paid nothing, since all expiration dates are far in the future. Nonetheless, we have used Black-Scholes valuation methods to record a yearend liability of $10 billion, an amount that will change on every reporting date. The two financial items – this estimated loss of $10 billion minus the $4.9 billion in premiums we have received – means that we have so far reported a mark-to-market loss of $5.1 billion from these contracts.

We endorse mark-to-market accounting. I will explain later, however, why I believe the Black-Scholes formula, even though it is the standard for establishing the dollar liability for options, produces strange results when the long-term variety are being valued.

One point about our contracts that is sometimes not understood: For us to lose the full $37.1 billion we have at risk, all stocks in all four indices would have to go to *zero* on their various termination dates. If, however – as an example – all indices fell 25% from their value at the inception of each contract, and foreign-exchange rates remained as they are today, we would owe about $9 billion, payable between 2019 and 2028. Between the inception of the contract and those dates, we would have held the $4.9 billion premium and earned investment income on it.

- The second category we described in last year's report concerns derivatives requiring us to pay when credit losses occur at companies that are included in various high-yield indices. Our standard contract covers a five-year period and involves 100 companies. We modestly expanded our position last year in this category. But, of course, the contracts on the books at the end of 2007 moved one year closer to their maturity. Overall, our contracts now have an average life of 2⅓ years, with the first expiration due to occur on September 20, 2009 and the last on December 20, 2013.

  By yearend we had received premiums of $3.4 billion on these contracts and paid losses of $542 million. Using mark-to-market principles, we also set up a liability for future losses that at yearend totaled $3.0 billion. Thus we had to that point recorded a loss of about $100 million, derived from our $3.5 billion total in paid and estimated future losses minus the $3.4 billion of premiums we received. In our quarterly reports, however, the amount of gain or loss has swung wildly from a profit of $327 million in the second quarter of 2008 to a loss of $693 million in the fourth quarter of 2008.

  Surprisingly, we made payments on these contracts of only $97 million last year, far below the estimate I used when I decided to enter into them. This year, however, losses have accelerated sharply with the mushrooming of large bankruptcies. In last year's letter, I told you I expected these contracts to show a profit at expiration. Now, with the recession deepening at a rapid rate, the possibility of an eventual loss has increased. Whatever the result, I will keep you posted.

- In 2008 we began to write "credit default swaps" on individual companies. This is simply credit insurance, similar to what we write in BHAC, except that here we bear the credit risk of corporations rather than of tax-exempt issuers.

  If, say, the XYZ company goes bankrupt, and we have written a $100 million contract, we are obligated to pay an amount that reflects the shrinkage in value of a comparable amount of XYZ's debt. (If, for example, the company's bonds are selling for 30 after default, we would owe $70 million.) For the typical contract, we receive quarterly payments for five years, after which our insurance expires.

  At yearend we had written $4 billion of contracts covering 42 corporations, for which we receive annual premiums of $93 million. This is the only derivatives business we write that has any counterparty risk; the party that buys the contract from us must be good for the quarterly premiums it will owe us over the five years. We are unlikely to expand this business to any extent because most buyers of this protection now insist that the seller post collateral, and we will not enter into such an arrangement.

- At the request of our customers, we write a few tax-exempt bond insurance contracts that are similar to those written at BHAC, but that are structured as derivatives. The only meaningful difference between the two contracts is that mark-to-market accounting is required for derivatives whereas standard accrual accounting is required at BHAC.

But this difference can produce some strange results. The bonds covered – in effect, insured – by these derivatives are largely general obligations of states, and we feel good about them. At yearend, however, mark-to-market accounting required us to record a loss of $631 million on these derivatives contracts. Had we instead insured the same bonds at the same price in BHAC, and used the accrual accounting required at insurance companies, we would have recorded a small *profit* for the year. The two methods by which we insure the bonds will eventually produce the same accounting result. In the short term, however, the variance in reported profits can be substantial.

We have told you before that our derivative contracts, subject as they are to mark-to-market accounting, will produce wild swings in the earnings we report. The ups and downs neither cheer nor bother Charlie and me. Indeed, the "downs" can be helpful in that they give us an opportunity to expand a position on favorable terms. I hope this explanation of our dealings will lead you to think similarly.

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The Black-Scholes formula has approached the status of holy writ in finance, and we use it when valuing our equity put options for financial statement purposes. Key inputs to the calculation include a contract's maturity and strike price, as well as the analyst's expectations for volatility, interest rates and dividends.

If the formula is applied to extended time periods, however, it can produce absurd results. In fairness, Black and Scholes almost certainly understood this point well. But their devoted followers may be ignoring whatever caveats the two men attached when they first unveiled the formula.

It's often useful in testing a theory to push it to extremes. So let's postulate that we sell a 100- year $1 billion put option on the S&P 500 at a strike price of 903 (the index's level on 12/31/08). Using the implied volatility assumption for long-dated contracts that we do, and combining that with appropriate interest and dividend assumptions, we would find the "proper" Black-Scholes premium for this contract to be $2.5 million.

To judge the rationality of that premium, we need to assess whether the S&P will be valued a century from now at less than today. Certainly the dollar will then be worth a small fraction of its present value (at only 2% inflation it will be worth roughly 14¢). So that will be a factor pushing the stated value of the index higher. Far more important, however, is that one hundred years of retained earnings will hugely increase the value of most of the companies in the index. In the 20th Century, the Dow-Jones Industrial Average increased by about 175-fold, mainly because of this retained-earnings factor.

Considering everything, I believe the probability of a decline in the index over a one-hundred-year period to be *far* less than 1%. But let's use that figure and also assume that the most likely decline – should one occur – is 50%. Under these assumptions, the mathematical expectation of loss on our contract would be $5 million ($1 billion X 1% X 50%).

But if we had received our theoretical premium of $2.5 million up front, we would have only had to invest it at 0.7% compounded annually to cover this loss expectancy. Everything earned above that would have been profit. Would you like to borrow money for 100 years at a 0.7% rate?

Let's look at my example from a worst-case standpoint. Remember that 99% of the time we would pay nothing if my assumptions are correct. But even in the worst case among the remaining 1% of possibilities – that is, one assuming a *total* loss of $1 billion – our borrowing cost would come to only 6.2%. Clearly, either my assumptions are crazy or the formula is inappropriate.

The ridiculous premium that Black-Scholes dictates in my extreme example is caused by the inclusion of volatility in the formula and by the fact that volatility is determined by how much stocks have moved around in some past period of days, months or years. This metric is simply irrelevant in estimating the probability-weighted range of values of American business 100 years from now. (Imagine, if you will, getting a quote every day on a farm from a manic-depressive neighbor and then using the volatility calculated from these changing quotes as an important ingredient in an equation that predicts a probability-weighted range of values for the farm a century from now.)

Though historical volatility is a useful – but far from foolproof – concept in valuing short-term options, its utility diminishes rapidly as the duration of the option lengthens. In my opinion, the valuations that the Black-Scholes formula now place on our long-term put options overstate our liability, though the overstatement will diminish as the contracts approach maturity.

Even so, we will continue to use Black-Scholes when we are estimating our financial-statement liability for long-term equity puts. The formula represents conventional wisdom and any substitute that I might offer would engender extreme skepticism. That would be perfectly understandable: CEOs who have concocted their own valuations for esoteric financial instruments have seldom erred on the side of conservatism. That club of optimists is one that Charlie and I have no desire to join.

The Annual Meeting

Our meeting this year will be held on Saturday, May 2nd. As always, the doors will open at the Qwest Center at 7 a.m., and a new Berkshire movie will be shown at 8:30. At 9:30 we will go directly to the question-and-answer period, which (with a break for lunch at the Qwest's stands) will last until 3:00. Then, after a short recess, Charlie and I will convene the annual meeting at 3:15. If you decide to leave during the day's question periods, please do so while *Charlie* is talking.

The best reason to exit, of course, is to *shop*. We will help you do that by filling the 194,300-square-foot hall that adjoins the meeting area with the products of Berkshire subsidiaries. Last year, the 31,000 people who came to the meeting did their part, and almost every location racked up record sales. But you can do better. (A friendly warning: If I find sales are lagging, I lock the exits.)

This year Clayton will showcase its new *i-house* that includes Shaw flooring, Johns Manville insulation and MiTek fasteners. This innovative "green" home, featuring solar panels and numerous other energy-saving products, is truly a home of the future. Estimated costs for electricity and heating total only about $1 per day when the home is sited in an area like Omaha. After purchasing the *i-house*, you should next consider the Forest River RV and pontoon boat on display nearby. Make your neighbors jealous.

GEICO will have a booth staffed by a number of its top counselors from around the country, all of them ready to supply you with auto insurance quotes. In most cases, GEICO will be able to give you a shareholder discount (usually 8%). This special offer is permitted by 44 of the 50 jurisdictions in which we operate. (One supplemental point: The discount is not additive if you qualify for another, such as that given certain groups.) Bring the details of your existing insurance and check out whether we can save you money. For at least 50% of you, I believe we can.

On Saturday, at the Omaha airport, we will have the usual array of NetJets aircraft available for your inspection. Stop by the NetJets booth at the Qwest to learn about viewing these planes. Come to Omaha by bus; leave in your new plane. And take along – with no fear of a strip search – the Ginsu knives that you've purchased at the exhibit of our Quikut subsidiary.

Next, if you have any money left, visit the Bookworm, which will be selling about 30 books and DVDs. A shipping service will be available for those whose thirst for knowledge exceeds their carrying capacity.

Finally, we will have three fascinating cars on the exhibition floor, including one from the past and one of the future. Paul Andrews, CEO of our subsidiary, TTI, will bring his 1935 Duesenberg, a car that once belonged to Mrs. Forrest Mars, Sr., parent and grandparent of our new partners in the Wrigley purchase. The future will be represented by a new plug-in electric car developed by BYD, an amazing Chinese company in which we have a 10% interest.

An attachment to the proxy material that is enclosed with this report explains how you can obtain the credential you will need for admission to the meeting and other events. As for plane, hotel and car reservations, we have again signed up American Express (800-799-6634) to give you special help. Carol Pedersen, who handles these matters, does a terrific job for us each year, and I thank her for it. Hotel rooms can be hard to find, but work with Carol and you will get one.

At Nebraska Furniture Mart, located on a 77-acre site on 72nd Street between Dodge and Pacific, we will again be having "Berkshire Weekend" discount pricing. We initiated this special event at NFM twelve years ago, and sales during the "Weekend" grew from $5.3 million in 1997 to a record $33.3 million in 2008. On Saturday of that weekend, we also set a single day record of $7.2 million. Ask any retailer what he thinks of such volume.

To obtain the Berkshire discount, you must make your purchases between Thursday, April 30th and Monday, May 4th inclusive, and also present your meeting credential. The period's special pricing will even apply to the products of several prestigious manufacturers that normally have ironclad rules against discounting but which, in the spirit of our shareholder weekend, have made an exception for you. We appreciate their cooperation. NFM is open from 10 a.m. to 9 p.m. Monday through Saturday, and 10 a.m. to 6 p.m. on Sunday. On Saturday this year, from 5:30 p.m. to 8 p.m., NFM is having a western cookout to which you are all invited.

At Borsheims, we will again have two shareholder-only events. The first will be a cocktail reception from 6 p.m. to 10 p.m. on Friday, May 1st. The second, the main gala, will be held on Sunday, May 3rd, from 9 a.m. to 4 p.m. On Saturday, we will be open until 6 p.m.

We will have huge crowds at Borsheims throughout the weekend. For your convenience, therefore, shareholder prices will be available from Monday, April 27th through Saturday, May 9th. During that period, please identify yourself as a shareholder by presenting your meeting credentials or a brokerage statement that shows you are a Berkshire holder.

On Sunday, in the mall outside of Borsheims, a blindfolded Patrick Wolff, twice U.S. chess champion, will take on all comers – who will have their eyes wide open – in groups of six. Nearby, Norman Beck, a remarkable magician from Dallas, will bewilder onlookers. Additionally, we will have Bob Hamman and Sharon Osberg, two of the world's top bridge experts, available to play bridge with our shareholders on Sunday afternoon.

Gorat's will again be open exclusively for Berkshire shareholders on Sunday, May 3rd, and will be serving from 1 p.m. until 10 p.m. Last year Gorat's, which seats 240, served 975 dinners on Shareholder Sunday. The three-day total was 2,448 including 702 T-bone steaks, the entrée preferred by the *cognoscenti*. Please don't embarrass me by ordering foie gras. Remember: To come to Gorat's on that day, you must have a reservation. To make one, call 402-551-3733 on April 1st (*but not before*).

We will again have a reception at 4 p.m. on Saturday afternoon for shareholders who have come from outside North America. Every year our meeting draws many people from around the globe, and Charlie and I want to be sure we personally greet those who have come so far. Last year we enjoyed meeting more than 700 of you from many dozens of countries. Any shareholder who comes from outside the U.S. or Canada will be given a special credential and instructions for attending this function.

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This year we will be making important changes in how we handle the meeting's question periods. In recent years, we have received only a handful of questions directly related to Berkshire and its operations. Last year there were practically none. So we need to steer the discussion back to Berkshire's businesses.

In a related problem, there has been a mad rush when the doors open at 7 a.m., led by people who wish to be first in line at the 12 microphones available for questioners. This is not desirable from a safety standpoint, nor do we believe that sprinting ability should be the determinant of who gets to pose questions. (At age 78, I've concluded that speed afoot is a ridiculously overrated talent.) Again, a new procedure is desirable.

In our first change, several financial journalists from organizations representing newspapers, magazines and television will participate in the question-and-answer period, asking Charlie and me questions that shareholders have submitted by e-mail. The journalists and their e-mail addresses are: Carol Loomis, of Fortune, who may be emailed at cloomis@fortunemail.com; Becky Quick, of CNBC, at BerkshireQuestions@cnbc.com, and Andrew Ross Sorkin, of The New York Times, at arsorkin@nytimes.com. From the questions submitted, each journalist will choose the dozen or so he or she decides are the most interesting and important. (In your e-mail, let the journalist know if you would like your name mentioned if your question is selected.)

Neither Charlie nor I will get so much as a clue about the questions to be asked. We know the journalists will pick some tough ones and that's the way we like it.

In our second change, we will have a drawing at 8:15 at each microphone for those shareholders hoping to ask questions themselves. At the meeting, I will alternate the questions asked by the journalists with those from the winning shareholders. At least half the questions – those selected by the panel from your submissions – are therefore certain to be Berkshire-related. We will meanwhile continue to get some good – and perhaps entertaining – questions from the audience as well.

So join us at our Woodstock for Capitalists and let us know how you like the new format. Charlie and I look forward to seeing you.

February 27, 2009

Warren E. Buffett
Chairman of the Board

Morning Session - 2009 Meeting

1. Q&A sessions starts

WARREN BUFFETT: Good morning. I'm Warren. The hyperkinetic fellow here is Charlie. (Laughter)

And we're going to go in just a minute to a question and answer section, at least a question section, that will be a little different than last year.

We have a panel — I can't see very well here — over to the right, of journalists who will ask questions and alternate with the people in the audience.

And we'll go back and forth. Got a little checklist here that we'll use as we go back and forth. Here we are. And we should have a pen here someplace to check things off.

2. Board of directors introduced

WARREN BUFFETT: But first, even though we'll have the formal meeting later on, I would like to introduce our directors. And if they would stand as I announce them and then remain standing until the end.

And if you'll just hold your applause until the end or even later if you wish — (laughter) — we'll recognize them. We'll have a meeting later on to elect them. But if you'll stand up. And like I say, you can't see very well here with the lights, but —

There's me and Charlie, we start off. And then Howard Buffett, Susan Decker, Bill Gates, Sandy Gottesman, Charlotte Guyman , Don Keough, Tom Murphy, Ron Olson, and Walter Scott. Those are the directors of Berkshire Hathaway. (Applause)

3. Money under your mattress beats Treasurys

WARREN BUFFETT: Now, we only have one slide, which actually is more than we would usually have. (Laughs)

And — but it does tell you something about what happened last year.

And it also acts as a commercial for our Nervous Nellie mattress with the famous night depository feature. (Laughter)

Last year — and have we got that up on the slide?

Last year, we wrote a ticket on December 19th. And we sold 5 million of Treasury bills. I hope you can see that. It's — we've got the December 19th circled up there.

And those Treasury bills came due, or were to come due, on April 29th of this year. So they were going to come due over four months later.

And the remarkable thing is, and this tells you about what an extraordinary year it was, is that we sold those $5 million of Treasury bills, which were going to pay off at $5 million on April 29th of 2009, in December of 2008 we sold them for five million and ninety dollars and seven cents.

In other words, if the person who bought those from us and paid us five million and ninety dollars, instead had bought the Nervous Nellie mattress and had put their money under the mattress, they would've been $90 better off at the end of four months, than by buying Treasury bills.

If the U.S. Treasury had just sold 5 trillion of these, they could've made an easy $90 million and Tim Geithner could've put the money under a Nervous Nellie mattress and we all would've been better off.

Negative yields on U.S. Treasury bills are really an extraordinary thing. You've got less on — less for your money from the U.S. Treasury than you got from sticking it under a mattress.

I'm not sure you'll see that again in your lifetime. But it's been a very extraordinary year.

4. Panel of journalists introduced

WARREN BUFFETT: We have with us, the journalists. We have Carol Loomis of Fortune. We have Becky Quick of CNBC. And we have Andrew Ross Sorkin of the New York Times.

They have received questions from shareholders all over the country. Andrew told me that he received a couple hundred just this morning.

And they have selected what they think are — they're all Berkshire Hathaway-related questions.

We were having a problem in recent annual meetings where we sort of drifted away from Berkshire, into the realm of what people's children had done in school recently and that sort of thing. (Laughter)

So we wanted to bring it back a little bit to Berkshire.

So they have selected among the best of the Berkshire-related questions that they've received. And we will go from — we will start with Carol Loomis. And we will go then to the audience.

We have 13 sections, 12 in this room, one in an overflow room. And we have selected the people in each of the audience sections by a raffle system, half an hour to an hour ago. And we'll go back and forth. And with that, we'll start it off with Carol.

5. Carol Loomis comments

CAROL LOOMIS: Good morning. I come first because Loomis outrakes — outranks — the others alphabetically. But this gives me a chance to just have a few sentences to tell you that — about the questions that we received.

We conferred this morning. Andrew definitely got more than any, either Becky or me. We got almost 5,000 questions, which I think even will surprise Warren. Because I don't think he knew that it'd run that high.

And the main thing I wanted to say is that an awfully lot of them were very good. And we had a real problem trying to get them down to the number that we're probably going to be able to ask. We don't even know what that is for sure.

But we want to apologize to anybody who sent us a Berkshire-related question, because we did have to cut out some because they weren't that, and whose question we didn't get asked. And maybe in another year, it will work.

6. Our stock index derivatives aren't dangerous

CAROL LOOMIS: So, my first question, "Warren and Charlie, Warren particularly.

"You have referred to derivatives, this is famous, as weapons — financial weapons — of mass destruction.

"In the 1964 movie, 'Dr. Strangelove,' Major T.J. Kong, nicknamed 'King' Kong and played by Slim Pickens, rides a weapon of mass destruction out of the bomb bay of his B-52.

"As a long-term Berkshire shareholder, I'm feeling a little like Slim today. I understand that despite the dramatic decline in the stock market, there is a good probability we could make money on our derivatives, taking into account the return on our premiums.

"But given the amount of accounting equity and statutory capital, and, I would argue, market value —" this is the questioner saying this — "that these derivatives have destroyed, at least temporarily, do you think these large derivative positions are appropriate for a highly-rated insurance company?

"And if so, you do you think you will be adding to these positions?"

WARREN BUFFETT: Yeah. I would say this. The questioner to some extent answers his own question.

I don't know whether he anticipates as strongly as I do that, net, these positions will make money.

But over — you know, our job is to make money over time at Berkshire Hathaway. It does not impinge on capital. We have arranged them so that the collateral posting requirements, which are one of the big dangers in the derivatives field, that we have very, very minimal exposure to that.

Even on March 31st, at a time when the market was down very substantially from when we entered into these transactions, we had posted collateral of a little less than 1 percent of our total marketable securities.

So they have no — they pose no — they pose problems to the world, generally. And that's why I referred to them on a macro basis, in the 2002 report, as being financial weapons of mass destruction.

But I also said in that report, that we use them in our own business regularly when we think they're mispriced.

And we think our shareholders are intelligent enough that if we explain the transactions, as we try to do in the annual report, and explain why we think we will make money — there's no guarantee we'll make money, but our expectancy is that we will make money — we think that as long as we explain them, that the financial consequences to our shareholders far outweigh any accounting consequences.

We explained in earlier reports that because of mark-to-market, that these things can swing billions of dollars as an accounting liability.

But the only cash that has taken place, for example, in our equity put options, we have received $4.9 billion roughly. And we hold that money. Originally, the terms of these were 15 to 20 years. So we have the use of $4.9 billion for 15 to 20 years.

And then markets have to be lower at that time than they were at the time of inception. So I personally think that the odds are extremely good that on the equity put options, we will make money.

I think on the high-yield index, credit default swaps we've written, I think that we will probably lose money before figuring the value of the money we've held.

Now, I told you a year ago, I thought we would make money on those. But we have run into far more bankruptcies in the last year than is normal.

We've, in effect, had a financial hurricane. We insure against natural hurricanes. And we insure against a financial hurricane. And we have been in a bit of a financial hurricane.

So I would expect those contracts, before investment income, would show a loss, and perhaps, after investment income. The bigger contracts are the equity put contracts. And I think the odds are very high that we make money on those.

Now, it would be nice if we were writing with current prices. But we probably couldn't write them without getting into collateral posting requirements now. So we have a very favorable position on those.

In fact, in the last week, we modified two equity put contracts, one that had a strike price of 1514. That has been reduced to 994 on the S&P 500. Now, we shortened it up eight years. But it still has about 10 years to run.

So merely for reducing the term from 18 years to about 10 years, we still have the use of the money for 10 years, we reduced the strike price from 1514 to 994.

So I think those are going to be very advantageous contracts. I think our shareholders are intelligent enough to, if they're explained properly, to realize how advantageous they are. And we'll continue to hold them. And we'll continue to explain them.

And they have no impact on our financial flexibility. And we are far more than an insurance company. I mean, we have earnings coming in from many areas. We have lots of cash sitting at the parent company. We have lots of cash in the subsidiaries. We have no significant debt maturities of any kind.

So we're ideally suited to hold this sort of instrument.

And Charlie, what would you say?

CHARLIE MUNGER: Well, I would agree with the questioner that there is some limit to the amount of those things we should do. But I think we stayed well short of the limit.

7. Financial literacy problem could help Berkshire

WARREN BUFFETT: OK, we'll go to zone 1.

AUDIENCE MEMBER: Hi. My name's Scott Slaybee (PH). I'm from Denver, Colorado.

First off, I'd like to thank Mr. Buffett and Mr. Munger for having us out here today. I appreciate you bringing us out here so thank you very much.

WARREN BUFFETT: And thank you.

AUDIENCE MEMBER: And it's great that you answer our questions.

I'm a former teacher. Or I'm a teacher. I shouldn't say former. Being a former teacher yourself, I see a problem with financial literacy with our future generations.

And I'm curious what you think future generations should know and if there's anything that needs to be in school curriculums to teach younger people financial literacy as we move forward?

WARREN BUFFETT: Yeah. I think there's a problem with financial literacy with our current generation. (Laughter)

There's a — Andy Heyward, who has helped us with the cartoon, has a — will have a — he sold his company last year, but he has a new company.

And he will have a program coming out that works on that question. And that I play a very small part in.

ABC has a program coming up with a number of well-known personalities in it that will deal with the question of financial literacy.

And it's, you know, it is a tough sell in a world of credit cards and, you know, a world that depends on calculators rather than people sitting down and doing actual arithmetic and all of that, to teach people. But in the end, I think we make progress over time. I mean, I hope our annual reports contribute to that sort of thing.

But you're going to have people doing very foolish things with money.

I remember on my honeymoon. I was 21 and my wife was 19. And we drove west. I'd never been west. And we went through Las Vegas. And it was 1952. And we stopped at the Flamingo. And people were better dressed in the casinos then.

And there were a bunch of Omaha fellows that actually owned part of the Flamingo at that time, terribly nice to us.

But I looked around at that casino and I saw all kinds of well-dressed people who had traveled thousands of miles to do something very dumb. And I thought this is a country where you're going to get very rich. (Laughter)

If people are going to get on a plane in New York and fly a couple thousand miles to stand there and do things with a mathematical expectation that's negative on every action they take, that is a world of opportunity. So — (Laughter)

I, you know, I recommend that you and — you work with your students. I started teaching at the University of Omaha, you know, when I was 21. And you work with your students to make them literate. And they will have a terrific advantage.

Charlie?

CHARLIE MUNGER: Well, a world where legalized gambling is now conducted by a great many states in the form of lotteries where people are encouraged to bet against the odds and a world where we have a vast overuse of high-cost credit card debt, it needs a lot more financial litery. I would argue — literacy.

I think we've been going in the wrong direction. So I don't think you can teach people high finance who can't use a credit card — (laughter) — intelligently.

WARREN BUFFETT: Yeah. If you're — I talk to students about that. If you're willing to pay 18 or 21 percent on a credit card —

And the credit cards companies need it, incidentally, currently, because you have losses running close to 10 percent. So with expenses, they may need that.

But there's no way that you're going to financially come out borrowing money at those kind of rates. And I wouldn't know how to do it. And it's too bad. On the other hand, it's probably good for our business.

I mean, one of — you know — we are looking for things that are mispriced. And the more people think that borrowing money on credit cards is intelligent, they probably will not think that doing long-term equity put contracts is intelligent. And we'll go our way and they'll go their way.

8. Buffett "commends" DC's response to credit crisis

WARREN BUFFETT: Becky?

BECKY QUICK: Warren, first of all, we've been asked to pass on a message that the attendance today is 35,000.

WARREN BUFFETT: Good. (Applause) Now —

BECKY QUICK: This —

WARREN BUFFETT: Now if they all just spend appropriately, it'll be a big day. (Laughter)

BECKY QUICK: This question comes from James Lewis (PH) from Logan, Ohio, who said it was OK to use his name and city.

He says, “One of the substantial investments of Berkshire is Wells Fargo. The chairman of Wells Fargo supposedly indicated that he did not want to take TARP funds from the federal government.

“He, furthermore, recently said that some of the programs of the federal government to reinvigorate the banks were asinine.

“Mr. Munger, do you agree with the chairman of Wells Fargo? And please explain why you do or do not agree. And Mr. Buffett, do you agree with Mr. Munger?” (Laughter)

WARREN BUFFETT: Yes. (Laughter)

CHARLIE MUNGER: When a government is reacting to the biggest financial crisis in 70 years, which threatens important values in the whole world, and the decisions are being made hurriedly and under pressure and with good faith, I think it’s unreasonable to expect perfect agreement with all of one’s own ideas.

I think the government is entitled to be judged more leniently when it’s doing the best it can under trouble.

Of course, there’s going to be some reactions that are foolish. And I happen to share one of the troubles of some of the Wells Fargo executives, in that I’m pretty blunt.

I happen to think that the accounting principle that says your earnings go up as your credit is destroyed — because if you had any money left, you could buy your own debt back at a discount — I happen to think that’s insane accounting.

And I think the people who voted it into effect ought to be removed from the accounting board. So a man who talks like that has to have some sympathy with the people at Wells Fargo.

WARREN BUFFETT: He usually gets to hang them by their thumbs, but he held back this morning.

The government, in mid-September last year, really did — they were facing a situation that was as close to a total meltdown throughout the financial system as I think you can imagine.

You had a couple hundred billion dollars move out of money market funds in a couple of days. You had the commercial paper market freeze up, which meant that companies all over the country that had nothing to do with the financial world, basically, were going to have trouble meeting payrolls.

We were — we really were looking into the abyss at that time. And a lot of action was taken very promptly. And overall, I commend the actions that were taken.

So as Charlie says, to expect perfection out of people that are working 20-hour days and are getting hit from all sides by new information, bad information, that one weekend with Lehman going, AIG going, Merrill would've gone, in my view, unless the BofA had bought it.

I mean it was — when you're getting punched from all sides and you have to make policy and you have to think about congressional reaction and the American people's reaction, you know, you're not going to do everything perfectly.

But I think overall, they did a very, very good job.

I'm sympathetic — that remark was made by Dick Kovacevich, who came in second last year to Charlie in the plain speaking contest around the world. (Laughter)

And it's true that Dick Kovacevich was called on a Sunday at a little after noon, as I understand it, and told would be in Washington the next day at 1- or 2 o'clock, without being told what it was about.

And there were 11 bankers there and some officials. And they were told that they were going to take TARP money. And they were going to take loans from the government and preferred stock. And that they only had an hour or two to sign it and they didn't get to consult with boards.

But that's the nature of an emergency. You know, it — I think you — well, you're going to have some decisions that later can be looked back at and somebody will say, "I could've done it a little bit better." But, by and large, the authorities, in my view, did a very good job.

And all banks aren't alike by a long shot. And in our opinion, Wells Fargo is a — among the large banks particularly — it's a fabulous bank and has some advantages that the other banks don't have.

But in a time like that, you're not dealing in nuances.

Incidentally, I would recommend to all of you, that you go to the internet and read Jamie Dimon's letter to his shareholders. Jamie Dimon of JPMorgan Chase. It's a fabulous letter. It talks about a point that Charlie made there.

But it — Jamie did a great job of writing about what caused this and what might be done in the future. It's as good a shareholders letter that I've ever seen. So by all means, look it up. It's long, but it's worth reading.

9. Higher mathematics can be dangerous for investing

WARREN BUFFETT: OK, we'll go to area 2.

AUDIENCE MEMBER: Yeah, thank you, Mr. Buffett and Mr. Munger. My name's Rick Franklin (PH). I'm from St. Louis, Missouri. I'd like to follow up on the microphone 1's question on financial literacy. And my own question from two years ago on your discount rate.

But before I do that, I hope you'll indulge me. Torstol's (PH) wife, Rosemary Coons (PH), if you could come to section 222. I found your husband. (Laughter)

You can come to microphone 2, if that's easier.

WARREN BUFFETT: You get a little of everything here. (Laughter)

AUDIENCE MEMBER: So my question is, free cash flow: sell-side analysts like to do a 10-year discounted cash flow analysis with a terminal value.

Even some of the books written about your style — "The Warren Buffett Way", "Buffettology" — imply that you go through that exercise.

But I know you're famous for not using computers or calculators. I'm wondering if those type of exercises fall into the "too hard" file, and you just do a simple free cash flow — normalized free cash flow — over a discount rate?

And if you care to augment the answer with your numerical analysis of Coke, I'd appreciate that. (Laughter)

WARREN BUFFETT: Well, the answer is that investing — all investing is, is laying out cash now to get more cash back at a later date. Now, the question is how much do you get back, how sure are you of getting it, when do you get it? It goes back to Aesop's fables. You know, "A bird in the hand is worth two in the bush."

Now, that was said by Aesop in 600 B.C. He was a very smart man. He didn't know it was 600 B.C. But I mean, he couldn't know everything. (Laughter)

But the — but that's what's being taught in the finance — you got a Ph.D. now and you do it more complicated, and you don't say, "A bird in the hand is worth two in the bush," because you can't really impress the laity with that sort of thing.

But the real question is, how many birds are in the bush? You know you're laying out a bird today, the dollar. And then how many birds are in the bush? How sure are you they're in the bush? How many birds are in other bushes? What's the discount rate?

In other words, if interest rates are 20 percent, you got to get those two birds faster than if interest rates are 5 percent and so on.

That's what we do. I mean, we are looking at putting out cash now to get back more cash later on.

You mentioned that I don't use a computer or a calculator. If you need to use a computer or a calculator to make the calculation, you shouldn't buy it.

I mean, it should be so obvious that you don't have to carry it out to tenths of a percent or hundredths of the percent. It should scream at you.

So if you really need a calculator to figure out that it's — the discount rate is 9.6 percent instead of 9.8 percent — forget about the whole exercise. Just go onto something that shouts at you. And essentially, we look at every business that way.

But you're right, we do not make — we do not sit down with spreadsheets and do all that sort of thing. We just see something that obviously is better than anything else around, that we understand. And then we act.

And Charlie, do you want to add to that?

CHARLIE MUNGER: Well, I'd go further. I'd say some of the worst business decisions I've ever seen are those that are done with a lot of formal projections and discounts back.

Shell Oil Company did that when they bought the Belridge Oil Company. And they had all these engineers make all these elaborate figures.

And the trouble is you get to believe the figures. And it seems that the higher mathematics, with more false precision, should help you. But it doesn't.

The effects, averaged out, are negative when you try and formalize it to the degree you're talking about. They do that in business schools because, well, they got to do something. (Laughter and applause)

WARREN BUFFETT: There's a lot of truth to that. I mean, if you stand up in front of a class and you say, "A bird in the hand is worth two in the bush," you know, you're not going to get tenure. (Laughter)

It's very important if you're in the priesthood to look, at least, like you know a whole more lot more than the people you're preaching to.

And if you come down and just — if you're a priest, and you just hand down the 10 Commandments and you say, "This is it," and we'll all go home, you know, it just isn't the way to progress in the world.

So, the false precision that goes into saying that this is a two standard deviation event or this is a three standard deviation event, and therefore we can afford to take this much risk and all that, it's totally crazy.

I mean, you saw it with Long-Term Capital Management in 1998. You've seen it time and time and time again.

And it only happens to people with high IQs. You know, those of you who are — have 120 IQs are all safe. (Laughter)

But if you have a very high IQ, and you've learned all this stuff, you know, you feel you have to use it. And the markets are not that way.

The markets of mid-September last year, when people who ran huge institutions were wondering how they were going to get funding the next week, you know, that doesn't appear on a — you can't calculate the standard deviation with — that that arises at.

It's going to arise much more often than people think, in markets that are made by people that get scared and get greedy. And they don't observe the laws of flipping coins, it's — in terms of the distribution of results.

And it's a terrible mistake to think that mathematics will take you a long place in investing. You have to understand certain aspects of mathematics. But you don't have to understand higher mathematics.

And higher mathematics may actually be dangerous and it will lead you down pathways that are better left untrod.

10. Moody's wasn't alone in making mistakes

WARREN BUFFETT: OK. Andrew, one of those 200 questions from this morning? Or what are —

ANDREW ROSS SORKIN: This one's not from this morning, but it relates to Moody's. And we've probably received about 300 questions, at least, on this topic.

This question, which is representative of many, comes from Aaron Goldsmeizer (PH). And the question is the following:

"Given the role of rating agencies in the current economic crisis — their conflict of interest, their reliance on, quote, 'flawed history-based models,' as you described in this year's letter to shareholders, and the likelihood that a loss of credibility and/or regulatory reforms could force drastic changes in their business models or earning streams — why do you retain such a large holding in Moody's?

“And more important, why didn’t you use your stake to try to do something to prevent conflicts of interest and reliance on these flawed history-based models?”

WARREN BUFFETT: Yeah, I don’t think the conflict of interest question was the — was the biggest —by anywhere close to the major cause of the shortcomings of the rating agencies in foreseeing what would happen with CDOs and CNBSs and all sorts of instruments like that.

Basically, five years ago, virtually everybody in the country had this model in their mind, formal or otherwise, that house prices could not fall significantly.

They were wrong. Congress was wrong. Bankers were wrong. People that bought the instruments were wrong. Lenders — the borrowers were wrong.

But people thought that if they were going to buy a house next year, they better buy it this year because it was going to be selling for more money the following year.

And people who lent them money said it doesn’t make any difference if they’re lying on their application or they don’t have the income because houses go up, and if we have to foreclose we won’t lose that much money. And besides, they can probably refinance next year and pay.

So there was an almost total belief — and there was always a few people that disagreed — but there was almost a total belief throughout the country that house prices would certainly not fall significantly, and that they would probably keep rising.

And the people at the rating agencies, one way or another, built that into their system.

And I don’t — I really don’t I think it was primarily the payment system that created the problem. I think they just didn’t understand the various possibilities of what could happen in a market— or in a bubble, really — where people leveraged up enormously on the biggest asset that most Americans possess, their house.

And so you had a $20 trillion asset class in a $50 trillion of total assets of American families that got leveraged up very high. And then once it started melting down, it had self-reinforcing aspects on the downside.

So I say that they made a major mistake in terms of analyzing the instruments. But they made a mistake that a great, great, great many people made.

And that probably if they had taken a different view of residential mortgages four or five years ago, they would’ve been answering to Congressional committees that would be saying, “How can you be so un-American as to deny all these people the right to buy houses simply because you won’t rate these securities higher?”

So I — they made a huge mistake. But the American people made a huge mistake. Congress made a huge mistake.

Congress presided over the two largest mortgage companies. And they were their creatures. And they were supervised by them. And, you know, they're both in conservatorship now.

So I don't think they were unique in their inability to spot what was coming.

In terms of us influencing their behavior, I don't think I've ever made a call to Moody's.

But it's also true that I haven't made it to, or made — maybe made one or two — to other companies in which we're involved.

I mean, we don't tell, you know, the Burlington Northern what safety procedures to put in.

We don't tell American Express who to cut off on credit cards and, you know, what they're — who they should lend to and who they shouldn't.

We are — when we own stock, we are not there to try and change people.

Our luck in changing them is very low, anyway. In fact, Charlie and I have been on boards of directors where we're the largest shareholders. And we've had very little luck in changing behavior.

So, we think that if you buy stock in a company, you know, you better not count on the fact that you're going to change their course of action.

And in terms of selling the stock, the odds are that the rating agency business is probably still a good business. It is subject to attack. And who knows where that leads? And who knows what Congress does about it?

But it's a business with very few people in it. It's a business that affects a large segment of the economy. I mean, the capital markets are huge. I think there will probably be rating agencies in the future. And I think that it's a business that doesn't require capital. So it has the fundamentals of a pretty good business.

It won't be doing the volume in the next — probably for a long time in certain areas of the capital markets. But capital markets are going to grow over time.

We have said in this meeting in the past, many times, that Charlie and I don't pay any attention to ratings. I mean, we don't believe in outsourcing investment decisions.

So we — if we buy a bond, the rating is immaterial to us, except to the extent if we think it's rated more poorly than it should, it may help us buy it at an attractive price.

But we do not think that the people at Moody's, or Standard and Poor's, or Fitch, or anyplace else, should be telling us the credit rating of a company. We figure that out for ourselves. And sometimes we disagree with the market in a major way. And we've made some money that way.

Charlie?

CHARLIE MUNGER: Yeah, I think the rating agencies, being good at doing mathematical calculations, eagerly sought stupid assumptions that enabled them to do clever mathematics. It's an example of being too smart for your own good.

There's an old saying, "To a man with hammer, every problem looks pretty much like a nail." And that's — (laughter) — what happened in the rating agencies.

WARREN BUFFETT: Yeah, the interesting things about all those triple-As, is the people that created them ended up owning a lot of them. So they believed their own baloney, themselves. Every — the belief was enormous.

So you had these people stirring up the Kool-Aid and then they drank it themselves. And they — (laughter) — you know, they paid a big penalty for it. But I don't think it was — I think it was stupidity and the fact that everybody else was doing it.

I send out a letter to our managers, only every couple of years. But the one reason you can't give at Berkshire, as far as I'm concerned, for any action, is that everybody else is doing it.

You know, and just — if that's the best you can come with, you know, something's wrong. But that happens in security markets all the time.

And of course, it's — when Charlie and I were at Salomon or someplace like that, it's very difficult to tell a huge organization that you shouldn't be doing something that people, well-regarded competitors, are doing. And particularly when there's a lot of money in it.

And so it's very hard to stop these things once you get sort of a industry acceptance of behavior. And you know, we were very unsuccessful, Charlie and I, at Salomon at saying, "Well, we just don't want to do this sort of thing."

We couldn't even get them — initially, when we got in there at first, they were doing business with Marc Rich. And we said, "Let's stop doing business with Marc Rich."

You know, that's like saying in the '30s, "Let's stop doing business with Al Capone," or something. And they said, "But it's good business. If he doesn't do it with us, he'll do it with somebody else." And they felt that way. And I think we won that one. But it wasn't easy.

You remember that, Charlie?

CHARLIE MUNGER: I certainly do.

11. Housing markets are beginning to improve

WARREN BUFFETT: OK, we'll go to area 3. (Laughter)

OK, zone 3, are we on?

AUDIENCE MEMBER: I'm Laurie Gould (PH) from Berkeley, California.

Where do you see the residential real estate market headed nationally, particularly in California, over the next year or two?

WARREN BUFFETT: Well, we don't know what real estate is going to do. We didn't know what it was going to do a few years ago. We thought it was getting kind of dangerous in certain ways. But it's very hard to tell.

I would say this. From what we're — from what I'm seeing, and I do see a lot of data — there's — and California, incidentally, is a very big — I mean, there are many markets within California. Stockton is going to be different than San Francisco and so on.

But, in the last few months, you've seen a real pickup in activity, although at much lower prices. But you've seen — I think you've seen something in the medium- to lower-priced houses. And medium means a different thing in California than it does in Nebraska.

But you've seen, in maybe $750,000 and under houses, you've seen a real pickup in activity, many more bidders. You haven't seen it bounce back in price. Prices are down significantly and it varies by the area.

But it looks as if — you know, you had a foreclosure moratorium for a while. And so get into distortions because of that.

But what it looks like, looking at our real estate brokerage data — and we have the largest real estate brokerage firm in Southern California, in Orange County, Los Angeles County, and San Diego in Prudential of California that's owned by MidAmerican — we see something close, I would say, to stability at these much-reduced prices in the medium to lower group.

If you've got a $5 million or $3 million house, that still looks like a very — erratic — it's a market in which there still isn't a lot of activity.

But in the lower levels, there's plenty of activity now. Houses are moving. Interest rates, of course, are down so it's much easier to make the payments.

The mortgages being put on the books every day in California, are much better than, you know, the mix that you had a few years earlier.

So it's improving. And I don't know what it'll do next month or three months from now.

The housing situation is pretty much this way. You can look at it this way.

We create about 1,300,000 or so households a year. It bounces around some. But — and it tends to — in a recession, it tends to be fewer because people postpone matrimony and so on to some extent.

But if there's 1,300,000 households created in a year and you create two million housing starts annually, you are going to run into trouble. And that's what we did. We just created more houses than the demand was — the fundamental demand — was going to absorb.

So we created an excess of houses. How much excess is there now? Perhaps a million and a half units. We were building two million units a year. That's down to 500,000 units a year.

Now, if you create 500,000 units a year and you have a 1,300,000 households created, you are going to absorb the excess supply.

It will be very uneven around the country. South Florida's going to be tough for a long, long time. So it isn't like you can move a house from one place to another if there's demand in one place and not another.

But we are eating up an excess inventory now. And we're probably eating it up at the rate of 7- or 800,000 units a year. And if we have a million and a half excess, that takes a couple of years. There's no getting away from it.

You have three choices. You could blow up a million and a half houses, you know. And if they do that, I hope they blow up yours and not mine, but that's a — (Laughter)

We could get rid of it. We could try to create more households. We could have 14-year-olds start getting married and having kids, and — (Laughter)

Or we can produce less than the natural demand increase. And that's what we're doing now.

And we're going to eat up the inventory. And you can't do it in a day. And you can't do it in a week. But it will get done.

And when it gets done, then you'll have a stabilization in pricings. And then you will create the demand for more housing starts. And then you go back up to a million and a quarter, and then our insulation business and our carpet business and our brick business will all get better.

Exactly when that happens nobody knows. But it will happen.

Charlie?

CHARLIE MUNGER: Oh, I think in a place like Omaha, which never had a really crazy boom in terms of housing prices, with interest rates so low if you've got good credit, that if I were a young person wanting a house in Omaha, I would buy it tomorrow. (Applause)

WARREN BUFFETT: We own the largest real estate brokerage firm in Omaha. So — (laughter) — Charlie will be — if he qualifies, we will give him a mortgage application.

If is true that 4 1/2 million houses will change hands. There's about 80 million houses in the country. Twenty-five million of those do not have a mortgage. About a third of the houses in the country do not have a mortgage. You've got about 55 million, or a little less, that have a mortgage. And five or six million of those are in trouble one way or another.

But we're selling 4 1/2 million houses every day. And by and large, they're going into stronger hands. The mortgages are more affordable. The down payments are higher. We're — the situation is getting corrected.

But it wasn't created in a day or a week or a month. And it's not going to get solved in a day or a week or a month. We are on the road to solution.

12. 2008 wasn't great for investment manager candidates

WARREN BUFFETT: OK, Carol?

CAROL LOOMIS: Perhaps I should have said one other thing at the beginning. Those of you who read the annual report carefully know that Charlie and Warren were to be given no clue as to what any of the three of us were going to ask. So don't think that they have gotten a little list. They have seen nothing.

This question, I got many versions of this question. This one happened to come from Jonathan Grant of New York City. It concerns the four investment managers you have said are in the wings as possible successors to you.

"Can you please tell us, without naming names, but preferably in both quantitative and qualitative terms, how each of the four did in 2008 with the money they are managing — they were managing — for their clients.

"You said you hoped to pick people who would be able to anticipate things that had never occurred before. While the world has seen credit crises before, there were a lot of things that happened in 2008, especially in the last few months of the year, that few were predicting and that you, yourself, have described as almost unprecedented.

“How would you rate the way that these managers — these four managers — did in managing against these low-probability risks? Are all four still on the list?

WARREN BUFFETT: Well, the answer is all four are still on the list. Let me just make one point first, though, because it got misreported a little bit.

We have three candidates for the CEO position. And this is always a major subject of discussion at our director’s meetings. All of them are internal candidates. You should know that.

That’s been said before. But it got misreported here once or twice. And it got confused, I think, because of the four possibilities for the investment job. And you could have all four come to work for us in that case.

We won’t have three CEOs or two CEOs. But we might have multiple investment managers after I’m not around. Or we might just have one. That would be up to the board at that time.

They are both inside and outside the organization. And we don’t preclude anything in terms of where they come from. So we could have a whole big list from outside the organization.

That will not be true about the CEO position. The person that follows me will come from within Berkshire Hathaway.

The four, I don’t have precise figures from them, although I’ve got a fair amount of information on some of them. I would say they did no better than match the S&P last year, which was minus 37 after adding back dividends.

So I would say that in terms of 2008, by itself, you would not say that they covered themselves with glory. But I didn’t cover myself with glory, either. So I’m very tolerant of that in 2008. (Laughter) They —

Charlie, you know some of the records pretty well. Wouldn’t you say that’s true?

CHARLIE MUNGER: Yeah. What’s interesting to me is that practically every investment manager that I know of in America, and regard as intelligent and disciplined and with a unusual record of past success, they all got creamed last year. (Scattered laughter)

WARREN BUFFETT: The group — I don’t hear a lot of laughter about that. (Laughter)

I think you’re hitting a nerve out there, Charlie.

The four have a better-than-average record over time. If you’d asked me at the start of the year, if you’d said, “There’s going to be a minus 37 percent year, will this group do better than average?” I would’ve said yes.

But I think I would've been wrong. And like I said, I haven't got audit returns from every one of them. But I would say I would be wrong.

I would say that their record over 10 years has been, in each case, has been anywhere from modestly to significantly better than average. And I'd be willing to be that would be the case over the next 10 years.

But certainly, last year, you know, there were a lot of things that didn't work. And our group was not exempt from them.

I have not changed the list. That doesn't mean that we're always looking with the idea of finding more people to add to it.

And as opposed to the CEO job, you know, if I dropped dead tonight, the board needs to put somebody in as a CEO tomorrow morning. And they will do so. And they know who it is. And they feel very good about it.

Not too good, I hope, but — (Laughter)

But on the investment officers — one or more, and it could easily be more — they don't need to do something the next day or the next week.

I mean, the portfolio isn't — everything doesn't stop because of that. So that can be a somewhat more leisurely decision they'll have. And it will be made, in an important way, in consultation and agreement with the new CEO.

So that is something that you shouldn't expect the next day to hear an announcement on the investment managers. But you should expect to hear, you know, within a month or something like that.

CHARLIE MUNGER: I don't think we would want a manager who thought he could just go to cash based on macroeconomic notions and then hop back in when it was no longer advantageous to be in cash. Since we can't do that ourselves —

WARREN BUFFETT: Yeah, we think it's impossible if we can't do it ourselves.

CHARLIE MUNGER: Yeah, right. (Laughs)

So we're not looking for a type who went to cash totally.

WARREN BUFFETT: Yeah, that would — in fact, we would leave out anybody that did that.

CHARLIE MUNGER: Yeah, we would exclude them.

WARREN BUFFETT: Yeah. That —

CHARLIE MUNGER: They're not dumb enough for us. (Laughter)

13. Munger expects public/private hybrid health care system

WARREN BUFFETT: OK, let's go to zone 4.

AUDIENCE MEMBER: Hi, Mr. Buffett, Mr. Munger. My name is Vern Cushenbery. I'm from Overland Park, Kansas.

I wonder if you might share your thoughts on the likelihood of a nationalized health care system, what that might look like and the effects on your portfolio?

WARREN BUFFETT: Well, I'm going to let Charlie answer that one since I don't know how to. (Laughs)

CHARLIE MUNGER: Personally, I think something more like Europe will come to the United States in due course. And I think it'll be supplemented by a private system, which is the equivalent of private school competition for public education.

And, although I'm a Republican, I'm not horrified by that probable development. Personally, I wish they'd put it off for a year while we solve the economic problems. (Applause)

WARREN BUFFETT: And I would say that in terms of its impact on Berkshire, you know, we have a broad cross section of companies — we have 246,000 people working for us — that we will adjust, like American business generally will adjust, to any developments along that line.

It won't pose special problems for us. It won't offer us special opportunities. We'll see what the national sentiment is, as expressed through Congress. And we'll behave accordingly.

14. Why we're not training or naming our next CEO

WARREN BUFFETT: Becky?

BECKY QUICK: This is a question that follows up on the succession question. This one is a, in particularly, though, addressed to the three candidates for CEO. It comes from Irving Fenster who writes:

"Running Berkshire is very complex and complicated. Give us some insight for your reluctance to bring in your replacement to give him the benefit of your training, instead of his having to tackle the myriad of problems of the transition on his own.

“The benefits for Berkshire, your replacement, and you, are so compelling your reluctance is puzzling. Having him on board may relieve some of the stress on you and help add many, many more years of good health for you.”

WARREN BUFFETT: Irving is a friend of mine in Oklahoma. Went in in my partnership 40 years ago, Irving and Irene. And he’s been writing me on this for 30 or 40 years. And he’s had — (laughter) — he’s had no luck with me. So he decided to write Becky, apparently. (Laughter)

If we had a good way to inject somebody into some role that was — would make them a better CEO of Berkshire, we would try it.

But the truth is that the candidates we have are running businesses. They’re making capital allocation decisions. They’re doing things every day of an operating nature. And these are major businesses.

And to sit around headquarters while I’m sitting in there reading and on the phone and, you know, who knows what else, they — it — there just is — there wouldn’t be anything to do.

I mean, we could meet every hour. You know, I could say, “Here’s what I’m thinking about now. What do you think about this?” and — (Laughter)

It’d be a waste of talent. It’d be ridiculous.

And Irving has this notion that somehow, that they would be absorbing all these things that I’m doing. I just throw The Wall Street Journal to him after I’m done reading it, and I’d throw him The New York Times and I’d throw him the FT. (Laughs)

And these are people that know how to run big businesses. They run businesses that make many, many, many millions, or even billions, of dollars.

So, they are ready for the job right now. I wouldn’t be happy unless we have — they are 100 percent ready. They know how to allocate capital.

The biggest job they’ll have is the fact that they will have to develop relationships with potential sellers of businesses, with the world, generally, with you, the shareholders, with other managers. That takes some time, not an extraordinary time.

But that — you know, they will have to become acquainted with people. But — different constituencies. But that — there’s, you know, that is nothing that really needs to be hastened along. It’s nothing terribly important.

I mean, they know how to run businesses. And they would do many things much better than I would. The biggest — probably the biggest challenge, because we have all of those talented managers that you saw during the movie.

And those people have different styles. And they have different needs to some degree. They have different ways of operating. They're all successes.

But you know, some of them bat left-handed. Some of them bat right-handed. Some of them stand deep in the box. You know, some of them crowd the plate. I mean, they all have a little bit of variation. But they all hit terrifically.

And for the CEO of Berkshire, it does require some knowledge of the individual personalities. And which ones like to run by themselves totally and which ones like to check in occasionally and all that.

But that is no reason to take a talent that's now running a business very successfully and building value and to have them sit in an office next to me and have us chew over the day's events.

I mean, Charlie and I worked together now for decades. And I've learned a lot from Charlie. But I haven't done it by, you know, having him sit next door and have hourly meetings or anything of the sort.

What do you think, Charlie?

CHARLIE MUNGER: Well, I think, averaged out, you're more likely to be qualified to be a CEO by running a subsidiary with an enormous amount of discretion than you are to being around headquarters watching somebody else do it his way.

A lot of the models that have worked well in the world, like Johnson & Johnson, are quite Berkshire-like, in that they're decentralized and they let these people pop up from the subsidiaries. They don't try and just create CEOs in a hothouse in headquarters.

WARREN BUFFETT: We have an unusual situation at Berkshire that most of the people at the top, virtually all of them, are doing what they want to do. I mean, they like running their businesses.

That's what they came in expecting to do. And that's what they're doing, and we're letting them do it the way they like to do it.

And so we don't have 50 people that all think they're on some pyramid to get to the top. And Irving would like me to name — he's talked to me about it. He would like to me name who it would be. But that could change in the future. It could create some possible —

Well, we saw it at General Electric, I mean, when Jeff Immelt got appointed from among three, the other two left. And I don't really see any advantage in having some crowned prince around. But Irving will keep writing me, I can promise you that. (Laughter)

15. Buffett's business school: only two courses

WARREN BUFFETT: OK, zone 5.

AUDIENCE MEMBER: Hi, Warren. That's a little loud, sorry. Hi. My name's Sarah. And I'm from Omaha, Nebraska.

I'd like to know if you could explain your strategies, namely value investing, in regards to cultivating the next generation of investors. How will you teach this young group?

WARREN BUFFETT: Well, I had 49 — mostly universities, a few colleges — that came to Omaha this year. We do them in clumps of six. And then the last one, we had an added university. So we had eight sessions, full-day sessions.

And they asked me what — sometimes they asked me what I'd do if I was running a business school, teaching investments.

And I'd tell them I'd only have two courses. One would be how to value a business, and the second would be how to think about markets.

And there wouldn't be anything about modern portfolio theory or beta or efficient markets or anything like that. We'd get rid of that in the first 10 minutes. The —

But if you know how to value a business — and you don't have to know how to value all businesses. On the New York Stock Exchange, I don't know, there's 4- or 5,000, probably, businesses and a whole lot more on NASDAQ.

You don't have to be right on 4,000 or 5,000. You don't have to be right on 400. You don't have to be right on 40.

You just have to stay within the circle of competence, the things that you can understand. And look for things that are selling for less than they're worth, of the ones you can value.

And you can start out with a fairly small circle of competence and learn more about businesses as you go along.

But you'll learn that there are a whole bunch of them that simply don't lend themselves to valuations and you forget about those.

And I think if — accounting helps you in that, you need to understand accounting to know the language of business, but accounting also has enormous limitations. And you have to learn enough to know what accounting is meaningful and when you have to ignore certain aspects of accounting.

You have to understand when competitive advantages are durable and when they're fleeting.

I mean, you have to learn the difference between a hula hoop company, you know, and Coca-Cola. But that isn't too hard to do.

And then you have to know how to think about market fluctuations and really learn that the market is there to serve you rather than to instruct you.

And to a great extent, that is not a matter of IQ. If you have — if you're in the investment business and you have a IQ of 150, sell 30 points to somebody else, 'cause you don't need it.

I mean, it — (laughter) — you need to be reasonably intelligent. But you do not need to be a genius, you know. At all. In fact, it can hurt.

But you do have to have an emotional stability. You have to have sort of an inner peace about your decisions. Because it is a game where you get subjected to minute-by-minute stimuli, where people are offering opinions all the time.

You have to be able to think for yourself. And, I don't know whether — I don't know how much of that's innate and how much can be taught.

But if you have that quality, you'll do very well in investing if you spend some time at it. Learn something about valuing businesses.

It's not a complicated game. As I say — said many times — it's simple, but not easy.

It is not a complicated game. You don't have to understand higher math. You don't — you know, you don't have to understand law. There's all kinds of things that you don't have to be good at. There's all kinds of jobs in this world that are much tougher.

But you do have to have sort of an emotional stability that will take you through almost anything. And then you'll make good investment decisions over time.

Charlie?

CHARLIE MUNGER: Yeah, you do have the basic problem that exactly half of the future investors of the world are going to be in the bottom 50 percent.

In other words — (laughter) — you're always going to have more skill at the top than you have at the bottom. And you're never going to be able to homogenize the investment expertise of the world.

There is so much that's false and nutty in modern investment practice, and in modern investment banking, and in modern academia in the business schools, even in the Economics

departments, that if you just reduce the nonsense, that's all I think you should reasonably hope for.

WARREN BUFFETT: Beyond a certain basic level, though, of skill, wouldn't you say your emotional make-up's more important than the — than some super high degree of skill?

CHARLIE MUNGER: Absolutely. And if you think your talent — if you think your IQ is 160 and it's 150, you're a disaster. (Laughter)

You know, much better a guy with a 130 that's operating well within himself.

WARREN BUFFETT: I get to see the students that come by. I loved a fellow from the University of Chicago, one of the students. And the first question that was asked of me was, "What are we learning that's most wrong?" That's the kind of — I mean, I wish they'd ask that sort of thing of the panel here.

CHARLIE MUNGER: How do you handle that in one session?

WARREN BUFFETT: Yeah. (Laughter)

But it was holy writ 25 years ago, efficient market theory. You know, I never understood how you could even teach it.

I mean, if you walked in in the first five minutes, you said to the students, "Everything is priced properly," I mean, how do you kill the rest of the hour?

But — (Laughter) — they did it. And they got Ph.D.s for doing it well. You know, and the more Greek symbols they could work into their, you know, their writings, you know, the more they were revered.

It's astounding to me and I — that may have even given me a jaundiced view of academia generally — is the degree to which ideas that are nutty take hold and get propagated.

And then I read a quote the other day that may have partially explained it. Max Planck was talking, the famous physicist.

Max Planck was talking about the resistance of the human mind, even the bright human mind, to new ideas. And particularly the ones that had been developed carefully over many years, and were blessed by others of stature, and so on.

And he said, "Science advances one funeral at a time." And I think there's a lot of truth to that. Certainly been true in the world of finance.

16. Ajit Jain's successor won't have the same broad authority

WARREN BUFFETT: OK, Andrew?

ANDREW ROSS SORKIN: OK. We have a succession question. However, this one has a twist, coming from Ben Knoll.

"You famously said, quote, 'You should invest in businesses that a fool can run, because someday a fool will.' (Laughter)

"Given your reinsurance company's capacity and inclination for big financial bets, can you provide us more reassurance about the risk once Ajit is gone?

"Do you have a succession plan for him?"

Ben says, "The Titanic-like ending at AIG, once Greenberg was gone, has me spooked."

WARREN BUFFETT: Yeah, I would say that it would be impossible to replace Ajit. And we wouldn't try. And, therefore, we wouldn't give the latitude, in terms of size of risk or that sort of thing, that we give to Ajit.

No, we've got a unique talent, in my view there, and I think in Charlie's. And so, when you get somebody like that, you give enormous authority to them after you firmly establish in your mind that that's who you're dealing with.

But that doesn't mean that the authority goes with the position. The authority goes with the individual. And we would not — giving your pen away in insurance, as they say, is extraordinary dangerous.

And we have in this town, we have Mutual of Omaha, which in the 1980s, had been built up carefully over, probably, 75 years by that time, and become the largest health and accident association in the world, I believe.

And they got the idea that they should be writing property-casualty reinsurance. So they gave a pen to somebody within the place. And probably nobody had even heard the guy's name, you know.

And in just signing a few contracts, they lost half their net worth in a very short period of time. And they were worried that they might have lost more than that.

So you can do enormous damage in the insurance business with a pen. And you'd better — have to be very careful about who you give your pen to. And we've given our pen to Ajit in a way that we wouldn't give it to anyone else.

Now, it just so happens that I enjoy hearing about the kind of things he does. So we talk daily. But we don't talk daily because he needs my approval on anything. We talk daily because I find it very interesting.

When he says, "How much should we charge to insure Mike Tyson's life for a couple of years?" I mean, that's the kind of thing I can get kind of interested in. I — (Laughter)

I asked him whether there was an exclusion in case he got shot by a woman that felt unhappy about her treatment or something, but —

And it makes a difference in the price, but —

I enjoy that sort of thing. But I'm not needed. And Ajit is needed. And we won't find a substitute for him. And you know, there's some things that have to be faced that way.

Charlie?

CHARLIE MUNGER: Yeah. What that quotation indicates is sometimes, stated differently, you say if it won't stand a little mismanagement it's not much of a business. Of course, you prefer a business that will prosper pretty well, even if it's not managed very well.

But that doesn't mean you don't like even better when you get such a business that's managed magnificently. And both factors are quite important.

We're not looking for mismanagement. We like the capacity to stand it, if we stumble into it. But we're not looking for it.

WARREN BUFFETT: Yeah, we will not do things that we think are — we will not assign tasks to people that we think are beyond their capabilities. And it just so happens that Ajit has enormous capabilities.

So he gets assigned some very unusual things. But you don't see that prevailing throughout our insurance operation. And our managers don't expect to operate that way.

That's a one-off situation with Ajit. And he's in good health. And, you know, we send him all the Cherry Coke or fudge that he wants. (Laughter)

17. Berkshire was "cheaper" at the end of 2008

WARREN BUFFETT: OK, area 6. I recommend this fudge, incidentally. It's terrific. I'm having a good time. (Laughter)

AUDIENCE MEMBER: Good morning. I'm Steve Fulton (PH) from Louisville, Kentucky. I gave up box tickets to the Kentucky Derby this afternoon to come out and ask you this question. Thank you for this opportunity.

My question relates to how you view, or what your view is of the market's valuation of Berkshire's shares.

You commonly comment that Berkshire has two primary components of value: the investments that they own — the stocks, the bonds, and similar — and the earnings from the non-insurance operating companies that you've got.

And when you compare 2007 to 2008, the investments were down about 13 percent. And the earnings were down about 4 percent. But the value that the market was placing on the shares was down about 31 percent. And I was curious as to your comments on that valuation.

WARREN BUFFETT: Yeah, well, I think you put your finger on something.

We do think that the — we think, obviously, the investments are worth what they're carried for, or we wouldn't own them.

In fact, we think they're worth more money than they're carried for at any given time because we think, on balance, they're underpriced. So we have no problem with that number.

We define our earning power — we leave out insurance underwriting profit or loss, on the theory that insurance is — if it breaks even — will give us float, which we will invest. And on balance, I actually think that insurance probably will produce some underwriting profit. So I think we even understate it a little bit in that respect.

But we think the earning power of those businesses was not as good last year as normal. It won't be as good this year as normal.

But we think those are pretty good businesses overall. A few of them have got problems. And — but most of them will do well. And I think a few of them will do sensationally.

So, I think it's perfectly reasonable to look at Berkshire as the sum of two parts. A lot of liquid marketable securities — or maybe not so liquid, but at least fairly priced, or maybe even undervalued, securities — and a lot of earning power, which we are going to try and increase over time.

And if you look at it that way, you would come to the conclusion that Berkshire was cheaper in relation to its intrinsic value at the end of 2008 than it was at the end of 2007. But you would also come to the conclusion that was true of most securities. In other words, the whole level of securities.

And every stock is affected by what every other stock sells for. I mean, if the value of ABC stock goes down, XYZ, absent any other variables, but XYZ is worth less.

If you can buy stocks at eight times earnings, good companies, you know, or nine times earnings, you know, they — it reduces the value of Berkshire, as opposed to when stocks were selling, well, at 18 or 20 times earnings. I'm pulling those numbers out of the air.

But everything is affected by everything else in the financial world.

When you say a bird in the hand is worth two in the bush, you're comparing it — you've got to compare that to every other bush that's available.

So, you're correct that Berkshire was cheaper in relation to intrinsic value at the end of 2008, than 2007, at least in my opinion.

And that that those two variables will count. We'll report them to you regularly. And over time, we would hope that both increase.

And we particularly hope the operating earnings aspect increases, because that's our major focus. We would like to move money into good operating businesses over time and build that number a lot.

Charlie?

CHARLIE MUNGER: Well, I would argue that last year was a bad year for a float business. It was naturally going to make the owner of the float appear, briefly, to be at a disadvantage.

But long-term, having a large float, which you're getting at a cost of less than zero, is going to be a big advantage. And I wouldn't get too excited about the fact that the stock goes down.

I happen to know that there was one buyer there who rather inartistically bought about 10,000 shares when Berkshire was driven to its absolute peak. And how much significance does that have in the big scheme of things over the long term?

What matters are things like this: our casualty insurance business is probably the best big casualty business in the world — our utility subsidiary, well, if there's a better one, I don't know it — and if I had to bet on one carbide cutting tool business in the world, I'd bet on ISCAR against any other comer.

And I could go down the list a long way. I think those things are going to matter greatly over the long term. And if you think that it's easy to get in that kind of a position, the kind of position that Berkshire occupies, you are living in a different world from the one I inhabit. (Applause)

WARREN BUFFETT: Yeah, our insurance business now, it is a remarkable business. And it's got some remarkable managers.

18. How GEICO benefited from the financial crisis

WARREN BUFFETT: There's one interesting thing that's happened. In September, when we had a financial meltdown and, really, almost the ultimate — it was almost the China Syndrome-type thing — Americans started behaving differently.

Probably people around the world, but I certainly know in terms of our businesses, it was like a bell had been rung. And one manifestation of it was kind of interesting.

Whereas it hurt very much our jewelry business, our carpet business, it hurt NetJets, it hurt all the businesses. Hurt American Express, for example. You know, the average ticket went down almost 10 percent.

I mean, it just was like that, that people's behavior changed. But one of the things it did, was it also caused the phones to start ringing even more at GEICO.

And we didn't change our advertising, particularly. Our price advantage, relative to other companies, didn't change that much. But all of a sudden, just — it was remarkable. Thousands and thousands and thousands of more people came to our website or phoned us every week.

So, it — all of a sudden, saving $100 or $150 or whatever it might be, became important. Not only the people who were watching our ads that day, but just with the people that it was lurking in the back of their minds. They went to geico.com.

So in the first four months of this year — last year, we added about 665,000 policy holders. That's a lot of people. It made us, by far, the fastest growing auto insurer among the big companies.

First four months of this year, we've added 505,000 in four months. It's the behavioral changes. And that franchise, that competitive advantage, has been built up over decades.

And Tony Nicely has nurtured it like nobody else could, just day after day, office after office, associate after associate. But then it just pays off huge when the time comes.

Because we can — we are the low-cost producer among big auto insurance companies. That means we can offer the best value. And now people are value conscious.

So these things are going on all the time with our subsidiaries, with those managers. And it's — it builds a lot of value over time.

I mean, every GEICO policy holder is a real asset to the company. I could give you an estimated value. But I don't think it'd necessarily be smart. But they're worth real money.

And, we are now the third largest auto insurer in the country. I think we'll end up the year maybe at 8 1/2 percent of the market.

And it was 2 and a small fraction percent back in 1993 when Tony took charge of the business. And the fundamentals are in place — (applause) — to take us much higher.

19. 2008 was tough, but still no plans for dividend

WARREN BUFFETT: Carol?

CHARLIE MUNGER: (Quietly) Can you reach that peanut brittle?

CAROL LOOMIS: I promise you, this question did not come from Susan Lucci. However, it does concern dividend policy. It came from Peter Sargent of Yardley, Pennsylvania.

And to ask that, he quotes from principle number 9 of the "Owner's Manual." And Warren wrote there, quote:

"We feel noble intentions should be checked periodically against results. We test the wisdom of retaining earnings by assessing whether retention over time delivers shareholders at least $1 of market value for each $1 retained. To date, this test has been met." Now, this was written some time ago.

"We will continue to apply it on a 5-year rolling basis. As our net worth grows, it more difficult to use retained earnings wisely."

So I'm now quoting the questioner here:

"The recent annual report made me think about the performance of both the company and the stock price. Berkshire seems to have done quite well in the past few years. But the stock price seems to have not quite kept pace.

"So I looked at the last five years of earnings per share. They're on page 26 of the annual report. And they add up, in total, to $29,207.

"As you probably know, the closing price of Berkshire on December 31st, 2008 was 84,250. If you add the 29,207 per share of retained earnings to this, you come up with a, quote, 'minimum market value of 113,457.'

"Since Berkshire closed on 12/31/2008 at 96,600" — oh, wait, I have read something wrong here.

“The closing price of Berkshire on 12/31/2003 was 84,250.

“And since Berkshire closed on 12/31/2008 at 96,600, and it’s been lower than that since, and is now around that now, it would seem that the market value has not increased for each $1 retained.

“Assuming my analysis is correct, it raises the question of whether or not Berkshire will pay a dividend in the coming year or not.”

WARREN BUFFETT: Well, we’ll now have a short quiz on that program — (laughter) — on the question.

The earnings, incidentally, of the 5-year period would include gains from things that were listed in unrealized appreciation at the end of the period.

In other words, some of those were actually built into the asset value at the time, but then become realized.

But the truth is if you take all of the money we earned in the five years, and the stocks, bonds, businesses purchased, and you sold them for cash on December 31st, 2008, we would not have — we would’ve had a loss on that, I mean, under the conditions that existed on December 31st, 2008.

I think that’s probably true of almost all capital programs that were (inaudible) — if you really measured it by what you could’ve sold, the businesses we bought — we love those businesses.

But there was no market to speak of for many businesses at that time. And security values were down significantly.

So I would say that he’s absolutely right, that measured on the value on December 31st, 2008, that the reinvested earnings had not produced a dollar market value at that particular market point.

Now, I would say this, that we also say we measure our business performance against the S&P. And we use book value as a conservative proxy for intrinsic business value.

We think intrinsic business value is higher, but we use that as a proxy. And we’ve done that consistently throughout the history of Berkshire.

And during that 5-year period — or during any — we’ve never had a 5-year period when we’ve under-performed the S&P, in terms of the — what I would call the intrinsic value measure of Berkshire.

And, as I said a few years ago, it's — as we get larger, it's much harder to do that, and we'll settle for a couple of points better.

But so far, that test has been made — been met. And it's been met while we reinvested all earnings.

So I think that we still have got the burden of — we still should have to prove by the fact that Berkshire will sell above the earnings we've retained. Berkshire sells above it — every dollar that's been retained at Berkshire translates even today into more than a dollar of market value.

But I would certainly say that if you took the five years and just sold all the things we bought during that period at that price, that there would be a loss.

Charlie?

CHARLIE MUNGER: Yeah, I don't get too excited about these oddball things that happen once every 50 years.

If you're reasonably prepared for them and you're dented a little on the bottom tick, and other people are suffering a lot more, and unusual opportunities are coming to you that you don't see under other conditions, I don't think we deserve any salt tears.

20. Wells Fargo's stock price plunge shouldn't spark selling

CHARLIE MUNGER: Take Wells Fargo. I think Wells Fargo's going to come out of this mess way stronger. The fact that the stock at the bottom tick scared a lot of people, I think will prove to be a very temporary phenomenon.

WARREN BUFFETT: Yeah. Wells Fargo got down below — actually, ticked below $9 a share at a time when spreads on business were never better, when depositing flows were never better, when their advantage in relation of costs of funds versus other large banks had never been better.

But you know, in a market that was terrified, it — literally, I had a class meeting that day, and it was the only time any of those classes have ever got me to name a stock. But they actually pushed me.

And somebody there with a BlackBerry, or whatever those instruments are that they carry around these days, checked the price and it was below $9. And I said, if I had to put all my net worth in one stock, that would've been the stock.

The — their business is — you know, the business model is fabulous.

And it, you know, when would you get a chance to buy something like Wachovia, which had the fourth largest deposit base in the United States, and bring that in? And then start getting the spread on assets versus liabilities that Wells gets and build the relationships they have. It's a great business opportunity.

Wells Fargo will be better off — unless they have to issue a lot of shares, which they shouldn't — Wells Fargo will be a lot better off a couple of years from now, than if none of this had happened.

And I think that's true of some of other businesses as well. But you — you know, you have to be prepared. You can't let somebody else get you in a position where you have to sell out your position.

Leverage is what causes people trouble in this world. So you don't — you never want to be in a position where somebody can pull the rug out from under you. And you also never want to be emotionally in a position where you pull the rug out from under yourself.

I mean, you don't want to have other people force you to sell and you don't want to let your own fears or emotions to cause you to sell at the wrong time.

I mean, why anybody sells Wells Fargo at $9 a share when they owned it at $25 and the business is better off, is one of the strange things about the way markets behave. But people do it. And they get very affected by looking at prices.

If they own a farm like I do, you know, 30 miles from here, they don't get a price on it every day. You know, they —

I bought that farm 25 years ago. And you look to the production of corn. You look to the production of soy beans and prices and cost of fertilizer and a few things. And you look to the asset itself to determine whether you made an intelligent investment. You have your expectations about what the asset will produce.

But people in stocks tend to look at the price. So they let the price tell them how they should feel or — that's kind of crazy in our view.

We think you should look at the business just like you'd look at the apartment house that you bought or the farm you want. They let the fact that a quote is available every day turn into a liability rather than an asset.

And all I would say there is you better go back and read chapter 8 of "The Intelligent Investor," where it tells you how to think about the market. And it will do you more good than learning what modern portfolio theory is all about.

21. Big stimulus spending bound to have some "slop"

WARREN BUFFETT: OK, number 7.

AUDIENCE MEMBER: My name is Jim Powers (PH). I'm from West Newton, Massachusetts. My question has to do with this stimulus bill by the federal government.

I've read that only 8 percent of the money is intended to go to infrastructure. When you invest money, you normally look at the asset you're getting for the money.

With the country going into so much debt, don't you think it would be better if a great percentage of the money invested by the federal government go to solid assets, as it did during the Great Depression with the Tennessee Valley Authority, Hoover Dam, other facilities, that are still making money today, and paying back the original investment by the government many times over, while putting numerous people to work?

CHARLIE MUNGER: Let me answer that one. Yes. (Laughter and applause)

WARREN BUFFETT: I would certainly agree. I mean the '30s — a lot of really wonderful things were done with the money that was used to then to stimulate the economy. And that should be the goal and a model.

I can't evaluate perfectly what the current stimulus bill will do. I know that I — I did get a notice the other day from the Social Security Administration telling me I'm getting $250 more. That ought to last me 6 or 7 months. (Laughter)

Charlie will make his last longer, I'm sure. (Laughter)

But you know, that's the stimulus that the Buffett household has received at the present time.

Obviously, you want to use the money as intelligently as possible.

Obviously, also, anytime the federal government does anything on a massive scale — any time any big organization, a church or a business or anything, you know, throws all kinds of resources at something, usually there's a fair amount of slop.

I think that the intent — but by the time it gets through Congress and everything, I can't guarantee how the result comes out — but I think the intent is to get the money into action quickly and to end up having it utilized in intelligent ways.

But if the day after Pearl Harbor happened, you know, if you'd attached 5 or 6 thousand earmarks to the declaration of war, you know, it would not have been a pretty sight.

I mean, it — we have a system now where — that doesn't seem to be perfectly effective, I would say, in detaching the interests of particular legislators away from the common goal.

I mean, I get distressed when I look at what gets attached to some of these bills. And that certainly was a case in point. So I'll go along with Charlie on the answer.

But I think the intent of the administration is the right thing. When the American public pulls back like they have, government does need to step in.

It will have consequences. We are doing things on a scale — we're doing the conventional things, but we're doing them in unconventional amounts.

And we will see consequences from what we are doing now. I think we should be doing it. But I don't think we should think it's a free ride.

CHARLIE MUNGER: Yeah, we have one big no-brainer on the list of infrastructure investments that can be made. And that is a hugely improved nationwide electricity grid. The chances that that won't help us are zero.

And that, when it happens, will enormously benefit Berkshire's utility subsidiary. But that isn't the reason I'm raising it. I would be making this argument if we didn't have a utilities subsidiary.

WARREN BUFFETT: We might make it a little more strongly if we had the utilities subsidiary, however. (Laughter)

22. Hard to compete with government-guaranteed debt

WARREN BUFFETT: Becky?

BECKY QUICK: This question comes from Rita Addison (PH), who says, "How does Berkshire's strong balance sheet and credit rating help take advantage of buying opportunities when even weak financial companies can now borrow more cheaply than Berkshire by using U.S. government guarantees of their debt?"

WARREN BUFFETT: Yeah, well, as I pointed out in the annual report, we are at a significant disadvantage in any financing-type business where we are competing against people who are getting their funding and their financing with a government guarantee.

Our raw material costs us a lot more money. And that's particularly applicable at Clayton where we have 10- or $11 billion of, really, mortgage paper on mostly manufactured homes.

And it's exceptionally good quality portfolio. Kevin Clayton and the people at Clayton Homes have done a great job in terms of lending responsibly. Our borrowers have behaved very well.

But the raw material to fund that portfolio — money — costs us a whole lot more than some bank that's in trouble.

And that's a real problem for us. And it's forcing us to try to come up with various other sources of funding that portfolio where, one way or another, we get people with government guarantees involved in the program.

That's just a fact of life with us now. There are the blessed who have government guarantees. And there're the ones that aren't.

And of course, you see that dramatically, in the case of some companies that have a government guarantee for part of their money and then sell other money — and then sell other bonds — that aren't guaranteed.

I mean, just the other day, as I remember, I may be wrong on this, but I think Goldman Sachs sold something with a 400 basis point spread that wasn't guaranteed. Whereas their guaranteed paper would be hundreds of basis points underneath that.

General Electric sold something earlier this year that wasn't guaranteed. And the spread between the guaranteed and the un-guaranteed was huge.

We don't have anything guaranteed to sell, so we are not in that favored class in any way. And we can't become a bank holding company. So as long as the situation goes on, we have to figure out ways that we adjust.

We only really use borrowed money — we use it in our utility business. But other utilities are not in this favored class. I mean, the utility industry generally.

So our utility borrows money quite well, compared to most utilities. MidAmerican's credit is regarded as very good.

And generally speaking, we've raised our money at a lower rate, which benefits our customers in the utility business.

We don't use much money in the rest of our businesses, except for the financing at Clayton. And we won't use much money.

So we get our money by float, basically. And our float is — it was $58 billion. I mentioned a little while ago, that Wells Fargo raises its money in the first quarter at, I think, 1.12 percent — 112 basis points — which is very cheap.

But our money's cheaper. We can't get as much of it as Wells does. But we do have 58 billion — in fact, we have more now — that you would think will cost us less than zero over time, although there will be given periods when we have a cost to it.

But we don't have an answer for going head-to-head against a government-sponsored business that gets — can raise money with a government guarantee. We do not have a way of going head-to-head with them at any business, no matter how prudently we conduct our operations.

Charlie?

CHARLIE MUNGER: Well, of course we're at a funding disadvantage. But on the other hand, we aren't regulated like a bank or a bank holding company.

I think we'd be pretty ungrateful if we took this one disadvantage that has come to us and obsessed on it.

WARREN BUFFETT: I get those kind of lectures all the time. (Laughter)

23. Graham would probably agree with us on derivatives

WARREN BUFFETT: OK, number 8.

AUDIENCE MEMBER: Hi, Mr. Buffett. Hi, Mr. Munger. My name is Mary Kimble (PH) from New York City.

In getting back to basics, what do you think Ben Graham would have said about derivatives?

WARREN BUFFETT: He would not have liked them. I think he probably would've said pretty much what I said back in 2002, that they pose a real risk to the system.

They cause leverage to run wild. They cause counterparties to sign up for things that may be difficult to achieve under certain circumstances. That they place an already fragile economic system — added strains on them — which can pop up in unpredictable ways.

But he would probably also say if he saw some that were mispriced, he would act accordingly. But he wouldn't get himself in a position where the problems of the people who didn't act prudently could cause him any problems. And I think that probably would be the answer.

The — one of the — one basic problem on derivatives — well, there are several problems.

I mean, back in — after 1929, Congress met — there was a Pecora committee and so on— and they decided that it was very dangerous to let people borrow a lot of money against securities and that it contributed to the Great Depression.

And therefore, they said the Federal Reserve should regulate how much people could borrow against securities. And it was important for society.

And the Federal Reserve started requiring margin — they had margin requirements. Those requirements still exist. You are not supposed to be able to borrow more than 50 percent against your securities.

Actually, during one period, they went to where they didn't — the Federal Reserve allowed no borrowing whatsoever. They went to a hundred percent margin.

But derivatives came along and just turned that into a — made those rules a laughingstock. You have what they call "total return swaps," which means you can borrow a hundred percent against what you own. That goes way beyond anything that existed in 1929.

So derivatives became a way around regulation of leverage in markets, which like I say, Congress felt was important and the Federal Reserve still has a responsibility for enforcing.

Derivatives also meant that settlement dates got pushed out. One of the problems in securities markets comes about when you have a trade today, if you had — didn't have to settle it for a year, you'd find it very hard sometimes to find the person on the other side.

And derivatives allow these very long settlement periods. Whereas security markets demand them in three days. There's a reason they demand them in three days.

As you extend out periods, you get more and more defaults. So they're a danger — they are a danger to the system. There's no question about that.

We have a book in The Bookworm called "The Great Crash" by Galbraith. It's one of the great books. You really ought to buy it. It tells the story of the '29 and it gets into margin requirements, so…

Ben Graham would not like a system that used derivatives heavily. But he would — I don't think he would have been above — if he saw something that looked way out of line and he knew he could handle it himself — I think he would have been quite willing to buy or sell one that was mispriced.

Charlie?

CHARLIE MUNGER: I think there's been a deeper problem in the derivative business. The derivative dealer takes two advantages of the customer.

One, there's croupier-style mathematical advantage equivalent to the house advantage in Las Vegas.

And two, the derivative dealer is playing in the same game with his own clients, with the advantage of being a better player. So —

WARREN BUFFETT: And having knowledge of what they're doing.

CHARLIE MUNGER: — and having knowledge of what the clients are doing.

This is basically a dirty business. And you're really selling things to your clients who trust you, that are bad for the clients.

We don't need more of this kind of thing in America. We need less. (Applause)

24. Bailouts shouldn't hurt senior debt holders

WARREN BUFFETT: Andrew?

ANDREW ROSS SORKIN: Well, this question came in this morning. And it's a timely, philosophical one, given the results of the stress test that will coming out next week. And it relates to your stakes in Wells, U.S. Bancorp and Goldman Sachs. And the question is the following:

"The government's proposed restructuring plans for Chrysler and GM require creditors, as well as common shareholders, to bear losses.

"Yet, with the banks, the government's actions, to date, have not required concessions from holders of preferred stock and debt. The government has merely required the dilution of common stock holders.

"To what extent should holders of preferred stock and debt share losses in the bank rescue plans or in the resolution of a major bank holding company? And do you expect to be diluted in any of your holdings?"

WARREN BUFFETT: Yeah, I would say this. That's very institution specific. With Freddy and Fannie, the preferred was gone. I mean, there was no equity. And the preferred got — in effect, it's gotten wiped out along with the common stock.

With U.S. Bancorp or Wells, those are companies making lots of money. There's lots of equity there. So there's no reason to go up to senior securities and say that they should give up anything when there's lots of common equity underneath.

It'd be like if I have a mortgage on my house and it's 70 percent against its current value, saying, just because other people are having trouble in the neighborhood paying their mortgages because they got much higher mortgage or something, your saying my mortgage holder with 70 percent mortgage, that he should give up something and increase my equity even further.

There's lots of equity there, which there is at Goldman, U.S. Bank, Wells Fargo. There's lots of equity, lots of earning power. There's really no reason for senior debt to give up anything.

You know, you could make an argument at Freddy and Fannie, about the subordinated debt, whether they should've suffered as well as the preferred stock and the common. But I don't see it as applying to earning institutions with lots of future earning power.

I would love to buy all of U.S. Bancorp. You know, or I'd love to buy all of Wells if we could do it. You know, we're not allowed to do it because it'd make us a bank holding company. But those businesses, there's no reason for the creditors to suffer.

Now, you get into Chrysler or something of that sort, you know, there is no — I mean, they're losing money all of time and they do not have a competitive advantage. You know, whether they've got a sustainable business model under any circumstances is open to question.

Whether there's any common equity there is not open to question. You know, there isn't any common equity. Nobody would pay a dollar, you know, if they had to take on Chrysler and all its debts.

Lots of people would pay billions of dollars to take on U.S. Bancorp or Goldman Sachs, you know, with all their debt. So those are different situations. I —

If you get into a situation where the common equity is wiped out, then you get into a question of — then you get into the proper allocation of things within the capital structure — who gives up so much, and the senior debt may give up something, and so on.

But I don't see it as applying at all to businesses that are worth a lot of money, where the equity's worth a lot money.

Charlie?

CHARLIE MUNGER: I have nothing to add. (Laughter)

25. Ignore original cost when reviewing your portfolio

WARREN BUFFETT: OK, number 9.

AUDIENCE MEMBER: Hello, Mr. Buffett. Sorry, about that. Mr. Buffett and Mr. Munger, my name's Kelly Cardwell from Warrenville, Illinois.

Guys, if either of you were starting a smaller investment fund today, let's say in Warrenville, Illinois, $26 million fund called Central Square Capital — hypothetically?

WARREN BUFFETT: What? You'll get billed for a commercial later on. (Laughter)

AUDIENCE MEMBER: With this smaller asset base, what would you do differently, both in terms of the number of positions and frequency of turnover?

For example, if you owned a portfolio of 10 stocks and five of them doubled in a short time period, would it make sense to actively manage the portfolio and take profits in the five that had doubled and redeploy the proceeds into your positions, into the ones that had not moved higher, where, presumably, more upside exists and the odds are more dramatically stacked in your favor? Or would you favor the strategy of sitting on your hands in the name of long-term investing?

WARREN BUFFETT: We would own the half of dozen or so stocks we like best. Their — and it wouldn't have anything to do with what our cost on them was.

It would only have to do with our evaluation of their price versus value. It doesn't make any difference what the cost is.

And incidentally, if they went down 50 percent, we would say the same thing. I — you know, and using your illustration, I don't know whether that fund has actually had something that went up or went down.

So, we would — our cost basis, except in rare cases — and we actually have a situation like this at Berkshire now, which I may explain a little later. But the cost basis doesn't have anything to do the fund.

When Charlie and I ran funds, we didn't worry about whether something was up or down. We worried about what it was worth compared to what it was selling for.

And we tried to have most of our money in a relatively few — very few — positions which we thought we knew very well. We do the same thing now. We'd do the same thing a hundred years from now.

Charlie?

CHARLIE MUNGER: Yes, he's tactfully suggesting that you adopt a different way of thinking. (Laughter and applause)

26. Berkshire's competitive advantage no longer requires us

WARREN BUFFETT: Carol?

CAROL LOOMIS: This question is from Michael Welter (PH) of Portland, Oregon.

"You've often said that two things you look for in an investment are a sustainable competitive advantage and a simple, easy to grasp business model. Berkshire's sustainable competitive

advantage is arguably you, Warren and Charlie. And that obviously is not sustainable over the long term."

WARREN BUFFETT: I reject that. Defeatism. (Laughs)

CAROL LOOMIS: I knew you would.

"While at this point, Berkshire does not have a simple, easy to grasp business model. So if the two of you were outside investors, is it possible that, no matter what combination of intrinsic value and price Berkshire offered, you would not invest in it today?"

WARREN BUFFETT: No, our sustainable competitive advantage is we have a culture and a business model, which people are going to find very, very difficult to copy, even semi-copy.

We have an unusual group of shareholders. We have a business that's owned by people where the turnover on our stock, even allowing for all the double-counting and everything like that, may be something like 20 percent a year, when virtually every stock in the S&P 500 turns over a hundred percent a year.

So we have a different shareholder base. We have people that understand their business differently.

And we have a business that can offer, to people who own private businesses, the chance to keep running their businesses as they have in the past and get rid of the problems of lawyers and bankers and all kinds of things like that.

And I don't see any other company in the United States that has the ability to do that now, or probably the ability to adopt that model in any big way.

So I would say we have sort of an ultimate — and it's not peculiar to me and Charlie. We may have helped create it. But it is a deeply embedded culture which any CEOs that follow are going to be well-versed in when they come into the job, and dedicated to, and able to continue in the future.

And you can't — I don't want to name names about other companies — but you can't do that elsewhere.

So I think anybody wanting to copy Berkshire is going to have a very hard time. And I think the advantages we have are going to be very, very long lasting. And they're not peculiar to the fact that Charlie and are I sitting up here anymore. They may have been, originally. But no longer.

Our culture, our managers join that culture. Our shareholders join that culture. It gets reinforced all the time. They see that it works.

You know, it's something that I don't know how I would copy it, if I were running, you know, some other company.

And it's meaningful. Because there will be businesses, just as there was with ISCAR awhile back, just as the management at GEICO felt back in the mid-'90s in terms of what they wanted to do, there will be people that want to join up with us. And they really won't have a good second choice. They'll be plenty that don't, too. But that's OK.

We just need to have the right ones — some of the right ones — join us. And it can go on a long, long time.

Charlie?

CHARLIE MUNGER: Yes. I might state that a little differently. A lot of corporations in America are run stupidly from headquarters, as they try and force the divisions to come up with profits for every quarter that are better than the profits from the same quarter in the previous year.

And a lot of terrible decisions and terrible practices creep into those businesses. In the Berkshire model, that doesn't happen.

So while Warren and Charlie will soon be gone — not too soon in my case, but I'm a little worried about Warren (laughter) — the stupidity of management practice in the rest of the corporate world will likely remain ample enough to give this company some comparative advantage way into the future. (Applause)

WARREN BUFFETT: OK. We'll go to — it's very important isn't it, to watch what you eat, as you — (laughter) — in terms of preserving longevity. So we watch it for hours up here at a time. (Laughs)

27. We don't keep every stock, but we do keep every business

WARREN BUFFETT: Number 10.

AUDIENCE MEMBER: Hello, Mr. Buffett, and Mr. Munger. My name is Aznar Midolf (PH). I'm from (Inaudible) organization, San Francisco.

And my question is from one of financial blogs. How do you justify holding stocks forever when the fundamentals have permanently changed?

WARREN BUFFETT: Well, the answer is we don't. You know, and — if we lose confidence in the management, if we lose confidence in the durability of the competitive advantage, if we recognize we made a mistake when we went into it — we sell plenty of times. So it's not unheard of.

On the other hand, if you really get a wonderful business with outstanding management — but mostly the wonderful business part of it — when in doubt, keep holding. But it's no inviolable rule.

Now, among the businesses we own, not just securities we own, we have an attitude, which we express in our economic principles, that when we buy a business it's for keeps.

And we make only two exceptions: when they promise to start losing money indefinitely or if we have major labor problems. But otherwise, we are not going to sell something just 'cause we get offered more money for it, even than it's worth.

And that's a peculiarity we have. And we want our partners to know about that.

We do think it probably helps us in terms of buying businesses over time. It's also the way we want to run our business.

But with stocks, bonds, we sell them. But we're more reluctant to sell them than most people. I mean, if we made the right decision going on, we like to ride that a very long time. And we've owned many — we've owned some stocks for decades.

But if the competitive advantage disappears, if we really lose faith in the management, if we were wrong in the original analysis — and that happens — we sell. Or if we find something more attractive —

Normally we have plenty of money around. But in September of last year, late September, we had committed to put 6.6 million — billion — in Wrigley. We — and then Goldman Sachs needed 5 billion, GE needed 3 billion.

I sold a couple billion dollars' worth of J&J just because I didn't like getting our cash level down below a certain point, under the circumstances that existed then.

That not was a negative decision on J&J. It just — it meant that I wanted a couple billion more around. And I saw an opportunity to do something that I probably wouldn't see too much later. Whereas, I could always buy J&J back at a later date. But that's an unusual situation.

28. We run Berkshire as if we owned all of it

WARREN BUFFETT: I'd like to go back to one point on the earlier question, too.

I always — I frequently ask CEOs of companies what they would do differently if they owned the whole place themselves.

You know, when I'm talking to, either companies where we've invested in, sometimes other companies, friends of mine run them. You know, "What would you do different if this was a hundred percent owned by you and your family?"

And they give me a list of things. There is no list at Berkshire. You know, we basically run this place the same way we'd run if we owned a hundred percent of it.

And that is a difference that — in terms of people joining in with us. They don't have to adjust their lives to a bunch of rules that are kind of self-imposed, in terms of how people think about public companies, in terms of earnings, predictions, and all of that sort of thing.

And there are certain people that would prefer to be associated with an enterprise like that. And also —following through on this rule I just explained — know that they've made a one decision on where that business that they built up over decades and cherish and everything — they make one decision on where it's going to go, and they're not going to get surprised later on.

They're not going to get some management consultant come in and say, "You ought to have a pure player, Wall Street's saying, so you ought to spin this off or sell it," or anything like that.

And they know we're not going to leverage it up. So they know they're really going to get to do what they love the most, which is to continue to run their business, not bothered by bankers or lawyers or public expectancies or anything of the sort.

And that is a — like I said earlier, that's a real advantage.

Charlie?

CHARLIE MUNGER: Yeah, in the show business, they say the show has legs if it's going to last a long time. I think Berkshire Hathaway's system has legs.

29. Why the annual meeting isn't webcast

WARREN BUFFETT: OK. With that, we'll go to Becky. (Laughter)

BECKY QUICK: This is a question from Humin Timadin (PH) in Seattle, Washington. He's got a two-part question. But he says, "From time to time, you purchase shares of public companies.

"Presumably, you feel that those shares are a better investment than Berkshire shares at the time, since you never buy back Berkshire shares.

"If Berkshire shareholders can purchase shares in the same companies for the same price as you, why shouldn't they shell — sell their Berkshire shares and buy what you are buying?"

And secondly, he wants to know why, because he, "like thousands of other shareholders, is unable to attend the annual meeting, how come Berkshire does not webcast the meeting? I am aware of the irony that I will not hear your answer." (Laughter)

WARREN BUFFETT: Well, our meeting does get written up, at least it gets written up a lot with various blogs and everything else. It gets written up pretty well in its entirety by Outstanding Investor Digest.

And there are others that prepare extensive reports. And they pop up on the internet. So he will, in all likelihood, find out the answer.

We could webcast. I get asked the same question about webcasting the meetings I have with students. You know, why not do that? It's so much easier and everything.

I think there is something gained by personal contact. I certainly know that when I was studying and all of that, I gained a lot by personal contact.

Even though I'd read Ben Graham's books, just going and being with him. And I follow that practice in teaching. And I think that —

I like the turnout we get. I like our partners to show up and see the products we sell and all of that. This is not something where we're going to go and hide and hold our meeting, you know, in some hamlet, you know, in western Nebraska or something to discourage attendance.

We've got a different attitude. And I think that that — I hope that comes across. And I think that if we webcast it, you know, it was something like turning on a television show, I don't think it would be quite the same.

30. No "quarrel" with copycats

WARREN BUFFETT: In terms of the first part of the question about buying the securities we buy, plenty of people do that. And some of them — but they — incidentally, they're not buying it with free float that's available from insurance.

So if they have $58 billion that they can get interest-free, they will be in the same position we are in buying those securities. But they are — on the other hand, they have some tax advantages we don't have. So I don't quarrel with people who do that.

We have to publicize to some extent what we own. Some things they wouldn't be able to buy because we make direct purchases.

They wouldn't be able to buy into the businesses we own. But they might very well do better piggybacking us in some way. And they're certainly free to do it.

Charlie?

CHARLIE MUNGER: Yeah, generally, I think it's quite smart to do what you're talking about — is to identify some investors you regard as very skilled, and carefully examine everything they're buying, and copy what you please. I think you have a very good idea. (Laughter)

WARREN BUFFETT: Yeah, I used — when I was 21 years old, I had to mail away to the SEC in those days — and you had these crummy copies about a week later and paid a lot per page to get them — but I used to get the semi-annual reports of Graham-Newman Corp before I went to work there.

And I would look at every security that was listed there. And I got some of my ideas that way. So it's a — there's nothing wrong with that.

31. Your best inflation protection

WARREN BUFFETT: Number 11.

AUDIENCE MEMBER: My name is Sam Alter (PH). I'm 11 years old and I'm from Westminster, New Jersey.

My question is, how will inflation affect my generation? And how is Berkshire investing to prepare for this time? (Applause)

WARREN BUFFETT: Well, that was about inflation, right? How inflation was going to affect him?

CHARLIE MUNGER: Yeah. How is inflation —?

WARREN BUFFETT: Well, inflation is going to affect you. You know, the — it's certain we will have inflation over time.

Paul Volcker got very upset the other day and spoke out about three weeks ago, I guess, when he read that a majority of the Federal Open Market Committee had sort of targeted 2 percent inflation as the number.

And Volker, who came in when inflation was raging and saw the problems of stopping it when it got a momentum of its own, said, "You know, 2 percent sounds great, but in a generation it cuts away purchasing power by 50 percent."

He was — kind of a long generation, there — but he was right in that once you start thinking about a couple percent, you are on something of a slippery slope.

And we are following policies in this country now to stimulate things, which — stimulate business — which are bound to have some inflationary consequences.

And to the extent that we borrow money from the rest of the world, it would be very human on the part of politicians in the future to decide that they would rather pay the rest of the world back in dollars that are worth far less than the dollars they borrowed.

I mean, it's the classic way of reducing the impact and cost of external debt. And we're building up a lot of external debt.

I always find it interesting when politicians now talk about using the taxpayer's money to do this and the taxpayer's money to do that and how the taxpayers are paying the bonuses at AIG.

We haven't raised taxes at all in this country. You know, I mean, taxpayers are paying nothing beyond what they were paying a couple years ago.

Matter of fact, the federal revenues this year, which were close to 2.6 trillion a couple years ago, you know, maybe more like 2.3 trillion. So we are taking less money from the taxpayers.

The people who are really paying for the things we're doing now will probably be the people who are buying fixed-dollar investments, much of it from the U.S. government, and who will find the purchasing power when they go to redeem those investments to be far less.

So you can — you might say that the AIG bonus is — probably the Chinese have — are the people that are ultimately paying the most in terms of the loss of purchasing power they will have with their holdings of government bonds, U.S. government bonds, many years down the road. But it sounds better to say the taxpayer than to say the Chinese are paying for it.

It's an interesting situation. I read that comment everyday about how the taxpayers are doing this and that. And, you know, I haven't had my taxes raised. You haven't had your taxes raised. They're giving me $250 bucks back here pretty soon.

The taxpayers haven't paid anything so far. And my guess is that the ultimate price of much of this will be paid by a shrinkage in the value of — the real value — of fixed-dollar investments down the road.

And that will be the easiest thing to do. And if it's the easiest thing to do, it's the most likely thing to have happen.

So you will see plenty of inflation. Now, the best protection against inflation is your own earning power.

If you're the best teacher, if you're the best surgeon, if you're the best lawyer, you know, whatever it may be, you will command a given part of other people's production of goods and services no matter what the currency is, whether it's seashells, or reichsmarks, or dollars.

So your own earning power is the best, by far. If you're the best journalist, whatever it may be, you will get your share of the national economic pie, regardless of the value of whatever the currency may be, as measured against some earlier standard.

The second best protection is a wonderful business. You know, if you own the Coca-Cola, trademark, Company, you will get a given portion of people's labor 20 years from now and 50 years from now for your product.

And it's doesn't make any difference what's happened to the price level, generally. Because people will give up three minutes of labor, whatever it may be, to enjoy, you know, 12 ounces, you know, of a product they like.

So those are the — and — those are the great assets, your own earning power first, and then the earning power of a wonderful business that does not require heavy capital investment.

If it requires heavy capital investment, you get killed in inflation. And with those guidelines, I would tell you the best thing to do is invest in yourself.

Charlie?

CHARLIE MUNGER: Yes. The young man should become a brain surgeon and invest in Coca-Cola instead of government bonds. (Laughter)

WARREN BUFFETT: I get paid by the word. He doesn't. (Laughter)

32. Newspapers are fading but we're keeping the Buffalo News

WARREN BUFFETT: Andrew?

ANDREW ROSS SORKIN: OK. This question comes to us from Dennis Wallace (PH) in Waldorf, Maryland. We got a lot of these. And I'm selfishly interested in the answer.

Given the current economic conditions in the newspaper and publishing business, can you please provide some of your thoughts on its impact on Berkshire? Given that our investee, the Washington Post Company, has had a substantial decline in its stock value, is it still a good use of capital?

And given the, quote, "cheap trading prices of newspapers in the current climate," would Berkshire considering — consider purchasing additional newspapers to add to the Buffalo News and Washington Post properties?

At what price does it become compelling to invest in the newspaper business? Or is there no price at which it becomes compelling in today's environment?

WARREN BUFFETT: I would say, it isn't today's environment. I mean, it's an evolutionary development.

But — so the current economic environment has accentuated the problems in newspapers. But it is not the basic cause.

Newspapers are, to the American public as a whole — Charlie and I — I read five a day. Charlie probably reads five a day. We'll never give them up.

But we'll also be the last guys reading a newspaper while having a landline phone, you know, by our side. (Laughter)

So, you don't want to judge consumer preferences by what we do. The newspaper — no. The answer is, for most newspapers in the United States, we would not buy them at any price.

They have the possibility, and in certain places, they've already hit it, but they have the possibility of just going to unending losses.

And they were absolutely essential to a very high percentage of the American public, you know, 20, 30, 40 years ago. They were the ultimate business.

It was a business where only one person won, basically, in almost every town in the country. There were 1,700 papers in the United States. And about 50 of those, 20 years ago, existed in a city where there were multiple papers.

So they were a product that had pricing power, that was essential to the customer, essential to the advertiser. And they've lost that essential nature.

They were primary 30 years or 40 years ago if you wanted to learn sports scores or stock prices or even news about international affairs.

And then that nature, what Walter Annenberg used to call "essentiality," I don't know whether it's in the dictionary or not, but it started eroding. And then the erosion has accelerated dramatically.

And they were only essential to the advertiser as long as they were essential to the reader. And you know, nobody liked buying ads in the paper. It was just that they worked.

And that has — that is changing. It's changing every day. And I do not see anything on the horizon that causes that erosion to end.

We — you know, at the Buffalo News, Stan Lipsey would greet me 10 years ago. And he would say, "Warren, you should — on an economic basis — you should sell this paper." And I said, "I agree 100 percent. But we're not going to do it."

And you know, we could've sold the Buffalo News for many hundreds of millions of dollars some years back. And we couldn't sell it, you know, for remotely anything like that now.

And that's one of the policies. We have a union that's been very cooperative — unions, a bunch of unions — have been quite cooperative with us in recent months in trying to have an economic model that will at least keep us making a little money.

And as I put in the annual report, in our economic principles, that as long as we don't think we face unending losses or have major union problems, we will stick with the businesses, even though it would be a mistake if you were acting as a trustee for, you know, a bunch of crippled children or something of the sort. And that's just our policy at Berkshire.

The Post has a very good cable business. It has a very good education business. But it does not have answers on the newspaper business, as Don Graham wrote in the annual report. Nor does anyone else.

Now, we all keep looking around for somebody that will find the model. But there — I think there are about 1,400 daily papers now in the United States, and nobody yet has found the model.

We are as well-positioned in Buffalo, believe it or not, I think, to play out the game as anyone else. But whether we find something before the lines get so that we're inexorably in the red, whether the situation gets so we're inexorably in the red, I don't know.

But we will play it out as long as we can. It's not what they teach you in business school. But it's the way we run Berkshire.

Charlie?

CHARLIE MUNGER: Well, I think that's all 100 percent right. And it's really a national tragedy. The — these monopoly daily newspapers have been an important sinew of our civilization.

And, by and large, they were impregnable from advertiser pressure. And by and large, they were desirable editorial influences. And by and large, they kept government more honest than it would otherwise be.

So as they disappear, I think what replaces it will not be as desirable as what we're losing. But this is life.

33. Expect weak consumer spending for "quite a bit longer"

WARREN BUFFETT: Number 12.

AUDIENCE MEMBER: Good morning, Mr. Buffett and Mr. Munger. I'm Marc Rabinov, from Melbourne Australia.

I'm wondering if I could ask you how retailing, manufacturing, and service businesses have been severely impacted by the recession given the way consumer spending has changed. Is it likely the results will still be 20 percent below 2007 levels in three years' time?

WARREN BUFFETT: I don't know about three years' time. Certainly those areas you named, to varying degrees, have been hit very hard.

Some of the manufacturing would tie in with residential construction. If we hold housing starts at 500,000 a year, you know, my guess is that in a couple of years at most, we would get something close to equilibrium in housing. Maybe quite a bit sooner. Nobody knows the figures with precision.

But if you keep forming households at a million-3, or something like that, a year, and you create 500,000 new units and a few of the old ones burn down, and a few — you will reach equilibrium at a point that's not ridiculously far in the future.

And that will make a big difference in our carpet business, and brick business, and insulation business, and paint business, and so on.

Retailing has been hit very hard. The higher the end of it, generally speaking, the harder it's been hit.

There's been a big change in consumer behavior. And I think it will last quite a bit longer.

I think for years, government was telling people to save. And now that they're saving, they're unhappy about it.

But I think that — I think the experience of the last couple years, I don't think will go away very fast. I think it could last quite a long time.

So I would not think our retailing businesses would do great for a considerable period of time.

And I would say that in retail real estate, I would think that that would be a tough field to be in for quite a period.

I think the shopping centers will be seeing vacancies that will be hard to fill. I think that the retailers will be struggling in many cases. And of course, the supply of real estate doesn't go away.

So, that could be — the shopping center business, which was selling at, you know, these premiere cap rates of 5 percent or even less sometimes. I think that is going to look very silly

before all of this is done. In fact, it already is looking that way. So I wouldn't count — I wouldn't —

The service businesses are generally the better businesses. They require less capital and they can be more specialized in the markets they serve, in general.

But I would not look for any quick rebound in the retail manufacturing service businesses. We've got a ways to go on that.

And we've got a ways to go on the ones that are construction related. But at least there, you can sort of see the math of when it'll work out. And you can get a lot of information on what's going on in real estate markets.

South Florida, I think, will be — for example, I think that's going to be a problem for a long, long time.

I hope it isn't. But I just think the math of it is pretty devastating, in terms of the number of units you have and net household formation down there. You've got a lot to wade through.

Charlie?

CHARLIE MUNGER: I've got nothing to add.

WARREN BUFFETT: OK.

34. We'll never buy back Berkshire shares at a "silly" price

WARREN BUFFETT: Let's go to Carol.

CAROL LOOMIS: I got lots of question sent in to me about the possibility of Berkshire buying its own shares. And here's what one said:

"You recently described Berkshire's policy regarding share repurchase as self-defeating, because before repurchase, you said, you would write a letter to shareholders explaining why we are going to do it.

"You said the letter would, by necessity, tell investors that the stock price was at a substantial discount to intrinsic value, which would cause the stock price to rise.

"The letter would be, in essence, a buy recommendation, though as a matter of policy, you don't make those.

"In the past, you have emphatically endorsed share repurchase by other companies and criticized managers who would not buy when the price was right.

“You have said no alternative action can benefit shareholders as surely as repurchases. Your previous views suggest little patience for a manager with a self-defeating policy.

“You’ve said when you have a manager who consistently turns his back on repurchases when these are clearly in the interest of owners, he reveals more than he knows of his motivations. So — and the market correctly discounts assets lodged with him.

“Would it not be rational to conclude that the market will appropriately discount Berkshire’s share price unless and until you abandon your self-defeating policy and engage in repurchases of shares?”

WARREN BUFFETT: Yeah, incidentally, the — and this important, actually — the comments I made about repurchasing, overwhelmingly, those go back a lot of years when stocks generally were — frequently were — cheap in relation to intrinsic value. I did not make that —

You haven’t seen me writing about that in the last 10 years or so. Because I would say most of the repurchasing done in recent years, I’ve thought has been foolish, because people have been paying too much.

And companies got, in many cases — they would never acknowledge this — but they were buying because they were basically liked — they were trying to give out a buy recommendation when it wasn’t justified.

In the ’70s and early ’80s, Charlie and I would frequently urge people to repurchase shares because it was so much more attractive than other things they could do with their money.

The only time we felt strongly that Berkshire should repurchase its shares was in roughly 2000, whenever it was, that we thought it was demonstrably below intrinsic business value. And we wrote we would do it, and it did become self-defeating.

There’s clearly a point where if we thought it was demonstrably below — conservatively estimated — intrinsic business value and we notified the stock holders we were going to do it, we would do it. I think again, it would largely be self-defeating.

I don’t think that situation exists now. I think — I won’t give any buy or sell recommendations. But I think it ought to be quite compelling.

Like I say, I don’t — I think, probably 90 percent of the repurchase activity I’ve seen in the last five years, I did not think was serving the cause of the shareholder.

I thought it was being done because management thought it was the thing to do, and their investor relations department told them it was the thing to do, and they were actually buying stock at kind of silly prices.

And that was not the case when Charlie and I looked at Teledyne or the Washington Post or Cap Cities Broadcasting doing it many years ago. But I haven't seen situations like that in recent years.

Charlie?

CHARLIE MUNGER: I've got nothing to add to that, either.

WARREN BUFFETT: Number — it's interesting how many companies were buying in their stock at twice present prices that aren't buying it now. I mean, there are lots of those.

We will never buy in our stock at a silly price. We may make a mistake by not buying it at a cheap price. But we'll never make a mistake, I don't think, by buying it at a silly price.

And we think a significant percentage of corporate America has done that in recent years, including a few stocks that we've owned ourselves.

35. Crisis made opportunity cost calculations difficult

WARREN BUFFETT: Number 13.

AUDIENCE MEMBER: Jack Benben (PH) from Haworth, New Jersey. First, I'd like to thank you. This is — I've been to about a dozen meetings. This is probably the best one.

So thank you very much for the new format. And thank you very much to the journalists who've really helped out a lot. (Applause)

WARREN BUFFETT: Yeah, thank you.

AUDIENCE MEMBER: At past meetings, you and Mr. Munger have talked at great length about opportunity cost. Excuse me. The past year has presented you with many unusual opportunities.

Can you discuss some of the more important opportunity cost decisions of the past year? And were those decisions at all affected by the macroeconomic picture? Thank you.

WARREN BUFFETT: Well, certainly opportunity cost has been much more in the forefront of mind in the last 18 months.

When things are moving very fast, when both prices are moving, and in certain cases, intrinsic business value is moving at a pace that's far greater than we've seen for a long time, it means that in terms of calibrating A versus B, versus C, it's tougher.

It's more interesting. It's more challenging. But it's — and it can be way more profitable, too. But it's a different task then when everything was moving at a more leisurely pace.

And I described earlier, you know, we face that problem. And it's a good problem to have. We faced that problem in September and October. Because we want to always keep a lot of money around.

We have all kinds of levels — extra levels of safety — that we follow at Berkshire. And we will never get so we're dependent on banks or other people's money or anything else. We're just not going to run the company that way.

So we were seeing things happen. I mean, we got a call — we got lots of calls. But, most of them, we ignored. But the calls that we got that we ignored helped us calibrate the calls that we paid attention to, too.

And if we got a call from a Goldman Sachs, I think it was on a Wednesday, maybe, you know, that was a transaction that couldn't have been done the previous Wednesday and might not be done the next Wednesday.

And we're talking real sums, 5 billion in that case. And we had certain commitments outstanding. We had a $3 billion commitment out on Dow Chemical. I think at that point, I could be wrong exactly on the day when we made it.

We had a $5 billion commitment out on Constellation Energy. We had 6 1/2 billion we were going to have to come up with in early October on the Wrigley-Mars deal. So we were faced with opportunity cost-type considerations.

And as I said earlier, we actually sold something that under normal circumstances we wouldn't have thought about selling if it was 10 or 15 points higher, in Johnson & Johnson. But we just didn't want to get uncomfortable.

So you are faced, in a chaotic market, particularly where people needs large sums — so you're not talking about buying a hundred million dollars' worth of something that, you know, one day and a hundred million the next day — but all of a sudden you're called on for billions, if you're going to play at all.

We faced that opportunity cost calculation frequently during that period. I mean, when we decided to commit to buy Constellation Energy, we had to be willing to come up with $5 billion seven or eight months down the line. And you didn't know exactly when because it would be subject to public utility commission approval.

But if something chaotic happened in the market next week, we would get phone calls. Or we would see stocks selling or bonds selling at prices we liked. And if the relative values, against what we held, were interesting, we might sell things.

Now, it's harder to sell things in huge quantities than it is to buy things in huge quantities during a period like that. So you have to measure whether you can actually get the offsetting transaction done to move from one to another.

We have a much — if we're going to move billions from one to another, it's much different than the problem you may have in moving hundreds of thousands or tens of thousands of dollars from one holding to another. We really can have big transactional costs unless we're careful.

But that's the kind of calculation we go through. And we love the fact we get the opportunity to make those calculations. It's a sign of opportunity around.

And you know, we'll — we haven't had the flurry of activity like we had last year for a long time. So it was the first time we really faced the question, you know, can we raise a couple billion dollars in a hurry, to be sure that we've offset the cash needs of what we're committing to on the purchase side.

On the Johnson & Johnson we sold, we actually made a deal where we got — I had a floor price on what we sell that for, just because the markets were so chaotic, that we wanted to be absolutely sure that we would not end up a couple billion dollars less than comfortable when we got all through.

Our definition of comfortable is really comfortable. We want to have billions and billions and billions around. And then we'll think about what we do with the surplus.

Charlie?

CHARLIE MUNGER: Again, I've got nothing to add.

36. GEICO spends millions on advertising and will "never stop"

WARREN BUFFETT: Becky?

BECKY QUICK: This is a question from someone named Yem (PH) in Columbus, Ohio. It's —

WARREN BUFFETT: That narrows it down.

BECKY QUICK: Yeah. Very company specific. It says, "GEICO has been spending around 400 to $600 million on media advertising a year in the last few years. What are the deciding factors into how much to spend? And how could one estimate the net return on such spending?"

WARREN BUFFETT: Well, that's a question people have been asking themselves since the beginning of advertising.

And, you know, I'm not sure whether it was Marshall Field or John Dorrance at Campbell Soup, or something, one of those fellows said that, you know, when asked whether they didn't waste a lot of money on advertising, he said, "Yeah, we waste half of it, but we don't know which half." (Laughter)

And that is the nature of advertising. Although, we can measure it better with GEICO than most companies.

We will spend about $800 million on advertising. We spend far more — even though we're the third largest company — we've spent far more than State Farm or Allstate. And we will spend more and more and more. I mean, we will never stop.

We were spending $20 million a year, a little over that, when we bought control of it in 1995.

But we want everybody in the world to — well, everybody in the United States. We're not going to be selling insurance in China or someplace very soon.

But we want everybody in the United States to have in their mind the fact that there's a good chance they can save money by picking up the phone or going to geico.com and checking it out. And important money.

And when we get that message in people's minds, you never know when it's going to pay off later down the line. Because, as I mentioned earlier, starting in — around September 30th, we saw a big difference in the propensity of people to come to us to save $100 or $200, whereas they might not have cared about saving that before. So, we want —

Here's auto insurance. Everybody has to buy it. Nobody likes to buy it. But they like to drive. And if you like to drive, you need auto insurance.

And so it's going to sell. And you're going to buy it from somebody. And if you care about saving money, you're going to check with us. And we want to make sure everybody understands that.

And we won't — you know, we will spend more money on it, I will guarantee you, three years from now.

Now, we're getting more for our money in buying advertising this year. So 800 million this year buys more than 800 million would've bought a couple of years ago. So we're getting more exposure for the money.

But we love spending money on advertising at GEICO. And we want to be in everybody's mind.

Coca-Cola's in everybody's mind around the world. You know, he started in 1886. And they just kept associating Coca-Cola with moments of pleasure and happiness. And billions and billions of billions of people have that in their mind.

And they don't have anything in their mind about RC Cola, you know. You know, or — they just — you say RC Cola to somebody around the globe and they give you a blank stare. You say Coca-Cola and it means something.

And a brand is a promise. We're getting our — we're getting that promise in people's minds that there's a good chance they can save money if they check with GEICO. And we'll never stop.

Charlie?

CHARLIE MUNGER: Yeah, it's interesting.

If GEICO would remain more or less the same size if we didn't advertise so healthy, and if the new subscribers are worth more than the $800 million we're spending advertising, then, in an important sense, GEICO is earning $800 million more pre-tax in a way that doesn't even show.

That's the kind of thing we like to see within Berkshire Hathaway.

WARREN BUFFETT: The value of GEICO goes up by far more than the earnings every year, if we keep adding these people, as Charlie says.

And we could maintain, I'm sure, we can maintain for a very long time our present policy holder count and probably spend $100 million a year, maybe less.

But we are getting more than our money's worth for the — for what we spend. We probably waste some. But overall, we're getting at terrific return on it.

And if I thought we could get anything like the same return by spending 2 billion next year, we'd spend 2 billion. I mean, it — it's a very attractive business. And I don't see how you create anything like it.

I mean, we are the low-cost producer. And if you're the low-cost producer in something people have to buy and is roughly a $1,500 item, I mean, you've got a terrific, terrific business. And we have durable competitive advantage there.

37. Wells Fargo is better than many other banks

WARREN BUFFETT: OK, we'll to go to number 1. And I think then we'll break for lunch. Number 1?

AUDIENCE MEMBER: OK. Hello Warren, Charlie. Felton Jenkins from Savannah, Georgia, a long-time shareholder and partner.

Just want to make a quick comment about something that was a big deal the last couple of years about PacifiCorp. There was some controversy.

But I'm glad that PacifiCorp has agreed to work with the Native Americans and fishing communities on the West Coast to remove the uneconomic and harmful dams on the Klamath River.

So I want to encourage PacifiCorp management to move quickly, close the deal, and open the river soon. But thanks for their improved efforts over the last year.

My question is, you mentioned Wells Fargo got to $9. And that was a great deal, it looks like, at that price.

But what about Washington Mutual, AIG, Wachovia, Citigroup, Fannie Mae, even some Irish banks that I think you were involved with?

Those went through $9. And probably a lot of people thought they were still good deals or mispriced at $9.

And now you've got very expensive toilet paper, essentially, out of those stock certificates. So I mean, how would you know on the way down?

And looking at something like Bank of America, that was on the 13F sometime recently, what's a likely outcome for a Bank of America and how would you analyze what might happen? Thanks.

WARREN BUFFETT: Well, there's some you can't analyze. And on the Irish banks, I couldn't have been more wrong.

But it isn't a matter of whether they go through $9 or anything like that. It's really what their business model is and what kind of competitive advantage they have.

I would say that Wells, among the large banks, has, by far, the best competitive position, you know, of any — of the really large banks in the country.

And essentially, if you look at the four largest, they each have somewhat different models. But the model of Wells is more different from the other three than any one of the other three would be from the remaining group.

But I was wrong on the Irish banks in a very big way. I simply didn't understand. And I should've understood.

It was available for me to understand, the incredible exposure they'd got into in more land development-type loans — not property loans, in terms of completed properties — but all kinds of land development loans.

It was extraordinary. For a country with 4 and a fraction million people, you know, they had money lent for developing properties, homes, that would extend just forever in the future.

It was the terrible mistake by me. Nobody lied to me, nobody gave me any bad information. I just plain wasn't paying attention. The —

If you talk about the WaMus — I don't want to go through all the names on them, because it's specific to some companies.

But there were a lot of signs that they were doing things that a highly leveraged institution shouldn't be doing. And that could cause trouble if this model of ever-rising housing prices turned out to be a false model.

You can get in a lot of trouble with leverage. I mean, it's — you start creating $20 of assets, or something like that. You know, for every dollar of equity, you better be right.

And some of those big institutions did some very — what, in retrospect, for certain here — were foolish things, which, if they hadn't been so highly leveraged, would not have hit them as badly.

And I would say most of them, if you read the 10-Ks and 10-Qs and did some checking, you could spot differences in them. Certainly, you can spot —

There's no comparison, if you take Wells Fargo versus a WaMu or something like that. I mean, you don't have to have an advanced level of sophistication about banking to compare those two.

They're two different kinds of businesses. It's like comparing a copper producer whose costs are $2.50 a pound with a copper producer whose costs are $1 a pound.

Those are two different kinds of businesses. One is going to go broke at a buck-fifty a pound. And the other one's going to still be doing fine.

And banking has real difference in it. But people don't — they don't seem to look at them. The figures are available. And — but they don't seem to look at them very carefully.

When Wells reported the other day, they have an item of expense of over $600 million in a quarter for the amortization of core deposits. That it not a real expense.

I mean, the core deposit figure will be up over time. And they are entitled under the tax law to put up, I don't know, $15 billion or so, and they get to amortize that, which is an advantage.

But I didn't see one newspaper article or any commentator that mentioned that that $600 million charge is in there, which is entirely different than looking at any other bank. But it just — it goes unnoticed.

So the figures are there. And the information's there. And I think with Freddy and Fannie, for example, I think it was pretty clear what was going to happen.

Now, the interesting thing is, the government was telling them to go out and raise some more money for investors. And if those investors had put the money in, it would've been gone. It was already gone, actually, within a month or two, so —.

We had calls on that, people trying to — investment bankers — trying to place billions of dollars with us on something, on those two institutions. And you just could take one look at them and you could tell they were in big, big trouble.

You do have to know a little bit about — you have to know something about banking and what's going on in the various kinds of lending and everything.

And I would say that generally speaking, for people that don't spend a lot of time on their investments, they're going to have trouble separating financial institutions.

I think it's much easier to come to a conclusion on something like Coca-Cola or Procter & Gamble than it is for a person who is spending only a limited amount of time on investing to make a decision on whether to own bank A, or bank B, or bank C.

Charlie?

CHARLIE MUNGER: Yeah, there's another problem. Generally accepted accounting principles allow a conservative, sensible bank to show vastly increased earnings if it changes its practices to make a lot of extremely dumb loans in large volumes.

Generally accepted accounting principles should not be constructed to allow this result. It's — that what seduces so many of these bankers into this ghastly decision-making.

WARREN BUFFETT: Yeah, when we bought Gen Re, they had a financial products division. It was named similarly to the AIG one. It was called Gen Re Financial Products — AIG Financial Products.

And it produced numbers regularly that were always satisfactory numbers. But, you know, when we looked at that, you know, it looked like all kinds of trouble to us.

It cost us over 400 million to get out of. And a black box like that can produce — that's why managements love them to some degree, they can produce numbers.

They don't necessarily produce cash. And they sure as hell can produce all kinds of problems if you have to start posting collateral and doing things of that sort.

And I would say it is tough for, you might say, the passive investor, the one who's not spending very much time on it. I would say it's difficult for them to discern when that's going on.

So I — it's not a bad area to just say, "This one's too tough," and go onto something else that's a lot easier.

I think you can analyze a utility operation easier or, you know, some premier consumer company or something of the sort.

I don't think I would look for the tough situations to differentiate tough industries in which to differentiate things.

But there are huge differentiations. And again, I urge to read the JP Morgan Chase — Jamie Dimon's letter. Because you'll learn a lot by reading that.

CHARLIE MUNGER: But a lot of the new regulation that is coming wouldn't have even been needed if accounting had done a better job, particularly in banking.

And yet, I have yet to meet an accountant from any of the big firms who has said, "I'm ashamed of my own profession."

That's a mistake in accounting. If they don't have shame, they're not thinking right.

WARREN BUFFETT: Well, with that happy thought, we will — (laughter) — we will go to lunch now.

We'll reconvene about — let's reconvene about a quarter of one. We'll start at that time with Andrew and move onto section 2 when we come back.

Afternoon Session - 2009 Meeting

1. Quarterly earnings release schedule

WARREN BUFFETT: OK, let's get back to work.

I should mention one thing, because it's appeared in the press recently — a bit.

We will — our goal is to issue every quarterly report on the last Friday — after the close — prior to the expiration of the 40-day period after the end of a quarter that we have for reporting to the SEC.

The SEC says 40 business days — or 40 calendar days — unless it ends on a weekend. Forty calendar days after the end of the quarter — that you have to file." If it comes on a weekend, then it's the Monday following that.

That usually means — because we hold the meeting, usually, on the first Saturday in May — it usually means that the last Friday possible will be the day before the annual meeting.

This year, because the meeting is early on a calendar basis, because of Saturday falling on May 2nd, the last Friday will fall on May 8th. And that — our policy —

We like to get it out on a Friday afternoon, if possible, because we want people to have the whole weekend to read it before the market opens. It takes time to — I think it takes time, anyway — to digest the report.

And we'd like — we don't want some headline to determine market prices. We want, as much as possible, a thorough reading of the report.

So we will always, unless something comes up, makes it unfeasible, we will issue our quarterly reports on the last Friday before the expiration of the 40-day period. And that's what we'll do this quarter. And so we have not changed anything.

2. Preliminary Q1 earnings

WARREN BUFFETT: I can tell you some preliminary figures, which then we have to file an 8-K on, because then the information I give you has to be in the public domain before the market opens.

But our — what I call our operating earnings, which would be the earnings before any gains or losses from securities or derivatives or any other transactions of that sort, the operating earnings will be about, after-tax, about 1.7 billion against 1.9 billion last year.

And — as I told you, we're lucky to be — in this particular period — we're lucky to be in the insurance and utility business. They're relatively unaffected by the recession. Whereas most of our other businesses are anywhere from significantly to drastically affected by the recession.

We had an underwriting profit, in our insurance business. It was a little larger than last year.

Our float increased a couple of billion. That was primarily due to a transaction that was announced with Swiss Re, which occurred in March, in which they bought what's known as an "adverse loss development cover" — and gave us 2 billion Swiss francs for that.

Now, that's very, very long float. And the probability is that we will not pay out on that, probably, for at least 15 years and maybe quite a bit longer. So that's long-duration float. And that's what accounts for the 2 billion— roughly — $2 billion gain in float.

The utility business — earnings are reported down somewhat. But there were two items that account for that. One is that, on our Constellation Energy deal, which blew up last year, and we reported a significant gain on it, we got a bunch of Constellation stock.

And that is a mark-to-market and goes through our income account, every day, in theory, but certainly every quarter. And Constellation was down somewhat during the quarter. So that got charged against the utility earnings.

And then a larger item was a payment, and the final payment, in terms of options that were issued 10 years ago, which had the effect of increasing Berkshire's interest in MidAmerican, which we like.

But we wrote a check, a significant check, with MidAmerican to buy out the option. So — and that got recorded as an expense in the first quarter.

But the utility earnings are more than satisfactory with those two items in it.

Then when you get into all of our other businesses, with just a couple of exceptions — those businesses are basically down. I mean, they're all getting hit to varying degrees by the recession. So — that's basically the operating earnings story.

Our book value per share went down about 6 percent in the first quarter, which is a combination of security markets, and the fact that the credit default swaps, which — I'm the one responsible for writing them — that experience has turned worse, even since I wrote the annual report, in terms of bankruptcy.

So that loss — or potential loss — we're actually still funds ahead by a substantial margin — but that potential loss — and, I would say, expectable loss — is reflected in the first quarter figures. And of course, there's been some bounce-back since March 31st. But that's pretty much the story of the first quarter.

We ended the quarter with cash equivalence of about 22.7 billion, excluding any cash at the utility or at the finance company operation.

But we spent 3 billion of that the next day on a Dow Chemical preferred. So we actually ended, effectively, one day later, the quarter with a little less than 20 billion in cash.

We always keep a significant amount of cash at the parent company, not at the regulated subsidiaries, so that — whatever comes along, we're prepared for.

And that's pretty much the story of the first quarter. And I wouldn't be surprised — I mean, I guess I would almost be surprised if the opposite happened, if the world changed much — over the remainder of the year.

I think that we will continue, barring some huge natural catastrophe, we will do quite well on insurance. And we will do in the utility operation. And we won't do well in most of the other operations.

But we will have significant operating earnings, which I mentioned is about a billion-seven the first quarter.

If you look at our operating earnings, a billion, or a little more, that comes from MidAmerican — from our energy business, basically — we're going to leave in that business. I mean, there's all kinds of opportunities to do things even within our present subsidiaries. There's lots of projects that promise decent returns.

So you should not think of that billion or so as being available to us at the parent. It would be, if we wanted it to be. But as a practical matter, we're going to leave it all in.

The rest of the earnings are available to us in cash, plus or minus any change in the float, to do anything interesting that comes along.

So that's an abbreviated summation of the first quarter. We will put out the 10-Q next Friday after the close. And we'll continue to follow that policy.

3. "Value" investments? What other kind are there?

WARREN BUFFETT: With that, we'll go to Andrew.

ANDREW ROSS SORKIN: Excellent. This question actually just came across the BlackBerry before lunch from what I think is an audience member.

Josh Wolfe (PH) of New York writes the following: "BYD appears to be more like a venture capital speculative investment than a value investment. Would you both explain that investment, your logic behind it, and your expectations for it?"

WARREN BUFFETT: Yeah. I'm going to turn that over to Charlie in just one second. But Charlie and I think there is no other kind of investment than a value investment.

In other words, we don't know how anybody would invest in a non-value investment. So we've always been puzzled by the term, "value," and saying that contrasts with growth or anything.

Value relates to getting a lot for the expectable flow of cash in the future, in terms of what you're laying out today.

So we — we've always — every time somebody characterizes us as value investors, we always ask them, what other kind can there be?

4. Munger: Electric car maker BYD is a "damn miracle"

WARREN BUFFETT: But Charlie is our team leader here on BYD. And he gets very excited. So I may have to control him. But go to it, Charlie. (Laughter)

CHARLIE MUNGER: Yes, well, of course, BYD, although its founder is only 43 years old, is not some early-stage venture capital company.

BYD is one of the main manufacturers to the world of the rechargeable lithium battery. And it achieved that position from a standing start at zero under the leadership of the founder, Wang Chuanfu.

And — they went on into cell phone components and developed a huge position.

And then, finally, not satisfied with having worked a couple of miracles, Wang Chuanfu decided he would go into the automobile business.

As nearly as I can tell, it was zero experience in automobiles. And from a standing start at zero and with very little capital, he rapidly was able to create the best-selling single model in China.

And that's against competition that was Chinese joint ventures with all the major auto companies of the world, technological marvels with way more capital and so on.

This is not some unproven, highly speculative activity. What it is, is a damn miracle. And — (Laughter)

WARREN BUFFETT: I warned you. (Laughter)

CHARLIE MUNGER: And of course, Wang Chuanfu has hired 17,000 engineering graduates. And those engineering graduates are selected from a billion, 300 million people in China.

And he's hiring at the top of the classes. And — so you get a remarkable aggregation of human talent.

And then you've got the basic quality of the Chinese people. Which, when unfettered from the wrong kind of government — for instance, the wrong kind of emperor — the Chinese people succeed mightily.

When they came to this country as "coolies" — slaves — they would leave and soon be the most important people in the town.

So this is a very talented group of people. And, in a sense, this particular period may be Chinese — the Chinese day.

And of course, these batteries, these lithium batteries, are totally needed in the future of the world. We need them in every utility company in America. We need them in every utility company in the world.

And we have to use the direct power of the sun. And we can't do that without marvelous batteries. And he's in the — BYD is in the sweet spot on that stuff.

And I know it looks like a miracle. And it looks like Warren and I have gone crazy. But I don't think we have.

WARREN BUFFETT: Well, one of us, at most. (Laughter)

CHARLIE MUNGER: And that car you're going to see in the annex — I think they make everything in that car except the glass and the rubber. There may be a couple of small exceptions.

That's unheard of. Whoever went into the automobile business and made every part, and made the automobile a best-settle — best-selling — thing? This is not normal. I mean, this is very unusual.

And I regard it as a privilege to have Berkshire associated with a company that is trying to do so much that's so important for humanity, when you get right down to it. Because it may be a small company, but its ambitions are large.

And I don't want to bet against 17,000 Chinese engineers led by Wang Chuanfu, plus 100,000 more talented Chinese in a brand-new area — constructed the way they want it. I will be amazed, if great things don't happen here.

I don't think, given the size, it can be all that important to Berkshire, financially. But I have never, in my life, been more — felt more privileged to be associated with something than I feel about BYD.

WARREN BUFFETT: BYD was Charlie's last year. The Irish banks were mine. So he's — (laughter) — the winner.

BYD, incidentally, does $4 billion a year of business. I mean, so it is not a small business. And it will probably get a lot larger.

5. U.S. dollar will buy less in the future

WARREN BUFFETT: Let's go to the — area 2.

AUDIENCE MEMBER: Hello, Mr. Buffett and Mr. Munger. My name's Dan Lewis (PH). I'm from Chicago.

My question has to do with the U.S. dollar versus other major currencies. You spoke a little bit already about the — government policy and its effect on inflation in the future.

And just by itself, you'd think inflation would hurt the dollar. But obviously, there's a lot of other factors at play. So I'm kind of interested in knowing your latest outlook on the dollar.

I know you've been bearish. But given everything that's been thrown up in the air in the last six months, how you think these various things will come together, trade deficit, budget deficits, and how it will affect the dollar?

WARREN BUFFETT: Yeah. It's pretty unpredictable. But the — I will guarantee you that the dollar will buy less, you know, five, 10, 20 years from now. And it may be — it may buy very, very substantially less.

But I don't know that, obviously. But we are doing things that will hurt the purchasing power of the dollar.

On the other hand, the same thing is happening in countries around the world. So it's very difficult to say whether the dollar versus the pound or the dollar versus the euro, et cetera — how that will behave.

Because, you know, the British will run a deficit this year of 12 and a fraction percent of GDP. And even the Germans, with their, you know, long-time fear of inflation, will probably run a deficit of 6 and a fraction percent of GDP.

So you've got governments around the world all electing to run — and I think properly so — electing to run very material deficits, in some cases, you know, close to unprecedented except in wartime — electing to do that in order to offset this contraction of demand by their citizenry.

And how that plays out in relative exchange rates, I can't tell you. How it will play out in terms of the value of their currencies' purchasing power in the future versus now, I think, is fairly easy to say, and that's that it's going to cause units of currency to buy a lot less over time.

That isn't going to happen in the next year or two. But that doesn't mean that markets won't start anticipating it at some point. And it's going to be a very, very interesting future.

I mean, we are doing things that we haven't seen in the past. And policymakers do not know the outcome of that. I don't know the outcome of it. You do know it will have consequences. And — you can bet on inflation.

Charlie?

CHARLIE MUNGER: Well — I was raised here in Omaha. And I well remember the two-cent first class stamp and the five-cent hamburger. And so, in my life, there's been a lot of inflation.

And in my life, I think I've had the most privileged era of all history in which to live. So a little inflation is not going to ruin the lives of any of us.

The trick is to avoid the runaway inflation. That is a problem Warren and I are going to quitclaim to the younger people. (Laughter)

WARREN BUFFETT: Here is a product, though. Six and a half ounces of this product, 100 years ago, cost a nickel plus a two-cent deposit. And it's hardly gone up in price at all. It's very interesting. And wheat hasn't gone up that much or oats or things of that sort.

And on the other hand, a newspaper that cost a penny 100 years ago costs a dollar now and they lose money turning it out. So it gets very uneven, in terms of its impact.

6. Buffett "irritated" by the loss of triple-A rating

WARREN BUFFETT: Carol?

CAROL LOOMIS: Warren, Charlie — this question, I got a good many of these. This one comes from — who does it come from? Well, it comes from Mr. Kempton (PH) — Kempton Lam or Lam Kempton (PH) — one of the two — from Calgary, Canada.

And the question is, "How would you quantify the financial impact and damage of Berkshire losing its triple-A credit rating — which increased the cost of capital of Berkshire, which was surely a competitive advantage for the company?

"And Warren, what are you doing actively to try to restore Berkshire's triple-A rating? Do you think that Berkshire will be able to regain it?"

WARREN BUFFETT: Well, it won't regain it soon, because I don't think rating agencies will turn around like that, even if they should. We have a triple-A from Standard & Poor's, but it's provisional. And they're going to look at it in about — I think they said about 12 months.

Moody's affirmed the rating early in January. Then we issued a bond at one point, where it was — well, that was right after the rating changed.

And actually, in terms of our credit default swaps, which is a metric you can use for credit acceptance — although, I'll tell you, in a second, an interesting aspect of that — that spread came down, actually.

It makes very, very little difference in our borrowing costs. I mean, very little. And it never has, incidentally. I mean, double-As versus triple-As, the spread has always been very small.

And people would argue, in finance classes and all that, it wasn't worth paying the price to have a triple-A because you didn't save that much on debt. And it costs you, in terms of return on equity.

I never subscribed to that. And I very much liked having a triple-A from both Moody's and Standard & Poor's. I was disappointed when Moody's downgraded us. We didn't really think that was going to happen, but it did.

And — it doesn't have any material effect on borrowing costs. It does cause us to lose some bragging rights around the world in terms of our insurance promise, although nobody ranks ahead of us, that's for sure.

But, it will not change back in a hurry. I mean, people don't make decisions in committees that they reverse very quickly. It's just not human nature.

We're still a triple-A in my mind. And actually, we're a triple-A in Standard & Poor's' mind, till we hear something differently.

We certainly think, and we run it in a way, that there can be no stronger credit than Berkshire.

It's difficult for a rating agency, if they have a checkbox system of ratios and such, to measure something like the attitude of management toward creditors.

But I will assure you that Berkshire has a management that regards meeting its obligations as sacred and a lot more important than increasing earnings per share or anything of the sort.

I mean, we have obligations to people in something like workers' compensation that go 50 years out in the future. I mean, this is somebody that's been injured severely and they get a check every month from Berkshire.

And you know, that's a lot more important than whether we earn X, or X plus a tenth, or a couple of tenths, percent on equity. And we conduct ourselves, or we try to — certainly try to conduct ourselves — so that not only will people get those checks, but they'll never have to even worry about getting those checks.

And that's very difficult for a rating agency to quantify that attitude on the part of the management of Berkshire. But believe me, it exists.

And — I would say that the triple-A change at Moody's is not going to be material in the future of Berkshire. But it still irritates me.

Charlie? (Laughs)

CHARLIE MUNGER: Well, at least they showed a considerable independence. (Laughter)

WARREN BUFFETT: Who knows? That may have entered into it, too.

CHARLIE MUNGER: Yeah. My attitude is quite philosophical. I think the next change at Moody's will be in the opposite direction. And I think that will happen because we deserve a higher rating and they're smart. (Laughter)

WARREN BUFFETT: When Charlie and I disagree, and we do disagree a lot. We never argue, but we disagree.

And Charlie, when he gets to the point where he really wants me to do something, like buy the BYD interest or something, he always says to me, "Well," he says, "in the end, you'll see it my way. Because you're smart, and I'm right." (Laughter)

7. "Crazy" prices for Berkshire credit default swaps

WARREN BUFFETT: I will — I can't resist pointing out one item that is, maybe, a little technical to most of you. But there are some people here who will find it quite interesting. And it actually even enters into credit ratings to a great extent, the credit default swaps enter into it.

When we write a, let's take an equity put option, and we get paid for writing a billion dollar put, somebody pays us $150 million, we get the $150 million of cash that day.

And we set up a liability for 150 million the first day, for the value or the — that we — our appraisal of what it's going to cost us to meet that obligation. I mean, that's the market price for it.

The other guy takes 150 million out of his cash and sets up a $150 million receivable that day.

Now, these receivables and payables change over time. But the first day, no profit, no loss, just cash changing hands. One guy sets up an asset, the other guy — we set up a liability.

Now, as the world has developed in the last couple of years, the value of that asset to the other fellow has increased in a mark-to-market basis.

And he reports that through earnings. So his asset goes up. Our liability goes up. And we report that through earnings as a loss.

But we've got the cash and he's got an asset from us that comes due in 15 years or something like that.

And in the last couple of years, the — his auditors — his credit department — has said, "Gee, you've got a receivable from Berkshire that comes due in 15 years. And, they don't have to post collateral. So you have to go out and buy a credit default swap to protect yourself against that receivable going bad."

Now, that has two effects. A, he's laying out money every year to buy something that doesn't cost us anything but costs him real money. So the — and the more he shows us a profit, the more of the credit insurance he has to buy, so the more money it costs him every year.

And that has driven up the demand for credit default swaps at Berkshire, which made for some crazy prices. So at one point, our credit default swaps were costing that guy five percent a year.

So if he was showing, say, a $200 million asset, he was laying out $10 a year, and he was going to have to lay it out for 15 years, just because of these — this credit department's requirements.

And it made it very unpleasant for the people on the other side of our transactions, even though they keep writing up the profits. It doesn't cost us anything. But it does result in kind of a crazy market in the credit default swaps.

I realize that that has not been a burning issue with many of you. But it is an unusual — it's something I didn't anticipate.

And it explains why, to some extent, people may want to modify their contracts with us. And if they — with us — and if they want to modify them enough, we'll answer the phone. But in the meantime, we're sitting with the money. (Laughter)

8. MidAmerican working with Iowa on wind farms

WARREN BUFFETT: Let's go to area 3.

AUDIENCE MEMBER: Jim Hadden (PH), a Cornhusker in Davenport, Iowa.

On our drive over from Davenport, we noticed two rather large wind farms by MidAmerica Energy.

And my question is, when will be the return on investment of these wind farms? And are Berkshire Hathaway looking at any other alternative energies?

WARREN BUFFETT: Yeah, we're the largest, in terms of owned capacity in wind, in the country, I believe, of any utility. And Iowa has the greatest percentage of its electricity generated by wind.

But of course, the wind only blows about 35 percent of the time in Iowa, something like that. And we've got people here who can be more accurate than that. But — so you can't count on it for your base load or anything of the sort.

But Iowa has been very, very receptive and, I would argue, progressive, in encouraging us — and we've encouraged them, in return — to bring in a lot of wind capacity.

We are a net exporter of electricity in Iowa. Iowa's far more than self-sufficient in our service area in terms of electric generation. And I think that works to the benefit of the people of Iowa.

And we have an arrangement with Iowa. We — as you may know, we have not increased our rates at all — what — for more than a decade now. And that's been achieved by efficiencies. It's been achieved with wind generation.

We have a return that's built in on that that's fair to us, fair to the people of Iowa. And part of that return comes in the form of a tax credit — I think it's 1.8 cents per kilowatt hour — that is given to anybody in the United States that develops wind power generation.

We love the idea of putting in more wind. And we're doing it. We're doing it out at PacifiCorp. And I think we'll continue to be a leader in it.

One advantage we have over, perhaps, some people is that we are a big taxpayer, so that we don't have to worry about whether the tax credits are useful.

I guess the tax credit could be sold, also. But we don't need to do that in our particular situation. So you'll see more and more wind generation by the MidAmerican companies.

When we went into PacifiCorp out on the West Coast, to six states out there, they had virtually nothing — maybe nothing at all — in wind generation. And we've developed a lot. And we've got more coming on.

Charlie?

CHARLIE MUNGER: Oh, I think in practically anything that makes sense in utilities, the Berkshire subsidiaries will be leaders. I think we can all be very proud of MidAmerican and its two leaders.

9. Constellation and Dynergy deals

WARREN BUFFETT: Yeah, we're enormously proud of MidAmerican. And we will do a lot more in utilities over time. Constellation didn't work out. I wish it had. But we were back there — Constellation, we learned of their troubles on a Tuesday at noon. I mean, we saw it in the stock price and so on.

Dave Sokol and Greg Abel were in Baltimore that evening with a firm, all-cash bid to solve Constellation's problems. And Constellation was likely to get downgraded within 48 hours, maybe 24 hours.

And they would've had posting requirements in connection with various derivative transactions that they probably would not have met. I mean, they were facing bankruptcy.

And we literally went from a phone call that Dave made to me at noon or 1 o'clock to handing them a firm bid that evening in Baltimore. And that's one of the advantages of Berkshire. That is — I think that's a durable competitive advantage.

I think there are very few organizations that will act in that manner and that — where you have the talent there that you feel is — as a CEO — you can back them up with that kind of money without worrying about it.

So it's — that is a plus — for Berkshire, even though it didn't work out in that case. We will do more in the utility business.

CHARLIE MUNGER: Well, you bought a pipeline, didn't you, in about two hours?

WARREN BUFFETT: Yeah, we did buy a pipeline, and it's turned out very well.

And, in that particular case, the company, Dynegy, that — this was back in 2002 or so — the company needed the money enormously. They had gotten the pipeline from Enron. It was a very complicated transaction.

But they needed the money. And we needed the Federal Trade Commission approval, the FTC approval, on the deal, as would anybody that was buying it.

And we literally wrote a letter. I wrote a letter to the commission. And I said, you know, "These guys need the money. They need it before the 30-day period is up. And let us go through with this early. And we'll do any damn thing you tell us, subsequently."

And Berkshire can make that kind of a transaction. We don't ask the lawyers before we do it or anything. We just do it.

And that is an advantage. And it was an advantage to Dynegy. It got them through a period that they would've — I'm not sure they would've gotten through otherwise. So, we can move fast when the time comes.

But the — one of the reasons we — there's a couple of reasons we move fast. A, we've always got the money. You know, but — and we've got a mental attitude toward that.

But we also know we've got the managers that can deliver on the properties, once we own them. And that's a huge, huge advantage. Back —

(BREAK IN RECORDING)

10. Foreign ownership rules limit China opportunities

WARREN BUFFETT (IN PROGRESS): — China. We would be restricted by that ownership limitation.

But it's very hard to imagine that we won't find more things to do in China over time. I mean, it's a huge market. We do a lot of things. And some of those are exportable.

And there will also, perhaps, be opportunities to buy more businesses there. We would've bought more than 10 percent of BYD, if we could've. But, that's all that they wished to sell us. So we hope that comes about.

11. U.S. trade deficit is actually China's problem

WARREN BUFFETT: In terms of the Chinese dollar holdings, you know, in a way, they can't get rid of owning more dollar assets. I mean, the nature of it is, if we're going to run a, as we did a few years ago, or a year or two ago —

If we're going to run a $250 billion trade deficit with China, I mean, if they're going to send us goods — and we want those goods — to the tune of $250 billion more than we sell to them, they end up with $250 billion of little pieces of paper.

And they can convert those pieces of paper, called U.S. dollars, they can convert them into — U.S. real estate, into U.S. stocks, U.S. government bonds. They can do all kinds of things.

They can even trade them to the French, you know, and get euros or something in exchange. But then the French have the problem.

So the — Chinese dollar assets are going to build as long as there's a significant trade surplus with China. And then they have the choice of what to put those dollars into. And they have elected, so far, to put a significant amount — into U.S. government bonds.

And — I think — a major official, about a month ago or so in China, said he wasn't too happy about the prospect of what's going to happen in terms of the purchasing power of that money that's been put in U.S. government bonds. And I would say he's right.

I mean, he — it — he — anybody that owns dollar obligations outside of this country is, if they hold them a long time, is going to get less back in the way of purchasing power than existed at the time that they took on those dollar obligations.

And it's a major problem, not the world's worst problem, but it's a major problem for a finance minister or a government in China to decide what to do with this buildup that comes about, because they are running a trade surplus.

And — they've set up the Chinese Investment Corp, which has a couple hundred billion dollars in it — in terms of deciding to make investments around the world, but —

12. Munger: China's economic policies are "exactly right"

WARREN BUFFETT: It's an interesting question, if you made me the finance minister of China, what I would do with the trade surplus, the funds that came in because of the trade surplus.

And I think it'll take it over to Charlie and ask him what he would do, if he were the finance minister of China.

CHARLIE MUNGER: Well, I (Inaudible) that is a very easy question. I would do exactly what they're doing.

I think China has one of the most successful economic policies in the world. And China has advanced more rapidly than the rest of the world. And, I would say their policies are exactly right.

And their rate of advance is so great and so meaningful that if they lost a little bit of purchasing power on their dollar holdings, it's a trifle in the big scheme of things from the viewpoint of China.

So I've got nothing but admiration for the way the Chinese have been running their own affairs. And they're going to be very hard to compete with all over the world. And that is exactly the correct policy for China. That's the way you get ahead fast is to be very hard to compete with all over the world.

So I think they're doing it exactly right. And I think that the United States and China should be very friendly nations. Because we're joined at the hip.

WARREN BUFFETT: So you'd suggest they keep buying U.S. Treasurys at —

CHARLIE MUNGER: You bet.

WARREN BUFFETT: — practically no yield?

CHARLIE MUNGER: Whatever the yield. They're not no-yield. Because they can buy longer.

WARREN BUFFETT: OK, we've got some advice for the Chinese government. (Laughter)

13. Deal post-mortems shouldn't be public

WARREN BUFFETT: Carol?

CAROL LOOMIS: "In the past, you have stated that management should —"

This question comes from Ingrid Hendershot.

"In the past, you have stated that management should be required, after several years, to do a post-mortem on acquisitions it makes. Would you each provide us with your post-mortem on Berkshire's largest acquisition, General Re?"

WARREN BUFFETT: Yeah, I don't think — I'll comment on General Re, but I don't think we generally should make our post-mortems public. I don't think — I think that, if we acquired —

We do believe in post-mortems. We strongly believe in them. We think they're conducted at far too few companies. It's easy to propose a deal and it's much harder to account for it later on.

And — Charlie is a big fan of rubbing anybody's nose in their own problems.

And it absolutely should be done. I don't think it necessarily should be made public.

I don't think that you attract businesses by — and managers — by pointing out — even though you are the one that made the mistake, as the acquirer, in your projections — pointing out the shortfalls that may have occurred with the managers that are maybe doing a very good job to try and overcome the fact that you made a mistake in buying it in the first place. So I don't want to — I wouldn't want to get into that.

14. Buffett: I was "dead wrong" on Gen Re's reputation

WARREN BUFFETT: Gen Re has worked out well after a terrible, terrible start. And I was dead wrong, in 1998, when I bought it, in thinking that it was the Gen Re of 15 years earlier, which had absolutely the premier reputation in the insurance world.

And some practices, in terms of reserving and underwriting, had changed somewhat. But I'm happy to say that, thanks to the combined work of Tad Montross, who is with us here today, and Joe, that the —

CHARLIE MUNGER: That's Joe Brandon.

WARREN BUFFETT: Yeah, Joe Brandon, of course. But Joe and Tad, when they took over in, what, September of 2001, actually — right about the time of the World Trade Center problem — they took after all of the problems. They went right after them, reserving, underwriting, whatever it might be.

And Gen Re is the company now that I thought it was when I purchased it in 1998.

So we're proud of them. It was a very tough job. It wasn't one that was going to get done by itself. And that, to some extent, when you tighten up on an organization that has fallen into some lax ways, it can — you know, that is not an easy job.

Both of them, or each of them, they could've left for some other place and made just as much money, maybe more money, not had to face the problems that they faced at Gen Re. But they hung in there. And now we have an organization that we feel terrific about and has a great future.

Charlie?

CHARLIE MUNGER: Well, I think that's right. And — but it's very important that you have an ability to turn your lemons into lemonade.

And we were very, very lucky to have Joe and Tad to help us in the process. It wasn't pleasant. And it wasn't pretty. And it was very successful.

And it wasn't something that ordinary managers would've been at all likely to do. You had to be very tough minded to fix General Re. And they really did fix it.

WARREN BUFFETT: When we do the post-mortems, we, in a sense, are looking at our own handiwork. I mean, we make the decisions.

You know, it's not some strategy department someplace, or vice president in charge of acquisitions, or some management consultant that comes in and tells us we ought to buy this or that. We're looking at our decisions.

And that's very important. And we talk about that. And we've made some dumb decisions. And most of them have been mine. Because I'm the guy that's sitting in Omaha, making most of the decisions.

But it would really be a mistake to discuss, in public, my dumb decisions, which might reflect, you know, on some of the managers in some of the arenas. So we will not disclose those. But we will tell you that there are dumb decisions made around Berkshire.

CHARLIE MUNGER: The really brilliant decision in the General Re transaction was made by Joe Brandon. He was the one who decided that Berkshire should buy General Re. And he caused the transaction. And it wouldn't have happened, I think, if he hadn't been there. Would you agree with that?

WARREN BUFFETT: Yeah, that's true.

CHARLIE MUNGER: And Joe was the steward for the General Re shareholders. We got a decent result, and they got a fabulous result. So if capitalism has any heroes in that transaction, why, Joe's the hero.

15. "We are not big believers in contracts"

WARREN BUFFETT: OK, let's go to number 6.

AUDIENCE MEMBER: Yes, sir. Mr. Buffett, Mr. Munger, I'm Chuck Hosmer (PH) from California.

And you mentioned earlier the union cooperation at the Buffalo newspapers. Without the introduction of unions, how do you view contracts for other employees of BRK subsidiaries?

WARREN BUFFETT: I'm just trying to think whether we have any real contracts.

CHARLIE MUNGER: I hope not.

WARREN BUFFETT: Yeah, we are not big believers in contracts. We hand people hundreds of millions or billions of dollars, in some cases, to sell us their business.

And the decision we have to make is, are they going to have the same passion for the business after they hand us the stock certificate and we hand them the money? Are they going to have the same passion that they had beforehand?

And if we're wrong on that, no contract is going to save us.

We don't want relationships that are based on contracts. So — I can't — you know, I'm — I can't really think of a formal contract that we have.

We have understandings about bonus arrangements and that sort of thing — and that's not that complicated — with various managers.

I mean, we have — the comp of the top person at each company is basically my responsibility. And we have all kinds of different arrangements, because we have all kinds of different businesses.

Some of our businesses, capital's an important factor. So you have to put that in the comp arrangement. Some of it, capital doesn't mean a thing. Some of our businesses are very easy and very profitable. Some of them are very tough. And it takes a genius to, you know, to get a so-so result.

So we have a whole bunch of different arrangements on that. But we don't try to hold people by contracts. And it wouldn't work. And we basically don't like engaging in them. So you're looking at a company that — can you think of any contracts we have, Charlie?

CHARLIE MUNGER: No. Our model is a seamless web of trust that's deserved on both sides. That's what we're aiming for. The Hollywood model, where everyone has a contract, and no trust is deserved on either side, is not what we want at all.

WARREN BUFFETT: Yeah, we don't — we do not want to negotiate the size of the executive bathroom. I mean, that is not our game.

16. How to get yourself thrown out of Buffett's office

WARREN BUFFETT: Becky?

BECKY QUICK: This is a question from Edward Donahue (PH) from Belmont, Massachusetts.

"In the spirit of raising partnership value in these times, has Warren given any thought to spinning off as separate companies?

"My thinking is that some of these companies would sell at higher multiples to book value that Berkshire currently does. Further, where appropriate, consolidate companies with similar industries with the wish to save on management costs, administration, and even potential selling costs."

WARREN BUFFETT: Yeah, we will not be spinning off any companies. We had to — we were a bank holding company, believe it or not, at one time. We became one in 1969. Then we were given 10 years to dispose of our bank, which was in Rockford, Illinois, and we did have a, in effect, a spinoff of that.

But, we — if somebody comes around us and says, "Gee, you can — you've got a multiple of X, and you can have a multiple of 1 1/2 times X for this subsidiary, if you spin it off," you know, we can't wait to throw them out of the office. I mean, it just doesn't interest us.

We are not looking for something that gives a, you know, a one-month jump or something like that in market value. If we've got a wonderful business, we want to continue it within Berkshire.

We've got this ability within Berkshire, which is a real asset, in terms of moving money around into various opportunities without tax consequences. I mean, they're part of a consolidated return.

So if a See's Candy is a wonderful business, which it is, but it generates a lot of capital that can't be used effectively in that business, we can move it to some other business or buy other businesses with it.

And we have a real advantage in allocation of capital that a shareholder, basically, can't do as tax efficiently as we can do it within the company.

Plus, when we buy businesses from people, we make them a promise. You know, they can read our economic principles in the back of the annual report. And they know that we're buying for keeps.

You know, it is a marriage that's going to last. And we're not going to, because we can get a higher multiple or something for a temporary period of time, spin something off.

On top of it, that — there would be those other costs. But that's not the determining factor. It's the basic principle at Berkshire that we buy to keep. And people can trust us to keep our word on that.

Charlie?

CHARLIE MUNGER: Yeah, the — so many of those spinoffs, because your market cap will be a little higher, Wall Street sells that stuff, so they can get fees.

It isn't really doing that much for anybody, in the ordinary case.

I suppose the one exception that could happen, if the regulation was crazy enough, you know, you can imagine something that might cause Berkshire to go to two parts. But short of something like that, you're looking at what you're going to get.

WARREN BUFFETT: Yeah, if it was actually hurting some operation that — because regulation was focused in that, and that tied the hands of other companies in the Berkshire group, you know, we'd have to look at that.

But, as Charlie said, we have listened to presentation after presentation, over a lot of years, about — by investment bankers, you know, basically saying, you know, "If you just do this wonderful thing," you know, all these — that the market will love you.

And — it — how much is conscious, and how much is subconscious, we'll never know. But the one thing we do know is there's always a fee that accompanies it.

17. Don't know much about student loan business

WARREN BUFFETT: Area 7.

AUDIENCE MEMBER: Good afternoon. Mike Nolan from Montclair, New Jersey.

Until recently, the student loan business in the United States has been a very attractive and successful one. However, proposed changes coming out of Washington have thrown the industry into disarray.

Could you comment on the industry, which is highly reliant on both faith, trust, as well as financing, and talk a little bit about the companies in this business?

WARREN BUFFETT: Yeah, I don't know that much about it. Maybe Charlie does.

CHARLIE MUNGER: No, I don't know this much about it, either. There's been a fair amount of scandal, in terms of the sales methods. Some of the companies in the field got awfully cozy with some of the university administrators and so on.

WARREN BUFFETT: It's been a long time since Charlie and I thought about getting a student loan. So we — (laughter) — haven't checked the regulations too carefully on that one.

CHARLIE MUNGER: But, you know, we don't know a lot about it.

WARREN BUFFETT: Yeah. (Laughter)

I actually got approached, I guess it was about a year ago or a year and a half ago, on the deal that fell through, on Sallie Mae.

And I said, at the time, to the fellow that called me, I didn't understand it that well. And it turned out to be a good thing I didn't.

18. Earnings "management" at Goldman Sachs and General Electric

WARREN BUFFETT: Andrew?

ANDREW ROSS SORKIN: OK, this question comes from John McDonald (PH).

And he asks, "Warren, in your General Electric and Goldman Sachs investments, do you think you've picked attractive businesses or simply attractive securities?

“Ben Graham’s ‘Security Analysis’ suggests that the most frightening things an executive management can do is manage earnings, which it could be argued both of these firms do. What is your reaction to that?”

WARREN BUFFETT: Well, I can say that I could argue that a very substantial percentage of American industry over the last 15 years, at one time or another, has managed earnings. And I’ve witnessed it and argued against it and gotten no place.

So, I don’t regard that as a malady that’s limited in its experience. I don’t know anything. I would not get into the specifics of those companies.

I felt good about those companies, in terms of the quality of the businesses they had and the quality of the management. But it was the terms, primarily, that caused us to make those deals.

I mean, those were made in a period when markets were in chaos and you should’ve gotten very good terms for committing money then.

Very people were either willing, or in some — many — most — cases, able to commit major sums on short notice. And it took good terms in order for us to do it. It —

And like I say, I’m not sure there was any second possibility in those cases. It was a really extraordinary period.

We were happy to do it. I feel good about the deals, obviously, because we got a very good coupon. But considering the circumstances under which the deals were made, I don’t think there was an alternative.

So if they wanted 5 billion and 3 billion, respectively, on those deals, I think we were the low bid, in effect. But I also think we made very decent deals.

And you know, could we have done something better with the money at that time? I don’t — as I measured at that time, I could not find anything that I liked better. It was the terms of the deals overwhelmingly, although we obviously liked the businesses.

I know the managers, the CEOs, of both companies very well. And I think they are terrific people. I think they’re smart people.

And I think they’re very — they’ve been very straight with us, straight with us long before we made a deal with them. So we’re very happy with those deals.

Charlie?

19. “Very happy relationship” with Goldman Sachs

CHARLIE MUNGER: Yeah, you know, there's been a lot of criticism of investment banking in this arena, starting with that movie. But Berkshire itself has had marvelous services from all of its investment bankers, which is interesting.

WARREN BUFFETT: Think of what we'd be saying, if we'd been mistreated. (Laughs)

We've done a lot of business with Goldman Sachs over the years. And my experience goes back to when I was 10 years old and met Sidney Weinberg, who was running the firm and was a legendary Wall Street — well, he was "Mr. Wall Street" for a long, long time.

And I was a friend of Gus Levy's. And Gus Levy also did some really nice things for us, including when we had a little nothing company, called Diversified Retailing, which Charlie and I and Sandy Gottesman jointly formed.

Gus came in on an underwriting of a $6 million issue brought by New York Securities, which he wouldn't have dreamt of coming in, you know, for — in that kind of a deal, under most circumstances. And he had Goldman Sachs join in at that time.

So there have been a lot of things that have made for a very happy relationship with Goldman Sachs. I feel good about them.

And of course, we do lots of business with General Electric. We've bought I don't know how many of those wind turbines from them.

But GE — you know, is a very, very important American institution. We'll do — we'll sell them a lot of things. We'll buy a lot of things from them. And we'll make money on our investment. So that keeps me happy.

20. Buffett optimistic on America's standard of living

WARREN BUFFETT: Area 8.

AUDIENCE MEMBER: Hello. Mark Hoffman (PH) from San Diego, California. Just want to thank you for all your wisdom and advice over the years.

Also like to thank the boys at — the Blumkins — the Furniture Mart. They gave us a great tour the other day. I'm from an organization called Eel (PH). And they really showed us the culture at Berkshire and what you guys do.

My question is, looking at the overall world economy, the Berkshire businesses are great. But my question is, is there underlying issues you see in the world economy, like going off the gold standard 40 years ago and fiat currency in countries making money like crazy?

If the Berkshire businesses are great, but the underlying economy is a problem, where do we go from there? What are the questions you're asking yourself about the world economy? Thanks.

WARREN BUFFETT: Yeah, there's always a lot of things wrong with the world. Unfortunately, it's the only world we've got. I mean, so we live with it, and we deal with it.

But the beauty of it is this system works very well. I don't have the faintest idea what's going to happen in business or markets in the next year or two years.

But the one thing I know is that, over time, people will live better and better in this country. We have a system that works. It unleashes human potential.

I was just thinking, we have, today, about 35,000 people here. That was almost 1 percent of the population of the United States in the first census in 1790. Just 100 groups like this, and you were talking the whole country.

If you look at the — if we had had this room filled, back in 1790, with 35,000 citizens of the United States then, they would've been just as smart as we were, natively, their intelligence.

They would've lived in a country with resources that, obviously, same fertile soil, the same temperature, the same minerals, all of that. So they were just as able as we are.

But they weren't turning out anything like we turn out today. I mean, just look at how we live compared to those people several hundred years ago.

So we have had a system that works. It unleashes human potential. And China went, for a long time, without a system that unleashed potential. Now they've got a system that's unleashing human potential.

We haven't reached the end of that road, by a long shot. I mean, we're just starting, basically. We will have bad years in capitalism. I mean, it overshoots in markets. It gets overcome by fear and greed and all of that sort of thing.

But if you look at the 19th century, you know, we had a civil war. And we had 15 years or so of bad economic times spread out through that century. We had six panics, as they called them in those days.

And the 20th century had a couple of great wars. And we had plenty of recessions. And we had the Great Depression. So we have these interruptions in the progress of our society.

But overall, we move ahead. And we not only move ahead, we move ahead at a pretty damn rapid rate, when you think about it.

I mean, when, in the 20th century, we had a 7-for-1 improvement in living. And we did that. You know, we had slavery for a long time. We had blacks counted as three-fifths of a person. We didn't let women vote for 130 years or thereabouts.

I mean, we have — we were wasting human potential. And we still are. But we were doing it more so for centuries. But we do keep moving forward in kind of fits and starts.

And right now, we're sputtering somewhat, in terms of the economy. But there is no question, in my mind, that there is enormous human potential and that every period, every year we will meet, you can name a bunch of problems.

I mean, it will happen. But the opportunities will win in the end. And you know, your kids will live better than you live. And your grandchildren will live better.

And we will find more and more ways to find easier and better ways to do things that we haven't even dreamt of yet.

Charlie?

21. Munger optimistic about solar energy

CHARLIE MUNGER: Well, now that I'm so close to the age of death, I find myself getting more cheerful about the economic future — (laughter) — which I'm not going to be here to enjoy.

And what I find really cheerful is that we are plainly going to harness the direct energy of the sun. And we're going to have electrical power all over the world.

And that's going to enable overpopulated countries to turn seawater into fresh. And it's going to eliminate a lot of the environmental problems and preserve more of the hydrocarbon resources for future needs in — as chemical feedstocks.

What I see is a final breakthrough that solves the main technical problem of man. And you can see it coming right over the horizon. And of course, MidAmerican and BYD will be participating in it.

So, I think it's hugely a mistake to think only about your probable misfortunes. You should also think about what's good about your situation.

And what's good about our situation now is the main technical problem of mankind is about to be fixed. It's the — if you have enough energy, you can solve a lot of your other problems.

WARREN BUFFETT: He is getting more optimistic as he gets older. (Laughter)

22. Not concerned about Swiss Re reinsurance deal

WARREN BUFFETT: Carol?

CAROL LOOMIS: This is a question about Berkshire's investment in Swiss Re. "Given that you have no control over Swiss Re's underwriting, how can you be comfortable with 2.6 billion invested in a relatively junior security in addition to the relatively sizeable common stock position you already have?

"Did the Gen Re acquisition's problems over the first several years you owned it not make you wary of the potential landmines in reinsurance?

"And isn't Swiss Re even more likely to continue to make mistakes, given that you have no management control?

"Or has your insight into its underwriting culture, since you entered into the quota share agreement, increased your comfort level with the risks it is taking?

"You have said, in the past, that Berkshire's float is worth as much or more than equity. Would you say the same about Swiss Re's float?"

WARREN BUFFETT: About Swiss Re's what, now?

CAROL LOOMIS: Swiss Re's float.

WARREN BUFFETT: Oh. The — we have several arrangements with Swiss Re. One was engaged in a little over a year ago, where we take 20 percent of their property-casualty business, which is reinsurance business, primarily, over a five-year period.

Then we made a — and that started about a year ago. And then, a month or two ago — and at that time, we bought about 3 percent of Swiss Re's common.

Then, about a month ago, we invested 3 million — 3 billion — Swiss francs in a security which pays us 12 percent a year and which they can call, after two years, at 120 percent of its principal amount. And then if they haven't called it by the third year, it becomes convertible to 25 Swiss francs a share.

The odds are probably pretty good that it will get called. And if it gets called, we'll be unhappy, because they only reason they'll call is if it's advantageous for them to call it and disadvantageous to us.

But if it does get called, we will get 120 percent of par plus 12 percent a year for it.

We are senior, actually, to the Swiss re-equity of roughly 20 billion Swiss francs. So I would not regard it as a junior security.

Swiss Re's problems of the last year or so have not come about, in any way, through their insurance underwriting.

Their insurance underwriting has been fine over the years. And we feel fine about having a 20 percent quota share in that. And we feel fine about our investment. So, I would regard —

They develop a large amount — as many reinsurance companies do — they develop a large amount of float per dollar of premium volume.

So we would expect that this 20 percent quota share that we've had for a year will develop a very significant amount of float relative to the 3 billion or so of premiums that it represents.

And I think it will turn out to be attractive float. It will be attractive for us. And it'll even be a little more attractive for Swiss Re. Because in effect, they get — the commission we pay them gives them a little overwrite on that.

I think, like I say, that the most likely thing is that our $3 billion position gets called.

We also have that $2 billion or 2 billion Swiss franc. If I've said, "dollar," I meant Swiss franc. $2 billion — 2 billion Swiss franc — adverse loss cover.

And what that says, essentially, is that, if their reserves — we'll say, in the property-casualty business, at the end of 2008 — were roughly 60 billion francs — that once they've paid out — these are not precise figures — but once they've paid out 58 billion, 2 billion less than their carried reserves, that we pay the next 5 billion.

And like I say, it's very unlikely we would be paying out money before 15 years on that. And if their reserves are accurate, we will pay out only the 2 billion.

So that was a transaction, again, that was made at a time when Swiss Re was under considerable pressure. They were under threat of downgrade, in terms of ratings.

And, I met with the CEO — the then-CEO — of Swiss Re on a Sunday in Washington, D.C., along with his investment adviser. And we arranged a transaction, which their shareholders and their directors later approved. And I think we met their needs. And I think we've got an attractive transaction.

There's nothing wrong — you know, we may prefer Gen Re — but there's nothing wrong with Swiss Re's underwriting. It did not cause any of the problems that they have now.

That arose from something akin to the problems of AIG, although not remotely on the scale of AIG, but both in somewhat in financial products and somewhat on the asset side. It did not arise from underwriting.

Charlie?

CHARLIE MUNGER: Yes, and that's a terrible problem. We wish we had more of it. (Laughter)

23. Irrational CEO compensation and incentive systems

WARREN BUFFTT: Area 9, please.

AUDIENCE MEMBER: I'm Vishali (PH) from the Philippines. My question is about compensation in a capital-intensive subsidiary.

Now, I am going to take the liberty to assume that the large number of bank failures were caused, in large part, by incentive bias.

If a board of directors makes a mistake with compensation, then the board introduces incentive bias towards earnings manipulation.

So bearing in mind rule number one, which is, "don't lose money," and bearing in mind that it's OK to have losses in the short term if the moat is widened, then how do you develop a fair and intelligent compensation package for a manager of a subsidiary that requires a lot of capital?

WARREN BUFFETT: Well, you obviously — it's a very, very good question. It's one that Charlie and I have both thought about. And we've been around so many crazy compensation systems that we've spent a lot of time thinking about it and talking about it.

In a capital-intensive business, you have to have something that — you have to have a factor in the compensation arrangement that includes a capital cost element.

We have dozens and dozens of subsidiaries. And we have different arrangements for different businesses.

Because — as you point out —an arrangement for a business that needs no capital, like a See's Candy or a Business Wire or something of that sort, has to be materially different than something that requires a lot of capital.

We think we've got rational compensation systems. We agree with you that incentives are very important.

I would say that I think your question implied, a little bit, that the board sets these things. The truth of the matter is, at least over 40 years of experience and 19 boards that I've been on and observing behavior a lot of other places — basically, the board has had relatively little effect on it.

The CEO has managed, in most cases — in a great many cases — to be an important determinant of his own — or her own, usually his — own compensation arrangement. They, you know, they — the human relations — first of all, they pick the comp committee, you know.

So I have been on one comp committee out of 19 boards. I mean, people are not looking for Dobermans. They're looking for Cocker Spaniels. And then — (Laughter) and they're looking for Cocker Spaniels that are waving — wagging their table — tails, very friendly.

You know, you — CEOs spend a lot of time thinking about who's on their comp committee. The audit committee is less important. But the comp committee, they think about plenty.

And the comp committee meets every few months. And a human relations vice president comes in, who is responsible, directly, to the CEO and probably recommends a compensation consultant. And believe me, they don't go around looking for the ones that are going to upset the apple cart.

So it's been a system that the CEO has dominated.

And in my experience, boards have done very little in the way of really thinking through, as an owner or as owners' representatives, what the hell is the proper way to pay these people and how to incent them, not only to do the right thing, but also to incentivize them not to do the wrong thing.

Charlie and I are fairly familiar with a company here in town, the Peter Kiewit Organization. And Pete Kiewit, I don't know, 50 years ago or more, you know, figured out a very, very logical way to pay people in this business.

And it wasn't rocket science. And I'll guarantee he didn't consult with any compensation consultant on the subject. He just figured it out.

And you would be able to figure out one. I can figure out one. But you have to understand that not every CEO wants a rational compensation system, you know? Who wants rationality, when irrationality pays off more?

So it's a real problem getting people at the board level — I think the — I don't think there should be a comp committee. I think the board as a whole actually should thrash this sort of thing out.

So that you don't get some report from the comp committee, and that's treated as holy writ, because they've debated for a couple of hours the day before, supposedly, and then come in and give some recommendation, everybody rubber stamps it.

I think it ought to be a subject of general discussion. I think it's very important how you compensate the CEO.

I've said, in our annual reports, choosing the right CEO, making sure they don't overreach, and exercising independent judgement on major acquisitions or divestitures, if the board does that right, you can forget about all this other check the list — checklist stuff. And if they don't get that right, the other doesn't make much difference.

So I would say that it can be done. It's very difficult to have a system where somebody — where the board, thinking as owners or representing owners, care as much about it as the guy on the other side who's getting compensated.

I do think it's gotten better in recent years. But it started from a very low base.

Charlie?

CHARLIE MUNGER: Yeah, there are some counterintuitive conclusions in the field that are quite interesting.

I would argue that a liberally paid board of directors in a big American public corporation is — the liberal pay is counterproductive to good management of the company.

There's a sort of a reciprocation. You know, "You keep raising me, and I keep raising you." And it gets very club-like. And I think, by and large, the corporations of America would be managed better if the directors weren't paid at all.

WARREN BUFFETT: We're working toward that. (Applause)

Well, it is interesting. Because the SEC would define independent directors, you know, as — they would question, you know, my independence, if we would own billions and billions of dollars' worth of some security, but we would sell them some ice cream at Dairy Queen or something of the sort.

And the — to get real owners' representatives is very — and knowledgeable, because they've got to know business. They have to really have some business savvy.

And the truth is, if you get somebody that's getting $200,000 a year, $250,000 a year, for being director of a company, and they don't have that much income outside or net worth, and they would just love to get one more directorship for another $200,000, they are very unlikely to sit there and argue with the CEO and say that the system is rigged in favor of incentive compensation or something of the sort.

There is more baloney in the compensation arrangements —

And now, you have these 100-page proxy statements. If you take 100 pages to explain how you're paying the people of the place, something is wrong. I mean, you don't need 100 — we don't have 100-page, you know, understandings or anything of the sort.

But it's gotten to be more and more of a game as it's gone along.

And I would say that, as Charlie — that when compensation is a very important part of a director's wellbeing, you do not have an independent director.

And the funny thing is, the way it's — the system has been arranged, those are the very people that tend to be regarded as the independent directors, in most cases.

CHARLIE MUNGER: It's way worse than practically anybody recognizes. Elihu Root, who was the ultimate good Cabinet officer in the United States, used to have a saying that no man was fit to hold public office who wasn't perfectly willing to leave it at any time.

And of course, the minute he left public office, he went right back to being the leading lawyer of the world. So he didn't have much to lose by —

But the man who has a lot to lose from his office is going to be very loath to be an independent director.

So the way we do it, at Berkshire Hathaway, is one-tenth of 1 percent of America. And the way everybody else does it is silly. (Laughter)

WARREN BUFFETT: (Laughs) I love being up here with him.

24. Worst-case scenario for insurance operation

WARREN BUFFETT: Becky.

BECKY QUICK: This is a question from Paula Sauer (PH). And, since Charlie seems to be getting more optimistic, maybe we should ask him this question first. And then Warren, you can try and top it.

But Paula writes in, "What's the worst-case scenario you could imagine with respect to the insurance business?"

CHARLIE MUNGER: You mean ours or generally?

BECKY QUICK: I believe she means yours in particular.

CHARLIE MUNGER: Yeah. Well, the very worst case is some catastrophe where we lose quite a few billions of dollars pretax. Even that, I don't think, significantly impairs the basic business in place.

So I think we have a marvelous insurance business. I don't want to trade it for any other that I know. How about you, Warren?

WARREN BUFFETT: Yeah, no, it is a fabulous business.

The worst — I used to say we would probably play 4 percent to 5 percent of the industry loss — from any mega-catastrophe.

I'm not sure where Katrina finally came in. I don't know whether it was 60 billion or something in that area. And we probably did pay close to — we were in that 4 percent to 5 percent range.

We're lower than that, probably, right now, not necessarily way lower. But if we had $100 billion catastrophe, you know, we would probably pay 3 to 4 percent of that, currently, so that you'd be talking 3 to 4 billion.

You know, the worst — I think the worst situation that could occur is if we ran into so much inflation that people got very, very unhappy with anything that they had to buy in their daily life.

This applies in the utility business, too, but certainly like auto insurance, and in effect, that they express their outrage at inflationary increases and said, "Let's nationalize the whole thing." I mean, that would not — that would be a huge asset that would disappear, if that occurred.

I don't think that's a high probability. But if you're asking me to look at worst cases, that's probably the one I would come up with. I —

CHARLIE MUNGER: Well, that happened. Auto insurance was nationalized somewhere, New Zealand or somewhere.

WARREN BUFFETT: Oh sure.

CHARLIE MUNGER: But it's not — if you want the absolute worst cases, you found it.

WARREN BUFFETT: Yeah, we nationalized, to some extent, the annuity business, you know, when we went into Social Security. I think it was a good thing.

But when people get outraged enough about something, you've heard talk about the banks. I mean, when the public gets outraged, the politicians will respond.

And inflation would be — wild inflation — would be the most likely cause, it seems to me, if something like that — I don't think that's probable — but something like that happening in auto insurance.

It's a bill that most people pay, you know, every six months, or even more frequently than that. And if they see that bill going up and they don't want to get rid of their car, they're going to get mad.

And utility companies are going to get — utility customers — are going to get very mad during inflation. Because they need to turn on the lights. And they hate to see, you know, those monthly bills going up.

It's the — it's something they can't give up. And it's very visible. And the reaction will be to go to their public representatives and say, "Do something about this."

And one of the things they can do about it is take it over. So very low probability of that, but it's not nonexistent.

25. No preset goal for international investments

WARREN BUFFETT: Area 10?

AUDIENCE MEMBER: Gentlemen, Patrick O'Donoghue (PH) from Cork in Ireland. So I suppose I should start by saying I'm sorry you've had such a tough time in my otherwise wonderful little country.

WARREN BUFFETT: I love the Irish. We've got some — we've had great luck with the Irish. It was my mistake. (Laughs)

AUDIENCE MEMBER: OK. Now, I'd like to grow my investment in Berkshire Hathaway. And I think we've established it's a wonderful company.

So I'm left with a couple of other issues, which, for a foreigner, are maybe a little different for people domestically, the first of which is that any gains in Berkshire Hathaway may be wiped out by a slide in the dollar versus the euro. And we're talking a long-term investment here, obviously.

The second is, perhaps you could discuss the — your — global acquisitions, which will reduce your dollar dependence and increase your foreign-source income.

I've lost the third. If you could discuss those, please.

WARREN BUFFETT: Sure, yeah, and if it comes to you, that'll be fine.

The — predicting the euro versus the dollar, I'm no good at. You —

CHARLIE MUNGER: You did pretty well.

WARREN BUFFETT: (Laughs) Yeah, we did make a couple billion. But the — (Laughter)

You could, if you wished — I'm not suggesting this at all — but euro/dollar is an easy thing to hedge. I'm not recommending that. I'm just telling you that that is an option, if you're worried about a major currency. It's hard to do with smaller-country currencies.

But when you're talking the euro/dollar thing, you can keep hedging that, if you want to.

But like I say, we don't normally do that sort of thing. And that could be a pain in the neck to you.

I would say, in terms of Berkshire's earnings, we will just keep doing things that make — we think make sense. Now, if we own —

We own over 8 percent, for example, of Coca-Cola. Coca-Cola, you know, makes 80 percent or more of its money outside the United States.

We own a lot of Procter & Gamble. They make a lot of their money out of the United States. Kraft makes a lot of money out of the United States.

So we have a lot of indirect sources of earnings. And then we have a lot of direct sources of earnings outside the United States.

ISCAR makes most of its money — it makes money in the United States, but it makes a lot of money elsewhere. And we have other businesses like that.

We do not have a predetermined goal at all of developing X percent of our earnings here or there or that place. We just keep, you know, every day, we go to work.

And we don't know whether the phone call will come from Israel or from Indiana, in terms of a chance to invest some money.

We want all of our subsidiaries to be looking at opportunities everyplace. And some of them will find them abroad. And some of them won't. So it — we are not a — we are not heading anyplace, in terms of sources of earnings.

There are a lot of countries we feel comfortable with. And we would be happy to put money into those countries.

But we don't wake up in the morning saying that we would like to have more money in Germany or Spain or whatever, or that we would want to take money out of those countries.

And Charlie, have any more?

CHARLIE MUNGER: Yeah. People look at a modern, liberal democracy. And it's very easy to conclude that it's messy and full of defects. And I think that's a correct view.

But it's not at all clear to me that the messy defects that we have are worse than the messy defects of Europe.

I am an agnostic about these things. I think there's plenty wrong and plenty right on both sides of the Atlantic.

26. "Nobody gets any joy" from layoffs

WARREN BUFFETT: OK, Andrew?

ANDREW ROSS SORKIN: So this question comes from three shareholders who happen to be employees of Berkshire portfolio companies. They've asked not to be named in the — they ask the following question.

They say, "We are concerned with both the financial condition of the company and the stability of our jobs. Could you discuss your attitude towards the use of layoffs as a means of responding to short-term downturns in company profits?"

WARREN BUFFETT: Yeah, these are investee companies or subsidiaries?

ANDREW ROSS SORKIN: These are — I imagine they are investee companies. They —

WARREN BUFFETT: Yeah.

ANDREW ROSS SORKIN: And they are shareholders and employees.

WARREN BUFFETT: Yeah, I wouldn't have a different attitude. I was just clarifying it.

The — there's no question that business conditions can change such as to necessitate temporary or permanent layoffs.

I mean, there's — scales of businesses change. We're fortunate, in a place like GEICO, where our business is expanding. So we'll probably add at least, I would guess, a thousand jobs, net, at a GEICO.

But at the same time, we probably have close to half of our brick plants closed in the Southwest, because people just aren't building houses now. Now, that business will come back. And we'll rehire people.

On the other hand, our textile business never came back. And we employ fewer people at the Buffalo News than we did a year ago. And we are not going to regain those or get back to previous levels.

So there are some businesses that may permanently contract. And you have to face up to that, in terms of layoffs.

There's other businesses that have severe cyclical-type contractions, and they are going to face significant layoffs.

There are other businesses that are suffering a little bit during a period like this, but very little. And we will resist the idea of having layoffs.

We — you know, nobody gets any joy out of it. And generally, you do it, probably, a little too late, even, because you keep hoping the business will bounce back up or something of the sort.

But, you know, it — if the business changes in a material way, you'd better change your business model. Or, you know, somebody else will. And then you'll even have more changes facing you.

On balance, we hope we get into businesses that don't face those kind of problems.

But certainly, in our construction-related businesses — we've had layoffs at Shaw, we've had layoffs at Johns Manville, we've had layoffs at Benjamin Moore, we've had layoffs at Acme Brick, and there's really no alternative. I mean, it — and our competitors all have had also.

And you know, in the textile business, we got into it in 1965. In the end, we laid off everybody. I mean, it — we — it had contracted enormously before we got there. We tried all kinds of things. And we finally gave up.

You know, there — capitalism — you know, is creative destruction. And sometimes, you're on the short end of that.

This year, in terms of the businesses we have, you know, our employment will probably be reduced even — I'm almost sure it will — even though GEICO will expand.

It will not be reduced dramatically, because it just hits in certain areas. But it will be reduced. And our managers have to look at the reality of the current situation.

Charlie?

CHARLIE MUNGER: Yeah. Some of our businesses have a shared-hardship model, where they don't layoff, at least not yet. And the businesses with that model tend to be very strongly placed, economically.

So I guess it shows that Benjamin Franklin was right, when he said, "It's hard for an empty sack to stand upright."

And, so we're all over the map on that, and so is all of industry. And —

But I do think the — an ideal model would be a business so strong that it could operate in the shared-hardship mode instead of the layoffs.

WARREN BUFFETT: Yeah, some are doing that, where they — you know, you give up hours. And — but a lot of operations don't lend themselves to that very well, either. So —

CHARLIE MUNGER: ISCAR's operating that way.

WARREN BUFFETT: Yeah, ISCAR's operating that way. And, in other cases, you basically have to close down whole plants. I mean —

CHARLIE MUNGER: Yeah, sure.

WARREN BUFFETT: Yeah, that's just the nature of it. It's better — you really can't operate every plant at 50 percent and have it work as effectively as shutting down the least-productive plants.

CHARLIE MUNGER: In a world where you sometimes have to amputate a limb to stay alive, you can't expect that every business can stay exactly as it is.

27. Fight egregious CEO pay with embarrassment, not legislation

WARREN BUFFETT: OK, area 11.

AUDIENCE MEMBER: Hi, Ralph Witkin from Greenwich, Connecticut. I was first here in 1995. And I really appreciate the way you handle this meeting. I've been to dozens of others. And I know you're not obligated to do this. And I thank you for it, both of you.

My question is very similar to number 9's, regarding executive compensation.

Not so much your view on the compensation, but how we, as shareholders, can make some attempt to try to correct this and bring it back into some level of balance. Thank you.

WARREN BUFFETT: I had a senator call me just the other day. And, his constituents, obviously, are enraged about executive comp.

Probably — you know, AIG really had a huge impact, although, you know, you can take the Merrills and all the rest of them, also. But that story was huge with people.

And it was probably — in a certain sense, the outrage was disproportionate to what happened. But in any — it doesn't make any difference. The people are enraged about it.

So this senator called me. And he said, you know — he was essentially saying, “Tell me about a statute we can enact that will make my constituents happy about executive compensation.”

And my advice to him was that he probably couldn’t, and that the last time Congress got into this was in the early days of the Clinton administration, when they passed a bill that said, as I remember, for the top five officers, that you couldn’t get deductibility for comp in excess of a million dollars annually, unless it was tied to performance in some way.

That was probably the most counterproductive piece of legislation that Congress has ever come up with, which is quite a statement to make in itself. (Laughter)

The net result of that was that when the tax was imposed, of course, the stockholders paid it and the officer didn’t. So it penalized the shareholder, who was already getting penalized by the comp.

It led to all kinds of arrangements that were designed to dance around this, which involved lots of lawyering and lots of consultants and lots of pages of proxy statements, the net effect of which was to ratchet up compensation very dramatically. Compensation increased far more, in my view, because that was put on the books than otherwise.

So I suggested to him that the first thing they would do — should do — is probably repeal that and say, “We were wrong,” and then figure out whether they should do something right. But that did not go over very well. (Munger laughs)

So I would say that — I’ve always proposed this. It never has gone anyplace. But that won’t stop me from continuing to propose it.

All you need in this country is the top half dozen or so investment managers who manage, you know, we’re talking hundreds of billions, trillions, in some cases, of assets.

If they would just speak out on the most egregious cases. Just — you know, there’s a lot of stuff about “say on pay” and everything. But half a dozen of them, they get lots of publicity — they wouldn’t have to worry about getting their views out.

The way they get big shots to change their behavior is to embarrass them, you know, basically. And the press has great opportunities to do that. And — but they need the cooperation of the big investors.

So if you’ve got three or four of the biggest investors, when the XYZ Company comes out with some crazy plan, to step up and just say, “This is outrageous,” it would change behavior. And it would —

The directors don’t like to look foolish. They don’t like their names in the paper looking foolish. And you would see some real changes.

I think that the legislation for it is going to be — I just don't know how to write the stuff, you know?

I mean, you read the case recently at Chesapeake Energy, you know, $75 million for kind of a re-signing bonus and some — there were some other things involved, too.

I mean, it just — you wonder what people are thinking. You know what the CEO is thinking. And it just — I don't think you can write the statute that stops it. And like I said, the one they tried to write just screwed everything up royally.

But I do think big institutions — if they spoke out — you'd only need three or four of them that spoke out jointly. And they don't have to do it on every corporation at all, just when it's egregious enough.

But if they get a reputation for speaking out when it's egregious, every now and then, it would act as — I think there would be some restraining factor that might set in in corporate America. Because the restraining factor is not there then — not there now.

I mean, right now, every consultant comes in and brings along what the people at so-called pure companies are making. And they —

Nobody wants to say their CEO is in the bottom quartile or something. So they just keep comparing themselves to the higher quartiles. And then they ratchet up from there.

And, you know, it's a game that works wonders. I call it the honor system. You know, the shareholders have the honor and the executives have the system. (Laughter)

Charlie?

CHARLIE MUNGER: Yeah, well, I don't — I'm not too optimistic about fixing it from the big investor standpoint.

The big investor groups contain many an investment manager making $20 million a year for insignificant contributions. He's like a man in a glass house that starts throwing stones.

And the public pension funds are dominated, in many cases, by left-wing politicians and by labor unions who tend to have an agenda of their own that doesn't really relate to good management. So, sometimes, the cure is worse than the disease.

28. We don't hire potentially great managers

WARREN BUFFETT: Well, on that hopeful note, we'll move on to Carol. (Laughter)

CAROL LOOMIS: This is a question from Peter Poulson, spelled P-O-U-L-S-O-N.

He says, “When you acquire companies, they come equipped with managers. And in general, Berkshire has done a great job putting the right leaders in the right roles.

“But occasionally, you have to hire someone for an executive spot. Please describe an interview that you might have with a prospective Berkshire operating executive. What do you look for? How do you evaluate a person’s potential to become a great manager?”

WARREN BUFFETT: Well, usually, we hire people that have already proven they’re great managers. I mean, when we buy a business, very — a very high percentage of the time, the management comes with it.

When we buy an ISCAR, you know, we get the group that had been knocking the ball out of the park for years and years and years.

And the real question we have to ask ourselves is, you know, will they be with us in the future? Will they keep — will they be feeling the same way after the deal as they did the day before the deal?

And we’ve made occasional mistakes on that. But overall, that does come through. So it’s — we’ve had good luck with managers, not perfect.

And, the toughest part is, since we have no retirement age, is when managers lose the abilities that they had at an earlier age.

And that — it doesn’t relate to — there’s no yardstick you can use up and down the line for that. So it’s — people age, at least in business ability, they age in very different ways and at different paces.

And Charlie and I have the problem of figuring out, sometimes, when somebody has — does not have the same managerial ability that they had at an earlier time.

And then we have the responsibility for doing something about it. And we hate it. But it’s —

CHARLIE MUNGER: By the way, we’ve been slow in those.

WARREN BUFFETT: We’ve been slow every time.

CHARLIE MUNGER: We’ve been slow. If we really love the guy, we’re really slow. (Laughter) We are far from ideal.

WARREN BUFFETT: Yeah, well, it’s very — well, we had a manager, you know, a wonderful — I mean, a guy we both loved at Wesco.

And he got Alzheimer's. I mean, it — you know, and we didn't want to face it. We finally did. But it took us probably an extra year, year and a half, didn't it, Charlie?

CHARLIE MUNGER: Sure.

WARREN BUFFETT: Yeah.

It's the only part of my job that I don't like, basically. I mean, I hate it. But — I'd pay a lot of money not to have to do it. But occasionally, it happens. Fortunately, it doesn't seem to happen that often at —

We find people who love their businesses, you know? I love Berkshire. I — you know, I go to work every day, and I'm excited about it. And we — you can spot that in people.

I mean, I think most of you would probably realize that that's the way I feel about it. And I realize that's the way the managers of our subsidiaries feel about it.

I mean, Tony — Tony Nicely — went to work at GEICO when, you know, he was a teenager. And he's as excited every day about GEICO as I am. It hit me the first time —

I saw him yesterday at lunch. And the first thing he does is hand me the figure, which he knows I'm waiting for. You know, "(Inaudible), we're up 505-thousand," and he carries it out all the way, "policyholders."

And, I mean, I get excited about those numbers. He gets excited about them. You know, we talk about state-by-state, whatever it may be. And, you can't put that into somebody.

But we do recognize it when it's there. And we do our best to make sure that we don't do anything that dampens that in any way.

29. Don't try to time the market

WARREN BUFFETT: OK, area 12.

AUDIENCE MEMBER: Good afternoon, Mr. Buffett, Mr. Munger. Jimmy Chong (PH) here from Dayton, Ohio.

Mr. Buffett, in October of last year, you wrote, in a New York Times op-ed piece, that you were moving your personal portfolio to a hundred percent U.S. equities.

My question is, is that move complete? If not, are you still buying? And in addition to that, how would you rank the recent market downturn in terms of investing opportunities in stocks during your investment careers?

WARREN BUFFETT: Well, it's certainly not as dramatic as the 1974 period was. Stocks got much cheaper in 1974 than they are now.

But you were also facing a different interest rate scenario. So you could say they really weren't that much cheaper.

You could buy very good companies at four times earnings or thereabouts with good prospects. But interest rates were far higher then.

That was the best period I've ever seen for buying common equities. The country may not have been in as much trouble then as we were back in September. I don't think it was. But stocks were somewhat cheaper then.

In the recent period, I — you know, I bought some equities. And then corporate bonds looked extraordinarily cheap. The spreads were very, very wide. So I bought some of those, too.

But the cheaper things get, the better I like buying them. I mean, if I was buying hamburgers at McDonald's, you know, the other day for X, and they reduced the price to 90 percent of X tomorrow — not likely — but if they did, I'm happy.

I don't think about what I paid yesterday for the hamburger. I think I'm going to be buying hamburgers the rest of my life, you know? The cheaper they get, the better I like it.

I'm going to be buying investments the rest of my life. And I would much rather pay half of X than X.

And, the fact that I paid X yesterday doesn't bother me, if I get — as long as I know the values in the business.

So on a personal basis, I like lower prices. I realize that that is not the way all of you feel when you wake up in the morning and look at quotes.

But, it just makes sense that when things are on sale, that you should be more excited about buying them than otherwise.

And lately — when I wrote that article in the Times, I did not predict what stocks were going to do. Because I never know what they're going to do.

But I do know when you're starting to get a lot for your money. And that's when I believe in buying.

Charlie?

CHARLIE MUNGER: Well, if stocks go off 40 percent on average, they're obviously closer to an attractive price than they were before.

And, of course, interest rates have gone down a lot recently, at least short-term interest rates.

It's nothing like '73-4. I knew when that happened that that was my time and my only time. I knew I was never going to get another trip to the buy counter like that one.

Unfortunately, I had practically no money available, which is — (Laughter)

WARREN BUFFETT: That's why it happened.

CHARLIE MUNGER: That's why those times occur.

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: So, if I were you, I wouldn't wait for 1973-4.

WARREN BUFFETT: No, we don't try to pick bottoms or you know —

We don't have an opinion about where the stock market's going to go tomorrow or next week or next month.

So to sit around and not do something that's sensible because you think there will be something even more attractive, that's just not our approach to it.

Anytime we get a chance to do something that makes sense, we do it. And if it makes even more sense the next day, and if we've got money, we may do more. And if we don't, you know, that — what can we do about it?

So picking bottoms is basically not our game. Pricing is our game. And that's not so difficult. Picking bottoms, I think, is probably impossible, but —

When you get — when you start getting a lot for your money, you buy it. And as I say, after I wrote that, stocks did get cheaper.

Corporate bonds — the corporate bond market got very, very, very disorganized. And we bought some fairly good-sized pieces of bonds for Berkshire. And I also bought a few little things for myself.

But I spend 99 percent of my time thinking about Berkshire. That's —

CHARLIE MUNGER: Warren, by now, don't we have our small life insurance companies pretty well full of desirable debt instruments at 10 percent?

WARREN BUFFETT: We certainly have got a lot more of it than we had, yeah. (Laughs)

No, we've — we got a chance to buy some corporate bonds very, very cheaply — at least in my view — a few months back.

And we had money in life companies that can't be used in certain other areas and for which this was an ideal time to just barrel in.

And anytime we like to do something, we really like to do it. I mean, our idea is not to tiptoe into anything. So we buy them as fast as we can, when prices are right.

CHARLIE MUNGER: Yeah, that bond thing didn't last very long, but —

WARREN BUFFETT: Nope.

CHARLIE MUNGER: — there were perfectly safe bonds that yielded 9 percent or more with very fancy call protection.

WARREN BUFFETT: Yep.

CHARLIE MUNGER: And some of those bonds are up 20, 25 percent. So the opportunities are frequently under shell A, when you're looking at shell B.

WARREN BUFFETT: Yeah. We try to look at all the shells.

CHARLIE MUNGER: Yeah, we look at all the shells.

30. "Decent" rates of return from regulated utilities

WARREN BUFFETT: Becky?

BECKY QUICK: This question is from Jim Mitchell from Costa Mesa, California, who wants to know from both of you.

He says, "Years ago, you taught us to beware of capital-intensive businesses, like electric utilities, that may be overstating profits due to understating depreciation.

"Now that you are investing in utilities and gas pipelines, have you discovered the secret of long life for power plants? Or do we need to discount your utility earnings?"

WARREN BUFFETT: Well, the utility earnings, pretty much, come about through a return on equity capital allowed by the jurisdictions in which you operate.

So, for example, if something like pension costs or something of the sort, you get surprises on, you do get to earn that back over time. But you don't get any bonanzas, either.

So I would say the capital-intensive businesses that scare me more are the ones outside of the utility field, where you just pump in more money without knowing that you're going, in a general way, to get, more or less — within a range, anyway — a guaranteed return.

So I do not have — there's no way we get rich on our utility investments. But there's no way we get poor, either. And we get decent rates of return on the equity that we leave in it.

And we'll probably get those returns with or without inflation. Now, inflation may diminish the value of getting an 11 or 12 percent return on equity, if you get into very high rates of inflation.

So in that sense, I'd agree with Jim, who I know, incidentally. He used to work with my daughter out there at Century 21. He's a good investor.

But the — on balance, if you can find a good business that's not capital intensive, you're going to be better off than in a capital-intensive business over time.

I mean, the world, they're hard to find. But the best businesses are the ones that don't require much capital and, nevertheless, make good money.

They've got some moat protecting them, other than the capital required as entry in the business that's protecting them.

And if you can find those that are durable, you've got a great investment and one that will do the best in inflation, which, as we mentioned earlier, seems fairly likely to come along.

Charlie?

CHARLIE MUNGER: Yeah, unfortunately, a lot of moats have been filling up with sand lately, you know, the daily newspaper, the network television station, all these castles with their lovely moats. The moats are filling up.

31. Surprise marriage proposal from Buffett's great-nephew

WARREN BUFFETT: Well, on that cheery note, we have time for just one more question. And Marc Hamburg, I believe you said there was somebody who wanted to finish this off. Marc, where are you?

MARC HAMBURG: Right here. Right here, Warren.

WARREN BUFFETT: OK, I can't — I still can't see you. But I can hear you.

MARC HAMBURG: He's right up in front.

WARREN BUFFETT: Right up in front. OK, good. Oh, I see you now.

ALEX ROZEK: Hi, Warren. It's Alex from Boston.

I just wondered if you could give us some advice on how we could improve the economy, as we leave.

WARREN BUFFETT: What was your name?

ALEX ROZEK: Alex, from Boston.

WARREN BUFFETT: Ah. Well, the obvious thing to do is to do what our government tells us to do, which is to go out and spend.

And as I mentioned, household formations are important to developing — to getting past this overbuild in residential construction. So does — I don't know whether that gives you any ideas or not. But… (Laughter)

ALEX ROZEK: I think so.

Mimi, you're my best friend. Would you be my wife? (Applause)

MIMI KRUEGER: Yes? (Applause)

VOICE: Mimi, you've got to say yes.

MIMI KRUEGER: I said, yes. Yes!

WARREN BUFFETT: I have just two —

ALEX ROZEK: Thanks, Warren.

WARREN BUFFETT: OK. I have two comments to make. Alex is my sister Doris' grandson, my great-nephew. And Mimi is terrific.

So on that note, we'll end the meeting. And we'll be back in 15 minutes for the board meeting. Thank you. (Applause)

32. Berkshire Hathaway formal meetings begins

WARREN BUFFETT: OK, now we're going to hold an annual meeting.

The meeting will now come to order. I'm Warren Buffett, chairman of the board of directors of the company. I welcome you to this 2009 annual meeting of shareholders.

I will first introduce the Berkshire directors that are present in addition to myself. We've got Charles Munger. We've got Howard Buffett, Susan Decker, Bill Gates, David Gottesman, Charlotte Guyman, Don Keough, Tom Murphy, Ron Olson, and Walter Scott.

Also with us today are partners in the firm of Deloitte and Touche, our auditors. They are available to respond to appropriate questions you might have concerning the firm's audit of the accounts of Berkshire.

Mr. Forrest Krutter is secretary of Berkshire. He will make a written record of the proceedings. Ms. Becki Amick has been appointed inspector of elections at this meeting. She will certify to the count of votes cast in the election for directors.

The main proxyholders for this meeting are Walter Scott and Marc Hamburg.

33. Berkshire shares outstanding and quorum

WARREN BUFFETT: Does the secretary have a report of the number of Berkshire shares outstanding entitled to vote and representing at the meeting?

FORREST KRUTTER: Yes, I do. As indicated in the proxy statement that accompanied the notice of this meeting that was sent to all shareholders of record on March 4, 2009 — being the record date for this meeting — there were 1,057,573 shares of Class A Berkshire Hathaway common stock outstanding, with each share entitled to one vote on motions considered at the meeting —

And 14,749,861 shares of Class B Berkshire Hathaway common stock outstanding with each share entitled to 1/200th of one vote on motions considered at the meeting.

Of that number, 821,400 Class A shares and 10,298,152 Class B shares are represented at this meeting through proxies returned through Thursday evening, April 30th.

WARREN BUFFETT: Thank you.

That number represents a quorum. And we will therefore directly proceed with the meeting.

34. Last meeting's minutes

WARREN BUFFETT: First order of business will be a reading of the minutes of the last meeting of shareholders. I recognize Mr. Walter Scott, who will place a motion before the meeting.

WALTER SCOTT: I move that the reading of the minutes of the last meeting of shareholders be dispensed with and the minutes be approved.

WARREN BUFFETT: Do I hear a second?

VOICE: I second the motion

WARREN BUFFETT: Motion's been moved and seconded. Are there any comments or questions?

We will vote on this question by voice vote. All those in favor, say, "Aye."

VOICE: Aye.

WARREN BUFFETT: Opposed? Motion's carried.

35. Election of Berkshire Hathaway directors

WARREN BUFFETT: The first item of business is to elect directors. If a shareholder is present who wishes to withdraw a proxy previously sent in and vote in person on the election of directors, he or she may do so.

Also, if any shareholder that is present has not turned in a proxy and desires a ballot in order to vote in person, you may do so.

If you wish to do this, please identify yourself to meeting officials in the aisles, who will furnish a ballot to you.

Will those persons desiring ballots please identify themselves, so that we may distribute them?

I now recognize Mr. Walter Scott to place a motion before the meeting with respect to election of directors.

WALTER SCOTT: I move that Warren Buffett, Charles Munger, Howard Buffett, Susan Decker, William Gates, David Gottesman, Charlotte Guyman, Donald Keough, Tom Murphy, Ron Olson, and Walter Scott be elected as directors.

WARREN BUFFETT: Is there a second?

VOICE: I second the motion.

WARREN BUFFETT: It's been moved and seconded that Warren Buffett, Charles Munger, Howard Buffett, Susan Decker, William Gates, David Gottesman, Charlotte Guyman, Donald Keough, Thomas Murphy, Ronald Olson, and Walter Scott be elected as directors.

Are there any other nominations? Is there any discussion?

The nominations are ready to be acted upon. If there are any shareholders voting in person, they should now mark their ballots on the election of directors and allow the ballots to be delivered to the inspector of elections.

Miss Amick, when you are ready, you may give your report.

BECKI AMICK: The ballot of the proxyholders in response to proxies that were received through last Thursday evening cast not less than 859,366 votes for each nominee. That number of — that number far exceeds a majority of the number of the total votes related to all Class A and Class B shares outstanding.

The certification required by Delaware law of the precise count of the votes, including the additional votes to be cast by the proxyholders in response to proxies delivered at this meeting, as well as any cast in person at this meeting, will be given to the secretary to be placed with the minutes of this meeting.

WARREN BUFFETT: Thank you, Miss Amick.

Warren Buffett, Charles Munger, Howard Buffett, Susan Decker, William Gates, David Gottesman, Charlotte Guyman, Donald Keough, Thomas Murphy, Ronald Olson, and Walter Scott have been elected as directors.

36. Shareholder motion on working conditions at Russell Athletic plant

WARREN BUFFETT: The next item of business is a motion put forth by Berkshire shareholder Joseph Petrofsky.

Mr. Petrofsky's motion is set forth in the proxy statement and would request Berkshire Hathaway to prepare a sustainability report for shareholders. The directors are recommended that the shareholders vote against the proposal.

We will now recognize, I believe it's Mr. Billenness — Mr. Petrofsky's representative — to present the motion.

To allow all interested shareholders to present their views, I will ask Mr. Billenness to limit his remarks to five minutes. The microphone at zone 1 is available. Well, we go first to Mr. Billenness.

SIMON BILLENNESS: Thank you very much, Mr. Buffett. My name is Simon Billenness. And I represent Mr. Joseph Petrofsky, the shareholder who filed this year's resolution asking for a publication of a sustainability report.

I will move that shareholder resolution. Miss Norma Mejía Castellanos (PH) will then second the resolution. And then I will ask for a preliminary count of the shares voted.

As shareholders, we are proud that, in so many ways, our company is a leader. A prime example is the emerging success story on the Klamath River. This may result in the largest river restoration project in U.S. history. And this makes economic sense for PacifiCorp and for us, as shareholders.

However, when it comes to managing environmental and human rights risk, and disclosing those risks to shareholders, our management is sadly a laggard.

Two respected proxy advisory firms, PROXY Governance and RiskMetrics, have advised shareholders to vote in favor of this resolution on the grounds that management badly lags other companies in disclosing these risks to shareholders.

Last week, CalPERS, the California retirement system, announced that it would vote close to half a billion dollars' worth of stock in favor of this resolution.

Consider the situation today with Russell, the subsidiary of Fruit of the Loom and a Berkshire Hathaway company. Collegiate licensed apparel — sweatshirts bearing university logos, for instance — is a $5 billion a year market.

Russell has admitted to repeatedly committing serious labor rights violations in Honduras. And now, over 50 universities, including Harvard, Stanford, and the entire University of California system, have decided to terminate Russell's license to make clothing bearing their college logos.

This particular sweatshirt, which I'm holding up right here, is University of North Carolina. This was made in a Berkshire Hathaway factory. But the university has since ended their licensing agreement.

The treatment — the management of Russell, through its actions, has put $5 billion of potential business at risk. The management of Berkshire Hathaway should provide proper disclosure of that risk to us, the shareholders in this company.

Now, I will pass over to Ms. Mejía Castellanos. She is a sewing machine operator who worked in the factory in Honduras that is the center of these problems. And after she has spoken, I will ask for a preliminary vote count for this resolution.

NORMA MEJÍA CASTELLANOS: Yo trabajó como operadora de una maquila de costura en la fábrica Jerzees Honduras.

INTERPRETER: I used to work as a sewing machine operator at the factory, Jerzees de Honduras.

NORMA MEJÍA CASTELLANOS: En 2006, cuando Fruit de Loom compró la empresa, las condiciones empeoraron.

INTERPRETER: In 2006, when Fruit of the Loom bought my factory, conditions got much worse.

NORMA MEJÍA CASTELLANOS: La empresa empezó hacer acumulación de personal esto para ahorrarse mas y no pagar renta.

INTERPRETER: Fruit of the Loom began to consolidate personnel in order to save more on rent.

NORMA MEJÍA CASTELLANOS: Esto ocasionó mucho molestar de salud en los trabajadores, como ser dolor en la espalda a causa de maquinaria de esta muy cerca, y esto provoca un recalentamiento.

INTERPRETER: This created many conditions in the factory that caused health problems for workers, such as pain in our backs being caused by the heat from the sewing machines, which were now pressed into our backs, because of the limited space.

NORMA MEJÍA CASTELLANOS: Esto significa una inseguridad en un momento de evacuación.

INTERPRETER: The close proximity also made it very dangerous in the case of an emergency evacuation.

NORMA MEJÍA CASTELLANOS: En nuestra fabrica, la ventilación era tan mala que esto nos provocaba enfermedades respiratorias como el cáncer del pulmón.

INTERPRETER: In part, because of the overcrowding, as well, the ventilation was so poor that it caused many respiratory illnesses, including lung cancer.

NORMA MEJÍA CASTELLANOS: El agua de los filtros era contaminada.

INTERPRETER: Even the filtered water was dirty.

NORMA MEJÍA CASTELLANOS: Trabajamos de la 6:30 de la mañana hasta las 5:30 de la noche, con tan solo 15 minutos para almorzar.

INTERPRETER: We worked from 6:30 in the morning until 5:30 at night with only 15 minutes for lunch.

NORMA MEJÍA CASTELLANOS: Nuestros salarios eran demasiado bajos que no nos alcanzaba para pagar una niñera y la empresa no respeta el código de trabajo de nuestro país, porque no brinda guarderías de niños.

INTERPRETER: Our wages were too low to afford childcare. And the management refused to provide onsite childcare, even though it was required by Honduran law.

NORMA MEJÍA CASTELLANOS: Por eso, decidimos organizarlos para obligar el gerente que nos escuchara y que respetara nuestros derechos.

INTERPRETER: Because of all of this, we decided to organize to compel management to clean up our factory.

NORMA MEJÍA CASTELLANOS: Entonces, fue cuando despidió 145 trabajadores ilegalmente por organizarse a un sindicato.

INTERPRETER: In retaliation, Russell illegally fired 145 workers for organizing a union.

NORMA MEJÍA CASTELLANOS: Russell tenía que respetar el sindicato, constituido por la ley. Y entonces, Russell dijo que por causa al sindicato, iba a cerrar la empresa y que nos íbamos a quedar aguantando hambre.

INTERPRETER: After we finally legally established our union, Russell said that because of the union, they would close down the factory and leave the workers to starve.

NORMA MEJÍA CASTELLANOS: Fue cuando empezamos hacer amenazados a muerte los directivos.

INTERPRETER: And this is when we started to receive death threats.

NORMA MEJÍA CASTELLANOS: Me dejaban mensajes y dibujos en los baños y en el puesto de trabajo, diciéndome que me iban a cortar la cabeza.

INTERPRETER: They would leave me notes and illustrations in the bathroom and at my workstation threatening to cut off my head.

NORMA MEJÍA CASTELLANOS: Finalmente, Russell siguió y cumplió con su dicho, y cerro la planta el 30 de enero de este año.

INTERPRETER: Finally, Russell Athletic did follow through with their threat and shut down the factory in January of this year.

NORMA MEJÍA CASTELLANOS: Russell sostiene que nos ayudara a encontrar nuevos puesto de trabajo, pero en cambio la lista negra que tiene con nosotros y nos han impedido la búsqueda de nuevos empleos.

INTERPRETER: Now, Russell has been claiming that they will help us find new jobs. But instead, they have blacklisted us, preventing us from finding work elsewhere.

NORMA MEJÍA CASTELLANOS: Es por que tantas universidades han cortados su contratos con Russell y porque esto se ha convertido en un problema para esta empresa.

INTERPRETER: This is why so many universities have stopped doing business with Russell and why this has become such a problem for Berkshire Hathaway.

NORMA MEJÍA CASTELLANOS: Y por tanto, yo voto a favor de la resolución y exhortó que a los accionistas voten a favor. Gracias.

INTERPRETER: And therefore, I second this resolution and urge that shareholders vote in favor. Thank you.

WARREN BUFFETT: OK. I'd like to ask Mr. John Holland, the CEO of Fruit of the Loom, to respond to the comments just made, and after which, we will act on the motion.

JOHN HOLLAND: First, I need to give you a little background. Russell was a public company listed on the New York Stock Exchange prior to the time that we acquired them in August of 2006. The acquisition consisted of 47 facilities with a little over 14,000 workers.

And, as we began to get involved with the Russell operations and how they were conducted, to integrate those into our operations, we found that there were a couple of plants in Honduras that had some problems.

And we began — we acknowledged the problems. And we began immediately to remedy these problems.

A little later, we had a letter from the WRC, the Workers Rights Commission (Consortium), indicating that there had been some abuses of the employees and that some had been terminated because they were involved in union activities.

We were unaware of the union activities. And we investigated the abuses. But we thought it best to contact an independent third-party organization to do an audit.

And we contacted the Free (Fair) Labor Association, which is kind of a worldwide organization that's grouped with a group of businesses and the leading universities in the U.S. to try to make certain that workers' rights are adhered to on a worldwide basis.

We asked them to conduct the audit. And they conducted the audit. And all of the abuses that we had been charged with, they said, through the independent audit — they were nonexistent.

But they did tell us that there were two supervisors who had conducted some abusive language with the employees and, also, that it was very likely that some employees might've been terminated due to their union activity.

So as a result, they gave us a list of items that they would like us to follow to remedy the situation. The supervisors, as well as the management of the facilities, were eliminated.

And we have started immediately, progressively, to implement all of the recommendations of the Free Labor Association's independent audit.

And part of that was that the workers that they felt might have been terminated due to union activities, that we reinstate the workers.

The plant had not been organized at that point. So we voluntarily engaged the union and acknowledged them and accepted the union.

And we rehired all of the workers that we could locate into a facility that was across the street from this particular plant.

And since then, we have followed all of the recommendations of the Free Labor Association. And they have a monitoring process.

And after about three months, there was another audit by the Free Labor Association and the Workers' Rights Commission, which is another related organization. And they said that the activity that we engaged in, they were very well pleased with the progress.

And as I said previously, we acknowledged the union and began negotiations. There was approximately 48 issues that they wanted to discuss. And we reached agreement on 24 of those.

And we — the union even agreed that we had had very good relationships, that we had approached the negotiations openly and fairly.

There were some other points that they wanted to move to arbitration on that — or mediation — that we could not agree on.

And by that time, the time had passed till we reached the midyear of 2008, when the recession in the apparel industry dramatically affected our particular business.

And over the course of the next few months, we had to close nine of our facilities. One of those was the Jerzees de Honduras plant that they have referred to.

And there was a total of 12,780 employees involved in the plant closures. And out of that group, about 310 people, which has been acknowledged by the union, that were union employees, because in Honduras, under the laws there, only 30 people are required to form a union and be acknowledged as a union.

And up until that time, there had been no indications of any issues that had been brought up by the union that were not solved.

Now, beyond that, I would like to tell you a little about how we conduct business worldwide in our plants.

We have been in Honduras since 1993. All of our plants are air conditioned, excellent ventilation in all of those facilities. Our wages in those plants are 26 percent, on the average, above the minimums in Honduras.

We offer 11 paid holidays. We have paid vacations. We have free life insurance. We have a doctor and nurse in each one of those facilities.

And the reference to the filtered water, when we acquired that plant, that particular plant had its own filtration systems, which was different from all of our other plants, which we used bottled water.

We immediately had that water tested. Although there was some discoloration, it was tested as pure. But we immediately shut down the filtration system and went to bottled water that we have in the other plants.

Now, we have paid maternity leaves, we have a breastfeeding hour, we celebrate the employee birthdays, in fact. And also, the — we have a children's day.

And that, I think, our benefits, I'm proud to tell you, I think are far and above any that you'll find in most other apparel facilities throughout the world.

And there have been no death threats. We have tried to conduct our business with honesty, integrity.

And quite frankly, I've been with this company, I'm in my 48th year, and I would tell you that I'm very proud of how we operate our particular plants.

We have met with a number of the leading universities to try to tell the other side of the story. We've invited those presidents of the universities and the administration to come to see for themselves what our plant facilities are like.

And we've had two acceptances that were down this past week, the representatives from Princeton and also from the University of Arizona.

And we welcome putting all of this into an open spotlight. We also have a website. That's www.russellsocialresponsibility.com — that all of this activity that we're responding to the recommendations of the Fair Labor Association is posted on that website. It's there for the world to see.

And we continue — Fair Labor Association has a three-step process of continued monitoring. And then they do independent audits periodically to see what our progress is. And all of that is posted on that website. Thank you.

WARREN BUFFETT: Thank you, John. The motion is now ready to be acted upon. (Applause)

If there are any shareholders voting in person, they should now mark their ballots on the motion and allow the ballots to be delivered to the inspector of election. Miss Amick, when you're ready, you may give your report.

BECKI AMICK: My report is ready. The ballot of the proxyholders, in response to the proxies that were received through last Thursday evening, cast 49,251 votes for the motion and 702,963 votes against the motion.

As the number of votes against the motion exceeds a majority of the number of votes related to all Class A and Class B shares outstanding, the motion has failed.

The certification required by Delaware law of the precise count of the votes will be given to the secretary to be placed with the minutes of this meeting.

WARREN BUFFETT: Thank you, Miss Amick. The proposal fails.

37. Berkshire formal meeting adjourns

WARREN BUFFETT: Does anyone have any further business to come before this meeting, before we adjourn? If not, I recognize Mr. Scott to place a motion before the meeting.

WALTER SCOTT: I move that this meeting be adjourned.

WARREN BUFFETT: Is there a second? Motion to adjourn has been made and seconded. We will vote by voice.

Berkshire's Corporate Performance vs. the S&P 500

Year	Annual Percentage Change in Per-Share Book Value of Berkshire (1)	Annual Percentage Change in S&P 500 with Dividends Included (2)	Relative Results (1)-(2)
1965	23.8	10.0	13.8
1966	20.3	(11.7)	32.0
1967	11.0	30.9	(19.9)
1968	19.0	11.0	8.0
1969	16.2	(8.4)	24.6
1970	12.0	3.9	8.1
1971	16.4	14.6	1.8
1972	21.7	18.9	2.8
1973	4.7	(14.8)	19.5
1974	5.5	(26.4)	31.9
1975	21.9	37.2	(15.3)
1976	59.3	23.6	35.7
1977	31.9	(7.4)	39.3
1978	24.0	6.4	17.6
1979	35.7	18.2	17.5
1980	19.3	32.3	(13.0)
1981	31.4	(5.0)	36.4
1982	40.0	21.4	18.6
1983	32.3	22.4	9.9
1984	13.6	6.1	7.5
1985	48.2	31.6	16.6
1986	26.1	18.6	7.5
1987	19.5	5.1	14.4
1988	20.1	16.6	3.5
1989	44.4	31.7	12.7
1990	7.4	(3.1)	10.5
1991	39.6	30.5	9.1
1992	20.3	7.6	12.7
1993	14.3	10.1	4.2
1994	13.9	1.3	12.6
1995	43.1	37.6	5.5
1996	31.8	23.0	8.8
1997	34.1	33.4	.7
1998	48.3	28.6	19.7
1999	.5	21.0	(20.5)
2000	6.5	(9.1)	15.6
2001	(6.2)	(11.9)	5.7
2002	10.0	(22.1)	32.1
2003	21.0	28.7	(7.7)
2004	10.5	10.9	(.4)
2005	6.4	4.9	1.5
2006	18.4	15.8	2.6
2007	11.0	5.5	5.5
2008	(9.6)	(37.0)	27.4
2009	19.8	26.5	(6.7)
Compounded Annual Gain – 1965-2009	20.3%	9.3%	11.0
Overall Gain – 1964-2009	434,057%	5,430%	

Notes: Data are for calendar years with these exceptions: 1965 and 1966, year ended 9/30; 1967, 15 months ended 12/31.

Starting in 1979, accounting rules required insurance companies to value the equity securities they hold at market rather than at the lower of cost or market, which was previously the requirement. In this table, Berkshire's results through 1978 have been restated to conform to the changed rules. In all other respects, the results are calculated using the numbers originally reported.

The S&P 500 numbers are **pre-tax** whereas the Berkshire numbers are **after-tax**. If a corporation such as Berkshire were simply to have owned the S&P 500 and accrued the appropriate taxes, its results would have lagged the S&P 500 in years when that index showed a positive return, but would have exceeded the S&P 500 in years when the index showed a negative return. Over the years, the tax costs would have caused the aggregate lag to be substantial.

BERKSHIRE HATHAWAY INC.

To the Shareholders of Berkshire Hathaway Inc.:

Our gain in net worth during 2009 was $21.8 billion, which increased the per-share book value of both our Class A and Class B stock by 19.8%. Over the last 45 years (that is, since present management took over) book value has grown from $19 to $84,487, a rate of 20.3% compounded annually.*

Berkshire's recent acquisition of Burlington Northern Santa Fe (BNSF) has added at least 65,000 shareholders to the 500,000 or so already on our books. It's important to Charlie Munger, my long-time partner, and me that *all* of our owners understand Berkshire's operations, goals, limitations and culture. In each annual report, consequently, we restate the economic principles that guide us. This year these principles appear on pages 89-94 and I urge all of you – but particularly our new shareholders – to read them. Berkshire has adhered to these principles for decades and will continue to do so long after I'm gone.

In this letter we will also review some of the basics of our business, hoping to provide both a freshman orientation session for our BNSF newcomers and a refresher course for Berkshire veterans.

How We Measure Ourselves

Our metrics for evaluating our managerial performance are displayed on the facing page. From the start, Charlie and I have believed in having a rational and unbending standard for measuring what we have – or have not – accomplished. That keeps us from the temptation of seeing where the arrow of performance lands and *then* painting the bull's eye around it.

Selecting the S&P 500 as our bogey was an easy choice because our shareholders, at virtually no cost, can match its performance by holding an index fund. Why should they pay us for merely duplicating that result?

A more difficult decision for us was how to measure the progress of Berkshire versus the S&P. There are good arguments for simply using the change in our stock price. Over an extended period of time, in fact, that is the best test. But year-to-year market prices can be extraordinarily erratic. Even evaluations covering as long as a decade can be greatly distorted by foolishly high or low prices at the beginning or end of the measurement period. Steve Ballmer, of Microsoft, and Jeff Immelt, of GE, can tell you about that problem, suffering as they do from the nosebleed prices at which their stocks traded when they were handed the managerial baton.

The ideal standard for measuring our yearly progress would be the change in Berkshire's per-share intrinsic value. Alas, that value cannot be calculated with anything close to precision, so we instead use a crude proxy for it: per-share book value. Relying on this yardstick has its shortcomings, which we discuss on pages 92 and 93. Additionally, book value at most companies understates intrinsic value, and that is certainly the case at Berkshire. In aggregate, our businesses are worth considerably more than the values at which they are carried on our books. In our all-important insurance business, moreover, the difference is huge. Even so, Charlie and I believe that our book value – understated though it is – supplies the most useful tracking device for changes in intrinsic value. By this measurement, as the opening paragraph of this letter states, our book value since the start of fiscal 1965 has grown at a rate of 20.3% compounded annually.

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*All per-share figures used in this report apply to Berkshire's A shares. Figures for the B shares are 1/1500th of those shown for A.

We should note that had we instead chosen *market prices* as our yardstick, Berkshire's results would look better, showing a gain since the start of fiscal 1965 of 22% compounded annually. Surprisingly, this modest difference in annual compounding rate leads to an 801,516% market-value gain for the entire 45-year period compared to the book-value gain of 434,057% (shown on page 2). Our market gain is better because in 1965 Berkshire shares sold at an appropriate discount to the book value of its underearning textile assets, whereas today Berkshire shares regularly sell at a premium to the accounting values of its first-class businesses.

Summed up, the table on page 2 conveys three messages, two positive and one hugely negative. First, we have never had *any* five-year period beginning with 1965-69 and ending with 2005-09 – and there have been 41 of these – during which our gain in book value did not exceed the S&P's gain. Second, though we have lagged the S&P in some years that were positive for the market, we have consistently done better than the S&P in the eleven years during which it delivered negative results. In other words, our defense has been better than our offense, and that's likely to continue.

The big minus is that our performance advantage has shrunk dramatically as our size has grown, an unpleasant trend that is *certain* to continue. To be sure, Berkshire has many outstanding businesses and a cadre of truly great managers, operating within an unusual corporate culture that lets them maximize their talents. Charlie and I believe these factors will continue to produce better-than-average results over time. But huge sums forge their own anchor and our future advantage, if any, will be a small fraction of our historical edge.

What We Don't Do

Long ago, Charlie laid out his strongest ambition: "All I want to know is where I'm going to die, so I'll never go there." That bit of wisdom was inspired by Jacobi, the great Prussian mathematician, who counseled "Invert, always invert" as an aid to solving difficult problems. (I can report as well that this inversion approach works on a less lofty level: Sing a country song in reverse, and you will quickly recover your car, house and wife.)

Here are a few examples of how we apply Charlie's thinking at Berkshire:

- Charlie and I avoid businesses whose futures we can't evaluate, no matter how exciting their products may be. In the past, it required no brilliance for people to foresee the fabulous growth that awaited such industries as autos (in 1910), aircraft (in 1930) and television sets (in 1950). But the future then also included competitive dynamics that would decimate almost all of the companies entering those industries. Even the survivors tended to come away bleeding.

  Just because Charlie and I can clearly see dramatic growth ahead for an industry does not mean we can judge what its profit margins and returns on capital will be as a host of competitors battle for supremacy. At Berkshire we will stick with businesses whose profit picture for decades to come seems reasonably predictable. Even then, we will make plenty of mistakes.

- We will never become dependent on the kindness of strangers. Too-big-to-fail is not a fallback position at Berkshire. Instead, we will always arrange our affairs so that any requirements for cash we may conceivably have will be dwarfed by our own liquidity. Moreover, that liquidity will be constantly refreshed by a gusher of earnings from our many and diverse businesses.

  When the financial system went into cardiac arrest in September 2008, Berkshire was a *supplier* of liquidity and capital to the system, not a supplicant. At the very peak of the crisis, we poured $15.5 billion into a business world that could otherwise look only to the federal government for help. Of that, $9 billion went to bolster capital at three highly-regarded and previously-secure American businesses that needed – *without delay* – our tangible vote of confidence. The remaining $6.5 billion satisfied our commitment to help fund the purchase of Wrigley, a deal that was completed without pause while, elsewhere, panic reigned.

We pay a steep price to maintain our premier financial strength. The $20 billion-plus of cash-equivalent assets that we customarily hold is earning a pittance at present. But we sleep well.

- We tend to let our many subsidiaries operate on their own, without our supervising and monitoring them to any degree. That means we are sometimes late in spotting management problems and that both operating and capital decisions are occasionally made with which Charlie and I would have disagreed had we been consulted. Most of our managers, however, use the independence we grant them magnificently, rewarding our confidence by maintaining an owner-oriented attitude that is invaluable and too seldom found in huge organizations. We would rather suffer the visible costs of a few bad decisions than incur the many invisible costs that come from decisions made too slowly – or not at all – because of a stifling bureaucracy.

  With our acquisition of BNSF, we now have about 257,000 employees and literally hundreds of different operating units. We hope to have many more of each. But we will never allow Berkshire to become some monolith that is overrun with committees, budget presentations and multiple layers of management. Instead, we plan to operate as a collection of separately-managed medium-sized and large businesses, most of whose decision-making occurs at the operating level. Charlie and I will limit ourselves to allocating capital, controlling enterprise risk, choosing managers and setting their compensation.

- We make no attempt to woo Wall Street. Investors who buy and sell based upon media or analyst commentary are not for us. Instead we want *partners* who join us at Berkshire because they wish to make a long-term investment in a *business* they themselves understand and because it's one that follows policies with which they concur. If Charlie and I were to go into a small venture with a few partners, we would seek individuals in sync with us, knowing that common goals and a shared destiny make for a happy business "marriage" between owners and managers. Scaling up to giant size doesn't change that truth.

  To build a compatible shareholder population, we try to communicate with our owners directly and informatively. Our goal is to tell you what we would like to know if our positions were reversed. Additionally, we try to post our quarterly and annual financial information on the Internet early on weekends, thereby giving you and other investors plenty of time during a non-trading period to digest just what has happened at our multi-faceted enterprise. (Occasionally, SEC deadlines force a non-Friday disclosure.) These matters simply can't be adequately summarized in a few paragraphs, nor do they lend themselves to the kind of catchy headline that journalists sometimes seek.

  Last year we saw, in one instance, how sound-bite reporting can go wrong. Among the 12,830 words in the annual letter was this sentence: "We are certain, for example, that the economy will be in shambles throughout 2009 – and probably well beyond – but that conclusion does not tell us whether the market will rise or fall." Many news organizations reported – indeed, blared – the first part of the sentence while making no mention whatsoever of its ending. I regard this as terrible journalism: Misinformed readers or viewers may well have thought that Charlie and I were forecasting bad things for the stock market, though we had not only in that sentence, but also elsewhere, made it clear we weren't predicting the market at all. Any investors who were misled by the sensationalists paid a big price: The Dow closed the day of the letter at 7,063 and finished the year at 10,428.

  Given a few experiences we've had like that, you can understand why I prefer that our communications with you remain as direct and unabridged as possible.

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Let's move to the specifics of Berkshire's operations. We have four major operating sectors, each differing from the others in balance sheet and income account characteristics. Therefore, lumping them together, as is standard in financial statements, impedes analysis. So we'll present them as four separate businesses, which is how Charlie and I view them.

Insurance

Our property-casualty (P/C) insurance business has been the engine behind Berkshire's growth and will continue to be. It has worked wonders for us. We carry our P/C companies on our books at $15.5 billion more than their net tangible assets, an amount lodged in our "Goodwill" account. These companies, however, are worth *far* more than their carrying value – and the following look at the economic model of the P/C industry will tell you why.

Insurers receive premiums upfront and pay claims later. In extreme cases, such as those arising from certain workers' compensation accidents, payments can stretch over decades. This collect-now, pay-later model leaves us holding large sums – money we call "float" – that will eventually go to others. Meanwhile, we get to invest this float for Berkshire's benefit. Though individual policies and claims come and go, the amount of float we hold remains remarkably stable in relation to premium volume. Consequently, as our business grows, so does our float.

If premiums exceed the total of expenses and eventual losses, we register an underwriting profit that adds to the investment income produced from the float. This combination allows us to enjoy the use of free money – and, better yet, get *paid* for holding it. Alas, the hope of this happy result attracts intense competition, so vigorous in most years as to cause the P/C industry as a whole to operate at a significant underwriting *loss*. This loss, in effect, is what the industry pays to hold its float. Usually this cost is fairly low, but in some catastrophe-ridden years the cost from underwriting losses more than eats up the income derived from use of float.

In my perhaps biased view, Berkshire has the best large insurance operation in the world. And I will absolutely state that we have the best managers. Our float has grown from $16 million in 1967, when we entered the business, to $62 billion at the end of 2009. Moreover, we have now operated at an underwriting profit for seven consecutive years. I believe it likely that we will continue to underwrite profitably in most – though certainly not all – future years. If we do so, our float will be cost-free, much as if someone deposited $62 billion with us that we could invest for our own benefit without the payment of interest.

Let me emphasize again that cost-free float is *not* a result to be expected for the P/C industry as a whole: In most years, premiums have been inadequate to cover claims plus expenses. Consequently, the industry's overall return on tangible equity has for many decades fallen far short of that achieved by the S&P 500. Outstanding economics exist at Berkshire only because we have some outstanding managers running some unusual businesses. Our insurance CEOs deserve your thanks, having added many billions of dollars to Berkshire's value. It's a pleasure for me to tell you about these all-stars.

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Let's start at GEICO, which is known to all of you because of its $800 million annual advertising budget (close to twice that of the runner-up advertiser in the auto insurance field). GEICO is managed by Tony Nicely, who joined the company at 18. Now 66, Tony still tap-dances to the office every day, just as I do at 79. We both feel lucky to work at a business we love.

GEICO's customers have warm feelings toward the company as well. Here's proof: Since Berkshire acquired control of GEICO in 1996, its market share has increased from 2.5% to 8.1%, a gain reflecting the net addition of seven million policyholders. Perhaps they contacted us because they thought our gecko was cute, but they bought from us to save important money. (Maybe you can as well; call 1-800-847-7536 or go to www.GEICO.com.) And they've stayed with us because they like our service as well as our price.

Berkshire acquired GEICO in two stages. In 1976-80 we bought about one-third of the company's stock for $47 million. Over the years, large repurchases by the company of its own shares caused our position to grow to about 50% without our having bought any more shares. Then, on January 2, 1996, we acquired the remaining 50% of GEICO for $2.3 *billion* in cash, about 50 times the cost of our original purchase.

An old Wall Street joke gets close to our experience:

Customer: Thanks for putting me in XYZ stock at 5. I hear it's up to 18.

Broker: Yes, and that's just the beginning. In fact, the company is doing so well now, that it's an even better buy at 18 than it was when you made your purchase.

Customer: Damn, I knew I should have waited.

GEICO's growth may slow in 2010. U.S. vehicle registrations are actually down because of slumping auto sales. Moreover, high unemployment is causing a growing number of drivers to go uninsured. (That's illegal almost everywhere, but if you've lost your job and still want to drive . . .) Our "low-cost producer" status, however, is sure to give us significant gains in the future. In 1995, GEICO was the country's sixth largest auto insurer; now we are number three. The company's float has grown from $2.7 billion to $9.6 billion. Equally important, GEICO has operated at an underwriting profit in 13 of the 14 years Berkshire has owned it.

I became excited about GEICO in January 1951, when I first visited the company as a 20-year-old student. Thanks to Tony, I'm even more excited today.

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A hugely important event in Berkshire's history occurred on a Saturday in 1985. Ajit Jain came into our office in Omaha – and I immediately knew we had found a superstar. (He had been discovered by Mike Goldberg, now elevated to St. Mike.)

We immediately put Ajit in charge of National Indemnity's small and struggling reinsurance operation. Over the years, he has built this business into a one-of-a-kind giant in the insurance world.

Staffed today by only 30 people, Ajit's operation has set records for transaction size in several areas of insurance. Ajit writes billion-dollar limits – and then keeps every dime of the risk instead of laying it off with other insurers. Three years ago, he took over huge liabilities from Lloyds, allowing it to clean up its relationship with 27,972 participants ("names") who had written problem-ridden policies that at one point threatened the survival of this 322-year-old institution. The premium for that single contract was $7.1 billion. During 2009, he negotiated a life reinsurance contract that could produce $50 billion of premium for us over the next 50 or so years.

Ajit's business is just the opposite of GEICO's. At that company, we have millions of small policies that largely renew year after year. Ajit writes relatively few policies, and the mix changes significantly from year to year. Throughout the world, he is known as the man to call when something both very large and unusual needs to be insured.

If Charlie, I and Ajit are ever in a sinking boat – and you can only save one of us – swim to Ajit.

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Our third insurance powerhouse is General Re. Some years back this operation was troubled; now it is a gleaming jewel in our insurance crown.

Under the leadership of Tad Montross, General Re had an outstanding underwriting year in 2009, while also delivering us unusually large amounts of float per dollar of premium volume. Alongside General Re's P/C business, Tad and his associates have developed a major life reinsurance operation that has grown increasingly valuable.

Last year General Re finally attained 100% ownership of Cologne Re, which since 1995 has been a key – though only partially-owned – part of our presence around the world. Tad and I will be visiting Cologne in September to thank its managers for their important contribution to Berkshire.

Finally, we own a group of smaller companies, most of them specializing in odd corners of the insurance world. In aggregate, their results have consistently been profitable and, as the table below shows, the float they provide us is substantial. Charlie and I treasure these companies and their managers.

Here is the record of all four segments of our property-casualty and life insurance businesses:

	Underwriting Profit		*Yearend Float*	
	(in millions)			
Insurance Operations	*2009*	*2008*	*2009*	*2008*
General Re	$ 477	$ 342	$21,014	$21,074
BH Reinsurance	349	1,324	26,223	24,221
GEICO	649	916	9,613	8,454
Other Primary	84	210	5,061	4,739
	$1,559	$2,792	$61,911	$58,488

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And now a painful **c**onfession: Last year your chairman closed the book on a very expensive business fiasco entirely of his own making.

For many years I had struggled to think of side products that we could offer our millions of loyal GEICO customers. Unfortunately, I finally succeeded, coming up with a brilliant insight that we should market our own credit card. I reasoned that GEICO policyholders were likely to be good credit risks and, assuming we offered an attractive card, would likely favor us with their business. We got business all right – but of the wrong type.

Our pre-tax losses from credit-card operations came to about $6.3 million before I finally woke up. We then sold our $98 million portfolio of troubled receivables for 55¢ on the dollar, losing an additional $44 million.

GEICO's managers, it should be emphasized, were never enthusiastic about my idea. They warned me that instead of getting the cream of GEICO's customers we would get the – – – – – well, let's call it the non-cream. I subtly indicated that I was older and wiser.

I was just older.

Regulated Utility Business

Berkshire has an 89.5% interest in MidAmerican Energy Holdings, which owns a wide variety of utility operations. The largest of these are (1) Yorkshire Electricity and Northern Electric, whose 3.8 million end users make it the U.K.'s third largest distributor of electricity; (2) MidAmerican Energy, which serves 725,000 electric customers, primarily in Iowa; (3) Pacific Power and Rocky Mountain Power, serving about 1.7 million electric customers in six western states; and (4) Kern River and Northern Natural pipelines, which carry about 8% of the natural gas consumed in the U.S.

MidAmerican has two terrific managers, Dave Sokol and Greg Abel. In addition, my long-time friend, Walter Scott, along with his family, has a major ownership position in the company. Walter brings extraordinary business savvy to *any* operation. Ten years of working with Dave, Greg and Walter have reinforced my original belief: Berkshire couldn't have better partners. They are truly a dream team.

Somewhat incongruously, MidAmerican also owns the second largest real estate brokerage firm in the U.S., HomeServices of America. This company operates through 21 locally-branded firms that have 16,000 agents. Though last year was again a terrible year for home sales, HomeServices earned a modest sum. It also acquired a firm in Chicago and will add other quality brokerage operations when they are available at sensible prices. A decade from now, HomeServices is likely to be much larger.

Here are some key figures on MidAmerican's operations:

	Earnings (in millions)	
	2009	*2008*
U.K. utilities	$ 248	$ 339
Iowa utility	285	425
Western utilities	788	703
Pipelines	457	595
HomeServices	43	(45)
Other (net)	25	186
Operating earnings before corporate interest and taxes	1,846	2,203
Constellation Energy *	—	1,092
Interest, other than to Berkshire	(318)	(332)
Interest on Berkshire junior debt	(58)	(111)
Income tax	(313)	(1,002)
Net earnings	$ 1,157	$ 1,850
Earnings applicable to Berkshire **	$ 1,071	$ 1,704
Debt owed to others	19,579	19,145
Debt owed to Berkshire	353	1,087

*Consists of a breakup fee of $175 million and a profit on our investment of $917 million.
**Includes interest earned by Berkshire (net of related income taxes) of $38 in 2009 and $72 in 2008.

Our regulated electric utilities, offering monopoly service in most cases, operate in a symbiotic manner with the customers in their service areas, with those users depending on us to provide first-class service and invest for their future needs. Permitting and construction periods for generation and major transmission facilities stretch way out, so it is incumbent on us to be far-sighted. We, in turn, look to our utilities' regulators (acting on behalf of our customers) to allow us an appropriate return on the huge amounts of capital we must deploy to meet future needs. We shouldn't expect our regulators to live up to their end of the bargain unless we live up to ours.

Dave and Greg make sure we do just that. National research companies consistently rank our Iowa and Western utilities at or near the top of their industry. Similarly, among the 43 U.S. pipelines ranked by a firm named Mastio, our Kern River and Northern Natural properties tied for second place.

Moreover, we continue to pour huge sums of money into our operations so as to not only prepare for the future but also make these operations more environmentally friendly. Since we purchased MidAmerican ten years ago, it has *never* paid a dividend. We have instead used earnings to improve and expand our properties in each of the territories we serve. As one dramatic example, in the last three years our Iowa and Western utilities have earned $2.5 billion, while in this same period spending $3 billion on wind generation facilities.

MidAmerican has consistently kept its end of the bargain with society and, to society's credit, it has reciprocated: With few exceptions, our regulators have promptly allowed us to earn a fair return on the ever-increasing sums of capital we must invest. Going forward, we will do whatever it takes to serve our territories in the manner they expect. We believe that, in turn, we will be allowed the return we deserve on the funds we invest.

In earlier days, Charlie and I shunned capital-intensive businesses such as public utilities. Indeed, the best businesses by far for owners continue to be those that have high returns on capital and that require little incremental investment to grow. We are fortunate to own a number of such businesses, and we would love to buy more. Anticipating, however, that Berkshire will generate ever-increasing amounts of cash, we are today quite willing to enter businesses that regularly require large capital expenditures. We expect only that these businesses have reasonable expectations of earning decent returns on the incremental sums they invest. If our expectations are met – and we believe that they will be – Berkshire's ever-growing collection of good to great businesses should produce above-average, though certainly not spectacular, returns in the decades ahead.

Our BNSF operation, it should be noted, has certain important economic characteristics that resemble those of our electric utilities. In both cases we provide fundamental services that are, and will remain, essential to the economic well-being of our customers, the communities we serve, and indeed the nation. Both will require heavy investment that greatly exceeds depreciation allowances for decades to come. Both must also plan far ahead to satisfy demand that is expected to outstrip the needs of the past. Finally, both require wise regulators who will provide certainty about allowable returns so that we can confidently make the huge investments required to maintain, replace and expand the plant.

We see a "social compact" existing between the public and our railroad business, just as is the case with our utilities. If either side shirks its obligations, both sides will inevitably suffer. Therefore, both parties to the compact should – and we believe will – understand the benefit of behaving in a way that encourages good behavior by the other. It is inconceivable that our country will realize anything close to its full economic potential without its possessing first-class electricity and railroad systems. We will do our part to see that they exist.

In the future, BNSF results will be included in this "regulated utility" section. Aside from the two businesses having similar underlying economic characteristics, both are logical users of substantial amounts of debt that is *not* guaranteed by Berkshire. Both will retain most of their earnings. Both will earn and invest large sums in good times or bad, though the railroad will display the greater cyclicality. Overall, we expect this regulated sector to deliver significantly increased earnings over time, albeit at the cost of our investing many tens – yes, tens – of billions of dollars of incremental equity capital.

Manufacturing, Service and Retailing Operations

Our activities in this part of Berkshire cover the waterfront. Let's look, though, at a summary balance sheet and earnings statement for the entire group.

Balance Sheet 12/31/09 (in millions)

Assets		*Liabilities and Equity*	
Cash and equivalents	$ 3,018	Notes payable	$ 1,842
Accounts and notes receivable	5,066	Other current liabilities	7,414
Inventory	6,147	Total current liabilities	9,256
Other current assets	625		
Total current assets	14,856		
Goodwill and other intangibles	16,499	Deferred taxes	2,834
Fixed assets	15,374	Term debt and other liabilities	6,240
Other assets	2,070	Equity	30,469
	$48,799		$48,799

Earnings Statement (in millions)

	2009	*2008*	*2007*
Revenues	$61,665	$66,099	$59,100
Operating expenses (including depreciation of $1,422 in 2009, $1,280 in 2008 and $955 in 2007)	59,509	61,937	55,026
Interest expense	98	139	127
Pre-tax earnings	2,058*	4,023*	3,947*
Income taxes and minority interests	945	1,740	1,594
Net income	$ 1,113	$ 2,283	$ 2,353

*Does not include purchase-accounting adjustments.

Almost all of the many and widely-diverse operations in this sector suffered to one degree or another from 2009's severe recession. The major exception was McLane, our distributor of groceries, confections and non-food items to thousands of retail outlets, the largest by far Wal-Mart.

Grady Rosier led McLane to record pre-tax earnings of $344 million, which even so amounted to only slightly more than one cent per dollar on its huge sales of $31.2 billion. McLane employs a vast array of physical assets – practically all of which it owns – including 3,242 trailers, 2,309 tractors and 55 distribution centers with 15.2 million square feet of space. McLane's prime asset, however, is Grady.

We had a number of companies at which profits improved even as sales contracted, always an exceptional managerial achievement. Here are the CEOs who made it happen:

COMPANY	*CEO*
Benjamin Moore (paint)	Denis Abrams
Borsheims (jewelry retailing)	Susan Jacques
H. H. Brown (manufacturing and retailing of shoes)	Jim Issler
CTB (agricultural equipment)	Vic Mancinelli
Dairy Queen	John Gainor
Nebraska Furniture Mart (furniture retailing)	Ron and Irv Blumkin
Pampered Chef (direct sales of kitchen tools)	Marla Gottschalk
See's (manufacturing and retailing of candy)	Brad Kinstler
Star Furniture (furniture retailing)	Bill Kimbrell

Among the businesses we own that have major exposure to the depressed industrial sector, both Marmon and Iscar turned in relatively strong performances. Frank Ptak's Marmon delivered a 13.5% pre-tax profit margin, a record high. Though the company's sales were down 27%, Frank's cost-conscious management mitigated the decline in earnings.

Nothing stops Israel-based Iscar – not wars, recessions or competitors. The world's two other leading suppliers of small cutting tools both had very difficult years, each operating at a loss throughout much of the year. Though Iscar's results were down significantly from 2008, the company regularly reported profits, even while it was integrating and rationalizing Tungaloy, the large Japanese acquisition that we told you about last year. When manufacturing rebounds, Iscar will set new records. Its incredible managerial team of Eitan Wertheimer, Jacob Harpaz and Danny Goldman will see to that.

Every business we own that is connected to residential and commercial construction suffered severely in 2009. Combined pre-tax earnings of Shaw, Johns Manville, Acme Brick, and MiTek were $227 million, an 82.5% decline from $1.295 billion in 2006, when construction activity was booming. These businesses continue to bump along the bottom, though their competitive positions remain undented.

The major problem for Berkshire last year was NetJets, an aviation operation that offers fractional ownership of jets. Over the years, it has been enormously successful in establishing itself as the premier company in its industry, with the value of its fleet far exceeding that of its three major competitors *combined*. Overall, our dominance in the field remains unchallenged.

NetJets' business operation, however, has been another story. In the eleven years that we have owned the company, it has recorded an aggregate pre-tax loss of $157 million. Moreover, the company's debt has soared from $102 million at the time of purchase to $1.9 billion in April of last year. Without Berkshire's guarantee of this debt, NetJets would have been out of business. It's clear that I failed you in letting NetJets descend into this condition. But, luckily, I have been bailed out.

Dave Sokol, the enormously talented builder and operator of MidAmerican Energy, became CEO of NetJets in August. His leadership has been transforming: Debt has already been reduced to $1.4 billion, and, after suffering a staggering loss of $711 million in 2009, the company is now solidly profitable.

Most important, none of the changes wrought by Dave have in any way undercut the top-of-the-line standards for safety and service that Rich Santulli, NetJets' previous CEO and the father of the fractional-ownership industry, insisted upon. Dave and I have the strongest possible personal interest in maintaining these standards because we and our families use NetJets for almost all of our flying, as do many of our directors and managers. None of us are assigned special planes nor crews. We receive exactly the same treatment as any other owner, meaning we pay the same prices as everyone else does when we are using our personal contracts. In short, we eat our own cooking. In the aviation business, no other testimonial means more.

Finance and Financial Products

Our largest operation in this sector is Clayton Homes, the country's leading producer of modular and manufactured homes. Clayton was not always number one: A decade ago the three leading manufacturers were Fleetwood, Champion and Oakwood, which together accounted for 44% of the output of the industry. All have since gone bankrupt. Total industry output, meanwhile, has fallen from 382,000 units in 1999 to 60,000 units in 2009.

The industry is in shambles for two reasons, the first of which must be lived with if the U.S. economy is to recover. This reason concerns U.S. housing starts (including apartment units). In 2009, starts were 554,000, by far the lowest number in the 50 years for which we have data. Paradoxically, this is *good* news.

People *thought* it was good news a few years back when housing starts – the supply side of the picture – were running about two million annually. But household formations – the demand side – only amounted to about 1.2 million. After a few years of such imbalances, the country unsurprisingly ended up with far too many houses.

There were three ways to cure this overhang: (1) blow up a lot of houses, a tactic similar to the destruction of autos that occurred with the "cash-for-clunkers" program; (2) speed up household formations by, say, encouraging teenagers to cohabitate, a program not likely to suffer from a lack of volunteers or; (3) reduce new housing starts to a number far below the rate of household formations.

Our country has wisely selected the third option, which means that within a year or so residential housing problems should largely be behind us, the exceptions being only high-value houses and those in certain localities where overbuilding was particularly egregious. Prices will remain far below "bubble" levels, of course, but for every seller (or lender) hurt by this there will be a buyer who benefits. Indeed, many families that couldn't afford to buy an appropriate home a few years ago now find it well within their means because the bubble burst.

The second reason that manufactured housing is troubled is specific to the industry: the punitive differential in mortgage rates between factory-built homes and site-built homes. Before you read further, let me underscore the obvious: Berkshire has a dog in this fight, and you should therefore assess the commentary that follows with special care. That warning made, however, let me explain why the rate differential causes problems for both large numbers of lower-income Americans and Clayton.

The residential mortgage market is shaped by government rules that are expressed by FHA, Freddie Mac and Fannie Mae. Their lending standards are all-powerful because the mortgages they insure can typically be securitized and turned into what, in effect, is an obligation of the U.S. government. Currently buyers of conventional site-built homes who qualify for these guarantees can obtain a 30-year loan at about 5¼%. In addition, these are mortgages that have recently been purchased in massive amounts by the Federal Reserve, an action that also helped to keep rates at bargain-basement levels.

In contrast, very few factory-built homes qualify for agency-insured mortgages. Therefore, a meritorious buyer of a factory-built home must pay about 9% on his loan. For the all-cash buyer, Clayton's homes offer terrific value. If the buyer needs mortgage financing, however – and, of course, most buyers do – the difference in financing costs too often negates the attractive price of a factory-built home.

Last year I told you why our buyers – generally people with low incomes – performed so well as credit risks. Their attitude was all-important: They signed up to live in the home, not resell or refinance it. Consequently, our buyers usually took out loans with payments geared to their verified incomes (we weren't making "liar's loans") and looked forward to the day they could burn their mortgage. If they lost their jobs, had health problems or got divorced, we could of course expect defaults. But they seldom walked away simply because house values had fallen. Even today, though job-loss troubles have grown, Clayton's delinquencies and defaults remain reasonable and will not cause us significant problems.

We have tried to qualify more of our customers' loans for treatment similar to those available on the site-built product. So far we have had only token success. Many families with modest incomes but responsible habits have therefore had to forego home ownership simply because the financing differential attached to the factory-built product makes monthly payments too expensive. If qualifications aren't broadened, so as to open low-cost financing to *all* who meet down-payment and income standards, the manufactured-home industry seems destined to struggle and dwindle.

Even under these conditions, I believe Clayton will operate profitably in coming years, though well below its potential. We couldn't have a better manager than CEO Kevin Clayton, who treats Berkshire's interests as if they were his own. Our product is first-class, inexpensive and constantly being improved. Moreover, we will continue to use Berkshire's credit to support Clayton's mortgage program, convinced as we are of its soundness. Even so, Berkshire can't borrow at a rate approaching that available to government agencies. This handicap will limit sales, hurting both Clayton and a multitude of worthy families who long for a low-cost home.

In the following table, Clayton's earnings are net of the company's payment to Berkshire for the use of its credit. Offsetting this cost to Clayton is an identical amount of income credited to Berkshire's finance operation and included in "Other Income." The cost and income amount was $116 million in 2009 and $92 million in 2008.

The table also illustrates how severely our furniture (CORT) and trailer (XTRA) leasing operations have been hit by the recession. Though their competitive positions remain as strong as ever, we have yet to see any bounce in these businesses.

	Pre-Tax Earnings (*in millions*)	
	2009	*2008*
Net investment income	$278	$330
Life and annuity operation	116	23
Leasing operations	14	87
Manufactured-housing finance (Clayton)	187	206
Other income *	186	141
Income before investment and derivatives gains or losses	$781	$787

*Includes $116 million in 2009 and $92 million in 2008 of fees that Berkshire charges Clayton for the use of Berkshire's credit.

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At the end of 2009, we became a 50% owner of Berkadia Commercial Mortgage (formerly known as Capmark), the country's third-largest servicer of commercial mortgages. In addition to servicing a $235 billion portfolio, the company is an important originator of mortgages, having 25 offices spread around the country. Though commercial real estate will face major problems in the next few years, long-term opportunities for Berkadia are significant.

Our partner in this operation is Leucadia, run by Joe Steinberg and Ian Cumming, with whom we had a terrific experience some years back when Berkshire joined with them to purchase Finova, a troubled finance business. In resolving that situation, Joe and Ian did far more than their share of the work, an arrangement I always encourage. Naturally, I was delighted when they called me to partner again in the Capmark purchase.

Our first venture was also christened Berkadia. So let's call this one Son of Berkadia. Someday I'll be writing you about Grandson of Berkadia.

Investments

Below we show our common stock investments that at yearend had a market value of more than $1 billion.

		12/31/09		
Shares	*Company*	*Percentage of Company Owned*	*Cost **	*Market*
			(in millions)	
151,610,700	American Express Company	12.7	$ 1,287	$ 6,143
225,000,000	BYD Company, Ltd.	9.9	232	1,986
200,000,000	The Coca-Cola Company	8.6	1,299	11,400
37,711,330	ConocoPhillips	2.5	2,741	1,926
28,530,467	Johnson & Johnson	1.0	1,724	1,838
130,272,500	Kraft Foods Inc.	8.8	4,330	3,541
3,947,554	POSCO	5.2	768	2,092
83,128,411	The Procter & Gamble Company	2.9	533	5,040
25,108,967	Sanofi-Aventis	1.9	2,027	1,979
234,247,373	Tesco plc	3.0	1,367	1,620
76,633,426	U.S. Bancorp	4.0	2,371	1,725
39,037,142	Wal-Mart Stores, Inc.	1.0	1,893	2,087
334,235,585	Wells Fargo & Company	6.5	7,394	9,021
	Others		6,680	8,636
	Total Common Stocks Carried at Market		$34,646	$59,034

*This is our actual purchase price and also our tax basis; GAAP "cost" differs in a few cases because of write-ups or write-downs that have been required.

In addition, we own positions in non-traded securities of Dow Chemical, General Electric, Goldman Sachs, Swiss Re and Wrigley with an aggregate cost of $21.1 billion and a carrying value of $26.0 billion. We purchased these five positions in the last 18 months. Setting aside the significant equity potential they provide us, these holdings deliver us an aggregate of $2.1 billion annually in dividends and interest. Finally, we owned 76,777,029 shares (22.5%) of BNSF at yearend, which we then carried at $85.78 per share, but which have subsequently been melded into our purchase of the entire company.

In 2009, our largest sales were in ConocoPhillips, Moody's, Procter & Gamble and Johnson & Johnson (sales of the latter occurring after we had built our position earlier in the year). Charlie and I believe that all of these stocks will likely trade higher in the future. We made some sales early in 2009 to raise cash for our Dow and Swiss Re purchases and late in the year made other sales in anticipation of our BNSF purchase.

We told you last year that very unusual conditions then existed in the corporate and municipal bond markets and that these securities were ridiculously cheap relative to U.S. Treasuries. We backed this view with some purchases, but I should have done far more. Big opportunities come infrequently. When it's raining gold, reach for a bucket, not a thimble.

We entered 2008 with $44.3 billion of cash-equivalents, and we have since retained operating earnings of $17 billion. Nevertheless, at yearend 2009, our cash was down to $30.6 billion (with $8 billion earmarked for the BNSF acquisition). We've put a lot of money to work during the chaos of the last two years. It's been an ideal period for investors: A climate of fear is their best friend. Those who invest only when commentators are upbeat end up paying a heavy price for meaningless reassurance. In the end, what counts in investing is what you pay for a business – through the purchase of a small piece of it in the stock market – and what that business earns in the succeeding decade or two.

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Last year I wrote extensively about our derivatives contracts, which were then the subject of both controversy and misunderstanding. For that discussion, please go to www.berkshirehathaway.com.

We have since changed only a few of our positions. Some credit contracts have run off. The terms of about 10% of our equity put contracts have also changed: Maturities have been shortened and strike prices materially reduced. In these modifications, no money changed hands.

A few points from last year's discussion are worth repeating:

(1) Though it's no sure thing, I expect our contracts in aggregate to deliver us a profit over their lifetime, even when investment income on the huge amount of float they provide us is excluded in the calculation. Our derivatives float – which is not included in the $62 billion of insurance float I described earlier – was about $6.3 billion at yearend.

(2) Only a handful of our contracts require us to post collateral under any circumstances. At last year's low point in the stock and credit markets, our posting requirement was $1.7 billion, a small fraction of the derivatives-related float we held. When we do post collateral, let me add, the securities we put up continue to earn money for our account.

(3) Finally, you should expect large swings in the carrying value of these contracts, items that can affect our reported quarterly earnings in a huge way but that do not affect our cash or investment holdings. That thought certainly fit 2009's circumstances. Here are the pre-tax quarterly gains and losses from derivatives valuations that were part of our reported earnings last year:

Quarter	$ Gain (Loss) in Billions
1	(1.517)
2	2.357
3	1.732
4	1.052

As we've explained, these wild swings neither cheer nor bother Charlie and me. When we report to you, we will continue to separate out these figures (as we do realized investment gains and losses) so that you can more clearly view the earnings of our operating businesses. We are delighted that we hold the derivatives contracts that we do. To date we have significantly profited from the float they provide. We expect also to earn further investment income over the life of our contracts.

We have long invested in derivatives contracts that Charlie and I think are mispriced, just as we try to invest in mispriced stocks and bonds. Indeed, we first reported to you that we held such contracts in early 1998. The dangers that derivatives pose for both participants and society – dangers of which we've long warned, and that can be dynamite – arise when these contracts lead to leverage and/or counterparty risk that is extreme. At Berkshire nothing like that has occurred – nor will it.

It's my job to keep Berkshire far away from such problems. Charlie and I believe that a CEO must not delegate risk control. It's simply too important. At Berkshire, I both initiate and monitor *every* derivatives contract on our books, with the exception of operations-related contracts at a few of our subsidiaries, such as MidAmerican, and the minor runoff contracts at General Re. If Berkshire ever gets in trouble, it will be *my* fault. It will not be because of misjudgments made by a Risk Committee or Chief Risk Officer.

* * * * * * * * * * * *

In my view a board of directors of a huge financial institution is *derelict* if it does not insist that its CEO bear full responsibility for risk control. If he's incapable of handling that job, he should look for other employment. And if he fails at it – with the government thereupon required to step in with funds or guarantees – the financial consequences for him and his board should be severe.

It has not been shareholders who have botched the operations of some of our country's largest financial institutions. Yet they have borne the burden, with 90% or more of the value of their holdings wiped out in most cases of failure. Collectively, they have lost more than $500 billion in just the four largest financial fiascos of the last two years. To say these *owners* have been "bailed-out" is to make a mockery of the term.

The CEOs and directors of the failed companies, however, have largely gone unscathed. Their fortunes may have been diminished by the disasters they oversaw, but they still live in grand style. It is the behavior of these CEOs and directors that needs to be changed: If their institutions and the country are harmed by their recklessness, they should pay a heavy price – one not reimbursable by the companies they've damaged nor by insurance. CEOs and, in many cases, directors have long benefitted from oversized financial carrots; some *meaningful* sticks now need to be part of their employment picture as well.

An Inconvenient Truth (Boardroom Overheating)

Our subsidiaries made a few small "bolt-on" acquisitions last year for cash, but our blockbuster deal with BNSF required us to issue about 95,000 Berkshire shares that amounted to 6.1% of those previously outstanding. Charlie and I enjoy issuing Berkshire stock about as much as we relish prepping for a colonoscopy.

The reason for our distaste is simple. If we wouldn't dream of selling Berkshire in its entirety at the current market price, why in the world should we "sell" a significant part of the company at that same inadequate price by issuing our stock in a merger?

In evaluating a stock-for-stock offer, shareholders of the target company quite understandably focus on the market price of the acquirer's shares that are to be given them. But they also expect the transaction to deliver them the *intrinsic* value of their own shares – the ones they are giving up. If shares of a prospective acquirer are selling below their intrinsic value, it's impossible for that buyer to make a sensible deal in an all-stock deal. You simply can't exchange an undervalued stock for a fully-valued one without hurting your shareholders.

Imagine, if you will, Company A and Company B, of equal size and both with businesses intrinsically worth $100 per share. Both of their stocks, however, sell for $80 per share. The CEO of A, long on confidence and short on smarts, offers 1¼ shares of A for each share of B, correctly telling his directors that B is worth $100 per share. He will neglect to explain, though, that what he is giving will cost his shareholders $125 in intrinsic value. If the directors are mathematically challenged as well, and a deal is therefore completed, the shareholders of B will end up owning 55.6% of A & B's combined assets and A's shareholders will own 44.4%. Not everyone at A, it should be noted, is a loser from this nonsensical transaction. Its CEO now runs a company twice as large as his original domain, in a world where size tends to correlate with both prestige and compensation.

If an acquirer's stock is overvalued, it's a different story: Using it as a currency works to the acquirer's advantage. That's why bubbles in various areas of the stock market have invariably led to serial issuances of stock by sly promoters. Going by the market value of their stock, they can afford to overpay because they are, in effect, using counterfeit money. Periodically, many air-for-assets acquisitions have taken place, the late 1960s having been a particularly obscene period for such chicanery. Indeed, certain large companies were built in this way. (No one involved, of course, ever publicly acknowledges the reality of what is going on, though there is plenty of private snickering.)

In our BNSF acquisition, the selling shareholders quite properly evaluated our offer at $100 per share. The cost to us, however, was somewhat higher since 40% of the $100 was delivered in our shares, which Charlie and I believed to be worth more than their market value. Fortunately, we had long owned a substantial amount of BNSF stock that we purchased in the market for cash. All told, therefore, only about 30% of our cost overall was paid with Berkshire shares.

In the end, Charlie and I decided that the disadvantage of paying 30% of the price through stock was offset by the opportunity the acquisition gave us to deploy $22 billion of cash in a business we understood and liked for the long term. It has the additional virtue of being run by Matt Rose, whom we trust and admire. We also like the prospect of investing additional billions over the years at reasonable rates of return. But the final decision was a close one. If we had needed to use more stock to make the acquisition, it would in fact have made no sense. We would have then been giving up more than we were getting.

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I have been in dozens of board meetings in which acquisitions have been deliberated, often with the directors being instructed by high-priced investment bankers (are there any other kind?). Invariably, the bankers give the board a detailed assessment of the value of the company being purchased, with emphasis on why it is worth far more than its market price. In more than fifty years of board memberships, however, never have I heard the investment bankers (or management!) discuss the true value of what is being *given*. When a deal involved the issuance of the acquirer's stock, they simply used market value to measure the cost. *They did this even though they would have argued that the acquirer's stock price was woefully inadequate – absolutely no indicator of its real value – had a takeover bid for the acquirer instead been the subject up for discussion*.

When stock is the currency being contemplated in an acquisition and when directors are hearing from an advisor, it appears to me that there is only one way to get a rational and balanced discussion. Directors should hire a second advisor to make the case *against* the proposed acquisition, with its fee contingent on the deal *not* going through. Absent this drastic remedy, our recommendation in respect to the use of advisors remains: "Don't ask the barber whether you need a haircut."

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I can't resist telling you a true story from long ago. We owned stock in a large well-run bank that for decades had been statutorily prevented from acquisitions. Eventually, the law was changed and our bank immediately began looking for possible purchases. Its managers – fine people and able bankers – not unexpectedly began to behave like teenage boys who had just discovered girls.

They soon focused on a much smaller bank, also well-run and having similar financial characteristics in such areas as return on equity, interest margin, loan quality, etc. Our bank sold at a modest price (that's why we had bought into it), hovering near book value and possessing a very low price/earnings ratio. Alongside, though, the small-bank owner was being wooed by other large banks in the state and was holding out for a price close to three times book value. Moreover, he wanted stock, not cash.

Naturally, our fellows caved in and agreed to this value-destroying deal. "We need to show that we are in the hunt. Besides, it's only a small deal," they said, as if only *major* harm to shareholders would have been a legitimate reason for holding back. Charlie's reaction at the time: "Are we supposed to applaud because the dog that fouls our lawn is a Chihuahua rather than a Saint Bernard?"

The seller of the smaller bank – no fool – then delivered one final demand in his negotiations. "After the merger," he in effect said, perhaps using words that were phrased more diplomatically than these, "I'm going to be a large shareholder of your bank, and it will represent a huge portion of my net worth. You have to promise me, therefore, that you'll never again do a deal this dumb."

Yes, the merger went through. The owner of the small bank became richer, we became poorer, and the managers of the big bank – newly bigger – lived happily ever after.

The Annual Meeting

Our best guess is that 35,000 people attended the annual meeting last year (up from 12 – *no* zeros omitted – in 1981). With our shareholder population much expanded, we expect even more this year. Therefore, we will have to make a few changes in the usual routine. There will be no change, however, in our enthusiasm for having you attend. Charlie and I like to meet you, answer your questions and – best of all – have you *buy* lots of goods from our businesses.

The meeting this year will be held on Saturday, May 1st. As always, the doors will open at the Qwest Center at 7 a.m., and a new Berkshire movie will be shown at 8:30. At 9:30 we will go directly to the question-and-answer period, which (with a break for lunch at the Qwest's stands) will last until 3:30. After a short recess, Charlie and I will convene the annual meeting at 3:45. If you decide to leave during the day's question periods, please do so while *Charlie* is talking. (Act fast; he can be terse.)

The best reason to exit, of course, is to *shop*. We will help you do that by filling the 194,300-square-foot hall that adjoins the meeting area with products from dozens of Berkshire subsidiaries. Last year, you did your part, and most locations racked up record sales. But you can do better. (A friendly warning: If I find sales are lagging, I get testy and lock the exits.)

GEICO will have a booth staffed by a number of its top counselors from around the country, all of them ready to supply you with auto insurance quotes. In most cases, GEICO will be able to give you a shareholder discount (usually 8%). This special offer is permitted by 44 of the 51 jurisdictions in which we operate. (One supplemental point: The discount is not additive if you qualify for another, such as that given certain groups.) Bring the details of your existing insurance and check out whether we can save you money. For at least 50% of you, I believe we can.

Be sure to visit the Bookworm. Among the more than 30 books and DVDs it will offer are two new books by my sons: Howard's *Fragile*, a volume filled with photos and commentary about lives of struggle around the globe and Peter's *Life Is What You Make It*. Completing the family trilogy will be the debut of my sister Doris's biography, a story focusing on her remarkable philanthropic activities. Also available will be *Poor Charlie's Almanack*, the story of my partner. This book is something of a publishing miracle – never advertised, yet year after year selling many thousands of copies from its Internet site. (Should you need to ship your book purchases, a nearby shipping service will be available.)

If you are a big spender – or, for that matter, merely a gawker – visit Elliott Aviation on the east side of the Omaha airport between noon and 5:00 p.m. on Saturday. There we will have a fleet of NetJets aircraft that will get your pulse racing.

An attachment to the proxy material that is enclosed with this report explains how you can obtain the credential you will need for admission to the meeting and other events. As for plane, hotel and car reservations, we have again signed up American Express (800-799-6634) to give you special help. Carol Pedersen, who handles these matters, does a terrific job for us each year, and I thank her for it. Hotel rooms can be hard to find, but work with Carol and you will get one.

At Nebraska Furniture Mart, located on a 77-acre site on 72nd Street between Dodge and Pacific, we will again be having "Berkshire Weekend" discount pricing. To obtain the Berkshire discount, you must make your purchases between Thursday, April 29th and Monday, May 3rd inclusive, and also present your meeting credential. The period's special pricing will even apply to the products of several prestigious manufacturers that normally have ironclad rules against discounting but which, in the spirit of our shareholder weekend, have made an exception for you. We appreciate their cooperation. NFM is open from 10 a.m. to 9 p.m. Monday through Saturday, and 10 a.m. to 6 p.m. on Sunday. On Saturday this year, from 5:30 p.m. to 8 p.m., NFM is having a Berkyville BBQ to which you are all invited.

At Borsheims, we will again have two shareholder-only events. The first will be a cocktail reception from 6 p.m. to 10 p.m. on Friday, April 30th. The second, the main gala, will be held on Sunday, May 2nd, from 9 a.m. to 4 p.m. On Saturday, we will be open until 6 p.m.

We will have huge crowds at Borsheims throughout the weekend. For your convenience, therefore, shareholder prices will be available from Monday, April 26th through Saturday, May 8th. During that period, please identify yourself as a shareholder by presenting your meeting credentials or a brokerage statement that shows you are a Berkshire holder. Enter with rhinestones; leave with diamonds. My daughter tells me that the more you buy, the more you save (kids say the darnedest things).

On Sunday, in the mall outside of Borsheims, a blindfolded Patrick Wolff, twice U.S. chess champion, will take on all comers – who will have their eyes wide open – in groups of six. Nearby, Norman Beck, a remarkable magician from Dallas, will bewilder onlookers.

Our special treat for shareholders this year will be the return of my friend, Ariel Hsing, the country's top-ranked junior table tennis player (and a good bet to win at the Olympics some day). Now 14, Ariel came to the annual meeting four years ago and demolished all comers, including me. (You can witness my humiliating defeat on YouTube; just type in Ariel Hsing Berkshire.)

Naturally, I've been plotting a comeback and will take her on outside of Borsheims at 1:00 p.m. on Sunday. It will be a three-point match, and after I soften her up, all shareholders are invited to try their luck at similar three-point contests. Winners will be given a box of See's candy. We will have equipment available, but bring your own paddle if you think it will help. (It won't.)

Gorat's will again be open exclusively for Berkshire shareholders on Sunday, May 2nd, and will be serving from 1 p.m. until 10 p.m. Last year, though, it was overwhelmed by demand. With many more diners expected this year, I've asked my friend, Donna Sheehan, at Piccolo's – another favorite restaurant of mine – to serve shareholders on Sunday as well. (Piccolo's giant root beer float is mandatory for any fan of fine dining.) I plan to eat at both restaurants: All of the weekend action makes me *really* hungry, and I have favorite dishes at each spot. Remember: To make a reservation at Gorat's, call 402-551-3733 on April 1st (*but not before*) and at Piccolo's call 402-342-9038.

Regrettably, we will not be able to have a reception for international visitors this year. Our count grew to about 800 last year, and my simply signing one item per person took about 2½ hours. Since we expect even more international visitors this year, Charlie and I decided we must drop this function. But be assured, we welcome every international visitor who comes.

Last year we changed our method of determining what questions would be asked at the meeting and received many dozens of letters applauding the new arrangement. We will therefore again have the same three financial journalists lead the question-and-answer period, asking Charlie and me questions that shareholders have submitted to them by e-mail.

The journalists and their e-mail addresses are: Carol Loomis, of Fortune, who may be e-mailed at cloomis@fortunemail.com; Becky Quick, of CNBC, at BerkshireQuestions@cnbc.com, and Andrew Ross Sorkin, of The New York Times, at arsorkin@nytimes.com. From the questions submitted, each journalist will choose the dozen or so he or she decides are the most interesting and important. The journalists have told me your question has the best chance of being selected if you keep it concise and include no more than two questions in any e-mail you send them. (In your e-mail, let the journalist know if you would like your name mentioned if your question is selected.)

Neither Charlie nor I will get so much as a clue about the questions to be asked. We know the journalists will pick some tough ones and that's the way we like it.

We will again have a drawing at 8:15 on Saturday at each of 13 microphones for those shareholders wishing to ask questions themselves. At the meeting, I will alternate the questions asked by the journalists with those from the winning shareholders. We've added 30 minutes to the question time and will probably have time for about 30 questions from each group.

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At 86 and 79, Charlie and I remain lucky beyond our dreams. We were born in America; had terrific parents who saw that we got good educations; have enjoyed wonderful families and great health; and came equipped with a "business" gene that allows us to prosper in a manner hugely disproportionate to that experienced by many people who contribute as much or more to our society's well-being. Moreover, we have long had jobs that we love, in which we are helped in countless ways by talented and cheerful associates. Indeed, over the years, our work has become ever more fascinating; no wonder we tap-dance to work. If pushed, we would gladly pay substantial sums to have our jobs (but don't tell the Comp Committee).

Nothing, however, is more fun for us than getting together with our shareholder-partners at Berkshire's annual meeting. So join us on May 1st at the Qwest for our annual Woodstock for Capitalists. We'll see you there.

February 26, 2010

Warren E. Buffett
Chairman of the Board

P.S. Come by rail.

Morning Session - 2010 Meeting

1. Opening remarks

WARREN BUFFETT: Good morning. I'm Warren, he's Charlie.

He can hear, I can see. We work together for that reason. (Laughter)

Like to make one correction in the movie. My fast ball was filmed in slow motion. They tried the regular way and you couldn't even see it, so — (Laughter)

Our approach today will be to announce a couple of things, our earnings, and introduce you to the directors. But as soon as that's through, we'll move on to questions. We'll have those until noon.

We'll break for an hour and we'll come back at 1:00. Those of you who are in the overflow rooms may find that you can get into the main arena here at that time.

And we'll go till 3:30 with the questions and then we'll have the annual meeting, business meeting, for those of you who are still around at that point. And at that time, we will have the election of directors.

2. Board of directors introduced

WARREN BUFFETT: But because not all of you may be here at that time, I would like to introduce the directors to you, and I'll ask them to stand.

And if you'll hold your applause until they're all done standing, or you can even hold it after that — (laughter) — it will make — it will make for a very orderly meeting.

So let's start in with Howard Buffett. I'm the next one alphabetically. Our new director, Steve Burke.

They didn't hear the part about stay standing, but that's OK. They're generally fairly obedient, but the — (laughter)

Susan Decker. Bill Gates. David Gottesman, Sandy Gottesman. Charlotte Guyman.

Don Keough is unable to be with us today. He's had a serious operation but he's recovering very well and he's got a lot of friends in this audience and he'll be with us next year.

Charlie, we've already introduced. Tom Murphy. Ron Olson, the manager in our movie. And Walter Scott.

Now you can go wild with applause for the group. (Applause)

3. Some recovery for "sputtering" economy

WARREN BUFFETT: Now, before we start with the questions, we do have preliminary earnings figures for the first quarter.

And I'd like to ask the projectionist to put up slide A. There's nothing really very surprising in these numbers, but we'd like to give them to you. They up there OK? Yeah. If you have any questions on these later on.

What we're seeing in our businesses is that, in what was sort of a sputtering recovery a few months ago, seems to have picked up steam in March and April.

And our businesses that kind of serve broad industry, such as the railroad or Marmon or ISCAR, we're seeing a pretty good uptick. It's a long way from where it was a couple years ago, but what was very spotty in the recovery a couple of months ago, the trends really seem a fair amount stronger in the last few months.

And we always encourage you to focus on operating earnings. We have the figures there for our investments and derivative businesses.

We don't really think they mean anything on a quarterly basis. Obviously, they're meaningful over the years. I mean, we've piled up a lot of net worth over the years with capital gains. But in any quarter, they mean absolutely nothing.

And you'll notice another thing about our report. We don't even put down — we have to when we publish generally — but we don't even put down the earnings per share. We're not focused on that number in any quarter or any year.

We're focused on the buildup of value. And we really think that an undue focus on quarterly earnings, not only is probably a bad idea for investors, but we think it's a terrible idea for managers.

If I had told our managers that we would earn three dollars and 17 1/2 cents for the quarter, you know, they might do a little fudging in order to make sure that we actually came out at that number.

And there was a very interesting study that was published a few months ago where thousands of earnings reports were examined.

And instead of taking it out to the penny, which is customary in the reporting, they took it out one further digit. And of course if you go out one further digit, and it's four or less, you round downward, and if it's five or more, you round upward.

And they found out that a statistically impossible number of — small number — of fours showed up because if they got to four-tenths of a cent, somehow somebody in the accounting department managed to find another tenth of a cent so they could round upward. It was not an accident.

And, you do not want to have — in our view, we think it's terrible practice to be thinking about trying to report to some penny that you've whispered to Wall Street analysts in previous months.

And we probably carry that to an extreme at Berkshire. But we always think of the enterprise as a whole. We think about building value over time.

And we do not worry about earnings per share, and we don't worry about investment gains or losses.

Charlie may want to weigh in on this one a bit. Charlie?

CHARLIE MUNGER: Well, I agree with you. (Laughter)

WARREN BUFFETT: Yeah. He is the perfect vice chairman. (Laughter) They don't come any better. OK.

With that preliminary — we probably ought to quit at that point, actually. (Laughter)

4. Panel of journalists introduced

WARREN BUFFETT: We're going to alternate the questions between a panel of three journalists here. We have Carol Loomis of Fortune magazine on the — on the far right. (Applause)

And we didn't do it quite alphabetically. We have Andrew Ross Sorkin from The New York Times. (Applause)

And Becky Quick of CNBC. (Applause)

Andrew's maneuvered for a seat there, apparently, to get earlier in the questioning order, but I'll probably stick with the alphabetical list.

And we will alternate between our journalists, and then we will go around the auditorium here where people have been chosen by chance to ask questions.

And we also will go to just I guess one of the overflow rooms; we have a whole lot of overflow rooms, but we'll not go to all of them.

5. To be deleted

WARREN BUFFETT: So let's just start things off. Carol?

CAROL LOOMIS: Well, since I won the alphabetical lottery, I get to make two very short statements also.

One is that we received an awful lot of questions. We really don't know how many because some people sent their question to all three of us. But I would guess we had something between 1,500 and 2,000 questions.

And obviously, we're not going to be able to ask all of those, and we're sorry for those we didn't get to ask. They were very good questions and we appreciate the work that people put into them.

The other thing I want to mention is that Warren and Charlie have had absolutely no hint as to what the questions will be so they will have to field them just as they come up.

6. Buffett strongly defends Goldman Sachs

CAROL LOOMIS: However, Warren and Charlie may be smart enough to have guessed that the first question will be about topic A, which is Goldman Sachs.

And I received several emails about the SEC's lawsuit against Goldman, all of them asking a different question about that problem.

I have combined the several thoughts in these questions, and with thanks to Greg Firman (PH), Kai Pan (PH) of Morgan Stanley, Brian Chan (PH), and Vic Timono (PH), here is the question:

Warren, every year in the Berkshire movie, you did it again today, you use the clip from the Salomon crisis in which you tell Congress that you have warned Salomon's employees that if they lose a shred of the firm's reputation, you will be ruthless in your reaction.

Clearly, Goldman Sachs has lost reputation because of the SEC's action. Could you tell us your reaction to the lawsuit, your reflections in light of it about Berkshire's large investment in Goldman?

And what advice, in light of your own Salomon experience, you would give Goldman's board of directors and management?

WARREN BUFFETT: OK. Anytime you ask me these multiple questions, I may go back to you to get all parts.

But, well, let's start with the transaction, because that's the important thing.

A few weeks ago on a Friday, a transaction described as ABACUS was made the subject of an SEC complaint. I think it ran about 22 pages. And I think there's been probably sort of misreporting, not intentional obviously, but misreporting of the nature of that transaction in at least — probably a majority of the accounts that I've read about it.

So, I would like — this will take a little time, but I think it's an important subject. I would like to go through that transaction first. And then we'll get further into the questions posed by the people that emailed Carol.

The transaction, the ABACUS transaction, there were four losers in, but we're going to focus on two of them.

Goldman itself was a loser. They didn't intend to be a loser, I'm sure. They couldn't sell the piece — a piece of the transaction — and they kept it, and I think they lost 90 or $100 million because they kept it.

But the main loser, in terms of actual cash out, was a very large bank in Europe named ABN AMRO, which subsequently became part of the Royal Bank of Scotland.

Now, what did ABN AMRO — why did they lose money? They lost money because they, in effect, guaranteed the credit of another company, ACA.

ABN AMRO was in the business of judging credits, deciding what credits they would accept themselves, what credits they would guarantee.

And in effect, they did something in the insurance world called fronting a transaction, which really means guaranteeing the credit of another party.

We have done that many times at Berkshire. We get paid for it. And people do not want the credit of the XYZ insurance company but they say they'll take a policy from XYZ if we guarantee it. And Berkshire has made a lot of money guaranteeing things over the years.

And Charlie can remember back to the early 1970s when we ran into some very dishonest people and we lost money, and we lost a fair amount of money at that time, because we guaranteed the credit of somebody that turned out to be not so good.

It happened to be some syndicates at Lloyd's, of all things. But they found ways not to pay when our name was on it.

So ABN AMRO agreed to guarantee about $900 million of the credit of a company called ACA. They got paid for that, and this is in the SEC complaint. It's not mentioned very often, but they got paid, what, 17 basis points, that's 17/100 of 1 percent.

So they took on a $900 million risk of guaranteeing credit. They got paid about a million-six. And the company whose credit they guaranteed went broke, and so they had to pay the 900 million. It's a little hard for me to get terribly sympathetic with the fact that a bank made a dumb credit deal.

But let's look at ACA, because they were sort of the nub of the transaction.

ACA, and you wouldn't really know this by reading most press accounts, ACA was a bond insurer. Now, they started out as a municipal bond insurer. They guaranteed various credits and they were like Ambac, they were like MBIA, they were like FGIC, they were like FSA.

And all of those companies — and we wrote about this a few years ago in the report — all of those companies started out insuring municipal bonds. Some of them started 30 years ago. And there was a big business in insuring municipal bonds.

And then the profit margins started getting squeezed in the municipal bond business. So what did they do? Instead of sticking to the business they knew and accepting lower profits, they went out and got into the business of insuring structured credits and all kinds of different other deals.

I described their activities a couple years in the annual report as being a little bit like Mae West who said, "I was Snow White but I drifted." (Laughter)

These bond insurers — and almost all of them did it — these bond insurers drifted into insuring things they didn't understand quite as well but where they could make a little more money.

ACA did it, MBIA did it, AMBEC did it, FGIC did it, FSA did it, and they all got into trouble, every one of them.

Now, is there anything wrong with a bond insurer insuring structured credit or something other than municipals? No. But you better know what you're doing.

Now, interestingly enough, Berkshire Hathaway, when these other guys got into trouble, went into the municipal bond insurance business.

And we insured things that were almost identical to what ACA or others had insured, the difference being that we thought we knew more about what we were doing. We got paid better than they got paid, and we stayed away from things we didn't understand.

We never insured a CDO; we never insured any kind of a RMBS deal or anything of the sort.

But I want to give you an example of something we did insure, because I think it will help you understand better this ABACUS transaction. So if the — if the projectionist would put up slide number 1, I'm going to describe a deal to you.

And as you — as you look at this — is it up there yet? Yeah. Somebody came to us a couple of years ago. I'll tell you the name a little later. But a large investment bank came to us a couple of years ago.

Now, we were insuring bonds regularly. We insured bonds here of the Omaha Public Power District that's familiar to many of you. We insured the bonds of the Nebraska — of the Methodist Hospital, which is six or seven miles from here.

We have told people that if the Nebraska Methodist Hospital does not pay its bonds, Berkshire Hathaway will pay them. And we've done that to the tune of about $100 million in their case. So we are in the business of insuring bonds.

Now, a couple of years ago, somebody came to us, large investment bank, and they said, "Take a look at this portfolio."

And as you can see, it's got the names of a whole bunch of states. Yeah, it's up there. And very different amounts. It's got a billion-one for Florida; it's only got 200 million for the State of California.

And they said to us, "Will you insure these states, that these bonds of these states, will pay for the next 10 years? If any of the states don't pay, you have to pay as the insurer."

And I looked at the list, Ajit Jain looked at the list, and we had to decide, A) whether we knew enough to insure them, and B) what premium we would charge, because that's what we're in the business for.

And we don't have to insure them. We can say, "Forget it. We don't know enough to make the decision." But we made the decision and we offered to insure those bonds for about $160 million for 10 years.

So we collected a premium of a little over 160 million, and somebody on the other side, the counterparty they call it, somebody on the other side, for 10 years, gets an assurance that, if these states don't pay, we will pay as if they did pay.

And this gets to the crux of the SEC's case — or complaint — in respect to Goldman. Somebody came to us with this list; we didn't dream up the list. Another party came to us.

Now, there's about four possibilities. Now I'll tell you who the party was that came to us two years ago: It was Lehman Brothers. So Lehman Brothers, there's four possibilities, roughly.

Lehman Brothers might own these bonds and want protection against the credit. They might just be negative on the bond market and, in effect, be shorting these bonds and using this method as a way of shorting it.

They might have a customer that owned these bonds who wanted to buy protection against the credit.

Or they might have a customer who was negative on these bonds and was simply wanting to short it.

We don't care which scenario exists. It's our job to evaluate the risk of the bonds and to determine the proper premium.

If they told me Ben Bernanke was on the other side of the trade, it wouldn't make any difference to me.

If I have to care about who's on the other side of the trade, I should not be insuring bonds. They could have told me Charlie was on the other side of the trade. (Laughs)

So, in effect, we did with these bonds exactly what ACA did with the bonds that were presented to them.

Now, ACA said, with the list of 120 that was presented to them, they said, "There's about 50 of these that we're willing to insure."

And then they went back and negotiated and took on 30 more of them.

We could have said, presumably, "We don't like Texas that well at a billion-150, and we'd rather have you give us more Floridas," or something like that.

We didn't do it. We just took the list that was submitted. So it was totally the other guy's list that we insured.

In the case of the ABACUS transaction, it was sort of a mutual — a negotiation — as to which bonds were included.

Now, in the end, the bonds that were included in the ABACUS transaction all went south very quickly.

That wasn't quite so obvious they were going to do that in early 2007, as you could see by studying something called the ABX Index.

But the housing bubble — really, mania — started blowing up in 2007.

Now, there could be troubles in these states that we insured. You can say they have big pension obligations, and maybe the guy who's shorting them on the other side knows more about that than we do, but, you know, that is our problem.

I mean, if we want to insure bonds, in the case of ACA, in the case of MBIA, they have teams of people do it. We just do it with a couple people at Berkshire.

But I see nothing whatsoever — I mean, if we lose a lot of money on these bonds, I am not going to go to the guy on the other side of the transaction and say, "Gee, you took advantage of me."

I don't care if John Paulson is shorting these bonds to me. He has no worries that I'm going to claim that he had superior knowledge about the finances of these states or anything of the sort.

So that was basically the ABACUS transaction. I think the central part of the argument is that Paulson knew more about the bonds than the bond insurer did.

My guess is the bond insurer employed more people than John Paulson did in his business, and they just made — they made what turned out, in retrospect, to be a dumb insurance decision.

And for the life of me, I don't see whether it makes any difference whether it was John Paulson on the other side of the deal, or whether it was Goldman Sachs on the other side of the deal, or whether it was Berkshire Hathaway on the other side of the deal.

Let's say we had decided to short the housing market in some way in early 2007. I don't think anybody should blame us for taking our position if we did it. We didn't do it. Or if we'd taken the long side.

I think before we get to the other part of Carol's questions, I'd ask Charlie to comment as this as Charlie has a law degree, and in other ways is superior to me, so we'll get his views.

CHARLIE MUNGER: Well, my attitude is quite simple. This was a three-to-two decision by the SEC commissioners under circumstances where they normally act unanimously.

If I had been on the SEC, I would have voted with the minority two and not with the three who authorized the lawsuit.

WARREN BUFFETT: Carol, would you get to the three parts that we probably haven't answered yet? And then I'll tackle this one.

But I really feel it's important to understand the transaction. I have not seen — I have seen ACA referred to as an investor. It's true that ACA had a management company, but it was 100 percent owned by ACA.

ACA was a bond insurer, pure and simple. And they had this — very simple, as it turned out — and they had one part of the organization did this and that. But ACA lost money because they were a bond insurer.

Yep, Carol?

CAROL LOOMIS: Well, I'm assuming that you have covered the part that says could you tell us your reaction to the lawsuit. So the next part was your reflections, in light of it, about Berkshire's large investment in Goldman.

And then the third was what advice you would have, given your Salomon experience and the thread of reputation that you have planted, those words you have planted. Those are the last two parts.

WARREN BUFFETT: Ironically, very ironically, it's probably helped our investment in Goldman in a certain way, because we have a $5 billion preferred stock that pays us $500 million a year.

Goldman has the right, the legal right, to call that at 110 percent of par. So anytime they want to, they can sent Berkshire 5 1/2 billion, and they get rid of this preferred stock which is costing them 500 million a year.

If we got that 5 1/2 billion in, immediately we'd put it in very short-term securities, which probably, under today's conditions, might produce 20 million a year or something like that.

So every day that goes by that Goldman does not call our preferred is money in the bank. It's been pointed out that our preferred is paying us $15 a second. So as we sit here, tick — (laughter) — tick, tick, tick, that's $15 every tick. (Applause)

I don't want those ticks to go away. (Laughs)

I just love them. They go on at night when I sleep — (laughter) — on weekends.

And frankly, Goldman would love to get rid of that preferred. I mean, they only agreed to sell us that preferred because it was sort of at the height of the crisis.

The U.S., I'm not sure what part of the government, probably the Fed, but they have been telling companies that took TARP money whether they could increase their dividends or not, whether they could redeem preferred, and all that.

Up till now, probably the Federal Government has been doing us a big favor by telling — even before this thing happened — they've probably been telling Goldman that, "You can't call that preferred until we tell you you can. And you can't increase your dividend."

They've been pretty strong with all of the TARP companies. That has not been publicized too much, but believe me that it's the case.

So I was just sitting here hoping that the — basically, that the Fed, or whomever, would be — continue to be — quite tough, in terms of letting Goldman call our preferred. But it wasn't going to go on forever.

I think that — I think recent developments have probably delayed the calling of our preferred by some time so the tick, tick, tick — (laughter) — will go on, and we will be getting $500 million a year instead of $20 million a year.

We love the investment, and I would expect that — the question about losing reputation.

There's no question that the allegation alone causes the company to lose reputation, and obviously the press of the past few weeks, they hurt. They hurt a company. They can hurt morale, a lot of things. Nothing — it's not remotely mortal or anything like that, but it hurts.

Incidentally, Goldman Sachs had a situation in connection with the Penn Central, 30 — 40 years ago now. And that hurt at that time.

They had a connection with one fellow in terms of Boesky that hurt at that time. And it was the source of great pain to John Weinberg, who was running Goldman.

But I don't believe that the allegation of something falls within my category of losing reputation. If something is proven, then you have to look at it.

My advice, in times of some kind of an emergent — when some transgression is either found or alleged, you know, basically, you saw Ron Olson in our movie, he was the manager of the team.

And back when we were working at Salomon together in a somewhat similar situation, we had as our motto, "Get it right. Get it fast. Get it out. Get it over."

But, "Get it right," was number one. I mean, you have to have your facts right, because if you go out with the wrong facts you get killed, and you can't redo it afterwards.

But that does mean sometimes some delay. You have to gather information from within your own organization, and you are on the defensive.

I would not — I do not hold against Goldman at all the fact that an allegation has been made by the SEC. And if it leads into something more serious, you know, then we'll look at the situation at that time.

But what I've seen in terms of the ABACUS activity, I just don't — I do not see that that would be any different than me complaining about the list of municipals that were given to me to insure a couple of years ago.

Charlie?

CHARLIE MUNGER: Well, I agree with all of that. But I also think that every business ought to decline a lot of business that's perfectly legal and proper to accept.

In other words, the standards in business should not be what's legal and convenient. The standards should be different.

And I don't think there's an investment bank in America of any consequence that didn't take too many scuzzy customers and deal in too many scuzzy securities.

WARREN BUFFETT: I would agree with that. But, Charlie — (applause) — do you think we should have done our municipal bond deal?

CHARLIE MUNGER: I think it was a closer case than you do.

WARREN BUFFETT: (Laughs) OK.

We insure, probably, 40 billion now, or something like that, of municipal bonds. And we have done very little in the last year, not because of Charlie's views that he just expressed, but basically because the price isn't right, the premiums are wrong.

And the reaction of other people when premiums are wrong is to take more risk. And our reaction when premiums are wrong is just to go play golf or something and tell somebody to call us when premiums get right again.

I do want to — Charlie and I will give our views on a lot of the activities that have gone on on Wall Street, and we do think plenty has been wrong.

I do want to point out, though, that our experience with Goldman goes back 44 years. And during those years, we've bought more businesses through them than through any other Wall Street investment bank. We've probably done more financing.

They have helped build Berkshire Hathaway. And we trade with them as well.

We don't hire them as investment advisors. They have a big investment advisory business, and, you know, our reaction to that is, "No, thanks." You know, we are in the business of making our own decisions.

But when we trade with them, they can very well be shorting to us a stock we're buying. You know, they can be buying for their own account some stock we're selling.

They do not owe us a divulgence of their position any more than we need to explain to them our reasoning or what we are doing in our position.

We are acting there in a non-fiduciary capacity, and they are operating in a non-fiduciary capacity, in my view, when they are trading with us.

Now, if they're working on our behalf on an acquisition or a financing, that's a different story.

But I would say that we have had a lot of very satisfactory transactions with Goldman Sachs.

And I don't want to prolong this. I won't do this on any more questions. But I'd like to — some people here will remember this — I'd like to take you back to the very first bond issue that Charlie and I ever did.

This was our maiden voyage back in 1967, I believe. Yeah. And if we could put slide 2 up there, I will direct your attention to the —

This is an offering that was made in 1967. We'd just bought a department store and we had a company called Diversified Retailing. Now, Diversified Retailing only owned one retailing operation, but we were sort of imaginative in those days, so we called it Diversified Retailing. (Laughter)

And we went out to raise $5 1/2 million. And Charlie Heider of Omaha, whom many of you know, helped me in the financing.

And you will notice our tombstone ad there has on the top two lines "New York Securities" and "First Nebraska Securities."

They were the lead underwriters. And as customary with tombstones, there are a group of underwriters listed below, and they're usually listed in the degree of their participation.

In other words, the more that they're involved, the higher up in the list they are, with the lead underwriters on top. And that's been true of every tombstone I've ever seen, except this one.

And what happened in this one was that we were having trouble raising $5 1/2 million. And I called Gus Levy of Goldman Sachs, and I called Al Gordon of Kidder Peabody. Those were two of the most prestigious firms in Wall Street at the time.

And I said, "Would you guys help me? We're trying to raise 5 1/2 million and there's nobody that wants to give Charlie and me 5 1/2 million. And the underwriters we've lined up are having trouble getting it done." And both Gus Levy and Al Gordon said to me, "Warren, we'll take a big piece."

And if you'll put — if you put up slide number 3, you will see the list of underwriters, and Goldman Sachs highlighted and Kidder Peabody highlighted were actually the next-largest underwriters. But they were so ashamed of being associated with our dinky little company that they asked us to leave their names off. (Laughter)

They wanted to give us money under an assumed name. (Laughter)

But they did — they did come through for us. They did come through for us. And believe me, a lot of people weren't coming through for us then. I do have a long memory for people that have taken good care of Berkshire over time.

And Al Gordon died last year at the age of 107. He worked until he was 104. He was a remarkable man. Gus Levy was a remarkable man. And I thank them for their participation, even though they did want to do it under an assumed name. (Laughter)

7. Munger: "I would make Paul Volcker look like a sissy"

WARREN BUFFETT: OK, we'll go to — we'll go to area number 1 and we'll shorten the answers. (Laughs)

AUDIENCE MEMBER: Good morning, Mr. Buffett and Mr. Munger. My name is Guy Pope and I'm from Portland, Oregon.

I'm curious about your thoughts on financial reform that Congress is currently working on. Specifically, what are the good ideas that you think are out there that should be included in the bill, and what are the bad ideas that you think should be left out?

WARREN BUFFETT: Charlie, it's 1,550 pages so you take the first 1,500, I'll take the last 50 pages. (Laughter)

CHARLIE MUNGER: Well, I don't think anybody in America right now, including the people in Congress, know what's going to happen. And my guess is that most of them have not read the bill, either.

So I think we're all in the doubt — (applause) — as to what's going to happen.

To me, one thing is perfectly clear and that is that our governmental system, which regulates the big investment banks, was so permissive and the investment banking culture had a nature, that together helped arrange that, under stress, every big investment bank except Goldman Sachs was going to go blooey.

A system that likely to go blooey, that is so important to the country, should be changed so it's less permissive in what it allows the banks and the investment banks to do. And people are thinking about that right now.

The banks and investment banks just hate the idea of losing investment flexibility. For instance, on maintaining the biggest derivative book in the world at, say, JPMorgan Chase.

They hate giving that stuff up. That doesn't mean that it's good for the country that they be allowed to continue to do as they have done.

WARREN BUFFETT: Based on what you know about the bill, and I know you haven't read all 1,550 pages, but would you vote for it today or not?

CHARLIE MUNGER: I simply don't know enough about it. I know what I would do if I were the benevolent despot of America. And I would make Paul Volcker look like a sissy. (Laughter and applause)

WARREN BUFFETT: You want to get more specific than that? That's quite a word picture. (Laughs)

Want to get more specific, Charlie?

CHARLIE MUNGER: Well, I would reduce the activities that are permitted. If you're de facto using the government's credit to help your business run, you shouldn't have a bunch of financial statements in the trillions, which you can't really understand even if you're a partner in the business.

This is crazy. The complexity that has come into the system is quite counterproductive. And of course, the people have proven they can't really control it.

So I think what we need is a new version of Glass-Steagall that drastically limits what — (applause) — what both commercial banks and investment banks are allowed to do.

They should have a much simpler and safer mode of business.

When we owned a savings and loan association, it had a very restricted repertoire that it could use. And of course, it had government credit for its deposits.

And by and large, as long as the repertoire was quite limited, the savings and loans stayed out of trouble. But you give human beings the flexibility the do any damn thing they please with absolutely unlimited credit under the repo system and other systems, and they will go plum crazy. And of course, they did.

8. We shouldn't have to collateralize previous deals

WARREN BUFFETT: OK. On that cheery note, we'll move to Becky. (Laughter)

BECKY QUICK: We received a lot of questions about the financial regulatory impending legislation. This question comes in from Jay Gelb, who wants to follow up on the point that Mr. Pope just made.

“What’s the anticipated impact of pending financial reform legislation on Berkshire? In particular, how much additional collateral may need to be posted on Berkshire’s existed $63 billion of derivative contracts? And could Berkshire get too close to its minimum requirement of $20 billion of cash on hand as a result?”

WARREN BUFFETT: Yeah. As I understand the bill now, the one that got presented a couple of days ago — and I could be wrong but I think I understand it and I’ve read the sections — the requirements would be zero.

If we were found — Berkshire were found — to be a — and I don’t know the exact term in the bill — but basically, dangerous to the system, by the secretary of the treasury, or I believe some commission, then we could be required to post collateral on retroactive contracts — on contracts that were written in the past.

I think the chances of us being regarded as a danger to the system when we have 250 contracts and other companies have a million contracts — our position was described in the Journal not long ago as “huge.”

You know, our position is 1 percent, in terms of notional value or liabilities or a lot of ways of measuring. It’s 1 percent of that of several other very large institutions.

So I — I’ve really wondered if you use the word “huge” to describe our position, what you would use for 100 times that position?

That must be some adjective that lurks out there someplace to be attributed to those other positions.

We had 23,000 positions 10 years ago when we bought Gen Re. And we proceeded promptly to get rid of all but less than a hundred that are left.

So we have absolutely, in my view, we have no problems.

If for any reason though, the Treasury or this commission should go back and maybe in some more sweeping declaration decide that they wanted all past contracts to be collateralized, we would comply, obviously.

We also would feel that we were due substantial money because, in negotiating those contracts, there was one price for collateralized contracts and there was another price for un-collateralized.

So if I sell my house to you for $100,000 and wanted $120,000 if it were furnished, but you said, “I’ll take it unfurnished for $100,000,” and then Congress comes along later on and says, “All houses have to be sold furnished, and by the way, that’s retroactive,” if I give you the furniture now I want something for it. A little unreasonable, maybe.

We do think — well, just a week ago we were offered an equity put contract that's identical, basically, it's a 10-year contract, by one of the very largest investment banking houses.

The price that they would pay us was 7 1/2 million un-collateralized and $11 million collateralized. So there's a very different — there's a price to be paid for having a collateralized contract.

And we elected to forgo probably a billion dollars of extra premiums we could have received in the past for our contracts if we had agreed to have them collateralized.

And with a few exceptions, we declined that. And we would feel, if we ever had to collateralize them, we would be entitled to fair compensation for it, and we would like that language to be in the bill.

And incidentally, Secretary Geithner — we'll put up slide number 7. We have his testimony before the Senate Ag Committee on December 2nd. And as you can see, he testified very strongly, in terms of the sanctity of past contracts.

But if the bill passes tomorrow, the way it reads to us and to our attorneys, we would not have to put up a dime.

And I would think there might be some other companies that would be determined to be dangerous to the system before Berkshire Hathaway would be.

So I really — I don't see any — I don't see any consequences unless there's some sweeping declaration that any company of a certain size that has derivatives shall be required to put up collateral.

And if that's required, we will, and it would be no problem. It would — it would have a cost to us in terms of the opportunity cost, but then of course we would argue about what collateral was proper and so on.

And if we could put our Coca-Cola stock, you know, we're going to hold our Coca-Cola stock anyway. So it really changes nothing. We still get the dividends from the Coca-Cola stock if it's placed as collateral, we get the profit if it goes up.

Charlie?

CHARLIE MUNGER: Well, yes. If collateral requirements were inserted by fiat of the government into existing contracts, it would be just like having a contract to buy a house for a million dollars, and the government passing a law saying, "No, you've got to pay $2 million."

I mean, it would be of dubious constitutionality, and it would be both unfair and stupid. I don't think the government is that crazy. (Laughter)

WARREN BUFFETT: Plus, I think what they would see — there's a whole list, in fact I think I've got a page even for that. Yeah, let's put up slide number 8.

And this is just a sample page of people who oppose putting up collateral — being required to put up collateral — prospectively. And you'll see IBM, you'll see Ford Motor, you'll see 3M, you'll see HCA.

I mean, there's all kinds of companies that don't want to do it in the future. We don't care what we do in the future as long as we get paid for it.

So this is not anything that is peculiar to Berkshire at all. In fact, we happen to be in a different position than the IBMs and the 3Ms and those of the world, in respect to this. As long as we get paid for it, we're indifferent to what the rules are going forward.

But considering the fact that we took lesser premiums in the past, we would not like something retroactively to take money out of our pocket.

But bear in mind, Burlington Northern, when we buy it, it has some fuel contracts. MidAmerican has energy contracts.

There was a story in Businessweek about Anheuser-Busch a couple of weeks ago. And, you know, they say, "We don't want to take money out of our business and send it to Wall Street as a deposit on collateral."

And I think when — if they really saw that the net effect of this would be to send a whole lot of money to be held by Wall Street that was otherwise employed in operating businesses, there might be a little less congressional enthusiasm.

9. Greek debt crisis: "I don't know how this movie ends"

WARREN BUFFETT: OK, we'll go to number 2.

AUDIENCE MEMBER: Good morning to all of you. Switching topics, Charlie and Warren, I'm Norman Rentrop from Bonn, Germany. I want to first give you a big thank you and then a question.

"Come by train," you wrote in the shareholder letter, and that is how I came to Omaha for the first time back in 1997.

I deliberately took the train from Denver to experience Omaha as a railroad city, and I immediately liked Omaha a lot. But the train ride, I saw room for improvement. So thank you very much for taking the future of American railroads into your gifted hands. (Applause)

WARREN BUFFETT: That's one of the best questions I've ever heard. (Laughter)

AUDIENCE MEMBER: Oh, here a question.

WARREN BUFFETT: Oh, OK. (Laughter)

AUDIENCE MEMBER: It's about Greece, the future of the euro, and the fiscal discipline all over the world, and what we have to prepare for as investors.

In the past, you have been warning us about structural weaknesses of the U.S. dollar. Now we see Greece, and potentially other European countries, in crisis.

Berkshire has significant investments in the eurozone, the big ones like Cologne Re, Munich Re, and even small ones like ISCAR's (inaudible) in Hamburg.

How are you preparing Berkshire Hathaway for potential currency failures? And what are your thoughts on the sustainability of the euro? And what is your advice for us as investors?

WARREN BUFFETT: Yeah. I'm going to — Charlie and I have not talked about Greece, actually, recently, so I'm going to be very interested in hearing his views on that. I will — I'll answer the last part of your question first.

We have a lot of exposure in various countries on both the asset and liability side. In other words, we do own stock in Munich Re, and they've got lots of assets, majority, probably, in the euro.

We have Cologne Re, a subsidiary of General Re, which has a substantial net worth that is basically tied to the euro.

On the other hand, we have very substantial liabilities that are denominated in other currencies, including fairly big time in the euro around the world.

For example, when we reinsured three or four years ago, three years ago maybe, Equitas, we took on many, many, many billions of liabilities around the world. And we were paid by, in effect, Lloyd's. And we took that money and invested it in dollars.

So we keep those liabilities for all kinds of old insurance claims arising from Equitas in foreign currencies.

And if the euro depreciates against the dollar, we benefit on that side, but we lose, as you point out, on other sides.

I can't tell you, and it's something I'm not concerned about, whether our net balance in euros or sterling or yen or whatever, I can't tell you what it is on any given day. Some of it enters into our equity put options and things of that sort.

But we have no dramatic exposures in any other currency. That doesn't mean that other currencies are unimportant to us, because what happens with the Greek situation and what may fall out from that can be quite important, in terms of the world's economy.

And Charlie's going to explain to you exactly what that might be. (Laughter)

CHARLIE MUNGER: Yeah. Well, generally speaking and with rare exceptions, of course, we're agnostic about currencies. We simply do our business and we take those fluctuations as they fall, wouldn't you agree with that?

WARREN BUFFETT: Yeah. We're agnostic in terms of the relative values, of —

CHARLIE MUNGER: Yes. Yes.

WARREN BUFFETT: — course. Yeah, we're not agnostic about where we think all currencies are headed, generally.

CHARLIE MUNGER: No, no.

WARREN BUFFETT: But the relative value —

CHARLIE MUNGER: But —

WARREN BUFFETT: — agnostic.

CHARLIE MUNGER: — Greece presents an interesting problem, of course. What's happened is that the past conservatism of a place like the United States gave it wonderful credit, a combination of success and conservatism.

And we used that credit to win World War II, and help revive Germany and Japan in one of the most constructive and intelligent foreign policy decisions ever made in the history of the world.

And we used that credit to help assure prosperity for all these decades in which Berkshire has flourished.

And now, of course, the government does not have quite as good a credit as it had before it started using it so heavily. And that's happened pretty much all over the world.

And so Greece is just the start of a very interesting period, and of course, it's more dangerous to civilization when governments push their credit so hard.

Because if you need credit to help civilization function, and you've blown it by your own aggression in using it in the past, that's not a good thing.

And I think in this country, and in other countries too, responsible voices are now realizing that we're nearer trouble from lack of government credit than we've been, well, in my lifetime.

WARREN BUFFETT: Everything you read about country credits, currency, you always want to make a — you always want to distinguish between countries that are borrowing in their own currency pretty much exclusively, like Japan has or the United States, and countries that are being forced for one reason or another, because the world doesn't trust them, to borrow in other countries' currencies.

I mean, in the past, you know, if you were some South American country and you were borrowing in your own currency, you never default, you just buy a new printing press or work it a little harder.

But the world doesn't like that sort of thing. So with weaker credits, and countries with poorer reputations, they force those countries to borrow in other currencies, frequently the United States currency.

And that can really put you out of business very quickly because, you can't — if you're some South American country, you can't print U.S. dollars, although you can print your own currency. And that's what's caused failures among countries.

The European Monetary Union, it's a really interesting situation, because Greece, they are a sovereign country, in terms of their own budget. But they can't print their own currency, you know, they've got the euro.

And this is — you know, the euro was regarded as quite an experiment 20 years or whenever it was ago, or less than that. But you may be seeing sort of a test case play out here of a country that is not using its own currency, in effect, or using a common currency, and yet is sovereign, in terms of making its own promises to its citizens.

And I don't know how this movie ends. That doesn't mean I'm forecasting disaster or anything, I really just don't know how this movie ends. And I try not to go to movies like that, if I can. (Laughter)

But I'll be watching. Really, this will be high drama, in my view, what happens here.

The one thing, Charlie says we're agnostic on currencies, and we don't make big currency plays. We did make one a few years ago and we did all right on it. But we very seldom will develop a strong view on one currency versus another.

I would say this though, that events in the world of the last few years would make me more bearish on all currencies, in terms of their future — holding their value over time — than previously. But it's not unique to the United States, it's not unique to the United Kingdom.

If you really could run budget deficits of 10 percent of your GDP and do it for a long period of time, believe me, the world would have been doing it a long before this. I mean, that is — that's a lot of fun if you can keep it up.

And the reason it hasn't been done in the past, I think, is probably that most people understand that it can't be kept up.

And how the world weans itself off huge deficit financing by country after country after country — it's going to be easy — I mean, it's going to be interesting — to watch.

You do not need to worry; as long as the United States government borrows in U.S. dollars, there is no possibility, none, of default. If the world won't take our obligations denominated in dollars then we — then you have a real problem.

But you don't default when you can print your own currency.

CHARLIE MUNGER: Well, yes. And of course, the published statistics are quite misleading because the debts of the currencies — of the countries — are normally stated in terms of the government bonds outstanding, and the unfunded promises of the various governments are much greater than the government bonds outstanding.

So whatever you think this problem is when you read the statistics, it's miles bigger.

And those unfunded promises don't bind if you keep growing GDP at 2 or 3 percent per annum, per person, or something like that. You can afford the unfunded promises.

But if you get to where the growth stops, then you're going to have enormous social strains. And God knows what the effect will be on government policy and on currencies.

10. Did Goldman need to disclose SEC notice?

WARREN BUFFETT: Andrew, you've been very patient.

ANDREW ROSS SORKIN: I've received over 300 questions just related to Goldman Sachs, and I know we've covered it already but there are a couple outstanding questions and one individual sent three specific questions that I thought I'd ask.

The first is, since Berkshire is a Goldman shareholder, who would you like the see run Goldman Sachs if not Lloyd Blankfein?

Were you made aware of Goldman's Wells notice, or anything about the case, prior to it being brought?

Do you think the Wells notice constituted material information and should have been disclosed? Would have you disclosed it?

And finally, have you been contacted as part of the Galleon investigation and the allegation that a Goldman Sachs board member passed inside information about your pending investment in Goldman in 2008 at the height of the crisis to Galleon?

I know there's a lot of pieces to that, but I thought we'd get Goldman out of the way —

WARREN BUFFETT: OK, good.

ANDREW ROSS SORKIN: — right now.

WARREN BUFFETT: Good. Yeah. Well, let's answer the third one first.

We've not been contacted in any way about Galleon. I read about that in the paper and the allegation, apparently, of a contact between a Goldman director and Galleon.

And I think in one of the stories, I read something about, presumably, Galleon trading on it. But the answer is no contact from anybody. And I can't pronounce the name of the guy that runs Galleon. (Laughter)

The Wells notice, I've talked to a number of lawyers about that. And I think — when we got a — we didn't get the Wells notice, but when the Gen Re executives got the Wells notice, I'm quite sure we stuck that in the 10-K or 10-Q that came up.

And maybe we filed an 8-K announcing it. That was not us receiving it ourselves but certain executives receiving it.

I have been on the board of at least one well-known company over the past 40 years, and I won't narrow it down any more than that.

But before, they received a Wells notice and they didn't publicize it, and, in truth, it was nothing. So lawyers tell me that if you regard it as material, you report it.

I don't think if I'd received something relating to the ABACUS transaction, based on what I know about it, I would have considered it material to a company that was making many, many, many billions of dollars a year.

Charlie?

CHARLIE MUNGER: Well, I wouldn't have regarded it as material, either.

If every company reported every little thing that might happen with what they regarded a tiny probability, we'd just have unlimited confusing reports.

There has to be some materiality standard. And you don't want to give blackmail potential to people that are mad at you and make claims. I'm not saying that's what the SEC was doing, but —

WARREN BUFFETT: No, but it could happen with a lot of — (laughter) it could happen with individual —

CHARLIE MUNGER: It could happen with other people, yeah.

WARREN BUFFETT: And I know what percentage of Wells notices result in something that's material to the company. But my guess is that there are plenty of them that wouldn't be.

And of course, the bigger the company, the less likelihood that it would be material.

And then your other question about who I would want running, if Lloyd wasn't running it?

I guess if Lloyd had a twin brother, I'd go for him. But I've never given that a thought.

We think about who would run Berkshire — (laughs) — but there's really no reason to think about that.

There wasn't any reason to think about, in my view, back in 1970, when they had the Penn Central problem whether somebody other than Gus Levy should be running Penn Central — be running Goldman.

And when the event happened in connection with the Boskey thing, John Weinberg was running it then. And I thought that John Weinberg was a terrific manager of Goldman.

So I just don't see this as reflecting on Lloyd.

I think, as Charlie — and we've got strong feelings. There's plenty of stuff goes on Wall Street that we don't like. But we do not think it's specific — we know it isn't specific — to Goldman.

Charlie?

CHARLIE MUNGER: Well, there are plenty of CEOs I'd like to see gone in America. (Laughter)

But Lloyd Blankfein is not one of them.

WARREN BUFFETT: OK, number 3. (Laughter)

I was afraid he might start naming names. (Laughter)

11. Driver feedback technology

AUDIENCE MEMBER: Hello. My name is David Clayman (PH) and I come from Chicago, Illinois. This question is for Mr. Buffett and Mr. Gates, principally as Berkshire shareholders, but also as Bill and Melinda Gates Foundation trustees.

The leading cause of death for Americans my age are motor vehicle crashes. Over 6 million occur each year and you insure a significant number of these crashes.

The World Health Organization ranks motor vehicle crashes as the 11th leading cause of death in the world.

A new category of technologies are reaching the market. These technologies not only reduce driver distraction but also deliver positive feedback to drivers to help make drivers aware of how well they're driving or how much better they could be doing.

Will GEICO or the Gates Foundation make an aggressive and visible bet on driver feedback technologies to stimulate road focus and save life, liberty, property, and insurance premiums?

I have a note here for Mr. Gates and Mr. Buffett. I'd be happy if I could get these to you somehow.

WARREN BUFFETT: OK, I think we know your position. (Laughter)

The Gates Foundation, I think, has a fairly major initiative, along with Mayor Bloomberg, in terms of cigarette smoking. And I think you'll find a whole lot more people have been affected by that than auto accidents.

Auto accidents per mile driven, auto deaths, have diminished. I thought I heard a figure of six — I thought the figure was more in the 30,000 to 40,000 range actually, but it's diminished over the years.

You know, there have been a lot of things done to make cars safer. I'm not sure that cell phones and BlackBerries are among them. (Laughter)

And I think they actually are — there will be more people die in auto accidents because the cell phone and various other instruments were invented than would otherwise be the case. I don't know how significant that item will be.

But everybody has an interest in bringing down fatalities. And GEICO has a very active safety program, testing cars, doing all kinds of things, working usually in conjunction with other insurance companies.

I do not think that — The Gates Foundation has fairly specific and intelligent, in my view, guidelines as to where they direct their activities, and they believe in focus, so they are not going to try and solve every problem in the world.

But I can assure you that the insurance industry, as well as auto companies generally, are continuously working to make cars safer.

Charlie?

CHARLIE MUNGER: I've got nothing to add. (Laughter)

WARREN BUFFETT: OK.

12. Berkshire shares not affected by Buffett's donations

WARREN BUFFETT: Carol?

CAROL LOOMIS: This question also concerns the Gates Foundation but it's entirely different.

"One of your owner-related business principles says that you will attempt, through your policies and communications, to keep Berkshire's stock price rational.

"Yet every year, you give large amounts of your Berkshire stock to the Gates Foundation. And my understanding is that more will go to the foundation when you die."

By the way, I forgot to say this is from Michael McLaughlin (PH) of Omaha, who continues: "Already, we have seen that foundation regularly sell Berkshire stock, and it will sell more because its purpose is to give money to charities not hold the stock forever.

"Won't the foundation selling create a downward pressure on the stock because as much as 25 percent of it will be turned over?"

WARREN BUFFETT: Yeah. Basically, there's five foundations I give money to every year, every July.

And the amount I would be giving now, it's a 5 percent declining balance, the amount I would be giving now would amount to about 1 1/2 percent of the shares outstanding annually, something like that.

So if they sell, and they will, that stock fairly promptly after receipt in order to make charitable gifts, you basically have 1 1/2 percent of the shares being sold annually.

Now, if you contrast that with trading on the New York Stock Exchange, which averages well over 100 percent of the amount of shares outstanding, it's not anything unusual at all in the way of sales.

And it is a free country. I mean, I could sell 10 percent of the company if I wanted to. I've never sold a share in my life, and I never plan to sell a share in my life. And I won't sell a hell of a lot of shares after I die either, probably. (Laughter)

If 1.5 percent of the outstanding shares at Berkshire move the price down in a year, it probably deserves to move down.

Charlie?

CHARLIE MUNGER: Well, of course, I regard that degree of stock distribution to aid charity as almost a nonevent, and it may actually have been a constructive event, in terms of getting Berkshire into the Standard and Poor's indexes and so on.

WARREN BUFFETT: Excuse me.

CHARLIE MUNGER: I think you've got more important things to worry about. (Laughs)

WARREN BUFFETT: If I'd owned 100 percent of Berkshire, for sure it would not have been in the S&P 500. It was always a problem of concentration.

So if by selling down it enhanced — and it did to some degree — enhanced the chances of Berkshire being in the S&P 500, that probably accounted for maybe 7 percent or so of the capitalization, some number like that.

So that was extraordinary, you might call it, buying that was brought in, to some extent because of the diminution of my own holdings.

As Charlie said, I would say if none of the stock had been given away in the last four years, I don't know whether — I have no idea — whether the stock would be selling a little higher or a little lower. I think that's sort of an even money bet.

13. Buffett: "I would not run from the United States"

WARREN BUFFETT: OK, number 4.

AUDIENCE MEMBER: Hello, Mr. Buffett. Hello, Mr. Munger. My name's Vern Cushenbery. I'm from Overland Park, Kansas.

What do you see as the biggest challenge facing the United States economy relative to other countries? And what are the implications of that with regard to investing globally over the next decade?

WARREN BUFFETT: Charlie? (Laughter)

CHARLIE MUNGER: Thank you for steering that easy problem to me. (Laughter)

I think the answer to that is that by and large we haven't made our way in life by having great global allocations systems.

Berkshire's attitude, generally, is to find things that seem sensible to us and to concentrate, to some extent, in those matters. And then let the world economy and the world's currency fluctuations fluctuate as they will.

I do think we'd prefer some countries to others, and the more responsible the countries seem, the more comfortable we are. Wouldn't you agree with that?

WARREN BUFFETT: Yeah. But we —

CHARLIE MUNGER: But beyond that, we can't help you very much because we really don't have a global allocation system at Berkshire, unless Warren is keeping it secret from me. (Laughter)

WARREN BUFFETT: Not that one. (Laughter)

We did not buy Burlington Northern with the idea of moving it to China or India or Brazil — (laughter) — and we love that. We love the fact that Burlington Northern is in the United States.

The biggest threat we have is some kind of a massive nuclear, chemical, or biological attack of one sort or another.

And if you would say what are the probabilities of that over a 50-year period, it's pretty high. Over a one-year period, it's very low.

But if you talk about whether the qualities that have led to the last 220 years of incredible progress, with a lot of hiccups, but incredible progress, you know, in the status of mankind that we've experienced in these two centuries compared to any two centuries you want to pick out in history, this country is remarkable and its system is remarkable.

And it does unleash human potential like has never been seen before.

This crowd here is not smarter than a similar crowd 200 years ago, and they don't work harder.

But, boy, do they live differently. And they live differently because this system has enabled fairly ordinary people, over a period of time, to do extraordinary things. And that game isn't over.

There is nothing that says we have come close, in my view, to the limits of what humans can achieve.

We probably don't even know our own potential, any more than the people in 1790 knew their own potential. I mean, they thought it would be great if somebody finally came along with some farm tool that let them work 10 hours a day instead of 12 hours a day.

So I — there's no reason — you know, I hope the rest of the world does well, and I think they will do well. And it is not a zero-sum game. If China and India do well, that does not mean we do worse; it may mean we do better.

So we are not — it's not what they get is taking it away from us. But I would be perfectly content if Berkshire Hathaway were forced in some way to limit its investment to the opportunities available in the United States.

We would have plenty of opportunities. I'd rather have the whole world, obviously, in terms of opportunities, but there will be ample in this country. I would not run from the United States. OK. (Applause)

14. No rush to find new investment chief

WARREN BUFFETT: Becky?

BECKY QUICK: This is a question that has to do with the Berkshire succession plans. It comes from Craig Merrigan in Sprucegrove who asks, "How did the four potential candidates for Berkshire's CIO position perform over the course of 2008 and 2009?

"Did any of the four employ leverage? And have any of the four now been excluded from consideration?"

WARREN BUFFETT: Yes, the answer to that is that, in 2008, I reported to you last year that they didn't, I think we got a question like that last year, they did not distinguish themselves. 2009, they did pretty darn well.

It's not — I would say that the four — it's not the same four. I would say that none of them, Charlie, I believe you may use leverage at all. Do you think so?

CHARLIE MUNGER: Well, the one with which I'm most familiar made a little over 200 percent using leverage of zero.

WARREN BUFFETT: Well, that narrows it down. (Laughter)

The potential investment people, that list will be subject to more movement around than probably the CEO succession.

And it's really far less urgent. If I die tonight, there will be a new CEO in place in Berkshire within 24 hours, and all the directors know who it would be, and they're all comfortable with it.

And there should be somebody in place within 24 hours.

The investments, they don't need anything done next week. I can go on vacation on investments. And we could go — we wouldn't do it, or the directors wouldn't do it, I won't be there — but they could wait a month, they could wait two months.

I mean, the Coca-Cola isn't going to go away, Procter & Gamble's not going to go away, American Express. There's no great need to be doing things day by day. We don't do things day by day.

So they can be fairly leisurely in working out, probably in conjunction with a new CEO, who they would like to bring in, how they would like to compensate them, what the number might be.

That is not fixed in stone at all. The one thing I can tell you is that there are some very able people who would like very much, I think, to be managing money for Berkshire, and who would do a good job, and who are familiar to at least some of the directors. And that problem would get solved.

The CEO problem — which is not a problem — but the CEO question, you want an answer for right now and you want to be prepared to implement it, you know, the next day, although I did just have a physical. (Laughs) Came out fine. (Laughter)

Charlie? (Applause)

My doctor isn't here today so I will tell you, it drives him nuts because I eat like I do and he can't find anything wrong — (laughs) — and he wants to, believe me. (Laughter)

And with that —

CHARLIE MUNGER: Well I'm — (Laughter)

I am not the most optimistic of the two people up here. And — (laughter) — yet, I'm quite optimistic that the culture of Berkshire will last a long, long time and will outlast, greatly, the life of the founder. I think it's going to work.

WARREN BUFFETT: I really think — I mean, we shouldn't be getting into superlatives — but I think we have as strong a culture, and as distinctive a culture, in terms of managers, ownership, the whole works, of any really large company in the country.

And it's taken a long time to develop, but it becomes self-reinforcing after a point. And we love it, and I think they'll love it after I'm gone. (Applause)

Don't clap there. (Laughter)

15. Good, but not brilliant, returns for businesses needing capital

WARREN BUFFETT: OK, number 5.

AUDIENCE MEMBER: Hi, I'm Steve Fulton (PH) from Louisville, Kentucky. Once again, I gave up a box seat to the Kentucky Derby to come ask you a question. (Laughter)

And I appreciate that opportunity.

My question's focused on the shift, if you will, to investing in the capital-intensive businesses and the related impact on intrinsic value.

You again stated in the annual report that best businesses for owners are those that have high returns on capital and require little incremental capital.

I realize this decision is somewhat driven by the substantial amounts of cash that the current operating companies are spinning off, but I would like you to contrast the requirement for this capital against the definition of intrinsic value, which is the discounted value of the cash that's being taken out.

And just for all of us to be aware, you've mentioned the fact that you think these businesses will require tens of billions of dollars over the few decades, and just the time value of that, I'd like to understand a little bit more of your insight into that.

WARREN BUFFETT: OK. Although it's clear you understand the situation quite well, and it's — as important a question as you could ask, virtually, I would say, at Berkshire.

We are putting money into good — big money — into good businesses from an economic standpoint. But they are not as good as some we could buy when we were dealing with smaller amounts of money.

If you take See's Candy, it has 40 million or so of required capital in the business, and, you know, it earns something well above that.

Now, if we could double the capital, if we could put another 40 million in at anything like the returns we receive on the first 40 million, I mean, we'd be down there this afternoon with the money.

Unfortunately, the wonderful businesses don't soak up capital. That's one of the reasons they're wonderful.

At the size we are, we earn operating earnings, $2.2 billion, or whatever it was in the first quarter, and we don't pay it out, and our job is to put that out as intelligently as we can.

And we can't find the See's Candies that will sop up that kind of money. When we find them, we'll buy them, but they will not sop up the kind of money we'll generate.

And then the question is, can we put it to work intelligently, if not brilliantly? And so far, we think the answer to that is yes.

We think it makes sense to go into the capital-intensive businesses that we have. And incidentally, so far, it has made sense. I mean, it's worked quite well. But it can't work brilliantly.

The world is not set up so that you can reinvest tens of billions of dollars, and many, many tens over time, and get huge returns. It just doesn't happen.

And we try to spell that out as carefully as we can so that the shareholders will understand our limitations.

Now, you could say, "Well, then aren't you better off paying it out?"

We're not better off paying it out as long as we can translate, as you mentioned, the discounted value of future cash generation. If we can translate it into a little something more than a dollar of present value, we'll keep looking for ways to do that.

In our judgment, we did that with BNSF, but the scorecard will be written on that in 10 or 20 years.

We did it with MidAmerican Energy. We went into a business, very capital intensive, and so far, we've done very well, in terms of compounding equity.

But it can't be a Coca-Cola, in terms of a basic business where you really don't need very much capital, if any, hardly. And you can keep growing the business if you're lucky, if you've got a growing business.

See's is not a growing business. It's a wonderful business, but it doesn't translate itself around the world like something like Coca-Cola would.

So I would say you've got your finger right on the right point. I think you understand it as well as we do. I hope we don't disappoint you, in terms of putting money out to work at decent returns, good returns.

But if anybody expects brilliant returns from this base in Berkshire, you know, we don't know how to do it.

Charlie?

CHARLIE MUNGER: Well, I'm just as good at not knowing as you are. (Laughter)

16. Making loans vs. buying stock in credit crisis

WARREN BUFFETT: OK, Andrew? (Laughter)

ANDREW ROSS SORKIN: This question comes from Victor and Amy Liu (PH) who are shareholders from Santa Monica, California.

And they ask, "When you made investments during the financial crisis in February of 2009, why did you lean towards debt instruments rather than equity?

"For example, why did you invest $300 million in Harley-Davidson at 15 percent interest instead of buying equity when the shares were at $12? Today, they're at $33.

WARREN BUFFETT: Well, I would say that if I were writing that question now, I might write the same question. But I'm not so sure you would have written the same question in February.

Now, there were different risk profiles, obviously, in investing. And the truth is, I don't know whether Harley-Davidson equity is worth $33 or $20 or $45. I just have no view on that.

You know, I kind of like a business where your customers tattoo your name on their chest or something. But — (laughter) — figuring out the economic value of that, you know. I'm not sure even going out and questioning those guys I'd learn much from them. (Laughter)

But I do know, or I thought I knew, and I think I was right, that, A) Harley-Davidson was not going out of business. And that, B) 15 percent was going to look pretty damned attractive.

And the truth is, we could probably sell those bonds, I don't know, probably at 135 or something like that. So we could have a very substantial capital gain, a lot of income.

I knew enough to lend them money; I didn't know enough to buy the equity. And that's frequently the case. And, you know, we love buying equities, but we love buying the Goldman preferred at 10 percent.

Now, let's say Goldman, instead of offering me the 10 percent preferred and warrants had said, "You can have a 12 percent preferred, non-callable," I might have taken that one instead. I mean, the callable — so there's a tradeoff involved in all these securities.

And obviously, if I think I can make very good money, as we did on Harley-Davidson, with a very simple decision, just a question of, "Are they going to go broke or not?" as opposed to a tougher decision, "Is the motorcycle market going to get diminished significantly? And, you know, are the margins going to get squeezed somewhat?" And all of that. I'll go with a simple decision.

Charlie?

CHARLIE MUNGER: Well, of course your one good answer, that you simply didn't know enough to buy the stock but you did know enough to buy the bond, is a very good response.

The other side to that is, after all, we are a fiduciary for a lot of people, including people with permanent injuries and et cetera, et cetera. And to some extent, we are constrained by how aggressively we buy stocks versus something else. And you mix those together, why, you get our investment policy.

I think, generally speaking, you raise a very good question. I think very often, when you're looking at a distress situation and buy the bonds, you should have bought the stock. So I think you're looking in a promising area.

WARREN BUFFETT: Yeah. Ben Graham wrote about that in 1934, actually, in "Security Analysis," that in the analysis of senior securities, the junior securities usually do better, but you may sleep better with the senior securities.

And we, as Charlie points out, we have 60 billion of liabilities to people in our insurance operation that, in some cases, extend out for 50 years or more.

And we would never have all of our money in stocks. I mean, we might have very significant amounts, but we are running this place so that it can stand anything.

And a couple years ago, we felt very good about where that philosophy left us.

I mean, we actually could do things at a time when most people were paralyzed, and we'll keep running it that way.

17. Creating a good corporate culture is easier than changing a bad one

WARREN BUFFETT: Area 6.

AUDIENCE MEMBER: Mr. Munger and Mr. Buffett, thanks for having us here.

I recently joined a new organization and for me to succeed there, the culture of the organization needs to change.

So I'm interested in hearing your thoughts about how do you change culture of an organization? And if you're building a new organization, then how do you make sure you have a strong and unique culture?

WARREN BUFFETT: Well, I think it's a lot easier to build a new organization around a culture than it is to change the culture of an existing organization. It is really tough. And I like that fact, in the sense of Berkshire.

I mean, it would be very tough to change the culture of Berkshire. It's so ingrained in all our managers, our owners. Everything about the place is designed, in effect, to reinforce a culture.

And for anybody to come in and try and change it very much, I think the culture would basically reject it.

And the problem you describe, if you want to walk into, you know, whatever kind of organization you want to name — I've got to be a little careful here — it is tough to change cultures.

Charlie and I have bucked up against that a few times. And I would say if you have any choice in the matter, I would much rather start from scratch and build it around it.

But that was the — I've had the luxury of time with Berkshire. I mean, it goes back to 1965, and there really wasn't much of anything there, you know, except some textile miles, so I didn't have to fight anything.

And as we added companies, they became complementary and they bought into something that they felt good about, but it took decades.

And, you know, at Salomon, I attempted to change the culture, in terms of some respects, and I would not grade myself A+ in terms of the result.

Charlie?

CHARLIE MUNGER: Well, I'm quite flattered that a man would say that he's in a new place where he can't succeed unless he changes the culture and he wants us to tell him how to change the culture.

In your position, my failure rate has been 100 percent. (Laughter) And —

WARREN BUFFETT: Yeah, Charlie started a law firm. Go back to, what, 1962, Charlie, what was it?

CHARLIE MUNGER: Yeah. I can move out but I couldn't change the culture. (Laughs)

WARREN BUFFETT: We can tell some interesting stories from the old law firm, but we'll go on to Carol now.

18. Ajit Jain can't be replaced

CAROL LOOMIS: This question is from Jon Brandt of Ruane, Cunniff in New York City.

"You have emphasized many times how important Ajit Jain is to Berkshire and National Indemnities reinsurance operations. So I'm wondering whether you expect National Indemnities' float to continue to grow or instead to unwind after he retires?"

Well, of course we don't think —

WARREN BUFFETT: No.

CAROL LOOMIS: — Ajit will retire.

"Another way of asking that is whether National Indemnity has competitive advantages beyond Ajit, or is all of its value, above book value, tied up in Ajit and the runoff profits from the deals he has already put on the books?"

WARREN BUFFETT: His operation has competitive advantages that go beyond Ajit, but they have been developed by Ajit, and he has maximized them, and he knows how to use them in a way that's far better, in my view, than anyone else in the world could.

But they don't all go away. I mean, he has a cadre of about 30 people who are schooled in it, you know, in a way that would make the Jesuits look quite liberal, in terms of what they let their membership do.

Ajit — you can't imagine a more disciplined operation than Ajit has. But Ajit cannot be replaced. On the other hand — well, I'll state that absolutely, categorically — it would be a huge loss to Berkshire if anything happened to Ajit.

But it would not mean that the Berkshire Hathaway reinsurance operation would not continue to be an extremely special place that would do large deals that nobody else would do, that could think and act quickly in ways that virtually no other insurance organization can.

We've got something very special in that unit, and then we've got the most special of leaders in Ajit.

As to our float, every year I think our float has peaked. I never see how we can add to it. It's up to 60 billion-plus now. And we have things like the Equitas deal that are runoffs.

Every day, in insurance, some of the float runs off, it's just that we add additional amounts. And like I say, I was ready to quit, you know, at 20 billion and think, you know, that we'd reached the apex of it.

But it's over 60 billion. Things keep happening.

Berkshire has become, in my view, the premiere insurance organization of the world, and we've got — a lot of good things come from that.

I don't see how, with 60-odd billion of float, I don't see how we can increase it significantly unless we would make some very significant acquisition. And I don't rule that out, but there's nothing imminent on that.

But we will not organically grow the float of Berkshire at a fast clip from here. It can't be done. And we may fight to stay even.

But we may come up with something out of the blue. I mean, who would have known that Equitas was going to come along three years ago? There are various things that could happen of a positive nature.

But when I tell you about the value that Ajit has added to Berkshire, believe me, if anything, I've understated it.

Charlie?

CHARLIE MUNGER: Well, I agree with you, and I've got nothing to add.

WARREN BUFFETT: Well. (Laughter)

19. Opportunities in India, but government paralysis is a deterrent

WARREN BUFFETT: In that case, we'll go to number 7. Here we are.

AUDIENCE MEMBER: Good morning, Warren and Uncle Charlie. I have to call you Uncle because my parents are from India and we call anybody older than us Uncle or Auntie.

WARREN BUFFETT: You may have to call us great uncle. (Laughter)

SABRINA CHOOG: I'm Sabrina Choog (PH) from Los Angeles and I'm 12 years old.

My mom owns a bunch of Berkies, which obviously I'm gonna get one day. (Laughter)

My question is, 17 percent of the world is Indian. That's one of six people in the world.

India's economy has been growing at 7-8 percent per year. At this rate, it will surpass total U.S. GDP in 2043.

Can you please tell me why aren't you investing in India?

WARREN BUFFETT: Well, it's a good question — (applause) — and we have connections there, obviously.

But it hasn't — in the insurance field, there have been very distinct limitations on what a non-Indian company — a non-Indian-owned company — can do.

We've looked a lot, mostly through Ajit. We've looked a lot at the possibility of being in the insurance business there.

And actually, as of yesterday, I agreed next March to go to India because our ISCAR business — (applause) — is doing very well there.

But, I don't know what they think I can do additionally, but in any event they said, "Come on to India in March and see if we can't expand it substantially."

India is going to grow dramatically, and ISCAR belongs in every industrial country in the world. I mean, we are very basic to industry, and we've done wonders for our customers all over the world.

And we have a good-sized operation in India. But ISCAR management hopes that if we take a trip over there in March, we might land a few more accounts.

We do not rule out India, believe me, in looking at either direct investments or marketable securities.

In fact, POSCO, Charlie can describe the POSCO situation better than I, but they have big plans for India.

Charlie?

CHARLIE MUNGER: Yeah, the one trouble that India presents is that its governments tend to have a fair amount of paralysis, endless due process, endless objection. Zoning is hard, planning permissions are hard, et cetera.

And that has caused the very wise founder of modern Singapore to say that China is going to grow much faster than India, because their government causes less paralysis.

So these countries are different in the opportunities they present.

But of course we like India, and we — kind of admire the democracy that causes the paralysis, but we still don't like the paralysis.

WARREN BUFFETT: It's not ordained, however. You know, if you'd looked at China 40 years ago, you wouldn't have dreamt of what would happen.

So countries do learn from each other, I mean, and they should. I mean, I think they've learned many things from the U.S. that they adapt — I'm not talking about India specifically, I'm talking about other countries generally.

They don't take on everything we have. But if you looked at a country that was as successful as this country has been over a couple hundred years, you might figure that there could be a few good ideas you could steal.

And I think that you're seeing that around the world, and maybe they can improve on us.

So I don't think I would feel that any impediments to growth that existed now are necessarily ones that have to be permanent. Indian — we ought to figure out a lot of ways to do business in those countries.

My preference is, obviously, in something like insurance, which I understand, and where we've got terrific people. Both China and India do limit us right now quite significantly in what we can own of a company.

And I really hate to take some of our managerial talent and put them to work for something we only own 25 percent of. I'd rather have them working on something we own 100 percent of.

So it will depend on the laws. But people in India are going to be living a lot better 20 years from now than they are now, as they are in China, and as they are in the United States.

20. "Prospects for significant inflation have increased"

WARREN BUFFETT: OK, Becky.

BECKY QUICK: This question comes from Jonathan Marsh (PH) in Sydney, Australia.

He says, "Many shareholder letters in the 1970s and 1980s discussed various aspects of inflation and its potentially destructive effects on investment.

"The 2008 letter mentioned the current Federal Reserve's quantitative easing could again bring about inflation, yet the 2009 letter made no mention of this threat.

"What are your current thoughts on the risk level of higher inflation in the United States?"

WARREN BUFFETT: Well, I may be a little biased on this because I've always worried a lot about inflation, and there's been a lot of inflation.

You know, Charlie's pointed out, you know, since I was born in 1930, the dollar's depreciated by well over 90 percent. But as he also points out, we've done OK. So it isn't the end of the world, necessarily.

I think that the prospects for significant inflation have increased, you know, with what — not only here, but around the world, with the situation that governments have either been forced into or elected to embrace.

And they may well have been the correct responses, but we may find that weaning ourselves from the medicine was harder than solving the original illness. And the medicine, you know, has been massive dosages of debt. And, like I say, not only here, but elsewhere.

And I don't see any way that countries running very high deficits, relative to GDP, don't have a significant diminution in the value of their currency over time.

Now, it could be done for a while. I mean, we've done it through wars and everything else, and maybe we will correct the situation.

But if we don't, I wrote an op-ed piece in The New York Times about a year ago on this.

And I do think that if you wanted to bet on higher or lower inflation, bet your life on it, I'd bet on higher, and maybe a lot higher.

Charlie?

CHARLIE MUNGER: Well, again, I agree. (Laughter)

21. Munger: McDonald's is better educator than universities

WARREN BUFFETT: OK, number 8.

AUDIENCE MEMBER: My name is Lucas Rineswell (PH) and I'm from Whangerei. And in case you don't know where Whangarei is, it's in New Zealand.

At the moment, it's quarter past 4 in the morning in New Zealand, so I'd be safe to say that my wife will be sound asleep.

So I'm an idealist. What can be done to educate the children about the sage of Omaha's philosophy of successful money management, and to prevent another reoccurrence of the financial mayhem that we've all seen and experienced in the 2007 and 2008 years?

WARREN BUFFETT: We will see financial mayhem, as you put it, from time to time. I hope we reduce it, I hope we reduce the magnitude, et cetera.

But people do crazy things, and it's not a function of IQ, and sometimes it's not a function of education.

In fact, I would argue that some of the problems, and not a small part of what's occurred in the last 30 years, has been because of what became the prevailing conventional wisdom in the leading business schools.

So, I'm not particularly positive about modifying the madness of mankind from time to time.

The first part though, however, is the kind of thing in our movie. I really do believe that getting good financial habits — other kinds of habits, too, but what I'm thinking about here is primarily financial habits — getting those early in life is enormously important.

I mean, Charlie and I were probably lucky that we grew up in households where we were getting all kinds of unspoken lessons, even, in terms of how to handle our life, but in particular, how to handle finances.

And not everybody gets that. And Andy Heyward, who did a terrific job with "Liberty's Kids" in teaching about the history of America three or four years ago, has come up with this idea of "The Secret Millionaires Club."

And if we get through to 2 or 3 percent, or 5 percent, or whatever it may be, of the kids, in terms of giving them some ideas they might not otherwise have, and they build some habits around it, you know, it isn't going to change the world, but it could be a plus in their lives.

It's very important to get the financial habits. And really, Charlie's a big fan, and so am I, of Ben Franklin's. And he was teaching those habits a couple hundred years ago. So we're just going to try and take Ben Franklin's ideas and make them entertaining for children's stories, in effect.

And I think that's about what you should be doing. I don't think — I think it's much more important to have good learning at the elementary level than, frankly, to have it in terms of advanced degrees and graduate schools.

Charlie?

CHARLIE MUNGER: Yeah, there are other great educational institutions in America to help handle this problem. One of the ones I admire most is McDonald's.

I had fun once at a major university when I said I thought McDonald's succeeded better as an educator than the people in the university did.

And what I meant was McDonald's hires a lot of people who are quite marginal at the very start of their working career. And they learn to show up on time for work and observe the discipline.

A lot of them go on in employment to much higher jobs. And they've had an enormous constructive effect about educating into responsibility a lot of people who were threatened with not making it.

So I think we all owe a lot to the employment culture of McDonald's. And it's not enough appreciated.

WARREN BUFFETT: I learned a lot from a paper manager at The Washington Times-Herald named John Daley (PH).

CHARLIE MUNGER: Yeah.

WARREN BUFFETT: And probably 13 years old or 14 years old, and I was lucky to run into him.

Basically, my life would have been somewhat different if I didn't get those lessons from a guy that taught them to me in a very enjoyable manner. He wasn't preaching them to me, he just told me I'd do better if I did this and that, and it worked.

So you're lucky if you've got the parents to teach you that. But anything that brings it into a broader teaching environment, I'm for.

And like I say, I really think Andy has got a terrific project in this and we'll see how it goes.

22. Giving away everything is a "terrific tax dodge"

WARREN BUFFETT: And speaking of Andrews or Andys, Andrew? (Laughs)

ANDREW ROSS SORKIN: So we received about a dozen questions, at least I did, on the subject of your taxes, Mr. Buffett, from shareholders no less. And I chose what I hope is the most polite version of the question.

WARREN BUFFETT: I hope so, too. (Laughter)

ANDREW ROSS SORKIN: This one came from Tom Cornfeld (PH).

And he says, "Mr. Buffett is often quoted as saying that his assistant pays at a higher tax rate than he does, because of the disparity between the long-term capital gain and ordinary income tax rates.

"The implication is that taxes should be much higher on people like himself.

“However, I note that Mr. Buffett has donated virtually 100 percent of his estate to charitable organizations. Because he has owned his Berkshire shares for many, many years with no dividend distributions, it is virtually certain that the bulk of his estate will therefore never be subject to taxation by the U.S. government.

“My question is that, if Mr. Buffett feels that he should pay more taxes, how should the tax system be changed?”

WARREN BUFFETT: Well, you could have a wealth tax, would be one way. I mean, you could tax — I don’t know how many countries do that now, Charlie.

In effect, you have that with a property tax in certain ways, but you could have a wealth tax. I would say this: he is absolutely correct. If you want to give away all of your money, it’s a terrific tax dodge. (Laughs)

Although, I will say this also. In the tax return I just filed, on the “charitable contributions” line, I have an unused carry-forward of something over $7 billion that I haven’t gotten a deduction for. (Laughter)

But I welcome the questioner or anybody else following my tax dodge example and giving away their money. They will save a lot of taxes that way, and the money will probably do a lot of good. (Laughs) (Applause)

Taxes — if we continue to spend 25 percent or 26 percent of GDP, as a country, and we made those elections through our representatives, we are not going to be able to keep taxation at 15 percent of GDP.

Now, we’ve got a deficit commission. You couldn’t have two better guys than Erskine Bowles and Alan Simpson heading it. You have got two classy individuals there. They’re smart, they’re decent. People like to work with them. I mean, the president made a great choice in picking those two.

But in the end, they’re either going to — they’re going to have to recommend, and it will be some combination of taxes quite a bit higher, and expenditures quite a bit lower, and then they won’t be quite as popular as they are today.

And I doubt very much if you’re going to be able to increase taxes significantly as a percentage of GDP and do it, essentially, from taxing lower income people a higher amount. So it’s going to be an interesting equation to solve and I wish them the very best. They’re two terrific fellows.

Charlie, what do you have to say about taxes?

CHARLIE MUNGER: Well, I think those who worry about your unfairly low taxes should be consoled by the fact that eventually you pay 100 percent. When you die and they ask, “How much did old Warren leave?” the answer will be, “I believe he left it all.”

WARREN BUFFETT: And I hope they emphasize old. (Laughter)

No, it’s kind of interesting. I mean, just take Berkshire. You know, essentially, I will never sell a share of Berkshire.

But I’ve known that for a long, long, long time. So basically, that’s fine.

If I was a trustee for some trust and they owned Berkshire, which, in effect, I am, you know, it’s a lot of fun to run and everything. And I’ve got everything in life I could possibly need, and I always will.

And, you know, in the end, because Berkshire’s done well, we can give away the rest.

Now, if you want, you can argue that if I gave it all to the federal government instead of giving it to the charities, society would be better off, but I don’t think many of you would want to hold that position. (Laughter)

23. The best defense against inflation

WARREN BUFFETT: Number 9. (Applause)

AUDIENCE MEMBER: Hello.

WARREN BUFFETT: Hi.

AUDIENCE MEMBER: Mr. Buffett, my name is Jeff Chen (PH) from San Francisco.

I wanted to ask you a little bit more detail about the inflation question, wanted to know what are the key metrics you look at when you evaluate future inflation and your valuation methodology?

And what are some of the catalysts that’s going to cause the inflation to rise in the future?

WARREN BUFFETT: You give me credit for more brain power than I actually bring to the question.

I don’t think you can look at any given metric in any given month and figure out exactly what that’s going to do to inflation rates because, so much — if it gets going so much, it creates its own dynamic.

You know, we saw that in the late 1970s and early 1980s until Volcker came along with a sledgehammer to the economy.

But we had people running from money at that time, and, of course, we got the prime rate up to 21-and-a-fraction percent, and we got governments up to very close to 15 percent.

So we had a little demonstration project 30 years ago in this country of what happens when people get fearful about money.

And if we were to continue the policies we have now, I would think something — a rerun of that, you know, could be fairly likely.

But, you know, trend is not destiny. We have the power to do things, and Congress has the power. And that's why I wrote that op-ed piece a year ago, to sort of flash a yellow light.

We have the power to control our future, and we do it through elected representatives.

I will just go back to the conclusion that, based on what I see happening, American people, government around the world, I think currencies are a poorer bet than they have been for some time. But I have no idea what that means in terms of rates of inflation. And I hope I'm wrong on it.

I would say if inflation ever really gets in the saddle, that it gets very unpredictable as to how fast it can accelerate and how faith in institutions can break down. A lot of things — a lot of bad things could happen with it.

Charlie?

CHARLIE MUNGER: Yeah. The best defense, of course, is to contribute as much as you can to the civilization and expect to counter inflation's effects by your own merits.

That's the safest antidote. The idea that just by outsmarting other people you can somehow profit from the inflation is a much more dangerous course of action.

WARREN BUFFETT: Yeah. Your money can be inflated away but your talent can't be inflated away. If you're the best brain surgeon in Omaha, or the best painter, or whatever it may be, you will always command your share of the resources around you, you know, whether the currency is seashells or $10 million notes, or whatever it may be.

Talent is a terrific asset to deal with any kind of a monetary situation. But Charlie and I have to fall back on money.

WARREN BUFFETT: Carol? (Laughter)

CHARLIE MUNGER: Too late for talent.

WARREN BUFFETT: Yeah.

24. Problems at NetJets

CAROL LOOMIS: This question comes from Douglas Ott of Banyan Capital Management in Atlanta.

"In your recent letter to shareholders, you wrote that it was clear you failed us in letting NetJets descend into such a condition that it has recorded an aggregate pre-tax loss over the 11 years we have owned the company.

"What specifically were the errors committed by you and the previous CEO? What have you learned? And how will you prevent such a thing from happening with any of our other businesses in the future?"

WARREN BUFFETT: Well, I probably won't. (Laughs)

We'll make mistakes from time to time, and some of our managers may make mistakes. And sometimes you run into conditions that are really extraordinary.

But the mistake, the biggest mistake made with NetJets is essentially we kept — we were buying planes at prices that were fictitious, in terms of the price at which we would later be able to sell them. And there's a certain time lapse involved in buying fractional shares.

There's a lot of explanations for it. But in the end, we didn't properly prepare for what was obviously happening. And we lost a lot of money, a good bit of which was attributable to the write-down of planes, which you could call is our inventory, where we bought them at X and we couldn't sell them at X or 90 percent of X.

Some of those were new planes that we should not have taken on, and many of them were planes coming back from owners.

We also let our operating costs get out of line with recurring revenues.

But, you know, I've made plenty of mistakes. I stayed in the textile business for 20 years. I knew it was a lousy business. Charlie was telling me it was a lousy business in the first year, the second year.

And 20 years later, I woke up. I was like Rip Van Winkle. I mean, it's kind of depressing when you think about it. (Laughter)

But the one thing we will guarantee, we'll make some mistakes. It was a big mistake at NetJets, $711 million is the figure.

We are now operating at NetJets at a very decent profit. The figures you saw there on the screen reflect a pretax profit of well over $50 million in the first quarter, and that's not with any big boom in plane sales or anything else. It's just with a business plan that involves not an iota of diminution of safety or service, but just got things in line that needed to be in line.

And I give Dave Sokol enormous credit. I mean, he turned that place around like nobody could have, and all the shareholders here owe him a big vote of thanks for that.

Charlie? (Applause)

CHARLIE MUNGER: Yes, but I believe that the episode ought to be reviewed in context.

If we buy 30 big businesses and generally let the people who run them successfully and before run them with very little interference from headquarters, and it works out 95 percent of the time very well, and we have one episode when the basic franchise was protected but we lost profit opportunities for a while, it's not a big failure record.

Nor does it indicate that we should stop being pretty easy with the remarkable people who join us with their companies.

WARREN BUFFETT: No, it does not change our management approach at all. I think that we have gotten performance, overall, from managers that are beyond the dreams I would have had when I was first putting this company together.

So, it's been a — we let managers do their stuff. And I think —

CHARLIE MUNGER: It's worked for us, net.

WARREN BUFFETT: Oh, it's worked — it's worked very well for us, net. And we're going to keep doing it.

25. BYD investment shows the "old men" are still learning

WARREN BUFFETT: Number 10.

AUDIENCE MEMBER: Mr. Buffett and Mr. Munger. This is Eric Chang from Beijing, China.

First, thanks for the occasion for us to engage with you like this, and also for inspiring young people to learn. Mr. Munger has described you as an incredible learning machine in terms of learning new areas, and expanding your circle of competence.

So I would like to understand is if you can make it more concrete, recently you make investment in BYD, a company in China that makes batteries and also electric cars which are, arguably, technology companies.

So can you sort of go through that example and see how you sort of like analyzed the case and asked questions that helped you make a decision to invest in such a company? Thank you.

WARREN BUFFETT: Charlie deserves 100 percent of the credit for BYD, so I'm going to let him answer that.

CHARLIE MUNGER: Well, it's an interesting example because Berkshire would not have made an investment in BYD if the opportunity had come along five or 10 years earlier. And it shows that the old men are continuing to learn, and that's absolutely essential.

Berkshire would have a lower potential than it does if we had stayed the way we were. And — so you are absolutely right in calling attention to this episode.

Again, Dave Sokol helped. I wasn't at all sure I could get Warren to do this all by myself so I inveigled Dave into going over to China, and the two of us were able to help the learning process. (Laughter)

WARREN BUFFETT: Well put. Well put.

26. Why we will never hire a compensation consultant

WARREN BUFFETT: Becky?

BECKY QUICK: This question comes from Mark Wares (PH) and it has to do with Berkshire's compensation.

He says, "How does Berkshire structure the performance based-compensation of the CEOs of its subsidiaries? Please because as specific as you can regarding the metrics on which you focus the most, and how the degree to which those are attained translates into compensation."

WARREN BUFFETT: Yeah, well, the first thing we do is we never engage a compensation consultant. (Applause)

And we have, whatever it may be, 70-plus or whatever number businesses we have.

They have very different economic characteristics. To try to set some Berkshire standard to apply to businesses such as insurance, which has capital as a bulwark but which we get to invest in other things we'd invest in anyway, so there's minus capital involved, to a BNSF or our utility business where there's tons of capital involved, or in between See's where there is very little capital involved.

We have other businesses that are basically just so damn good that a, you know, a chimpanzee could run them, and we have other business that are so tough at times that, you know, if we had Alfred P. Sloan back, you know, we wouldn't be able to do very well with them.

So there's enormous differences in the economic characteristics of our business.

I try to figure out what — if I owned the whole business — what is a sensible way to employ somebody and compensate them, considering the economic characteristics of the business. So we have all kinds of different plans.

It doesn't take a couple of hours of my time a year to do it. We have managers who stay with us, so they must be reasonably happy with the plans.

And, you know, it is not rocket science, but it does require — it requires the ability to differentiate.

If we had a human relations department, it would be a disaster. They would be attending conferences and people would be telling them all these different things to put in equations and so on. It just requires a certain amount of common sense.

And it requires, incidentally, an interaction with the managers where, you know, I listen to them, they listen to me, and we sort of agree on what really is the measure of what they're actually adding to the company.

And — what do you — what do you say to that, Charlie?

CHARLIE MUNGER: Well, I think the U.S. Army and General Electric have centralized personnel policies that probably work best for them, and we have just the opposite system, and I think it clearly works best for us.

And practically nobody else is entirely like us, which makes us very peculiar. And I like it that way, don't you?

WARREN BUFFETT: Yeah, we really like it that way. We get worried when people agree with us. (Laughter)

We pay people — we pay some very big money. We have managers that have made and will make in the tens of millions annually, and we have managers that, you know, when we suffer, they suffer.

But you've got to treat people fairly. Even though they don't need the money, everybody wants to be treated fairly.

And so the rationale for how you're doing it should be understood, but there is no cross-Berkshire rationale at all. I mean, if you run See's Candy, to put a cost of capital factor in or something like that, what the consultant would tell you, it's nonsense.

It isn't going to make any difference whether there's 40 million or 43 million or 37 million of capital in the business.

The main thing to do is, in terms of market position and all that sort of thing, the real thing I really want to pay managers for is widening the moat that separates our business from our competitors' businesses over time. Now, that gets very subjective, so I don't have any perfect way of doing that. But that is always going through my mind in trying to design compensation systems.

So far, like I say, I don't think — I can't — can you recall any manager that's ever left us over compensation, Charlie?

CHARLIE MUNGER: I think it's amazing how simple it's been and how little time it has taken and how well it has worked.

There's this idea that headquarters can do these wonderful things. Headquarters, in a conglomerate kind of a company, is frequently hated in the field. We don't want to be hated in the field. We don't want an imperial headquarters with big costs that's imposed everywhere.

And averaged out, it's worked wonderfully well for us.

WARREN BUFFETT: Yeah, we make no headquarters charges. We charge for our credit with a couple of companies, but — most companies are allocating a couple percent of sales, maybe, or whatever it might be, to all their different operations. And usually it's resented out in the field. And —

CHARLIE MUNGER: Is it ever.

WARREN BUFFETT: Yeah. So we don't do it.

27. "We won't trade reputation for money"

WARREN BUFFETT: Number 11.

AUDIENCE MEMBER: Thank you. My name is Joe Bob Hitchcock. I'm a winemaker from the Napa Valley in California.

I would like to suggest that the next time you and Charlie have a steak at Gorat's that you accompany it with a new health food, a Napa Valley red wine. (Laughter)

WARREN BUFFETT: We just went in the wine distribution business, as you may know. (Laughs)

AUDIENCE MEMBER: Excellent.

CHARLIE MUNGER: Warren is helpless, but I'm with you.

AUDIENCE MEMBER: OK. (Laughter)

I'll send you a bottle.

One of the keys to the success of Berkshire is your policy to allow the managers of the various Berkshire Hathaway companies to operate with minimal interference from Omaha.

But if you became aware of unethical or illegal activities at a Berkshire Hathaway-owned company, would you directly and personally intervene?

WARREN BUFFETT: Sure. We have to jump in.

We have a hotline, which I think was a very good invention of — it wasn't an invention, but a good policy embodied in Sarbanes-Oxley. And, you know, that's been a plus to us. I get letters directly sometimes.

So I want to hear about problems. I hope somebody else has heard about them first and already gotten them solved, but if they don't get solved someplace else, I want to hear about them.

And we have an internal audit function, which is important at Berkshire. And anything that comes in, you know, when somebody calls in on the complaint line and says, "The guy works next to me has bad breath," I tend to skip over those.

But if anything comes in that relates to alleged bad behavior, it's going to get investigated at Berkshire. And it does.

And every now and then, there have been some important transgressions that have come to us via either letters to me, or calls on the hotline, or maybe letters to the audit committee, whatever. We encourage that.

Charlie?

CHARLIE MUNGER: Yeah. We care more about that than business mistakes, way more.

WARREN BUFFETT: We have a letter that goes out every roughly two years; it's the only communication. I probably ought to put a copy of it in the annual report sometime so that the shareholders see it.

But it's a page and a half long. It asks the manager to tell me who, if something happened to them that night, who I should consider putting in charge of the place the next day.

Doesn't mean I'll follow their advice, but I want to know their reasons and the pluses and minuses.

But it starts off basically and it says, "Look, we've got all the money we need." We'd like to make more money. We love making money.

But we don't have a shred more reputation than we need, and we won't trade reputation for money.

And we want that message to get out. It's the reason we stick that Salomon thing in the movie every year. I mean, you can — probably some of you can recite it by now, but I don't think it can hurt to keep repeating that story.

And the one thing we tell — we tell them that message, and then I've added a new line in this. And I say, if the reason you're doing something, the best reason you can come up with, is that the other guy is doing it, it's not good enough.

There's must be — there's got to be some other reason besides, "The other fellow's doing it," or you're in trouble. And I tell them, "Call me if anything's questionable. You think it's close to the line, give me a call."

By saying that, nobody gives me a call because they — (laughs) — they know that the very fact that they think it's that close to the line probably tells them it's over the line.

But I want to hear about stuff. We can cure any problem if we hear about it soon enough and take action soon enough. But if it's allowed to fester out someplace and people cover it up — and sometimes they have — then we've got a problem.

And we will have more of that in the future, there's no getting around it, you know. If you have 260,000 people, there can be some things going on. I just hope we hear about them fast.

And I hope their managers hear about them even faster and do something before it even gets to us. But we want very much to protect the reputation of Berkshire. It's the right thing to do.

Charlie?

CHARLIE MUNGER: Well, it is absolutely essential. And Berkshire, averaged out, has a very good reputation, as you can tell by the ratings from major media and surveys.

And that is absolutely precious to us. In a sense, you people are part of the culture, too.

The ideal is not to just make all the money that can be legally be made without causing too much legal trouble. The idea is bigger than that. It's that we celebrate wealth only when it's been fairly won and wisely used.

And if that idea pervades the culture of a place, including the shareholders, we think that's very helpful to us. (Applause)

28. BNSF has benefitted from good regulations

WARREN BUFFETT: Andrew?

ANDREW ROSS SORKIN: This question relates to your investment in Burlington Northern, and it comes from Josh Sanbules (PH), who I believe is in New York City.

And he asks, "You mention in your annual letter that regulators of the railroad industry need to provide, quote, 'certainty about allowable returns,' unquote, in order to make huge investments. If you were going to help the regulators calculate, quote, 'allowable returns,' how would you suggest they do it?"

WARREN BUFFETT: Well, I think the Service Transportation Board — and maybe Matt Rose could help give more details — but I think they've adopted something like 10 1/2 percent, or thereabouts, on invested capital.

And if you had a major enough change in interest rates or something, you could argue that there should be some adjustment, perhaps, in one direction or another.

Usually, in the case of regulated utilities, they talk about return on equity. And you have different amounts in different states, but some states it may be 11 percent, in some states it may be 12 percent or something like that. It's usually in that range.

With the railroads, they've gone toward this return on invested capital, which includes debt as an adjusted figure.

And I don't think that's a crazy, crazy standard. I mean, the railroad, unlike the electric utility, when you get an allowed return in the electric utility you're almost certain of earning it, I mean, if you behave yourself. And your demand is never going to fall off that much, probably, that you'll go way below your return.

The railroad's got more downside in it if you run into a terrific industrial recession, so you're not as protected on the downside.

But there should be some figure, and I would argue that the 10 1/2 percent, or whatever it may be on invested capital, that's been achieved by the four big railroads in recent years, something close to that or right around that figure.

And you want the railroads investing a whole lot more than depreciation, and I would think that would be — it's certainly an inducement to me to invest money in improving the transportation system.

And on the other hand, if that return were far lower than that, it would be crazy to put money, because you can't change that railroad system and do something else with it.

So I think the country and the railroad systems have a very common interest in not earning exorbitant profits or anything like that, but getting a decent return on what is sure to be much needed investment over the next 10, 20, 30 years.

And I'd go along with — if the Service Transportation Board says 10 1/2 percent, or some number like that, I think that's not a crazy number.

Charlie?

CHARLIE MUNGER: Well, yeah, the railroads have been a hugely successful system, in terms of a regulated business. If you stop to think about it, the railroads of America have been essentially totally rebuilt in the last 30 or 40 years.

They've improved the tracks, they've changed the size of the tunnels, they've improved the bridges. The average train can be more than twice as long and twice as heavy.

And you can hardly imagine a business that's done a better job in adapting to the needs of the rest of us than the American railroad industry. And that's by and large been a system of wise regulation accompanied by wise management. And that was not always the case.

If you go back a long time, neither the management nor the regulation was all that wise. But the existing system has worked very well for all of us.

29. "Lumpy" earnings as competitive advantage

WARREN BUFFETT: OK, number 12.

AUDIENCE MEMBER: Hello, my name is Ashish Texali (PH). I am from New Delhi, India.

First of all, I would like to thank Kelly Bruce (PH) and Carol from American Express to the help they've extended to make this event possible.

The question regarding General Re and reinsurance business.

As the insurance business uses complex models, how is Berkshire more comfortable that insurance business models are not exposing you to significant risks like the models did for Wall Street?

Also, if it is not confidential, is there concentration of risk? That is, what are those few events which can cause significant loss for insurance businesses?

WARREN BUFFETT: I'm not sure I got all of that, but we run significant risks from earthquakes. We had, in the Chilean quake — I don't know how much would have been in the first quarter. When you read our 10-Q there will be a number in there. But we insure 20 percent of Swiss Re. We will take 20 percent of their loss from that.

We have various other exposures in something like that. We included our best estimate in those figures I put up earlier.

Our peak risks now, in terms of earthquakes or hurricanes — which are the two biggest natural catastrophes, in terms of frequency and severity — are probably down quite considerably from a few years ago, not because of any diminished appetite for risk. But we just haven't felt that the rates were that attractive in those areas.

But if we thought the rates were attractive, we're perfectly willing to take on a group of risks where, if something very close to worst case happened, you know, we would lose $5 billion or something like that.

We lost 3 billion-plus in Katrina. We lost well over 2 billion, I think quite a bit more than that actually, on 9/11.

There will be things come along like that. Nothing that ever remotely comes close to making us uncomfortable, though, in terms of the level. I don't know whether I got his full question there or not, Charlie, but you —

CHARLIE MUNGER: Well, pretty close. I would say that the main difference between our practice and that of most other people is that we are deliberately seeking a method of operation which will give us occasional big losses in a single year, big overall losses.

And everybody else is trying to avoid that. And we just want to be rich enough so a big loss in a single year is a blip.

And that's a competitive advantage, that willingness to endure fluctuating annual results. Big advantage, wouldn't you say?

WARREN BUFFETT: It's a huge advantage. It's a huge advantage. And it's one that no one else is going to pick up on. I mean, they know what we do, they just don't want to do it, or they're unable to do it, in terms of financial resources.

So, I would say that comes very close to a permanent and substantial advantage at Berkshire.

I don't — forget about — you shouldn't forget about it, but forget about the human suffering and all that. Just the financial consequences of a Katrina, you know, when we lose 3 billion in that, I don't feel any different the next day than I felt the day before, financially. I mean, it just doesn't make any difference, because we are in that particular game.

And as long as we make the right decisions over time, in terms of the premiums we get, and as long as we never expose ourselves to a loss that would really shake up our capital structure or anything, you know, that is a game in which we have a huge competitive edge. And it gets wider every year.

So, you know, risk — we are in the business — in insurance, we are in the business of taking the other guys' desire to smooth their earnings, and, in exchange, get what we think are larger, lumpy earnings over time. We like the business.

Carol? Oh, go ahead, Charlie.

CHARLIE MUNGER: I was going to say Warren has a different position than a lot of other people in the insurance business. After a year in which Berkshire has a big loss, he can look into his shaving mirror and say, "Your shareholder still loves you." (Laughter)

WARREN BUFFETT: That's right.

CHARLIE MUNGER: Other people are not in that position.

WARREN BUFFETT: Charlie and I knew a guy from Omaha who, 40 or 50 years ago, was one of the richest guys in the United States, named Howard Ahmanson. And Howard had a fetish about owning 100 percent of everything that he came in contact with.

And so he said, when asked why, he said, "I like to look in the mirror and say, 'All my shareholders love me.'" (Laughter)

And I'm not quite that extreme, but I like to look in the mirror and say, "Enough of my shareholders love me." (Laughter)

30. "Gambling" with derivatives

WARREN BUFFETT: Carol.

CAROL LOOMIS: This question is about derivatives.

"What useful function do derivatives serve in our economy? We got along quite well without them for many years. If they serve no useful purpose, and in fact, have demonstrated that they can do considerable damage to the economy, why are they not made illegal, especially the naked ones? There is precedent for that.

“I believe that short selling of stocks that one does not own or has managed to borrow is illegal.”

WARREN BUFFETT: Charlie has — he can get worked up more on this than I can, so I’m going to let him answer that. (Laughs)

CHARLIE MUNGER: Well, I think the usefulness of derivatives has always been overrated. If we didn’t have any derivatives at all, including contracts to buy and sell grain that were traded on exchanges, we’d still have plenty of oats and wheat.

I mean, I think it is slightly more convenient for people to be able to hedge their risks of farming by using derivative markets and commodities.

And the test is not, “Is there any benefit in derivatives?” The question is, is the net benefit versus disadvantage from derivatives useful? Or would we be better off without it?

My own view is that, if we went back to having nothing but derivative trading in commodities, metals, currencies, safely conducted under responsible rules, and all other derivatives contracts vanished from the earth, it would be a better place. (Applause)

WARREN BUFFETT: We’ll take a current example. Burlington Northern has hedged diesel fuel, which they use a lot of, over the years. And then they also have fuel adjustment clauses in a lot of their contracts for transportation.

With Matt Rose, who does a wonderful job of running Burlington, I basically say, “Look at. If I were running the place, I wouldn’t bother to hedge them,” because if you hedge it — if you hedge it for a million years, you know, you’re going to be out the frictional costs, probably, of doing it, unless you’re smarter than the market generally on diesel fuel. And if you’re smarter than the market on diesel fuel generally, we’ll go into the business of speculating on diesel fuel.

I mean, if we’ve really got an edge, you know, why bother to run the trains? Let’s just speculate diesel fuel.

But I also say, you know, they’ve got — and if you have an organization where you have somebody in charge of that activity, it’s going to take place.

On the other hand, Matt Rose has done a fabulous job, as well as his management team, in running Burlington Northern. If they are more comfortable, or they find it useful in any way, in terms of pricing contracts, or anything, to hedge it, that’s fine with me, too.

I mean, it’s his company, he can figure out the best way of running it. I’ll hold him responsible for how it does over time. And, you know, I would do it one way and somebody else would do it another way. I don’t think that’s —

I would not condemn anybody that's running a railroad for hedging diesel fuel, nor would I condemn anybody that runs an energy company, like we do at MidAmerican, for hedging energy costs in certain ways.

But I do think, if we could put up a presentation, number 4 on the screen, please.

I think it was said very well in 1935. In fact, chapter 8 of Keynes's General — chapter 12, I'm sorry — chapter 12 of Keynes's "General Theory" is, by far, in my view, probably Charlie's too, the best description of the way capital markets function, the real way people operate. It's prescriptive, it's descriptive.

Everybody should read chapter 12. It's a little — it starts a little slow in the first few pages.

But Keynes — I'm going to read this because I don't think Charlie has it in front of him.

The first part of it is very familiar to people. I mean, this quote has been used a lot. But every word in this, to me, is right on the money.

"Speculators may do no harm as bubbles on a steady stream of enterprise. But the position is serious when enterprise becomes the bubble on a whirlpool of speculation."

You can change that to "gambling" if you want to.

"When the capital development of a country becomes a by-product of the activities of a casino, the job is likely to be ill-done." That's the famous part of the quote.

Keynes went on to say, "The measure of success attained by Wall Street, regarded as an institution of which the proper social purpose is to direct new investment into the most profitable channels in terms of future yield, cannot be claimed as one of the outstanding triumphs of laissez-faire capitalism - which is not surprising, if I am right in thinking that the best brains of Wall Street have been in fact directed towards a different object."

That was written in 1935. I don't think there's been anything better written about how government, how citizens, should look at Wall Street and what it does and it doesn't.

It's always had this mixture of a casino operation and a very socially important operation.

And when derivatives became popular, and academia was behind them 100 percent. They were teaching more about how to value an option than they were about how to value a business. And I witnessed that and it drove me crazy.

But in 1982, Congress was considering, really, the expansion of a derivative contract to the general public in a huge, publicized way. It was the S&P 500 contract. That changed the whole derivatives game.

At that point, basically, Wall Street just said, “Come on in, and everybody can speculate in an index. Not any real company, just an index. And you can buy it at 10 o’clock in the morning and sell it at 10:01, and you’re contributing to this wonderful society by doing it.”

And I wrote a letter to Congressman Dingle, and we’ll put up exhibit 5. I just excerpted a few of the statements I made there. This was one month before they put in trading in the S&P 500, April. They put it in April, 1982, in Chicago; did a little in Kansas City first.

And I went through four pages of things and I just pulled out a few things. But I think that, to some extent, what I forecasted then has turned out to be the case.

And then it got squared and all of that, as both the people in Wall Street kept dreaming up new and new ways for people to gamble.

And as I say, academia was applauding all along the way and getting hired as consultants to various exchanges to tell them how wonderful they were, in terms of their social purpose.

I think that — well, it’s up there for you to read. I’d be glad — the whole letter was reprinted, I believe, in Fortune at one time, Carol. Was it—?

CHARLIE MUNGER: By the way, if I remember right, this was like the only letter in opposition to this uniformly acclaimed new world of better gambling in things related to securities. Warren wrote the letter —

WARREN BUFFETT: And it’s a —

CHARLIE MUNGER: — all those years ago, and it was the only letter —

WARREN BUFFETT: Incidentally —

CHARLIE MUNGER: He basically said the idea’s insane. It will do more harm than good. Then, as now, people didn’t pay that much attention to him.

WARREN BUFFETT: And I’ll venture that very few people in this room know — you all know that if you buy a stock, you have to hold it for a very long period of time to get a special capital gains treatment on it.

If you buy an S&P 500 contract at 11 o’clock and sell it at 11:01 and have a profit, it’s taxed 60 percent as a long-term capital gain, and 40 percent as short-term capital gain.

So you really get better tax treatment if you’re gambling on an S&P 500 derivative, which is what it is, in Chicago, than you do if you invest for four or five months in some security and then have to sell it for some reason.

It's a tribute to the lobbying power of a rather small group that has done very well off this particular activity.

Charlie, can you think of any reason why it's 60 percent long-term gain if you hold something for 30 seconds? (Laughs)

CHARLIE MUNGER: Well, of course it's crazy. It's neither fair nor sensible.

But if a small group with a lot of money and influence cares a great deal about something and the rest of us are indifferent, why, they tend to win before our legislative bodies.

That's just the way it is. I always liked Bismarck's remark that you shouldn't watch two things: sausage making and legislation making. (Laughter)

31. Buffett is losing his bet against hedge funds

WARREN BUFFETT: OK, with those hopeful words — (laughter) — we're going to break for lunch. Before we break for lunch, I made a charitable wager with a group, Protégé Partners, two years ago about the behavior of funds of funds that they would select, hedge funds, and the S&P index fund.

The duration of our wager is ten years, and whichever one loses, the money goes — well the money from both goes to the winner's charity, is what it amounts to.

Interesting firm out on the West Coast that supervises what they call these long bets. So if we'll put up exhibit 6, you can see at this point I'm behind.

And have we gotten exhibits? Yeah. Let's go to lunch. OK. (Laughter)

Afternoon Session - 2010 Meeting

1. Speak out, but speak responsibly

WARREN BUFFETT: And I think therefore we go to 13, which is in a separate room. And is there anybody at the microphone in 13?

AUDIENCE MEMBER: Yes, there is.

WARREN BUFFETT: OK.

AUDIENCE MEMBER: Hello, Mr. Buffett and Mr. Munger. This is a shareholder from New York. One could argue that a major contributor to the great bubble was that there wasn't a healthy and open debate. That all the opinion and all of the money was on one side of the trade.

And I was thinking about this recently as I read Christine Richard's new book, "Confidence Game," about Bill Ackman and his battle with what was once the largest bond insurer, MBIA.

The story also reminded me of David Einhorn and the questions he raised about Allied Capital and Lehman Brothers. We now know that they were 100 percent correct, but at the time that they first spoke up they were attacked by the companies, pilloried by the media, ignored by the accountants of those firms and the rating agencies, and perhaps most alarmingly were investigated by the SEC for daring to go public with their bearish analyses.

And I can tell you that watching what happened to them, it's a real deterrent to anyone else speaking up and raising similar questions.

So I'd be curious for your thoughts on this, and is having short sellers speak out healthy for our markets?

And in general what should be done to encourage a greater diversity of opinions so that we can avoid future bubbles? Thank you. (Applause)

WARREN BUFFETT: Yeah, I don't see anything wrong with people who are positive or negative speaking out, as long as they're willing to be held responsible for the kind of statements they make. I mean, there are — obviously —

Well, take the extreme example. If there were two banks in town, and I owned one of them and I was of kind of a devious type of mind, I might go out and hire 50 people to stand in line in front of the other bank, and I would probably not have a competitor before long.

So you can do things on either side, the long side or the short side, that I would regard as certainly unethical and in many cases should be illegal.

But anytime you attack the conventional wisdom, you're going to meet with a lot of opposition because you're threatening people's positions.

When we would talk about the efficient market theory 30 years ago when it was absolutely de rigueur that — and virtually every finance department in the country, major schools, you either had to swear allegiance to it or you were not going to be promoted.

You know, people don't like that. And any institution, when they get a threat from the outside, they will attack both the threat and the threatener.

But that exists on both sides. I have no problem with short selling, and I have no problem with speaking out responsibly about your reasons for doing so, any more than I have on the long side.

There have been some very bad practices on the short side, and there have been some very bad practices on the long side, in terms of people trying to literally spread things that are untrue.

But that has probably been more on the long side over the years than on the short side, by some margin.

Charlie?

CHARLIE MUNGER: Yeah, I think to some extent you're criticizing the wrong people. In many cases, the accountants that allowed the lousy accounting are the ones that ought to be held in the dock. And they get very little criticism in America and that's a mistake.

2. Why there's no synergy among subsidiaries

WARREN BUFFETT: Becky? (Applause)

BECKY QUICK: This question comes from Ben Soh (PH) who lives in the metro Vancouver area in British Columbia, Canada. This is for either Mr. Buffett or Mr. Munger.

He wants to know about synergies at Berkshire, specifically, "Does it make sense that the Dairy Queen stores here sell PepsiCo products and would not expect — accept — American Express, only Mastercard or Visa? (Laughter)

WARREN BUFFETT: There are — around the world, there are pretty close to 6,000 Dairy Queen outlets of one sort or another. And some are called Grill and Chill now, different things, but roughly 6,000, and company-operated are 70 of those.

So almost 99 percent are franchised, and at Dairy Queen we do not control what the franchisees do. Most of the franchisees — last time I checked sometime back — but most of the franchisees serve Coke, the enlightened ones — (laughter) — but it is entirely their business.

They can — they can — they can serve Coca-Cola products or Pepsi. It seems some of the other franchise operations seem to have more control over that than Dairy Queen.

But if you think about it, Dairy Queen goes back before McDonald's, before Wendy's, before Burger King, before Kentucky Fried, all of those. It goes way back into the '30s, and a lot of the agreements with franchisees were territorial operators were done on the back of a napkin, or something of the sort.

So to some extent we have less control over what franchisees do, particular in certain — a few parts of the country — than other people.

But we'll — keep asking for Coke, and maybe you can cause them to see the light. The synergies, any synergies, any synergies at Berkshire come about at the operational level pretty much.

We do not tell our companies to do business with each other. We hope they do do business with each other, and, you know, and we hope that each side of a subsidiary A offers good reasons for subsidiary B to do business with them.

But the whole idea at Berkshire is that our managers are responsible for their businesses, and if they're going to be responsible for their businesses it means we shouldn't tell them what to do, except in very limited ways.

Charlie?

CHARLIE MUNGER: Well, you've accurately described the way it is. What's interesting about it is we really like it that way. (Laughter)

WARREN BUFFETT: It's a lot less work. (Laughs)

CHARLIE MUNGER: Yes.

WARREN BUFFETT: And I think, actually, that there's some merit. Sometimes people work better together if it's their decision to work together than if you tell them to work together.

CHARLIE MUNGER: It goes beyond that. Warren and I would like it that way if we were in the subsidiaries. There's no doubt about that.

WARREN BUFFETT: Yeah, we'd probably leave if it wasn't that way. (Laughs)

3. Act as if "you were an owner of the place"

WARREN BUFFETT: OK. Area 1.

AUDIENCE MEMBER: Dear Mr. Buffett, dear Mr. Munger, my name is Steven Roman (PH). I'm a student of engineering maschinenbau at the University of Vienna in Austria.

If I one day want to apply as a manager with one of the Berkshire companies, what qualities are you especially looking for? And what do I have to do to become your successor? (Laughter)

WARREN BUFFETT: Probably shoot me. (Laughter)

The managers of our subsidiaries hire their own people. The number of decisions I have to make about managers are really, really few.

As I mentioned earlier, they do send me a letter that if something happens to them, gives me their ideas about who should succeed them.

But I make no decisions about who gets hired at GEICO, or Burlington, or Mid-American or anything of the sort. I mean, if they need a CFO they go out and hire a CFO, or if they need somebody to run a plant they go out and hire them themselves.

They are responsible for their operations, and occasionally we have a death, we have an occasional — very occasional, I can't even hardly think of one — resignation.

And at that point I have to make a decision about who should be put in charge of the operation. But I don't think I've had more than 10 or 12 of those in 45 years.

So I'm not a very good employment agency. We have 21 people, I think it is, at headquarters, and I made a terrific hire here a few months ago. But that'll take care of me for four or five years.

Charlie?

CHARLIE MUNGER: Yeah, there's no indication we'd be particularly good at it, either. (Laughter)

WARREN BUFFETT: Yeah. I wasn't going to mention that. (Laughter)

But I would say this: if you want — what is interesting to me is that when you find somebody outstanding, boy, do they jump out. I mean, somebody that is thinking about the place the right way, is working extra hard, whatever it may be.

There aren't — you don't have that much competition in this world. So, in terms of generally advancing within organizations, I think you'd be surprised at how little competition you really

have if you start thinking like you would if you were an owner of the place, and working like you would if you were an owner of the place, and pretty soon you may be running something.

4. Retained earnings, present value, and dividends

WARREN BUFFETT: Andrew?

ANDREW ROSS SORKIN: This question comes from Tomer Malon (PH) from Tel Aviv, Israel. And he has clearly been a long-time shareholder because he references your 1984 Chairman Letter.

He writes, "You have previously stated that a company should retain its earnings only if, quote, 'For every dollar retained, at least one dollar of market value will be created for owners,' unquote.

"You also noted that if such conditions will no longer apply to Berkshire, as measured on the basis of a five-year rolling average, then quote, 'We will distribute all unrestricted earnings that we believe cannot be effectively used.'

"However, during the five-year period between July third — I'm sorry, January 3rd, 2005 and December 31st, 2009, the average annual earnings per share for class A, as reported, amounted to $5,930, while at the same period the average annual change in the share's market price was only $2,420.

"Consequently, are you considering a distribution of a dividend or buying back shares? I imagine I know the answer, but I thought we had to ask." (Laughter)

WARREN BUFFETT: Well, he does know the answer, but we'll elaborate.

I did write that, not only in 1984 but continuously in the back of the Berkshire annual report where I've got our economic principles.

And frankly, the way I wrote that the first time was not well thought out. And in the 2009 annual report, partly because somebody asked that question last year, I actually rewrote that section.

And I pointed out that even when I wrote it in 1984, we would have flunked the test in many previous years when, generally speaking, the stock market had suffered a significant decline over a period of time.

As you can tell by looking at our report, right now every dollar that we have left in the business, you know, has produced, in present value terms, something over $1.30 of market value.

We have met the test of retained earnings proving their worth. But the way I phrased that originally, anytime the stock market went down a whole lot in a five-year period, because we

were carrying our Coca-Cola at a certain price five years earlier or whatever it was that entered into our asset value, we could have done a great job of allocating capital in the five-year period and we still would have looked bad.

And similarly if the stock market had gone up a whole lot, we could have done a dumb job and looked good.

So, if you will look in the back of the 2009 annual report, I think it's number 11, or — I'm not sure about that.

But read the economic principles. You'll see that I had to confess my error in how I originally worded that.

But I think it is still intellectually honest, in terms of meeting what I intended to say.

You know, I voted against this before I voted for it, or something like John Kerry said in 2004. (Laughs)

I think it does meet the test of a dollar retained earnings producing more than a dollar of market value. And we will continue to measure ourselves based on whether we meet that test.

If we don't — if keeping a buck doesn't produce more than a buck in present value, I don't mean every day or every week, but over time, we should figure out something else to do.

Charlie?

CHARLIE MUNGER: Well, I like people that parse through a long series of documents and find an error and rub my nose in it, particularly when it's your error.

WARREN BUFFETT: Rub my nose in it. (Laughter)

CHARLIE MUNGER: Yeah, yeah.

WARREN BUFFETT: How tolerant. (Laughter)

I should have had him word it originally. Actually I think those were his words. It's just coming back to me. (Laughter)

5. Safety net needed for the unemployed, but Berkshire isn't it

WARREN BUFFETT: OK. Number 2.

AUDIENCE MEMBER: Glen Molinar (PH) from Cleveland, Ohio. It's been on my bucket list to come meet you, Mr. Buffett and Mr. Munger, so it's a privilege to be here.

My question has to do with hope and jobs. You know, in America, I think we need to figure out how we can go about creating jobs. I have been trying to help people get jobs.

My question is, and a challenge maybe, how can we get Berkshire Hathaway and your board to maybe go out and just basically hire people to give them hope?

WARREN BUFFETT: Well, we will hire people when we have something for them to do. (Applause)

But — and we are actually, net, hiring people now.

I mean, when the Burlington is carrying 173,000 cars a week like last week, as opposed to some time back 155,000, we need more people. And we need more people at some of our other businesses.

But our carpet business, we are down 6,000 people-plus from our peak. But people aren't going to quit buying carpet forever. And we will be hiring a number of people, but there's no sense hiring them when they're not — when there's nothing for them to do.

I went through a period, particularly, it was dramatic to me, because we owned — Berkshire Hathaway owned — a couple of textile mills, one of them in New Bedford.

And eventually we had to close those mills after we tried for 20 years to make them work.

And if you get somebody that's working in a textile mill and they're 55 years old, and in many cases still were speaking Portuguese, you know, retraining doesn't mean much to them.

I mean, you need — if you believe in creative destruction and you believe in capitalism, essentially figuring out ways to do the same things with less and less people, you better have a social safety net.

And we've got a pretty good one in this country, a whole lot better than we had 30 or 40 years ago.

But right now there is significant unemployment. Not any higher than it was in 1982 or thereabouts, but it's a lot and it's not going to go away fast, although it is going to go away.

And we should take — in my view, society owes some minimum living standard to people who are looking for work, trying to get work, and frankly, at a time like this, they're not going to be able to find it.

But I don't think that Berkshire Hathaway should be the social safety net.

Charlie?

CHARLIE MUNGER: Yeah, I would say that if Berkshire started out to create a bunch of make-work jobs in order to increase human hope, the net effect would, over time, would be the reduce human hope. (Applause)

WARREN BUFFETT: I think that's true, but I'd rather have Charlie saying it than me. (Laughter)

6. Why GEICO isn't looking at China or India

WARREN BUFFETT: Carol?

CAROL LOOMIS: "Our car insurance business" —

Oh, this comes from a New York man who asked that I use his initials, A.J.

"Our car insurance business has continued to return excellent profits and expand its business within the United States. Why hasn't Berkshire made any progress in the car insurance business in China, or India, or even Europe?

"As BYD has shown, these markets are exploding in automobile sales, so aren't they ripe for the picking?"

WARREN BUFFETT: Yeah. There's no — we've known for a long time there's no shortage of drivers around the world. That — there may be a lot of business in the United States, but there's a whole lot of business elsewhere.

In terms of India and China specifically, we can only own a limited amount, I believe 24.9 percent, of a company in either of those countries. And we're not eager to work hard on something where we own 24.9 when we could work hard on something where we can own 100 percent.

Obviously, we talk all the time, we've thought for decades about ways we can possibly expand GEICO, because it's a wonderful, wonderful company.

And we have gone from a market share of 2-and-a-faction percent when we bought control to 8 1/2 or so now.

But there's plenty to do here. And we do not have the same kind of advantages — or we don't think we could build those in any reasonable period of time — as we look at other markets.

I mean, obviously we look at Canada. You know, I mean — Tony and I talk about this kind of thing frequently.

I agree with his decision that now, and probably for a long time to come, there is so much opportunity in the United States. And the other areas, for one reason or another, as we're

looking at them, do not give us the same kind of competitive advantage we have here, that we pass on them.

But we love the idea of taking a business that's working in one area and figuring out a way to have it work in other areas. Whether it's geographical adjacencies or product extensions, or all kinds of things.

We're well aware of possibilities out there. In the case of GEICO, we have not decided to go to other countries, but it isn't because we didn't know there were cars there. (Laughter)

Charlie?

CHARLIE MUNGER: I've got nothing to add. (Laughter)

7. China's economic growth is "fun" to watch

WARREN BUFFETT: OK. Number 3.

CHINESE STUDENT: Good afternoon. My name is Shin Tse Chen (PH). I am a Chinese student from Kansas State University.

My question is, Mr. Buffett, what is the most important thing that you have learned from China? Thank you.

WARREN BUFFETT: Most important thing I've learned from China?

CHARLIE MUNGER: China, yeah.

WARREN BUFFETT: Yeah. What's the most important thing you've learned from China, Charlie? (Laughter)

CHARLIE MUNGER: It has some very unusual people in BYD. (Laughter)

WARREN BUFFETT: I've learned —

CHARLIE MUNGER: No other lesson is as important as that one. (Laughter)

WARREN BUFFETT: I've learned they like Sprite better than Coke. Sprite outsells Coke in China by two-to-one. But they're both growing dramatically.

I think China is an amazing economy. I mean, there is no question in my mind that, you know, the growth on a per-capita basis is going to be dramatic going forward. They're just starting to exercise their potential.

When you think about it, in 1790, there were four million people in the United States, just under four million. There were 290 million in China in 1790. Just as smart, you know, just as hard working, resources of the land, the minerals, everything, its climate, very, very similar.

And for 170 years or so, relatively little progress was made in the standard of living for those people, like you say, who had all the native abilities that America had.

But, you know, in recent decades, the potential of the Chinese is being unleashed and it's huge. And I think it's very, very interesting to watch.

Charlie and I, and a group of some of the directors, are going over there at the end of September.

You know — and I was over there a couple of years ago. It's a sight to behold.

But, in terms of specific lessons, they haven't taught me how to eat Chinese food, I will say that. (Laughs)

CHARLIE MUNGER: I think I always knew that the Chinese people had an enormous potential for huge and rapid progress, because I could see that in all the Chinese-Americans that I dealt with.

And indeed, people came in here as Chinese "coolies" — in effect, slaves — and they rose so rapidly that it was a marvel.

So I always knew that China had a potential to be a huge credit to human civilization. But I think I underrated how fast it could happen.

China is setting a new record for advancement of civilization at a very rapid rate. It's fun to watch.

8. Why Buffett addresses the annual report to his two sisters

WARREN BUFFETT: Becky?

BECKY QUICK: This question comes from a shareholder in Aiken, South Carolina who asks not to be identified, but he asks that Mr. Buffett or Mr. Munger discuss changes that have been made in the Berkshire annual report in the last several years, and the reasons for making some of these changes.

Two of the changes that he's noticed are, number one , look-through earnings no longer seem to be discussed, and number two, the unaudited combined financial statements of the business groups no longer seem to be included, although at least some of the business groups material seem to be covered in other places in the report.

WARREN BUFFETT: Yeah, the second point I'm confused about, because we have broken them down into four groups and tried to give the relevant financial information for what we thought was a logical grouping, and will continue to do that. So I'm not sure I totally get that.

We really do have four fairly logical breakdowns. Now, you can break it down 70 ways and all that, but there's a point at which adding 100 pages to an annual report obfuscates information rather than illuminates.

And that's what — we're trying to, in a reasonable number of words — Carol might say too many — but in a reasonable number of words, convey as much as we can about the information we'd want to have if we were in your place and you were writing to us.

And we think these four classifications — regulated industry is terribly capital intensive. You know, insurance: capital, really not a factor, but the amount of capital it gives us being a factor, and so on.

And so I don't think we really changed on that. Now, when you get into look-through earnings or sometimes when we talk about the earnings per share and the investments per share, some of that I don't repeat every year because we try to get — run at, maybe, 12,000 words or something like that in the annual report.

I really think if you extend it too much — I'll say this, nobody's told me it was too short, yet — (laughs) — including my editor, who is here today.

And every other year I may do that breakdown between operating earnings and the — but that takes 1,000 words or so to explain it to people.

The whole report is guided, as it has been ever since I really started taking it seriously in the mid '70s, is guided by the idea that I'm — actually, I'm writing it to my two sisters who are here. And I have my audience in my mind — is two very intelligent, interested people but who are not around the place, been gone for a year, and they're very capable of understanding anything but they're not necessarily familiar with all the lingo.

If I get too esoteric on it, so I should explain that. And I really want them to understand how I'm thinking about the business, and by implication, how I think they should think about it, and to answer the questions that I think would be in their mind.

And they've got most of their net worth in it, so they're going to read to the end. And I really haven't changed that framework in my mind for how I've written it.

I start mentally off writing, "Dear Doris and Bertie," and then I just cross them off and put, "To the shareholders of Berkshire Hathaway." But that's the way it's done.

Charlie?

CHARLIE MUNGER: Yeah, but the details can change as the facts change. The undistributed earnings of corporations in which we hold shares, but do not control, used to be way more important than they are now. It's perfectly natural that the emphasis would shift.

WARREN BUFFETT: Yeah, the undistributed earnings now, without me looking at it very carefully, you know, are probably — they're not more than, probably, 15 percent of our reported earnings or something like that.

They used to be a much higher percentage. And they're still important. But I don't think they're — I think the people that understand that Coca-Cola and American Express aren't paying out all their earnings, and it's not a big enough number that I would want to spend a lot of the report explaining it.

9. Munger endorses Roth IRAs

WARREN BUFFETT: Number 4.

AUDIENCE MEMBER: My name is Joe Hudson (PH), a shareholder from Culver, Indiana.

I doubt either of you have any money in Roth IRAs, but what are your thought on the opportunity this year for anyone to convert IRAs to Roth IRAs, thus having all future growth on Berkshire or other investments 100 percent tax free?

Is the government making a big mistake here, and should people be concerned about the deal changing down the road?

CHARLIE MUNGER: I'll take this one, because I have an IRA that I am going to convert to a Roth IRA. So there's your answer. (Laughter)

WARREN BUFFETT: Well, I still don't understand it, but —

CHARLIE MUNGER: You don't have to. (Laughter)

WARREN BUFFETT: OK. He's always telling me that. (Laughter)

I assume - if Charlie said it, it must be true.

10. Newspapers are losing ground in battle with internet

WARREN BUFFETT: Let's go to Andrew. (Laughter)

ANDREW ROSS SORKIN: This question I'm actually very self-interested in. It comes from Anton Ossip (at) Alexander Forbes from Johannesburg, and (he writes), "Last year you said you were down on the newspaper industry.

“Given your life-long interest in newspaper companies and your stake in the Washington Post Company and others, has your view changed in the past year with the introduction of the iPad and other e-reading technologies?

“Do you think we will see a contraction in the value of — in the value retained by — media houses versus what will be passed on to distributors of the media?”

WARREN BUFFETT: Well, you could probably answer it better than I can.

My relatively uninformed opinion — because I’m not that up on the technology — but I just have a feeling that when the money — has basically — the money to run good newspapers has come from advertising, you know, three-quarters of the money or thereabouts — the papers become less useful to advertisers.

I mean, they were the only game in town for a long, long time. They are not the only game in town. And what a difference that makes if you’re selling something.

So, when the Philadelphia Inquirer, I — Stan Lipsey is here — I called Stan up and I said, “Stan, this is probably like an old fire horse or something, but let’s think about it anyway a little bit.”

And it was sold yesterday at a bankruptcy sale, although I think that’s pending confirmation.

But, you know, it is very tempting, if you’ve still got fairly substantial circulation - The Philadelphia Inquirer and they’ve got the Daily News there, too.

But the math is really tough. I mean, the distribution costs, the printing costs, everything, and maybe all this changes that in some way that you would understand better than I would.

But since I don’t understand it, I have to stay with — and there are plenty of things I don’t understand — and I cannot make an affirmative decision on newspaper ownership.

I just got the — the ABC puts out Fast Facts, this big yellow publication — I just got it a couple days ago and I can’t resist looking through there. And I flip the pages and look at circulation of all kinds of papers.

Actually, in Buffalo, we were down less than a great many papers, even though, you know, our population demographics are very tough. We were down less than Rochester, I might mention, which is owned by Gannett.

But you look at San Francisco Chronicle, you know, down 20-odd percent. Dallas —

These are communities that are thriving, and it blows your mind how fast people are dropping it.

It's not just older — it's not just that younger people aren't picking it up. I mean, the world has really changed, in terms of the essential nature of newspapers.

There's nothing that looked — back when Charlie and I would talk about them in 1970 or '65, there was probably nothing that looked more bulletproof than a daily newspaper where the competition had melted away.

But it's a form of distributing information and entertainment that has lost its immediacy in many cases.

It's certainly — it is not the essential place to get — think about how stock market quotations were, you know, 30 or 35 years ago. You looked in the paper to see what stocks had done. You looked in the paper to see how sports games had turned out.

So its primacy has withered away, and the advertisers weren't there because they love the publisher of the newspaper. They were there because it was a microphone to talk to everybody in town, and they had to talk to everybody in town.

And so you get this chicken and egg thing that the newspaper becomes less valuable as the advertisers float away, and the advertisers float away as the subscribers diminish. And I don't see a good answer to it, but Charlie, what do you have to say?

CHARLIE MUNGER: Well, the independent newspapers, due to the accidents of history, as they became dominant in their individual towns, for decades had impregnable economic strength.

And by and large they behaved better because they were so strong. And they were called the "Fourth Estate." They were really a branch of the government, they helped keep government honest.

And if you take this state in which we're located, The World-Herald has been a very constructive force, net, over a long period of time. As those dominant franchises have weakened and weakened, it's not good for the country.

I think we're losing something that we have no substitute for. And I think it's very sad and I don't have the faintest idea what to do about it.

WARREN BUFFETT: Charlie and I love newspapers.

I think The World-Herald hit a 300,000 circulation peak on Sunday at one time. I don't think they averaged that for the six-month period, but I seem to remember that, I could be wrong.

And the figures — 100,000 off that or something of the sort, and the state has gained population, the city's gained population.

I think it's as vital to me as ever, but it clearly — it has changed for the populous as a whole.

And, you know, when I look at the Philadelphia Inquirer and I forget what it was, 350,000 or something like that of circulation, and, you know, I'm not worried about Philadelphia going away.

But when I look at the figures being down — I don't know, I forget what it was now — 30 or 40,000, you know, in a year, it doesn't work very well as that goes along, because the advertiser just does not need you the same way as they needed you 10 or 15 years ago. So your ability to price evaporates in them.

It used to be — Charlie and I met Lord Thompson in 1970 or so, and he owns the paper — he owned the paper — in Council Bluffs, right across the river. And he was a jovial fellow, he was very happy to see us.

And we said to him, "Lord Thomson," we said, "We noticed you own the paper in Council Bluffs. Have you ever been there?" He said, "I wouldn't dream of it." (Laughter)

And then I said, "Well, Lord Thomson," I said, "You seem to increase the price of your paper every year and your poor advertisers" — I mean the advertising price. And I said, "What can they do about it?" He says, "Nothing."

And then I said to him, "Well, in that case, how do you decide how much to increase prices, since it's totally at your discretion?"

And he said — I think Charlie will remember these words — he says, "I tell my U.S. managers to price to make 40 percent pre-tax. Above that, I feel I may be gouging." (Laughter)

Those days are gone. (Laughs)

CHARLIE MUNGER: Yes, and the politicians are not behaving better as the newspapers are weakening. We're going to miss the newspaper power.

WARREN BUFFETT: I agree with that. (Applause)

11. There will "always be opportunities to overperform"

WARREN BUFFETT: Number 5.

AUDIENCE MEMBER: My name is Robert McArthur (PH) from Boston, Massachusetts.

I'm starting a career in investing, and many, if not most, investors my age think they're value investors.

Also, there's a record number of people here to see you this year, and the same value investors who were laughed at three years ago are now celebrated by the financial press.

Will there be fewer metaphorical $100 bills left on the street going forward, and if so, should I look for a career in managing a business instead of managing money?

WARREN BUFFETT: There will probably be fewer, but I would say there will always be — except in the most bubbly of markets, perhaps — but there will always be opportunities if you're not working with large amounts of money.

The money manager — there's a basic conflict. There's conflicts in most businesses. Everybody's pointing out the conflicts now in the investment banking business.

But the investment management business has a conflict that's equally as significant in the fact that asset gathering can become a way more important part of your income than asset managing.

But if you manage moderate sums of money, I think there will always be opportunities to overperform. That doesn't mean lots of people are going to do it, but they will be out there.

And, you know, it might have been easier many years ago when there were fewer people looking and not as much information was available on the internet and all that.

But people still make the same mistakes and they still get — well, I'll give you an illustration.

Charlie has a company called the Daily Journal Company. And the Daily Journal Company has a bunch of cash. And it sat there with cash, and it sat there with cash, and I own 100 shares — which is all he'll let me own — and I got their annual report here a while back.

And in their fiscal year of 2009, they never bought stocks before that I'd seen, and all of a sudden they'd bought $15 million worth of stocks and they were worth 45 million.

So by sitting around for a while, but waiting until things got really ridiculous in certain cases, he put $15 million out that became 45 million within, probably, a six month period or so.

So opportunities come around. You have to be prepared to grab them when they come. And you can't do it with the kind of money — I mean, you can't get the extraordinary things with the kind of money that we're running.

With moderate amounts of money, I think there will always be opportunities. Charlie's going to tell you something more pessimistic now, probably. (Laughter)

CHARLIE MUNGER: Yes. One piece of advice that Warren frequently gives — and it's particularly useful to those going into money management — take the high road. It's far less crowded. (Laughter and applause)

WARREN BUFFETT: Alan Simpson used to say, he said, "Those who take the high road in Washington are seldom bothered by heavy traffic." (Laughter)

But getting to the last part of your question, there's going to be opportunities for talent, whether it's in money management, operating management, whatever. It's going to work.

Money management, you know, is easier to scale up and easier to get into and all of that. So it was certainly my natural inclination, in any event.

I would not have wanted to work my way up to plant superintendent and all of that — (laughs) — until I got a job at the top, you know, about the time they were going to give me a gold watch.

But there's opportunities in both places.

12. Municipal bond insurers must worry about contagion

WARREN BUFFETT: Carol?

CAROL LOOMIS: This question is about municipal bonds. Municipal bond defaults, on the scale you described in the 2008 letter, have so far not materialized.

To what extent will we see municipalities default outright in the next five to 10 years? Will the bond insurance companies be able to swallow the losses? Will there be federal bailouts of states?

And considering all of these risks, should investors be getting paid more than they already are for holding municipal bonds?

WARREN BUFFETT: Well, if the bonds are insured by Berkshire, you don't need to worry at all. (Laughs)

But we're not insuring a lot of bonds currently, because we don't think the premiums are appropriate, which gets to the question.

Just the other day, within the last few days — you've probably read about it in the papers — Harrisburg, Pennsylvania, defaulted on a relatively small amount of bonds.

And the bond insurer, named Assured Guarantee, starts paying the interest.

And Harrisburg may get things worked out in a week, you know, and they may not. There's certainly some incentive to do that. And if they do get it worked out, the bond insurer's not too much on the hook.

But what you worry about is correlation in this field, that if one entity defaults — and particularly if nothing terrible happens, that the police are on the street the next day, and the fire trucks still go to fires and all that — and people start thinking, "Why should I have a great fiscal reputation when I can have lower taxes and still have all the services I need?"

It's very hard to tell how that will play out. I personally think it would be very hard, in the end, for the federal government to turn away a state that was having extreme financial difficulties when they'd, in effect, gone into General Motors and various other entities and saved them.

I don't know exactly how you would tell the governor of state X that you were going to stiff-arm him, and when you'd participated in so many other bailouts of corporations.

But who knows what would happen, and who knows how contagious it would be? The big thing you worry about if you're a bond insurer is contagion.

Obviously the bond insurers — except for Berkshire — the bond insurers, in my view, have got extraordinary liabilities in relation to their capital.

And virtually every one of them either failed or effectively failed — had to spin off a bad bank versus a good bank type of thing, or something like that — with merely the troubles they encountered when they got into structured securities.

And I think they've had a very optimistic attitude toward what could happen in the field. But I don't know the answer on what default rates are going to be over the next few years.

I knew that I felt I was getting paid fairly for taking that risk on a year-and-a-half ago, and I don't feel that we're getting offered a premium that's fair now, so we're going to let somebody else do it.

Charlie?

CHARLIE MUNGER: Yeah, with the municipal bonds, I would try and invest in places that were both prosperous and disciplined.

You want to invest in the prosperous, because Ben Franklin was right when he said, "It's hard for an empty sack to stand upright."

And you want to invest in the disciplined places because integrity still matters. It's not very difficult, it's not very complicated.

WARREN BUFFETT: But you could argue that in a country, if the undisciplined are not being punished for being undisciplined, that the taxpayers in disciplined areas would say, “Wait a second. You know, why should we keep up a record of financial prudence and all that and pay our bills when other guys aren’t paying their bills?”

CHARLIE MUNGER: Well, there’s no question about the fact that bad behavior is contagious. That’s the way human nature works. But I’d still rather be with the disciplined, —

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: — prosperous people.

WARREN BUFFETT: Number 6.

CHARLIE MUNGER: That’s why I like the Berkshire meeting. (Laughter)

WARREN BUFFETT: That, and free fudge. (Applause)

13. Short-term stock moves aren’t predictable and don’t matter

AUDIENCE MEMBER: Good afternoon, Mr. Buffett and Mr. Munger. I’m (inaudible) from Fort Lauderdale, Florida. First of all I want to thank you for sharing your wisdom with us so generously.

Back in October of 2008, you highly recommended buying U.S. stocks and that was a brilliant idea, it worked very well.

And I just want to get your opinion how you think about the market going forward.

Are you still that optimistic, and what’s a reasonable rate of return to expect from equities in the next decade or so?

WARREN BUFFETT: Well, I write articles very infrequently, or get interviewed very infrequently, on the subject of the general level of the market itself. Probably only four or five times in 40 years have I really declared myself about — what I thought — about the general level of the stock market.

And it turned out I was pretty premature, actually, in October of 2008, as was pointed out to me by a number of people.

But I felt — and what I said in that article really was that it would be way better to own stocks over the long term than to follow a policy of buying either long-term bonds or holding cash. And I knew I could make that statement and I would be eventually — I thought odds were very high — I’d be proven right on that.

But I don't like — I don't know what the stock market's going to do next week, or next month, or next year. I don't have any idea.

People always think I do. I know I don't have any idea, I don't think about it, it doesn't make any difference because Charlie and I — I can't recall a discussion we've ever had on it, basically.

But I do think over the next 10 years or 20 years, I'd much rather own equities — including U.S. equities — I'd much rather own them than cash, or I'd much rather own them than a 10 or 20-year bond. But that's partly because I'm very unenthusiastic about the alternatives.

I think equities are likely to give you some positive — modest positive — real return over time. But beyond that I really don't know anything.

Charlie?

CHARLIE MUNGER: That's a cheerful thought that equities are the best of a bad lot of available opportunities. (Laughter)

WARREN BUFFETT: You disagree with it?

CHARLIE MUNGER: No, I think you're right. (Laughter)

I think people should get accustomed, on average, to doing less well in their investment portfolios, in real terms.

WARREN BUFFETT: Charlie and I don't —

CHARLIE MUNGER: I think we're in for a long period of where the ordinary result is not going to be very exciting.

WARREN BUFFETT: But we like owning businesses. And we're in a position where we can own entire businesses, but we also like partial ownership of businesses.

And we want to own businesses where we really think they have some competitive advantage over time, and where we feel good about the management, and where we think the price is reasonably attractive.

I think you can find things like that now, but they aren't dramatically attractive at all. They do beat, in my view, they do beat holding cash or five, 10, or 20-year bonds.

14. Why we don't use bond rating agencies

WARREN BUFFETT: Becky?

BECKY QUICK: This question comes from John Bailer (PH), who's asking about the rating agencies. He points out that you started selling your stake in Moody's this year.

"Has the investment case for Moody's changed due to potential regulation, and if so, why not sell the position to zero?"

WARREN BUFFETT: We won't discuss what we will or won't do with any position, but I would say this. The ratings agencies have had, and still have, under current conditions, an incredibly wonderful business.

I mean, it takes no capital at all, you know, the pricing power is significant. And certain parts of the world feel they need rating agencies.

There are also — a certain part of the world is very mad at rating agencies. And many feel that the rating agencies let them down when the rating agencies, essentially, succumbed to the same mania, in effect, you can say, that prevailed throughout the investment world, and, really, the political world, and the media world, et cetera.

They made the same mistake that, again, politicians made, I made, you know, you made, mortgage brokers made, whomever.

They couldn't see a world where residential housing, countrywide, would collapse.

And I don't think that was done because they were — the incentive part of it, there may have been some small aspect that that played. I just think that, you know, it's very hard to think contrary to the crowd.

And on the other hand, there is a, obviously, a backlash against rating agencies. There may be legal remedies. You can get views on that either way.

If they are not forced to change their — the whole structure around them does not change in some dramatic way — it's a pretty darn good business in that you can't shop pricing in the rating agency business.

We have never paid any attention to ratings for bonds, I mean, you know, at Berkshire. We don't think we should farm out, outsource, investment judgment.

If we can't do it ourselves, we just don't do it. And we're not going to rely on somebody else's opinion, whether it's a rating agency or an investment advisory organization, or a management consultant firm, or anybody else.

So, it's not a business that we rely on, but we do recognize that if the, sort of, the social model doesn't change, it still remains a phenomenal business.

Charlie?

CHARLIE MUNGER: Well, I would argue that the rating agencies, in their present forum, and structured with their present incentives, have been a wonderfully constructive influence in our country for a great many decades.

And what happened, of course, is that the cognition faltered. They drifted with the stupidity of their times in a way that was regrettable.

Part of it came out of asininity in American business education. They overbelieved in these ridiculous models and so on and so on. And I have yet to hear a single apology from business academia for its huge contribution to our present difficulties. (Applause)

15. World will find a solution when oil "windfall" gives out

WARREN BUFFETT: Area 7.

AUDIENCE MEMBER: Mike McCoy (PH) from San Francisco.

Chairman Buffett, you frequently speak favorably about the prosperity of future generations, that our children and our children's children will live better than us.

How much of our current prosperity do you attribute to us being able to get oil out of the ground at a fraction of the cost of its value to us in the economy?

And how will we be able to live better in the future when we can no longer get more and more of this free lunch and we become dependent on more dilute sources like solar and wind?

Couldn't this turn out like trying to satisfy a drug addict with a Coca-Cola?

WARREN BUFFETT: The oil business — obviously, the discovery of oil — what was it, about 1850- something? Colonel Drake at Titusville, Pennsylvania, or something?

That changed the world in a very major way, and it was only 150 years ago.

And since then we've been sticking straws into the earth at an incredible pace. There's over 500,000 producing wells in the United States, would you believe that? I mean, 11 barrels, 10 barrels a day average or something of the sort.

We have really exploited what may have taken, I don't know, whether it was hundreds of thousands of years or millions of years to create.

It's contributed in a huge way to the prosperity of the world, but the world, in my view, will not be dependent upon that particular — call it "windfall" — for the next hundred years.

And Charlie knows way more about this subject than I do, but there will be other free lunches available. You know, whether it's solar or — there's lots of possibilities.

Don't ever give up on humans' ability to innovate in ways that create solutions to problems that seem insolvable.

We've faced all kinds of predictions. You know, all of the inventions having been invented — there's some famous statement, I forget who made, on that.

We haven't really started. I mean, if you could pick a time in history when you would want to be born — leaving out the nuclear, chemical and biological threat, which is something to leave out — but I would pick today. The world has a bright future.

Now, Charlie will give you the other side of that. (Laughter)

CHARLIE MUNGER: No. I think you're failing to recognize something really important. In the technology of 150 years ago, they really needed the oil to get ahead.

In our advanced civilization, which has benefited from this last 150 years of technological expertise, we can get ahead without the oil if we have to.

Now, Freeman Dyson is a physicist who is not an economist but a genius, and he's been very good at pointing out that it isn't that horrible to contemplate a world which goes off oil, provided that world is as rich and knowledgeable as ours is now.

So the fact that they couldn't have got to where we are now without the oil starting 150 years ago, does not mean we can't do without the oil if we have to.

We need the oil and the gas, and the coal, eventually, for chemical feed stocks more than we need it for keeping warm and propelling our vehicles.

WARREN BUFFETT: And the adjustment, fortunately, will be fairly gradual. I mean, it isn't like 85 million barrels in the day goes to 50 million or something in five or 10 years. So it's a workable period of adjustment, in my view.

CHARLIE MUNGER: If it doesn't bother Freeman Dyson, who knows more about it, I don't think it should bother you too much. (Laughter)

WARREN BUFFETT: He's always pulling that on me. (Laughter)

16. Buffett doesn't like Kraft's purchase of Cadbury

WARREN BUFFETT: Andrew?

ANDREW ROSS SORKIN: I received a number of questions regarding Kraft, and this one comes from a shareholder who says they prefer to remain anonymous.

The question is, "Given your stake in Kraft and your public criticism earlier this year about the Kraft-Cadbury deal, how would you grade the Kraft board of director's capital allocation and the management compensation abilities?

"What did you think of Kraft CEO Irene Rosenfeld's $26.3 million compensation package for services, including her leadership in completing the Cadbury acquisition and selling Kraft's North American frozen pizza business?"

WARREN BUFFETT: Well, I didn't like either the Cadbury decision or the pizza decision. But we've made our share of dumb deals at Berkshire, you know.

So I've gotten more tolerant of other people, and incidentally the fact I think it's a dumb deal doesn't for certain make it a dumb deal, but I think the odds are it was a dumb deal.

In fact, I think the odds are that both deals were dumb. The pizza deal was particularly dumb, but — in my view.

But just think of all the dumb things we've done, right? Starting with that department store in Baltimore.

CHARLIE MUNGER: Oh yeah, right. A few Irish banks, you know.

WARREN BUFFETT: Right, (inaudible).

CHARLIE MUNGER: We never seem to go —

WARREN BUFFETT: I wish you hadn't brought this up.

CHARLIE MUNGER: — we never get over it. (Laughs)

WARREN BUFFETT: We expect to do some dumb things, it's just we get mad when other people do dumb things with our money. (Laughs)

You know, the pizza business — somewhere I probably have some figures on that — but when they sold the pizza business for $3.7 billion they announced it as selling it for $3.7 billion.

They didn't sell it for $3.7 billion, that's what the other guy paid. What they got was about $2.5 billion. And that was a terribly tax-inefficient deal when they'd already shown their ability to understand that you could do a tax-efficient deal when they sold the Post cereals business earlier.

And when they referenced — well, they didn't reference at all what pizza was earning beforehand, but I think that Nestle said it was earning something like 280 million pre-tax, but that was referring to the previous year.

When they talked about the Cadbury earnings they were buying, they were talking about next year. And when they talked about the pizza earnings they were selling, they talked about last year.

Pizza in 2009, believe it or not, earned three hundred and, I think, 40 million pre-tax.

So they got 2 1/2 billion for 340 million of pizza earnings that were growing as fast or faster than the Cadbury earnings and where the sales were going as fast or faster. It really didn't make sense in my view.

Now, you know, Irene is a perfectly capable manager and she may know a lot of things about that business I don't know. Like I say, we've made plenty of mistakes ourselves.

But if it'd been me, I would have voted to keep pizza and not buy Cadbury. And I expressed myself, and I don't do that too often, but we owned a lot of Kraft.

And Kraft, still, is selling for considerably less than the value of its constituent parts, particularly if you value them the way they valued Cadbury. (Laughter)

But if they don't sell them all like they sold pizza, you know, the present price is below the value of Kool-Aid and A.1. Sauce and — and Jell-O and Oscar Meyer wieners and a few things.

Those are very good businesses. I just hated to see them give up a significant portion of those businesses to buy Cadbury at what I felt was a very fancy price.

Charlie?

And in terms of her compensation, you know, we've got a compensation system at Berkshire that I regard as quite rational. And there's a lot of companies in the United States that have different compensation systems. (Laughter)

CHARLIE MUNGER: Yeah, I think generally, at the top of American businesses, people think they know too much about strategy. And they tend to hate the tough competitive conditions in the business they're in, and to yearn for some business where it's less difficult.

You remember when Xerox bought Crum & Forster, an American insurance company, one of the dumbest acquisitions in all time?

The reason Xerox did that is they didn't have any tough Japanese competing in the insurance business. They were really tired of facing the tough competition they had in the business they were in.

I think it's quite typical to dream, if you're in business, that something that's a little different, no matter how much you pay for it, will make your troubles less.

WARREN BUFFETT: And you will have an absolute army of lawyers, investment advisors, public relations people, all of whom will have a strong economic interest in having you push ahead on deal, after deal, after deal, regardless of how the shareholders come out. It's just — it's the way it works. OK.

CHARLIE MUNGER: That's why Berkshire is a better deal. (Laughter)

We are very stupid in many ways, but we have avoided a slight subset of stupidities. (Laughter)

And they're important.

17. Biggest threat to integrity: "everyone else is doing it"

WARREN BUFFETT: OK Number 8.

AUDIENCE MEMBER: Dear Mr. Buffett, dear Mr. Munger. My name is Richard Rentrop. I'm a shareholder from Germany.

Mr. Munger, you just mentioned again the importance of integrity. My question is about changes in integrity of management.

One of your three key questions is, does management love what they do or does management love the money? So how do you see the crisis having changed integrity of management?

CHARLIE MUNGER: I think what led to the crisis involved, to some extent, a lack of integrity in many a management. Fortunately, some of them are now gone. So, integrity's very important.

It's the safest way to make money, also. There's an occasional perfect knave who succeeds pretty well with money, but that kind of success reminds me of what Pope Urban said about Cardinal Richelieu.

He said, "If there is a God, Cardinal Richelieu has much to answer for. But if there is no God, he's done rather well." (Laughter)

And too many people want to be like Pope Urban's view of Cardinal Richelieu.

And — the integrity is important, it's terribly important. And of course everybody mouths the integrity, even when it's lacking.

So it's difficult to be sure that professing integrity is the same as having it.

WARREN BUFFETT: The "everyone else is doing it" is the toughest thing. I think —

CHARLIE MUNGER: Yeah.

WARREN BUFFETT: You had this classic example. In about 1993, roughly, you know, the Accounting Standards Board came out and says what was obvious to everybody all along, was that stock options were actually expense, and that expenses, for some reason or another, belonged on the income statement.

And America — corporate America — fought back like you cannot believe. I mean, it was like World War III had broken out, in terms of armies of CEOs marching on Washington.

So the Accounting Standard Board backed off. Congress — the Senate — voted 88 to 9 to tell them that, you know, what the hell did the Accounting Standards Board know about accounting, and that the Senate would tell them what accounting was all about.

When the Accounting Standards Board backed off, they said, "We'll now say that you can do it one of two ways. Number one is preferred," which was to expense. Number two was acceptable, but not preferred.

Of the Standard & Poor's 500 companies, 498 chose number two, the non-preferred way. Two took the preferred method.

And I talked to a number of people in that 498 that I would trust to be a trustee of my will, you know, I'd love to have them as a next door neighbor, they could marry my daughter, but in the end they said, "I can't do it if the other guy isn't doing it."

It was a variation on the, "I'm doing it because the other guy is doing it."

They basically said, "I'll be penalizing my shareholders if I report less in the way of earnings than I can report. And all the other guys are doing it that way, and I understand your point."

And the situational ethics problem is huge. I gave you earlier that illustration of how rare it is to find, if you carry it out to tenths of a cent, a four in reported earnings, quarterly.

That's not accidental and it's — but if you talk to the people that play games to get that four up to five, they would say, "Everybody else is doing it, your own statistics proved that."

And that is, you know, it is a tough problem to deal with.

We try to create as few situations in Berkshire as we can that would induce such behavior. I don't have the managers submit budgets to me, there is no Berkshire budget, you know. They can use them in their own operations. Some do and some don't. Many do, a great many do.

But if they submit them to me, you know, and the temptation becomes, if they're not quite making it and they think I'm looking at them all the time, the temptation becomes to fudge in some way.

And very few would do it, but the more that thought the other ones were doing it, the more that would do it. It's just human behavior. And you want to try and create a structure that minimizes the weaknesses in human behavior.

And I think Berkshire's about as good a place at that as any, although I'm sure we're not perfect at it.

Charlie?

CHARLIE MUNGER: Yeah, what's really interesting on this issue is that so much of the bad behavior does not come from malevolence or overweening greed or anything like that.

It comes from subconscious poor cognition that justifies a lot of behavior that's really not justifiable if it's better understood. And that happens to practically everybody.

And the cure is very difficult. The best cure is to have a system where the people who are making the decisions bear the consequences.

And that's why the system that Wall Street created where nobody really owned the mortgages, they just passed them rapidly to somebody else at a profit. And so nobody felt any responsibility that the mortgages be any good.

Systems like that, at a basic level, are irresponsible systems, and it's deeply immoral to create irresponsible systems like that.

But the people who create them don't realize they're being immoral, they think those systems are wonderful.

Who do you see apologizing for the behavior you now find so regrettable in our recent mess?

There are very few apologies, you'll note. People think they did fine.

18. Can't make money if you're scared when everyone else is scared

WARREN BUFFETT: Carol? (Applause)

CAROL LOOMIS: This question is from James A. Star.

“I have read an enormous amount about past market declines and the opportunities they presented to investors.

“The last two years have seemed to me, a 43-year-old investor, a real opportunity. Yet in the thick of the action, I was too scared, because I felt the market decline, while severe, was not necessarily sufficient to match the risks of global financial meltdown.

“So my question is, given that we are possibly not totally out of the woods, how did the two of you assess this latest buying opportunity against the previous opportunities of your life?”

WARREN BUFFETT: It’s not the greatest one. We’ve seen a few that scream at us, and we’ve seen a few periods of overvaluation that scream at us. And 90 percent of the time we’re somewhere in between and we don’t know exactly where we are in between.

The business of being scared, you know, I don’t know what you do about that.

If you’re of that — if you have a temperament that when others are fearful you’re going to get scared yourself, you know, you are not going to make a lot of money in securities over time, in all probability.

You know, people really — if they didn’t look at quotations — but, of course, the whole world is urging them to look at quotations, and more than that, do something based on small changes in quotations.

But think how much more rational — we’ve talked about it before — but think how much more rational investing in a farm is than the way many people buy stocks.

If you buy a farm, do you get a quote next week, do you get a quote next month? If you buy an apartment house, do you get a quote next week or month?

No, you look at the apartment house or the farm and you say, “I expect it to produce so many bushels of soy beans and corn, and if it does that, it meets my expectations.”

If they buy a stock and they think if it goes up it’s wonderful, and if it goes down it’s bad.

We think just the opposite. When it goes down we love it, because we’ll buy more. And if it goes up, it kills us to buy more.

And I — you know — all kinds — you know, Ben Graham wrote about it. It’s been explained. But if you can’t get yourself in that mental attitude, you’re going to be scared whenever everybody else is scared.

And to expect somebody else to tell you when to buy and therefore get your courage back up or something, you know, I could get this fellow's courage up substantially by saying this is a wonderful time to buy, and then a week from now he'd run into somebody else that tells him the world is coming to an end and he'd sell.

I mean, he's a broker's friend, but he's not going to make a lot of money.

Charlie?

CHARLIE MUNGER: Yeah, I think I developed more courage after I learned I could handle hardship. So maybe you should get your feet wet with a little more failure. (Laughter and applause)

WARREN BUFFETT: I've certainly followed that advice. (Laughter)

No, some people really do not have the — apparently, they don't have the temperament, or emotional stability, or whatever it may be, to invest in securities.

They'd be much better off if there were no quotations at all. And Keynes talked about that some in the past, too.

To take something that should be an asset, a quotation every day, you know, terrific liquidity, nobody says, "How liquid is my farm?" or something of the sort. So they're not expecting the prices to tell them something about how they're doing.

The market is saying this or that. Whenever anybody says, "The market is saying this or that," you know, it's sort of unbelievable.

But there's a lot of interest in investing, and people are going to yak about it all the time.

And in the end, what counts is buying a good business at a decent price, and then forgetting about it for a long, long, long time. And some people can do it and some people can't.

19. Munger is "enormously optimistic" about solar power

WARREN BUFFETT: Number 9.

AUDIENCE MEMBER: Hi, my name is Joe McCabe (PH). I'm from Littleton, Colorado. I want to thank you for the opportunity to ask a question and for your annual discussions in your report, just wonderful reading.

Charlie Munger, you are on a YouTube video that discusses BYD and solar energy, and I really appreciate that interview and it being available to everyone. I want to talk about that in relationship to your other companies.

So the BYD was mentioned as electric car and battery, but I understand their second goal is solar energy.

And you also own roofing companies and buildings companies, (inaudible) and Clayton, as well as utilities, Mid-America, PacifiCorp, and Pacific Power.

This seems to be a perfect golden opportunity for solar to be on these buildings in those kinds of utility companies.

You've mentioned you don't interfere with individual companies, but is there a way you can direct, suggest, motivate a synergy between all these companies to bring solar solutions? Thank you.

CHARLIE MUNGER: As the solar solutions are coming, because they're so obviously needed.

And regarding solar panels on roofs, I never pass an opportunity to decline to put them in, because I think they're going to get a lot cheaper and I'd rather wait.

WARREN BUFFETT: Well, at 86 you can afford to, Charlie. (Laughter)

CHARLIE MUNGER: Yes, I have to think about the long term. (Laughter)

And I'm going to miss you terribly. (Laughter)

WARREN BUFFETT: Touché.

CHARLIE MUNGER: It reminded me of the wife, and the husband said, "Will you still love me if I lost all of my money?" And she says, "Yes, I would always love you, but I would miss you terribly." (Laughter)

Well, the solar is coming because we have no other practical alternative.

And it should be regarded as a very good thing, because what in hell would modern civilization do if we had no alternative to fossil fuels? That would be a really serious problem.

And so of course, the cities that are chocking to death on their own poisonous air are going to go to electric cars and we're going to get a lot more renewable energy from the sun.

I'm also quite negative about growing corn in America using fossil water and fossil fuels in order to burn up in automobiles. (Applause)

That is a stunningly stupid idea, and another example of how our politicians have failed us.

But I am enormously optimistic about what is going to happen. Our politicians will eventually create a big electric grid that's way better than what we have now. We'll eventually have the energy we need, and we will be way better for it.

And it's wonderful that these technical problems are proving solvable.

It is not all that important over the long term, if solar power costs twice as much as what we're used to. That's a blip in the economic future of our country, it's just a blip.

And I think it's probably a good thing that we have all these big capital needs coming that will create a better system in the end and solve our problems in the end.

So I'm quite optimistic. But in terms of immediate business decisions, I think frequently the right answer is counterintuitive, like mine, to say, if you want to put in solar panels, wait. They're going to get cheaper.

Warren, do you want to criticize that?

WARREN BUFFETT: I have nothing to add. (Laughter)

20. No "exploding bananas" now in our stock portfolio

WARREN BUFFETT: Becky?

BECKY QUICK: This question comes from Jennifer Mancuso (PH) who is a shareholder here in Omaha. And she's hoping that you can settle a debate between her husband and her.

WARREN BUFFETT: That a promising assignment. (Laughs)

BECKY QUICK: She says that he believes the Berkshire Hathaway stock will rise significantly in the next one to two years because of all the smart buys Warren made last year in Fortune 500s when stock prices were bottomed out.

She says she knows this type of purchasing has driven much of your financial success, but she doesn't know how impactful these buys are, given the size of Berkshire Hathaway and that Warren himself indicates that we shouldn't expect to see large increases in his stock price in the next few years.

So the question is, what percentage of the portfolio is represented by those stock purchases, and what kind of an impact might they have on the fund's value as the valuation of that stock increases?

WARREN BUFFETT: I would say this, that our portfolio now — I've always regarded our portfolio as something that we thought would be worth more money later on.

But the degree of undervaluation in our portfolio now compared to what I would expect it to produce over time is not dramatic, and that undervaluation has been exceeded many times in the past.

So it isn't like we're sitting here on some exploding bananas or anything like that. That couldn't be further from the truth.

We think we'll do reasonably well over time. We've got a lot of good businesses, we try to allocate capital rationally, we don't waste a lot of money at the top.

But we do not have a whole bunch of things that are likely to increase dramatically in value from here, it just isn't the case. So I hope she and her husband get along fine. (Laughter)

Charlie?

CHARLIE MUNGER: I don't think I can solve any of those domestic troubles, either. In my own day, I simply accepted the other point of view. (Laughter)

21. "If I can be optimistic when I'm nearly dead, surely the rest of you can handle a little inflation"

WARREN BUFFETT: Number 10.

AUDIENCE MEMBER: Hello gentlemen, my name is Randy Bellows (PH) and I'm from Rock Hall, Maryland.

I've been coming here for many, many years, yet today I sense from each of you a guarded sense, a sense of reserve.

Not quite overt pessimism, but real reserve. You have spoken of impending inflation, government debt, both here and abroad, that's higher than we're accustomed to, increased regulation and red tape that may slow innovation and growth.

And just a few minutes ago, Charlie, you spoke of that we have to reduce our expectation of investment returns.

And yet in the same day you say children in India will live better than we do, Chinese will live better than we do, and our own children here in this country will live better than we do today.

Can you give me four or five facts that explain your optimism? And thank you.

CHARLIE MUNGER: Well, having the main technical problems of civilization — which, of course, are all energy related — having a solution that's on the horizon and nearly here, that is not a small benefit to humanity.

That is the biggest single problem we have, so of course I'm optimistic about that.

And — I'm optimistic about the culture that generally pervades in Berkshire, because I think it will continue to work.

And of course it gives me some pleasure to see people that have had it tough for a long time — through their own extreme efforts and talents — rising rapidly, as in many parts of China and India.

All of that gives me pleasure, and why shouldn't it? Of course there are terrible problems, and of course reduced expectations are the rational way. There's no better way to be happy than getting your expectations down, it's much easier than —

WARREN BUFFETT: Getting your results up.

CHARLIE MUNGER: — than getting your results up, yeah. (Laughter)

It's just — we never know anything here except the most elementary common sense. It's amazing that it's sufficed for us.

So no, I'm optimistic about life. If I can be optimistic when I'm nearly dead, surely the rest of you can handle a little inflation. (Laughter and applause)

WARREN BUFFETT: I really have nothing to add to that. (Laughter)

22. Why Buffett prefers TV interviews

WARREN BUFFETT: Andrew?

ANDREW ROSS SORKIN: This question comes from Myard Shields (PH), and I want to say in advance that I don't — I'm not thrilled asking this question and you'll see why.

The question is, "The American public almost certainly benefits from Mr. Buffett's increasing media exposure, but is it the best use of your time for Berkshire's shareholders?"

WARREN BUFFETT: Probably not. (Laughter)

I do a lot of things that aren't the best use of my time for Berkshire shareholders. I play bridge on the internet 12 hours a week, you know. I'm not sitting there thinking improving my bridge skills is going to do wonders for Berkshire. (Laughs)

No, I — I do — I have seen over the years that the development of broadcast television, as opposed to print, and I would say that if you want to have a record of exactly what you said as

opposed to interpreted through not only reporters but editors who bounce back things and say, "Take six paragraphs down to four paragraphs, and why don't you ask this question?"

I would much rather have a record on Charlie Rose which is permanent. Where people can go back and look at exactly what I said, and my body language, and whether I was kidding.

I'm sure Lloyd Blankfein would have preferred to have a television interview. He would like to take back that remark about, you know, doing God's work, under any circumstances. But I would bet that that was delivered as a throwaway line in terms of something that was said earlier.

Clearly he did not mean that in a literal sense, but he's gotten killed in the media because somebody elected to treat it halfway seriously, and then other people, to fit other stories, play it that way.

I like the idea, whether it's, you know, in terms of CNBC keeping a record of it or Charlie Rose keeping a record of it, of being judged by my own words rather than somebody writing a few paragraphs trying to summarize some views.

And that requires being on television instead of having people, essentially, take a one-hour interview, often just shopping for a single quote that fits their storyline, and having that somehow become representative of what I think.

So the clearer I can be about what I think, whether writing my own annual report or whether being in broadcast, the better I feel about the accuracy of the reporting.

And I figured that out a few years ago. So that's the direction I go now. And whether it's the best use of the time, it works fine.

I'll tell you one story on that. You even have to be a little careful about broadcast.

After we made the Burlington deal, Charlie Rose, who may be here, did an interview with me and we taped it on a Friday morning. And we did the tape, and we had a good time doing it.

And during the tape there was a little section on it showing great railroad scenes, and one had Cary Grant and Grace Kelly, and another one had Marilyn Monroe in "Some Like It Hot," and then they showed a bunch of the kind of things we had about railroads in our movie this morning.

And when we got all through that, he asked me some question. And just to give a flip answer, but it did tie in with what I'd just seen, I said, "Well, I would have paid more for the Burlington if they'd thrown in Grace Kelly and Marilyn Monroe." (Laughter)

Well, this taped interview ran an hour and six minutes, so when they ran the tape that night they had to take out six minutes and they took out these railroad scenes that showed Grace Kelly and Marilyn Monroe. (Laughter)

So to anybody that viewed this thing, it looked like I was spending my time there fantasizing about these — while Charlie was talking to me. (Laughter)

So even television isn't safe. (Laughter)

23. How Berkshire gets loyal shareholders

WARREN BUFFETT: Number 11.

AUDIENCE MEMBER: Hi, my name is Kip Johann-Berkel from Boston, Massachusetts.

First, thank you both for your writings, annual shareholder meetings, and even the Charlie Rose interviews — (Buffett laughs) — as they have helped me grow both as an investor and as a person.

Berkshire has, in my opinion, the best and most loyal shareholders of any publicly-traded company or mutual fund.

How do you attract and retain a shareholder base, particularly when many of the same behavioral tendencies that produce mispriced securities also produce fleet-footed shareholders? Thank you.

WARREN BUFFETT: Yeah, the interesting thing about marketable securities is that, basically, anybody can buy them.

You might elect to join somebody in buying a McDonald's franchise or a farm, or apartment house, or something, but if you're running a public company, you know, you can have anybody from, you know, Osama Bin Laden, you know, to the Pope as your shareholder.

I mean, they elected — you don't elect them, they elect you.

Now, if you want a shareholder body that is going to be in sync with you, it's important — in my view — it's important that you let them know exactly what sort of institution you plan to run.

And we've got the annual reports, we've got television interviews, we've got various ways of conveying to people what kind of a place Berkshire is. And to some, that says, "Come in," and to others it says, "Stay out."

Phil Fisher wrote a great book on investing back in the very early 1960s and he described the situation this way.

He said, “Look it, you can have a restaurant and it can say ‘French food’ and if you have French food inside, you know, people are going — you’re going to get a satisfied and returning clientele. And you can have another one that says hamburgers. But what you can’t do is have hamburgers on the outside on the marquee and deliver French food inside.”

And so many companies sort of try and promise everything to everybody. Their investor relations department tells them that any shareholder they can get interested, you know, they want.

We want people who think the way we do. And we think, on balance, we won’t disappoint them too much.

But if we get a bunch of people who think that the earnings next quarter are going to be up 10 percent for some reason, and that’s the reason they own the stock, we’re going to have a lot of disappointed people.

And our goal in life is not to spend our time associating with people who are going to be disappointed with us.

It’s our fault if we give out the wrong advertisement. So we try to advertise what we are, and then we try to deliver on that.

And I do think we have the best group of shareholders in the world, you know, among large publicly-traded companies.

And I think it’s because we’ve got people that basically look into buying a business, becoming our partners over the years, and they know we’ll treat them like partners.

And they, in turn, give us a lot of comfort in having a stable shareholder base and a good feeling about just running the whole place.

Charlie?

CHARLIE MUNGER: Well, what happened here is, to some extent, an accident.

Warren and I started out investing money for our families and friends, and the people who trusted us when we were young and unknown, of course, we developed a strong affection for.

And we morphed into controlling public companies from that base, and so we tend to regard our shareholders, including the new ones, as family.

And that’s not put on, that’s the way we regard you. Other people can’t do that because they morphed into their situation in a different way.

And if you were a CEO and dealt with the average institutional investor, who is interested in having his portfolio management look good the next six months, you'd find it hard to love your shareholders.

They're sort of a hostile force that are putting unreasonable expectations on you. And so I don't think Warren and I deserve such wonderful credit for the fact that we have better relations with our shareholders. We came up in a totally different way.

Now, we did have enough sense, when we saw that it was such a good thing and so satisfying, that we stayed with it. But weren't we — we got into this by accident, didn't we?

WARREN BUFFETT: Yeah, we got in by accident, and we also were blessed with the fact that we did not have an investor relations department that wanted us to go out and pump up.

CHARLIE MUNGER: But that was on purpose.

WARREN BUFFETT: Yeah, yeah. (Laughter)

I have seen them in operation at dozens of companies, I've been involved in one way or another. And it is really ridiculous, the idea that you go out and try and cater to the expectations of people that are expecting you to do things you can't do by operations, but maybe you can do by accounting for a short period of time. It leads to the worst behavior.

And in the end, somebody's going to own all your shares, you know. There's no way that shares remain empty, you know, in the shareholder list. So why not get a bunch of people who are going to stick with you who are in sync?

And the way they're going to be in sync is if you told them rather accurately what you expect, how you expect to do it, and tell them when you make mistakes, all of that.

CHARLIE MUNGER: But we probably shouldn't be as critical of people who came up a different way dealing with a different shareholder face.

It's not at all clear that we wouldn't have ended up somewhat the same way if we'd had the same manner of rising.

WARREN BUFFETT: Sure. Yeah. So we'll give up being critical for the next five or 10 minutes, and then we'll go back. (Laughter)

24. Low interest rates are hurting people scared out of stocks

WARREN BUFFETT: Carol?

CAROL LOOMIS: Very short question. Please comment on the implications of our existing, and perhaps continuing, zero percent interest rate.

WARREN BUFFETT: Well, it's very tough for anybody that's got their investment in short-term money.

You know, if you're getting a tenth of a percent on some money market fund currently that if you'd started doing that when Columbus landed, and didn't pay any taxes, you'd have almost doubled your money by now. (Laughter)

It's really — I mean, people talk about easy money policies, but it isn't so easy on the people who've got the money.

It won't go on forever, but it may seem like forever to people that are on fixed income. I'm very sympathetic with them.

Basically they got, many of them, became fearful when the world was looking like it was collapsing in late 2008. And the price they pay is really — I know some people like that that are — it's terrible in terms of returns and their purchasing power will be eaten away. But this will end at some point.

I don't know how it will end, but I would not like to be chairman of the Fed or secretary of the treasury. Nobody's ever asked me, but maybe that's why I say I wouldn't want to do it.

But the — we will — it won't work forever to run huge budget deficits and try and have very easy monetary policy. And when — if we do run into trouble, the blame should not go to the Fed, the blame should go to Congress. (Applause)

CHARLIE MUNGER: In some sense, the reality of our situation is almost amusingly depressing.

Stocks are up because the return from loaning your money out at interest in a safe way is so lousy, and of course, one answer is that can't last.

In which case, stocks won't be as pronounced a value, relatively speaking. And of course, if it does last, as it has in Japan, we won't like that either because it will mean we're mired in some horrible stagnation.

This is a very cheery message. (Laughter)

WARREN BUFFETT: The pressure that is exerted by extremely low interest rates — short-term rates — on the value of everything else, it's hard to overestimate that.

I mean, the reason people have their money out at one-tenth of 1 percent is that they're afraid of everything else. But as they're being afraid of everything else abates, as it has over the last

couple years, the pressure to push stock prices up, push real estate prices back up, it's enormous.

And of course, that's understood by people who have something to do with those matters. But I don't think you should underestimate the degree to which the last year of stock prices has been a result of the agony that people are being put through that keep their money in short-term money instruments.

Unless they're terrified of the world, they get pushed into other investments, and I think we've seen a lot of that, and we'll see what happens when money rates do go up, if they do.

25. Valuing businesses by asking questions

WARREN BUFFETT: Twelve.

AUDIENCE MEMBER: Hello, my name is Jeff Colvette (PH) and I'm from Olathe, Kansas.

I got started in investing in 1999, right before the big tech bubble, and unfortunately I learned buy and hold and don't fret about market price fluctuations before I learned the importance of valuing a business and applying a margin of safety.

So, as Charlie said, I got my feet wet with huge failure right away. And —

CHARLIE MUNGER: Join the club. (Laughter)

AUDIENCE MEMBER: Thank you, I don't feel so bad now.

So that leads to my question. It seems like I've read all the Berkshire reports and all the reading I can do about you two, and I thank you for these wonderful meetings.

But it seems like it boils down to some simple things, valuing a business and applying a margin of safety.

So my question is, what do you recommend for an approach to getting better and better at valuing companies?

WARREN BUFFETT: That was a very, very good question. And in my own case, you know, I started out without knowing anything about valuing companies.

And Ben Graham taught me a way to value a certain type of company that would prove successful, except the universe of those companies dried up.

But nevertheless — it was almost a guarantee against failure, but it was not a guarantee that these things would continue to be available.

Charlie taught me a lot about the value of a durable competitive advantage, and a really first-class business.

But over time, I've learned more about various types of businesses. But you'd be amazed how many businesses I don't feel that I understand well.

The biggest thing is not how big your circle of competence is, but knowing where the perimeter is.

You don't have to be an expert on 90 percent of the businesses, or 80 percent, or 70, or 50. But you do have to know something about the ones that you actually put your money into, and if that's a very small part of the universe, that still is not a killer.

And I think if you think about what you would pay for a McDonald's sandwich, you think you would pay for — you know, think about the businesses in your own hometown of Olathe.

Which would you like to buy into? Which do you think you could understand their economics? Which do you think will be around 10 or 20 years from now? Which do you think it would be very tough to compete with?

Just keep asking yourself questions about businesses. Talk with other people about them.

You will extend your knowledge over time. And always remember that margin of safety. And I think you basically have the right attitude because you recognize your limitations, and that's enormously important in this business. You will find things to do.

Six or seven years ago — maybe not that long — six or seven years ago, when I was looking at Korean stocks, for example, I never had any idea that Korean stocks would be something that I would be buying.

But I looked over there, and I could see that there were a number of businesses that met the margin of safety test.

And there I diversified, because I didn't know that much about any specific one, but I knew that a package of 20 was going to work out very well, even if a crook might run one of them, and a couple might run into competition I didn't anticipate, because they were so cheap. And that was sort of the old Graham approach.

You will find opportunities from time to time, and the beauty of it is you don't have to find very many of them.

Charlie?

CHARLIE MUNGER: Well obviously, if you want to get good at something which is competitive, you have to think about it a lot, and learn a lot, and practice doing it a lot.

And the way the world is constructed in this field, you have to keep learning, because the world keeps changing and your competitors keep learning.

So you just have to get up each morning and try and go to bed that night a little wiser than you were when you got up.

And if you keep doing that for a long time — and accumulate some experience, good and bad, as you try and master what you're trying to do — people who do that almost never fail utterly.

They may have a bad period when luck goes against them or something. But very few people have ever failed with that.

If you have the right temperament, you may rise slowly but you're sure to rise.

WARREN BUFFETT: Charlie, did you take any business courses in school?

CHARLIE MUNGER: None. I took accounting.

WARREN BUFFETT: And when did you start valuing businesses and how did you go about it?

CHARLIE MUNGER: When I was a little boy. (Laughter)

I can remember, I would come down to the Omaha Club, and there was an old gentleman who hit the Omaha Club about 10:30 every morning. He obviously did almost no work, and yet was quite prosperous.

WARREN BUFFETT: He became your ideal. (Laughter)

CHARLIE MUNGER: Yeah. But he made me very curious as a little boy. I said to my father, "How in the hell does he do that?" And he said, "Charlie," he said, "A business where he enjoys practically no competition. He gathers up and renders dead horses."

That was an example of avoiding competition by one stratagem. And you keep asking questions like that of reality, starting at a young age, you gradually learn. And weren't you doing the same thing?

WARREN BUFFETT: Yeah, thankfully he went beyond his original insight there. (Laughs)

CHARLIE MUNGER: I noticed, it was rather interesting — you take the rulers of the businesses when I was a little boy, an awful lot of those businesses, in Omaha, a lot of those businesses went broke, a lot of them sold out at modest prices under distress.

And some of the people who rose, like Kiewit, from small beginnings, nobody thought of as the great glories of that early time.

And I think that's kind of the way life is. It's hard to get anywhere near the top, and it's hard to hold any position once you've attained it.

But I think you can predict that Kiewit was likely to win. They cared more about doing it right. They cared more about avoiding trouble. They put more discipline on themselves.

WARREN BUFFETT: Well, if you knew the individual well, you would have bet, right?

CHARLIE MUNGER: What?

WARREN BUFFETT: If you knew the individual.

CHARLIE MUNGER: I would not have bet on any of the people I knew who were already wealthy. But I would have bet on Pete Kiewit. His sister taught me math, and no, half-Dutch, half-German, you know, this is a tough culture. (Laughter)

WARREN BUFFETT: There's your — you just heard it folks. Half-Dutch, half-German. (Laughter)

CHARLIE MUNGER: Well but —

WARREN BUFFETT: Go out looking for them. (Laughter)

CHARLIE MUNGER: Well, the man who's recommending this is named Munger. (Laughter)

Anyway, the — no — I don't think it's that — I was just automatically doing that. What was working, what was failing, why was it working, why was it failing?

If you have that temperament, you are gradually going to learn. And if you don't have that temperament, I can't help you. (Laughter)

WARREN BUFFETT: If you'd followed Pete Kiewit around for 10 years, you never would have seen him do anything dumb, right?

CHARLIE MUNGER: Oh yeah. It's so —

WARREN BUFFETT: It's avoiding the dumb thing. You really don't have to be brilliant, but, you know, you have to avoid just sort of what almost seem the obvious mistakes.

But I would say that you're on the right track back there, in terms of having the basic fundamentals, knowing your limitations, but still seeking to learn more about various kinds of businesses.

Charlie, I think, when he practiced law, any client that came in Charlie was thinking about that business as if he owned the place.

And he probably generally thought he knew more about the place than the guy that actually owned it, who was his client. (Laughs)

But I remember talking to him, you know, 50 years ago, and he would start talking about Caterpillar dealerships in Bakersfield or something of the sort. He was incapable of looking at a business without thinking about the fundamental economics of it.

How'd that guy do with the Caterpillar deal? (Laughs)

CHARLIE MUNGER: Well, he sold it for a perfectly ridiculous price to a dumb oil company. (Laughter)

It wasn't worth half what he got for it.

WARREN BUFFETT: But they had a concept and a strategy.

CHARLIE MUNGER: They had a concept and a strategy, and turned out they had consultants. (Laughter)

WARREN BUFFETT: Yeah. (Laughs)

26. Companies with the best return on capital

WARREN BUFFETT: Becky?

BECKY QUICK: This question comes from Carson Mitchell in Aberdeen, South Dakota, who asks both of you, "What business has had the best return on capital for Berkshire, and what business of any on earth has had the best return on capital?"

And he adds, "PS, I would have come by rail but there are no seats in the grain rail cars." (Laughter)

WARREN BUFFETT: There's two ways of looking at it.

If you talk about the capital necessary to run the business, as opposed to what we might have paid for the business — I mean, if we buy a wonderful business — you could run the Coca-Cola Company —assuming you had the bottling systems — you could run it with no capital.

Now, if you buy it for $100 billion, you can look at that as your capital or you can look at the basic capital. When we look at what's a good business, we're defining it in terms of the capital actually needed in the business.

Whether it's a good investment for us depends on how much we pay for that in the end.

There are a number of businesses that operate on negative capital. Carol's with Fortune magazine. You know, any of the great magazines operate with negative capital.

I mean, the subscribers pay in advance, there are no fixed assets to speak of, and the receivables are not that much, the inventory is nothing.

So a magazine business — my guess is that People magazine operates, or Sports Illustrated operates, with negative capital, and particularly People makes a lot of money.

So there are certain businesses. Well, we had a company called Blue Chip Stamps where we got the float ahead of time, and operated with really substantial negative capital.

But there are a lot of great businesses that need very, very little capital. Apple doesn't need that much capital, you know.

The best ones, of course, are the ones that can get very large while needing no capital.

See's is a wonderful business, needs very little capital, but we can't get people eating ten pounds of boxed chocolates every day.

CHARLIE MUNGER: Except here.

WARREN BUFFETT: We want to. (Laughs)

Generally, the great consumer businesses need relatively little capital. The businesses where people pay you in advance, you know, magazine subscriptions being a case, insurance being a case, you know, you're using your customer's capital.

And we like those kind of businesses, but of course, so does the rest of the world, so they can become very competitive in buying them.

We have a business, for example, that's run wonderfully by Cathy Baron Tamraz, called Business Wire. Business Wire does not require a lot of capital. It has receivables and everything, but it is a service-type business and many of the service-type businesses and consumer-type businesses require little capital.

And when they get to be successful, you know, they can really be something.

Charlie?

CHARLIE MUNGER: I've got nothing to add, but at any rate, the formula never changes.

WARREN BUFFETT: If you could own one business in the world, what would it be, Charlie? (Laughter)

I hope we already own them, myself.

CHARLIE MUNGER: You and I got in trouble by addressing such a subject many decades ago.

WARREN BUFFETT: That's right. (Laughs)

CHARLIE MUNGER: And I don't think I'll come back to it.

WARREN BUFFETT: OK. (Laughter) Number 13 —

CHARLIE MUNGER: If you name some business that has incredible pricing power, you're talking about a business that's a monopoly or a near monopoly.

WARREN BUFFETT: Sure.

CHARLIE MUNGER: And I don't think it's very smart for us to sit up here naming our most admired business or something, that other people regard as a monopoly.

WARREN BUFFETT: OK. We'll move right along. (Laughter)

27. Phone hasn't been ringing, but we're still ready to buy

WARREN BUFFETT: Let's see, have we done number 13? No, I don't think so, that's in the other room again. Anybody there?

AUDIENCE MEMBER: Yes, Mr. Buffett, Mr. Munger, greetings from the breakout room.

My name is Glenn Tongue from New York. I would like to thank you both for your exemplary stewardship through the economic crisis. We are all wealthier in several ways as a result of your efforts.

I'd like to ask about Berkshire's growth, specifically your acquisition outlook and appetite. Has the phone been ringing?

WARREN BUFFETT: The phone doesn't ring very often at Berkshire, you know. That's partly because — well, we set out our criteria in the annual report for what we're looking for, and we're not looking for larger and larger things.

So when we start saying that we want to buy businesses that earn 75 or 100 million, at a minimum, before tax, that weeds out a lot of phone calls.

And I would say that, you know, if we get a couple of — three or four serious phone calls a year that sort of meet our criteria that look like they might be a possibility, that's a good year, I like that.

I don't think there's been any major change in the frequency that something comes along that might interest us.

The answer is, in terms of being interested, we're as interested as ever. I mean, we wrote a big check and issued shares in connection with BNSF.

But I would love it if Monday morning my phone rings with some big deal. We'll figure out a way to do it.

Charlie?

CHARLIE MUNGER: Yeah, it's amazing to me that we have been as successful as we have been in buying desirable places.

And it's human revulsion that has helped us, because many of the people who sell to us are so smart that they're revolted by almost everything else.

They don't want to sell into some fee-driven buying system that doesn't care about their employees or their business.

And they finally decide they want to join this one, they don't want to join the alternatives. And of course, that's marvelous for us.

We've got a screening device out there that is protecting us, to some extent, from the wrong sort of people. And very few people have this particular —

We get offered things by people who would not sell to anybody else. That is really peculiar. And it's happened what, how many times?

WARREN BUFFETT: Well —

CHARLIE MUNGER: A lot.

WARREN BUFFETT: It's happened, and on important ones. There's one I've mentioned before, so I can mention the name.

When I heard from ISCAR, and I'd never heard of ISCAR before, I'd never heard of Eitan Wertheimer, who wrote me, but he basically told me and made it quite specific, they either wanted to sell to Berkshire Hathaway or they didn't want to sell it to anybody.

And we met and we made a deal. And there was another person — I won't even define exactly the time period — but he came in and he'd been thinking about it for about a year on this business, and he'd built it over many decades.

And he said, "There were three possibilities. One was to sell it to a competitor." And he said, "They would have ideas immediately about all the people they could take out of this place and move the headquarters," and everything, and they would dismantle something that he'd spent 30 years or so building.

And he decided that he didn't want to do that, even though it was probably worth more to a competitor, because that's often the case, than to anybody else.

And then he looked at selling to a leverage buyout firm — and now would call itself a private equity firm — and he decided he did not want his place being, basically, a piece of meat that would be resold in not that many years. He really wanted to find a permanent home.

So he said, "When I come to you, I don't come to you because you're so damned attractive." He said, "You're the only guy left." (Laughter)

And we bought the business. So that happens from time to time, and it's accidental. It's when something happens in someone's life that they decide they really want to assure a permanent home.

It may be because the family isn't getting along. It may be, you know, a half a dozen reasons. Maybe somebody wants to monetize it because they want to give away a lot of money.

But periodically that will come up, and we are a logical place to get the call, and we will get the calls. But there's not much we can do to accelerate the process or do anything of the sort.

We are ready to act when it happens. I mean, if I get a call, and it's a $10 billion deal, on Monday, and I like it, I will say yes. (Laughs)

And then I'll figure out how we do it.

CHARLIE MUNGER: Yeah, I don't think it's over. It may be, in fact, it will be, slower than it was in the early days. But that's not so bad, considering how much richer we all are than we were then.

28. Big question for Berkshire's future

WARREN BUFFETT: Andrew?

ANDREW ROSS SORKIN: Since I imagine this may be one of the last questions, Peter Brotchie, a shareholder from Wenham, Massachusetts, writes to say, “Thank you, Warren and Charlie, for improving the Q&A session last year.

“Along those lines, are there important questions that you were surprised that you don’t get asked about Berkshire’s financials or businesses? And if so, what is the question you would ask yourself if the roles were reversed?”

WARREN BUFFETT: Well Andrew, first of all, I will say we got a lot of compliments on changing the format. It worked, and that’s why we’re continuing it. So it’s worked very well. (Applause)

And that applause is for you, not for me, and you deserve it.

It really has improved the quality of questions, in terms of having it Berkshire-related and having a system of weeding them out without us being the ones that do the weeding out.

Now, I’ve given Charlie time to think about what the answer to that question is going to be, so I’m going to turn it over to him. (Laughter)

CHARLIE MUNGER: Well, I don’t have a lot of comment about things that should be done differently at Berkshire.

I think it is quite interesting that we got into BYD, because BYD is surfing along on the developing edge of new technology, and that has not — we have always bragged about avoiding that.

Isn’t that a fair statement?

WARREN BUFFETT: That’s fair.

CHARLIE MUNGER: And yet here we are.

I think it’s because we’ve shown some capability for learning. And I think the BYD investment is going to work out very well. And I think it’ll work out very well in a way that gives great pleasure to all of us shareholders, because I think they’re going to help solve some significant problems of the world.

And, that place is — you know, I spoke with pride of Kiewit. They tried harder, they were more self-disciplined. That’s the way I feel about BYD.

And it’s a pleasure to associate with such people, and in my life those are the people with whom I’ve achieved the most.

So as far as I'm concerned, we found our own kind, except they're better. And we may do more of that.

And we wouldn't have felt confident enough to go into venture capital, typically with just a bright young man with an idea, no matter how brilliant.

WARREN BUFFETT: Not me.

CHARLIE MUNGER: No, I wouldn't either.

But BYD had won its spurs in life by the time we found it. They had accomplished things that struck me as almost impossible to do, and yet they'd done them.

And so I don't think that's the last unusual thing that Berkshire will do, and the last one that will work.

And I think the Burlington Northern acquisition — when we did it, we knew it would be better for their shareholders than it was for ours, because, after all, they were getting into Berkshire. (Laughter)

But we also thought it was good for our shareholders. And why should we care that it was better for theirs, if it was satisfactory for us? And I think that will happen again, too.

That's our kind of a culture. You know, Middle Western, and constantly improving the place. And with MidAmerican and Burlington, we're getting a fair amount of engineering into Berkshire, which of course, I like.

And so I hope you people are comfortable with the way things are going, because I think they'll keep going in the same direction. (Applause)

WARREN BUFFETT: Yeah. (Applause) I think they will keep going in the same direction.

But to answer your question on that, Andrew, I would probably ask the question, you know, "Can you keep using all of the capital you generate, effectively, for a very long time?"

And the answer, I think, to that is that even — we will see more things and we will do some more of this. There comes a point where the numbers get big enough that it gets extraordinarily hard to do things that add value.

I mean, if you just play out the numbers, you could see where in 10 or 15 years, not only the capital that's already accumulated, but the generation of capital in everything, would make it very hard to do things that are, essentially, creating more than a dollar of value per dollar invested.

A portion of the money may be able to be used that way, and likely would be used in the kind of businesses we're in.

There comes a point where the numbers get too big. And actually, our history is a curve that approaches that point all the time.

It's turned out to be that now I think we can go a lot further than I would have thought 30 years ago. I mean, it's just — it's developed that way. And partly that's because we see things that I never would have thought we would have seen 30 years ago.

But there is a limit. And there will come a time when we cannot intelligent — in my view — there will come a time when we cannot intelligently use 100 percent of the capital that we develop internally.

And then we'll do something that's — whatever is in the most interest — best interest — of the shareholders will be done at that point.

CHARLIE MUNGER: I think we will get into Berkshire, on the investment side — probably starting sooner than many of you expect — people who have some promise of being, well, if not as good as Warren, a decent approximation. And in some cases with abilities that Warren lacks.

In other words, it won't be all negative. (Laughter)

And so I'm really quite optimistic. (Laughter)

I can see — the reason I think we will succeed at that is because Warren never looks twice at anybody who isn't a little eccentric, which, of course, is what you're looking at when you look up here.

WARREN BUFFETT: Living proof, yeah. (Laughter)

29. "Find your passion, and then don't let anything stop you"

WARREN BUFFETT: Well I think we'd better move on to section 1. (Laughs)

AUDIENCE MEMBER: Hello, my name is Joseph Mazzella from Jim Thorpe, PA.

I wanted to first thank Mr. Munger and Mr. Buffett, as well as the board of directors for this meeting, as well as the whole shareholder weekend. I've had a great time so far.

WARREN BUFFETT: Terrific. (Applause)

CHARLIE MUNGER: Thank you.

AUDIENCE MEMBER: With that, I wanted to share. Aristotle, when asked how to define wealth, answered simply this, “It is he who spends less than he earns.”

What advice could you give a young entrepreneur as myself on how to go about defining and both building wealth within their own business, as I hope to build a business that, one day, you’d be interested in acquiring.

WARREN BUFFETT: I predict you’re going to build one. You know, it may not quite get to the size that — and we’re a moving target as well — but if you start off with that principle you just enunciated, there are probably some other similar principles that you’ll have that we would also agree with.

There’s nothing like following your passion. I mean, I love what I do, obviously, and I’ve loved it the whole time I’ve done it. Charlie is the same way.

We have managers, you know, they come — some of them went to business school, some of them didn’t, you know.

They’re all types. But the common factor in them — they’re successful — the common factor is they love what they do, you know.

And you’ve got to find that in life. And some people are very lucky in finding it very early. It was dumb luck that my father happened to be in the securities business, so when I would go to his office there were a lot of books to read, and I got entranced with that.

But, you know, if he’d been in some other occupation — I think I would have read those books eventually, but it would have been a lot later.

So if you find something that turns you on, my guess is you’re going to do very well in it.

And the beauty of it is, in a sense, there’s not that much competition. There are not a lot of people out there that are going to be running faster than you in the race that you elect to get into.

And if you haven’t found it yet — you may well have found it — but if you haven’t found it yet, you know, you’ve got to keep looking.

And we’ve got 70-plus managers. You know, some of them didn’t — we had one guy that didn’t go to high school, even, didn’t he, Charlie? (Inaudible)

CHARLIE MUNGER: Oh yeah.

WARREN BUFFETT: He quit in fourth grade, I think.

Well, Mrs. B never went to school a day in her life.

And when you go out to the Furniture Mart — I hope you go out this evening, we expect to set a record today in sales (laughter) — what you are looking at on those 78 acres, you know, is the largest home furnishing store, about 400 million in sales. The largest store in the United States, and it comes from $500 of capital paid in by a woman that never went to a day of school in her life and couldn't read or write.

She loved what she was doing, and, you know, I tell the story, this is a true story.

When she was well into her 90s, she invited me over to her house for dinner. That was very unusual.

And a very nice house, six or seven blocks away from the store. And I went into the house, and the sofa, the chairs, the lamp, the dining room table, they all had little green price tags hanging down. (Laughter)

It made her feel at home. (Laughter)

And I said to her, "Mrs. B, you are my kind of woman." Forget Sophia Loren and all of that, this is my kind of woman. She loved it.

And she loved it all her life, and just think of what that produced. I mean, it just — it's incredible.

I mean, you know, one time — my dad used to quote Emerson, that "the power that lies within you is new in nature."

And basically, the power that was within Mrs. B was new in nature. And over a lifetime it produced amazing things.

So find your passion, and then don't let anything stop you.

30. Munger's fundamental algorithm of life

WARREN BUFFETT: OK, Carol? (Applause)

CAROL LOOMIS: This is a deeply philosophical question. "Many things that you" — the man did not want his name announced — "Many things that you and Charlie do and preach are opposite to those of what people practice and expect.

"For example, you do not change the management of the acquired company, you applaud long-standing employees while others always look for fresh blood and try to fire people as they grow old. You probably do not encourage retirement, while many companies do.

“You do not give large compensation to directors or compensate them using stock options. You do not seem to hire many MBAs. You don’t invest in high tech, but your company has grown very fast.

“You do not provide earnings guidelines. You do not live near New York. You do not like sushi.” (Laughter)

WARREN BUFFETT: That’s the key. (Laughter)

CAROL LOOMIS: “I wonder, what is the fundamental reason for all of these things? In other words, there appears to be a central philosophy here that I am missing.

“I can understand these as isolated principles, but where is the beef? Scientists and philosophers look for a unifying theory when possible.

“What is yours? Is it Buddhism, or Paganism, or something else? Yes, I am looking for your fundamental or unified theory of management in life or fundamental guiding principles.”

WARREN BUFFETT: In ten words or less. (Laughter)

CHARLIE MUNGER: Let me try that one, Warren.

WARREN BUFFETT: Oh good. (Laughter)

CHARLIE MUNGER: It’s pragmatism. Partly, we do things in our different way because it suits us. And partly, we do it — it suits our temperaments and our natures — and partly, we do it because we’ve found through experience that it works better, at least with us sitting where we sit.

It’s just that simple. And we’ve had enough good sense when something is working very well to keep doing it.

So I’d say we’re demonstrating what might be called the fundamental algorithm of life. Repeat what works.

Is that terse enough for you? (Laughter)

31. Private high-speed passenger trains aren’t economic

WARREN BUFFETT: We’ll go on to number 3, I like it. (Laughs)

Or number 2, I’m sorry. Number 2.

AUDIENCE MEMBER: Good afternoon, I am Carolyn Boyle, from Barrington, Illinois.

Thanks for the meeting and thanks everybody from behind the scenes who put this together. It's quite well orchestrated. (Applause)

WARREN BUFFETT: If I may interrupt you for just one second, that's very well deserved. And I would to point out that at Berkshire, everybody in our home office — we have 21 of us — they all participate in working at this meeting.

I mean, our CFO works on it — you name anybody in the office — because they enjoy it.

We don't think we should have a department, you know, for this or that, or the other thing. And I think that's probably fairly unusual with companies with market caps of close to $200 billion. (Laughs)

But you've seen Marc Hamburg walking around here and doing things. It's a group effort, and they have — I hope they have — fun doing it, because they sure don't get a bonus for it. (Laughs)

But I think it exemplifies the organization. Thank you, I'm sorry to interrupt you, go ahead.

AUDIENCE MEMBER: That's OK. Let me share a bit.

I had some trouble getting the annual statement information, so I finally got on the internet and sent in the postcard request a week ago Friday, yesterday, and I got my tickets before the meeting. So it was very well orchestrated.

WARREN BUFFETT: Thank you.

AUDIENCE MEMBER: Now that you own some rail business, I'd like to have your perspective on whether our country needs a high-speed passenger rail service.

And if you think it does, should that be a private or a public endeavor?

WARREN BUFFETT: Yeah, I think by its nature, it would be non-economic when it competes with auto and competes with air. We don't have the point-to-point density and demand that would produce a return on capital.

That just — that is my guess. I made no big study of it. But all of the times I've seen projections of the economics of it, it just doesn't work that well.

So it will be — if it gets done — unless it's heavily subsidized in some way, which means it's public anyway — I don't think it will happen under private — it won't meet the test of private economics.

Charlie, you know, they've got a big proposal in California on this. What do you know about the economics of that?

CHARLIE MUNGER: Well, I know very little, but I'm at least as dubious as you are.

The cost of putting in a high-speed rail system in a place that's already densely populated is awesomely large. And of course, you're competing with a system that people prefer.

WARREN BUFFETT: They're talking about in Omaha —

CHARLIE MUNGER: I'm very skeptical about sticking high-speed rails. I think it's great in Japan and China.

WARREN BUFFETT: It's working.

CHARLIE MUNGER: They have a different calculus.

WARREN BUFFETT: Yeah, in Japan, But it worked — yeah.

CHARLIE MUNGER: But putting high-speed rail into Los Angeles just looks to me like a bottomless pit of cost and trouble. And just think of how difficult that would be.

WARREN BUFFETT: If it's going to be high-speed, it can't stop very often, you know, by definition. And it can't go off into spurs and all of these kind of things.

So it really gets to point-to-point operation, and the cost gets staggering. There's talk in Omaha about a trolley system, and I think — they're talking about, you know, a couple hundred million dollars or something like that from the federal government.

And the projections of actual revenue are, as I remember, are something like $400,000, and that's before operating costs.

So the math — you put $200 million into something to move people a few miles in Omaha, and most of the people are going to want to ride their cars. And to have it be efficient it has to be point-to-point, pretty much, for them. I mean, if you start living six blocks one way or eight blocks another way, you say, "Nuts, I'll take the car."

The math really gets to be staggering on these things.

And now, you know, everybody figures if you can get the money from the federal government, you know, it doesn't cost anybody anything. But it would be a lot of money.

It's been done in Buffalo, and people like it. But I've also — I've requested the figures on it, and it blows your mind, in terms — I mean, you could give everybody a cab ride or something and it'd be cheaper for society as a whole.

So I have a feeling that it works marvelously, maybe, between Tokyo and Yokohama or something. And it really does. And it even works well enough so I think it justifies private investment.

But it's tough in a country of, you know, three million-plus square miles, and within the continental lower 48. It's very tough to make the math work.

Now, if people get — it becomes a huge project or something of the government so it isn't anybody's math, you know, maybe it'll happen. I don't think it'll ever happen with money that wants a return.

32. We can handle claims from a major earthquake

WARREN BUFFETT: Becky?

BECKY QUICK: This is a question on the insurance portfolio from Jerry Haller (PH).

What would be the impact on insurance companies, and the U.S. economy in general, if an earthquake of the same magnitude that struck Chile were to be focused on Los Angeles or San Francisco?

WARREN BUFFETT: Well, I don't know the answer to that. The Richter Scale is not a perfect — it's far from a perfect — index of the damage caused, even if you tell me where the epicenter will be.

And then you get into the — you know, the big damage in the famous San Francisco quake was the fire following.

They call that — when they distinguish between the — what coverages are involved — they call that the "shake and bake."

I mean, how much is shake and how much is bake afterwards? (Laughter)

I think it gets hard to get up — I mean, in a really extreme quake — I think it gets hard to get up much more than 100 billion.

You know, a very big quake — the frequency is way less — but if you get up in the Pacific Northwest, you know, there is a possibility of a very high Richter Scale quake there.

And of course, the big ones that we know about — I mean, our history doesn't go back that far — but New Madrid, Missouri, had three quakes in a relatively short period of time that were all well over eight.

And that will happen again someday, maybe 500 years, you know, maybe 1,000 years, and maybe tomorrow. That's what the insurance business is all about.

I tend to think — and when I think about quake exposure, sort of worst case in California — I think 100 billion is getting up there.

Northridge caused far more damage than the one that was up near San Francisco a few years earlier.

But we'll have them. And Berkshire is totally prepared to handle anything that comes along, even if it's considerably worse than what I've —

The worst insured loss — I don't know whether Katrina came in finally at 70 billion or something like that — I think in terms of a 250 billion sort of worst case.

And my guess is if that came along, and we had a normal year and everything else, Berkshire would still have positive earnings of some substantial amount. So we are prepared.

Charlie?

CHARLIE MUNGER: Yeah, and, you know, the big San Francisco quake of whatever it was, '06, caused a terrible fire. But the recent California quakes, the big ones, have not caused much fire. And a lot of earthquake damage is totally uninsured.

So you might have a hell of a lot of damage without massive — Warren would know more about that than I.

WARREN BUFFETT: So far in Chile —

CHARLIE MUNGER: The earthquake insurance is not universal like fire insurance.

WARREN BUFFETT: Oh no, no, not at all, not at all. And —

CHARLIE MUNGER: So it — an earthquake — a really terrible fire, or terrible wind conditions, it seems to me, catch people worse than the earthquakes.

WARREN BUFFETT: And so far in Chile, as I understand it — and I could be wrong on this and it may not be the way the final numbers come in — but as the numbers have been coming in, something like 40 percent of it has been the tsunami and 60 percent has been the quake, in terms of damage.

But that may well not hold to be — in terms of final figures.

There will be huge catastrophes from time to time. We're in a different class, in terms of even being able to handle them.

I mean, we've got so much earning power outside of the insurance business that if you take a $250 billion quake, or hurricane, or whatever, and we have, probably now, not much more than 3 percent of that — but call it 4 percent — that'd be $10 billion — and, you know, our pre-tax earnings, in any given year, I would expect would be substantially greater than that.

So we would have other — we have net earnings in a year that every other insurance company, you know, would be gasping. So we're in pretty good shape on that.

33. "Huge amounts of debt are not going to do us in"

WARREN BUFFETT: Area 3.

This is probably the last question, and then we'll go to the business meeting.

AUDIENCE MEMBER: My name's Frank Teed and I'm from Arkadelphia, Arkansas.

This is also an insurance-type question, but I did want to thank Mr. Buffett and Mr. Munger, the board, and in Arkansas we call them the associates — the managers — for your integrity in running Berkshire Hathaway and dealing fairly with the shareholders. So thank you very much.

WARREN BUFFETT: Thank you. (Applause)

AUDIENCE MEMBER: We saw in the credit crisis the gross overuse of credit, which led to the big financial meltdown with the government ultimately stepping in.

Now we see a huge increase in debt in our cities, our states, our countries.

For Berkshire Hathaway, what could be our exposure on a global financial meltdown? Could there be correlated risk that could get us in trouble?

You've said we have 40 billion in municipal bond insurance. There's 8 billion to the states, which I'm not sure exactly if that was a municipal bond.

Could a large event cause a large number of losses that was coupled with a decrease in our investments to make an AIG-type situation? Thank you.

WARREN BUFFETT: Well, if you postulate something where there was a total meltdown, and we essentially made the bet in 2008 there would not be.

It would be unnecessary, but we came close in 2008, and I decided that A) the government could solve the panic that existed, and finally that they would.

There wasn't any question in my mind they could. The question is, would they get so muddled up, would decision making get paralyzed, would rivalries break out, would, you know, Congress grandstand? All of those sort of things.

And I thought there'd be some of that, but I thought in the end we would do the right thing, which was go all in, which we did.

And that would happen again. So I — if you talk about some massive nuclear, chemical, or biological attack that really does in a very significant proportion of the population or something, you know, who knows what would happen.

But I would say this, that I think Berkshire can withstand anything that any corporation can.

And it won't be our insurance business that causes a problem. If something extraordinary happens — and I don't anticipate that at all — but there could be a situation where the world becomes paralyzed.

But I think that having gone through 2008, I think that our government probably better understands the necessity of taking massive action at a time like that.

Doing whatever is necessary — when the guaranteed money market funds, when the guaranteed commercial paper — I mean, when there are things like that, you know, they were sort of unprecedented, and they did them very quickly.

They'd do it again, in my view. There is no reason — the plants of the country don't disappear, the land doesn't become less fertile, you know, people don't become less innovative — things will work unless somehow the gears get all entirely messed up. And I don't see that happening.

Berkshire, from any insurance catastrophe — and you're right that things correlate on the downside — when things are bad in one area, they really do spread to another.

But we were built, I think, to withstand anything that — other than a total sort of wipe out of the world. That isn't going to happen.

Charlie?

CHARLIE MUNGER: I'm not worried about it. (Laughter)

WARREN BUFFETT: Yeah. Huge amounts of debt are not going to do us in. That's one thing I can guarantee you.

I can't tell you about comets hitting us or something of that sort, but I don't care how silly governments get in terms of finance, or corporations get, or anything of that sort, that will not harm Berkshire.

I want to thank you all for coming. Charlie and I really appreciate it. (Applause) And thank you.

CHARLIE MUNGER: Thank you. (Applause)

WARREN BUFFETT: Thank you. I appreciate it, we appreciate that, I'm sure the panel does.

Now we'll break for about five minutes. Some of you can go shop and some of you will want to stay around for the business meeting, and we'll start the business meeting in five minutes and we'll see how long it takes.

34. Berkshire business meeting begins

WARREN BUFFETT: OK. I've already introduced the Berkshire Hathaway directors.

Also with us today are partners in the firm of Deloitte and Touche, our auditors. They are available to respond to appropriate questions you might have concerning their firm's audit of the accounts of Berkshire.

Mr. Forrest Krutter is secretary of Berkshire. He will make a written record of proceedings.

Miss Becki Amick has been appointed inspector of elections at this meeting, and she will certify to the count of votes casts in the election of directors.

The main proxy holders for this meeting are Walter Scott and Marc Hamburg.

Does the secretary have a report of the number of Berkshire shares outstanding, entitled to vote, and represented at the meeting?

FORREST KRUTTER: Yes, I do. As indicated in the proxy statement that accompanied the notice of this meeting that was sent to all shareholders of record on March 3, 2010, being the record date for this meeting, there were 1,029,738 shares of Class A Berkshire Hathaway common stock outstanding, with each share entitled to one vote on motions considered at the meeting, and 926,013,086 of Class B Berkshire Hathaway common stock outstanding, with each share entitled to one ten-thousandth of one vote on motions considered at the meeting.

Of that number, 705,611 Class A shares and 566,627,821 Class B shares are represented at this meeting by proxies returned through Thursday evening, April 29th.

WARREN BUFFETT: Thank you. That number represents a quorum, and we will therefore directly proceed with the meeting.

First order of business will be a reading of the minutes of the last meeting of shareholders. I recognize Mr. Walter Scott who will place the motion before the meeting.

WALTER SCOTT: I move that the reading of the minutes of the last annual meeting of the shareholders and the special meeting of shareholders be dispensed with and the minutes be approved.

WARREN BUFFETT: Do I hear a second?

VOICE: I second the motion.

WARREN BUFFETT: The motion has been moved and seconded. Are there any comments or questions?

We will vote on this motion by voice vote. All of those in favor say aye.

VOICES: Aye.

WARREN BUFFETT: Opposed? The motion's carried.

35. Election of Berkshire directors

WARREN BUFFETT: Second item of business is to elect directors. The shareholders present who wishes to withdraw a proxy previously sent in and vote in person on the election of directors, he or she may do so.

Also, if any shareholder that is present has not turned in a proxy and desires a ballot in order to vote in person, you may do so.

If you wish to do this, please identify yourself to meeting officials in the aisles who will furnish a ballot to you. Would those persons desiring ballots please identify themselves so that we may distribute them?

I now recognize Mr. Walter Scott to place a motion before the meeting with respect to the election of directors.

WALTER SCOTT: I move that Warren Buffett, Charles Munger, Howard Buffett, Stephen Burke, Susan Decker, William Gates, David Gottesman, Charlotte Guyman, Donald Keough, Thomas Murphy, Ron Olson, and Walter Scott be elected as directors.

WARREN BUFFETT: Is there a second?

VOICE: I second the motion.

WARREN BUFFETT: It's been moved and seconded that Warren Buffett, Charles Munger, Howard Buffett, Stephen Burke, Susan Decker, William Gates, David Gottesman, Charlotte Guyman, Donald Keough, Thomas Murphy, Ronald Olson, and Walter Scott be elected as directors.

Are there any other nominations? Is there any discussion? Nominations are ready to be voted upon.

If there are any shareholders voting in person, they should now mark their ballots on the election of directors and allow the ballots to be delivered to the inspector of elections.

Miss Amick, when you're ready, you may give your report.

BETSY AMICK: My report is ready. The ballot of the proxy holders, in response to proxies that were received through last Thursday evening, cast not less than 756,041 votes for each nominee.

That number far exceeds a majority of the number of the total votes related to all Class A and Class B shares outstanding.

The certification required by Delaware law of the precise count of the votes, including the additional votes to be cast by the proxy holders in response to proxies delivered at this meeting, as well as any cast in person at this meeting, will be given to the secretary to be placed with the minutes of this meeting.

WARREN BUFFETT: Thank you, Miss Amick.

Warren Buffett, Charles Munger, Howard Buffett, Stephen Burke, Susan Decker, William Gates, David Gottesman, Charlotte Guyman, Donald Keough, Thomas Murphy, Ronald Olson, and Walter Scott have been elected as directors.

36. Business meeting adjourns

WARREN BUFFETT: Does anyone have any further business to come before this meeting before we adjourn?

If not, I recognize Mr. Scott to place a motion before the meeting.

WALTER SCOTT: I move this meeting be adjourned.

WARREN BUFFETT: Second?

VOICE: I second the motion.

WARREN BUFFETT: Motion to adjourn has been made and seconded. We will vote by voice. Is there any discussion? If not, all in favor say aye.

VOICES: Aye.

Berkshire's Corporate Performance vs. the S&P 500

Year	Annual Percentage Change in Per-Share Book Value of Berkshire (1)	Annual Percentage Change in S&P 500 with Dividends Included (2)	Relative Results (1)-(2)
1965	23.8	10.0	13.8
1966	20.3	(11.7)	32.0
1967	11.0	30.9	(19.9)
1968	19.0	11.0	8.0
1969	16.2	(8.4)	24.6
1970	12.0	3.9	8.1
1971	16.4	14.6	1.8
1972	21.7	18.9	2.8
1973	4.7	(14.8)	19.5
1974	5.5	(26.4)	31.9
1975	21.9	37.2	(15.3)
1976	59.3	23.6	35.7
1977	31.9	(7.4)	39.3
1978	24.0	6.4	17.6
1979	35.7	18.2	17.5
1980	19.3	32.3	(13.0)
1981	31.4	(5.0)	36.4
1982	40.0	21.4	18.6
1983	32.3	22.4	9.9
1984	13.6	6.1	7.5
1985	48.2	31.6	16.6
1986	26.1	18.6	7.5
1987	19.5	5.1	14.4
1988	20.1	16.6	3.5
1989	44.4	31.7	12.7
1990	7.4	(3.1)	10.5
1991	39.6	30.5	9.1
1992	20.3	7.6	12.7
1993	14.3	10.1	4.2
1994	13.9	1.3	12.6
1995	43.1	37.6	5.5
1996	31.8	23.0	8.8
1997	34.1	33.4	.7
1998	48.3	28.6	19.7
1999	.5	21.0	(20.5)
2000	6.5	(9.1)	15.6
2001	(6.2)	(11.9)	5.7
2002	10.0	(22.1)	32.1
2003	21.0	28.7	(7.7)
2004	10.5	10.9	(.4)
2005	6.4	4.9	1.5
2006	18.4	15.8	2.6
2007	11.0	5.5	5.5
2008	(9.6)	(37.0)	27.4
2009	19.8	26.5	(6.7)
2010	13.0	15.1	(2.1)
Compounded Annual Gain – 1965-2010	20.2%	9.4%	10.8
Overall Gain – 1964-2010	490,409%	6,262%	

Notes: Data are for calendar years with these exceptions: 1965 and 1966, year ended 9/30; 1967, 15 months ended 12/31.

Starting in 1979, accounting rules required insurance companies to value the equity securities they hold at market rather than at the lower of cost or market, which was previously the requirement. In this table, Berkshire's results through 1978 have been restated to conform to the changed rules. In all other respects, the results are calculated using the numbers originally reported.

The S&P 500 numbers are **pre-tax** whereas the Berkshire numbers are **after-tax**. If a corporation such as Berkshire were simply to have owned the S&P 500 and accrued the appropriate taxes, its results would have lagged the S&P 500 in years when that index showed a positive return, but would have exceeded the S&P 500 in years when the index showed a negative return. Over the years, the tax costs would have caused the aggregate lag to be substantial.

BERKSHIRE HATHAWAY INC.

To the Shareholders of Berkshire Hathaway Inc.:

The per-share book value of both our Class A and Class B stock increased by 13% in 2010. Over the last 46 years (that is, since present management took over), book value has grown from $19 to $95,453, a rate of 20.2% compounded annually.*

The highlight of 2010 was our acquisition of Burlington Northern Santa Fe, a purchase that's working out even better than I expected. It now appears that owning this railroad will increase Berkshire's "normal" earning power by nearly 40% pre-tax and by well over 30% after-tax. Making this purchase increased our share count by 6% and used $22 billion of cash. Since we've quickly replenished the cash, the economics of this transaction have turned out very well.

A "normal year," of course, is not something that either Charlie Munger, Vice Chairman of Berkshire and my partner, or I can define with anything like precision. But for the purpose of estimating our current earning power, we are envisioning a year free of a mega-catastrophe in insurance and possessing a general business climate somewhat better than that of 2010 but weaker than that of 2005 or 2006. Using these assumptions, and several others that I will explain in the "Investment" section, I can estimate that the normal earning power of the assets we currently own is about $17 billion pre-tax and $12 billion after-tax, excluding any capital gains or losses. Every day Charlie and I think about how we can build on this base.

Both of us are enthusiastic about BNSF's future because railroads have major cost and environmental advantages over trucking, their main competitor. Last year BNSF moved each ton of freight it carried a record 500 miles on a single gallon of diesel fuel. That's *three* times more fuel-efficient than trucking is, which means our railroad owns an important advantage in operating costs. Concurrently, our country gains because of reduced greenhouse emissions and a much smaller need for imported oil. When traffic travels by rail, society benefits.

Over time, the movement of goods in the United States will increase, and BNSF should get its full share of the gain. The railroad will need to invest massively to bring about this growth, but no one is better situated than Berkshire to supply the funds required. However slow the economy, or chaotic the markets, our checks will clear.

Last year – in the face of widespread pessimism about our economy – we demonstrated our enthusiasm for capital investment at Berkshire by spending $6 billion on property and equipment. Of this amount, $5.4 billion – or 90% of the total – was spent in the United States. Certainly our businesses will expand abroad in the future, but an overwhelming part of their future investments will be at home. In 2011, we will set a new record for capital spending – $8 billion – and spend *all* of the $2 billion increase in the United States.

Money will always flow toward opportunity, and there is an abundance of that in America. Commentators today often talk of "great uncertainty." But think back, for example, to December 6, 1941, October 18, 1987 and September 10, 2001. No matter how serene today may be, tomorrow is *always* uncertain.

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* All per-share figures used in this report apply to Berkshire's A shares. Figures for the B shares are 1/1500th of those shown for A.

Don't let that reality spook you. Throughout my lifetime, politicians and pundits have constantly moaned about terrifying problems facing America. Yet our citizens now live an astonishing six times better than when I was born. The prophets of doom have overlooked the all-important factor that *is* certain: Human potential is far from exhausted, and the American system for unleashing that potential – a system that has worked wonders for over two centuries despite frequent interruptions for recessions and even a Civil War – remains alive and effective.

We are not natively smarter than we were when our country was founded nor do we work harder. But look around you and see a world beyond the dreams of any colonial citizen. Now, as in 1776, 1861, 1932 and 1941, America's best days lie ahead.

Performance

Charlie and I believe that those entrusted with handling the funds of others should establish performance goals at the onset of their stewardship. Lacking such standards, managements are tempted to shoot the arrow of performance and then paint the bull's-eye around wherever it lands.

In Berkshire's case, we long ago told you that our job is to increase per-share intrinsic value at a rate greater than the increase (including dividends) of the S&P 500. In some years we succeed; in others we fail. But, if we are unable over time to reach that goal, we have done nothing for our investors, who by themselves could have realized an equal or better result by owning an index fund.

The challenge, of course, is the calculation of intrinsic value. Present that task to Charlie and me separately, and you will get two different answers. Precision just isn't possible.

To eliminate subjectivity, we therefore use an *understated* proxy for intrinsic-value – book value – when measuring our performance. To be sure, some of our businesses are worth far more than their carrying value on our books. (Later in this report, we'll present a case study.) But since that premium seldom swings wildly from year to year, book value can serve as a reasonable device for tracking how we are doing.

The table on page 2 shows our 46-year record against the S&P, a performance quite good in the earlier years and now only satisfactory. The bountiful years, we want to emphasize, will never return. The huge sums of capital we currently manage eliminate *any* chance of exceptional performance. We will strive, however, for better-than-average results and feel it fair for you to hold us to that standard.

Yearly figures, it should be noted, are neither to be ignored nor viewed as all-important. The pace of the earth's movement around the sun is not synchronized with the time required for either investment ideas or operating decisions to bear fruit. At GEICO, for example, we enthusiastically spent $900 million last year on advertising to obtain policyholders who deliver us no immediate profits. If we could spend twice that amount productively, we would happily do so though short-term results would be further penalized. Many large investments at our railroad and utility operations are also made with an eye to payoffs well down the road.

To provide you a longer-term perspective on performance, we present on the facing page the yearly figures from page 2 recast into a series of five-year periods. Overall, there are 42 of these periods, and they tell an interesting story. On a comparative basis, our best years ended in the early 1980s. The *market's* golden period, however, came in the 17 following years, with Berkshire achieving stellar absolute returns even as our relative advantage narrowed.

After 1999, the market stalled (or have you already noticed that?). Consequently, the satisfactory performance relative to the S&P that Berkshire has achieved since then has delivered only moderate absolute results.

Looking forward, we hope to average several points better than the S&P – though that result is, of course, far from a sure thing. If we succeed in that aim, we will almost certainly produce better relative results in bad years for the stock market and suffer poorer results in strong markets.

Berkshire's Corporate Performance vs. the S&P 500 by Five-Year Periods

Five-Year Period	Annual Percentage Change in Per-Share Book Value of Berkshire (1)	Annual Percentage Change in S&P 500 with Dividends Included (2)	Relative Results (1)-(2)
1965-1969	17.2	5.0	12.2
1966-1970	14.7	3.9	10.8
1967-1971	13.9	9.2	4.7
1968-1972	16.8	7.5	9.3
1969-1973	17.7	2.0	15.7
1970-1974	15.0	(2.4)	17.4
1971-1975	13.9	3.2	10.7
1972-1976	20.8	4.9	15.9
1973-1977	23.4	(0.2)	23.6
1974-1978	24.4	4.3	20.1
1975-1979	30.1	14.7	15.4
1976-1980	33.4	13.9	19.5
1977-1981	29.0	8.1	20.9
1978-1982	29.9	14.1	15.8
1979-1983	31.6	17.3	14.3
1980-1984	27.0	14.8	12.2
1981-1985	32.6	14.6	18.0
1982-1986	31.5	19.8	11.7
1983-1987	27.4	16.4	11.0
1984-1988	25.0	15.2	9.8
1985-1989	31.1	20.3	10.8
1986-1990	22.9	13.1	9.8
1987-1991	25.4	15.3	10.1
1988-1992	25.6	15.8	9.8
1989-1993	24.4	14.5	9.9
1990-1994	18.6	8.7	9.9
1991-1995	25.6	16.5	9.1
1992-1996	24.2	15.2	9.0
1993-1997	26.9	20.2	6.7
1994-1998	33.7	24.0	9.7
1995-1999	30.4	28.5	1.9
1996-2000	22.9	18.3	4.6
1997-2001	14.8	10.7	4.1
1998-2002	10.4	(0.6)	11.0
1999-2003	6.0	(0.6)	6.6
2000-2004	8.0	(2.3)	10.3
2001-2005	8.0	0.6	7.4
2002-2006	13.1	6.2	6.9
2003-2007	13.3	12.8	0.5
2004-2008	6.9	(2.2)	9.1
2005-2009	8.6	0.4	8.2
2006-2010	10.0	2.3	7.7

Notes: The first two periods cover the five years beginning September 30 of the previous year. The third period covers 63 months beginning September 30, 1966 to December 31, 1971. All other periods involve calendar years.

The other notes on page 2 also apply to this table.

Intrinsic Value – Today and Tomorrow

Though Berkshire's intrinsic value cannot be precisely calculated, two of its three key pillars can be measured. Charlie and I rely heavily on these measurements when we make our own estimates of Berkshire's value.

The first component of value is our investments: stocks, bonds and cash equivalents. At yearend these totaled $158 billion at market value.

Insurance float – money we temporarily hold in our insurance operations that does not belong to us – funds $66 billion of our investments. This float is "free" as long as insurance underwriting breaks even, meaning that the premiums we receive equal the losses and expenses we incur. Of course, underwriting results are volatile, swinging erratically between profits and losses. Over our entire history, though, we've been significantly profitable, and I also expect us to average breakeven results or better in the future. If we do that, all of our investments – those funded both by float and by retained earnings – can be viewed as an element of value for Berkshire shareholders.

Berkshire's second component of value is earnings that come from sources other than investments and insurance underwriting. These earnings are delivered by our 68 non-insurance companies, itemized on page 106. In Berkshire's early years, we focused on the investment side. During the past two decades, however, we've increasingly emphasized the development of earnings from non-insurance businesses, a practice that will continue.

The following tables illustrate this shift. In the first table, we present per-share investments at decade intervals beginning in 1970, three years after we entered the insurance business. We exclude those investments applicable to minority interests.

Yearend	*Per-Share Investments*	*Period*	*Compounded Annual Increase in Per-Share Investments*
1970	$ 66		
1980	754	1970-1980	27.5%
1990	7,798	1980-1990	26.3%
2000	50,229	1990-2000	20.5%
2010	94,730	2000-2010	6.6%

Though our compounded annual increase in per-share investments was a healthy 19.9% over the 40-year period, our rate of increase has slowed sharply as we have focused on using funds to buy operating businesses.

The payoff from this shift is shown in the following table, which illustrates how earnings of our non-insurance businesses have increased, again on a per-share basis and after applicable minority interests.

Year	*Per-Share Pre-Tax Earnings*	*Period*	*Compounded Annual Increase in Per-Share Pre-Tax Earnings*
1970	$ 2.87		
1980	19.01	1970-1980	20.8%
1990	102.58	1980-1990	18.4%
2000	918.66	1990-2000	24.5%
2010	5,926.04	2000-2010	20.5%

For the forty years, our compounded annual gain in pre-tax, non-insurance earnings per share is 21.0%. During the same period, Berkshire's stock price increased at a rate of 22.1% annually. Over time, you can expect our stock price to move in rough tandem with Berkshire's investments and earnings. Market price and intrinsic value often follow very different paths – sometimes for extended periods – but eventually they meet.

There is a third, more subjective, element to an intrinsic value calculation that can be either positive or negative: the efficacy with which retained earnings will be deployed in the future. We, as well as many other businesses, are likely to retain earnings over the next decade that will equal, or even exceed, the capital we presently employ. Some companies will turn these retained dollars into fifty-cent pieces, others into two-dollar bills.

This "what-will-they-do-with-the-money" factor must always be evaluated along with the "what-do-we-have-now" calculation in order for us, or anybody, to arrive at a sensible estimate of a company's intrinsic value. That's because an outside investor stands by helplessly as management reinvests his share of the company's earnings. If a CEO can be expected to do this job well, the reinvestment prospects add to the company's current value; if the CEO's talents or motives are suspect, today's value must be discounted. The difference in outcome can be huge. A dollar of then-value in the hands of Sears Roebuck's or Montgomery Ward's CEOs in the late 1960s had a far different destiny than did a dollar entrusted to Sam Walton.

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Charlie and I hope that the per-share earnings of our non-insurance businesses continue to increase at a decent rate. But the job gets tougher as the numbers get larger. We will need both good performance from our current businesses and more *major* acquisitions. We're prepared. Our elephant gun has been reloaded, and my trigger finger is itchy.

Partially offsetting our anchor of size are several important advantages we have. First, we possess a cadre of truly skilled managers who have an unusual commitment to their own operations and to Berkshire. Many of our CEOs are independently wealthy and work only because they love what they do. They are volunteers, not mercenaries. Because no one can offer them a job they would enjoy more, they can't be lured away.

At Berkshire, managers can focus on running their businesses: They are not subjected to meetings at headquarters nor financing worries nor Wall Street harassment. They simply get a letter from me every two years (it's reproduced on pages 104-105) and call me when they wish. And their wishes do differ: There are managers to whom I have not talked in the last year, while there is one with whom I talk almost daily. Our trust is in people rather than process. A "hire well, manage little" code suits both them and me.

Berkshire's CEOs come in many forms. Some have MBAs; others never finished college. Some use budgets and are by-the-book types; others operate by the seat of their pants. Our team resembles a baseball squad composed of all-stars having vastly different batting styles. Changes in our line-up are seldom required.

Our second advantage relates to the allocation of the money our businesses earn. After meeting the needs of those businesses, we have very substantial sums left over. Most companies limit themselves to reinvesting funds within the industry in which they have been operating. That often restricts them, however, to a "universe" for capital allocation that is both tiny and quite inferior to what is available in the wider world. Competition for the few opportunities that *are* available tends to become fierce. The seller has the upper hand, as a girl might if she were the only female at a party attended by many boys. That lopsided situation would be great for the girl, but terrible for the boys.

At Berkshire we face no institutional restraints when we deploy capital. Charlie and I are limited only by our ability to understand the likely future of a possible acquisition. If we clear that hurdle – and frequently we can't – we are then able to compare any one opportunity against a host of others.

When I took control of Berkshire in 1965, I didn't exploit this advantage. Berkshire was then only in textiles, where it had in the previous decade lost significant money. The dumbest thing I could have done was to pursue "opportunities" to improve and expand the existing textile operation – so for years that's exactly what I did. And then, in a final burst of brilliance, I went out and bought *another* textile company. Aaaaaaargh! Eventually I came to my senses, heading first into insurance and then into other industries.

There is even a supplement to this world-is-our-oyster advantage: In addition to evaluating the attractions of one business against a host of others, we also measure businesses against opportunities available in marketable securities, a comparison most managements don't make. Often, businesses are priced ridiculously high against what can likely be earned from investments in stocks or bonds. At such moments, we buy securities and bide our time.

Our flexibility in respect to capital allocation has accounted for much of our progress to date. We have been able to take money we earn from, say, See's Candies or Business Wire (two of our best-run businesses, but also two offering limited reinvestment opportunities) and use it as part of the stake we needed to buy BNSF.

Our final advantage is the hard-to-duplicate culture that permeates Berkshire. And in businesses, culture counts.

To start with, the directors who represent you think and act like owners. They receive token compensation: no options, no restricted stock and, for that matter, virtually no cash. We do not provide them directors and officers liability insurance, a given at almost every other large public company. If they mess up with your money, they will lose their money as well. Leaving my holdings aside, directors and their families own Berkshire shares worth more than $3 billion. Our directors, therefore, monitor Berkshire's actions and results with keen interest and an owner's eye. You and I are lucky to have them as stewards.

This same owner-orientation prevails among our managers. In many cases, these are people who have sought out Berkshire as an acquirer for a business that they and their families have long owned. They came to us with an owner's mindset, and we provide an environment that encourages them to retain it. Having managers who love their businesses is no small advantage.

Cultures self-propagate. Winston Churchill once said, "You shape your houses and then they shape you." That wisdom applies to businesses as well. Bureaucratic procedures beget more bureaucracy, and imperial corporate palaces induce imperious behavior. (As one wag put it, "You know you're no longer CEO when you get in the back seat of your car and it doesn't move.") At Berkshire's "World Headquarters" our annual rent is $270,212. Moreover, the home-office investment in furniture, art, Coke dispenser, lunch room, high-tech equipment – you name it – totals $301,363. As long as Charlie and I treat your money as if it were our own, Berkshire's managers are likely to be careful with it as well.

Our compensation programs, our annual meeting and even our annual reports are all designed with an eye to reinforcing the Berkshire culture, and making it one that will repel and expel managers of a different bent. This culture grows stronger every year, and it will remain intact long after Charlie and I have left the scene.

We will need all of the strengths I've just described to do reasonably well. Our managers will deliver; you can count on that. But whether Charlie and I can hold up our end in capital allocation depends in part on the competitive environment for acquisitions. You will get our best efforts.

GEICO

Now let me tell you a story that will help you understand how the intrinsic value of a business can far exceed its book value. Relating this tale also gives me a chance to relive some great memories.

Sixty years ago last month, GEICO entered my life, destined to shape it in a huge way. I was then a 20-year-old graduate student at Columbia, having elected to go there because my hero, Ben Graham, taught a once-a-week class at the school.

One day at the library, I checked out Ben's entry in Who's Who in America and found he was chairman of Government Employees Insurance Co. (now called GEICO). I knew nothing of insurance and had never heard of the company. The librarian, however, steered me to a large compendium of insurers and, after reading the page on GEICO, I decided to visit the company. The following Saturday, I boarded an early train for Washington.

Alas, when I arrived at the company's headquarters, the building was closed. I then rather frantically started pounding on a door, until finally a janitor appeared. I asked him if there was anyone in the office I could talk to, and he steered me to the only person around, Lorimer Davidson.

That was my lucky moment. During the next four hours, "Davy" gave me an education about both insurance and GEICO. It was the beginning of a wonderful friendship. Soon thereafter, I graduated from Columbia and became a stock salesman in Omaha. GEICO, of course, was my prime recommendation, which got me off to a great start with dozens of customers. GEICO also jump-started my net worth because, soon after meeting Davy, I made the stock 75% of my $9,800 investment portfolio. (Even so, I felt *over*-diversified.)

Subsequently, Davy became CEO of GEICO, taking the company to undreamed-of heights before it got into trouble in the mid-1970s, a few years after his retirement. When that happened – with the stock falling by more than 95% – Berkshire bought about one-third of the company in the market, a position that over the years increased to 50% because of GEICO's repurchases of its own shares. Berkshire's cost for this half of the business was $46 million. (Despite the size of our position, we exercised no control over operations.)

We then purchased the remaining 50% of GEICO at the beginning of 1996, which spurred Davy, at 95, to make a video tape saying how happy he was that his beloved GEICO would permanently reside with Berkshire. (He also playfully concluded with, "Next time, Warren, please make an appointment.")

A lot has happened at GEICO during the last 60 years, but its core goal – saving Americans substantial money on their purchase of auto insurance – remains unchanged. (Try us at 1-800-847-7536 or www.GEICO.com.) In other words, get the policyholder's business by *deserving* his business. Focusing on this objective, the company has grown to be America's third-largest auto insurer, with a market share of 8.8%.

When Tony Nicely, GEICO's CEO, took over in 1993, that share was 2.0%, a level at which it had been stuck for more than a decade. GEICO became a different company under Tony, finding a path to consistent growth while simultaneously maintaining underwriting discipline and keeping its costs low.

Let me quantify Tony's achievement. When, in 1996, we bought the 50% of GEICO we didn't already own, it cost us about $2.3 billion. That price implied a value of $4.6 billion for 100%. GEICO then had tangible net worth of $1.9 billion.

The excess over tangible net worth of the implied value – $2.7 billion – was what we estimated GEICO's "goodwill" to be worth at that time. That goodwill represented the economic value of the policyholders who were then doing business with GEICO. In 1995, those customers had paid the company $2.8 billion in premiums. Consequently, we were valuing GEICO's customers at about 97% (2.7/2.8) of what they were annually paying the company. By industry standards, that was a very high price. But GEICO was no ordinary insurer: Because of the company's low costs, its policyholders were consistently profitable and unusually loyal.

Today, premium volume is $14.3 billion and growing. Yet we carry the goodwill of GEICO on our books at only $1.4 billion, an amount that will remain unchanged no matter how much the value of GEICO increases. (Under accounting rules, you write down the carrying value of goodwill if its economic value decreases, but leave it unchanged if economic value increases.) Using the 97%-of-premium-volume yardstick we applied to our 1996 purchase, the real value today of GEICO's economic goodwill is about $14 billion. And this value is likely to be much higher ten and twenty years from now. GEICO – off to a strong start in 2011 – is the gift that keeps giving.

One not-so-small footnote: Under Tony, GEICO has developed one of the country's largest personal-lines insurance *agencies*, which primarily sells homeowners policies to our GEICO auto insurance customers. In this business, we represent a number of insurers that are not affiliated with us. They take the risk; we simply sign up the customers. Last year we sold 769,898 new policies at this agency operation, up 34% from the year before. The obvious way this activity aids us is that it produces commission revenue; equally important is the fact that it further strengthens our relationship with our policyholders, helping us retain them.

I owe an enormous debt to Tony and Davy (and, come to think of it, to that janitor as well).

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Now, let's examine the four major sectors of Berkshire. Each has vastly different balance sheet and income characteristics from the others. Lumping them together therefore impedes analysis. So we'll present them as four separate businesses, which is how Charlie and I view them.

We will look first at insurance, Berkshire's core operation and the engine that has propelled our expansion over the years.

Insurance

Property-casualty ("P/C") insurers receive premiums upfront and pay claims later. In extreme cases, such as those arising from certain workers' compensation accidents, payments can stretch over decades. This collect-now, pay-later model leaves us holding large sums – money we call "float" – that will eventually go to others. Meanwhile, we get to invest this float for Berkshire's benefit. Though individual policies and claims come and go, the amount of float we hold remains remarkably stable in relation to premium volume. Consequently, as our business grows, so does our float. And how we have grown: Just take a look at the following table:

Yearend	*Float (in $ millions)*
1970	$ 39
1980	237
1990	1,632
2000	27,871
2010	65,832

If our premiums exceed the total of our expenses and eventual losses, we register an underwriting profit that adds to the investment income that our float produces. When such a profit occurs, we enjoy the use of free money – and, better yet, get *paid* for holding it. Alas, the wish of all insurers to achieve this happy result creates intense competition, so vigorous in most years that it causes the P/C industry as a whole to operate at a significant underwriting *loss*. This loss, in effect, is what the industry pays to hold its float. For example, State Farm, by far the country's largest insurer and a well-managed company, has incurred an underwriting loss in seven of the last ten years. During that period, its aggregate underwriting loss was more than $20 billion.

At Berkshire, we have now operated at an underwriting profit for eight consecutive years, our total underwriting gain for the period having been $17 billion. I believe it likely that we will continue to underwrite profitably in most – though certainly not all – future years. If we accomplish that, our float will be better than cost-free. We will benefit just as we would if some party deposited $66 billion with us, paid us a fee for holding its money and then let us invest its funds for our own benefit.

Let me emphasize again that cost-free float is *not* an outcome to be expected for the P/C industry as a whole: In most years, industry premiums have been inadequate to cover claims plus expenses. Consequently, the industry's overall return on tangible equity has for many decades fallen far short of the average return realized by American industry, a sorry performance almost certain to continue. Berkshire's outstanding economics exist only because we have some terrific managers running some unusual businesses. We've already told you about GEICO, but we have two other very large operations, and a bevy of smaller ones as well, each a star in its own way.

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First off is the Berkshire Hathaway Reinsurance Group, run by Ajit Jain. Ajit insures risks that no one else has the desire or the capital to take on. His operation combines capacity, speed, decisiveness and, most importantly, brains in a manner that is unique in the insurance business. Yet he never exposes Berkshire to risks that are inappropriate in relation to our resources. Indeed, we are *far* more conservative than most large insurers in that respect. In the past year, Ajit has significantly increased his life reinsurance operation, developing annual premium volume of about $2 billion that will repeat for decades.

From a standing start in 1985, Ajit has created an insurance business with float of $30 billion and significant underwriting profits, a feat that no CEO of any other insurer has come close to matching. By his accomplishments, he has added a great many billions of dollars to the value of Berkshire. Even kryptonite bounces off Ajit.

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We have another insurance powerhouse in General Re, managed by Tad Montross.

At bottom, a sound insurance operation requires four disciplines: (1) An understanding of *all* exposures that might cause a policy to incur losses; (2) A conservative evaluation of the likelihood of any exposure actually causing a loss and the probable cost if it does; (3) The setting of a premium that will deliver a profit, on average, after both prospective loss costs and operating expenses are covered; and (4) The willingness to walk away if the appropriate premium can't be obtained.

Many insurers pass the first three tests and flunk the fourth. The urgings of Wall Street, pressures from the agency force and brokers, or simply a refusal by a testosterone-driven CEO to accept shrinking volumes has led too many insurers to write business at inadequate prices. "The other guy is doing it so we must as well" spells trouble in any business, but none more so than insurance.

Tad has observed all four of the insurance commandments, and it shows in his results. General Re's huge float has been better than cost-free under his leadership, and we expect that, on average, it will continue to be.

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Finally, we own a group of smaller companies, most of them specializing in odd corners of the insurance world. In aggregate, their results have consistently been profitable and, as the table below shows, the float they provide us is substantial. Charlie and I treasure these companies and their managers.

Here is the record of all four segments of our property-casualty and life insurance businesses:

	Underwriting Profit		*Yearend Float*	
	(in millions)			
Insurance Operations	*2010*	*2009*	*2010*	*2009*
General Re	$ 452	$ 477	$20,049	$21,014
BH Reinsurance	176	250	30,370	27,753
GEICO	1,117	649	10,272	9,613
Other Primary	268	84	5,141	5,061
	$2,013	$1,460	$65,832	$63,441

Among large insurance operations, Berkshire's impresses me as the best in the world.

Manufacturing, Service and Retailing Operations

Our activities in this part of Berkshire cover the waterfront. Let's look, though, at a summary balance sheet and earnings statement for the entire group.

Balance Sheet 12/31/10 (in millions)

Assets		*Liabilities and Equity*	
Cash and equivalents	$ 2,673	Notes payable	$ 1,805
Accounts and notes receivable	5,396	Other current liabilities	8,169
Inventory	7,101	Total current liabilities	9,974
Other current assets	550		
Total current assets	15,720		
Goodwill and other intangibles	16,976	Deferred taxes	3,001
Fixed assets	15,421	Term debt and other liabilities	6,621
Other assets	3,029	Equity	31,550
	$51,146		$51,146

Earnings Statement (in millions)

	2010	*2009*	*2008*
Revenues	$66,610	$61,665	$66,099
Operating expenses (including depreciation of $1,362 in 2010, $1,422 in 2009 and $1,280 in 2008)	62,225	59,509	61,937
Interest expense	111	98	139
Pre-tax earnings	4,274*	2,058*	4,023*
Income taxes and non-controlling interests	1,812	945	1,740
Net earnings	$ 2,462	$ 1,113	$ 2,283

*Does not include purchase-accounting adjustments.

This group of companies sells products ranging from lollipops to jet airplanes. Some of the businesses enjoy terrific economics, measured by earnings on unleveraged net *tangible* assets that run from 25% after-tax to more than 100%. Others produce good returns in the area of 12-20%. Unfortunately, a few have very poor returns, a result of some serious mistakes I have made in my job of capital allocation. These errors came about because I misjudged either the competitive strength of the business I was purchasing or the future economics of the industry in which it operated. I try to look out ten or twenty years when making an acquisition, but sometimes my eyesight has been poor.

Most of the companies in this section improved their earnings last year and four set records. Let's look first at the record-breakers.

- TTI, our electronic components distributor, had sales 21% above its previous high (recorded in 2008) and pre-tax earnings that topped its earlier record by 58%. Its sales gains spanned three continents, with North America at 16%, Europe at 26%, and Asia at 50%. The thousands of items TTI distributes are pedestrian, many selling for less than a dollar. The magic of TTI's exceptional performance is created by Paul Andrews, its CEO, and his associates.

- Forest River, our RV and boat manufacturer, had record sales of nearly $2 billion and record earnings as well. Forest River has 82 plants, and I have yet to visit one (or the home office, for that matter). There's no need; Pete Liegl, the company's CEO, runs a terrific operation. Come view his products at the annual meeting. Better yet, buy one.

- CTB, our farm-equipment company, again set an earnings record. I told you in the 2008 Annual Report about Vic Mancinelli, the company's CEO. He just keeps getting better. Berkshire paid $140 million for CTB in 2002. It has since paid us dividends of $160 million and eliminated $40 million of debt. Last year it earned $106 million pre-tax. Productivity gains have produced much of this increase. When we bought CTB, sales per employee were $189,365; now they are $405,878.

- Would you believe shoes? H. H. Brown, run by Jim Issler and best known for its Born brand, set a new record for sales and earnings (helped by its selling 1,110 pairs of shoes at our annual meeting). Jim has brilliantly adapted to major industry changes. His work, I should mention, is overseen by Frank Rooney, 89, a superb businessman and still a dangerous fellow with whom to have a bet on the golf course.

A huge story in this sector's year-to-year improvement occurred at NetJets. I can't overstate the breadth and importance of Dave Sokol's achievements at this company, the leading provider of fractional ownership of jet airplanes. NetJets has long been an operational success, owning a 2010 market share five times that of its nearest competitor. Our overwhelming leadership stems from a wonderful team of pilots, mechanics and service personnel. This crew again did its job in 2010, with customer satisfaction, as delineated in our regular surveys, hitting new highs.

Even though NetJets was consistently a runaway winner with customers, our financial results, since its acquisition in 1998, were a failure. In the 11 years through 2009, the company reported an aggregate pre-tax loss of $157 million, a figure that was far understated since borrowing costs at NetJets were heavily subsidized by its free use of Berkshire's credit. Had NetJets been operating on a stand-alone basis, its loss over the years would have been several hundreds of millions greater.

We are now charging NetJets an appropriate fee for Berkshire's guarantee. Despite this fee (which came to $38 million in 2010), NetJets earned $207 million pre-tax in 2010, a swing of $918 million from 2009. Dave's quick restructuring of management and the company's rationalization of its purchasing and spending policies has ended the hemorrhaging of cash and turned what was Berkshire's only major business problem into a solidly profitable operation.

Dave has meanwhile maintained NetJets' industry-leading reputation for safety and service. In many important ways, our training and operational standards are considerably stronger than those required by the FAA. Maintaining top-of-the-line standards is the right thing to do, but I also have a selfish reason for championing this policy. My family and I have flown more than 5,000 hours on NetJets (that's equal to being airborne 24 hours a day for seven months) and will fly thousands of hours more in the future. We receive no special treatment and have used a random mix of at least 100 planes and 300 crews. Whichever the plane or crew, we always know we are flying with the best-trained pilots in private aviation.

The largest earner in our manufacturing, service and retailing sector is Marmon, a collection of 130 businesses. We will soon increase our ownership in this company to 80% by carrying out our scheduled purchase of 17% of its stock from the Pritzker family. The cost will be about $1.5 billion. We will then purchase the remaining Pritzker holdings in 2013 or 2014, whichever date is selected by the family. Frank Ptak runs Marmon wonderfully, and we look forward to 100% ownership.

Next to Marmon, the two largest earners in this sector are Iscar and McLane. Both had excellent years. In 2010, Grady Rosier's McLane entered the wine and spirits distribution business to supplement its $32 billion operation as a distributor of food products, cigarettes, candy and sundries. In purchasing Empire Distributors, an operator in Georgia and North Carolina, we teamed up with David Kahn, the company's dynamic CEO. David is leading our efforts to expand geographically. By yearend he had already made his first acquisition, Horizon Wine and Spirits in Tennessee.

At Iscar, profits were up 159% in 2010, and we may well surpass pre-recession levels in 2011. Sales are improving throughout the world, particularly in Asia. Credit Eitan Wertheimer, Jacob Harpaz and Danny Goldman for an exceptional performance, one far superior to that of Iscar's main competitors.

All that is good news. Our businesses related to home construction, however, continue to struggle. Johns Manville, MiTek, Shaw and Acme Brick have maintained their competitive positions, but their profits are far below the levels of a few years ago. Combined, these operations earned $362 million pre-tax in 2010 compared to $1.3 billion in 2006, and their employment has fallen by about 9,400.

A housing recovery will probably begin within a year or so. In any event, it is certain to occur at some point. Consequently: (1) At MiTek, we have made, or committed to, five bolt-on acquisitions during the past eleven months; (2) At Acme, we just recently acquired the leading manufacturer of brick in Alabama for $50 million; (3) Johns Manville is building a $55 million roofing membrane plant in Ohio, to be completed next year; and (4) Shaw will spend $200 million in 2011 on plant and equipment, all of it situated in America. These businesses entered the recession strong and will exit it stronger. At Berkshire, our time horizon is forever.

Regulated, Capital-Intensive Businesses

We have two very large businesses, BNSF and MidAmerican Energy, with important common characteristics that distinguish them from our many others. Consequently, we give them their own sector in this letter and split out their financial statistics in our GAAP balance sheet and income statement.

A key characteristic of both companies is the huge investment they have in very long-lived, regulated assets, with these funded by large amounts of long-term debt that is *not* guaranteed by Berkshire. Our credit is not needed: Both businesses have earning power that, even under very adverse business conditions, amply covers their interest requirements. For example, in recessionary 2010 with BNSF's car loadings far off peak levels, the company's interest coverage was 6:1.

Both companies are heavily regulated, and both will have a never-ending need to make major investments in plant and equipment. Both also need to provide efficient, customer-satisfying service to earn the respect of their communities and regulators. In return, both need to be assured that they will be allowed to earn reasonable earnings on future capital investments.

Earlier I explained just how important railroads are to our country's future. Rail moves 42% of America's inter-city freight, measured by ton-miles, and BNSF moves more than any other railroad – about 28% of the industry total. A little math will tell you that more than 11% of *all* inter-city ton-miles of freight in the U.S. is transported by BNSF. Given the shift of population to the West, our share may well inch higher.

All of this adds up to a huge responsibility. We are a major and essential part of the American economy's circulatory system, obliged to constantly maintain and improve our 23,000 miles of track along with its ancillary bridges, tunnels, engines and cars. In carrying out this job, we must anticipate society's needs, not merely react to them. Fulfilling our societal obligation, we will regularly spend far more than our depreciation, with this excess amounting to $2 billion in 2011. I'm confident we will earn appropriate returns on our huge incremental investments. Wise regulation and wise investment are two sides of the same coin.

At MidAmerican, we participate in a similar "social compact." We are expected to put up ever-increasing sums to satisfy the future needs of our customers. If we meanwhile operate reliably and efficiently, we know that we will obtain a fair return on these investments.

MidAmerican supplies 2.4 million customers in the U.S. with electricity, operating as the largest supplier in Iowa, Wyoming and Utah and as an important provider in other states as well. Our pipelines transport 8% of the country's natural gas. Obviously, many millions of Americans depend on us every day.

MidAmerican has delivered outstanding results for both its owners (Berkshire's interest is 89.8%) and its customers. Shortly after MidAmerican purchased Northern Natural Gas pipeline in 2002, that company's performance as a pipeline was rated dead last, 43 out of 43, by the leading authority in the field. In the most recent report published, Northern Natural was ranked second. The top spot was held by our other pipeline, Kern River.

In its electric business, MidAmerican has a comparable record. Iowa rates have not increased since we purchased our operation there in 1999. During the same period, the other major electric utility in the state has raised prices more than 70% and now has rates far above ours. In certain metropolitan areas in which the two utilities operate side by side, electric bills of our customers run far below those of their neighbors. I am told that comparable houses sell at higher prices in these cities if they are located in our service area.

MidAmerican will have 2,909 megawatts of wind generation in operation by the end of 2011, more than any other regulated electric utility in the country. The total amount that MidAmerican has invested or committed to wind is a staggering $5.4 billion. We can make this sort of investment because MidAmerican retains *all* of its earnings, unlike other utilities that generally pay out most of what they earn.

As you can tell by now, I am proud of what has been accomplished for our society by Matt Rose at BNSF and by David Sokol and Greg Abel at MidAmerican. I am also both proud and grateful for what they have accomplished for Berkshire shareholders. Below are the relevant figures:

MidAmerican	*Earnings (in millions)*	
	2010	*2009*
U.K. utilities	$ 333	$ 248
Iowa utility	279	285
Western utilities	783	788
Pipelines	378	457
HomeServices	42	43
Other (net)	47	25
Operating earnings before corporate interest and taxes	1,862	1,846
Interest, other than to Berkshire	(323)	(318)
Interest on Berkshire junior debt	(30)	(58)
Income tax	(271)	(313)
Net earnings	$1,238	$1,157
Earnings applicable to Berkshire*	$1,131	$1,071

*Includes interest earned by Berkshire (net of related income taxes) of $19 in 2010 and $38 in 2009.

BNSF

(Historical accounting through 2/12/10; purchase accounting subsequently)	*(in millions)*	
	2010	*2009*
Revenues	$16,850	$14,016
Operating earnings	4,495	3,254
Interest (Net)	507	613
Pre-Tax earnings	3,988	2,641
Net earnings	2,459	1,721

Finance and Financial Products

This, our smallest sector, includes two rental companies, XTRA (trailers) and CORT (furniture), and Clayton Homes, the country's leading producer and financer of manufactured homes.

Both of our leasing businesses improved their performances last year, albeit from a very low base. XTRA increased the utilization of its equipment from 63% in 2009 to 75% in 2010, thereby raising pre-tax earnings to $35 million from $17 million in 2009. CORT experienced a pickup in business as the year progressed and also significantly tightened its operations. The combination increased its pre-tax results from a loss of $3 million in 2009 to $18 million of profit in 2010.

At Clayton, we produced 23,343 homes, 47% of the industry's total of 50,046. Contrast this to the peak year of 1998, when 372,843 homes were manufactured. (We then had an industry share of 8%.) Sales would have been terrible last year under any circumstances, but the financing problems I commented upon in the 2009 report continue to exacerbate the distress. To explain: Home-financing policies of our government, expressed through the loans found acceptable by FHA, Freddie Mac and Fannie Mae, favor site-built homes and work to negate the price advantage that manufactured homes offer.

We finance more manufactured-home buyers than any other company. Our experience, therefore, should be instructive to those parties preparing to overhaul our country's home-loan practices. Let's take a look.

Clayton owns 200,804 mortgages that it originated. (It also has some mortgage portfolios that it purchased.) At the origination of these contracts, the average FICO score of our borrowers was 648, and 47% were 640 or below. Your banker will tell you that people with such scores are generally regarded as questionable credits.

Nevertheless, our portfolio has performed well during conditions of stress. Here's our loss experience during the last five years for originated loans:

Year	*Net Losses as a Percentage of Average Loans*
2006	1.53%
2007	1.27%
2008	1.17%
2009	1.86%
2010	1.72%

Our borrowers get in trouble when they lose their jobs, have health problems, get divorced, etc. The recession has hit them hard. But they want to stay in their homes, and generally they borrowed sensible amounts in relation to their income. In addition, we were keeping the originated mortgages for our own account, which means we were not securitizing or otherwise reselling them. If we were stupid in our lending, *we* were going to pay the price. That concentrates the mind.

If home buyers throughout the country had behaved like our buyers, America would not have had the crisis that it did. Our approach was simply to get a meaningful down-payment and gear *fixed* monthly payments to a sensible percentage of income. This policy kept Clayton solvent and also kept buyers in their homes.

Home ownership makes sense for most Americans, particularly at today's lower prices and bargain interest rates. All things considered, the third best investment I ever made was the purchase of my home, though I would have made far more money had I instead rented and used the purchase money to buy stocks. (The two best investments were wedding rings.) For the $31,500 I paid for our house, my family and I gained 52 years of terrific memories with more to come.

But a house can be a nightmare if the buyer's eyes are bigger than his wallet and if a lender – often protected by a government guarantee – facilitates his fantasy. Our country's social goal should not be to put families into the house of their dreams, but rather to put them into a house they can afford.

Investments

Below we show our common stock investments that at yearend had a market value of more than $1 billion.

			12/31/10	
Shares	*Company*	*Percentage of Company Owned*	*Cost **	*Market*
			(in millions)	
151,610,700	American Express Company	12.6	$ 1,287	$ 6,507
225,000,000	BYD Company, Ltd.	9.9	232	1,182
200,000,000	The Coca-Cola Company	8.6	1,299	13,154
29,109,637	ConocoPhillips	2.0	2,028	1,982
45,022,563	Johnson & Johnson	1.6	2,749	2,785
97,214,584	Kraft Foods Inc.	5.6	3,207	3,063
19,259,600	Munich Re	10.5	2,896	2,924
3,947,555	POSCO	4.6	768	1,706
72,391,036	The Procter & Gamble Company	2.6	464	4,657
25,848,838	Sanofi-Aventis	2.0	2,060	1,656
242,163,773	Tesco plc	3.0	1,414	1,608
78,060,769	U.S. Bancorp	4.1	2,401	2,105
39,037,142	Wal-Mart Stores, Inc.	1.1	1,893	2,105
358,936,125	Wells Fargo & Company	6.8	8,015	11,123
	Others		3,020	4,956
	Total Common Stocks Carried at Market		$33,733	$61,513

*This is our actual purchase price and also our tax basis; GAAP "cost" differs in a few cases because of write-ups or write-downs that have been required.

In our reported earnings we reflect only the dividends our portfolio companies pay us. Our share of the undistributed earnings of these investees, however, was more than $2 billion last year. These retained earnings are important. In our experience – and, for that matter, in the experience of investors over the past century – undistributed earnings have been either matched or exceeded by market gains, albeit in a highly irregular manner. (Indeed, sometimes the correlation goes in reverse. As one investor said in 2009: "This is worse than divorce. I've lost half my net worth – and I still have my wife.") In the future, we expect our market gains to eventually at least equal the earnings our investees retain.

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In our earlier estimate of Berkshire's normal earning power, we made three adjustments that relate to future investment income (but did *not* include anything for the undistributed earnings factor I have just described).

The first adjustment was decidedly negative. Last year, we discussed five large fixed-income investments that have been contributing substantial sums to our reported earnings. One of these – our Swiss Re note – was redeemed in the early days of 2011, and two others – our Goldman Sachs and General Electric preferred stocks – are likely to be gone by yearend. General Electric is entitled to call our preferred in October and has stated its intention to do so. Goldman Sachs has the right to call our preferred on 30 days notice, but has been held back by the Federal Reserve (bless it!), which unfortunately will likely give Goldman the green light before long.

All three of the companies redeeming must pay us a premium to do so – in aggregate about $1.4 billion – but all of the redemptions are nevertheless unwelcome. After they occur, our earning power will be significantly reduced. That's the bad news.

There are two probable offsets. At yearend we held $38 billion of cash equivalents that have been earning a pittance throughout 2010. At some point, however, better rates will return. They will add at least $500 million – and perhaps much more – to our investment income. That sort of increase in money-market yields is unlikely to come soon. It is appropriate, nevertheless, for us to include improved rates in an estimate of "normal" earning power. Even before higher rates come about, furthermore, we could get lucky and find an opportunity to use some of our cash hoard at decent returns. That day can't come too soon for me: To update Aesop, a girl in a convertible is worth five in the phone book.

In addition, dividends on our current common stock holdings will almost certainly increase. The largest gain is likely to come at Wells Fargo. The Federal Reserve, our friend in respect to Goldman Sachs, has frozen dividend levels at major banks, whether strong or weak, during the last two years. Wells Fargo, though consistently prospering throughout the worst of the recession and currently enjoying enormous financial strength and earning power, has therefore been forced to maintain an artificially low payout. (We don't fault the Fed: For various reasons, an across-the-board freeze made sense during the crisis and its immediate aftermath.)

At some point, probably soon, the Fed's restrictions will cease. Wells Fargo can then reinstate the rational dividend policy that its owners deserve. At that time, we would expect our annual dividends from just this one security to increase by several hundreds of millions of dollars annually.

Other companies we hold are likely to increase their dividends as well. Coca-Cola paid us $88 million in 1995, the year after we finished purchasing the stock. Every year since, Coke has increased its dividend. In 2011, we will almost certainly receive $376 million from Coke, up $24 million from last year. Within ten years, I would expect that $376 million to double. By the end of that period, I wouldn't be surprised to see our share of Coke's *annual* earnings exceed 100% of what we paid for the investment. Time is the friend of the wonderful business.

Overall, I believe our "normal" investment income will at least equal what we realized in 2010, though the redemptions I described will cut our take in 2011 and perhaps 2012 as well.

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Last summer, Lou Simpson told me he wished to retire. Since Lou was a mere 74 – an age Charlie and I regard as appropriate only for trainees at Berkshire – his call was a surprise.

Lou joined GEICO as its investment manager in 1979, and his service to that company has been invaluable. In the 2004 Annual Report, I detailed his record with equities, and I have omitted updates only because his performance made mine look bad. Who needs that?

Lou has never been one to advertise his talents. But I will: Simply put, Lou is one of the investment greats. We will miss him.

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Four years ago, I told you that we needed to add one or more younger investment managers to carry on when Charlie, Lou and I weren't around. At that time we had multiple outstanding candidates immediately available for my CEO job (as we do now), but we did not have backup in the investment area.

It's easy to identify many investment managers with great recent records. But past results, though important, do not suffice when prospective performance is being judged. How the record has been achieved is crucial, as is the manager's understanding of – and sensitivity to – risk (which in no way should be measured by beta, the choice of too many academics). In respect to the risk criterion, we were looking for someone with a hard-to-evaluate skill: the ability to anticipate the effects of economic scenarios not previously observed. Finally, we wanted someone who would regard working for Berkshire as far more than a job.

When Charlie and I met Todd Combs, we knew he fit our requirements. Todd, as was the case with Lou, will be paid a salary plus a contingent payment based on his performance relative to the S&P. We have arrangements in place for deferrals and carryforwards that will prevent see-saw performance being met by undeserved payments. The hedge-fund world has witnessed some terrible behavior by general partners who have received huge payouts on the upside and who then, when bad results occurred, have walked away rich, with their limited partners losing back their earlier gains. Sometimes these same general partners thereafter quickly started another fund so that they could immediately participate in future profits without having to overcome their past losses. Investors who put money with such managers should be labeled patsies, not partners.

As long as I am CEO, I will continue to manage the great majority of Berkshire's holdings, both bonds and equities. Todd initially will manage funds in the range of one to three billion dollars, an amount he can reset annually. His focus will be equities but he is not restricted to that form of investment. (Fund consultants like to require style boxes such as "long-short," "macro," "international equities." At Berkshire our only style box is "smart.")

Over time, we may add one or two investment managers if we find the right individuals. Should we do that, we will probably have 80% of each manager's performance compensation be dependent on his or her own portfolio and 20% on that of the other manager(s). We want a compensation system that pays off big for individual success but that also fosters cooperation, not competition.

When Charlie and I are no longer around, our investment manager(s) will have responsibility for the entire portfolio in a manner then set by the CEO and Board of Directors. Because good investors bring a useful perspective to the purchase of businesses, we would expect them to be consulted – but not to have a vote – on the wisdom of possible acquisitions. In the end, of course, the Board will make the call on any major acquisition.

One footnote: When we issued a press release about Todd's joining us, a number of commentators pointed out that he was "little-known" and expressed puzzlement that we didn't seek a "big-name." I wonder how many of them would have known of Lou in 1979, Ajit in 1985, or, for that matter, Charlie in 1959. Our goal was to find a 2-year-old Secretariat, not a 10-year-old Seabiscuit. (Whoops – that may not be the smartest metaphor for an 80-year-old CEO to use.)

Derivatives

Two years ago, in the 2008 Annual Report, I told you that Berkshire was a party to 251 derivatives contracts (other than those used for operations at our subsidiaries, such as MidAmerican, and the few left over at Gen Re). Today, the comparable number is 203, a figure reflecting both a few additions to our portfolio and the unwinding or expiration of some contracts.

Our continuing positions, all of which I am personally responsible for, fall largely into two categories. We view both categories as engaging us in insurance-like activities in which we receive premiums for assuming risks that others wish to shed. Indeed, the thought processes we employ in these derivatives transactions are identical to those we use in our insurance business. You should also understand that we get paid up-front when we enter into the contracts and therefore run no counterparty risk. That's important.

Our first category of derivatives consists of a number of contracts, written in 2004-2008, that required payments by us if there were bond defaults by companies included in certain high-yield indices. With minor exceptions, we were exposed to these risks for five years, with each contract covering 100 companies.

In aggregate, we received premiums of $3.4 billion for these contracts. When I originally told you in our 2007 Annual Report about them, I said that I expected the contracts would deliver us an "underwriting profit," meaning that our losses would be less than the premiums we received. In addition, I said we would benefit from the use of float.

Subsequently, as you know too well, we encountered both a financial panic and a severe recession. A number of the companies in the high-yield indices failed, which required us to pay losses of $2.5 billion. Today, however, our exposure is largely behind us because most of our higher-risk contracts have expired. Consequently, it appears almost certain that we will earn an underwriting profit as we originally anticipated. In addition, we have had the use of interest-free float that averaged about $2 billion over the life of the contracts. In short, we charged the right premium, and that protected us when business conditions turned terrible three years ago.

Our other large derivatives position – whose contracts go by the name of "equity puts" – involves insurance we wrote for parties wishing to protect themselves against a possible decline in equity prices in the U.S., U.K., Europe and Japan. These contracts are tied to various equity indices, such as the S&P 500 in the U.S. and the FTSE 100 in the U.K. In the 2004-2008 period, we received $4.8 billion of premiums for 47 of these contracts, most of which ran for 15 years. On these contracts, only the price of the indices on the termination date counts: No payments can be required before then.

As a first step in updating you about these contracts, I can report that late in 2010, at the instigation of our counterparty, we unwound eight contracts, all of them due between 2021 and 2028. We had originally received $647 million in premiums for these contracts, and the unwinding required us to pay $425 million. Consequently, we realized a gain of $222 million and also had the interest-free and unrestricted use of that $647 million for about three years.

Those 2010 transactions left us with 39 equity put contracts remaining on our books at yearend. On these, at their initiation, we received premiums of $4.2 billion.

The future of these contracts is, of course, uncertain. But here is one perspective on them. If the prices of the relevant indices are the same at the contract expiration dates as these prices were on December 31, 2010 – and foreign exchange rates are unchanged – we would owe $3.8 billion on expirations occurring from 2018 to 2026. You can call this amount "settlement value."

On our yearend balance sheet, however, we carry the liability for those remaining equity puts at $6.7 billion. In other words, if the prices of the relevant indices remain unchanged from that date, we will record a $2.9 billion gain in the years to come, that being the difference between the liability figure of $6.7 billion and the settlement value of $3.8 billion. I believe that equity prices will very likely increase and that our liability will fall significantly between now and settlement date. If so, our gain from this point will be even greater. But that, of course, is far from a sure thing.

What is sure is that we will have the use of our remaining "float" of $4.2 billion for an average of about 10 more years. (Neither this float nor that arising from the high-yield contracts is included in the insurance float figure of $66 billion.) Since money is fungible, think of a portion of these funds as contributing to the purchase of BNSF.

As I have told you before, almost all of our derivatives contracts are free of any obligation to post collateral – a fact that cut the premiums we could otherwise have charged. But that fact also left us feeling comfortable during the financial crisis, allowing us in those days to commit to some advantageous purchases. Foregoing some additional derivatives premiums proved to be well worth it.

On Reporting and Misreporting: The Numbers That Count and Those That Don't

Earlier in this letter, I pointed out some numbers that Charlie and I find useful in valuing Berkshire and measuring its progress.

Let's focus here on a number we omitted, but which many in the media feature above all others: net income. Important though that number may be at most companies, it is almost always *meaningless* at Berkshire. Regardless of how our businesses might be doing, Charlie and I could – quite legally – cause net income in any given period to be almost any number we would like.

We have that flexibility because *realized* gains or losses on investments go into the net income figure, whereas *unrealized* gains (and, in most cases, losses) are excluded. For example, imagine that Berkshire had a $10 billion increase in unrealized gains in a given year and concurrently had $1 billion of realized losses. Our net income – which would count only the loss – would be reported as *less* than our operating income. If we had meanwhile realized gains in the *previous* year, headlines might proclaim that our earnings were down X% when in reality our business might be much improved.

If we really thought net income important, we could regularly feed realized gains into it simply because we have a huge amount of unrealized gains upon which to draw. Rest assured, though, that Charlie and I have *never* sold a security because of the effect a sale would have on the net income we were soon to report. We both have a deep disgust for "game playing" with numbers, a practice that was rampant throughout corporate America in the 1990s and still persists, though it occurs less frequently and less blatantly than it used to.

Operating earnings, despite having some shortcomings, are in general a reasonable guide as to how our businesses are doing. Ignore our net income figure, however. Regulations require that we report it to you. But if you find reporters focusing on it, that will speak more to their performance than ours.

Both realized and unrealized gains and losses are fully reflected in the calculation of our book value. Pay attention to the changes in that metric and to the course of our operating earnings, and you will be on the right track.

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As a p.s., I can't resist pointing out just how capricious reported net income can be. Had our equity puts had a termination date of June 30, 2010, we would have been required to pay $6.4 billion to our counterparties at that date. Security prices then generally rose in the next quarter, a move that brought the corresponding figure down to $5.8 billion on September 30th. Yet the Black-Scholes formula that we use in valuing these contracts required us to *increase* our balance-sheet liability during this period from $8.9 billion to $9.6 billion, a change that, after the effect of tax accruals, reduced our net income for the quarter by $455 million.

Both Charlie and I believe that Black-Scholes produces wildly inappropriate values when applied to long-dated options. We set out one absurd example in these pages two years ago. More tangibly, we put our money where our mouth was by entering into our equity put contracts. By doing so, we implicitly asserted that the Black-Scholes calculations used by our counterparties or their customers were faulty.

We continue, nevertheless, to use that formula in presenting our financial statements. Black-Scholes is the accepted standard for option valuation – almost all leading business schools teach it – and we would be accused of shoddy accounting if we deviated from it. Moreover, we would present our auditors with an insurmountable problem were we to do that: They have clients who are our counterparties and who use Black-Scholes values for the same contracts we hold. It would be impossible for our auditors to attest to the accuracy of both their values and ours were the two far apart.

Part of the appeal of Black-Scholes to auditors and regulators is that it produces a precise number. Charlie and I can't supply one of those. We believe the true liability of our contracts to be far lower than that calculated by Black-Scholes, but we can't come up with an exact figure – anymore than we can come up with a *precise* value for GEICO, BNSF, or for Berkshire Hathaway itself. Our inability to pinpoint a number doesn't bother us: We would rather be approximately right than precisely wrong.

John Kenneth Galbraith once slyly observed that economists were most economical with ideas: They made the ones learned in graduate school last a lifetime. University finance departments often behave similarly. Witness the tenacity with which almost all clung to the theory of efficient markets throughout the 1970s and 1980s, dismissively calling powerful facts that refuted it "anomalies." (I always love explanations of that kind: The Flat Earth Society probably views a ship's circling of the globe as an annoying, but inconsequential, anomaly.)

Academics' current practice of teaching Black-Scholes as revealed truth needs re-examination. For that matter, so does the academic's inclination to dwell on the valuation of options. You can be highly successful as an investor without having the slightest ability to value an option. What students *should* be learning is how to value a business. That's what investing is all about.

Life and Debt

The fundamental principle of auto racing is that to finish first, you must first finish. That dictum is equally applicable to business and guides our every action at Berkshire.

Unquestionably, some people have become very rich through the use of borrowed money. However, that's also been a way to get very poor. When leverage works, it magnifies your gains. Your spouse thinks you're clever, and your neighbors get envious. But leverage is addictive. Once having profited from its wonders, very few people retreat to more conservative practices. And as we all learned in third grade – and some relearned in 2008 – any series of positive numbers, however impressive the numbers may be, evaporates when multiplied by a single zero. History tells us that leverage all too often produces zeroes, even when it is employed by very smart people.

Leverage, of course, can be lethal to businesses as well. Companies with large debts often assume that these obligations can be refinanced as they mature. That assumption is usually valid. Occasionally, though, either because of company-specific problems or a worldwide shortage of credit, maturities must actually be met by payment. For that, only cash will do the job.

Borrowers then learn that credit is like oxygen. When either is abundant, its presence goes unnoticed. When either is missing, that's *all* that is noticed. Even a short absence of credit can bring a company to its knees. In September 2008, in fact, its overnight disappearance in many sectors of the economy came dangerously close to bringing our entire country to its knees.

Charlie and I have *no* interest in any activity that could pose the slightest threat to Berkshire's well-being. (With our having a combined age of 167, starting over is not on our bucket list.) We are forever conscious of the fact that you, our partners, have entrusted us with what in many cases is a major portion of your savings. In addition, important philanthropy is dependent on our prudence. Finally, many disabled victims of accidents caused by our insureds are counting on us to deliver sums payable decades from now. It would be irresponsible for us to risk what all these constituencies need just to pursue a few points of extra return.

A little personal history may partially explain our extreme aversion to financial adventurism. I didn't meet Charlie until he was 35, though he grew up within 100 yards of where I have lived for 52 years and also attended the same inner-city public high school in Omaha from which my father, wife, children and two grandchildren graduated. Charlie and I did, however, both work as young boys at my grandfather's grocery store, though our periods of employment were separated by about five years. My grandfather's name was Ernest, and perhaps no man was more aptly named. No one worked for Ernest, even as a stock boy, without being shaped by the experience.

On the facing page you can read a letter sent in 1939 by Ernest to his youngest son, my Uncle Fred. Similar letters went to his other four children. I still have the letter sent to my Aunt Alice, which I found – along with $1,000 of cash – when, as executor of her estate, I opened her safe deposit box in 1970.

Ernest never went to business school – he never in fact finished high school – but he understood the importance of liquidity as a condition for *assured* survival. At Berkshire, we have taken his $1,000 solution a bit further and have pledged that we will hold at least $10 billion of cash, excluding that held at our regulated utility and railroad businesses. Because of that commitment, we customarily keep at least $20 billion on hand so that we can both withstand unprecedented insurance losses (our largest to date having been about $3 billion from Katrina, the insurance industry's most expensive catastrophe) and quickly seize acquisition or investment opportunities, even during times of financial turmoil.

Dear Fred & Catherine:

Over a period of a good many years I have known a great many people who at some time or another have suffered in various ways simply because they did not have ready cash. I have known people who have had to sacrifice some of their holdings in order to have money that was necessary at that time.

For a good many years your grandfather kept a certain amount of money where he could put his hands on it in very short notice.

For a number of years I have made it a point to keep a reserve, should some occasion come up where I would need money quickly, without disturbing the money that I have in my business. There have been a couple occasions when I found it very convenient to go to this fund.

Thus, I feel that everyone should have a reserve. I hope it never happens to you, but the chances are that some day you will need money, and need it badly, and with this thought in view, I started a fund by placing $200.00 in an envelope, with your name on it, when you were married. Each year I added something to it, until there is now $1000.00 in the fund.

Ten years have elapsed since you were married, and this fund is now completed.

It is my wish that you place this envelope in your safety deposit box, and keep it for the purpose that it was created for. Should the time come when you need part, I would suggest that you use as little as possible, and replace it as soon as possible.

You might feel that this should be invested and bring you an income. Forget it -- the mental satisfaction of having $1000.00 laid away where you can put your hands on it, is worth more than what interest it might bring, especially if you have the investment in something that you could not realize on quickly.

If in after years you feel this has been a good idea, you might repeat it with your own children.

For your information, I might mention that there has never been a Buffett who ever left a very large estate, but there has never been one that did not leave something. They never spent all they made, but always saved part of what they made, and it has all worked out pretty well.

This letter is being written at the expiration of ten years after you were married.

Ernest Buffett
"Dad"

We keep our cash largely in U.S. Treasury bills and avoid other short-term securities yielding a few more basis points, a policy we adhered to long before the frailties of commercial paper and money market funds became apparent in September 2008. We agree with investment writer Ray DeVoe's observation, "More money has been lost reaching for yield than at the point of a gun." At Berkshire, we don't rely on bank lines, and we don't enter into contracts that could require postings of collateral except for amounts that are tiny in relation to our liquid assets.

Furthermore, not a dime of cash has left Berkshire for dividends or share repurchases during the past 40 years. Instead, we have retained *all* of our earnings to strengthen our business, a reinforcement now running about $1 billion per month. Our net worth has thus increased from $48 million to $157 billion during those four decades and our intrinsic value has grown far more. No other American corporation has come close to building up its financial strength in this unrelenting way.

By being so cautious in respect to leverage, we penalize our returns by a minor amount. Having loads of liquidity, though, lets us sleep well. Moreover, during the episodes of financial chaos that occasionally erupt in our economy, we will be equipped both financially and emotionally to play offense while others scramble for survival. That's what allowed us to invest $15.6 billion in 25 days of panic following the Lehman bankruptcy in 2008.

The Annual Meeting

The annual meeting will be held on Saturday, April 30th. Carrie Kizer from our home office will be the ringmaster, and her theme this year is Planes, Trains and Automobiles. This gives NetJets, BNSF and BYD a chance to show off.

As always, the doors will open at the Qwest Center at 7 a.m., and a new Berkshire movie will be shown at 8:30. At 9:30 we will go directly to the question-and-answer period, which (with a break for lunch at the Qwest's stands) will last until 3:30. After a short recess, Charlie and I will convene the annual meeting at 3:45. If you decide to leave during the day's question periods, please do so while *Charlie* is talking. (Act fast; he can be terse.)

The best reason to exit, of course, is to *shop*. We will help you do that by filling the 194,300-square-foot hall that adjoins the meeting area with products from dozens of Berkshire subsidiaries. Last year, you did your part, and most locations racked up record sales. In a nine-hour period, we sold 1,053 pairs of Justin boots, 12,416 pounds of See's candy, 8,000 Dairy Queen Blizzards® and 8,800 Quikut knives (that's 16 knives per minute). But you can do better. Remember: Anyone who says money can't buy happiness simply hasn't learned where to shop.

GEICO will have a booth staffed by a number of its top counselors from around the country, all of them ready to supply you with auto insurance quotes. In most cases, GEICO will be able to give you a shareholder discount (usually 8%). This special offer is permitted by 44 of the 51 jurisdictions in which we operate. (One supplemental point: The discount is not additive if you qualify for another, such as that given certain groups.) Bring the details of your existing insurance and check out whether we can save you money. For at least half of you, I believe we can.

Be sure to visit the Bookworm. It will carry more than 60 books and DVDs, including the Chinese language edition of Poor Charlie's Almanack, the ever-popular book about my partner. So what if you can't read Chinese? Just buy a copy and carry it around; it will make you look urbane and erudite. Should you need to ship your book purchases, a shipping service will be available nearby.

If you are a big spender – or merely a gawker – visit Elliott Aviation on the east side of the Omaha airport between noon and 5:00 p.m. on Saturday. There we will have a fleet of NetJets aircraft that will get your pulse racing. Come by bus; leave by private jet.

An attachment to the proxy material that is enclosed with this report explains how you can obtain the credential you will need for admission to the meeting and other events. As for plane, hotel and car reservations, we have again signed up American Express (800-799-6634) to give you special help. Carol Pedersen, who handles these matters, does a terrific job for us each year, and I thank her for it. Hotel rooms can be hard to find, but work with Carol and you will get one.

Airlines have often jacked up prices – sometimes dramatically so – for the Berkshire weekend. If you are coming from far away, compare the cost of flying to Kansas City versus Omaha. The drive is about 2½ hours and it may be that you can save significant money, particularly if you had planned to rent a car in Omaha.

At Nebraska Furniture Mart, located on a 77-acre site on 72nd Street between Dodge and Pacific, we will again be having "Berkshire Weekend" discount pricing. Last year the store did $33.3 million of business during its annual meeting sale, a volume that – as far as I know – exceeds the one-week total of *any* retail store anyplace. To obtain the Berkshire discount, you must make your purchases between Tuesday, April 26th and Monday, May 2nd inclusive, and also present your meeting credential. The period's special pricing will even apply to the products of several prestigious manufacturers that normally have ironclad rules against discounting but which, in the spirit of our shareholder weekend, have made an exception for you. We appreciate their cooperation. NFM is open from 10 a.m. to 9 p.m. Monday through Saturday, and 10 a.m. to 6 p.m. on Sunday. On Saturday this year, from 5:30 p.m. to 8 p.m., NFM is having a picnic to which you are all invited.

At Borsheims, we will again have two shareholder-only events. The first will be a cocktail reception from 6 p.m. to 9 p.m. on Friday, April 29th. The second, the main gala, will be held on Sunday, May 1st , from 9 a.m. to 4 p.m. On Saturday, we will be open until 6 p.m. On Sunday, around 1 p.m., I will be at Borsheims with a smile and a shoeshine, selling jewelry just as I sold men's shirts at J.C. Penney's 63 years ago. I've told Susan Jacques, Borsheims' CEO, that I'm still a hotshot salesman. But I see doubt in her eyes. So cut loose and buy something from me for your wife or sweetheart (presumably the same person). Make me look good.

We will have huge crowds at Borsheims throughout the weekend. For your convenience, therefore, shareholder prices will be available from Monday, April 25th through Saturday, May 7th. During that period, please identify yourself as a shareholder by presenting your meeting credentials or a brokerage statement that shows you are a Berkshire shareholder.

On Sunday, in the mall outside of Borsheims, a blindfolded Patrick Wolff, twice U.S. chess champion, will take on all comers – who will have their eyes wide open – in groups of six. Nearby, Norman Beck, a remarkable magician from Dallas, will bewilder onlookers. Additionally, we will have Bob Hamman and Sharon Osberg, two of the world's top bridge experts, available to play bridge with our shareholders on Sunday afternoon.

Gorat's and Piccolo's will again be open exclusively for Berkshire shareholders on Sunday, May 1st. Both will be serving until 10 p.m., with Gorat's opening at 1 p.m. and Piccolo's opening at 4 p.m. These restaurants are my favorites and – still being a growing boy – I will eat at both of them on Sunday evening. Remember: To make a reservation at Gorat's, call 402-551-3733 on April 1st (*but not before*) and at Piccolo's call 402-342-9038.

We will again have the same three financial journalists lead the question-and-answer period, asking Charlie and me questions that shareholders have submitted to them by e-mail. The journalists and their e-mail addresses are: Carol Loomis, of Fortune, who may be emailed at cloomis@fortunemail.com; Becky Quick, of CNBC, at BerkshireQuestions@cnbc.com, and Andrew Ross Sorkin, of The New York Times, at arsorkin@nytimes.com.

From the questions submitted, each journalist will choose the dozen or so he or she decides are the most interesting and important. The journalists have told me your question has the best chance of being selected if you keep it concise, avoid sending it in at the last moment, make it Berkshire-related and include no more than two questions in any email you send them. (In your email, let the journalist know if you would like your name mentioned if your question is selected.)

Neither Charlie nor I will get so much as a clue about the questions to be asked. We know the journalists will pick some tough ones, and that's the way we like it.

We will again have a drawing at 8:15 a.m. on Saturday at each of 13 microphones for those shareholders wishing to ask questions themselves. At the meeting, I will alternate the questions asked by the journalists with those from the winning shareholders. We hope to answer at least 60 questions. From our standpoint, the more the better. Our goal, which we pursue both through these annual letters and by our meeting discussions, is to give you a better understanding of the business that *you* own.

* * * * * * * * * * *

For good reason, I regularly extol the accomplishments of our operating managers. Equally important, however, are the 20 men and women who work with me at our corporate office (all on one floor, which is the way we intend to keep it!).

This group efficiently deals with a multitude of SEC and other regulatory requirements, files a 14,097-page Federal income tax return along with state and foreign returns, responds to countless shareholder and media inquiries, gets out the annual report, prepares for the country's largest annual meeting, coordinates the Board's activities – and the list goes on and on.

They handle all of these business tasks cheerfully and with unbelievable efficiency, making my life easy and joyful. Their efforts go beyond activities strictly related to Berkshire: They deal with 48 universities (selected from 200 applicants) who will send students to Omaha this school year for a day with me and also handle all kinds of requests that I receive, arrange my travel, and even get me hamburgers for lunch. No CEO has it better.

This home office crew has my deepest thanks and deserves yours as well. Come to our Woodstock for Capitalism on April 30th and tell them so.

February 26, 2011

Warren E. Buffett
Chairman of the Board

Memo

To: Berkshire Hathaway Managers ("The All-Stars")

cc: Berkshire Directors

From: Warren E. Buffett

Date: July 26, 2010

This is my biennial letter to reemphasize Berkshire's top priority and to get your help on succession planning (yours, not mine!).

The priority is that all of us continue to zealously guard Berkshire's reputation. We can't be perfect but we can try to be. As I've said in these memos for more than 25 years: "We can afford to lose money – even a lot of money. But we can't afford to lose reputation – even a shred of reputation." We *must* continue to measure every act against not only what is legal but also what we would be happy to have written about on the front page of a national newspaper in an article written by an unfriendly but intelligent reporter.

Sometimes your associates will say "Everybody else is doing it." This rationale is almost always a bad one if it is the main justification for a business action. It is totally unacceptable when evaluating a moral decision. Whenever somebody offers that phrase as a rationale, in effect they are saying that they can't come up with a *good* reason. If anyone gives this explanation, tell them to try using it with a reporter or a judge and see how far it gets them.

If you see anything whose propriety or legality causes you to hesitate, be sure to give me a call. However, it's very likely that if a given course of action evokes such hesitation, it's too close to the line and should be abandoned. There's plenty of money to be made in the center of the court. If it's questionable whether some action is close to the line, just assume it is outside and forget it.

As a corollary, let me know promptly if there's any significant bad news. I can handle bad news but I don't like to deal with it after it has festered for awhile. A reluctance to face up immediately to bad news is what turned a problem at Salomon from one that could have easily been disposed of into one that almost caused the demise of a firm with 8,000 employees.

Somebody is doing something today at Berkshire that you and I would be unhappy about if we knew of it. That's inevitable: We now employ more than 250,000 people and the chances of that number getting through the day without any bad behavior occurring is nil. But we can have a huge effect in minimizing such activities by jumping on anything immediately when there is the slightest odor of impropriety. Your attitude on such matters, expressed by behavior as well as words, will be the most important factor in how the culture of your business develops. Culture, more than rule books, determines how an organization behaves.

In other respects, talk to me about what is going on as little or as much as you wish. Each of you does a first-class job of running your operation with your own individual style and you don't need me to help. The only items you need to clear with me are any changes in post-retirement benefits and any unusually large capital expenditures or acquisitions.

* * * * * * * * * * * *

I need your help in respect to the question of succession. I'm not looking for any of you to retire and I hope you all live to 100. (In Charlie's case, 110.) But just in case you don't, please send me a letter (at home if you wish) giving your recommendation as who should take over tomorrow if you should become incapacitated overnight. These letters will be seen by no one but me unless I'm no longer CEO, in which case my successor will need the information. Please summarize the strengths and weaknesses of your primary candidate as well as any possible alternates you may wish to include. Most of you have participated in this exercise in the past and others have offered your ideas verbally. However, it's important to me to get a periodic update, and now that we have added so many businesses, I need to have your thoughts in writing rather than trying to carry them around in my memory. Of course, there are a few operations that are run by two or more of you – such as the Blumkins, the Merschmans, the pair at Applied Underwriters, etc. – and in these cases, just forget about this item. Your note can be short, informal, handwritten, etc. Just mark it "Personal for Warren."

Thanks for your help on all of this. And thanks for the way you run your businesses. You make my job easy.

WEB/db

P.S. Another minor request: Please turn down all proposals for me to speak, make contributions, intercede with the Gates Foundation, etc. Sometimes these requests for you to act as intermediary will be accompanied by "It can't hurt to ask." It will be easier for both of us if you just say "no." As an added favor, don't suggest that they instead write or call me. Multiply 76 businesses by the periodic "I think he'll be interested in this one" and you can understand why it is better to say no firmly and immediately.

Morning Session - 2011 Meeting

1. Welcome

WARREN BUFFETT: Good morning. I'm Warren. He's Charlie.

I can see, he can hear. That's why we work together. (Laughter)

Have trouble remembering each other's names from time to time. (Laughs)

We're going to — we're going to introduce the directors, we're going to give you some information on the first quarter earnings.

We're going to talk briefly about the David Sokol/Lubrizol situation, and then we're going to open it up for your questions.

Anything as it relates to the Lubrizol matter is going to be transcribed and will be put up on the website — the Berkshire Hathaway website — just as promptly as we can, maybe this evening or this afternoon, maybe tomorrow morning, but very promptly, because we want to be sure that all shareholders hear — or get to read every word of what has been said here about the matter.

2. Board of directors introduced

WARREN BUFFETT: First thing I'd like to do is introduce the directors. And if they'd stand and remain standing, you can withhold your applause as they stand, but you can go crazy at the end, or you can continue to withhold your applause. That will be your call. (Laughter)

Charlie and I are up here, and we don't like to stand up too often so we'll skip our standing.

The — Howard Buffett, Stephen Burke, Susan Decker, Bill Gates, Sandy Gottesman, Charlotte Guyman, Don Keough, Tom Murphy, Ron Olson, and Walter Scott. (Applause)

3. Q1 earnings hurt by Asian catastrophes

WARREN BUFFETT: Now, we have a few slides that deal with the first quarter earnings.

I think Marc Hamburg would like me to emphasize that these are preliminary. This is about as early as we ever have a meeting, in relation to the quarter.

Normally it's always the first Saturday in May, so they had to work a little harder than usual to get these numbers together.

And I will tell you as background that basically pretty much all of our businesses, with the exception of those that are related to residential housing, are getting better, and you can almost see it with most of them quarter by quarter.

We have a wide diversity of businesses. We have more than 70 companies we list, but then Marmon itself has over a hundred businesses. So we are a cross section of not only the American economy, but to some extent we see a fair amount about what's going on internationally, too.

And in the first quarter, as has been the case, really, since the fall of 2009, both our nonresidential construction businesses, except for those nonresidential construction businesses, our other businesses have generally gotten better quarter by quarter, and there was no exception to that in the first quarter.

What was very different in the first quarter was that we had a — probably the second worst quarter for the insurance industry, in terms of catastrophes around the globe.

Normally, the third quarter of the year is the worst period because that's when hurricanes tend to hit the U.S. with most of them — well, about 50 percent of them occurring in September and then sort of forming a normal curve on either side of September — so the third quarter usually is the record quarter, and the third quarter was the record quarter back at the time of Katrina.

But in the first quarter of this year, we had some major catastrophes in the Pacific Asian areas, and that hit the reinsurance industry particularly hard.

No one knows at this point. I mean it's a wild guess, but probably those catastrophes cost the reinsurance industry on the order of $50 billion, and we usually participate to the extent of 3 to 5 percent.

First of all, I'll give you our overall earnings the way we normally present them. And if we'll put the first slide up.

You can see that our insurance underwriting suffered an after-tax loss of $821 million.

Now, when I wrote the annual report, I postulated normal earning power of Berkshire at about 17 billion pretax and about 12 billion after tax, assuming breakeven on insurance underwriting.

Our insurance underwriting has done better than breakeven. In fact, it's made quite a bit of money for eight consecutive years.

But I would say with a start of these catastrophes in the first quarter — or the catastrophes experience we had in the first quarter — I would say that it's unlikely that we would have an underwriting profit for 2011.

If it was remarkably catastrophe-free from this point forward, including hurricanes in the United States, it's conceivable we would break even or make a tiny profit.

But that's an improbable assumption, so I think for the first time in nine years we will likely have an insurance underwriting loss this year.

I think our record may very well be quite a bit better than, certainly, most other reinsurers and it does not change my expectation that over time, our insurance underwriting should at least break even. And if you have followed the — what I've written in the annual reports — if insurance breaks even, we get the free use of float, and that's been enormously valuable in the past and I would expect it to be in the future.

And if you look at the other lines, insurance investment income is down a little. That will go down more because our Goldman Sachs preferred was called in April.

Our General Electric preferred is almost certain to be called in October. So we have lost — and we lost a — we had called a note from Swiss Re that was paying us 12 percent and came to something over $360 million a year when the Swiss franc went above par.

So we have lost, or are losing, at least three very high-yield investments, which we cannot replace with similar investments at present. So that line will go down.

On the other hand, at the end of the quarter we had 38 billion in cash, and that does not count the 5 1/2 billion that we were going to receive in April from our Goldman Sachs preferred. So that money is earning virtually nothing now, and I would not expect that to be part of the long-term picture, either.

So there would — you know, just a few percent on that would be many, many hundreds of millions of dollars.

So I think over time, our insurance investment income, even though it will dip throughout this year, I would expect that if we have a similar level of investments, to actually grow from the level we show here.

We had the full ownership of BNSF in the quarter this year. We only had it, I think, from February 12th last year, so that, in a significant way, accounts for the gain in that next line of railroad, utilities and energy.

But the BNSF also had a significant gain in earnings and the railroad business looks to me like it will have a very good year this year, not just our railroad but all railroads, and the competitive advantage of railroads is becoming more and more evident, almost by the day, particularly as fuel prices increase.

And in the remaining lines, we also had gains in most of our businesses.

So overall, we got hit very hard in the insurance business.

And if we'll move to slide 2, we list the three major catastrophes that occurred, which in aggregate we estimate we have a total loss of a billion, 673 pretax, and that figure, as with all estimates — early estimates about major catastrophes — is subject to a lot of change. Nobody knows what the insured losses will be from the Japanese earthquake.

But this is our best estimate now. You'll notice that over 40 percent of the underwriting loss comes from a contract we have with Swiss Re where we get 20 percent of their business.

That contract is in the fourth of its five years. They have indicated that they will not be interested in renewing it. I just wish they told us that a few months ago. (Laughs)

But we've enjoyed the relationship with Swiss Re, it's just that we enjoy it some quarters more than others.

Our estimate — we've added a little something into their estimate because on balance we feel that most catastrophe losses develop upward. It's sort of the nature of the business.

But that — incidentally, the tornadoes in April, just at GEICO, we expect — and all we're talking about is automobiles here, cars, because we don't insure homeowners. We act as agent in placing insurance for people, but we do not take the insurance risk.

We estimate that 25,000 cars will get automobile claims. That's a lot of automobiles when you think about it, and our market share is about 9 percent, although it varies by state.

But it's been an extraordinary tornado season, as you know. That does not hit — I do not believe that that hits the reinsurance business particularly hard, because there are multiple, multiple events but no one event is anything like, say, the New Zealand earthquake.

The New Zealand earthquake estimated at $12 billion of insured damage. Charlie, how many people are in New Zealand?

CHARLIE MUNGER: Well —

WARREN BUFFETT: We don't practice these things, as will become evident here. (Laughter)

CHARLIE MUNGER: I'd guess —

WARREN BUFFETT: What, about four million? Three million?

CHARLIE MUNGER: I'd guess a little more than that.

WARREN BUFFETT: Four?

CHARLIE MUNGER: Five, maybe.

WARREN BUFFETT: Five, OK. Five million people. So that's 1/60th of the population, we'll say, of the

United States. And if you take 12 billion and multiply it by 60, you come up with 720 billion, which is 10 times Katrina, in terms of the impact on a place like that.

So those — there's been some really extraordinary earthquakes. And as I say, the worst part of the season is, generally speaking, for reinsurers, is yet to come. So this may be a year that the reinsurers will remember, although they might prefer to forget it.

There's some good news on the insurance front. On the next slide I show the growth in policies at GEICO month by month this year versus last year.

Now, if you'll remember, in the annual report I gave an explanation, in talking about goodwill value, about how the goodwill of GEICO is carried on our books at about a billion dollars. And no matter how successful the business becomes, that goodwill value is never increased on the books, but it does grow.

And as I put in the annual report, I estimate its value currently, using the same sort of yardstick we used when we purchased the second half of the company back in 1995, I estimate that value has grown, maybe, to 14 billion.

I mean, every policyholder at GEICO, on average, has a value to us, the way I calculate it, of something on the order of $1,500.

And when we add 318,000 — and as of yesterday it was up to 381,000 — when we add that, we've added something approaching $500 million to the goodwill value.

That does not count the earnings from underwriting, which were substantial for GEICO. That does not count the investment income from the float, it does not count the investment income from the net worth we have attributed to it. That is added goodwill value, the same sort of goodwill value that a Coca-Cola has, or a Mars has, or any company like that.

And people think of it differently when they think of most consumer products. But a policyholder to Berkshire at GEICO has very, very significant value.

There's a very significant percentage have been there for 10 years or more. And it's something that we do not realize on our balance sheet or income account, but it's an asset that's every bit as real as the numbers that we do put on the balance sheet.

So there's good news at GEICO. We are gaining market share every day.

As a matter of fact, if you think about it, we have some people in the adjacent room that will be glad to sell you GEICO policies, and if only 66 of you sign up, that's a goodwill value of about $100,000, so it will take care of some of the expenses of this meeting. (Laughter)

Not that I care whether you do it or not but — (Laughs)

Now, there's one more item I want to go through on the earnings picture, just because it illustrates to some extent the capriciousness of accounting and how we value our securities — or whether we take write-downs on them, I should say.

There's something called "other than temporary impairment," which is an accounting rule. It's kind of a fuzzy accounting rule, but it says that if you own a security for a while, and you paid X for it, and it's been selling at, say, 80 percent of X for quite a while, nobody knows exactly what quite a while means, and I'm sure they phrase it differently in the accounting textbooks, but anyway, if it sells there for quite a while, you're supposed to mark it down to that new valuation and have that markdown go through your income account, through your profit and loss account.

Now we mark it down in any event for the balance sheet, and the balance sheet is what gives you the number for book value and is our reference point.

But only when it meets this other than temporary thing does the mark down actually get run through the profit and loss account.

Now, on March 31, as is shown, I believe, on the next slide, we owned some Wells Fargo stock, which had a cost of about 8 billion and the market value was 11.3 billion.

But some of the Wells Fargo stock we bought had been bought at higher prices than the March 31 figure, whereas, as you can see, a lot of the stock, which had a gain in it of 3.7 billion, had been bought at lower prices.

Well, under the rules, we were required to mark down the stock we bought at a higher price by 337 million, whereas we ignored, in the income account, the 3.7 billion of gain.

Now, interestingly enough, there's two ways you can account for securities, as I understand it, both fully meeting GAAP accounting requirements. And if we had — if we had used the average cost method, we would not have had to mark down.

But we use what they call the specific identification method. Now the specific identification method is actually useful to us from a tax standpoint, because it means whenever we sell a security we can pick out the highest priced security and attribute the sale to that.

So it actually saves us money, or the time use of money, to get into specific identification.

But we could just as easily use the average cost method and then we would not have a write-down like we have and that's why I — one of the reasons I emphasize that — the fact that you should ignore gains or losses in securities or derivatives on a quarterly basis, or even an annual basis.

The important thing is what the operating earnings of our businesses are doing and what the gain in book value, generally, has been.

And then on top of that, you have to make your own estimate for what intrinsic value is, which would include things like the goodwill value that has been developed at GEICO.

I apologize for taking you through the accounting lessons, but the headlines often just say what the final net income is, as if that's the all-important figure. And sometimes it's the all-deceptive figure.

I mean, it really bears — if you include gains and losses — it bears, really, no connection to the reality of whether a quarter has been satisfactory from our standpoint.

But it does get a lot of attention in the press and that's why we spend, perhaps, an inordinate amount of time trying to explain what really takes place in our financials.

Now, I think we're going to get to the questions and answers here in just a second. We'll alternate between the press group on my right and 13 stations that — microphones that have been placed. I think a dozen of them in this room and maybe one in one of the overflow rooms.

4. David Sokol and Lubrizol: "inexcusable" and "inexplicable"

WARREN BUFFETT: I'd like to just comment for a few minutes — and this will be transcribed and up on the internet at our web page — I'd like to comment for just a few minutes, and I'd like to ask Charlie then to give his thoughts, on the matter of David Sokol and the purchase of Lubrizol stock.

You saw in the movie a clip from the Salomon situation, and that occurred almost 20 years ago. It will be 20 years ago this August.

And at the time, it was a Sunday, Charlie was there, and I was elected the chairman at — what, about 3:00 in the afternoon or so I think on a Sunday at Salomon, and I went down to address a press group.

And almost the first — somewhere in the early questions, somebody sort of asked me, you know, what happened?

Well, A) I'd just gotten to Salomon fairly recently, so I didn't know too much about it, but the phrase that came out of my mind then — out of my mouth then — sometimes my mind and my

mouth are coordinated — (laughter) — the phrase that came out of my mouth then was that what happened was inexplicable and inexcusable.

Now, it's 20 years later, and looking back on Salomon, I still find what happened inexplicable and inexcusable. You know, I will never understand exactly why some of the events that transpired did transpire.

And to some extent, in looking at what happened a few months ago with Dave Sokol's failure to notify me at all that he'd had any kind of contact with Citigroup. In fact, he directed my attention to the fact that they represented Lubrizol and never said a word about any contact with them.

And then the purchases of stock immediately prior to recommending Lubrizol to Berkshire, I think I — for reasons that are laid out in the audit committee report, which I urge you to read and which is on our website — I don't think there's any question about the inexcusable part that Dave violated, and that the code of ethics, he violated our insider trading rules, and he violated the principles I laid out — I lay out — every two years in a direct personal letter to all of our managers and which I've been doing for a long time. So I — you can read the audit committee report about that.

The inexplicable part is somewhat — well, it's inexplicable, but I'd like to talk about it a little bit because I will tell you what goes through my mind in respect to it.

Certainly — well, one interesting point is that Dave, to my knowledge, at least, made no attempt to disguise the fact that he was buying the stock. I mean, you know, you read about insider trading cases and people set up trusts in Luxembourg, or they use neighbors who know neighbors, or they use third cousins — I mean, they have various ways of trying to buy the stock so that when it's later — FINRA is a supervising organization — looks at the trading activity in the months prior to a deal, they do not see names that jump out at them as being associated with the deal.

To my knowledge, Dave did nothing like that, so he was leaving a total record as to his purchases.

Now, I think at least usually — and maybe always — we are queried after any deal. We are asked who knew about it when, and we supply a list of whether it's people at the law firm or people that are in a secretarial position at our place or the law firm.

We give them a list of everybody that might have known or did know about the deal prior to the public announcement. And I don't know whether they do that 100 percent of the time, but certainly it's my experience that you get that.

And then a while later, you get a list of names of people that FINRA, again, has picked up as trading it, and they ask you whether any of those names ring a bell with you. So they're trying to put together whether anybody did any inside trading ahead of time.

So the odds that if you're trading in your own name, and you're on that list of people who know of a deal ahead of time, the odds that it's not going to get picked up seem to me are very much against you.

But, to my knowledge, Dave did not disguise the trading. Which, you know, that's somewhat inexplicable that if he really felt he was engaging in insider trading and knew the penalties that could be attached to it, that he essentially did it right out in the open.

The second fact, which is less — perhaps less — puzzling, but Dave obviously has a net worth in very high numbers. He made, I think, close to $24 million. He earned it from Berkshire last year, and we got our money's worth, but he did get $24 million, too.

So I would say that there are plenty of activities in this world that are unsavory that are committed by people with lots of money.

So I don't regard that as, you know, totally puzzling. But I will give you one instance that does make it puzzling. It makes it very puzzling to me.

We bought MidAmerican at the end — Berkshire Hathaway bought MidAmerican — at the end of 1999. Berkshire Hathaway bought about 80 percent.

Walter Scott, who I just introduced, and his family was the second largest holder, I think something over 10 percent, and then two operating people, Dave Sokol the senior one, owned or had options on a big piece, and Greg Abel, a terrific partner of Dave's, also had a piece.

And Walter Scott — and I've told this story privately a few times but not — I don't think I've done it publicly.

Walter Scott came to me a year or two after we'd bought it, and Walter said, I think we ought to have some special compensation arrangement for Dave and Greg if they perform in a really outstanding manner. And he said — I think maybe he suggested something involving equity and he saw me turn white.

So he said, "Why don't you design one and let me know." So I just scribbled something out on a yellow pad. It didn't take me five minutes.

And we call it, sort of in honor of Charlie, although he didn't know about it, we called it the Lollapalooza.

And it provided for a very large cash payout, which I'll get to in a second, based on the five-year compounded gain in earnings. And we were starting from a high base, in other words this was not from any depressed level, and we set a figure that no other utility company in the United States was going to come close to.

But if that figure were achieved, we were going to give $50 million to Dave and $25 million to Greg Abel.

And I had Dave come to the office and I said, "Here's what Walter and I are thinking," and, "What do you think of this plan?"

And it had these figures on per share that — that like I say, move forward at 16 percent compounded per year, and then I say, "Here's the payout."

And he looked at it for just a very short period of time and he said — he said, "Warren, this is more than generous." But he said, "There's just one change you should make."

And I said, "What's that?" And he said, "You should split it equally between me and Greg, instead of being 50 million for me and 25 for Greg. It should be 37 1/2 apiece."

So I witnessed — and Walter witnessed, you can talk to him about it — we witnessed Dave voluntarily, without any — Greg had nothing to do with it, he wasn't there — we saw Dave transfer over 12 1/2 million dollars — getting no fanfare, no credit whatsoever — to his, in effect, junior partner.

And I thought that was rather extraordinary, and what really makes it extraordinary is that $3 million, you know, 10 or so years later, would have led to the kind of troubles that it's led to.

I find — that is really the fact that I find inexplicable, and I think I'll probably — you know, it's 20 years after Salomon — 20 years from now Charlie will be 107 — (laughter) — and we won't mention what I'll be — but I think 20 years from now, I will not understand what causes a man to voluntarily turn away 12 1/2 million dollars to an associate without getting any credit for it in the world, and then 10 or so years later, buy a significant amount of stock the week before he talked to me.

And when he talked to me about Lubrizol, it was either the 14th or 15th — he says it was 14th, I have no reason to disagree with that. The only reason I couldn't say specifically was I had eight university groups, 160 students, in on that Friday. That's the only thing that shows, and I spent most of the day with them.

And the 10K and the 10Q that got printed out on Saturday have that date on them, the 15th, when I looked at Lubrizol for the first time.

You might be interested in knowing, I've been looking up 10Ks and 10Qs for 20 or 30 years, but I don't know how to print them out. So, fortunately, Tracy Britt was in the office, and I said, "Tracy, would you print this damn thing out? I don't know how to do it yet." (Laughter)

But that is why I don't know whether it was the 14th or the 15th. The 10Q says the 15th.

But, at that time, when Dave called me on it, he said nothing about contact with Citigroup or anything of the sort and he — and I said, "I don't know anything, really, about the company." He said, "Well, take a look at it. It — you know, it might fit Berkshire."

And I said, "How come?" And he said, well — he said, "I've owned it and it's a good company. It's a Berkshire-type company."

And, you know, I obviously made a big mistake by not saying, "Well, when did you buy it?"

But I think if somebody says I've owned the stock, you know it sounds to me like they didn't buy it the previous week.

So there we are with a situation, which is sad for Berkshire, sad for Dave, still inexplicable in my mind, and we will undoubtedly get more questions on that. We'll be glad to answer them.

Charlie, do you have any thoughts on this?

CHARLIE MUNGER: Well, I think it's generally a mistake to assume that rationality is going to be perfect, even in very able people. (Laughter)

We prove that pretty well, regularly.

WARREN BUFFETT: Do you have any explanation for the irrational?

CHARLIE MUNGER: Yeah. I think hubris contributes to it.

WARREN BUFFETT: Well, we've gotten quite a bit out of him, folks. (Laughter)

5. Journalists introduced

WARREN BUFFETT: OK. Let's go to work.

We'll start with Carol Loomis of Fortune Magazine. I might as well — I should introduce our group here.

Oh, we didn't go alphabetical this time. We've got Carol, and then we've got Andrew Ross Sorkin of the New York Times, and we have Becky Quick of CNBC. (Applause)

In terms of my check-off system, I'm still going to go to Becky. That's alphabetical.

So, Andrew, it didn't do you any good to try to move over there into the center spot. (Laughs)

Carol, you're on.

CAROL LOOMIS: Good morning from all of us, and I will make the small preamble that I've made before.

We've been getting questions for a couple of months, each of us on our e-mail.

Sometimes a question will be sent to all three of us and sometimes they'll just send to one of us, therefore it becomes very hard to count how many we've had, but certainly it's in the many hundreds and probably in the — up into a thousand, 2000.

And obviously we aren't going to be able to ask every question — every good question. We have a lot of good questions we won't be able to get to. But it's just that you had to pick and choose.

And the other thing I should say is that whatever we do ask, Warren and Charlie have no idea of the question. None. No hint.

WARREN BUFFETT: Sometimes we have no idea of the answer either, but go ahead. (Laughter)

6. Buffett's David Sokol timeline

CAROL LOOMIS: So I will begin. I don't think that anybody will be surprised that it is a Sokol question.

And actually, the — this particular long-term shareholder believed, as Warren has believed, he says, "I do not see why he should have been expected to ask Sokol about his Lubrizol stock holdings when he said he owned the stock. That wouldn't have been a natural question.

"But when you found out the details of his stock purchases a short time later, I do not understand your reaction.

"Surely you realized immediately that these facts were going to become known and that they were going to damage Berkshire's reputation, something you had said repeatedly you would be ruthless in protecting.

"Being ruthless probably would have meant your firing Sokol on the spot, but you didn't do that.

“And then you put out a press release that many Berkshire shareholders that I have talked to found totally inadequate.

“You have always been very direct in stating things. You were not direct in that press release, except in praising David Sokol. Otherwise you stated some facts and behavior that you said you didn’t believe was illegal.

“And then you ended the release, leaving us — now maybe you thought somehow we were going to read between the lines — without expressing any anger about what had happened. Why were you not incensed?

“If you were, why did you not express your anger? Why did you handle this matter in the inadequate way you did?”

WARREN BUFFETT: Yeah. The — (applause) — it wasn’t really immediately thereafter. I learned on March 14th, which was the day we announced it. Now bear in mind his first conversation when he said he owned the stock was January 14th.

In between January 14th and March 14th, Dave gave no indication that he’d had any contact with Citigroup of any kind, and as we learned later, I mean, he went — they met in, maybe, October or something like that where — and talked about possible acquisition candidates for Berkshire.

But none of that — he told me at one point, he said Evercore and Citi represent Lubrizol. One of them represents the directors and one of them represents the company, and not a word about any contact.

On March 14th, when the deal was announced in the morning, I got a call from John Freund. John Freund is probably here today. John Freund works for Citi in Chicago, and he handles — he’s handled the great majority of our business in equities for decades, and I’ve got a direct line to him. I talk to him frequently.

And he called and said congratulations and — you know and aren’t you proud of our — words to the effect. You can talk to John directly, although I’ve been told that the Citi lawyers have told him not to talk, but that — knowing the press, they probably can work something out of him.

The — he’s — essentially his words were that Citi’s team had worked with Dave on this acquisition, and they were proud to be part of it, et cetera, et cetera.

And this was all news to me, so that set up some yellow lights, at least. And the next day, I had Marc Hamburg, our CFO, call Dave, and Dave readily gave him the information about when he had bought the stock and how much.

Marc also asked him what the participation of Citi had been in reference to Berkshire's side of the transaction, and Dave said that he thought he called a fellow there to get their phone number, which turned out to be somewhat of an understatement.

Now, during the period when we announced the deal on March 14th, Lubrizol is the one that needed to prepare a proxy statement. We were not issuing shares at Berkshire. So there was no proxy statement, no — nothing of this — that sort — on our part.

The Lubrizol legal team, Jones Day, went to work with Lubrizol management to start preparing the proxy statement.

We eagerly awaited to see the first draft of that because I was going to be leaving for Asia on Saturday, which, I guess, would be the 19th, and I wanted to see what Lubrizol had to say about this whole Citi matter or anything else.

The most interesting part of every proxy statement is something that says — it's basically the history of the transaction, and it's the first thing I read on any deal because it gives you a blow-by-blow of what has taken place.

And as Marc Hamburg can tell you, I kept — and our law firm can tell you — I kept urging them to get that to me before I took off for Asia.

We got that the afternoon of Friday the 18th, and it had a fair amount of material in it about Dave's involvement with Citigroup.

Then at that point — I believe it was at that point — our law firm got involved, Munger Tolles got involved, in their input to the Lubrizol lawyers as to what we had seen that was different or what we had seen that they didn't know about that we could add.

Ron Olson, the director of Berkshire and partner of Munger Tolles, was on the trip to Asia. So we got on the plane on Saturday the 19th and traveled over the next week until the 26th.

And we knew at that point that his partners at Munger Tolles were interviewing Dave, as — maybe some other people too, but certainly Dave — and I believe that he was interviewed at least three times about both the stock purchases, the history of things with — of his relationship with Citigroup, and they were assembling this information.

I don't have a BlackBerry or whatever it may be. Ron does. So he would get some information as we were over there. And he was getting some input but — and we decided that when we got back we would need to have a prompt meeting of the Berkshire board about this matter.

And we would also learn what — the full details, at least — of what Bob Denham, and maybe other attorneys at Munger Tolles learned from their interviews with Dave.

And we back on — I guess it would be Saturday the 26th — and on the 28th we were going to bring Charlie into it before calling a board meeting.

But there would have been a board meeting that week. And then about five or so in the afternoon, a letter was delivered by Dave's assistant, which really came out of the blue.

And I — he said to me he felt he was retiring on a high point and he gave the reasons why he was retiring, which I laid out and so on.

I don't know whether the questioning the previous week had affected his attitude. He would say not.

But in any event, we had that resignation. That resignation as is — I believe it may have been put in the audit committee report — may have saved us some money.

If we'd fired him, the question would be whether it was with cause or not with cause, and we would have said it was with cause, but that might have very well gotten litigated, and a retirement did provide, in effect, the same non-level of severance payments that a firing with cause provided.

So I drafted up a press release, which has since been the subject of at least mild criticism — (laughs) — and I laid out the good things that Dave had done, which he had done for the company. He'd done many good things, some extraordinary things.

And then I laid out some actions which I said, based on what I knew then, did not seem to me to be unlawful, and incidentally, I talked with both Charlie and Ron about that.

Ron would have been more careful in that wording. I'm not sure Charlie would have been. I'll let him speak for himself on that.

And we ran it by — I ran it by Dave Tuesday morning, just to be sure the facts were accurate, and he said — he objected very much to something I'd put in where I said that I thought that he was, in effect, had had his hopes dashed for succeeding me and that was part of the reason, and he said that was absolutely not true, that he had no hopes ever of succeeding me and that I — you know, basically he was telling me what was in his mind, and I shouldn't be trying to second-guess what was in his mind.

So I took that part out. But he affirmed all of the other facts in that letter, and then I took it out, I sent it to him a second time to make sure that he was OK with the facts, and he said they were accurate.

Now, in there was included the fact that Dave had no indication that Lubrizol had any interest in an approach from Berkshire and that, at least according to the final Lubrizol proxy, is not the case.

I have not talked to anybody except John Freund at Citigroup, so I have no idea what took place with the investment bankers at Citigroup, except for what I read in the Lubrizol proxy. But the Lubrizol proxy now says that Dave did know that Lubrizol had an interest on December 17th.

But, both in the two chances he had to review it, and then when he went on CNBC on a Thursday and he talked for a half an hour, he made no attempt to correct any of the facts in it.

Now, on Wednesday, when we put out the report, we had to have a board meeting first. It was news to the board. They got the release a little bit ahead of time and then we had a board meeting.

We also delivered — well, through our law firm, we phoned the head of the enforcement division of the Securities and Exchange Commission and told him exactly the facts regarding the stock purchases and anything else that they might have cared to know.

So I think we acted in that case, very, very promptly, to make sure the Securities and Exchange Commission, and the top of the enforcement division, was well-versed on what had taken place, to our knowledge up to that point.

So, from our standpoint and my standpoint, Dave was gone, minimum severance costs, minimum chances for lawsuits about compensation due him, and we had turned over some very damning evidence, in my view, to both the public and to the SEC.

What I think bothers people is that there wasn't some big sense of outrage or something in the release, and, you know, I plead guilty to that.

I — this fellow had done a lot of good things for us over 10 or 11 years, and I felt that if I'm laying out a whole bunch of facts that are going to create lots of problems for him for years to come, that I also list his side of the equation, in terms of what he'd done for Berkshire.

And I — and as I said a little bit earlier, you know, one thing I didn't even lay out was this extraordinary act where, in effect, he turned over 12 1/2 million dollars to a fellow employee.

So that's the history of my thinking on it.

Charlie, do you want to add anything? (Applause)

CHARLIE MUNGER: Yes. Well, I think we can concede that that press release was not the cleverest press release in the history of the world. (Laughter)

The facts were complicated, and we didn't foresee, appropriately, the natural reaction.

But I would argue that you don't want to make important decisions in anger. You want to display as much ruthlessness as your duty requires, and you do not want to add one single iota because you're angry.

So, Tom Murphy, one of our best directors — (applause) — one of our best directors, always told the people at Cap Cities, you can always tell a man to go to hell tomorrow if it's such a good idea. (Laughter)

So the anger part of it — and I don't think it was wrong to remember the man's virtues as well as his error. (Applause)

WARREN BUFFETT: I might add as an aside, Charlie and I have worked together for 52 years, and we have disagreed on a lot of things. We've never had an argument.

I need Tom Murphy's advice to remind myself of it a lot of times on other things, but with Charlie it's never even been necessary. It was long before I met Murph.

7. Market reaction when Fed ends stimulus

WARREN BUFFETT: OK. Let's go to area 1.

AUDIENCE MEMBER: Mary Broderick, Berkeley, California. Good morning, Mr. Buffett. Good morning, Mr. Munger. And a big thank you. You probably aren't aware of this, but you've been my personal financial and investment advisors for years.

I would like to know what you think the effect of the government ending the POMO program mid-July this year will have on the stock market and the economy in general.

WARREN BUFFETT: The government ending the — QE2 or —

AUDIENCE MEMBER: Permanent open market operation.

WARREN BUFFETT: Well, you're one acronym ahead of me. (Laughter)

The — well, just as we're discussing it now, it's no secret what they're going to do.

I mean, it's sort of the most advertised open market purchase in history, and probably in terms of defining the amount per month and when it comes to an end, you know, what the balance sheet will look like at the end of the Fed.

So I don't think — you know, if something is that well known by all participants in a market, I think any effect of it has been discounted by this point in time.

I mean, if you say you're going to increase tax rates in a year, we'll say, on corporations or decrease them or whatever it may be, and it's really done and locked in stone, the market doesn't wait until the date when the tax increases or decreases go through to build that into market prices. So I don't — I see no reason — there may be some other things that happen then — but I see no reason why simply having that program come to an end will cause any significant change in stock or bond markets at that time.

You know, obviously, a huge market force will be withdrawn.

I mean you buy $600 billion worth of Treasurys and, you know, you probably leave a few traces along the way that you've done it. And it has been 100 billion or so a month, and that purchasing will not be in the market but the government issuances of debt will still be at a level that are consistent with what they are now.

So it will be a different market, but I think it's a different market that's already been anticipated.

Charlie?

CHARLIE MUNGER: I have nothing to add. (Laughter)

WARREN BUFFETT: Yep.

8. Role of Berkshire's next chairman

WARREN BUFFETT: Becky?

BECKY QUICK: I'd like to ask a question that comes from Ron Taracant (PH) from Sugar Land, Texas.

He says, "Good morning, Mr. Buffett and Mr. Munger. You have always put great emphasis on hiring and retaining managers that not only have exceptional talent but also adhere to the higher standards of corporate ethics and behavior.

"Recent events surrounding Mr. Sokol's actions have demonstrated that we were not very far from a situation where someone running Berkshire Hathaway had great talent, but lacked the other quality that has made Berkshire the envy of the business world.

In some ways, we are relieved these events happened when you were still at the helm.

But coming back to the succession plan that you have in place, how can you ensure that there are no more Sokols in the lineup of successional managers that you have.

WARREN BUFFETT: Yeah, he made an assumption there about Sokol being the next in line, which I'm not sure was warranted.

But he certainly was entitled to think that he was a candidate. And there are — that is, one of the reasons that I think it's a good idea if my son, Howard Buffett, who would have no — get paid nothing, and have no activities in the company, be the chairman after I'm not around, because you can make a mistake in selecting a CEO.

I mean, I think the odds of us making a mistake are very, very low. And certainly the candidate that I think is the leading candidate now, I wouldn't — I would lay a lot of money on the fact that he is straight as an arrow.

But mistakes can be made. You know, the — the Bible says the meek shall inherit the earth, but the question is, will they stay meek? (Laughter)

The idea of having an independent chairman, who would be voting a lot of stock — because even at my death, because of the concentration of A stock and so on, the executors would have a very significant block of stock — and if some mistake were made, it would be easier to change if not only a very large block of stock were available to express an opinion, but also if the chairmanship was not locked in with the CEO.

It's gotten less tough to change CEOs at companies where either their moral or their intellectual qualities are found lacking, but it's still difficult.

If — you know, it's particularly difficult if they turn out to be a mediocre CEO. If the person is really bad, you know, people will rise up sometimes and — particularly if they have meetings without the CEO present.

But it's not an easy job to displace a sitting CEO who also holds the chairman's position and controls the agenda and all of that.

So I think an independent chairman, particularly one that represents a very large block of stock, and has no designs himself on taking over the place, is a safety measure for the possibility, however remote, that the wrong decision is made.

But I will tell you that the directors at Berkshire will be thinking every bit as much about the quality of the person as a human being as they will be thinking about their managerial skills, because it's vital that you have somebody at Berkshire, in my view, that is running the place that really cares more about Berkshire than he does about himself, in terms of advancement.

And I think we have multiple candidates that fulfill that. And the idea of an independent chairmanship is a — is, you know, part of the belt and suspenders.

Charlie?

CHARLIE MUNGER: Well, you know, your idea about the Buffett family has a precedent.

The Rockefellers left the management of Standard Oil many, many decades ago, and they — but they did intervene once, and that was to throw out, what was it, the head of Standard of Indiana, and it was on moral grounds.

So that sort of thing can happen and you have put another string in our bow.

9. Picking tech stocks is difficult but could be profitable

WARREN BUFFETT: OK. We'll go to area 2.

AUDIENCE MEMBER: Caroline Tile (PH), Boston, Massachusetts.

Mr. Buffett and Mr. Munger, if you were going to live another 50 years, and we sincerely hope you do, and could add one additional sector or asset class to your circle of competence, which sector would it be and why?

WARREN BUFFETT: Well, that's a very good question, and I particularly like the preamble. (Laughter)

Well, you would — you would certainly pick a sector that's large, because it isn't going to make any difference to Berkshire if we get to be experts on some tiny little industry or business.

I would say that — that, you know, it would have to be something in the — this isn't going to happen — but if I could really become expert — and I mean really expert, knowing more than most — almost anybody else about the subject — in the tech field, you know, I think that that would be terrific.

It isn't going to happen, but it's going to be a huge field.

There are likely to be, you know, a few enormous winners, a lot of disappointments. So that the ability to pick the winners, you know, is far disproportionate to the ability to pick the winners, we'll say, among integrated major oil companies where they're all equated in price.

You're not going to have a big edge in trying to pick Chevron against Exxon against Continental and Occidental, and you name it.

But the degree of disparity in results among larger tech companies in the future is likely to be very, very dramatic. And if I had the skills where I could pick the winners there I would do a lot better than if I had the skills to pick the winners in the major integrated oil field.

You probably will have better luck with Charlie on this one because he knows a lot more about a lot of industries than I do. Charlie, what's your answer?

CHARLIE MUNGER: Well, it would either be tech or energy. And I think that we're the wrong people to develop the expertise. (Laughter)

I think if we were going to do it, it would have already happened.

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: I do think we might identify someone else who has abilities that we lack. That's been very hard for us but — (Laughter)

WARREN BUFFETT: We're not going to tell you. (Laughs)

CHARLIE MUNGER: But we've done a little better lately.

WARREN BUFFETT: That's a good question.

10. Why Buffett got past his skepticism about Lubrizol

WARREN BUFFETT: Andrew?

ANDREW ROSS SORKIN: This question comes from a shareholder named Ralph Coutant (PH) who asks, "In in your press release, your original press release, you noted that Dave 'brought the idea of purchasing Lubrizol to me on either January 14th or 15th.'

"Initially you said, 'I was unimpressed.' You went on to note that on January 24th you sent another note to Dave indicating your, quote, 'skepticism' about making an offer for the company.

"However, in a very short period of time after Dave's discussion with Lubrizol's CEO, you, quote, 'quickly warmed' to the idea.

"Please clarify what caused you to, quote, 'warm' to the idea so quickly if this didn't strike you as being a great business at first glance. What changed? And what was David Sokol's role in convincing you?"

WARREN BUFFETT: Yeah, the — it wasn't that it didn't — it struck me as a business I didn't know anything about, initially.

You know, you're talking about petroleum additives. I never would understand the chemistry of it, but I — but that's not necessarily vital.

What is important is that I understand the economic dynamics of the industry. Is there — are there competitive moats? Is there ease of entry? All of that sort of thing. I did not have any understanding of that at all, initially.

As a matter of fact, I suggested to Dave, I said, “Charlie is a lot smarter about oil than I am. Why don’t you give him a call because I don’t — you know, I just don’t know anything about that business?”

And I talked to Charlie a few days later, and I don’t remember whether I asked him whether Dave had called or anything, but I mentioned it to Charlie, and Charlie says, “I don’t understand it, either.”

So when I talked to Dave later he had not talked — he had not gotten ahold of Charlie. I told him, “Forget it. He’s as bad as I am.”

What Dave passed along to me after having that dinner with James Hambrick, and which I later confirmed in a lunch when James Hambrick came out here on February 8th, but it was the same thing.

I thought I — and I still feel — I thought I got a good understanding of industry dynamics and how the business had developed over time, what the role of oil companies was and would be, in relation to a chemical additive.

The oil companies are the biggest customers. They sell base oil to a Lubrizol, but they buy the — they are the big customers, and they have gotten out of the business to quite a degree, although there’s two of them left in it.

So this industry had consolidated over time. I looked at the question of ease of entry. You know, every time I look at a business — when we bought See’s Candy in 1972, I said to myself, if I had a hundred million dollars and I wanted to go in and take on See’s Candy, could I do it?

And I came to the conclusion, no, so we bought See’s Candy. If the answer had been yes, we wouldn’t have done it.

I asked myself that same question, you know, can I start a soft drink company and take on Coca-Cola if I have a hundred billion dollars, you know?

Richard Branson tried it some years ago in something called Virgin Cola. You know, the brand is supposed to be a promise. I’m not sure that’s the promise you want to get if you buy a soft drink but — laughter) — in any event, I felt after my conversation with Dave, subject to a second conversation with James Hambrick, but covering the same ground, that it’s not impossible at all for people to enter this business.

But in terms of the service that — and the relatively low cost of what Lubrizol brings to the party, and in terms of people trying to break into a market and take them on — and it’s not a huge market, it’s probably only about a $10 billion market overall, I decided that there was a pretty good-sized moat around this.

They've got lots and lots of patents, but more than that, they have a connection with customers. They work with customers when new engines come along to develop the right kind of additive.

So I felt that I had an understanding — didn't understand one thing more about chemistry than when I started — but I felt that I had an understanding of the economics of the business, the same way I felt that when the ISCAR people talked to me — I mean, who would think you can take some tungsten out of the ground in China and put it in the little carbide tools and that you could have some durable competitive advantage? But I decided ISCAR had a durable competitive advantage after looking at it for a while.

That's the conclusion — I have come to the conclusion that — and Charlie as well — that the Lubrizol position is the dominant — or the number one company, not dominant — but the number one company, in terms of market share, in that business — is sustainable and that it's a very good business over time.

It helps — you know, they are helping engines run longer, run smoother, you know. You know, when metal is acting on metal, the lubricants are important, and they're always going to be around. And I think Lubrizol will be the leading company for a very, very long time.

And that's the conclusion I came to. And I did not have a fix on that, nor did Charlie, prior to Dave relaying on to me what he had learned at that dinner, which incidentally, Lubrizol had been telling the world — I mean they made investor presentations and all that quite extensively over the years.

I simply hadn't paid any real attention to it. And when it was explained to me, I thought I understood it, and I still think I understand it.

I think Lubrizol will be a very, very good addition to Berkshire. And I saw James Hambrick just yesterday, and despite the turmoil around this, they are very enthused about becoming part of Berkshire, that they regard it as the ideal home.

Charlie?

CHARLIE MUNGER: Yeah, you know, ISCAR and Lubrizol, to some extent, are sisters under the skin.

You've got very small markets that aren't really too attractive to anybody with any sense to enter, and fanaticism in service. So if you have any more like that why, please give Warren a call. (Laughter)

11. Using Berkshire's stock for acquisitions

WARREN BUFFETT: OK. Area 3.

AUDIENCE MEMBER: This is Hsiang Hsiao Chu (PH) from Ottawa, Ontario. Warren, Charlie, I admire you guys tremendously.

I want to ask a question about the valuation of your company. You said, "Price is what you pay and value is what you get."

In your letter to the shareholders this year, each Class A share owns about — investment about $95,000, and each share commands an earnings of $6,000.

So in my simplistic way of calculation, each share is worth $95,000 of investment plus the earnings discounted at 7 percent. That's another about $90,000. So it adds up to about 185,000. Is that correct?

Does that mean the complexity of your empire is a value trap?

WARREN BUFFETT: We give those figures because we think they're important, both the investments per share and the operating earnings per share, excluding earnings that come from the investments, and leaving out insurance underwriting profits or losses, because we think at worst they'll break even, but they do bounce around from year to year.

Those figures are pretax on the operating earnings, so I'm not sure whether you're applying your discount factor to pretax or after-tax.

But we think they're important. And I would expect — well, the operating earnings, you know, are almost certain to increase. How much, you know, who knows? But that number is likely to go up.

The investments are still about the same as at year-end but that — they could go up or down based on whether we're able to buy more operating businesses.

Our goal is to build both numbers to some extent, but our primary goal is to build the operating earnings figures.

We never — we — if Charlie and I had to stick a number in an envelope in front of us as to what we thought the intrinsic value of Berkshire was, well, neither one of us would stick a figure, we'd stick a range, because it would be ridiculous to come up with a single specific number, which encompasses not only the businesses we own, but what we're going to do with the capital in the future.

But even our ranges would differ modestly, and they might differ tomorrow, in terms of how I would feel versus today, but not dramatically at all.

I would say this: I think — I certainly — well, you've received signals once or twice when we said we would buy in our stock, we obviously thought that it was selling below the bottom of a conservative range of intrinsic value, and we did that once some years ago.

And by saying so, of course, the stock went up, and so we never got any stock bought. So there's sort of a self-defeating factor about taking the kind of approach to it that we do, in terms of really telling people that the only reason we'll buy in stock is because we think it's cheap. That is not standard practice in corporate America at all.

In fact, corporate America, to some extent, buys in their stock more aggressively when it's high than when it's low. But they may have some equation in their mind that escapes my reasoning power.

But the — I would — we do not regard Berkshire as overpriced. And I would say that we had, very recently, we had a very, very large international company that might well have been interested in doing something with Berkshire, and it's a very nice company, but it's bigger than we can handle unless we would use a lot of stock.

And we won't use the stock. We just think our shareholders would come out behind. It would be a wonderful company and, you know, make a lot of headlines, but in the end our shareholders would be poorer because our stock is a currency, and unless it's fully valued, it's a big mistake to use it as a currency.

Now, we used some in the Burlington deal, but we used a whole lot more cash, and, in effect, we only used 30 percent for stock, and it was worth doing, but it was painful.

And if Lubrizol had wanted to do a deal involving stock, we would not have done it. I told James Hambrick that right off the bat.

So we had absolutely no interest in buying Lubrizol — we were perfectly willing to give, you know, close to $9 billion in cash, and in my view, we're getting our money's worth.

But we would not have given a significant portion of it in Berkshire stock, because we would be giving away part of the businesses we already own, and we like Burlington, and we like See's Candy. We like ISCAR.

And to give away a portion of those, even to get another very good business, would not make financial sense for our shareholders.

So you can draw your own deductions about our calculations of intrinsic value from that statement.

Charlie?

CHARLIE MUNGER: Well, he's obviously looking at two right factors. And I think that we have not permanently lost the ability to do some interesting things eventually with our enormous wealth in cash and marketable securities.

We won't always be as inactive as we are now.

WARREN BUFFETT: We're not that inactive, Charlie. (Laughter)

CHARLIE MUNGER: Well, I don't know. You practically crawl out of your skin, sometimes.

WARREN BUFFETT: Nine billion is — you know, we say normal earning power is 12 billion. That uses up a good portion of one year's quota.

Although we'd like to use more. I mean, there's no question.

CHARLIE MUNGER: Now you're talking.

WARREN BUFFETT: Can you see us using stock in the next few years?

CHARLIE MUNGER: If the business were good enough, of course.

Our trouble is — it's a terrible trouble you people have — the businesses you already own are so good it's not wise to part with them to get a business we don't own. Ordinarily.

12. Buffett is always optimistic about American capitalism

WARREN BUFFETT: Carol?

CAROL LOOMIS: This is for Warren — and Charlie, too — from your longtime Omaha friend Dick Holland.

"Whenever you talk in a general way about America's economic future, your remarks are invariably positive, even glowing, despite the severe problems of growing public and private debt, the huge budget imbalances that result, and no real policies to solve these problems.

"Some experts believe that we may reach the point where future bond offerings to cover the rising debt might fail. Many wonder if we are not entering a time of national decline.

"How can a lousy long-term U.S. economy make you so happy, and why do you see gold nuggets where others see salt?"

WARREN BUFFETT: That's from Charlie's good friend as well, Dick Holland, who we both have known for 60-plus years.

I don't see how anybody can be other than enthused about this country.

If you look back to 1776 or 1789, whichever one you want to date it from, you know, it has been the most extraordinary economic period in the history of the world.

In fact, if you go back — I was born on August 30th, 1930.

Now, if somebody had come to me in the womb and said, "Let me tell you what it's like outside now. The stock market has just crashed, but you haven't seen anything yet. 4,000 banks are going to fail.

"The Dow Jones average is going to go down to 42. It was 381 back just a little bit before you were conceived, and it's going to go to 42. They're going to close the banks for a while. We're going to have 25 percent unemployment. We're going to have the dust bowl in the Midwest. The grasshoppers are going to take over."

You know, it would be like in that Woody Allen movie where he says, "Go back, go back."

All that's happened since August 30th, 1930, is that the standard of living of the average American has increased six-for-one. Six-for-one.

You know, that's absolutely incredible. I mean, you look at centuries where nothing happened for the average person. I mean, century after century. So we have a system that works magnificently.

It gets gummed up periodically. And it always has troubles. I mean, you know, I — my father was very anti-New Deal, so my sisters and I sat around a dinner table from the first we can remember hearing how things were going to go to hell.

As a matter of fact, my father-in-law told my wife-to-be and her mother that he wanted to have a talk with me before we got married.

And he was very much on my side, so I was not in a panic about this or anything, but I went down to his house shortly before the marriage and this wonderful man, Doc Thompson, sat in a chair for a couple of hours, and he said, "Warren," he said. "I just want to tell you that you're going to fail but it's not your fault." (Laughter)

And he said, "You and Susie, my daughter, if you starve, she would have starved anyway. I mean, it is not your fault. It's because — you know, it's because the Democrats are in, you know, and they're going to take the country down the road to Communism and, you know, and just don't worry about the fact you're going to fail."

And this went on for quite a while. And then he blessed me and we got married. It was a happy ending.

But ever since — when I got out of school in 1951, the two people I admired the most in the world, my dad and Ben Graham, both said, you know, you've got a good future but don't start in stocks now because there's never been a year when the Dow Jones average has not ended up below 200, and it's above 200 now. It's much too high, and if you start now selling stocks to people they're going to have bad experiences. So why don't you wait a while and go work in the Omaha National Bank or do something, park yourself on the sidelines.

There's always negatives. The country always faces problems. I mean, this country went through, you know, it went through a civil war, you know. It — it's gone through all kinds of things. But what happens?

You know, we have a few lousy years from time to time. We've had, probably, 15 recessions since the country started. And we will always have a list of 10 or 15 things at the start of the year that will tell you why this country can't possibly work well.

But all I can tell you is that it doesn't do it in a straight line, but the power of capitalism is incredible. I mean, you know, that's what is bringing us out of this recession.

I mean, monetary and fiscal policy add some utility, and certainly in the fall of 2008 the government was needed in a huge, huge way. It could do what — it was the only one that could do what was needed.

But if you look at the history of the United States, you know, probably half of our recessions have occurred during — we'll say in the 19th century — when people didn't even know what fiscal or monetary policy was.

I mean, what happened was that excesses would come in and then the resuscitative power of capitalism would set the country back on the right — on a stronger growth pattern — and that's happened time after time after time.

And the game isn't over. I mean, it is not like the potential of America has been used up.

What has happened is the rest of the world has caught on, to some extent, so you're seeing some state capitalism in places like China, and they are turning economies loose that have been dormant for centuries.

But it's not because the people are smarter. It's not because they work harder. It's just because they have tapped into a system that works marvelously over time.

And I will tell you, in the next hundred years you're going to have probably 15, maybe as many as 20 lousy years, but we will be so far ahead of where we are now that it will be unrecognizable.

Charlie? (Applause)

CHARLIE MUNGER: Well, I can go back a lot farther than that. You know, Europe survived the Black Death, where about a third of the people died. The world is going to go on.

WARREN BUFFETT: That's wildly optimistic for Charlie. (Laughter)

Have you got anything more encouraging than that to say, Charlie? (Laughter)

CHARLIE MUNGER: I don't know. I kind of — I understand a little bit of Dick Holland's point of view.

And by the way, I've known him a long time. He aced me out of any hope of being the chief candle snuffer at the Unitarian church. (Laughter)

He was so damn good at it. (Laughter)

Anyway, what was the question? (Laughter)

WARREN BUFFETT: Can you bring yourself to say anything optimistic?

CHARLIE MUNGER: Well, I have a little bit of a twist on that. And so I would say that you can be cheerful even if things are slightly deteriorating, and that's a very good quality to have.

I have a personal saying that has always amused me. I say, the politicians are never so bad you don't live to want them back. (Laughter)

WARREN BUFFETT: Well, on that note of wisdom — (Laughter)

13. Best assets in an inflationary environment

WARREN BUFFETT: Let's go to area 4.

AUDIENCE MEMBER: Good morning. Angie Janssen (PH) of Cambridge, Massachusetts.

My question is, aside from the need to put huge amounts of capital to work, do you still believe that a high return on tangible capital business, like See's or Coke, is the best asset to hold in an inflationary environment, or do you now think an irreplaceable hard asset with pricing power, like a railroad or a hydroelectric dam, is superior?

WARREN BUFFETT: The first group is superior. I mean, if you can have a wonderful consumer product — doesn't have to be a consumer product — a product that requires very little capital to grow, and to do more dollar volume, as will happen with inflation even if you don't have unit growth, and it doesn't take much capital to support that growth, that is a wonderful asset to have in inflation.

I mean, the ultimate test of that is your own earning ability. I mean, if you're an outstanding doctor, lawyer, whatever it may be, teacher, the — you — as inflation goes along, your services will command more and more in dollar terms, and you don't have to make any additional investment in yourself.

People think of that, you know, with a very long-lived real estate asset or something of the sort, or a farm, or anything where additional capital is not required to finance inflationary growth.

The worst kind of businesses are the businesses with tons of receivables and inventories and all of that.

And in dollar terms, if their volume stays flat but the price level doubles, and they need to come up with double the amount of money to do that same volume of business, that can be a very bad asset.

Now normally, we are not enthused about businesses that require heavy capital investment, just like utilities and the railroad.

We think that, on the other hand, particularly with the railroad, that where you do not have any guaranteed lower rate of return, that you should be entitled to earn returns on assets that are becoming more and more valuable to the economy as — whether it's because of inflationary factors or because of just natural growth factors, or in the case of the United States, I think it will be both.

But the ideal business — See's Candy is doing — it was doing $25 million of volume when we bought it, and it sold 16 million pounds of candy — a little more than — well, it retails $1.90, and we had some quantity discounts, so we were doing close to $30 million worth of business.

Now, we're doing well over $300 million worth of business. It took $9 million of tangible assets to run it when it was doing 30, and it takes about 40 million of tangible assets at 300-and-some.

So we've only had to ploy back $30 million into a business which will make us — well, it's made us, probably, a billion-and-a-half pretax during that period.

And if the price of candy doubles, we don't have any receivables to speak of. Our inventory turns fast. We don't store it or anything like that. We gear up seasonally and the fixed assets aren't big, so that is a much better business to own than a utility business if you're going to have a lot of inflation.

Charlie?

CHARLIE MUNGER: And what's interesting about it is that we didn't always know this. And so — (Laughter)

WARREN BUFFETT: And sometimes we forget it. (Laughter)

CHARLIE MUNGER: That's true, too.

But it shows how continuous learning is absolutely required to have any significant achievement at all in the world.

WARREN BUFFETT: Yeah, and it does show — you know, I've said in the past that I'm a better businessman because I'm an investor and I'm a better investor because I'm a businessman.

There's nothing like actually experiencing the necessity, particularly in the 1970s when inflation was gathering strength, and early '80s, you would see this absolutely required capital investment on a very big scale that really wasn't producing anything commensurate in the way of earnings.

I wrote an article for Fortune called "How Inflation Swindles the Equity Investor" back in 1977.

You really want — the ideal asset, you know, is a royalty on somebody else's sales during inflation, where all you do is get a royalty check every month, and it's based on their sales volume.

And you made — you came up with some product originally, licensed it to them, and you never have another bit of capital investment. You have no receivables, you have no inventory, and you have no fixed assets.

That kind of business is real inflation protection, assuming the product maintains its viability.

So even though we are going into some very capital-intensive businesses, part of that reflects the fact we can't deploy the amount of capital we have in a whole bunch of See's Candies. We just can't find them. We would love to find them, but we can't find them in that quantity.

So we are not doing as well with capital when we have to invest many billions a year, as we would if we were investing a few millions a year. There's no question.

That's true in investments. It's true in operating businesses. There is a real disadvantage to size, and we just hope that problem grows.

CHARLIE MUNGER: Now you're talking.

14. No dividend, so sell a slice of Berkshire if you need cash

WARREN BUFFETT: Becky?

BECKY QUICK: Aside from questions about Dave Sokol, the questions I've received most from shareholders have to do with dividends.

And Dave Corneal (PH), who is a shareholder who couldn't be here this weekend because he's at his daughter's wedding, writes in, "I know that Berkshire is a great allocator of capital, but as an owner of stock and as I get closer to retirement, there will be a time when I will need income from my assets.

"Currently Berkshire does not pay dividends, yet it loves collecting on dividends on its investments. It also generates extensive cash flow in which it could pay dividends if it chooses to.

"Currently the only real option to get income from your Berkshire investment is to sell a share or two of the stock. Is there a point in the future where Berkshire shareholders may expect a dividend payment, or what conditions would be needed for Berkshire to consider paying a dividend?"

WARREN BUFFETT: Yeah, we will pay dividend — as a matter of fact, there may be an argument that when we pay dividends we should pay out almost 100 percent, because it does mean that we lost the ability to find ways to invest a dollar in a manner that creates more than a dollar of present value for the shareholders.

But let's assume you had a savings account, and the savings account paid 5 percent. And you had your choice of taking $50 a year out, or letting the $50 stay in and somebody would pay you 120 percent of that savings account any time you wanted to sell a piece of it.

Now, would you want to take the $5 out or would you rather let it accumulate and have the ability to sell at 120 cents on the dollar, that account?

Every dollar that's been reinvested in Berkshire has created more than a dollar of market value, so it's much more intelligent, if you control the dividend policy of Berkshire, it's much more intelligent for people to leave the dollar in, have it valued at $1.20 or $1.30 or whatever it may be valued, and then sell off a little piece if they want the income, or if they want to receive some cash.

And the logic of it, I think, is unquestionable. The execution of it is a problem. I mean, the question of whether we can keep investing dollars to create more than a dollar of present market value, you know, there's an end to that at some point.

But so far, people, by leaving 160 billion at the end of third quarter in the business, have $200 billion that they can cash out for at any time they wish.

There will come a time and, you know, who knows how soon, because the numbers are getting big — there will come a time when we do not think we can lay out, you know, 15 or 20 billion a year and get something that's immediately worth more than that for our shareholders.

And like I say, when the time comes where a dollar is only buying us 90 cents of value, we'll quit spending the dollar. We'll give it to the shareholders.

But I predict that the day that Berkshire declares a dividend, the stock will go down. I mean, it will — and it should go down — because it's an admission, essentially, that a compounding machine has lost its ability to continue on that course.

Charlie?

CHARLIE MUNGER: Well, and there's nothing wrong with selling a little Berkshire stock to buy jewelry if you do it in the right place. (Laughter)

WARREN BUFFETT: I would like to announce that my niece, Cynthia, visited Borsheims yesterday around — I guess around 3:00 — and she was there with her boyfriend, and he proposed, and they bought a ring. Congratulations. (Applause)

Her mother did the same thing a few years ago. And, you know, these things become family traditions, so go out there and who knows what will happen? (Laughter)

15. Still bullish on bank stocks Wells Fargo and U.S. Bancorp

WAREEN BUFFETT: OK. Number 5.

AUDIENCE MEMBER: Jeremy Pozen (PH), Newton, Massachusetts.

Mr. Buffett and Mr. Munger, Berkshire Hathaway has had large investments in Wells Fargo and U.S. Bank.

What are the revenue outlooks and business prospects for these two banks, given the backdrop of slow U.S. growth, an extended U.S. consumer, a tepid rebound in the U.S. housing market with foreclosures and write-downs lessening but still at historically high levels, and the potential for greater-than-expected inflation, or worse, possibly, deflation similar to Japan?

Thank you for your time and consideration.

WARREN BUFFETT: Yeah, Wells Fargo and U.S. Bancorp are both among the best large banks, if not the best, in the country and they're different than what you think of in terms of some money center banks, but they're very large. Wells is four times as large as USB.

Banking as a whole — U.S. banking — profitability will be considerably less, in my view, in the period ahead than it was, say, in the early part of this century.

And a very important reason is that the leverage will be reduced. And that's probably a good thing for society.

It's — it may be a bad thing for individual banks that could use leverage intelligently, but the trouble was that they all thought they could use leverage intelligently, and the actions of one, or more, that were unintelligent about it, you know, had consequences for everybody, which you can see if you view HBO on whatever it is — is it May 26?

The — so I would say that return on assets — even if return on assets were as good as it was some years ago, there will be less assets per dollar of common equity than before which means returns on common equity will be less.

We still think that Wells Fargo and U.S. Bank are very good operations. We think they're very decent businesses. They're not as attractive as when leverage ratios could be higher.

In terms of the troubles in banking, I think you've seen, by far, the worst in the past. And loan losses have been trending downward now for several quarters, and I think the expectation is that will continue, and I think banking is a very fundamental business.

But as John Stumpf said a few years ago at Wells Fargo, he said, "I don't know why we keep thinking of new ways to lose money when the old ones were working so well." (Laughter)

And banks periodically go crazy. It's always on the asset side.

I mean, here you've got cheap money. You've got the federal government behind, although the federal government has never had to pay out anything on — in terms of the FDIC.

The FDIC has handled 3800 since it was established on January 1, 1934. The FDIC has paid out probably 3800, 3900 by now, institutions, 250 of them or so in the last couple years. And that has not cost the U.S. taxpayer a penny. I mean, that has all come from FDIC assessments on other banks. It's been a mutual insurance company.

Banking, if you just keep out of trouble on the asset side, is a very good business because you get your money so cheap and, you know, because of the implicit federal guarantee, and you do get to leverage up to a fair extent, and America's been a pretty good place to lend money.

So I like our positions in there. You will see that — if you looked at those totals — you'll see we've added to Wells Fargo. And both those companies are very well run institutions, but they will not be able to earn — I don't know what the figures were, but I think they were up 25 or — to 30 percent on tangible equity — and that's not going to get repeated in the future, and it shouldn't be.

Charlie?

CHARLIE MUNGER: Well, yeah, we might add that M&T Bank, which most people —

WARREN BUFFETT: Oh, yeah.

CHARLIE MUNGER: — never talk about, is headed by a really sensible fellow, and it's been a wonderful investment for us.

WARREN BUFFETT: Yeah, as a matter of fact, if you get the M&T annual report, it's written by Bob Wilmers, the letter, the first part of it is about M & T specifically, but the second part is about particularly the American financial economy, and I would really recommend you read that.

Bob is a very smart guy and he has a lot of good observations.

And, frankly, the other one I recommend you read is Jamie Dimon's letter, at JPMorgan, is a tour de force, in terms of describing the banking scene, the economic scene. He has some real insights in there about some very important subjects.

We don't own that stock, but it's a letter that I think everybody could learn a lot from reading, as they could from reading Bob Wilmer's letter at M&T.

CHARLIE MUNGER: And those people who like an element of morality in business, Wilmer sounds like an Old Testament prophet.

I mean, he really doesn't like it that all the really big banks are making so much money out of trading, because he says you're really trying to outsmart your own customers, and he'd rather serve them in a culture of deserved trust in both directions. It's hard to think he's totally wrong.

WARREN BUFFETT: He also expresses quite a dislike for the fact that a market system creates a reward system where money sort of disproportionally flows to people who work with money, and that that tends to attract a disproportional number of people that — of lots of ability that he thinks might be — at least some of them — might be better deployed elsewhere. It's an interesting read.

CHARLIE MUNGER: It's one of the best annual reports that's ever came out of banking. Right out of Buffalo.

16. Productive assets will always beat gold

WARREN BUFFETT: Ok. Andrew?

ANDREW ROSS SORKIN: This question who comes from Neil Steinhoff (PH) who writes, "The commodity market, and particularly gold, have appreciated astronomically over the last few years.

"My Berkshire Hathaway stock is only slightly better — doing better — than it was in 2006. It's barely kept up with inflation," he says.

"Please explain why you have not invested more heavily in commodities. As long as Ben Bernanke continues to print money and there's no indication he's going to stop any time soon, isn't it right that commodities, and particularly gold, will continue to appreciate?"

WARREN BUFFETT: Well, I would point out that when we started with Berkshire, it was about 3/4 of an ounce of gold, and gold was $20 an ounce then, and it was 15.

So gold, even at 1500, has a ways to go, and the — (Laughter and applause)

I think he's right about inflation. But if you think about it, there are three major categories of investment. And you ought to think very hard about which category you want to be in before you start thinking about the choices available within that category.

Now, the first category is anything denominated in a currency. It could be bonds, it could be deposits in a bank, it can be a money market fund, it can be cash in your pocket.

And the — if you will reach in your pocket — I don't like to do this, but — and pull out your wallet — you're watching an historic event. (Laughter)

If you look at this — and I might point out this is a one. Charlie carries a — on the back of it, it says, "In God We Trust." And that's really false advertising.

The — if Elizabeth Warren were here, she would say, quite properly, it should say, "In Government We Trust," because God isn't going to do anything about that dollar bill, you know, if government does the wrong things, in terms of keeping it as valuable as it was when you parted with it to buy a bond or put it in a bank.

Any currency-related investment is a bet on how government now, and in the future, will behave. And if you happen to be unfortunate to live — fortunate to live in Zimbabwe and you decided to make currency-related investments, you know, you — family would have left you by now, and it was not a good decision.

Almost all currencies have declined in value over time. I mean, it may be built into almost any economic system that it will be easier to work with a value of currency that declines in value than a currency that appreciates in value, and the Japanese might reaffirm that here with their experience.

So as a class, currency-related investments, whether they are in the UK, or the United States, or anyplace else, unless we're getting paid extremely well for having them, we do not think make much sense.

The second category of investments regard items that you buy that don't produce anything but that you hope someone will pay you more for later on. And the classic case of that is gold.

And I've used this illustration before, but if you take all of the gold in the world — don't get too excited now — and put it into a cube, it will be a cube that's about 67 feet on a side. That would be 165,000 or 170,000 metric tons.

So you could have a cube — if you owned all the gold in the world — you could have a cube that would be 67 or 68 feet on a side, and you could get a ladder and you could climb up on top of it, and you could say, you know I'm sitting on top of the world, and think you're king of the world.

You could, you know, you could fondle it, you could polish it, you could do all these things with it. Stare at it. But it isn't going to do anything.

All you are doing when you buy that is that you're hoping that somebody else a year from now, or five years from now, will pay you more to own something that, again, can't do anything, but you're hoping that the person then thinks that somebody else will buy something five years later from him.

In other words, you're betting on not just how scared people are now of paper money, you're betting on how much they think a year from now people will be scared two years from then on.

Keynes described all of this. I think it was in Chapter 12 of "The General Theory," when he talked about this famous beauty contest where the game was not to pick out the most beautiful woman among the group, but the one that other people would think was the most beautiful woman, and then he carried it on to second and third degrees of reasoning.

Any time you buy an asset that can't do anything, produce anything, you're simply betting on whether somebody else will pay more for, again, an asset that can't do anything.

And actually, we did that with silver, but silver had an industrial use, and we — about 13 years ago I bought a whole lot of silver. And if you'll notice, silver has moved recently, so my timing was only about 13 years off, but, you know, who's perfect?

The third category of asset is something that you value based on its — what it will produce, what it will deliver. You buy a farm because you expect a certain amount of corn or soybeans or cotton or whatever it may be, to come your way every year. And you decide how much you pay based on how much you think the asset itself will deliver over time. And those are the assets that appeal to me and Charlie.

Now, there's some logical follow-on to that. If you buy that farm, and you really think about how many bushels of corn, how much bushels of soybeans will it produce, how much do I have to pay the tenant farmer, how much do I have to pay in taxes and so on, you can make a rational calculation, and the success of that investment will be determined in your own mind by whether it meets your expectations as to what it delivers.

Logically, you should not care whether you get a quote on that farm a day later, or a week later, or a month later, or a year later. We feel the same way about businesses.

When we buy ISCAR, or we buy Lubrizol, or whatever, we don't run around getting a quote on it every week and say, you know, "Is it up or down or anything like that?" We look to the business.

We feel the same way about securities. When we buy a marketable security, we don't care if the stock exchange closes for a few years.

So when we look at Berkshire, we are looking at what we think can be delivered from the productive assets that we own, and how we can utilize that capital in acquiring more productive assets.

And there will be times, you know, cotton doubled in price, much to our chagrin at Fruit of the Loom, but, you know, if you own cotton for the right six or eight months in the past year, you came close to doubling your money.

But if you go back a century and try to make money owning cotton over time, it has not been a very good investment.

So to pick a product, crude oil, cotton, gold, silver, anything that — and, of course, cotton has utility. Gold really doesn't have utility.

I would bet on good-producing businesses to outperform something that doesn't do anything over any period of time.

But there's no question that rising prices create their own excitement. So when people see gold go up a lot — I mean, if your neighbor owns some gold, and you think you're smarter than he is, and you didn't own any, and your wife says to you, you know, "How come that jerk next door is making money, you know, and you're just sitting here?" It can start affecting behavior.

And people like to get in on things that have been rising in price and all of that. But over time, that has not been the way to get rich.

Charlie?

CHARLIE MUNGER: Well, I certainly agree with that. And besides, something peculiar to buy an asset which only will really go up if the world really goes to hell. (Laughter)

It doesn't strike to me as an entirely rational thing to do.

I think you can figure on leaving the country because the country is going to kill you. And all the countries you might go to will also be thoroughly screwed up.

I think all those people should buy a little gold, but I think the rest of us would be better off with Berkshire Hathaway stock. (Laughter and applause)

And, of course, there's another class of people that think they can protect themselves by buying paintings of soup cans. (Laughter)

I don't recommend that, either. (Laughter)

WARREN BUFFETT: One thing about gold, also, is that in addition to this 67-foot cube, more gold is being produced every year.

So you have to have buyers not only to offset sellers in the natural course of events, but you have to absorb something like a hundred billion dollars' worth of added items of no utility.

I mean, it's really interesting. I mean, they dig it up out of the ground in South Africa, and then they ship it to the Federal Reserve in New York and they put it back in the ground.

I mean, if you were watching this from Mars you might think it was a little peculiar. But think of how many people it makes happy.

I might mention that the value of that cube, all the gold in the world, is now about — valued at 1500-plus — it's about $8 trillion. And there are a billion acres, roughly, of farmland in the United States. That's a little a million-and-a-half square miles. And that's valued at something over 2 trillion.

And if you take ten Exxon Mobils, you get up, maybe, another 4 trillion and — maybe not that much even — and so you could own all the farmland in the United States, every bit of it, and you could own ten Exxon Mobiles and you could stick a trillion or so in your pocket for walking around money, and you could have your choice of that or this 67-foot piece of gold that you could fondle and — (Laughter)

That may seem like a close choice to some people, but not to me. (Laughter)

CHARLIE MUNGER: Well, you would also need an army to defend the gold. And it's really not a very good spot.

17. Buffett on getting his first investors

WARREN BUFFETT: OK. Number 6.

AUDIENCE MEMBER: — Millard, Dallas, Texas.

Mr. Buffett and Mr. Munger, when you were raising your first investment funds, how did you go about attracting investors, and once you had your first funds and your first investors, how did you go about growing them?

WARREN BUFFETT: Sounds to me like a man that's about ready to start a hedge fund. (Laughter)

The — in my case, I'd moved back here from New York in March or so of 1956, and a few members of my family said we'd like you to manage our investments just like I did when I was selling securities out here before I went to New York. And I didn't like being in the securities selling business, partly because if I sold somebody a stock at 20 and it went down to 10, I wanted to buy more, but I couldn't face the idea of people that had bought at 20 and, based only on confidence in me not because they understood it, and now they were feeling depressed, and it was — it just wasn't — it wasn't very satisfactory.

I could not do as well managing money if people were watching every decision as I could if I did it in a room all by myself.

So I just told these seven members of the family — one of them, actually, was my roommate in college and his mother, they came in also — I said, you know, if you'd like to join up in a partnership, I'm not going to tell you what's going on, but I will tell you that I will be doing with my own money what I'm doing with yours. Later on, I put all my own money in.

And it just was very slow.

A few months later, Graham-Newman, that I'd worked for, was liquidating, and a fellow named Homer Dodge asked Ben Graham what he should do with the money he was getting out of Graham-Newman. He said, "This kid used to work for me and he's OK." And so he came out and went in with me.

And another fellow, late in the fall, had seen the notice of partnership formed in some legal paper and he said, "What's this?" and came in with me. It's just — we just stumbled along.

And for almost six years, I operated out of my house, no employee. I kept all the books, I filed the tax returns, I, you know, went out and picked up the stocks personally and stuck them in a safe deposit box.

When Charlie came along, I kept chiding him about the fact — I met him in 1959 — and I said, "Law is OK as a hobby, but it's no place for a man with your intellect to spend his time." (Laughter)

And, well, I'll let Charlie take it over from there. (Laughs)

CHARLIE MUNGER: It actually took me a long time to leave what was a family business.

And so any of you who are having a slow time accepting good ideas, why, you should be cheered by my example, because it was some years after you started working on me, and you pounded on me, and I slowly got the point.

WARREN BUFFETT: And he was actually asking about attracting money.

CHARLIE MUNGER: Well, of course, it helps if you conducted yourself in life so that other people trust you. (Laughter)

And then it helps even more if —

WARREN BUFFETT: You can see why I was so slow and he was so fast. (Laughter)

CHARLIE MUNGER: And then it helps even more if other people are right to trust you. So the formula is quite simple. First one, then the other.

WARREN BUFFETT: Unfortunately, with the present fee structure, just attracting money, rather than performing with it, can be enormously lucrative.

So the skill of attracting money may be — at least in the short run, and maybe the intermediate run — it may be a more important quality than the ability to manage money.

But we, neither one of us, ever charged any fixed fee of any kind.

Am I right on that, Charlie?

CHARLIE MUNGER: Well, we stopped taking any significant overrides on other people's money at very young ages and at very small amounts of net worth.

I wish our example were more common. But I like our compensation practices, too, and they're spreading slowly.

We get a new company every, what, five years?

WARREN BUFFETT: Yeah.

18. Berkshire isn't a '60s "Go-Go" conglomerate

WARREN BUFFETT: OK. Carol?

CAROL LOOMIS: This is from Jeff — sorry, Jeff Cunningham of Directorship.

"Berkshire's corporate strategy resembles that of the go-go conglomerates of the 1960s: Geneen's ITT, Teledyne, Textron.

"Small corporate team, tight financial controls, sector neutrality, and little involvement in subsidiary operations, and ultimately not fully valued for the sum of their parts. If you disagree with this, how does Berkshire differ?"

WARREN BUFFETT: Yeah, it — we are a conglomerate and, you know, people shy from that name, but that's exactly what we are.

And I think I laid out in the annual report at least one of the advantages of being a conglomerate, namely the tax-efficient transfer of money from businesses that do not have good ways of using it to businesses that have better ways of using it, which is, if it's carried out intelligently, is a very significant plus.

The conglomerates you mentioned — and I'm familiar with all of them — really became sort of stock issuance machines, where the idea was to get your stock to sell at a very high multiple, and then trade it for something else that was selling at a lower multiple, and voilà, you know, earnings per share went up, and then people said you'll do it again.

So it was — it was really accepted and endorsed by Wall Street that if you had this sort of semi-Ponzi scheme of issuing shares constantly for things that had lower P/E ratios, everybody knew what the game was, but they thought the game would continue to succeed. And for a while it did.

And the Gulf and Westerns of the world, and the Littons of the world, and there were numbers of them, it was almost like an unspoken conspiracy that nobody will point out that this is kind of a perpetual motion machine, and if they don't it will keep working.

But if something says anything about it, somebody says, "The emperor has no clothes," it will all collapse.

The interesting thing, of course, you mentioned Teledyne in there. Teledyne played that game, and then it ended, and all of this stuff came back to Earth, but then Teledyne went into reverse and bought in stock like crazy when their stock got underpriced.

So they issued stock like crazy when it was overpriced, and they bought it in to an extraordinary degree when it was underpriced, and it created a sensational record.

Most of those companies, though, I think have very little relationship to Berkshire.

It's true that, I think, some of them were pretty decentralized, although I remember — didn't Harold Geneen have some famous room that he brought everybody in —

CHARLIE MUNGER: Yes.

WARREN BUFFETT: —chewed them out, you know, monthly for not making their projections, so they learned to make them whether they were actually really making them or not.

The managers were — if you took Charlie Bluhdorn at Gulf and Western, or, you know, take the group, they were primarily thinking about how — Jimmy Ling at LTV — they were primarily thinking about how they could pump the stock up to a level where they could buy big established businesses that were selling at lower P/E ratios and sort of have this perpetual motion game going. And it came to an end.

I don't think there's — you know, at Berkshire we are not in that game. We are in the game of trying to buy very good businesses that we're going to keep forever and having them grow their earnings and have them also throw off cash that we can use to buy more similar businesses.

It is a conglomerate. Conglomerates, generally, are unpopular, and I don't disagree with why they are. But I think it's a very rational way of running the business as long as you keep it focused on running businesses and not as a stock-issuance machine.

Charlie?

CHARLIE MUNGER: Well, yes, and some of those companies got into really pretty heavy manipulation of the numbers.

One of them said, "I know what I'm going to report, I just don't know how I'm going to do it." (Laughter)

That's not the attitude around this place.

WARREN BUFFETT: Yeah, we don't know what we're going to report. (Laughs)

CHARLIE MUNGER: No, no. And sometimes we don't know how to do it, either. (Laughter)

19. Buffett's preferred legacy: "teacher"

WARREN BUFFETT: OK. Number 7.

AUDIENCE MEMBER: Good morning, Warren and Charlie. John Norwood from West Des Moines, Iowa.

I have a question on legacy. A hundred years from now, Warren and Charlie, what would each of you like to be remembered for?

WARREN BUFFETT: Old age. (Laughter)

CHARLIE MUNGER: I've heard Warren say that what he wants said at his funeral is that's the oldest looking corpse I ever saw. (Laughter)

I have a different saying that came down from one of my great grandfathers. And I think it — he wanted to be remembered for a fortune fairly won and wisely used. That's a pretty good system.

WARREN BUFFETT: Yeah, I would — if you really ask me, I'd probably like "teacher." I enjoy teaching a lot.

Some people think I do a little too much of the didactic stuff, but I like students coming. And, you know, I've benefited by some fabulous teachers, starting with my dad, but going on to Ben Graham, going on to Tom Murphy, I mean, lots of great teachers. So I would say that.

I might point out that on Wilt Chamberlain's gravestone, I think it says, "At last, I sleep alone." (Laughter)

Well, we have some people from Kansas here, anyway. (Laughs)

20. Dollar will decline, but inflation won't destroy the economy

WARREN BUFFETT: OK. Becky?

BECKY QUICK: This question comes from Pierre Sorel. He's a portfolio manager at Fidelity and he says that the U.S. dollar has been depreciating against major currencies.

"The Federal Reserve continues to run a zero interest rate policy in contrast to other major economies that are raising rates or have stepped back from quantitative easing.

"A few years ago, Berkshire had a short U.S. dollar position to preserve the company's value from the devaluating dollar.

"So what's the company's management doing about the risk of further U.S. dollar weakness, given that most of the company's assets and operating businesses are denominated in the U.S. dollar?"

WARREN BUFFETT: Yeah, we had a significance short position some years ago. Last year we had a small short position in two currencies, and we made about a hundred million dollars in them, but we have not been really active in the foreign exchange market.

We think — shouldn't speak for Charlie here on this — but I think that there's no question that the purchasing power of the U.S. dollar will decline over time. The only question is at what rate.

But I also think that the purchasing power of most currencies around the world — almost most currencies around the world — will decline.

And, of course, a short position is just a bet on which one declines at the faster rate, and I don't have a strong conviction on that. I've got some mild feelings about it but not enough to where I want to back it up with a lot of money.

We do own some businesses — I mean, l take Coca-Cola.

Coca-Cola — I don't have the exact figures — but my guess is that 80 percent or thereabouts of the earnings will be non-dollar. And we've got exposure in various other ways.

But we are not — we're unlikely to make another big currency bet, although I — you know, I do think that the purchasing power of the U.S. dollar is destined to decrease. And I have fears, but I've long had some unwarranted fears, of it declining at a rapid rate.

Now, Charlie has pointed out to me that the dollar of 1930, when I was born, is worth 6 cents now. You know, 16-to-1 in terms of depreciation. And as he points out, we've both done pretty well.

So inflation has not destroyed us.

If somebody had said to me in 1930, In addition to this Great Depression you're facing, and a World War where it looks like we're even losing for a little while, and all these terrible things, on top of that that dollar that, you know, your grandfather is going to hand you when you're born, is only going to be worth six cents in purchasing power, that might have been discouraging.

But overall, we've still done pretty well.

So, I hate inflation, but we've adapted pretty well to it over the years, and we have not had the total runaway-type inflation that really can be upsetting to a society, yet, but I think it's something you always have to guard against.

Charlie?

CHARLIE MUNGER: No, but God knows where the world is headed. I just think that one way or another, the world muddles through.

Take a really god-awful culture, which is Greece, modern Greece.

I don't mean there's anything wrong with the Greeks, but — in their family life — but the way they manage their money and pay their taxes. The main industry in Greece — or one of the main industries — is tourist attractions, and they closed right — most of the time — during the tourist season.

It's a pretty dysfunctional government. (Laughter)

And, of course, people don't want to pay any taxes or do much work, and yet there it is. It's — the people of Greece are surviving.

WARREN BUFFETT: It's lasted a long time.

CHARLIE MUNGER: Yeah, yeah.

Adam Smith said it very well. He said, "A great civilization has a lot of ruin in it."

It takes a long time, and there's a lot left after you've been through a good deal of ruin.

In fact, it's an easier game than the ordinary process of living and then dying.

WARREN BUFFETT: Well, I think we'll see a lot of inflation, but if I had a choice, I would rather be born in the United States today than any other place, any other time in history, so — (Applause)

21. Buy Berkshire stock or a mutual fund?

WARREN BUFFETT: OK. Area 8.

AUDIENCE MEMBER: Good morning, Mr. Munger and Mr. Buffett. This is Mary Bundrick (PH) from Rochester, Minnesota.

I was wondering, what factors would you consider in deciding between investment in Berkshire Hathaway versus a no-load mutual fund?

WARREN BUFFETT: Well, I advise people to buy index funds, actually, if they're not going to be active in investments.

I mean, if you just are going — if you've got a day job, and you want to just put money aside over time, I think the average individual will do better buying an index fund consistently over time than almost anything else available to them.

I think it will be a perfectly satisfactory investment. It won't be — it'll never be regarded as a great investment, but it will be a perfectly satisfactory investment.

If I personally had a choice between an index fund and Berkshire at present prices, I would rather own Berkshire. But I wouldn't be unhappy if you told me I had to leave all my money in an index fund for the rest of my life and then — but I like Berkshire better. (Laughs)

Charlie?

CHARLIE MUNGER: Well, I like it a lot better, and I'd be very unhappy if I had to own an index fund. My ambitions are larger.

I don't think the average return of a skilled investor over the next 50 years is going to be as good after all factors as it was over the last 50 years.

So I think reduced expectations are the best defense any investor has, and after that, I think Berkshire is a pretty good bet.

WARREN BUFFETT: Charlie's big on lowering expectations.

CHARLIE MUNGER: Absolutely. (Laughter)

That's the way I got married. (Laughter)

My wife lowered her expectations. (Laughter)

WARREN BUFFETT: And he lived up to them. (Laughter)

22. "Rules are not meant to be danced around"

WARREN BUFFETT: OK. Andrew?

ANDREW ROSS SORKIN: The question is, "Can you explain the company's policy for your own personal investing outside of Berkshire and that of your other managers, and why aren't all trades in investments first cleared through a compliance department like that of most other companies?"

WARREN BUFFETT: Well, I don't think it is true of most other companies.

We have 260,000 employees, and we have one company that's a subsidiary of General Re called New England Asset Management, but that's the only company that advises other people on investments or operates in the investment field.

At Berkshire, there are presently three people that can execute trades, and then there are a few other clerical people that would see what was done.

But we are not an investment advisory firm. We're not a mutual fund or anything of the sort.

So if we — we have some, I think, pretty clear rules that are going to be looked at, again, I can assure you, by the audit committee.

But in terms of the Code of Conduct, Code of Ethics, and insider trading rules, which go to the managers, I don't think there's anything ambiguous in those.

Now, to extend those beyond — I don't know, Marc, how many people those go to but — whether 60 or 70 or something, I'm not sure of the number — but the problem with rules, you know, is, I mean, you've got to have them and we emphasize not only the letter of them, but the spirit. That's why I write that letter every couple years.

I was on the audit committee, for example, of Coca-Cola. And Coca-Cola has about one-fifth as many employees — or did then — had about 50,000 — had about one-fifth as many employees as Berkshire. And each time the audit committee met we had eight or 10 code violations.

I mean, people — if you take Berkshire at 260,000 people, you know, that's about the number of households in the greater metropolitan Omaha. And perfect as we like to think we are in Omaha, I will tell you there's a lot of things going on in Omaha right as we sit here that, you know, do not match the rules. So it's a real problem.

The problem, obviously, with the Sokol thing is it hit very, very high up, you know.

But we had a case sometime back where a fellow that was a friend of mine, vice president of one of our subsidiaries, and, like I say, a personal friend, and we supplied the evidence that sent him to jail.

You know, it has happened. We had a — as I remember some years ago, I think it was in Woodbury, New York, we may have had a woman arrested in the offices just because we want to make very clear, you know, what — that we mean business and as the — as the audit committee said that this is not public relations, this is reality.

Here's a letter that went out from Johns Manville. I didn't know anything about it until Todd Raba gave it to me the other day, but it describes what — dated April 27, and it said, "The audit committee clearly found that Mr. Sokol compromised the integrity-related values of both Berkshire and JM have worked so hard to ingrain in the fabric of both companies.

"This should serve as a tragic lesson learned for every employee in JM." And then in boldface, "There are no gray areas when it comes to integrity." And it goes on.

So we hope to get some value out of this experience that will help us reinforce, with not only the 60 or 70 managers, but with 260,000 people that we do mean business on this, and we've showed them we mean business when we have sent more than one person to jail.

But there will be, you know, we can have all the records in the world and if somebody wants to trade outside them or something, you know, I — they're not going to tell us they're trading in their cousin's name. I mean, you know, it just doesn't work that way.

We will have occasions in the future when people do wrong things.

Usually they get handled at the subsidiary level. I mean, it's somebody doing something, whether it's getting a kickback from a vendor or stealing out of a cash register, whatever it may be, and then, you know, we get the occasional mega one, which is very painful.

But we will — if there's anything we can do in the rules that will make it even more explicit or get across further the idea that rules are not made to be danced around but rather that the spirit of them extends beyond them, we want to be sure we do it.

Charlie?

CHARLIE MUNGER: Yeah, all that said, if you look at the greatest institutions in the world, they select very trustworthy people, and they trust them a lot. And it's so much fun to be trusted. And there's so much self-respect you get from it when you are trusted and are worthy of the trust, that I think your best compliance cultures are the ones which have this attitude of trust, and some of the ones with the biggest compliance departments, like Wall Street, have the most scandals.

So it's not so simple that you can make your behavior better automatically just by making the compliance department bigger and bigger and bigger.

This general culture of trust is what works. And, you know, Berkshire hasn't had that many scandals of consequence, and I don't think we're going to get huge numbers, either.

23. Deficit spending is economic stimulus

WARREN BUFFETT: OK. Number 9. (Applause)

AUDIENCE MEMBER: Hi, Charlie and Warren. I'm Michelle from Decatur, Illinois.

Half the U.S. economy seems to be in a sluggish recovery while most foreign economies are showing solid growth numbers.

Are there any significant changes that you think can be made to either current U.S. economic policy or Federal Reserve policy or tax laws to get the economy healthy and growing in the U.S.?

WARREN BUFFETT: Yeah, we've really had our foot to the floor in both monetary and fiscal policy.

You know, you've seen it, obviously, on the monetary side, with extended period of effectively zero interest rates and actually with the chairman, just the other day saying this is going to go on for an extended period.

And then they asked him what an extended period meant, and he was — he said an extended period. (Laughter)

The — but we — it's hard to imagine pushing harder on monetary policy than has occurred.

The interesting thing is people think of fiscal policy and they think, well, we had a stimulus bill.

Well, if you think about what stimulus really is, it's not whether you call something a stimulus bill. If you had something that was called a stimulus bill and you didn't run a deficit, it would not be, you know, it would not be a stimulus. You'd be —

And if you don't have anything you call a stimulus bill at all, but you're spending 10 percent more of your GDP than you're taking in, you are applying an incredible stimulus — fiscal stimulus — to the economy.

We have a huge fiscal stimulus program going on now, and it's called taking in 15 percent of GDP and spending 25 percent of GDP. That's extraordinary.

So, I think that we have used those levers in a way that's almost unprecedented. And I think it's been wise, in general, to do what's done, and I think it was particularly wise what was done in the fall of 2008.

But I think, generally, we have followed the right policies. I think they're less important than most people think they are.

I think if you did the wrong policies it would really screw things up. But I don't — I don't — I think the natural resuscitative powers of capitalism are — will be the biggest factor in taking us out.

And I think you've seen that over the last two years and we're seeing it month by month.

I would say this: residential construction is flatlined at, you know, 500,000 or so units per year.

I think when it comes back, and it will, but it will take — it takes working off a crazy excess inventory we had, and there's no way to do that except through creating fewer residential units than you create households. That's how you reduce the oversupply.

When that ends — when part comes back — I think you're going to see much more of a pick-up in employment than you might think just by looking at construction workers.

I mean, we have Shaw Carpets. You know, I'm sure they're not counted as construction jobs, but we have thousands fewer people working there because residential construction is where it is.

And we have people at the Furniture Mart and how much carpet they're selling or houses, so I think there's a lot of indirect, as well as direct, reservoir of jobs that will be drawn upon, or utilized, when residential construction comes back.

I don't think I'd measure it just by the number of construction workers that are being employed currently versus, say, four or five years ago.

It will come back. I don't know when. I said in the annual report I thought you'd be seeing it by the end of the year. I may or may not be right on that, but that would be my best guess, still.

We are creating households faster than we're creating housing units. And, you know, we lose housing units just — you know, you look at the — with the tornadoes recently.

So there are — that problem will get cured. And I don't think, when you mention we're progressing more slowly than other places, certainly in terms of Asia, you know, there's no question about it, or Brazil, but actually, I think our pace of coming out of this, while it's been slow compared to the hit we took in 2008 — the American economy was paralyzed — it's come back quite a distance, and we see that in our businesses.

Now, you know, our peak on railcar loadings were 219,000 one week, I believe, in 2006, but — and our bottom was 150- or 51-thousand. We'll probably run 190,000, or thereabouts, currently, and that will pick up more as the year goes along.

So it's come back a significant way. We have certain companies that are setting records that serve basic industries. If you look at TTI, which makes — which distributes — electronic components, has thousands and thousands of customers all over the world — it's setting new records, and it's way up in the first quarter and it set a record last year.

If you look at ISCAR, which supplies nothing but basic industry, I mean, nobody buys little carbon cutting tools, you know, to put in their recreation room or anything. This stuff is used, you know, for making big things, and their business is going up and up and up, you know, month by month.

So, the economy is coming back, and when residential construction finally gets this huge overhang largely eliminated I think — I think you'll see a lot of improvement in the employment picture.

Charlie?

24. Munger tells how he'd take "an ax to our financial sector"

CHARLIE MUNGER: Yeah, the one place that I feel we're making a huge mistake is not learning enough from the big mess that came from wretched excess in our financial system.

I don't think we throttled the sin and folly out of that aspect of the economy nearly enough. And I think — if you look at all the panics and depressions in the United States, they all came from financial collapses, usually preceded by perfectly asinine and greedy behavior. And I think that would be a lot to be said for taking an ax to our financial sector and whittling it down to a more constructive size.

WARREN BUFFETT: Tell us more about how you use that ax. (Applause)

CHARLIE MUNGER: Well, Warren, I'll make myself ridiculous, but I guess I'm so old I'm entitled to do that.

The — I would have the tax system discourage trading. I would have various kinds of Tobin taxes.

I would have securities trading more with the frequency of real estate than the trading by computer algorithms where one person's computers outwit another person's computers in what amounts to sort of legalized front running.

I don't think we need any of that stuff. And I think making heroes out of the people who succeed at it is not good for the fiber of the country, either.

I hate the idea that 25 percent of our best engineers are going into the financial sector.

So, I think it's crazy what we've allowed. (Applause)

And I think the lack of contrition in our financial sector, after the disgraceful stuff they got us into, is perfectly awesome. It makes Dave Sokol look like a hero. (Applause)

WARREN BUFFETT: He's getting warmed up. (Laughter)

Just as a sidelight, how many of you know that if you trade an S & P future contract — 500 — S&P 500 contract — and you hold it for 10 seconds and you have a profit, that 60 percent of the gain is long-term gain and 40 percent is short-term gain. So, essentially, our Congress has said that this activity should be more lightly taxed, you know, than cleaning washrooms or doing all the things that you people do every day. You get a special tax treatment.

Now that illustrates one of the problems with the tax code, in that there's a few people that care intensely about having that in there, and the cost of it, in terms of less revenue for the U.S. government, is diffused among a large group, none of whom have enough interest to want to go out and write their Congressman or hire a lobbyist to fight the other way.

But it's pretty extraordinary that we have decided that that particular form of activity should get 60 percent taxed at a 15 percent maximum rate, even though it may only take 10 or 20 seconds and be just a little flicker on a screen.

CHARLIE MUNGER: And the hedge fund operators of America get a much lower tax rate than the professors of physics or the drivers of taxis. This is demented. (Applause)

25. Update on Buffett's bet against hedge funds

WARREN BUFFETT: Well, with that, we're getting to our break at noon, and I promised — I made a bet three years ago with some fellows that run a fund of funds, and I promised to put the figures up every year as to how we're doing.

It's a 10-year deal, and if we can put up the slide — what number would that be? Probably five.

As you can see, these funds of funds — these are five funds of funds groups chosen by these people who I like, Ted Seides and his friends, and Ted couldn't be with us today, but we will put these figures up annually.

He got off to a very good start with his group. Obviously, hedge funds should do better in a down market. And we haven't caught them yet with the S&P 500, but it will give you all a reason to keep coming back over the next seven years as I report regularly on how we are doing in the S&P 500 versus the five funds of funds.

As [Fortune Magazine's] Carol [Loomis] pointed out in an article recently or a — maybe it was on the web — in reporting on this, she looked at the bottom line where the investors in the S&P 500 are behind for the three years, and the investors in the funds of funds are behind, and the only people that are ahead so far are the investment managers. (Laughs)

They're doing very well at this point. So we'll keep you up to date on that.

Afternoon Session - 2011 Meeting

1. Two clarifications on David Sokol and Lubrizol

WARREN BUFFETT: OK. If you'll all be seated.

I can't see whether Ron Olson is in the front row or not.

Ron, are you here?

OK. Ron wanted to — well, we'll get you a mic.

Because we're transcribing this and we want to get it all corrected, Ron has one point or two points that he wants to correct in terms of dates that I used. So we are going to give the microphone to him.

RON OLSON: Not that they're all that telling, but I thought since we are creating a record, I wanted to clarify two points.

The Berkshire law firm, namely Munger, Tolles & Olson worked with the Lubrizol counsel in pulling together what Warren described as Lubrizol's proxy describing the background of the transaction.

We, as counsel for Berkshire, started to work on that gathering of facts pertaining to Berkshire's involvement, essentially David Sokol's and Warren's, during the week of March 15.

Warren, in speaking to you about the facts this morning, I believe, placed the beginning of that work in the subsequent week. So I simply wanted to clarify that as we gathered the facts, and that gathering included several interviews of David Sokol during that week.

Secondly, in describing internal policies at Berkshire to protect against misbehavior or negligent behavior, Berkshire maintains a — something that those in the trading business describe as restricted lists.

And on that restricted list are any securities in which Berkshire is buying, selling, has a peculiar interest, and that prohibits any of the corporate officers or the top officers of the subsidiaries of Berkshire from participating in trades in those securities without the consent of the CFO, Marc Hamburg.

That is what I wanted to clarify, Warren.

WARREN BUFFETT: Thanks, Ron.

2. Munger still bullish on electric-car maker BYD

WARREN BUFFETT: OK. We'll move right along. And we're going to go to 3:30 and then we'll adjourn for a couple minutes, and then we'll go to the regular meeting.

WARREN BUFFETT: Carol again leads off.

CAROL LOOMIS: Warren and Charlie, both of your expressed a very positive view of BYD and its chairman, Wang Chuanfu, when MidAmerican bought its stake in 2008.

Does BYD remain as attractive a long-term investment now as it was when you acquired your stake?

If so, why? Has BYD's recent pattern of unexplained product launch delays affected your confidence in the operation?

WARREN BUFFETT: Charlie is the BYD expert, so I'm going to let him start on that one.

CHARLIE MUNGER: Well, of course, the price is still way higher than the price Berkshire paid, and so almost by definition it's not quite as cheap as it was then.

Any company that tries to move as fast as BYD does, and on as many fronts, is going to have various delays and glitches. But I would say I'm quite encouraged by what's going on, and I expect delays and glitches.

They had trouble in the auto distribution, but they tried to double auto sales every year for six years, and it worked the first five times. (Laughter)

WARREN BUFFETT: I have nothing to add. (Laughter)

3. Making money by trading oil is too hard

WARREN BUFFETT: OK. Number 10.

AUDIENCE MEMBER: Hi, Warren and Charlie. My name is Catherine Brood (PH). I'm from Los Angeles, California.

I invest primarily in commodities and commodity equities. I started out back 2007 buying oil.

In the summer of 2008, we reached the peak of the oil bubble. That's when I reversed my holdings and started shorting oil.

I made a nice profit.

In 2009, I started buying oil again and oil equities, and I've been doing pretty well. But given the status of the world today and the price of oil, I'm questioning my investments.

Is this another oil bubble? Has oil reached its peak? Should I keep my holdings? Should I short oil? Should I exit oil altogether and move into other commodities or other investments?

So my question to you is, what your sentiments regarding oil?

WARREN BUFFETT: Well, I would say you've done a whole lot better than we have. (Laughs)

I think the crowd would rather hear from you.

We actually did take a position in oil — I don't know how many years ago.

CHARLIE MUNGER: A long time ago.

WARREN BUFFETT: A long time ago.

CHARLIE MUNGER: It was $10 a barrel. (Laughter)

WARREN BUFFETT: It wasn't that long ago though, incidentally. That was in the 1990s, although we've seen oil a lot cheaper than that.

East Texas Oil sold for a dime a barrel in 1932.

The — we really don't know.

I mean, obviously, you're dealing with a finite resource. I don't know whether the world is up to 88 million barrels or — it was down around 85 million barrels, but there's got to be some comeback, so I wouldn't be surprised if the current figure is getting pretty close to 88 million barrels a day.

That's a lot of oil to take out of the ground every day. And, of course, there are — new frontiers have been found, but you are — you've stuck a lot of straws into the Earth, and it is a finite number.

So, the one thing I can promise you is — almost promise you — is that oil will sell for a lot more someday.

Interestingly enough, how many producing oil wells do you think there are in the United States?

The answer is something like 500,000. You know, there's these stripper wells, there's wells out near Charlie that have been going for a hundred years.

CHARLIE MUNGER: Yeah.

WARREN BUFFETT: But we have looked in a lot of places now.

And what's happening, of course, from the standpoint of United States companies, is that the smaller countries where oil is being found now are quite a bit smarter about how they grant their concessions than people were 50 or 75 or 100 years ago, so that they drive much more intelligent deals than was originally the case when we went exploring around the world.

But I have no idea — you know, we — traditionally, BNSF had hedged a certain amount of oil and — because they obviously use huge quantities of diesel — and I suggested to them — although how they run the BNSF is up to them — but I really didn't think we could guess the price of oil.

And I thought if we could guess the price of oil, we didn't need to run the railroad. I mean, it was a — took a lot of effort, time to run that railroad. And if we know how to make money just sitting in a room trading oil, why not do that instead?

So I don't really — we don't hedge — well, in terms of Berkshire's parent company policies, we don't hedge anything in the way of commodities. Some of our subsidiaries do, and that's fine. They're responsible for their businesses.

But there are very, very few commodities that I've ever thought I was going to — would know the direction of their movement in the next six months or a year.

The one thing I'm quite convinced of, as we talked about this morning, is the fact the dollar will become less valuable over time, so that the dollar price of most things will go up, and maybe go up very substantially.

Whether they go up enough so that you have the same amount of purchasing power after you pay tax on your nominal gains is another question.

I really think that an intelligent person can make more money, over time, thinking about assets that — productive assets — rather than speculating in commodities, or for that matter, fixed dollar investments, but that's maybe my own bias.

Charlie?

CHARLIE MUNGER: Well, if we'd done nothing but oil from the very beginning, I'm confident that we would not have done nearly as well as we have.

To me, that's perfectly obvious. So I think what we've done is much easier than what you're trying to do.

WARREN BUFFETT: And we like easy.

CHARLIE MUNGER: We're not trying to make it any more difficult than we have to.

WARREN BUFFETT: I really don't know any way to have an edge in that sort of activity.

I mean, if you are going to try and figure out whether when to be long or short oil, or natural gas, or copper or cotton or whatever, I don't know of people who I feel would have an edge in trying to do that over the next 10 years.

But I do know people where I think they'd have a very significant edge in investing in common stocks, and maybe distressed bonds, for that matter, too.

CHARLIE MUNGER: Yeah, trading oil worked best of all for the people who bribed Nigeria.

That's not our milieu.

WARREN BUFFETT: Well, that's an insight I hadn't heard before. (Laughter)

4. Clarification of the clarification on Sokol and Lubrizol

WARREN BUFFETT: Becky? Oh, I got Ron here.

RON OLSON: I wanted to clarify my clarification. (Laughter)

Sounds like a lawyer, doesn't it?

WARREN BUFFETT: It sounds like a lawyer. (Laughter)

RON OLSON: Marc Hamburg was concerned that when I spoke of our insider trading policy and mentioned that we had a restricted list, that it — somebody may interpret that as suggesting that Lubrizol was on that restricted list. It was not.

What goes on our restricted list are securities that we have a position in that we publicly reported.

So I just simply wanted clarify that point. Lubrizol was not on the restricted list.

5. "I'm going to have Charlie write the next press release"

WARREN BUFFETT: OK. Becky?

BECKY QUICK: Charlie, I've got several variations of this question, but this one comes from Peter Kerr (PH) in Waterloo, Canada.

He says, "Could you please let us know a couple of the most important things you learned during the last year?"

WARREN BUFFETT: I'll let Charlie go first. (Laughs)

CHARLIE MUNGER: Well, I hate to admit this because I've ignored high-tech all my life, but I actually read that book "In the Plex" about Google, and I found it a very interesting book.

And so here I am at my advanced age, and I find it interesting the way people have created these engineering cultures, which are quite peculiar and different from most of what we have at Berkshire.

And will I ever make any use of this? I doubt it. But I certainly enjoyed learning it.

And if I enjoy learning it, I regard it as important, because I think that's what you're here for, is to go to bed every night a little wiser than you were when you got up.

WARREN BUFFETT: I'm just trying to hold my own, actually. (Laughs)

What I learned in the last year is that I'm going to have Charlie write the next press release. (Laughter)

CHARLIE MUNGER: Warren, I approved that damn press release with no objections. (Laughter)

The Berkshire shareholders are going to be in terrible trouble if they're relying on me to fix your errors. (Laughter)

6. CEO should be left "dead broke" after a bailout

WARREN BUFFETT: OK. Let's go to number 11.

CHARLIE MUNGER: Yeah.

WARREN BUFFETT: Getting too close to confession time up here. (Laughter)

AUDIENCE MEMBER: Good afternoon, Warren and Charlie. My name is Phil Drew (PH), and I'm here with my wife Tina and our good friends the Grummys (PH) and the Henriksens (PH).

We're all from Indianapolis, and we're all small businesspeople. So we are not too big to fail.

And our question, basically, is simply this: do either of you gentlemen think that we might be headed down the same type of path years from now when we get into a situation as taxpayers, that we might have to bail out a company on Wall Street that is too big to fail? And if so, have we done anything to avert that?

WARREN BUFFETT: There are institutions around the world that I think governments should properly — although people won't like it — but I think that there are institutions around the world that governments would properly — I think bailout has got a little bit of a pejorative term

on it, in the sense that stockholders should not be saved, managers should not be saved — but certainly the institutions, in some cases, should not be allowed to collapse immediately.

I mean, right now, we're continuing to follow that policy, for example, with Freddie Mac and Fannie Mae. I mean, they have not reconstituted themselves, as many of the banks and the auto companies.

I mean, Chrysler is even paying back, which, you know, surprises me, but my hat is off to them, and I mean that sincerely. I was really on the fence on saving the auto companies, but I think the administration did the right thing.

I mean, there were — they weren't saving the auto companies, per se, they were still working at saving a very fragile economy.

And, like I say, particularly in retrospect, they certainly, in my view, made the right decision.

There are — right now, you know, in Europe they're deciding whether countries are too big to fail.

And so I think that problem will always be with us.

I think for that reason that you have to do things to reduce the propensity to fail, and among those things, I think you have to make it so that the CEO, and to some extent the board — but not to the draconian degree that I'll suggest for the CEO — I think that any institution that requires society to come and bail it out for society's sake should have a system in place that leaves their CEO, basically, and his spouse, dead broke, because I think that the upside and downside incentives are vastly different. (Applause)

And I think the board of directors of those institutions should suffer severe penalties. Nothing like that, but they certainly, you know, should give back, say, the last five years of directors' fees or whatever it may be that they received.

Because they — if you run an institution that actually needs — society can suffer such a blow if you fail — that society needs to come in and save you, you ought to have somebody running that institution, and you ought to have incentive practices in place that make it very, very, very painful to the people involved for the failure if it indeed happens.

And you also ought to reduce leverage in the system, and I think we've gone, to some degree, in that direction.

But there will be too big to fail institutions 10 years from now or 20 years from now. Right now Freddie Mac and Fanny Mae are sort of too big to figure out.

We just sit there — and incidentally, here's nothing wrong with that. It's more important to come up with the right solution than it is to come up with an immediate solution on those.

But particularly, I would say, in Europe there are banking institutions in countries that people are facing the question of whether they are too big to fail.

Charlie?

CHARLIE MUNGER: Well, my answer is that the past panics and depressions, by and large, started on Wall Street or in stock brokerages.

They tended to involve great waves of excessive speculation and bad behavior in the people who were profiting from those waves as salesman, or market makers, or promoters or what have you.

And I think that this last mess, which created so much danger, should have caused something like happened in the aftermath of the '30s, where we prevented a new mess for a long, long time, but, of course, it hasn't done that.

And so I think you can confidently expect a new mess or two before you career is over, and I think it is really stupid for our country to have allowed this.

Partly the failure is not one of evil, it's one of stupidity. And part of the stupidity is in our great academic institutions who believe a whole lot of things that aren't true. And that is a really hard problem to solve.

WARREN BUFFETT: You're talking about particularly in finance?

CHARLIE MUNGER: Yes, of course, and economics, too.

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: Those are not hard sciences, finance and economics. And finance really attracts people who should have gone into snake charming or — (Laughter)

WARREN BUFFETT: If there's anybody we've forgotten to insult, just pass a note up, and we'll get to you. (Laughter)

CHARLIE MUNGER: Yeah.

7. No Washington Post shares will be sold after board resignation

WARREN BUFFETT: OK. Andrew?

ANDREW ROSS SORKIN: This question comes from a shareholder based in Washington, DC, who has asked to remain anonymous.

This person says, "Warren, in the past year you and Melinda Gates resigned from the board of the Washington Post. What does this say about Berkshire's intention to hold the Washington Post stock over the long term, and is this related to the problems at its for-profit education business, Kaplan?"

WARREN BUFFETT: No, I made this statement, actually, publicly, and they may have only run it in the Post, I'm not sure about elsewhere.

But I made the statement that we would not be selling any stock, and it had nothing to do with that, that I'm a phone call away from Don Graham or anybody else at the Post, and they can just save a lot of directors fees and I can save a lot of travel if at age 80 I decide that I'd rather spend a few more days at Berkshire and less on the road.

I am — we will not be selling any Post shares.

Normally I won't comment about what we'll do on marketable securities, but I'll be unequivocal about that.

And my enthusiasm for the Post itself and the management is 100 percent what it's always been, and I — I'm just available a lot cheaper than before if the Post management wants any advice.

I don't think Melinda did it on the basis of age. You'll have to ask her.

I really decided at 80 that I'd been there since 1974, with an interruption when I was at Cap Cities/ABC, and it's just a lot easier this way.

Charlie, do you have any thoughts on serving on boards generally? Charlie is on the Costco board.

CHARLIE MUNGER: Well, that's because I really admire Costco. And that's one of the pleasures of my life, is interfacing with those people.

But that's the only one where we don't — where I don't have a big ownership interest.

I think, generally speaking, serving on a whole lot of different boards is for the birds. (Laughter)

WARREN BUFFETT: Yeah. I agree. (Laughs)

8. Can't predict if Berkshire will outperform the Australian dollar

WARREN BUFFETT: OK. Area 12.

AUDIENCE MEMBER: Good afternoon, Mr. Buffett and Mr. Munger. I'm Marc Rabinov from Melbourne, Australia.

As an investor from the Asian region, I am concerned that a weaker dollar will erode the value of my Berkshire stock.

However, Berkshire is highly productive with real pricing power, so can I be confident that over the long term any fall in the dollar will be offset by a rise in the value of my Berkshire stock? And by that I mean in addition to any intrinsic growth in the underlying business.

CHARLIE MUNGER: The answer is no. (Buffett laughs)

WARREN BUFFETT: It would be a lot easier if you just had the Australian dollar go down. The Australian dollar was one of two currencies that we did own last year that contributed to the $100 million profit.

But, no, I cannot tell you what policies will be followed in the United States and what policies will be followed in Australia that will — what they will be and how they will affect the relative value of those two currencies, say, 10 years from now.

I think the movement could be quite dramatic, and I think it actually could be dramatic in either direction. That's why I don't know what to do.

But the only promise you'll get from Charlie and me about Berkshire is that we do every day, as I said in the annual report, try to think about increasing the earning power and the intrinsic value of Berkshire.

And to the degree we increase it, the shareholders will — or to the degree we decrease it — the shareholders will share in exactly the same proportion as Charlie and I do.

We will — our interests are 100 percent aligned. We will make or lose money through our stock and luck, to some extent, will depend — will determine — how well we do.

We know we can't do remotely as well in the future as we have in the past.

There is no way to compound — there's no way we know to compound the kind of sums we're working with now at rates that are anywhere close to what we were able to do when working with much smaller sums. But you'll get our best efforts.

Charlie?

CHARLIE MUNGER: I can't add to that.

Australia has these fabulous open pit mines, and at a time when Asia is just totally booming with its demand for metals, I can't tell you how Berkshire stock is going to perform vis-a-vis mines in Australia.

I think we'll do pretty well compared to companies here in the United States.

WARREN BUFFETT: Yeah, I think so, too.

9. We're not neglecting the stock portfolio

WARREN BUFFETT: Carol?

CAROL LOOMIS: This shareholder wishes to be known only by his initials, AJ.

The importance of Berkshire's equity portfolio has diminished other the past few decades. Today I view Berkshire's appetite for equity as an afterthought and instead see its focus as being on large acquisitions.

Would you agree with this, and where do you see the equity portfolio going over the next five or 10 years?

WARREN BUFFETT: Well, I prefer large acquisitions, but it's not an afterthought at all in terms of the portfolio.

I mean, we — Charlie and I spend — well, we probably spend more time thinking about the portfolio because it's only occasionally that we get a chance to think about acquisitions that are sizable and that are available to us.

So we are equally interested in both aspects of Berkshire's operations. But where we hope we really get lucky is in adding significant companies to what we have already, and having our — the companies that we already own — make various bolt-on acquisitions.

We've had several of those already this year that you don't read about.

A lot of our companies have the potential to do — to earn — considerably more money five or 10 years from now than they're earning now.

So both the development of those businesses, which really resides with the managers — Charlie and I don't contribute anything on that — but we will — we spend as much time thinking about the portfolio as we ever did.

And, you know, it's important. I mean, if you talk about $150-some billion in cash and marketable securities, the performance of that particular segment is going to have a lot to do with how well Berkshire does over time.

Charlie?

CHARLIE MUNGER: Yeah, we'll always have a fair amount of marketable securities because of our insurance subsidiaries and — but as we get forced by our size into the bigger and bigger stocks, of course we're going to do less well than we did when we had a bigger universe of practicable things to consider.

WARREN BUFFETT: A lot less well. I mean, it really is the nature of things.

We are buying securities where we have to put billions of dollars in them in most cases, and that is not a field that is unlooked at by other analysts.

So it's impossible to have a big edge. We hope we have a small edge.

CHARLIE MUNGER: On the other hand, when we were doing so well in marketable securities, nobody called us and said, I have a wonderful business, and you're the only place in the world where I would want to transfer it.

And now that happens, what, a couple times a year at least?

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: And I really prefer, in some ways, this part of the game to the earlier game. It's more fun to create permanent partners doing constructive things than just outsmart other people and shuffling little pieces of paper.

WARREN BUFFETT: It's fun to do both, actually. (Laughter)

CHARLIE MUNGER: Yeah. Well, I don't see you holding back. (Buffett laughs)

10. "We have an unbelievable insurance operation"

WARREN BUFFETT: OK. Let's go to the other room. 13.

AUDIENCE MEMBER: Hi, I'm Whitney Tilson, a shareholder from New York. Thank you for including in your latest annual letter such complete and clear valuation information regarding Berkshire.

You stated that the operating earnings of the insurance businesses are excluded from your earnings table, and I know you said this morning that 2011 is going to be a break-even year at best.

But in light of the disclosure in the annual report that Berkshire earned $17 billion in profit over the last eight years without a single money-losing year, are you being overly conservative?

Don't you think the intrinsic value of your insurance businesses is more than just their float, especially GEICO, for the reasons you discussed this morning?

WARREN BUFFETT: Yeah, I'd agree with that, Whitney, but I — it's very hard to estimate, you know, what the normal underwriting profit might be — might be over the next 20 years or something of the sort.

And so I agree with you. I don't know whether I'd call it overly conservative. I would say it's conservative to assume break-even underwriting.

But as you — I mean, if we had another Katrina or something of the sort — and forget about, you know, winter storms in Europe and all that — I mean, we could lose significant money in underwriting this year, and we expect to lose significant money in underwriting, you know, maybe every fifth year, every tenth year, whatever it might be.

But I think you're right in saying it would not be inappropriate to include some normalized underwriting profit in addition to the calculation that I made in the annual report.

CHARLIE MUNGER: Whitney, let me help you by asking another question of Warren. Is there any other large casualty insurance operation in the world that you know of that you would trade for ours?

WARREN BUFFETT: Not remotely — no, no. Nothing close. I mean, we — however we lucked into it, we've got — we have an unbelievable insurance operation.

And, I mean, GEICO, you know, is fabulous. And, you know, if you think about — since 1936, the idea has been out there, but, you know, with all the strength that all the other companies had, and the agency plants and everything else, GEICO has now moved to where it's the third largest in the United States and gaining ground every day on the two ahead of them, and doing it very profitably.

GEICO's combined ratio — GEICO had an underwriting profit of close to eight points, as I remember it, in the first quarter. Now that's going to be, probably, the best quarter of the year, I should add, but it's a marvelous business.

Ajit [Jain] has built an insurance business from scratch in the reinsurance business, that, in many respects, you know, he operates all alone.

He may not see a lot of transactions in any given period of time, but there are certain things, where if somebody wants huge amounts of insurance and a quick answer, or even a slow answer sometimes — we'll give them a quick one — there's really nobody else to call. It's a little like Charlie mentioned on acquisition opportunities.

So he's — and he's done it. I mean, it didn't exist when he got there.

Tad Montrose has got a magnificent operation at Gen Re. It had to get shaken out to quite a degree, but Tad has got a very, very disciplined business there.

And then we have a group of smaller companies that some of them have some very unusual franchises.

So there really — you know, I didn't have anything to do with it, so I can brag about these people, but they have really done a job in building an insurance company that I don't think there's anything like it.

CHARLIE MUNGER: Some of you people that have been around a long time, you invested with an Omaha boy, and you ended up owning part of the best casualty insurance business in the world.

WARREN BUFFETT: If you go to 30th and Harney, you'll see a building there, National Indemnities. We paid 7 million for National Indemnity, a million-four for its sister company National Fire & Marine, and that's the same building that we operated out of in 1967, we're operating out of today.

The only difference is that today it's got more net worth than any insurance company in the world.

CHARLIE MUNGER: Yeah, so we — it's not that great a business as a business, casualty insurance.

It's a tough game. There are temptations to be stupid in it. It's like banking. (Laughter)

And — but if you're in it, I think we've got the best one.

11. Why See's Candies does well in inflationary times

WARREN BUFFETT: With those modest statements, we'll move onto Becky. (Laughs)

BECKY QUICK: This question comes from Mark Jordan (PH) in Charleston, South Carolina.

He writes, "In a period of high inflation, which particular businesses owned by Berkshire Hathaway will perform the best, and which will perform the worst and why?"

WARREN BUFFETT: Well, the businesses that will perform the best are the ones that require little capital investment to facilitate inflationary growth and that have strong positions that allow them to increase prices with inflation.

And, you know, we have a candy business, for example, and the value of the dollar since we bought that candy business has probably fallen at least 85 percent, I would say — 80 to 85

percent — and that candy business sells 75 percent more pounds of candy than it did when we bought it, but it has ten times the revenues and it doesn't take a lot more capital.

So that kind of a business — any business that can — that has enough freedom to price to offset inflation and doesn't commensurate invest — or huge investment — to support it, will do well.

Businesses like our utilities which get, in effect, a bond-like return but require — you know, if you're going to build a generating plant and it costs twice as much per kilowatt hour of capacity, and all you're going to get is a fixed return and yields on bonds go up, perhaps dramatically, to get high inflation, is not going to do that well in an inflationary period, just because it has certain aspects of a bond-like investment, and bonds generally are not going to do well in inflation.

Charlie?

CHARLIE MUNGER: Well, but like our insurance operations, our capital intensive railroad business is certainly one of the best railroads in the world. And our utility operations are certainly one of the best utility operations in the world.

And so it isn't all bad to be up there, world class, in your main businesses.

WARREN BUFFETT: Our railroad — the government has talked about building a high-speed rail system in California.

I think they're talking about 800 miles of track, and their estimated cost was about 43 billion, and estimated costs on construction and things like that go up dramatically much more often than they get reduced even by a minor amount.

And, of course, we paid 43 billion, counting debt assumed, for our rail system, which has 22,000 miles of main track and 6,000-plus locomotives, and 13,000 bridges, if you ever want to buy a bridge.

So that — the replacement value of that asset during inflation already is huge and it would grow dramatically, and the world — our country will always need rail transportation. So it — it is a terrific asset to own, I'll just leave it at that.

12. "May you live until the A stock splits"

WARREN BUFFETT: OK. Area 1 again.

AUDIENCE MEMBER: I'm Martin Greenberger, UCLA Anderson School, where I work in disruptive technologies, not finance.

WARREN BUFFETT: You're forgiven. Go ahead. (Laughs)

AUDIENCE MEMBER: My friend Walt would like to know if Berkshire has been considering splitting its Type A shares, like it did its Type B shares, and if so, what are the pros and cons, in your opinion? And what would be the short-term and longer-term effects?

WARREN BUFFETT: Yeah. Well, in effect, we've already split it, you know, 1500-for-one by having the B available.

And, you know, we have a situation where the company will never be sold, but if any transaction involves the A stock, the B shares are going to get treated exactly the same. So there's really no disadvantage to owning the B stock, except it has somewhat less voting power than the A stock.

But in every other way it's the same instrument, and so we already have a split stock available.

So I would tell Walt that he really should not count heavily on the A stock getting split.

Charlie?

CHARLIE MUNGER: Yeah, Warren used to cheer up his old friends by telling them, may you live until the A stock splits. (Laughter)

WARREN BUFFETT: And I would love to make that deal myself. (Laughs)

13. Buffett's best deal: hiring Ajit Jain

WARREN BUFFETT: Andrew?

ANDREW ROSS SORKIN: This question comes from Matthew Palmer of North Andover, Massachusetts.

And he writes, "Mr. Buffett, you have praised [Berkshire Hathaway reinsurance chief] Ajit [Jain] as a possible successor. Since he may be in line as our next CEO, can you give us a concrete example of a policy that he's written that's impressed you, and can you talk a little about the way he thinks since we rarely get an opportunity to hear from him?"

WARREN BUFFETT: Yeah, Ajit is not exactly a publicity hound.

Ajit — (laughs) — he —

I can't think of any decision he's ever made that I think I could have made better.

And I've — I'm not privy to all of his transactions anymore. There just — there are lots of them that are not of huge size or of great interest, but he tells me about all the interesting things that come along and all the very big things that come along. And I would say this: you'd be better off voting with him than with me after listening to any proposition he brings up.

He is as rational a thinker as Charlie is, as anybody I've met. He loves what he does.

He's creative. He's very creative. We have moved into one area after another in reinsurance when people came in copying us in one area of business that we would be operating in. Ajit comes up with something else.

Lately we've been much more active in life reinsurance, but who knows tomorrow brings. I mean, if there happens to be a huge cat in the third quarter of this year or something of the sort, that might open up all kinds of opportunities in writing covers when — if capacity got strained.

But who knows what will happen. All I know is that Ajit's mind works like a machine, you know, day after day. And he does love what he does, which is an important part of doing well at any activity.

And I really — I don't know what his best deal was. I know what my best deal was, which was hiring him.

Charlie?

CHARLIE MUNGER: Yeah. Sir William Osler, who created a model medical school for the world, used to say that the secret of success in a field is getting very interested in it.

Well, Ajit is real interested in what he does. Many of you don't know this, but every Thanksgiving, Ajit flies to London because they don't have a Thanksgiving holiday. (Laughter)

WARREN BUFFETT: We give him Christmas off, though. (Laughter)

Ajit, we just — he — I say how invaluable he is, and I'm not exaggerating when we talk about him. He is — to an extraordinary degree, he thinks of Berkshire first.

Ajit, at various periods when insurance companies became popular for one reason or another, there was, you know, there was the big thing about Bermuda companies some few years ago, Ajit could have monetized himself to an incredible degree. Still could do it.

I mean, people would hand him a significant percentage of any company being formed with lots of money, so that immediately he could create, I would guess, in the hundreds of millions of wealth without lifting a finger, just by somebody putting up, you know, a couple billion dollars and saying you've got 20 percent of it or whatever it may be.

I mean, listen, he's smart. He knows that, and it doesn't cross his mind to do anything like that.

I mean, he — we have, in comp — he always thanks me for what I do at the end of the year, and I feel I've left off a zero, you know, when I get all through. (Laughs)

He's just a remarkable human being. And we are very, very lucky that, I think, he has a lot of fun in what he does at Berkshire.

He's got a cadre of about 30 people that work with him. There's many more that are settling claims and doing that sort of thing on runoff business, but it's — you won't find anything like it, in my view, not only in the insurance world, but really in almost any part of the business world. (Applause)

WARREN BUFFETT: Let's go —

CHARLIE MUNGER: You didn't answer the question. Maybe you avoided it on purpose.

WARREN BUFFETT: Oh.

CHARLIE MUNGER: He said, what are our worst businesses?

WARREN BUFFETT: What are our worst businesses?

Well, generally speaking — and this is general — I have — well, made certain mistakes in going into smaller businesses that really never had the potential of becoming big.

But I would say overall, probably, I would call retailing — you know, Dexter was our worst business, but I've — the Furniture Mart, obviously, is a terrific operation. But we have not made — despite being in numerous retailing — quite a few — retailing business for quite a while, we have not created major earning power there.

Wouldn't you agree on that, Charlie?

CHARLIE MUNGER: Yeah, but luckily it's a small part of the operation.

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: But you're right. That's been the hardest game for us. And, you know, if we were a little smarter we could have figured that out better. (Laughs)

WARREN BUFFETT: Well, if we were a little smarter we could have done a lot of things. (Laughs)

Of course, See's is a retailing business, to some degree.

CHARLIE MUNGER: Yes.

WARREN BUFFETT: And we had enormous success there, so maybe we started thinking we were geniuses. We are like the duck on the pond when it was raining, and we thought we were rising in the world because of merit and it was just because it was raining. (Laughter)

14. "Forget about goodwill" when evaluating a business

WARREN BUFFETT: OK. We'll go to number 2.

AUDIENCE MEMBER: Joe Tellinghas (PH), Boston, Massachusetts.

What's the proper way to think about goodwill and return on capital?

Berkshire's manufacturing, service, and retail businesses earn pretax returns on tangible capital over 20 percent, which suggests either skilled managers or fantastic businesses. But the return on allocated equity is in the single digits, which looks drab.

Accountants treat intangibles similarly because they have different economics. (Inaudible)

For an indestructible brand like See's or Coca-Cola, I can see why the intangibles should not be amortized because it's worth more every year, and your comments on GEICO policyholders were one way to think about that.

But all the tobacco companies have billions of dollars of goodwill in unit sales of cigarettes to claim every year in developed countries, so perhaps they should be amortized. And for Time Warner- AOL, goodwill definitely needed to be amortized.

WARREN BUFFETT: Yeah, goodwill — you mention AOL-Time Warner or something of the sort, it should be written off, actually. It was just a mistake in purchase price.

Goodwill should not be used in evaluating the fundamental attractiveness of a business. There you should look at return on tangible assets, and even then there's some minor — some other adjustments you may want to make.

But basically, in evaluating the businesses we own, in terms of what the management are doing and what the underlying economics of the business are, forget about goodwill.

In terms of evaluating the job we're doing in allocating capital, you have to include goodwill, because we paid for it.

So if we buy — you know, Coca-Cola goes back to 1886 and John Pemberton at Jacobs Pharmacy in Atlanta, and there was not a whole lot of goodwill put on the books when he sold that first Coca-Cola.

If you were to buy the company now, the whole company, you'd be putting a figure, you know, of 100 billion or something like that on it.

You shouldn't amortize that, and you shouldn't, in judging the economics of the business, look at that.

But in terms of judging the economics of the business that purchased it — we'll call it Berkshire — then you have to allow for the goodwill, because we are allocating capital and paying a lot for it.

I don't think the amortization of goodwill makes any sense. I think write-offs of it, when you find out you've made the wrong purchase and the business doesn't earn commensurate with the tangible assets employed plus the goodwill, I think write-offs of it make sense.

But when looking at businesses as to whether they're good businesses, mediocre businesses, poor businesses, look at the return on net tangible assets.

Charlie?

CHARLIE MUNGER: Well, I think that's right. But as the gentleman says, when we buy a business, a whole business, we never get a huge bargain and, of course, we may get down toward 10 percent pretax earnings on what we pay.

That isn't so awful as you think when you — a lot of the money comes from insurance float that costs you nothing.

In other words, if you have 60 billion of float and God gives you 6 billion a year earnings, it's not all bad.

WARREN BUFFETT: Well, on Lubrizol we're paying close to 9 billion for the equity, and it earns — and you should make adjustments for debt but it's not an important factor there — and, you know, current rate of earnings is probably a billion pretax.

And now Lubrizol itself is employing far — you know, they're employing, you know, call it 2 1/2 billion of equity to earn that billion of pretax, so it's a very good business, in terms of the assets that are employed. But when we end up paying the premium we pay to buy into it, it becomes a billion pretax on something close to 9 billion.

You have to judge us based on close to a $9 billion investment. You have to judge James Hambrick in running the business based on the much lower capital that he has employed.

It can turn out to be a very good business, and we could turn out to have made at least a minor mistake if it isn't as good a business as we think it is now, but still is a very satisfactory business based on the tangible capital employed.

Charlie, can you make that clearer? (Laughs)

CHARLIE MUNGER: Well, it's just — we are not going to buy, in the climate we're in now, operating businesses that are at all decent for low prices. It's just not going to happen.

15. Munger really loves Costco

WARREN BUFFETT: Carol?

CAROL LOOMIS: In a book about Charlie, "Damn Right!" by Janet Lowe, Charlie talks about his view on teaching finance.

He says that he would use the histories of a hundred or so companies that did something right or wrong as a basis for teaching the course.

Could each of you — and since this concerned Charlie, could each of you — we'll start with Charlie — give us an example or two from either category, right moves or wrong moves?

WARREN BUFFETT: I predict Charlie is going to talk about Costco. Go ahead, Charlie. (Laughs)

CHARLIE MUNGER: Well, Costco, of course, is a — (laughter) — a business that became the best in the world in its category, and it did it with an extreme meritocracy and an extreme ethical duty, self-imposed, to take all its cost advantages as fast as it could accumulate them and pass them onto the customers. And, of course, that created ferocious customer loyalty.

And it's been a wonderful business to watch, and, of course, strange things happen when you do that and do that long enough.

Costco has one store in Korea that will do over 400 million in sales this year. These are figures that can't exist in retailing, but, of course, they do.

And so that's an example of somebody having the right managerial system, the right personnel selection, the right ethics, the right diligence and et cetera, et cetera, et cetera. That is quite rare.

And if you — if once or twice in a lifetime you're associated with such a business, you're a very lucky person.

And the more normal business is a business like, say, General Motors, which became the most successful business of its kind in the world and wiped out its common shareholders, what, last year?

That is a very interesting story, and if I were teaching in a business school, I would have Value Line-type figures that took people through the entire history of General Motors. And I would try and relate the changes in the graph and in the data to what happened in the business.

And to some extent, they faced a really difficult problem: heavily unionized business, combined with great success, and very tough competitors who came up from Asia and elsewhere, and to some extent from Europe. And that is a real problem, which, of course — to prevent wealth from killing you, your success turning into a disadvantage, is a big problem in business.

And so there are all these wonderful lessons in those graphs. And I don't know why people don't do it. The graphs don't even exist that I would use to teach.

I can't imagine anybody being dumb enough not to have the kind of graphs I yearn for. (Laughter)

But so far as I know there's no business school in the country that's yearning for these graphs.

Partly the reason they don't want it is if you taught a history of business this way you'd be trampling on the territories of all the little professors in subdisciplines. You'd be stealing some of their best cases.

And in bureaucracies, even academic bureaucracies, people protect their own turf. And, of course, a lot of that happened at General Motors. (Applause)

Yeah.

It's a — I really think the world — that's the way it should be taught. Harvard Business School once taught it much that way, and they stopped.

I'd like to make a case study as to why they stopped. (Laughter)

I think I can — I think I can successfully guess. It's that, of course, the history of business trampled on the territory of barons of other disciplines like the baron of marketing, the baron of finance, the baron of whatever.

And IBM is an interesting case. I mean, there's just one after another that are utterly fascinating, and I don't think they're properly taught at all because nobody wants to do the full sweep.

WARREN BUFFETT: Charlie and I were on a plane recently that was hijacked.

CHARLIE MUNGER: With what?

WARREN BUFFETT: It was hijacked. I'm telling about our experience on that hijacked plane when the hijackers picked us out as the two dirty capitalists that they really had to execute.

But they were a little abashed about it. They didn't really have anything against us, so they said that each of us would be given one request before they shot us, and they turned to Charlie and they said, "What would you like as your request?"

Charlie said, "I would like to give once more my speech on the virtues of Costco, with illustrations." (Laughter)

And the hijacker said, "Well, that sounds pretty reasonable to me."

And he turned to me and said, "And what would you like, Mr. Buffett?"

And I said, "Shoot me first." (Laughter)

CHARLIE MUNGER: Anyway.

16. Incentivizing kids

WARREN BUFFETT: OK. Number 3.

AUDIENCE MEMBER: Sumat Mehra (PH) from Kashmir in India. Mr. Buffett, hope you enjoyed your first trip to India.

WARREN BUFFETT: I sure did.

AUDIENCE MEMBER: Here's my question. One of the most important things that drive people are incentives, but if you live in a rich society it's very hard to get your kids to work hard and reach their full potential because they just don't need to.

So if you or Charlie decide to have a kid in the next five years — (Laughter)

CHARLIE MUNGER: It would be a star in the east.

WARREN BUFFETT: It will take more than a decision. (Laughter)

AUDIENCE MEMBER: How would you incentivize him or her —

WARREN BUFFETT: I thought you were going to say, "How would you?" (Laughter)

No, it's a good question. I apologize for interrupting.

AUDIENCE MEMBER: How would you incentivize him or her to compete among the hungry and highly motivated kids from emerging markets like China, Brazil, Russia, or India?

WARREN BUFFETT: I think certainly that if you are very rich and you bring up your kids to think that they are more important in society, or that they have some special privilege, simply because they came out of the right womb, that, you know, that's just a terrible mistake.

But Charlie has raised eight children that I know quite well, most of them, and I don't think any of them have that sense.

But it's — if you really are going to raise your kids to think that other people should do all the work for them and that they will be entitled to sit around and fan themselves for the rest of their lives, I mean, you know, you will probably not get a good result.

I — you know, in my — Charlie has been rich most of the time when his kids — many of his kids — were growing up — some of his kids were growing up,

I've been rich while my kids were getting — certainly when they got into high school and college — but I don't think — I certainly didn't want to give them the idea that they were special just because their parents were rich.

And I don't think you necessarily have to get a bad result or have children that don't have any incentives simply because their parents are rich.

The one thing I don't think you want to give them an incentive to do is try and outdo their parents at what their parents happen to be good at.

I don't think that makes sense, whether if you are a professional athlete, or a rich person, or whatever it may be, a great novelist, you name it.

But I really think if you're rich and your kids turn out to have no incentives, I don't think you should point at them. I think you should probably point at yourself.

Charlie?

CHARLIE MUNGER: Well, I don't think you can raise children in an affluent family and have them love working 60 hours a week in the hot sun digging fence post holes or something. That's not going to work.

So to some extent, you are destroying certain kinds of incentives. And my advice to you is to lose your fight as gracefully as you can. (Laughter)

WARREN BUFFETT: I'm not sure if you're poor if you can get your kids to love the idea of working 60 hours a week. They may have to, but —

CHARLIE MUNGER: Kids that really get interested in something will work no matter how rich they are.

But it's rare to have an Ajit-like intensity of interest.

You know, if you were a proctologist, you might not like your day as it went on and on. (Laughter)

WARREN BUFFETT: I think we better move along. Becky? (Laughter)

17. Compensation incentives for Berkshire's next CEO

BECKY QUICK: This question comes from a shareholder from central Iowa who asks, "Berkshire Hathaway does well, in part, because its managers want to be there for nonpecuniary reasons. But it seems likely that the next operations CEO will be best be filled by someone who insists on a salary of more than $100,000.

"What kind of compensation structure do you expect for the next generation of Berkshire leadership?"

WARREN BUFFETT: Well, I think the next CEO will make a lot of money and should make a lot of money.

I mean, the responsibility for running a company with a couple hundred billion dollars of market value should pay well.

I think that whatever the level the board decides then, in terms of a base salary, should be supplemented by, probably, an option system that incorporates a couple things that are perhaps unusual.

I don't think the option price — the original strike price — should be less than if the company were for sale, the assets would bring.

So the idea of giving somebody an option during some depressed part of the stock market at the market price, I think, is crazy because you wouldn't sell your business at that price and why sell part of it on that basis.

So I think the base price should be what the business is worth at the time you start, and then I think if, because of the compounding feature of leaving money there — you know, no management at all would produce some gain in value over time — so I think there should be an increase in the base price annually at some rate, and then minus the dividend that's being paid.

So, if you assume a 3 percent dividend was paid, and you wanted to have a hurdle rate of increasing at 7 or 8 percent a year, then you would have the option price accelerate, maybe, at 4 or 5 percent.

But with that kind of a structure, I think you can give a very large option because you — if somebody is creating excess value above a given rate on a very large sum, I think they deserve something quite significant in terms of that excess earned.

Now, they — the present compensation system has no relevance at all to what my successor should earn. The main thing is getting the right person with the right values who interacts well with the managers and who knows how to allocate capital.

And as you just heard a little earlier, our managers who accomplish a lot, if they — and if they're working with big operations so that it turns into a lot of dollars — they can make a lot of money with Berkshire.

They — nothing is worked off the eccentricities of Charlie and me at the top level.

So, you know, people make well into eight figures, sometimes, at Berkshire. But they earn it, and they don't get it because of any phony targets or anything of that sort. They get it because they really deliver incredible, in some cases, excess value to Berkshire.

Charlie?

CHARLIE MUNGER: Well, I hope it will be a long time in the future, and I don't regard it as absolutely inconceivable that Warren's spot will someday be occupied by a very rich man who has adopted Warren's system of pay.

I think somebody in America has to be the exemplar for not grabbing all that you can. I think it's a very important part of the whole scheme. (Applause)

WARREN BUFFETT: I don't think you better run an ad, though, after I go, that says CEO wanted, $100,000 pay plus pleasant surroundings. (Laughs)

18. Societal issues are important but don't affect investment decisions

WARREN BUFFETT: OK. We'll go to number 4.

AUDIENCE MEMBER: Hi, Mr. Buffett, Mr. Munger. My name is Vern Cushenbery and this question is on behalf of a group of investors that made the trip up today from Overland Park, Kansas.

Given your interest in renewable energy and natural resources, I wonder if you'd be willing to share your thoughts on how a world of limited and depleting clean water supplies and declining food stocks affects your investment strategies and thinking on the future.

WARREN BUFFETT: Yeah, I would say it's an important subject but it doesn't affect our investment strategy to any real degree.

In other words, you know, we would love to buy another GEICO. We would love to buy another BNSF. We'd love to buy another MidAmerican.

And we look at those businesses over a long time frame, but we are looking at what we expect their earning power to be three, five, 10, 15 years down the road compared to what we are paying.

So I would say that there are a number of societal issues that really do not enter into our investment or purchase of business-type decisions.

Charlie?

CHARLIE MUNGER: Well, I would advise not paying too much attention to the clean water issue. If there's enough energy, you can always get enough clean water.

Israel sometimes goes month after month making half its water from sea water. With enough energy, why, you have — the water problem goes away. And that's very helpful in considering the future.

And regarding the agricultural productivity, I think one of the main reasons for being restrained in the use of hydrocarbons is that modern agriculture won't work without them.

So I'm a great believer in being conservative, in terms of blowing all the hydrocarbons on heating houses and running cars. I think that — think of how happy we'd be if we'd taken a bunch of that dollar oil in the Middle East and just carted it here and put it in salt caverns.

I mean you could argue that we really screwed up the past, and you could argue all the people who think that our main solution is to drill, drill, drill. They're all nuts. (Laughter and applause)

It's probably quite wise to use up the other fellow's hydrocarbon while preserving our own.

It's not going away because we are not drilling it now.

But you can see that this will lead into unproductive discussion. (Laughter)

19. We wouldn't participate in an auction for any company

WARREN BUFFETT: OK. We'll move right onto Andrew.

ANDREW ROSS SORKIN: This next question, actually, just came in by email from someone in the audience from their BlackBerry, actually a prominent investor that asked that his name not be named.

And his question is the following: He writes, “Your purchase of Lubrizol was done in a negotiated transaction. The board of Lubrizol did not market the company for sale nor run an auction.

“According to the proxy, you did not permit the company to run a go-shop process, despite the requests you allow them to do so.

“Did the board of Lubrizol breach its fiduciary duty by not running a more competitive process to sell the company? And if not, why not?”

CHARLIE MUNGER: Let me do this.

WARREN BUFFETT: OK. Charlie will. (Laughter)

He volunteers —

CHARLIE MUNGER: The answer is no, the board at Lubrizol did not breach its duty because we were not going to participate in the transaction if they didn’t do it our way. (Laughter and applause)

WARREN BUFFETT: Yeah, we basically don’t participate in auctions.

And actually, just very, very recently we were asked to participate in one, and we’re just not interested.

They may end up getting less money than they would have gotten from us. But if they want to auction it, the one thing I can guarantee them, you know, is that when they get all through, we will not pay them what we would have them paid originally if they stepped up.

So they get a very certain deal, they got a very significant price, in my view, and in the view of two advisors.

And if they had said we want to conduct an auction, we would have said good luck, and we’d have looked at something else.

CHARLIE MUNGER: Has anybody else got an easy question? (Laughter)

20. How to judge if Buffett is doing a good job of allocating capital

WARREN BUFFETT: OK. Number 5.

AUDIENCE MEMBER: Hi, Charlie. I think I have an easy question. My name is —

WARREN BUFFETT: Give it to me then. (Laughter)

AUDIENCE MEMBER: My name is Stuart Kaye from Matarin Capital Management in Stanford, Connecticut.

And, Warren, you've often described a big part of your job is allocating capital.

Going forward, by just looking at Berkshire's financial statements, how can we determine how good of a job you have done at allocating capital?

WARREN BUFFETT: Well, the real test will be whether the earnings progress at a rate that's commensurate with the amount of capital that's being retained. And over time, a market value test — but markets can be very volatile and capricious — but over time, obviously, we — unless the market value of Berkshire is significantly greater than the amount of capital that we have kept from you, retained, and used to buy businesses, you know — the verdict is against us if we ever start selling at a discount to that factor.

But you just have — and, you know, it is not a perfect measurement and certainly is not on any three-month or six months or even one-year basis, but over time, if we're going to keep your money, we have to earn a better-than-average return on that money we keep and that has to translate into the stock selling at a premium over the money we retain from you.

And so far we've done OK on that, but the job gets tougher every year.

Charlie?

CHARLIE MUNGER: Yeah. We have continued to beat the market averages. We just aren't beating our own past record. And I guarantee that will continue, at least the last half of it. (Laughter)

WARREN BUFFETT: Yeah. Only the last half of it, right?

CHARLIE MUNGER: Yeah.

21. Don't compare opportunities now to your best-ever deal

WARREN BUFFETT: OK. Carol?

CAROL LOOMIS: This question is from Mike Rifkin (PH). He wants to ask about five transactions you've made in recent years with very different terms.

Goldman, 5 billion at 10 percent plus warrants; GE, five billion at ten percent plus warrants; Dow Chemical, 3 billion at 8.5 percent convertible to common; Wrigley- M&M Mars, 4.4 billion at 11.45; Swiss Re 2.7 billion at 12 percent.

Now, why the different interest rates you set and how about why the warrants in some cases, and why did the rich Mars family need 4.4 billion to do a deal, and at 11.45 percent?

WARREN BUFFETT: Well, we'll let the Mars family speak for themselves.

But in terms of comparing those five deals, it was 3 billion with GE, and the Mars deal actually involved a $2.1 billion preferred stock, which has some usual characteristics, so you have to look at it as a package.

But the important thing is that every one of these deals was done at a different time, although the Goldman and the GE deals were done in close proximity with each other.

And market conditions — you know, you heard Charlie in the movie talk about opportunity costs. Our opportunity costs were different in every single one of those five transactions. And incidentally, we could have done a much better — I could have done a much better — job of allocating our money, you know, in terms of the post-panic period.

I was early on Goldman and GE, compared to the situation five months later. But, you know, we don't have — we not only don't have perfect foresight, sometimes it's pretty bad.

But each deal — when I did the Swiss Re deal, I was not thinking about the Dow Chemical deal, which was committed to, maybe, a year-plus earlier. I was thinking about what else I could do with $2.7 billion, and that's the way all the decisions are made.

So they are not related — they're not related to each other. They go through a mind that is looking at everything available that day, including the amount of cash we have, the likelihood of being able to do something else next week or next month, what else we can do that day. And past deals we've made don't really make any difference.

In fact, one of the things — one of the errors people make in business — and sometimes it can be a huge error — is that they try and measure every deal against the best deal they've ever made.

So they say, you know, I made this wonderful deal for, maybe, an insurance policy written, or it might be a company bought, it might be a stock bought, and they're determined that they're never going to make a deal that isn't that attractive in the future.

So they, in effect — sometimes they take themselves out of the game.

The goal is not to make a better deal than you've ever made before. The goal is to make a satisfactory deal that's the best deal you can make at the time. And Charlie relates it to marriage, and I'll let him expand on that. (Laughter)

CHARLIE MUNGER: No, those are — of course, we're going to make different deals at different times based on different opportunity costs. There's no other rational way to make deals.

22. You don't have to read quickly but you should read

WARREN BUFFETT: OK. We'll go to number 6.

AUDIENCE MEMBER: Keith McGowan, Norfolk, Massachusetts. Thank you, Mr. Buffett and Mr. Munger. Thank you for being a role model.

Your ethics, frugality, sense of humor, honesty, sharing your ideas on investing, sharing your ideas on business, make this world a better place for everyone. (Applause)

Charlie mentioned in a prior answer about continuous learning. Mr. Buffett, you read about five newspapers a day. You also read many annual reports and other business-related reports.

You have the ability to read much faster than the vast majority of people. Reading is a fantastic thing.

What advice would you give to children in high school, college, or adults who want to increase their ability to read faster?

WARREN BUFFETT: Well, you know that's an interesting question because I do read, as you described, the five papers and lots of 10Ks and 10Qs.

Unfortunately, I'm not a fast reader, and I'm not as fast as I used to be on reading.

But I don't know how effective various speed reading classes may be, but if they are effective, you know, I would — I would really suggest anybody that can improve their speed — I wish I could read a lot faster than I can.

Charlie can read faster than I can. And it's a huge advantage to be able to read fast.

And, you know, there's a that old Woody Allen story about how he took the speed reading course, and he met somebody, he was telling him how wonderful it was, and the guy said, "Well, give me an example."

And Woody Allen said, "Well," he said. "I read 'War and Peace' last night in 20 minutes. It's about Russia." (Laughter)

That's the problem I have when I try and read fast. I get all through reading the book, and I say, it's about business, you know, so —

I really don't know the effectiveness of speed reading-type courses, but if you know of any friends or — you can learn more about that, and there are effective techniques.

Obviously, the thing to do is to learn them very young because there really — there's nothing — there's hardly anything more pleasurable, you know, than reading and reading and reading and reading.

And Charlie and I do a lot of it. We continue do a lot of it. But I don't do it as fast as I would like to.

Charlie?

CHARLIE MUNGER: Well, I think speed is overestimated. I had a roommate at Caltech who had a very distinguished mind, and I could do problems faster than he could, but he never made a mistake, and I did. (Laughter)

So, I wouldn't be too discouraged if you have to go a little slower. What the hell difference does it make? (Laughter and applause)

Pass that peanut brittle, Warren.

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: Thank you. Thank you.

WARREN BUFFETT: You may have noticed we have a 15-pound box out for sale in the other room, but Charlie is looking for a 25-pound box.

23. Buffett: There shouldn't even be a debt ceiling

WARREN BUFFETT: Becky?

BECKY QUICK: This question comes from Eric Wiseman (PH) who asks, "Are you worried about Congress playing politics with the raising of the debt ceiling? What would this do to Berkshire Hathaway stock and to the overall economy?"

WARREN BUFFETT: You mean if they didn't raise it?

BECKY QUICK: If they didn't raise it, right.

WARREN BUFFETT: Yeah, well. It would probably be the most asinine, you know, act that Congress has ever performed.

One time in Indiana back in the 1890s, I think they passed a bill — I know it was introduced — you can look it up on a search engine. They passed a bill to change the value of pi, the mathematical term pi, to an even 3 — (laughter) — because they said it would be easier for the school children to work with.

Well, that's the only bill I can think of that would give competition to a refusal to raise the debt ceiling.

I mean, it's extraordinary. I mean, it really is extraordinary that with our deficit running, you know, well over $100 billion a month, and all kinds of items that can't be changed — I mean, there's — having a debt ceiling to start with is a mistake.

I mean, it doesn't — the United States of 2011 has a different debt capacity than the United States of 1911, and we're always — it's going to be a growing country, and we're going to have a growing debt capacity.

That doesn't mean I think it's a great idea at all to have debt growing, as a percentage of GDP.

But this — the debt ceiling's on — so that these games get played and all the time that gets wasted and everything, and, you know, the amount of — number of — silly statements that you hear. It just seems such a waste of time for a country that's got a lot of things to do.

But in the end, they won't, in my view — there's no chance that they don't increase the debt ceiling and I would love to see them — well, I'd love to see them eliminate the idea, because it results in these periodic kind of stalemate operations where everybody uses it for posturing purposes and everything of the sort.

The United States is not going to have a debt crisis of any kind as long as we keep issuing our notes in our own currency. You know, the difference between being able to borrow in your own currency and having to borrow in another currency is night and day.

The only thing we have to worry about is the printing press and inflation. And if you're a member of the euro, European Monetary Union, you have to worry about — you can't print money. You can go and get your co-members to try and help you out.

But giving up the right to issue debt in your own currency is a huge step. And the United States has not done it. I don't know whether we've ever issued U.S. bonds in any other currency but we certainly haven't made a habit of it.

And the Japanese, incidentally, which have a very ratio of debt-to-GDP, also have consistently borrowed in their own currency.

And believe me, when it's time to pay somebody back, and you have a choice of paying — and you're forced to pay somebody else's currency versus paying in your own — it's entirely a different proposition.

As a matter of fact, Charlie and I, we were trying to buy that bank back in —

CHARLIE MUNGER: Chicago.

WARREN BUFFETT: Yeah, in Chicago in the late 1960s, and this was a time of really tight money.

And tight money was different then than tight money is today. I mean, tight money meant no money.

And somebody — we wanted to buy this bank, and they wanted — the only place we could find some money, I think, was in Kuwait in dinars, wasn't it?

CHARLIE MUNGER: Kuwaiti dinars. (Laughter)

WARREN BUFFETT: And I thought to myself, and Charlie concurred, who the hell knew what they were going to say the value of the dinar was when we went to pay it back. It was not something over which we had a lot of control. So we decided not to borrow the money in dinars even though I kind of wish we'd bought the bank.

Charlie, do you have anything to say on that?

CHARLIE MUNGER: No. (Laughter)

I do think — I do think — you know, I remember an era when we had a bipartisan foreign policy and all that, and I liked that era. And that was the Marshall Plan, and a lot of wonderful constructive things were done, and they were generous things.

Now, it seems to me that both parties are trying to compete to see who can be the most stupid — (laughter) — and they keep topping one another. (Laughter and applause)

WARREN BUFFETT: You can tell Charlie is a fellow who has always filed an accurate income tax form. (Laughter)

He's not worried.

24. Nuclear power is "important" and "safe"

WARREN BUFFETT: Number 7.

AUDIENCE MEMBER: Good afternoon, Mr. Buffett and Mr. Munger. I'm John Gorrie (PH) from Iowa City, Iowa, where I'm a happy customer of MidAmerican Energy.

Around 2004, Mr. Buffett, you told us of a great attention you had given to limiting Berkshire's exposure to mega-catastrophes so that one could not break Berkshire.

Today, MidAmerican Energy is seeking approval to build a nuclear power plant in eastern Iowa. At the same time, another utility company, Tokyo Electric and Power, faces claims that Merrill Lynch has estimated as exceeding 12 trillion yen, or $140 billion, to compensate residences and businesses that have been displaced and farmers that cannot produce.

Do you believe that the bond-like return that MidAmerican Energy might receive from a nuclear power plant can justify the mega-catastrophe risk that it would pose to Berkshire?

WARREN BUFFETT: Yeah, I don't think it does pose — I don't know the details of it, and Greg Abel can speak to it better than I can, but I don't think there's anything like the exposure that you refer to.

I think nuclear power is an important part of the world's equation, really, in dealing with its problems on — it's very long term because you're not going to change the installed base in any hurry.

And as you know, France has a very high percentage of nuclear power. And, actually, 20 percent of the electricity generated in the United States comes from nuclear power.

I probably am getting some of mine from — we have — at Fort Calhoun, we have a nuclear facility — not we, but Omaha Public Power District has a nuclear facility I've actually been in.

But I think nuclear power is important, and I think it's safe. I think that — I know — I don't think nuclear power is going to go any place in the United States for a while — maybe quite a while — because of the reaction to what happened in Tokyo — with Tokyo Electric Power.

But that doesn't change my view as to the advisability of continuing to develop nuclear power, not only in the United States, but around the world.

I think some people misinterpreted what I said when I was interviewed, when I said that I thought it would have a major setback in its development, just because of the popular reaction to what happened in Japan.

But that does not change my view that nuclear power is important for the future of this country and the world.

Charlie? (Applause)

CHARLIE MUNGER: Yeah, we can't be so risk averse that things that have a very tiny chance of making a big dent in one subsidiary are unendurable for us. We have to have a certain reasonable amount of courage in operating this company.

WARREN BUFFETT: We have pipelines — we have gas pipe — you can dream of all kinds of worst-case situations.

We have to carry toxic materials. We're required by law to carry those on the railroad, and, you know, you can picture the wrong place, the wrong time, the wrong everything. But we are not bearing any risks, in my view, ever, that threaten the enterprise.

I mean, that is one thing I think about all the time. I regard myself as the Chief Risk Officer of Berkshire, and that is not something to be delegated to a committee, in my view, at all.

So I think about — whether I think about derivative positions, whether I think about leverage, whether I'm thinking about nuclear power plants or anything, I mean, we are not doing anything that I know of that — pressing my imagination as far as I can — threatens me losing a night's sleep over Berkshire's well-being.

CHARLIE MUNGER: And I think you'd also count on any new nuclear plant built in Iowa will be a hell of a lot safer than the ones we already have. We are learning as we go along here. (Applause)

WARREN BUFFETT: Yeah. Obviously, more people — more people have lost their lives, by far, in coal mine accidents, you know, than ever in the United States — have suffered no losses from anything involving nuclear — with it producing 20 percent of the electricity used by 309 million people.

CHARLIE MUNGER: And if a tsunami gets to Iowa, it will a hell of a tsunami. (Laughter)

WARREN BUFFETT: Yeah. And our railroad won't do so well, either. (Laughter)

25. Charity program fell victim to pressure groups

WARREN BUFFETT: Andrew?

ANDREW ROSS SORKIN: This question comes from Mary and Jim Beaumont (PH) from Springfield, Illinois. They've been Berkshire shareholders since 1971, and I should note that we received several questions from some long-term shareholders along these lines, and this one reads:

"Would Berkshire ever consider reinstating its shareholder-directed charitable giving program now that you have a big cash position and are urging people to give away their wealth to worthy causes?

“When you had that program, we were able to support many local schools and charities over the years.”

WARREN BUFFETT: Yeah, I love that program, which we had for, maybe, 20 or so years. Charlie loved it. A lot of the shareholders loved it.

And it was interesting because it was a tax-efficient way to let shareholders give away some money to whatever they chose, as long as it was a 501(c)(3), and they could pick up to three charities.

And some families, for example, used it as a learning device. When they would get the form from us, they’d get their kids around the table and they’d talk about philanthropy and why they were choosing what they did.

Two things — well, one thing that was very interesting about it is nobody else copied it. I mean, the rest of corporate America was not interested in having their shareholders direct contributions. They were much more interested in having the CEO direct contributions. So it did not catch on, despite a fair amount of publicity.

We always had a small backlash of sorts from people who didn’t like the charities that our shareholders were choosing.

So Berkshire’s name was on the check. The shareholders would tell us we want $20 a share, let’s say — and they own ten shares, so they can direct $200 — they’d say, we want our $200 to go to more —churches and synagogues, actually, were number one — but there were schools and there were all kinds of things.

And we would always get some letters where Berkshire would be contributing to, say, Planned Parenthood of California, and people would say, “Well, we’re not going to buy See’s Candy because Berkshire is supporting Planned Parenthood in California.”

And sometimes I would write the people a letter and tell them that when See’s bought almonds or milk or anything like that we didn’t get into the charitable preferences of the person supplying us, but it never really amounted to anything.

Then we bought the Pampered Chef, and that was a different situation because with the Pampered Chef we operated through 50,000-plus independent contractors.

These are women, largely, women, who sometimes, to supplement their income — we have at least one in the office that — a woman that sells Pampered Chef products — sometimes as a main source of income — were — these 50,000 were independent contractors, and a campaign developed where people said that because Berkshire Hathaway gives money, probably primarily to pro-choice organizations, and that was at the direction — we had other people giving them to pro-life organizations.

I mean, these reflected the views of our shareholders, not of Berkshire management — but that they were going to boycott these independent contractors.

And these were people who depended on the income, who had nothing to do with Berkshire's policies, and they were being hurt, in terms of their livelihood, and in some cities it became a radio campaign, and in some cities people regularly started interfering with the parties arranged for our Pampered Chef consultants.

And it was hurting a whole lot of innocent people who had nothing to do with Berkshire's policies, who had nothing to do with Berkshire.

And at that time, reluctantly, we decided to end the program.

I did not — I didn't mind at all losing some See's Candy business or whatever to some people.

But when we start affecting individuals — most of these are not high-income individuals — and we're cutting off their livelihood because of something Berkshire is doing, it became — it just became apparent to me that it was unfair to continue it, and reluctantly, we stopped it, and I think it's too bad.

Charlie?

CHARLIE MUNGER: We don't want the parent company involved in distracting arguments about the social issues of the times.

WARREN BUFFETT: Well, we certainly don't want it where it affects —

CHARLIE MUNGER: Yeah.

WARREN BUFFETT: — people who are just bystanders, basically, who have counted on us over the years to work with them. And it was literally affecting the income of thousands, primarily women, concentrated in certain communities around the country. OK.

CHARLIE MUNGER: A lot of stock — Berkshire stock — is given away every year. It isn't like we've lost the flow of charity totally.

WARREN BUFFETT: No, a huge amount is given away. Partly that's because Charlie and I started our partnerships back in the 50s and 60s, and we've got a number of partners that are now in their 80s, and some of them have given away some exceptional amounts of money.

You had a question earlier from Dick Holland, for example, and Dick Holland — I think it's a matter of record as to exact numbers — but he's given away huge amounts of money over the years and continues to.

And we've got dozens like that that I would say are going to end up giving back 90 percent or more of all the money they've made in Berkshire.

26. Why we hate projections

WARREN BUFFETT: OK. (Applause)

Number 8.

AUDIENCE MEMBER: Tanya Laneva (PH), Boston, Massachusetts.

When you think about long-term cash flows, do you try to forecast growth? Or do you just think about certainty?

If you have an indestructible company like Coca-Cola or Burlington Northern, do you try to estimate growth?

WARREN BUFFETT: Well, we think — are you finished on that?

AUDIENCE MEMBER: Yes, thank you.

WARREN BUFFETT: We — growth is part of the investment equation, and obviously, we love profitable growth. So we would love to figure out a way to, say, take a See's Candy, to move it geographically into new areas, all kinds of things.

I mean, if we could find areas for growth with See's, it would be likely to be very, very profitable.

If Coca-Cola, which is in 200 countries, I mean they have pursued that policy successfully now for 125 years. And some products travel way better than others.

But when we look at a business and we're looking out in the future, obviously, if we see growth in that picture and it's growth which is — produces a high return on incremental capital involved, we love it, but we do not rule out companies where we think there will be little or no growth, if the price is attractive relative to the earning power.

You know, there will be some growth, over time, in something like lubricants, you know, at Lubrizol, but it won't be dramatic growth.

Would we love it if it, you know, if it were going to grow ten percent a year in units or something of the sort? Sure. But that's not going to happen.

So it's a factor in every investment decision because we're really looking out to the future as to future earning power, but also future capital requirements.

And we think plenty about whether any business we go into is likely to grow profitably, and sometimes we're right and sometimes we're wrong. But we don't rule out companies that have very slow growth or no-growth possibilities.

Charlie?

CHARLIE MUNGER: Yeah, well, the interesting thing is that in our country, the business schools teach people to make these projections way in the future, and they program these computers to grind these projections out. And then they use them in their business decision making, et cetera, et cetera.

I've always regarded those projections as doing more harm than good. And Warren has never prepared one that I know of, and where an investment banker prepares one, we tend to throw them aside without reading them.

WARREN BUFFETT: We them upside down, actually.

CHARLIE MUNGER: What?

WARREN BUFFETT: We turn them upside down.

CHARLIE MUNGER: Yeah, yeah. And I think an enormous false precision gets into things when you program computers to make forward projections for a long period of time.

We make rough projections in our head all the time.

WARREN BUFFETT: Sure.

CHARLIE MUNGER: And we don't do any of those formal projections, because the fact that they're there on paper and came out of a computer makes some people think they must be significant. I really think they do more damage than they do good.

WARREN BUFFETT: When we bought Scott Fetzer, which was back in about 1985, it had been shopped by First Boston to more than 30 parties. They never got around to calling us.

So after shopping it to about 30 parties, Scott Fetzer, finally, was working on a deal with an ESOP after something else had fallen through, I forget the exact details.

And I sent a letter to Ralph Schey. I'd read about it in the paper. I'd never met him, never talked to the guy. But I sent him a letter.

I figured I'd gamble 21-cents, or whatever the first class rate was then, and I said, "We'll pay $60 a share. If you like the idea, I'll meet you in Chicago Sunday, and if you don't like the idea tear up the letter."

So that took place and Ralph met me, and we made the deal, and we paid the $60 a share or whatever it was.

And Charlie and I went back to sign up the deal, and the follow from First Boston was there, and he was a little abashed since he had not sent us — contacted us at all — when they were looking for something. But naturally he had a contract that called for a few million dollars of commission even though he'd not bothered to ever contact us and we made the deal by ourselves.

So, in a moment of exuberance while he was collecting his few million dollars, he said to Charlie, he said, "Well, we prepared this book in connection with Scott Fetzer, and since you're paying us a couple million dollars and have gotten nothing so far," he said, "maybe you would like to have this book."

And Charlie, with his usual tact, said I'll pay you $2 million if you don't show me the book. (Laughter)

And I should mention, this will — in connection with Lubrizol, Dave Sokol met James Hambrick, I think on whatever it was, January 25, or whatever the date, and he — Lubrizol had already made projections publicly out to 2013.

And Dave told me that they had — they — that James had also given him some projections, I guess out to 2015 or something, and did I want to see them? And I told him no.

I mean, I don't want to look at the other follow's projections. I've never seen a projection from an investment banker that didn't show the earnings going up over time, and believe me, the earnings don't always go up over time.

So, it's just — you know, it's the old story: don't ask the barber whether you need a haircut, you know.

You do not want to ask an investment banker what he thinks the earnings are going to be in five years of something he's trying to sell.

So I pay no attention to that sort of thing.

But we do, as Charlie says, we are doing projections in our head, obviously, when we look at a business. I mean, when we look at any company to buy, or any stock to buy, we are thinking in our mind, we've got a model in our mind, of what that place is likely to look like over some period of years. And then we also have some model in our mind of how far off we can be.

I mean there's some things we can be way off on, there's other things we're likely to be in a fairly narrow range on.

So all that is taking place, but we sure don't want to listen to anybody else's projections.

CHARLIE MUNGER: Those of you about to enter business school, or who are there, I recommend you learn to do it our way, but at least until you're out of school you have to pretend to do it their way. (Laughter and applause)

27. Buffett owns a few stocks and lots of bonds

WARREN BUFFETT: OK. Carol?

CAROL LOOMIS: On Berkshire's quarterly 13F filings at the SEC, three stocks are held only by the entity recorded on the form as Warren E. Buffett, and not by a Berkshire subsidiary company.

Please clear up some confusion on this matter. Are these holdings your own personal investments outside of Berkshire, or do they belong to Berkshire Hathaway?

WARREN BUFFETT: Well, you'll have to tell me what the names are.

CAROL LOOMIS: Unfortunately, the questioner didn't include those. But these are the three, I think, that are — that say Warren E. Buffett is the owner.

WARREN BUFFETT: Yeah. Well, Marc Hamburg prepares those forms. Marc, do you have a microphone that you can — you could —

MARC HAMBURG: I think —

WARREN BUFFETT: Yeah. Go ahead.

MARC HAMBURG: Well, those are securities that are owned by certain employee benefit plans and so that — Warren is directed into those plans, but it doesn't — they're not owned by Warren, or there's no indication that they're owned by Warren.

Warren is part of the filing because he's considered to be a controlling shareholder of Berkshire. So every security listed on there shows Warren as one of the — one of the owners.

WARREN BUFFETT: Yeah. Do we file stocks owned by pension plans?

MARC HAMBURG: To the extent that you direct — have directed —

WARREN BUFFETT: I got you, yeah.

MARC HAMBURG: Right.

WARREN BUFFETT: Yeah. No, I don't — I don't think I — well, Marc knows the rules on it better than I do. I own very, very few securities.

I really spend my time thinking about Berkshire, so I've got a lot of the very security I've been telling you not to buy, which is government bonds, but that's not because it's a good investment. It's a place to have some money and forget about it, and I'll work on Berkshire.

28. Evaluating a company outside the U.S.

WARREN BUFFETT: Area 9.

AUDIENCE MEMBER: Mr. Buffett, Mr. Munger, it's an honor and a pleasure. My name is Ben Anderson (PH), I'm from Los Angeles.

When you're looking at an investment in China, where the business culture is a lot different than it is here in the U.S., and successful business practices are, again, very different than they are here, what are the characteristics you look for when placing investment in that company, and is that any different than the general principles at Berkshire?

WARREN BUFFETT: We follow the same principles, but we recognize that we know less about tax laws, about customs, about attitudes towards shareholders, any time we get outside the United States, than we know in the United States. Now, to varying degrees, we weigh in that uncertainty.

At the time I bought PetroChina stock, which, I don't know, was probably 2003 or thereabouts, it was extraordinarily cheap, in relation to any calculation of reserves or refining capacity or cash flow or you name it. And at the same time, Yukos in Russia was similarly very, very cheap, and they were both huge.

And I'm no geopolitical expert or anything of the sort, but I decided I was more comfortable buying PetroChina than I was buying Yukos. Now, was I as comfortable buying PetroChina as I would have been buying, you know, some domestic company of similar size?

No, because I don't know as much — I didn't know then, and I don't know as much now, about all the intricacies of Chinese tax law and what the policies might be.

But I was fairly impressed — quite impressed — when I read the report of PetroChina.

For one thing, they said they were going to pay out 45 percent of — as I remember — 45 percent of their earnings in dividends. That's more than any company — oil company — in the United States would tell me.

So I regarded it as a plus and an indication of intent that I thought would be fulfilled, and it has been fulfilled.

So we do make allowances for our lack of understanding, as well as we might in the United States, various key factors.

But the basic principles of trying to value the business, trying to find managements in which we have confidence, in both their ability and integrity, and then finding attractive purchase price, those principles apply wherever in the world we would be investing.

Charlie?

CHARLIE MUNGER: Well, we make so few investments in China that trying to draw general lessons from us would be hard.

It reminds me of the time a professor went west for the summer and came back to his faculty and he said, “I’ve learned that Indians always walk single file.” And they said, “How did you figure that out?” And he said, “I saw one and he did.” (Laughter)

WARREN BUFFETT: How did we get from there to China? (Laughter)

CHARLIE MUNGER: Well, we only had a couple of things in China. They’re like the one Indian. You can’t draw general lessons from them.

WARREN BUFFETT: But we’re willing to look tomorrow.

I mean, obviously, if we had a call on some — that could be a significant size investment because we — it just doesn’t make any sense for us to look at things we can just put a couple of hundred million dollars in — but we, you know, I love the idea of looking at various ideas.

I mean, I find it a fascinating game to hear about companies or businesses that are new to me. And the problem now is that the universe has gotten much smaller because of our size. But we welcome a call from a lot of countries.

There’s some countries that are just too small. They’re not going to have businesses that could move the needle at a place like Berkshire, and so those are off the list, but —

CHARLIE MUNGER: China has at least one private company that makes over $3 billion a year after taxes. There’s some big things out there.

WARREN BUFFETT: I’ll get the name from him later, but I don’t want you to hear. (Laughter)

29. Where Berkshire’s short-term cash goes

WARREN BUFFETT: Becky?

BECKY QUICK: This question comes from Ed Schmidt (PH) in Alaska. He's asking about Berkshire's cash.

He writes, "Where is that money held? All in Treasury bills or notes? If so, what will happen in June when the biggest buyer, the Fed, quits buying? Where is all that money on the sidelines? Is it under the mattress we saw two years ago?

"I don't see how any significant amount of money can be in banks that aren't paying interest, corporate bonds that are risky and not paying much interest, or government bonds that seem less and less sound as each day passes."

WARREN BUFFETT: Well, he's certainly right that all of the choices are lousy for short-term money now, but we don't play around with short-term money. So we did not own commercial paper in 2008 before problems occurred. We did not own money market funds.

When I say we didn't own them, maybe small amounts at various subsidiaries, but in terms of the big money, which we run out of Berkshire, we basically keep it in Treasurys.

And we get paid virtually nothing now for it, and that's irritating, but the last thing in the world we would do at Berkshire is to try and get 5 or 10 or 20 or 30 basis points more by going into some other things with our short-term money.

It is a parking place. It's an unattractive parking place, but it's a parking place where we know we'll get our car back when we want it.

You know, when we need — certainly the case — in September of 2008, we had committed for some time to put $6.5 billion in Wrigley when the Mars/Wrigley deal occurred, and we certainly didn't contemplate at the time we made that commitment, which was probably in the summer, that the events would take place like they did in September and — but we had the money.

I knew I had to show up with 6 1/2 billion dollars — I think it was on October 6 — and, you know, I had to show up. (Laughs)

I couldn't show up with a money market fund or some commercial paper or anything of the sort. I had to show up with cash.

And the only thing I feel — virtually the only thing I feel good about, in terms of having large amounts of ready cash is Treasury bills, and that's where we've got — if you look at our March 31st statement, I think you'll see 38 billion, and overwhelmingly that will be in Treasurys.

Charlie?

CHARLIE MUNGER: Well, of course, I've watched a lot of people struggle who thought it was their duty in life to get an extra 10 basis points on the short-term money.

I think it's really stupid to try and maximize returns on short-term money if you're in an opportunist game the way we are, where we want to suddenly deploy money.

Some of those pipelines we bought, they came for sale on Saturday, and we had to close on Monday or something?

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: Why fool around with some dubious instrument when we had sudden needs for money like that?

WARREN BUFFETT: We bought one pipeline where the seller was worried about going bankrupt the following week. And there's a Hart-Scott-Rodino clearance required through the FTC, and they needed the money right away, and we — I wrote a letter, as I remember, to the FTC, and I said that we will do whatever you tell us to do later on.

You can look at this all you want. We'll give you all the data you want. And if you tell us, you know, to unwind the deal, whatever you tell us, we will do.

But these guys need the money, and so we closed it earlier. And our ability to come up with cash when people need it and when the rest of the world is petrified for some reason, has enabled several deals to get done.

We don't know whether — that could happen tomorrow. I mean, if — you know, Ben Bernanke runs off to South America with Paris Hilton or something — (laughter) —I mean, who knows what will happen. And we want to be able, at that moment, to have our check clear.

So, we figure we never know what tomorrow will bring, although it won't bring that, I want to — leave that off the transcribed part of the report. (Laughter)

But we are — when somebody comes to us and they say, we need a deal right now, we can do it, and they know we can do it, and it can be big. It just has to be attractive.

30. Wind power needs government subsidies

WARREN BUFFETT: OK. Area 10.

AUDIENCE MEMBER: Hi, Warren. Hi, Charlie. Thank you very much for taking the time to have a terrific shareholders meeting.

Four years ago we announced that we're naming our son after you, so we're happy to say hi to both you and Charlie.

Charlie, since Berkshire bought Wesco, we wanted to see if you can take some time to host a meeting of your own? It can be anywhere, anytime.

CHARLIE MUNGER: We're going to do that.

AUDIENCE MEMBER: Great.

CHARLIE MUNGER: We won't call it a Wesco meeting. We'll call it, "An Afternoon with Charlie."

AUDIENCE MEMBER: Great.

CHARLIE MUNGER: It's only for hard-core addicts. (Laughter)

AUDIENCE MEMBER: Warren, MidAmerican Energy is investing over a billion dollars in wind power. How do you feel about wind power as a source of renewable energy and its economics? Will this scale of investment continue and what type of returns do you expect to come from wind power?

WARREN BUFFETT: Yeah, it's terrific, but wind power is terrific, but only when the wind blows. And the wind blows about — as I remember— about 35 percent of the time in Iowa.

So you never can count on wind power, obviously, for your base load. And, you know, that is a real limitation.

On the other hand, wind power, you know, is basically, I guess, the cleanest energy you can come up with, except for the fact that it can't be relied on. It — the economics only make sense with an incentive credit — tax credit — provided by the federal government, which they've been doing for a considerable period of time.

It does not — standing on their own, the investment will not return anything like an adequate return on capital. So there is a tax credit that your government has made a decision that it wants to subsidize, in effect, wind power.

And Iowa has been — Iowa is a good wind state. This whole central belt is good and — central part of the country is good — so it's made sense to locate a lot of megawatts of generating capacity in Iowa, and we have more under construction now, and I think we're now, I think, number one in the country in respect to wind power.

So we'll be doing more. It is dependent, in terms of the price you can get, the percentage of the time that you're generating capacities actually get used and everything, it only makes sense with the tax credits.

And one thing that is kind of interesting — one of the assets of Berkshire is that it pays a lot of taxes. That doesn't sound like much of an asset, but in these days, a lot of utilities, when you

get both a hundred percent depreciation, which has been put in now by the federal government for a short period of time, and you get these sort of tax credits on wind, they really don't have the tax paying capacity to be able to use the tax credits.

So they are in a different position than Berkshire, which pays a lot of taxes. We've probably paid something like 2 percent of all the corporate taxes in the United States, maybe, over the last five years. I want to check that, but it's not — I don't think that's way off.

So we have a lot of tax paying capacity. We can use it to build more wind projects. And I think it's very likely we will continue to do it.

It helps our Iowa customers. Because these projects are successful, it's enabled us to keep rates — among other reasons — it's helped to keep rates absolutely unchanged now for more than a decade, which is very unusual among electric utilities in the United States.

Charlie?

CHARLIE MUNGER: No, I've got nothing to add.

31. We would not have let NetJets go bankrupt

WARREN BUFFETT: Andrew?

ANDREW ROSS SORKIN: Well, this is not a David Sokol question, but it relates to him. It's actually a NetJets question.

This shareholder asked, "I was struck by your statement when you praised Sokol for, quote, 'having resurrected an operation that was destined for bankruptcy.'

"This really got my attention because I don't recall you or Berkshire Hathaway saying earlier that NetJets was on the verge of bankruptcy at the time that his predecessor, Richard Santulli, had stepped down.

"In fact, at the time, the company seemed to give the impression it was dealing with a few short-term problems but that it was fundamentally sound. In truth, how close was it to bankruptcy? And if that was the case, why didn't you tell us?

"And finally, was it ethical for NetJets to be asking perspective clients to part with their money at a time when it was, in the eyes of its main shareholder, quote, 'destined for bankruptcy?'"

WARREN BUFFETT: Yeah, I think I said it was — maybe we can find the exact words here — but I think I said it was destined for bankruptcy, absent the fact that Berkshire Hathaway owned it, if it had been a standalone entity.

And Berkshire never had any intent, never would have had any intent of any kind, to bankrupt NetJets.

But if it had been owned as a standalone by somebody else, the public, that's what would have happened to it.

With Berkshire's ownership, Berkshire has had two insurance companies that would have gone bankrupt as standalone insurance companies. And we — it never crossed our mind that we would let them do it.

So we put money into companies that were bankrupt that Berkshire owned to make them whole, basically. And, essentially, we were doing the same thing with NetJets when we put in — we got it up to 1.9 billion.

But NetJets, in my opinion — well, it would have been bankrupt, absent somebody like Berkshire owning it. I'm almost positive that I said that, that absent Berkshire's ownership, or some words to that effect — let's see if I can find it.

Maybe Charlie can be commenting while I'm looking for this.

In any event — (Laughter)

Well, I'm not finding it immediately where I even discussed it, but I know I talked about it on the bankruptcy thing, but I also know that I conditioned it on not being owned by Berkshire.

Charlie?

CHARLIE MUNGER: No comment.

WARREN BUFFETT: No comment. (Laughter)

We've pointed that out to Standard & Poor's and Moody's. We look at — Berkshire has a lot of different companies, but we feel that it's one entity and, you know, Moody's or Standard and Poor's has to look at each one separately and all of that, but Charlie and I did not — have not been running this business to walk away from some company.

We had one in Louisiana, Southern Casualty, and we had another one in Chicago, both of which, if left to their own devices, would have gone bankrupt, and we didn't even think about not making them whole.

32. Buffett's advice: invest in your own skills

WARREN BUFFETT: Area 11?

AUDIENCE MEMBER: Good afternoon. My name is Christopher David (PH). I'm an entrepreneur from Arlington, Virginia. My question is about the youth.

I work with a lot of high school and college students and recent graduates who are facing a job market with 20 percent youth unemployment, and at the same time one of the most favorable entrepreneurial environments. It's easier than ever to start a business or get involved with a startup.

So considering that these kids are politically savvy, they like studying economics, they're brilliant and they're willing to learn, what advice can you give them from an investment perspective that could help them chart their own course, as opposed to get a nine-to-five job?

WARREN BUFFETT: Well, the main thing you could do — and people do it different ways. I used to do it by doing a lot of reading — I was — practically lived at the Omaha Public Library for three or four years in pre- — when I was 9 or 10 or 11.

I mean, anything you do to improve your own skills, you know, you never know where it's going to pay off later on.

I only — I have one diploma hanging in my office, and I got a couple of others, but the one diploma I have hanging up there is one I got from a Dale Carnegie course, which cost me a hundred bucks back in 1951, and I can't — it's incalculable how much value I got from that hundred dollars.

There's nothing like working to improve your own skills, and I would say communications skills are the first area I would work on to enhance your value throughout life, no matter what you do.

I mean, if I had stayed in the same position I was in, in terms of communicating, back in 1950 or '51, my life would have turned out differently. I mean, I started selling securities. If you can't talk to people, you've got a real problem selling securities.

The — so I — you know, I think people — I think the — if you get lucky, you find your passion early on, but you want to work at something you're passionate about, and then you want to work to improve your skills in that. And I think if you do both of those things, I think you're likely to do very well.

Charlie?

CHARLIE MUNGER: Yeah, I think economics is a really tough subject, and I think it's easy to teach the basic microeconomics and certain of the basic ideas, but the minute it gets into the full range of complexity, you have the difficulty that the experts disagree.

So, I don't think I would hurry if I were trying to learn something into the parts of the fields where none of the experts can agree among themselves. I would master the easy stuff first.

WARREN BUFFETT: Yeah, I don't think — yeah, I would not advise taking lots of courses in economics to somebody going to school.

I'm just trying to think back. It's been a long time since I took my economics courses at Wharton, but I don't regard them as the ones that pushed me forward in any significant way.

33. Reinsurance is a lot harder than it looks

WARREN BUFFETT: Carol?

CAROL LOOMIS: Question from Jon Brandt. Does Berkshire's equity ownership in Munich and Swiss Re reduce the amount of catastrophe-exposed insurance business you are willing to write directly?

If so, assume that prices return to being attractive, would you then limit the quantity of other reinsurance stocks you buy so that you could do more direct business?

WARREN BUFFETT: We have invested in Munich and Swiss Re less than — well, let's see what it would be — it's less than $4 billion, so we're talking 2 1/2 percent of our net worth.

So those investments, in aggregate, are not of a magnitude that would cause me to change at all what we're willing to do — the risks we're willing to bear — in the reinsurance field.

We're way below, sort of, capacity, in terms of risk that we will tolerate in insurance. I mean, I put in the report, you know, I expect our normal earning power to be in the $17 billion or something pretax range.

Well, that is so unlike any other reinsurance company in the world. We went through the worst quarter in reinsurance history, except for Katrina's quarter, you know, and we end up earning, you know, very substantial sums.

So those investments are no constraint at all on our willingness to write insurance. We would love to have a lot more attractive reinsurance business on the books, we just — we just can't find it at prices that we think are commensurate for the risk. But it's not because of an aversion to risk overall.

Charlie?

CHARLIE MUNGER: Yeah, it's — insurance, and particularly reinsurance, it's not that easy a business. It's taken you a long time to do as well as you do. And if it weren't for Ajit, why, we wouldn't — we'd be a lot smaller business.

WARREN BUFFETT: Well, it should be pointed out, we really didn't succeed at all in the reinsurance business in the first 15 years.

We started in reinsurance around 1970, and we had a fellow that I thought the world of running it, George Young, but net, counting the value of float, it was not a good business for us for 15 years until Ajit came along. It is not an easy business. It looks easy most of the time. I mean —

CHARLIE MUNGER: That's the trouble with it. It looks easier than it is.

WARREN BUFFETT: It looks way easier than it is.

And, you know, it's like having a pair of dice, and, you know, accepting bets on boxcars or something like that, and, you know, it's going to come up once in 36 times, so you can win a lot of bets by giving the wrong odds, but if you keep do it long enough, you lose a lot of money.

So these infrequent events, you better have factored in to your pricing, and not fool yourself by whether you make money in a given year or two years or even three or four years. And most people have a little trouble with that, and we had a little trouble with it for about 15 years.

CHARLIE MUNGER: And incidentally, the investment bankers of the world, now that they trade so much for their own account and derivatives, they have sold some of these products where most of the time the customer wins but when the customer loses, he really loses big.

In other words, they're smarter than the customers, and they have caused some of the most horrendous losses to ordinary businessmen. It happened in Korea, it happened in Mexico, it happened —

Just beware of the salesman who's selling a new derivative product.

WARREN BUFFETT: Or an old one. An old one, too.

CHARLIE MUNGER: Yeah, but new ones are worse.

WARREN BUFFETT: Yeah.

34. How Buffett first met Todd Combs

WARREN BUFFETT: OK. Area 12.

AUDIENCE MEMBER: Hi, my name is Bottle Pondy (PH). I'm from Philadelphia, Pennsylvania.

Question's about Todd Combs, the young money manager you hired late last year.

For Mr. Munger, I understand you introduced him to Berkshire. Could you talk a little bit about that — how that relationship started, and how we as shareholders, are we going to be able to assess his progress?

CHARLIE MUNGER: Well, I hate doing this because I may get more letters than I want, but he sent me a letter. That's how it happened. It was like Warren's letter to the guy at — Ralph Schey.

And at any rate, I had a meal with him, and then I called Warren and I said, "I think this is the guy you should talk to." We have a very complicated business and very elaborate procedures, as you can tell. (Laughter)

WARREN BUFFETT: And his results will be known over a five-year period or something. I mean, you cannot judge an investor by what they do in six months or a year.

CHARLIE MUNGER: Todd has the advantage that he's been thinking about financial companies like Berkshire for a great many years. That's useful for us to have around.

WARREN BUFFETT: And as we put in the annual report, it's more likely than not, but not a sure thing, that over time, we have more than one investment manager.

You know, there's a lot of money at Berkshire to be managed. And it would not be a bad idea, but we have to find the right people, and the right people just does not mean a given IQ or a given past record, it means a lot of things.

And if we end up with two or three, you know, that — that's a plus. But it's not — we don't mandate that sort of a result.

35. Acquisitions and stock

WARREN BUFFETT: Becky?

BECKY QUICK: This question comes in from Scott Wilkin, and he's from Chicago, but he's sitting in the audience right now.

Johnson & Johnson is one of Berkshire's biggest holdings, and he asks for your thoughts, Warren, on Johnson & Johnson's recent acquisition of Synthes for $21 billion.

You were quite outspoken in your opposition of Kraft's deal for Cadbury, particularly because of their use of stock. J&J's deal also is primarily with stock, and do you support this deal?

WARREN BUFFETT: I have not talked to anybody in the Johnson & Johnson management, and I have no specific knowledge of the company, but basically, I would like the deal a whole lot better if it was all for cash.

The idea — when a management trades away — I think this deal is about two-thirds stock, roughly, and one-third cash. And Johnson & Johnson has plenty of ability to pay cash for a $22 billion deal. And when they trade away their present businesses for some other business, they're either saying their own businesses are pretty fully valued, or they're saying the guy is making a hell of a mistake that's selling to them.

So I would — like I say, if it was all for cash, I would like it a lot better. And I think that it is — by using a lot of stock for a deal like this, that it certainly — you can — you can draw the inference that J&J is not valuing its own businesses, you know, as attractively as you might think they should be evaluated.

And if you use your own company stock to pay 20 percent or more than market for some other company and, you know, there probably are not a lot of synergies involved or anything in the management. There may be some, but there's usually some offsets too.

But like I said, I would have much preferred it if they'd done it for cash.

Charlie?

CHARLIE MUNGER: Yeah, you also have the disadvantage in (inaudible) that you know a hell of a lot more about chocolate and pizza than you know about medical devices.

WARREN BUFFETT: You think I know more about chocolate?

CHARLIE MUNGER: Well, you — (Laughter)

But at Kraft, I mean, you're talking about businesses that Warren knew a lot about, and neither of us knows much about medical devices.

WARREN BUFFETT: Yeah, the pizza has business has done pretty well since it was sold by Kraft. (Laughs)

36. Why we won't issue stock to make an acquisition

WARREN BUFFETT: We go to 13 in the other room.

AUDIENCE MEMBER: Hi, I'm Glenn Tongue from New York. First off, thank you for a terrific day.

My question deals with acquisitions. Pre-Lubrizol, we estimated Berkshire's year-end 2011 cash balance could approach $60 billion.

I believe you commented recently on an elephant that you thought was too big.

What is your acquisition appetite? What size is too big? Has the phone been ringing lately? And what if anything can we, as shareholders, do to help?

WARREN BUFFETT: I got through college answering fewer questions than that. But the — (Laughter)

But anything you can do to help, I appreciate, Glenn.

The — you know, it's hard to name a precise figure. This one, you know, was way too big unless we used a lot of stock, which, like I say, we wouldn't do.

Our appetite is always there. We are not going to borrow a lot of money. We're not going to issue shares, except perhaps in some minor amount to make a deal that couldn't get made otherwise.

But — and, obviously, we'll never sell a business to buy some other business. So, you know, our cash balances will tend to build month to month unless we do something.

And we can, and will, sell some portfolio securities. But doing Lubrizol requires close to $9 billion of cash, and obviously we could do another one of that size.

In fact, we're looking at a couple, but they're no more than a gleam in the eye, but they would take sums roughly similar to Lubrizol, and, you know, we would be comfortable doing those, and they would add significant — significantly to Berkshire's earning power. They're worth doing.

But we can't do a really — a really big elephant now, and we won't — you know, we won't stretch. We never — we've never really taken any risks because we don't need to, and we will not trade something that we have and need for something that we don't have and don't need, even if we'd kind of like to have it.

Charlie?

CHARLIE MUNGER: Well, I certainly agree with all that.

We are very reluctant to issue shares. And in that, we're different from most places.

I have a friend that sold out to a socialist country, and they issued shares in a controlled corporation, and the socialist executive said, "Isn't this wonderful we're getting this business for nothing."

WARREN BUFFETT: Some people really have that, and, of course, there are some companies — and we talked about the wave that took place in the late '60s, but periodically — one certainly happened during the internet period — companies just couldn't issue shares fast enough,

because they basically were trading confetti for real assets. And that is a business model that has been applied successfully for some periods of time by certain companies in the past.

It usually ends in some kind of a fiasco, but — well, I shouldn't say it usually does, but it runs out of gas at some point.

But, you know, essentially, we've never been in that game.

We hate issuing shares and the idea of selling our — when we issue shares we're divesting ourselves of a portion of every wonderful business we have, from GEICO to ISCAR to you name it. And we don't like doing that. We like owning those businesses. We'd like to own more of them.

We — you know, we have a deal, for example, on Marmon where we bought some more of it this year, and we will buy the rest of it a few more years, and we feel good about that. We pay a fair price for it, but we get a business we know, a management we like, and that's really what we'd like to continue doing at Berkshire. In fact, we will continue doing it.

37. Housing market is terrible, but we'll profit on the rebound

WARREN BUFFETT: Andrew?

ANDREW ROSS SORKIN: This question comes from Larry Pitkowsky, who is a long-time shareholder, I think he's in the audience, from the GoodHaven Fund.

He asks, "Over the years, you built or acquired a significant number of businesses that are related to the residential and commercial real estate markets, including such segments as brokerage servicing, insulation, carpeting, construction products, painted furniture.

"Berkshire's ownership with these businesses would seem to give you a unique window through which to view current conditions. Could you give us some insight into the current state of the housing and commercial real estate market and what we might expect to see in these businesses over" — and this might be a long shot — "over the next decade."

WARREN BUFFETT: Well, the immediate situation is it's terrible. It's been flatlined now for a long time, and it affects Shaw, it affects MiTek, it affects Acme Brick, it affects Johns Manville, it affects our HomeServices operation.

And there has been no bounce, at all, but you see that in the housing start figures, too.

I'm not telling you anything you don't see, except I see it with pain as I look at the monthly earnings figures.

But those are good businesses. And as I mentioned in the annual report, we bought the largest brick operation in Alabama. And I think Alabama uses more brick per capita than any state in the union, but that doesn't mean much currently, because nobody is using any brick to speak of.

But we bought it. We wrote a check for cash, and we like improving our position.

MiTek has bought operations. Shaw is spending a couple hundred million dollars this year, partly because of a change in the nature of the carpet business.

This country, over time, will build houses at a rate, overall, in total, commensurate with household growth, and I think we're going to see plenty of household growth in future decades, and I think that our companies are well-positioned to make significant money when we get to a normalized level of home building.

I said in the annual report I thought it would — we would be seeing the upswing by year-end. I've seen nothing since I wrote the annual report that makes it look like I'm certain to be correct or anything, that there's been no movement that I've seen so far in the two months since I wrote the report.

I would think it would start occurring by then, but if it doesn't, you know, it may be a year later. I don't think anybody knows the answer on that.

If I had to bet one way or another, though, I think it will be turning up by year-end.

It really isn't that important to us. When I made the decision to buy the brick company in Alabama, it was not because I thought brick was going to turn in two months or six months or a year.

I thought that over time, being a very important brick manufacturer and distributor in Alabama adjacent to our strong operation in Texas, it would be a good investment at the price that we paid. And I feel good about the decision, but I won't feel good about our brick results in the next six months. I can be sure of that.

Charlie?

CHARLIE MUNGER: Well, one advantage of buying these very cyclical businesses is a lot of people don't like them. And what difference does it make to us if the earnings average, say, 300 million a year, if it comes in in a very lumpy fashion?

In the big scheme of things, what do we care if it's lumpy, as long as it's a good business? And we have an advantage on that stuff. Nobody else was bidding for a brick plant in Alabama with no customers to speak of. (Laughter)

WARREN BUFFETT: We'll be there if you need brick in Alabama. (Laughter)

You know, See's Candy, a wonderful business, loses money roughly eight months of the year.

Now, it just so happens we know the seasonal pattern, so we don't worry in July that somehow Christmas won't come, you know. We've got a couple thousand years on our side. (Laughter)

So the — but that's — you know, that's easy to see. If you just looked at one month of See's earnings or looked at one quarter, you'd think, what are these guys doing in this business?

Now, obviously, cyclical businesses, you know, are not going to behave exactly the same as seasonal businesses, but why look at it any differently?

I mean, if you take the next 20 years, there will be, you know, three or four terrible years for residential housing, and there will be a lot of them that are pretty good, and there will be a few that are terrific.

And I don't know the order in which they're going to appear, but I know if I can buy the assets cheap enough to participate in those 20 years, that we'll do OK over that time. So that's why we're in the brick business.

38. Short adjournment before formal business meeting

WARREN BUFFETT: Now let's see. Yeah, we're at 3:30, so we will adjourn for about five minutes, and then we will conduct the business meeting of Berkshire Hathaway, and we can turn the lights up, and we'll rejoin you in just a couple of minutes. (Applause)

39. Berkshire formal annual meeting begins

WARREN BUFFETT: OK. If you'll settle down, we'll conduct a little business.

This morning I introduced the Berkshire Hathaway directors that are present.

Also with us today are partners in the firm of Deloitte & Touche, our auditors. They are available to respond to appropriate questions you might have concerning their firm's audit of the accounts of Berkshire.

Forrest Krutter is secretary of Berkshire. He will make a written record of the proceedings.

Becki Amick has been appointed inspector of elections at this meeting. She will certify to the count of votes cast in the election for directors and the motions voted upon at this meeting.

The named proxy holders for this meeting are Walter Scott and Marc Hamburg.

Does the secretary have a report of the number of Berkshire shares outstanding, entitled to vote, and represented at the meeting?

FORREST KRUTTER: Yes, I do.

As indicated in the proxy statement that accompanied the notice of this meeting that was sent to all shareholders of record on March 2, 2011, being the record date for this meeting, there were 942,559 shares of Class A Berkshire Hathaway common stock outstanding, with each share entitled to one vote on motions considered at the meeting, and 1,059,055,810 shares of Class B Berkshire Hathaway common stock outstanding, with each share entitled to 1/10,000th of one vote on motions considered at the meeting.

Of that number, 663,042 Class A shares, and 659,697,109 Class B shares are represented at this meeting by proxies returned through Thursday evening, April 28th.

WARREN BUFFETT: Thank you. That number represents a quorum and we will therefore directly proceed with the meeting.

The first order of business will be a reading of the minutes of the last meeting of shareholders. I recognize Mr. Walter Scott, who will place a motion before the meeting.

WALTER SCOTT: I move that the reading of the minutes of the last meeting of the shareholders be dispensed with and the minutes be approved.

WARREN BUFFETT: Do I hear a second?

VOICE: Second.

WARREN BUFFETT: The motion has been moved and seconded. Are there any comments or questions?

We will vote on this motion by voice vote. All those in favor, say aye. Opposed? The motion is carried.

40. Election of directors

WARREN BUFFETT: The next item of business is to elect directors.

If a shareholder is present who wishes to withdraw a proxy previously sent in and vote in person on the election of directors, you may do so.

Also, if any shareholder that is present has not turned in a proxy and desires a ballot in order to vote in person, you may do so.

If you wish to do this, please identify yourself to one of the meeting officials in the aisles, who will furnish a ballot to you.

I recognize Mr. Walter Scott to place a motion before the meeting with respect to election of directors.

WALTER SCOTT: I move that Warren Buffett, Charles Munger, Howard Buffett, Stephen Burke, Susan Decker, William Gates, David Gottesman, Charlotte Guyman, Don Keough, Tom Murphy, Ron Olson, and Walter Scott be elected as directors.

WARREN BUFFETT: Is there a second?

VOICE: I second the motion.

WARREN BUFFETT: It has been moved and seconded that Warren Buffett, Charles Munger, Howard Buffett, Stephen Burke, Susan Decker, William Gates, David Gottesman, Charlotte Guyman, Donald Keough, Thomas Murphy, Ronald Olson, and Walter Scott be elected as directors.

Are there any other nominations? Is there any discussion?

The nominations are ready to be acted upon. If there are any shareholders voting in person, they should now mark their ballots on the election of directors and allow the ballots to be delivered to the inspector of elections.

Miss Amick, when you are ready, you may give your report.

BECKI AMICK: My report is ready.

The ballot of the proxyholders in response to proxies that were received through last Thursday evening, cast not less than 701,770 votes for each nominee. That number far exceeds a majority of the number of the total votes of all Class A and Class B shares outstanding.

The certification required by Delaware law of the precise count of the votes will be given to the secretary to be placed with the minutes of this meeting.

WARREN BUFFETT: Thank you, Miss Amick.

Warren Buffett, Charles Munger, Howard Buffett, Stephen Burke, Susan Decker, William Gates, David Gottesman, Charlotte Guyman, Donald Keough, Thomas Murphy, Ronald Olson, and Walter Scott have been elected as directors.

41. Shareholder advisory vote on Berkshire's executive compensation

WARREN BUFFETT: The next item on the agenda is an advisory vote on the compensation of Berkshire Hathaway's executive officers.

I recognize Mr. Walter Scott to place a motion before the meeting on this item.

WALTER SCOTT: I move that the shareholders of the company approve, on an advisory basis, the compensation paid to the company's named executive officers, as disclosed pursuant to Item 402 of Regulation S-K, including compensation discussion and analysis, the accompanying compensation tables, and related narrative discussion, in the company's 2011 annual meeting proxy statement.

WARREN BUFFETT: Is there a second?

VOICE: I second the motion.

WARREN BUFFETT: It has been moved and seconded that the shareholders of the company approve, on an advisory basis, the compensation paid to the company's named executive officers.

Is there any discussion?

The motion is ready to be acted upon. If there are any shareholders voting in person, they should now mark their ballots on the motion and allow the ballots to be delivered to the inspector of elections.

Miss Amick, when you are ready, you may give your report.

BECKI AMICK: My report is ready.

The ballot of the proxyholders in response to proxies that were received through last Thursday evening, cast not less than 720,883 votes to approve, on an advisory basis, the compensation paid to the company's named executive officers.

That number far exceeds a majority of the number of the total votes of all Class A and Class B shares outstanding.

The certification required by Delaware law of the precise count of the votes will be given to the secretary to be placed with the minutes of this meeting.

WARREN BUFFETT: Thank you, Miss Amick.

The motion to approve, on an advisory basis, the compensation paid to the company's named executive officers has passed.

42. Shareholders decide to hold a compensation vote every three years

WARREN BUFFETT: The next item is an advisory vote on the frequency of a shareholder advisory vote on compensation of named executive officers.

I recognize Mr. Walter Scott to place a motion before the meeting with respect to this item.

WALTER SCOTT: I move that the shareholders of the company determine, on an advisory basis, the frequency, whether annual, bi-annual, or tri-annual, with which they shall have an advisory vote on the compensation of the company's named executive officers, set forth in the company's proxy statement.

WARREN BUFFETT: Is there a second?

VOICE: I second the motion.

WARREN BUFFETT: If has been moved and seconded that the shareholders of the company determine the frequency with which they shall have an advisory vote on compensation of named executive officers, with the options being every one, two, or three years.

Is there any discussion?

The motion is ready to be acted upon. If there are any shareholders voting in person, they should now mark their ballots on the motion and allow the ballots to be delivered to the inspector of elections.

Miss Amick, when you are ready, you may give your report.

BECKI AMICK: My report is ready.

The ballot of the proxyholders in response to proxies that were received through last Thursday evening, cast 112,395 votes for a frequency of every year; 4,615 votes for a frequency of every two years; and 609,699 votes for a frequency of every three years, of an advisory vote on the compensation of named executive officers.

The certification required by Delaware law of the precise count of the votes will be given to the secretary to be placed with the minutes of this meeting.

WARREN BUFFETT: Thank you, Miss Amick.

The shareholders of the company have determined, on an advisory basis, that they shall have an advisory vote on the compensation paid to the company's named executive officers every three years.

43. Shareholder motion on reduction of greenhouse gases

WARREN BUFFETT: The next item of business is a motion put forth by Miss Coward, a Berkshire shareholder represented by Mr. Bruce Herbert and Mr. Larry Dorrs (PH).

The motion is set forth in the proxy statement.

The motion requests Berkshire Hathaway to establish goals for the reduction of greenhouse gas at its subsidiaries' power plants, and prepare a report for shareholders on how it will achieve these goals.

The directors recommend that the shareholders vote against the proposal.

I will now recognize Mr. Herbert to present the motion. To allow all interested shareholders to present their views, I ask Mr. Herbert to limit his remarks to five minutes.

The microphone at, well, let's have Mr. Herbert first, if we can turn up the lights.

BRUCE HERBERT: Thank you.

Good day, ladies and gentlemen. My name is Bruce Herbert and I'm chief executive of Newground Social Investment in Seattle, Washington.

It is such a pleasure to be here today, representing a life-long owner of Berkshire Class A shares. And I stand to present the resolution found on page 12 of the proxy, that asks our company to set goals for reducing greenhouse gas emissions at its energy holdings.

This is because serious investors know, and studies show, that climate change creates financial liability.

The Investor Network on Climate Risk, whose members manage more than $10 trillion, and the Carbon Disclosure Project, representing more than $70 trillion in assets globally, call on companies to disclose risks related to climate change, as well as the actions taken to mitigate those risks.

In 2010, 66 percent of U.S. electric utilities had already set greenhouse gas emission reduction goals. Sixty-six percent. Unfortunately, Berkshire MidAmerican was not among them.

Now, investors have cause to be concerned. Just last year, the SEC announced that climate risks are material, and that they must be disclosed.

We do applaud MidAmerican for having the largest wind energy portfolio of any utility in the United States.

However, it is also true that MidAmerican generates close to three-quarters of its power burning coal. Investors, globally, want to reduce risk through cleaner generation, and 66 percent of public utilities have already published their plans for doing so.

But MidAmerican offers no such plan, despite the public proclamation via its website, that, quote, “We will set challenging goals and assess our ability to continually improve our environmental performance,” unquote.

There is no more important environmental goal for a coal-burning utility than to reduce pollution. But more than this, Berkshire is uniquely vulnerable, in that the financial burdens of climate change are pushed onto insurance companies, and as a major insurer, this has serious financial ramifications for our company.

Berkshire enjoys a remarkable and well-earned reputation, earned over many decades, for being practical visionaries. Addressing climate change offers an opportunity for our company both to uphold and to enhance this reputation.

So in closing, the world’s largest institutional investors call on companies to set greenhouse gas reduction goals. Such goals are key tools for managing the extraordinary business risk of climate change.

Two-thirds of utilities in the United States have already set these types of reduction goals, and this resolution, importantly, gives Berkshire managers the freedom to determine what those goals should be and to shape the process for meeting them.

And the major proxy advisory firms have repeatedly recommended voting for similar resolutions.

So I will close with a request and a question. The request is for all of you here to please join us in supporting this common sense proposal.

And the question, gentlemen, is, have you evaluated the business risk of climate change to our companies and what did you find out? Thank you.

WARREN BUFFETT: Thank you, Mr. Herbert.

We have a microphone at zone 1. It’s available for anyone wishing to speak for or against the motion. You’ve seen where zone 1 is there.

I’ll wait just a minute or two in case anybody would like — is there an additional speaker there that —?

I’ll ask that, for the benefit of those present, I ask that each speaker for or against the motion limit themselves to two minutes and confine your remarks solely to the motion.

So go ahead.

AUDIENCE MEMBER: Hi, I'm Paul Herman, founder of HIP Investor. HIP stands for Human Impact and Profit. We're a registered investment advisor in the states of California, Illinois, and Washington.

Climate change is obviously one of the risks to Berkshire Hathaway conglomerate companies, including MidAmerican Energy and Burlington — the Burlington railway — which transports coal, much of which is getting exported to China.

So we are concerned about, also, about the disclosure, quantification, and impact on profit, of greenhouse gases, as well as the quantification of the asset of the carbon credits that might be available for eco-efficient companies.

So we strongly support this resolution for increased disclosure, increased transparency and evaluation of the financial returns that are possible, or the financial liabilities, especially with your expertise in reinsurance, because reinsurance companies typically put a quantification of potential carbon exposure and liabilities, whereas traditional insurance companies may not do so.

So we strongly advocate for transparency, disclosure, and quantification as to the potential risks and liabilities. The SEC has encouraged this type of disclosure, though they have not mandated it. So Berkshire Hathaway would be a leader in doing this, as companies like GE, which their Ecomagination initiative, the 10 percent of revenue that they generate from their Ecomagination products, and other leaders from Jeff Immelt to the leaders of Duke Power that take a positive position on the financial returns that are possible for addressing climate change and carbon efficiency. Thank you.

WARREN BUFFETT: Thank you.

We have some more speakers there?

AUDIENCE MEMBER: Mr. Buffett, Mr. Munger. My name is Jefferson Lilly (PH), a long-term Berkshire shareholder. It's my personal opinion that it's the previous two speakers that are the hot air in the problem around global warming, and that we — (applause) — that we not regulate Berkshire Hathaway to force it to have carbon disclosure or other silly rules.

It's fine if the managers of the individual businesses choose to do that on their own, but it's completely inappropriate to bring this false religion of global warming to try and regulate Berkshire Hathaway.

You guys are doing a great job on your own. (Applause)

WARREN BUFFETT: Are there any other speakers there that —?

AUDIENCE MEMBER: Mr. Munger and Warren Buffett. I would just like to say one thing, which I think is really important.

Berkshire Hathaway can be a leader in the environment. And I'm for transparency, as I know these two gentlemen are, and John Doerr, who is very passionate about the environment, and I know if he was here today, he would have the same sentiments as these two gentlemen.

And it's important that as American citizens, we care about the environment. And not keep polluting the environment. And I'm with these two gentlemen 100 percent.

WARREN BUFFETT: Thank you. (Applause)

Do we have any others that haven't spoken?

AUDIENCE MEMBER: Yes. My name is Eric Shlime (PH). I am not for this, so against the motion.

I think Berkshire Hathaway has a pretty good reputation at being clean, being environmentally responsible. I don't think anyone is saying that either Mr. Buffett or Mr. Munger is somehow — doesn't care about the environment.

I think most people care about the environment. But it doesn't mean that we should for Mr. Buffett and Mr. Munger, or any of the CEOs, to tell them how to run their business.

You guys care a lot about Berkshire's reputation. If Berkshire's subsidiaries are just polluting oceans and ponds and destroying the reputation in different towns and cities, I don't think that would be too cool with either Buffett or Munger.

So, doesn't mean you don't care about the environment just because you're not going to somehow regulate and tell other people how to run their business. Let's just do things voluntarily, do things to make money, and be responsible. At the end of the day, that's what wins. Thank you.

WARREN BUFFETT: Thank you. (Applause)

Anyone additional?

AUDIENCE MEMBER: Yeah, my name's Larry Dorrs (PH) and I support this resolution.

I don't think anybody is saying anything other than you're gentlemen of great integrity. But this is a dollars and cents issue. And the EPA is releasing new rules that are calling for more regulation of greenhouse gas emissions.

So this — you know, we're really approaching this from a point of view of a conglomerate that has insurance holdings, and it really is insurance companies that are bearing the great costs.

So I'm looking very much forward to your point of view on this. Thank you.

WARREN BUFFETT: Thank you.

Anyone else?

AUDIENCE MEMBER: Yes, thank you. David Hughes (PH), a shareholder.

It's my opinion that this is the right thing to do and I think that it makes sense to do it, as an organization, prior to being forced to do it.

And if this gives you the tools to set the rules your way, as you see fit, then I think that's far more powerful and sets a precedent, as Berkshire has done in the past, so I am for the resolution.

WARREN BUFFETT: Thank you. (Scattered applause)

Anyone additional?

AUDIENCE MEMBER: Hello. My name is Thomas Dankenburter (PH) and my background was in biochemistry, and I'm very passionate about the environment, and I think it's very important for Berkshire to work to be a leader, and so I'm very much in support of this proposition.

WARREN BUFFETT: Thank you. (Scattered applause)

Got somebody else there?

AUDIENCE MEMBER: Hi. My name is Sarah Cleveland. I'm from Portland, Oregon.

I want to just also put a voice in favor of this resolution, and I think it's not about rights or wrong. It's about a willingness to take a look at risks and opportunities. And also for Berkshire Hathaway to be a leader. And also work with the subsidiary companies on specific possibilities.

WARREN BUFFETT: Thank you. (Scattered applause)

AUDIENCE MEMBER: Hi.

WARREN BUFFETT: You're on.

AUDIENCE MEMBER: My name is Sam Roy (PH). This is my first meeting.

Mr. Munger and Warren Buffett, I'm so impressed how you run your business, but I think you will care for the environment as well. I don't know whether we should impose a route, but at least you will, by your act, how the local businesses are run, and all the operating goes out and

appears, and there is no question that we do everything possibly that we never pollute the air that cannot be changed.

It is not hot air, but it is something I'm very passionate about. You can do anything with your environmental, but if you are not taking charge right now, we don't know what the implications would be for our kids and grandkids.

I request you give it total investigation, and I think you will do that. Thank you for this opportunity.

WARREN BUFFETT: Thank you. (Scattered applause)

AUDIENCE MEMBER: Yes. Mr. Buffett and Mr. Munger, my name is Bob Stein (PH). I'm a registered, professional engineer, and I have a couple comments, and I'm a Berkshire stockholder.

One, I think we all support very sound environmental protection. But the science before this — that's being used by EPA for greenhouse gases is not necessarily sound, and is not necessarily in the best interests of Berkshire Hathaway shareholders.

Also, everything that the EPA has proposed is not practical and has caused a lot of problems making U.S. competitive in the world industrial market. Thank you.

WARREN BUFFETT: Thank you. (Scattered applause)

AUDIENCE MEMBER: Jason Bang (PH), Palo Alto, California. For me, one thing that's been very interesting about the issue is that it is something that deserves the passion that people bring to it. And I actually side with many of these people on the science of the issue.

What concerns me is, not necessarily that Berkshire agrees to the motion, I'm actually against it, but that the enterprises under Berkshire are about to help evangelize the true science behind what's actually going on and help the American public get a better understanding, so they can also bring about change, rather than have it all occur from the executive level.

WARREN BUFFETT: Thank you.

AUDIENCE MEMBER: Good afternoon. My name is Bill Guenther. I'm a shareholder from Newfane, Vermont.

I work as a state forester back home and I want to say for folks that don't believe global warming is reality, I wish you would follow me around in the woods. It definitely is.

I want to support this resolution and I hope that the rest of the shareholders will feel it important enough to see it through. Thank you.

WARREN BUFFETT: Thank you. (Scattered applause)

AUDIENCE MEMBER: Good afternoon. I'm (inaudible). I care about energy. I care about energy and environment more than anybody else because I'm currently still studying energy and environment issues.

But I truly believe the power of private sector, the power of free markets. And I think it's not your responsibility to put the resources of the shareholder for this issue. It's not your expertise.

I can personally do a better job to provide (inaudible) to do environmental advocacy than you do. So actually, against this resolution. Thank you.

WARREN BUFFETT: Thank you. (Scattered applause)

AUDIENCE MEMBER: Sorry, I have a friend to say something. I can translate it.

(OFF-MICROPHONE SPEAKING)

OK. He says the development of the solar panel has great impact on China. And the question — and he also thinks that, actually, Berkshire should do something, as should think about the implication of that.

WARREN BUFFETT: Thank you. (Scattered applause)

OK. Whoops, we have one more.

AUDIENCE MEMBER: Hi, I'm Kevin Thompson (PH). I'm a shareholder.

I'm for the motion. I am a career engineer that works with an oil company. And what we found when we started looking at greenhouse gas emissions was that what we thought was going to end up costing the company more money actually created more revenue for the company.

And those are some of the stories that generally don't get told, but they are out there. And I would recommend that you take a look at it, because in actuality, what you may be dismissing may actually be revenue for your shareholders. Thank you.

WARREN BUFFETT: Thank you. (Scattered applause)

AUDIENCE MEMBER: Hello, Mr. Buffett. I'm Mike from (inaudible) and there's obviously a fine line between, like, cutting down the Amazon forest and, like, just burning some coal.

So sometimes you can give up a little but you can't really give up that much. So that's why I don't support the motion.

WARREN BUFFETT: Thank you. (Scattered applause)

AUDIENCE MEMBER: You're welcome.

MEETING OFFICIAL: There do not appear to be any further comments.

WARREN BUFFETT: OK, thank you. (Applause)

Democracy in action at Berkshire.

The — a couple of questions that were raised. In terms of material information, or material risks, in respect to Berkshire and specifically to our insurance operation, annually in the 10-K, there's a recitation of risk. And, in my own opinion, in terms of our insurance operation, this question does not pose material risk to Berkshire's insurance operations.

The question one gentleman, toward the end, mentioned the fact that it might even be more profitable for Berkshire, in terms of what might happen if we followed the motion. Ironically, he could well be right if it were in our determination, but just take our three major states in electric utility operation, where we serve almost two million customers, Iowa, Utah, and Oregon, but it's true of other states as well.

We operate under the dictates of the utility commissions in those three states, all of which — or each of which — sets their own rules regarding operation, and each of which we end up obeying.

If we were to unilaterally, for example, decide to close down significant coal generation, we would be told to depreciate those plants over a shorter period, and that would translate, not in the cost to Berkshire, it would translate into higher rates for electricity there.

We are entitled to a return on our investment and the faster the depreciation, the higher the rates have to be in order to achieve allowed returns.

So there was a woman from Oregon speaking, for example. And the burden of any unilateral attempt by us — and we couldn't do it without the approval of the utility commissions — but the burden would fall on customers.

And it is true, actually, that we would recoup accelerated depreciation and we would probably have a much larger investment on which we would be allowed a return in other generating facilities.

But this is a question — this is not something that the stockholders of Berkshire end up incurring the costs of. It's something that the rate, or the users of electricity in these various states, will pay for. And that judgment, quite properly, should be made by the public utility commissions of those various states. And whatever they decide, you know, we will follow.

And over time, there's no question, just like we've talked about our wind generation in Iowa, this country will move toward a different composition of electricity generation.

And as I stated earlier, I personally favor more nuclear over time, but that will be determined both at the state level, and in some ways, at the national level.

So it's our recommendation that the motion be voted down. And I think the motion is now ready to be acted upon.

If there are any shareholders voting in person, they should now mark their ballots on the motion and allow the ballot to be delivered to the inspector of elections.

Miss Amick, when you are ready you may give your report?

BECKI AMICK: My report is ready.

The ballot of the proxyholders in response to proxies that were received through last Thursday evening cast 67,733 votes for the motion, and 608,576 votes against the motion.

As the number of votes against the motion exceeds a majority of the number of votes of all Class A and Class B shares outstanding, the motion has failed.

The certification required by Delaware law of the precise count of the votes will be given to the secretary to be placed with the minutes of this meeting.

WARREN BUFFETT: Thank you, Miss Amick.

The proposal fails.

44. Formal meeting adjourns

WARREN BUFFETT: Does anyone have any further business to come before this meeting before we adjourn?

If not, I recognize Mr. Scott to place a motion before the meeting.

WALTER SCOTT: I move this meeting be adjourned.

WARREN BUFFETT: Is there a second?

VOICE: I second it.

WARREN BUFFETT: A motion to adjourn has been made and seconded. We will vote by voice.

Is there any discussion? If not, all in favor say aye.

All opposed say no.

Berkshire's Corporate Performance vs. the S&P 500

Year	Annual Percentage Change in Per-Share Book Value of Berkshire (1)	Annual Percentage Change in S&P 500 with Dividends Included (2)	Relative Results (1)-(2)
1965	23.8	10.0	13.8
1966	20.3	(11.7)	32.0
1967	11.0	30.9	(19.9)
1968	19.0	11.0	8.0
1969	16.2	(8.4)	24.6
1970	12.0	3.9	8.1
1971	16.4	14.6	1.8
1972	21.7	18.9	2.8
1973	4.7	(14.8)	19.5
1974	5.5	(26.4)	31.9
1975	21.9	37.2	(15.3)
1976	59.3	23.6	35.7
1977	31.9	(7.4)	39.3
1978	24.0	6.4	17.6
1979	35.7	18.2	17.5
1980	19.3	32.3	(13.0)
1981	31.4	(5.0)	36.4
1982	40.0	21.4	18.6
1983	32.3	22.4	9.9
1984	13.6	6.1	7.5
1985	48.2	31.6	16.6
1986	26.1	18.6	7.5
1987	19.5	5.1	14.4
1988	20.1	16.6	3.5
1989	44.4	31.7	12.7
1990	7.4	(3.1)	10.5
1991	39.6	30.5	9.1
1992	20.3	7.6	12.7
1993	14.3	10.1	4.2
1994	13.9	1.3	12.6
1995	43.1	37.6	5.5
1996	31.8	23.0	8.8
1997	34.1	33.4	.7
1998	48.3	28.6	19.7
1999	.5	21.0	(20.5)
2000	6.5	(9.1)	15.6
2001	(6.2)	(11.9)	5.7
2002	10.0	(22.1)	32.1
2003	21.0	28.7	(7.7)
2004	10.5	10.9	(.4)
2005	6.4	4.9	1.5
2006	18.4	15.8	2.6
2007	11.0	5.5	5.5
2008	(9.6)	(37.0)	27.4
2009	19.8	26.5	(6.7)
2010	13.0	15.1	(2.1)
2011	4.6	2.1	2.5
Compounded Annual Gain – 1965-2011	19.8%	9.2%	10.6
Overall Gain – 1964-2011	513,055%	6,397%	

Notes: Data are for calendar years with these exceptions: 1965 and 1966, year ended 9/30; 1967, 15 months ended 12/31. Starting in 1979, accounting rules required insurance companies to value the equity securities they hold at market rather than at the lower of cost or market, which was previously the requirement. In this table, Berkshire's results through 1978 have been restated to conform to the changed rules. In all other respects, the results are calculated using the numbers originally reported. The S&P 500 numbers are **pre-tax** whereas the Berkshire numbers are **after-tax**. If a corporation such as Berkshire were simply to have owned the S&P 500 and accrued the appropriate taxes, its results would have lagged the S&P 500 in years when that index showed a positive return, but would have exceeded the S&P 500 in years when the index showed a negative return. Over the years, the tax costs would have caused the aggregate lag to be substantial.

BERKSHIRE HATHAWAY INC.

To the Shareholders of Berkshire Hathaway Inc.:

The per-share book value of both our Class A and Class B stock increased by 4.6% in 2011. Over the last 47 years (that is, since present management took over), book value has grown from $19 to $99,860, a rate of 19.8% compounded annually.*

Charlie Munger, Berkshire's Vice Chairman and my partner, and I feel good about the company's progress during 2011. Here are the highlights:

- The primary job of a Board of Directors is to see that the right people are running the business and to be sure that the next generation of leaders is identified and ready to take over *tomorrow*. I have been on 19 corporate boards, and Berkshire's directors are at the top of the list in the time and diligence they have devoted to succession planning. What's more, their efforts have paid off.

  As 2011 started, Todd Combs joined us as an investment manager, and shortly after yearend Ted Weschler came aboard. Both of these men have outstanding investment skills and a deep commitment to Berkshire. Each will be handling a few billion dollars in 2012, but they have the brains, judgment and character to manage our entire portfolio when Charlie and I are no longer running Berkshire.

  Your Board is equally enthusiastic about my successor as CEO, an individual to whom they have had a great deal of exposure and whose managerial and human qualities they admire. (We have two superb back-up candidates as well.) When a transfer of responsibility is required, it will be seamless, and Berkshire's prospects will remain bright. More than 98% of my net worth is in Berkshire stock, all of which will go to various philanthropies. Being so heavily concentrated in one stock defies conventional wisdom. But I'm fine with this arrangement, knowing both the quality and diversity of the businesses we own and the caliber of the people who manage them. With these assets, my successor will enjoy a running start. Do not, however, infer from this discussion that Charlie and I are going anywhere; we continue to be in excellent health, and we love what we do.

- On September 16th we acquired Lubrizol, a worldwide producer of additives and other specialty chemicals. The company has had an outstanding record since James Hambrick became CEO in 2004, with pre-tax profits increasing from $147 million to $1,085 million. Lubrizol will have many opportunities for "bolt-on" acquisitions in the specialty chemical field. Indeed, we've already agreed to three, costing $493 million. James is a disciplined buyer and a superb operator. Charlie and I are eager to expand his managerial domain.

- Our major businesses did well last year. In fact, *each* of our five largest non-insurance companies – BNSF, Iscar, Lubrizol, Marmon Group and MidAmerican Energy – delivered record operating earnings. In aggregate these businesses earned more than $9 billion pre-tax in 2011. Contrast that to seven years ago, when we owned only one of the five, MidAmerican, whose pre-tax earnings were $393 million. Unless the economy weakens in 2012, *each* of our fabulous five should again set a record, with aggregate earnings comfortably topping $10 billion.

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* All per-share figures used in this report apply to Berkshire's A shares. Figures for the B shares are 1/1500th of those shown for A.

- In total, our entire string of operating companies spent $8.2 billion for property, plant and equipment in 2011, smashing our previous record by more than $2 billion. About 95% of these outlays were made in the U.S., a fact that may surprise those who believe our country lacks investment opportunities. We welcome projects abroad, but expect the overwhelming majority of Berkshire's future capital commitments to be in America. In 2012, these expenditures will again set a record.

- Our insurance operations continued their delivery of costless capital that funds a myriad of other opportunities. This business produces "float" – money that doesn't belong to us, but that we get to invest for Berkshire's benefit. And if we pay out less in losses and expenses than we receive in premiums, we additionally earn an underwriting profit, meaning the float costs us less than nothing. Though we are sure to have underwriting losses from time to time, we've now had nine consecutive years of underwriting profits, totaling about $17 billion. Over the same nine years our float increased from $41 billion to its current record of $70 billion. Insurance has been good to us.

- Finally, we made two major investments in marketable securities: (1) a $5 billion 6% preferred stock of Bank of America that came with warrants allowing us to buy 700 million common shares at $7.14 per share any time before September 2, 2021; and (2) 63.9 million shares of IBM that cost us $10.9 billion. Counting IBM, we now have large ownership interests in four exceptional companies: 13.0% of American Express, 8.8% of Coca-Cola, 5.5% of IBM and 7.6% of Wells Fargo. (We also, of course, have many smaller, but important, positions.)

  We view these holdings as partnership interests in wonderful businesses, not as marketable securities to be bought or sold based on their near-term prospects. Our share of *their* earnings, however, are far from fully reflected in *our* earnings; only the dividends we receive from these businesses show up in our financial reports. Over time, though, the undistributed earnings of these companies that are attributable to our ownership are of huge importance to us. That's because they will be used in a variety of ways to increase future earnings and dividends of the investee. They may also be devoted to stock repurchases, which will increase our share of the company's future earnings.

  Had we owned our present positions throughout last year, our dividends from the "Big Four" would have been $862 million. That's all that would have been reported in Berkshire's income statement. Our share of this quartet's earnings, however, would have been far greater: $3.3 billion. Charlie and I believe that the $2.4 billion that goes unreported on our books creates at least that amount of value for Berkshire as it fuels earnings gains in future years. We expect the combined earnings of the four – and their dividends as well – to increase in 2012 and, for that matter, almost every year for a long time to come. A decade from now, our current holdings of the four companies might well account for earnings of $7 billion, of which $2 billion in dividends would come to us.

  I've run out of good news. Here are some developments that hurt us during 2011:

- A few years back, I spent about $2 billion buying several bond issues of Energy Future Holdings, an electric utility operation serving portions of Texas. That was a mistake – a *big* mistake. In large measure, the company's prospects were tied to the price of natural gas, which tanked shortly after our purchase and remains depressed. Though we have annually received interest payments of about $102 million since our purchase, the company's ability to pay will soon be exhausted unless gas prices rise substantially. We wrote down our investment by $1 billion in 2010 and by an additional $390 million last year.

  At yearend, we carried the bonds at their market value of $878 million. If gas prices remain at present levels, we will likely face a further loss, perhaps in an amount that will virtually wipe out our current carrying value. Conversely, a substantial increase in gas prices might allow us to recoup some, or even all, of our write-down. However things turn out, I totally miscalculated the gain/loss probabilities when I purchased the bonds. In tennis parlance, this was a major unforced error by your chairman.

- Three large and very attractive fixed-income investments were called away from us by their issuers in 2011. Swiss Re, Goldman Sachs and General Electric paid us an aggregate of $12.8 billion to redeem securities that were producing about $1.2 billion of pre-tax earnings for Berkshire. That's a lot of income to replace, though our Lubrizol purchase did offset most of it.

- Last year, I told you that "a housing recovery will probably begin within a year or so." I was dead wrong. We have five businesses whose results are significantly influenced by housing activity. The connection is direct at Clayton Homes, which is the largest producer of homes in the country, accounting for about 7% of those constructed during 2011.

  Additionally, Acme Brick, Shaw (carpet), Johns Manville (insulation) and MiTek (building products, primarily connector plates used in roofing) are all materially affected by construction activity. In aggregate, our five housing-related companies had pre-tax profits of $513 million in 2011. That's similar to 2010 but down from $1.8 billion in 2006.

  Housing will come back – you can be sure of that. Over time, the number of housing units necessarily matches the number of households (after allowing for a normal level of vacancies). For a period of years prior to 2008, however, America added more housing units than households. Inevitably, we ended up with far too many units and the bubble popped with a violence that shook the entire economy. That created still another problem for housing: Early in a recession, household formations slow, and in 2009 the decrease was dramatic.

  That devastating supply/demand equation is now reversed: Every day we are creating more households than housing units. People may postpone hitching up during uncertain times, but eventually hormones take over. And while "doubling-up" may be the initial reaction of some during a recession, living with in-laws can quickly lose its allure.

  At our current annual pace of 600,000 housing starts – considerably less than the number of new households being formed – buyers and renters are sopping up what's left of the old oversupply. (This process will run its course at different rates around the country; the supply-demand situation varies widely by locale.) While this healing takes place, however, our housing-related companies sputter, employing only 43,315 people compared to 58,769 in 2006. This hugely important sector of the economy, which includes not only construction but everything that feeds off of it, remains in a *depression* of its own. I believe this is the major reason a recovery in employment has so severely lagged the steady and substantial comeback we have seen in almost all other sectors of our economy.

  Wise monetary and fiscal policies play an important role in tempering recessions, but these tools don't create households nor eliminate excess housing units. Fortunately, demographics and our market system will restore the needed balance – probably before long. When that day comes, we will again build one million or more residential units annually. I believe pundits will be surprised at how far unemployment drops once that happens. They will then reawake to what has been true since 1776: America's best days lie ahead.

Intrinsic Business Value

Charlie and I measure our performance by the rate of gain in Berkshire's per-share intrinsic business value. If our gain over time outstrips the performance of the S&P 500, we have earned our paychecks. If it doesn't, we are overpaid at any price.

We have no way to pinpoint intrinsic value. But we do have a useful, *though considerably understated*, proxy for it: per-share book value. This yardstick is meaningless at most companies. At Berkshire, however, book value very roughly tracks business values. That's because the amount by which Berkshire's intrinsic value exceeds book value does not swing wildly from year to year, though it increases in most years. Over time, the divergence will likely become ever more substantial in absolute terms, remaining reasonably steady, however, on a percentage basis as both the numerator and denominator of the business-value/book-value equation increase.

We've regularly emphasized that our book-value performance is almost certain to outpace the S&P 500 in a bad year for the stock market and just as certainly will fall short in a strong up-year. The test is how we do over time. Last year's annual report included a table laying out results for the 42 five-year periods since we took over at Berkshire in 1965 (i.e., 1965-69, 1966-70, etc.). All showed our book value beating the S&P, and our string held for 2007-11. It will almost certainly snap, though, if the S&P 500 should put together a five-year winning streak (which it may well be on its way to doing as I write this).

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I also included two tables last year that set forth the key quantitative ingredients that will help you estimate our per-share intrinsic value. I won't repeat the full discussion here; you can find it reproduced on pages 99-100. To update the tables shown there, our per-share investments in 2011 increased 4% to $98,366, and our pre-tax earnings from businesses other than insurance and investments increased 18% to $6,990 per share.

Charlie and I like to see gains in both areas, but our primary focus is on building operating earnings. Over time, the businesses we currently own should increase their aggregate earnings, and we hope also to purchase some large operations that will give us a further boost. We now have eight subsidiaries that would each be included in the Fortune 500 were they stand-alone companies. That leaves only 492 to go. My task is clear, and I'm on the prowl.

Share Repurchases

Last September, we announced that Berkshire would repurchase its shares at a price of up to 110% of book value. We were in the market for only a few days – buying $67 million of stock – before the price advanced beyond our limit. Nonetheless, the general importance of share repurchases suggests I should focus for a bit on the subject.

Charlie and I favor repurchases when two conditions are met: first, a company has ample funds to take care of the operational and liquidity needs of its business; second, its stock is selling at a material discount to the company's intrinsic business value, conservatively calculated.

We have witnessed many bouts of repurchasing that failed our second test. Sometimes, of course, infractions – even serious ones – are innocent; many CEOs never stop believing their stock is cheap. In other instances, a less benign conclusion seems warranted. It doesn't suffice to say that repurchases are being made to offset the dilution from stock issuances or simply because a company has excess cash. Continuing shareholders are *hurt* unless shares are purchased below intrinsic value. The first law of capital allocation – whether the money is slated for acquisitions or share repurchases – is that what is smart at one price is dumb at another. (One CEO who always stresses the price/value factor in repurchase decisions is Jamie Dimon at J.P. Morgan; I recommend that you read his annual letter.)

Charlie and I have mixed emotions when Berkshire shares sell well below intrinsic value. We like making money for continuing shareholders, and there is no surer way to do that than by buying an asset – our own stock – that we know to be worth *at least* x for less than that – for .9x, .8x or even lower. (As one of our directors says, it's like shooting fish in a barrel, *after* the barrel has been drained and the fish have quit flopping.) Nevertheless, we don't enjoy cashing out partners at a discount, even though our doing so may give the selling shareholders a slightly higher price than they would receive if our bid was absent. When we are buying, therefore, we want those exiting partners to be fully informed about the value of the assets they are selling.

At our limit price of 110% of book value, repurchases clearly increase Berkshire's per-share intrinsic value. And the more and the cheaper we buy, the greater the gain for continuing shareholders. Therefore, if given the opportunity, we will likely repurchase stock aggressively at our price limit or lower. You should know, however, that we have no interest in supporting the stock and that our bids will fade in particularly weak markets. Nor will we buy shares if our cash-equivalent holdings are below $20 billion. At Berkshire, financial strength that is unquestionable takes precedence over all else.

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This discussion of repurchases offers me the chance to address the irrational reaction of many investors to changes in stock prices. When Berkshire buys stock in a company that is repurchasing shares, we hope for two events: First, we have the normal hope that earnings of the business will increase at a good clip for a long time to come; and second, we also hope that the stock *underperforms* in the market for a long time as well. A corollary to this second point: "Talking our book" about a stock we own – were that to be effective – would actually be harmful to Berkshire, not helpful as commentators customarily assume.

Let's use IBM as an example. As all business observers know, CEOs Lou Gerstner and Sam Palmisano did a superb job in moving IBM from near-bankruptcy twenty years ago to its prominence today. Their operational accomplishments were truly extraordinary.

But their financial management was equally brilliant, particularly in recent years as the company's financial flexibility improved. Indeed, I can think of no major company that has had better financial management, a skill that has materially increased the gains enjoyed by IBM shareholders. The company has used debt wisely, made value-adding acquisitions almost exclusively for cash and aggressively repurchased its own stock.

Today, IBM has 1.16 billion shares outstanding, of which we own about 63.9 million or 5.5%. Naturally, what happens to the company's earnings over the next five years is of enormous importance to us. Beyond that, the company will likely spend $50 billion or so in those years to repurchase shares. Our quiz for the day: What should a long-term shareholder, such as Berkshire, cheer for during that period?

I won't keep you in suspense. We should wish for IBM's stock price to *languish* throughout the five years.

Let's do the math. If IBM's stock price averages, say, $200 during the period, the company will acquire 250 million shares for its $50 billion. There would consequently be 910 million shares outstanding, and we would own about 7% of the company. If the stock conversely sells for an average of $300 during the five-year period, IBM will acquire only 167 million shares. That would leave about 990 million shares outstanding after five years, of which we would own 6.5%.

If IBM were to earn, say, $20 billion in the fifth year, our share of those earnings would be a full $100 million greater under the "disappointing" scenario of a lower stock price than they would have been at the higher price. At some later point our shares would be worth perhaps $1½ billion more than if the "high-price" repurchase scenario had taken place.

The logic is simple: If you are going to be a net buyer of stocks in the future, either directly with your own money or indirectly (through your ownership of a company that is repurchasing shares), you are *hurt* when stocks rise. You benefit when stocks swoon. *Emotions*, however, too often complicate the matter: Most people, including those who will be net buyers in the future, take comfort in seeing stock prices advance. These shareholders resemble a commuter who rejoices after the price of gas increases, simply because his tank contains a day's supply.

Charlie and I don't expect to win many of you over to our way of thinking – we've observed enough human behavior to know the futility of that – but we do want you to be aware of our personal calculus. And here a confession is in order: In my early days I, too, rejoiced when the market rose. Then I read Chapter Eight of Ben Graham's *The Intelligent Investor*, the chapter dealing with how investors should view fluctuations in stock prices. Immediately the scales fell from my eyes, and low prices became my friend. Picking up that book was one of the luckiest moments in my life.

In the end, the success of our IBM investment will be determined primarily by its future earnings. But an important secondary factor will be how many shares the company purchases with the substantial sums it is likely to devote to this activity. And if repurchases ever reduce the IBM shares outstanding to 63.9 million, I will abandon my famed frugality and give Berkshire employees a paid holiday.

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Now, let's examine the four major sectors of our operations. Each has vastly different balance sheet and income characteristics from the others. Lumping them together therefore impedes analysis. So we'll present them as four separate businesses, which is how Charlie and I view them. Because we may be repurchasing Berkshire shares from some of you, we will offer our thoughts in each section as to how intrinsic value compares to carrying value.

Insurance

Let's look first at insurance, Berkshire's core operation and the engine that has propelled our expansion over the years.

Property-casualty ("P/C") insurers receive premiums upfront and pay claims later. In extreme cases, such as those arising from certain workers' compensation accidents, payments can stretch over decades. This collect-now, pay-later model leaves us holding large sums – money we call "float" – that will eventually go to others. Meanwhile, we get to invest this float for Berkshire's benefit. Though individual policies and claims come and go, the amount of float we hold remains remarkably stable in relation to premium volume. Consequently, as our business grows, so does our float. And how we have grown, as the following table shows:

Year	*Float (in $ millions)*
1970	$ 39
1980	237
1990	1,632
2000	27,871
2010	65,832
2011	70,571

It's unlikely that our float will grow much – if at all – from its current level. That's mainly because we already have an outsized amount relative to our premium volume. Were there to be a *decline* in float, I will add, it would almost certainly be *very* gradual and therefore impose no unusual demand for funds on us.

If our premiums exceed the total of our expenses and eventual losses, we register an underwriting profit that adds to the investment income our float produces. When such a profit occurs, we enjoy the use of free money – and, better yet, get *paid* for holding it. Unfortunately, the wish of all insurers to achieve this happy result creates intense competition, so vigorous in most years that it causes the P/C industry as a whole to operate at a significant underwriting *loss*. For example, State Farm, by far the country's largest insurer and a well-managed company besides, has incurred an underwriting loss in eight of the last eleven years. There are a lot of ways to lose money in insurance, and the industry is resourceful in creating new ones.

As noted in the first section of this report, we have now operated at an underwriting profit for nine consecutive years, our gain for the period having totaled $17 billion. I believe it likely that we will continue to underwrite profitably in most – though certainly not all – future years. If we accomplish that, our float will be better than cost-free. We will profit just as we would if some party deposited $70.6 billion with us, paid us a fee for holding its money and then let us invest its funds for our own benefit.

So how does this attractive float affect intrinsic value calculations? Our float is deducted *in full* as a liability in calculating Berkshire's book value, just as if we had to pay it out tomorrow and were unable to replenish it. But that's an incorrect way to view float, which should instead be viewed as a revolving fund. If float is both costless and long-enduring, the true value of this liability is *far* lower than the accounting liability.

Partially offsetting this overstated liability is $15.5 billion of "goodwill" attributable to our insurance companies that is included in book value as an asset. In effect, this goodwill represents the price we paid for the float-generating capabilities of our insurance operations. The cost of the goodwill, however, has *no* bearing on its true value. If an insurance business produces large and sustained underwriting losses, any goodwill asset attributable to it should be deemed valueless, whatever its original cost.

Fortunately, that's not the case at Berkshire. Charlie and I believe the true economic value of our insurance goodwill – what *we* would pay to purchase float *of similar quality* – to be far in excess of its historic carrying value. The value of our float is one reason – a huge reason – why we believe Berkshire's intrinsic business value substantially exceeds book value.

Let me emphasize once again that cost-free float is *not* an outcome to be expected for the P/C industry as a whole: We don't think there is much "Berkshire-quality" float existing in the insurance world. In most years, including 2011, the industry's premiums have been inadequate to cover claims plus expenses. Consequently, the

industry's overall return on tangible equity has for many decades fallen far short of the average return realized by American industry, a sorry performance almost certain to continue. Berkshire's outstanding economics exist only because we have some terrific managers running some extraordinary insurance operations. Let me tell you about the major units.

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First by float size is the Berkshire Hathaway Reinsurance Group, run by Ajit Jain. Ajit insures risks that no one else has the desire or the capital to take on. His operation combines capacity, speed, decisiveness and, most importantly, brains in a manner that is unique in the insurance business. Yet he never exposes Berkshire to risks that are inappropriate in relation to our resources. Indeed, we are *far* more conservative in that respect than most large insurers. For example, if the insurance industry should experience a $250 billion loss from some mega-catastrophe – a loss about triple anything it has ever faced – Berkshire as a whole would likely record a moderate profit for the year because of its many streams of earnings. Concurrently, all other major insurers and reinsurers would be far in the red, and some would face insolvency.

From a standing start in 1985, Ajit has created an insurance business with float of $34 billion and significant underwriting profits, a feat that no CEO of any other insurer has come close to matching. By these accomplishments, he has added a great many billions of dollars to the value of Berkshire. Charlie would gladly trade me for a second Ajit. Alas, there is none.

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We have another insurance powerhouse in General Re, managed by Tad Montross.

At bottom, a sound insurance operation needs to adhere to four disciplines. It must (1) understand *all* exposures that might cause a policy to incur losses; (2) conservatively evaluate the likelihood of any exposure actually causing a loss and the probable cost if it does; (3) set a premium that will deliver a profit, on average, after both prospective loss costs and operating expenses are covered; and (4) be willing to walk away if the appropriate premium can't be obtained.

Many insurers pass the first three tests and flunk the fourth. They simply can't turn their back on business that their competitors are eagerly writing. That old line, "The other guy is doing it so we must as well," spells trouble in any business, but in none more so than insurance. Indeed, a good underwriter needs an independent mindset akin to that of the senior citizen who received a call from his wife while driving home. "Albert, be careful," she warned, "I just heard on the radio that there's a car going the wrong way down the Interstate." "Mabel, they don't know the half of it," replied Albert, "It's not just one car, there are hundreds of them."

Tad has observed all four of the insurance commandments, and it shows in his results. General Re's huge float has been better than cost-free under his leadership, and we expect that, on average, it will continue to be. In the first few years after we acquired it, General Re was a major headache. Now it's a treasure.

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Finally, there is GEICO, the insurer on which I cut my teeth 61 years ago. GEICO is run by Tony Nicely, who joined the company at 18 and completed 50 years of service in 2011.

GEICO's much-envied record comes from Tony's brilliant execution of a superb and almost-impossible-to-replicate business model. During Tony's 18-year tenure as CEO, our market share has grown from 2.0% to 9.3%. If it had instead remained static – as it had for more than a decade before he took over – our premium volume would now be $3.3 billion rather than the $15.4 billion we attained in 2011. The extra value created by Tony and his associates is a major element in Berkshire's excess of intrinsic value over book value.

There is still more than 90% of the auto-insurance market left for GEICO to rake in. Don't bet against Tony acquiring chunks of it year after year in the future. Our low costs permit low prices, and every day more Americans discover that the Gecko is doing them a favor when he urges them to visit GEICO.com for a quote. (Our lizard has another endearing quality: Unlike human spokesmen or spokeswomen who expensively represent other insurance companies, our little fellow has no agent.)

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In addition to our three major insurance operations, we own a group of smaller companies, most of them plying their trade in odd corners of the insurance world. In aggregate, their results have consistently been profitable and the float they provide us is substantial. Charlie and I treasure these companies and their managers.

At yearend, we acquired Princeton Insurance, a New Jersey writer of medical malpractice policies. This bolt-on transaction expands the managerial domain of Tim Kenesey, the star CEO of Medical Protective, our Indiana-based med-mal insurer. Princeton brings with it more than $600 million of float, an amount that is included in the following table.

Here is the record of all four segments of our property-casualty and life insurance businesses:

	Underwriting Profit		*Yearend Float*	
	(in millions)			
Insurance Operations	*2011*	*2010*	*2011*	*2010*
BH Reinsurance	$(714)	$ 176	$33,728	$30,370
General Re	144	452	19,714	20,049
GEICO	576	1,117	11,169	10,272
Other Primary	242	268	5,960	5,141
	$ 248	$2,013	$70,571	$65,832

Among large insurance operations, Berkshire's impresses me as the best in the world.

Regulated, Capital-Intensive Businesses

We have two very large businesses, BNSF and MidAmerican Energy, that have important common characteristics distinguishing them from our many other businesses. Consequently, we assign them their own sector in this letter and also split out their combined financial statistics in our GAAP balance sheet and income statement.

A key characteristic of both companies is the huge investment they have in very long-lived, regulated assets, with these partially funded by large amounts of long-term debt that is *not* guaranteed by Berkshire. Our credit is not needed: Both businesses have earning power that even under terrible business conditions amply covers their interest requirements. In a less than robust economy during 2011, for example, BNSF's interest coverage was 9.5x. At MidAmerican, meanwhile, two key factors ensure its ability to service debt under all circumstances: The stability of earnings that is inherent in our exclusively offering an essential service and a diversity of earnings streams, which shield it from the actions of any single regulatory body.

Measured by ton-miles, rail moves 42% of America's inter-city freight, and BNSF moves more than any other railroad – about 37% of the industry total. A little math will tell you that about 15% of *all* inter-city ton-miles of freight in the U.S. is transported by BNSF. It is no exaggeration to characterize railroads as the circulatory system of our economy. Your railroad is the largest artery.

All of this places a huge responsibility on us. We must, without fail, maintain and improve our 23,000 miles of track along with 13,000 bridges, 80 tunnels, 6,900 locomotives and 78,600 freight cars. This job requires us to have ample financial resources under *all* economic scenarios and to have the human talent that can instantly and effectively deal with the vicissitudes of nature, such as the widespread flooding BNSF labored under last summer.

To fulfill its societal obligation, BNSF regularly invests far more than its depreciation charge, with the excess amounting to $1.8 billion in 2011. The three other major U.S. railroads are making similar outlays. Though many people decry our country's inadequate infrastructure spending, that criticism cannot be levied against the railroad industry. It is pouring money – *funds from the private sector* – into the investment projects needed to provide better and more extensive service in the future. If railroads were not making these huge expenditures, our country's publicly-financed highway system would face even greater congestion and maintenance problems than exist today.

Massive investments of the sort that BNSF is making would be foolish if it could not earn appropriate returns on the incremental sums it commits. But I am confident it will do so because of the value it delivers. Many years ago Ben Franklin counseled, "Keep thy shop, and thy shop will keep thee." Translating this to our regulated businesses, he might today say, "Take care of your customer, and the regulator – your customer's representative – will take care of you." Good behavior by each party begets good behavior in return.

At MidAmerican, we participate in a similar "social compact." We are expected to put up ever-increasing sums to satisfy the future needs of our customers. If we meanwhile operate reliably and efficiently, we know that we will obtain a fair return on these investments.

MidAmerican, 89.8% owned by Berkshire, supplies 2.5 million customers in the U.S. with electricity, operating as the largest supplier in Iowa, Utah and Wyoming and as an important provider in six other states as well. Our pipelines transport 8% of the country's natural gas. Obviously, many millions of Americans depend on us every day. They haven't been disappointed.

When MidAmerican purchased Northern Natural Gas pipeline in 2002, that company's performance as a pipeline was rated dead last, 43 out of 43, by the leading authority in the field. In the most recent report, Northern Natural was ranked second. The top spot was held by our other pipeline, Kern River.

In its electric business, MidAmerican has a comparable record. In the most recent survey of customer satisfaction, MidAmerican's U.S. utilities ranked second among 60 utility groups surveyed. The story was far different not many years back when MidAmerican acquired these properties.

MidAmerican will have 3,316 megawatts of wind generation in operation by the end of 2012, far more than any other regulated electric utility in the country. The total amount that we have invested or committed to wind is a staggering $6 billion. We can make this sort of investment because MidAmerican retains *all* of its earnings, unlike other utilities that generally pay out most of what they earn. In addition, late last year we took on two solar projects – one 100%-owned in California and the other 49%-owned in Arizona – that will cost about $3 billion to construct. Many more wind and solar projects will almost certainly follow.

As you can tell by now, I am proud of what has been accomplished for our society by Matt Rose at BNSF and by Greg Abel at MidAmerican. I am also both proud and grateful for what they have accomplished for Berkshire shareholders. Below are the relevant figures:

MidAmerican	*Earnings (in millions)*	
	2011	*2010*
U.K. utilities	$ 469	$ 333
Iowa utility	279	279
Western utilities	771	783
Pipelines	388	378
HomeServices	39	42
Other (net)	36	47
Operating earnings before corporate interest and taxes	1,982	1,862
Interest, other than to Berkshire	(323)	(323)
Interest on Berkshire junior debt	(13)	(30)
Income tax	(315)	(271)
Net earnings	$1,331	$1,238
Earnings applicable to Berkshire*	$1,204	$1,131

*Includes interest earned by Berkshire (net of related income taxes) of $8 in 2011 and $19 in 2010.

BNSF *(Historical accounting through 2/12/10; purchase accounting subsequently)*	*(in millions)*	
	2011	*2010*
Revenues	$19,548	$16,850
Operating earnings	5,310	4,495
Interest (Net)	560	507
Pre-Tax earnings	4,741	3,988
Net earnings	2,972	2,459

In the book value recorded on our balance sheet, BNSF and MidAmerican carry substantial goodwill components totaling $20 billion. In each instance, however, Charlie and I believe current intrinsic value is far greater than book value.

Manufacturing, Service and Retailing Operations

Our activities in this part of Berkshire cover the waterfront. Let's look, though, at a summary balance sheet and earnings statement for the entire group.

Balance Sheet 12/31/11 (in millions)

Assets		*Liabilities and Equity*	
Cash and equivalents	$ 4,241	Notes payable	$ 1,611
Accounts and notes receivable	6,584	Other current liabilities	15,124
Inventory	8,975	Total current liabilities	16,735
Other current assets	631		
Total current assets	20,431		
		Deferred taxes	4,661
Goodwill and other intangibles	24,755	Term debt and other liabilities	6,214
Fixed assets	17,866	Non-controlling interests	2,410
Other assets	3,661	Berkshire equity	36,693
	$66,713		$66,713

Earnings Statement (in millions)

	*2011***	*2010*	*2009*
Revenues	$72,406	$66,610	$61,665
Operating expenses (including depreciation of $1,431 in 2011, $1,362 in 2010 and $1,422 in 2009)	67,239	62,225	59,509
Interest expense	130	111	98
Pre-tax earnings	5,037*	4,274*	2,058*
Income taxes and non-controlling interests	1,998	1,812	945
Net earnings	$ 3,039	$ 2,462	$ 1,113

*Does not include purchase-accounting adjustments.
**Includes earnings of Lubrizol from September 16.

This group of companies sells products ranging from lollipops to jet airplanes. Some of the businesses enjoy terrific economics, measured by earnings on unleveraged net *tangible* assets that run from 25% after-tax to more than 100%. Others produce good returns in the area of 12-20%. A few, however, have very poor returns, a result of some serious mistakes I made in my job of capital allocation. These errors came about because I misjudged either the competitive strength of the business being purchased or the future economics of the industry in which it operated. I try to look out ten or twenty years when making an acquisition, but sometimes my eyesight has been poor. Charlie's has been better; he voted no more than "present" on several of my errant purchases.

Berkshire's newer shareholders may be puzzled over our decision to hold on to my mistakes. After all, their earnings can never be consequential to Berkshire's valuation, and problem companies require more managerial time than winners. Any management consultant or Wall Street advisor would look at our laggards and say "dump them."

That won't happen. For 29 years, we have regularly laid out Berkshire's economic principles in these reports (pages 93-98) and Number 11 describes our general reluctance to sell poor performers (which, in most cases, lag because of industry factors rather than managerial shortcomings). Our approach is far from Darwinian, and many of you may disapprove of it. I can understand your position. However, we have made – and continue to make – a commitment to the sellers of businesses we buy that we will retain those businesses through thick and thin. So far, the dollar cost of that commitment has not been substantial and may well be offset by the goodwill it builds among prospective sellers looking for the right permanent home for their treasured business and loyal associates. These owners know that what they get with us can't be delivered by others and that our commitments will be good for many decades to come.

Please understand, however, that Charlie and I are neither masochists nor Pollyannas. If either of the failings we set forth in Rule 11 is present – if the business will likely be a cash drain over the longer term, or if labor strife is endemic – we will take prompt and decisive action. Such a situation has happened only a couple of times in our 47-year history, and none of the businesses we now own is in straits requiring us to consider disposing of it.

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The steady and substantial comeback in the U.S. economy since mid-2009 is clear from the earnings shown at the front of this section. This compilation includes 54 of our companies. But one of these, Marmon, is itself the owner of 140 operations in eleven distinct business sectors. In short, when you look at Berkshire, you are looking across corporate America. So let's dig a little deeper to gain a greater insight into what has happened in the last few years.

The four housing-related companies in this section (a group that excludes Clayton, which is carried under Finance and Financial Products) had aggregate pre-tax earnings of $227 million in 2009, $362 million in 2010 and $359 million in 2011. If you subtract these earnings from those in the combined statement, you will see that our multiple and diverse *non-housing* operations earned $1,831 million in 2009, $3,912 million in 2010 and $4,678 million in 2011. About $291 million of the 2011 earnings came from the Lubrizol acquisition. The profile of the remaining 2011 earnings – $4,387 million – illustrates the comeback of much of America from the devastation wrought by the 2008 financial panic. Though housing-related businesses remain in the emergency room, most other businesses have left the hospital with their health fully restored.

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Almost all of our managers delivered outstanding performances last year, among them those managers who run housing-related businesses and were therefore fighting hurricane-force headwinds. Here are a few examples:

- Vic Mancinelli again set a record at CTB, our agricultural equipment operation. We purchased CTB in 2002 for $139 million. It has subsequently distributed $180 million to Berkshire, last year earned $124 million pre-tax and has $109 million in cash. Vic has made a number of bolt-on acquisitions over the years, including a meaningful one he signed up after yearend.

- TTI, our electric components distributor, increased its sales to a record $2.1 billion, up 12.4% from 2010. Earnings also hit a record, up 127% from 2007, the year in which we purchased the business. In 2011, TTI performed far better than the large publicly-traded companies in its field. That's no surprise: Paul Andrews and his associates have been besting them for years. Charlie and I are delighted that Paul negotiated a large bolt-on acquisition early in 2012. We hope more follow.

- Iscar, our 80%-owned cutting-tools operation, continues to amaze us. Its sales growth and overall performance are unique in its industry. Iscar's managers – Eitan Wertheimer, Jacob Harpaz and Danny Goldman – are brilliant strategists and operators. When the economic world was cratering in November 2008, they stepped up to buy Tungaloy, a leading Japanese cutting-tool manufacturer. Tungaloy suffered significant damage when the tsunami hit north of Tokyo last spring. But you wouldn't know that now: Tungaloy went on to set a sales record in 2011. I visited the Iwaki plant in November and was inspired by the dedication and enthusiasm of Tungaloy's management, as well as its staff. They are a wonderful group and deserve your admiration and thanks.

- McLane, our huge distribution company that is run by Grady Rosier, added important new customers in 2011 and set a pre-tax earnings record of $370 million. Since its purchase in 2003 for $1.5 billion, the company has had pre-tax earnings of $2.4 billion and also increased its LIFO reserve by $230 million because the prices of the retail products it distributes (candy, gum, cigarettes, etc.) have risen. Grady runs a logistical machine second to none. You can look for bolt-ons at McLane, particularly in our new wine-and-spirits distribution business.

- Jordan Hansell took over at NetJets in April and delivered 2011 pre-tax earnings of $227 million. That is a particularly impressive performance because the sale of new planes was slow during most of the year. In December, however, there was an uptick that was more than seasonally normal. How permanent it will be is uncertain.

  A few years ago NetJets was my number one worry: Its costs were far out of line with revenues, and cash was hemorrhaging. Without Berkshire's support, NetJets would have gone broke. These problems are behind us, and Jordan is now delivering steady profits from a well-controlled and smoothly-running operation. NetJets is proceeding on a plan to enter China with some first-class partners, a move that will widen our business "moat." No other fractional-ownership operator has remotely the size and breadth of the NetJets operation, and none ever will. NetJets' unrelenting focus on safety and service has paid off in the marketplace.

- It's a joy to watch Marmon's progress under Frank Ptak's leadership. In addition to achieving internal growth, Frank regularly makes bolt-on acquisitions that, in aggregate, will materially increase Marmon's earning power. (He did three, costing about $270 million, in the last few months.) Joint ventures around the world are another opportunity for Marmon. At midyear Marmon partnered with the Kundalia family in an Indian crane operation that is already delivering substantial profits. This is Marmon's second venture with the family, following a successful wire and cable partnership instituted a few years ago.

  Of the eleven major sectors in which Marmon operates, ten delivered gains in earnings last year. You can be confident of higher earnings from Marmon in the years ahead.

- "Buy commodities, sell brands" has long been a formula for business success. It has produced enormous and sustained profits for Coca-Cola since 1886 and Wrigley since 1891. On a smaller scale, we have enjoyed good fortune with this approach at See's Candy since we purchased it 40 years ago.

  Last year See's had record pre-tax earnings of $83 million, bringing its total since we bought it to $1.65 billion. Contrast that figure with our purchase price of $25 million and our yearend carrying-value (net of cash) of less than zero. (Yes, you read that right; capital employed at See's fluctuates seasonally, hitting a low after Christmas.) Credit Brad Kinstler for taking the company to new heights since he became CEO in 2006.

- Nebraska Furniture Mart (80% owned) set an earnings record in 2011, netting more than ten times what it did in 1983, when we acquired our stake.

  But that's not the big news. More important was NFM's acquisition of a 433-acre tract north of Dallas on which we will build what is almost certain to be the highest-volume home-furnishings store in the country. Currently, that title is shared by our two stores in Omaha and Kansas City, each of which had record-setting sales of more than $400 million in 2011. It will be several years before the Texas store is completed, but I look forward to cutting the ribbon at the opening. (At Berkshire, the managers do the work; I take the bows.)

  Our new store, which will offer an unequalled variety of merchandise sold at prices that can't be matched, will bring huge crowds from near and far. This drawing power and our extensive holdings of land at the site should enable us to attract a number of other major stores. (If any high-volume retailers are reading this, contact me.)

  Our experience with NFM and the Blumkin family that runs it has been a real joy. The business was built by Rose Blumkin (known to all as "Mrs. B"), who started the company in 1937 with $500 and a dream. She sold me our interest when she was 89 and worked until she was 103. (After retiring, she died the next year, a sequence I point out to any other Berkshire manager who even thinks of retiring.)

  Mrs. B's son, Louie, now 92, helped his mother build the business after he returned from World War II and, along with his wife, Fran, has been my friend for 55 years. In turn, Louie's sons, Ron and Irv, have taken the company to new heights, first opening the Kansas City store and now gearing up for Texas.

The "boys" and I have had many great times together, and I count them among my best friends. The Blumkins are a remarkable family. Never inclined to let an extraordinary gene pool go to waste, I am rejoicing these days because several members of the fourth Blumkin generation have joined NFM.

Overall, the intrinsic value of the businesses in this Berkshire sector significantly exceeds their book value. For many of the smaller companies, however, this is not true. I have made more than my share of mistakes buying small companies. Charlie long ago told me, "If something's not worth doing at all, it's not worth doing well," and I should have listened harder. In any event, our large purchases have generally worked well – extraordinarily well in a few cases – and overall this sector is a winner for us.

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Certain shareholders have told me they hunger for more discussions of accounting arcana. So here's a bit of GAAP-mandated nonsense I hope both of them enjoy.

Common sense would tell you that our varied subsidiaries should be carried on our books at their cost plus the earnings they have retained since our purchase (unless their economic value has materially decreased, in which case an appropriate write-down must be taken). And that's essentially the reality at Berkshire – except for the weird situation at Marmon.

We purchased 64% of the company in 2008 and put this interest on our books at our cost, $4.8 billion. So far, so good. Then, in early 2011, pursuant to our original contract with the Pritzker family, we purchased an additional 16%, paying $1.5 billion as called for by a formula that reflected Marmon's increased value. In this instance, however, we were required to immediately write off $614 million of the purchase price retroactive to the end of 2010. (Don't ask!) Obviously, this write-off had no connection to economic reality. The excess of Marmon's intrinsic value over its carrying value is widened by this meaningless write-down.

Finance and Financial Products

This sector, our smallest, includes two rental companies, XTRA (trailers) and CORT (furniture), and Clayton Homes, the country's leading producer and financer of manufactured homes. Aside from these 100%-owned subsidiaries, we also include in this category a collection of financial assets and our 50% interest in Berkadia Commercial Mortgage.

It's instructive to look at what transpired at our three operating businesses after the economy fell off a cliff in late 2008, because their experiences illuminate the fractured recovery that later came along.

Results at our two leasing companies mirrored the "non-housing" economy. Their combined pre-tax earnings were $13 million in 2009, $53 million in 2010 and $155 million in 2011, an improvement reflecting the steady recovery we have seen in almost all of our non-housing businesses. In contrast, Clayton's world of manufactured housing (just like site-built housing) has endured a veritable depression, experiencing no recovery to date. Manufactured housing sales in the nation were 49,789 homes in 2009, 50,046 in 2010 and 51,606 in 2011. (When housing was booming in 2005, they were 146,744.)

Despite these difficult times, Clayton has continued to operate profitably, largely because its mortgage portfolio has performed well under trying circumstances. Because we are the largest lender in the manufactured homes sector and are also normally lending to lower-and-middle-income families, you might expect us to suffer heavy losses during a housing meltdown. But by sticking to old-fashioned loan policies – meaningful down payments and monthly payments with a sensible relationship to regular income – Clayton has kept losses to acceptable levels. It has done so even though many of our borrowers have had negative equity for some time.

As is well-known, the U.S. went off the rails in its home-ownership and mortgage-lending policies, and for these mistakes our economy is now paying a huge price. All of us participated in the destructive behavior – government, lenders, borrowers, the media, rating agencies, you name it. At the core of the folly was the almost universal belief that the value of houses was certain to increase over time and that any dips would be inconsequential. The acceptance of this premise justified almost any price and practice in housing transactions. Homeowners everywhere felt richer and rushed to "monetize" the increased value of their homes by refinancings. These massive cash infusions fueled a consumption binge throughout our economy. It all seemed great fun while it lasted. (A largely unnoted fact: Large numbers of people who have "lost" their house through foreclosure have actually realized a profit because they carried out refinancings earlier that gave them cash in excess of their cost. In these cases, the evicted homeowner was the winner, and the victim was the lender.)

In 2007, the bubble burst, just as all bubbles must. We are now in the fourth year of a cure that, though long and painful, is sure to succeed. Today, household formations are consistently exceeding housing starts.

Clayton's earnings should improve materially when the nation's excess housing inventory is worked off. As I see things today, however, I believe the intrinsic value of the three businesses in this sector does not differ materially from their book value.

Investments

Below we show our common stock investments that at yearend had a market value of more than $1 billion.

			12/31/11	
Shares	*Company*	*Percentage of Company Owned*	*Cost**	*Market*
			(in millions)	
151,610,700	American Express Company	13.0	$ 1,287	$ 7,151
200,000,000	The Coca-Cola Company	8.8	1,299	13,994
29,100,937	ConocoPhillips	2.3	2,027	2,121
63,905,931	International Business Machines Corp.	5.5	10,856	11,751
31,416,127	Johnson & Johnson	1.2	1,880	2,060
79,034,713	Kraft Foods Inc.	4.5	2,589	2,953
20,060,390	Munich Re	11.3	2,990	2,464
3,947,555	POSCO	5.1	768	1,301
72,391,036	The Procter & Gamble Company	2.6	464	4,829
25,848,838	Sanofi	1.9	2,055	1,900
291,577,428	Tesco plc	3.6	1,719	1,827
78,060,769	U.S. Bancorp	4.1	2,401	2,112
39,037,142	Wal-Mart Stores, Inc.	1.1	1,893	2,333
400,015,828	Wells Fargo & Company	7.6	9,086	11,024
	Others		6,895	9,171
	Total Common Stocks Carried at Market		$48,209	$76,991

*This is our actual purchase price and also our tax basis; GAAP "cost" differs in a few cases because of write-ups or write-downs that have been required.

We made few changes in our investment holdings during 2011. But three moves were important: our purchases of IBM and Bank of America and the $1 billion addition we made to our Wells Fargo position.

The banking industry is back on its feet, and Wells Fargo is prospering. Its earnings are strong, its assets solid and its capital at record levels. At Bank of America, some huge mistakes were made by prior management. Brian Moynihan has made excellent progress in cleaning these up, though the completion of that process will take a number of years. Concurrently, he is nurturing a huge and attractive underlying business that will endure long after today's problems are forgotten. Our warrants to buy 700 million Bank of America shares will likely be of great value before they expire.

As was the case with Coca-Cola in 1988 and the railroads in 2006, I was late to the IBM party. I have been reading the company's annual report for more than 50 years, but it wasn't until a Saturday in March last year that my thinking crystallized. As Thoreau said, "It's not what you look at that matters, it's what you see."

Todd Combs built a $1.75 billion portfolio (at cost) last year, and Ted Weschler will soon create one of similar size. Each of them receives 80% of his performance compensation from his own results and 20% from his partner's. When our quarterly filings report relatively small holdings, these are not likely to be buys I made (though the media often overlook that point) but rather holdings denoting purchases by Todd or Ted.

One additional point about these two new arrivals. Both Ted and Todd will be helpful to the next CEO of Berkshire in making acquisitions. They have excellent "business minds" that grasp the economic forces likely to determine the future of a wide variety of businesses. They are aided in their thinking by an understanding of what is predictable and what is unknowable.

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There is little new to report on our derivatives positions, which we have described in detail in past reports. (Annual reports since 1977 are available at www.berkshirehathaway.com.) One important industry change, however, must be noted: Though our existing contracts have very minor collateral requirements, the rules have changed for new positions. Consequently, we will not be initiating any major derivatives positions. We shun contracts of any type that could require the instant posting of collateral. The possibility of some sudden and huge posting requirement – arising from an out-of-the-blue event such as a worldwide financial panic or massive terrorist attack – is inconsistent with our primary objectives of redundant liquidity and unquestioned financial strength.

Our insurance-like derivatives contracts, whereby we pay if various issues included in high-yield bond indices default, are coming to a close. The contracts that most exposed us to losses have already expired, and the remainder will terminate soon. In 2011, we paid out $86 million on two losses, bringing our total payments to $2.6 billion. We are almost certain to realize a final "underwriting profit" on this portfolio because the premiums we received were $3.4 billion, and our future losses are apt to be minor. In addition, we will have averaged about $2 billion of float over the five-year life of these contracts. This successful result during a time of great credit stress underscores the importance of obtaining a premium that is commensurate with the risk.

Charlie and I continue to believe that our equity-put positions will produce a significant profit, considering both the $4.2 billion of float we will have held for more than fifteen years and the $222 million profit we've already realized on contracts that we repurchased. At yearend, Berkshire's book value reflected a liability of $8.5 billion for the remaining contracts; if they had all come due at that time our payment would have been $6.2 billion.

The Basic Choices for Investors and the One We Strongly Prefer

Investing is often described as the process of laying out money now in the expectation of receiving more money in the future. At Berkshire we take a more demanding approach, defining investing as the transfer to others of purchasing power now with the reasoned expectation of receiving more purchasing power – *after taxes have been paid on nominal gains* – in the future. More succinctly, investing is forgoing consumption now in order to have the ability to consume more at a later date.

From our definition there flows an important corollary: The riskiness of an investment is *not* measured by beta (a Wall Street term encompassing volatility and often used in measuring risk) but rather by the probability – the *reasoned* probability – of that investment causing its owner a loss of purchasing-power over his contemplated holding period. Assets can fluctuate greatly in price and not be risky as long as they are reasonably certain to deliver increased purchasing power over their holding period. And as we will see, a non-fluctuating asset can be laden with risk.

Investment possibilities are both many and varied. There are three major categories, however, and it's important to understand the characteristics of each. So let's survey the field.

- Investments that are denominated in a given currency include money-market funds, bonds, mortgages, bank deposits, and other instruments. Most of these currency-based investments are thought of as "safe." In truth they are among the most dangerous of assets. Their beta may be zero, but their risk is huge.

  Over the past century these instruments have destroyed the purchasing power of investors in many countries, even as the holders continued to receive timely payments of interest and principal. This ugly result, moreover, will forever recur. Governments determine the ultimate value of money, and systemic forces will sometimes cause them to gravitate to policies that produce inflation. From time to time such policies spin out of control.

  Even in the U.S., where the wish for a stable currency is strong, the dollar has fallen a staggering 86% in value since 1965, when I took over management of Berkshire. It takes no less than $7 today to buy what $1 did at that time. Consequently, a tax-free institution would have needed 4.3% interest annually from bond investments over that period to simply maintain its purchasing power. Its managers would have been kidding themselves if they thought of *any* portion of that interest as "income."

For tax-paying investors like you and me, the picture has been far worse. During the same 47-year period, continuous rolling of U.S. Treasury bills produced 5.7% annually. That sounds satisfactory. But if an individual investor paid personal income taxes at a rate averaging 25%, this 5.7% return would have yielded *nothing* in the way of real income. This investor's visible income tax would have stripped him of 1.4 points of the stated yield, and the invisible inflation tax would have devoured the remaining 4.3 points. It's noteworthy that the implicit inflation "tax" was more than triple the explicit income tax that our investor probably thought of as his main burden. "In God We Trust" may be imprinted on our currency, but the hand that activates our government's printing press has been all too human.

High interest rates, of course, can compensate purchasers for the inflation risk they face with currency-based investments – and indeed, rates in the early 1980s did that job nicely. Current rates, however, do not come close to offsetting the purchasing-power risk that investors assume. Right now bonds should come with a warning label.

Under today's conditions, therefore, I do not like currency-based investments. Even so, Berkshire holds significant amounts of them, primarily of the short-term variety. At Berkshire the need for ample liquidity occupies center stage and will *never* be slighted, however inadequate rates may be. Accommodating this need, we primarily hold U.S. Treasury bills, the only investment that can be counted on for liquidity under the most chaotic of economic conditions. Our working level for liquidity is $20 billion; $10 billion is our absolute minimum.

Beyond the requirements that liquidity and regulators impose on us, we will purchase currency-related securities only if they offer the possibility of unusual gain – either because a particular credit is mispriced, as can occur in periodic junk-bond debacles, or because rates rise to a level that offers the possibility of realizing substantial capital gains on high-grade bonds when rates fall. Though we've exploited both opportunities in the past – and may do so again – we are now 180 degrees removed from such prospects. Today, a wry comment that Wall Streeter Shelby Cullom Davis made long ago seems apt: "Bonds promoted as offering risk-free returns are now priced to deliver return-free risk."

- The second major category of investments involves assets that will never produce anything, but that are purchased in the buyer's hope that someone else – who also knows that the assets will be forever unproductive – will pay more for them in the future. Tulips, of all things, briefly became a favorite of such buyers in the 17th century.

  This type of investment requires an expanding pool of buyers, who, in turn, are enticed because they believe the buying pool will expand still further. Owners are *not* inspired by what the asset itself can produce – it will remain lifeless forever – but rather by the belief that others will desire it even more avidly in the future.

  The major asset in this category is gold, currently a huge favorite of investors who fear almost all other assets, especially paper money (of whose value, as noted, they are right to be fearful). Gold, however, has two significant shortcomings, being neither of much use nor procreative. True, gold has some industrial and decorative utility, but the demand for these purposes is both limited and incapable of soaking up new production. Meanwhile, if you own one ounce of gold for an eternity, you will still own one ounce at its end.

  What motivates most gold purchasers is their belief that the ranks of the fearful will grow. During the past decade that belief has proved correct. Beyond that, the rising price has on its own generated additional buying enthusiasm, attracting purchasers who see the rise as validating an investment thesis. As "bandwagon" investors join any party, they create their own truth – *for a while*.

  Over the past 15 years, both Internet stocks and houses have demonstrated the extraordinary excesses that can be created by combining an initially sensible thesis with well-publicized rising prices. In these bubbles, an army of originally skeptical investors succumbed to the "proof" delivered by the market, and the pool of buyers – for a time – expanded sufficiently to keep the bandwagon rolling. But bubbles blown large enough inevitably pop. And then the old proverb is confirmed once again: "What the wise man does in the beginning, the fool does in the end."

Today the world's gold stock is about 170,000 metric tons. If all of this gold were melded together, it would form a cube of about 68 feet per side. (Picture it fitting comfortably within a baseball infield.) At $1,750 per ounce – gold's price as I write this – its value would be $9.6 trillion. Call this cube pile A.

Let's now create a pile B costing an equal amount. For that, we could buy *all* U.S. cropland (400 million acres with output of about $200 billion annually), plus 16 Exxon Mobils (the world's most profitable company, one earning more than $40 billion annually). After these purchases, we would have about $1 trillion left over for walking-around money (no sense feeling strapped after this buying binge). Can you imagine an investor with $9.6 trillion selecting pile A over pile B?

Beyond the staggering valuation given the existing stock of gold, current prices make today's annual production of gold command about $160 billion. Buyers – whether jewelry and industrial users, frightened individuals, or speculators – must continually absorb this additional supply to merely maintain an equilibrium at present prices.

A century from now the 400 million acres of farmland will have produced staggering amounts of corn, wheat, cotton, and other crops – and will continue to produce that valuable bounty, whatever the currency may be. Exxon Mobil will probably have delivered trillions of dollars in dividends to its owners and will also hold assets worth many more trillions (and, remember, you get *16* Exxons). The 170,000 tons of gold will be unchanged in size and still incapable of producing anything. You can fondle the cube, but it will not respond.

Admittedly, when people a century from now are fearful, it's likely many will still rush to gold. I'm confident, however, that the $9.6 trillion current valuation of pile A will compound over the century at a rate far inferior to that achieved by pile B.

- Our first two categories enjoy maximum popularity at peaks of fear: Terror over economic collapse drives individuals to currency-based assets, most particularly U.S. obligations, and fear of currency collapse fosters movement to sterile assets such as gold. We heard "cash is king" in late 2008, just when cash should have been deployed rather than held. Similarly, we heard "cash is trash" in the early 1980s just when fixed-dollar investments were at their most attractive level in memory. On those occasions, investors who required a supportive crowd paid dearly for that comfort.

  My own preference – and you knew this was coming – is our third category: investment in productive assets, whether businesses, farms, or real estate. Ideally, these assets should have the ability in inflationary times to deliver output that will retain its purchasing-power value while requiring a minimum of new capital investment. Farms, real estate, and many businesses such as Coca-Cola, IBM and our own See's Candy meet that double-barreled test. Certain other companies – think of our regulated utilities, for example – fail it because inflation places heavy capital requirements on them. To earn more, their owners must invest more. Even so, these investments will remain superior to nonproductive or currency-based assets.

  Whether the currency a century from now is based on gold, seashells, shark teeth, or a piece of paper (as today), people will be willing to exchange a couple of minutes of their daily labor for a Coca-Cola or some See's peanut brittle. In the future the U.S. population will move more goods, consume more food, and require more living space than it does now. People will forever exchange what they produce for what others produce.

  Our country's businesses will continue to efficiently deliver goods and services wanted by our citizens. Metaphorically, these commercial "cows" will live for centuries and give ever greater quantities of "milk" to boot. Their value will be determined not by the medium of exchange but rather by their capacity to deliver milk. Proceeds from the sale of the milk will compound for the owners of the cows, just as they did during the 20th century when the Dow increased from 66 to 11,497 (and paid loads of dividends as well). Berkshire's goal will be to increase its ownership of first-class businesses. Our first choice will be to own them in their entirety – but we will also be owners by way of holding sizable amounts of marketable stocks. I believe that over any extended period of time this category of investing will prove to be the runaway winner among the three we've examined. More important, it will be *by far* the safest.

The Annual Meeting

The annual meeting will be held on Saturday, May 5th at the CenturyLink Center (renamed from "Qwest"). Last year, Carrie Kizer debuted as the ringmaster and earned a lifetime assignment. Everyone loved the job she did – especially me.

Soon after the 7 a.m. opening of the doors, we will have a new activity: The Newspaper Tossing Challenge. Late last year, Berkshire purchased the Omaha World-Herald and, in my meeting with its shareholder-employees, I told of the folding and throwing skills I developed while delivering 500,000 papers as a teenager.

I immediately saw skepticism in the eyes of the audience. That was no surprise to me. After all, the reporters' mantra is: "If your mother says she loves you, check it out." So now I have to back up my claim. At the meeting, I will take on all comers in making 35-foot tosses of the World-Herald to a Clayton porch. Any challenger whose paper lands closer to the doorstep than mine will receive a dilly bar. I've asked Dairy Queen to supply several for the contest, though I doubt that any will be needed. We will have a large stack of papers. Grab one. Fold it (no rubber bands). Take your best shot. Make my day.

At 8:30, a new Berkshire movie will be shown. An hour later, we will start the question-and-answer period, which (with a break for lunch at the CenturyLink's stands) will last until 3:30. After a short recess, Charlie and I will convene the annual meeting at 3:45. If you decide to leave during the day's question periods, please do so while *Charlie* is talking.

The best reason to exit, of course, is to *shop*. We will help you do so by filling the 194,300-square-foot hall that adjoins the meeting area with products from dozens of Berkshire subsidiaries. Last year, you did your part, and most locations racked up record sales. In a nine-hour period, we sold 1,249 pairs of Justin boots, 11,254 pounds of See's candy, 8,000 Quikut knives (that's 15 knives per minute) and 6,126 pairs of Wells Lamont gloves, a Marmon product whose very existence was news to me. (The product I focus on is money.) But you can do better. Remember: Anyone who says money can't buy happiness simply hasn't shopped at our meeting.

Among the new exhibitors this year will be Brooks, our running-shoe company. Brooks has been gobbling up market share and in 2011 had a sales gain of 34%, its tenth consecutive year of record volume. Drop by and congratulate Jim Weber, the company's CEO. And be sure to buy a couple of pairs of limited edition "Berkshire Hathaway Running Shoes."

GEICO will have a booth staffed by a number of its top counselors from around the country, all of them ready to supply you with auto insurance quotes. In most cases, GEICO will be able to give you a shareholder discount (usually 8%). This special offer is permitted by 44 of the 51 jurisdictions in which we operate. (One supplemental point: The discount is not additive if you qualify for another, such as that given certain groups.) Bring the details of your existing insurance and check out whether we can save you money. For at least half of you, I believe we can.

Be sure to visit the Bookworm. It will carry more than 35 books and DVDs, including a couple of new ones. I recommend *MiTek*, an informative history of one of our very successful subsidiaries. You'll learn how my interest in the company was originally piqued by my receiving in the mail a hunk of ugly metal whose purpose I couldn't fathom. Since we bought MiTek in 2001, it has made 33 "tuck-in" acquisitions, almost all successful. I think you'll also like a short book that Peter Bevelin has put together explaining Berkshire's investment and operating principles. It sums up what Charlie and I have been saying over the years in annual reports and at annual meetings. Should you need to ship your book purchases, a shipping service will be available nearby.

If you are a big spender – or aspire to become one – visit Elliott Aviation on the east side of the Omaha airport between noon and 5:00 p.m. on Saturday. There we will have a fleet of NetJets aircraft that will get your pulse racing. Come by bus; leave by private jet. I'll OK your credit.

An attachment to the proxy material that is enclosed with this report explains how you can obtain the credential you will need for admission to the meeting and other events. Airlines have sometimes jacked up prices for the Berkshire weekend. If you are coming from far away, compare the cost of flying to Kansas City versus Omaha. The drive between the two cities is about 2½ hours, and it may be that you can save significant money, particularly if you had planned to rent a car in Omaha. Spend the savings with us.

At Nebraska Furniture Mart, located on a 77-acre site on 72nd Street between Dodge and Pacific, we will again be having "Berkshire Weekend" discount pricing. Last year the store did $32.7 million of business during its annual meeting sale, a volume that exceeds the yearly sales of most furniture stores. To obtain the Berkshire discount, you must make your purchases between Tuesday, May 1st and Monday, May 7th inclusive, and also present your meeting credential. The period's special pricing will even apply to the products of several prestigious manufacturers that normally have ironclad rules against discounting but which, in the spirit of our shareholder weekend, have made an exception for you. We appreciate their cooperation. NFM is open from 10 a.m. to 9 p.m. Monday through Saturday, and 10 a.m. to 6 p.m. on Sunday. On Saturday this year, from 5:30 p.m. to 8 p.m., NFM is having a picnic to which you are all invited.

At Borsheims, we will again have two shareholder-only events. The first will be a cocktail reception from 6 p.m. to 9 p.m. on Friday, May 4th. The second, the main gala, will be held on Sunday, May 6th, from 9 a.m. to 4 p.m. On Saturday, we will be open until 6 p.m. On Sunday, around 2 p.m., I will be clerking at Borsheims, desperate to beat my sales figure from last year. So come take advantage of me. Ask me for my "Crazy Warren" price.

We will have huge crowds at Borsheims throughout the weekend. For your convenience, therefore, shareholder prices will be available from Monday, April 30th through Saturday, May 12th. During that period, please identify yourself as a shareholder by presenting your meeting credentials or a brokerage statement that shows you are a Berkshire holder.

On Sunday, in the mall outside of Borsheims, a blindfolded Patrick Wolff, twice U.S. chess champion, will take on all comers – who will have their eyes wide open – in groups of six. Nearby, Norman Beck, a remarkable magician from Dallas, will bewilder onlookers. Additionally, we will have Bob Hamman and Sharon Osberg, two of the world's top bridge experts, available to play bridge with our shareholders on Sunday afternoon. Two non-experts – Charlie and I – will also be at the tables.

Gorat's and Piccolo's will again be open exclusively for Berkshire shareholders on Sunday, May 6th. Both will be serving until 10 p.m., with Gorat's opening at 1 p.m. and Piccolo's opening at 4 p.m. These restaurants are my favorites, and I will eat at both of them on Sunday evening. (Actuarial tables tell me that I can consume another 12 million calories before my death. I'm terrified at the thought of leaving any of these behind, so will be frontloading on Sunday.) Remember: To make a reservation at Gorat's, call 402-551-3733 on April 1st (*but not before*) and at Piccolo's, call 402-342-9038. At Piccolo's, show some class and order a giant root beer float for dessert. Only sissies get the small one.

We will again have the same three financial journalists lead the question-and-answer period at the meeting, asking Charlie and me questions that shareholders have submitted to them by e-mail. The journalists and their e-mail addresses are: Carol Loomis, of Fortune, who may be e-mailed at cloomis@fortunemail.com; Becky Quick, of CNBC, at BerkshireQuestions@cnbc.com, and Andrew Ross Sorkin, of The New York Times, at arsorkin@nytimes.com.

From the questions submitted, each journalist will choose the dozen or so he or she decides are the most interesting and important. The journalists have told me your question has the best chance of being selected if you keep it concise, avoid sending it in at the last moment, make it Berkshire-related and include no more than two questions in any e-mail you send them. (In your e-mail, let the journalist know if you would like your name mentioned if your question is selected.)

This year we are adding a second panel of three financial analysts who follow Berkshire. They are Cliff Gallant of KBW, Jay Gelb of Barclays Capital and Gary Ransom of Dowling and Partners. These analysts will bring their own Berkshire-specific questions and alternate with the journalists and the audience.

Charlie and I believe that all shareholders should have access to new Berkshire information simultaneously and should also have adequate time to analyze it, which is why we try to issue financial information after the market close on a Friday. We do not talk one-on-one to large institutional investors or analysts. Our new panel will let analysts ask questions – perhaps even a few technical ones – in a manner that may be helpful to many shareholders.

Neither Charlie nor I will get so much as a clue about the questions to be asked. We know the journalists and analysts will come up with some tough ones, and that's the way we like it. All told, we expect at least 54 questions, which will allow for six from each analyst and journalist and 18 from the audience. If there is some extra time, we will take more from the audience. Audience questioners will be determined by drawings that will take place at 8:15 a.m. at each of the 13 microphones located in the arena and main overflow room.

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For good reason, I regularly extol the accomplishments of our operating managers. They are truly All-Stars, who run their businesses as if they were the only asset owned by their families. I believe their mindset to be as shareholder-oriented as can be found in the universe of large publicly-owned companies. Most have no financial need to work; the joy of hitting business "home runs" means as much to them as their paycheck.

Equally important, however, are the 23 men and women who work with me at our corporate office (all on one floor, which is the way we intend to keep it!).

This group efficiently deals with a multitude of SEC and other regulatory requirements and files a 17,839-page Federal income tax return – hello, Guinness! – as well as state and foreign returns. Additionally, they respond to countless shareholder and media inquiries, get out the annual report, prepare for the country's largest annual meeting, coordinate the Board's activities – and the list goes on and on.

They handle all of these business tasks cheerfully and with unbelievable efficiency, making my life easy and pleasant. Their efforts go beyond activities strictly related to Berkshire: They deal with 48 universities (selected from 200 applicants) who will send students to Omaha this school year for a day with me and also handle all kinds of requests that I receive, arrange my travel, and even get me hamburgers for lunch. No CEO has it better.

This home office crew, along with our operating managers, has my deepest thanks and deserves yours as well. Come to Omaha – the cradle of capitalism – on May 5th and tell them so.

February 25, 2012

Warren E. Buffett
Chairman of the Board

Morning Session - 2012 Meeting

1. Welcome

WARREN BUFFETT: Good morning. I'm Warren, and this hyperkinetic fellow is Charlie.

And we're going to conduct this pretty much as we have in the past. We'll take your questions, alternating among the media and analysts in the audience until 3:30, with a break around noon for an hour.

And then we'll have the regular meeting of the shareholders beginning at that time. Feel free to drift away and shop in the other room. We have a lot of things for you there.

2. See's Candy lollypop group photo

WARREN BUFFETT: We only have one scripted part of this meeting, and See's Candy has placed on all of the seats a little packet.

And what we'd like you to do, we're going to like — we'd like to videotape everyone eating their pop at the same time for posting on Facebook and for use by the media in today's meeting.

So, if each of you will open up the lollipop now.

Now, first of all, you've got them open. We'd like you to hold them up above your head. We're going to get a shot of 18,000. Dennis, here we come. And we'll get a few shots of that.

We got it all, Mele?

OK. And now you can take off the cover and the good part comes, and Charlie and I have — we have fudge up here and we have peanut brittle.

And I said the meeting would run until 3:30. If we've consumed 10,000 calories each, we sometimes have to stop a little early at that point. (Laughter)

3. Q1 earnings

WARREN BUFFETT: The only slide we have at this point is we did put out our earnings — first quarter earnings — yesterday.

And in general, all of our companies are — with the exception of the ones in the residential construction business, which was the case last year and it's the case this year — that all of the companies, except those in that area, pretty much have shown good earnings.

And in the case of the bigger ones, the five largest non-reinsurance companies earned — all had record earnings last year, aggregating of those five companies something over 9 billion pretax.

And in the annual report I said I thought they would — if business didn't take a nosedive this year — that they would earn over $10 billion pretax this year. And certainly nothing we've seen so far would cause me to backtrack on that prediction.

The insurance — if you read our 10-Q and turn to the insurance section, you will see that there was an accounting change mandated for all property-casualty insurance companies, which — rather technical and I won't get into the details of it — it changed something that's called the deferred policy acquisition cost, called DPAC.

It has no effect on the operations at all, on the cash, but it did change the earnings downward by about $250 million pretax for GEICO in the first quarter. It's based on whether you defer some advertising.

It has — GEICO had a terrific first quarter, had a real profit margin of almost 9 percentage points, and the float grew, and everything good happened at GEICO in the first quarter. We had good growth.

But we did make that accounting change. That accounting change also affects, to a lesser degree, the second quarter, and it may even trail just a bit into the third.

But the underlying figures are somewhat better than the figures that we've presented there.

And so, overall, we feel good about the first quarter. We feel good about the year.

4. Berkshire directors introduced

Maybe we should — even though we'll do it again at the meeting — but we should probably introduce the directors. And I don't know whether the audience can see the people here but if you can turn up the lights or something so they can.

We'll start off, of course, with Charlie, Charlie Munger. And then alphabetically — if the directors would just — (Applause)

I was going to suggest that you withhold your applause until the end, but I know he's sort of irresistible, so we'll make an excuse for him. (Laughter)

For the remainder of the directors, if they stand and remain standing, and then you can applaud them at the end, if you will.

We've got Howard Buffett, Stephen Burke, Susan Decker, Bill Gates, David Gottesman, Charlotte Guyman, Don Keough, Tom Murphy, Ron Olson, and Walter Scott, Jr.

Now you can go wild. (Applause)

5. Q&A begins

WARREN BUFFETT: Now we'll start with the questions. And what we will do is we'll start over here with the media —with one of them — move to one of the analysts, and then move to one of the shareholders, and we'll go by stations with the shareholders.

And if we get — sometimes we've had as many as 60 or 62 questions.

If we get to 54, at which point each person on the panel here has had a shot at 6 questions, then from that point on we'll do nothing but the — but from the shareholders from 54 on.

So we'll see how that goes.

6. Buffett: My successor will also be the "chief risk officer"

WARREN BUFFETT: And with that, we'll start off with Carol Loomis of Fortune Magazine.

CAROL LOOMIS: Good morning. I'll make my mini speech, which the most important point is that neither Warren nor Charlie have an idea of what we're going to ask.

The other thing is that we received hundreds, if not thousands, of questions. We don't know the exact count, so we certainly couldn't use every one. If we didn't use yours, we're sorry.

So for the first question, Warren, two shareholders wrote me about the heavy responsibilities that will fall on your successor and his or her ability to deal with them. So I'll make this a two-part question.

From Chris Inge (PH), "Mr. Buffett, you have stated that you believe the CEO of any large financial organization must be the chief risk officer as well.

"So, at Berkshire, does the leading CEO candidate for successor, as well as the backup candidates, possess the necessary knowledge, experience, and temperament to be the Chief Risk Officer?"

The related question is about the Goldman Sachs, GE, and Bank of America deals, all giving Berkshire warrants, that you have negotiated.

Shareholder Jacques Cartier — Catere (PH), excuse me — asked whether these specific transactions could have been done with similar terms without your involvement.

If not, what implications would that have for Berkshire's future returns?

WARREN BUFFETT: Yeah. The — I do believe that the CEO of any large, particularly financial-related, company should — it really should apply beyond that, but certainly with a financially-related company — should be the chief risk officer.

It's not something to be delegated. In fact, Charlie and I have seen that function delegated at very major institutions, and the risk committee would come in and report every week, every month, and they'd report to the directors, and they'd have a lot of nice figures lined up, and be able to talk in terms of how many sigmas were involved and everything, and the place was just ripe for real trouble.

So I do — I am the chief risk officer at Berkshire. It's up to me to understand anything that could really hit us in any catastrophic way.

My successor will have the same responsibility, and we would not select anybody for that job that we did not think had that ability.

It's a very important ability. It ranks right up there with allocation of capital and selection of managers for the operating units.

It's not an impossible job. I mean, it — the basic risks could involve excessive leverage and they — and then the — they could involve excessive insurance risk.

Now, we have people in charge of our insurance businesses that themselves worry very much about the risk of their own unit and, therefore, the person at the top really has to understand whether those three or four people running the big insurance units are correctly assessing their risks, and then also has to be able to aggregate and think how they accumulate over the units.

That's where the real risk is, unless you're engaging in a lot of leverage in your financial structure, which isn't going to happen. Before I answer the second, Charlie, would you like to comment on that?

CHARLIE MUNGER: Well, not only was it — this risk decision frequently delegated in America, but it was delegated to people who were using a very silly way of judging risk that they've been taught in some our leading business schools. (Laughter)

So this is a very serious problem this man is raising. The so-called "Value at Risk" and the theories that outcomes in financial markets followed a Gaussian curve, invariably. It was one of the dumbest ideas ever put forward. (Laughter)

WARREN BUFFETT: He's not kidding, either. We've seen it in action.

And the interesting thing is we've seen it in action with people that know better, that have very high IQs, that study lots of mathematics. But it's so much easier to work with that curve,

because everybody knows the properties of that curve, and can make calculations to eight decimal places using that curve.

But the only problem is that curve is not applicable to behavior in markets, and people find that out periodically.

The second question: we're well equipped, Carol, to answer that question. We would not have anybody — we're not going to have an arts major in charge of Berkshire. (Laughter)

The question about negotiated deal, there's no question that partly through age, partly through the fact we've accumulated a lot of capital, partly the fact that I know a lot more people than I used to know, and partly because Berkshire can act with speed and finality that is really quite rare among large American corporations, we do get a chance, occasionally, to make large transactions.

But that takes a willing party on the other side. When we got in touch with Brian Moynihan at the Bank of America last year, I had dreamt up a deal which I thought made sense for us, and I thought it made sense for the Bank of America, under the circumstances that existed.

But I'd never talked to Brian Moynihan before in my life. I had no real connection with the Bank of America.

But when I talked to him, he knew that we meant what we said, so that if I said we would do 5 billion and — I laid out the terms of the warrants — and I said we'd do it.

And he knew that that was good and that we had the money.

And that ability to commit, and have the other person know your commitment is good for very large sums and, maybe, complicated instruments, is a big plus.

Berkshire will possess that subsequent to my departure. I don't think that every deal that I made would necessarily be makeable by a successor, but they'll bring other talents as well.

I mean, I can tell you the successor that the board has agreed on can do a lot of things much, much better that I can do.

So, if you give up a little on negotiated financial deals, you may gain a great deal, just in terms of somebody that's more energetic about going out and making transactions.

And those deals have not been key to Berkshire. If you look at what we did with General Electric and Goldman Sachs, for example in those two deals in 2008, I mean, they were OK, but they are not remotely as important as, you know, maybe buying Coca-Cola stock, which was done in the market over a period of six or eight months.

We bought IBM over a period of six or eight months last year in the market. We bought all these businesses on a negotiated basis.

So the values in Berkshire that have been accumulated by some special security transaction are really just peanuts compared to the values that have been created by buying businesses like GEICO or ISCAR or BNSF, and the sort.

It's not a key to Berkshire's future, but the ingredients that allowed us to do that will still be available and, to some extent, peculiar to Berkshire, in terms of sizable deals.

If somebody gets a call from most people and they say, you know, we'll give you $10 billion tomorrow morning, and we'll have the lawyers work on it overnight, and here are the terms and there won't be any surprises, they're inclined to believe it's a prank call or something of the sort. But with Berkshire, they believe it can get done.

Charlie?

CHARLIE MUNGER: Yeah, and in addition, a lot of the Berkshire directors are terrific at risk analysis.

Think of the Kiewit Company succeeding, as it has over decades, in bid construction work on oil well platforms and tunnels and remote places and so on.

That's not easy to do. Most people fail at that eventually, and Walter Scott has presided over that bit of risk control all his life and very routinely.

And Sandy Gottesman created one of my favorite risk control examples. One day he fired an associate, and the man said, "How can you be firing me when I'm such an important producer?"

And Sandy said, "Yes," he says. "But I'm a rich old man and you make me nervous." (Laughter)

WARREN BUFFETT: Yeah. We do not have anybody around Berkshire that makes us nervous.

7. We "reserve conservatively" at insurance operations

WARREN BUFFETT: OK. Now we go to our new panel.

Cliff Gallant of KBW, we're getting the first question here from an analyst.

I don't think that is on.

CLIFF GALLANT: Oh, can you hear me?

BUFFETT: Yeah.

CLIFF GALLANT: OK, sorry. Thank you again for the opportunity. The subject, generally, still is mortality.

In your 2011 annual report, Berkshire disclosed that Berkshire Hathaway Reinsurance Group made changes in its assumptions for mortality risk, which resulted in a charge, specifically saying that mortality rates had exceeded assumptions in the Swiss Re contract.

Conversely in Gen Re's Life/Health segment, they reported lower than expected mortality, and I believe these trends continued into the first quarter that we saw in the report last night.

What was the surprise in the Swiss Re contract? And is there a difference in basic assumptions and trends for things like mortality rates among Berkshire's different businesses?

In the property-casualty businesses, for example, are the same assumptions and reserving philosophies applied companywide?

WARREN BUFFETT: Starting off with the Swiss Re example, we wrote a very, very large contract of reinsurance with Swiss Re — I would say, I don't know, a year-and-a-half ago now, or thereabouts — and it applied to their business written, I think, in 2004 and earlier. And they had a lot of business. It was American business.

And we started seeing — we got reports quarterly — and we started seeing mortality figures coming in quarterly that were considerably above our expectations and what looked like should be the case — should have been the case — looking at their earlier figures.

So at the end of last year — we have a stop-loss arrangement on this — so we set up a reserve that really reserves it to the worst case, except we present-value that.

But until we get — until we figure out what can be done about that contract — and we have some possibilities in that respect — we will keep that reserved at this worst case. And so we took a charge for that amount.

We do — we are reinsuring Swiss Re, and then they are reinsuring a bunch of American life insurers, and there is ability to reprice that business as we go along, but the degree to which we and Swiss Re might want to reprice that may be a subject of controversy, we'll see, so we just decided to put it up on a worst-case basis.

Getting to the question of how GEICO reserves, how Gen Re reserves, I would say that — it's described to some extent in our annual report — but I would say that the one overriding principle is that we hope, and our plan is, to reserve conservatively.

I mean, it's a lot different reserving in the auto business, where on short-tail lines and physical damage and property damage, you know, you find out very quickly how you're doing.

And if you look at GEICO's figures, you know, we've had redundancies year after year after year.

Gen Re was under reserved at the time we bought it, and back in those 1999/1998 years, those developed very badly. Now they've been developing very favorably for some time. I think with Tad Montross, we've got a fellow that — where I feel very good about the way he reserves.

But he is not — there's no coordination between him and Tony [Nicely] at GEICO, nor with Ajit [Jain] at Berkshire Hathaway Reinsurance. They all have, I think, the same mindset, but they don't — they're three very different, different businesses.

Charlie?

CHARLIE MUNGER: There's always going to be some contract where the results are worse than we expected. Why would anybody buy our insurance if that weren't the case? (Scattered laughter)

WARREN BUFFETT: It's interesting how — I mean, just take 9/11. You know, it's very hard to reserve after something like 9/11, because to what extent is business interruption insurance — when you close the stock exchange for a few days, are you going to be able to collect on insurance?

And, you know, when you close restaurants at airports, you know, 2,000 miles away, because the airport is closed for a few days, is that business interruption insurance? There's — a lot of questions come up.

We turned out to be somewhat over-reserved for 9/11, as it turned out.

You've got the same situation going on in both Thailand and Japan because, as you know, the supply chain for many American companies was interrupted by the tsunami in Japan and the floods in Thailand.

And if you're a car manufacturer in the United States and you aren't getting the parts, you know, does your business interruption insurance cover the fact that there were floods for your supplier in Thailand or the tsunami hit in Japan? Sometimes that stuff takes years and years to work out.

On balance, I think you will find that our reserves generally develop favorably.

8. "It's amazing how little influence we've had"

WARREN BUFFETT: OK. We go to the audience now up at post number 1, and there he is.

AUDIENCE MEMBER: There he is. Good morning, Mr. Chairman, Mr. Vice Chairman. My name is Andy Peake (PH), and I'm from Weston, Connecticut.

In the past, you've made a few investments in China: PetroChina and BYD, to name two.

Given the growing importance of China in the world, what advice would you give the new Chinese leadership and corporate CEOs such that you would make more investments in China? Xièxiè.

WARREN BUFFETT: Well, Charlie has made the most recent investment in China, so I'll let him handle that one.

CHARLIE MUNGER: Yeah, we're not spending much time giving advice to China. (Laughter)

WARREN BUFFETT: That's not because they're not hungry for our advice. (Laughs)

CHARLIE MUNGER: If you stop to think about it, China has been doing very, very well from a very tough start. To some extent, we ought to seek advice there instead of give it.

WARREN BUFFETT: We have — I would say that we've found it almost useless in 60 years of investing to give advice to anybody in business.

CHARLIE MUNGER: We have found that we have a lot of control — it's kind of like controlling affairs by pushing on a noodle.

It's amazing how little influence we've had when we had 20 percent of the stock.

And people have this illusion of mass control at headquarters. The beauty of Berkshire is that we created a system that doesn't require much control at headquarters.

WARREN BUFFETT: But we — if you look at our four largest investments, which are worth, we'll say — they're certainly worth $50 billion today.

We've had some of them for 25 years — one of them — and another one for 20 years.

The number of times that we have talked — unless we were on the board, which I was at Coca-Cola — but the number of times we've talked to the CEO of those companies, where we have $50 billion, I would say doesn't average more than twice a year, and we are not in the business of giving them advice.

If we thought that the success of our investment depended upon them following our advice, we'd go onto something else. (Laughter)

9. No warnings when Berkshire shares are overvalued

WARREN BUFFETT: Becky?

BECKY QUICK: This question comes from a shareholder named Ben Noll (PH), and I've got several different emails that were very similar to this one but I'm choosing Ben's question.

He writes that while pleased by your announcement to buy back stock at 110 percent of book value, he feels like a bit of a chump for sometimes having paid nearly 200 percent of book in the past few years.

Since you've stated repeatedly that it's as bad to be overvalued as to be undervalued, why didn't you warn us previously when the price-book relationship was very different, or have you not felt that Berkshire was trading above intrinsic value over the last decade?

WARREN BUFFETT: Yeah, we've written in the back of the report how we prefer to — not to see our shares sell at the highest possible price.

I mean, we've got a whole different view on that than many managers.

If we could have our way, we would have the stock trade once a year, and Charlie and I would try to come up with a fair value for intrinsic business value, and it would trade at that.

That's incidentally what some private companies do, but you're not allowed that luxury in the public market, and public markets do very strange things.

If Charlie and I think Berkshire is overvalued, then it would be a very interesting proposition to have us announce, you know, a half an hour before the market opens someday, and have us both saying, gee, we think your stock is overpriced.

I mean, we would have to do that with every shareholder simultaneously, and they would — who knows how they would react. We have never — I don't think — certainly never consciously done anything to encourage people to buy our stock at a price we thought was above intrinsic value.

The one time we sold stock, under some pressure back in the mid-1990s when somebody was going to do something with the stock that we thought would be injurious to people, we created a stock and we thought the stock was a little on the high side then and we put on the cover of the prospectus something that I don't think has ever been seen, which we said that neither Charlie nor I would buy the stock at the price, nor would we recommend that our family did it. (Scattered laughter)

And if you want a collector's item for a proxy material — offering material — get that because I don't think you'll see that one again.

We think that if we are going to repurchase shares from people, that we ought to let them know what — that we think we're buying it too cheap.

I mean, we wouldn't buy out — if we had two or three partners and somebody wanted to sell out — but we'd probably try to arrive at a fair price — but if it was established by a market and they were going to sell too cheap, we'd tell them we thought they were selling it too cheap.

We are not selling it. We are not saying that 111 percent — we're using 110 percent of book — 111 percent or 112 percent is intrinsic business value — we know it's significantly above 110.

And I don't think we will ever announce — because I don't see how we would do it — I don't think we'll ever announce that we think the stock is selling considerably above intrinsic business value, but we will certainly do nothing to indicate that we think the stock is attractively priced, if that comes about.

Charlie?

CHARLIE MUNGER: I've got nothing to add. (Laughter)

10. We'll buy "significantly" undervalued Berkshire shares

WARREN BUFFETT: Jay Gelb from Barclays.

JAY GELB: Thank you. My question is also on share buybacks.

Warren, in last year's annual letter, you said not a dime of cash has left Berkshire for dividends or share repurchases during the past 40 years.

In 2011, Berkshire changed course and announced a share repurchase authorization.

What I'd like to focus in on is, what is Berkshire's capacity for share buybacks, based on continued strong earnings power? How attractive is deploying excess capital and share buybacks compared to acquisitions, even above 1.1 times book value? And what are your latest thoughts on instituting a shareholder dividend?

WARREN BUFFETT: The 1.1 is a figure that we feel very comfortable with. So, we would probably feel comfortable with a figure somewhat higher than that, but we wanted to be dramatically — or very significantly — undervalued to do buybacks, and we want to be very sure that every shareholder that sells to us knows that we think that it's dramatically — or significantly — undervalued when we do it.

But we have a terrific group of businesses.

The marketable securities that we own, we think, are going to be worth more in the future, but we carry them at what they're selling for today. So they're not — that's not an undervalued item, you know, in the balance sheet.

But some of the businesses we own are worth far more money than we carry them, and we have no significant business that's worth any significant discount from the carrying value.

So we would — from strictly a money-making viewpoint — we would love to buy billions and billions and billions of dollars' worth of stock at — we'll move that up to tens of billions — at 110 percent of book.

You know, I don't think it will happen, but it could happen. You never know what kind of a market you'll run into.

And if we get the chance to do it, as long as we don't take our cash position below 20 billion, we will — we would buy very aggressively at that price. We know we're making significant money for remaining shareholders.

The value per share goes up when we buy at 110 percent of book, and therefore — and it's so obvious to us that we would do it on a big scale if given the chance to, and if it did not take our cash position down below a level that leaves us comfortable.

Charlie?

CHARLIE MUNGER: Well, some people buy their own stock back regardless of price. That's not our system.

WARREN BUFFETT: Well, we think it's — we think a lot of the share repurchases are idiotic.

CHARLIE MUNGER: I was trying to say that more gently.

WARREN BUFFETT: You've never done it before. (Laughter)

The — it's — I mean, it's for ego. I've been in a lot of board rooms where share repurchase authorizations have been voted, and I will guarantee you it's not because the CEO is thinking the way we think at all.

They like buying their stock better at higher prices, and they like issuing options at lower prices. You know, it's just exactly the opposite than the way we would think.

We will only do it for one reason, and that's to increase the per-share value the day after we've done it.

And if we get a chance to do that, we both, you know, in a big way, we'll do it in a big way.

I don't — strictly operating as a financial guy, I would hope we get a chance to do a lot of it. Operating as a fiduciary for hundreds of thousands of people, I don't want to see them sell —

CHARLIE MUNGER: We hope the opportunity never comes.

WARREN BUFFETT: Yeah. But if it does, we'll grab it.

11. U.S. banks are in better shape European banks

WARREN BUFFETT: OK. Station two, shareholder?

AUDIENCE MEMBER: Hello, Mr — Hi, Mr. Buffett. My name is Bernard Fura (PH) from Austria, Vienna.

My question is about banks. What's your view on the European banks? What's your view on the U.S. banks? And what must happen that you invest in European banks? Thank you.

WARREN BUFFETT: Well, I have a decidedly different view on European banks than American banks.

The American banks are in a far, far, far better position than they were three or four years ago. They've taken most of the abnormal losses that existed, or that were going to manifest themselves, in their portfolios from what's now 3 1/2 or four years ago.

They've buttressed their capital in a very big way. They've got liquidity coming out their ears at the bigger banks. The American banking system is in fine shape.

The European banking system was gasping for air a few months back, which is why Mr. Draghi opened up his wallet at the ECB and came up with roughly a trillion euros of liquidity for those banks.

Now a trillion euros is about $1.3 trillion, and $1.3 trillion is about one-sixth of all the bank deposits in the United States.

I mean, it was a huge act by the European Central Bank, and it was designed to replace funding that was running off from European banks. European banks had more wholesale funding than American banks, on average.

If you look at the Bank of America or Wells Fargo, they get an enormous amount of money from a natural customer base. European banks tended to get much more of it on a wholesale basis, and that money can run pretty fast.

So the European banks need more capital in many cases. They've done very little along that line.

One Italian bank had a rights offering here three or four months ago, but basically they have not wanted to raise capital, probably because they didn't like the prices at which they would have had to do so, and they were losing their funding base.

The problem on the funding base has been solved by the ECB because the ECB gave them this money for three years at 1 percent.

I'd like to have a lot of money at three years at 1 percent, but I'm not in trouble, so I can't get it. (Laughter)

But I just — if you look at our banking system, it's really remarkable what's been accomplished.

I thought at the time that the Treasury and the Fed were maybe a little overdoing it when they brought those bankers to Washington and banged their heads together and said you're going to take this money whether you like it or not.

But overall, I think that policy was very sound for this country's economy. And if some banks were forced to raise capital that they didn't need, you know, which I might not have liked as a shareholder at one of them, overall, I think that our society benefited enormously.

And I think the Fed and the Treasury has handled things quite sensibly during a period when if they hadn't handled this sensibly, that our world today would be a lot different.

Charlie?

CHARLIE MUNGER: Yeah. Europe has a lot of problems we don't. We've got this full federal union, and the country that runs the central bank can print its own money and pay off its own debt and so on.

And in Europe, they don't have a full federal union and that makes it very, very difficult to handle these stresses. So we're more comfortable with the risk profile in the United States.

WARREN BUFFETT: It's night and day. I mean, it — in the fall of 2008, when essentially Bernanke and Paulson, and implicitly, the President of the United States, said we'll do whatever it takes, you knew that they had the power, and the will, to do whatever it took.

But when you get 17 countries that have surrendered their sovereignty, as far as their currency is concerned, you know, you have this problem. Henry Kissinger said it a long time ago. He said, "If I want to call Europe, what number do I dial?"

You know, and when you have 17 countries and — just imagine if we'd had 17 states in 2008, and we had to have the governors of those states all go to Washington and agree on a course of action when money market funds were — there was a panic in there, the panic in commercial paper, you name it — we would have had a different outcome.

So I would put European banks and American banks in two very different categories.

12. Munger: "Idiotic" to use natural gas instead of coal

WARREN BUFFETT: Andrew?

ANDREW ROSS SORKIN: Thank you Warren. This question comes from a shareholder who works at a coal mining company and he asked the following:

"Burlington Northern and MidAmerican are two key links in a critical supply chain. Can you describe your views on coal and natural gas investments, and can you discuss how the current low-price environments impact the prospect for each of these businesses?

"You seem to have created an elegant hedge. As Burlington Northern suffers from the decline in coal, MidAmerican may benefit from the fire sale in its fuel sources."

WARREN BUFFETT: Yeah. Well, MidAmerican will never really benefit or be penalized too much by the price of coal, because if coal is cheap, the benefit is going to be passed on to customers, and if it's expensive, the costs are going to be passed on.

You know, MidAmerican really is a — it's a regulated public utility. It has several — we have two MidAmericans. We have a MidAmerican Holding and a MidAmerican that operates in Iowa, then we have utilities on the West Coast.

But those utilities are pass-through organizations. They need to be operated efficiently in order to achieve their rate of return, but if they are operated efficiently and in the public interest, whether coal or labor, whatever it is, may go up or down, really doesn't affect them, although it affects their customers.

Coal traffic is important to all railroads in the United States, and coal traffic is down this year.

This may interest you. This year, in the first quarter, kilowatt hours used in the United States went down 4 percent — 4.7 percent. That is a remarkable decrease in electricity usage, 4.7 percent, and that affected, of course, the demand for coal.

But the other thing that's happening, as you mentioned, natural gas got down under $2 — it's a little higher now — but it got down under $2 at the same time oil was $100.

And if you told Charlie or me five years ago that you'd have a 50-to-1 ratio between oil and natural gas, I think we would have asked you what you were drinking.

Did you ever think that was possible, Charlie?

CHARLIE MUNGER: No. And I think what's happening now is, to use your word, it's idiotic.

We are using up a precious resource, which we need to create fertilizer and so forth, and sparing a resource which is precious but not as precious, which is thermal coal.

If I were running the United States, I would use up every ounce of thermal coal before I'd touch a drop of natural gas. But that's — conventional view is exactly the opposite. I think those natural gas reserves we just found are the most precious things we could leave our descendants.

I'm in no hurry to use it up, and the gas is worth more than the coal.

WARREN BUFFETT: Despite the wild things we've seen in pricing, particularly this ratio of natural gas prices to oil, you can't change — I mean the installed base is so huge when you get into electricity generation — that you can't really change the percentages too much, although there has been a shift in recent months.

Where gas generation is feasible, it has supplanted some coal generation. And certainly in the future, you're going to see a diminution in the percentage of electricity generated from coal in this country.

But it won't be dramatic because it can't be dramatic. You just can't — the megawatts involved are just too huge to have some wholesale change.

It's going to be very interesting to see how this whole gas-oil ratio plays out, because it has changed everyone's thinking, and it's changed in a very short period of time. I mean, three years ago, people wouldn't have said this was possible.

CHARLIE MUNGER: Yeah. The conventional wisdom of the economics professors is if it happens in a free market it must be OK. It will work out best in the end.

That is not my view with 100 percent accuracy. I think there are exceptions to that idea. And I think it's crazy to use up natural gas at these prices.

13. GEICO has no plans to use driver tracking technology

WARREN BUFFETT: OK. Gary Ransom of Dowling.

GARY RANSOM: Telematics is the latest pricing technology in the auto insurance business whereby you put a little device in your car and you can either get a discount or some other determination of your pricing based on actual driving behavior.

What is GEICO doing to keep pace with that change, and are there any other initiatives that GEICO has in place to maintain its competitive advantages in pricing?

WARREN BUFFETT: Yeah. Progressive, as you know, has probably been the leader in what you just described. And we have not done that at GEICO, but it — if we think there becomes a superior way to evaluate the likelihood of anybody having an accident, you know, I think we have 50 — I think you have to answer 51 questions — which is more than I would like, if you go to our website to get a quote.

And every one of those is designed to evaluate your propensity to get in an accident.

Obviously, if you could you could ride around in a car with somebody for six months, you might learn quite a bit about the propensity, particularly if they didn't know you were there, you know, like with your 16-year-old son.

But I do not see that as being a major change, but if it becomes something that gives you better predictive value about the propensity of any given individual to have an accident, we will take it on, you know, and we will try to get rid of the things that don't really tell us that much all the time.

But we're always looking for more things that will tell us if we look around at these — the people in this room, one by one, you know — what tells us their likelihood of having an accident in the next year.

We know that youth is, for example. I mean, there is no question that a 16-year-old male is much more likely to have an accident than some guy like me that drives 3500 miles a year and is not trying to impress a girl when he does it, you know. (Laughter)

So, you know, that one is pretty obvious. Some of these others — some things are very good predictors that you wouldn't necessarily expect to be. Credit scores are, but — and they're not allowed in all places — but they will tell you a lot about driving habits.

We'll keep looking at anything, but I do not see any — I don't see in this new experiment — anything that threatens GEICO in any way. GEICO, in the first quarter of the year — now the first quarter is our best quarter — but we added a very significant number of policies.

I forget what the exact number was, but February turns out to be the best month for some reason. We were up there getting pretty close to 300,000 policies.

So our marketing is working extremely well, and our risk selection is working extremely well, and our retention is working well. So GEICO is quite a machine.

That's one of the — that's the business that we carry, as I've mentioned in the past — I think we carry it at a billion dollars — roughly a billion dollars over its tangible book value. You know, it's worth a whole lot more than that.

I mean, based on the price we paid, that figure would come up these days to, you know, certainly something more like $15 billion more than carrying value.

And we wouldn't sell it there. We wouldn't sell it at all, but that would not tempt us in the least.

Charlie?

CHARLIE MUNGER: Nothing to add.

14. Business schools are improving but still teach "nonsense"

WARREN BUFFETT: OK. Station 3.

AUDIENCE MEMBER: Hi, Charlie and Warren. My name is Chris Reese. I'm here with a group of MBA students from the University of Virginia in Charlottesville.

In recent years, business schools have taken a lot of blame for some of the recent state of the economy.

What would you suggest to change the way that business leaders are trained in our country?

WARREN BUFFETT: Well, I wouldn't — I don't know. Charlie, I wouldn't blame business schools particularly for most of the ills — would you?

I think they've taught to students a lot of nonsense about investments, but I don't think that's been the cause of great societal problems. What do you think?

CHARLIE MUNGER: No, but it was a considerable sin. (Laughter)

WARREN BUFFETT: Well, you want to elaborate on what was the more sin —

CHARLIE MUNGER: No, no. I think business school education is improving. (Laughter)

WARREN BUFFETT: Is the implication from a low base or —

CHARLIE MUNGER: Yes. (Laughter)

WARREN BUFFETT: I'd agree with that. (Laughter)

No, in investing, I would say that probably the silliest stuff that we've seen taught at major business schools probably has been — maybe it's because it's the area that we operate in — but has been in the investment area.

I mean, it is astounding to me how the schools have focused on sort of one fad after another in finance theory, and it's usually been very mathematically based.

When it's become very popular, it's almost impossible to resist if you're — if you hope to make progress in faculty advancement.

Going against the revealed wisdom of your elders can be very dangerous to your career path at major business schools.

And you know, really, investing is not that complicated. I would have — you know, a couple of the courses. I would have a course on how to value a business, and I would have a course on how to think about markets.

And I think if people grasped the basic principles in those two courses that they would be far better off than if they were exposed to a lot of things like modern portfolio theory or option pricing. Who needs option pricing to be in an investment business?

You know, when people — you know, when Ray Kroc started McDonald's, I mean, he was not thinking about the option value of what the McDonald's stock might be or something. He was thinking about whether people would buy hamburgers, you know, and what would cause them to come in, and how to make those fries different than other people's, and that sort of thing.

It's totally drifted away — the teaching of investments.

I look at the books that are used, sometimes, and there's really nothing in there about valuing businesses, and that's what investing is all about.

If you buy businesses for less than they're worth, you're going to make money.

And if you know the difference between the businesses that you can value and the ones that you can't value, you know, which is key, you're going to make money.

But they've tried to make it a lot more difficult and, of course, that's what the high priests in any particular arena do. They have to convince the laity that the priests have to be listened to.

Charlie?

CHARLIE MUNGER: The folly creeps into the accounting, too. A very long-term option on a big business you understand — the stock of a big business that you understand — or even a stock market index — should not be — the optimal way to price it is not by using Black Scholes, and yet the accounting profession does that.

They want some kind of a standardized solution that requires them not to think too hard, and they have one. (Laughter)

WARREN BUFFETT: Is there anybody we've forgotten to offend? (Laughter)

If you'll send a note up. (Laughs)

15. Buffett Rule: minimum tax for "very, very high earners"

WARREN BUFFETT: Carol?

CAROL LOOMIS: Well, talking about not offending, "The talk of the "Buffett Rule" is all over newspapers and TV.

"But I believe your concept of what should happen to taxation of very high earners is different from what is now promulgated as the 'Buffett Rule.'

"Could you clear us up on this?" This is a question from Leo Slazeman (PH) from the Kansas City metropolitan area.

WARREN BUFFETT: Yeah. I would say this: it has gotten used in different ways.

I think, intentionally, in some cases, because it was more fun to attack something that I hadn't said than try to attack what I had said.

Basically the proposal is that people that make very large incomes pay a rate that is commensurate with what people think is paid by people of those incomes.

I mean, I think most people believe, when they look at the tax rates and all that, that if you're making 30 or 40 or $50 million a year, that you're probably paying tax rates in the 30 percent area, at least. And many people are.

But the figures are such that if you look at the most recent year, and you aggregate both payroll and income taxes, because they both go to the federal government on your behalf, if you take the 400 largest incomes in the United States, they average $270 million each.

That's per person, 270 million each. 131 of those 400 paid tax rates that were below 15 percent. Now — counting payroll taxes, too.

In other words, they were paying at less than what the standard payroll tax was — up till we've had this giveback here recently — but payroll tax was 15.3 percent for most of the last decade.

So, under the "Buffett Rule," we would have a minimum tax — only for these very, very high earners — that, essentially, would restore their rate to what it used to be back in 1992.

When the average income of the top 400 was only 45 million, there were only 16 of the 400 that were at 15 percent or below. But now there's 131.

There's still plenty of them that are paying in the 30s. I wouldn't touch them.

But I would say when we're asking for shared sacrifice from the American public, when we're telling people that we formally told — were given promises on Social Security and Medicare and various things — and we're telling them we're sorry but we kind of overpromised so we're going to have to cut back a little, I would at least make sure that the people with these huge incomes get taxed at a rate that is commensurate with the way they used to be taxed not that long ago and probably — and is commensurate also with the way that two-thirds of the people in that area get taxed at higher rates.

So it's gotten butchered a little bit, but it would affect very, very, very few people. It would raise a lot of money. (Applause)

CHARLIE MUNGER: Warren, isn't the suggestion that you can give about half of a 30 percent to charity instead of the government?

WARREN BUFFETT: Well, but the tax rates, still, after the charitable deduction, after the charitable deduction, you have to give — if you're going to give 50 percent and get a deduction — it has to be all cash. If you start giving appreciated securities —

And then if you give to a private foundation, you're down to 20 percent. Yeah. But —

CHARLIE MUNGER: But there is some exception in this proposal now isn't it — Obama's proposal — that charitable contributions help you?

WARREN BUFFETT: Well, there is a — there's a bill, actually, by Senator [Sheldon] Whitehouse of Rhode Island. I mean, that is the only actual bill. That was voted on, and it did not get the vote. It got 51 votes in the Senate and needed 60. I can't tell you the exact precision on what it included there.

I don't have any — you know, there can be all kinds of other ways of getting at the same proposition. I just think that people like me that have huge incomes — and I have no tax planning, I don't have any gimmicks, I don't have Swiss bank accounts, I don't have any of that kind of stuff.

But when I get all through, you know, I've made the calculation four different — three different times — 2004, 2006, and 2010 — and in all three of those years, when my income was anywhere from 25 to 65 or so million, I came in with the lowest tax rate in our office. And we had maybe 15 to 22 or so people in the office at different times, and everybody in the office was surprised.

They were all in the 30s. And I was, several times, you know, in this area of 17 percent, and that's because the tax law has gotten moved over the years in a way to favor people that make huge amounts of money.

Imagine having 270 million of income and there were — I believe there were — 31 of the 400 that were below 10 percent on tax rates, and that counts payroll taxes as well.

And like I say, you know, my cleaning lady — incidentally, I've been asked to explain — I keep talking about my cleaning lady.

Well, my wife wants it very clear, she doesn't have a cleaning lady. This is the cleaning lady at the office, Mary that I — (laughter) — my wife has gotten very — she does not have a cook, she does not have a cleaning lady, and she got a little tired of me implying that she had one.

So it's my cleaning lady at the office has been paying 15.3 percent on Social Security taxes, at the same time that an appreciable number of people making hundreds of millions of dollars a year are paying less than 10 percent.

I think it's time to take a look at that. OK — (applause)

16. Catastrophe insurance: "nobody knows for sure what the right rate is"

WARREN BUFFETT: Cliff.

CLIFF GALLANT: Over the past two years, the world has witnessed a number of surprisingly large financial losses from major catastrophes, including earthquakes in Chile, and Japan, New Zealand, as well as floods in Thailand.

Near term, what do you expect the impact on reinsurance pricing will be for catastrophe risk? And longer term, does this trend of increased frequency of major catastrophes affect Berkshire's view on the global reinsurance business?

WARREN BUFFETT: It's very hard, because of the random nature of quakes and hurricanes and that sort of thing, very hard to know when you really have had a trend.

We've had that situation with global warming. I mean, it has been ungodly warm here in the last few months. A few years ago, it was extremely cold.

Anything that moves as slowly as the things affecting our globe, separating out the random from new trends is really — is not easy to do.

We tend to sort of assume the worst. I mean, if we see more earthquakes in New Zealand than have existed, you know, in the last few years than existed over the last 100 years, we don't say that we'll extrapolate the last couple of years and say that's going to be the case, this huge explosion of quakes. But we also don't take the 100-year figure anymore.

We have written — in the last few months — we have written far more business in Asia, and by that I mean New Zealand, Australia, Japan, and Thailand.

We've written quite a bit more — a lot more business — than we wrote a year ago, or two years ago, or three years ago, because they've had some huge losses, and they have found that the rates they had been using were really inadequate. And they are looking for large amounts of capacity in some cases, and we are there to do that if we think the rate is right.

But nobody knows for sure what the right rate is.

I mean, we can tell you how many 6.0 or greater quakes have happened in California in the last hundred years and how many Category 3 hurricanes have hit, you know, both sides of Florida, whatever.

There's all kinds of data available on that, but the question is, how much does it tell you about the next 50 years?

And so we — if we think we're getting a rate that — if a fairly negative hypothesis would indicate — then we move ahead, and we've done that in the Pacific.

I don't know whether you know it, but if you — last year, we had two or three quakes in Christchurch, New Zealand, but I believe it was — the second one caused, like, $12 billion of insured damage.

And if you think of that in relationship of a country of 4 or 5 million and you compare that to the kind of cats we've had in the United States, that's ten Katrinas. You know, there's been some really severe —

And Thailand was the same way with the floods.

It was — the losses were just huge in respect to the entire premium volume in the country.

So when that happens, everybody reevaluates the situation, and we are perfectly willing to take on very big limits if we think we're getting the right price.

We have propositions out for as much as 10 billion of coverage, you know. Now, we don't want that 10 billion to correlate with anything else, and we want to be sure we get the right price. But — and we may write some at some point.

It's certainly — the market for cat business in some parts of the world is significantly better from our standpoint than it was a year or two ago, but that's not true every place.

17. Wind power wouldn't "make sense" without subsidies

WARREN BUFFETT: OK. Station 4.

AUDIENCE MEMBER: Good morning, Mr. Buffett, Mr. Munger. My name is Verne Fishenberry (PH), and I ask this question on behalf of a group of investors that made the trip up from Overland Park, Kansas.

MidAmerican has a large investment in wind and solar power. What effect do subsidies and incentives have on that business, and could you share your thoughts on a sustainable energy policy?

I gather we should be conserving our natural gas. What is the most appropriate use of that resource?

WARREN BUFFETT: Yeah. Well, I believe the — on wind — and we're much bigger in wind than solar, although we've entered solar in the last six months or so. We've got two solar projects that we own about a half of each one of them.

But we've been doing wind for quite a while, and I think the subsidy is 2.2 cents for ten years per kilowatt hour, and that's a federal subsidy.

And there's no question that that makes wind projects — in areas where the wind blows fairly often — that makes wind projects work, whereas they wouldn't work without that subsidy. The math just wouldn't work out.

So the government, by putting in that 2.2 cents subsidy, has encouraged a lot of wind development. And I think if there had been none, my guess is there would have been no wind development. I don't think any of our projects would make sense without that subsidy.

In the case of solar, the projects we have have got a commitment from Pacific Gas and Electric to a very long-term purchase commitment.

How that ties in with their particular obligations or anything, I mean, there may be some subsidy involved in why they wish to buy it at the price they do from us. I'm sure there is; I don't know the specifics of it.

But neither one of those projects, neither solar nor wind — if Greg Abel is here and wants to go over to a microphone and correct me on this, it would be fine — but I don't think any solar or wind would be working without subsidy.

And, of course, you can't count on wind for your base load. I mean, it works and it's clean, but if the wind isn't blowing, you know, it does not mean that everybody wants to have their lights off.

So it's a supplementary type of generation, but it can't be part of your base generation.

Charlie, do you have any thoughts on that? And Greg, do we have Greg up here? Go ahead, Charlie.

CHARLIE MUNGER: Well, I think, of course, it — eventually we're going to have to take a lot of power from these renewable sources and, of course, we're going to have to help the process along with subsidies.

You know, I think it's very wise that that's what the various governments are doing.

WARREN BUFFETT: Yeah, you could say the future is subsidizing, you know, oil and natural gas now, in a sense.

Is Greg up there?

CHARLIE MUNGER: He needs a mic.

WARREN BUFFETT: He needs a mic.

GREG ABEL: Zone 7. Yeah.

WARREN BUFFETT: Yeah.

GREG ABEL: Just to touch on the — both the wind projects and the solar, Warren, you were exactly right. Obviously the subsidy associated with the wind has allowed us to build, now, 3,000 megawatts across our two utilities.

And you are absolutely correct, we would have not moved forward without that type of subsidy.

On the solar, there's actually a couple other incentives that are in place. You get a very large incentive associated with constructing the assets.

We get — we recover 30 percent of the construction costs as we build it.

Significant advantage there, relative to Berkshire being a full taxpayer, where a lot of other entities in the U.S. are not — or the corporate entities that are competing for those projects relative to ourselves often don't have the tax appetite for those type of assets.

So we do benefit from the ongoing tax structure, there's no question, both in wind and in solar.

WARREN BUFFETT: Greg has hit on a point that people don't — often don't — understand about Berkshire.

We have a distinct competitive advantage. It's not unique, but it's a distinct competitive advantage in that Berkshire pays lots of federal income tax.

So when there are programs in the energy field, for example, that involve tax credits, we can use them because we have a lot of taxes that we're going to pay, and therefore, we get a dollar-for-dollar benefit.

I don't have the figures, but I would guess that perhaps 80 percent of the utilities in the United States cannot reap the full tax benefits, or maybe any tax benefits, from doing the things that we just talked about because they don't pay any federal income taxes.

They've used bonus depreciation, which was enacted last year and where you get 100 percent write-off in the first year. They wipe out their taxable income.

And if they've wiped out their taxable income through such things as bonus depreciation, they do not — they cannot — have any appetite for wind projects where they get a tax credit or — in the solar arrangement.

So, by being part of Berkshire Hathaway, which is a huge taxpayer, MidAmerican has extra abilities to go out and do a lot of projects without worrying about whether they sort of exhausted their tax capacity. It's an advantage we have.

18. Political views shouldn't affect investing decisions

WARREN BUFFETT: Becky?

BECKY QUICK: This question comes from John in Brunswick, Georgia.

He says, "You are clearly entitled to speak your mind on any and all subjects as an individual, but the recent publicity around the Buffett tax has become quite loud.

"And as a shareholder, I fear it is limiting, to some degree, the interest in the Berkshire stock, on principal, for some people.

"For instance my 84-year-old father is not interested in investing in Berkshire because of his opposition to this tax position, and otherwise, he likely would.

"While being a public company CEO, should some of the political dialogue be somewhat muted for the betterment of the company and its share price?"

WARREN BUFFETT: Yeah. That's a question that's raised frequently. (Applause)

But I really — in the end, I don't think that any employee of Berkshire, I don't think that the CEOs of any of the companies that we own stock in, should in any way have their citizenship restricted.

We did not — (Applause)

When Charlie and I took this job, we did not decide to put our citizenship in a blind trust. People are perfectly willing — it's fine if they disagree with us. I think it's kind of silly.

I don't know the politics of — necessarily — of [American Express CEO] Ken Chenault or [Coca-Cola CEO] Muhtar Kent or [Wells Fargo CEO] John Stumpf. I got a pretty good idea with [banker Richard] Kovacevich at one time. (Laughs)

But they run these businesses in which we have ten — [IBM CEO] Ginni Rometty, I mean, we've got 11 or $12 billion with her. I don't know what her politics are, and, you know, I don't know what her religion is.

She's got all kinds of personal views, I'm sure, that probably are better than mine, but it doesn't make any difference. I just want to know how she runs the business.

And I really think that that 84-year-old man making a decision on what he invests in based on who he agrees with politically, sounds to me like you ought to own FOX. (Laughter and applause)

Charlie?

CHARLIE MUNGER: Well, I want to report that Warren's view on taxes for the rich has reduced my popularity around one of my country clubs. (Laughter)

WARREN BUFFETT: If it keeps him from hanging around the country club, I'm all for it.

CHARLIE MUNGER: And it's a disadvantage I am willing to bear in order to participate in this enterprise. (Laughter)

WARREN BUFFETT: Charlie and I, we don't disagree on as many things as you might think, but we've certainly disagreed on some things over 53 years. It's never — we've never had an argument in 53 years. Maybe you can get one started here if you work on it. (Laughter)

But it — it's just — it's irrelevant. I mean, you know, roughly half of the country is going to feel one way this November and the other half is going to feel a different way.

And if you start selecting your investments, or your friends, or your neighbors, based on trying to get people that agree with you totally, you're going to live a pretty peculiar life, I think.

19. Size of potential deals limited by commitment to not use stock

WARREN BUFFETT: OK. Jay.

JAY GELB: Warren, this question is on acquisitions. Would you consider an acquisition in excess of $20 billion?

And if so, would it be funded in terms of existing cash, as well as issuing debt and equity, or perhaps even selling existing investments?

WARREN BUFFETT: Yeah. We considered one here just a month or two ago which we would have liked — I wish we could have made it. There was probably about 22 billion.

I mean, it gets — above 20 billion it gets to be more and more of a stretch, particularly because we won't use our stock at all.

We used stock in the Burlington Northern acquisition, and we felt that it was a mistake, but we were using it for what, in effect, turned out to be about 30 percent of the deal, and we felt that we were doing well enough with the cash that overall that the mix was OK.

But we would not use our stock now, and we wouldn't even use it for 30 or 40 percent of some deal. It's hard to imagine. So we really —

CHARLIE MUNGER: It's hard to imagine, but it could be conceivably happen.

WARREN BUFFETT: It could happen, it could happen.

But I don't think it will happen. (Laughs)

CHARLIE MUNGER: I don't either.

WARREN BUFFETT: So, we looked at this 22 or $23 billion-dollar deal, and we would have done it if we could have made the deal.

But it would have stretched us, but we would not have pushed it to the point where it would have taken our cash below 20 billion.

We would have sold securities, we would have done whatever was necessary to have a $20 billion cash balance when we got done with the deal.

But I would have had to sell some securities I didn't want to sell. I liked the deal well enough so I would have done it.

Now, if that had been 40 billion, I don't think we, you know, no matter how well I liked it, I don't think I would have wanted to peel off 25 billion or so of marketable securities trying to get it done, and I certainly wouldn't want to be in limbo not knowing exactly where the money was going to come from, and therefore, be subject to some terrible shock in the world, in the market.

If you have a $20 billion-dollar deal, though, I've got an 800 number, so — (Laughter)

But you've actually sort of hit the point where we start squirming a little bit as to where we would come up with the money.

On the other hand, the money is building up month by month so I — we will — if we can make the right $20 billion deal, we'll do it. And next year, if we haven't made a deal, I'll probably say if we can find the right $30 billion deal, we would do it.

20. We can't bring jobs back to the U.S. because they never left

WARREN BUFFETT: OK. Station 5.

AUDIENCE MEMBER: Glenn Mollenhour (PH), Westlake, Ohio. First of all, I want to thank you for having us here today. Very nice. Now Warren, I'd like to have dinner with you tomorrow night at Gorat's.

WARREN BUFFETT: They'll have a bidding at Glide here in June. It went for two million-six last year. (Laughter)

AUDIENCE MEMBER: My question is about jobs coming back to the U.S. I notice a number of companies have started to bring jobs back here.

Is Berkshire Hathaway looking at doing that for any job they've shipped out of the United States?

WARREN BUFFETT: Well, I have to finish my fudge here — the — I would say that of the 200 — the number of jobs we have is listed in the back of the report — I think it's about 270,000 — 270,858 at year-end.

I'm just trying to think.

We probably — I don't think we have more than 15,000 on the outside — of those 270 — outside the United States.

So as I put in the annual report, we invested in plant equipment — not in stocks, but in plant equipment, and not in acquisitions — over $8 billion last year, and 95 percent or so of that was in the United States.

So we don't really have a lot around the world. (Applause)

I'm not opposed to it. I mean, our ISCAR operation, which is based in Israel, operates throughout the world.

I mean, they — I've been to their plants in Japan, I've been to their plants in Korea, I've been to their plants in India.

The product they sell is going to be sold throughout the world. The U.S. is an important market for them, but it's not a majority of their business or anything like it.

So that company has about 11,000 employees or so, and relatively few of theirs are going to be in the United States.

We'd like to do more business in the United States, but we'd like to do more business in Korea and Japan and India and you name it.

We have utility operations in the UK, but other than — we have — we just bought a business in Australia at Marmon here, recently.

Well we bought — just the last day or so it's been announced — we're buying a — for CTB, which we've had a terrific history with. Vic Mancinelli has been a great man to manage businesses.

And just in the last day or two, we bought an operation based in The Netherlands [poultry-processing device maker Meyn Holding], although they have employment here.

But I would say that it's extremely likely that 10 years from now, when you look at the breakdown of our employees, that we have many, many more employees, you know, maybe hundreds of thousands more employees. And some of those will be outside this country, but most of them will be in this country.

We find — there's lots of opportunity in the United States. There is no shortage of opportunity.

In that 8.2 billion, or whatever it was last year, we loved putting that money out, and we'll put out more this year.

And this is — I mean it's a real land of opportunity. That's not to knock opportunities elsewhere. But we find lots of things to do that make a — we think — make a lot of sense in this country.

Charlie?

CHARLIE MUNGER: You can't bring a lot back if it never left. (Laughter)

WARREN BUFFETT: That's the long version of my answer. (Laughter)

21. Buffett: prostate cancer treatment is "nonevent"

WARREN BUFFETT: Andrew?

ANDREW ROSS SORKIN: Well, Warren, I should say I was not planning to ask you this question, but in the past hour, I've received probably two dozen emails from shareholders in this room who want the question asked, so I will ask it, and it's a very simple question. How are you feeling?

WARREN BUFFETT: I feel terrific. And — I always feel terrific, incidentally. That's not news. (Applause)

I love what I do. I work with people I love. It's more fun every day.

And it — basically, I seem to have a good immune system. You know, I mean, my diet is such that, you know, as any fool can plainly see, I'm eating properly. (Laughter)

All I can say is it works.

And I have four doctors, at least a few of them, I think, own Berkshire Hathaway.

Not a screen I put everybody through, but —

And my wife and my daughter and I listened to the four of them for an hour and a half about two weeks ago.

And they described various alternatives, and none of them — well, not that — the ones that they recommend, you know, do not involve a day of hospitalization.

They don't require me to take a day off from work. The survival numbers are way up. I read one where it's 99 1/2 percent for 10 years.

So, you know, maybe I'll get shot by a jealous husband, but — (laughter) — this is not — this is a really minor event, and Charlie will tell you how minor it is.

CHARLIE MUNGER: Well, as a matter of fact, I rather resent all this attention and sympathy Warren is getting. (Laughter)

I probably have more prostate cancer than he does. (Laughter)

WARREN BUFFETT: He's bragging.

CHARLIE MUNGER: I don't know because I don't let them test for it. (Laughter and applause)

WARREN BUFFETT: He's not kidding. (Laughs)

CHARLIE MUNGER: At any rate, I want the sympathy. (Laughter)

WARREN BUFFETT: My secretary was getting too much attention, so I decided I had to throw the spotlight back on myself. (Laughter)

In all seriousness, it is a nonevent, yeah.

The Med Center is about two minutes from the office, and for two months, I'll have to drop over there every afternoon and it will take a few minutes. And I may have a little less energy, but that may mean I do fewer dumb things, who knows? (Laughter)

22. We'll take on runoff annuity liabilities at the right price

WARREN BUFFETT: OK. Gary?

GARY RANSOM: Yes. Your insurance operations have taken on a good chunk of some runoff property-casualty businesses.

There's another business that has an increasing amount of runoff, and that's the annuity business, Hartford, ING, Cigna, et cetera.

Is there a time, or are there conditions, under which you might consider taking on some of those liabilities?

WARREN BUFFETT: Sure. In effect, in some of our businesses, we're taking on some annuity, but not like — I mean, it's generally classified as property-casualty.

But we would take on annuity books. The problem is there, we're not going to assume anything much better than the risk-free rate in making a bid for that sort of thing.

I mean, we do not like the idea of taking on long-term liabilities and paying 150 basis points, you know, above Treasuries or something, to do that.

And there are people that will do that. They may not be quite as likely to fulfill those promises in the years to come as we would.

But we want to get money on the liability side at attractive rates. Now, the most attractive is if we can write property-casualty business at an underwriting profit and get it for nothing.

But we're willing to pay for annuity-type liabilities, and I don't think it's impossible you'll see us do a little of that.

We've done some in the UK. We've actually taken on a little bit, but it's not huge. But we're beginning to take on more.

23. What Buffett would have done differently

WARREN BUFFETT: OK. Station 6.

AUDIENCE MEMBER: Good morning, Warren and Charlie. Glad you're feeling well.

My name is Ryan Boyle, and I'm 26 and working for a private equity firm in Chicago.

If you were me and had the chance to start over, what areas would you look to get into?

And do you think that my generation will have the same number of opportunities as yours? And if not, would you look to focus on emerging markets?

WARREN BUFFETT: Oh, I think you have all kinds of opportunities.

I would probably do very much what I have done in life, except I'd do it — I'd try and do it a little earlier, and I would have tried to be a little bit better when I was running a partnership, in terms of aggregating the money faster.

I used to work with $5,000 contributions from partners and, you know, I would try to develop an audited record of performance as early as I could.

I would try to attract some money, and then when I'd build up a fair amount of money out of investing, I would try to get into something much more interesting, which would be buying businesses to keep.

You mentioned private equity, which very often is buying businesses to sell. I don't want to be buying and selling businesses. I mean, if I establish relationships with people that come to me with their business, and they want to join Berkshire, I want it to be for keeps.

And that's been enormously satisfying. But it takes some capital to get into that business, and I didn't have any capital when I started out, so I built it through managing money for myself and other people, combined.

And like I say, I would get us through that process as fast as I could and then into a game where I could buy businesses of significance and interest to me. And I'd spend the rest of my life doing it, just as I've done.

Charlie?

CHARLIE MUNGER: Well, I've got nothing to add to that, either.

WARREN BUFFETT: And I'd do it with Charlie, incidentally. (Laughs)

24. Take advantage when "Mr. Market" acts like a "psychotic drunk"

WARREN BUFFETT: Carol.

CAROL LOOMIS: This comes — this question comes from a man who believes the stock — that Berkshire stock — is being held down some by your talking about the Buffett Rule.

I know you said you doubt that, but he suspects that at least 95 percent of the people in this arena believe that Berkshire Hathaway stock is undervalued.

If you don't think it's the Buffett Rule, could each of you give us your opinions about why the stock stays stuck at these levels?

WARREN BUFFETT: Yeah. We've run Berkshire now for 47 years. There have been several times — oh, four or five times — when we've thought it was significantly undervalued.

We saw the price get cut in half at least four times — or roughly in half — in fairly short periods of time.

And I would say this: if you run any business for a long period of time, there are going to be times when it's overvalued and sometimes when it's undervalued.

Tom Murphy ran one of the most successful companies [Capital Cities] the world has ever seen, and in the early 1970s, his stock was selling for about a third of what you could have sold the properties for.

And, you know, Berkshire, back in 2000/2001, whenever it was that I wrote in the annual report that we were also going to repurchase shares, was selling at what I thought was a very low price, and we didn't get any repurchase.

But that — stocks — the beauty of stocks is they do sell at silly prices from time to time. That's how Charlie and I have gotten rich. You know, Ben Graham writes about it in Chapter 8 of the Intelligent Investor.

You know, next to — well, Chapters 8 and Chapters 20 are really all you need to do to get rich in this world.

And Chapter 8 says that in the market you're going to have a partner named "Mr. Market," and the beauty of him as your partner is that he's kind of a psychotic drunk — (laughter) — and he will do very weird things over time and your job is to remember that he's there to serve you and not to advise you.

And if you can keep that mental state, then all those thousands of prices that Mr. Market is offering you every day on every major business in the world, practically, that he is making lots of mistakes, and he makes them for all kinds of weird reasons.

And all you have to do is occasionally oblige him when he offers to either buy or sell from you at the same price on any given day, any given security.

So it's built into the system that stocks get mispriced, and Berkshire has been no exception to that.

I think Berkshire, generally speaking, has come closer to selling around its intrinsic value, over a 47-year period or so, than most large companies.

If you look at the range from our high to low in a given year and compare that to the range high and low on a hundred other stocks, I think you'll find that our stock fluctuates somewhat less than most, which is a good sign.

But I will tell you, in the next 20 years, Berkshire will someday be significantly overvalued, and at some points significantly undervalued.

And that will be true for Coca-Cola and Wells Fargo and IBM and all of the other securities that — I don't — I just don't know in which order and at which times.

But the important thing is that you make your decisions based on what you think the business is worth.

And if you make your buy and sell decisions based on what you think a business is worth, and you stick with businesses that you think — you've got good reason to think — you can value, you simply have to do well in stocks.

The stock market is the most obliging, money-making place in the world because you don't have to do anything.

You know, you sit there with thousands of businesses being priced at the same price for the buyer and the seller, and you don't — and it changes every day, and you've got lots of information about most of those businesses, and you don't have to do anything.

Compare that to any other investment alternative you've got. I mean, you can't do that with farms.

If you own a farm and the guy has the farm next to you and you'd kind of like to buy him out or something, he's not going to name a price every day at which he'll buy your farm or sell you his farm, but you can do that with Berkshire Hathaway or IBM.

It's a marvelous game. The rules are stacked in your favor, if you don't turn those rules upside down and start behaving like the drunken psychotic instead of the guy that's there to take advantage of it.

Charlie?

CHARLIE MUNGER: Well, what's interesting about this place is I think we've had a lot more fun and we got rich enough so we bought businesses and stocks to hold instead of to resell.

It's an enormously more constructive life. So as fast as you can work yourself into our position, the better off you'll be. (Laughter)

WARREN BUFFETT: And you should be very encouraged by the fact he's only 88 and I'm only 81. Just think, it may take you a little while. (Laughs)

25. We ignore headlines and macro factors

WARREN BUFFETT: Cliff?

CLIFF GALLANT: I guess along those lines, you talk about the drunken market, have systemic fear — systemic risk fears — ever caused you to pause in your eagerness to buy equities?

You know, back in 2008/2009, you know, why weren't you more aggressive back then?

WARREN BUFFETT: You'll probably find this interesting. Charlie and I, to my memory, in 53 years, I don't think we've ever had a discussion about buying a stock or a business, or selling a stock or a business, that has been — where we've talked about macro affairs.

I mean, if we find a business that we think we understand and we like the price at which it's being offered, we buy it. And it doesn't make any difference what the headlines are, it doesn't make any difference what the Federal Reserve is doing, it doesn't make any difference what's going on in Europe. We buy it.

You know, there's always going to be good and bad news out there, and which gets emphasized the most, you know, depends on the moods of people or newspaper editors or whomever.

And there's — you know, there's a ton of bad — I bought my first stock, you know, in June of — in June of '42, and what had happened?

You know, we were losing the war, until the Battle of Midway. I mean, so here was a country that — you know, all my older friends had gone, you know, disappeared.

We weren't going to make any kinds of goods that were — people wanted. We were going to build battleships and things to drop in the sea, and we were losing.

But stocks were cheap.

And I wrote that article in October of 2008 in the Times. I should have written it a few months later, but in the end, I said we've just had a financial panic and it's going to flow over into the economy, you know, you're going to read all kinds of bad news, but so what, you know?

America is not going to go away. Stocks are cheap.

You've got to — we look to value, and we don't look to headlines at all. And we really don't — everybody thinks we sit around and talk about macro factors. We don't have any discussions about macro factors.

Charlie?

CHARLIE MUNGER: Yeah, but we did keep liquid reserves at the bottom of the panic that, if we'd known it was not going to get any worse, we would have spent, but we didn't know that.

WARREN BUFFETT: Yeah. We know what we don't know.

We all — we know we don't want to go broke. I mean, we start with that.

And we know you can't go broke if you've got a fair amount of liquid reserves around and you don't have any near-term debts and so on.

So our first rule is always to play it tomorrow, no matter what happens. But if we've got that covered, and we can find things that are attractive, we buy it.

Well Charlie has a little company called the Daily Journal Company and he sat there with a whole lot of cash. And when 2008 came along, he went out and bought a few stocks. He won't tell me the names of them, but —

You know, that was the time to use the money, not to sit on it.

Was that the name of the stock, Charlie? (Laughter)

You don't get anything out of him. (Laughter)

26. Big Berkshire subsidiaries have "done well" over past 5 years

WARREN BUFFETT: Station 7.

AUDIENCE MEMBER: Mr. Buffett, Mr. Munger, thank you for your inspiration and insight.

When you look at the stable of businesses that Berkshire owns, which business has greatly improved its competitive position over the last five years, and why?

And then conversely, perhaps you might name a business that was not so lucky.

WARREN BUFFETT: Yeah. We don't like to dump on the ones that aren't — that haven't done as well. But there's no question — and fortunately, the big ones have done well.

There's no question, even though we didn't — well, we didn't own all of it, but we actually have owned a significant piece of Burlington Northern over the last five.

But the railroad business for very fundamental reasons, which I should have figured out earlier, has improved its position dramatically over the last, really, 15 or 20 years, but it continues to this day.

I mean, it is an extremely efficient and environmentally-friendly way of moving a whole lot of things that have to be moved.

And it's an asset that couldn't be duplicated for, you name it, three, four, five, six times, you know, what it's selling for. So that it's a whole lot better business than it was five or 10 years ago.

Now, GEICO is a whole lot better business than it was five or 10 years ago, although I think you could have predicted that the chances were good that that was going to happen.

But, you know, we have — we're approaching 10 percent of the market now. And you go back to 1995, we had 2 percent of the market.

We had the ingredients in place to become much larger, and then fortunately, we had [CEO] Tony Nicely who absolutely maximized what was there to be done.

And GEICO's worth billions and billions and billions of dollars more than when we bought it.

And the Burlington is worth considerable billions more than when we bought it, even though it was recently.

MidAmerican has done a great job. We bought that stock at 34 or so dollars a share in 1999, and I think we appraise it now at around $250 a share, and that's in the utility business.

So ISCAR has been wonderful since we bought it. We bought that six years ago. And they just don't stop. You know, they do everything well. And I would not want to compete with them.

So we've — there are a number of them. And —

CHARLIE MUNGER: We have 80 percent or so of our businesses, by value, at least, increased their market strength.

WARREN BUFFETT: Yeah. By value, I would say more than 80 percent.

CHARLIE MUNGER: More than, yeah.

WARREN BUFFETT: But not by number, but by value.

CHARLIE MUNGER: By value. We are not suffering at all. We're never going to get the rate to 100 percent.

WARREN BUFFETT: And the mistakes have been made in the purchasing. I mean, it's where I misgauged the competitive position of the business.

It isn't because of the faults of management. It's because I just — either because I had too much money around or because I was — been drinking too much Cherry Coke or whatever it was — I assessed the future competitive position in a way that was really inappropriate.

But it wasn't because it really changed on me so much. And, you know, we've done some of that.

But the big ones — the big ones have worked out very well.

Gen Re, which took, like, real problems for some years. I mean, Tad [Montross] is running a fabulous operation there.

Ajit [Jain] has created something from nothing that's worth tens of billions of dollars. You know, he created that out of walking into the office in 1985 and entering the insurance business for the first time, but he just brought brains and energy and character to something, and we backed him with some money, and he's created a business like nobody I've ever seen.

Charlie?

CHARLIE MUNGER: Well, we've been very fortunate. And what's interesting is the good fortune is not going to go away merely because Warren happens to die. (Laughter)

It won't help him but — (Laughter)

WARREN BUFFETT: You'll have an explanation of that in the second half of this. (Laughter)

27. Derivatives are "not going to be a huge factor at Berkshire"

WARREN BUFFETT: Becky?

BECKY QUICK: This question comes from Joel Bannister (PH) in Dallas, Texas, who says, "Warren, you personally run the derivative book.

"Who will manage these weapons of mass destruction after your tenure? We don't want to end up like AIG under someone else's watch."

He also adds, "P.S. I am wearing the wedding ring you sold my wife last year at the annual meeting at Borsheims."

WARREN BUFFETT: Well, obviously a man of intelligence. (Laughter)

Yeah, I don't think there will be much of a derivatives book after I'm around. In fact, there won't be much of a derivatives book when I am around. I mean, it's not that big of a deal.

But there will be — there could well be — well, I'll go back to will be, because it's almost required in certain of our utility operations that they engage in certain types of derivative activities. The utility boards that they respond to want them to hedge out certain types of activities.

And then they engage in swaps of generation. And there's a number of activities that there's some derivatives that fit into doing that, but it's not of a huge scope.

The railroad formerly hedged diesel fuel, for example. They may do that in the future; they may not. I mean — so there's a few operating businesses that will have minor positions.

I don't think that — I think it's unlikely that whoever follows me — well, they'll be in — there will be several investment guys that follow me, at least two, and they're on board now, Todd Combs and Ted Weschler.

We hit a home run with both of them. We got better than we deserved, but Charlie and I like that.

And they — it's unlikely they do anything — very unlikely they do anything — in derivatives, although I wouldn't restrict them from doing it because they're smart people and sometimes derivatives get mispriced.

But it's not going to be a huge factor at Berkshire. I think we're going to do really, probably, quite well with the derivative positions that we have. We've done fine with the ones that have expired so far, and I like the positions.

But the rules have changed in relation to collateralizing, and I don't like ever exposing us to anything that would cause me to worry about Berkshire's financial condition if the Federal Reserve were hit by a nuclear bomb tomorrow, or anything of the sort, or Europe, you know, something terrible happened.

We just — we think about worst cases all of the time around Berkshire. Charlie and I probably think about worst cases more than any two managers you'll ever find, and we are never going to expose ourselves to a worst case.

And a requirement to collateralize things means that you are putting yourself in a position where you may have to come up with some cash tomorrow morning, and we're never going to do that on any significant scale, because we don't know what tomorrow morning will bring.

Charlie?

CHARLIE MUNGER: We wouldn't — the derivatives have bothered some people. We never would have entered if we'd had to sign normal contracts.

We had better credit than anybody else, and we got better terms. And I think by the time that has all run off, we will have made at least $10 billion, maybe a lot more.

In other words, we're going to be very lucky we did those contracts.

28. Different valuation methods for different companies

WARREN BUFFETT: Jay?

JAY GELB: Warren, when you discuss Berkshire's intrinsic value, why do you value the insurance business at only cash plus investments per share?

And what's a reasonable multiple to apply to the pretax earnings of the noninsurance businesses?

WARREN BUFFETT: I would — I don't value the insurance business quite the way you say it. I would value GEICO, for example, differently than I would value Gen Re, and I would value even some of our minor companies differently.

But basically, I would say that GEICO is worth — has an intrinsic value — that's greater — significantly greater — than the sum of its net worth and its float. Now, I wouldn't say that about some of our other insurance businesses.

But that's for two reasons. One is, I think it's quite rational to assume a significant underwriting profit at GEICO over the next decade or two decades, and I think it's likely that it will have significant growth.

And both of those are value — items of enormous value. So that adds to the present float value, but I can't say that about some other businesses.

But in any event, once you come up with your own valuation on that, in terms of the operating business, obviously different ones have different characteristics.

But I would love to buy a new bunch of operating businesses that had similar competitive positions in everything.

Under today's conditions, I would love to buy those at certainly nine times pretax earnings, maybe 10 times pretax earnings. I'm not talking about EBITDA or anything like that, which is nonsense. I'm talking about regular pretax earnings.

If they have similar characteristics, we'd probably pay a little more than that, because we know so much more about them than we might know about some other businesses.

What would you say, Charlie?

CHARLIE MUNGER: When you used the word EBITDA, I thought to myself, I don't even like hearing the word. (Laughter)

There's so much nutcase thinking involving EBITDA. Earnings before what really counts in costs. (Laughter)

WARREN BUFFETT: Yeah. We prefer EBE, which is earnings before everything. (Laughter)

CHARLIE MUNGER: Right.

WARREN BUFFETT: It's nonsense. I mean, if you compare a business that, you know, leases pencils or something like that where they all get depreciated in a two-year period and then compare that to some business that uses virtually no capital, you know, like See's Candies, it's just nonsense. But it works for the people that sell businesses.

It's like Charlie's friend that used to sell fishing flies, Charlie, right?

CHARLIE MUNGER: Right. They don't sell these lures to fish. (Buffett laughs)

29. Buffett's negativity on gold "arouses passions"

WARREN BUFFETT: Station 8.

AUDIENCE MEMBER: Oh, hi, thanks. Neil Steinhoff (PH) from Phoenix. Thanks for holding the meeting today.

You mentioned a while ago that you were concerned about you and Charlie exposing yourself. Well, I for one am glad that you're not doing that. (Laughter)

Since 1999, the Berkshire Hathaway stock has — we have not gone up appreciably, whereas gold has gone up multiple times. I don't own your stock for the glamour. I own it to earn money. What happened?

WARREN BUFFETT: Well, I would say this: when we took over Berkshire, gold was at $20 and Berkshire was at $15 so — gold is now at $1600 and Berkshire is at $120,000. So you can pick different starting periods. (Applause)

Obviously, you can pick anything that's gone up a lot in the last, you know, month or year. I mean, it will beat 90 percent of — or 95 percent — of other investments.

But the one thing I would bet my life on, essentially, is over a 50-year period, not only will Berkshire do considerably better than gold, but common stocks as a group will do better than gold, and probably farmland will do better than gold.

I mean, if you own an ounce of gold now and, you know, you caress it for the next hundred years, you'll have an ounce of gold a hundred years from now.

If you own a hundred acres of farmland, you'll also have a hundred acres of farmland a hundred years from now and you'll have taken the crops for a hundred years and sold them and presumably bought more farmland in the process.

It's very hard for an unproductive investment to beat productive investments over any long period of time, and I recognize that —

It's very interesting. I can say bonds are no good and [Federal Reserve Chairman Ben] Bernanke still smiles at me. You know, and I can say some stock is no good, and people —

But if you say anything negative about gold, I mean, it arouses passions with people, which is kind of fascinating, because usually if you thought through something intellectually, it shouldn't really make much difference what people say. It should be that, well, you know, the question is whether your facts are right and your reasoning is right.

But when you run into people that are really excited about gold — and I came from a family where my dad loved gold.

And he was tolerant. He could take a discussion of it. I find many people have trouble with it.

Charlie?

CHARLIE MUNGER: Well, I have never had the slightest interest in owning gold. It's a much better life to work with businesses and people engaged in business. I can't imagine a worse crowd to deal with than a bunch of gold bugs. (Laughter)

30. Buffett: "my best ideas are all in Berkshire"

WARREN BUFFETT: Andrew?

ANDREW ROSS SORKIN: We got a couple of questions on this topic.

"You said in an interview on CNBC that you had bought shares in J.P. Morgan for your personal account.

"Can you explain how you decide to make a personal investment versus one in your role as a fiduciary for us as shareholders of Berkshire?

"And while you're at it, could you please share some names of stocks you've recently bought for your own account?" (Applause)

WARREN BUFFETT: The truth is I like Wells Fargo better than I like J.P. Morgan but I — but I also — we bought, and we're buying, Wells Fargo stock, and that takes me out of the business of buying Wells Fargo. So therefore, I go into something that I don't like quite as well but that I still like very much.

And that's one of the problems I have, is that I can't be buying what Berkshire is buying, and I've got some money around, and therefore, I go into my second choices, or into tiny little companies like I did with Korean companies and that sort of thing.

But my best ideas are all in Berkshire. That I can promise you.

Charlie? Charlie's bought real estate, too, and different things to avoid that problem.

CHARLIE MUNGER: Yeah. But basically the Munger family is in two or three things only.

Diversification is my idea of — not something I have practically no interest in, except as it happens automatically in a big place like Berkshire.

I rejoiced the day I got rid of a quote — you know, a stock quoting machine.

And I like this buy and hold investing. It's a lovely way to live a life and you deal with a better class of people, and it's worked pretty well for all of us.

And I don't think you need to worry about Warren's side investments. His investments in Berkshire are so huge and those are so small, relevantly, that if that's your main problem in life, you have a very favored life.

WARREN BUFFETT: Well, if you have 98 1/2 percent of your money in Berkshire and you really are trying to do your thinking about what's best for the 1 1/2 percent, you're a little bit crazy. (Laughs)

You should be thinking about Berkshire, which I can assure you I do. But, there could be —

CHARLIE MUNGER: And he does like Wells Fargo better than J.P. Morgan.

WARREN BUFFETT: Yeah, I do, yeah. And we have 400 and some million shares of Wells Fargo in Berkshire.

I like J.P. Morgan fine, obviously, but I know Wells better. It's easier to understand.

So, you know, we — well, we bought Wells Fargo in the first quarter. We bought Wells Fargo last year. We've bought it an awful lot of years.

And if I wasn't managing Berkshire, you know, but instead was sitting with my own money, I'd have a lot of money in Wells Fargo and I'd probably have some money in J.P. Morgan, too.

31. Why is BNSF a subsidiary of National Indemnity?

WARREN BUFFETT: Gary?

GARY RANSOM: When Berkshire bought BNSF, it raised the surplus of the property-casualty industry by about 4 percent. It's unusual to have a property-casualty company own such a large non-operating company.

I'd also characterize your whole organization chart as challenging, a lot of different pieces to it, which gives rise to the issue of capital efficiency.

And I'm just wondering, are there any parts of your organization structure that have any hindrance, whether it's regulatory or otherwise, to making use of the capital in the best way, generally, and in particular for BNSF?

WARREN BUFFETT: Yeah. Well, I would say that money in our life companies has less utility to us — I'd rather have $100 million in our property-casualty companies than 100 million in our life companies, because we're more restricted as to what we can do with the money in the life companies.

So — and we've got a fair amount of money in life companies, and that money cannot be used as effectively over a period of years, in my view, as money we have in the property-casualty business. It's a disadvantage to being in the life business versus the PC business.

And the best place — obviously, the number one place where we like to have money is in the holding company. And we've got about 10 billion in the holding company right now. That, you have the ultimate flexibility with.

Most of our operating businesses keep more cash around than they need, but it's there. And I'm — as long as I have 20 billion someplace, I feel comfortable. We'll never have anything that can come up, remotely, that would cause me to lose any sleep as long as I start with the 20 billion.

That's probably considerably more than we need, but it just leaves us comfortable, and it makes us feel we can do other things aggressively, as long as we know the downside is protected.

The — having the railroad in National Indemnity was just something we thought was nice to have a huge asset like that there that should make the rating agencies and everyone feel comfortable, and there's no disadvantage to us.

Very interesting, the rating agencies — at least one rating agency — said they didn't want to give us any credit for that asset in there, although if we had 20 percent, like we had had earlier, they would have given us full credit for the market value. I didn't push them too hard on that.

But there's a fair amount of logic, I think, to where things are placed. If we were to make a big acquisition, it might require shifting some funds from one place to another, but we'll always leave every place more than adequately capitalized.

And if you can figure out a way that I could use the life funds more like I can use the property-casualty funds, call me. I've got an 800 number. (Laughs)

CHARLIE MUNGER: Well, two things are peculiar about that casualty operation. One is that it has so much more capital, in relation to insurance premiums, than anybody else. And the other is that it has, among the assets in that great surplus of capital, is something like the Burlington Northern Railroad, which makes it immensely stronger from the viewpoint of the policyholder.

It's a huge advantage you're talking about, not a disadvantage.

WARREN BUFFETT: Yeah. Here's a property-casualty company that has an asset in it that, unrelated to insurance, will probably make $5 billion pretax or more.

So if we're writing — well, in that entity, we're writing less than that — but let's say we're writing 25 billion of premiums. That means we can write at 120, and just our railroad operation

will bring us an underwriting neutrality. I mean, it's a terrific — it's like having a royalty or something.

CHARLIE MUNGER: It's a wonderful position we have.

WARREN BUFFETT: And nobody else has it.

CHARLIE MUNGER: And nobody else has it. And they wouldn't let us do it if we weren't so strong.

32. We don't want Berkshire's stock to be too high or too low

WARREN BUFFETT: Station 9.

AUDIENCE MEMBER: Yes. John Horton, Water Street Capital, Jacksonville, Florida.

Since Berkshire will likely need to offer a stock component for very large acquisitions like Burlington Northern, wouldn't Berkshire lower its cash outlay by increasing the price of its stock to near fair value, perhaps by offering a 2 to 3 percent dividend or a promised percentage of cash earnings?

Might this have the effect of actually lowering the cash outlay needed for such acquisitions? As 30-year shareholders with almost $1 billion of exposure, we like this approach. Thank you.

WARREN BUFFETT: Yeah. We would obviously prefer to have our stock sell at exactly intrinsic business value, even though we don't know that precise figure, but Charlie and I would have a range that would not differ too widely.

And if it's over intrinsic business value, and we could use it as part of a consideration for buying something else at intrinsic business value, and then use cash for the balance, you know, we would like that situation.

And that — that's very likely to occur in the future. It's occurred in the past. Berkshire, without paying a dividend, has sold, probably, at or above intrinsic value as much of the time in the last 35 or so years as it has below.

I mean, it will bob around. And I do not think a dividend would be a plus, in terms of having it sell at intrinsic value most of the time. I think it might be just the opposite.

I mean, here we are, we're willing to pay, you know, 110 cents on the dollar for what's in there.

So the idea of paying out money, which we think is worth at least 110 cents on the dollar within the place, and have it turn into 100 cents on the dollar when paid out, just is not very attractive to us, unless we find we can't do things in the future that make sense.

But our goal — and we put it in the annual report. Our goal is to have the stock sell at as close to intrinsic business value as it can.

But with markets — you know, the way markets operate, most of the time it will be bobbing up or down from that level. And we've seen that now for 40-plus years, and we've tried to, at least in a way, point out what we think is going on.

And if it ever — if it — and it will. I mean, when it trades at intrinsic business value or higher, there may be times when we will use it.

We'd still prefer using cash, though. Cash is our favorite medium of purchase just because we're going to generate a lot of it. And we hate giving out shares.

We do not like the idea of trading away part of See's Candies or GEICO or ISCAR or BNSF. The idea of leaving you with a lower percentage interest in those companies because of any acquisition ambitions of ours is anathema to us.

Charlie?

CHARLIE MUNGER: Well, what he suggested is a very conventional approach, and we think it's better for the shareholders to do it the way we're doing it. (Applause)

WARREN BUFFETT: I should point out, I'm in the position — giving away all of my stock between now and 10 years after my death when my estate is settled — but I'm giving it away every year.

You know, it will do more good, in terms of its philanthropic consequences, if it's at a higher price than lower price. I mean, there's nobody here that has more of an interest in the stock selling at what I'll call a fair value, as opposed to a discount value, than I do.

I know I'm not a seller, but I'm disposing of the stock, and I would rather have it buy, you know, X quantity of vaccines than 80 percent of X.

So it isn't like we've got some great desire to have the stock sell cheap. If it does sell cheap, we'll, you know, we'll buy it in, but our interest is really in having it sell at, more or less, the fair value.

And we think if we perform reasonably well, in terms of running the business, and if we tell the truth about the business, and explain to a selected group of shareholders who are interested in that aspect of investing, that over time, it will average that.

And that's happened over the years, but it doesn't happen every year. If people get excited enough about internet stocks, they're going to forget about Berkshire. When they get disillusioned with internet stocks then — I'm going back 10 or 12 years on that.

But there have been times when people have gotten very excited about Berkshire, and there have been times when they've gotten very depressed.

Charlie, anything?

33. Buffett sees value in local newspapers

WARREN BUFFETT: OK. Carol.

CAROL LOOMIS: This question comes from Kevin Getnowski (PH) of Yutan, Nebraska. And to it, I've added one question at the end, which came from another shareholder writing about the same subject.

"You've described the newspaper business in the past as chopping down trees, buying expensive printing presses, and having a fleet of delivery trucks, all to get pieces of paper to people to read about what happened yesterday.

"You constantly mention the importance of future intrinsic value in evaluating a business or company. With all of the new options available in today's social media and the speculation of the demise of the newspaper media, why buy the Omaha World-Herald?"

"Was there some" — this is a question from the other one — "Was there some self-indulgence in this?"

WARREN BUFFETT: No, I would say this about newspapers. It's really fascinating, because everything she read is true, and it's even worse than that. (Laughter)

The newspapers have three problems, two of which are very difficult to overcome, and one, if they don't — the third — if they don't overcome it, they're going to have even worse problems, but maybe can be overcome.

Newspapers — you know, news is what you don't know that you want to know. I mean, everybody in this room has a whole bunch of things that they want to keep informed on.

And if you go back 50 years, the newspaper contained dozens and dozens and dozens of areas of interest to people where it was the primary source. If you wanted to rent an apartment, you could learn more about renting apartments by looking at a newspaper than going anyplace else.

If you wanted a job, you could learn more about that job. If you wanted to know where bananas were selling the cheapest this weekend, you could find it out. If you wanted to know how — whether Stan Musial, you know, went two for four, or three for four, last night, you went to the newspapers.

If you wanted to look at what your stocks were selling at, you went to the newspapers.

Now, all of those things, which are of interest to many, many people, have now found other means — they've found other venues — where that information is available on a more timely, often cost-free, basis.

So newspapers have to be primary about something of interest to a significant percentage of the people that live within their distribution area.

And the — there were so many areas where they were primary 30 or 40 years ago that you could buy a newspaper and only use a small portion of it and it still was valuable to you.

But now you don't use a newspaper to look for stock prices. You get them instantly off the computer. You don't look for the newspapers for apartments to rent, in many cases, or jobs to find, or the price of bananas, or what happened in the NFL yesterday.

So they've lost primacy in all of these areas that were important.

They still are primary in a great many areas. The World-Herald tells me, every day, a lot of things that I want to know that I can't find someplace else.

They don't tell me as many things as they did 20 or 30 or 40 years ago that I want to know, but they still tell me some things that I can't find out elsewhere.

Most of those items — overwhelmingly — those items are going to be local. You know, they're not going to tell me a lot about Afghanistan or something of the sort that I want to know but I don't know. I'm going to get that through other medium.

But they do tell me a lot of things about my city, about local sports, about my neighbors, about a lot of things that I want to know. And as long as they stay primary in that arena, they've got an item of interest to me.

Now, the problem they have, they are expensive to distribute, as the questioner mentioned. And then the second problem is that, throughout this country, we had 1700 daily newspapers. We have about 1400 now.

The — in a great many cases, they are going up on the web and giving free the same thing that they're charging for in delivery. Now, I don't know of any business plan that has sustained itself for a long time, maybe you can think of — maybe Charlie can think of one — but that has charged significantly in one version and offers the same version free to people, that had a business model that would work over time.

And lately, in the last year even, many newspapers have experimented with, and to some extent succeeded, in those experiments, in getting paid for what they were giving away on the net that otherwise they were trying to charge for in terms of delivery.

I think there is a future for newspapers that exist in an area where there's a sense of community, where people actually care about their schools, and they care about what's going on in the given geographic area. I think there's a market for that.

It's not as bullet proof, at all, as the old method when you had 50 different reasons to subscribe to the newspaper.

But I think if you're in a community where most people have a sense of community, and you don't give away the product, and you cover that local area in telling people about things that are of concern to them, and doing that better than other people, whether it be high school sports, you know.

I've always used the example of obituaries. I mean, people still get their obituaries from the newspaper. It's very hard to go to the internet and get obituaries.

But I'm interested in Omaha and knowing who's getting married, or dying, or having children, or getting divorced, or whatever it may be.

When I lived in White Plains, New York, I really wasn't that interested in it. I did not feel a sense of community there.

So we have bought — and we own a paper in Buffalo where there's a strong sense of community, and we make reasonable money in Buffalo. It's declined, and we have to have a internet presence there where people have to pay to come on. We have to develop that.

But I think that the economics, based on the prices we paid — and we may buy more newspapers — I think the economics will work out OK. It's nothing like the old days, but it still fulfills an important function.

It's not going to come back and tell you what your — and tell you on Wednesday what stock prices closed at on Tuesday and have you rush to the paper to find out.

It's not going to tell you what happened in basketball last night when you've gone to ESPN.com and found out about it. But it will tell you a whole lot about what's going on, if you're interested in your local institutions. And we own papers in towns where people have strong local interest.

Charlie?

CHARLIE MUNGER: Well, we had a similar situation years ago when World Book's encyclopedia business was about 80 percent destroyed by Bill Gates. (Laughter)

He gave away a free computer with every bit of software.

WARREN BUFFETT: He charged $5, I think, Charlie —

CHARLIE MUNGER: And well, whatever it was. But we are still selling encyclopedias and we still make a reasonable profit but not nearly as much as we used to.

WARREN BUFFETT: Right.

CHARLIE MUNGER: Some of these newspapers, we hope, will be the same kind of investments. They're not going to be our great lollapaloozas.

WARREN BUFFETT: The prices were — well, we actually may be doing more in newspapers, and we will be going where there's a strong sense of community.

But if you live in Grand Island, Nebraska, where we have a paper, or North Platte, and your children live there and your parents probably live there, your church is there, you are going to be quite interested in a lot of things that are going on in North Platte, and in the state of Nebraska, that you won't find readily on television or the internet.

And you'll be willing to pay something for it, and advertisers will find it a good way to talk to you, but it won't be like the old days.

34. Buffett: Amazon won't affect Nebraska Furniture Mart

WARREN BUFFETT: Cliff?

CLIFF GALLANT: Thank you. Just on that general topic, it is true that in the past some of your investments have been fairly affected by technology, in newspapers or World Book.

Are there other businesses where you're concerned about technology affecting them, for example, you know, Amazon or online grocery stores? Could they affect a business indirectly, like McLane?

WARREN BUFFETT: Amazon is a tough one to figure. I mean, Amazon — it could affect a lot of businesses that don't think they're going to be affected today in the retailing area. It's huge. It's a powerhouse.

I don't think it's going to affect a Nebraska Furniture Mart, but I think it could affect some of the other retailing operations THAT we have. It won't affect the Nebraska Furniture Mart.

I should report to you that in the first four days: Tuesday, Wednesday, Thursday, and Friday of this week, our business at the Furniture Mart is up about 11 percent over last year, so you people are doing your part there.

We had — on Tuesday we did over $6 million of business. Now, those of you who are in the retailing business, thinking about a Tuesday and 6 million-plus of volume, we'll do more probably today, but those are huge, huge volumes.

And we're going to go to Dallas here in a couple of years. We've got a 433-acre plot of ground down there, and I think we're going to have a store that will make any records we've set in the past look like nothing.

Going back to Amazon, though, in terms — GEICO was very affected by the internet, and at first, we missed that.

I mean, we — GEICO's got an interesting history. It was mail originally, if you go back into the late '30s and early '40s, and it was very successful. And then it moved — not leaving mail totally behind — but it moved to television big time.

And then the internet came along, and I thought, originally, that only young people would look for quotes on the internet and that — you know, I mean, I never would have done it. I would have been calling on a rotary dial phone, you know, and saying — when they said number, please, first, I have to get my quote on GEICO — forever.

But it just changed dramatically, you know, to the internet.

So, things do change very significantly, and if the consumer finds something they like to do better in some new way — and Amazon has been an incredible success. It's very hard to find people who have done business with Amazon that are unhappy about the transaction. They have happy customers.

And a business that has millions and millions of happy customers can introduce them to new items and then, you know, and it will be a powerhouse, and I think it could affect a lot of businesses. It's hard for me to figure out.

CHARLIE MUNGER: I think it's almost sure to hurt a lot of businesses a lot.

WARREN BUFFETT: Which ones do you think it will hurt the most, Charlie?

CHARLIE MUNGER: Well, anything that can be easily bought by using a home computer, or an iPad, for that matter.

WARREN BUFFETT: Which of our businesses do you think it can hurt?

CHARLIE MUNGER: I won't be buying the stuff because I'm habit bound. Besides, I almost never buy anything. (Laughter)

But I think it will hugely affect a lot of people. I think it's terrible for most retailers. Not slightly terrible, really terrible.

WARREN BUFFETT: Well, with that cheerful assessment, we'll go to station 10. (Laughter)

35. “Almost impossible” to copy Berkshire

AUDIENCE MEMBER: Hi. This is Hector from (inaudible) Industry Fund Management Company in China.

My question is, you mentioned acquiring insurance float with zero, or even negative cost, is one of the key competitive advantages of Berkshire Hathaway. And we also found that an average leverage of Berkshire always about 100 percent.

I guess the net asset growth will significantly decline without using that leverage.

Therefore, to own an insurance company acquiring insurance float would be an important strategy if (inaudible) want to copy Berkshire business model. Would you please give me a comment?

WARREN BUFFETT: Charlie, I didn’t get all that so you —

CHARLIE MUNGER: I didn’t get it all, either. (Laughter)

But, we have a very peculiar model, and it works very well for us. I think it’s very hard for other people to get the same result.

WARREN BUFFETT: Yeah, I think it’s almost impossible. Besides, I mean, it’s taken a long, long time to get here. It’s taken a great amount of consistency, and that consistency has been allowed because, basically, we’ve had a controlling shareholder during that time.

So we’ve not had to bow to any of the urgings of Wall Street or, you know, whatever may be the fad of the day. But we have had a culture that — where we could write out 13 or 14 principles more than 30 years ago, and we’ve been able to stick with them.

And that’s very hard to do for most American corporations, and I think it’s very hard to do when managers come and go and they have small shareholdings. I think it takes a very unusual structure to be able to do it.

And, you know, it took a long time to get to the point where people with large private businesses in this country really cared about where those businesses were lodged after they gave up their stewardship. Took a long time to have it get so that a great many of those people would think of Berkshire first.

And the nice thing about it is, if they think of Berkshire first they don’t think of anybody second, so we get the call.

We don’t do well buying businesses at auction. I mean, if somebody’s only interest is to get the top price for their business, you know, seldom we’ll get one.

We did buy one at auction, I mean, but it was an add-on. The Dutch company we bought yesterday, we bought at auction. But that sometimes happens with our smaller acquisitions.

But the big private acquisitions are going to come to Berkshire because they want to come to Berkshire. And that's a significant competitive edge, and I don't see how anybody really challenges us on that.

CHARLIE MUNGER: Well, not only do I think other people will have a hard time copying it effectively, I think if Warren went back to being 30 years of age with a modest amount of capital and not much else, he'd have a hell of a time doing it again, too.

WARREN BUFFETT: I'd like to try. (Laughter)

OK. Becky?

36. Rarely try to change companies in our stock portfolio

BECKY QUICK: This question comes from David Schermerhorn (PH) in Boulder, Colorado.

And he writes that "Berkshire Hathaway has several substantial investments in other publicly traded companies.

"As a shareholder, Berkshire is entitled to annually cast votes on matters such as election of directors, advisory vote on executive compensation, approval of stock option plans, and so forth.

"So could you tell us what goes into your thinking and decisions with respect to how you vote our shares in these companies?"

WARREN BUFFETT: Yeah. We virtually never have voted against management, but we've done it a couple of times. There have been a —

CHARLIE MUNGER: Yeah, in 50 years.

WARREN BUFFETT: Yeah. There have been a couple of times when we thought — on the question of stock option expensing when that was put on a ballot.

If we — there may have been a particularly egregious option grant or something, we might have voted against, but our general feeling is that when we're a large shareholder of a company that we certainly generally like the business, we generally like the management.

We realize that they're not going to subscribe to our views 100 percent, in many cases 90 percent or 80 percent. Doesn't mean we think they're bad people or anything. They just — they

have a different — they're sort of judging by behavior elsewhere. And they're perfectly decent people, but they don't think about things exactly the same way we do.

But that doesn't rule out owning a big piece of the business. We are not in the business of trying to change people. We don't try and change people when we buy the entire business. We think it's like marrying somebody to change them. It just doesn't work very well.

CHARLIE MUNGER: Doesn't work very well with children, either. (Laughter)

WARREN BUFFETT: No. And we know we don't want anybody to marry us to change us.

So I mean, we're not going to do it — we accept people the way they come, pretty much. Doesn't mean we look — we decide we'll associate with anyone, but we don't expect everybody to be clones of us.

And if we were to see a particularly dumb merger, a particularly egregious stock option plan, we might vote against it. It would pass anyway. We wouldn't conduct a campaign against it.

But we have seen a few of our companies engage in some — what we thought were really dumb deals, and we've usually been right, but we couldn't stop them.

But we have — I think we've voted against maybe one or two of them.

Charlie?

CHARLIE MUNGER: Well, I think you've said it all.

37. Good commercial insurance companies are hard to find

WARREN BUFFETT: OK. Jay.

JAY GELB: This question is on Berkshire's commercial insurance operations. Berkshire has a smaller presence in primary commercial lines insurance compared to its much larger reinsurance and auto insurance businesses.

Under what circumstances would Berkshire be open to increasing the scale of its primary commercial insurance operations, including acquisitions?

WARREN BUFFETT: Yeah, if we thought we can either expand internally, which would be tough, or buy a great company in the commercial field, which would — that would be the more likely way — you know, we'd do it.

Now, we got a chance, I don't know, six or seven years ago to get in the medical malpractice field when GE wanted out and we bought that, and then we added to that with our Princeton Insurance acquisition last year.

So we did get a chance to go into a first-class company with a first-class manager in Tim Kenesey about six or seven years ago, and we jumped at it. And GE was just getting out of the insurance business.

So it's hard to think of very many commercial insurance companies that I would get excited about, a very few. There might be a couple, and we'd like the business. I mean, you know, there are very few personal lines companies we like, but love GEICO, obviously.

There are very few reinsurance companies we like, but we love the ones we've got. And if we could find a quality company in commercial lines and we — presumably it would have quality management — we'd buy it in an instant. We've got nothing against that business.

38. More flexible buyback threshold?

WARREN BUFFETT: Station 11.

AUDIENCE MEMBER: Mr. Munger and Mr. Buffett, this is Whitney Tilson. I'm a shareholder from New York. I have a question for Debbie.

I'm just kidding. I applaud the fact that you've —

WARREN BUFFETT: She's in the president's box. (Laughs)

AUDIENCE MEMBER: I applaud the fact that you've set a price above which you won't buy back your stock, but it seems, based on the trading of the stock since the announcement, the wall may have put a floor on the stock. It also may have put a ceiling on it slightly above 1.1 times book value.

If so, this is obviously contrary to your desire to have the stock trade close to intrinsic value, which you've said is far higher than 1.1 times book.

Have you considered being a little more flexible in the price at which you'd buy back your stock depending on how well your business is going and what other opportunities are available?

For example, I would much prefer it if you bought back 3.4 billion of your own stock at 1.15 times book value last quarter, rather than the stocks you bought of other companies.

WARREN BUFFETT: Yeah, so would I. But the — I'm afraid — I don't think it puts a ceiling on, but I do think it certainly has an effect on a floor. It doesn't make a floor. I mean, you and I have

seen enough of markets to know that if things get chaotic or anything like that, floors disappear.

So, I think there could be circumstances under which we would buy a lot of stock, but I don't think they're, you know, highly likely at all.

I think if we were at 115 — and believe me 115 would not be a crazy price — I don't think we'd probably buy a lot more stock. It might have the effect of the stock selling at, you know, a little above that or even a lot above it, just like 110 can do the same thing.

I do think it signals to a lot of people that they don't have much to lose if they buy it just slightly above the price we've named and perhaps they've got a lot to gain. But I don't think it sets a ceiling, Whitney.

When people feel differently in markets, it can sell it at a much different price.

If I thought we would buy a whole lot more stock at a slightly higher price, I would probably adjust the price, but I don't think that's the case. I think it would just cause everybody to think, you know, I can buy it at this little higher price and have very little to lose, just like they may very well think now.

But you get into any kind of a chaotic market — and we'll have chaotic markets in the future — and we might buy a lot of stock.

Charlie?

CHARLIE MUNGER: Oh, I've got nothing to add to that, either.

39. No permanent damage to Walmart from Mexico bribery scandal

WARREN BUFFETT: OK. We'll just have one or two more and then we'll break. Andrew?

ANDREW ROSS SORKIN: OK. This question comes from a shareholder named David Cass (PH) of Maryland.

He says, "One of Berkshire's largest investments in recent years has been Walmart. Has your opinion of this company changed as a result of the Mexican bribery scandal?"

WARREN BUFFETT: No. I think — it looks — if you read the New York Times story, there's always another side to it. But it looks like they may well have made a mistake in how that was handled, but I do not think it — and it may well result in a significant fine, you know.

But I don't think it changes the fundamental dynamic. I mean, Walmart does operate on low gross margins, which means it offers low prices. And that works in retailing, and a lot of other things they do work in retailing.

So I do not see — I mean, it's a huge diversion of management time and it's costly and a whole bunch of things, but I don't think the earning power of Walmart five years from now will be materially affected by the outcome of this situation.

Charlie?

CHARLIE MUNGER: Well, these are interesting issues.

I'm unaware of any place where Berkshire is slipping on this, but we have so many employees that it's not inconceivable we could have some slippage somewhere.

And you get as big as Walmart, you're going to have an occasional glitch. I don't think there's something fundamentally dishonorable about Walmart.

WARREN BUFFETT: When you have something as big as Berkshire, you're going to have an occasional glitch. I mean, we have 270,000 people today interacting with customers and government officials and vendors and all kinds of people. I will guarantee you somebody is doing something wrong.

In fact, I would guarantee you at least, you know probably 20 people are doing something wrong. You can't have a city of 270,000 people and not have something going on.

And we can talk until we're blue in the face about what people should do and not do, but people don't get messages sometimes the same way that you give them, and you know, we're layers removed from people operating and others. And a lot of people just do crazy things.

So it is a — I mean, it is a real worry if you're running a business like this that — you don't worry about the fact somebody is doing something wrong, because there is going to be somebody doing something wrong. What you worry about is that it's material and nothing gets done about it, and that you act fast if you hear about something.

And, you know, we've got hotlines and we've got all communications and everything, but that does not stop the fact that right now, somebody is doing something wrong at Berkshire.

And if we get twice as large someday we'll have more people. And we try to convey to the managers that when they find out about something, you know, act on it, immediately let us know. We can handle bad news as long as we get it promptly.

But I'm very sympathetic to anybody running hundreds of thousands of people to the problems of the ones that — sometimes, you know, they don't even think they're doing something

wrong. I mean, if you get 270,000 people together, maybe even a crowd this size, you'll have some very peculiar people in it. (Laughter)

40. Update on Buffett's wager against hedge funds

WARREN BUFFETT: OK, we're at noon, roughly.

I made this bet four years ago with a group at Protege Partners about the S&P versus — or an index fund — versus five funds of funds. And I told them at the time I'd put up the results every year.

And as you can see — I can't see it from here, but the first year they — it was a huge down year. And as you might expect, just like us, we beat the S&P a lot in a down year and the last three years, the S&P has beaten them, but we're still a tiny bit behind the hedge funds at the end of four years.

There's six years to go. You might find it interesting, we each bought a zero-coupon 10-year bond so that there would be $1 million to go to the charity of — selected by either them or by me, depending on who won the bet — and that zero-coupon bond has performed magnificently, much better than Berkshire. (Laughter)

We should have bought nothing but zero-coupon bonds. But the zero coupon bond, because interest rates are so low, you know, is practically selling at par, so we have petitioned the stakeholder in this case — and I don't think we've heard yet — but to let us sell the zero-coupon bond and put the money in Berkshire. And I'll guarantee them that it will be worth more than a million bucks at the end of 10 years.

But so far, the best thing you could have done was ignored both of us and just looked at where we were putting the money.

And I will keep you up to date on this bet as we go along and we're having a lot of fun.

We'll come back in an hour, and then we'll go till 3:30, and then we'll have the business of the meeting.

Afternoon Session - 2012 Meeting

1. Gen Re improving after "major fix-up operation"

WARREN BUFFETT: OK. Round two. Gary, you're up.

GARY RANSOM: Am I up yet?

WARREN BUFFETT: You're up.

GARY RANSOM: OK. A question on General Re. If I look back at the General Re property-casualty premiums, it's been cut in half, roughly, from 10 years ago, maybe a little more stable recently.

Can you give us some idea of how you've had to adjust the personnel over that time, and then also what opportunities are there for General Re to grow as we go forward?

WARREN BUFFETT: Yeah, Gen Re, I think, got off the track. It may — it was probably off the track when we bought it, and I didn't spot it.

CHARLIE MUNGER: Sure it was.

WARREN BUFFETT: Yeah. OK. (Laughter)

I was in charge of that part. And, they had — I think they'd gotten more concerned about growth and satisfying certain personnel, in terms of their activities, than they had about emphasizing profitability, and it took us awhile to figure that out.

And when Joe Brandon came in, he operated 100 percent, in terms of focusing on underwriting profit instead of premium volume, and Tad Montross has followed through on that, with terrific results.

But it did mean getting rid of a lot of business that didn't make any sense. They did an awful lot of what I would call "accommodation business." So, it's true that the PC volume dropped very significantly during that period, but it's not volume that we miss.

The life business kept growing consistently during that period. Their life business strikes me as very, very good. They've got a little long-term care mixed in there that we wish we didn't have.

But I think Gen Re is — it's right-size, in terms of people. It's got an underwriting discipline to it. And I wouldn't be surprised if it grows at a reasonable rate in the future.

But it, there was a major change that had to be made in the culture at Gen Re. And, you don't make that overnight, and you don't keep a lot of the business — or some of the business — that you got through a wrong culture when you do straighten it out.

It's a terrific asset to us now. And I think that, the life business will continue to grow, and I would bet the PC business grows, too. But it will only grow if we see the chance to do it on a profitable basis.

That's one we feel enormously better about than we did some years back.

Charlie?

CHARLIE MUNGER: Well, it was a major fix-up operation, but we finally got it done.

WARREN BUFFETT: We don't go looking for those, though.

CHARLIE MUNGER: No.

2. Threats to Berkshire's culture after Buffett

WARREN BUFFETT: OK. Station 1.

AUDIENCE MEMBER: Hi. Dan Lewis (PH) from Chicago.

I wanted to get your thoughts on two of my concerns about a post-Buffett Berkshire.

Do you worry that some of your key operating and investing managers might leave for more lucrative opportunities once they realize they're working for one of their peers instead of a legend?

And do you think it's possible that a large investor or hedge fund could ever gain enough control of Berkshire to force a change in the unique culture and structure?

WARREN BUFFETT: Yeah. I think that — I would say I virtually know — that the successor we have in mind will not be the kind that will turn off our managers because that — the manager in mind is a — successor in mind — has got the culture as deeply embedded in as I do.

They would not — our managers would not — I don't think it would be a question of leaving for more lucrative jobs.

I think it would be because they love the kind of environment in which they exist. And if that environment didn't exist, it wouldn't be a question whether the alternative was more lucrative.

Many of them, a majority, could retire, wouldn't need to work at all. They're only going to work if it's more fun for them to work than to do anything else, you know, in the world, because they've got the money to leave, in a great many cases.

The conditions — it's the same reason I work. I mean, I'm 81, and I am doing what I find the most enjoyable thing to do in the world, and there are a couple reasons for that. I get to paint my own painting and, you know, I have a lot of fun, working with the people I work.

And our managers work for the same reason. They do get to paint their own paintings. And my successor will understand that just as well as I do. And there would be a lot of people that might very well manage other companies that, I think if stuck in my position, would lose a fair number of managers. They just have a different style. And our managers don't need that style.

In terms of a takeover, I think that really gets unlikely. The size is a huge factor. And, even because of the A and B shares, the A shares get converted to B shares when I give them away.

And even 10 years from now, it would be likely that I would own, or my estate would own, something in the area, you know, perhaps, of 20 percent of the votes, thereabouts.

So the Buffett family will probably have 10 times the voting power, for a long time, of anybody else. So I really — I think it's extraordinarily unlikely for both those reasons, size and the concentration that will exist.

And the longer we go, the larger we'll get. So the — as the voting power aspect goes down, the size aspect goes up. So I don't think there will be a takeover of Berkshire.

And I really — you do not need to worry about my successor. You know, in many ways he'll be better than I am.

He will be totally imbued with the culture. The company is imbued with the culture. It would reject anything. The board of directors reflect that culture. It's everyplace you look around.

Berkshire stands for something different than most companies, and, that's not going to change.

Charlie?

CHARLIE MUNGER: Well, what I said last night was that the first 200 billion was hard, and the second 200 billion, with the momentum in place, is likely to be pretty easy compared to what's been accomplished in the past.

So, I don't think it's going to hell at all. I think the momentums are in place and the right kind of people are in place and the culture is, by and large, pretty well loved, I would say, by the people who've chosen to be in it. Nobody's going to want to change it.

WARREN BUFFETT: Yeah, the businesses are in place to take it to 400 billion.

CHARLIE MUNGER: Hmm?

WARREN BUFFETT: The business — we have the businesses to take it to 400 billion.

CHARLIE MUNGER: Well, but in addition to that, I think people of the type who have sold to us when we were the only acceptable buyer, I think will come to our successors because they will be the only acceptable buyer, at least for some significant part of what's done.

So I don't think it's going to be all that difficult.

WARREN BUFFETT: Don't make it sound too attractive, Charlie. (Laughter)

3. Buffett OK with 12 percent return for cash-consuming businesses

WARREN BUFFETT: Carol?

CAROL LOOMIS: You're interested in businesses that throw off lots of cash, for instance, See's Candies, as well as those where you expect significant capital reinvestment needs, for example, Burlington Northern.

What is it about a capital-consuming business that persuades you to forego the cash yield you seem to have historically preferred?

How do you balance the expected need for reinvestment in a capital-consuming business against the other possible uses of cash Berkshire may have in the future, such as new investments or stock repurchases?

WARREN BUFFETT: Well, cash-consuming businesses, by their nature, are unattractive unless the cash they consume gets to earn a reasonable return.

And, in the electric utility business, you know, we can expect, cash retained to perhaps earn an average of 12 percent or something like that, which we regard as quite satisfactory.

It's not as exciting as having some business that's going to grow 20 percent a year and not require any capital. I mean, there are a few wonderful businesses like that, but it's perfectly satisfactory.

Same way with the railroad business. You know, we are going to invest a lot of capital over the next 10 years in railroads. Every year we will spend way more than depreciation charges. I think the prospect of earning reasonable returns on that are pretty darn good.

But if I had to put a lot of money, you know, into some capital intensive business where all we were doing was staying alive with that money, you know, we would be in a terrible situation.

And we don't have — in any meaningful way — we do not have any capital-consuming businesses where I see that as the prospect.

It's true, if you go back to a world where we thought we could earn 20 percent on equity or something of the sort, then there's very few capital-consuming businesses where huge amounts of incremental capital can earn at a 20 percent rate.

So that would be disadvantageous, but we don't know how to make 20 percent on equity going forth in the future with the kind of sums we're working with.

And we will be very happy if we can earn 12 percent or something like that on equity, particularly when some of that capital is being consumed is generated by float, which doesn't cost us anything. We've got some small advantage there.

Charlie?

CHARLIE MUNGER: Well, I think it's going to work pretty well. (Laughter)

There's some Mungers here. I hope you won't listen to the siren songs of others and kind of stay with the family heirloom.

WARREN BUFFETT: My family is just hoping for an heirloom. (Laughter)

4. Berkshire's float growth rate likely to slow

WARREN BUFFETT: Cliff?

CLIFF GALLANT: Along those lines, in regard to float, in your annual letter this year, you say that you expect the rate of growth in your float to slow going forward.

How slow? What are the drivers? Is it possible that float could shrink going forward?

WARREN BUFFETT: The float could shrink because we have lots of retroactive contracts, that by their nature, the float runs off, although not at a really rapid rate.

And, the float at GEICO is going to grow. I mean, that — the float at our smaller insurance companies will probably net grow over time a little bit, but it's not a lot of money.

In Ajit's operation, where we have a lot of the retroactive stuff, it's very, very tough. You've always got a melting ice cube that you've got to, you know, add a little more water to.

And I have felt — I felt when the float was 40 billion it probably wasn't going to grow very much, and now we're at 70 billion. So, we are looking for ways to intelligently grow the float all the time. That's been true ever since I got in the insurance business in 1967.

So, the desire is always there. We've been reasonably imaginative in figuring out ways to do it and still have the float cost us less than nothing. We've got the smartest guys in the business

out there working on it. But the numbers are huge now, and you do have a natural runoff from the retroactive contracts.

So I just thought that it was fair to tell the shareholders that they really should — while they look at that history of float growth, that they really can't extrapolate that.

If we get lucky, you know, we could add a fair amount more, but it's also — it's possible that it will actually dwindle down a little bit and — not at a fast rate — and it certainly is more than possible that it won't grow at very much of a rate from here on.

Ajit told me that when I put that in the annual report that it became a challenge to him. So I'm glad I stuck it in there. He wants to make me look like an idiot, which isn't too hard sometimes, and I may have to stick some other things in the annual report next year to get the attention.

I — if I had to bet on whether float will be higher or lower five years from now, I probably would bet just a slight bit higher, but I also wanted the shareholders to know there's a possibility that it will decline a bit.

We're working on things, though. Every day we're working on things to try to figure out how to increase it.

Charlie?

CHARLIE MUNGER: Yeah. The casualty insurance business, by its nature, is not a terribly good business. You have to be in the top 10 percent, really, to do at all well in it, and I think we're very lucky.

We probably have the best large-scale casualty insurance business in the world. Just because it came out of nothing doesn't mean it's nothing now. But I don't think it will be wildly — it won't grow wildly, will it, Warren?

WARREN BUFFETT: No.

CHARLIE MUNGER: No. But if you have something that is very good and it doesn't grow wildly, that's not the end of the world.

WARREN BUFFETT: It's certainly brought us to where we are today.

CHARLIE MUNGER: Yes.

WARREN BUFFETT: It's done wonders for us, and there's been multiple people that have done — I mean, with the jobs that Tony has done at GEICO, I mean, he's created billions and billions of dollars of value for Berkshire shareholders. That's true certainly with Ajit. You know, it's huge.

CHARLIE MUNGER: We get used to having Ajit work miracles, and he'll probably continue to do so for a long time. But if Matt Rose has to carry some of the future freight, well, that's all right.

5. Past mistakes buying declining businesses

WARREN BUFFETT: OK. Station two.

AUDIENCE MEMBER: Greetings to all of you from the Midwest of Europe. I'm Norman Rentrop from Bonn, Germany.

Warren, thank you very much for being so open about your health situation. You are in my thoughts and in my prayers, and I wish you a thorough healing.

WARREN BUFFETT: Thank you. (Applause)

AUDIENCE MEMBER: As I have traveled a long way and can no longer ask questions in Pasadena, I'm hoping for an elaborate answer from you, Charlie, as well. (Laughter)

My question is, how do you value declining businesses? You were talking about the encyclopedia businesses brought down by Encarta or retailing disrupted by Amazon and others by comparison shopping. How do you value declining businesses?

CHARLIE MUNGER: Want me to answer that one? They're not worth nearly as much as growing businesses. (Laughter)

WARREN BUFFETT: Well —

CHARLIE MUNGER: But they can still be quite valuable if a lot of cash is going to come out of them.

WARREN BUFFETT: Yeah. Generally speaking, it pays to stay away from declining businesses.

It's very hard. You'd be amazed at the offerings of businesses we get where they say, you know, it's — I don't want to upset Charlie, but they say, you know, it's only six times EBITDA, and then they project some future that doesn't have any meaning whatsoever.

If you really think a business is declining, most of the time you should avoid it. Now, we are in several declining businesses.

You know, the newspaper business is a declining business. We will pay a price in that business. We do think we understand it pretty well. We will pay a price to be in that, but that is not where we're going to make the real money at Berkshire.

The real money is going to be made by being in growing businesses, and that's where the focus should be.

I would never spend a lot of time trying to value a declining business and think, you know, I'm going to get one free — what I call the cigar butt approach, where you get one free puff out of the cigar butt that you find.

It just isn't — the same amount of energy and intelligence brought to other types of businesses is just going to work out better. And so we — our general reaction, unless there's some special case, is to avoid new ones.

We're playing out certain declining businesses, by their nature, but you know, we started with declining businesses. We started with textiles in New England and we tried U.S.-made shoes and we've —

CHARLIE MUNGER: Department store in Baltimore.

WARREN BUFFETT: Department store in Baltimore. Howard and Lexington Street.

CHARLIE MUNGER: Trading stamp company. We're specialists in — (Laughter)

WARREN BUFFETT: Yeah. We have one business that did 120 million or so of sales in 1967 or '8, and what did we do last year, about 20,000?

CHARLIE MUNGER: Yes.

WARREN BUFFETT: 20,000. Yeah.

CHARLIE MUNGER: I presided over it myself. (Laughter)

WARREN BUFFETT: Yeah. Well, I want to say I helped. I mean, he didn't do it all by himself.

CHARLIE MUNGER: No, no, but I sat there on the location and watched the —

WARREN BUFFETT: We thought of bringing the sales chart down here and turning it upside down to impress you, but Charlie is still in charge of this business. He's — (laughter)

I can't get him to sell it, but make me an offer. (Laughs)

CHARLIE MUNGER: If you think what came out of those three declining businesses, all of which failed, it's so many billions you — it's hard to imagine how much came out of it. We're not looking for an opportunity to do it again.

WARREN BUFFETT: No. But it was — in 1966 — maybe we should, because in 1966, Sandy Gottesman — one of our directors and Charlie and I — we put $6 million into a company.

We called it Diversified Retailing, although we only had one operation but, you know — (Laughter)

It was kind of like Angelo Mozilo calling his one location, you know, in New York, Countrywide Mortgage, at the time. (Laughter)

And we bought a department store at Howard and Lexington Street. Now, in our defense, I would have to say there were four department stores at Howard and Lexington Street in Baltimore, and all four of them are gone.

But that $6 million has turned into about $30 billion, starting with that —

CHARLIE MUNGER: — failed business.

WARREN BUFFETT: Failed business. Yeah, yeah.

And of course, Blue Chip Stamps was another example of that because that was another company that — and then, of course, Berkshire was the textile business.

So we were sort of masochistic in the early days. (Laughs)

Becky?

CHARLIE MUNGER: Ignorant, too. (Laughter)

WARREN BUFFETT: Yeah, OK. (Laughter)

That was the word that came to mind, but I didn't really like to use it. (Laughter)

6. Stay away from IPOs and big commissions

BECKY QUICK: This question is from Bill Nolan who's a shareholder from West Des Moines, Iowa.

He says, "Many of us are interested in what you," meaning Berkshire, "are buying and you won't tell us that.

"Using Charlie's principle of invert, invert, always invert, maybe you can help us by suggesting what to avoid and stay away from, specifically, what in the investment world today strikes you as folly, fad, unsustainable, crazy, or dumb?

CHARLIE MUNGER: A lot. (Laughter)

WARREN BUFFETT: Yeah, well. We — I think I would describe it as we try to stay away from the things, to start with, that we don't understand. And when I say don't understand, it isn't that I don't understand, you know, what a certain business does.

But when I say understand, it means that I think I have a reasonably — a reasonable fix on about what the earning power and competitive position will look like in five or 10 years. So I've got some notion of how the industry will develop and where the company will stand within the industry.

Well, that eliminates a whole bunch of things. And then, beyond that, if the price is crazy, even though I understand it, that eliminates another bunch. So you get down to a very small universe, and you get down to a particularly small universe when we're working with lots of money, as we are now.

But we — well, I would say this: I can't recall any time in the last 30 years, at least, that we've bought a new issue, have we, Charlie?

CHARLIE MUNGER: I can't think of one.

WARREN BUFFETT: No. I mean, the idea, that somebody is bringing something to market today, a seller who has a choice of when to come to market, and that that security, where there's going to be a lot of hoopla connected with it, is going to be the single cheapest thing to buy out of thousands and thousands and thousands of businesses in the world is nonsense, you know.

CHARLIE MUNGER: And then when it carries a 7 percent commission, or higher. It's ridiculous.

WARREN BUFFETT: Yeah, it's ridiculous. So you know it can't be the most attractive thing. But people get excited about what's coming and all that sort of thing.

But I will guarantee you that if you have thousands of opportunities among stocks all over the world and most of them are not being promoted or being sold with special commissions in them or something else, and then some other security is coming to market that day, when the seller picks the time to bring it, as opposed to just this auction market operating otherwise, you know, it just doesn't make any sense to spend five seconds thinking about new issues, so we don't think about them.

And we also — you know, there's industries we know that may have a wonderful future, but we don't have the faintest idea who the winners will be, so we don't think about those, either.

So there's a whole lot of things we don't think about. And we have a — Charlie and I have a number of filters that things have to get through very quickly before we're willing to think about them.

And sometimes we're thought of as rude — probably Charlie is thought of that way a little more often than I am — (laughter) — sometimes we're thought of as rude because people will call us and they start explaining some idea to us, and it just doesn't make it through the first filter or two.

So we just — we think we're saving their time if we just politely say, you know, that we just have no interest, and we don't want to have you finish the sentence. (Laughter)

But we do that, don't we, Charlie?

CHARLIE MUNGER: Yeah.

WARREN BUFFETT: We don't have to do very many things that work. I mean, that's the beauty of this business.

You don't have to be able, you know, to spell 500 words or something to get to the end of the spelling bee and beat everybody else.

You just have to do one or two things every now and then that — where you don't make a big mistake and where every now and then one works out real well. And the solution — you know, you'll get a good result.

You can't have a big disaster. You just — that is what we try to avoid. We do not ever want to lose a significant percentage of Berkshire's net worth, and so far we haven't.

CHARLIE MUNGER: I think there are a couple little rules of thumb. If it's got a really large commission in it —

WARREN BUFFETT: Forget it.

CHARLIE MUNGER: — don't read it. Because the chance of somebody who is paying a very high commission to give you a big advantage is very low.

And the other thing that is, I think, helpful in reverse, is — as a place to look, looking at things that other smart people are buying. That is not a crazy search method as a sorting device for opportunities to consider.

WARREN BUFFETT: Charlie knew me when, I used to look at — I grabbed the Graham-Newman reports as fast as they would come out. (Laughs)

CHARLIE MUNGER: Yeah, sure.

WARREN BUFFETT: You know, if Graham Newman was doing something, it was certainly worth my time to look at it.

CHARLIE MUNGER: Warren has made a lot of people rich he doesn't even know. Just copied him.

WARREN BUFFETT: Don't go into things with big commissions.

7. Berkshire is "not just an investment company"

WARREN BUFFETT: Jay?

JAY GELB: On the subject of regulation, a question I often get from investors is, what are the implications if Berkshire ends up being subject to the Investment Company Act of 1940 because of insurance becoming a smaller part of Berkshire's overall business?

WARREN BUFFETT: I don't — I may be —

CHARLIE MUNGER: That's too remote. That's not going to happen.

WARREN BUFFETT: Yeah. I used to — I read the Investment Company Act of 1940 probably 20 times because it was quite pertinent when I was setting up my partnership and all that.

I don't remember every detail now, but I see no way that — that Berkshire comes close to that.

We used to worry about both personal holding company status and investment company status, but we steered — we made very clear that we steered clear of both of those. But now — I think we're a million miles away from it now.

CHARLIE MUNGER: Yeah, we really need the financial heft we have to make our basic businesses work. We are not just an investment company.

WARREN BUFFETT: Yeah. We've got 270,000 employees. We own 8 companies that each would qualify for Fortune 500 stand-alone. So it's — people thought of us as investment company long after we were nothing remotely —

CHARLIE MUNGER: Like one.

WARREN BUFFETT: — like one, and where we had no intention of going in that direction.

But the background of both of us caused people to hang on to that notion longer than it was appropriate.

8. Great Chinese companies

WARREN BUFFETT: Station 3.

AUDIENCE MEMBER: Hello, Mr. Buffett and Mr. Munger. Good afternoon. My name is Yung (PH). I'm from Toronto, Canada. I appreciate you giving me this opportunity to stand here and ask a question.

And my question is, how long do you think it will take China to appear a great company like Coca-Cola, and in which industry you think it will be? Thank you.

WARREN BUFFETT: How long will it take China to do what?

CHARLIE MUNGER: I didn't quite get that one.

WARREN BUFFETT: Connection to Coca-Cola, yeah.

CHARLIE MUNGER: How long will it take China to do what?

AUDIENCE MEMBER: Oh, just how long do you think it will take China to appear a great company like Coca-Cola, and in which industry you think?

CHARLIE MUNGER: China already has some great companies. It's hard to think of a great branded goods company, but China has some very great companies already.

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: (Inaudible). I can't pronounce them, but they've got some very great companies. (Laughter)

WARREN BUFFETT: Yeah. So far it has not been Chinese fast food companies that have been exported to the United States as opposed to — you know, we've got over 500 Dairy Queens now in China.

We tend to export certain products well, some consumer products, entertainment products, that sort of thing.

But China's got some huge companies and they may eclipse in market value, you know, some of the ones such as Coca-Cola that we're talking about.

9. Won't invest in Apple or Google, but wouldn't bet against them

WARREN BUFFETT: Let's see, that was station 3. Andrew?

ANDREW ROSS SORKIN: OK. This question comes from Larry Pitkowsky from the GoodHaven Fund, also another shareholder, also asked a similar question that I've tried to combine.

Given that you're now in IBM, are there any other entrenched leaders in technology that are, to use one of your terms, inevitable, in the same way that Coke and Gillette were?

For example, is Google inevitable? Is it reminiscent of the advertising agencies you owned in the 1970s, i.e., a toll bridge on all digital spending that's highly likely to keep growing over time?

What are the one or two things about Google, for example, that you think are real risks? And what about Apple?

WARREN BUFFETT: Well, those are extraordinary companies, obviously, and both — they're both huge companies. They make lots of money. They earn fantastic returns on capital. They look very tough to dislodge, where they have their strengths.

You know, I would not be at all surprised to see them be worth a lot more money 10 years from now, but I wouldn't want to buy either one of them.

I do not get to the level of conviction that would cause me to buy them. But I sure as hell wouldn't short them, either.

Charlie?

CHARLIE MUNGER: Well, I think we can fairly say that other people will always understand those two companies better than we do. We have the reverse of an edge. And we're not looking for that. (Laughter)

WARREN BUFFETT: Now he's going to say isn't the same thing true in IBM?

CHARLIE MUNGER: Well, I don't think it is. I think IBM is easier to understand.

WARREN BUFFETT: Yeah. The chances of being way wrong in IBM are probably less, at least for us, than being way wrong with Google or Apple. But that doesn't mean that those — the latter two companies —aren't going to do, say, far better than IBM.

But we wouldn't have predicted what would happen with Apple 10 years ago. And it's very hard for me to predict, you know, what will happen in the next 10 years.

They're certainly — you know, they've come up with these brilliant products. There's other people trying to come up with brilliant products.

I just don't know how to evaluate the people that are out there working, either in big companies or in garages, that are trying to think of something that will change the world the way they have changed it in recent years.

CHARLIE MUNGER: And what do we know about computer science?

WARREN BUFFETT: There's no reply. (Laughter)

10. Strong freight railroad economics will overcome politics

WARREN BUFFETT: Gary?

GARY RANSOM: Politics sometimes affects your businesses. Recently we've seen some coal plant closings, turndown of XL pipeline, all of which seemed to have potential effect on BNSF revenues.

Can you talk about how you manage that risk or what the impact might be of some of those political issues?

WARREN BUFFETT: Yeah. Well, BNSF runs their own business very much. I went down to Fort Worth once after we bought it a few years ago, and I haven't been there since. And I probably talk to Matt on the phone, I don't know, once every three months or something of the sort.

But there's no question that railroads, utilities, insurance companies, are all very much affected by the political process.

Fortunately, I think, in the railroad industry, you know, we've got economics on our side. And economics usually win out.

I mean, we can move a ton of product 500 miles on one gallon of diesel, and that may be three times or so as efficient as trucking. And that may be why the railroads currently move, say, 42 percent of all intercity traffic.

I don't think our percentage is going to go down, the railroad industry as a whole, no matter what the politics may be. It's just too compelling to move heavy traffic long distances over steel rail. And in terms of congestion, in terms of emissions, all kinds of reasons.

So we've got a wonderful product, and there will always be struggles in the political arena between competitors and railroads, and customers and railroads. It's just — it's the nature of the game, and there will be some of that in utilities, too. But overall, I like our position in it.

They do have to be involved in politics. I mean, the railroads — all four of the big railroads — are going to be involved in the political process because people have got a — who would like to change some of the rules, either as customers or competitors, are going to be in politics, too, and things will get decided in state capitals ,and more important in Washington, of importance.

So they will — they'll have lobbyists and they'll play a political game and their opponents will.

I like our position. The — it would be very dumb for the country to do anything that discouraged the railroad industry from spending the kind of capital that will need to be spent to take care of the transportation needs of this country in the future.

If you think about the money that will have to be spent on highways, and on the costs involved in there, and the congestion problems, the emissions problems, everything, the country has a strong interest in the railroad industry having every incentive to invest.

And the railroad industry pays its own way, you know. We'll spend $3.9 billion this year, and a lot of it will go to improve our present system an awful lot, and some will go toward expansion of a type. And the country will be better off on that, and the Federal Government will not write a check for it.

Charlie?

CHARLIE MUNGER: Yeah. It's in the nature of things that there are waves of good breaks and bad breaks.

Burlington Northern was enormously helped when you could double the container carriage by making the tunnels a little higher and the bridges a little stronger. And they were enormously helped when they found all this oil in North Dakota and there weren't any pipelines.

And they will get some bad breaks, too, occasionally, where somebody will take away a little break. But averaged out, it's a terrific business with terrific management. I don't think our main problems are political at all.

WARREN BUFFETT: No. The railroad industry —

CHARLIE MUNGER: For one thing, we're headed by a prominent Democrat.

WARREN BUFFETT: The railroad industry was — (laughter) — that may not be a help, Charlie. (Laughter)

Right after World War II — now, there was a lot of passenger traffic then — but the railroad industry, I think, had as many as 1,700,000 employees in the United States.

And here we are today, there's less than 200,000. I mean, railroads have become so much more efficient, just by a huge factor, and it's a fundamentally very good way to move heavy stuff a long distance.

I mean, it's hard to conceive of anything — it's be nice maybe to have barge traffic, but you only got a few rivers that are going to lend themselves to real volume along that line.

And so, you know, you have air, pipeline, you know, vehicles, planes, trains. Trains are pretty darn good.

11. No question from station 4

WARREN BUFFETT: OK. Station 4.

AUDIENCE MEMBER: Section 4 does not have any questions at this time. Thank you.

WARREN BUFFETT: Well, that's a first. (Laughter)

12. Comparing Berkshire to the S&P

WARREN BUFFETT: Carol, have you run out?

CAROL LOOMIS: Unprepared as I am, this is a question about the table on the first page of the annual letter, which shows the relative performance of the S&P 500 index against Berkshire's book value.

"This is an unfair apples-to-oranges presentation. An investor in the S&P 500 index can easily earn the returns shown for the S&P, but an investor in Berkshire will not earn the returns implied by the company's book values figures shown.

"Instead, he or she will earn returns over any given period that depend on the market's assessment thereof, that is, the price-to-book value ratio, and we've seen that go down in the last few years.

"A fairer comparison would be against the annual percentage change in the book value per share of the S&P 500 with dividends included. Wouldn't your shareholders be better served by better information?"

WARREN BUFFETT: Well, actually you can make the calculation two different ways as alternatives to what we do. You could have the market value of the S&P, which is in there with dividends added back, versus the market value of Berkshire.

Berkshire would show up better on that table than it does in the table I present. In other words, our advantage over the S&P would be larger if calculated that way because we started at a discount from book value and we ended up at a premium.

So it would bounce around the years. But overall, our gain would be probably at least — well, it would be about 35 or so percent higher in aggregate over the time than is shown by the book value gain, which is a lot of dollars when you make the calculation.

You could also show the book value of the S&P versus the book value of Berkshire. That figure will be a wash, pretty much, because if you take the S&P's price to book value, if that maintains the ratio at the beginning to the same ratio at the end, it's a wash as to how that calculation comes out.

So I think we could show — we could make a calculation that was more favorable to Berkshire. I don't think what the person suggests there would result in a calculation that's less favorable to Berkshire.

CHARLIE MUNGER: Long-term, the stock value has tracked fairly well with book value.

WARREN BUFFETT: But it's over-performed book value —

CHARLIE MUNGER: Yes.

WARREN BUFFETT: — for the whole time. Which is the point this question seems —

CHARLIE MUNGER: Well, you've been criticized for making yourself look worse.

WARREN BUFFETT: Yeah. (Laughter)

CHARLIE MUNGER: It's all right. You can bear it. (Laughter)

WARREN BUFFETT: I've done the other, too. (Laughs)

13. We don't even try to coordinate our subsidiaries

WARREN BUFFETT: Cliff.

CLIFF GALLANT: In studying the collapse of AIG, one of the things we learned is there were parts of the company that understood there were certain financial risks in the market and they were lowering their exposure.

While, at the same time, there were other parts of AIG which were actually increasing their exposure to the same risk.

In terms of enterprise risk management at Berkshire, how do you share information across units to make sure that the same mistakes aren't made?

WARREN BUFFETT: I didn't totally get that. Did you get that, Charlie?

CHARLIE MUNGER: Well, he was talking about how do we share information across units.

Well, if there's any sharing, they're doing it; we're not.

WARREN BUFFETT: Yeah. We don't —we don't have any — we're the most uncoordinated pair of individuals, operating both in sports or at the executive level.

There are certainly some people at Berkshire that have some contact with other people at Berkshire, but there's nothing in the way of an organized way of doing that.

I mean, [Gen Re CEO] Tad [Montross] and [GEICO CEO] Tony [Nicely] and [reinsurance chief] Ajit [Jain] are friends, and [National Indemnity President] Don Wurster, and they see each other sometimes so they're — and I'm sure they talk insurance.

But we don't make any attempt — if somebody goes in to get a quote from Gen Re and gets a quote from Ajit, there's no — we have no system that prevents — or that coordinates — our two units to give the same quote or anything of the sort.

We want our businesses to run very autonomously, and we want the managers of those businesses to feel like they're their own business. That's enormously important at Berkshire.

So we don't tell the people at Clayton Homes to buy their carpet from Shaw or to buy their paint from Benjamin Moore. We just don't do that.

And you could say that's kind of silly, but it's — any gains we would get from doing that, by selling incremental units, I think would be far offset by the change in the feeling of the manager as to whether they're really running their own business.

We hand people billions of dollars and they hand us stock certificates and they have been running those businesses for decades in many cases.

And we want them to feel the same way the next day, when they've got the money and we've got the stock certificates, as the day before when they had the stock certificates and we had the money.

And the moment we start telling them how to change the way they operate, or to coordinate with this guy, or get this person's approval, or anything like that, you know, that just erodes that advantage, which we think is very substantial, that they have this proprietary feeling about their business.

Have I answered that, Charlie?

CHARLIE MUNGER: Yeah. We're trying to fail at what you wanted us to succeed at. (Laughter)

WARREN BUFFETT: I'll have to think about that a little. (Laughter)

14. Acquisition of a forest products company unlikely

WARREN BUFFETT: Station 5?

AUDIENCE MEMBER: Hello, Charlie and — Warren.

WARREN BUFFETT: I'm Warren, yeah. (Laughs)

AUDIENCE MEMBER: Yes. Well, my name is Richard Cooper, and I'm from Honor, Michigan. And I'm a professional forester.

Trees are one of America's greatest resources, and it seems that a well-run forest products firm would fit well with Berkshire's holdings.

You've got the transportation system to move the product. You have the construction firms to use the product — furniture companies, home builders — and you've got insurance companies to cover the insurance end of the holdings.

Have you given any thought to getting a forest products firm?

WARREN BUFFETT: Well, your question touches on the answer we just gave. We would not really consider the other activities that Berkshire has in determining whether we would get into forest products.

We've looked at forest products companies, but we don't think about them in terms of how they may divert their products to some other subsidiaries of ours, or how other subsidiaries might benefit from selling them something.

To date, we've looked at several. To date, we've never really found any that met our test for returns against purchase price.

I mean, it's a business that's easy — or reasonably easy — to understand, I mean, in terms of the economics and its permanence and all that sort of thing. But the math has escaped us, in terms of being compelling.

Charlie?

CHARLIE MUNGER: A lot of forest products companies convert themselves into flow-through partnerships of some kind so they don't pay normal full corporate income taxes the way we do.

Berkshire is actually organized so that we'd be a disadvantage — we'd be at a disadvantage — in bidding for forests.

WARREN BUFFETT: Yeah. We're at a disadvantage in terms of any kind of activity that people manage to convert into pass-through organizations.

So particularly — take REITs, Real Estate Investment Trust, you know, they have eliminated one tax in their structure that we would bear.

And like Charlie says, you know, you have firms like Plum Creek Timber and those sort of operations where they have eliminated the federal income tax, and we don't have any structure like that. So just going in, we have a structural disadvantage that is really quite significant.

15. No magic formula for calculating risk

WARREN BUFFETT: Becky?

BECKY QUICK: This question comes from Scott Bondurant who is from Chicago, Illinois, and he's a shareholder.

And he asks, "Can you please elaborate your views on risk? You clearly aren't a fan of relying on statistical probabilities, and you highlight the need for $20 billion in cash to feel comfortable. Why is that the magic number, and has it changed over time?"

WARREN BUFFETT: Yeah. Well, it isn't the magic number, and there is no magic number.

I would get very worried about somebody that walked in every morning and told us precisely how many dollars of cash we needed to be, you know, secured at three sigma or something like that.

Charlie and I have had a lot of — we saw a lot of problems develop in an organization that expressed their risks in sigma, and we even argued sometimes with the appropriateness of how they calculated their risk.

CHARLIE MUNGER: It was truly horrible.

WARREN BUFFETT: And they were a lot smarter than we were. (Laughs) That's what's depressing.

But we both have the same bend of mind whereby we think about worst cases all the time, and then we add on a big margin of safety, and we don't want to go back to go.

I mean, I enjoy tossing those papers in the other room, but I don't want to do it for a living again.

So we undoubtedly build in layers of safety that others might regard as foolish, but we've got 600,000 shareholders and we've got members of my family that have 80 or 90 percent of their net worth in the company.

And I'm just not interested in explaining to them that we went broke because there was a one-hundredth of 1 percent chance that we would go broke and there was a — the remaining probability was filled by the chance of doubling our money, and I decided that that was just a good gamble to take.

We're not going to do that. It doesn't mean that much. We are never going to risk what we have and need for what we don't have and don't need. We'll still find things to do where we can make money, but we don't have to stretch to do it.

And it's my job — and Charlie thinks the same way. We don't have to talk about it much.

But it's our job to figure out what can really go wrong with this place and, you know, we've seen September 11th, and we've seen September of 2008, and we'll see other things of a different nature but similar impact in the future.

And we not only want to sleep well all those nights, we want to be thinking about things to do with some excess money we might have around.

So it is — if you're calibrating it in some mathematical way, I would say it's really dangerous. I could give you a couple examples on that, but unfortunately I've learned about them on a confidential basis.

But some really great organizations have had dozens of people with advanced mathematical training and make — and thinking about it daily, making computations, and they don't really — they don't really get at the problem.

So it's at the top of the mind, always, around Berkshire, and your returns in 99 years out of 100 will probably be penalized by us being excessively conservative, and one year out of a hundred, we'll survive when some other people won't.

Charlie?

CHARLIE MUNGER: Yeah, how do these super-smart people with all these degrees in higher mathematics end up doing these dumb things?

I think it's explainable by the old proverb that, "To a man with a hammer, every problem looks pretty much like a nail." They've learned these techniques and they just twist the problem so they fit the solution, which is not the way to do it.

WARREN BUFFETT: And they have a lack of understanding of history, I would say.

One of the things — in 1962, when I set up our office in Kiewit Plaza, where we still are, it's a different floor, I put seven items on the wall. Our art budget was $7, and I went down to the library, and for a dollar each I made photo copies of the pages from financial history.

And one of those cases, for example, was in May of 1901 when the Northern Pacific Corner occurred, and it's kind of interesting in terms of being in Omaha because Harriman was trying to get control of the Northern Pacific, and James J. Hill was trying to control the Northern Pacific.

And unbeknownst to each other, they both bought more than 50 percent of the stock. Now, when two people buy more than 50 percent of the stock each, and they both really want it, they're not just going to resell it. You know, interesting things happen.

CHARLIE MUNGER: To the shorts.

WARREN BUFFETT: And in that paper of May 1901, the whole rest of the market was totally collapsing because Northern Pacific went from $170 a share to $1000 a share in one day, trading for cash, because the shorts needed it.

And there was a little item at the top of that paper, which we still have at the office, where a brewer in Troy, New York, committed suicide by diving into a vat of hot beer because he'd gotten a margin call.

And to me, the lesson — that fellow probably understood sigmas and everything and knew how impossible it was that in one day a stock could go from 170 to 1,000 to cause margin calls on everything else.

And he ended up in a vat of hot beer, and I've never wanted to end up in a vat of hot beer. (Laughter)

So those seven days that I put up on the wall — life in financial markets has got no relation to sigmas.

I mean, if everybody that operated in financial markets had never had any concept of standard errors and so on, they would be a lot better off.

Don't you think so, Charlie?

CHARLIE MUNGER: Well, sure. (Laughter)

WARREN BUFFETT: Here, have some fudge. (Laughs)

CHARLIE MUNGER: It's created a lot of false confidence and — now, it has gone away.

Again, as I said earlier, the business schools have improved. So has risk control on Wall Street. They now have taken the Gaussian curve and they've just changed its shape.

WARREN BUFFETT: Threw it away.

CHARLIE MUNGER: They threw it away. Well, they just made a different shape than Gauss did, and it's a better curve now, even though it's less precise.

WARREN BUFFETT: They talk about fat tails, but they still don't know how fat to make them. They have no idea.

CHARLIE MUNGER: Well, but they knew — they've learned through painful experience they weren't fat enough.

WARREN BUFFETT: Yeah. They learned the other was wrong, but they don't know what's right.

CHARLIE MUNGER: We always knew there were fat tails. Warren and I, in the Salomon meetings, would look over at one another and roll our eyes when the risk control people were talking.

16. Swiss Re contract expiration is "nonevent"

WARREN BUFFETT: OK. Jay?

JAY GELB: This question is on Swiss Re.

Berkshire's quota share treaty with Swiss Re, covering 20 percent of Swiss Re's property-casualty risk, ends in 2012. Does Berkshire plan to replace that premium volume through another transaction?

WARREN BUFFETT: Well, we would hope to — we always hope to get more good volume, but what we do has no relationship to the expiration of that contract.

I mean, that contract was a five-year contract. It's a big contract, billions of dollars a year. But the fact that that expires and our premium volume will go down by multiple billions does not cause us to do one thing differently than we would do otherwise.

We've got the capacity to write billions and billions of business, and we would love to do it if we were expanding the Swiss Re contract, and we don't want to write any dumb business when we lose that contract. It's just — it's a nonevent, in terms of future strategy.

It's not a nonevent, in terms of losing some business that we like, but it's a nonevent in terms of any future strategy.

We regard every decision, you know, as independent. We don't do — if money comes in, that doesn't cause us to want to think about doing something today that we weren't thinking about doing the day before. We just don't operate that way.

We'll have things that come along that are terrific, and that doesn't mean the next day we don't want to look for something in addition that's terrific. Every decision is sort of independent.

CHARLIE MUNGER: I don't think there's another large insurance operation in the world that is more cheerful about losing volume than we are. If it doesn't make sense —

WARREN BUFFETT: We don't want it.

CHARLIE MUNGER: — if the business has to shrink, we let it shrink.

WARREN BUFFETT: We don't measure ourselves in any way —

CHARLIE MUNGER: By size.

WARREN BUFFETT: — by size, except by the growth in value over time.

17. Housing problems after Fannie and Freddie "left the tracks"

WARREN BUFFETT: OK. Station 6.

AUDIENCE MEMBER: Wendy Wasserman (PH) from Boston. Warren, best wishes on a speedy and complete recovery.

My question is regarding Fannie Mae and Freddie Mac. You wrote that you expected the housing market to be improved by now but that it hasn't improved.

You spoke about demographics and the housing-dependent parts of the business. You did not, however, speak about Fannie and Freddie. Fannie Mae, the Federal Reserve, and Freddie Mac are the three largest financial institutions.

Then comes J.P. Morgan and Bank of America. Fannie and Freddie have been in conservatorship for 3 1/2 years, the longest. Initially they had combined assets of 1.6 trillion, each a Lehman Brothers.

Now they have 5.5 trillion, adding 4 trillion of off-balance sheet items and government mortgage modification programs.

They are public companies with operating losses, a negative net worth, owned by the government, acting at times with the power of the government, financed with a blank check from Treasury, and taxpayers, who are usually also homeowners.

Most near-bankrupt companies shed assets. These two added assets and liabilities. AIG and General Motors have emerged; these two have not.

Contrary to popular belief, the securities law did not need the biggest rewriting since the Great Depression. The 1933 and 1934 Securities Acts worked. Sarbanes-Oxley works.

Fannie and Freddie, and the 1938 and 1968 governing laws, do not, no matter how much they have contributed to U.S. housing standards.

What is the solution? How many years can they stay in conservatorship? Can the resolution trust authority be used? Are they truly too big to fail? What role will banks like Wells Fargo and U.S. Bancorp, who are leading mortgage players — (applause) — play now that they are well capitalized?

What happens to the MBS market and the (inaudible) system? How can housing improve even with better demographics without an answer to Fannie and Freddie?

WARREN BUFFETT: Well, I got through college answering fewer questions than that. (Laughter and applause)

I would say that the overall tone of your remark, which indicates that you think Fannie and Freddie are a mess, is probably justified.

And of course, the reason they're a mess is we haven't figured out yet, or we can't get agreement, on what the best structure is to have in this country going forward to generally finance mortgages.

There's no question that a government guarantee program brings down the overall cost of financing mortgages over time.

And then we had one, of course — we've had several — but we had one in Fannie and Freddie that went wild when we introduced the profit motive into the mix of two institutions that really were half trying to serve a housing mission and half trying to serve a profit mission, and gradually the profit mission sort of overcame the housing mission.

Congress hadn't sorted that out yet. It's a huge item, obviously. There are roughly 50 million residential mortgages in the United States, you know, and they total 10 trillion or so.

It's important that you have a market that does minimize costs for borrowers who have adequate down payments and adequate income and all of that.

And I think for a while, we were going in that direction with Fannie and Freddie, and then they left the tracks.

But that's going to get — how long they can stay in conservatorship? They can stay there a long time.

They will stay there, in my view, until politically we get some kind of a resolution that — as to a future policy — that both parties can go along with, and it looks to me that's a ways off.

Charlie?

CHARLIE MUNGER: Well, of course, the interesting thing is that Canada, right to the north, kept a more responsible real estate lending system, and they had almost no trouble.

We departed completely from sanity and decency and morality in mortgage lending in the United States, and the government of the United States participated in the folly, and they did it in a big way.

And it was wrong not to step on the boom that was obviously so full of fraud and folly. And I sometimes say that [former Federal Reserve Chairman] Alan Greenspan overdosed on [author] Ayn Rand when he was young. (Laughter)

He thought if an ax murder happened in a free market, it was probably all for the best.

And so we had — there's a lot of disgraceful behavior we have to regret, in terms of what happened, and it caused enormous damage. And a modest little country like Spain, and another one called Ireland, you had something somewhat similar.

People just allowed craziness to go unchecked, and that was a big mistake. And Greenspan was really wrong. It's the duty of the government to step on crazy market booms — (applause) — and prevent them by keeping sound policies, as Canada did.

And so you put your finger on a very disgraceful episode in United States history.

But once we were into it, I think we had no option but to do exactly as the government did, which was to nationalize Fannie Mae and Freddie and try to make them behave better in the future, and that's what's happened.

WARREN BUFFETT: It's going to be a long runoff.

And Congress, it wasn't just the Fed— Congress did their share in that, too. But it was —

CHARLIE MUNGER: Everybody did.

WARREN BUFFETT: Everybody did. I mean, it —

CHARLIE MUNGER: By the way, we didn't. (Laughter)

WARREN BUFFETT: Charlie, we resigned from the Savings and Loan League a good many years ago just because we thought such nutty stuff was going on and —

CHARLIE MUNGER: It was disgraceful.

WARREN BUFFETT: Yeah. And Charlie got lectured for it, too. (Laughs)

CHARLIE MUNGER: Yes, I did.

WARREN BUFFETT: They made him go to school, learn how to loan money, and I think one of the regulators said, "Well, what kind of people do you lend money to?"

And I think Charlie said, "Well, the one thing we do is we don't lend money to people like you." (Laughter)

And for some reason we had regulatory problems after that. (Laughter)

CHARLIE MUNGER: I was not popular because he said you're using the government's credit in our savings and loan, and therefore, you have to make a lot of dumb loans because we're telling you to.

And I said, "We're not using the government's credit. As a condition of one of our mergers, Berkshire Hathaway agreed you'd never have trouble with our savings and loan. We're paying you insurance premiums, and you're using our credit." This did not make me popular.

WARREN BUFFETT: No. (Laughter)

CHARLIE MUNGER: And he was a florid-faced alcoholic. (Laughter)

I remember it very well.

WARREN BUFFETT: I do, too, but —

CHARLIE MUNGER: We left the savings and loan business.

WARREN BUFFETT: We have more problems when Charlie wins an argument. (Laughter)

But it's a lot of fun. (Laughter)

CHARLIE MUNGER: Well.

18. How Todd Combs and Ted Weschler are compensated — and taxed

WARREN BUFFETT: OK. Andrew?

ANDREW ROSS SORKIN: OK, here's the question:

“Please tell us more about your experience this past year with Todd Combs and Ted Weschler. What did they do well, and did they make any mistakes? And please discuss how you compensate them a bit more.

In an interview, you said that Todd Combs was well compensated for the performance of his stock picks last year.

Should we be worried about a short-term horizon for compensation? How do you ensure that Todd and Ted don’t chase high-flying stocks for the sake of compensation?

WARREN BUFFETT: Well, we’ve always been more concerned about how our record is achieved than the precise record itself. And with both Todd and Ted, Charlie and I were struck by, not only a good record, but intellectual integrity and qualities of character, a real commitment to Berkshire, a lifelong-type commitment.

And we’ve seen hundreds and hundreds of good records in our lifetimes; we haven’t seen very many people we want to have join Berkshire.

But these two are perfect, and we pay them each a salary of a million dollars a year, and we give them 10 percent of the amount by which their portfolios beat the S&P.

So that if they beat the S&P by 10 points, they get one point, for example, and we get nine points. But we do it on a three-year rolling basis so you don’t get the seesaw effect.

And each one gets paid 80 percent based on their own efforts and 20 percent based on the other person’s, so that they have every incentive to operate in a collaborative way rather than sit there jealously guarding their own ideas and hoping the other guy doesn’t do very well.

So it’s a — I don’t think we could have a better — it’s the same structure on pay, basically, that we had with Lou Simpson for 20-some years, except he did not have a partner.

To the extent that they employ people underneath them, that comes out of their performance record, and it’s worked far better than either Charlie and I had hoped, and we had pretty high hopes.

We had 1 3/4 billion with each of them at year end, but we’ve added another billion each on March 31, so they’re running 2 3/4 billion apiece.

I don’t look at what they do. I see it eventually when I look at a GEICO portfolio at the end of the month or something of the sort.

But they operate through their own brokers. They don’t — I’ve told them that the only thing I want to know is, if they’re getting into a new name, I just want to know the name so I’m certain that it isn’t something that I am familiar with some inside information on, or something, so that

there's no inadvertent appearance that we would be — or that their purchase would have been influenced by something that I knew about.

That's never come up. They can't — they can't — if there's something we would have to file a 13D on, they would have to check with me. But basically none of that's going to happen. Never happened with Lou, either.

They operate in different stocks. They've got a much bigger universe than I have because they're working with 2 3/4 billion instead of 150 billion, so they can look at a lot more things.

And they've cheerfully pitched in for other duties that they don't really get compensated directly on, but that are helpful to Berkshire. And they will — they'll do a great job for Berkshire when they're running a whole lot more money than they are now.

Ted only joined us this year. Todd did substantially better than the S&P last year, so he racked up a big performance gain, a third of which was paid to him in the first year, but the two years is deferred and he could lose that back if he were to underperform.

So I think we've got a good system and terrific people.

Charlie?

CHARLIE MUNGER: What's interesting about it is that at least 90 percent of the investment management business of the United States would starve to death on our formula. I think — and I think these people will do pretty well with it. So —

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: And not only that, they'll be terrific for the long pull for Berkshire. They're the kind of people we like having around headquarters.

WARREN BUFFETT: Yeah. I hope they get into that — those 400 taxpayers I mentioned, but if they do, even under the present haul, they'll be paying taxes in the mid-30s.

They are doing what they did before which — they ran hedge funds — but they're going to work every day thinking about the same things, and they get taxed at 35 percent-plus.

And if they were running hedge funds, they'd get taxed at 15 percent. And for all of those in the audience who can reconcile that, there'll be a free Dilly Bar. (Laughter)

CHARLIE MUNGER: I think each of them could earn more money in a different format but with a less desirable lifestyle.

WARREN BUFFETT: Yeah. We have a little free Coke machine at our office. (Laughter)

CHARLIE MUNGER: Well, they get to hang around with a fellow eccentric of the same type as Warren.

19. GEICO's profit hurt by Florida decision on auto insurance liabilities

WARREN BUFFETT: OK, Gary, before we go too far with this. (Laughs)

GARY RANSOM: My next question is on GEICO, a little bit more detailed question.

In the fourth quarter of last year, the GEICO combined ratio went up over 100 percent for the first time since, I think, in some quarter in 2001.

Now I realize a quarter doesn't make a trend, but something unusual happened in the quarter. Can you tell us more about that?

WARREN BUFFETT: The biggest thing that happened was a decision, or maybe a couple of decisions — Tony Nicely could elaborate more on them — but they involved Florida and some interpretation down there, I think, of the PIP coverage that caused us to set up some extra reserves that — they weren't extra — I mean, they were called for by what was happening in Florida at that time.

But it was a one-time sort of arrangement. And in the first quarter of this year, on a comparable basis, as you've probably seen in our Q, we wrote at about 91.

So, the basic business is good, but the Florida decision cost us significant money because it changed our potential liability for a bunch of claims already outstanding.

And my guess is you're more familiar with the exact terms of that than I am, but that is the bottom line answer on it.

And GEICO — every metric for GEICO that I've seen this year, in terms of retention, combined ratio on seasoned business versus new, all of that sort of thing, is quite consistent with our general record.

GEICO is a terrific asset for Berkshire. I mean, it will be worth — it's worth a lot of money now. It will be worth a lot more money in the future.

20. Environmental benefits of freight railroads

WARREN BUFFETT: Station 7.

AUDIENCE MEMBER: Hello, Charlie and Warren. My name is Stuart Kaye from Matarin Capital Management in Stamford, Connecticut.

You mentioned earlier today that one of Burlington Northern Santa Fe's competitive advantages is its environmentally-friendly business relative to transportation alternatives.

When evaluating other investment opportunities, what financial statement or other publicly available data do you use to gauge whether a company is both environmentally responsible and a good investment?

WARREN BUFFETT: Well, in terms of what's a good investment, you know, we try to look at every aspect, everything we can that will tell us how the world is going to develop for both that industry and the company in the future.

And sometimes we feel a lot of confidence about that. If we're looking at Coca-Cola, we think we know a lot about how the world will look with the Coca-Cola Company over the next five or 10 or 20 years.

If we're looking at some retail business or something, we would not have the same degree of conviction at all.

I mentioned the environmentally-friendly aspect of it. It is just — you know, it is just — requires less, in the way, of the world's resources to move goods, you know, on a steel rail in large containers, you know, with only a couple people involved with 120 cars, a train a mile long, than it does if you're working, you know, with trucks that have many, many more people and much more in the way of fuel to deliver the same kind of tonnage.

So there's no — we don't — there's no magazine we go to or books we go to or anything like that. We just look at the dynamics of the specific industry and company.

Charlie?

CHARLIE MUNGER: Warren, even though he's an unseasoned young man, was able to figure out that if you used a lot less fuel per ton of freight, you were causing fewer undesired particles to go into the air.

WARREN BUFFETT: That's about the limit of my capabilities, folks. (Laughter)

21. Berkshire lets managers paint their own pictures

WARREN BUFFETT: OK. Station 8.

We've gotten into the — we've covered 36 questions from the two panels, so we're now going to keep going around the audience as long as the questions last, we're going to give you more than your share at this point.

AUDIENCE MEMBER: Good afternoon, Warren and Charlie. Up here.

WARREN BUFFETT: Yeah, I see ya.

AUDIENCE MEMBER: All right. Very good.

John Norwood from West Des Moines, Iowa. We spent a lot of time today talking about two out of the three things you fellows said you spend a lot of time thinking about. One is allocating capital; one is managing risk.

We've had just one question related to motivating your people and tied into executive compensation. So that's what I'm interested in learning more about: executive compensation, how you motivate Berkshire managers, financial versus nonfinancial incentives. Can you speak more about that?

WARREN BUFFETT: Yeah. Well, obviously, Charlie and I have thought a few times about why do we do what we do when we don't need the money at all. And we jump out of bed excited about what we're going to do every day, and why is that the case?

Well, we get the opportunity to paint our own painting every day, and we love painting that painting, and it's a painting that will never be finished.

And you know, if we had somebody over us that was saying why don't you use more red paint than blue paint, and we had all the money in the world, we might tell them what they could do with the paint brush. (Laughter)

But we get to paint our own painting, and ours overlap. We have more fun doing it together than we would have doing it singly, because it is more fun to do with people around you that are pleasant and interesting to be around, and we also like applause.

So if that works with us, we say to ourselves — (applause) — that was not a brazen — (Laughs)

If that works for us, why shouldn't it work for a bunch of other people who have long been doing what they like to do and now, in many cases, have all the money they possibly need? But still, they may have to sell us their business for one reason or another connected with family or taxes, who knows what else?

But they really like what they've been doing. That's the reason — probably — the reason they've been so good at it — part of the reason they've been so good at it.

So we give them the paint brush, let them keep the paint brush, and we don't go around and tell them to use more red paint than blue paint or something of the sort. And we applaud and we try to compensate them fairly, because though they aren't primarily doing it for the money in many cases, nobody likes to be taken advantage of.

But that has not been a big problem at Berkshire. We have not had compensation problems over time. If you think about it, over 40-odd years, the times when compensation has been of importance are practically nil.

And it — we don't — we'll just take that we've talked about the investment — the compensation of two investment people. Those people are making below hedge fund standards, below private equity standards, and having a less favorable tax treatment.

They'll still make a lot of money, I mean, huge amounts of money. And I hope that they are having a good time doing what they're doing. I think that's why they're here.

And I think they'll enjoy it a lot more over the years than going around to a bunch of people explaining why they're worth two and twenty even in the years that aren't so good and trying to attract new money when other people are making bigger promises someplace else. It's just a different way to live your life.

So we want to have our managers enjoying their lives and enjoying their business lives. And we get rid of some of the things they don't like, a lot of them.

I was with a fellow the other day that had come from England. And he's got plenty of business problems to work on, and he's spending a significant part of his time talking to investors, which does him no good.

I mean, he ought to be talking to customers or, you know, employees or something, but he — I think a number of managers may have to spend time talking to lawyers or talking to bankers or talking to investors and what they really like to do is run their businesses, and we give them the best opportunity to do that.

So I can't put passion into somebody about their jobs, but I can certainly create a structure that will take that passion away from them.

And Berkshire is a negative art in that way. We focus on not messing up something that's already good, and that's my job. And I think the person that follows me will have a very similar job.

But we have a unique — we have a bunch of managers nobody else can hire and, you know, how many companies of size can you say that about around the country these days?

And I think we will retain that advantage for many, many decades to come. It works, and people know that it works within the company.

So it's self-reinforcing, and there's nothing like getting proof that what you've designed works, to cause you desire to perpetuate it and to build upon it.

Charlie?

CHARLIE MUNGER: Well, and we don't have any standard formulas like they have in some big companies where X percent is on diversity and Y percent is on something else and Z percent is on something else and everybody is putting all this stuff through a big human resources department.

And every incentive arrangement with a key executive is different from every other, so we can't help you with a standard formula. We don't have one.

WARREN BUFFETT: Our businesses are all so different. It would be crazy to try and have some master arrangement, you know, that involved return on capital — there are some businesses that don't use any capital in our companies — or operating margins. They're just — you know, we could hire consultants in compensation to come in and they —

CHARLIE MUNGER: We never have.

WARREN BUFFETT: No, we never will.

But, you know, they would want to please the people they were working for and get referred elsewhere.

I mean, I will guarantee that you can go to many corporations, if you've got a comp committee, it meets periodically, and the human relations VP comes in and probably suggests a compensation consultant to take. And, you know, who does a human relations VP want to — whose approval do they want? The CEO's.

Whose approval does the compensation consultant want? Well, they want to get recommended elsewhere by the CEO and the human relations VP. So what kind of a system do you get? You get what I call ratchet, ratchet, and bingo, you know.

We're not going to have any of that at Berkshire, and like I say it's worked very well.

Now, we've had people make lots of money at Berkshire. I mean, we've got numbers in eight figures, you know, a page-and-a-half or so, I saw it the other day, that would be at a million dollars and over, and we'll have more.

But it does relate to logical measures of performance in practically all cases. And the amount of time we spend on it is just — I am the compensation committee for 60 or 70 people, and I'm not overworked. (Laughs)

Anything further on that, Charlie?

CHARLIE MUNGER: Well, in past years, I've made the remark about compensation consultants that prostitution would be a step up for them. (Laughter)

WARREN BUFFETT: Charlie is also in charge of diplomacy at Berkshire. (Laughter)

We told you we'd get to everybody in terms of offending them before the day was over. (Laughter)

It didn't even take until 3:30.

22. Modest GDP growth creates "staggering" increases over time

WARREN BUFFETT: Station 9.

AUDIENCE MEMBER: Good afternoon gentleman. (Inaudible), Arlington, Virginia. I have a question for you.

What will it take to get America growing by 4 percent again?

WARREN BUFFETT: Well, Charlie, that's too easy for me. You take it. (Laughter)

CHARLIE MUNGER: A lot. A lot. It's not going to be easy.

WARREN BUFFETT: No. But if population grows 1 percent a year and GDP, in real terms, grows 2 1/2 percent a year, by the standards of 2,000 or 5,000 years, that would be remarkable.

I mean, it would result in, you know, a quadrupling of real GDP per capita every century.

We don't — it's nice to have 4 percent in real terms, but 2 1/2 percent, it may be slow in getting us out from the slump that we entered into a few years ago, but it's a really — it's a remarkable rate of growth for a country that already enjoys a very high standard of living.

It's a remarkable rate of growth for a country that has 1 percent a year gain in population. It is huge over one person's lifetime. I've used this a lot of times, but in my lifetime, the real GDP per capita has increased six-for-one.

CHARLIE MUNGER: But it's nowhere near 4 percent per annum.

WARREN BUFFETT: No. It's staggering. It's staggering. And we have $48,000 or thereabouts of GDP per capita in the United States. We are unbelievably rich.

But an awful lot of people are not feeling that way, and in many cases for good reason. But we've got a tremendous country to work for — to work with.

It's got all kinds of strengths. And it has this huge abundance that — if my parents back in 1930, if you'd told my mother and father that when I was 81, that I would be living in a country that had six times the per capita output of their day, they would have thought, you know, that this would be a utopia. And it hasn't been bad, I might add.

But our country is not a mess. Our politics may be a mess, but the output is — (applause) — you know, it's terrific.

Charlie, if you had to guess the real growth rate per capita over the next 20 years in the United States, what do you think it would be?

CHARLIE MUNGER: That's after inflation?

WARREN BUFFETT: No. This is just real.

CHARLIE MUNGER: Real, that's what I mean. After taking inflation out of it?

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: Well, if God were making the guarantee, I would settle for a very low figure. I think we're a very mature economy, with a lot of social safety net, and a lot of competition from new nations rising, I think 1 percent per capita in real growth would be a sensational result.

WARREN BUFFETT: Yeah, which in 20 years means people would be living close to 25 percent better on average. That's not bad. That's the next generation — in one generation.

CHARLIE MUNGER: You get your expectations too high. When you think that 4 percent is what the world ought to provide, you're asking for trouble.

WARREN BUFFETT: It won't do it.

CHARLIE MUNGER: That's what happened in the housing boom. People got these foolish dreams, and they just started doing foolish things to try and reach unattainable objectives.

WARREN BUFFETT: But if you had the 1 percent, you would be talking about each generation living something over 20 percent better than their parents did.

CHARLIE MUNGER: For this base, it would be a sensational result.

WARREN BUFFETT: And we'll probably get it, in my view.

It won't come in even increments, but the system still works.

And incidentally, you've actually seen — even after the incredible crash, in effect, that we had in the fall of 2008, you've seen an enormous amount of resilience here and, of course, you compare it with Europe and it looks particularly strong, but —

CHARLIE MUNGER: Yes, but the resilience has been better for the businesses than it has been for the employment situation —

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: — which is too bad.

WARREN BUFFETT: Yeah. Business has done extraordinarily well.

Business profits as a percent of GDP were right at the height, you know, last year — and of course our own worth.

I mean, that produces a lot of strains on the political system.

Well, we've mused enough on that.

23. Buffett won't contribute to super PACs

WARREN BUFFETT: So let's go to station 10.

AUDIENCE MEMBER: Hi, Warren. Arthur Lewis (PH) from Denver, Colorado, new home of Peyton Manning. But my question is —

WARREN BUFFETT: It's also the home of Johns Manville. (Laughter)

AUDIENCE MEMBER: My question is with the election coming up, have you thought about making a donation to a super PAC to try to protect a competitive advantage?

WARREN BUFFETT: No, I won't. You know, I wish it never — (applause) — [U.S. Supreme Court case] Citizens United never happened.

It's very tempting, and I will hear this argument put forth to me. People will say, well, you know, we don't believe in it either, but they're doing it on the other side, and, you know, you've got hundreds of millions pouring in on the other side and you're going to tie your hands behind your back, you know, just over principle.

But, you know, I think the whole idea of super PACs is wrong, and I think the idea of huge money by relatively few people influencing politics, I think we've got enough of a push toward a plutocracy from a lot of other factors that we don't need to throw it into the voting process.

And I might say that — I'll say this for [Las Vegas Sands CEO and GOP contributor] Sheldon Adelson who was — you know, he and his wife I think have probably put 12 million in or something. He says this, and I believe him entirely. He says the same thing. He thinks the system is wrong, but he says that's the way the system is. So he has to — you know, he has to play or other people will play and he won't be.

I can understand that, but I don't want to do it. I just think that, you know, you've got to take a stand someplace.

And the idea that I should toss $10 million into some super PAC which is going to spend its whole time kind of misleading people about the opponent's behavior or record, I don't want to see democracy go in that direction.

Charlie? (Applause)

CHARLIE MUNGER: Well, I'm ordinarily so negative and I am extremely negative about our — the nature of our politics with both parties doing the gerrymandering and requiring this unified thought so that the crazies on each side get all this power.

And I remember when we did the Marshall Plan with bipartisan support. That's more my kind of a world. So I don't like it.

That said — (applause) - I think we're lucky to have two candidates as good as we have. Considering the system, I think we've done pretty well this year.

WARREN BUFFETT: How would you feel about contributing to a super PAC if the other side had way more going to their super PACs?

CHARLIE MUNGER: Well, there are certain subjects where I would give money to a super PAC if I thought it would work. If I thought I could really reduce legalized gambling in the United States by a major amount, I would be willing to spend some money to get it done. (Applause)

I think it does us no good. And to the extent we have allowed our securities markets to be more like gambling casinos, I think that's a dumb outcome, too. (Applause)

WARREN BUFFETT: Yeah. If you've got a super PAC out there, call on Charlie, not me.

24. Don't worry about Berkshire's short-term stock moves

WARREN BUFFETT: 11.

AUDIENCE MEMBER: Glenn Tongue, T2 Partners, shareholder from New York.

In an interview with Becky yesterday, Mr. Munger commented that in the old days, the vast majority of Berkshire's value was embedded in the investment portfolio, which is presumably worth around book value.

Today the majority is in the controlled businesses, which we believe are worth a substantial premium to book. In light of this, Berkshire Hathaway's intrinsic value, as a multiple of book value, should be increasing over time, yet Berkshire's price-to-book value has been declining. I'm trying to understand this.

Since the beginning of the year, Berkshire's investment portfolio — I'm sorry — since the beginning of last year, Berkshire's investment portfolio has increased in value by $20 billion and you've acquired Lubrizol. The controlled businesses are going gangbusters, yet the stock price hasn't budged. Is "Mr. Market" simply in one of his manic moods?

WARREN BUFFETT: Charlie?

CHARLIE MUNGER: Well, I'd say no, but I'd say it's in the nature of things that the market is not going to do exactly what you want when you want it.

I think over time, "Mr. Market" will treat the Berkshire shareholders fine, and I wouldn't worry too much about what happens over this six months or this 12 months.

I don't think you're really all that welcome in this room if the short-term orientation is what turns you on. (Applause)

WARREN BUFFETT: I think you'd agree, though, probably, that Berkshire is somewhat cheaper relative to its price than it was a year ago.

CHARLIE MUNGER: Yes, absolutely, if that's your test. Should you feel better about the margin of safety in Berkshire? Yes, it's fine.

25. Why Berkshire hasn't paid a dividend

WARREN BUFFETT: OK. Station 1.

AUDIENCE MEMBER: Good afternoon. Based on your earlier — oh, this is Roberta Cole (PH) from the Twin Cities of Minnesota.

Based on your earlier comments you made this morning, we understand you will buy back shares to help increase share value.

Our confusion, and appreciate clarification, arises as to why you are unwilling to distribute a dividend on a sporadic basis when the stock is too expensive to buy back, and you have the

excess cash so that you could do that, particularly in a low interest rate environment. We look forward to clarification. Thank you.

WARREN BUFFETT: Yeah. By and large, we feel, perhaps unjustifiably, but so far justified, that we can create more than a dollar of present value by investing.

Sometimes, if the stock is cheap, we can create more than a dollar of present value by simply repurchasing shares. But even if that option isn't available, we feel that by every dollar we retain, we can — overall — we can turn that into a greater than a dollar of present value.

And for 47 years, that's worked. I mean, we have — every dollar retained is turned into more than a dollar of value.

So, if somebody wanted to create their own income stream out of it, they were much better off selling a little bit of stock every year than they were by getting a dividend out of it.

They would have more money working per share in Berkshire if they sold off 2 percent of their holdings than if we actually paid them out in 2 percent dividends.

So the math has been compelling to this point. Now, the question is whether we can keep doing that in the future.

But so far, at any point in our history, if we had paid out dividends — and I paid out 10 cents a share back in the 1960s which was a big mistake, but — we won't repeat that.

If we paid out dividends, our shareholders, net, would be worth less money than they are by having left it in, and I think that will continue to be the case, but who knows?

Charlie?

CHARLIE MUNGER: Well, I think the dividends will come in due course because eventually we'll find it difficult to multiply the rabbits, but we hope that that evil day is delayed.

WARREN BUFFETT: And even events of the last few years are encouraging in that respect.

CHARLIE MUNGER: Yeah, absolutely, particularly encouraging.

WARREN BUFFETT: Yeah. I would feel better about — well, the last few years have been better than we anticipated, in terms of being able to put money to work in ways that we think are creating more than a dollar of present value at the time we did it.

CHARLIE MUNGER: You know, MidAmerica may have very unusual opportunities in the next ten or fifteen years to employ an enormous amount of capital at a very reasonable return.

WARREN BUFFETT: Perhaps 100 billion.

CHARLIE MUNGER: What?

WARREN BUFFETT: Perhaps 100 billion.

CHARLIE MUNGER: Perhaps $100 billion. And you can see why that doesn't make us too excited about dividends.

WARREN BUFFETT: We'll think about it when we're older. (Laughter)

CHARLIE MUNGER: A lot older. (Laughs)

26. "Learning and learning and learning"

WARREN BUFFETT: Number 2.

AUDIENCE MEMBER: Hi, Warren and Charlie. This is Thomas Schulz (PH) from Germany.

You once said that if you had just $1 million to invest now, you could achieve returns of 50 percent per year.

Given what you know now, how would you be able to improve on the already spectacular performance of when you started out with your partnership?

CHARLIE MUNGER: We can't do with our present resources what we did once. There are a lot of things I can't do that I used to do better. (Laughter)

WARREN BUFFETT: Well, you can confess to those, Charlie. (Laughter)

CHARLIE MUNGER: And so —

WARREN BUFFETT: Well, but I think he may be driving it to the point that have we learned things in managing since we were at that level where we can do even better with $1 million now than we could have done with $1 million then, and I would say the answer to that is yes. Wouldn't you?

CHARLIE MUNGER: Yeah, I think that's true.

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: There's enough craziness out there. If you have endless time and only a very small amount of money, I think you could find ways to do pretty well.

WARREN BUFFETT: And in the course of 50 or so years, we have probably learned more, or been exposed to more, that if we were back at the million-dollar level we would know more places to look, I think.

CHARLIE MUNGER: Well, I say what's interesting about Berkshire, and many of you have been around for so long you've actually seen it happen, Berkshire's record would have been terrible compared to the way it turned out if Warren hadn't kept learning and learning and learning all the way.

I mean, each decade, to make the record decent, he had to learn to do some things he didn't know how to do at the start of the decade. And I think that's pretty much the human condition, and of course, he's getting old. I worry about him a lot. (Laughter)

WARREN BUFFETT: I'll resist commenting. (Laughter)

27. Learning from the follies of others

WARREN BUFFETT: OK. Station 3.

AUDIENCE MEMBER: Hi. My name is Jeff Chen (PH). I'm from San Francisco. I'm 26, and I run a software start-up out there.

My question is about mistake minimization. I found that I've made a lot of mistakes in my business, looking back, and I want to know besides thinking harder and learning from your own mistakes, what are the most effective techniques you've used to minimize the mistakes?

WARREN BUFFETT: Yeah. Well, I — we made mistakes; we'll make more mistakes.

We do — we think not so much — we think in terms of not exposing ourselves to any mistakes that could really hurt our ability to play tomorrow.

And so we are always thinking about, you know, worst-case situations and there are — on the other hand, we have a natural instinct to do things big, both of us.

So we have to think about whether we're doing anything really big that could have really terrible consequences.

And, I would say this, that A) I don't worry much about mistakes, I mean, the idea of learning from mistakes. The next mistake is something different. So I do not sit around and think about my mistakes and things I'm going to do differently in the future or anything of the sort.

I would say that the — you may get some advantage — I think I've learned something over the years. I haven't learned more about a basic investment philosophy. I got that when I was 19 and I still —

I think I've learned more about people over the years. And I'll make mistakes with people. You know, that's inevitable. But, I think I'll make more good judgments about people. I'll recognize the extraordinary ones better than I would have 40 or 50 years ago.

So I think that improves, but I don't think it improves by certainly any conscious sitting around and focusing on what mistake did I make with that person or this person. I just don't operate that way.

Charlie?

CHARLIE MUNGER: Warren, I would argue that what you've done, and what I've done to a lesser extent, is to learn a lot from other people's mistakes. That is really a much more pleasant way to learn hard lessons. (Laughter)

And we have really worked at that over the years, partly because we find it so interesting, the great variety of human mistakes and their causes. And I think this constant study of other people's disasters and other people's errors has helped us enormously, don't you, Warren?

WARREN BUFFETT: Oh yeah, well that's true. In terms of reading of financial history and all that sort of thing, I've always been absolutely absorbed with reading about disasters. (Laughs)

And there's no question. I mean, when you look at the folly of humans — you know, I've focused on the folly in the financial area — there's all kinds of folly elsewhere — but just the financial area will give you plenty of material if you like to be a follower of folly.

And I do think that understanding — and that's what gave us some advantage over these people that have IQs of 180, you know, and can do things with math that we couldn't do.

They just — they really just didn't have an understanding of how human beings behave and what happens. 2008 was a good example of that, too.

So we've — we have been a student of other people's folly, and its served us well.

28. We don't build strong barriers to entries, we buy them

WARREN BUFFETT: Station 4, have we got a question yet?

AUDIENCE MEMBER: John Boxters (PH), Dartmouth, Massachusetts, which as you know is next door to New Bedford, a former home of Berkshire.

My question is how do you build barriers to entry, especially in industries which have few?

WARREN BUFFETT: Industries which have?

CHARLIE MUNGER: Few barriers to entry.

WARREN BUFFETT: Oh.

CHARLIE MUNGER: How do we build barriers?

WARREN BUFFETT: Pretty tough. (Laughs)

CHARLIE MUNGER: Yeah. We sort of buy barriers; we don't build them. (Laughter)

WARREN BUFFETT: Yeah. Well, think about that because it's true. It's very — there are some industries that are just never going to have barriers to entry.

And in those industries, you better be running very fast because there are a lot of other people that are going to be running and looking at what you're doing and trying to figure out, you know, what your weakness is or what they can do a little bit better.

You really — you know, a great barrier to entry, you know, is something like this. If you gave me 10, 20, $30 billion and told me to go in and try and knock off the Coca-Cola Company with some new cola drink, I wouldn't have the faintest idea how to do it.

I mean, there are billions of people around the world that have something in their mind about Coca-Cola, and you're not going to change that with 10 or $20 billion.

CHARLIE MUNGER: Yeah, but our great brands we bought, we didn't create.

WARREN BUFFETT: We didn't create them, no.

We eat them but we don't create them. (Laughter)

But you know, not so many years ago, you remember Richard Branson, he came to this country and he came up with something called Virgin Cola. And, you know, they say a brand is a promise. Well, I'm not sure what promise he was trying to convey by that particular branding — (laughter) — but you know, you haven't heard anything about that since.

I don't know how many cola drinks there have been in the history. Don Keough would probably know but there's been hundreds, I'm sure.

And those are real barriers, but it's hard to do.

I mean, the people — as Pfizer finds out with Lipitor, you know, the time runs out and what was an absolute gold mine still is a pretty good mine, it's not what it was by a long shot.

But we've got a number of businesses that have — well, nobody's going to build another railroad, you know. We have a competitor and we will have competitors in alternative methods of transportation and all of that.

But if you're buying something at a huge discount from replacement cost and it's an essential sort of activity, you've certainly got a barrier to new competition.

But the UP is out there fighting for every bit of business every day, of course.

Charlie?

CHARLIE MUNGER: Yeah. We have found in a long life that one competitor is frequently enough to ruin a business.

WARREN BUFFETT: Well, I did find that out. I started with a gas station out at 30th and Redick here in Omaha, and we had a Phillips station next to it. I had a Sinclair station. And you know, whatever he charged for gas was my price. (Laughs)

I didn't have much choice. You don't like to be in a business like that.

29. Munger on China's BYD and electric cars

WARREN BUFFETT Number 5.

AUDIENCE MEMBER: Hi. I'm Kyle Miller (PH) from Kansas City, Missouri, and I was wondering about the BYD electric car company and if — with the new cars going on sale in the U.S., if that will hopefully increase the value of the company.

WARREN BUFFETT: Charlie is our expert on BYD, and he will now carry forth. (Laughter)

CHARLIE MUNGER: Well, the car market in China is a huge market, and they happen to be located in China. So that's the main focus of BYD.

I think the first cars they will try and bring here will be for fleets in California where we have environmental troubles and so on, and there may be a market for electric cars with that.

And of course, there are various subsidies that come to people who use electric cars.

I have some relatives who commute into Washington, D.C., and they can only use the fast lane on the freeway if they buy a Prius, and that's been very helpful to Toyota. And we'll see a lot more of that sort of thing.

Generally speaking, I think BYD is an interesting company, if you stop to think about it.

Here's one of eight children of a peasant that becomes a famous engineering school professor, and before he's reached 50, he's won the equivalent of China's Nobel Prize.

And he has created a company which has 180-some thousand employees, a land holding about the size of Macau, and 100-and-some million square feet of buildings.

It's a very interesting start-up company.

WARREN BUFFETT: What percent of the cars do you think in 2030 will be electrics?

CHARLIE MUNGER: Not many. (Laughter)

WARREN BUFFETT: I shouldn't have asked.

CHARLIE MUNGER: I think society — it's like the wind power that's being subsidized in Iowa.

We should subsidize electric cars in various ways, as they do in Washington, D.C. by letting them use the fast lane on the freeway, in order to get the technology going so that we can wean ourselves from oil more quickly.

So I think there will be more subsidies, and there will be more electric cars, but I'm not expecting a sudden revolution.

I drove the latest version of BYD's electric car. I was driven around the block Tuesday, and I was flabbergasted at how much improved that car was.

It's simply amazing how fast people in China are learning to do what took us a long time to learn. The world is getting very much more competitive.

30. Berkshire's insurance float and low interest rates

WARREN BUFFETT: OK. Area 6.

AUDIENCE MEMBER: Good afternoon, Warren and Charlie. Jay (inaudible) from Mumbai, India, residing in Austin, Texas.

I want to thank you for a great show again, and over the few years that I've been here, I've truly enjoyed hearing both of you speak and especially ability to synthesize and clarify so many issues on important things like, you know, valuation, the philosophy of life, or sometimes even the trivial things, Warren, like you clarifying two years ago about, you know, your joke on Charlie Rose about Sophia Loren.

They've all been extremely beneficial.

My question is regarding some clarification around the insurance business, and especially how you value it. Now, typically we've had, you know, a lot of float information and the underwriting profit or loss info.

So, in one way we've been geared to think about it is the value of the investments that you get — the present value of the investments that you get — from the future expected float.

However, I think last year, you also talked about the economic goodwill, especially in GEICO, and I think you were using some ratio, 90 percent of that year's insurance premiums.

So I was wondering if you could just talk to us a little bit about the different ways you could look at valuing the different insurance businesses. That would be of huge help. Thank you.

WARREN BUFFETT: Well, the economic value comes from the ability to utilize float if obtained at a bargain rate.

Now, if interest rates were 7 or 8 percent and float even cost you 2 percent to obtain, it still would be very valuable.

But the economic — at GEICO, for example, I think it's quite reasonable to expect a fairly substantial underwriting profit, on average, for as far as the eye can see, and growth for as far as the eye can see.

And then coupled with that is a growing float, because float grows with the premium volume. Well, that's the most — you know, that is a very attractive combination of factors that comes about because GEICO is a low-cost producer.

And it has some real advantages, in terms of scale, in terms of the whole method of operation, that makes it very hard for other companies to duplicate their cost structure. It's always good, though, to own a low-cost producer in any business, but it's very, very nice in the insurance business.

Now, Ajit's business did not come the same way at all. I mean, at GEICO we have, you know, almost — we have well over 10 million policies, and that's a statistical-type business.

And so we have, you know, hundreds of thousands of drivers in New York, and we have them by age and profession and all kinds of things. So it's a very statistical-type business, and that coupled with a low cost, is very, very likely to produce a good result over time.

In Ajit's business, he has to be smart on each deal, because something comes along and somebody wants to buy coverage for events causing the loss of more than $10 billion in Japan in the next year.

That is not — you can't look it up in any book, and you can't do enough transactions just like that one to even know whether your calculation was right on that specific deal.

Now, if you make 100 calculations on 100 of these type of deals, you'll soon find out whether you have the right person making those calculations or not.

But the economic goodwill with Ajit's operation is based much more on the skill to price individual transactions and the ability to find the people even that want those transactions. Whereas at GEICO, it's based basically on a machine.

But it's enormously important how that machine is run, and Tony Nicely has absolutely knocked the ball out of the park, in terms of managing it.

In the years prior to when he took over, it was — you know, it had gone along at 2 percent of the market and really hardly gone anyplace.

And Tony is — quintupled, virtually, our share of the market, while at the same time producing great underwriting results.

So he took a machine that had a current — had a lot of potential — and then he exceeded even the potential that I thought it had. So you get the value in different ways.

It does relate in the end to a combination of growing a large float, and extremely low-cost float, and in our case, the cost of float has been negative, so people are actually paying us to hold $70 billion of their money, and that's a lot of fun. (Laughter)

And I think that the chances of that continuing are really quite high, although I don't think the chances of the 70 billion growing at a fast clip are high at all. I think we'll be lucky to hold onto the 70 billion.

But I think the chances of the fact of us being able to get that at a less-than-zero cost is good, and I think that will even be true if interest rates go up to 4 or 5 or 6 or 7 percent. I think we may very well be able to do it, and that's a huge asset under circumstances like that.

Charlie?

CHARLIE MUNGER: Yeah. And we're currently in a low-return environment from conventional investment float, but that won't last forever.

And there were times in the past when Ajit would generate a lot of one-of-a-kind float, and Warren would make 20 or 30 percent with it before we had to give it back. That was a lot of fun, and we did it over and over and over again.

Whether that will ever come again on that scale, I don't know, but it doesn't have to.

WARREN BUFFETT: You know, when we have 30 — presently our cash position — well, really if you counted all the companies, it's probably 36 or 7 billion — you know, we're essentially getting nothing on that.

So if you — our earning power today is being affected by current Fed policies.

And I — you know, that is not going to be a normal rate for many, many — for over the longer term. So we — in that sense, our normal earning power is being depressed by Mr. Bernanke but probably for very good reason.

31. Munger: Energy independence is a "stupid idea"

WARREN BUFFETT: Seven?

AUDIENCE MEMBER: Ola Larson (PH), Salt Lake City.

Five, six years ago, you wrote in your annual shareholders report that the current account deficit, the trade deficit, couldn't go on indefinitely. Of course, a very large part of that is crude oil import.

Now some people in the energy markets are sort of talking about United States becoming independent in the energy market.

Could you shed some light on how this might affect the trade deficit? Thank you.

WARREN BUFFETT: Yeah. It will be a huge plus, obviously, if our total energy production increases substantially and what we have to import costs us less. I mean, it is a big factor in the current account deficit.

We're doing a lot in oil. I don't see us getting self-sufficient in oil, but gas is huge. We — our picture has changed a lot in the last three years, in terms of energy.

Charlie and I might argue that, over time, we'd still be better off using somebody else's up and keeping our own for a long time.

CHARLIE MUNGER: That's my view.

WARREN BUFFETT: Yeah. For a long time — we were an oil exporter in my lifetime, a substantial oil exporter. And it might have been better if we would have been using Saudi —

CHARLIE MUNGER: It would have been better.

WARREN BUFFETT: Yeah. (Laughs)

You can't get by with much with Charlie here.

It would have been better. OK. It would have been better if we had been using Saudi Arabia's oil then and just, in effect, treated all of those huge reserves we had in places like East Texas and such as a strategic petroleum reserve which we just kept around for another century, but —

CHARLIE MUNGER: It would have been much better.

WARREN BUFFETT: Yeah, it would have.

But our picture has changed for the better, and that means our current account deficit picture has changed for the better.

We still got a ways to go, but it does look better than three or four years ago. Don't you think so, Charlie?

CHARLIE MUNGER: Well, I think the — those — that's a very complex interaction.

My view is that the single-most precious resource in the United States are its hydrocarbon reserves, the ones that are right here and, of course, I want to use up —

I'm a puritan. I always want to suffer now to make the future better, because I think that's the way grown-ups should behave. So I'm all for — (applause) — using up the other fellow's oil and conserving our own.

You know, I think the idea of energy independence is one of the stupidest ideas I've ever heard grown people talk about.

Think of what terrible shape we'd been in if we'd achieved total energy independence way earlier.

We wouldn't have any oil and gas left at all. Wouldn't that be a wonderful condition? We don't want energy independence. We want to conserve this stuff.

And thank God other people have some of this precious stuff they're willing to sell.

I have the exact opposite idea on this subject than most people and, of course, I think I'm right. (Laughter)

WARREN BUFFETT: This is Charlie's version of saving up sex for your old age. (Laughter)

CHARLIE MUNGER: No, we're going to use the oil. (Laughter)

32. Wealth inequality and economic growth

WARREN BUFFETT: OK. Number 7. Was that 7?

AUDIENCE MEMBER: Jim Powers (PH), Newton, Massachusetts.

A few minutes ago you were talking about per capita GDP, and if it went up 1 percent a year, each generation would be 20, 25 percent better off than the previous one.

In Boston right now, we have a big controversy where the executive officer of Liberty Mutual Insurance Company has been making over 50 million a year in compensation plus other perks.

And that amount of money, in an hour or two, is more than 95 percent of the employees of that company make in the course of a year.

The newspapers have been commenting on the concentration of the profits of that mutual insurance company not going to the insurance policyholders who own the company because it's a mutual insurance company, and the lack of compensation going to the average employee.

What good does it do the average American for the economy to improve 1 percent of GDP per year if they don't — if they don't enjoy some of that themselves?

WARREN BUFFETT: We certainly agree — (applause) — without commenting on any specific individuals, but obviously, if we start out with $48,000 per capita GDP and we do increase by 20 percent or so each generation, you would certainly hope that that would not keep bubbling to the people at the top as it has during the past generation.

I mean, the past 20 years we have not seen the progress that the country overall has made distributed in any kind of way except very, very much at the top.

And the tax code has encouraged that. The tax code is — you know, the tax code, which was taking those people making the $45 million incomes in 1992, was taking 27 or 28 percent from them. When they got up to 270 million now, it's taking a figure that's more like 18 percent.

So, we've got a tax code that has become more and more pro the ultra-rich, and coupled with what you see, and you've seen in compensation, and what the CEO makes in relation to the average worker and all that, you know, we've gone a long direction — a long way — in making sure that what we were promised in the way of trickle-down benefits has not been achieved.

CHARLIE MUNGER: It's also true that most of the great mutual insurance companies — and there are a lot of them in the United States — do not have that kind of compensation abuse in them.

WARREN BUFFETT: That's true, for example —

CHARLIE MUNGER: That's quite fair.

WARREN BUFFETT: — State Farm, or something like that, does not have that.

CHARLIE MUNGER: No, no. Most of them don't. That's a very egregious example, but Boston has always led in egregious examples. (Laughter)

WARREN BUFFETT: No — it's — the corporate world —

CHARLIE MUNGER: It got there early, you know. It mastered the art. (Laughter)

WARREN BUFFETT: The corporate world has been — there's been a lot more egregious behavior in the corporate world than the mutual world.

CHARLIE MUNGER: Well, that's why it's so anomalous, really.

WARREN BUFFETT: Yeah, yeah.

CHARLIE MUNGER: No wonder it's drawing some attention.

WARREN BUFFETT: The rich like it that way. You have to understand that. (Laughs)

But the tax code is basically — you know, that is an important place where people decide, you know, who actually bears the cost of this government, and we have moved away from the rich on that as they have gotten further and further away from the middle class, in terms of earnings.

And, you know, there's a — there may be a natural tendency in a democracy to work toward a plutocracy. If you think about the effect of money in politics, if you think of the nature of how market systems work, you know, there may be some underlying trends that push a democracy toward plutocracy, and you need countervailing factors to prevent it.

CHARLIE MUNGER: I don't think you ought to be too discouraged about Boston, either, because when I first went to Boston, the mayor was running the city from the federal penitentiary. (Laughter)

WARREN BUFFETT: Was that Curley or —

CHARLIE MUNGER: Yes, Mayor Curley.

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: And nobody in Boston saw anything peculiar about it. (Laughter)

WARREN BUFFETT: If you live long enough, you'll see everything. (Laughter)

CHARLIE MUNGER: Yeah, right.

33. Sovereign debt and "fiscal virtue"

WARREN BUFFETT: Area 8.

VOICES FROM AUDIENCE: Nine, nine.

CHARLIE MUNGER: Nine, he says.

WARREN BUFFETT: Oh, 9? OK. Nine.

AUDIENCE MEMBER: My name is Brian Chilton (PH), also from the Boston, Massachusetts, area.

WARREN BUFFETT: I'm surprised you admit it. (Laughter)

AUDIENCE MEMBER: I was tempted.

Warren, a lot of today's questions referenced risk. It seems to me one of the biggest risks facing us is the (inaudible) sovereign debt levels both here in the U.S. and in many countries in Europe.

The liquidity injections by the Fed, and more recently the ECB, have given us some breathing room, but how do these large debts get balanced and do they concern you? (Applause)

WARREN BUFFETT: Well, the nice thing about sovereign debt is they can not pay you in the end and you can't grab anything from them, unlike other kinds of debts.

And, you know, the truth is that the world has seen many, many failures of sovereign debt. I remember when Walt Wriston, back in the early 1980s, said sovereigns don't default.

Well, the truth is they've defaulted many, many times over history. And what happens then is you get a big reallocation of wealth.

Now, the wealth doesn't go away. I mean, you don't lose the farms, you don't — you lose the (inaudible), you don't lose the people with their skills and all of that sort of thing. I mean, there may be some marginal losses.

But I don't know how it plays out in Europe. We have seen the ECB here recently give the trillion dollars to banks which are loaded with sovereign debt, which really is questionable in many cases.

And I wouldn't be surprised, in some cases, if they haven't used some of those — some of the borrowing to even buy more of it.

So it's like giving a guy with a margin account with some perhaps bad assets in it even more money to play with to further leverage themselves up and make an even bigger bet.

But when they did that at MF, or whatever it was, Global, you know, then it had a bad ending, and it might have a bad ending over there.

I would much prefer, you know, a world that was getting its fiscal house in order, including in the United States.

The counterargument, of course, is that when you're in a recession, or close to it, as some or all of Europe might be, that that will feed on itself and be destructive in the same way that it was in the early '30s in the United States.

But we have been having in the United States — it's very interesting. We talk about the fact that there was a stimulus bill a few years ago, even though they didn't call it that, and whether it was adequate and inadequate and all that.

When the government is operating at a deficit that's 8 to 9 percent of GDP, that is stimulus on a huge, huge level. They don't call it — they may not call it, but that is, by definition, huge fiscal stimulus.

So we have been having consistent, huge fiscal stimulus in this country, and we will have to wean ourselves off of that fairly soon.

And the interesting, I think, almost — leaders of both parties realize that you probably have to get revenues up to something around 19 percent of GDP and you have to get expenses down to 21 percent of GDP.

And that that will work fine over time, but you have a situation where both sides feel they will show weakness by going first.

And you also have a situation where the leader, probably, of at least one party can't speak for their party, so that you can't have negotiations in private, which are probably the way to get something like this solved.

I would avoid — I would — certainly at these rates, I would totally avoid buying medium-term or long-term government bonds. I think that's the obvious answer. I wish I had answers that would solve the problem further beyond than that.

But in terms of your own situation, I would stay away from medium- or long-term government bonds, our own, or those of other countries.

Charlie?

CHARLIE MUNGER: Well, of course, he's asking the really intelligent question of the day, and of course we're having difficulty answering it. (Laughter)

It is very hard to know how much of this Keynesian stuff will work after you've lost all your fiscal virtue.

You know you come to a time, if you're a government which has pretty much lost all its fiscal virtue, that the Keynesian stuff won't work, and the money printing won't work, and it's all counterproductive, and you're heading for calamity.

We don't know the precise point at which it stops working. And somebody like Paul Krugman — who I think is a genius — but I also think he's more optimistic about doing well with various economic tricks after you've lost a lot of fiscal virtue than I think is justified by the facts.

I think it's very dangerous to go low on fiscal virtue and, of course, here in the United States, we've used up some of our store.

And it's very important that we not go too far in that direction because we want to be able to do what we did in the Great Recession, where we avoided a huge calamity because we had enough fiscal virtue left so the economic tricks would work.

So it's a terrible problem, and I ask you the question, Warren. Is it inconceivable that we could get a very mediocre result in the United States as a result of all this trouble?

WARREN BUFFETT: I think we'll get a good result over time.

CHARLIE MUNGER: I know you do, but — (Buffett laughs) — is it inconceivable? I'm trying —

WARREN BUFFETT: Well, we can have problems, but —

CHARLIE MUNGER: I'm a little less optimistic than he is. I'm roughly in his position. I think there's some slight chance that we can get a pretty mediocre result.

WARREN BUFFETT: Let's say I came to you right now with a budget that made sense in general — in what it achieved — it had a 19 percent revenue built into it and 21 percent of expenditures. Would you want to adopt that now?

CHARLIE MUNGER: I think the reason intelligent people disagree on this subject is because it's so difficult.

Everybody wants fiscal virtue but not quite yet. They're like that guy who felt that way about sex. He was willing to give it up but not quite yet. (Laughter)

WARREN BUFFETT: Saint Augustine.

CHARLIE MUNGER: Saint Augustine, yes.

WARREN BUFFETT: He's a hero to many of us. (Laughter)

CHARLIE MUNGER: I think these are very, very hard questions. And I have one thing I'm sure of: that it is safer, if you're going to these deficit financing things, to use the money intelligently to build something you're sure to need than it is to just throw it off the end of trains or give it to crooked lawyers. (Applause)

And so I think we all have an interest in making sure that whatever tricks we play are intelligently used because it will protect our reputation and reality in having this fiscal virtue.

WARREN BUFFETT: I'll let you design the 21 percent that gets expended.

CHARLIE MUNGER: Oh, if I were doing it, I would expend it sensibly on infrastructure that I knew we were going to need, and I would have a massive program — (applause) — and I would have the whole damn country pay more cheerfully, like we were so many Romans in the Punic Wars.

The Punic Wars, the Romans paid off two-thirds of the war debt before the war was over. That's my kind of —

WARREN BUFFETT: That's our campaign slogan, folks. Punic Wars again. (Laughs)

CHARLIE MUNGER: But the answer is, I think we do need more sacrifice. I think we need more patriotism, we need more sensible ways of spending money, and we need more civilized politics. (Applause)

But it's still a hard question. I think we should go on to an easier one. (Laughter)

Warren is not strained, but I'm at my limit. (Laughter)

34. Economy held back by health costs, not tax rates

WARREN BUFFETT: OK. We'll do one more question, from area 10.

AUDIENCE MEMBER: This will be an easier question.

WARREN BUFFETT: Good.

AUDIENCE MEMBER: Thank you so much both for being here today, and I hope when you're both in your 90s and your 100s, you'll still be here doing these meetings. (Applause)

WARREN BUFFETT: Thank you.

AUDIENCE MEMBER: And I'm Candy Lewis (PH) from Denver, Colorado.

And my question has to do with taxes and what do you feel is the ideal corporate tax rate to get this economy started and excited?

WARREN BUFFETT: Yeah. Last year the actual taxes paid were about 13 percent of profits, as I remember.

So the corporate rate is 35 percent, and last year you were allowed to write off 100 percent of most kinds of fixed-asset purchases.

I don't think the — corporate profits are not the problem, or corporate balance sheets, or corporate liquidity, is not the problem in the economy moving.

I mean, there is money available, huge amounts of money available in the corporate world, including at Berkshire, to push forward on opportunities.

You know, we will — we're spending money where we see opportunity. And we spent lots of money in the railroad business, we spent lots of money in the energy business, and we built plants elsewhere and did other things.

But — so it is not a lack of capital at all that's holding back, nor is it tax rates, in my view, that are holding back, at all, investment.

You know, this country prospered in the '50s and the '60s when the corporate rate was 52 percent and people actually paid it.

When it was cut to 48 percent, we all rejoiced. And our GDP per capita grew. So it is not a factor holding back.

I will tell you, I mean, corporate tax rates last year were 1.2 percent of GDP. Medical costs were 17-and-a-fraction percent of GDP. And there we have at least a 7 percentage point disadvantage against the rest of the world, which is a big multiple of all the corporate taxes paid.

So if you ask me about the tapeworm of American industry, you know, it's basically our medical costs. We've got a huge cost disadvantage against the rest of the world. (Applause)

Now, that's unbelievably tough to address, but that is where — as Willie Sutton would say — that's where the money is.

And you can fiddle around with corporate tax rates. I don't think that will have any big effect on the economy.

You may achieve greater fairness within the corporate tax code, I wouldn't argue about that at all.

And incidentally, the Treasury — I mean, I think both parties agree that they would like to see a lower overall corporate tax rate but one that applies more equally across corporations so that the —

But getting from here to there is going to be very, very difficult, because it's fine when you talk about it in the terms I just used. But once you put specific proposals out, everyone whose tax rate is going to go up — and some have to go up if others are going to go down — everyone whose tax rate is going to go up will fight with an intensity against that bill that far outstrips the intensity with which those on the other side fight.

It's a real complex problem that way. But corporate tax rates are not our country's problem, in my view.

Charlie?

CHARLIE MUNGER: Well, I used to say when I was younger that I expected to live to see a value-added tax, and now I'm not so sure. But I think it's going to come eventually and probably should.

It equalizes the import-export effect of the taxes, and I think it's quite logical to tax consumption.

I think we get in a lot of trouble when we give people the money and then come around later and try and take it back.

Human nature really resists that. And I think it's much better, if you're going to rely on taxes, to have taxes that are sort of taken out right off the top, and they don't vary so much from year to year.

I come from a state where the state income tax is based on capital gains — go way up and then they collapse. And of course, the politicians spend like crazy when they go up, and there's agony when — it's a crazy way to have a tax system.

We have a lot of problems.

And I don't think a 52 percent tax rate — we may have gotten by with it when we sort of led the world, but I'm not so sure it would be such a good right now to have our tax at 52 percent and the rest of the world taxing corporate profits at 15 percent or something.

That might have a lot of perverse consequences. And since so little money is involved, it's not where the game should be played.

And if Warren could save a lot of money on medical expense for everybody, why, he probably would have done it already. It's really hard.

WARREN BUFFETT: It's hard. So we'll end with a hard one. And I thank you all for coming. We're going to reconvene in about ten minutes to conduct the business of the meeting, and thank you. (Applause)

35. Formal business meeting begins

WARREN BUFFETT: We'll now go to the business meeting. We follow a script here, at least to quite a degree. And the meeting will now come to order.

I'm Warren Buffett, Chairman of the Board of Directors of the company. I welcome you to this 2012 annual meeting of shareholders.

This morning, I introduced the Berkshire Hathaway directors that are present.

Also with us today are partners in the firm of Deloitte & Touche, our auditors. They are available to respond to appropriate questions you might have concerning their firm's audit of the accounts of Berkshire.

Forrest Krutter is secretary of Berkshire. He will make a written record of the proceedings.

Becki Amick has been appointed inspector of elections at this meeting and she will certify to the count of votes cast in the election for directors and the motions to be voted upon at this meeting.

The named proxy holders for this meeting are Walter Scott and Marc Hamburg.

Does the secretary have a report of the number of Berkshire shares outstanding, entitled to vote, and represented at the meeting?

FORREST KRUTTER: As indicated in the proxy statement that accompanied the notice of this meeting that was sent to all shareholders of record on March 7, 2012, being the record date for this meeting, there were 934,158 shares of Class A common stock outstanding, with each share entitled to one vote on motions considered at the meeting, and 1,075,302,988 shares of Class B common stock outstanding, with each share entitled to 1/10,000th of one vote on motions considered at the meeting.

Of that number, 640,153 Class A shares, and 664,293,280 Class B shares are represented at this meeting by proxies returned through Thursday evening, May 3rd.

WARREN BUFFETT: Thank you. That number represents a quorum and we will therefore directly proceed with the meeting.

The first order of business will be a reading of the minutes of the last meeting of shareholders, and I recognize Mr. Walter Scott, who will place a motion before the meeting.

WALTER SCOTT: I move that the reading of the minutes of the last meeting of the shareholders be dispensed with and the minutes be approved.

WARREN BUFFETT: Do I hear a second?

The motion has been moved and seconded. Are there any comments or questions?

We will vote on this motion by voice vote. All those in favor, say aye. Opposed? The motion's carried.

36. Election of directors

WARREN BUFFETT: The next item of business is to elect directors.

If a shareholder is present who wishes to withdraw a proxy previously sent in and vote in person on the election of directors, you may do so.

Also, if any shareholder that is present has not turned in a proxy and desires a ballot in order to vote in person, you may do so.

If you wish to do this, please identify yourself to one of the meeting officials in the aisles, who will furnish a ballot to you.

I recognize Mr. Walter Scott to place a motion before the meeting with respect to election of directors.

WALTER SCOTT: I move that Warren Buffett, Charles Munger, Howard Buffett, Stephen Burke, Susan Decker, William Gates, David Gottesman, Charlotte Guyman, Don Keough, Thomas Murphy, Ron Olson, and Walter Scott be elected as directors.

WARREN BUFFETT: Is there a second?

It has been moved and seconded that Warren Buffett, Charles Munger, Howard Buffett, Stephen Burke, Susan Decker, William Gates, David Gottesman, Charlotte Guyman, Donald Keough, Thomas Murphy, Ronald Olson, and Walter Scott be elected as directors.

Are there any other nominations? Is there any discussion?

The motions are ready to be acted upon. If there are any shareholders voting in person they should now mark their ballots on the election of directors and allow the ballots to be delivered to the inspector of elections.

Miss Amick, when you are ready, you may give your report.

BECKI AMICK: My report is ready.

The ballot of the proxyholders in response to proxies that were received through last Thursday evening, cast not less than 697,021 votes for each nominee. That number far exceeds a majority of the number of the total votes of all Class A and Class B shares outstanding.

The certification required by Delaware law of the precise count of the votes will be given to the secretary to be placed with the minutes of this meeting.

WARREN BUFFETT: Thank you, Miss Amick.

Warren Buffett, Charles Munger, Howard Buffett, Stephen Burke, Susan Decker, William Gates, David Gottesman, Charlotte Guyman, Donald Keough, Thomas Murphy, Ronald Olson, and Walter Scott have been elected as directors.

37. Shareholder proposal for written CEO succession planning policy

WARREN BUFFETT: The next item of business is a motion put forth by the AFL-CIO Reserve Fund. The motion is set forth in the proxy statement.

The motion requests Berkshire Hathaway to amend its corporate governance guidelines to establish a written succession planning policy, including certain specified features.

The directors have recommended that shareholders vote against this proposal.

I will now recognize Ken Mass to present the motion. To allow all interested shareholders to present their views, I ask Mr. Mass to limit his remarks to five minutes.

KEN MASS: Mr. Buffett — Mr. Buffett, members of the board of directors. My name is Ken Mass. I represent the AFL-CIO, a federation of 56 unions, representing more than 12 million members.

I’m here today to introduce the AFL-CIO shareholders proposal for succession planning.

Our proposal urges the board of directors to adopt and disclose a policy on CEO succession planning.

Planning for the succession of CEO is one of the most important responsibilities of the board of directors. Having a succession plan in place is particularly important at a company like Berkshire Hathaway where the CEO has created tremendous value.

Shareholders are thankful for Warren Buffett's leadership as CEO.

Last year, shareholders became concerned when David Sokol resigned from the company after allegations of improper trading.

Mr. Sokol has been rumored to be a possible successor to Mr. Buffett.

We filed our proposal last fall because we feel that an internal CEO candidate is needed to carry out Mr. Buffett's legacy.

Internal candidate may be maintain — can help maintain — Berkshire Hathaway's strong culture.

In Mr. Buffett's letter to shareholders earlier this year, he disclosed that the board of directors had identified his successor, as well as two superb backup candidates.

We were relieved to hear this news.

We are not asking the company to disclose the name of Mr. Buffett's successor. All we're asking for is the board of directors update shareholders annually on the status of its succession planning.

We are pleased that Berkshire Hathaway has adopted all of these practices we recommended in our shareholders proposal, except for an annual reporting.

We hope the company will continue to keep shareholders informed about the status of its succession plan.

Thank you again — AFL-CIO — for considering this proposal. Thank you.

WARREN BUFFETT: Thank you Mr. Mass.

Is there anyone else that wishes to speak?

OK, if there's no one — no one else, I would say, Mr. Mass, you know, we are on the same page.

We regard it — and I speak for all the directors — we regard it as the number one obligation of the board to have a successor, and one that we're very happy with, as to both ability and integrity, and that we know well, to step in tomorrow morning if I should die tonight.

And we spend more time on that subject than any other subject that might come before the board.

So we do not disagree with you on the importance of it. We have taken it very seriously, and I note that you do not ask us to name the candidates, and I think there are obvious disadvantages to doing that. So again, we're on the same page on that.

And so as I understand it, you basically want to be sure that we report annually to you that the subject continues to be at the top of the list, and I can assure you that it will. And in terms of affirming that fact, I would say that certainly more often than once a year, I get — in some public forum — I get asked questions where I get to answer precisely the question that you want me to address, and I think that will continue in the future.

We have not built it into any formal item in the proxy statement, which your organization has suggested we do, but we have covered it in the annual report. We cover it at these meetings. We cover it when I'm interviewed, frequently.

And I don't think that anything would be gained by putting it in some other form, but I do want to say that we — I'm glad you take it seriously. We take it seriously. And I think we're going to get a result that you'll be very happy with, although I hope it doesn't happen too soon. (Laughter)

So, with that I would say that the motion is now ready to be acted upon. If there are any shareholders voting in person they should now mark their ballots on the motion and allow the ballots to be delivered to the inspector of elections.

Miss Amick, when you're ready, may you give your report.

BECKI AMICK: My report is ready.

The ballot of the proxyholders in response to proxies that were received through last Thursday evening, cast 32,179 votes for the motion and 672,285 votes against the motion.

As the number of votes against the motion exceed a majority of the number of votes of all Class A and Class B shares outstanding, the motion has failed.

The certification required by Delaware law of the precise count of the votes will be given to the secretary to be placed with the minutes of this meeting.

WARREN BUFFETT: The vote was about 95 percent — 5 percent, and thank you, Miss Amick. The proposal fails.

38. Formal meeting adjourns

WARREN BUFFETT: Does anyone else have any further business to come before this meeting before we adjourn?

If not, I recognize Mr. Scott to place a motion before the meeting.

WALTER SCOTT: I move that this meeting be adjourned.

WARREN BUFFETT: Is there a second?

A motion to adjourn has been made and seconded. We will vote by voice.

Is there any discussion? If not, all in favor say yes. Aye. Yes.

All opposed say no.

Berkshire's Corporate Performance vs. the S&P 500

Year	Annual Percentage Change in Per-Share Book Value of Berkshire (1)	Annual Percentage Change in S&P 500 with Dividends Included (2)	Relative Results (1)-(2)
1965	23.8	10.0	13.8
1966	20.3	(11.7)	32.0
1967	11.0	30.9	(19.9)
1968	19.0	11.0	8.0
1969	16.2	(8.4)	24.6
1970	12.0	3.9	8.1
1971	16.4	14.6	1.8
1972	21.7	18.9	2.8
1973	4.7	(14.8)	19.5
1974	5.5	(26.4)	31.9
1975	21.9	37.2	(15.3)
1976	59.3	23.6	35.7
1977	31.9	(7.4)	39.3
1978	24.0	6.4	17.6
1979	35.7	18.2	17.5
1980	19.3	32.3	(13.0)
1981	31.4	(5.0)	36.4
1982	40.0	21.4	18.6
1983	32.3	22.4	9.9
1984	13.6	6.1	7.5
1985	48.2	31.6	16.6
1986	26.1	18.6	7.5
1987	19.5	5.1	14.4
1988	20.1	16.6	3.5
1989	44.4	31.7	12.7
1990	7.4	(3.1)	10.5
1991	39.6	30.5	9.1
1992	20.3	7.6	12.7
1993	14.3	10.1	4.2
1994	13.9	1.3	12.6
1995	43.1	37.6	5.5
1996	31.8	23.0	8.8
1997	34.1	33.4	0.7
1998	48.3	28.6	19.7
1999	0.5	21.0	(20.5)
2000	6.5	(9.1)	15.6
2001	(6.2)	(11.9)	5.7
2002	10.0	(22.1)	32.1
2003	21.0	28.7	(7.7)
2004	10.5	10.9	(0.4)
2005	6.4	4.9	1.5
2006	18.4	15.8	2.6
2007	11.0	5.5	5.5
2008	(9.6)	(37.0)	27.4
2009	19.8	26.5	(6.7)
2010	13.0	15.1	(2.1)
2011	4.6	2.1	2.5
2012	14.4	16.0	(1.6)
Compounded Annual Gain – 1965-2012	19.7%	9.4%	10.3
Overall Gain – 1964-2012	586,817%	7,433%	

Notes: Data are for calendar years with these exceptions: 1965 and 1966, year ended 9/30; 1967, 15 months ended 12/31. Starting in 1979, accounting rules required insurance companies to value the equity securities they hold at market rather than at the lower of cost or market, which was previously the requirement. In this table, Berkshire's results through 1978 have been restated to conform to the changed rules. In all other respects, the results are calculated using the numbers originally reported. The S&P 500 numbers are **pre-tax** whereas the Berkshire numbers are **after-tax**. If a corporation such as Berkshire were simply to have owned the S&P 500 and accrued the appropriate taxes, its results would have lagged the S&P 500 in years when that index showed a positive return, but would have exceeded the S&P 500 in years when the index showed a negative return. Over the years, the tax costs would have caused the aggregate lag to be substantial.

BERKSHIRE HATHAWAY INC.

To the Shareholders of Berkshire Hathaway Inc.:

In 2012, Berkshire achieved a total gain for its shareholders of $24.1 billion. We used $1.3 billion of that to repurchase our stock, which left us with an increase in net worth of $22.8 billion for the year. The per-share book value of both our Class A and Class B stock increased by 14.4%. Over the last 48 years (that is, since present management took over), book value has grown from $19 to $114,214, a rate of 19.7% compounded annually.*

A number of good things happened at Berkshire last year, but let's first get the bad news out of the way.

- When the partnership I ran took control of Berkshire in 1965, I could never have dreamed that a year in which we had a gain of $24.1 billion would be subpar, in terms of the comparison we present on the facing page.

  But subpar it was. For the ninth time in 48 years, Berkshire's percentage increase in book value was less than the S&P's percentage gain (a calculation that includes dividends as well as price appreciation). In eight of those nine years, it should be noted, the S&P had a gain of 15% or more. We do better when the wind is in our face.

  To date, we've never had a five-year period of underperformance, having managed 43 times to surpass the S&P over such a stretch. (The record is on page 103.) But the S&P has now had gains in each of the last four years, outpacing us over that period. If the market continues to advance in 2013, our streak of five-year wins will end.

  One thing of which you can be certain: Whatever Berkshire's results, my partner Charlie Munger, the company's Vice Chairman, and I will not change yardsticks. It's our *job* to increase intrinsic business value – for which we use book value as a *significantly understated* proxy – at a faster rate than the market gains of the S&P. If we do so, Berkshire's share price, though unpredictable from year to year, will itself outpace the S&P over time. If we fail, however, our management will bring no value to our investors, who themselves can earn S&P returns by buying a low-cost index fund.

  Charlie and I believe the gain in Berkshire's intrinsic value will over time likely surpass the S&P returns by a small margin. We're confident of that because we have some outstanding businesses, a cadre of terrific operating mangers and a shareholder-oriented culture. Our relative performance, however, is almost certain to be better when the market is down or flat. In years when the market is particularly strong, expect us to fall short.

- The second disappointment in 2012 was my inability to make a major acquisition. I pursued a couple of elephants, but came up empty-handed.

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* All per-share figures used in this report apply to Berkshire's A shares. Figures for the B shares are 1/1500th of those shown for A.

Our luck, however, changed early this year. In February, we agreed to buy 50% of a holding company that will own all of H. J. Heinz. The other half will be owned by a small group of investors led by Jorge Paulo Lemann, a renowned Brazilian businessman and philanthropist.

We couldn't be in better company. Jorge Paulo is a long-time friend of mine and an extraordinary manager. His group and Berkshire will each contribute about $4 billion for common equity in the holding company. Berkshire will also invest $8 billion in preferred shares that pay a 9% dividend. The preferred has two other features that materially increase its value: at some point it will be redeemed at a significant premium price and the preferred also comes with warrants permitting us to buy 5% of the holding company's common stock for a nominal sum.

Our total investment of about $12 billion soaks up much of what Berkshire earned last year. But we still have plenty of cash and are generating more at a good clip. So it's back to work; Charlie and I have again donned our safari outfits and resumed our search for elephants.

Now to some good news from 2012:

- Last year I told you that BNSF, Iscar, Lubrizol, Marmon Group and MidAmerican Energy – our five most profitable non-insurance companies – were likely to earn more than $10 billion pre-tax in 2012. They delivered. Despite tepid U.S. growth and weakening economies throughout much of the world, our "powerhouse five" had aggregate earnings of $10.1 billion, about $600 million more than in 2011.

  Of this group, only MidAmerican, then earning $393 million pre-tax, was owned by Berkshire eight years ago. Subsequently, we purchased another three of the five on an all-cash basis. In acquiring the fifth, BNSF, we paid about 70% of the cost in cash, and for the remainder, issued shares that increased the amount outstanding by 6.1%. Consequently, the $9.7 billion gain in annual earnings delivered Berkshire by the five companies has been accompanied by only minor dilution. That satisfies our goal of not simply growing, but rather increasing *per-share* results.

  Unless the U.S. economy tanks – which we don't expect – our powerhouse five should again deliver higher earnings in 2013. The five outstanding CEOs who run them will see to that.

- Though I failed to land a major acquisition in 2012, the managers of our subsidiaries did far better. We had a record year for "bolt-on" purchases, spending about $2.3 billion for 26 companies that were melded into our existing businesses. These transactions were completed without Berkshire issuing *any* shares.

  Charlie and I love these acquisitions: Usually they are low-risk, burden headquarters not at all, and expand the scope of our proven managers.

- Our insurance operations shot the lights out last year. While giving Berkshire $73 billion of *free* money to invest, they also delivered a $1.6 billion underwriting gain, the tenth consecutive year of profitable underwriting. This is truly having your cake and eating it too.

  GEICO led the way, continuing to gobble up market share without sacrificing underwriting discipline. Since 1995, when we obtained control, GEICO's share of the personal-auto market has grown from 2.5% to 9.7%. Premium volume meanwhile increased from $2.8 billion to $16.7 billion. Much more growth lies ahead.

  The credit for GEICO's extraordinary performance goes to Tony Nicely and his 27,000 associates. And to that cast, we should add our Gecko. Neither rain nor storm nor gloom of night can stop him; the little lizard just soldiers on, telling Americans how they can save big money by going to GEICO.com.

  When I count my blessings, I count GEICO twice.

- Todd Combs and Ted Weschler, our new investment managers, have proved to be smart, models of integrity, helpful to Berkshire in many ways beyond portfolio management, and a perfect cultural fit. We hit the jackpot with these two. In 2012 each outperformed the S&P 500 by double-digit margins. They left me in the dust as well.

  Consequently, we have increased the funds managed by each to almost $5 billion (some of this emanating from the pension funds of our subsidiaries). Todd and Ted are young and will be around to manage Berkshire's massive portfolio long after Charlie and I have left the scene. You can rest easy when they take over.

- Berkshire's yearend employment totaled a record 288,462 (see page 106 for details), up 17,604 from last year. Our headquarters crew, however, remained unchanged at 24. No sense going crazy.

- Berkshire's "Big Four" investments – American Express, Coca-Cola, IBM and Wells Fargo – all had good years. Our ownership interest in each of these companies increased during the year. We purchased additional shares of Wells Fargo (our ownership now is 8.7% versus 7.6% at yearend 2011) and IBM (6.0% versus 5.5%). Meanwhile, stock repurchases at Coca-Cola and American Express raised our percentage ownership. Our equity in Coca-Cola grew from 8.8% to 8.9% and our interest at American Express from 13.0% to 13.7%.

  Berkshire's ownership interest in all four companies is likely to increase in the future. Mae West had it right: "Too much of a good thing can be wonderful."

  The four companies possess marvelous businesses and are run by managers who are both talented and shareholder-oriented. At Berkshire we much prefer owning a non-controlling but substantial portion of a wonderful business to owning 100% of a so-so business. Our flexibility in capital allocation gives us a significant advantage over companies that limit themselves only to acquisitions they can operate.

  Going by our yearend share count, our portion of the "Big Four's" 2012 earnings amounted to $3.9 billion. In the earnings we report to you, however, we include only the dividends we receive – about $1.1 billion. But make no mistake: The $2.8 billion of earnings we do not report is every bit as valuable to us as what we record.

  The earnings that the four companies retain are often used for repurchases – which enhance our share of future earnings – and also for funding business opportunities that are usually advantageous. Over time we expect substantially greater earnings from these four investees. If we are correct, dividends to Berkshire will increase and, even more important, so will our unrealized capital gains (which, for the four, totaled $26.7 billion at yearend).

- There was a lot of hand-wringing last year among CEOs who cried "uncertainty" when faced with capital-allocation decisions (despite many of their businesses having enjoyed record levels of both earnings and cash). At Berkshire, we didn't share their fears, instead spending a record $9.8 billion on plant and equipment in 2012, about 88% of it in the United States. That's 19% more than we spent in 2011, our previous high. Charlie and I love investing large sums in worthwhile projects, whatever the pundits are saying. We instead heed the words from Gary Allan's new country song, "Every Storm Runs Out of Rain."

  We will keep our foot to the floor and will almost certainly set still another record for capital expenditures in 2013. Opportunities abound in America.

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A thought for my fellow CEOs: Of course, the immediate future is uncertain; America has faced the unknown since 1776. It's just that sometimes people focus on the myriad of uncertainties that always exist while at other times they ignore them (usually because the recent past has been uneventful).

American business will do fine over time. And stocks will do well just as certainly, since their fate is tied to business performance. Periodic setbacks will occur, yes, but investors and managers are in a game that is heavily stacked in their favor. (The Dow Jones Industrials advanced from 66 to 11,497 in the 20th Century, a staggering 17,320% increase that materialized despite four costly wars, a Great Depression and many recessions. And don't forget that shareholders received substantial dividends throughout the century as well.)

Since the basic game is so favorable, Charlie and I believe it's a terrible mistake to try to dance in and out of it based upon the turn of tarot cards, the predictions of "experts," or the ebb and flow of business activity. The risks of being out of the game are huge compared to the risks of being in it.

My own history provides a dramatic example: I made my first stock purchase in the spring of 1942 when the U.S. was suffering major losses throughout the Pacific war zone. Each day's headlines told of more setbacks. Even so, there was no talk about uncertainty; *every* American I knew believed we would prevail.

The country's success since that perilous time boggles the mind: On an inflation-adjusted basis, GDP per capita more than *quadrupled* between 1941 and 2012. Throughout that period, *every* tomorrow has been uncertain. America's destiny, however, has always been clear: ever-increasing abundance.

If you are a CEO who has some large, profitable project you are shelving because of short-term worries, call Berkshire. Let us unburden you.

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In summary, Charlie and I hope to build per-share intrinsic value by (1) improving the earning power of our many subsidiaries; (2) further increasing their earnings through bolt-on acquisitions; (3) participating in the growth of our investees; (4) repurchasing Berkshire shares when they are available at a meaningful discount from intrinsic value; and (5) making an occasional large acquisition. We will also try to maximize results for *you* by rarely, if ever, issuing Berkshire shares.

Those building blocks rest on a rock-solid foundation. A century hence, BNSF and MidAmerican Energy will continue to play major roles in the American economy. Insurance, moreover, will always be essential for both businesses and individuals – and no company brings greater resources to that arena than Berkshire. As we view these and other strengths, Charlie and I like your company's prospects.

Intrinsic Business Value

As much as Charlie and I talk about intrinsic business value, we cannot tell you precisely what that number is for Berkshire shares (or, for that matter, any other stock). In our 2010 annual report, however, we laid out the three elements – one of which was qualitative – that we believe are the keys to a sensible estimate of Berkshire's intrinsic value. That discussion is reproduced in full on pages 104-105.

Here is an update of the two quantitative factors: In 2012 our per-share investments increased 15.7% to $113,786, and our per-share pre-tax earnings from businesses other than insurance and investments also increased 15.7% to $8,085.

Since 1970, our per-share investments have increased at a rate of 19.4% compounded annually, and our per-share earnings figure has grown at a 20.8% clip. It is no coincidence that the price of Berkshire stock over the 42-year period has increased at a rate very similar to that of our two measures of value. Charlie and I like to see gains in both areas, but our strong emphasis will always be on building operating earnings.

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Now, let's examine the four major sectors of our operations. Each has vastly different balance sheet and income characteristics from the others. Lumping them together therefore impedes analysis. So we'll present them as four separate businesses, which is how Charlie and I view them.

Insurance

Let's look first at insurance, Berkshire's core operation and the engine that has propelled our expansion over the years.

Property-casualty ("P/C") insurers receive premiums upfront and pay claims later. In extreme cases, such as those arising from certain workers' compensation accidents, payments can stretch over decades. This collect-now, pay-later model leaves us holding large sums – money we call "float" – that will eventually go to others. Meanwhile, we get to invest this float for Berkshire's benefit. Though individual policies and claims come and go, the amount of float we hold remains quite stable in relation to premium volume. Consequently, as our business grows, so does our float. And *how* we have grown, as the following table shows:

Year	*Float (in $ millions)*
1970	$ 39
1980	237
1990	1,632
2000	27,871
2010	65,832
2012	73,125

Last year I told you that our float was likely to level off or even decline a bit in the future. Our insurance CEOs set out to prove me wrong and *did*, increasing float last year by $2.5 billion. I now expect a further increase in 2013. But further gains will be tough to achieve. On the plus side, GEICO's float will almost certainly grow. In National Indemnity's reinsurance division, however, we have a number of run-off contracts whose float drifts downward. If we do experience a decline in float at some future time, it will be *very* gradual – at the outside no more than 2% in any year.

If our premiums exceed the total of our expenses and eventual losses, we register an underwriting profit that adds to the investment income our float produces. When such a profit is earned, we enjoy the use of free money – and, better yet, get *paid* for holding it. That's like your taking out a loan and having the bank pay *you* interest.

Unfortunately, the wish of all insurers to achieve this happy result creates intense competition, so vigorous in most years that it causes the P/C industry as a whole to operate at a significant underwriting *loss*. This loss, in effect, is what the industry pays to hold its float. For example, State Farm, by far the country's largest insurer and a well-managed company besides, incurred an underwriting loss in eight of the eleven years ending in 2011. (Their financials for 2012 are not yet available.) There are a lot of ways to lose money in insurance, and the industry never ceases searching for new ones.

As noted in the first section of this report, we have now operated at an underwriting profit for ten consecutive years, our pre-tax gain for the period having totaled $18.6 billion. Looking ahead, I believe we will continue to underwrite profitably in most years. If we do, our float will be better than free money.

So how does our attractive float affect the calculations of intrinsic value? When Berkshire's book value is calculated, the *full* amount of our float is deducted as a liability, just as if we had to pay it out tomorrow and were unable to replenish it. But that's an incorrect way to look at float, which should instead be viewed as a revolving fund. If float is both costless and long-enduring, which I believe Berkshire's will be, the true value of this liability is *dramatically* less than the accounting liability.

A partial offset to this overstated liability is $15.5 billion of "goodwill" that is attributable to our insurance companies and included in book value as an asset. In effect, this goodwill represents the price we paid for the float-generating capabilities of our insurance operations. The cost of the goodwill, however, has *no* bearing on its true value. For example, if an insurance business sustains large and prolonged underwriting losses, any goodwill asset carried on the books should be deemed valueless, whatever its original cost.

Fortunately, that's not the case at Berkshire. Charlie and I believe the true economic value of our insurance goodwill – what we would happily pay to purchase an insurance operation producing float *of similar quality* – to be far in excess of its historic carrying value. The value of our float is one reason – a huge reason – why we believe Berkshire's intrinsic business value substantially exceeds its book value.

Let me emphasize once again that cost-free float is *not* an outcome to be expected for the P/C industry as a whole: There is very little "Berkshire-quality" float existing in the insurance world. In 37 of the 45 years ending in 2011, the industry's premiums have been inadequate to cover claims plus expenses. Consequently, the industry's overall return on tangible equity has for many decades fallen far short of the average return realized by American industry, a sorry performance almost certain to continue.

A further unpleasant reality adds to the industry's dim prospects: Insurance earnings are now benefitting from "legacy" bond portfolios that deliver much higher yields than will be available when funds are reinvested during the next few years – and perhaps for many years beyond that. Today's bond portfolios are, in effect, wasting assets. Earnings of insurers will be hurt in a significant way as bonds mature and are rolled over.

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Berkshire's outstanding economics exist only because we have some terrific managers running some extraordinary insurance operations. Let me tell you about the major units.

First by float size is the Berkshire Hathaway Reinsurance Group, run by Ajit Jain. Ajit insures risks that no one else has the desire or the capital to take on. His operation combines capacity, speed, decisiveness and, most important, brains in a manner unique in the insurance business. Yet he never exposes Berkshire to risks that are inappropriate in relation to our resources. Indeed, we are *far* more conservative in avoiding risk than most large insurers. For example, if the insurance industry should experience a $250 billion loss from some mega-catastrophe – a loss about triple anything it has ever experienced – Berkshire as a whole would likely record a significant profit for the year because it has so many streams of earnings. All other major insurers and reinsurers would meanwhile be far in the red, with some facing insolvency.

From a standing start in 1985, Ajit has created an insurance business with float of $35 billion and a significant cumulative underwriting profit, a feat that no other insurance CEO has come close to matching. He has thus added a great many billions of dollars to the value of Berkshire. If you meet Ajit at the annual meeting, bow deeply.

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We have another reinsurance powerhouse in General Re, managed by Tad Montross.

At bottom, a sound insurance operation needs to adhere to four disciplines. It must (1) understand *all* exposures that might cause a policy to incur losses; (2) conservatively assess the likelihood of any exposure actually causing a loss and the probable cost if it does; (3) set a premium that, on average, will deliver a profit after both prospective loss costs and operating expenses are covered; and (4) be willing to walk away if the appropriate premium can't be obtained.

Many insurers pass the first three tests and flunk the fourth. They simply can't turn their back on business that is being eagerly written by their competitors. That old line, "The other guy is doing it, so we must as well," spells trouble in any business, but none more so than insurance.

Tad has observed all four of the insurance commandments, and it shows in his results. General Re's huge float has been better than cost-free under his leadership, and we expect that, on average, it will continue to be. We are particularly enthusiastic about General Re's international life reinsurance business, which has achieved consistent and profitable growth since we acquired the company in 1998.

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Finally, there is GEICO, the insurer on which I cut my teeth 62 years ago. GEICO is run by Tony Nicely, who joined the company at 18 and completed 51 years of service in 2012.

I rub my eyes when I look at what Tony has accomplished. Last year, it should be noted, his record was considerably better than is indicated by GEICO's GAAP underwriting profit of $680 million. Because of a change in accounting rules at the beginning of the year, we recorded a charge to GEICO's underwriting earnings of $410 million. This item had *nothing* to do with 2012's operating results, changing neither cash, revenues, expenses nor taxes. In effect, the writedown simply widened the already huge difference between GEICO's intrinsic value and the value at which we carry it on our books.

GEICO earned its underwriting profit, moreover, despite the company suffering its largest single loss in history. The cause was Hurricane Sandy, which cost GEICO more than three times the loss it sustained from Katrina, the previous record-holder. We insured 46,906 vehicles that were destroyed or damaged in the storm, a staggering number reflecting GEICO's leading market share in the New York metropolitan area.

Last year GEICO enjoyed a meaningful increase in both the renewal rate for existing policyholders ("persistency") and in the percentage of rate quotations that resulted in sales ("closures"). Big dollars ride on those two factors: A sustained gain in persistency of a bare one percentage point increases intrinsic value by more than $1 billion. GEICO's gains in 2012 offer dramatic proof that when people check the company's prices, they usually find they can save important sums. (Give us a try at 1-800-847-7536 or GEICO.com. Be sure to mention that you are a shareholder; that fact will usually result in a discount.)

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In addition to our three major insurance operations, we own a group of smaller companies, most of them plying their trade in odd corners of the insurance world. In aggregate, these companies have consistently delivered an underwriting profit. Moreover, as the table below shows, they also provide us with substantial float. Charlie and I treasure these companies and their managers.

Late in 2012, we enlarged this group by acquiring Guard Insurance, a Wilkes-Barre company that writes workers compensation insurance, primarily for smaller businesses. Guard's annual premiums total about $300 million. The company has excellent prospects for growth in both its traditional business and new lines it has begun to offer.

	Underwriting Profit		*Yearend Float*	
	(in millions)			
Insurance Operations	*2012*	*2011*	*2012*	*2011*
BH Reinsurance	$ 304	$(714)	$34,821	$33,728
General Re	355	144	20,128	19,714
GEICO	680*	576	11,578	11,169
Other Primary	286	242	6,598	5,960
	$1,625	$ 248	$73,125	$70,571

*After a $410 million charge against earnings arising from an industry-wide accounting change.

Among large insurance operations, Berkshire's impresses me as the best in the world. It was our lucky day when, in March 1967, Jack Ringwalt sold us his two property-casualty insurers for $8.6 million.

Regulated, Capital-Intensive Businesses

We have two major operations, BNSF and MidAmerican Energy, that have important common characteristics distinguishing them from our other businesses. Consequently, we assign them their own section in this letter and split out their combined financial statistics in our GAAP balance sheet and income statement.

A key characteristic of both companies is their huge investment in very long-lived, regulated assets, with these partially funded by large amounts of long-term debt that is *not* guaranteed by Berkshire. Our credit is in fact not needed because each business has earning power that even under terrible conditions amply covers its interest requirements. In last year's tepid economy, for example, BNSF's interest coverage was 9.6x. (Our definition of coverage is pre-tax earnings/interest, *not* EBITDA/interest, a commonly-used measure we view as deeply flawed.) At MidAmerican, meanwhile, two key factors ensure its ability to service debt under all circumstances: the company's recession-resistant earnings, which result from our exclusively offering an essential service, and its great diversity of earnings streams, which shield it from being seriously harmed by any single regulatory body.

Every day, our two subsidiaries power the American economy in major ways:

- BNSF carries about 15% (measured by ton-miles) of *all* inter-city freight, whether it is transported by truck, rail, water, air, or pipeline. Indeed, we move more ton-miles of goods than *anyone* else, a fact making BNSF the most important artery in our economy's circulatory system.

  BNSF also moves its cargo in an extraordinarily fuel-efficient and environmentally friendly way, carrying a ton of freight about 500 miles on a single gallon of diesel fuel. Trucks taking on the same job guzzle about four times as much fuel.

- MidAmerican's electric utilities serve regulated retail customers in ten states. Only one utility holding company serves more states. In addition, we are the leader in renewables: first, from a standing start nine years ago, we now account for 6% of the country's wind generation capacity. Second, when we complete three projects now under construction, we will own about 14% of U.S. solar-generation capacity.

Projects like these require huge capital investments. Upon completion, indeed, our renewables portfolio will have cost $13 billion. We relish making such commitments if they promise reasonable returns – and on that front, we put a large amount of trust in future regulation.

Our confidence is justified both by our past experience and by the knowledge that society will forever need massive investment in both transportation and energy. It is in the self-interest of governments to treat capital providers in a manner that will ensure the continued flow of funds to essential projects. And it is in our self-interest to conduct our operations in a manner that earns the approval of our regulators and the people they represent.

Our managers must think today of what the country will need far down the road. Energy and transportation projects can take many years to come to fruition; a growing country simply can't afford to get behind the curve.

We have been doing our part to make sure that doesn't happen. Whatever you may have heard about our country's crumbling infrastructure in no way applies to BNSF or railroads generally. America's rail system has never been in better shape, a consequence of huge investments by the industry. We are not, however, resting on our laurels: BNSF will spend about $4 billion on the railroad in 2013, roughly double its depreciation charge and more than any railroad has spent in a single year.

In Matt Rose, at BNSF, and Greg Abel, at MidAmerican, we have two outstanding CEOs. They are extraordinary managers who have developed businesses that serve both their customers and owners well. Each has my gratitude and each deserves yours. Here are the key figures for their businesses:

MidAmerican (89.8% owned)	*Earnings (in millions)*	
	2012	*2011*
U.K. utilities	$ 429	$ 469
Iowa utility	236	279
Western utilities	737	771
Pipelines	383	388
HomeServices	82	39
Other (net)	91	36
Operating earnings before corporate interest and taxes	1,958	1,982
Interest	314	336
Income taxes	172	315
Net earnings	$ 1,472	$ 1,331
Earnings applicable to Berkshire	$ 1,323	$ 1,204

BNSF	*Earnings (in millions)*	
	2012	*2011*
Revenues	$20,835	$19,548
Operating expenses	14,835	14,247
Operating earnings before interest and taxes	6,000	5,301
Interest (net)	623	560
Income taxes	2,005	1,769
Net earnings	$ 3,372	$ 2,972

Sharp-eyed readers will notice an incongruity in the MidAmerican earnings tabulation. What in the world is HomeServices, a real estate brokerage operation, doing in a section entitled “Regulated, Capital-Intensive Businesses?”

Well, its ownership came with MidAmerican when we bought control of that company in 2000. At that time, I focused on MidAmerican’s utility operations and barely noticed HomeServices, which then owned only a few real estate brokerage companies.

Since then, however, the company has regularly added residential brokers – three in 2012 – and now has about 16,000 agents in a string of major U.S. cities. (Our real estate brokerage companies are listed on page 107.) In 2012, our agents participated in $42 billion of home sales, up 33% from 2011.

Additionally, HomeServices last year purchased 67% of the Prudential and Real Living franchise operations, which together license 544 brokerage companies throughout the country and receive a small royalty on their sales. We have an arrangement to purchase the balance of those operations within five years. In the coming years, we will gradually rebrand both our franchisees and the franchise firms we own as Berkshire Hathaway HomeServices.

Ron Peltier has done an outstanding job in managing HomeServices during a depressed period. Now, as the housing market continues to strengthen, we expect earnings to rise significantly.

Manufacturing, Service and Retailing Operations

Our activities in this part of Berkshire cover the waterfront. Let's look, though, at a summary balance sheet and earnings statement for the entire group.

Balance Sheet 12/31/12 (in millions)

Assets		*Liabilities and Equity*	
Cash and equivalents	$ 5,338	Notes payable	$ 1,454
Accounts and notes receivable	7,382	Other current liabilities	8,527
Inventory	9,675	Total current liabilities	9,981
Other current assets	734		
Total current assets	23,129		
		Deferred taxes	4,907
Goodwill and other intangibles	26,017	Term debt and other liabilities	5,826
Fixed assets	18,871	Non-controlling interests	2,062
Other assets	3,416	Berkshire equity	48,657
	$71,433		$71,433

Earnings Statement (in millions)

	2012	*2011**	*2010*
Revenues	$83,255	$72,406	$66,610
Operating expenses	76,978	67,239	62,225
Interest expense	146	130	111
Pre-tax earnings	6,131	5,037	4,274
Income taxes and non-controlling interests	2,432	1,998	1,812
Net earnings	$ 3,699	$ 3,039	$ 2,462

*Includes earnings of Lubrizol from September 16.

Our income and expense data conforming to Generally Accepted Accounting Principles ("GAAP") is on page 29. In contrast, the operating expense figures above are non-GAAP. In particular, they exclude some purchase-accounting items, primarily the amortization of certain intangible assets. We present the data in this manner because Charlie and I believe the adjusted numbers more accurately reflect the real expenses and profits of the businesses aggregated in the table.

I won't explain all of the adjustments – some are small and arcane – but serious investors should understand the disparate nature of intangible assets: Some truly deplete over time while others never lose value. With software, for example, amortization charges are very real expenses. Charges against other intangibles such as the amortization of customer relationships, however, arise through purchase-accounting rules and are clearly not real expenses. GAAP accounting draws no distinction between the two types of charges. Both, that is, are recorded as expenses when calculating earnings – even though from an investor's viewpoint they could not be more different.

In the GAAP-compliant figures we show on page 29, amortization charges of $600 million for the companies included in this section are deducted as expenses. We would call about 20% of these "real" – and indeed that is the portion we have included in the table above – and the rest not. This difference has become significant because of the many acquisitions we have made.

"Non-real" amortization expense also looms large at some of our major investees. IBM has made many small acquisitions in recent years and now regularly reports "adjusted operating earnings," a non-GAAP figure that excludes certain purchase-accounting adjustments. Analysts focus on this number, as they should.

A “non-real” amortization charge at Wells Fargo, however, is not highlighted by the company and never, to my knowledge, has been noted in analyst reports. The earnings that Wells Fargo reports are heavily burdened by an “amortization of core deposits” charge, the implication being that these deposits are disappearing at a fairly rapid clip. Yet core deposits regularly *increase*. The charge last year was about $1.5 billion. In *no* sense, except GAAP accounting, is this whopping charge an expense.

And that ends today’s accounting lecture. Why is no one shouting “More, more?”

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The crowd of companies in this section sell products ranging from lollipops to jet airplanes. Some of the businesses enjoy terrific economics, measured by earnings on unleveraged net *tangible* assets that run from 25% after-tax to more than 100%. Others produce good returns in the area of 12-20%. A few, however, have very poor returns, a result of some serious mistakes I made in my job of capital allocation.

More than 50 years ago, Charlie told me that it was far better to buy a wonderful business at a fair price than to buy a fair business at a wonderful price. Despite the compelling logic of his position, I have sometimes reverted to my old habit of bargain-hunting, with results ranging from tolerable to terrible. Fortunately, my mistakes have usually occurred when I made smaller purchases. Our large acquisitions have generally worked out well and, in a few cases, more than well.

Viewed as a single entity, therefore, the companies in this group are an excellent business. They employ $22.6 billion of net tangible assets and, on that base, earned 16.3% after-tax.

Of course, a business with terrific economics can be a bad investment if the price paid is excessive. We have paid substantial premiums to net tangible assets for most of our businesses, a cost that is reflected in the large figure we show for intangible assets. Overall, however, we are getting a decent return on the capital we have deployed in this sector. Furthermore, the intrinsic value of the businesses, in aggregate, exceeds their carrying value by a good margin. Even so, the difference between intrinsic value and carrying value in the insurance and regulated-industry segments is *far* greater. It is there that the huge winners reside.

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Marmon provides an example of a clear and substantial gap existing between book value and intrinsic value. Let me explain the odd origin of this differential.

Last year I told you that we had purchased additional shares in Marmon, raising our ownership to 80% (up from the 64% we acquired in 2008). I also told you that GAAP accounting required us to immediately record the 2011 purchase on our books at far less than what we paid. I’ve now had a year to think about this weird accounting rule, but I’ve yet to find an explanation that makes *any* sense – nor can Charlie or Marc Hamburg, our CFO, come up with one. My confusion increases when I am told that if we hadn’t already owned 64%, the 16% we purchased in 2011 would have been entered on our books at our cost.

In 2012 (and in early 2013, retroactive to yearend 2012) we acquired an additional 10% of Marmon and the same bizarre accounting treatment was required. The $700 million write-off we immediately incurred had no effect on earnings but did reduce book value and, therefore, 2012’s gain in net worth.

The cost of our recent 10% purchase implies a $12.6 billion value for the 90% of Marmon we now own. Our balance-sheet carrying value for the 90%, however, is $8 billion. Charlie and I believe our current purchase represents excellent value. If we are correct, our Marmon holding is worth at least $4.6 billion more than its carrying value.

Marmon is a diverse enterprise, comprised of about 150 companies operating in a wide variety of industries. Its largest business involves the ownership of tank cars that are leased to a variety of shippers, such as oil and chemical companies. Marmon conducts this business through two subsidiaries, Union Tank Car in the U.S. and Procor in Canada.

Union Tank Car has been around a long time, having been owned by the Standard Oil Trust until that empire was broken up in 1911. Look for its UTLX logo on tank cars when you watch trains roll by. As a Berkshire shareholder, you own the cars with that insignia. When you spot a UTLX car, puff out your chest a bit and enjoy the same satisfaction that John D. Rockefeller undoubtedly experienced as he viewed *his* fleet a century ago.

Tank cars are owned by either shippers or lessors, not by railroads. At yearend Union Tank Car and Procor together owned 97,000 cars having a net book value of $4 billion. A new car, it should be noted, costs upwards of $100,000. Union Tank Car is also a major manufacturer of tank cars – some of them to be sold but most to be owned by it and leased out. Today, its order book extends well into 2014.

At both BNSF and Marmon, we are benefitting from the resurgence of U.S. oil production. In fact, our railroad is now transporting about 500,000 barrels of oil daily, roughly 10% of the total produced in the "lower 48" (i.e. not counting Alaska and offshore). All indications are that BNSF's oil shipments will grow substantially in coming years.

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Space precludes us from going into detail about the many other businesses in this segment. Company-specific information about the 2012 operations of some of the larger units appears on pages 76 to 79.

Finance and Financial Products

This sector, our smallest, includes two rental companies, XTRA (trailers) and CORT (furniture), as well as Clayton Homes, the country's leading producer and financer of manufactured homes. Aside from these 100%-owned subsidiaries, we also include in this category a collection of financial assets and our 50% interest in Berkadia Commercial Mortgage.

We include Clayton in this sector because it owns and services 332,000 mortgages, totaling $13.7 billion. In large part, these loans have been made to lower and middle-income families. Nevertheless, the loans have performed well throughout the housing collapse, thereby validating our conviction that a reasonable down payment and a sensible payments-to-income ratio will ward off outsized foreclosure losses, even during stressful times.

Clayton also produced 25,872 manufactured homes last year, up 13.5% from 2011. That output accounted for about 4.8% of all single-family residences built in the country, a share that makes Clayton America's number one homebuilder.

CORT and XTRA are leaders in their industries as well. Our expenditures for new rental equipment at XTRA totaled $256 million in 2012, more than double its depreciation expense. While competitors fret about today's uncertainties, XTRA is preparing for tomorrow.

Berkadia continues to do well. Our partners at Leucadia do most of the work in this venture, an arrangement that Charlie and I happily embrace.

Here's the pre-tax earnings recap for this sector:

	2012		*2011*
		(in millions)	
Berkadia	$ 35		$ 25
Clayton	255		154
CORT	42		29
XTRA	106		126
Net financial income*	410		440
	$848		$774

*Excludes capital gains or losses

Investments

Below we show our common stock investments that at yearend had a market value of more than $1 billion.

Shares	Company	Percentage of Company Owned	12/31/12 Cost*	12/31/12 Market
			(in millions)	
151,610,700	American Express Company	13.7	$ 1,287	$ 8,715
400,000,000	The Coca-Cola Company	8.9	1,299	14,500
24,123,911	ConocoPhillips	2.0	1,219	1,399
22,999,600	DIRECTV	3.8	1,057	1,154
68,115,484	International Business Machines Corp.	6.0	11,680	13,048
28,415,250	Moody's Corporation	12.7	287	1,430
20,060,390	Munich Re	11.3	2,990	3,599
20,668,118	Phillips 66	3.3	660	1,097
3,947,555	POSCO	5.1	768	1,295
52,477,678	The Procter & Gamble Company	1.9	336	3,563
25,848,838	Sanofi	2.0	2,073	2,438
415,510,889	Tesco plc	5.2	2,350	2,268
78,060,769	U.S. Bancorp	4.2	2,401	2,493
54,823,433	Wal-Mart Stores, Inc.	1.6	2,837	3,741
456,170,061	Wells Fargo & Company	8.7	10,906	15,592
	Others		7,646	11,330
	Total Common Stocks Carried at Market		$49,796	$87,662

*This is our actual purchase price and also our tax basis; GAAP "cost" differs in a few cases because of write-ups or write-downs that have been required.

One point about the composition of this list deserves mention. In Berkshire's past annual reports, every stock itemized in this space has been bought by me, in the sense that I made the decision to buy it for Berkshire. But starting with this list, any investment made by Todd Combs or Ted Weschler – or a combined purchase by them – that meets the dollar threshold for the list ($1 billion this year) will be included. Above is the first such stock, DIRECTV, which both Todd and Ted hold in their portfolios and whose combined holdings at the end of 2012 were valued at the $1.15 billion shown.

Todd and Ted also manage the pension funds of certain Berkshire subsidiaries, while others, for regulatory reasons, are managed by outside advisers. We do not include holdings of the pension funds in our annual report tabulations, though their portfolios often overlap Berkshire's.

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We continue to wind down the part of our derivatives portfolio that involved the assumption by Berkshire of insurance-like risks. (Our electric and gas utility businesses, however, will continue to use derivatives for operational purposes.) New commitments would require us to post collateral and, with minor exceptions, we are unwilling to do that. Markets can behave in extraordinary ways, and we have no interest in exposing Berkshire to some out-of-the-blue event in the financial world that might require our posting mountains of cash on a moment's notice.

Charlie and I believe in operating with many redundant layers of liquidity, and we avoid any sort of obligation that could drain our cash in a material way. That reduces our returns in 99 years out of 100. But we will survive in the 100th while many others fail. And we will sleep well in all 100.

The derivatives we have sold that provide credit protection for corporate bonds will all expire in the next year. It's now almost certain that our profit from these contracts will approximate $1 billion pre-tax. We also received very substantial sums upfront on these derivatives, and the "float" attributable to them has averaged about $2 billion over their five-year lives. All told, these derivatives have provided a more-than-satisfactory result, especially considering the fact that we were guaranteeing corporate credits – mostly of the high-yield variety – throughout the financial panic and subsequent recession.

In our other major derivatives commitment, we sold long-term puts on four leading stock indices in the U.S., U.K., Europe and Japan. These contracts were initiated between 2004 and 2008 and even under the worst of circumstances have only minor collateral requirements. In 2010 we unwound about 10% of our exposure at a profit of $222 million. The remaining contracts expire between 2018 and 2026. Only the index value at expiration date counts; our counterparties have no right to early termination.

Berkshire received premiums of $4.2 billion when we wrote the contracts that remain outstanding. If all of these contracts had come due at yearend 2011, we would have had to pay $6.2 billion; the corresponding figure at yearend 2012 was $3.9 billion. With this large drop in immediate settlement liability, we reduced our GAAP liability at yearend 2012 to $7.5 billion from $8.5 billion at the end of 2011. Though it's no sure thing, Charlie and I believe it likely that the final liability will be considerably less than the amount we currently carry on our books. In the meantime, we can invest the $4.2 billion of float derived from these contracts as we see fit.

We Buy Some Newspapers . . . Newspapers?

During the past fifteen months, we acquired 28 daily newspapers at a cost of $344 million. This may puzzle you for two reasons. First, I have long told you in these letters and at our annual meetings that the circulation, advertising and profits of the newspaper industry overall are *certain* to decline. That prediction still holds. Second, the properties we purchased fell far short of meeting our oft-stated size requirements for acquisitions.

We can address the second point easily. Charlie and I love newspapers and, *if their economics make sense*, will buy them even when they fall far short of the size threshold we would require for the purchase of, say, a widget company. Addressing the first point requires me to provide a more elaborate explanation, including some history.

News, to put it simply, is what people don't know that they want to know. And people will seek their news – what's important to *them* – from whatever sources provide the best combination of immediacy, ease of access, reliability, comprehensiveness and low cost. The relative importance of these factors varies with the nature of the news and the person wanting it.

Before television and the Internet, newspapers were the *primary* source for an incredible variety of news, a fact that made them indispensable to a very high percentage of the population. Whether your interests were international, national, local, sports or financial quotations, your newspaper usually was first to tell you the latest information. Indeed, your paper contained so much you wanted to learn that you received your money's worth, even if only a small number of its pages spoke to your specific interests. Better yet, advertisers typically paid almost all of the product's cost, and readers rode their coattails.

Additionally, the ads themselves delivered information of vital interest to hordes of readers, in effect providing even more "news." Editors would cringe at the thought, but for many readers learning what jobs or apartments were available, what supermarkets were carrying which weekend specials, or what movies were showing where and when was far more important than the views expressed on the editorial page.

In turn, the local paper was indispensable to advertisers. If Sears or Safeway built stores in Omaha, they required a "megaphone" to tell the city's residents why their stores should be visited *today*. Indeed, big department stores and grocers vied to outshout their competition with multi-page spreads, knowing that the goods they advertised would fly off the shelves. With no other megaphone remotely comparable to that of the newspaper, ads sold themselves.

As long as a newspaper was the only one in its community, its profits were certain to be extraordinary; whether it was managed well or poorly made little difference. (As one Southern publisher famously confessed, "I owe my exalted position in life to two great American institutions – nepotism and monopoly.")

Over the years, almost all cities became one-newspaper towns (or harbored two competing papers that joined forces to operate as a single economic unit). This contraction was inevitable because most people wished to read and pay for only one paper. When competition existed, the paper that gained a significant lead in circulation almost automatically received the most ads. That left ads drawing readers and readers drawing ads. This symbiotic process spelled doom for the weaker paper and became known as "survival of the fattest."

Now the world has changed. Stock market quotes and the details of national sports events are old news long before the presses begin to roll. The Internet offers extensive information about both available jobs and homes. Television bombards viewers with political, national and international news. In one area of interest after another, newspapers have therefore lost their "primacy." And, as their audiences have fallen, so has advertising. (Revenues from "help wanted" classified ads – long a huge source of income for newspapers – have plunged more than 90% in the past 12 years.)

Newspapers continue to reign supreme, however, in the delivery of local news. If you want to know what's going on in *your* town – whether the news is about the mayor or taxes or high school football – there is no substitute for a local newspaper that is doing its job. A reader's eyes may glaze over after they take in a couple of paragraphs about Canadian tariffs or political developments in Pakistan; a story about the reader himself or his neighbors will be read to the end. Wherever there is a pervasive sense of community, a paper that serves the special informational needs of that community will remain indispensable to a significant portion of its residents.

Even a valuable product, however, can self-destruct from a faulty business strategy. And that process has been underway during the past decade at almost all papers of size. Publishers – including Berkshire in Buffalo – have offered their paper free on the Internet while charging meaningful sums for the physical specimen. How could this lead to anything other than a sharp and steady drop in sales of the printed product? Falling circulation, moreover, makes a paper less essential to advertisers. Under these conditions, the "virtuous circle" of the past reverses.

The Wall Street Journal went to a pay model early. But the main exemplar for local newspapers is the *Arkansas Democrat-Gazette*, published by Walter Hussman, Jr. Walter also adopted a pay format early, and over the past decade his paper has retained its circulation far better than any other large paper in the country. Despite Walter's powerful example, it's only been in the last year or so that other papers, including Berkshire's, have explored pay arrangements. Whatever works best – and the answer is not yet clear – will be copied widely.

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Charlie and I believe that papers delivering comprehensive and reliable information to tightly-bound communities *and* having a sensible Internet strategy will remain viable for a long time. We do not believe that success will come from cutting either the news content or frequency of publication. Indeed, skimpy news coverage will almost certainly lead to skimpy readership. And the less-than-daily publication that is now being tried in some large towns or cities – while it may improve profits in the short term – seems certain to diminish the papers' relevance over time. Our goal is to keep our papers loaded with content of interest to our readers and to be paid appropriately by those who find us useful, whether the product they view is in their hands or on the Internet.

Our confidence is buttressed by the availability of Terry Kroeger's outstanding management group at the *Omaha World-Herald*, a team that has the ability to oversee a large group of papers. The individual papers, however, will be independent in their news coverage and editorial opinions. (I voted for Obama; of our 12 dailies that endorsed a presidential candidate, 10 opted for Romney.)

Our newspapers are certainly not insulated from the forces that have been driving revenues downward. Still, the six small dailies we owned throughout 2012 had unchanged revenues for the year, a result far superior to that experienced by big-city dailies. Moreover, the two large papers we operated throughout the year – *The Buffalo News* and the *Omaha World-Herald* – held their revenue loss to 3%, which was also an above-average outcome. Among newspapers in America's 50 largest metropolitan areas, our Buffalo and Omaha papers rank near the top in circulation penetration of their home territories.

This popularity is no accident: Credit the editors of those papers – Margaret Sullivan at the *News* and Mike Reilly at the *World-Herald* — for delivering information that has made their publications indispensable to community-interested readers. (Margaret, I regret to say, recently left us to join *The New York Times*, whose job offers are tough to turn down. That paper made a great hire, and we wish her the best.)

Berkshire's cash earnings from its papers will almost certainly trend downward over time. Even a sensible Internet strategy will not be able to prevent modest erosion. At our cost, however, I believe these papers will meet or exceed our economic test for acquisitions. Results to date support that belief.

Charlie and I, however, still operate under economic principle 11 (detailed on page 99) and will not continue the operation of *any* business doomed to unending losses. One daily paper that we acquired in a bulk purchase from Media General was significantly unprofitable under that company's ownership. After analyzing the paper's results, we saw no remedy for the losses and reluctantly shut it down. All of our remaining dailies, however, should be profitable for a long time to come. (They are listed on page 108.) At appropriate prices – and that means at a *very* low multiple of current earnings – we will purchase more papers of the type we like.

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A milestone in Berkshire's newspaper operations occurred at yearend when Stan Lipsey retired as publisher of *The Buffalo News*. It's no exaggeration for me to say that the *News* might now be extinct were it not for Stan.

Charlie and I acquired the *News* in April 1977. It was an evening paper, dominant on weekdays but lacking a Sunday edition. Throughout the country, the circulation trend was toward morning papers. Moreover, Sunday was becoming ever more critical to the profitability of metropolitan dailies. Without a Sunday paper, the *News* was destined to lose out to its morning competitor, which had a fat and entrenched Sunday product.

We therefore began to print a Sunday edition late in 1977. And then all hell broke loose. Our competitor sued us, and District Judge Charles Brieant, Jr. authored a harsh ruling that crippled the introduction of our paper. His ruling was later reversed – after 17 long months – in a 3-0 sharp rebuke by the Second Circuit Court of Appeals. While the appeal was pending, we lost circulation, hemorrhaged money and stood in constant danger of going out of business.

Enter Stan Lipsey, a friend of mine from the 1960s, who, with his wife, had sold Berkshire a small Omaha weekly. I found Stan to be an extraordinary newspaperman, knowledgeable about every aspect of circulation, production, sales and editorial. (He was a key person in gaining that small weekly a Pulitzer Prize in 1973.) So when I was in big trouble at the *News*, I asked Stan to leave his comfortable way of life in Omaha to take over in Buffalo.

He never hesitated. Along with Murray Light, our editor, Stan persevered through four years of very dark days until the *News* won the competitive struggle in 1982. Ever since, despite a difficult Buffalo economy, the performance of the *News* has been exceptional. As both a friend and as a manager, Stan is simply the best.

Dividends

A number of Berkshire shareholders – including some of my good friends – would like Berkshire to pay a cash dividend. It puzzles them that we relish the dividends we receive from most of the stocks that Berkshire owns, but pay out nothing ourselves. So let's examine when dividends do and don't make sense for shareholders.

A profitable company can allocate its earnings in various ways (which are not mutually exclusive). A company's management should first examine reinvestment possibilities offered by its current business – projects to become more efficient, expand territorially, extend and improve product lines or to otherwise widen the economic moat separating the company from its competitors.

I ask the managers of our subsidiaries to unendingly focus on moat-widening opportunities, and they find many that make economic sense. But sometimes our managers misfire. The usual cause of failure is that they start with the answer they want and then work backwards to find a supporting rationale. Of course, the process is subconscious; that's what makes it so dangerous.

Your chairman has not been free of this sin. In Berkshire's 1986 annual report, I described how twenty years of management effort and capital improvements in our original textile business were an exercise in futility. I *wanted* the business to succeed and *wished* my way into a series of bad decisions. (I even bought *another* New England textile company.) But wishing makes dreams come true only in Disney movies; it's poison in business.

Despite such past miscues, our first priority with available funds will always be to examine whether they can be *intelligently* deployed in our various businesses. Our record $12.1 billion of fixed-asset investments and bolt-on acquisitions in 2012 demonstrate that this is a fertile field for capital allocation at Berkshire. And here we have an advantage: Because we operate in so many areas of the economy, we enjoy a range of choices far wider than that open to most corporations. In deciding what to do, we can water the flowers and skip over the weeds.

Even after we deploy hefty amounts of capital in our current operations, Berkshire will regularly generate a lot of additional cash. Our next step, therefore, is to search for acquisitions unrelated to our current businesses. Here our test is simple: Do Charlie and I think we can effect a transaction that is likely to leave our shareholders wealthier on a per-share basis than they were prior to the acquisition?

I have made plenty of mistakes in acquisitions and will make more. Overall, however, our record is satisfactory, which means that our shareholders are *far* wealthier today than they would be if the funds we used for acquisitions had instead been devoted to share repurchases or dividends.

But, to use the standard disclaimer, past performance is no guarantee of future results. That's particularly true at Berkshire: Because of our present size, making acquisitions that are both meaningful and sensible is now more difficult than it has been during most of our years.

Nevertheless, a large deal still offers us possibilities to add materially to per-share intrinsic value. BNSF is a case in point: It is now worth considerably more than our carrying value. Had we instead allocated the funds required for this purchase to dividends or repurchases, you and I would have been worse off. Though large transactions of the BNSF kind will be rare, there are still some whales in the ocean.

The third use of funds – repurchases – is sensible for a company when its shares sell at a meaningful discount to conservatively calculated intrinsic value. Indeed, disciplined repurchases are the *surest* way to use funds intelligently: It's hard to go wrong when you're buying dollar bills for 80¢ or less. We explained our criteria for repurchases in last year's report and, if the opportunity presents itself, we will buy large quantities of our stock. We originally said we would not pay more than 110% of book value, but that proved unrealistic. Therefore, we increased the limit to 120% in December when a large block became available at about 116% of book value.

But never forget: In repurchase decisions, price is all-important. Value is *destroyed* when purchases are made above intrinsic value. The directors and I believe that continuing shareholders are benefitted in a meaningful way by purchases up to our 120% limit.

And that brings us to dividends. Here we have to make a few assumptions and use some math. The numbers will require careful reading, but they are essential to understanding the case for and against dividends. So bear with me.

We'll start by assuming that you and I are the equal owners of a business with $2 million of net worth. The business earns 12% on tangible net worth – $240,000 – and can reasonably expect to earn the same 12% on reinvested earnings. Furthermore, there are outsiders who always wish to buy into our business at 125% of net worth. Therefore, the value of what we each own is now $1.25 million.

You would like to have the two of us shareholders receive one-third of our company's annual earnings and have two-thirds be reinvested. That plan, you feel, will nicely balance your needs for both current income and capital growth. So you suggest that we pay out $80,000 of current earnings and retain $160,000 to increase the future earnings of the business. In the first year, your dividend would be $40,000, and as earnings grew and the one-third payout was maintained, so too would your dividend. In total, dividends and stock value would increase 8% each year (12% earned on net worth less 4% of net worth paid out).

After ten years our company would have a net worth of $4,317,850 (the original $2 million compounded at 8%) and your dividend in the upcoming year would be $86,357. Each of us would have shares worth $2,698,656 (125% of our half of the company's net worth). And we would live happily ever after – with dividends and the value of our stock continuing to grow at 8% annually.

There is an alternative approach, however, that would leave us even happier. Under this scenario, we would leave *all* earnings in the company and each sell 3.2% of our shares annually. Since the shares would be sold at 125% of book value, this approach would produce the same $40,000 of cash initially, a sum that would grow annually. Call this option the "sell-off" approach.

Under this "sell-off" scenario, the net worth of our company increases to $6,211,696 after ten years ($2 million compounded at 12%). Because we would be selling shares each year, our *percentage* ownership would have declined, and, after ten years, we would each own 36.12% of the business. Even so, your share of the net worth of the company at that time would be $2,243,540. And, remember, every dollar of net worth attributable to each of us can be sold for $1.25. Therefore, the market value of your remaining shares would be $2,804,425, about 4% greater than the value of your shares if we had followed the dividend approach.

Moreover, your annual cash receipts from the sell-off policy would now be running 4% more than you would have received under the dividend scenario. Voila! – you would have both more cash to spend annually *and* more capital value.

This calculation, of course, assumes that our hypothetical company can earn an average of 12% annually on net worth and that its shareholders can sell their shares for an average of 125% of book value. To that point, the S&P 500 earns considerably more than 12% on net worth and sells at a price far above 125% of that net worth. Both assumptions also seem reasonable for Berkshire, though certainly not assured.

Moreover, on the plus side, there also is a possibility that the assumptions will be exceeded. If they are, the argument for the sell-off policy becomes even stronger. Over Berkshire's history – admittedly one that won't come close to being repeated – the sell-off policy would have produced results for shareholders *dramatically* superior to the dividend policy.

Aside from the favorable math, there are two further – *and important* – arguments for a sell-off policy. First, dividends impose a specific cash-out policy upon all shareholders. If, say, 40% of earnings is the policy, those who wish 30% or 50% will be thwarted. Our 600,000 shareholders cover the waterfront in their desires for cash. It is safe to say, however, that a great many of them – perhaps even most of them – are in a net-savings mode and logically should prefer no payment at all.

The sell-off alternative, on the other hand, lets each shareholder make his own choice between cash receipts and capital build-up. One shareholder can elect to cash out, say, 60% of annual earnings while other shareholders elect 20% or nothing at all. Of course, a shareholder in our dividend-paying scenario could turn around and use his dividends to purchase more shares. But he would take a beating in doing so: He would both incur taxes and also pay a 25% premium to get his dividend reinvested. (Keep remembering, open-market purchases of the stock take place at 125% of book value.)

The second disadvantage of the dividend approach is of equal importance: The tax consequences for *all* taxpaying shareholders are inferior – usually *far* inferior – to those under the sell-off program. Under the dividend program, all of the cash received by shareholders each year is taxed whereas the sell-off program results in tax on only the gain portion of the cash receipts.

Let me end this math exercise – and I can hear you cheering as I put away the dentist drill – by using my own case to illustrate how a shareholder's regular disposals of shares can be accompanied by an *increased* investment in his or her business. For the last seven years, I have annually given away about 4¼% of my Berkshire shares. Through this process, my original position of 712,497,000 B-equivalent shares (split-adjusted) has decreased to 528,525,623 shares. Clearly my ownership *percentage* of the company has significantly decreased.

Yet my investment in the business has actually increased: The book value of my current interest in Berkshire considerably exceeds the book value attributable to my holdings of seven years ago. (The actual figures are $28.2 billion for 2005 and $40.2 billion for 2012.) In other words, I now have *far* more money working for me at Berkshire even though my ownership of the company has materially decreased. It's also true that my share of both Berkshire's intrinsic business value and the company's normal earning power is far greater than it was in 2005. Over time, I expect this accretion of value to continue – albeit in a decidedly irregular fashion – even as I now annually give away more than 4½% of my shares (the increase having occurred because I've recently doubled my lifetime pledges to certain foundations).

* * * * * * * * * * *

Above all, dividend policy should always be clear, consistent and rational. A capricious policy will confuse owners and drive away would-be investors. Phil Fisher put it wonderfully 54 years ago in Chapter 7 of his *Common Stocks and Uncommon Profits*, a book that ranks behind only *The Intelligent Investor* and the 1940 edition of *Security Analysis* in the all-time-best list for the serious investor. Phil explained that you can successfully run a restaurant that serves hamburgers or, alternatively, one that features Chinese food. But you can't switch capriciously between the two and retain the fans of either.

Most companies pay consistent dividends, generally trying to increase them annually and cutting them very reluctantly. Our "Big Four" portfolio companies follow this sensible and understandable approach and, in certain cases, also repurchase shares quite aggressively.

We applaud their actions and hope they continue on their present paths. We like increased dividends, and we love repurchases at appropriate prices.

At Berkshire, however, we have consistently followed a different approach that we know has been sensible and that we hope has been made understandable by the paragraphs you have just read. We will stick with this policy as long as we believe our assumptions about the book-value buildup and the market-price premium seem reasonable. If the prospects for either factor change materially for the worse, we will reexamine our actions.

The Annual Meeting

The annual meeting will be held on Saturday, May 4th at the CenturyLink Center. Carrie Sova will be in charge. (Though that's a new name, it's the same wonderful Carrie as last year; she got married in June to a very lucky guy.) All of our headquarters group pitches in to help her; the whole affair is a homemade production, and I couldn't be more proud of those who put it together.

The doors will open at 7 a.m., and at 7:30 we will have our second International Newspaper Tossing Challenge. The target will be the porch of a Clayton Home, precisely 35 feet from the throwing line. Last year I successfully fought off all challengers. But now Berkshire has acquired a large number of newspapers and with them came much tossing talent (or so the throwers claim). Come see whether their talent matches their talk. Better yet, join in. The papers will be 36 to 42 pages and you must fold them yourself (no rubber bands).

At 8:30, a new Berkshire movie will be shown. An hour later, we will start the question-and-answer period, which (with a break for lunch at the CenturyLink's stands) will last until 3:30. After a short recess, Charlie and I will convene the annual meeting at 3:45. If you decide to leave during the day's question periods, please do so while *Charlie* is talking.

The best reason to exit, of course, is to *shop*. We will help you do so by filling the 194,300-square-foot hall that adjoins the meeting area with products from dozens of Berkshire subsidiaries. Last year, you did your part, and most locations racked up record sales. In a nine-hour period, we sold 1,090 pairs of Justin boots, (that's a pair every 30 seconds), 10,010 pounds of See's candy, 12,879 Quikut knives (24 knives per minute) and 5,784 pairs of Wells Lamont gloves, always a hot item. But you can do better. Remember: Anyone who says money can't buy happiness simply hasn't shopped at our meeting.

Last year, Brooks, our running shoe company, exhibited for the first time and ran up sales of $150,000. Brooks is on fire: Its volume in 2012 grew 34%, and that was on top of a similar 34% gain in 2011. The company's management expects another jump of 23% in 2013. We will again have a special commemorative shoe to offer at the meeting.

On Sunday at 8 a.m., we will initiate the "Berkshire 5K," a race starting at the CenturyLink. Full details for participating will be included in the Visitor's Guide that you will receive with your credentials for the meeting. We will have plenty of categories for competition, including one for the media. (It will be fun to report on *their* performance.) Regretfully, I will forego running; *someone* has to man the starting gun.

I should warn you that we have a lot of home-grown talent. Ted Weschler has run the marathon in 3:01. Jim Weber, Brooks' dynamic CEO, is another speedster with a 3:31 best. Todd Combs specializes in the triathlon, but has been clocked at 22 minutes in the 5K.

That, however, is just the beginning: Our directors are also fleet of foot (that is, *some* of our directors are). Steve Burke has run an amazing 2:39 Boston marathon. (It's a family thing; his wife, Gretchen, finished the New York marathon in 3:25.) Charlotte Guyman's best is 3:37, and Sue Decker crossed the tape in New York in 3:36. Charlie did not return his questionnaire.

GEICO will have a booth in the shopping area, staffed by a number of its top counselors from around the country. Stop by for a quote. In most cases, GEICO will be able to give you a shareholder discount (usually 8%). This special offer is permitted by 44 of the 51 jurisdictions in which we operate. (One supplemental point: The discount is not additive if you qualify for another, such as that given certain groups.) Bring the details of your existing insurance and check out whether we can save you money. For at least half of you, I believe we can.

Be sure to visit the Bookworm. It will carry about 35 books and DVDs, including a couple of new ones. Carol Loomis, who has been invaluable to me in editing this letter since 1977, has recently authored *Tap Dancing to Work: Warren Buffett on Practically Everything*. She and I have cosigned 500 copies, available exclusively at the meeting.

The Outsiders, by William Thorndike, Jr., is an outstanding book about CEOs who excelled at capital allocation. It has an insightful chapter on our director, Tom Murphy, overall the best business manager I've ever met. I also recommend *The Clash of the Cultures* by Jack Bogle and Laura Rittenhouse's *Investing Between the Lines*. Should you need to ship your book purchases, a shipping service will be available nearby.

The *Omaha World-Herald* will again have a booth, offering a few books it has recently published. Red-blooded Husker fans – is there any Nebraskan who isn't one? – will surely want to purchase *Unbeatable*. It tells the story of Nebraska football during 1993-97, a golden era in which Tom Osborne's teams went 60-3.

If you are a big spender – or aspire to become one – visit Signature Aviation on the east side of the Omaha airport between noon and 5:00 p.m. on Saturday. There we will have a fleet of NetJets aircraft that will get your pulse racing. Come by bus; leave by private jet. Live a little.

An attachment to the proxy material that is enclosed with this report explains how you can obtain the credential you will need for admission to the meeting and other events. Airlines have sometimes jacked up prices for the Berkshire weekend. If you are coming from far away, compare the cost of flying to Kansas City versus Omaha. The drive between the two cities is about 2½ hours, and it may be that you can save significant money, particularly if you had planned to rent a car in Omaha. Spend the savings with us.

At Nebraska Furniture Mart, located on a 77-acre site on 72nd Street between Dodge and Pacific, we will again be having "Berkshire Weekend" discount pricing. Last year the store did $35.9 million of business during its annual meeting sale, an all-time record that makes other retailers turn green. To obtain the Berkshire discount, you must make your purchases between Tuesday, April 30th and Monday, May 6th inclusive, and also present your meeting credential. The period's special pricing will even apply to the products of several prestigious manufacturers that normally have ironclad rules against discounting but which, in the spirit of our shareholder weekend, have made an exception for you. We appreciate their cooperation. NFM is open from 10 a.m. to 9 p.m. Monday through Saturday, and 10 a.m. to 6 p.m. on Sunday. On Saturday this year, from 5:30 p.m. to 8 p.m., NFM is having a picnic to which you are all invited.

At Borsheims, we will again have two shareholder-only events. The first will be a cocktail reception from 6 p.m. to 9 p.m. on Friday, May 3rd. The second, the main gala, will be held on Sunday, May 5th, from 9 a.m. to 4 p.m. On Saturday, we will be open until 6 p.m. In recent years, our three-day volume has far exceeded sales in all of December, normally a jeweler's best month.

Around 1 p.m. on Sunday, I will begin clerking at Borsheims. Last year my sales totaled $1.5 million. This year I won't quit until I hit $2 million. Because I need to leave well before sundown, I will be desperate to do business. Come take advantage of me. Ask for my "Crazy Warren" price.

We will have huge crowds at Borsheims throughout the weekend. For your convenience, therefore, shareholder prices will be available from Monday, April 29th through Saturday, May 11th. During that period, please identify yourself as a shareholder by presenting your meeting credentials or a brokerage statement that shows you are a Berkshire holder.

On Sunday, in the mall outside of Borsheims, a blindfolded Patrick Wolff, twice U.S. chess champion, will take on all comers – who will have their eyes wide open – in groups of six. Nearby, Norman Beck, a remarkable magician from Dallas, will bewilder onlookers. Additionally, we will have Bob Hamman and Sharon Osberg, two of the world's top bridge experts, available to play bridge with our shareholders on Sunday afternoon. Don't play them for money.

Gorat's and Piccolo's will again be open exclusively for Berkshire shareholders on Sunday, May 5th. Both will be serving until 10 p.m., with Gorat's opening at 1 p.m. and Piccolo's opening at 4 p.m. These restaurants are my favorites, and I will eat at both of them on Sunday evening. Remember: To make a reservation at Gorat's, call 402-551-3733 on April 1st (*but not before*) and at Piccolo's call 402-342-9038. At Piccolo's, order a giant root beer float for dessert. Only sissies get the small one. (I once saw Bill Gates polish off two of the giant variety *after* a full-course dinner; that's when I knew he would make a great director.)

We will again have the same three financial journalists lead the question-and-answer period at the meeting, asking Charlie and me questions that shareholders have submitted to them by e-mail. The journalists and their e-mail addresses are: Carol Loomis, of Fortune, who may be emailed at cloomis@fortunemail.com; Becky Quick, of CNBC, at BerkshireQuestions@cnbc.com, and Andrew Ross Sorkin, of The New York Times, at arsorkin@nytimes.com.

From the questions submitted, each journalist will choose the six he or she decides are the most interesting and important. The journalists have told me your question has the best chance of being selected if you keep it concise, avoid sending it in at the last moment, make it Berkshire-related and include no more than two questions in any email you send them. (In your email, let the journalist know if you would like your name mentioned if your question is selected.)

Last year we had a second panel of three analysts who follow Berkshire. All were insurance specialists, and shareholders subsequently indicated they wanted a little more variety. Therefore, this year we will have one insurance analyst, Cliff Gallant of Nomura Securities. Jonathan Brandt of Ruane, Cunniff & Goldfarb will join the analyst panel to ask questions that deal with our non-insurance operations.

Finally – to spice things up – we would like to add to the panel a credentialed bear on Berkshire, preferably one who is short the stock. Not yet having a bear identified, we would like to hear from applicants. The only requirement is that you be an investment professional and negative on Berkshire. The three analysts will bring their own Berkshire-specific questions and alternate with the journalists and the audience in asking them.

Charlie and I believe that all shareholders should have access to new Berkshire information simultaneously and should also have adequate time to analyze it, which is why we try to issue financial information after the market close on a Friday and why our annual meeting is held on Saturdays. We do not talk one-on-one to large institutional investors or analysts. Our hope is that the journalists and analysts will ask questions that will further educate shareholders about their investment.

Neither Charlie nor I will get so much as a clue about the questions to be asked. We know the journalists and analysts will come up with some tough ones, and that's the way we like it. All told, we expect at least 54 questions, which will allow for six from each analyst and journalist and 18 from the audience. If there is some extra time, we will take more from the audience. Audience questioners will be determined by drawings that will take place at 8:15 a.m. at each of the 11 microphones located in the arena and main overflow room.

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For good reason, I regularly extol the accomplishments of our operating managers. They are truly All-Stars, who run their businesses as if they were the only asset owned by their families. I believe their mindset to be as shareholder-oriented as can be found in the universe of large publicly-owned companies. Most have no financial need to work; the joy of hitting business "home runs" means as much to them as their paycheck.

Equally important, however, are the 23 men and women who work with me at our corporate office (all on one floor, which is the way we intend to keep it!).

This group efficiently deals with a multitude of SEC and other regulatory requirements, files a 21,500-page Federal income tax return as well as state and foreign returns, responds to countless shareholder and media inquiries, gets out the annual report, prepares for the country's largest annual meeting, coordinates the Board's activities – and the list goes on and on.

They handle all of these business tasks cheerfully and with unbelievable efficiency, making my life easy and pleasant. Their efforts go beyond activities strictly related to Berkshire: Last year they dealt with 48 universities (selected from 200 applicants) who sent students to Omaha for a Q&A day with me. They also handle all kinds of requests that I receive, arrange my travel, and even get me hamburgers for lunch. No CEO has it better; I truly do feel like tap dancing to work every day.

This home office crew, along with our operating managers, has my deepest thanks and deserves yours as well. Come to Omaha – the cradle of capitalism – on May 4th and chime in.

March 1, 2013

Warren E. Buffett
Chairman of the Board

Morning Session - 2013 Meeting

1. Welcome

WARREN BUFFETT: Good morning.

I'm a little worn out. (Laughter)

We're going to — well, first of all, I really want to thank Brad Underwood. He puts the movie together every year, does a terrific job. (Applause)

Andy Heyward and Amy are responsible for the cartoon. They also produce "The Secret Millionaire's Club," which has been a huge hit this year, and I really want to thank them for their part in this, too. (Applause)

And finally, Carrie Sova who — who puts this whole affair together, she's four months pregnant. She got her MBA, I think, yesterday or — and, in addition, she is the ringmaster for all of this. Let's give Carrie a terrific hand. (Applause)

We'll go through a few figures, few slides. I'll introduce the directors and make one or two more announcements, and then we'll get on to the questions.

2. Q1 earnings

WARREN BUFFETT: Now, if we could put up the first slide, which is the earnings that were released yesterday. And as you can see, it was a good quarter.

It wasn't quite as a good a quarter as it looks, which I'll explain in a second. But really all of our businesses did very well.

You should focus on operating earnings. Charlie's getting a head start here on the peanut brittle and fudge, so I'll catch up later.

It was a very good — it was a benign quarter in insurance, but our other businesses, particularly our big businesses, did quite well, and I don't remember whether we've ever had operating earnings of more than 3 point — almost 8 billion. But, in any event, it was quite satisfactory.

Now, we'll put up slide two. The insurance earnings were helped a bit. They were still terrific without these factors, but they were helped a bit by the fact that the dollar was strong, and that reduces the liabilities we have on outstanding in foreign currencies.

So if we have losses we're going to pay in the future and they're payable in pounds or euros and the dollar appreciates against those currencies, we get a small benefit from that.

We also have it — it hurts us in other ways. We have so many different kinds of businesses, and then we own other earnings through Coca-Cola that operate around the world, that I really never know whether when the dollar goes up or down, whether it helps us or not.

So I've never been able to figure it out. So we just sort of take it as it comes. And we do want to explain that to you, the insurance earnings.

And then we had another item, which is kind of interesting. We've had a disagreement with Swiss Re about a life reinsurance contract, and that's — the disagreement's probably lasted for well over a year, and that was settled in the first quarter.

And as you can see, we showed a gain of 255 million pretax from settling this disagreement, but, interestingly, Swiss Re showed a gain of 100 million also from settling the disagreement. (Laughter)

So, we are working on an arrangement with Swiss Re whether we'll get in an argument every quarter (laughter), and both report higher earnings when we settle it.

It's magnificent what accounting can do. (Laughter)

One real high point of the first quarter was the pickup which I noticed — which I noted — in the annual report, about the gain in both the closure rate and the persistency rate at GEICO. These are hugely important factors.

And if we'll put up the chart showing the gain of GEICO's auto policies, the strengths I mentioned in 2012, and not only continued in 2013, but the trend has become even stronger.

And there's a lot of seasonal to policy gains. But as you can see, month by month, our gains have — and policies have very significantly improved over 2012.

And, again, it's because our closure ratio, in other words, the number of people that get a quote from us and then go on to buy a policy, that rate has improved very significantly this year, and with it we also had a gain in persistency, the people that renew the policies with us, and that's pure gold.

A policy has a mathematical value to us of at least $1,500, so if we had a million policies in a year — and I'm hopeful we might do that this year — that's a billion-and-a-half of value that gets built into our intrinsic value, which does not show up on the income statement or balance sheet at all, but it does increase the value of GEICO versus what we carry it for.

And I can't resist a little sales pitch on that because this closure rate, which, like I say, is at incredible levels, means that when people go to our website or call us and get a quote, they find that they can save a lot of money.

I mean, people love our little gecko, but they buy the policies because we save them money.

And it just so happens that in the auditorium right near here, the exposition hall, we have a lot of very friendly people that will help you save money, too.

So I urge you — you can walk out anytime Charlie is talking (laughter) and go and get a quote, and a very high percentage of you could save money by doing that.

And, you know, that is in the Berkshire spirit, to save money at every opportunity. So I'm hoping you will check that out, and we will set a record for policies sold.

And, finally, our railroad, this year, is doing very well. You saw the earnings in the first quarter report, if you've had a chance to look at that.

And we've got some figures up that show our gain in car loadings in the first 17 weeks. It's been 3.8 percent, whereas the other four major Class I railroads in the United States have had a gain of four-tenths of a percent.

That's significant money that — and we don't have the Canadian railroads here that operate in the United States. They both come down, the Canadian National, Canadian Pacific. But — but this is representative of what's been happening.

We've been helped by the fact that, fortunately, a lot of oil has been found very, very close to our railroad tracks, and what better place to find oil? (Laughter)

And so we've been moving a lot of that, and it's worth — and we'll be moving a lot more the way things are going.

And the result of all this — we now will put up the next slide — we're now the fifth most valuable company in the world. (Applause)

And that will change over time, but I hope it changes for the better.

3. Directors introduced

WARREN BUFFETT: I'd like — the business part of this meeting starts at around 3:30, and at that time we'll have the election of directors.

But I would like, nevertheless, for those of you who won't stick around to the bitter end, I would like to introduce our directors, and — Charlie and I are directors.

And if our directors would stand and remain standing when I call your name. And no matter how strong the urge, withhold your applause until they're all finished standing, and then you can withhold your applause then if you wish, too, but I plan to applaud. OK.

Howard Buffett. Steve Burke. Susan Decker.

So just stand and remain standing — there we are. OK.

Bill Gates. Sandy Gottesman. Charlotte Guyman. Don Keough. Tom Murphy. Ron Olson. Walter Scott, Jr.

And our soon to be new member, Meryl Witmer.

OK. No more withholding. (Applause)

4. Table tennis champ Ariel Hsing

WARREN BUFFETT: Now, we'll start the questioning in just one minute, but there were one or two announcements to make.

We did not put it in the — we did not put it in the annual report because we hadn't firmed it up yet, but tomorrow at Borsheims, our friend Ariel Hsing will be available to play table tennis with any of you foolish enough to challenge her.

I met Ariel when she was nine, and she became the youngest women's table tennis champion of the United States, and then last summer she went on to the Olympics.

And at the Olympics, she won her first two matches, and she won more games off the woman that became the eventual Olympic champion than any other participant in that event.

So Ariel will be out there tomorrow at 1 o'clock. And if you're courageous, you'll show up with your paddle and end up looking like an idiot. (Laughter))

5. Buffalo News publisher Stan Lipsey retires

WARREN BUFFETT: One more introduction, I don't know whether we can get a spotlight on him or not, but Stan Lipsey retired this year as publisher of The Buffalo News.

And, as Charlie can attest, as well as I, back in 1978, '79, '80, we had an enormous business problem in the Buffalo News. We were locked in a competitive struggle. And we were not doing well, in part, because of we were operating under a tough judicial order for a while until it got reversed on appeal.

And Stan gave up a wonderful life here in Omaha and asked no questions and for no pay came up to Buffalo, and The Buffalo News would not have turned out to be the paper that it's turned out to be or produced the profits that have been produced for Berkshire, without Stan Lipsey.

So, if Stan could stand, let's give him a hand. Stan the Man. (Applause)

6. Berkshire buys remaining ISCAR stake

WARREN BUFFETT: One other announcement, then we'll go to the questions.

It was announced a couple of days ago that we bought out the final 20 percent of ISCAR held by the family for about $2 billion. It's a transaction they're happy with, we're happy with.

As a matter of fact, if you saw Eitan Wertheimer dancing at "Dancing with the Stars" there, you could have seen how happy he was.

So we will now own 100 percent of ISCAR, but our relationship with the Wertheimer family will continue.

It's been a sheer joy. The business has done terrifically. The people have behaved magnificently, and ISCAR will be part of Berkshire forever. So I want to thank Eitan and his family.

And, Eitan, are you here? Can you stand up, and your family? Thank you. (Applause)

Let's have a light here in the front row. OK. (Applause)

7. Q&A begins

OK. We'll now move on to our questions. We'll continue these until about noon. We'll take an hour break for lunch. We'll come back, and then we'll continue until about 3:30, at which time we will convene the business meeting.

And we will start off — we have three journalists who have been here before on the right, and we have a distinguished panel on the left, including a short seller, perhaps the first at any annual meeting, and we will start off with Carol Loomis.

8. Berkshire lagging the S&P 500

CAROL LOOMIS: Good morning. Speaking for the three of us, I hope here, we have received into the thousands of questions. We don't even know how many. And if we didn't pick your question, it was because we just didn't get to it.

I do want to tell you that Warren and Charlie have no idea of what our questions are going to be, no hints at all, and so we look forward to sending them curve balls.

I'll start off here. Warren, you measure Berkshire — this is from William Bernard (PH) of Colleyville, Texas.

You measure Berkshire's corporate performance based on growth and book value per share. The table on page 103 of the annual report shows book value per share has grown at less than

an average 12 percent a year for 9 of the last 11 5-year periods, yet in your last annual letter, you state, quote, "The S&P 500 earns considerably more than 12 percent on net worth," and then you say, "That seems reasonable for Berkshire also."

Why do you say that, given the past record showing that Berkshire has not been earning that much, or is it that you expect to earn that much, recognizing that it is not assured in the future?

WARREN BUFFETT: It certainly is not assured in the future. And the last ten or so years have not been the best for business, generally.

But if the stock market continues to behave in 2013 as it has so far, this will be the first five-year period where the gain in book value per share has fallen short of the market performance, including dividends, of the Standard & Poor's.

And that won't be a happy day, but it won't be — it won't totally discourage us because it will be a period where the market has gone up in every one of the five years. And as we've regularly pointed out, we're likely to be better in down years as we did in 2008, for example, which is the year that gets dropped this year. We're likely to do better in down years, relatively, than we do in up years.

Charlie, how do you feel about the prospects of — I should point out, incidentally, that we use book value because it's a calculable figure, and it does serve as a reasonable proxy of the year-to-year change in the intrinsic value of Berkshire.

If we could really give you a figure for intrinsic value, and back it up, that would be the important figure.

As I pointed out, if we gain a million policyholders at GEICO, that actually adds a billion-and-a-half to intrinsic value, and it doesn't add a dime to book value.

So, there's a significant gap, which is why we're willing to buy in stock at 120 percent of book value — a significant gap between the two. But book value is a useful tracking device.

I should point out also — I did this in the annual report in respect to Marmon — when we buy the ISCAR stock, which we pay about 2 billion for, the day we buy it, we mark it down in terms of our book value by roughly a billion dollars.

So a billion dollars comes off our book value for making a purchase which we regard as quite satisfactory. And so there are these distortions that occur.

But in the end, we have to do better for you than you would do in an index fund. And if we don't, we aren't earning our pay.

And I think we'll do that in the future, but I don't think we'll do it every year, and we've proven that in the last few years.

Charlie?

CHARLIE MUNGER: Well, I confidently expect that Berkshire's going to do quite well over the long term.

I don't pay much attention to whether it's five years or three years or — I think we have momentums in place that are going to do OK.

Of course, we won't do as well in the future, in terms of annual gain averaged out, because our past returns were almost unbelievable.

So, we're slowing down, but I think it'll still be very pleasant.

WARREN BUFFETT: At 89, Charlie is not really concerned about this stuff year-to-year. I mean, he's taking a longer-range view. (Laughter)

CHARLIE MUNGER: I'm trying to take care of my old age, which might come on at any time. (Laughter)

WARREN BUFFETT: I haven't noticed it.

9. Jonathan Brandt introduced

WARREN BUFFETT: OK. Jonathan Brandt, who is a newcomer to the panel, his area is the other-than-insurance aspects of Berkshire Hathaway.

And I can assure you that no one has paid more — I played Jonny in chess when he was about four years old, and, I don't know, I must have been 40 or something at the time, and he kept insisting during dinner that we play chess afterwards.

And we started playing, and, of course, he got me into some impossible position in a few moves, and I told his parents to put him to bed. (Laughter)

So, Jonny, I still have kind of comebacks in me, so be careful what you ask. Jon Brandt. (Laughs)

10. ISCAR vs Sandvik

JONATHAN BRANDT: Good to see you, Warren.

A question about ISCAR: what do you feel are the specific competitive advantages that ISCAR has over its primary competitor, Sandvik, and, in turn, what advantages does Sandvik have over ISCAR as the larger player?

WARREN BUFFETT: Yeah. Sandvik is a very good company, and ISCAR is a much better company.

The advantage it has is brains and incredible passion for the business.

It's interesting to reflect on ISCAR because if you go back to — what would it be? — 1951 or thereabouts, when Stef Wertheimer, who had come from Germany, was in Israel, started ISCAR, just think of the prospect that was facing him.

Here was a company like Sandvik, or in this company — country — Kennametal, or different countries, well-entrenched companies, well-entrenched, well-financed.

And here's this fellow in Israel, 25 years old, and the raw material for these cutting tools comes from China. It isn't that the raw material is in Israel.

So everybody buys their tungsten from China, and they sell to customers that are using large machine tools throughout the world, but they're selling it to heavy industry to a significant extent.

So they're selling to people like Boeing or General Motors or big industrial companies in Germany, and there's no great locational advantage, in terms of being in Israel doing this.

But here's this 25-year-old fellow getting the tungsten from thousands of miles away, selling it to customers thousands of miles away, competing against people like Sandvik, and this remarkable business, ISCAR, comes from that.

And there's no other answer you can give to your question when you see that result than to say that you have had some incredibly talented people who never stopped working, never stopped trying to improve the product, never stopped trying to make customers happy, and that continues to this day.

Sandvik is a very good company. I can tell you that based not only on the figures, but on every other aspect of business observation that I possess, that ISCAR is one of the great companies of the world, and we feel very fortunate to own it and to be associated with their management.

Charlie?

CHARLIE MUNGER: Well, it's a good comparison. Sandvik is a fabulous company, and it's a particular achievement to really do a little better in the competitive market, as ISCAR has done.

WARREN BUFFETT: Quite a bit better.

CHARLIE MUNGER: They've gained.

WARREN BUFFETT: Have you really ever seen much — a better operation than ISCAR in the manufacturing business?

CHARLIE MUNGER: It's the only place I was ever in where I saw nothing but robots and engineers working computers.

WARREN BUFFETT: It's a —

CHARLIE MUNGER: You cannot believe how modern ISCAR is.

WARREN BUFFETT: Yeah. And the game's not over yet, either.

11. Preserving Berkshire's culture after Buffett

WARREN BUFFETT: OK. Now we go to a shareholder in station number 1.

AUDIENCE MEMBER: Hi. Dan Lewis (PH) from Chicago. First of all, I wanted to thank you for letting us in the building early today. But let's not — (Applause)

Let's not do that again next year, though. I don't want to wake up any earlier to get in line.

WARREN BUFFETT: If we had a company that sold coats, we would have left you out there. (Laughter)

AUDIENCE MEMBER: Always a comeback.

When you think about Berkshire in the decade after you're gone, my question is what worries you the most? What — I know nothing keeps you up at night — but what are your big worries and, you know, what can go wrong?

WARREN BUFFETT: Well, it's a good question. It's one we think about all the time.

And that's why the culture is all important, the businesses we own are all important, because those trains will keep running and people will keep calling GEICO the day after I die. There's no question about that.

And the key is preserving the culture and having a successor as CEO that will have more brains, more energy, and more passion for it, even than I have.

And it's the number one subject that our board considers at every meeting, and we're solidly in agreement as to whom that individual should be.

And I think the culture has just become intensified year after year after year. And I think Charlie would agree with that.

I mean, we always knew what we were about when we first got involved with Berkshire, but making sure that everybody that joined us, that the owners, the shareholders, directors, managers, everybody that bought into this what I think very special culture. That took time, and — but it is — I think it's really one of a kind now, and I think that it will remain one of a kind.

I think that anything that came in — any foreign-type behavior would be cast out because people have self-selected into this group, into the company, and it would be rejected like a foreign tissue if we got the wrong sort of person in there.

We have a board that is especially devoted to Berkshire. We don't hold them by paying them huge amounts, it may be noted.

And we have people who have brought their companies to Berkshire because they want to be part of it, as did ISCAR.

So, I think that whoever succeeds me — and it will be a lot of newspaper stories and people — after six months, there will be a story that says, you know, it isn't the same thing.

It will be the same thing. You can count on that.

Charlie, what are your thoughts?

CHARLIE MUNGER: Well, I — my thoughts are very simple. I want to say to the many Mungers in the audience, don't be so stupid as to sell these shares. (Laughter)

WARREN BUFFETT: That goes for the Buffetts, too. (Laughter)

12. Partnering with 3G Capital for $23B Heinz deal

WARREN BUFFETT: OK. Becky?

BECKY QUICK: This is a question that comes from Ben Knoll, who happens to be the chief operating officer at the Greater Twin Cities United Way.

And he writes in that after the Heinz deal, there was a column that was written indicating that you had gotten the better end of the Heinz deal from your Brazilian partners [3G Capital].

That column said that your return was likely to come from the preferred stock dividends, with the common equity portion being dead money.

It also said that the way the deal was structured indicated your low expectations for the market overall.

Is this an accurate portrayal of the deal and of your expectations for the market overall?

WARREN BUFFETT: No. It's totally inaccurate.

The — it's interesting. [3G Capital co-founder] Jorge Paulo Lemann and I were in Boulder, Colorado, in early December. And I can't remember if it was — yeah, on the way to the airport or when we got in the plane. But he said that he was thinking about going to the people at Heinz and proposing a deal and would I be interested.

And I, because I knew both Heinz and I knew Jorge Paulo, and I thought highly, very highly, of both, I said, "I'm in."

And maybe a week later — I don't remember exactly how long — I received from Jorge Paulo, who I had known for many years starting at Gillette when we were both directors — I received a term sheet on the deal and another sheet on the governance procedures that he suggested.

And he said, "If you got any thoughts about changing this, just let me know." They were just his thoughts.

It was an absolutely fair deal, and it was — I didn't have to change a word in either the term sheet or the governance arrangement.

Now, we actually, Charlie and I, probably paid a little more than we would have paid if we had been doing the deal ourselves, because we think that Jorge Paulo and his associates are extraordinary managers.

They're both classy, and they're unusually good, and so we stretched a little because of that fact.

We like the business, and the design of the deal is such that if we do quite well over time at Heinz, that their 4.1 billion will achieve higher rates of return than our overall 12 billion.

We have a less-leveraged position in the capital structure than they have. We created — they wanted more leverage, and we provided that leverage on what I regard as fair terms and what they regard as fair terms.

If anybody thinks that the common is dead money, you know, we think they're making a mistake.

But we'll know the answer to that in five years.

But the design of the deal, essentially — we have more money than operating ability at the parent company level, and they have lots of operating ability and wanted to maximize their return on 4 billion.

So my guess is that five years from now or ten years from now, you will find that they've earned a higher rate of return on their investment. But because we put more dollars in, we will have received that same rate of return on our 4 billion, plus of cap common equity, but we also will have received a very fair return on the 8 billion that we put in that created more leverage for them.

Charlie?

CHARLIE MUNGER: Well, as you said, the report was totally wrong. (Laughter)

WARREN BUFFETT: That'll teach them. (Laughter)

13. Moving into commercial insurance

WARREN BUFFETT: OK. We have Cliff Gallant from Nomura who will ask insurance-related questions for this meeting.

CLIFF GALLANT: Thank you.

At Berkshire Hathaway Reinsurance group, Mr. Ajit Jain appears to be employing a new strategy recently with some high profile actions.

Berkshire signed a portfolio underwriting arrangement with Aon to do business with Lloyd's. And then last week, there was the hiring of several AIG executives.

It appears that Berkshire may be taking a broader share of the market.

What is the goal of these moves, and won't these actions eventually produce more average results?

WARREN BUFFETT: Well, you — the goal is to take a greater share of the market.

There have been two important moves made by Ajit's operation in the last month or so.

One is the — the first one that was announced — was this participation of 7 1/2 percent in all of the business.

Originally, it was announced as applying to the Lloyd's market. I believe it's been extended to the entire London market.

And, now, bear in mind that the people that are insured still have the right to pick who their insurers shall be, so it isn't totally automatic that we receive 7 1/2 percent of every slip.

But we had had an arrangement for a couple of years with Marsh on a marine book and perhaps some other areas, but not across the board.

And we think that — we think that the profit possibilities are reasonable for that business, or we wouldn't have entered into it.

It will give us more of a cross-section of business than we've been used to having, but it doesn't mean that we give up our present business at all, either.

The second item you mentioned is just in the last week or thereabouts. It was announced that four pretty well-known insurance people that had been with AIG had joined us to write, primarily, commercial insurance, initially domestically, perhaps, but around the world.

And these are people that reached out to Berkshire. In the case of at least one of them, even reached out a number of times in the past.

But we were ready to enter this field with these people who were very able people. We've had a number of people reach out since the announcement was made only a week or so ago.

So I think you will see Berkshire, in addition to all of the other insurance businesses that has had over the years, I think you'll see us become a very significant factor, worldwide, in the commercial insurance business.

I mean, it could be business that reaches into the billions. In fact, I would hope that it would — it could be — you know, a fair number of billions over time.

And we've got the right people. We've got capital like nobody else has. We have the ability to sign on to coverages that other people have to spread out among others.

So, I think we're ideally situated to go into this business, and I'm looking forward to it.

Charlie?

CHARLIE MUNGER: Well, generally speaking, I don't think the reinsurance business is a very good business for most people.

And I think it's a very desirable part of Berkshire's business, the way it's run, but it's different from something like the other businesses, which would work pretty well if somebody else owned them.

I think our reinsurance business under Ajit is very peculiar, and other people who think it's easy are going to find out that it isn't.

WARREN BUFFETT: Yeah. And I should point out, this commercial insurance business also, I mean, it will be primary insurance. The Aon arrangement is a reinsurance arrangement, but we will be in the primary business.

So, it will be large commercial risks, but there's a lot of premium buy-in there, and there's a lot of chances to make mistakes.

But I'd rather have the group we have overseeing that business than any other group I can think of.

14. GEICO vs Progressive's Snapshot

WARREN BUFFETT: OK. Station 2?

AUDIENCE MEMBER: Hi. Mike Sorenski (PH) from New York.

In regards to GEICO, Warren, last year you said the firm had no plans to adopt usage-based driving technology, similar to what competitor Progressive —

WARREN BUFFETT: Right.

AUDIENCE MEMBER: — called Snapshot.

Is that still the case, and if so, why wouldn't that technology give GEICO better data to potentially give discounts to customers?

WARREN BUFFETT: Yeah. That still is the case, and Snapshot has attracted a fair amount of attention and there are other companies doing that.

It's an arrangement, essentially, to tie — well, the term "Snapshot," perhaps, says it — to get a picture of how people really do drive.

Insurance underwriting, you know, is an attempt to figure out the likely propensity, based on a number of variables, of a person having an accident.

Now, you know, in life insurance, it's very obvious that somebody 100 is — if you don't know anything else about them — is more likely to die in the next year than somebody that's 20.

When you get into auto insurance, figuring out who's likely to have an accident involves assessing a number of variables, and different companies go at it different ways.

Clearly, on statistics, if you're a 16-year-old male, you're more likely to have an accident than I am.

Now, that isn't because I'm a better driver. It's because the 16-year-old is probably driving about ten times as much, and he's trying to impress the girl sitting next to him.

And that doesn't work with me anymore, so I've given it up. (Laughter)

But the — we ask a number of questions, and our attempt, as much as possible, is to figure out the propensity of any given applicant, or the possibility, that they will have accidents.

And there are a number of variables that are quite useful in predicting. And Progressive is focusing on this Snapshot arrangement, and we'll see how they do.

I would say that our ability to sell insurance at a price that's considerably lower than most of our competitors, evidenced by the fact that when people call us, they shift to us, and, at the same time, earn a significant underwriting profit, indicates that our selection process is working quite well.

I mean, if your selection process is wrong, if you treat a 16-year-old male and give him the same rate that you'd give a 40-year-old that's driving their car 3 or 4,000 miles a year, you know, you're going to get terrible underwriting results.

So our systems, our underwriting criteria, have been developed, you know, over many decades. We have a huge number of policyholders, so that it becomes very credible, these different underwriting cells.

And everybody in the business is trying to figure out ways to predict with greater accuracy the possibilities that a given individual will have an accident.

And Progressive is focusing on this Snapshot approach, and we watch it with interest, but we're quite happy with the present situation.

OK. Andrew Ross Sorkin?

Oh, Charlie, I've got to give you a chance to comment.

CHARLIE MUNGER: I have nothing to add. (Laughter)

15. Business Wire and new rule allowing internet disclosures

WARREN BUFFETT: OK. Andrew?

ANDREW ROSS SORKIN: OK. Warren, we got a couple questions related to this.

Warren, now that you're on Twitter and the SEC is allowing companies to make material announcements over social media, what are the implications for Business Wire, a unit of Berkshire?

Do you agree with the SEC's new position on the distribution of material information, and would you consider selling Business Wire given the new rules?

If not, how do you think Business Wire will have to transform itself? And, by the way, what are you doing on Twitter? (Laughter)

WARREN BUFFETT: I haven't figured that last one out yet.

The — no, I think it is a mistake. Some companies have announced — made important announcements — on webpages, and some, in certain cases, they've messed it up and caused a fair amount of trouble.

But the key to disclosure is accuracy and simultaneity. I mean, if we own stocks, or are thinking about owning stocks, we want to be very sure that we get accurate information and we get it exactly at the same time as all other people.

And Business Wire does a magnificent job of that.

And I do not want, if I'm buying Wells Fargo, or selling it, or whatever it may be, I do not want to have to keep hitting up to their webpage, or something, and hoping that I'm not 10 seconds behind someone else if there's some important announcement.

So, Business Wire has got a traffic record of accuracy and of getting the information to every part of the globe in a simultaneous manner, and that is the key to disclosure.

And I think — I don't think that — I don't think anything has come close to doing that as well as Business Wire.

So I think we will do very well. We've got a sensational manager in Cathy Baron Tamraz.

I couldn't be happier with the business, so we will not be selling it. And if I could clone Cathy, I would do it.

I will not — Berkshire, when it puts out its information — and we like to put it out, actually, after the market closes because we think there's so much to digest that it's a terrible mistake to have people try and figure it all out in reading a one- or two-page announcement.

But anything important from Berkshire, or any of our companies, is going to come out on Business Wire so that people get accurate information at exactly at the same time.

Charlie?

CHARLIE MUNGER: Well, it's very hard for me to know anything about Twitter when I'm avoiding it like the plague.

WARREN BUFFETT: He sent me out to venture in it, and he's going to see if anything bad happens to me. (Laughter)

16. As Berkshire grows, it's paying more for bigger acquisitions

WARREN BUFFETT: OK. We now have a short seller in a first, I believe, at any meeting, Doug Kass.

DOUG KASS: Thank you, Warren and Charlie. Thanks for this unusual invitation. I'm honored, and I look forward to playing the role of Daniel in the lion's den in front of 45,000 of your closest friends and greatest admirers.

WARREN BUFFETT: You can bring your own crowd next year. (Laughter)

DOUG KASS: I would note, you have me asking the last question in the group, though.

My first question is a follow-up to Carol Loomis's first question. Warren, it's said that size matters.

WARREN BUFFETT: It does. (Laughter)

DOUG KASS: In the past, Berkshire has purchased cheap or wholesale. For example, GEICO, MidAmerican, your initial purchase of Coca-Cola.

And, arguably, your company has shifted to becoming a buyer of pricier and more mature businesses, for example, IBM, Burlington Northern, Heinz, and Lubrizol. These were all done at prices, sales, earnings, book value multiples, well above your prior acquisitions and after the stock prices rose.

Many of the recent buys might be great additions to Berkshire's portfolio of companies; however, the relatively high prices paid for these investments could potentially result in a lower return on invested capital.

You used to hunt gazelles. Now you're hunting elephants. As Berkshire gets bigger, it's harder to move the needle.

To me, the recent buys look like preparation for your legacy, creating a more mature, slower-growing enterprise.

Is Berkshire morphing into a stock that has become to resemble an index fund and that, perhaps, is more appropriate for widows and orphans, rather than past investors who sought out differentiated and superior compounded growth?

WARREN BUFFETT: Yeah. There's no question that we cannot do as well as we did in the past, and size is a factor.

Actually, the — it depends on the nature of markets, too. We might — there will be times when we'll run into bad markets, and sometimes there our size can even be an advantage. It may well have been in 2008.

But there — I would take exception to the fact that we paid fancier prices in some cases than, say — in GEICO, I think we paid 20 times earnings and a fairly-sized — good-sized — multiple of book value.

So we have paid up — partly at Charlie's urging — we've paid up for good businesses more than we would have 30 or 40 years ago.

But it's tougher as we get bigger, I we've always known that would be the case.

But even with some diminution from returns of the past, they still can be satisfactory and we are willing — there's companies we should of bought 30 or 40 years ago that looked higher priced then, but we now realize that paying up for an extraordinary business is not a mistake.

Charlie, what would you say?

CHARLIE MUNGER: Well, we've said over and over again to this group that we can't do as well in percentage terms per annum in the future as we did in our early days.

But I think I can make the short seller's argument even better than he did, and I'll try and do that.

If you look at the oil companies that got really big in the past history of the world, the record is not all that good.

If you stop to think about it, Rockefeller's Standard Oil is practically the only one, after it got monstrous, continued to do monstrously well.

So, when we think we're going to do pretty well in spite of getting very big, we're telling you we think we'll do a little better than the giants of the past. We think we've got a better system.

We don't have a better system than riding up oil, you know, but we have a better system than most other people.

WARREN BUFFETT: Yeah. In terms of the acquisitions we've made in the last five years, I think we feel pretty good about those and — overall — and, obviously, including the Heinz.

We are buying some very good businesses.

We actually, as we pointed out, we own eight different businesses that would each be on the Fortune 500 list if it was a separate company, and then in a few months, we'll own half of another one, so we'll have eight-and-a-half, in effect.

Well, you haven't convinced me yet to sell the stock, Doug, but keep working. (Laughter)

17. Will U.S. dollar lose reserve currency status?

WARREN BUFFETT: Section 3.

AUDIENCE MEMBER: Thank you. Jonathan Schiff, visiting from Macau, China.

You briefly touched upon this. But on our side of the world, there's a lot of discussion about the U.S. dollar's status at the world's reserve currency.

I'm sorry, there's some feedback. It's kind of weird.

What would be the effect upon the U.S. and the world economy if the dollar loses that status as a world reserve currency?

WARREN BUFFETT: Well, I don't know the answer to that, but fortunately, I don't think it's going to be relevant.

I think the dollar bill will be the world's reserve currency for some decades to come. I think China and the United States will be the two supereconomic powers, but I don't see any — I think it's extremely unlikely — that any currency supplants the U.S. dollar as the world reserve currency for many decades, if ever.

Charlie?

CHARLIE MUNGER: Well, there are advantages to a country that has the reserve currency, and if you lose that, you lose some advantage.

England had a better hand when it had the reserve currency of the world than it had later when the United States had the reserve currency of the world.

If that eventually happened to the United States, it would not be, I think, all that significant.

It's in the nature of things that sooner or later every great leader is no longer the leader.

Over the long run, as Keynes said, we're all dead, and over the long run —

WARREN BUFFETT: This is the cheery part of the section. (Laughter)

CHARLIE MUNGER: Well, if you stop and think about it, every great leading civilization of the past passed the baton.

WARREN BUFFETT: What do you think the probabilities are that the U.S. dollar will not be the reserve currency 20 years from now?

CHARLIE MUNGER: Oh, I think it'll still be the reserve currency of the world 20 years from now. That doesn't mean that it's forever.

18. "Extraordinary" corporate profits despite tax complaints

WARREN BUFFETT: OK. Carol?

CAROL LOOMIS: This question comes from John Custabal (PH) of the Philadelphia area.

Mr. Buffett, you have said in the past, specifically in a 1999 speech that was printed in Fortune, quote, "You —"

WARREN BUFFETT: You would bring that up, wouldn't you?

CAROL LOOMIS: I would bring that up, right. I'm so glad he sent this question.

"You have to be" — you have said, "You have to be wildly optimistic to believe that corporate profits, as a percent of GDP can, for any sustained period, hold much above 6 percent."

Corporate profits are now greater than 10 percent of GDP. How should we think about that?

WARREN BUFFETT: What we should think is pretty unusual, and particularly considering the economic backdrop.

Corporate profits are extraordinary, as a percentage of GDP, at least looking back on the history of the United States.

And what's interesting about it, of course, is that American business, to a great extent, is complaining enormously — or frequently, anyway — about the level of the corporate income tax.

Now, the corporate income tax is about half what it was 40 years ago, as a percentage of GDP. But yet, as you point out, corporate profits are at an all-time record, as a percentage of GDP.

So I would have you take with a grain of salt the complaint that American business is noncompetitive because of our corporate income tax rate, which gets so widely complained about.

American business has done extraordinarily well at a time when inequality, actually, is — has widened considerably — both measured by net worth and measured by income, if you take the top versus the people down below.

And — (loud noise) —

Well, we heard from one of the people here. (Laughter)

And, it will be interesting to see whether these levels can be maintained.

Corporate — business has come back very, very strong, in terms of profits, from the precipice that we were on in the fall of 2008, the panic.

Employment has not come back, the same way. And that's going to be, I would say, a subject of a lot of public discourse. And you're seeing — you're reading more about that, currently.

If I had to bet on whether corporate profits would be 10 percent of GDP — and, of course, we're talking about profits that are earned outside the United States, I believe, in that — in the figures you quote — I would say they're likely to trend downward.

But I think that, of course, GDP will be growing, so that does not mean any terrible things will be happening to profits.

Charlie, what do you think about the —?

CHARLIE MUNGER: Well, I wouldn't be too surprised if that 6 percent figure turned out to be on the low side, in the estimate.

Just because Warren thought something 20 years ago, doesn't mean it's a law of nature. (Laughter)

WARREN BUFFETT: We'll talk this over at lunchtime. (Laughter)

How do you feel about 10 percent?

CHARLIE MUNGER: Well, I'm a natural conservative on such items.

But you've got to recognize that the stocks themselves are owned by a lot of endowments and pension funds and so on. So it — that figure doesn't mean that the world's becoming grossly more unequal.

There's no automatic correlation between those two figures.

WARREN BUFFETT: Do you feel the corporate tax rate is too high?

CHARLIE MUNGER: Well, I think when the rest of the world is — keeps bringing the rates down, —there's some disadvantage to us if we're much higher. So I — (Applause)

I rather like Warren's idea that people like us should pay more, but the corporate tax rate, I'm glad to have lower.

WARREN BUFFETT: OK. He's the Republican; I'm the Democrat.

19. Too many subsidiaries for Buffett's successor to manage?

WARREN BUFFETT: Jonathan? (Laughter)

JONATHAN BRANDT: Thanks, Warren.

You probably have a couple of dozen direct reports from the multitude of noninsurance businesses that Berkshire owns, and this arrangement seems to work wonderfully for you.

But I wonder if this could potentially pose a challenge to your successors.

Adding smaller units like Oriental Trading and the newspaper group, even if they are economically sound transactions individually, could arguably add to the unwieldiness of the organization.

How do you weigh the benefits of adding earnings with the risk of leaving a less-focused and harder-to-manage company for even highly capable successors?

WARREN BUFFETT: Yeah. I think my successor will probably organize things a little differently on that, Jonathan, but not dramatically so.

And we'll certainly never leave the principle of our CEOs running their businesses in virtually all important ways except, perhaps — except for capital allocation.

But, I actually have delegated a few units to an assistant of mine, and my guess is that my successor will modestly organize things in a somewhat different way.

I've grown up with these companies and with the people and everything, and so it's a lot easier for me to communicate with dozens of managers, sometimes very infrequently, because they don't need it. It just — sometimes it's their own preference to some degree.

And somebody coming in fresh would want, obviously, to be — to understand very well — and that person will understand, in fact, understands now — very well, the major units.

But you're right, when you get down to units that we have, you know, some businesses that make, you know, only 5 or $10 million a year or something like that.

And my guess is that it gets rearranged a little bit, but that won't really make any difference.

I mean, the real money is made by the big businesses. It will continue to be made by the big businesses, and the insurance business, and a little change in reporting arrangements, maybe one more person at headquarters if they go crazy, will really take care of things.

Charlie?

CHARLIE MUNGER: Well, I think, of course, it would be unwieldy to have so many businesses, a lot of them small, if we were trying to run them through an imperial headquarters that dominated all the details.

But our system is totally different. If your system is decentralization, almost to the point of abdication, what difference does it make how many subsidiaries you have?

WARREN BUFFETT: Yeah. It's working pretty well now.

CHARLIE MUNGER: Yeah.

WARREN BUFFETT: It'll work pretty well afterwards, too.

But my successor is not going to do things identically. It'd be a mistake.

But the culture will remain unchanged. And the preeminence of the managers of the operating units will remain unchanged, and then every now and then something comes along and a change needs to be made. Sometimes it's through death or disability, or sometimes a mistake is made.

But, in the end, we're now trying to acquire companies that are at least at the $75 million pretax level.

Incidentally, the best acquisitions — to some extent, the best acquisitions — certainly from my standpoint makes it easier — is the one — is these bolt-ons that I talked about in the annual report, in which we did, I think, 2-and-a-half billion worth of last year, because they fall under the purview of managers that we've got terrific confidence in and they add really nothing to what happens at headquarters.

And, of course, the best bolt-ons out of all are when we do buy a — buy out — a minority interest.

When we buy $2 billion worth more of ISCAR, or a billion-and-a-half more of Marmon, with another billion-and-a-half to come in the next year, you know, that's adding earning power without it, you know, posing any more work.

Those are the ultimate in bolt-on acquisitions, getting more of a good thing.

Charlie, any more on that, or—?

CHARLIE MUNGER: Well, if you stop to think about it, if it were all that difficult, what we're doing now would be impossible, and it isn't.

WARREN BUFFETT: I'll have to think about that a little. (Laughter)

CHARLIE MUNGER: Well, think if 50 years — 20 years ago — they said to you, can you make something this size with a staff of ten or something in a little office in Omaha? People would've thought that's ridiculous. But it's happened, and it works.

WARREN BUFFETT: Well, we'll let it go at that.

20. Dangers when Fed reverses economic stimulus

WARREN BUFFETT: Station 4? (Laughter)

AUDIENCE MEMBER: Thank you. Scott Moore (PH), Overland Park, Kansas.

With the Fed buying 85 billion per month of mortgage securities and Treasurys, what do you think are the long-run risks to this process, and how does the Fed stop this without negative implications? Thank you.

WARREN BUFFETT: Charlie, you answered that yesterday in an interview, so I'll let you lead off.

CHARLIE MUNGER: My basic answer is I don't know.

WARREN BUFFETT: Yeah. (Laughter)

I might say I have nothing to add. (Laughter and applause)

But Scott, you came from Overland, so we'll do our best.

CHARLIE MUNGER: I think you're— the questioner — is right to suspect that it's going to be difficult.

WARREN BUFFETT: It's going to be — yeah, it is really uncharted territory.

And as many people have found out, whether it was the Hunt Brothers buying silver or whatever it might be, it's a lot easier to buy things, sometimes, than it is to sell them.

And the Fed's balance sheet is up around 3.4 trillion now, and that's a lot — those are a lot of securities.

And the bank reserve positions are incredible. I mean, Wells Fargo is sitting with $175 billion at the Fed earning a quarter of a percent, and really earning nothing, after attendant expenses.

So, there's all this liquidity that's been created. It hasn't really hit the market because the banks have let it sit there.

You know, in classical economics, you know, that's how you juice the economy, and you pushed it out by having the Fed buy securities and create reserves for the banks and all of those things.

But, believe me, the banks want loans. I mean, they are not happy — Wells is not happy — having 175 billion at the Fed, and they're looking every place they can to get it out, with the proviso that they hope to get it back from whoever they get it out to, which can slow down a bank at times.

But it— we really are in uncharted territory. I've got a lot of faith in Bernanke. I mean, he — if he's running a risk, he's running a risk he knows and understands.

I don't know whether he's affected by the fact that his term expires pretty soon, so he just hands the baton off to the next guy and said, "Here. Here's this wonderful balance sheet. And all you have to do is bring it down a few trillion dollars," you know. (Laughs)

And I gave a few lectures at George Washington University last year, if you care to read them, and maybe it'll help you.

The — this is something we haven't seen. It certainly has the potential for being very inflationary. It hasn't been so far. In fact, my guess is that the Fed wishes it had been a little more inflationary.

If you're running up a lot of debt, it gets measured in relation to nominal GDP, and the best way to run up — easiest way to run up, not the best way — the easiest way to run up nominal GDP is to inflate, and my guess is that they never would admit it but that the — that at least some Fed members — are probably disappointed that they haven't seen more inflation.

It won't be when they start selling. It'll be — when the market gets a — any kind of a signal — that maybe just the buying ends, maybe that selling will take place, you know, it's likely to be the shot heard around the world.

Now, that doesn't mean the world will come to an end, but it will certainly mean that everybody that owns securities and who's felt that they've been driven into them by extremely low rates or that the assets have to go up in price because interest rates are so low, will start re-evaluating their hand, and people re-evaluate very fast in markets.

So, while I've been talking, Charlie, have you got any new insights?

CHARLIE MUNGER: Well, generally speaking, I think that what's happened in the realm of macroeconomics has surprised all the people who thought they knew the answers, namely the economists.

Who would have guessed that interest rates could go so low and stay so low for so long? Or that Japan, a mighty, powerful nation, could have 20 years of stasis after using all the tricks in the economist's bag?

So I think given this history, the economists ought to be a little more cautious in believing they know exactly how to stay out of trouble when they print money in massive amounts.

WARREN BUFFETT: It is a huge experiment.

CHARLIE MUNGER: Yeah. (Applause)

WARREN BUFFETT: What do you think the probabilities are that within ten years you see inflation at a rate of 5 percent or higher a year?

CHARLIE MUNGER: Well, I worry about even more than inflation.

If we could get through the next century with the same results we had in the last century, which involved a lot of inflation over that long period, I think we'd all be quite satisfied.

I suspect it's going to be harder, not easier, in this next century. And it wouldn't surprise me — I'm not going to be here to see it — but I would predict that we may have more trouble than we think — than we now think.

WARREN BUFFETT: Charlie says he won't be here to see it, but I reject such defeatism. (Laughter)

21. Effects of low interest rates

WARREN BUFFETT: Becky?

BECKY QUICK: This is actually a follow-up to the shareholder from Overland Park, the question that was just asked.

This comes from Anthony Starace (PH) who is in Lincoln, Nebraska, and he says, “How has the Fed’s zero-interest policy affected Berkshire Hathaway’s various business segments? For example, has it helped or hurt their operations and profitability?”

WARREN BUFFETT: Well, it’s helped. You know it— interest rates are to asset prices, you know, sort of like gravity is to the apple.

And when there are very low interest rates, there’s a very small gravitational pull on asset prices.

And we have seen that getting played out. I mean, people make different decisions when they can borrow money for practically nothing than they made back in 1981 and ’2 when Volcker was trying to stem inflation and use — and the government bond rates got up to 15 percent.

So, interest rates power everything in the economic universe, and they have some effect on the decisions we make.

We borrowed the money on the Heinz purchase a lot cheaper than we could’ve borrowed it 10 or 15 years ago, so that does affect what people are willing to pay.

So it’s a — it’s a huge factor and, of course, it will — presumably — it will change at some point, although, as Charlie was pointing out in Japan, it hasn’t changed for decades.

So, if you wanted to inflate asset prices, you know, bringing down interest rates and keeping them down — at first, nobody believed they’d stay down there very long, so it reflects the permanence that people feel will be attached to the lower rates.

But when you get the 30-year bond down to 2.8 percent, you know, you are — you’re able to have transactions take place.

It makes houses more attractive.

I mean, it’s been a very smart policy, but the unwind of it, you know, has got to be more difficult, by far, than buying.

I mean, it is very easy if you’re the Fed to buy 85 billion a month and — I don’t know what would happen if they started trying to sell 85 billion.

Now, when you’ve got the banks with loads of reserves there, it might — it’d certainly — be a lot easier than if those reserves had already been deployed out into the real economy. Then you would really be tightening things up.

But I have — you know, this is like watching a good movie, as far as I’m concerned, because I do not know the end, and that’s what makes for a good movie.

So, we will be back here next year and I will — or maybe in two or three years — and I will tell you I told you so and hope you have a bad memory.

Charlie? (Laughter)

CHARLIE MUNGER: Well, I strongly suspect that interest rates aren't going to stay this low for hugely extended periods. But as I pointed out, practically everybody has been very surprised by what's happened, because what's happened would've seemed impossible to practically all intelligent people not very long ago.

At Berkshire, of course, we've got this enormous float in the insurance business, and our incremental float, when we're carrying huge amounts of cash, is worth less than it was in the old days.

And that, I suppose, should give some cheer to you people because if that changes, we may get an advantage.

WARREN BUFFETT: Yeah, we have 40 — at the end of the first quarter, we had, whatever it was, 48 or maybe 9 billion or something like that — in short-term securities.

We're earning basically nothing on that. We do not — we never stretch for yield in terms of commercial paper that brings ten basis points more than Treasury.

Our money— we don't count on anybody else, so we keep it in Treasurys, basically, and so we're earning nothing on that.

So if we get back to an environment where short-term rates are 5 percent, and we would still have the same amount, then that would be a couple billion dollars of annual earnings, pretax, that we don't have now.

But of course, it would have lots of other effects in our business.

We have benefited significantly, and the country has benefited significantly, by what the Fed has done in the last few years.

And if they can successfully pull off a reversal of this without getting a lot of surprises, you know, we will all have been a lot better off.

22. Building, not buying, commercial insurance growth

WARREN BUFFETT: Cliff?

CLIFF GALLANT: Thank you.

WARREN BUFFETT: Cliff, incidentally, you ran a 2:40 last year, didn't you, in the marathon at Lincoln?

CLIFF GALLANT: I ran the Lincoln marathon after the shareholder meeting.

WARREN BUFFETT: OK. We've got incredible talent on this thing. (Laughter)

CLIFF GALLANT: I wanted to ask you more about the commercial insurance business and Berkshire's interest.

WARREN BUFFETT: Right.

CLIFF GALLANT: If the business is attractive, why not make an acquisition? Do you think that public company valuations are too high today?

WARREN BUFFETT: Yeah. There aren't too many commercial operations that we would want to acquire, big ones.

It wouldn't do much — I mean, we're acquired — when we acquired GUARD Insurance, it's workers' compensation, but it's just — it's a small acquisition. It's a good acquisition, but that is a commercial, in effect, underwriter that we acquired late last year.

But, if you look at the big ones, some of them we wouldn't want. There's a couple that we would. But the prices would be probably far higher than what we think we might be able to develop a comparable operation for.

I mean, we — in effect — I think we're going to build a very large commercial operation, and essentially we've built it at book value. And we pick up no bad habits of other companies, at least we hope we don't.

And so, it's really better to build than buy, if you can find the right people with the right mind-set, and everything, in the business.

And you know, we've got a terrific manager, obviously, in Ajit, and these other people have sought him out, so I think — if there were certain commercial operations, and we could've bought them at the right price, we'd have done it.

But we have not been able to do that so we will build our own. And I predict that we will have a good and significant commercial insurance operation in a relatively short time.

23. Munger: bitcoin won't be "big universal currency"

WARREN BUFFETT: OK. Station 5?

AUDIENCE MEMBER: Good morning. My name is Benjamin. I'm from Appleton, Wisconsin, and I had a question for you regarding unregulated digital currency, such as bitcoin.

I was wondering what you think the significance of something like that showing up in the last few years is, and what you think that might mean for the future? Thank you.

WARREN BUFFETT: Charlie, I hope you know something about this subject because I don't know a thing. (Laughs)

CHARLIE MUNGER: I know what he's talking about.

WARREN BUFFETT: I know what he's talking about, but I just don't —

CHARLIE MUNGER: I have no confidence whatsoever in bitcoin being any kind of a big universal currency.

WARREN BUFFETT: That would certainly be my gut reaction, but I don't — I haven't really looked into it.

But I— I'll put it this way: of our 49 billion, we haven't moved any to bitcoin. (Laughter)

My— well, the truth is I don't know anything about it. That doesn't always stop me from talking about things, but it will in this case.

24. Pampered Chef isn't a pyramid scheme

WARREN BUFFETT: OK. Andrew? (Laughter)

ANDREW ROSS SORKIN: OK.

Bill Ackman, the activist investor, who's also a Berkshire investor as well, has raised questions in recent months about the legality of the multilevel marketing company Herbalife. He called it a pyramid scheme.

Berkshire owns a multilevel marketing company, too: the Pampered Chef.

Will Ackman's attack on Herbalife have any impact on the Pampered Chef or Berkshire, and do you believe Ackman's concerns are legitimate?

How do you think about the debate over multilevel marketing companies and decipher which ones are legitimate and which ones are not?

WARREN BUFFETT: Yeah. I don't know anything— I've never actually even looked at a 10-K of Herbalife, so I do not know about their operation.

But, I think the key, obviously, is whether a direct marketing operation is really based on selling product to would-be distributors of one sort, and loading them up, instead of sell— in effect — selling it to end users.

And Pampered Chef is a million miles away from anything where the money is made, in any way, by selling to level A, and then those people selling to level B, and all that sort of thing.

It is true that certain people — lots of people — get paid on the results — the selling results — of other people that they recruit.

But this business of loading up people with a couple-hundred dollar package of something that they never sell, and that being sort of the main business — and I don't know anything about Herbalife on this, I do know about Pampered Chef — and that is not Pampered Chef's business.

Pampered Chef's business is based on selling to the end user.

And we have thousands and thousands and thousands of parties every week where people who are actually going to use the product buy it from somebody, and we are not making it — we're not making the money — by loading up people and then having them leave the sales force and our profit coming from that.

Charlie?

I think that should be the distinguishing characteristic. If I were regulating the industry, I would look very hard at operations where thousands of people got their hopes as to earning a living by selling the product, invested their savings, and buying a whole bunch of product that they didn't need themselves, and then sort of being — abandoning the hope and being left with the product.

And the parent company just— or the main company — just going out and selling millions and millions of people on a dream that was not fulfilled.

Charlie?

CHARLIE MUNGER: Well, there's likely to be more flimflam in selling magic potions than pots and pans. (Laughter)

WARREN BUFFETT: At our age, we're in the market, though, for any magic potions, if any of you have them. (Laughter)

That's the extent of your comment, I assume, Charlie?

CHARLIE MUNGER: Yes.

25. “Lender of last resort” after Buffett?

WARREN BUFFETT: OK.

Doug?

DOUG KASS: Warren —

WARREN BUFFETT: Doug. (Laughs)

DOUG KASS: Warren. (Laughter)

Much of Berkshire’s returns over the last decade have been based on your reputation and your ability to extract remarkable deals from companies in duress, as compared to the past, when you conducted yourself more as a value investor digging and conducting extensive analysis.

What gives you confidence that your successor’s imprimatur will be as valuable to Berkshire as yours has been?

WARREN BUFFETT: Well, the successor will probably have even more capital to work with, and they will have capital, presumably, from time to time, when markets are in distress.

And at those times, very few people — few people have the capital, and a lot fewer people have the willingness, to commit.

But I have no question that my successor will have unusual capital at times when — at turbulent times when — the ability to say “yes” very quickly with very large sums sets you apart from virtually anybody in the investing universe.

And I would not worry about that successor being willing to deploy capital under those circumstances, and being called upon.

I mean, Berkshire is the 800 number when there’s really, sort of, panic in markets, and for one reason or another, people need significant capital.

Now, that’s not our main business. You know, it happened a couple times in 2008. It happened once in 2011. But that’s not been our main business, but it’s fine. And it will happen again.

And I would think if you come to a day when the Dow has fallen 1,000 points a day for a few days, and the tide had gone out and we’re finding out who’s been swimming naked, that those naked swimmers may call Berkshire — they will call Berkshire — if they need lots of money.

I mean— and Berkshire’s reputation will become even more solidified, in terms of being willing to provide capital for sound deals at times when most people are frozen.

And when that happens when I'm not around, it becomes even more the Berkshire brand and not anything attached to a single individual.

Charlie?

CHARLIE MUNGER: Well, I would argue that in the early days, Warren had huge success as a value investor in little-owned companies because his competition was so small.

If he stayed in that field, he would have to be in bigger companies, and his competition would be way more intense.

He's gotten into a field, being a good home for a big companies that don't want to be controlled in meticulous detail by headquarters, where there isn't much competition.

So I would argue that he's done exactly the right thing, and it's ridiculous to think that the past is the thing he should have stayed in.

WARREN BUFFETT: Well, we will send— I think he's probably referring to something like the Bank of America transaction or Goldman Sachs and GE — and there will come a time, in markets, where large sums — I've gotten calls on other things, too, but —

CHARLIE MUNGER: Yeah, but other people are not getting the calls.

WARREN BUFFETT: Well, they don't have the money and they don't have the willingness to act immediately.

And Berkshire will — those qualities will remain with Berkshire after I'm gone.

In fact, in a sense, the area we occupy becomes more and more our own as we get even bigger, I would say, Charlie.

CHARLIE MUNGER: That's what I like about it. (Laughter)

26. We only buy from willing sellers

WARREN BUFFETT: OK. Station 6?

AUDIENCE MEMBER: Hi. My name is Andre from Beverly Hills, California.

During very key events, like the Sanborn incident, when you were buying See's, or when you were buying Berkshire stocks, you persuaded people to sell you their shares when they really didn't want to.

What were your three keys to influencing people in those specific situations?

WARREN BUFFETT: Yeah. I don't think — you brought up Sanborn and you brought up See's and— I don't think —the See's family, there had been a death in the See's family— it was Larry See, wasn't it, that died?

CHARLIE MUNGER: Yeah.

WARREN BUFFETT: And he had been the instrumental, I guess, grandson of Mary See, and the operator, and there was a— the rest of the family really didn't want to run the business.

So it was put up for sale, and I didn't even hear about it until they'd had one other party— I don't know even know who it was— but that they negotiated a deal with and that it didn't go through.

Charlie probably remembers this better than I do. We certainly — the See family— and Charlie persuaded me to buy it. We didn't persuade them to sell it. Charlie?

CHARLIE MUNGER: Yeah. We didn't buy anything from any unwilling sellers.

WARREN BUFFETT: No. And Berkshire, we started buying that in 1962 in the open market. It had quite a few shareholders. It was a — it traded fairly actively, and we bought a lot of stock, and we did buy a couple of key pieces.

We bought one from Otis Stanton, who was Seabury Stanton's brother, but Otis wanted to sell.

It wasn't the most attractive business in the world. I mean, here was a textile company that lost money in most of the previous years, and over a ten-year period, that had significant losses. And it was a northern textile company.

So, we bought stock in the market, a lot of stock in the market. We had two big blocks from Otis Stanton and from some relatives of Malcolm Chace, but they were happy to sell.

I never met — at the time I bought the stock from Otis Stanton — I had never met him, and so I delivered no personal sales talk to him.

And the same thing is true of the Chase family, not Malcolm himself, but some relatives, they sold us a block of 100,000 shares. But we were not out convincing anybody to sell their stock.

So there's been very little that I can remember where — we talked to Betty Peters about avoiding a transaction we thought was dumb, when Wesco was considering merging with Financial Corp of Santa Barbara.

I flew out to see her in San Francisco. But she stayed with us. She did not sell her stock and remains a shareholder to this day, 30-plus years, almost 40 years later.

Charlie?

CHARLIE MUNGER: Well, I've got nothing to add to that at all.

27. Berkshire's edge for acquisitions

WARREN BUFFETT: OK. Then we'll go to Carol.

CAROL LOOMIS: This question comes from Mark Trautman of Crested Butte, Colorado.

And you've touched on this, Warren and Charlie, on little fringes today, but this is a direct question.

"Warren, both you and Charlie have described over the years how you have built Berkshire Hathaway to be sustainable for the long term.

"I am having difficulty explaining to my 13-year-old daughter, and frankly, to many adults, also, in easy to understand terms, Berkshire's business model and long-term sustainable, competitive advantage.

"Can you give all of us, and particularly my daughter, Katie, who is here today, the Peter Lynch two-minute monologue explaining the business of Berkshire Hathaway and its merits as a long-time investment for future decades?"

WARREN BUFFETT: OK, Charlie, you talk to Katie. (Laughter)

I'm going to have some fudge. (Laughter)

CHARLIE MUNGER: All right. I'll try that.

We've always tried to stay sane, and other people, a lot of them, like to go crazy. That's a competitive advantage. (Laughter and applause)

Number two: as we've gotten bigger, we've used this sort of golden rule that we want to treat the subsidiaries the way we would want to be treated if we were in the subsidiaries.

And that, again, is a very rare attitude in corporate America, and it causes people to come to us who don't want to come to anybody else. That is a long-term competitive advantage.

We've tried to be a good partner to people who come to us and need a partner with more money. That is a competitive advantage.

And so, we are leaving behind a field that's very competitive and getting into a place where we're more unusual.

This was a very good idea. I wish we had done it on purpose. (Laughter)

WARREN BUFFETT: A few years ago, a person who's in this audience, I believe, came to me and he was in his 60s, and he said that for about a year, he'd been thinking about selling his business.

And the reason he had been thinking about it was not because he wanted to retire. We're not — we very seldom buy businesses from people who want to retire. He didn't want to retire at all. He loved what he was doing.

But he'd had an experience in buying a business a few years earlier from a family where he had known the fellow that built it, the fellow had died, and then just everything bad started happening in the family and the business and the employees, everything else.

So he really wanted to put to bed the question of what happened with his business.

It wasn't that he really cared a lot about monetizing it or having the money. He just wanted — he wanted to put his mind at ease, that what he had spent lovingly building up over 30 or 40 years was not going to get destroyed — or that his family would get destroyed — if he — if he made a — if he died.

So he said he thought about it a year. And he thought about it and he thought, "Well, if I sell it to one of my competitors" — and they would be a logical buyer, they usually are. That's why we have antitrust laws.

If he sold it to a competitor, they would come in and basically they would put their people in charge.

They would have all these ideas about synergy, and synergy would mean that the people that had helped him build the business over 30 years would all get sacked and that the acquiring company would come in like Attila the Hun and be the conquering people, and he just didn't want to do that to the people that helped him over the years.

And then he thought he could — he might — sell it to some private equity firm. And he figured that if he sold it to them, they'd load it up with debt, which he didn't like, and then they'd resell it later on. And so he would, again, have lost control and they might do the same thing that he didn't want to have happen in the first place, in terms of selling it to a competitor, or whatever it might be.

So when he came to me, he said — he described this — and he said, "It really isn't because you're so attractive."

But he said, "You're the only guy left standing. You know, I mean, you're not a competitor, you're not a private equity firm, and I know I will get a permanent home with Berkshire and

that the people that have stayed with me over the years will continue to get opportunities and they will continue to work for me. I'll keep to get doing what I love doing, and I won't have to worry about what will happen if something happens to me tonight."

Well, that company has turned out to be a wonderful acquisition for Berkshire, and our competitive advantage is we had no competitors. And I think — well, we will see more of that. We've seen a lot of that over the years. We'll see more of it.

Charlie, anything?

And I don't think you mentioned the fact that developing a shareholder base, too, that's different than —we do look at shareholders as partners, and, you know, it's not something a public relations firm wrote for us, or anything of the sort. We want you to get the same result we get, and we try to demonstrate that in every way we can.

28. BNSF outlook for carrying coal and oil

WARREN BUFFETT: Jonathan?

JONATHAN BRANDT: I have a — (Applause)

I have a couple questions about Burlington Northern's two energy franchises, coal and crude.

WARREN BUFFETT: Uh-huh.

JONATHAN BRANDT: Given that coal-fired generation is in gradual structural decline, can you discuss whether the tracks, locomotives, and other assets used to deliver coal can be redeployed, equally profitable, serving other customers? Are those assets fungible?

Can you also discuss whether crude by rail can continue to grow even as pipelines are built to serve the Bakken, and as the currently large geographic spreads in crude prices potentially narrow?

You've talked about the flexibility of crude by rail on TV. Can you elaborate on that, please?

WARREN BUFFETT: Yeah. If there was no coal moving, we would not find a lot of use for some of the tracks we have, there's no question about that.

So, the — I think what you're talking about would be very gradual over time. But, I mean, the outlook for coal is not the same as the outlook for oil.

A lot of the coal, in terms of the year-by-year fluctuations, may depend on the price of natural gas because some of the generating capacity can go in either direction.

In terms of oil, I think the view a few years ago was that there might just be a little blip in terms of rail transportation. But I've talked to some oil producers, the largest up there in the Bakken, and I think there will be a lot of rail usage for a long time, in fact, increased rail usage.

Oil moves a whole lot faster, incidentally, by rail than it does by pipeline. Most people have sort of a visual conception that the oil is flowing at terrific speeds through pipelines and that the railcars are sitting on the sidelines someplace.

But it's just the opposite. You can move oil a lot faster.

And with change — with different market prices and different refinery situations and all that — there's a lot of flexibility in the oil transportation by rail.

Matt Rose is right up front here, and if somebody would give him a microphone, I think he can probably tell you a lot more about moving coal and oil than I can. Matt?

We got a spotlight someplace that can focus right on here?

MATT ROSE: Yes. So, Warren, the two franchises are really different. That's just the way the geographic is laid out.

We expect the coal franchise to basically stay about where it is today, depending on natural gas prices as well as what happens with the EPA.

Our crude by rail, right now we have about 10 loading stations in the Bakken with about 30 destination stations. We're currently in negotiation, looking at about another 30 destination stations.

So it's really an exciting time right now. We're handling about 650,000 barrels of crude a day. We think we'll be at 750 by the end of this year, and we see a pathway to a million-two to a million-four.

WARREN BUFFETT: When you think of the whole country producing 5 million barrels a day not long ago, that is a lot of oil.

And of course, it isn't just the Bakken. You know, the shale developments, they can open up a lot of things over time.

29. Sorry to see Harley-Davidson notes expire

WARREN BUFFETT: OK. Station 7?

AUDIENCE MEMBER: Good morning, Warren and Charlie. My name is Bill Hennessy (PH) and I'm from Milwaukee, Wisconsin.

I have a similar question. Back in 2009, you made a substantial investment in Harley-Davidson with the five-year term at 15 percent. I noticed that note comes due in 2014.

What are your plans or thoughts once that investment comes due?

WARREN BUFFETT: Well, what we'd like to do is not answer the mail, and just let him keep paying his 15 percent, but that won't happen.

The — no, those were — we had a few private transactions during a period when the corporate bond market was basically frozen and received unusual terms, although the best terms those companies obviously could obtain at that time. And those deals are coming due, and I wish the five-year deals had been ten-year deals.

But, now those — that was a special time. And in effect, that's a depleting asset that we have that's left over from five years ago.

We won't see anything like that for a while, but we'll see similar things at some point in the future.

I mean, the world is given to excesses, and they have consequences, and we are always willing to act.

I mean, we did not think Harley-Davidson was going to go broke. I mean, it was that simple.

You know, any kind of company that gets its customers to tattoo ads on their chest can't be all bad, you know, I mean— (Laughter)

But it will be a sad day when the Harley-Davidson notes mature.

30. Todd Combs and Ted Weschler's stock-picking independence

WARREN BUFFETT: OK. Becky?

BECKY QUICK: This question comes from Andishi Tuzush (PH) who asks, "If Todd Combs and Ted Weschler, if they purchase stock in a company that you have reviewed before and did not believe to be a good investment, would you share your thoughts with them?"

WARREN BUFFETT: I would probably not know they were even buying it until, maybe, a month after they started.

I do not — they do not check with me before they buy something.

I gave them each another billion dollars on March 31st, and I do not know whether they've spent the billion or whether — which stocks they bought or—

Now, I will see it on portfolio sheets. I get them monthly, but they're in charge of their investments.

They've got one or two things that they're restricted on, in terms of— things that — for example, if we own a chunk of American Express, and under the Bank Holding Company law we would not be able to buy another share.

So there's a couple things like that — restrictions they have. But otherwise, they have no restrictions on what they buy.

They've bought things I wouldn't buy. You know, I buy things they wouldn't buy. That part of the investment process.

I do not tell them how much to diversify. They can put it all in one stock if they want to. They can put it in 50 stocks, although that's not my style.

They are managing money. And when I managed money, you know, I wanted to be a free agent.

If he wanted to give me — they could make the decision on whether they wanted to give me the money, but once they gave me the money, and I had the responsibility for managing it, I wanted free reign to do what I wanted. And I did not want to be held responsible for things with my hands tied.

And that's exactly the position we have with Todd and Ted now.

It takes a lot of — it's an unusual person that we will give that kind of responsibility to. That's not something that Charlie and I would do lightly at all.

But we thought they deserved the trust when we hired them, and we believe that more than ever after watching them in action for a time.

Charlie?

CHARLIE MUNGER: What can I say in addition to that?

31. Why GEICO isn't copying Progressive's Snapshot

WARREN BUFFETT: OK. Cliff?

CLIFF GALLANT: Thank you. I wanted to ask a follow-up question about Snapshot at Progressive.

Now, I realize that GEICO's first quarter numbers are very good, things are going very well at the company.

But Progressive is claiming that the data is profound, that they're getting from Snapshot. That they can give their best drivers 30 percent rate cuts, and those customers are still their most profitable customers.

We have a lot of GEICO policyholders here today. I'm sure they're very good drivers.

Why shouldn't they go try Snapshot and try to save 30 percent or more? Why isn't GEICO investing in what I think appears to be a credible underwriting tool and potential threat?

WARREN BUFFETT: Yeah. They — I don't think — but obviously Progressive disagrees with us — but I don't think their selection method is better than ours. And I would say that I might even feel that ours is a little bit better than theirs.

But every company has a different approach to it.

Peter Lewis, who runs Progressive, when he started the company— he told me this story himself. I mean, it was a tiny, tiny little company. It came out of a mutual company, as you know.

And he went in the motorcycle business. And the first guy that he insured— or the first loss, I think, that was reported— came from some guy that was redheaded, and he just decided not to insure any redheads for a while. (Laughter)

That — you know—when you don't have very much money, you can't afford to experiment too long.

Well, Peter learned that that was not a criteria, and he knew that, but he had fun telling the story.

But all we're trying to do— if I'm looking at all these people here and I'm going to issue them insurance policies for the next year, I'm going to charge different rates to different people.

And, if I'm going to sell them life insurance, I'm going to charge different rates to them. If I'm going to sell them health insurance, I'm going to charge different rates.

There's a different — there's a different probability attached to each individual, based on a whole lot of variables.

And Progressive — before Snapshot, they had a different selection approach than GEICO.

And like I say, ours has worked very well and we think it will continue to work well.

And we are obtaining, under our selection system, we are obtaining a hugely disproportionate number of new policyholders compared to the growth in the market, so our rates are attractive and our underwriting results are attractive.

And we continue, always, to look for further ways, obviously, to refine the selection technique.

But we don't do any of it lightly because what we're doing now is working very well.

And I just invite you to compare the Progressive results with the GEICO results in the next two or three years, and I will — if we're wrong — I will be here to freely admit that we were wrong, but I don't think we will be.

OK, station 8?

Oh, Charlie, you want to add something?

CHARLIE MUNGER: Well now, obviously, we're not going to immediately copy the oddball thing that every single competitor does in the world, particularly when we've got an operation that's working so well.

WARREN BUFFETT: If I were starting in the direct auto insurance business, I think I would attempt to copy GEICO.

It wouldn't work, but it would offer you the best chance, I think. It's a remarkable system.

And Tony Nicely, you can't give him enough credit. I mean — you know, we will — I hope we will — gain a million policies this year.

The entire industry, I don't think, will gain more than a million-and-a-half. So we will probably get two-thirds — in my view — we'll get two-thirds of all the growth and we'll do it profitably, and we'll save people a lot of money. So I think that's quite a company.

32. We rely on sugar and caffeine, not to-do lists

WARREN BUFFETT: OK. Station 8?

AUDIENCE MEMBER: Hi. My name is Alex, and I'm from Los Angeles.

Mr. Buffett, I've heard that one of your ways of focusing your energy is that you write down the 25 things you want to achieve, choose the top 5, and then avoid the bottom 20.

I'm really curious how you came up with this, and what other methods you have to prioritizing your desires?

WARREN BUFFETT: Well, I'm actually more curious about how you came up with it, because — (laughter) — it really isn't the case.

It sounds like a very good method of operating, but it's much more disciplined than I actually am. (Laughter)

If they stick fudge down in front of me, I eat it, you know, I'm not thinking about 25 other choices. (Applause)

So I don't mean to —you know, Charlie and I live very simple lives. We know what we do enjoy, and we now have the option of doing it, pretty much.

Charlie likes to design buildings. I mean, he's not—he's no longer a frustrated architect — he's a full-fledged architect now. And, you know — and we both like to read a lot.

But we — I've never made lists. I can't recall making a list in my life, but maybe I'll start.

You've given me an idea. Thank you.

Charlie?

CHARLIE MUNGER: Well, what's really interesting on the subject of Warren's operating methods, you can see happening here.

We didn't know, when we started out, this modern psychological evidence to the effect that you shouldn't make a lot of important decisions when you're tired and that making a lot of difficult decisions is tiring.

And we didn't also know, as well as we now do, how helpful it is to be consuming caffeine and sugar when you're making important decisions. (Laughter)

And what happens, of course, is that both Warren and I live entirely on autopilot, in terms of the ordinary decisions in life, which is totally habitual, so we don't work — waste — any decision making industry — I mean energy — on that stuff, and we're ingesting caffeine and sugar.

And, it turns out, under the modern evidence, this is an ideal way to sit where Warren sits. And he didn't know that, he just stumbled into it. (Laughter)

WARREN BUFFETT: When we write our book on nutrition, it promises to be a huge seller. (Laughter)

CHARLIE MUNGER: I cannot remember an important decision that Warren has made when he was tired.

He’s never tired. (Laughter)

He sleeps soundly, and he doesn’t waste time thinking about what he’s going to eat. As you say, he just eats what he’s always eaten.

You know, his style turns out to be absolutely ideal for human cognition. (Laughter)

It looks peculiar, but he stumbled into something very good.

WARREN BUFFETT: You can write the forward to my next book. OK. (Laughter)

33. Buffett defends buying newspaper companies

WARREN BUFFETT: Andrew?

ANDREW ROSS SORKIN: This following question comes from a shareholder who asked to remain anonymous.

They write, “I’m from Omaha, and I’m thrilled you bought our newspaper as a local citizen, but not so much as an investor in Berkshire.

“I read your reasons for acquiring newspapers, but it still doesn’t make sense to me, economically, given the downward trends in the industry.

“Don’t you think there are other businesses with higher rates of return that you could buy?

“Why would you buy such a small business, since you always say you want to buy elephants?

“Please quantify exactly what rate of return you expect from the newspapers.” (Scattered applause)

WARREN BUFFETT: Yeah. I would say that we will get a decent rate of return.

Whether it’s — most of them, incidentally, have been bought, and they were either S corporations or partnerships of some sort.

So they — compared to buying a Heinz, for example, or a BNSF or something of the sort — they actually have a certain structural advantage in terms of the eventual return after tax, because we get to write off the intangibles we’re purchasing.

That affects the after-tax return, compared to the pretax return that would come from this.

But I would say that our after-tax return, with declining earnings, which I expect, would be at least 10 percent after tax, but I think — and it could well be somewhat higher.

I think it's very unlikely that it would be significantly lower.

And everything we have seen to date, and it hasn't been that long, but we have a number of papers now, would indicate that we will meet or beat the 10 percent.

It doesn't have — it's not going to move the needle at Berkshire.

You know, the papers we have bought now, we're probably getting close to maybe having 100 million of pretax earnings, a good bit of which is — fair amount of which — we get a favorable tax treatment on, because they were bought from S corporations.

You know, and 100 million is real money, but it doesn't move the needle at Berkshire.

But it will end up being a very — I think it will be a perfectly decent return in relation to capital employed.

Now, we wouldn't have done it in any other business. I mean, there's no question — the questioner is right about that.

But, it doesn't — you know — doesn't require an extra ounce of effort by me or Charlie or people at headquarters. We will get a decent return and we like newspapers and —

Although, the one thing I'll promise to do with you is I will be glad to give you figures, annually, as to how we are doing relative to investment.

We are buying the papers at very, very low prices compared to current earnings, and we must do that because the earnings will go down.

Now, the interesting thing is, of course, is that we see books from investment bankers on all kinds of businesses, and always the projected earnings go up in the book.

A lot of times they don't — you know, in reality — they don't go up. The difference is that we expect them to go down in the newspapers, and whatever the investment salesmen expect, they certainly don't project that any business they sell will have declining earnings.

Charlie?

CHARLIE MUNGER: Well, I think what you're saying is that it's an exception and you like doing it. (Laughter)

WARREN BUFFETT: I wish I hadn't asked. (Laughter) OK.

34. Follow Teledyne CEO Henry Singleton's lead

WARREN BUFFETT: Doug? Sort of a lead-in to you, Doug. (Laughter)

DOUG KASS: Warren, in a previous answer to a question, you suggested, I think for the first time, that when you're gone — and everyone here hopes that's not for a very long time —

WARREN BUFFETT: No one more than I. (Laughter)

DOUG KASS: I thought you would say that —

You're going to move — Berkshire will likely move — to a more centralized style, or approach, to management.

My question is, in the past you've demonstrated a great deal of respect for Dr. Henry Singleton, the founder and longtime CEO of the diversified conglomerate Teledyne.

You have written about Singleton, quote, "Henry is a manager that all investors, CEOs, would-be CEOs, and MBA students should study.

"In the end, he was 100 percent rational, and there are very few CEOs about whom I can make that statement," close quotes.

Prior to his death, he broke up Teledyne into three companies. Dr. Singleton told our mutual friend, Lee Cooperman, that he did it for several reasons.

There was one reason in particular that Lee mentioned to me that I want to ask you about. According to Singleton, Teledyne was getting very hard to manage for one CEO.

What would you say about the Berkshire situation, given your company's greater complexity, size, and the management issues that you faced in the last three years?

And what is the advisability of restructuring Berkshire into separately-traded companies along business lines?

WARREN BUFFETT: Berkshire, to me, seems about the easiest company to manage imaginable.

And if you took an earlier answer — and I understand why you did, that implied greater centralization after my death, there will be a tiny bit more, just in terms of the small companies. But I do not anticipate any change of any real significance.

Now, Charlie knew Henry Singleton, and I think it might be interesting for Charlie to give you his views on what Singleton did right and, eventually, wrong.

And, I'll answer the last part of your question, though.

Breaking it up into several companies, I'm convinced, would produce a poorer result. Certainly now, and I believe in the future.

Charlie?

CHARLIE MUNGER: Well, Henry Singleton was a genius who could play chess blindfolded just below the grandmaster level and never got less than an 800 on any complicated math or physics exam.

And, I knew him. He lived in my community.

But he started as a conglomerate where he was very interested in reporting higher earnings all the time so he could keep the daisy chain going. And when he managed it on the way down, he bought in the stock relentlessly and very logically, like a great chess player should.

And — but he managed those companies on a way more centralized basis than Berkshire has ever operated.

And in the end, the great bulk of the enterprises, he wanted to sell to us. And by that time, he was ill and he really wanted to sell to us. And of course, he wanted Berkshire stock.

And we basically said to him, "Henry, we love you and we'd love to buy your businesses, but we don't want to issue Berkshire stock."

So, I don't think you should get the idea that just because he was a genius he did it better than we did.

He did, in some ways, because he understood these very high-tech businesses, but —

WARREN BUFFETT: He played the public markets way better. I mean, it—

CHARLIE MUNGER: Yeah.

WARREN BUFFETT: We're not interested in doing that, actually.

CHARLIE MUNGER: No, we're not.

WARREN BUFFETT: And he was incredible in that, and he made a fortune for shareholders that stayed with him.

But he was — to some extent, he looked at the shareholder group as somebody to be taken advantage of, and he issued stock like crazy. I'll bet he did at least 50 acquisitions where—

CHARLIE MUNGER: Yes.

WARREN BUFFETT: He wanted to use a very fancy price stock. He was playing the game of the ’60s, and we actually have never wanted to get in that game.

I mean, he promoted the stock. And, you know, he had the Litton Industries background on it, and it was a game that worked wonderfully if you didn’t care about how it ended up.

And so we have not played that game. He was — in terms of wanting to get Berkshire stock — you know, he essentially was going into the third stage—(laughs) — of first issuing shares at overprice, then buying it back very underpriced, and then he was going to —

CHARLIE MUNGER: — sell it to us for more than it was worth.

WARREN BUFFETT: Yeah, exactly.

CHARLIE MUNGER: It was the wrong stock. But he was an enormously talented man and that cool rationality was to be admired.

I like our system better. We’re more avuncular than Teledyne was.

WARREN BUFFETT: Not the toughest test. (Laughs)

35. High health costs are hurting competitiveness

WARREN BUFFETT: OK. Station 9?

AUDIENCE MEMBER: Hi. My name is Kelly Morrell (PH) from New York, and I have a question.

You’ve been both very outspoken on corporate and personal tax rates, as well as the trade deficit.

And I’m wondering if you can elaborate on what the top two or three things you think both business leaders and policy makers should be focused on to preserve U.S. competitiveness?

WARREN BUFFETT: Well, I would say health care costs would be a big item.

We’re spending — we’re a country that’s spending, we’ll say — you get different figures — but call it 17 1/2 percent or so of GDP. And most of our rivals in the world are paying anywhere from, probably, 9 1/2 to, maybe, 11 1/2, or thereabouts.

So, you know, there are only 100 cents in the dollar, and if you give up 6 or 7 or 8 points of that dollar, I mean, it’s just like having a raw material that costs you more, or something of the sort.

So, that will be a major problem in American competitiveness. It is right now, and it will — all signs point to the fact that it will become more so.

And it doesn't relate to the Medicare problem, which is a huge problem, obviously, but the real problem is health care costs, whether it's in the private system or whatever payer system you have.

We have a big, big disadvantage in cost versus the rest of the world.

People used to talk about how General Motors had $1500 a car in health care costs that Toyota didn't have. Well, if they had $1500 a car disadvantage in steel costs, I mean, you know, the management would be focused on that.

If they had $150 — if they had $15 — difference in steel costs, but health care costs, which are sort of beyond the control of any one company, promise to be a huge competitive disadvantage.

Overall, though, incidentally, I mean, the United States — since the crisis of 2008 — we have done very well, compared to most countries, and our system works.

But if you asked me the number one problem for American business, I would say it's that health care cost disadvantage.

Charlie?

CHARLIE MUNGER: Well, I would add that I don't think it does our competitiveness any good to have this grossly swollen securities and derivative market — markets. (Scattered applause)

And the young men from Caltech and MIT going into high finance and derivative trading, and so on, I think this is a perfectly crazy outcome in terms of its effect on the country.

WARREN BUFFETT: Anything further? (Scattered applause)

CHARLIE MUNGER: Well, I agree with you about the health care, but I find the other more revolting.

WARREN BUFFETT: Charlie's very Old Testament. And he's right.

36. Obamacare's effect on Berkshire?

WARREN BUFFETT: Carol?

CAROL LOOMIS: This question picks up, indeed, from where you were on the previous answer. It's from John Sealme (PH).

"I have never heard or read whether all of Berkshire's nearly 300,000 employees are currently receiving health benefits.

“If all employees today are not receiving benefits, has Berkshire quantified the cost of complying with the Affordable Care Act? And if so, what will be the costs be?

“In other words, how is the Affordable Care Act going to affect Berkshire?”

WARREN BUFFETT: Yeah. I don’t know the answer to that.

The— I’m virtually certain that — you know, we’ve got 70-plus subsidiaries, some of which — one of which — has over 100 itself.

So, very hard to speak totally categorically. But to my knowledge, I don’t know of any units that don’t have health care benefits.

But like I say, I mean, we just bought 27 or 28 daily newspapers, some of them are very small, so I can’t really speak to every single unit.

But health care costs are a huge cost for us. We’re actually going to do — we do very few things with, as you know, on a centralized basis — but that is something where all of our companies will try to learn what’s in store for them and try to figure out some answers.

But we have not yet — we have not assessed in any way — put together — the kind of figures that that question calls for.

We spent a lot of money, obviously, I mean, to get up to the kind of numbers that are coming through on health care costs.

I see them at some of our — a few of our — individual units, as I look at their monthly reports. I will see costs rising 10 or 12 percent.

And what happens in 2014, I don’t know.

But the same thing will be happening to our competitors, and we will try to figure out what makes the most sense at that time.

And our individual managers are already working, particularly the larger units, are spending a lot of time on that.

But it’s not something we try to control out of headquarters.

Charlie?

CHARLIE MUNGER: Yeah, it’s a — we really don’t want to try and control it out of headquarters. We like that kind of decision being made near the firing line.

37. Future of rooftop solar power

WARREN BUFFETT: Jonathan?

JONATHAN BRANDT: Here's a question for Charlie on a subject which I consider him an expert on, and I hope I don't prove my ignorance by asking the question.

The question is about capital spending plans at your regulated utilities and a potential long-term risk to realizing returns on current and future capacity.

With the ongoing reduction in the cost of solar panels causing more utility customers to, at least, consider generating electricity from their own rooftops, some worry about a vicious circle of customers reducing their dependence on the grid, forcing utilities to raise rates, to maintain returns on the remaining customers who, in turn, are then incentivized to reduce their dependence on the grid, or even exit it.

I understand the risks are greatest to regulated utilities in sunny places like Arizona and California, but given how much solar power is generated in cloudy places like Germany, are regulated utilities in Iowa, the Pacific Northwest, the Rocky Mountains, and the UK really immune?

CHARLIE MUNGER: Well, my answer would be I don't think anybody really knows exactly how this is going to play out.

I confidently predict there will be more solar generation in deserts than there is going to be on rooftops in cloudy places — (laughter) — and there's a good reason for that.

And Berkshire's big operations, as you — in solar — are in what amounts to desert.

And we get very favorable terms and incentives, and I think Berkshire's going to do fine in solar.

I am skeptical, myself, about trying to run the utilities of the world from a bunch of little, tiny rooftops. I suspect there's some twaddle in that — and some fancy salesmanship in that arena.

And of course, the people that did it early were foolish because the price came down rapidly thereafter. So put me down as not totally charmed by rooftops in cloudy areas.

WARREN BUFFETT: We have Greg Abel here from MidAmerican Energy. If we can direct a spotlight down there, Greg can probably speak to this with a lot more intelligence than Charlie and I. I noticed that —

CHARLIE MUNGER: Yeah.

WARREN BUFFETT: I noticed that—I noticed that Jonathan left me out of the thing entirely when he wanted to get an intelligent answer, but I'm not taking any offense at that. Greg?

GREG ABEL: Sure. Happy to touch on it.

Jonathan, I would touch on the fact you're absolutely right. We're seeing, when it comes to rooftop solar, a decline in the total cost of installing them.

At the same time, when you compare it to a regional tariff, or a specific tariff in most of those states, the utility is extremely still competitive.

And I would highlight that as you see more rooftops coming on, you'll see a restructuring of the tariffs, but at the same time, there's a lot of protection for the utilities.

So in the regions we're supplying power, we will see some introduction of solar, but we're absolutely comfortable our systems for the long-term are valuable both to our customers and to our shareholders — Berkshire shareholders — for the long term. Thanks.

38. Luck, timing, and success

WARREN BUFFETT: OK. Station 10.

AUDIENCE MEMBER: Thank you. Marc Marzotto, Toronto, Canada.

Bill Gross made recent comments that his generation of investors, yourselves included, owed a deal of their success to timing.

Do you agree with Bill's comment, and do you think a similar opportunity will provide itself to today's investors? Thank you.

WARREN BUFFETT: Yeah, there's no question that being born in the United States was a huge, huge, huge advantage to me, and as I've pointed out in a recent article, being born male was a big advantage.

I would not have had the same opportunities in the investment, or in the business world, remotely, that I've had if I'd been a female born in 1930.

And the timing could have been a little better. Actually, my dad was a security salesman and, you know, I was conceived in November, 1929. And if you remember, the stocks had gone down dramatically at that time.

There really wasn't anybody to call on, for my dad, and there wasn't any television at home or anything. So here I am, you know. (Laughter)

So I feel myself very lucky that the crash of 1929 came along.

And that also provided a decade, more than a decade, of people who were very turned off. Well, it was a decade of terrible business for quite a while, and then a decade of — more of people that were turned off on stocks, just as we sort of had a decade like that in the past decade going up to 2010 or so, people that — a lot of people — that had gotten turned off by stocks.

So that was a favorable environment. But the United States itself was an incredibly favorable environment. If I'd been born five years earlier, I probably would have made more money. But if I'd been born 10 or 15 years later, I would've made, probably, less money.

But, it— I envy the baby that's being born today in the United States. I mean, I think, on a probability basis, that's the luckiest individual that's ever been born.

And I think that they will do very well in life in all kinds of ways, on a probability basis, better than existed when I was born.

And I think they'll have opportunities to do very well in the investment field.

It may not be as good a field as it was for me starting in 19-, say, '50, '51 or thereabouts, but it will be a very good field to operate in.

The person that has a passion for investing, born today, coming of age 20 years from now, is likely, in my view, to do very well, and to live far better than we live today, just as we live far better than John D. Rockefeller lived many years ago.

Charlie?

CHARLIE MUNGER: Well, the competition was very weak in your early days, and I don't think the competition is as weak now.

So I think, sure, we got advantages from timing. And I don't think that means there's nothing to be done ahead.

WARREN BUFFETT: But Charlie, in 2008 and '9, there were all kinds of high IQ —

CHARLIE MUNGER: Yeah.

WARREN BUFFETT: — highly experienced, investment professionals, I mean, thousands and thousands and thousands of them.

And you invested at the Daily Journal Company in some equities at X that are worth, what, three X or four X now, or something like that?

CHARLIE MUNGER: That's right.

WARREN BUFFETT: Yeah. Well, I call that opportunity, but it may be routine to him. (Laughs)

CHARLIE MUNGER: But I sat for a lot of years before I did it.

WARREN BUFFETT: But it still became available.

CHARLIE MUNGER: Oh, yes. But you were drowning in opportunities when I first knew you. (Laughter)

You were waiting for —

WARREN BUFFETT: I wasn't drowning in money, unfortunately. (Laughs)

CHARLIE MUNGER: No, what you lacked was money.

WARREN BUFFETT: Yeah. Well, now we've got money and no ideas.

39. You have to like what you're doing

WARREN BUFFETT: OK. Station—(Laughter)

Station 10? Station 10? Do we have a Station 10? Let's take a look. It should be right over there.

AUDIENCE MEMBER: Hi.

WARREN BUFFETT: Hi.

AUDIENCE MEMBER: My name is Dexter Ang (PH). I'm from Stafford, Virginia.

I'm 30 years old, and I'm wondering what my life will be like in a few years, let alone 50 years from now.

My question for both Mr. Buffett and Mr. Munger is: how do you think you've changed over the last 50 years?

And if you could communicate to yourself 50 years ago, what would you tell them, one piece of advice, business or personal, and how would you do it in a way where your former self would actually heed it? (Laughter)

WARREN BUFFETT: Charlie, I'll let you answer that. (Laughter)

Incidentally, I'll trade you places, so don't worry about your future.

CHARLIE MUNGER: Yeah, we're basically so old-fashioned that we're boringly trite.

We think you ought to keep plugging along and stay rational and stay energetic and just all the old virtues still work, and—

WARREN BUFFETT: But find what turns you on.

CHARLIE MUNGER: You've got to work where you're turned on.

I don't know about Warren, but I have never succeeded to any great extent in something I didn't like doing.

WARREN BUFFETT: Charlie and I both started in the same grocery store, and neither one of us are in the grocery business. (Laughs)

CHARLIE MUNGER: We were not going to be promoted, either, and even though you had the family name.

WARREN BUFFETT: Yeah. (Laughter)

My grandfather was right, too. (Laughs)

It's really — I mean, if you're lucky, and Charlie and I were lucky in this respect. We — well, we were lucky to be in this country to start with — but we found things we like to do very early in life, and then we, you know, we pushed very hard in doing those things, but we were enjoying it while we did it.

We have had so much fun running Berkshire, I mean, it's almost sinful.

But, we were lucky to — you know, my dad happened to be in a business that he didn't find very interesting but I found very interesting.

And so when I would go down on Saturday, there were a lot of books to read, and, you know, it just flowed from a very early age. And Charlie found — he found —

CHARLIE MUNGER: We found a way to atone by your — for your — sins in having so much fun. You're giving all the money back.

WARREN BUFFETT: Yeah, but you give it all back whether you want to or not, in the end.

CHARLIE MUNGER: That's true, too. (Laughter)

40. Rational insurance pricing

WARREN BUFFETT: OK. Becky?

BECKY QUICK: This question comes from Laurence Endersen in Dublin, Ireland.

And he asks, “What factors have enabled Berkshire’s insurance pricing policy to stay so rational while also being a very sizable market participant?”

WARREN BUFFETT: In insurance, was that the —

BECKY QUICK: In insurance, yeah.

WARREN BUFFETT: Yeah. Well, I would say this: I really do think that Berkshire is an unusually rational place.

I mean, we know what we want to accomplish. We’ve had the benefit of a very, very long run, and we’ve had the benefit of a — you can argue whether it was a benefit or not — but of controlling shareholders, so we did not have outside influences that pushed us in directions that we didn’t want to go.

So, you know, insurance should be conducted as a rational activity. And one of the problems that some insurers have had is that they would have a pressure for increasing premium volume every year, brought upon by Wall Street, you know— very few—

We actually contracted the business written by National Indemnity, formerly our main business, its traditional business, I think we contracted it, probably, by 80 percent or something of the sort when the business became less attractive.

I’m not sure any manager of a public company that was answering to quarterly earnings calls and that sort of thing, I’m not sure whether they could’ve really stood up to the kind of pressure that they would receive if they followed a similar policy.

We have no — if we do something stupid, it’s because we did something stupid. It’s not — no external factors are pressing on us. And that’s a great way to operate, and it’ll continue to be the way we operate.

Most people, if you own a half of 1 percent of the company or less, you know, and other people are doing things that Wall Street is applauding and you’re not doing them, it could be very hard to resist.

And you know, you respond to media criticism and all kinds of things that—

We don’t have — we don’t have to do it. And there’s no reason for us to do anything stupid in insurance.

You get offered a lot of opportunities to do things that are stupid. We were major writers of catastrophe — natural catastrophe — insurance in the United States some years ago when the prices were right.

We don't think the prices are right now, so we don't write it. We haven't left the market, the market left us, and — but we are not about to do something where we get paid 90 cents for running the — running a probabilistic loss of a dollar.

It just doesn't make any sense and we won't do it. And we don't put any pressure on anybody to do it, and their incomes are not dependent on doing it. So it's not hard to be rational at Berkshire.

Charlie?

CHARLIE MUNGER: Yeah. There are pressures on other people that we don't want and therefore don't have.

It is very hard to shrink an insurance operation by 80 percent when the people who come in every day don't have enough to do, and it's just — it's a counter-intuitive thing to do.

But it's absolutely required that you do it in a place where people go as crazy as they do in insurance.

WARREN BUFFETT: Well, it's like buying Internet stocks, you know, in the late 1990s. I mean, the — all around you, you have these people that have high IQs and they're doing it and they're being successful in it.

So, you know, everybody from your, you know, your spouse to your employer to the press says, you know, "How come all these other — how come you think you're so smart, you know, avoiding this when everybody else is doing it and they're making a lot of money?"

And, of course, it creates this social proof where it works for a while.

That's the great danger period in all of these bubbles, is that what starts out with skepticism ends up with your neighbor getting richer than you are because he went along and you didn't.

And that sort of thing — the bandwagon effect and everything — those things are very hard to resist.

But we don't have any pressures to do that sort of thing. I mean, we just don't give a damn, you know, and if —

We don't necessarily think we're smarter than the other person on that. We just think we don't understand what it's all about.

And if they can make a lot of money, you know, day trading or whatever it may be, you know, good luck to them. But we're not envious of them, but we certainly are not going to do it just because they're doing it.

Charlie, any more on that?

CHARLIE MUNGER: Oh, I always say there's a reason why all that stuff is in the Bible. You can't covet your neighbor's ass or — (Laughter)

I mean, they were having trouble with envy a long time ago. And it's a perfectly terrible thing to do, and how much fun can you have being envious?

We always say it's the one sin there's no fun in.

WARREN BUFFETT: Yeah. (Laughter)

Gluttony is a lot of fun. (Laughs)

Lust has its place, too, but we won't get into that.

41. "Dumb" competition from hedge funds in reinsurance

WARREN BUFFETT: Cliff? (Laughter)

CLIFF GALLANT: We can follow that up. (Laughter)

Reinsurance pricing is expected to be down at midyear renewals this year, despite the fact that we've had a lot catastrophes in recent years.

The finger is being pointed towards alternative capital entering the market, new capacity entering the market.

How concerned are you about this new capacity, and, you know, what is the likelihood that cheap reinsurance pricing soon leads to cheaper primary commercial pricing?

WARREN BUFFETT: Yeah. We hate dumb competition, and hedge fund — managed money, but particularly hedge funds — have entered the insurance, and more particularly, probably, the reinsurance business, quite aggressively in the last few years.

For one thing, it gives them a chance to have a beard, in effect, to operate in Bermuda or someplace where the tax rates are low and where they defer their own income from U.S. income taxes for a long time, and it's a perfectly respectable beard.

And it can be sold to investors. And people talk about it, you know, being an uncorrelated type of operation and all of that. Anything Wall Street can sell, it will sell. I mean, you can count on that. And —

CHARLIE MUNGER: They like big words, too.

WARREN BUFFETT: Yeah. And it's very salable now, and the money will flow in and the money will — may — bring down prices, it may do stupid things in reinsurance, but that's happened before.

And in the end, you know, we know what we're willing to do, we know what we think the prices should be, and we will do insurance business where we think that the odds favor us earning an underwriting profit. And if we can't do it, we'll watch for a while.

You can't afford, you know, to go along with the crowd in investment, insurance, or a whole lot of other things.

And it can be irritating to have a dumb competitor. I mean, if you've got a service station on the corner and you've got a guy across the street that is willing to sell gas below cost, you know, you've got a terrible problem. That's why I got out of the gas station business a long time ago.

But insurance, it's — nice thing about it is— the standby costs are not huge, so it's not like idling steel plants or something.

So we were perfectly willing in the 1980s to have our expense ratio go up significantly because our volume went down so dramatically.

And, you know, it was a standby cost that was real, but it wasn't back breaking, and we just waited for better days, and they came along.

Charlie?

CHARLIE MUNGER: With our cranky, wait-it-out methods, we probably have ended up with the best large-scale causality insurance operation in the world.

WARREN BUFFETT: Yeah, I think that's true, but —

CHARLIE MUNGER: So why would we change?

WARREN BUFFETT: We never really anticipated it would happen, though, when we started in.

CHARLIE MUNGER: That's true.

WARREN BUFFETT: Yeah. It just sort of evolved.

But the principles were useful, and then we were very lucky in getting some sensational people.

You know, we've got Tad Montross at Gen Re, we've got Ajit Jain, we've got Don Wurster, we've got Tony Nicely at GEICO.

I mean, we have just hit the jackpot, in terms of the people. And they like the environment of Berkshire in which to operate, because they do not get pressures to do dumb things, which they would get at many other places.

42. Buffett calls for more women in corporate leadership roles

WARREN BUFFETT: OK. Station 11.

AUDIENCE MEMBER: Hi. My name is Susan Tilson, and I'm from New York City. I am a long-term shareholder, but this is my first time to Omaha. This is quite the little gathering you've got going on here.

You, just a few minutes ago, Mr. Buffett, mentioned that you enjoyed a lot of advantages as a male.

I have three daughters, and I would like them to be able to go as far as their aspirations and hard work take them.

I've noticed and applaud the fact that you've added women to Berkshire's board, but both the board and senior management at Berkshire still reflect the reality that in 2013, there are very few women holding the top jobs in corporate America.

Do you see this as a problem? And if so, what should be done about it?

WARREN BUFFETT: Well, I do see it as a problem, and I — (Scattered applause)

I've written an article in Fortune Magazine, which if you go to Fortune.com, I guess it's in front of the paywall. You can click on it. It's only 1150 words or so. And you'll see my views on that.

But there's no question that women throughout my lifetime and, you know, for a millennia before that, have not had the same shot at many things in the world that males have.

I mean, I have two sisters, as I pointed out in this article — both here today, I believe — and, you know, a couple years on each side of me, and absolutely as smart as I am. They're more personable than I am. They got along with people much better than I did when we were young. Got — their grades were the same, but they did not have the same opportunities at all.

I mean, nobody really wanted to limit them. Certainly the— you know, my parents love them the same way as they felt about me, and they never would've dreamt of saying to them that, you know, Warren gets all these opportunities and you don't. But it just existed.

And, you know, all my teachers in grade school, every one of them was a female. And the reason they were females is because they only had a few occupations open to them.

So, as a result, I had way better teachers than I sort of deserved for the pay level that existed in it because all this talent was being compressed into a few areas.

Well, a lot of improvement has been made, but there's still a ways to go.

And there is a pipeline effect, so I mean, you couldn't change it all in one day if you wanted to. But on the other hand, that should not be an excuse for not changing at all.

And then I also wrote about the fact that there's — that when people are placed in that position, they start believing it about themselves, so they do not set their own objectives as high as their potential would indicate.

And that's — I use the example of Katharine Graham, who I knew quite well, and she was, you know, she was very, very intelligent. She was very high-grade. She had all kinds of good qualities.

But she had been told by a mother, and she had been told by a husband, and she had been told by society that women couldn't run businesses as well as men.

And she knew it wasn't true, but she couldn't get rid of it. And she saw herself in this funhouse mirror, and it — no matter how hard you tried, you couldn't really get rid of the funhouse mirror. It had just been there too long.

And I kept saying, you know, "Look at yourself in a regular mirror, and you'll see somebody who's very smart and very high-grade and just as good as any male you'll find."

Her stock went up 40-for-1 when she was CEO. She wrote a Pulitzer Prize-winning autobiography. And to her dying day, you know, she — at one level she knew she was the equal of the males around her, and at another level, she couldn't get rid of that little voice inside of her that came from her mother and came from all of society that said, you know, "You should take care of the garden and let the males do all the important work."

So, both the exterior obstacles— they're crumbling to a very significant degree and they should. I mean, it only took thousands of years.

I mean, as I point out in the article, we said in the Declaration of Independence, "We hold these truths to be self-evident, that all men are created equal," but they weren't so self-evident when

they got around to writing the Constitution and they used a bunch of male pronouns in describing the presidency in Article II, or when they didn't get around to putting a Supreme Court—a female Supreme Court — justice on until 1981.

So, the country has come a long way on it. It continues to move. It's moving in the right direction.

But you know, I hope it keeps moving and moving faster, and I hope that the females that are laboring under these beliefs that were told to them about themselves that aren't true, get rid of the funhouse mirrors and get regular mirrors. And I say all this in this article if you want to read it in Fortune.com. Thank you. (Applause)

43. Berkshire is not "too big to fail"

WARREN BUFFETT: OK. Andrew?

ANDREW ROSS SORKIN: You'll know why I'm asking this question in a second, and why I picked it.

This question is the following: "Is Berkshire too big to fail? On the same topic — "

WARREN BUFFETT: I think I heard of a book by that name. Who wrote it? (Laughs)

ANDREW ROSS SORKIN: "On the same topic, how do you feel about Dodd-Frank? And now that it's being implemented, how is it impacting Berkshire's insurance businesses and our investments in banks like Wells Fargo and Goldman Sachs?"

WARREN BUFFETT: Yeah. I don't think it's affecting Berkshire's insurance businesses, to my knowledge. I mean — we're — we've had — to my knowledge, you know, we've never had anything that impinges on our activity arising from a too-big-to-fail doctrine.

The capital ratios for large banks are being established at somewhat higher levels than smaller banks, and that obviously affects return on equity.

The ratios, as I understand it, for Wells are not as high as they would be for Citi or J.P. Morgan, but they're higher than they would be for a local bank in Omaha.

And the higher the capital ratio, the lower the return on equity will be.

I consider the banking system in the United States to be stronger than, certainly, any time in the last 25 years.

Capital is dramatically higher. A lot of the — well, a very significant part — of the loans that were troublesome are gone. The loans that have been put on the last four or five years are far better.

It's a — I think we've got — the Canadian banking system is very strong, but compared to Europe, I think our banks — or compared to our banks of 20 years ago — I think they're dramatically stronger than they were then.

I do not worry about the banking system being the cause of the next bubble. I mean, it will be something else.

I mean, we will have bubbles in capitalism. Capitalism goes to excess, and it's because of the humans that operate it.

And we will have that again, but usually you don't get it the same way as you got it before. I don't think it will be a housing boom next time.

But, I am — you know, I feel very good about our investment in Wells Fargo. I feel very good about our investment in U.S. Bank. I feel very good about our investment in M&T.

All of those are very strong banks pursuing, in my view, sound practices, and they should result — they should be decent investments, over time.

They won't earn as high a return on tangible equity, nearly as high a return as they would have seven or eight years ago, because the rules have been changed. And they have been changed to provide thicker equities, and that pulls down return on equity.

Charlie has been known to express himself on this subject, and I'll give him the floor.

CHARLIE MUNGER: Well, I'm a little less optimistic about the banking system, long-term, than you are.

I would like to see something more extreme, in terms of limiting bank activities. I do not see why massive derivative books should be mixed up with insured — deposits that are insured — by the country.

WARREN BUFFETT: I'm with Charlie on that. (Applause)

CHARLIE MUNGER: The more bankers want to be like investment bankers instead of bankers, the worse I like it. (Applause)

I don't want to say more.

WARREN BUFFETT: Yeah. (Laughter)

CHARLIE MUNGER: I get in enough trouble on the subject already.

WARREN BUFFETT: (Laughs) I can—I can see the journalists just licking their chops over there waiting for Charlie to throw a thunderbolt, but he's unusually restrained.

44. Buffett updates his bet against hedge funds

WARREN BUFFETT: We're now very close to noon.

I promised — five years ago — I wrote about five or six years ago about the inordinate costs that investors bear in — many investors bear in—getting sold various types of products.

And I talked about hedge funds and private equity and all kinds — and a whole variety of things.

The investment world has been very good at extracting a very significant percentage of the returns that investors get for themselves.

So I offered to bet anyone that wanted to step up to the plate that a group of hedge funds would not beat an unmanaged no-load index over a ten-year period.

And I promised — and then I got a taker, a very nice group of people. I like them. Ted Seides is in the group.

So they took me up on this. So we each put about $350,000 or so into something where in ten years — well, we put it in zero-coupon Treasurys, which would mature and be worth a million dollars in ten years.

And I promised to report on the bet every year.

And what we did this year, interest rates fell so far that our original 700,000 or so investment got to be worth like 950,000 just because the five-year Treasury got so low. So there was very little appreciation left into it between now and five years from now when it matures.

So, we sold the zero-coupon Treasurys and we bought Berkshire with the proceeds, and I guaranteed that it would be worth a million dollars. Currently it's worth about a million-two, so that the charities are benefiting to some extent.

Now, Ted has one charity, which is a very worthwhile charity. I have Girls Inc. of Omaha, which is a charity I selected.

And we'll put the — we can put the figures up on the — there as to where we stand at the moment.

The hedge funds got off to a fast start, and were 13 points ahead of the index fund at the end of the first year.

But the last four years — and these are funds of funds, so they really represent probably 2 or 300, maybe, hedge funds underneath.

But there's two levels of fees involved. There's the standard fees of the hedge funds, which probably many times are "2 and 20," but can be other things, and then there's the fee of the fund of funds on top of it.

So, we now are at the halfway point, and I'll keep reporting to you every year how we do. And if Berkshire does well, we'll have well over a million dollars to distribute to one of two charities.

You might enjoy going to a website called longbets.org. That's where — they're the people that hold the money.

And you will see that there are a number of propositions that people have wagered on, and the proponents and the opponent of every proposition give a short little description. Ted gave a description of why he thought he'd win. I gave a description of why I thought I'd win.

But some of these are — I just can't resist a couple of — pointing out a couple of them. You can see these on the web.

But one of it is that a large collider will destroy the Earth in 10 years. Now there's a $1,000 bet on that, but I'm not sure who will collect. (Laughter)

I thought that was an interesting one. And there was one other, and then we'll go to lunch. But there are a number of these that are quite interesting.

At least one human alive in the year 2000 will still be alive in 2150. Now, that's 148 years from when the bet was entered, there's a $2,000 bet on that.

And I hope Charlie is in contention for the — being the winner of that one.

Afternoon Session - 2013 Meeting

1. Buffett's hot dog lunch

WARREN BUFFETT: I had a hot dog with a lot of ketchup for lunch. I hope you did the same.

2. Buffett: I haven't lost any intensity

WARREN BUFFETT: And we'll go to Doug.

DOUG KASS: Thank you, Warren.

Mae West once said, "The score never interested me, only the game."

Are you at the point now where the game interests you more than the score? But before you answer the question, let me explain to you why I asked it.

In the past, your research has been all-encompassing, whether measured in time devoted to selecting investments and acquisitions, or the intensity of analysis, your interest in the old days of knowing the slightest minutia about a company.

You once said, in characterizing Ben Rosner, quote, "Intensity is the price of excellence," closed quotes.

Your research style has seemed to morph over time from a sleuth-like analysis — American Express comes into mind when you hired Jonathan's dad, Henry Brandt. You and he conducted weeks of analysis and sight visits and channel checks.

Not so much in the later investments. As an example, you famously thought of making the Bank of America investment in your bathtub.

There is an investment message of this transformation from being intense to less intense.

Would you please explain the degree it has to do with the market, Berkshire's size, or some other factors?

WARREN BUFFETT: Yeah. I think, actually, you have to love something to do well at it. There may be exceptions on that, but it is an enormous, enormous advantage if you absolutely love what you're doing, every minute of it.

And the nature of it is that that intensity adds to your productivity.

And I have every bit of the intensity — not manifested exactly the same way — but it's there every minute. I mean, I love thinking about Berkshire. I love thinking about its investments. I love thinking about its businesses. I love thinking about its managers. It's part of me.

And it is true, you can't separate the game from the scorecard. I mean, you — so your score card is part of playing the game and loving the game.

The proceeds are — you know, to me — are unimportant, but the proceeds are part of the score card, so they come with a score card.

But it's much more important — I mean, I would — no question about it, I wouldn't be — feel — the same way about Berkshire at this point if I didn't own a share of it, if I didn't get paid. I mean, it's what I like doing in life, and that's why I do it.

So, I don't think you'll — I don't think it's actually a correct observation — and Charlie can comment on this — to say that because we're doing things in a somewhat different way, that any of the intensity or the passion has been lost.

There's nothing more fun for me than finding something new to add to Berkshire, and that was true 40 years ago. It's true now. And it'll be true 10 years from now, I hope.

Charlie, how would you answer that?

CHARLIE MUNGER: Well, I think when you bought American Express for the first time, you didn't know that much about it, so, naturally, you were digging in rather deeply.

The second time you bought it, I remember you got on the golf course with Olson —

WARREN BUFFETT: Frank Olson, yep.

CHARLIE MUNGER: — and you just saw how he couldn't get rid of American Express if he wanted to, and then you bought it the second time.

The research is still — the first one was hard, and the second was easy.

WARREN BUFFETT: It's all cumulative.

CHARLIE MUNGER: Yeah, it's cumulative, eventually.

WARREN BUFFETT: Yeah. And, you know, what I learned sitting with Lorimer Davidson on a Saturday at GEICO in January of 1951 is still — is useful to me, and I don't have to learn it a second time. I can build on it.

But that's one of the great things about investing. I mean, the universe, there's enough in it so that you can finds lots of opportunities, but there — it's not like it's changing dramatically all the time.

There's some things that may change, and we just don't play in that part of the game if we don't understand them.

But what Charlie says is true. I didn't know a thing about American Express when the Salad Oil Scandal hit in November of 1963. But I thought I saw an opportunity, so I learned a lot about it.

I went around to restaurants and talked to people about travel and entertainment cards, as they were called then. I learned about traveler's checks. I talked to banks. And I was absorbing some knowledge.

And then, as Charlie said, when we were up at Prouts Neck playing golf with Frank Olson, and he was running the Hertz Corp., and he was telling me that there was no way in the world that he could get rid of American Express, or even get them to cut their fees. That was my kind of business.

And I knew enough to proceed to buy a fair amount of stock, and now we own whatever it is, probably 13 percent of the company or thereabouts. And they keep buying in their stock. We can't buy anymore stock ourselves.

I got asked that question in March of 2009 by Joe Kernen, "Why aren't you buying the stock of American Express?" Well, it was a bank holding company, and we couldn't add a share.

But they are doing it for us, and I love it.

At Coca-Cola, at Wells Fargo, to a lesser degree, at IBM, at most of our companies, our interest in the company goes up every year because the companies are repurchasing shares and they probably earn more money so we got a double play going for us.

But the passion is not gone, I promise you.

3. We don't buy anything just "by the numbers"

WARREN BUFFETT: Station 1.

AUDIENCE MEMBER: Hi, Warren and Charlie. My name is Vincent Wong (PH) from Seattle.

When people analyze a stock, a lot of them look at quantitative metrics, such as P/E ratio, return on equity, debts-to-asset ratio, et cetera.

So, Mr. Buffett, when you analyze a stock for purchase, what's your top five quantitative metrics that you looked at, and what's your preferred number for each metric? Thank you.

WARREN BUFFETT: Well, we're looking at quantitative and quality — we aren't looking at the aspects of the stock, we're looking at the aspects of a business.

It's very important to have that mindset, that we are buying businesses, whether we're buying 100 shares of something or whether we're buying the entire company. We always think of them as businesses.

So when Charlie and I leaf through Value Line or look at annual reports that come across our desk or read the paper, whatever it may be, that, for one thing, we have a — we do have this cumulative knowledge of a good many industries and a good many companies, not all by a long shot.

And different numbers are of different importance — or various numbers are of different importance — depending on the kind of business.

I mean, if you were a basketball coach, you know, you would — if you were walking down the street and some guy comes up that's 5'4" and says, you know, "You ought to sign me up because you ought to see me handle the ball," you would probably have a certain prejudice against it. But there might be some — one player out there it made sense on.

But on balance, we would say, "Well, good luck, son, but, you know, we're looking for 7-footers." And then if we find 7-footers, we have to worry about whether we can get them halfway coordinated and keep them in school, a few things like that.

But we see certain things that shout out to us, look further or think further.

And over the years, we've accumulated this background of knowledge on various kinds of businesses, and we also have come up with the conclusion that we can't make an intelligent analysis out of — about all kinds of businesses.

And then, usually, some little fact slips into view that causes us to rethink something. It was mentioned how I got the idea about buying the Bank of America — or making an offer to Bank of America on a preferred stock — when I was in the bathtub, which is true.

But the bathtub really was not the key factor. (Laughter)

The truth is, I read a book more than 50 years ago called "Biography of a Bank." It was a great book, about A.P. Giannini and the history of the bank.

And I have followed the Bank of America, and I've followed other banks, you know, for 50 years.

Charlie and I have bought banks. We used to trudge around Chicago trying to buy more banks in the late '60s.

And so, we have certain things we think about, in terms of a bank, that are different than we think about when we're buying ISCAR. And so there is not one-size-fits-all.

We have certain things we think about when we're buying an insurance company, certain things we think about when we're buying a company dependent upon — that depended upon — brands. Some brands travel very well, Coca-Cola being a terrific example, and some brands don't travel.

And, you know, we just keep learning about things like that, and then every now and then we find some opportunity.

The Bank of America — whenever it was — in 2011 — was subject to a lot of rumors, terrible — I mean, lots — big short interest, morale was terrible, and everything else. It just struck me that an investment by Berkshire might be helpful to the bank and might make sense for us.

And I'd never met Brian Moynihan at that point — maybe I'd met him at some function, some party of something, but I had no memory of it — and I didn't have his phone number but I gave him a call. And things like that happen.

And it's not because I calculate some price — precise — P/E ratio or price-book value ratio or whatever it might be.

It is because I have some idea of what the company might look like in five or ten years, and I have a reasonable amount of confidence in that judgment, and there's a disparity in price and value, and it's big.

Charlie, would you like to elaborate?

CHARLIE MUNGER: We don't know how to buy stocks just by looking at financial figures and making judgments based on the ratios.

We may be influenced a little by some of that data, but we need to know more about how the company actually functions. And anything a computer could be functioned to do, in terms of screening — I know I never do it. Do you use a computer to screen anything?

WARREN BUFFETT: No. I don't know how to. (Laughter)

CHARLIE MUNGER: No. Bill's still trying to explain it to me.

WARREN BUFFETT: I — we — you can — it's a little hard to be precise on, because we don't really use screens — (inaudible) were screening everything. But it's not like we sit there and say, you know, we want to look at things that are below the price of book value, or low P/Es, or something of the sort.

We are looking at businesses exactly like we'd look at them if somebody came in and offered us the entire business, and then we try to think, what is this place going to look like in five or ten years, and how sure are we of it.

And most — a lot of companies, you know, we just don't know the answer to it. We do not know which auto company is going to, you know, be knocking the ball out of the park ten years from now or which one is going to be hanging on by its fingernails.

You know, we watched the auto business for 50 years, a very interesting business, but we don't know how to — we don't know how to foresee the future well enough on something like that.

CHARLIE MUNGER: We think that the Burlington Northern will have a computer — a competitive —advantage 15 years from now, with a high degree of confidence. We would never have that degree of confidence about Apple, no matter what their financial statement showed.

WARREN BUFFETT: No.

CHARLIE MUNGER: It's just — it's too hard.

WARREN BUFFETT: Yeah. We don't know about an oil company ten years from now, you know, in terms of what the product will be selling for or anything.

I would say we're — you know, we're virtually 100 percent confident about a Burlington Northern, or a GEICO, or some other companies that I won't name.

CHARLIE MUNGER: People with very high IQs who are good at math naturally look for a system where they can just look at the math and know what security to buy. It's not that easy.

You really have to understand the company and its competitive position, and the reasons why its competitive position is what it is, and that is often not disclosed by the math.

WARREN BUFFETT: Yeah. It's not what I learned from Ben Graham, although the fundamentals of looking at stocks as businesses, and the attitude toward the market and all that, is absolutely still part of the catechism.

But I wouldn't — I don't know exactly how I would manage money if I was just trying to do it by the numbers that —

CHARLIE MUNGER: You'd do it poorly. (Laughter)

WARREN BUFFETT: Yeah. That takes care of that. (Laughs)

4. Disagreement on whether the "new normal" will bring lower returns

WARREN BUFFETT: OK. Carol?

CAROL LOOMIS: This question is from Benjamin Knoll of Greater Twin Cities United Way.

“Every time Bill Gross writes a new essay on the, quote, ‘new normal,’ unquote, I get more depressed about the prospects for my retirement.

“Do you share his view that market returns in the next few decades will be much lower than in the past few? And should we expect Berkshire’s future market returns to be greatly constrained, not only by its size, but also by much lower equity returns overall?

WARREN BUFFETT: Yeah, Charlie and I don’t pay any attention to macro forecasts.

We have worked together now for 54 years, and I can’t think of a time when we made a decision on a stock, or on a company, where a macro discussion — where we’ve talked about macro.

We don’t know what things are going to look like, in any precise way. And, incidentally, naturally, we think if we don’t know it, nobody else knows. That’s the conceit that we have. (Laughs)

And — so we — you know, why talk — why spend time talking about something you really don’t know anything about? I mean it — people do it all the time, but it not very productive. So we talk about the businesses.

I like Bill Gross. Sounds like Lloyd Bentsen, you know, back in the — he’s a friend of mine.

But I don’t — it doesn’t make any difference to me what he thinks about the future, doesn’t make any difference to me, you know, what any economist thinks about it.

I have a general feeling that America will continue to work well. And I don’t — you know — there’s — throughout my adult lifetime, and before that, there’s always been all kinds of opinions that, you know, about what’s going to happen this year or the next year or anything like that. And nobody knows.

What you do know, with a very high degree of certainty, in my view, is that BNSF will be carrying more carloads 10 years from now, 20 years from now; that there will be no substitute for the service that they provide; that there will be two important railroads in the west and two important railroads in the east; and that they will have an asset that has incredible replacement value, nobody could turn out something like it, and that they’ll get paid fairly for what they do. It’s not very complicated.

And to ignore what you know because of predictions about what you don’t know, or what nobody else knows, in our view, it’s just plain silly.

So we don’t have anything against somebody talking about a new normal or an old normal or an in-between normal, but it doesn’t mean anything to us.

My own guess is that people will do very well owning good businesses, if they don't pay too much for them, you know, whether they hold them for 10 years or 20 years or 30 years.

And if they try and time their purchases in some way by listening to forecasts about what's going to happen in business and try and buy and sell them, they're going to do very well for their broker and not so well for themselves.

Charlie?

CHARLIE MUNGER: Yeah. But, of course, Warren, we have a lot of money. We have to do something with it. So we're going to do our thing no matter what the external climate is.

If you're a busy surgeon and trying to decide whether to work two more years before you retire, then you may be more interested, and rationally so, in the new normal.

And I would personally advise the guy to work an extra couple of years. (Laughter)

In other words, I kind of agree with Bill Gross.

WARREN BUFFETT: What do you think the normal is?

CHARLIE MUNGER: Well, less than we've enjoyed in our lifetimes, the new normal.

WARREN BUFFETT: What have we enjoyed in the last 10 years? I mean, you know —

CHARLIE MUNGER: It hasn't been so bad.

WARREN BUFFETT: No. And it hasn't been —

CHARLIE MUNGER: It's not nearly as good as it was in the first 30.

WARREN BUFFETT: Yeah. And do you think it would be worse than the average of the last 10 years?

CHARLIE MUNGER: I think that's quite a conceivable outcome.

WARREN BUFFETT: So take your pick. OK. (Laughter)

5. Fruit of the Loom's vs. Gildan Activewear

WARREN BUFFETT: Jonathan?

JONATHAN BRANDT: Warren, I'm sorry. My last question about solar was directed at Charlie, but my next question is about underwear, so I think you can probably field this one.

WARREN BUFFETT: Boxers or briefs? (Laughs)

JONATHAN BRANDT: I'm not talking.

Over time, Fruit of the Loom and others have lost nearly all of the T-shirt-focused wholesale screen print market to Gildan, a relatively new player with very low cost structure.

Gildan is now going after the underwear-focused retail market and is having some success with certain large customers. Branding is obviously more important in the retail market, but is there any reason to think Fruit of the Loom won't lose significant amounts of share here over time, just as they did in the wholesale screen print market?

What can they do to protect what remains of their franchise?

WARREN BUFFETT: Yeah. You keep — you keep your costs down and you constantly work at brand building, and you try very hard to make sure that your main customers, in turn, have their customers happy with the product, and are happy with the price points that you can deliver it at.

And you're correct that Gildan, in terms of certain aspects, the non-branded aspects, basically, of some parts of the business, has hurt Fruit in the last — well, last 10 years, certainly.

But we turn out first-quality, low-priced underwear with a strong brand recognition. And I think it will be very tough to either build a brand against it or to beat our costs significantly.

Now Gildan pays very little in the way of income taxes, you know, because they route stuff through the Cayman Islands, and that's a modest factor.

But I think you'll find five years from now, or 10 years from now, that our market share in men's and boys', particularly underwear, will hold up.

But you're right. They're a competitive threat. Hanes is a competitive threat. And it's not a business that you can coast on. It's not Coca-Cola, but it's not an unbranded product, either.

And I think Fruit will do reasonably well, but it will not get anything like, you know, the kind of profit margins that you can get in certain branded products.

Charlie?

CHARLIE MUNGER: Yeah. And then, too, as many products as we have, we may average out pretty well, in terms of market shares, but we're not going to win every skirmish or every battle.

6. Influential books and early investments

WARREN BUFFETT: OK. Station 2.

AUDIENCE MEMBER: Yeah. Hi, Warren. Hi, Charlie. I'm Fritz Hauser (PH) from Offenburg, Germany.

I'd like to know what 10 books influenced you the most and that weren't written by Graham and Fisher, and I'd also like to tell you that I think it would be great if you would publish the portfolio statements of the Buffett Partnership years.

I think there are a lot of small investors that would get a kick out of knowing, you know, what you invested and how you went ahead and analyzed the companies. Thank you.

WARREN BUFFETT: Yeah. Well, Charlie ran something called Wheeler,Munger and his portfolio was even more interesting, so we'll start with you, Charlie. (Laughs)

He ran a more concentrated portfolio than I did in those days.

CHARLIE MUNGER: Yeah. I don't think people would be greatly helped. You wouldn't recognize the names, most of them, clearly, by the partnership.

You'd recognize American Express. Rattle off some of the names.

WARREN BUFFETT: Yeah. Well, we can start with Mosaic Tile and —

CHARLIE MUNGER: The map company.

WARREN BUFFETT: — Meadow River Coal & Land. There's hundreds of them. Flagg-Utica, Philadelphia Reading Coal & Iron, you name it.

I've literally owned — I bet I've owned 4- or 500 names at one time or another, but most of the money's been made in about 10 of them.

CHARLIE MUNGER: And I couldn't name 10 books either that have — that I regard as that much better than the next 10. My mind is a blend of so many books I can't even sort it out anymore. (Laughter)

WARREN BUFFETT: Yeah. "The Intelligent Investor" changed my life, in terms of — I literally had read every book in the Omaha Public Library by the time I was 11 on the subject of investing, and there were a lot of books.

And there were a lot — there were technical books, Edwards & Magee, I mean, that was a classic in those days, and a whole bunch of them, Garfield Drew. But — and I love — I enjoyed reading them a lot. Some of them I read more than once.

But I never developed a philosophy about it. I enjoyed it. I charted stocks. I did all that sort of thing.

Graham's book gave me a philosophy, a bedrock philosophy, on investing that made sense. I mean, he taught me how to think about a stock, he taught me how to think about the stock market, and he taught me that the market was there not to instruct me but to serve me.

And he used that famous "Mr. Market" example. He taught me to think about stocks as pieces of businesses, rather than ticker symbols or things that, you know, you could chart, or something of the sort.

And so it was that philosophy — and in some way, further influenced by Phil Fisher's book — and Phil Fisher was just telling me the same thing that Charlie was telling me, which was that it's very important to get into a business with fundamentally good economics, and one that you could ride with for decades, rather than one where you had to go from flower to flower every day.

And those — that philosophy has carried me along. Now, I've learned different ways of applying it over the years, but it's the way I think about businesses now.

I have not found any aspect of that bedrock philosophy that has flaws in it. You have to learn how to apply it in different ways.

So those are the books that influenced me.

And, of course, in other arenas, Charlie's probably read more biography than anybody that I know of. And I like to read a lot of it.

We're just about through reading the Joe Kennedy biography. You've read that, haven't you, now, Charlie?

CHARLIE MUNGER: Yeah.

WARREN BUFFETT: You know, I'm not sure you want to emulate everything he did, but it's still interesting reading. (Laughs)

We read for the enjoyment of it. I mean, it's been enormously beneficial to us, but the reason we read is that it's fun. And, you know, it's still fun.

And on top of it, we have gotten very substantial benefits from it. My life would have been different if Ben Graham hadn't gone to the trouble of writing a book, which he had no financial need to do at all. You know, I would have a very different life.

7. Buffett remains bearish on airlines

WARREN BUFFETT: OK. Becky.

BECKY QUICK: This question comes from Bill Miller of Legg Mason.

He writes, “The U.S. airline industry has been plagued with terrible economics for over 100 years. With the pending merger of USAir and American, the industry will have consolidated to the point where the top four carriers will control almost 90 percent of the traffic.

“As a result, the industry has been consistently profitable this past several years, with many of the airlines now earning double-digit returns on invested capital and generating substantial free cash flow.

Do you think the industry’s much improved economics are likely to persist? And would there be any economic benefits if Berkshire were to own a domestic airline and pair it with NetJets?”

WARREN BUFFETT: Yeah. Well, the answer to the second is no.

But the question about the industry is really interesting, because it is true that it has consolidated very significantly.

And in some businesses, you can have only two competitors and they’re still terrible businesses, they beat each other’s brains out. And sometimes they end up competing to do very stupid things. You can argue that that’s what happened with Freddie Mac and Fannie Mae. I mean, enormous companies that had a huge advantage over everybody else, but they still, in their battle to both report higher earnings every quarter and to beat the other guy out, you know, drove prices for insuring loans down to the improper levels, and did a lot of other stupid things, too.

So you see — you do see certain industries where once they get down to very — a very few companies, do extremely well. And you see other industries where, even when they get to be two of them, they don’t do that that well.

I mean, you can take Coke and Pepsi in the United States.

I mean, they’re the only two colas that people can name, and 50 percent or so of the soft drinks are colas. But if you go into a supermarket on the weekend, you will see them pricing their product at ridiculously low prices and competing very vigorously.

So it’s very industry specific. The airline industry, you know, has this situation where they have very, very, very low incremental costs per seat, you know, with enormous fixed costs, and the temptation to sell that last seat at a very low price is very high and it’s very — and sometimes it can be very difficult to distinguish between the last seat and other seats.

So it's a labor-intensive, capital-intensive, largely commodity-type business, and it's been — as Bill Miller points out in that question, it's been, you know, a death trap for investors ever since Orville [Wright] took off.

I mean, as I've said, if there had been a capitalist at Kitty Hawk he should have shot down Orville and done us all a favor. (Laughter)

But the — but having neglected to do that, investors have poured money into airline companies, and aircraft manufacturing companies, now for 100 years-plus, with terrible results.

And if it ever gets down to where there's one airline and there's no regulation, it will be a wonderful business. And then the question is whether, having gotten down, now, through a lot of bankruptcies, to a relatively few that are doing a high percentage of the seat miles, whether it's a good business yet. I don't know the answer, but I'm skeptical.

Charlie?

CHARLIE MUNGER: Well, the last time we were presented with a similar opportunity was when the railroads did exactly what Bill Miller suggests. The railroads got down and consolidated and got better control of their labor costs and it turned into a wonderful business. And what did we do? We missed it. We stumbled in very late to the party, right?

WARREN BUFFETT: Right.

CHARLIE MUNGER: So we've proven ourselves to be slow learners in this field, and it's conceivable, isn't it, that Bill Miller is right in what he suggests?

WARREN BUFFETT: Which way do you bet?

CHARLIE MUNGER: It goes into my too hard pile. (Scattered laughter)

WARREN BUFFETT: Mine, too.

CHARLIE MUNGER: But he could be right.

WARREN BUFFETT: Yeah, sure he could. And it will be fun to watch.

But we like things we have stronger feelings about.

We do not think that things will change dramatically in — well, with See's Candy, you know, it's — we've got — even there, you know, the real profitability is limited to the West Coast, but we do not see some competitor coming along and taking away business.

CHARLIE MUNGER: You really couldn't create another railroad and —

WARREN BUFFETT: I hope not.

CHARLIE MUNGER: — and you — and you can create another airline.

WARREN BUFFETT: Very easily, and you have people that like to do it.

CHARLIE MUNGER: That's what we don't like about it.

WARREN BUFFETT: And people love doing it. It's exciting to people.

And you can sell the idea. I've had, probably, a dozen proposals over the last 25 or 30 years from people that want to get into the airline business one way or the — and a number of them have. It's sexy, for some reason.

I mean, it — you know, if you go to the office of some Mr. Big CEO and say, "I want to talk to you about this new airplane," you get in the door. You know, I mean, if you want to talk to him about hauling coal or something, it's a little different.

So it is a business that attracts people. And you can go out and raise money for a new airline, and the record is — it's really been something. I don't know how many bankruptcies there have been in the airline field, but it's an enormous number.

And, of course, some have done it more than once. We bought USAir. I bought that. I was at Gorat's with [CEO] Ed Colodny, and he explained to me how wonderful the airline was — he's a good guy, incidentally — and I wrote a check.

And by the time the check was cashed, they were having troubles. I mean, it did not take long.

CHARLIE MUNGER: No.

WARREN BUFFETT: And then they went bankrupt twice. We were very lucky on — we actually made quite a bit of money on it, as it turned out, because there was a little blip at one point. But I think it went bankrupt twice after we bought it.

And Charlie and I were on the board, and we would look at these projections, you know, and they were just ridiculous. I mean, they never came true, did they, Charlie?

CHARLIE MUNGER: No, no, no. It was —

WARREN BUFFETT: We were very popular because we actually pointed that out a few times. (Laughter)

8. Mixed feelings on Berkshire stock buybacks

WARREN BUFFETT: OK. Cliff.

CLIFF GALLANT: I want to ask you about share repurchases. How hard a floor should shareholders think about the 1.2 times book value buyback multiple?

Are there circumstances under which you would not be buying back at 1.2?

WARREN BUFFETT: Yeah. Well, generally speaking, book value has got nothing to do with the price at which you should purchase your shares; intrinsic business value does. And the correlation between intrinsic business value and book value throughout the investment universe is — you know, there's virtually no correlation.

So book value is unimportant to most companies. It actually has — it has a reasonable tracking utility at Berkshire.

Our intrinsic business value is very considerably above book value, and we have signaled that — we'll say it right here, we've said it before — but in addition, we've signaled that by saying that we would repurchase our shares as long as we had a substantial cash balance, met all the needs of our operating companies, at 120 percent of book value, and if we got the opportunity to buy it there, we would probably buy a whole lot of it.

The calculus is very much what I put in the report. You know, you take care of your business with money first, and if you can buy additional businesses at something where you add to the per-share value of the business, you do that.

If you can repurchase your shares at a significant discount from intrinsic value, it like buying dollar bills at 90 cents or 80 cents or whatever it may be, and it's a very sure way of improving per-share value.

It's been very difficult for us to do it because every time we announce it, people say, "Well, if it's — if he thinks it's worth more than 120 percent of book," you know —

CHARLIE MUNGER: Yeah. Those cheapskates are willing to pay that.

WARREN BUFFETT: Yeah, right. Well, if at least one cheapskate is willing to pay that, the —

And, you know, they're right. And we don't really — we've got mixed emotions on it.

We don't really like the idea of running a company where it makes most of its money by buying its partners out at a discount, but if partners want to sell out at a discount, we also like the idea of buying and making, you know, sure money that way.

We haven't done much of it. Most of the time our stock has sold in a reasonable range in relation to intrinsic business value. We would think that probably a fairly significant percentage

of the time in recent years it sold at at least some discount. There were a few years when we thought it sold for more than intrinsic business value.

But if it, in our opinion, the directors' opinion, the stock is selling at a significant discount and we've got the money around and we've got the stock offered to us in a reasonable quantity, we will buy it, and then — and there could be circumstances — it's unlikely — but there could be circumstances where we'd buy a whole lot at a price that would be attractive for the stockholders who stayed in.

Charlie?

CHARLIE MUNGER: Nothing to add.

9. Munger won't be moving to Omaha

WARREN BUFFETT: Station 3.

AUDIENCE MEMBER: Hi there. Sean Cawley. I'm a real estate agent in Los Angeles, California.

Question for Charlie. It's kind of a real estate question, and it's also a company culture question. Have you ever considered moving to Omaha to be closer to corporate headquarters?

CHARLIE MUNGER: (Laughs) Oh, I think the answer to that is no. (Laughter)

WARREN BUFFETT: I'm sure the answer to that is no.

Our partnership works extremely well. And even though we're somewhat technophobic, we have gotten to the point where we can handle using the phone — (laughter) — don't push us beyond that.

CHARLIE MUNGER: No, we've never learned anything beyond the phone.

WARREN BUFFETT: But we — I mean, as a practical matter, we each know exactly how the other guy thinks, so that we don't really even need the phone, exactly. (Laughter)

We used to do a lot of phoning back when it cost a lot of money to phone. Now it doesn't cost anything to phone, and we don't talk to each other, hardly. (Laughter)

Charlie — but Charlie has a lot of fond thoughts about Omaha, incidentally, as do I.

CHARLIE MUNGER: Yes. Although, I — as I said earlier on this weekend, they're rebuilding it so rapidly now that I felt like Rip Van Winkle. They've torn down so many of the buildings I remember. It's amazing how much Omaha has changed the last five years.

WARREN BUFFETT: Well, you have to remember that a third of the lifetime of the country has passed during our lifetime, so you have to expect a little change occasionally, Charlie. (Laughter)

10. Climate change isn't a factor for short-term insurance rates

WARREN BUFFETT: OK. Andrew.

ANDREW ROSS SORKIN: OK, Warren. We got a couple of questions related, this year, to climate change and its impact on the company.

So let me ask this question from Clem Dinsmore, who asks: "If asked, what would the underwriting experts at your casualty insurance and reinsurance companies advise you and your fellow board members are the emerging risks to Berkshire's many enterprises from the changes in extreme weather associated with climate change?"

And I would add that Jed McDonald asked a separate question, but related, saying, "What are your thoughts on the price on carbon debate?"

WARREN BUFFETT: Yeah. Well, as you've noticed if you've been here the last few years, the climate really is getting a lot warmer. (Laughter)

Obviously — well, Charlie knows far more about science than I do, which is not saying a whole lot, but the — my general feeling is that there is a — certainly a reasonable chance — that people that are worried about warming and the effect of CO2, et cetera, are right.

But I don't know enough so that I can say that, you know, that I can speak as any kind of an expert on it.

I don't know the answer on it, but I certainly am willing to assume that — there are a lot of very smart people who think that, and I think that it's a reasonable assumption.

I don't think that it makes any real difference in assessing insurance rates from year to year.

We have a general tendency to be pessimistic in our assumptions about the likelihood of natural catastrophes, but we would have that general bias, which I think is useful, regardless, if there were no carbon emissions of any kind going on.

We would still assume that whatever the past history had been of natural disasters, we would assume that they were going to be somewhat worse.

And the global warming, in terms of resetting prices of insurance from year to year, is not a real factor.

Our general pessimistic bias is something of a factor.

The second part about pricing of carbon emissions, do you want to repeat that again?

ANDREW ROSS SORKIN: The full question — and I abbreviated it — was, "What are your thoughts on the carbon — the price of carbon — debate?

"Do you think it's a feasible way, for example, to incentivize efficiency improvements and capture the externalities of carbon's damaging effects, or is it a lofty, idealized concept too tricky to figure out in practice?"

WARREN BUFFETT: I would say that the question calls for having Charlie give the answer. (Laughter)

CHARLIE MUNGER: Well, you've got to realize that I'm a Caltech-trained meteorologist, but that was before they'd invented most of modern meteorology. (Laughter)

I think that I think that carbon trading is pretty impractical, a whole bunch of nations with different ideas, and so on.

And I think if you're going to change habits, the correct answer is carbon taxes.

I think Europe, because they're socialists and wanted to tax the thing the people needed the most, they put these big high taxes on motor fuel. So they did it by accident, and not because it was a good idea, vis-a-vis global warming and a lot of other issues, but because they really needed the money.

But I think they stumbled into the right policy. I think the United States should have way higher taxes on motor fuel, and that's efficient. (Applause)

Some group of shareholders, though. They like clapping for high taxes. (Laughter)

WARREN BUFFETT: They weren't all clapping. (Laughter and applause)

11. Doug Kass's short-selling challenge

WARREN BUFFETT: OK. Doug.

DOUG KASS: Warren, my next question is both a question and an unusual challenge.

I'm asking this next question because in the past, you've been open to inviting your audience to apply for jobs.

In 2002, you suggested that shareholders who thought they were eligible to send in their qualifications if they were interested in seeking a seat on your board of directors.

And, again, in your 2006 letter, when you advertised for a successor to Lou Simpson at GEICO, you said at the time "Send me your resume."

In the past, you have discussed your views on short selling. You have cited that stocks tend to rise over time, and you've talked about the asymmetry between reward and risk.

By contrast, the last 15 years has demonstrated that short selling can be a value additive tool to total return when done by professionals. In fact, I believe Todd Combs had success as a short seller when you hired him.

CHARLIE MUNGER: He had so much success he stopped doing it. (Laughter and applause)

DOUG KASS: Yes, Charlie, but he got the job from that success. My question is —

WARREN BUFFETT: No, no, he didn't. (Laughs)

Can't slide that one in there, Doug. (Laughter)

DOUG KASS: My question is: would you ever consider committing capital to a short-selling strategy? Would you or Berkshire consider being my Homer Dodge, who invested in your partnership after the original seven investors?

Would you or Berkshire Hathaway be willing to give my firm at least $100 million in a managed account?

If Seabreeze failed to outperform the increase, during the two-year period, of the book value increase in Berkshire, all the earned fees earned would be contributed half to the Sherwood Foundation, and half to two charities of my choice, including the Jewish Federation of Palm Beach County?

And even if Seabreeze outperformed Berkshire's change in book value, 25 percent of the earned fees would be contributed to the charities.

And I want to add something else. You talked about being technophobic.

Technology may be very hard for Berkshire to invest in, but it is also disruptive to many industries whose business models are scathed by it, and this produces very fertile ground for short-selling opportunities.

WARREN BUFFETT: Well, we got to —

CHARLIE MUNGER: Let me add to that.

WARREN BUFFETT: OK — 1:55 without an ad, but — (laughs)

CHARLIE MUNGER: The answer to your question is no. (Laughter and applause)

WARREN BUFFETT: Charlie and I are no strangers to short selling. I mean, we both —

CHARLIE MUNGER: Failed at it.

WARREN BUFFETT: Yeah. (Laughter)

So we'll — just think about how lucky you are. You don't have the competition from all kinds of people that listen to us or — ourselves.

No, we — I may even propose a little wager at some point, but we'll let that ride for the time being.

I've known — well, if you go back far enough, you know, we did a reasonable amount of short selling, and I've certainly identified lots of companies that I thought were far overpriced, and I've identified a fair number of companies that I not only thought, but was virtually certain, were frauds. And so, Charlie — we've been seeing them ever since we got in the business.

But making a lot of money short selling, still, is not a game that appeals to us over a long period of time. It's one of those things that —

CHARLIE MUNGER: We don't like trading agony for money. (Applause)

WARREN BUFFETT: But we wish you well. (Laughter)

12. Reluctantly paying more for a great business

WARREN BUFFETT: Station 4.

AUDIENCE MEMBER: Ben Sauer (PH) from Shreveport, Louisiana.

Could you be more specific about what factors you considered when determining what a fair price was for an acquisition such as Heinz?

And also, what sources do you use to make judgments about major changes that will affect an industry?

WARREN BUFFETT: Well, we usually — we usually feel we're paying too much. Isn't that right, Charlie? (Laughs)

But we find the business so compelling, the management, our associates, so compelling, that we gag and we get there on the price.

But we — there is no mathematical — perfect mathematical — formula.

Looking back, when we've bought wonderful businesses that turned out to continue to be wonderful, we could've paid significantly more money, and they still would have been great business decisions. But you never know 100 percent for sure.

And so it isn't as precise as you might think. Generally speaking, if you get a chance to buy a wonderful business — and by that, I would mean one that has economic characteristics that lead you to believe, with a high degree of certainty, that they will be earning unusual returns on capital over time — unusually high — and, better yet, if they get the chance to employ more capital at — again, at high rates of return — that's the best of all businesses. And you probably should stretch a little.

Charlie and I have had several conversations where we were looking at a building — a business — which we liked, and were sort of gagging at the price, and Charlie or I will say, you know, "Let's do it," even though it kind of kills us to pay that last 5 percent.

We did that with See's Candy. Charlie was the one that said, "For God's sakes, Warren, write the check." I was the one that was suffering.

But it's happened quite a few times, hasn't it, Charlie?

CHARLIE MUNGER: It almost always happens. (Laughter)

Modern prices are not cheap.

WARREN BUFFETT: No, no. And great businesses, you know, you're not going to find lots of them, and you're not going to get the opportunity to buy them and — although you do in the market.

The stock market will offer you opportunities for profit, percentage-wise, that you'll never see, in terms of negotiated purchase of business.

In negotiated purchase of a business, you're almost always dealing with someone that has the option of either selling or not selling, and can sort of pick the time when they decide to sell, and all of that sort of thing.

In stock markets, it's an auction market. Crazy things can happen.

You can have, you know, some technological blip that will cause a flash crash or something. And the world really hasn't changed at all, but all kinds of selling mechanisms are tripped off, and that sort of thing.

So you will see opportunities in the stock market that you'll never really get in the business market.

But what we really like, we really like buying businesses to hold and keep. We like buying cheap marketable securities, too. But particularly when you've got lots of cash coming in and you're going to continue to have lots of cash coming in, you really want to deploy it in great businesses that you can own forever.

Charlie, anything?

CHARLIE MUNGER: No. It — we're sort of in a different mode now, and that has a great lesson, in that if we'd kept our earlier modes, if we'd never learned, we wouldn't have done very well.

The game of life is a game of everlasting learning. At least it is if you want to win.

WARREN BUFFETT: We want to win.

CHARLIE MUNGER: Yeah.

13. George W. Bush's 10 words of economic wisdom

WARREN BUFFETT: Carol.

CAROL LOOMIS: This question is from Logan Reed (PH) of Pawling, New York, and has both a question and a postscript, and I'm going to do the postscript first. It's friendly.

"I'm an 86-year-old World War II vet, which puts me about halfway between you and Mr. Munger. I would respectfully and urgently request that you quit eating so many hamburgers. (Laughter)

"Those things plug up your arteries, and I want to keep you around for a while, in spite of the fact" — the unfriendliness comes in here — "that you voted for President Obama." (Laughter)

Now, here is the question.

WARREN BUFFETT: This guy is trying to kill me, and he's doing it — (Laughter)

CAROL LOOMIS: "Over the years, you've frequently alluded to your legendary reputation for thriftiness, and you've extolled the virtues of the managers of Berkshire companies who have invariably been extremely cost conscious.

“If these are hallmarks of the philosophy which has enabled you to achieve your astounding success, how can you possibly support an administration which has plunged our country into $16 trillion worth of debt, and has not indicated the slightest concern — (applause) — over the efficiency — inefficiency — over the inefficiency of big government?”

WARREN BUFFETT: Yeah. Well, the 16 trillion, we’ll have to give Bush a certain amount of credit for that, too. (Applause)

They certainly didn’t — certainly wasn’t — the Obama administration that, at least, allowed policy that created the greatest financial crisis and required an appropriate stimulus on the part of the government. (Applause)

But, in the end, I find it totally unproductive — and that fellow at 86 probably is — should have found it out by now — to discuss politics with people. I mean, you’re to have roughly half agree with you and half disagree.

So if you — if you look at this — the trouble is, Charlie and I, even though he’s a Republican, I’m a Democrat, we really don’t disagree as much as you might think based on that.

Otherwise, I could say you could just take your pick here and vote for one of us and ignore the other one, and we would offer a little something for everyone.

The amount of deficit spending in the last four years, the amount of stimulus provided — fiscal stimulus provided — I think, has been quite appropriate in relation to the threat to the economy that was posed by the greatest panic in my lifetime.

I mean, you literally had a situation where Berkshire Hathaway was getting a phone call because General Electric needed money, and we were the last stop.

That is quite a situation. It’s quite a situation when Freddie and Fannie go into conservatorship and WaMu and Wachovia fail, and where money market funds have 5 percent drained out of them in three days, and with a panic underway.

So I — we needed fiscal stimulus in this country.

Now, the real question is: how do you get off of that? And that is a problem, but it’s a lesser problem than we would’ve had if we’d decided to follow some austerity program, in my view, at least, starting in 2008.

How do you feel about that, Charlie?

CHARLIE MUNGER: I agree with you completely. (Applause)

And, by the way, so did George W. Bush.

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: That was bipartisan. We were in so much trouble, that on both sides of the aisle, we finally got together and supported these extreme interventions.

WARREN BUFFETT: George Bush issued, probably, the ten greatest words of economic thought in history. Most people don't give him credit for that.

They think of Adam Smith and comparative advantage and Keynes and animal spirits and all those guys.

But George Bush went out there in September of 2008 and said, "If money doesn't loosen up, this sucker could go down." (Laughter)

I mean, that is a man that knew how to get to the point. (Laughter)

And I give him great credit for it, enormous credit.

And plenty of members of his party did not agree with what he was doing, but we owe him a lot, in that respect.

And, you know, we — our leaders, generally speaking, in both parties, once they were in the terrible trouble, I think they behaved, or came up with policies that, in general, were very useful in avoiding something far worse than what we experienced.

And they weren't easy to do. I mean, it took some guts.

So, I am disturbed by a national debt that grows in respect to GDP. In fact, I wrote an article in The New York Times, an op-ed piece, in — I think maybe 2009 or 2010 — talking about this very problem.

But, you know, we came out of World War II with a debt higher — a gross or net debt — higher in relation to GDP than we have now, and people were predicting terrible things at that time because of that situation, and the country has done sensationally.

The real danger is that it just continues to grow, and it gets easier to print money than exercise some discipline.

But we've encountered far worse problems than we face now. I mean, this is not our country's toughest hour, by a huge margin.

And I think we will do fine, but with a lot of bickering, and kind of nonsense that will bother you when you read about it day to day. But when you look at it from a viewpoint of history 10 or 20 years from now, you will not be that disturbed.

Charlie?

CHARLIE MUNGER: Well, I agree with you about George W. Bush, and I like these nonpartisan episodes when we get together and do things right.

And I also think that our current problems are quite confusing. In fact, if you aren't confused, I don't think you understand it very well. (Laughter)

WARREN BUFFETT: That sort of immunizes you from everything. (Laughs)

How bothered are you by the level of debt in relation to GDP?

CHARLIE MUNGER: Well, I don't think there's any one fixed ratio that is written in the stars.

As a matter of fact, most of the debt, as I conceive it, is not even counted in what you call "debt." The off-the-books debt of the United States is bigger than the on-the-books debt, all the present value of future promises that are unfunded.

WARREN BUFFETT: That can be changed, however.

CHARLIE MUNGER: Yes. But, if they can be changed, but are we really going to take Social Security away from somebody who's worked a lifetime?

WARREN BUFFETT: Well, we shouldn't.

CHARLIE MUNGER: I don't think it's very likely.

WARREN BUFFETT: No, no. But Social Security is not a killer, actually, in terms — if you have a GDP that rises a couple percent in real terms —

CHARLIE MUNGER: Of course — that's the great problem. All of our problems are trivial, if GDP will just rise at 2 percent per annum, per capita.

All these problems that the Republicans are screaming about fade into insignificance if we can do that.

But you've got to have policies that enable you to do it, and I'm not sure we always do that very well. (Applause)

WARREN BUFFETT: OK. Stay tuned.

14. Benjamin Moore won't go downmarket

WARREN BUFFETT: Jonathan.

JONATHAN BRANDT: I have a question about the competitive landscape in the paint business.

I personally always use Benjamin Moore, but some say that Benjamin Moore is disadvantaged because it doesn't control its own distribution, as does Sherwin-Williams, and they note that it has lost market share to Behr, which is sold in the home centers at lower prices.

You recently replaced management there. What changes in strategy and/or pricing, if any, are being undertaken at that unit, and what is the outlook for that franchise?

WARREN BUFFETT: Yeah. Benjamin Moore, it's a relatively small percentage of the total paint industry, but it — at the high end, it is the best regarded paint, and we have not lost position in that respect.

But the — when we purchased Benjamin Moore, I made a promise. I even made a video. It had a dealer system, and people that invested their savings and passed on from generation to generation dealerships from Benjamin Moore, and counted on the company adhering to a dealer system, even though you could always get a huge jump in volume, particularly in the first year, if you went with the big boxes.

So we were always approached by the big boxes, and they said, you know, "Let us take Benjamin Moore into our stores," whether it be Home Depot or whomever. And we would've gotten a big jump in volume when that happened and they would've loved us — to have us — as a brand with that kind of identity in their stores, but it would've represented a total change in the distribution arrangement.

I don't think it would've worked out as well over time, and I know it would have been essentially — particularly after my pledge, which the other — which the management pledged too, they would've been double-crossing a network of dealers that trusted us, and trusted us when we bought it to continue with the policy.

A dealer policy will work with a first-class brand like Benjamin Moore. It will never get the kind of market share as will take a Behr, which is distributed through Home Depot.

We were actually offered Behr at one time. Charlie, do you remember that one?

CHARLIE MUNGER: Yes, I do.

WARREN BUFFETT: Yeah, yeah. But the company was actually investigating, and went on its way to implementing, some moves that would've, in effect, gutted, or we felt would drastically hurt the dealers and violate the pledge that I'd made to them back when we bought it.

So we did have a change there. And we will — we will not follow the Sherwin-Williams path, which is a very — I mean, it's a very effective business strategy. I'm not knocking that at all, but

that is not our strategy. Our strategy will be a dealer strategy, focused on the high end of the market.

CHARLIE MUNGER: Besides, it's worked very well.

WARREN BUFFETT: Oh, yeah, it's worked well, and it'll continue to work well.

It doesn't mean that Sherwin-Williams won't do extremely well. I think they will. It doesn't mean that Behr won't do well. I think they will.

But we are in a different segment and it's up to us to protect and really foster the dealer distribution network, and I think we can have something, and do have something, very special with those dealers and with the position that Benjamin Moore has.

But it will not lead to far higher market shares or anything. I think it will lead — and it has — to very decent profitability. Benjamin Moore is a good business, and I think it will continue to be a good business.

Charlie?

CHARLIE MUNGER: Well, I agree totally. I always wish we could buy five more like it tomorrow.

WARREN BUFFETT: Yeah, exactly.

15. Stock strategy

WARREN BUFFETT: OK. Station 5.

AUDIENCE MEMBER: Derek Foster, Ottawa, Canada.

First of all, thank you, Warren, for sharing all your information. You've changed my life. I took finance in university, couldn't understand Greek formulas, but now I can invest reasonably well.

My question to you is, in the past you've said for an investor, you should simply — for 99 percent of investors — you should simply stick money in an index fund and let it go and don't worry about it. Those 1 percent of investors, choose your best five stocks and put a substantial amount of money in it.

I'm just wondering, how about a strategy of, perhaps, buying 20 of the best stocks in America, you know, Procter & Gamble, Coca-Cola, Johnson & Johnson, whatever, the companies that have been around for centuries — or a century or decades or whatever — and just leaving it at that.

Do you think that that would outperform an index fund over the long term? And I want Charlie's opinion as well.

WARREN BUFFETT: Well, I don't know whether you're saying the 20 largest companies or the 20 best. You might get different thoughts from different people on what they are.

But I think you would — probably the 20 you would pick would virtually match the results of an index fund. Who knows exactly which ones would be the best?

But the real distinction — and Graham made this in his book, basically — is between the person who is going to spend an appreciable amount of time becoming something of an expert on businesses, because that's what stocks are, or the person who is going to be busy with another profession, wants to own equities, and actually will actually do very well in equities. But the real problem they have is that they may tend to get excited about stocks at the wrong time.

You know, they, really, the idea of buying an index fund over time is not to buy stocks at the right time or the right stocks. It's to avoid buying them at the wrong time, the wrong stocks.

So equities will do well over time, and you just have to avoid getting — you know, getting excited when other people are excited, or getting excited about certain industries when other people are, trying to behave like a professional when you aren't spending the time and bringing what's needed to the game to be a professional.

And if you're an amateur investor, there's nothing wrong with being an amateur investor, and you just simply — you've got a very logical, profitable course of action available to you, and that is simply to buy into American business in a broadly diversified way and put your money in over time.

So I would say your group of 20 will probably match an index fund, and you'll probably do well in that, and you will do well in an index fund.

Charlie?

CHARLIE MUNGER: Well, I have nothing to add. I do think it's — that knowing the edge of your own competency is very important. If you think you know a lot more than you do, well, you're really asking for a lot of trouble.

WARREN BUFFETT: Yeah. And that's true outside of investments, too.

CHARLIE MUNGER: Yes. Works particularly well in matrimony. (Laughter)

WARREN BUFFETT: Do you want to give any other advice on that subject?

CHARLIE MUNGER: No.

WARREN BUFFETT: He gave it in the movie. I saw people taking notes.

16. Are Buffett's stock donations hurting Berkshire's price?

WARREN BUFFETT: OK. Becky?

BECKY QUICK: This question comes from James Brodbelt Harris of Columbus, Ohio.

He says that your enormously generous multibillion charitable gifts of Berkshire Hathaway stock over the past decade have, and will continue to be, sources of salable assets for the charities linked to the Buffett, Gates, and Munger families.

Could annual sales of billions of dollars' worth of donated stock by these charitable foundations be a reason why shares have traded under 120 percent of book value, and will announced share repurchase plans fully address this selling by the charitable funds in the coming decade?

WARREN BUFFETT: Yeah. I give away 4 3/4 percent of my stock, we'll say, every year, and let's say that's $2 billion worth of stock, roughly. That's 1 percent — a little less than 1 percent — of the market value of Berkshire.

Many companies in the New York Stock Exchange trade over 100 percent a year. A 1 percent sale annually of the outstanding capitalization is absolutely peanuts, and you can even argue, in some cases, that it can aid, in terms of market price, because the availability of stocks sometimes determines whether people get interested in buying.

But a supply of 1 percent annually is not going to change the level at which a stock trades. I mean, it just it's insignificant compared to the volume.

Berkshire — I think Berkshire's volume, A and B combined, is — probably averages, what, 4 or $500 million a day, so 2 billion spent over a year is not going to affect things.

And you can argue that, you know, everybody else has a right to sell their stock or give it to a charity. I don't think I should be totally tied up, in terms of being able to give the stock away.

Charlie?

CHARLIE MUNGER: Well, there's nothing so insignificant as an extra $2 billion to an old man. (Laughter)

WARREN BUFFETT: I've never given away a penny that in any way changed my life. Have you, Charlie?

CHARLIE MUNGER: No, of course not.

WARREN BUFFETT: We never even thought of it. (Laughs)

CHARLIE MUNGER: It would be unthinkable.

WARREN BUFFETT: It's — it has a lot more utility in the hands of other people than it does in my safe deposit box.

17. Most of our opportunities will be in the U.S.

WARREN BUFFETT: OK. Cliff? (Applause)

CLIFF GALLANT: Looking over your first quarter results in the 10-Q, I was wondering — and this might apply more to the noninsurance businesses — what are you seeing in terms of reading the tea leaves for the U.S. economy right now?

Are you starting to see lift? And I'm curious if you have any — if you feel any — need to start to expand Berkshire internationally outside of the U.S.?

WARREN BUFFETT: Well, we're willing to go, you know, anyplace where we think we understand what things are — in a reasonable way— what things are going to look like in five or 10 years, and where we get our money's worth, and good management, and all of the things that we emphasize.

But — so we don't — we've never foreclosed anything, but we're going to find most of our opportunities in the United States. It's just the nature of things that this is a huge, huge market for businesses, and we're better known here.

But, you know, most of our deals will take place here, but we find things outside the United States, particularly in terms of bolt-on acquisitions.

In terms of current business, ever since the fall of 2009, coming on four years, we've seen a gradual improvement. And sometimes people have gotten encouraged to think it was speeding up quite a bit, and then they get feeling that — they start talking about a double-dip, which I've never believed in and hasn't happened.

What we see overall is just a slow progress in the American economy. You saw those figures on carloadings for the first 17 weeks. And, you know, we were up 3-and-a-fraction percent, but the other railroads were up 4/10 of a percent, so the industry as a whole might be up 1 percent or thereabouts, a little over 1 percent.

This economy is not — for the last four years — it's not come roaring back in any way, shape, or form.

It's never faltered, and I wouldn't be surprised if it keeps going this way.

Now, finally, the overhang in housing ended — it ended about a year ago — but — so we're starting to get — we're seeing some recovery in home prices, which has a big psychological effect, and we're seeing some improvement in construction.

But we don't want to start overbuilding again. We really want to have housing starts that more or less equal household formation. And I think we're seeing that.

So if you ask me where we're going to be when we meet here next year, you know, I think we will have moved forward.

But I don't think it will be in any surge of any sort, but I don't think we'll stall, either.

Charlie?

CHARLIE MUNGER: Well, it's not a field where —

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: — I've been good.

WARREN BUFFETT: We do know what's going on now, though. I mean —

CHARLIE MUNGER: Yeah, we know what's going on now.

WARREN BUFFETT: And I guess that ends it? (Laughs)

CHARLIE MUNGER: Can't make a lot of money knowing what's going on now. (Laughter)

WARREN BUFFETT: And you can't make a lot of money thinking you know what's going to go on tomorrow if you don't, either.

We will — we'll just keep — we keep playing the game. I mean —

CHARLIE MUNGER: Yeah, we keep playing the game.

WARREN BUFFETT: And if we hear about something tomorrow that we can spend 15 or $20 billion on and we feel we like the business, United States or otherwise, we'll move in an instant, and if we don't, we won't do anything.

And we just never know when opportunity is going to come along, but it does come along from time to time. And sometimes in financial markets, it comes in a huge way. I mean, that will happen from time to time.

We may not see very many more, but most of the people in this room will see four or five times in their — during their lifetimes — they will see incredible opportunities offered in — probably in equity markets — but maybe in bond markets as well.

People — things will happen, and then, you know, you have to be able to act, and then you have — and that means both in terms of having the ability and also having the mental fortitude to jump in when most people are jumping out. OK. Station 6. Charlie, you want to —

CHARLIE MUNGER: No.

18. How should a young money manager attract investors?

WARREN BUFFETT: OK. Station 6.

AUDIENCE MEMBER: Hi. Brandon from Los Angeles.

I'm in my 20s and I'm starting a partnership. What advice do you have about getting people to put in money before I have a track record as a solo investor? (Laughter)

WARREN BUFFETT: Well, you haven't sold me. (Laughter)

No, I think people should be quite cautious about investing money with other people, even when they have a track record, incidentally. There are a lot of track records that don't mean much.

But overall, I would advise any young person that wants to manage money, and wants to attract money later on, to start developing an audited track record as early as they can.

I mean, it was far from the sole reason, far from the sole reason, that we hired Todd and Ted, but we certainly looked at their record, and we looked at a record that we both believed and could understand, because we see a lot of records that we don't really think mean much.

I mean, if you get — you know, if you have a coin flipping contest, as I wrote, you know, some years ago, and you get 310 million orangutans out there and they all flip coins and they flip them 10 times, you know, you will — instead of having 300 million left, you'll have 300,000, roughly, left that'll flip ten times in a row successfully.

And those orangutans will probably go around trying to attract a lot of money to back them in future coin flipping contests.

So it's our job when we hire somebody to manage money to figure out whether they've been lucky coin flippers or whether they really know what they're —

CHARLIE MUNGER: When you had his problem, didn't you scrape together about $100,000 from a loving family?

WARREN BUFFETT: Yeah. Well, I hope they kept loving me after they gave me the money. That was —

Well, it was very slow, and it should have been very slow. As Charlie has pointed out, some people thought I was running a Ponzi scheme, probably, there.

And other people may not have thought it, but it was to their advantage to sort of scare people because they were selling investments in Omaha.

But you — to attract money, you should deserve money, and you should develop a record over time that — and then you should be able to explain to people why that record is a product of sound thinking rather than simply being in tune with a trend or simply just being lucky.

Charlie? You're starting today and you're 25 years old. How do you attract money?

CHARLIE MUNGER: I think most people start with friends and family, or people whose trust they've already earned in some other way. So it's hard to do when you're young, and that's why people start so small.

WARREN BUFFETT: And a relatively few will be successful.

CHARLIE MUNGER: That's right, too.

WARREN BUFFETT: Some of them — a great many will be successful and make — I mean, you know, we have the hedge fund record here. And during that time, the hedge fund managers have probably made a very considerable amount of money.

As I pointed out, Todd and Ted, working under a 2 and 20 arrangement, if they put the money in a hole in the ground, would make $120 million each this year.

So it's not exactly an arrangement that you don't want to think about a little bit before you engage in it.

CHARLIE MUNGER: The arithmetic attracts many of the wrong sort of people.

WARREN BUFFETT: Naturally, we thought we were exceptions.

CHARLIE MUNGER: Yes.

19. Is Ajit Jain going to run Berkshire after Buffett?

WARREN BUFFETT: Andrew?

ANDREW ROSS SORKIN: OK. At Berkshire, there is a unique dynamic that exists between your recognition of Ajit's special skills and Ajit's special skills.

You comment often about how unique Ajit's skills are. So just tell us, is Ajit your successor? (Buffett laughs)

And if not, what happens to Ajit's businesses without Ajit?

WARREN BUFFETT: Well, they won't be without Ajit for a long time. And he — what — he's remarkable in many ways, but one of the ways he's particularly remarkable is that when people start copying something he's doing and turning what was maybe quite profitable into something that becomes something every Tom, Dick, and Harry is doing, he figures out new ways to do business.

And I notice you started with the 'A's when you started on a possible successor with Ajit, and you won't have any more luck when you get to the 'B's. (Laughs)

Charlie?

CHARLIE MUNGER: Well, I think the basic answer is that if Ajit ever is not with us —

WARREN BUFFETT: We won't look as good.

CHARLIE MUNGER: Yeah, we won't look as good, right.

WARREN BUFFETT: And that's true of a number of other managers, too. We have an extraordinary group of people, in most cases, who do not need the money that they earn working for us. They may make substantial money. And they are doing a job for you shareholders and for me and Charlie that you can almost say we don't deserve.

But they are having — I think they're having — a good time running their businesses. The one thing we do is try and create an atmosphere where they can enjoy running the businesses rather than spend all their time running back and forth to headquarters and doing show-and-tell operations and that sort of thing.

And it's taken a long time, though, too. I mean, we operated Berkshire for 20 years without Ajit. If he'd come in the office in 1965 instead of 1985, we'd probably own the world. (Laughter)

Kind of fun to think about, isn't it?

Charlie?

20. Howard Buffett's role after his father isn't running Berkshire

WARREN BUFFETT: Doug?

DOUG KASS: Howard, like you, I have two sons that I love. Like you, I have a son in the audience today. This question is not meant to be disrespectful —

WARREN BUFFETT: Sounds like it's going to be, but go ahead. (Laughter)

DOUG KASS: — but it's a question I have to ask.

WARREN BUFFETT: OK.

DOUG KASS: Someday your son, Howard, will become Berkshire's nonexecutive chairman. Berkshire is a very complex business, growing more complex as the years pass. Howard has never run a diversified business, nor is he an expert on enterprise risk management.

Best as we know, he hasn't made material stock investments, nor has he ever been engaged in taking over a large company.

Away from the accident of birth, how is Howard the most qualified person to take on this role?

WARREN BUFFETT: Well, he's not taking on the role that you described. He is taking on the role of being nonexecutive chairman in case a mistake is made in terms of who is picked as a CEO.

I don't — I think the probabilities of a mistake being made are less than 1 in 100, but they're not 0 in 100. And I've seen that mistake made in other businesses.

So it is not his job to run the business, to allocate capital, do anything else. If a mistake is made in picking a CEO, having a nonexecutive chairman who cares enormously about preserving the culture and taking care of the shareholders of Berkshire, not running the business at all, it will be far easier to then make another change.

And that — he is there as a protector of the culture, and he has got an enormous sense of responsibility about that, and he has no illusions about — at all — about running the business.

He would have no interest in running the business. He won't get paid for running the business. He won't have to think about running the business.

He'll only have to think about whether the board and himself — but as a member of the board — but whether the board may need to change the CEO.

And I have seen many times, really many times, over 60-plus years or — well, probably 55 years as a director — times when a mediocre CEO, likable, you know, not dishonest, but not the person who should run it, needs to be changed.

And it's very, very hard to do when that person is in the chairman's position. It's not as — it's a bit easier now that you have this procedure where the board meets at least once a year without the chairman present.

That's a very big improvement, in my view, in corporate America. Because it — a board is a social institution, and it is not easy for people to come in, we'll say, to Chicago or New York or Los Angeles once every three months, have a few committee meetings, and maybe have some doubts about whether they've really got the right person running it.

They may have a very nice person running it, but they could do better. But who's going to make a change?

And that's the position that the nonexecutive chairman, in this case, Howard, will be in. And I know of nobody that will feel that responsibility more in terms of doing that job as it should be done than my son, Howard, you know.

CHARLIE MUNGER: Yeah. I think the Mungers are much safer — (applause) with Howard there.

You've got to remember, the board owns a lot of stock, you know. We're thinking about the shareholders. We're not trying to gum it up for the shareholders.

WARREN BUFFETT: Yeah. After my death, whatever it may be in terms of value then, but it would be $50 billion worth of stock, will, over a period of time, go to help people around the world and it makes an enormous difference, you know, whether the company behind that stock is doing well or not.

And both Charlie and I have seen — we've seen some — more than one example — of where a CEO who might be a six on a scale of 10, and is perfectly likable and has, perhaps, helped select some of the directors that sit there, and continues to run the business year after year when somebody else could do it a whole lot better.

And it can be hard to make that — very hard — to make that change if that person controls the agenda and, you know, keeps everybody busy when they come into town for a little while.

CHARLIE MUNGER: You can have a CEO that's nine out of 10 on everything but with deep flaws, too.

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: It helps to have some objective person with a real incentive sitting in the position Howard will be in.

WARREN BUFFETT: The example I've used in the past, I mean, that — you know, that blessed are the meek for they shall inherit the earth, but after they inherit the earth, will they stay meek?

Well, that could be the problem, you know, if somebody got named CEO of Berkshire. It could be a position where people might want to throw their weight around in various ways.

You may have noticed that in the annual report, in terms of our newspapers, I said, you know, I am not going to be telling them who to endorse for president. Ten of them endorsed Romney and two endorsed Obama. I voted for Obama, but I'm not going to change that.

But when I write that sort of thing, I'm trying to box in my successor, to some degree, too, and we do not want somebody using Berkshire Hathaway as a power base in the future. We want them to be thinking about the shareholders. It's that simple.

CHARLIE MUNGER: Sometimes somebody becomes CEO who has the characteristic of a once-famous California CEO, and they used to say about him he's the only man who could strut sitting down. (Laughter)

21. Near-zero rates "brutal" for bonds

WARREN BUFFETT: OK. Station 7.

AUDIENCE MEMBER: Hi. I'm Brad Johnston from Minneapolis, Minnesota.

And my question is within the context of a very low interest rate environment that may be sustained for some time and the challenge that insurance companies are facing in that environment with respect to managing their capital, as well as managing their risk and uncertainty when they have future liabilities and potentially the need for liquidity.

And maybe you could transcend that down to the individual, as well, who is dealing with a low interest rate environment, trying to manage uncertainty and yet still get some cash return from investments.

I appreciate your concept of selling, you know, some of your shares periodically and being better off to do that rather than take dividends, but many people are dealing with the challenges of cash flow.

WARREN BUFFETT: Yeah.

AUDIENCE MEMBER: And then — and just one final tag-on. If you could at the end, could you explain what Federal Reserve Chairman Ben Bernanke believes he has as a tool in his toolbox called the "term credit facility"?

WARREN BUFFETT: No. The answer is I can't. Can you, Charlie?

CHARLIE MUNGER: No.

WARREN BUFFETT: The problem faced by people who have stayed in cash, or cash equivalents, or short-term Treasurys, or whatever, I mean, it is brutal.

The loss — if they live off their income, you know — the loss of purchasing power, it's just staggering when you get into these low interest rates. They are huge victims of a low-interest policy and a dramatically low-interest policy, you know.

Basically, you know, I've written — I wrote back in 2008 to own equities. I mean, it was — equities were cheap.

And you were almost certain to get killed, you know, in terms of — for at least a while — we had a promise that the Fed was going to hold rates very low, so it was a great time to own equities.

And I feel sorry for people that have clung to fixed-dollar investments, particularly short-term ones, during a period like this, and I don't know what I would do if I were in that position.

Imagine having, you know, some sum that seemed like a very large amount of money in the past but, you know, a quarter of a percent on a million dollars is $2,500 a year, and that is not what people anticipated when they were saving over the years.

So I — well, anybody I've advised, I've always felt that owning businesses certainly made sense — more sense — than fixed dollars, under most circumstances.

Not every time in my life, but probably 90 percent of the time in my life, it's made more sense than owning fixed-dollar investments. And it's certainly made dramatic sense a few years ago when equities were marked down to where they were, you know, terrific buys, and where you could see the prospect that fixed-dollar investments were going to pay very little for a considerable period of time.

And I didn't anticipate that we would see the kind of rates for the extended period that we have already, and I don't know how long it will go on.

But it's a real dilemma for people. I get letters — I get a lot of letters — from people that say, you know, "I've got $300,000," and they say, "What should I do?"

So it's — the fallout from low interest rates has hit millions of people in a very harsh way. And you don't read much about it and they don't have much of a voice, but it's been a good argument for owning productive assets rather than dollars during a period like this.

Charlie?

CHARLIE MUNGER: Well, they had to hurt somebody, and the savers were convenient.

WARREN BUFFETT: What would you do about it?

CHARLIE MUNGER: I would've done about what they did.

WARREN BUFFETT: Yeah, so would I.

CHARLIE MUNGER: I would've felt bad about it, but I would have — that's what I would have done.

22. IBM's competitive moat

WARREN BUFFETT: OK. Station 8. We're now going to the shareholder base. We've gone through the panels, and we've got about 45 minutes left and so we're going to give the shareholders a chance to ask — answer — to ask all the questions — maybe answer them — ask all the questions from this point.

Station 8.

AUDIENCE MEMBER: Hi. Chris Hu (PH) from Tokyo, Japan.

Can you talk a little bit more about the IBM investment? Where do you see the moat for that business? And just in the spirit of full disclosure, I work for Microsoft.

WARREN BUFFETT: Yeah. Was your — what was your — the moat about which business?

AUDIENCE MEMBER: IBM.

WARREN BUFFETT: Oh, IBM. Well, I would say that I do not understand the moat around an IBM as well as I understand the mode around a Coca-Cola. I think I have some understanding of it, but I feel I would have more conviction about the moat around a Coca-Cola, or a Wrigley or a Heinz, for that matter, than an IBM.

But I feel good enough about IBM that we've put a considerable amount of money in it. And there's nothing that precludes both Microsoft, which you mentioned, and IBM being successful. In fact, I hope they both are.

We — I've got enough conviction about IBM's position that we took a very large position.

I like their financial policies. I think the odds are good that their position is maintained in a strong way over time, but I don't feel the same degree of conviction about that as I do about the BNSF railroad. I mean, you know, it's very hard for me to think of anything that could go wrong with BNSF. I could think of some things that could go wrong with IBM.

They, incidentally, have a very large pension obligation. Now, they have a large pension fund, too, but you're talking 75 or $80 billion of assets and liabilities that, you know, is a big — it is a big annuity company on the side.

And you can have — balls can take funny bounces in the annuity field. I would rather they didn't have that, but that is a fact that I take into consideration when I buy. They show the assets and liabilities of being roughly equal, but the liabilities are a lot more certain than the assets over time.

Charlie?

CHARLIE MUNGER: Yeah. Well, at least the IBM pension plan has the resources of IBM. Suppose you're a big life insurance company now. All over the world, the life insurance companies have started to suffer the tortures of hell.

In Japan, they agreed to pay 3 percent interest, and, of course, there was no way to earn 3 percent interest once the Japanese policies had been in place a long time.

A whole lot of once revered, secure places look unsecure now.

And around Berkshire, you'll notice the life operations are — where we have our own policies as distinguished from reinsurance — are pretty small, right?

WARREN BUFFETT: Yeah. We do not like giving options in this world, and people tend to — well, particularly they've got a sales force pushing them on, as you have in the life insurance industry. They have tended to give people options that have, in certain cases, cost them huge amounts of money.

It's — you know, you always want to accept an option; you never want to give an option. But the life business is in just the reverse side of that.

Actually, the mortgage business — I mean, you know, Charlie and I were in the savings and loan business. The idea of giving somebody a 30-year mortgage where they can — if it's a good deal for you — they can call it off tomorrow, and if it's a good deal for them, they keep it for 30 years.

Those are terrible instruments. They're good for you if you're buying a house, and I recommend that you — I recommend everybody in this room get a 30-year mortgage immediately on a house for all they can.

If it's a bad deal and rates go to 1 percent, you can refund it. If rates go to 6 or 7 percent, maybe you can buy it back for 70 cents on the dollar or something of the sort.

So the life companies have engaged in that big time — big, big time — in the last few decades, and a lot of them are paying the price, and some of them haven't even realized exactly quite what the problems are.

They're kind of like the fellow in the switchblade fight, you know, where the other guy takes a big swipe at him with a switchblade and the fellow says, "You didn't touch me," and the other guy says, "Well, just wait until you try and shake your head." Well, that's a little bit like where some of the life companies are right now.

Charlie? Anything further, Charlie?

CHARLIE MUNGER: No, that's gloomy enough.

23. Investing with much smaller amounts of money

WARREN BUFFETT: OK. Station 9. (Laughter)

AUDIENCE MEMBER: Hi. My name is Masato Muso. I'm from Los Angeles, California, and an MBA student at Boston University.

You have mentioned that you are 85 percent Benjamin Graham and 15 percent Phil Fisher, and you have also said that if you only had $1 million today, you could generate 50 percent returns.

Since I'm a young investor, this is my question for the both of you: how was your investment strategy different when you were still accumulating money as opposed to managing billions?

Did you focus on specific industries, small cap, large cap, et cetera? Thank you.

WARREN BUFFETT: Well, managing a million dollars is an entirely different game than running Berkshire Hathaway, or running some 20 or $50 billion fund of money.

And if Charlie and I were running a million dollars now or 100,000 or — we would be looking in some — we'd be looking at some — probably some very small things. We would be looking for small discrepancies in certain situations.

And the opportunities are out there, and periodically, they're extraordinary.

But that's something we really don't think about anymore because our problem is handling 12 or 14 billion, or whatever it might be, coming in every year, and that means we have to be looking for very big deals and forget about what we used to do when we were very young.

Charlie?

CHARLIE MUNGER: Yeah. I'm glad I'm through with that particular problem. (Laughter)

WARREN BUFFETT: He worked pretty hard at it when —

CHARLIE MUNGER: Yes.

WARREN BUFFETT: We both did.

CHARLIE MUNGER: Did we ever.

WARREN BUFFETT: Yeah, yeah. We looked under a lot of rocks, and —

CHARLIE MUNGER: I used to make big returns on my float on my own income taxes. Between the time I got the money and I paid it to the government, I frequently made enough money to pay the tax. It was working for small amounts of money and doing it on most things.

WARREN BUFFETT: He didn't tell me how to do it, though. (Laughs)

24. Don't invest in countries or categories

WARREN BUFFETT: OK. Station 10.

AUDIENCE MEMBER: Hi, Warren and Charlie. This is Andy Ling (PH) from Shanghai, China.

Thank you very much for what you have said and what you have done. People around the globe have benefited a lot from your philosophies, so you have fans — even a lot of fans — even in China.

My question is: how did you see investments in emerging markets where Berkshire is spend its investments in places like China? If yes, what kind of industries and companies you are interested in? Thank you.

WARREN BUFFETT: Yeah. We don't really start out looking to either emerging markets or specific countries or anything of the sort.

We may find things, you know, as we go around, but it isn't like Charlie and I talk in the morning and we say, you know, it's a particularly good idea to invest in Brazil or India or China or whatever it may be. We've never had a conversation like that, have we, Charlie?

CHARLIE MUNGER: No.

WARREN BUFFETT: It just won't happen.

We don't think that's where our strength is. We know that our strength is not there. And we think, probably, most people's strength isn't there either. I mean, it sounds good, but I don't really think it's the best way to look at investments.

If you told me that we can only invest —

We're perfectly willing to do it. We owned a lot of PetroChina at one time. We own some BYD now. We've owned securities outside the United States and will continue to.

But if you told us that we could only invest in the United States the rest of our lives, we would not regard that as a huge hardship, would we, Charlie?

CHARLIE MUNGER: Yeah. It's a great way to sell investment advice, to have a whole lot of different categories, lots of commissions, lots of advice, lots of action.

And a lot of things we just — we don't feel we've got enough of an edge so that we want to play.

WARREN BUFFETT: Yeah. When we hear somebody talking concepts, of any sort, including country-by-country concepts or whatever it might be, we tend to think that they're probably going to do better at selling than at investing.

It's just such an easy way — I mean, it's what people expect to hear when — you know, when somebody comes calling that, you know, today we think you ought to be looking at this or that around the world.

The thing to do is just find a good business at an attractive price and buy it.

CHARLIE MUNGER: Our experts really like Bolivia. And you say, "Well, last year you liked Sri Lanka." It's just — we're not comfortable with that.

WARREN BUFFETT: Yeah. And we usually think it's a lot of baloney, but —

CHARLIE MUNGER: That's why we're not comfortable.

WARREN BUFFETT: Yeah. (Laughter)

25. Washington not solely to blame for housing bubble

WARREN BUFFETT: OK. Station 11.

AUDIENCE MEMBER: Hello, Mr. Buffett, and Mr. Munger. My name is Brandt Hooker from Los Angeles.

I want to thank you both, first of all, for all the years of advice and your financial philanthropy, as well as your education and/or knowledge philanthropy you've given to so many investors around the world.

And my question is: the U.S. government was seemingly complicit in enticing the American public to buy a home, and, therefore, a mortgage, at any cost. Do you think our legislators are doing the same thing now, and are we creating a bubble?

WARREN BUFFETT: No. I don't think we're remotely near a bubble, in terms of housing, now.

And I certainly think that your statement is accurate but not complete, in terms of what went on before.

I mean, the whole country, almost, every — really kind of went crazy in terms of housing. And the government was a very big part of it because they're a very big part of the financing of it. And it's certainly true that plenty of legislators were encouraging Freddie and Fannie to be doing things that they shouldn't have been doing, not just in retrospect. I mean, if you looked at it at the time, you could come to that conclusion.

But there were an awful lot of people doing the same thing. I mean, it was coming from all sources. And it had that aspect to it, which bubbles do, where year after year for three or four or five years, whatever it might be, that the skeptics looked like idiots and that the people who jumped on the bandwagon were the ones that were refinancing their houses at ever higher prices and people who were speculating on other houses.

So it just looked all so wonderful. And people are really susceptible to that sort of bandwagon effect where they see their neighbors making easy money, everybody's making easy money but them, and they finally succumb.

It's just — it's the nature of things. And it doesn't mean the people at Freddie or Fannie were necessarily evil — a few of them were — or that legislators, necessarily, were evil, although, again, a few of them probably were. But overwhelmingly, I think most people just get caught up in a grand illusion.

And, you know, it's happened many times in history, it'll happen again, and you can use that very much to your profit.

We're not in that kind of a period now on housing. You've got very, very low interest rates, which support, in many cases, the purchase of houses, because it brings down the payments, obviously.

But I personally, about a year ago, I mean, I recommended to people that they buy houses, and I certainly recommend to people that they finance them now.

And most places I would recommend if you find a — if you're going to live in the community for some time and you find a house that fits your needs, I think it's probably a very good time to buy it, in part because the financing is so unbelievably attractive.

Charlie?

CHARLIE MUNGER: Well, the main problem was that as things got crazier and crazier, the government could've intervened by pulling away the punch bowl before everybody was totally drunk, and instead, the government increased the proof.

And this was not a good idea. But you — it's hard to get governments in a democracy to be pulling away the punch bowl from voters who want to get drunk.

WARREN BUFFETT: Well, it's almost impossible.

CHARLIE MUNGER: Yeah.

WARREN BUFFETT: Yeah. I mean, it isn't —

CHARLIE MUNGER: So you're complaining a little bit about what's sort of inevitable in life. Not too good an idea.

WARREN BUFFETT: Yeah. You'll see it again, not necessarily in housing, but you will see it.

And humans will continue to make the same mistakes that they have made in the past.

I mean, they get fearful when other people are fearful. I mean, that's — you saw it in those money market funds when 175 billion, you know, flowed out in three days. I mean, everybody gets — when people get scared, you know, they — it's very, very pervasive.

I've often thought that, you know, if I owned a bank in a two-bank town, you know, I'd — if I were inclined to — I might hire a whole bunch of Hollywood extras to form a line in front of the other guy's bank. (Laughter)

The hell of it is that they — you know, as soon as they got through forming a line there, they'd start forming a line at my bank because they — people really get — they get fearful en masse.

Confidence comes back sort of one at a time, but when they get greedy, they get greedy en masse, too.

I mean, it just — it's just the way the humans are constructed. That's where Charlie and I have an edge. We don't have an edge, particularly, in many other ways.

But we are able, I think, perhaps better than most, to not really get caught up with what other people are doing. And, you know, I don't know whether we learned that over time or what.

But when we see falling prices, you know, we think it's an opportunity to buy, and it doesn't bother us.

Now, we don't own things on margin or, you know, we don't get ourselves in a position where somebody else can pull the rug out from under us. That's enormously important in life. You never want to, you know, get out on a limb.

And, of course, leverage gets very tempting when things are going up. And leverage was what was introduced into housing in a huge, huge way. I mean, people just felt that you were an idiot if you didn't keep borrowing more on your house, and using that to buy more houses, or using it to live on, or whatever, and then finally the roof fell in.

Charlie?

26. Ready to invest in Europe despite its debt problems

WARREN BUFFETT: OK. Station 1.

AUDIENCE MEMBER: Hi, Warren. Hi, Charlie. My name is George Islets (PH) from Cologne.

Do you see investment opportunities in the eurozone? For example, extending your stake in Munich Re?

Do you trust in the policy of the ECB to bring the things together? Thank you.

WARREN BUFFETT: Yeah. Well, we're perfectly willing to look at business opportunity in the eurozone, and we bought a couple of bolt-on acquisitions, one for a couple hundred million in the farm equipment area. And we'll be happy if we find a business in any one of the 17 countries tied to the euro.

There might be a few of them we may be a little less inclined than others. (Laughs)

But — you know, it may create opportunities for us to buy businesses. We'd be happy to. Europe is not going to go away. But the European monetary union was — you know, had a major flaw, and they're grappling with a way to correct that flaw.

And with 17 political bodies and a lot of diverse cultures, it's really tough for them to do so.

They'll do it in time, in my view. But essentially they synchronized a currency without synchronizing much else.

And nature finds the fatal flaw always, and so does economics, and they found it fairly quickly, in terms of the euro. And the structure that was put in place will not work, and they'll have to find something that does work.

And they will, eventually, but they may go through a fair amount of pain in the process.

Charlie?

CHARLIE MUNGER: Yeah. Structured as Europe was structured, letting in Greece into the European Union was a lot like using rat poison as whipping cream. (Laughter)

It just — it was an exceptionally stupid idea. (Laughter)

It's not a responsible capitalistic country, a place where people don't pay taxes and so on and so — it just — and —

WARREN BUFFETT: I've tried for years to get him to use 'Country A' and 'Country B,' but he — (Laughter)

CHARLIE MUNGER: — and committed fairly extreme fraud in the course of getting into the union. They lied about their debt.

And so Europe made terrible mistakes. They have politicians, too. (Laughter and applause)

WARREN BUFFETT: You think it'll be behind them in ten years?

CHARLIE MUNGER: I think Europe will muddle through.

WARREN BUFFETT: Sure.

CHARLIE MUNGER: Think what Europe has already muddled through.

WARREN BUFFETT: But we would be delighted, even with that dire forecast, not overly — we would be delighted, tomorrow, to buy a big business in Europe that we liked, and we'd pay cash for it.

CHARLIE MUNGER: I hope you'll call me if it's in Greece. (Laughter)

WARREN BUFFETT: I make these small suggestions, but you can see it doesn't help much. (Laughs)

27. Social media will help some Berkshire businesses

WARREN BUFFETT: OK. Station 2.

AUDIENCE MEMBER: Hi. I'm David Yarus (PH) from Miami Beach, Florida.

On behalf of the internet, welcome to Twitter.

And my question is: how has social media impacted your business and any Berkshire companies, and what impact do you see it having on the world in the short and long term?

WARREN BUFFETT: Probably half the people or more in this audience could answer that question better than I can.

It has — certainly in a place like GEICO, you know, we are — it makes a difference, and over time will make a huge difference in marketing, just as the internet made a change.

I mean, GEICO was founded in 1936 and it had a great business idea of going direct, but it did it entirely by mail, initially, and it worked very well.

And then it progressed to — as the world changed, it, you know, went to TV advertising and phone numbers and that sort of thing, and then it went to the internet, and now it goes on to social media.

So, you know, we have to listen to our customers in all our businesses. Some of them it's much more dramatic than others.

And I've been amazed, you know, at how fast the world has changed. I thought the internet, for example, in terms of GEICO, would affect younger people very quickly, in terms of their buying habits.

But the truth that it spread across the entire age range very, very quickly, a huge change. And you have to respond to that. And I am not the best person, by miles, to do that, but we have people that are very good at it at our businesses, and they're thinking about it plenty, and they'll continue to think about it.

But it would be a terrible mistake to put me in charge of social media at Berkshire Hathaway. (Laughter)

And Charlie would not be a particularly good choice, either. (Laughter)

Charlie, do you want to defend yourself, or —

CHARLIE MUNGER: Well, I don't understand it very well. For very good reason, I avoid it like the plague.

And I hate the idea of the teenagers in my own family immortalizing for all time the three dumbest things they said when they were 13. (Laughter)

WARREN BUFFETT: We would have been in big trouble, Charlie. (Laughs)

CHARLIE MUNGER: We would have been in big trouble, both of us, if that were the system.

And so I think there's a time when your ignorance and folly ought to be hidden. (Laughter and applause)

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: I also think that when you multitask like crazy, like the young people do, none of the tasks is likely to be done well. (Applause)

WARREN BUFFETT: Is there anyone we've forgotten to offend? (Laughter)

28. Frauds, crooks, and accounting

WARREN BUFFETT: OK. Station 3.

AUDIENCE MEMBER: Hello. My name is Stuart Kaye (PH) and I work in Stamford, Connecticut.

Earlier in the meeting, you said when reading over financial statements, you identified companies you were virtually certain were frauds.

What was it in those financial statements that you saw that made you be so certain they were frauds?

WARREN BUFFETT: Well, it varies just enormously over the years, but there are — we can't identify 100 percent of the frauds, or 90 percent, or 80 percent, but there are certain ones that jump out to you, just — people give themselves away a lot, too.

I mean, in poker they talk about tells. And Charlie and I have bought a lot of businesses, and it's very important when we buy those businesses that we assess the individuals that we're buying from with some degree of accuracy.

Because, you know, they hand us the stock certificate and we hand them a lot of money, and then we count on them to run the business with as much enthusiasm after they have the money as they did before.

And so we are assessing people. And we don't think we can assess everyone accurately. We just have to be right about the ones where we make an affirmative decision.

And those decisions have not always been perfect, but they've been pretty good. And I would say they've probably gotten a little bit better, even, as the years have passed.

Similarly, in looking at financial statements — for example, in the insurance field, we've seen some frauds, and they're — you can see things being done with loss reserves occasionally. We saw it back in — I won't name any names. Unlike Charlie, I don't — we'll call them Company As and Bs instead of naming names.

But you would see companies that, when they were offering stock to the public, you know, the year or two before that, the reserves would be down very suspiciously, and — you know, then — or even when they were selling them to other insurance companies, if they were buying in stock they might be building the reserves.

But there's a million different ways. And I don't claim I know all the ways, obviously, but I have seen enough situations over the years, and I've seen how promoters act. And you can spot certain people who you know are, one way or another, playing games with the numbers. They give themselves away.

But I can't give you a checklist of 40 items or something of the sort that you look for in the balance sheet or the income account or the footnotes.

Charlie, can you help?

CHARLIE MUNGER: Sometimes it's pretty obvious. I once was introduced by Warren, of all people, by accident, to a man who wanted to sell us a fire insurance company. One of the first things he said, with a thick accent, from Eastern Europe, I think —

WARREN BUFFETT: Don't name countries. (Laughter)

CHARLIE MUNGER: And I don't remember the country.

WARREN BUFFETT: Good. (Laughter)

CHARLIE MUNGER: But what he told me was — he says, "It's like taking candy from babies," he said.

"We only write fire insurance on concrete structures that are underwater." And I figured out instantly that it was probably fraudulent.

WARREN BUFFETT: The guy's a crook.

CHARLIE MUNGER: I'm a very acute man.

WARREN BUFFETT: Yeah, the guy's a crook.

Well, you actually — you had some experience — you know, he was a lawyer in the movie industry. (Laughs)

CHARLIE MUNGER: Oh, my God.

WARREN BUFFETT: Yeah. The — when you get into accounting for — well, movies are a good thing, in terms of how fast you write off properties, and anything where you've got construction in progress or progress payment-type things — there's so many ways you can cheat in accounting.

And financial institutions are particularly, probably, prone to it. And there's been plenty of it in insurance.

CHARLIE MUNGER: A lot of it, they're not being deliberately fraudulent, because they're deluded. In other words, they believe what they're saying.

WARREN BUFFETT: Yeah. People like to hire them as salesmen. (Laughter)

If you've got doubts, forget it. There's probably some reason you —

It's interesting. The accounting — they worked harder and harder and harder at coming up with disclosures in accounting. And I'm not sure I find present financial statements more useful or, in some cases, as useful as I found them 30 or 40 years ago. (Scattered applause)

Charlie?

CHARLIE MUNGER: Well, I think the financial statements of big banks are way harder to understand now than they used to be. They just do so many different things, and they've got so many footnotes, and there's so much gobbledygook, that it doesn't — they're not my grandfather's banks.

WARREN BUFFETT: Well, we couldn't understand them when we owned them.

CHARLIE MUNGER: Yeah.

WARREN BUFFETT: I mean, we bought a company that — Gen Re — where they had 23,000 derivative contracts. And Charlie and I could've spent 24 hours a day, and had the help of 10 or 20 math Ph.Ds. and we still wouldn't have known what was going on.

It cost us about $400 million to find out, but — and that was in a benign market. But nobody can.

CHARLIE MUNGER: And the accountants had certified the balance sheet.

WARREN BUFFETT: Sure.

CHARLIE MUNGER: It's a new kind of asset I invented a name for. I said, "Good until reached for." (Laughter)

WARREN BUFFETT: Yeah. Well, and you would — you would actually — the same auditing firm would be auditing two different companies that are on the opposite side of a derivative transaction and attesting to different values to the same contract.

And Charlie found one mistake at Salomon on a derivative contract. What was it, 20 million?

CHARLIE MUNGER: No. It was a big contract, and both sides reported a large profit, blessed by their accountants, on the same contract —

WARREN BUFFETT: Kind of like us and Swiss Re.

CHARLIE MUNGER: — just for breaking it.

Once people get in a competitive frenzy, things just go out of control.

WARREN BUFFETT: I became the interim chairman of — interim CEO — of Salomon in 1991, and, fortunately, I testified to both the House and Senate committee before I found this out.

And, generally speaking, incidentally, Salomon wanted to have conservative accounting. I think that would be a fair statement. And in many cases did.

But they did come in to me one day and they said, "Warren, you probably should know that we have this item" — and I think it was around 180 million or something like that — with a capital base of 4 billion, maybe — but 180 million.

And they said, this is a plug number, and we've been plugging it ever since Phibro merged with Salomon in 19 — I guess, '81.

For ten years, this number moved around every day. And as I remember, Phibro or some — one of them was on a trade date system, and that was on a settlement date system.

And in ten years, with Arthur Andersen as their accountant, paying a lot of money in auditing fees, they just never figured out how the hell to get the thing to balance, so they just stuck a number in every day.

And they literally plugged it for ten years, and I couldn't figure out how to unplug it myself. I mean, it was — you almost had to start over. Didn't they do that one time out there?

CHARLIE MUNGER: We did that, Warren.

WARREN BUFFETT: Right. (Laughs)

CHARLIE MUNGER: We had a discrepancy when we changed accounting systems in our savings and loan, and none of the accountants could fix it. So we just let it run out.

WARREN BUFFETT: Yeah, we let the account —

CHARLIE MUNGER: We just let the account run out, and then —

WARREN BUFFETT: Figured we'd start over again.

CHARLIE MUNGER: We started over, right.

WARREN BUFFETT: Accounting is not quite the science that people might want you to —

CHARLIE MUNGER: In accounting, you can do things like they do in Italy when they have trouble with the mail. You know, it piles up and irritates the postal employees. They just throw away a few carloads — (laughter) — everything flows smoothly thereafter.

WARREN BUFFETT: You're naming names again, folks. (Laughs)

That happened in some unnamed international country. (Laughter)

CHARLIE MUNGER: Yeah, Italy. (Laughter)

29. Would Berkshire invest in sub-Saharan Africa?

WARREN BUFFETT: OK. Section 4.

AUDIENCE MEMBER: Good afternoon. My name is Jerry Lucas (PH) from Newark, Delaware.

You answered the question earlier about emerging markets. I just have a similar question.

If you found the business that attracted you in sub-Saharan Africa, outside of South Africa, are the conditions right today to make that investment?

WARREN BUFFETT: Well, I might not know enough to do it myself, but I think — and I wouldn't rule — if it was attractive enough and I thought I understood the nature of the business, I would probably get some advice from some other people. And I might not end up doing it, but I wouldn't totally preclude it.

CHARLIE MUNGER: I saw that done. The University of Michigan hired an investment manager in London who specialized in sub-Saharan Africa. And I thought, “My God, how are they doing this?”

What they did is the little banks would trade in the pink sheets in Africa, and the first thing people would want was not to have the money under their pillow, and they just bought all the little banks in Africa, and they made a lot of money.

So it is possible, if you know what you’re doing, to go into very unlikely places. I would say we’re not very good at it.

WARREN BUFFETT: No, that isn’t our specialty, but it can be done. And if we were poor enough, we might even be thinking about doing it, right, Charlie?

CHARLIE MUNGER: I don’t think so.

WARREN BUFFETT: OK. (Laughter)

Next year we’ll prepare for this. (Laughter)

30. Read over your will with your adult children

WARREN BUFFETT: OK. Station 5.

AUDIENCE MEMBER: Hello. I’m Marvin Blum from Fort Worth, Texas, the home to four of your companies.

WARREN BUFFETT: Absolutely. We love Fort Worth.

AUDIENCE MEMBER: Thank you. We love you, too, and your presence in our community.

I’m an estate planning lawyer, and it’s interesting as we wrap up today to ponder that the Baby Boomer generation is about to pass along the greatest transfer of wealth in history.

I can design plans that eliminate estate tax and pass down great amounts of wealth to the next generation, but many of my clients come to me and say they want a plan like Warren Buffett’s, leaving their kids enough so they can do anything, but not so much that they can do nothing.

Now they ask me, and I’m asking you, how much is that, and how do you keep from ruining your kids?

WARREN BUFFETT: Yeah. Well.

(Applause)

I think more kids are ruined by the behavior of their parents than by the amount of the inheritance. (Applause)

Your children are learning about the world through you, and more through your actions than through your words, you know, from the moment they're born. You're their natural teacher, and, you know, it's a very important and serious job.

And I don't think — I don't actually think — that the amount of money that a rich person leaves to their children is the determining factor, at all, in terms of how those children turn out. But I think that the atmosphere, and what they see about them, and how their parents behave, is enormously important.

I would say this: I've loosened up a little bit as I go along.

Every time I rewrite my will, my kids are happy because they know I'm not reducing the amount, anyway. (Laughter)

And I do something else that — I find that — which I think is an obvious thing, but it's amazing to me how many don't do it.

I think that your children are going to read the will someday — that's assuming you're a wealthy person — your children are going the read the will someday.

It's crazy to have them read it after you're dead, for the first time. I mean, you're not in a position to answer questions then unless the Ouija board really works or something of the sort.

So if they're going to have questions about how to carry out your wishes, or why you did this or that, you know, why leave them endlessly wondering after you die?

So in my own case, I always have my children — I rewrite a will every five or six years or something like that — and I have them read it.

They're the executors under it. They should understand how to carry out their obligations that are embodied in the will, and they should — also, if they feel there's anything unfair about it, they should express themselves before I sign that will, and we should talk it over, and we should figure out whether they're right or I'm right, or someplace in between.

So I do think it's very important in wealthy families, once the kids are of a certain age. I mean, I don't advise doing this with your 14-year-old or something, but when they get — you know, certainly by the time they're in the mid-30s or thereabouts — I think they should be participants in the will.

And I do think that if you get to be very wealthy that the idea of trying to pass on, create a dynasty of sorts, it just sort of runs against the grain, as far as I'm concerned.

And the money has far more utility — you know, the last hundreds of millions or billions have far more utility to society than they would have to make — create a situation — where your kids don't have to do anything in life except call a trust officer once a year and tell them how much money they want.

Charlie?

CHARLIE MUNGER: I don't think I want to go into this one.

WARREN BUFFETT: OK.

CHARLIE MUNGER: And I'm absolutely sure you don't want to discuss your will with your children if you're going to treat them unequally.

WARREN BUFFETT: No.

CHARLIE MUNGER: That is poison.

WARREN BUFFETT: But there — one of the problems you have — I mean, and what you want to discuss just for that very situation is there may be circumstances where one child will have much more of an interest in one type of asset than others, or something of the sort.

And you want to make sure that your definition of equality, in terms of handling different kinds of assets, meshes, or at least is understood, by the children so that they don't think the fact that you may gave one a farm and another a house or something of the sort resulted in inequality when you thought it was equality.

Charlie, you got anything?

CHARLIE MUNGER: No. I'm —

WARREN BUFFETT: He's staying away from this one.

31. No question from station 6 — Buffett's happy

WARREN BUFFETT: OK. Station 6.

AUDIENCE MEMBER: No question.

WARREN BUFFETT: No questions. I like station six. (Laughter)

32. Don't hold your breath until …

WARREN BUFFETT: Station 7.

AUDIENCE MEMBER: Mr. Buffett, Mr. Munger, thanks for everything that you do for us, including advice that you give us, and also for — as an individual investor — for the things that you've done for me.

I have a question. You've long been against stock splits, but as you think about the Berkshire A share and one day can — if you don't split it — it can get to a million dollars, is the board thinking about how to deal with that, in terms of getting new stock owners, the ownership structure, and so on?

WARREN BUFFETT: Well, I — we actually — I think we've got a pretty good arrangement now.

It evolved, originally, through some people that were going to try and make a lot of money off of our shareholders by creating their own split shares, so we created the B shares.

And then when the BNSF acquisition came along, we wanted to be sure that people that wanted to have a stock-free exchange, or that wanted to get shares, would not prohibit it simply because they had a small amount of BNSF, and, therefore, our B shares were too expensive.

So I think now with one stock, you know, in the $100 range, people can split the — people that own the A stock can split their stock anytime they wish.

And we've always pledged that there won't ever be this situation, but if there was some corporate transaction or anything like that, we will — the A and B will get treated identically.

And so I really see no reason to change the present situation.

Charlie?

CHARLIE MUNGER: I would not hold your breath until we change. (Laughter)

WARREN BUFFETT: That may apply to almost anything in our lives.

Berkshire's Corporate Performance vs. the S&P 500

Year	Annual Percentage Change in Per-Share Book Value of Berkshire (1)	Annual Percentage Change in S&P 500 with Dividends Included (2)	Relative Results (1)-(2)
1965	23.8	10.0	13.8
1966	20.3	(11.7)	32.0
1967	11.0	30.9	(19.9)
1968	19.0	11.0	8.0
1969	16.2	(8.4)	24.6
1970	12.0	3.9	8.1
1971	16.4	14.6	1.8
1972	21.7	18.9	2.8
1973	4.7	(14.8)	19.5
1974	5.5	(26.4)	31.9
1975	21.9	37.2	(15.3)
1976	59.3	23.6	35.7
1977	31.9	(7.4)	39.3
1978	24.0	6.4	17.6
1979	35.7	18.2	17.5
1980	19.3	32.3	(13.0)
1981	31.4	(5.0)	36.4
1982	40.0	21.4	18.6
1983	32.3	22.4	9.9
1984	13.6	6.1	7.5
1985	48.2	31.6	16.6
1986	26.1	18.6	7.5
1987	19.5	5.1	14.4
1988	20.1	16.6	3.5
1989	44.4	31.7	12.7
1990	7.4	(3.1)	10.5
1991	39.6	30.5	9.1
1992	20.3	7.6	12.7
1993	14.3	10.1	4.2
1994	13.9	1.3	12.6
1995	43.1	37.6	5.5
1996	31.8	23.0	8.8
1997	34.1	33.4	0.7
1998	48.3	28.6	19.7
1999	0.5	21.0	(20.5)
2000	6.5	(9.1)	15.6
2001	(6.2)	(11.9)	5.7
2002	10.0	(22.1)	32.1
2003	21.0	28.7	(7.7)
2004	10.5	10.9	(0.4)
2005	6.4	4.9	1.5
2006	18.4	15.8	2.6
2007	11.0	5.5	5.5
2008	(9.6)	(37.0)	27.4
2009	19.8	26.5	(6.7)
2010	13.0	15.1	(2.1)
2011	4.6	2.1	2.5
2012	14.4	16.0	(1.6)
2013	18.2	32.4	(14.2)
Compounded Annual Gain – 1965-2013	19.7%	9.8%	9.9
Overall Gain – 1964-2013	693,518%	9,841%	

Notes: Data are for calendar years with these exceptions: 1965 and 1966, year ended 9/30; 1967, 15 months ended 12/31. Starting in 1979, accounting rules required insurance companies to value the equity securities they hold at market rather than at the lower of cost or market, which was previously the requirement. In this table, Berkshire's results through 1978 have been restated to conform to the changed rules. In all other respects, the results are calculated using the numbers originally reported. The S&P 500 numbers are **pre-tax** whereas the Berkshire numbers are **after-tax**. If a corporation such as Berkshire were simply to have owned the S&P 500 and accrued the appropriate taxes, its results would have lagged the S&P 500 in years when that index showed a positive return, but would have exceeded the S&P 500 in years when the index showed a negative return. Over the years, the tax costs would have caused the aggregate lag to be substantial.

BERKSHIRE HATHAWAY INC.

To the Shareholders of Berkshire Hathaway Inc.:

Berkshire's gain in net worth during 2013 was $34.2 billion. That gain was *after* our deducting $1.8 billion of charges – meaningless economically, as I will explain later – that arose from our purchase of the minority interests in Marmon and Iscar. After those charges, the per-share book value of both our Class A and Class B stock increased by 18.2%. Over the last 49 years (that is, since present management took over), book value has grown from $19 to $134,973, a rate of 19.7% compounded annually.*

On the facing page, we show our long-standing performance measurement: The yearly change in Berkshire's per-share book value versus the market performance of the S&P 500. What counts, of course, is per-share *intrinsic* value. But that's a subjective figure, and book value is useful as a rough tracking indicator. (An extended discussion of intrinsic value is included in our Owner-Related Business Principles on pages 103 - 108. Those principles have been included in our reports for 30 years, and we urge new and prospective shareholders to read them.)

As I've long told you, Berkshire's intrinsic value far exceeds its book value. Moreover, the difference has widened considerably in recent years. That's why our 2012 decision to authorize the repurchase of shares at 120% of book value made sense. Purchases at that level benefit continuing shareholders because per-share intrinsic value exceeds that percentage of book value by a meaningful amount. We did not purchase shares during 2013, however, because the stock price did not descend to the 120% level. If it does, we will be aggressive.

Charlie Munger, Berkshire's vice chairman and my partner, and I believe both Berkshire's book value and intrinsic value will outperform the S&P in years when the market is down or moderately up. We expect to fall short, though, in years when the market is strong – as we did in 2013. We have underperformed in ten of our 49 years, with all but one of our shortfalls occurring when the S&P gain exceeded 15%.

Over the stock market cycle between yearends 2007 and 2013, we overperformed the S&P. Through full cycles in future years, we expect to do that again. If we fail to do so, we will not have earned our pay. After all, you could always own an index fund and be assured of S&P results.

The Year at Berkshire

On the operating front, just about everything turned out well for us last year – in certain cases *very* well. Let me count the ways:

- We completed two large acquisitions, spending almost $18 billion to purchase all of NV Energy and a major interest in H. J. Heinz. Both companies fit us well and will be prospering a century from now.

  With the Heinz purchase, moreover, we created a partnership template that may be used by Berkshire in future acquisitions of size. Here, we teamed up with investors at 3G Capital, a firm led by my friend, Jorge Paulo Lemann. His talented associates – Bernardo Hees, Heinz's new CEO, and Alex Behring, its Chairman – are responsible for operations.

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* All per-share figures used in this report apply to Berkshire's A shares. Figures for the B shares are 1/1500th of those shown for A.

Berkshire is the financing partner. In that role, we purchased $8 billion of Heinz preferred stock that carries a 9% coupon but also possesses other features that should increase the preferred's annual return to 12% or so. Berkshire and 3G each purchased half of the Heinz common stock for $4.25 billion.

Though the Heinz acquisition has some similarities to a "private equity" transaction, there is a crucial difference: Berkshire never intends to sell a share of the company. What we would like, rather, is to buy more, and that could happen: Certain 3G investors may sell some or all of their shares in the future, and we might increase our ownership at such times. Berkshire and 3G could also decide at some point that it would be mutually beneficial if we were to exchange some of our preferred for common shares (at an equity valuation appropriate to the time).

Our partnership took control of Heinz in June, and operating results so far are encouraging. Only minor earnings from Heinz, however, are reflected in those we report for Berkshire this year: One-time charges incurred in the purchase and subsequent restructuring of operations totaled $1.3 billion. Earnings in 2014 will be substantial.

With Heinz, Berkshire now owns 8½ companies that, were they stand-alone businesses, would be in the Fortune 500. Only 491½ to go.

NV Energy, purchased for $5.6 billion by MidAmerican Energy, our utility subsidiary, supplies electricity to about 88% of Nevada's population. This acquisition fits nicely into our existing electric-utility operation and offers many possibilities for large investments in renewable energy. NV Energy will *not* be MidAmerican's last major acquisition.

- MidAmerican is one of our "Powerhouse Five" – a collection of large non-insurance businesses that, in aggregate, had a record $10.8 billion of pre-tax earnings in 2013, up $758 million from 2012. The other companies in this sainted group are BNSF, Iscar, Lubrizol and Marmon.

  Of the five, only MidAmerican, then earning $393 million pre-tax, was owned by Berkshire nine years ago. Subsequently, we purchased another three of the five on an all-cash basis. In acquiring the fifth, BNSF, we paid about 70% of the cost in cash, and, for the remainder, issued shares that increased the number outstanding by 6.1%. In other words, the $10.4 billion gain in annual earnings delivered Berkshire by the five companies over the nine-year span has been accompanied by only minor dilution. That satisfies our goal of not simply growing, but rather increasing *per-share* results.

  If the U.S. economy continues to improve in 2014, we can expect earnings of our Powerhouse Five to improve also – perhaps by $1 billion or so pre-tax.

- Our many dozens of smaller non-insurance businesses earned $4.7 billion pre-tax last year, up from $3.9 billion in 2012. Here, too, we expect further gains in 2014.

- Berkshire's extensive insurance operation again operated at an underwriting profit in 2013 – that makes 11 years in a row – and increased its float. During that 11-year stretch, our float – money that doesn't belong to us but that we can invest for Berkshire's benefit – has grown from $41 billion to $77 billion. Concurrently, our underwriting profit has aggregated $22 billion pre-tax, including $3 billion realized in 2013. And all of this all began with our 1967 purchase of National Indemnity for $8.6 *million*.

  We now own a wide variety of exceptional insurance operations. Best known is GEICO, the car insurer Berkshire acquired in full at yearend 1995 (having for many years prior owned a partial interest). GEICO in 1996 ranked number seven among U.S. auto insurers. Now, GEICO is number two, having recently passed Allstate. The reasons for this amazing growth are simple: low prices and reliable service. You can do yourself a favor by calling 1-800-847-7536 or checking Geico.com to see if you, too, can cut your insurance costs. Buy some of Berkshire's other products with the savings.

- While Charlie and I search for elephants, our many subsidiaries are regularly making bolt-on acquisitions. Last year, we contracted for 25 of these, scheduled to cost $3.1 billion in aggregate. These transactions ranged from $1.9 million to $1.1 billion in size.

  Charlie and I encourage these deals. They deploy capital in activities that fit with our existing businesses and that will be managed by our corps of expert managers. The result is no more work for us and more earnings for you. Many more of these bolt-on deals will be made in future years. In aggregate, they will be meaningful.

- Last year we invested $3.5 billion in the surest sort of bolt-on: the purchase of additional shares in two wonderful businesses that we already controlled. In one case – Marmon – our purchases brought us to the 100% ownership we had signed up for in 2008. In the other instance – Iscar – the Wertheimer family elected to exercise a put option it held, selling us the 20% of the business it retained when we bought control in 2006.

  These purchases added about $300 million pre-tax to our current earning power and also delivered us $800 million of cash. Meanwhile, the same nonsensical accounting rule that I described in last year's letter required that we enter these purchases on our books at $1.8 billion less than we paid, a process that reduced Berkshire's book value. (The charge was made to "capital in excess of par value"; figure *that* one out.) This weird accounting, you should understand, instantly increased Berkshire's excess of intrinsic value over book value by the same $1.8 billion.

- Our subsidiaries spent a record $11 billion on plant and equipment during 2013, roughly twice our depreciation charge. About 89% of that money was spent in the United States. Though we invest abroad as well, the mother lode of opportunity resides in America.

- In a year in which most equity managers found it impossible to outperform the S&P 500, both Todd Combs and Ted Weschler handily did so. Each now runs a portfolio exceeding $7 billion. They've earned it.

  I must again confess that their investments outperformed mine. (Charlie says I should add "by a lot.") If such humiliating comparisons continue, I'll have no choice but to cease talking about them.

  Todd and Ted have also created significant value for you in several matters unrelated to their portfolio activities. Their contributions are just beginning: Both men have Berkshire blood in their veins.

- Berkshire's yearend employment – counting Heinz – totaled a record 330,745, up 42,283 from last year. The increase, I must admit, included one person at our Omaha home office. (Don't panic: The headquarters gang still fits comfortably on one floor.)

- Berkshire increased its ownership interest last year in each of its "Big Four" investments – American Express, Coca-Cola, IBM and Wells Fargo. We purchased additional shares of Wells Fargo (increasing our ownership to 9.2% versus 8.7% at yearend 2012) and IBM (6.3% versus 6.0%). Meanwhile, stock repurchases at Coca-Cola and American Express raised our percentage ownership. Our equity in Coca-Cola grew from 8.9% to 9.1% and our interest in American Express from 13.7% to 14.2%. And, if you think tenths of a percent aren't important, ponder this math: For the four companies in aggregate, each increase of one-tenth of a percent in our share of their equity raises Berkshire's share of their annual earnings by $50 million.

The four companies possess excellent businesses and are run by managers who are both talented and shareholder-oriented. At Berkshire, we much prefer owning a non-controlling but substantial portion of a wonderful company to owning 100% of a so-so business; it's better to have a partial interest in the Hope diamond than to own all of a rhinestone.

Going by our yearend holdings, our portion of the "Big Four's" 2013 earnings amounted to $4.4 billion. In the earnings we report to you, however, we include only the dividends we receive – about $1.4 billion last year. But make no mistake: The $3 billion of their earnings we don't report is every bit as valuable to us as the portion Berkshire records.

The earnings that these four companies retain are often used for repurchases of their own stock – a move that enhances our share of future earnings – as well as for funding business opportunities that usually turn out to be advantageous. All that leads us to expect that the per-share earnings of these four investees will grow substantially over time. If they do, dividends to Berkshire will increase and, even more important, our unrealized capital gains will, too. (For the four, unrealized gains already totaled $39 billion at yearend.)

Our flexibility in capital allocation – our willingness to invest large sums passively in non-controlled businesses – gives us a significant advantage over companies that limit themselves to acquisitions they can operate. Woody Allen stated the general idea when he said: "The advantage of being bi-sexual is that it doubles your chances for a date on Saturday night." Similarly, our appetite for *either* operating businesses or passive investments doubles our chances of finding sensible uses for our endless gusher of cash.

* * * * * * * * * * *

Late in 2009, amidst the gloom of the Great Recession, we agreed to buy BNSF, the largest purchase in Berkshire's history. At the time, I called the transaction an "all-in wager on the economic future of the United States."

That kind of commitment was nothing new for us: We've been making similar wagers ever since Buffett Partnership Ltd. acquired control of Berkshire in 1965. For good reason, too. Charlie and I have always considered a "bet" on ever-rising U.S. prosperity to be very close to a sure thing.

Indeed, who has ever benefited during the past 237 years by betting *against* America? If you compare our country's present condition to that existing in 1776, you have to rub your eyes in wonder. And the dynamism embedded in our market economy will continue to work its magic. America's best days lie ahead.

With this tailwind working for us, Charlie and I hope to build Berkshire's per-share intrinsic value by (1) constantly improving the basic earning power of our many subsidiaries; (2) further increasing their earnings through bolt-on acquisitions; (3) benefiting from the growth of our investees; (4) repurchasing Berkshire shares when they are available at a meaningful discount from intrinsic value; and (5) making an occasional large acquisition. We will also try to maximize results for *you* by rarely, if ever, issuing Berkshire shares.

Those building blocks rest on a rock-solid foundation. A century hence, BNSF and MidAmerican Energy will still be playing major roles in our economy. Insurance will concomitantly be essential for both businesses and individuals – and no company brings greater human and financial resources to that business than Berkshire.

Moreover, we will *always* maintain supreme financial strength, operating with at least $20 billion of cash equivalents and never incurring material amounts of short-term obligations. As we view these and other strengths, Charlie and I like your company's prospects. We feel fortunate to be entrusted with its management.

Intrinsic Business Value

As much as Charlie and I talk about intrinsic business value, we cannot tell you precisely what that number is for Berkshire shares (nor, in fact, for any other stock). In our 2010 annual report, however, we laid out the three elements – one of them qualitative – that we believe are the keys to a sensible estimate of Berkshire's intrinsic value. That discussion is reproduced in full on pages 109 - 110.

Here is an update of the two quantitative factors: In 2013 our per-share investments increased 13.6% to $129,253 and our pre-tax earnings from businesses other than insurance and investments increased 12.8% to $9,116 per share.

Since 1970, our per-share investments have increased at a rate of 19.3% compounded annually, and our earnings figure has grown at a 20.6% clip. It is no coincidence that the price of Berkshire stock over the 43-year period has increased at a rate very similar to that of our two measures of value. Charlie and I like to see gains in both sectors, but we will most strongly focus on building operating earnings.

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Now, let's examine the four major sectors of our operations. Each has vastly different balance sheet and income characteristics from the others. So we'll present them as four separate businesses, which is how Charlie and I view them (though there are important and *enduring* advantages to having them all under one roof). Our goal is to provide you with the information we would wish to have if our positions were reversed, with you being the reporting manager and we the absentee shareholders. (But don't get any ideas!)

Insurance

> *"Our investment in the insurance companies reflects a first major step in our efforts to achieve a more diversified base of earning power."*
>
> — 1967 Annual Report

Let's look first at insurance, Berkshire's core operation and the engine that has consistently propelled our expansion since that 1967 report was published.

Property-casualty ("P/C") insurers receive premiums upfront and pay claims later. In extreme cases, such as those arising from certain workers' compensation accidents, payments can stretch over decades. This collect-now, pay-later model leaves P/C companies holding large sums – money we call "float" – that will eventually go to others. Meanwhile, insurers get to invest this float for their benefit. Though individual policies and claims come and go, the amount of float an insurer holds usually remains fairly stable in relation to premium volume. Consequently, as our business grows, so does our float. And *how* we have grown, as the following table shows:

Year	*Float (in $ millions)*
1970	$ 39
1980	237
1990	1,632
2000	27,871
2010	65,832
2013	77,240

Further gains in float will be tough to achieve. On the plus side, GEICO's float will almost certainly grow. In National Indemnity's reinsurance division, however, we have a number of run-off contracts whose float drifts downward. If we do experience a decline in float at some future time, it will be *very* gradual – at the outside no more than 3% in any year. The nature of our insurance contracts is such that we can *never* be subject to immediate demands for sums that are large compared to our cash resources. (In this respect, property-casualty insurance differs in an important way from certain forms of life insurance.)

If our premiums exceed the total of our expenses and eventual losses, we register an underwriting profit that adds to the investment income our float produces. When such a profit is earned, we enjoy the use of free money – and, better yet, get *paid* for holding it.

Unfortunately, the wish of all insurers to achieve this happy result creates intense competition, so vigorous in most years that it causes the P/C industry as a whole to operate at a significant underwriting *loss*. This loss, in effect, is what the industry pays to hold its float. For example, State Farm, by far the country's largest insurer and a well-managed company besides, incurred an underwriting loss in nine of the twelve years ending in 2012 (the latest year for which their financials are available, as I write this). Competitive dynamics almost guarantee that the insurance industry – despite the float income all companies enjoy – will continue its dismal record of earning subnormal returns as compared to other businesses.

As noted in the first section of this report, we have now operated at an underwriting profit for eleven consecutive years, our pre-tax gain for the period having totaled $22 billion. Looking ahead, I believe we will continue to underwrite profitably in most years. Doing so is the daily focus of *all* of our insurance managers who know that while float is valuable, it can be drowned by poor underwriting results.

So how does our float affect intrinsic value? When Berkshire's *book* value is calculated, the *full* amount of our float is deducted as a liability, just as if we had to pay it out tomorrow and could not replenish it. But to think of float as strictly a liability is incorrect; it should instead be viewed as a revolving fund. Daily, we pay old claims – some $17 billion to more than five million claimants in 2013 – and that reduces float. Just as surely, we each day write new business and thereby generate new claims that add to float. If our revolving float is both costless and long-enduring, which I believe it will be, the true value of this liability is *dramatically* less than the accounting liability.

A counterpart to this overstated liability is $15.5 billion of "goodwill" that is attributable to our insurance companies and included in book value as an asset. In very large part, this goodwill represents the price we paid for the float-generating capabilities of our insurance operations. The cost of the goodwill, however, has *no* bearing on its true value. For example, if an insurance business sustains large and prolonged underwriting losses, any goodwill asset carried on the books should be deemed valueless, whatever its original cost.

Fortunately, that does not describe Berkshire. Charlie and I believe the true economic value of our insurance goodwill – what we would happily pay to purchase an insurance operation possessing float *of similar quality* to that we have – to be far in excess of its historic carrying value. The value of our float is one reason – a huge reason – why we believe Berkshire's intrinsic business value substantially exceeds its book value.

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Berkshire's attractive insurance economics exist only because we have some terrific managers running disciplined operations that possess strong, hard-to-replicate business models. Let me tell you about the major units.

First by float size is the Berkshire Hathaway Reinsurance Group, managed by Ajit Jain. Ajit insures risks that no one else has the desire or the capital to take on. His operation combines capacity, speed, decisiveness and, most important, brains in a manner unique in the insurance business. Yet he never exposes Berkshire to risks that are inappropriate in relation to our resources. Indeed, we are *far* more conservative in avoiding risk than most large insurers. For example, if the insurance industry should experience a $250 billion loss from some mega-catastrophe – a loss about triple anything it has ever experienced – Berkshire as a whole would likely record a significant profit for the year because of its many streams of earnings. And we would remain awash in cash, looking for large opportunities if the catastrophe caused markets to go into shock. All other major insurers and reinsurers would meanwhile be far in the red, with some facing insolvency.

From a standing start in 1985, Ajit has created an insurance business with float of $37 billion and a large cumulative underwriting profit, a feat no other insurance CEO has come close to matching. Ajit's mind is an idea factory that is always looking for more lines of business he can add to his current assortment.

One venture materialized last June when he formed Berkshire Hathaway Specialty Insurance ("BHSI"). This initiative took us into commercial insurance, where we were instantly accepted by both major insurance brokers and corporate risk managers throughout America. These professionals recognize that no other insurer can match the financial strength of Berkshire, which guarantees that legitimate claims arising many years in the future will be paid promptly and fully.

BHSI is led by Peter Eastwood, an experienced underwriter who is widely respected in the insurance world. Peter has assembled a spectacular team that is already writing a substantial amount of business with many Fortune 500 companies and with smaller operations as well. BHSI will be a major asset for Berkshire, one that will generate volume in the billions within a few years. Give Peter a Berkshire greeting when you see him at the annual meeting.

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We have another reinsurance powerhouse in General Re, managed by Tad Montross.

At bottom, a sound insurance operation needs to adhere to four disciplines. It must (1) understand *all* exposures that might cause a policy to incur losses; (2) conservatively assess the likelihood of any exposure actually causing a loss and the probable cost if it does; (3) set a premium that, on average, will deliver a profit after both prospective loss costs and operating expenses are covered; and (4) be willing to walk away if the appropriate premium can't be obtained.

Many insurers pass the first three tests and flunk the fourth. They simply can't turn their back on business that is being eagerly written by their competitors. That old line, "The other guy is doing it, so we must as well," spells trouble in any business, but in none more so than insurance.

Tad has observed all four of the insurance commandments, and it shows in his results. General Re's huge float has been better than cost-free under his leadership, and we expect that, on average, to continue. We are particularly enthusiastic about General Re's international life reinsurance business, which has grown consistently and profitably since we acquired the company in 1998.

It can be remembered that soon after we purchased General Re, the company was beset by problems that caused commentators – and me as well, briefly – to believe I had made a huge mistake. That day is long gone. General Re is now a gem.

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Finally, there is GEICO, the insurer on which I cut my teeth 63 years ago. GEICO is managed by Tony Nicely, who joined the company at 18 and completed 52 years of service in 2013. Tony became CEO in 1993, and since then the company has been flying.

When I was first introduced to GEICO in January 1951, I was blown away by the huge cost advantage the company enjoyed compared to the expenses borne by the giants of the industry. That operational efficiency continues today and is an all-important asset. No one *likes* to buy auto insurance. But almost everyone likes to drive. The insurance needed is a major expenditure for most families. Savings matter to them – and *only* a low-cost operation can deliver these.

GEICO's cost advantage is the factor that has enabled the company to gobble up market share year after year. Its low costs create a moat – an *enduring* one – that competitors are unable to cross. Meanwhile, our little gecko continues to tell Americans how GEICO can save them important money. With our latest reduction in operating costs, his story has become even more compelling.

In 1995, we purchased the half of GEICO that we didn't already own, paying $1.4 billion more than the net tangible assets we acquired. That's "goodwill," and it will forever remain unchanged on our books. As GEICO's business grows, however, so does its *true* economic goodwill. I believe that figure to be approaching $20 billion.

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In addition to our three major insurance operations, we own a group of smaller companies, most of them plying their trade in odd corners of the insurance world. In aggregate, these companies are a growing operation that consistently delivers an underwriting profit. Moreover, as the table below shows, they also provide us with substantial float. Charlie and I treasure these companies and their managers.

	Underwriting Profit		*Yearend Float*	
	(in millions)			
Insurance Operations	*2013*	*2012*	*2013*	*2012*
BH Reinsurance	$1,294	$ 304	$37,231	$34,821
General Re	283	355	20,013	20,128
GEICO	1,127	680	12,566	11,578
Other Primary	385	286	7,430	6,598
	$3,089	$1,625	$77,240	$73,125

* * * * * * * * * * * *

Simply put, insurance is the sale of promises. The "customer" pays money now; the insurer promises to pay money in the future if certain events occur.

Sometimes, the promise will not be tested for decades. (Think of life insurance bought by those in their 20s.) Therefore, both the ability and willingness of the insurer to pay – even if economic chaos prevails when payment time arrives – is all-important.

Berkshire's promises have no equal, a fact affirmed in recent years by the actions of the world's largest and most sophisticated insurers, some of which have wanted to shed themselves of huge and exceptionally long-lived liabilities, particularly those involving asbestos claims. That is, these insurers wished to "cede" their liabilities to a reinsurer. Choosing the wrong reinsurer, however – one that down the road proved to be financially strapped or a bad actor – would put the original insurer in danger of getting the liabilities right back in its lap.

Almost without exception, the largest insurers seeking aid came to Berkshire. Indeed, in the largest such transaction ever recorded, Lloyd's in 2007 turned over to us both many thousands of known claims arising from policies written before 1993 and an unknown but huge number of claims from that same period sure to materialize in the future. (Yes, we will be receiving claims decades from now that apply to events taking place prior to 1993.)

Berkshire's ultimate payments arising from the Lloyd's transaction are today unknowable. What is certain, however, is that Berkshire will pay all valid claims up to the $15 billion limit of our policy. No other insurer's promise would have given Lloyd's the comfort provided by its agreement with Berkshire. The CEO of the entity then handling Lloyd's claims said it best: "Names [the original insurers at Lloyd's] wanted to sleep easy at night, and we think we've just bought them the world's best mattress."

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Berkshire's great managers, premier financial strength and a variety of business models possessing wide moats form something unique in the insurance world. The combination is a huge asset for Berkshire shareholders that will only get more valuable with time.

Regulated, Capital-Intensive Businesses

> *"Though there are many regulatory restraints in the utility industry, it's possible that we will make additional commitments in the field. If we do, the amounts involved could be large."*
>
> — 1999 Annual Report

We have two major operations, BNSF and MidAmerican Energy, that share important characteristics distinguishing them from our other businesses. Consequently, we assign them their own section in this letter and split out their combined financial statistics in our GAAP balance sheet and income statement.

A key characteristic of both companies is their huge investment in very long-lived, regulated assets, with these partially funded by large amounts of long-term debt that is *not* guaranteed by Berkshire. Our credit is in fact not needed because each company has earning power that even under terrible economic conditions will far exceed its interest requirements. Last year, for example, BNSF's interest coverage was 9:1. (Our definition of coverage is pre-tax earnings/interest, *not* EBITDA/interest, a commonly-used measure we view as seriously flawed.)

At MidAmerican, meanwhile, two factors ensure the company's ability to service its debt under all circumstances. The first is common to all utilities: recession-resistant earnings, which result from these companies exclusively offering an essential service. The second is enjoyed by few other utilities: a great diversity of earnings streams, which shield us from being seriously harmed by any single regulatory body. Now, with the acquisition of NV Energy, MidAmerican's earnings base has further broadened. This particular strength, supplemented by Berkshire's ownership, has enabled MidAmerican and its utility subsidiaries to significantly lower their cost of debt. This advantage benefits both us *and* our customers.

Every day, our two subsidiaries power the American economy in major ways:

- BNSF carries about 15% (measured by ton-miles) of *all* inter-city freight, whether it is transported by truck, rail, water, air, or pipeline. Indeed, we move more ton-miles of goods than *anyone* else, a fact establishing BNSF as the most important artery in our economy's circulatory system. Its hold on the number-one position strengthened in 2013.

  BNSF, like all railroads, also moves its cargo in an extraordinarily fuel-efficient and environmentally friendly way, carrying a ton of freight about 500 miles on a single gallon of diesel fuel. Trucks taking on the same job guzzle about four times as much fuel.

- MidAmerican's utilities serve regulated retail customers in eleven states. No utility company stretches further. In addition, we are the leader in renewables: From a standing start nine years ago, MidAmerican now accounts for 7% of the country's wind generation capacity, with more on the way. Our share in solar – most of which is still in construction – is even larger.

  MidAmerican can make these investments because it retains *all* of its earnings. Here's a little known fact: Last year MidAmerican retained more dollars of earnings – by far – than any other American electric utility. We and our regulators see this as an important advantage – one almost certain to exist five, ten and twenty years from now.

When our current projects are completed, MidAmerican's renewables portfolio will have cost $15 billion. We relish making such commitments as long as they promise reasonable returns. And, on that front, we put a large amount of trust in future regulation.

Our confidence is justified both by our past experience and by the knowledge that society will forever need massive investments in both transportation and energy. It is in the self-interest of governments to treat capital providers in a manner that will ensure the continued flow of funds to essential projects. It is meanwhile in our self-interest to conduct our operations in a way that earns the approval of our regulators and the people they represent.

Tangible proof of our dedication to that duty was delivered last year in a poll of customer satisfaction covering 52 holding companies and their 101 operating electric utilities. Our MidAmerican group ranked number one, with 95.3% of respondents giving us a "very satisfied" vote and not a single customer rating us "dissatisfied." The bottom score in the survey, incidentally, was a dismal 34.5%.

All three of our companies were ranked far lower by this measure before they were acquired by MidAmerican. The extraordinary customer satisfaction we have achieved is of great importance as we expand: Regulators in states we hope to enter are glad to see us, knowing we will be responsible operators.

Our railroad has been diligent as well in anticipating the needs of its customers. Whatever you may have heard about our country's crumbling infrastructure in no way applies to BNSF or railroads generally. America's rail system has never been in better shape, a consequence of huge investments by the industry. We are not, however, resting: BNSF spent $4 billion on the railroad in 2013, double its depreciation charge and a single-year record for *any* railroad. And, we will spend considerably more in 2014. Like Noah, who foresaw early on the need for dependable transportation, we know it's our job to plan ahead.

Leading our two capital-intensive companies are Greg Abel, at MidAmerican, and the team of Matt Rose and Carl Ice at BNSF. The three are extraordinary managers who have my gratitude and deserve yours as well. Here are the key figures for their businesses:

MidAmerican (89.8% owned)	*Earnings (in millions)*		
	2013	*2012*	*2011*
U.K. utilities	$ 362	$ 429	$ 469
Iowa utility	230	236	279
Western utilities	982	737	771
Pipelines	385	383	388
HomeServices	139	82	39
Other (net)	4	91	36
Operating earnings before corporate interest and taxes	2,102	1,958	1,982
Interest	296	314	336
Income taxes	170	172	315
Net earnings	$ 1,636	$ 1,472	$ 1,331
Earnings applicable to Berkshire	$ 1,470	$ 1,323	$ 1,204

BNSF	*Earnings (in millions)*		
	2013	*2012*	*2011*
Revenues	$22,014	$20,835	$19,548
Operating expenses	15,357	14,835	14,247
Operating earnings before interest and taxes	6,657	6,000	5,301
Interest (net)	729	623	560
Income taxes	2,135	2,005	1,769
Net earnings	$ 3,793	$ 3,372	$ 2,972

Ron Peltier continues to build HomeServices, MidAmerican's real estate brokerage subsidiary. Last year his operation made four acquisitions, the most significant being Fox & Roach, a Philadelphia-based company that is the largest single-market realtor in the country.

HomeServices now has 22,114 agents (listed by geography on page 112), up 38% from 2012. HomeServices also owns 67% of the Prudential and Real Living franchise operations, which are in the process of rebranding their franchisees as Berkshire Hathaway HomeServices. If you haven't yet, many of you will soon be seeing our name on "for sale" signs.

Manufacturing, Service and Retailing Operations

"See that store," Warren says, pointing at Nebraska Furniture Mart. "That's a really good business."
"Why don't you buy it?" I said.
"It's privately held," Warren said.
"Oh," I said.
"I might buy it anyway," Warren said. "Someday."
— *Supermoney* by Adam Smith (1972)

Our activities in this part of Berkshire cover the waterfront. Let's look, though, at a summary balance sheet and earnings statement for the entire group.

Balance Sheet 12/31/13 (in millions)

Assets		*Liabilities and Equity*	
Cash and equivalents	$ 6,625	Notes payable	$ 1,615
Accounts and notes receivable	7,749	Other current liabilities	8,965
Inventory	9,945	Total current liabilities	10,580
Other current assets	716		
Total current assets	25,035		
		Deferred taxes	5,184
Goodwill and other intangibles	25,617	Term debt and other liabilities	4,405
Fixed assets	19,389	Non-controlling interests	456
Other assets	4,274	Berkshire equity	53,690
	$74,315		$74,315

Earnings Statement (in millions)

	2013	*2012*	*2011*
Revenues	$95,291	$83,255	$72,406
Operating expenses	88,414	76,978	67,239
Interest expense	135	146	130
Pre-tax earnings	6,742	6,131	5,037
Income taxes and non-controlling interests	2,512	2,432	1,998
Net earnings	$ 4,230	$ 3,699	$ 3,039

Our income and expense data conforming to Generally Accepted Accounting Principles ("GAAP") is on page 29. In contrast, the operating expense figures above are non-GAAP and exclude some purchase-accounting items (primarily the amortization of certain intangible assets). We present the data in this manner because Charlie and I believe the adjusted numbers more accurately reflect the true economic expenses and profits of the businesses aggregated in the table than do GAAP figures.

I won't explain all of the adjustments – some are tiny and arcane – but serious investors should understand the disparate nature of intangible assets: Some truly deplete over time while others in no way lose value. With software, for example, amortization charges are very real expenses. Charges against other intangibles such as the amortization of customer relationships, however, arise through purchase-accounting rules and are clearly not real costs. GAAP accounting draws no distinction between the two types of charges. Both, that is, are recorded as expenses when earnings are calculated – even though from an investor's viewpoint they could not be more different.

In the GAAP-compliant figures we show on page 29, amortization charges of $648 million for the companies included in this section are deducted as expenses. We would call about 20% of these "real," the rest not. This difference has become significant because of the many acquisitions we have made. It will almost certainly rise further as we acquire more companies.

Eventually, of course, the non-real charges disappear when the assets to which they're related become fully amortized. But this usually takes 15 years and – alas – it will be my successor whose reported earnings get the benefit of their expiration.

Every dime of depreciation expense we report, however, is a real cost. And that's true at almost all other companies as well. When Wall Streeters tout EBITDA as a valuation guide, button your wallet.

Our public reports of earnings will, of course, continue to conform to GAAP. To embrace reality, however, remember to add back most of the amortization charges we report.

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The crowd of companies in this section sells products ranging from lollipops to jet airplanes. Some of these businesses, measured by earnings on unleveraged net *tangible* assets, enjoy terrific economics, producing profits that run from 25% after-tax to far more than 100%. Others generate good returns in the area of 12% to 20%. A few, however, have very poor returns, a result of some serious mistakes I made in my job of capital allocation. I was not misled: I simply was wrong in my evaluation of the economic dynamics of the company or the industry in which it operated.

Fortunately, my blunders usually involved relatively small acquisitions. Our large buys have generally worked out well and, in a few cases, more than well. I have not, however, made my last mistake in purchasing either businesses or stocks. Not everything works out as planned.

Viewed as a single entity, the companies in this group are an excellent business. They employed an average of $25 billion of net tangible assets during 2013 and, with large quantities of excess cash and little leverage, earned 16.7% after-tax on that capital.

Of course, a business with terrific economics can be a bad investment if the purchase price is excessive. We have paid substantial premiums to net tangible assets for most of our businesses, a cost that is reflected in the large figure we show for goodwill. Overall, however, we are getting a decent return on the capital we have deployed in this sector. Furthermore, the intrinsic value of these businesses, in aggregate, exceeds their carrying value by a good margin. Even so, the difference between intrinsic value and carrying value in the insurance and regulated-industry segments is *far* greater. It is there that the truly big winners reside.

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We have far too many companies in this group to comment on them individually. Moreover, both current and potential competitors read this report. In a few of our businesses we might be disadvantaged if they knew our numbers. So, in some of our operations that are not of a size material to an evaluation of Berkshire, we only disclose what is required. You can find a good bit of detail about many of our operations, however, on pages 80-84.

I can't resist, however, giving you an update on Nebraska Furniture Mart's expansion into Texas. I'm not covering this event because of its *economic* importance to Berkshire – it takes more than a new store to move the needle on Berkshire's $225 billion equity base. But I've now worked 30 years with the marvelous Blumkin family, and I'm excited about the remarkable store – truly Texas-sized – it is building at The Colony, in the northern part of the Dallas metropolitan area.

When the store is completed next year, NFM will have – under one roof, and on a 433-acre site – 1.8 million square feet of retail and supporting warehouse space. View the project's progress at www.nfm.com/texas. NFM already owns the two highest-volume home furnishings stores in the country (in Omaha and Kansas City, Kansas), each doing about $450 million annually. I predict the Texas store will blow these records away. If you live anywhere near Dallas, come check us out.

I think back to August 30, 1983 – my birthday – when I went to see Mrs. B (Rose Blumkin), carrying a 1¼-page purchase proposal for NFM that I had drafted. (It's reproduced on pages 114 - 115.) Mrs. B accepted my offer without changing a word, and we completed the deal without the involvement of investment bankers or lawyers (an experience that can only be described as heavenly). Though the company's financial statements were unaudited, I had no worries. Mrs. B simply told me what was what, and her word was good enough for me.

Mrs. B was 89 at the time and worked until 103 – definitely my kind of woman. Take a look at NFM's financial statements from 1946 on pages 116 - 117. Everything NFM now owns comes from (a) that $72,264 of net worth and $50 – *no* zeros omitted – of cash the company then possessed, and (b) the incredible talents of Mrs. B, her son, Louie, and his sons Ron and Irv.

The punch line to this story is that Mrs. B never spent a day in school. Moreover, she emigrated from Russia to America knowing not a word of English. But she loved her adopted country: At Mrs. B's request, the family always sang *God Bless America* at its gatherings.

Aspiring business managers should look hard at the plain, but rare, attributes that produced Mrs. B's incredible success. Students from 40 universities visit me every year, and I have them start the day with a visit to NFM. If they absorb Mrs. B's lessons, they need none from me.

Finance and Financial Products

> *"Clayton's loan portfolio will likely grow to at least $5 billion in not too many years and, with sensible credit standards in place, should deliver significant earnings."*
>
> *— 2003 Annual Report*

This sector, our smallest, includes two rental companies, XTRA (trailers) and CORT (furniture), as well as Clayton Homes, the country's leading producer and financer of manufactured homes. Aside from these 100%-owned subsidiaries, we also include in this category a collection of financial assets and our 50% interest in Berkadia Commercial Mortgage.

Clayton is placed in this section because it owns and services 326,569 mortgages, totaling $13.6 billion. In recent years, as manufactured home sales plummeted, a high percentage of Clayton's earnings came from this mortgage business.

In 2013, however, the sale of new homes began to pick up and earnings from both manufacturing and retailing are again becoming significant. Clayton remains America's number one homebuilder: Its 2013 output of 29,547 homes accounted for about 4.7% of all single-family residences built in the country. Kevin Clayton, Clayton's CEO, has done a magnificent job of guiding the company through the severe housing depression. Now, his job – definitely more fun these days – includes the prospect of another earnings gain in 2014.

CORT and XTRA are leaders in their industries as well. And Jeff Pederson and Bill Franz will keep them on top. We are backing their plans through purchases of equipment that enlarge their rental potential.

Here's the pre-tax earnings recap for this sector:

	2013	*2012*	*2011*
		(in millions)	
Berkadia	$ 80	$ 35	$ 25
Clayton	416	255	154
CORT	40	42	29
XTRA	125	106	126
Net financial income*	324	410	440
	$985	$848	$ 774

* Excludes capital gains or losses

Investments

"Our stock portfolio . . . was worth approximately $17 million less than its carrying value [cost] . . . it is our belief that, over a period of years, the overall portfolio will prove to be worth more than its cost."

— 1974 Annual Report

Below we list our fifteen common stock investments that at yearend had the largest market value.

			12/31/13	
*Shares***	*Company*	*Percentage of Company Owned*	*Cost**	*Market*
			(in millions)	
151,610,700	American Express Company	14.2	$ 1,287	$ 13,756
400,000,000	The Coca-Cola Company	9.1	1,299	16,524
22,238,900	DIRECTV	4.2	1,017	1,536
41,129,643	Exxon Mobil Corp.	0.9	3,737	4,162
13,062,594	The Goldman Sachs Group, Inc.	2.8	750	2,315
68,121,984	International Business Machines Corp.	6.3	11,681	12,778
24,669,778	Moody's Corporation	11.5	248	1,936
20,060,390	Munich Re	11.2	2,990	4,415
20,668,118	Phillips 66	3.4	660	1,594
52,477,678	The Procter & Gamble Company	1.9	336	4,272
22,169,930	Sanofi	1.7	1,747	2,354
301,046,076	Tesco plc	3.7	1,699	1,666
96,117,069	U.S. Bancorp	5.3	3,002	3,883
56,805,984	Wal-Mart Stores, Inc.	1.8	2,976	4,470
483,470,853	Wells Fargo & Company	9.2	11,871	21,950
	Others		11,281	19,894
	Total Common Stocks Carried at Market		$56,581	$117,505

*This is our actual purchase price and also our tax basis; GAAP "cost" differs in a few cases because of write-ups or write-downs that have been required under its rules.

**Excludes shares held by Berkshire subsidiary pension funds.

Berkshire has one major equity position that is not included in the table: We can buy 700 million shares of Bank of America at any time prior to September 2021 for $5 billion. At yearend these shares were worth $10.9 billion. We are likely to purchase the shares just before expiration of our option. In the meantime, it is important for you to realize that Bank of America is, in effect, our fifth largest equity investment and one we value highly.

In addition to our equity holdings, we also invest substantial sums in bonds. Usually, we've done well in these. But not always.

Most of you have never heard of Energy Future Holdings. Consider yourselves lucky; I certainly wish I hadn't. The company was formed in 2007 to effect a giant leveraged buyout of electric utility assets in Texas. The equity owners put up $8 billion and borrowed a massive amount in addition. About $2 billion of the debt was purchased by Berkshire, pursuant to a decision I made without consulting with Charlie. That was a *big* mistake.

Unless natural gas prices soar, EFH will almost certainly file for bankruptcy in 2014. Last year, we sold our holdings for $259 million. While owning the bonds, we received $837 million in cash interest. Overall, therefore, we suffered a pre-tax loss of $873 million. Next time I'll call Charlie.

A few of our subsidiaries – primarily electric and gas utilities – use derivatives in their operations. Otherwise, we have not entered into any derivative contracts for some years, and our existing positions continue to run off. The contracts that have expired have delivered large profits as well as several billion dollars of medium-term float. Though there are no guarantees, we expect a similar result from those remaining on our books.

Some Thoughts About Investing

Investment is most intelligent when it is most businesslike.
— *The Intelligent Investor* by Benjamin Graham

It is fitting to have a Ben Graham quote open this discussion because I owe so much of what I know about investing to him. I will talk more about Ben a bit later, and I will even sooner talk about common stocks. But let me first tell you about two small non-stock investments that I made long ago. Though neither changed my net worth by much, they are instructive.

This tale begins in Nebraska. From 1973 to 1981, the Midwest experienced an explosion in farm prices, caused by a widespread belief that runaway inflation was coming and fueled by the lending policies of small rural banks. Then the bubble burst, bringing price declines of 50% or more that devastated both leveraged farmers and their lenders. Five times as many Iowa and Nebraska banks failed in that bubble's aftermath than in our recent Great Recession.

In 1986, I purchased a 400-acre farm, located 50 miles north of Omaha, from the FDIC. It cost me $280,000, considerably less than what a failed bank had lent against the farm a few years earlier. I knew nothing about operating a farm. But I have a son who loves farming and I learned from him both how many bushels of corn and soybeans the farm would produce and what the operating expenses would be. From these estimates, I calculated the normalized return from the farm to then be about 10%. I also thought it was likely that productivity would improve over time and that crop prices would move higher as well. Both expectations proved out.

I needed no unusual knowledge or intelligence to conclude that the investment had no downside and potentially had substantial upside. There would, of course, be the occasional bad crop and prices would sometimes disappoint. But so what? There would be some unusually good years as well, and I would never be under any pressure to sell the property. Now, 28 years later, the farm has tripled its earnings and is worth five times or more what I paid. I still know nothing about farming and recently made just my second visit to the farm.

In 1993, I made another small investment. Larry Silverstein, Salomon's landlord when I was the company's CEO, told me about a New York retail property adjacent to NYU that the Resolution Trust Corp. was selling. Again, a bubble had popped – this one involving commercial real estate – and the RTC had been created to dispose of the assets of failed savings institutions whose optimistic lending practices had fueled the folly.

Here, too, the analysis was simple. As had been the case with the farm, the unleveraged current yield from the property was about 10%. But the property had been undermanaged by the RTC, and its income would increase when several vacant stores were leased. Even more important, the largest tenant – who occupied around 20% of the project's space – was paying rent of about $5 per foot, whereas other tenants averaged $70. The expiration of this bargain lease in nine years was certain to provide a major boost to earnings. The property's location was also superb: NYU wasn't going anywhere.

I joined a small group, including Larry and my friend Fred Rose, that purchased the parcel. Fred was an experienced, high-grade real estate investor who, with his family, would manage the property. And manage it they did. As old leases expired, earnings tripled. Annual distributions now exceed 35% of our original equity investment. Moreover, our original mortgage was refinanced in 1996 and again in 1999, moves that allowed several special distributions totaling more than 150% of what we had invested. I've yet to view the property.

Income from both the farm and the NYU real estate will probably increase in the decades to come. Though the gains won't be dramatic, the two investments will be solid and satisfactory holdings for my lifetime and, subsequently, for my children and grandchildren.

I tell these tales to illustrate certain fundamentals of investing:

- You don't need to be an expert in order to achieve satisfactory investment returns. But if you aren't, you must recognize your limitations and follow a course certain to work reasonably well. Keep things simple and don't swing for the fences. When promised quick profits, respond with a quick "no."

- Focus on the future productivity of the asset you are considering. If you don't feel comfortable making a rough estimate of the asset's future earnings, just forget it and move on. No one has the ability to evaluate every investment possibility. But omniscience isn't necessary; you only need to understand the actions you undertake.

- If you instead focus on the prospective price change of a contemplated purchase, you are speculating. There is nothing improper about that. I know, however, that I am unable to speculate successfully, and I am skeptical of those who claim sustained success at doing so. Half of all coin-flippers will win their first toss; *none* of those winners has an expectation of profit if he continues to play the game. And the fact that a given asset has appreciated in the recent past is *never* a reason to buy it.

- With my two small investments, I thought *only* of what the properties would produce and cared not at all about their daily valuations. Games are won by players who focus on the playing field – not by those whose eyes are glued to the scoreboard. If you can enjoy Saturdays and Sundays without looking at stock prices, give it a try on weekdays.

- Forming macro opinions or listening to the macro or market predictions of others is a waste of time. Indeed, it is dangerous because it may blur your vision of the facts that are truly important. (When I hear TV commentators glibly opine on what the market will do next, I am reminded of Mickey Mantle's scathing comment: "You don't know how easy this game is until you get into that broadcasting booth.")

- My two purchases were made in 1986 and 1993. What the economy, interest rates, or the stock market might do in the years immediately following – 1987 and 1994 – was of no importance to me in making those investments. I can't remember what the headlines or pundits were saying at the time. Whatever the chatter, corn would keep growing in Nebraska and students would flock to NYU.

There is one major difference between my two small investments and an investment in stocks. Stocks provide you minute-to-minute valuations for your holdings whereas I have yet to see a quotation for either my farm or the New York real estate.

It should be an enormous advantage for investors in stocks to have those wildly fluctuating valuations placed on their holdings – and for some investors, it is. After all, if a moody fellow with a farm bordering my property yelled out a price every day to me at which he would either buy my farm or sell me his – and those prices varied widely over short periods of time depending on his mental state – how in the world could I be other than benefited by his erratic behavior? If his daily shout-out was ridiculously low, and I had some spare cash, I would buy his farm. If the number he yelled was absurdly high, I could either sell to him or just go on farming.

Owners of stocks, however, too often let the capricious and often irrational behavior of their fellow owners cause them to behave irrationally as well. Because there is so much chatter about markets, the economy, interest rates, price behavior of stocks, etc., some investors believe it is important to listen to pundits – and, worse yet, important to consider acting upon their comments.

Those people who can sit quietly for decades when they own a farm or apartment house too often become frenetic when they are exposed to a stream of stock quotations and accompanying commentators delivering an implied message of "Don't just sit there, *do* something." For these investors, liquidity is transformed from the unqualified benefit it should be to a curse.

A "flash crash" or some other extreme market fluctuation can't hurt an investor any more than an erratic and mouthy neighbor can hurt my farm investment. Indeed, tumbling markets can be helpful to the true investor if he has cash available when prices get far out of line with values. A climate of fear is your *friend* when investing; a euphoric world is your enemy.

During the extraordinary financial panic that occurred late in 2008, I never gave a thought to selling my farm or New York real estate, even though a severe recession was clearly brewing. And, if I had owned 100% of a solid business with good long-term prospects, it would have been foolish for me to even consider dumping it. So why would I have sold my stocks that were small participations in wonderful businesses? True, any one of them might eventually disappoint, but as a group they were certain to do well. Could anyone really believe the earth was going to swallow up the incredible productive assets and unlimited human ingenuity existing in America?

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When Charlie and I buy stocks – which we think of as small portions of businesses – our analysis is very similar to that which we use in buying entire businesses. We first have to decide whether we can sensibly estimate an earnings range for five years out, or more. If the answer is yes, we will buy the stock (or business) if it sells at a reasonable price in relation to the bottom boundary of our estimate. If, however, we lack the ability to estimate future earnings – which is usually the case – we simply move on to other prospects. In the 54 years we have worked together, we have *never* foregone an attractive purchase because of the macro or political environment, or the views of other people. In fact, these subjects never come up when we make decisions.

It's vital, however, that we recognize the perimeter of our "circle of competence" and stay well inside of it. Even then, we will make some mistakes, both with stocks and businesses. But they will not be the disasters that occur, for example, when a long-rising market induces purchases that are based on anticipated price behavior and a desire to be where the action is.

Most investors, of course, have not made the study of business prospects a priority in their lives. If wise, they will conclude that they do not know enough about specific businesses to predict their future earning power.

I have good news for these non-professionals: The typical investor doesn't need this skill. In aggregate, American business has done wonderfully over time and will continue to do so (though, most assuredly, in *unpredictable* fits and starts). In the 20th Century, the Dow Jones Industrials index advanced from 66 to 11,497, paying a rising stream of dividends to boot. The 21st Century will witness further gains, almost certain to be substantial. The goal of the non-professional should not be to pick winners – neither he nor his "helpers" can do that – but should rather be to own a cross-section of businesses that in aggregate are bound to do well. A low-cost S&P 500 index fund will achieve this goal.

That's the "what" of investing for the non-professional. The "when" is also important. The main danger is that the timid or beginning investor will enter the market at a time of extreme exuberance and then become disillusioned when paper losses occur. (Remember the late Barton Biggs' observation: "A bull market is like sex. It feels best just before it ends.") The antidote to that kind of mistiming is for an investor to accumulate shares over a long period and never to sell when the news is bad and stocks are well off their highs. Following those rules, the "know-nothing" investor who both diversifies and *keeps his costs minimal* is virtually certain to get satisfactory results. Indeed, the unsophisticated investor who is realistic about his shortcomings is likely to obtain better long-term results than the knowledgeable professional who is blind to even a single weakness.

If "investors" frenetically bought and sold farmland to each other, neither the yields nor prices of their crops would be increased. The only consequence of such behavior would be decreases in the overall earnings realized by the farm-owning population because of the substantial costs it would incur as it sought advice and switched properties.

Nevertheless, both individuals and institutions will constantly be urged to be active by those who profit from giving advice or effecting transactions. The resulting frictional costs can be huge and, for investors in aggregate, devoid of benefit. So ignore the chatter, keep your costs minimal, and invest in stocks as you would in a farm.

My money, I should add, is where my mouth is: What I advise here is essentially identical to certain instructions I've laid out in my will. One bequest provides that cash will be delivered to a trustee for my wife's benefit. (I have to use cash for individual bequests, because *all* of my Berkshire shares will be fully distributed to certain philanthropic organizations over the ten years following the closing of my estate.) My advice to the trustee could not be more simple: Put 10% of the cash in short-term government bonds and 90% in a very low-cost S&P 500 index fund. (I suggest Vanguard's.) I believe the trust's long-term results from this policy will be superior to those attained by most investors – whether pension funds, institutions or individuals – who employ high-fee managers.

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And now back to Ben Graham. I learned most of the thoughts in this investment discussion from Ben's book *The Intelligent Investor*, which I bought in 1949. My financial life changed with that purchase.

Before reading Ben's book, I had wandered around the investing landscape, devouring everything written on the subject. Much of what I read fascinated me: I tried my hand at charting and at using market indicia to predict stock movements. I sat in brokerage offices watching the tape roll by, and I listened to commentators. All of this was fun, but I couldn't shake the feeling that I wasn't getting anywhere.

In contrast, Ben's ideas were explained logically in elegant, easy-to-understand prose (without Greek letters or complicated formulas). For me, the key points were laid out in what later editions labeled Chapters 8 and 20. (The original 1949 edition numbered its chapters differently.) These points guide my investing decisions today.

A couple of interesting sidelights about the book: Later editions included a postscript describing an unnamed investment that was a bonanza for Ben. Ben made the purchase in 1948 when he was writing the first edition and – brace yourself – the mystery company was GEICO. If Ben had not recognized the special qualities of GEICO when it was still in its infancy, my future and Berkshire's would have been far different.

The 1949 edition of the book also recommended a railroad stock that was then selling for $17 and earning about $10 per share. (One of the reasons I admired Ben was that he had the guts to use current examples, leaving himself open to sneers if he stumbled.) In part, that low valuation resulted from an accounting rule of the time that required the railroad to exclude from its reported earnings the substantial retained earnings of affiliates.

The recommended stock was Northern Pacific, and its most important affiliate was Chicago, Burlington and Quincy. These railroads are now important parts of BNSF (Burlington Northern Santa Fe), which is today fully owned by Berkshire. When I read the book, Northern Pacific had a market value of about $40 million. Now its successor (having added a great many properties, to be sure) *earns* that amount every four days.

I can't remember what I paid for that first copy of *The Intelligent Investor*. Whatever the cost, it would underscore the truth of Ben's adage: Price is what you pay, value is what you get. Of all the investments I ever made, buying Ben's book was the best (except for my purchase of two marriage licenses).

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Local and state financial problems are accelerating, in large part because public entities promised pensions they couldn't afford. Citizens and public officials typically under-appreciated the gigantic financial tapeworm that was born when promises were made that conflicted with a willingness to fund them. Unfortunately, pension mathematics today remain a mystery to most Americans.

Investment policies, as well, play an important role in these problems. In 1975, I wrote a memo to Katharine Graham, then chairman of The Washington Post Company, about the pitfalls of pension promises and the importance of investment policy. That memo is reproduced on pages 118 - 136.

During the next decade, you will read a lot of news – *bad* news – about public pension plans. I hope my memo is helpful to you in understanding the necessity for prompt remedial action where problems exist.

The Annual Meeting

The annual meeting will be held on Saturday, May 3rd at the CenturyLink Center. Carrie Sova, our talented ringmaster, will be in charge, and all of our headquarters group will pitch in to help her. Our gang both does a better job than professional event planners would and – yes – saves us money.

CenturyLink's doors will open at 7 a.m., and at 7:30 we will have our third International Newspaper Tossing Challenge. Our target will be a Clayton Home porch, precisely 35 feet from the throwing line. I tossed about 500,000 papers when I was a teenager, so I think I'm pretty good. Challenge me: I'll buy a Dilly Bar for anyone who lands his or her throw closer to the doorstep than I do. The papers will be 36 to 42 pages, and you must fold them yourself (no rubber bands allowed).

At 8:30, a new Berkshire movie will be shown. An hour later, we will start the question-and-answer period, which (with a break for lunch at CenturyLink's stands) will last until 3:30. After a short recess, Charlie and I will convene the annual meeting at 3:45. If you decide to leave during the day's question periods, please do so while *Charlie* is talking.

The best reason to exit, of course, is to *shop*. We'll assist you by filling the 194,300-square-foot hall that adjoins the meeting area with products from dozens of Berkshire subsidiaries. Last year, you did your part, and most locations racked up record sales. In a nine-hour period, we sold 1,062 pairs of Justin boots (that's a pair every 32 seconds), 12,792 pounds of See's candy, 11,162 Quikut knives (21 knives per minute) and 6,344 pairs of Wells Lamont gloves, always a hot item. This year, Charlie and I will have competing ketchup bottles for sale. Naturally, the one with Charlie's picture will be heavily discounted. But, if you help, my bottle will outsell his. This is important, so don't let me down.

Brooks, our running-shoe company, will again have a special commemorative shoe to offer at the meeting. After you purchase a pair, wear them the next day at our second annual "Berkshire 5K," an 8 a.m. race starting at the CenturyLink. Full details for participating will be included in the Visitor's Guide that you will receive with your tickets for the meeting. Entrants will find themselves running alongside many of Berkshire's managers, directors and associates.

GEICO will have a booth in the shopping area, staffed by a number of its top counselors from around the country. Stop by for a quote. In most cases, GEICO will be able to give you a shareholder discount (usually 8%). This special offer is permitted by 44 of the 51 jurisdictions in which we operate. (One supplemental point: The discount is not additive if you qualify for another, such as that given certain groups.) Bring the details of your existing insurance and check out whether we can save you money. For at least half of you, I believe we can.

Be sure to visit the Bookworm. It will carry about 35 books and DVDs, among them a couple of new titles. One is Max Olson's compilation of Berkshire letters going back to 1965. The book includes an index that I find particularly useful, specifying page numbers for individuals, companies and subject matter. I also recommend *Forty Chances* by my son, Howard. You'll enjoy it.

If you are a big spender – or aspire to become one – visit Signature Flight Support on the east side of the Omaha airport between noon and 5 p.m. on Saturday. There, we will have a fleet of NetJets aircraft sure to set your pulse racing. Come by bus; leave by private jet. Live a little.

An attachment to the proxy material that is enclosed with this report explains how you can obtain the credential you will need for admission to the meeting and other events. Airlines have sometimes jacked up prices for the Berkshire weekend. If you are coming from far away, compare the cost of flying to Kansas City versus Omaha. The drive between the two cities is about 2½ hours, and it may be that Kansas City can save you significant money, particularly if you had planned to rent a car in Omaha. Spend the savings with us.

At Nebraska Furniture Mart, located on a 77-acre site on 72nd Street between Dodge and Pacific, we will again be having "Berkshire Weekend" discount pricing. Last year in the week surrounding the meeting, the store did $40.2 million of business, breaking its previous record by 12%. It also set a single day record of $8.2 million on Saturday, selling nearly $1 million of mattresses alone.

To obtain the Berkshire discount at NFM, you must make your purchases between Tuesday, April 29th and Monday, May 5th inclusive, and also present your meeting credential. The period's special pricing will even apply to the products of several prestigious manufacturers that normally have ironclad rules against discounting but which, in the spirit of our shareholder weekend, have made an exception for you. We appreciate their cooperation. NFM is open from 10 a.m. to 9 p.m. Monday through Saturday, and 10 a.m. to 6 p.m. on Sunday. On Saturday this year, from 5:30 p.m. to 8 p.m., NFM is having a picnic to which you are all invited.

At Borsheims, we will again have two shareholder-only events. The first will be a cocktail reception from 6 p.m. to 9 p.m. on Friday, May 2nd. The second, the main gala, will be held on Sunday, May 4th, from 9 a.m. to 4 p.m. On Saturday, we will be open until 6 p.m. In recent years, our three-day volume has far exceeded sales in all of December, normally a jeweler's best month.

About 1:15 p.m. on Sunday, I will begin clerking at Borsheims. Ask for my "Crazy Warren" quote on the item of your choice. As I get older, my pricing gets ever more ridiculous. Come take advantage of me.

We will have huge crowds at Borsheims throughout the weekend. For your convenience, therefore, shareholder prices will be available from Monday, April 28th through Saturday, May 10th. During that period, please identify yourself as a shareholder by presenting your meeting credentials or a brokerage statement that shows you are a Berkshire holder.

On Sunday, in the mall outside of Borsheims, a blindfolded Patrick Wolff, twice U.S. chess champion, will take on all comers – who will have their eyes wide open – in groups of six. Nearby, Norman Beck, a remarkable magician from Dallas, will bewilder onlookers. Additionally, we will have Bob Hamman and Sharon Osberg, two of the world's top bridge experts, available to play bridge with our shareholders on Sunday afternoon. Don't play them for money.

My friend, Ariel Hsing, will be in the mall as well on Sunday, taking on challengers at table tennis. Last year, she made Americans – and especially me – proud with her performance at the Olympics.

I met Ariel when she was nine and even then I was unable to score a point against her. Now, she's a freshman at Princeton and the U.S. Women's Champion. If you don't mind embarrassing yourself, test your skills against her, beginning at 1 p.m. Bill Gates and I will lead off and try to soften her up.

Gorat's and Piccolo's will again be open exclusively for Berkshire shareholders on Sunday, May 4th. Both will be serving until 10 p.m., with Gorat's opening at 1 p.m. and Piccolo's opening at 4 p.m. These restaurants are my favorites, and I will eat at both of them on Sunday evening. Remember: To make a reservation at Gorat's, call 402-551-3733 on April 1st (*but not before*) and for Piccolo's call 402-342-9038. At Piccolo's order a giant root beer float for dessert. Only sissies get the small one.

We will again have the same three financial journalists lead the question-and-answer period at the meeting, asking Charlie and me questions that shareholders have submitted to them by e-mail. The journalists and their e-mail addresses are: Carol Loomis, of Fortune, who may be e-mailed at cloomis@fortunemail.com; Becky Quick, of CNBC, at BerkshireQuestions@cnbc.com; and Andrew Ross Sorkin, of The New York Times, at arsorkin@nytimes.com.

From the questions submitted, each journalist will choose the six he or she decides are the most interesting and important. The journalists have told me your question has the best chance of being selected if you keep it concise, avoid sending it in at the last moment, make it Berkshire-related and include no more than two questions in any e-mail you send them. (In your e-mail, let the journalist know if you would like your name mentioned if your question is selected.)

We will also have a panel of three analysts who follow Berkshire. This year the insurance specialist will be Jay Gelb of Barclays. Questions that deal with our non-insurance operations will come from Jonathan Brandt of Ruane, Cunniff & Goldfarb.

And we will again have a credentialed bear on Berkshire. We would like to hear from applicants who are short Berkshire (please include evidence of your position). The three analysts will bring their own Berkshire-specific questions and alternate with the journalists and the audience in asking them.

Charlie and I believe that all shareholders should have access to new Berkshire information simultaneously and should also have adequate time to analyze it. That's why we try to issue financial information late on Fridays or early on Saturdays and why our annual meeting is held on Saturdays. We do not talk one-on-one to large institutional investors or analysts, but rather treat *all* shareholders the same. Our hope is that the journalists and analysts will ask questions that further educate our owners about their investment.

Neither Charlie nor I will get so much as a clue about the questions to be asked. We know the journalists and analysts will come up with some tough ones, and that's the way we like it. All told, we expect at least 54 questions, which will allow for six from each analyst and journalist and 18 from the audience. If there is some extra time, we will take more from the audience. Audience questioners will be determined by drawings that will take place at 8:15 a.m. at each of the 15 microphones located in the arena and main overflow room.

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For good reason, I regularly extol the accomplishments of our operating managers. They are truly All-Stars, who run their businesses as if they were the only asset owned by their families. I believe the mindset of our managers to be as shareholder-oriented as can be found in the universe of large publicly-owned companies. Most have no financial need to work; the joy of hitting business "home runs" means as much to them as their paycheck.

Equally important, however, are the 24 men and women who work with me at our corporate office. This group efficiently deals with a multitude of SEC and other regulatory requirements, files a 23,000-page Federal income tax return as well as state and foreign returns, responds to countless shareholder and media inquiries, gets out the annual report, prepares for the country's largest annual meeting, coordinates the Board's activities – and the list goes on and on.

They handle all of these business tasks cheerfully and with unbelievable efficiency, making my life easy and pleasant. Their efforts go beyond activities strictly related to Berkshire: Last year they dealt with the 40 universities (selected from 200 applicants) who sent students to Omaha for a Q&A day with me. They also handle all kinds of requests that I receive, arrange my travel, and even get me hamburgers and French fries (smothered in ketchup, of course) for lunch. No CEO has it better; I truly do feel like tap dancing to work every day.

In closing, I think it's become appropriate to ignore our "no pictures" policy and let you view our remarkable home-office crew. Below is a photo from our Christmas lunch. Two people couldn't make it; otherwise you are looking at all of those who staff Berkshire's headquarters. They are truly miracle-workers.

Next year's letter will review our 50 years at Berkshire and speculate a bit about the next 50. In the meantime, come to Omaha on May 3rd and enjoy our Woodstock for Capitalists.

February 28, 2014

Warren E. Buffett
Chairman of the Board

A power lunch, Berkshire-style

Morning Session - 2014 Meeting

1. Buffett's "second career" with singer Paul Anka

WARREN BUFFETT: Thank you. (Applause)

Good morning. Before we start, there are two very special guests that I'd like to introduce, have stand up.

The first, even though he was on tour, he took a quick detour to Omaha to be here today. And will my friend [singer-songwriter] Paul Anka please stand up. Paul? (Applause)

With all the talk that had been around about my succession, I thought it was probably a good idea to try and hook up with someone famous that might give me a shot at a second career here. (Laughter)

So we're available for weddings and funerals and bar mitzvahs. (Laughter)

We actually had one offer the other day. I thought it was kind of insulting. They offered $1,000. And, I mean, for me and Paul, that really seemed a little ridiculous.

I told the people that and they said, "OK. We'll make it $10,000 if just Paul comes." (Laughter)

2. Berkshire's Carrie Sova introduced

WARREN BUFFETT: Now we have one other very special guest.

This affair does not just happen by itself.

And there's a young woman who had a baby, a young boy named Brady, in September. And she has marshaled together 400-plus of the people from our various companies and put on the show you're witnessing today.

And I just want to say a special thanks to the woman we all love, and especially me, Carrie Sova. Carrie? (Applause)

Please stand up. There she is. (Applause)

3. Berkshire directors introduced

WARREN BUFFETT: OK. Now we get down to the minor players and we'll introduce the board of directors. (Laughs)

We're going to have the — we'll have the board meeting — the shareholders meeting, I should say — after the Q&A, which will end at 3:30. And then we'll recess for 15 minutes. And at 3:45, reinstitute the — or begin — the shareholders meeting.

But for those of you who won't be around at 3:45, I'd like you to have a chance to meet the directors now.

So, I will introduce them one at a time and ask them to stand. Hard as it may be, withhold your applause until they're all finished standing, and then you can go crazy.

So, doing it alphabetically, and if you'll stand as I give your name.

Howard Buffett, Steve Burke, Sue Decker, Bill Gates, Sandy Gottesman, Charlotte Guyman, Don Keough, my partner Charlie Munger, Tom Murphy, Ron Olson, Walter Scott, and Meryl Witmer.

And that is the board of directors at Berkshire. (Applause)

4. Berkshire's Q1 earnings summary

WARREN BUFFETT: We have just a couple of slides and then we'll move right into the questioning, which will go on until roughly at noon.

We'll take a break at noon and come back about 1:00, and then we'll continue till 3:30, at which point we'll adjourn and then have the annual meeting at 3:45.

But, there are just a couple slides. We released our earnings yesterday.

And I've always emphasized — we try to release our earnings always after the market's closed, and, preferably, after the market's closed on a Friday, so that people will have a full weekend to digest the information, because there's a lot of information about Berkshire every quarter. And it's contained, primarily, in a 10-Q that we make available for you to read over the full weekend.

So we always urge you not to just look at the summary figures, but take a look at the 10-Q. It's great reading. And absorb all that by Monday morning.

But here we have the summary for the first quarter.

And as you can see, our operating earnings were down a bit. And that was more than accounted for in insurance underwriting. And you should understand that insurance underwriting from quarter to quarter really doesn't mean that much.

For one thing, it can be quite affected by changes in foreign exchange, which really don't have anything to do with our insurance business. But — or at least in the reality of interim results.

Our insurance business now has a float of $77 billion. And that $77 billion is ours to invest. And whether it costs us anything or not is determined by whether we have an underwriting profit.

So even though our underwriting profit in the first quarter was quite satisfactory, but nevertheless down from the first quarter of last year, the insurance business is marvelous for us.

And if we even break even, that $77 billion, which is subtracted from net worth, I mean, it's a liability on the balance sheet, but if it's cost free, it really does us about as much good as net worth itself does. So it's a very remarkable business.

And frankly, if we average an underwriting profit over the years, I'll be very happy and you should be very happy with what our insurance business does for us.

But it was down in the first quarter. And, like I said, that more than accounted for the decline in earnings.

We always advise you to pay little — pay no attention, really — to quarterly or even annual realized gains or losses in securities because we make no attempt to time the sales of securities to produce earnings in any given quarter.

We just try to manage the money as well as we can. And we let the chips fall where they may, in terms of whether those actions produce gains or losses in the short term.

We hope that they produce a lot of gains over the longer term, and they have.

But they should be ignored in attempting to interpret our shorter-term earnings.

5. Buffett praises shareholders for rejecting dividend proposal

WARREN BUFFETT: With that, I would like to give you a little preview of a vote that has taken place and which we will talk more about when we get the shareholders meeting.

But it's so remarkable, that I wanted to put it up for all of you to look at now.

As you know, we had a shareholder resolution. Yeah, it's up there.

We had a shareholder resolution, rather elegantly stated, that suggested that we pay a dividend. And with the sort of subliminal suggestion that we weren't paying it because I was so rich that I could live in this grand style to which I've become accustomed, without a dividend, but that the shareholders were out there essentially bereft of the necessities of life because we were holding all the money here in Omaha. (Laughter)

So this gentleman put this on the ballot. And if we'll go to the next slide, you'll see some remarkable figures.

Bear in mind that, you know, you people get these proxies at your home or at your office. And you can mark anything you want.

We hire no proxy solicitation firms. So we are making no calls. We make no attempt to influence how anybody votes. We just count them as they come in.

And as you'll see at the top, among the Class A shares, the vote was roughly 90-plus-to-one, against the dividend. But you might suspect that I stuffed the ballot box, which I did. (Laughter)

And so I took my vote out. And you'll see down below, the vote was a little less than 40-to-one among the untainted shareholders of A against receiving a dividend.

And then you may say to yourself, "Well, you know, those are Warren and his rich friends, all the plutocrats. And easy for them to say."

So let's go onto the next slide. And you will see there that among the B shareholders — and we believe we may have as many as a million B shareholders. We don't know the exact number. We don't even know an approximate number very well. But it's not a bad guess that we have a million or so shareholders.

And remarkably, by a vote of 45-to-one — these are people — we're not making any phone calls to get their vote or anything — by 45-to-one, our shareholders said, "Don't pay us a dividend."

I'm not sure that there's any company in the world that would get quite that vote.

And now you go to one more slide and that'll be the end.

But this is the rather disturbing part of that vote. If you go to the next page, you'll see again, among the B shareholders, that — I've got that same vote up there — and if you look down below, you will notice that almost the same number of people voted against, or withheld their vote for me, as voted for having a dividend.

So from that you can only deduce that if the shareholders are ever forced with the choice — or I should say, if the directors are ever forced with the choice — of paying a dividend or getting rid of me, it's a close vote. (Laughter)

So you can see why I'm rather reluctant to bring up the dividend question with the directors.

The vote, actually, up until two days earlier, before these final figures, the vote was actually just virtually a dead heat.

The number of people that wanted to have a dividend and the number of people that wanted me to get out of the place were running neck in neck. So it — again, it's a rather unusual voting arrangement.

6. Q&A begins

WARREN BUFFETT: Well, with that we're going to do the questioning, as we always do.

We have journalists on this side. We have financial analysts on this side. And we've got a wonderful group of shareholders in the audience.

So we're going to alternate among these groups. And we will keep doing that until noon. And then we'll pick up where we left off at 1 o'clock, then continue doing it.

And we will start off with Carol Loomis of Fortune Magazine.

CAROL LOOMIS: Good morning. I'll make my two or three sentence introductory remarks.

First, Becky and Andrew and I get hundreds, if not thousands, of questions, and we can only ask a few. So, if we didn't get to your question, please excuse us.

Secondly, Warren and Charlie got no hint of what we were going to ask.

Though they read the news like we do, and that may explain that they would sometimes get a thought about what they were going to get asked. And that will explain my first question.

7. Buffett defends abstaining on "excessive" Coca-Cola compensation

CAROL LOOMIS: The question is from Will Elridge (PH) of New York City.

And he says, "Mr. Buffett, this is a question about Berkshire's holdings in Coca-Cola.

"This spring, Coke asked shareholders to approve a magnanimous stock option program for its executives.

"Asked about it by the press after the vote, you said the program was excessive. Yet, you did not tell the world prior to the Coke shareholders meeting that you believed the program to be excessive, a disclosure that, had it been made earlier, might've made shareholders vote against it.

"And in fact, you did not vote Berkshire's shares against the plan. You only abstained in the voting.

“I guess you had your reasons. I must say, I don’t expect to agree with them. And I cannot see how they can stand up under examination.

“But I still would like to know why you engaged in this very strange, un-Buffett-like behavior.

“So why did you abstain rather than voting no against a corporate action that deserved to be shouted down?”

WARREN BUFFETT: Yeah. Well, some people, incidentally, think that strange and un-Buffett-like are really not quite right. Strange is frequently Buffett-like. (Laughter)

The proposal was made by a shareholder who’d owned shares for a long time and was opposed to the option program.

His calculations — and I probably should explain this in a minute — but his calculations of the dilution were wildly off. And we did not care to get into a discussion of that or anything else.

But we did talk — or I did talk — to Muhtar Kent. And I informed him that we were going to abstain.

I told him that we admired, enormously, the Coca-Cola Company. We admire the management.

And we thought the compensation plan, although it was very similar to a great many plans, was excessive.

And Muhtar and I had a very good discussion right here in Omaha, as a matter of fact, as well as a couple of telephone discussions. And then immediately after the vote, I announced that we had abstained, and gave the reasons that we thought the plan was excessive.

And I think that in terms of having an effect on the Coca-Cola compensation practices, as well as maybe having an effect on some other compensation practices, that that is the most effective — was the most effective — way of behaving for Berkshire.

We made a very clear statement about the excessiveness of the plan. And at the same time, we, in no way, went to war with Coca-Cola. We have no desire to go to war with Coca-Cola.

And we did not endorse some calculations that were wildly inaccurate, and joined forces with someone that I had really no contact with him. I received several letters in the mail after they’d first been given to the press.

So, I think you have to be — I don’t think going to war is a very good idea in most situations. And I think if you’re going to join forces in going to war with somebody, you’d better be very sure about what that alliance might mean.

So, I think the best result for the Coca-Cola Company was achieved by our abstention. And we will see what happens in terms of compensation between now and the next meeting with Coke.

Charlie?

CHARLIE MUNGER: I think you handled the whole situation very well. (Laughter)

WARREN BUFFETT: And Charlie remains vice chairman. (Laughter)

Charlie, incidentally, was the — Charlie was the only one with whom I talked over the vote before — or the abstention — before I did it.

I called Charlie. And told him about the plan. And we agreed on the course of action.

I should point out one thing. And in fairness to David Winters who may — who led the war — he took figures from the Coca-Cola proxy statement. So it's hard to fault him for that.

But for those of you who would really — would like to know how to think about calculating dilution, Coca-Cola has regularly repurchased the shares that are issued through options.

And the share count has, thereby, come down just a small bit at Coca-Cola. Not anywhere near as much as if they hadn't issued as many shares, though, in repurchased shares.

But Coca-Cola has a plan that involves 500 million shares. And they say in the annual report that they expect to issue these over approximately four years. And then they have a further calculation between performance shares and option shares, but I'll leave that out. Make this a little simpler.

And that's a lot of shares.

Let's assume for the moment that Coca-Cola's selling around $40 a share now, which it is. And that when — and that all the options are issued at $40. And that the — when they're exercised, we'll say the stock is $60.

Now, at that point, there has been a $10 billion transfer of value. Twenty dollars a share times 500 million shares, a $10 billion transfer of value.

Now, the company, when that is done, gets a tax deduction — and at the — for 10 billion — and at the present tax rates, that would result in 3 1/2 billion less tax.

So if you take 20 billion of proceeds from exercise of the options, and you add 3 1/2 billion of tax savings, the Coca-Cola Company receives 23 1/2 billion.

And if they should buy in the stock at $60 a share, which it would be selling for then, they would be able to buy 391,666,666 shares.

So, in effect, the Coca-Cola Company, net, would be out a little over eight — 108 million shares. And that's on a base of four-billion-four.

So the dilution — assuming all the proceeds from the option exercise and the tax refund were used to buy shares — the dilution would be 108 million shares on 4.4 billion, or about 2 1/2 percent.

And I don't like dilution and I don't like 2 1/2 percent dilution. But it's a far cry from the numbers that were getting tossed around.

It's a long explanation, but I've never seen the math written about. I mean, I've seen people throwing out claims and all of that.

And you can change my supposition from 55 — 60 to 55 — or 65. It doesn't change things very much.

8. Berkshire likely to team with 3G again despite different styles

WARREN BUFFETT: Jon Brandt

JONATHAN BRANDT: Hi, Warren. Thanks again for having me back.

My first question is as follows: Berkshire has a track record of buying successful companies and leaving them alone.

3G has a more hands-on strategy with its acquisition. Its zero-base budgeting would seem to offer the potential to improve margins at any non-insurance business.

Is there a way for Berkshire to use 3G's methods to boost profits without violating promises made to selling shareholders or breaking faith with Berkshire's decentralized culture?

Would it be consistent with Berkshire's culture to hire a 3G alumnus to run a Berkshire subsidiary after an existing manager retired? Or alternatively, how hard would it be for a non-3G alumnus to learn and implement their management process? Thank you.

WARREN BUFFETT: Yeah. I don't think the two blend very well.

But I do think that we — I think 3G does a magnificent job of running businesses. And I've watched them in the past from afar and I've watched them more recently up close.

And there's no question that it's a different style than Berkshire. And I don't think it would pay to try and blend the two.

But I certainly think that we will see more opportunities to partner with 3G. And we're very likely to jump at those opportunities, because I think they're as able as anybody I've seen in the management of businesses.

And to get a chance to join with them — and in addition to that, they're marvelous partners. They're more than fair in everything they do with us.

So we will, as I've put in the past, I think we're very likely to partner with them, perhaps in things that are very large.

But I do not think a blending of the two would work very well. We've got a system, works very well for us.

And managers, when they join Berkshire, are joining into a large business that's unlike virtually any large business that's around. They really can't find a home exactly like Berkshire.

And that's a huge corporate asset. It's one that's grown over time. It'll continue to grow. And we want to maintain that with a very clear message that it goes well beyond my lifetime.

But we welcome the chance to join with 3G.

Charlie?

CHARLIE MUNGER: I don't think we've ever had a policy that loved overstaffing. (Laughter)

WARREN BUFFETT: Well, I would only slightly disagree with that.

We certainly never had a policy that allows for overstaffing at the home office.

We only feel happy when people are sitting in other people's laps. I mean, you have to understand this.

But the — but we have not enforced, or attempted to enforce, nor would wish to enforce, a strong discipline on every subsidiary as to whether they have a few too many people or not.

A great many don't. In fact, I mean, most of them are — overwhelmingly — they're managed on a lean basis.

But that's not true of everyone we've been involved in over the years. And it probably won't be true of everyone in the future.

We encourage — I mean, we encourage, just by example. But we do not encourage it by edicts, particularly.

Charlie?

CHARLIE MUNGER: I think a lot of great businesses spill a little just because they don't want to be fanatic.

And that's all right. I don't think you have to have the last nickel out of the staffing cost.

9. Corporate taxes aren't holding back businesses

WARREN BUFFETT: OK. We'll go to the shareholder in station 1, up on my far right.

AUDIENCE MEMBER: Yes, hello. My name is Doug Merrill (PH). I'm from Denver, Colorado, the home of Peyton Manning.

WARREN BUFFETT: Omaha, Omaha. (Laughter)

AUDIENCE MEMBER: Awesome.

The president's approval rating is at 40 percent. Steve Wynn said, "Obama is the biggest wet blanket to the economy." Other countries are lowering taxes and reducing debt.

You have Obama's ear. The train's going in the wrong direction. Can you conduct Obama to change the train's direction? (Applause)

WARREN BUFFETT: Doug, I think I'll let you communicate with him directly. (Laughter)

I don't agree with a number of things you've said there. American business is doing extraordinarily well. (Applause)

The — many of the American people are not. And, you know, and I think Obamacare is more about doing something for them than many other people would.

But we're going to have a difference of opinion on politics. And I'm not going to convince you, and you're not going to convince me.

But I will say that anybody that thinks American business is doing — is not doing well — should just look at corporate profits.

Anybody that thinks our corporate taxes are too high should look at a chart of corporate taxes as a percentage of GDP since World War II, and it's come down from 4 percent of GDP to 2 percent of GDP, while many other forms of taxes have, obviously, increased.

And American business earnings on net tangible assets, which is the way to measure profitability overall, you know, it's basically the envy of the world. I mean, we have extraordinary returns on tangible assets — net tangible assets — in this country.

And our tax rates now for corporations are far lower than when Charlie and I were operating. And American business actually was doing pretty good then.

But for much of our life, taxes were at — corporate taxes — were at either 52 percent or 48 percent.

But I don't want to try and convince you because I don't want you to try and convince me. So we'll call a truce on that and I'll let Charlie comment. (Laughter)

CHARLIE MUNGER: I'm going to avoid this one. (Laughter)

WARREN BUFFETT: And people complain about me abstaining. (Laughter)

10. Berkshire underperforms when stock market is strong

WARREN BUFFETT: OK, Becky Quick.

BECKY QUICK: This question is from Manolo Salseda (PH).

And I'll preface it by saying he says that he is "a true admirer of Buffett and what he stands for, so please don't confuse my bluntness and straightforwardness with a lack of admiration or empathy with this amazing person and his master creation." With that disclaimer —

WARREN BUFFETT: "But." (Laughter)

BECKY QUICK: But. His question is, "You've stated several times in the past that if management, you, wasn't capable of delivering a better return than the index, than management wasn't doing the job.

"Then you said that the yardstick should be any five-year period. You've just missed your five-year period comparison.

"How come you didn't tackle the issue in your annual shareholder letter? Are you changing the yardstick, and what's next?"

WARREN BUFFETT: No, we're not changing the yardstick.

But I would point out that we said, actually, in the 2012 report — and it's in the upper half of the first page — we pointed out how we do worse in very strong years and better in poor years.

And I said then, “If the market continues to advance in 2013, our streak of five-year wins will end.”

I didn’t say it might end, or could end, or anything. It was obvious that if you have five strong years in a row, we will not beat the S&P. And that will be true in the future, for sure.

And of course, last year was — I think there were two years in the last 40 or so that the market was up more than it was last year. So, despite the things mentioned about President Obama, the stock market seems to have done quite well.

We will underperform in very strong up years. We’ll probably, more or less, match in moderate up years. We’ll do better than average in even years or down years.

And I have said, and I’ll continue to say, and it’s been true that over any cycle, we will — I think we will overperform. But there’s no guarantee on that.

But it was clearly said — like I say, on the first page of the 2012 report — that if the market went up, we would have a five-year streak of underperformance. And that’s exactly what happened.

Charlie?

CHARLIE MUNGER: Well, we should remember that Warren’s standard talks about net worth of Berkshire increasing, after full corporate taxes, at roughly 35 percent. And the indexes aren’t paying any taxes.

And so, Warren has set a ridiculously tough standard and has so far met it over a long period of time.

In the last couple of years, the net worth of Berkshire, after full corporation income taxes, went up, what, 60?

WARREN BUFFETT: Something like that, yeah —

CHARLIE MUNGER: $60 billion —

WARREN BUFFETT: Yeah. Pre-tax, probably 90 billion in —

CHARLIE MUNGER: Yeah. And so, if this is failure, I want more of it. (Laughter and applause)

11. “Eager” to buy back shares at 120% of book value

WARREN BUFFETT: OK. Jay Gelb.

JAY GELB: Warren, this question is on Berkshire's intrinsic value.

In the annual letter, you appear to strongly signal that Berkshire's shares are undervalued, especially relative to intrinsic value.

Aside from share buybacks, what actions can Berkshire take to narrow the discount between the current share price and intrinsic value? For example, would you ever consider an IPO of Berkshire's individual operating units?

WARREN BUFFETT: The answer to the last part is no.

But the — I think we try to explain —my guess is I've never seen an annual report that uses the term, "intrinsic value," or even talks about the intrinsic value of its units or business, as much as Berkshire does.

So, Charlie and I really devote considerable effort to explaining which of our businesses — where there's really a significant discrepancy between what carrying value is, or book value — call it carrying value — and the true value, or the intrinsic value, of the business.

And I got very specific in the case of GEICO in the past year, for example.

And I said that GEICO, which is carried at about 1 billion over tangible assets, may be worth as much as 20 billion over tangible assets. And I wouldn't be surprised if five years or ten years from now that that figure itself will be a lot larger.

So we've talked about it. We said we are willing to buy — not only willing, but eager to buy — stock at 120 percent of book value.

Well, with book value being close to 230 billion now, that obviously means we think that at $45 billion, roughly, over that figure, we are getting a bargain, in relation to intrinsic value.

But we're never going to try and put out an exact number because we don't know an exact number.

And it's — A, it changes from day to day. And — although not a lot day to day, but certainly changes, you know, over the quarters and over the years.

And the second reason is, if you ask Charlie and me to write down a figure as we sit here as to the intrinsic value of Berkshire, we'd probably be within 5 percent of each other.

But we might very — we probably would not be within 1 percent of each other.

And so we will continue to try to give shareholders information about the important units.

It isn't — the small ones are not unimportant to us, but they are — they do not have a big impact on the overall intrinsic value.

We've got a few businesses. I mean, we have some businesses that may be carried at a few hundred million that might be worth a billion or maybe 2 billion, even.

But that isn't where the big, undisclosed by the balance sheet, values are.

You know, they're in the railroad, they're in the insurance business, they're in our utility business.

And we — they add up to some pretty big numbers. We try to tell you exactly the numbers and, really, and use the words that we use when we're thinking about those businesses ourselves, in terms of estimating their value. But we don't want to go further than that.

The 120 percent, obviously, is a loud shoutout as to a figure that we think is very significantly below intrinsic value, or we wouldn't use it to repurchase shares.

We only believe in repurchasing shares when we can do so at a significant discount from intrinsic value.

Some companies talk about — Coca-Cola does — they talk about buying in shares to cover options. That actually isn't the best reason to buy in shares.

I mean, the stock could be overpriced, and even though you issued on options, you shouldn't be buying it in.

But that's become sort of a mantra throughout corporate America, that if you buy shares to cover the option exercises that you've negated the dilution to shareholders.

But again, if you buy shares — if you buy a dollar bill for 90 cents, you're doing your shareholders a favor. And if you buy it for $1.10, you are doing them no favor at all.

Charlie?

CHARLIE MUNGER: Well, I don't believe we've ever wanted to get the stock way over intrinsic value so that we can issue it to other people and get an advantage for ourselves and a disadvantage for them.

And, I think the people that want the stock up very close to intrinsic value, or higher, really want egg in their beer. It's okay if it's a little below.

And we're not in the game of ballooning our stock up as high as we can get it so we can issue it more at a profit to ourselves.

I think over the long term, our system will work pretty well. And I think the stock will eventually go above intrinsic value, whether we like it or not.

WARREN BUFFETT: Yeah. But we have — we really watched a lot over the years of certain managers attempting to get their stock to sell for way more than it was worth, so they could use it to trade for other companies. I mean, that was all the rage in the late ’60s.

One of the reasons that I wound up my partnership was that that activity was going on so much and it affected all other values.

And it was really a game. And it was a game that some people played sort of halfway honestly, and other people really cheated like crazy, because if you’re trying to get your stock to be overpriced, you’re very likely to cheat on your earnings and cheat on projections. Cheat on everything.

And it works, incidentally. It doesn’t work indefinitely, but it works.

Some companies, whose names you know, were, to some extent, built on that principle.

That’s a game that we not only don’t want to play, we really found it very distasteful, because we saw a lot of these people in action.

And it comes in waves. And we just — we don’t want to come close to playing it.

Unless I’m careful, Charlie will name names, so we’d better move on to shareholders. (Laughter)

12. Why sellers trust Berkshire with the companies they’ve built

WARREN BUFFETT: Well, let’s go to station number 2.

AUDIENCE MEMBER: Hi, Mr. Buffett—

WARREN BUFFETT: Hi.

AUDIENCE MEMBER: — and Mr. Munger.

My name is Masato Luso (PH) and I’m from Los Angeles, California.

Berkshire is known to buy into whole companies for many, many years. But earlier in your careers, that was not known.

And typically, acquisitions of other companies is very disruptive. Employees fear losing their jobs as a redundancy. And managers really have to think twice and be diligent about it.

So my question is, what do you do to gain the trust of founders or owners of the companies you have bought out in the past?

WARREN BUFFETT: Well, we've kept our word to them.

And now we have to be very careful about what we promise, because we can't promise, for example, never to have a layoff in a business we buy, because who knows what the world holds.

But we can promise that we won't sell their business, for example, if it turns out to be disappointing, as long as it doesn't run into the prospect of continuing losses or having significant labor problems.

But we keep — we are keeping — certain businesses that you would not get a passing grade at business school on if you wrote down our reasons for keeping them.

But the reason is, we made a promise.

And we put that — we not only make the promise, we put it in the back of the annual report now — we've done it for 30 years or so — where we list the economic principles.

And we put it there because we believe it. But we put it there, also, so that the managers who sell us their— the owners who sell us their business — know they can count on it.

And if we behave differently, you know, the word would get around. And it should get around.

So, we can make promises. We can't make promises we'll never change employment. We can't even make a promise that we'll keep a business forever.

But we can promise what we do promise, which is that if it turns out to be somewhat disappointing on earnings, but does not promise, sort of, unending losses, or if we have labor problems, we can keep that promise.

And we have kept that promise. We've only had to get rid of a few businesses, including our original textile business.

We promise the managers, you know, that they are going to continue to run their businesses.

And believe me, if we didn't do it, the word would get around on that very quickly. But we've been doing it now for 49 years.

And we've put ourselves in a class that is hard for other people to compete with, if that's important to the seller of a business.

A private equity firm is going to be totally unimpressed by what's in the back of our annual report. They don't care. And that's — there's nothing wrong with that. That's their business.

But for somebody that's built up their company over 20 or 30 or 40 years — and maybe their father or grandfather built it up even before that — some of those people care about where their businesses go.

They're very rich, they've accomplished all kinds of things in life. And they don't want to build up something which somebody else tears apart very quickly believe they handing it over to a few MBAs who want to show their stuff.

So, we do have a unique — close to a unique — asset at Berkshire. And as long as we behave properly, we will maintain that asset. And really, no one else will have much luck in competing with us.

But it doesn't solve all problems, but — and it — and frankly, it's the way we want to operate anyway.

So it's — we're comfortable with it. The sellers that do come to us that care about their businesses are comfortable with it. And I think it'll continue to work well.

Charlie?

CHARLIE MUNGER: Well, obviously, we behave the way we do because we like doing it. And number two, it's worked pretty well and we're unlikely to stop.

WARREN BUFFETT: OK. (Applause)

You can tell that he doesn't get paid by the word. (Laughter)

13. "Social dynamics" weaken oversight by corporate boards

WARREN BUFFETT: Andrew?

ANDREW ROSS SORKIN: Warren. This is a tough corporate governance question. I probably received about a dozen of them this week, some polite and some less polite. This —

WARREN BUFFETT: Use one of the polite ones.

ANDREW ROSS SORKIN: This is probably one of the more polite ones.

"Your son Howard serves on the board of Coke and voted to support its CEO pay package proposal, which you have said was excessive and you were against.

“You have said Howard will become non-executive chairman of Berkshire after you step down, as its, quote, ‘protector of culture,’ to uphold the morals that you and we all hold so dear.

Given his role in the Coke vote, how can we count on Howard to defend the culture of Berkshire and ensure that the future management of Berkshire does not benefit at the expense of its shareholders?”

WARREN BUFFETT: Yeah. Well, I think, as I mentioned in at least one interview, I voted for not — I’m not referring to Coke here necessarily — but as a director of various companies, I not only voted for comp plans that were far from what I would’ve come up myself, but I voted for acquisitions that I didn’t think make much sense.

I voted against a few. And they attracted a lot of attention. But they were big ones, where I really think — where I thought — it really made a difference.

But the nature — and this is something worth exploring, generally, because the nature of boards is such that they’re part business organizations and part social organizations. And people behave in some ways with their business brain and they behave to some extent with their social brain.

And I would say — and I said this — that in 55 years of being on corporate boards, and 19 companies aside from Berkshire, I don’t think I’ve ever seen a comp committee report come in and get a dissenting vote.

And the social reason for that is that the board organizes itself in a way whereby certain activities are delegated to a smaller portion of the board, one being a compensation committee.

And that committee presumably meets for a few hours the day before the meeting, or maybe the morning of the meeting. And then they go into a board meeting. And the comp committee reports on its activities. And you’ve delegated that activity, as a board member, to that group.

It’s almost unheard of to question that. I’m not saying that maybe it shouldn’t be questioned, but I’m just saying that that is the way it works.

Now bear in mind that the so-called independent directors on such a board are probably receiving maybe $200,000 a year, maybe $300,000 a year. Believe me, they are not independent.

They’re independent as measured by some standards, perhaps, at the SEC, but they — you know, how would you feel about having a job that required you to go to work four or six times a year, pleasant company, you know, certain amount of prestige attached with it, and on top of it, you get paid maybe $300,000 a year and you kind of hope to get another job like that? That is not independence.

So, you get a group coming in like that from the comp committee. And in those 19 boards, I was put on the comp committee exactly once. Charlie might be able to tell you exactly what the result was that time. They do not look for Dobermans. (Laughter)

They look for cocker spaniels. And then they make sure that the tails are wagging. (Laughter)

But that is — don't condemn it too much because you and I are doing similar things in other parts of our lives.

You know, the social dynamics are important in board actions. My son Howard — in fact, my other two children as well, if they were involved — you know, they would have a dedication, and do have a dedication, to the culture of Berkshire, which is clearly defined. It's one of the reasons I want it clearly defined. And it's reinforced by the behavior and it's reinforced by results.

And, incidentally, their job would not be to set the compensation. I mean, the non-executive board chairman is not there to select the compensation of the CEO or others. He's not there to select the CEO.

He is there to facilitate a change if the board of directors decides a change is needed. And that can be important. Very, very, very unlikely to be important in the case of Berkshire.

But it's a nice, little, extra safety valve. And Howie's the perfect guy to carry that out.

And like I say, I voted for comp plans at various places, including way back, you know, at Coke that were far from what I would've designed myself. And the ones I designed myself would have worked.

But that is the way boards work.

I was made chairman of one comp committee, and Charlie can tell you a little about that.

CHARLIE MUNGER: Yeah. (Laughter)

Warren was totally voted down at Salomon Inc. In fact, people acted like, what in the hell is he doing? How could he be disapproving compensation on Wall Street?

And I think the general idea that a person should just shout disapproval all day long of everything he disapproves of is very suspect. In the world in which we inhabit, people accomplish more if they pick their spots for public disapproval.

And knowing both Howie and Warren Buffett, I don't think you have to worry that they're going to go crazy or be soft and foolish just because they don't shout all the time about everything they disapprove of. If we all did that, we wouldn't be able to hear each other.

WARREN BUFFETT: Yeah. (Applause)

If you — if you're in any social organization and you keep belching at the dinner table, you'll be eating in the kitchen before very long. (Laughter)

And people won't pay any attention to you.

I mean, you really have to — you not only have to pick your spots, you have to pick how you do it.

I mean, you — that could even be — I mean, sure, Charlie gives the marital advice around here, as you noticed, in the movie, but it's not even a bad thought to keep in mind in marriage, I mean, in terms of — of attempting to change the behavior of others, which is — you'll have a very limited ability to do, in any event. It's not helped by shouting a lot.

CHARLIE MUNGER: I offend more people than you do. And I'm quite satisfied with your level of disapproval. (Laughter)

14. Everyone else is wrong on cost of capital

WARREN BUFFETT: OK. Gregg Warren of Morningstar. Gregg, welcome.

GREGG WARREN: Thank you. Warren and Charlie, on behalf of Morningstar, I want to thank you for having us on the panel this year.

I may not be an accredited bear, but hopefully, I ask probing questions that add value for shareholders.

My first question relates to the measurement of management performance.

For Morningstar, the ultimate measure of success is not just whether or not a firm can earn more than its cost of capital, but whether or not it can do so for an extended period of time.

Berkshire has historically done a good job of generating outsized returns. But as you've noted in the past, the sheer size of the firm's operations, which continue to grow, will ultimately limit the returns that Berkshire could generate.

With that in mind, what do you believe Berkshire's cost of capital is? How much do you think that this hurdle rate is increased as you've acquired more capital intensive, debt-heavy firms?

And how much confidence do you have that future capital allocators at Berkshire will be able to generate returns in excess of the firm's cost of capital, acknowledging, of course, the fact that Berkshire's days of outsized returns are most likely behind it?

WARREN BUFFETT: Yeah. Well, there's no question that size is an anchor to performance. And we intend to prove that up to the point where it starts really biting.

But it — we cannot earn the returns on capital with well over 200 — well, with a market cap of 300-plus billion. It just isn't doable.

Archimedes, he said he could move the world if he had a long enough lever, didn't he, or something like that, Charlie?

CHARLIE MUNGER: Yes, he did.

WARREN BUFFETT: Well, I wish I had his lever because we don't have that lever at Berkshire.

So we — well, we'll answer two questions there.

In terms of cost of capital, Charlie and I always figure that our cost of capital is the — is what could be produced by our second best idea. And then our best idea has to exceed that.

We think — I have listened to so many nonsensical cost of capital discussions, that —

CHARLIE MUNGER: I've never heard an intelligent one.

WARREN BUFFETT: Yeah. Yeah. (Laughter)

It's really true. I mean, and there's — that's another thing. I've been on boards and the CFO comes in and explains why we're doing this and it always gets down to, you know, it exceeds our cost of capital.

And he doesn't know what the hell his cost of capital is, and I don't know. And — but I don't embarrass him, you know?

So I just sit there and listen to this stuff and apply my own thing, and then still end up voting for it, probably, if I don't like it, although there have been a few exceptions to that.

The real test, you know, over time, is whether the capital we retain produces more than a dollar of market value as we go along.

And if we keep putting billions in and those billions, in effect, are worth, in terms of present value terms, in terms of what they add to the value of the business, more than what we're putting in, you know, we'll keep doing it.

We bought a company day before yesterday, I guess it was. And we are spending close to $3 billion U.S. It's a Canadian company.

And we think we will be better off financially because we did that and we thought it was the best thing that we could do with the $3 billion on that day. And those are the yardsticks that we have.

And what I do know is that I've never seen a CEO who wanted to do a deal where the CFO didn't come in and say it exceeded the cost of capital.

It's just — it's a game, as far as we're concerned.

And we think we can evaluate businesses. And we know the capital we have available. And we have things that we can sell to buy. Not businesses, but marketable securities that we can sell to buy businesses if we like.

And we are constantly measuring that opportunity cost that Charlie talked about in the movie. It's an important subject. And one that I think has had more nonsense written about it than about anything.

But I'll turn it over to Charlie to go over —

CHARLIE MUNGER: Well, a phrase like "cost of capital," which means different things to different people, and often means silly things to people who teach in business schools, we just don't use it.

Warren's definition of behaving in a corporation, so that every dollar retained tends to create more than a dollar of market value for the shareholders, is probably the best way of describing cost of capital. That is not what they mean in business schools.

The answer's perfectly simple. We're right and they're wrong. (Laughter)

WARREN BUFFETT: I look good compared to him, don't I? (Laughter)

15. Buying Nebraska Furniture Mart from the Blumkins

WARREN BUFFETT: OK. Station 3.

AUDIENCE MEMBER: Good morning. My name is Jonathan Fye (PH) and I'm from Denton, Texas, just up the road from the new Nebraska Furniture Mart that's going to be located in The Colony.

My question relates to your original acquisition of that business from the Blumkin family in 1983.

Based on the data you provided in this year's annual report, it appears you were able to purchase this business for roughly 85 percent of book value, or roughly two times earnings.

Can you comment on the factors or the environment in Omaha that enabled you to purchase this wonderful business for such a wonderful price?

WARREN BUFFETT: Well, I wish we had bought it that cheap, Jonathan, but no — we paid at the time, as I remember, probably 11 or 12 times after-tax earnings. It was not a discount from book value.

I'm not sure where those numbers come. Well, we bought 80 percent of the company. It was bought on the basis, as I remember, of 100 —of $60 million of purchase price.

So we —actually there was a second transaction involved in it. But 60 million was 100 percent value. We ended up with 80 percent.

The 60 million would've been more than book at the time. Not way more, but more than book.

And it would've been a multiple of 11 or 12 times earnings, as I remember. The sales were about 100 million. Pre-tax margins were in the 7 percent range.

So, it was about 7 million pre-tax. And, you know, 4 ½, probably, after-tax. That's ballpark.

So, it was not a bargain purchase. It was a great business. It was a wonderful opportunity to join as fine a family as I've ever met.

But it was — and incidentally, there was another company, I believe, from Germany, that was trying to buy it at the time.

And believe it or not, Erskine Bowles, of Simpson-Bowles, was representing them, my friend Erskine — I didn't know this at the time.

And then I went out on my birthday, August 30th, 1983. And had that contract, which is in the annual report.

And I gave it to Mrs. B. And — and she didn't read, but Louie, her son, told her what was in it.

And I never asked her for an audit. I just asked her if she owed any money. And I asked her if she owned the building. And she said yes. And we made the deal. But it was not a bargain purchase.

Now, if you want to talk about bargain purchases, we should talk about going out to the Nebraska Furniture Mart. (Laughter)

So far, in the three — we —in the days of this annual meeting, our sales, which were a record 40 million for the week last year, are up about — I think they're up about 7 percent now. And last year, of course, it was a record.

And on Tuesday, which was the first day, we did 7.8 million.

And Berkshire owns the largest home furnishing store in Sacramento, California. We own the largest one in Boise, Idaho. We own the largest one in Salt Lake City. We own the largest one in Las Vegas. Largest one in Reno.

Our sales at the Furniture Mart on Tuesday were larger than the monthly sales of any one of those stores I've just named, being the largest ones in places like Sacramento. So it is a remarkable organization. (Applause)

And the good news is there's still time for you to avail yourself of those prices. (Laughter)

I would like to put in a plug for the Dallas store, where — I was down there a week ago. And it's a plot of land like you wouldn't believe. It's a store like you wouldn't believe. It is 1,800,000 square feet under one roof. Over 40 acres.

It will do more volume, I predict, than any other home furnishing store in the world. And I wouldn't be surprised if I could add to that by a factor of at least two.

It's a remarkable store. And I toured around it. And we're, you know, we're putting in streets. We're — site preparation, utilities, racking, all these things. This wonderful woman, Michelle, who showed me around.

And the Blumkins later told me that she had started — worked for Nebraska Furniture Mart as a cashier, and she is in charge of this, you know, many hundreds of millions of dollar project. It's really — it's the good thing about America.

And at the end of the tour, she'd had this number two person working — walking around with us, who — she was explaining some things to us, too. And I learned at the end of the tour that number two was Michelle's husband. (Laughter)

Interesting pillow talk, you know? "How many cubic yards did you move today, honey," you know? (Laughter)

16. Why Buffett recommends an index fund for his wife's inheritance

WARREN BUFFETT: OK. Carol.

CAROL LOOMIS: This question comes from Jason Rothman (PH) of Oklahoma City, who was the first shareholder to ask a question that subsequently was framed by a number of other shareholders as well.

In my mailbox, this was the most popular question asked.

“Mr. Buffett, you state in your annual letter to shareholders that in your will you have given instructions to the trustee who will be acting for your wife’s benefit to put 10 percent of the cash given her in short-term government bonds and 90 percent in a very low-cost S&P 500 index fund.

“My question is why are you advising the trustee to put 90 percent of the cash into an S&P 500 index fund instead of into Berkshire shares?”

WARREN BUFFETT: Well —

CAROL LOOMIS: “This might imply that you expect the index fund to outperform Berkshire in the future when the company is run by a new CEO and chairman. Please clarify.”

WARREN BUFFETT: Yeah, I’ll be glad to clarify. That letter didn’t come from Vanguard, by any chance, did — (Laughter)

When I die, incidentally, then all the Berkshire shares I have at that point will go to five different foundations. Every single share. I mean, there are no shares that have not been designated, mentally, to charity. A good many of them have been designated specifically to — in numbers and all that.

But — and they will be distributed over the ten years after my estate is closed. So figure over 12 years.

And I tell my — I tell the trustees that will be holding these shares, you know, “Don’t sell any Berkshire shares until they have to be sold.”

So my views, on Berkshire at least through 12 years after my death are as bullish as anybody could possibly come up with.

And incidentally, without those kind of instructions, anybody would say, “You know, you’re crazy to keep many, many billions of dollars all in one stock.” I can’t think of anything better to do it over those 12 years.

In terms of my wife’s situation, you know, that is not a question of maximizing capital. It’s just a question of total, 100 percent peace of mind on something that cannot get a bad result.

And, like I said, there’s way more money for her than she’ll ever use. As a matter of fact, those of you who know her, you know, may feel that I’ve added about three zeros too many.

But it is not designed for her to get even larger amounts of capital. And there’ll be capital, loads of capital left over on that part of it.

On the part that I care about maximizing, I have instructed the three trustees to not sell a single share until it has to be sold. So, that's good for 12 years after I die, as to my best advice as to what I want them to hold.

Charlie?

CHARLIE MUNGER: Well, Warren is a little peculiar in the way he distributes money in the family. And I think he's entitled to do what he damn pleases. (Applause)

Speaking —

WARREN BUFFETT: Do I — do I hear my — children applauding? Do I hear my children applauding? (Laughs)

CHARLIE MUNGER: And I've never had this feeling I had to starve the family down to a few trifles.

And Warren really — and Susie, when she was alive, was the same way.

He really is a meritocrat. He's really quite extreme in wanting to let most of his money go back to the civilization in which it was earned.

I like being associated with it. (Applause)

17. BNSF service problems are hurting earnings

WARREN BUFFETT: Jonathan?

JONATHAN BRANDT: The BNSF has done very well since Berkshire acquired it in 2010.

But its western competition of Union Pacific has actually grown its earnings more. And at the moment, the UP seems to be operating more smoothly for its customers.

Could you shed some light on the service challenges Burlington has experienced recently and perhaps discuss any differences between the two railroads in end markets, geography, and strategy that may have led to the divergent result?

Would it be fair to say that, in trying to aggressively sign up new business volume last year, that the railroad did not allow for a sufficient margin of safety in terms of what its capacity could handle, should there be a harsher than normal winter or other adverse circumstances?

WARREN BUFFETT: Yeah. It — we've handled more volume, actually, than in the past. I mean, in 2006, we had a peak of 219,000 carloads. That was in the late fall.

But no question that we've had a lot of service problems, particularly on our northern route.

We have been spending more money than Union Pacific, and they spend a lot, in terms of attempting to anticipate the kind of problems that can occur when you get a big increase in volume, on that one route particularly, from the boom in the — particularly the Bakken shale oil.

We've got a lot of unit trains that are running over those lines that weren't running five years ago.

I think I've got Matt Rose here — right — I think somewhere in the front. And he might address some of the problems of cold weather. I mean, want to get — there were a lot of days where it was 15 below or worse.

And in terms of sending people out to work on problems, under those circumstances, it can be really — it can be life threatening.

But Matt, do you have — oh, there he is. OK. Could you shine a light down on him, please, too? So he's right here in the front. In the front.

MATT ROSE: Warren. So last year, the industry grew at about 820,000 units. BNSF handled 53 percent of all those units.

And it's not what we wanted to take or what we didn't want to take. Quite frankly, it's the geographic nature of our franchise. And the oil came a lot faster than we were expecting and we've been spending money at a rapid clip to try and build into it.

The second issue was, you know, I had previously, prior to this past year, been in the CEO role for 13 years, and I have never seen a weather — a winter weather — like that.

We had 83 inches of snow in Chicago. We had multiple days, over 30 days, where it didn't get to zero in the Minnesota area.

So, you know, we know this is an outdoor sport. We get it, on the weather. But quite frankly, when we get to about 0 to 10 degrees below, things just don't work.

The weather's getting better. Last week, we handled 206,000 units. No other railroad has ever handled 205,000 units.

So the railroad's coming back. And we're making the significant investments to be able to handle all the business that's out there.

WARREN BUFFETT: Thanks, Matt. (Applause)

We will spend $5 billion on the railroad this year. No railroad's ever spent that kind of money, or even very close to it.

But I got a call — or I got a letter — from a fellow in North Dakota. And they were having a problem getting fertilizer. And I called and talked to him. And they sent it down to Matt.

But we've now put on — I think we're going to have 52 unit trains of fertilizer. And they will get there in time for the planting. And that's important. I mean, we take it seriously.

But cold in winter or floods in the summer, I mean, we're now really functioning a lot better and our earnings will be, in my view, are very likely to be a lot better.

But the thing that could disrupt that is, if for some reason, you had incredible floods. You're dealing with 22,000 miles of track. And if you get weak links, one of which, always, for all four big railroads, is Chicago, because that's where things get interchanged and that's where a lot of bottlenecks have been this year, and that's where weather was tough as well.

But you're right, Jon, in the comparative financials in recent months. And believe me, Matt's paying a lot of attention to them and Carl's paying a lot of attention to them, and I even pay a little attention to them.

So I have a feeling that they will be getting better over the remainder of the year.

18. Generating electricity with natural gas

WARREN BUFFETT: OK, station 4.

AUDIENCE MEMBER: Rosal Kerkhove (PH). I'm from Omaha, Nebraska. My question relates to our company's use of natural gas to generate electricity.

This past winter, natural gas in storage has declined substantially.

In the future, how do our companies assure that they have an adequate supply of natural gas to generate electricity?

And if the price of natural gas increases in multiples, how do our companies assure that they can sell the electricity at a satisfactory return on investment? Thank you.

WARREN BUFFETT: Yeah. We have — I'm going to ask Greg Abel to be more specific on this.

But we are the largest alternative generator of — using alternative sources — I think, in the country. And I think by the end of 2015, we will be capable of producing 40 percent of our needs in Iowa through wind, which will be unlike any other company you can find in the country. (Applause)

But I think I'll have Greg answer the specifics of any natural gas-dependent generating units we have.

I'm not worried about that thing, but I — about what you raised —but Greg would know a lot more about the mix on natural gas and the opportunity to shift to coal. And exactly the profile of the generating capacity.

Greg? Now, let's get a light down on him, if you can. He —

GREG ABEL: I think it's — okay, there it is.

WARREN BUFFETT: Yeah, there we go —

GREG ABEL: Yup. Sorry. So like Matt touched on, obviously, we had a very cold winter in the Midwest.

So our systems, for the first time, were challenged in a significant way. But very proud of how the resources were managed.

So if you look at the question around natural gas, and specifically the gas availability, there was substantial gas available to be utilized both to heat homes and produce the energy, because ultimately, we're worried about both, the — keeping the furnaces on and, equally, keeping the lights on.

So when you looked at the balance of supply, there was gas there.

But clearly, we have to continue to look at the unique situation as we continue to move towards using more gas in the United States.

Warren touched on an important point. This past year, as he highlighted — he highlighted 2015 — but if you look at just what we produced on the renewable side in Iowa, that was 39 percent renewable, i.e. wind. And that'll only get larger.

So as we continue to manage these multiple resources, there's clearly a way to meet the needs of our customers. And we're meeting it in an extremely cost-effective fashion.

I'd also highlight that when you think through the cost recovery side of it, we've got very unique mechanisms within our utilities.

When the underlying cost of gas goes up, where we have to purchase more than we had anticipated, we've got clear pass-throughs back to our customers. And we've negotiated those across each of our states.

So we're well positioned to service our customers long term, and equally protect the fundamental financials of the underlying businesses.

WARREN BUFFETT: The —

GREG ABEL: Thank you.

WARREN BUFFETT: The company that Greg runs has many subsidiaries. And our gas pipeline subsidiaries move about 8 percent of the gas in the United States.

And I think you said you were from Omaha. And the gas that comes into this area comes through a pipeline that we own. And we just renamed the company to Berkshire Hathaway Energy, from MidAmerican Energy. We changed it to Berkshire Hathaway Energy.

But, it's a point of some pride to us that that company, Northern Natural Gas, which originally came from Omaha, when we bought that from Enron a decade or so ago — actually, Dynegy had it in between — but its origin then was Enron.

You know, they'd skimped on maintenance, done all kinds of things. And it was ranked number 42 out of the 42 ranked pipelines in the United States at that time. And last year it was ranked number one.

So it went from last to first under Greg's management. And I tip my hat to him. (Applause)

And number two was our other pipeline — current pipeline. So we're running one, two at the moment.

19. Two heads running Berkshire are better than one

WARREN BUFFETT: Becky?

BECKY QUICK: This question comes from Fred Ireman (PH) in Richmond, Virginia, and it's addressed to you, Warren.

He says that, "During the past several years, much has been written and many have speculated about your successor. I shall not even go down that path, as it would cause you to repeat yourself.

"However, has there been any discussion at your board meetings about a replacement for your partner, longtime friend, and co-chairman, Charlie Munger?

"Has it been determined Berkshire will continue to be led by a similar dynamic duo? Two magnificent investor minds, each providing a unique point of view, have been a major reason

the business has performed magnificently over the decades and has delighted the shareholders."

WARREN BUFFETT: Well, Charlie is my — he's my canary in the coal mine. (Laughter)

Charlie turned 90. And I find it very encouraging how well he's handling middle age. (Laughter)

So I hope to be able to do the same thing myself.

No — you raised a point, which is — I hadn't thought about, but I'm a little sensitive now that you raised it.

They always talk about replacing me, but they never talking about replacing Charlie.

I do think — I think it's very likely, incidentally, that whoever replaces me as CEO probably has, over the years certainly, developed — they'll never be able to develop another Charlie — but they'll develop somebody that they work with very closely. It's a great way to operate.

Berkshire is better off because the two of us have worked together than if either one of us had been working individually, there's no question about that. (Applause)

And —but I do think, you know, we saw it with Roberto Goizueta and Don Keough at Coke, we saw it with Tom Murphy and Dan Burke at Cap Cities. I mean, these were magnificent companies.

And I think that in both cases that I just named, I think that they accomplished far more because they had two incredible people running them who admired and worked well with the other. And they were complimentary, in terms of the talents they brought.

In many ways, it's a great way to operate. You can't will it to somebody.

But I would be very surprised if, a few years after my successor takes over, or maybe sooner, that there isn't some relationship, a partnership, that enhances the CEO's not only — not only achievements — but the fun they have.

And — but so far, nobody's brought up, in the meeting, any successor to Charlie.

And frankly, I have a lot of trouble thinking of anybody that could be a successor to Charlie. (Laughs)

Charlie, you want to comment? I've got to give you a chance. (Laughter)

CHARLIE MUNGER: I don't think the world has much to worry about. Most 90-year-old men are gone soon enough. (Laughter)

WARREN BUFFETT: Well, the canary has spoken. OK. (Laughter)

20. Subsidiary shuffles aren't related to Berkshire succession plans

WARREN BUFFETT: Jay?

JAY GELB: I have a question on succession planning, as well.

Matt Rose recently shifted his role from CEO of the Burlington Northern unit, to executive chairman of Burlington. Does this change affect who will be the next CEO of Berkshire? And what is the succession plan for Ajit Jain at Berkshire's reinsurance unit?

WARREN BUFFETT: The only succession for Ajit would be reincarnation. (Laughter)

We will not get another Ajit. But fortunately, we won't have to for a very, very long time.

The situation with Matt, which was at Matt's suggestion, was designed to fit specifically the succession situation at BNSF and the wishes of certain people. It doesn't have any implications for Berkshire.

I have letters from every one of our managers telling me what I should — I keep — these are private, I don't share these with the board, even — telling me what I should do if something happens to them tonight.

So I have their ideas. In some cases, they talk about more than one person. In some cases, they tell me the strengths and weaknesses of the people.

But the — I would not try to make any judgments about the succession plans at the parent company from what is done in terms of succession planning at any of the subsidiaries.

Charlie?

CHARLIE MUNGER: Well, I always say, I'm not the least bit worried about it. If I — I wish my main problem in life was the fear about succession problems at Berkshire. I think we're in very good shape.

21. "Great" question, but no answer

WARREN BUFFETT: OK. Station 5.

AUDIENCE MEMBER: I am Bill Melby from Northfield, Minnesota.

At the 2009 annual meeting, Mr. Buffett, you said that if you were required to invest your total net worth in one company, that that company would be Wells Fargo.

So in 2014, I ask the same company — or the same question. If you were required to invest your total net worth in one company, what would that be?

WARREN BUFFETT: When the question was asked in 2009, did you exclude Berkshire? Because I think I would've answered Berkshire. (Laughs)

But I wouldn't quarrel with Wells Fargo as a marketable security outside of Berkshire at that time.

Well, I guess he's checking his notes on — the — well —

AUDIENCE MEMBER: The question is other than Berkshire —

WARREN BUFFETT: Oh, other than Berkshire.

AUDIENCE MEMBER: —what would you invest in today?

WARREN BUFFETT: Yeah. Well, it's a great question, but it's not going to get an answer. (Laughter)

Charlie, do you want to answer?

CHARLIE MUNGER: No, no, I think you've given exactly the right answer. (Laughter)

WARREN BUFFETT: Yeah. Well, I'm sorry to disappoint you, but we've disappointed others when they've asked that question.

22. Shareholders aren't helped by rule requiring CEO pay disclosure

WARREN BUFFETT: OK, Andrew?

ANDREW ROSS SORKIN: Thank you, Warren. This question comes from Dave Hitchy (PH) from Auburn.

It's a long question. He says, "As a shareholder for about a dozen corporations in addition to Berkshire, I always see a number of proxy statements each year. In all, except Berkshire, the summary compensation table has the compensation listed for at least five or more of the highest paid executives. Berkshire lists three, Warren, Charlie and Mark.

"I assume that since Berkshire is a holding company structure, that's the way it is. I think it would be instructive to include at least two of the highest paid executives from the wholly-owned subsidiaries in the summary table, Ajit, Tony, or Greg, or Matt, to give the shareholders, your partners, a sense of how Berkshire compensates its strongest and highest-paid leaders, as other companies do.

“This would be particularly valuable since two-thirds of the current listees, Warren and Charlie, only receive nominal salaries of $100,000 per year, a figure that is vastly below the value they bring to the company.

“Would you, in the spirit of transparency, be willing to add at least two of the highest-paid subsidiary officers in the table in future years? And how much do you think the next CEO of Berkshire should be paid?”

WARREN BUFFETT: Well, the answer to the last is he certainly will be entitled to pay — get paid a lot. But their decision as to how much they accept is another question.

But I’m going to write about that very end question next year in the annual report because it has a lot of interesting ramifications.

We, obviously, are following the SEC rules, which I can’t recite, in terms of the officers required to be in the proxy statement as to their pay.

But, you know, Andrew, in my sporting mood, I would say that Comcast probably has some people in the employ that make a lot more money — not at CNBC, we’re not —but — that would exceed the salaries of the people that they list in the proxy statement, as well.

And there’s a real question as to whether it’s in the interests of the shareholders of the company to start listing, you know, how much the person who’s the anchor of the nightly news or whomever it might be, gets paid because it might have a very negative effect, in terms of negotiating salaries with other people within the organization.

I would say that the — I would say the shareholders of Comcast would be hurt, actually, if you published the five highest salaries paid at the subsidiaries or at Comcast itself.

And certainly, if you carried it to every subsidiary there was. I mean, if you were to publish the five highest salaries at CNBC, I don’t think the salaries overall would go down the following year.

So, I think that is a — I think that’s a good reason for not — for us not publishing the salaries of, you know, say, our top ten managers of the company.

At Salomon — we mentioned that a little earlier — everybody — virtually everybody — was dissatisfied with what they were getting paid. And they were getting paid enormous amounts of money.

But they were disappointed, not because of the absolute amount. They were disappointed because they looked at somebody else in the place and it drove them crazy.

And as a matter of fact, the first big crisis we had in compensation was when the management made a — what was regarded as a secret deal, with the arb group, as I remember — whereby, John Meriwether and his crew got paid a lot of money, which I would argue they earned. I mean, I think they deserved it.

But as soon as that happened, it made compensation, which had always been a terrible problem, an even greater problem because of the jealousy that broke out among the people that weren't in John Meriwether's group.

I think it's been — I think it's very seldom that publishing compensation accomplishes much for the shareholders.

In fact, you can argue that much of what's going on in corporate America — well, I would put it this way: corporate CEOs, as a group, would be being paid a lot less money if proxy statements hadn't revealed how much other people were getting paid.

It is only human to look at a whole bunch of proxy statements and say, "Well, I'm worth more than that guy," and negotiate that way. And a comp committee is going to respond to that.

So, American shareholders are paying a significant price for the fact that they get to look at that proxy statement every year and see how much those top five officers are earning.

Charlie? (Scattered applause)

CHARLIE MUNGER: In the spirit of transparency, you're asking for something that wouldn't be good for the shareholders. And it's not going to happen unless the SEC makes it happen.

We're way better off without adding to the culture of envy in America.

WARREN BUFFETT: Yeah, there's no one that looks at —there's no CEO that looks at other proxy statements and comes away thinking, "I should get paid less." I mean, that — you know? (Laughter)

We haven't seen — have we ever seen them?

CHARLIE MUNGER: No.

WARREN BUFFETT: No.

CHARLIE MUNGER: No, I —

WARREN BUFFETT: Well, we're not old enough.

CHARLIE MUNGER: I would say that envy is doing the country a lot of harm. And our practices are envy dampeners.

23. Why Berkshire maintains $20B cash cushion

WARREN BUFFETT: OK. Greg. (Applause)

GREGG WARREN: Thank you. As you know, Berkshire's cash balances are an issue for some investors. Especially with excess cash being in the 25 to $30 billion range the last couple of years, and Berkshire having a more difficult time than it's had historically reinvesting capital as quickly as it comes in.

Although Berkshire did provide $3.5 billion of the $3.6 billion of cash that was used to acquire NV Energy last year, with MidAmerican funding the remainder with debt, was there something that kept Berkshire from providing all of the capital for the acquisition, perhaps via inter-company debt?

And on a separate note, can you provide with us some insight into the decision to allow MidAmerican to retain all of its earnings, while Burlington Northern, which spent $3 billion on capital expenditures last year and is on pace to spend $5 billion this year, continues to pay a distribution to Berkshire, all while it takes on additional debt to help fund capital spending?

WARREN BUFFETT: Yeah. MidAmerican, now renamed Berkshire Hathaway Energy — we'll call it BH Energy — will have multiple opportunities, I hope, and we've seen two of them in the last 12 months, to buy other businesses.

And, as you noted, we spent a substantial amount of money on NV Energy and two days ago we agreed to buy transmission lines in Alberta.

So, we will — we hope we will — and so far we've been able to — come up with really large businesses to buy at BH Energy.

That will not — at BNSF, we will spend a lot of money to have the best railroad possible. But we're not going to be buying other businesses.

So, we distribute substantial money out of BNSF and we will continue to do so because it'll earn substantial money. And it can easily handle the debt that it has and will incur.

Whereas, at Berkshire Hathaway Energy, we have pretty much the appropriate level of debt at both the subsidiary and the parent company level. So as we buy things, we need not only the retained earnings that we have, but occasionally we need some money from the shareholders.

And there are three shareholders of BH Energy. Berkshire owns 90 percent and then Greg and Walter Scott have the balance.

And so, if we make a large acquisition and we need a little more equity, we will have a pro rata subscription, which the other two shareholders are welcome to participate in. But if they don't — if they decided not to, it wouldn't hurt them. They'd still have an improvement in the value of their shares.

So those two companies are quite different that way.

I hope that more possible deals for Berkshire Hathaway Energy come along. And I think they will.

So we may invest many, many, many billions there. We will invest billions at the railroad, but it'll all be to improve the railroad. It won't be to buy additional businesses.

So far this year, if you think about it, counting yesterday — now, two of these deals started last year — but we've spent 5 billion on acquisitions, roughly.

And, of course, in the first quarter, we spent another 2.8 billion on property, plant, and equipment.

But we are finding — we are finding things to do that tend to sop up the cash.

We always will have $20 billion around Berkshire. We will never be dependent on the kindness of strangers. It didn't work that well for Blanche DuBois, either.

But in any event, the — we don't count on bank lines. You know, we don't count on — we don't count on anything.

There will be some time in the next 100 years, and it may be tomorrow and it may be 100 years from now, and nobody knows, you know, where we cannot depend on anybody else to keep our own strength and to maintain our operations.

And we spent too long building Berkshire to have that one moment destroy us.

I mean, we lent money, as you probably know, to Harley-Davidson at 15 percent. And we lent it at a time when short-term rates were probably a half a percent.

Well, Harley-Davidson is a fine company — but it, like Goldman Sachs and General Electric and a bunch of other companies —we lent money to Tiffany's — they — you know, they needed — when you need cash, you know, it's the thing — it's the only thing — you need. And it's because other people aren't coming up with it.

I've always said that, you know, cash is — available cash or credit — is a lot like oxygen: that you don't notice it — the lack of it — 99.9 percent of the time.

But if it's absent, it's the only thing you notice. And we don't want to be in that position.

So we will keep 20 billion. We will never go to sleep at night worrying about any event that's taken place that could hurt our ability to keep playing our game.

And above 20 billion, we'll try to find ways to invest it intelligently. And so far, we've generally done it. I mean, right — you know, we always had something above that.

But, you know, we've spent a fair amount of money so far this year. We'll probably spend more later in the year.

So, so far, I feel we could get the cash out at reasonable returns. We never feel a compulsion to use it though, just because it's there.

Charlie?

CHARLIE MUNGER: I think we're very lucky to have these businesses that can employ a lot of new capital at very respectable rates.

And if — earlier in the history of Berkshire, we didn't have such automatic opportunities. And now that we're so affluent, we really are way better off having these opportunities.

It's a blessing. I mean, who would want to get rid of MidAmerican and the Burlington Northern Railroad? Nobody in his right mind.

I mean, we love the opportunity to invest more capital intelligently in a world where short-term interest rates are half a percent, or lower.

WARREN BUFFETT: And we love the opportunity to go in with 3G at Heinz and —

CHARLIE MUNGER: Yes.

WARREN BUFFETT: —employ significant capital. We'll get the chances to use capital.

Eventually, you know, compound interest will catch up with us. And it's certainly dampened things.

But it hasn't delivered its final blow yet.

24. Buffett and Munger disagree, but never argue

WARREN BUFFETT: Station 6.

AUDIENCE MEMBER: Hi Warren, Charlie. John Norwood from West Des Moines, Iowa. Thank you so much for the annual meetings. And please don't move it to Dallas or some other place. I've got my system worked out here.

WARREN BUFFETT: We won't.

AUDIENCE MEMBER: Thank you. Hey, two quick questions.

One is allocation of capital and how you wrestle with the operating companies and how much cash comes up to the operating companies — or comes up to the mother ship — versus the operating companies.

And you and Charlie, do you ever fight or argue? And any lessons over the years for how you manage your partnership of two? Thank you.

WARREN BUFFETT: Yeah. Charlie and I have never had an argument. We met in 19 — when I was 29. He was 35. We're a little older now.

And in those years, 55 years, we've disagreed on a lot of things. And it's just never led, and never will, lead to an argument.

We argue with other people. (Laughs)

But it just — it hasn't occurred.

I called Charlie on the Coca-Cola vote, you know, and then said what the proxy statement said and everything. Said, "What do you think?" And we thought alike, you know?

Sometimes we don't think alike. And we never go away in the least bit mad if we don't, or —

CHARLIE MUNGER: Most of the time, we think alike. That's one of the problems. If one of us misses it, the other is likely to, too. (Laughter)

WARREN BUFFETT: Yeah. I would say that — well, there's no question. If you look at the really bad mistakes we've made, I've made them.

I'm probably a little more inclined toward action than Charlie. Would you say that's fair, Charlie? Or —

CHARLIE MUNGER: Well, you once called me the abominable 'no' man. (Laughter)

25. Berkshire's cash cushion is partially held by subsidiaries

WARREN BUFFETT: Now we've missed — what's the — what was the first part of the question? (Laughter)

AUDIENCE MEMBER: Capital allocation. How do you decide how much cash comes up from the operating companies —

WARREN BUFFETT: Yeah, that's —

AUDIENCE MEMBER: — to the mother ship?

WARREN BUFFETT: Yeah, that's pretty simple, in that we don't really care too much where that 20 billion minimum is.

We wouldn't — but we don't count the money in a regulated — well, in the energy business or the railroad.

So we really count the money that we could make a phone call and get.

With interest rates at these levels, we sit around sometimes with — every one of our companies, I would say, probably has more cash in it than if some other large conglomerate was running the place.

They would probably have sweep accounts and all of that. And we may get around to that at some point, but it just doesn't make that much difference, because if we had it at the parent company, we'd have it out at five basis points. And if it's at the — if it's down at the subsidiary, it's probably getting five basis points.

So we're not — it's not something we think about on a day to day or week to week or month to month basis.

I know where the cash is. And I know when we're going to need cash and I know what I'm thinking about doing, or may possibly do in the next few months, that maybe something's a 50/50 probability of happening.

And anything I am committing to do, I know where the cash is coming from.

But it doesn't mean that we try to get it all in the parent company, day by day or week by week like many companies do. We could change that procedure someday. Maybe a sweep account would make sense at some point. Probably would.

But we're not big disciplinarians of our subsidiaries day by day. We don't want them to feel that way.

And there's one company I'm thinking of, where I've never been there. Probably only talked to the fellow who runs it three or four times in ten years. You know, and there's a lot of cash around. And every now and then, he sends me some.

And if I really need it, I mean, I know where it is. And he'll give it to me. But there's — it doesn't really make much difference, you know, whether it's sitting there, whether it's sitting at Berkshire.

I don't want to encourage to our managers of our other subsidiaries who are listening to this a new way of behaving. But, I sort of adapt to the companies, except when we really need the money, and then I grab it. (Laughter)

Charlie?

CHARLIE MUNGER: That's just fine.

26. Buffett admits he's "slow to make personnel changes"

WARREN BUFFETT: Carol?

CAROL LOOMIS: This question comes from an astute fellow named Richard Sercer of Tucson, who spotted an opening and is going for it.

And it actually reminds me of a question that you, Warren, or Charlie, could've thought up yourself.

"In an interview on April 23rd, 2014 about the Q&A session, Warren said, quote, 'I hope we will get questions that probe at our weak points.' My question is, what is our weak points and what can be done to address them?" (Laughter)

WARREN BUFFETT: Well, that would spoil all the fun for the journalists. (Laughs)

They're the ones that are supposed to look for the weak points.

We have a lot of weak — we point them out. You know, I've just pointed out one.

Probably, I would say if you'd — if we'd — executed a sweep account for all our subsidiaries some years ago, you know, we would have a few more dollars than we have now.

You know, it — who knows what they're doing with some of those balances in terms of — we wouldn't — it wouldn't be because we do riskier things. But we — you know — we are very disciplined in some ways. And by ordinary business standards, we're sloppy in other ways.

And, oh, well, a clear weak point of mine would be I'm slow to make personnel changes. I mean, I like the managers we have.

And Charlie and I had a wonderful friend who couldn't have been a greater guy. And, you know, we were slow to make a change there. We loved the guy. And it wasn't killing us in our business.

And how long would you say we went beyond where somebody else would've acted in that case, Charlie?

CHARLIE MUNGER: Well, I don't know exactly.

But that, turning to the sweep account system, reminds me of a friend I had when I was in the Air Corps and he was a very skinny man. And he decided to give blood. And they put the needle into his arm and the blood stopped flowing.

And the nurse just started stripping his arm as though it were the udder of a cow. And he got the impression that he was going to — they were going to get that blood whether it took all he had. And he fainted.

It was a very unpleasant occurrence. And I don't think a sweep account is all that pleasant to sit there and just — every little dollar comes in, somebody sweeps it away.

WARREN BUFFETT: Charlie, our —

CHARLIE MUNGER: I like the tone of our business.

WARREN BUFFETT: Our managers are listening here. I mean, don't give them that illustration to use when I ask for money. (Laughter)

CHARLIE MUNGER: But, you know, I've seen people subject to — Teledyne and Litton, those people, swept every dime every day, basically.

And it was a little more economic, but it created a tone in the company that — which I think is less desirable than ours.

WARREN BUFFETT: We've waited too long on managers, though, sometimes, Charlie.

CHARLIE MUNGER: Well, sure. You and I participated in taking one man directly from an executive chair into a Alzheimer's home. There was no — (Laughter)

WARREN BUFFETT: You're hitting a sensitive subject here, Charlie. (Laughter)

CHARLIE MUNGER: We'd arranged that he could do no harm, and we loved him well enough so that we just made it easy for him.

I've never regretted it, have you?

WARREN BUFFETT: No. Not —

CHARLIE MUNGER: No.

WARREN BUFFETT: Not at all. Not at all. It —

CHARLIE MUNGER: On the other hand, I want to be pretty careful.

WARREN BUFFETT: It — we will be slow. And we — there will be times when what you might call our lack of supervision over subsidiaries, you know, we'll miss something.

Now, we think that giving our managers the degree of freedom that they enjoy will also accomplish a lot.

So someone will come along someday and say, "If you'd had many more checks and oversight and all of that sort of thing," you know, something — well, something will happen at Berkshire and they'll say, "That wouldn't have happened if you'd followed the procedure that some other company followed." And they'll be right.

But what they won't be able to measure is how much on the positive side we have achieved with dozens and dozens of people because we gave them that same sort of leeway.

I mean, we operate differently in terms of the level of control and supervision. You know, we don't have a general counsel's office at Berkshire. We don't have a human relations department at Berkshire.

And that would be almost unthinkable to other companies. And we're not saying that's a 100 percent benefit in all ways. We think — but we think on balance, it's a benefit.

But when the down side of such a procedure shows up, people will say, "Well, you should of done it differently and you should've been spending lots of money over the years and restricting the activities more of your subsidiary managers," and so on.

And our reaction will be that they are wrong. But we will look bad in that individual case.

Wouldn't you say that's true, Charlie?

CHARLIE MUNGER: Yeah. The — by the standards of the rest of the world, we over trust. And so far, our results have been way better because we carefully selected people because they were going to be over trusted. And it's worked very well for us.

And, I think a lot of places work better when they create a culture of deserved trust. And that's been our system. And some people regard that as a weakness.

And this modern accounting treatment, when everybody's measured on internal controls, I think it's going to do more harm than good. (Applause)

27. Trying, and failing, to expand See's Candies' geographic market

WARREN BUFFETT: Jonathan?

JONATHAN BRANDT: See's Candy is obviously small in the context of Berkshire's currently expansive operations, but has long been one of your favorite businesses.

And no wonder, given that its pre-tax profits grew consistently from less than $5 million in 1972 when Berkshire acquired it, to $74 million in 1999.

However, since 1999, profit growth appears to have stalled.

Can you explain why See's was able to grow its profits through the '70s, '80s and '90s, but not, so far, in this millennium?

Did something change about the business, for instance, the growth and demand for boxed chocolates or its market position?

Could you or Brad Kinstler discuss whether the relatively recent geographic expansion could help reignite See's growth? Thank you.

WARREN BUFFETT: Yeah, the boxed chocolate business is, basically, not growing.

I mean, if you go back 100 years, the — each city of any size was characterized by lots of candy shops. Chicago was a big leader. New York was a big leader.

Believe it or not, the predecessor company to Pepsi Cola was the — a company with the most — it was a company called Loft's — that had the most candy shops in New York City.

It was a candy shop company, originally, that a fellow that — what was his name?

CHARLIE MUNGER: [Charles] Guth.

WARREN BUFFETT: Yeah. What was it?

CHARLIE MUNGER: Guth.

WARREN BUFFETT: Yeah. He acquired Pepsi for a few thousand bucks, stuck it in Loft's.

And the corporate — the corporate name, if you go all the way back on Pepsi, is Loft's.

So there were loads of candy shops around everyplace. And including in Omaha.

Boxed chocolates have lost position dramatically. Primarily, I would guess, to salted snacks of one sort or another. Various things.

See's has done remarkably well, far better than any chocolate company in the country.

Russell Stover did very well for a while. Very well, with a different business model. But, you know, they ran into their problems as well.

So, we can't do much about increasing the size of the market. And we've tried a lot of ways. And we've tried moving out of our strong geography, multiple times.

I mean, Charlie and I looked at what we were earning in California in the '70s and said to ourselves, "If we could do this in 50 states instead of one, you know, we'll get very rich."

So we tried it and we didn't get very rich. It doesn't travel that well.

CHARLIE MUNGER: Well, sometimes it does and sometimes it doesn't. And you figure out whether it's going to work by trying it.

WARREN BUFFETT: Yeah. And we've tried it many times.

But so far — it's interesting. Two-thirds — people in the East prefer dark chocolate, two-thirds to one-third. In the West, they prefer milk chocolate, two-thirds to one-third.

They like miniatures in the East. They won't eat miniatures in the West. There's a lot of different things.

But in the end, there isn't a lot of boxed chocolates volume.

And we've done very, very, very well in See's. And it not only has provided us with earnings that we've used to buy other businesses, so we've added lots of earnings power through See's, beyond the earning power we've added at See's.

But it opened my eyes to the power of brands and probably you could say that we made a lot of money in Coca-Cola partly because we bought See's, or at least in my case, bought See's, because I'd understood brands to some degree, but there's nothing like owning one, and sort of

seeing the possibilities with it as well as the limitations, to educate yourself about things you might do in the future.

And in 1972, we bought See's. And in 1988 we bought Coca-Cola.

And I wouldn't be at all surprised, if we had not owned See's, whether we would've owned Coca-Cola later on.

Charlie?

CHARLIE MUNGER: Yeah. There's no question about the fact that its main contribution to Berkshire was ignorance removal. And it's not the only big contributor to ignorance removal.

If it weren't for the fact we were so good at removing our ignorance, step by step, Berkshire would be practically nothing today.

What we knew originally wasn't enough. We were pretty damn stupid when we bought See's. We were just barely smart enough to buy it.

And if there's any secret to Berkshire, it's the fact that we're pretty good at ignorance removal. And the nice thing about that is we have a lot of ignorance left to remove. (Laughter)

WARREN BUFFETT: Well, that's what happens when I call on him. (Laughter)

28. Buffett explains deal to change Bank of America investment

WARREN BUFFETT: Station 7.

AUDIENCE MEMBER: My name is Ben Ottenhoff and I'm from Washington, D.C.

I was wondering if you could talk — I've read recently that the Bank of America investment, you changed it so they can now treat it as tier one capital.

WARREN BUFFETT: Right.

AUDIENCE MEMBER: Can you explain a little bit why you did that and what benefit, if any, there is to Berkshire's shareholders?

And also, does it give you any pause that they can't calculate their tier one capital requirements properly?

WARREN BUFFETT: The — it came about some — really, a good many months ago, that Brian Moynihan called me and asked me whether we would be willing to change our preferred stock, five billion of it, from a cumulative preferred, to a noncumulative preferred.

Now, a non-cumulative preferred has certain defects, obviously, compared to a cumulative preferred. As, for example, the shareholder — the preferred shareholders — of Freddie Mac and Fannie Mae are finding out.

Noncumulative preferreds — Ben Graham wrote about them in the 1934 edition of "Security Analysis" — they're a terribly weak form of security.

But, partly because they are that weak form of security, they count different in capital with banks.

So Brian asked me to do that and then he said, "If you will do that" — and this requires approval by their shareholders and everything — but he said, "If you'll do that, we would be willing to make your preferred noncallable for five years."

Now, in a world of five-basis money — five-basis-point money — you know, practically nothing — no returns — I was very willing to make that trade-off.

It was — they felt it was good for them and I felt it was good for Berkshire.

So, I get five years at Berkshire of non-call of a 6 percent preferred, which I can always use as payment for the warrants we have.

So, I don't have a problem of being locked into it forever, into a noncumulative committed preferred, and the BofA gets the benefit of using it in their calculation of capital.

That was all done before this recent — I mean, a long time ago — before the recent, you know, week ago or so when they had the miscalculation involving some structured notes of Merrill Lynch.

That error they made does not bother me. I mean, it — you know, we work on our figures, you know, we've got that 20,000 page-plus tax return. We have 10-Ks, 10-Qs, going in and out. You do the best you can.

But I — that error did not affect their GAAP reported numbers or anything of the sort. And they wished they hadn't made it. And they'll pay a penalty, in the sense of their capital plan, because they did make it.

But it doesn't change my feeling about the Bank of America or its management one iota.

And I do think that this — they were going to pay the dividend anyway. You know, I mean, the probabilities that going to non-cumulative hurts us are very, very low. And the probability that making it noncallable for five years is a real plus to us.

So, it was an exchange I was happy to make. And I think that it was good for us and good for them.

Charlie?

CHARLIE MUNGER: Well, I agree with you.

WARREN BUFFETT: OK. (Laughter)

29. NetJets is "satisfactory," but don't expect big growth

WARREN BUFFETT: Becky?

BECKY QUICK: This question comes from Frank Robinson in Madison.

And he asks, "Ten years ago, NetJets was mentioned at the annual meeting each year as an exciting growth opportunity for Berkshire. Five years ago, there were some problems which seem to have been addressed since they're no longer mentioned.

"What are the current prospects for NetJets? Is it a substantial contributor to growth and revenue and earnings?"

WARREN BUFFETT: Yeah, it's not a big grow — it's a very — it's a perfectly decent business.

The number — it peaked in new unit volume more or less coincident with what happened in the stock market in 2007 and '08.

I mean, there were a fair number of people whose income was dependent on stock market behavior, particularly hedge fund managers. But other — a lot of others.

And they gave us quite a boom in sales. And not only did their demand fall off, but when their contracts ran out — and they tended to run out in, like, 2011 and '12 — a lot of them did not renew.

Until the last — won't be totally accurate on this — but until the last six or eight months, net ownership in the U.S. was declining just slightly. And that's turned around now. Net ownership is growing month by month.

But it is not a huge growth business at all. I mean — it's a very large-size business. I mean, we are, you know, probably 60-some percent of the industry and there's nobody remotely close as a second. I mean, we are the premier product.

But I don't see the market being double or triple the present size.

We are going to China very soon. But that's a very, very long-range play. We are in Europe and that is not — that still is declining a little bit in unit volume.

Now, the flight hours have picked up a fair amount. So the owners are using the planes more in the last six months to a year, and that fell off a lot in the 2007- 8 period.

So I would not characterize NetJets as a big growth opportunity. But I would — but I'm glad we own it. And I think it's very — it's a very satisfactory business.

But it is not one I would expect to see a whole lot of growth out of.

Charlie?

CHARLIE MUNGER: Well, I demonstrated my optimism by buying 25 more hours. (Laughter)

WARREN BUFFETT: He was a tough sell, too, I got to tell you that. (Laughter)

I can think of a few more comments, but I won't make them.

30. Unlikely to use major stock holdings to pay for acquisitions

WARREN BUFFETT: Jay.

JAY GELB: This question is on acquisitions.

How large of an acquisition is Berkshire comfortable targeting currently?

And to what extent are Berkshire's major equity investments in Wells Fargo, Coke, American Express, and IBM realistically a potential source of funds for deals?

WARREN BUFFETT: Well, they could be a source of funds. But it's very unlikely they will be.

But — the — our goal is to buy really good businesses, and big businesses, and businesses where we like the management, and businesses that we think we can grow over time.

I mean, Berkshire is about building earning power. When we buy, as we did a day or two ago, agreed to buy that transmission line in Alberta, I mean, I'm looking at trying to add earning power to Berkshire.

And we try to do that every day or every week or every month. And we don't get opportunities that often.

But if the opportunities were large enough and we needed to raise some money, you know, we can dip into a huge reservoir of securities and still have, you know, huge investments thereafter.

It hasn't come to that. You know, when we've got 40-some billion of capital — or cash — and I'm willing to take it down to 20, it — you know, we've got a fair cushion there.

But if I needed to, we would do something, if it was attractive enough, and big enough, that it required us to.

So, that could happen. Could happen this year, could happen ten years from now. You never know.

Charlie, have you got any thoughts on that?

CHARLIE MUNGER: Well, no, I think the — our acquisitions have been irregular in the past. They'll be irregular in the future.

I do think we'll get more, sort of, automatic, intelligent redeployment of capital from our railroad and our utility subsidiary than we have in the past. And I think that's good, good for the shareholders.

WARREN BUFFETT: I think people may think that what we get turned on is by finding some stock we'd like to buy. That's fine.

But what really — there's no comparison — what really turns us on is finding a business that we want to buy, and that fits well for Berkshire, and that'll be earning money for Berkshire 10 and 20 and 50 years from now.

That's what we're — that's what we've been trying to build for 49 years.

And marketable securities have played a big part in that, because the profits that we've made from them have helped do that, and it's a great place to deploy capital on an — you know, it's easy to do there.

But if you — what we're really thinking about, at least Charlie and I — we've got Todd and Ted thinking about marketable securities — what we're really thinking about is buying businesses. And that's what it'll continue to be.

We're in no hurry to sell any of those stocks you mentioned. (Laughs)

They — there probably would be other stocks — if we were going to go out to raise five or 10 billion from stocks, they would not be the names you mentioned.

31. Still reluctant to borrow despite cheap money

WARREN BUFFETT: OK. Station 8.

AUDIENCE MEMBER: Hello Warren, Charlie. My name is Stefano Grasso (PH) and I come from Genova, Italy, all the way from there. It's a pleasure to be here today with you.

I have a question about increasing leverage for Berkshire in this day. This question is really to trigger a discussion and to hear your thoughts on that.

And also, this question was triggered by the fact that following the acquisition of BNSF, few years ago, which was partially financed by Berkshire stock, shortly after, there was plenty of cash around.

There could be different advantages for Berkshire to wisely increase leverage these days. Some generally true for all the companies. Some Berkshire specific.

And the Berkshire specific, most important one for me as a shareholder, is that the investment decision made to invest the funds would be made by the present team, you and the other managers.

Question is then, why not go out and ask for several billions in bonds with a long maturity, and maybe even with some earlier endorsement or callable options embedded at Berkshire discretion, and good — and make a good use of it? Thank you.

WARREN BUFFETT: Well, what you say makes great sense.

And it's the kind of thing Charlie and I used — I think if you'd asked Charlie and me 40 years ago, that if we were looking at the present set of interest rates and we had some wonderful businesses that were making a lot of money, whether we would have gone out and borrowed a whole lot of money for the long term. We would've said yes, right, Charlie?

CHARLIE MUNGER: Wouldn't have been a hard decision.

WARREN BUFFETT: But, we've got several reasons. We — A, we do have a good way of generating funds other than through equity: through float. And we've done that to the tune of 77 billion.

And we don't like the idea of operating a very conservatively-leveraged company, and then changing courses so that the people who bought bonds that were rated double-A, sort of find themselves with much lower rated bonds of the sort.

We don't have any problem leveraging up the utility or the railroad. They deserve to have even a lot more debt than they do, but we keep it sort of in line with what the rating agencies think should be conventional ratios.

But they're — if you look — if you analytically look at them — both of them could withstand a fair amount more debt.

At the parent level, we — you know, looking back on the BNSF deal, we borrowed some money that time and we used some equity.

I think using equity helped us make the deal. But it was, you know, it was not a smart thing to do, basically.

I should — and I could've always gone to the market and repurchased a bunch of stocks subsequently, and that's probably what I should've done on that.

So I understand your point. I completely — you know, another 30 or 40 billion of debt at Berkshire would be nothing and it would cost very little.

We don't actually have great places to put it now, as evidenced by the fact that we've got 25 billion or so of excess cash.

We'd be — we are reluctant to leverage it up a lot at the parent now, since we have these other sources of money that are really pretty attractive.

We are selling what we call structured settlements, for example, that have a very long duration. And they actually have an interest cost to us of less than if we were to sell bonds.

So we are doing certain things that are along the lines you urge, but not nearly as aggressively as you urge.

And you probably are right. And you're certainly right if we saw a $50 billion deal and we passed on it for some reason because we were unwilling to take on some debt.

If we see a really good $50 billion deal, we'll figure out a way to do it.

Charlie?

CHARLIE MUNGER: I think we'd welcome it. We're — even though what you suggest is intelligent, we're probably not going to do it in advance.

WARREN BUFFETT: You caught the last two words there.

32. Climate change threat doesn't affect investment decisions

WARREN BUFFETT: Andrew.

ANDREW ROSS SORKIN: Question comes from Rory Holscher in Galena, Illinois. This question is about Berkshire's investments in climate change.

"On one hand, Berkshire's utilities have large commitments to wind and solar power. Berkshire also has an investment in BYD, an innovative transportation company that may be comparable in some ways to Tesla.

"On the other hand, Burlington Northern hauls a lot of coal. You point out in the 2013 annual report that its profits could shrink if coal burning was curtailed.

And then there's the reinsurance business.

How do these and other Berkshire investments align with your understanding of the risks and opportunities posed by climate change? How should we think about this as investors?"

WARREN BUFFETT: Well, I think that you've stated the facts on a whole bunch of businesses. And, I mean, if you own a railroad that's carrying a lot of coal, it'll carry a lot of coal for a long period. A very long period. But it'll probably carry less at some point. I don't think —I think that's very likely, too.

But, I get all these questions from people who tell me they want me to fill out lots of forms and everything about how it'll affect our insurance business. It doesn't — it just doesn't operate in that — in that time period.

I mean, we are not making — when Ajit and I talk about what we'll charge for catastrophe insurance, you know, whether it's hurricanes in Florida, or whether it's earthquakes in New Zealand, or whatever it may be, the year-to-year change in probabilities on that are, at least in our view, extremely low.

I mean, it doesn't come close to being anything that affects your prices in any material way in any given year.

And, you know, we will continue to develop alternative sources of energy. We'll continue to use coal in our coal generation plants until the utility commissions under which we operate tell us that we should do something different. We have no choice about that.

We, incidentally, have no — I mean, we're happy to carry the coal, but beyond that, we are a common carrier. I mean, we might love to turn away chlorine or ammonia or something like that because of the dangers in carrying it. And we can't get compensated adequately for that.

But we are a common carrier. So, we — by law, we're required to carry the freight that is offered to us.

So I — I don't think in making an investment decision on Berkshire Hathaway, or most companies, virtually all of the companies I can think of, that climate change should be a factor in the decision- making process. Charlie?

CHARLIE MUNGER: Yeah, I think a lot of the people who think they know how climate change is going to change weather patterns and hurricanes are overclaiming. (Applause)

We're sort of agnostic. It isn't that there isn't some global warming, because there plainly is.

But the people who think they know exactly what's going to happen and how many people are going to die from tropical diseases and so forth are mostly talking through their hats.

I think there's a class of people who like the idea they've got a calamity to worry about. And —

WARREN BUFFETT: Well, but — and when you say it, I mean, just in terms of being an economic variable in making a decision, this —

CHARLIE MUNGER: No. We're not saying, "How can we structure our whole investment program to take into account what we think we know about climate change?"

But I think we're very well located long term, no matter what happens.

I think that transmission lines and more or — we're going to have to produce a lot more electricity directly from the sun or indirectly through things like wind. And, we're beautifully positioned.

It's just like GEICO made a lot of money when the internet came along, that they didn't really plan on, I think we'll make a lot of money as more and more electricity is produced more directly from the sun.

So I think we're in a very good shape. But I don't think we deserve any great credit for it. We just stumbled into it.

33. Praise for portfolio managers Todd Combs and Ted Weschler

WARREN BUFFETT: Gregg?

GREGG WARREN: Since Berkshire started to transfer some of the responsibility for the company's investment portfolio over to Todd Combs and Ted Weschler, the two men have gone from managing around $3 billion each in early 2012, to managing more than $7 billion each earlier this year.

That said, this still represents less than 10 percent of the equity portion of your investment portfolio, with big legacy positions in Wells Fargo, Coca-Cola, American Express, IBM and Proctor & Gamble, overshadowing the rest of the holdings.

Can you give us an update on how much money each of your lieutenants is now running and how much you see that growing into over the next five years?

And given that both men have seemingly been involved in things beyond their roles as portfolio managers the last couple of years, how much do you expect their roles to expand over time?

And on a completely separate note, at what point can we expect to see Todd and Ted join you and Charlie up there on stage to talk about their efforts managing Berkshire's investment portfolio?

WARREN BUFFETT: I got through college answering fewer questions than that. (Laughter)

They are managing about —it's a little over 7 billion now. We will change that periodically and it will always be upward. But we don't change it month by month.

I mean, their portfolios may change in value month by month. But they will be handling more money in the future than they are now.

I think, to some extent, they, as well as I — you know, I've had the unpleasant experience of handling more and more money as the years go by — they are seeing that it does get a little more difficult as the sums get larger.

But it's still far better to keep moving money over to them and away from me as time passes. And that'll continue to be the case.

They're both terrific additions to Berkshire, beyond their investment skills in that they know — they each know — a whole lot about business. They know a whole lot about management.

And there are a lot of things that come across the desk at Berkshire that I get an idea on, but I just don't feel like carrying out myself, because they might involve a lot of time, particularly if they get involved in negotiating small points and that sort of thing.

So Ted and Todd have both, as I mentioned in the report, been very helpful in doing things beyond their investment management duties that have added a significant value to Berkshire. And I think it's a cinch that that will continue.

They want to do it. They enjoy doing it. They don't ask for extra compensation, at all, because they do it.

They're 100 percent attuned to Berkshire. They know how I think. And if I tell them, you know, "Here's a deal that I think makes sense if you can get it done," they'll know why it makes sense, and they'll know how to get it done, and they'll spend the time to do it.

So it's been a big, big plus for Berkshire to bring them onboard. And they'll be more important factors as the years go by. OK.

Charlie? I'm sorry, I'm —

CHARLIE MUNGER: Nothing to add.

WARREN BUFFETT: OK.

CHARLIE MUNGER: How's that?

34. Praise for Federal Reserve and Chairman Ben Bernanke

WARREN BUFFETT: Station 9.

AUDIENCE MEMBER: Good morning, Warren and Charlie. My name is Jason. I'm from Toronto and my question relates to the general financial markets.

We've been in an environment of virtually zero interest rates now for many years. In recent times, prolonged periods of low rates have led to asset bubbles, such as the housing bubble and, potentially, now a bond bubble.

If you were running the Fed, what would be your policy with respect to interest rates? Do you see a need for a hike? And what would be your time horizon for such a change? Thank you.

WARREN BUFFETT: Well, since it's — you're right about the — who would've guessed five years ago that you'd have had rates this low for this long?

You're — I would say that I'm surprised at, really, how well things are going.

I don't think I would be doing much differently. And I particularly say that because it's worked so well so far. So I would like to say that I would've done exactly the same thing and take credit for it.

I've been surprised at how well this worked. But as I said last year, this is really an interesting movie because we haven't seen it before. And what makes it interesting is also we don't know how it ends. But, I think Ben Bernanke was a hero, both at the time of the crash — or the panic — and subsequently.

I think he's a very smart man. I think he handled things very well.

What was interesting to me was when the minutes of the Fed from the period in 2007 and 2008 came out, it was interesting to me how a number of the members of the Fed were not getting it, as to what was happening.

That was really fascinating. It wasn't — there were a lot of them that didn't really understand, it seems that way, or some of them that didn't understand just how serious things were.

And so I give particular credit to Bernanke, considering the fact that he was really not getting a cons — certainly not a unanimous view from those surrounding him, that the kind of actions he knew were necessary, were really necessary.

And yet, he went ahead with them. And in my opinion, did a masterful job. And from everything I've seen of Janet Yellen, I feel the same way about her.

We will see how this movie plays out. You know, I do not know the answer as to what happens if you keep rates close to zero for a very, very long time. And keep absorbing more and more of the debt issuance of the country because so far, we've tapered, but we're still buying.

I'd be interested to hear Charlie's thoughts on it.

CHARLIE MUNGER: Well, nobody, for instance, in Japan would ever have anticipated that interest rates would go way down and stay down for 20 years.

And nobody would've expected common stocks to decline by huge amounts and stay down for 20 years.

So strange things have happened. And they're very confusing to the economics profession.

In fact, if you're not confused, you really probably don't understand it very well.

And at Berkshire, what I noticed is there aren't many long-term bonds being bought.

WARREN BUFFETT: Yeah. We — well, you know, in 2008, I wrote an article saying, you know, that — everybody was saying cash is king. Well, cash may have been king if you used it, but cash was the dumbest damn thing you could possibly own, you know, if you weren't going to use it.

And people cling to cash at — usually at the wrong times.

But it is — a zero interest rate policy has had a huge effect, both in rejuvenating the economy and — and in terms of asset prices.

It has not, in my view, produced a bubble. That doesn't mean it can't produce one. But this is not — this is not a bubble situation, at all, that we're living in. But it's an unusual situation that we're living in.

Any further thoughts, Charlie?

CHARLIE MUNGER: No, I'm as confused as you are.

WARREN BUFFETT: Oh good. Good. (Laughter)

That's why we get along so well.

35. How Berkshire benefits from being a conglomerate

WARREN BUFFETT: Carol?

CAROL LOOMIS: This question concerns another uncertainty. It's from Chris Gotcho (PH) of Gotcho Capital Management in New York City.

"You've been looking for a credentialed bear to ask questions at this meeting. I'm not it. In fact, selling short on Berkshire would be quite silly.

"However, in the long term, Berkshire has a business model of owning over 70 non- financial, unrelated businesses — bricks and chocolate, for example — which is a model that has almost universally not worked well in the past 100 years of American business.

"The model has worked well for you two, Mr. Buffett and Mr. Munger, who are uniquely talented.

"But the question is, the probabilities do not seem likely to be favorable that their successors will be able to have it continue to work nearly as well."

So that is my question.

WARREN BUFFETT: OK. Actually, the — it's interesting.

The model has worked well for America. I mean, if you look at all these disparate businesses in America, they've done extraordinarily well over time.

So if you want to look at the Dow Jones average as one entity — now, it was a changing group of companies over a 100-year period — but, you know, any business unit that goes from 67 — or 66 — to 11,497 while paying you out a fair amount of money every year, actually is a model that's worked pretty well. But it hasn't been, of course, under one management.

But owning a group of good businesses is not a terrible business plan. A good many of the conglomerates were put together to perform financial magic of one sort or another.

They were based upon — you know, if you go back to the Litton Industries and the Gulf and Westerns and just — you could name them by the hundreds. They were really put together — Ling-Temp — LTV, and — on the idea of serial issuance of stock, where you issued stock that was selling at 20 times earnings to buy businesses that were at ten times earnings.

And it was the idea that somehow you could fool people into continuously riding along on this chain letter scheme, without the primary thought being given to what you were actually building in the management.

I think our business plan makes nothing but great sense, to own a great group, a group of great businesses, diversified, outstanding managers, conservatively capitalized.

And with one enormous advantage, which people don't really understand. I mean, capitalism is about, in an important way, it's about the allocation of capital. And we have a system at Berkshire where we can allocate capital without tax consequences.

So we can move businesses from See's Candy, to generate surplus capital, to other areas. It doesn't hurt See's in the process, and we can move it, as the textbooks say, to places where capital can be usefully employed, like wind farms or whatever it may be.

So we are — you know — there's nobody else really better situated to do that than Berkshire Hathaway, and it makes perfectly good sense.

But it has to be applied with business-like principles, rather than with stock promotion principles. And I would say a great many of the conglomerates have been — have had, as their underlying premise, stock promotion.

You know, you saw what happened with Tyco or — the serial acquirers were usually interested in issuing a lot of stock.

I think if you had to look at one of the primary indicators of what sort of species you're viewing, you would see whether somebody's issuing — if they're issuing stock continuously, one way or another, they've probably got a chain letter game going on. And that does come to a bad end.

I think our method of acquiring for cash, and acquiring good businesses, and building many, many sources of growing earning power, I think, is a terrific model.

Charlie?

CHARLIE MUNGER: Well, I think there're a couple of differences between us and the people who are generally thought to have failed at a conglomerate model.

One is we have an alternative when there's nothing to buy in the way of companies. We've got more securities to buy in the insurance company portfolios. And that's an option which most of the other conglomerates didn't have.

Number two, they were hell bent to buy something or other quite regularly. And we don't feel any compulsion to buy. We're willing to just sit until something makes sense.

We're quite different. We're a lot more like the Mellon brothers than we are like Gulf and Western. And the Mellon brothers did very, very well for what, 50, 60, 70 years.

And they were willing to own minority interest, they were willing to grow companies, they were a lot like us.

And so I don't think we're a standard conglomerate. And I think we're likely to continue to do very well, sort of like if the Mellon brothers had just kept young forever.

WARREN BUFFETT: Now you're talking.

CHARLIE MUNGER: Yeah. (Laughter)

36. Praise for Forest River's Pete Liegl

WARREN BUFFETT: Jonathan.

JONATHAN BRANDT: Forest River is one of Berkshire's better performing acquisitions. Since Berkshire purchased it in 2005, its sales have grown considerably faster than those of its principle competitor, Thor. And I believe it has taken the number one spot at retail for recreational vehicles.

Can you explain what Forest River is doing differently from Thor? And tell us whether Forest River is accepting lower operating margins than Thor's 7 percent to gain the share.

Does Forest River have any sustainable, structural advantages over Thor that will help it maintain its number one position?

Also, with three companies now accounting for about 80 percent of the share in the RV market, are there greater barriers to entry than in the past, or can a feisty upstart like Forest River, in its day, still come out of nowhere and gain a lot of share?

WARREN BUFFETT: Yeah. We bought a company called Forest River, run by a fellow named Pete Liegl, I'd say about ten years ago or so.

And it's interesting. Pete, who is not an MBA type at all, he's a terrific guy, he built up a — (Laughter)

That was not a statement, that was an observation. (Laughter)

Pete built up a very successful, but much smaller, RV business. And he sold it to a private equity firm in the mid-1990s. And they promptly started telling him how to run it. And he, very shortly thereafter, told them to go to hell.

And, not very long after that, it went broke, which is not an unusual — I would've predicted that.

So Pete then bought it out of bankruptcy, and rebuilt it, and then came to see me about ten years ago.

And in one afternoon — we went to dinner that night. He brought his wife and his daughter. And we bought the business.

And he made me a couple of promises then. He's very limited in his promises. I told him what I'd do. And we've lived happily ever after.

I've never been to Forest River. It's based in Elkhart, Indiana. I hope it's there. I mean, maybe they're just making up these figures — you know?

I could see that. Some guy saying, "What figures shall we send Warren this month, you know, ha, ha, ha." (Laughter)

Pete does a terrific job of running the company. We made a deal at the time he came, on incentive comp and base comp. He's never suggested a change, I've never suggested a change.

He's built the company to where it'll do over — I think it'll do over $4 billion of business this year.

I've probably had three or four phone calls with him in the whole time.

It's his company. And he does a sensational job.

I don't know about the Thor-Forest River situation in terms of how tough it is to go in to compete with him. I think it'd be tough to compete with Pete under any circumstances.

His IT department, for a $4 billion business, consists of six people. He just knows what's going on in the place.

And the important thing is that it's his company. I couldn't run an RV company, and we don't have anybody at headquarters that could run one.

It's a tough business. And you do work on narrow margins, to get to your point on that, Jonny. The —it's a business that runs with maybe 11 or 12 percent gross margins, and probably 5 to 6 percent of SG&A. So, you know, your margins are in that 6-or-so percent range.

We have a very good — both from his standpoint and from our standpoint — we worked out an incentive comp. Like I say, we worked it out that afternoon in Omaha when he came by.

And it's worked for him. It's worked for us. You know, it couldn't be a better arrangement. I wish we had 20 like it.

And probably, most of our shareholders don't even know we own Forest River. But that is a company that will do 4 billion of business this year, and I'll bet will do more business over time. It's the leader in its industry. The industry's not going to go away.

And, you know, maybe we can even sell a little insurance on RVs. So that's the story on Forest River.

37. Modest impact of Bakken oil shale on Berkshire

WARREN BUFFETT: Station 10.

AUDIENCE MEMBER: Hi, Warren, Charlie. My name is Vishal Patel (PH). I'm visiting from Toronto, Canada, and my question is about the oil sands.

Can you please share with the audience your view on the oil sands industry and their impact on Berkshire Hathaway?

WARREN BUFFETT: Well, in terms of —are you thinking of the oil sands or are you thinking of shale production?

AUDIENCE MEMBER: I'm thinking oil sands, Alberta.

WARREN BUFFETT: Alberta, yeah.

AUDIENCE MEMBER: Keystone XL.

WARREN BUFFETT: It's not a huge impact. We have a crane business at Marmon that does a lot of business in oil development, generally. But, certainly, is active in the oil sands.

We will soon have a transmission operation that will cover 85 percent of Alberta. Alberta's a big place. It'll have 8,000 miles, or something like that, of transmission lines, for example.

But the oil sands business is — I mean, you know, oil sands are huge. And we own some Exxon Mobil, when they've got an operation in the oil sands, obviously.

One thing you might find kind of interesting, you know, we are moving 700,000 barrels a day of crude oil on our railroad. We've got — probably got — maybe, nine unit trains — now [BNSF Executive Chairman] Matt [Rose] can correct me on that — you know, that carry 100 cars or so.

And each one has 650 barrels, or so, of oil so that — oil, you may find interesting, not only is there a significant advantage in terms of the flexibility of where you take it, so that spreads are different in different places, and you can move it to refineries that you might otherwise have trouble moving it to. Rail's flexible that way.

But rail, actually, you know — mentally, you think of oil gushing through pipelines. But rail is probably, I would say, close to twice as fast in moving oil as is — as are pipelines.

But we recently bought a company from Phillips 66. We got it in an exchange for our Phillips stock. We bought a specialty chemicals company.

And its main product is a chemical additive that causes oil to move through pipelines about 10 percent faster than it would otherwise. So it may take a day off of a trip.

So we're actually in the pipeline business in a small way — the crude pipeline business — in a small way, through that.

I don't think — I think the oil sands are an important asset for mankind, obviously. There's a huge amount of oil there. They're an important asset for mankind, you know, in — over the centuries to come.

But I don't think there's — I don't think it will dramatically change anything at Berkshire.

Matt might have a different view on that. I'll ask Charlie to talk. And then if Matt would like to say anything, I'd be glad to hear from him, too.

CHARLIE MUNGER: Well, but, a lot of the oil sand production uses natural gas to produce the heavy oil.

So it's a very peculiar thing. It's economic only if oil stays at a very high price, and it's delightfully economic only if natural gas is too cheap.

So it's a very peculiar business. And it is good for mankind. But whether it's a great investment or not, I haven't the faintest idea.

WARREN BUFFETT: Matt, would you — do you have anything to add on the crude situation there?

38. Update on Buffett's hedge fund bet

WARREN BUFFETT: OK. We're at noon.

I promised a group — some people — six years ago I made a bet for charity on how a index — Standard and Poor's 500 index fund — would compare in performance to a group of hedge funds. And a firm in New York took me up on the bet.

And I promised that every year I would give the up-to-date results on how we're doing. And it's getting to be more fun to give these results every year. (Laughter)

We're now six years into the bet. And it's interesting, because the people who selected these funds are very decent people and smart people. And, obviously, the fund of funds gets paid based on the per — they get paid a fee, naturally.

But they also get paid an additional performance fee based on how the hedge funds they select do. So they have every economic incentive to come up with a wonderful group of hedge funds.

And underneath these fund — five funds of funds that are involved in the bet — there are probably, at least, 200 hedge funds that the fund of fund managers have carefully picked in order to enhance their own income. They got the ultimate motivation going for them.

So we are now five years — six years — into the bet. And the first year, the fund of fund groups, in a down market, did considerably better than the S&P.

But as you can see in the five years subsequently, the S&P has been running away, to some degree.

Interestingly enough, we bought — we each put in 350, or something, thousand dollars, and we bought zero-coupon bonds so there would be a million dollars in ten years.

We bought ten-year Treasurys, zero coupon. And we bought a million dollars principal. We each put up 350.

Well, the way interest rates changed after a few years to practically zero rates, it meant the bonds, even though they had no coupons attached to them, practically went to par.

So, a year or two ago, we sold the bonds at about 95 or 6, we got almost the full million dollars. We put that all in Berkshire stock. I guaranteed them that they would have a million dollars at the end of ten years, no matter what happened.

And so the prize looks like it's going to be quite a bit more than a million dollars when the ten years comes around, so. So, so far, everyone's happy.

Afternoon Session - 2014 Meeting

1. Record attendance

WARREN BUFFETT: OK, let's get ready to proceed.

We never get any precise figures, because people come and go from the meeting. But I did know that we sent out about 11,000 more tickets this year than in any other year, and we had all the overflow rooms filled. We're using space in a room over at the Hilton and everything, so clearly this year we have substantial more attendance than any year in the past, and I hope the spending patterns reflect that. (Laughter)

2. Risk of change to businesses

WARREN BUFFETT: So with that, we'll go to Becky. Assuming she's here.

BECKY QUICK: I am, I'm here.

WARREN BUFFETT: OK.

BECKY QUICK: Let's see, this is a question that comes, and I hope I pronounce your name correctly, Michael.

It's Michael — Michael Locheck (PH) and he says, "Energy Future Holdings' likely bankruptcy is a consequence of unexpected and dramatic decline in prices of natural gas prices caused by a revolution in drilling technology. To what extent do you believe other assets held in Berkshire's portfolio, debt, equity, et cetera, may be subject to disruptive technological or other changes that erode business models and barriers to entry?"

"For example, changes in consumer behavior and regulation could affect Coca-Cola. Revolution in payment systems could affect American Express, ever-increasing rate of change in technology and competitive landscape could affect IBM, wireless delivery of media content and urbanization could be disruptive to DirecTV.

"Could you also comment on whether participation of some sponsors of Energy Future Holdings, which include the very best of private equity, contributed to your decision to invest? Was it the degree of crowd mentality at play, and what lessons are to be learned from the experience?"

WARREN BUFFETT: Yeah, well. I would be unwilling to share the credit for my decision to invest in Energy Future Holdings with anybody else. I would think that's very unfair of anyone to insinuate that they had anything to do with that decision.

That was just a mistake on my part. It was a big — it was a significant mistake, and we will make mistakes in the future.

All businesses should constantly be thinking about what can mess up their business model. And with Energy Future Holdings it was a fairly simple assumption that was made that just turned out to be wrong.

I mean, the assumption there was that gas prices would stay roughly as high as they were or go higher, and instead they went a whole lot lower.

And at that point the whole place toppled. They had a lot of reserve holdings and they had some futures positions which kept them alive for a while. But that was a basic error.

We look at all of our businesses as subject to change. A classic case would be GEICO. I mean, GEICO set out in 1936 to operate at low costs and pass on those low costs to the customer through lower prices for something that was a necessity, auto insurance.

And they originally did it by mail offerings, U.S. Postal Service, two people who were government employees. That's where the name comes from, GEICO, Government Employees Insurance Company.

And they had to adapt over the years, and they adapted first to widening classifications. But they went from the U.S. mail, primarily, to the telephone, and later went to the internet, and onto social media.

But in there they stumbled one time, too, as they went to adapt, and they — when they left the government employees classification, at one point they became too aggressive about expanding and they almost — they really did go broke.

So there's — change is going on all the time, and it's going on with all of our businesses. And we want managers that are thinking about change, and what can — what's going to be needed for their business model in the future. And we know they're not going look the same five or ten years from now.

I mean, BNSF, something as basic as railroads, is looking big at LNG for its locomotives. Everything is going to change.

Our businesses generally deal from strength and they're generally not subject to rapid change. But they're all subject to change, and of course, slow change can be much harder to perceive, and can lull you to sleep easier, sometimes than when rapid change is clearly in sight.

So I would say, in answer to that question, A) I will make mistakes in the future. I mean, when you — that's guaranteed.

We do not make anything like "bet the company" decisions that will ever cause us real anguish. That just doesn't happen at Berkshire. But you're not going to make a lot of decisions without making some significant mistakes.

And occasionally they work out very well. Charlie and I, and Sandy Gottesman, in 1966, bought a department store in Baltimore. Now, there's probably nothing dumber than buying a department store in the mid-1960s. There were four department stores on the corner of Howard and Lexington Street in Baltimore in 1966, and none of them are there. And the number one store, Hutzler's, went broke a little later than our store went broke.

But fortunately Sandy did a great job of selling it, so the $6 million invested in that department store became worth about $45 billion in Berkshire Hathaway stock as we did other things with the money as we went along.

So you do have to be very alert to what is going on in your businesses, and we want our managers to do that. But actually, it's something that Charlie and I, and our directors, are going to think about, as well as our managers. Charlie?

CHARLIE MUNGER: Yeah, I spoke earlier about the desirability of removing your ignorance piece by piece, and there's another trick, which is scrambling out of your mistakes. And we've been quite good at both, and it's enormously useful.

Imagine Berkshire, a textile mill sure to go broke because power costs in New England were about twice as high as they were in TVA country, a sure-to-fail department store, and a trading stamp sure to be forced out of business by change in mode. Out of that comes Berkshire Hathaway. Talk about scrambling out of mistakes, I think of what we might have done if we'd had a better start. (Laughter)

WARREN BUFFETT: Yeah. The point was driven home to me — my great-grandfather started a grocery store here in Omaha in 1869. And my grandfather was running it in 1929, and he wrote my uncle who was going to be running it with him.

And the letter started out, this is in 1929, "The day of the chain store is over." And that is why we ended up with one grocery store, which went out of business in 1969.

It — you really have to face facts around you, and the wish being father to the thought was, unfortunately, what overcame my grandfather.

3. Heinz earning power

WARREN BUFFETT: OK, Jay?

JAY GELB: This question is on the Heinz transaction.

Berkshire's 50 percent ownership in Heinz is included in Berkshire's results, which can be meaningful to its earnings over time.

What is Heinz's current normalized earning power, after the substantial restructuring of the business, and what do you anticipate Heinz could earn within a few years?

WARREN BUFFETT: Yeah. Well, Heinz will be filing its own 10-Qs. In fact, I guess its first quarter would be — they went to a calendar year now — first quarter would be about due now. So you'll get to see Heinz's figures.

And I will say this, that Heinz was actually a very reasonably run food company with about 15 percent pre-tax margins for many years, and that's not an unusual operating margin in the food business.

And I would just invite you to look quarter by quarter and maybe next year, too, I think the margins of Heinz will be significantly improved from those historical figures. What Bernardo Hees and his associates have done there is — they've just restructured the business model.

And I think that the brands, which are all-important, are as strong as ever. And I think the cost structure is going to be significantly improved without cutting into marketing expenditures.

So I think you'll see a significant improvement, but I don't want to name a number on that. You'll find it out soon enough.

4. Buy companies or stock?

WARREN BUFFETT: OK. Station 11.

AUDIENCE MEMBER: Hi, Mr. Buffett and Mr. Munger. My name is Dev Contessaria (PH) and I'm a fund manager from Philadelphia.

You've touched on some of this already today, but I wanted to ask, if you could expand on how you think about comparing investment opportunity.

In the past, you haven't been afraid to make a single position a large portion of your portfolio, such as Coca-Cola.

So when there is a chance to buy more of your favorite names, as in 2008 and early 2009, how did the case of buying more of companies like Coca-Cola or even a Moody's, which had dropped from 75 to 15, as examples, compare with other things that you actually did?

Could Berkshire have achieved its historical returns with a more simple, concentrated portfolio of your favorite names with positive characteristics such as durable competitive advantage, pricing power, strong organic growth, et cetera, versus the larger, more complex collection of businesses which exist today? Thank you.

WARREN BUFFETT: Yeah. Well, depends which favorite name we might have hit harder back in the 2008 and 2009 period.

In the first instance, I spent a considerable part of our cash reserves too early, looking back, too early in the 2009 panic. The bottom of that was reached early in March in 2009, and that bottom was quite a bit lower than September and October of 2008 when we spent 16 or so billion.

Now, we were committed to finance Mars for 6.6 billion, and that commitment had been made many months earlier, so we didn't really have much choice in terms of the timing of that.

But we did fine on the expenditures we made during that period, but obviously we didn't do as well, remotely as well, as if we'd kept all of the powder dry and then just spent it all at once at the bottom.

But we've never really figured out how to do that, and we won't figure out how to do that.

So, the timing could have been improved dramatically. On the other hand, as late as the late fall of October of 2009, when the economy was still in the dumps, really in the dumps, you know, we were able to buy BNSF, which will be an enormous part of our future.

So, overall we did reasonably well going through that period. But looking back, the most money would have been made just by buying a bundle of stocks.

When we were buying Harley Davidson bonds at 15, looking back we should have been buying the stock. But that'll always be the case.

Overall, we would love the idea — what really we want to do at our present size and scope, and with the objectives we've got for our shareholders, is we want to buy big businesses with good management at reasonable prices and then try to build them over time.

I mean, when we start 2014, we've got a really good group of businesses, some of them very big. Those businesses will earn more over time, and then the — what we're trying to do is add onto them and make sure we don't issue any shares in the process. So it's not a complicated process.

And looking back we'll always be able to do it better than we've done it. That's just the nature of things. But I don't — I feel the game is still a very viable one, and will be for some time. It won't be forever, it can't be forever. But it's still got some juice left in it. Charlie?

CHARLIE MUNGER: Well, what's happened, of course, is the private businesses that we control have gotten to be a bigger and bigger percentage of the thing. For a great many of the early years we had more in common stocks than the total value of the company. And so we were — it was like a big portfolio of common stocks and a lot of businesses thrown in as extras.

And now, of course, the private companies are worth way more than the stocks. And, I would guess that that will continue, wouldn't you Warren?

WARREN BUFFETT: Sure, it'll continue. And the difference is when we're right about stocks, it shows up in market value and in net worth.

When we're right about businesses, it shows up in future earning power, which you can see, but it doesn't jump out at you the same way changes in stock values do. So it's a different sort of buildup of value, and one is somewhat easier to see than the other.

But the other is more enduring and does not require going from flower to flower. And they're both fine, but we've moved into phase two. Say that's fair, Charlie?

CHARLIE MUNGER: Yeah, well, if you're just investing moderate amounts of capital in the middle of some panic, you take the bottom tick, it's a very attractive price. But no significant volume of the shares could have been purchased at that price.

And so when we buy these businesses, we can get huge chunks of money into things. And now if we'd wanted to go much heavier into Moody's, we couldn't have bought that much anyway.

WARREN BUFFETT: No, no.

CHARLIE MUNGER: Yeah, so, we are sort of forced by our own past success, more into these bigger positions represented by the private companies.

But really, that's in the advantage of all of us, I think.

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: I love it when we buy transmission lines in Alberta. I don't think anything horrible is going happen to Alberta. And nor do I think transmissions —

WARREN BUFFETT: If it does, we won't know it.

CHARLIE MUNGER: Yeah, right, right. (Laughter)

And — no, I think we've adapted pretty well to changes in our circumstances.

And that, again, is part of life. I mean, since change is inevitable, how well you adapt to it is terribly important. And I would say the changes that many of you have watched in Berkshire over the years have been very much in our interest, and then there may be future changes that are just as desirable.

WARREN BUFFETT: We bought a fair amount of Wells Fargo, for example, really over the last few years. And because the economy came back, really, the most money, if you were buying at the bottom, came from buying the banks of lesser quality because they — their weaknesses drove them down even further in price, and they needed a good economy to come back.

But they were kind of like a marginal copper producer or something, that you make more money if copper goes up, not if you buy the best copper company but, usually, if you buy the worst one, because it — they have the highest marginal cost, but that gives it the biggest kick on profits.

To some extent that's been true, for example, the banks. But we felt 100 percent comfortable buying Wells Fargo, and we might have felt 50 percent comfortable buying some others and so we went where we were comfortable.

Looking back, you can say we should have just bought them all. And in fact, bought the ones that had had the worst record going into 2008 or '09, because they had the greatest recovery possible, simply because they'd fallen so far. Andrew?

5. Technology and GEICO's future

ANDREW ROSS SORKIN: — And it has to do with the future as well, and it relates to GEICO.

And the questioner asked, "Could you, and perhaps Tony Nicely, please explain how you think about usage-based pricing, tracking drivers electronically and charging premiums accordingly, and how that will affect the auto insurance industry in the U.S. in the next decade, and how these changes impact the moat at GEICO?

I'm also sure you've studied the potential impact of self-driving cars on GEICO. Google says it's now five years away. What does this mean to the future of the profit machine that is GEICO, and if the analysis showed a challenging future, would you ever sell?"

WARREN BUFFETT: Yeah. Well, the answer to the very last question is no.

The usage-based pricing is something that's popular with some companies that have done a lot of work on it. Probably the one most identified with it is Progressive doing something called "Snapshot."

And there's no question that knowing how customers drive, or policy holders drive, and how they use their cars is a valuable input to assessing the proper premium to people.

And insurance is all about comparing the propensity of loss to achieve — or evaluating the propensity of loss to establish the proper premium.

And it's very easy to understand in life insurance. I mean, if somebody is 90, they're more likely to die than 20, despite Charlie — situation. (Laughter)

Even at 83 they're more likely to die than somebody at 20.

The — so you know, that's obvious. Females live longer. That's not quite as obvious but it's been established.

So there are various variables in insurance, and you try to assess those variables and set the proper price for the policy holder. If you lived in a state, for example, where the population of the state was one instead of, you know, 100 million, there'd be a whole lot less chance of an accident, you know, than — because of the lack of density of driving and so on. There's all kinds of variables.

And through studying usage, by various methods, Progressive being probably the best known on it, they're attempting to look at some variables and hope they get better information about the propensity of that particular driver to — or the likelihood of that particular driver — to be in an accident.

And we look at lots of variables, they look at lots of variables. We think we've got a pretty good system, and so far I think that's been proven correct. But we'll continue to look at many variables.

I feel very, very, very good about GEICO, GEICO's management, and its ability to evaluate risk. And I think there are plenty of other people that are good at it, but I don't think there's — in my view, there's nobody better at it, in terms of auto insurance, than the GEICO people.

So — but we ought to keep asking ourselves, "Can we do it better?" And we do ask ourselves that.

Now, when you get to the self-driving car, that is a real threat to the auto insurance industry. I mean, if that proves successful and reduces accidents dramatically, it will be very good for society and it will be very bad for auto insurers.

So you know, that can happen. I don't know how to evaluate over how long a period that might take or what percentage of cars might be affected with that. But it certainly could happen and it would not cause us to be thinking for one second about selling GEICO. Charlie?

CHARLIE MUNGER: Yeah, some of these things happen a lot more slowly than you might think. I went to a program at Harvard, oh, at least 30 years ago, describing how color movies were going come to the house on demand, and they were just around the corner.

Well, they've come, but it was 30 years later. I have a feeling that self-driving cars having a huge impact on the market may take quite a while. And so I'm not —

WARREN BUFFETT: That would be my guess, but we could be wrong, you know.

CHARLIE MUNGER: Yeah, it could be wrong.

WARREN BUFFETT: But — (Laughter)

CHARLIE MUNGER: But —

WARREN BUFFETT: But if we are wrong, we'll be wrong together. (Laughs)

It is hard to figure out how it could have a major impact in 10 years, but it may not work at all, who knows?

But GEICO will be doing more business, a lot more business, in my view, five years from now than now, and ten years from now.

You know, 30 years from now, you're young enough to find out, and I will go away peacefully without knowing.

OK. (Laughter)

6. More international acquisitions?

WARREN BUFFETT: Gregg.

GREGG WARREN: Thank you, Warren.

You've been pretty explicit about your acquisition criteria over the years, and some years ago, perhaps around the time of the ISCAR deal, you mentioned at one of the annual meetings that a concerted effort was being made to make non-U.S. companies more aware of Berkshire's positive attributes as a preferred acquirer.

Yet, despite the higher proportion of large family-owned businesses in places like Europe and the fact that over half of the world's listed market cap currently comes from outside of the U.S., Berkshire has deployed very little capital outside of the U.S. with just ISCAR, and more recently AltaLink, coming to mind.

Is the U.S. truly that much more attractive a destination for capital, or is there some other reason why the firm has not deployed serious capital outside of the region?

WARREN BUFFETT: Yeah, no, we've never turned down a chance to make a significant acquisition outside the United States because of any feeling we'd much rather be doing something in the United States. We just — you know, you mentioned the Alberta deal.

But we have not had as much luck getting on the radar screen of owners around the world as we have in the United States.

Our best bet, by far, in buying a business is to buy it from the family of a founder or the founder himself or herself. So we've, you know, that's our strong suit, and in the United States I think almost anybody that fits in that category with a business of size thinks of us. And a fair number would prefer us.

I don't think that same — I think there's some recognition outside the U.S. Certainly when we heard from ISCAR, that was in 2006, Eitan Wertheimer said, he wrote me a letter, I'd never heard of him before, I'd never heard of the company. And he said the family had thought about it, and we were the only company to which they wanted to sell, and if they didn't sell it to us, they weren't going to sell it.

So, there's some awareness. But I've been a little disappointed in that we haven't had better luck outside the country. And we'll keep working at it and see what happens.

Incidentally, I just talked to Jacob Harpaz, who does an incredible job of running ISCAR. I talked to him yesterday when I was touring the exhibition hall.

They set a new record in April. Now, that won't be the last new record they set. But that may have some slight meaning, in terms of how world business is doing, because they sell, you know, these tiny little cutting tools, and so on, that go into basic industry all over the world.

And people don't buy those because they — you know, they're going look pretty in their offices or anything else, they buy them because they're using them up. And, it was a record in April. March had been extremely good, too. So they are seeing strength in the business that certainly would make it hard to believe there's weakness going on throughout the industrial world.

ISCAR's been a wonderful company for us. The people have been sensational. The business is extraordinary. It just is — it fits us so well that I just wish I could find a few more like it out there.

But this year, aside from the one we announced yesterday, we have not been contacted by any significant ones that made sense. We have heard from people over the last five years, I mean, we've — fair number. But nothing that really makes sense. But we'll keep trying.

7. Knowing your "circle of competence"

WARREN BUFFETT: OK, station 1. We're back at — here we are.

AUDIENCE MEMBER: Hello, Mr. Buffett, and hello, Mr. Munger. Thank you for being extremely generous with sharing your wisdom. My name is Chander Chawla, and I am visiting from San Francisco.

In the past, you have said that people should operate within their circle of competence. My question is, how does one figure out what one's circle of competence is? (Laughter)

WARREN BUFFETT: Good question. (Laughs)

Some of the people in the audience are identifying with it, I can hear them.

The — it's — you know, it is a question of being self-realistic, and that applies outside of business as well.

And, I think Charlie and I have been reasonably good at identifying what I would call the perimeter of that circle of competence, but obviously we've gone out of it.

I would say that in my own case, I've gone out of it more often in retail than in any other arena. I think it's easy to sort of think you understand retail, and then subsequently find out you don't, as we did with the department store in Baltimore.

You could say I was outside of my circle of competence when I bought Berkshire Hathaway, although I bought it, really, to resell as a stock, originally.

I probably was out of my circle of competence when I decided that I should go in and buy control of the company. That was a dumb decision — which worked out.

The — being realistic in appraising your own talents and shortcomings, I think — I don't know whether that's innate, but some people seem a whole lot better at it than the others. And I certainly know of a number of CEOs that I feel have no idea of where their circle of competence begins and ends.

But, we've got a number of managers who I think are just terrific at it. I mean, they really know when they're playing in the game they're going win in, and they don't go outside of that game.

The ultimate was Mrs. B, at the Furniture Mart. She told me that she did not want stock, in terms of the Berkshire Hathaway deal. Now, that may sound like it was a bad decision. It was a splendid decision.

She did not know anything about stock, but she knew a lot about what to do with cash. She knew real estate, she knew retailing, and she knew exactly what she knew and what she didn't know, and that took her a long, long, long, long way in business life.

And that — that ability to know when you're playing the game in which you're going to win, and playing outside of that game, is a huge asset.

I can't tell you the best way to develop a great sense of that about yourself. You might get some of your friends that know you well to offer contributions. Charlie's given me a few contributions

occasionally, saying, “What the hell do you know about that?” That’s one way of putting it, of course. (Laughs)

But Charlie, do — can you help him out?

CHARLIE MUNGER: Well, I don’t think it’s as difficult to figure out competence as it may appear to you. If you’re five-foot-two, you don’t have much of a future in the National Basketball League. And if you’re 95 years of age, you probably shouldn’t try and act the romantic lead part in Hollywood. (Laughter)

And if you weigh 350 pounds, you probably shouldn’t try and dance the lead part in the Bolshoi Ballet. And if you can hardly count cards at all, you probably shouldn’t try and win chess tournaments playing blindfolded, and so on and so on.

WARREN BUFFETT: You’re ruling out everything I want to do. (Laughter)

CHARLIE MUNGER: But competency is a relative concept. And what a lot of us need, including the one speaking, is — what I needed to get ahead was to compete against idiots, and luckily there’s a large supply. (Laughter)

WARREN BUFFETT: OK, Carol. (Laughter)

8. Comparing Berkshire’s book value to stock index

CAROL LOOMIS: This question comes back a little to a question asked earlier about your annual performance standard that you comparison.

“Mr. Buffett and Mr. Munger, I think of you as running a rational company. But when I look at your annual comparison of Berkshire’s book value per share versus the S&P average, I don’t see any rationality in that at all.”

“What is the logic of comparing a stock market index against the rise in an operating company’s book value? And an operating company is predominantly what Berkshire is these days, so why do you annually make this irrational comparison?”

CHARLIE MUNGER: Let me answer that one.

WARREN BUFFETT: OK. (Laughter)

CHARLIE MUNGER: The answer is you’re totally right, and we do that because Warren wants to make it eccentrically difficult for himself. So if you don’t understand people who like to wear hair shirts, you’ll never figure out why anybody would do such a thing.

It's a ridiculous way to make a comparison, but it makes it hard for Warren to look good. And he likes to climb mountains that are difficult. But it's insane, you're right. (Laughter and applause)

WARREN BUFFETT: Yeah, yeah.

Normally when he goes all wishy washy like that, I like to clarify. But I don't think I'll try. (Laughter)

9. ISCAR and Marmon deal valuations

WARREN BUFFETT: OK. Jonathan.

JONATHAN BRANDT: The multiple of pre-tax profit that Berkshire paid for minority interests in Marmon and ISCAR in 2013 were considerably higher than the multiples Berkshire paid for earlier purchases of majority stakes in those two firms.

Can you please explain why the valuation formulas changed, why the multiples weren't fixed for future increases in Berkshire's stake, which at least in Marmon's case were always contemplated, and why Berkshire was willing to accept meaningfully lower returns on the more recent purchases, not so many years after the first purchases?

WARREN BUFFETT: Yeah, well, the multiple with ISCAR was actually determined precisely on the basis of which the original purchase was made. In other words when we made the deal in 2006, we took multiples of earnings and allowed for cash and a few things.

But — and then we took that formula and we stuck that in as both a put and call option for the family or Berkshire. They had the put, we had the call. And we stuck that in to govern things for, you know, between now and judgment day, and so that there's no variation from the original formula.

We would never — shouldn't say never, but we had — our style would not be ever to call that from the family, even though we had the right to do it.

The put and call were at the same price, or at the same — following the same formula. But the family elected to put it to us, but they put it to us exactly on the same basis as what was involved in the original purchase of the 80 percent.

The Marmon deal is entirely different. The Marmon deal was an installment sale, and, in effect, to make the deal and buy the originals turned out to be 64 percent, we intended it to be 60 but gave them the option to do more.

That was simply an installment sale, and we looked at the consequences of the formulas being applied in the future. The family would not have sold us the 64 percent, which they did on the

original piece, unless they had the formula applying to the second and third piece that was embodied in the contract.

And we looked at that as a single transaction, knowing that if the business improved we would be paying more money, and as the cash position improved, we'd be paying more money later on. But it was all built into the original deal, so one was one — was at exactly the same price, and one was part of a three-step deal, in effect. Charlie?

CHARLIE MUNGER: But the price went up because the value went up.

WARREN BUFFETT: Yeah, but it was — and because it was built into —

CHARLIE MUNGER: Yeah, and we'd agreed to — that that would be — we'd pay value.

WARREN BUFFETT: In both cases, I should say too, both with the Pritzker family at Marmon and with the Wertheimer family at ISCAR, it couldn't have been — they couldn't have behaved better — or the feelings are entirely good, everybody felt good about the transaction. The initial transaction and the subsequent transaction. So it pays to have to have deals in which people feel good when they —

CHARLIE MUNGER: Nothing that happened there is that — we got just an enormous respect for the intelligence of those two families. The more we looked at those businesses, the smarter and better those families looked. It was just amazing what each family had done, wouldn't you say, Warren?

WARREN BUFFETT: Right, right.

CHARLIE MUNGER: Absolutely amazing.

WARREN BUFFETT: And those were two important acquisitions. I mean, they — you know, they add up to lots of intrinsic value. And there, partly because of some accounting peculiarities, but the carrying value of the businesses is well below what the intrinsic business value is now.

CHARLIE MUNGER: And by the way, that Union Tank Car that's within Marmon is John D. Rockefeller's old business. The first John D. Rockefeller. It's amazing how some of these good businesses have lasted.

WARREN BUFFETT: Yeah, well, actually the corporate form it — the original corporation that is Marmon, I'm quite sure, is Rockwood and Company, which I did a cocoa arbitrage with back in 1955 or something, and that's where I met Jay Pritzker. So it — these things wind their way along.

It — one thing you learn in life, but also learn particularly in business, is that you're going to meet a lot of people and entities and experiences — in the future that — you may have thought were one shot —one stop shops originally in your life.

10. How to find what you love and do it

WARREN BUFFETT: Station 2.

AUDIENCE MEMBER: Mr. Bung — this — Mr. Buffett, Mr. Munger, my name is Nicholas Erdenberger. I hail from the beautiful Garden State of New Jersey. And I guess the — (laughs) — I guess the question —

WARREN BUFFETT: Withhold your applause, applause. (Laughter)

AUDIENCE MEMBER: So I guess this is a follow up question to the question before.

I really connect with the idea of not investing in industries you can't fully understand. Being a young guy who has limited ability to code and who can't build robots, tech is certainly not an industry I fully understand.

And yet these days, the concept of entrepreneurship is nearly synonymous with tech amongst people my age. So my question to you, Mr. Buffett, is if you were 23-years-old with entrepreneurial tendencies, what non-tech industry would you start a business in and why?

WARREN BUFFETT: I'd probably do just what I did when I was 23. (Laughs)

The — you know, I would go in the investment business. And I would look at lots of companies and I would go and talk to lots of people, and I would try to learn from them what I could about different industries.

One thing I did when I was 23, if I got interested in the coal business, I would go out and see the CEOs of eight or ten coal companies. And the interesting thing was I never made appointments usually or anything, I just dropped in. But they —they felt a fellow from Omaha who looked like me couldn't be too harmful.

So they'd always see me. And I would — I'd ask them a lot of questions, but one question I'd always ask them, two questions at the end, I would ask them if they had to put all of their money into any coal company except their own and go away for ten years and couldn't change it, which one would it be and why?

And then I would say, after I got an answer to that, I would say, and if as part of that deal they had to sell short in the equivalent amount of money — in one coal company — which would it be and why?

And if I went around and talked to everybody in the coal business about that, I would know more about the coal companies from an economic standpoint than any one of those managers probably would.

So, I think there's lots of ways to learn about business. You're not going learn how to start another Facebook or Google that way, but you can — you can learn a lot about the economic characteristics of companies by reading, personal contact.

You do have to have — you have to have a real curiosity about it. I mean, you — I don't think you can do it because your mother's telling you to do it, or something of the sort. (Laughs)

I think you — it really has to turn you on. And I mean, what could turn you on more than running around asking questions about coal companies? (Laughter)

You have to maybe be a little odd, too.

But that's what I would do. And I might, in the process of doing that, find some industry that particularly interested me, in my case the insurance industry did, and you might become very well equipped, even perhaps, to start your own insurance company, but perhaps to pick the most logical one to go to work for.

If you just keep learning things, something will come along that you'll find extremely useful to do. I mean, it — but you've got to be open to it. Charlie?

CHARLIE MUNGER: Well, you might try a version of the trick that Larry Bird used. When he wanted an agent to negotiate his new contract, he asked every agent why he should be selected. And if he was not going be selected, whom the agent would recommend. And since everybody recommended the same number two choice, Larry Bird just hired him and negotiated the best contract in history. There's —

WARREN BUFFETT: Well —

CHARLIE MUNGER: — there are a lot of tricks that people use.

WARREN BUFFETT: We did the same thing with Solomon, actually. It was a Saturday morning —

CHARLIE MUNGER: Yeah.

WARREN BUFFETT: — when I call —and you were there, Charlie, weren't you? -

CHARLIE MUNGER: Yes —

WARREN BUFFETT: — I wasn't sure.

I called in, I don't know whether it was eight or ten of the manager — I had just gotten in there on Friday afternoon, and now it's Saturday morning and we had to open for business Sunday night in Tokyo, and I had to have somebody to run the place.

So I called in eight people and I said, you know, "Who besides you would be the ideal person to run this, and why?"

One guy told me that there was nobody compared to him. (Laughter)

He was gone from the firm within a few months. (Laughter)

But — the — it's not a bad system to use.

You can really learn a lot just by asking. I mean, it's starting to sound a little bit like a Yogi Berra quote or something, but it is — it is literally true that you — if you talk to enough people about something they know something about, and people like to talk. You know, and — here we are talking ourselves. (Laughs)

And you just have to be open to it. And you will find your spot. You may not find it the first day, or the week, or month, but you'll find what fascinates you.

I was very lucky because I found what fascinated me when I was seven or eight years of age. But — you know, some people find chess or music, you know, fascinates them when they're four or five.

If you're lucky you find it early, and sometimes it takes you longer, but you'll find it.

CHARLIE MUNGER: If it's a very competitive business, and it plainly requires the qualities that you lack, it should probably be avoided.

I could — when I was at Caltech I took thermodynamics, and Homer Joe Stewart, who was a genius, taught the course. And it was fairly apparent to me that no amount of time or effort would turn me into a Homer Joe Stewart. He was utterly, impossibly more talented than I could be.

Gave up. I immediately said I wasn't going try and be a professor of thermodynamics at Caltech. And I've done that with field after field, and pretty soon there was only one or two left. (Laughter)

WARREN BUFFETT: Yeah, I had a similar experience in athletics. (Laughter)

11. Hotel room economics during Berkshire meeting

WARREN BUFFETT: OK, Becky.

BECKY QUICK: This question comes from Darren Bordemier (PH). He says, “Warren, you’ve commented in the press that you are concerned about the hotel price gauging in the Omaha area during the Berkshire meeting weekend.” (Applause)

Hold your applause, you haven’t heard the rest. “Please elaborate further on that position, as it seems to contradict free market capitalism. Shouldn’t the law of supply and demand apply in this case?”

WARREN BUFFETT: Absolutely. And so therefore, since we want to increase the demand, the proper thing to do is increase the supply, right? (Laughs)

And that’s why we have encouraged, for example, Airbnb, to come in and — they supplied some rooms this year.

But it’s very logical. If you think about most cities, the big events that come to their convention centers and use their hotels, they size themselves in deciding where to go. If you have a relatively small industry, they can pick a moderate-sized city and they can have their convention there, and they don’t outstrip the supply of rooms.

If you have a very big industry and you’re having a convention, you know, you have to go to some place like Vegas or some place that has a lot of rooms because otherwise you do throw the supply-demand out of whack.

So, if you have an event, which isn’t sized by the people that are scheduling it, can’t be sized by the people that are scheduling it, then you can totally outstrip rational supply of rooms.

I mean, you know, the great case would be something like the Masters tournament. I mean, Augusta can’t size its hotel industry to Augusta, to the Masters, and the Masters isn’t going move any place. Well, there — are certain events like that, but there aren’t very many.

And Omaha cannot size its hotel supply to the Berkshire meeting. It sizes it to the kind of conventions it normally gets and all of that, but the Berkshire meeting has grown beyond what we anticipated.

So fortunately, there’s developed — and for that reason people started putting in — what really bothered me were the three-day minimums. I mean, it — you know, I think there’s something particularly irritating about somebody’s coming in for a one-day event to have to buy — have a three-day minimum. And the prices were getting high.

Incidentally, the Omaha Hilton right across the street, they — they’ve been magnificent throughout this, as have many others. But there were a few that were really pushing things, and we didn’t want to cut down on the demand. We didn’t want to move to Dallas, even though we’re opening a store there next year, it would be kind of fun for that.

But we're not going move to Dal — I mean, we want — Omaha people love this event, it's an economic boon for Omaha, but — and people get a good impression of Omaha when they come here, generally.

So it's — there's a lot of good things about having the meeting in Omaha, and we can't expect anybody to build new hotels to take care of three days a year. So, fortunately, something like Airbnb is sort of a flex supply arrangement that seems to me to make a lot of sense for it.

And I think that it will be more developed by next year, and I think that the hotels will do extremely well next year. But I don't think they can push it to the ultimate extreme of a total scarcity product. And we want them to do well, and that's why we've gone where we have. Charlie?

CHARLIE MUNGER: Nothing to add.

12. Will GEICO eventually overtake State Farm?

WARREN BUFFETT: Jay?

JAY GELB: This question is on GEICO. GEICO continues to gain the most market share of the large auto insurers while delivering attractive margins. It also has the largest advertising budget of the auto insurers while maintaining the advantage of being a low-cost operator.

My question is, will GEICO, with 10 percent market share currently in auto insurance, eventually overtake State Farm, which currently has 19 percent market share in auto insurance, keeping in mind that State Farm is also a major writer of homeowners insurance coverage?

WARREN BUFFETT: Yep. Well, that's a good question. Nobody knows the answer to that for sure. But I will tell you this, we passed Allstate this year.

And State Farm is a terrific company, I mean, it's one of the great histories — has one of the great company histories in America. It was started by a farmer who had no insurance experience to speak of when he was, I think, in his early 40s. There's a book called "The Farmer from Merna," I think it is, over in Illinois, and you know, he built this incredible business based on a better business model. And that was done around 1920 or so, I believe.

And then, of course, GEICO came out with an even better model, but State Farm was huge by that time. Allstate was very, very large. And it's taken us since 1936 to become number two.

Now, I have some projections that if I live to be 100, that we should be number one. And I tell GEICO, I'm going do my part. So the rest is up to them. (Laughter)

We will gain share, in my view. We will gain share month after month, year after year, as long as we never forget that our job is to take extremely good care of the customer, and as long as we can properly rate risks.

We've got some basic advantages that will enable us to do that as long as we take care of those two matters. And Tony Nicely has done a job that belongs in, you know, world's hall of fame, in terms of achieving that objective.

The 15 years prior to Tony coming — taking over — roughly 15 years, maybe 14 years — the market share had hovered around 2 percent. And you know, maybe two-one or two-two. And you know, since he took over in 1993, it's gone to ten-plus and it will keep going.

But State Farm has got a net worth of probably 70 billion now or there abouts, 60 to 70 billion, and they've got a strong presence in homeowners and they've got a strong agency force. They've got a lot of satisfied customers. So it won't come fast, but I do think it will come. Charlie?

CHARLIE MUNGER: Well, GEICO to me is very much like Costco. And one of the reasons it's succeeded is that they really feel a holy duty to have a wonderful product at a very low price.

A lot of people talk that game, but very few have it just right down under the body and soul of the company. But GEICO does, and companies like that do tend to grind ahead over time.

WARREN BUFFETT: One thing you'll find about it, I think this is true about Costco, too, it's certainly true about GEICO, is that people don't come and go from there as they — I mean, we have practically no one from the rest of the insurance industry that's come over to GEICO, and they don't leave us.

I mean, they really have their own idea about how it should be done, what should be done right. And it becomes very, very reinforced. And, of course, it becomes reinforced by success. Is that true at Costco, Charlie?

CHARLIE MUNGER: Oh, Costco's unbelievable. And it reminds me very much of GEICO, and I'm not surprised that both companies keep taking share.

It's easy to talk the game, but living the game is something else. I mean, it's against the human nature of many entrepreneurial people to try and get the price down and the service quality up all the time. I mean, it's like wearing the ultimate hair shirt and yet it works.

13. Has Buffett's frugality hurt Berkshire?

WARREN BUFFETT: OK, station 3.

AUDIENCE MEMBER: Mr. Buffett, my name is Neil Patel from Chicago. I greatly admire the way you have lived a frugal personal life even with your considerable wealth.

How do you think your frugality has helped Berkshire shareholders over the years? And Charlie, are there any instances where you think that Warren's frugality has hurt Berkshire and shareholders?

WARREN BUFFETT: Well, first of all, let's ask who is the more frugal between us. Charlie, who do you think — (Laughs)

CHARLIE MUNGER: Well, in personal consumption, Warren is more frugal. (Laughter)

WARREN BUFFETT: Would you care to give an example? (Laughs)

CHARLIE MUNGER: Warren lives in the same house he bought for a very modest price, what, in 1950-something?

WARREN BUFFETT: I bought in 1958, and you moved into yours about 1960, didn't you?

CHARLIE MUNGER: Yeah, and I paid more. (Laughter)

WARREN BUFFETT: But he designed his own —

CHARLIE MUNGER: Absolutely, I could get —

WARREN BUFFETT: — he designed his own house.

CHARLIE MUNGER: — he's more frugal.

WARREN BUFFETT: He did not pay an architect, right?

CHARLIE MUNGER: I did, I paid an architect $1,900. It was as much as 30 percent of the normal price.

WARREN BUFFETT: Yeah. Notice how he remembers the details. (Laughter)

No, I would — I have everything in life I want. It's a very simple thing. If there's anything that money can buy — there are things money can't buy, but if there's anything money could buy that I wanted, I'd do it this afternoon. I wouldn't have any problem with that at all.

I do not think that standard of living equates with cost of living beyond a certain point. I mean, up to a certain point there's no question that it does in — in terms of having good housing, good health, good health service, good food, everything. But — good transportation.

But there's a point I think, if anything, you start getting inverse correlation. My life would not be happier, and it'd be worse, if I had six or eight houses or, you know, a whole bunch of different things I could have. It just doesn't correlate.

And so I — having everything I have, I mean, you can't have more than that. And that doesn't really make any — it makes a difference up to a point. I mean, you could start thinking a lot differently when you got to X, but when you get to ten-X, or a 100-X, or 1,000-X, it just doesn't make any possible difference. Charlie, can you —?

CHARLIE MUNGER: The frugality, basically, has helped Berkshire. And I look out at this audience and I see a bunch of understated, frugal people, too. We collect you people. (Laughter)

WARREN BUFFETT: But forget about it this weekend. (Laughter and applause)

The more you buy the more you save at these prices, folks. (Laughter)

14. Berkshire doesn't "begrudge" paying taxes

WARREN BUFFETT: OK. Andrew.

ANDREW ROSS SORKIN: This question comes from Azhar Quader who's in the audience, Queens Court Capital, wants you to know that he's a Columbia B School grad just like you, Warren.

WARREN BUFFETT: Good.

ANDREW ROSS SORKIN: The question is the following, "Berkshire paid $8.9 billion in taxes in 2013. Pfizer is currently contemplating an acquisition that would allow it to move its technical holding company overseas and thereby save income tax expense and create shareholder value. Is this something you and Charlie would ever consider if it would create value for Berkshire shareholders?"

WARREN BUFFETT: I think the answer to that is no. What do you say, Charlie? (Applause)

CHARLIE MUNGER: I think it would be — I think it would be crazy to be as prosperous as Berkshire and get our tax to zero while we remain this prosperous. That would not be a legitimate ideal. (Applause)

WARREN BUFFETT: Yeah. We could not have done Berkshire in any other country except the United States, either. You know, and just look at what we've acquired and everything.

America has, in a very, very, very big way helped Charlie and I become very, very, very rich. (Laughs). Charlie?

CHARLIE MUNGER: I've got no complaints. And I look around at this group, I see you at breakfast, it's a very happy group of people. I don't think a lot of people are gnashing their teeth that somebody else has a little more.

WARREN BUFFETT: But we don't pay — I don't want to make it holier than thou, this stuff. We don't pay anything beyond that — when we get all through figuring out tax on our 20,000 page-plus return, we just don't — we don't add a tip of 20 percent or 15 percent or anything. (Laughter)

And we do certain transactions which are tax driven. We're in low-income housing tax credits, which actually George Bush 41 congratulated me for. So it's bipartisan.

We — the wind energy deals we do, the solar deals we do, they are tax driven to — I mean, they won't make economic sense otherwise.

So we follow the rules. But we don't begrudge the taxes we pay. We've earned a lot of money while paying U.S. taxes. (Applause)

15. Try for Mexico's rail freight market?

WARREN BUFFETT: OK, Gregg.

GREGG WARREN: Warren, Burlington Northern's main competitor in the west, Union Pacific, generates around 10 percent of its revenue from freight moving to and from Mexico. It also owns a 20 percent stake in the large Mexican railroad, Ferromex.

Given the expectation for strong auto production growth in Mexico with 30 percent more capacity coming online in the next two years, and the potential for additional near-sourcing manufacturing in Mexico, how attractive do you find the Mexican freight market?

And assuming that the answer to that question is positive, would it not be a greater benefit to Burlington Northern to own the smallest Class-I railroad at Kansas City Southern, which generates about half its revenue from its Mexican concession, whether than just receiving cargo from the firm?

WARREN BUFFETT: Yeah, Union Pacific has a big edge in terms of Mexico. I mean, their route structure is such, I think they cross the border at six different places. Their route structure is far better than ours in relation to Mexico.

And Kansas — it's true as you say, that Kansas City Southern has a very significant presence in Mexico.

But, in terms of what we can do with our money and what we see as the prospects — there are good prospects there, but there are good prospects elsewhere for traffic, too.

So it doesn't make sense for us. But, you know, maybe someday something will, but — the math does not work for Mexico. But we're continuously thinking about Mexico, but we're thinking about lots of other markets, too.

There are lots of possibilities for moving more freight on the BNSF over the years. And we won't forget about Mexico, but we won't do anything silly, either. Charlie?

CHARLIE MUNGER: I don't have anything to say.

You know, it's awfully easy to imagine combinations that just make you rich with sleight of hand. And, of course, the easiest transaction is buying a competitor. But most of that stuff, when you get to a certain size, you can't do. So why spend time even thinking about it? I'm afraid Burlington Northern is going have to get ahead on its own from here on.

WARREN BUFFETT: Wouldn't worry about that.

CHARLIE MUNGER: I'm not worried about it.

16. Intrinsic value and the Berkshire model

WARREN BUFFETT: Station 4.

AUDIENCE MEMBER: Hi, Warren and Charlie. Dan Hua from Los Angeles. My wife, Cora, and I are thrilled to be here.

WARREN BUFFETT: We're delighted to have you.

AUDIENCE MEMBER: Thank you. You earlier today discussed intrinsic value, and I'm a big fan of Graham and Fisher, especially "Security Analysis." What differences do you have, if any, for calculating intrinsic value, versus what was said in "Security Analysis?"

And for examples, how does management factor into that? You recently mentioned evaluating management is like dating, and recently you said, also, management does matter.

My second part is, which company do you fear the most? Why is it that no one else has done what you have done? I mean, Coca-Cola has their Pepsi. Thank you.

WARREN BUFFETT: Yeah, the — actually Graham didn't get too specific about intrinsic value in terms of precise calculations. But intrinsic value has come to be equated with, and I think quite properly, with what you might call private business value.

Now, I'm not sure who was the first one that came up with it, but — well, the first one that came up with it was Aesop, actually. But the intrinsic value of any business, if you could foresee

the future perfectly, is the present value of all cash that will be ever distributed for that business between now and judgment day.

And we're not perfect at estimating that, obviously. (Laughs)

But that's what an investment or a business is all about. You put money in and you take money out.

Aesop said, "A bird in the hand is worth two in the bush." Now, he said that around 600 B.C. or something like that, but that hasn't been improved on very much by the business professors now.

Now the question is, you know, how sure are you that there are two in the bush, you know? How far away is the bush? There are all kinds of things. What are interest rates? But I mean, Aesop wanted to leave us something to play with over the next couple thousand years, so he didn't spell the whole thing out. But that's what intrinsic value essentially is.

And, we don't — Graham would say that, Phil Fisher would say that. Phil Fisher would say that in calculating that, he would want to look a lot harder at the qualitative factors of the business in making that estimate of how many birds were in the bush.

Graham would say he would want to see the bush — you know, $2 worth of cash in the bush, you know, and to pay a dollar for it now.

One emphasized quantitative factors and one emphasized qualitative factors, but neither one would have disagreed with the math.

And I started out very influenced by Graham, so I emphasized quantitative factors. Charlie came along and said I was all wrong, and that he'd learned more in law than I'd learned in financial studies and everything, and that I should think more about qualitative factors, and he was right. And Phil Fisher said the same thing.

But that's what intrinsic value is about, you know. if you buy a McDonald's franchise, if you buy General Motors, whatever it may be, the real question is, A) are you going to have to put more cash into after you buy it? But it's really cash in, cash out? When? What discount rate? All the standard stuff.

In terms of — if I had a silver bullet, what company would I shoot as being a threat to us? I don't really — I don't see any competitor to Berkshire. I see private equity buying lots of businesses and having an advantage in that they'll leverage up when we won't, and also that presently they can borrow money very cheap and all of that.

So I mean, there are always going to be people competing with us to buy businesses. But — which is our main business — main occupation for me and Charlie.

But I don't see anybody that's got a model, or trying to build a model, that will essentially go after what we're trying to achieve, which is to buy wonderful businesses from people that care about where their business goes, and who generally want to keep on running them. Charlie?

CHARLIE MUNGER: Well, as I've said earlier, I think the Berkshire model as now constructed will have — as said in show business, with legs. It will go a long time, and I think it will be quite creditable. And I think it has enough advantage that it will just keep going a long time. And I think most big businesses don't.

If you stop to think about it, all the great big businesses of yesteryear, how few of them have really gotten big and stayed big.

Of the really old businesses, only one stayed big and that was Rockefeller's Standard Oil. And so we're getting up into a territory where very few people keep going well.

But I think what we'll be more like Standard Oil, than we'll be like ordinary businesses, because I think we will just keep going. We will keep doing what we're already doing, and we'll keep learning from our mistakes.

And the people up here are no longer all that important. The momentum's in place, the ethos is in place. It's going to keep going. And to you young people in the audience, I always say, "Don't be too quick to sell the stock."

WARREN BUFFETT: Why don't we get more copycats?

CHARLIE MUNGER: It reminds me of our mutual friend, Ed Davis. He figured out how to do an operation that was so difficult that he operated the bottom of a dark hole with instruments of his own creation. He gave his own shots by Novocain, 87 of them, while he was operating. And it was a better operation. His death rate was 2 percent and everybody else was 20.

And the other surgeons came to copy him, and they watched him. And they just said, "Well, I don't think I'll try and copy that." (Laughs)

I think it looks just too hard to do. There's — nothing in the American business school teaches people to be like Berkshire.

WARREN BUFFETT: Eddie Davis is the guy that, in effect, introduced the two of us. He was a famous urologist here in Omaha, and —

CHARLIE MUNGER: But people didn't try and learn his operation. And it doesn't look all that easy. It's very different.

WARREN BUFFETT: It's slow, too.

CHARLIE MUNGER: And it's slow, it's — yeah, very slow.

WARREN BUFFETT: I think the slowness deters more people than anything else.

CHARLIE MUNGER: And the difficulty with being slow is you're dead before it's finished. (Laughter)

WARREN BUFFETT: Well, that's kind of cheerful. (Laughter)

Carol, let's come up with something a little — (Laughs)

CAROL LOOMIS: Well, for a more cheerful subject, mine is inflation. In it — (Laughter)

WARREN BUFFETT: Only compared to Charlie can inflation be cheerful. (Laughter)

17. Positive and negative effects of inflation

CAROL LOOMIS: This comes from Larry Pitkowsky and Keith Trauner at the GoodHaven Fund.

"In your 1981 shareholder letter, you discuss returns on equity, interest rates and inflation, and how difficult it was for many companies to function under inflationary conditions. Indeed that Berkshire itself was not immune and would be negatively — could be negatively affected.

"Today it seems like every central banker in the world is desperate to create inflation, something that is generally great for debtors, not so great for creditors, and difficult for owners and managers.

Should investors and business owners be thinking more about inflation and higher interest rates after 30 years of declines in both? How would Berkshire behave differently if it became apparent that the future was turning inflationary?"

WARREN BUFFETT: Well, inflation would hurt us, but it would hurt most businesses. It doesn't — there's certain assets that if highly leveraged, obviously, would benefit from inflation. But, well, it's just —

We'll set up an inflationary condition. Let's just assume tonight that drones are sent up over all of the United States and they happen to drop a million dollars in every household.

Now, the question is would the country be better off? Every individual would now have — or every family would now have a million dollars that they didn't have the day before.

The one thing I can guarantee you is that Berkshire would be worse off at that point, obviously. And obviously, what I've described would be wildly inflationary.

The trick in that circumstance is to find out that you've got a million dollars before anybody else finds out that they have, and you'll do very well if you're first.

But essentially, you don't create wealth by inflation or by having — you can move it around, but you don't create it by inflation, and you don't — a firm like Berkshire, you know, our earnings per share would go up. The intrinsic value of our business, measured in dollars, would go up. But under lots of inflation, unless we had leveraged those businesses, the value of your investment, in real terms, would go down. Charlie?

CHARLIE MUNGER: Well, we had a test of hyperinflation in Weimar Germany, and the people who owned stocks in places like Berkshire got through. And they didn't prosper joyously, but they got through. And everybody else, practically, life insurance policies, bank deposits, you name it, got wiped out.

And, of course, if you create so much misery that you get a Hitler, and a World War, and a Holocaust and so forth, it's not a good thing to let things go that far.

And so I'm — I don't like this huge confidence that all you have to do is just keep printing money and spending it. I think there's some limit to when that will work, and I am never going forget Weimar Germany. And I don't think any of the rest of us should either.

We can handle a little bit of subpar growth for some stretch or other. But it would be quite dangerous to let the whole damn thing blow up because a bunch of crazy politicians were printing money. (Applause)

WARREN BUFFETT: If you own a home, though, with a very large mortgage, and you have incredible inflation that wipes out the mortgage, then you've still got the home. I mean, it's just —

CHARLIE MUNGER: In Weimar, Germany, they gave you the mortgage back at the end. It was very interesting. That's the one thing they did right. (Laughs)

WARREN BUFFETT: He's way ahead of me, folks. (Laughs)

18. Why companies make "dumb" deals

WARREN BUFFETT: Jonathan?

JONATHAN BRANDT: In evaluating the after-tax returns Berkshire earns on its acquisitions of non-insurance businesses, whether it be the utilities, the railroad, or the manufacturing service and retailing business, in terms of choosing a benchmark, what would be your best estimate of the returns on acquisitions earned by an aggregate of all American industry, adjusted, of course, to exclude the impact of accounting write-offs and equalizing for leverage?

WARREN BUFFETT: That sounds too tough for me, but go ahead, Charlie. I'll be thinking. (Laughs)

CHARLIE MUNGER: Well, let me summarize. I think the sum total of all acquisitions done by American industry will be lousy. It's in the nature of corporations that are prosperous to be talked into dumb deals, and bureaucracy tends to feed on itself and create unnecessary costs.

So I think the history of acquisitions is that it's not an enormous way to wealth. Now, it has been for us, but we're very peculiar, and luckily a lot of people don't want to be peculiar in our way.

WARREN BUFFETT: Yeah, I would — it's really hard to, you know, come up with a useful answer on that. But I certainly —

CHARLIE MUNGER: But you don't have a great deal of optimism, do you?

WARREN BUFFETT: When we read that a company we don't control is going to make an acquisition, I'm much more inclined to cry than to smile.

But on the other hand, we love making acquisitions ourselves, so it's a little hard to get too harsh just because we don't like the other guy's acquisitions.

I have been — I have sat in on, probably, hundreds of acquisition discussions conducted by people I didn't control, as a director. And most of them have been bad ideas, but there have been some —

CHARLIE MUNGER: Some are mediocre. (Laughter)

WARREN BUFFETT: A great case is GEICO. I mean, it's really a great case study because GEICO had this wonderful business prior to going off the tracks in the early 1970s, but it'd been an incredible business and everybody — it was well known in the financial world.

And then it went off the tracks in its own business, got back on the tracks. And then in the next — after it got back on the tracks, it made a couple of acquisitions. And they weren't disasters, but they certainly weren't successes, and they tended to take people's — I think they took their eyes off the ball in terms of the potential of GEICO itself.

So the accounting costs of those — there were two acquisitions in particular — the accounting costs of those two acquisitions was not — it was poor, but it wasn't disastrous.

But if you look to secondary effects, it was huge. I mean, there were a dozen years there or so where all kinds of gains could have been made that weren't. And you don't get those years back.

Now, that was probably a net plus for Berkshire, you know, in the end, because we'd bought half of the company then we got to buy the other half later on. If they'd done wonderfully, we probably would have never bought the second half. Now, maybe the first half would have been worth that much more.

But it's human nature, to some degree, to, you know, keep wanting — I mean, normally the people who get to be CEOs are not shrinking violets, you know.

And they have animal spirits, as Keynes talked about, and they like to do things. And the supporting staff certainly senses that they like to do things. I mean, they often have people in charge of strategy or acquisitions, or all of those things.

What do you think those people are going to do? Sit around and suck their thumbs? No, they're going keep coming up with deals. And the investment bankers will be, you know, calling on them daily.

So there are all these forces that push toward deals, and if you try to push toward deals, you're going to get a lot of dumb deals.

We try very hard, Charlie and I, not to get eager to do a deal. We're just eager to do a deal that makes sense.

And that would be a lot harder if we had directors, strategy departments, whatever it might be, all pushing us toward, you know, what have you done in the last three months, or something of the sort.

So the setting in which you operate really can be very important. Charlie, anything further?

CHARLIE MUNGER: No, but it's — you know how much more tactful he is.

WARREN BUFFETT: Yeah, well the comparison isn't tough. (Laughter)

19. Prosecute individuals or corporations?

WARREN BUFFETT: Station 5.

AUDIENCE MEMBER: I'm Russell Narig (PH) from Neenah, Wisconsin. The — not another Packer fan.

The people in this hall tonight are here because of the invest into your money, in anticipation and hope that you and Charlie would make that investment grow.

We recognize that things go wrong and that we might lose money. But never, ever, has it ever crossed our minds that we'd be cheated out of their money.

Unfortunately, that — that's not — that's new — I'm sorry, having problems with this microphone. Unfortunately, particularly in the investment banking business, confidence, my confidence, and I'm sure the confidence of many people in this room, are falling.

Particularly distressing are reports in the "New York Times" in the last week or so about private meetings in the Justice Department, Securities and Exchange Commission, the Fed, and others, about the need or desire, the requirement, perhaps, to bring criminal charges against some of the largest banks dealing business, for, among other things, knowingly laundering billions of Iranian dollars through our U.S. banks, knowingly laundering billions of drug cartel money through U.S. banks, soliciting on U.S. soil deals which would include tax evasion by moving assets offshore, and even fixing the LIBOR.

The problem the Justice Department is having is that they are being told that if they bring criminal charges against those banks, and we can list those banks, they've been in the "New York Times," that those banks would be sorely hurt, may be required to go out of business, and require — and evolve into a new financial crisis of some sort. (Applause)

CHARLIE MUNGER: Now, we can't —

AUDIENCE MEMBER: My question — my question, though, to you is do you believe a financial crisis will be — come about as a result of bringing justice to criminal activity on a large scale? Or have we reached a new point where criminal activity in Wall Street is being institutionalized, sort of allowed to happen because they're too big to fail, too big to go to jail, and too big to be regulated, to follow the law?

WARREN BUFFETT: Charlie, you're the lawyer, you take it up. (Applause)

CHARLIE MUNGER: Well, I think behavior on Wall Street has enormously improved as a result of the trauma we've just been through. And so I think the worst of it is behind us.

But you're never going to have perfect behavior when a bunch of human beings live in a miasma of easy money. It's just this is always going happen to some extent, and —

WARREN BUFFETT: How do you feel about the prosecution of individuals versus the prosecution of corporations?

CHARLIE MUNGER: Well, I think there's hardly anything that changes behavior more than prosecuting individuals.

When they took Boy Scout leaders out of Pittsburgh or wherever it was and put them in the federal penitentiary for fixing steel prices, it really changed behavior of American businessmen. So I do think that a few criminal prosecutions do change behavior a lot. And it looks to me like we'll get a few.

WARREN BUFFETT: Yeah. I may be biased a little bit by the experience at Salomon, but — I lean way more toward prosecution of individuals than corporations.

You know, I literally saw, you know, a bad act, or maybe multiple bad acts, by just a couple of people and negligence in reporting by a couple more, you know, come close — certainly upsetting, hurting, and maybe destroying, you know, possibly thousands and thousands of other people's lives, forgetting about the financial investment.

And it is — it did seem to me, and that's — had that experience a couple of other times in what I've seen, that — that it really — it may be easy — it's way easier to prosecute the corporation. The corporation's going write a check, and you know, I mean, it's somebody else's money.

And the prosecutor knows he's going get a win, basically, if he goes against the company, whereas he's got a way tougher job going against individuals. The company's going to cave, it's just their calculus is such that it just doesn't make sense to fight if they can write a check, whereas the individual is fighting to stay out of jail.

So the prosecutor's got an easy case, or relatively easy case, and probably a headline-grabbing case, if he goes against the corporation. And he has a grinded-out type of thing, which he can very well lose and which really takes a lot of work, against individuals. So — but I still lean very much — toward going against individuals. And —

CHARLIE MUNGER: I do, too. That's what I meant when I said when antitrust violations were regarded as forgivable offenses, menial sins, we had a lot of them, and we still have some now that we prosecute people criminally. But we have really changed behavior on price fixing by the individual prosecutions, and we haven't had many of those prosecutions in finance yet. And we probably need some more. Don't you agree with that?

WARREN BUFFETT: Yeah, it's — absolutely, absolutely.

And I will tell you this: we have 300,000-plus people working at Berkshire. Somebody is doing something wrong now, I mean, that — you know, you cannot have a city of 300,000 people and not have somebody behaving badly.

And that's the thing — that is the one thing that — I don't worry about us making money, we'll figure out a way to do that. And it may be better or worse than we hope for. But it won't be a disaster, ever.

The disaster is if somebody is doing something wrong that, you know, that actually reflects badly on the whole organization.

And I know that's, to a degree, out of my hands. I can tell the managers, and they can tell the people that work for them that reputation is more important than anything else. And that's

going to have an effect, and I think it's going to have more of an effect than having them — giving them some 200-page manual.

But it's not going cure everything. And what we hope is when there is something wrong that we find it out early, and then it's up to us to do something about it.

But we will have a problem of some sort, at some time, because it just — you know, 300,000 people are not going to all behave properly every day. It just doesn't happen.

But the individual prosecution, and I've written about that a little bit in the annual report in terms of — the way to change behavior is to have the fear, at least among people who may be doing the wrong things, is to have the fear that somehow it's going to come home to them and hit them hard.

And if the only fear is that the company's going have to write a big check, you're going to get way less change in behavior than if it'll hit home to the individual. Becky? (Applause)

20. Effect of major railroad accident on BNSF and Berkshire

BECKY QUICK: This comes from Mark Blakley from Tulsa, Oklahoma.

He says there's been a number of railroad accidents in the past year. In January, the Wall Street Journal published an article highlighting the lack of insurance to cover a worst-case accident scenario.

"Mr. [Matt] Rose of BNSF was mentioned as wanting to set up an insurance fund funded by the railroads to protect the industry in case of an accident, similar to a fund currently set up by nuclear power companies, but that idea has gained no traction.

"How would a worst-case accident scenario impact BNSF and Berkshire Hathaway? And if the industry is lacking insurance for such an event, how can the company protect itself, and what exposure does Berkshire have should a major accident occur?"

WARREN BUFFETT: Yeah, well we're on both sides of that because Ajit [Jain] has offered the rail industry some very high limits to all the major railroads. But they don't like his price, presumably. And I would say this, the four major railroads really have the financial capacity to pay a huge award if something really terrible happened.

The most — you know, I don't know which is the most dangerous — they have what they call hazmat, hazardous materials, and rails have to carry them. You're a common carrier, you're forced to carry them. And the railroads would really prefer they didn't carry them, but they do, they have to. And they probably can't get enough, ever get enough, in the way of payments per carload to really compensate them for the risk involved.

But the four major railroads, certainly have the — it might be a very, very significant financial hit to them, but I think they have the capability of, if something really drastic happened, I think they do have the financial capability to handle that size — kind of an award.

And if they feel that they don't, they can buy insurance from Ajit, but so far we haven't sold any.

The companies have insurance, but they don't like — they're not going talk about the amounts that they have or anything of the sort because that becomes a honey pot sometimes, and it's not advisable to discuss your insurance limits publicly.

But I would — it is true, as the writer mentions, that the nuclear risk — the government decided was too big, as they have with terrorism — decided it was too big to be borne by private industry.

I don't think the consequences of any conceivable accident — you could probably dream up one — but of any conceivable accident on rails would go beyond the capability of the major railroads to pay. But it could be very, very large, relative to their net worth and relative to their current earnings. Charlie?

CHARLIE MUNGER: Yeah, the big surprise for everyone, of course, was British Petroleum.

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: Nobody in their wildest dreams believed that a major oil company, from an accident in one well, would have a loss in so many tens of billions of dollars. And, of course, that's gotten a lot of attention.

I don't know about Warren, but after that happened, I would have less enthusiasm for drilling in the Gulf. It was just such a big loss compared to anything.

WARREN BUFFETT: And a gain, possible gain.

CHARLIE MUNGER: And gain — possible gain. And that was a big oil field they tapped into, but it wouldn't remotely pay for this accident. And so — but I — Matt will know, the biggest rail accident in the history of the rails, has it cost $200 million? Is Matt there?

WARREN BUFFETT: I don't think — I don't think Norfolk Southern has ever announced what that accident cost.

But we are not getting paid enough, I can tell you this, for carrying chlorine or ammonia or something like that. I mean, it — just — you know, to buy appropriate insurance just to cover those kind of products, compared to the revenue, I don't think it ever would make sense.

But we're required — they're going move from one place to another one way or another, either by truck or in some manner. And we are a common carrier.

But it is not — that's not one that keeps me awake nights from a financial standpoint. The big risk is some form of very effective terrorism or action by a rogue state in terms of nuclear, chemical, biological, or cyber.

And, you know, war acts are excluded in insurance policies. But you could have some kind of a terrorist act that would create damages, whether they're liable under insurance contracts is another matter, but could create damages like we have never seen. And there's a, you know, there's obviously a reasonable probability of that happening sometime in the next 50 years, and what that probability is I don't know. But it's not insignificant. Charlie?

CHARLIE MUNGER: Well, we saw what one pilot could do recently in this Malaysian airplane.

I think we live in a world where there are always going be big events, and I think we're lucky, to some extent, that we have some big corporations that can have elaborate safety programs and that can handle the losses when they occur. I don't think we'd be better off if we had a bunch of little Flivvers going around the airplanes.

21. Is commercial property-casualty insurance expansion too late?

WARREN BUFFETT: Jay?

JAY GELB: — question is on Berkshire's primary commercial property-casualty insurance business.

Berkshire plans to substantially expand the Berkshire Hathaway specialty insurance unit and has also become a major insurer of Lloyd's business through an Aon-brokered facility.

Why is Berkshire increasing its presence in commercial property-casualty insurance when pricing has peaked?

WARREN BUFFETT: We — it's the first one that's more important.

We entered the commercial insurance field the middle of last year, and we had some wonderful talent that wanted to join us. And we have a great amount of capital, a very, very good reputation, and we think we have the ability to both underwrite more intelligently than most, to keep larger limits than anybody, and to operate at costs significantly below average.

So if you put those elements together, and you throw in Ajit Jain overseeing the operation, I think it's a terrific opportunity.

And I think you will — and it wouldn't make any difference when we entered it. I mean, we entered it because we had the availability of some terrific people. That was the reason for the timing of it.

And we'll have — we've added to that group significantly. Peter Eastwood runs it, and I think we will build a very, very significant commercial insurance operation over time. And I believe that that operation will operate with better underwriting results than the great majority of our competitors.

Charlie?

CHARLIE MUNGER: Well, I think it's a very logical thing for us to do. And, of course, when something is logical we don't hold back because we think the business cycle might possibly be a little better. It's a long-term play.

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: We're not going away based on the little short-term troubles.

WARREN BUFFETT: No, it's a forever play. And — when we see a chance to enter a business we like, basically, with outstanding people and with some very fundamental competitive advantages, we're going to play the game and we're going to play the game hard.

22. Buy a sports team or sports equipment company?

WARREN BUFFETT: Station 6?

AUDIENCE MEMBER: My name's Ed Boyle (PH) and I'm from Chicago. My question's for Warren and Charlie.

Do you ever have any plans, or would you be interested, in buying a professional sport team — (laughter) — or sports equipment manufacturing company, being that we're — sports is in a global world today? Or is this out of the Berkshire game?

CHARLIE MUNGER: Warren's already done it.

WARREN BUFFETT: I owned a quarter of a major — a minor-league team, but it's not responsible for my position on the Forbes 400. (Laughter)

The answer to your question about buying a sports team is no. In fact, if — Charlie and I — if you read that either one of us is buying a sports team, it may be time to talk about successors. (Laughter)

We are — we do — sports equipment has generally not been a very good business, although, you know, obviously Nike's done incredibly well in its overall operation.

But — we own Spalding. We own Russell. And you know, Spalding has been around a long, long time. A.G. Spalding, I forget when the hell he was — I think he was trying to take baseball to the rest of the world back in the, I don't know, the 1880s or something like that.

But it's — generally speaking, if you look at the people that have made golf equipment, footballs, helmets particularly, baseball gloves, baseballs, it's not been a particularly profitable business.

And certain aspects of it, like helmets, you know — the last thing Berkshire should do is own a helmet company. A helmet company should be owned by some guy that owes about a million dollars and doesn't have a dime to his name, because, you know, he is not going to be a target. And we would be the ultimate target.

That's the reason — we used to be involved in Pinkerton, but we'd had no interest in — and we got offered the chance to buy the whole place, and the idea of owning a business that provided guards at airports, you know, when anything went wrong, you know, you're going to say that it was the guard's fault. And here's this super-rich corporation around there that is a perfect target.

I mean, a guard company at airports, again, should be owned by somebody whose net worth does not get out to two figures. (Laughter)

So, you won't see much of us in the sports arena.

But Charlie here, are you looking at the Clippers or —? (Laughter)

Now I'm worried that he is. No — (Laughter)

CHARLIE MUNGER: Whatever Warren thinks about sports teams ownership, I like it less. (Laughter)

23. Secrecy, Bill Ackman, and activist investors

WARREN BUFFETT: OK. Andrew.

ANDREW ROSS SORKIN: OK, Warren. You have long advocated for transparency and disapproved of greenmailers. Bill Ackman compared his amassing his stake in Allergan in stealth ahead of Valeant's bid to your purchase of Coca-Cola in the 1980s.

Is that right? What do you make of the covert tactic Ackman is using from a policy perspective for the markets?

And just as important, what do you make of the larger trend of activism in corporate America?

WARREN BUFFETT: I hadn't heard that about Coca-Cola. I'm really not sure how that would come about. I mean, we bought stock in the open market, we never used a derivative transaction or any sort in buying it, or anything. I mean, and we certainly haven't taken it over yet. The — so I — I'm not sure — can you elaborate, Andrew?

ANDREW ROSS SORKIN: I don't have more from the —

WARREN BUFFETT: Oh yeah.

ANDREW ROSS SORKIN: — the question. I believe Bill Ackman went on television at one point, had commented that using his stake, or buying the stake, rather, he did it covertly, and I think he was perhaps suggesting that, I don't know, maybe I will adjust the question.

There have been times in the past when you have bought stakes in other companies and used specific rules through the SEC to do so with — to give you some room without disclosing. Maybe, will that adjust the question?

WARREN BUFFETT: It —

ANDREW ROSS SORKIN: Or you could just go to the activism question.

WARREN BUFFETT: Yeah, and tell me the activism question again, because we have never used derivatives or anything that would get us around the rules of reporting, I mean, it's that simple.

But what's the second part?

ANDREW ROSS SORKIN: I think that the second part is what do you make of the larger trend of activism in corporate America, given that it's in the news so much today?

WARREN BUFFETT: Well, I don't think it'll go away, and I think it scares the hell out of a lot of managers. (Laughs)

The — there are cases — certainly cases where corporate management should be changed. I mean, you can't have thousands of corporations without that being the case.

I think, generally speaking, that the — you know, the activists, if they get the price of the stock up one way or another, you know, that's going to end their interest in the business, so I don't think they're looking for — often they're not looking for permanent changes for the better in the business. But they're looking for a specific event that will result in a big price change, and —

They're certainly attracting more and more money. In other words, the funds flowing to activist hedge funds and so on is — multiply them, sure, by a significant factor, and that means they can play the game on a bigger scale.

And anything in Wall Street that looks like it's successful will generate a funds flow that will, you know, go on until it's no longer successful. Charlie?

CHARLIE MUNGER: Well, you're right that the activism is causing more of a stir in corporate management than anything has in years. Practically nobody feels immune.

When an activist comes into a company, 20 or 30 percent of the stock can change hands rather rapidly, and management that seemed entrenched is — suddenly is threatened. And, of course, that sort of thing causes a lot of anguish.

And on the other side, the activists, by and large, are making a fair amount of money. And, of course, in the culture we live in, most people don't care how the money is earned, they just care whether they get it or not.

And so that — that just grows like some — I don't know, the beanstalk of Jack. And so I think we have a very significant effect.

And some of the stuff — you'll find an activist who is not what you'd want to marry into the family, going after a company you would never buy into. And when that happens, it reminds me of Oscar Wilde's definition of fox hunting. He said, "The pursuit of the uneatable by the unspeakable." (Laughter)

And I think we're seeing some of that. It's — I don't think it's good for America, what's happening —

WARREN BUFFETT: What do you think —

CHARLIE MUNGER: — averaged out.

WARREN BUFFETT: What do you think it'll be three years from now?

CHARLIE MUNGER: Bigger.

WARREN BUFFETT: Wow.

CHARLIE MUNGER: Well, what's stopping it?

WARREN BUFFETT: Yeah. If it's bigger three years from now, it'll be a lot bigger. I mean, just the compounding of numbers.

CHARLIE MUNGER: It's really serious.

24. Buy smaller companies instead of waiting for an "elephant?"

WARREN BUFFETT: OK. Gregg. (Laughter)

GREGG WARREN: If Berkshire's size is expected to be an ongoing constraint for growth, does it make more sense for the firm to target a larger collection of smaller companies that are growing faster and can do so for a longer period of time, rather than looking to bag a big elephant that is in all likelihood already reached maturity, leaves the firm to sit on larger-than-normal cash balances for a longer period of time, even if it means paying a higher price for the growth?

And if the answer is no, then what is the opportunity cost to Berkshire shareholders for keeping a lot of excess cash on hand until the right deal comes along?

WARREN BUFFETT: Well, the answer to the first is one doesn't preclude the other. You know, we'd be delighted to buy some company for 2 or 3 billion that we thought would do very well over time.

But that applies to one for 20 or 30 billion. Now, if you get down to buying one for a couple hundred million, that may fit one of our subsidiaries to do that that knows the business.

But — we're not passing up anything of any size that can have any real impact on Berkshire. And like I say, our subsidiaries made 25 tuck-ins last year, and they'll keep making more. They'll see things that fit them.

But one, you know, one $30 billion deal is ten $3 billion deals, and a hundred $300 million deals. So, in terms of the reality of how we build a lot more earning power into Berkshire, which is what we're trying to do, our main emphasis should be on bigger deals. Charlie?

CHARLIE MUNGER: Well, I agree with that. The idea of buying hundreds and hundreds of small businesses —

WARREN BUFFETT: Not worth a damn.

CHARLIE MUNGER: — not as bolt-ons for what we already have, it would be anathema.

WARREN BUFFETT: Yeah, there's lots of competition for the small deals. I mean, private equity is going after all kinds of small deals. In fact they just keep selling them to each other to some degree.

We don't feel envious when we look at what they're doing, in the least. But that doesn't mean we can't find an occasional small business that fits in and that will do well.

It's not going be the future of Berkshire, though. But I want to emphasize one does not preclude the other.

25. The most intelligent question you've been asked?

WARREN BUFFETT: Station 7.

AUDIENCE MEMBER: Willy Larsen (PH) from San Francisco.

You both mingle with the smartest investors in the country, something that I don't have the opportunity to do. So to my question, what is the most intelligent question you have been asked recently on investing, and what was your answer to that question? (Laughter)

WARREN BUFFETT: Charlie, you can go first on that while I think.

CHARLIE MUNGER: Well, I've already done that when I answered the young gentleman who said he couldn't understand why Warren compared his — or Berkshire's book value increase to stock market index performance.

In other words there are a lot of interesting questions that don't get much attention where there's a lot of irrationality.

WARREN BUFFETT: The question you asked, I get that frequently from the college students that come out. They say, "What's the most intelligent question that you've gotten in the past." And I never come up with a good answer, and I'm not coming up with one today —

CHARLIE MUNGER: I don't like the question, do you?

WARREN BUFFETT: No. (Laughter)

That's why we changed —

CHARLIE MUNGER: I don't think it's quite fair.

WARREN BUFFETT: That's why I let you go first. (Laughter)

CHARLIE MUNGER: Yeah.

26. MidAmerican energy return on assets

WARREN BUFFETT: OK, now we've hit 54 questions. So now we start going around to the stations in order. All of the journalists of each had six apiece, so we'll go to station 8.

AUDIENCE MEMBER: Philip Case, Manchester, New Hampshire.

My question pertains to the MidAmerican Energy segment. On page 64 of our annual report, you provide us with segment data for each business.

For the MidAmerican Energy segment, when I take earnings before interest and taxes and add back depreciation expense and subtract capex, the result is negative operating cash flow.

When I repeat that exercise for each of the past five years, in its best year the segment generates $308 million of operating cash flow. When I divide that by tangible assets, the result is a return on tangible assets of 0.86 percent.

Why are we allocating capital to a business that in its best year generates a return on tangible assets of less than 1 percent?

WARREN BUFFETT: You were doing great until you got to return on tangible assets. The — we love the math that you just described, as long as we are going to get returns on the added capital investment. And we are in businesses, whether it's wind energy in Iowa or whether with PacifiCorp after we bought it, there were lots of opportunities for capital investment. And the energy which we bought, we're looking forward to putting more capital in because as long as we get treated fairly by the regulators in the states that we operate, we will get appropriate returns on that.

And the return is not measured by the cash minus the increased capital investment we're making. It's measured by the operating earnings after depreciation. And there will be times in our businesses where no net investment may be required. But we actually prefer the ones where net — in the utility business — where net investment is required because we like the idea of getting more capital out at reasonable returns.

Now, the bet we are making is that regulatory authorities will treat us fairly in the future. And we've got every reason to believe that's true in the jurisdictions in which we operate. And one of the reasons we believe it's true is because we've done so much better than, really, the great majority of utilities in delivering electricity at lower rates than are charged by most utilities.

We have a situation in Iowa, for example, where there is one stockholder-owned competitive utility, and some other municipal-owned ones, and if you look at our rates, they are significantly below those of our competitors.

And in fact, one of our directors has a farm where he buys from two different sources, one being us. And his rate from us is dramatically lower than the one from the cooperative arrangement that exists.

So, we have a deserved good reputation with the regulators that we're dealing with. We've improved the operations, including safety, incidentally, dramatically from the conditions that existed before we purchased the utilities. That's why they welcome us when we come to new states.

And so if we can put more money into useful projects in those states, we've got every reason to believe we will get returns that are appropriate.

But if you compute net cash generated from those, you will see nominal or negative figures for a considerable period as we add to our investment and we make those utilities even more useful for people in those jurisdictions. I think we'll get a fair return.

We have somewhat similar situation at the railroad, too. But we're very happy about both of those businesses. Charlie?

CHARLIE MUNGER: Yeah, if the numbers you recited came from a declining department store, we would just hate it. But when it comes from a growing utility, we like it because we have such confidence that the reinvested money is going to do exceptionally well. It's just that simple.

WARREN BUFFETT: Yeah.

Greg —

CHARLIE MUNGER: They're two different kinds of businesses.

WARREN BUFFETT: Greg? Is Greg here? You want to — you might be able to give him a few figures that I don't remember off the top of my head in terms of comparative — how our prices compare, and give him a little more of a flavor on how the utility commissions do regard us and how they treat us fairly.

GREG ABEL: Sure. When you look at our rates across each of the regions, effectively we're generally the low-cost provider, or in the low quartile.

Your example, Warren, in Iowa was a great example. The last time we had a rate increase there was 1998. We've just currently had one this past year, so it's the first one in the past 16 years. And we don't see another one in the foreseeable future. And when you create that type of model with our regulators, obviously they're very supportive of the various projects we've introduced.

So this past year we introduced a project in Iowa, it's a 1,000 megawatt project, $1.9 billion being incurred. And if you go to the gentleman's comment, yes, we're going put the — we'll deploy that $1.9 billion over the coming two years, but we'll earn 11-and-a-half percent — 11.6 percent return on it.

Generally when we look at our utilities, we do pay attention to our capital, we try to keep it very close to our depreciation. That's what we put back into the business. We'll even earn on that capital, but the reality is the lion's share of our capital right now is growth capital. And we earn a very nice return on that.

WARREN BUFFETT: Greg, you might comment, just a minute, I think they'd find it interesting, on what's happening in Iowa with the tech companies, simply because of what we're doing in the electric field. Or not simply, but in part because of what we're doing in the field of electricity.

GREG ABEL: Right. So when you look at the tech companies and the data centers that exist, if you just go across the river, we service Google in Council Bluffs.

They've got a site that was initially a relatively small data center. They're looking at taking it to 40 to 50 megawatts, which is a small size of a power plant. But the reality is they're talking about ultimately building that to 1,000 megawatts. And we're seeing that replicated time after time in the state.

And it's really due to two things. One, we've got these exceptionally low rates. And then the fact that a significant portion of our energy, as Warren highlighted earlier and I touched on, comes from renewable energy. They want those credits, they want to be associated with a utility that's producing green power.

27. Education market's future in U.S. and China

WARREN BUFFETT: OK. Station 9, please. (Applause)

AUDIENCE MEMBER: Good afternoon, Mr. Buffett and Mr. Munger. My name is Gao Ling Yun and I came from Shanghai, China. I focus on the education investment.

Today, my co-worker, Yi Nuo Education Company and I have a question. What do you think about the education market in America and China in future? Thank you.

WARREN BUFFETT: Charlie?

CHARLIE MUNGER: Well, I didn't catch those last two words. In what?

WARREN BUFFETT: He wanted to know what we thought of the education market in U.S. and China, but he didn't —

CHARLIE MUNGER: But in what? He said in some — is it health care?

AUDIENCE MEMBER: In future.

CHARLIE MUNGER: In the future, I see.

Well, we certainly are getting the easy questions late in the day. (Laughter)

WARREN BUFFETT: Yeah. Yeah. (Laughter)

CHARLIE MUNGER: I think America —

WARREN BUFFETT: Whatever he says, I agree with. (Laughter)

CHARLIE MUNGER: I think America made a huge mistake when they allowed the public schools, and many particularly big school systems, to just go to hell. (Applause)

And I think the Asian cultures are less likely to do that. So to the extent that Asian cultures are avoiding some of our mistakes, why, I just wish we were more like them.

WARREN BUFFETT: OK. (Applause)

28. Buffett's joke about Munger's hearing

WARREN BUFFETT: I probably shouldn't tell you this. When Charlie was having a little trouble there on those last two words — I get a little worried about Charlie, don't know whether I should talk about this, but — (Laughter)

I thought maybe he was losing his hearing and I didn't want to confront him with it. I mean, we've been pals for a long time, so I went to the doctor and I said, "Doc, I've got this wonderful partner, but I think maybe his hearing is going on him.

"And I want to talk to him about it. I mean, how do you say that to somebody you've known that long? And what should I do?" He says, "Well, you stand across the room, talk to him in normal course of — tone of voice, and let me know what happens."

So the next time I was with Charlie, I stood across the room and I said, "Charlie, I think we ought to buy General Motors at 35, do you agree?" Not a flicker.

I go halfway across the room. I say, "Charlie, I think we ought to buy General Motors at 35, do you agree?" Nothing.

Get right next to him, in his ear, "Charlie, I think we ought to buy General Motors at 35, do you agree?"

He said, "For the third time, yes." (Laughter and applause)

So speak up, speak up. (Laughs)

29. Is housing lending reform needed?

WARREN BUFFETT: Station 10.

AUDIENCE MEMBER: Yes, this is — Glen Green (PH) from Chicago.

First of all, I want to thank you for allocating capital so well all these years, very much appreciated.

The question has to do with housing and housing reform more specifically, and there's clearly legislation in Washington, D.C. right now talking about reforming the GSEs, specifically Fannie and Freddie. Do you think we need housing reform? What would be a reasonable approach to do it, and if private participants were involved, would that make sense for Berkshire given Ajit's actuarial skills and your ability to allocate capital?

WARREN BUFFETT: Well, I think that — and Charlie may disagree with me on it, I think that the 30-year fixed-rate mortgage is a terrific boon to home owners.

It's not necessarily such a great instrument to own as an investor, but I think it's done a lot for home ownership. May have been abused in some cases, but overall it's done a terrific job for home ownership in the country. Let people get into homes earlier than they might have been able to otherwise, kept costs down to quite a degree.

And so I would hope that — and the government guarantee part of it does keep the cost down. Nobody — no private organizations can do it. I mean, home mortgages are an 11 trillion-or-so dollar market, and there's not the insurance capacity, or remotely the insurance capacity, for private industry to do the job, and the rates would be much higher.

So I think you keep the government in the picture. Now, the question is how you keep the government in the picture without keeping politics in the picture? And we've found some of the problems with that, in terms of not only Fannie and Freddie being — doing a lot of dumb things on their own, but being prodded into doing some of those things by politicians.

And I think there could be a way — I wrote an article 20, or 30 or — probably 30 years ago, an op-ed piece that appeared, I think, in the "Washington Post," when the F-D-I — well, when FSLIC, the savings and loan guarantee operation was essentially falling apart, and suggesting for the FDIC some way to get the private sector into pricing and evaluating the risk, in that case, of banks, but essentially the government being the main insurer.

There could be — there could well be a way that that model, and it's being explored now, that model works in terms of home mortgage insurance.

I don't think we would likely be a player, because I think that other people would be more optimistic than we would be in setting rates.

In the end, the government would have to be the main insurer. You might have a situation where private industry priced 5 percent of it and the government took the other 95 percent and, in turn, even guaranteed the 5 percent by the private industry once the private investors went broke.

But I do think it's very important to get housing, the mortgages for homes — to get that a correct national policy. I know it's being worked on. And I think, you know, I think it's very unlikely that Berkshire Hathaway would play any part in it.

Charlie, what are your thoughts?

CHARLIE MUNGER: Well, when private industry was allowed to take over pretty much the whole field, we got the biggest bunch of thieves and idiots that you can imagine screwing up the whole system and threatening all of us. So I'm not very trustful of private industry in this field.

And so, as much as I hate what politicians frequently do, I think the existing system is probably pretty sound.

At the moment, Fannie and Freddie are being pretty conservative and they're making almost all the home loans. I think that's OK, and I'm not anxious to go back to where the investment banks were in a big race to the bottom, in terms of creating phony securities.

WARREN BUFFETT: Yeah, and I think — one question is whether you let Fannie and Freddie just run off as is, and I don't know —

CHARLIE MUNGER: Instead of keep doing just what they're doing.

WARREN BUFFETT: But I think — I think you may — I think certainly one of the things that led Fannie and Freddie astray was the desire to serve two masters and increase earnings at double-digit ranges. And to do that, they started doing big portfolio activities.

I think if Freddie and Fannie had stuck to insuring mortgages and not become the biggest hedge funds in the country, because they did have this capability of borrowing very cheap, very long, and therefore could get a reasonable — what looked like a reasonable spread on a huge portfolio action. I think that was a big contributing factor to —

CHARLIE MUNGER: Well, they became, in effect, private corporations. But they're not anymore, Warren. They're —

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: — and they are at the moment being fairly conservative.

WARREN BUFFETT: There are people who want them to return to being private corporations, though.

CHARLIE MUNGER: Yeah, but I think that's a mistake because when they really got lousy, it's because the private companies were taking over the whole mortgage market as bad lending

drove out good. And Fannie May and Freddie Mac, to hold up their volumes, joined in the rush to laxity and fraud and folly. And so —

WARREN BUFFETT: Would you let them have portfolio activities at all?

CHARLIE MUNGER: I don't see any need for it.

WARREN BUFFETT: Yeah, I don't either. And I think that did get them into quite a bit of trouble. And I think those were done in order to keep the earnings per share game going.

CHARLIE MUNGER: No, I think that particular experiment in privatization was a total failure. (Applause)

WARREN BUFFETT: OK. Station 11, and —

CHARLIE MUNGER: And we made a billion dollars out of it, if you remember.

WARREN BUFFETT: Well, I wasn't going mention that. (Laughter)

30. "Fortunate" to partner with 3G and Jorge Paulo Lemann

AUDIENCE MEMBER: Good afternoon. Whitney Tilson, shareholder from New York City.

I've just started reading "Dream Big," the book recently released about your new Brazilian partners and I'm really enjoying it. Their track records are unbelievable, and as a long-time Berkshire shareholder I'm delighted that you've partnered with them, and hope that Heinz is the first of many elephants that you bag together.

WARREN BUFFETT: Can I interrupt you just for one second, Whitney? I appreciate that sentiment, and that book is available in — (Laughter)

I should have mentioned it earlier. The book was written in Portuguese and it was a best seller in Brazil for the last year. But it just got translated very, very, very recently and it is available at the Bookworm. So — Whitney, you can go on from there, but I did want to mention it's available.

CHARLIE MUNGER: Why would you assume that all of our shareholders don't read Portuguese? (Laughter)

AUDIENCE MEMBER: I'll also mention that it is only available on Amazon via Kindle. The only hard copies in the world in English that I'm aware of are available downstairs, so that will create quite a run on the book, I think.

WARREN BUFFETT: We will raise the price. (Laughter)

AUDIENCE MEMBER: So I have two questions related to this. First, I know you've known these gentlemen probably for a couple decades, and I'd love to hear your observations on what's their secret sauce? It's got to be more than zero-based budgeting, which we all hear about. What are the key things they do that produces such extraordinary returns?

And secondly, when I look at some of the biggest, best deals that you've done in recent years, important factors seem to be your longtime personal relationships, for example, with Jorge Paulo Lemann in the Heinz deal, or your brand name.

The Warren Buffett stamp of approval mattered a lot to some of the deals you did with, for example, Goldman or GE during the financial crisis. And I just wonder what your thoughts are on whether your successors will have the same opportunities to do wonderful deals like this?

WARREN BUFFETT: It will become the Berkshire brand. I mean, the first year or so people will wonder about it, but the person that follows me will bring the same qualities, including the ability to write a very big check. But other things besides that, and it will be a Berkshire brand that may have started with me, but that will continue.

Going on to our Brazilian friends, they're very smart, they're very focused, they're very hardworking and determined. They're never satisfied.

And as I said earlier, when you make a deal with them you've made a deal with them. They don't overreach, they don't overpromise. They've got a lot of good qualities. And if you read the book, I think you'll probably learn a lot more about the qualities that made them what they are.

But we are very fortunate to be associated with them, and we're very fortunate to be associated with a number of the managers that have joined us, too.

We want to be a good partner ourselves because it attracts good partners. And that is a reputation that Berkshire deserves. I mean, Charlie and I do our part toward keeping that reputation intact, but that takes a lot of other people also behaving in a way that causes people to want to join them, causes people to want to trust them. And that will be part of a Berkshire brand. Charlie?

CHARLIE MUNGER: Yeah, I always say the way to get a good spouse is to deserve one. And the way to get a good part —

WARREN BUFFETT: What's your second way? (Laughter)

CHARLIE MUNGER: — and the other — well, but to get a good partner you deserve a good partner. It's an old-fashioned way of getting ahead. And the interesting about it is it still works in these modern times. Nothing changes, if you just behave yourself correctly, it's amazing how well it works. (Applause)

WARREN BUFFETT: You have any further thoughts on the Brazilians?

CHARLIE MUNGER: On what?

WARREN BUFFETT: On the success of Jorge Paulo and his associates, beyond what I laid out?

CHARLIE MUNGER: Well, there — you can't skirt the fact that they're very good at removing unnecessary costs.

WARREN BUFFETT: Sure.

CHARLIE MUNGER: And I do not consider that in any way immoral or wrong or something.

WARREN BUFFETT: Not in the least.

CHARLIE MUNGER: I think removing unnecessary costs is a service to civilization. And I think it should be done with some — what do they call it? Mercy, really.

WARREN BUFFETT: Sensitivity.

CHARLIE MUNGER: Yeah, sensitivity. But I don't think it's good for our system to have a lot of make-work and what have you. So —

WARREN BUFFETT: If it was, we'd love government, right?

CHARLIE MUNGER: Yeah, and so, generally speaking, I think they're an interesting example to all of us.

WARREN BUFFETT: Yeah, we're learning from them.

CHARLIE MUNGER: Everybody is.

WARREN BUFFETT: OK —

CHARLIE MUNGER: Some reluctantly.

31. We'll decide what to do with "too much" cash when we get there

WARREN BUFFETT: OK. Station 1.

AUDIENCE MEMBER: Hi, Warren. Hi, Charlie. My name is Walter Chang (PH) and I came from Taiwan for this meeting.

Seven years ago, I named my first-born son after you, Warren, so the second one hasn't come yet —

WARREN BUFFETT: How's he — how's he —

AUDIENCE MEMBER: — so sorry —

WARREN BUFFETT: — how's he — how's he doing?

AUDIENCE MEMBER: He's doing great.

WARREN BUFFETT: OK.

AUDIENCE MEMBER: So he says hi. He always says, "Warren Buffalo," so, sorry — (Laugher) — sorry about that.

WARREN BUFFETT: I've been called — I've been called worse. (Laughter)

AUDIENCE MEMBER: My question is for both of you. We wish you continued good health, and when both of you break Mrs. B's record of working to 103 years old, that will be 20 years from now.

If Warren — or sorry, if Berkshire breaks that record and basically doubles over the next ten years and doubles again, you'll have a market cap of $1.2 trillion.

What do you think Berkshire will look like at that time and can you get there sooner? (Laughter)

WARREN BUFFETT: We may have to. Your original hypothesis may not hold up.

I do plan on writing about that next year, but there's no question that at some point we will have more cash than we can intelligently deploy. And then — in the business — and then the question is what do we do with the excess? And that will depend on circumstances at the time.

I mean, if the stock can be bought in at a price that makes sense for continuing shareholders, in other words that their value is enhanced by the repurchase, you know, if I were around at that time I would probably be very aggressive about repurchasing shares. But who knows what the circumstances will be. Who knows what the tax law will be then, you know.

What I do know is that we will have more cash than we can intelligently invest at some point in the future. That's built into what we're doing, and I hope that isn't real soon, and I don't think it probably will be.

But it's not on a distant horizon. I mean, the numbers are getting up to where we will not be able to deploy intelligently everything that's coming in.

But then we can deploy — it may be that we can deploy very intelligently and repurchase the shares. Who knows what the circumstances will be?

All I can tell you is that whatever is done will be done in the interest of the shareholder. That, you know, that is what every decision starts from, from that principle. Charlie?

CHARLIE MUNGER: It's not a tragedy to succeed so much that future returns go down. That's success, that's winning.

WARREN BUFFETT: Well, he'll name his next child after you. (Laughter) OK.

32. Uber, Airbnb, and the "disruptive" sharing economy

WARREN BUFFETT: Station 2.

AUDIENCE MEMBER: Afternoon. My name's Michael Sontag (PH) and I'm from Washington, D.C.

My question's about the sharing economy. What larger implications do you expect companies like Uber and Airbnb to have on their sectors, and do you think this business model is here to stay?

WARREN BUFFETT: Well, they are obviously trying to disrupt some other businesses, and those businesses will fight back in competitive ways, and they may try to fight back through legislation.

You know, when anybody's threatened, or any business is threatened, it tries to fight back.

If you go back to when State Farm came on the scene in 1921, that the — or '20, or whenever it was, the agency system was sacrosanct, in terms of insurance. It'd been around forever and the big companies were in Hartford or New York and they fought over having the number one agency in town.

So if you came to Omaha and you were at Travelers or Aetna, or whomever it might be, your objective was to get the agent. And the policy holder really wasn't being thought about.

And then State Farm came along and they had a better mouse trap, and then GEICO came along with a better mouse trap yet.

And so, every — the industries originally — the insurance companies fought back in a lot of ways. But one of the ways they tried to do it was to insist, you know, on various state laws involving what agents could do and what could not be done in insurance without agents and all that.

It's — that's standard. And you'll see that, and in the end the better mouse trap usually wins. But the people with the second or third-best mouse trap will try to keep that from happening.

The ones you name, I don't know anything about. I mean, I know what they do, but I don't their specific prospects, which is why we kind of stay away from that sort of thing because we don't — we know there'll be change, and we don't know who the winners will be. And we try to stick with businesses where we know the winners.

We know — and there are energy companies that — a railroad. A lot of our businesses are very, very, very likely to be winners, and that doesn't mean they don't have some change involved with them, but they're going to be winners.

And then there's other fields where we can't pick the winners, and so we just sit and watch. We find them interesting but we don't get tempted. Charlie?

CHARLIE MUNGER: Well, I think the new technology is going to be quite disruptive to a lot of people. I think retailing, in particular, is facing some very significant threats.

And you heard Greg Abel talk about a power plant in Iowa that was huge to serve one Google server farm. When you get computer capacity all over the world on this scale, it is changing the world. I mean, you're talking about —

WARREN BUFFETT: Fast, too.

CHARLIE MUNGER: Yeah, fast. So — and I think it's going to hurt a lot of people just as all the past technology investments hurt a lot of people. I think Berkshire, by and large, is in pretty good shape.

WARREN BUFFETT: Where do you think we're most vulnerable?

CHARLIE MUNGER: Well, I don't think I want to name them.

WARREN BUFFETT: OK. (Laughs)

Now you've got them all wondering, Charlie. (Laughs)

33. Teach financial literacy to children in school?

WARREN BUFFETT: Section 3.

AUDIENCE MEMBER: Good afternoon. My name is Diane Wieland (PH), and I'm from Hollywood, Florida.

I've worked in public education for over 35 years. My concern is that I think that we need to do more to proactively prepare our children and youth to be financially literate, especially in light of the serious financial stresses many adults in our society face on a daily basis.

My question is, do you think that financial literacy should be a standard part of the curriculum in our nation's schools and, if so, how early do you think it should begin and what do you think some of the most important learning goals would be?

WARREN BUFFETT: Well, certainly the earlier the better. I mean, habits are such a powerful force in everyone's life, and certainly good financial habits.

You know, I see it all the time. I get letters every day from people that have committed some kind of financial lunacy or another, but they didn't know it was lunacy and, you know, they didn't get taught that. Their parents didn't teach it to them.

And digging yourself out of the holes that financial illiteracy can cause, you know, you can spend the rest of your lifetime doing it. So I'm very sympathetic to what you're talking about.

We've done a little bit. I don't know whether you saw our "Secret Millionaire's Club" exhibit in the exhibition hall.

And you want to talk to people at a very young age. Charlie and I were lucky. I mean, we got it in our families so that, you know, we were learning it at the dinner table when we were — before we knew what we were learning. And that happens in a lot of families, and in a lot of families it doesn't happen.

And, of course, you mention about childhood financial literacy. Then there's a big problem with adulthood, adult financial illiteracy. And it's harder to be smarter or have better habits than your parents unless the schools intercede or —probably, you know, the schools are your best bet, but it can be done — a lot can be done on television or through the internet.

But it is really important to have good financial habits, and I think anything you can do very early through the school system, you know, would certainly have my vote. Charlie?

CHARLIE MUNGER: Well, I'm not sure if the schools are at fault. I would place most of the fault with the parents. I think the most powerful example (applause) is the behavior of the parent, and so if you're —

WARREN BUFFETT: Well, I agree with — the most important thing is the parents, but not everybody gets the right parents.

CHARLIE MUNGER: Yeah. Well, it's very hard to fix people who have the wrong parents. (Laughter)

WARREN BUFFETT: Well, let's just say you have the job of fixing people that have the wrong parents. What would you do about it?

CHARLIE MUNGER: Well, what's the — if you had the job of living forever, what would you do about it? It gets to be so impractical. (Laughter)

Who would ever believe that I would have any ability to fix all the people that have the wrong parents?

WARREN BUFFETT: How about a few? (Laughs)

CHARLIE MUNGER: I don't think I'm good at that, either. The only thing I've ever been slightly good at in my life is raising the top higher. It's just — they left the talent out of me.

I don't scorn it. I think it's a noble work. I just — I'm no good at it.

I don't think you're so hot, either. (Laughter)

WARREN BUFFETT: If he hadn't been in public, it would have been stronger. (Laughs)

Stop by our "Secret Millionaire's Club," though. You may get some ideas.

CHARLIE MUNGER: By the way, the main troubles with education in this field are probably not in the grade schools. They're probably in the colleges.

There's a lot of asininity taught in the finance courses at the major universities, and even the departments of economics have much wrong with them. So, if you really want to start fixing the world, you shouldn't assume that when it gets highfalutin, it's a lot better.

WARREN BUFFETT: Well — (Applause)

There was certainly a period of at least 20 years, I would say, when I think the net utility of knowledge given to finance majors was negative in major universities. I think maybe it's getting better now, but it is a —

CHARLIE MUNGER: Imagine it. Net utility was negative. It was (unintelligible) asinine.

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: I wish you'd use normal English. (Laughter)

WARREN BUFFETT: I'm worried about what English you're going to use. (Laughter)

I don't want to egg him on.

The — it was — frankly, it was fascinating to me because here was something I understood.

And to watch — I mean extraordinary universities that, essentially, were teaching people some very, very dumb things. And where even to obtain the positions in the departments of those schools, you had to subscribe to this orthodoxy, which made no sense at all.

And it got stronger and stronger, and then — now it's changing to quite a degree. But it may have soured my feeling on higher education to an unwarranted degree because that — you know, it may have been particularly bad in the area that I was familiar with, but it was bad.

Have I got — is my language okay, Charlie?

CHARLIE MUNGER: You would have liked academics better if you'd have taken physics instead of finance. (Laughter)

WARREN BUFFETT: Yeah. Well, I'm glad I didn't. (Laughs)

34. "There's no advantage to breaking Berkshire into pieces"

WARREN BUFFETT: OK. Area 4.

AUDIENCE MEMBER: Mr. Buffett and Mr. Munger. First of all, great party last night. I stood there for half an hour and still couldn't get a drink, so great crowd. Oh, by the way this is Zhang Xiaozhu (PH) from Ottawa, Ontario.

My question relates to the age-old question about dividends and also valuation. I think you guys are penalized by the great success of your enormously successful company. It's huge, so no one knows how to properly valuate it, and also because of your yardstick you picked, which is not quite fair.

Every year I see some of the old shareholders, and they are waiting to get a dividend, using some of the monies to supplement their retirements.

I do not feel it's essentially fair for them to sell their shares. I remember the case study you had in last year's letter to the shareholders. You did a case study comparing issuing dividends or having the shareholders selling their shares directly.

Because of the shares are so depressed, I do not feel it's very fair. So I'm wanting to ask, is there a practical way for you to break up the company into four logical groups, as you report in every year's AGM, and unlock some of the values and still allow you to allocate the capital freely, please?

WARREN BUFFETT: We would lose — we would not unlock value. We would lose significant value if we were to break it into four companies.

There are large advantages in both capital allocation, occasionally in the tax situation. There's — Berkshire is worth more as presently constituted than in any other form that I can conceive of unless we engaged in something to de-tax the whole place, which we're not going to do and which would probably be impossible anyway, but even if it was possible, we wouldn't be doing it.

But the — we did have this vote, and it's now time to adjourn and then we'll come back in a few minutes for the annual meeting. But we did have a vote, and unfortunately we — there's not a way to deliver a dividend to a few shareholders and not to others, although — whereas there is a way to — for shareholders to maintain an even and greater dollar investment in Berkshire, in terms of the underlying assets, and still cash out annually some portion of their investment, just like they would with a partnership, and incur fairly little tax in the matter. And I wrote about that last year and you've read that.

But there's no advantage to breaking Berkshire into pieces. It would be a terrible mistake. Charlie?

CHARLIE MUNGER: Well, generally I think that you're not being deprived when the stock goes from 100 to 200, and you didn't get a dividend that year.

WARREN BUFFETT: Yeah. Well, it isn't going to go up every year, though. I mean, it's going to —

CHARLIE MUNGER: Or two years or whatever it was.

WARREN BUFFETT: Yeah. We had, by a 45-to-1 vote, we had people — which actually surprised me. We had people say that they prefer the present policy to a change in that policy, so it would be a big mistake to change.

And with that we will end the Q-and-A session. We'll be back in about ten or so minutes, and we'll have an annual meeting. Thank you. (Applause)

35. Berkshire's formal annual meeting

WARREN BUFFETT: OK. If you'll take your seats, we'll get on to the meeting.

OK. I have a script here that I'll read from and make sure everything's proper.

The meeting will now come to order. I'm Warren Buffett, chairman of the board of directors of the company, and I welcome you to the 2014 annual meeting of shareholders.

This morning, I introduced the Berkshire Hathaway directors that are present. Also with us today are partners in the firm of Deloitte & Touche, our auditors. They're available to respond to appropriate questions you might have concerning their firm's audit of the accounts of Berkshire.

Sharon Heck is secretary of Berkshire Hathaway. She will make a written record of the proceedings.

Becki Amick has been appointed inspector of elections at this meeting. She will certify that the count of votes cast in the election for directors and the motion to be voted upon at the meeting.

The named proxy holders for this meeting are Walter Scott and Marc Hamburg.

WARREN BUFFETT: Does the secretary have a report of the number of Berkshire shares outstanding, entitled to vote, and represented at the meeting?

SHARON HECK: Yes, I do. As indicated in the proxy statement that accompanied the notice of this meeting that was sent to all shareholders of record on March 5, 2014, there were 857,848 shares of Class A Berkshire Hathaway common stock outstanding with each share entitled to one vote on motions considered at this meeting and 1,179,267,338 shares of Class B Berkshire Hathaway common stock outstanding with each share entitled to one ten-thousandth of one vote on motions considered at this meeting. Of that number, 601,494 Class A shares and 682,365,717 Class B shares are represented at this meeting by proxies returned through Thursday evening, May 1.

WARREN BUFFETT: Thank you. That number represents a quorum, and we will, therefore, directly proceed with the meeting.

36. Approval of last year's minutes

WARREN BUFFETT: First order of business will be a reading of the minutes of the last meeting of shareholders. I recognize Mr. Walter Scott who will place the motion before the meeting.

WALTER SCOTT: I move that the reading of minutes of the last meeting of the shareholders be dispensed with and the minutes be approved.

WARREN BUFFETT: Do I hear a second?

VOICE: I second the motion.

WARREN BUFFETT: The motion has been moved and seconded. Are there any comments or questions?

We will vote on this motion by voice vote. All those in favor say, "Aye." Opposed? The motion is carried.

37. Election of Berkshire directors

WARREN BUFFETT: The next item of business is to elect directors. If a shareholder is present who did not send in a proxy or wishes to withdraw a proxy previously sent in, you may vote in person on the election of directors and other matters to be considered at this meeting. Please identify yourself to one of the meeting officials in the aisle so that you can receive a ballot.

I recognize Mr. Walter Scott to place a motion before the meeting with respect to election of directors.

WALTER SCOTT: I move that Warren Buffett, Charles Munger, Howard Buffett, Stephen Burke, Susan Decker, William Gates, David Gottesman, Charlotte Guyman, Don Keough, Thomas Murphy, Ronald Olson, Walter Scott, and Meryl Witmer be elected as directors.

WARREN BUFFETT: Is there a second?

VOICE: I second the motion.

WARREN BUFFETT: It has been moved and seconded that Warren Buffett, Charles Munger, Howard Buffett, Stephen Burke, Susan Decker, William Gates, David Gottesman, Charlotte Guyman, Don Keough, Thomas Murphy, Ronald Olson, Walter Scott, and Meryl Witmer be elected as directors.

Are there any other nominations? Is there any discussion? The nominations are ready to be acted upon.

If there are any shareholders voting in person, they should now mark their ballot on the election of directors and deliver their ballot to one of the meeting officials in the aisles.

Ms. Amick, when you are ready you may give your report.

BECKI AMICK: My report is ready. The ballot of the proxy holders in response to proxies that were received through last Thursday evening cast not less than 660,619 votes for each nominee.

That number far exceeds a majority of the number of the total votes of all Class A and Class B shares outstanding. The certification required by Delaware law of the precise count of the votes will be given to the secretary to be placed with the minutes of this meeting.

WARREN BUFFETT: Thank you, Ms. Amick.

Warren Buffett, Charles Munger, Howard Buffett, Stephen Burke, Susan Decker, William Gates, David Gottesman, Charlotte Guyman, Don Keough, Thomas Murphy, Ronald Olson, Walter Scott, and Meryl Witmer have been elected as directors.

38. Advisory vote on executive compensation

WARREN BUFFETT: The next item on the agenda is an advisory vote on the compensation of Berkshire Hathaway's executive officers. I recognize Mr. Walter Scott to place a motion before the meeting on this item.

WALTER SCOTT: I move that the shareholders of the company approve, on an advisory basis, the compensation paid to the company's named executive officers as disclosed pursuant to Item 402 of the regulation S-K, including the compensation discussion and the analysis and the accompanying compensation tables and the related narrative discussion in the company's 2014 annual meeting proxy statement.

WARREN BUFFETT: Is there a second?

VOICE: I second the motion.

WARREN BUFFETT: It has been moved and seconded that the shareholders of the company approve, on an advisory basis, the compensation paid to the company's named executive officers.

Is there any discussion? I believe there may be on this. Do we have anyone?

OK. Ms. Amick, when you are ready, you may give your report.

BECKI AMICK: The report is ready. The ballot of the proxy holders in response to proxies that were received through last Thursday evening cast not less than 666,751 votes to approve, on an advisory basis, the compensation paid to the company's named executive officers.

That number far exceeds a majority of the number of the total votes of all Class A and Class B shares outstanding. The certification required by Delaware law of the precise count of the votes will be given to the secretary to be placed with the minutes of this meeting.

WARREN BUFFETT: Thank you, Ms. Amick.

The motion to approve, on an advisory basis, the compensation paid to the company's named executive officers is passed.

WARREN BUFFETT: The next item on the agenda is an advisory vote on the frequency of a shareholder advisory vote on compensation of Berkshire Hathaway's executive officers. I recognize Mr. Walter Scott to place a motion before the meeting on this item.

WALTER SCOTT: I move that the shareholders of the company determine, on an advisory basis, the frequency, whether by annual, biannual, or triannual, with which they shall have an advisory vote on the compensation paid to the company's named executive officers as set forth in the company's 2014 annual meeting proxy statement.

WARREN BUFFETT: Is there a second?

VOICE: I second the motion.

WARREN BUFFETT: It has been moved and seconded that shareholders of the company determine the frequency with which they have an advisory vote on compensation of named executive officers with the options being every one, two or three years. Is there any discussion? I believe on this one there is a — somebody wishes to speak? Yes.

AUDIENCE MEMBER: — Boston, Massachusetts. I suggest a vote of one year in order to change the policy of named executives.

In addition to Warren, Charlie, and Marc, the company should report Ajit Jain's salary. He is irreplaceable, and Warren works integrally with him in setting insurance rates.

Since —five — there should be five members of management, either another insurance manager or someone from the capital-related industries group, from BNSF or MidAmerican, should also be added.

You are so lean at corporate, the group managers should be named. Two should be named, but at least Ajit should be added.

The CEOs of former Fortune 500s used to disclose what is their compensation now. There is no retirement age at Berkshire, which is fine, but there should be more depth of disclosure, and this should be done next year, not three years from now.

WARREN BUFFETT: Is there anyone else that — doesn't appear to be.

I personally actually agree with a one-year frequency on this, normally, but it does seem in the case of Berkshire that considering what's required and considering what the numbers are and everything, that it probably doesn't make a whole lot of sense. But I generally feel one year is not a bad idea.

I do not think it's a good idea to start selecting people among the managers to give compensation for the reasons discussed earlier.

OK. Ms. Amick, when you are ready, you may give your report.

BECKI AMICK: My report is ready. The ballot of the proxy holders in response to proxies that were received through last Thursday evening cast 113,530 votes for a frequency of every year, 2,412 votes for a frequency of every two years, and 552,309 votes for a frequency of every three years of an advisory vote on the compensation paid to the company's named executive officers. The certification required by Delaware law of the precise count of the votes will be given to the secretary to be placed with the minutes of this meeting.

WARREN BUFFETT: Thank you, Ms. Amick.

Shareholders of the company determined, on an advisory basis, that they shall have an advisory vote on the compensation paid to the company's named executive officers every three years.

39. Proposal to set greenhouse gas reduction goals

WARREN BUFFETT: The next item of business is a motion put forth by Meyer Family Enterprises, LLC, a Berkshire shareholder represented by Brady Anderson and Linda Nkosi.

The motion is set forth in the proxy statement. The motion directs Berkshire Hathaway to establish quantitative goals for reduction of greenhouse gases and other air emissions at its energy generating holdings and publish a report to shareholders on how it will achieve those goals.

The directors have recommended that the shareholders vote against the proposal.

I will now recognize Brady Anderson and Linda Nkosi to present the motion. To allow all interested shareholders to present their views, I ask them to limit their remarks to five minutes.

LINDA NKOSI: Good afternoon, Mr. Buffett, Mr. Munger, ladies and gentlemen. My name is Linda Nkosi from Swaziland, and this is Brady Anderson from Iowa.

We are students of economics and finance at Wartburg College in Iowa and are here representing a delegation of students who manage a $1.2 million portfolio that includes shares of Berkshire Hathaway. We very much appreciate the opportunity to take part in this celebrated event.

We stand to represent Investor Voice SPC of Seattle on behalf of the Meyer Family Enterprises to move Item 4 on page 12 of the proxy, a proposal that Berkshire establish goals for greenhouse gas reduction at its energy holdings.

We applaud Berkshire Hathaway Energy for having the largest renewable energy portfolio in the country.

That said, it is also true that BH Energy generates close to half its power by burning coal, which makes BH Energy a huge emitter of greenhouse gas. Given these facts, it would benefit BH Energy to have a carbon reduction plan.

Sixty-six percent of U.S. electric utilities have greenhouse gas reduction goals. Berkshire Hathaway Energy is not among them, despite stating on its website, "We will set challenging goals and assess our ability to continually improve our environmental performance."

As shareholders are aware, climate disruption creates profound financial risk for the global economy as well as for Berkshire. The Investor Network on Climate Risk, whose members manage more than $11 trillion, and the Carbon Disclosure Project, representing more than $80 trillion in assets globally, have called on companies to disclose risks related to climate change, as well as to take steps to reduce that risk.

BRADY ANDERSON: The SEC has stated that climate risks are financially material and that they must be disclosed. This is because a high-carbon approach creates risk, whereas a low-carbon approach avoids risk, both now and into the future.

Without planning and a set of forward-looking goals, neither management nor investors can truly know where they stand.

In addition, Berkshire's core businesses are vulnerable to climate disruption. Why? Because many of the most negative financial impacts of climate disruption are borne by insurance companies.

Berkshire's GEICO took its single largest loss in history from Superstorm Sandy, a $490 million loss due to claims on more than 46,000 flooded vehicles.

Berkshire's reinsurance business is likely to bear significantly more risk from the trends towards increasingly extreme weather.

For a time, some portion of these costs may be pushed onto customers in the form of higher premiums, but it is a prudent — it is (not) a prudent or sustainable long-term strategy to impose on customers the cost of not planning for the greenhouse gas reductions that climate scientists agree are urgently needed.

In summary, hundreds of the world's largest institutional investors, representing trillions of dollars of invested assets, call on companies to set greenhouse gas reduction goals. Such goals are key tools for reducing the profound business risk that climate change creates.

More than two-thirds of United States utilities already have such goals, and institutional proxy advisory firms repeatedly recommend voting for goal setting and disclosure of this sort.

Therefore, please join us in voting for this common sense proposal, which not only benefits the planet, it will preserve, if not boost, Berkshire profits by avoiding risk.

Thank you for this truly amazing opportunity to share our concerns.

WARREN BUFFETT: OK, and thank you. (Applause)

I assume that the fact the lights went off, there's nobody additionally that would like to speak on the motion for or against?

Hearing nothing, I'll say that the motion is now ready to be acted upon. If there are any shareholders voting in person, they should now mark their ballot on the motion and deliver their ballot to one of the meeting officials in the aisles.

Ms. Amick, when you're ready, you can give your report.

BECKI AMICK: My report is ready. The ballot of the proxy holders in response to proxies that were received through last Thursday evening cast 49,553 votes for the motion and 561,642 votes against the motion.

As the number of votes against the motion exceeds a majority of the number of votes of all Class A and Class B shares outstanding, the motion has failed. The certification required by Delaware law of the precise count of the votes will be given to the secretary to be placed with the minutes of this meeting.

WARREN BUFFETT: Thank you, Ms. Amick. The proposal fails.

40. Shareholder proposal to pay a dividend

WARREN BUFFETT: The next item of business is a motion put forward by David Witt. The motion is set forth in the proxy statement. The motion requested the board of directors consider payment of a dividend. The directors have recommended the shareholders vote against the proposal.

Mr. Witt available?

As neither Mr. Witt nor his representative is present to present their proposal for action, the motion fails.

41. Meeting adjourned

WARREN BUFFETT: OK. Does anyone have any further business to come before this meeting before we adjourn? If not, I recognize Mr. Scott to place a motion before the meeting.

WALTER SCOTT: I move that this meeting be adjourned.

WARREN BUFFETT: Is there a second?

VOICE: I second the motion to adjourn.

WARREN BUFFETT: The motion to adjourn has been made and seconded. We will vote by voice.

Berkshire's Performance vs. the S&P 500

Year	Annual Percentage Change in Per-Share Book Value of Berkshire	in Per-Share Market Value of Berkshire	in S&P 500 with Dividends Included
1965	23.8	49.5	10.0
1966	20.3	(3.4)	(11.7)
1967	11.0	13.3	30.9
1968	19.0	77.8	11.0
1969	16.2	19.4	(8.4)
1970	12.0	(4.6)	3.9
1971	16.4	80.5	14.6
1972	21.7	8.1	18.9
1973	4.7	(2.5)	(14.8)
1974	5.5	(48.7)	(26.4)
1975	21.9	2.5	37.2
1976	59.3	129.3	23.6
1977	31.9	46.8	(7.4)
1978	24.0	14.5	6.4
1979	35.7	102.5	18.2
1980	19.3	32.8	32.3
1981	31.4	31.8	(5.0)
1982	40.0	38.4	21.4
1983	32.3	69.0	22.4
1984	13.6	(2.7)	6.1
1985	48.2	93.7	31.6
1986	26.1	14.2	18.6
1987	19.5	4.6	5.1
1988	20.1	59.3	16.6
1989	44.4	84.6	31.7
1990	7.4	(23.1)	(3.1)
1991	39.6	35.6	30.5
1992	20.3	29.8	7.6
1993	14.3	38.9	10.1
1994	13.9	25.0	1.3
1995	43.1	57.4	37.6
1996	31.8	6.2	23.0
1997	34.1	34.9	33.4
1998	48.3	52.2	28.6
1999	0.5	(19.9)	21.0
2000	6.5	26.6	(9.1)
2001	(6.2)	6.5	(11.9)
2002	10.0	(3.8)	(22.1)
2003	21.0	15.8	28.7
2004	10.5	4.3	10.9
2005	6.4	0.8	4.9
2006	18.4	24.1	15.8
2007	11.0	28.7	5.5
2008	(9.6)	(31.8)	(37.0)
2009	19.8	2.7	26.5
2010	13.0	21.4	15.1
2011	4.6	(4.7)	2.1
2012	14.4	16.8	16.0
2013	18.2	32.7	32.4
2014	8.3	27.0	13.7
Compounded Annual Gain – 1965-2014	19.4%	21.6%	9.9%
Overall Gain – 1964-2014	751,113%	1,826,163%	11,196%

Notes: Data are for calendar years with these exceptions: 1965 and 1966, year ended 9/30; 1967, 15 months ended 12/31. Starting in 1979, accounting rules required insurance companies to value the equity securities they hold at market rather than at the lower of cost or market, which was previously the requirement. In this table, Berkshire's results through 1978 have been restated to conform to the changed rules. In all other respects, the results are calculated using the numbers originally reported. The S&P 500 numbers are **pre-tax** whereas the Berkshire numbers are **after-tax**. If a corporation such as Berkshire were simply to have owned the S&P 500 and accrued the appropriate taxes, its results would have lagged the S&P 500 in years when that index showed a positive return, but would have exceeded the S&P 500 in years when the index showed a negative return. Over the years, the tax costs would have caused the aggregate lag to be substantial.

A note to readers: Fifty years ago, today's management took charge at Berkshire. For this Golden Anniversary, Warren Buffett and Charlie Munger each wrote his views of what has happened at Berkshire during the past 50 years and what each expects during the next 50. Neither changed a word of his commentary after reading what the other had written. Warren's thoughts begin on page 24 and Charlie's on page 39. Shareholders, particularly new ones, may find it useful to read those letters before reading the report on 2014, which begins below.

BERKSHIRE HATHAWAY INC.

To the Shareholders of Berkshire Hathaway Inc.:

Berkshire's gain in net worth during 2014 was $18.3 billion, which increased the per-share book value of both our Class A and Class B stock by 8.3%. Over the last 50 years (that is, since present management took over), per-share book value has grown from $19 to $146,186, a rate of 19.4% compounded annually.*

During our tenure, we have consistently compared the yearly performance of the S&P 500 to the change in Berkshire's per-share book value. We've done that because book value has been a crude, but useful, *tracking device* for the number that really counts: intrinsic business value.

In our early decades, the relationship between book value and intrinsic value was much closer than it is now. That was true because Berkshire's assets were then largely securities whose values were continuously restated to reflect their current market prices. In Wall Street parlance, most of the assets involved in the calculation of book value were "marked to market."

Today, our emphasis has shifted in a major way to owning and operating large businesses. Many of these are worth far more than their cost-based carrying value. But that amount is *never* revalued upward no matter how much the value of these companies has increased. Consequently, the gap between Berkshire's intrinsic value and its book value has materially widened.

With that in mind, we have added a new set of data – the historical record of Berkshire's stock price – to the performance table on the facing page. Market prices, let me stress, have their limitations in the short term. Monthly or yearly movements of stocks are often erratic and not indicative of changes in intrinsic value. Over time, however, stock prices and intrinsic value almost invariably converge. Charlie Munger, Berkshire Vice Chairman and my partner, and I believe that has been true at Berkshire: In our view, the increase in Berkshire's per-share intrinsic value over the past 50 years is roughly equal to the 1,826,163% gain in market price of the company's shares.

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* All per-share figures used in this report apply to Berkshire's A shares. Figures for the B shares are 1/1500th of those shown for A.

The Year at Berkshire

It was a good year for Berkshire on all major fronts, except one. Here are the important developments:

- Our "Powerhouse Five" – a collection of Berkshire's largest non-insurance businesses – had a record $12.4 billion of pre-tax earnings in 2014, up $1.6 billion from 2013.* The companies in this sainted group are Berkshire Hathaway Energy (formerly MidAmerican Energy), BNSF, IMC (I've called it Iscar in the past), Lubrizol and Marmon.

  Of the five, only Berkshire Hathaway Energy, then earning $393 million, was owned by us a decade ago. Subsequently we purchased another three of the five on an all-cash basis. In acquiring the fifth, BNSF, we paid about 70% of the cost in cash and, for the remainder, issued Berkshire shares that increased the number outstanding by 6.1%. In other words, the $12 billion gain in annual earnings delivered Berkshire by the five companies over the ten-year span has been accompanied by only minor dilution. That satisfies our goal of not simply increasing earnings, but making sure we also increase *per-share* results.

  If the U.S. economy continues to improve in 2015, we expect earnings of our Powerhouse Five to improve as well. The gain could reach $1 billion, in part because of bolt-on acquisitions by the group that have already closed or are under contract.

- Our bad news from 2014 comes from our group of five as well and is unrelated to earnings. During the year, BNSF disappointed many of its customers. These shippers depend on us, and service failures can badly hurt their businesses.

  BNSF is, by far, Berkshire's most important non-insurance subsidiary and, to improve its performance, we will spend $6 billion on plant and equipment in 2015. That sum is nearly 50% more than any other railroad has spent in a single year and is a truly extraordinary amount, whether compared to revenues, earnings or depreciation charges.

  Though weather, which was particularly severe last year, will always cause railroads a variety of operating problems, our responsibility is to do *whatever it takes* to restore our service to industry-leading levels. That can't be done overnight: The extensive work required to increase system capacity sometimes disrupts operations while it is underway. Recently, however, our outsized expenditures are beginning to show results. During the last three months, BNSF's performance metrics have materially improved from last year's figures.

- Our many dozens of smaller non-insurance businesses earned $5.1 billion last year, up from $4.7 billion in 2013. Here, as with our Powerhouse Five, we expect further gains in 2015. Within this group, we have two companies that last year earned between $400 million and $600 million, six that earned between $250 million and $400 million, and seven that earned between $100 million and $250 million. This collection of businesses will increase in both number and earnings. Our ambitions have no finish line.

- Berkshire's huge and growing insurance operation again operated at an underwriting profit in 2014 – that makes 12 years in a row – and increased its float. During that 12-year stretch, our float – money that doesn't belong to us but that we can invest for Berkshire's benefit – has grown from $41 billion to $84 billion. Though neither that gain nor the size of our float is reflected in Berkshire's earnings, float generates significant investment income because of the assets it allows us to hold.

* Throughout this letter, as well as in the "Golden Anniversary" letters included later in this report, all earnings are stated on a pre-tax basis unless otherwise designated.

Meanwhile, our underwriting profit totaled $24 billion during the twelve-year period, including $2.7 billion earned in 2014. And all of this began with our 1967 purchase of National Indemnity for $8.6 *million*.

- While Charlie and I search for new businesses to buy, our many subsidiaries are regularly making bolt-on acquisitions. Last year was particularly fruitful: We contracted for 31 bolt-ons, scheduled to cost $7.8 billion in aggregate. The size of these transactions ranged from $400,000 to $2.9 billion. However, the largest acquisition, Duracell, will not close until the second half of this year. It will then be placed under Marmon's jurisdiction.

  Charlie and I encourage bolt-ons, *if* they are sensibly-priced. (Most deals offered us aren't.) They deploy capital in activities that fit with our existing businesses and that will be managed by our corps of expert managers. This means no more work for us, yet more earnings, a combination we find particularly appealing. We will make many more of these bolt-on deals in future years.

- Two years ago my friend, Jorge Paulo Lemann, asked Berkshire to join his 3G Capital group in the acquisition of Heinz. My affirmative response was a no-brainer: I knew immediately that this partnership would work well from both a personal and financial standpoint. And it most definitely has.

  I'm not embarrassed to admit that Heinz is run far better under Alex Behring, Chairman, and Bernardo Hees, CEO, than would be the case if I were in charge. They hold themselves to extraordinarily high performance standards and are never satisfied, even when their results far exceed those of competitors.

  We expect to partner with 3G in more activities. Sometimes our participation will only involve a financing role, as was the case in the recent acquisition of Tim Hortons by Burger King. Our favored arrangement, however, will usually be to link up as a *permanent* equity partner (who, in some cases, contributes to the financing of the deal as well). Whatever the structure, we feel good when working with Jorge Paulo.

  Berkshire also has fine partnerships with Mars and Leucadia, and we may form new ones with them or with other partners. Our participation in any joint activities, whether as a financing or equity partner, will be limited to friendly transactions.

- In October, we contracted to buy Van Tuyl Automotive, a group of 78 automobile dealerships that is exceptionally well-run. Larry Van Tuyl, the company's owner, and I met some years ago. He then decided that if he were ever to sell his company, its home should be Berkshire. Our purchase was recently completed, and we are now "car guys."

  Larry and his dad, Cecil, spent 62 years building the group, following a strategy that made owner-partners of all local managers. Creating this mutuality of interests proved over and over to be a winner. Van Tuyl is now the fifth-largest automotive group in the country, with per-dealership sales figures that are outstanding.

  In recent years, Jeff Rachor has worked alongside Larry, a successful arrangement that will continue. There are about 17,000 dealerships in the country, and ownership transfers always require approval by the relevant auto manufacturer. Berkshire's job is to perform in a manner that will cause manufacturers to welcome further purchases by us. If we do this – and if we can buy dealerships at sensible prices – we will build a business that before long will be multiples the size of Van Tuyl's $9 billion of sales.

  With the acquisition of Van Tuyl, Berkshire now owns 9½ companies that would be listed on the Fortune 500 were they independent (Heinz is the ½). That leaves 490½ fish in the sea. Our lines are out.

- Our subsidiaries spent a record $15 billion on plant and equipment during 2014, well over twice their depreciation charges. About 90% of that money was spent in the United States. Though we will always invest abroad as well, the mother lode of opportunities runs through America. The treasures that have been uncovered up to now are dwarfed by those still untapped. Through dumb luck, Charlie and I were born in the United States, and we are forever grateful for the staggering advantages this accident of birth has given us.

- Berkshire's yearend employees – including those at Heinz – totaled a record 340,499, up 9,754 from last year. The increase, I am proud to say, included no gain at headquarters (where 25 people work). No sense going crazy.

- Berkshire increased its ownership interest last year in each of its "Big Four" investments – American Express, Coca-Cola, IBM and Wells Fargo. We purchased additional shares of IBM (increasing our ownership to 7.8% versus 6.3% at yearend 2013). Meanwhile, stock repurchases at Coca-Cola, American Express and Wells Fargo raised our percentage ownership of each. Our equity in Coca-Cola grew from 9.1% to 9.2%, our interest in American Express increased from 14.2% to 14.8% and our ownership of Wells Fargo grew from 9.2% to 9.4%. And, if you think tenths of a percent aren't important, ponder this math: For the four companies in aggregate, each increase of one-tenth of a percent in our ownership raises Berkshire's portion of their annual earnings by $50 million.

  These four investees possess excellent businesses and are run by managers who are both talented and shareholder-oriented. At Berkshire, we much prefer owning a non-controlling but substantial portion of a wonderful company to owning 100% of a so-so business. It's better to have a partial interest in the Hope Diamond than to own all of a rhinestone.

  If Berkshire's yearend holdings are used as the marker, our portion of the "Big Four's" 2014 earnings before discontinued operations amounted to $4.7 billion (compared to $3.3 billion only three years ago). In the earnings we report to you, however, we include only the dividends we receive – about $1.6 billion last year. (Again, three years ago the dividends were $862 million.) But make no mistake: The $3.1 billion of these companies' earnings we don't report are every bit as valuable to us as the portion Berkshire records.

  The earnings these investees retain are often used for repurchases of their own stock – a move that enhances Berkshire's share of future earnings without requiring us to lay out a dime. Their retained earnings also fund business opportunities that usually turn out to be advantageous. All that leads us to expect that the per-share earnings of these four investees, in aggregate, will grow substantially over time (though 2015 will be a tough year for the group, in part because of the strong dollar). If the expected gains materialize, dividends to Berkshire will increase and, even more important, so will our unrealized capital gains. (For the package of four, our unrealized gains already totaled $42 billion at yearend.)

  Our flexibility in capital allocation – our willingness to invest large sums passively in non-controlled businesses – gives us a significant advantage over companies that limit themselves to acquisitions they can operate. Our appetite for *either* operating businesses or passive investments doubles our chances of finding sensible uses for Berkshire's endless gusher of cash.

- I've mentioned in the past that my experience in business helps me as an investor and that my investment experience has made me a better businessman. Each pursuit teaches lessons that are applicable to the other. And some truths can only be fully learned through experience. (In Fred Schwed's wonderful book, *Where Are the Customers' Yachts?*, a Peter Arno cartoon depicts a puzzled Adam looking at an eager Eve, while a caption says, "There are certain things that cannot be adequately explained to a virgin either by words or pictures." If you haven't read Schwed's book, buy a copy at our annual meeting. Its wisdom and humor are truly priceless.)

Among Arno's "certain things," I would include two separate skills, the evaluation of investments and the management of businesses. I therefore think it's worthwhile for Todd Combs and Ted Weschler, our two investment managers, to each have oversight of at least one of our businesses. A sensible opportunity for them to do so opened up a few months ago when we agreed to purchase two companies that, though smaller than we would normally acquire, have excellent economic characteristics. Combined, the two earn $100 million annually on about $125 million of net tangible assets.

I've asked Todd and Ted to each take on one as Chairman, in which role they will function in the very limited way that I do with our larger subsidiaries. This arrangement will save me a minor amount of work and, more important, make the two of them even better investors than they already are (which is to say among the best).

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Late in 2009, amidst the gloom of the Great Recession, we agreed to buy BNSF, the largest purchase in Berkshire's history. At the time, I called the transaction an "all-in wager on the economic future of the United States."

That kind of commitment was nothing new for us. We've been making similar wagers ever since Buffett Partnership Ltd. acquired control of Berkshire in 1965. For good reason, too: Charlie and I have always considered a "bet" on ever-rising U.S. prosperity to be very close to a sure thing.

Indeed, who has ever benefited during the past 238 years by betting *against* America? If you compare our country's present condition to that existing in 1776, you have to rub your eyes in wonder. In my lifetime alone, *real* per-capita U.S. output has *sextupled*. My parents could not have dreamed in 1930 of the world their son would see. Though the preachers of pessimism prattle endlessly about America's problems, I've never seen one who wishes to emigrate (though I can think of a few for whom I would happily buy a one-way ticket).

The dynamism embedded in our market economy will continue to work its magic. Gains won't come in a smooth or uninterrupted manner; they never have. And we will regularly grumble about our government. But, most assuredly, America's best days lie ahead.

With this tailwind working for us, Charlie and I hope to build Berkshire's per-share intrinsic value by (1) constantly improving the basic earning power of our many subsidiaries; (2) further increasing their earnings through bolt-on acquisitions; (3) benefiting from the growth of our investees; (4) repurchasing Berkshire shares when they are available at a meaningful discount from intrinsic value; and (5) making an occasional large acquisition. We will also try to maximize results for *you* by rarely, if ever, issuing Berkshire shares.

Those building blocks rest on a rock-solid foundation. A century hence, BNSF and Berkshire Hathaway Energy will still be playing vital roles in our economy. Homes and autos will remain central to the lives of most families. Insurance will continue to be essential for both businesses and individuals. Looking ahead, Charlie and I see a world made to order for Berkshire. We feel fortunate to be entrusted with its management.

Intrinsic Business Value

As much as Charlie and I talk about intrinsic business value, we cannot tell you precisely what that number is for Berkshire shares (nor, in fact, for any other stock). In our 2010 annual report, however, we laid out the three elements – one of them qualitative – that we believe are the keys to a sensible estimate of Berkshire's intrinsic value. That discussion is reproduced in full on pages 123-124.

Here is an update of the two quantitative factors: In 2014 our per-share investments increased 8.4% to $140,123, and our earnings from businesses other than insurance and investments increased 19% to $10,847 per share.

Since 1970, our per-share investments have increased at a rate of 19% compounded annually, and our earnings figure has grown at a 20.6% clip. It is no coincidence that the price of Berkshire stock over the ensuing 44 years has increased at a rate very similar to that of our two measures of value. Charlie and I like to see gains in both sectors, but our main focus is to build operating earnings. That's why we were pleased to exchange our Phillips 66 and Graham Holdings stock for operating businesses last year and to contract with Procter and Gamble to acquire Duracell by means of a similar exchange set to close in 2015.

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Now, let's examine the four major sectors of our operations. Each has vastly different balance sheet and income characteristics from the others. So we'll present them as four separate businesses, which is how Charlie and I view them (though there are important and *enduring* advantages to having them all under one roof). Our goal is to provide you with the information we would wish to have if our positions were reversed, with you being the reporting manager and we the absentee shareholders. (But don't get any ideas!)

Insurance

Let's look first at insurance, Berkshire's core operation. That industry has been the engine that has propelled our expansion since 1967, when we acquired National Indemnity and its sister company, National Fire & Marine, for $8.6 million. Though that purchase had monumental consequences for Berkshire, its execution was simplicity itself.

Jack Ringwalt, a friend of mine who was the controlling shareholder of the two companies, came to my office saying he would like to sell. Fifteen minutes later, we had a deal. Neither of Jack's companies had ever had an audit by a public accounting firm, and I didn't ask for one. My reasoning: (1) Jack was honest and (2) He was also a bit quirky and likely to walk away if the deal became at all complicated.

On pages 128-129, we reproduce the 1½-page purchase agreement we used to finalize the transaction. That contract was homemade: Neither side used a lawyer. Per page, this has to be Berkshire's best deal: National Indemnity today has GAAP (generally accepted accounting principles) net worth of $111 billion, which exceeds that of any other insurer in the world.

One reason we were attracted to the property-casualty business was its financial characteristics: P/C insurers receive premiums upfront and pay claims later. In extreme cases, such as those arising from certain workers' compensation accidents, payments can stretch over many decades. This collect-now, pay-later model leaves P/C companies holding large sums – money we call "float" – that will eventually go to others. Meanwhile, insurers get to invest this float for their benefit. Though individual policies and claims come and go, the amount of float an insurer holds usually remains fairly stable in relation to premium volume. Consequently, as our business grows, so does our float. And *how* we have grown, as the following table shows:

Year	*Float (in $ millions)*
1970	$ 39
1980	237
1990	1,632
2000	27,871
2010	65,832
2014	83,921

Further gains in float will be tough to achieve. On the plus side, GEICO and our new commercial insurance operation are almost certain to grow at a good clip. National Indemnity's reinsurance division, however, is party to a number of run-off contracts whose float drifts downward. If we do in time experience a decline in float, it will be *very* gradual – at the outside no more than 3% in any year. The nature of our insurance contracts is such that we can *never* be subject to immediate demands for sums that are large compared to our cash resources. This strength is a key pillar in Berkshire's economic fortress.

If our premiums exceed the total of our expenses and eventual losses, we register an underwriting profit that adds to the investment income our float produces. When such a profit is earned, we enjoy the use of free money – and, better yet, get *paid* for holding it.

Unfortunately, the wish of all insurers to achieve this happy result creates intense competition, so vigorous indeed that it frequently causes the P/C industry as a whole to operate at a significant underwriting *loss*. This loss, in effect, is what the industry pays to hold its float. Competitive dynamics almost guarantee that the insurance industry, despite the float income all its companies enjoy, will continue its dismal record of earning subnormal returns on tangible net worth as compared to other American businesses. The prolonged period of low interest rates our country is now dealing with causes earnings on float to decrease, thereby exacerbating the profit problems of the industry.

As noted in the first section of this report, Berkshire has now operated at an underwriting profit for twelve consecutive years, our pre-tax gain for the period having totaled $24 billion. Looking ahead, I believe we will continue to underwrite profitably in most years. Doing so is the daily focus of *all* of our insurance managers, who know that while float is valuable, its benefits can be drowned by poor underwriting results. That message is given at least lip service by all insurers; at Berkshire it is a religion.

So how does our float affect intrinsic value? When Berkshire's *book* value is calculated, the *full* amount of our float is deducted as a *liability*, just as if we had to pay it out tomorrow and could not replenish it. But to think of float as strictly a liability is incorrect; it should instead be viewed as a revolving fund. Daily, we pay old claims and related expenses – a huge $22.7 billion to more than six million claimants in 2014 – and that reduces float. Just as surely, we each day write new business and thereby generate new claims that add to float.

If our revolving float is both costless and long-enduring, which I believe it will be, the true value of this liability is *dramatically* less than the accounting liability. Owing $1 that in effect will never leave the premises – because new business is almost certain to deliver a substitute – is worlds different from owing $1 that will go out the door tomorrow and not be replaced. The two types of liabilities are treated as equals, however, under GAAP.

A partial offset to this overstated liability is a $15.5 billion "goodwill" asset that we incurred in buying our insurance companies and that increases book value. In very large part, this goodwill represents the price we paid for the float-generating capabilities of our insurance operations. The cost of the goodwill, however, has *no* bearing on its true value. For example, if an insurance company sustains large and prolonged underwriting losses, *any* goodwill asset carried on the books should be deemed valueless, whatever its original cost.

Fortunately, that does not describe Berkshire. Charlie and I believe the true economic value of our insurance goodwill – what we would happily pay for float *of similar quality* were we to purchase an insurance operation possessing it – to be *far* in excess of its historic carrying value. Under present accounting rules (with which we agree) this excess value will *never* be entered on our books. But I can assure you that it's real. That's one reason – a huge reason – why we believe Berkshire's intrinsic business value substantially exceeds its book value.

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Berkshire's attractive insurance economics exist only because we have some terrific managers running disciplined operations that possess hard-to-replicate business models. Let me tell you about the major units.

First by float size is the Berkshire Hathaway Reinsurance Group, managed by Ajit Jain. Ajit insures risks that no one else has the desire or the capital to take on. His operation combines capacity, speed, decisiveness and, most important, brains in a manner unique in the insurance business. Yet he never exposes Berkshire to risks that are inappropriate in relation to our resources.

Indeed, we are *far* more conservative in avoiding risk than most large insurers. For example, if the insurance industry should experience a $250 billion loss from some mega-catastrophe – a loss about triple anything it has ever experienced – Berkshire as a whole would likely record a significant profit for the year because of its many streams of earnings. We would also remain awash in cash and be looking for large opportunities in a market that might well have gone into shock. Meanwhile, other major insurers and reinsurers would be far in the red, if not facing insolvency.

Ajit's underwriting skills are unmatched. His mind, moreover, is an idea factory that is always looking for more lines of business he can add to his current assortment. Last year I told you about his formation of Berkshire Hathaway Specialty Insurance ("BHSI"). This initiative took us into commercial insurance, where we were instantly welcomed by both major insurance brokers and corporate risk managers throughout America. Previously, we had written only a few specialized lines of commercial insurance.

BHSI is led by Peter Eastwood, an experienced underwriter who is widely respected in the insurance world. During 2014, Peter expanded his talented group, moving into both international business and new lines of insurance. We repeat last year's prediction that BHSI will be a major asset for Berkshire, one that will generate volume in the billions within a few years.

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We have another reinsurance powerhouse in General Re, managed by Tad Montross.

At bottom, a sound insurance operation needs to adhere to four disciplines. It must (1) understand *all* exposures that might cause a policy to incur losses; (2) conservatively assess the likelihood of any exposure actually causing a loss and the probable cost if it does; (3) set a premium that, on average, will deliver a profit after both prospective loss costs and operating expenses are covered; and (4) be willing to walk away if the appropriate premium can't be obtained.

Many insurers pass the first three tests and flunk the fourth. They simply can't turn their back on business that is being eagerly written by their competitors. That old line, "The other guy is doing it, so we must as well," spells trouble in any business, but in none more so than insurance.

Tad has observed all four of the insurance commandments, and it shows in his results. General Re's huge float has been considerably better than cost-free under his leadership, and we expect that, on average, to continue. We are particularly enthusiastic about General Re's international life reinsurance business, which has grown consistently and profitably since we acquired the company in 1998.

It can be remembered that soon after we purchased General Re, it was beset by problems that caused commentators – and me as well, briefly – to believe I had made a huge mistake. That day is long gone. General Re is now a gem.

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Finally, there is GEICO, the insurer on which I cut my teeth 64 years ago. GEICO is managed by Tony Nicely, who joined the company at 18 and completed 53 years of service in 2014. Tony became CEO in 1993, and since then the company has been flying. There is *no* better manager than Tony.

When I was first introduced to GEICO in January 1951, I was blown away by the huge cost advantage the company enjoyed compared to the expenses borne by the giants of the industry. It was clear to me that GEICO would succeed because it *deserved* to succeed. No one *likes* to buy auto insurance. Almost everyone, though, likes to drive. The insurance consequently needed is a major expenditure for most families. Savings matter to them – and *only* a low-cost operation can deliver these. Indeed, at least 40% of the people reading this letter can save money by insuring with GEICO. So stop reading and go to geico.com or call 800-368-2734.

GEICO's cost advantage is the factor that has enabled the company to gobble up market share year after year. (We ended 2014 at 10.8% compared to 2.5% in 1995, when Berkshire acquired control of GEICO.) The company's low costs create a moat – an *enduring* one – that competitors are unable to cross. Our gecko never tires of telling Americans how GEICO can save them important money. The gecko, I should add, has one particularly endearing quality – he works without pay. Unlike a human spokesperson, he never gets a swelled head from his fame nor does he have an agent to constantly remind us how valuable he is. I love the little guy.

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In addition to our three major insurance operations, we own a group of smaller companies, most of them plying their trade in odd corners of the insurance world. In aggregate, these companies are a growing operation that consistently delivers an underwriting profit. Indeed, over the past decade, they have earned $2.95 billion from underwriting while growing their float from $1.7 billion to $8.6 billion. Charlie and I treasure these companies and their managers.

	Underwriting Profit		*Yearend Float*	
	(in millions)			
Insurance Operations	*2014*	*2013*	*2014*	*2013*
BH Reinsurance	$ 606	$1,294	$42,454	$37,231
General Re	277	283	19,280	20,013
GEICO	1,159	1,127	13,569	12,566
Other Primary	626	385	8,618	7,430
	$2,668	$3,089	$83,921	$77,240

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Simply put, insurance is the sale of promises. The "customer" pays money now; the insurer promises to pay money in the future should certain unwanted events occur.

Sometimes, the promise will not be tested for decades. (Think of life insurance bought by people in their 20s.) Therefore, both the ability and willingness of the insurer to pay, even if economic chaos prevails when payment time arrives, is all-important.

Berkshire's promises have no equal, a fact affirmed in recent years by certain of the world's largest and most sophisticated P/C insurers, who wished to shed themselves of huge and exceptionally long-lived liabilities. That is, these insurers wished to "cede" these liabilities – most of them potential losses from asbestos claims – to a reinsurer. They needed the right one, though: If a reinsurer fails to pay a loss, the original insurer is still on the hook for it. Choosing a reinsurer, therefore, that down the road proves to be financially strapped or a bad actor threatens the original insurer with getting huge liabilities right back in its lap.

Last year, our premier position in reinsurance was reaffirmed by our writing a policy carrying a $3 billion single premium. I believe that the policy's size has only been exceeded by our 2007 transaction with Lloyd's, in which the premium was $7.1 billion.

In fact, I know of only eight P/C policies in history that had a single premium exceeding $1 billion. And, yes, all eight were written by Berkshire. Certain of these contracts will require us to make substantial payments 50 years or more from now. When major insurers have needed an unquestionable promise that payments of this type will be made, Berkshire has been the party – the *only* party – to call.

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Berkshire's great managers, premier financial strength and a variety of business models protected by wide moats amount to something unique in the insurance world. This assemblage of strengths is a huge asset for Berkshire shareholders that will only get more valuable with time.

Regulated, Capital-Intensive Businesses

We have two major operations, BNSF and Berkshire Hathaway Energy ("BHE"), that share important characteristics distinguishing them from our other businesses. Consequently, we assign them their own section in this letter and split out their combined financial statistics in our GAAP balance sheet and income statement.

A key characteristic of both companies is their huge investment in very long-lived, regulated assets, with these partially funded by large amounts of long-term debt that is *not* guaranteed by Berkshire. Our credit is in fact not needed because each company has earning power that even under terrible economic conditions will far exceed its interest requirements. Last year, for example, BNSF's interest coverage was more than 8:1. (Our definition of coverage is pre-tax earnings/interest, *not* EBITDA/interest, a commonly used measure we view as seriously flawed.)

At BHE, meanwhile, two factors ensure the company's ability to service its debt under all circumstances. The first is common to all utilities: recession-resistant earnings, which result from these companies offering an essential service on an exclusive basis. The second is enjoyed by few other utilities: a great diversity of earnings streams, which shield us from being seriously harmed by any single regulatory body. Recently, we have further broadened that base through our $3 billion (Canadian) acquisition of AltaLink, an electric transmission system serving 85% of Alberta's population. This multitude of profit streams, supplemented by the inherent advantage of being owned by a strong parent, has enabled BHE and its utility subsidiaries to significantly lower their cost of debt. This economic fact benefits both us *and* our customers.

Every day, our two subsidiaries power the American economy in major ways:

- BNSF carries about 15% (measured by ton-miles) of *all* inter-city freight, whether it is transported by truck, rail, water, air, or pipeline. Indeed, we move more ton-miles of goods than *anyone* else, a fact establishing BNSF as the most important artery in our economy's circulatory system.

  BNSF, like all railroads, also moves its cargo in an extraordinarily fuel-efficient and environmentally friendly way, carrying a ton of freight about 500 miles on a single gallon of diesel fuel. Trucks taking on the same job guzzle about four times as much fuel.

- BHE's utilities serve regulated retail customers in eleven states. No utility company stretches further. In addition, we are a leader in renewables: From a standing start ten years ago, BHE now accounts for 6% of the country's wind generation capacity and 7% of its solar generation capacity. Beyond these businesses, BHE owns two large pipelines that deliver 8% of our country's natural gas consumption; the recently-purchased electric transmission operation in Canada; and major electric businesses in the U.K. and Philippines. And the beat goes on: We will continue to buy and build utility operations throughout the world for decades to come.

  BHE can make these investments because it retains *all* of its earnings. In fact, last year the company retained more dollars of earnings – by far – than any other American electric utility. We and our regulators see this 100% retention policy as an important advantage – one almost certain to distinguish BHE from other utilities for many years to come.

When BHE completes certain renewables projects that are underway, the company's renewables portfolio will have cost $15 billion. In addition, we have conventional projects in the works that will also cost many billions. We relish making such commitments as long as they promise reasonable returns – and, on that front, we put a large amount of trust in future regulation.

Our confidence is justified both by our past experience and by the knowledge that society will forever need massive investments in both transportation and energy. It is in the self-interest of governments to treat capital providers in a manner that will ensure the continued flow of funds to essential projects. It is concomitantly in our self-interest to conduct our operations in a way that earns the approval of our regulators and the people they represent.

Last year we fully met this objective at BHE, just as we have in every year of our ownership. Our rates remain low, our customer satisfaction is high and our record for employee safety is among the best in the industry.

The story at BNSF, however – as I noted earlier – was not good in 2014, a year in which the railroad disappointed many of its customers. This problem occurred despite the record capital expenditures that BNSF has made in recent years, with those having far exceeded the outlays made by Union Pacific, our principal competitor.

The two railroads are of roughly equal size measured by revenues, though we carry considerably more freight (measured either by carloads or ton-miles). But our service problems exceeded Union Pacific's last year, and we lost market share as a result. Moreover, U.P.'s earnings beat ours by a record amount. Clearly, we have a lot of work to do.

We are wasting no time: As I also mentioned earlier, we will spend $6 billion in 2015 on improving our railroad's operation. That will amount to about 26% of estimated revenues (a calculation that serves as the industry's yardstick). Outlays of this magnitude are largely unheard of among railroads. For us, this percentage compares to our average of 18% in 2009-2013 and to U.P.'s projection for the near future of 16-17%. Our huge investments will soon lead to a system with greater capacity and much better service. Improved profits should follow.

Here are the key figures for Berkshire Hathaway Energy and BNSF:

Berkshire Hathaway Energy (89.9% owned)	*Earnings (in millions)*		
	2014	*2013*	*2012*
U.K. utilities	$ 527	$ 362	$ 429
Iowa utility	298	230	236
Nevada utilities	549	—	—
PacifiCorp (primarily Oregon and Utah)	1,010	982	737
Gas Pipelines (Northern Natural and Kern River)	379	385	383
HomeServices	139	139	82
Other (net)	236	4	91
Operating earnings before corporate interest and taxes	3,138	2,102	1,958
Interest	427	296	314
Income taxes	616	170	172
Net earnings	$ 2,095	$ 1,636	$ 1,472
Earnings applicable to Berkshire	$ 1,882	$ 1,470	$ 1,323

BNSF	*Earnings (in millions)*		
	2014	*2013*	*2012*
Revenues	$23,239	$22,014	$20,835
Operating expenses	16,237	15,357	14,835
Operating earnings before interest and taxes	7,002	6,657	6,000
Interest (net)	833	729	623
Income taxes	2,300	2,135	2,005
Net earnings	$ 3,869	$ 3,793	$ 3,372

Manufacturing, Service and Retailing Operations

Our activities in this part of Berkshire cover the waterfront. Let's look, though, at a summary balance sheet and earnings statement for the entire group.

Balance Sheet 12/31/14 (in millions)

Assets		*Liabilities and Equity*	
Cash and equivalents	$ 5,765	Notes payable	$ 965
Accounts and notes receivable	8,264	Other current liabilities	9,734
Inventory	10,236	Total current liabilities	10,699
Other current assets	1,117		
Total current assets	25,382		
		Deferred taxes	3,801
Goodwill and other intangibles	28,107	Term debt and other liabilities	4,269
Fixed assets	13,806	Non-controlling interests	492
Other assets	3,793	Berkshire equity	51,827
	$71,088		$71,088

Earnings Statement (in millions)

	2014	*2013**	*2012**
Revenues	$97,689	$93,472	$81,432
Operating expenses	90,788	87,208	75,734
Interest expense	109	104	112
Pre-tax earnings	6,792	6,160	5,586
Income taxes and non-controlling interests	2,324	2,283	2,229
Net earnings	$ 4,468	$ 3,877	$ 3,357

*Earnings for 2012 and 2013 have been restated to exclude Marmon's leasing operations, which are now included in the Finance and Financial Products section.

Our income and expense data conforming to GAAP is on page 49. In contrast, the operating expense figures above are non-GAAP and exclude some purchase-accounting items (primarily the amortization of certain intangible assets). We present the data in this manner because Charlie and I believe the adjusted numbers more accurately reflect the true economic expenses and profits of the businesses aggregated in the table than do GAAP figures.

I won't explain all of the adjustments – some are tiny and arcane – but serious investors should understand the disparate nature of intangible assets. Some truly deplete over time, while others *in no way* lose value. For software, as a big example, amortization charges are very real expenses. The concept of making charges against other intangibles, such as the amortization of customer relationships, however, arises through purchase-accounting rules and clearly does not reflect reality. GAAP accounting draws no distinction between the two types of charges. Both, that is, are recorded as expenses when earnings are calculated – even though from an investor's viewpoint they could not be more different.

In the GAAP-compliant figures we show on page 49, amortization charges of $1.15 billion have been deducted as expenses. We would call about 20% of these "real," the rest not. The "non-real" charges, once non-existent at Berkshire, have become significant because of the many acquisitions we have made. Non-real amortization charges will almost certainly rise further as we acquire more companies.

The GAAP-compliant table on page 67 gives you the current status of our intangible assets. We now have $7.4 billion left to amortize, of which $4.1 billion will be charged over the next five years. Eventually, of course, every dollar of non-real costs becomes entirely charged off. When that happens, reported earnings increase even if true earnings are flat.

Depreciation charges, we want to emphasize, are different: Every dime of depreciation expense we report is a real cost. That's true, moreover, at most other companies. When CEOs tout EBITDA as a valuation guide, wire them up for a polygraph test.

Our public reports of earnings will, of course, continue to conform to GAAP. To embrace reality, however, you should remember to add back most of the amortization charges we report.

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To get back to our many manufacturing, service and retailing operations, they sell products ranging from lollipops to jet airplanes. Some of this sector's businesses, measured by earnings on unleveraged net *tangible* assets, enjoy terrific economics, producing profits that run from 25% after-tax to far more than 100%. Others generate good returns in the area of 12% to 20%. A few, however, have very poor returns, the result of some serious mistakes I made in my job of capital allocation. I was not misled: I simply was wrong in my evaluation of the economic dynamics of the company or the industry in which it operates.

Fortunately, my blunders normally involved relatively small acquisitions. Our large buys have generally worked out well and, in a few cases, more than well. I have not, nonetheless, made my last mistake in purchasing either businesses or stocks. Not everything works out as planned.

Viewed as a single entity, the companies in this group are an excellent business. They employed an average of $24 billion of net tangible assets during 2014 and, despite their holding large quantities of excess cash and using little leverage, earned 18.7% after-tax on that capital.

Of course, a business with terrific economics can be a bad investment if it is bought for too high a price. We have paid substantial premiums to net tangible assets for most of our businesses, a cost that is reflected in the large figure we show for goodwill. Overall, however, we are getting a decent return on the capital we have deployed in this sector. Furthermore, the intrinsic value of these businesses, in aggregate, exceeds their carrying value by a good margin, and that premium is likely to widen. Even so, the difference between intrinsic value and carrying value in both the insurance and regulated-industry segments is *far* greater. It is there that the truly big winners reside.

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We have far too many companies in this group to comment on them individually. Moreover, their competitors – both current and potential – read this report. In a few of our businesses we might be disadvantaged if others knew our numbers. In some of our operations that are not of a size material to an evaluation of Berkshire, therefore, we only disclose what is required. You can find a good bit of detail about many of our operations, however, on pages 97-100.

Finance and Financial Products

This year we include in this section Marmon's very sizable leasing operations, whose wares are railcars, containers and cranes. We have also restated the previous two years to reflect that change. Why have we made it? At one time there was a large minority ownership at Marmon, and I felt it was more understandable to include all of the company's operations in one place. Today we own virtually 100% of Marmon, which makes me think you will gain more insight into our various businesses if we include Marmon's leasing operations under this heading. (The figures for the many dozens of Marmon's other businesses remain in the previous section.)

Our other leasing and rental operations are conducted by CORT (furniture) and XTRA (semi-trailers). These companies are industry leaders and have substantially increased their earnings as the American economy has gained strength. Both companies have invested more money in new equipment than have many of their competitors, and that's paying off.

Kevin Clayton has again delivered an industry-leading performance at Clayton Homes, the largest home builder in America. Last year, Clayton sold 30,871 homes, about 45% of the manufactured homes bought by Americans. When we purchased Clayton in 2003 for $1.7 billion, its share was 14%.

Key to Clayton's earnings is the company's $13 billion mortgage portfolio. During the financial panic of 2008 and 2009, when funding for the industry dried up, Clayton was able to keep lending because of Berkshire's backing. In fact, we continued during that period to finance our competitors' retail sales as well as our own.

Many of Clayton's borrowers have low incomes and mediocre FICO scores. But thanks to the company's sensible lending practices, its portfolio performed well during the recession, meaning a very high percentage of our borrowers kept their homes. Our blue-collar borrowers, in many cases, proved much better credit risks than their higher-income brethren.

At Marmon's railroad-car operation, lease rates have improved substantially over the past few years. The nature of this business, however, is that only 20% or so of our leases expire annually. Consequently, improved pricing only gradually works its way into our revenue stream. The trend, though, is strong. Our 105,000-car fleet consists largely of tank cars, but only 8% of those transport crude oil.

One further fact about our rail operation is important for you to know: Unlike many other lessors, we manufacture our own tank cars, about 6,000 of them in a good year. We do not book *any* profit when we transfer cars from our manufacturing division to our leasing division. Our fleet is consequently placed on our books at a "bargain" price. The difference between that figure and a "retail" price is only slowly reflected in our earnings through smaller annual depreciation charges that we enjoy over the 30-year life of the car. Because of that fact as well as others, Marmon's rail fleet is worth considerably more than the $5 billion figure at which it is carried on our books.

Here's the earnings recap for this sector:

	2014	*2013*	*2012*
		(in millions)	
Berkadia (our 50% share)	$ 122	$ 80	$ 35
Clayton	558	416	255
CORT	36	40	42
Marmon – Containers and Cranes	238	226	246
Marmon – Railcars	442	353	299
XTRA	147	125	106
Net financial income*	296	324	410
	$ 1,839	$ 1,564	$ 1,393

* Excludes capital gains or losses

Investments

Below we list our fifteen common stock investments that at yearend had the largest market value.

*Shares***	*Company*	*Percentage of Company Owned*	*12/31/14* *Cost**	*Market*
			(in millions)	
151,610,700	American Express Company	14.8	$ 1,287	$ 14,106
400,000,000	The Coca-Cola Company	9.2	1,299	16,888
18,513,482	DaVita HealthCare Partners Inc.	8.6	843	1,402
15,430,586	Deere & Company	4.5	1,253	1,365
24,617,939	DIRECTV	4.9	1,454	2,134
13,062,594	The Goldman Sachs Group, Inc.	3.0	750	2,532
76,971,817	International Business Machines Corp.	7.8	13,157	12,349
24,669,778	Moody's Corporation	12.1	248	2,364
20,060,390	Munich Re	11.8	2,990	4,023
52,477,678	The Procter & Gamble Company	1.9	336	4,683 ***
22,169,930	Sanofi	1.7	1,721	2,032
96,890,665	U.S. Bancorp	5.4	3,033	4,355
43,387,980	USG Corporation	30.0	836	1,214
67,707,544	Wal-Mart Stores, Inc.	2.1	3,798	5,815
483,470,853	Wells Fargo & Company	9.4	11,871	26,504
	Others		10,180	15,704
	Total Common Stocks Carried at Market		$55,056	$ 117,470

*This is our actual purchase price and also our tax basis; GAAP "cost" differs in a few cases because of write-ups or write-downs that have been required under GAAP rules.

**Excludes shares held by pension funds of Berkshire subsidiaries.

***Held under contract of sale for this amount.

Berkshire has one major equity position that is not included in the table: We can buy 700 million shares of Bank of America at any time prior to September 2021 for $5 billion. At yearend these shares were worth $12.5 billion. We are likely to purchase the shares just before expiration of our option. In the meantime, it is important for you to realize that Bank of America is, in effect, our fourth largest equity investment – and one we value highly.

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Attentive readers will notice that Tesco, which last year appeared in the list of our largest common stock investments, is now absent. An attentive *investor*, I'm embarrassed to report, would have sold Tesco shares earlier. I made a big mistake with this investment by dawdling.

At the end of 2012 we owned 415 million shares of Tesco, then and now the leading food retailer in the U.K. and an important grocer in other countries as well. Our cost for this investment was $2.3 billion, and the market value was a similar amount.

In 2013, I soured somewhat on the company's then-management and sold 114 million shares, realizing a profit of $43 million. My leisurely pace in making sales would prove expensive. Charlie calls this sort of behavior "thumb-sucking." (Considering what my delay cost us, he is being kind.)

During 2014, Tesco's problems worsened by the month. The company's market share fell, its margins contracted and accounting problems surfaced. In the world of business, bad news often surfaces serially: You see a cockroach in your kitchen; as the days go by, you meet his relatives.

We sold Tesco shares throughout the year and are now out of the position. (The company, we should mention, has hired new management, and we wish them well.) Our after-tax loss from this investment was $444 million, about 1/5 of 1% of Berkshire's net worth. In the past 50 years, we have only once realized an investment loss that at the time of sale cost us 2% of our net worth. Twice, we experienced 1% losses. All three of these losses occurred in the 1974-1975 period, when we sold stocks that were very cheap in order to buy others we believed to be even cheaper.

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Our investment results have been helped by a terrific tailwind. During the 1964-2014 period, the S&P 500 rose from 84 to 2,059, which, with reinvested dividends, generated the overall return of 11,196% shown on page 2. Concurrently, the purchasing power of the dollar declined a staggering 87%. That decrease means that it now takes $1 to buy what could be bought for 13¢ in 1965 (as measured by the Consumer Price Index).

There is an important message for investors in that disparate performance between stocks and dollars. Think back to our 2011 annual report, in which we defined investing as "the transfer to others of purchasing power now with the reasoned expectation of receiving more purchasing power – *after taxes have been paid on nominal gains* – in the future."

The unconventional, but inescapable, conclusion to be drawn from the past fifty years is that it has been *far* safer to invest in a diversified collection of American businesses than to invest in securities – Treasuries, for example – whose values have been tied to American currency. That was also true in the preceding half-century, a period including the Great Depression and two world wars. Investors should heed this history. To one degree or another it is almost certain to be repeated during the next century.

Stock prices will always be far more *volatile* than cash-equivalent holdings. *Over the long term*, however, currency-denominated instruments are *riskier* investments – *far* riskier investments – than widely-diversified stock portfolios that are bought over time and that are owned in a manner invoking only token fees and commissions. That lesson has not customarily been taught in business schools, where volatility is almost universally used as a proxy for risk. Though this pedagogic assumption makes for easy teaching, it is dead wrong: Volatility is *far* from synonymous with risk. Popular formulas that equate the two terms lead students, investors and CEOs astray.

It is true, of course, that owning equities for a day or a week or a year is far riskier (in both nominal and purchasing-power terms) than leaving funds in cash-equivalents. That is relevant to certain investors – say, investment banks – whose viability can be threatened by declines in asset prices and which might be forced to sell securities during depressed markets. Additionally, any party that might have meaningful near-term needs for funds should keep appropriate sums in Treasuries or insured bank deposits.

For the great majority of investors, however, who can – and *should* – invest with a multi-decade horizon, quotational declines are unimportant. Their focus should remain fixed on attaining significant gains in purchasing power over their investing lifetime. For them, a diversified equity portfolio, *bought over time*, will prove far less risky than dollar-based securities.

If the investor, instead, fears price volatility, erroneously viewing it as a measure of risk, he may, ironically, end up doing some very risky things. Recall, if you will, the pundits who six years ago bemoaned falling stock prices and advised investing in "safe" Treasury bills or bank certificates of deposit. People who heeded this sermon are now earning a pittance on sums they had previously expected would finance a pleasant retirement. (The S&P 500 was then below 700; now it is about 2,100.) If not for their fear of meaningless price volatility, these investors could have assured themselves of a good income for life by simply buying a very low-cost index fund whose dividends would trend upward over the years and whose principal would grow as well (with many ups and downs, to be sure).

Investors, of course, can, *by their own behavior*, make stock ownership highly risky. And many do. Active trading, attempts to "time" market movements, inadequate diversification, the payment of high and unnecessary fees to managers and advisors, and the use of borrowed money can destroy the decent returns that a life-long owner of equities would otherwise enjoy. Indeed, borrowed money has *no* place in the investor's tool kit: *Anything* can happen *anytime* in markets. And no advisor, economist, or TV commentator – and definitely not Charlie nor I – can tell you when chaos will occur. Market forecasters will fill your ear but will never fill your wallet.

The commission of the investment sins listed above is not limited to "the little guy." Huge institutional investors, viewed as a group, have long underperformed the unsophisticated index-fund investor who simply sits tight for decades. A major reason has been fees: Many institutions pay substantial sums to consultants who, in turn, recommend high-fee managers. And that is a fool's game.

There are a few investment managers, of course, who are very good – though in the short run, it's difficult to determine whether a great record is due to luck or talent. Most advisors, however, are far better at generating high fees than they are at generating high returns. In truth, their core competence is salesmanship. Rather than listen to their siren songs, investors – large and small – should instead read Jack Bogle's *The Little Book of Common Sense Investing*.

Decades ago, Ben Graham pinpointed the blame for investment failure, using a quote from Shakespeare: "The fault, dear Brutus, is not in our stars, but in ourselves."

The Annual Meeting

The annual meeting will be held on Saturday, May 2nd at the CenturyLink Center. Last year's attendance of 39,000 set a record, and we expect a further increase this year as we celebrate our Golden Anniversary. Be there when the doors open at 7 a.m.

Berkshire's talented Carrie Sova will again be in charge. Carrie joined us six years ago at the age of 24 as a secretary. Then, four years ago, I asked her to take charge of the meeting – a huge undertaking, requiring a multitude of skills – and she jumped at the chance. Carrie is unflappable, ingenious and expert at bringing out the best in the hundreds who work with her. She is aided by our entire home office crew who enjoy pitching in to make the weekend fun and informative for our owners.

And, yes, we also try to sell our visiting shareholders our products while they're here. In fact, this year we will substantially increase the hours available for purchases, opening for business at the CenturyLink on Friday, May 1st, from noon to 5 p.m. as well as the usual 7 a.m. to 4 p.m. on meeting day. So bring a smile to Charlie's face and do some serious shopping.

Get up early on Saturday morning. At 6:20 a.m., Norman and Jake, two Texas longhorns each weighing about a ton, will proceed down 10th Street to the CenturyLink. Aboard them will be a couple of our Justin Boot executives, who do double duty as cowboys. Following the steers will be four horses pulling a Wells Fargo stagecoach. Berkshire already markets planes, trains and automobiles. Adding steers and stagecoaches to our portfolio should seal our reputation as America's all-purpose transportation company.

At about 7:30 a.m. on Saturday, we will have our fourth International Newspaper Tossing Challenge. Our target again will be a Clayton Home porch, located precisely 35 feet from the throwing line. When I was a teenager – in my one brief flirtation with honest labor – I tossed about 500,000 papers. So I think I'm pretty good. Challenge me! Humiliate me! Knock me down a peg! I'll buy a Dilly Bar for anyone who lands his or her throw closer to the doorstep than I do. The papers will run 36 to 42 pages, and you must fold them yourself (no rubber bands allowed). I'll present a special prize to the 12-or-under contestant who makes the best toss. Deb Bosanek will be the judge.

At 8:30 a.m., a new Berkshire movie will be shown. An hour later, we will start the question-and-answer period, which (with a break for lunch at CenturyLink's stands) will last until 3:30 p.m. After a short recess, Charlie and I will convene the annual meeting at 3:45 p.m. This business session typically lasts only a half hour or so.

Your venue for shopping will be the 194,300-square-foot hall that adjoins the meeting and in which products from dozens of Berkshire subsidiaries will be for sale. If you don't get your shopping done on Friday, slip out while Charlie's talking on Saturday and binge on our bargains. Check the terrific BNSF railroad layout also. Even though I'm 84, it still excites me.

Last year you did your part as a shopper, and most of our businesses racked up record sales. In a nine-hour period on Saturday, we sold 1,385 pairs of Justin boots (that's a pair every 23 seconds), 13,440 pounds of See's candy, 7,276 pairs of Wells Lamont work gloves and 10,000 bottles of Heinz ketchup. Heinz has a new mustard product, so both mustard and ketchup will be available this year. (Buy both!) Now that we are open for business on Friday as well, we expect new records in every precinct.

Brooks, our running-shoe company, will again have a special commemorative shoe to offer at the meeting. After you purchase a pair, wear them the next day at our third annual "Berkshire 5K," an 8 a.m. race starting at the CenturyLink. Full details for participating will be included in the Visitor's Guide that will be sent to you with your credentials for the meeting. Entrants in the race will find themselves running alongside many of Berkshire's managers, directors and associates. (Charlie and I, however, will sleep in.)

A GEICO booth in the shopping area will be staffed by a number of the company's top counselors from around the country. Stop by for a quote. In most cases, GEICO will be able to give you a shareholder discount (usually 8%). This special offer is permitted by 44 of the 51 jurisdictions in which we operate. (One supplemental point: The discount is not additive if you qualify for another discount, such as that available to certain groups.) Bring the details of your existing insurance and check out our price. We can save many of you real money.

Be sure to visit the Bookworm. It will carry about 35 books and DVDs, among them a couple of new titles. Last year, many shareholders purchased Max Olson's compilation of Berkshire letters going back to 1965, and he has produced an updated edition for the meeting. We also expect to be selling an inexpensive book commemorating our fifty years. It's currently a work in process, but I expect it to contain a wide variety of historical material, including documents from the 19th Century.

An attachment to the proxy material that is enclosed with this report explains how you can obtain the credential you will need for admission to both the meeting and other events. Airlines have sometimes jacked up prices for the Berkshire weekend. If you are coming from far away, compare the cost of flying to Kansas City vs. Omaha. The drive between the two cities is about 2½ hours, and it may be that Kansas City can save you significant money, particularly if you had planned to rent a car in Omaha. The savings for a couple could run to $1,000 or more. Spend that money with us.

At Nebraska Furniture Mart, located on a 77-acre site on 72nd Street between Dodge and Pacific, we will again be having "Berkshire Weekend" discount pricing. Last year in the week surrounding the meeting, the store did a record $40,481,817 of business. (An average week for NFM's Omaha store is about $9 million.)

To obtain the Berkshire discount at NFM, you must make your purchases between Tuesday, April 28th and Monday, May 4th inclusive, and also present your meeting credential. The period's special pricing will even apply to the products of several prestigious manufacturers that normally have ironclad rules against discounting but which, in the spirit of our shareholder weekend, have made an exception for you. We appreciate their cooperation. NFM is open from 10 a.m. to 9 p.m. Monday through Friday, 10 a.m. to 9:30 p.m. on Saturday and 10 a.m. to 8 p.m. on Sunday. From 5:30 p.m. to 8 p.m. on Saturday, NFM is having a picnic to which you are all invited.

At Borsheims, we will again have two shareholder-only events. The first will be a cocktail reception from 6 p.m. to 9 p.m. on Friday, May 1st. The second, the main gala, will be held on Sunday, May 3rd, from 9 a.m. to 4 p.m. On Saturday, we will remain open until 6 p.m. In recent years, our three-day volume has far exceeded our sales in all of December, normally a jeweler's best month.

We will have huge crowds at Borsheims throughout the weekend. For your convenience, therefore, shareholder prices will be available from Monday, April 27th through Saturday, May 9th. During that period, please identify yourself as a shareholder by presenting your meeting credentials or a brokerage statement that shows you are a Berkshire holder.

On Sunday, in the mall outside of Borsheims, Norman Beck, a remarkable magician from Dallas, will bewilder onlookers. Additionally, we will have Bob Hamman and Sharon Osberg, two of the world's top bridge experts, available to play bridge with our shareholders on Sunday afternoon. Don't play them for money.

My friend, Ariel Hsing, will be in the mall as well on Sunday, taking on challengers at table tennis. I met Ariel when she was nine and even then I was unable to score a point against her. Now, she's a sophomore at Princeton, having already represented the United States in the 2012 Olympics. If you don't mind embarrassing yourself, test your skills against her, beginning at 1 p.m. Bill Gates and I will lead off and try to soften her up.

Gorat's and Piccolo's will again be open exclusively for Berkshire shareholders on Sunday, May 3rd. Both will be serving until 10 p.m., with Gorat's opening at 1 p.m. and Piccolo's opening at 4 p.m. These restaurants are my favorites, and I will eat at both of them on Sunday evening. Remember: To make a reservation at Gorat's, call 402-551-3733 on April 1st (*but not before*); for Piccolo's, call 402-346-2865. At Piccolo's, order a giant root beer float for dessert. Only sissies get the small one.

We will again have the same three financial journalists lead the question-and-answer period at the meeting, asking Charlie and me questions that shareholders have submitted to them by e-mail. The journalists and their e-mail addresses are: Carol Loomis, who retired last year after sixty years at Fortune, but remains *the* expert on business and financial matters, and who may be e-mailed at loomisbrk@gmail.com; Becky Quick, of CNBC, at BerkshireQuestions@cnbc.com; and Andrew Ross Sorkin, of The New York Times, at arsorkin@nytimes.com.

From the questions submitted, each journalist will choose the six he or she decides are the most interesting and important. The journalists have told me your question has the best chance of being selected if you keep it concise, avoid sending it in at the last moment, make it Berkshire-related and include no more than two questions in any e-mail you send them. (In your e-mail, let the journalist know if you would like your name mentioned if your question is asked.)

We will also have a panel of three analysts who follow Berkshire. This year the insurance specialist will be Gary Ransom of Dowling & Partners. Questions that deal with our non-insurance operations will come from Jonathan Brandt of Ruane, Cunniff & Goldfarb and Gregg Warren of Morningstar. Our hope is that the analysts and journalists will ask questions that add to our owners' understanding and knowledge of their investment.

Neither Charlie nor I will get so much as a clue about the questions headed our way. Some will be tough, for sure, and that's the way we like it. All told we expect at least 54 questions, which will allow for six from each analyst and journalist and for 18 from the audience. (Last year we had 62 in total.) The questioners from the audience will be chosen by means of 11 drawings that will take place at 8:15 a.m. on the morning of the annual meeting. Each of the 11 microphones installed in the arena and main overflow room will host, so to speak, a drawing.

While I'm on the subject of our owners' gaining knowledge, let me remind you that Charlie and I believe all shareholders should simultaneously have access to new information that Berkshire releases and should also have adequate time to analyze it. That's why we try to issue financial data late on Fridays or early on Saturdays and why our annual meeting is always held on a Saturday. We do not talk one-on-one to large institutional investors or analysts, treating them instead as we do all other shareholders.

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We get terrific help at meeting time from literally thousands of Omaha residents and businesses who want you to enjoy yourselves. This year, because we expect record attendance, we have worried about a shortage of hotel rooms. To deal with that possible problem, Airbnb is making a special effort to obtain listings for the period around meeting time and is likely to have a wide array of accommodations to offer. Airbnb's services may be especially helpful to shareholders who expect to spend only a single night in Omaha and are aware that last year a few hotels required guests to pay for a minimum of three nights. That gets expensive. Those people on a tight budget should check the Airbnb website.

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For good reason, I regularly extol the accomplishments of our operating managers. They are truly All-Stars who run their businesses as if they were the only asset owned by their families. I believe the mindset of our managers also to be as shareholder-oriented as can be found in the universe of large publicly-owned companies. Most of our managers have no financial need to work. The joy of hitting business "home runs" means as much to them as their paycheck.

Equally important, however, are the 24 men and women who work with me at our corporate office. This group efficiently deals with a multitude of SEC and other regulatory requirements, files a 24,100-page Federal income tax return and oversees the filing of 3,400 state tax returns, responds to countless shareholder and media inquiries, gets out the annual report, prepares for the country's largest annual meeting, coordinates the Board's activities – and the list goes on and on.

They handle all of these business tasks cheerfully and with unbelievable efficiency, making my life easy and pleasant. Their efforts go beyond activities strictly related to Berkshire: Last year they dealt with the 40 universities (selected from 200 applicants) who sent students to Omaha for a Q&A day with me. They also handle all kinds of requests that I receive, arrange my travel, and even get me hamburgers and french fries (smothered in Heinz ketchup, of course) for lunch. No CEO has it better; I truly do feel like tap dancing to work every day.

Last year, for the annual report, we dropped our 48-year-old "no pictures" policy – who says I'm not flexible? – and ran a photo of our remarkable home-office crew that was taken at our Christmas lunch. I didn't warn the gang of the public exposure they were to receive, so they didn't have on their Sunday best. This year was a different story: On the facing page you will see what our group looks like when they think someone will be noticing. However they dress, their performance is mind-boggling.

Come meet them on May 2nd and enjoy our Woodstock for Capitalists.

February 27, 2015

Warren E. Buffett
Chairman of the Board

BERKSHIRE HATHAWAY INC.

ACQUISITION CRITERIA

We are eager to hear *from principals or their representatives* about businesses that meet all of the following criteria:

(1) Large purchases (at least $75 million of pre-tax earnings unless the business will fit into one of our existing units),
(2) Demonstrated consistent earning power (future projections are of no interest to us, nor are "turnaround" situations),
(3) Businesses earning good returns on equity while employing little or no debt,
(4) Management in place (we can't supply it),
(5) Simple businesses (if there's lots of technology, we won't understand it),
(6) An offering price (we don't want to waste our time or that of the seller by talking, even preliminarily, about a transaction when price is unknown).

The larger the company, the greater will be our interest: We would like to make an acquisition in the $5-20 billion range. *We are not interested, however, in receiving suggestions about purchases we might make in the general stock market.*

We will not engage in unfriendly takeovers. We can promise complete confidentiality and a very fast answer – customarily within five minutes – as to whether we're interested. We prefer to buy for cash, but will consider issuing stock when we receive as much in intrinsic business value as we give. *We don't participate in auctions*.

Charlie and I frequently get approached about acquisitions that don't come close to meeting our tests: We've found that if you advertise an interest in buying collies, a lot of people will call hoping to sell you their cocker spaniels. A line from a country song expresses our feeling about new ventures, turnarounds, or auction-like sales: "When the phone don't ring, you'll know it's me."

Berkshire – Past, Present and Future

In the Beginning

On May 6, 1964, Berkshire Hathaway, then run by a man named Seabury Stanton, sent a letter to its shareholders offering to buy 225,000 shares of its stock for $11.375 per share. I had expected the letter; I was surprised by the price.

Berkshire then had 1,583,680 shares outstanding. About 7% of these were owned by Buffett Partnership Ltd. ("BPL"), an investing entity that I managed and in which I had virtually all of my net worth. Shortly before the tender offer was mailed, Stanton had asked me at what price BPL would sell its holdings. I answered $11.50, and he said, "Fine, we have a deal." Then came Berkshire's letter, offering an eighth of a point less. I bristled at Stanton's behavior and didn't tender.

That was a monumentally stupid decision.

Berkshire was then a northern textile manufacturer mired in a terrible business. The industry in which it operated was heading south, both metaphorically and physically. And Berkshire, for a variety of reasons, was unable to change course.

That was true even though the industry's problems had long been widely understood. Berkshire's own Board minutes of July 29, 1954, laid out the grim facts: "The textile industry in New England started going out of business forty years ago. During the war years this trend was stopped. The trend must continue until supply and demand have been balanced."

About a year after that board meeting, Berkshire Fine Spinning Associates and Hathaway Manufacturing – both with roots in the 19th Century – joined forces, taking the name we bear today. With its fourteen plants and 10,000 employees, the merged company became the giant of New England textiles. What the two managements viewed as a merger agreement, however, soon morphed into a suicide pact. During the seven years following the consolidation, Berkshire operated at an overall loss, and its net worth shrunk by 37%.

Meanwhile, the company closed nine plants, sometimes using the liquidation proceeds to repurchase shares. And that pattern caught my attention.

I purchased BPL's first shares of Berkshire in December 1962, anticipating more closings and more repurchases. The stock was then selling for $7.50, a wide discount from per-share working capital of $10.25 and book value of $20.20. Buying the stock at that price was like picking up a discarded cigar butt that had one puff remaining in it. Though the stub might be ugly and soggy, the puff would be free. Once that momentary pleasure was enjoyed, however, no more could be expected.

Berkshire thereafter stuck to the script: It soon closed another two plants, and in that May 1964 move, set out to repurchase shares with the shutdown proceeds. The price that Stanton offered was 50% above the cost of our original purchases. There it was – my free puff, just waiting for me, after which I could look elsewhere for other discarded butts.

Instead, irritated by Stanton's chiseling, I ignored his offer and began to aggressively buy more Berkshire shares.

By April 1965, BPL owned 392,633 shares (out of 1,017,547 then outstanding) and at an early-May board meeting we formally took control of the company. Through Seabury's and my childish behavior – after all, what was an eighth of a point to either of us? – he lost his job, and I found myself with more than 25% of BPL's capital invested in a terrible business about which I knew very little. I became the dog who caught the car.

Because of Berkshire's operating losses and share repurchases, its net worth at the end of fiscal 1964 had fallen to $22 million from $55 million at the time of the 1955 merger. The full $22 million was required by the textile operation: The company had no excess cash and owed its bank $2.5 million. (Berkshire's 1964 annual report is reproduced on pages 130-142.)

For a time I got lucky: Berkshire immediately enjoyed two years of good operating conditions. Better yet, its earnings in those years were free of income tax because it possessed a large loss carry-forward that had arisen from the disastrous results in earlier years.

Then the honeymoon ended. During the 18 years following 1966, we struggled unremittingly with the textile business, all to no avail. But stubbornness – stupidity? – has its limits. In 1985, I finally threw in the towel and closed the operation.

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Undeterred by my first mistake of committing much of BPL's resources to a dying business, I quickly compounded the error. Indeed, my second blunder was far more serious than the first, eventually becoming the most costly in my career.

Early in 1967, I had Berkshire pay $8.6 million to buy National Indemnity Company ("NICO"), a small but promising Omaha-based insurer. (A tiny sister company was also included in the deal.) Insurance was in my sweet spot: I understood and liked the industry.

Jack Ringwalt, the owner of NICO, was a long-time friend who wanted to sell to me – me, personally. In no way was his offer intended for Berkshire. So why did I purchase NICO for Berkshire rather than for BPL? I've had 48 years to think about that question, and I've yet to come up with a good answer. I simply made a colossal mistake.

If BPL had been the purchaser, my partners and I would have owned 100% of a fine business, destined to form the base for building the company Berkshire has become. Moreover, our growth would not have been impeded for nearly two decades by the unproductive funds imprisoned in the textile operation. Finally, our subsequent acquisitions would have been owned in their entirety by my partners and me rather than being 39%-owned by the legacy shareholders of Berkshire, to whom we had no obligation. Despite these facts staring me in the face, I opted to marry 100% of an excellent business (NICO) to a 61%-owned terrible business (Berkshire Hathaway), a decision that eventually diverted $100 billion or so from BPL partners to a collection of strangers.

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One more confession and then I'll go on to more pleasant topics: Can you believe that in 1975 I bought Waumbec Mills, another New England textile company? Of course, the purchase price was a "bargain" based on the assets we received and the *projected* synergies with Berkshire's existing textile business. Nevertheless – surprise, surprise – Waumbec was a disaster, with the mill having to be closed down not many years later.

And now some good news: The northern textile industry is finally extinct. You need no longer panic if you hear that I've been spotted wandering around New England.

Charlie Straightens Me Out

My cigar-butt strategy worked very well while I was managing small sums. Indeed, the many dozens of free puffs I obtained in the 1950s made that decade by far the best of my life for both relative and absolute investment performance.

Even then, however, I made a few exceptions to cigar butts, the most important being GEICO. Thanks to a 1951 conversation I had with Lorimer Davidson, a wonderful man who later became CEO of the company, I learned that GEICO was a terrific business and promptly put 65% of my $9,800 net worth into its shares. Most of my gains in those early years, though, came from investments in mediocre companies that traded at bargain prices. Ben Graham had taught me that technique, and it worked.

But a major weakness in this approach gradually became apparent: Cigar-butt investing was scalable only to a point. With large sums, it would never work well.

In addition, though marginal businesses purchased at cheap prices may be attractive as short-term investments, they are the wrong foundation on which to build a large and enduring enterprise. Selecting a marriage partner clearly requires more demanding criteria than does dating. (Berkshire, it should be noted, would have been a highly satisfactory "date": If we had taken Seabury Stanton's $11.375 offer for our shares, BPL's weighted annual return on its Berkshire investment would have been about 40%.)

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It took Charlie Munger to break my cigar-butt habits and set the course for building a business that could combine huge size with satisfactory profits. Charlie had grown up a few hundred feet from where I now live and as a youth had worked, as did I, in my grandfather's grocery store. Nevertheless, it was 1959 before I met Charlie, long after he had left Omaha to make Los Angeles his home. I was then 28 and he was 35. The Omaha doctor who introduced us predicted that we would hit it off – and we did.

If you've attended our annual meetings, you know Charlie has a wide-ranging brilliance, a prodigious memory, and some firm opinions. I'm not exactly wishy-washy myself, and we sometimes don't agree. In 56 years, however, we've never had an argument. When we differ, Charlie usually ends the conversation by saying: "Warren, think it over and you'll agree with me because you're smart and I'm right."

What most of you do *not* know about Charlie is that architecture is among his passions. Though he began his career as a practicing lawyer (with his time billed at $15 per hour), Charlie made his first real money in his 30s by designing and building five apartment projects near Los Angeles. Concurrently, he designed the house that he lives in today – some 55 years later. (Like me, Charlie can't be budged if he is happy in his surroundings.) In recent years, Charlie has designed large dorm complexes at Stanford and the University of Michigan and today, at age 91, is working on another major project.

From my perspective, though, Charlie's most important architectural feat was the design of today's Berkshire. The blueprint he gave me was simple: Forget what you know about buying fair businesses at wonderful prices; instead, buy wonderful businesses at fair prices.

Altering my behavior is not an easy task (ask my family). I had enjoyed reasonable success without Charlie's input, so why should I listen to a lawyer who had never spent a day in business school (when – ahem – *I* had attended *three*). But Charlie never tired of repeating his maxims about business and investing to me, and his logic was irrefutable. Consequently, Berkshire has been built to Charlie's blueprint. My role has been that of general contractor, with the CEOs of Berkshire's subsidiaries doing the real work as sub-contractors.

The year 1972 was a turning point for Berkshire (though not without occasional backsliding on my part – remember my 1975 purchase of Waumbec). We had the opportunity then to buy See's Candy for Blue Chip Stamps, a company in which Charlie, I and Berkshire had major stakes, and which was later merged into Berkshire.

See's was a legendary West Coast manufacturer and retailer of boxed chocolates, then annually earning about $4 million pre-tax while utilizing only $8 million of net tangible assets. Moreover, the company had a huge asset that did not appear on its balance sheet: a broad and durable competitive advantage that gave it significant pricing power. That strength was virtually certain to give See's major gains in earnings over time. Better yet, these would materialize with only minor amounts of incremental investment. In other words, See's could be expected to gush cash for decades to come.

The family controlling See's wanted $30 million for the business, and Charlie rightly said it was worth that much. But I didn't want to pay more than $25 million and wasn't all that enthusiastic even at that figure. (A price that was three times net tangible assets made me gulp.) My misguided caution could have scuttled a terrific purchase. But, luckily, the sellers decided to take our $25 million bid.

To date, See's has earned $1.9 billion pre-tax, with its growth having required added investment of only $40 million. See's has thus been able to distribute huge sums that have helped Berkshire buy other businesses that, in turn, have themselves produced large distributable profits. (Envision rabbits breeding.) Additionally, through watching See's in action, I gained a business education about the value of powerful brands that opened my eyes to many other profitable investments.

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Even with Charlie's blueprint, I have made plenty of mistakes since Waumbec. The most gruesome was Dexter Shoe. When we purchased the company in 1993, it had a terrific record and in no way looked to me like a cigar butt. Its competitive strengths, however, were soon to evaporate because of foreign competition. And I simply didn't see that coming.

Consequently, Berkshire paid $433 million for Dexter and, rather promptly, its value went to zero. GAAP accounting, however, doesn't come close to recording the magnitude of my error. The fact is that I gave Berkshire stock to the sellers of Dexter rather than cash, and the shares I used for the purchase are now worth about $5.7 billion. As a financial disaster, this one deserves a spot in the Guinness Book of World Records.

Several of my subsequent errors also involved the use of Berkshire shares to purchase businesses whose earnings were destined to simply limp along. Mistakes of that kind are deadly. Trading shares of a wonderful business – which Berkshire most certainly is – for ownership of a so-so business irreparably destroys value.

We've also suffered financially when this mistake has been committed by companies whose shares Berkshire has owned (with the errors sometimes occurring while I was serving as a director). Too often CEOs seem blind to an elementary reality: The intrinsic value of the shares you give in an acquisition must not be greater than the intrinsic value of the business you receive.

I've yet to see an investment banker quantify this all-important math when he is presenting a stock-for-stock deal to the board of a potential acquirer. Instead, the banker's focus will be on describing "customary" premiums-to-market-price that are currently being paid for acquisitions – an absolutely asinine way to evaluate the attractiveness of an acquisition – or whether the deal will increase the acquirer's earnings-per-share (which in itself should be far from determinative). In striving to achieve the desired per-share number, a panting CEO and his "helpers" will often conjure up fanciful "synergies." (As a director of 19 companies over the years, I've never heard "dis-synergies" mentioned, though I've witnessed plenty of these once deals have closed.) Post mortems of acquisitions, in which reality is honestly compared to the original projections, are rare in American boardrooms. They should instead be standard practice.

I can promise you that long after I'm gone, Berkshire's CEO and Board will carefully make intrinsic value calculations before issuing shares in any acquisitions. You can't get rich trading a hundred-dollar bill for eight tens (even if your advisor has handed you an expensive "fairness" opinion endorsing that swap).

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Overall, Berkshire's acquisitions have worked out well – and *very* well in the case of a few large ones. So, too, have our investments in marketable securities. The latter are always valued on our balance sheet at their market prices so any gains – including those unrealized – are immediately reflected in our net worth. But the businesses we buy outright are never revalued upward on our balance sheet, even when we could sell them for many billions of dollars more than their carrying value. The unrecorded gains in the value of Berkshire's subsidiaries have become huge, with these growing at a particularly fast pace in the last decade.

Listening to Charlie has paid off.

Berkshire Today

Berkshire is now a sprawling conglomerate, constantly trying to sprawl further.

Conglomerates, it should be acknowledged, have a terrible reputation with investors. And they richly deserve it. Let me first explain why they are in the doghouse, and then I will go on to describe why the conglomerate form brings huge and enduring advantages to Berkshire.

Since I entered the business world, conglomerates have enjoyed several periods of extreme popularity, the silliest of which occurred in the late 1960s. The drill for conglomerate CEOs then was simple: By personality, promotion or dubious accounting – and often by all three – these managers drove a fledgling conglomerate's stock to, say, 20 times earnings and then issued shares as fast as possible to acquire another business selling at ten-or-so times earnings. They immediately applied "pooling" accounting to the acquisition, which – with not a dime's worth of change in the underlying businesses – automatically increased per-share earnings, and used the rise as proof of managerial genius. They next explained to investors that this sort of talent justified the maintenance, or even the enhancement, of the acquirer's p/e multiple. And, finally, they promised to endlessly repeat this procedure and thereby create ever-increasing per-share earnings.

Wall Street's love affair with this hocus-pocus intensified as the 1960s rolled by. The Street's denizens are always ready to suspend disbelief when dubious maneuvers are used to manufacture rising per-share earnings, particularly if these acrobatics produce mergers that generate huge fees for investment bankers. Auditors willingly sprinkled their holy water on the conglomerates' accounting and sometimes even made suggestions as to how to further juice the numbers. For many, gushers of easy money washed away ethical sensitivities.

Since the per-share earnings gains of an expanding conglomerate came from exploiting p/e differences, its CEO had to search for businesses selling at low multiples of earnings. These, of course, were characteristically mediocre businesses with poor long-term prospects. This incentive to bottom-fish usually led to a conglomerate's collection of underlying businesses becoming more and more junky. That mattered little to investors: It was deal velocity and pooling accounting they looked to for increased earnings.

The resulting firestorm of merger activity was fanned by an adoring press. Companies such as ITT, Litton Industries, Gulf & Western, and LTV were lionized, and their CEOs became celebrities. (These once-famous conglomerates are now long gone. As Yogi Berra said, "Every Napoleon meets his Watergate.")

Back then, accounting shenanigans of all sorts – many of them ridiculously transparent – were excused or overlooked. Indeed, having an accounting wizard at the helm of an expanding conglomerate was viewed as a huge plus: Shareholders in those instances could be sure that *reported* earnings would never disappoint, no matter how bad the operating realities of the business might become.

In the late 1960s, I attended a meeting at which an acquisitive CEO bragged of his "bold, imaginative accounting." Most of the analysts listening responded with approving nods, seeing themselves as having found a manager whose forecasts were certain to be met, whatever the business results might be.

Eventually, however, the clock struck twelve, and everything turned to pumpkins and mice. Once again, it became evident that business models based on the serial issuances of overpriced shares – just like chain-letter models – most assuredly redistribute wealth, but in no way create it. Both phenomena, nevertheless, periodically blossom in our country – they are every promoter's dream – though often they appear in a carefully-crafted disguise. The ending is always the same: Money flows from the gullible to the fraudster. And with stocks, unlike chain letters, the sums hijacked can be staggering.

At both BPL and Berkshire, we have *never* invested in companies that are hell-bent on issuing shares. That behavior is one of the surest indicators of a promotion-minded management, weak accounting, a stock that is overpriced and – all too often – outright dishonesty.

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So what do Charlie and I find so attractive about Berkshire's conglomerate structure? To put the case simply: If the conglomerate form is used judiciously, it is an ideal structure for maximizing long-term capital growth.

One of the heralded virtues of capitalism is that it efficiently allocates funds. The argument is that markets will direct investment to promising businesses and deny it to those destined to wither. That is true: With all its excesses, market-driven allocation of capital is usually far superior to any alternative.

Nevertheless, there are often obstacles to the rational movement of capital. As those 1954 Berkshire minutes made clear, capital withdrawals within the textile industry that should have been obvious were delayed for decades because of the vain hopes and self-interest of managements. Indeed, I myself delayed abandoning our obsolete textile mills for far too long.

A CEO with capital employed in a declining operation seldom elects to massively redeploy that capital into unrelated activities. A move of that kind would usually require that long-time associates be fired and mistakes be admitted. Moreover, it's unlikely *that* CEO would be the manager you would wish to handle the redeployment job even if he or she was inclined to undertake it.

At the shareholder level, taxes and frictional costs weigh heavily on individual investors when they attempt to reallocate capital among businesses and industries. Even tax-free institutional investors face major costs as they move capital because they usually need intermediaries to do this job. A lot of mouths with expensive tastes then clamor to be fed – among them investment bankers, accountants, consultants, lawyers and such capital-reallocators as leveraged buyout operators. Money-shufflers don't come cheap.

In contrast, a conglomerate such as Berkshire is perfectly positioned to allocate capital rationally and at minimal cost. Of course, form itself is no guarantee of success: We have made plenty of mistakes, and we will make more. Our structural advantages, however, are formidable.

At Berkshire, we can – without incurring taxes or much in the way of other costs – move huge sums from businesses that have limited opportunities for incremental investment to other sectors with greater promise. Moreover, we are free of historical biases created by lifelong association with a given industry and are not subject to pressures from colleagues having a vested interest in maintaining the status quo. That's important: If horses had controlled investment decisions, there would have been no auto industry.

Another major advantage we possess is the ability to buy *pieces* of wonderful businesses – a.k.a. common stocks. That's not a course of action open to most managements. Over our history, this strategic alternative has proved to be very helpful; a broad range of options always sharpens decision-making. The businesses we are offered by the stock market every day – in small pieces, to be sure – are often far more attractive than the businesses we are concurrently being offered in their entirety. Additionally, the gains we've realized from marketable securities have helped us make certain large acquisitions that would otherwise have been beyond our financial capabilities.

In effect, the world is Berkshire's oyster – a world offering us a range of opportunities far beyond those realistically open to most companies. We are limited, of course, to businesses whose economic prospects we can evaluate. And that's a serious limitation: Charlie and I have no idea what a great many companies will look like ten years from now. But that limitation is much smaller than that borne by an executive whose experience has been confined to a single industry. On top of that, we can profitably scale to a *far* larger size than the many businesses that are constrained by the limited potential of the single industry in which they operate.

I mentioned earlier that See's Candy had produced huge earnings compared to its modest capital requirements. We would have loved, of course, to intelligently use those funds to expand our candy operation. But our many attempts to do so were largely futile. So, without incurring tax inefficiencies or frictional costs, we have used the excess funds generated by See's to help purchase other businesses. If See's had remained a stand-alone company, its earnings would have had to be distributed to investors to redeploy, sometimes after being heavily depleted by large taxes and, almost always, by significant frictional and agency costs.

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Berkshire has one further advantage that has become increasingly important over the years: We are now the home of choice for the owners and managers of many outstanding businesses.

Families that own successful businesses have multiple options when they contemplate sale. Frequently, the best decision is to do nothing. There are worse things in life than having a prosperous business that one understands well. But sitting tight is seldom recommended by Wall Street. (Don't ask the barber whether you need a haircut.)

When one part of a family wishes to sell while others wish to continue, a public offering often makes sense. But, when owners wish to cash out entirely, they usually consider one of two paths.

The first is sale to a competitor who is salivating at the possibility of wringing "synergies" from the combining of the two companies. This buyer invariably contemplates getting rid of large numbers of the seller's associates, the very people who have helped the owner build his business. A caring owner, however – and there are plenty of them – usually does not want to leave his long-time associates sadly singing the old country song: "*She got the goldmine, I got the shaft.*"

The second choice for sellers is the Wall Street buyer. For some years, these purchasers accurately called themselves "leveraged buyout firms." When that term got a bad name in the early 1990s – remember RJR and *Barbarians at the Gate*? – these buyers hastily relabeled themselves "private-equity."

The name may have changed but that was all: Equity is dramatically *reduced* and debt is piled on in virtually all private-equity purchases. Indeed, the amount that a private-equity purchaser offers to the seller is in part determined by the buyer assessing the *maximum* amount of debt that can be placed on the acquired company.

Later, if things go well and equity begins to build, leveraged buy-out shops will often seek to re-leverage with new borrowings. They then typically use part of the proceeds to pay a huge dividend that drives equity sharply downward, sometimes even to a negative figure.

In truth, "equity" is a dirty word for many private-equity buyers; what they love is debt. And, because debt is currently so inexpensive, these buyers can frequently pay top dollar. Later, the business will be resold, often to another leveraged buyer. In effect, the business becomes a piece of merchandise.

Berkshire offers a third choice to the business owner who wishes to sell: a permanent home, in which the company's people and culture will be retained (though, occasionally, management changes will be needed). Beyond that, any business we acquire dramatically increases its financial strength and ability to grow. Its days of dealing with banks and Wall Street analysts are also forever ended.

Some sellers don't care about these matters. But, when sellers do, Berkshire does not have a lot of competition.

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Sometimes pundits propose that Berkshire spin-off certain of its businesses. These suggestions make no sense. Our companies are worth more as part of Berkshire than as separate entities. One reason is our ability to move funds between businesses or into new ventures instantly and without tax. In addition, certain costs duplicate themselves, in full or part, if operations are separated. Here's the most obvious example: Berkshire incurs nominal costs for its single board of directors; were our dozens of subsidiaries to be split off, the overall cost for directors would soar. So, too, would regulatory and administration expenditures.

Finally, there are sometimes important tax efficiencies for Subsidiary A because we own Subsidiary B. For example, certain tax credits that are available to our utilities are currently realizable only because we generate huge amounts of taxable income at other Berkshire operations. That gives Berkshire Hathaway Energy a major advantage over most public-utility companies in developing wind and solar projects.

Investment bankers, being paid as they are for action, constantly urge acquirers to pay 20% to 50% premiums over market price for publicly-held businesses. The bankers tell the buyer that the premium is justified for "control value" and for the wonderful things that are going to happen once the acquirer's CEO takes charge. (What acquisition-hungry manager will challenge *that* assertion?)

A few years later, bankers – bearing straight faces – again appear and just as earnestly urge spinning off the earlier acquisition in order to "unlock shareholder value." Spin-offs, of course, strip the owning company of its purported "control value" without any compensating payment. The bankers explain that the spun-off company will flourish because its management will be more entrepreneurial, having been freed from the smothering bureaucracy of the parent company. (So much for that talented CEO we met earlier.)

If the divesting company later wishes to reacquire the spun-off operation, it presumably would again be urged by its bankers to pay a hefty "control" premium for the privilege. (Mental "flexibility" of this sort by the banking fraternity has prompted the saying that fees too often lead to transactions rather than transactions leading to fees.)

It's possible, of course, that someday a spin-off or sale at Berkshire would be required by regulators. Berkshire carried out such a spin-off in 1979, when new regulations for bank holding companies forced us to divest a bank we owned in Rockford, Illinois.

Voluntary spin-offs, though, make no sense for us: We would lose control value, capital-allocation flexibility and, in some cases, important tax advantages. The CEOs who brilliantly run our subsidiaries now would have difficulty in being as effective if running a spun-off operation, given the operating and financial advantages derived from Berkshire's ownership. Moreover, the parent and the spun-off operations, once separated, would likely incur moderately greater costs than existed when they were combined.

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Before I depart the subject of spin-offs, let's look at a lesson to be learned from a conglomerate mentioned earlier: LTV. I'll summarize here, but those who enjoy a good financial story should read the piece about Jimmy Ling that ran in the October 1982 issue of *D Magazine*. Look it up on the Internet.

Through a lot of corporate razzle-dazzle, Ling had taken LTV from sales of only $36 million in 1965 to number 14 on the Fortune 500 list just two years later. Ling, it should be noted, had never displayed any managerial skills. But Charlie told me long ago to never underestimate the man who overestimates himself. And Ling had no peer in that respect.

Ling's strategy, which he labeled "project redeployment," was to buy a large company and then partially spin off its various divisions. In LTV's 1966 annual report, he explained the magic that would follow: "Most importantly, acquisitions must meet the test of the 2 plus 2 equals 5 (or 6) formula." The press, the public and Wall Street loved this sort of talk.

In 1967 Ling bought Wilson & Co., a huge meatpacker that also had interests in golf equipment and pharmaceuticals. Soon after, he split the parent into three businesses, Wilson & Co. (meatpacking), Wilson Sporting Goods and Wilson Pharmaceuticals, each of which was to be partially spun off. These companies quickly became known on Wall Street as Meatball, Golf Ball and Goof Ball.

Soon thereafter, it became clear that, like Icarus, Ling had flown too close to the sun. By the early 1970s, Ling's empire was melting, and he himself had been spun off from LTV . . . that is, *fired*.

Periodically, financial markets will become divorced from reality – you can count on that. More Jimmy Lings will appear. They will look and sound authoritative. The press will hang on their every word. Bankers will fight for their business. What they are saying will recently have "worked." Their early followers will be feeling very clever. Our suggestion: Whatever their line, never forget that 2+2 will always equal 4. And when someone tells you how old-fashioned that math is --- zip up your wallet, take a vacation and come back in a few years to buy stocks at cheap prices.

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Today Berkshire possesses (1) an unmatched collection of businesses, most of them now enjoying favorable economic prospects; (2) a cadre of outstanding managers who, with few exceptions, are unusually devoted to both the subsidiary they operate *and* to Berkshire; (3) an extraordinary diversity of earnings, premier financial strength and oceans of liquidity that we will maintain under *all* circumstances; (4) a first-choice ranking among many owners and managers who are contemplating sale of their businesses and (5) in a point related to the preceding item, a culture, distinctive in many ways from that of most large companies, that we have worked 50 years to develop and that is now rock-solid.

These strengths provide us a wonderful foundation on which to build.

The Next 50 Years at Berkshire

Now let's take a look at the road ahead. Bear in mind that if I had attempted 50 years ago to gauge what was coming, certain of my predictions would have been far off the mark. With that warning, I will tell you what I would say to my family today if they asked me about Berkshire's future.

- First and definitely foremost, I believe that the chance of permanent capital loss for patient Berkshire shareholders is as low as can be found among single-company investments. That's because our per-share *intrinsic business value* is almost certain to advance over time.

  This cheery prediction comes, however, with an important caution: If an investor's entry point into Berkshire stock is unusually high – at a price, say, approaching double book value, which Berkshire shares have occasionally reached – it may well be many years before the investor can realize a profit. In other words, a sound investment can morph into a rash speculation if it is bought at an elevated price. Berkshire is not exempt from this truth.

  Purchases of Berkshire that investors make at a price modestly above the level at which the company would repurchase its shares, however, should produce gains within a reasonable period of time. Berkshire's directors will only authorize repurchases at a price they believe to be *well below* intrinsic value. (In our view, that is an essential criterion for repurchases that is often ignored by other managements.)

  For those investors who plan to sell within a year or two after their purchase, I can offer *no* assurances, whatever the entry price. Movements of the general stock market during such abbreviated periods will likely be far more important in determining your results than the concomitant change in the intrinsic value of your Berkshire shares. As Ben Graham said many decades ago: "In the short-term the market is a voting machine; in the long-run it acts as a weighing machine." Occasionally, the voting decisions of investors – amateurs and professionals alike – border on lunacy.

  Since I know of no way to reliably predict market movements, I recommend that you purchase Berkshire shares *only* if you expect to hold them for at least five years. Those who seek short-term profits should look elsewhere.

  Another warning: Berkshire shares should not be purchased with borrowed money. There have been three times since 1965 when our stock has fallen about 50% from its high point. Someday, something close to this kind of drop will happen again, and no one knows when. Berkshire will almost certainly be a satisfactory holding for *investors*. But it could well be a disastrous choice for speculators employing leverage.

- I believe the chance of any event causing Berkshire to experience financial problems is essentially zero. We will always be prepared for the thousand-year flood; in fact, if it occurs we will be selling life jackets to the unprepared. Berkshire played an important role as a "first responder" during the 2008-2009 meltdown, and we have since more than doubled the strength of our balance sheet and our earnings potential. Your company is the Gibraltar of American business and will remain so.

  Financial staying power requires a company to maintain three strengths under *all* circumstances: (1) a large and reliable stream of earnings; (2) massive liquid assets and (3) *no* significant near-term cash requirements. Ignoring that last necessity is what usually leads companies to experience unexpected problems: Too often, CEOs of profitable companies feel they will always be able to refund maturing obligations, however large these are. In 2008-2009, many managements learned how perilous that mindset can be.

  Here's how we will *always* stand on the three essentials. First, our earnings stream is huge and comes from a vast array of businesses. Our shareholders now own many large companies that have durable competitive advantages, and we will acquire more of those in the future. Our diversification assures Berkshire's continued profitability, even if a catastrophe causes insurance losses that far exceed any previously experienced.

Next up is cash. At a healthy business, cash is sometimes thought of as something to be minimized – as an unproductive asset that acts as a drag on such markers as return on equity. Cash, though, is to a business as oxygen is to an individual: never thought about when it is present, the only thing in mind when it is absent.

American business provided a case study of that in 2008. In September of that year, many long-prosperous companies suddenly wondered whether their checks would bounce in the days ahead. Overnight, their financial oxygen disappeared.

At Berkshire, our "breathing" went uninterrupted. Indeed, in a three-week period spanning late September and early October, we supplied $15.6 *billion* of fresh money to American businesses.

We could do that because we always maintain at least $20 billion – and usually far more – in cash equivalents. And by that we mean U.S. Treasury bills, not other substitutes for cash that are claimed to deliver liquidity and actually do so, *except* when it is truly needed. When bills come due, only cash is legal tender. Don't leave home without it.

Finally – getting to our third point – we will never engage in operating or investment practices that can result in sudden demands for large sums. That means we will not expose Berkshire to short-term debt maturities of size nor enter into derivative contracts or other business arrangements that could require large collateral calls.

Some years ago, we became a party to certain derivative contracts that we believed were significantly mispriced and that had only minor collateral requirements. These have proved to be quite profitable. Recently, however, newly-written derivative contracts have required full collateralization. And that ended our interest in derivatives, regardless of what profit potential they might offer. We have not, for some years, written these contracts, except for a few needed for operational purposes at our utility businesses.

Moreover, we will not write insurance contracts that give policyholders the right to cash out at their option. Many *life* insurance products contain redemption features that make them susceptible to a "run" in times of extreme panic. Contracts of that sort, however, do not exist in the property-casualty world that we inhabit. If our premium volume should shrink, our float would decline – but only at a very slow pace.

The reason for our conservatism, which may impress some people as extreme, is that it is entirely predictable that people will occasionally panic, but not at all predictable when this will happen. Though practically all days are relatively uneventful, tomorrow is *always* uncertain. (I felt no special apprehension on December 6, 1941 or September 10, 2001.) And if you can't predict what tomorrow will bring, you must be prepared for whatever it does.

A CEO who is 64 and plans to retire at 65 may have his own special calculus in evaluating risks that have only a tiny chance of happening in a given year. He may, in fact, be "right" 99% of the time. Those odds, however, hold no appeal for us. We will never play financial Russian roulette with the funds you've entrusted to us, even if the metaphorical gun has 100 chambers and only one bullet. In our view, it is madness to risk losing what you *need* in pursuing what you simply *desire*.

- Despite our conservatism, I think we will be able *every* year to build the underlying per-share earning power of Berkshire. That does *not* mean operating earnings will increase each year – far from it. The U.S. economy will ebb and flow – though mostly flow – and, when it weakens, so will our current earnings. But we will continue to achieve organic gains, make bolt-on acquisitions and enter new fields. I believe, therefore, that Berkshire will annually add to its *underlying* earning power.

  In some years the gains will be substantial, and at other times they will be minor. Markets, competition, and chance will determine when opportunities come our way. Through it all, Berkshire will keep moving forward, powered by the array of solid businesses we now possess and the new companies we will purchase. In most years, moreover, our country's economy will provide a strong tailwind for business. We are blessed to have the United States as our home field.

- The bad news is that Berkshire's long-term gains – measured by percentages, not by dollars – cannot be dramatic and *will not come close* to those achieved in the past 50 years. The numbers have become too big. I think Berkshire will outperform the average American company, but our advantage, if any, won't be great.

  Eventually – probably between ten and twenty years from now – Berkshire's earnings and capital resources will reach a level that will not allow management to intelligently reinvest all of the company's earnings. At that time our directors will need to determine whether the best method to distribute the excess earnings is through dividends, share repurchases or both. If Berkshire shares are selling below intrinsic business value, massive repurchases will almost certainly be the best choice. You can be comfortable that your directors will make the right decision.

- No company will be more shareholder-minded than Berkshire. For more than 30 years, we have annually reaffirmed our Shareholder Principles (see page 117), always leading off with: "Although our form is corporate, our attitude is partnership." This covenant with you is etched in stone.

  We have an extraordinarily knowledgeable and business-oriented board of directors ready to carry out that promise of partnership. None took the job for the money: In an arrangement almost non-existent elsewhere, our directors are paid only token fees. They receive their rewards instead through ownership of Berkshire shares and the satisfaction that comes from being good stewards of an important enterprise.

  The shares that they and their families own – which, in many cases, are worth very substantial sums – were *purchased* in the market (rather than their materializing through options or grants). In addition, unlike almost all other sizable public companies, we carry no directors and officers liability insurance. At Berkshire, directors walk in your shoes.

  To further ensure continuation of our culture, I have suggested that my son, Howard, succeed me as a *non-executive* Chairman. My only reason for this wish is to make change easier if the wrong CEO should ever be employed and there occurs a need for the Chairman to move forcefully. I can assure you that this problem has a *very* low probability of arising at Berkshire – likely as low as at any public company. In my service on the boards of nineteen public companies, however, I've seen how hard it is to replace a mediocre CEO if that person is also Chairman. (The deed usually gets done, but almost always very late.)

  If elected, Howard will receive no pay and will spend no time at the job other than that required of all directors. He will simply be a safety valve to whom any director can go if he or she has concerns about the CEO and wishes to learn if other directors are expressing doubts as well. Should multiple directors be apprehensive, Howard's chairmanship will allow the matter to be promptly and properly addressed.

- Choosing the right CEO is all-important and is a subject that commands much time at Berkshire board meetings. Managing Berkshire is primarily a job of capital allocation, coupled with the selection and retention of outstanding managers to captain our operating subsidiaries. Obviously, the job also requires the replacement of a subsidiary's CEO when that is called for. These duties require Berkshire's CEO to be a rational, calm and decisive individual who has a broad understanding of business and good insights into human behavior. It's important as well that he knows his limits. (As Tom Watson, Sr. of IBM said, "I'm no genius, but I'm smart in spots and I stay around those spots.")

  Character is crucial: A Berkshire CEO must be "all in" for the company, not for himself. (I'm using male pronouns to avoid awkward wording, but gender should never decide who becomes CEO.) He can't help but earn money far in excess of any possible need for it. But it's important that neither ego nor avarice motivate him to reach for pay matching his most lavishly-compensated peers, even if his achievements far exceed theirs. A CEO's behavior has a huge impact on managers down the line: If it's clear to them that shareholders' interests are paramount to him, they will, with few exceptions, also embrace that way of thinking.

My successor will need one other particular strength: the ability to fight off the ABCs of business decay, which are arrogance, bureaucracy and complacency. When these corporate cancers metastasize, even the strongest of companies can falter. The examples available to prove the point are legion, but to maintain friendships I will exhume only cases from the distant past.

In their glory days, General Motors, IBM, Sears Roebuck and U.S. Steel sat atop huge industries. Their strengths seemed unassailable. But the destructive behavior I deplored above eventually led each of them to fall to depths that their CEOs and directors had not long before thought impossible. Their one-time financial strength and their historical earning power proved no defense.

Only a vigilant and determined CEO can ward off such debilitating forces as Berkshire grows ever larger. He must never forget Charlie's plea: "Tell me where I'm going to die, so I'll never go there." If our non-economic values were to be lost, much of Berkshire's economic value would collapse as well. "Tone at the top" will be key to maintaining Berkshire's special culture.

Fortunately, the structure our future CEOs will need to be successful is firmly in place. The extraordinary delegation of authority now existing at Berkshire is the ideal antidote to bureaucracy. In an operating sense, Berkshire is not a giant company but rather a collection of large companies. At headquarters, we have never had a committee nor have we ever required our subsidiaries to submit budgets (though many use them as an important internal tool). We don't have a legal office nor departments that other companies take for granted: human relations, public relations, investor relations, strategy, acquisitions, you name it.

We do, of course, have an active audit function; no sense being a dammed fool. To an unusual degree, however, we trust our managers to run their operations with a keen sense of stewardship. After all, they were doing exactly that before we acquired their businesses. With only occasional exceptions, furthermore, our trust produces better results than would be achieved by streams of directives, endless reviews and layers of bureaucracy. Charlie and I try to interact with our managers in a manner consistent with what we would wish for, if the positions were reversed.

- Our directors believe that our future CEOs should come from internal candidates whom the Berkshire board has grown to know well. Our directors also believe that an incoming CEO should be relatively young, so that he or she can have a long run in the job. Berkshire will operate best if its CEOs average well over ten years at the helm. (It's hard to teach a new dog old tricks.) And they are not likely to retire at 65 either (or have you noticed?).

  In both Berkshire's business acquisitions and large, tailored investment moves, it is important that our counterparties be both familiar with and feel comfortable with Berkshire's CEO. Developing confidence of that sort and cementing relationships takes time. The payoff, though, can be huge.

  Both the board and I believe we now have the right person to succeed me as CEO – a successor ready to assume the job the day after I die or step down. In certain important respects, this person will do a better job than I am doing.

- Investments will always be of great importance to Berkshire and will be handled by several specialists. They will report to the CEO because their investment decisions, in a broad way, will need to be coordinated with Berkshire's operating and acquisition programs. Overall, though, our investment managers will enjoy great autonomy. In this area, too, we are in fine shape for decades to come. Todd Combs and Ted Weschler, each of whom has spent several years on Berkshire's investment team, are first-rate in all respects and can be of particular help to the CEO in evaluating acquisitions.

  All told, Berkshire is ideally positioned for life after Charlie and I leave the scene. We have the right people in place – the right directors, managers and prospective successors to those managers. Our culture, furthermore, is embedded throughout their ranks. Our system is also regenerative. To a large degree, both good and bad cultures self-select to perpetuate themselves. For very good reasons, business owners and operating managers with values similar to ours will continue to be attracted to Berkshire as a one-of-a-kind and *permanent* home.

- I would be remiss if I didn't salute another key constituency that makes Berkshire special: our shareholders. Berkshire truly has an owner base unlike that of any other giant corporation. That fact was demonstrated in spades at last year's annual meeting, where the shareholders were offered a proxy resolution:

  > RESOLVED: Whereas the corporation has more money than it needs and since the owners unlike Warren are not multi billionaires, the board shall consider paying a meaningful annual dividend on the shares.

  The sponsoring shareholder of that resolution never showed up at the meeting, so his motion was not officially proposed. Nevertheless, the proxy votes had been tallied, and they were enlightening.

  Not surprisingly, the A shares – owned by relatively few shareholders, each with a large economic interest – voted "no" on the dividend question by a margin of 89 to 1.

  The remarkable vote was that of our B shareholders. They number in the hundreds of thousands – perhaps even totaling one million – and they voted 660,759,855 "no" and 13,927,026 "yes," a ratio of about 47 to 1.

  Our directors recommended a "no" vote but the company did not otherwise attempt to influence shareholders. Nevertheless, 98% of the shares voting said, in effect, "Don't send us a dividend but instead reinvest all of the earnings." To have our fellow owners – large and small – be so in sync with our managerial philosophy is both remarkable and rewarding.

  I am a lucky fellow to have you as partners.

Warren E. Buffett

Vice Chairman's Thoughts – Past and Future

To the shareholders of Berkshire Hathaway Inc.:

I closely watched the 50-year history of Berkshire's uncommon success under Warren Buffett. And it now seems appropriate that I independently supplement whatever celebratory comment comes from him. I will try to do five things.

(1) Describe the management system and policies that caused a small and unfixably-doomed commodity textile business to morph into the mighty Berkshire that now exists,

(2) Explain how the management system and policies came into being,

(3) Explain, to some extent, why Berkshire did so well,

(4) Predict whether abnormally good results would continue if Buffett were soon to depart, and

(5) Consider whether Berkshire's great results over the last 50 years have implications that may prove useful elsewhere.

The management system and policies of Berkshire under Buffett (herein together called "the Berkshire system") were fixed early and are described below:

(1) Berkshire would be a diffuse conglomerate, averse only to activities about which it could not make useful predictions.
(2) Its top company would do almost all business through separately incorporated subsidiaries whose CEOs would operate with very extreme autonomy.
(3) There would be almost nothing at conglomerate headquarters except a tiny office suite containing a Chairman, a CFO, and a few assistants who mostly helped the CFO with auditing, internal control, etc.
(4) Berkshire subsidiaries would always prominently include casualty insurers. Those insurers as a group would be expected to produce, in due course, dependable underwriting gains while also producing substantial "float" (from unpaid insurance liabilities) for investment.
(5) There would be no significant system-wide personnel system, stock option system, other incentive system, retirement system, or the like, because the subsidiaries would have their own systems, often different.
(6) Berkshire's Chairman would reserve only a few activities for himself.

(i) He would manage almost all security investments, with these normally residing in Berkshire's casualty insurers.

(ii) He would choose all CEOs of important subsidiaries, and he would fix their compensation and obtain from each a private recommendation for a successor in case one was suddenly needed.

(iii) He would deploy most cash not needed in subsidiaries after they had increased their competitive advantage, with the ideal deployment being the use of that cash to acquire new subsidiaries.

(iv) He would make himself promptly available for almost any contact wanted by any subsidiary's CEO, and he would require almost no additional contact.

(v) He would write a long, logical, and useful letter for inclusion in his annual report, designed as he would wish it to be if he were only a passive shareholder, and he would be available for hours of answering questions at annual shareholders' meetings.

(vi) He would try to be an exemplar in a culture that would work well for customers, shareholders, and other incumbents for a long time, both before and after his departure.

(vii) His first priority would be reservation of much time for quiet reading and thinking, particularly that which might advance his determined learning, no matter how old he became; and

(viii) He would also spend much time in enthusiastically admiring what others were accomplishing.

(7) New subsidiaries would usually be bought with cash, not newly issued stock.

(8) Berkshire would not pay dividends so long as more than one dollar of market value for shareholders was being created by each dollar of retained earnings.

(9) In buying a new subsidiary, Berkshire would seek to pay a fair price for a good business that the Chairman could pretty well understand. Berkshire would also want a good CEO in place, one expected to remain for a long time and to manage well without need for help from headquarters.

(10) In choosing CEOs of subsidiaries, Berkshire would try to secure trustworthiness, skill, energy, and love for the business and circumstances the CEO was in.

(11) As an important matter of preferred conduct, Berkshire would almost never sell a subsidiary.

(12) Berkshire would almost never transfer a subsidiary's CEO to another unrelated subsidiary.

(13) Berkshire would never force the CEO of a subsidiary to retire on account of mere age.

(14) Berkshire would have little debt outstanding as it tried to maintain (i) virtually perfect creditworthiness under all conditions and (ii) easy availability of cash and credit for deployment in times presenting unusual opportunities.

(15) Berkshire would always be user-friendly to a prospective seller of a large business. An offer of such a business would get prompt attention. No one but the Chairman and one or two others at Berkshire would ever know about the offer if it did not lead to a transaction. And they would never tell outsiders about it.

Both the elements of the Berkshire system and their collected size are quite unusual. No other large corporation I know of has half of such elements in place.

How did Berkshire happen to get a corporate personality so different from the norm?

Well, Buffett, even when only 34 years old, controlled about 45% of Berkshire's shares and was completely trusted by all the other big shareholders. He could install whatever system he wanted. And he did so, creating the Berkshire system.

Almost every element was chosen because Buffett believed that, under him, it would help maximize Berkshire's achievement. He was not trying to create a one-type-fits-all system for other corporations. Indeed, Berkshire's subsidiaries were not required to use the Berkshire system in their own operations. And some flourished while using different systems.

What was Buffett aiming at as he designed the Berkshire system?

Well, over the years I diagnosed several important themes:

(1) He particularly wanted continuous maximization of the rationality, skills, and devotion of the most important people in the system, starting with himself.
(2) He wanted win/win results everywhere--in gaining loyalty by giving it, for instance.
(3) He wanted decisions that maximized long-term results, seeking these from decision makers who usually stayed long enough in place to bear the consequences of decisions.
(4) He wanted to minimize the bad effects that would almost inevitably come from a large bureaucracy at headquarters.
(5) He wanted to personally contribute, like Professor Ben Graham, to the spread of wisdom attained.

When Buffett developed the Berkshire system, did he foresee all the benefits that followed? No. Buffett stumbled into some benefits through practice evolution. But, when he saw useful consequences, he strengthened their causes.

Why did Berkshire under Buffett do so well?

Only four large factors occur to me:

(1) The constructive peculiarities of Buffett,
(2) The constructive peculiarities of the Berkshire system,
(3) Good luck, and
(4) The weirdly intense, contagious devotion of some shareholders and other admirers, including some in the press.

I believe all four factors were present and helpful. But the heavy freight was carried by the constructive peculiarities, the weird devotion, and their interactions.

In particular, Buffett's decision to limit his activities to a few kinds and to maximize his attention to them, and to keep doing so for 50 years, was a lollapalooza. Buffett succeeded for the same reason Roger Federer became good at tennis.

Buffett was, in effect, using the winning method of the famous basketball coach, John Wooden, who won most regularly after he had learned to assign virtually all playing time to his seven best players. That way, opponents always faced his best players, instead of his second best. And, with the extra playing time, the best players improved more than was normal.

And Buffett much out-Woodened Wooden, because in his case the exercise of skill was concentrated in one person, not seven, and his skill improved and improved as he got older and older during 50 years, instead of deteriorating like the skill of a basketball player does.

Moreover, by concentrating so much power and authority in the often-long-serving CEOs of important subsidiaries, Buffett was also creating strong Wooden-type effects there. And such effects enhanced the skills of the CEOs and the achievements of the subsidiaries.

Then, as the Berkshire system bestowed much-desired autonomy on many subsidiaries and their CEOs, and Berkshire became successful and well known, these outcomes attracted both more and better subsidiaries into Berkshire, and better CEOs as well.

And the better subsidiaries and CEOs then required less attention from headquarters, creating what is often called a "virtuous circle."

How well did it work out for Berkshire to always include casualty insurers as important subsidiaries?

Marvelously well. Berkshire's ambitions were unreasonably extreme and, even so, it got what it wanted.

Casualty insurers often invest in common stocks with a value amounting roughly to their shareholders' equity, as did Berkshire's insurance subsidiaries. And the S&P 500 Index produced about 10% per annum, pre-tax, during the last 50 years, creating a significant tailwind.

And, in the early decades of the Buffett era, common stocks within Berkshire's insurance subsidiaries greatly outperformed the index, exactly as Buffett expected. And, later, when both the large size of Berkshire's stockholdings and income tax considerations caused the index-beating part of returns to fade to insignificance (perhaps not forever), other and better advantage came. Ajit Jain created out of nothing an immense reinsurance business that produced both a huge "float" and a large underwriting gain. And all of GEICO came into Berkshire, followed by a quadrupling of GEICO's market share. And the rest of Berkshire's insurance operations hugely improved, largely by dint of reputational advantage, underwriting discipline, finding and staying within good niches, and recruiting and holding outstanding people.

Then, later, as Berkshire's nearly unique and quite dependable corporate personality and large size became well known, its insurance subsidiaries got and seized many attractive opportunities, not available to others, to buy privately issued securities. Most of these securities had fixed maturities and produced outstanding results.

Berkshire's marvelous outcome in insurance was not a natural result. Ordinarily, a casualty insurance business is a producer of mediocre results, even when very well managed. And such results are of little use. Berkshire's better outcome was so astoundingly large that I believe that Buffett would now fail to recreate it if he returned to a small base while retaining his smarts and regaining his youth.

Did Berkshire suffer from being a diffuse conglomerate? No, its opportunities were usefully enlarged by a widened area for operation. And bad effects, common elsewhere, were prevented by Buffett's skills.

Why did Berkshire prefer to buy companies with cash, instead of its own stock? Well, it was hard to get anything in exchange for Berkshire stock that was as valuable as what was given up.

Why did Berkshire's acquisition of companies outside the insurance business work out so well for Berkshire shareholders when the normal result in such acquisitions is bad for shareholders of the acquirer?

Well, Berkshire, by design, had methodological advantages to supplement its better opportunities. It never had the equivalent of a "department of acquisitions" under pressure to buy. And it never relied on advice from "helpers" sure to be prejudiced in favor of transactions. And Buffett held self-delusion at bay as he underclaimed expertise while he knew better than most corporate executives what worked and what didn't in business, aided by his long experience as a passive investor. And, finally, even when Berkshire was getting much better opportunities than most others, Buffett often displayed almost inhuman patience and seldom bought. For instance, during his first ten years in control of Berkshire, Buffett saw one business (textiles) move close to death and two new businesses come in, for a net gain of one.

What were the big mistakes made by Berkshire under Buffett? Well, while mistakes of commission were common, almost all huge errors were in not making a purchase, including not purchasing Walmart stock when that was sure to work out enormously well. The errors of omission were of much importance. Berkshire's net worth would now be at least $50 billion higher if it had seized several opportunities it was not quite smart enough to recognize as virtually sure things.

The next to last task on my list was: Predict whether abnormally good results would continue at Berkshire if Buffett were soon to depart.

The answer is yes. Berkshire has in place in its subsidiaries much business momentum grounded in much durable competitive advantage.

Moreover, its railroad and utility subsidiaries now provide much desirable opportunity to invest large sums in new fixed assets. And many subsidiaries are now engaged in making wise "bolt-on" acquisitions.

Provided that most of the Berkshire system remains in place, the combined momentum and opportunity now present is so great that Berkshire would almost surely remain a better-than-normal company for a very long time even if (1) Buffett left tomorrow, (2) his successors were persons of only moderate ability, and (3) Berkshire never again purchased a large business.

But, under this Buffett-soon-leaves assumption, his successors would not be "of only moderate ability." For instance, Ajit Jain and Greg Abel are proven performers who would probably be under-described as "world-class." "World-leading" would be the description I would choose. In some important ways, each is a better business executive than Buffett.

And I believe neither Jain nor Abel would (1) leave Berkshire, no matter what someone else offered or (2) desire much change in the Berkshire system.

Nor do I think that desirable purchases of new businesses would end with Buffett's departure. With Berkshire now so large and the age of activism upon us, I think some desirable acquisition opportunities will come and that Berkshire's $60 billion in cash will constructively decrease.

My final task was to consider whether Berkshire's great results over the last 50 years have implications that may prove useful elsewhere.

The answer is plainly yes. In its early Buffett years, Berkshire had a big task ahead: turning a tiny stash into a large and useful company. And it solved that problem by avoiding bureaucracy and relying much on one thoughtful leader for a long, long time as he kept improving and brought in more people like himself.

Compare this to a typical big-corporation system with much bureaucracy at headquarters and a long succession of CEOs who come in at about age 59, pause little thereafter for quiet thought, and are soon forced out by a fixed retirement age.

I believe that versions of the Berkshire system should be tried more often elsewhere and that the worst attributes of bureaucracy should much more often be treated like the cancers they so much resemble. A good example of bureaucracy fixing was created by George Marshall when he helped win World War II by getting from Congress the right to ignore seniority in choosing generals.

Sincerely,

Charles T. Munger

Morning Session - 2015 Meeting

1. Buffett's opening joke

WARREN BUFFETT: Thank you. Thank you. Thank you.

I'm Warren; this is Charlie. He can hear. I can see. We work together. (Laughter)

In just a couple of minutes we'll move onto the questions and answers and follow the same procedures as in previous years.

2. John Landis and "Trading Places"

WARREN BUFFETT: But first, there's just a couple of special introductions I'd like to make. And I'd like to start it off with John Landis. Do we have a spotlight that we can pick out John?

John is the man that directed, conceived, et cetera, of the Floyd Mayweather fight.

And John, as you know, directed "Coming to America,"" Animal House," and the one I particularly like is "Trading Places."

If you haven't seen "Trading Places," by all means get it. It has Dan Aykroyd, and Eddie Murphy, and Charlie's favorite, Jamie Lee Curtis. (Laughter)

And it's a truly great movie.

It brought back Ralph Bellamy and Don Ameche.

Don Ameche had disappeared. Have we got a light on — can we get a light on John? Where's John? He should be right down here. (Applause)

We're going to find — over here? Come on.

Well, John, thank you, thank you, thank you. He did all that and now came to the meeting. We really appreciate it.

3. Thank you, Carrie Sova

WARREN BUFFETT: The other person I want to say — have a special thanks for — is a young, 30-year-old woman who has a 1 1/2-year-old baby at home and manages to put on this whole event with the help of hundreds that come from our various companies, and that's Carrie Sova.

I hope Carrie is here, that we can give her a thanks. (Applause)

Carrie, a few months ago, while she was already working on this meeting, I said to Carrie, "I think it would be kind of nice if we had a commemorative book, sort of a retrospective on the 50 years." And I said, "Would you mind turning out a book, you know, in your spare time during these couple months while you're putting together the meeting?"

And she put together what I think is an absolutely terrific book, which we have outside. We printed up — we thought we printed 15,000 copies, but I think there's not quite that many. We sold 5,000 yesterday and then held back copies.

But it's really a nice history of Berkshire Hathaway. And the credit, 100 percent, goes to Carrie for putting that together. So I'd just like to thank her personally and I hope you'll thank her.

4. More people than seats

WARREN BUFFETT: Now, we'll have the annual meeting at 3:30, and at that time we will be voting on directors, but many of you won't be here at that time, although we'll have a full house in here.

I should mention all of the overflow rooms in — here at the CenturyLink — are full now.

There may be seats — we've got the grand ballroom and the second ballroom over at the Hilton — and there may be some seats left over at the Hilton. So if you can't find a seat here at the CenturyLink, either here or in the overflow rooms, at least give it a try over there at the Hilton.

We've got all the rooms we could possibly get, but I think the attendance may have outrun the seats this time.

5. Berkshire directors introduced

WARREN BUFFETT: I'd like to introduce the directors, and, like I say, you'll vote on them at a little after 3:30.

And if they'll stand — and we'll get a light down here — and withhold your applause until the end, and you can withhold it then, if you would like. (Laughter)

And we'll do this alphabetically.

You've met Charlie, of course, but we'll start with Howard Buffett, Steve Burke, Sue Decker, Bill Gates, Sandy Gottesman, Charlotte Guyman, Tom Murphy, Ron Olson, Walter Scott, and Meryl Witmer. They're a great bunch of directors. (Applause)

We're missing one of our great directors, Don Keough, my neighbor from over 55 years ago.

He was a coffee salesman, then, for Butter-Nut Coffee, for those of you around Omaha.

He broadcast Nebraska football games and around 1950 had a radio show on WOW, for 15 minutes.

He was followed by a fellow named Johnny Carson, who had another 15-minute program. And Don, when I would see him in later years, he'd always say, "What happened to that Carson fellow?" (Laughs)

And Don died a few weeks ago, but we are very grateful that his wife, Mickie Keough, has joined us together, so let's have a hand for Mickie Keough. Mickie, will you stand? (Applause)

Mickie practically raised our kids, so if they have any faults, talk to Mickie about it. (Laughter)

6. Q1 earnings

WARREN BUFFETT: OK. We have just — we have one slide that relates to our quarterly earnings that — if we could put up.

We released these yesterday afternoon, and nothing particularly remarkable.

The railroad, BNSF, did dramatically better last year, not only in earnings, but in all kinds of performance measures, in terms of train velocity, and on time, and you name it, so that the —

You know, we got behind last year, early in the year, and there's been lots of money, and more important, lots of effort, spent to get the railroad operating like it should be.

And in the first quarter those efforts paid off. We gained share. Our earnings, relative to other railroads, improved dramatically, so, you know, we got the trains running. We're going to spend a lot of money making sure we get even better.

But the improvement has been huge, and I want to thank Matt Rose and Carl Ice for a really extraordinary performance and having our railroad running the way it should be running. So thanks, Matt and Carl. (Applause)

VOICE FROM AUDIENCE: (Inaudible)

WARREN BUFFETT: I didn't quite get, it but I'll assume it was complimentary. (Laughter)

7. Rotating questioners

WARREN BUFFETT: OK. I think we're ready to move on to our questioners.

We'll handle it the same way as before. We start with the journalists, we move to the analysts, and then we move to the audience, and we keep doing that until about noon.

And at that time, we take a break for about an hour, and then we come back and we repeat the procedure.

After we get through a — I think it's either 48 or 54 questions, then we just take them all from the audience. We have various zones where people have been selected, by drawing, to ask questions personally.

8. Carol Loomis introduction

WARREN BUFFETT: But we start off the first one with a woman who retired after 60 years, setting a longevity record for all of Time Inc. — she retired at Fortune — been my friend for many years, and in my opinion the best print business journalist in the world, Carol Loomis. That doesn't soften her up at all, folks. (Applause)

CAROL LOOMIS: I'll make my customary, very short speech.

The three of us have been getting questions for two months, and there have been a lot of them.

Warren and Charlie have no idea what our questions are going to be, and some of them are very tough. Warren is right that I don't normally soften them up.

And we're sorry, we got hundreds of questions, literally, many hundreds, and we're sorry if we didn't pick yours, which doesn't mean it wasn't a good question. It's just that the — our ability to ask as many as you'd like — as you would like to get yours in — was limited.

9. Defending Clayton Homes from predatory lending accusations

CAROIL LOOMIS: So, my first question is from a man in Timpson, Texas, who happens to have a familiar name, Frank Gifford, but wants to make it clear that he isn't the football Frank Gifford, but rather a travel photographer.

And his question is a hard one. He says, "I've been a shareholder for 15 years, but I'm now suffering heartburn. Until recently I considered Berkshire an ethical company, benefiting society through" — and here he mentions two Berkshire companies headquartered in his home state — he says, "— through BNSF and ACME Brick.

"Two points call that opinion into question now: One is the Seattle Times story on predatory practices at our Clayton Homes subsidiary.

"Clayton mainly responded with platitudes to this article and would not answer questions, so I have to assume the facts in the story are correct.

“The other point that I want to mention is our growing partnership with 3G Capital. I sold my Tim Horton stock in disgust before 3G gutted 20 percent of the corporate staff and plunged this well-run company deep into junk territory.

“Other takeovers 3G has made have been still more brutal.

“You and Charlie have made many statements about upholding Berkshire’s reputation, and you have avoided anti-social investments like tobacco and gambling.

“Your efforts years ago to keep Berkshire’s textile mills running show you once aspired to balance capitalism with compassion.

“I cannot make the moral case for practices at either Clayton or 3G, and I wonder how you can do so.”

WARREN BUFFETT: OK. Let’s talk first about the Clayton article because there was some important mistakes in that, but I think it’s first — it’s better to back up even to the situation in mortgage lending that’s taken place, and why Clayton follows a pattern that, actually, is exemplary and rather extraordinary, in the home building and mortgage business.

If you look back at the housing bubble in — well, ending more or less in 2008, one of the great problems, in fact, maybe the greatest cause, was the fact that the mortgage holder became totally divorced from the mortgage originator and from the home builder.

In other words, the home builder built a house and sold it, took his profit, and that was that. It didn’t really make much difference who he sold it to.

And the mortgage originator would originate a mortgage but then package those, securitize them, and often sell them around — even around the world — so people thousands and thousands of miles had no connection with the original transaction.

And the mortgage originator suffered no loss if the loan went bad.

So we had these two parties: the one that connected with the home buyer, and the one that originated the mortgage, and they had no connection with the actual outcome of whether it was a good mortgage or not.

At Clayton, unlike virtually anybody — there’s a few — we offer the — we offer mortgages to all the buyers of our homes. And we have retained roughly 12 billion of mortgages on 300,000 homes.

Now, when a mortgage goes bad, two people lose: the person that owns the house loses, and the person that owns the mortgage loses.

And in our case, we have this identity of interest. We have no interest in selling anybody a house, and having that mortgage default, because it is a net loss to us. It is a net loss to the customer.

And like I say, that's not true of most home builders. It's not true of most mortgage originators.

So you — and there's been much talk, in terms of possible changes in mortgage rules, to try and get the mortgage originator to keep some skin in the game. And they've talked about them retaining maybe 3 percent of the mortgage or something like that, just so they would have an interest in, really, what kind of a mortgage they were putting on the books.

Well, we keep — in many cases — we offer to everybody, but we keep — probably in half the cases, we keep 100 percent of the mortgage, so we have exactly the same interest as society has, and as the home buyer has, in not making mortgage loans to people who are going to get in trouble on those loans.

Now, it's true that manufactured housing hits the lower end of the market, in terms of house values. Of the homes selling for $150,000 — new homes selling for $150,000 or less — 70 percent of them are manufactured houses.

And some of those people — most — many — of those people do not qualify, on a FICO score, to obtain loans that are government guaranteed. Some do, but most don't.

And the question is: can you lend intelligently to people who have a good chance of making the payments, keeping that house?

And Clayton has been exemplary in doing that. About 3 percent of the mortgages default in a year, you know, and when they do, we lose money and the person who bought the house loses money.

But 97 percent don't, and most of those people would not be living in the kind of houses that you can see right here at the auditorium, without the financing availabilities that Clayton makes available, and others make available.

And I invite you to go out and look at that house for $69,500. That house will be transported and erected, ready to go — you have to have the land and that — and I'll get to that in a second — but for 69,500, you have that house with appliances, with air-conditioning, with a couple bedrooms, 1200 square feet. And probably you'll put another 25,000 or so in the house, but — in terms of the land and preparation there — so maybe it will be $95,000.

But I just — you know, you can make your own judgment as to whether that's a decent value. And I know most of you are not living in $95,000 homes, but there are an awful lot of people that aspire to do that.

And we help them, with our own money at risk, to move into those homes. And if we make a mistake, it hurts them and it hurts us. And that is a very unusual arrangement in the financial industry.

Now, I read that story, and in it, there was an item in it, which, reading through the story, I just knew wasn't true. I mean, nobody that knew anything about manufactured housing could have put that up.

I'd like to put that up on the slide, where it says, "Another Clayton executive said in a 2012 affidavit that the average profit margin on Clayton homes sold in Arkansas between 2006 and 2009 was 11,170 — roughly 1/5 of the average sales price of the homes."

So this fellow is quoting somebody as saying that we're making a 20 percent profit on home sales.

Well, I knew that that was nonsense, so I asked for the affidavit. And I read the affidavit about three times, and nowhere in that affidavit was it — was this statement made.

Now, what was said was what I'll show in the next slide. It's hard for me to see what's up there, but it should show Item 6, where it says Clayton Manufactured Homes sold 2,201 homes, and Item 7, that four percent of the gross profit from the home sales totaled 983,000.

So if we'll move to the next slide. I did a little arithmetic and, sure enough, if you take 25 times the commission for — the commission is 4 percent, so you take 25 times — and then you divide by the number of homes, you come up with 11,170.

But, that statement in the affidavit said gross profit, and gross profit is not the same thing as profit. I'm not sure that the fellow that wrote the story understood that.

So I have put on the next page the difference, for example, of a couple other retailers. I put Macy's and Target.

And Macy's has a 40 percent gross profit margin, but a pretax margin of 8 1/2 percent, after taxes of 5.4.

Gross profit is what you — if it's the case of Macy's, what they pay for a sofa or something, and what they sell it for. But they also have the expenses of paying salespeople, rent, utilities, advertising, all kinds of other things.

So the idea that gross profit and net profit are the same thing is — you know — anybody that understands accounting would never make a mistake like that.

In our particular case, on the next page, our gross margin is what the fellow said in the affidavit, and he used the word "gross," of 20 percent. But the writer of the story turned that into a

profit margin, and our profit margin is actually three percent. So I'd just like to point out the mathematics on that particular subject.

There's one other item you should see — and, again, I have trouble seeing the — what's up there — but we have a — in every retail Clayton establishment, we have a lender board which shows exactly what a variety of lenders are willing to do and what their terms are.

And we also have a sheet, which I think will be put up there, and it's less than a full page, and it sets out the lenders who are available.

And at the very top — I'm just looking to see whether I can find that right here — at the very top of it, it basically says, you know, check out more than one lender, and you can send the application to any of these people. And we have people sign at the bottom, and there's no small print on it. I can't see it here, but — it may look like small print — but it's one page, and multiple lenders are put on that sheet.

Sometimes people borrow — if there's a credit union in San Antonio that's very big, the local bank is very big, and we also will lend money to the buyer of the home, if they wish.

If you buy that home that's out there, we'll give you a list of four or five lenders, probably including your local bank, and you will probably take the loan that offers you the best terms.

So, I make no apologies whatsoever about Clayton's lending terms.

I get letters from people complaining about our subsidiaries in various ways. I mean, some people call the office, some people write in. I can say, in the last three years I have not received one call — we've got 300,000 loans — I've not received one call from any party in connection with a Clayton Home.

Moreover, we are — at Clayton — we are regulated in almost every state — every state in which we have financing, which is practically every state.

And in the last three years, we have had — I think its 91 examinations by the state, 91 examinations.

They come in. They look at our practices. They make sure that they conform with the laws.

And in those 91, we — I think the largest fine we've had has been $5,500, and the largest group of refunds we had was about $110,000.

Yeah, there were — and, you know, those were regulated, not only by those states, were regulated by HUD, all kinds of people.

When we can, we try to get people an FHA loan, because that's the best loan for them to get.

But, as I say, most of our borrowers are below the 620 FICO score. And it's true that three percent or so will lose their homes in a year. It's true that 97 percent of those people will have a home where their average principal and interest payment is a little under $600 a month, and that takes care of having a two- and perhaps three-bedroom house, well equipped. I invite you to go through it.

And Clayton has behaved, in my book, extraordinarily well.

The article talked about 30-year mortgages. Over 4 1/2 years ago, I said we're not going to have 30-year mortgages. So we don't have them, except for the FHA-guaranteed ones, which, of course, have a very low rate.

So I have no — I'm proud of the Clayton management. I'm proud of the fact they put, this year, maybe 30,000 people in homes at a very low cost, a very good home. And a very high percentage of those people are going to have those loans paid off, probably in 20 years, and have a home that has cost them — has been a real bargain, basically.

I'll get to the other question — the 3G question, too — in just a second, but we'll give Charlie a chance to say what he'd like to.

CHARLIE MUNGER: I don't know a lot about the mortgage practices at Clayton, but I certainly know that we've sold an enormous number of houses and we have a big share of the total market in manufactured.

WARREN BUFFETT: About 50 percent.

CHARLIE MUNGER: Fifty percent.

And it's a very constructive thing. Personally, I've always wondered why manufactured houses don't have a bigger share of the market. It's such an efficient way of creating quite usable houses.

Part of the reason is that the track builders, under capitalism, got so efficient. And isn't Clayton now doing some track building itself?

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: I think so, yes.

So, Clayton is a very productive part of the economy, but we can't make lending to poor people who buy houses 100 percent successful for everybody. We wouldn't be running the business right if the foreclosure rate was zero. Too many people would deserve credit that wouldn't get it.

WARREN BUFFETT: Yeah. The big causes of default are the loss of a job, death, and divorce. And, you know, that happens with high-priced houses as well, but it happens more often with people that are living closer to the edge.

But I don't think that's a reason to deny them a house, and particularly when so many — it turns out so well for so many.

The 2008 recession was — and '9 — was very interesting, because all kinds of securitized deals, involving houses costing hundreds and hundreds of thousands of dollars, the default rate on those was many, many, many times what happened in our own case.

And similarly with delinquency rates. Our delinquency rates are running 3 percent, currently.

And, you know, it — the people want to live in those houses, and I think they deserve the right to.

Incidentally, we had a — a few years ago we had a couple houses here, we called them the "Warren" and the "Charlie."

The "Charlie" sold first, and it sold to one of the cameramen who was in the credits on the movie you just saw. And you can check with Matt, and he's — Matt Mason — he is very, very happy with that house he bought four or five years ago.

10. Defending 3G from accusations of excessive job cuts

WARREN BUFFETT: The second question was about 3G, and I don't think you can ever find a statement that Charlie and I have ever made, in terms of Berkshire's companies or anybody else's, where we said that there should be more people working than are needed in a company.

And the 3G people have been successful in building marvelous businesses. And it is true that they have entered into some purchases where there were considerably more people running the business than needed. And the interesting thing is that after they reduced the headcount to the number needed, the companies have done extremely well.

I mean, you've seen Burger King outgrow its main competitor by a significant margin. You've seen Tim Horton have some very good figures in the first quarter.

And I don't know of any company that has a policy that says we're going to have a lot more people than we need. But a good many companies end up in that position, and if 3G buys into one, they quite promptly — and treat people well in terms of the severance — but they get it down to what they need.

And I hope our Berkshire companies are not being run with more people than they need, either. They usually aren't when we buy them, and, you know, we look for those companies that are well managed.

3G is — will — if they find out that 100 people are doing what 50 people can do, they'll get it to where 50 people are doing it. And I think that actually makes sense throughout American business. Charlie?

CHARLIE MUNGER: Well, the alternate to the system of having your company right-sized, the right number of people, is what eventually happened in Russia. And there, everybody had a job. And the way it all worked out was some workers said, "Well, they pretend to pay us and we pretend to work," and the whole damn economy didn't work. Of course, we want the right number of people in the jobs.

WARREN BUFFETT: It's interesting. In the railroad business — in the railroad business after World War II, in 1947 or thereabouts — I think there were about 1.6 million people in the railroad business, and it was a lousy business. And capital was short for any kind of improvements.

And now there are less than 200,000. So they've gone from a million-six to less than 200,000, carrying more freight, more distance, and doing it in far safer conditions. Safety has improved dramatically in the railroad industry.

And if somebody thinks it would be better to be running the railroads with a million-six, you know, people doing it, you would have a terrible railroad system. You wouldn't have anything like you have today.

Efficiency is required over time in capitalism, and I really tip my hat to what the 3G people have done.

11. Will Van Tuyl move away from negotiations in auto sales?

WARREN BUFFETT: OK. Jonny Brandt?

JONATHAN BRANDT: Thank you, Warren, for allowing me — inviting me — to be part of this 50th anniversary celebration. I have a question about Van Tuyl.

Van Tuyl is a fabulously productive auto dealer that has, since its founding, used a traditional negotiated model with a particular successful emphasis on profitable add-on insurance and financial products.

Meanwhile, at least some other auto dealers, CarMax and Don Flow among them, have adopted, or are moving towards, models which emphasize fixed prices, transparency, and low sales pressure.

Given the evolving regulatory environment and changing consumer preferences, will Van Tuyl eventually need to adapt to this new mode of selling, or do you feel the traditional method of selling cars will be viable for decades into the future?

If the market requires a new way of selling, how hard is it for a sales culture that has been successful for decades doing business one way to change to another?

WARREN BUFFETT: Yeah. If a change is required, it will be made. And I don't know the answers to which way it's going to go on that. The — it's true that people are — have been — and that's not new — that's been experimented with before — where people have tried a one-price system and no negotiating, no haggling and everything.

And I think a very large number of people would like to see that system, except when they actually get into it, it seems to break down for some reason.

It — there's negotiation going on in a lot of businesses that — and it always amazes me. People say they don't like it, but it's what ends up happening.

And so Van Tuyl will adapt to what the customer wants. We'll see how some of these experiments go. And I don't think there would be any problem at all if the world goes in that direction and Van Tuyl going to it.

But I wouldn't be surprised if five or ten years from now the system is pretty much the same. I wouldn't be totally surprised if it changes, either, but I can't predict the outcome.

I can predict that Van Tuyl, and the subsequent auto dealerships we buy, I can predict that they will be a very important part of Berkshire and I think will be quite profitable in relation to the capital we employ in the business.

Charlie?

CHARLIE MUNGER: Well, I very much like that acquisition, partly because I think we can do a lot more like it. I —

WARREN BUFFETT: Do you think you'll be negotiating on cars ten years from now, when you buy a new one?

CHARLIE MUNGER: It's been amazingly resistant to change for my whole lifetime.

WARREN BUFFETT: Yeah. Happens in the jewelry business, too.

I mean, there's certain items — well, it happens in real estate. I mean, let's just say that some real estate firm said we're only going to take listings where you can't negotiate.

Do you think? — I'm not sure how it would do, in terms of obtaining both listings and customers.

People seem to want to negotiate. If they hear a house is priced at 200,000, they're not going — unless it's some unusual situation — they're not going to step right up and pay the 200. They're going to bid.

When people are dealing with a big ticket item — a lot of people — their natural tendency is to negotiate and they particularly will do so if they think that's built into the system.

So I'm not sure how it changes, but we'll do fine, whatever direction it goes.

12. Company characteristics for predictable earnings

WARREN BUFFETT: OK. Now we go to the shareholder at Station 1.

AUDIENCE MEMBER: Hi, Warren. Hi, Charlie. Great to be here. This is my first time here, incredibly lucky to have my question answered.

So my question is this: can you name at least five characteristics of a company that gives you confidence to predict its earnings ten years out in the future? And can you also use IBM as a case study, how we check all those boxes?

WARREN BUFFETT: Charlie, what are your five? (Laughter)

CHARLIE MUNGER: We don't have a one-size-fits-all system for buying businesses. They're all different, every industry is different, and we also keep learning. So what we did ten years ago, we hopefully are doing better now. But we can't give you a formula that will help you.

WARREN BUFFETT: Now, if you're looking at the BNSF railroad as we were in 2009 or if you're looking at Van Tuyl in 2014, there are a lot of things that go through our minds. And most of the things that go through our minds are things that will stop us from going further.

I mean, there's — the filters are there. And there are a lot of things that, if we see it in a business, including, maybe, who we're dealing with, will stop us from going on to the next layer. But it's very different in different businesses.

We are looking for things where we do think we've got some reasonable fix on how it's going to look in five or ten years, and that does eliminate a great many businesses. But it's not the same — it's not the same five questions at all.

Certainly, when we're buying a business where we're going to have somebody that's selling it to us continue to run it for us, you know, a very big question is, you know, do we really want to be in partnership with this person and count on them to behave in the future when they don't

own the business, as they behaved in the past when they do own the business. And that stops a fair number of deals.

But I can't give you five — we don't have a list of five. Or if we do, Charlie has kept it from me. (Laughter)

WARREN BUFFETT: You want anything more?

CHARLIE MUNGER: No.

13. Munger supports IBM stake purchase

WARREN BUFFETT: Becky?

BECKY QUICK: This question is for Charlie. It comes from John Baylor (PH).

He says, "Charlie, you broke Warren of his cigar butt buying habits. With the significant innovation that is occurring in technology, is IBM similar to those textile mills in the 1960s, and did you try to talk Warren out of buying IBM?"

CHARLIE MUNGER: The answer is no.

I think IBM is a very interesting company. It totally dominated Hollerith machines, you know, the punch card computing. And then when they invented electronic computing, it dominated that for a while.

It's very rare that when a technological change comes along that people adapt as successfully as IBM did that time.

Well, now they have the personal computer, and that's been a mixed bag. And — but I think IBM is a very credible company.

We own a lot of companies that have temporary reverses, or once were mightier in some ways than they are now.

IBM is still an enormous enterprise, and I think it's still a very admirable enterprise, and I think we bought it at a reasonable price.

WARREN BUFFETT: When we bought it, it was a two-to-nothing vote. (Laughs)

CHARLIE MUNGER: Yeah.

WARREN BUFFETT: OK. (Laughter)

14. Why we don't "talk up" our investments

WARREN BUFFETT: Incidentally, there's one thing I always find interesting.

We get asked questions about investments we own, and people think we want to talk them up, you know, or —

We have no interest in encouraging other people to buy what — the investments we own.

I mean, we are better off, because either we or the company is likely to be buying stock in the future. Why would we want the stock to go up if we're going to be a buyer next year, and the year after, and the year after that?

But the whole mentality of Wall Street is that if you buy something — even if you're going to buy more of it later on, or if the company is going to buy its own stock in — the people seem to think that they're better off if it goes up the next day, or the next week, or the next month, and that's why they talk about "talking your book."

If we talked our book, from our standpoint, we would say pessimistic things about all four of the biggest holdings we have, because all four of them are repurchasing their shares, and, obviously, the cheaper they repurchase their shares, the better off we are. But people don't seem to get that point.

Do you have any idea why, Charlie?

CHARLIE MUNGER: Warren, if people weren't so often wrong, we wouldn't be so rich. (Laughter and applause)

WARREN BUFFETT: He's finally explained it to me. OK. (Laughter)

15. "Three extraordinary pieces of luck" with insurance

WARREN BUFFETT: Gary?

GARY RANSOM: Thank you.

In his letter, Charlie talked about Berkshire's insurance success, quote, "being so astoundingly large that I believe that Buffett would now fail to recreate it if he returned to a small base while retaining his smarts and regaining his youth."

Do you agree that you could not repeat that success today? And if so, what do you think are the conditions in the insurance industry today that would inhibit a repeat of that performance?

WARREN BUFFETT: Well, I had many, many, many pieces of luck, but I had three extraordinary pieces of luck, in terms of the insurance business.

One was, when I was 20 years old, having a fellow on a Saturday, a fellow named Lorimer Davidson, be willing to spend four hours with some 20-year-old kid who he never heard of before, explain the insurance business to him.

So I received an education at age 20 that was — I couldn't have gotten at any business school in the United States. And that was just pure luck. I mean, I just happened to go to Washington. I had no idea I would run into him. I had no idea whether he would talk to me, and he spent four hours with me. So just chalk that one up, the chance of that happening again.

In 1967, I got lucky again when Jack Ringwalt, who, for about five minutes every year wanted to sell his company, because he would get mad about something, some claim would come in that he didn't like or something of the sort. And I told my friend Charlie Heider, I said, "Next time Jack is in the mood, be sure to get him to my office." And Charlie got him up there one day, and we bought National Indemnity.

We couldn't have done that — we not only couldn't have done it a day later, we couldn't have done it an hour later. You know, that — that was lucky.

And then I really got lucky in the mid '80s when, on a Saturday, some guy came in the office and he said, "I've never worked in the insurance business, but maybe I can do you some good." And that was Ajit Jain. And, you know, how lucky can you get?

So, if you ask me whether we can pull off a trifecta like that again in the future, I'd say the odds are very much against it.

But the whole — the whole thing in business is being open to ideas as they come along, and insurance happened to be something that I could understand. I mean, that was in my sweet spot.

If Lorimer Davidson had talked to me about some other business, you know, it wouldn't have done any good. But it just so happened he hit a chord with me on that in explaining it. I could understand what he was talking about. And I could understand what National Indemnity was when Jack had it for sale.

And that's — there's an awful lot of accident in life, but if you keep yourself open to having good accidents happen, and kind of get past the bad accidents, you know, some good things will happen. Might not happen in insurance — you know, it can happen in some other field — probably would happen in some other field — if you were to start in today.

So, no, we could not have — you couldn't expect to have three lucky events like that happen, and there were many more along the way.

But, you know, we — I think if we were starting over again, we'd find something else to do. What about it, Charlie?

CHARLIE MUNGER: Yeah. I don't think we would have that kind of success.

You know, mostly we bought wonderful businesses and nourished them. But the reinsurance division was just created out of whole cloth right here in Omaha, and it's a huge business. Insurance has been different for us.

16. Berkshire's culture "runs deep"

WARREN BUFFETT: OK. Station 2? And if you'll say where you're from too, please?

AUDIENCE MEMBER: Dear Warren, dear Charlie. I'm Lawrence from Germany, and in my home country, you two are regarded as role models for integrity. And at Berkshire, its culture is its most important competitive edge.

Hence, my question: how can we, as outside investors, judge the state of Berkshire's culture long after you depart from the company?

WARREN BUFFETT: Well, I think it's fair that you do, you know, come with a questioning mind to the culture, post-me and Charlie, but I think you're going to be very — I don't think you should be surprised, but I think you will be very pleased with the outcome.

The culture — I think Berkshire's culture runs as deep as any large company could be in the world.

It's interesting you're from Germany, because just three or four days ago, we closed on a transaction with a woman named Mrs. Louis, in Germany.

And she and her husband had built a business [Detlev Louis Motorrad-Vertriebs GmbH]. Over 35 years, they'd spent developing this business of retail shops, dealing with motorcycle owners, and lovingly, had built this business.

Her husband died a couple years ago. And Mrs. Louis, in Germany — it came about in sort of a roundabout way — but she wanted to sell to Berkshire Hathaway. And, you know, that would not have been the case 30 or 40 years ago.

So it does — it's a vital part of Berkshire to have a clearly defined, deeply embedded culture that pervades the parent company, the subsidiary companies. It's even reflected in our shareholders.

And, you know, when you have 97 percent of the shareholders vote and say we don't want a dividend, I don't think there's another company like that in the world.

So we have a — our directors sign on for it and, there again, we behave consistently. Instead of having a bunch of directors who are — love to be a director because they'd like to get $2- or $300,000 a year for showing up four times a year, we have directors who look at it as a great opportunity for stewardship, and who want their ownership, and have their ownership, represented by buying stock in the market, exactly like you do.

So we — it's — we try to make clear and define that culture in every way possible, and it's gotten reinforced over the years to an extreme degree. People who join us believe in it; people who shun us don't believe in it, so we — it's self-reinforcing.

And I think it's a virtual certainty to continue and to become even stronger, because once Charlie and I aren't around, it will be so clear that it's not the force of personality, but it's the — it's institutionalized that, you know, nobody will doubt that it will really continue for decades and decades and decades to come.

Charlie?

CHARLIE MUNGER: Well, as I said in the annual report, I think Berkshire is going to do fine after we're gone. In fact, it will do a lot better, in dollars. But, percentage-wise, it will never gain at the rate we did in the early years, and that's all right. There's worse tragedies in life than having Berkshire's assets and have the growth rates slow a little.

WARREN BUFFETT: Name one. (Laughter)

CHARLIE MUNGER: Warren and I have one not very far ahead.

WARREN BUFFETT: OK. Yeah, yeah. (Laughter)

OK. Andrew?

I should say culture is everything at Berkshire. And if you run into a terrible culture, it's — you know, the Salomon thing was up there on the screen, and it would be hard to turn Salomon into a Berkshire. I don't think we could have done it, Charlie.

CHARLIE MUNGER: I don't think anybody's ever done it on Wall Street.

WARREN BUFFETT: No. It's just — it's a different world.

And that doesn't mean that Berkshire is a monastery, by any means, but it does mean that — I can guarantee you that Charlie and I, and a great, great many of our managers, are more concerned — and Carrie Sova who put this meeting together and everything — they are more concerned about getting a good job done for Berkshire than what they get out of it themselves.

And, you know, it's great to work around people like that.

17. Health concerns about sugar won't stop Coca-Cola's growth

WARREN BUFFETT: Andrew?

ANDREW ROSS SORKIN: OK, Warren. This question comes from Simone Wallace (PH) in New York, New York.

And she writes, "Over the last 50 years, we Berkshire shareholders have, effectively, been long sugar consumption, through directly owned companies, such as See's Candies, Dairy Queen, in funding Heinz, and publically-traded investments, such as Coca-Cola today.

"Yet, from improvements in scientific research, we as a society have become increasingly attuned to the true costs of greater sugar consumption, in the form of rising health-care costs.

"We are seeing this awareness of sugar's impact in changing consumer behavior. Carbonated soft drink volumes are declining, and consumer packaged goods companies, focused on the center aisles of supermarkets, are struggling with organic growth.

"If we have reached — have we reached an inflection point in human behavior in how consumers view sugar consumption? And do you think Coca-Cola's moat, and potentially that of Heinz's or Kraft's, is narrowing? And if not, what news would it take you to be convinced that it is?"

WARREN BUFFETT: Well, I think it's an enormously wide moat, but I think it's also true that the trends you described are happening.

But, you know, there will be 1.9 billion eight-ounce servings of Coca-Cola products, not Coca-Cola, but Coca-Cola products, consumed in the world today.

I don't think you're going to see anything revolutionary, and I think you will see all food and beverage companies adjust to the expressed preferences of the consumers as they go along.

No company ever does well ignoring its consumers.

But there will be — I would predict — 20 years from now there will be more people — there will be more Coca-Cola cases consumed — than there are now, by some margin.

Back in the late 1930s, Fortune ran an article saying that the growth of Coca-Cola was all over.

And when we bought our Coca-Cola stock in 1988, you know, people were not that enthused about growth possibilities for the product.

I sit here as somebody who, for the — in the last 30 years, one-quarter of all the calories I've consumed come from Coca-Cola. (Laughter)

And that is not an exaggeration. I am one-quarter Coca-Cola. I'm not sure which quarter.

But — and, you know, if you really — I don't think there is this choice. I think there's a lot to be said about being happy with what you're doing.

If I'd been eating broccoli and Brussels sprouts, and all that, all my life, I don't think I'd live as long. You know, I — (Laughter)

Every meal, I would approach, thinking, you know, it's like going to jail or something. (Laughter)

No. I think — I think — Charlie? (Laughter)

Charlie's 91, and his habits aren't that different than mine. They're slightly better, but —

CHARLIE MUNGER: There's no question about it. The way I look at it is, sugar is an enormously helpful substance. It prevents premature softening of the arteries. (Laughter)

And the way I look at it, is that, if I die a little sooner that will just be avoiding a few months of drooling in a nursing home. (Laughter)

WARREN BUFFETT: Charlie and I have enjoyed every meal we ever had, virtually, except when I was eating at my grandfather's and he made me eat those damn green vegetables.

There, obviously, are some shifts in preferences, although it's remarkable how durable items are in this field.

We — Berkshire Hathaway — I believe, was the largest shareholder of General Foods from about 1981 or thereabouts, to about 1984 when it was bought by Philip Morris.

And, you know, that's 30-plus years ago, and those same — those same brands — you know, they went through Philip Morris, they got spun out as Kraft, they broke Kraft into two pieces. But now, we're going to own those brands, and they're terrific brands.

Heinz — Heinz goes back to 1869. The ketchup came out a little later. They went bankrupt, actually, when they were counting on the horseradish or whatever it was.

But the ketchup came out in the 1870s. Coca-Cola dates to 1886. It's a pretty good bet that an awful lot of people are going to like the same thing.

And when I compare drinking Coca-Cola, you know, to something that somebody would sell me at Whole Foods —(Laughter)

I don't know — I don't see smiles on the faces of people at Whole Foods. (Laughter and applause)

So I like the brands we're buying, Andrew.

18. Why Buffett likes local auto dealerships

WARREN BUFFETT: OK. Gregg Warren?

GREGGORY WARREN: Thank you, Warren. I just wanted to circle back and add on to Jonathan's question on Van Tuyl Group.

What is it that attracted you most to the deal? Potential for consolidation in a highly fragmented industry, which would allow you to put some of your excess capital to work, or the unique positioning in the auto chain of the auto dealer sector, which has its hands not only in auto sales but financing insurance and parts and services?

I know that Charlie just said that he'd like to do more deals like it, but where do you feel the greatest return will come from longer term? Rolling up auto dealerships or tapping into the advantages that are inherent in the full service model?

WARREN BUFFETT: Yeah. There are not any huge advantages of scale, at least that I'm aware of, in owning lots of dealerships. But running dealerships well is a very good business. It's a local business.

So I don't see that having some — there's 17,000 dealers in the country, and if you ask the people here in Omaha to name a bunch of dealers, they'd come up with a bunch of local names.

And I don't think that you widen profit margins, particularly, by having a thousand dealers versus having a hundred or even having one very good dealer.

So we will be buying, I hope, more dealerships, but it will be based on local considerations.

We don't see the finance business, in dealers — we don't bring anything to that party.

[CEO] John Stumpf is here from Wells Fargo. I think they're the biggest auto finance company in the United States. And they have a cost of funds advantage over Berkshire.

Berkshire is able to borrow money at a low price, but I forget whether John's liabilities cost him something like 12 basis points or something like that last quarter. And we can't come up with money as cheap as the banks can, and they're the natural lenders for loans, so we're not going to be in the finance business.

We will keep looking for dealerships, maybe groups of dealers. It doesn't give us a buying advantage from a manufacturer. And we will hope that we run those local operations very well

and that they're regarded by the people who buy cars as a local business, not some part of some giant operation.

So, I think you'll see us buying more, but I don't think you'll see us widening out margins from what existed before, except in the cases where we can run a local dealer better.

Charlie?

CHARLIE MUNGER: Yes. And Van Tuyl has a system of meritocracy where the right people get the power and get some ownership.

So on the — it reminds me a lot of the Kiewit Company, an Omaha company and whose headquarters Berkshire resides as a tenant. And the Van Tuyl and Kiewit are kissing cousins. Those are very successful cultures, and I think they've got a very good thing going for them. The right people are prospering in Van Tuyl.

19. Building culture and values at Berkshire

WARREN BUFFETT: OK. Station 9? And if you'll identify where you're from, please.

Oh, I'm sorry. Station 3. You're number 9. I apologize.

AUDIENCE MEMBER: Apology accepted. (Laughter)

WARREN BUFFETT: We'd have cut off your mic if you hadn't. (Laughter)

AUDIENCE MEMBER: Fair enough.

My name is Stuart Kaye, and I'm from Stamford, Connecticut.

And I wanted to follow up on the questions that have been asked about culture and stewardship at Berkshire Hathaway, because I'm currently in year five of helping build a firm called Matarin Capital Management, and we discuss values and culture quite a bit.

And so I'd like some tips from you about what characteristics you thought about 45 years ago when you were building the culture and values at Berkshire Hathaway.

WARREN BUFFETT: Yeah, well I think culture has to come from the top, it has to be consistent, it has to be part of written communications, it has to be — you know, has to be lived, and it has to be rewarded when followed, and punished when not.

And then it takes a very, very long time to really become solid.

And obviously, it's easier — much easier — to do it if you inherit a culture you like, and it's easier in smaller firms, I think.

I can think of a lot of companies — very big companies — in this country, and I don't think if Charlie and I were around them for ten years we'd be able to accomplish much of anything.

So it — you know, it is a grain of sand type of thing. And people — just like your child, you know, sees what you do rather than what you say, it's the same thing in a business, that people see how those above them behave and they move in that direction.

They don't all move that way. We've got 340,000 people now working for Berkshire, and I will guarantee you that there's, you know, some number —a dozen, maybe 50, maybe 100 —that are doing something today that they shouldn't be doing.

And we — what you have to do is when you find out about it, you have to do something about it.

I didn't like, for example, making 30-year mortgages at Clayton five years ago. And I said, "We're not going to make 30-year mortgages, you know, unless they're government guaranteed."

And when we bought Kirby, there was some sales practices we didn't like, and we particularly didn't like them with older people. So we put in a golden age policy where, if you're over 65 and you bought a Kirby and for any reason you didn't like it, any time up to a year, you could send it and get all of your money back. And I encouraged people to write me if they had a problem on anything like that.

So it takes a lot of time, and you'll — you know, at GEICO we're going to — you know, we're going to settle millions and millions and millions of claims. And I will guarantee you that when two people are in an auto accident, they don't agree 100 percent of the time on whose fault it was, so they may go away and be unhappy for a time.

But we work all the time at trying to behave with other people as if our positions were reversed. That's what Charlie's always advised in all our activities, and we've tried to follow it. And we're certainly far from perfect at it, but if you keep working at it, it does get results.

Charlie?

CHARLIE MUNGER: Yeah. I think the one thing that we did that's worked best of all is we were always dissatisfied with what we already knew and we always wanted to know more. And Berkshire, if Warren and I had stayed frozen in time, particularly Warren, it would have been a —

WARREN BUFFETT: I'd like to do it, understand.

CHARLIE MUNGER: It would have been a terrible place. It's what we kept learning that made it work, and I don't think that will ever stop.

20. Any company with an economist has "one employee too many"

WARREN BUFFETT: Carol?

CAROL LOOMIS: This question comes from Mona Dyan (PH). And it concerns two indicators, Warren, that you have discussed in the past about the general level of the stock market.

The first one is the percentage of total market cap relative to the U.S. GNP, which you have said is probably the best single measure of where valuations stand at any given moment.

This indicator is at about 125 percent. That is the ratio of total market cap to U.S. GNP, and that's about what it was when Warren talked about this back in 1999 just before the — shortly before — the bubble broke.

The second indicator, which you mentioned in a famous 1999 speech that subsequently became an article in Fortune, is the corporate profits — is corporate profits — as percent of GNP.

You had said at the time that that number ranged between 4 percent to 6 1/2 percent over a long period of time, which I believe was 1951 to 1999.

Well, as of Friday, it is about 10 1/2 percent, according to the St. Louis Federal Reserve site. That is way above the range you had mentioned.

Are the current levels of either one, or both, of these indicators a matter of concern for the general investing public?

WARREN BUFFETT: Yeah. Well, the — it might be — the second figure, which is the profits as a percentage of GDP, might be a concern for other segments of society because what it indicates is that American business has done wonderfully well in recent years.

And I know it says how — what a terrible disadvantage it has, because of U.S. tax rates and a host of other things, you know, the facts are that American business has prospered incredibly.

And the first comparison is very much affected by the fact that we live in an interest rate environment, which Charlie and I probably would have thought was almost impossible, not too many years ago.

And, obviously, profits are worth a whole lot more if the government bond yield is 1 percent, than they're worth if the government bond yield is 5 percent.

So it gets back — and, you know, Charlie in that movie talked about alternatives and opportunity cost. And for many people, the opportunity cost is owning a lot of bonds, which pay practically nothing, or owning stocks, which are selling at fairly high prices historically, but they weren't selling at those historic prices with interest rates like this.

So I would not — I look at those numbers, but I also look at them in the context of the fact that we're living in a world that has incredibly low interest rates, and the question is how long those are going to prevail. Is it going to be something like Japan that goes on decade after decade, or will we be back to what we thought was normal interest rates?

If we get back to what are normal interest rates, stocks at these prices will look pretty high. If we continue with these kinds of interest rates, stocks will look very cheap. And now I've given you the answer and you can take your pick. (Laughs)

Charlie?

CHARLIE MUNGER: Well, since we failed to predict what happened, and what exists now, why would anybody ask us what our prediction is in the future? (Laughter)

WARREN BUFFETT: Yeah, yeah. We — incidentally, the one thing I can assure you, Charlie and I, to my knowledge, or my memory, I can't recall ever us making an acquisition or turning down one based on macro factors that — you know, and we talk about deals when they come along, but whether it was See's Candy, or whatever it might have been, the Burlington Northern we bought at a terrible time, in general economic conditions.

But we don't — it just doesn't come up, because we don't — we know we don't know what the next 12 months, 24 months, 30 — we know we don't know what that's going to look like. But it doesn't really make any difference if we're buying a business to hold for a hundred years.

What we have to do is figure out what's likely to be the average profitability of the business over time and how strong its competitive mode is and that sort of thing.

So, people have trouble believing that. They think we talk about it. We think any company that has an economist, you know, certainly, has one employee too many. (Laughter)

Charlie? Can you think of anything rude to say that I haven't said? (Laughter)

CHARLIE MUNGER: Well, it would be hard to top that one. (Laughter)

WARREN BUFFETT: I know. OK. (Laughter)

21. Effect on BNSF of new crude-by-rail safety rules

WARREN BUFFETT: OK. Jonathan?

JONATHAN BRANDT: There's been an awful lot written about what should be done to improve the safety of the crude-by-rail infrastructure. Both this week and last month, federal regulators introduced new standards. These new standards include thicker tanks, better fire protection, electronically controlled pneumatic brakes, and speed limits in more populous areas to reduce the chance of derailments near where people live.

The railroad association has complained that the brakes are too expensive, while others have complained about what they view as an overly-long timetable to switch out the old tank cars.

Given the tank car industry's limits on manufacturing and retrofitting capacity, and the impact on overall rail network velocity from speed limits, do you think the new rules strike the right balance between efficiency and safety?

For Berkshire, what impact will these new rules have on the operations of Marmon's Union Tank Car subsidiary and on the BNSF Railroad?

Can you also update us on the BNSF initiative to purchase up to 5,000 of its own oil tankers — oil tank cars — which is a departure from historic industry practices, and what drove that decision?

WARREN BUFFETT: Yeah. Well, you've asked all the questions I'll be asking.

But I think those rules just came out, what, two days ago now? Yeah. And they're 300 pages. And little as I have to do with this meeting and everything, I have not read those, although I have talked very briefly to Matt Rose and also Frank Ptak who runs our — the company that manufactures and leases tank cars.

You know, our interest — actually, the interest of our railroad and our tank car manufacturing and leasing operation may diverge in various ways.

Clearly, we've got an interest — the country has an interest — in developing safer cars, and we found that the — some cars we thought were safe have turned out to be less safe than we thought going in.

The most dangerous kinds of thing we carry, of course, are — as a common carrier, we have to carry chlorine, we have to carry ammonia, and we're required to carry that. We'd rather not carry it.

There are dangerous products that have to get transported in the country, and they're — it's more logical to transport them by rail than either truck or pipeline, and some of those we'd rather not carry but we do carry.

I would say that the — probably everybody will be somewhat unhappy with the rules, but the — you know, it's up to — it is up to Washington, and the government, to devise the rules under which something that is potentially dangerous is transported.

And transporting by pipeline has its problems. Transporting by rail has its problems.

And railroads have gotten dramatically safer over the years. Our safety figures — and Burlington Northern leads the industry in safety — but the safety figures get better and better year after year.

And — but you are — but you're going to have derailments, and you better have very safe cars carrying that, and nothing will be perfect.

Charlie?

CHARLIE MUNGER: Yeah. Well, big companies and successful companies, like Burlington Northern and Exxon and Chevron and so on, have a lot of engineers and they have long histories of trying to be way safer than average and knowing a lot about how to do it. And none of that is going to change.

You'd be out of your mind to own these big companies and not run them with big attention to safety. And we're not out of our minds and neither are the people who run Burlington Northern. The safety is going to be improved continuously, and should be.

WARREN BUFFETT: Yeah. And it has been consistently, but —

CHARLIE MUNGER: Yeah.

WARREN BUFFETT: But there are new problems. For one thing, the Bakken crude has been proven to be quite a bit more volatile than most of the crude that is —

CHARLIE MUNGER: It's not really crude. It's condensate. I mean, it's almost misnamed, to call it crude. It is more volatile.

WARREN BUFFETT: Yeah.

I can tell you — and I may write about this next year in the report, though — that Burlington Northern has the best safety record among the big railroads. And Berkshire Hathaway Energy, it's extraordinary, their safety record, in terms of utilities. And every new utility we purchase at Berkshire Hathaway Energy, we've brought — the safety statistics, they've gotten far better after Greg Abel has taken over.

CHARLIE MUNGER: After they bought the Omaha pipeline, which had been mismanaged and safety had been improperly ignored, we watched those people, the Berkshire employees, just work day and night improving the safety. They didn't want more pipeline explosions.

WARREN BUFFETT: Yeah. We went from last out of 40-some — I think it was — to either second or first. And if we were second, it was because our other pipeline was first. (Laughter)

22. "Lucky" to have avoided business school

WARREN BUFFETT: OK. Station 4?

AUDIENCE MEMBER: Hello, Mr. Munger and Mr. Buffett. Nirav Patel from Haverhill, Massachusetts.

What advice would you give to someone who's trying to network with influential people but doesn't have access to the alumni network of a top business school?

CHARLIE MUNGER: Let me take that one. I think you should do the best you can — (Laughter)

— playing the hand you've got.

WARREN BUFFETT: Charlie is very Old Testament on this. (Laughter)

He didn't get much past Genesis. (Laughter)

Was his question that he didn't have a lot of associations because of —?

CHARLIE MUNGER: Well, he'd like to have you help him —

WARREN BUFFETT: — tap into —

CHARLIE MUNGER: — tap — do well without business school training. I never had any business school training, why should you have any? (Laughter)

WARREN BUFFETT: And actually, I would say the business school training, particularly in investments, was a handicap about 20 years ago when they were preaching efficient market theory because essentially they told you it didn't do any good to try and figure out what a company was worth because the market had a price perfectly already. Imagine paying, you know, 30 or $40,000 a year to hear that. (Laughter)

CHARLIE MUNGER: You were very lucky to avoid a lot that you've avoided. (Laughter)

WARREN BUFFETT: How do you feel about your law school training, Charlie, while we're on it? (Laughter)

CHARLIE MUNGER: Well I have a son-in-law who recently explained how modern profit-obsessed law school — law firms — work. He said it's like a pie eating contest, and if you win, you get to eat a lot more pie. (Laughter)

23. Railroad accidents, insurance, and BNSF

WARREN BUFFETT: OK, Becky. You're on.

BECKY QUICK: This question is a follow-up to the one that Jonathan Brandt just asked. It's an appropriate follow-up for that, though.

It comes from Mark Blakley in Tulsa, Oklahoma, who says that one risk to Berkshire and BNSF appears to be a large railroad accident.

"It appears many recent accidents have occurred in rural areas. However, how would a worst-case scenario, perhaps one in a more urban area or a BP-type accident, impact BNSF and Berkshire Hathaway? And is the company insured or protected against such losses?

WARREN BUFFETT: Our insurance — reinsurance — unit actually went to the four major railroads offering very high limits. I think we — this is from memory, I could be off on this somewhat, but I think we offered something like $5 or $6 billion, excess — or maybe a billion and-a-half or something like that that the railroad retained.

So we — there's no question about it. If you had the exact wrong circumstances, you know, a train with a lot of ammonia or chlorine or something, you know, right in some terrible urban area, the possibility always exists that that can happen.

It can happen — you know, you can have plane crashes. There are things that are very small probabilities.

But if we run trains millions and millions of miles, year after year, something will happen just like, you know, they happen in every other possible accident way.

So you minimize it. You obviously — you run trains slower in urban areas. They've already instituted that with crude. I think they've brought it down to 35 miles an hour in towns of 100,000. That's the maximum.

So you're always working to be safer; you'll never be perfectly safe.

We do not — we have some insurance at Burlington Northern, but we don't need insurance at Berkshire. You know, we've got the capability to take any loss that comes along. So we actually would be more likely to be offering that insurance, and we did offer that insurance, and the railroad industry didn't like our rates, which is understandable, and so they haven't bought it. But that doesn't mean they won't at some time in the future.

I should add one thing that I forgot to say to Jonathan. The — I don't think we will be buying the 5,000 railcars. I think — I don't know that for sure, but, you know, there's going to be a lot going on in terms of retrofitting.

Our Marmon operation has actually taken on a new facility that will be working very hard — once we know what the retrofit requires — we will be, I'm sure, working three shifts on retrofitting cars, probably our own, probably some other people's. We'll be building new cars. The industry has been waiting to see what the requirements would be before moving ahead.

The first quarter of 2015, there were practically no tank cars ordered. There's a backlog, but there's — no tank cars were ordered, because we need to see what the regulations are.

But we'll be very active in retrofitting and in manufacturing new cars, but I don't think we'll be — historically the railroads have never really owned tank cars. That goes back to the Rockefeller days.

And I think the present method of having car lessors, such as the one we own, I think will continue in the future rather than having the railroads own them.

24. Why move assets around insurance subsidiaries?

WARREN BUFFETT: OK. Gary?

GARY RANSOM: I have a question on intercompany transactions within the insurance companies.

In the last couple of years, you've had a number of them, including 50 percent of the business ceded up to — from GEICO — to National Indemnity.

You did something similar with MedPro and with GUARD. You also moved some of the companies — or the subsidiaries — like Clayton Homes, out of the Geico sub and up into the holding company.

It seems like a lot more activity than normal, and I'm just asking, what is the main purpose of all those movements, what financial flexibility might it provide you, and why now?

WARREN BUFFET: Yeah. Well, there are a lot of things at Berkshire that the 'why now' is answered by — going to be answered by the fact, well, we just got around to it.

The huge chunk of capital, in the insurance companies, is at National Indemnity. So we have moved through these, quote, "share arrangements," we moved premium volume that is generated at GEICO or MedPro or different companies, we've moved that up to the parent, because that's where all the — there's a — you know, there's just extra layer after extra layer after extra layer of capital there, and it makes it a little simpler that way.

It makes it a little simpler just in keeping all the money invested, as opposed to having 50 pockets or 75 pockets to look at it, if you have a couple of main pockets to look at it.

There's no real change in the certainty of payment of policies or anything of the sort.

It really makes life a little — just a little easier — in terms of managing the money by having most of the — most of the funds concentrated in National Indemnity.

So there's no mastermind to it. We ended up with a few companies in GEICO Corp, which was a holding company for GEICO itself. And it just seemed that we probably ought to get those up to the parent company level and we put them there.

But our general approach is just to keep every place loaded with more capital than anybody could possibly conceive of us needing. And that's going to result, more and more, probably, in the funds being concentrated in National Indemnity.

25. "Dollar will be the world's reserve currency 50 years from now"

WARREN BUFFETT: OK. Station 5.

AUDIENCE MEMBER: Good morning, Warren. Good morning, Charlie. My name is David Tollefson (PH) from Minneapolis, Minnesota.

Currently, the U.S. is not a prospective founding member of the Asian Infrastructure Investment Bank, where many European countries are. The AIIB is relatively small, but if this is part of an ongoing trend in the next 50 years, how will that impact the U.S. multinational corporations? Thank you.

WARREN BUFFETT: Well, that's a subject I know absolutely nothing about, so let's hope Charlie does. (Laughter)

CHARLIE MUNGER: I know a little less than you do. (Laughter)

WARREN BUFFETT: I really apologize to you, in terms of your question, but, you know, if we started talking about it, we'd be bluffing.

CHARLIE MUNGER: Yeah.

WARREN BUFFETT: Do you have a second question? (Laughter)

AUDIENCE MEMBER: Off the top of my head, how about the dollar as a reserve currency? Do you have any issues or concerns in the next 50 again — I know we're in a good position now — but with us losing that position?

WARREN BUFFETT: I think the dollar will be the world's reserve currency 50 years from now, and I think the probabilities of that are very high. Nothing certain, but I would bet a lot of money on that one.

Charlie?

CHARLIE MUNGER: Well, I have a little feeling on that subject. I'm probably more nervous than a lot of people about printing a lot of money and spending it. There are times when you have to do it, I'm sure, and we just came through one.

But I'm happier when we print money and use it improving infrastructure than I am when we just spread it around with a helicopter. (Applause)

WARREN BUFFETT: So what do you think is going to happen if we keep spreading it around with a helicopter?

CHARLIE MUNGER: I think it's always more dangerous than the economic profession thinks.

26. Subsidiaries using the Berkshire Hathaway name

WARREN BUFFETT: OK. With that, we'll go to Andrew.

ANDREW ROSS SORKIN: This question comes from a local shareholder, Max Rudolph, who writes in:

"Recently, several subsidiaries were renamed to include Berkshire or BH in their name, which Mr. Buffett has avoided doing previously, at least due in part, I imagine, to increased reputational risk should something go wrong.

"Can you discuss how you decide which subs are allowed to rebrand, and discuss those risks, given that Clayton, NetJets, and others, have received negative publicity this year?"

And attached to that question, Steve Rider (PH) of Chicago asks, "Will Fruit of the Loom become Berkshire Undergarments?" (Laughter)

WARREN BUFFETT: Well, if it does, we won't pay him a royalty for the idea. (Laughter)

The — we did create a Berkshire Hathaway HomeService operation, which is a franchise operation.

We bought two-thirds of the Prudential franchise operation a couple of years ago, and we have a contract where we can buy the — where we will — buy the remaining third in another couple of years.

And so we were going to lose the rights to Prudential over time. And Greg Abel asked me about using Berkshire Hathaway, and I told him that they could use it, but that if I started hearing of any abuses of it or anything of the sort, we would yank it, and that maybe that would be a useful tool in making sure that people behaved like we wanted them to. And so far, that's worked out fine.

We've had no idea that we wanted to take Berkshire Hathaway into becoming a household name and that that would create extra value, but we were going to rename a large franchising operation.

And, like I say, as long as the name does not get abused, that will be fine. And the Van Tuyl Auto — we're calling it the Berkshire Hathaway Automotive Group.

Certain of the dealers will have the right to use that as a tag line and others won't. And, again, if there's problems connected with it, we'll change it.

But in a sense, that isn't bad. If there are going to be problems, I'd just as soon hear about them. If I hear about them because the name is "Berkshire Hathaway," that may mean that I get on top of them faster than I would otherwise.

We have no — we have — a good many of our companies, at the bottom of their letterhead or something of the sort, they say a "Berkshire Hathaway Company," and that's fine.

But we have no — we do not anticipate that we're going to turn it into some huge asset by branding a bunch of products that way.

Charlie?

CHARLIE MUNGER: We'd be crazy to try and sell Berkshire Hathaway peanut brittle instead of See's. Those old brand names are worth a lot of money.

27. MidAmerican's embrace of wind power

WARREN BUFFETT: OK. Gregg?

GREGGORY WARREN: This question is on the energy business.

During last year's meeting, we touched briefly on the topic of distributed generation, a method of generating electricity on a small scale at the point of consumption, from renewable and nonrenewable energy sources. Much of this has come around the last several years due to the growth of renewable energy sources like solar and wind.

Up until now, though, it has been difficult, if not cost prohibitive, for self-generators to store this energy.

Now that Elon Musk has joined the fray this week with his idea of batteries for the home, for his new Tesla Energy initiative, which could lead the way for larger systems, and realizing that disruptive technologies can, at times, upend an industry's business model and competitive positioning, how long do you believe it will be before distributed generation becomes a meaningful threat to your utilities, especially if power can be stored more easily at the end user's place of business or home?

WARREN BUFFETT: Well, you put your finger on storage being the key. And Charlie follows storage a little bit more than I do, and maybe I'll have Greg Abel talk about it.

But obviously, distributed energy is something we pay a lot of attention to.

One of the — probably the best defense is to have very low-cost energy, and MidAmerican has done a terrific job in that respect. And the figures, in terms of people who have adopted solar in our territories, are just minuscule and will stay that way.

But huge improvements in storage would make a difference in a lot of ways. And, Charlie, what are your thoughts on that?

CHARLIE MUNGER: Well, obviously, we're going to use a lot more renewable energy because the fossil fuels aren't going to last forever. And, obviously, Berkshire is very aggressive and very well located, in terms of this development.

You know, I grew up here in this part of the world, and to have 20 percent of the power of Berkshire utilities in Iowa coming from the wind, I regard as a huge stunt.

And it's, of course, very desirable, in a windy place like Iowa where the farmers like the extra income, to be getting a lot of power out of the wind. And, of course, we're going to have a lot better storage, and the technology has been improving.

And this is — it's not a threat, it's a huge benefit to humanity, and I think it will be a huge benefit to Berkshire. And everything is working for us.

I love owning MidAmerican in an era where we're going to have more storage, more wind, more solar, more grid.

And I think we're so lucky. What the hell would we do if the fossil fuels run down, if we didn't have the sun to use indirectly in these forms?

And, of course, the — it's going to be a lot more storage. And, of course, there will be some disruption in the utility industry, but there will be more opportunity, I think, than disruption.

WARREN BUFFETT: Just in the last week, we've announced two different — we're already the leader — and we've announced two different projects.

One in Nebraska — I think it's 400 megawatts in Nebraska. That will be the first time we've had a wind farm here.

And then, we just got approval in the last couple days for, I think, a billion-and-a-half-worth more of wind in Iowa.

And I think Charlie mentioned 20 percent, but if we could — if Greg Abel could take the microphone, I think it's a lot greater percentage than that now. It's a moving target. So I may not have kept Charlie posted on the number.

But, Greg, would you bring people up to date on what percent we will be in Iowa when the present projects are completed, and also what has happened in Nevada and a few places like that? Greg?

GREG ABEL: So, I'd love to provide an update. Actually, as it's been touched on, we announced our tenth project in Iowa. That brings us to more than 4,000 megawatts built over the last ten years in that state.

And at the end of 2016, we will now have 58 percent of our energy — approximately 58 percent — of our energy that we provide to our customers coming from wind.

And then, if you continue to — thank you. (Applause)

And then, if you continue to look at our other utilities and our unregulated businesses — Warren, you've touched on this in the past — we now have more than $18 billion committed to renewable assets across our different utilities.

And if you look at NV Energy, our Nevada utility, for example, we've committed to retire 76 percent of their coal by 2019, and a large portion of that will be replaced with renewable energy. So, clearly a continued commitment to that. (Applause)

CHARLIE MUNGER: Greg, in our utility business, do you think we have more disruption to fear, or more opportunity to love?

GREG ABEL: Distributed generation and solar bring great opportunities for all of our different utilities, and we'll embrace it.

CHARLIE MUNGER: The answer is, you couldn't be luckier, is what I'm telling you.

WARREN BUFFETT: And one thing that has helped in this respect, is that wind and solar are — the development of wind and solar at present — are dependent on tax credits.

In other words, the federal government has made a decision that the market system would not produce solar or wind under today's economics, but it has an interest, as a society, in

developing it. So they have established a credit — I think it's one-point — electric is 1.9 cents a kilowatt — for ten years.

And because Berkshire Hathaway Energy is part of the consolidated tax return of Berkshire Hathaway Incorporated, it has been able to invest far more money than it would make sense to invest on a stand-alone basis.

Among electric utilities in the United States, there's really no one situated as well as MidAmerican Energy is, because it's part of this consolidated tax return, to really put its foot to the floor, in terms of developing wind and solar.

So it's become the biggest developer, by far, among the utility industry, and it — I think it's very likely to continue to be, simply because most utilities really don't pay that much income tax and, therefore, they're sort of limited in how far they can push development of wind and solar.

28. Buffett's most memorable failure

WARREN BUFFETT: OK. Station 6?

AUDIENCE MEMBER: Hello. I'm Linen Cygaloski (PH). I'm from Chicago, Illinois, and Berkeley, California.

I'd like to thank you for giving the opportunity to ask this question. This is my first meeting. I plan to attend once every 50 years. (Laughter)

And also, for your essay on the — both of your essays — on the past, present, and future of Berkshire.

As we reflect on the last 50 years, I'd like to ask you this question: what was your most memorable failure and how did you deal with it? Thank you.

WARREN BUFFETT: Yeah. Well, we've discussed Dexter many times in the annual report, where I — back in the mid-1990s — I looked at a shoe business in Dexter, Maine, and decided to pay 400-or-so million dollars for something that was destined to go to zero in a few years, and I didn't figure that out.

And then on top of that, I gave the purchase price in stock, and I guess that stock would be worth, I don't know, maybe 6 or 7 billion now. It makes me feel better when the stock goes down because the stupidity gets reduced. (Laughter)

Nobody misled me on that, in any way. I just looked at it and came up with the wrong answer. But I would say almost any time we've issued shares, it's been a mistake. Wouldn't you say that, Charlie?

CHARLIE MUNGER: Of course.

WARREN BUFFETT: Yeah. (Laughter)

CHARLIE MUNGER: We don't do it much anymore.

WARREN BUFFETT: No.

We probably could have pushed harder, particularly in the earlier years.

We've always been — well, we've had all of our own net worth in the company, we've had all our family's net worth, and we've had all these friends that came out of our partnership, many of whom put half or more of their net worth with us, so we've been very, very, very cautious in what we've done.

And there probably were times when we could have stretched it a little and pulled off something quite large, that we made a mistake, looking back.

But, I wouldn't want to take a 1 percent chance, you know, of wiping out my Aunt Katie's net worth or something. It's just not something in life that I could live with.

So I would rather be, you know, a hundred times too cautious than 1 percent too incautious, and that will continue as long as I'm around.

But people looking at our past would say that we missed some big opportunities that we understood, and could have swung, if we wanted to go out and borrow more money.

Charlie?

CHARLIE MUNGER: Well, it's obviously true. If we had used the leverage that a lot of successful operators did, Berkshire would be a lot bigger.

WARREN BUFFETT: A lot bigger.

CHARLIE MUNGER: A lot bigger.

And — but we would have been sweating at night. It's crazy to sweat at night. (Laughter)

WARREN BUFFETT: Over financial things.

CHARLIE MUNGER: Over financial things, yes. (Laughter and applause)

WARREN BUFFETT: Well, we won't pursue that.

29. Surprised that low rates haven't sparked inflation

WARREN BUFFETT: Carol? (Laughter)

CAROL LOOMIS: In your 2008 annual letter, you mentioned that a likely consequence of the Treasury and Federal Reserve's action to stabilize the economy would be, quote, "an onslaught of inflation."

Now that we are presumably nearing the time when the Federal Reserve will begin raising interest rates, could you share your thoughts regarding both the likelihood of accompanying high inflation, and the consequences that might follow?

And if high rates of inflation did occur, how would the consequences for Berkshire compare to those for most large companies?

And this question, I say belatedly, came from James Cook (PH) of Waterville, Maine.

WARREN BUFFETT: Well, so far we've been very wrong — or I've been very wrong. Charlie has probably been a little bit wrong, too. (Laughs)

CHARLIE MUNGER: Of course.

WARREN BUFFETT: Yeah. The —

No, I would not have predicted that you could have five or six years of, you know, close to zero rates, and now get negative rates in Europe, and run fairly large deficit, although the current deficit is not that large. I mean, the country could sustain on average, you know, 2 or 2 1/2 percent deficits forever and not increase the ratio of debt to GDP. So the word "deficit" is not a dirty word. But very large deficits, and sort of uncontrollable, are scary.

But, you know, we've taken the Federal Reserve balance sheet up from a trillion to over 4 trillion, and we've done a lot of things that weren't in my Economics 101 course, and so far nothing bad has happened, except for the fact that people who saved and kept their money in short-term savings instruments have just totally gotten killed, in terms of their — the income that they received from that.

But it's still hard for me to see how if you toss money from helicopters that eventually you don't have inflation.

Certainly, if the money supplied grows faster and faster relative to the output of goods and services, something like that is supposed to happen.

But I've been surprised by what's happened. I've been — you know, when Poland issues bonds at negative interest rates, you know, I did not have that list — in my list — of forecasts a few years ago.

And so I think we're operating in a world that Charlie and I don't understand very well and that —

And to the second part of the question, I think Berkshire, in almost any kind of environment, will do better than most big companies.

I mean, we are prepared for anything. We'll always be prepared for anything. And if we see really unusual opportunities, we're also prepared to act. And that gives us a real advantage over most big companies.

We don't count on anybody else. We're sitting with over 60 billion right now. I'd rather be sitting with 20 billion and made a great $40 billion acquisition.

But we will — you know, we will be very willing to act if economic turbulence of any kind occurs, and we'll be prepared and most people won't be.

Charlie?

CHARLIE MUNGER: Yeah. We have made very little progress in life by trying to outguess these macroeconomic factors. We basically have abdicated.

We're just swimming all the time, and we let the tide take care of itself.

WARREN BUFFETT: And we really don't see — we've not seen great successes by others who have been all involved in macro predictions. I mean, they get a lot of air time, but that's about all that happens.

CHARLIE MUNGER: The trouble with making all these economic pronouncements is that people gradually get so they think they know something. (Laughter)

It's much better just to say, "I'm ignorant." (Laughter)

WARREN BUFFETT: Yeah. We will find things, though, under any circumstances.

They don't come at an even flow. They may not — and, you know, you cannot predict the size or anything — but you can be sure that over the next ten years, you'll see a lot of things you didn't think were possible.

And we will occasionally see something that makes sense for Berkshire, and we will be prepared to do it both psychologically and financially.

30. Deferred taxes aren't a "hidden form of equity"

WARREN BUFFETT: OK. Jonathan?

JONATHAN BRANDT: For a variety of reasons, bonus depreciation on fixed assets investments in the noninsurance businesses perhaps being the most important, Berkshire's cash taxes have been meaningfully lower than reported taxes for the last several years.

The cumulative difference between cash taxes and reported taxes, which could be viewed as another form of float, now stands at around 37 billion.

Do you consider any portion of the cash flow from annual increase in deferred taxes to be economic earnings?

Is this a sustainable dynamic, or do you expect the relationship between cash and reported taxes to ever flip, for instance, if bonus depreciation ever expires?

Given Berkshire's massive appetite for capital spending at the utility and the railroad, is it possible, instead, that its deferred tax liability will never have to be paid, no matter what Congress does with bonus depreciation? And is it perhaps even likely that this form of float will continue to grow?

WARREN BUFFETT: Probably the most likely answer — there's two forms of float from deferred taxes.

One is the unrealized appreciation on securities, and they're — who knows what happens? I don't think the appreciation is going to disappear, but we may decide to realize some of it from time to time. In fact, we could realize a lot of it.

If you move over to the depreciation, which you're talking about, on the 37 billion — because the total deferred taxes, as I remember, maybe 60 billion or something like that — that is a factor of accelerated depreciation. And one form or another of accelerated depreciation has been around a long time.

Occasionally the — I think the bonus depreciation one year went to 100 percent. I could be wrong on that.

The — certainly in our utility business, that helps our customer and it doesn't help us, basically. I mean, we get a — we will get a return on equity, and that is not — that's not free equity to us, or anything of the sort.

The regulatory commissions take that into account. Return on invested capital, in terms of how the surface transportation board would look at it, again, I don't think we benefit enormously by that.

But it does mean there's less cash going out the door and we, therefore, don't need to borrow as much money for capital investment as otherwise.

But I don't think I would look at that as a hidden form of equity. I'd rather have the deferred taxes than not have them, but it's not meaningful there.

Now what could happen, is that, overwhelmingly, those deferred taxes were probably, entirely even — to the extent they're in the United States — were accrued at a 35 percent rate.

So if the corporate rate changed, then you would have a major change in the deferred tax item. And there's always a possibility of that.

CHARLIE MUNGER: But it would be a book entry. It wouldn't mean much.

WARREN BUFFETT: It wouldn't mean much. Yeah, yeah.

We do — the float from the insurance business, we regard as a terrific asset. The deferred tax liability is a plus, but it's not — it's not a big asset.

31. Lessons on hidden incentives from Teledyne's Henry Singleton

WARREN BUFFETT: OK. Station 7.

AUDIENCE MEMBER: Hi. My name is Dan Hutner from Vermont.

I was wondering if you could talk about Henry Singleton's Teledyne, and whether you learned lessons from that, used it as a model, and what you think about how it ultimately unwound, and how you might want Berkshire to continue differently?

WARREN BUFFETT: Yeah. That's a very good question. And Charlie knew Henry Singleton. I knew a lot about him. I mean, I studied him very carefully, but Charlie knew him personally, as well as studying him.

So I'm going to let Charlie answer that. But there's a lot to be learned from both what Singleton did in his operating years and then what happened subsequently.

CHARLIE MUNGER: Henry Singleton was very interesting. He was a lot smarter than either Warren or I.

Henry was the kind of guy that always got 800 on every test and left early. And he could play chess blindfolded, at just below the grand master level, when he was an old man.

That said, I watched him invest, and I watched Warren invest, and Warren did a lot better. He just worked at it.

Henry was thinking about inertial guidance, and Warren was thinking about securities. And the extra work enabled Warren to get by with his horrible deficit of IQ, compared to Henry. (Laughter)

And the interesting thing —

WARREN BUFFETT: But let's not quantify it. (Laughter)

CHARLIE MUNGER: No. The interesting thing about Singleton is he had very clever incentives on all the key executives, and they were tough, and they were important, and they were meaningful.

And in the end, he had three different Defense Departments that got into scandals.

He wasn't doing anything wrong. He wasn't trying to hurt the Defense Department on purpose. But the incentives got so strong, and the culture of performance got so strong, that people actually — it went too far — in dealing with the government, Teledyne did.

And so, we haven't had any trouble like that, that I know of. Can you think of any, Warren?

WARREN BUFFETT: No. And Charlie and I, we really believe in the power of incentives. And there's these hidden incentives that we try to avoid.

One — we have seen, both of us, more than once, really decent people misbehave because they felt that there was a loyalty to their CEO to present certain numbers — to deliver certain numbers — because the CEO went out and made a lot of forecasts about what the company would earn.

And if you — if you go and say — if I were to say that Berkshire's going to earn X per share next year, and we have a bunch of executives in the insurance business that set loss reserves and do all kinds of things, or companies in other areas that can load up channels at the end of quarters, at the end of years, I've seen a lot of misbehavior that actually doesn't profit anybody financially, but it's been done merely because they don't want to make the CEO look bad, in terms of his forecast. Or he's done it, because he doesn't want to look —

When they get their ego involved, people do things that they shouldn't do.

So we try to eliminate incentives that would cause people to misbehave, not only for financial rewards, but for, you know, ego satisfaction.

I think that's probably pretty unusual to even be considering that in the business, but we've seen enough, so we do consider it.

CHARLIE MUNGER: I might also report that at the end, Henry wanted to sell his business to Berkshire for stock, so he was very smart right to the very end.

WARREN BUFFETT: We had a case at National — it's interesting.

You really have to understand — should understand — human behavior, if you're going to run a business, because when National Indemnity — we're going back to the late 1960s —

Jack Ringwalt was a marvelous man, and he ran it, and he had another marvelous man who worked for him, his tennis partner, and that fellow was in charge of claims.

And when the claims man would come in to Jack and say, "I just received a claim for $25,000" or something, for some long-haul truck or something, Jack would say — Jack — it was just his personality.

He would start berating the fellow and say, "How could you do this to me?" and "These claims are killing me," and all of that, and he was joking.

But the fellow he was joking with couldn't take it, really, and he started hiding claims. And he just didn't — he stuck them in a drawer.

And that caused us to not only misreport fairly minor figures, but it also caused us to misinform our reinsurers, because they had an interest in the size of claims.

And the fellow that was hiding the claims had no financial interest in doing it at all, but he just didn't like to walk into the office and have Jack kid him about the fact that he was failing him.

And you really have to be very careful in the messages you send as a CEO. And if you tell your — if you tell your managers you never want to disappoint Wall Street, and you want to report X per share, you may find that they start fudging figures to protect your predictions.

And we try to avoid all that kind of behavior at Berkshire. We've just seen too much trouble with it. (Applause)

32. Berkshire isn't "too big to fail"

WARREN BUFFETT: Becky?

BECKY QUICK: This question comes from Anthony Sterochi (PH) in Lincoln, Nebraska.

He says, "If government regulators deem Berkshire Hathaway's reinsurance business too big to fail, how would government regulation of the reinsurance business affect Berkshire Hathaway?"

WARREN BUFFETT: Yeah. The question — there's two, essentially, regulatory aspects to it.

One is there's the European — and I hope I'm describing this right — I may be wrong, a little bit, on some technicality — there's a European group that is looking at insurers, generally, and has designated, I believe, nine or so insurance companies as — I'm not sure what they call them — but they deserve special attention, I'll put it that way. There's a technical name for it.

The one that's more relevant in the United States is the Financial Stability Oversight Committee, I believe they call it, which designates so-called SIFIs, systemically important financial institutions.

And large banks are in that category. And then the question is, what non-banks are in it?

And they designated General Electric, and Prudential, and recently, Metropolitan, and Metropolitan is fighting the designation.

The question is whether — question isn't just whether you're large. I mean, Exxon Mobil is large, Apple is large, Walmart's large, and nobody thinks about them as SIFIs.

The definition on a non-bank SIFI would be 85 percent of revenues coming from financial matters, and we don't come remotely close on that. I mean, we're 20 percent or thereabouts.

But the real question is whether problems that Berkshire might encounter could destabilize the financial system in the country. And we have not been approached. Nobody's ever called me.

They spent a year with Metropolitan, even before they designated them. So there's — we have no reason, in logic, or in terms of what we've heard, to think that Berkshire would be designated as a SIFI.

I mean, during the last time of trouble, we were about the only party that was supplying help to the financial system, and we will always conduct ourselves in a way where the problems of others can't hurt us in any significant way.

And I think we're almost unique, among financial institutions, in the layers of safety that we've built into our system, in terms of both cash, and operating methods, and everything else. So, it's a moot question.

It — the law exists. We haven't been approached about it as we — as I know — as I mentioned.

Apparently it takes a year or so, even if they approach you while they listen to your presentation and look at your facts. And I do not think Berkshire Hathaway comes within miles of qualifying as a SIFI.

Charlie?

CHARLIE MUNGER: I think that's true. But I think that, generally speaking, there is still too much risk in a lot of high finance. And the idea that Dodd-Frank has removed it all permanently is nonsense. And people like hanging onto it.

You know, trading derivatives, as a principle, if you're shrewd, is a lot like running a bucket shop in the '20s or a gambling parlor in the current era. And you have a gambling parlor that you have a proprietary edge in, and you say it's sharing risk, and helping the economy, and so forth. That's mostly nonsense.

The people are doing it because they like making money with their gambling parlor, and they like favorable labels instead of unfavorable labels.

So, I think there's still danger in the financial system. And I also think our competitors don't like it that they deserve regulation and we don't. And I think there's danger in that too.

WARREN BUFFETT: Yeah. One thing that may not be — (Applause)

I haven't read much about it, but my understanding is that Dodd-Frank actually weakens the power of the Fed, and to some extent the Treasury, too, to take the kind of actions they took in 2008, primarily.

And those powers were needed to keep our system, in my view, from really going into utter chaos.

The ability to say, and have people believe you when you say it, that whatever needs to be done, will be done, has resided in the Federal Reserve and with the Central Bank — the European Central Bank.

And the fact that people believed when Hank Paulson said that the money market funds are going to be guaranteed, that stopped a run on 3 1/2 trillion of money market funds that had lost 175 billion in deposits in the first three days, there, back in September of one week.

If that — if people hadn't believed that, you would have seen that 175 billion turn into a trillion very quickly. I mean, the system would have gone down.

So the — when you have a panic, you have to have someone, somewhere, who can say and be believed, and be correctly believed, that he or she will do whatever it takes.

And you saw what happened in Europe when Draghi finally said that, and you saw what happened in the United States when Bernanke and Paulson, more or less together, said it.

And if you don't have that, panics — they will accelerate like you cannot believe.

You know, in the old days, the only way you could stop a run on a bank was, basically, for somebody to come and pile up gold. I mean, they used to race it to the branches that were having a problem. I remember reading the history of the Bank of America on that, and how they would put out runs before the Federal Reserve existed, and the only thing that stopped it was to pile up gold.

I mean, if the CEO of the bank came out and said, you know, our Basel II ratio is 11.4 percent, the line would just lengthen. It would not get the job done.

Gold got the job done. Bernanke and Paulson got the job done, but the only way they got it done was saying, "We're guaranteeing new commercial paper. We're guaranteeing that the money market funds won't break the bank. You know, we're going to do whatever's necessary."

I think Dodd-Frank weakens that, and I think that's a terrible thing to weaken. (Applause)

33. Selling workers' comp insurance online

WARREN BUFFETT: OK. Gary?

GARY RANSOM: You have started a direct workers' comp operation online, BHDWC.com. It looks a little bit like you're Geico-izing some of the commercial lines.

What's the overall strategy of that effort, and how big do you think it can grow, and what concerns might you have on channel conflict with GUARD, who uses independent agents?

WARREN BUFFETT: Yeah. We — well, Progressive did pretty well with the channel conflict between direct writing and agents.

We will find out what the consumer wants. But we are experimenting with online workers' comp. As you can tell, we've done pretty well with online direct auto over the years.

We'll find out. I don't think that — I don't think the channel conflict is a big problem for us. It might be a bigger problem for some other companies, but I don't think that's a big problem.

It's a trickier thing. We write commercial auto through GEICO, and that's grown and it's not small, but it hasn't achieved private passenger auto proportions at all. So we'll find out.

But we believe in experimenting at Berkshire, and we've got the know-how to write that business in direct, and we'll find out if the customer wants to buy it that way.

We've got an awfully good insurance business, but the nature of the insurance business has changed. I mean, GEICO was all direct mail back in 1936, when Leo Goodwin and his wife sat there and stuffed envelopes.

And the basic idea of saving people money on auto insurance continues to this day, but it went from direct mail to — it went to the TV and the phone, went to cable TV, and then went to the Internet and — and goes to mobile and it — you know, the world moves on.

And the key is to be able to save people money and give them good service. And whatever way does that in the most effective way is going to be what wins 20 or 30 or 50 years from now, and we'll try to stay on top of it.

34. Question you've never been asked

WARREN BUFFETT: OK. Station 8.

AUDIENCE MEMBER: Hello. My name is Paula, and I'm from Gainesville, Florida.

And I would just like to ask Mr. Buffett, after all these years of interviews and meetings, what is the one question that you've never been asked that you would like to answer now? (Laughter and applause)

WARREN BUFFETT: Well, I can think of the question I haven't been asked, but I'm not sure I want to answer it now. (Laughter)

I think I've been asked almost all of them, and many of them, time after time after time.

Charlie, do you have anything that you're just dying to be asked?

CHARLIE MUNGER: Well, if this lady will first tell us the worst thing she ever did in her life. (Laughter)

AUDIENCE MEMBER: Those secrets are not —

WARREN BUFFETT: Paula, I wish we could help you. Have you got another question you'd like to throw at us?

AUDIENCE MEMBER: I could ask you another question.

WARREN BUFFETT: Good.

AUDIENCE MEMBER: Can I buy you lunch? (Laughter)

WARREN BUFFETT: I think she's talking to you, Charlie. (Laughter)

He always wins. You saw him in the movie. He always gets the girl.

CHARLIE MUNGER: Yeah. I'm so heavily involved with those girls in the movie, I just don't have room on my list. (Laughter)

WARREN BUFFETT: Thank you, Paula. (Laughs)

35. Buffett: We run Berkshire almost as tightly as 3G would

WARREN BUFFETT: OK. Andrew.

ANDREW ROSS SORKIN: This is a toughy, and I should say we've probably got — or at least I got — several dozen emails on 3G, and so this is a follow-up to what you talked about on 3G earlier.

And specifically, actually, it's two questions in one that actually came from the audience after your response about 3G. So just to put it in perspective, those shareholders are in the audience, and they asked not to be named, so here we go.

This shareholder writes, "I intend no disrespect to 3G's money making abilities and, as a Berkshire shareholder, like the partnership very much. However, you took more than a decade to shut down the Berkshire mills.

"You take great pride in letting Berkshire's managers run their companies for you, and as Charlie says, almost to the point of abdication. And that approach has made Berkshire a very attractive home for companies.

"You've even bought newspaper groups in the face of the internet tidal wave, and acknowledged they didn't have the same investment characteristics of other Berkshire businesses.

"Are you actually saying 3G's management method is congruent with yours?

"Asked another way, if 3G ran Berkshire, would there not be significant layoffs and consolidation among the companies and intense focus on short-term profits?"

WARREN BUFFETT: No. I think there would be — there would be some companies they'd make changes in. But I would say that GEICO, for example, 33,000 employees, or whatever the number is, is run just as efficiently as 3G would run it.

I would say our home office, with 25 people — we could have a home office with 500 people. We could have floors devoted to strategy, and floors devoted to human resources and comparing the salaries of everybody at all our different companies, and so on.

If they walked into that situation, they'd cut it back. I don't know whether they'd get it down to the 25 we have, but we do not believe in having extra people around.

And our newspapers, you know, unfortunately, you know, they have had to cut back, as revenue has kept shrinking.

And the idea that you run a fat operation just because you're making a lot of money — we cut back on our textile business — I closed the Waumbec mill considerably before we closed the Berkshire mills. It was only when it became apparent that it was just hopeless, we gave up on it.

But in the meantime, every time at Berkshire — I had a drawer full of proposals that said if we put in this kind of a loom, we'll be able to get rid of eight people, and we put in the loom.

I mean, we were trying to reduce our labor complement all the time because we were in competition with people that were doing the same thing.

So I don't think there's any — I don't think there's anything in — we do have some businesses that probably have more people than we need, and I don't do something about it.

But I don't encourage it in any way and most of our managers don't operate that way.

And it's true, if 3G were running our operations, they would get more active at that than I will. But that doesn't mean that I endorse it. It just means that I basically tolerate it where I've got a manager that I think well of.

I think better of the 3G way — method — of operation than I do of our operators where they really have excess people in it. We've got very few of those, but we do have a few.

So, I would never advocate running a business at a loss. If you — where it's going to continue. And you'll see that in our economic principles that's been in the back of the book — back of the annual report — for 30 years or so.

And the same goes for having excess people around, and I think you'll see our attitude toward excess people best expressed in our office here that has 25 people, and Charlie's office in Los Angeles that has two, counting him.

CHARLIE MUNGER: I'd say we've got two-thirds of one. (Laughter)

We're getting by with practically nothing.

WARREN BUFFETT: Yeah.

36. "Great brands will survive and the great retailers will do well"

WARREN BUFFETT: OK. Gregg?

GREGGORY WARREN: This is sort of a follow-on to the 3G question.

When we look at the body of work that the firm has put together in the consumer staples universe, Anheuser-Busch, InBev, Burger King, Tim Hortons, and now Kraft Heinz, one gets the sense that they view the average consumer staples firm as being undermanaged, with a potential for substantially greater levels of profitability.

Given the ongoing struggles of many packaged food firms, most of which compete in a mature category against private label and/or store brand offerings that undercut them in price and diminish the value of their brands, and many of them having to deal with large retailers, like Walmart, that provide meaningful sales volumes but are also quite demanding and continuously pushing for the lowest price available, do you see the potential for further consolidation in the industry with a firm like Kraft Heinz emerging as a big consolidator? Or do you feel that Nestle's more recent squawking about the deal, and 3G Capital's reputation as being a bit heavy-handed with cost cutting, being enough to keep further consolidation at bay?

WARREN BUFFETT: Well, there will be deals in the future. I mean, there are bound to be.

But the strong brands — you know, just look at the ones that General Foods added in the 1980s and the ones that Kraft has now that come from that same company.

And, I mean, Coca-Cola sold more cases of beverages last year than any year in their history and they'll sell more this year. I mean, it's — a strong brand is really potent stuff.

I mean, take Heinz Ketchup or something of the sort. It's 60 percent brand share in the United States, but it's much higher in many other countries.

So you'll always have the fight between the retailer and the brand, and the retailer is going to use all the pressure they've got and, therefore, the brand has to stand for something in the consumer's mind.

Because, in the end, the retailer may want to shift to a house brand, a private label, but — and they — private labels have been around forever in the soft drink field. I mean, I can remember when I was looking at Cott Beverage and all of those and thinking, what will it do to us?

I remember when Sam Walton sent me the first six-pack. He told me, it's the first six-pack of Sam's Cola, 20 years ago, and believe me, Walmart has plenty of power, but so does Coca-Cola.

And the brand — you've got to nourish them. You know, you've got to take very, very, very good care of them. They have to stand for the promise that's in people's mind about them.

But a lot of people have tried to — I don't know how many dozens, or maybe hundreds, of cola beverages there have been over the years. RC Cola. You know, they came up with the first diet product back in the early '60s, and that looked like a big maneuver.

Wilkinson came up with the blade back in the ’60s after Gillette, but Gillette ends up with 70 percent, by dollar value, worldwide of razor blades after 100 years.

So there’s all — you’ve got to protect a brand. You’ve got to enhance it in every way. You’ve got to get a promise in people’s minds that gets delivered that way.

But that’s the question Charlie and I faced in 1972 when we looked at See’s. See’s was selling for $1.95 a pound, Russell Stover was selling a little cheaper, and you had to decide how much damage could a Russell Stover do if they came after See’s, and they copied our shops, and all that sort of thing.

If you protect a brand — if you got a terrific brand and you protect it, it’s a fabulous asset.

But you’ll always have trouble dealing with Costco and Walmart and the rest of the guys — Kroger, you name it, you know, they’re tough, too.

But the great brands will survive and the great retailers will do well.

Charlie?

CHARLIE MUNGER: Well, we’ve almost exhausted this topic. The — there’s no question about the fact that waves of layoffs frighten people. A job is a very important part of a person’s life, and it’s no small thing to lose it.

So — but on the other hand, I don’t think you — what would our country be if we kept everybody on the farms? All this prosperous group would be pitching hay and milking cows at 4:00 in the morning. No, we need — we need our businesses to be right sized.

37. Value investing in China?

WARREN BUFFETT: Station 9?

Better have some fudge, Charlie.

AUDIENCE MEMBER: Very exciting to see my superstars here. I’m Leo (inaudible) from China and a loyal fan of you and Charlie.

Many Chinese investors feel all kinds of performance pressure, question, and even laughing, at value investing.

Many also believe that value investing, that doesn’t apply to China, where the stock market just doubled over the last six months.

I would like to ask Mr. Buffett, do you think value investment can be widely applied in all markets, or just the (inaudible) markets, just as the ones in the United States?

Do you have any suggestions for value investors to hold against pressure and to be much happy? Thank you.

WARREN BUFFETT: I'm not sure I got all of it, but Charlie will help me.

I certainly think investment principles do not stop at borders. So if I were investing in China or any place else — India, UK, Germany — I would apply exactly the same sort of principles that I learned from "The Intelligent Investor."

I would think of stocks as a small piece of a business. I would think of investment fluctuations being there to benefit me, rather than to hurt me. And I would try to focus my attention on businesses where I thought I understood the competitive advantage they had and where they would — what they would — look like in five or ten years.

So I don't think I would change the principles at all. I'm not sure I got all of the question.

Maybe Charlie can elaborate on the rest.

CHARLIE MUNGER: Well, the Chinese have a history of being very entrepreneurial and gambling very heavily when they have the opportunity, and it has created great volatility in the Chinese stock markets.

And when things get bouncy and prosperous, like our Internet craze here in the United States, China looks a lot like Silicon Valley.

I think China would be way better to be more value investor minded and less absorbed in waves of speculation.

So I think the more China copies the way Berkshire operates, I think the better it will be for China. (Applause)

WARREN BUFFETT: Yeah. There's a certain irony, in that we will — we would — do the best, over decades, if we operated in a market where people operated very foolishly.

And the more people respond to short term events and exaggerated things or — anything that causes people to get wildly enthusiastic or wildly depressed, actually, is what allows people to make lots of money in securities.

And, on the other hand, it's not the greatest thing for a society. And Charlie and I have benefited enormously by the fact that over a 50-year period, there have been a few periods,

probably the most extraordinary being 1973 and ’74, where you could buy stocks unbelievably cheap, cheaper than happened in 2008 and 2009.

And, you know, it doesn’t make sense to have that much volatility in the market, but humans behave the way humans behave, and they’re going to continue to behave that way in the next 50 years.

I mean, if you’re a young investor, and you can sort of stand back and value stocks as businesses and invest when things are very cheap, no matter what anybody is saying on television or what you’re reading, and perhaps, if you wish, sell when people get terribly enthused, it is really not a very tough intellectual game. It’s an easy game, if you can control your emotions.

And as Charlie says, we’ve talked about a little bit that the Chinese market may be more — there may be more speculative influences in it, even than in the United States, because it’s a relatively new development and it may lend itself to greater extremes, and that should produce great opportunities. Charlie?

CHARLIE MUNGER: Yeah. But there’s great opportunities for excess and nasty contractions after unnatural booms and so on.

I think China is wise to dampen the speculative booms and to — and I think the Chinese — I don’t think that value investing will ever go out of style. Who in the hell doesn’t want value when you buy something? How can there be anything else that makes any sense except value investing?

WARREN BUFFETT: It never gets that popular though. (Laughs)

CHARLIE MUNGER: People are looking for an easier way.

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: And that’s a mistake. It looks easier, but, in fact, it’s harder. And there’s a lot of misery to be obtained by misusing stocks.

WARREN BUFFETT: Yeah. Nobody buys a farm to make a lot of money next week or next month, or they buy, you know, an apartment house. They buy it based on what they think the long-term future is. And if they get a — if they make a reasoned calculation of that and the purchase price looks attractive, they buy it and then they don’t get a quote on it every day or every week or every month or even every year, and that’s probably a better way to look at stocks.

38. U.S. needs to protect against catastrophic terror attacks

WARREN BUFFETT: Carol?

CAROL LOOMIS: “Mr. Buffett, you have expressed your optimism about the future of America many times and have often made the point that the U.S. simply has a superior economic system.

“But my question” — and this is from Christopher Gottchio (PH) of New York City — “my question concerns the risk of chemical, nuclear, biological, and cybersecurity problems and the audience should reflect on the initial letters of those words when I tell you that Mr. Buffett has sometimes dubbed that C-N-B-C.” Sorry, Becky. (Laughter)

WARREN BUFFETT: I just do that to tease people, but the —

CAROL LOOMIS: Wait a minute. One more. “How do these threats affect your outlook?”

WARREN BUFFETT: Well, they are the great threat to the United States. The — we will have — we have, and will have, a wonderful economic system.

You know, your children are going to live better than you do, and your grandchildren are going to live better than they do. That is — there are fits and starts and ups and downs. But just go outside or — as you fly home, just imagine what you’re flying over looked like in 1776, and everything since then is profit.

I mean, the farms are incredibly more productive. The cities have grown. It’s all here, you know, and that’s all come from unleashing the energies and brains of the American people and the system that has worked quite well despite all the deficiencies that we talk about all the time. So that hasn’t been lost at all.

And, you know, people get upset because we’re having 2 percent growth. Well, 2 percent growth with 1 percent population growth means 20 percent gain in a generation, and 20 percent on 54,000 of GDP per capita is another 10,000 of GDP per capita coming in the next generation.

This country has a wonderful future, but as the questioner pointed out, that can all be nullified by either madmen, or rogue states, or religious fanatics, or sociopaths, or whatever it may be, who have — who wish to have — access to weapons of mass destruction.

And to nuclear, which, as I used to think was the primary one, you know, you can now add biological and chemical and cyber.

And there will be an increasing number — there already are a huge number — of people that would wish harm, and particularly on the United States, although on others as well.

And those people aren’t going to go away, and they’re going to look for more ingenious ways of utilizing the raw materials that they have access — or might get access to — and better delivery systems.

And we need an extremely vigilant security operation in the United States, and we will have threats. I can't — I do a little bit about those things in a few ways — but that's something we live with.

But we also live in a country that is going to do extraordinarily well. And if we successfully ward off those threats, or at least minimize their impact on us, I still maintain that the luckiest person ever born in history, on a probabilistic basis, is the baby being born in the United States today. (Applause)

Charlie?

CHARLIE MUNGER: Well, of course, we were a favored place, and we've had a favored outcome, and we've been lucky too.

I think I probably lived in the most ideal era that any man in human history could have been born into. I think you have, too, Warren.

WARREN BUFFETT: Right.

CHARLIE MUNGER: But I don't think we should get too smug. China has come up a lot faster than any other big nation ever came up, and —

WARREN BUFFETT: But that's good for us.

CHARLIE MUNGER: Oh, I think — I can hardly think of anything more important than future close collaboration between the United States and China.

I think you're talking about the two most important nations in the world going forward. And I think it is very important that we like and trust one another, and have very good relations, and work together to avoid bad consequences that come from other people's mistakes and misbehavior.

So I'm — (Applause)

I think both China and the United States would be crazy not to collaborate and increase trust.

I don't think there's anything more important that we could do for our respective safety and for the general benefit of the world. (Applause)

WARREN BUFFETT: If you had your choice, would you rather be born now with all the qualities you've got, or when you were born?

CHARLIE MUNGER: Well, I must say it's very interesting now, but it was always interesting.

And I think that's too tough a question. I don't like these very theoretical questions. (Laughter)

I'd rather think about something where I might gain some advantage or help somebody else to gain an advantage.

39. Unlikely that one person will run both investments and operations

WARREN BUFFETT: OK. Then we'll move on to Jonathan. (Laughs)

JONATHAN BRANDT: Warren, you have up to this point said that Berkshire in the future will have a chief executive officer and one or more chief investment officers.

You haven't explicitly said that a chief investment officer cannot be the CEO, but that has, for me at least, been implied.

Berkshire has been successfully managed for 50 years by a chairman and vice chairman whose principal experience was in allocating capital amongst a number of businesses and industries with which they were familiar and whose attributes they could compare.

Since capital allocation is the key skill needed for a company structured the way Berkshire is, why couldn't the company's principal decision maker in the future also be someone who is experienced in choosing among different reinvestment options, with perhaps a second outstanding person expert in operations acting as chief operating officer, albeit a route of the hands-off one, given Berkshire's extreme decentralization?

WARREN BUFFETT: That's a very good question.

It's not inconceivable. It's very unlikely, Jonny, that — but as you say, the — a chief investment officer has a — will have — or should have — a significant array of skills that would be useful, also, for a chief executive officer.

But I would say, also, that I would not want to move — if I were voting on it — I would not want to vote to put somebody whose sole experience had been investments in charge of an operation like Berkshire, who had not had any, also, significant operating experience.

I've said that I'm a better investment manager because I've been an operating manager, and I'm a better operating manager because I've been the investment manager.

But the — you — operations — I've learned a lot through operations that I wouldn't have learned if I'd stayed in investments all my life. I would not have been equipped to run it.

I learned a lot of things about operations by being in operations. So if you had somebody that had the dual experience and was very good at investments, but had a lot of experience in operations, that would be conceivable. Otherwise, I wouldn't vote that way.

Charlie?

CHARLIE MUNGER: Well, every year at Berkshire, as now constituted, the owned and controlled businesses get more and more important, and the measurable securities are relatively less important.

So, I think it would be crazy not to go with the tide to some extent.

And we need more — we need expertise beyond that of a typical portfolio analyst.

WARREN BUFFETT: Yeah. But the CEO should have some real understanding of investments and investment alternatives and all that.

I've seen a lot of businesses run by people that really don't understand the math of investing or capital allocation very well. So having a dual background is useful, but actually our operating managers know — some of them know — a lot about investing.

40. Weschler and Combs are good investors and good people

WARREN BUFFETT: OK. Station 10,

AUDIENCE MEMBER: Hello. Warren, Charlie, it's a pleasure to be here. My name is Douglas Coburn. I'm originally from Caracas, Venezuela, but I'm here with a large group from Columbia Business School. (Cheers)

My question —

Thank you.

My question is regarding Ted Weschler. Can you please share your views regarding his investment philosophy, his investment process, and the qualities that he brings to Berkshire?

WARREN BUFFETT: Yeah. Well, both Ted and Todd [Combs], the two investment managers, aside from myself, at Berkshire, are very, very smart about businesses and investments.

I mean, they understand the reality of business operations. They understand what makes for competitive strength, and all of the things that you'd learn in business school or learn through investing.

And on top of that, they have qualities of character which are terribly important to me and Charlie.

We have seen dozens and dozens and dozens of investment managers with great records over the years. We used to drop in and see some of those guys, you know, that were running — I'm talking back in the 1960s and '70s.

And when I gave up my partnership, I knew probably 20 people with great records from the previous six or eight years, but I picked Bill Ruane to handle the funds of my partners going forward.

And he set up a fund called Sequoia Fund, and 10,000 put in that fund has become over $4 million now.

Well, Bill was a terrific investment manager, but he was a terrific human being. And we really want people where they do more than their share, where they don't claim credit for things they don't do, where they — you know, they — just every aspect of their personality is such that you want to be around them, and you want to hand responsibility over to them.

And Ted and Todd fit that bill, and there's plenty of investment managers in Wall Street with great records that don't fit that bill, in our view. So that's about all I can tell you.

Charlie met — he met Todd first. I met Ted first. And we both — when we talked about them, we talked about their record and the kind of stocks they owned, but we talked a whole lot more about what kind of people they were and we haven't been disappointed.

Charlie?

CHARLIE MUNGER: Yeah, I think the whole thing is working pretty well. And I think those people will be constructive around Berkshire for reasons apart from their expertise in handling securities. In fact, they already are.

WARREN BUFFETT: They already very are.

CHARLIE MUNGER: Oh. They're — they've just — each one has helped buy a business recently.

WARREN BUFFETT: Yeah. And they will help oversee it, too, the businesses. They're smart about business, and they know just exact — they know the right touch to apply in terms of how much they get involved.

I mean, Todd worked on Charter Brokerage. He worked on an acquisition we made from Phillips.

Ted just worked on this operation over in Germany, went over there a couple of times.

And he's just smart. You know, he's got good sense. He knows how to deal with people. You know, if a deal is to be made, he'll get it made.

And we — Charlie and I run into more dysfunctional people with 160 IQs, probably, than anybody alive.

But Salomon gave us a head start on that, as a matter of fact. Wouldn't you say that —?

CHARLIE MUNGER: We've specialized in it.

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: We've absolutely specialized in it.

WARREN BUFFETT: We've seen — take the Salomon — we've seen a group of people whose IQs far surpassed those of people at Berkshire, and we've seen them self-destruct to make money they didn't need, when they were already rich. You know, I mean, see, that's madness.

But a lot of people are just incapable of functioning well day after day, even though they're capable of brilliance from time to time.

And we're looking — we've got very solid people in Ted and Todd. They're very bright and they identify with Berkshire and not with themselves, and that's a — it's a huge factor over time.

Any more, Charlie, on that?

CHARLIE MUNGER: Well, yeah. And that trustworthiness is more important than the brains. It's not that they don't have the brains, but we wouldn't hire anybody, no matter how able, if we didn't trust them.

WARREN BUFFETT: Yeah. Very occasionally — (Applause)

Yeah. We'll get disappointed on that occasionally, but not very often.

41. Update on Buffett's hedge fund wager

WARREN BUFFETT: We're approaching noon. We'll come back at 1:00.

I promised — seven years ago I made this bet, which was originally to produce a million dollars for the charity of the winner, and another fellow who was in the hedge fund business — and I offered this bet to anybody. Only one person took me up on it.

And we made this bet where a million dollars goes to the winner's charity, as to whether a group of five hedge funds, the funds would beat the S&P Vanguard fund.

And my point being that the fees would not overcome — would not be overcome — by managerial brilliance and that the hedge funds would fall short.

And the other fellow betting, essentially, that paying people 2-and-20, and having an override to the fund of funds, was nothing to pay for the brilliance of getting Wall Street to manage your money.

And I promised that every year I would report the update.

And the first year I fell far behind, but we reported it then.

So we'll put that slide up. And as you can see, seven years into it, it's interesting that just buying Vanguard fund, you know, with no — nothing but putting the S&P 500 in there, has now given a cumulative return of 63 1/2 percent, and the hedge funds are at 19 percent.

The interesting thing is, some of that is underperformance, but the hedge fund managers have done very well during that period. If they were managing a billion dollars, for example, at 2-and-20, you get $20 million a year just for coming to the office.

It's — you know, it's been — the hedge funds haven't done bad. It's the investors in the hedge funds have paid a very big price. And the — (Applause)

We originally funded this with zero-coupon bonds. We each bought about 350,000 of zero-coupon bonds that would be worth 500,000 at the end of the period.

We converted it to Berkshire Hathaway stock — so — a few years ago, the fellow on the other side of the bet did it with me. So now it now looks like the winner will get appreciably more than a million dollars.

And if you want to entertain yourself, you can go to Long Bets — on search, just put in Long Bets, and you'll find this organization out in Washington that sort of acts as the stakeholder, sets the rules for these long bets.

And now there's hundreds of them up there, and they're on all kinds of predictions, and you can go there, and if you want to disagree with one of the parties on there, you can make these bets that pay off in 50 years or 25 years.

Afternoon Session - 2015 Meeting

1. Didn't get Clayton Homes question in advance

WARREN BUFFETT: OK. Everybody will settle down, we'll move right along.

I want to clear up one thing. My daughter told me that because we had all those — I had — all those slides that were in answer to Carol's first question, that Carol [Loomis] and I had discussed it ahead of time.

I will guarantee you that I've discussed no questions with anyone on the panel, and they will tell you the same thing.

But I knew I was going to be asked questions about Clayton, so I prepared the slides.

It was an accident that it turned out to be the first question, but it was certain to be in the first few.

So, Carol did not — Carol in 60 years has never tipped me off on anything, nor have the other panelists.

And everything — but we were — but I was — prepared for the fact that people would be asking questions about Clayton.

OK. Let's move right along, and we'll go to Becky.

2. Businesses that do best in high inflation

BECKY QUICK: OK. This is a question — oops, that's not the question. Hold on.

Here it is. This is a question from John Wells, right here in Omaha, and he says, "You've described inflation as a gigantic corporate tapeworm. Which of Berkshire's businesses are best suited to thrive during a period of high inflation and why? Which will suffer the most and why?"

WARREN BUFFETT: Yeah. Well, the best businesses during inflation are usually the best — they're the businesses that you buy once and then you don't have to keep making capital investments subsequently.

So you get — you do not face the problem of continuous reinvestment involving greater and greater dollars because of inflation.

That's one reason real estate, in general, is good during inflation. If you built your own house 55 years ago like Charlie did, or bought one 55 years ago like I did, it's a one-time outlay, whereas if you're — and you get the — you get an inflationary expansion in replacement capital without having to replace yourself.

And if you've got something that's useful to someone else, it tends to be priced in terms of replacement value over time, so you really get the inflationary kick.

Now, if you're in a business such as the utility business or the railroad business, it just keeps eating up more and more money, and your depreciation charges are inadequate and you're kidding yourself as to your real economic profits.

So, any business with heavy capital investment tends to be a poor business to be in in inflation and often it's a poor business to be in generally.

And the business where you buy something once — a brand is a wonderful thing to own during inflation.

You know, See's Candy built their brand many years ago. Now, we've had to nourish it as we've gone along, but the value of that brand increases during inflation, just as the value of, really, any strongly branded goods.

Gillette bought the entire radio rights to the World Series in 1939. And as I remember, it cost them $100,000, and for that they got to broadcast the Yankees, I think, versus the Reds in 1939.

And think of the number of impressions they made on minds in 1939 dollars for $100,000, and they were getting in the minds of young guys like myself. I was eight or nine. And millions of people — and they did it in those dollars then.

And, of course, if you were going to go out and try out and do — have similar impressions on millions of minds now, it'd cost a fortune. And part of that is due to inflation. Part of it's due to other things.

But it was a great investment, which could be made in 1939 dollars that paid off, in terms of selling razors and blades in 1960 and 1970 and 1980 dollars.

So that's the kind of business you want to own.

Charlie?

CHARLIE MUNGER: Well, yeah, but if the inflation ever goes completely out of control, you have no idea how it's going to end up.

If it weren't for the Weimar inflation, we might never have had Adolf Hitler. It was the twosome of the great German inflation followed by the Great Depression that brought us Hitler. And think of the price that the world paid for that one.

We don't want inflation because it's good for See's Candy. (Laughter)

WARREN BUFFETT: I didn't quite realize I was —

CHARLIE MUNGER: No, I wasn't criticizing you.

WARREN BUFFETT: What's good for See's Candy is good for the United States. (Laughter)

3. Organic growth vs. acquisitions

WARREN BUFFETT: OK. Gary?

GARY RANSOM: Three years ago you noted that you had looked at a large commercial lines insurance company as a possible acquisition, and now you've started up Berkshire Specialty, which seems to be off to a good start.

What are your thoughts on whether that has replaced the idea of taking over — of buying or acquiring a large company, or is Berkshire Specialty doing well enough that you're content with that —

WARREN BUFFETT: Yeah.

GARY RANSOM: — organic growth?

WARREN BUFFETT: I would say that it's almost certain that we — I don't want to say 100 percent certain — but it's almost certain we will not take over a large commercial insurance company.

We've got the ideal operation, in my view, in Berkshire Hathaway Specialty.

We've got the right people running it. We've got Ajit overseeing it. We've got more capital than any commercial insurance company in the world so that our securities are — and, therefore, our policies — are really better than anyone else's.

So, we've got all these things going for us. And if we bought a big operation, we would have paid a very substantial nondeductible acquisition premium, and this way we've actually made money while we're in the building stage.

And I think it can be a very, very big operation five or 10 years from now. So it's almost zero probability that we'll buy somebody else.

Charlie?

CHARLIE MUNGER: Well, I certainly agree with you.

WARREN BUFFETT: OK. The — that's how he keeps his job. (Laughter)

We'll go to — incidentally, all the overflow rooms, including at the Hilton, got filled. I'm not sure where a couple — where station 11 is — but we always lose a fair number at lunchtime.

So I'm sure everybody can find a seat, but we do apologize to those who could not find a seat this morning.

4. Munger on reputation and behaving well

WARREN BUFFETT: Station 11?

AUDIENCE MEMBER: Yes. Hey, Warren and Charlie. How are you guys? Congratulations on 50 years.

WARREN BUFFETT: Thank you.

AUDIENCE MEMBER: So, in this year's annual letter, Charlie wrote about the peculiar attributes that made the Berkshire system, and the leader of the system, a historically organizing entity — organizational entity.

So, my question to both of you is what practical mental model or mental models would you impress upon a young, enterprising individual at the infancy of their career to build an important enduring enterprise of that particular distinction and impact?

And if you could give, like, maybe some contrasting examples, like why is a Microsoft able to build itself into a dominating monolithic company, versus a See's Candy, which can be a great enterprise to spin off cash flow but not necessarily be an enduring — or not necessarily enduring — but an impactful enterprise to the level of a Berkshire or Microsoft?

CHARLIE MUNGER: Thank you, Warren. (Laughter)

WARREN BUFFETT: You're the guy that wrote it. (Laughter)

This is pineapple juice, incidentally. People were questioning that. (Laughter)

They say it's good for your throat if you're going to talk a long time.

CHARLIE MUNGER: Yes. Well, of course, reputation you get over a long period of time.

Very few people are like Charles Lindbergh where you just suddenly have a great reputation.

Most of us have to acquire one very slowly, and that was true in Berkshire's case.

And any individual you just have to get the best reputation you can in the years you're allotted and the time available.

And it may work out well, it may work out poorly. But it's a wise investment.

I see, all the time, opportunities come to people where it's the credibility they've gotten in the past that causes them to have the new opportunity.

So, I think hardly anything is more important than behaving well as you go through life.

And — I think we actually try to behave better as we got more prosperous, and I think you'd be crazy if you didn't.

So, I'd certainly recommend that you follow those old-fashioned principles.

And I don't think there's any way of guaranteeing a total powerhouse brand, nor can — if a result is a one in 50 million-type result, you're probably not going to get it.

WARREN BUFFETT: Gianni Agnelli of Fiat, back in — I think it was 1988 — I was at dinner with him one time, and he said something to me that stuck with me. He said, "When you get old," he says, "You'll have the reputation you deserve." He says, "For a while you can" —

CHARLIE MUNGER: Fool people.

WARREN BUFFETT: — "fool people," but he says, "When" — he was talking about himself at the time — but he said, "When you get to be my age," he said, "Whatever reputation you have, it's probably the one you deserve."

And I think the same is true of companies. And, frankly, you know, it has helped Berkshire a whole lot that it has gotten a reputation to be a somewhat different sort of company.

I mean, I don't think we set out to do that, exactly, but it has worked out that way.

5. Climate change risk for insurance subsidiaries

WARREN BUFFETT: Andrew?

ANDREW ROSS SORKIN: Warren, you have said that global warming has not increased Berkshire's payouts for weather-related events. Yet, other insurers, including Travelers, have cited climate change as a risk factor that they use.

Are Berkshire's models different and, if so, how?

WARREN BUFFETT: Yeah. No. I've seen the — of course, the SEC requires you put in all these risk factors, and the lawyers will tell you to put in, you know, everything possibly you can think of, you know, that you'll develop Alzheimer's or whatever it may be.

They just want you to have a laundry list so that it's all been covered in case of later litigation or something of the sort.

So people do put in weather risk, and maybe they put it in because they've got some model that shows it. But, you know, we price our business — basically, we price it every year.

It's not like a life insurance company. A life insurance company you make a contract that — so much a thousand. And if you buy whole life insurance, you've set a price for — if you're 20, you may have set a price for 60 or 70 years in the future. But that is not the property casualty insurance business, which we're in.

We set it one year at a time. And I see nothing that tells me that on a yearly basis that global warming is something that should cause me to change my prices a lot, or even a small amount.

That doesn't mean that it isn't a threat to humanity or — you know, and terribly important. It just means that if I'm going to sell a one-year insurance policy, and I'm going to sell it on a $1 billion plant, I may care enormously about the fire protection, and other various other kinds of protection, within that plant.

I may care about what's going on adjacent to that plant, and all kinds of things, but I am not thinking about global warming. It does not change the situation, in a material way, in any one-year period of time, in my judgment.

And, you know, it — if I was writing a 50-year wind storm policy in Florida, I would think very hard about what global warming might do in that case to the incidence and the intensity of potential hurricanes.

But I do not think it has any material effect on the likelihood of — or the intensity — of a hurricane in Florida or Louisiana or Texas or — next year.

So, it is not a — it's not something I would put in the 10-K as a threat.

Charlie?

CHARLIE MUNGER: I don't think it's totally clear what the effects of global warming will be on extremes of weather. I think there's a lot of guesswork in that field, and a lot of people like howling about calamities that are by no means sure.

WARREN BUFFETT: Yeah. Do you think — would it change your one-year prediction as to what the rate should be?

CHARLIE MUNGER: No.

WARREN BUFFETT: No. It wouldn't change mine either, so I don't really understand why they put that in there.

CHARLIE MUNGER: A lot of people get very invested. It's like a crazy ideology.

It's not that global warming isn't happening. It's just that you can get so excited about it you make all kinds of crazy extrapolations that aren't necessarily correct.

WARREN BUFFETT: Yeah. Look at it this way. Would you change the rate for tomorrow on insurance because — from the rate today — for global warming? I doubt it very much.

Now, you know, would you change it for 50 years? Might very well.

But I think that one year is much closer to one day than it is to 50 years, in terms of focusing on that factor.

So, I do not want our underwriters to sit there thinking a lot about — in terms of writing a risk or the price at which to write that risk — I do not want them thinking about global warming. I want them thinking about whether there's a moral risk involved and who owns the property.

I mean, that can be very significant. There used to be one fellow called "Marvin the Torch," that if you insured "Marvin the Torch," global warming didn't really make much difference. His building was going to go. (Laughter)

Marvin had a marvelous way of looking at it, though. He said, "I don't burn buildings; I create vacant lots." (Laughter)

6. More oil & gas investments possible despite poor record

WARREN BUFFETT: OK. Gregg?

GREGG WARREN: When we look back at some of your bigger stock purchases during the past decade, two names actually stand out: ConocoPhillips and ExxonMobil.

In the first instance, you bought shares near the height of the spike in oil prices in 2008, later acknowledging that this was a mistake given how dramatically oil prices fell during the crisis.

While you've been able to swap some of those holdings, post a spinoff of Phillips 66 into operating assets, most of what you sold the last six years, by our estimates, has been at a loss.

Given that experience, it surprised some of us to see you take a meaningful position in ExxonMobil during the summer of 2013.

While it looks like you were able to eliminate that stake at cost as oil prices fell last year, these types of investments, which can be negatively impacted by the volatility in oil prices, don't really seem to fit well with the other types of investments in your stock portfolio, many of which are built on strong franchises with unique competitive advantages.

With that in mind, and given the track record that Greg Abel and his team at Berkshire Hathaway Energy have had acquiring and investing in energy assets, does it make more sense to leave future energy-related investments in their hands?

WARREN BUFFETT: Well, there's nothing we like better than to back up Greg in buying utility properties.

And — but they — we call it energy, but it's not oil and gas in Berkshire Hathaway Energy, and they're really in a dramatically different business than ConocoPhillips or ExxonMobil.

But we are looking, constantly, for opportunities for Berkshire Hathaway Energy to spend big money, and it will.

Berkshire Hathaway Energy, we paid $35.05 per share in 1999 to buy the stock.

I was at $35, and I don't change my prices and Berkshire — the company was then called MidAmerican — they hired some investment bankers to come out from New York, and investment bankers spent a week here doing nothing.

But they felt — before they went home, they said, you know, "You've got to give us something because we're going to send a big bill." And I said, "Well, in that case, we'll pay $35.05 and you can say you got the last nickel out of me." (Laughter)

So my ambition ever since has been to have Berkshire Hathaway Energy earn $35.05 per share. It's never paid a dividend.

It will probably earn about $30 a share this year, which is a great tribute to Greg and his management. But we will get the 35 or better because he will make some good deals.

It's not at all analogous to the ConocoPhillips or ExxonMobil investments. As it turned out, we wrote ConocoPhillips down because we were required by the auditors to do it.

We actually, by the time we got all through, we made some money in it, and we made a little money in ExxonMobil, too.

But we will not be buying, very often, oil and gas stocks, but we will — we probably haven't bought the last one.

In the end, we look at the cash, we look at available opportunities, both in investments and businesses, and we make decisions, occasionally, on buying something and sometimes we change our mind.

And that will continue that way. It's been going on that way for a lot of years.

And we have not distinguished ourselves, at all, in the oil and gas field, although we've made a little money, and we passed up one or two where we could have made a lot of money.

Charlie?

CHARLIE MUNGER: Yeah. And with interest rates being so low and the dividend on ExxonMobil being the size it was, it was not a bad cash substitute, if you think only in those terms.

WARREN BUFFETT: Yeah. It worked out OK. There were other things we could have done a lot better, but that's always been true and will continue to be true.

7. No "tears" for corporations on taxes

WARREN BUFFETT: Station 1.

AUDIENCE MEMBER: Mr. Chairman, Mr. Vice Chairman, my name is Andy Peake, and I'm from New York City.

First, congratulations to you on a remarkable 50 years, and second, thank you for hosting a one-of-a-kind annual meeting where you patiently answer questions from shareholders. I believe you are both — (Applause)

WARREN BUFFETT: Thank you.

AUDIENCE MEMBER: I believe you are two of the most knowledgeable and authoritative people on planet Earth on the U.S. tax code.

Our tax code is obviously broken at both the individual and the corporate levels.

Today, we have 2.1 trillion in offshore corporate cash sitting there not being brought home. We have the highest corporate tax rates in the world, and for high-income earners in the U.S., other than hedge fund managers, in states like New York and California, an all-in rate greater than 50 percent.

What can be done to effect real change to bring about a simpler, more rational tax code? Thank you.

WARREN BUFFETT: Well, it takes 218 members of the House of Representatives and 51 U.S. senators, and a president that will sign the bill.

The question is: how much you think the country should spend and then from whom do you get it?

And I would point out that despite the tax rates that all the corporate chieftains complain about, the share of earnings — share of GDP — accounted for by corporate profits is at a record.

Corporate taxes 40 years ago were 4 percent of GDP. They're now running about 2 percent. They've decreased significantly while payroll taxes have increased.

You know, it's a real question.

And once you get special provisions in the code, it is really hard to get rid of them, absent a major revision of the code.

I actually think — I may be an optimist on this, but I'm — I think both Ron Wyden and Orrin Hatch, the two ranking members, Senate Finance Committee, I think they're capable of working out something that they — neither one of them likes — but they both like it better than what exists now, and I think it can be made considerably more rational.

But in the end, if we're going to spend 21 or 2 percent of GDP, we should probably raise 19 percent of GDP.

We can take a gap of a couple percent without getting further into debt as a proportion of GDP than we are, so we've got that leeway.

But, you know, you take 19 percent of 17 1/2 trillion, or thereabouts, and you're talking, as Senator [Everett] Dirksen said one time, real money.

And how much you get from corporations, how much you get from individuals, how much you get from estate taxes, you know, it's a fight up and down the line.

So I — and in terms of the cash abroad, basically you can bring it back, you just have to pay tax at U.S. corporate rates. And our corporate rates are 35 percent.

Charlie and I, a good bit of our life, operated with corporate rates of 52 percent, later at 48 percent, and the country grew well. American business prospered during that period.

I don't shed any tears for American business, in terms of the tax rate overall. I think there could be a much more equitable code, in terms of the corporate tax, but I do not think that the 2

percent of GDP that's being raised from corporate taxes, which is far lower than was the percentage 30 or 40 years ago, I do not think that's an onerous number.

And for people who are getting 1/4 or 1/2 percent on their CDs, who have retired, and with American business earning, on tangible equity, which is the way they measure it, you know, probably averaging close to 15 percent, I think equity holders are getting treated extraordinarily well compared to debt holders in this economy. (Scattered applause)

Charlie?

CHARLIE MUNGER: Well, I agree with you, and I don't die over these little differences in the tax code, either.

I live in California, of course, where — there's, like, a 13 1/2 percent tax on long-term capital gains, nondeductible for federal purposes. That's a ridiculous kind of a tax to have in California because it drives rich people out.

Hawaii and Florida have enough sense to know that rich people don't commit a lot of crimes, they don't burden the schools, and they provide a whole lot of medical expenditures that are good for everybody else's income.

I think California has a really stupid tax policy. But I don't think the U.S. — but I don't think the U.S. policy is — (applause) — I don't think the U.S. policy is bad at all.

WARREN BUFFETT: And it's nondeductible because of the alternative income tax —

CHARLIE MUNGER: Yes, exactly.

WARREN BUFFETT: Yeah. That really wasn't the case before, but it —

CHARLIE MUNGER: No, it's always —

WARREN BUFFETT: — kind of slipped in.

CHARLIE MUNGER: No, they did it on purpose. (Laughter)

No, they did it on purpose.

WARREN BUFFETT: Early stages of paranoia. (Laughter)

CHARLIE MUNGER: Yeah. But it is — it's amazing. The idea of driving the rich people out, Florida is so much smarter than California on that subject. And it is really demented.

Who in the hell doesn't want rich people coming in and spending in their state?

WARREN BUFFETT: Yeah, yeah. Remember that as you come here to Nebraska for the meeting. (Laughter)

I would say I really do think there's some chance this year — and not a tiny chance.

I know both Ron Wyden and Orrin Hatch. They're patriotic, they're smart, they want to do the right thing. They've got different ideas about what the right thing is, there's no question about that, but they also know they can't get any place without cooperating.

But I think the real opportunity is if they work out of the public eye in doing — in working on something — and I wouldn't be surprised if they are. I think that's the way to get it done.

Charlie has always pointed out, what would have happened if the Constitutional Convention back there in Philadelphia had been held with every delegate running out immediately to tell the TV cameras how right he was and how wrong everybody else was.

It doesn't accomplish much to dig in on positions, and not be in a position to compromise, because it takes a lot of compromise to write something when you have two different — fundamentally different — views on some important aspects of the tax code.

But those are two good guys, and I would not — I don't think it's impossible that we have a new corporate tax code within a year.

8. Buffett on Adam Smith's "Wealth of Nations"

WARREN BUFFETT: OK. Carol?

CAROL LOOMIS: This question, which is a little bit offbeat, comes from Jordan Shopof (PH) of Melbourne, Australia.

"Mr. Buffett, in the forward to the sixth edition of Benjamin Graham's 'Security Analysis,' you identified four books that you particularly cherish.

"Three of these books were authored by Graham himself, and their influence on you is well-known.

"The contributions of the fourth book to your thinking, however — that book was Adam Smith's 'The Wealth of Nations,' published in 1776 — what that book meant to you is seldom discussed.

"So my question is, what did you learn from "The Wealth of Nations" and how did it shape your investment and business philosophy?"

WARREN BUFFETT: Well, it doesn't shape my investment philosophy, but I certainly learned economics from it. And my friend Bill Gates gave me an original copy of it. I was able to study this.

Adam Smith wrote it in 1776. It's — you know, there's just — if you read Adam Smith and if you read Keynes, Ricardo, and then — and if you also read that little book we've got out there called "Where Are the Customers' Yachts?" you will have a lot of wisdom.

I forgot to mention, I was supposed to mention, too: we didn't want to put it on sale earlier because it would have given away the movie, but we do have "Berkshire Bomber" underwear out there, or sweatshirts, or whatever it may be, so Fruit of the Loom has those.

And we have Fred Schwed's "Where Are the Customers' Yachts?" book, which contains an incredible amount of wisdom and very few pages and very entertaining.

But if you want to go for — if you want to not only get a lot more wisdom but appear more erudite, you should read "The Wealth of Nations," also.

Charlie?

CHARLIE MUNGER: Adam Smith is one of those guys that has really worn well. I mean, he is rightly recognized as one of the wisest people that ever came along.

And, of course, the lessons that he taught way back then were taught again when communism failed so terribly, and places like Singapore and Taiwan and China, and so forth, came up so fast.

The productive power of the capitalist system is simply unbelievable, and he understood that fully and early, and he's done a lot of good.

WARREN BUFFETT: I took an idea of his on the specialization of labor, you know, and he talked about people making pins or something, but I applied that, actually, to philanthropy.

You know, I mean, the idea that you let other people do what they're best at and stick with what you're best at, I've carried from mowing my lawn to philanthropy, and it's a wonderful thing to just shove off everything and say somebody else is better than I am at that, and then work in the field that's most productive for you.

CHARLIE MUNGER: Yeah. You didn't do your own bowel surgery, either.

WARREN BUFFETT: No. (Laughter)

I'm not sure I have any reply to that. (Laughter)

9. Subsidiaries aren't too focused on short term

WARREN BUFFETT: OK. Jonathan?

JONATHAN BRANDT: Warren, you have told the managers of your businesses to think of their businesses as something they will own forever and that their first priority should be to widen the moat and take care of their customers.

In more than one case, according to people I've spoken to, Berkshire's subsidiaries that were formally publicly traded have run into trouble by — now this is on the margin, mind you — trying to maximize calendar year earnings and dividends to the parent, as opposed to focusing on the long-term health of the business.

Do you find that managements of formally public companies, through force of habit, perhaps, have more trouble making decisions with only minimal concern for short-term results than would be the case for formally private companies?

If this dynamic is a real one, is there something more that can be done to combat it?

And I'm curious, are most of Berkshire's compensation structures based on 12-month results or are they already based over multiyear periods?

WARREN BUFFETT: Yeah. I don't think we've had any particular problem with public companies versus private companies that we've bought.

I mean, if you took the aggregate of the public companies we bought and matched them up against the private companies, I don't know which group I would rather own or which has delivered the greater returns.

CHARLIE MUNGER: I don't know where he gets the idea.

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: It's not apparent to us.

WARREN BUFFETT: Yeah. Well, you've heard Charlie. And I can't think of it myself.

And, you know, if we tell them to think about 100 years, we mean think about 100 years, and I think they know we mean it. They certainly know we run Berkshire, you know, in terms of our own decisions that way.

So, I think we set the right example, and I think we use the words to convey that belief as strongly as we can, and we try to reinforce — we try to put it in the annual report, we try to talk about it in meetings like this.

We believe in sort of hammering the same message out there over and over again.

Now, we don't ignore yearly results at all, it's just we don't live by them. But I get figures every month on virtually every business, and I read them with great interest, and, you know, I'm thinking about them all the time.

I don't think they're unimportant, but we don't live by them. And I think what really counts, you know, is where we're going to be three years, five years, or 10 years from now.

But I also — I wouldn't — if we're subpar in some area, I wouldn't accept the fact that we're working to maximize things in 10 years mean that we should be throwing away money, or anything like that, in the short run, or not paying attention to the business.

But I'd have to say what Charlie has, I don't really agree with the premise.

10. Buffett's interest in German companies

WARREN BUFFETT: OK. Station 2.

AUDIENCE MEMBER: Dear Warren, dear Charlie. Thank you for 50 great years. I'm a happy shareholder and hope to have you continue long.

My name is Victoria Von Tropp (PH). I'm from Bonn in Germany.

And my question is, you own companies both here in the U.S. as well as in Germany. What differences in corporate culture and in performance do you see between German and U.S. starter companies?

WARREN BUFFETT: Charlie?

CHARLIE MUNGER: Differences between what —

WARREN BUFFETT: I know the question. I'm just looking to you for the answer, not the question. (Laughter)

CHARLIE MUNGER: Now that he can hear so much better, he —

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: Well, we — we've had a hard time buying things in Europe. It's been quite rare.

And I think the traditions, and the family traditions, are different in Europe than they are in the United States, and in some other countries.

And Germany, of course, has a long tradition of being very good at technology and capitalism, and that's been a godsend to Germany. And we've always admired the way the Germans have performed.

The Germans actually work fewer hours than a lot of other people and produce a lot more and, of course, Warren and I are pretty good at that. (Laughter)

So we're — we admire the Germans, particularly the engineering side, and — but we've been thinking about owning good German companies for a long time and we finally bought one.

WARREN BUFFETT: Yeah. But I'll make a prediction. I will predict we buy at least one German company in the next five years.

I think that — I think we are far more on the radar screen than we were just a few years ago in Germany. I think we now have a woman over there who brought, through somebody else as well, but brought Louis to our attention.

I think she is going to hear about more things because of her association with us on the transaction and the fact that we tried to get the word out as to her help with us.

So, I would really be surprised if we don't make at least one deal in Germany in the next five years, and I would look forward to it. I mean, we'll be very, very happy with — you know, we have to get a business, we understand.

I've had, probably, four or five letters in the last couple months, ever since the Louis deal was announced, but they've been very small businesses in practically each case.

But we'll get one. We're eager, we've got the money, and we do fit the family situation, occasionally.

And prices may be a little more attractive there than in the United States, although I haven't seen anything yet that we've bought.

But I would say that there's a reasonable chance that the price of something we're offered over there might catch my attention more than U.S. prices, currently.

11. Why competitors sometimes underprice GEICO

WARREN BUFFETT: OK. Becky.

BECKY QUICK: This question caught my attention not because I think it's a complaint, but I think it's an actual question about the actuarial models that you use at GEICO.

It comes from Stan Zion (PH). And he says, “My wife and I are stockholders of Berkshire Hathaway. I’m 78 and she’s 74. We have a long-time accident-free driving record.

Yet, when we applied to GEICO with our stockholder discount, GEICO was unable to beat our rates for comparable coverage with other fine companies. Why?”

WARREN BUFFETT: Well, it’s the reason that we probably can beat the rate maybe 40 percent of the time with people who contact us and 60 percent of the time we can’t.

No company is going to be the lowest in all cases. And we have our own underwriting criteria that involves many variables, one of which is age, but it wouldn’t be a dominant one at that age.

But we have many, many variables. And we make our calculations, and very good competitors like State Farm and Allstate, USAA, and so on, they have somewhat different underwriting weightings and sometimes they come in below us.

But I don’t think any company, of size, will be the lowest more often than GEICO.

We give out quotes on the telephone to many, many thousands of people every week. I get the figures every week, and I get the number of quotes, and I get the number of policies sold.

And I can tell you the percentages are very substantial that we sell. And we’re not selling them if we’re charging them more than the people before them. So it — different people have different weightings for different variables.

And the couple you referred to sound like they should get a very good rate from somebody, but they apparently got a better rate from somebody else other than us. And that’s going to happen, perhaps 60 percent of the time, and 40 percent of the time we’re going to get the business.

And since we’re only 11 percent of the whole market now, it means we’ve got a lot of policyholders yet to gather.

The — it’s an interesting question when you’re looking at how to evaluate drivers. You know, we know that 16-year-old boys are about as bad as they get; 16-year-old girls are a better class.

Does that mean they’re better drivers? Not necessarily.

It may mean they don’t have the same tendency to show off. It may mean they don’t drive as many miles. It may mean a whole lot of things.

So we ask a lot of questions, and other people ask different questions, and we will come up with different rates. But it’s definitely worth 15 minutes to call GEICO. (Laughter)

Charlie?

CHARLIE MUNGER: Well, I would say besides if — when you get into the older people's group and you find you're not deteriorating as fast as most of your contemporaries, you may be paying an unfair price for the insurance, but it's a good tradeoff. (Laughter)

WARREN BUFFETT: Gary.

I haven't thought of it that way before. (Laughter)

12. Reinsurance business getting worse due to "facades"

GARY RANSOM: The reinsurance market has changed dramatically over the last two or three years, a lot of alternative capital coming into the business, making it much harder to make the assumption that there would be a big opportunity after the next big catastrophic event.

What is it that you and Ajit are planning to change, or do, to take advantage of whatever opportunities might be there?

WARREN BUFFETT: Well, wouldn't our competitors like to know? (Laughs)

The reinsurance business is not as good as it was, and it's unlikely to be as good as it was.

There's a lot of money that's come into reinsurance, not because they want to reinsure people, but because it's become either a fashionable asset class for people that are looking for so-called noncorrelated investments and may not know what they're doing, but it's something you can sell people, you know, that's an attractive line to go to pension funds with.

And then, secondly, it's a beard for doing — for asset management. So, if you go to Bermuda and start a reinsurance company, you can actually run a hedge fund, and you need a little business to make it look like you're doing something other than running a hedge fund, and locating it offshore so you don't pay any tax, but that's the primary motivation.

So when you get a whole lot of people that are bringing money in and they sort of need your facade of reinsurance to cover up what their real motivations are, you're likely to get less attractive prices in reinsurance.

And that's been happening on a fairly large scale, and I would say that I would expect the reinsurance business in the next 10 years to not be as good as it has been — I'm talking about the whole industry — as it has been, you know, in the last 30 or something like that.

It's a business whose prospects have turned for the worse, and there's not much we can do about it.

We do find things to do. There are certain things that only Berkshire can do, and we've — I mentioned in the annual report that there have been eight—I think it was eight—contracts written with premiums of a billion dollars or more, and we've written all eight of them.

So, we do — there's a certain corner of the world that we've got a strong position in, and there's a few other things we will do, but it's not as good as it was.

Charlie?

CHARLIE MUNGER: Well, I think, generally speaking, of course, it's going to be harder and, of course, this competition from promotional finance is getting more and more intense and they're more optimistic.

They're searching for a robust narrative. We're not searching for a robust narrative so we can sell something. We're playing the game for the long pull and other people just pretend to be doing so.

WARREN BUFFETT: Yeah. We could — we've had the opportunity over — for a long period of time — to go out and promote reinsurance-type money, and really take advantage, you know, of people on it, because we would have the best reputation in the field, and we could attract a ton of money, and we could get a big overwrite on it.

But it's not our game.

CHARLIE MUNGER: And we don't particularly admire the way it's being played.

13. How to win friends and influence people

WARREN BUFFETT: Station 3.

AUDIENCE MEMBER: Mr. Buffett and Mr. Munger, my name is (inaudible) from South Florida, and I'm currently in seventh grade.

My question is how do you make lots of friends and get people to like you and work with you?

WARREN BUFFETT: That's not a bad question. (Applause)

Very good question.

CHARLIE MUNGER: Well, you know, I was pretty obnoxious when I was your age and asked a lot of impertinent questions, and not everybody liked me.

And so the only way I could get the people to like me a little bit was to get very rich and very generous. (Laughter)

That will work.

WARREN BUFFETT: People will see all kinds of virtues in you if they think you'll write a check. (Laughter)

Yeah. The two of us — both Charlie and I were on the obnoxious side early on, but you should get a little smarter about human behavior as you get older.

And I turned out to have some pretty good teachers as I went along, in terms of what worked.

I mean, I have looked at other people during my lifetime and at these wonderful teachers. They weren't teachers in the standard definition, but they were people I admired and I thought to myself, "Why do I admire these people?" And if I want to be admired myself, you know, why shouldn't I take on some of their qualities?

So, it's not a complicated proposition, you know. If you look around you at the people you like in your school, write down three or four things they do that make you like them, and then look around at the three or four people that turn you off, and write down those qualities, and decide that you're going to be a person you, yourself, would like, that you'd take on the qualities of the person on the left.

You're generous, you're friendly, you know, you accept things with good humor, you don't claim credit for things you don't do, all of these things. And they're all possible to do.

And if you like that in other people, people are going to like it in you. And if you find things that are kind of obnoxious, you're always late, you're always claiming credit for more than you do, and you're kind of negative on everything, and you don't like those in other people, get rid of them in yourself and you'll find out it works pretty well. (Applause)

CHARLIE MUNGER: And it really works in marriage. If you can change yourself instead of trying to change your spouse, that's a good idea. (Laughter)

WARREN BUFFETT: Charlie has said the most important thing in selecting a marriage partner is that you don't look for intelligence or humor or character. He says you look for someone with low expectations. (Laughter)

14. NetJets wasn't a mistake despite labor problems

WARREN BUFFETT: OK. Andrew?

ANDREW ROSS SORKIN: OK. This is a question about NetJets. We received several related to NetJets. We've combined these two.

The first is, can you comment on the lengthy dispute with NetJets' pilots who are picketing outside, and Whitney Tillson asks, "What type of return on investment do you expect from the billions on order in aircraft for NetJets," and in a very pointed way, he writes, "Was buying NetJets a mistake?"

WARREN BUFFETT: No, I don't think buying NetJets was a mistake. We've had a few things where it looked like a mistake for quite a while and some of them turned out to be a mistake.

But NetJets is a very decent business. We have a good business; the pilots have a good job.

And the — it's not really the right way to look at it, I don't think, in terms of return on investment in the billions of dollars of orders we have because we resell those planes to owners.

And we do have a core fleet that represents an investment, but the investment is held, in very large part, by the owners themselves. I own — what do I own? Three-sixteenths, or something like that, of one type of plane that my children use. I own an eighth of another plane that I use. But that's my investment; it's not the NetJets investment.

The — labor relations — at Berkshire we've had hundreds of labor unions over the years, literally hundreds. In fact, we probably have hundreds at the present time.

And we've only had — in 50 years — we've had three strikes that I can remember. I don't think there have been any others. There could have been some one-day walkout, maybe.

But we had a four-day strike at a Berkshire Hathaway textile operation, we had a four-day or so strike at the Buffalo News 30 years ago, and we had another strike at See's Candy one time.

So, we have no anti-union agenda whatsoever, and we think we have sensational pilots.

I mean, I've flown NetJets, my family has flown NetJets, now for 20 years, and we've had nothing but professional pilots and friendly pilots.

And it's not — you know, it's in human nature to have differences, sometimes, about what people get paid.

Our pilots make an average of 145,000 a year. They worked — they work seven — they have options, but one of the options, and the main option, is seven days on and seven days off.

We pay for their time to get to where they're based. They can live anyplace in the country. And compared to our competitors at Flexjets or Flight Options or so on, or in charter, we pay well.

But it's perfectly understandable that employers and employees have some differences from time to time. And we'll get it worked out, but that doesn't necessarily come in a day or a week or a month.

And our volume is up, in terms of flying. Our volume is up, in terms of owners in the United States. Europe is flat. But the United States is the bigger end of it.

So it's a business I'm very glad we own. I'm proud we own it. It's a first-class operation. We give our pilots more training, I believe, than anybody else.

I'm flying on NetJets. My kids are all flying on NetJets. Our managers, in many cases, are flying on it, so nobody cares more about safety.

This is not a company where the CEO flies on his own jet and other people fly in other ways. So I — and I get the same — I get the same planes that the other people get and the same pilots. I mean, there's no special arrangements.

So we've got this intense interest in safety, and we've got very professional pilots. And at the moment, we've got a difference of opinion about a contract, but that will get settled, in my view.

Charlie?

CHARLIE MUNGER: I have never, in all the years, had a NetJets pilot who didn't affect me as a wonderful fellow and a very skilled, able, and dutiful, reliable person.

And I would say most — I can think of no NetJets pilot that has ever in any way indicated that he's dissatisfied with his life, and a lot of them say they just love it, because of the — I'm not at all sure the union is fairly representing the pilots.

WARREN BUFFETT: OK. (Applause)

He said fellows. Actually, we have a lot of women pilots, too.

15. Tax code helped Duracell-P&G deal

WARREN BUFFETT: Gregg?

GREGG WARREN: Warren, looking at your acquisition of Duracell from Procter & Gamble, at the time of the deal, you noted that Duracell is a leading global brand with top quality products. You're obviously familiar with the business, which was initially acquired by Gillette in 1996.

While Duracell does provide fairly steady cash flows and has a strong brand in market position, its core business is in decline, with advances in technology making alkaline batteries far less relevant than they were 20 years ago.

Looking back historically, you've been willing to hang onto businesses operating in declining industries as long as they continue to generate some cash for Berkshire overall, so having Duracell in the portfolio is not necessarily out of the ordinary.

The question I have is, how much of a role did tax planning actually play in doing this deal, given the extremely low-cost basis on your P&G shares, some of which you've been selling the last several years?

And would you have done this deal without tax considerations? And, if so, at what price?

WARREN BUFFETT: Well, both Procter & Gamble and Berkshire Hathaway had tax advantages in doing the deal this way, so they probably wouldn't have sold it at the price at which the deal took place, and we wouldn't have bought it at the price, without the tax benefits that each enjoyed.

And this is something — we had to have held our stock for over five years in Procter & Gamble.

It's something that's been in the code a long time that we've had nothing to do with it being in the code, but it's part of the code.

And it's somewhat similar to the real estate exchange arrangement, where you can exchange real estate and defer any tax.

And we don't get a new tax basis on the Duracell; we keep the old lower tax base, just like on — what do they call it? Is it section 1231 or —

CHARLIE MUNGER: Yeah.

WARREN BUFFETT: — real estate exchanges. So it's analogous to that, and the answer is that there wouldn't have been a transaction from Procter & Gamble's standpoint and there wouldn't have been a transaction, probably, from Berkshire's standpoint, if it hadn't been for the fact that we could do an exchange arrangement.

As to the declining business part, the battery business will be a declining business, but it will be around for a very, very, very long time on a worldwide basis.

And Duracell has a very strong position. It's a very good business. And, like you say, I was familiar with it when I was on the Gillette board.

But the — you know, it will have unit declines over a period of time, but I think we'll do fine with the Duracell investment. I'm looking forward to getting the deal complete, which probably won't take place until the fourth quarter because we have to get it detached from a lot of other things like the IT and distribution centers and everything else that it's involved in with P&G.

But P&G has been great to work with. They're making the transition — you know, they couldn't be better to work with during that period, and I'll be very happy when we own it.

16. Why I'm giving away most of my wealth

WARREN BUFFETT: Station 4.

AUDIENCE MEMBER: Hello, Warren and Charlie. I am Marvin Blum, an estate planning lawyer from Fort Worth, Texas, home to four of your companies.

And by the way, we're excited about the new Nebraska Furniture Mart and the Berkshire Hathaway Automotive Group in the Dallas/Fort Worth area.

Next to Omaha, we hope you think of Fort Worth as your second home.

WARREN BUFFETT: It's been good to us. And actually, we have five companies down there. MiTek just bought one.

AUDIENCE MEMBER: All right. Even better.

At the annual meeting a couple years ago, I asked about your estate plan and your idea of leaving kids enough so they can do anything, but not so much that they can do nothing.

Today, I'd like to ask you about your decision to sign the Giving Pledge, promising to give away at least one-half of your assets to charity.

Can you talk about your views on philanthropy, and how to balance leaving an inheritance to your family versus assets to charity?

WARREN BUFFETT: Well, it depends very much on the individual situation. And actually, I promised to give over 99 percent, in my case. But that still leave plenty left over. (Applause)

As you know, the estate tax exemption has been moved up substantially here in the last couple years, so you — I might have a very different feeling if I'd had a child that worked actively, helped me build the business, and all that sort of thing, and it was a small business, and I wanted to give it to them. But that can be really done without any estate tax these days, particularly if a little planning is used ahead of time.

It's a very individual thing. I — as Charlie — you know, when you get to the — figuring out what you do with your money, the options get very — fairly — limited. And as Charlie said the other day, you know, he said where he's going it won't do him much good anyway. (Laughter)

There's no Forbes 400, you know, in the graveyard.

So the question is, where does it do the most good? And I think it does limited amounts to do some real good for my children, so I'll be sure that they have that, or they already have it, to a degree.

And, on the other hand, when I look at a bunch of stock certificates in a safe deposit box that were put there 50 years ago or so, they have absolutely no utility to me, zero. They can't do anything for me in life.

I mean, they can't let me consume 7,000 calories a day instead of 3,000. They can't — there's nothing they can do.

I've got everything in the world I want, and I've had it for decades. If I wanted something additionally, I'd go buy it.

So, here these things are that have no utility to me and they have enormous utility to some people in other parts of the world. I mean, they can save lives. They can provide vaccines. They can provide education. There are all kinds of utility.

So why in the world should they sit there for me or for, you know, some fourth generation down of great-grandchildren or something, when they can do a lot of good now?

So that's my own philosophy on it, but I think everybody has to develop their own feelings about it and should follow where they go.

I do think — I do think they might ask themselves, what — you know, where will it do the most good?

And it can be pretty dramatic between what it can do for millions of people that don't really have remotely the same shot at having a decent life that I've had, or what it, you know, what it can do for me.

I mean, if it — I could have 10 houses, but, you know, I could buy a hotel to live in, you know. But would I be happier? It would be crazy.

Charlie and I both like fairly simple lives. But the one thing we do know is we know what we like and what we don't like, and we don't judge it by what other people like.

So I don't have too much advice for anybody, but I would say start thinking about it.

When I call people on the Giving Pledge, you know, some of them — I'll get some 70-year-old and he says, "You know, I don't want to think about it yet." And I always tell him. "Are you going to make a better decision when you're 95 with some blond on your lap?" (Laughter)

That actually was tried a few years ago, as you may know. (Laughter)

Charlie?

CHARLIE MUNGER: No, but it does occur to me that that fellow that was complaining about the tax system should remember that when — they recently changed the estate tax rules, so you can leave 5 million to your kids, and so forth. I think that's a very constructive change in the law.

So I don't think we should assume that our politicians are always going to be totally crazy. That was a very desirable change, I think.

17. Distribute long-term stock holdings to shareholders?

WARREN BUFFETT: OK. Carol.

CAROL LOOMIS: The questioner's name is Andre Bartel (PH), and he's a Berkshire shareholder.

"Would it make sense" — and I'm going to add my own edit here to say, and would it be legally permissible — "for Berkshire to distribute, at some time in the future, any or some of the long-term equity investments, for example, Coca-Cola or American Express, to the shareholders in a tax-sufficient way, as Yahoo is planning to do with the Alibaba stake, for example?

"The idea would be to return capital to shareholders using assets that Berkshire is not actively managing, that is, has not bought or sold for some time, and has very low incentive to sell because of income tax implications, while not taking away resources—cash—that could be reinvested by the Berkshire management better than by its shareholders."

WARREN BUFFETT: Yeah, I don't think Yahoo solved it, actually. Charlie, you follow that, too.

CHARLIE MUNGER: I don't think that we can do that with American Express and so forth. It's a bad example. We've got no way of doing that.

WARREN BUFFETT: No. There used to be a way to do that many years ago, and it was done. I don't mean by us, but I saw other examples of it.

But, under the code, there's no way to use appreciated securities to redeem your own shares, to — you can do it for something like acquiring, where you're exchanging it for like asset type thing on the Duracell arrangement, but there's no way to distribute it to shareholders without paying the full capital gains tax. And —

CHARLIE MUNGER: Yeah, spinoffs of whole businesses to shareholders, if you held them a long time, but that's about the only thing you can do.

WARREN BUFFETT: Yeah, but even there, I mean, what Yahoo has done has not got rid of the tax.

CHARLIE MUNGER: I don't know anything about Yahoo.

WARREN BUFFETT: Yeah. No. The — or what they're planning to do.

It may give them some other option if Alibaba wants to eventually redeem it themselves.

I mean, there could be something where they could work out a deal with Alibaba. I do not see how that they've gotten rid of the tax, unless they do a subsequent transaction of some sort with Alibaba, but maybe they have different tax advice than I've seen.

I mean, I know all kinds of cases where people — where corporations — have unrealized — large unrealized — gains in marketable securities, and I have not seen, in recent years — although I did see it early in my career when the law was different, but I've not seen in recent years any way that people have gotten that money into the hands of the shareholders without paying a tax at the corporate level.

Charlie?

CHARLIE MUNGER: No. That's — that's what we say.

18. Is reduced household formation by young people permanent?

WARREN BUFFETT: Yeah. Jonathan?

JONATHAN BRANDT: Berkshire owns many companies that benefit from single-family home construction: ACME, Johns Manville, Benjamin Moore, MiTek, and Shaw among them, not to mention the railroad.

After the financial crisis, you said that young adults who are postponing household formation by living with parents or in-laws would eventually get sick of that arrangement and we would start to see normal rates of household formation once the job market improved or even if it didn't.

Jobs are now more plentiful. Yet, household formation still continues to be below rates thought to be normal, whether because of high student debt, a shift in attitudes about homeownership, or stricter mortgage terms for first-time buyers.

Could something more secular be going on where household formation rates, relative to the population, could continue to be lower than historical rates?

Could the U.S. become more like Europe where many adult children live with their parents or in-laws for quite some time, or do you think, still, that the subdued rate of household formation is a mostly cyclical phenomenon, and that the rate will eventually revert to the historical mean, boosting single-family home starts and earnings for this group of companies?

WARREN BUFFETT: Yeah. I don't know the answer, obviously, but I think the latter is more likely.

I may be wrong. When's the last set of figures you've looked at in that connection? I've heard that it's turned up a fair amount in the last six months, but — have you seen anything on that, Jonny?

JONATHAN BRANDT: Nothing really recently, no.

WARREN BUFFETT: Yeah. I should know the figures, but I don't, for the last six months or nine months. But my impression was they had turned up somewhat.

I did my best on selling that ring in the movie to that guy, and they're going to form a household here in another month or two to which I've been invited.

But the truth is I don't know, the — you know, what's going to happen on household formation.

I would expect — but I expected it earlier than this — I would expect it to turn up. It always turns down in a recession, and you could argue that we're not all the way back from the recession yet.

Your guess would be as good as mine.

Charlie?

CHARLIE MUNGER: I feel exactly the same way, but I think I speak for a lot of members of the audience when I say I have some grandchildren that I wish would marry somebody suitable promptly. (Laughter)

WARREN BUFFETT: What's the reason for your interest, Charlie?

CHARLIE MUNGER: I don't think it's healthy for these people to hang around looking for pie in the sky or whatever in hell they're doing. (Laughter)

WARREN BUFFETT: Are they in attendance today?

CHARLIE MUNGER: I don't know. Some of them may be. I don't want to name names. (Laughter)

WARREN BUFFETT: No. I think you've already been pointed enough.

19. Why individual over corporate philanthropy?

WARREN BUFFETT: OK. Station 5.

AUDIENCE MEMBER: Gentlemen, thank you for a great day.

My name is Mark Roy (PH), and I am the executive director of the Immanuel Vision Foundation here in Omaha.

Earlier today, I sat up in the corner and spoke to my son who is working and living in Indonesia, among the poorest of the poor, funded, incidentally, by the Gates Foundation.

The contrast between where he is sitting today and where I am sitting could not be more dramatic.

You have been a model of philanthropic caring for the needs of others. You have demonstrated that it's not how many shares we have but how we share with others.

So following up on the last speaker, I want to ask, how can corporations be encouraged to make an even greater impact in the lives of those who are not shareholders?

WARREN BUFFETT: Yeah. I agree, you know, entirely with your motivation about increasing philanthropy.

I am much more of a believer, however, in individual philanthropy than corporate philanthropy.

I really feel that I've got everything I need, but I do also feel that I'm working for the shareholders and they should determine their own philanthropic activities, that it's their money. (Applause)

Now, we participate in — I mean, I encourage all our companies to continue the philanthropic behavior that they had before we've acquired them, and, you know, we want them to participate in their communities and to help the entities that help their employees and their customers.

But I don't really think it's my business, ever, to write a check to my alma mater or whatever it may be, and do it on company funds. I just — I don't feel it's my money.

I really look at this as a partnership. We've always looked at it as a partnership. And we had a system some years back where all the shareholders could designate contributions, and I felt that was quite a good system. And then we had to give it up for reasons that — I hated to give it up, but we had to do it.

The interesting thing about philanthropy — I mean, I have never given a penny to any organization that has cost me anything in my life. I mean, I've never given up a movie, I've never given up a trip, I've never given up a vacation, I've never given up a present to my kids.

You know, people give money this Sunday, you know, that really, actually, changes their lifestyle in a small way, and that hasn't happened with me. Everything I've given has been ungodly surplus, you know, and I'm glad I can do it.

But it's people like your son, you know, that I really admire.

Charlie? (Applause)

CHARLIE MUNGER: Well, my taste for giving away somebody else's money is also quite restrained. (Laughter)

WARREN BUFFETT: I was on the board one time of an organization that needed to raise a fair amount of money, and it wasn't church affiliated or anything like that.

And so they asked me to call on four or five corporate chieftains and they said, "Be sure not to ask them to give anything personally, just ask them to give corporate money."

And just — I said, "I'm not going to do it," basically. If they're not — if they won't put up their own money, why should they write checks on behalf of all their shareholders?

So I've got real reservations about corporate philanthropy for the personal reasons, to some extent, of the CEO, or the directors.

20. Euro can survive eurozone changes

WARREN BUFFETT: OK. Becky?

BECKY QUICK: This question comes from Felipe, and he asks, "Do Charlie and you think that the euro currency has had a positive or negative effect overall on the eurozone economy, and do you think it would be a good decision for France to quit the euro currency and go back to the franc?

WARREN BUFFETT: Well, that's too easy for me to answer, so I'll give it to Charlie. (Laughter)

CHARLIE MUNGER: I haven't got the faintest idea. (Laughter)

I think the euro had a noble motivation and had promise of doing a lot of good and it undoubtedly has done a lot of good.

But it's a flawed system, in some ways, to put countries that are so different together, and it's straining at the moment. The big strains aren't in France.

WARREN BUFFETT: No.

CHARLIE MUNGER: The big strains are in Greece and Portugal and so on.

And I do think they created something that was probably unwise. They got countries in there that shouldn't have been there.

You can't form a business partnership with your frivolous, drunken brother-in-law, you know. (Laughter)

I mean, you have to make your partnerships with somebody else. And I think they lowered their standards a little and it's caused strains.

WARREN BUFFETT: I think — (laughs) — everything here is off the record, understand. (Laughter)

They — I think it's a good idea that needs a lot of work, still.

And I think it has been a good thing, net, to this point.

But it — you know, it is flawed and the flaws are appearing, but that doesn't mean it can't be corrected.

I mean, we wrote a Constitution in 1789 that, you know, still took a few amendments, you know, and some of them didn't happen for a long time in respect to some very important factors.

So, I don't think the fact that it wasn't perfectly designed initially should condemn it to being abandoned, but I think that if there are flaws, you have to face up to them. And I think that maybe the events that are happening currently will cause that.

We could have had — presumably — we could have had a common currency with Canada and probably have made it work, I mean, if we decided —

CHARLIE MUNGER: Sure, we could have made it work.

WARREN BUFFETT: Yeah. We could have had a North American currency with Canada and, you know, we'd have worked it out, and it might have even been useful.

But we couldn't have had a hemisphere-wide currency with Venezuela in it or —

CHARLIE MUNGER: With Argentina.

WARREN BUFFETT: Yeah. (Laughter)

And so — he loves to name names. (Laughter)

Praise by name; criticize by category. (Laughter)

And I actually think it's probably desirable to have a euro currency properly designed and enforced so that — you know, that the rules really apply. There were rules, originally, on the euro, which got broken very early on, by not the Greeks, but by the Germans and the French, as I remember. So —

CHARLIE MUNGER: The investment bankers let them — they helped them prepare phony financial statements.

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: They — actually, it was investment banker-aided fraud.

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: Not exactly novel. (Laughter)

WARREN BUFFETT: So, returning to our main point, I think the euro can and probably should survive and I think it's going to take some real changes and maybe some examples to enable it to do so.

I hope it really — I mean, it's going to go in the direction of more cohesion or less, and very soon, probably. And I think if it can figure out a way to do it with more cohesion, overall it will be a good thing for Europe.

But it certainly, you know, in its present form it's not going to work.

Charlie? I don't know why I'm giving you another shot, but — (Laughter)

CHARLIE MUNGER: I think I've offended enough people.

WARREN BUFFETT: Right. (Laughter)

There's two or three in the balcony. (Laughter)

21. Munger: GEICO synergies are "dumb idea"

WARREN BUFFETT: OK. Gary.

GARY RANSOM: With the Van Tuyl acquisition — or now Berkshire Hathaway Automotive — there may be some natural synergies with GEICO, if it's nothing more than just putting a gecko on the salesman's desk.

Would you expect to do anything in that regard to encourage getting more customers through that relationship?

WARREN BUFFETT: Yeah, I don't think so.

You always have these things that the investment banker will tell you will produce synergy and all that. Most times that doesn't work.

And historically, selling auto insurance through dealerships hasn't been particularly effective. And if we were to do that, we would probably have to compensate people who did the insurance work — or made the insurance sales — out of Van Tuyl. That would add to costs.

I mean, GEICO is a low-cost model, and it's a wonderful low-cost model. And [CEO] Tony Nicely has done an incredible job of keeping those costs down and our — and you can see it in our expense ratios.

We spend a lot of money on advertising. But its success depends on delivering first-class insurance at a better price than other people can get, and the more people we put in distribution system or anything —

So, I would doubt very much that we do anything along that line. I think that those two companies will do better if run as two independent businesses than if we try to push through something.

We — Charlie and I have seen a lot of things on paper that involve that sort of a proposition and very, very few succeed.

Charlie?

CHARLIE MUNGER: Well, I agree. It's a very dumb idea, and we're not going to do it. (Laughter)

22. Buffett doesn't follow silver market anymore

WARREN BUFFETT: OK. Station 6.

AUDIENCE MEMBER: Mr. Buffett, in this environment of quantitative easing, low interest rates, and an overvalued stock market, what value in silver at these prices do you see, and do you still follow the silver market?

WARREN BUFFETT: I really don't follow it much anymore. But at one time, we owned over 100 million ounces of silver, and I knew a fair amount about the supply and demand for it, and the prospective supply and demand.

But I really don't — I haven't paid much attention to it for a long, long time.

CHARLIE MUNGER: That's a very good thing too. (Laughter)

We didn't do that well.

WARREN BUFFETT: Yeah. We made a little money.

CHARLIE MUNGER: Yes.

WARREN BUFFETT: The — you know, photography — the interesting thing about silver is that there are some pure silver mines, but overwhelmingly, silver is produced as a by-product, you know, in terms of copper mining and that.

So it — it doesn't respond as much to its own supply and demand characteristics — that's still a factor — as it does in terms of the supply and demand characteristics of the things of which it's a by-product, like copper.

So, it's a very small market, too. But we came out better than the Hunt brothers, but other than that, we don't think about silver anymore.

23. Could activists take control after Buffett?

WARREN BUFFETT: OK. Andrew.

ANDREW ROSS SORKIN: Charlie, question about activism.

Activism continues to grow and, as Charlie stated at the 2014 annual meeting, he sees it getting worse instead of getting better.

So the question is, we hope that Charlie and Warren will both be around forever, but, unfortunately, there will be a time when they're no longer here to manage the store.

WARREN BUFFETT: I reject such defeatism. (Laughter)

ANDREW ROSS SORKIN: If Warren is giving away his shares to charity over a ten-year period through his estate plan, and activists become increasingly more powerful, how will Berkshire defend itself from activists in the near and far future?

And would you consider it a failure if Berkshire were broken up in the future and shareholders received a significant premium? And for you to consider it success, what would the premium need to be?

WARREN BUFFETT: Well, if it's run right, there won't be a premium in breaking it up.

It may look like it. I mean, people will say there's subsidiary A that would sell at 20 times earnings and the whole place would sell, like, at 15. But the whole place won't sell at 15 if you spin off the one at 20.

I mean, it — I laid out in the annual report — there are a lot of benefits to Berkshire, in terms of having the companies in the same corporate tax return.

So I think it's unlikely that, on any long-term basis or intermediate-term basis, that the value of the parts will be greater than the value of the whole.

The best defense against activism is performance. But lately, there's been so much money pouring into activist funds, because it's been easy to raise money for that — I mean, it's been a successful way of handling money for the last few years, and institutional money then starts flowing into it, and the consultants recommend it, and all of that sort of thing.

And so, I would say that much of what I see as activism now, people are really reaching, in terms of what they're — of the kind of companies that they're talking about and the claims of what they can do and that sort of thing.

I think the biggest — you know, if you're talking about my shares getting dispensed over 10 years after my estate is settled, and the voting power they have, and I think, by the time that gets to be a reality, I think the market value of Berkshire is likely to be so great that even if all the activists gathered together, they wouldn't be able to do very much about it.

Berkshire is likely to really be a very, very large organization 10 or 20 years from now.

CHARLIE MUNGER: Besides, the Buffett super-voting power is going to last a long time.

WARREN BUFFETT: Last a long time, yeah.

I always — I've got these friends that call me — other companies and they've got an activist, and they're worried about it. I just tell them to send them over to Berkshire. We'll welcome them.

We'd love to have them buy our stock because they're not going to get anyplace. And that's going to be the situation for a long, long time.

We should be a place where people can dump their activists. (Laughter)

Charlie?

CHARLIE MUNGER: Well, the thing that I find interesting is, in the old days when many — most — stocks sold for way less than they were worth, in terms of intrinsic value, it was very rare to find an American corporation buying the stock in.

WARREN BUFFETT: Oh, yeah.

CHARLIE MUNGER: Now, in many cases, the activists are urging corporations to buy the stock in heavily, even though it's selling for more than it's worth.

This is not a constructive activity, and it's not a desirable change, and it's not a very responsible activity for the activists.

WARREN BUFFETT: There's been more stupid stuff written on such a simple activity as stock repurchase. Both stupid stuff written and stupid stuff done.

I mean, it's a very simple decision, in my view, as to whether you repurchase your shares. You know, you repurchase them if you're taking care of the needs of the business and your stock is selling for less than it's intrinsically worth. That — I don't see how anything could be more simple.

If you had a partnership and the partner wanted to sell out to you at 120 percent of what the business is worth, you'd say forget it.

And if he'd want to sell out to you for 80 percent of what it's worth, you'd take it. It's not complicated.

But there's so many other motivations that entered into people's minds about deciding whether to repurchase shares or not. It's gotten to be a very contorted and kind of silly discussion in many cases.

And Charlie is right. The — if you look at the history of share repurchases, you know, it falls off like crazy when stocks are cheap and it tends to goes up dramatically when stocks get fully priced.

But it's not what we'll do at Berkshire. At Berkshire, you know, we will presently — you know, we would love to buy it by the bushel basket at 120 percent of book, because we know it's worth a lot more than that.

We don't know how much more, but we know it's worth a lot more.

And we don't get a chance to do that very often. But if we do get a chance, we'll do it, big time.

But we won't buy it in at 200 percent of book, because it isn't worth it.

You know, it's not a complicated question, but people that — I've been around a lot of managements that announce they're going to buy X worth and then they buy it regardless of price.

And a lot of times the price makes sense. But if it doesn't, they don't seem to stop, and nobody tries to — seems to want to stop them.

Charlie?

CHARLIE MUNGER: Well, I certainly agree with you.

WARREN BUFFETT: OK.

CHARLIE MUNGER: I don't think it's a great age, this age of activism.

WARREN BUFFETT: Want to expand on that? (Laughter)

CHARLIE MUNGER: Well, I — it's hard for me to think of any activists I want to marry into the family. (Applause)

WARREN BUFFETT: I better stop before he names names. (Laughter)

24. American Express & credit card history

WARREN BUFFETT: OK. Gregg.

GREGG WARREN: Warren, American Express, which is Berkshire's third largest stock holding, has relied on powerful network effects and its valuable brand to generate economic profits over the years.

It has created a virtual cycle with its collection of cardholders being desirable to merchants, who have been willing to pay higher transaction fees with those fees ending up funding rewards programs and services for American Express's cardholders.

More recently, though, competitors have turned this model against the firm, targeting its cardholder base with ever-increasing levels of rewards and services, while charging merchants lower fees than American Express does.

The company also saw its image of exclusivity take a bit of a hit earlier this year when Costco ended a 16-year relationship with the firm, a move that affects one in 10 American Express cards in circulation and which will impact results this year and next.

With restrictions on interchange fees and the growth and acceptance of mobile payment technologies likely to impact future revenue streams, and moves by the firm to go down-market in pursuit of transaction volume potentially diminishing the brand, how does American Express defend its moat?

WARREN BUFFETT: Well, American Express has been pretty good at that, and particularly when Ken Chenault's been running it.

The — it will be — you know, it — all aspects of payments will be subject to lots of innovation and various modes of attack.

I think that American Express is still a very special company. And like I say, Ken has done a sensational job in anticipating a lot of these trends and guiding it into different markets. As you mentioned, it's going down in the — into debit cards, effectively, and things of that sort.

I think there's a lot of loyalty with American Express cardholders. I do think a proprietary card is worth more than a co-branded card, but I think that — I probably shouldn't get into the specifics of Costco. I've got a Costco director sitting next to me.

But we're very happy with American Express, but we'd be even happier if the stock goes down and the 4 or 5 billion they spend a year buying in stock buys even more shares.

Charlie?

CHARLIE MUNGER: Well, I like it a little better when they had a little less competition, but that's life. (Laughter)

WARREN BUFFETT: Incidentally, you'll find in this 50-year history of Berkshire, you know, American Express did wonders for us back in the 1960s. And there's a little history in there on the fact that it was an assessable stock until 1965, which nobody paid any attention to until 1963 on.

But the company has an incredible history of adapting. I mean, they started out as an express company, you know, move trunks around, and valuables around.

And then the railroad came around and started doing the same thing, so they went to traveler's checks as a way to — very handy way — of moving money around the world.

And then the credit card came along, Diner's Club came along, in the 1950s, and that threatened the traveler's check and then they moved into the Travel and Entertainment card, as it was called then.

And the interesting thing is that Diner's Club, who was first — Ralph Schneider and Al Bloomingdale priced their card at, as I remember, $3, and they looked like they were sewing up the market.

And American Express came along and did something very interesting. They priced their card, I think, at $5, and actually established a better image.

I mean, people that pulled out their American Express card at a dinner table, they looked like J.P. Morgan.

And the guy that pulled out a Diner's Club card, they'd have a whole bunch of flashy things on it, he looked like a guy who was kiting his expense account or something of the sort. So you just automatically felt like a more important person with your American Express card.

They have been very nimble, and very smart, and particularly in recent years, under Ken, in terms of meeting all kinds of challenges. And I think they'll have plenty of challenges in the future, and I'm delighted we own 15 percent of the company.

25. Why children need good financial habits

WARREN BUFFETT: OK. Station 7.

AUDIENCE MEMBER: Hi. My name is Chang, originally from Seoul, South Korea, and working in Los Angeles, California.

I've been traveling more than 27 countries, and last year I taught financial literacy lesson in one of the local elementary school in (inaudible) city.

Today here, we're talking about investments in capital markets, but young students in developing countries, they don't know how to save money, or they don't know the concept of interest.

So, in order to overcome the educational challenges, I would like to provide volunteer opportunities to talented Americans to teach in South American schools to overcome the — while they are traveling.

So, what do you think about my plan or do you have any advice? Thank you.

WARREN BUFFETT: Charlie, do you have any advice?

CHARLIE MUNGER: Well, I failed in this activity with some of my relatives, so I don't think I can improve South America. (Laughter)

No, I think if you don't — if you don't know how to save, I can't help you. (Laughter)

WARREN BUFFETT: No, but the important thing is to get good habits early on.

CHARLIE MUNGER: Yeah.

WARREN BUFFETT: You really — you know someone said the chains of habit are too light to be felt until they're too heavy to be broken. And habits really make an enormous difference in your life.

So Andy and Amy Heyward have developed the "Secret Millionaires Club," which I've helped out with a little, and our goal is to, in an entertaining way, present good habits to young kids through a kind of a comedy series.

And I think that's — it's actually having a pretty good effect. And here in a few days, we're going to have a — here in Omaha — we're going to have eight finalists in young kids from around the country that have developed businesses of their own, and I'm always enormously impressed with these kids.

But the importance of developing good habits yourself, or encouraging good habits in your children very early on, in respect to money, can change their lives.

And, you know, I was 9 or $10,000 ahead when I got out of college, and I got married young and had kids very fast.

And if I hadn't had that start, my life would have been vastly different. So it — you can't start young enough on working on good money habits.

And I do think the "Secret Millionaires Club" is very good, but there could be lots of other good ways of teaching those lessons.

26. No plans to change debt level

WARREN BUFFETT: OK. We now have moved solely to the audience, so we'll go to station 8.

AUDIENCE MEMBER: Hello, Warren, Charlie. My name is Stefano Grasso (PH), and I come from Genova, Italy. It's great to be here today for the 50th anniversary.

Last year, I asked you what was the right level for leverage at Berkshire Hathaway, and why not to increase it. I argued that increasing liability more at the cheap level would benefit Berkshire, thanks to the investment capabilities of the present management.

This year, I would like to get your view on the possibility of working on the other side of the balance sheet and using part of the cash sitting on bank chair — bank accounts — to reduce some of the liabilities currently on its balance sheet.

For example, the index puts at Berkshire sold between 2004 and 2008, generated a premium of almost 5 billion.

Few years down the line, Berkshire benefited from the float. The indexes are higher and the time to maturity of the put got shorter.

The question is, if the unwinding of the puts were acceptable by the counterparts which bought them, would you consider unwinding them at a reasonable price? Thank you.

WARREN BUFFETT: Are you speaking — you're speaking specifically of the equity put options we have?

AUDIENCE MEMBER: I'm speaking about them, but as just an example. I'm talking also of maybe reducing debts or doing other —

WARREN BUFFETT: Yeah. Well, what we hope, of course, is that what we call the excess cash, which is cash beyond 20 billion that we can put to work buying a business. But you can't do, you know, one a week or one a month. So it's opportunistic.

And I don't know whether the phone call that's going to result in the next deal will come in next week or it may come in a year from now.

We will get calls and we will put money to work. You know, we just — we can't do it at an even flow. And we have, you know, virtually no debt.

If someone had told the two of us 50 years ago that we'd be able to borrow money in euros with a long duration of 1 percent or something like that, we would have felt we would have ended up with a way different balance sheet than we have today.

But, I mean, money is so cheap that it causes people to do almost anything on the asset side, and we try to avoid doing that because we don't, you know, we don't want to drop our standards too fast just because the liability side is costing us so little.

But I don't think — obviously, if we can unwind a derivative trade on a basis where we thought we were mathematically ahead by a significant amount, we would do it.

But I think that's very unlikely with the contracts we have now, so we'll probably — I think it's very likely they just run out over time.

We carry a liability of well over — I think it's getting somewhere between 3 1/2 and 4 billion — for something that has a settlement value today of 400 million.

So it's very hard for us to — it's very hard for us on the other side of the contract to arrive at a price that we both would be happy with.

We're not going to deleverage Berkshire. There isn't that much leverage to start with.

I mean, the float really is, essentially, very close to permanent. I mean, it can decline a couple percent in a year, but it can also increase a few percent.

So, I see no drain on funds of any consequence from the float for as far as the eye can see, and we have very little debt out. So I would not want to pay down the debt we have now.

Logically, we probably should take on more debt at these prices, but that's just not something that appeals to us.

Maybe if we find a really big deal, we might take on a little more. I would like to at least have that as something I was thinking about.

Charlie?

CHARLIE MUNGER: We'd love to have something come along where we actually felt a little capital constrained. We haven't felt capital constrained for a long time.

It's a problem we'd love to have, something so attractive that we —

WARREN BUFFETT: We'd stretch a little.

CHARLIE MUNGER: We'd stretch a little. That would be glorious.

And it could happen, by the way.

WARREN BUFFETT: And it could happen.

27. No economies of scale for auto dealers

WARREN BUFFETT: OK. Station 9.

AUDIENCE MEMBER: Hi, Mr. Buffett and Mr. Munger. My name is George. I'm translating for my father, (inaudible), from Shanghai, China.

Last year it was my father standing here asking his question, and this year it's me. I feel so lucky.

I know at the end of last year, you purchased a car sales dealer. This year, you said in your public letter that you are going to continue to buy. The ultimate purpose of investment is to seek the return.

So my question is, whether the rate of return can be necessarily higher with the scale of the dealers?

If so, why we cannot see that happen in China? How come the differences with the dealership business of the same nature in the United States and China? Thank you.

WARREN BUFFETT: Yeah. I don't know the dealership situation in China.

I would say — I think I mentioned this a little earlier — that I don't think we're going to get significant benefits of scale as we buy more units in the auto field. I just don't see where it would come from.

But we don't need it. What we really need is managers in those individual dealerships that have skin in the game of their own, and that run them, you know, as first-class businesses, independently.

And that's what we'll be looking for. We'll not be looking for scale. I don't know the situation in China. Maybe Charlie knows more about that. I think he does.

CHARLIE MUNGER: No. But I don't think we'd be very good at running dealerships in China. And I think the people who run Van Tuyl are very good at running the ones here, so —

WARREN BUFFETT: Yeah with 17,000 here and we've got 81 of them, there's a little room to expand.

The problem is going to be price. Our purchase probably caused people to move up their multiples by one or two — people that have them — and we paid a full, but fair, price for Van Tuyl and we'll be using that price, more or less, as a yardstick.

And we really thought we bought the best there, so, if anything, we would be hoping to buy others, maybe for a bit less.

So we will not — we may buy a lot of them, we may buy very few, just depending on price developments.

The — we're having a big car year and profits are good in the dealership field. But when profits are good, we want to pay a lower multiple.

I mean, because, if we're going to be in the car business forever, we're going to have some good years and we're going to have some bad years. And we would rather buy at a 10 or 12 times multiple of a bad year than buy at an eight times multiple of a good year.

And that's not necessarily the way that sellers think, although they probably understand it, but they don't want to think that way. So we'll see what happens.

28. Buffett values internet more than private jet

WARREN BUFFETT: OK. Station 10.

AUDIENCE MEMBER: Hi. Mr. Buffett and Munger, very excited to be here.

My name is (inaudible), also from Shanghai, China. Because now (inaudible) a company providing wealth management to the high-net wealth individuals in China. The company name is North, from North Ark (PH), listed at (inaudible).

You two are my idols. What's your secrets of keeping so young, so energetic, and so quick?

Please don't say because of Coca-Cola. (Laughter)

And as someone says that old papa could not understand the internet, but I don't believe that.

What's your opinion? Will you pay more attention to internet? Could I invite both two gentlemen to answer my question? Thank you very much.

WARREN BUFFETT: Charlie, I didn't get all that, so you —

CHARLIE MUNGER: Well, he asked are we going to be using the internet.

Warren is a big internet user compared to me. And — but —

WARREN BUFFETT: I love it. (Laughs)

CHARLIE MUNGER: He plays bridge on it.

WARREN BUFFETT: I use a lot of — I use search. It's been a huge change in my life, and it costs me a hundred dollars a year, or something like that.

If I had to give up the plane or I had to give up the internet: the plane costs me a million-and-a-half a year, the internet costs me a hundred dollars a year. You know, I wouldn't want to give up either one of them, but I'd give up the plane.

CHARLIE MUNGER: Interesting. (Laughter)

WARREN BUFFETT: Charlie's given up both.

CHARLIE MUNGER: Are we going to be doing more — I think everybody's going to be doing more things on the internet. It is growing in importance. And so like it or not, we're dragged into modern reality.

WARREN BUFFETT: Doesn't sound like he likes it, does it? (Laughs)

CHARLIE MUNGER: No, I don't like it.

I don't like multitasking. I see these people doing three things at once, and I think, God, what a terrible way that is to think.

I am so stupid, though, I have to think hard about a thing for a long time. And the idea of multitasking my way to glory has never occurred to me. (Laughter)

But at any rate, the internet is here and it's going to be more and more important and everybody's going to think more about it and do more about it, like it or not. And, of course, the younger people are way more prone to use it than we are.

But Berkshire — you have what, how many Bloombergs now?

WARREN BUFFETT: In the office?

CHARLIE MUNGER: Yeah.

WARREN BUFFETT: Do we have two or three. Mark?

I don't know. They don't tell me about them. They sort of hide them when I come in the room.

CHARLIE MUNGER: We're into the modern world.

WARREN BUFFETT: We have — [CFO] Marc Hamburg tells me we have three — but we'll reevaluate that situation when I get back to the office. (Laughter)

What's that?

Oh, we're not paying for one. I like that. (Laughter)

Let's see if we can not pay for two. (Laughter)

No, the internet — and it's changed many of our businesses. I mean, it's changed GEICO's business very, very dramatically. And it's affecting — it affects them all, to one degree or another.

It's amazing to me — I mean, people get pessimistic about America. Just think in the last 20 or 25 years—well, just 20 years on the internet—how dramatically it's changed your life.

You know, the game is not over yet. There's all kinds of things that are going to happen to make life better.

And Charlie may not think the internet makes life better, but when I compare trying to round up three other guys on a snowy day to come over to my house to play bridge, versus snapping the thing on and having my partner in San Francisco there and two other friends, and so on, in 10 or 20 seconds, I think the world has improved.

CHARLIE MUNGER: Well, if I had your partner, I'd think it had improved, too. (Laughter)

29. Raise earned income tax credit instead of minimum wage

WARREN BUFFETT: OK. Station 11.

AUDIENCE MEMBER: Hi. I'm Whitney Tillson, a shareholder from New York.

Mr. Buffett, I know many shareholders have felt irritation, to put it mildly, when you've weighed in on social issues such as tax policy, or endorsed and raised money for a particular candidate, but I, for one, applaud it.

I think everyone, but especially people who've achieved wealth and prominence and thus have real ability to effect change, have a duty to try and make the world a better place, not just through charitable donations, but also through political engagement, and I'd say that even to people whose political views are contrary to my own.

My question relates to one of the big issues today: rising income inequality, and related to that, the campaign to raise the minimum wage, which has had some recent successes with some of the largest businesses in the country like Walmart and McDonald's.

How concerned are you about income inequality? Do you think raising the minimum wage is a good idea? And do you think these efforts might meaningfully affect the profitability of corporate America?

WARREN BUFFETT: Yeah. I think income inequality is — I think it's extraordinary, in the United States, to see how far we've gone.

Well, just go back to my own case. Since I was born in 1930, the average GDP per capita in the United States has gone up six for one.

Now, my parents thought they were living in a reasonably decent economy in 1930, and here their son has lived to where the average is six times what it was then.

And if you'd asked them at that time, and they'd known that fact, that it would go from 8 or $9,000 in today's terms to $54,000, they would have said, "Well, everybody in America is going to be enjoying a terrific life," and clearly they're not.

So, I think it is a huge factor. There are a million causes for it, and I don't pretend to know all the answers, in terms of working towards solutions.

But I do think that everybody that is willing to work should have a reasonably decent livelihood in a country like the United States, and — (applause) — how that is best achieved — I'm actually going to write something on it pretty soon.

I have nothing against raising the minimum wage, but to raise it to a level sufficient to really change things very much, I think, would cost a whole lot of jobs.

I mean, there are such things as supply and demand curves. And if you were to move it up dramatically, I think you would — it's a form of price fixing. I think you would change the opportunities available to people very dramatically.

So I am much more of a believer in reforming and enlarging the earned income tax credit, which rewards people that work, but also takes care of those whose skills don't fit well into a market system. So I think you put your finger on a very big problem.

I don't think — I don't have anything against raising the minimum wage, but I don't think you can do it in a significant enough way without creating a lot of distortions.

Whereas, I do think the earned income tax credit makes a lot of sense and I think it can be improved. There's a lot of fraud in it. It pays out this lump sum, so you get into these payday type loans against — I mean, there's — a lot of improvements can be made in it.

But I think the answer lies more in that particular policy than the minimum wage. And, like I said, I think I'm going to write something on it pretty soon. And if there's anybody I haven't made mad yet, you know, I'll take care of it in the next one.

Charlie?

CHARLIE MUNGER: Well, you've just heard a Democrat speaking and here's a Republican who says I agree with him.

I think if you raise the minimum wage a lot, it would be massively stupid and hurt the poor, and I think it would help the poor to make the earned income credit bigger. (Applause)

30. "Ridiculous argument" that college boosts lifetime earnings

WARREN BUFFETT: Let's go to station 1.

AUDIENCE MEMBER: Hi. I'm Michael Monahan (PH) from Long Island, New York.

Warren, Charlie, the higher education system has expanded, covering almost everyone who would like to receive a college education. This demand has translated into rising college costs.

As a high school junior, I'm looking at prestigious institutions such as UPenn, Villanova, NYU, Fordham, and Boston University.

On the other hand, my parents are experiencing sticker shock. All of these schools have a sticker price of over $60,000, with some students, as shown in a businessinsider.com article, can pay over $70,000, as the case at NYU.

How will the average American family be able to pay this in the future and, more importantly, how do you two feel about this?

WARREN BUFFETT: Charlie?

CHARLIE MUNGER: Well, the average American family does it by going to less expensive places and getting massive subsidies from the expensive places.

If we had to give our college education to only people who could write cash checks for 60 or $70,000 a year, we wouldn't have that many college students.

WARREN BUFFETT: No.

CHARLIE MUNGER: So most people are paying less or getting subsidies. And — but I think it is a big problem, that education has just kept raising the price, raising the price, raising the price.

And they say, but college educated people do better. It's a big bargain. But maybe they do better because they were better to start with before they ever went to college, and they never tell you that. (Applause)

WARREN BUFFETT: It's a ridiculous argument.

CHARLIE MUNGER: And so —

WARREN BUFFETT: I think that's one of the silliest statistics that they publish, I mean, to say that a college education is worth X because people that go to college earn this much more than the ones that don't. You're talking about two different universes.

And to attribute the entire difference to the one variable, that they went to college as opposed to the difference between the people who want to go to college and have the ability to get into college —

CHARLIE MUNGER: It's completely nutty —

WARREN BUFFETT: — it's a fraud

CHARLIE MUNGER: — and about 70 percent of the people believe in it. So it gives you a certain hesitation about relying on your fellow man. (Laughter)

So I think most people have to struggle through with the system the way it is.

There's a big tendency to have prices rise to what can be collected. And people just rationalize that the service is worth it. And I think a lot of that has happened in education, and, of course — (applause) — a lot is taught in higher education that isn't very useful to the people who are learning it and, of course, a lot of those people would never learn much from anything.

So it's really wasting your time, and that's just the way it works. So I think there's a lot wrong.

What I noticed that was very interesting is that when the Great Recession came, every successful university in America was horribly overstaffed and they all behaved just like 3G. They all, with a shortage of money, laid off a lot of people. And the net result was they all worked better when it was all over with the people gone.

And so this right-sizing is not all bad. I don't think there's a college in America that wants to go back to its old habits. And — but you put your finger on — it is a real problem to look as those sticker shocks.

It's like any other problem in life. You figure out your best option and just live with it.

We can't change Villanova or Fordham. They're going to do what they're going to do. And as long as it works, they'll keep raising the prices.

WARREN BUFFETT: And it will keep working.

CHARLIE MUNGER: Yes. And that's pretty much the way the system works.

When it really gets awful there's finally a rebellion. In my place in Los Angeles, the little traffic accident got so it cost too much to everybody because of so much fraud, and the chiropractors, and some of the plaintiffs' attorneys, and so on.

And finally, the little accidents were costing so much that they worried about the guy who lived in a tough neighborhood who couldn't afford to drive out to get a job. And the auto insurance companies thought, my God, with prices going up like this, they'll have legislation creating state auto insurance or something.

So the net result is they put the plaintiffs' attorneys to trial in every case, and that fixed it. And maybe something like that will happen in higher education. But without some big incentive, I think higher education will just keep raising the prices.

31. Bullish on China

WARREN BUFFETT: On that cheerful note, we'll move to station 2.

AUDIENCE MEMBER: Thank you for taking my question.

My name is Brendan Chin (PH). I'm form Taipei, Taiwan.

My question is, China is undergoing a number of structural changes. What do you — when you take the pulse of the Chinese economy, what do you read and what advice would you give? Thank you.

WARREN BUFFETT: Charlie's the China expert. I think China's going to do very fine over a period of time.

CHARLIE MUNGER: Yeah. I'm a big fan for what's happening in China.

And as a matter of fact, I've just ordered — prepared — a bust of Lee Kuan Yew, the recently deceased ex-prime minister of Singapore, because I think he's contributed so much to fixing, first Singapore, and then China.

And one of the things Lee Kuan Yew did in China — in Singapore — was to stop the corruption, including cashiering some of his close friends.

And China is doing the same thing. And I consider it the smartest damn thing I've seen a big country do in a long, long time, and I think that to — it's hard to set the proper example if the leading political rulers are kleptocrats.

You know, you don't want to be run by a den of thieves. You want responsible people.

And what Lee Kuan Yew did is he paid the civil servants way better and recruited very good people. And he just created a better system and, of course, China is widely copying him. And it's a wonderful thing they're doing.

So I'm very high on what's going on in China, and I think it's — I think it's very likely to work. If you — they've actually shot a few people. That really gets people's attention. (Laughter)

WARREN BUFFETT: Now we're starting to get some practical advice here. (Laughter)

What has happened in China, you know, over the last 40 or so years, I mean, I — it just strikes me as totally miraculous. I don't think — I would not have believed that a country could move so far so — a country of that size, particularly — so far so fast. And it's —

CHARLIE MUNGER: It never happened before, in the history of the world, that a company so big had come so far. When I was a little boy, 80 percent of the population of China was illiterate and mired in subsistence poverty and agriculture.

Now just think — and they've been through horrible wars and look at them. It's one of the most remarkable achievements in the history of the Earth.

And a few people made an extreme contribution to it, including this Chinese politician in Singapore.

And I give the Communist Party a lot of credit for copying Lee Kuan Yew.

That's all Berkshire does is copy the right people.

WARREN BUFFETT: Yeah. In 1790, the United States had 4 million people. China had 290 million people.

They were just as smart as we were. They worked as hard, similar climate, similar soil. And for 200 — close to 200 — years, you know, the United States went with those 4 million people to close to 25 percent of the world's GDP and China really didn't go anyplace.

And then those same people, in 40 years — and they're not working harder now than they were 40 years ago — they're not smarter now than they were 40 years ago, in terms of the basic intelligence — and just look at what's been accomplished.

I mean, it does show you the human potential when you find a system that unleashes it, and we found a system that unleashed human potential a couple hundred years ago and they found a system that unleashed human potential 40 or 50 years ago.

And, you know, when you see that example, you know, it has to have a powerful effect on what happens in the future.

And it's just amazing that you can have people go nowhere, basically, in their lives for centuries and then just — it explodes. And it just blows me away to see it, and you make it — it's the same human beings, but they've — they found a way to unlock their potential and I congratulate them for it.

And as Charlie said earlier, China and the United States are going to be the superpowers for as far as the eye can see. And it is really good for us, in my view, that the Chinese have found the way to unlock their potential.

And I think its imperative for two countries with nuclear weapons that, in this kind of world, that they figure out ways to see the virtues in each other rather than the flaws.

We'll have plenty of disagreements with the Chinese, and they will with us, but remember that on balance, we're both better off if the other one is doing well. That's just my own view. OK. (Applause)

32. "We just kept reading … and went with our instincts"

WARREN BUFFETT: Station 3, please.

AUDIENCE MEMBER: Hello, Mr. Buffett and Mr. Munger. My name is Chander Chawla and I'm from San Francisco. Thank you for the last 50 years of sharing your wisdom and being an exemplar of integrity.

Fifty years ago, when you were starting out or getting into new industries, how did you figure out the operational metrics for a new industry where you did not have previous experience?

WARREN BUFFETT: Well, we — A) we didn't have it thought out that well, in a sense, at that time.

But we basically looked for companies where we thought we could understand what the future would look like 5 or 10 or 15 years hence. And that didn't mean we had to do it to four decimal places or anything of the sort, but we had to have a feel for it, and we had to know our limitations. So we stayed away from a lot of things.

And at that time, prices were different, so we — in terms of knowing we were getting enough for our money, it was a much easier decision than it is currently.

But it wasn't — they weren't elaborate — well, there were no planning sessions or anything of the sort. We just kept reading and we kept thinking and we kept looking at things that came along, as Charlie described it in the movie, and you know, comparing Opportunity A with Opportunity B.

And in those days, we were capital constrained, so we usually had to sell something if we were going to buy something else. And that always makes for — you know, that's the — an interesting challenge, always, when you're measuring something you hold against something that has come along and to see which is more attractive.

And we probably leaned very much toward things where we felt we were certain to get a decent result than where we were hopeful of getting a brilliant result.

Went with our instincts, and kept putting one foot in front of the other.

Charlie, what would you say?

CHARLIE MUNGER: Well, that's exactly what we did, and it worked wonderfully well. And part of it is because we were such splendid people and worked so constructively, and part of it is we were a little lucky. We had some good fortune.

Now, Warren says he was lucky to go to GEICO, but not every 20-year-old was going down to Washington, D.C., and knocking on the doors of empty buildings to try and find something out that he was curious about.

So we made some of our luck by being curious and seeking wisdom, and we certainly recommend that to anybody else.

And there's nothing that produces wisdom more thoroughly than really getting your own nose whacked hard when you make a mistake, and we had a firm amount of that, didn't we?

WARREN BUFFETT: We had plenty of them. If you read this book, you'll see about a few of them.

We thought we knew the department store business in Baltimore and we thought we knew about the trading stamp business.

We've had a lot of experience with bad businesses, and that makes you appreciate a good one. And to some extent, it sharpens your ability to make distinctions between good and bad ones.

And we've had a lot of fun along the way. That helps too. If you're enjoying what you're doing, you know, you're likely to get a better result than if you go to work with your teeth clenched every morning.

CHARLIE MUNGER: I think we were helped because we came from families where there was some admirable people, and we tended to identify other admirable people better than we would have coming from a different background.

So, my deceased wife used to say, you can't accomplish much in one generation.

We owe a considerable amount, both of us, to the families we were raised in. I think the family standards helped us to identify the good people more easily than we would have if we'd had a more disadvantaged background.

Do you agree with that, Warren?

WARREN BUFFETT: Yeah. Have you still got your father's briefcase?

CHARLIE MUNGER: I've still got it, but I don't know where it is. (Laughter)

Can't carry it anymore. It's worn out. It's got holes in it.

WARREN BUFFETT: I've got my dad's desk from 75 years ago.

33. How Buffett found his first investors

WARREN BUFFETT: OK. Station 4.

AUDIENCE MEMBER: Hi, Warren and Charlie. This is Cora and Dan Chen from Talguard in Los Angeles, and we're thrilled to be here again.

Thank you for planting the seeds for which my generation can sit under the shade, and for my children's generation with "The Secret Millionaires Club," so that they can sit under the shade. I walk amongst giants.

WARREN BUFFETT: Go on. Go on. (Laughter)

AUDIENCE MEMBER: That's all I have. (Laughter)

WARREN BUFFETT: Don't hold back.

AUDIENCE MEMBER: Seriously though, thank you so much for everything you've taught us.

WARREN BUFFET: Thank you.

AUDIENCE MEMBER: How were you able to persuade — (applause)

WARREN BUFFETT: Thank you.

AUDIENCE MEMBER: How were you able to persuade your early investors, all early on, besides your family and friends, to overcome their doubts and fears and to believe in what you're doing?

There's a lot of other asset classes out there, such as — a lot of people believe, real estate, bonds, gold. How were you able to get over that? And something I've been really dying to ask you —

CHARLIE MUNGER: We didn't do very well until we had a winning record. (Laughter)

AUDIENCE MEMBER: Prior to the early winning record, how were you able to get them to buy into what you were trying to do?

I mean, no one has ever done what you're doing, and no one has, still. And I've been really wanting to ask you, in the past, you said you're 90 percent Graham and 10 percent Fisher. Where does that percentage stand today?

Thank you again from a grateful student of your teachings, and my children love what you do, too. They wrote you a letter.

WARREN BUFFETT: Thank you. Thank you. (Applause)

A lot of it — you know, I started selling stocks here when I was 20 years old. I got out of Columbia. And although I was 20, I looked about 16 and I behaved like I was about 12.

So I was not — I did not make a huge impression selling stocks. I used to just walk around downtown and call on people, which is the way it was done, and then I went to work for Graham.

But when I came back, the people that joined me, actually — one of my sisters, her husband, my father-in-law, my Aunt Alice, a guy I roomed with in college, and his mother, and I've skipped one — but in any event, those people just had faith in me.

And my father-in-law, who was a dean at the University — what was then the University of Omaha — he gave me everything he had, you know, and to quite an extent they all did.

And so it was — they knew I'd done reasonably well by that time. That would have been 1956, so I'd been investing five or six years. And actually, I was in a position where when I left New York and came back to Omaha, I had about $175,000 and I was retired.

So I guess they figured if I was retired at 26, I must be doing something right and they gave me their money.

And then it just unfolded after that. An ex-stockholder of Graham-Newman, the president of a college came out, Ben Graham was winding up his partnership for his fund and he recommended me.

And then another fellow saw the announcement in the paper that we formed a partnership and he called me and he joined, and just one after another.

And then, actually, a year or two later, a doctor family called and they were the ones that ended up with me meeting Charlie.

So a lot of stuff just comes along if you just keep plodding along.

But the record, later on, of the partnership attracted money, but initially it was much more just people that knew me and had faith in me. But these were small sums of money. We started with 105,000.

Charlie?

CHARLIE MUNGER: Well, of course that's the way you start, and — but it's amazing. We've now watched a lot of other people start. And the people that have followed the old Graham-Newman path have one thing in common: they've all done pretty well. I can hardly think of anybody who hasn't done moderately —

WARREN BUFFETT: Everybody did well, yeah.

CHARLIE MUNGER: So, if you just avoid being a perfect idiot — (laughter) — and have a good character and just keep doing it day after day, it's amazing how it will work.

WARREN BUFFETT: Yeah. It was accident, to a significant extent.

If a few of those people hadn't have said to me, you know, "What should I buy?" And I said, "I'm not going to go back in the stock brokerage business, but I will — you know, we'll form a partnership and, you know, your fate will be the same as mine and I won't tell you what I'm doing."

And they joined in, and it went from there.

But it was not — it was not planned out in the least. Zero.

I met Charlie, and he was practicing law, and I told him that was OK as a hobby, but it was a lousy business. (Laughter)

And so he —

CHARLIE MUNGER: Fortunately, I listened. (Laughter)

It took a while, however.

WARREN BUFFETT: Yeah.

34. Munger: rationality is a moral virtue

WARREN BUFFETT: OK. Station 5. We've got —

AUDIENCE MEMBER: Hi. My name is Arthur. I'm from Los Angeles. I want to thank you for having us in your hometown.

And we've all been listening to your business prowess and all your successes. There's no question that you're good at business and finance and have fun doing it.

But there are comments that you've made on income inequality, giving away 99 percent of your wealth, and I'm led to believe that you're motivated by more than just amassing wealth or financial gains.

So, I'd like to speak to your value core and ask what matters to you most and why?

WARREN BUFFETT: Charlie, what matters to you most?

CHARLIE MUNGER: Well, I think that I had an unfortunate channeling device.

I was better at figuring things out than I was at everything else. I was never going to succeed as a movie star, or as an athlete, or as an actor, something, so — and I, early, got the idea that — partly from my family, my grandfather, in particular, whose name I bore, had the same idea — that really, your main duty is to become as rational as you could possibly be.

I mean, rationality was just totally worshiped by Judge Munger, and my father and others.

And since I was good at that and no good at anything else, I was steered in something that worked well for me and — but I do think rationality is a moral duty.

That's the reason I like Confucius. He had the same idea all those years ago. And I think Berkshire is sort of a temple of rationality. What's really admired around Berkshire is somebody who sees it the way it is. Wouldn't you agree with that, Warren?

WARREN BUFFETT: Yeah, that —

CHARLIE MUNGER: More than anything, more than —

WARREN BUFFETT: You better see it the way it is.

CHARLIE MUNGER: Huh?

WARREN BUFFETT: You better see it the way it is.

CHARLIE MUNGER: See it the way it is.

And so, that's the way I did it.

But that goes beyond a technique for amassing wealth. To me that's a moral principle.

I think if you have some easily removable ignorance and keep it, it's dishonorable. I don't think it's just a mistake or a lack of diligence. I think it's dishonorable to stay stupider than you have to be, and so that's my ethos.

And I think you have to be generous because it's crazy not to be. We're a social animal, and we're tied to other people.

WARREN BUFFETT: Well, I would say — this doesn't sound very noble, but the — what matters to me most now, and probably has for some time — I mean, there are things that matter that you can't do anything about, I mean, in terms of health and the health of those around you and all that — but actually, what matters to me most is that Berkshire does well.

Basically, I'm in a position where we've probably got a million or more people that are involved with us, and it just so happens that it's enormously enjoyable to me so I can rationalize it, the activity.

But I would not be happy if Berkshire were doing poorly. That doesn't mean whether the stock goes down or whether, you know, the economy has a bad year.

But if I felt that we weren't building something every year that was better than what we had the year before, I would not be happy.

And, you know, I get this enormous fun out of it and I get to work with people I like and —

CHARLIE MUNGER: But that's very important. Truth of the matter is it's easy for somebody like Warren or me to lose a little of our own money, because it doesn't matter that much, but we hate losing somebody else's.

It's — and that's a very desirable attitude to have in a civilization.

Don't you hate losing Berkshire money?

WARREN BUFFETT: Yeah. That would be the only thing that would keep me up at night. (Laughs)

CHARLIE MUNGER: Yeah.

WARREN BUFFETT: Yeah. We won't do it.

We can lose money on individual things, obviously. We can have bad years in the economy, and we can have years the stock market goes down a lot. That doesn't bother me in the least.

What bothers me is if I do something that actually costs Berkshire, in terms of its long-term value, and then I feel, you know, I do not feel good about life on that day.

But we can avoid most of that, fortunately. We do get to pick our spots. We're very fortunate with that.

CHARLIE MUNGER: Well, a good doctor doesn't like it when the patient dies on the table, either, you know. (Laughter)

Not a new thought. (Laughter)

35. No help for "the most intelligent question"

WARREN BUFFETT: OK. Let's go to — let's go to station 6.

AUDIENCE MEMBER: Hi, Mr. Buffett and Mr. Munger. My name is Petra Bergman. I'm from Stockholm, Sweden, in northern Europe. I work at something called EFN.SE.

I wanted to ask you, from my point of view, what would be the answer to the most intelligent question I could ask you right now? (Laughter)

CHARLIE MUNGER: Everybody tries that question, and it would be wonderful if that would solve all your problems. But I don't think it's a very good question. (Laughter)

Or perhaps I should say —

WARREN BUFFETT: Let's phrase that differently, Charlie.

CHARLIE MUNGER: Well, what I mean is, you're asking too much of somebody when you — you ask him to honestly say what is the most enlightening question he can answer.

WARREN BUFFETT: Yeah. I get that asked by the students a lot. And I've had a lot of practice in hearing it asked, but I haven't had very much success in answering it.

So I'll have to beg off on that one.

36. Buffett on fun and "the game"

WARREN BUFFETT: How about 7?

AUDIENCE MEMBER: Good afternoon, Warren and Charlie. Congrats on 50 years. My name is Jim and I'm from Brooklyn, New York.

This is kind of a follow-on to a recent question. You both had success in investing, even before Berkshire Hathaway, as investors and as fund managers.

While it's well known you closely followed Graham's teachings, others, like Walter Schloss and his son, also had success with similar teachings, yet different strategies.

What would you cite as the most important reason for your early success with small amounts of capital, and given hindsight today, what might you have done to improve your strategy with these small funds?

WARREN BUFFETT: Yeah. Well, I had a great teacher, I had exceptional focus, and I had the right sort of emotional qualities that would help me in being an investor.

I enjoyed the game. You do give it all back in the end. It wouldn't make any difference if I — you know, that was not the key thing.

The game was enormously fun. And I think Gene McCarthy said about football one time, you know, it's just about, you know, hard enough to be interesting but not so hard as to be beyond the capabilities of people understanding it, and that's kind of the way this game is.

I mean, it's not like Henry Singleton, kind of questions he took on. It's actually a pretty easy game, and it does require a certain emotional stability.

And I went at it hammer and tong. I went through the manuals and everything, but I was enjoying when I did it.

And, like I say, I started out — between ages seven and about 19, I had that same enthusiasm, but I didn't really have any guiding principle.

And then I ran into "The Intelligent Investor" and Ben Graham. And then at that point, I was able to take all this energy and everything, and enthusiasm for it, and now I had a philosophy that made a lot of sense — total sense — and I found that I could employ, and so the game became even more fun. But it wasn't really more complicated than that.

Charlie?

CHARLIE MUNGER: Well, I don't have anything to add.

I do think that it's an easy game if somebody has the temperament for it and keeps at it because he's — likes it and it's interesting — interested in it.

I have a problem that Warren has less of. I don't like being too much an example to people who want to get rich by being shrewd and buying and passively holding securities.

I don't think that's enough of a life. If you wrest a fortune from life by being shrewder than other people and buying little pieces of paper, I don't think that's an adequate contribution in exchange for what you're taking.

So, I like it when you're investing money for an endowment, or a pension fund, or your relatives, or something, but I never considered it enough of a life to merely be shrewd in picking stocks and passively holding them.

WARREN BUFFETT: Yeah. Running Berkshire has been far, far more fun than running, in my case, multiple partnerships, or just an investment fund. I mean, that —

CHARLIE MUNGER: You'd be less of a man. If you'd run that partnership —

WARREN BUFFETT: It would be a crazy way to go through life.

CHARLIE MUNGER: Yeah.

WARREN BUFFETT: Yeah. I mean, it just — you know, Berkshire is incredibly more satisfying.

CHARLIE MUNGER: So if you're good at just investing your own money, I hope you'll morph into doing something more.

37. Dow Jones's big missed opportunity

WARREN BUFFETT: OK. We'll do 8 and then we'll move onto the annual meeting.

AUDIENCE MEMBER: My name is John Boxtose (PH). I'm from South Dartmouth, Massachusetts.

My question was regarding an interview that you gave, Mr. Buffett, several years ago.

You made a very interesting point. It was about the old Wall Street Journal, if you will, the one before it was purchased by News Corp.

You mentioned in the interview that Wall Street Journal, at some point in the past, had very significant competitive advantages, but a number of them were largely unrealized.

I was just wondering if you could elaborate on that, what the advantages were, how they were unrealized, et cetera. Thank you.

WARREN BUFFETT: Well, Dow Jones, which owned the Wall Street Journal, you know, in the '60s and '70s, going into the era of the enormous spread of financial information — and value of financial information — you know, they basically, they owned the field.

They had the news ticker and they had the Journal, which, you know, anybody interested in finance in the country identified with.

And they — starting with that, in what would be an incredible growth industry, finance, you know, for the next 30 or 40 years they — I forget a couple of those ventures they went into, and they bought a chain of small newspapers, I remember, one time — and they just totally missed what was going to happen.

You know, here comes Michael Bloomberg and, you know, takes away financial information. They had such an advantage. And they didn't really see various areas that they could have pursued, which could have turned that company into something worth many hundreds of billions of dollars, in all probability.

And, you know, they had a situation where a family owned it, and a lawyer essentially controlled the family's behavior, and they were sitting pretty. You know, they were all getting dividends, but there was nobody there with any imagination as to what could be done in the financial field.

So, starting with this position, they were a trusted name, they were in every brokerage firm in the country with a news ticker.

I mean, I went to Walter Annenberg's house one time and he had the Dow Jones ticker there — it just — or the news ticker.

And it was — they couldn't have been in a better place. They couldn't have started with a stronger position. They had a very good balance sheet. And they just let the world pass them by.

Now, Rupert is changing it into a different newspaper. He's going into — he's basically going into competition with the — or he's gone into competition — with the New York Times, so he — but that's the game he likes. And it makes for a very interesting competitive situation.

Charlie?

CHARLIE MUNGER: Well, they did end up with 6 or $7 billion, so they may have blown their opportunities, but they didn't destroy their fortune.

WARREN BUFFETT: If you'd had the hand — if Tom Murphy had had the hand —

CHARLIE MUNGER: Oh, yeah.

WARREN BUFFETT: — it would have been in the hundreds of billions, wouldn't it?

CHARLIE MUNGER: Well, I don't know. I'm not sure if we had had that hand we would have —

WARREN BUFFETT: Well, I'm not so sure. I'm talking about Murph. (Laughs)

There were a lot of opportunities there.

CHARLIE MUNGER: Well, I think even Murph is more like us than he is like Bill Gates.

WARREN BUFFETT: Well, I'm not sure where that goes, but... (Laughter)

CHARLIE MUNGER: Well, but I think it's hard to invent new — entirely new — modalities and so on.

WARREN BUFFETT: I think Bill would have done well with Dow Jones, too.

CHARLIE MUNGER: Yes. He might —

WARREN BUFFETT: I'd like to buy into that retroactively.

38. Q&A concludes

WARREN BUFFETT: OK. 3:30 has arrived. We're going to go to the annual meeting in about five minutes. We've got a certain amount of formal business to take care of. And I thank you all for coming. (Applause)

39. Berkshire's formal annual business meeting

WARREN BUFFETT: Let's reassemble and we'll conduct the business of the meeting.

The meeting will now come to order. I'm Warren Buffett, chairman of the board of directors of the company, and I welcome you to this 2015 annual meeting of shareholders.

This morning I introduced the Berkshire Hathaway directors that are present.

Also with us today are partners in the firm of Deloitte & Touche, our auditors. They are available to respond to appropriate questions you might have concerning the firm's audit of the accounts of Berkshire.

Sharon Heck is secretary of Berkshire Hathaway, and she will make a written record of the proceedings.

Becki Amick has been appointed inspector of elections at this meeting. She will certify to the count of votes cast in the election for directors and the motion to be voted at this meeting.

The named proxy holders for this meeting are Walter Scott and Marc Hamburg.

Does the secretary have a report of the number of Berkshire shares outstanding, entitled to vote, and represented at the meeting?

SHARON HECK: Yes, I do. As indicated in the proxy statement that accompanied the notice of this meeting that was sent to all shareholders of record on March 5, 2015, the record date for this meeting, there were 824,920 shares of Class A Berkshire Hathaway common stock outstanding, with each share entitled to one vote on motions considered at the meeting, and 1,227,069,442 shares of Class B Berkshire Hathaway common stock outstanding, with each share entitled to one ten-thousandth of one vote on motions considered at the meeting.

Of that number, 592,750 Class A shares and 736,403,387 Class B shares are represented at this meeting by proxies returned through Thursday evening, April 30.

WARREN BUFFETT: Thank you, Sharon. That number represents a quorum, and we will therefore directly proceed with the meeting.

First order of business will be a reading of the minutes of the last meeting of shareholders. I recognize Mr. Walter Scott, who will place a motion before the meeting.

WALTER SCOTT: I move that the reading of the minutes of the last meeting of shareholders be dispensed with and the minutes be approved.

WARREN BUFFETT: Do I hear a second?

VOICE: I second the motion.

WARREN BUFFETT: The motion has been moved and seconded. Are there any comments or questions?

We will vote on this motion by voice vote. All those if favor say “Aye.”

AUDIENCE: Aye.

WARREN BUFFETT: Opposed? The motion is carried.

40. Election of Berkshire directors

WARREN BUFFETT: The next item of business is to elect directors.

If a shareholder is present who did not send in a proxy or wishes to withdraw a proxy previously sent in, you may vote in person on the election of directors and other matters to be considered at this meeting. Please identify yourself to one of the meeting officials in the aisle so that you can receive a ballot.

I recognize Mr. Walter Scott to place a motion before the meeting with respect to election of directors.

WALTER SCOTT: I move that Warren Buffett, Charles Munger, Howard Buffett, Stephen Burke, Susan Decker, William Gates, David Gottesman, Charlotte Guyman, Thomas Murphy, Ronald Olson, Walter Scott, and Meryl Witmer be elected as directors.

WARREN BUFFETT: Is there a second?

VOICE: Second.

WARREN BUFFETT: It has been moved and seconded that Warren Buffett, Charles Munger, Howard Buffett, Stephen Burke, Susan Decker, William Gates, David Gottesman, Charlotte Guyman, Thomas Murphy, Ronald Olson, Walter Scott, and Meryl Witmer be elected as directors.

Are there any other nominations? Is there any discussion? The nominations are ready to be acted upon.

If are there any shareholders voting in person, they should now mark their ballot on the election of directors and deliver their ballot to one of the meeting officials in the aisles.

Ms. Amick, when you are ready, you may give your report.

BECKI AMICK: My report is ready. The ballot of the proxy holders in response to proxies that were received through last Thursday evening cast not less than 657,744 votes for each nominee. That number far exceeds a majority of the number of the total votes of all Class A and Class B shares outstanding.

The certification required by Delaware law of the precise count of the votes will be given to the secretary to be placed with the minutes of this meeting.

WARREN BUFFETT: Thank you, Ms. Amick. Warren Buffett, Charles Munger, Howard Buffett, Stephen Burke, Susan Decker, William Gates, David Gottesman, Charlotte Guyman, Thomas Murphy, Ronald Olson, Walter Scott, and Meryl Witmer have been elected as directors.

41. Adjournment of formal Berkshire annual meeting

WARREN BUFFETT: Does anyone have any further business to come before this meeting before we adjourn?

If not, I recognize Mr. Scott to place a motion before the moving.

WALTER SCOTT: I move that this meeting be adjourned.

WARREN BUFFETT: Second?

VOICE: Seconded.

WARREN BUFFETT: A motion to adjourn has been made and seconded. We will vote by voice. Is there any discussion? If not, all in favor say “Aye.”

AUDIENCE: Aye.

Berkshire's Performance vs. the S&P 500

Year	Annual Percentage Change in Per-Share Book Value of Berkshire	in Per-Share Market Value of Berkshire	in S&P 500 with Dividends Included
1965	23.8	49.5	10.0
1966	20.3	(3.4)	(11.7)
1967	11.0	13.3	30.9
1968	19.0	77.8	11.0
1969	16.2	19.4	(8.4)
1970	12.0	(4.6)	3.9
1971	16.4	80.5	14.6
1972	21.7	8.1	18.9
1973	4.7	(2.5)	(14.8)
1974	5.5	(48.7)	(26.4)
1975	21.9	2.5	37.2
1976	59.3	129.3	23.6
1977	31.9	46.8	(7.4)
1978	24.0	14.5	6.4
1979	35.7	102.5	18.2
1980	19.3	32.8	32.3
1981	31.4	31.8	(5.0)
1982	40.0	38.4	21.4
1983	32.3	69.0	22.4
1984	13.6	(2.7)	6.1
1985	48.2	93.7	31.6
1986	26.1	14.2	18.6
1987	19.5	4.6	5.1
1988	20.1	59.3	16.6
1989	44.4	84.6	31.7
1990	7.4	(23.1)	(3.1)
1991	39.6	35.6	30.5
1992	20.3	29.8	7.6
1993	14.3	38.9	10.1
1994	13.9	25.0	1.3
1995	43.1	57.4	37.6
1996	31.8	6.2	23.0
1997	34.1	34.9	33.4
1998	48.3	52.2	28.6
1999	0.5	(19.9)	21.0
2000	6.5	26.6	(9.1)
2001	(6.2)	6.5	(11.9)
2002	10.0	(3.8)	(22.1)
2003	21.0	15.8	28.7
2004	10.5	4.3	10.9
2005	6.4	0.8	4.9
2006	18.4	24.1	15.8
2007	11.0	28.7	5.5
2008	(9.6)	(31.8)	(37.0)
2009	19.8	2.7	26.5
2010	13.0	21.4	15.1
2011	4.6	(4.7)	2.1
2012	14.4	16.8	16.0
2013	18.2	32.7	32.4
2014	8.3	27.0	13.7
2015	6.4	(12.5)	1.4
Compounded Annual Gain – 1965-2015	19.2%	20.8%	9.7%
Overall Gain – 1964-2015	798,981%	1,598,284%	11,355%

Notes: Data are for calendar years with these exceptions: 1965 and 1966, year ended 9/30; 1967, 15 months ended 12/31. Starting in 1979, accounting rules required insurance companies to value the equity securities they hold at market rather than at the lower of cost or market, which was previously the requirement. In this table, Berkshire's results through 1978 have been restated to conform to the changed rules. In all other respects, the results are calculated using the numbers originally reported. The S&P 500 numbers are **pre-tax** whereas the Berkshire numbers are **after-tax**. If a corporation such as Berkshire were simply to have owned the S&P 500 and accrued the appropriate taxes, its results would have lagged the S&P 500 in years when that index showed a positive return, but would have exceeded the S&P 500 in years when the index showed a negative return. Over the years, the tax costs would have caused the aggregate lag to be substantial.

BERKSHIRE HATHAWAY INC.

To the Shareholders of Berkshire Hathaway Inc.:

Berkshire's gain in net worth during 2015 was $15.4 billion, which increased the per-share book value of both our Class A and Class B stock by 6.4%. Over the last 51 years (that is, since present management took over), per-share book value has grown from $19 to $155,501, a rate of 19.2% compounded annually.*

During the first half of those years, Berkshire's net worth was roughly equal to the number that really counts: the intrinsic value of the business. The similarity of the two figures existed then because most of our resources were deployed in marketable securities that were regularly revalued to their quoted prices (less the tax that would be incurred if they were to be sold). In Wall Street parlance, our balance sheet was then in very large part "marked to market."

By the early 1990s, however, our focus had changed to the outright ownership of businesses, a shift that diminished the relevance of balance-sheet figures. That disconnect occurred because the accounting rules that apply to controlled companies are materially different from those used in valuing marketable securities. The carrying value of the "losers" we own is written down, but "winners" are *never* revalued upwards.

We've had experience with both outcomes: I've made some dumb purchases, and the amount I paid for the economic goodwill of those companies was later written off, a move that reduced Berkshire's book value. We've also had some winners – a few of them very big – but have not written those up by a penny.

Over time, this asymmetrical accounting treatment (with which we agree) necessarily widens the gap between intrinsic value and book value. Today, the large – and growing – unrecorded gains at our "winners" make it clear that Berkshire's intrinsic value *far* exceeds its book value. That's why we would be delighted to repurchase our shares should they sell as low as 120% of book value. At that level, purchases would instantly and meaningfully increase per-share intrinsic value for Berkshire's continuing shareholders.

The unrecorded increase in the value of our owned businesses explains why Berkshire's aggregate market-value gain – tabulated on the facing page – materially exceeds our book-value gain. The two indicators vary erratically over short periods. Last year, for example, book-value performance was superior. Over time, however, market-value gains should continue their historical tendency to exceed gains in book value.

* All per-share figures used in this report apply to Berkshire's A shares. Figures for the B shares are 1/1500th of those shown for A.

The Year at Berkshire

Charlie Munger, Berkshire Vice Chairman and my partner, and I expect Berkshire's *normalized* earning power to increase every year. (*Actual* year-to-year earnings, of course, will sometimes decline because of weakness in the U.S. economy or, possibly, because of insurance mega-catastrophes.) In some years the normalized gains will be small; at other times they will be material. Last year was a good one. Here are the highlights:

- The most important development at Berkshire during 2015 was not financial, though it led to better earnings. After a poor performance in 2014, our BNSF railroad dramatically improved its service to customers last year. To attain that result, we invested about $5.8 billion during the year in capital expenditures, a sum far and away the record for any American railroad and nearly three times our annual depreciation charge. It was money well spent.

  BNSF moves about 17% of America's intercity freight (measured by revenue ton-miles), whether transported by rail, truck, air, water or pipeline. In that respect, we are a strong number one among the seven large American railroads (two of which are Canadian-based), carrying 45% more ton-miles of freight than our closest competitor. Consequently, our maintaining first-class service is not only vital to our shippers' welfare but also important to the smooth functioning of the U.S. economy.

  For most American railroads, 2015 was a disappointing year. Aggregate ton-miles fell, and earnings weakened as well. BNSF, however, maintained volume, and pre-tax income rose to a record $6.8 billion* (a gain of $606 million from 2014). Matt Rose and Carl Ice, the managers of BNSF, have my thanks and deserve yours.

- BNSF is the largest of our "Powerhouse Five," a group that also includes Berkshire Hathaway Energy, Marmon, Lubrizol and IMC. Combined, these companies – our five most profitable non-insurance businesses – earned $13.1 billion in 2015, an increase of $650 million over 2014.

  Of the five, only Berkshire Hathaway Energy, then earning $393 million, was owned by us in 2003. Subsequently, we purchased three of the other four on an all-cash basis. In acquiring BNSF, however, we paid about 70% of the cost in cash and, for the remainder, issued Berkshire shares that increased the number outstanding by 6.1%. In other words, the $12.7 billion gain in annual earnings delivered Berkshire by the five companies over the twelve-year span has been accompanied by only minor dilution. That satisfies our goal of not simply increasing earnings, but making sure we also increase *per-share* results.

- Next year, I will be discussing the "Powerhouse Six." The newcomer will be Precision Castparts Corp. ("PCC"), a business that we purchased a month ago for more than $32 billion of cash. PCC fits perfectly into the Berkshire model and will substantially increase our *normalized* per-share earning power.

  Under CEO Mark Donegan, PCC has become the world's premier supplier of aerospace components (most of them destined to be original equipment, though spares are important to the company as well). Mark's accomplishments remind me of the magic regularly performed by Jacob Harpaz at IMC, our remarkable Israeli manufacturer of cutting tools. The two men transform very ordinary raw materials into extraordinary products that are used by major manufacturers worldwide. Each is the da Vinci of his craft.

  PCC's products, often delivered under multi-year contracts, are key components in most large aircraft. Other industries are served as well by the company's 30,466 employees, who work out of 162 plants in 13 countries. In building his business, Mark has made many acquisitions and will make more. We look forward to having him deploy Berkshire's capital.

* Throughout this letter, all earnings are stated on a pre-tax basis unless otherwise designated.

A personal thank-you: The PCC acquisition would not have happened without the input and assistance of our own Todd Combs, who brought the company to my attention a few years ago and went on to educate me about both the business and Mark. Though Todd and Ted Weschler are primarily investment managers – they each handle about $9 billion for us – both of them cheerfully and ably add major value to Berkshire in other ways as well. Hiring these two was one of my best moves.

- With the PCC acquisition, Berkshire will own 10¼ companies that would populate the Fortune 500 if they were stand-alone businesses. (Our 27% holding of Kraft Heinz is the ¼.) That leaves just under 98% of America's business giants that have yet to call us. Operators are standing by.

- Our many dozens of smaller non-insurance businesses earned $5.7 billion last year, up from $5.1 billion in 2014. Within this group, we have one company that last year earned more than $700 million, two that earned between $400 million and $700 million, seven that earned between $250 million and $400 million, six that earned between $100 million and $250 million, and eleven that earned between $50 million and $100 million. We love them all: This collection of businesses will expand both in number and earnings as the years go by.

- When you hear talk about America's crumbling infrastructure, rest assured that they're not talking about Berkshire. We invested $16 billion in property, plant and equipment last year, a full 86% of it deployed in the United States.

  I told you earlier about BNSF's record capital expenditures in 2015. At the end of *every* year, our railroad's physical facilities will be improved from those existing twelve months earlier.

  Berkshire Hathaway Energy ("BHE") is a similar story. That company has invested $16 billion in renewables and now owns 7% of the country's wind generation and 6% of its solar generation. Indeed, the 4,423 megawatts of wind generation owned and operated by our regulated utilities is *six* times the generation of the runner-up utility.

  We're not done. Last year, BHE made major commitments to the future development of renewables in support of the Paris Climate Change Conference. Our fulfilling those promises will make great sense, both for the environment and for Berkshire's economics.

- Berkshire's huge and growing insurance operation again operated at an underwriting profit in 2015 – that makes 13 years in a row – and increased its float. During those years, our float – money that doesn't belong to us but that we can invest for Berkshire's benefit – grew from $41 billion to $88 billion. Though neither that gain nor the size of our float is reflected in Berkshire's earnings, float generates significant investment income because of the assets it allows us to hold.

  Meanwhile, our underwriting profit totaled $26 billion during the 13-year period, including $1.8 billion earned in 2015. Without a doubt, Berkshire's largest unrecorded wealth lies in its insurance business. We've spent 48 years building this multi-faceted operation, and it can't be replicated.

- While Charlie and I search for new businesses to buy, our many subsidiaries are regularly making bolt-on acquisitions. Last year we contracted for 29 bolt-ons, scheduled to cost $634 million in aggregate. The cost of these purchases ranged from $300,000 to $143 million.

  Charlie and I encourage bolt-ons, *if* they are sensibly-priced. (Most deals offered us most definitely aren't.) These purchases deploy capital in operations that fit with our existing businesses and that will be managed by our corps of expert managers. That means no additional work for us, yet more earnings for Berkshire, a combination we find highly appealing. We will make many dozens of bolt-on deals in future years.

- Our Heinz partnership with Jorge Paulo Lemann, Alex Behring and Bernardo Hees more than doubled its size last year by merging with Kraft. Before this transaction, we owned about 53% of Heinz at a cost of $4.25 billion. Now we own 325.4 million shares of Kraft Heinz (about 27%) that cost us $9.8 billion. The new company has annual sales of $27 billion and can supply you Heinz ketchup or mustard to go with your Oscar Mayer hot dogs that come from the Kraft side. Add a Coke, and you will be enjoying my favorite meal. (We will have the Oscar Mayer Wienermobile at the annual meeting – bring your kids.)

  Though we sold no Kraft Heinz shares, "GAAP" (Generally Accepted Accounting Principles) required us to record a $6.8 billion write-up of our investment upon completion of the merger. That leaves us with our Kraft Heinz holding carried on our balance sheet at a value many billions above our cost and many billions below its market value, an outcome only an accountant could love.

  Berkshire also owns Kraft Heinz preferred shares that pay us $720 million annually and are carried at $7.7 billion on our balance sheet. That holding will almost certainly be redeemed for $8.32 billion in June (the earliest date allowed under the preferred's terms). That will be good news for Kraft Heinz and bad news for Berkshire.

  Jorge Paulo and his associates could not be better partners. We share with them a passion to buy, build and *hold* large businesses that satisfy basic needs and desires. We follow different paths, however, in pursuing this goal.

  Their method, at which they have been extraordinarily successful, is to buy companies that offer an opportunity for eliminating many unnecessary costs and then – *very promptly* – to make the moves that will get the job done. Their actions significantly boost productivity, the all-important factor in America's economic growth over the past 240 years. Without more output of desired goods and services per working hour – that's the measure of productivity gains – an economy inevitably stagnates. At much of corporate America, truly major gains in productivity are possible, a fact offering opportunities to Jorge Paulo and his associates.

  At Berkshire, we, too, crave efficiency and detest bureaucracy. To achieve our goals, however, we follow an approach emphasizing *avoidance* of bloat, buying businesses such as PCC that have long been run by cost-conscious and efficient managers. After the purchase, *our* role is simply to create an environment in which these CEOs – and their eventual successors, who typically are like-minded – can maximize both their managerial effectiveness and the pleasure they derive from their jobs. (With this hands-off style, I am heeding a well-known Mungerism: "If you want to guarantee yourself a lifetime of misery, be sure to marry someone with the intent of changing their behavior.")

  We will continue to operate with extreme – indeed, almost unheard of – decentralization at Berkshire. But we will also look for opportunities to partner with Jorge Paulo, either as a financing partner, as was the case when his group purchased Tim Horton's, or as a combined equity-and-financing partner, as at Heinz. We also may occasionally partner with others, as we have successfully done at Berkadia.

  Berkshire, however, will join only with partners making friendly acquisitions. To be sure, certain hostile offers are justified: Some CEOs forget that it is shareholders for whom they should be working, while other managers are woefully inept. In either case, directors may be blind to the problem or simply reluctant to make the change required. That's when new faces are needed. We, though, will leave these "opportunities" for others. At Berkshire, we go only where we are welcome.

- Berkshire increased its ownership interest last year in each of its "Big Four" investments – American Express, Coca-Cola, IBM and Wells Fargo. We purchased additional shares of IBM (increasing our ownership to 8.4% versus 7.8% at yearend 2014) and Wells Fargo (going to 9.8% from 9.4%). At the other two companies, Coca-Cola and American Express, stock repurchases raised our percentage ownership. Our equity in Coca-Cola grew from 9.2% to 9.3%, and our interest in American Express increased from 14.8% to 15.6%. In case you think these seemingly small changes aren't important, consider this math: For the four companies in aggregate, each increase of one percentage point in our ownership raises Berkshire's portion of their annual earnings by about $500 million.

  These four investees possess excellent businesses and are run by managers who are both talented and shareholder-oriented. Their returns on tangible equity range from excellent to staggering. At Berkshire, we much prefer owning a non-controlling but substantial portion of a wonderful company to owning 100% of a so-so business. It's better to have a partial interest in the Hope Diamond than to own all of a rhinestone.

  If Berkshire's yearend holdings are used as the marker, our portion of the "Big Four's" 2015 earnings amounted to $4.7 billion. In the earnings we report to you, however, we include only the dividends they pay us – about $1.8 billion last year. But make no mistake: The nearly $3 billion of these companies' earnings we don't report are every bit as valuable to us as the portion Berkshire records.

  The earnings our investees retain are often used for repurchases of their own stock – a move that increases Berkshire's share of future earnings without requiring us to lay out a dime. The retained earnings of these companies also fund business opportunities that usually turn out to be advantageous. All that leads us to expect that the per-share earnings of these four investees, in aggregate, will grow substantially over time. If gains do indeed materialize, dividends to Berkshire will increase and so, too, will our unrealized capital gains.

  Our flexibility in capital allocation – our willingness to invest large sums passively in non-controlled businesses – gives us a significant edge over companies that limit themselves to acquisitions they will operate. Woody Allen once explained that the advantage of being bi-sexual is that it doubles your chance of finding a date on Saturday night. In like manner – well, not exactly like manner – our appetite for either operating businesses or passive investments doubles *our* chances of finding sensible uses for Berkshire's endless gusher of cash. Beyond that, having a huge portfolio of marketable securities gives us a stockpile of funds that can be tapped when an elephant-sized acquisition is offered to us.

* * * * * * * * * * * *

It's an election year, and candidates can't stop speaking about our country's problems (which, of course, only *they* can solve). As a result of this negative drumbeat, many Americans now believe that their children will not live as well as they themselves do.

That view is dead wrong: The babies being born in America today are the luckiest crop in history.

American GDP per capita is now about $56,000. As I mentioned last year that – *in real terms* – is a staggering six times the amount in 1930, the year I was born, a leap far beyond the wildest dreams of my parents or their contemporaries. U.S. citizens are not intrinsically more intelligent today, nor do they work harder than did Americans in 1930. Rather, they work far more efficiently and thereby produce far more. This all-powerful trend is certain to continue: America's economic magic remains alive and well.

Some commentators bemoan our current 2% per year growth in real GDP – and, yes, we would all like to see a higher rate. But let's do some simple math using the much-lamented 2% figure. That rate, we will see, delivers astounding gains.

America's population is growing about .8% per year (.5% from births minus deaths and .3% from net migration). Thus 2% of *overall* growth produces about 1.2% of *per capita* growth. That may not sound impressive. But in a single generation of, say, 25 years, that rate of growth leads to a gain of 34.4% in *real* GDP per capita. (Compounding's effects produce the excess over the percentage that would result by simply multiplying 25 x 1.2%.) In turn, that 34.4% gain will produce a staggering $19,000 increase in *real GDP per capita* for the next generation. Were that to be distributed equally, the gain would be $76,000 annually for a family of four. Today's politicians need not shed tears for tomorrow's children.

Indeed, most of *today's* children are doing well. *All* families in my upper middle-class neighborhood regularly enjoy a living standard better than that achieved by John D. Rockefeller Sr. at the time of my birth. His unparalleled fortune couldn't buy what we now take for granted, whether the field is – to name just a few – transportation, entertainment, communication or medical services. Rockefeller certainly had power and fame; he could not, however, live as well as my neighbors now do.

Though the pie to be shared by the next generation will be *far* larger than today's, how it will be divided will remain fiercely contentious. Just as is now the case, there will be struggles for the increased output of goods and services between those people in their productive years and retirees, between the healthy and the infirm, between the inheritors and the Horatio Algers, between investors and workers and, in particular, between those with talents that are valued highly by the marketplace and the equally decent hard-working Americans who lack the skills the market prizes. Clashes of that sort have forever been with us – and will forever continue. Congress will be the battlefield; money and votes will be the weapons. Lobbying will remain a growth industry.

The good news, however, is that even members of the "losing" sides will almost certainly enjoy – *as they should* – far more goods and services in the future than they have in the past. The quality of their increased bounty will also dramatically improve. Nothing rivals the market system in producing what people want – nor, even more so, in delivering what people don't yet know they want. My parents, when young, could not envision a television set, nor did I, in my 50s, think I needed a personal computer. Both products, once people saw what they could do, quickly revolutionized their lives. I now spend ten hours a week playing bridge online. And, as I write this letter, "search" is invaluable to me. (I'm not ready for Tinder, however.)

For 240 years it's been a terrible mistake to bet against America, and now is no time to start. America's golden goose of commerce and innovation will continue to lay more and larger eggs. America's social security promises will be honored and perhaps made more generous. And, yes, America's kids will live far better than their parents did.

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Considering this favorable tailwind, Berkshire (and, to be sure, a great many other businesses) will almost certainly prosper. The managers who succeed Charlie and me will build Berkshire's per-share intrinsic value by following our simple blueprint of: (1) constantly improving the basic earning power of our many subsidiaries; (2) further increasing their earnings through bolt-on acquisitions; (3) benefiting from the growth of our investees; (4) repurchasing Berkshire shares when they are available at a meaningful discount from intrinsic value; and (5) making an occasional large acquisition. Management will also try to maximize results for *you* by rarely, if ever, issuing Berkshire shares.

Intrinsic Business Value

As much as Charlie and I talk about intrinsic business value, we cannot tell you precisely what that number is for Berkshire shares (nor, in fact, for any other stock). It is possible, however, to make a sensible estimate. In our 2010 annual report we laid out the three elements – one of them qualitative – that we believe are the keys to an estimation of Berkshire's intrinsic value. That discussion is reproduced in full on pages 113-114.

Here is an update of the two quantitative factors: In 2015 our per-share cash and investments increased 8.3% to $159,794 (with our Kraft Heinz shares stated at market value), and earnings from our many businesses – *including insurance underwriting income* – increased 2.1% to $12,304 per share. We exclude in the second factor the dividends and interest from the investments we hold because including them would produce a double-counting of value. In arriving at our earnings figure, we deduct all corporate overhead, interest, depreciation, amortization and minority interests. Income taxes, though, are not deducted. That is, the earnings are pre-tax.

I used the italics in the paragraph above because we are for the first time including insurance underwriting income in business earnings. We did not do that when we initially introduced Berkshire's two quantitative pillars of valuation because our insurance results were then heavily influenced by catastrophe coverages. If the wind didn't blow and the earth didn't shake, we made large profits. But a mega-catastrophe would produce red ink. In order to be conservative then in stating our business earnings, we consistently assumed that underwriting would break even over time and ignored any of its gains or losses in our annual calculation of the second factor of value.

Today, our insurance results are likely to be more stable than was the case a decade or two ago because we have deemphasized catastrophe coverages and greatly expanded our bread-and-butter lines of business. Last year, our underwriting income contributed $1,118 per share to the $12,304 per share of earnings referenced in the second paragraph of this section. Over the past decade, annual underwriting income has averaged $1,434 per share, and we anticipate being profitable in most years. You should recognize, however, that underwriting in any given year could well be unprofitable, perhaps substantially so.

Since 1970, our per-share investments have increased at a rate of 18.9% compounded annually, and our earnings (*including* the underwriting results in both the initial and terminal year) have grown at a 23.7% clip. It is no coincidence that the price of Berkshire stock over the ensuing 45 years has increased at a rate very similar to that of our two measures of value. Charlie and I like to see gains in both sectors, but our main goal is to build operating earnings.

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Now, let's examine the four major sectors of our operations. Each has vastly different balance sheet and income characteristics from the others. So we'll present them as four separate businesses, which is how Charlie and I view them (though there are important and *enduring* economic advantages to having them all under one roof). Our intent is to provide you with the information we would wish to have if our positions were reversed, with you being the reporting manager and we the absentee shareholders. (Don't get excited; this is not a switch we are considering.)

Insurance

Let's look first at insurance. The property-casualty ("P/C") branch of that industry has been the engine that has propelled our expansion since 1967, when we acquired National Indemnity and its sister company, National Fire & Marine, for $8.6 million. Today, National Indemnity is the largest property-casualty company in the world, as measured by net worth. Moreover, its intrinsic value is *far* in excess of the value at which it is carried on our books.

One reason we were attracted to the P/C business was its financial characteristics: P/C insurers receive premiums upfront and pay claims later. In extreme cases, such as those arising from certain workers' compensation accidents, payments can stretch over many decades. This collect-now, pay-later model leaves P/C companies holding large sums – money we call "float" – that will eventually go to others. Meanwhile, insurers get to invest this float for their own benefit. Though individual policies and claims come and go, the amount of float an insurer holds usually remains fairly stable in relation to premium volume. Consequently, as our business grows, so does our float. And *how* we have grown, as the following table shows:

Year	*Float (in millions)*
1970	$ 39
1980	237
1990	1,632
2000	27,871
2010	65,832
2015	87,722

Further gains in float will be tough to achieve. On the plus side, GEICO and several of our specialized operations are almost certain to grow at a good clip. National Indemnity's reinsurance division, however, is party to a number of run-off contracts whose float drifts downward. If we do in time experience a decline in float, it will be *very* gradual – at the outside no more than 3% in any year. The nature of our insurance contracts is such that we can *never* be subject to immediate or near-term demands for sums that are of significance to our cash resources. This structure is by design and is a key component in the strength of Berkshire's economic fortress. It will *never* be compromised.

If our premiums exceed the total of our expenses and eventual losses, we register an underwriting profit that adds to the investment income our float produces. When such a profit is earned, we enjoy the use of free money – and, better yet, get *paid* for holding it.

Unfortunately, the wish of all insurers to achieve this happy result creates intense competition, so vigorous indeed that it sometimes causes the P/C industry as a whole to operate at a significant underwriting *loss*. This loss, in effect, is what the industry pays to hold its float. Competitive dynamics almost guarantee that the insurance industry, despite the float income all its companies enjoy, will continue its dismal record of earning subnormal returns on tangible net worth as compared to other American businesses. The prolonged period of low interest rates the world is now dealing with also virtually guarantees that earnings on float will steadily decrease for many years to come, thereby exacerbating the profit problems of insurers. It's a good bet that industry results over the next ten years will fall short of those recorded in the past decade, particularly for those companies that specialize in reinsurance.

As noted early in this report, Berkshire has now operated at an underwriting profit for 13 consecutive years, our pre-tax gain for the period having totaled $26.2 billion. That's no accident: Disciplined risk evaluation is the daily focus of *all* of our insurance managers, who know that while float is valuable, its benefits can be drowned by poor underwriting results. All insurers give that message lip service. At Berkshire it is a religion, Old Testament style.

So how does our float affect intrinsic value? When Berkshire's *book* value is calculated, the *full* amount of our float is deducted as a *liability*, just as if we had to pay it out tomorrow and could not replenish it. But to think of float as strictly a liability is incorrect. It should instead be viewed as a revolving fund. Daily, we pay old claims and related expenses – a huge $24.5 billion to more than six million claimants in 2015 – and that reduces float. Just as surely, we each day write new business that will soon generate its own claims, adding to float.

If our revolving float is both costless and long-enduring, which I believe it will be, the true value of this liability is *dramatically* less than the accounting liability. Owing $1 that in effect will never leave the premises – because new business is almost certain to deliver a substitute – is worlds different from owing $1 that will go out the door tomorrow and not be replaced. The two types of liabilities, however, are treated as equals under GAAP.

A partial offset to this overstated liability is a $15.5 billion "goodwill" asset that we incurred in buying our insurance companies and that increases book value. In very large part, this goodwill represents the price we paid for the float-generating capabilities of our insurance operations. The cost of the goodwill, however, has *no* bearing on its true value. For example, if an insurance company sustains large and prolonged underwriting losses, *any* goodwill asset carried on the books should be deemed valueless, whatever its original cost.

Fortunately, that does not describe Berkshire. Charlie and I believe the true economic value of our insurance goodwill – what we would happily pay for float *of similar quality* were we to purchase an insurance operation possessing it – to be *far* in excess of its historic carrying value. Indeed, almost the entire $15.5 billion we carry for goodwill in our insurance business was already on our books in 2000. Yet we subsequently *tripled* our float. Its value today is one reason – a huge reason – why we believe Berkshire's intrinsic business value substantially exceeds its book value.

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Berkshire's attractive insurance economics exist only because we have some terrific managers running disciplined operations that possess hard-to-replicate business models. Let me tell you about the major units.

First by float size is the Berkshire Hathaway Reinsurance Group, managed by Ajit Jain. Ajit insures risks that no one else has the desire or the capital to take on. His operation combines capacity, speed, decisiveness and, most important, brains in a manner unique in the insurance business. Yet he never exposes Berkshire to risks that are inappropriate in relation to our resources.

Indeed, Berkshire is *far* more conservative in avoiding risk than most large insurers. For example, if the insurance industry should experience a $250 billion loss from some mega-catastrophe – a loss about triple anything it has ever experienced – Berkshire as a whole would likely record a significant profit for the year because of its many streams of earnings. We would also remain awash in cash and be looking for large opportunities to write business in an insurance market that might well be in disarray. Meanwhile, other major insurers and reinsurers would be swimming in red ink, if not facing insolvency.

When Ajit entered Berkshire's office on a Saturday in 1986, he did not have a day's experience in the insurance business. Nevertheless, Mike Goldberg, then our manager of insurance, handed him the keys to our reinsurance business. With that move, Mike achieved sainthood: Since then, Ajit has created tens of billions of value for Berkshire shareholders.

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We have another reinsurance powerhouse in General Re, managed by Tad Montross.

At bottom, a sound insurance operation needs to adhere to four disciplines. It must (1) understand *all* exposures that might cause a policy to incur losses; (2) conservatively assess the likelihood of any exposure actually causing a loss and the probable cost if it does; (3) set a premium that, on average, will deliver a profit after both prospective loss costs and operating expenses are covered; and (4) be willing to walk away if the appropriate premium can't be obtained.

Many insurers pass the first three tests and flunk the fourth. They simply can't turn their back on business that is being eagerly written by their competitors. That old line, "The other guy is doing it, so we must as well," spells trouble in any business, but in none more so than insurance.

Tad has observed all four of the insurance commandments, and it shows in his results. General Re's huge float has been considerably better than cost-free under his leadership, and we expect that, on average, to continue. We are particularly enthusiastic about General Re's international life reinsurance business, which has grown consistently and profitably since we acquired the company in 1998.

It can be remembered that soon after we purchased General Re, it was beset by problems that caused commentators – and me as well, briefly – to believe I had made a huge mistake. That day is long gone. General Re is now a gem.

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Finally, there is GEICO, the insurer on which I cut my teeth 65 years ago. GEICO is managed by Tony Nicely, who joined the company at 18 and completed 54 years of service in 2015. Tony became CEO in 1993, and since then the company has been flying. There is *no* better manager than Tony. In the 40 years that I've known him, his every action has made great sense.

When I was first introduced to GEICO in January 1951, I was blown away by the huge cost advantage the company enjoyed compared to the expenses borne by the giants of the industry. It was clear to me that GEICO would succeed because it *deserved* to succeed.

No one *likes* to buy auto insurance. Almost everyone, though, likes to drive. The insurance consequently needed is a major expenditure for most families. Savings matter to them – and *only* a low-cost operation can deliver these. Indeed, at least 40% of the people reading this letter can save money by insuring with GEICO. So stop reading – right now! – and go to geico.com or call 800-368-2734.

GEICO's cost advantage is the factor that has enabled the company to gobble up market share year after year. (We ended 2015 with 11.4% of the market compared to 2.5% in 1995, when Berkshire acquired control of GEICO.) The company's low costs create a moat – an *enduring* one – that competitors are unable to cross.

All the while, our gecko never tires of telling Americans how GEICO can save them important money. I love hearing the little guy deliver his message: "15 minutes could save you 15% or more on car insurance." (Of course, there's always a grouch in the crowd. One of my friends says he is glad that only a few animals can talk, since the ones that do speak seem unable to discuss any subject but insurance.)

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In addition to our three major insurance operations, we own a group of smaller companies that primarily write commercial coverages. In aggregate, these companies are a large, growing and valuable operation that consistently delivers an underwriting profit, usually much better than that reported by their competitors. Indeed, over the past 13 years, this group has earned $4 billion from underwriting – about 13% of its premium volume – while increasing its float from $943 million to $9.9 billion.

Less than three years ago, we formed Berkshire Hathaway Specialty Insurance ("BHSI"), which we include in this group. Our first decision was to put Peter Eastwood in charge. That move was a home run: BHSI has already developed $1 billion of annual premium volume and, under Peter's direction, is destined to become one of the world's leading P/C insurers.

Here's a recap of underwriting earnings and float by division:

	Underwriting Profit		*Yearend Float*	
	(in millions)			
Insurance Operations	*2015*	*2014*	*2015*	*2014*
BH Reinsurance	$ 421	$ 606	$ 44,108	$ 42,454
General Re	132	277	18,560	19,280
GEICO	460	1,159	15,148	13,569
Other Primary	824	626	9,906	8,618
	$ 1,837	$ 2,668	$ 87,722	$ 83,921

Berkshire's great managers, premier financial strength and a variety of business models protected by wide moats amount to something unique in the insurance world. This assemblage of strengths is a huge asset for Berkshire shareholders that will only get more valuable with time.

Regulated, Capital-Intensive Businesses

We have two major operations, BNSF and BHE, that share important characteristics distinguishing them from our other businesses. Consequently, we assign them their own section in this letter and split out their combined financial statistics in our GAAP balance sheet and income statement. Together, they last year accounted for 37% of Berkshire's after-tax operating earnings.

A key characteristic of both companies is their huge investment in very long-lived, regulated assets, with these partially funded by large amounts of long-term debt that is *not* guaranteed by Berkshire. Our credit is in fact not needed because each company has earning power that even under terrible economic conditions would far exceed its interest requirements. Last year, for example, in a disappointing year for railroads, BNSF's interest coverage was more than 8:1. (Our definition of coverage is the ratio of earnings before interest and taxes to interest, *not* EBITDA/interest, a commonly used measure we view as seriously flawed.)

At BHE, meanwhile, two factors ensure the company's ability to service its debt under all circumstances. The first is common to all utilities: recession-resistant earnings, which result from these companies offering an essential service on an exclusive basis. The second is enjoyed by few other utilities: a great and ever-widening diversity of earnings streams, which shield BHE from being seriously harmed by any single regulatory body. These many sources of profit, supplemented by the inherent advantage of being owned by a strong parent, have allowed BHE and its utility subsidiaries to significantly lower their cost of debt. This economic fact benefits both us *and* our customers.

All told, BHE and BNSF invested $11.6 billion in plant and equipment last year, a massive commitment to key components of America's infrastructure. We relish making such investments as long as they promise reasonable returns – and, on that front, we put a large amount of trust in future regulation.

Our confidence is justified both by our past experience and by the knowledge that society will forever need huge investments in both transportation and energy. It is in the self-interest of governments to treat capital providers in a manner that will ensure the continued flow of funds to essential projects. It is concomitantly in our self-interest to conduct our operations in a way that earns the approval of our regulators and the people they represent.

Low prices are a powerful way to keep these constituencies happy. In Iowa, BHE's average retail rate is 6.8¢ per KWH. Alliant, the other major electric utility in the state, averages 9.5¢. Here are the comparable industry figures for adjacent states: Nebraska 9.0¢, Missouri 9.3¢, Illinois 9.3¢, Minnesota 9.7¢. The national average is 10.4¢. Our rock-bottom prices add up to real money for paycheck-strapped customers.

At BNSF, price comparisons between major railroads are far more difficult to make because of significant differences in both their mix of cargo and the average distance it is carried. To supply a *very* crude measure, however, our revenue per ton-mile was just under 3¢ last year, while shipping costs for customers of the other four major U.S.-based railroads were at least 40% higher, ranging from 4.2¢ to 5.3¢.

Both BHE and BNSF have been leaders in pursuing planet-friendly technology. In wind generation, no state comes close to Iowa, where last year megawatt-hours we generated from wind equaled 47% of all megawatt-hours sold to our retail customers. (Additional wind projects to which we are committed will take that figure to 58% in 2017.)

BNSF, like other Class I railroads, uses only a single gallon of diesel fuel to move a ton of freight almost 500 miles. That makes the railroads four times as fuel-efficient as trucks! Furthermore, railroads alleviate highway congestion – and the taxpayer-funded maintenance expenditures that come with heavier traffic – in a major way.

Here are the key figures for BHE and BNSF:

Berkshire Hathaway Energy (89.9% owned)	*Earnings (in millions)*		
	2015	*2014*	*2013*
U.K. utilities	$ 460	$ 527	$ 362
Iowa utility	314	298	230
Nevada utilities	586	549	(58)
PacifiCorp (primarily Oregon and Utah)	1,026	1,010	982
Gas pipelines (Northern Natural and Kern River)	401	379	385
Canadian transmission utility	170	16	—
Renewable projects	175	194	50
HomeServices	191	139	139
Other (net)	27	26	12
Operating earnings before corporate interest and taxes	3,350	3,138	2,102
Interest	499	427	296
Income taxes	481	616	170
Net earnings	$ 2,370	$ 2,095	$ 1,636
Earnings applicable to Berkshire	$ 2,132	$ 1,882	$ 1,470

BNSF	*Earnings (in millions)*		
	2015	*2014*	*2013*
Revenues	$ 21,967	$ 23,239	$ 22,014
Operating expenses	14,264	16,237	15,357
Operating earnings before interest and taxes	7,703	7,002	6,657
Interest (net)	928	833	729
Income taxes	2,527	2,300	2,135
Net earnings	$ 4,248	$ 3,869	$ 3,793

I currently expect increased after-tax earnings at BHE in 2016, but lower earnings at BNSF.

Manufacturing, Service and Retailing Operations

Our activities in this part of Berkshire cover the waterfront. Let's look, though, at a summary balance sheet and earnings statement for the entire group.

Balance Sheet 12/31/15 (in millions)

Assets		*Liabilities and Equity*	
Cash and equivalents	$ 6,807	Notes payable	$ 2,135
Accounts and notes receivable	8,886	Other current liabilities	10,565
Inventory	11,916	Total current liabilities	12,700
Other current assets	970		
Total current assets	28,579		
		Deferred taxes	3,649
Goodwill and other intangibles	30,289	Term debt and other liabilities	4,767
Fixed assets	15,161	Non-controlling interests	521
Other assets	4,445	Berkshire equity	56,837
	$ 78,474		$ 78,474

Earnings Statement (in millions)

	2015	*2014*	*2013**
Revenues	$107,825	$ 97,689	$ 93,472
Operating expenses	100,607	90,788	87,208
Interest expense	103	109	104
Pre-tax earnings	7,115	6,792	6,160
Income taxes and non-controlling interests	2,432	2,324	2,283
Net earnings	$ 4,683	$ 4,468	$ 3,877

* Earnings for 2013 have been restated to exclude Marmon's leasing operations, which are now included in the Finance and Financial Products results.

Our income and expense data conforming to GAAP is on page 38. In contrast, the operating expense figures above are non-GAAP because they exclude some purchase-accounting items (primarily the amortization of certain intangible assets). We present the data in this manner because Charlie and I believe the adjusted numbers more accurately reflect the true economic expenses and profits of the businesses aggregated in the table than do GAAP figures.

I won't explain all of the adjustments – some are tiny and arcane – but serious investors should understand the disparate nature of intangible assets. Some truly deplete in value over time, while others *in no way* lose value. For software, as a big example, amortization charges are very real expenses. Conversely, the concept of recording charges against other intangibles, such as customer relationships, arises from purchase-accounting rules and clearly does not reflect economic reality. GAAP accounting draws no distinction between the two types of charges. Both, that is, are recorded as expenses when earnings are calculated – even though, from an investor's viewpoint, they could not differ more.

In the GAAP-compliant figures we show on page 38, amortization charges of $1.1 billion have been deducted as expenses. We would call about 20% of these "real," the rest not. The "non-real" charges, once non-existent at Berkshire, have become significant because of the many acquisitions we have made. Non-real amortization charges are likely to climb further as we acquire more companies.

The table on page 55 gives you the current status of our intangible assets as calculated by GAAP. We now have $6.8 billion left of amortizable intangibles, of which $4.1 billion will be expensed over the next five years. Eventually, of course, every dollar of these "assets" will be charged off. When that happens, reported earnings increase even if true earnings are flat. (My gift to my successor.)

I suggest that you ignore a portion of GAAP amortization costs. But it is with some trepidation that I do that, knowing that it has become common for managers to tell their owners to ignore certain expense items that are all too real. "Stock-based compensation" is the most egregious example. The very name says it all: "compensation." If compensation isn't an expense, what is it? And, if real and recurring expenses don't belong in the calculation of earnings, where in the world do they belong?

Wall Street analysts often play their part in this charade, too, parroting the phony, compensation-ignoring "earnings" figures fed them by managements. Maybe the offending analysts don't know any better. Or maybe they fear losing "access" to management. Or maybe they are cynical, telling themselves that since everyone else is playing the game, why shouldn't they go along with it. Whatever their reasoning, these analysts are guilty of propagating misleading numbers that can deceive investors.

Depreciation charges are a more complicated subject but are almost always true costs. Certainly they are at Berkshire. I wish we could keep our businesses competitive while spending less than our depreciation charge, but in 51 years I've yet to figure out how to do so. Indeed, the depreciation charge we record in our railroad business falls far short of the capital outlays needed to merely keep the railroad running properly, a mismatch that leads to GAAP earnings that are higher than true economic earnings. (This overstatement of earnings exists at all railroads.) When CEOs or investment bankers tout pre-depreciation figures such as EBITDA as a valuation guide, watch their noses lengthen while they speak.

Our public reports of earnings will, of course, continue to conform to GAAP. To embrace reality, however, you should remember to add back most of the amortization charges we report. You should also subtract something to reflect BNSF's inadequate depreciation charge.

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Let's get back to our many manufacturing, service and retailing operations, which sell products ranging from lollipops to jet airplanes. Some of this sector's businesses, measured by earnings on unleveraged net *tangible* assets, enjoy terrific economics, producing profits that run from 25% after-tax to far more than 100%. Others generate good returns in the area of 12% to 20%.

A few, however – these are serious mistakes I made in my job of capital allocation – have very poor returns. In most of these cases, I was wrong in my evaluation of the economic dynamics of the company or the industry in which it operates, and we are now paying the price for my misjudgments. At other times, I stumbled in evaluating either the fidelity or the ability of incumbent managers or ones I later appointed. I will commit more errors; you can count on that. If we luck out, they will occur at our smaller operations.

Viewed as a single entity, the companies in this group are an excellent business. They employed an average of $25.6 billion of net tangible assets during 2015 and, despite their holding large quantities of excess cash and using only token amounts of leverage, earned 18.4% after-tax on that capital.

Of course, a business with terrific economics can be a bad investment if it is bought at too high a price. We have paid substantial premiums to net tangible assets for most of our businesses, a cost that is reflected in the large figure we show for goodwill and other intangibles. Overall, however, we are getting a decent return on the capital we have deployed in this sector. Earnings from the group should grow substantially in 2016 as Duracell and Precision Castparts enter the fold.

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We have far too many companies in this group to comment on them individually. Moreover, their competitors – both current and potential – read this report. In a few of our businesses we might be disadvantaged if others knew our numbers. In some of our operations that are not of a size material to an evaluation of Berkshire, therefore, we only disclose what is required. You can nevertheless find a good bit of detail about many of our operations on pages 88-91.

Finance and Financial Products

Our three leasing and rental operations are conducted by CORT (furniture), XTRA (semi-trailers), and Marmon (primarily tank cars but also freight cars, intermodal tank containers and cranes). These companies are industry leaders and have substantially increased their earnings as the American economy has gained strength. At each of the three, we have invested more money in new equipment than have many of our competitors, and that's paid off. Dealing from strength is one of Berkshire's enduring advantages.

Kevin Clayton has again delivered an industry-leading performance at Clayton Homes, the second-largest home builder in America. Last year, the company sold 34,397 homes, about 45% of the manufactured homes bought by Americans. In contrast, the company was number three in the field, with a 14% share, when Berkshire purchased it in 2003.

Manufactured homes allow the American dream of home ownership to be achieved by lower-income citizens: Around 70% of new homes costing $150,000 or less come from our industry. About 46% of Clayton's homes are sold through the 331 stores we ourselves own and operate. Most of Clayton's remaining sales are made to 1,395 independent retailers.

Key to Clayton's operation is its $12.8 billion mortgage portfolio. We originate about 35% of *all* mortgages on manufactured homes. About 37% of our mortgage portfolio emanates from our retail operation, with the balance primarily originated by independent retailers, some of which sell our homes while others market only the homes of our competitors.

Lenders other than Clayton have come and gone. With Berkshire's backing, however, Clayton steadfastly financed home buyers throughout the panic days of 2008-2009. Indeed, during that period, Clayton used precious capital to finance dealers who did *not* sell our homes. The funds we supplied to Goldman Sachs and General Electric at that time produced headlines; the funds Berkshire quietly delivered to Clayton both made home ownership possible for thousands of families and kept many non-Clayton dealers alive.

Our retail outlets, employing simple language and large type, consistently inform home buyers of alternative sources for financing – most of it coming from local banks – and always secure acknowledgments from customers that this information has been received and read. (The form we use is reproduced in its actual size on page 119.)

Mortgage-origination practices are of great importance to both the borrower and to society. There is no question that reckless practices in home lending played a major role in bringing on the financial panic of 2008, which in turn led to the Great Recession. In the years preceding the meltdown, a destructive and often corrupt pattern of mortgage creation flourished whereby (1) an originator in, say, California would make loans and (2) promptly sell them to an investment or commercial bank in, say, New York, which would package many mortgages to serve as collateral for a dizzyingly complicated array of mortgage-backed securities to be (3) sold to unwitting institutions around the world.

As if these sins weren't sufficient to create an unholy mess, imaginative investment bankers sometimes concocted a second layer of sliced-up financing whose value depended on the junkier portions of primary offerings. (When Wall Street gets "innovative," watch out!) While that was going on, I described this "doubling-up" practice as requiring an investor to read tens of thousands of pages of mind-numbing prose to evaluate a single security being offered.

Both the originator and the packager of these financings had no skin in the game and were driven by volume and mark-ups. Many housing borrowers joined the party as well, blatantly lying on their loan applications while mortgage originators looked the other way. Naturally, the gamiest credits generated the most profits. Smooth Wall Street salesmen garnered millions annually by manufacturing products that their customers were unable to understand. (It's also questionable as to whether the major rating agencies were capable of evaluating the more complex structures. But rate them they did.)

Barney Frank, perhaps the most financially-savvy member of Congress during the panic, recently assessed the 2010 Dodd-Frank Act, saying, "The one major weakness that I've seen in the implementation was this decision by the regulators not to impose risk retention on all residential mortgages." Today, some legislators and commentators continue to advocate a 1%-to-5% retention by the originator as a way to align its interests with that of the ultimate lender or mortgage guarantor.

At Clayton, our risk retention was, and is, 100%. When we originate a mortgage we keep it (leaving aside the few that qualify for a government guarantee). When we make mistakes in granting credit, we therefore pay a price – a hefty price that dwarfs any profit we realized upon the original sale of the home. Last year we had to foreclose on 8,444 manufactured-housing mortgages at a cost to us of $157 million.

The average loan we made in 2015 was only $59,942, small potatoes for traditional mortgage lenders, but a daunting commitment for our many lower-income borrowers. Our buyer acquires a decent home – take a look at the home we will have on display at our annual meeting – requiring monthly principal-and-interest payments that average $522.

Some borrowers, of course, will lose their jobs, and there will be divorces and deaths. Others will get over-extended on credit cards and mishandle their finances. We will lose money then, and our borrower will lose his down payment (though his mortgage payments during his time of occupancy may have been well under rental rates for comparable quarters). Nevertheless, despite the low FICO scores and income of our borrowers, their payment behavior during the Great Recession was *far* better than that prevailing in many mortgage pools populated by people earning multiples of our typical borrower's income.

The strong desire of our borrowers to have a home of their own is one reason we've done well with our mortgage portfolio. Equally important, we have financed much of the portfolio with floating-rate debt or with short-term fixed-rate debt. Consequently, the incredibly low short-term rates of recent years have provided us a constantly-widening spread between our interest costs and the income we derive from our mortgage portfolio, which bears fixed rates. (Incidentally, we would have enjoyed similar margins had we simply bought long-term bonds and financed the position in some short-term manner.)

Normally, it is risky business to lend long at fixed rates and borrow short as we have been doing at Clayton. Over the years, some important financial institutions have gone broke doing that. At Berkshire, however, we possess a natural offset in that our businesses always maintain at least $20 billion in cash-equivalents that *earn* short-term rates. More often, our short-term investments are in the $40 billion to $60 billion range. If we have, say, $60 billion invested at ¼% or less, a sharp move to higher short-term rates would bring benefits to us far exceeding the higher financing costs we would incur in funding Clayton's $13 billion mortgage portfolio. In banking terms, Berkshire is – and always will be – heavily asset-sensitive and will consequently benefit from rising interest rates.

Let me talk about one subject of which I am particularly proud, that having to do with regulation. The Great Recession caused mortgage originators, servicers and packagers to come under intense scrutiny and to be assessed many billions of dollars in fines and penalties.

The scrutiny has certainly extended to Clayton, whose mortgage practices have been continuously reviewed and examined in respect to such items as originations, servicing, collections, advertising, compliance, and internal controls. At the federal level, we answer to the Federal Trade Commission, the Department of Housing and Urban Development and the Consumer Financial Protection Bureau. Dozens of states regulate us as well. During the past two years, indeed, various federal and state authorities (from 25 states) examined and reviewed Clayton and its mortgages on 65 occasions. The result? Our total fines during this period were $38,200 and our refunds to customers $704,678. Furthermore, though we had to foreclose on 2.64% of our manufactured-home mortgages last year, 95.4% of our borrowers were current on their payments at yearend, as they moved toward owning a debt-free home.

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Marmon's rail fleet expanded to 133,220 units by yearend, a number significantly increased by the company's purchase of 25,085 cars from General Electric on September 30. If our fleet was connected to form a single train, the engine would be in Omaha and the caboose in Portland, Maine.

At yearend, 97% of our railcars were leased, with about 15-17% of the fleet coming up for renewal each year. Though "tank cars" sound like vessels carrying crude oil, only about 7% of our fleet carries that product; chemicals and refined petroleum products are the lead items we transport. When trains roll by, look for the UTLX or Procor markings that identify our tank cars. When you spot the brand, puff out your chest; you own a portion of that car.

Here's the earnings recap for this sector:

	2015	*2014*	*2013*
		(in millions)	
Berkadia (our 50% share)	$ 74	$ 122	$ 80
Clayton	706	558	416
CORT	55	49	42
Marmon – Containers and Cranes	192	238	226
Marmon – Railcars	546	442	353
XTRA	172	147	125
Net financial income*	341	283	322
	$ 2,086	$ 1,839	$ 1,564

* Excludes capital gains or losses

Investments

Below we list our fifteen common stock investments that at yearend had the largest market value. We exclude our Kraft Heinz holding because we are part of a control group and account for it on the "equity" method.

*Shares***	*Company*	*Percentage of Company Owned*	*12/31/15* *Cost**	*Market*
			(in millions)	
151,610,700	American Express Company	15.6	$ 1,287	$ 10,545
46,577,138	AT&T	0.8	1,283	1,603
7,463,157	Charter Communications, Inc.	6.6	1,202	1,367
400,000,000	The Coca-Cola Company	9.3	1,299	17,184
18,513,482	DaVita HealthCare Partners Inc.	8.8	843	1,291
22,164,450	Deere & Company	7.0	1,773	1,690
11,390,582	The Goldman Sachs Group, Inc.	2.7	654	2,053
81,033,450	International Business Machines Corp.	8.4	13,791	11,152
24,669,778	Moody's Corporation	12.6	248	2,475
55,384,926	Phillips 66	10.5	4,357	4,530
52,477,678	The Procter & Gamble Company	1.9	336	4,683 ***
22,169,930	Sanofi	1.7	1,701	1,896
101,859,335	U.S. Bancorp	5.8	3,239	4,346
63,507,544	Wal-Mart Stores, Inc.	2.0	3,593	3,893
500,000,000	Wells Fargo & Company	9.8	12,730	27,180
	Others		10,276	16,450
	Total Common Stocks Carried at Market		$ 58,612	$ 112,338

* This is our actual purchase price and also our tax basis; GAAP "cost" differs in a few cases because of write-ups or write-downs that have been required under GAAP rules.

** Excludes shares held by pension funds of Berkshire subsidiaries.

*** Held under contract of sale for this amount.

Berkshire has one major equity position that is not included in the table: We can buy 700 million shares of Bank of America at any time prior to September 2021 for $5 billion. At yearend these shares were worth $11.8 billion. We are likely to purchase them just before expiration of our option and, if we wish, we can use our $5 billion of Bank of America 6% preferred to fund the purchase. In the meantime, it is important for you to realize that Bank of America is, in effect, our fourth largest equity investment – and one we value highly.

Productivity and Prosperity

Earlier, I told you how our partners at Kraft Heinz root out inefficiencies, thereby increasing output per hour of employment. That kind of improvement has been the secret sauce of America's remarkable gains in living standards since the nation's founding in 1776. Unfortunately, the label of "secret" is appropriate: Too few Americans fully grasp the linkage between productivity and prosperity. To see that connection, let's look first at the country's most dramatic example – farming – and later examine three Berkshire-specific areas.

In 1900, America's civilian work force numbered 28 million. Of these, 11 million, a staggering 40% of the total, worked in farming. The leading crop then, as now, was corn. About 90 million acres were devoted to its production and the yield per acre was 30 bushels, for a total output of 2.7 billion bushels annually.

Then came the tractor and one innovation after another that revolutionized such keys to farm productivity as planting, harvesting, irrigation, fertilization and seed quality. Today, we devote about 85 million acres to corn. Productivity, however, has improved yields to more than 150 bushels per acre, for an annual output of 13-14 billion bushels. Farmers have made similar gains with other products.

Increased yields, though, are only half the story: The huge increases in physical output have been accompanied by a dramatic reduction in the number of farm laborers ("human input"). Today about three million people work on farms, a tiny 2% of our 158-million-person work force. Thus, improved farming methods have allowed tens of millions of present-day workers to utilize their time and talents in other endeavors, a reallocation of human resources that enables Americans of today to enjoy huge quantities of *non-farm* goods and services they would otherwise lack.

It's easy to look back over the 115-year span and realize how extraordinarily beneficial agricultural innovations have been – not just for farmers but, more broadly, for our entire society. We would not have anything close to the America we now know had we stifled those improvements in productivity. (It was fortunate that horses couldn't vote.) On a day-to-day basis, however, talk of the "greater good" must have rung hollow to farm hands who lost their jobs to machines that performed routine tasks far more efficiently than humans ever could. We will examine this flip-side to productivity gains later in this section.

For the moment, however, let's move on to three stories of efficiencies that have had major consequences for Berkshire subsidiaries. Similar transformations have been commonplace throughout American business.

- In 1947, shortly after the end of World War II, the American workforce totaled 44 million. About 1.35 million workers were employed in the railroad industry. The revenue ton-miles of freight moved by Class I railroads that year totaled 655 billion.

  By 2014, Class I railroads carried 1.85 trillion ton-miles, an increase of 182%, while employing only 187,000 workers, a reduction of 86% since 1947. (Some of this change involved passenger-related employees, but most of the workforce reduction came on the freight side.) As a result of this staggering improvement in productivity, the inflation-adjusted price for moving a ton-mile of freight has fallen by 55% since 1947, a drop saving shippers about $90 billion *annually* in current dollars.

  Another startling statistic: If it took as many people now to move freight as it did in 1947, we would need well over three million railroad workers to handle present volumes. (Of course, that level of employment would raise freight charges by a lot; consequently, nothing close to today's volume would actually move.)

Our own BNSF was formed in 1995 by a merger between Burlington Northern and Santa Fe. In 1996, the merged company's first full year of operation, 411 million ton-miles of freight were transported by 45,000 employees. Last year the comparable figures were 702 million ton-miles (plus 71%) and 47,000 employees (plus only 4%). That dramatic gain in productivity benefits both owners and shippers. Safety at BNSF has improved as well: Reportable injuries were 2.04 per 200,000 man-hours in 1996 and have since fallen more than 50% to 0.95.

- A bit more than a century ago, the auto was invented, and around it formed an industry that insures cars and their drivers. Initially, this business was written through traditional insurance agencies – the kind dealing in fire insurance. This agency-centric approach included high commissions and other underwriting expenses that consumed about 40¢ of the premium dollar. Strong local agencies were then in the driver's seat because they represented multiple insurers and could play one company off against another when commissions were being negotiated. Cartel-like pricing prevailed, and all involved were doing fine – except for the consumer.

  And then some American ingenuity came into play: G. J. Mecherle, a farmer from Merna, Illinois, came up with the idea of a captive sales force that would sell the insurance products of only a single company. His baby was christened State Farm Mutual. The company cut commissions and expenses – moves that permitted lower prices – and soon became a powerhouse. For many decades, State Farm has been the runaway volume leader in both auto and homeowner's insurance. Allstate, which also operated with a direct distribution model, was long the runner-up. Both State Farm and Allstate have had underwriting expenses of about 25%.

  In the early 1930s, another contender, United Services Auto Association ("USAA"), a mutual-like company, was writing auto insurance for military officers on a direct-to-the-customer basis. This marketing innovation rose from a need that military personnel had to buy insurance that would stay with them as they moved from base to base. That was business of little interest to local insurance agencies, which wanted the steady renewals that came from permanent residents.

  The direct distribution method of USAA, as it happened, incurred lower costs than those enjoyed by State Farm and Allstate and therefore delivered an even greater bargain to customers. That made Leo and Lillian Goodwin, employees of USAA, dream of broadening the target market for its direct distribution model beyond military officers. In 1936, starting with $100,000 of capital, they incorporated Government Employees Insurance Co. (later compressing this mouthful to GEICO).

  Their fledgling did $238,000 of auto insurance business in 1937, its first full year. Last year GEICO did $22.6 *billion*, more than double the volume of USAA. (Though the early bird gets the worm, the second mouse gets the cheese.) GEICO's underwriting expenses in 2015 were 14.7% of premiums, with USAA being the only large company to achieve a lower percentage. (GEICO is fully as efficient as USAA but spends considerably more on advertising aimed at promoting growth.)

  With the price advantage GEICO's low costs allow, it's not surprising that several years ago the company seized the number two spot in auto insurance from Allstate. GEICO is also gaining ground on State Farm, though it is still far ahead of us in volume. On August 30, 2030 – my 100th birthday – I plan to announce that GEICO has taken over the top spot. Mark your calendar.

  GEICO employs about 34,000 people to serve its 14 million policyholders. I can only guess at the workforce it would require to serve a similar number of policyholders under the agency system. I believe, however, that the number would be at least 60,000, a combination of what the insurer would need in direct employment and the personnel required at supporting agencies.

- In its electric utility business, our Berkshire Hathaway Energy ("BHE") operates within a changing economic model. Historically, the survival of a local electric company did not depend on its efficiency. In fact, a "sloppy" operation could do just fine financially.

  That's because utilities were usually the sole supplier of a needed product and were allowed to price at a level that gave them a prescribed return upon the capital they employed. The joke in the industry was that a utility was the only business that would automatically earn more money by redecorating the boss's office. And some CEOs ran things accordingly.

  That's all changing. Today, society has decided that federally-subsidized wind and solar generation is in our country's long-term interest. Federal tax credits are used to implement this policy, support that makes renewables price-competitive in certain geographies. Those tax credits, or other government-mandated help for renewables, may eventually erode the economics of the incumbent utility, particularly if it is a high-cost operator. BHE's long-established emphasis on efficiency – even when the company didn't need it to attain authorized earnings – leaves us particularly competitive in today's market (and, more important, in tomorrow's as well).

  BHE acquired its Iowa utility in 1999. In the year before, that utility employed 3,700 people and produced 19 million megawatt-hours of electricity. Now we employ 3,500 people and produce 29 million megawatt-hours. That major increase in efficiency allowed us to operate without a rate increase for 16 years, a period during which industry rates increased 44%.

  The safety record of our Iowa utility is also outstanding. It had .79 injuries per 100 employees in 2015 compared to the rate of 7.0 experienced by the previous owner in the year before we bought the operation.

  In 2006 BHE purchased PacifiCorp, which operated primarily in Oregon and Utah. The year before our purchase PacifiCorp employed 6,750 people and produced 52.6 million megawatt-hours. Last year the numbers were 5,700 employees and 56.3 million megawatt-hours. Here, too, safety improved dramatically, with the accident-rate-per-100-employees falling from 3.4 in 2005 to .85 in 2015. In safety, BHE now ranks in the industry's top decile.

  Those outstanding performances explain why BHE is welcomed by regulators when it proposes to buy a utility in their jurisdiction. The regulators know the company will run an efficient, safe and reliable operation and also arrive with unlimited capital to fund whatever projects make sense. (BHE has never paid a dividend to Berkshire since we assumed ownership. No investor-owned utility in America comes close to matching BHE's enthusiasm for reinvestment.)

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The productivity gains that I've just spelled out – and countless others that have been achieved in America – have delivered awesome benefits to society. That's the reason our citizens, as a whole, have enjoyed – and will continue to enjoy – major gains in the goods and services they receive.

To this thought there are offsets. First, the productivity gains achieved in recent years have largely benefitted the wealthy. Second, productivity gains frequently cause upheaval: Both capital and labor can pay a terrible price when innovation or new efficiencies upend their worlds.

We need shed no tears for the capitalists (whether they be private owners or an army of public shareholders). It's their job to take care of themselves. When large rewards can flow to investors from good decisions, these parties should not be spared the losses produced by *wrong* choices. Moreover, investors who diversify widely and simply sit tight with their holdings are certain to prosper: In America, gains from winning investments have always *far* more than offset the losses from clunkers. (During the 20th Century, the Dow Jones Industrial Average – an index fund of sorts – soared from 66 to 11,497, with its component companies all the while paying ever-increasing dividends.)

A long-employed worker faces a different equation. When innovation and the market system interact to produce efficiencies, many workers may be rendered unnecessary, their talents obsolete. Some can find decent employment elsewhere; for others, that is not an option.

When low-cost competition drove shoe production to Asia, our once-prosperous Dexter operation folded, putting 1,600 employees in a small Maine town out of work. Many were past the point in life at which they could learn another trade. We lost our entire investment, which we could afford, but many workers lost a livelihood they could not replace. The same scenario unfolded in slow-motion at our original New England textile operation, which struggled for 20 years before expiring. Many older workers at our New Bedford plant, as a poignant example, spoke Portuguese and knew little, if any, English. They had no Plan B.

The answer in such disruptions is not the restraining or outlawing of actions that increase productivity. Americans would not be living nearly as well as we do if we had mandated that 11 million people should forever be employed in farming.

The solution, rather, is a variety of safety nets aimed at providing a decent life for those who are willing to work but find their specific talents judged of small value because of market forces. (I personally favor a reformed and expanded Earned Income Tax Credit that would try to make sure America works for those willing to work.) The price of achieving ever-increasing prosperity for the great majority of Americans should not be penury for the unfortunate.

Important Risks

We, like all public companies, are required by the SEC to annually catalog "risk factors" in our 10-K. I can't remember, however, an instance when reading a 10-K's "risk" section has helped me in evaluating a business. That's not because the identified risks aren't real. The truly important risks, however, are usually well known. Beyond that, a 10-K's catalog of risks is seldom of aid in assessing: (1) the probability of the threatening event actually occurring; (2) the range of costs if it does occur; and (3) the timing of the possible loss. A threat that will only surface 50 years from now may be a problem for society, but it is not a *financial* problem for today's investor.

Berkshire operates in more industries than any company I know of. Each of our pursuits has its own array of possible problems and opportunities. Those are easy to list but hard to evaluate: Charlie, I and our various CEOs often differ in a very major way in our calculation of the likelihood, the timing and the cost (or benefit) that may result from these possibilities.

Let me mention just a few examples. To begin with an obvious threat, BNSF, along with other railroads, is *certain* to lose significant coal volume over the next decade. At some point in the future – though not, in my view, for a long time – GEICO's premium volume *may* shrink because of driverless cars. This development could hurt our auto dealerships as well. Circulation of our print newspapers will continue to fall, a certainty we allowed for when purchasing them. To date, renewables have helped our utility operation but that could change, particularly if storage capabilities for electricity materially improve. Online retailing threatens the business model of our retailers and certain of our consumer brands. These potentialities are just a few of the negative possibilities facing us – but even the most casual follower of business news has long been aware of them.

None of these problems, however, is crucial to Berkshire's long-term well-being. When we took over the company in 1965, its risks could have been encapsulated in a single sentence: "The northern textile business in which all of our capital resides is destined for recurring losses and will eventually disappear." That development, however, was no death knell. We simply adapted. And we will continue to do so.

Every day Berkshire managers are thinking about how they can better compete in an always-changing world. Just as vigorously, Charlie and I focus on where a steady stream of funds should be deployed. In that respect, we possess a major advantage over one-industry companies, whose options are far more limited. I firmly believe that Berkshire has the money, talent and culture to plow through the sort of adversities I've itemized above – and many more – and to emerge with ever-greater earning power.

There is, however, one clear, present and enduring danger to Berkshire against which Charlie and I are powerless. That threat to Berkshire is also the major threat our citizenry faces: a "successful" (as defined by the aggressor) cyber, biological, nuclear or chemical attack on the United States. That is a risk Berkshire shares with *all* of American business.

The probability of such mass destruction in any given year is likely very small. It's been more than 70 years since I delivered a Washington Post newspaper headlining the fact that the United States had dropped the first atomic bomb. Subsequently, we've had a few close calls but avoided catastrophic destruction. We can thank our government – and luck! – for this result.

Nevertheless, what's a small probability in a short period approaches certainty in the longer run. (If there is only one chance in thirty of an event occurring in a given year, the likelihood of it occurring at least once in a century is 96.6%.) The added bad news is that there will forever be people and organizations and perhaps even nations that would like to inflict maximum damage on our country. Their means of doing so have increased exponentially during my lifetime. "Innovation" has its dark side.

There is no way for American corporations or their investors to shed this risk. If an event occurs in the U.S. that leads to mass devastation, the value of all equity investments will almost certainly be decimated.

No one knows what "the day after" will look like. I think, however, that Einstein's 1949 appraisal remains apt: "I know not with what weapons World War III will be fought, but World War IV will be fought with sticks and stones."

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I am writing this section because we have a proxy proposal regarding climate change to consider at this year's annual meeting. The sponsor would like us to provide a report on the dangers that this change might present to our insurance operation and explain how we are responding to these threats.

It seems highly likely to me that climate change poses a major problem for the planet. I say "highly likely" rather than "certain" because I have no scientific aptitude and remember well the dire predictions of most "experts" about Y2K. It would be foolish, however, for me or anyone to demand 100% proof of huge forthcoming damage to the world if that outcome seemed at all possible and if prompt action had even a small chance of thwarting the danger.

This issue bears a similarity to Pascal's Wager on the Existence of God. Pascal, it may be recalled, argued that if there were only a tiny probability that God truly existed, it made sense to behave as if He did because the rewards could be infinite whereas the lack of belief risked eternal misery. Likewise, if there is only a 1% chance the planet is heading toward a truly major disaster and delay means passing a point of no return, inaction now is foolhardy. Call this Noah's Law: If an ark may be essential for *survival*, begin building it today, no matter how cloudless the skies appear.

It's understandable that the sponsor of the proxy proposal believes Berkshire is especially threatened by climate change because we are a huge insurer, covering all sorts of risks. The sponsor may worry that property losses will skyrocket because of weather changes. And such worries might, in fact, be warranted if we wrote ten- or twenty-year policies at fixed prices. But insurance policies are customarily written for one year and repriced annually to reflect changing exposures. Increased possibilities of loss translate promptly into increased premiums.

Think back to 1951 when I first became enthused about GEICO. The company's average loss-per-policy was then about $30 annually. Imagine your reaction if I had predicted then that in 2015 the loss costs would increase to about $1,000 per policy. Wouldn't such skyrocketing losses prove disastrous, you might ask? Well, no.

Over the years, inflation has caused a huge increase in the cost of repairing both the cars and the humans involved in accidents. But these increased costs have been promptly matched by increased premiums. So, paradoxically, the upward march in loss costs has made insurance companies far more *valuable*. If costs had remained unchanged, Berkshire would now own an auto insurer doing $600 million of business annually rather than one doing $23 billion.

Up to now, climate change has *not* produced more frequent nor more costly hurricanes nor other weather-related events covered by insurance. As a consequence, U.S. super-cat rates have *fallen* steadily in recent years, which is why we have backed away from that business. If super-cats become costlier and more frequent, the likely – though far from certain – effect on Berkshire's insurance business would be to make it larger and more profitable.

As a citizen, you may understandably find climate change keeping you up nights. As a homeowner in a low-lying area, you may wish to consider moving. But when you are thinking only as a shareholder of a major insurer, climate change should not be on your list of worries.

The Annual Meeting

Charlie and I have finally decided to enter the 21st Century. Our annual meeting this year will be webcast worldwide in its entirety. To view the meeting, simply go to https://finance.yahoo.com/brklivestream at 9 a.m. Central Daylight Time on Saturday, April 30th. The Yahoo! webcast will begin with a half hour of interviews with managers, directors and shareholders. Then, at 9:30, Charlie and I will commence answering questions.

This new arrangement will serve two purposes. First, it may level off or modestly decrease attendance at the meeting. Last year's record of more than 40,000 attendees strained our capacity. In addition to quickly filling the CenturyLink Center's main arena, we packed its overflow rooms and then spilled into two large meeting rooms at the adjoining Omaha Hilton. All major hotels were sold out notwithstanding Airbnb's stepped-up presence. Airbnb was especially helpful for those visitors on limited budgets.

Our second reason for initiating a webcast is more important. Charlie is 92, and I am 85. If we were partners with you in a small business, and were charged with running the place, you would want to look in occasionally to make sure we hadn't drifted off into la-la land. Shareholders, in contrast, should not need to come to Omaha to monitor how we look and sound. (In making your evaluation, be kind: Allow for the fact that we didn't look that impressive when we were at our best.)

Viewers can also observe our life-prolonging diet. During the meeting, Charlie and I will each consume enough Coke, See's fudge and See's peanut brittle to satisfy the weekly caloric needs of an NFL lineman. Long ago we discovered a fundamental truth: There's nothing like eating carrots and broccoli when you're *really* hungry – and want to stay that way.

Shareholders planning to attend the meeting should come at 7 a.m. when the doors open at CenturyLink Center and *start shopping*. Carrie Sova will again be in charge of the festivities. She had her second child late last month, but that did not slow her down. Carrie is unflappable, ingenious and expert at bringing out the best in those who work with her. She is aided by hundreds of Berkshire employees from around the country and by our entire home office crew as well, all of them pitching in to make the weekend fun and informative for our owners.

Last year we increased the number of hours available for shopping at the CenturyLink. Sales skyrocketed – so, naturally, we will stay with the new schedule. On Friday, April 29th you can shop between noon and 5 p.m., and on Saturday exhibits and stores will be open from 7 a.m. until 4:30 p.m.

On Saturday morning, we will have our fifth International Newspaper Tossing Challenge. Our target will again be a Clayton Home porch, located precisely 35 feet from the throwing line. When I was a teenager – in my one brief flirtation with honest labor – I delivered about 500,000 papers. So I think I'm pretty good at this game. Challenge me! Humiliate me! Knock me down a peg! The papers will run 36 to 42 pages, and you must fold them yourself (no rubber bands allowed).

The competition begins at 7:15, when contestants will make preliminary tosses. The eight throws judged most accurate – four made by contestants 12 or under, and four made by the older set – will compete against me at 7:45. The young challengers will each receive a prize. But the older ones will have to beat me to take anything home.

And be sure to check out the Clayton home itself. It can be purchased for $78,900, fully installed on land you provide. In past years, we've made many sales on the meeting day. Kevin Clayton will be on hand with his order book.

At 8:30 a.m., a new Berkshire movie will be shown. An hour later, we will start the question-and-answer period, which (including a break for lunch at CenturyLink's stands) will last until 3:30 p.m. After a short recess, Charlie and I will convene the annual meeting at 3:45 p.m. This business session typically lasts only a half hour or so and can safely be skipped by those craving a little last-minute shopping.

Your venue for shopping will be the 194,300-square-foot hall that adjoins the meeting and in which products from dozens of Berkshire subsidiaries will be for sale. Say hello to the many Berkshire managers who will be captaining their exhibits. And be sure to view the terrific BNSF railroad layout that salutes all of our subsidiaries. Your children (and you!) will be enchanted with it.

We will have a new and very special exhibit in the hall this year: a full-size model of the world's largest aircraft engine, for which Precision Castparts makes many key components. The real engines weigh about 20,000 pounds and are ten feet in diameter and 22 feet in length. The bisected model at the meeting will give you a good look at many PCC components that help power your flights.

Brooks, our running-shoe company, will again have a special commemorative shoe to offer at the meeting. After you purchase a pair, wear them on Sunday at our fourth annual "Berkshire 5K," an 8 a.m. race starting at the CenturyLink. Full details for participating will be included in the Visitor's Guide that will be sent to you with your meeting credentials. Entrants in the race will find themselves running alongside many of Berkshire's managers, directors and associates. (Charlie and I, however, will sleep in; the fudge and peanut brittle take their toll.) Participation in the 5K grows every year. Help us set another record.

A GEICO booth in the shopping area will be staffed by a number of the company's top counselors from around the country. Stop by for a quote. In most cases, GEICO will be able to give you a shareholder discount (usually 8%). This special offer is permitted by 44 of the 51 jurisdictions in which we operate. (One supplemental point: The discount is not additive if you qualify for another discount, such as that available to certain groups.) Bring the details of your existing insurance and check out our price. We can save many of you real money. Spend the savings on our other products.

Be sure to visit the Bookworm. It will carry about 35 books and DVDs, among them a couple of new titles. Andy Kilpatrick will introduce (and be glad to sign) the latest edition of his all-encompassing coverage of Berkshire. It's 1,304 pages and weighs 9.8 pounds. (My blurb for the book: "Ridiculously skimpy.") Check out Peter Bevelin's new book as well. Peter has long been a keen observer of Berkshire.

We will also have a new, 20-page-longer edition of Berkshire's 50-year commemorative book that at last year's meeting sold 12,000 copies. Since then, Carrie and I have uncovered additional material that we find fascinating, such as some very personal letters sent by Grover Cleveland to Edward Butler, his friend and the then-publisher of *The Buffalo News*. Nothing from the original edition has been changed or eliminated, and the price remains $20. Charlie and I will jointly sign 100 copies that will be randomly placed among the 5,000 available for sale at the meeting.

My friend, Phil Beuth, has written *Limping on Water*, an autobiography that chronicles his life at Capital Cities Communications and tells you a lot about its leaders, Tom Murphy and Dan Burke. These two were the best managerial duo – both in *what* they accomplished and *how* they did it – that Charlie and I ever witnessed. Much of what you become in life depends on whom you choose to admire and copy. Start with Tom Murphy, and you'll never need a second exemplar.

Finally, Jeremy Miller has written *Warren Buffett's Ground Rules*, a book that will debut at the annual meeting. Mr. Miller has done a superb job of researching and dissecting the operation of Buffett Partnership Ltd. and of explaining how Berkshire's culture has evolved from its BPL origin. If you are fascinated by investment theory and practice, you will enjoy this book.

An attachment to the proxy material that is enclosed with this report explains how you can obtain the credential you will need for admission to both the meeting and other events. Airlines have sometimes jacked up prices for the Berkshire weekend. If you are coming from far away, compare the cost of flying to Kansas City vs. Omaha. The drive between the two cities is about 2½ hours, and it may be that Kansas City can save you significant money, particularly if you had planned to rent a car in Omaha. The savings for a couple could run to $1,000 or more. Spend that money with us.

At Nebraska Furniture Mart, located on a 77-acre site on 72nd Street between Dodge and Pacific, we will again be having "Berkshire Weekend" discount pricing. Last year in the week encompassing the meeting, the store did a record $44,239,493 of business. If you repeat that figure to a retailer, he is not going to believe you. (An average week for NFM's Omaha store – the highest-volume home furnishings store in the United States except for our new Dallas store – is about $9 million.)

To obtain the Berkshire discount at NFM, you must make your purchases between Tuesday, April 26th and Monday, May 2nd inclusive, and also present your meeting credential. The period's special pricing will even apply to the products of several prestigious manufacturers that normally have ironclad rules against discounting but which, in the spirit of our shareholder weekend, have made an exception for you. We appreciate their cooperation. During "Berkshire Weekend" NFM will be open from 10 a.m. to 9 p.m. Monday through Friday, 10 a.m. to 9:30 p.m. on Saturday and 10 a.m. to 8 p.m. on Sunday. From 5:30 p.m. to 8 p.m. on Saturday, NFM is hosting a picnic to which you are all invited.

At Borsheims, we will again have two shareholder-only events. The first will be a cocktail reception from 6 p.m. to 9 p.m. on Friday, April 29th. The second, the main gala, will be held on Sunday, May 1st, from 9 a.m. to 4 p.m. On Saturday, we will remain open until 6 p.m. During last year's Friday-Sunday stretch, the store wrote a sales ticket every 15 seconds that it was open.

We will have huge crowds at Borsheims throughout the weekend. For your convenience, therefore, shareholder prices will be available from Monday, April 25th through Saturday, May 7th. During that period, please identify yourself as a shareholder either by presenting your meeting credential or a brokerage statement showing you own our stock.

On Sunday, in the mall outside of Borsheims, Norman Beck, a remarkable magician from Dallas, will bewilder onlookers. On the upper level, we will have Bob Hamman and Sharon Osberg, two of the world's top bridge experts, available to play bridge with our shareholders on Sunday afternoon. I will join them and hope to have Ajit and Charlie there also.

My friend, Ariel Hsing, will be in the mall as well on Sunday, taking on challengers at table tennis. I met Ariel when she was nine and even then I was unable to score a point against her. Now, she's a junior at Princeton, having already represented the United States in the 2012 Olympics. If you don't mind embarrassing yourself, test your skills against her, beginning at 1 p.m. Bill Gates and I will lead off and try to soften her up.

Gorat's will again be open exclusively for Berkshire shareholders on Sunday, May 1st, serving from 1 p.m. until 10 p.m. To make a reservation at Gorat's, call 402-551-3733 on April 1st (*but not before*). As for my other favorite restaurant, Piccolo's, I'm sad to report it closed.

We will again have the same three financial journalists lead the question-and-answer period at the meeting, asking Charlie and me questions that shareholders have submitted to them by e-mail. The journalists and their e-mail addresses are: Carol Loomis, the preeminent business journalist of her time, who may be e-mailed at loomisbrk@gmail.com; Becky Quick, of CNBC, at BerkshireQuestions@cnbc.com; and Andrew Ross Sorkin, of The New York Times, at arsorkin@nytimes.com.

From the questions submitted, each journalist will choose the six he or she decides are the most interesting and important. The journalists have told me your question has the best chance of being selected if you keep it concise, avoid sending it in at the last moment, make it Berkshire-related and include no more than two questions in any e-mail you send them. (In your e-mail, let the journalist know if you would like your name mentioned if your question is asked.)

An accompanying set of questions will be asked by three analysts who follow Berkshire. This year the insurance specialist will be Cliff Gallant of Nomura Securities. Questions that deal with our non-insurance operations will come from Jonathan Brandt of Ruane, Cunniff & Goldfarb and Gregg Warren of Morningstar. Our hope is that the analysts and journalists will ask questions that add to our owners' understanding and knowledge of their investment.

Neither Charlie nor I will get so much as a clue about the questions headed our way. Some will be tough, for sure, and that's the way we like it. Multi-part questions aren't allowed; we want to give as many questioners as possible a shot at us.

All told we expect at least 54 questions, which will allow for six from each analyst and journalist and for 18 from the audience. (Last year we had 64 in total.) The questioners from the audience will be chosen by means of 11 drawings that will take place at 8:15 a.m. on the morning of the annual meeting. Each of the 11 microphones installed in the arena and main overflow room will host, so to speak, a drawing.

While I'm on the subject of our owners' gaining knowledge, let me remind you that Charlie and I believe all shareholders should simultaneously have access to new information that Berkshire releases and, if possible, should also have adequate time to digest and analyze it before any trading takes place. That's why we try to issue financial data late on Fridays or early on Saturdays and why our annual meeting is always held on a Saturday. We do not follow the common practice of talking one-on-one with large institutional investors or analysts, treating them instead as we do all other shareholders. There is no one more important to us than the shareholder of limited means who trusts us with a substantial portion of his savings.

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For good reason, I regularly extol the accomplishments of our operating managers. They are truly All-Stars who run their businesses as if they were the only asset owned by their families. I also believe the mindset of our managers to be as shareholder-oriented as can be found in the universe of large publicly-owned companies. Most of our managers have no financial need to work. The joy of hitting business "home runs" means as much to them as their paycheck.

Equally important, however, are the 24 men and women who work with me at our corporate office. This group efficiently deals with a multitude of SEC and other regulatory requirements, files a 30,400-page Federal income tax return – that's up 6,000 pages from the prior year! – oversees the filing of 3,530 state tax returns, responds to countless shareholder and media inquiries, gets out the annual report, prepares for the country's largest annual meeting, coordinates the Board's activities, fact-checks this letter – and the list goes on and on.

They handle all of these business tasks cheerfully and with unbelievable efficiency, making my life easy and pleasant. Their efforts go beyond activities strictly related to Berkshire: Last year, for example, they dealt with the 40 universities (selected from 200 applicants) who sent students to Omaha for a Q&A day with me. They also handle all kinds of requests that I receive, arrange my travel, and even get me hamburgers and french fries (smothered in Heinz ketchup, of course) for lunch. No CEO has it better; I truly do feel like tap dancing to work every day. In fact, my job becomes more fun every year.

In 2015, Berkshire's revenues increased by $16 billion. Look carefully, however, at the two pictures on the facing page. The top one is from last year's report and shows the entire Berkshire home-office crew at our Christmas lunch. Below that photo is this year's Christmas photo portraying the *same* 25 people identically positioned. In 2015, no one joined us, no one left. And the odds are good that you will see a photo of the same 25 next year.

Can you imagine another very large company – we employ 361,270 people worldwide – enjoying that kind of employment stability at headquarters? At Berkshire we have hired some wonderful people – and they have stayed with us. Moreover, no one is hired unless he or she is truly needed. That's why you've never read about "restructuring" charges at Berkshire.

On April 30th, come to Omaha – the cradle of capitalism – and meet my gang. They are the best.

February 27, 2016

Warren E. Buffett
Chairman of the Board

Front Row – Becki Amick, Sharon Heck, Melissa Hawk, Jalayna Busse, Warren Buffett, Angie Wells, Alisa Krueger, Deb Ray, Carrie Sova, Ellen Schmidt **Back Row –** Tracy Britt Cool, Jennifer Tselentis, Ted Weschler, Joanne Manhart, Bob Reeson, Todd Combs, Dan Jaksich, Debbie Bosanek, Mark Sisley, Marc Hamburg, Kerby Ham, Mark Millard, Allyson Ballard, Stacy Gottschalk, Tiffany Vokt

Morning Session - 2016 Meeting

1. Charlie Munger always "gets the girl"

WARREN BUFFETT: Good morning. I'm Warren Buffett. This is Charlie Munger. (Applause)

I'm the young one. (Laughter)

You may notice in the movie, incidentally, that Charlie is always the one that gets the girl, and he has one explanation for that. But I think mine is more accurate.

As you know, every mother in this country tells her daughter at an early age, if you're choosing between two very old and very rich guys, pick the one that's older. (Laughter)

2. Welcome webcast viewers

WARREN BUFFETT: I'd especially — we're webcasting this for the first time, so I'd especially like to welcome our visitors from all over the world.

We're having this meeting simultaneously translated into Mandarin. And that poses certain problems for me and Charlie, because I'm not sure how sensible all our comments will come out once translated into Mandarin.

In fact, I'm not so sure how sensible they come out initially sometimes. (Laughter)

But we're delighted to have people around the world joining us.

3. Meeting agenda

WARREN BUFFETT: Now the drill of the day is that I'll make a couple of introductions, and we'll show a couple of slides, and then we'll go on to questions from both our two panels and from the audience, we'll rotate them. And we'll do that until about noon.

Actually, about a quarter of twelve, I'll give you a rundown on a bet that was made that we report on every year.

But then I'll also, in connection with that, explain, and it ties in with it, what I really think is probably the most important investment lesson in the world. So we'll have that about a quarter of twelve and I hope that keeps you around.

And then we'll break at noon for an hour for lunch. We'll reconvene at one o'clock.

We'll proceed until 3:30 with questions. We'll then adjourn for fifteen minutes and at 3:45 convene the formal meeting.

4. Introductions

WARREN BUFFETT: I'd like to just make a couple of introductions.

I hope Carrie Sova is here. Do we have a spotlight? Carrie puts this whole meeting together. There she is.

Wonder Woman. (Applause)

Carrie joined us, Carrie joined us as a receptionist about six years ago, and I just kept throwing more and more problems at her.

And she'd put together the 50th anniversary book, which we've actually expanded further this year. We have a revised edition.

Charlie and I autographed a hundred of them. We interspersed them among the group being sold.

And Carrie, while doing that, she also had a young baby girl, her second baby, late in January. But then she's gone ahead to put on this whole annual meeting.

It's a remarkable achievement and I really want to thank her, it's been terrific. (Applause)

Actually, we have one surprise guest. I think my youngest great-grandchild, who will be about seven months old, is also here today and if he happens to break out crying a lot, and don't let it bother you. It's just his mother is explaining to him my views on it inherited wealth and… (Laughter)

We also have our directors with us. And they're here in the front row.

I'll introduce them. If they'll stand when introduced, withhold your applause, no matter how extreme the urge to applaud them individually. And when we're finished, then you can go wild.

First of all, Howard Buffett. Steve Burke. Sue Decker. Bill Gates. Sandy Gottesman. Charlotte Guyman. Tom Murphy. Ron Olson. Walter Scott. And Meryl Witmer. And that's our wonderful group. (Applause)

5. Q1 earnings

WARREN BUFFETT: Now we just have two slides to show you now.

The first one is a preliminary… summary figures — for the first quarter.

And you'll notice that insurance underwriting — these are after-tax figures by category — are down somewhat.

The basic underwriting at GEICO is actually improving, but we had some important hailstorms in Texas toward the end of the quarter. We've actually had some since the end of the quarter, too, so there were more cat losses in the first quarter than last year.

Railroad earnings are down significantly, and railroad car loadings throughout the industry, all of the major railroads, were down significantly in the first quarter, and probably will continue to be down, almost certainly will continue to be down, the balance of the year.

We have two companies which we added to the manufacturing, service, and retailing field: Precision Castparts and Duracell, but they were added during the quarter, so their full earnings aren't shown in the figures.

In the other category, we have, and I don't like to get too technical here, and you should read the 10-K — 10-Q — when it comes out next weekend.

But, when we borrow money in other currencies, and the only currency we've done that with is the euro, but we have a fair amount of money that we borrowed in euros, and the nature of accounting is that the change in value of the foreign exchange — change in value each quarter — is actually shown in interest expense.

So if the euro goes up, we have a lot of extra interest expense, they're shown that way. It's not a realized factor, but it moves from quarter to quarter. And if the euro goes down, it offsets interest expense.

It's a technicality, to some extent, because we have lots of assets in Europe and they are expressed in euros when they go up. It does not go through the income account. It goes directly to other comprehensive income. So I just, that figure which looks a little unusual, that's the reason for it.

And we always urge you to pay no attention to the figures below operating earnings. They will bounce around from quarter to quarter, and we make no attempt to manage earnings in any way, to have them be smoother. We could do that very easily, but it'd be ridiculous.

We make investment decisions solely on the basis of what we think the best investment decision is, not on the basis of how it will affect earnings in any quarter or in any year.

And in the first quarter we exchanged - we completed a transaction that was begun over a year ago — whereby we exchanged our Procter and Gamble stock for cash and for Duracell, and that accounts for the large — largely accounts — for the large capital gain in the quarter.

So, those are the figures for the first quarter.

6. Share count and earnings

WARREN BUFFETT: And then, to illustrate what we're sort of all about here, I put up a second slide.

And I started this slide in 1999. The reason being that at the end of 1998, we affected a large merger with Gen Re, and at that point we sort of entered a different era.

After 1998 merger with Gen Re, we had a little over a 1,500,000-some A-equivalent shares out. And our shares — up to that point, we'd increase the outstanding shares by more than 50 percent over the 30-some years preceding that point.

Since that time, as I note here, we've only increased the number of shares, over the next 17 years, we've only increased the shares outstanding by 8.2 percent.

So these figures represent a fairly unchanged share count since that point, whereas the share count had changed quite a bit before.

And, as you'll note, in terms of operations, I've told you that our goal at Berkshire is to increase the normalized earnings, operating earnings, every year.

And I've said sometimes it will — we hope it will only be — it'll turn out to be only a little bit — and sometimes we can get some fairly decent jumps. But that's the goal.

Now, earnings will not increase every year, because there's such a thing as a business cycle, and in times of recession we're going to earn less money, obviously, than in times when things are much better overall.

And on top of that, we're heavily in an insurance business, and earnings there can be quite volatile because of catastrophes.

And this chart shows you what's happened to the operating earnings since that time. Again, pointing out that shares outstanding have gone up very little during that period.

You'll notice in 2001, when we suffered significant insurance losses due to 9/11, we actually were in the red, in terms of operating earnings.

And you'll notice the figures are very irregular, but over time, by adding new subsidiaries, by further developing the businesses we have by bolt-on acquisitions, by the reinvestment of retained earnings, the earnings have moved up, in a very irregular fashion, quite substantially.

I've put in, also, the capital gains we've achieved through investments in derivatives, and they total some $32 billion after-tax, close to fifty billion pretax.

Those are not important in any given year. Those numbers can go all over the place.

The main advantage, from my standpoint, in that $32 billion, is it gives us money to buy other businesses.

What we really want to focus on, what we hope, is that the bigger under operations, five, or ten, or twenty, years from now, grow substantially, partly because retained earnings from operations, partly because our operations improve in their own profitability, partly because they make bolt-on acquisitions, partly because we have gains from securities, which enable us to buy even more businesses.

But we don't manage, as you know, we don't manage to try to get any given number from quarter to quarter. We never make a forecast on earnings. We don't give out earnings guidance. We think it's silly.

We do not have budgets at the parent company level. Most of our subsidiaries have budgets, but they don't submit them, or they're not required to submit them, to headquarters.

We just focus, day after day, year after year, decade after decade, on trying to add earning power, sustainable and growing earning power, to Berkshire.

So that's a quick summary. Now we'll move on to the questions.

I just ask, with the audience, that you limit your question to one question. The multiple questions have a way of sneaking in, occasionally, but — so let's keep them to a single question.

7. "One of the problems of prosperity"

WARREN BUFFETT: We'll start off with the journalist group on my right, and we'll start off with Carol Loomis.

CAROL LOOMIS: Good morning. I'll make my very short little speech about the fact that the journalists and the analysts, too, have given Charlie and Warren no hint of what they're going to ask, so they will be learning for the first time what that's going to be, also.

This question comes from Eli Moises.

"In your 1987 letter to shareholders, you commented on the kind of companies Berkshire likes to buy, those that required only small amounts of capital. You said, quote, 'Because so little capital is required to run these businesses, they can grow, while concurrently making almost all of their earnings available for deployment in new opportunities.'

“Today the company has changed its strategy. It now invests in companies that need tons of capital expenditures, are overregulated, and earn lower returns on equity capital. Why did this happen?”

WARREN BUFFETT: Yeah. Well, it’s one of the problems of prosperity.

The ideal business is one that takes no capital, but yet grows, and there are a few businesses like that, and we own some.

But we are not able — we’d love to find one that we could buy for $10 or $20 or $30 billion that was not capital intensive and we may, but it’s harder.

And that does — that does hurt us, in terms of compounding earnings growth, because, obviously, if you have a business that grows and gives you a lot of money every year and doesn’t take it — it isn’t required in its growth — you know, you get a double-barreled effect from the earnings growth that occurs internally without the use of capital, and then you get the capital it produces to go and buy other businesses. And See’s Candy was a good example of that. I’ve used that.

Back when the newspaper business was good, our Buffalo newspaper was, for example, was a good example of that. The Buffalo newspaper was making, at one time, $40 million a year and had no capital requirement, so we could take that whole $40 million and go and do — go buy something else with it.

But capital — increasing capital — acts as an anchor on returns in many ways. And one of the ways is that it drives us into — just in terms of availability — it drives us into businesses that are much more capital intensive.

You just saw a slide, for example, on Berkshire Hathaway Energy, where we just announced, just in the last couple of weeks, we announced a $3.6 billion investment coming up in wind generation. And we pledged overall to have $30 billion in renewables.

Anything that Berkshire Hathaway Energy does, anything that BNSF does, takes lots of money. We get decent returns on capital, but we don’t get the extraordinary returns on capital that we’ve been able to get in some of the businesses we acquire that are not capital intensive.

As I mentioned in the annual report, we have a few businesses that actually earn 100 percent a year on true invested capital. And clearly, that’s a different sort of operation than something like Berkshire Hathaway Energy, which may earn 11 or 12 percent on capital — and that’s a very decent return — but it’s a different sort of animal than the business that’s very low capital intensive — intensity.

Charlie?

CHARLIE MUNGER: Well, when our circumstances changed, we changed our minds.

WARREN BUFFETT: Slowly and reluctantly. (Laughs)

CHARLIE MUNGER: In the early days, quite a few times we bought a business that was soon producing 100 percent per annum on what we paid for it and didn't require much reinvestment.

If we'd been able to continue doing that, we would have loved to do it, but when we couldn't, we got to plan B. And plan B is working pretty well. In many ways, I've gotten so I sort of prefer it. How about you, Warren?

WARREN BUFFETT: Yeah, that's true. When something's forced on you, you might as well prefer it. (Laughter)

But, I mean, we knew that was going to happen. And the question is, does it lead you from what looks like a sensational result to a satisfactory result.

And we don't — we're quite happy with a satisfactory result. The alternative would be to go back to working with very tiny sums of money, and that really hasn't gotten a lot of serious discussion between Charlie and me. (Laughs)

8. Precisions Castparts acquisition

WARREN BUFFETT: OK. From the analyst group, Jonathan Brandt.

JONATHAN BRANDT: Hi Warren. Thanks for having me again.

WARREN BUFFETT: Thanks for coming.

JONATHAN BRANDT: My first question is about Precision Castparts.

Besides your confidence in its talented CEO Mark Donegan, what in particular do you like about their business that gave you the confidence to pay historically high multiple?

Are there ways Precision can be even more successful as, essentially, a private company?

For instance, are there long-term investments to support client programs or acquisitions that Precision can make now that they couldn't realistically have done as a publicly traded entity?

WARREN BUFFETT: Yeah, we completed the acquisition of Precision Castparts at the end of January this year. We agreed — we made the deal last August.

And you covered the most important asset in your question. Mark Donegan, who runs Precision Castparts, is an extraordinary manager. I mean we've seen very — and Charlie and I've seen a lot of managers over the years — and I would almost rank Mark as one of a kind.

I mean he is doing extremely important work, in terms of making — primarily making — aircraft parts.

I would say that there's certainly no disadvantages to him to be working as a — and for that company to be a subsidiary of Berkshire and not be a public company.

And I think he would say, and I think Charlie and I would agree with him, that over time, there could be some significant advantages.

For one thing, he can spend 100 percent of his time now on figuring out better things to do with aircraft engines. And it was always his first love to be thinking about that, and he did spend most of his time, but he also had to spend some time, you know, explaining quarterly earnings to analysts and perhaps negotiating bank lines and that sort of thing.

So his time, like all of our managers, can be spent exactly on what makes the most sense to them and their business. Mark does not have to come, ever, to Omaha to put on some show for me, in terms of justifying a billion dollar acquisition or plant investment.

He wastes — doesn't have to waste his time on anything that isn't productive. And running a public company, you do waste your time on quite a bit of stuff that isn't productive.

So I would say we've taken the main asset of Precision Cast and made it — made him in this case — even more valuable to the company.

In terms of acquisitions, Precision's always made a number of them. But, as being part of Berkshire, there's really no limitations on what can be done. And so, there again, his canvas has been broadened, in large, with the acquisition by Berkshire.

I see no downside whatsoever. If he needs capital, I've got an 800 number.

And, you know, he wasn't paying much of a dividend before, but he doesn't have to pay any dividend now.

Precision Cast will do better under Berkshire than it would have independently, although it would have done very, very well independently.

Charlie?

CHARLIE MUNGER: Well, in the early days, we used to make wiseass remarks. And Warren would say we buy a business an idiot can manage, because sooner or later, an idiot will.

And we did buy some businesses like that in the early days, and they were widely available.

Of course we'd prefer to do that, but the world has gotten harder, and we had to learn new and more powerful ways of operating.

A business like Precision Castparts requires a very superior management that's going to stay superior for a long time.

And we gradually have done more and more and more of that, and it's simply amazing how well it works.

I think, to some extent, we've gotten almost as good at picking the superior managers as we were in the old days at picking the no-brainer businesses.

WARREN BUFFETT: Yeah, we would love to find — we won't be able to find them because they're very rare birds — but we would love to find another three or four of a similar type to Precision Castparts, where they, forever, are going to be producing something that — where quality is enormously important, where the customers depend very heavily on them, when there's contracts that extend over many years, and where people don't simply just take the low bid in order to get this gadget of one sort or another.

It's very important that you have somebody there that has enormous skill running the business, and their reputation, among aircraft manufacturers, engine manufacturers, you know, is absolutely unparalleled.

9. "Can't imagine anybody any happier"

WARREN BUFFETT: OK, now we go to the audience, and we go up to section 1. And if you'll give your name and where you're from, I'd appreciate it.

AUDIENCE MEMBER: Hi, good morning. My name is Gaspar. I'm Spanish and I come from London.

I admire you both in many ways, but I would like to know that, when looking backwards, what would you have done differently in life in your search for happiness?

WARREN BUFFETT: Well, I'm 85 and I can't imagine anybody any happier than I am.

So — by accident or whatever, I still — I mean, you know, I'm sitting here eating exactly what I like to eat, doing in life exactly what I love to do, with people I love. So it really doesn't get any better than that and I — (applause)

I did decide, fairly early in life, that my favorite employer was myself. (Laughter)

And, that — I think that presented — I've managed to avoid, really, aggravation of almost any sort.

Really, you know, if you, or those around you that you love, have health problems or something, I mean, that is a real tragedy, and there's not much you can do about it but accept it.

But Charlie and I have, every day, been blessed. I mean, here Charlie is, 92, and he's doing, every day, something that he finds fascinating.

You know he — I think he probably finds what he is doing at 92 as interesting, as fascinating, and as rewarding, as socially productive, you know, as any period you can pick in his life.

And so we've been extraordinarily lucky. We've been, you know, we're lucky it's a partnership. It's more fun doing things as a partnership.

So, I've got no complaints. It would be very churlish of me to have any kind of complaint. I would say, if you're talking about business life, I don't think I would have started with a textile company. (Laughter)

Charlie?

CHARLIE MUNGER: Well, looking back, I don't regret that I didn't make more money, or become better known, or any of those things. I do regret that I didn't wise up as fast as I could have and —

But there's a blessing in that, too. Now that I'm 92, I still have a lot of ignorance left to work on. (Laughter and applause)

10. Reinsurance outlook a factor in Munich Re and Swiss Re sales

WARREN BUFFETT: OK, Becky Quick.

BECKY QUICK: This question comes from Solomon Ackerman, who's in Frankfurt, Germany.

He wants to know why Berkshire has significantly sold down their holdings in Munich Re, which is the world's biggest reinsurance company, based in Germany, while sticking with the reinsurance operations within Berkshire, like Berkshire Hathaway Reinsurance and General Re.

Would you reduce exposure to Berkshire Hathaway Reinsurance and General Re if they were listed companies? And he's hoping that this can bring out some of your insights as to what's happening in the reinsurance business right now.

WARREN BUFFETT: Yeah, we — I said in the annual report that I thought it was very likely that the reinsurance business would not be as good in the next ten years as it has been in the last ten years.

I may be wrong on that, but that's just a judgment based on seeing the competitive dynamics of the reinsurance business now versus 10 or 20 years ago.

Both Munich — we sold our entire holdings, which were substantial — of Munich Re and Swiss Re. We owned about 3 percent of Swiss Re, and we own more than 10 percent of Munich Re, and last year we sold those two holdings.

They're fine companies. They're well-managed companies. I like the people that run them.

I think their business — the business of the reinsurance companies generally — is less attractive for the next 10 years than it has been for the last 10 years.

In part, that's because what's happened to interest rates. A significant portion of what you earn in insurance comes from investment of the float. And both of those companies, and for that matter almost all of the reinsurance industry, is somewhat more restricted in what they can do with their float, because they don't have this huge capital cushion that Berkshire has, and also because they don't have this great amount of unrelated earning power that Berkshire has.

Berkshire has more leeway in what it can do simply because it does have capital that's many times what its competitors have, and it also has earning power coming from a whole variety of unrelated areas — unrelated to insurance.

So it was not a negative judgment, in any way, on those two companies. It was not a negative judgment on their managements. But it was a — at least — a mildly negative judgment on the reinsurance business.

Now, we have the ability at Berkshire to actually rearrange, to a degree — we are certainly affected by industry factors — but we have more flexibility in modifying business models, and we've operated that way, over the years, in insurance generally, and particularly in reinsurance.

So, a Munich, a Swiss, all the major reinsurance companies, except for us, is pretty well tied to a given type of business model.

They don't really have as many options, in terms of where capital gets deployed. They have to continue down the present path.

And I think they'll do fine. But I don't think they will do as fine in the next 10 years as they have in the last 10.

And I don't think if we played the same game as we were playing the last 10, we would do as well, but we do have considerably more flexibility — in terms of how we conduct all of our insurance operations, but particularly in reinsurance — we have an extra string to our bow that the rest of the industry doesn't have.

The amount of capital that's come in to the reinsurance business — you know, it is no fun running a traditional reinsurance company and having money come in — particularly if you're in Europe — and have money come in, and look around you for investment choices and find out that a great many of the things that you were buying a few years ago now have negative yields.

The whole idea of float is it's supposed to be invested at a positive rate — a fairly substantial — positive rate.

And that game has been over for a while, and it looks like it will be, at least, unattractive, if not terrible, for a considerable period in the future.

Charlie?

CHARLIE MUNGER: Yeah. But, you know, there's a lot of new capacity in reinsurance and there's a lot of very heavy competition.

A lot of people from finance have come over into reinsurance, and all the old competitors remained, too. That's different from Precision Castparts, where most of the customers would be totally crazy to hire some other supplier, because Precision Castparts is so much more reliable and so much better.

Of course, we like the place with more competitive advantage. We're learning.

WARREN BUFFETT: The — to put it in terms of Economics 101 — basically, in reinsurance, supply has gone up and demand has not gone up.

And some of the supply is driven by investment managers who would like to establish something offshore where they don't have to pay taxes, and reinsurance is sort of the easiest beard — what you might call beard — behind which to actually engage in money management in a friendly tax jurisdiction.

And you can set up a reinsurance operation with very few people, by taking large chunks of what brokers may offer. It's not the greatest reinsurance in the world, and a couple of the operations that have done that have proven that statement to be right.

But nevertheless, it is a very, very easy way to have a disguised investment operation in a friendly tax jurisdiction. But that becomes supply in the reinsurance field, and supply has gone up relative to demand, and it looks to me like that will continue to be the case. And couple that with the poor returns on float, and it's not as good a business as it was.

11. Rise in auto death rate hurt GEICO

WARREN BUFFETT: Now we'll talk to an insurance man about it, Cliff Gallant.

CLIFF GALLANT: Thank you.

In terms of growth in profitability, GEICO really got whupped by Progressive Direct over the last year. In 2015, Progressive Direct's auto business group grew its policy count by 9.1 percent. GEICO, only 5.4. And in terms of profitability, the combined ratio at Progressive was a 95.1 and GEICO's was a 98.0.

Is this evidence that Progressive's investments in technology, like Snapshot, investments that GEICO has spurned, is it making a difference in a time of difficult loss trends? Why is GEICO suddenly losing to Progressive Direct?

WARREN BUFFETT: Yeah, well, I would say this. Over the — over the last — well, I forget what year it was we passed Progressive and what year it was we passed Allstate, but GEICO's growth rate in the first quarter was not as high as in the past couple first quarters, but it was it was quite satisfactory.

Now the first quarter is, by far, the best quarter for growth. But last year, both frequency — how often people had accidents — and severity — which is the cost per accident; in other words, just how much those accidents cost you — both of those went up quite suddenly and substantially. And Progressive's figures show that they were hit by that less than Allstate and GEICO and some others.

But I don't think you'll see, necessarily, those same trends this year.

It's an interesting thing. Last year, for the first time in I don't know how many years, the number of deaths in auto accidents, per 100 million miles, went up.

Now, if you go back to the mid-1930s, there were almost 15 people killed per 100 million miles driven. It got down to just slightly over one — from 15 — to one.

You had almost as many — you had roughly as many — people killed in auto accidents in the mid-1930s, about 30, 32,000 a year, as we had last year — or the year before — when people drove almost 15 times as many miles.

Cars have gotten far, far, far, far safer.

And it's a good thing, because if we'd had the same rate of deaths from auto accidents as we had in the '30s, relative to miles driven, we would have had over a half a million people die last year from auto accidents, instead of a figure closer to 40,000.

But last year, for the first time, there was more driving, and I think there was more distracted driving. So you really had this uptick in frequency, and more important, in severity.

GEICO has adjusted its rates. As I mentioned, my own prediction would be that the underwriting margins at GEICO will be better this year than last year, although you never know when catastrophes are coming along. March and April have had a lot of cat activity.

I made a bet a long time ago on — a mental one — on the GEICO model versus the Progressive model. And, as I say, they were significantly ahead of us in volume a few years back. Then we passed them and we passed Allstate and, as I put in the annual report, I hope on my 100th birthday that the GEICO people announce to me that they passed State Farm.

But I have to do my share on that, too, by getting to 100. So we'll see what happens on that particular one. (Laughs)

Charlie?

CHARLIE MUNGER: Well, I don't think it's a tragedy that some competitor got a little better ratio from one period. GEICO's quadrupled its market share since we bought all of it.

WARREN BUFFETT: Quintupled.

CHARLIE MUNGER: Yeah, quintupled, all right. (Laughter)

I don't think we should worry about the fact that somebody else had a good quarter.

WARREN BUFFETT: Yeah. (Applause)

I think it's far more sure that GEICO will pass State Farm someday than that I'll make it to 100, I'll put it that way. (Laughs)

12. Amazon has "disrupted plenty of people"

WARREN BUFFETT: OK. We'll go to the shareholder from station 2.

AUDIENCE MEMBER: Greetings to all of you from the Midwest of Europe. I'm Norman Rentrop from Bonn, Germany, a shareholder since 1992.

My question is about the future of salesmanship in our companies.

Warren, you have always demonstrated a heart for direct selling. When we met you in the midst of a tornado warning, in the barbershop, you immediately offered to write insurance for us. (Laughter)

WARREN BUFFETT: That's true. They were all huddled down there in the barbershop. There wasn't going to be any tornadoes, so I told them they give me a dollar, I'd — they can go upstairs and if anything happened to them I'd pay them — I forget — a million dollars, or something of the sort. (Laughter)

AUDIENCE MEMBER: Now we see with the rise of Amazon.com and others a shift from push marketing to pull marketing. From millions of catalogs having been sent out in the past, to now consumers searching on what they are looking for.

What is your take on how this shift from push to pull marketing will affect our companies?

WARREN BUFFETT: Well, Norman, the development you refer to is huge. I mean, really huge.

And it isn't just Amazon, but Amazon is a huge part of it and what they've accomplished, in a fairly short period of time, and continue to accomplish, is remarkable. The number of satisfied customers they've developed and —

We don't make any decision involving even the manufacturing of goods, the retailing, whatever it is, without thinking long and hard about what the world will look like in five or 10 or 20 years with that powerful trend — really hugely powerful trend — that you just described.

So, we're not — we don't look at that as something where we're going to try and beat them at their own game, you know. They're better than we are at that. And so, Charlie and I are not going to out-Bezos Bezos, by a long shot.

But we are going to think about that.

It does not worry us, obviously, with Precision Cast — it doesn't worry us, in terms of the overwhelming majority of our businesses.

But it is a huge economic trend that, 20 years ago, was not on anybody's radar screen, and lately, has been on everybody's radar screen. And many of them have not — and including us, in a few areas — have not figured the way to either participate in it or to counter it.

GEICO's a good example of a company in an industry that had to adjust to change, and some people made the change better than others.

We were slow on the internet. The phone had worked so well for us, you know, this traditional advertising, and the phone had worked so well, you know, there's always a resistance to think about new possibilities.

When we saw what was happening on the internet, we jumped in with both feet and you know, with mobile and whatever. But — but there are — capital — the nature of capitalism is

somebody's always trying to figure — if you've got some good business — they're always trying to figure out how to take it away from you and improve on it.

And the effect — I would say just of Amazon, but others that are playing the same game — the effect on industry — the full effect — is far from having been seen.

I mean, it is a big, big force and it will — it already — has disrupted plenty of people and it will disrupt more.

I think Berkshire is quite well situated. For one thing, one big advantage we have is we didn't ever see ourselves as starting out in one industry. I mean, we didn't go into — we went into department stores — but we didn't think of ourselves as department store guys, or we didn't think of ourselves as steel guys, or tire guys, or anything of that sort.

So we've thought of ourselves as having capital to allocate. If you start with a given industry focus and you spend your whole time working on a way to make a better tire, or whatever it may be, I think it's hard to have the flexibility of mind that you have if you just think you have a large — hopefully large — and growing pile of capital, and trying to figure out what is the best — next — best next move that you can make with that capital. And I think we do have a real advantage that way.

But I think — I think the fellow that — I think Amazon's got a real advantage, too, in this intense focus on having, you know, hundreds of millions of, generally, very happy customers getting very quick delivery of something that they want to get promptly, and they want to shop the way they shop.

And if I owned a bunch of shopping malls, or something like that, that would be — I'd be thinking plenty hard about what they might look like 10 or 20 years from now.

Charlie?

CHARLIE MUNGER: Well, I would say that we failed so thoroughly in retailing when we were young that we pretty well avoided the worst troubles when we were old.

I think, net, Berkshire has been helped by the internet. The help at GEICO has been enormous. And it's contributed greatly to the huge increase in market share.

And our biggest retailers are so strong that they're — they'll be among the last people to have troubles from Amazon.

WARREN BUFFETT: I didn't get that dollar from you, Norman, actually that — after I gave you that wonderful advice.

13. Defending Coca-Cola from sugar health worries

WARREN BUFFETT: Andrew?

ANDREW ROSS SORKIN: Thank you, Warren. Great to see you today.

Got a lot of questions on this particular topic, and this question is a particularly pointed one.

“Warren, for the last several years at this meeting, you’ve been asked about the negative health effects of Coca-Cola products, and you’ve done a masterful job dodging the question, by telling us how much Coke you drink personally. (Laughter)

“Statistically, you may be the exception. According to a peer-reviewed study by Tufts University, soda and sugary drinks may lead to 184,000 deaths among adults every year.

“The study found that sugar-sweetened beverages contributed to 133,000 deaths from diabetes, 45,000 deaths from cardiovascular disease, 6,450 deaths from cancer.”

Another shareholder wrote in about Coke, noted that you declined to invest in the cigarette business on ethical grounds, despite once saying, quote, “It was a perfect business because it cost a penny to make, sell it for a dollar, it’s addictive, and there’s fantastic brand loyalty.”

“Again, removing your own beverage consumption from the equation, please explain directly why we Berkshire Hathaway shareholders should be proud to own Coke.”

WARREN BUFFETT: Yeah, I think people confuse — (Applause)

— you know, the amount of calories consumed.

I mean, I happen to elect to consume about 700 calories a day from Coca-Cola. So I’m about one-quarter Coca-Cola, roughly. (Laughter)

Not sure which quarter, and I’m not sure we want to pursue the question.

I think if you decide that sugar, generally, is something that the human race shouldn’t have — I think the average person consumes something like 150 pounds of dry weight sugar here and 125 pounds — I mean, you know, it —

What’s in Coca-Cola, largely, are more of the calories come from is sugar.

I elect to get my 26 or 2700 calories a day from things that make me feel good when I eat them. And that’s been my sole test. That wasn’t a test that my mother necessarily thought was great, or my grandfather.

But there are over 1.9 billion 8-ounce servings of some Coca-Cola drink. Now they have an enormous range of products, you know. I mean, you have a few that are called Coke, Diet Coke, Coke Zero and that sort of thing, but they have literally thousands of products.

One-point-nine billion. That's — what is that — 693,500,000,000 8-ounce servings a year, except it's a leap year. (Laughter)

That's almost 100 8-ounce servings per capita for 7 billion people in the world every year. And that's been going on since 1886.

And I would find quite spurious the fact that somebody says, if you're eating 3500 or so calories a day, and you're consuming 27-or-8 hundred, and some of the 3500 is Coca-Cola, to lay it — any particular obesity-related illnesses — on the Coca-Cola you drink.

You have the choice of consuming more than you use, I mean. And I make a choice to eat — or get — 700 calories from this, and I like fudge a lot, peanut brittle.

And I am a very, very, very happy guy and I don't know — I think — and I'm serious about this — I think if you are happy every day, you know, it may be hard to measure, but I think you're going to live longer as well. So there may be a compensating factor. (Applause)

And I really wish I'd had a twin, and that twin had eaten broccoli his entire life, and we both consume the same number of calories. I know I would have been happier. And I think the odds are fairly good I would have loved longer.

I think Coca-Cola is a marvelous product, you know. I mean, if you consume 3500 or 4000 calories a day, and live a normal life, in terms of your metabolism, you know, something's going to go wrong with your body at some point.

But if you keep — I think if you balance out the calories so that you don't become obese, I do — I have not seen evidence that convinces me that, you know, I'll make it — it will be more likely I reach 100 if I suddenly switch to water and broccoli.

Incidentally, a friend of mine, Arjay Miller, a remarkable man — born about 100 miles from here, west — eighth child — near Shelby, Nebraska.

He said Shelby's population was 596 and it never changed because every time some girl had a baby a guy had to leave town, it was a very stable. (Laughter)

But Arjay went on to be president of Ford Motor Company, from this farm near Shelby, and he had his 100th birthday on March 4th of this year. So I went out to see Arjay for his birthday on March 4th, and Arjay told me that there were 10,000 men in the United States that had lived to be 100 or greater, and there were 45,000 women that were 100 or greater.

So I came back and I checked that on the internet — I went to the census figures — and sure enough, that is the ratio. There's 10,000 men over 100, roughly, and 45,000 women.

So if you really want to improve your longevity prospects, I mean a guy in my position, you have a sex change. (Laughter)

I mean as a — you're 4 1/2 times more likely to get to be 100.

That sounds like one of those studies that people put out. It's just a matter of facts, folks.

I think I'll have Charlie go first, though, on that one. (Laughter)

Charlie, do you have any comments?

CHARLIE MUNGER: Well —

WARREN BUFFETT: Have some fudge.

CHARLIE MUNGER: I like the peanut brittle better than the Coke. I drink a lot of Diet Coke and — I think the people who ask questions like that one always make one ghastly error that's really inexcusable. They measure the detriment without considering the advantage.

Well, that's really stupid. That's like saying we should give up air travel through airlines because 100 people die a year in air crashes or something. That would be crazy. The benefit is worth the risk.

And if every person has to have about 8 or 10 glasses of water every day to stay alive, and it's pretty cheap and sensible, and it improves life to have a little extra flavor to your water, and a little stimulation, and a little calories, if you want to eat that way, there are huge benefits to humanity in that, and it's worth having some disadvantage.

We ought to have, almost, a law in the editorial — I'm sounding like Donald Trump — (laughter) — where these people shouldn't be allowed to cite the defects without citing the offsetting advantage. It's immature and stupid. (Applause)

14. Renewable energy investments

WARREN BUFFETT: OK. Gregg Warren.

GREGG WARREN: Warren, with both coal fired and natural gas plants continuing to generate around two-thirds of the nation's electricity, and renewables accounting for less than 10 percent, there remains plenty of room for growth.

At this point, Berkshire Energy, which has invested heavily in the segment, is one of the nation's largest producers of both wind and solar power, and yet still only generates around one-third of its overall capacity from renewables.

As you noted earlier, MidAmerican recently committed another $3.6 billion to wind production, which should lift the amount of electricity it generates from wind to 85 percent by 2020.

You've also had the company, overall, pledging to have around 30 billion in renewables longer term.

The recent renewal of both the wind and solar energy tax credits has made this kind of investment more economically viable and should clear the path for future investments.

Eliminating coal-fired plants looks to be the main priority, but natural gas-fired plants are also fossil fuel driven and are exposed to the vagaries of energy prices.

Is the endgame here for Berkshire Energy to get 100 percent of its generation capacity converted over to renewables, and what are the risks and rewards associated with that effort?

After all, the company operates in a highly-regulated industry, where rates are driven by an effort to keep customer costs low, while still providing adequate returns for the utilities.

WARREN BUFFETT: Yeah, well, I think implicit in what you say is that we do — any decision we make — including the one that we just showed on the — during the movie to — on any decision about new generation, changes in generation — has to go through what's usually called the Public Utility Commission, they may have different names in a few states.

But the utility industry is overwhelmingly regulated at the state level, and we cannot make changes that are not approved by the Public Utility Commission.

We've had more problems, for example, in bringing in renewables in our western utility, Pacific Corp, because it's, in effect, regulated by six states — I believe it's six states — and they don't necessarily agree on how the cost and benefits should be divided if we put in a bunch of renewables, and we have to follow their instructions.

Iowa was just been marvelous about encouraging — I mean at every level — I mean the consumer groups, the governor, you name it — they have seen the benefits.

And in Iowa it's literally true that we have one major competitor, called Alliant, and they have not — either been able to — I don't know the reasons — but they have not pursued renewables the way we have, so our rates are considerably lower than theirs.

And, if you look at their budget projections — although they're substantially higher rates than we have now — they may well need a rate increase within a year or so.

And with our latest expansion, we have said that we will not need a rate increase till 2029 at the earliest. That's thirteen years off.

So there've been great benefits if you have a regulation that works with you on that, but it is a determination that is made at the state level.

Now, the federal government has encouraged, in a major way, the development of renewables by this production tax credit, which currently amounts to about 2.3 cents per kilowatt hour.

We would not have the renewable generation that we have if it hadn't been for the fact that that building of those projects is subsidized by the federal government, because the benefits of reducing solar emissions are — or carbon emissions — are worldwide, and therefore it's deemed proper that the citizenry as a whole should participate in subsidizing the cost of reducing those emissions.

And that has encouraged — in fact, it's allowed — things like have happened in Iowa as well.

But the degree to which the renewables replace, primarily coal — although there's plenty of emissions connected with natural gas if you trace it all the way through — will depend on governmental policy.

And I think, so far, I think it's been quite sensible in encouraging — having the cost borne by society as a whole, in terms of reduced tax revenues, and having the benefits, which is less CO_2, into the atmosphere.

They also, broadly — you know, they're not just limited to the people of Iowa when we build that. That's a benefit that accrues to the world.

I think you'll see continued change. It will vary by jurisdiction.

And we would hope — we've got the capital, we've got lots of taxes, federal taxes, paid in our consolidated returns — so we're in a particularly advantageous position to take advantage of massive investments that companies with limited tax appetites couldn't handle.

I think you'll see us be a very big player. But governmental policy is going to be, you know, the major driver.

Charlie?

CHARLIE MUNGER: Yeah, I think we're doing way more than our share of shifting to renewable energy, and we're charging way lower energy prices to our utility customers than other people.

If the whole rest of the world were behaving the way we are, it would be a much better world.

I will say this about the subject, though, and that is that I think that the people who worry about climate change as the major trouble of Earth don't have my view.

I think that we — I like all this shifting to renewables, but I have a different reason. I want to conserve the hydrocarbons, because eventually, I think, we're going to use every drop, humanity, for chemical feedstocks. And so I'm in their camp, but I've got a different reason.

WARREN BUFFETT: One thing you'll find — might find — kind of interesting: Nebraska has not done much with wind power. And maybe three miles from — two miles — from where we're sitting, right across the river, people are buying their electricity cheaper, in Council Bluffs right across the river, than they are in Omaha.

And yet Omaha — Nebraska is entirely a public power state, so there's no stockholders who have to have any earnings, the bonds are issued on a tax-exempt basis, and yet electricity is considerably cheaper right across the river.

And, you know, the wind blowing doesn't just start at the Missouri River. I mean, it comes across Nebraska and that wind could be captured. And, so far, it really hasn't.

And the real irony is that because our electricity is so much cheaper in Iowa, you have these massive server farms of people like Google. It's become a tech haven for these operations that just gobble up electricity. And Iowa has gotten plant after plant after plant and job after job after job, and increased property tax — I mean gotten more property tax revenues — and that's being done — the Google server is probably seven or eight miles from here — and it's located in Iowa because we have cheap wind-generated electricity. And it's creating jobs. It's fascinating.

Nebraska has prided itself on public power. It was originated back, I believe, in the '30s when George Norris was a very powerful senator here and it's been a source of pride. But lately, it's been a source of cost, too.

15. Derivatives still a "danger to the system"

WARREN BUFFETT: OK, shareholders section 3.

AUDIENCE MEMBER: Good morning Mr. Buffett and Mr. Munger. My name's Adam Bergman. I'm with Sterling Capital in Virginia Beach.

In your 2008 shareholder letter, you said, "Derivatives are dangerous… They have made it almost impossible for investors to understand and analyze our largest commercial banks and investment banks."

So my question for you is: how do you analyze and value companies like Bank of America Merrill Lynch and other commercial banks that Berkshire has investments in, relative to their significant derivative exposures? Thanks.

WARREN BUFFETT: Yeah, derivatives do complicate the problem very dramatically.

Now, they are moving away to being collateralized, which helps.

But there's no question that if you asked me to describe the derivative position of the B of A, for example, I would know that they have done a conscientious job and worked hard at properly evaluating.

But the great danger in derivatives is if there's a discontinuity. If there's not discontinuities, you probably don't have much of a problem, assuming they get marked to market, and collateralized, and so on.

But if the system stopped for a while — the system stopped after 9/11 for three or four days. It stopped at the time of World War One. They closed the New York Stock Exchange for many months.

They debated closing the stock exchange, very seriously, the day after October 19, 1987. And it was — there were a lot of people that wanted to close it. And on that Tuesday morning, it looked like it was about to stop, but it continued.

But if you had a — if you have a major cyber, nuclear, chemical, biological, attack on the country — which will certainly happen at some point — if you have a major discontinuity, then you'll have a lot of problems, a lot of problems.

But you will also — when things reopen — you will find there can be enormous gaps in things that you thought were fully protected by collateral, and that sort of thing, or netting arrangements, and that type of thing.

So I regard very large derivative positions as dangerous.

We inherited a modest- sized position at Gen Re and, in a benign market, we lost about $400 million, just in trying to unwind it, with no pressure on us whatsoever.

So I do think it continues to be a danger to the system.

CHARLIE MUNGER: By the way, the accountants blessed that big derivative position as being worth a lot of money. They were only off, what, many hundreds of millions.

WARREN BUFFETT: Yeah, well. Charlie found one position when he was on the audit committee at Salomon. I think it was mismarked by $20 million.

I actually, by happenstance, happen — I do know of one incredibly mismarked position — doesn't affect any of our operations — but it almost staggers the mind to know the way that position is marked. And you can only come to the conclusion that some trader got somehow — influenced whoever did mark it, or marked it himself, heaven forbid, and probably just influenced someone.

Or they didn't know enough. Some of these things get so complicated, they are very hard to evaluate. That's the kind that have the most profit in them, usually, so they were quite enthusiastic about those when we were at Solomon.

They can be extraordinary hard to mark. And, like I say, I know one that's so mismarked it would blow your mind.

And, you know, the auditors, I don't think, are necessarily capable of holding that behavior in check.

It's very interesting, because now there's really four big auditing firms, and obviously, they're auditing companies where there's a derivative position, and they're auditing company A that's on one side of the transaction, and they're auditing company B that's on the other side of the transaction. In some cases, it's the same auditor.

And I will guarantee you that there's plenty of times when the marks on what they're attesting to are significantly different, which would be an interesting exercise to pursue, in terms of checking those numbers out.

Derivatives are still dangerous, in large quantities, and we have — we would not do them, on a collateralized basis, because if there was a discontinuity, I don't know exactly where we would end up, and I'm never going to get us in a position where we could have money demanded of us and not be able to fulfill it with ease, and with me sleeping well.

So we won't engage in it. We've got some in runoff, but so far we've made money and had the use of money for a decade or more, and it's been very attractive for us. But that does not entice me, at all, into doing any derivative transactions that would involve collateral, when collateral is not required.

It's still a potential time bomb in the system.

Anything where discontinuities — and basically that means closing up and stopping trading markets from functioning — anything where discontinuities can exist, can be real poison in markets.

Kuwait, some years ago, went to a very delayed system on settlement of stock purchases, so they didn't have to settle up for six months or thereabouts. And it caused all kinds of problems,

because, you know, you've got an IOU from somebody for six months and if you got zillions of those, a lot of trouble can ensue.

So I agree with your general caution. I'm not in the least troubled by our Bank of America investment, nor our Wells Fargo — we added to Wells Fargo — and our Bank of America position, right now, is a preferred stock, but we're very likely to exercise the warrants on that.

On the other hand, there are a great number of banks in the world. If you take the 50 largest banks in the world, we wouldn't even think about probably 45 of them. Wouldn't you say that, Charlie?

CHARLIE MUNGER: Well, we're in the awkward position where I think we'll probably make about $20 billion out of derivatives, and just those few contracts that you and Ajit [Jain] did years ago.

All that said, we're different from the banks. We would really prefer it if those derivatives had been illegal for us to buy. It would have been better for our country.

16. Float still "useful" despite low interest rates

WARREN BUFFETT: Carol?

CAROL LOOMIS: This questions relates to something that Warren briefly said earlier today. The question comes from Lynn Palmer, who is just finishing her freshman year at a Houston, Texas high school.

"My question," she says, "concerns the float generated by Berkshire's insurance companies. In Mr. Buffett's 2015 annual letter, he said that the large amount of float that Berkshire possesses allows the company to significantly increase its investment income.

"But what happens when interest rates decline? If the U.S. were to implement negative interest rates in the same way that the eurozone and Japan have done, how would Berkshire be affected?"

WARREN BUFFETT: Yeah, well some of our float actually exists in Europe, where we have the problem of negative interest rates on very high-grade and short-term and medium — even medium-term bonds — and obviously anything that reduces the value of having money is going to affect Berkshire, because we're always going to have a lot of money.

We — because we have so much capital, and so many sources of earning power, we have the ability, quite properly, to use our float in — to a certain degree — in ways that most insurance companies can't think about.

So we can find things to do, but sometimes we get, you know we — we've got fifty-odd billion of short-term government securities now, and we're going to get another $8.3 billion, in all likelihood, early in June when our Kraft Heinz preferred is called, so we'll be back over 60 billion again very soon.

So we've got 60 billion out, that's out at, say, a quarter of 1 percent. Well, the difference between a quarter of 1 percent and minus a quarter of 1 percent, you know, is not that great. I mean, it's almost as painful to have 60 million out at a quarter of a percent, as to have it out at a negative rate.

Float is not worth as much to insurance companies now as it was 10 years ago or 15 years ago. And that's true at Berkshire. I think it's worth considerably more to us than it is to the typical insurance company, because I think we have a broader range of options as to what to do with it.

But there's no question about it, that having a lot of money around now is not just a problem for insurance companies. It's a problem for retirees. It's a problem for anybody that's stuck with fixed-dollar investments and finds that their income now is a pittance or, you know, in Europe, perhaps a negative rate. And that was not something in their calculation at all 15 years ago.

We love the idea, however, of increasing our float. I mean that money has been very useful to us over time.

It's useful to us today, even under present conditions, and it's likely to be very useful to us in the future. It's shown as a liability, but it's actually a huge asset.

Charlie?

CHARLIE MUNGER: I've got nothing to add.

WARREN BUFFETT: He's now in full swing. (Laughter)

17. We still love BNSF despite falling coal shipments

WARREN BUFFETT: Jonathan?

CHARLIE MUNGER: We can't hear you.

JONATHAN BRANDT: Testing. The railroad industry seems, right now, to be suffering from exposure to some of the weakest parts of the economy, with volume declines of varying magnitudes in coal, oil, sand, and metals. Even intermodal, usually a steady source of growth, has been relatively weak of late.

How much of the weakness is cyclical, how much is secular?

In the last 15 months, the other western railroad's market capitalization is down by 30 — 35 percent — as projections of future growth have come down.

Is your estimate of BNSF's intrinsic value down by a material amount during the same period, or is your view of the value of BNSF's irreplaceable network unaffected by these short-term wiggles?

WARREN BUFFETT: Well, I would — certainly the decline in coal — which is a very important commodity — it's about 20 percent of revenues — that's secular.

Now, there's other factors that may cause the line of decline to jiggle around. We had a very mild winter, and we went into the winter with utilities carrying unusual amounts of coal.

And ironically, part of the reason for that was that our service the year before had been bad and they'd gotten low on coal, so then they compensated by bringing in more than they needed, just to catch up. And because the weather was mild, electricity use was poor in the winter time. And so they continue, at this point, to have considerably more coal on hand than they would like.

So they are not only — they're trying to under order what they will be using, and that has a little effect. But the decline in coal, for sure, is secular. And at 20 percent of revenues, that's a significant factor.

But — and it's true that the market, generally, got very enthused about railroad stocks a year or two ago, so they sold up a lot. And now that people have seen that car loadings are down and earnings are down, in some places, that equity valuations have come down.

We don't — we love the fact we own BNSF. We think we bought it at an attractive price. We'd love to be able to buy a second thing exactly like it at that price. We'd do it in a second. We'd even pay a little bit more, probably.

But we don't mark up, and down, our wholly-owned businesses, based on stock market valuations.

Obviously, stock market valuations are some factor in our thinking, but we are not marking our wholly-owned businesses to market because we know we're going to hold them forever. And we regard BNSF as a very good business to hold forever.

But it will it will lose coal volume and, you know, it may lose in other areas, but it will gain in other areas. It's a terrific and valuable asset, and it will learn a lot of money this year, but it won't earn as much money as it earned last year.

Charlie?

CHARLIE MUNGER: I've got nothing to add.

18. Don't envy people making money from risky behavior

WARREN BUFFETT: OK. Station 4.

AUDIENCE MEMBER: Hi, Warren. Hi, Warren and Charlie. Great to see you. This is Cora and Dan Chen from Taulguard Investments of Los Angeles.

This annual meeting reminds me of the magical world of Hogwarts, of Harry Potter. This arena is our Hogwarts. Warren, you are our Headmaster and Professor Dumbledore. (Laughter)

WARREN BUFFETT: I haven't read Harry Potter, but I'll take it as a compliment. (Laughter)

AUDIENCE MEMBER: Charlie is our Headmaster Snape, direct, and full of integrity.

The magic of long-term, concentrated, value investing is real, yet similar to Harry Potter, the rest of the world doesn't believe we exist.

Your letter to me has changed my life. Your "Secret Millionaire's Club" has changed my children's life. They go to class chatting about investing.

My question is for my children watching at home today and the children in the audience.

How should they look at stocks, when every day in the media they see companies that have never made a dime in their life go IPO?

They're dilutive and they see a lot of very short-term spin. The cycle is getting shorter and shorter.

How should they view stocks, and what's your message for them?

Finally, Cora and I would love to thank you in person and shake your hand personally today. I'll repeat what I said last year: thank you for putting — setting — the seeds for my generation to sit in the shade, and for my children's generation to sit in the shade with the "Secret Millionaire's Club."

I truly walk amongst giants. Thank you.

WARREN BUFFETT: Would you mind repeating the whole thing? (Laughter)

"The Secret Millionaire's Club," we want to give great credit to Andy Heyward on that. I think it has helped — I know it's helped — thousands and thousands of children and Andy — it was Andy's idea — and it grows in strength.

And having young children learn good lessons, in terms of handling money, and making friendships, and just generally behaving as better citizens is a great objective, and Andy makes it easy for them to do. So, on his behalf, I accept your comments.

You don't really have to worry about, you know, what's going on in IPOs, or people making money.

People win lotteries every day, but there's no reason to have that effect you at all. You shouldn't be jealous about it.

I mean, you know, if they want to do mathematically unsound things, and one of them occasionally gets lucky, and they put the one person on television, and the million that contributed to the winnings, with the big slice taken out for the state, you know, don't get on — it's nothing to worry about.

Just, all you have to do is figure out what makes sense. And you don't — you look at buying — when you — when you buy a stock, you get yourself in the mental frame of mind that you're buying a business, and if you don't look at a quote on it for five years, that's fine.

You don't get a quote on your farm every day or every week or every month. You don't get it on your apartment house, if you own one. If you own a McDonald's franchise, you don't get a quote every day.

You know, you want to look at your stocks as businesses, and think about their performance as businesses. Think about what you pay for them, as you would think about buying a business.

And let the rest of the world go its own way. You don't want to get into a stupid game just because it's available.

And I'm going to say a little more about that close to the break. But with that, I'll turn it over to Charlie.

CHARLIE MUNGER: Yeah, well, I think that your children are right to look for people they can trust in dealing with stocks and bonds.

Unfortunately, more than half the time, they will fail, in a conventional answer. So you — they really have to — they have a hard problem. If you just listen to your elders, they'll lie to you and make — spread — a lot of folly.

WARREN BUFFETT: But they really have an easy problem, in the sense that American business, as a whole, is going to do fine over time. So the only way they can —

CHARLIE MUNGER: But not the average client of a stock broker.

WARREN BUFFETT: Well, we'll get to that later. (Laughs)

The stockbroker will do fine. The — (laughter)

CHARLIE MUNGER: Yes, that's true.

WARREN BUFFETT: But, they don't have to do that and we can talk — I'd rather address that just a little later.

But — just — you don't want to worry — you don't want to be — a lot of problems are, as Charlie would say, are caused by envy. You don't want to get envious of somebody who's won the lottery, or bought an IPO that went up. You have to figure out what makes sense and follow your own course.

19. Nevada utility customers shouldn't have to subsidize solar power

WARREN BUFFETT: Becky?

BECKY QUICK: This question comes from a shareholder named Lisa Kang Le (PH) in Singapore. And this has to do with NV Energy's issue with solar energy in Nevada.

"Can the chairman help his environmentally conscious shareholders understand why NV Energy has lobbied for new rules in Nevada that make it prohibitive for households to use solar energy? Is there a good reason that we haven't yet heard about?

"And can the chairman or vice chairman share their views on whether there's a need to implement an environmental, social, and governance policy, on Berkshire investments going forward?

"I understand that Berkshire Hathaway typically lets the underlying operating companies and CEOs manage their own policies autonomously, but should Berkshire's board influence better environmental protection policies going forward?"

WARREN BUFFETT: Well, the public utility and the pricing policies and everything in Nevada, as well as other places, but they're determined by a public utility commission. So, there are, I believe, three commissioners that decide what's proper.

The situation in Nevada is that, in terms of rooftop power, was that for the last few years, if you had a solar project on your roof, you could sell back excess power you generated to the grid at a price that was far, far, far above what we, as a utility, could buy it for elsewhere.

So, you could sell it back, we'll say, at roughly 10 cents a kilowatt hour. And about 17,000 — maybe a few more now — about 17,000 people had rooftop installations.

Now they get — there were federal credits involved, but those usually got sold to other people, in terms of tax credits.

So they were being subsidized by the federal government, and that encouraged solar generation, as it's encouraged us to do solar generation and wind generation, as well.

But the people who had these 17,000 rooftop installations were selling back to the grid at 10 cents, roughly, a kilowatt hour, energy we could purchase or produce — either — but purchase elsewhere, too — for 3 1/2 cents, or thereabouts.

So, 99 percent of our consumers were being asked to subsidize the 1 percent that had solar units, by paying them a significantly — triple the market price, basically — of what we could otherwise buy electricity to sell to the 99 percent.

So then it's just a question of whether you wish to have the 99 percent subsidize the 1 percent.

And the public utility commission in Nevada, they had originally let this small amount of rooftop solar generation be allowed as an experiment with this 10 cent, roughly 10 cent, rebate.

And they decided that they did not believe that the 99 percent should be subsidizing the 1 percent.

There may — there's no question — that for solar to be competitive, just like wind, it needs subsidization. Costs are not yet at a level where it becomes competitive with natural gas, for example.

And who pays the subsidy gets to be a real question, if you want to encourage people to use renewables.

And, in general, the federal government has done it through tax subsidies, which means taxpayers, generally, throughout the country subsidize it.

And the public utility commission in Nevada decided that after seeing this experiment, they decided that it was not right for a million — well over a million — customers to be buying electricity at a price that subsidized the 17,000 people, and therefore increase the prices of electricity for the million.

And that question of who subsidizes renewables, and how much, is, you know, going to be a political question for a long time to come.

And I personally think that if society is the one that's benefiting from the lack of — reduction of — greenhouse gases, that society should pick up the tab.

And I don't think that somebody sitting in a house in someplace in Nevada, we'll call it Las Vegas, but it could be other cities because we serve most of Nevada, should be picking up the subsidy for their neighbor, and the public utility commission agrees with that.

I think we have Greg Abel here who — NV Energy is a subsidiary of Mid-American — of Berkshire Hathaway Energy.

Greg, was there anything you want to add? Can we get a spotlight down here? Maybe?

It's not live.

GREG ABEL: I think it's on now.

So, as usual Warren, you summarized it extremely well. When we think of Nevada, it's exactly as you described. I would just add a few things.

One: as you've touched on earlier, we absolutely support renewables. So we start with the fundamental concept that we are for solar. But, as you highlighted, we want to purchase renewable energy at the market rate, not at a heavily subsidized rate that 1 percent of the customers will benefit from and harm the other 99 percent.

And it goes back to being as fundamental as this: if you take, as you touched on, a working family in Nevada who can't afford the roof top unit and you ask him, "Do you want to subsidize your neighbor, that 1 percent?" the answer is clearly no.

At the same time, we're absolutely committed to Nevada utilizing renewable resources, and absolutely proud of what our team's doing. By 2019, we will have eliminated or retired 76 percent of our coal units and be replacing it with solar energy. So we're on a great path there. Thank you. (Applause)

And we're just going to encourage our team. And with the work of the commission, and obviously led by the state, we'll head down a great path. Thank you.

WARREN BUFFETT: Yeah, if the projectionist would put up slide 7, it will give you a view of what the situation is.

This counts all of our all our Berkshire Hathaway Energy operations, and you can see, in a 20-year period we'll have a 57 percent reduction.

You wouldn't want a 100 percent reduction tomorrow. Believe me, the lights would be off all over the country. But it's moving at a fast pace.

But, you do — you want to be sure that you treat fairly the people involved in this, because somebody pays the cost of electric generation.

And I do think that if you're doing something that's to benefit the planet — and it's important that it be done — but that you have the cost be assessed for that, not on a specific person who's having trouble, perhaps, making ends meet in their job.

And obviously, if you've got over a million customers in Nevada, a lot of them are struggling. A lot of them are going fine, too. But they are not the ones, in my view, to subsidize the person who could afford to put the solar unit in.

20. We don't buy or sell based on commodity price predictions

WARREN BUFFETT: OK. Cliff?

CLIFF GALLANT: Over the past year we've learned — perhaps I've learned — that Berkshire's results are more influenced by oil markets than I previously appreciated. Revenues at the railway company and some of Berkshire's manufacturing businesses were negatively impacted. And arguably, low gas prices hurt GEICO's loss ratio.

Yet during this year, Berkshire invested in Phillips 66, Kinder Morgan, and even PCP has revenues associated with the oil and gas industries.

I know Berkshire wouldn't make a bet on a commodity like oil, but is Berkshire making a statement about the long-term outlook for oil?

WARREN BUFFETT: Making a statement about what?

CLIFF GALLANT: Oil.

WARREN BUFFETT: The price? The price of oil?

CLIFF GALLANT: Yes.

WARREN BUFFETT: No. We haven't the faintest idea what the long-term price of oil was and there's always a better system available.

You can buy oil, as you know, for delivery a year from now, or two years from now, or three years from now. We actually did that once, Charlie, didn't we? Some years back.

CHARLIE MUNGER: Cashed it in too soon, too.

WARREN BUFFETT: Yeah. We made money but we could have made a lot more money.

We don't think we can predict commodity prices. We don't hedge cocoa or sugar (inaudible). We do some forward buying of chocolate coatings or something of the sort.

But basically, we are not two fellows who think we can predict the price of soybeans or corn or oil or anything else.

So, anything you have seen in our investment transactions — some of those securities you mentioned there were bought by Todd or Ted, and one was bought by me — but neither they nor I bought those, or if we sell them, sell them, based on commodity price predictions.

We don't know how to do it. And we're thinking about other things when we make those decisions.

Charlie?

CHARLIE MUNGER: I'm even more ignorant than you are.

WARREN BUFFETT: That would be hard to beat. (Laughs)

OK. I think that's the first time I've heard him say that. It has a nice ring to it. (Laughter)

21. Don't expect efficiency in higher education

WARREN BUFFETT: OK, station 5.

AUDIENCE MEMBER: Hi Warren. Hi Charlie.

WARREN BUFFETT: Hi.

AUDIENCE MEMBER: I'm Ken Martin. I'm an MBA student from the Tuck School at Dartmouth.

My question is about college tuition and the problem of rising student debt balances.

In the past, prominent philanthropists have founded institutions that are now prominent research universities in our country. Why is this not a bigger part of today's philanthropic debate, the founding of new colleges? Would not new supply in higher education be at least part of the solution to this problem?

WARREN BUFFETT: Charlie, you want to tackle that one? You're more of an expert than I am.

CHARLIE MUNGER: Yeah. I think that if you expect a lot of efficiency — financial efficiency — in American higher education, you're howling at the wind. (Laughter and applause)

WARREN BUFFETT: Well. I think he's also talking about just more philanthropy to deliver there. Am I right?

Want to give him the light back on there?

AUDIENCE MEMBER: Yeah, that's right.

CHARLIE MUNGER: What's the question again?

WARREN BUFFETT: The question about is — maybe — whether more philanthropy ought to be devoted to that relatively because of the cost. But —

CHARLIE MUNGER: Well, I do a lot more than Warren does in this field — (laughs) — and I am frequently disappointed but — (Laughter)

Monopoly has kind of — and bureaucracy — have kind of pernicious effects everywhere, and the universities aren't exempted from it.

But of course, they are the glory of civilization, and if people want to give more to it, why, I'm all for it.

WARREN BUFFETT: Yeah, it — you know, you've got the option of very good state schools and — we spend a lot of money on education in this country.

You know, if you just take — you take kindergarten through twelve, it's interesting. People talk about entitlements in this country. They say it's terrible we have all these entitlements for Social Security and everything.

We have entitlements for the young. We spend $600 billion a year educating 50 million kids in the public schools between kindergarten and twelfth grade, and just think what that is as an entitlement.

Nobody ever seems to bring that up. But it's a huge — and I believe in it, obviously, but — you know, the people in their working ages, generally speaking, I think have an — in a rich society — have an obligation to both the young and the old.

And based on the amount we spend, if we have problems with our school system it's not because we're cheap. No, there are other problems that contribute to it. In terms of the money we put out, we're right up there. (Applause)

But I was the trustee of a college that saw the endowment go from $8 million to over a billion. And I didn't see the tuition come down. And I didn't see the number of students go up.

CHARLIE MUNGER: Nothing went up, except the professors' salaries.

WARREN BUFFETT: Yeah. From 8 million to a billion. I mean — and very, very decent people running the place.

But when you read the figures on endowment of the big schools, you know, and some of them have really got up in the big numbers, the main objective of the people running the endowment is to have the endowment grow larger. And that will be ever thus. That is the way humans operate.

You have any more comments on that, Charlie? You've seen a lot.

CHARLIE MUNGER: I've made all the enemies I can afford at the moment.

WARREN BUFFETT: OK. (Laughter.)

That's never slowed him down in the past. (Laughter)

22. Berkshire will "do fine" if Trump or Clinton wins

WARREN BUFFETT: Andrew.

ANDREW ROSS SORKIN: Thank you, Warren. This from a shareholder who asked to remain anonymous.

"If Donald Trump becomes the president of the United States, and recognizing your public criticism of him and your public support for Hillary Clinton, what specific risks, regulatory, policy, or otherwise, do you foresee for Berkshire Hathaway's portfolio of businesses?

WARREN BUFFETT: That won't be the main problem. (Laughter and applause)

Well. Government, you know, is a very big factor in our business and in all businesses. I mean, there's the very broad policies that affect practically everybody, and sometimes there can be some pretty specific policies.

But, I will predict that if Don — either Donald Trump or Hillary Clinton becomes president — and one of them is likely to be — very likely to be — I think Berkshire will continue to do fine.

Charlie?

CHARLIE MUNGER: I'm afraid to get into this area. (Laughter)

WARREN BUFFETT: Yeah. We've operated under all — I mean, we've operated under price controls. I mean, there —

We've had 52 percent federal taxes applied to our earnings for many years. Even high — I mean, they were higher at other times — but there — you know, we've had regulations come along and, in the end, business in this country has done extraordinarily well for a couple of hundred years, and it was adapted to the society and the society has adapted to business.

This is a remarkably attractive place in which to conduct a business. Imagine, in a world of practically zero interest rates, you know, American business earning terrific returns on tangible cap — equity. I mean, those are the assets that were actually employed in the business. The numbers are staggering.

And, you know, people who have had their money in savings accounts or something like that get destroyed.

But owners of business, if you look at returns on tangible equity, just check them out some time, and they have not suffered even as people who own fixed-interest — fixed-income — instruments have suffered enormously.

And, you know, farm prices are down now. Farmer income has fallen off a lot in the last couple of years.

But business has managed to take care of itself. And for a good reason, because it contributes to, and has been the engine of, our market economy that's delivered output that is staggering by the imagination of anyone that might have existed 100 years ago.

In my lifetime, the GDP per capita, in real terms, of the United States, has gone up six-for-one. Can you imagine a society where in one person's lifetime, overall, people have six times the real output that they had at the beginning.

It's — you know, the system works very well in terms of aggregate output. In terms of distribution of that output, sometimes it can fall very short, in my view. But, it'll keep working. You don't have to worry about that.

Twenty years from now, they'll be far more output per capita in the United States, in real terms, than there is now. In 50 years, it will be far more. It'll — and the quality will get better.

And no presidential candidate or president is going to end that. They can shape it in ways that are good or bad, but they can't end it.

Now Charlie, give something pessimistic here to balance me out.

CHARLIE MUNGER: No, I want to say something optimistic.

I think that the GDP figures greatly understate the real advantage that our system has given our citizens. It underweighs a lot of huge achievements because they don't translate right into money in a certain way that the economists can easily handle.

But the real achievements over the last century, say, are way higher than are indicated by the GDP figures, and the GDP figures are good.

I don't think the future is necessarily going to be quite as a good as the past. But it doesn't have to be.

WARREN BUFFETT: There's no one you'll run into, at least in my experience, that says, "With my same talents, I wish I'd lived 50 years ago instead." Born 50 years earlier.

But a majority of the American public thinks that it's a bad time to be born today compared to when they were born. They think their children will not — they're wrong. I mean, it's — the pace of innovation — just think how different you're living compared to 20 years ago, in terms of what you do with your time.

Now, a lot of people may condemn it, or something of the sort, but you're making free choices that were not available to you 20 years ago and you're making them in a different direction than —

I'm still staying with the landline, but you people are way ahead of me. (Laughs).

23. BNSF CEO doesn't see rail mergers in near future

WARREN BUFFETT: OK. Gregg?

GREGG WARREN: Warren. Late last year we saw Canadian Pacific make a hostile bid for Norfolk Southern, a combination that would have linked Canada's second largest carrier with one of the two largest railroads in the eastern U.S.

This move led to a largely negative reaction from not only Norfolk Southern, but from federal and state lawmakers, shippers, and other railroad operators, even though a formal evaluation process hadn't even begun with the U.S. Surface Transportation Board. Canadian Pacific eventually backed down.

Looking back to 1999, when the Transportation Board blocked a proposed merger between BNSF and Canadian National, the attitude was that any additional mergers amongst railroads would have to be accretive to competition.

What do you think they meant by this? And if one believes that the hookup of one of the two major western railroads with one of the two eastern railroads would not alter the current landscape, where most shippers have just two choices amongst the large railroads operating in the region, and could actually generate efficiencies and cost savings that could be passed along to customers, how does a combination of someone like BNSF with Norfolk Southern or CSX not satisfy their goal?

WARREN BUFFETT: I — I think now there's — and is Matt Rose, is he here? He can probably answer that — some of that — better than I can — certainly. He can answer all of it better than I can.

Yeah. There's Matt. Yeah.

MATT ROSE: Yeah. So, the statement is actually right.

Back in 1999, we had a failed merger with Canadian National. New rules were put in place by our regulator, a little group called the STB, and what they said was that the public litmus test for the next merger would have to be different.

And, at that point in time we didn't really think that a large merger was possible. And so, when Canadian Pacific announced their merger of the Norfolk Southern, when we think about our four constituencies, and those four are our customers, the labor groups, the communities in which we serve, and shareholders, which, our shareholder, of course, is BRK, we didn't see any interest in the final round of these mergers occurring outside of the shareholder community.

And so our position was simply to say, if the rest of the shipping community believes that we ought to see this final round, that's fine, we'll participate, but we don't see it occurring right now.

We do believe that when that final round occurs, there will be great efficiencies made for shippers and communities, but right now we don't see the dynamics in place.

So, what are those dynamics? It will be as the country continues to grow in population from where we are today, 315 million people, to, say, 320, 330, 350, transportation becomes more scarce and the railroads will need to do more. And that's really when we think the next round will occur.

24. Berkshire indifferent to Wells Fargo's investment banking

WARREN BUFFETT: OK. Station 6.

AUDIENCE MEMBER: Hi, my name is Michael Mozia. I'm from Brooklyn, New York and I'll be starting at Wharton Business School in the fall.

In an interview with Bloomberg Markets recently, Jamie Dimon defended the role banks play in financial markets, saying, "Banks aren't markets. The market is amoral… You're a trade to the market… A bank is a relationship."

But banks, namely investment banks, have struggled as regulators have favored market-based solutions, and many of those relationships investment banks have worked so hard for have proven to be less lucrative, especially compared to the growing fixed costs of supporting them.

As it relates to our marketable securities portfolio, how do you feel about the investment banking component, particularly as Wells moves into that space? Would you feel differently if the cost basis was higher?

And Warren, Charlie, thank you so much for doing this every year.

WARREN BUFFETT: Thank you. Charlie, I didn't totally get that, but does he feel the investment banking firms are being disadvantaged?

CHARLIE MUNGER: Well, he's basically, how do we feel about — Jamie says —

AUDIENCE MEMBER: How do you feel about —?

CHARLIE MUNGER: You can't make as much money as you used to out of relationships, and it's getting tougher and so forth?

WARREN BUFFETT: Yeah. Well, the public policy since 2008-9 has been to, very much, toughen up capital requirements in a variety of ways for banks, but it is specifically been designed to make large banks- very large banks — less profitable relative to smaller banks.

And you do that by increasing capital requirements. You can change the math of banking, and the attractiveness of banking, totally, by capital requirements. Obviously, if you said every bank had to be 100 percent equity, it would be a terrible business. You couldn't possibly earn any money that was significant on capital.

And if you let people operate with 1 percent capital ratios, they can make a lot of money and they will cause the system all kinds of trouble.

So, since 2009, the rules have been tilted against the larger banks by — primarily — through capital requirements. And that just means returns on equity go down, but returns on equity were awfully high prior to that. So it doesn't — it hasn't turned it into a bad business, it's turned it into a less attractive business than earlier.

And that — some of the investment banks operate as bank holdings companies, still, and they've been affected by those capital requirements, too.

I'm not sure I'm getting 100 percent to your question, so I invite you to give me a follow-up, if you like, on that.

AUDIENCE MEMBER: In the marketable securities portfolio, do you feel good about the going-forward prospects of the investment — of the investment banking companies — especially as Wells Fargo moves into that business?

WARREN BUFFETT: Well, Wells Fargo has an investment banking aspect to it that primarily came in through Wachovia. And it's not insignificant.

But our ownership of Wells Fargo, which is very large — it's our largest single marketable security — I'm not counting Kraft Heinz, which is about the same size, because in that situation we're in a control position — it's the largest non-control situation that we have, at Wells Fargo.

And that's by intent. I like it extremely well compared to other securities. Not because it has the most upside, but I feel that, weighted for upside and downside, that it's —

CHARLIE MUNGER: It's not the investment banking that charms you in Wells Fargo. It's the general banking that —

WARREN BUFFETT: Yeah. No. We're not — it isn't that big a deal, and that's not what attracts us.

We think Wells Fargo is a very well run bank. But, we didn't make any decision to buy a single share based on the fact they were going to be more in the investment banking business because of the Wachovia acquisition.

They've got a lot of sources of income. They've got a huge base of very cheap money, but unfortunately, they've got it out at very cheap rates on the other side now. But, spreads will probably work in their advantage eventually. And we think it's a very well run bank.

Investment banking business — Charlie and I are probably a little affected by the experience we had in running one for a short period of time — it's not been something that we invested in significantly.

We, obviously, made a major investment in Goldman Sachs, and we continue to hold shares that came out of the warrants that we received when we made the investment in 2008.

But I think I can't recall us making an investment banking purchase — a marketable security involving an investment bank — for a long time. Can you, Charlie?

CHARLIE MUNGER: No, I think, generally, we fear the genre more than we love it.

25. "Very, very unlikely" activists could break up Berkshire

WARREN BUFFETT: Carol?

CAROL LOOMIS: In the conclusion of the book "Dear Chairman," which you recommend in this year's annual letter — a new book you recommend- the author argues that, quote, "The life's work of great investors is inevitably reabsorbed into the industrial complex with little acknowledgement of their accomplishments."

He then argues that Berkshire Hathaway will eventually be targeted by activist investors if it trades at too sharp a discount to intrinsic value.

Do you agree with this assessment and have you considered installing corporate defenses that might prevent future generations of activists from trying to break up Berkshire Hathaway?

WARREN BUFFETT: Yeah, I used to worry more about that than I do now.

Partly, size is one factor. I think the more important factor would be that Berkshire will always be in a position to repurchase very significant amounts of stock, and as long as it's willing to buy that stock at some price — and it should be — close to intrinsic value, there should not be a large margin, in terms of anybody that might come along and think there'd be a lot money to be made by breaking up.

There would be money lost by breaking it up, in terms of we'd lose — there'd be certain advantages lost.

MidAmerican Energy could not have done what it has done in renewables without Berkshire being the parent. I mean, if it had been split off, it would have been worth — the parts would have been worth — less than the whole. And there are other instance — I could give you significant instances of that in other cases.

So, I don't think there will be a spread that will be enticing to anyone. And beyond that, I think the numbers involved would be staggering, and I think we have a shareholder base that recognizes the advantages of both the Berkshire businesses and its culture and — so I think it's very, very unlikely.

But there have been periods in business history where stocks sold at — where practically all stocks — sold at dramatic discounts from what you might call intrinsic value. And it's interesting that very little activity occurred there.

In the 1974 period, 1973 and '74, you know, there were company — really good companies — one of which was Cap Cities, for example, that Tom Murphy ran, that was selling at a huge discount to what it was worth. But people did not come along. And so, to some extent, when the discounts are huge, money is hard to get.

It's not a huge worry with me. Actually, in my own case, because of the way my stock will get distributed to philanthropies after I die, it's very likely that my estate, for some years, will be, by far, the largest shareholder of Berkshire, in terms of votes, even with this distribution policy that occurs.

So I — it's not something I worry about now. I used to worry about it some, but it's not a factor now.

Charlie?

CHARLIE MUNGER: Well I — I think we have almost no worries at all on this subject, and that most other people have a lot of thoroughly justifiable worry, and I think that helps us. So, I look forward on this subject with optimism.

WARREN BUFFETT: You want to explain how it helps us, Charlie?

CHARLIE MUNGER: Well, if you're being attacked by people you regard as evil and destructive and so on, and you want a strong ally, how many people would you pick in preference to Berkshire?

WARREN BUFFETT: My name is Warren Buffett and I approve of that message. (Laughter)

26. No interest in "pure" leasing businesses

WARREN BUFFETT: Jonathan?

JONATHAN BRANDT: Leasing has quietly become an important contributor to Berkshire's earnings with its several leasing units logging about $1 billion in combined annual pre-tax income.

Could you talk about Berkshire's competitive advantages in its varying leasing businesses including containers, cranes, furniture, tank cars, and rail cars?

Are there other leasing businesses you'd be interested in entering, for instance, airplanes or commercial auto fleets? Plane leasing companies, in particular, seem to sell for reasonable prices and are often available.

WARREN BUFFETT: Yeah. Well, we've got a very good truck leasing business in XTRA, and we've got a good, primarily tank car leasing, business at Union Tank Car and Procor. And we expanded by a billion dollars when we bought the GE fleet recently.

Leasing, generally, isn't something that will — we have to bring something to the party.

At XTRA , that's much more than just handing people a trailer and taking a check every month. There's important service advantages brought to that.

But pure leasing — leasing of new cars, which is a huge business — the math is not that attractive for us.

The banks have an advantage over us because their cost of funds is so low now. It's not quite as low as it looks, but I think Wells Fargo, I think the last figure was, you know, down around 10 basis points.

And when somebody has, you know, maybe a trillion dollars or so, and they're paying 10 basis points for it, I don't feel very competitive at Berkshire in that situation.

So, pure money-type leasing is not an attractive business for us when we've got other people with a lower cost of funds. I mean, they've got the edge.

And we have got — railcar leasing involves a lot more than just a financial transaction. I mean, we repair — we've got huge activity in the repair field, and those cars require servicing, and the same way in our trailer business.

But you will not see us get in — aircraft leasing doesn't interest me in the least. We've looked at that a lot of times, at various aircraft leasing companies offered to us. And that's a scary business. And some people have done well in it by, in recent years, by using short-term money to finance longer-term assets which have big residual risks, and that just isn't for us.

Charlie?

CHARLIE MUNGER: I think you've said it pretty well. We're well located now but we — I don't agree that we have huge opportunities.

27. "We're not targeting competitors for destruction"

WARREN BUFFETT: OK. Station 7.

AUDIENCE MEMBER: Good morning Warren and Charlie. I am Vandemere Se from the Philippines. Warren, my wife and I sent original paintings to your office two days ago, we hope you like them.

WARREN BUFFETT: Thank you.

AUDIENCE MEMBER: Today — sorry — today Berkshire's size ensures that it faces competition from numerous businesses. If you had a silver bullet, which competitor would you take out and why? I'm sorry — and you can't say Donald Trump. (Laughter)

WARREN BUFFETT: Which competitor in which businesses? I mean, you're asking about which —

CHARLIE MUNGER: Which — which competitor would you kill if you could? I don't think — I don't think we have to answer this one.

WARREN BUFFETT: (Laughs) Charlie's a lawyer. (Laughter)

But I've thought about the question. (Laughter)

We have lots of tough competitors. And in many areas, we're a pretty tough competitor ourselves.

And — and the real — what we want our managers to be doing, you know, is thinking every day about how to achieve a stronger competitive position. We call it "widening the moat."

But, we want to turn out better products, we want to keep our costs down to a minimum, you know, we want to be thinking about what our customer's likely to be wanting from us, you know, a month, a year, 10 years from now.

And, generally, if you take care of your customer, the customer takes care of you. But there are cases where there is some force coming along that really is — you may not have the answer for it. And then, you know, you get out of that business.

We had that department store in Baltimore in 1966, and if we'd kept it, we would have gone out of business.

So, recognizing reality is also important. I mean, you do not want to try and fix something that's unfixable.

CHARLIE MUNGER: We're not targeting competitors for destruction. We're just trying to do the best we can everywhere.

WARREN BUFFETT: Spoken like an anti-trust lawyer. (Laughter)

OK. We really hope to be the ones that the other guys want to use the silver bullet on.

28. Sequoia Fund was "overly entranced" by Valeant

WARREN BUFFETT: Becky?

BECKY QUICK: This question comes from Rom and Raji Terracod from Sugarland, Texas.

He writes, "My wife and I have the vast majority of our net worth invested in Berkshire and in shares of the Sequoia Fund. Mr. Buffett, you have endorsed the Sequoia Fund on more than a few occasions.

"Recently, the Sequoia Fund has been in the news because of its large position in Valeant Pharmaceuticals. Mr. Munger has termed Valeant's business model 'highly immoral.'

"Mr. Buffett, do you agree with Mr. Munger's assessment? Have your views about Sequoia Fund changed? Also, as you know, Sequoia is an admirer and large holder of Berkshire stock. "

WARREN BUFFETT: Yeah, in a sense, I'm the father of Sequoia Fund, in that when I was closing up my partnership at the end of 1969, I was giving back a lot of money to partners, and these people had trusted me, and they wanted to know what they should do with their money.

And we helped out those who wanted to put it in municipal bonds for a few months, Bill Scott and I stayed around and helped those people come up with those. But most of them were equity oriented-type investors.

And we said there were two people that we admired enormously in the investment business, not simply because they were terrific investors, but they were terrific people. And they would be the kind of people that you'd make trustee of your will.

So those two, one of whom is in the room — Sandy Gottesman, our director — and one was Sandy and one was Bill Ruane. They were friends themselves.

So, Sandy took on a number of our clients — a number of our partners — and they became clients, and very happy clients, of his, and I'll bet some of them are still clients, or their children or their grandchildren are, to this day.

Others went with Bill — a lot of them went with both of them, actually — in fact, I would be surprised if the majority who had a lot of money gave some to Sandy and gave some to Bill.

But Bill — we had a lot of people whose total funds were really not of a size that made them economic individual clients. And so, Bill, who would not have otherwise set up a fund, Bill said, "I'll set up a fund."

And they actually had an office in Omaha. John Harding, who used to work for me, became the employer here.

And a number of our ex-partners — my ex-partners — joined Sequoia Fund as a way to find an outstanding investment manager, like I say, both for ability and for integrity, and could deploy small sums with him.

And Bill ran Sequoia until, I think, roughly 2005, when he died, and did a fantastic job.

And even now, if you take the record from inception to now, with the troubles they've had recently, I don't know of a mutual fund in the United States that has a better record. There probably is one, maybe, or two, But it's — it's far better than the S&P, and you won't find many records that go for 30 or 40 years that are better than the S&P.

So Bill did a great job for people. And Bill died in 2005, and the record continued to be good until a year or so ago.

And at that time, they — the management company — the manager, I should say — took an unusually large position in Valeant and, despite the objection of some people on the board, not only maintained that position but actually increased it, after a fair amount of doubt had been expressed by the board about the advisability of doing that.

The record, like I say, to date, still, from when it started, is significantly better than average.

My understanding is that the manager who made the decision on Valeant is no longer running the operation, and that other people have (inaudible) for doing so, and I have every reason to believe that they're — I know that they're very smart, decent people, who are good, probably way better than average analysts, in terms of Wall Street.

So, I think it was a very unfortunate period when the manager got overly entranced with a business model, which, if you — I watched the Senate hearings a couple of days ago when Senator Collins and Senator McCaskill interrogated three people from Valeant, and it was not a pretty picture.

In my view, the business model of Valeant was enormously flawed. It had been touted to us. We had several people who urged us, strongly, to buy Valeant, and wanted us to meet Pearson, and all that sort of thing.

But it illustrated a principle that Pete Kiewit, I think, said many, many years ago. He said if you're looking for a manager, find somebody that's intelligent, energetic, and has integrity. And he said that if they don't have the last, be sure they don't have the first two. If you've got somebody that lacks integrity, you want them to be dumb and lazy.

You know — and if you get an intelligent, energetic guy, or woman, who is pursuing a course of action which, if put on the front page, you know, would make you very unhappy, you can get in a lot of trouble.

It may take a while. But Charlie and I have seen, and we're not remotely perfect at this, I don't mean that, but we've seen patterns. You get — pattern recognition gets very important in evaluating humans and businesses. And, the pattern recognition isn't 100 percent, and none of the patterns exactly repeat themselves, but there're certain things in business and securities markets that we've seen over and over, and that frequently come to a bad end, but frequently look extremely good in the short run.

One, which I talked about last year — I'm not referring to Valeant in this regard — is the chain letter scheme, the disguised chain letter. You're going to see chain letters the rest of your life.

Nobody calls them chain letters because that has a connotation that will scare you off. But they're disguised chain letters. And many of the schemes in Wall Street that are designed to fool people have that particular aspect to it.

And there were patterns at Valeant that I think — certainly if you go and watch those Senate hearings, I think, you'll decide that there were patterns there that really should have been picked up on, and it's been very painful to the people of Sequoia.

And I personally think that the people running Sequoia now are able people, and I'll get into in a second the difficulty in managing money, but first, I'll give Charlie a chance to comment on this.

CHARLIE MUNGER: Well, I totally agree with you that Sequoia, as reconstituted, is a reputable investment fund and that the manager, as reconstituted, is a reputable investment adviser.

I've got quite a few friends and clients that use Ruane, Cunniff, and I've advised them to stay with the place as reconstituted. I believe you've done the same thing, haven't you?

WARREN BUFFETT: Right.

CHARLIE MUNGER: So we trust — we think the whole thing is fixed.

Valeant, of course, was a sewer, and those who created it deserve all the opprobrium that they got. (Applause)

29. Buffett leads in wager against hedge funds

WARREN BUFFETT: In a few minutes we'll break, but I think it almost ties in with this last question.

If we could put slide 3 up.

I promised — some years ago I made a wager — and I promised to report, before the lunch, how the wager was coming out.

And I've been doing that regularly, but it probably seems appropriate, since it's developed this far, to point out a rather obvious lesson, which is what I hoped to drive home, to some degree, by offering to make the wager originally.

Incidentally, when I offered to make the wager, namely that somebody could pick out five hedge funds and I would take the unmanaged S&P index used by Vanguard Fund, and I would bet that over a ten-year period that the unmanaged index would beat these five funds that were all being managed, presumably — they could pick any five funds — that were managed by people who were charging incredible sums to people because of their supposed expertise.

And, fortunately, there's an organization called, or at least you go — if you go to the Internet, if you put in longbets.org — it's a terribly interesting website.

You can have a lot of fun with it because people take the opposite side of various propositions that have a long tail to them and make bets as to the outcome, and then they both give their — each side gives their reasons.

And you can go to that website and you can find bets about, you know, whether — what population will be doing 15 years from now or — all kinds of things.

And our bet became quite famous on there. They — and a fellow I like, who I didn't know before this, Ted Seides, bet that he could pick out five hedge funds — these were funds of funds.

In other words, there was one hedge fund at the top and then that manager picked out who he thought were the best managers underneath, and then bought into these other funds in turn, so that the five funds of funds represent, maybe, 100 or 200 hedge funds underneath.

Now bear in mind that the hedge fund — the fellow making the bet — was picking out funds where the manager on top was getting paid, perhaps, 1/2 percent a year, plus a cut of the profits, for merely picking out who he thought were the best managers underneath, who in turn were getting paid, maybe, 1 1/2 or 2 percent, plus a cut of the funds' profits.

But certainly the guy at the top was incentivized to try and pick out great funds, and at the next level, those people were presumably incentivized, too.

So the result is, after eight years, and several hundred hedge fund managers being involved, is that now the totally unmanaged fund by Vanguard with very, very minimal costs, is now 40-some points ahead of the group of hedge funds.

Now that may sound like a terrible result for the hedge funds, but it's not a terrible result for the hedge fund managers. (Laughs)

These managers — A), you've got this top-level manager that's charging probably 1/2 percent, I don't know that for sure, and down below you've got managers that are probably charging 1 1/2 to 2 percent.

So if you have a couple of percentage points sliced off every year, that is a lot of money.

We have two managers at Berkshire that each manage $9 billion for us. They both ran hedge funds before.

If they had a 2-and-20 arrangement with Berkshire, which is not uncommon in the hedge fund world, they would be getting $180 million each, you know, merely for breathing, annually. (Laughter)

That — I mean that — it's a compensation scheme that is unbelievable to me, and that's one reason I made this bet.

But what I'd like you to do is for a moment imagine that in this room we have the entire — you people own all of America, all the stocks in America are owned by this group. You are the Berkshire 18,000, or whatever it is, that has someone managed to accumulate all the wealth in the country.

And let's assume we just divide it down the middle, and on this side we put half the people — half of all the investment capital in the world — and that capital is what a certain presidential candidate might call "low energy."

In fact, they have no energy at all. They buy half of everything that exists in the investment world, 50 percent, everyone on this side. And so now half of it is owned by these — by these no-energy people.

They don't look at stock prices. They don't turn on business channels. They don't read The Wall Street Journal. They don't do anything. They just — they are a slovenly group that just sits for year after year after year owning half of the country — half of America's business.

Now what's their result going to be? Their result is going to be exactly average, as how America business does, because they own half of all of it. They have no expenses, no nothing.

Now what's going to happen with the other half? The other half are what we call the "hyperactives."

And the hyperactives, their gross result is also going to be half, right? They can't — the whole has to be the sum of the parts here, and this group, by definition, can't change from its half of the ultimate investment results.

This half is going to have the same gross results — you're going to have the same results as the low-energy — no-energy people, and they're also going to have terrific expenses, because they're all going to be moving around, hiring hedge funds, hiring consultants, paying lots of commissions and everything.

And that half, as a group, has to do worse than this half. The people who don't do anything have to do better than the people that are trying to do better. It's that simple.

And I hoped through making this bet to actually create a little example of that, but that offer was open to anybody. And I would make, incidentally, the same offer now except, you know, being around in 10 years to collect gets a little more problematic as we go through life. (Laughs)

But it seems so elementary. But I will guarantee you that no endowment fund, no public pension fund, no extremely rich person, wants to sit in that part of the auditorium.

They just can't believe that because they have billions of dollars to invest that they can't go out and hire somebody who will do better than average. I hear from them all the time.

So this group over here, supposedly sophisticated people, generally richer people, hire consultants, and no consultant in the world is going to tell you, just buy an S&P index fund and sit for the next 50 years.

You don't get to be a consultant that way. And you certainly don't get an annual fee that way.

So the consultant's got every motivation in the world to tell you, this year I think we should concentrate more on international stocks, or this year this manager is particularly good on the short side.

And so they come in and they talk for hours, and you pay them a large fee, and they always suggest something other than just sitting on your rear end and participating in American business without cost.

And then those consultants, after they get their fees, they, in turn, recommend to you other people who charge fees which, as you can see over a period of time, cumulatively eat up capital like crazy.

So, I would suggest that what I felt sure — I didn't feel sure because nothing — you can't tell for sure about any 10-year period — but it certainly felt very probable or I wouldn't have stuck my neck out.

It just demonstrates so dramatically — I've talked to huge pension funds, and I've taken them through the math, and when I leave, they go out and hire a bunch of consultants and pay them a lot of money. And — it — just unbelievable. And the consultants always change the recommendations a little bit from year to year. They can't change them 100 percent, because then it didn't look like they knew what they were doing the year before, so they tweak them from year to year.

And they come in and they have lots of charts and PowerPoint presentations, and they recommend people who, in turn, are going to charge them a lot of money. And they say, well, you can only get the best talent by paying 2-and-20, or something of the sort.

And the flow of money from the hyperactive to what I call the helpers is dramatic, while this group over here sits here and absolutely gets the record of American industry.

So I hope you realize that for most — for the population as a whole — American business has done wonderfully, and the net result of hiring professional management, you know, is a huge minus.

And at the bookstore we have a little book called “Where Are the Customer’s Yachts?” written by Fred Schwed. I read it when I was about 10-years-old. Been updated a few — well it hasn’t been updated, but new editions have been put out a few times — but the basic lessons are there.

That lesson is told in that book from 1940. It’s so obvious, and yet all the commercial push is behind telling you that you ought to think about doing something today that’s different than you did yesterday.

You don’t have to do that. You just have to sit back and let American industry do its job for you.

Charlie, do you have anything to add to my sermon? (Applause)

CHARLIE MUNGER: Well, you’re talking to a bunch of people who have solved their problem by buying Berkshire Hathaway. (Laughter)

That worked even better. And there have been a few of these managers, the managers —

WARREN BUFFETT: Sure.

CHARLIE MUNGER: — who’ve actually succeeded. They are a few in the universities who are really good.

But it’s a tiny group of people. It’s like looking for a needle in a haystack.

WARREN BUFFETT: Yeah. And when I was given the job of naming two in 1969, I knew — I knew two — I knew a couple of others. Charlie wasn’t interested in managing more money then, and my friend Walter Schloss would not scale up well, although he had a fabulous record over 45 years, or thereabouts.

But, you know, that was all I could come up with at that time. And fortunately, you know, I did have a couple. And the people who went with Sequoia Fund have been well-served, if they stayed for the whole period.

But the — the people — there’s been far, far, far more money made by Wall — by people in Wall Street — through salesmanship abilities than through investment abilities.

There are a few people out there who are going to have an outstanding investment record. But there are very few of them, and the people you pay to have identify them don’t know how to identify them. And — and they do know how to sell you. That’s my message.

Afternoon Session - 2016 Meeting

1. Sell commercial insurance on the internet?

WARREN BUFFETT: OK. If you'll take your seats, we'll get underway.

CLIFF GALLANT: Thank you.

Berkshire has an online portal for commercial insurance business. I believe it's CoverYourBusiness.com. Is there an opportunity in commercial lines to go direct akin to what we've seen GEICO do in personal auto insurance?

WARREN BUFFETT: Yeah. Well, the answer to that is we'll find out. We have actually two online arrangements. I'm not sure whether they're both up yet.

One is called — I believe it's called Big. I think we got that domain name, B-I-G, and that will be run by the Applied Underwriters, which is a subsidiary of ours that writes workers comp.

And the other is run by Ajit [Jain]. And then, actually, we do commercial auto, some commercial auto, through GEICO as well, so we will learn soon —

I guess my message about inherited wealth is getting delivered here. (Laughter)

The kid probably wants to put himself up for adoption now. (Laughter)

The — so we will be — we have been a little bit, and we will be experimenting more with various insurance lines.

When you look at what has happened, you know, just take Amazon, you have to — you want to try a lot of things, and it amazed me how fast the inquiries on personal auto migrated from phone to the internet, and, you know, I would've thought that the younger people would do it, but the people like myself would be very slow to do it.

But the adaptation by the American public of internet response has really been pretty incredible and shows no sign of slowing down.

So the answer is, we'll try various things and we'll make some mistakes, and my guess is that 10 and 20 and 30 years from now, it'll be a lot different.

2. Our culture will endure for "many, many decades"

WARREN BUFFETT: Station 8.

AUDIENCE MEMBER: Hi. My name is Matt Clayborn from Columbus, Ohio. And thank you for putting this on for all of us.

My question is: you have said before that your role will be divided into parts for your succession, one of which will be the responsibility of maintaining culture by having [son] Howard [Buffett] as non-executive chairman.

What is the plan for how Berkshire will maintain its culture when Howard no longer fills the role, and what should shareholders watch for to make sure that the culture is being properly maintained decades from now when I am your age?

WARREN BUFFETT: Yeah. Well, that's a question we've obviously given a lot of thought to, and although I hope that Howard is made chairman just for the reason that if a mistake is made in selecting a successor, it's easier to correct it if you have a non-executive chairman. But that's a very, very — I mean, that's a 1-in-100 or 1-maybe-in-500 probability, but there's no sense ignoring it totally.

It's not a key factor. The main — by far, the main factor in keeping Berkshire's culture is that you have a board and you'll have successor board members. You have managers and you'll have successor managers. And you have shareholders that clearly recognize the special nature of the culture, that have embraced the culture. When they sold their businesses to us, they wanted to join that culture.

It's a — it thrusts out people that really aren't in tune with it, and there are very few of them. And it embraces those who enjoy and appreciate it, and I think, to some extent, we don't have a lot of competition on it. So it becomes very identifiable, and it works.

So I think the chances of us going off the rails in terms of culture are really very, very, very slight, regardless of whether there's a non-executive chairman or not. But that's just a small added protection.

So it's — I think that the main problem that Berkshire will have will be size, and I've always — I thought that when I was managing money, when I first started managing money. Size is the enemy of performance to a significant degree.

But I do think that the culture of Berkshire adds significantly to the value of the individual components viewed individually. And I don't see any evidence that there'd be any board member, any managers, or anything that would — could in any way really move away from what we have now for many, many decades. Charlie?

CHARLIE MUNGER: I'm even more optimistic than you are.

WARREN BUFFETT: I've never noticed it. (Laughter)

CHARLIE MUNGER: I really think the culture is going to surprise everybody — how well it lasts — and how well they do. They're going to wonder why they ever made any fuss over us in the first place. It's going to work very well.

WARREN BUFFETT: We've got so many good ingredients in place just in terms of the businesses and people already here, you know, that — at the companies.

CHARLIE MUNGER: That's what I'm saying.

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: There's just so much power in place.

WARREN BUFFETT: Another thing that's interesting is how little turnover we get in it, too. So that — the number of managers that have been needed, that we've had to replace in the last ten years, are very few.

You know, without a retirement age, and I tend to bring that up at every meeting to reinforce the idea, the — but without a retirement age and with people working because they love their jobs — and they like the money as well — but their primary motive is that they really like accomplishing what they do in their jobs. And that means that we get long tenure out of our managers.

So the turnover is low, the directors are not here for the money, and so we have great tenure among the directors, and I would argue that's a huge plus. It's going to go on a very long time.

3. Diversity isn't a factor in choosing Berkshire directors

WARREN BUFFETT: Andrew.

ANDREW ROSS SORKIN: Thank you, Warren. The following question comes from Ariz Galdos (PH), and several other shareholders asked similar questions that are a part of this as well. It's a bit of a multipart question.

WARREN BUFFETT: Uh-uh.

ANDREW ROSS SORKIN: "About two dozen men and women work with you, Warren, at our corporate office. I see from last year the quality of the picture has been improved in the annual report, so congratulations on that.

"However, looking at it, there is something that comes to anyone's attention and is the lack of diversity among the staff. A 2015 analysis by Calvert Investments found that Coca-Cola was one of the best companies for workplace diversity while Berkshire Hathaway was one of the worst.

"You've explicitly stated that you do not consider diversity when hiring for leadership roles and board members. Does that need to change? Are we missing any investment opportunities as a result?

“And do you consider diversity, however defined, of company leadership and staff when analyzing the value of a company that you may want to purchase?

WARREN BUFFETT: Well, it’s a multiple part question. The answer to the last one is no.

What was the one before it? (Laughter)

ANDREW ROSS SORKIN: “You’ve explicitly stated you do not consider diversity when hiring for leadership roles and board members. Does that need to change, and are we missing any investment opportunities as a result?”

WARREN BUFFETT: No. We will select board members, and we lay it out. And we’ve done so for years, and I think we’ve been much more explicit than most companies.

We are looking for people who are business savvy, shareholder oriented, and have a special interest in Berkshire. And we found people like that. And as a result, I think we’ve got the best board that we could have. They’re not in it — they’re clearly not in it for the money.

I get called by consulting firms who have been told to get candidates for directors for other companies, and by the questions they ask, it’s clear they’ve got something other than the three questions we ask, in terms of directors, in mind.

They really want somebody whose name will reflect credit on the institution, which means a big name. You know, and one organization recently, the one that did the blood samples with small pricks, got — they got some very big names on their board. Theranos, I think, or — is that the way you pronounce it, Charlie? Theranos?

CHARLIE MUNGER: Yeah.

WARREN BUFFETT: Yeah. I mean the names are great, but we’re not interested in people that want to be on the board because they want to make 2- or $300,000 a year, you know, for 10 percent of their time. And we’re not interested in the ones who — for whom it’s a prestige item and who want to go and check boxes or that sort of thing.

So I think we’ve got — we will continue to apply that test: business savvy, shareholder oriented, and with a strong personal interest in Berkshire.

And every share of Berkshire that our shareholders own, they bought just like everybody else in this room. They haven’t gotten them on an option or they haven’t — I’ve been on boards where they’ve given me stock, you know, and they — I get it for breathing, basically. Half a dozen places that are — maybe three or four that I was on the board of.

We want our shareholders to walk in the shoes — I mean, our directors to walk in the shoes of shareholders. We want them to care a lot about the business, and we want them to be smart

enough so that they know enough about business that they know what they should get involved in and what they shouldn't get involved in.

The people in the office — I'm hoping that when we take the Christmas picture again this year, they're exactly the same 25 that were there last year, even though we might have added 30,000 employees elsewhere and maybe 10 billion of sales or something like that.

It's a remarkable group of people, and they — I mean, just take this meeting. Virtually every one of the 25, our CFO, my assistant, whoever, they've been doing job after job connected with making this meeting a success and a pleasant outing for our shareholders. It's a cooperative effort.

The idea that you would have some department called Annual Meeting Department and, you know, you'd have a person in charge of it and she'd — or he — would have an assistant and then they would go to various conferences about holding annual meetings and build up — and then they'd hire consultants to come in and help them on the meeting. We just don't operate that way. It's a place where everybody helps each other, but — (Applause)

Part of the — what makes — part of what makes my — well, my job is extraordinarily easy, but the people around me really make it easy. And part of the reason it's easy is because we don't have any committees. Maybe we have some committee I don't know about, but I've never been invited to any committees, I'll put it that way, at Berkshire.

And we don't — we may have a PowerPoint someplace, I haven't seen it, and I wouldn't know how to use it anyway.

The — we just don't do — we don't have make-work activities. And we might go a to a baseball game together or something like that, but it — I've seen the other kind of operation and I like ours better, I'll put it that way. Charlie?

CHARLIE MUNGER: Well, years ago I did some work for the Roman Catholic Archbishop of Los Angeles, and my senior partner pompously said, you know, you don't need to hire us to do this. There's plenty of good Catholic tax lawyers. And the archbishop looked at him like he was an idiot and said, "Mr. Peeler," he says," last year I had some very serious surgery, and I did not look around for the leading Catholic surgeon." That's the way I feel about board members. (Applause)

4. Buffett's "mixed emotions" on Berkshire buybacks

WARREN BUFFETT: OK. Gregg.

GREGG WARREN: Warren, while —

WARREN BUFFETT: Gregg. (Laughter.)

GREGG WARREN: While Berkshire has authorized a share repurchase program, originally aimed at buying back shares at prices no higher than 10 percent premium to the firm's most recent book value per share, a figure that was subsequently increased to repurchase shares at prices no higher than 20 percent premium to book value, there's been relatively little share repurchase activity during the last four-and-a-half years.

Even as the shares dipped down below the 1.2 times book value threshold during both January and February of this year, if you base it on a buyback price calculated on Berkshire's book value per share at the end of 2015, a number that had not yet been published when the stock did dip that low.

Given your belief that Berkshire's intrinsic value continues to exceed its book value, with the difference continuing to widen over time, are we at a point where it makes sense to consider buying back stock at a higher break point than Berkshire currently has in place, and would you ever consider stepping in and buying back shares if they dip down blow 1.2 times book value per share even if that prior year's figure had not yet been released?

WARREN BUFFETT: Yeah. Gregg, you mentioned that it sold below 1.2, and I don't think that's correct. I keep a pretty close eye on that, and it's come fairly close to 1.2. But I could almost guarantee you that it has not hit 1.2, or we would've done it. And I'd be happy to send you figures on any day that you might feel that it did hit the 1.2.

Clearly in my view, Charlie's view, the board's, the stock is worth significantly more than 1.2, but it should be worth significantly more, or we wouldn't have it at that level.

On the other hand, we did move it up from 1.1 to 1.2 because we had acquired more businesses over time that were — where the differential between our carrying value and the book value — and the intrinsic value really had widened from when we set the 1.1.

I have mixed emotions on the whole thing, in that from strictly a financial standpoint, and from the standpoint of the continuing shareholders, I love the idea of buying it at 1.2, which means I probably would love the idea of buying it a little higher than 1.2.

On the other hand, I don't take — and it's the surest way of making money per share there is. I mean, if you can buy dollar bills for anything less than a dollar, you know, there's no more certain way of making money.

On the other hand, I don't particularly like — enjoy the actual act of buying out people who are my partners at a price that is below — well below what I think the stock is worth.

So — but we will buy stock, almost certainly. We don't make it a 100 percent pledge because there'd be a lot of ramifications to that, but the odds are extremely high that we would buy a lot of stock at 1.2 times or less. But we would do it in a manner where we were not propping

the stock at any given level. And if it happens, it will be very good for the stockholders who continue.

It is kind of an interesting situation, though, because if it's true that we will, and are eager even, from a financial standpoint, to buy it at that price, it's really like having a savings account where if you take your money out as a dividend, or as an interest payment on a savings account, you know, you get a dollar.

But if you leave it in, you're almost guaranteed that we'll pay you $1.20. I mean, why would anybody want to take money out of a savings account if they could cash it in, what they left, at 120 percent?

So it's a — it acts as a backstop for ensuring that a no-dividend policy results in greater returns than it would be if we paid out a dollar and people got a dollar. If they leave a dollar in, they're going to get at least $1.20 in my view, at least — it's not a total guarantee, but it's a pretty strong probability.

So would we increase that number? Perhaps. If we run out of ideas, and I don't mean, you know, day by day, but if it really becomes apparent that we can't use capital effectively within the company, in the quantities with which it's being generated, then at some point the threshold might be moved up a little because it could still be attractive to buy it.

And you don't — you know, you don't want — you don't want to keep accumulating so much money that it burns a hole in your pocket. And it's been said, actually, that — you know, that a full wallet is a little like a full bladder, that you may get an urge fairly quickly to pee it away, and we don't want that to happen.

But so far that hasn't happened, and we will — if it ever gets to where we have 100 billion or 120 billion or something like that around, we might have to increase the price.

Anytime you can buy stock in for less than it's worth, it's advantageous to the continuing shareholders, and — but it should be by a demonstrable margin. You can't — intrinsic value can't be that finely calculated that you can figure it out to four decimal places or anything of the sort. Charlie?

CHARLIE MUNGER: Well, you'll notice that elsewhere in corporate America, these buyback plans get a life of their own, and it's gotten quite common to buy back stock at very high prices that really don't do the shareholders any good at all. I don't know why people exactly are doing it. I think it gets to be fashionable.

WARREN BUFFETT: It's fashionable and they get sold on it by advisors.

CHARLIE MUNGER: That's true, too.

WARREN BUFFETT: Yeah. Can you imagine somebody going out and saying, we're going to buy a business and we don't care what the price is? You know, we're going to spend $5 billion this year buying a business, we don't care what the price is.

But that's what companies do when they don't attach some kind of a metric to what they're doing on their buybacks. To say we're going to buy back 5 billion of stock, maybe they don't want to publicize the metric, but certainly they should say, we're going to buy back 5 billion of stock if it's advantageous to buy it back.

But they don't — you know, if they say we're going buy the XYZ Company, they say, we'll buy it at this price, but we won't buy it at 120 percent of that price. But I have very rarely seen — Jamie Dimon is very explicit about saying he's going to buy back the stock when he's buying it below what he considers intrinsic value to be.

But I have seen hundreds of buyback notices, and I've sat on boards of directors one after another where they have voted buybacks and basically — and they said they were doing it to prevent dilution or something like that. It's got nothing to do with preventing dilution. I mean, if you're — dilution by itself is a negative and buying back your stock at too high a price is another negative.

So it has to be related to valuation. And as I say, you will not find a lot of press releases about buybacks that say a word about valuation.

CHARLIE MUNGER: The occasion — we're always behaving a lot like what some might call the Episcopal prayer. We prayerfully thank the Lord that we're not like these other religions who are inferior. (Laughs)

I'm afraid there's probably too much of that in Berkshire, but we can't help it. (Laughter.)

5. New Nebraska Furniture Mart store in Dallas doing big business

WARREN BUFFETT: OK. Station 9.

AUDIENCE MEMBER: Good afternoon, Mr. Buffett.

WARREN BUFFETT: Hi.

AUDIENCE MEMBER: My name is Shawn Montgomery (PH) from Fort Worth, Texas. The Nebraska Furniture Mart has been open for about a year in Dallas.

WARREN BUFFETT: Right.

AUDIENCE MEMBER: I was just curious how sales have been, how they compare to your other stores, and what you think they'll be in the future. Thank you.

WARREN BUFFETT: Yeah. It's our largest store in volume. But we had a problem there that we had in Kansas City, and we'll probably have every time we open a store, in that we generate so much initial volume that we had a delivery problem. Like I say, it was worse in Kansas City — that was the first one we opened.

So we really had to take our foot off the gas pedal because the last thing in the world we want to do, you know, is make first impressions with delivery problems — accompanied by delivery problems.

So, it's our largest store in volume. The deliveries have gotten far better. They actually are meeting our company standards that we have in Omaha.

But that wasn't the case for some months. And it's hard to go open up — we opened up the largest home furnishing store in the United States, and we did it in an area where we naturally thought we trained the drivers as well as we could and everything.

But delivery with 100-plus units out there in a new operation, you know, taking in carpet and people getting lost and routing being bad and all kind — there was plenty of work to be done. And it's been done.

So I expect that store, which already is the largest store we have, but I think it'll be a billion-dollar annual store before very long. We're getting ready to step on the gas. It's a terrific area.

We have 20-plus auto dealerships there in the Dallas/Fort Worth area. We probably have three or four of them in the area where our Furniture Mart is. They can't build fast enough down there. Toyota's moving there. Lexus.

It's going — it already is a great store, but it's going to be something even far beyond that.

We've opened up about — I think there are about four food places so far. We've got four or five more in the works. And they're doing terrific volumes.

I'm starting to sound like Donald Trump here, you know, tremendous, terrific, you know, fantastic, I've never seen anything like it. (Laughter)

Just wait until next year. I'll come back, I'll really be in shape then.

It's doing well. We couldn't have picked a better area. We have 400 and — have over 400 acres that we were very fortunate in corralling a whole bunch of land, and we're bringing prices and variety like they — nobody's seen. And now we've just got to bring in delivery like nobody's ever seen.

6. Buffett's concerns about weapons of mass destruction

WARREN BUFFETT: OK. Carol.

CAROL LOOMIS: This question comes from Chris Gottscho (PH) of New York.

Mr. Buffett, you have expressed concern about cyber, biological, nuclear, and chemical attacks, but preventing catastrophe is not getting enough attention.

For example, a bill passed the house unanimously to harden the electric grid against the high-altitude nuclear explosion. Not too many bills pass unanimously these days, but then the bill got bottled up in the Senate.

Have you considered funding — wouldn't it be a good idea for you to consider funding a lobbying and educational campaign to promote the public good in this area and counteract industry lobbyists who are often more interested in short-term profits?

WARREN BUFFETT: Yeah. Well, in my view, there is no problem remotely like the problem of what I call C-N-B-C, cyber, nuclear, chemical, and biological attacks, that either by rogue organizations, even possibly individuals, rogue states, I mean, you know, if you think about — you can think about a lot of things. It will happen.

I think we've been both lucky and, frankly, the people have done a very good job in government, because government is the real protection on this, in not having anything since 1945.

We came very, very close during the Cuban Missile Crisis. And I don't know what the odds were, but I do think that if there had been — I can think of many people that if they'd been in place of either [U.S. President John] Kennedy or [USSR Premier Nikita] Khrushchev, we would've had a very different result.

And it's the ultimate problem. As I put in the annual report, it's the only real threat to Berkshire's economic — external threat to Berkshire's economic well-being over time. And I just hope when — it'll happen — I hope when it happens that it's minimized.

But the desire of psychotics and megalomaniacs and religious fanatics and whatever to do harm on others is a lot more when you have 7 billion people on earth than when you had 3 billion or so, which was the case when I was born — less than 3 billion.

And unfortunately, there are means of doing it. You know, if you were a psychotic back far enough, you threw a stone at the guy in the next cave, and you would sort of limit — relationship of damage to psychosis.

But the — and that went along, you know, through bows and arrows and spears and cannons and various things. And in 1945, we unleashed something like the world had never seen, and that is a pop gun compared to what can be done now.

So there are plenty of people that would like to cause us huge damage. And I came to that view when I was in my 20s. And in terms of my philanthropic efforts, I decided that that was one of two issues that I thought should be the main issue, and I got involved with all kinds of things like the Concerned — Union of —

CHARLIE MUNGER: You supported the Pugwash Conference year after year and were exactly all by yourself.

WARREN BUFFETT: Union of Concerned Scientists, and I have given some money to the Nuclear Threat Initiative that was going to create a — sort of a Federal Reserve system to bank uranium that will take away some of the excuse for countries to develop their own highly-enriched uranium.

So — but it's overwhelmingly a governmental problem on what you're dealing, and it should be, and I think it actually has been the top priority for president after president. It's not the thing they can go out and talk about it every day, and they don't want to scare the hell out of everybody, and they also don't want to tip people's hands as to what they're doing.

But being in the insurance business — you don't have to even be in the insurance business — you can — you know that someday somebody will pull off something on a very, very, very big scale that will be harmful.

Maybe it will — the United States is probably the most likely place it happens, but it can happen a lot of other places, and that's the one huge disadvantage to innovation. I mean, people —

CHARLIE MUNGER: Warren, I think he also asked, why don't we, Berkshire, spend a lot more time telling the government what it should be doing and thinking?

WARREN BUFFETT: Well, I've tried telling people. (Laughs)

Nobody disagrees with you on it. They just — it seems sort of hopeless to — I mean, they don't know what to do beyond what they're doing.

And incidentally, they've done a lot of things. I mean, not all gets publicized, but — and I think Kennedy and Khrushchev — I mean, Khrushchev shouldn't have been sending it over to Cuba, but at least he had enough sense when he knew Kennedy meant business to turn the ships around.

But it's — you can't count on there being Kennedys and Khrushchevs all the time in charge of things.

And the mistakes that are — I see the mistakes that are made in business or human behavior where people act so contrary to their own long-range self-interest that — humans are very — you know, they've got a lot of frailties.

You can argue that if Hitler hadn't been so anti-Semitic, you know, he could've kept a lot of scientists that might have gotten him to the atomic bomb before we did, but he was — he drove out the best of the scientific minds and fortunate —

CHARLIE MUNGER: Imagine a guy stupid enough to think the way to improve science is to kick out all the Jews. (Laughter.)

WARREN BUFFETT: It was — the hero of the 20th century may have been Leo Szilard. I mean, Leo Szilard is the guy that got [Albert] Einstein to cosign a letter to [President Franklin] Roosevelt and say, you know, one side or the other is going to get this, and we better get it first, basically. He said it much more eloquently than that. You can go to the internet and look up the letter, but — you know, we've both been good and we've been lucky.

But, if you remember post-9/11, people started getting a few envelopes with anthrax, and they went to, like, the National Enquirer and Tom Brokaw and Tom Daschle — I can't remember.

I mean, who knows what — when you're — when you've got a mind that's going to send anthrax to people, you know, how that decision making is made is just totally beyond comprehension. And that person did not end up doing a lot of damage, but the capability for damage is absolutely incredible.

I don't know how Berkshire does anything about — I don't know how to do it philanthropically. If I knew how to do — reduce the probabilities of the C-N-B-C-type mass attack, if I knew how to reduce the probability by 5 percent, all my money would go to that, no question about that, maybe 1 percent.

CHARLIE MUNGER: But hasn't it been true we haven't been very good at getting the government to follow any of our advice?

WARREN BUFFETT: Yeah. But this one's important. (Laughter.)

CHARLIE MUNGER: Yeah, well —

WARREN BUFFETT: Yeah. Nobody argues with you about it. They just sort of throw up their hands. And some people work for a while on it and just get discouraged and quit.

I was involved — I forget the exact name of it, but their idea was — a bunch of nuclear scientists — this is long ago, but their idea was to affect elections in small states, the theory being that government was the main instrument and you would have the maximum impact. And just one after another, you know, people took it up and got discouraged.

I don't — I don't think it's because we — we've had the wrong leaders. I think our leaders have been good on this.

I think that any candidate — well, I do not worry about the fact that either [Hillary] Clinton or [Donald] Trump would regard that as the paramount problem of their presidency.

But I just don't know — the offense can be ahead of the defense, and that's — you can win the game 99.99 percent of the time, but eventually anything that has any probability of happening, you know, will happen.

I wish I could give you a better answer. Charlie, have you got any —

CHARLIE MUNGER: I have no hope of giving a better answer.

WARREN BUFFETT: That's what they all say to me. Yeah.

7. Lubrizol's lubricant additives business

WARREN BUFFETT: Jonathan.

JONATHAN BRANDT: The Lubrizol lubricant additives business is one of your six largest noninsurance units, but there's been relatively little disclosure about its performance since it was acquired nearly five years ago.

Can you please update us on how the core business has done and how the competitive landscape and end markets have evolved since it was acquired?

I know the core business is not a growth business, but has the increase in miles driven helped their top line at all?

Could you also talk about the performance of one or two of their more important bolt-on acquisitions, whether it be Chemtool, the pipeline flow-improver company, Warwick, Weatherford, or Lipotec?

WARREN BUFFETT: Yeah. The additive business — there's four companies in it, basically — and it's a no-growth, but very good, business, and we're the leader.

So it has performed almost exactly as you would anticipate since purchase. And other specialty companies have — some of which have — have growth possibilities, but they're small.

So Lubrizol overall, on an operational basis, has been very much as we anticipated, or you would've anticipated, if you looked at the prospectus at the time we bought it.

They made one large acquisition which is — was a big mistake, and that was in the oil field specialty chemical area, and was made just about the time that — or even a little after — that oil took a nosedive.

So we've had a — we've had some decent acquisitions there, but the biggest acquisition should not have been made.

It is — we still got the fundamental earning power of the additives business and everything. That has not disappointed us in any way. It's a very well-run operation that way, but it's not a growth operation.

Charlie?

CHARLIE MUNGER: Nothing to add.

8. "We like to look at micro factors"

WARREN BUFFETT: OK. Station 10.

AUDIENCE MEMBER: Hello. Hello, Mr. Buffett and Mr. Munger, thank you so much for your insights, teaching, and being great role models. My name is Eric Silberger, a violinist based in New York City.

My question for both of you is related to psychological biases. Through Berkshire Hathaway's operations, you get a very good read on macroeconomic factors. Yet, Berkshire does not make investment decisions based upon macroeconomic factors.

How do you control the effect of information, such as knowing macroeconomic factors, or the anchoring effect of knowing stock prices, because after a while it's hard not to once you've analyzed them before?

And how does that influence your rational decision making, whether you should ignore it, or whether you should try to use it in a positive way?

WARREN BUFFETT: Charlie and I are certainly — we read a lot, so we — and we're interested in economic matters, and political matters, for that matter. And so we — we know a lot, or are familiar a lot, I should say, with almost all the macroeconomic factors.

That doesn't mean we know where they're going to lead. We don't know where zero interest rates are going to lead. But we do know what's going on, if we don't know what — what is likely to —

CHARLIE MUNGER: Warren, there's a confusion here.

WARREN BUFFETT: Oh.

CHARLIE MUNGER: It says microeconomic factors.

WARREN BUFFETT: Oh, micro.

CHARLIE MUNGER: We pay a lot of attention to those.

WARREN BUFFETT: Oh, yeah. I'm sorry.

CHARLIE MUNGER: If you talk about macro, we don't know any more than anybody else.

WARREN BUFFETT: He summed it up.

In terms of the businesses we buy, and we — when we buy stocks, we look at it as buying businesses, so they're very similar decisions — we try to know all, or as many as we can know, of the microeconomic factors.

We — I like looking at the details of a business whether we buy it or not. I mean, I just find it interesting to study the species, and — and that's the way you do study it. So I — I don't think there's any lack of interest in those factors or denying the importance of them. So am I getting his question or not, Charlie?

CHARLIE MUNGER: Well, there hardly could be anything more important than the microeconomics. That is business. Business and microeconomics is sort of the same term.

AUDIENCE MEMBER: I guess —

CHARLIE MUNGER: Microeconomics is what we do, and macroeconomics is what we put up with.

AUDIENCE MEMBER: The anchoring effect, I mean, how do you deal with that as well?

CHARLIE MUNGER: Well, we're not anchored to what we're ignoring.

AUDIENCE MEMBER: I see. (Laughter)

WARREN BUFFETT: But we — Charlie and I are the kind that literally find it interesting in every business — we like to look at micro factors.

If we buy — when we buy a See's Candy in 1972, you know, there may have been 140 shops or something. We'll look at the — we'll look at numbers on each one, and we'll watch them over time, and we'll see how third-year shops behave in the second year — we really like understanding businesses.

It's just — it's interesting to us. And some of the information is very useful, and some of it may look like it's not helpful, but who knows when some little fact stored in the back of your mind pops up and really does make a difference.

So, we're fortunate in that we're doing what we love doing. I mean, we love doing this like other people like watching baseball games, and which I like to do, too.

But they — just the very act, every pitch is interesting, and every movement, you know, and whether the guy's — you know, a double steal is interesting, or whatever it may be, and so that's what our activity is really devoted to, and we talk about that sort of thing.

CHARLIE MUNGER: We try and avoid the worst anchoring effect, which is always your previous conclusion. We really try and destroy our previous ideas.

WARREN BUFFETT: Charlie says that if you disagree with somebody, you want to be able to state their case better than they can.

CHARLIE MUNGER: Absolutely.

WARREN BUFFETT: And at that point, you've earned the right to disagree with them.

CHARLIE MUNGER: Otherwise, you should just keep quiet. It would do wonders for our politics if everybody followed my system. (Laughter and applause)

9. I'd "much rather make money for Berkshire than for myself"

WARREN BUFFETT: OK, Becky.

BECKY QUICK: Warren, just a quick request. Would you please stop using C-N-B-C as an acronym for mass destruction? (Laughter.)

WARREN BUFFETT: But if I use N-B-C-C, then I've got a problem with [NBCUniversal CEO] Steve [Burke].

BECKY QUICK: This question comes from Matt Bandy in Dallas, Texas.

He's asking about Seritage Growth Properties. He says, "In December, 2015, you filed a personal 13-G evidencing a roughly 8 percent ownership position in the real estate investment trust Seritage Growth Properties, which to my knowledge is not paralleled as a Berkshire investment.

"Alternatively, in September, 2015, Warren filed a personal 13-G evidencing ownership in Phillips 66, which is paralleled as a Berkshire investment.

"My question is, how do you decide when making a personal investment for your own account versus an investment for Berkshire? I understand market cap and ownership sizing are the likely factors, but does it still not behoove him to invest for the shareholder's benefit in a company

like Seritage that might have significant upside, and where are you putting your personal money to work?"

WARREN BUFFETT: Right. I do not own a share, or never have owned, a share of Phillips 66, so I'm not sure where that person — what he's referring to.

It may be that there's some way when the form is filled out that — that because I'm CEO of Berkshire that on some line it imputes ownership to me or something. The answer is I've never owned a share of Phillips.

And Seritage is a real estate investment trust that had a total market value of under $2 billion when I bought it. And my situation is that I have about 1 percent of my net worth outside of Berkshire and 99 percent in it, and I can't be doing things that Berkshire does.

So a Seritage, with a $2 billion market cap, is not really something that is of a Berkshire size. Plus we've never owned a real estate investment trust to my knowledge, or my memory, in Berkshire at all. I mean, it's just not a — so, I could buy that and not have any worry about a conflict with Berkshire.

As a practical matter, you know, my best ideas are — I hope they're my best ideas —are off-limits for me because they go to Berkshire, if they're sizable enough to have a significance to Berkshire.

We will not be making investments — unless it's something very odd — we will not be making investments in companies with a total market cap of a couple billion while we're our present size.

But — so, every now and then I see something that's subsize for Berkshire that I'll put my — that 1 percent of my net worth in, and the rest of the stuff is off-limits, basically, unless Berkshire's all done buying something or — I mean, I own some wells that I bought a long, long time ago, and Berkshire was not in — was not interested. I mean, we bought enough or something at the time, or maybe we didn't have money for investment.

But I try to stay away from anything that could conflict with Berkshire.

And if I'd been buying Phillips, when Berkshire was buying Phillips, or immediately — or prior — or subsequently, there could be a case where it'd be OK when — we might have hit some limit.

But the answer is I didn't buy any, and I've never owned any. Charlie?

CHARLIE MUNGER: Well, part of being in a position like that we occupy, is you really don't want conflict of interest or even the appearance of it. And it's been 50 or 60 years, when have we embarrassed Berkshire by some of our side-gunning?

Both of us have practically nothing of significance, in the total picture, outside of Berkshire. I've got some Costco stock, because I'm director of Costco. Berkshire's got some Costco stock.

There are two or three little overlaps like that, but basically Berkshire shareholders have more to worry about than some conflict that Warren and I are going to give it. We're not going to do it.

WARREN BUFFETT: It may sound a little crazy, and it's only because I can afford to say this, but I would much rather make money for Berkshire than for myself.

I mean, it isn't going to make any difference to me anyway. I've got all the money I could possibly need, and way more, and on balance, my personality — everything's more wound up in how Berkshire does than I am myself, because I'm going to give it all away.

So, I know my end result is zero, and I don't want Berkshire's end result to be zero. So I'm on Berkshire's side. (Laughs)

10. Berkshire's cash flow outlook

WARREN BUFFETT: Cliff. (Applause.)

CLIFF GALLANT: One of the great financial characteristics of Berkshire today is its awesome cash flow.

While its simple earnings-less-capex formula yields an annual free cash flow calculation of, I figure, of around 10 to 12 billion, in reality it seems to be much higher, closer to 20 billion, and I think, in part, due to changes in the deferred tax asset year-to-year.

What is the outlook for free cash flow, and can investors continue to expect similar dynamics going forward?

WARREN BUFFETT: Yeah. There's a lot of deferred tax that's attributable to unrealized appreciation in securities. I don't have the figure, but let's just assume that's 60 billion of unrealized appreciation in securities. Well, then there would be 21 billion of deferred tax.

That isn't really cash that's available. It's just an absence of cash that's going to be paid out until we sell the securities.

Some arises through bonus depreciation. The railroad will have depreciation for tax purposes that's a fair amount higher than for book purposes.

But overall, I think of, primarily, the cash flow of Berkshire as a practical matter relating to our net income plus our increase in float, assuming we have an increase.

And over the years, float has added $80-billion-plus to make available for investment beyond what our earnings have allowed for, and that's the huge element.

We're going to spend more than our depreciation in our businesses, primarily, number one, because of the — well, the railroad and Berkshire Hathaway Energy are two entities that will spend quite a bit more than depreciation, in all likelihood, for a long, long, long, long time.

And the other businesses, unless we get into inflationary conditions, it won't be a huge swing one way or the other.

So, our earnings, the 17 — not counting investment, not counting capital gains — but our earnings, which were — whatever they were, you know, around 17 billion — plus our change in float is the net new available cash. But, of course, we can always sell securities and create additional cash. We can borrow money and create additional cash.

But it's not a very complicated economic equation at Berkshire. People didn't — for a long time, they didn't appreciate the value of float. We kept explaining it to them, and I think they probably do now.

The big thing, the goal, what Charlie and I think about, we want to add, every year, something to the normalized — you know, the normalized earning power per share of the company.

And we think we can do it because we should be able to do it. We have retained earnings to work with every year to get that job done.

Sometimes it doesn't look like we've accomplished much, and we haven't accomplished much.

And other years, we — something big happens, and we don't know ahead of time which year is going to be which. Charlie?

CHARLIE MUNGER: Well, there are very few companies that have ever been similarly advantaged.

In the whole history of Berkshire Hathaway, we've lived in a torrent of money, and we were constantly deploying it, and disbursed assets, and we were wising up as we went along. That's a pretty good system.

WARREN BUFFETT: It's a —

CHARLIE MUNGER: We're not going to change it.

WARREN BUFFETT: No. And it's allowed for a lot of mistakes. I mean, that's the interesting thing.

American business has been good enough that you don't have to be — you don't have to really be smart to get a decent result. And if you can bring a little bit of intellect, you know, then you should get a pretty good result.

CHARLIE MUNGER: What you've got to do is be aversive to the standard stupidities. You just keep those out. You don't have to be smart.

WARREN BUFFETT: Thank God.

CHARLIE MUNGER: Thank God, right.

11. We've "avoided the self-destructive behavior"

WARREN BUFFETT: OK. Section 11.

AUDIENCE MEMBER: Hey, Warren and Charlie. Thank you so much for your generosity and sharing your life's accumulation of knowledge and financial capital to the progress of humanity. Thank you for that.

And Berkshire managers, thank you for building important companies and stewarding our financial futures. Thank you, guys.

This is Bruce Wang from MICROJIG, traveling west from Orlando, Florida.

Last year, you kindly shared with me the importance of getting the best reputation you can and behaving well. This year I'd like to ask and preface with, Bill Gates wrote, "Warren's gift is being able to think ahead of the crowd. It requires more than taking his aphorisms to the heart to accomplish that, although Warren is full of aphorisms well worth taking to heart."

And he also added that, "I've never met anyone who thought in business in such a clear way."

Warren, what elusive, yet obvious to you, truth has allowed you to think ahead of the crowd and build a clear mental framework to produce a historically significant institution powerhouse brand?

And, Charlie, same to you, what obvious truth presents itself so clearly to you, but many would fervently disagree with you upon?

WARREN BUFFETT: I think I got the question, and I — you know, I owe a great deal to Ben Graham in terms of learning about investing.

And I learned a — I owe a great deal to Charlie, in terms of learning a lot about business.

And then I've also been around — I mean, I spent a lifetime, you know, looking at businesses and why some work and why some don't work.

You know, as Yogi Berra said, you can see a lot just by observing. And that's pretty much what Charlie and I have been doing for a long time.

And you do — I mentioned pattern recognition earlier — you know, there's — you — and I would say it's important to recognize what you can't do. So we have — we may have tried the department store business and a few things, but we've — we've generally tried to only swing at things in the strike zone, and our particular strike zone. And it really hasn't been much more complicated than that.

You do not need — you don't need the IQ in the investment business that you need in certain activities in life. But you do have — you do have to have emotional control.

I mean, we see very smart people do very stupid things, and it's fascinating how humans do that. Just take the people that get very rich and then leverage themselves up in some way that they lose everything.

I mean, they are risking something that's important to them for something that isn't important to them.

Well, you can say, you could figure that one out in first grade, but people do it time after time.

And you see that constantly, self-destructive behavior of one way or another. I think we've probably — and it doesn't take a genius to do it, but I think we've sort of avoided the self-destructive behavior.

Charlie?

CHARLIE MUNGER: Well, there's just a few simple tricks that work — work well, and particularly if you've got a temperament that has a combination of patience and opportunism in it.

And I think that's largely inherited, although I suppose it can be learned to some extent.

Then I think there's another factor that accounts for the fact that Berkshire has done as well as it has, is that we're really trying to behave well.

And I had a great-grandfather. When he died, the preacher gave the talk, and he said none envied this man's success, so fairly won and wisely used. That's a very simple idea, but it's exactly what Berkshire's trying to do.

There are a lot of people who make a lot of money and everybody hates them, and they don't admire the way they earned the money.

And I'm not particularly admirable of making money running gambling casinos. And, you know, we don't own any. And we've turned down businesses, including a big tobacco business.

So, I don't think Berkshire would work as well if we were just terribly shrewd, but didn't have a little bit of what the preacher said about my grandfather, Ingham.

We want to have people think of us as having won fairly and used wisely.

It works. (Applause.)

WARREN BUFFETT: And we were very, very lucky to be born when we were and where we were. And I mean, we — you could've dropped us at some other place in time or some other part of the world, and things would've turned out —

CHARLIE MUNGER: And think of how lucky you were to have your Uncle Fred. Warren had an uncle who was one of the finest men I ever knew. I used to work for him, too. You know, a lot of people have terrible relatives. (Laughter.)

WARREN BUFFETT: That's not an unimportant point. Just yesterday, we had a meeting of all my cousins and a whole bunch that we just get together at the annual meeting time. There are probably 40 of us or 50 of us there.

And they were pulling out some old pictures, and four — I had four aunts, they are all in these pictures — and every one of them — you know, I mean, you were so lucky to have one like that, and I had four. I mean, they just were — in every way they reinforced a lot of things that needed some reinforcement in my case.

CHARLIE MUNGER: I wish you'd had a couple more. (Laughter.)

WARREN BUFFETT: But —

CHARLIE MUNGER: We'd be doing even better.

WARREN BUFFETT: But, he mentioned my Uncle Fred, but my Aunt Katie worked in the store, too. My Aunt Alice worked in the store, and they just — you just couldn't have been around better people. I think Charlie would agree with that.

CHARLIE MUNGER: Yeah. Well, we were very lucky.

WARREN BUFFETT: Yeah. My grandfather was a little tough, however. Tell them what my grandfather used to do when he paid you on Saturday, Charlie.

CHARLIE MUNGER: Well, that was very interesting. Warren's a Democrat, but he came from different antecedents. I worked for his grandfather, Ernest, and he was earnest. (Laughs)

And when they passed Social Security, which he disapproved of because he thought it reduced self-reliance — and he paid me $2 for 10 hours work, there was no minimum wage in those days — on Saturday, and it was a hard ten hours.

At the end of the ten hours, I came in and he made me give him two pennies, which was my contribution to Social Security. (Laughter)

And he gave me two $1 bills and a long lecture about the evils of Democrats, and the welfare state, and a lack of self-reliance, and it went on and on and on and on.

So, I had the right antecedents, too. I had Ernest Buffett telling me what to do.

WARREN BUFFETT: OK. Enough family history.

CHARLIE MUNGER: I haven't overstated that, have I?

WARREN BUFFETT: No, you haven't overstated it at all. (Laughs)

CHARLIE MUNGER: You can't believe what people — and he thought he was doing his duty by the world to do that.

WARREN BUFFETT: But we were lucky then. The people we were around when we were young, we were very lucky.

12. Due diligence doesn't find the real risks of buying a company

WARREN BUFFETT: Andrew.

ANDREW ROSS SORKIN: "Warren and Charlie, you're famous for making a deal over a day or two with nothing more than a handshake. You pride yourself on the small overhead of doing the diligence mostly yourself.

Other successful acquisitive companies use teams of internal people, outside bankers, consultants, and lawyers to due diligence, often over many months to assess deals.

Speed may be a competitive advantage. You've done some amazing deals. But does your diligence process also put us at greater risk? And if you're ever gone, how would you recommend Berkshire change how we approach dealmaking?

WARREN BUFFETT: Yeah. I get that question fairly often, sometimes — often from lawyers.

In fact, our own — we talked to Munger Tolles, the law firm, and that was one of the questions I got, why we didn't do more due diligence, which we would have paid them by the hour for.

The — (Laughter)

It's interesting. We've made plenty of mistakes in acquisitions. Plenty. And we made mistakes in not making acquisitions, but the mistakes are always about making an improper assessment of the economic conditions in the future of the industry of the company.

They're not a bad lease. They're not a specific labor contract. They're not a questionable patent. They're not the things that are on the checklist, you know, for every acquisition by every major corporation in America. Those are not the things that count.

What counts is whether you're wrong about — whether you've really got a fix on the basic economics and how the industry's likely to develop, or whether Amazon's likely to kill them, you know, in a few years, or that sort of thing.

We have not found a due diligence list that gets at what we think are the real risks when we buy a business. And like I say, we've made — we've certainly made at least — oh, at least a half a dozen mistakes and probably a lot more if you get into mistakes of omission.

But none of those would have been cured by a lot more due diligence. They might have been cured by us being a little smarter.

It isn't — it just isn't the things that are on the checklist that really count. Assessing whether a manager, who I'm going to hand a billion dollars to, for his business, and he is going to hand me a stock certificate, assessing whether he's going to behave differently in the future in running that business than he has in the past when he owned it, that's incredibly important, but there's no checklist in the world that's going to answer that.

So, if we thought there were items of due diligence — and incidentally, there are a few that get covered. I mean, you want to make sure that they don't have twice as many shares out as you're buying or something of the sort.

But they're — if we thought there were things that we were missing that were of importance in assessing the future economic prospects of the business, you know, we would, by all means, drill down on those.

But the question of — you know, when we bought See's, it probably had 150 leases. You know, when we — when we buy Precision Castparts, they have 170 plants, you know, there's going to be pollution problems at some place.

Those are — that is not what determines whether a $32 billion acquisition is going to look good five years from now, or ten years from now.

We try to focus on those things. And I do think it probably facilitates things with, at least, certain people that our method of operation does cut down —

You get into squabbles on small things. I've seen deals fall apart because people start arguing about some unimportant point, and their egos get involved, and, you know, they draw lines in the sand and all of that.

I think we gain a lot. When we start to make a deal, it usually gets done. Charlie.

CHARLIE MUNGER: Well, if you stop to think about it, business quality usually counts on something more than whether you cross the T in some old lease or something.

And the human quality of the management who are going to stay are very important. And how are you going to check that as — by due diligence, you know?

And I think — I don't know anybody who's had a generally better record than Berkshire in judging business quality and the human quality of the people.

We're going to lead the business after it's acquired, and I don't think it would've improved at all by using some different method. So I think the answer is that for us, at least, we're doing it the way we should.

WARREN BUFFETT: Negotiations that drag out have a tendency — they're more likely to blow up for some reason. I mean, people — they can get obstinate about very small points, and it's silly to be obstinate, but people get silly sometimes.

I like to keep things moving. I like to show a certain amount of trust in the other person, because usually trust comes back to you.

But the — you know, the truth is there's some bad apples out there, and spotting them is not going to come from looking at documents.

You really have to size up whether that person who's getting a lot of cash from you is going — how they're going to behave in the future, because we're counting on them.

And that assessment is as important as anything involved — you know, we know all the figures and everything going in, and we know what we'll pay, and so we don't want things to get gummed up in negotiations.

And I'm perfectly willing to lose small points here and then on a deal. If I have the deal on the right terms, I don't believe in — in making a — and Tom Murphy taught me this — I mean, you know, you just don't try and win every point. It's a terrible mistake.

You make a decent deal, and if you find something that bends a little different someway, that's OK.

If you think it's bad faith and gives an indication of the character of the person you're dealing with, then you got another problem, and you're lucky if you find that out early. Charlie, any more?

CHARLIE MUNGER: How many people who, in this room, are happily married, carefully checked their spouse's birth certificate and so on? (Laughter)

My guess is that our methods are not so uncommon as they appear.

WARREN BUFFETT: Yeah. I'll think about that. (Applause.)

13. "We don't pay any attention to titles"

WARREN BUFFETT: OK, Gregg.

GREGG WARREN: Warren, the announcement earlier this month, that Ajit Jain would be taking over responsibility for all of Berkshire's reinsurance efforts once Tad Montross retires from General Re, has raised some questions about not only the change in leadership structure but succession planning.

Given the state of the reinsurance market, it makes sense to have Ajit overseeing both businesses, especially if the pricing environment expected to be difficult for another ten years, and there are duplicative efforts that can be streamlined.

Given this move and the change in responsibilities we've seen at several of Berkshire's subsidiaries the last few years, I was just wondering if you could just give us some color on how succession planning is handled at the subsidiary level, and any insight you could give us into what led you to finally decide to have Ajit oversee both of Berkshire's reinsurance arms, and whether or not it will change the amount of work you'll be doing on the specialty side of the business, would be greatly appreciated.

WARREN BUFFETT: Yeah. Well, Tad Montross, after 39 years, has done an absolutely sensational job for Berkshire. You know, originally — (applause)

Gen Re was a problem child for a while, as you know. Some brought on by itself and some external. But the — and Tad is — I mean, he's sensational, and I tried several times, maybe successfully in terms of months but not in terms of years, to get him to stay on longer.

As you say, it makes sense to have the reinsurance operation under Ajit. Ajit's ability to handle more and more things in insurance — he oversees a company called GUARD, which most of you have never heard it, and we bought it a few years ago, and it's doing terrifically. It's based in Wilkes-Barre, Pennsylvania.

It's doing a great job with small business policies, primarily workers' comp, around the country. And it's flourished, you know, being put under Ajit.

He started the specialty operation a couple years ago, and under Peter [Eastwood], that is going gangbusters.

And I have found — and this is interesting, but it's true — I have found with really able people, they can handle so much.

I mean, they almost — well, just take Carrie Sova, that put this meeting together.

You know, if you have some preconceived notion that an annual meeting that's going to have 40,000 people therefore needs, you know, to spend millions of dollars with all kinds of organizational planning and meetings and meetings and meetings, but really able people — my assistant, Debbie Bosanek, she can do anything.

So there's just no limit to what talented people can accomplish. And if I had something else in insurance tomorrow that needed doing, I'd probably call Ajit on that, too.

So it has no — you know, in terms of my succession, that's something — we'll have a board meeting on Monday, but we'll talk about it as we always do at every meeting and — you know, when — we haven't — our thoughts are as one on that, and everybody knows why it makes the most sense.

But five years from now, something different could make sense. That's one reason for not announcing any names. I mean, who knows what happens in terms of the time when it happens or what happens to the person involved? Maybe their situation changes.

So it's not a — there are no tea leaves to read in the fact that Ajit is supervising Gen Re from this point forward. Charlie?

CHARLIE MUNGER: Well, and there's an obverse side of that. Not only can the able people usually do a lot more, but the unable people by and large you can't fix. So —

WARREN BUFFETT: That is for sure.

CHARLIE MUNGER: I think you're forced to use our system if you have your wits about you.

WARREN BUFFETT: And we don't feel the need to follow any kind of organizational common view as to, you know, you do this and you have — only so many people can report to you or any of this sort of thing.

Berkshire — every decision that comes up, you know, we just try and figure out the most logical thing to do at that time. But we don't have some grand design in mind of, you know, like an army organizational chart or something of the sort, and we never will.

CHARLIE MUNGER: Warren and I once reached a decision we wouldn't pay more than X dollars for something, and the man who was subordinate to both of us who was working on it just said, you guys are out of your minds. This is really stupid. This is a quality operation, you ought to pay up for it. We just looked at one another, and did it his way.

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: We don't pay any attention to titles or —

WARREN BUFFETT: He was right, too.

CHARLIE MUNGER: He was right, yeah, of course. (Laughs)

WARREN BUFFETT: OK. I'm sorry. Have you got —?

CHARLIE MUNGER: If a charwoman gave us a good idea, we'd accept it cheerfully.

WARREN BUFFETT: Actually, one time the woman that does clean my office came in, and I think she'd been kind of wondering what I did, you know, based on — and I'd see her frequently, and her name was Ruby.

And finally one day she decided to really get to the heart of the matter, and she said, "Mr. Buffett, do you ever get any good horses?" Apparently thought this is where I was really making my money, was at the track, but — (Laughter)

14. "The rating agencies are wrong" on Berkshire

WARREN BUFFETT: OK. Station 1.

AUDIENCE MEMBER: Hello, Mr. Buffett —

WARREN BUFFETT: Hi.

AUDIENCE MEMBER: — Mr. Munger. Nirav Patel. Haverhill, Massachusetts. Thank you for taking my question.

With Berkshire Hathaway being so well managed, why doesn't it have a highest credit bond rating?

CHARLIE MUNGER: Let me take that one.

WARREN BUFFETT: OK.

CHARLIE MUNGER: The rating agencies are wrong — (laughter and applause)

— and set in their ways.

WARREN BUFFETT: And we don't fit their model very well.

CHARLIE MUNGER: Yeah.

WARREN BUFFETT: Yeah. I mean, we don't look like anything, exactly, they see otherwise. But —

CHARLIE MUNGER: But that's the answer.

WARREN BUFFETT: Yeah. And we — (Laughter)

I'll say this, though. What I do, when they come in the door, I always say, "Let's talk quadruple-A." I believe in starting the negotiation from that standpoint. I never get any place.

15. 3G's cost cutting hasn't hurt Kraft Heinz

WARREN BUFFETT: OK. Carol.

CAROL LOOMIS: Questions continuing to come in about the financing and working relationship that Berkshire formed with 3G a couple of years ago, and this is one of those questions:

"While 3G has been very successful in cutting costs and increasing margins at Kraft Heinz, the company has seen volumes and revenues decline.

As a long-term investor, how do you judge when a management is cutting muscle as well as fat? Can a business increase revenues while cutting costs?"

And I forgot to say, this came from Rick Smith at New York City.

WARREN BUFFETT: Well, the answer is, yes, that sometimes you can cut costs that are a mistake to cut, and you can — and sometimes you can keep costs that are a mistake to keep.

Tom Murphy had the best approach. I mean, he never hired a person that he didn't need, and therefore, they never had layoffs.

And you might say that at headquarters at Berkshire, we follow a similar approach. You would never — we just don't — we don't take on anybody.

Now, I think it is totally crazy when companies are in — now, if you're in a cyclical business, you may have to cut a workforce because there aren't as many carloads of freight moving, or something like that, so you cut back on crane crews and all that — but the idea that you give up your staff, whatever it may be, economists or something like that, because business has slowed down — if you didn't need them — if you don't need them now, you didn't need them in the first place, you know.

I mean, the people that are there just because somebody started a department, and they hired more people, and so on, I would argue that — since we've forgotten to insult this group so far — I would suggest that happens in investor relations departments, perhaps, or something of the sort.

You know, you get people — you get a department going and they're always going to want to expand.

The ideal method is not to do it in the first place. But there are all kinds of American companies that are loaded with people that aren't really doing anything or are doing the wrong thing. And if you cut that out, it should not really have any significant effect on volume.

On the other hand, if you cut out the wrong things, you could have a big effect. I mean, it can be done in a dumb way or a smart way.

My impression, with everything I've seen, and I've seen a fair amount so far, is that 3G, in terms of the cost cuts that they have made, have been extremely intelligent about it, and have not done things that will cut volume.

It is true that in the packaged goods industry, volume trends for everybody — whether they're fat or lean in their operation — volume trends are not good. And the test will be over time — you know, three, five years — are the operations which have had their costs cut, do they do poor, in terms of volume, than the ones, that in my judgment, look very fat? So far I see no evidence of that whatsoever.

I do think at Kraft Heinz, for example, we've got certain lines that will decline in volume. I think we've got certain lines that will increase. But I think overall, the packaged goods industry is not going to go anyplace in terms of physical volume, and it may decline just a bit.

I can't — I've never — I've never seen anybody run anything more sensibly than 3G has, in terms of taking over operations where costs were unnecessarily high, and getting those costs under control in a hurry.

And the volume question, we'll look at as we go along. But believe me, I look at those figures every month, and I look at everybody else's figures every month, and I try to — I'm always looking for any signs of underperformance because of any decisions made, and I've seen none. Charlie?

CHARLIE MUNGER: Yeah. And sometimes when you reduce volume, it's very intelligent, because you're losing money on the volume you're discarding.

It's quite common for a business, not only to have more employees than it needs, but sometimes it has two or three customers that it would be better off without. And so it's hard to judge from outside whether things are good or bad just because volume is going up or down a little.

Generally speaking, I think the leanly-staffed companies do better at everything than the ones that are overstaffed. I think overstaffing is like getting to weigh 400 pounds when you're a normal person. It's not a plus.

WARREN BUFFETT: Yeah. Sloppy thinking in one area probably indicates there may well be sloppy thinking elsewhere.

And I have been a director of 19 public corporations, and I've seen some very sloppy operations, and I've seen a few really outstanding business operators. And there's a huge, huge difference.

If you have a wonderful business, you can get away with being sloppy. We could be wasting a billion dollars a year at Berkshire, you know, 650 million after tax, that'd be 4 percent of earnings, and maybe you wouldn't notice it. But —

CHARLIE MUNGER: I would.

WARREN BUFFETT: — it grows. (Laughter)

Charlie would notice it, so I —

But it's the really prosperous companies that — you know, some — well, the classic case I think were the tobacco companies many years ago. I mean, they, you know, they went off into this thing and that thing and — and it was practically play money because it was so easy to make, and it didn't require, you know — it didn't require good management, and they took advantage of that fact. You can read about some of that in "Barbarians at the Gate."

16. We paid less for Van Tuyl than it appears

WARREN BUFFETT: OK. Jonathan.

JONATHAN BRANDT: Berkshire paid 4.1 billion for Van Tuyl's auto retailing business and consolidated its earnings for nearly ten months last year.

Given prevailing acquisition multiples in the industry, and margins, and the record level of retail auto sales, it seems that the acquisition should have contributed more to Berkshire's bottom

line in 2015 than it seemed to, although it's hard to tell for sure since its results were lumped in with those of the German motorcycle apparel acquisition, which was only owned for a part of the year, also.

I understand the deductive — tax-deductible intangibles reduce the effective purchase price of Van Tuyl, but I still wonder whether there were any one-time charges or whether profits from insurance and finance operations could have been reported somewhere other than in the retail segment?

WARREN BUFFETT: Yeah.

JONATHAN BRANDT: I imagine Berkshire is earning a better return on the acquisition than is so far apparent, but I wonder if you could explain the difference between the likely economics of the deal and what I infer from the annual report figures.

WARREN BUFFETT: Yeah. Well, you're right about it. It is better than it looks.

For one thing, we got a billion dollars of securities, roughly, with the 4.1, and those securities we're basically carrying at a quarter of a percent. But that billion is available to us, and that came with the deal.

There's some very significant acquisition accounting charges that will continue for a couple of years, and that I'm happy to have taken that way.

The economics of Van Tuyl, I would say, have worked out almost exactly as — if you had me, a year ago, lay out a projection — I don't do it — but if I had, it would look very much like things have turned out.

And Jeff Rachor, who runs that operation, really fits the Berkshire mold. I mean, we've got a first-class CEO there.

But take a billion off the purchase price just for openers, and then there are some amortization charges of items that are allowable that make you correctly see a fairly low figure against what it appears the acquisition price was. So far, it's exactly on schedule, and the schedule was perfectly satisfactory.

OK. Station 2.

We haven't — incidentally — we haven't had much luck, so far, in acquiring other auto dealerships based on the same metrics that we bought Van Tuyl. And I think to a small degree, that's because people think we paid more for Van Tuyl than we did.

They're not seeing certain factors in it, so they think we paid X, and therefore they're entitled to X, and we didn't pay X, so we haven't made — we've bought very little so far. I hope that changes in the future.

But we're not going to change — we're not going to change our metrics, in terms of how we value auto dealerships.

17. "Very cheap money makes me pay a little more"

WARREN BUFFETT: OK. Station 2.

AUDIENCE MEMBER: Good afternoon, Mr. Buffett and Mr. Munger. I'm John Gorry from Iowa City, Iowa.

When interest rates go from zero to negative in a country, how does that change the way that you value a company or a stock?

Do you choose a high valuation because the discount rate is low, or on the other hand, do you choose a low valuation because the cash flow is likely to be poor?

WARREN BUFFETT: Well, going from — which we haven't done in this country, yet — but going from zero to minus-a-half is really no different than going from 4 to 3 and a half.

It has a different feel to it, obviously, if you have to pay a half a point to somebody. But if you have your yield — or your base rate — reduced by a half a point, it's of some significance, but it isn't dramatic.

What's dramatic is interest rates being where they are, generally. I mean, whether they're zero, plus a quarter, minus a quarter, plus a half, minus a half, we are dealing with a situation of, essentially, very close to zero interest rates, and we have been for a long time and longer than I would've anticipated.

The nature of it is that you'll pay more for a business when interest rates are zero than if they were, like, 15 percent when [former Federal Reserve Chairman Paul] Volcker was around, and you can take that up and down the line.

I mean, we don't get too exact about it, because it isn't that exact a science, but very cheap money makes me pay a little more for businesses than when money was at what we previously thought was normal rates. And very tight money would cause me to pay somewhat less.

I mean, you know, the — we had a rule for 2600 years that — Aesop lived around 600 BC, but he didn't happen to know it was BC, but, you know, you can't know everything — and it was that a bird in a hand is worth two in the bush. But a bird in the hand now is worth about nine-

tenths of a bird in the bush in Europe, you know, because it depends on how far out the bush, but it keeps getting a little less as you go on. So these are very unusual times that way.

And if you ask me whether I paid a little more for Precision Castparts because interest rates were around zero, than if they'd been 6 percent, the answer is yes.

I try not to pay too much more, but it has an effect. And if interest rates continue at this rate for a long time, if people ever really start thinking something close to this is normal, that will have an enormous effect on asset values.

It already has some effect. Charlie?

CHARLIE MUNGER: Yeah, but I don't think anybody really knows much about negative interest rates. We never had them before.

And we've never had periods of stasis like — except for the Great Depression — we didn't have things like happened in Japan: great modern nation playing all the monetary tricks, Keynesian tricks, stimulus tricks, and mired in stasis for 25 years.

And none of the great economists who have studied this stuff, and taught it to our children, understand it, either. So we just do the best we can.

WARREN BUFFETT: And they still don't understand it.

CHARLIE MUNGER: No. Our advantage is that we know we don't understand it.

WARREN BUFFETT: It's interesting, though. I mean, we are — you know, it's — it makes for an interesting movie.

And it does modestly affect what we pay for businesses. Whether — I don't think anybody expected it to last this long, do you Charlie, personally?

CHARLIE MUNGER: I don't think — if you're not confused, you haven't thought about it correctly.

WARREN BUFFETT: Yeah. I thought about it correctly, then. (Laughs)

18. No comment on GEICO-IBM cooperation

WARREN BUFFETT: Becky.

BECKY QUICK: Warren, in the past you've talked about GEICO working with IBM's Watson.

WARREN BUFFETT: Yeah.

BECKY QUICK: And this shareholder, Guillermo Bermudez, writes in and wants to know, “Would IBM be able to offer insurance industry competitors of GEICO the solutions developed with GEICO help and expense?

“I would think that there would be confidentiality provisions to protect GEICO, because in as much as GEICO educates IBM as to insurance issues, GEICO could be at jeopardy of competitors gaining or equaling its advantage if they purchase solutions jointly developed by GEICO and IBM.”

WARREN BUFFETT: Yeah. I would say the answer to that is that both parties have thought about that matter, very intensively and extensively, and neither would be in a position to talk about it.

I don’t like to not answer any questions, but there’s some things that it doesn’t pay to answer. Am I right, Charlie?

CHARLIE MUNGER: Yes, of course you’re right. (Laughter)

WARREN BUFFETT: I like that.

19. American Express faces tough competition

WARREN BUFFETT: Cliff.

CLIFF GALLANT: You’ve long stressed the importance of taking a long-term view when investing. Over the decades, your substantial returns in American Express seem to support your point.

Now, you’ve talked in the past about the ability of American Express to reinvent itself over time, but today it seems to be a company that doesn’t have alternative businesses and its brand doesn’t seem to have the same cachet as it once did.

Shouldn’t a prudent investor — shouldn’t Berkshire — periodically reassess its reasons for owning an investment?

WARREN BUFFETT: Well, we reassess our reasons for owning all investments on almost a continuous basis.

And both Charlie and I do that, and we’re usually in a general range of agreement, but sometimes we are a fair distance apart, perhaps.

There’s no question that payments are an area of intense interest to a lot of very smart people, who have got a lot of resources, and —

CHARLIE MUNGER: And rapid change.

WARREN BUFFETT: Yeah. And rapid change, and it will change.

And I personally feel OK about American Express. We — and I'm happy to own it. I think — but their position — and it has been under attack for decades, more intensively later — lately — and it will continue to be under attack.

I mean, it's too big a business, and it's too interesting a business, and it could be too attractive a business, for people to ignore it.

And it plays to the talents of some very smart people. I mean, it's a natural, that a great many organizations that are really quite able, think about it. And it's big. So —

CHARLIE MUNGER: A lot of great businesses aren't quite so great as they used to be.

The packaged good business, the Procter & Gambles and so forth of the world — General Mills — they're all weaker than they used to be at their peak and —

WARREN BUFFETT: And the auto companies. I mean when Charlie and I were —

CHARLIE MUNGER: Oh, my God. When I think of the power of General Motors when I was young, and what happened — they wiped out all the shareholders — I would no more have predicted that.

When I was young, General Motors loomed over the economy like a colossus. It looked totally invincible. Torrents of cash. Torrents of everything.

WARREN BUFFETT: Trying to hold down market share.

CHARLIE MUNGER: Yes, because they — yeah, they were afraid they'd be too monopolistic.

And so the world changes, and we can't change — make a portfolio change — every time something is a little less advantaged than it used to be.

WARREN BUFFETT: But you have to be —

CHARLIE MUNGER: Alert.

WARREN BUFFETT: — you have to be thinking all the time and alert to whether there's been something that really changes the game in a big way. And that's not only true for American Express, that's true for other things we own, including things we own 100 percent of.

And we'll be wrong sometimes. We'll be late sometimes, we'll be wrong sometimes. But we'll be right sometimes, too. But it's not that we're not cognizant of threats.

Assessing the probabilities of those threats being a minor problem, or a major problem, or a life-threatening problem, you know, it's a tough game, but that's what makes our job interesting.

CHARLIE MUNGER: I think anybody in payments, probably has — with an established long-time player with an old method — has more danger than used to exist. It's just — there's more fluidity in it.

20. We like steak but aren't interested in owning cattle

WARREN BUFFETT: OK. Station 3.

AUDIENCE MEMBER: Hi, Mr. Buffett.

WARREN BUFFETT: Hi.

AUDIENCE MEMBER: Hi, Mr. Munger. I'm from Flagstaff, Arizona. My name is Nick Kelly. My family runs some cattle ranches down in Arizona, and that's kind of what my question pertains to.

I'm curious on your thoughts as it relates to the expanding global population and investing in cattle and if you think it's wise. Thank you.

WARREN BUFFETT: Charlie?

CHARLIE MUNGER: I think it's one of the worst businesses I can imagine for somebody like us. (Laughter)

WARREN BUFFETT: There's nothing personal about this.

CHARLIE MUNGER: Yeah. Not only is it a bad business, but we have no aptitude for it.

WARREN BUFFETT: Some people have done well in it, Charlie.

CHARLIE MUNGER: Well, I — yeah. They have one good year every 20 years or something.

AUDIENCE MEMBER: I know you guys like steak.

WARREN BUFFETT: Very much.

CHARLIE MUNGER: But not owning cattle. (Laughs)

WARREN BUFFETT: You know, it — actually, I know a few people that have done reasonably well in cattle, but they usually own banks on the side or something, so — (Laughter)

But I wish you the best at it. (Laughter)

And I'm in Kiewit Plaza, if want to send anything along. (Laughs)

CHARLIE MUNGER: Somebody has to occupy the tough niches in the economy.

We need you. (Laughter)

AUDIENCE MEMBER: Thank you.

WARREN BUFFETT: Thank you.

CHARLIE MUNGER: Yeah. (Applause)

21. Don't reward profits in compensation plans

WARREN BUFFETT: Andrew.

ANDREW ROSS SORKIN: Warren and Charlie — well, the first part is for Charlie; second part is for Warren.

"Charlie, you clearly understand the power of incentives. How do you apply this at Berkshire when designing compensation formula?

"Without naming names or dollar amounts, please illustrate for us with examples — of a couple of examples — of how Berkshire's operating managers get paid for performance in different industries."

The second part is for Warren, which is, "You once said you'd write about how we should compensate the next Berkshire CEO. Can you describe exactly how we should do it now?"

CHARLIE MUNGER: I'll let Warren worry about the next CEO.

But the — when it comes to assess — our incentive systems are different and what they try and adapt to is the reality of each situation.

And the basic rule on incentives is you get what you reward for. So, if you have a dumb incentive system, you get dumb outcomes.

And one of our really interesting incentive systems is at GEICO, and I'll let Warren explain it to you, because we don't have a normal profits-type incentive for the people at GEICO.

Warren, tell them, because it's really interesting.

WARREN BUFFETT: Yeah. Well at GEICO, we have two variables, and they apply to well over 20,000 people. I think you have to be there a year, but beyond that point, anybody that's been there a year or more — and I could be wrong on the exact period — is subject — and knows — understands — that these two variables will determine bonus compensation. And as you go up the ladder, it has a multiplier effect.

It's still the same two variables, but it gets to be larger and larger, in terms of bonus compensation as a percentage of your base, but it's always significant. It's always significant.

And those two variables are very simple. I care about growing the business, and I care about growing it with a profitable business. So we have a grid, which consists of growth and policies in force on one axis — not gross in dollars, because that's reflected by average premiums, which are outside their control — but growth in policies in force.

And then on the other grid, we have the profitability of seasoned business. It costs a lot of money to put business on the books. I mean, we spend a lot of money on advertising and all of that.

So the first year, any business we put on the books is going to reduce profits significantly. And I don't want people to be worried about the profit if it's going — that comes — that might be impaired by growing the business fast.

So, profit of seasoned business, growth of policies in force. Very simple. We've used it since 1995. We put a tiny little tweak or two in for new businesses or something, but it's overwhelmingly a simple system.

Everybody understands it. In February, or so, it's a big day when the two variables are announced and people figure out how they come out on it.

And it totally aligns the goals of the organization, in terms of compensation, with the goals of the owner.

And that's a simple one. The interesting thing about —

CHARLIE MUNGER: It's simple, but other people might reward something like just profits, and so the people don't take on new business, they should take it on, because it hurts profits.

So you've got to think these things through, and, of course, Warren's good at that, and so is [GEICO CEO] Tony Nicely.

WARREN BUFFETT: Yeah. And just thinking about — you know, I mean, very — somebody comes in and says, well, if you reward profits — you don't want to award profits, alone. It'd be the dumbest thing you could do.

You just quit advertising, and, you know, start shrinking the business a little. That's a — and like I said, that — people there know that the very top person is getting paid based on those same two variables. So that they — they don't think that the guys at the top have got a cushy deal compared to them, and all of that. It's just a very logical system.

The interesting thing — and I'll get to your second thing in a — second question — in a minute, but the interesting thing is that if we brought in a compensation consultant, they would start coming up with plans that would be designed for all of Berkshire, and get us all pulling together, you know —

CHARLIE MUNGER: Maybe an undertaking parlor.

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: God knows where they'd get the plan.

WARREN BUFFETT: The — you know, the idea of having a — sort of — a coordinated arrangement for incentive compensation across 70 or 80 businesses, or whatever, is just totally nuts.

And yet, I would almost guarantee you that if we brought in somebody, they would be thinking in terms of some master plan, and little subplans, and all this kind of thing, and explain it with all kinds of objectives.

We try to figure out what makes sense in each business we're in. There's some businesses where the top person is enormously important, or some businesses where the business itself dominates the nature — the result.

We try to design plans that make sense. In certain cases — I asked one fellow that came to work for us — or that was selling me his business — the day I met him he came to the office, and he had a business he wanted to sell, but he also wanted to keep running it. And I made a deal with him on it.

And then I said, you know, tell me what the compensation plan should be. And he said, well, he said, I thought you told me that. (Laughs)

I said no. I said, I don't want a guy working for me that has a plan that he thinks doesn't make sense, or that he's unhappy with, or chewing at him, or he's complaining to his wife about it, whatever it may be.

You tell me what makes sense. And he told me what made sense, and it made sense, and we've been using it ever since. Never changed a word.

We have so many different kinds of businesses. Some of them are very tough businesses. Some of them are very easy businesses. Some of them are capital intensive. Some of them don't take capital.

I mean, you just go up and down the line, and to think that you'll have a simple formula that can be sort of stamped out for the whole place, and then with some overall stuff for corporate results on top of it, you'd be wasting a lot of money, and you'd be misdirecting incentives.

So we think it through one at a time, and it seems to work out pretty well.

In terms of the person that succeeds me, it's true, I have sent a memo to the — in fact, I sent two memos to the board — with some thoughts on that. Maybe I'll send a third one.

But I don't think it would be wise to disclose exactly what's in those letters. But it's the same principle as I've just gotten through describing.

CHARLIE MUNGER: And he wanted more bad examples.

A lot of the bad examples of incentives come from banking and investment banking. And if you reward somebody with some share of the profits, and the profits are being reported using accounting practices that cause the profit to exist on paper that are not really happening in terms of underlying economics, then people are doing the wrong thing, and it's endangering the bank and hurting the country and everything else.

And that was a major part of the cause of the great financial crisis: it's that the banks were reporting a lot of income they weren't making, and the investment banks were, too.

The accounting allowed, for a long time, a lender to use his bad — as his bad debt provision — his previous historical loss rate. So an idiot could make a lot of money by just making way-gamier loans at high interest, and accruing a lot of interest, and saying, "I'm not going to lose any more money on these, because I didn't lose money on different loans in the past."

That was insane for the accountants to allow that. And — literally insane. That's not too strong a word.

And yet nobody's ashamed of it. I've never met an accountant that's ashamed of it.

WARREN BUFFETT: The other — another thing that — possibility is when you get the very greedy chief executive who wants an enormous payoff for himself, and to justify it, designs a pyramid, so that a whole bunch of other people down the line get overpaid in some relation — or get paid — in relation to something they have no control over, just so it doesn't look like he's all by himself, in terms of that fantastic payoff he's arranged for himself.

There's a lot of misbehavior.

And, you know, we saw it — you saw it in pricing of stock options. I mean, people that — you know, I literally would hear conversations in a board room where they hoped they were issuing the options, you know, at a terribly low price.

Well, if you've got people interested in having options issued at a terribly low price, they may occasionally do something that might cause that. And it certainly — what could be dumber than a company looking for a way to issue shares at the lowest price?

Compensation isn't as complicated as the world would like to make it, but that's — if you were a consultant, you would want to make people think it's very complicated, and that only you could solve this terrible problem for them that they couldn't solve.

CHARLIE MUNGER: We want it simple and right, and we don't want it to reward what we don't want.

If you have — those of you with children — just imagine how your household would work if you constantly rewarded every child for bad behavior.

The house would be ungovernable in short order.

22. BNSF's capital expenditures

WARREN BUFFETT: OK. Gregg.

GREGG WARREN: During the past several years, Burlington Northern has spent more than just about every railroad on capital expenditures.

While the company reduced its capex budget from $5.7 billion during 2015, to $4.3 billion this year, it stills represents around 20 percent of annual revenue, which we believe is at least a bare minimum for most railroads to continue to invest indefinitely.

Other than maintenance capex, which is likely to account for around 60 percent of that total, what do you believe are the most likely additional investment opportunities for BNSF, realizing that the secular decline in coal, which has accelerated of late, and the complicated nature of crude oil shipments, where BNSF has already invested heavily the past few years, are likely to push it more towards other parts of the business?

WARREN BUFFETT: As I mentioned in the annual report, in the case of all railroads, merely spending their depreciation expense will not keep them in the same place.

So depreciation is an inadequate measure of the actual steady state of capital expenditure needs of a railroad, even in these fairly noninflationary ways.

And that's an important consideration in buying the business. We knew that going in, and it's been reinforced since.

We spent a lot of money in 2015 because we had a lot of problems to correct. That was when we spent the 5.7 billion.

I would say that the true maintenance capex, if you're looking at 4.3 billion, is higher than 60 percent of that number, when you really evaluate keeping the railroad in competitive shape to do just the same volume as it would be doing the year before.

There is an additional expense at BNSF that is not reflected in the figures. There — we also have a lot of intangible expenses at some other businesses that aren't real expenses. I mean, overall, I think that Berkshire's figures actually are on the conservative side, in relation to real economic earnings. But that's not true at any railroad.

We've also had something called "positive train control," which amounts to a lot of money for the industry. I think we may be a little further along than most of them in paying for that, but that's 2 or $300 million a year and maybe — I don't know whether it'd be close to 2 billion, or something like that, in aggregate.

So it is a very capital-intensive business. We run — at the BNSF — we run far more gross, in revenue ton miles, than any other railroad in North America. And that has obviously some — is a factor on capital expenditures.

But I would say that it's very likely that we will spend more than depreciation — unfortunately, quite a bit more than depreciation — to stay in the same place for a long, long time, as will other railroads.

And that is — that's a negative in the picture. We will always be looking for ways to use capital expenditure money to develop additional business, and we get that opportunity regularly. It's just a question of the size of it.

And, you know, we did a lot of that in the Bakken, and we got benefits from it. We're not getting benefits as much as we thought we would at this point when the price of oil was falling off. But that was a very sensible capital expenditure. And I hope we get the opportunity to do more.

What's happening in coal, with the decline, I mean, that doesn't really have anything to do with our overall capital expenditure budget except we won't be spending a whole lot of money to expand in that arena.

Does that answer your question OK?

GREGG WARREN: I was just thinking maybe with intermodal as well, if that's, you know, a longer-term opportunity to invest more heavily there.

WARREN BUFFETT: Well, we're always open to it. But we would want — you know, you have to see a fair amount of revenue coming from —

We had a proposition, very recently, which we worked on for many, many years, in terms of making the port at Long Beach considerably more efficient. And we spent a lot of money on that, and spent a lot of time, and we would've spent a lot more money — a whole lot more money — if it'd been approved.

Recently a court came out with a decision that was negative on it, and whether that kills the chance to do that or we look someplace else, you know, we'll have to look at the situation.

CHARLIE MUNGER: Our competitors there pretend to be environmentalists. (Laughs)

It's a common practice now.

WARREN BUFFETT: Yeah. In any event, we wouldn't — we thought we had something that made a lot of sense, for both the area and for the transportation system of the country, and — but there are —

CHARLIE MUNGER: We are trying to do the right thing, and so far we've lost.

WARREN BUFFETT: But we're still willing to spend a lot of money —

CHARLIE MUNGER: Yeah.

WARREN BUFFETT: — if we can find things that make the railroad more efficient, or make it larger, I mean, either way.

23. U.S. benefits overall from low oil prices

WARREN BUFFETT: OK. Section 4.

AUDIENCE MEMBER: Good afternoon, Mr. Buffett and Mr. Munger. My name is Marcus Douglas. I'm an investment advisor from Houston, Texas.

Where I'm from, there are a lot of people losing their jobs, mostly due to the sharp decline of crude oil prices. My question pertains to the overall state of the union, more so than my dear city.

Keeping in mind that crude oil is primarily bought and sold in American dollars, do either of you believe the major fluctuations in the supply of crude oil influence the future monetary policy decisions?

WARREN BUFFETT: Well, that's yours, Charlie.

CHARLIE MUNGER: Well, my answer would be, not much.

WARREN BUFFETT: Yeah, it's an important industry, obviously. And the decline in the price of oil has had a lot of effects, very good for the consumer, millions and — well, hundreds and millions of consumers — and very bad for certain of the businesses, like the one we bought in Lubrizol, and some others, to a degree.

You know — net, it should be good for the United States, overall, to have low prices for oil. We're a net oil importer. I mean, just like it's good for the United States to have low prices for bananas. We're a banana importer.

Anything we net buy is a plus when prices fall, but oil is big enough, and extends into so many areas, that it also hurts, plenty, when the price of oil falls, and it particularly hurts capital values.

So the value — the consumer gets the benefit when he or she goes to the filling station, you know, every two or three weeks, or something like that, and it comes in relatively small increments.

The capital value contraction, which is huge, if you project out lower-price oil for a while, you know, hits immediately. I mean, an oil field that was worth X may be worth half X, or a third of X, or no X, overnight.

And so, there's certain big factors — well, in terms of our chemical operation, people just stop ordering.

So you have this big impact on capital values immediately, and you have the benefits move in over time. But net, the United States is better off, and Saudi Arabia is worse off, when prices of oil are lower.

Oil is a big part of the economy, but our economy has continued to make progress, overall, during the oil price decline.

But obviously, different regions suffer disproportionately, just like they boomed — you know, they got a real boom in — during the period when it was at $100, and when trucking came in big time. Charlie?

CHARLIE MUNGER: Well, I think that that will do it for this subject.

24. No need to sweep cash from subsidiaries

WARREN BUFFETT: OK. Carol.

CAROL LOOMIS: The question is from Larry Levowitz (PH) of Boston.

"The year-end balance sheet for our manufacturing, service, and retailing operations shows total current assets of 28.6 billion, of which cash and equivalents are 6.8 billion.

"Meanwhile, total current liabilities are 12.7 billion, implying net working capital of 15.9 billion.

"It has become increasingly common for companies like Apple and Dell to finance their business via their suppliers, in some cases with negative working capital.

"Why is it necessary for these Berkshire businesses to have so much working capital, particularly so much cash?

"More generally, how do you think about efficiently managing the working capital of a business segment so large, sprawling, and decentralized as this one?"

WARREN BUFFETT: Yeah. Well, we have excess cash every place at Berkshire, so we don't — at present, it really doesn't make any difference whether we have it at certain subsidiaries or other subsidiaries.

So we do not — we have excess cash. As I pointed out in the past, we'll never go below 20 billion in cash, and we'll actually stay comfortably above it, but — allowing for the preferred that's going to — of Kraft Heinz — we'll be, again, over 60 billion of consolidated cash.

We don't really worry much about what pocket it's in. It's not making anything, anyway, at these levels.

Now, if rates move higher, we've actually got the mechanics in process to do sweep accounts and that sort of thing, which — so I would pay no attention to the particular cash that's being held in that category there.

The cash in Berkshire Hathaway Energy, the cash in the railroad, we have independent levels, that we don't guarantee their debt, and they run with ample cash, and we would not look at sweeping that down to a minimum.

But if you talk about 40 or 50 of our miscellaneous subsidiaries, we will go to a sweep account when rates gets where it really makes any difference to do it.

But right now, when you're getting zero, it doesn't make much difference where you get zero. So I think the fellow's overanalyzed it a little bit, but I understand why he did it.

CHARLIE MUNGER: Warren, one of these ideas is, why don't we imitate some of these other people, and pay our suppliers a lot more slowly, so we have more working capital?

WARREN BUFFETT: Yeah. Well, that's a big thing in business now. And last year, Walmart, for example, went to almost all of their suppliers, as I understand it, and certainly the companies that we supply, and they basically had a list of half a dozen things that they wanted present suppliers to agree to, and one of those things was more-extended terms.

And each of our companies made their own decisions, but my guess is they got more extended terms from most of their suppliers, maybe a very high percentage of their suppliers, and they may have gone from — I don't remember the exact request, whether they went from 30 to 60 days, or what it was — but they got a meaningful extension.

So, you will — you know, in a couple years or a year, takes time to implement, you'll see higher payables, relative to sales, at Walmart than you saw a year or two ago.

And, you know, they are under a lot of pressure competing with Amazon and others, and that's one of the ways they expressed it.

And I've seen it done other places, and it's conceivable that one of our subsidiaries might deem it wise to do it, but I don't think they will. I mean, I think that the pressure for cash at Berkshire is not that high, and I think that the pressure for — or the desire for — great relations with suppliers is — would probably overcome, in most of our managers' minds, any desire to start extending terms.

CHARLIE MUNGER: Yeah. I think it's hard to do that, brutally, when you're rich and your supplier isn't, and think that your supplier is going to love you.

And so I think there's something to be said for leaning over backward to have a win-win relationship with both suppliers and customers, always. (Applause)

WARREN BUFFETT: It's never been pushed at Berkshire, that's for sure.

You can argue we got a pretty good thing going in float anyway, so — (Laughs)

CHARLIE MUNGER: Yeah, and we don't need it. Let somebody else set the record on that one.

25. "We don't need to inflate the figures"

WARREN BUFFETT: OK. Jonny?

JONATHAN BRANDT: Most American corporations separate out supposedly one-time restructuring costs, whereas Berkshire doesn't. Berkshire's reported operating earnings are, therefore, in my opinion, of higher quality.

Have you ever calculated how much higher operating earnings, on average, would be if Berkshire separated out plant closing costs, product line exits, severance pay, and similar items?

Is it a material number? Or does Berkshire not incur much in the way of these types of costs typically because most of your acquisitions are stand-alones?

CHARLIE MUNGER: Let me take that one.

That's a question like asking, why don't you kill your mother to get the insurance money? (Laughter)

We don't do it. We're not interested in manipulating those numbers, and we haven't had a restructuring charge ever, and I don't think we're about to start. (Applause)

WARREN BUFFETT: Yeah. I would say this, too, Johnny.

We don't do that. The numbers would not be huge. You know, there could be a year, I suppose, when they might be, for some reason, but they are more conservatively stated than most companies, and I think they're of higher quality.

But I've pointed out, also, that I think that our depreciation expense at the railroad, which is standard and which all of the other railroads use, is inadequate as a measure of true operating earnings, but that's —

CHARLIE MUNGER: And you're talking about — we like to advertise our defects.

WARREN BUFFETT: Not all of them. (Laughs)

There's no question that we — I think we will have more amortization of certain intangibles in our — which reduce earnings and reported earnings, but which, in reality, are not expenses — we'll have more of that than some companies.

And I've pointed that out. I haven't — I never want to report one of these things where I have the whole adjusted earnings set out and say, this is what you're supposed to pay attention to, because every one of those I've seen virtually results in some inflation of figures.

Things are good enough at Berkshire. We don't need to inflate the figures.

26. Berkshire Hathaway's credit default swaps

WARREN BUFFETT: OK. Station 5.

AUDIENCE MEMBER: This is Martin, calling from Germany. I'm a fixed-income manager.

We launched, with (inaudible), a fund and —

WARREN BUFFETT: You have my — you have my sympathy.

AUDIENCE MEMBER: Yeah, yeah. The volume is about 600, 650 million. We are 4.1 percent ahead this year.

Obviously my question is about fixed income. If I look in your annual report, it's about the volume of 25 billion. And if I add, let's say, the CDS, you were selling the CDS, it is by the volume of 7 or 8 billion.

So my concrete question is, the premium on your CDS is about 31 percent — 31 basis points — at the end of the year, so mark-to-market, it is probably at the high teens or 20s.

So would you consider to unwind this position? Are you allowed to do it and the (inaudible) say no? But probably you can make exactly the contrary trade on it. That means you are buying protection.

Is that a philosophy which you stand behind? Could you do that from the (inaudible) point of view, when the premiums are extremely low, which is at the case that the spreads are, as I said, between 15 and 20 basis points? Can you give —?

WARREN BUFFETT: Charlie, that sounds like it was designed for you. (Laughs)

I think he was referring to — we have one position left over from six or seven years ago, or thereabouts, that involves us selling protection on zero coupon municipal bonds with a nominal value — maturity value, which is — since there's zero coupons, is far off, and not present value, at all. I think 7.7 billion or something like that.

And we're just sitting with that position because we like the position. And the gentleman mentions that our CDS — our CDS is — that's an insurance premium against our debt that people buy.

A, there's a fair amount of activity in it from time to time, and I think that's partially caused by the fact that we neither collateralize that municipal contract that he refers to, but we don't collateralize, with minor exceptions, the equity puts that are still out there.

So the counterparties have to buy — I believe this is the case — I think the counterparties have to buy protection on Berkshire's credit through CDSs.

Now, the people they buy it from, their credit probably isn't as good as Berkshire's, so I mean I think they're — but it's probably an internal rule at some of these firms that are on the other side of the contract, and so — but that really doesn't make any difference to us.

Back in 2008 and ’9, our CDS prices went up to a crazy level, and I even commented here at the annual meeting that I would love to be selling them myself, except I wasn’t allowed to.

But what goes on in a CDS market really isn’t of any particular interest to us, and it’s too bad for the other guys. They didn’t get collateral from us and we wouldn’t have given it to them. And so they have to buy these things that, like I say, from our standpoint, they’re wasting their money, but they probably have internal rules that make them.

I think I’ve addressed your question, but — Charlie, do you think I’ve addressed his question?

CHARLIE MUNGER: Well, the truth of the matter is that we don’t pay much attention to trying to get an extra two basis points by being gamey on our short-term things. And that credit default position is a weird, historical accident, and we don’t pay much attention to it, either. It’ll go away in due course.

WARREN BUFFETT: Yeah. All of our contracts are just going to expire. We’re not — now, we do a few operational contracts in our energy company. I’ve mentioned a couple places where they — for their own reasons and sometimes because the utility commissions want them to — they do certain things, but it’s peanuts.

And the positions that I instituted six or seven years ago are basically all in a runoff position, and the first big runoffs will be in 2018, in a couple years.

CHARLIE MUNGER: We’re basically not in — we don’t fool around with our own credit defaults.

WARREN BUFFETT: No, no, never, no. But I would’ve liked to have sold them in 2008. (Laughs)

They actually got up — people were paying —

CHARLIE MUNGER: I know, it was crazy.

WARREN BUFFETT: — 500 basis points, 5 percent, in terms of betting that Berkshire would go broke, which was totally crazy, but I couldn’t take advantage of it. I wanted to, though.

27. A fantastic manager makes a huge difference

WARREN BUFFETT: Becky.

BECKY QUICK: This question comes from Tom Hinsley, a long-time shareholder from Houston, Texas, who says, “Over the years, you’ve been effusive in your praise of Ajit Jain and his contributions to Berkshire.

“In the 2009 chairman’s letter you wrote, ‘If Charlie, Ajit, and I are ever sinking in a boat, and you can only save one of us, swim to Ajit.’

My question is, what if we don't get to Ajit in time? Please comment on the impact on National Indemnity and Berkshire, and whether or not there's another Ajit in the house."

WARREN BUFFETT: There's not another Ajit in the house.

I didn't hear the part immediately before it when you were — but there is not another Ajit on the house.

BECKY QUICK: The impact on National Indemnity — I guess the impact on the insurance companies, as a result —

WARREN BUFFETT: If we lost him?

BECKY QUICK: Yeah.

WARREN BUFFETT: It would be very significant. And that would be true of some other managers of some other subsidiaries.

But it's quite dramatic with Ajit's operation, because, literally, there were a few years when we had, like, 25 or so — or 30 — people where that operation — it was an unusual period to be in — but where it's earning potential, under Ajit, was fantastic. That probably won't happen to that degree again. I wish it would.

But he's done a tremendous amount for Berkshire. But I can, you know, you can start with [GEICO CEO] Tony [Nicely] — you go to all — there have been a lot of managers that have created billions and billions of dollars of value for Berkshire. I mean, and maybe you can get into the tens of billions, you know.

It's — having a fantastic manager that has a large business — potential business — available to them, and who makes the most of it, you know, it's huge over time. You don't see it necessarily in a week or a month or anything of the sort.

But when you're building capital value, I mean, think of the value of [CEO] Jeff Bezos to Amazon. It wouldn't have happened without him, you know, and you're looking at huge values.

And I could name other situations. You know, the value of Tom Murphy and Dan Burke was the difference between zero and what they ended up with. I mean, they built that thing from a bankrupt UHF station in Albany.

It wasn't that they were — they didn't invent television or anything of the sort, they just managed it so well.

So, really outstanding managers, they're invaluable, and we want to —

Charlie and I can't do it ourselves, but we want to align ourselves with them and then, you know, have them feel about Berkshire the way we feel about it.

And if we do that, we have an enormous asset, and we do have, in Ajit and a number of the other managers. Charlie?

CHARLIE MUNGER: Yes, and Ajit has a longer shelf life than we do. (Laughter)

He'd be particularly missed.

WARREN BUFFETT: Well, let's not give up here, Charlie. (Laughter)

I reject such defeatism. (Laughs)

28. Paying a little money now to have a lot of money later

WARREN BUFFETT: Cliff.

CLIFF GALLANT: Thank you.

Low-to-negative interest rates is something that's been discussed a few times today, and you've mentioned its implications for a return on float.

I was wondering, how should shareholders value the 25 percent of the float that's been created by retrocessional reinsurance, where the business is booked at an underwriting loss, and at times, has adversely developed?

WARREN BUFFETT: Yeah. Cliff brings up, some of our business, in the insurance business, we take with either the probability of some underwriting loss, in order to get to use the money for a very long period of time. And it would look, under today's interest rates, like we can't do much with that.

There's two answers to that. We don't think it will — for the duration of the kind of contracts we have — we don't expect these rates, but we could be wrong.

But the second one, also, is that we do think that occasionally we will get chances, even in periods of low interest rates, to do things that are — will produce quite a bit — very reasonable returns.

And so we do not — we are not measuring it against, you know, double-A corporates, or anything of the sort. We're measuring it in the potential utility, to us with our really pretty unusual flexibility, in respect to the deployment of funds, and this long period when we'll have an opportunity, perhaps, to come up with one or two things that — where we can deploy

money at a rate that may be quite a bit higher than other people. Assume now the money can be deployed. Charlie?

CHARLIE MUNGER: Yeah, we're willing to pay a little money now to have just a certainty of having a lot of money available in case something really attractive comes up in a difficult time.

WARREN BUFFETT: Yeah. It's an option cost.

CHARLIE MUNGER: It's an option cost, right.

WARREN BUFFETT: And that option came in handy in 2008 and '9, for example.

CHARLIE MUNGER: Did it ever.

29. No nationwide bubble in residential real estate now

WARREN BUFFETT: OK. Station 6.

AUDIENCE MEMBER: Hi, Charlie and Warren. My name is Mindy Jensen, and I'm from Longmont, Colorado. I work for the largest real estate investing social network online, called BiggerPockets.com.

We're seeing investors starting to get concerned that the real estate market is a bit frothy, similar to the run-up of 2005, '6, and '7, that led to the crash in 2008.

Warren, in 2012, you told Becky Quick that if you had a way to easily manage them, you'd buy 100,000 houses and rent them out. How do you feel about the real estate market today?

WARREN BUFFETT: It's not as attractive as it was in 2012. (Laughs)

The — you know, we're not particularly better at predicting real estate markets than we are stock markets, or interest rate markets, but there's certainly — and it's driven to some extent by these low interest rates — but there's certainly properties that are being sold at very, very low cap rates that strike me as having more potential for loss than gain.

But again, if you can borrow money for very, very little, and you think you're getting into some very safe asset, 100 basis points or 150 basis points higher, there's a great temptation to do it.

I think it's a mistake to do that, but, you know, I could be wrong.

I don't see a nationwide bubble in residential real estate now, at all. I think, you know, I think in a place like Omaha or, you know — most of the country — you are not paying bubble prices for residential real estate.

But it's quite different than it was in 2012. And I don't think the next time around the problem is going to be a real estate bubble. I think that it certainly was the cause, in a very large part, of what happened in 2008 and '9, but I don't — I don't think it'll be a replica of that. Charlie?

CHARLIE MUNGER: Nothing to add.

30. Praise for portfolio managers Ted Weschler and Todd Combs

WARREN BUFFETT: OK. Andrew.

ANDREW ROSS SORKIN: Warren, Todd and Ted now have been at Berkshire for several years.

What have been their biggest hits, and failures, specifically?

And what have they learned from Charlie and Warren, and what are the biggest differences between you and them?

WARREN BUFFETT: Well, I'll answer the last part, the easiest.

I am trying to think of very big deals that we can do something in, in investments, or in business, preferably just in operating businesses.

I mean, they still are — their primary job is working on — each has a $9 billion portfolio, and one of them has, I don't know, perhaps seven or eight positions, and the other one has maybe thirteen or fourteen, but they have a very similar approach to investing.

They've both been enormously helpful in doing several things, including important things, that — for which they don't get paid a dime, and which they're just as happy working on as — working on the things — as they are when they're working on things that do pay off for them financially.

They've got — they're perfect cultural fits for Berkshire. They're smart at what they do. And, you know, they're a big addition to Berkshire. Charlie?

CHARLIE MUNGER: Again, I've got nothing to add.

WARREN BUFFETT: Did I cover the whole thing, Andrew, or was there one —a part I missed there?

ANDREW ROSS SORKIN: Biggest hits and failures. I think they specifically wanted to know, in terms of investments, and trying to understand the way you think perhaps — I think the question was more — I think — the implication was, the way they think and the way you think, are there differences?

WARREN BUFFETT: Yeah. They're — I would say they're — they have a bigger universe to work with, because they can look at ideas in which they can put 500 million, and I'm looking — I'm trying to think of ways to put, you know, sums into billions.

But — and they probably — well, they certainly — have more extensive knowledge of certain industries and activities in business that have developed in the last ten or fifteen years. They'd be smarter on that than I am.

But their approach to investing, I mean, they're looking for businesses that they understand and that are going to — and through the stocks of those businesses — that they can buy at a sensible price and that they think will be earning significantly more money five or ten years from now.

So it's very similar to what I'm thinking about, except I'd probably add another zero to it.

CHARLIE MUNGER: And we don't want to talk about specific hits and failures.

WARREN BUFFETT: No.

OK. Gregg.

Yeah, we will never get into disclosing — I mean, we file reports every 90 days that show what Berkshire does in marketable securities, but we don't identify — I may identify whether it's mine or theirs, but we don't get into identifying what they do individually.

31. We moved money to pay for Precision Castparts

GREGG WARREN: Looking at Berkshire's finance and financial products segment, there was a fairly significant increase in the amount of cash carried on the group's books last year.

After holding steady between 2 and 2-and-a-half billion dollars during 2012 to 2014, the amount of cash held at the segments spiked up to 5.4 billion at the end of the third quarter of last year, and $7.1 billion at the end of 2015.

This incidentally coincided with your acquisition of GE's railcar leasing unit, as well as the acquisition of several railcar repair maintenance facilities.

Sales and profitability were fairly solid last year, but don't really seem to account for the magnitude of the change in cash. And investments, debt, and other liabilities do not look to have changed significantly enough to count for the difference, perhaps accounting for about $1 billion of the increase.

Just wondering where the additional $3.5 billion in cash came from, and whether or not the elevated level of cash at the end of last year is excess to the business, or a new required level of cash for the operation?

WARREN BUFFETT: Yeah. Well, I can — I can't tell where it came from — you think I would, 3-and-a-half billion — but I can tell you why we were funneling money into the parent company and the finance company.

That money was basically dedicated to making the 22 billion portion of the Precision Castparts purchase that was accounted for by cash. We borrowed — we actually borrowed 12 billion — but 10 billion was what was — of the borrowing — was there.

And we pushed money from various sources, depending on who owned what and that sort of thing, we pushed money into those two entities, and eventually into the parent company, to take care of the 22 billion that was coming due, turned out to be at the end of January, when the Precision Castparts closed. There's really no significance to it other than that.

32. IBM is "coping with a considerable change"

WARREN BUFFETT: OK. Station 7.

AUDIENCE MEMBER: Good afternoon, Mr. Buffett and Mr. Munger. My name is Jeffrey Ustep (PH) from Cranford, New Jersey.

I just have a simple question for you. How would you explain IBM's moat?

WARREN BUFFETT: I'm not sure that's a simple question. (Laughs)

CHARLIE MUNGER: No, I don't either.

WARREN BUFFETT: Well, it has certain strengths and certain weaknesses. And I don't think we want to get into giving an investment analysis of any of the portfolio companies that we own.

I would — I think I probably better leave it there. Charlie?

CHARLIE MUNGER: Yeah. It's obviously coping with a considerable change in the computing world, and it's attempting something that's big and interesting, and God knows whether it's going to work modestly or very well.

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: I don't think Warren knows either.

WARREN BUFFETT: No. We'll find out whether the strengths are strengths. But —

CHARLIE MUNGER: But it's a field that a lot of intelligent people are trying to get big in.

33. Where Buffett and Munger get their sense of humor

WARREN BUFFETT: OK. We're going to go to Section 8, and then we will adjourn for 15 minutes, prior to the formal meeting of the company.

Station 8.

AUDIENCE MEMBER: Hello, everybody. Good afternoon. My name is Cristian Campos. I'm from New York City. I'm a senior accounting major at Baruch College, part of the City University of New York.

And, Mr. Buffett, in your annual shareholder letters, and during interviews, and even today, your sense of humor always shines through. Where does your sense of humor come from? Please tell us. Thank you. (Laughter)

WARREN BUFFETT: That's just the way I see the world. It's a very interesting and, at times, very humorous place. And actually, I think Charlie has a better sense of humor than I have, so I'll let him answer where he got his. (Laughter)

CHARLIE MUNGER: I think if you see the world accurately, it's bound to be humorous, because it's ridiculous. (Laughter and applause)

WARREN BUFFETT: Well, I think that's a good note to close on.

34. Shareholder Q&A concludes

WARREN BUFFETT: We will reconvene in 15 minutes for the formal part of the meeting.

We have one proxy item to act on, and — so I hope that those of you who are interested in learning more about, actually, the insurance aspects of climate change, will stick around, and we'll have a discussion on that. And I'll see you at 3:45. Thank you.

35. Berkshire's formal annual meeting begins

WARREN BUFFETT: OK. If everybody will please settle down, we'll proceed with the meeting.

The meeting will now come to order.

I'm Warren Buffett, chairman of the board of directors of the company. I welcome you to this 2016 annual meeting of shareholders.

This morning, I introduced the Berkshire Hathaway directors that are present.

Also with us today are partners in the firm of Deloitte & Touche, our auditors. They're available to respond to appropriate questions you might have concerning their firm's audit of the accounts of Berkshire.

Sharon Heck is secretary of Berkshire Hathaway, and she will make a written record of the proceedings.

Becki Amick has been appointed inspector of elections at this meeting. She will certify the count of votes cast in the election for directors, and the motion to be voted upon at this meeting.

The named proxy holders for this meeting are Walter Scott and Marc Hamburg.

Does the secretary have a report of the number of Berkshire shares outstanding — turned off the lights on me — entitled to vote and represented at the meeting?

SHARON HECK: Yes, I do.

As indicated in the proxy statement that accompanied the notice of this meeting that was sent to all shareholders of record on March 2nd, 2016, the record date for this meeting, there were 807,242 shares of Class A Berkshire Hathaway common stock outstanding, with each share entitled to one vote on motions considered at the meeting, and 1,254,393,030 shares of Class B Berkshire Hathaway common stock outstanding, with each share entitled to one ten-thousandth of one vote on motions considered at the meeting.

Of that number, 575,608 Class A shares and 772,724,950 Class B shares are represented at this meeting by proxies returned through Thursday evening, April 28th.

WARREN BUFFETT: Thank you. That number represents a quorum, and we will therefore directly proceed with the meeting.

The first order of business will be a reading of the minutes of the last meeting of shareholders. I recognize Mr. Walter Scott who will place a motion before the meeting.

WALTER SCOTT: I move that the reading of the minutes of the last meeting of shareholders be dispensed with and the minutes be approved.

WARREN BUFFETT: Do I hear a second?

MARC HAMBURG: I second the motion.

WARREN BUFFETT: The motion has been moved and seconded. We will vote on the motion by voice vote. All those in favor say, "Aye."

Opposed? The motion is carried.

36. Election of Berkshire directors

WARREN BUFFETT: The next item of business is to elect directors.

If a shareholder is present who did not send in a proxy or wishes to withdraw a proxy previously sent in, you may vote in person on the election of directors and other matters to be considered at this meeting. Please identify yourself to one of the meeting officials in the aisle so that you can receive a ballot.

I recognize Mr. Walter Scott to place a motion before the meeting with respect to election of directors.

WALTER SCOTT: I move that Warren Buffett, Charles Munger, Howard Buffett, Stephen Burke, Susan Decker, William Gates, David Gottesman, Charlotte Guyman, Thomas Murphy, Ron Olson, Walter Scott, and Meryl Witmer be elected as directors.

WARREN BUFFETT: Is there a second?

MARC HAMBURG: I second the motion.

WARREN BUFFETT: It has been moved and seconded that Warren Buffett, Charles Munger, Howard Buffett, Stephen Burke, Susan Decker, William Gates, David Gottesman, Charlotte Guyman, Thomas Murphy, Ronald Olson, Walter Scott, and Meryl Witmer be elected as directors.

Are there any other nominations or any discussion?

The nominations are ready to be acted upon. If there are any shareholders voting in person, they should now mark their ballot on the election of directors and deliver their ballot to one of the meeting officials in the aisles.

Miss Amick, when you are ready, you may give your report.

BECKI AMICK: My report is ready.

The ballot of the proxy holders, in response to proxies that were received through last Thursday evening, cast not less than 643,789 votes for each nominee. That number far exceeds a majority of the number of the total votes of all Class A and Class B shares outstanding.

The certification required by Delaware law of the precise count of the votes will be given to the secretary to be placed with the minutes of this meeting.

WARREN BUFFETT: Thank you, Miss Amick.

Warren Buffett, Charles Munger, Howard Buffett, Stephen Burke, Susan Decker, William Gates, David Gottesman, Charlotte Guyman, Thomas Murphy, Ronald Olson, Walter Scott, and Meryl Witmer have been elected as directors.

37. Shareholder proposal on climate change risks

WARREN BUFFETT: The next item of business is a motion put forth by the Nebraska Peace Foundation.

The motion is set forth in the proxy statement, and will the projectionist please put up number 9? Here we are.

The motion requested our insurance business issue a report describing their response to the risks posed by climate change, including specific initiatives and goals relating to each risk issue identified.

The directors have recommended that the shareholders vote against the proposal.

I will now recognize — and I think it'll be up in area one — I will now recognize Dr. James Hansen to present the motion.

But I believe, maybe, the gentleman from the Nebraska Peace Foundation may be introducing it, and then he may introduce Dr. Hansen.

To allow all interested shareholders to present their views, I ask the initial speaker to limit his remarks to five minutes, and then those — the microphone in zone one is available for those wishing to speak for or against the motion, subsequently — zone one is the only microphone station in operation.

For the benefit of those present, I ask that each speaker for or against the motion limit themselves, with the exception of the initial speaker, to two minutes, and confine your remarks solely to the motion. And the motion should be left up on the — let's see, is that up there or not? Yeah, OK, the motion shall be left up there.

In a sense, incidentally, it asks us to present a report about the risk to the insurance division by climate change, and I did address this subject in the annual report. That would be a report, and it was a report that was concurred in by Ajit Jain, who is our number one expert on insurance risks. So that does represent the view of our insurance division, and myself, as the chief risk officer.

But the subject now is open and we welcome the initial speaker's comments.

And if you're just going to introduce Dr. Hansen — I can't see who's who up there — then I presume that he will have the five minutes and then subsequent speakers will have two minutes. So go to it, you're on.

MARK VASINA: Thank you. My name is Mark Vasina. I'm the treasurer of the Nebraska Peace Foundation, the owner of one A share of Berkshire Hathaway.

We are the sponsor of the shareholder resolution which Mr. Buffett has described. In so doing, making the recommendation to develop a risk analysis and report on it, we're following the lead of the Bank of England, which last September published a comprehensive report on climate change risks facing the insurance industry, and recommended that its regulated companies conduct reviews of the risks and make this available.

The Bank of England regulates the UK insurance industry, which is the third-largest global insurance market. I'll turn the rest of my time over to world-renowned climate scientist Dr. James Hansen.

DR JAMES HANSEN: Thank you for this opportunity.

I want to make a suggestion that I hope you will ponder.

Some aspects of climate have become clear. Humans are changing the atmosphere, and we can measure how this is changing earth's energy balance. More energy is coming in than going out.

So the ocean is warming, ice sheets are melting, and sea level is beginning to rise.

We are now close to a point of handing young people a situation that will be out of control, with ice sheet disintegration and multimeter sea level rise during the lifetime of today's young people, which would mean loss of coastal cities and economic devastation.

Sea level rise would be irreversible on any time scale of interest to humanity. The other irreversible effect of rapid climate change would be extinction of a substantial fraction of the species on Earth.

The bottom line is that we cannot burn all fossil fuels, and the economic law of gravity is that as long as fossil fuels appear to be the cheapest energy, we will keep burning them.

So my request, given the respect and the trust the public has in you, is that you reflect upon the possibility of a public statement in favor of a revenue-neutral, gradually-rising carbon fee.

A carbon fee is needed to make the price of fossil fuels honest, to include the costs to humanity of their air pollution, water pollution, and climate change.

A rising carbon fee is needed to spur effective investments by the private sector in clean energies and energy efficiency.

Most important, it will steadily phase down fossil fuel use. I'm not asking you to endorse a carbon fee on the spot, but I hope that you will reflect upon it and perhaps provide a clear statement in your next report.

It could be your greatest legacy. It could affect everything, even the course of our future climate. T

Thanks.

WARREN BUFFETT: Thank you, Dr. Hansen.

I might say that we — (Applause)

— although we may differ on some specifics, and I don't know — I am no expert on this subject whatsoever — I don't think you and I have any difference in the fact that it's important that climate change — you know, since it's something where there is a point of no return — if we are on the course that you think is certain and I think is probable, that it's a terribly important subject.

But the motion that was put forth was relating to the insurance aspects of it, and we have discussed — believe me, we have thought and discussed insurance aspects, and I've, in effect, given a report in the — which was asked for by this — within the annual report.

So it is really not — the issue before the shareholders is not how I feel about whether climate change is real, or whether a carbon tax is appropriate, it's whether it poses a risk to our insurance business.

And I recognize the Bank of England — read that report — but we respectfully disagree with them in terms of — not in terms of the importance of climate change — but in terms of the risk to our insurance business.

We don't — we are not forced — we don't write policies for a long period of time. We're not forced to write a policy on anything, so we are — our judgment is made as propositions are presented to us, usually as to whether, for one year, we are willing to accept a given risk for a given price.

And that — obviously, climate is enormously important in our activities, hurricanes being the most important, probably, although we also get involved in earthquakes — but that is what the proposal is about, and that — and we've given a response to that, and it does not mean that we differ on the importance of climate change to the human race.

So with that, I would be delighted to hear from the various seconders.

JIM JONES: Hello. My name is Jim Jones. I'm the executive director of the Katie School of Insurance at Illinois State University.

I would like to express my concerns, based on three hidden risks associated with climate change.

The first relates to stranded assets of insurers investing in fossil fuels. The second is a more insidious risk related to climate change. This risk is associated with the long-term liabilities associated with property, life, and health lines of business.

And I realize that a number of intelligent people and experts don't see a long-term liability, but they're missing one important part, is that primary insurers are not able to withdraw or reprice books — entire books of business.

Following Hurricanes Katrina, Rita, and Wilma, new hurricane models were developed in Florida, and they attempted to get the recommended rate approvals for that. They were not allowed to, and so many insurers began to withdraw from that market.

Ten years later, that — about 40 percent of the underperforming business is still on the books of those insurers, and this could play out in several other states that are exposed to climate risk.

For a reinsurer, the value of reinsurance with their customers is a long-term business.

The reason why this is so important is because, according to my count, 156 of your reinsurance customers have filed climate change disclosures, and these customers are looking for long-term interest being protected by their reinsurer.

And if not, there's a potential for a relationship default risk that could occur if they perceived your reinsurance as just being one-year contracts that can be repriced or withdrawn.

And you enter into that world of the expanding market competition of alternative reinsurance, which just last year was $72 billion, and earlier this quarter, we set a record of $2.2 billion in cap bonds.

WARREN BUFFETT: Thank you. The — I would point out that we have not been asked, ever, to my knowledge, to write long-term contracts. Our primary insurers know that we look at it one year at a time, and we will not write business that we think has a major negative probability. They don't expect us to.

It's way less a relational business than in the past. It's much more a transactional business.

But it — we will not write — if we lose a customer because they want us to do something stupid, we lose the customer, and there is not a — in our business — I'm not speaking for other reinsurers, but in our business, and I believe with most other reinsurers, they are not going to do something that they think is terribly disadvantageous to them just to maintain a relationship. That's not really a relationship. It'd be a subsidy.

So I do — that does not strike me, frankly, as a factor at all of any negative consequence at Berkshire.

We — in terms of what happened after Katrina — rates went up, and actually it — the hurricane experience in Florida has been better than any period since before 1850 that we have any records on.

That's been a surprise to us, incidentally. But we have not written business — catastrophe business — in Florida during that period, because we didn't think the rates were adequate. They were adequate, we just were wrong about it.

So the — and incidentally, that does not — the fact that we walked away from cat business in Florida that we thought was mispriced — does not hurt us in the business.

It's really a — it's much more of a transactional business in the — there may have been a time when relationships were very big in reinsurance, but with so many entrants in it, it is very much a transactional business. And no one expects you to do something that's very stupid.

You know, if they do, it's the wrong kind of a relationship. But glad to hear the next speaker.

JANE KLEEB: Hello, Mr. Buffett. My name is Jane Kleeb. I run a group called Bold Nebraska, which was part of an unlikely alliance who beat Keystone XL, to protect the aquifer in our state as well as property rights.

And I met you several years at Senator Nelson's home, and I had pulled you aside and asked how could we get health care reform passed?

And you told me two things: You said, the polling numbers matter, and that we have to keep on applying public pressure.

And we feel the same way about climate change and climate action. The most recent Yale study said that even 47 percent of conservatives believe in climate change and want to start seeing corporate and government action.

And your response to this resolution struck me, because one of the sentences said that if you live in a low-lying area, you should probably move.

Well, we work with Native brothers and sisters who live in coastal communities, and one of those tribes is now the first United States climate refugees.

They didn't have the option to move. They were forced to move.

And so we're turning to you and we're turning to ourselves to continue to apply public pressure and hope that both you and Charlie stand with us.

And maybe it's not this year, and maybe it's not the year after, but we really look forward to you doing full climate risk analysis, as well as divesting from all the fossil fuels that you own.

And lastly, it takes both small and mighty, as well as big and powerful, to solve this problem of climate change. So you blocking small solar in Nevada is the wrong road to go down. Thank you. (Scattered applause)

WARREN BUFFETT: I think you'll have a reasonable time to move, but I would say, if you're making a 50-year investment in low-lying properties, it's probably a mistake.

I actually said you may — as a homeowner in a low-lying area — you may wish to consider moving.

And I would say that if you expect to be there for ten years or so, I don't think I would consider moving. But if I thought I was making a 100-year investment, I don't think I would make it.

I think it gets to the question — we have a shareholder proposal that says, what are the risks to the insurance division from climate change?

We're not denying climate change is an incredibly important subject. We're not denying its existence.

But it will not hurt our insurance business, and it's immaterial compared to other things that could affect our insurance business. And, you know, that is the issue before the meeting. But I'll be glad to hear from the next speaker.

AUDIENCE MEMBER: Good afternoon, Mr. Buffett. My name is Kay Harn (PH). I've been a shareholder for more than a decade, basically my investing life.

Today someone said that you think ahead of the crowd. With regards to this resolution, you're saying that the Berkshire insurance business will just raise rates the next time the policy is renewed, and that makes sense. But you agree that climate change poses a major problem for our planet.

I would say that climate change poses a major problem for the stability of our global financial markets, if the political action continues at its current pace with regards to this issue.

I personally agree with Dr. Hansen, that a carbon fee is the solution to address this issue. I'm wondering if you can tell us what you think the solution to address this issue is, and whether you think the Berkshire businesses, more broadly than just insurance, will be impacted by this issue in the next decade or two.

WARREN BUFFETT: Yeah. I would doubt if it's affected in the next decade or two.

But I won't argue with you at all that it's likely, not certain, that — unless various techniques are designed for reducing — well, for sequestration, different things of that sort — that plenty of people will be working on — or unless the emissions greenhouse — gas emissions — are reduced significantly — that it's a terribly important problem for civilization.

And there have been other — I mean, there's certainly going to be some very smart people working on ways to change the balance in some way, either through less being released in the atmosphere or by various techniques that might diminish the impact, but no one here will deny that it's important.

I don't think it will impact — I don't think it will impact, in a serious way, the climate — or insurance, for that matter — in the next decade or two.

But, as I pointed out in the report, if you're dealing with something where there's a point of — where you pass a point of no return, the time to do something isn't when we get ten minutes away from the point of no return.

So there are policies, which we've subscribed to very strongly, in terms of renewables and that sort of thing, but I think there's also possibilities that within the scientific community, there will be solutions that are beyond my limited knowledge of physics to conjure up myself, but there are a whole lot of people out there that are a lot smarter.

And I think that a basic problem on the reduction — if those things don't come to pass — is the fact that it's a planetary problem, and it requires cooperation by very important countries, and I think President Obama has made a good start in working with leaders of other countries. But it can't be solved by the United States alone, as you know better than I.

I'd be glad to hear from the next speaker.

AUDIENCE MEMBER: Hello. My name is Nancy Meyer (PH), and I've been a shareholder for 15 years with my husband.

We have great faith in Berkshire Hathaway. That's why we invested. So I'm just here to say that, as a shareholder, I'd like to ask my fellow shareholders to consider the economic costs of climate change and urge Berkshire Hathaway to adopt this resolution to show leadership in the insurance industry. Thank you.

WARREN BUFFETT: Thank you. I appreciate the fact you've been a shareholder, but I do think for reasons that — I don't really think that the resolution — I think the resolution is, in a sense, inapplicable to our insurance business.

I mean, insurance — global climate is not a risk to our insurance business. It may be a risk to the planet over time, but that's a different thing.

I mean, you can — we can adopt all kinds of resolutions about saying that, obviously, nuclear proliferation is a threat to the planet, and you can say, well then, it's a threat to Berkshire.

But in terms of being Berkshire-specific, you know, you can read the resolution and, like I say, our answer, with Ajit Jain, probably the smartest person I know in insurance, and I have 99 percent of my net worth in Berkshire that's all destined to go to philanthropic institutions, and I'm not eager to see that disappear, and I do regard myself as the chief risk officer of Berkshire, and I worry about things that can hurt Berkshire, and I do not see it in our insurance division, in relation to climate change. But, thank you.

RICHARD MILLER: Good afternoon, Mr. Buffett. I am Richard Miller, in the Creighton Theology Department, here in Omaha. And I study and teach climate change and its social effects.

I just wanted to make you aware that Berkshire is operating within a larger economy, and that the most important climate analysis — economic analysis — from Nicholas Stern, indicates that on our current path, by the end of this century, 30 percent loss in global GDP is possible.

The other issue is, when we talk about doing something about climate change, doing something means to avoid major sea level rise, we need to reduce emissions globally, starting today, 7 percent per year.

The only time we've ever reduced emissions, over a ten-year period, in a growing economy, was in the 1990s in England, and we reduced them 1 percent per year.

So we're talking about a completely different thing than President Obama's gradual move.

And we need to do something — no, we need to do massive transformation — immediately. And with your large global holdings, you are a world significant figure on this, not just about this particular shareholder resolution. Thank you for your time.

WARREN BUFFETT: Thank you.

Is that the — complete the speakers?

AUDIENCE MEMBER: Say that again?

WARREN BUFFETT: Are you the final speaker?

AUDIENCE MEMBER: Yes, I think those are all the speakers.

WARREN BUFFETT: OK. Well, thank you. Charlie, do you have anything you want to say?

CHARLIE MUNGER: Well, yes.

We're in Omaha, which is considerably above sea level. We have no big economic interest in this subject in our insurance companies. We don't write much of that catastrophic insurance we used to write many years ago.

So we're asked, as a corporation, to take a public stance on very complicated issues. We've got crime in the cities. We've got 100 — we've got 1,000 — complicated issues that are very material to our civilization.

And if we spend our time in the meeting taking public stands on all of them, I think it would be quite counterproductive.

And I don't like the fact that the people that constantly present this issue never discuss any solution, except reducing consumption of fossil fuels.

So there are geo-engineering possibilities that nobody's willing to talk about, and I think that's asinine, so put me down as not welcoming. (Applause)

WARREN BUFFETT: We don't want to have a political rally.

The motion is now ready to be acted upon. If there are any shareholders voting in person, they should now mark their ballots on the motion and deliver their ballot to one of the meeting officials in the aisles.

Ms. Amick, when you are ready, you may give your report.

BECKI AMICK: My report is ready.

The ballot of the proxy holders, in response to proxies that were received through last Thursday evening, cast 69,114 votes for the motion and 531,724 votes against the motion.

As the number of votes against the motion exceeds a majority of the number of votes of all Class A and Class B shares properly cast on the matter, as well as all votes outstanding, the motion has failed.

The certification required by Delaware law of the precise count of the votes will be given to the secretary to be placed with the minutes of this meeting.

WARREN BUFFETT: Thank you, Ms. Amick. The proposal fails.

38. Adjournment

WARREN BUFFETT: Does anyone have any questions for our audit firm before we adjourn? If not, I recognize Mr. Scott to place a motion before the meeting.

WALTER SCOTT: I move this meeting be adjourned.

WARREN BUFFETT: Mr. Olson?

RON OLSON: And I second it.

WARREN BUFFETT: Motion to adjourn has been made and seconded. We will vote by voice. Is there any discussion? If not, all in favor say, “Aye.”

All opposed say, “No.”

Berkshire's Performance vs. the S&P 500

Year	Annual Percentage Change in Per-Share Book Value of Berkshire	in Per-Share Market Value of Berkshire	in S&P 500 with Dividends Included
1965	23.8	49.5	10.0
1966	20.3	(3.4)	(11.7)
1967	11.0	13.3	30.9
1968	19.0	77.8	11.0
1969	16.2	19.4	(8.4)
1970	12.0	(4.6)	3.9
1971	16.4	80.5	14.6
1972	21.7	8.1	18.9
1973	4.7	(2.5)	(14.8)
1974	5.5	(48.7)	(26.4)
1975	21.9	2.5	37.2
1976	59.3	129.3	23.6
1977	31.9	46.8	(7.4)
1978	24.0	14.5	6.4
1979	35.7	102.5	18.2
1980	19.3	32.8	32.3
1981	31.4	31.8	(5.0)
1982	40.0	38.4	21.4
1983	32.3	69.0	22.4
1984	13.6	(2.7)	6.1
1985	48.2	93.7	31.6
1986	26.1	14.2	18.6
1987	19.5	4.6	5.1
1988	20.1	59.3	16.6
1989	44.4	84.6	31.7
1990	7.4	(23.1)	(3.1)
1991	39.6	35.6	30.5
1992	20.3	29.8	7.6
1993	14.3	38.9	10.1
1994	13.9	25.0	1.3
1995	43.1	57.4	37.6
1996	31.8	6.2	23.0
1997	34.1	34.9	33.4
1998	48.3	52.2	28.6
1999	0.5	(19.9)	21.0
2000	6.5	26.6	(9.1)
2001	(6.2)	6.5	(11.9)
2002	10.0	(3.8)	(22.1)
2003	21.0	15.8	28.7
2004	10.5	4.3	10.9
2005	6.4	0.8	4.9
2006	18.4	24.1	15.8
2007	11.0	28.7	5.5
2008	(9.6)	(31.8)	(37.0)
2009	19.8	2.7	26.5
2010	13.0	21.4	15.1
2011	4.6	(4.7)	2.1
2012	14.4	16.8	16.0
2013	18.2	32.7	32.4
2014	8.3	27.0	13.7
2015	6.4	(12.5)	1.4
2016	10.7	23.4	12.0
Compounded Annual Gain – 1965-2016	19.0%	20.8%	9.7%
Overall Gain – 1964-2016	884,319%	1,972,595%	12,717%

Notes: Data are for calendar years with these exceptions: 1965 and 1966, year ended 9/30; 1967, 15 months ended 12/31. Starting in 1979, accounting rules required insurance companies to value the equity securities they hold at market rather than at the lower of cost or market, which was previously the requirement. In this table, Berkshire's results through 1978 have been restated to conform to the changed rules. In all other respects, the results are calculated using the numbers originally reported. The S&P 500 numbers are **pre-tax** whereas the Berkshire numbers are **after-tax**. If a corporation such as Berkshire were simply to have owned the S&P 500 and accrued the appropriate taxes, its results would have lagged the S&P 500 in years when that index showed a positive return, but would have exceeded the S&P 500 in years when the index showed a negative return. Over the years, the tax costs would have caused the aggregate lag to be substantial.

BERKSHIRE HATHAWAY INC.

To the Shareholders of Berkshire Hathaway Inc.:

Berkshire's gain in net worth during 2016 was $27.5 billion, which increased the per-share book value of both our Class A and Class B stock by 10.7%. Over the last 52 years (that is, since present management took over), per-share book value has grown from $19 to $172,108, a rate of 19% compounded annually.*

During the first half of those years, Berkshire's net worth was roughly equal to the number that really counts: the intrinsic value of the business. The similarity of the two figures existed then because most of our resources were deployed in marketable securities that were regularly revalued to their quoted prices (less the tax that would be incurred if they were to be sold). In Wall Street parlance, our balance sheet was then in very large part "marked to market."

By the early 1990s, however, our focus was changing to the outright ownership of businesses, a shift that materially diminished the relevance of balance sheet figures. That disconnect occurred because the accounting rules (commonly referred to as "GAAP") that apply to companies we control differ in important ways from those used to value marketable securities. Specifically, the accounting for *businesses* we own requires that the carrying value of "losers" be written down when their failures become apparent. "Winners," conversely, are *never* revalued upwards.

We've experienced both outcomes: As is the case in marriage, business acquisitions often deliver surprises *after* the "I do's." I've made some dumb purchases, paying far too much for the economic goodwill of companies we acquired. That later led to goodwill write-offs and to consequent reductions in Berkshire's book value. We've also had some winners among the businesses we've purchased – a few of the winners very big – but have not written those up by a penny.

We have no quarrel with the asymmetrical accounting that applies here. But, over time, it necessarily widens the gap between Berkshire's intrinsic value and its book value. Today, the large – and growing – unrecorded gains at our winners produce an intrinsic value for Berkshire's shares that *far* exceeds their book value. The overage is truly huge in our property/casualty insurance business and significant also in many other operations.

Over time, stock prices gravitate toward intrinsic value. That's what has happened at Berkshire, a fact explaining why the company's 52-year market-price gain – shown on the facing page – materially exceeds its book-value gain.

* All per-share figures used in this report apply to Berkshire's A shares. Figures for the B shares are 1/1500th of those shown for A.

What We Hope to Accomplish

Charlie Munger, Berkshire's Vice Chairman and my partner, and I expect Berkshire's *normalized* earning power per share to increase every year. *Actual* earnings, of course, will sometimes decline because of periodic weakness in the U.S. economy. In addition, insurance mega-catastrophes or other industry-specific events may occasionally reduce earnings at Berkshire, even when most American businesses are doing well.

It's our job, though, to over time deliver significant growth, bumpy or not. After all, as stewards of *your* capital, Berkshire directors have opted to retain all earnings. Indeed, in both 2015 and 2016 Berkshire ranked first among American businesses in the dollar volume of earnings retained, in each year reinvesting many billions of dollars more than did the runner-up. Those reinvested dollars must earn their keep.

Some years, the gains in underlying earning power we achieve will be minor; very occasionally, the cash register will ring loud. Charlie and I have no magic plan to add earnings except to dream big and to be prepared mentally and financially to act fast when opportunities present themselves. Every decade or so, dark clouds will fill the economic skies, and they will briefly rain gold. When downpours of that sort occur, it's imperative that we rush outdoors carrying washtubs, not teaspoons. And that we will do.

I earlier described our gradual shift from a company obtaining most of its gains from investment activities to one that grows in value by owning businesses. Launching that transition, we took baby steps – making small acquisitions whose impact on Berkshire's profits was dwarfed by our gains from marketable securities. Despite that cautious approach, I made one particularly egregious error, acquiring Dexter Shoe for $434 million in 1993. Dexter's value promptly went to zero. The story gets worse: I used stock for the purchase, giving the sellers 25,203 shares of Berkshire that at yearend 2016 were worth more than $6 billion.

That wreck was followed by three key happenings – two positive, one negative – that set us firmly on our present course. At the beginning of 1996, we acquired the half of GEICO we didn't already own, a cash transaction that changed our holding from a portfolio investment into a wholly-owned operating business. GEICO, with its almost unlimited potential, quickly became the centerpiece around which we built what I believe is now the world's premier property/casualty business.

Unfortunately, I followed the GEICO purchase by foolishly using Berkshire stock – a *boatload* of stock – to buy General Reinsurance in late 1998. After some early problems, General Re has become a fine insurance operation that we prize. It was, nevertheless, a terrible mistake on my part to issue 272,200 shares of Berkshire in buying General Re, an act that increased our outstanding shares by a whopping 21.8%. My error caused Berkshire shareholders to give far more than they received (a practice that – despite the Biblical endorsement – is far from blessed when you are buying businesses).

Early in 2000, I atoned for that folly by buying 76% (since grown to 90%) of MidAmerican Energy, a brilliantly-managed utility business that has delivered us many large opportunities to make profitable and socially-useful investments. The MidAmerican *cash* purchase – I was learning – firmly launched us on our present course of (1) continuing to build our insurance operation; (2) energetically acquiring large and diversified non-insurance businesses and (3) largely making our deals from internally-generated cash. (Today, I would rather prep for a colonoscopy than issue Berkshire shares.)

Our portfolio of bonds and stocks, de-emphasized though it is, has continued in the post-1998 period to grow and to deliver us hefty capital gains, interest, and dividends. Those portfolio earnings have provided us major help in financing the purchase of businesses. Though unconventional, Berkshire's two-pronged approach to capital allocation gives us a real edge.

Here's our financial record since 1999, when the redirection of our business began in earnest. During the 18-year period covered, Berkshire's outstanding shares grew by only 8.3%, with most of the increase occurring when we purchased BNSF. That, I'm happy to say, was one issuance of stock that made good sense.

After-Tax Earnings
(in billions of dollars)

Year	Operations (1)	Capital Gains (2)	Year	Operations (1)	Capital Gains (2)
1999	0.67	0.89	2008	9.64	(4.65)
2000	0.94	2.39	2009	7.57	0.49
2001	(0.13)	0.92	2010	11.09	1.87
2002	3.72	0.57	2011	10.78	(0.52)
2003	5.42	2.73	2012	12.60	2.23
2004	5.05	2.26	2013	15.14	4.34
2005	5.00	3.53	2014	16.55	3.32
2006	9.31	1.71	2015	17.36	6.73
2007	9.63	3.58	2016	17.57	6.50

(1) Including interest and dividends from investments, but *excluding* capital gains or losses.

(2) In very large part, this tabulation includes only *realized* capital gains or losses. Unrealized gains and losses are also included, however, when GAAP requires that treatment.

Our expectation is that investment gains will continue to be substantial – though totally random as to timing – and that these will supply significant funds for business purchases. Concurrently, Berkshire's superb corps of operating CEOs will focus on increasing earnings at the individual businesses they manage, sometimes helping them to grow by making bolt-on acquisitions. By our avoiding the issuance of Berkshire stock, any improvement in earnings will translate into equivalent per-share gains.

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Our efforts to materially increase the normalized earnings of Berkshire will be aided – as they have been throughout our managerial tenure – by America's economic dynamism. One word sums up our country's achievements: miraculous. From a standing start 240 years ago – a span of time less than triple my days on earth – Americans have combined human ingenuity, a market system, a tide of talented and ambitious immigrants, and the rule of law to deliver abundance beyond any dreams of our forefathers.

You need not be an economist to understand how well our system has worked. Just look around you. See the 75 million owner-occupied homes, the bountiful farmland, the 260 million vehicles, the hyper-productive factories, the great medical centers, the talent-filled universities, you name it – they all represent a net gain for Americans from the barren lands, primitive structures and meager output of 1776. Starting from scratch, America has amassed wealth totaling $90 trillion.

It's true, of course, that American owners of homes, autos and other assets have often borrowed heavily to finance their purchases. If an owner defaults, however, his or her asset does not disappear or lose its usefulness. Rather, ownership customarily passes to an American lending institution that then disposes of it to an American buyer. Our *nation's* wealth remains intact. As Gertrude Stein put it, "Money is always there, but the pockets change."

Above all, it's our market system – an economic traffic cop ably directing capital, brains and labor – that has created America's abundance. This system has also been the primary factor in allocating rewards. Governmental redirection, through federal, state and local taxation, has in addition determined the distribution of a significant portion of the bounty.

America has, for example, decided that those citizens in their productive years should help both the old and the young. Such forms of aid – sometimes enshrined as "entitlements" – are generally thought of as applying to the aged. But don't forget that four million American babies are born each year with an entitlement to a public education. That societal commitment, largely financed at the local level, costs about $150,000 per baby. The annual cost totals more than $600 billion, which is about 3½% of GDP.

However our wealth may be divided, the mind-boggling amounts you see around you belong almost exclusively to Americans. Foreigners, of course, own or have claims on a modest portion of our wealth. Those holdings, however, are of little importance to our national balance sheet: *Our* citizens own assets abroad that are roughly comparable in value.

Early Americans, we should emphasize, were neither smarter nor more hard working than those people who toiled century after century before them. But those venturesome pioneers crafted a system that unleashed human potential, and their successors built upon it.

This economic creation will deliver increasing wealth to our progeny far into the future. Yes, the build-up of wealth will be interrupted for short periods from time to time. It will not, however, be stopped. I'll repeat what I've both said in the past and expect to say in future years: Babies born in America today are the luckiest crop in history.

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America's economic achievements have led to staggering profits for stockholders. During the 20th century the Dow-Jones Industrials advanced from 66 to 11,497, a 17,320% capital gain that was materially boosted by steadily increasing dividends. The trend continues: By yearend 2016, the index had advanced a further 72%, to 19,763.

American business – and consequently a basket of stocks – is virtually certain to be worth far more in the years ahead. Innovation, productivity gains, entrepreneurial spirit and an abundance of capital will see to that. Ever-present naysayers may prosper by marketing their gloomy forecasts. But heaven help them if they act on the nonsense they peddle.

Many companies, of course, will fall behind, and some will fail. Winnowing of that sort is a product of market dynamism. Moreover, the years ahead will occasionally deliver major market declines – even panics – that will affect virtually all stocks. No one can tell you when these traumas will occur – not me, not Charlie, not economists, not the media. Meg McConnell of the New York Fed aptly described the reality of panics: "We spend a lot of time looking for systemic risk; in truth, however, it tends to find us."

During such scary periods, you should never forget two things: First, widespread fear is your *friend* as an investor, because it serves up bargain purchases. Second, *personal* fear is your enemy. It will also be unwarranted. Investors who avoid high and unnecessary costs and simply sit for an extended period with a collection of large, conservatively-financed American businesses will almost certainly do well.

As for Berkshire, our size precludes a *brilliant* result: Prospective returns fall as assets increase. Nonetheless, Berkshire's collection of good businesses, along with the company's impregnable financial strength and owner-oriented culture, should deliver decent results. We won't be satisfied with less.

Share Repurchases

In the investment world, discussions about share repurchases often become heated. But I'd suggest that participants in this debate take a deep breath: Assessing the desirability of repurchases isn't that complicated.

From the standpoint of exiting shareholders, repurchases are always a plus. Though the day-to-day impact of these purchases is usually minuscule, it's always better for a seller to have an additional buyer in the market.

For continuing shareholders, however, repurchases only make sense if the shares are bought at a price below intrinsic value. When that rule is followed, the remaining shares experience an immediate gain in intrinsic value. Consider a simple analogy: If there are three equal partners in a business worth $3,000 and one is bought out by the partnership for $900, each of the remaining partners realizes an immediate gain of $50. If the exiting partner is paid $1,100, however, the continuing partners each suffer a loss of $50. The same math applies with corporations and their shareholders. Ergo, the question of whether a repurchase action is value-enhancing or value-destroying for continuing shareholders is entirely purchase-price dependent.

It is puzzling, therefore, that corporate repurchase announcements almost never refer to a price above which repurchases will be eschewed. That certainly wouldn't be the case if a management was buying an outside business. There, price would always factor into a buy-or-pass decision.

When CEOs or boards are buying a small part of their own company, though, they all too often seem oblivious to price. Would they behave similarly if they were managing a private company with just a few owners and were evaluating the wisdom of buying out one of them? Of course not.

It is important to remember that there are two occasions in which repurchases should not take place, even if the company's shares are underpriced. One is when a business both needs all its available money to protect or expand its own operations and is also uncomfortable adding further debt. Here, the internal need for funds should take priority. This exception assumes, of course, that the business has a decent future awaiting it after the needed expenditures are made.

The second exception, less common, materializes when a business acquisition (or some other investment opportunity) offers far greater value than do the undervalued shares of the potential repurchaser. Long ago, Berkshire itself often had to choose between these alternatives. At our present size, the issue is far less likely to arise.

My suggestion: Before even discussing repurchases, a CEO and his or her Board should stand, join hands and in unison declare, "What is smart at one price is stupid at another."

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To recap Berkshire's own repurchase policy: I am authorized to buy large amounts of Berkshire shares at 120% or less of book value because our Board has concluded that purchases at that level clearly bring an instant and material benefit to continuing shareholders. By our estimate, a 120%-of-book price is a significant discount to Berkshire's intrinsic value, a spread that is appropriate because calculations of intrinsic value can't be precise.

The authorization given me does not mean that we will "prop" our stock's price at the 120% ratio. If that level is reached, we will instead attempt to blend a desire to make meaningful purchases at a value-creating price with a related goal of not over-influencing the market.

To date, repurchasing our shares has proved hard to do. That may well be because we have been clear in describing our repurchase policy and thereby have signaled our view that Berkshire's intrinsic value is significantly higher than 120% of book value. If so, that's fine. Charlie and I prefer to see Berkshire shares sell in a fairly narrow range around intrinsic value, neither wishing them to sell at an unwarranted high price – it's no fun having owners who are disappointed with their purchases – nor one too low. Furthermore, our buying out "partners" at a discount is not a particularly gratifying way of making money. Still, market circumstances could create a situation in which repurchases would benefit both continuing and exiting shareholders. If so, we will be ready to act.

One final observation for this section: As the subject of repurchases has come to a boil, some people have come close to calling them un-American – characterizing them as corporate misdeeds that divert funds needed for productive endeavors. That simply isn't the case: Both American corporations and private investors are today awash in funds looking to be sensibly deployed. I'm not aware of *any* enticing project that in recent years has died for lack of capital. (Call us if you have a candidate.)

Insurance

Let's now look at Berkshire's various businesses, starting with our most important sector, insurance. The property/casualty ("P/C") branch of that industry has been the engine that has propelled our growth since 1967, the year we acquired National Indemnity and its sister company, National Fire & Marine, for $8.6 million. Today, National Indemnity is the largest property/casualty company in the world as measured by net worth.

One reason we were attracted to the P/C business was its financial characteristics: P/C insurers receive premiums upfront and pay claims later. In extreme cases, such as claims arising from exposure to asbestos, payments can stretch over many decades. This collect-now, pay-later model leaves P/C companies holding large sums – money we call "float" – that will eventually go to others. Meanwhile, insurers get to invest this float for their own benefit. Though individual policies and claims come and go, the amount of float an insurer holds usually remains fairly stable in relation to premium volume. Consequently, as our business grows, so does our float. And *how* it has grown, as the following table shows:

Year	*Float (in millions)*
1970	$ 39
1980	237
1990	1,632
2000	27,871
2010	65,832
2016	91,577

We recently wrote a huge policy that increased float to more than $100 billion. Beyond that one-time boost, float at GEICO and several of our specialized operations is almost certain to grow at a good clip. National Indemnity's reinsurance division, however, is party to a number of large run-off contracts whose float is certain to drift downward.

We may in time experience a decline in float. If so, the decline will be *very* gradual – at the outside no more than 3% in any year. The nature of our insurance contracts is such that we can *never* be subject to immediate or near-term demands for sums that are of significance to our cash resources. This structure is by design and is a key component in the unequaled financial strength of our insurance companies. It will *never* be compromised.

If our premiums exceed the total of our expenses and eventual losses, our insurance operation registers an underwriting profit that adds to the investment income the float produces. When such a profit is earned, we enjoy the use of free money – and, better yet, get *paid* for holding it.

Unfortunately, the wish of all insurers to achieve this happy result creates intense competition, so vigorous indeed that it sometimes causes the P/C industry as a whole to operate at a significant underwriting *loss*. This loss, in effect, is what the industry pays to hold its float. Competitive dynamics almost guarantee that the insurance industry, despite the float income all its companies enjoy, will continue its dismal record of earning subnormal returns on tangible net worth as compared to other American businesses.

This outcome is made more certain by the dramatically lower interest rates that now exist throughout the world. The investment portfolios of almost all P/C companies – though *not* those of Berkshire – are heavily concentrated in bonds. As these high-yielding legacy investments mature and are replaced by bonds yielding a pittance, earnings from float will steadily fall. For that reason, and others as well, it's a good bet that industry results over the next ten years will fall short of those recorded in the past decade, particularly in the case of companies that specialize in reinsurance.

Nevertheless, I very much like our own prospects. Berkshire's unrivaled financial strength allows us far more flexibility in investing than that generally available to P/C companies. The many alternatives available to us are always an advantage; occasionally, they offer us major opportunities. When others are constrained, our choices expand.

Moreover, our P/C companies have an excellent underwriting record. Berkshire has now operated at an underwriting profit for 14 consecutive years, our pre-tax gain for the period having totaled $28 billion. That record is no accident: Disciplined risk evaluation is the daily focus of *all* of our insurance managers, who know that while float is valuable, its benefits can be drowned by poor underwriting results. All insurers give that message lip service. At Berkshire it is a religion, Old Testament style.

So how does our float affect intrinsic value? When Berkshire's *book* value is calculated, the *full* amount of our float is deducted as a *liability*, just as if we had to pay it out tomorrow and could not replenish it. But to think of float as a typical liability is a major mistake. It should instead be viewed as a revolving fund. Daily, we pay old claims and related expenses – a huge $27 billion to more than six million claimants in 2016 – and that reduces float. Just as surely, we each day write new business that will soon generate its own claims, adding to float.

If our revolving float is both costless and long-enduring, which I believe it will be, the true value of this liability is *dramatically* less than the accounting liability. Owing $1 that in effect will never leave the premises – because new business is almost certain to deliver a substitute – is worlds different from owing $1 that will go out the door tomorrow and not be replaced. The two types of liabilities, however, are treated as equals under GAAP.

A partial offset to this overstated liability is a $15.5 billion "goodwill" asset that we incurred in buying our insurance companies and that is included in our book-value figure. In very large part, this goodwill represents the price we paid for the float-generating capabilities of our insurance operations. The cost of the goodwill, however, has *no* bearing on its true value. For example, if an insurance company sustains large and prolonged underwriting losses, *any* goodwill asset carried on the books should be deemed valueless, whatever its original cost.

Fortunately, that does not describe Berkshire. Charlie and I believe the true economic value of our insurance goodwill – what we would happily pay for float *of similar quality* were we to purchase an insurance operation possessing it – to be *far* in excess of its historic carrying value. Indeed, almost the entire $15.5 billion we carry for goodwill in our insurance business was already on our books in 2000 when float was $28 billion. Yet we have subsequently increased our float by $64 billion, a gain that in no way is reflected in our book value. This unrecorded asset is one reason – a huge reason – why we believe Berkshire's intrinsic business value far exceeds its book value.

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Berkshire's attractive insurance economics exist only because we have some terrific managers running disciplined operations that in most cases possess hard-to-replicate business models. Let me tell you about the major units.

First by float size is the Berkshire Hathaway Reinsurance Group, managed by Ajit Jain. Ajit insures risks that no one else has the desire or the capital to take on. His operation combines capacity, speed, decisiveness and, most important, brains in a manner unique in the insurance business. Yet he never exposes Berkshire to risks that are inappropriate in relation to our resources.

Indeed, Berkshire is *far* more conservative in avoiding risk than most large insurers. For example, if the insurance industry should experience a $250 billion loss from some mega-catastrophe – a loss about triple anything it has ever experienced – Berkshire as a whole would likely record a large profit for the year. Our many streams of non-insurance earnings would see to that. Additionally, we would remain awash in cash and be eager to write business in an insurance market that might well be in disarray. Meanwhile, other major insurers and reinsurers would be swimming in red ink, if not facing insolvency.

When Ajit entered Berkshire's office on a Saturday in 1986, he did not have a day's experience in the insurance business. Nevertheless, Mike Goldberg, then our manager of insurance, handed him the keys to our small and struggling reinsurance business. With that move, Mike achieved sainthood: Since then, Ajit has created tens of billions of value for Berkshire shareholders. If there were ever to be another Ajit and you could swap me for him, *don't hesitate*. Make the trade!

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We have another reinsurance powerhouse in General Re, managed until recently by Tad Montross. After 39 years at General Re, Tad retired in 2016. Tad was a class act in every way and we owe him a ton of thanks. Kara Raiguel, who has worked with Ajit for 16 years, is now CEO of General Re.

At bottom, a sound insurance operation needs to adhere to four disciplines. It must (1) understand *all* exposures that might cause a policy to incur losses; (2) conservatively assess the likelihood of any exposure actually causing a loss and the probable cost if it does; (3) set a premium that, on average, will deliver a profit after both prospective loss costs and operating expenses are covered; and (4) be willing to walk away if the appropriate premium can't be obtained.

Many insurers pass the first three tests and flunk the fourth. They simply can't turn their back on business that is being eagerly written by their competitors. That old line, "The other guy is doing it, so we must as well," spells trouble in any business, but in none more so than insurance. Tad never listened to that nonsensical excuse for sloppy underwriting, and neither will Kara.

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Finally, there is GEICO, the company that set my heart afire 66 years ago (and for which the flame still burns). GEICO is managed by Tony Nicely, who joined the company at 18 and completed 55 years of service in 2016.

Tony became CEO of GEICO in 1993, and since then the company has been flying. There is *no* better manager than Tony, who brings his combination of brilliance, dedication *and* soundness to the job. (The latter quality is essential to sustained success. As Charlie says, it's great to have a manager with a 160 IQ – unless he thinks it's 180.) Like Ajit, Tony has created tens of billions of value for Berkshire.

On my initial visit to GEICO in 1951, I was blown away by the huge cost advantage the company enjoyed over the giants of the industry. It was clear to me that GEICO would succeed because it *deserved* to succeed. The company's annual sales were then $8 million; In 2016, GEICO did that much business every three hours of the year.

Auto insurance is a major expenditure for most families. Savings matter to them – and only a low-cost operation can deliver those. In fact, at least 40% of the people reading this letter can save money by insuring with GEICO. So stop reading – right now! – and go to geico.com or call 800-847-7536.

GEICO's low costs create a moat – an *enduring* one – that competitors are unable to cross. As a result, the company gobbles up market share year after year, ending 2016 with about 12% of industry volume. That's up from 2.5% in 1995, the year Berkshire acquired control of GEICO. Employment, meanwhile, grew from 8,575 to 36,085.

GEICO's growth accelerated dramatically during the second half of 2016. Loss costs throughout the auto-insurance industry had been increasing at an unexpected pace and some competitors lost their enthusiasm for taking on new customers. GEICO's reaction to the profit squeeze, however, was to *accelerate* its new-business efforts. We like to make hay while the sun *sets*, knowing that it will surely rise again.

GEICO continues on a roll as I send you this letter. When insurance prices increase, people shop more. And when they shop, GEICO wins.

Have you called yet? (800-847-7536 or go to geico.com)

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In addition to our three major insurance operations, we own a collection of smaller companies that primarily write commercial coverages. In aggregate, these companies are a large, growing and valuable operation that consistently delivers an underwriting profit, usually one much superior to that reported by their competitors. Over the past 14 years, this group has earned $4.7 billion from underwriting – about 13% of its premium volume – while increasing its float from $943 million to $11.6 billion.

Less than three years ago, we formed Berkshire Hathaway Specialty Insurance ("BHSI"), which is included in this grouping. Our first decision was to put Peter Eastwood in charge, a move that proved to be a home run: We expected significant losses in the early years while Peter built the personnel and infrastructure needed for a world-wide operation. Instead, he and his crew delivered significant underwriting profits throughout the start-up period. BHSI's volume increased 40% in 2016, reaching $1.3 billion. It's clear to me that the company is destined to become one of the world's leading P/C insurers.

Here's a recap of pre-tax underwriting earnings and float by division:

	Underwriting Profit		*Yearend Float*	
			(in millions)	
Insurance Operations	*2016*	*2015*	*2016*	*2015*
BH Reinsurance	$ 822	$ 421	$ 45,081	$ 44,108
General Re	190	132	17,699	18,560
GEICO	462	460	17,148	15,148
Other Primary	657	824	11,649	9,906
	$2,131	$1,837	$ 91,577	$ 87,722

Berkshire's great managers, premier financial strength and a range of business models protected by wide moats amount to something unique in the insurance world. This assemblage of strengths is a huge asset for Berkshire shareholders that time will only make more valuable.

Regulated, Capital-Intensive Businesses

Our BNSF railroad and Berkshire Hathaway Energy ("BHE"), our 90%-owned utility business, share important characteristics that distinguish them from Berkshire's other activities. Consequently, we assign them their own section in this letter and split out their combined financial statistics in our GAAP balance sheet and income statement. These two very major companies accounted for 33% of Berkshire's after-tax operating earnings last year.

A key characteristic of both companies is their huge investment in very long-lived, regulated assets, with these partially funded by large amounts of long-term debt that is *not* guaranteed by Berkshire. Our credit is in fact not needed because each company has earning power that even under terrible economic conditions would far exceed its interest requirements. Last year, for example, in a disappointing year for railroads, BNSF's interest coverage was more than 6:1. (Our definition of coverage is the ratio of earnings before interest and taxes to interest, *not* EBITDA/interest, a commonly-used measure we view as seriously flawed.)

At BHE, meanwhile, two factors ensure the company's ability to service its debt under all circumstances. The first is common to all utilities: recession-resistant earnings, which result from these companies offering an essential service for which demand is remarkably steady. The second is enjoyed by few other utilities: an ever-widening diversity of earnings streams, which shield BHE from being seriously harmed by any single regulatory body. These many sources of profit, supplemented by the inherent advantage of the company being owned by a strong parent, have allowed BHE and its utility subsidiaries to significantly lower their cost of debt. That economic fact benefits both us *and* our customers.

All told, BHE and BNSF invested $8.9 billion in plant and equipment last year, a massive commitment to their segments of America's infrastructure. We relish making such investments as long as they promise reasonable returns – and, on that front, we put a large amount of trust in future regulation.

Our confidence is justified both by our past experience and by the knowledge that society will forever need huge investments in both transportation and energy. It is in the self-interest of governments to treat capital providers in a manner that will ensure the continued flow of funds to essential projects. It is concomitantly in our self-interest to conduct our operations in a way that earns the approval of our regulators and the people they represent.

Low prices are a powerful way to keep these constituencies happy. In Iowa, BHE's average retail rate is 7.1¢ per KWH. Alliant, the other major electric utility in the state, averages 9.9¢. Here are the comparable industry figures for adjacent states: Nebraska 9.0¢, Missouri 9.5¢, Illinois 9.2¢, Minnesota 10.0¢. The national average is 10.3¢. We have promised Iowans that our base rates will not increase until 2029 *at the earliest*. Our rock-bottom prices add up to real money for paycheck-strapped customers.

At BNSF, price comparisons between major railroads are far more difficult to make because of significant differences in both their mix of cargo and the average distance the load is carried. To supply a *very* crude measure, however, our revenue per ton-mile was 3¢ last year, while shipping costs for customers of the other four major U.S.-based railroads ranged from 4¢ to 5¢.

Both BHE and BNSF have been leaders in pursuing planet-friendly technology. In wind generation, no state comes close to rivaling Iowa, where last year the megawatt-hours we generated from wind equaled 55% of all megawatt-hours sold to our Iowa retail customers. New wind projects that are underway will take that figure to 89% by 2020.

Bargain-basement electric rates carry second-order benefits with them. Iowa has attracted large high-tech installations, both because of its low prices for electricity (which data centers use in huge quantities) and because most tech CEOs are enthusiastic about using renewable energy. When it comes to wind energy, Iowa is the Saudi Arabia of America.

BNSF, like other Class I railroads, uses only a single gallon of diesel fuel to move a ton of freight almost 500 miles. Those economics make railroads four times as fuel-efficient as trucks! Furthermore, railroads alleviate highway congestion – and the taxpayer-funded maintenance expenditures that come with heavier traffic – in a major way.

All told, BHE and BNSF own assets that are of major importance to our country as well as to shareholders of Berkshire. Here are the key financial figures for both:

BNSF	*Earnings (in millions)*		
	2016	*2015*	*2014*
Revenues	$ 19,829	$ 21,967	$ 23,239
Operating expenses	13,144	14,264	16,237
Operating earnings before interest and taxes	6,685	7,703	7,002
Interest (net)	992	928	833
Income taxes	2,124	2,527	2,300
Net earnings	$ 3,569	$ 4,248	$ 3,869

Berkshire Hathaway Energy (90% owned)	*Earnings (in millions)*		
	2016	*2015*	*2014*
U.K. utilities	$ 367	$ 460	$ 527
Iowa utility	392	292	270
Nevada utilities	559	586	549
PacifiCorp (primarily Oregon and Utah)	1,105	1,026	1,010
Gas pipelines (Northern Natural and Kern River)	413	401	379
Canadian transmission utility	147	170	16
Renewable projects	157	175	194
HomeServices	225	191	139
Other (net)	73	49	54
Operating earnings before corporate interest and taxes	3,438	3,350	3,138
Interest	465	499	427
Income taxes	431	481	616
Net earnings	$ 2,542	$ 2,370	$ 2,095
Earnings applicable to Berkshire	$ 2,287	$ 2,132	$ 1,882

HomeServices may appear out of place in the above table. But it came with our purchase of MidAmerican (now BHE) in 1999 – and we are lucky that it did.

HomeServices owns 38 realty companies with more than 29,000 agents who operate in 28 states. Last year it purchased four realtors, including Houlihan Lawrence, the leader in New York's Westchester County (in a transaction that closed shortly after yearend).

In real estate parlance, representing either a buyer or a seller is called a "side," with the representation of both counting as two sides. Last year, our *owned* realtors participated in 244,000 sides, totaling $86 billion in volume.

HomeServices also *franchises* many operations throughout the country that use our name. We like both aspects of the real estate business and expect to acquire many realtors and franchisees during the next decade.

Manufacturing, Service and Retailing Operations

Our manufacturing, service and retailing operations sell products ranging from lollipops to jet airplanes. Let's look, though, at a summary balance sheet and earnings statement for the entire group.

Balance Sheet 12/31/16 (in millions)

Assets		*Liabilities and Equity*	
Cash and equivalents	$ 8,073	Notes payable	$ 2,054
Accounts and notes receivable	11,183	Other current liabilities	12,464
Inventory	15,727	Total current liabilities	14,518
Other current assets	1,039		
Total current assets	36,022		
		Deferred taxes	12,044
Goodwill and other intangibles	71,473	Term debt and other liabilities	10,943
Fixed assets	18,915	Non-controlling interests	579
Other assets	3,183	Berkshire equity	91,509
	$129,593		$129,593

Earnings Statement (in millions)

	2016	*2015*	*2014*
Revenues	$120,059	$107,825	$97,689
Operating expenses	111,383	100,607	90,788
Interest expense	214	103	109
Pre-tax earnings	8,462	7,115	6,792
Income taxes and non-controlling interests	2,831	2,432	2,324
Net earnings	$ 5,631	$ 4,683	$ 4,468

Included in this financial summary are 44 businesses that report directly to headquarters. But some of these companies, in turn, have many individual operations under their umbrella. For example, Marmon has 175 separate business units, serving widely disparate markets, and Berkshire Hathaway Automotive owns 83 dealerships, operating in nine states.

This collection of businesses is truly a motley crew. Some operations, measured by earnings on unleveraged net *tangible* assets, enjoy terrific returns that, in a couple of instances, exceed 100%. Most are solid businesses generating good returns in the area of 12% to 20%.

A few, however – these are serious blunders I made in my job of capital allocation – produce very poor returns. In most cases, I was wrong when I originally sized up the economic characteristics of these companies or the industries in which they operate, and we are now paying the price for my misjudgments. In a couple of instances, I stumbled in assessing either the fidelity or ability of incumbent managers or ones I later put in place. I will commit more errors; you can count on that. Fortunately, Charlie – never bashful – is around to say "no" to my worst ideas.

Viewed as a single entity, the companies in the manufacturing, service and retailing group are an excellent business. They employed an average of $24 billion of net tangible assets during 2016 and, despite their holding large quantities of excess cash and carrying very little debt, earned 24% after-tax on that capital.

Of course, a business with terrific economics can be a bad investment if it is bought at too high a price. We have paid substantial premiums to net tangible assets for most of our businesses, a cost that is reflected in the large figure we show on our balance sheet for goodwill and other intangibles. Overall, however, we are getting a decent return on the capital we have deployed in this sector. Absent a recession, earnings from the group will likely grow in 2017, in part because Duracell and Precision Castparts (both bought in 2016) will for the first time contribute a full year's earnings to this group. Additionally, Duracell incurred significant transitional costs in 2016 that will not recur.

We have far too many companies in this group to comment on them individually. Moreover, their competitors – both current and potential – read this report. In a few of our businesses, we might be disadvantaged if outsiders knew our numbers. Therefore, in certain of our operations that are not of a size material to an evaluation of Berkshire, we only disclose what is required. You can nevertheless find a good bit of detail about many of our operations on pages 90 - 94. Be aware, though, that it's the growth of the Berkshire forest that counts. It would be foolish to focus over-intently on any single tree.

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For several years I have told you that the income and expense data shown in this section does not conform to GAAP. I have explained that this divergence occurs primarily because of GAAP-ordered rules regarding purchase-accounting adjustments that require the full amortization of certain intangibles over periods averaging about 19 years. In our opinion, most of those amortization "expenses" are not truly an economic cost. Our goal in diverging from GAAP in this section is to present the figures to you in a manner reflecting the way in which Charlie and I view and analyze them.

On page 54 we itemize $15.4 billion of intangibles that are yet to be amortized by annual charges to earnings. (More intangibles to be amortized will be created as we make new acquisitions.) On that page, we show that the 2016 amortization charge to GAAP earnings was $1.5 billion, up $384 million from 2015. My judgment is that about 20% of the 2016 charge is a "real" cost.

Eventually amortization charges fully write off the related asset. When that happens – most often at the 15-year mark – the GAAP earnings we report will increase without any true improvement in the underlying economics of Berkshire's business. (My gift to my successor.)

Now that I've described a GAAP expense that I believe to be overstated, let me move on to a less pleasant distortion produced by accounting rules. The subject this time is GAAP-prescribed depreciation charges, which are necessarily based on historical cost. Yet in certain cases, those charges materially *understate* true economic costs. Countless words were written about this phenomenon in the 1970s and early 1980s, when inflation was rampant. As inflation subsided – thanks to heroic actions by Paul Volcker – the inadequacy of depreciation charges became less of an issue. But the problem still prevails, *big time*, in the railroad industry, where current costs for many depreciable items far outstrip historical costs. The inevitable result is that reported earnings throughout the railroad industry are considerably higher than true economic earnings.

At BNSF, to get down to particulars, our GAAP depreciation charge last year was $2.1 billion. But were we to spend that sum and no more annually, our railroad would soon deteriorate and become less competitive. The reality is that – *simply to hold our own* – we need to spend far more than the cost we show for depreciation. Moreover, a wide disparity will prevail for decades.

All that said, Charlie and I love our railroad, which was one of our better purchases.

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Too many managements – and the number seems to grow every year – are looking for any means to report, *and indeed feature*, "adjusted earnings" that are higher than their company's GAAP earnings. There are many ways for practitioners to perform this legerdemain. Two of their favorites are the omission of "restructuring costs" and "stock-based compensation" as expenses.

Charlie and I *want* managements, *in their commentary*, to describe unusual items – good or bad – that affect the GAAP numbers. After all, the reason we look at these numbers of the past is to make estimates of the future. But a management that regularly attempts to wave away very real costs by highlighting "adjusted per-share earnings" makes us nervous. That's because bad behavior is contagious: CEOs who overtly look for ways to report high numbers tend to foster a culture in which subordinates strive to be "helpful" as well. Goals like that can lead, for example, to insurers underestimating their loss reserves, a practice that has destroyed many industry participants.

Charlie and I cringe when we hear analysts talk admiringly about managements who always "make the numbers." In truth, business is too unpredictable for the numbers always to be met. Inevitably, surprises occur. When they do, a CEO whose focus is centered on Wall Street will be tempted to *make up* the numbers.

Let's get back to the two favorites of "don't-count-this" managers, starting with "restructuring." Berkshire, I would say, has been restructuring from the first day we took over in 1965. Owning only a northern textile business then gave us no other choice. And today a fair amount of restructuring occurs every year at Berkshire. That's because there are always things that need to change in our hundreds of businesses. Last year, as I mentioned earlier, we spent significant sums getting Duracell in shape for the decades ahead.

We have never, however, singled out restructuring charges and told you to ignore them in estimating our normal earning power. If there were to be some truly major expenses in a single year, I would, of course, mention it in my commentary. Indeed, when there is a total rebasing of a business, such as occurred when Kraft and Heinz merged, it is imperative that for several years the huge one-time costs of rationalizing the combined operations be explained clearly to owners. That's precisely what the CEO of Kraft Heinz has done, in a manner approved by the company's directors (who include me). But, to tell owners year after year, "Don't count this," when management is simply making business adjustments that are necessary, is misleading. And too many analysts and journalists fall for this baloney.

To say "stock-based compensation" is not an expense is even more cavalier. CEOs who go down that road are, in effect, saying to shareholders, "If you pay me a bundle in options or restricted stock, don't worry about its effect on earnings. I'll 'adjust' it away."

To explore this maneuver further, join me for a moment in a visit to a make-believe accounting laboratory whose sole mission is to juice Berkshire's *reported* earnings. Imaginative technicians await us, eager to show their stuff.

Listen carefully while I tell these enablers that stock-based compensation usually comprises at least 20% of total compensation for the top three or four executives at most large companies. Pay attention, too, as I explain that Berkshire has several hundred such executives at its subsidiaries and pays them similar amounts, but uses only cash to do so. I further confess that, lacking imagination, I have counted *all* of these payments to Berkshire's executives as an expense.

My accounting minions suppress a giggle and immediately point out that 20% of what is paid these Berkshire managers is tantamount to "cash paid in lieu of stock-based compensation" and is therefore not a "true" expense. So – presto! – Berkshire, too, can have "adjusted" earnings.

Back to reality: If CEOs want to leave out stock-based compensation in reporting earnings, they should be required to affirm *to their owners* one of two propositions: why items of value used to pay employees are not a cost or why a payroll cost should be excluded when calculating earnings.

During the accounting nonsense that flourished during the 1960s, the story was told of a CEO who, as his company revved up to go public, asked prospective auditors, "What is two plus two?" The answer that won the assignment, of course, was, "What number do you have in mind?"

Finance and Financial Products

Our three leasing and rental operations are conducted by CORT (furniture), XTRA (semi-trailers), and Marmon (primarily tank cars but also freight cars, intermodal tank containers and cranes). Each is the leader in its field.

We also include Clayton Homes in this section. This company receives most of its revenue from the sale of manufactured homes, but derives the bulk of its *earnings* from its large mortgage portfolio. Last year, Clayton became America's largest home builder, delivering 42,075 units that accounted for 5% of all new American homes. (In fairness, other large builders do far more *dollar* volume than Clayton because they sell site-built homes that command much higher prices.)

In 2015, Clayton branched out, purchasing its first site-builder. Two similar acquisitions followed in 2016, and more will come. Site-built houses are expected to amount to 3% or so of Clayton's unit sales in 2017 and will likely deliver about 14% of its dollar volume.

Even so, Clayton's focus will always be manufactured homes, which account for about 70% of new American homes costing less than $150,000. Clayton manufactures close to one-half of the total. That is a far cry from Clayton's position in 2003 when Berkshire purchased the company. It then ranked third in the industry in units sold and employed 6,731 people. Now, when its new acquisitions are included, the employee count is 14,677. And that number will increase in the future.

Clayton's earnings in recent years have materially benefited from extraordinarily low interest rates. The company's mortgage loans to home-buyers are at fixed-rates and for long terms (averaging 25 years at inception). But Clayton's own borrowings are short-term credits that re-price frequently. When rates plunge, Clayton's earnings from its portfolio greatly increase. We normally would shun that kind of lend-long, borrow-short approach, which can cause major problems for financial institutions. As a whole, however, Berkshire is always asset-sensitive, meaning that higher short-term rates will benefit our *consolidated* earnings, even as they hurt at Clayton.

Last year Clayton had to foreclose on 8,304 manufactured-housing mortgages, about 2.5% of its total portfolio. Customer demographics help explain that percentage. Clayton's customers are usually lower-income families with mediocre credit scores; many are supported by jobs that will be at risk in any recession; many, similarly, have financial profiles that will be damaged by divorce or death to an extent that would not be typical for a high-income family. Those risks that our customers face are partly mitigated because almost all have a strong desire to own a home and because they enjoy reasonable monthly payments that average only $587, *including* the cost of insurance and property taxes.

Clayton also has long had programs that help borrowers through difficulties. The two most popular are loan extensions and payment forgiveness. Last year about 11,000 borrowers received extensions, and 3,800 had $3.4 million of scheduled payments permanently canceled by Clayton. The company does not earn interest or fees when these loss-mitigation moves are made. Our experience is that 93% of borrowers helped through these programs in the last two years now remain in their homes. Since we lose significant sums on foreclosures – losses last year totaled $150 million – our assistance programs end up helping Clayton as well as its borrowers.

Clayton and Berkshire have been a wonderful partnership. Kevin Clayton came to us with a best-in-class management group and culture. Berkshire, in turn, provided unmatched staying power when the manufactured-home industry fell apart during the Great Recession. (As other lenders to the industry vanished, Clayton supplied credit not only to its own dealers but also to dealers who sold the products of its competitors.) At Berkshire, we never count on synergies when we acquire companies. Truly important ones, however, surfaced after our purchase of Clayton.

Marmon's railcar business experienced a major slowdown in demand last year, which will cause earnings to decline in 2017. Fleet utilization was 91% in December, down from 97% a year earlier, with the drop particularly severe at the large fleet we purchased from General Electric in 2015. Marmon's crane and container rentals have weakened as well.

Big swings in railcar demand have occurred in the past and they will continue. Nevertheless, we very much like this business and expect decent returns on equity capital over the years. Tank cars are Marmon's specialty. People often associate tank cars with the transportation of crude oil; in fact, they are essential to a great variety of shippers.

Over time, we expect to expand our railcar operation. Meanwhile, Marmon is making a number of bolt-on acquisitions whose results are included in the Manufacturing, Service and Retailing section.

Here's the pre-tax earnings recap for our finance-related companies:

	2016	*2015*	*2014*
		(in millions)	
Berkadia (our 50% share)	$ 91	$ 74	$ 122
Clayton	744	706	558
CORT	60	55	49
Marmon – Containers and Cranes	126	192	238
Marmon – Railcars	654	546	442
XTRA	179	172	147
Net financial income*	276	341	283
	$ 2,130	$ 2,086	$ 1,839

* Excludes capital gains or losses

Investments

Below we list our fifteen common stock investments that at yearend had the largest market value. We exclude our Kraft Heinz holding because Berkshire is part of a control group and therefore must account for this investment on the "equity" method. The 325,442,152 shares Berkshire owns of Kraft Heinz are carried on our balance sheet at a GAAP figure of $15.3 billion and had a yearend market value of $28.4 billion. Our cost basis for the shares is $9.8 billion.

			12/31/16	
*Shares**	*Company*	*Percentage of Company Owned*	*Cost***	*Market*
			(in millions)	
151,610,700	American Express Company	16.8	$ 1,287	$ 11,231
61,242,652	Apple Inc.	1.1	6,747	7,093
6,789,054	Charter Communications, Inc.	2.5	1,210	1,955
400,000,000	The Coca-Cola Company	9.3	1,299	16,584
54,934,718	Delta Airlines Inc.	7.5	2,299	2,702
11,390,582	The Goldman Sachs Group, Inc.	2.9	654	2,727
81,232,303	International Business Machines Corp.	8.5	13,815	13,484
24,669,778	Moody's Corporation	12.9	248	2,326
74,587,892	Phillips 66	14.4	5,841	6,445
22,169,930	Sanofi	1.7	1,692	1,791
43,203,775	Southwest Airlines Co.	7.0	1,757	2,153
101,859,335	U.S. Bancorp	6.0	3,239	5,233
26,620,184	United Continental Holdings Inc.	8.4	1,477	1,940
43,387,980	USG Corp.	29.7	836	1,253
500,000,000	Wells Fargo & Company	10.0	12,730	27,555
	Others		10,697	17,560
	Total Common Stocks Carried at Market		$ 65,828	$ 122,032

* Excludes shares held by pension funds of Berkshire subsidiaries.

** This is our actual purchase price and also our tax basis; GAAP "cost" differs in a few cases because of write-downs that have been required under GAAP rules.

Some of the stocks in the table are the responsibility of either Todd Combs or Ted Weschler, who work with me in managing Berkshire's investments. Each, *independently*, manages more than $10 billion; I usually learn about decisions they have made by looking at monthly trade sheets. Included in the $21 billion that the two manage is about $7.6 billion of pension trust assets of certain Berkshire subsidiaries. As noted, pension investments are not included in the preceding tabulation of Berkshire holdings.

* * * * * * * * * * * *

Excluded from the table – *but important* – is our ownership of $5 billion of preferred stock issued by Bank of America. This stock, which pays us $300 million per year, also carries with it a valuable warrant allowing Berkshire to purchase 700 million common shares of Bank of America for $5 billion at any time before September 2, 2021. At yearend, that privilege would have delivered us a profit of $10.5 billion. If it wishes, Berkshire can use its preferred shares to satisfy the $5 billion cost of exercising the warrant.

If the dividend rate on Bank of America common stock – now 30 cents annually – should rise above 44 cents before 2021, we would anticipate making a cashless exchange of our preferred into common. If the common dividend remains below 44 cents, it is highly probable that we will exercise the warrant immediately before it expires.

Many of our investees, including Bank of America, have been repurchasing shares, some quite aggressively. We very much like this behavior because we believe the repurchased shares have in most cases been underpriced. (Undervaluation, after all, is why we own these positions.) When a company grows and outstanding shares shrink, good things happen for shareholders.

* * * * * * * * * * * *

It's important for you to understand that 95% of the $86 billion of "cash and equivalents" (which in my mind includes U.S. Treasury Bills) shown on our balance sheet are held by entities in the United States and, consequently, is not subject to any repatriation tax. Moreover, repatriation of the remaining funds would trigger only minor taxes because much of that money has been earned in countries that themselves impose meaningful corporate taxes. Those payments become an offset to U.S. tax when money is brought home.

These explanations are important because many cash-rich American companies hold a large portion of their funds in jurisdictions imposing very low taxes. Such companies hope – and may well be proved right – that the tax levied for bringing these funds to America will soon be materially reduced. In the meantime, these companies are limited as to how they can use that cash. In other words, off-shore cash is simply not worth as much as cash held at home.

Berkshire has a partial offset to the favorable geographical location of its cash, which is that much of it is held in our insurance subsidiaries. Though we have many alternatives for investing this cash, we do not have the unlimited choices that we would enjoy if the cash were held by the parent company, Berkshire. We *do* have an ability annually to distribute large amounts of cash from our insurers to the parent – though here, too, there are limits. Overall, cash held at our insurers is a very valuable asset, but one slightly less valuable to us than is cash held at the parent level.

* * * * * * * * * * * *

Sometimes the comments of shareholders or media imply that we will own certain stocks "forever." It is true that we own some stocks that I have no intention of selling for as far as the eye can see (and we're talking 20/20 vision). But we have made no *commitment* that Berkshire will hold *any* of its marketable securities forever.

Confusion about this point may have resulted from a too-casual reading of Economic Principle 11 on pages 110 - 111, which has been included in our annual reports since 1983. That principle covers *controlled businesses*, not marketable securities. This year I've added a final sentence to #11 to ensure that our owners understand that we regard any marketable security as available for sale, however unlikely such a sale now seems.

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Before we leave this investment section, a few educational words about dividends and taxes: Berkshire, like most corporations, nets considerably *more* from a dollar of dividends than it reaps from a dollar of capital gains. That will probably surprise those of our shareholders who are accustomed to thinking of capital gains as the route to tax-favored returns.

But here's the *corporate* math. Every $1 of capital gains that a corporation realizes carries with it 35 cents of federal income tax (and often state income tax as well). The tax on dividends received from *domestic* corporations, however, is consistently lower, though rates vary depending on the status of the recipient.

For a non-insurance company – which describes Berkshire Hathaway, the parent – the federal tax rate is effectively 10½ cents per $1 of dividends received. Furthermore, a non-insurance company that owns more than 20% of an investee owes taxes of only 7 cents per $1 of dividends. That rate applies, for example, to the substantial dividends we receive from our 27% ownership of Kraft Heinz, all of it held by the parent company. (The rationale for the low corporate taxes on dividends is that the dividend-paying investee has already paid its own corporate tax on the earnings being distributed.)

Berkshire's insurance subsidiaries pay a tax rate on dividends that is somewhat higher than that applying to non-insurance companies, though the rate is still well below the 35% hitting capital gains. Property/casualty companies owe about 14% in taxes on most dividends they receive. Their tax rate falls, though, to about 11% if they own more than 20% of a U.S.-based investee.

And that's our tax lesson for today.

"The Bet" (or how your money finds its way to Wall Street)

In this section, you will encounter, early on, the story of an investment bet I made nine years ago and, next, some strong opinions I have about investing. As a starter, though, I want to briefly describe Long Bets, a unique establishment that played a role in the bet.

Long Bets was seeded by Amazon's Jeff Bezos and operates as a non-profit organization that administers just what you'd guess: long-term bets. To participate, "proposers" post a proposition at Longbets.org that will be proved right or wrong at a distant date. They then wait for a contrary-minded party to take the other side of the bet. When a "doubter" steps forward, each side names a charity that will be the beneficiary if its side wins; parks its wager with Long Bets; and posts a short essay defending its position on the Long Bets website. When the bet is concluded, Long Bets pays off the winning charity.

Here are examples of what you will find on Long Bets' very interesting site:

In 2002, entrepreneur Mitch Kapor asserted that "By 2029 no computer – or 'machine intelligence' – will have passed the Turing Test," which deals with whether a computer can successfully impersonate a human being. Inventor Ray Kurzweil took the opposing view. Each backed up his opinion with $10,000. I don't know who will win this bet, but I will confidently wager that no computer will ever replicate Charlie.

That same year, Craig Mundie of Microsoft asserted that pilotless planes would routinely fly passengers by 2030, while Eric Schmidt of Google argued otherwise. The stakes were $1,000 each. To ease any heartburn Eric might be experiencing from his outsized exposure, I recently offered to take a piece of his action. He promptly laid off $500 with me. (I like his assumption that I'll be around in 2030 to contribute my payment, should we lose.)

Now, to my bet and its history. In Berkshire's 2005 annual report, I argued that active investment management by professionals – in aggregate – would over a period of years underperform the returns achieved by rank amateurs who simply sat still. I explained that the massive fees levied by a variety of "helpers" would leave their clients – *again in aggregate* – worse off than if the amateurs simply invested in an unmanaged low-cost index fund. (See pages 114 - 115 for a reprint of the argument as I originally stated it in the 2005 report.)

Subsequently, I publicly offered to wager $500,000 that no investment pro could select a set of at least five hedge funds – wildly-popular and high-fee investing vehicles – that would over an extended period match the performance of an unmanaged S&P-500 index fund charging only token fees. I suggested a ten-year bet and named a low-cost Vanguard S&P fund as my contender. I then sat back and waited expectantly for a parade of fund managers – who could include their own fund as one of the five – to come forth and defend their occupation. After all, these managers urged *others* to bet billions on their abilities. Why should they fear putting a little of their own money on the line?

What followed was the sound of silence. Though there are thousands of professional investment managers who have amassed staggering fortunes by touting their stock-selecting prowess, only one man – Ted Seides – stepped up to my challenge. Ted was a co-manager of Protégé Partners, an asset manager that had raised money from limited partners to form a fund-of-funds – in other words, a fund that invests in multiple hedge funds.

I hadn't known Ted before our wager, but I like him and admire his willingness to put his money where his mouth was. He has been both straight-forward with me and meticulous in supplying all the data that both he and I have needed to monitor the bet.

For Protégé Partners' side of our ten-year bet, Ted picked five funds-of-funds whose results were to be averaged and compared against my Vanguard S&P index fund. The five he selected had invested their money in more than 100 hedge funds, which meant that the overall performance of the funds-of-funds would not be distorted by the good or poor results of a single manager.

Each fund-of-funds, of course, operated with a layer of fees that sat above the fees charged by the hedge funds in which it had invested. In this doubling-up arrangement, the larger fees were levied by the underlying hedge funds; each of the fund-of-funds imposed an additional fee for its presumed skills in selecting hedge-fund managers.

Here are the results for the first nine years of the bet – figures leaving no doubt that Girls Inc. of Omaha, the charitable beneficiary I designated to get any bet winnings I earned, will be the organization eagerly opening the mail next January.

Year	Fund of Funds A	Fund of Funds B	Fund of Funds C	Fund of Funds D	Fund of Funds E	S&P Index Fund
2008	-16.5%	-22.3%	-21.3%	-29.3%	-30.1%	-37.0%
2009	11.3%	14.5%	21.4%	16.5%	16.8%	26.6%
2010	5.9%	6.8%	13.3%	4.9%	11.9%	15.1%
2011	-6.3%	-1.3%	5.9%	-6.3%	-2.8%	2.1%
2012	3.4%	9.6%	5.7%	6.2%	9.1%	16.0%
2013	10.5%	15.2%	8.8%	14.2%	14.4%	32.3%
2014	4.7%	4.0%	18.9%	0.7%	-2.1%	13.6%
2015	1.6%	2.5%	5.4%	1.4%	-5.0%	1.4%
2016	-2.9%	1.7%	-1.4%	2.5%	4.4%	11.9%
Gain to Date	8.7%	28.3%	62.8%	2.9%	7.5%	85.4%

Footnote: Under my agreement with Protégé Partners, the names of these funds-of-funds have never been publicly disclosed. I, however, see their annual audits.

The compounded annual increase to date for the index fund is 7.1%, which is a return that could easily prove typical for the stock market over time. That's an important fact: A particularly weak nine years for the market over the lifetime of this bet would have probably helped the relative performance of the hedge funds, because many hold large "short" positions. Conversely, nine years of exceptionally high returns from stocks would have provided a tailwind for index funds.

Instead we operated in what I would call a "neutral" environment. In it, the five funds-of-funds delivered, through 2016, an average of only 2.2%, compounded annually. That means $1 million invested in those funds would have gained $220,000. The index fund would meanwhile have gained $854,000.

Bear in mind that every one of the 100-plus managers of the underlying hedge funds had a huge financial incentive to do his or her best. Moreover, the five funds-of-funds managers that Ted selected were similarly incentivized to select the best hedge-fund managers possible because the five were entitled to performance fees based on the results of the underlying funds.

I'm certain that in almost all cases the managers at both levels were honest and intelligent people. But the results for their investors were dismal – *really* dismal. And, alas, the huge fixed fees charged by all of the funds and funds-of-funds involved – fees that were totally unwarranted by performance – were such that their managers were showered with compensation over the nine years that have passed. As Gordon Gekko might have put it: "Fees never sleep."

The underlying hedge-fund managers in our bet received payments from their limited partners that likely averaged a bit under the prevailing hedge-fund standard of "2 and 20," meaning a 2% annual fixed fee, payable even when losses are huge, and 20% of profits with no clawback (if good years were followed by bad ones). Under this lopsided arrangement, a hedge fund operator's ability to simply pile up assets under management has made many of these managers extraordinarily rich, even as their investments have performed poorly.

Still, we're not through with fees. Remember, there were the fund-of-funds managers to be fed as well. These managers received an additional fixed amount that was usually set at 1% of assets. Then, despite the terrible overall record of the five funds-of-funds, some experienced a few good years and collected "performance" fees. Consequently, I estimate that over the nine-year period roughly 60% – gulp! – of *all* gains achieved by the five funds-of-funds were diverted to the two levels of managers. That was their misbegotten reward for accomplishing something far short of what their many hundreds of limited partners could have effortlessly – and with virtually *no* cost – achieved on their own.

In my opinion, the disappointing results for hedge-fund investors that this bet exposed are almost certain to recur in the future. I laid out my reasons for that belief in a statement that was posted on the Long Bets website when the bet commenced (and that is still posted there). Here is what I asserted:

> Over a ten-year period commencing on January 1, 2008, and ending on December 31, 2017, the S&P 500 will outperform a portfolio of funds of hedge funds, when performance is measured on a basis net of fees, costs and expenses.
>
> A lot of very smart people set out to do better than average in securities markets. Call them active investors.
>
> Their opposites, passive investors, will by definition do about average. In aggregate their positions will more or less approximate those of an index fund. Therefore, the balance of the universe—the active investors—must do about average as well. However, these investors will incur far greater costs. So, on balance, their aggregate results after these costs will be worse than those of the passive investors.
>
> Costs skyrocket when large annual fees, large performance fees, and active trading costs are all added to the active investor's equation. Funds of hedge funds accentuate this cost problem because their fees are superimposed on the large fees charged by the hedge funds in which the funds of funds are invested.
>
> A number of smart people are involved in running hedge funds. But to a great extent their efforts are self-neutralizing, and their IQ will not overcome the costs they impose on investors. Investors, on average and over time, will do better with a low-cost index fund than with a group of funds of funds.

So that was my argument – and now let me put it into a simple equation. If Group A (active investors) and Group B (do-nothing investors) comprise the total investing universe, and B is destined to achieve average results before costs, so, too, must A. Whichever group has the lower costs will win. (The academic in me requires me to mention that there is a very minor point – not worth detailing – that *slightly* modifies this formulation.) And if Group A has exorbitant costs, its shortfall will be substantial.

There are, of course, some skilled individuals who are highly likely to out-perform the S&P over long stretches. In my lifetime, though, I've identified – *early on* – only ten or so professionals that I expected would accomplish this feat.

There are no doubt many hundreds of people – perhaps thousands – whom I have never met and whose abilities would equal those of the people I've identified. The job, after all, is not impossible. The problem simply is that the great majority of managers who attempt to over-perform will fail. The probability is also very high that the person soliciting your funds will not be the exception who does well. Bill Ruane – a truly wonderful human being and a man whom I identified 60 years ago as almost certain to deliver superior investment returns over the long haul – said it well: "In investment management, the progression is from the innovators to the imitators to the swarming incompetents."

Further complicating the search for the rare high-fee manager who is worth his or her pay is the fact that some investment professionals, just as some amateurs, will be lucky over short periods. If 1,000 managers make a market prediction at the beginning of a year, it's very likely that the calls of at least one will be correct for nine consecutive years. Of course, 1,000 monkeys would be just as likely to produce a seemingly all-wise prophet. But there *would* remain a difference: The lucky monkey would not find people standing in line to invest with him.

Finally, there are three connected realities that cause investing success to breed failure. First, a good record quickly attracts a torrent of money. Second, huge sums invariably act as an anchor on investment performance: What is easy with millions, struggles with billions (sob!). Third, most managers will nevertheless seek new money because of their *personal* equation – namely, the more funds they have under management, the more their fees.

These three points are hardly new ground for me: In January 1966, when I was managing $44 *million*, I wrote my limited partners: "I feel substantially greater size is more likely to harm future results than to help them. This might not be true for my own personal results, but it is likely to be true for your results. Therefore, . . . I intend to admit no additional partners to BPL. I have notified Susie that if we have any more children, it is up to her to find some other partnership for them."

The bottom line: When trillions of dollars are managed by Wall Streeters charging high fees, it will usually be the managers who reap outsized profits, not the clients. Both large and small investors should stick with low-cost index funds.

* * * * * * * * * * * *

If a statue is ever erected to honor the person who has done the most for American investors, the hands-down choice should be Jack Bogle. For decades, Jack has urged investors to invest in ultra-low-cost index funds. In his crusade, he amassed only a tiny percentage of the wealth that has typically flowed to managers who have promised their investors large rewards while delivering them nothing – or, as in our bet, *less* than nothing – of added value.

In his early years, Jack was frequently mocked by the investment-management industry. Today, however, he has the satisfaction of knowing that he helped millions of investors realize far better returns on their savings than they otherwise would have earned. He is a hero to them and to me.

* * * * * * * * * * * *

Over the years, I've often been asked for investment advice, and in the process of answering I've learned a good deal about human behavior. My regular recommendation has been a low-cost S&P 500 index fund. To their credit, my friends who possess only modest means have usually followed my suggestion.

I believe, however, that *none* of the mega-rich individuals, institutions or pension funds has followed that same advice when I've given it to them. Instead, these investors politely thank me for my thoughts and depart to listen to the siren song of a high-fee manager or, in the case of many institutions, to seek out another breed of hyper-helper called a consultant.

That professional, however, faces a problem. Can you imagine an investment consultant telling clients, year after year, to keep adding to an index fund replicating the S&P 500? That would be career suicide. Large fees flow to these hyper-helpers, however, if they recommend small managerial shifts every year or so. That advice is often delivered in esoteric gibberish that explains why fashionable investment "styles" or current economic trends make the shift appropriate.

The wealthy are accustomed to feeling that it is their lot in life to get the best food, schooling, entertainment, housing, plastic surgery, sports ticket, you name it. Their money, they feel, should buy them something superior compared to what the masses receive.

In many aspects of life, indeed, wealth does command top-grade products or services. For that reason, the financial "elites" – wealthy individuals, pension funds, college endowments and the like – have great trouble meekly signing up for a financial product or service that is available as well to people investing only a few thousand dollars. This reluctance of the rich normally prevails even though the product at issue is –on an expectancy basis – clearly the best choice. My calculation, admittedly very rough, is that the search by the elite for superior investment advice has caused it, in aggregate, to waste more than $100 billion over the past decade. Figure it out: Even a 1% fee on a few trillion dollars adds up. Of course, not every investor who put money in hedge funds ten years ago lagged S&P returns. But I believe my calculation of the aggregate shortfall is conservative.

Much of the financial damage befell pension funds for public employees. Many of these funds are woefully underfunded, in part because they have suffered a double whammy: poor investment performance accompanied by huge fees. The resulting shortfalls in their assets will for decades have to be made up by local taxpayers.

Human behavior won't change. Wealthy individuals, pension funds, endowments and the like will continue to feel they deserve something "extra" in investment advice. Those advisors who cleverly play to this expectation will get very rich. This year the magic potion may be hedge funds, next year something else. The likely result from this parade of promises is predicted in an adage: "When a person with money meets a person with experience, the one with experience ends up with the money and the one with money leaves with experience."

Long ago, a brother-in-law of mine, Homer Rogers, was a commission agent working in the Omaha stockyards. I asked him how he induced a farmer or rancher to hire him to handle the sale of their hogs or cattle to the buyers from the big four packers (Swift, Cudahy, Wilson and Armour). After all, hogs were hogs and the buyers were experts who knew to the penny how much any animal was worth. How then, I asked Homer, could any sales agent get a better result than any other?

Homer gave me a pitying look and said: "Warren, it's not how you sell 'em, it's how you tell 'em." What worked in the stockyards continues to work in Wall Street.

* * * * * * * * * * *

And, finally, let me offer an olive branch to Wall Streeters, many of them good friends of mine. Berkshire *love*s to pay fees – even outrageous fees – to investment bankers who bring us acquisitions. Moreover, we have paid substantial sums for over-performance to our two in-house investment managers – and we hope to make even larger payments to them in the future.

To get biblical (Ephesians 3:18), I know the height and the depth and the length and the breadth of the energy flowing from that simple four-letter word – fees – when it is spoken to Wall Street. And when that energy delivers value to Berkshire, I will cheerfully write a big check.

The Annual Meeting

Last year we partnered with Yahoo to air the first-ever webcast of our annual meeting. Thanks to Andy Serwer and his Yahoo crew, the production was a success in all respects, registering 1.1 million unique visits in real-time viewing and 11.5 million more in replays (many of those, to be sure, called up by viewers interested in only certain segments of the webcast).

Berkshire's thank-you mail for initiating the webcast included many notes from three constituencies: the elderly who find travel difficult; the thrifty who find it expensive to travel to Omaha; and those who cannot attend a Saturday meeting for religious reasons.

The webcast cut attendance at last year's meeting to about 37,000 people (we can't get a precise count), which was down about 10%. Nevertheless, both Berkshire's subsidiaries and Omaha hotels and restaurants racked up huge sales. Nebraska Furniture Mart's sales broke their 2015 record volume by 3%, with the Omaha store recording one-week volume of $45.5 million.

Our Berkshire exhibitors at CenturyLink were open from noon until 5 p.m. on Friday and drew a crowd of 12,000 bargain-hunting shareholders. We will repeat those Friday shopping hours this year on May 5th. Bring money.

The annual meeting falls on May 6th and will again be webcast by Yahoo, whose web address is https://finance.yahoo.com/brklivestream. The webcast will go live at 9 a.m. Central Daylight Time. Yahoo will interview directors, managers, stockholders and celebrities before the meeting and during the lunch break. Both those interviews and meeting will be translated simultaneously into Mandarin.

For those attending the meeting in person, the doors at the CenturyLink will open at 7:00 a.m. on Saturday to facilitate shopping prior to our shareholder movie, which begins at 8:30. The question-and-answer period will start at 9:30 and run until 3:30, with a one-hour lunch break at noon. Finally, at 3:45 we will begin the formal shareholder meeting. It will run an hour or so. That is somewhat longer than usual because three proxy items are to be presented by their proponents, who will be given a reasonable amount of time to state their case.

On Saturday morning, we will have our sixth International Newspaper Tossing Challenge. Our target will again be the porch of a Clayton Home, located precisely 35 feet from the throwing line. When I was a teenager – in my one brief flirtation with honest labor – I delivered about 500,000 papers. So I think I'm pretty good at this game. Challenge me! Humiliate me! Knock me down a peg! The papers will run 36 to 42 pages, and you must fold them yourself (no rubber bands allowed). The competition will begin about 7:45, and I'll take on ten or so competitors selected a few minutes earlier by my assistant, Deb Bosanek.

Your venue for shopping will be the 194,300-square-foot hall that adjoins the meeting and in which products from dozens of our subsidiaries will be for sale. Say hello to the many Berkshire managers who will be captaining their exhibits. And be sure to view the terrific BNSF railroad layout that salutes all of our companies. Your children (and you!) will be enchanted with it.

Brooks, our running-shoe company, will again have a special commemorative shoe to offer at the meeting. After you purchase a pair, wear them on Sunday at our fourth annual "Berkshire 5K," an 8 a.m. race starting at the CenturyLink. Full details for participating will be included in the Visitor's Guide that will be sent to you with your meeting credentials. Entrants in the race will find themselves running alongside many of Berkshire's managers, directors and associates. (Charlie and I, however, will sleep in; the fudge and peanut brittle we eat throughout the Saturday meeting takes its toll.) Participation in the 5K grows every year. Help us set another record.

A GEICO booth in the shopping area will be staffed by a number of the company's top counselors from around the country. At last year's meeting, we set a record for policy sales, up 21% from 2015. I predict we will be up again this year.

So stop by for a quote. In most cases, GEICO will be able to give you a shareholder discount (usually 8%). This special offer is permitted by 44 of the 51 jurisdictions in which we operate. (One supplemental point: The discount is not additive if you qualify for another discount, such as that available to certain groups.) Bring the details of your existing insurance and check out our price. We can save many of you real money. Spend the savings on other Berkshire products.

Be sure to visit the Bookworm. This Omaha-based retailer will carry about 35 books and DVDs, among them a couple of new titles. The best book I read last year was *Shoe Dog*, by Nike's Phil Knight. Phil is a very wise, intelligent and competitive fellow who is also a gifted storyteller. The Bookworm will have piles of *Shoe Dog* as well as several investment classics by Jack Bogle.

The Bookworm will once again offer our history of the highlights (and lowlights) of Berkshire's first 50 years. Non-attendees of the meeting can find the book on eBay. Just type in: *Berkshire Hathaway Inc. Celebrating 50 years of a Profitable Partnership* (2nd Edition).

An attachment to the proxy material that is enclosed with this report explains how you can obtain the credential you will need for admission to both the meeting and other events. Keep in mind that airlines have sometimes jacked up prices for the Berkshire weekend – though I must admit I have developed some tolerance, bordering on enthusiasm, for that practice now that Berkshire has made large investments in America's four major carriers. Nevertheless, if you are coming from far away, compare the cost of flying to Kansas City vs. Omaha. The drive between the two cities is about $2^1/_2$ hours, and it may be that Kansas City can save you significant money. The savings for a couple could run to $1,000 or more. Spend that money with us.

At Nebraska Furniture Mart, located on a 77-acre site on 72nd Street between Dodge and Pacific, we will again be having "Berkshire Weekend" discount pricing. To obtain the Berkshire discount at NFM, you must make your purchases between Tuesday, May 2nd and Monday, May 8th inclusive, and must also present your meeting credential. The period's special pricing will even apply to the products of several prestigious manufacturers that normally have ironclad rules against discounting but which, in the spirit of our shareholder weekend, have made an exception for you. We appreciate their cooperation. During "Berkshire Weekend," NFM will be open from 10 a.m. to 9 p.m. Monday through Friday, 10 a.m. to 9:30 p.m. on Saturday and 10 a.m. to 8 p.m. on Sunday. From 5:30 p.m. to 8 p.m. on Saturday, NFM is hosting a picnic to which you are all invited.

This year we have good news for shareholders in the Kansas City and Dallas metro markets who can't attend the meeting or perhaps prefer the webcast. From May 2nd through May 8th, shareholders who present meeting credentials or other evidence of their Berkshire ownership (such as brokerage statements) to their local NFM store will receive the same discounts enjoyed by those visiting the Omaha store.

At Borsheims, we will again have two shareholder-only events. The first will be a cocktail reception from 6 p.m. to 9 p.m. on Friday, May 5th. The second, the main gala, will be held on Sunday, May 7th, from 9 a.m. to 4 p.m. On Saturday, we will remain open until 6 p.m. Remember, the more you buy, the more you save (or so my daughter tells me when we visit the store).

We will have huge crowds at Borsheims throughout the weekend. For your convenience, therefore, shareholder prices will be available from Monday, May 1st through Saturday, May 13th. During that period, please identify yourself as a shareholder either by presenting your meeting credential or a brokerage statement showing you own our stock.

On Sunday, in the mall outside of Borsheims, Norman Beck, a remarkable magician and motivational speaker from Dallas, will bewilder onlookers. On the upper level, we will have Bob Hamman and Sharon Osberg, two of the world's top bridge experts, available to play with our shareholders on Sunday afternoon. If they suggest wagering on the game, change the subject. I will join them at some point and hope Ajit, Charlie and Bill Gates will do so also.

My friend, Ariel Hsing, will be in the mall as well on Sunday, taking on challengers at table tennis. I met Ariel when she was nine, and even then I was unable to score a point against her. Ariel represented the United States in the 2012 Olympics. Now, she's a senior at Princeton (after interning last summer at JPMorgan Chase). If you don't mind embarrassing yourself, test your skills against her, beginning at 1 p.m. Bill Gates did pretty well playing Ariel last year, so he may be ready to again challenge her. (My advice: Bet on Ariel.)

Gorat's will be open exclusively for Berkshire shareholders on Sunday, May 7th, serving from 1 p.m. until 10 p.m. To make a reservation at Gorat's, call 402-551-3733 on April 3rd (*but not before*). Show you are a sophisticated diner by ordering the T-bone with hash browns.

We will have the same three financial journalists lead the question-and-answer period at the meeting, asking Charlie and me questions that shareholders have submitted to them by e-mail. The journalists and their e-mail addresses are: Carol Loomis, the preeminent business journalist of her time, who may be e-mailed at loomisbrk@gmail.com; Becky Quick, of CNBC, at BerkshireQuestions@cnbc.com; and Andrew Ross Sorkin, of the New York Times, at arsorkin@nytimes.com.

From the questions submitted, each journalist will choose the six he or she decides are the most interesting and important to shareholders. The journalists have told me your question has the best chance of being selected if you keep it concise, avoid sending it in at the last moment, make it Berkshire-related and include no more than two questions in any e-mail you send them. (In your e-mail, let the journalist know if you would like your name mentioned if your question is asked.)

An accompanying set of questions will be asked by three analysts who follow Berkshire. This year the insurance specialist will be Jay Gelb of Barclays. Questions that deal with our non-insurance operations will come from Jonathan Brandt of Ruane, Cunniff & Goldfarb and Gregg Warren of Morningstar. Since what we will be conducting is a *shareholders'* meeting, our hope is that the analysts and journalists will ask questions that add to our owners' understanding and knowledge of their investment.

Neither Charlie nor I will get so much as a clue about the questions headed our way. Some will be tough, for sure, and that's the way we like it. Multi-part questions aren't allowed; we want to give as many questioners as possible a shot at us. Our goal is for you to leave the meeting knowing more about Berkshire than when you came and for you to have a good time while in Omaha.

All told, we expect at least 54 questions, which will allow for six from each analyst and journalist and for 18 from the audience. The questioners from the audience will be chosen by means of 11 drawings that will take place at 8:15 a.m. on the morning of the annual meeting. Each of the 11 microphones installed in the arena and main overflow room will host, so to speak, a drawing.

While I'm on the subject of our owners' gaining knowledge, let me remind you that Charlie and I believe all shareholders should simultaneously have access to new information that Berkshire releases and, if possible, should also have adequate time to digest and analyze it before any trading takes place. That's why we try to issue financial data late on Fridays or early on Saturdays and why our annual meeting is always held on a Saturday (a day that also eases traffic and parking problems).

We do not follow the common practice of talking one-on-one with large institutional investors or analysts, treating them instead as we do all other shareholders. There is no one more important to us than the shareholder of limited means who trusts us with a substantial portion of his or her savings. As I run the company day-to-day – and as I write this letter – that is the shareholder whose image is in my mind.

* * * * * * * * * * * *

For good reason, I regularly extol the accomplishments of our operating managers. They are truly All-Stars who run their businesses as if they were the only asset owned by their families. I also believe the mindset of our managers to be as shareholder-oriented as can be found in the universe of large publicly-owned companies. Most of our managers have no financial need to work. The joy of hitting business "home runs" means as much to them as their paycheck.

Equally important, however, are the men and women who work with me at our corporate office. This team efficiently deals with a multitude of SEC and other regulatory requirements, files a 30,450-page Federal income tax return, oversees the filing of 3,580 state tax returns, responds to countless shareholder and media inquiries, gets out the annual report, prepares for the country's largest annual meeting, coordinates the Board's activities, fact-checks this letter – and the list goes on and on.

They handle all of these business tasks cheerfully and with unbelievable efficiency, making my life easy and pleasant. Their efforts go beyond activities strictly related to Berkshire: Last year, for example, they dealt with the 40 universities (selected from 200 applicants) who sent students to Omaha for a Q&A day with me. They also handle all kinds of requests that I receive, arrange my travel, and even get me hamburgers and French fries (smothered in Heinz ketchup, of course) for lunch. In addition, they cheerfully pitch in to help Carrie Sova – our talented ringmaster at the annual meeting – deliver an interesting and entertaining weekend for our shareholders. They are proud to work for Berkshire, and I am proud of them.

I'm a lucky guy, very fortunate in being surrounded by this excellent staff, a team of highly-talented operating managers and a boardroom of very wise and experienced directors. Come to Omaha – the cradle of capitalism – on May 6th and meet the Berkshire Bunch. All of us look forward to seeing you.

February 25, 2017

Warren E. Buffett
Chairman of the Board

Morning Session - 2017 Meeting

1. Welcome and introductions

WARREN BUFFETT: Thank you, and good morning.

That's Charlie. I'm Warren. (Laughter)

You can tell us apart because he can hear and I can see. That's why we — (laughter) — work together so well. We each have our specialty.

I'd like to welcome you to — we've got a lot of out-of-towners here, and I'd like to welcome you to Omaha. It's a terrific — (Applause)

Thank you.

It's a terrific city. And Charlie's lived in California now for about 70 years, but he's still got a lot of Omaha in him.

Both of us were born within two miles of this building that you're in. And Charlie — as he mentioned [in the pre-meeting movie] in his description of his amorous triumphs in high school — Charlie graduated from Central High, which is about one mile from here. It's a public school.

And my dad, my first wife, my three children and two of my grandchildren have all graduated from the same school.

In fact, my grandchildren say they've had the same teachers that my dad — (Laughter)

The — but it's a great city. I hope you get to see a lot of it while you're here.

And in just a minute we will start a question period — hopefully a question and answer period that will last till about noon, and then we'll take a break for an hour or so. We'll reconvene at one. And then we'll go — continue with the question and answer period till 3:30.

And then we'll break for 15 minutes or so. And then we'll convene the annual meeting of Berkshire, which I — we have three propositions that people wish to speak on, so that could last perhaps as long as an hour.

Before we start, I'd like to make a couple of introductions, the first being Carrie Sova, who's been with us about seven years. And can we have a light on Carrie? I think she — Carrie, are you there? (Applause)

Carrie. Stand up, Carrie, come on. (Laughter and applause)

Carrie puts on this whole program. She came to us about seven years ago and a few years ago I said, “Why don’t you just put on the annual meeting for me?” And she handles it all. And she has two young children.

And she has dozens and dozens and dozens of exhibitors that she works with and, as you can imagine, with all of what we put on and all of the numbers of you that come, the hotels and the airlines and the rental cars and everything, she does it as if, you know, she could do that and be juggling three balls at the same time.

She’s amazing, and I want to thank her for putting on this program for us. And — (Applause)

I also would like to welcome and have you welcome our directors.

They will be voted on later, so I’ll do this alphabetically. They’re here in the front row. And if we could just have the spotlight drop on them as they’re introduced.

And alphabetically, is Howard Buffett, Steve Burke, Sue Decker, Bill Gates, Sandy Gottesman, Charlotte Guyman, we have Charlie Munger next to me, Tom Murphy, Ron Olson, Walter Scott, and Meryl Witmer. Yeah. (Applause)

One more introduction I’m going to make, but I’ll save that for just a minute.

2. First quarter earnings

WARREN BUFFETT: And our earnings report was put out yesterday.

The — as we regularly explain, the realized investment gains or losses in any period really mean nothing. I mean, they —

We could take a lot of gains if we wanted to. We could take a lot of losses if we wanted to. But we don’t really think about the timing of what we do at all, except in relation to the intrinsic value of what we’re buying or selling. We are not —

We do not make earnings forecasts. And we have — on March 31st, we have over $90 billion of net unrealized gains. So if we wanted to report almost any number you can think of and count capital gains as part of the earnings, we could do it.

So in the first quarter — and I would say that we have a very, very, very slight preference this year, if everything else were equal — well, it’s true in any year, but it’s a little more so this year — we would rather take losses than gains, because of the tax effect if two securities were equally valued.

And there's probably just one touch more of emphasis on that this year, because we are taxed on gains at 35 percent, which means we also get the benefit — the tax benefit — at 35 percent of any losses we take.

And I would say that there's some chance of that rate being lower, meaning that losses would have less tax value to us after this year than they would have this — after this year than this year.

That is not a big deal, but it would be a very slight preference. And it may get to be more of a factor in deferring any gains, and perhaps accelerating any losses, as the year gets closer to December 31st, assuming — and I'm making no predictions about it — but assuming that there were to be a tax act that had the effect of reducing the earnings.

So in the first quarter, insurance underwriting was the swing factor. And the — there's a lot more about this in our 10-Q, which you can look up on the internet.

And you really, if you're seriously interested in evaluating our earnings or our businesses, you should go to the 10-Q, because the summary report, as we point out every quarter, does not really get to a number of the main points of valuation.

I would just mention two factors in connection with the insurance situation, which I love.

In the first four months — not the first three months — but the first four months, GEICO's had a net gain of 700,000 policy holders, and that's the highest number I can remember.

There may have been a figure larger than that somewhere in the past. I did not go back and look at them all. But last year I believe that figure was like 300,000.

And this has been a wonderful period for us at GEICO, because several of our major competitors have decided — and they publicly stated this — in fact one of them just reiterated it the other day — although they've now changed their policy — but they intentionally cut back on new business because new business carries with it a significant loss in the first year. There's just costs of acquiring new business.

Plus the loss ratio, strangely enough, on first-year business tends to run almost 10 points higher than on renewal business. And so not only do you have acquisition costs, but you actually have a higher loss ratio.

So when you write a lot of new business, you're going to lose money on that portion of the business that year.

And we wrote a lot of new business, and at least two of our competitors announced that they were lightening up for a while on new business, because they did not want to pay the penalty of the first-year loss.

And, of course, that's made to order for us, so we just put our foot to the floor and tried to write as much business — good business — as we can. And there are costs to that.

A second factor — well, it was not a factor in the P&L — but an important event in the first quarter is that we increased our float.

And on the slide, I believe it shows that year-over-year, 16 billion. Fourteen billion of that came in the first quarter of this year, so we had a $14 billion increase in float.

And for some years I've been telling you it's going to be hard to increase the float at all, and I still will tell you the same thing.

But it's nice to have $14 billion or more, which is one reason, if you look at our 10-Q, you will see that our cash and cash equivalents, including Treasury bills, now has come to well over 90 billion.

So I think I feel very good about the first quarter, even though our operating earnings were down a little bit.

One quarter means nothing. I mean, over time, what really counts is whether we're building the value of the businesses that we own.

And I'm always interested in the current figures, but I'm always dreaming about the future figures.

3. Tribute to Vanguard's Jack Bogle

WARREN BUFFETT: There's one more person I would like to introduce to you today, and I'm quite sure he's here. I haven't seen him, but I understood he was coming. There's a — I believe that he's made it today. And that is Jack Bogle, who I talked about in the annual report.

Jack Bogle has probably done more for the American investor than any man in the country. (Applause)

And Jack, would you stand up? There he is. (Applause)

Jack Bogle, many years ago, he wasn't the only one that was talking about an index fund, but he — it wouldn't have happened without him.

I mean, Paul Samuelson talked about it. Ben Graham even talked about it.

But the truth is, it was not in the interest of invest — of the investment industry of Wall Street. It was not in their interest, actually, to have the development of an index fund — the index fund — because it brought down fees dramatically.

And, as we've talked about some in the reports, and other people have commented, index funds, overall, have delivered for shareholders a result that has been better than Wall Street professionals as a whole.

And part of the reason for that is that they've brought down the costs very significantly.

So when Jack started, very few people — certainly Wall Street did not applaud him, and he was the subject of some derision and a lot of attacks.

And now we're talking trillions when we get into index funds, and we're talking a few basis points when we talk about investment fees, in the case of index funds, but still hundreds of basis points when we talk about fees elsewhere.

And I estimate that Jack, at a minimum, has saved — left in the pockets of investors, without hurting them overall in terms of performance at all — gross performance — he's put tens and tens and tens of billions into their pockets. And those numbers are going to be hundreds and hundreds of billions over time.

So, it's Jack's 88th birthday on Monday, so I just say happy birthday, Jack, and thank you on behalf of American investors. (Applause)

And Jack, I've got great news for you.

You're going to be 88 on Monday, and in only two years you'll be eligible for an executive position at Berkshire. (Laughter)

Hang in there, buddy. (Laughter)

4. Q&A begins

WARREN BUFFETT: OK. We've got a panel of expert journalists on this side, and expert analysts on that side, and expert shareholders in the middle. And we're going to rotate, starting with the analysts. And some who are here I have a — here we go. And we will — we'll do this through the afternoon.

After we — if we get through 54 questions, which would be six for each journalist, six for each analyst, and 18 more for the audience, then we will go strictly to the audience.

I don't think I've got any information as to what the situation is on overflow rooms. But we'll go to at least one of them.

But let's start off with Carol Loomis of Fortune Magazine, the longest serving employee in the history of Time Inc., I believe, with 60 years. And Carol, go to it. (Applause)

5. Loomis asks for Berkshire-related questions

CAROL LOOMIS: Thank you. Thanks from all of us journalists up here.

I know that there are many, many people out there who have sent us questions that aren't going to get answered. And I just want to say that it's very hard to get a question answered.

The one thing I could suggest is that you follow Warren's thought in the annual report, that he wants everybody to go away from this meeting more educated about Berkshire than they were when they came.

And one way you can do that is keep your questions quite directly Berkshire-related or relating to the annual letter. Even then it will be hard to get your question answered.

The three of us only have 18 questions in total, but I encourage you to think in the Berkshire-related direction when you're submitting a question next year.

6. Wells Fargo didn't act quickly enough to stop bad behavior

CAROL LOOMIS: Now, my first question. It's about Wells Fargo, which is Berkshire's largest equity holding — 28 billion at the end of the year. And this question comes from a shareholder who did not wish to be identified.

"In the wake of the sales practices scandal that last year engulfed Wells Fargo, the company's independent directors commissioned an investigation and hired a large law firm to assist in carrying it out.

"The findings of the investigation, which were harsh, have been released in what is called the Wells Fargo Sales Practices Reports." You can find it on the internet.

"It concludes that a major part of the company's problem was that, and I quote, 'Wells Fargo's decentralized corporate structure gave too much autonomy to the community banks' senior leadership,' end of quote.

"Mr. Buffett, how do you satisfy yourself that Berkshire isn't subject to the same risk, with its highly decentralized structure and the very substantial autonomy given to senior leadership of the operating companies?"

WARREN BUFFETT: Yeah, it's true that we at Berkshire probably operate on as — we certainly operate on a more decentralized plan than any company of remotely our size.

And we count very heavily on principles of behavior rather than loads of rules.

It's one reason at every annual meeting you see that Salomon description. And it's why I write very few communiqués to our managers, but I send them one once every two years and it basically says that we've got all the money we need. We'd like to have more, but we're — it's not a necessity.

But we don't have one ounce of reputation more than we need, and that our reputation at Berkshire is in their hands.

And Charlie and I believe that if you establish the right sort of culture, and that culture, to some extent, self-selects who you obtain as directors and as managers, that you will get better results that way in terms of behavior than if you have a thousand-page guidebook.

You're going to have problems regardless. We have 367,000, I believe, employees. Now, if you have a town with 367,000 households, which is about what the Omaha metropolitan area is, people are doing something wrong as we talk here today. There's no question about it.

And the real question is whether the managers at — [audio drops out] — are in a better — are worrying and thinking about finding and correcting any bad behavior, and whether, if they fail in that, whether the message gets to Omaha, and whether we do something about it.

At Wells Fargo, you know, there were three very significant mistakes, but there was one that dwarfs all of the others.

You're going to have incentive systems at any business — almost any business. There's nothing wrong with incentive systems, but you've got to be very careful what you incentivize. And you can't incentivize bad behavior. And if so, you better have a system for recognizing it.

Clearly, at Wells Fargo, there was an incentive system built around the idea of cross-selling and number of services per customer. And the company, in every quarterly investor presentation, highlighted how many services per customer. So, it was the focus of the organization — a major focus.

And undoubtedly, people got paid and graded and promoted based on that number — at least partly based on that number.

Well, it turned out that that was incentivizing the wrong kind of behavior.

We've made similar mistakes. I mean any company's going to make some mistakes in designing a system.

But it's a mistake. And you're going to find out about it at some point. And I'll get to how we find out about it.

But the biggest mistake was that — and I don't know — obviously don't know all the facts as to how the information got passed up the line at Wells Fargo.

But at some point, if there's a major problem, the CEO will get wind of it. And that is — at that moment, that's the key to everything, because the CEO has to act.

That Salomon situation that you saw happened because of — on April, I think, 28th, the CEO of Salomon, the president of Salomon, the general counsel of Salomon, sat in a room and they had described to them, by a fellow named John Meriwether, some bad practice, terrible practice, that was being conducted by a fellow named Paul Mozer, who worked for them.

And Paul Mozer was flimflamming the United States Treasury, which is a very dumb thing to do. And he was doing it partly out of spite, because he didn't like the Treasury and they didn't like him. So he put in phony bids for U.S. Treasurys and all of that.

So on April 28th, roughly, the CEO and all these people knew that they had something that had gone very wrong, and they had to report it to the Federal Reserve Board in New York — the Federal Reserve Bank of New York.

And the CEO, John Gutfreund, said he would do it, and then he didn't do it. And he undoubtedly put it off just because it was an unpleasant thing to do.

And then on May 15th, another Treasury auction was held, and Paul Mozer put in a bunch of phony bids again.

And at this point, it's all over, because the top management had known ahead of time, and now a guy that was a pyromaniac had gone out and lit another fire. And he lit it after they'd been warned that he was a pyromaniac, essentially.

And it all went downhill from there. It had to stop when the CEO learns about it.

And then they made a third mistake, actually, but again, it pales in comparison to the second mistake.

They made a third mistake when they totally underestimated the impact of what they had done once it became uncovered, because they — there was a penalty of 185 million. And in the banking business, people get fined billions and billions of dollars for mortgage practices and all kinds of things.

The total fines against the big banks, I don't know whether the total's 30 or 40 or a billion or whatever the number may be.

So, they measured the seriousness of the problem by the dimensions of the fine. And they thought $185 million fine signaled a less offensive practice than something involved 2 billion, and they were totally wrong on that.

But the main problem was they didn't act when they learned about it. It was bad enough having a bad system, but they didn't act.

At Berkshire, we have — the main source of information for me about anything that's being done wrong at a subsidiary is the hotline. Now, we got 4,000 or so hotline reports — or that come — we get communications on the hotline — perhaps 4,000 times a year.

And most of them are frivolous. You know, the guy next to me has bad breath or something like that. I mean it's — (laughter) — but there are a few serious ones, and the head of our internal audit, Becki Amick, looks at all those. People — a lot of them come in anonymous, probably most of them.

And some of them, she refers back to the companies, probably most of them. And — but anything that looks serious, you know, I will hear about, and that has led to action — well, put it, more than once.

And we've spent real money investigating some of those. We put special investigators, sometimes, on them. And, like I say, it has uncovered certain practices that we would not at all condone at the parent company.

I think it's a good system. I don't think it's perfect. I don't know what — I'm sure they've got an internal audit at Wells Fargo, and I'm sure they've got a hotline.

And I don't know the facts, but I would just have to bet that a lot of communications came in on that, and I don't know what their system was for getting them to the right person. And I don't know who did what at any given time.

But that was — it was a huge, huge, huge error if they were getting — and I'm sure they were — getting some communications and they ignored them, or they just sent them back down to somebody down below.

Charlie? You've followed it. What are your thoughts on it?

CHARLIE MUNGER: Well, put me down as skeptical when some law firm thinks they know how to fix something like this.

If you're in a business where you have a whole a lot of people under incentives very likely to cause a lot of misbehavior, of course you need a big compliance department.

Every big wirehouse stock brokerage firm has a huge compliance department. And if we had one, we would have a big compliance department too, wouldn't we, Warren?

WARREN BUFFETT: Absolutely.

CHARLIE MUNGER: Absolutely, but doesn't mean that everybody should try and solve their problems with more and more compliance.

I think we've had less trouble over the years by being more careful in whom we pick to have power and having a culture of trust. I think we have less trouble, not more.

WARREN BUFFETT: But we will have trouble from time to time.

CHARLIE MUNGER: Yes, of course. We'll be blindsided someday.

WARREN BUFFETT: Charlie says an ounce of prevention — he said when Ben Franklin, who he worships, said, "An ounce of prevention is worth a pound of cure," he understated it. An ounce of prevention is worth more than a pound of cure.

And I would say a pound of cure, promptly applied, is worth a ton of cure that's delayed. It — problems don't go away.

John Gutfreund said that problem, originally, was — he called it a traffic ticket. He told the troops there at Salomon it was a traffic ticket. You know, and it almost brought down a business.

Some other CEO, that they described the problem that he'd encountered as a foot fault. You know, and it resulted in incredible damage to the institution.

And so you've got to act promptly. And frankly, I don't know any better system than hotlines and anonymous letters to me. I get anonymous letters. And I've gotten three or four of them probably in the last six or seven years that have resulted in major changes.

And very, very occasionally they're signed. Almost always they're anonymous, but it wouldn't make any difference, because there were — will be no retribution against anybody, obviously, if they call our attention to something that's going wrong.

But I will tell you, as we sit here, somebody is doing — quite a few people — are probably doing something wrong at Berkshire, and usually, it's very limited. I mean maybe stealing small amounts of money or something like that.

But when it gets to some sales practice like was taking place at Wells Fargo, you can see the kind of damage it would do.

7. Driverless vehicles would hurt BNSF and GEICO

WARREN BUFFETT: We will now shift over to the analysts and Jonny Brandt.

JONATHAN BRANDT: Hi, Warren. Hi, Charlie. Thanks for having me.

You've addressed the risk of driverless cars to GEICO's business. But it strikes me that driverless trucks could narrow the cost advantage of railroads, even if the number of crew members in a locomotive eventually declines from two to zero.

Is autonomous technology more of an opportunity or more of a threat for the Burlington Northern?

WARREN BUFFETT: Oh, I would say that driverless trucks are a lot more of a threat than an opportunity — (laughs) — to the Burlington Northern.

And I would say that if driverless cars became pervasive, it would only be because they were safer. And that would mean that the overall economic cost of auto-related losses had gone down, and that would drive down the premium income of GEICO.

So, I would say both of those — and autonomous vehicles — widespread — would hurt us if they went — if they spread to trucks, and they would hurt our auto insurance business.

I think my personal view is that they will certainly come. I think they may be a long way off, but that will depend. It'll probably, frankly, depend on experience in the first early months of the introduction in other than test situations.

And if they make the world safer, it's going to be a very good thing, but it won't be a good thing for auto insurers.

And similarly, if they learn how to move trucks more safely, there's a — tends to be driver shortages in the truck business now — it obviously improves their position vis-à-vis the railroads.

Charlie?

CHARLIE MUNGER: Well, I think that's perfectly clear. (Laughter)

WARREN BUFFETT: Finally, approval. All these years. (Laughter)

8. Buying See's Candies from someone who preferred "girls and grapes"

WARREN BUFFETT: OK. Station 1. The shareholder.

AUDIENCE MEMBER: Hi, Warren and Charlie. My name is Bryan Martin and I'm from Springfield, Illinois.

In the HBO documentary, "Becoming Warren Buffett," you had a great analogy comparing investing to hitting a baseball and knowing your sweet spot.

Ted Williams knew his sweet spot was a pitch right down the middle. When both of you look at potential investments, what attributes make a company a pitch in your sweet spot that you'll take a swing at and invest in?

WARREN BUFFETT: Well, I'm not sure I can define it in exactly the terms you would like, but the — we sort of know it when we see it.

And it would tend to be a business that, for one reason or another, we can look out five, or 10, or 20 years and decide that the competitive advantage that it had at the present would last over that period.

And it would have a trusted manager that would not only fit into the Berkshire culture, but that was eager to join the Berkshire culture. And then it would be a matter of price.

But the main — you know, when we buy a business, essentially, we're laying out a lot of money now based on what we think that business will deliver over time. And the higher the certainty with which we make that prediction, the better off — the better we feel about it.

You can go back to the first — it wasn't the first outstanding business we bought, but it was kind of a watershed event — which was a relatively small company, See's Candy.

And the question when we looked at See's Candy in 1972 was, would people still want to be both eating and giving away that candy in preference to other candies?

And it wouldn't be a question of people buying candy for the low bid. And we had a manager we liked very much. And we bought a business that was — paid $25 million for it, net of cash, and it was earning about 4 million pretax then. And we must be getting close to $2 billion or something like that, pretax, that was taken out of it.

But it was only because we felt that people would not be buying, necessarily, a lower-price candy.

I mean it does not work very well if you go to your wife or your girlfriend on Valentine's Day — I hope they're the same person — (laughter) — and say, you know, "Here's a box of candy, honey. I took the low bid." You know, it doesn't — it loses a little as you go through that speech.

And we made a judgment about See's Candy that it would be special and — probably not in the year 2017 — but we certainly thought it would be special in 1982 and 1992. And fortunately, we were right on it. And we're looking for more See's Candies, only a lot bigger.

Charlie?

CHARLIE MUNGER: Yeah, well, but it's also true that we were young and ignorant then. And —

WARREN BUFFETT: Now we're old and ignorant. Yeah. (Laughter)

CHARLIE MUNGER: And yes, that's true, too.

And the truth of the matter is that it would have been very wise to buy See's Candy at a slightly higher price. You know if they'd asked it, we wouldn't have done it, so we've gotten a lot of credit for being smarter than we were.

WARREN BUFFETT: Yeah, and to be more accurate, if it had been 5 million more, I wouldn't have bought it. Charlie would have been willing to buy it, so, yeah.

Fortunately, that we didn't get to the point where we had to make that decision that way. But he would've pushed forward when I probably would've faded.

It's a good thing that a guy came around — actually the seller was the — well, he's the grandson of Mrs. See, wasn't he, Charlie? He was Larry See's son. Am I correct? Or Larry See's brother.

But he was not interested in the business. And he was interested in — more interested in girls and grapes, actually. And he almost changed his mind. Well, he did change his mind about selling.

And I wasn't there, but Rick Guerin told me that Charlie went in and gave a — an hour talk on the merits of girls and grapes over having a candy company. (Laughter)

This is true, folks. And the fellow sold to us, so that — (laughter) — I pull Charlie out in emergencies like that. He's — (Laughter)

CHARLIE MUNGER: We were very lucky that, early, the habit of buying horrible businesses because they were really cheap. It gave us a lot of experience trying to fix unfixable businesses as they headed downward toward doom.

And that early experience was so horrible, fixing the unfixable, that we were very good at avoiding it, thereafter. So, I would argue that our early stupidity helped us.

WARREN BUFFETT: Yeah, yeah. We learned we could not make a silk purse out of a sow's ear.

CHARLIE MUNGER: No, we learned —

WARREN BUFFETT: So, we went out looking for silk after that.

CHARLIE MUNGER: But you have to try it for a long time and fail and have rub — have your nose rubbed in it to really understand it.

9. "There are going to be marauders" at the moat

WARREN BUFFETT: OK, Becky? Becky Quick.

BECKY QUICK: This question comes from a shareholder named Mark Blakley in Tulsa, Oklahoma, who says, "There has been more news than usual in some of Berkshire's core stock holdings.

"Wells Fargo in the incentive and new account scandal, American Express losing the Costco relationship and playing catch-up in the premium card space, United Airlines and customer service issues, Coca-Cola and slowing soda consumption.

"How much time is spent reviewing Berkshire's stock holdings? And is it safe to assume, if Berkshire continues to hold these stocks, that the thesis remains intact?"

WARREN BUFFETT: Well, we spend a lot of time think — those are very large holdings. If you add up American Express, Coca-Cola, and Wells Fargo, I mean, you're getting up, you know, well into the high tens of billions of dollars. And those are businesses we like very much. There're different characteristics.

In the case of — you mentioned United Airlines, we actually are the largest holder of all four of the — we're the largest holder of the four largest airlines. And that is much more of an industry thought.

But all businesses have problems. And some of them have some very big plusses.

I personally — you mentioned American Express. If you read American Express's first quarter report and talk about their Platinum Card, the Platinum Card is doing very well.

The gains around the world. You know, I think there were 17 percent or something like that in billings in the U.K. and 15 percent is original currency — or the local currency — Japan, Mexico, and very good in the United States.

There's competition in all these businesses. If we thought — we did not buy American Express or Wells Fargo or United Airlines, Coca-Cola, with the idea that they would never have problems or never have competition.

What we did buy — why we did buy them — is we thought they had very, very strong hands. And we liked the financial policies in the cases of many of them. We liked their position.

We've bought a lot of businesses. And we do look to see where we think they have durable competitive advantage.

And we recognize that if you've got a very good business, you're going to have plenty of competitors that are going to try and take it away from you. And then you make a judgment as to the ability of your particular company and product and management to ward off competitors.

They won't go away, but the — we think — I'm not going to get into specific names on it — but those companies generally are very well-positioned.

I've likened essentially — if you've got a wonderful business, even if it was a small one like See's Candy, you basically have an economic castle. And in capitalism, people are going to try and take away that castle from you.

So, you want a moat around it, protecting it in various ways that can protect it. And then you want a knight in the castle that's pretty darn good at warding off marauders. But there are going to be marauders. And they'll never go away.

And if you look at — I think Coca-Cola was 1886. American Express was 18 — I don't know — '51 or '52 — starting out with an express business.

Wells Fargo was — I don't know what year they were started. Incidentally, I — American Express was started by [Henry] Wells and [William] Fargo as well.

So these companies had lots of challenges. And they'll have more challenges. And the companies we own have had challenges.

Our insurance business has had challenges. But, you know, we started with National Indemnity's $8 million purchase in 1968. And fortunately, we've had people like Tony Nicely at GEICO. And we've had Ajit Jain, who's added tens of billions of value.

And we've got some smaller companies that you probably don't even know about, but really have done a terrific job for us.

So there'll always be competition in insurance, but there'll always be things to do that a really intelligent management with a decent distribution system, various things going for him, can do to ward off the marauders.

So I — there was a specific question, "How much time is spent reviewing the holdings?" I would say that I do it every day. I'm sure Charlie does it every day.

Charlie?

CHARLIE MUNGER: Well, I don't think I had anything to add to that, either. (Laughter)

WARREN BUFFETT: We'll cut his salary if he doesn't participate here. (Laughter)

10. "We think we'll do well" with AIG reinsurance deal

WARREN BUFFETT: OK, Jay Gelb.

JAY GELB: This question is on Berkshire's retroactive reinsurance deal with AIG, which was the largest ever of its kind.

Based on AIG's track record of reserve deficiencies and the opportunity for Berkshire to invest the float, what is your level of confidence that this contract covering up to $20 billion of AIG's reserves in return for $10 billion of premiums will ultimately be profitable for Berkshire?

WARREN BUFFETT: Well, at the time we do every deal, I think it's smart. And then sometimes — (laughs) — I find out otherwise as we go along.

The deal, that Jay knows, but might be unfamiliar to many people, is that AIG transferred to us the liability for 80 percent of 25 billion — excess — of 25 billion.

In other words, they had to pay the first 25 billion. And then on the next 25 billion, we had to pay 80 percent of what they paid up to a limit of 20 billion, 80 percent of 25. And we got paid $10.2 billion for that.

And we had — and this applies to their losses in many classes of business written — or earned — before December 31st, 2015.

So Ajit Jain, who has made a lot more money for Berkshire than I — for you — than I have, but he evaluates that sort of transaction.

We talk about it a fair amount ourselves. I just find it interesting. I particularly find the 10.2 billion that they're going to give us interesting.

And the — we come to the conclusion that we think we'll do well by getting 10.2 billion today with a maximum payout of 20 billion over some — I mean, between now and judgment day — on this large piece of business.

AIG had very good reasons for doing this, because their reserves had been under criticism. And this essentially — probably — and should have, I think — put to bed the question of whether they were underreserved on that business. And we get the 10.2 billion.

And the question is how fast we pay out the money and how much money we pay out. And Ajit does 99 percent of the thinking on that. And I do one percent. And we project out what we think will happen.

And we know whatever our projection is, that it will be wrong, but we try to be conservative.

And we've done a fair amount of these deals. This is the largest. The second largest was a creature that was formed out of Lloyd's of London some years ago.

And we've been wrong on one transaction that involved something over a billion of premium. I mean clearly wrong.

And there are a couple of others that may or may not work out depending on what you assume we have earned on the funds. But they're OK.

But they probably didn't come out as well as we thought they would, though. But overall, we've done OK on this.

It's less OK when we're sitting around with 90-plus billion of cash. So the incremental 10.2 billion we took in in the first quarter is earning us peanuts at the moment. And peanuts is not what fits into the formula for making this an attractive deal.

So we have — we do have to assume we'll find uses of the money, but the money will be with us quite a while. And I think our calculations are on the conservative side. They are not the identical calculations that AIG makes. I mean, we come up with our own estimate of payouts and all of that.

And I think it — actually, I think it was quite a good transaction from AIG's standpoint. Because they did take 20 billion of potential losses off for 10.2 billion.

And I think they satisfied the investing community that they were quite unlikely to have adverse development in the period prior to 2015 that was not accounted for by this transaction.

Charlie?

CHARLIE MUNGER: Well, I think it's intrinsically a dangerous kind of activity. And — but that's one of its attractions. I don't think there are any two people in the world that are better at this kind of transaction than Ajit and Warren.

And nobody else has had the experience we've had. Just get me in a lot more of those businesses and I'll accept a little extra worry.

WARREN BUFFETT: There's one thing I should mention, too, that we actually were the only insurance operation in the world that would write that sort of a contract and that — where it would be satisfactory to the other party.

I mean, when somebody hands you $10.2 billion and says, "I'm counting on you to pay 20 billion back, even if it's 50 years from now, on the last dollar," there are very few people that they'd want to hand 10.2 billion to. And there —

So it's a — there's limited people on the other side. I mean, there's not that many people remotely that have that kind of size deal. But —

CHARLIE MUNGER: "Very few" is a good expression. He means "one." (Laughter)

WARREN BUFFETT: Yeah.

11. "A life properly lived is just learn, learn, learn"

WARREN BUFFETT: OK. We'll go to station 2.

AUDIENCE MEMBER: Hello, Mr. Buffett, Mr. Munger. My name's Grant Gibson (PH). I'm from Denver, Colorado, and this is my fifth consecutive year here. So thank you for having us.

WARREN BUFFETT: Thanks for coming.

AUDIENCE MEMBER: Appreciate it. With all due respect, Mr. Buffett, this question is for Mr. Munger. (Laughter)

In your career of thousands of negotiations and business dealings, could you describe for the crowd which one sticks out in your mind as your favorite or is otherwise noteworthy?

CHARLIE MUNGER: Well, I don't think I've got a favorite. But the one that probably did us the most good as a learning experience was See's Candy.

It's just the power of the brand, the unending flow of ever-increasing money with no work. (Laughter)

AUDIENCE MEMBER: Sounds nice. (Laughter)

CHARLIE MUNGER: It was. And I'm not sure we would have bought the Coca-Cola if we hadn't bought the See's.

I think that a life properly lived is just learn, learn, learn all the time. And I think Berkshire's gained enormously from these investment decisions by learning through a long, long period.

Every time you appoint a new person that's never had big capital allocation experience, it's like rolling the dice. And I think we're way better off having done it so long. And —

But the decisions blend, and the one feature that comes through is the continuous learning. If we had not kept learning, you wouldn't even be here.

You'd be alive probably, but not here. (Laughter)

WARREN BUFFETT: There's nothing like the pain of being in a lousy business — (laughs) — to make you appreciate a good one.

CHARLIE MUNGER: Well, there's nothing like getting into a really good one that's a very pleasant experience and it's a learning experience.

I have a friend who says, "The first rule of fishing is to fish where the fish are. And the second rule of fishing is to never forget the first rule." (Laughter)

And we've gotten good at fishing where the fish are.

WARREN BUFFETT: Yeah, that's only metaphorically.

CHARLIE MUNGER: There're too many other —

WARREN BUFFETT: I went to fish with Charlie one time. He didn't get —

CHARLIE MUNGER: There are too many other boats in the damn water. (Laughter)

But the fish are still there.

WARREN BUFFETT: Yeah, we bought a department store in Baltimore in 1966. And there's really nothing like being in an experience of trying to decide whether you're going to put a new store in a area that hasn't really developed yet enough to support it, but your competitor may move there first.

And then you have the decision of whether to jump in. And if you jump in, that kind of spoils it. Now you've got two stores where even one store isn't quite justified.

How to play those games — those business games — is — you learn a lot by trying. And what you really learn is which ones to avoid.

I mean, it — you just stay out of a bunch of terrible businesses, you're off to a very great start, as far as — because we've tried them all.

CHARLIE MUNGER: But you can really learn, because the experience is a lot like eating cuttle (PH) burgers. And it really gets your attention. (Laughter)

WARREN BUFFETT: Well, we won't expand on that. (Laughter)

12. Making mistakes with IBM, Google, and Amazon

WARREN BUFFETT: Andrew Ross Sorkin.

ANDREW ROSS SORKIN: Good morning, Warren.

This question comes from a long-time shareholder who I should tell you accosted me last night in the lobby of the Hilton Hotel with this question.

"Warren, for years, you stayed away from technology companies, saying they were too hard to predict and didn't have moats. Then you seemed to change your view about technology when you invested in IBM, and again when you recently invested in Apple.

"But then on Friday you said IBM had not met your expectations and sold a third of our stake.

"Do you view IBM and Apple differently? And what have you learned about investing in technology companies?"

WARREN BUFFETT: Well, I do view them differently. But, you know, obviously, when I bought the IBM — started buying it six years ago — I thought it would do better in the six years that have elapsed than it has.

And Apple — I regard them as being in quite different businesses. I think Apple is much more of a consumer products business, in terms of the — in terms of sort of analyzing moats around it, and consumer behavior, and all that sort of thing.

It's obviously a product with all kinds of tech built into it. But in terms of laying out what their prospective customers will do in the future, as opposed to, say, IBM's customers, it's a different sort of analysis.

That doesn't mean it's correct. And we'll find out over time. But they are two different types of decisions.

And I was wrong on the first one, and we'll find out whether I'm right or wrong on the second. But I do not regard them as apples and apples, and I don't quite regard them as apples and oranges, but they're — it's somewhat in between on that.

Charlie?

CHARLIE MUNGER: Well, we avoided the tech stocks, because we felt we had no advantage there and other people did. And I think that's a good idea not to play where the other people are better.

But, you know, if you ask me, in retrospect, what was our worst mistake in the tech field, I think we were smart enough to figure out Google. Those ads worked so much better in the early days than anything else.

So I would say that we failed you there. And we were smart enough to do it and didn't do it. We do that all the time, too.

WARREN BUFFETT: Yeah. We were their customer very early on with GEICO, for example. And we saw — I don't — these figures are way out of date, but I — as I remember, you know, we were paying them 10 or 11 dollars a click or something like that.

And any time you're paying somebody 10 or 11 bucks every time somebody just punches a little thing where you've got no cost at all, you know, that's a good business, unless somebody's going to take it away from you.

And so we were close up, seeing the impact of that.

And incidentally, if any of you don't have anything to do in your hotel rooms tonight, just keep punching Progressive or something. And — (Laughter)

Don't really do that. (Laughter)

The thought just happened to cross my mind. The — (Laughter)

But, you know, that is — and you've never seen a business — almost never seen a business — like it, where —

And I think for LASIK surgery and things like that, I think the figures were, you know, 60 or 70 bucks a click with no incremental — no cost.

So — and I knew the guys. I mean, they actually designed their prospectus. They came to see me. And they — a little bit after the original one, when they went public, a little bit after Berkshire even. And so I had plenty of ways to ask questions or anything of the sort, educate myself. But I blew it — (laughs) — and —

CHARLIE MUNGER: We blew Walmart, too. When it was a total cinch, we were smart enough to figure that out and we didn't.

WARREN BUFFETT: Yeah, figuring out — execution is what counts. So — (Laughs)

Anyway, we'll — and I could be making two mistakes on IBM. I mean, the — you know, they're — they —

It's harder to predict, in my view, the winners in various items, or how much price competition will enter in to something like cloud services and all of that.

I will — I made a statement the other day, which it's really remarkable, and I was — I asked Charlie whether he could think of a situation like it — where one person has built an extraordinary economic machine in two really pretty different industries, you know, almost simultaneously, as has happened —

CHARLIE MUNGER: From a standing start at zero.

WARREN BUFFETT: From a standing start at zero, with other — with competitors with lots of capital and everything else.

To do it in retailing and to do it with the cloud, like Jeff Bezos has done, I mean, I —

People like the Mellons invested in a lot of different industries and all of that. But he has been, in effect, the CEO, simultaneously, of two businesses starting from scratch that if — you know, Andy Grove used to use — at Intel — used to say, you know, "Think about if you had a silver bullet and you could shoot it at — and get rid of one of your competitors, who would it be?"

Well, I think that both in the cloud and in retail, there are a lot of people that would aim that silver bullet at Jeff.

And he's done — it's a different sort of game — but he's, you know, at The Washington Post, he's played that hand as well as anybody I think possibly could.

So it's a remarkable business achievement, where he's been involved, actually, in the execution, not just bankrolling it, of two businesses that are probably as feared by their competitors, almost, as any you can find.

It's — Charlie, you got further thoughts?

CHARLIE MUNGER: Well, we're sort of like the Mellons, old-fashioned people who done all right. And Jeff Bezos is a different species. (Laughter)

WARREN BUFFETT: And we missed it entirely, incidentally. We never owned a share of Amazon. (Laughs)

13. Buffett defends investing in competitive airline industry

WARREN BUFFETT: OK, Gregg Warren.

GREGG WARREN: Warren, my question relates to some recent stock purchases as well.

Unlike the railroads, which benefit from colossal barriers to entry due to their established, practically impossible to replicate, networks of rail and rights of way, the airline industry seems to have few, if any advantages.

Even with the consolidation we've seen during the past 15 years, the barriers to entry are few and the exit barriers are high.

The industry also suffers from low switching cost and intense pricing competition, and is heavily exposed to fuel costs, with rising fuel prices being difficult to pass on, and declining fuel prices leading to more price competition.

Compare this with rail customers who have few choices and thus wield limiting buying power, and where fuel charges allow the industry to mitigate fuel price fluctuations.

While you've noted several times since the airline stock purchases were announced that the two industries are quite different and that comparisons should not be made to Berkshire's move into railroads a decade ago, could you walk us through what convinced you that the airlines were different enough this time around for Berkshire to invest close to $10 billion in the four major airlines?

Because it would seem to me that UPS, which you have a small stake in, and FedEx, both of which have wider economic moats built on more identifiable and durable competitive advantages, would be a better option for long-term investors.

WARREN BUFFETT: Yeah, the decision in respect to airlines had no connection with our being involved in the railroad business.

I mean, you can classify them, you know, maybe in — as transportation businesses or something. But it had no connection, had no more connection than the fact we own GEICO or, you know, any other business.

You couldn't pick a tougher industry, you know, ever since Orville [Wright] went up and I said, you know, that if anybody'd really been thinking about investors, they should have had Wilbur [Wright] shoot him down and save everybody a lot of money for a hundred years.

You can go to the internet and type in "airlines" and "bankrupt," and you'll see that something like a hundred airlines — in that general range, you know, gone bankrupt in the last few decades.

And actually, Charlie and I were directors for some time of USAir. And people write about how we had a terrible experience in USAir. It was the — one of the dumbest things I'd ever done. And there's a lot of —

CHARLIE MUNGER: You made a fair amount of money out of it, too.

WARREN BUFFETT: Yeah, and we made a lot of money out of it. (Laughs)

CHARLIE MUNGER: It was undeserved.

WARREN BUFFETT: But we made a lot of money out of it, because there was one little brief period when people got all enthused about USAir. And after we left as directors and after we sold our position, USAir managed to go bankrupt twice in the subsequent period.

I mean, you've named all of the — not all of them — but you've named a number of factors that just make for terrible economics.

And I will tell you that if capacity — you know, it's a fiercely competitive industry. The question is whether it's a suicidally competitive industry, which it used to be.

I mean, when you get virtually every one of the major carriers, and dozens and dozens and dozens of minor carriers going bankrupt, you know, it ought to come upon you, finally, that maybe you're in the wrong industry.

It has been operating for some time now at 80 percent or better of capacity — being available seat miles — and you can see what deliveries are going to be and that sort of thing.

So if you make — I think it's fair to say that they will operate at higher degrees of capacity over the next five or 10 years than the historical rates, which caused all of them to go broke.

Now the question is whether, even when they're doing it in the 80s, they will do suicidal things in terms of pricing, remains to be seen.

They actually, at present, are earning quite high returns on invested capital. I think higher than either FedEx or UPS, if you actually check that out.

But that doesn't mean — tomorrow morning, you know, if you're running one of those airlines and the other guy cuts his prices, you cut your prices, and as you say, there's more flexibility when fuel goes down to bring down prices than there is to raise prices when prices go up.

So the industry, you know — it is no cinch that the industry will have some more pricing sensibility in the next 10 years than they had in the last hundred years. But the conditions have improved for that.

They've got more labor stability than they had before, because they're basically all going to — they've been through bankruptcy.

And they're all going to sort of have an industry pattern bargaining, it looks to me like. They're going to have a shortage of pilots to some degree. But it's not like buying See's Candy.

Charlie?

CHARLIE MUNGER: No, but the investment world has gotten tougher with more competition, more affluence, and more absolute obsession with finance throughout the whole country. And we picked up a lot of low-hanging fruit in the old days, where it was very, very easy. And we had huge margins of safety.

Now we operate with a less advantageous general climate. And maybe we have small statistical advantages, where in the old days it was like shooting fish in a barrel.

But that's all right. It's OK if it gets a little harder after you get filthy rich. (Laughter)

WARREN BUFFETT: Yeah. Charlie's more philosophical than I am on that point. (Laughter)

CHARLIE MUNGER: Well, I can't bring back the low-hanging fruit, Warren. You're just going to have to keep reaching for the higher branches.

WARREN BUFFETT: Gregg, the — I don't — I think the odds are very high that there are more revenue passenger miles five years from now or 10 years from now.

If the airlines — if the airline companies are only worth, five or 10 years from now, what they're worth now, in terms of equity, we'll get a pretty reasonable rate of return, because they're going to buy in a lot of stock at fairly low multiples.

So if the company's worth the same amount at the end of the year and there's fewer shares of stock outstanding, over time we make decent money. And all four of the major airlines are buying in stock at a —

CHARLIE MUNGER: You've got to remember that the railroads were a terrible business for decades and decades and decades and then they got good.

WARREN BUFFETT: Yeah, it — we like — I like the position. Obviously, by buying all four, it means that it's very hard to distinguish who will do the — at least in my mind — it's hard to distinguish who will do the best.

I do think the odds are quite high that, if you take revenue passenger miles flown five or 10 years from now, it will be a higher number. And that will be —

There'll be low-cost people who come in. And, you know, the Spirits of the world and JetBlues, whatever it may be. But the — my guess is that all four of the companies we have will have higher revenues. The question is what their operating ratio is.

They will have fewer shares outstanding by a significant margin. So even if they're worth just what they're worth today, we could make a fair amount of money. But it is no cinch, by a long shot.

14. Coca-Cola and Buffett get "Black Planet Award"

WARREN BUFFETT: OK, station 3.

AUDIENCE MEMBER: Good morning, everybody. My name is Savilla Aliance (PH). I'm from Germany. And I'm member of board of Ethecon Foundation Ethics and Economy.

I'm very happy that I can put my question here. And maybe you are not as happy as I am to listen to it.

WARREN BUFFETT: (Laughs) Well, we'll try to stay happy. Thank you for coming. (Laughter)

AUDIENCE MEMBER: Thank you. Mr. Buffett, a few years ago, I saw a movie in which you proclaimed that the print on the dollar bill — "In God We Trust" — does not really express your philosophy. In your opinion, only cash counts. And your credo is, "in the dollar I trust." You obviously thought —

WARREN BUFFETT: I don't think I've ever said that actually. But —

AUDIENCE MEMBER: Well, I can show you the movie. (Laughs) That will prove.

WARREN BUFFETT: Oh, well, I — send me a clip. I —

AUDIENCE MEMBER: Well, maybe it was just joking. But always behind a joke there is also a truth. So — well, you laughed heartily at that moment.

You, as one of the most richest men in — of all times on this Earth, are you not a good-humored, friendly, elderly gentleman?

Whatever motivated those who designed the dollar notes, they certainly wanted to say that there is something higher than the value of this printed paper.

Regrettably, you have shown many times in your life that you see this differently. You have accumulated billions of dollars — (applause) — showed extraordinary cleverness and skill, and you knew — you knew better to pick up than many others who, like you, used the rules which are inherent to capitalism for their own intentions.

But have you ever given a thought to what troubles and sacrifices, slavery and destruction of Mother Earth, and even diseases and deaths stick to the dollar bills which you gather so eagerly? (Booing)

Let's take Coca-Cola. (Booing)

Ethecon Foundation Ethics and Economy from Germany has awarded the Black Planet Award to the members of the board of directors as well as to the large shareholders, Warren Buffett and Allen — and Herbert Allen —because you are co-responsible for all of what makes these group make so much money, isn't it?

Among other things, Coca-Cola deprives people —

WARREN BUFFETT: Well, I —

AUDIENCE MEMBER: — of their drinking water —

WARREN BUFFETT: — at some point, yeah, I —

AUDIENCE MEMBER: — in drought-prone areas of the world.

WARREN BUFFETT: Well, are you asking a question?

AUDIENCE MEMBER: And many (inaudible) contaminate the groundwater in these areas.

WARREN BUFFETT: I don't want to interrupt you, but are you — (applause) — making a speech or asking a question?

AUDIENCE MEMBER: Well, I put my question right now.

WARREN BUFFETT: OK, good.

AUDIENCE MEMBER: Will you give up your Coca-Cola shares if the destruction of the environment, the monopolization of the right to healthy drinking water, and the shameless exploitation of the workers continue?

CHARLIE MUNGER: Well, that's more of a speech than a question.

WARREN BUFFETT: Yeah. (Applause)

I don't think that quote you had earlier — I have — I've said once or twice that it should say "In the Federal Reserve We Trust" because they print the money. And if they print too much of it, it could decline in value.

But I've never — to my knowledge, I've never said anything like you originally said.

And I would say this. I think I've been eating things I like to eat all my life. And Coca-Cola — this Coca-Cola's 12 ounces, I drink about five a day. (Laughter) It has about 1.2 ounces of sugar in it.

And if you look at what people — different people — get their sugar and calories from, they get them from all kinds of things. I happen to believe that I like to get 1.2 ounces with this. And it's enjoyable.

Since 1886, people have found it pleasant. And I would say that if you pick every meal in terms of what somebody in some recent publication has told you is the very best for you, I offer you that. I say, "Go to it."

But if you told me that I would live one year longer. And I don't even think that — that I would live one year longer if I'd eaten nothing but broccoli and asparagus and everything my Aunt Alice wanted me to eat all my life or I could eat everything I enjoyed eating, including chocolate sundaes, and Coca-Cola, and steak, and hash browns, you know, I would rather eat what — in a way I enjoy for my whole life than — and — than, you know eat some other way and live another year. (Applause)

And I do think that choice should be mine, you know? If somebody decides sugar is harmful, you know, there — maybe you'd encourage the government to ban sugar. But sugar in Coca-Cola is not different than eating sugar, you know, put on my Grape-Nuts in the morning or whatever else I'm having.

So I think Coca-Cola's been a very, very positive factor in America for — and the world — for a long, long time. And you can look at a list of achievements of the company. (Applause)

And I really don't want anybody telling me I can't drink it.

Charlie?

CHARLIE MUNGER: Well, I've solved my Coca-Cola problem by drinking Diet Coke. And I swill the stuff like other people swill I don't know what. And I've been doing it for just as long as you've been taking all those Coca-Colas that — I've had breakfast with Warren when he has Coca-Colas and nuts. (Laughter)

WARREN BUFFETT: And pretty damn good too. (Laughter)

CHARLIE MUNGER: If you keep doing that, Warren, you may not make a hundred.

WARREN BUFFETT: Well — (laughter) — I think there's something in longevity to feeling happy about your life, too. It's not —

CHARLIE MUNGER: Absolutely. (Applause)

15. Intrinsic value projections depend on interest rates

WARREN BUFFETT: OK, Carol?

CAROL LOOMIS: This question is from Franz Tramberger (PH) of Austria. And it concerns intrinsic value, which is neither — Warren may rather — he may amend this, my definition here, but — which is neither a company's accounting value nor its stock market value, but is rather its estimated real value.

So the question is, "At what rate has Berkshire compounded intrinsic value over the last 10 years? And at what rate, including your explanation for it please, do you think intrinsic value can be compounded over the next 10 years?"

WARREN BUFFETT: Yeah. Intrinsic value, you know, can only be calculated — or gains — you know, in retrospect.

But the intrinsic value pure definition would be the cash to be generated between now and Judgment Day, discounted at an interest rate that seems appropriate at the time. And that's varied enormously over a 30 or 40-year period.

If you pick out 10 years, and you're back to May of 2007, you know, we had some unpleasant things coming up. But we've — I would say that we've probably compounded it at about 10 percent.

And I think that's going to be tough to achieve, in fact almost impossible to achieve, if we continued in this interest rate environment.

That's the number one — if you asked me to give the answer to the question, if I could only pick one statistic to ask you about the future before I gave the answer, I would not ask you about GDP growth. I would not ask you about who was going to be president.

I would — a million things — I would ask you what the interest rate is going to be over the next 20 years on average, the 10-year or whatever you wanted to do.

And if you assume our present interest rate structure is likely to be the average over 10 or 20 years, then I would say it'd be very difficult to get to 10 percent.

On the other hand, if I were to pick with a whole range of probabilities on interest rates, I would say that that rate might be — it might be somewhat aspirational. And it might well — it might be doable.

And if you would say, "Well, we can't continue these interest rates for a long time," I would ask you to look at Japan, you know, where 25 years ago, we couldn't see how their interest rates could be sustained. And we're still looking at the same thing.

So I do not think it's easy to predict the course of interest rates at all. And unfortunately, predicting that is embedded in giving a good answer to you.

I would say the chances of getting a terrible result in Berkshire are probably as low as about anything you can find. Chance of getting a sensational result are also about as low as anything you can find. So if I — I would — I —

My best guess would be in the 10 percent range, but that assumes somewhat higher interest rates — not dramatically higher — but somewhat higher interest rates in the next 10 or 20 years than we've experienced in the last seven years.

Charlie?

CHARLIE MUNGER: Well, there's no question about the fact that the future, with our present size is, in terms of percentages of rates of return, is going to be less glorious than our past. And we keep saying that. And now we're proving it. (Laughter)

WARREN BUFFETT: Do you want to end on that note, Charlie? Or would you care to — (Laughter)

CHARLIE MUNGER: Well, I do think Warren's right about one thing. I think we have a collection of businesses that on average has better investment values than, say, the S&P average. So I don't think you shareholders have a terrible problem.

WARREN BUFFETT: And I would say we probably — well, I'm certain — we have — we do have more of a shareholder orientation than the S&P 500 as a whole. I mean, for — you know, the —

This company has a culture where decisions are made for — as an owner, as a private owner would make them. And frankly, that's a luxury we have that many companies don't have. I mean, they're under pressures today, sometimes, to do things.

One of the questions I ask the CEO of every public company that I meet is, "What would you be doing differently if you owned it all yourself?" And the answer, you know, is usually this, that, and a couple of other things.

If you would ask us, the answer is, you know, we're doing exactly what we would do if we owned them all — all the stock ourselves. And I think that's a small plus over time.

Anything further, Charlie? (Applause)

CHARLIE MUNGER: I think we have one other advantage. A lot of other people are trying to be brilliant. And we're just trying to stay rational. And — (laughter and applause) — it's a big advantage. Trying to be brilliant is dangerous, particularly when you're gambling.

16. Who benefits from corporate tax cut varies by industry

WARREN BUFFETT: OK, Jonathan?

JONATHAN BRANDT: If corporate tax rates are reduced meaningfully, Berkshire will enjoy a one-time boost to book value because of its sizable deferred tax liability, and its go-forward earnings should be higher, too, at least in theory.

How much of the reduced tax rate will be passed along to Berkshire's customers through, for instance, lower electricity rates or lower railroad shipping rates? And how much will go to Berkshire shareholders?

WARREN BUFFETT: Yeah, the question is, in the case of our utility businesses, all benefit of lower tax rates goes to customers. And it should be, because we are allowed a return on equity — in general — I mean, I'm simplifying a little bit. But the —

We're allowed a return on equity that's computed on an after-tax basis. And the utility commissions would, if taxes were raised, would presumably give us higher rates to compensate for that.

And if taxes are lowered, they would say, "You're not entitled to make more money just because tax rates — on equity — because tax rates have been lowered." So forget about the utility portion of the deferred taxes.

The deferred taxes that are applicable to our unrealized gains in securities, we would get all the benefit of. Because I mentioned we had 90 billion-plus of unrealized gains. And if the rates were changed on those in either direction, our owners, dollar for dollar, will participate in that.

And then you get into the other businesses. You mentioned the railroad, but it can be all of our other businesses.

To some extent, if tax rates are lowered, to different degrees in different industries, depending on the number of players, the competitive conditions, some of it may — some if it almost certainly gets competed away. And some of it would likely not be competed away.

And that's — you know, economists can argue about that a lot. But I've seen it in action in a lot of cases.

You got a big decline in rates, for example, in the U.K. And we've had them over my lifetime. We had 52 percent corporate rates. You know, we've had a lot of different numbers.

So I have seen how behavior — economic behavior — works. And I would say that it's certain that some of any lower rate would be competed away. And it's virtually certain that some would enure to the benefit of the shareholders. And it's very industry and company specific in how that plays out.

Charlie?

Well, we — dollar for dollar, I mean, there's 90 or 95 billion, if the rate were to drop 10 percent, that 9 1/2 billion is — by 10 percentage points — that 9 1/2 billion's real.

On the other hand, if it goes up as it did — went up from 28 to 35 percent, they can take it away from us, too.

CHARLIE MUNGER: Well, I think it's true that we're peculiar in one way. If things go to hell in a handbasket and then get better later, we're likely to do better than most others.

And we don't wish for that. And we don't want our company to have to suffer through it. And we fear what might happen if the country went through the ringer like that.

But if that real adversity comes, we're likely to do better in the end. We're good at navigating through that kind of stuff.

WARREN BUFFETT: Yeah, and occasionally, there will be —

CHARLIE MUNGER: A lot — in fact, we're quite good at it. (Laughter)

WARREN BUFFETT: There will be occasional hiccups in the American economy. Doesn't have much to do with who's president or anything like that. Those people may get blamed or given credit for different things.

But it's just — it is the nature of market systems to occasionally go haywire in one direction or another. And it's been ever thus, you know, and it'll be ever thus.

It's not — it does not have a — there's not a — it's not a — on a regular sine wave-type picture or anything of the sort. But it's certain to happen from time to time.

And we will probably have a fair amount of money and credit at that time. And we certainly —

We're not affected. When the rest of the world is fearful, we know America's going to come out fine. And we will not have a trouble — any trouble — psychologically, acting at all.

And then the question is how much do we have in the way of resources? We'll also never put the company in any kind of risk just because we see a lot of opportunities. We'll grab all the ones we can that we can handle. And not lose a day of sleep.

(Someone shouts in the audience)

I didn't quite get that. But —

17. Why Buffett sold his used Cadillac for a profit

WARREN BUFFETT: In any event, we will now go to station 4. And if the person yelling — are we up there in station — are you on station 4?

AUDIENCE MEMBER: Yes, Dr. Bruce Hertz from Glenview, Illinois. I wanted to thank you for allowing me to attend. I feel both honored and blessed.

My question for Mr. Buffett is, you've always advised us to purchase equities that appreciate in value. Yet a few years ago you sold your used Cadillac at a tremendous profit. (Laughter)

How can you justify selling a depreciating asset for a significant profit? Thank you.

WARREN BUFFETT: Yeah, well — (laughter) — actually I gave it to Girls Inc. And they sold it. And it was kind of an interesting — (Applause)

A very nice guy bought it for a hundred and some thousand dollars. And I did not — and Girls Inc. got the money. And he got in the — he came later, actually, with his family.

And he drove it away without any plates. He was driving back to New York. And he got picked up by the police — (laughter) — in Illinois. And he said, "Well" — he started giving this explanation about how he'd given this money to Girls Inc. and was driving the car back. And he had this nice looking family with him.

And the cops were quite skeptical. But fortunately, I'd signed the dashboard for him as part of the deal when he — and so they looked at that. And then they just said, "Well, did he give you any stock tips?" And they let him go. (Laughter)

I can't recall ever selling a used car at a profit. But we — I don't think I've sold any personal possession. Well, I've got a house for sale.

CHARLIE MUNGER: You don't have any personal possessions. (Laughter)

WARREN BUFFETT: Yeah. No, I — anything you see with a figure attached like that —

CHARLIE MUNGER: You're a fatter version of Mahatmas Gandhi — (laughter) — Mahatma Gandhi.

WARREN BUFFETT: The guy was a very nice guy that bought it. And, you know, his check cleared. So we were fine. (Laughter)

18. Why Buffett wants his wife to own an index fund after he dies

WARREN BUFFETT: Becky?

BECKY QUICK: I'd like to ask a question that can serve as a follow-up to the question that Carol had asked. And Charlie, in that response, said that he thinks that Berkshire's businesses on the whole will do better than the S&P 500.

Clark Cameron (PH) from Birmingham, Alabama, who owns 281 shares of Berkshire B, writes in and asks, "Why have you advised your wife to invest in index funds after your death rather than Berkshire Hathaway? I believe Munger has counseled his offspring to quote, 'Not be so dumb as to sell.'"

WARREN BUFFETT: Yeah. (Laughter)

She won't be selling any Berkshire to buy the index funds. All of my Berkshire, every single share, will go to philanthropy.

So the — I don't even regard myself as owning Berkshire, you know, basically — (applause) — it's committed.

And so far, about 40 percent has already been distributed.

So the question is, somebody who is not an investment professional will be, I hope, reasonably elderly by the time that the estate gets settled.

And what is the best investment, meaning one that there would be less worry of any kind connected with and less people coming around and saying, "Why don't you sell this and do something else?" and all those things. She's going to have more money than she needs.

And the big thing, then, you want is money not to be a problem. And there will be no way that if she holds the S&P — or virtually no way, absent something happening with weapons of mass destruction — but virtually no way that she won't — she'll have all the money that she possibly can use.

She'll have a little liquid money so that if stocks are down tremendously at some point, there's — they close the stock exchange for a while, anything like that — she'll still feel that she's got plenty of money.

And the object is not to maximize. It doesn't make any difference whether the amount she gets doubles or triples or anything of the sort. The important thing is that she never worries about money the rest of her life.

And I had an Aunt Katie here in Omaha, who Charlie knew well, and worked for her husband, as did I. And she worked very hard all her life. And had lived in a house she'd paid, I think, I don't know, $8,000 for at 45th and Hickory all her life.

And because she was in Berkshire, she ended up — she lived to 97 — she ended up with, you know, a few hundred million. (Laughter)

And she would write me a letter every four or five months. And she said, “Dear Warren, you know, I hate to bother you. But am I going to run out of money?”

And — (laughter) — I would write her back. And I’d say, “Dear Katie, it’s a good question because, if you live 986 years, you’re going to run out of money.” And — (laughter) — then about four or five months later, she’d write me the same letter again.

And I have seen there’s no way in the world, if you’ve got plenty of money, that it should become a minus in your life. And there will be people, if you’ve got a lot of money, that come around with various suggestions for you, sometimes well-meaning, sometimes not so well-meaning.

So if you’ve got something as certain to deliver — you know, it was all in Berkshire, they’d say, “Well, if Warren was alive today, you know, he would be telling you to do this.” I just don’t want anybody to go through that.

And the S&P will be a — I think actually what I’m suggesting is what — a very high percentage of people should do something like that. And I don’t think they will have as — I think there’s a chance they won’t have as much peace of mind if they own one stock.

And they’ve got neighbors and friends and relatives that are trying to do some — like I say, sometimes well-intentioned, sometimes otherwise, to do something else. And so I think it’s a policy that’ll get a good result and is likely to stick.

Charlie?

CHARLIE MUNGER: Well, as Becky said, the Mungers are different. I want them to hold the Berkshire.

WARREN BUFFETT: Well, I want to hold the Berkshire, too. (Laughter)

CHARLIE MUNGER: No, but I mean I don’t like the — I recognize the logic of the fact that that S&P algorithm is very hard to beat. You know, diversified portfolio of big companies. It’s all but impossible for most people. But, you know, it’s — I’m just more comfortable with the Berkshire.

WARREN BUFFETT: Well, it’s the family business.

CHARLIE MUNGER: Yeah.

WARREN BUFFETT: Yeah. But it — I've just — I've seen too many people as they get older, particularly, being susceptible and just having to listen to the arguments of people coming along.

CHARLIE MUNGER: Well, if you're going to protect your heirs from the stupidity of others, you may have some good system. But I'm not much interested in that subject.

WARREN BUFFETT: OK. (Laughter)

19. Berkshire probably would have put $15B into failed Unilever deal

WARREN BUFFETT: OK. Jay?

JAY GELB: Berkshire reportedly partnered with 3G and Kraft Heinz's attempt to acquire Unilever for $143 billion.

How much was Berkshire willing to invest in this deal? And does this mean Berkshire's next large acquisition is likely to be in partnership with 3G?

WARREN BUFFETT: Yeah, well, Kraft, I — you'd have to distinguish between two situations. Kraft Heinz was a widely-owned company in which we and 3G act as a control group and have a little over 50 percent of the stock.

But as originally contemplated — no certainty that this exactly is what would have happened — we would have invested an additional 15 billion and 3G would have invested an additional 15 billion if a friendly agreement could have been reached.

So if the deal had been made, if the independent directors of Kraft Heinz had approved the transaction, the likely — well, then the likelihood is that we would have invested 15 billion. But it would've required the approval of the independent directors as well.

Now Kraft Heinz, in going forward with making that offer, wanted to be sure that there would be enough equity capital, in addition to the debt that would be incurred, to make the deal. And so, informally, we had basically committed the 15 billion.

It only was approved on the basis that it be a friendly deal with Unilever. And initially, we thought they would be at least possibly interested in such a deal.

And when we found out otherwise, we withdrew the offer. So it would have been 15 billion of additional money, in all probability.

20. Speculation is inevitable in China and the U.S.

WARREN BUFFETT: OK, station 5?

AUDIENCE MEMBER: Dear Honorable Mr. Buffett and Mr. Munger, I'm Tian Du Hua (PH) from China. My company (Inaudible) Holdings is spreading value investing philosophy in Asia.

My business partner Ken Chi (PH), Cho Quy Ying (PH), and I are committed to awake 100 million Chinese people to return to rational way of investing.

The hardest thing in this world is to change people's values or belief system. And we should like to awake investors to change from speculate in the market to investing in the market. It's not changing the speculator's values or belief system.

May I ask you, Mr. Buffett, can you kindly advise us what we should do to spread your value investing philosophy? Or is there any word of encouragement? Thank you.

WARREN BUFFETT: Yeah, the — when — in any system — Keynes wrote about this in 1936 — I think it was, in "The General Theory," or '35. I think it's Chapter 12. It's — great chapter on investing.

And he talked about investment and speculation and the propensity of people to speculate and the dangers of it.

And worded eloquently, there's always the possibility of, I mean, there's always some speculation, obviously, and there's always some value investors and all that sort of thing in the market. But there's —

When speculation gets rampant, and when you're getting what I guess Charlie would call "social proof" — that it's worked recently — people can get very excited about speculating in markets. And we will have it from time to time in this market.

There's nothing more agonizing than to see your neighbor who you think has an IQ about 30 points below you getting richer than you are by buying stocks. And whether it's internet stocks or whatever. And it — and people succumb to it. And they'll succumb in this economy just as elsewhere.

There's also a point which gets to your question. I would say that early on in the development of markets — there is probably a — there's some tendency for them, I think, to be more speculative than markets that have been around for a couple hundred years because the — it has a — invest —

Markets have a casino characteristic that has a lot of appeal to people, particularly when they see, like I say, people getting rich around them. And those that haven't been through cycles before are probably a little more prone to speculate than people who have experienced the outcome of wild speculation.

So I — you know, basically in this country, Ben Graham was, in the book I read in 1949, was preaching investment. And that book continues to sell very well.

But if the market gets hot, new issues are doing well and people on leverage are doing well, a lot of people will be attracted to, not only speculation, but what I would call gambling. And I'm afraid that that will be true in the United States.

And I think that China, being a newer market, essentially, in which there's widespread participation, is likely to have some pretty extreme experiences in that respect. We will have some in this country, too.

Charlie?

CHARLIE MUNGER: Well, I certainly agree with that. (Laughter)

The Chinese will have more trouble. They're very bright people. They have a lot of action and, sure they're going to be more speculative.

And it's a dumb idea. And to the extent you're working on it, why, you're on the side of the angels. But lots of luck. (Laughter)

WARREN BUFFETT: Well, it will offer the investor more opportunities actually — (laughs) — if they can keep their wits about them — if you have wild speculation. I mean, we —

Charlie just mentioned earlier, you know, that if we get into periods that are very tough, Berkshire certainly will do reasonably well because it won't — we won't be — we won't get fearful. And fear spreads like you cannot believe until you've seen a few examples of it.

At the start of September 2008, you had 35 million people with their money in money market funds with $3 1/2 trillion in them. And none of them were afraid that that dollar wasn't going to be a dollar when they went to cash in their money market fund.

And three weeks later, they were all terrified, and 175 billion flowed out in three days. And so the way the public can react is really extreme in markets. And that actually offers opportunities for investors.

You'll never — people like action and they like to gamble. And if they think there's easy money to be made, a lot of them, you'll get a rush to it. And for a while it will be self-fulfilling and create new converts until the day of reckoning comes. They'll —

Just keep preaching investing, and if the market swings around a lot, you'll keep adding a few people here and there to a group that recognizes that markets are there to be taken advantage of, rather than to instruct you as to what is going on. OK. Andrew?

Anything more on that, Charlie?

CHARLIE MUNGER: We've done a lot of preaching, Warren, without much effect.

WARREN BUFFETT: Right. And that's probably good, from our standpoint.

21. We don't do anything differently due to tax law changes

WARREN BUFFETT: OK. Andrew?

ANDREW ROSS SORKIN: Thank you, Warren. This question comes from Ryan Prince (PH).

"President Donald Trump and his advisors have talked about proposing a substantial investment tax credit to provide incentives for long-term corporate fixed capital investment.

"In BNSF, Berkshire owns a sprawling infrastructure portfolio requiring regular routine maintenance investment of substantial scale.

"What impact would an investment tax credit have on BNSF's capital investment decision-making, from a return on investment capital perspective, as well as in terms of timing?

"And just as importantly, given the current economy and employment picture, would such a tax credit amount to a subsidization of otherwise mandatory maintenance capital investment or a proper incentive to stimulate investment?"

WARREN BUFFETT: Yeah, well, it would all depend on how it was worded — you know, because — we've had investment tax credits in this country, and we've had bonus depreciation. It's another form of it. We — and we do get extra first-year depreciation. That does not enter into our calculation very much.

You know, in fact — certainly at the Berkshire level, I've never instructed anybody to do anything different because of investment tax credits or accelerated depreciation. There may be some calculations done down at the operating company level.

It's certainly true in something like wind projects and solar projects. They are dependent on the tax law, currently. There may come a time when they aren't, but they wouldn't have been done without some subsidization through the tax law.

But I would say, if you change the depreciation schedules and, you know, double depreciation — triple depreciation, for — that — we're going to do what we need to do at the railroad to make it safer and more efficient if we just had ordinary depreciation.

And I doubt if there'd be any dramatic differences. Obviously, if you were going to, say, buy a bunch of planes and the law was going to change on December 31st, and the math made it better to wait till January 1st or do it this December 31st, you make that kind of calculation.

But I can't recall, in all the years, that I've ever sent out anything to our managers saying, "Let's do this because the tax law is being changed or might be changed," or something of the sort.

As I mentioned earlier, it changes just a little bit if you think there's going to be a change in capital gains rates at a given time. Obviously if it's going to — the rate's going to be lowered, you would take losses ahead of time and defer gains, maybe, a little.

And that's why it's useful, actually, if the tax committees in the Senate and the House are working on something, it might be useful if the chairmans would say that, "If we do make any changes, we're likely to use this effective date," or something of the sort. And I think they've done that a few times in the past.

We are not, the big tax-driven item — is — in wind and solar. And that is a specific policy, because the government has decided they want to move people — or society has decided — they want to move people toward those forms of electric generation. And the market system wouldn't do it.

And there may come a time when the market system will do it all by itself.

We won't make big changes. And it's so speculative anyway, in terms of even what the law would be.

But beyond that, if it becomes less speculative as the law and it really looks like something is going through, it doesn't change us big time at all.

Charlie?

CHARLIE MUNGER: Nothing to add. We're not going to change anything at the Berkshire — at the railroad — for some little tax jiggle.

WARREN BUFFETT: Yeah, if we need a bridge repaired, we're going to repair the bridge, you know. And if need — we need a lot of track maintenance all the time and that sort of thing. And it just, I don't think [BNSF's] Matt [Rose] and I have ever had a talk about it since we've owned the railroad, but —

22. Coal shipment revenues will drop for BNSF

WARREN BUFFETT: Gregg?

GREGG WARREN: Warren, my question also relates to Burlington Northern.

Despite the current administration's belief that they can bring the coal industry back, market forces continue to lead to the industry's demise.

While 90 percent of U.S. coal consumption is driven by electricity generation, natural gas has been both cheaper and cleaner burning, and renewable electricity generation has remade parts of the market as wind and solar have gained scale and become cheaper alternatives.

This has created problems for Burlington Northern, with coal shipments accounting for just 18 percent of volume and revenue for the railroad last year, down from an average of 24 percent for both measures the previous 10 years.

While some of this was due to large buildup of coal supplies the past couple of winters, which finally seem to be working their way out, what are your expectations for the contribution coal can make to BNSF longer term?

And I know that the railroad currently handles some export shipments going through Canada's Pacific Coast ports, but will there be enough growth there to offset domestic demand? Or will BNSF need to rely more heavily on segments like intermodal to offset lost coal volumes?

WARREN BUFFETT: Yeah, the answer is coal's — coal is going to go down over time. I don't think there's much question about that.

The specifics of any given year relate very importantly to the price of natural gas. I mean, right now there are — there —

Demand is somewhat up — fair amount up — from last year because natural gas is at 3.15 or 3.20, and the utilities can produce electricity, in many cases, quite a bit cheaper with coal than with natural gas. Whereas, with a $2, it would all be — it would be natural gas.

But over time, coal is — in my mind — is essentially certain to decline as a percentage of the revenue of the railroad.

The speed at which it does, you know, it — you don't build — create generation plants overnight. And so it —

You can't predict the rate. And if natural gas is cheap enough, it's going to be a — you'll see a big conversion back to natural gas.

So coal is a — coal is going to go down, as a percentage of revenues, significantly.

You know, certainly over 10 years it'll be quite significant, and who knows exactly, year by year. We are looking for other sources of growth than coal. If you're tied to coal, you got problems.

Charlie?

CHARLIE MUNGER: Well — you go out over the extremely long term, I think that all hydrocarbons will be used, including all the coal.

So I think that, in the end, these hydrocarbons are a huge resource for humanity, and I don't think we've got any good substitute.

And I've never minded saving them for the next generation. I don't like using them up very fast. So, I'm often on a road on my own on this one.

And people think that all this hydrocarbons are going to be stranded and the whole world's going to change. I think we're going to use every drop of the hydrocarbon sooner or later. We'll use them as chemical feed stocks. It's —

I regard all these things as very hard to predict. And I'm not at all sure that — I would eventually expect natural gas to be pretty short in supply.

WARREN BUFFETT: A change in storage would make a big difference.

We will produce, within a few years, as much electricity in Iowa — or virtually as much — electricity in Iowa from wind as our customers use. But the wind only blows about 35 percent of the time or something like that. And sometimes it blows too hard.

But the storage, you know, having it 24 hours a day, seven days a week, is a real problem, even if we've got the capability of producing, like I say, a self-sufficient amount, essentially, in Iowa before very long.

Coal — our shipments of coal are up fairly substantially this year on the BNSF. But they were very low last year, and as you said, stockpiles grew and have come down somewhat. They're still on the high side.

But in my mind — Charlie's got a longer-term outlook on this — in my mind, we're going to be shipping a whole lot less coal 10 or 20 years from now than we are now.

On the other hand, I think there's some decent prospects in other long hauls.

I mean, it's a pretty cheap way to move bulk commodities long distance. Rail is. And I think it's a good business, but the coal aspect of it's going to diminish.

23. Big change: You don't need money to run America's biggest companies

WARREN BUFFETT: OK. Station 6.

AUDIENCE MEMBER: Good morning. It's Marcus Burns from Sydney, Australia.

My question, Mr. Buffett, is, you used to buy capital-light, cash-generative businesses, but now buy lower-growth, capital-consumptive businesses.

I realize Berkshire generates a lot of cash flow, but would shareholders have been better off if you had continued to invest in capital-light companies?

WARREN BUFFETT: Well, we'd love to find them. I mean, there's no question that buying a high-return-on-assets, very light-capital-intensive business that's going to grow beats the hell out of buying something that requires a lot of capital to grow.

And this varies from day to day, but I believe — and I don't think it's sufficiently appreciated. I believe that probably the five largest American companies by market cap — and some days we're in that group and some days we aren't — let's assume we're not in that group on a given day — they have a market value of over $2 1/2 trillion, and that 2 1/2 trillion is a big number.

I don't know whether the aggregate market cap of the U.S. market is, but that's probably getting up close to 10 percent of the whole market cap of the United States. And if you take those five companies, essentially, you could run them with no equity capital at all. None.

That is a very different world than when Andrew Carnegie was building a steel mill and then using the earnings to build another steel mill and getting very rich in the process, or Rockefeller was building refineries and buying tank cars and everything.

Generally speaking, over — for a very long time in our capitalism, growing and earning large amounts of money required considerable reinvestment of capital and large amounts of equity capital, the railroads being a good example.

That world has really changed, and I don't think people quite appreciate the difference.

You literally don't need any money to run the five companies that are worth collectively more than $2 1/2 trillion, and who have outpaced any number of those names that were familiar, if you looked at the Fortune 500 list 30 or 40 years ago, you know, whether it was Exxon or General Motors or you name it.

So we would love — I mean, there's no question that a business that doesn't take any capital and grows and has, you know, almost infinite returns on required equity capital, is the ideal business.

And we own a couple of businesses — a few businesses — that earn extraordinary returns on capital, but they don't grow.

We still love them, but if they had — if they were in fields that would grow, believe me, we wouldn't — you know, they would be number one on our list.

We aren't seeing those that we can buy and that we understand well.

But you are absolutely right that that's a far, far, far better way of laying out money than what we're able to do when buying capital-intensive businesses.

Charlie?

CHARLIE MUNGER: Yeah. The chemical companies of America, at one time, were wonderful investments.

Dow and DuPont sold at 20-some times earnings, and they kept building more and more complicated plants and hiring more Ph.D. chemists, and it looked like they owned the world.

Now, most chemical products are sort of commoditized and it's a tough business being a big chemical producer. And in comes all these other people like Apple and Google and they're just on top of the world.

I think the questioner's basically right that the world has changed a lot, and that the people who have made the right decisions in getting into these new businesses that are so different from the old ones have done very well.

WARREN BUFFETT: Yeah, Andrew Mellon would be absolutely baffled by looking at the high-cap companies now. I mean, the idea that you could create hundreds of billions of value essentially without assets — without tangible assets —

CHARLIE MUNGER: Fast.

WARREN BUFFETT: Fast, yeah. But that is the world. I mean, there is —

When Google can sell you something that — where GEICO was paying 11 bucks or something every time somebody clicked something — that is a lot different than spending years finding the right site and developing, you know, iron mines to supply the steel plants and, you know, railroads to haul the iron to where the steel is produced and distribution points, and all that sort of thing.

Our world was built — you know, when we first looked at it, our U.S. — our capitalist system, basically, was built on tangible assets, and reinvestment, and all that sort of thing, and a lot of innovation and invention to go with it.

But this is so much better, if you happen to be good at it, to essentially be able to build hundreds of billions of market value without really needing any capital.

That is a different world than existed in the past. And I think, listen, I think it's a world that is likely to continue. I mean, the trend is, I don't think the trend in that direction is over by a long shot.

CHARLIE MUNGER: A lot of the people who are chasing that sort of thing very hard now in the venture capital field are losing a lot of money. It's a wonderful field, but not everybody's going to win big in it. A few are going to win big in it.

24. Benefits of Berkshire's "management by abdication"

WARREN BUFFETT: OK. Carol?

CAROL LOOMIS: This question is from a shareholder in California, in the Silicon Valley area, who didn't want his name mentioned because he said he wasn't looking for publicity, but whose picture makes him appear to be a millennial.

"Every Berkshire shareholder knows about the stock market value of Berkshire, but my question is about the value of Berkshire to the world.

"For instance, the value of Apple to the world has been iPhones. The value of GEICO is cost-effective auto insurance. The value of 3G," and I will tell you that there are some shareholders who would be arguing about it here, but "the value of 3G is improved operations."

"But about Berkshire, I just don't know. In managing Berkshire's subsidiaries, as Mr. Munger once famously said, you practice 'delegation just short of abdication.' So, hands-on management can't be the answer.

"That means the majority of Berkshire's subsidiaries would do just as well if they were to stay independent companies. So that's my question. What is the value of Berkshire to the world?"

WARREN BUFFETT: Yeah, well, the — I would say the question about — I'm with him to the point where he says that our — which he accurately describes as "delegation to the point of abdication."

But I would argue that that abdication, actually, in many cases, will enable those businesses to be run better than they would if they were part of the S&P 500 and the target, perhaps, of activists or somebody that wants to get some kind of a jiggle in the short term.

So I think that our abdication actually has some very positive value on the companies. But that, you know, you'd have to look at it company by company.

We've got probably 50 managers in attendance here. And naturally, they're not going to say anything, probably, on television or anything where they knock a certain thing.

But get them off in a private corner and just ask them whether they think their business can be run better with a "management by abdication" from Berkshire, but with also all the capital strengths of Berkshire, that when any project that makes sense can be funded in a moment without worrying whether the banks are still lending, like in 2008, you know, or whether Wall Street will applaud it or something of that sort.

So I think our very — our hands-off style, actually, I think can add significant value in many companies, but we do have managers here you could ask about that.

We certainly don't add to value by calling them up and saying that we've developed a better system, you know, for turning out additives at Lubrizol, or running GEICO better than Tony Nicely can run it or anything of the sort.

But we do take a — we have a very objective view about capital allocation.

We can free managers up. I would say that we might very well free up at least 20 percent of the time of a CEO in the normal public — who would have — otherwise have a public company — just in terms of meeting with analysts, and the calls, and dealing with banks, and all kinds of things that, essentially, we relieve them of so that they can spend all of their time figuring out the best way to run their business.

So I think we bring something to the party, even if it — even if we're just sitting there with our feet up on the desk.

Charlie?

CHARLIE MUNGER: Yeah. We're trying to be a good example for the world. I don't think we'd be having these big shareholders meetings if there weren't a little bit of teaching ethos in Berkshire.

And I've watched it closely for a long time. I'd argue that that's what we're trying to do, is set a proper example. Stay sane. Be honest. Yeah. (Applause)

So I'm proud of Berkshire, and I don't worry too much if we sell Coca-Cola. (Laughter)

WARREN BUFFETT: We — I would say, you know, GEICO is an extraordinarily well-run company and it would be extraordinarily well-run if it were public.

But it has gone from 2-and-a-fraction percent of the auto insurance market to 12 percent.

And part of the reason, a small part — the real key is GEICO and Tony Nicely — but part of the reason is that when other — at least two of our competitors — and big competitors — said that they would not meet their profit objectives if they didn't lighten up their interest in new

business, eight or 10 months ago, I think our business decision to step on the gas is a better business decision.

But I think that GEICO, as a public company, would have more trouble making that decision than they do when they're part of GEICO [Berkshire].

Because we are thinking about nothing but where GEICO's going to be in five or 10 years, and if that requires having new— we want new business cost to penalize our earnings in the short-term.

And other people have different pressures. I'm not arguing about how the —how they behave, because they have a different constituency than GEICO has with Berkshire and what Berkshire has with its shareholders, in turn.

And I think in that case, our system's superior. But it's not because we work harder. Charlie and I don't do hardly anything. (Laughter)

25. Structured settlements interest rate

WARREN BUFFETT: Jonathan?

JONATHAN BRANDT: Could you please talk about your periodic payment annuity business? The weighted average interest rate on these contracts is 4.1 percent, which doesn't sound particularly attractive given the current interest rate environment.

Is the duration of these liabilities long enough to make that an attractive cost of funds? Or were these contracts executed primarily when rates were higher?

WARREN BUFFETT: Well, those contracts — these are what are called structured settlements, primarily.

And when somebody young has a terrible auto accident or whatever it may be — perhaps urged by the court, urged by family members who really do have the interest of the injured party at heart, or — they may convert what could be a large sum settlement, probably against the insurance company — you know, maybe a million dollars, maybe $2 million — into periodic payments for the rest of the life of the injured party.

And we issue those for other insurance companies.

In fact, sometimes the court directs that Berkshire — or hints strongly — that Berkshire should be the one to issue those, because you're talking about somebody's life 30 or 40 or 50 years from now.

And the court, or the lawyer, or the family, they want to be very, very sure that whoever makes that promise is going to be around to keep it. And Berkshire has a preferred position in that.

We look — to get to your question, Jonny — we look for taking the longer maturity situations. We always have.

And we have to make assumptions about mortality, and we have to make — and then we have to decide at what interest rate we'll do it.

The 4.1 is a mix of a lot of contracts over a lot of years, obviously. We write maybe 30 million of these, 20 to 30 million a week, looking for the long maturities.

And so, if you take an average of 15 years, or something of the sort, that's how we come up with that sort of a figure. We adjust them to interest rates at all times.

And when doing that, we're making an assumption that we're going to earn more money that — than is inherent in the cost of these structured settlements. It's a business we've — I think we've got six or seven billion up now. And we'll keep doing them.

And incidentally, probably a significant percentage of the six or seven billion, we're not yet paying anything on. Somebody else may have the earlier payments. And they're certainly weighted far out. So it's a business that we'll be in 10 or 20 years from now.

We've got some natural advantage, because people trust us more than any other company to make those payments. And the test is whether we earn, over time, a return above that which we're paying to the injured party.

And that's a bet we're willing to make. But if interest rates continued at present levels for a long time — we would, assuming we kept the money in fixed-income instruments — we would — we'd have some loss in that.

We've got an allowance in there for the expenses, incidentally, because we do make monthly payments to these people, eventually.

And we have to keep track of whether they're still alive or not. Because you cannot count on the relatives of somebody that's deceased when a check is coming in every month to notify you promptly that the person has become deceased. But it's — it'll —

That number will go up over time. If interest rates stay where they are, that 4.1 will come down a little bit as we add new business.

26. USG investment not "great," but not a "disaster"

WARREN BUFFETT: OK. Station 7.

AUDIENCE MEMBER: Thank you, Mr. Buffett and Mr. Munger, for all you've done and the opportunity to learn even more from your approach to investing and life.

My name's Harry Hong, and I'm a respirologist from Vancouver, British Columbia.

The question involves, back in 2001, you made an initial investment in USG, shortly before the company declared bankruptcy due to the mounting asbestos liability.

You held those shares through the bankruptcy process, even though standard wisdom says that the equity in Chapter 11 is usually worthless. Can you explain why USG's equity was a safe investment?

WARREN BUFFETT: Well, I don't really remember all the details then.

CHARLIE MUNGER: It was very cheap. (Laughter) Very cheap. (Laughter)

WARREN BUFFETT: Yeah, but I would say this. USG, we own — I'm not sure what percent, but it's very significant percentage. I don't know what —

CHARLIE MUNGER: Twenty percent, or something.

WARREN BUFFETT: Probably 30 percent or something like that. But USG, overall, has just been disappointing because the gypsum business has been disappointing.

And I think — I may be wrong — I think they went bankrupt twice, first from asbestos going back and then, subsequently, because they just had too much debt. So it has not been a brilliant investment.

Now if gypsum prices were at levels that they were in some years in the past, it would have worked out a lot better.

CHARLIE MUNGER: But it hasn't been terrible.

WARREN BUFFETT: No, it hasn't been terrible, but it — gypsum took — has taken a real dive several times, and there has been too much gypsum capacity.

And then when it comes back, the managements have been — not necessarily at USG, but including USG perhaps — they've gotten more optimistic about future demand than they should have. And it —

And they like — going back historically a way — they like to build new plants. And it's a business where the supply has been significantly — potential supply — has been significantly greater than demand in a lot of years. I mean, it —

You've seen housing starts in — since 2008 and 2009 — not come back anywhere near as much as people anticipated. So gypsum prices have moved up but not dramatically.

So just put that one down as not one of our great ideas. Not one of my great ideas. Charlie wasn't involved in that. It's no disaster, though.

CHARLIE MUNGER: No it isn't. It's —

27. "Terrific" insurance operations are even better with Ajit Jain

WARREN BUFFETT: Becky?

BECKY QUICK (off microphone): This question — this question —

WARREN BUFFETT: Oh.

BECKY QUICK: Hello? Oh, there we go.

WARREN BUFFETT: OK.

BECKY QUICK: This question comes from Axel Meyersiek in Germany who writes, "If Ajit Jain were to retire, God forbid, be promoted, what would be the impact on the insurance operations, both with regards to underwriting profit as well as the development of float?"

WARREN BUFFETT: Well, nobody will — could possibly replace Ajit. I mean, it just — you can't come close.

But we have a terrific operation in insurance. We really do, outside of Ajit, and it's terrific-squared with Ajit.

There are things only he can do. But there are a lot of things that are institutionalized, a lot of things in our insurance business, where we've got extraordinarily able management, too.

So Ajit, for example, bought a company that nobody here has heard of, probably, called Guard Insurance a few years ago, based in worker's comp, primarily. It's based in — improbably — in Wilkes-Barre, Pennsylvania.

And it's expanding like crazy in Wilkes-Barre. And it — it's been a gem. And Ajit oversees it, but we've got a terrific person running it.

And we bought Medical Protective some years ago. Tim Kenesey runs that. Ajit oversees it, but Tim Kenesey can run a terrific insurance company, with or without Ajit. But he's smart enough to realize that, if you got somebody like Ajit that's willing to oversee it to a degree, that's great.

But Tim is a great insurance manager all by himself, and Medical Protective has been a wonderful business for us. Most people don't know we own it. The company goes back into the 19th century, actually.

We've got a lot of good operations. If you look at that section of the annual report called "Other" — insurance company, I mean that is — in aggregate, that is a wonderful insurance company. There's very few like it. GEICO is a terrific company.

So, Ajit has made more money for Berkshire than I have, probably. But we've still got what I would consider the world's best property-casualty insurance operation, even without him. And with him, you know, it — nobody, I don't think anybody comes close.

Charlie?

CHARLIE MUNGER: Well, a few years ago, California made a little change in its workmen's compensation law, and Ajit saw instantly that it would cause the underwriting results to change drastically.

And he went from a tiny percent of the market, (inaudible) 10 percent of the market, which is big, and he just grasped a couple billion dollars, at least, out of the air, like it was snapping his fingers. And when it got tough, he pulled back.

We don't have a lot of people like Ajit. It's hard to just snap your fingers and grab a couple billion dollars out of the air. (Laughter)

WARREN BUFFETT: Well, we've — actually, the California Workers' Comp (inaudible), Guard has moved into that. I — we have got a lot of terrific insurance managers. I mean, I don't know of a better collection any place. And Ajit has found some of those.

I've gotten lucky a few times. I mean, Tom Nerney at U.S. Liability, that goes back, what, 15, 16 years. He has a terrific operation. It's not huge, but it is so well-managed.

And people don't even know we own these things. But if you look at that last line — and now we've added Peter Eastwood with Berkshire Hathaway Specialty. And these are really good businesses, I got to tell you. (Laughs)

When you can produce underwriting prowess, and on top of that just hand more float — we don't have many businesses like that. Those are great businesses.

We've got a hundred — you know, whatever it is — a hundred billion-plus of money that we get to earn on, while at the same time, overall, you know, on balance, we're likely to make some additional money for holding it.

And if you can get somebody to hand you $104 billion and pay you to hold it while you get to invest and get the proceeds, it's a good business.

Now, most people don't do well at it. And, you know, the problem is that what I just described tempts lots of people to get into it.

And recently, people have gotten into it, really, just for the investment management. It's a way to earn money offshore. And we don't do that, but it can be done for small companies with investment managers.

So there's a lot of competition in it. But we have some fundamental advantages, plus we have — in certain areas — plus we have absolutely terrific managers to maximize those advantages. And we're going to make the most of it.

28. Promo for Kraft Heinz Philadelphia Cream Cheese product

WARREN BUFFETT: I've just been handed something Kraft Heinz came out with. They just came out with it commercially a couple days — a few days ago, maybe a few weeks ago. At the directors' meeting they had this. I had three of these.

I'm sure that there's a member or two of the audience that may not approve of it, but they — (laughter) — I got to tell you folks, it's good.

It's a cheesecake arrangement with topping and Philadelphia Cream Cheese (Inaudible), so you create your own cheesecake.

And I thought that I can eat it while Charlie's talking. And — (laughter) — you'll be able to get it at the halftime. It's selling very well.

And I think, just so you don't feel too guilty, I think it's 170 calories for this cherry one. Like I say, I had three of these here. I don't mind having five- or 600 calories for dessert, you know. (Laughter)

I'll let somebody else eat the broccoli and I'll have the dessert. (Laughter)

So we'll be eating this, but you, too, at halftime — I think they brought 8- or 9,000 of these. I'll be disappointed if we don't run out. Actually, I'll be disappointed in you, not them. (Laughter)

29. Subsidiary managers aren't competing for Buffett's job

WARREN BUFFETT: OK. Jay?

JAY GELB: This question is on the topic of succession planning.

Warren, there seem to be fewer mentions, by name, of top-performing Berkshire managers in this year's annual letter. Does this mean you're changing your message regarding the succession plan for Berkshire's next CEO?

WARREN BUFFETT: Well, the answer to that's no. And I didn't realize there were fewer mentions by name.

I write that thing out and send it to Carol [Loomis], and she tells me, "Go back to work." (Laughs)

I don't actually think that much about how many personally get named.

I would say this. And this is absolutely true. We have never had more good managers — now, it's because we've got more good companies — but we have never had more good managers than we have now, so I — but it has nothing to do with succession.

Charlie?

CHARLIE MUNGER: Well, I certainly agree with that. We don't seem to have a whole lot of 20-year-olds. (Laughter)

WARREN BUFFETT: Certainly not at the front table. (Laughter)

No, we've got an extraordinary group of good managers, which is why we can manage by abdication.

It wouldn't work if we had a whole bunch of people who were — had come with the idea of getting my job. I mean, if we had 50 people out there, all of who wanted to be running Berkshire Hathaway, it would not work very well. And —

But they have the jobs they want in life. Tony Nicely loves running GEICO. You know, it — then you go down the line. They have jobs they love.

And that's a lot better, in my view, than having a whole bunch of them out there that are kind of doing their job there kind of hoping the guys competing with them will fail so that, when I'm not around, that they'll get the nod.

It's a much different system than exists at most American corporations.

Charlie, got anything?

30. Berkshire's buying advantage: "There just isn't anyone else"

WARREN BUFFETT: Well, we'll go to Station 8.

AUDIENCE MEMBER: Hi, Warren and Charlie. My name's Vicky Wei. I'm an M.B.A. student from the Wharton School of Business.

This is my first time to be in the first — in the annual meeting. I'm really excited about it. Thanks for having us here. My —

WARREN BUFFETT: Thanks for coming.

AUDIENCE MEMBER: My question is, where do you want to go fishing for the next three to five years? Which sectors are you most bullish on, and which sectors are you most bearish on? Thank you.

WARREN BUFFETT: Yeah. Charlie and I do not really discuss sectors much. Nor do we let the macro environment or thoughts about it enter into our decisions.

We're really opportunistic. And we — we, obviously, are looking at all kinds of businesses all the time. I mean, it's a hobby with us, almost — probably more with me than Charlie.

But we're hoping we get a call, and we've got a bunch of filters.

And I would say this is true of both of us. We probably know in the first five minutes or less whether something is likely to — or has a reasonable chance of happening.

And it's just going to go through there, and it's going to — first question is, "Can we really ever know enough about this to come to a decision?" You know, and that knocks out a whole bunch of things.

And there's a few. And then if it makes it through there, there's a pretty good — reasonable chance we're going to — we may do something. But it's not sector specific. It —

We do love the companies, obviously, with the moats around the product long — where consumer behavior can be, perhaps, predicted further out. But I would say it's getting harder to — for us, anyway — to anticipate consumer behavior than we might've thought 20 or 30 years ago. I think that it's just a tougher game now.

But we'll measure it and we'll look at it in terms of returns on present capital, returns on prospective capital. We may have — we can —

A lot of people give you some signals as to what kind of people they are, even in talking in the first five minutes, and whether you're likely to actually have a satisfactory arrangement with them over time. So a lot of things go on fast, but it —

We know the kind of sectors we kind of like to — or the type of business we'd kind of like to end up in. But we don't really say, "We're going to go after companies in this field, or that field, or another field."

Charlie, you want to?

CHARLIE MUNGER: Yeah. Some of our subsidiaries do little bolt-on acquisitions that make sense, and that's going on all the time. And, of course we like it when —

But I would say the general field of buying whole companies, it's gotten very competitive. There's a huge industry of doing these leveraged buyouts. That's what I still call them.

The people who do them think that's a — kind of a bad marker, so they say they do private equity. You know, it's like (inaudible) a janitor call himself the chief of engineering or something. (Laughter) And —

But at any rate, the people who do the leveraged buyouts, they can finance practically anything in about a week or so through shadow banking. And they can pay very high prices and get very good terms and so on.

So, it's very, very hard to buy businesses. And we've done well, because there's a certain small group of people that don't want to sell to private equity. And they love the business so much that they don't want it just dressed up for resale.

WARREN BUFFETT: We had a guy some years ago, came to see me, and he was 61 at the time. And he said, "Look, I've got a fine business. I got all the money I can possibly need." But he said, "There's only one thing that worries me when I drive to work."

Actually, there's more than one guy's told me that that's used the same term.

He said, "There's only one thing that bothers me when I go to work. You know, if something happens to me today, my wife's left.

"You know, I've seen these cases where executives in the company try to buy them out cheap or they sell to a competitor and all the people —"

He says, "I don't want to leave her with the business. I want to decide where it goes, but I want to keep running it, and I love it."

And he said, "I thought about selling it to a competitor, but if I sell it to a competitor, you know, their CFO's going to become the CFO of the new company, and there, you know, on down the line.

“And all these people who helped me build the business, you know, they’re — a lot of them are going to get dumped. And I’ll walk away with a ton of money, and some of them will lose their job.” He said, “I don’t want to do that.”

And he says, “I can sell it to a leveraged buyout firm, who would prefer to call themselves private equity, but they’re going to leverage it to the hilt and they’re going to resell it. And they’re going to dress it up some, but in the end, it’s not going to be in the same place. I don’t know where it’s going to go.”

He said, “I don’t want to do that.” So he said, “It isn’t because you’re so special.” He says, “There just isn’t anyone else.” (Laughter)

And if you’re ever proposing to a potential spouse, don’t use that line, you know. (Laughter)

But that’s what he told me. I took it well, and we made a deal.

So, logically, unless somebody had that attitude, we should lose in this market. I mean, you can borrow so much money so cheap. And we’re looking at the money as pretty much all equity capital.

And we are not competitive with somebody that’s going to have a very significant portion of the purchase price carried in debt, maybe averaging, you know, 4 percent or something.

CHARLIE MUNGER: And he won’t take the losses if it goes down. He gets part of the profit if it goes up.

WARREN BUFFETT: Yeah, his calculus is just so different than ours. And he’s got the money to make the deal.

So, if all you care about is getting the highest price for your business, you know, we are not a good call.

And we will get some calls in any event. And we can offer something that — wouldn’t call it unique, but it’s unusual.

The person that sold us that business and a couple of others that have — actually it’s almost, word for word, the same thing they say. They are all happy with the sale they made, very happy.

And, you know, they are — they have lots and lots and lots of money, and they’re doing what they love doing, which is still running the business. And they know that they made a decision that will leave their family and the people who work with them all their lives in the best possible position.

And that's — in their equation, they have done what's best. But that is not the equation of many people, and it certainly isn't the equation of somebody who buys and borrows every dime they can with the idea of reselling it after they, you know, maybe dress up the accounting and do some other things.

And — but there — when the disparity gets so wide between what a heavily debt-financed purchase will bring as against an equity-type purchase, it gets to be tougher. There's just no question about it. And it'll stay that way.

CHARLIE MUNGER: But it's been tough for a long time, and we've bought some good businesses.

WARREN BUFFETT: Yeah. Yeah.

31. "If the board hires a compensation consultant after I go, I will come back"

WARREN BUFFETT: OK. Andrew?

ANDREW ROSS SORKIN: Warren. This comes from a shareholder who I think is here, who asked to remain anonymous.

Writes: "Three years ago, you were asked at the meeting about how you thought we should compensate your successor. You said it was a good question, and you would address it in the next annual letter. We've been patiently waiting. (Laughter)

"Can you tell us now, at least philosophically, how you've been thinking about the way the company should compensate your successor, so we don't have to worry when the pay consultants arrive on the scene?"

WARREN BUFFETT: Yeah. Well, that — unfortunately, at my age I don't have to worry about things I say — said three years ago, but this guy, obviously much younger, remembers. (Laughter)

I'm not — well, I'll accept his word that I said that. But the — there's a couple possibilities, actually.

I don't want to get into details on them, but you may have — and I, actually, would hope that we would have somebody, A) who's already very rich — which they should be if they've been working a long time and have got that kind of ability — that's very rich, and really is not motivated by whether they have 10 times as much money that they and the families can need or a hundred times as much.

And they might even wish to perhaps set an example by engaging for something far lower than actually what you could say their true market value is. And that could or could not happen, but I think it'd be terrific if it did. But I can't blame anybody for wanting their market value.

And then — if they didn't elect to go in that direction, I would say that you — would probably pay them a very modest amount and then have an option which increased in value by — or increased in striking price — annually.

Nobody does this, hardly. The Washington — Graham Holdings has done it, The Washington Post Company did a little bit — but would increase because it's assuming that there were substantial retained earnings every year.

Because why should somebody retain a bunch of earnings and then claim they've actually improved the value, simply because they withheld the money from shareholders?

So it's very easy to design that, and in private companies people do design it in that way. They just don't want to do it in public companies, because they get more money the other way.

But they might have a very substantial one that could be exercised, but where the shareholder's — the shares had to be held for a couple years after retirement, so that they really got the result over time that the majority of the stockholders would be able to get, and not be able to pick their spots, as to when they exercised and sold a lot of stock.

It's — it would — it's not hard to design. And it really depends who you're dealing with, in terms of actually how much they care about money and having money beyond what they can possibly use.

And most people do have an interest in that, and I don't blame them.

But I don't know. What do you think, Charlie?

CHARLIE MUNGER: Well, I — one thing I think is that I have avoided, all my life, the compensation consultants. To me it's a — I hardly can find the words to express my contempt. (Laughter)

WARREN BUFFETT: I will say this. If the board hires a compensation consultant after I go, I will come back. (Laughter)

CHARLIE MUNGER: Mad. Mad.

So I think there's a lot of mumbo jumbo in this field, and I don't see it going away.

WARREN BUFFETT: Oh, it isn't going to go away. No, it's going to get worse. It — I mean, the — if you look at, I mean, the way compensation gets handled, I mean, it — you know, everybody

looks at everybody else's proxy statement and says, "We can't possibly hire a guy that hasn't been — "

CHARLIE MUNGER: It's ridiculous.

WARREN BUFFETT: —so on. And the human relations department, you know, who work for the CEO, come in and suggest a consultant.

What consultant is ever going to get another assignment if he says, "You should pay your CEO below the — down in the fourth quartile because you're getting a fourth quartile result?" It —

I mean, it just, you know — it isn't that the people are evil or anything. It's just the nature of the situation just — it produces a result that is not consistent with how representatives of the owners should behave.

CHARLIE MUNGER: It's even worse than that. Capitalism is the golden goose that we all live on. And if people generally get so they have contempt for it because they don't like the pay arrangements in the system, your capitalism may not last as well. And that's like killing the golden goose.

So I think the existing system has a lot wrong with it.

WARREN BUFFETT: I think there is something coming in pretty soon — I may be wrong about this — where companies are going to have to put in their proxy statement the CEO's pay to the average pay, or something like that. That isn't going to change anything. I mean —

CHARLIE MUNGER: It won't change a thing.

WARREN BUFFETT: It won't change a thing. And, you know, it'll cost us virtually —

CHARLIE MUNGER: By the way, it won't get any headlines, either. It'll be tucked away.

WARREN BUFFETT: It'll cost us a lot of money, with 367,000 people employed around the world. And, I mean, we'll hope to get something that makes it somewhat simpler so we can use estimates or something of the sort.

But to get the median income or mean income or whatever, however the rules may read, you know, and —

CHARLIE MUNGER: That's what consultants are for, Warren. (Laughter)

WARREN BUFFETT: It — it's, you know, it is human nature that produces this. And, you know, the most —I write in this letter to the managers every two years, I said, "The only excuse I won't take on something is that everybody else is doing it."

But of course, “everybody else is doing it,” is exactly the rationale for why people did not want to count the costs of stock options as a cost — I mean, it was ridiculous.

All these CEOs went to Washington and they got the Senate, I think, to vote 88 to 9 to say that stock options aren’t a cost. And then a few years later, you know, it became so obvious that they finally put it in so it was a cost. You know, it reminded me of Galileo or something, I mean, all these guys.

CHARLIE MUNGER: Worse. It was way worse. The pope behaved better to Galileo in the —and he was —

WARREN BUFFETT: Well, anyway, it’s — it — I would hope, you know, like I say, somebody — well — and it doesn’t even have to be, I’m not talking about the current successor or anybody else.

I mean, successors down the line are probably going to have gotten very wealthy by the time they’re running Berkshire. And the incremental value of wealth gets very close to zero at some point. And there is a chance to use it as a different sort of model.

But I don’t have any problem, if it’s — a system is devised that recognizes retained earnings. Nobody wanted — I’ve never heard anybody talk about it, you know, in the 20 boards I’ve been on.

You know, if you and I were partners in a business, you know, and we kept retaining earnings in the business and I kept having the value to buy a portion of you out at a constant price, you’d say, “This is idiocy.”

But of course that’s the way all option systems are designed, and it’s better to be — for the CEO and for the consultants. And of course, usually if there’s — there’s some correlation between what CEOs are paid and what boards are paid.

If CEOs were getting paid at the rate that they got paid 50 years ago, adapted to present dollars, director pay would be lower. So it’s — you know, it’s got all these built-in things that, to some extent, sort of kindle the —

CHARLIE MUNGER: No Berkshire director is in it for the money.

WARREN BUFFETT: Well, they are if they own a lot of stock. And they bought it in the market just like the —

CHARLIE MUNGER: Yeah, it’s —

WARREN BUFFETT: — shareholder did.

CHARLIE MUNGER: It's a very old-fashioned system.

WARREN BUFFETT: I looked at one company the other day, and seven of the directors had never bought a share of stock with their own money. Now they'd been given stock, but not one of them — I mean, I shouldn't say not one — seven of the directors had never actually bought a share of stock.

And there they are, you know, making decisions on who should be CEO and how they should be paid and all that sort of thing. But, you know, they never felt like shelling out a dollar themselves. Now they'd been given a lot of stock.

And it's, you know, we're dealing with human nature here, folks. (Laughs) And that — what you want is to have a system that works well in spite of how human nature's going to drive it.

And we've done awfully well in this country in that respect. I mean, American business has — overall has done very well for the Americans generally. But not every aspect of it is exactly what you want to teach your kids.

32. BNSF is a "good" business, but probably won't grow much

WARREN BUFFETT: OK. Gregg?

GREGG WARREN: Warren.

WARREN BUFFETT: Yeah.

GREGG WARREN: Between 2010 and 2015, intermodal rail traffic enjoyed double-digit rates of revenue growth as shorter-haul freight converted from truck to rail.

During the past year or so, though, cheaper diesel prices and more readily available truckload capacity have made trucking more competitive, leading to a decline in intermodal rail traffic.

While carload growth is expected to be solid longer term, helping to offset weakness in other segments like coal, what impact do you expect the widening of the Panama Canal, which was completed last year, to have on the West Coast port shipments that BNSF has traditionally carried through to exchange points for the Eastern U.S. railroads, as shippers elect to have goods unloaded at ports in the Gulf of Mexico or up the Eastern seaboard?

And while loss of volumes is never a good thing, could there be a small trade-off here as the bottleneck in Chicago, where most East-West cargo is handed off, eases a bit over time, if some of the current traffic gets rerouted?

WARREN BUFFETT: Well, you know — I — Chicago has got lots of problems, and it's going to continue for a while. I mean, that requires a good solution.

When you think of how the railroads developed, I mean, they — Chicago was the center and, you know, they laid the rails — and there were a whole bunch of different railroads — you know, a hundred years ago. And the city grows up around them and everything. So Chicago is a — can be a huge problem.

But getting to intermodal, I think intermodal will do very well. But you are correct that car loadings actually hit a peak in 2006, so here we are 11 years later.

And the investment of the five big Class I railroads — four of the biggest — if you look at their investment beyond depreciation, it's tens and tens of billions of dollars, and we're carrying less freight before, in aggregate, than we were in 2006. And coal will continue to decrease.

It's a good business, and it has big advantages over truck in many respects. Truck gets much more of a free ride in terms of the fact that their right of way, which is the highway system, is subsidized to a much greater degree beyond the gas tax — you know, we — than the railroad industry.

But it has not been a growth business, in physical volume, to any great degree. I think it's unlikely to be. I think it's likely to be a good business. I think we've got a great territory.

I like the West better than the East, and as you mention, you know, there will be some intermodal traffic that gets diverted to Eastern ports perhaps or so on.

Overall, I —we've got a terrific system in that respect. And we will do well.

It would be more fun if we had something where you could expect aggregate car loadings to increase two or three or four percent a year, but I don't think that's going to happen.

I do think our fundamental position is terrific, however. I think we'll earn decent returns on capital. But that's — I think that's the limit of it.

Charlie?

CHARLIE MUNGER: Nothing to add.

33. Berkshire's next CEO needs a "money mind"

WARREN BUFFETT: OK. Station 9.

AUDIENCE MEMBER: I'm from — Shankar Anant from Gurnee, Illinois. Thank you for doing everything you do for us. I have a question.

The two of you have largely avoided capital allocation mistakes by bouncing ideas off of one another.

Will this continue long into Berkshire's future? And I'd like to — I'm interested in both at headquarters and at subsidiaries.

CHARLIE MUNGER: It can't continue very long.

WARREN BUFFETT: I — (Laughter)

Don't get defeatist, Charlie. (Laughter)

Any successor that's put in at Berkshire, capital allocation abilities, and proven capital allocation abilities, are certain to be uppermost in board's minds or in, in the current case — in terms of my recommendation, Charlie's recommendation, for what happens after we're not around.

Capital allocation is incredibly important at Berkshire. Right now we have 280 or -90 billion, whatever it may be, of shareholders' equity. If you take the next decade alone, you know, nobody can make accurate predictions on this.

But in the next 10 years, if you just take — and depreciation right now is another seven billion a year, something on that order.

The next manager in the decade is going to have to allocate, maybe, 400 billion or something like that, maybe more. And it's more than already has been put in.

So 10 years from now, Berkshire will be an aggregation of businesses where more money has been put in in that decade than everything that took place ahead of time. So you need a very sensible capital allocator in the job of being CEO of Berkshire. And we will have one.

It would be a terrible mistake to have someone in this job where, really, capital allocation might be — might even be their main talent. It probably should be very close to their main talent.

And of course, we have an advantage at Berkshire, in that we do know how important that is and there is that focus on it.

And in a great many companies, people get to the top through ability, and sales sometimes, if they come from the legal side, something like that — all different sides — and they then have the capital allocation, sort of, in their hands.

Now, they may not establish strategic thinking divisions. And they may listen to investment bankers and everything, but they better be able to do it themselves.

And if they've come from a different background or haven't done it, it's a little bit, as I put in one of my letters, I think — it's like getting to Carnegie Hall playing the violin, and then you walk out on the stage and they hand you a piano.

I mean, it is something that — Berkshire would not do well if somebody was put in who had a lot of skills in other areas but really did not have an ability to capital allocation.

I've talked about it as being something I call a "money mind." I mean, people can have 120 IQs or 140 IQs or whatever it may be, very similar scoring abilities in terms of intelligence tests. And some of them have minds that are good at one kind of thing and some of them another.

I've known very bright people that do not have money minds, and they can make very unintelligent decisions. They can do all kinds of other things that most mortals can't do. But it just doesn't, it isn't the way their wiring works.

And I've known other people that really would not do that brilliantly. They do fine, but on an SAT test or something like that. But they've never made a dumb money decision in their life. And Charlie, I'm sure, has seen the same thing.

So we do want somebody — and hopefully they've got a lot of talents — but we certainly do not want somebody that — if they lack a money mind.

Charlie?

CHARLIE MUNGER: Well, there's also the option of buying in stock, which — so, it isn't like it's some hopeless problem. One way or another, something intelligent will be done.

WARREN BUFFETT: And a money mind will recognize when it makes sense to buy in stock and doesn't. You know, and —

In fact, it's a pretty good test for some people, in terms of managements, how they think about something like buying in stock, because it's not a very complicated equation if you sort of think straight about that sort of a subject.

But some people think that way and some don't, and they're probably miles better at something else. But they say some very silly things when you get to something that seems so clear as whether, say, buying in stock makes sense.

Anything further, Charlie?

CHARLIE MUNGER: No.

34. Most financial advisors don't deserve their fees

WARREN BUFFETT: OK, Carol?

CAROL LOOMIS: This question comes from Steve Haverstroll (PH) of Connecticut.

“Warren, you have made it very clear in your annual letter that you think the hedge fund compensation scheme of ‘2 and 20’ generally does not work well for the fund’s investors.

“And in the past, you have questioned whether investors should pay, quote, ‘financial helpers,’ unquote, as much as they can. But financial helpers can create tremendous value for those they help.

“Take Charlie Munger, for instance. In nearly every annual letter and on the movie this morning, you describe how valuable Charlie’s advice and counsel has been to you and, in turn, to the incredible rise in Berkshire’s value over time.

“Given that, would you be willing to pay the industry standard, quote ‘financial helper’ fee of one percent on assets to Charlie? Or would you perhaps even consider ‘2 and 20’ for him? What is your judgment about this matter?”

WARREN BUFFETT: Yeah. (Laughter)

Well, I’ve said in the annual report that I’ve known maybe a dozen people in my life — and I said there are undoubtedly hundreds or maybe thousands out there.

But I’ve said that I’ve known, personally, a dozen where I would have predicted or did predict — in a fair number of those 12 cases — I did predict that the person involved would do better than average in investing over a long period of time.

And obviously, Charlie is one of those people. So would I pay him? Sure. But would I take financial advisors as a group and pay them one percent with the idea that they would deliver results to me that were better than the S&P 500 by one percent, and thereby leave me breaking even against what I could have done on my own? You know, there’s very few.

So it’s just not a good question to ask whether, you know, I’d pay Charlie one percent. That’s like asking, you know, whether I’d have paid Babe Ruth, you know, 100,000 or whatever it was to come over from the Red Sox to the Yankees. I mean, sure I would have, but there weren’t very many people I would have paid 100,000 to in 1919, or whatever it was, to come over to the Yankees.

And so, the — it’s a fascinating situation, because the problem isn’t that the advisors are going to do so terrible. It’s just that you have an option available that doesn’t cost you anything that is going to do better than they are, in aggregate.

And it — it’s an interesting question. I mean, if you hire an obstetrician, assuming you need one, they’re going to do a better job of delivering the baby than, you know, if the spouse comes in to do it, or if they just pick somebody up off the street.

And if you go to a dentist, if you hire a plumber, in all of the professions, there is value added by the professionals as a group, compared to doing it yourself or just randomly picking laymen.

In the investment world, it isn't true. I mean, they, the active group, the people that are professionals, in aggregate, are not, cannot do better than the aggregate of the people who just sit tight.

And if you say, "Well, in the active group there's some person that's terrific," I will agree with you. But the passive people can't all pick that person. And they wouldn't — they don't know how to identify them. So I —

CHARLIE MUNGER: It's even worse than that. The (inaudible) — the expert who's really good, when he gets more and more money in, he suffers just terrible performance problems.

WARREN BUFFETT: Yeah. Yeah.

CHARLIE MUNGER: And so you'll find the person who has a long career at "2 and 20," and if you analyze it, net, all the people who've lost money because some of the early people have had a good record but more money coming in later and they lose it.

So, the investing world is just, it's a morass of wrong incentives, crazy reporting, and I'd say a fair amount of delusion.

WARREN BUFFETT: Yeah, if you asked me whether I — those 12 people I picked would do better than the S&P working with a hundred billion dollars, I would answer that probably none of them would. I mean, they — that would not be their prospective performance.

They're not, but when I was talking of them, I — you know, or referencing them — and when they actually worked in practice, they dealt, generally, with pretty moderate sums. And as the sums grew, their relative advantage diminished.

It — I mean, it's so obvious from history. The example I used in the report — I mean, the guy who made the bet with me, and incidentally all kinds of people didn't make the bet with me because they knew better than to make the bet with me.

You know, there were hundreds, at least a couple hundred underlying hedge funds. These guys were incented to do well. The fund of fund manager was incented to pick the best ones he could pick. The guy who made the bet with me was incented to pick the best fund of funds.

You know, and tons of money, and just in with those five funds, a lot of money went to pay managers for what was subnormal performance over a long period of time. And it can't be anything but that.

And it's an interesting — you know, it's an interesting profession when you have tens of thousands, or hundreds of thousands of people, who are compensated based on selling something that, in aggregate, can't be true: superior performance. So —

But it'll continue, and the best salespeople will tend to attract the most money. And because it's such a big game, people will make huge sums of money, you know, far beyond what they're going to make in medicine or you name it. I mean, you know, repairing the country's infrastructure, I think.

I mean, the big money — huge money — is in selling people the idea that you can do something magical for them.

And if you have — if you even have a billion-dollar fund, you know, and get two percent of it — for terrible performance, you make — that's $20 million.

In any other field, you know, it would just blow your mind. But people get so used to it, you know, in the Wall — in the field of investment that it just sort of passes along. And $10 billion, I mean, $200 million fees?

We've got two guys in the office, you know, that are managing $11 billion. Well, no they're not. I'm sorry. Yeah, they're managing 20 billion, you know, between the two of them, 21 billion maybe.

And, you know, we pay them a million dollars a year, plus the amount by which they beat the S&P. They have to actually do something to get contingent compensation, which is much more reasonable than the 20 percent.

But how many hedge fund managers in the last 40 years have said, "I only want to get paid if I do something for you?" You know, "Unless I actually deliver something beyond what you can get yourself, you know, I don't want to get paid." It just doesn't happen.

And, you know, it get back — it's get back — it gets back to that line that I've used, but when I asked a guy, you know, "How can you, in good conscience, charge '2 and 20?'" And he said, "Because I can't get 3 and 30." You know — (Laughter)

Any more, Charlie? Or have we used up our —

CHARLIE MUNGER: I think you've beaten up on them enough.

WARREN BUFFETT: Yeah, well. (Laughter)

35. "I love the fact we bought Precision Castparts"

WARREN BUFFETT: Jonathan.

JONATHAN BRANDT: Precision Castparts represents the second largest acquisition Berkshire has ever made. There wasn't much qualitative or quantitative information about it in the 2016 annual.

Would you be willing to update us here with how it is doing currently, what excites you about its prospects, and what worries you most about it?

I'm also curious if there were any meaningful purchase price adjustments beyond intangible amortization that negatively impacted Precision's earnings in 2016, as was the case with Van Tuyl in 2015?

And finally, are there any opportunities in sight for bolt-on acquisitions?

WARREN BUFFETT: Yeah, we've actually made acquisitions, and we will make more that fit there, because we've got an extraordinary manager. And we've got a terrific position in the aircraft field.

So there will be sensible — there will be the chance for sensible acquisitions. And we've already made two, anyway. And we will make more over time. The — it's —

The amortization of intangibles is the only big purchase price adjustment. That's something over $400 million a year, nondeductible. In my mind, that's 400-and-some million of earnings.

I do not regard the economic goodwill of Precision Castparts being diminished at that rate annually. That is a — and, you know, I've explained that in some degree. The —

As a very long-term business, you can worry about 3-D printing. I don't think you have to worry about aircrafts being manufactured. But aircraft deliveries can be substantially altered in relation to any given backlog in most cases.

So the deliveries can be fairly volatile, but I don't think the long-term demand is anything I worry about.

And the question is, whether anybody can do it better or cheaper, or like I say, whether 3-D printing at least takes away part of the field in some respects.

But overall, I would tell you I feel very good about Precision Castparts. It is a very long-term business. I mean, we have contracts that run for a very long time, and like I say, the initiation of a new plane may be delayed or something of the sort.

But if you take a look at the engine that's in the other adjoining room here and in our exhibition hall, you would, if you were putting that engine together for the 20 or 25-year life or whatever it may have, carrying hundreds of people, you would care very much about your supplier.

And you'd care not only in the quality, you know — which would be, absolutely you'd care — of the work being done. But you also, if you were an engine manufacturer or an aircraft manufacturer further down the line, you would care very much about the reliability of delivery on something.

Because you do not want a plane that — or an engine — that's 99 percent complete while somebody's dealing with a problem of faulty parts or anything else that would delay delivery.

So, the reliability is incredibly important. And I don't think anybody has a reputation better than Mark Donegan for — and the company — for delivery.

So I love the fact we bought Precision Castparts.

Charlie?

CHARLIE MUNGER: Yeah, well, what's interesting about them, too, is that it's a very good business purchased at a fair price under — but this is no screaming bargain like the old days.

WARREN BUFFETT: No.

CHARLIE MUNGER: For quality businesses, you pay up now a lot more than we used to.

WARREN BUFFETT: Yeah, that's absolutely true, and we — you don't get a bargain price.

The 400-plus million incidentally, you know, goes on for quite a while, too.

And we'll explain it in the report just like — just as we'll explain that the depreciation charge at a railroad would not be adequate. I mean, it's the way accounting works.

36. A "really stupid" accounting rule change

WARREN BUFFETT: And starting — I don't even want to tell you about this one — but starting the first of next year, accounting is going to become sort of a nightmare in terms of Berkshire and other companies because they're going to have us mark our equities to market just like we were a Wall Street trading firm or something.

And those changes in the value of Coca-Cola, or American Express, or everything, are going to run through the income account every quarter. In fact, they run through it every day in this theory, so that it really will get confusing.

Now, it's our job to explain things so that you aren't confused when we report GAAP earnings, but GAAP earnings, as reported, will become even more meaningless, if looking only at the bottom line, than they are now, and —

CHARLIE MUNGER: That was not necessarily a good idea.

WARREN BUFFETT: No, I think it's a terrible idea, but we'll deal with it. And we'll — and, I mean, it's my job to explain to what extent GAAP accounting is useful to you in evaluating Berkshire, and the times when it actually distorts things.

Accounting isn't supposed to — it's not supposed to describe value.

On the other hand, it's a terribly useful tool, if understood, in order to estimate value if you're analyzing businesses. And so, you know, certainly, you can't blame the auditing profession for doing what they think is their job, which is not to present value. Although, by using these market values —

CHARLIE MUNGER: But you can blame the audit —

WARREN BUFFETT: What's that?

CHARLIE MUNGER: You can blame the audit profession for that one.

WARREN BUFFETT: OK, well.

CHARLIE MUNGER: That was really stupid. (Laughter)

WARREN BUFFETT: Well, I agree with that actually. (Laughter)

But we will do our best to give you — we're always going to give you the audited figures.

And then we're going to explain their shortcomings in either direction and how they — how what you should use and what you probably should ignore in looking at those numbers and using them to come to a judgment as to the value of your holdings.

And I'll explain it to you the same way I would explain it to my sisters or anybody else that — you know, we want you to understand what you own. And we try to cover the details that are really important in that respect.

I mean, there's a million things you can talk about that are just of minor importance when you're talking about a $400 billion market value.

But they're the things that, if Charlie and I were talking about the company, that they'd be the figures or the interpretations or anything that we would regard as important in sort of coming to an estimate of the value of the business. But it's going to be —

You can't knock the media. I mean, they've only got a few paragraphs to describe the earnings at Berkshire every quarter. But if they simply look at bottom line numbers, what can be silly this

year will become absolutely ludicrous next year because of the new rule that comes into effect for 2018.

37. Munger: China's stock market is cheaper than U.S.

WARREN BUFFETT: OK. Station 10.

AUDIENCE MEMBER: Hello Warren. This is a question from China.

VOICE: (Inaudible)

WARREN BUFFETT: Pardon me?

AUDIENCE MEMBER: I am Jeff Chan (PH), a pension fund manager from China, Shanghai. My question is quite simple.

What is the probability of duplicating your great investment track record in China's stock market the next decades or two in terms of a (inaudible)? That's all.

And I thank my friends from (FOREIGN LANGUAGE) Fund Management House for guiding me in writing this question. Thank you.

WARREN BUFFETT: Charlie, you're the expert on China. (Laughter)

CHARLIE MUNGER: It's like determining the order of precedency between a louse and a flea. Yeah.

I do think that the Chinese stock market is cheaper than the American market. And I do think China has a bright future. And I also think that there'll be growing pains, of course. And —

But —

WARREN BUFFETT: Well —

CHARLIE MUNGER: We have this opportunistic way of going through life. We don't have any particular rules about which market we're in or anything like that.

WARREN BUFFETT: Well, Charlie's delivered a headline anyway, now: "Munger Predicts China Market Will Outperform U.S." (Laughter)

Afternoon Session - 2017 Meeting

1. Berkshire and 3G's different approaches to job cuts

WARREN BUFFETT: Panel all here? OK. We're back for action. And we'll go right to Becky.

BECKY QUICK: All right. This question comes from Anne Newman (PH). She says that she's a shareholder of the Class B stock.

And her question is, "The primary investment strategy of 3G Capital is extreme cost-cutting after the purchase of a company. This typically includes the elimination of thousands of jobs.

"With the current U.S. president focusing on retention of U.S. jobs, will Berkshire Hathaway still consider future investments with 3G Capital if those investments result in the purchase of U.S. companies and the elimination of more U.S. jobs?"

WARREN BUFFETT: Now, the, essentially, 3G management — and I've watched them up very close at Kraft Heinz — is — basically, they don't — they believe in having a company as productive as possible.

And, of course, the gains in this world, for the people in this room, and people in Omaha, and people throughout America, have come through gains in productivity.

If there had been no change in productivity, we would be living the same life as people lived in 1776.

Now, the people — the 3G people — do it very fast. And they're very good at making a business productive with fewer people than operated before.

But that — they've been, you know, we've been doing that in every industry, whether it's steel, or cars, or you name it. And that's why we live as well as we do.

We prefer at Berkshire — I wrote about this a year ago — we prefer to buy companies that are already run efficiently because, frankly, we don't enjoy the process at all of getting more productive. I mean, it's not pleasant.

But it is what has enabled the country to progress. And nobody has figured out a way to double people's consumption per capita without, in some way, improving productivity per capita.

It's a good question in the — whether it's smart overall if you think you're going to suffer politically because political consequences do hit businesses. So I don't know that I can answer the question categorically.

But I can tell you that they not only focus on productivity and do it in a very intelligent way, but they also focus, to a terrific degree, on product improvement, innovation, and all of the other things that you want a management to focus on.

And I hope that, at the lunchtime, if you had the Kraft Heinz cheesecake, you'll agree with me that product improvement and innovation there is a — is just as much a part of the 3G playbook as productivity. I don't —

Personally, we have been through the process of buying into a textile business that employed a couple thousand people and went out of business over a period of time, or a department store, a business that was headed for oblivion.

And it is just not as much fun to be in a business that cuts jobs rather than one that adds jobs.

So, Charlie and I would probably forego, personally, having Berkshire directly buy businesses where the main benefits were come — would come from increasing productivity by actually having fewer workers.

But I think it's pro-social to think in terms of improving productivity. And I think that people at 3G do a very good job at that.

Charlie?

CHARLIE MUNGER: Well, I agree. I don't see anything wrong with increasing productivity. On the other hand, there's a lot of counterproductive publicity to doing it. Just because you're right doesn't mean you should always do it.

WARREN BUFFETT: Yeah. I'd agree with that.

2. Pressure to deploy Berkshire's cash grows as it nears $100B

WARREN BUFFETT: Jay?

JAY GELB: Berkshire's cash and Treasury bill holdings are approaching $100 billion.

Warren, a year ago, you said Berkshire might increase its minimum valuation for share buybacks above 1.2 times book value if this occurred. What are your latest thoughts on raising the share repurchase threshold?

WARREN BUFFETT: Yeah, the — when the time comes — and it could come reasonably soon, even while I'm around — but [if] we really don't think we can get the money out in a reasonable period of time into things we like, we have to reexamine then what we do with those funds that we don't think can be deployed well.

And at that time, we'd make a decision. And it might include both, but it could be repurchases. It could be dividends.

There are different inferences that people draw from a dividend policy than from a repurchase policy that, in terms of expectations that you won't cut a dividend and that sort of thing. So you have to factor that all in.

But if we really — if we felt that we had cash that was unlikely to be used — excess cash — in a reasonable period of time, and we thought repurchases at a price that was still attractive to continuing shareholders was feasible in a substantial sum, that could make a lot of sense.

At the moment, we're still optimistic enough about deploying the capital that we wouldn't be inclined to move to a price much closer where there's only a narrow spread between an intrinsic value and the repurchase price. But at a point, the burden of proof is definitely on us.

I mean, that — I — the last thing we like to do is own something at a hundred times earnings where the earnings can't grow.

I mean, we're — as you point out, we've got almost a hundred billion — it's $90-plus billion invested in a business, we'll call it a business, where we're paying almost a hundred times earnings. And it's kind of a lousy business.

CHARLIE MUNGER: It's more after after-tax earnings.

WARREN BUFFETT: Yeah. So, it — you know, we don't like that. And we shouldn't use your money that way for a long period of time. And, then, the question is, you know, are we going to be able to deploy it?

And I would say that history is on our side, but it'd be more fun if the phone would ring instead of just relying on history books.

And, you know, I am sure that sometime in the next 10 years — and it could be next week or it could be nine years from now — there will be markets in which we can do intelligent things on a big scale.

But it would be no fun if that happens to be nine years off. And I don't think it will be, but just based on how humans behave and how governments behave and how the world behaves.

But like I say, at a point, the burden of proof really shifts to us, big-time. And there's no way I can come back here three years from now and tell you that we hold 150 billion or so in cash or more, and we think we're doing something brilliant by doing it.

Charlie?

CHARLIE MUNGER: Well, I agree with you. The answer is maybe. (Laughter)

WARREN BUFFETT: He does have a tendency to elaborate. (Laughter)

3. CBT and animal rights

WARREN BUFFETT: Station 11.

AUDIENCE MEMBER: Thank you, Mr. Buffett and Mr. Munger. I am Anil Daron (PH) from Short Hills, New Jersey and New Delhi, India.

This is my 18th time to this wonderful event, and profoundly thank you for your extraordinary wisdom, generosity, and time.

As I'm involved with sustainable investments that also do not directly harm animals, I would appreciate your perspective, if any, on the practices of your CTB subsidiary, which is somewhat involved in pig, poultry, and egg production.

Somewhat indirectly related, as you share your concern on nuclear war extensively at the last annual meeting, I would love to pick your brain on Albert Schweitzer's Nobel Peace Prize acceptance speech, shortly after the first nuclear bombs were detonated, that compassion can attain its full breadth and depth if it is not limited to humans only. Thank you.

WARREN BUFFETT: Well, that's a pretty broad question. I would say on your first point, we have a subsidiary, CTB, run by Vic Mancinelli. And I sit down with him once a year. And he's a terrific manager. He's one of our very best. You don't hear much about him.

And they do make the equipment for poultry growers. And I would — I can't answer your question specifically, but I would be glad to have you get in contact with Vic directly because I know that what — question you raised is a — it's a major factor in what they do.

I mean, they do care about how the equipment is used, in terms of poultry and egg production. And, as you know, a number of the largest purchasers and the largest producers are also in the same camp. But I can't tell you enough about it directly that I can give you a specific answer.

But I can certainly put you in touch with Vic. And I think you would find him extremely well-informed and doing some very good things in the area that you're talking about.

In terms of the nuclear weapon question, I'm very pessimistic on weapons of mass destruction, generally. Although, I don't think that nuclear, probably, is quite as likely as either biological — primarily, biological — and maybe cyber. I don't know that much about cyber.

But I do think that's the number one problem with mankind. But I don't think I can say anything particularly constructive on it now.

Charlie?

CHARLIE MUNGER: Well, I don't think we mind killing chickens. (Laughter)

And I do think we're against nuclear war, so — (Laughter)

WARREN BUFFETT: Yeah. (Applause)

We are not actually a poultry producer, but we do — they use our equipment. And that equipment has been changed substantially in the last 10 or 15 years.

But, again, I'm not that good on the specifics that I can give them to you. But I can certainly you put you in touch with Vic.

4. Giving Weschler and Combs more to manage wouldn't help them

WARREN BUFFETT: Andrew ?

ANDREW ROSS SORKIN: Warren. Since Todd [Combs] and Ted [Weschler] joined Berkshire, the market cap of the company has doubled, and cash on hand is now nearly a hundred billion dollars.

It doesn't look like Todd and Ted have been allocated new capital on the same relative basis. Why?

WARREN BUFFETT: Well, actually, I would say they have been.

I think we started out with two billion. That could be wrong, but my memory was two billion with Todd when he came with us. And so, there have been substantial additions.

And, of course, their own capital has grown just because — say, in a sense, they retain their own earnings.

So yeah, they are managing a proportion of Berkshire's capital — also measured by marketable securities — I think they're managing a proportion that's pretty similar, maybe even a little higher than when each one of them entered. And Ted entered a year or two after Todd.

You know, they — I think they would agree that it's tougher to run 10 billion than it is to run one or two billion. I mean, your expectable returns go down as you get into larger sums.

But the decision to bring them on has been terrific. I mean, they have — they've done a good job of managing marketable securities. They made more money than I would've made with that same, what is now 20 billion, but originally was two billion.

And they've been a terrific help in a variety of ways beyond just money management. So that decision, I'll — you know — that's been a very, very good decision.

And they are — they're smart. They have money minds. They are good, specifically, at investment management. But they're absolutely first-class human beings. And they really fit at Berkshire. So, that was —

Charlie gets credit for Todd. He met Charlie first. And I'll claim credit for Ted. And I think we both feel very good about the decisions.

Charlie?

CHARLIE MUNGER: Well, I think the shareholders are very lucky to have them because they both think like shareholders.

WARREN BUFFETT: Totally.

CHARLIE MUNGER: After all, it came up that way. And that is not the normal way headquarters employees think. It's a pretense that everybody takes on, but the reality is different.

And these people really, deeply think like shareholders. And they're young, and smart, and constructive. So we're all very lucky to have them around.

WARREN BUFFETT: Yeah. Their mindset is a hundred percent, "What can I do for Berkshire," not, "What can Berkshire do for me?" And, believe me, you can spot that over time with people.

And on top of that, you know, they're very talented.

But, you know, it's hard to find people young, ambitious, very smart, that don't put themselves first. And I would — every experience we've had, they did not put themselves first. They put Berkshire first.

And believe me, I can spot it when people are extreme in one direction or another. Maybe I'm not so good around the middle, but you've got —

You couldn't have two better people in those positions.

But — and you say, "Well, why don't you give them another 30 billion each or something?" I don't think that would improve their lives or their performance.

They may be handling more as they go along, but the truth is, I've got more assigned to me than I can handle at the present time, as proven by the fact that we've got this 90 billion-plus around.

I think there are reasonable prospects for using it. But if you told me I had to put it to work today, I would not like the prospect.

Charlie, anything?

CHARLIE MUNGER: Well, I certainly agree with that. It's a lot harder now than it was at times in the past.

5. Private transactions not needed now for Class A shares

WARREN BUFFETT: Gregg?

GREGG WARREN: Warren, plans for your ownership stake, which is heavily concentrated in Class A shares, are fairly well known, with the bulk of the stock going to the Bill and Melinda Gates Foundation and four different family charities over time.

Your annual pledges to these different charities involve the conversion of Class A shares, which hold significantly greater voting rights than the Class B shares.

As such, the voting control held by your estate will diminish over time, with a whole layer of super-voting shares being eliminated in the process.

While the voting influence of Class B shareholders are expected to increase over time, it will not be large enough to have a big influence on Berkshire's affairs.

With that in mind, and recognizing the great importance on having Berkshire buy back and retire Class A shares in the long run, I was just wondering if the firm has compiled a pipeline of potential future sellers from the ranks of the company's existing shareholders.

Given the limited amount of liquidity for the shares, privately negotiated transactions with these sellers, like the one you negotiated in December of 2012, would end up being in the best interest of both parties.

WARREN BUFFETT: Well, again, it would depend on the price of Berkshire.

So, in terms of what I give away annually, you know, it's — the last two years, it's been about 2.8 billion per year. That can be — you know that's one day's trading in Apple.

I mean, the amount I'm giving away is, in terms of Berkshire's market cap, I mean, you know, you're down to seven-tenths of one percent of the market cap. So, it's not a big market factor, and it really wouldn't be that illiquid.

So, I know a few big holders that, you know, might have 8- or 10,000 shares of A. But the market can handle it now.

When we bought that block of — I think it was 12,000 shares of A, I mean, we bought it because we thought it increased the intrinsic business value of Berkshire by a significant amount. And we paid the seller what the market was at the time.

And, you know, we're open to that up to 120 percent. And who knows? If it came along at a time and it was 124 percent or something, it was a very large block and the directors decided that that was OK, it still was a significant discount, we might very well buy it.

But in terms of the orderly flow of the market or anything like that, there will be no problems just as there haven't been, you know, when I've given away — I do it every July — when I've given away the last two years.

Some of the foundations may keep it for a while. But they have to spend what I give them. And they may build up a position in B for, you know, a fairly significant dollar amount. But they're going to sell it.

And it is true that for a period after I die, there'll be a lot of votes still in the estate and later in a trust.

But, you know, that will get reduced over time. I see no problem with our capitalization over time.

You know, I like the idea of a fair number of votes being concentrated with people that believe in the culture strongly and, you know, would be thinking about whether they'd get a 20 percent jump in the stock if somebody came along with some particular plan.

But, eventually, that's going to get diminished. It continues to get diminished. And I think, in terms of — you know, there's a very good market in Berkshire shares.

And if we can buy them at a discount from intrinsic business value and somebody offers some sum — a big piece — and it may be at a hundred — stock may be selling at 122 percent, 124 percent, you know, I would pick up the phone and call the directors and see if they didn't want to make a change.

And we did it once before. And if it made sense, I'm sure they'd say yes. And if it didn't make sense, I'm sure they'd say no. So, I don't think we have any problem in terms of blocks of stock or anything.

I don't think people that own it have a problem selling it. And I don't think we have a problem in terms of evaluating the desirability of repurchasing it.

Charlie?

CHARLIE MUNGER: Nothing to add.

6. Deciding whether to exercise Bank of America warrant

WARREN BUFFETT: OK. Station 1.

AUDIENCE MEMBER: Hello. My name is Erin Byer. And I was born and raised in Pasadena, California, and I currently live in New York City.

It's been a dream of mine to come here today. I've been a proud BH shareholder for almost 20 years.

I asked my dad for stock for Christmas when I was 15. And I kept thinking at the opportunity to ask you a question today that I should make it one that would change my life.

Well, that question is, do you know any eligible bachelors living in the New York City area? (Laughter and applause)

WARREN BUFFETT: Well, you certainly have the approach toward life that Charlie and I would. (Laughs)

AUDIENCE MEMBER: But the question that might make my Monday, back in the office: back in 2011, you purchased Bank of America preferred stock with a warrant. You had the opportunity, at a later date, to exercise and convert those into common shares.

When you're looking at evaluating that decision to exercise that position, which would increase all of our Berkshire holdings — or the value of the Berkshire holdings — what are you going to consider when you're looking at that?

WARREN BUFFETT: Well, it's almost — well, if the price of the stock is above seven dollars a share, which seems quite likely, whether we were going to keep it or not, it would still make sense for us to exercise the warrant shortly before it expired, because it would be a valuable warrant, but it's only a valuable warrant if it's converted — or if exercised — and exchanged into common. And that warrant does expire.

So, as I put in the annual report, our income from the investment would increase if the Bank of America ever got to where it was paying 11 cents quarterly.

We get 300 million off the — a year — off the preferred. And for us to use the preferred as payment in the exercise of the warrant, we would need to — we would want to feel we were getting more than 300 million a year by — and that would take 11 cents quarterly.

They may or may not get to where they pay that amount before the warrant expires in 1921 — or 2021.

If we — if it does get to there, we'll exercise the warrant. And then, instead of owning the five billion of preferred and the warrant, we'll have 700-plus million shares of common.

Then that becomes a separate decision. Do we want to keep the 700 million shares of common?

I — if it were to happen today, I would definitely want to keep the stock. Now, who knows what other alternatives may be available in 2021 or —

But as of today, if our warrant were expiring tomorrow, we would use the preferred to buy 700 million-plus shares of common. And we would keep the common.

If they get to 11 cents quarterly dividend, we'll convert it. And we'll very likely keep the common.

And if we get to 2021, if the common's above seven dollars, which I would certainly anticipate, we will exercise.

So that's all I can tell you on that. But I certainly wish you success on your other objective. (Laughter)

And I think, probably, the fellow will be using very good judgment, too.

OK. Charlie?

CHARLIE MUNGER: Well, I think it's a very wise thing for a woman that owns Berkshire stock and is a good looking woman to put her picture up like that. (Laughter and applause)

WARREN BUFFETT: It does give me a thought, though. We might actually start selling ads in the annual report. And — (Laughter)

OK. That — incidentally, that BofA purchase, it literally was true that I was sitting in the bathtub when I got the idea of checking with the BofA, whether they'd be interested in that preferred.

But I've spent a lot of time in the bathtub since, and nothing's come to me. So — (Laughter)

Clearly, I either need a new bathtub or we got to get in a different kind of market.

7. Defending 3G's job cuts

WARREN BUFFETT: Carol?

CAROL LOOMIS: This is a question from George Benaroya. And it adds a layer to the discussion about 3G a little bit ago.

He says, “I am a very happy, long-term shareholder. But this is a concern I have regarding Berkshire Hathaway’s Kraft Heinz investment.

“This investment has done well in economic terms. The carrying value is 15 billion, and the market value was 28 billion in 2016.

“But the DNA of 3G is quite different from ours. We do not make money by buying companies and firing people. 3G fired 2,500 employees at Kraft Heinz. That is what private equity firms do, but we are not a private equity firm.

“Our values have worked for us for over four — 50 years. There is a risk that as 3G continues to deviate from our principles, they will, eventually, harm both our value and our values. How do we prevent that from happening?”

WARREN BUFFETT: Well, that’s interesting. I mentioned earlier that it was very gradual. But it would’ve been, probably, a better decision. We fired 2,000 people over time — and some retired and left and all of that — but at the textile operation [Berkshire Hathaway]. You know, it didn’t work.

And at Hochschild Kohn, the successor — we fortunately sold it to somebody else — but eventually, they closed up the department stores because department stores, at least that particular one and a good many, actually, including our competitors in Baltimore, could not make it work.

Walmart came along with something — and, now, Amazon’s coming along with something — that changed the way people thought they knew. You —

We mentioned our poultry with CTB, which is a lot of different farm equipment.

The farm equipment, often, that CTB develops, the idea is that it’s more productive than what already is out there, which means fewer people are employed on farms.

We had 80 percent of the American public — population, working population — working on farms a couple of hundred years ago.

And if nobody had come up with things to make it more productive — farming — we’d have 80 percent of people working on farms now to feed our populace. And it means that we’d be living in a far, far more primitive way.

So there — you know — if you look at the auto industry, it gets more productive. If you look at any industry, they’re trying to get more productive. Walmart was more productive than department stores, and —

That will continue in America. And it better continue or we won't live in — or our kids won't live any better than we do.

Our kids will live better than we do, because America does get more productive as it goes along. And people do come up with better ways of doing things. The —

When Kraft Heinz finds that they can do whatever amount of business — $27 billion worth of business or something — and they can do it with fewer people, they're doing what American business has done for a couple hundred years and why we live so well. But they do it very fast.

They're more than fair, in terms of severance pay and all of that sort of thing. But they don't want to have two people doing the job that one can do.

And I, frankly, don't like going through that, having faced that.

I faced that down at Dempster in Beatrice, Nebraska. And it really needed change. But the change is painful for a lot of people. And I just would rather spend my days not doing that sort of thing, having had one or two experiences.

But I think that it's absolutely essential to America that we become more productive because that is the only way we have more consumption per capita, is to have more productivity per capita.

Charlie?

CHARLIE MUNGER: Well, I — you're absolutely right. We don't want to go back to subsistence farming. I had a week of that when I was young on a western Nebraska farm. And I hated it. (Laughter)

And I don't miss the elevator operators who used to sit there all day in the elevator, run the little crank, you know.

So, on the other hand, it — as you say it's terribly unpleasant for the people that have to go through it and why would we want to get into a — the business of doing that over and over ourselves?

We did it in the past when we had to, when the businesses were dying.

I don't see any moral fault in 3G at all, but I do see that there's some political reaction that doesn't do anybody any good.

WARREN BUFFETT: Milton Friedman, I think it was, used to talk about the time — probably apocryphal — he would talk about the huge construction project in some communist country.

And they had thousands and thousands and thousands of workers out there with shovels digging away on this major project.

And, then, they had a few of these big, earth-moving machines behind — which were idle — and which could've done the work in one-twentieth of the time of the workers.

So the economists suggested to the local party worker or whoever it was that, you know, why in the world didn't they use these machines to get the job done in one-tenth or one-twentieth the time instead of having all these workers out there with shovels?

And the guy replied, "Well, yeah. But that would put the workers out of work." And Friedman said, "Well, then, why don't you give them spoons to do it instead," you know? (Laughter)

8. Berkshire's $20B cash cushion is an "absolute minimum"

WARREN BUFFETT: Jonathan?

JONATHAN BRANDT: I understand that Berkshire is much more liquid than is ideal right now with a 113 billion of consolidated cash and bonds versus policyholder float of 1-0 — 105 billion. But I have trouble calculating how much incremental buying power Berkshire has at any point in time.

You've talked about having a minimum of 20 billion in cash on a consolidated basis.

But for regulatory, risk control, or liquidity purposes, is there some minimum amount of float beyond the 20 billion that has to be in cash bonds or, say, preferred stocks?

Or can all but 20 billion be put into either common stocks or invested into wholly-owned businesses if you found attractive opportunities?

WARREN BUFFETT: Yeah.

JONATHAN BRANDT: What does the balance sheet look like if you were fully invested? And where does additional debt fit into the equation, if at all?

WARREN BUFFETT: Yeah. The — I wouldn't conflate the cash and the bonds. I mean, when we talk about 20 billion in cash, we can own no bond beyond that. Twenty billion would be the absolute minimum. As a practical matter, I never —

Since I've set 20 billion as a minimum, I'm not going to operate with 21 billion any more than I'm going to see a highway, a truck sign that says maximum load 30,000 pounds or something and, then, drive 29,800 across it. So, we won't come that close.

But the answer is that, A, we could use — we're not inclined to use debt. Obviously, if we found something that really lit the — lit our fire — we might use some more debt, although that'd be a — it's unlikely under today's circumstances. But we can —

Twenty billion's an absolutely minimum. You can say that because I say 20 billion's an absolute minimum, it probably wouldn't be below 24 or 25.

And we could do a very large deal if we thought it was sufficiently attractive. I mean, we have not put our foot to the floor on anything for really a very long time. But if we saw something really attractive —

We spent 16 billion back when we were much smaller in a period of two or three weeks — probably three weeks maybe — in the fall of 2008. And we never got to a point where it was any problem for me sleeping at night. And now, we, obviously, have a lot more money to put out.

So, if a good — Charlie, at what point, if I called you, would you say, "I think that's a little bit big for us today?"

CHARLIE MUNGER: I would say about $150 billion.

WARREN BUFFETT: Well, in that case, I'll call you. (Laughter)

Don't — I'm a little more conservative on that than, actually, Charlie. But we both would do a very, very big deal if we —

CHARLIE MUNGER: We don't have to agree perfectly.

WARREN BUFFETT: Yeah. It'd have to be —

But, if we find a really big deal that makes compelling sense —

CHARLIE MUNGER: Now, you're talking.

WARREN BUFFETT: — we're going to do it. (Laughter)

9. Very unlikely Jorge Paulo Lemann would succeed Buffett as CEO

WARREN BUFFETT: OK. Station 2.

AUDIENCE MEMBER: Hello, Mr. Buffett, Mr. Munger.

My name is Felipe Kioni (PH). I'm 19 years old from Brazil.

And your partnership with Jorge Paulo Lemann and his associates at 3G has been very successful, taking into account great outcome of transactions such as the Kraft Heinz merger.

Even though you and Jorge Paulo have different investment methods, would you and Charlie consider him to be your — a member of your board, or even your successor?

WARREN BUFFETT: I don't think that will happen, but I — but then, I think it would complicate things, in terms of the board membership.

But we love the idea of being their partner. And I don't think — I think there's a good chance that we will do more, and perhaps even bigger, things together.

But the — we're probably unlikely to be doing much change in the board, certainly in the next few years.

And there will be a successor, and the successor could very well be while I'm alive.

But that will be — there's a very high probability that will be from somebody that's been in our company for some time. I mean, the world could change in very strange ways, you know. But that's a very, very high probability.

Charlie?

CHARLIE MUNGER: All I can say is that my back hurts when I come to these functions because I want to indicate to the — my fellow shareholders — that they probably got seven more good years to get out of Warren. (Laughter and applause)

WARREN BUFFETT: Charlie's inspiring me. I got to tell you that.

But we've been very, very lucky in life. And so far, our luck seems to be holding.

10. Online competition hasn't yet affected Berkshire retailers

WARREN BUFFETT: OK. Becky?

BECKY QUICK: This question comes from Drew Estes in Atlanta, Georgia.

And he asks, "Is Fruit of the Loom experiencing difficulties related to the distribution channel shift towards online and the troubles in the brick and mortar retail world? If so, do you believe the difficulties are short term in nature?"

And, then, Drew goes on to add, "I'm hoping millennials haven't bucked the underwear trend, too." (Laughter)

WARREN BUFFETT: Yeah. Well, he may know more about that than I do. (Laughter)

The answer is essentially no, so far. But anybody that doesn't think that online isn't changing retail in a big way, and that anybody who thinks they're totally insulated from it is correct —

I mean, the world is changing big time. And like I say, at Fruit of the Loom, I don't — it really hasn't changed. And at our furniture operation, which is setting a record so far again this year for the shareholder's weekend. You know, I mentioned it in the report, but I think we did $45 million in one week.

And our furniture operations — it's hard to see any effect from online, outside of our own online operations. It had really good same-store gains.

You can take, you know, whether it's the Nebraska Furniture Mart, but RC Willey, whether it's in Sacramento, or Reno, or Boise, or Salt Lake City, or Jordan's, which, in Boston, has done very well on a same-store basis.

So, we don't really see it, but there were a lot of things we didn't see 10 years ago that then materialized.

One thing you may find interesting is that the Furniture Mart here in Omaha, which is an extraordinary operation — the online has grown very substantially.

And I may be wrong on this, but I think it's getting up to — I'd like to check this with the Blumkins before I say it, but I think it's getting pretty close to 10 percent or so of volume. But it's a very significant percentage of those people still go and pick the product up at the Furniture Mart.

So apparently, they — it's the time spent entering the store or maybe at check-out lines or whatever it may be. I'm surprised that it gets to be that percentage.

But the one thing about it is we keep looking at the figures and trying to figure out what they're telling us.

So far, I would not say that it's affected Fruit of the Loom in a significant manner. I would not say it's affected the furniture operation in a significant manner. But I have no illusions that 10 years is going to look — from now — is going to look anything like today.

If you think about it, you know, if you go back a hundred years to the great department stores, what did they offer? They offered incredible selection.

You know, if you had a big department store in Omaha, you had the thousand bridal dresses. And if you lived in a small town around, the local guy had two or something of the sort.

So the department store was the big, exciting experience of variety and decent prices and convenient transportation, because people took the street cars to get there.

And, then, along came the shopping center. And they took what was vertical before. And they made it horizontal. And they changed it into multiple ownerships.

But they still kept incredible variety, and assortments, and convenience of going to one place, and accessible transportation because, now, the car was the method. And now you go to — and, you know, and then, we went for the discount stores and all of that.

But now you've got the internet. And you've got the ultimate, in terms of assortments. And you've got people that are coming in at low prices. And the transportation is taken care of entirely, so the evolution that has taken place —

The department store is online now, basically, except much expanded in assortment, much more convenient, and lower prices.

So the world has evolved, and it's going to keep evolving. But the speed has increased dramatically.

And what'll happen with — the brands are going to be tested in a variety of ways that — and they have to make decisions as to whether they try to do an online themselves, or work through an Amazon, or whether they try to hang onto the old methods of distribution while embracing new ones.

There's a lot of questions in retail and in branding that are very interesting to watch. And you'll get some surprises in the next 10 years, I can promise you that.

Charlie?

CHARLIE MUNGER: It's — it would be certainly — be unpleasant if we were in the department store business. Just think of what we avoided, Warren.

WARREN BUFFETT: Yeah, we got very lucky, actually, because we were in the department store business, and our business was so lousy that we recognized it. If it had been a little bit better, we would've hung on.

And we owe a tremendous gratitude to Sandy Gottesman, our director who's here in the front row, because he got us out of the business when Charlie and I, and Sandy, were partners in that.

And something we paid six dollars a share for, I think it's worth about $100,000 a share now, because we got out of the business.

And if it had been a somewhat better business, you know, it might be worth 10 or $12 a share now. So, sometimes you get lucky.

We don't miss it either, do we, Charlie? Hochschild Kohn.

CHARLIE MUNGER: No. We don't miss it.

11. Book value a "whole lot less" relevant to Berkshire

WARREN BUFFETT: Jay.

JAY GELB: This question is on Berkshire's intrinsic value. A substantial portion of the company's value is driven by operating businesses rather than the performance of the securities portfolio.

Also, the values of previously acquired businesses are not marked up to their economic value, including GEICO, MidAmerican, and Burlington Northern.

Based on these factors, is book value per share still a relevant metric for valuing Berkshire?

WARREN BUFFETT: Well, it's got some relevance, but it's got a whole lot less relevance than it used to. And that's why — I don't want to drop the book value per share factor, but the market value tends to have more significance as the decades roll along.

It's a starting point. And clearly, our securities aren't worth more than we're carrying for — carrying them for — at that time. And, on the other hand, we've got the kind of businesses you've mentioned.

But we've got some small businesses that are worth 10 times or so, you know, what would — could carry it for. We've also got some clunkers, too.

But I think the best method, of course, is just to calculate intrinsic business value. But it can't be precise.

We know — we think the probability's exceptionally high that 120 percent understates it. Although, if it was all in securities, you know, 120 percent would be too high.

But as the businesses have evolved, as we built in unrecognized value at the operating businesses — unrecognized for accounting purposes — I think it still has some use as being kind of the base figure we use.

If it were a private company and 10 of us here owned it, instead we'd just sit down annually and calculate the businesses one by one and use that as a base value.

But that gets pretty subjective when you've got as many as we do. And so, I think the easiest thing is to use the standards we're using now, recognizing the limitations in them.

Charlie?

CHARLIE MUNGER: Yeah. I think the equities in the insurance company offsetting shareholders equity in the company are really not worth the full market value because they're locked away in a high-tax system.

And so I, basically, like it when our marketable securities go down and our own businesses go up.

WARREN BUFFETT: Yeah, we're working to that end. We've been working that way for 30 years now or something like that.

CHARLIE MUNGER: We've done a pretty good job, too.

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: We have a lot of — we've replaced a lot of marketable securities with unmarketable securities that are worth a lot more.

WARREN BUFFETT: Yeah. And it's actually a more enjoyable way to operate, too, beyond that, but —

CHARLIE MUNGER: Yeah. We know a lot of people we wouldn't otherwise —

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: — be with. Good people.

12. I don't know tech, but I know consumer behavior

WARREN BUFFETT: OK. Station 3.

AUDIENCE MEMBER: Hello.

WARREN BUFFETT: Hi.

AUDIENCE MEMBER: My name is Michael Monahan (PH). And I'm from Long Island, New York.

I don't know if this question qualifies as investment advice. So I have a short, different question if you don't want answer this one. (Laughter)

Unlike the last shareholder from zone 3, this will not be a stump speech, nor a protest.

One of your most well-known pieces of investment advice is to buy what you know. Additionally, you said earlier, one of the main criteria for buying is if you could ever understand the business.

Ever since I came to my first meeting in 2011, you were not known for being a tech guy. You have said smart phones are too smart for you, you don't have a computer at your desk, and you've only tweeted nine times in the last four years. (Laughter)

WARREN BUFFETT: It was either that or going to a monastery. (Laughter)

AUDIENCE MEMBER: Despite this, you've recently been investing, looking, and talking more about tech companies.

My question to you and also to Charlie to comment is, what you turned you from the Oracle of Omaha to the Tech Maven of Omaha?

WARREN BUFFETT: (Laughs) Well, I don't think I would — I don't think I've talked that much about tech companies.

But the truth is, we made a large investment in IB — I made a large investment in IBM, and — which has not turned out that well. We haven't lost money. But in terms of the bull market we've been in, it's been a significant laggard.

And, then, fairly recently, we took a large position in Apple, which I do regard as more a consumer goods company, in terms of certain economic characteristics. Although, that —

You know, it has a huge tech component in terms of what that product can do, or what other people might come along to do, to leapfrog it in some way.

But I've — I think I'll end up being — no guarantees — but I think I'll end up being 1- for-2 instead of 0- for-2. But we'll find out.

Charlie?

I make no pretense whatsoever of being on the intellectual level of some 15-year-old that's got an interest in tech. I think I may know — have some insights into consumer behavior.

I, certainly, can get a lot of information on consumer behavior and, then try to draw inferences about what that means about what consumer behavior is likely to be in the future. But we will find with —

The one — the other thing I'll guarantee is I'll make some mistakes on marketable securities, and I've made them in other areas than tech. So it — you'll not bat a thousand, you know, no matter what industries you stick — you try to stick by.

I know insurance pretty well. But I think we probably lost money on an insurance stock, perhaps, you know, once or twice over the years. So it — you don't bat a thousand.

But I have gained no real knowledge about tech in the last — well, since I was born, actually. (Laughter)

Charlie?

CHARLIE MUNGER: I think it's a very good sign that you bought the Apple. It shows either one of two things. Either it is you've gone crazy or you're learning. (Laughter)

I prefer the learning explanation.

WARREN BUFFETT: Well, so do I, actually. (Laughter)

13. Artificial intelligence impact is hard to predict

WARREN BUFFETT: Andrew?

ANDREW ROSS SORKIN: Hi, Warren. This one's a fun one. Thomas Kimay (PH) is here. He's a 27-year-old shareholder from Kentfield, California.

And I should preface this question by saying that he was here 17 years ago at 10 years old, asked you a question from the audience asking you if the internet might hurt some of Berkshire's investments.

At the time, you said you wanted to see how things would play out. He's now updated the question. (Buffett laughs)

"What do you think about the implications of artificial intelligence on Berkshire's businesses, beyond autonomous driving and GEICO, which you've talked about already? In your conversations with Bill Gates, have you thought through which other businesses will be most impacted?

"And do you think Berkshire's current businesses will have a significantly — will have significantly more or less employees a decade from now as a function of artificial intelligence?"

WARREN BUFFETT: Well, I —

ANDREW ROSS SORKIN: I mixed a couple questions together.

WARREN BUFFETT: Yeah. I certainly have no special insights on artificial intelligence, but I will bet a lot of things happen in that field in the next couple of decades, and probably a shorter timeframe.

They should lead, I would certainly think — but again, I don't bring much to this party. But I would certainly think they would result in significantly less employment in certain areas. But that's good for society.

And it may not be good for a given business, but let's take it to the extreme. Let's assume one person could push a button and, essentially, through various machines and robotics, all kinds of things, turn out all of the output we have in this country.

So, everybody's — there's just as much output as we have. It's all being done by, you know, instead of 150-some million people being employed, one person.

You know, is the world better off or not? Well, certainly we'd work a lot less hours a week — of work per week and so on.

I mean, it would be a good thing, but it would require enormous transformation in how people relate to each other, what they expect of government, you know, all kinds of things. And, of course, as a practical matter, more than one person would keep working.

But pushing the idea that way is one of the — you'd certainly think that's one of the consequences of making great progress in artificial intelligence.

And that's enormously prosocial, eventually. It's enormously disruptive in other ways. And it can have huge problems, in terms of a democracy and how it reacts to that.

It's similar to the problem we have in trade where trade is beneficial to society, but the people that see the benefits day by day of a — of trade — don't see a price at Walmart on socks or whatever they're importing, that says, you know, "you're buying — you're paying X, but you would pay X-plus-so-many-cents if you bought this domestically."

So they're getting these small benefits and invisible benefits. And the guy that gets hurt by it, who's the roadkill of free trade, feels it very specifically. And that translates into politics.

And so, you can — it gets very uncertain as to how the world would adjust, in my view, to great increases in productivity.

And without knowing a thing about it, I would think that artificial intelligence would have that hugely beneficial social effect, but a very unpredictable political effect if it came in fast, which I think it could.

Charlie?

CHARLIE MUNGER: Well, you're painting a very funny world where everybody's engaged in trade. And the trade is, I give you golf lessons and you dye my hair. And that would be a world kind of like the royal family of Kuwait or something.

And I don't think it would be good for America to have everything produced by one person and the rest of us just engaged in leisure.

WARREN BUFFETT: How about if we just got twice as productive?

CHARLIE MUNGER: What?

WARREN BUFFETT: How about if we got twice as productive in a short period of time, so that 75 million people could do what 150 million people are doing now?

CHARLIE MUNGER: I think you'd be amazed how quickly people would react to that.

WARREN BUFFETT: In what way?

CHARLIE MUNGER: Favorably.

WARREN BUFFETT: I —

CHARLIE MUNGER: That's what happened during the period when there — I'm sure everybody remembers with such affection — back in the Eisenhower years, five percent a year or something — people loved it.

Nobody complained that they were getting air conditioning and they didn't have it before. Nobody wanted to go back to stinking, sweating nights in the South and —

WARREN BUFFETT: Well, if you cut everybody's hours in half, it's one thing. But if you fire half the people and the other people keep working, I just think it gets very unpredictable. I mean, I think we saw some of that in this election because I think that —

CHARLIE MUNGER: Well, we've adjusted to an enormous amount of it. It just came along a few percent per year.

WARREN BUFFETT: Well, and the question, then, is —

CHARLIE MUNGER: Don't think you have to worry — I don't think you have to worry about coming out at 25 percent a year. You know, I think you have to worry about it — you're going to get less than two percent a year. That's what's worrisome.

WARREN BUFFETT: OK. We'll move on. But it will be, you know, it's an absolutely fascinating subject to see what happens with this. But it's very, very hard to predict.

If — in some way, you know, we've got 36,000 people, say, employed at GEICO, you know.

And if you could do the same — perform all the same functions, virtually all the same functions even, and do it with five- or 10,000 people, and it came on quickly, and the same thing was happening in a great many other areas, you know, I don't think we've ever experienced anything quite like that.

And maybe we won't experience anything like it in the future. I don't know that much about AI, but —

CHARLIE MUNGER: I don't think you have to worry about that.

WARREN BUFFETT: Well, that's because I'm 86. (Laughter)

CHARLIE MUNGER: It's not going to come that quickly.

14. We have a "huge appetite" for both wind and solar projects

WARREN BUFFETT: OK. Gregg.

GREGG WARREN: Warren, during the past five years, Berkshire Energy's investments in solar and wind generation have been about equal, with around 4.7 billion dedicated to capital projects in each segment.

Based on the company's end-of-year capital spending forecast for 2017 through 2019, investments in wind generation were expected to be more than seven times greater than investments in solar generation the next three years, with just over $4.5 billion going into wind generation.

Just wondering how much of that future spending is tied to PacifiCorp's recently announced $3.5 billion expansion plan, which is heavily weighted towards improving and expanding the subsidiary's existing wind fleet, and whether the economics for wind are that much better than solar given that MidAmerican has also been spending heavily on wind investments?

Or is this disparity between the two segments being driven more by genuine capacity needs, which would imply that you have much more solar capacity than you need?

WARREN BUFFETT: Yeah. It is — we don't look at it as having more solar capacity than we need or anything like —

It's really a question of what comes along. I mean, and these — the projects, they're internally generated, they're externally offered to us, and we've got a big appetite for wind or solar. We have seen — you know — just based on those figures, we've seen more wind lately.

But we have no bias toward either one. I mean, if we saw five billion of attractive solar projects we could do and didn't happen to see any wind during that period, it wouldn't slow us down from doing the five billion or vice versa.

So we are — we have an appetite, a huge appetite, for projects in either area. We're particularly well situated, as I think I've explained or talked about in the past, because we pay lots of taxes.

And therefore, solar and wind projects all involve a tax aspect to them. And we can handle those much better than many other — certainly, electric utilities.

Most electric utilities really, A, don't have that much money left over after dividends and these — frequently, the taxes aren't that significant.

At Berkshire, we pay lots of taxes, and we've got lots of money. So it's really just a question of doing the math on the deals as they come along.

We've been very fortunate in Iowa, in finding lots of projects that made sense. And as a result, we've had a — we've got a much lower price for electricity than our main competitor in the state. We've got a lower price than in any states that touch us.

We've told the people of Iowa we won't — they won't have a price increase for many, many, many years — guaranteed that. So this worked out extremely well.

But if somebody walks in with a solar project tomorrow and it takes a billion dollars or it takes three billion dollars, we're ready to do it. There's no specific —

And the more, the better. There's no specific preference between the two. Obviously, it depends where you are in the country.

I mean, Iowa's terrific for wind. And, obviously, California's terrific for sun. And there are geographical advantages to one or the other. But from our standpoint, we can do them anyplace. And we will do them anyplace.

15. I "underestimated the brilliance" of Jeff Bezos at Amazon

WARREN BUFFETT: OK. Station 4.

AUDIENCE MEMBER: Hi. My name is Joey (PH). And I'm an MBA candidate at Wharton. Thank you for having us.

Amazon has been hugely disruptive, due to the brilliance of Jeff Bezos, whom Charlie earlier called the business mind of our generation.

What is your current outlook and — on Amazon? And why hasn't Berkshire bought in?

WARREN BUFFETT: Well, because I was too dumb to realize what was going to happen — (laughs) — even though I admired Jeff. I've admired him for a long, long time and watched what he was doing.

But I did not think that he could succeed on the scale he has. And I certainly didn't — I didn't even think about the possibility of doing anything with Amazon Web Services or the cloud.

So if you'd asked me the chances that, while he was building up the retail operation, that he would also be doing something that was disrupting the tech industry, you know, that would've been a very, very long shot for me. And I've underestimated — I've really underestimated the brilliance of the execution.

I mean, it's one thing to dream about doing this stuff online, but it takes a lot of ability. And, you know, you can read his 1997 annual report. And he laid out a roadmap. And he's done it, and done it in spades.

And if you haven't seen his interview on Charlie Rose three or four months ago — CharlieRose.com — go to it and listen to it because you'll learn a lot. At least, I did. So, I just plain —

It always looked expensive. And I really never thought that he would be where he is today. I thought he would do — I thought he was really brilliant. But I did not think he would be where he is today when I looked at it three, five, eight, 12 years ago — whenever it may have been.

Charlie, how did you miss it? (Laughter)

CHARLIE MUNGER: It was easy. (Buffett laughs)

What was done there was very difficult, and it was not at all obvious that it was all going to work as well as it did.

I don't feel any regret about missing out on the achievements of Amazon. But other things were easier. And I think we screwed up a little.

WARREN BUFFETT: No. We won't pursue that line. (Laughs)

CHARLIE MUNGER: Well, I meant Google.

WARREN BUFFETT: Well, we missed a lot of things.

CHARLIE MUNGER: Yes.

WARREN BUFFETT: We missed a lot of things.

CHARLIE MUNGER: And we'll keep doing it.

WARREN BUFFETT: Yeah. (Laughter) And we'll have a two —

CHARLIE MUNGER: Luckily, we don't miss everything, Warren. That's our secret. We don't miss them all. (Laughter)

WARREN BUFFETT: OK. We better move on, I think. (Applause)

He may start getting specific.

16. "If I died tonight, I think the stock would go up tomorrow."

WARREN BUFFETT: Carol?

CAROL LOOMIS: The creator of this question, Jim Keifer (PH) of Atlanta, has even higher expectations for Warren's longevity than Charlie does.

"Mr. Buffett, we all hope you win the record as mankind's oldest living person. But at some point, you and/or Charlie will go, and Berkshire stock may then come under selling pressure.

"My question is, if Berkshire stock falls to a price where share repurchase is attractive, can we count on the board and top management to repurchase shares?

"I ask this question both because of past comments you have made about not wanting to take advantage of shareholders and because some of the passages in the owner's manual lead me to believe this might be an instance when the board does not choose to repurchase shares.

"Can you clarify what course of action we might expect about repurchases in the circumstances I have outlined?"

WARREN BUFFETT: Yeah. Well, as far as I'm concerned, they're not taking advantage of shareholders if they buy the stock when it's undervalued. That's the only way they should buy it. And they should —

But in doing so — there were a few cases back when Charlie and I were much younger — where there were very aggressive repurchases — or the equivalent of repurchases — by people. And the repurchases, incidentally, made a lot more sense than they do now.

But they were done by people who either — for various techniques — tried to depress the shares. And if you're trying to encourage your partners to sell out at a depressed price by

various techniques, including misinformation — but there's other techniques — you know, I think that's reprehensible. But our board wouldn't be doing that.

I'll take exception to the first part of it, but I'll still answer the second. I think the stock is more likely to go up. If I died tonight, I think the stock would go up tomorrow. And there'd be speculation about break ups and all that sort of thing.

So, it would be a good Wall Street story that, you know, this guy that's obstructed breaking up something that — where some of the parts might sell for more than the whole.

They wouldn't necessarily be — probably be worth less than the whole — but might sell for — temporarily — for more than the whole. And it would happen. So I would bet in that direction.

But if, for some reason, it went down to a level that's attractive, I don't think the board is doing anything in the least that's reprehensible by buying in the stock at that point. No false information, no nothing. It should —

And their buying means that the seller would get a somewhat better price — if there are a lot of sellers — they'd get a mildly better price than if they weren't buying. And the continuing stockholders would benefit.

So I think that — I think it's obvious what they would do. And I would think it's obvious that it's pro-shareholder to do it. And I think they would engage in pro-shareholder acts as far as the eye can see. I mean, we've got that sort of board.

Charlie?

CHARLIE MUNGER: Well, I think you or I might suddenly get very stupid very quickly, but I don't think our board is going to have that problem. (Laughter)

WARREN BUFFETT: Well, I want to think about that one. (Laughter)

17. We try to explain material accounting issues to shareholders

WARREN BUFFETT: OK. Jonathan.

JONATHAN BRANDT: Warren, in the past, you've enjoyed discussing accounting for options grants.

So I'm curious, what's your view of the new accounting standard which mandates that companies report lower tax provisions, based on so-called excess tax benefits enjoyed when share-based compensation ends up being more profitable for the grantees than when it's initially modeled?

These so-called benefits — excess benefits — used to go through the shareholder's equity line on the balance sheet. Which accounting method makes more sense to you, the old method or the new?

WARREN BUFFETT: Jonny, I think you know a lot more about it than I do. So, if I were asked to answer that question, I'd probably call you up and say, "What should I say?" (Laughter)

It's not a factor that will enter into Berkshire, so I really have not — I mean, I've heard just a little bit about that accounting standard. But I really don't know anything about it.

Charlie?

CHARLIE MUNGER: It's not a big deal, Warren.

WARREN BUFFETT: Yeah. Well, I know that. (Laughter)

Yeah. We — there are few things in accounting we really disagree with and whether they might be material to somebody trying to evaluate Berkshire. And, you know, that primarily gets into amortization of intangibles.

It will certainly — it certainly gets into realized capital gains and that sort of thing. And we will go to great lengths to try to tell our partners, basically, not all of whom, you know, are accounting experts or anything.

And we will try to make clear to them, at least, what our view is. You know, the same way as if I had a family business and I was talking to my sisters or something about it.

But unless it's material, we'll probably stay away from trying to opine on any new accounting standards. If it's material to Berkshire, we'll go to great lengths to, at least, give our view.

Charlie?

CHARLIE MUNGER: Well, I certainly agree with that.

WARREN BUFFETT: OK —

CHARLIE MUNGER: That is, that what he's talking about is not very material to Berkshire.

WARREN BUFFETT: No. It isn't. And it really won't be. You know, and —

CHARLIE MUNGER: No.

WARREN BUFFETT: Some of these others are, though, and we will bring those up as they come up. The — yeah.

We are reporting 400-and-some million dollars less in our earnings than if Precision Castparts had remained a public company.

Well, is Precision Castparts — I mean, are the earnings less real? Is the cash less real? Is anything — because it's moved, the ownership? I don't think so.

And I want to convey that belief to shareholders. And they can debate whether it's right or wrong. But I think it's a mistake not to comment if — and just assume that the owners understand that because it, you know, it's a fairly arcane point. And so, we point it out. But we also point out if we think depreciation is inadequate.

As for valuation purposes, the depreciation is inadequate at a very capital-intensive business like BNSF, which we, I must say, still love anyway.

Charlie, any more?

CHARLIE MUNGER: No.

18. "Valuation … is not reducible to any formula"

WARREN BUFFETT: OK. Section 5.

AUDIENCE MEMBER: Thank you, and good afternoon. I'm Adam Bergman with Sterling Capital in Virginia Beach, Virginia.

Earlier today, Mr. Munger commented on the valuation of China versus the U.S. market.

My question for you is, are market cap to GDP and cyclically adjusted P/E still valid ways to consider market valuation? And how do those influence Berkshire's investment decisions? Thank you.

WARREN BUFFETT: Charlie, I think — well, I expect that I guess Charlie's overall valued in China.

I would say that both of the standards you mention are not paramount at all in our valuation of securities. It's harder —

People are always looking for a formula. And there is an ultimate formula, but the trouble is you don't know what to stick in for the variables. But the —

And, you know, that's the value of anything, being the present value of all the cash it's ever going to distribute. But the P/E ratios — I mean, every number has some degree of meaning, means more sometimes than others.

Valuation of a business is — it's not reducible to any formula where you can actually put in the variables perfectly.

And both of the things that you mentioned get — themselves, get bandied around a lot.

It's not that they're unimportant. But sometimes they're — they can be very important. Sometimes they can be almost totally unimportant. It's just not quite as simple as having one or two formulas and, then, saying the market is undervalued or overvalued or a company is undervalued or overvalued.

The most important thing is future interest rates. And, you know, and people frequently plug in the current interest rate saying that's the best they can do. After all, it does reflect a market's judgment.

And, you know, the 30-year bond should tell you what people who are willing to put out money for 30 years and have no risk of dollar gain or dollar loss at the end of the 30-year period.

But what better figure can you come up with? I'm not sure I can come up with a better figure. But that doesn't mean I want use the current figure, either. So, I would say that —

I think Charlie's answer will be that he does not come up with China versus the U.S. market based on what you've mentioned as yardsticks. But, no, Charlie, you tell them.

CHARLIE MUNGER: All I meant was that — I said before that the first rule of fishing is to fish where the fish are — is that a good fisherman can find more fish in China if your — if fish is the stock market. That's all I meant.

WARREN BUFFETT: Yeah. One — I'm going to go back to one —

CHARLIE MUNGER: It's a happier hunting ground.

19. Lessons from running a "lousy business"

WARREN BUFFETT: This doesn't really directly relate. Just going — I want to go back to one question that was mentioned earlier.

I really think if you want to be a good evaluator of businesses — an investor — you really ought to figure out a way, without too much personal damage, to run a lousy business for a while.

I think you learn a whole lot more about business by actually struggling with a terrible business for a couple of years than you run by — than you learn by getting into a very good one where the business itself is so good that you can't mess it up.

I don't know what — I don't know whether Charlie has a view on that or not. But it's certainly — it's — it was a big part of our learning experience. And I think a bigger part, in a sense, than running — being involved — with good businesses was actually being involved in some bad businesses and just seeing —

CHARLIE MUNGER: How awful it was.

WARREN BUFFETT: — how awful it is, and how little you can do about it, and how IQ does not solve the problem, and a whole bunch of things.

It's a useful experience. But I wouldn't advise too much of it. Would you think so, Charlie? Or —

CHARLIE MUNGER: It was very useful to us. There's nothing like personal, painful experience if you want to learn. And we certainly had our share of it.

20. Weapons of mass destruction pose biggest risk to Berkshire

WARREN BUFFETT: OK. Becky.

BECKY QUICK: This question comes from Tom Spanfelner (PH). And he'd like to be called Tom Span from Pennsylvania.

He says, "In life, business, and investing, strategies often work until they don't work. Other than a massive insurance loss, any thoughts on what could cause the Berkshire enterprise to not work?"

WARREN BUFFETT: I think the only —

CHARLIE MUNGER: Good question.

WARREN BUFFETT: Yeah. Well, if there were some change, if we got some infection — outside agent of some sort that changed the culture in some major way, an invasion of different thought.

But as a practical matter, I don't think anything — you know, and it's the things you can't think of — but I can't think of anything that can harm Berkshire in a material, permanent way except weapons of mass destruction. But I don't regard that as a low probability.

It would take a recession, a depression, a panic, you know, hurricanes, earthquakes. They all would have some effect. And in some cases, it might even be that we would do better because of them.

But if there were a successful — as measured by the aggressor — nuclear, chemical, biological, or cyber-attack on the United States — and there are plenty of people that would like to pull

that off or organizations and maybe even a few countries — it could disrupt society to such an extent that it would harm us.

But I think — with the variety of earning streams, with the asset positions, with the general philosophy at play — the culture — I think that we would be close to the last one affected.

But if somebody figures out how to kill millions of Americans and totally disrupt society, then, you know, then all bets are off.

Charlie?

CHARLIE MUNGER: Well, I agree. It would take something really extreme.

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: And just take the question like — British Petroleum took a huge loss with one oil well blowing.

And Berkshire has all these independent subsidiaries. And they really are independent. And the parent company is not (inaudible) if there's one horrible accident somewhere.

We would tend to pay, of course, maybe more than our legal liability, but we are not — one accident in one subsidiary that caused a big lot of damage, we're better protected than most companies.

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: In every way, Berkshire is structured to handle stresses.

WARREN BUFFETT: It's the kind of thing we think about all the time. We've thought about it ever since we started. But I really don't know any company that can take more general adversity or even some specific adversities.

But if you get into the "what could happen with weapons of mass destruction?" that is something we can't predict about. But if that ever happens, there'll be more to worry about than the price of Berkshire.

21. Buffett confident about growth for property-casualty business

WARREN BUFFETT: Jay?

JAY GELB: Berkshire Hathaway Specialty Insurance generated $1.3 billion of premium volume in 2016. This business is on the smaller end of commercial property-casualty insurers in terms of scale, although its volume did grow 40 percent last year.

In a highly competitive commercial P&C environment, what gives you confidence that Berkshire Hathaway Specialty is destined to become one of the world's leading commercial P&C insurers, as you said in this year's annual letter?

WARREN BUFFETT: Yeah. I think it will be. And I think how fast it grows depends very — it does depend very much on the market.

I mean, we're, you know, we are not interested in trying to be a price-cutter in a market where the prices already aren't that attractive.

But we have built the scale, worldwide. And a lot of this has just been added in, you know, recent months and just over the past year. We have —

We will grow a lot. But if the market should turn hard for any reason, we would grow a lot faster. But we are destined, at Berkshire Hathaway Specialty, to be one of the leading PC firms in the world, just as we were destined to have — when Ajit [Jain] came in, even though we had nothing — we were destined to become a very important reinsurer throughout the world and, in certain ways, almost the only reinsurer for certain types of risks in the world.

And we've got the people. We've got the capital. We've got the reputation. There is no stronger company in the insurance world — and there won't be — than the Berkshire Hathaway insurers. We've got the talent there.

So it will grow. It may grow slowly some years. It may have big jumps just like the reinsurance operation did many years ago. But it's a very important addition to Berkshire that brought that on. I wish — just wish we could've started a little earlier.

But we had to have to right people. And they came to us. And, as you say, we wrote whatever it was, a billion-three or a billion-four last year, and we'll write more this year. But we won't write as much as if we were in a hard market.

22. "My God, we're still learning"

WARREN BUFFETT: Station 6?

AUDIENCE MEMBER: Good afternoon. My name Sally Burns. I'm from Australia. But I currently reside in Austin, Texas.

My question, Mr. Buffett, I have heard that Mr. Munger says your greatest talent is that you're a learning machine, that you never stop updating your views.

What are the most interesting things you've learned over the last few years?

WARREN BUFFETT: Well, it is fun to learn. I would say Charlie is much more of a learning machine than I am. I'm a specialized one, and he's a much — he does as well as I do in my specialty. And, then, he's got a much more general absorption rate than I have about what's going on in the world.

But, you know, it's a world that gets more fascinating all the time. And a lot of fun can occur when you learn you were wrong on something. It — you know, that's when you really learn that the old ideas really weren't so correct. And you have to adapt to new ones. And that, of course, is difficult.

I don't know that I would pick out — well, I think, actually, what's going on, you know, in America is terribly, terribly interesting, you know, and politically, all kinds of things. But just the way the world's unfolding, it's moving fast.

I do enjoy trying, you know, to figure out not only what's going to happen, but what's even happening now. But I don't think I've got any special insights that would be useful to you. But maybe Charlie does.

CHARLIE MUNGER: Well, I think buying the Apple stock is a good sign in Warren. (Laughter)

And he did run around Omaha and ask if he could take his grandchildren's tablets away. (Buffett laughs)

And he did market research.

And I do think we keep learning. And more important, we keep — we don't unlearn the old tricks. And that is really important.

You look at the people who try and solve their problems by printing money and lying and so forth.

Take Puerto Rico. Who would've guessed that a territory of the United States would be in bankruptcy? Well, I would've predicted it because they behave like idiots. (Laughter) And so —

WARREN BUFFETT: And we did not buy any Puerto Rico bonds. (Laughs)

CHARLIE MUNGER: No. And if you go to Europe — you go to Europe, you should look at the government bond portfolios we're required to hold in Europe. There's not only no Greek bonds, they're the bonds of nobody but Germany.

Everywhere you look in Berkshire, somebody is being sensible. And that is a great pleasure. And if you combine that with being very opportunistic so that when something comes along like a panic, why, it's a nice — it's like playing with two hands instead of one on a game that requires two hands.

It helps to have a fair-sized repertoire.

And, Warren, we've learned so damn much. There are all kinds of things we've done over the last 10 years we would not have done 20 years ago.

WARREN BUFFETT: Yeah. That's true, although if you take — it's interesting. I've mentioned this before. But one of the best books on investment was written, I think, in 1958. I think I read it around 1960, by Phil Fisher, called Common Stocks and Uncommon Profits. And he told —

CHARLIE MUNGER: All the countries went — companies went to hell eventually.

WARREN BUFFETT: But it talked about the importance, I mean, or the usefulness of, what do you call, the "scuttlebutt method." And, you know, that was something I didn't learn from [Benjamin] Graham.

But every now and then, it's turned out to be very useful. Now, it doesn't solve everything. And, I mean, there's a whole lot of more —

CHARLIE MUNGER: I saw you do it with American Express in the Salad Oil scandal.

WARREN BUFFETT: Yeah, yeah.

CHARLIE MUNGER: You're still doing at Apple, you know, decades later.

WARREN BUFFETT: Yeah. It — in certain cases, you actually can learn a lot just by asking a lot of questions. And I give Phil Fisher credit. That book goes back a lot of years.

But as Charlie said, some of the companies he picked as winners forever did sort of peter out on him.

But the basic idea, that you can learn a lot of things just by asking in some cases — I mean, I used to —

I mean, if I got interested in the coal industry — just say to pick one out of the air — you know, when I was much younger, more energetic, if I went and talked to the heads of 10 coal companies and I asked each one of them — way later into the conversation, after they got feeling very — they felt like talking.

And I would just, you know, I'd just say, "If you had to go away for 10 years on a desert island and you had to put all of your family's money into one of your competitors, which one would it be and why?"

And then, you know, and then I'd ask them if they had to sell short one of their competitors for 10 years, all their family money, why?

And they — everybody loves talking about their competitors. And if you do that with 10 different companies, you'll probably have a better fix on the economics of the coal industry than any one of those individuals has.

I mean, the — it — there's ways of getting at things. And sometimes they're useful. Sometimes, they're not. But sometimes, they can be very useful.

And, you know, the idea of just learning more all the time about —

I'm more specialized in that by far than Charlie. I mean, he wants to learn about everything. And I just want to learn about something that'll help Berkshire.

But — (laughs) — it's a very, you know, it's a very useful attitude toward — have toward — the world.

And, of course, I don't know who said it. But somebody said the problem is not in getting the new ideas but shedding the old ones. And there's a lot of truth to that.

CHARLIE MUNGER: We would never have bought ISCAR if it had come along 10 years earlier. We would never have bought Precision Castparts if it had come along 10 years earlier. We are learning. And, my God, we're still learning.

23. "We're getting too much medicine"

WARREN BUFFETT: OK. Andrew?

ANDREW ROSS SORKIN: Hi. Warren, this is my final question.

In 2012, you were quoted as saying, "I think the health care problem in — is the number one problem of America and of American business. We have not dealt with that yet."

Do you believe that the current administration's plan to repeal and replace ACA will ultimately benefit the economy and Berkshire or not?

WARREN BUFFETT: Yeah. Well, I'll answer — I'll give you two answers here, the first one being that if you go back to 1960 or thereabouts, corporate taxes were about four percent of GDP. I mean, they bounced around some.

And, now, they're about two percent of GDP. And at that time, health care was five percent of GDP. And now, it's about 17 percent of GDP.

So when American business talks about taxes strangling our competitiveness or that sort of thing, they're talking about something that, as a percentage of GDP, has gone down from four

to two while medical costs, which are borne to a great extent by business, have gone from five to 17 percent.

So medical costs are the tapeworm of economic — American economic competitiveness, I mean, if you're really talking about it.

And that — and business knows that. They don't feel they can do much about it, but it is not —

The tax system is not crippling Berkshire competitiveness around the world or anything of the sort. Our health costs have gone up incredibly and will go up a lot more. And if you look at the rest of the world, there were a half a dozen countries that were around our five percent if you go back to the early years.

And while we're at 17, now, they're at 10 or 11. So they have gained a five or six point advantage — the world — even in these countries with fairly high medical costs.

CHARLIE MUNGER: And that's with socialized medicine.

WARREN BUFFETT: Yeah. So it's a huge — whatever I said then goes and is accentuated now. And that isn't a problem —

I mean, that is a problem this society is having trouble with and is going to have more trouble with, and — regardless of which party's in power or anything of the sort. It almost transcends that.

In terms of the new act that was passed a couple days ago versus the Obama administration act, it's a very interesting thing.

All I can tell you is the net effect of that act on one person is that my taxes — my federal income taxes — would've gone down 17 percent last year, if the act — if what was proposed went into effect.

So, it is a huge tax cut for guys like me. And you'll have to figure out the effects of the rest of the act.

But the one thing I can tell you is if it goes through the White House — put in, I mean, it — anybody with $250,000 a year of adjusted gross income and a lot of investment income is going to have a huge tax cut. And when there's a tax cut, either the deficit goes up or they get the taxes from somebody else.

So, as it stands now, it is — that is the one predictable effect, if it should pass, as it — and it — the Senate will do something different and hold a conference. And who knows what happens? But that is in the law that was passed a couple days ago.

Charlie?

CHARLIE MUNGER: Well, I certainly agree with you about the medical care. What I don't like about the medical care is that a lot of — we're getting too much medicine.

There's too much chemotherapy on people that are all but dead, and all kinds of crazy things go on in Medicare and in other parts of the health system.

And every — there are so many vested interests that it's very hard to change.

But I don't think any rational person looking objectively from the outside of the American system of medical care — we all love all the new life-saving stuff, and the new chemotherapies, and the new drugs, and all that.

But, my God, the system is crazy. And the cost is just going wild. And it does put our manufacturers at a big disadvantage with other people where the government is paying the medical bills. And so, I agree with Warren totally.

WARREN BUFFETT: If you had to bet, 10 years from now, we'll be higher or lower than 17 percent of GDP?

CHARLIE MUNGER: Well, if present trends continue, it'll get more and more. There are huge vested interests in having this thing continue the way it is. And they're very vocal and active. And the rest of us are indifferent. So, naturally, we get a terrible result.

And I would say that on this issue, both parties hate each other so much that neither one of them can think rationally. And I don't think that helps, either.

WARREN BUFFETT: It's — (Applause)

It is kind of interesting that, you know, with — the federal government spends — or raises, we'll say — 3 1/2 trillion or something like that — I mean, the degree of concern everybody has about that — although that's stayed fairly steady in the 18 percent or so of GDP plus or minus a couple points — but three trillion-plus is spent on health care.

And everybody wants the best. And it's perfectly understandable. But it's a very, very — it's a big number compared to the whole federal budget. I mean, there's some overlap and all of that. But it's —

If you talk about world competitiveness of American industry, it's the biggest single variable where we keep getting more and more out of whack with the rest of the world.

And it's very tough for political parties to attack it. Yet, it's, you know, it — basically, it's a political subject.

CHARLIE MUNGER: A lot of it is deeply immoral. If you have a group of hospital people and doctors that are feasting like a bunch of jackals on the carcass of some dying person, it's not a pretty sight.

WARREN BUFFETT: Tell them about that group out — (applause) — in California that —

CHARLIE MUNGER: Oh yes.

WARREN BUFFET: Perfect — this is —

CHARLIE MUNGER: This is Redding. This is one of my favorite stories. There are a bunch of very ambitious cardiologist and heart surgeons in Redding.

And they got the thought that, really, what a heart was was a "widowmaker." So everybody — every patient that came in, they said, "You've got a widowmaker in your chest. And we know how to fix it." And so they recommended heart surgery for everybody.

And, of course, they developed a huge volume of heart surgery. And they got very wonderful results because nobody comes through heart surgery better than the man who doesn't need it at all. (Laughter)

And they made so much money that the hospital chain, which was Tenet, brought all its other hospitals — why can't you be more like Redding? And this is a true story. And it went on and on and on.

And finally, there was some beloved Catholic priest. And they said, "You've got a widowmaker in your chest." And he didn't believe them. And he blew the whistle.

WARREN BUFFETT: He was a priest. You could see why he didn't believe them. (Laughter)

CHARLIE MUNGER: At any rate — well, when you get a routine, you just keep using it, you know. A heart is a widowmaker. It's a widowmaker.

Later, I met one of the doctors who threw these people out of the medical profession. And I said to him, "In the end, did they think they were doing anything wrong?"

He said, "No, Charlie. They thought that what they were doing was good for people." That is why it's so hard to fix these things. The self — the delusion that comes into people as they make money and get more successful by doing God-awful things should never be underestimated. And it's — there's a lot — (Applause)

A lot of that goes on. And you're (inaudible) such gross craziness. And you thought little Wells Fargo looks like innocence. He only has a little trouble with his incentive system.

But the heart surgery rate was 20 times normal or something. You'd think you'd notice if you're running a hospital. And — but they did notice. They wanted the other hospitals to be more like it.

WARREN BUFFETT: They had a terrific success ratio.

24. Buffett expects Berkshire will own more utilities

WARREN BUFFETT: OK. Gregg? (Laughs)

GREGG WARREN: Thank you, Warren.

As you look forward, in taking into consideration some of the headwinds faced in the U.S.-based utilities, including weaker electricity demand growth as increasing energy efficiency impacts demand, distributed generation, which hits vertically integrated utilities doubly hard as they face both declining energy sales revenue and increased network cost to support reliable delivery and, third, higher interest rates, which would increase borrowing costs, what are the key attributes that Berkshire Energy would be looking for in future acquisition candidates? In —

WARREN BUFFETT: Yeah. Oh, excuse me. I'm sorry.

GREGG WARREN: I'm sorry. In particular, are there advantages or disadvantages attached to, say, transmission assets relative to generation assets that would make you favor one over the other?

WARREN BUFFETT: Yeah. Well, generation assets, you can say, have inherently more risk because that — some of them are going to —

CHARLIE MUNGER: Be stranded.

WARREN BUFFETT: — stranded, yeah, and obsoleted. Now the question is how they treat stranded and all of that sort of thing.

We — on the other hand, more of the capital investment is in the generating assets. So that tends to be where a good bit of the capital base is.

We like the utility business OK. I mean — electric — electricity demand is not increasing like it was, as you point out. They're going to be stranded assets. They —

If they're stranded because of rank foolishness, you know, they will probably be less inclined — or the utility commissions — will be less inclined to let you figure that in your rate base as you go forward as opposed to things that are — where societal demands are just changing.

But we still think the utility business is a very decent asset. The prices are very high, but that's what happens in a low interest rate environment. I would be —

I'd be surprised if 10 years from now, we don't have significantly more money in not only wind and solar, but probably — we'll probably own more utility systems than we own now.

We're a buyer of choice with many utility commissions. In fact, if we can put up the slide, there's a slide which shows something about our pricing compared to other utilities.

And Greg Abel and his group have done an extraordinary job. They've done it in safety. They've done it in reliability. They've done it in price. They've done it in renewables. It's hard to imagine a better run operation than exists at MidAmerican Energy.

And people want us — with that record — people want us to come to their state in many cases.

But when prices get to the level they have, I mean, some utilities have sold at extraordinary prices. And we can't pay them and have it make sense for Berkshire shareholders.

But just because we can't do it this year doesn't mean it won't happen next year or the year after. So I think we'll get a chance.

CHARLIE MUNGER: And our utilities are not normal. The way Greg has run those things, they're so much better run in every way than normal utilities. They're better regarded by the paying customers. They're better regarded by the regulators. They have better safety records. They charge —

It's just everything about it is way the hell better. And it's a pleasure to be associated with people like that and to have assets of that quality.

And it's a lot safer. If somebody asked Berkshire to build a $50 billion nuclear plant, we wouldn't do it.

WARREN BUFFETT: Yeah. And we have public power here in Nebraska. I mean, it's been sort of the pride of Nebraska for many decades. It's all — there are no privately-held utility systems, and totally public power. And, you know, those utilities have no requirements for earnings on equity. They have —

They can borrow at tax-exempt rates. We have to borrow at taxable rates. And Nebraska — you know, the wind — it's not that much different than Iowa. And we're selling electricity across the river, a few miles from here, you know, at lower prices than exist in Nebraska. So it's an extraordinary utility.

And it was lucky when we got involved in it. I thank Walter Scott, our director, for introducing me to it almost 17 or 18 years ago or so. And —

But I don't think the utility business, as such — I mean, if I were putting together a portfolio of stocks, I don't think there would be any utilities in that group now. But I love the fact we own Berkshire Hathaway Energy.

CHARLIE MUNGER: But it's different —

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: — radically different —

WARREN BUFFETT: A lot —

WARREN BUFFETT: — and better.

WARREN BUFFETT: A lot better, actually.

25. McLane: lots of revenue, but very thin profit margin

WARREN BUFFETT: Station 7.

AUDIENCE MEMBER: Hi.

WARREN BUFFETT: Hi.

AUDIENCE MEMBER: My name's Grant Misterly from beautiful, historic Saint Augustine, Florida.

I've been a fan of yours and of Berkshire since I was a kid, looking through the stock pages and seeing one crazy stock that traded for $10,000 a share.

Unfortunately, I wasn't able to convince my parents to buy it at that point. But now I'm a shareholder as an adult. And I'm here with my daughters, Mabel, who's seven and Willa, who's one year old, my wife.

I voraciously read the letter every year. And I love the stories of — from the different companies, GEICO and See's, BNSF, that kind of teach investing lessons.

And this year, when I was looking through the accounting information in the back, I noticed that one company, McLane, contributes a lot of revenue, a large portion of Berkshire's revenue and, to a lesser extent, earnings. But I don't ever see much about it in the annual report.

So I'm curious why we don't hear more about that company? And are there any investing lessons like we get from See's and GEICO that you can share about that company?

WARREN BUFFETT: Yeah, McLane — the reason you see their figures separately is because the SEC has certain requirements that are based on sales. And McLane is a company that has an extraordinary amount of sales in relation to intrinsic value or to net income.

It, basically, is a distributor of — well, it's a huge customer, for example, of the food companies, the candy companies, the cigarette companies, it — go up and down the line of anything that goes into convenience stores.

But we bought it from Walmart. And Walmart is our biggest customer. I can't tell you the precise volume, but — well, if you get Walmart's and Sam's together, you know, you're getting up to 20 percent-plus.

But it's nationwide. But in the end, it operates on about six percent gross margins and five percent operating expenses, so it has a one percent pre-tax margin.

And, obviously, a one percent pre-tax margin only works in terms of return on capital if you turn your equity extraordinarily fast. And that's what McLane does. Being a wholesaler, it's moving things in, moving things out very fast, very efficiently. And it does this —

It also has a few liquor distribution subsidiaries that have wider margins. But the basic McLane business is, you know, 45 billion-plus, makes one percent pre-tax on sales.

But the return on capital is very decent. But it sort of has an outsized appearance simply because of this huge volume of sales that go through it.

Grady Rosier, who runs it, is exceptional. He was there when we bought it from Walmart, whenever it was, a dozen years ago.

And I've been there once. We've got thousands and thousands of trucks, big distribution centers all over the country. It is a major factor in moving goods at wholesale.

I mean, if you're a Mars Candy or something of the sort, I mean, we — we're — we'll be the biggest customer.

But that pretty well describes the business. You know, it's a business that earns good returns in relation to invested capital and in relation to our purchase price.

But, you know, every tenth of a cent is important in the business. In collect — moving your receivables exceptionally fast, and consequently you have — you know, you have payables moving big time.

So the sales are 30 times receivables and 30 times payables, you've got — and maybe, yeah, 35 or so times inventory. I mean, this is a business that's moving a lot of goods. But, in terms of its —

It's an important subsidiary but not remotely as important as would be indicated by the sales. It's still very important making the kind of money that shows up in the 10-K.

Charlie?

CHARLIE MUNGER: You said it all. (Buffett laughs)

WARREN BUFFETT: That was an interesting thing. Walmart wanted to sell it. They came to see us, and we made a deal. And the CFO came. We talked for a while. He went into the other room and called the CEO and came back and said, "You have a deal."

And Walmart has told me subsequently that they never had a deal that closed as fast as the one with Berkshire. I mean, they — you know, we said what we would pay. It was cash. And we got it done very promptly. And they were terrific on their side.

CHARLIE MUNGER: By the way, that reputation for being quick and simple, and doing what we promised and so on, has helped at Berkshire time after time.

WARREN BUFFETT: Yeah. Yeah, we wouldn't have made that deal without, essentially, having that reputation. But they knew —

CHARLIE MUNGER: Well, you bought the Northern Natural Gas Company in one weekend. And they wanted the Monday — that money on Monday.

WARREN BUFFETT: They needed the money on Monday.

WARREN BUFFETT: Before the lawyers could complete the legal papers, we managed to do it.

WARREN BUFFETT: Well, not only that, but I think it took some clearance by — in Washington. And, essentially, I think I wrote a letter and said that if they didn't — if they decided after looking at it they didn't want to clear it, we'd undo the deal.

But these guys needed the money so bad, we were going to give them the money, essentially, based on the deal clearing. And there wasn't any reason why it wouldn't clear, but that was just a procedural problem.

But most companies can't do that. I mean, we can. We've got a flexibility that, really, in most large companies just plain doesn't exist. There's too many people have to sign off on it or something of the sort.

So the Northern Natural deal would not have been made if we'd had to follow the normal timetable. It —

CHARLIE MUNGER: And it's a lovely business to own.

WARREN BUFFETT: Yeah. Absolutely.

26. Buffett wants to be remembered as a (very old) teacher

WARREN BUFFETT: Now, we're moving from one station to another between now and 3:30, so we now go to station 8.

AUDIENCE MEMBER: Good morning or good afternoon, Warren and Charlie, John —

WARREN BUFFETT: Hi.

AUDIENCE MEMBER: — Norwood from West Des Moines, Iowa. You guys have iron bladders. (Laughter)

WARREN BUFFETT: We won't tell you the secret to that.

AUDIENCE MEMBER: Fine — (Laughter)

I was wondering about a contraption under the —

WARREN BUFFETT: No.

AUDIENCE MEMBER: — table there.

WARREN BUFFETT: No. You can come down and inspect.

AUDIENCE MEMBER: All right. (Laughter)

Hey, I had a question for each. Warren, I was fortunate to ask you a question, I think, in 2011 about legacy and what you wanted to be known for a hundred years from now. And I'm kind of curious to hear what Charlie would like to be known for.

Warren, I'm 52. So I guess you started this — doing this — when I was born. And I'm kind of interested in a memory from your first annual meeting.

CHARLIE MUNGER: My first memory when Warren got on this subject and they asked him what he wanted said at his funeral.

He said, "I want them to all be saying 'that's the oldest looking corpse I ever saw.'" (Laughter) And —

WARREN BUFFETT: That may be the smartest thing I ever said. (Laughter)

Oh, it — well — with me, it —very simple. It — I really like teaching.

So, basically, I've been doing it formally and, you could say, somewhat informally, all my life. And I certainly had the greatest teachers you can imagine. So, if somebody thought that I did a decent job at teaching, I'd feel very good about that. (Applause)

CHARLIE MUNGER: Yeah. To make the teaching endurable it has to have a bit of wise-assery in it. And that we've both been able to supply. (Laughter)

WARREN BUFFETT: And for those of you who are old-time basketball fans, have I mentioned that on Wilt Chamberlain's tomb it was reputed that it was going to say, "At last, I sleep alone?" (Laughter)

27. "Don't wait till you're 93"

WARREN BUFFETT: OK. Station 9.

AUDIENCE MEMBER: Good afternoon, Mr. Munger and Mr. Buffett.

My name is Ji Wen Yue (PH). I come from China. It's my first time to come to this meeting. And I think I'm very lucky to have a chance to ask question.

WARREN BUFFETT: We're glad to have you.

AUDIENCE MEMBER: Thank you. Everyone has personal dreams. And at a different age, maybe dreams will come different to you. And what's your dream now?

WARREN BUFFETT: Charlie, we'll let you go first.

CHARLIE MUNGER: I didn't quite hear that.

WARREN BUFFETT: Oh, I — what's your dream now? She says —

CHARLIE MUNGER: My dream. Well — (Laughter)

WARREN BUFFETT: Let's skip the first one. (Laughter)

CHARLIE MUNGER: Sometime when I'm especially wishful, I think, oh, to be 90 again. (Applause)

And I got some advice for the young. If you got anything you really want to do, don't wait till you're 93.

WARREN BUFFETT: No, do it. (Laughter)

No, that's the same thing I would tell students is, you can't always find it the first time or the second time. But when you go out in the world, look for the job that you would take if you didn't need a job.

I mean, don't postpone that sort of thing. Somebody — I think it was Kierkegaard, said that, you know, life must be evaluated backwards but it must be lived forwards.

And you want to sort of — Charlie says all he wants to know is where he'll die so he'll never go there, you know. And so you — (Laughter)

You do want to do a certain amount of reverse engineering in life. I mean, that's not — that doesn't mean you can do everything that way.

But you really want to think about what will make you feel good, when you get older, about your life.

And you, at least generally, want to keep going in that direction. And, you know, you need some luck in life. And you got to accept some bad things that are going to happen as you go along.

But life has been awfully good to me and Charlie, so we have no complaints.

CHARLIE MUNGER: What you don't want to be is like the man, when they held his funeral, and the minister said, "Now, it's the time for somebody to say something nice about the deceased." And nobody came forward. And nobody came forward.

He said, "Surely, somebody can say somebody — something nice — about the deceased." And nobody came forward.

And finally, one man came up. And he said, "Well," he said, "His brother was worse."

WARREN BUFFETT: Yeah. (Laughter)

28. Buffett's regret: "I wish I'd met Charlie earlier"

WARREN BUFFETT: OK. We'll move to station 10 and see if we can improve on it. (Laughter)

AUDIENCE MEMBER: Hi. My name is Andy Lijun Lin from Loyal Valley Innovation Capital from Shanghai.

This is my sixth year from Shanghai to here. I have say — I have to say to you two, Warren and Charlie, you are highly respected and deeply loved by millions and millions, or even billions, globally.

I have two questions today. First question, in your letters to shareholders you said you believe EBITDA is not a good parameter to value a business. Why it's not? Can you elaborate on that?

Second question, you both have very successful and happy lives with great respect. My question is to each of you. In retrospect, from a personal standpoint, do you have regrets in life?

If there is one thing you could have done differently in your life, family, personal, or business, what is it? Thank you very much.

WARREN BUFFETT: Yeah. I don't think you should expect us to answer that on personal.

But in business, I would say I wish I'd met Charlie earlier. (Laughs)

We've had a lot of fun ever since I was 29 and he was 35. But it would've been even more fun if we'd started many, many years earlier. We had a chance to. We worked in the same grocery store but not at the same time.

29. Teaching the "delusion" of EBITDA is "horror squared"

WARREN BUFFETT: In respect to EBITDA, depreciation is an expense. And it's the worst kind of an expense. You know, we love to talk about float. And float is where we get the money first and we have the expense later.

Depreciation is where you spend the money first, you know, and, then, record the expense later. And it's reverse float. And it's not a good thing.

And to have that enter into a multiple — it's much better to buy a business that has, everything else being equal — has no depreciation because it has, essentially, no investment and fixed assets that makes X, than it is to buy a company where there's a lot of depreciation in getting to X.

And I — actually, I may write a little bit more on that next year, just because it's such a mass delusion. And, of course, it's in the interests of Wall Street, enormously, to focus on something called EBITDA because it results in higher borrowing power, higher valuations, and all of that sort of thing.

So it's become very popular in the last 20 years, but I — it's a very misleading statistic that can be used in very pernicious ways.

Charlie, on either one of those subjects?

CHARLIE MUNGER: I think you've understated the horrors of the subject and the disgusting nature of the people that brought that term into the valuation of business. It was just —

It would be like a leasing broker of real estate who's got a thousand square-foot new suite to be leased, and he says it's got 2,000 feet in it. That's not honorable behavior. And that's the way that term got into common usage.

Nobody in his right mind would think that depreciation is not an expense.

WARREN BUFFETT: Yeah. It — but it's very much in the interest of Wall Street.

CHARLIE MUNGER: Yes. That's why —

WARREN BUFFETT: You —

CHARLIE MUNGER: — they did it.

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: It made the multiple seem lower.

WARREN BUFFETT: And what's amazing is the way it's accepted, actually.

But anyway, it just illustrates how people use language, you know, and sell concepts that work to their own use.

And "2 and 20" has the same sort of thing. I mean, the number of people — the amount of money that's overperformed after paying 2 and 20, compared to the expenses that have been incurred, I will assure you, makes for a terrible indictment of that particular arrangement.

But as long as it can get sold, it will get sold. And —

CHARLIE MUNGER: And, now, they use it in the business schools. Now, that is horror squared.

I mean — (laughter) — it's bad enough that a bunch of thieves start using a term. But when it gets so common that the business schools copy it, that is not a — that's not a good result.

WARREN BUFFETT: OK. (Applause)

30. "Nobody should be roadkill in this sort of society"

WARREN BUFFETT: Station 11.

AUDIENCE MEMBER: Good afternoon. I'm Whitney Tilson, a shareholder from New York.

My question is related to the ones asked earlier about job cuts. Perhaps, the only thing that makes American workers angrier than layoffs is to shut down an operation entirely and move the jobs overseas.

Ask anyone in Ohio or Michigan, and they'll tell you stories about companies that have been operating in those states for decades, benefitting from the educational system, infrastructure and so forth, things that were paid for by local taxpayers.

But, then, some high-paid consultants came along and showed the company how it could reduce its costs by relocating production to Mexico or China. And poof, the good U.S. jobs disappeared.

My observation is that most investors and those in corporate America today worship at the altar of maximizing shareholder value, which is code for doing whatever is necessary to boost the share price as high as possible.

But in doing so, companies are taking actions that make millions of workers feel, at best, fearful and left behind and, at worst, deeply harmed by corporate America.

It makes so many people so angry that I think it's testing the post-World War II economic order, which is rooted in free trade, and even the strength of our democracy. I'd argue that it was decisive in our last election.

So my question to you is, do you think that businesses should consider factors outside of pure economics when making these types of decisions? What obligations, if any, do they have to their employees and communities in which they operate?

And lastly, if a Berkshire CEO came to you and asked for your approval to close a U.S. operation and relocate it overseas to save money, what questions would you ask beyond the economics of this decision? Thank you.

WARREN BUFFETT: Yeah. Well, the truth is that — (applause) — in certain cases, production that would otherwise — that had formerly been in the United States has definitely been supplanted by production that comes from other parts of the world.

Originally — I was there when Fruit of the Loom was called Union Underwear and bought by Graham-Newman Corp in 1955, I believe. And it was probably all domestic then. And the truth is if it was all domestic now, it wouldn't exist.

We had the same thing happen with Dexter Shoe. And it was a wonderful company and skilled workers. And in the end, if we sold the shoes at a price that yielded what they cost us, they were not competitive with shoes from around the world.

Trade, I would argue — both ways, export, import — massive trade should be — and is, actually — enormously beneficial both to the United States and the world. I mean, it will — it — greater productivity will benefit the world in a general way.

But to be roadkill, to be the textile worker in New Bedford that was put out of a job eventually, to be the shoe worker in Dexter — at Dexter to be — was put out of work, you know, is —

I mean, it would be no fun to go through life and say, "I'm doing this for the greater good and so that shoes or underwear will sell for five percent less," or something, "and the American public will actually never know."

So what you need is two things, in my view. You've got an enormously prosperous country. You've got almost $60,000 of GDP per capita. It's unbelievable — six times what it was when I was born, in real terms.

So we've got the prosperity. And that prosperity is enhanced by trade. We were only exporting five percent of our GDP back in 1970, and that's — I think it's around 12 percent or something like that now.

We're doing what we do best. But we need an educator-in-chief, logically the president — I don't mean this specific president. I mean any president who's been around for decades — has to be able to explain to the American public the overall benefits of, essentially, free trade.

And then, beyond that, we have to have policies that take care of the people that become the roadkill in the process.

Because it doesn't make any difference to me if — as far as I'm concerned, if my life is miserable because I've been put out of business by something that's good for 320-some million people in some infinitesimal way, and it's messed up my life when I've tried to live it in a proper way.

So we have got the resources to take care of those people. The investors, I don't worry about. I wrote about this a few years ago.

The investors can diversify their investments in such a way that, overall, trade probably benefits them and they don't get killed by a specific industry condition.

But the worker, in many cases, can't do that. You're not going to retrain some 55-year-old worker in New Bedford who may not even speak English in our textile mill or something. I mean, they —

If they get destroyed by something that's good for society, they get destroyed, unless government puts in some policies that takes care of people like that. And we've got a rich society that can do that. And we got a society that will benefit by free trade.

And I think we ought to try to hit both objectives of making sure that there is not roadkill and that, at the same time, we get — 320 million people — get the benefits of free trade. (Applause)

Charlie?

CHARLIE MUNGER: Well, I don't quarrel with that. And we have unemployment insurance for that exact reason.

But I'm afraid that a capitalist system is always going to hurt some people as it modifies and improves. There's no way to avoid it.

WARREN BUFFETT: Yeah. Well, capitalism is brutal to capital if you're in the wrong businesses. And, like I say, you can diversify those results.

Capitalism is brutal to people that have the bad luck to be skilled or develop their skills for decades.

But a rich — a very rich society can actually — if it's beneficial to society overall, it can take care of those people. I mean, it just — you know, the new tax —

The bill that was passed a couple days ago reduces my taxes, you know, by 17 percent. You know, and is that needed by the government or anything of the sort?

CHARLIE MUNGER: I wouldn't start spending the money.

WARREN BUFFETT: No. And — (laughter) — but that was the will, I mean, of the —

No, I agree. I don't think — who knows what happens with the bill? But I'm just — to have that happen, and I don't think —

I think if you polled a thousand people in Omaha that were walking to a shopping center as to whether my tax bill had been cut by some very large sum because of what passed, I don't think many people would have the faintest idea what happened, in terms of the coverage of it and all of that that took place.

So I — we've got — we do have — it's probably more like 57- or $58,000 of GDP per capita — family of four, $230,000. But nobody should be roadkill in this sort of society —

CHARLIE MUNGER: Well, remember what Bismarck said: There are two things that nobody should have to watch. One is the making of the sausage. And the other is the making of legislation. (Laughter)

WARREN BUFFETT: Yeah. Well, I would say that somebody ought to watch. (Laughter)

Anyway, we've hit the magic hour of 3:30. We'll reconvene at 3:45 to do — have a formal shareholders meeting.

And that may take a while. So, you're welcome to stay and watch that. Or you're welcome to shop. And I might even have a small preference of that. But go — do whatever you wish. OK. (Applause)

31. Formal business meeting begins

WARREN BUFFETT: OK. Let's regroup.

If you'll all take your seats, we'll begin the formal meeting. And I'll work from a script in this.

The meeting will now come to order. I'm Warren Buffett, chairman of the board of the directors of the company. I welcome you to this 2017 annual meeting of shareholders.

This morning, I introduced the Berkshire Hathaway directors that are present. Also with us today are partners in the firm of Deloitte and Touche, our auditors.

Sharon Heck is secretary of Berkshire Hathaway, and she will make a written record of the proceedings.

Becki Amick has been appointed inspector of elections at this meeting, and she will certify to the count of votes cast in the election for directors and the motions to be voted upon at this meeting.

The named proxy holders for this meeting are Walter Scott and Marc Hamburg.

Does the secretary have a report of the number of Berkshire shares outstanding —?

VOICES: (Inaudible)

WARREN BUFFETT: if you don't mind, keep the lights on a little more so I can read this — outstanding, entitled to vote, and represented at the meeting?

SHARON HECK: Yes. I do. As indicated in the proxy statement that accompanied the notice of this meeting that was sent to all shareholders of record on March 8th, 2017, the record date for this meeting, there were 770,994 shares of Class A Berkshire Hathaway common stock outstanding, with each share entitled to one vote on motions considered at the meeting, and 1,310,304,247 shares of Class B Berkshire Hathaway common stock outstanding, with each share entitled to 1/10,000th of one vote on motions considered at the meeting.

Of that number, 538,915 Class A shares and 734,450,954 Class B shares are represented at this meeting by proxies returned through Friday afternoon, May 5th.

WARREN BUFFETT: Thank you, Sharon. That number represents a quorum and will therefore — we will therefore directly proceed with the meeting.

The first item of business will be a reading of the minutes of the last meeting of shareholders. I recognize Mr. Walter Scott, who will place a motion before the meeting.

WALTER SCOTT: I move that the reading of the minutes of the last meeting of the shareholders be dispensed with and the minutes be approved.

WARREN BUFFETT: Do I hear a second?

RON OLSON: I second the motion.

WARREN BUFFETT: The motion has been moved and seconded. We will vote on the motion by voice vote. All those in favor say, "Aye."

VOICES: Aye.

WARREN BUFFETT: I didn't hear very many. But opposed? The motion is carried.

32. Election of Berkshire directors

WARREN BUFFETT: The next item of business is to elect directors. If a shareholder is present who did not send in a proxy or who wishes to withdraw a proxy previously sent in, you may vote in person on the election of directors and other matters to be considered at this meeting.

Please identify yourselves to one of the meeting officials in the aisle so that you can receive a ballot.

I recognize Mr. Walter Scott to place a motion before the meeting with respect to election of directors.

WALTER SCOTT: I move that Warren Buffett, Charles Munger, Howard Buffett, Stephen Burke, Susan Decker, William Gates, David Gottesman, Charlotte Guyman, Thomas Murphy, Ron Olson, Walter Scott, and Meryl Witmer be elected as directors.

WARREN BUFFETT: Is there a second?

RON OLSON: I second the motion.

WARREN BUFFETT: It's been moved and seconded that Warren Buffett, Charles Munger, Howard Buffett, Stephen Burke, Susan Decker, William Gates, David Gottesman, Charlotte Guyman, Thomas Murphy, Ronald Olson, Walter Scott, and Meryl Witmer be elected as directors.

Are there any other nominations or any discussion?

The nominations are ready to be acted upon. If there are any shareholders voting in person, they should now mark the ballots on the election of directors and deliver their ballot to one of the meeting officials in the aisles.

Miss Amick, when you are ready, you may give your report.

BECKI AMICK: My report is ready. The ballot of the proxy holders in response to proxies that were received through last Friday afternoon cast not less than 601,375 votes for each nominee.

That number exceeds a majority of the number of the total votes of all Class A and Class B shares outstanding. The certification required by Delaware law of the precise count of the votes will be given to the secretary to be placed with the minutes of this meeting.

WARREN BUFFETT: Thank you, Miss Amick. Warren Buffett, Charles Munger, Howard Buffett, Stephen Burke, Susan Decker, William Gates, David Gottesman, Charlotte Guyman, Thomas Murphy, Ronald Olson, Walter Scott, and Meryl Witmer have been elected as directors.

33. Advisory vote on Berkshire's executive compensation

WARREN BUFFETT: The next item on the agenda is an advisory vote on the compensation of Berkshire Hathaway's executive officers. I recognize Mr. Walter Scott to place a motion before the meeting at this time.

WALTER SCOTT: I move that the shareholders of the company approve, on an advisory basis, the compensation paid to the company's named executive directors as disclosed pursuant to Item 402 of Regulation S-K, including the compensation discussion and analysis, and the accompanying compensation tables, and the related narrative discussion, in the company's 2017 annual meeting proxy statement.

WARREN BUFFETT: Is there a second?

RON OLSON: I second the motion.

WARREN BUFFETT: It has been moved and seconded that the shareholders of the company approve, on an advisory basis, the compensation paid to the company's named executive officers.

Miss Amick, when you are ready you may give your report.

BECKI AMICK: My report is ready. The ballot of the proxy holders in response to proxies that were received through last Friday afternoon cast not less than 608,765 votes to approve, on an advisory basis, the compensation paid to the company's named executive officers.

That number exceeds a majority of the number of the total votes of all Class A and Class B shares outstanding. The certification required by Delaware law of the precise count of the votes will be given to the secretary to be placed with the minutes of this meeting.

WARREN BUFFETT: Thank you, Miss Amick. The motion to approve, on an advisory basis, the compensation paid to the company's named executive officers has passed.

34. Advisory vote on frequency of advisory compensation votes

WARREN BUFFETT: The next item on the agenda is an advisory vote on the frequency of a shareholder advisory vote on compensation of Berkshire Hathaway's executive officers. I recognize Mr. Walter Scott to place a motion before the meeting on this item.

WALTER SCOTT: I move that the shareholders of the company determine, on an advisory basis, the frequency, whether annual, biannual, or triannual, with which they shall have an advisory vote on the compensation paid to the company's named executives as set forth in the company's 2017 annual meeting proxy statement.

WARREN BUFFETT: Is there a second?

RON OLSON: Second the motion.

WARREN BUFFETT: It has been moved and seconded that the shareholders of the company determine the frequency with which they shall have an advisory vote on compensation of named executive officers with the option being every one, two, or three years.

Miss Amick, when you are ready, you may give your report.

BECKI AMICK: My report is ready. The ballot of the proxy holders in response to proxies that were received through last Friday afternoon cast 131,268 votes for a frequency of every year, 1,954 votes for a frequency of every two years, and 476,661 votes for a frequency of every three years of an advisory vote on the compensation paid to the company's named executive officers.

The certification required by Delaware law of the precise count of the votes will be given to the secretary to be placed with the minutes of this meeting.

WARREN BUFFETT: Thank you, Miss Amick. The shareholders of the company have determined, on an advisory basis, that they shall have an advisory vote on the compensation paid to the company's named executive officers every three years.

35. Shareholder motion to disclose political contributions

WARREN BUFFETT: The next item of business is the motion put forth by Clean Yield Asset Management on behalf of shareholders, Tom Beers and Mary Durfee. The motion is set forth in the proxy statement.

The motion requests that the company provide a report on its political contributions. The directors recommended that the shareholders vote against the proposal.

I will now recognize Eileen Durry (PH) — I hope I'm pronouncing that right — to present the motion.

To allow all interested shareholders present their views, I ask to limit the — I ask to limit her remarks to five minutes.

And the microzone — the microphone at zone 1 is available for those wishing to speak for or against the motion. Zone 1 is the only microphone station in operation.

For the benefit of those present, I ask that each speaker for or against the motion, with the exception of the original proposer, limit themselves to two minutes and confine your remarks solely to the motion.

And do we have, at station 1, the representative of Clean Yield Management? Or, wait. Sorry. Clean Yield Asset Management.

EILEEN DURRY: Good afternoon, Mr. Chairman, board of directors, and my fellow shareholders.

My name is Eileen Durry. And I have been asked to read the following statement by the filers of this proposal, Tom Beers and Mary Durfee.

Our proposal, number four on the proxy ballot, calls on Berkshire Hathaway to fully disclose the extent of its political spending.

Why do we ask for this? Corporate political spending is a controversial activity that must be carefully managed and overseen at the most senior levels of management.

Mismanagement or misjudgment around political contributions can bring reputation damage, political risks, and legal consequences.

In recent years, at the urging of shareholders and other stakeholders, scores of companies have adopted stronger disclosure and better oversight of political contributions.

Best practices in this area include full disclosure of direct and indirect political contributions, descriptions of policies and procedures to ensure full legal compliance, and a commitment to board oversight.

But our company's policies in this area are so nonexistent or hidden that they have earned it a score of zero for six years running on the leading rating system for corporate political disclosure and accountability, the CPA-Zicklin Index.

In contrast, 56 percent of the S&P make public a detailed policy governing political expenditures from corporate funds. Peers such as GE, Travelers, Unum, CSX, and Norfolk Southern disclose political spending.

In contrast, all we know about Berkshire's political spending is contained in the two paragraph response to our proposal in this year's proxy statement, which seeks to reassure us that Berkshire's political spending is small, relative to its size.

But management's statement raises more questions than it answers. It says nothing, for example, about whether Berkshire gives to third party, like trade associations and 501(c)(4)s, which are leading sources of dark money contributions that are nearly impossible to trace.

Since 2012, over $670 million in dark money was spent in the U.S. elections with no disclosure of who the underlying donors were.

Fellow shareholders, as you know, our company is a large and complicated enterprise. Berkshire Hathaway ranks number four in the Fortune 500.

At a time when the trend among large companies is to be more open about their political spending and their policies regarding dark money vehicles, it doesn't behoove or benefit Berkshire Hathaway to be so secretive if it has nothing to hide. If you agree, please vote in favor of proposal number four.

WARREN BUFFETT: Thank you. Are there other people that wish to speak on the motion?

EILEEN DURRY: Not that I know of.

WARREN BUFFETT: OK. Thank you.

And I will tell you that, to my knowledge, in 52 years, Berkshire Hathaway, at the parent company level, has not made a political contribution. I don't — I, personally, disagree strongly with the Citizens United decision, which was a five-to-four vote.

And I think that having unlimited contributions by wealthy individuals through super PACs and — or wealthy corporations — I do not think it's a plus at all. And I think it's a minus in our democracy. And I think that big money does — can often distort the political process.

It's a reality that any of our subsidiaries in heavily regulated industries are probably going to have to make some political contributions. Their competitors do it.

And I tell our managers, basically, if they — I don't want them making contributions on their own personal preferences in elections to be made from corporate funds. And I would regard that as a breach of trust with Berkshire.

But I do recognize that if they're in the railroad industry, or the electric utility industry, or whatever it may be, that there is a necessity, essentially, to make political contributions. And I'm sure they give money to people that I wouldn't vote for.

But that is a reality of doing business in certain businesses which have a significant political aspect to their activities.

So, I (inaudible) and my heart is with you to some extent, in terms of I wish Citizens United had gone the other way. I don't like the idea of great sums being spent.

But I do not think we — I think it — personally, I think that it could be disadvantageous to actually list all of the political organizations to which people contribute when competitors don't. And I think there's expense involved in all three of the proposals that are coming up on this one.

So I, personally, voted against the proposition. But I do hope, like you, that money plays a lesser part in politics — big money — in the future — and undisclosed money — than it does now. And I don't think the odds are good that the Supreme Court is going to reverse Citizens United.

So with that, I would say the motion is now ready to be acted upon. If there are any shareholders voting in person, they should now mark their ballot on the motion and deliver their ballot to one of the meeting officials in the aisles.

Miss Amick, when you're ready, you may give your report.

BECKI AMICK: My report is ready. The ballot of the proxy holders in response to proxies that were received through last Friday afternoon cast 64,449 votes for the motion and 542,399 votes against the motion.

As the number of votes against the motion exceeds a majority of the number of votes of all Class A and Class B shares properly cast on the matter, as well as all votes outstanding, the motion has failed.

The certification required by Delaware law of the precise count of the votes will be given to the secretary to be placed with the minutes of this meeting.

WARREN BUFFETT: Thank you, Miss Amick. The proposal fails.

36. Shareholder motion on methane emissions

WARREN BUFFETT: The next item of business is put forth by Baldwin Brothers Inc. on behalf of shareholder Marcia Sage. The motion is set forth in the proxy statement.

The motion requests that the company provide a report reviewing the company's policies, actions, plans and reduction targets related to methane emissions from all operations. The directors have recommended that the shareholders vote against the proposal.

I will now recognize Eileen Durry to present the motion. To allow all interested shareholders to present their views, I ask her to limit her remarks to five minutes.

The microphone at zone 1 is available for those wishing to speak for or against the motion. Zone 1 is the only microphone station in operation.

For the benefit of those present, I ask that each speaker for and against — or against the motion — limit themselves to two minutes — although, Miss Durry, that's five minutes in your case — and to confine your remarks solely to the motion.

EILEEN DURRY: Good afternoon, Mr. Chairman, members of the board, and fellow shareholders.

My name is Eileen Durry. I am here to move Arjuna Capital and Baldwin Brothers' proposal on behalf of Marcia Sage, a long-term investor in our company.

Proposal five seeks to protect shareholder value by ensuring the transparent disclosure for information regarding methane emissions.

The reason for this proposal are clearly in the interest of protecting long-term shareholder value. Leaked gas has a direct economic impact on our company as it is no longer available for sale, establishing a clear business case for reduction targets and control processes.

In fact, leaked methane represented $30 billion of lost revenue in 2012, equivalent to three percent of gas produced globally.

The National Resources Defense Council estimates that capturing currently wasted gas for sale could reduce methane pollution by roughly 80 percent.

And while the climate benefit of replacing coal with natural gas has been widely publicized, that benefit is negated when leakage rates exceed 2.7 percent, as methane carries 84 times the global warming impact of CO2 over a 20-year period.

Recent academic studies are particularly troubling as they have identified methane leakage far north of current EPA estimates. Additionally, gas storage presents outsized risks.

The 2015 failure of a gas injection well at Southern California Gas Company's Aliso Canyon storage field in Los Angeles revealed major vulnerabilities in the maintenance and safety of natural gas storage facilities. The incident exposed both a lack of oversight and contingency planning in the face of a well blowout.

Berkshire Hathaway has storage facilities that face similar risks as it is estimated to hold the 11th highest volume in natural gas in the country.

There are over 400 gas storage facilities around the country, many of which were drilled decades ago. Numerous independent researchers have concluded that if natural gas is to lead to a more sustainable energy future, then missing emissions must be addressed.

Ongoing concerns have spurred public debate and led to regulatory action at the state and federal level. A strong program of target-setting measurement, mitigation, and disclosure would indicate a reduction in regulatory risk as well as efficient operations maximizing gas for sale and shareholder value.

Given this, we believe our company has a tremendous opportunity to move forward by providing shareholders with this important information.

ISS, the leading provider of proxy voting advice, agrees and has a recommended a vote in favor, noting such disclosures would allow shareholders to better understand the company's management of its methane emissions and any related risks. Thank you for your consideration.

WARREN BUFFETT: Are there other people who wish to speak on this motion?

EILEEN DURRY: I don't believe so.

WARREN BUFFETT: OK. The motion is now ready to be acted upon. If there are any shareholders voting in person, they should now mark their ballot on the motion and deliver their ballot to one of the meeting officials in the aisles. Miss Amick, when you're ready, you may give your report.

BECKI AMICK: My report is ready. The ballot of the proxy holders in response to proxies that were received through last Friday afternoon cast 57,600 votes for the motion and 542,870 votes against the motion.

As the number of votes against the motion exceeds a majority of the number of votes of all Class A and Class B shares properly cast on the matter, as well as all votes outstanding, the motion has failed.

The certification required by Delaware law of the precise count of the votes will be given to the secretary to be placed with the minutes of this meeting.

WARREN BUFFETT: Greg, incidentally — is there a live microphone? You're — yeah, there we — you might talk a little bit about the methane situation.

GREGORY ABEL: Sure, Warren. So thank you for your comments.

And when you think about methane emissions, it is a serious issue, relative to carbon. It was highlighted 84 times worse than a carbon emission. But I'd be very pleased to report on our situation at Berkshire Hathaway.

So, three different issues were raised in the comment. One was overall emissions from oil and gas production. So, the first thing I would just highlight is that we do not own any oil and gas producing assets. So we don't have any wells and, effectively, don't have that risk.

The second thing that was highlighted was the significant loss of gas at Aliso Canyon. It was a injection well that failed. Took many months to fix the well.

And if you fundamentally look at the problem there — and we do own other storage facilities, but we do not use their technology or that type of well. All of our wells are cased to the top which creates a very different risk and, literally, can be mitigated within hours.

And, then, the third issue which was raised was leakage rates. And it was highlighted, at least in a second response to the proposal, that the leading companies in the industry have a leakage rate of one percent, or they've put together programs to achieve a leakage rate of one percent.

And I'm happy to report, when we look at our leakage rate from our pipelines, we're at 0.53 of one percent. So, basically, half of the leading companies in the industry. So that, obviously, support the recommendation of the shareholders. Thank you.

WARREN BUFFETT: Thanks, Greg. You've heard the vote. And the proposal fails.

37. Shareholder motion to divest fossil fuel holdings

WARREN BUFFETT: The next item of business is a motion put forth by a shareholder, the Nebraska Peace Foundation. The motion is set forth in the proxy statement. The motion requests that the company divest of its holdings in companies involved in the extracting, processing, or burning of fossil fuels.

The directors have recommended the shareholders vote against the proposal.

I will now recognize Mark Vasina to present the motion. And, again, to allow all interested shareholders to present their views, I asked him to limit his remarks to five minutes.

And the microzone at zone 1 is available for those wishing to speak for or against the motion. Zone 1 is the only microphone station in operation.

And for the benefit of those present, subsequent speakers should — I ask that they limit themselves to two minutes and confine your remarks solely to the motion. With that, if you'll proceed.

MARK VASINA: Thank you. My name's Mark Vasina. I represent the Nebraska Peace Foundation. We're here to present our proposal asking Berkshire Hathaway to divest of its carbon-based assets over a period of 12 years, a period of time we believe is a very modest proposal indeed.

Last year, we were here with a proposal that Berkshire Hathaway evaluate and report on the impact of climate change on their insurance companies.

After our — after the meeting, we were approached by a number of shareholders who suggested we were pulling our punches. And they suggested the real question is divestiture. So we thought about it. We came back to ask for divestiture of the carbon-based assets.

We recognize that for a public company that's involved in investing in other companies, divestiture represents different kinds of challenges from those of university endowments, pension plans, public foundations, such as the Bill and Melinda Gates Foundation — organizations which have divested or have implemented divestiture plans.

However, we believe that the necessity for divestiture involves more than just a social, ethical, or even moral question, but also involves financial risk.

As the Bank of England, in their recommendation to the insurance companies that they regulated, that they investigate and report on the climate change risk to these companies, they pointed out that financial risk of holding these carbon-based assets was real — unpredictable.

Things like regulatory risk, political risk, technology changes, investment — investor sentiment changes — these things pose risks towards the financial value of assets in this type of investment.

So we are proposing, as I said, divestiture of all carbon-based assets over 12 years.

I'm going to be followed by three prominent American climate scientists, Frank LaMere of the Winnebago tribe of Nebraska, and Richard Miller, Creighton University theologian. Thank you for giving us the opportunity to make our case for this proposal.

WARREN BUFFETT: Thank you. And we'll proceed to the next speaker, please.

MICHAEL MANN: Chairman Buffett, board members and shareholders, my name is Michael Mann. I'm a professor at Penn State University and a climate scientist.

And as a scientist who spends much of my time communicating the reality and threat of climate change, it's an honor to have this opportunity to speak to you today.

Warren Buffett, known as the Wizard of Omaha, is an inspiration to many, a symbol of the value of work ethic, self-made success, and the great reward that comes with foresight.

Now, foresight means recognizing both opportunity and risk. And when it comes to risk, there is no better example than climate change. I recently co-authored an article in the journal, "Scientific Reports," for example, demonstrating that climate change played a key role in the onslaught of unprecedented, devastating droughts, floods, and heat waves in recent years.

And the impacts we're seeing now are just the veritable tip of the iceberg. Carbon emissions must be brought down dramatically within the next few years if we are to avert the worst impacts of climate change.

Mr. Buffett coined the term "Noah's Law" in his 2015 shareholder letter to describe the risk posed by climate change, stating, "If there is only a one percent chance the planet is heading toward a truly major disaster and delay means passing a point of no return, inaction now is foolhardy."

Well, I couldn't agree more. And the science tells us that we are heading toward disaster in the absence of substantial reductions in greenhouse gas emissions.

Board member Bill Gates demonstrated bold leadership a year ago when the Bill and Melinda Gates Foundation announced it was divesting of fossil fuel holdings.

Were Mr. Buffett to follow suit, it would send a profound message to the rest of the global business community, a message that we can both mitigate risk and seize opportunity in the form of massive growth in clean energy technology by tackling this problem now head-on before it's too late. Thank you.

WARREN BUFFETT: Thank you. And I believe there's another speaker or maybe two. If you'll identify yourself, please.

RICHARD SOMERVILLE: My name is Richard Somerville. I'm a climate scientist and a professor at the University of California San Diego.

Chairman Buffett, board and shareholders, the world is warming. It is due to human activities. It is getting worse. The observational evidence is overwhelming.

All the warmest years, globally, are recent years. We see the weather changing. We see more severe floods and droughts. Sea level rise is accelerating. Ice sheets and glaciers are shrinking worldwide.

Climate change will become more and more serious unless emissions of heat-trapping gases and particles are quickly and drastically reduced.

The biggest unknown about future climate is human behavior. Everything depends on what humanity does now. We have our hands on the thermostat that controls the climate of our children and grandchildren.

In 2015, the nations of the world agreed in Paris on how much warming can safely be allowed. The Paris target was informed by science. And the science shows that to meet the target, emissions need to be reduced drastically and quickly.

We cannot just muddle through. Dithering and procrastinating lead to catastrophe. Alleviating the disruption of climate change is cheap compared to coping with the damage that unmitigated climate change will cause.

Want an example? Doing nothing about climate change means that sea level will become so high that coastal cities must eventually be abandoned.

We caused this problem. We can solve it. And polls show that most Americans want strong actions to limit climate change.

The forces driving clean energy are powerful. The market is turning against fossil fuels. The prices of solar and wind energy are dropping. They can already compete without subsidies. Vehicle electrification is happening fast.

Clean energy provides jobs and economic growth. Progress and prosperity do not require emitting heat-trapping gasses.

Berkshire Hathaway and Warren Buffett are rightly admired and respected worldwide. Helping the world confront climate change should be an important part of their legacy. We owe it to our children and grandchildren. Thank you.

WARREN BUFFETT: Thank you. I believe there's one more speaker. (Applause)

DAVID TITLEY: Thank you, sir. I am David Titley, retired rear admiral, former oceanographer of the Navy and now a professor of practice at Penn State.

I've been a shareholder of Berkshire Hathaway since December of 2000. Thank you, sir, for your leadership of this enterprise.

When I was stationed at the Pentagon, I had the privilege of working directly for the Pentagon's foremost strategic planner, Mr. Andrew Marshall.

He taught me how to think about risk, and especially risks that may seem distant or low probability, but one with very high impact, such as weapons of mass destruction. Climate change is a fat tail, emerging risk.

It's really a risk to people, to us. And when this risk is not managed, we have a security problem.

One example would be Syria. Climate is one of the links in a long chain of events that led to the tragic outcome. Non-climate events, such as over a million refugees pouring into Syrian cities from the Iraq War, stress Syrian governance.

Then, about a decade ago, an exceptionally intense drought and heat spell, linked with high confidence to a changing climate, devastated Syrian agriculture. Now, you have millions of desperate people with nothing and a breeding ground for extremists.

Syria is an example of why, in the security community, we say that climate change accelerates the risks of instability. It can make bad places worse, a lot worse.

Senior military officers know you must address risks and take precautions while you can, before it's too late. The U.S. Defense Department understands the risks of climate change. And it's been working quietly to adapt to the changing climate for years.

Winston Churchill is alleged to have said, "Americans can always be counted upon to do the right thing after exhausting every other possibility." But we will prevail. And you, sir, can help.

Here's my ask. What are government and business leaders doing to stabilize the climate? We should reduce rather than accept the risks of unchecked climate change because the ice doesn't care which party controls the White House or the Congress. It just melts. Thank you. (Applause)

FRANK LAMERE: I am Frank LaMere, of the Bear Clan of the Winnebago Tribe of Nebraska.

It was the indigenous people of this continent who first consecrated the ground on which we live and grow, who offered up prayers and petitions asking that we be allowed to live and to provide a way for the generations to come.

In exchange for the blessings given by the creator, our forbearers agreed to be good stewards of the land. The stewardship of our Mother Earth, who provides for us, has now changed. But the covenant remains the same. Let there be no mistake about that.

If we continue to disrespect our earth mother, those things given us, bountiful harvest, protection from the elements and good, clean water will surely be taken from us. Our elders speak of this. It has been foretold.

On Christmas Eve, my son came from Standing Rock to visit us for one hour. His mother and I worried about him. “How is it there? Why did you go?” I asked. He said, “It is dangerous, dad. But someone has to protect our water.”

I nodded and said, “Ahoo! That is good.” He is a water protector. I stand on his shoulders. Mni wiconi. The protectors proclaim water is life.

Bearing that in mind, I am told that this waterway flowing south from Standing Rock and passing just a short walk from here would be fouled by any kind of breach in the Dakota Access Pipeline.

My sense and my years tells me that this will happen. Millions would be poisoned.

I’m further told that this collective body holds a 15 percent interest in the — an oil company that is a 25 percent shareholder in the Dakota Access Pipeline.

I would ask that you walk away from that investment, stand with Mother Earth today.

I’m a Winnebago Indian. The Missouri River brought us here when we had no place to go.

We stand with our Mother Earth now as she stood with us. Think about that. Mni wiconi. Water is life. Pinagigi. Thank you.

WARREN BUFFETT: Thank you. (Applause)

RICHARD MILLER: Dear Chairman Buffett, board members and shareholders.

I am Richard Miller. I am an associate professor of philosophical theology and sustainability studies at Creighton University. I write and teach on ethical issues raised by the climate crisis.

As a rationale for voting no on the divestment resolution, the board maintained that Berkshire should not limit its universe of potential investments based upon complex social and moral issues, and that following state and federal laws was sufficient to meet your obligations.

There is not only an overwhelming consensus in the scientific community about the reality and dangers of climate change, but there is also an overwhelming consensus among all major ethical theories that is one not morally justified to use increased profit as a rationale for doing harm to others.

By continuing to invest in, and thus promote, the extracting, processing, and burning of fossil fuels, Berkshire is doing harm to people around the world and creating conditions that will threaten future generations.

While one is not morally justified to use increased profits as a rationale for doing harm to others, one cannot also opt out of ethical considerations by appealing to moral complexity. When you're doing harm to others, especially at that — this scale, there is no neutral space.

Nor can you simply appeal to the fact that Berkshire is following state and federal laws when those laws are, themselves, unethical in that they allow the United States to violate the human rights of people around the world and set in motion catastrophic future for young people.

The consensus among ethical theories will, in due time, become self-evident to the average person, analogous to the way slavery, as an evil, is self-evident today.

Indeed, the recognition of the immorality of investing in fossil fuels is rapidly gaining ground as more and more institutions divest their fossil fuel holdings.

Mr. Buffett, you're standing on an ethical house of cards. It is only a matter of time before it comes tumbling down.

Like the thousands gathered here and the millions on live stream, I admire your considerable achievements. But I am afraid that if you do not change course very soon, history will not judge you kindly. Thank you for your time.

WARREN BUFFETT: OK. Thank you. (Applause)

The motion is now ready to be acted upon. If there are any shareholders voting in person, they should now mark their ballots on the motion and deliver their ballots to one of the meeting officials in the aisles.

Miss Amick, when you're ready, you may give your report.

BECKI AMICK: My report is ready. The ballot of the proxy holders in response to proxies that were received through last Friday afternoon cast 7,784 votes for the motion and 594,044 votes against the motion.

As the number of votes against the motion exceeds a majority of the number of votes of all Class A and Class B shares properly cast on the matter, as well as all votes outstanding, the motion has failed.

The certification required by Delaware law of the precise count of the votes will be given to the secretary to be placed with the minutes of this meeting.

WARREN BUFFETT: Thank you, Miss Amick. The proposal fails. And Mr. Scott, do you have a motion?

WALTER SCOTT: I move the meeting be adjourned.

WARREN BUFFETT: Is there a second?

RON OLSON: I second the motion.

WARREN BUFFETT: The motion to adjourn has now been made and seconded. We will vote by voice. Any discussion, if not, all in favor say, “Aye.”

VOICES: Aye.

Berkshire's Performance vs. the S&P 500

Year	Annual Percentage Change in Per-Share Book Value of Berkshire	in Per-Share Market Value of Berkshire	in S&P 500 with Dividends Included
1965	23.8	49.5	10.0
1966	20.3	(3.4)	(11.7)
1967	11.0	13.3	30.9
1968	19.0	77.8	11.0
1969	16.2	19.4	(8.4)
1970	12.0	(4.6)	3.9
1971	16.4	80.5	14.6
1972	21.7	8.1	18.9
1973	4.7	(2.5)	(14.8)
1974	5.5	(48.7)	(26.4)
1975	21.9	2.5	37.2
1976	59.3	129.3	23.6
1977	31.9	46.8	(7.4)
1978	24.0	14.5	6.4
1979	35.7	102.5	18.2
1980	19.3	32.8	32.3
1981	31.4	31.8	(5.0)
1982	40.0	38.4	21.4
1983	32.3	69.0	22.4
1984	13.6	(2.7)	6.1
1985	48.2	93.7	31.6
1986	26.1	14.2	18.6
1987	19.5	4.6	5.1
1988	20.1	59.3	16.6
1989	44.4	84.6	31.7
1990	7.4	(23.1)	(3.1)
1991	39.6	35.6	30.5
1992	20.3	29.8	7.6
1993	14.3	38.9	10.1
1994	13.9	25.0	1.3
1995	43.1	57.4	37.6
1996	31.8	6.2	23.0
1997	34.1	34.9	33.4
1998	48.3	52.2	28.6
1999	0.5	(19.9)	21.0
2000	6.5	26.6	(9.1)
2001	(6.2)	6.5	(11.9)
2002	10.0	(3.8)	(22.1)
2003	21.0	15.8	28.7
2004	10.5	4.3	10.9
2005	6.4	0.8	4.9
2006	18.4	24.1	15.8
2007	11.0	28.7	5.5
2008	(9.6)	(31.8)	(37.0)
2009	19.8	2.7	26.5
2010	13.0	21.4	15.1
2011	4.6	(4.7)	2.1
2012	14.4	16.8	16.0
2013	18.2	32.7	32.4
2014	8.3	27.0	13.7
2015	6.4	(12.5)	1.4
2016	10.7	23.4	12.0
2017	23.0	21.9	21.8
Compounded Annual Gain – 1965-2017	19.1%	20.9%	9.9%
Overall Gain – 1964-2017	1,088,029%	2,404,748%	15,508%

Note: Data are for calendar years with these exceptions: 1965 and 1966, year ended 9/30; 1967, 15 months ended 12/31. Starting in 1979, accounting rules required insurance companies to value the equity securities they hold at market rather than at the lower of cost or market, which was previously the requirement. In this table, Berkshire's results through 1978 have been restated to conform to the changed rules. In all other respects, the results are calculated using the numbers originally reported. The S&P 500 numbers are **pre-tax** whereas the Berkshire numbers are **after-tax**. If a corporation such as Berkshire were simply to have owned the S&P 500 and accrued the appropriate taxes, its results would have lagged the S&P 500 in years when that index showed a positive return, but would have exceeded the S&P 500 in years when the index showed a negative return. Over the years, the tax costs would have caused the aggregate lag to be substantial.

BERKSHIRE HATHAWAY INC.

To the Shareholders of Berkshire Hathaway Inc.:

Berkshire's gain in net worth during 2017 was $65.3 billion, which increased the per-share book value of both our Class A and Class B stock by 23%. Over the last 53 years (that is, since present management took over), per-share book value has grown from $19 to $211,750, a rate of 19.1% compounded annually.*

The format of that opening paragraph has been standard for 30 years. But 2017 was far from standard: A large portion of our gain did *not* come from anything we accomplished at Berkshire.

The $65 billion gain is nonetheless real – rest assured of that. But only $36 billion came from Berkshire's operations. The remaining $29 billion was delivered to us in December when Congress rewrote the U.S. Tax Code. (Details of Berkshire's tax-related gain appear on page K-32 and pages K-89 – K-90.)

After stating those fiscal facts, I would prefer to turn immediately to discussing Berkshire's operations. But, in still another interruption, I must first tell you about a new accounting rule – a generally accepted accounting principle (GAAP) – that in *future* quarterly and annual reports will severely distort Berkshire's net income figures and very often mislead commentators and investors.

The new rule says that the net change in *unrealized* investment gains and losses in stocks we hold must be included in all net income figures we report to you. That requirement will produce some truly wild and capricious swings in our GAAP bottom-line. Berkshire owns $170 billion of marketable stocks (not including our shares of Kraft Heinz), and the value of these holdings can easily swing by $10 billion or more within a quarterly reporting period. Including gyrations of that magnitude in reported net income will swamp the truly important numbers that describe our operating performance. For analytical purposes, Berkshire's "bottom-line" will be useless.

The new rule compounds the communication problems we have long had in dealing with the *realized* gains (or losses) that accounting rules compel us to include in our net income. In past quarterly and annual press releases, we have regularly warned you not to pay attention to these realized gains, because they – just like our unrealized gains – fluctuate randomly.

That's largely because we sell securities when that seems the intelligent thing to do, not because we are trying to influence earnings in any way. As a result, we sometimes have reported substantial realized gains for a period when our portfolio, overall, performed poorly (or the converse).

*All per-share figures used in this report apply to Berkshire's A shares. Figures for the B shares are 1/1500th of those shown for the A shares.

With the new rule about unrealized gains exacerbating the distortion caused by the existing rules applying to realized gains, we will take pains every quarter to explain the adjustments you need in order to make sense of our numbers. But televised commentary on earnings releases is often instantaneous with their receipt, and newspaper headlines almost always focus on the year-over-year change in GAAP net income. Consequently, media reports sometimes highlight figures that unnecessarily frighten or encourage many readers or viewers.

We will attempt to alleviate this problem by continuing our practice of publishing financial reports late on Friday, well after the markets close, or early on Saturday morning. That will allow you maximum time for analysis and give investment professionals the opportunity to deliver informed commentary before markets open on Monday. Nevertheless, I expect considerable confusion among shareholders for whom accounting is a foreign language.

At Berkshire what counts most are increases in our normalized per-share earning power. That metric is what Charlie Munger, my long-time partner, and I focus on – and we hope that you do, too. Our scorecard for 2017 follows.

Acquisitions

There are four building blocks that add value to Berkshire: (1) sizable stand-alone acquisitions; (2) bolt-on acquisitions that fit with businesses we already own; (3) internal sales growth and margin improvement at our many and varied businesses; and (4) investment earnings from our huge portfolio of stocks and bonds. In this section, we will review 2017 acquisition activity.

In our search for new stand-alone businesses, the key qualities we seek are durable competitive strengths; able and high-grade management; good returns on the net tangible assets required to operate the business; opportunities for internal growth at attractive returns; and, finally, *a sensible purchase price*.

That last requirement proved a barrier to virtually all deals we reviewed in 2017, as prices for decent, but far from spectacular, businesses hit an all-time high. Indeed, price seemed almost irrelevant to an army of optimistic purchasers.

Why the purchasing frenzy? In part, it's because the CEO job self-selects for "can-do" types. If Wall Street analysts or board members urge that brand of CEO to consider possible acquisitions, it's a bit like telling your ripening teenager to be sure to have a normal sex life.

Once a CEO hungers for a deal, he or she will never lack for forecasts that justify the purchase. Subordinates will be cheering, envisioning enlarged domains and the compensation levels that typically increase with corporate size. Investment bankers, smelling huge fees, will be applauding as well. (Don't ask the barber whether you need a haircut.) If the historical performance of the target falls short of validating its acquisition, large "synergies" will be forecast. Spreadsheets never disappoint.

The ample availability of extraordinarily cheap debt in 2017 further fueled purchase activity. After all, even a high-priced deal will usually boost per-share earnings if it is debt-financed. At Berkshire, in contrast, we evaluate acquisitions on an all-equity basis, knowing that our taste for overall debt is very low and that to assign a large portion of our debt to any individual business would generally be fallacious (leaving aside certain exceptions, such as debt dedicated to Clayton's lending portfolio or to the fixed-asset commitments at our regulated utilities). We also never factor in, nor do we often find, synergies.

Our aversion to leverage has dampened our returns over the years. But Charlie and I sleep well. Both of us believe it is insane to risk what you have and need in order to obtain what you don't need. We held this view 50 years ago when we each ran an investment partnership, funded by a few friends and relatives who trusted us. We also hold it today after a million or so "partners" have joined us at Berkshire.

Despite our recent drought of acquisitions, Charlie and I believe that from time to time Berkshire will have opportunities to make very large purchases. In the meantime, we will stick with our simple guideline: The less the prudence with which others conduct their affairs, the greater the prudence with which we must conduct our own.

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We were able to make one sensible stand-alone purchase last year, a 38.6% partnership interest in Pilot Flying J ("PFJ"). With about $20 billion in annual volume, the company is far and away the nation's leading travel-center operator.

PFJ has been run from the get-go by the remarkable Haslam family. "Big Jim" Haslam began with a dream and a gas station 60 years ago. Now his son, Jimmy, manages 27,000 associates at about 750 locations throughout North America. Berkshire has a contractual agreement to increase its partnership interest in PFJ to 80% in 2023; Haslam family members will then own the remaining 20%. Berkshire is delighted to be their partner.

When driving on the Interstate, drop in. PFJ sells gasoline as well as diesel fuel, and the food is good. If it's been a long day, remember, too, that our properties have 5,200 showers.

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Let's move now to bolt-on acquisitions. Some of these were small transactions that I will not detail. Here is an account, however, of a few larger purchases whose closings stretched between late 2016 and early 2018.

- Clayton Homes acquired two builders of conventional homes during 2017, a move that more than doubled our presence in a field we entered only three years ago. With these additions – Oakwood Homes in Colorado and Harris Doyle in Birmingham – I expect our 2018 site built volume will exceed $1 billion.

Clayton's emphasis, nonetheless, remains manufactured homes, both their construction and their financing. In 2017 Clayton sold 19,168 units through its own retail operation and wholesaled another 26,706 units to independent retailers. All told, Clayton accounted for 49% of the manufactured-home market last year. That industry-leading share – about three times what our nearest competitor did – is a far cry from the 13% Clayton achieved in 2003, the year it joined Berkshire.

Both Clayton Homes and PFJ are based in Knoxville, where the Clayton and Haslam families have long been friends. Kevin Clayton's comments to the Haslams about the advantages of a Berkshire affiliation, and his admiring comments about the Haslam family to me, helped cement the PFJ deal.

- Near the end of 2016, Shaw Industries, our floor coverings business, acquired U.S. Floors ("USF"), a rapidly growing distributor of luxury vinyl tile. USF's managers, Piet Dossche and Philippe Erramuzpe, came out of the gate fast, delivering a 40% increase in sales in 2017, during which their operation was integrated with Shaw's. It's clear that we acquired both great human assets *and* business assets in making the USF purchase.

Vance Bell, Shaw's CEO, originated, negotiated and completed this acquisition, which increased Shaw's sales to $5.7 billion in 2017 and its employment to 22,000. With the purchase of USF, Shaw has substantially strengthened its position as an important and durable source of earnings for Berkshire.

- I have told you several times about HomeServices, our growing real estate brokerage operation. Berkshire backed into this business in 2000 when we acquired a majority interest in MidAmerican Energy (now named Berkshire Hathaway Energy). MidAmerican's activities were then largely in the electric utility field, and I originally paid little attention to HomeServices.

But, year-by-year, the company added brokers and, by the end of 2016, HomeServices was the second-largest brokerage operation in the country – still ranking, though, far behind the leader, Realogy. In 2017, however, HomeServices' growth exploded. We acquired the industry's third-largest operator, Long and Foster; number 12, Houlihan Lawrence; and Gloria Nilson.

With those purchases we added 12,300 agents, raising our total to 40,950. HomeServices is now close to leading the country in home sales, having participated (including our three acquisitions pro-forma) in $127 billion of "sides" during 2017. To explain that term, there are two "sides" to every transaction; if we represent both buyer and seller, the dollar value of the transaction is counted twice.

Despite its recent acquisitions, HomeServices is on track to do only about 3% of the country's home-brokerage business in 2018. That leaves 97% to go. Given sensible prices, we will keep adding brokers in this most fundamental of businesses.

- Finally, Precision Castparts, a company built through acquisitions, bought Wilhelm Schulz GmbH, a German maker of corrosion resistant fittings, piping systems and components. Please allow me to skip a further explanation. I don't understand manufacturing operations as well as I do the activities of real estate brokers, home builders or truck stops.

Fortunately, I don't need in this instance to bring knowledge to the table: Mark Donegan, CEO of Precision, is an extraordinary manufacturing executive, and any business in his domain is slated to do well. Betting on people can sometimes be more certain than betting on physical assets.

Let's now move on to operations, beginning with property-casualty ("p/c") insurance, a business I *do* understand and the engine that for 51 years has powered Berkshire's growth.

Insurance

Before I discuss our 2017 insurance results, let me remind you of how and why we entered the field. We began by purchasing National Indemnity and a smaller sister company for $8.6 million in early 1967. With our purchase we received $6.7 million of tangible net worth that, by the nature of the insurance business, we were able to deploy in marketable securities. It was easy to rearrange the portfolio into securities we would otherwise have owned at Berkshire itself. In effect, we were "trading dollars" for the net worth portion of the cost.

The $1.9 million premium over net worth that Berkshire paid brought us an insurance business that usually delivered an underwriting profit. Even more important, the insurance operation carried with it $19.4 million of "float" – money that belonged to others but was held by our two insurers.

Ever since, float has been of great importance to Berkshire. When we invest these funds, all dividends, interest and gains from their deployment belong to Berkshire. (If we experience investment losses, those, of course, are on our tab as well.)

Float materializes at p/c insurers in several ways: (1) Premiums are generally paid to the company upfront whereas losses occur over the life of the policy, usually a six-month or one-year period; (2) Though some losses, such as car repairs, are quickly paid, others – such as the harm caused by exposure to asbestos – may take many years to surface and even longer to evaluate and settle; (3) Loss payments are sometimes spread over decades in cases, say, of a person employed by one of our workers' compensation policyholders being permanently injured and thereafter requiring expensive lifetime care.

Float generally grows as premium volume increases. Additionally, certain p/c insurers specialize in lines of business such as medical malpractice or product liability – business labeled "long-tail" in industry jargon – that generate far more float than, say, auto collision and homeowner policies, which require insurers to almost immediately make payments to claimants for needed repairs.

Berkshire has been a leader in long-tail business for many years. In particular, we have specialized in jumbo *reinsurance* policies that leave us assuming long-tail losses already incurred by other p/c insurers. As a result of our emphasizing that sort of business, Berkshire's growth in float has been extraordinary. We are now the country's second largest p/c company measured by premium volume and its leader, by far, in float.

Here's the record:

(in $ millions)

Year	Premium Volume	Float
1970	$ 39	$ 39
1980	185	237
1990	582	1,632
2000	19,343	27,871
2010	30,749	65,832
2017	60,597	114,500

Our 2017 volume was boosted by a huge deal in which we reinsured up to $20 billion of long-tail losses that AIG had incurred. Our premium for this policy was $10.2 billion, a world's record and one we won't come close to repeating. Premium volume will therefore fall somewhat in 2018.

Float will probably increase slowly for at least a few years. When we eventually experience a decline, it will be modest – at most 3% or so in any single year. Unlike bank deposits or life insurance policies containing surrender options, p/c float can't be withdrawn. This means that p/c companies can't experience massive "runs" in times of widespread financial stress, a characteristic of prime importance to Berkshire that we factor into our investment decisions.

Charlie and I *never* will operate Berkshire in a manner that depends on the kindness of strangers – or even that of friends who may be facing liquidity problems of their own. During the 2008-2009 crisis, we liked having Treasury Bills – *loads* of Treasury Bills – that protected us from having to rely on funding sources such as bank lines or commercial paper. We have intentionally constructed Berkshire in a manner that will allow it to comfortably withstand economic discontinuities, including such extremes as extended market closures.

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The downside of float is that it comes with risk, sometimes oceans of risk. What looks predictable in insurance can be anything but. Take the famous Lloyds insurance market, which produced decent results for three centuries. In the 1980's, though, huge latent problems from a few long-tail lines of insurance surfaced at Lloyds and, for a time, threatened to destroy its storied operation. (It has, I should add, fully recovered.)

Berkshire's insurance managers are conservative and careful underwriters, who operate in a culture that has long prioritized those qualities. That disciplined behavior has produced underwriting profits in most years, and in such instances, our cost of float was less than zero. In effect, we got *paid* then for holding the huge sums tallied in the earlier table.

I have warned you, however, that we have been fortunate in recent years and that the catastrophe-light period the industry was experiencing was not a new norm. Last September drove home that point, as three significant hurricanes hit Texas, Florida and Puerto Rico.

My guess at this time is that the insured losses arising from the hurricanes are $100 billion or so. That figure, however, could be *far* off the mark. The pattern with most mega-catastrophes has been that initial loss estimates ran low. As well-known analyst V.J. Dowling has pointed out, the loss reserves of an insurer are similar to a self-graded exam. Ignorance, wishful thinking or, occasionally, downright fraud can deliver inaccurate figures about an insurer's financial condition for a very long time.

We currently estimate Berkshire's losses from the three hurricanes to be $3 billion (or about $2 billion after tax). If both that estimate and my industry estimate of $100 billion are close to accurate, our share of the industry loss was about 3%. I believe that percentage is also what we may reasonably expect to be our share of losses in future American mega-cats.

It's worth noting that the $2 billion net cost from the three hurricanes reduced Berkshire's GAAP net worth by less than 1%. Elsewhere in the reinsurance industry there were many companies that suffered losses in net worth ranging from 7% to more than 15%. The damage to them could have been *far* worse: Had Hurricane Irma followed a path through Florida only a bit to the east, insured losses might well have been an additional $100 billion.

We believe that the annual probability of a U.S. mega-catastrophe causing $400 billion or more of insured losses is about 2%. No one, of course, knows the correct probability. We do know, however, that the risk increases over time because of growth in both the number and value of structures located in catastrophe-vulnerable areas.

No company comes close to Berkshire in being financially prepared for a $400 billion mega-cat. Our share of such a loss might be $12 billion or so, an amount far below the annual earnings we expect from our non-insurance activities. Concurrently, much – indeed, perhaps most – of the p/c world would be out of business. Our unparalleled financial strength explains why other p/c insurers come to Berkshire – and *only* Berkshire – when they, themselves, need to purchase huge reinsurance coverages for large payments they may have to make in the far future.

Prior to 2017, Berkshire had recorded 14 consecutive years of underwriting profits, which totaled $28.3 billion pre-tax. I have regularly told you that I expect Berkshire to attain an underwriting profit in a majority of years, but also to experience losses from time to time. My warning became fact in 2017, as we lost $3.2 billion pre-tax from underwriting.

A large amount of additional information about our various insurance operations is included in the 10-K at the back of this report. The only point I will add here is that you have some extraordinary managers working for you at our various p/c operations. This is a business in which there are no trade secrets, patents, or locational advantages. What counts are brains and capital. The managers of our various insurance companies supply the brains and Berkshire provides the capital.

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For many years, this letter has described the activities of Berkshire's many other businesses. That discussion has become both repetitious and partially duplicative of information regularly included in the 10-K that follows the letter. Consequently, this year I will give you a simple summary of our dozens of non-insurance businesses. Additional details can be found on pages K-5 – K-22 and pages K-40 – K-50.

Viewed as a group – *and excluding investment income* – our operations other than insurance delivered pre-tax income of $20 billion in 2017, an increase of $950 million over 2016. About 44% of the 2017 profit came from two subsidiaries. BNSF, our railroad, and Berkshire Hathaway Energy (of which we own 90.2%). You can read more about these businesses on pages K-5 – K-10 and pages K-40 – K-44.

Proceeding down Berkshire's long list of subsidiaries, our next five non-insurance businesses, as ranked by earnings (but presented here alphabetically) Clayton Homes, International Metalworking Companies, Lubrizol, Marmon and Precision Castparts had aggregate pre-tax income in 2017 of $5.5 billion, little changed from the $5.4 billion these companies earned in 2016.

The next five, similarly ranked and listed (Forest River, Johns Manville, MiTek, Shaw and TTI) earned $2.1 billion last year, up from $1.7 billion in 2016.

The remaining businesses that Berkshire owns – and there are many – recorded little change in pre-tax income, which was $3.7 billion in 2017 versus $3.5 billion in 2016.

Depreciation charges for all of these non-insurance operations totaled $7.6 billion; capital expenditures were $11.5 billion. Berkshire is always looking for ways to expand its businesses and regularly incurs capital expenditures that far exceed its depreciation charge. Almost 90% of our investments are made in the United States. America's economic soil remains fertile.

Amortization charges were an additional $1.3 billion. I believe that in large part this item is not a true economic cost. Partially offsetting this good news is the fact that BNSF (like all other railroads) records depreciation charges that fall well short of the sums regularly needed to keep the railroad in first-class shape.

Berkshire's goal is to substantially increase the earnings of its non-insurance group. For that to happen, we will need to make one or more huge acquisitions. We certainly have the resources to do so. At yearend Berkshire held $116.0 billion in cash and U.S. Treasury Bills (whose average maturity was 88 days), up from $86.4 billion at yearend 2016. This extraordinary liquidity earns only a pittance and is far beyond the level Charlie and I wish Berkshire to have. Our smiles will broaden when we have redeployed Berkshire's excess funds into more productive assets.

Investments

Below we list our fifteen common stock investments that at yearend had the largest market value. We exclude our Kraft Heinz holding – 325,442,152 shares – because Berkshire is part of a control group and therefore must account for this investment on the "equity" method. On its balance sheet, Berkshire carries its Kraft Heinz holding at a GAAP figure of $17.6 billion. The shares had a yearend market value of $25.3 billion, and a cost basis of $9.8 billion.

			12/31/17	
*Shares**	*Company*	*Percentage of Company Owned*	*Cost***	*Market*
			(in millions)	
151,610,700	American Express Company	17.6	$ 1,287	$ 15,056
166,713,209	Apple Inc.	3.3	20,961	28,213
700,000,000	Bank of America Corporation	6.8	5,007	20,664
53,307,534	The Bank of New York Mellon Corporation	5.3	2,230	2,871
225,000,000	BYD Company Ltd.	8.2	232	1,961
6,789,054	Charter Communications, Inc.	2.8	1,210	2,281
400,000,000	The Coca-Cola Company	9.4	1,299	18,352
53,110,395	Delta Airlines Inc.	7.4	2,219	2,974
44,527,147	General Motors Company	3.2	1,343	1,825
11,390,582	The Goldman Sachs Group, Inc.	3.0	654	2,902
24,669,778	Moody's Corporation	12.9	248	3,642
74,587,892	Phillips 66	14.9	5,841	7,545
47,659,456	Southwest Airlines Co.	8.1	1,997	3,119
103,855,045	U.S. Bancorp	6.3	3,343	5,565
482,544,468	Wells Fargo & Company	9.9	11,837	29,276
	Others		14,968	24,294
	Total Common Stocks Carried at Market		$ 74,676	$ 170,540

* Excludes shares held by pension funds of Berkshire subsidiaries.

** This is our actual purchase price and also our tax basis; GAAP "cost" differs in a few cases because of write-downs that have been required under GAAP rules.

Some of the stocks in the table are the responsibility of either Todd Combs or Ted Weschler, who work with me in managing Berkshire's investments. Each, *independently of me*, manages more than $12 billion; I usually learn about decisions they have made by looking at monthly portfolio summaries. Included in the $25 billion that the two manage is more than $8 billion of pension trust assets of certain Berkshire subsidiaries. As noted, pension investments are not included in the preceding tabulation of Berkshire holdings.

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Charlie and I view the marketable common stocks that Berkshire owns as interests in *businesses*, not as ticker symbols to be bought or sold based on their "chart" patterns, the "target" prices of analysts or the opinions of media pundits. Instead, we simply believe that if the businesses of the investees are successful (as we believe most will be) our investments will be successful as well. Sometimes the payoffs to us will be modest; occasionally the cash register will ring loudly. And sometimes I will make expensive mistakes. Overall – and over time – we should get decent results. In America, equity investors have the wind at their back.

From our stock portfolio – call our holdings "minority interests" in a diversified group of publicly-owned businesses – Berkshire received $3.7 billion of dividends in 2017. That's the number included in our GAAP figures, as well as in the "operating earnings" we reference in our quarterly and annual reports.

That dividend figure, however, *far* understates the "true" earnings emanating from our stock holdings. For decades, we have stated in Principle 6 of our "Owner-Related Business Principles" (page 19) that we expect *undistributed* earnings of our investees to deliver us at least equivalent earnings by way of subsequent capital gains.

Our recognition of capital gains (and losses) will be lumpy, particularly as we conform with the new GAAP rule requiring us to constantly record *unrealized* gains or losses in our earnings. I feel confident, however, that the earnings retained by our investees will over time, and with our investees viewed as a group, translate into commensurate capital gains for Berkshire.

The connection of value-building to retained earnings that I've just described will be impossible to detect in the short term. Stocks surge and swoon, seemingly untethered to any year-to-year buildup in their underlying value. Over time, however, Ben Graham's oft-quoted maxim proves true: "In the short run, the market is a voting machine; in the long run, however, it becomes a weighing machine."

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Berkshire, itself, provides some vivid examples of how price randomness in the short term can obscure long-term growth in value. For the last 53 years, the company has built value by reinvesting its earnings and letting compound interest work its magic. Year by year, we have moved forward. Yet Berkshire shares have suffered four truly major dips. Here are the gory details:

Period	High	Low	Percentage Decrease
March 1973-January 1975	93	38	(59.1%)
10/2/87-10/27/87	4,250	2,675	(37.1%)
6/19/98-3/10/2000	80,900	41,300	(48.9%)
9/19/08-3/5/09	147,000	72,400	(50.7%)

This table offers the strongest argument I can muster against ever using borrowed money to own stocks. There is simply no telling how far stocks can fall in a short period. Even if your borrowings are small and your positions aren't immediately threatened by the plunging market, your mind may well become rattled by scary headlines and breathless commentary. And an unsettled mind will not make good decisions.

In the next 53 years our shares (and others) will experience declines resembling those in the table. *No one* can tell you when these will happen. The light can at *any time* go from green to red without pausing at yellow.

When major declines occur, however, they offer extraordinary opportunities to those who are not handicapped by debt. That's the time to heed these lines from Kipling's *If*:

> "If you can keep your head when all about you are losing theirs . . .
> If you can wait and not be tired by waiting . . .
> If you can think – and not make thoughts your aim . . .
> If you can trust yourself when all men doubt you . . .
> Yours is the Earth and everything that's in it."

"The Bet" is Over and Has Delivered an Unforeseen Investment Lesson

Last year, at the 90% mark, I gave you a detailed report on a ten-year bet I had made on December 19, 2007. (The full discussion from last year's annual report is reprinted on pages 24 – 26.) Now I have the final tally – and, in several respects, it's an eye-opener.

I made the bet for two reasons: (1) to leverage my outlay of $318,250 into a disproportionately larger sum that – if things turned out as I expected – would be distributed in early 2018 to Girls Inc. of Omaha; and (2) to publicize my conviction that my pick – a virtually cost-free investment in an unmanaged S&P 500 index fund – would, over time, deliver better results than those achieved by most investment professionals, however well-regarded and incentivized those "helpers" may be.

Addressing this question is of enormous importance. American investors pay staggering sums annually to advisors, often incurring several layers of consequential costs. In the aggregate, do these investors get their money's worth? Indeed, again in the aggregate, do investors get *anything* for their outlays?

Protégé Partners, my counterparty to the bet, picked five "funds-of-funds" that it expected to overperform the S&P 500. That was *not* a small sample. Those five funds-of-funds in turn owned interests in more than 200 hedge funds.

Essentially, Protégé, an advisory firm that knew its way around Wall Street, selected five investment experts who, in turn, employed several hundred other investment experts, each managing his or her own hedge fund. This assemblage was an elite crew, loaded with brains, adrenaline and confidence.

The managers of the five funds-of-funds possessed a further advantage: They could – and did – rearrange their portfolios of hedge funds during the ten years, investing with new "stars" while exiting their positions in hedge funds whose managers had lost their touch.

Every actor on Protégé's side was highly incentivized: Both the fund-of-funds managers and the hedge-fund managers they selected significantly shared in gains, even those achieved simply because the market generally moves upwards. (In *100%* of the 43 ten-year periods since we took control of Berkshire, years with gains by the S&P 500 exceeded loss years.)

Those performance incentives, it should be emphasized, were frosting on a huge and tasty cake: Even if the funds *lost* money for their investors during the decade, their managers could grow very rich. That would occur because *fixed* fees averaging a staggering 2½% of assets or so were paid *every year* by the fund-of-funds' investors, with part of these fees going to the managers at the five funds-of-funds and the balance going to the 200-plus managers of the underlying hedge funds.

Here's the final scorecard for the bet:

Year	Fund-of-Funds A	Fund-of-Funds B	Fund-of-Funds C	Fund-of-Funds D	Fund-of-Funds E	S&P Index Fund
2008	-16.5%	-22.3%	-21.3%	-29.3%	-30.1%	-37.0%
2009	11.3%	14.5%	21.4%	16.5%	16.8%	26.6%
2010	5.9%	6.8%	13.3%	4.9%	11.9%	15.1%
2011	-6.3%	-1.3%	5.9%	-6.3%	-2.8%	2.1%
2012	3.4%	9.6%	5.7%	6.2%	9.1%	16.0%
2013	10.5%	15.2%	8.8%	14.2%	14.4%	32.3%
2014	4.7%	4.0%	18.9%	0.7%	-2.1%	13.6%
2015	1.6%	2.5%	5.4%	1.4%	-5.0%	1.4%
2016	-3.2%	1.9%	-1.7%	2.5%	4.4%	11.9%
2017	12.2%	10.6%	15.6%	N/A	18.0%	21.8%
Final Gain	21.7%	42.3%	87.7%	2.8%	27.0%	125.8%
Average Annual Gain	2.0%	3.6%	6.5%	0.3%	2.4%	8.5%

Footnote: Under my agreement with Protégé Partners, the names of these funds-of-funds have never been publicly disclosed. I, however, have received their annual audits from Protégé. The 2016 figures for funds A, B and C were revised slightly from those originally reported last year. Fund D was liquidated in 2017; its average annual gain is calculated for the nine years of its operation.

The five funds-of-funds got off to a fast start, each beating the index fund in 2008. Then the roof fell in. In *every one* of the nine years that followed, the funds-of-funds as a whole trailed the index fund.

Let me emphasize that there was nothing aberrational about stock-market behavior over the ten-year stretch. If a poll of investment "experts" had been asked late in 2007 for a forecast of long-term common-stock returns, their guesses would have likely averaged close to the 8.5% actually delivered by the S&P 500. Making money in that environment should have been easy. Indeed, Wall Street "helpers" earned staggering sums. While this group prospered, however, many of their investors experienced a lost decade.

Performance comes, performance goes. Fees never falter.

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The bet illuminated another important investment lesson: Though markets are generally rational, they occasionally do crazy things. Seizing the opportunities then offered does *not* require great intelligence, a degree in economics or a familiarity with Wall Street jargon such as alpha and beta. What investors then need instead is an ability to both disregard mob fears or enthusiasms and to focus on a few simple fundamentals. A willingness to look unimaginative for a sustained period – or even to look foolish – is also essential.

Originally, Protégé and I each funded our portion of the ultimate $1 million prize by purchasing $500,000 face amount of zero-coupon U.S. Treasury bonds (sometimes called "strips"). These bonds cost each of us $318,250 – a bit less than 64¢ on the dollar – with the $500,000 payable in ten years.

As the name implies, the bonds we acquired paid no interest, but (because of the discount at which they were purchased) delivered a 4.56% annual return if held to maturity. Protégé and I originally intended to do no more than tally the annual returns and distribute $1 million to the winning charity when the bonds matured late in 2017.

After our purchase, however, some very strange things took place in the bond market. By November 2012, our bonds – now with about five years to go before they matured – were selling for *95.7%* of their face value. At *that* price, their annual yield to maturity was less than 1%. Or, to be precise, *.88%*.

Given that pathetic return, our bonds had become a dumb – a *really* dumb – investment compared to American equities. Over time, the S&P 500 – which mirrors a huge cross-section of American business, appropriately weighted by market value – has earned *far* more than 10% annually on shareholders' equity (net worth).

In November 2012, as we were considering all this, the *cash* return from dividends on the S&P 500 was 2½% annually, about triple the yield on our U.S. Treasury bond. These dividend payments were almost certain to grow. Beyond that, huge sums were being retained by the companies comprising the 500. These businesses would use their retained earnings to expand their operations and, frequently, to repurchase their shares as well. Either course would, over time, substantially increase earnings-per-share. And – as has been the case since 1776 – whatever its problems of the minute, the American economy was going to move forward.

Presented late in 2012 with the extraordinary valuation mismatch between bonds and equities, Protégé and I agreed to sell the bonds we had bought five years earlier and use the proceeds to buy 11,200 Berkshire "B" shares. The result: Girls Inc. of Omaha found itself receiving $2,222,279 last month rather than the $1 million it had originally hoped for.

Berkshire, it should be emphasized, has not performed brilliantly since the 2012 substitution. But brilliance wasn't needed: After all, Berkshire's gain only had to beat that annual .88% bond bogey – hardly a Herculean achievement.

The only risk in the bonds-to-Berkshire switch was that yearend 2017 would coincide with an exceptionally weak stock market. Protégé and I felt this possibility (which *always* exists) was very low. Two factors dictated this conclusion: The reasonable price of Berkshire in late 2012, and the large asset build-up that was almost certain to occur at Berkshire during the five years that remained before the bet would be settled. Even so, to eliminate *all* risk to the charities from the switch, I agreed to make up any shortfall if sales of the 11,200 Berkshire shares at yearend 2017 didn't produce at least $1 million.

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Investing is an activity in which consumption today is foregone in an attempt to allow greater consumption at a later date. "Risk" is the possibility that this objective won't be attained.

By that standard, purportedly "risk-free" long-term bonds in 2012 were a *far* riskier investment than a long-term investment in common stocks. At that time, even a 1% annual rate of inflation between 2012 and 2017 would have decreased the purchasing-power of the government bond that Protégé and I sold.

I want to quickly acknowledge that in *any* upcoming day, week or even year, stocks will be riskier – far riskier – than short-term U.S. bonds. As an investor's investment horizon lengthens, however, a diversified portfolio of U.S. equities becomes progressively *less* risky than bonds, assuming that the stocks are purchased at a sensible multiple of earnings relative to then-prevailing interest rates.

It is a terrible mistake for investors with long-term horizons – among them, pension funds, college endowments and savings-minded individuals – to measure their investment "risk" by their portfolio's ratio of bonds to stocks. Often, high-grade bonds in an investment portfolio *increase* its risk.

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A final lesson from our bet: Stick with big, "easy" decisions and eschew activity. During the ten-year bet, the 200-plus hedge-fund managers that were involved almost certainly made tens of thousands of buy and sell decisions. Most of those managers undoubtedly thought hard about their decisions, each of which they believed would prove advantageous. In the process of investing, they studied 10-Ks, interviewed managements, read trade journals and conferred with Wall Street analysts.

Protégé and I, meanwhile, leaning neither on research, insights nor brilliance, made only one investment decision during the ten years. We simply decided to sell our bond investment at a price of more than 100 times earnings (95.7 sale price/.88 yield), those being "earnings" that could not increase during the ensuing five years.

We made the sale in order to move our money into a single security – Berkshire – that, in turn, owned a diversified group of solid businesses. Fueled by retained earnings, Berkshire's growth in value was unlikely to be less than 8% annually, even if we were to experience a so-so economy.

After that kindergarten-like analysis, Protégé and I made the switch and relaxed, confident that, over time, 8% was certain to beat .88%. By a lot.

The Annual Meeting

The annual meeting falls on May 5th and will again be webcast by Yahoo!, whose web address is https://finance.yahoo.com/brklivestream. The webcast will go live at 8:45 a.m. Central Daylight Time. Yahoo! will interview directors, managers, stockholders and celebrities before the meeting and during the lunch break. Both the interviews and meeting will be translated simultaneously into Mandarin.

Our partnership with Yahoo! began in 2016 and shareholders have responded enthusiastically. Last year, real-time viewership increased 72% to about 3.1 million and replays of short segments totaled 17.1 million.

For those attending the meeting in person, the doors at the CenturyLink will open at 7:00 a.m. on Saturday to facilitate shopping prior to our shareholder movie, which begins at 8:30. The question-and-answer period will start at 9:15 and run until 3:30, with a one-hour lunch break at noon. Finally, at 3:45 we will begin the formal shareholder meeting, which usually runs from 15 to 45 minutes. Shopping will end at 4:30.

On Friday, May 4th, our Berkshire exhibitors at CenturyLink will be open from noon until 5 p.m. We added that extra shopping time in 2015, and serious shoppers love it. Last year about 12,000 people came through the doors in the five hours we were open on Friday.

Your venue for shopping will be the 194,300-square-foot hall that adjoins the meeting and in which products from dozens of our subsidiaries will be *for sale*. (Your Chairman discourages freebies.) Say hello to the many Berkshire managers who will be captaining their exhibits. And be sure to view the terrific BNSF railroad layout that salutes all of our companies.

Brooks, our running-shoe company, will again have a special commemorative shoe to offer at the meeting. After you purchase a pair, wear them on Sunday at our sixth annual "Berkshire 5K," an 8 a.m. race starting at the CenturyLink. Full details for participating will be included in the Visitor's Guide that will be sent to you with your meeting credentials. Entrants in the race will find themselves running alongside many of Berkshire's managers, directors and associates. (Charlie and I, however, will sleep in; even with Brooks running shoes, our times would be embarrassing.) Participation in the 5K grows every year. Help us set another record.

A GEICO booth in the shopping area will be staffed by a number of the company's top counselors from around the country. At last year's meeting, we set a record for policy sales, up 43% from 2016.

So stop by for a quote. In most cases, GEICO will be able to give you a shareholder discount (usually 8%). This special offer is permitted by 44 of the 51 jurisdictions in which we operate. (One supplemental point: The discount is not additive if you qualify for another discount, such as that available to certain groups.) Bring the details of your existing insurance and check out our price. We can save many of you real money. Spend the savings on other Berkshire products.

Be sure to visit the Bookworm. This Omaha-based retailer will carry more than 40 books and DVDs, among them a couple of new titles. Berkshire shareholders are a bookseller's dream: When *Poor Charlie's Almanack* (yes, *our* Charlie) made its debut some years ago, we sold 3,500 copies at the meeting. The book weighed 4.85 pounds. Do the math: Our shareholders left the building that day carrying about 8½ tons of Charlie's wisdom.

An attachment to the proxy material that is enclosed with this report explains how you can obtain the credential you will need for admission to both the meeting and other events. Keep in mind that most airlines substantially increase prices for the Berkshire weekend. If you are coming from far away, compare the cost of flying to Kansas City vs. Omaha. The drive between the two cities is about 2½ hours, and it may be that Kansas City can save you significant money. The savings for a couple could run to $1,000 or more. Spend that money with us.

At Nebraska Furniture Mart, located on a 77-acre site on 72nd Street between Dodge and Pacific, we will again be having "Berkshire Weekend" discount pricing. To obtain the Berkshire discount at NFM, you must make your purchases between Tuesday, May 1st and Monday, May 7th inclusive, and must also present your meeting credential. Last year, the one-week volume for the store was a staggering $44.6 million. Bricks and mortar are alive and well at NFM.

The period's special pricing will even apply to the products of several prestigious manufacturers that normally have ironclad rules against discounting but which, in the spirit of our shareholder weekend, have made an exception for you. We appreciate their cooperation. During "Berkshire Weekend," NFM will be open from 10 a.m. to 9 p.m. Monday through Saturday and 11 a.m. to 8 p.m. on Sunday. From 5:30 p.m. to 8 p.m. on Saturday, NFM is hosting a picnic to which you are all invited.

NFM will again extend its shareholder's discount offerings to our Kansas City and Dallas stores. From May 1st through May 7th, shareholders who present meeting credentials or other evidence of their Berkshire ownership (such as brokerage statements) to those NFM stores will receive the same discounts enjoyed by those visiting the Omaha store.

At Borsheims, we will again have two shareholder-only events. The first will be a cocktail reception from 6 p.m. to 9 p.m. on Friday, May 4th. The second, the main gala, will be held on Sunday, May 6th, from 9 a.m. to 4 p.m. On Saturday, we will remain open until 6 p.m. Remember, the more you buy, the more you save (or so my daughter tells me when we visit the store).

We will have huge crowds at Borsheims throughout the weekend. For your convenience, therefore, shareholder prices will be available from Monday, April 30th through Saturday, May 12th. During that period, please identify yourself as a shareholder either by presenting your meeting credential or a brokerage statement showing you own our stock.

On Sunday afternoon, on the upper level above Borsheims, we will have Bob Hamman and Sharon Osberg, two of the world's top bridge experts, available to play with our shareholders. If they suggest wagering on the game, change the subject. Ajit, Charlie, Bill Gates and I will likely drop by as well.

My friend, Ariel Hsing, will be in the mall as well on Sunday, taking on challengers at table tennis. I met Ariel when she was nine, and even then I was unable to score a point against her. Ariel represented the United States in the 2012 Olympics. If you don't mind embarrassing yourself, test your skills against her, beginning at 1 p.m. Bill Gates did pretty well playing Ariel last year, so he may be ready to again challenge her. (My advice: Bet on Ariel.) I will participate on an advisory basis only.

Gorat's will be open exclusively for Berkshire shareholders on Sunday, May 6th, serving from 12 p.m. until 10 p.m. To make a reservation at Gorat's, call 402-551-3733 on April 2nd (*but not before*). Show you are a sophisticated diner by ordering the T-bone with hash browns.

We will have the same three financial journalists lead the question-and-answer period at the meeting, asking Charlie and me questions that shareholders have submitted to them by e-mail. The journalists and their e-mail addresses are: Carol Loomis, the preeminent business journalist of her time, who may be e-mailed at loomisbrk@gmail.com; Becky Quick, of CNBC, at BerkshireQuestions@cnbc.com; and Andrew Ross Sorkin, of the New York Times, at arsorkin@nytimes.com.

From the questions submitted, each journalist will choose the six he or she decides are the most interesting and important to shareholders. The journalists have told me your question has the best chance of being selected if you keep it concise, avoid sending it in at the last moment, make it Berkshire-related and include no more than two questions in any e-mail you send them. (In your e-mail, let the journalist know if you would like your name mentioned if your question is asked.)

An accompanying set of questions will be asked by three analysts who follow Berkshire. This year the insurance specialist will be Gary Ransom of Dowling & Partners. Questions that deal with our non-insurance operations will come from Jonathan Brandt of Ruane, Cunniff & Goldfarb and Gregg Warren of Morningstar. Since what we will be conducting is a *shareholders'* meeting, our hope is that the analysts and journalists will ask questions that add to our owners' understanding and knowledge of their investment.

Neither Charlie nor I will get so much as a clue about the questions headed our way. Some will be tough, for sure, and that's the way we like it. Multi-part questions aren't allowed; we want to give as many questioners as possible a shot at us. Our goal is for you to leave the meeting knowing more about Berkshire than when you came and for you to have a good time while in Omaha.

All told, we expect at least 54 questions, which will allow for six from each analyst and journalist and for 18 from the audience. After the 54th, all questions come from the audience. Charlie and I have often tackled more than 60 by 3:30.

The questioners from the audience will be chosen by means of 11 drawings that will take place at 8:15 a.m. on the morning of the annual meeting. Each of the 11 microphones installed in the arena and main overflow room will host, so to speak, a drawing.

While I'm on the subject of our owners' gaining knowledge, let me remind you that Charlie and I believe all shareholders should simultaneously have access to new information that Berkshire releases and, if possible, should also have adequate time to digest and analyze that information before any trading takes place. That's why we try to issue financial data late on Fridays or early on Saturdays and why our annual meeting is always held on a Saturday (a day that also eases traffic and parking problems).

We do not follow the common practice of talking one-on-one with large institutional investors or analysts, treating them instead as we do all other shareholders. There is no one more important to us than the shareholder of limited means who trusts us with a substantial portion of his or her savings. As I run the company day-to-day – and as I write this letter – that is the shareholder whose image is in my mind.

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For good reason, I regularly extol the accomplishments of our operating managers. They are truly All-Stars who run their businesses as if they were the only asset owned by their families. I also believe the mindset of our managers to be as shareholder-oriented as can be found in the universe of large publicly-owned companies. Most of our managers have no financial need to work. The joy of hitting business "home runs" means as much to them as their paycheck.

If managers (or directors) own Berkshire shares – and many do – it's from open-market purchases they have made or because they received shares when they sold their businesses to us. *None*, however, gets the upside of ownership without risking the downside. Our directors and managers stand in your shoes.

We continue to have a wonderful group at headquarters. This team efficiently deals with a multitude of SEC and other regulatory requirements, files a 32,700-page Federal income tax return, oversees the filing of 3,935 state tax returns, responds to countless shareholder and media inquiries, gets out the annual report, prepares for the country's largest annual meeting, coordinates the Board's activities, fact-checks this letter – and the list goes on and on.

They handle all of these business tasks cheerfully and with unbelievable efficiency, making my life easy and pleasant. Their efforts go beyond activities strictly related to Berkshire: Last year, for example, they dealt with the 40 universities (selected from 200 applicants) who sent students to Omaha for a Q&A day with me. They also handle all kinds of requests that I receive, arrange my travel, and even get me hamburgers and French fries (smothered in Heinz ketchup, of course) for lunch. In addition, they cheerfully pitch in to help at the annual meeting in whatever way they are needed. They are proud to work for Berkshire, and I am proud of them.

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I've saved the best for last. Early in 2018, Berkshire's board elected Ajit Jain and Greg Abel as directors of Berkshire and also designated each as Vice Chairman. Ajit is now responsible for insurance operations, and Greg oversees the rest of our businesses. Charlie and I will focus on investments and capital allocation.

You and I are lucky to have Ajit and Greg working for us. Each has been with Berkshire for decades, and Berkshire's blood flows through their veins. The character of each man matches his talents. And that says it all.

Come to Omaha – the cradle of capitalism – on May 5th and meet the Berkshire Bunch. All of us look forward to your visit.

February 24, 2018

Warren E. Buffett
Chairman of the Board

Morning Session - 2018 Meeting

1. Buffett opens a box of peanut brittle for Munger

WARREN BUFFETT: Good morning.

VOICE: Warren and Charlie, we love you! (Applause)

WARREN BUFFETT: I'm Warren. He's Charlie. Charlie does most things better than I do, but - (laughter) - you know, this one's a little tough. Charlie, maybe you can chew on that a while. OK. (Laughter)

At the formal meeting that will begin at 3:45, we will elect 14 directors. Charlie and I are two of them, and I would like to introduce the other 12. I'll do it in alphabetical order.

If they will stand as I announce their name. Withhold your applause. May be hard to do, but give it your best. And when we get all through, then you can let loose, but -

We'll do this alphabetically beginning with Greg Abel, if you'll stand and stay standing. Howard Buffett, Steve Burke, Sue Decker, Bill Gates, Sandy Gottesman, Charlotte Guyman, Ajit Jain, Tom Murphy, Ron Olson, Walter Scott, and Meryl Witmer. (Applause)

2. Accounting-rule net loss "not representative" of the business

WARREN BUFFETT: Let's see. This morning, we posted both our earnings and our 10-Q. And if we can put up slide one, you can take a look at what was reported.

And as I warned you in the annual report, a new accounting rule was introduced at the beginning of this year. And it provides that our equity securities, whether we sell them or not, are marked to market every day.

So we can have a gain or loss of a couple billion dollars in our equity securities portfolio, and that day, according to the accounting principles now in effect, which are a change, will be recorded as making a couple billion dollars that day or losing a couple billion.

And I told you that would produce some very unusual effects from quarter to quarter. And it further explains why I like to release our earnings early Saturday morning and - as well as the 10-Q - to give people a chance to read through the explanation.

Because if you just were handed this with a TV monitor, you know, at 3:30 in the afternoon or whatever it might be, you would report the net earnings figure, understandably, very quickly. And it really is not representative of what's going on in the business at all.

So, if you look at the figure of operating earnings, which is what we look at, we actually earned a record amount for any quarter we've ever had.

And that includes no realized gains or losses on securities, or on the few remaining derivatives we have.

You might leave that slide up there just a little longer. Maybe it is up -

The insurance underwriting - GEICO had a quite a good-sized turnaround in profitability and a good gain, although not as big a gain as last year, which was a record in terms of policies in force and, really, throughout most of our businesses.

And the details are in the 10-Q, which is up on our website now.

And as you can see, the railroad was up significantly, and we had - most of our businesses tended to be up.

Now we were aided in that, in a material way, by the reduction in the federal income tax rate from 35 percent to 21 percent. Our businesses were up significantly on a pretax basis, but the gain was further enhanced by the change in the income tax rate.

So that pretty well sums up the first quarter. We'll probably get some - may well get some questions on it when we get into the question and answer section.

3. Master class: How to think about investments

WARREN BUFFETT: The questions we'll be getting, we've got the press over here, and then we have the analysts on my left. And of course, we have our partners out in front of me. And we will rotate among you.

And the questions we get, as we go through the next six hours or so, will understandably relate to a lot of current events. You know, you will -

We may get asked, and we don't know the questions, but we may get asked, you know, about Fed policy, or whether we're seeing any inflation, or whether business is speeding up or down, or the threats we may face competitively in our businesses as we go along.

And you - anything goes on the questions, except we won't tell you what we're buying or selling. But it really can be a question sometimes of confusing the forest with the trees.

And I would like to just spend just a couple of minutes giving you a little perspective on how you might think about investments, as opposed to the tendency to focus on what's happening today, or even this minute, as you go through.

And to help me in doing that, I'd like to go back through a little personal history.

And we will start - I have here a New York Times of March 12th, 1942. I'm a little behind on my reading. (Laughter)

And if you go back to that time, that - it was about, what? Just about three months since we got involved in a war which we were losing at that point.

The newspaper headlines were filled with bad news from the Pacific. And I've taken just a couple of the headlines from the days preceding March 11th, which I'll explain was kind of a momentous day for me.

And so you can see these headlines. We've got slide two up there, I believe. And we were in trouble, big trouble, in the Pacific. It was only going to be a couple months later that the Philippines fell, but we were getting bad news.

We might go to slide three for March 9th. Hope you can read the headlines, anyway. The price of the paper's three cents, incidentally.

The - and let's see, we've got March 10th up there, as slide - I - when I get to where there's advanced technology of slides, I want to make sure I'm showing you the same thing that I'm seeing in front of me.

So anyway, on March 10th, when again, the news was bad: "Foe Clearing Path to Australia." And it was like it - the stock market had been reflecting this.

And I'd been watching a stock called Cities Service preferred stock, which had sold at $84 the previous year. It had sold at $55 the year - early in January, two months earlier - and now it was down to $40 on March 10th.

So that night, despite these headlines, I said to my dad - I said, "I think I'd like to pull the trigger, and I'd like you to buy me three shares of Cities Service preferred" the next day.

And that was all I had. I mean, that was my capital accumulated over the previous five years or thereabouts. And so my dad, the next morning, bought three shares.

Well, let's take a look at what happened the next day. Let's go to the next slide, please. And it was not a good day. The stock market, the Dow Jones Industrials, broke 100 on the downside.

Now they were down 2.28 percent as you see, but that was the equivalent of about a 500-point drop now. So I'm in school wondering what is going on, of course.

Incidentally, you'll see on the left side of the chart, the New York Times put the Dow Jones Industrial Average below all the averages they calculated. They - they had their own averages, which have since disappeared, but the Dow Jones has continued.

So the next day - we can go to the next slide - and you will see what happened. The stock that was at 39 - my dad bought my stock right away in the morning because I'd asked him to, my three shares. And so I paid the high for the day.

That 38 1/4 was my tick, which was the high for the day. And by the end of the day, it was down to 37, which was really kind of characteristic of my timing in stocks that was going to appear in future years. (Laughs)

But it was on the - what was then called the New York Curb Exchange, then became the American Stock Exchange.

But things, even though the war, until the Battle of Midway, looked very bad and - and if you'll turn to the next slide, please - you'll see that the stock did rather well. I mean, you can see where I bought at 38 1/4.

And then the stock went on, actually, to eventually be called by the Cities Service Company for over $200 a share. But this is not a happy story because, if you go to the next page, you will see that I - (Laughter)

Well, as they always say, "It seemed like a good idea at the time," you know. (Laughter)

So I sold - I made $5 on it. It was, again, typical - (laughs) - of my behavior. But when you watch it go down to 27, you know, it looked pretty good to get that profit.

Well, what's the point of all this? Well, we can leave behind the Cities Service story, and I would like you to, again, imagine yourself back on March 11th of 1942.

And as I say, things were looking bad in the European theater as well as what was going on in the Pacific. But everybody in this country knew America was going to win the war. I mean, it was, you know, we'd gotten blindsided, but we were going to win the war. And we knew that the American system had been working well since 1776.

So, if you'll turn to the next slide, I'd like you to imagine that at that time you had invested $10,000. And you put that money in an index fund - we didn't have index funds then - but you, in effect, bought the S&P 500.

Now I would like you to think a while, and don't - do not change the slide here for a minute.

I'd like you to think about how much that $10,000 would now be worth, if you just had one basic premise, just like in buying a farm you buy it to hold throughout your lifetime and depend - and you look to the output of the farm to determine whether you made a wise investment.

You look to the output of the apartment house to decide whether you made a wise investment if you buy an apartment - small apartment house - to hold for your life.

And let's say, instead, you decided to put the $10,000 in and hold a piece of American business, and never look another stock quote, never listen to another person give you advice or anything of this sort.

I want you to think how much money you might have now. And now that you've got a number in your head, let's go to the next slide, and we'll get the answer.

You'd have $51 million. And you wouldn't have had to do anything. You wouldn't have to understand accounting. You wouldn't have to look at your quotations every day like I did that first day - (laughs) - when I'd already lost $3.75 by the time I came home from school.

All you had to do was figure that America was going to do well over time, that we would overcome the current difficulties, and that if America did well, American business would do well.

You didn't have to pick out winning stocks. You didn't have to pick out a winning time or anything of the sort. You basically just had to make one investment decision in your life.

And that wasn't the only time to do it. I mean, I can go back and pick other times that would work out to even greater gains.

But as you listen to the questions and answers we give today, just remember that the overriding question is, "How is American business going to do over your investing lifetime?"

I would like to make one other comment because it's a little bit interesting. Let's say you'd taken that $10,000 and you'd listened to the prophets of doom and gloom around you, and you'll get that constantly throughout your life. And instead, you'd used the $10,000 to buy gold.

Now for your $10,000 you would have been able to buy about 300 ounces of gold. And while the businesses were reinvesting in more plants, and new inventions came along, you would go down every year in your - look in your safe deposit box - and you'd have your 300 ounces of gold.

And you could look at it, and you could fondle it, and you could - I mean, whatever you wanted to do with it. (Laughter)

But it didn't produce anything. It was never going to produce anything.

And what would you have today? You would have 300 ounces of gold just like you had in March of 1942, and it would be worth approximately $400,000.

So if you decided to go with a nonproductive asset - gold - instead of a productive asset, which actually was earning more money and reinvesting and paying dividends and maybe purchasing

stock - whatever it might be - you would now have over 100 times the value of what you would have had with a nonproductive asset.

In other words, for every dollar you had made in American business, you'd have less than a penny by - of gain - by buying in this store of value, which people tell you to run to every time you get scared by the headlines or something of the sort.

It's just remarkable to me that we have operated in this country with the greatest tailwind at our back that you can imagine. It's an investor's haven - I mean, you can't really fail at it unless you buy the wrong stock or just get excited at the wrong time.

But if you'd - if you owned a cross-section of America and you put your money in consistently over the years, there's just - there's no comparison against owning something that's going to produce nothing.

And there - frankly - there's no comparison with trying to jump in and out of stocks and pay investment advisors.

If you'd followed my advice, incidentally - or this retrospective advice - which is always so easy to give - (Laughs)

If you'd follow that, of course you - there's one problem. Your friendly stock broker would have starved to death.

I mean, you know, and you could have gone to the funeral to atone for their fate. But the truth is, you would have been better off doing this than a very, very, very high percentage of investment professionals have done, or people have done that are active that - it's very hard to move around successfully and beat, really, what can be done with a very relaxed philosophy.

And you do not have to be - you do not have to know as much about accounting or stock market terminology or whatever else it may be, or what the Fed is going to do next time and whether it's going to raise three times or four times or two times.

None of that counts at all, really, in a lifetime of investing. What counts is having a philosophy that you've - that you stick with, that you understand why you're in it, and then you forget about doing things that you don't know how to do.

4. Nothing's changed - Buffett's still "semi-retired"

WARREN BUFFETT: So with all those happy words, we will move on and start the questioning, and we'll start with Carol.

CAROL LOOMIS: Good morning. In choosing a first question to ask each year, I look for a question that is definitely Berkshire-related and is timely. And this question seemed to fill the bill. The question came from William Anderson (PH) of Salem, Oregon.

And he said, "Mr. Buffett, you have previously said that there are two parts to your job, overseeing the managers and capital allocation. Mr. [Greg] Abel and Mr. [Ajit] Jain now oversee the managers, which leaves you with capital allocation.

"However, you share capital allocation with Ted Weschler and Todd Combs. Question. Does all that mean you are semi-retired? Or if not, please explain." (Laughter)

WARREN BUFFETT: I've been semi-retired for decades. (Laughter)

The answer is that I was probably - well, it's hard to break down the percentage of the time that I was involved in but now - the jobs that are now done by Ajit and Greg, and in the case of investing, the sub part of the job that is done by Ted and Todd.

Ted and Todd each manage 12- or $13 billion, so in total, that's 25 billion. And we have in equities 170-some billion, probably now, and 20 billion in longer-term bonds, and another hundred billion in cash and short-term.

So they're managing 20 - 25 and doing a very good job. And I still have the responsibility, basically, for the other 300 billion. So - (Laughter and applause)

I think Charlie will tell you - in fact, I'd like him to comment - nothing's really changed that much. We've got - clearly we've got two people in Ajit and Greg that are smarter, more energetic, just bring more to the job every day.

But they don't bring too much, because the culture is that our managers are running their business. But there's a lot - there's a good bit to oversee. So they do a superb job.

And Ted and Todd not only do a great job with the 12 or 13 billion each - they started with a couple billion each - not that it's all been the growth of the 2 billion - but they also do - have done a number of things for Berkshire that they do it cheerfully, but more important, very skillfully.

So there's just - there's one thing after another that I will have them looking into or working on. And sometimes I steal their ideas and -

But I think, actually, semi-retired is probably - catches me at my most active point. I think if - (laughter) - your questioner's got a good point.

OK, Charlie?

CHARLIE MUNGER: Well, I've watched Warren for a long time, and he sits around reading most of the time and thinking. And every once in a while he talks on the phone or talks to somebody. I can't see any great difference. A lot of people - (Laughter)

Part of the Berkshire secret is that when there's nothing to do, Warren is very good at doing nothing. (Laughter)

WARREN BUFFETT: I'm still looking forward to being a mattress tester. (Laughter)

5. Precision Castparts is "a very good business"

WARREN BUFFETT: OK, Jonathan Brandt.

JONATHAN BRANDT: Hi Warren. Hi Charlie. Given the growth in airplane build rates, it seems surprising that Precision Castparts isn't doing better on the top or bottom line.

I understand the issue with a bumpy transition from old to new programs, but I've also heard from industry sources that Precision's market position is not as strong as it used to be amid intensifying competition and some technological disruption.

What does Precision need to do to solidify and strengthen its preeminent position with its aerospace customers so that it can deliver the growth you expected when Berkshire acquired it?

WARREN BUFFETT: Yeah -

JONATHAN BRANDT: More generally, two years after the acquisition, what is your outlook for that business?

WARREN BUFFETT: Give me the last part again. The outlook.

JONATHAN BRANDT: More generally, two years after the acquisition, what is your updated outlook for that business longer term?

WARREN BUFFETT: Oh, longer term, I think - and in the reasonably shorter term - it's a very good business. I mean, you were -

You mentioned aircraft, but we get into other industries. But certainly aircraft's the most important. You have manufacturers that are very dependent on both the quality of the parts and the promptness of delivery.

You do not want to have an aircraft with 75- or 100- or maybe $200 million and be waiting for a part or something of the sort. So it's -

Reliability is, both in terms of quality and delivery times and all of that sort of thing, is enormously important. And we get contracts that extend out many years. And sometimes we - I mean, we will get them well before the plane even starts in production. So there's very long lead times.

And we have found in the last year - found it earlier, but I know of some specific cases in the last year - where other suppliers have failed in their deliveries and then the manufacturers come to us and say, "We would like you to help us out."

And we say, "Well, we'd be glad to help you out, but we'd like about a five-year contract, if we're going to do it because we're just not going to make up for these other guys' shortfalls periodically." But that sort of thing has a very long lead time.

The business is a very good business. One thing you will see their earnings charged with is about $400 million - little over $400 million a year - of intangible - nondeductible in that case - amortization of goodwill, which is really - is not an economic cost in my view.

We have a significant amount of that through Berkshire, but by far, the largest amount is related to the Precision acquisition. So whatever you see, you can add about 400 million that in my view is not an economic expense, but the accountants would argue otherwise. But it's our money, so we'll take my view. The - (Laughter)

Mark Donegan, who runs that operation, is incredible, and he has been not only - he's a fabulous manager. I wouldn't have bought it without him in charge. He also has been very helpful to us in other areas, and he loves to do it. So you can't beat him, both as a manager in his own operation, but with his devotion to really doing everything that will help Berkshire.

It was - it's a very good acquisition with very long tails to the products that are being developed.

Charlie?

CHARLIE MUNGER: Well, yeah, I think we'd buy another one just like it tomorrow if we had the chance.

WARREN BUFFETT: Yeah, that's the answer. (Laughter)

Man of few words, but he gets the point. (Laughter)

6. Trade benefits are huge, so U.S. and China won't do something "foolish"

WARREN BUFFETT: OK, now we will go to the shareholder in Station 1. I believe that's probably up here to my right.

AUDIENCE MEMBER: Hello. This is Chao (PH) from Wuxi, China, (Inaudible) Capital. I've been to the meeting for 12 years. Wish you and Charlie good health, so we could see you both from meeting for 12 more years.

WARREN BUFFETT: Thank you. (Applause)

AUDIENCE MEMBER: Quick question. We know both you and China delegations - U.S. and China delegations - are in China for intense discussion, also called a trade war.

Let's go one step beyond the trade war. Do you think there's a win-win situation for both countries or the world is just too small for both to win and we have to revisit your 1942 chart again? Thank you.

WARREN BUFFETT: Thank you. I'd like to just mention one thing. In August, I'm going to be 88, and that will be the eighth month of the year, and it's a year that ends with an eight.

And as you and I both know, eight is a very lucky number in China. So if you find anything over there for me, this is the time we should be acquiring something. All those eights.

AUDIENCE MEMBER: Will do. (Buffett laughs)

WARREN BUFFETT: The United States and China are going to be the two superpowers of the world, economically and in other ways, for a long, long, long time.

We have a lot of common interests, and like any two big economic entities, there are times when there'll be tensions.

But it is a win-win situation when the world trades, basically. And China and the U.S. are the two big factors in that, but there's plenty of other citizens of the world that are involved in how this comes out. And there is no question -

The nice thing about in this country I think is that both Democrats and Republicans basically, on balance, believe in the benefits of free trade.

And we will have disagreements with each other. We'll have disagreements with other countries on trade.

But it's just too big and too obvious for - that the benefits are huge, and the world's dependent on it in a major way for its progress, that two intelligent countries will do something extremely foolish.

We both may do things that are mildly foolish from time to time, and there is some give and take, obviously, involved.

But U.S. exports in 1970 and U.S. imports in 1970 were both about 5 percent of GDP. I mean, here we we were, selling 5 percent of our GDP and buying up 5 percent of our GDP, basically.

Now people think we don't export a lot of things. Our exports are 11 and a fraction percent of GDP. They've more than doubled as a share of this rising GDP. But the imports are about 14 1/2 percent, so there's a gap of three percent or thereabouts.

And I would not like that gap to get too wide. But when you think about it, it's really not the worst thing in the world to have somebody send you a lot of goods that you want and hand them little pieces of paper.

I mean, because the balancing item is, if you have a surplus or deficit in your trade, you're going to have a surplus in investment.

And so the world is getting more claim checks on the United States, and they - to some extent they buy our government securities, they can buy businesses.

And over time, you don't want the gap to get to be too wide because the amount of claim checks you are giving out to the rest of the world could get a little unpleasant under some circumstances.

But we've done remarkably well with trade. China's done remarkably well with trade. The countries of the world have done remarkably well with trade. So it is a win-win situation.

And the only problem gets to be when one side or the other may want to win a little bit too much, and then you have a certain amount of tension.

But we will not sacrifice - the world, I mean - will not sacrifice world prosperity based on differences that arise in trade.

Charlie?

CHARLIE MUNGER: Yeah, well I think that both countries have been advancing. And of course China is advancing faster economically, because it started from a lower base and they've had a little more virtue than practically anybody else in the world in having a high savings rate.

And of course, a country that was mired in poverty for a long, long time, and that assimilates the advanced technology of the world, and has a big savings rate, is going to advance faster than some very mature company like Britain or the United States. And that's what's happened.

But I think we're getting along fine, and I'm very optimistic that both nations will be smart enough to realize that the last thing they should do is have any ill will for the other.

7. Deals don't depend on Buffett: "The reputation belongs to Berkshire now"

WARREN BUFFETT: OK, Becky Quick. (Applause)

BECKY QUICK: This question comes from Kirk Thompson.

He says, “Warren, in this year’s annual letter to shareholders, you referenced both cheap debt and a willingness by other companies to leverage themselves as competitive examples as to why it’s hard to get more acquisition deals done.

“It seems like the trust in - and prestige of doing a deal with Warren Buffett and Charlie Munger allow Berkshire to get a hometown discount and beat out other firms that might pay a little more to a prospective seller.

“Have you given thought to having other Berkshire managers have more public exposure, so future generations of successful business owners continue to bring deal opportunities to Berkshire like they have in prior decades?”

WARREN BUFFETT: Yeah, that sort of reminds me of - who was it? Tony O’Reilly remarked one time about the responsibility of a CEO.

That the very first job of the CEO was to search through his organization and find that person who had the initiative and the brains, the determination, all of the qualities to be his logical successor, and then fire the guy. (Laughter)

The - there’s no question. I think the reputation of Berkshire as being a very good home for companies - particularly private companies - but a good home for companies, I don’t think that reputation is dependent on me or Charlie.

It may take a little, you know, there’ll be a little testing period for whoever takes over, in that respect. But, you know, basically we’ve got the money to do the deals. We’ll have the money to do the deals subsequently. People can see how our subsidiaries operate in the future.

And the truth is that, I think some of the other executives are going - are getting better known. But there will be a - you know, I’ll tell you this, if things get bad enough, you don’t have to worry. They’ll be calling us no matter what. (Laughs)

So I do not worry about the so-called “deal flow,” which is a term I hate. But I don’t think there’s - I think that’s dependent on Berkshire and not dependent on me.

And, you know, as I’ve mentioned, my phone isn’t ringing off the hook with good deals. So apparently this big winning personality or something is not delivering for you. (Laughter)

So it may be the next person will be even more - get even more calls.

Berkshire - the reputation belongs to Berkshire now. And we are, for somebody that cares about a business that they and their parents and maybe their grandparents lovingly built over decades - if they care about where that business ends up being after, for one reason or another, they don't want to keep it or can't keep it in the family, we absolutely are the first call.

And we will continue to be the first call, whether Charlie or I answer the phone or somebody else does.

Charlie?

CHARLIE MUNGER: Well, a lot of the subsidiaries have for a long time already been making all kinds of acquisitions with people they know and we don't. So it's already happening. And, in fact, it's happening more there than it is at headquarters, so -

WARREN BUFFETT: Don't tell them, Charlie.

CHARLIE MUNGER: You're getting your wish. (Laughter)

And it is weird that about 99 percent of the public companies that change hands, in terms of control, change hands in a sort of auction presided over by an investment banker.

And the people that buy are usually just leverage it to the gills, and when it starts doing a little better, they re-leverage it.

And that money is coming out of the charitable endowments and pension plans who are making these highly-leveraged investments in all these companies changing hands at very high prices. Sooner or later, this is not going to work perfectly.

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: And it's going to have an unpleasant episode. And I think we'll be around and in good shape at that time.

WARREN BUFFETT: There was one fellow who came to me many years ago. And he had a wonderful business. And he had been worried because he had seen a friend of his die.

And the problems that arose later when the managers, to some extent, tried to take advantage of the widow. And it became a disaster.

So he said he thought about it a lot the previous year. And he decided he didn't want to sell the business to a competitor, who would be a logical buyer, because they would fire all of his people. And the CFO that would remain, and, you know, all up and down the line, they'd all be the acquirer's people. He didn't want to do that to his people.

And then he thought, and he didn't want to sell it to a private equity firm, because he thought they'd leverage it up. He never liked to leverage that much, and then they'd just resell it later on to somebody, so it would be totally out of control of what he wanted to do.

And he wanted to keep running it himself. So he said, "Warren," he said, "It isn't that you're such a great guy," he says, "It's you're the only one left." So - (Laughter) -

Berkshire will continue to be the only one left in many cases.

8. "We don't know what we're doing" in cyber insurance

WARREN BUFFETT: Gary Ransom.

GARY RANSOM: Good morning. Warren, in your annual letter, you wrote about a potential for a $400 billion natural catastrophe event, something out in the tail of the loss distribution. I can think of another risk that could have a similar order of magnitude, and that would be cyberrisk.

I'm sure all your managers have taken steps against that potential, but in - out in the tail of the cyberrisk distribution, it could hit a lot of industries, a lot of your companies. So how do you think about and prepare for the big one in cyber?

WARREN BUFFETT: Yeah. Well, I include, incidentally, in my - that part I wrote in the annual report where I said that roughly - nobody knows the answer on this. I mean, I could stick down two, and somebody else much smarter in insurance would stick down a different figure.

But I think it's about a 2 percent risk of what I call a 400 billion super-cat of all time. And -

But cyber is in that equation. I mean, that's not just earthquakes and that sort of thing. And frankly, I don't think we, or anybody else, really knows what they're doing when writing cyber. I mean, we - it is just very, very, very early in the game.

And we don't know what the interpretations of the policies, necessarily, will be. We don't know the degree to which they'll be what - there'll be correlated incidents, which we don't really think are correlated now or haven't had the imagination to come up with.

We know that every year when I go and hear these people from the CIA or wherever it may be, they tell me that the offense is ahead of the defense, and will continue that way.

And I can dream of a lot of cyber incidents, which I'm not going to spell out here, because people that have twisted minds may be - they've probably got more - way more - ideas than I've got, but I don't believe in feeding them any.

But it's a business where we don't - we have a pretty good idea of the probabilities of a quake in California, or the probabilities of a three or a four hurricane hitting Florida, or whatever it may be.

We don't know what we're doing in cyber, and we try to keep - we don't want to be a pioneer on this. We do some business in that arena in Berkshire Hathaway Specialty.

But if you're doing something for competitive reasons - which I'm OK with - but when I'm doing something where I - that people tell me is a competitive necessity, we are going to try not to have - we don't want to be number one or number two or number three in exposures on it. And I don't - and I am sure we are not in cyber. But I don't -

I think anybody that tells you now that they think they know in some actuarial way, either what general experience is likely to be in the future, or what the worst case would be, I think, is kidding themselves.

And that's one of the reasons that I say that a $400 billion event has a - I think has roughly a 2 percent probability per year of happening.

Cyber's uncharted territory, and it's going to get worse, not better. And then the question is whether, if we have a whole bunch of $25 billion commercial limits out there, whether there's some aggregation that we didn't foresee or that the courts interpret those policies differently, then you know - they are generally going to give the benefit of the doubt to the insured.

So you're right in pointing that out as a very material risk, which didn't exist 10 or 15 years ago and that - and will be much more intense as the years go along.

And all I can tell you, Gary, is that, that's part of my 400 billion and my 2 percent. But if you've got a different guess, it's just as likely that yours is right than mine on that.

Charlie?

CHARLIE MUNGER: Yeah, well, something that's very much like cyberrisk is, you've got computers programmed to do your security trading and your computer goes a little wild from some error.

And that's already happened at least once where somebody just was fine one morning and by the afternoon they were broke because some computer went crazy. We don't have any computers we allot - we allow to do big, automatically trading securities.

I think, generally, Berkshire is less likely than most other places to be careless in some really stupid way.

WARREN BUFFETT: I do think if there's a mega-cat from cyber, and let's say it hits 400 billion, I do not think we'll have more than a 3 percent -

CHARLIE MUNGER: No, no -

WARREN BUFFETT: - exposure.

CHARLIE MUNGER: No, no, we'll get our share.

WARREN BUFFETT: And but it, you know, it will destroy - what will destroy a lot of companies - that we will actually, if we had a $12 billion loss, I would think, except for the new accounting rule, but I believe from what I call operating earnings, we would probably still have a reasonable profit that year.

I mean, we are in a different position than any insurance company I know of in the world, in our ability to handle the really - really super, super-cat.

OK, shareholder from station 2.

CHARLIE MUNGER: May I point out that the main shareholder to my right here has almost all his net worth in one security. That's likely to be more carefully managed than some public place with people just passing through.

WARREN BUFFETT: Yeah, you don't want a guy that's 64 and is going to retire at 65. And a lot of decisions you really don't want him or her to be making. (Laughter)

9. Capital allocation in the public sector

WARREN BUFFETT: Station 2?

AUDIENCE MEMBER: Wally Obermeyer, Obermeyer Wood Investment Counsel, Aspen, Colorado.

Warren and Charlie, you two have demonstrated great talent in private sector capital allocation and shown the world the power of excellence in this area.

Do you think there is a similar opportunity for outstanding capital allocation in the public sector, at both the state and federal levels? And if so, what approach and/or changes would you suggest for society to achieve these benefits?

CHARLIE MUNGER: That's too tough. Why don't we go on to a new question? (Laughter)

WARREN BUFFETT: I'm afraid I have nothing to add. (Laughter and applause)

I don't mean to be unfair to somebody asking a question, but it - you know, it is unfortunately an entirely different game. And the electorate - the motivations are different, the terms, the reward system is different.

I mean, everything is different. And if we knew how to solve that, we wouldn't - we can't add anything to what you had in your view. I'm sorry on that.

10. Wells Fargo will emerge stronger after its "big mistake"

WARREN BUFFETT: OK, Andrew?

ANDREW ROSS SORKIN: Hi Warren. This question comes from Paul Spieker (PH) of Chicago, Illinois. I believe he may be here today.

He writes, "One of your more famous and perhaps most insightful quotes goes as follows:

"'Should you find yourself in a chronically leaking boat, energy devoted to changing vessels is likely to be more productive than energy devoted to patching leaks.'

"In light of the unauthorized accounting scandal at Wells Fargo, of its admission that it charged customers for duplicate auto insurance, of its admissions that it wrongly fined mortgage holders in relation to missing deadlines caused by delays that were its own fault, of its admission that it charged some customers improper fees to lock in mortgage interest rates, of the sanction placed upon it by the Federal Reserve prohibiting it from growing its balance sheet, and of the more than recent $1 billion penalty leveled by federal regulators for the aforementioned misbehavior, if Wells Fargo company is a chronically leaking boat, at what magnitude of leakage would Berkshire consider changing vessels?"

WARREN BUFFETT: Yeah, well, Wells Fargo (Applause) -

Wells Fargo is a company that proved the efficacy of incentives, and it's just that they had the wrong incentives. And that was bad.

But then they committed a much greater error - and I don't know exactly how or who did it or when, but - ignoring the fact that they had a faulty incentive system which was incenting people to do things that were kind of crazy, like opening nonexistent accounts, et cetera.

And, you know, that is a cardinal sin at Berkshire. We know people are doing something wrong, right as we sit here, at Berkshire.

You can't have 377,000 employees and expect that everyone is behaving like Ben Franklin or something out there. They - we - I don't know whether there are ten things being done wrong as we speak, or 20, or 50.

The important thing is, we don't want to incent any of that if we can avoid it, and if we find - when we find it's going on, we have to do something about it. And that is absolutely the key to it.

And Wells Fargo didn't do it, but Salomon didn't do it. And the truth is, we've made a couple of our greatest investments where people have made similar errors.

We bought our American Express stock - that was the best investment I ever made in my partnership years - we bought our American Express stock in 1964 because somebody was incented to do the wrong thing in something called the American Express Field Warehousing Company. We bought -

A very substantial amount of GEICO we bought that became half the - half of GEICO, for $40 million because somebody was incented to meet Wall Street estimates of earnings and growth. And they didn't focus on having the proper reserves.

And that caused a lot of pain at American Express in 1964. It caused a lot of pain at GEICO in 1976. It caused a layoff of a significant portion of the workforce, all kinds of things. But they cleaned it up.

They cleaned it up, and look where American Express has moved since that time. Look at where GEICO has moved since that time.

So the fact that you are going to have problems at some very large institutions is not unique. In fact, almost every bank has - all the big banks have had troubles of one sort or another.

And I see no reason why Wells Fargo as a company, from both an investment standpoint and a moral standpoint going forward, is in any way inferior to the other big banks with which it competes on -

It - they made a big mistake. It cost - I mean, we still got - I mean we have a large, unrealized gain in it, but that doesn't have anything to do with our decision-making. But the -

I like it as an investment. I like Tim Sloan as a manager, you know, and he is correcting mistakes made by other people.

I tried to correct mistakes at Salomon, and I had terrific help from Deryck Maughan as well as a number of the people at Munger, Tolles. And I mean, that is going to happen. You try to minimize it.

Charlie says that, "An ounce of prevention isn't worth a pound of cure, it's worth about a ton of cure." And we ought to jump on everything. He's pushed me all my life to make sure that I attack unpleasant problems that surface. And that's sometimes not easy to do when everything else is going fine.

And at Wells, they clearly - and I don't know exactly what - but they did what people at every organization have sometimes done, but it got accentuated to an extreme point.

But I see no reason to think that Wells Fargo, going forward, is other than a very, very large, well-run bank that had an episode in its history it wished it didn't have.

But GEICO came out stronger, American Express came out stronger. The question is what you do when you find the problems.

Charlie?

CHARLIE MUNGER: Well, I agree with that. I think Wells Fargo is going to be better going forward than it would have been if these leaks had never been discovered.

WARREN BUFFETT: Or happened.

CHARLIE MUNGER: Yeah, so I think it's - it - but I think Harvey Weinstein has done a lot for improving behavior, too. (Laughter)

It was clearly an error, and they're acutely aware of it and acutely embarrassed, and they don't want to have it happen again.

You know, if I had to say which bank is more likely to behave the best in the future, it might be Wells Fargo, of all of them.

WARREN BUFFETT: This New York Times that I have here from March 12th, 1942, if you go toward the back of it, in the classified section, you have one big section that says, "Help Wanted Male," and another one that says, "Help Wanted Female."

You know, was the New York Times doing the right thing in those days? You know, I think the New York Times is a terrific paper. But people make mistakes.

And you know, the idea of classifying between - taking ads and saying, "Well, we'll take them and divide them up between men and women, what jobs we think are appropriate," or that the advertiser thinks is appropriate.

We do a lot of dumb things in this world. And GEICO, as I say, in the early 1970s, they just ignored - and you can do it in the setting of proper reserves, which mean they charged the wrong price to new customers because they thought their losses were less than they were.

And I'm sure some of that may have been a desire to please Wall Street or just because they didn't want to face how things were going. But it came out incredibly stronger. You know, and now it's got 13 percent of the households in the United States insured.

And it came out with an attention to reserves and that sort of thing that was heightened by the difficulties that they'd found themselves in where they almost went bankrupt. Forty-two -

CHARLIE MUNGER: It was a lot more stupid than Wells Fargo. It was really stupid what they did way back, right?

WARREN BUFFETT: Yeah. They had the world by the tail, and then they quit looking at the reserve development. But - and American Express was just picking up a few dollars by having the field warehousing company in 1963. And, you know, they were worried whether it was going to sink the company.

And when some guy named Tino De Angelis in, I think it was Bayonne, New Jersey -

In fact, I went to the annual meeting in 1964 of American Express after the scandal developed, and somebody asked if the auditor would step forward.

And the auditor from one of the big firms, which I won't mention, came up to the microphone, and somebody said, "How much did we pay you last year?"

And the auditor gave his answer, and then the questioner said, "Well, how much extra would you have charged us to go over to Bayonne, which was ten miles away, and check whether there's any oil in the tanks?" (Laughs)

So it - you know, here was something - a tiny little operation - some guy was calling him from a bar in Bayonne and telling him this phony stuff was going on, and they didn't want to hear it. They shut their ears to it.

And then what emerged was one great company after this kind of, what they thought was a near-death experience. So it's - we're going to make mistakes.

I will guarantee you that we will get some unpleasant news at Berkshire. I don't know what it'll be, you know - the most important thing is we do something about it.

And there have been times when I procrastinated, and Charlie has been the one that jabs me into action. And so he's performed a lot of services you don't know about. (Laughter)

11. "I like to think I'll be missed a little bit, but you won't notice it"

WARREN BUFFETT: OK. Gregg, Gregg Warren.

GREGG WARREN: Good morning, Warren. I have a little bit of a follow-up on Becky's question.

At the 2014 annual meeting, as well as this morning, you noted that the power of Berkshire brand and its reputation, as well as the strength of Berkshire's balance sheet, would allow the

company's next managers to replicate many of the advantages that have come with your being the face of the organization, one of which has been an ability to extract high rents from firms in exchange for a capital infusion and the Buffett seal of approval during times of financial distress.

I buy the argument about the strength of the balance sheet and believe that deals will continue to be done with sellers still lining up to become part of the Berkshire family, especially if the company's next managers are allowed to keep a ton of cash on hand.

But I'm not entirely convinced that they'll be able to garner the same 8, 9, 10 percent coupons, as well as other add-ons, that you've been able to extract from firms like Goldman Sachs and Bank of America in times of distress.

I'd expect those rents to be at least a few percentage points lower once you're no longer running the show. That is, until those managers build up a reputation to warrant higher returns. Am I right to think about it that way?

WARREN BUFFETT: I'm not sure. The - when we, in two - you mentioned Goldman Sachs, and we also did with General Electric, in September or early October of 2008. We probably could actually have extracted better terms.

You know, I think it might have been counterproductive in the end, but I was - we would have done better, incidentally, financially, if we'd really waited until the panic developed further - because I didn't know how far it would develop - but we could have made a lot better purchases three or four or five months later than we did at that time.

And we also did not want to do something that looked to be so high as to in - make the transaction disadvantageous to Goldman or to GE.

They were going to take the terms we offered, but we actually didn't push it to the limit, because there really wasn't anybody else around.

I think - and we're working on something right now that probably won't happen. It's not huge.

But actually, in this case, both Todd [Combs] and Ted [Weschler] have brought deals to me. One of them brought something to me, and, you know, he was thinking in the same terms that I got - was thinking about - and he's the one that returned the call that he had received about a transaction.

And I do not think the party on the other side is going to care about the fact that they had him on the phone rather than me on the phone. I -

You know, there may - there could be just a little bit at certain times in history. But, you know, we will continue to have our standards of what we think money is worth at any given time. And Ted and Todd think just as well about that as I do.

And there will be times, very occasionally, when our phone will ring a lot. And I don't think they'll hang up because I don't answer it, if they need the money.

Charlie?

CHARLIE MUNGER: Well. The times he's referring to, a lot of them, were like the worst in 50 years. So that's a really rare kind of an occurrence. And we didn't make all that many deals. So I think he's right that it'll be harder for us to make similar deals in the future.

WARREN BUFFETT: Yeah, the problem is the sums involved now, more than the problem of deciding what the proper terms should be. And sometimes we can get what we think is appropriate and sometimes we - most of the time, today, we can't.

But you may see a transaction or two that - not in terms of buying business but in terms of securities - that strike you as perfectly decent ways to invest Berkshire's money.

And they may well have come through Todd or Ted instead of directly to me.

I like to think I'll be missed a little bit, but I - you won't notice it. (Laughter)

12. Buffett talks to Ajit Jain about insurance pricing because it's fun

WARREN BUFFETT: OK, Station 3.

AUDIENCE MEMBER: I'm Todd Lichter (PH) from Boulder, Colorado.

Mr. Buffett, are you still involved in pricing decisions at See's Candies and The Buffalo News? And with what other Berkshire subsidiaries do you take more than a hands-off approach?

WARREN BUFFETT: Yeah, you're correct that at one time I, and for some - for quite a while - both Charlie and I took part in the pricing decisions at See's Candy.

And certainly, for some years, particularly with the question of the survival of The Buffalo News was really in question, I definitely took part in those decisions.

In both cases, we had good managers, but still we wanted to - we thought those decisions were important. But it's been a long, long time - very long time - since we've participated in anything like that.

I can't tell you what the per pound price is for See's Candy, which is because people, and you're invited to join this group, send me free candy from time to time. (Laughter)

And I can't - I really, I can't tell you the prices at The Buffalo News. All I know is it's very, very, very hard to move up prices on advertising, generally. So no, we -

The only thing is, Ajit [Jain] and I talk frequently. And if there's some very big risk, if somebody wants a $5 billion cover on a chemical plant some way excessive loss of over 3 billion or something - we have a certain amount of fun with him deciding on the price in his head. And I decide in my head, and then we compare notes.

It's the kind of risk that you really can't look up in a book and see, actuarially, what it's fairly - the parameters - are fairly likely to be.

I enjoy thinking through the pricing of that, and I particularly enjoy comparing it with Ajit. So the -

These are just oddball situations, but we do that sort of thing, and we've done it for three decades. And it's part of the fun of my job.

The candy prices, if you got to complain about those, you have to go to Charlie. (Laughter)

CHARLIE MUNGER: Well, the answer is, Warren is still doing it and talking to Ajit, and - but that's because Ajit likes it that way.

WARREN BUFFETT: Yep.

CHARLIE MUNGER: We have a very peculiar place where the - where Warren's contact with the various people elsewhere in the organization largely depends on what they want, not what he wants.

WARREN BUFFETT: The CEO of one of our -

CHARLIE MUNGER: It's very unusual, and it's worked beautifully.

WARREN BUFFETT: The CEO of one of our most successful subsidiaries, I may have talked to - unless I saw him here and just said hello - I probably talked to him three times in the last ten years.

And he does remarkably well. (Laughs)

He might have done even better if I hadn't talked to him those three times. (Laughter)

And on the other hand, Ajit and I talk very, very frequently. And he's got the kind of business, A, I do know - I know more about the insurance business than I know about a good many of the other businesses.

And it's interesting. And we are evaluating things that you don't look up in a book, you know. I mean, actuarial talent is not what's important in the things that Ajit talks to me about. It's plenty important throughout our insurance operation.

But in these particular cases, you know, we're making judgments, and his judgment's better than mine. But I like to - I just like to hear about them. They're interesting propositions.

13. Putting business values in income account is "enormously deceptive"

WARREN BUFFETT: OK, Carol.

CAROL LOOMIS: ... shareholder named Jack Ciesielski . He's a well-known accounting expert, who for many years has written "The Accounting Observer."

"Mr. Buffett, in this year's shareholder letter you have harsh words for the new accounting rule that requires companies to use market value accounting for their investment holdings.

"'For analytical purposes,' you said, 'Berkshire's bottom-line will be useless.'

"I'd like to argue with you about that. Shouldn't a company's earnings report cite everything that happened to, and within, a company during an accounting period?

"Shouldn't the income statement be like an objectively written newspaper informing shareholders of what happened under the management for that period, showing what management did to increase shareholder value and how outside forces may have affected the firm?

"If securities increased in value, surely the company and the shareholders are better off. And surely they're worse off if securities decreased in value.

"Those changes are most certainly real. In my opinion, ignoring changes in the way that some companies ignore restructuring costs, is censoring the shareholders' newspaper.

"So my question is, how would you answer what I say?" (Laughter)

WARREN BUFFETT: Well, my answer to the question that asks what my answer would be to what he said - the - I would ask Jack, if we've got $170 billion of partly-owned companies, which we intend to own for decades, and which we expect to become worth more money over time, and where we reflect the market value in our balance sheet, does it make sense to, every quarter, mark those up and down through the income account, when at the same time we own

businesses that have become worth far more money, in most cases, and become, you know, since we bought - you name the company - take GEICO, an extreme case - we bought half the company for $50 million, roughly - do we want to be marking that up every quarter to the value - and having it run through the income account?

That becomes an appraisal process. There's nothing wrong with doing that, in terms of evaluation. But in terms of - and you can call it gain in net asset value or loss in net asset value - that's what a closed-end investment fund, or an open-investment fund would do.

But to run that through an income account - if I looked at our 60 or 70 businesses, or whatever number there might be, and every quarter we marked those to market, we would have, obviously, a great many, in certain cases, where over time we'd have them at 10 times what we paid, but how quarter-by-quarter we should mark those up and run it through the income account, where 99 percent of investors probably look at net income as being meaningful, in terms of what has been produced from operations during the year, I think would be - well, I can say it would be enormously deceptive.

I mean, in the first quarter of this year - you saw the figures earlier - where we had the best what I would call operating earnings in our history, and our securities went - were down six billion, or whatever it was, to keep running that through the income account every day you would say that we might have made on Friday, we probably made 2 1/2 billion dollars. Well, if you have investors and commentators and analysts and everybody else working off those net income numbers and trying to project earnings for quarters, and earnings for future years, to the penny, I think you're doing a great disservice by running those through the income account.

I think it's fine to have marketable securities on the balance sheet - the information available as to their market value - but we have businesses there - if we - we never would do it - but if we were to sell half, we'll say, of the BNSF railroad, we would receive more than we carried - carried for them - we would turn - we could turn it into a marketable security and it would look like we made a ton of money overnight. Or if we were to appraise it, you know, appraise it every three months and write it up and down, A, it could lead to all kinds of manipulation, but B, and it would just lead to the average - to any investor- being totally confused.

I don't want to receive data in that manner and therefore I don't want to send it out in that manner.

Charlie?

CHARLIE MUNGER: Well, to me it's obvious that the change in valuation should be noted, and it is and always has been - it goes right into the net worth figures.

So the questioner doesn't understand his own profession. (Laughter and applause)

I'm not supposed to talk that way but it slips out once in a while. (Laughter)

WARREN BUFFETT: Sometimes he even gives it a push. (Laughter)

14. McLane profits hurt by severe competitive pressure

WARREN BUFFETT: OK. Jonathan.

JONATHAN BRANDT: McLane's core operating margins have dropped about 50 percent from where they've generally been since acquisition [from Walmart].

Could you elaborate on the competitive pressures in the grocery and convenience store distribution business that have caused the deterioration in profits? And do you expect the margin structure of that business to eventually get back to where it was, or is this the new normal?

WARREN BUFFETT: Well, I don't know the answer to the second part about the future, but there's no question that the margins have been squeezed. They were very, very narrow, as you know, they were about one cent on the dollar pretax, and they have been squeezed from that. Payment terms get squeezed.

In some cases we have fairly long-term contracts on that, so it will go on for five years (inaudible).

It's a very, very tight margin business. And the situation is even worse than you portray because within McLane we have a liquor distribution business in a few states and that business has actually increased its earnings moderately, and we've added to that business, so within McLane's figures there are about 70 million or so pretax from the liquor part that have nothing to do with the massive parts you're talking about, in terms of food distribution.

So it's even - the decline is even greater in what you're referring to than you've (inaudible).

That's just become very much more competitive. We have to decide - if you'll look at our competitors, they're not making much money either. And that's capitalism.

I think, you know, there comes a point where the customer says, you know, "I'll only pay X," and you have to walk away.

And there's a great temptation when you're employing - particularly employing thousands of people -and you've built distribution facilities, and all of that sort of thing - take care of them - to meet what you'd like to term as "irrational competition," but that is capitalism.

And - you're right. We took - the earnings went up quite a bit from the time we bought it. And we're still earning more than then. And we've earned a lot of money over time.

But, as I say, a fair amount of that is actually coming from liquor distribution, activities in about four states that we purchased - very well-run.

And - we will do our best to get the margins up. But I would not - I could not tell you - give you a really - your guess is almost as good as mine, or better than mine, maybe, as to what margins will be in that distribution business five years from now.

It's a very essential service. We do $40-some billion. And we move more of the product of all kinds of companies that names are known to you, than anybody else. But - when you get - when you get - Kraft Heinz for that matter, or Philip Morris, or whomever it may be, on one side of the deal, and you get Walmart and some other - 7/11 - on the other side of the deal, sometimes they don't leave you very much room in between.

Charlie?

CHARLIE MUNGER: I think you've described it very well. (Buffett laughs)

15. Health care costs partnership with Amazon and JPMorgan

WARREN BUFFETT: OK. (Laughter) Station 4.

AUDIENCE MEMBER: Good morning, Charlie and Warren. I know that seems a little bit out of order, but I'm a huge fan of yours, Charlie, mostly for your 25 Cognitive Biases.

I'm from Seattle, Washington. I run a one-person digital marketing firm that specializes in Facebook ads and email marketing. I use these a lot. I - your breakdown of Coca-Cola was really, really solid.

And I use that as reference when looking to how to understand the mechanics of my clients' products and how to promote them. So I'm fairly certain that your cognitive biases work for internet-related companies.

Now that you're partnering with Amazon [and JPMorgan] on health care, I'm curious, have you started to understand how to apply these biases to internet-related companies? Or is there another set of tools you use to decide if you understand a business? Because you guys talk a lot about not investing in businesses that you don't understand.

WARREN BUFFETT: Well, health care is a - we don't plan to start health care companies or, necessarily, insurers or anything. We simply have three organizations with leaders that I admire and trust. And we - mutually goes around all three.

And we hope to do something which Charlie correctly would probably say is almost impossible to change in some way a system which is - was taking 5 percent of GDP in 1960, and now is taking close to 18 percent.

And we have a hugely noncompetitive medical cost in American business, relating to any country in the world. The countries that - there were some countries that were around our 5 percent when we were at 5 percent. But we've managed to get to 18 without them going beyond 11 or so.

Literally, in 1960, we were spending $170 per capita on medical costs in the United States. And now we're spending over 10,000.

And, you know, every dollar only has a hundred cents. So there is a cost problem. It is a tapeworm, in terms of American business and its competitiveness.

We don't - we have fewer doctors per capita. We have fewer hospital beds per capita, fewer nurses per capita, than some of the other countries that are well below us.

And you've got a system that is delivering $3.3 trillion - that's almost as much as the federal government raises - it's delivering 3.3 trillion, or some number like that, to millions and millions and millions of people who are involved in the system. And every dollar has a constituency. It's just like politics.

And whether we can find the chief executive, which we're working on now, and which I would expect we would - we would be able to announce before too long - that - but that's a key part of it.

And whether that person will have the imagination and support of people that will enable us to make any kinds of significant improvements in a system which everybody agrees is sort of out of control on cost, but what - but - but they all think it's the other guy's fault, generally - we'll find out. It won't be - it won't be easy.

But it is not a - the motivations are not primarily profit-making. They're - we want to deliver - we want our employees to get better medical service at a lower cost. We're not going to - we're certainly not going to come up with something where we think the service that they receive is inferior to what they're getting now.

But we do think that there may be ways to make a real - significant changes - that could have an effect. And we know that the resistance will be unbelievable.

And if we fail, we've at least tried. And - but they - the idea is not that I will be able to contribute anything to, you know, in some breakthrough moment, by reading a few medical journals or something - (laughs) - changing something that is as embedded as the medical system.

But the idea is that maybe the three organizations, which employ over a million people and which, after we announced it, we had a flood of calls from people that wanted to join in, but

there isn't anything to join into now. But they will if we have - come up with any ideas that are useful.

Whether we can - bring the resources, bring the person. And the CEO is terribly important. And then bring the person, support that person. And somehow, figure out a better way for people to continue to receive better medical care in the United States without that 8 percent - 18 percent - going to 20 or 22 percent, you know, in the lifetime of, you know, our children or something of the sort - because there are only a hundred cents in the dollar.

And we will see what happens. It's - you know - if you were Ajit [Jain], actuarially figuring, it would not - you would not bet on us. But - I think there is some chance we will do something.

There's a chance - nobody can quantify it - that we can do something significant. And we are positioned better than most people to try. And we've certainly got the right partners. So, we will give it a shot and see what happens.

Charlie? (Applause)

CHARLIE MUNGER: There is some precedent for success in this public service activity. If you go back many decades, John B. Rockefeller I, using his own money, made an enormous improvement in American medical care. Perfectly enormous. In fact, there's never been any similar improvement done by any one man since that rivals it.

So Warren, having imitated Rockefeller in one way, is just trying another. And maybe it'll work.

WARREN BUFFETT: Rockefeller, incidentally, lived a very long time. So I actually am trying to imitate him three ways there. (Laughter)

We'll see what happens. But we are - we're making a lot of progress. And I think we'll probably have a CEO within a couple of months. But if we don't have one, then we're not going to pick somebody just because we want to meet any deadline or anything like that. We've got these wonderful partners.

We don't have a partnership agreement among us. Somebody started drawing up one in a legal department and the CEO just put a stop to it.

They - you do have places that have a lot of resources. And while we all have our share of bureaucracy, we can cut through it if we've got something that we really think makes sense.

And we will get the support - we'll get - we'll get a lot of resistance, too. But we will get the support of a lot of American business, if we come up with something that makes sense.

But if it was easy, it would've already been done. There's no question about that.

CHARLIE MUNGER: It's not easy.

WARREN BUFFETT: No. (Laughs) But it should be tried.

16. Weschler and Combs "slightly ahead" of S&P

WARREN BUFFETT: OK. Becky?

BECKY QUICK: This question comes from David Rolfe, who is with Wedgewood Partners, and has been - the company - has been shareholders in Berkshire since 1989. The stock is currently the largest holding in their stocks - 18 stocks.

He asks this question: "Over the past two years, you have listed the individual fund-of-funds performance from Protégé Partners. When will you start showing the annual performance on 25 billion that Ted [Weschler] and Todd [Combs] manage? Can you state if either Ted or Todd has beaten the S&P 500 index over the last five years?

WARREN BUFFETT: Yeah. Both - A, we'll probably never report their individual performance.

But you can be sure that I have an enormous interest in - as does Charlie - in how much we think they contribute to Berkshire. And they have - they've been terrific. They've - they not only have the intellect, and the record, but they are exceptional human beings. And they -

Todd has done a tremendous amount of work, for example, on the medical project.

And - Ted is - I've given him several things, and he's done them better than I could do them.

So the record, since inception - and I'm measuring it - Ted came later than Todd, a year or so later - but the record, since inception, is almost identical - both for the two managers - from their different inception and matching the S&P.

And they've received some incentive compensation, which they only get if they beat the S&P. And as I say, they're just slightly ahead. That really hasn't -

It's been better than I've done, so naturally, I can't criticize it. (Laughs)

They - they were the - they were two very, very, very good choices.

Charlie?

CHARLIE MUNGER: You did report it in a previous year. You just didn't do it this year. And - but now you have your report. (Laughter)

WARREN BUFFETT: I would - the problem that all of us has is size. It's actually - it's harder to run even 12 or $13 billion, frankly, than it is to run a billion. And if you're running a million dollars or something of the sort, it's a whole different game. You'd agree with that, wouldn't you, Charlie?

CHARLIE MUNGER: Of course.

WARREN BUFFETT: Yeah, OK. (Laughter)

Just like any good lawyer, you never ask him a question unless you think you know the answer they're going to give. (Laughter)

17. GEICO is on a good growth and profit track

WARREN BUFFETT: OK. Gary?

GARY RANSOM: My question's on GEICO. Last year, you promised growth and delivered. But along the way, the combined ratio was moving up, and it was the first time it was over a hundred in about 15 years.

Granted, some of that was catastrophes. But even excluding catastrophes, there was something going on in the loss trends that caused you to slow down that growth, at least at the - as we got to the latter part of the year.

And I wondered if you could tell us what was going on. And I did look this morning, too, so it looked like the first quarter has settled down a little bit, but I'd still like to know about the fourth quarter.

WARREN BUFFETT: Yeah, sure. It - the only thing I differ with the question on slightly - when you say it caused us to slow down - we didn't want to slow down the growth. I mean, you're looking at a guy here that has never wanted to slow down the growth of GEICO. The growth did slow down, but it wasn't because we wanted it to.

Our prices that led to the underwriting loss - we actually - we'd have been slightly in the black without the catastrophes.

But, you know, if we hadn't have paid our light bills, we might have been in the black, too. I mean, this "except for" stuff doesn't mean much in insurance as far as I'm concerned.

The - if you'll look at the first quarter - our margins were around 7 percent, which is actually a little more than we aimed for. And I received the unaudited - I mean, the preliminary - figures for April, and they're similar.

So, the underwriting gain is - or margins - are perfectly satisfactory now. And we'd love to get all the growth we can. And we will gain market share this year. And we gained market share - Tony - when Tony [Nicely] took over the place, it was - in 1993 - it was two and a very small fraction percent. And it'll be 13 percent of the - you know - 13 percent of the households in the country now. And we will keep gaining share. We will keep writing profitably - most of the time.

And every now and then, our rates will be slightly - modestly inaccurate - inadequate, I should say. And/or we'll have, maybe, some big losses on hurricanes or something of the sort, or we'll have a [Hurricane] Sandy in New York.

The - but GEICO is a jewel. And it's - you know, it's really a - we've got some others we feel awfully close to similarly about, but it's an incredible company. It has a culture all of its own. It's saving its customers probably 4 or $5 billion a year against which they would - against what they would otherwise be paying, based on the average in auto insurance. And it will be profitable on underwriting a very high percentage of the year. It contributed another $2 billion to float last year.

It is a terrific company. And like I say, the first four months are dramatically better.

Now, there's some seasonal in auto insurance. So, the first quarter is usually the best of the four quarters. But it's not a dramatic seasonal. So, I think when you read the 10-Q - and you can take my word for April - I think GEICO is on a good profit track as well as a good growth track. And the more it grows, the better I like it.

Charlie?

CHARLIE MUNGER: Well, I think you've said it perfectly.

WARREN BUFFETT: Huh.

CHARLIE MUNGER: It was never very bad, and it's better now. (Buffett laughs)

18. Munger on steel tariffs: "Even Donald Trump can be right"

WARREN BUFFETT: OK. Station five.

AUDIENCE MEMBER: Good morning, Warren Buffett and Charlie Munger. My name is Ethan Mupposa (PH), and I am from Omaha, Nebraska.

My question is, how will Donald Trump's tariffs affect the manufacturing business of Berkshire Hathaway?

WARREN BUFFETT: Well, to date - (applause) - steel costs - we've seen steel costs increase somewhat. But as I said earlier, I don't think the United States or China - there'll be some

jockeying back and forth, and there will be something that leaves some people unhappy and - but I don't think - I don't think either country will dig themselves into something that precipitates and continues any kind of real trade war in this country.

We - we've had that in the past a few times. And I think we've learned a general lesson on it.

But there will - there will be some things about our trade policies that irritate others. And there will be some from others that irritate us. And there will be some back and forth. But in the end, I don't think we'll come out with a terrible answer on it.

Charlie, I'll let you -

CHARLIE MUNGER: Well, steel has - it reached - the conditions in steel were almost unbelievably adverse to the American steel industry.

You know, even Donald Trump can be right on some of this stuff. (Laughter and applause)

WARREN BUFFETT: The - the thing about trade - you know, I've always said that the president, whether it's president - any president - needs to be an educator-in-chief, which [Franklin] Roosevelt was in the Depression. That's why he had those Fireside Chats, and it was very important that he communicated to the people what needed to be done and what was happening around them, and -

Trade is particularly difficult, because the benefits of trade are basically not visible, you know. You don't know what you would be paying for the clothes you're wearing today if we'd had a rule they all had to be manufactured in the United States, or what you'd be paying for your television set, or whatever it may be.

No one thinks about the benefits day-by-day as they walk around buying things and carrying on their own business.

The negatives, and there are negatives, are very apparent and very painful. And if you're laid off - like happened in our shoe business [Dexter Shoes] in Maine - and you know you are - been a very, very, very good worker, and you were proud of what you did, and maybe your parents did it before you, and all of a sudden you find out that American shoes - shoes manufactured in America - are not competitive with shoes made outside the United States.

You know, you can talk all you want about Adam Smith or David Ricardo or something and explain the benefits of free trade and comparative advantage and all that sort of thing, and that doesn't make any difference.

And if you're 55 or 60 years old, to talk about retraining or something like that, you know, so what?

So, I - it is tough in politics where you have a hidden benefit and a very visible cost to a certain percentage of a - of your constituency.

And you need to do two things under those circumstances, if you have that situation. You know what's good for the country. So, you have to be very good at explaining how it does really hurt, in a real way, somebody that works in a textile mill, like we had in New Bedford, where you only spoke Portuguese - half our workers only spoke Portuguese. And suddenly, they have no job. And they've been doing their job well for years.

You've got to do two things. You can - you'll have to - you have to understand that that's the price individuals pay for what's good for the collective good.

And secondly, you've got to take care of the people that are - that - where retraining is a joke because of their age, or whatever it may be. And you've got to take care of the people that become the roadkill in something that is collectively good for us as a country. And -

That takes society acting through its representatives to develop the policies that will get us the right collective result, and not kill too many people economically in the process. And you know, we've done that in various arenas over the years.

The people in their productive years do help take care of the people that are too old, and too young. I mean, every time a baby is born in the United States, you know, we take on an obligation of educating them for 12 years. It'll cost $150,000 now, you know? It -

We have a system that has a bond between the people in their productive years and the ones in the young and old. And it gets better over time. It's far from perfect now. But it has gotten better over time.

And I believe that trade, properly explained, and with policies that take care of the people that are roadkill, is good for our country and can be explained.

But I think it's a tough - it's been a tough, tough sell to a guy that made shoes in Dexter, Maine or worked on a loom in New Bedford, Mass, or works in the steel mill in Youngstown, Ohio. (Applause)

19. Buffett won't impose his political opinions on Berkshire

WARREN BUFFETT: Andrew?

ANDREW ROSS SORKIN: OK, Warren. This question comes from a Berkshire shareholder who says they've been a shareholder for ten years. I should say this may be one of the most pointed questions I've ever received for you. So -

WARREN BUFFETT: But you elected to give it, though.

ANDREW ROSS SORKIN: But I did. (Laughter)

The shareholder writes, “I have watched the movie every year at this meeting, when you testify in front of Congress on behalf of Salomon, as the symbol of what it means to have a moral compass. Investors are increasingly looking to invest in companies that are socially and morally responsible.

“So I was disturbed when you were asked on CNBC about the role that business could play in sensible policies around the sales of guns.

“You said you didn’t think business should have a role at all, and you wouldn’t impose your values on others. I was even more surprised when you said you’d be OK with Berkshire owning shares in gun manufacturers.

“At this meeting years ago, you said you wouldn’t buy a tobacco company because of the social issues. The idea that Berkshire would associate with any company as long as it isn’t illegal seems at odds with everything I think you stand for. Please tell us you misspoke.”

WARREN BUFFETT: Well - (applause) - let’s explore that a little. (Laughter)

Should it be just my view, or should it be the view of the owners of the company? So, if I decide to poll the owners of the company on a variety of political issues, and one of them being whether, you know, Berkshire Hathaway should support the NRA, I don’t - if a majority of the shareholders voted to do it, or if a majority of the board of directors voted to do it, I would - I wouldn’t - I would accept that.

I don’t think that the - my political views - I don’t think I put them in a blind trust at all when I take the job. And I - in the elections of 2016, I raised a lot of money. In my case, I raised it for Hillary [Clinton]. And I spoke out in various ways that were quite frank, but - (applause) - I don’t think that I speak -

When I do that, I don’t think I’m speaking for Berkshire. I’m speaking as a private citizen. And I don’t think I have any business speaking for Berkshire. We have never - at the parent company level - we have never made a political contribution, you know -

And I don’t go to our suppliers. I don’t do anything of that sort where I raise money either for the school I went to, or for a political candidate I went to, or anything else.

And I don’t think that we should have a question on the GEICO policyholder form, “Are you an NRA member?” you know, and if you are, you just aren’t good enough for us, or something. That - I think -

I do not believe in imposing my political opinions on the activities of our businesses.

And if you get to what companies are pure and which ones aren't pure - (applause) - I think it is very difficult to make that call. Thank you.

I think with that response, I'm almost afraid to call on Charlie. But go ahead, Charlie. (Laughter)

CHARLIE MUNGER: Well, obviously, you do draw a limit, Warren -

WARREN BUFFETT: Yeah, we did.

CHARLIE MUNGER: - in all kinds of thing -

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: - which are beneath us, even though they're legal. But we don't necessarily draw it perfectly because we've got some sort of supreme knowledge. We just do the best we can.

And certainly, we're not going to ban all guns, surrounded by wild turkeys in Omaha. (Laughter)

20. "Very unlikely" Berkshire would pay a special dividend

WARREN BUFFETT: OK, Gregg. (Laughter)

GREGG WARREN: Warren, this question's also based on something you said more recently, so I can't guarantee it's going to be any easier. (Buffett laughs)

You recently noted that you prefer share repurchases over dividends as a means for returning capital to shareholders should Berkshire's cash balances continue to rise and hit the $150 billion threshold you noted as being difficult to defend to shareholders at last year's annual meeting.

While I understand the rationale for not establishing a regular dividend, a one-time special dividend could be a useful option for returning a larger chunk of Berkshire's excess capital to shareholders without the implied promise to keep paying a regular dividend forever.

The drawback with the special dividend, though, is that it would lead to an immediate decline in book value and book value per share. Whereas a larger share repurchase effort, while depressing book value, would reduce Berkshire's share count, limiting the impact on book value per share.

If we do happen to get a few years out and Berkshire does hit that $150 billion threshold, because valuations continue to be too high, both for acquisitions and for the repurchase of company stock, would you consider a one-time special dividend as a means for returning capital to shareholders?

WARREN BUFFETT: Well, if we thought we couldn't use capital effectively, we would figure - we would try to figure out the most effective way of returning capital to shareholders. And - you could - I would have probably - I think it'd be unlikely we'd do it by a special dividend.

I think it'd be more likely we'd do it by a repurchase, if the repurchase didn't result in us paying a price above intrinsic value per share. We're never going to do anything that we think is harmful to continuing shareholders.

So if we think the stock is intrinsically worth X, and we would have to pay some modest multiple even above that to repurchase shares, we wouldn't do it because we would be hurting continuing shareholders to the benefit of the people who are getting out.

But we will try and do whatever makes the most sense, but not with the idea that we have to do something every day because we simply can't find something that day.

We had a vote as you know - I don't know, a few years back - on whether people wanted a dividend. And - the B shares - so I'm not talking my shares or Charlie's or anything - but the B shares voted 47 to one against it.

So I think through self-selection of who become shareholders - I don't think shareholders world - or countrywide - on all stocks would vote 47 to one at all.

But we get self-selection in terms of who joins us. And I think they expect us to do whatever we think makes sense for all shareholders. And obviously, if we really thought we never could use the money effectively in the business, we should get it out, one way or another. And -

You've got a bunch of directors who own significant - very significant - amounts of stock themselves. And you can expect them to think like owners. It's the reason they're on the board.

And you can expect the management to think like owners and - owners will return money to all of the owners if they think it makes more sense than continuing to look for things to do.

But we invested in the first quarter, maybe - have to look it up on the - well, certainly through April - probably close to 15 billion or something like that, net, so -

And we won't always be in a world of very low interest rates - or high private market prices.

So we will do what makes the most sense. But I can't see us ever making a special - almost - it's very unlikely we would just pay out a big, special dividend. I think that if we put that to the vote of the shareholders, and Charlie and I did not vote, I think we would get a big negative vote. And I'd be willing to - be willing to make a bet on that one.

Charlie?

CHARLIE MUNGER: Well, as long as the existing system continues to work as well as it has, why would we change it? We've got a whole lot of people that are accustomed to it, have done well under it. And if conditions change, why, we're capable of changing our minds, if the facts change.

WARREN BUFFETT: Yeah, and we've done that several times.

CHARLIE MUNGER: Yes.

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: Although, I must say, it's a little hard. (Laughter)

WARREN BUFFETT: He always brings me back to earth.

21. Munger is more interested than Buffett in Chinese stocks

WARREN BUFFETT: OK. Station 6?

STEPHANIE YU: Hi, good morning, Mr. Buffett and Mr. Munger. My name is Stephie Yu from Horizon Insights, a China-focused research firm based in Shanghai. So I have a lot of mutual fund clients in China, who are very young - relatively younger - and they manage a smaller portion of funds.

So my question is, if you only have $1 billion in your portfolio today, how would you change your investments? Would you consider more investment opportunities in emerging markets such as China? Thank you.

WARREN BUFFETT: Yeah. I would say, if I were working with a billion, I would probably find - within a $30 trillion market in the United States, where I understood things better, generally, than I do around the world - I'd probably find opportunities there that would be better, incidentally, by some margin, than what we can find for hundreds of billions.

But I wouldn't - there's no way I'd rule out emerging markets. There was a time, 15 years ago or so, when just because it was kind of interesting and it took me back to my youth, I - on the weekend, I went through a directory of Korean stocks. And I bought - and these were small stocks - well, they weren't small by standards of either Korean or American business. They were big, big companies.

But I found 15 or 20 in - that were statistically cheap and bought some of each one myself.

And there are opportunities with smaller amounts of money to do things that we just can't do. And - but I - my first inclination always would be to comb through things in the United States. And -

But I've combed through - in other countries. I probably wouldn't get into very, very small markets because there can be a lot of difficulties even in market execution and taxation, (inaudible).

You can find - if you can't find it, you know, in America and China and Britain and a few other places - (laughs) - you probably aren't going to find it someplace else. You may think you've found it. But that may be - it may be a different game than you know. Our problem is size, not geography.

Charlie?

CHARLIE MUNGER: Well, I already have more stocks in China than you do, as a percentage, so I'm with the young lady. (Laughter)

WARREN BUFFETT: OK. Well, you can - you want to name names? Do these stocks have names? Or - (Laughs)

CHARLIE MUNGER: No, I don't. (Buffett laughs)

WARREN BUFFETT: Carol?

CAROL LOOMIS: This question is -

WARREN BUFFETT: I should just add one thing. You will find plenty of opportunities in China. Charlie would say you've got a better hunting ground than even a person with similar capital in the United States. Would you agree with -?

CHARLIE MUNGER: Yes, I do.

WARREN BUFFETT: Yeah, yeah. So - and in the sense they're - it's logical that should be the case because it's a younger market, but still a large market. So that -

Markets probably work toward efficiency as they age. Japan had this very strange situation with warrants being priced out of line and all of that 30 years ago. And people notice after a while and it disappears. But there can be - some very strange things happen in markets as they develop. I think you'd agree with that, Charlie, wouldn't you?

CHARLIE MUNGER: Absolutely.

WARREN BUFFETT: Yeah.

22. Munger: Keep the faith and don't sell your stock when we're gone

WARREN BUFFETT: Jonathan?

JONATHAN BRANDT: Hello -

CAROL LOOMIS: You skipped me.

WARREN BUFFETT: Did I skip -? I skipped Carol?

CAROL LOOMIS: Yup.

WARREN BUFFETT: Oh. I'm sorry.

CAROL LOOMIS: OK.

WARREN BUFFETT: OK.

CAROL LOOMIS: This question, and I would concede it is not a small one, comes from Gideon Pollack of Montreal.

He says, "The world knows generally how the looks of Berkshire Hathaway have changed since you began to run the company in 1965. Berkshire was then a tiny northeastern, textile company. And now it is the number-four company on the Fortune 500.

"What about the next 50 years? Could you give us your view of what Berkshire looks like in 2068?"

WARREN BUFFETT: I think it'll look a long way away. (Laughter)

No, the answer is I don't know. And I didn't know, 50 years ago, what it would like now, I mean -

It will be based on certain principles. But where that leads, you know, we will find out and we'll have people that are thinking about different things than I am. And we'll have a world that's different. But -

We will be - I very much hope and believe that we will be - that we'll be as shareholder-oriented as any large company in the world. We will look at our shareholders as partners and we will be trying to do with their money exactly what we'd do with our own, not seeking to get an edge on them. And who knows what else will be happening then?

Charlie?

CHARLIE MUNGER: Well, I want to talk to the younger shareholders in the group. Those of you who, after we are gone, sell your Berkshire stock and do something else with it, helped by your many friends, I think are going to do worse. (Laughter)

So I would advise you to keep the faith. (Applause)

By the way, some of that has already happened in many families.

WARREN BUFFETT: I'll give his answer next time now that I see it get all of that applause. (Laughter)

23. "Duracell should be earning more money than it is now"

WARREN BUFFETT: Jonathan.

JONATHAN BRANDT: Duracell's $82 million of pretax profits in 2017 were still well below what it earned as a subsidiary of P&G. Can you clarify or quantify to what extent transition costs or purchase price accounting impacts at the segment level were still temporarily burdened last year? Or is it possible that the gap in earnings contribution simply reflects a commoditization of the category given the entry of Amazon into the battery market?

I did see that Duracell's earnings were up in the first quarter. Is that a sign of a more meaningful contribution in 2018 and beyond, as you finish right-sizing the manufacturing footprint and acquisition-related charges fall away?

WARREN BUFFETT: Yeah. Duracell should be earning more money than it is now, and will be. And as you mentioned, it's well on its way there. But it is not earning an appropriate amount now, based on the history of the company.

I was around when - I was on the board of Gillette when Gillette bought Duracell. And I've seen what it does when it is managed to its full extent. And I saw what Jim Kilts did with it at Gillette when he ran it. And there were a lot more transition problems in the purchase. For one thing, there's a lot of rules connected with our swap of our stock in P&G for Duracell. There are a lot of things which you cannot do that made sense to do in that period of transition from P&G's management to ours. But Duracell - the brand is strong. Very strong.

The product line is very strong. And we are making more money. And we should, and I believe we will earn, really, what the property is capable of earning. We should be earning that relatively soon.

But you're absolutely right that it is - from a profit standpoint - is underperforming.

We're making a lot of changes. And some of those are involved in jurisdictions - countries - where it is really expensive to change in terms of employment - payments that have to be made if a plant is changed or something of the sort.

But I like the Duracell deal absolutely as well as when we made it.

Charlie?

CHARLIE MUNGER: I like it better than you do. (Laughter)

WARREN BUFFETT: No. Duracell is a very, very - is our kind of business.

CHARLIE MUNGER: It is.

24. Long-term bonds are "almost ridiculous" at current rates

WARREN BUFFETT: OK. Station 7.

AUDIENCE MEMBER: Good morning. And I have a question related to the bond market - U.S. Treasury bond market. And my name is Ola Larsson (PH). I live in the San Francisco bay area.

And I never worked in the financial industry. I started out buying penny mining stocks on the Vancouver Stock Exchange. And then decades later, I got married. And my wife convinced me to buy Berkshire shares. That was probably a good decision. (Laughter)

So my question is, I read the newspapers about the Federal Reserve and the inflation numbers. And there must be an increase supply of Treasury bonds that must go to auction. And my question is how would - what do you expect that to impact yield or interest rate?

WARREN BUFFETT: Yeah. The answer is, I don't know. And the good news is, nobody else knows, including members of the Federal Reserve and everyone -

There are a lot of variables in the picture. And the one thing we know is we think that long-term bonds are a terrible investment, and we - at current rates or anything close to current rates.

So basically all of our money that is waiting to be placed is in Treasury bills that, I think, have an average maturity of four months, or something like that, at most.

The rates on those have gone up lately, so that in 2018, my guess is we'll have at least $500 million more of pretax income than we would've had in the bills last year.

But they still - it's not because we want to hold them. We're waiting to do something else.

But long-term bonds - they're basically, at these rates - it's almost ridiculous when you think about it. Because here the Federal Reserve Board is telling you we want 2 percent a year inflation. And the very long bond is not much more than 3 percent. And of course, if you're an individual, then you pay tax on it. You're going to have some income taxes to pay.

And let's say it brings your after-tax return down to 2 1/2 percent. So the Federal Reserve is telling you that they're going to do whatever's in their power to make sure that you don't get more than a half a percent a year of inflation-adjusted income.

And that seems to me, a very - I wouldn't go back to penny stocks - but I think I would stick with productive businesses, or productive - certain other productive assets - by far.

But what the bond market does in the next year, you know - you've got trillions of dollars in the hands of people that are trying to guess which maturity would be the best to own and all that sort of thing. And we do not bring anything to that game that would allow us to think that we've got an edge.

Charlie?

CHARLIE MUNGER: Well, it really wasn't fair for our monetary authorities to reduce the savings rates, paid mostly to our old people with savings accounts, as much as they did. But they probably had to do it to fight the Great Recession, appropriately.

But it clearly wasn't fair. And the conditions were weird. In my whole lifetime, it's only happened once that interest rates went down so low and stayed low for a long time.

And it was quite unfair to a lot of people. And it benefited the people in this room enormously because it drove asset prices up, including the price of Berkshire Hathaway stock. So we're all a bunch of undeserving people - (laughter) - and I hope that we continue to be so. (Laughter)

WARREN BUFFETT: At the time this newspaper came out in 1942, it was - the government was appealing to the patriotism of everybody. As kids, we went to school and we bought Savings Stamps to put in - well, they first called them U.S. War Bonds, then they called them U.S. Defense Bonds, then they called them U.S. Savings Bonds. (Laughs) But they were called war bonds then.

And you put up $18.75 and you got back $25 in ten years. And that's when I learned that that $4 for three - in ten years - was 2.9 percent compounded. They had to put it in small print then.

And even an 11-year-old could understand that 2.9 percent compounded for ten years was not a good investment. But we all bought them. It was - you know, it was part of the war effort, basically.

And the government knew - I mean, you knew that significant inflation was coming from what was taking place in finance, in World War II.

We actually were on a massive Keynesian-type behavior, not because we elected to follow Keynes, but because war forced us to have this huge deficit in our finances, which took our debt up to 120 percent of GDP. And it was the great Keynesian experiment of all time, and we

backed into it, and it sent us on a wave of prosperity like we've never seen. So you get some accidental benefits sometimes.

But the United States government (inaudible) every citizen to put their money into a fixed-dollar investment at 2.9 percent compounded for ten years. And I think Treasury bonds have been unattractive ever since - (laughs) - with the exception of the early '80s. That was something at that time.

I mean, you really had a chance to buy - you had a chance to invest your money by buying zero-coupon Treasury bonds, and in effect, guarantee yourself that for 30 years you would get a compounded return, you know, something like 14 percent for 30 years of your lifetime.

So every now and then, something really strange happens in markets and the trick is to not only be prepared but to take action when it happens.

Charlie, did you ever buy any war bonds?

CHARLIE MUNGER: No. No. I never bought war bonds.

WARREN BUFFETT: No. Used to be like take me -

CHARLIE MUNGER: I didn't have any money when I was in the war. (Laughter)

WARREN BUFFETT: That's a good reason not to buy. (Laughs)

25. "A bureaucracy is sort of like a cancer"

WARREN BUFFETT: OK, Becky?

BECKY QUICK: This question comes from Angus Hanton (PH), who - he and his wife are based in London, and he says they've been shareholders in Berkshire Hathaway for over 30 years.

He says, "We have all read about the zero-based budgeting that has been so effective with Kraft Heinz and other investments that you've done with 3G Partners. Can we expect these cost-reduction techniques to be used by your managers in other parts of the Berkshire Hathaway enterprise?"

WARREN BUFFETT: Well, in general, we do not expect the managers, generally, to get in the position where there would be a lot of change in terms of zero-based budgeting. In other words, why in the world aren't you thinking that way all of the time?

The 3G people have gone into certain situations where there were - probably primarily in personnel, but in other expenses as well - a lot of expenses that were not delivering a dollar of value per dollar expended.

And so, they made changes very fast that - to a situation that probably shouldn't have existed in the first place.

Whereas, we hope that our managers - take a GEICO. GEICO's gone from, I think, 8,000 to 39,000 people since we bought control. But they're all very productive. I mean, you would not find a way for a 3G operation to take thousands of people out of there.

On the other hand, I can think of some organizations where you could take a whole lot of people out, where it isn't being done because the businesses are very profitable to start with.

That's what happened with the tobacco companies, actually. They were so profitable that they had all kinds of people around that didn't - weren't really needed. But they - the money just flowed in.

So I - our managers have different techniques of keeping track of - or of - trying to maximize customer satisfaction at the same time that they don't incur other than necessary costs.

And I think, probably, some of our managers may well use something that's either zero-based budgeting or something akin to it. They do not submit budgets - never have - to me. I mean, they've never been required to. We've never had a budget at Berkshire.

We don't consolidate our figures monthly. I mean, I get individual reports on every company. But there's no reason to have some extra time spent, for example, by having consolidated figures at the end of April, or consolidated figures at the end of May.

We know where we stand. And - you know, I'm sure we're the only company that - probably in the whole Fortune 500 - that doesn't do it. But we don't do unnecessary things around Berkshire. And a lot of stuff that's done at big companies is unnecessary. And that's why a 3G finds opportunities from time to time.

Charlie?

CHARLIE MUNGER: Well, if you've got 30 people at headquarters and half of those are internal auditors, that is not the normal way of running a big company in America.

And what's interesting about it is, obviously, we lose some advantages from big size. But we also lose certain disadvantages from having a big bureaucracy with endless meeting after meeting after meeting around headquarters.

And net, I think we've been way ahead with our low overhead, diversified method. And also, it makes our company attractive to very able, honorable people who have companies.

So generally speaking, the existing system has worked wonderfully for us. I don't think we have the employment that could be cut effectively that a lot of other places have. And I think our methods have worked so well that we'd be very unlikely to change them.

WARREN BUFFETT: Yeah. I think if some - at headquarters, you could say we have kind of subzero-based budgeting. (Laughter)

And we hope that the example of headquarters is, to a great extent, emulated by our -

CHARLIE MUNGER: But it isn't just the cost reduction. I think the decisions get made better if you eliminate the bureaucracy.

WARREN BUFFETT: Oh yeah.

CHARLIE MUNGER: I think a bureaucracy is sort of like a cancer. And it functions sort of like a cancer. (Applause)

And so, we're very anti-bureaucracy. And I think it's done us a lot of good. In that case, we're quite different from, say, Anheuser-Busch at its peak.

26. We're experimenting with lower-cost commercial insurance

WARREN BUFFETT: OK. Gary.

GARY RANSOM: My question is on small commercial, and specifically, direct small commercial.

You seem to have some websites that enable buyers to purchase small commercial insurance directly; biBERK is one of them.

It's a very competitive, fragmented market. But what is your strategy for that market? And then, can you ultimately GEICO-ize the small commercial market?

WARREN BUFFETT: Well, we'll find out. I mean, it's a very good question because that's exactly the question we ask ourselves.

And we have this incredible company at GEICO, which has gone direct in the personal auto field, and was, you know, first started it in 1936.

And there's no question in my mind that over a lot of years - and maybe not so many years - something like small commercial - anything that takes cost out of the system, you know, makes it easier for the customer, is going to work over time, if you've got a system that was based on something that had more layers of agency costs and that sort of thing.

So we are experimenting, and we'll continue to experiment, on something like small commercial, workers' comp, whatever it may be. We'll try and figure out ways to take cost out of the system, offer the customer an equivalent product or better at lesser price, and we'll find out what can be done and what can't be done.

And we're not the only ones doing it, as you know. But we are not going - we've got some managers that are going to be quite, I'm sure, enterprising on that. And we back them. And we expect some to fail and some - and if a few succeed - we'll have some very good businesses. And the world is going in that direction. So - you could expect us to try and go with it.

Charlie?

CHARLIE MUNGER: Well, if it were easy, I think it would've happened more fast -

WARREN BUFFETT: Yeah -

CHARLIE MUNGER: - than it has.

WARREN BUFFETT: It will happen as we go along. I mean, it wasn't easy in auto, I mean, when you think about it.

CHARLIE MUNGER: No, it wasn't.

WARREN BUFFETT: No. I mean, it was a system with all kinds of extra costs that go back to the turn of the 19th century into the 20th. I mean, it was built on fire insurance and strong general agencies. And that slopped over into auto when the auto came along in 1903 from Ford or whenever. And - so it grew within a system that really wasn't very efficient compared to what was available.

But it took State Farm initially to go to a direct, or a captive agency system. And then it took USAA, and then later, GEICO, and then later, Progressive, to go to direct systems that are even more efficient and consumer-friendly.

And the same thing is going to happen, to some degree, in all kinds of industries, and certainly small commercial - somebody will -

CHARLIE MUNGER: It could happen, but it will be slow.

WARREN BUFFETT: It takes an amazingly long time. I mean, it - but you know, the battle doesn't always go to the strong and the race to the swift. But that's the way to bet, you know, as they say. So - (Laughs)

27. Health care partnership is attacking a huge "industry moat"

WARREN BUFFETT: OK, station eight?

AUDIENCE MEMBER: Austin Merriam, from Jacksonville, Florida.

Mr. Buffett, with the recent news of the partnership between you, Mr. [Jeff] Bezos, and Mr. [Jamie] Dimon, to challenge the health care industry and the self-admitted difficulties you are running across, this would lead me to believe the industry has higher barriers to entry than may have originally been hypothesized; a larger moat, if you will.

Would that justify a higher earnings multiple for established players in the industries, such as PBMs, for example?

WARREN BUFFETT: Well, just - though the system may have a moat against intruders, it doesn't mean that everybody operating within the system has individual moats, for one thing.

Now, I - we are - if this new triumvirate succeeds at all, we are attacking an industry moat. And I'm defining industry very broadly; health care, not just, you know, health care insurers or this or that.

We're trying to figure out a better way of doing it and making sure that we're not sacrificing care. And the goal is to improve care.

And like I say, that is a - that's a lot bigger than a single company's moat. It's bigger than a component of the industry's moat. The moat held by the whole system, since it interacts in so many ways, is actually - that's the moat that essentially has to be attacked, and that's a huge moat.

And like I say, we'll do our best. But - I hope if we fail, I hope somebody else succeeds.

Charlie?

CHARLIE MUNGER: Well, I suspect that eventually when the Democrats control both houses of Congress and the White House, we will get single-payer medicine. And I don't think it's going to be very friendly to many of the current PBMs. (Applause)

And I won't miss them. (Laughter)

28. Buffett vs Elon Musk on whether competitive moats are "lame"

WARREN BUFFETT: Andrew?

ANDREW ROSS SORKIN: This question comes from Kiwi (PH) and actually is directly about the issue of moats.

He notes that - “Elon Musk, this week, on his Tesla earnings call, said the following, quote, ‘I think moats are lame. They are, like, nice in a sort of quaint, vestigial way. And if your only defense against invading armies is a moat, you will not last long. What matters is the pace of innovation. That is the fundamental determinant of competitiveness,’ unquote.

“So, Warren, it seems the world has changed. Business is getting more competitive. Pace of innovation. Technology is impacting everything. Is Elon right?”

CHARLIE MUNGER: Let me answer that one, Warren.

Elon says a conventional mode is quaint. And that’s true of a puddle of water. And he says that the best moat would be to have a big competitive position. And that is also right. You know, it’s ridiculous. (Laughter)

Warren does not intend to build an actual moat. (Laughter)

Even though they’re quaint.

WARREN BUFFETT: Yeah. (Laughter)

There’s certainly a great number of businesses - this has always been true, but it does seem like it - the pace has accelerated and so on, in recent years. There’s been more moats that have been - become susceptible to invasion - than seemed to be the case, earlier. But there’s always been the attempt to do it.

And there - here and there, there are probably places where the moat is as strong as ever. But certainly - you could work at - certainly should be working at improving your own moat and defending your own moat all of the time. And then - Elon may turn things upside down in some areas.

I don’t think he’d want to take us on in candy. But - (Laughter)

And we’ve got some other businesses that wouldn’t be so easy to -

You can look at something like Garanimals out there in the other room. And - it won’t be technology that takes away the business in - (laughs) - Garanimals. Maybe something else that catches the young kid’s fantasy or something.

But - there are some pretty good moats around. Being the low-cost producer, for example, is a terribly important moat. And something like GEICO - technology has really not brought down the cost that much. I think our position as - there is a couple of companies that have costs as low as ours. But among big companies, we are a low-cost producer, and that is not bad when you’re selling an essential item.

29. Not surprised "if we find good uses" for Berkshire Hathaway Energy's capital

WARREN BUFFETT: OK, Gregg?

GREGG WARREN: Warren, Berkshire Energy has benefited greatly from operating under the Berkshire umbrella. By not having to pay out 60 to 70 percent of earnings annually as a dividend, the company was able to amass 9 billion in capital the past five years, and closer to 12 billion in the past ten, money that can be allocated to acquisitions and capital spending, especially on renewables.

While tax credits for solar energy don't run out until next year, we've already seen a dramatic reduction in Berkshire Energy's capital commitment to solar projects. And even though spending on wind generation capacity is projected to be elevated this year and next, it does wind down in 2020 as the wind production tax credits are phased out.

Absent a major commitment to additional capital projects, it looks like Berkshire Energy's expenditures in 2021 will be its lowest since 2012, leaving the firm with more cash on hand than it has had in some time.

Do you think it is likely at that point that Berkshire Energy starts funneling some of that cash up to the parent company? Or will it be earmarked for debt reduction, or just be left on the balance sheet as dry powder for acquisitions?

WARREN BUFFETT: Yeah. The - you're right about when tax credits phase out and all of that. Although, as you know, they've extended that legislation in the past. Who knows exactly what the government's position will be on incentivizing various forms of alternative energy?

But my guess is - I mean, if you take the logical expenditures that may be required in all aspects of the public - like regeneration and the utility business generally - I think there'll be a lot of money spent.

And the question is whether we can spend it and get a reasonable return on it. There again, we'll do what's logical.

There are three shareholders, basically, of Berkshire Hathaway Energy. Berkshire Hathaway itself owns 90 percent of it. And Greg Abel and his family, perhaps, and Walter Scott and, again, family members - own the other 10 percent. And we all have an interest in employing as much capital as we can at good rates.

And we'll know when it can be done and when it can't be done. And we'll do - there's no tax consequences to Berkshire at all. So - but the three partners will figure out which makes the most sense.

But when you think of what might be done to improve the grid in the U.S. and the fact that we do have the capital, I wouldn't be surprised if we find good uses for capital in Berkshire Hathaway Energy for a long time in the future.

Charlie?

CHARLIE MUNGER: Yeah. Well, I think there'll be huge opportunities in Berkshire Energy as far ahead as you can see to deploy capital very intelligently. So I think the chances of a big dividend is approximately zero.

WARREN BUFFETT: Yeah. And we've not only got the money to an extent that virtually no utility company does - we've also got the talent, too. I mean, we've got a very, very talented organization there.

So it's a big field and we've got shareholders that are capitalists. And we've got managers that are terrific. And you would think we'd find something intelligent to do over time in the field.

So far, we have. I mean, we've owned it now for close to 20 years. And we've deployed a lot of capital and so far, so good. I mean, it's -

If you look at the improvements that can be made in our utility system in the United States, you're talking hundreds and hundreds and hundreds of billions of dollars, if not trillions. So - you know, where else but Berkshire would you look for that kind of money? (Laughs)

30. "We do expect that normalized earning power to increase over time"

WARREN BUFFETT: OK, station 9.

AUDIENCE MEMBER: I'm Richard Sercer (PH) from Tucson, Arizona.

"At Berkshire what counts most are increases in our normalized per-share earning power." That was in your last letter. What is our normalized per-share earning power, as you estimate it?

WARREN BUFFETT: Well, I would say that what you saw in the first quarter, under these tax rates, would probably be a reasonable guess. You know, obviously, it depends on the economy in any given year. I would say that would - is a reasonable estimate.

But we have firepower we haven't used. And we'll have more firepower as we go along. So we do expect that normalized earning power to increase over time. And if it doesn't, you know, one way or another, we're failing you because we're retaining those earnings.

So - I don't see anything abnormal in our earnings, figured now at a 21 percent federal rate. But as I look at the 5 1/4 billion in the first quarter - seasonally, insurance is better in the first

quarter - but seasonally, most of our businesses, the first quarter is not the strongest quarter for us. I don't see anything abnormal with it.

And then I think you can expect, you should expect, we expect, substantial capital gains over time in addition to what comes from the operating businesses.

So how much you figure in for that - I would say that the retained earnings beyond dividends of our 770 billion of equities - in other words, how much they're keeping from us, but that our share of the earnings, which can be used by them, whether it's Apple or American Express or Coca-Cola or Wells Fargo or whatever, our share, you know, is in many billions of dollars annually. And one way or another, we think that those dollars will benefit us as much as if they had been paid out.

Now, in certain cases, they won't. But in certain cases, they'll excel the amount, in terms of market value created.

So there's many billions of dollars we are not showing in our earnings that is being retained by our investees. And one way or another, I think we'll get value received out of those.

So you can take 20 or 21 billion under present tax rates, present economic conditions, and then we should get something from that and we should get more when we get 100 billion of cash invested. And we should get more as we retain the earnings. So we hope it adds up to a bigger number as we go along.

Charlie?

CHARLIE MUNGER: Well, I don't think our shareholders are going to see another increase in net worth of $65 billion in a single year. They may have to wait a while for another. But I don't think that - I think eventually there - another will come, and then another. Just be patient. (Laughter)

WARREN BUFFETT: We don't regard the present situation as, you know, as disadvantageous, except we'd like to get more money out. But we like the businesses we have. We like the businesses that we own part of. We are not reflecting - in the way we look at earnings - the dividends we get from those partially-owned companies falls far short of what they're going to contribute, in our view, to Berkshire's overall earnings over time. We wouldn't own those stocks otherwise. So -

CHARLIE MUNGER: And you also like the Apple and airline stocks you've recently purchased better than the cash you parted with.

WARREN BUFFETT: Absolutely. Yeah.

CHARLIE MUNGER: And that's quite a lot.

WARREN BUFFETT: Yeah, yeah, yeah. OK. We won't pursue that further. Carol? (Laughter)

31. No "unusual profits involved in being a real estate agent"

CAROL LOOMIS: This question is from Daniel Kane (PH) of Atlanta.

"Your annual letter this year pointed out that Berkshire has become a leader in real estate brokerage in the United States. Congratulations. That is a significant feat in less than 20 years.

"But let me mention a sticky point. If fees charged by stock market active managers are a drag on investor performance, I would argue that real estate commissions are no different, and perhaps more detrimental, especially when one considers the lifetime effects of large, forgone, upfront cash flows and the power of compounding interest. I would be pleased to hear your rejoinder on the points I've raised."

WARREN BUFFETT: Well, the purchase of a home is the largest financial transaction, for a significant percentage of the population, that they make. And - people - a lot of people need a lot of attention. And you can show a lot of houses before you sell one.

I would say this. If you look at our close to 50,000 agents now, I think they make a good living - or a decent living. But I would say that that people who manage money make a whole lot more money with perhaps less contribution to the welfare of the person that they are dealing with.

So I don't think that there are unusual profits involved in being a real estate agent. I don't think there are unusual profits involved in the ownership. We like it because it's fundamentally a good business.

But here we are, doing 3 percent of all the real estate transactions in the United States, and we're making, maybe, $200 million a year - which - well, we won't get into what the comparative efforts are in Wall Street to earn $200 million. But -

I think I have to tell them about Roy Tolles a little bit on this. Roy Tolles, for example - Charlie's partner - many, many, many years ago, decided he was going to want to buy a house in San Marino. He's going to have a number of kids.

So he sent his wonderful wife, Martha, out. And for six months, he had her look at houses in San Marino. And this was many years ago. And if they were priced at 150,000, she would offer (inaubible), or offer 75,000. And of course, the real estate agents were going crazy because they're never going to get something listed at 150 sold at 75.

And then finally, when she found one that they both really liked, he had her offer something like 120 and the real estate was so happy to get a bid that was in the general area - (laughs) - of the offering price that he would work very hard on the seller to take that bid. Because he knew

what - (laughs) - he did not want six more months of Roy bidding at the lower prices. So you don't sell them on the first trip.

Incidentally, I had Roy buy a house for me, sight unseen, because this was a guy that - (laughs) - knew human nature.

You don't get rich - real estate agency - you know, the people earn their money, and they earn it in a perfectly respectable and honorable manner in terms of what they get paid. And as in every single industry there is, you know, there can be excesses or mistakes or that sort of thing.

But we will continue to buy more brokers. In fact, we'll probably have another couple to announce before long.

And we will feel that if we get to where we're doing 10 percent of the real estate brokerage business in the country and we're making 6- or $700 million a year, pretax, we will not think that's a crazy amount of money to make for enabling 10 percent of 5 million people to change their homes every year in the United States.

Charlie?

CHARLIE MUNGER: Well, the commissions in real estate may get unreasonable if you're talking about $20 million houses. It seems a little ridiculous to pay a 5 percent commission on a $20 million transaction.

But do any of us really care if the kind of people who pay $20 million for a house have a slightly higher commission? (Laughter)

The ordinary commission is pretty well-earned.

WARREN BUFFETT: Yeah. We have a number of brokerage firms. So the highest has their average transaction - in one section of the country - would be close to $600,000 a unit. But the - in terms of the sales price of the house. But the - in most of our real estate operations - the average price is more like $250,000 or something in that area. And you can show a lot of houses to make one $250,000 sale.

And of course, you split - the listing company and the selling company are usually two different companies. So it's - it does not strike me as excessive.

And incidentally, it doesn't strike the people in the industry that way either. It has not been particularly susceptible to online-type substitution or something of the sort. The real estate agent earns their commission in most cases.

But Charlie's had more experience with $20 million houses. So he will comment on that area. (Laughter)

32. Some Kraft Heinz products "enjoy fairly healthy" growth

WARREN BUFFETT: OK, we'll have one more question before we break. Jonathan?

JONATHAN BRANDT: Given the changes in consumer tastes in the food business, and Kraft Heinz's already high margin structure, do you think the brands they own today, plus new product introductions, can together maintain or increase the current level of profits over the next ten years without the benefit of acquisitions? Is there anything in their portfolio besides ketchup that is enjoying growing demand?

WARREN BUFFETT: Well, in effect, you're asking me whether Kraft Heinz is a good buy. And we don't - (laughs) - we don't want to give information on marketable securities in that manner.

But - yeah, there are a number of items besides ketchup that enjoy growing demand. And some vary quite a bit by geography. There's enormous differences in the penetration of various products in the portfolio.

Consumer packaged goods are still a terrific business in terms of return on invested assets. And you know - but the population, worldwide, grows fairly smally and at - a fairly minor rate. And - people are going to eat about the same amount. And there is some more willingness to experiment, you know, or go for organic products of the sort.

It's a very good business. And there are new products coming out constantly. It's not one where you're going to get terrific organic growth, but it never has been. And - you know, I like the business and we own 26 or so percent of it.

But there are a number of items within Kraft Heinz that enjoy pretty - fairly - healthy growth. And I think you'd find that at most food companies. And I think you'd find very good returns on invested - on tangible net assets - at those businesses.

Afternoon Session - 2018 Meeting

1. Thanks to meeting organizer Melissa Shapiro

WARREN BUFFETT: OK. Last year, for several years, we had a wonderful woman who carried this meeting off without a hitch, Carrie Sova. And she just had her third child here about a few weeks ago, and decided that — she decided right after the last meeting that that was going to be her full-time occupation.

And this year, again, we've had everything carried off without me having to do anything, without a hitch.

And I would just like to have Melissa Shapiro stand up. And we'll get a spotlight on her. (Applause)

I can't believe it, how she does it. It's just been — it's remarkable. I mean, we — I just tell her the date and then that's all the help I am — (laughs) — and it goes on from there. So, Melissa, thank you.

OK, I think we next go to station ten, and we will continue until 3:30. Then we'll take a 15-minute break, and at 3:45 we'll convene the actual annual meeting.

2. Why Berkshire won't be buying Microsoft stock

WARREN BUFFETT: Station 10?

AUDIENCE MEMBER: Hi, I'm Theresa Lukasinski (PH). I'm from Omaha, Nebraska. And I have a question about Microsoft.

You have gotten into the tech world with buying Apple. You have Mr. [Bill] Gates there. I'm just wondering why you've never bought Microsoft.

WARREN BUFFETT: Well — (laughter) — in the earlier years, it's very clear it's — the answer's stupidity. But the — (Laughter)

Since Bill has — particularly since Bill has joined the board, but even earlier than that because of our friendship, it would be — it just would be a mistake for Berkshire to buy Microsoft.

Because if something happened a week later, a month later, in terms of them having better earnings than expected, or making an acquisition — anything — both Bill and I would — incorrectly, but — would be a target of suggestions and accusations, perhaps even, that somehow he had told me something or vice versa.

I stay away from — I try to stay away from a few things just totally because the inference would be drawn that we might have talked — that I might have talked to somebody about something.

So I've told the fellows, Ted [Weschler] and Todd [Combs] for example, that there are just a few things that are off the list because there would be a lot of people who wouldn't believe us if something good immediately happened after we bought it.

And of course, we — to buy a lot of stock, it can take six months to buy it or something of the sort. We just don't need it.

But both that and my stupidity have cost us a lot of money. (Laiughs)

It's a very — it's a good question, and I think the answer makes sense.

Charlie?

CHARLIE MUNGER: Well, it's part of theology that a late conversion is better than never — (laughter) — and you've greatly improved yourself. (Laughter)

3. "Through it all … America really, really moves ahead"

WARREN BUFFETT: Becky. (Laughs)

BECKY QUICK: All right, this question comes from Dave Shane (PH). He says, "Warren, you are a big believer in the U.S. political system, the financial system, and in every American.

You've said that regardless of who is president, the economy and the U.S. consumer will continue to prosper over the long run. All that said, do you believe that people in this country are more divided today than 50 years ago?

Or is it just social media, and media in general, that blows this divide out of proportion? And if you do believe the divide has grown, what words of wisdom do you have to possibly help remedy it?"

WARREN BUFFETT: Yeah, I would say this. Multiple times in my life, people have felt the country was more divided than ever.

And I've gone through periods where people I knew and admired thought that, because the other party was in power, that there never would be another election. That the Constitution would —

I've heard everything. Now, the interesting thing is this paper from 1942. Since then, there have been 14 American presidents, just since my young venture into the stock market at 11, I've lived under 14 of the 44 presidents the United States has had.

Now, they call Trump 45, but they count Grover Cleveland twice, so there's really only been 44 presidents of the United States. And 14 of the 44 have been during this period when that $10,000 became 51 million.

Seven have been Republicans, seven have been Democrats. One has been assassinated, one has resigned under pressure.

It works, you know. It — if you'd told me at the start, you know, that you'd have a Cuban Missile Crisis, and you've have nuclear weapons, and you'd have a panic in 200[8] — a financial panic — and you'd have many recessions, and you'd have war in the streets in the late '60s from a divided country, you'd say, "Why the hell are you buying stocks?"

And through it all, you know, America — in fits and starts — but America really, really moves ahead.

And we are always — we survived the Civil War. I mean, it — I hate to think of having to do it that way. But this country, in only less than three of my lifetimes —

If you go back three of my lifetimes, you go back 263 years, I guess, and Thomas Jefferson is 12 years old. And that's just three — and there was nothing here.

You know, you've flown in from all over to Omaha today, and you flew over a country with more than 75 million owner-occupied homes, and 260 million vehicles, and great universities, and medical systems, and everything. And it's all a net gain in less than three of my lifetimes.

So — and we've had these events since I started buying my first stock. This country really, really works. And it always will have lots of disagreements, and after every election you'll have people feeling the world is coming to an end and, you know, "How could this happen?"

And I remember my future father-in-law in 1952, he wanted to have a talk with me before his daughter and I got married. So kind of reluctantly I sat down with him, and he said, "Warren," he said, "there's just one thing I want to tell you." He said, "You're going to fail."

He said — (laughter) — you know, "The Democrats are going to get in," you know, they're going to take over the country. And you're going to fail, but don't feel responsible for it because it's not your fault."

And he wanted to absolve me from this feeling that, while his daughter was starving to death, it was my fault. And — (laughter) — I kept buying stocks and doing a little bit better all the time. And, but —

And if the Republicans were in, it was OK, and it was because of them that I was doing well. And if they were out, forget it, it was all going to disappear and stuff.

I mean, I've seen a lot of American public opinion over the years. I've seen a lot of media commentary. I've seen the headlines. And when you get all through with it, this country has six times the per capita GDP growth — the GDP per capita — that it had when I was born.

One person's lifetime, six-for-one change. Everybody in this room, essentially, is living better in multiple ways, than John D. Rockefeller Sr. was, who was the richest person, you know, in the world at that — during my early years. And we're all living better than he could live.

So this is a remarkable, remarkable country, and we found something — (applause) — very special.

CHARLIE MUNGER: (Inaudible)

WARREN BUFFETT: I would love to be a baby being born in the United States today. Charlie. OK, Charlie, you give the other side of this.

CHARLIE MUNGER: Well — (laughter) — there's a tendency to think that our present politicians are much worse than any we had in the past. But we tend to forget how awful our politicians were in the past. I can — (Laughter)

I can remember a prominent senator [Roman Hruska] arguing with an absolute earnestness that mediocre people ought to have more representation on the United States Supreme Court.

WARREN BUFFETT: Yeah. He came from Nebraska, incidentally.

CHARLIE MUNGER: He did. He came from Nebraska. (Laughter) So we're not quite as bad as that yet.

WARREN BUFFETT: Yeah. He succeeded my dad in the House of Representatives.

4. "We'll have a somewhat larger operation at Gen Re"

WARREN BUFFETT: OK. Gary.

GARY RANSOM: Yes, on reinsurance. I know we've talked in the past about reinsurance not really being as attractive an industry in, say, the next ten years as the last ten. But I don't think we've talked specifically about General Re.

And I looked this morning at the 10-Q and I see General Re has grown nicely. I know there's been some changes in the management.

And I wondered if you could just give us a sense of what's going on at the company to bring about some of that growth and what looks like improvement.

WARREN BUFFETT: Yeah. Well, the reinsurance business — I don't think I'd say that it's tougher than it was ten years ago. But you go to 40 or 50 years ago, it was not brutally competitive, I'll put it that way.

And at Gen Re — Tad Montross, who did a fantastic job for us at Gen Re, retired. And we have under Ajit [Jain] — and then Kara [Raiguek] in addition — but under Ajit, the focus of the place has changed somewhat.

And it probably is more growth oriented than before. But I can assure you that anything associated with Ajit is — also has underwriting discipline attached to it.

But, I — there has, as you've correctly noticed, there's been some pick-up. And I think you actually will see the property-casualty reinsurance business grow a fair amount.

And the life business — reinsurance business — and this is really the only place we do much in life — but that has grown very substantially ever since we took it over, particularly internationally. And so that part, I like.

And we will have a somewhat — I think we'll have a somewhat larger operation at Gen Re.

But we have various methods, as you know, of being in reinsurance. We do these huge bulk deals. That's why our net revenues are down this year. We did that $10 billion deal with AIG, which was the biggest deal in history, last year. And we don't have a repeat of it this year.

We will be in the reinsurance business five years from now, 10 years from now, 20 years from now, and 50 years from now, in my view. And we will have some unusual advantages that stem both from our capital position, our attitude toward the business, and the talent that we have.

We have an — we have a way better than average insurance business, generally. We have some real gems that nobody really knows much about.

And we have a very, very good reinsurance business that will be subject to more ups and downs than something like GEICO will be, which just moves ahead every year. But it will be an important part of Berkshire.

Charlie?

CHARLIE MUNGER: Yeah. I would argue the part that any idiot financier can easily get into has gotten way tougher. And why wouldn't it?

WARREN BUFFETT: Charlie is my substitute for my father-in-law that was — (Laughter)

5. "I can't reduce that to a formula for you"

WARREN BUFFETT: OK, Station 11.

AUDIENCE MEMBER: Hey, Warren. Charlie. Thank you again for having us and having me. I just can't thank you guys enough and appreciate you guys enough for the body of work that you guys have delivered to us and the exemplar example that you guys have set with your principles. Thank you. (Applause)

Charlie, you've mentioned that, if given the chance — or the same chance with a smaller capital base — you would still look for mispriced stock opportunities.

CHARLIE MUNGER: Of course.

AUDIENCE MEMBER: And that would be determined through, obviously, what we've called the intrinsic value of the organization — or the company in question — an aggregate of the discounted future cash flows.

Would you work the arithmetic using a fictional data set to illustrate the mathematical principia to determine an intrinsic value?

And I hope you include the comprehensive mental model of the key metrics considered, and quantitative assessments of the management, and any assumptions of its industry to determine the durability of its earning power.

And, Warren, same to that effect. Would you also demonstrate or illustrate an arithmetic problem set using, with a significant capital base, and provide the object lessons on how those have changed from a small to a large capital base?

CHARLIE MUNGER: Well, I can't give you a formulaic approach because I don't use one. (Laughter)

And I just mix all — (laughter) — I just mix all the factors and if the gap between value and price is not attractive, I go on to something else.

And sometimes it's just quantitative. For instance, when Costco was selling at about 12 or 13 times earnings, I thought that was a ridiculously low value, just because the competitive strength of the business was so great and it was so likely to keep doing better and better.

Well, I can't reduce that to a formula for you. I liked the cheap real estate. I liked the competitive position. I liked the way the personnel system worked. I liked everything about it.

And I thought, even though it's three times book, or whatever it was then, that it's worth more. But that's not a formula that anybody —

If you want a formula, you should go back to graduate school. (Laughter)

They'll give you lots of formulas that won't work. (Applause)

WARREN BUFFETT: This is the longest we've ever gone in a Berkshire meeting without Charlie saying that — getting to the point where he prefers Costco to Berkshire. (Laughter)

6. Why Apple and thoughts on Apple's buybacks

WARREN BUFFETT: OK, Andrew?

ANDREWROSS SORKIN: We got a handful of questions relating to Apple. This is a bit of a mash-up of a couple of them.

Warren, you have bought in and sold out of IBM. You have praised [Amazon CEO] Jeff Bezos but never bought Amazon. And you have doubled down on Apple. Can you tell us what it is about Apple?

And given your sometimes critical views on buybacks, do you think Apple would do better spending a hundred billion dollars on buybacks, or buying other productive businesses the way you have generally preferred? A hundred billion dollars is a lot of money.

WARREN BUFFETT: I used to think so. (Laughter) The —

Apple has a incredible consumer product which you understand a lot better than I do. Whether they should buy in their shares — they shouldn't buy in their shares at all, unless they think that they're selling for less than they're worth.

And if they are selling for less then they're worth, and they have the money, and they don't see an acquisition that's even more attractive, they should buy in their shares. And I think that that's very —

Because I think it's extremely hard to find acquisitions that would be accretive to Apple that would be in the 50 or 100 billion, or $200 billion range. They do a lot of small acquisitions.

And, you know, I'm delighted to see them repurchasing shares. We own — let's say we own 250 million or so shares. They have, I think, 4 billion, 923 million or something like that. And mentally, you can say we own 5 percent of it.

But I figure with, you know, with the passage of a little time we may own 6 or 7 percent simply because they repurchase shares. And it —

I find that if you've got an extraordinary product, and ecosystem, and there's lots to be done, I love the idea of having our 5 percent, or whatever it may be, grow to 6 or 7 percent without us laying out a dime. I mean, it's worked for us in many other situations.

But you have to have some very, very, very special product, and — which has an enormous wide — enormously widespread ecosystem, and the product's extremely sticky, and all of that sort of thing.

And they're not going to find 50 or a hundred billion dollar acquisitions that they can make at remotely a sensible price that really become additive to that.

And they may find it, who knows? But there certainly, as I look around the horizon, I don't see anything that would make a lot of sense for them in terms of what they'd have to pay and what they would get.

Whereas I do see a business that they know everything about, and where they may or may not be able to buy it at an attractive price when they repurchase their shares. That remains to be seen.

Incidentally, that's one thing that I always enjoy. People say, "Well, you're talking your book," or something if you talk —

From our standpoint, we would love to see Apple go down in price. They're going to — well, just put it this way. If Andrew and Charlie and I were partners in a business that was worth $3 million so each of us had a million dollar interest in it, if Andrew offered to sell out his one-third interest at 800,000 and we had the money around, we'd jump at the chance to buy him out. I mean, it's so simple.

But people get all lost — and if he'd wanted a million-two for it, we wouldn't pay it to him. (Laughs)

It's very simple math, but it gets lost in all these discussions. And of course, like I say, Tim Cook could do simple math. And he could probably do very complicated math, too. So, we very much approve of them repurchasing shares.

Charlie?

CHARLIE MUNGER: I think, generally speaking in America, when companies go out hell-bent to buy other companies, they do — they're worth less after the transaction is made than they were before.

So I don't think you have a general way to wealth for American corporations to go out and buy other corporations. Averaged out, it's a way down, not up.

And I think that a great many places have nothing better to do than to buy in their own stock, and nothing as advantageous to do as they can — as buying in their own stock.

So, I think we know pretty damn well what's going to happen to Apple. They'd be very lucky to — if there was something available at a low price that they could buy. It's —

I don't think the world's that easy. I think that the reason these companies are buying their stock is that they're smart enough to know that it's better for them than anything else.

WARREN BUFFETT: And that does not mean we approve of every buyback, at all, though. I mean, we've seen —

CHARLIE MUNGER: No, no, no. I think some people just buy it to keep the stock up. And that, of course, is insane. And immoral. But apart from that, it's fine. (Laughter)

7. "I like very much our holdings of American Express"

WARREN BUFFETT: OK, Gregg?

GREGG WARREN: Warren, if we look at the performance of your equity investment portfolio the last three to five years, some of the strongest performances come from Visa and MasterCard, which put up returns that are three to four times greater than American Express.

Unfortunately, your holdings of the two names, which we assume were held by Todd [Combs] or Ted [Wechsler], have accounted for less than one percent of stock holdings on a combined basis the past five years, while American Express has tended to be a top-five holding, accounting for 10 percent of the portfolio, on average, and closer to 8 percent of late.

Given that all three firms benefit from powerful network effects along with valuable brands, were there any particular reasons Berkshire did not ramp up its stakes in Visa and MasterCard to more meaningful levels, especially during those years when American Express was struggling?

After all, you've shown a willingness to own several stocks from the same industry, holding shares in several competing banks, and buying stakes in all four domestic airlines in fairly equal amounts when you picked them up in late 2016.

WARREN BUFFETT: Yeah. When Ted and Todd, or either one of them — I won't get into which specifically — which one of them specifically — bought, or for that matter they could both have bought — Visa and MasterCharge — they were significant portions of their portfolio.

And there was no embargo or anything on them owning those stocks because we had a big investment in American Express. And I could have bought them as well. And, looking back, I should have.

On the other hand, I think American Express has done a fabulous job, and now we own 17 and a large fraction percent of a company that not that long ago we may have owned 12 percent.

We've done it without spending a dime and without — you know, it's a company that has really done a fantastic job in a very competitive field where lots of people would love to take their customers away from them. But they have more customers than ever, and they're spending more money than ever. The customers are.

And the international growth has accelerated. The small business penetration is terrific. It's really quite a business. And, you know, we love the fact we own it.

Like I say, it didn't preclude me from, in any way, from buying MasterCharge or Visa. And if I had been as smart as Ted or Todd, I would have. (Laughs)

Charlie?

CHARLIE MUNGER: Well, we would have been a little — a lot better with all of our stock picking if we could do it in retrospect.

But — (laughter) — at the time, we have a big position in American Express, and there is one tiny cloud on the horizon of the payments processors and that is the system of WeChat in China.

And so it isn't as though there isn't a little cloud somewhere off in the — and I don't have the faintest idea how important that cloud is, and I don't think Warren does either.

WARREN BUFFETT: No. No. Payments are a huge deal worldwide. And you've got all kinds of smart people working at various ways to change the payment arrangements. And —

CHARLIE MUNGER: To destroy what we have now.

WARREN BUFFETT: Sure, sure. And you've got some very smart people that, you know, I am — the — but there — building a company.

And American Express made a decision a few years ago not to bid as low as somebody else did to retain the Costco business. And I think — Charlie and I disagree on this — but I think it was a smart decision. He doesn't think it was a smart decision. But one of us will be right. And — (laughter) — and one of us will remind you that they were right. (Laughter)

The — but if you look at American Express, it is — it's a remarkable company. I mean, you know, they came after them with Sapphire last year. People want that business. And payments are changing.

And you can see in different countries different ways things are going on in that. And there are a lot of people that will play the game of gaming the system, and switch from one to another based on the rewards on this card or that, and all of that sort of thing.

But there also is a — I think there's a very substantial group for which American Express does something very special, and they keep capitalizing on that premier position with that group.

And they're doing it successfully around the country. And you'll see in the first quarter — you've seen in the first quarter — you know, where in Britain, in Mexico, in Japan, you're seeing gains of 15 percent or better in local currencies.

And the base is not tiny, but it's not huge, so there's a lot of room left to go in that. And the small business penetration is good. The loan portfolio has behaved sensationally compared to, really, just about anybody.

So, I like very much our holdings of American Express.

The first half, because of the accounting changes, they had to suspend their repurchase program for six months. But I — they've announced that they expect to renew it.

And someday we'll even, you know, we'll own a greater percentage of American Express and it will be a bigger company, in my opinion. And I think we'll do very well.

But as Charlie says, nobody knows how payments is — for sure — comes out. And nobody knows how autos for sure come out. And there — that is true of a great many businesses we're in, and we've faced it before.

We used to buy things that were certain failures, like textiles and second-rate department stores and trading stamps in California. Now we just face things that face real difficulty. So we're actually moving up the ladder. (Laughter)

8. Capital-intensive businesses are "good enough"

WARREN BUFFETT: OK, Station 1.

AUDIENCE MEMBER: Mr. Buffett, my name is Daphne Collier Starr (PH). I'm eight years old and live in New York City. I've been a shareholder for two years and this is my second annual shareholders meeting.

Berkshire Hathaway's best investments on which the company built its reputation have been in very capital-efficient businesses — (laughter) — such as Coke, See's Candy, American Express, and GEICO.

But recently, Berkshire has made really big investments in a few businesses that require huge capital investments to maintain and that offer only a regulated low rate of return such as — (laughter) — Burlington Northern Railroad.

My question to you, Mr. Buffett, is could you please explain why Berkshire's largest recent investments have been departed from your old capital-efficient philosophy?

And why specifically have you invested Burlington Northern instead of buying a capital-efficient company like American Express? (Applause)

WARREN BUFFETT: You're killing me, Daphne. (Laughter) Yeah.

CHARLIE MUNGER: I'm certainly glad she's not nine years old.

WARREN BUFEFTT: Yeah. (Laughter)

I'm just sitting here thinking which of the six panelists we're going to bump next year and put you in. (Laughter)

Well, I thought I was doing well when I bought that City Service at 11. (Laughs)

The answer is that we have — we'd love — we always prefer the businesses that earn terrific returns on capital, like a See's Candy when we bought it or a good many of the businesses.

And, we've — and, you know, American Express, you know, earns a terrific return on equity, and has for a very long time.

The fact that we buy a Burlington — BNSF, Burlington Northern — means that, essentially, we can't get more money deployed in capital-light businesses at prices that make sense to us. And so we have gone into more capital-intensive businesses that are good businesses.

But wouldn't it be wonderful if we could run the railroad without trains, and track, and tunnels, and bridges, and a few things?

We get a decent return on the capital-intensive businesses. We bought most of them at very decent prices, and they've been run very well since we bought them.

We still love a business that takes very little capital and earns high returns, and continues to grow, and requires very little incremental capital.

We can't deploy as much money as we have in doing that. And so as the second-best choice, still a good choice, the answer is yes. It's not as good as the best choice.

Charlie?

CHARLIE MUNGER: Yes, I like the aspiration of that young lady. She basically wants her royalty on the other fellow's sales. And of course that's a very good model, and if everybody could do that, why, nobody would do anything else.

The reason we're satisfied with our utility returns and our railroad returns is they're quite satisfactory. And we — and the — quite satisfactory. I wish we had two more just like them. Don't you, Warren?

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: So —

WARREN BUFFETT: Definitely.

CHARLIE MUNGER: So the answer is they're good enough, and you're asking us to get perfection if you would want us to have all our money in Coke at, say five percent of what it's now selling for.

WARREN BUFFETT: Yeah. And a business like Apple really doesn't take much capital.

But — so, you've got to spend a lot of money to buy businesses like that. Very few are for sale.

And the answer is we have not foregone any opportunity to buy businesses that earn high returns — very high returns — on equity capital, when we could buy them at a sensible price, to buy these other businesses.

So they haven't shoved anything else off the table. But you are — you definitely have a job in our capital allocation department. (Laughter)

9. Buffett "surprised" rate of decline for newspapers hasn't moderated

WARREN BUFFETT: OK, Carol.

CAROL LOOMIS: This question is from Max Taylor (PH) of Chicago, and it concerns the newspapers that Berkshire owns.

In your 2012 letter to shareholders, Mr. Buffett, you had a section devoted to Berkshire's buying 28 newspapers during the year just past. Since then, you have not come back to the newspaper subject.

But this year, at the end of the annual report, you published a list of the newspapers Berkshire owns today, along with their circulation. I compared that list with the one you published five years ago at the end of 2012.

As you no doubt know better than anyone, the circulation of the 26 newspapers that Berkshire still owns, of the 28 originally bought, fell sharply. In many cases, by big amounts like 30 percent to almost 50 percent.

I know that five years ago, you acknowledged the risk in owning newspapers, but you still said, 'Charlie and I believe that papers delivering comprehensive and reliable information to tightly-bound communities, and having a sensible internet strategy, will remain viable for a long time.'

Skip to today, and imagine that you are writing about Berkshire's experience with newspapers. What would you be saying?"

WARREN BUFFETT: Yeah. I would say that — I forget the modifying word on internet strategy — but I could say (Inaudible).

The problem has been — about 1,300 daily newspapers in the United States — there were 1,700 not that long ago — is that no one except The Wall Street Journal, The New York Times, and now probably The Washington Post has come up with a digital product that, really in any really significant way, will replace the revenue that is being lost as print newspapers lose both circulation and advertising.

And if you look at the communities in which we operate, or the communities in which, you name it — other newspapers operate, the community could be prospering. We're in a prosperous economy presently. And all are losing daily circulation, they're losing Sunday circulation, they're losing street — all street sales, they're losing home-delivered.

And it is — I've been surprised that the rate of decline has not moderated in the last five years.

We bought all the papers at reasonable prices, so it is not of great economic consequence to Berkshire. But I would like to see daily newspapers, actually, you know, be economically viable, because of the importance to society.

But I would say that the trends which — I put those circulation figures in there because I think the shareholder's entitled to look, year-to-year, at what is happening. And it's not only —

It's happening to 1,300 newspapers throughout the United States. And it happens in small towns, where you would think that the alternative sources of information would not be that good. It happens every place.

And The Journal, The Times, and probably The Post, have a viable economic model in the digital world, and probably will continue to shrink — I'm almost certain will continue to shrink — in the print world.

But the digital world will be big enough that — and they'll be successful enough — so that they have, in my view, a sustainable business model.

But it is very difficult to see, with the lack of success, in terms of important dollars arising from digital, it's difficult to see how the print product survives over time. And that's — I'm afraid that's true of 1,300 papers in this country.

And we'll keep looking to see if there is a way to do it. But you'd have to look at our experience, and look at the experience of everyone else's.

McClatchy newspapers came out the other day, you know, and I think that newspaper — which is very good — fine cities that they operate in — and advertising revenue is down something like 17 or 18 percent, and circulation. But it isn't just them, it's everybody in the business. And I wish I had a better answer for you, but I don't.

I would say that the economic significance to Berkshire is almost negligible, but the significance to society, I think, actually is enormous.

And, you know, I hope that we find something. I hope others find something because we'll copy it. But so far, we have not succeeded in that.

Charlie?

CHARLIE MUNGER: Well, the decline was faster than we thought it was going to be. So it was not our finest bit of economic prediction. And I think it's even worse.

I think, to the extent we miscalculated, we may have done it because we both love newspapers and are — and have considered them so important in our country.

These little local newspaper monopolies tended to be owned by people who behaved well and tended to control the politicians. And we're going to miss these newspapers if they disappear. We're going to miss them terribly. And —

WARREN BUFFETT: I think you may continue —

CHARLIE MUNGER: — I hope to God it doesn't happen, but the figures are not good, Warren.

WARREN BUFFETT: No. No, they aren't. And it isn't just — you know, it isn't some town that has a particular problem with unemployment or anything of the sort. And it isn't due to general economic conditions.

It's due to the fact that a newspaper, if you wanted to know the baseball results from the present day, and the box scores, and everything else, they told you the following morning and it was still news to you.

And the financial material that I read from there, and in terms of looking at the stock prices and everything, they were news to you the following morning. And the —

What was developing in the Pacific in terms of the war was news to you when you read about it in the morning in The New York Times. And it's — news is what you don't know that you want to know. And the —

And those Help Wanted ads, you know, segregated as they may have been, still were the place to go to look to find a job. And you can go up and down the line and one element after another where the daily print newspaper was primary, they're no longer primary.

And the business has changed in a very material way, and we haven't been able to figure out any solutions to that, and we'll keep trying.

Like I say, it's not of economic consequence, but I think it is societal consequence. And we haven't been able to solve it.

10. TTI has "improved dramatically in the past year"

WARREN BUFFETT: OK, Jonathan?

JONATHAN BRANDT: TTI has been a nice growth story since Berkshire acquired it 11 years ago, more than doubling its pre-tax earnings to about $400 million due to fine organic growth and at least two successful bolt-on acquisitions. Business momentum appeared to accelerate in the first quarter.

Can you please talk about the competitive landscape in the electronic components distribution industry and what TTI's advantages are? Is it just a great industry to be in or is TTI's business model and/or management team special?

WARREN BUFFETT: Well —

JONATHAN BRANDT: Do you expect it to continue to be one of Berkshire's faster growing non-insurance subsidiaries?

WARREN BUFFETT: TTI is run by a fellow named Paul Andrews who's done an absolutely sensational job with us. He's a wonderful man. He's a wonderful manager.

And in the last — he's quadrupled the business, basically, but in the last year and accelerating right to this point.

They distribute little electronic components. They actually — their average — they're a many-billion dollar business — and their average item is less than a nickel that they sell. So it's kind of like being in the jellybean business or something like that. Except these things go into all kinds of fancy machines that I don't understand.

And we have a worldwide operation based in the Dallas, Fort Worth area. And built by one man who left a division of General Dynamics 45 or 50 years ago. And step-by-step built up this business — like we just bought within the last two months, we bought an operation in South Korea that will be another substantial addition. We do business worldwide. And electronic components that have absolutely taken off in the last year.

And they use something called, you know, well, it's essentially a measure of backlog. And book-to-build is the ratio they call it. But it's just kind of a special term.

The — but, it's grown — I mean, it's just improved dramatically in the last year. And it continues month after month. So something is going on out there because nobody buys these things to store them in their basement or anything of the sort. I mean, these get used, these electronic components.

Some of them are on allocation. We have a great relationship with suppliers. We have a very good relationship with our customers because we carry more inventory than most of our competitors. So particularly when the business is tight we can deliver and do a very first-class job doing it.

So I give credit to Paul. He increased his physical facility, started on that a few years ago. And it's a godsend that he did it because with the business going through there now we wouldn't have been able to handle it.

But it's a competitive business. I mean, if you look at Arrow Electronics, you know, on the New York Stock Exchange — we've got competitors. I think Paul is doing a better job, by a considerable margin, than they are. And I'm delighted as a part of the Berkshire family.

There will be times when that business slows down because their customers, you know, will have their own cycles. And what it does will go down. But over time that business is going to grow.

Charlie?

CHARLIE MUNGER: Yeah, it's a wonderful business because it's so difficult to do that competitors don't want try it. When I lived in Omaha there was a man who lived in great prosperity and almost no work. And his business was gathering up and rendering dead horses. And he never had any competitors. (Laughter)

He used to come up to the Omaha Club and start drinking about 11 in the morning. It was not a difficult business. But nobody ever crowded him with new competition.

And very few people want to distribute zillions of electronic parts that are worth a nickel each. It's very complicated.

And of course that business is terribly good at it. And it keeps getting more and more of the same. So you're right. It's a huge growth business which is sort of the electronic equivalent of gathering up and rendering dead horses. (Laughter)

WARREN BUFFETT: Imagine keeping track of close to a million different items, you know, with very small values attached to them and getting them out to your customer fast because they

want them fast, all over the world. You know, and those things are not easy to manage. I mean, yeah.

CHARLIE MUNGER: And staying in stock on so many items. It's very complicated. And that business is very good at it.

WARREN BUFFETT: Yeah, we're luck —

CHARLIE MUNGER: And of course it'll grow. The horses went away but these parts aren't going to go away. (Laughter)

WARREN BUFFETT: Charlie made a profession of studying businesses where the owners could sit around and drink all day and have — (laughter) — he thought that was where we ought to be competing but — or buying.

CHARLIE MUNGER: My theory, Warren, is if it can't stand a little mismanagement, it's no business. (Laughter)

WARREN BUFFETT: Yeah and we're testing that sometimes. (Laughter)

11. Phillips 66 and staying below 10 percent ownership

WARREN BUFFETT: OK, Station 2.

AUDIENCE MEMBER: Hi, Ben Sherber (PH), Topeka, Kansas. Just want to say, Warren and Charlie, thank you again for hosting us all. This is a great event.

WARREN BUFFETT: Thank you.

AUDIENCE MEMBER: My question is about the recent decision to sell shares back of Phillips 66. Not to put you on the hot seat. But right after that, share prices jumped up about $22 a share.

You mentioned at the time that there's some regulatory requirements if you own over 10 percent of a company. Could you talk about the factors that go into how you decide whether to retain more than that or get under that threshold? And then what are your thoughts long-term on Phillips 66, like, their business mid-stream refining?

WARREN BUFFETT: Yeah, well, it was the City Service preferred of last year. (Laughter)

We sold the stock at around 93 or '4. And it's probably 115 now. But we own just under 10 percent of the company. And the more Ted [Weschler] and Todd [Combs] and I think about various problems connected with regulatory problems and trading problems and so on, overwhelmingly we will stick below 10 percent on marketable security holdings.

We've done it with the airlines. Now that does not mean we're going to reduce our holdings in American Express or anything of the sort.

But — and Greg Garland has done a great job at Phillips 66. We've had very good relations with the company. They're very — he's a very, very, very experienced and sensible manager.

But I did decide that I wanted to be below 10 percent in that holding. And we, like I say, we'll stay just slightly under 10 percent of Wells Fargo.

We've actually sold a few shares just to stay below 10 percent in the case, I think, of both American Airlines and United Continental.

Unless there's something unusual we're going to stay under ten. But we have nine and a significant fraction percent of Phillips. And I think they've been good at operations. I think they've been good at capital allocation.

We traded them a business — we traded them stock for a business some years ago, which has been a very nice business that we've retained in operation.

So we've got a lot of money still in Phillips. And I wish I'd made the deal at a higher price. But we made money on what we sold and we accomplished an objective.

Charlie?

CHARLIE MUNGER: Well, we like the subsidiary we traded the stock for. (Laughter)

WARREN BUFFETT: I missed that —

CHARLIE MUNGER: We traded the stock for a subsidiary.

WARREN BUFFETT: Yeah, well, yeah.

CHARLIE MUNGER: We like the subsidiary.

WARREN BUFFETT: Oh yeah. Well, it improved —

CHARLIE MUNGER: It isn't like the stock went away for nothing.

WARREN BUFFETT: Yeah. Yeah, actually we've done pretty well with Phillips.

12. Cryptocurrency craze will "come to a bad ending"

WARREN BUFFETT: Becky?

BECKY QUICK: This question comes from Vlad Koptev (PH) in Ukraine. He says, “Capitalization of cryptocurrency has approached that of Berkshire and Apple last year. And clearly the idea behind crypto will affect conventional banking groups where Berkshire is a shareholder. You always say you didn’t go into too much detail to obtain an understanding on cryptocurrencies. So what factors caused you to say that it’s a bubble?”

WARREN BUFFETT: Well, generally non-productive assets remain not only — if you’d bought gold at the time of Christ and you figured the compound rate on it, you know, it may be a couple tenths of 1 percent.

It essentially is not going to deliver anything other than supposed scarcity, you know, because they’ll only — you can only mine so many. But so what? I mean, what does it produce itself?

You know, the check is a wonderful idea. Just imagine how the world would be without being able to write checks or have wire transfer of funds. But it doesn’t make the check intrinsically itself worth a lot of money.

And if you said you can’t use something called “check” with a little piece of paper you’d do something else to transfer money.

I think that anytime you buy a nonproductive asset you are counting on somebody else later on to buy a nonproductive asset because they think they can sell it to somebody for more money.

And it’s been tried with tulips and it’s been tried. It’s been tried with various things over time. And it does come to a bad ending.

I mean, having — you have a hard time. You can think of raw land. I mean, the Louisiana Purchase was, say, $15 million for 800,000 or so square miles of land. In fact, you’re sitting on land that came with the Louisiana Purchase.

And so what’d we pay? We paid 20 bucks a square mile. And, you know, 640 acres in a square mile. And you’re down to three cents or something. So that was a pretty good purchase of what was then a nonproductive property. But it’d depend — but it’s very hard. You can buy stamps. Bill Gross got, you know, collected a wonderful stamp collection. It sold for more money in the end.

But it’s dependent on somebody else wanting to buy, hoping they will sell it for more money and so on.

And in the end you make your money on productive assets. If you buy a farm, you try to estimate what the crops, what amount per acre of soybeans or corn or whatever may be raised, and how much you have to pay the farmer that farms it for you, and what your taxes will be, and various things. And you make a conclusion based on what the asset itself will produce over time. And that’s an investment.

When you buy something because you're hoping tomorrow morning you're going to wake up, you know, and the price will be higher, the only reason, you know, you need more people coming into it than are leaving.

And you can get that. And it will feed on itself for a while, and sometimes for a long while, and sometimes to extraordinary numbers. But in the end — but they come to bad endings. And cryptocurrencies will come to bad endings.

And along with the fact that there's nothing being produced in the way of value from the asset that you also have the problem that it draws in a lot of charlatans and that sort of thing who are trying to create various sorts of exchanges or whatever it may be.

You know, it's something where people who are of less than stellar character see an opportunity to clip people who are trying to get rich because their neighbor's getting rich buying this stuff that neither one of them understands. It will come to a bad ending.

Charlie?

CHARLIE MUNGER: Well, I like cryptocurrencies a lot less than you do. (Laughter)

And so to me it's just dementia. And I think the people who are professional traders that go into trading cryptocurrencies, it's just disgusting. It's like somebody else is trading turds and you decide, "I can't be left out." (Laughter and applause)

WARREN BUFFETT: To the extent that this — we are being webcast around the world, I hope some of our stuff doesn't translate very well, actually. (Laughter)

13. Shareholders will get a lot of the corporate tax cut benefit

WARREN BUFFETT: OK, Gary.

GARY RANSOM: Yes, I had a question on the corporate tax rate. And we have a debate in my investment world about where the benefits of that cut fall. And I'd say the consensus is going to the consumer as it gets competed away over time. But perhaps some of it sticks to shareholders.

And my question is, do you think, over the long run, some of the benefits sticks to shareholders? And maybe it's even beyond auto insurance? Maybe it's other businesses you have as well.

WARREN BUFFETT: Well, what people do generally with that is they take what they want to be the answer for them and then they hire — or they just attach themselves to some economist that gives them a more complicated way of saying it's all going to be wonderful because it's happened.

But the answer is that in the case of our regulated public utilities, the benefits are all supposed to go, and will go, to the utility customer, because we're entitled to a return on equity if we perform well. And we're not entitled to get excess returns because our tax rates changed. And similarly, if tax rates would go back up, we would expect to get compensated for that. So in that area — and that was 5 or $6 billion for us.

But in that area, absolutely, it goes to the user, the consumer. And it should.

Then the question is, with the remainder, does it get competed away or not? And the answer is sometimes it does, sometimes it gets competed very quickly and substantially. Sometimes it may be slow. And other times it probably won't.

The one thing to know is that the change in the corporate tax law was good for shareholders, generally, and Berkshire shareholders. I mean — and that's what Congress passed. And the intent had to be that if you were going to cut taxes that shareholders would get a particularly large portion this time. And some of you will agree with that politically and some of you won't agree with it politically. But you'll all benefit equally. (Laughs)

And I think it's human nature if you're getting a break to say it's going to work wonderfully for everybody else. And we'll find out whether it will or not.

It's very, very, very difficult in economics to measure the impact of single variables. You cannot just do one thing in economics. People kind of learn that in physics and talk about butterflies in China and all that sort of thing. But the — every question you get in economics the next, any statement, you should say "and then what?"

And when you get into the "and then whats" you get start favoring people who give an answer to that in political life that happens to usually help you in some way or another, including your pocketbook. And we've see that with this. And it's helped the shareholders at Berkshire Hathaway.

I would say that some will be competed away. Some (inaudible) utilities and some will benefit Berkshire shareholders. Charlie?

CHARLIE MUNGER: I have nothing to add.

14. Utilizing multicultural backgrounds to improve international economies, and the benefits of multiculturality

WARREN BUFFETT: OK. Station 3.

AUDIENCE MEMBER: Hi, Mr. Buffett and Mr. Munger. My name's Kevin and I'm from Shenzhen, China, currently studying finance and philosophy at Boston College.

I have a rather broad question. In this more and more globalized world, what do you think our younger generation can do to best leverage our background and experience of both China and U.S. to create values and for the benefit two countries' economy and relationship? And what do you see valuable in a person with a multicultural background? Thank you.

WARREN BUFFETT: Well, I think in answer to the last question, I think it's terrific to have a multicultural background. And I never was any good at languages. But if I were in college today, in either country, I'd be learning the language of the other country, because I think it would be a great advantage over time.

The first part of the question, I'd like to have that stated again to me. I want to make sure I'm answering your specific aspect there on the — I think it's going to be good for your future. But can we have the microphone on up there again?

AUDIENCE MEMBER: So the first part of the question is, like, what do you think our younger generation can do to best leverage our background and experience of both China and U.S.?

WARREN BUFFETT: Well, I'd start with being multilingual, I mean, certainly, in terms of, you know, I mean, obviously you want to be able to express yourself in both. And the better you can understand, obviously, the culture of another society, obviously, that's a benefit.

But I think the market system, modified as it may be, both in China and in the United States, in a way, it really does — there will be an invisible hand, to some extent, that does work to improve the lot of future generations by the fact that both China and the United States, and the rest of the world, is improving. I mean, it is much better, in my view, particularly in a nuclear world. But it's much better to have people prospering throughout the world, partly through their own efforts but partly through their interactions with the rest of the world.

And we've made a lot of progress in that respect particularly since World War II. I mean, it was a terrific idea to have the Marshall Plan, you know, instead of behaving like we did after World War I and getting the result that we got. I think we behaved much more intelligently after World War II.

So I'm bullish on the future of United States. But I'm bullish on the future of China, and to a significant extent, you know, the rest of the world.

People are going to be living better 10, 20, 50 years from now. And I don't think that's something that can be stopped even. Charlie? Absent weapons of mass destruction.

CHARLIE MUNGER: Yeah, well, the multicultural stuff, it wouldn't do you much good to be fluent in both English and Chinese if you were, say, a proctologist in China or a proctologist in Nebraska. (Laughter)

So if you're going to use your multicultural background, you've got to work at some interface between the United States and China.

And you can raise money in the United States and invest it in China like Li Lu does or you can be some kind of an importer or a trade specialist. But you've got to get near that interface to benefit from being bilingual and so on.

WARREN BUFFETT: But you would bet that the interface will be substantially greater.

CHARLIE MUNGER: Huge.

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: Huge.

WARREN BUFFETT: And that's what you want to prepare for.

CHARLIE MUNGER: Yes. And I think that, generally speaking, that we get multicultural you can also be multidisciplinary. But generally I think people make more money if they're very narrowly specialized, like the proctologist. (Laughter)

And it's much harder to make a lot of money for most people if you try to imitate Warren and me.

WARREN BUFFETT: I'm glad I didn't meet him earlier. I mean — (Laughter)

15. Subsidiaries encouraged to offer low-cost 401(k) options

WARREN BUFFETT: OK, Andrew.

ANDREW ROSS SORKIN: OK, this question comes from someone who says, "I am a Berkshire employee and shareholder."

WARREN BUFFETT: Uh huh.

ANDREW ROSS SORKIN: "I read an investigative article from ProPublica and The Washington Post that many of Berkshire's various units only offer 401(k) plans with high fees that are actively managed rather than the low-cost indexes you have advocated as the best path for savings for retirement.

"The article's author said he contacted the company and nobody would comment.

“Will you do something to improve our 401(k) offerings to match your investment philosophy? And from an operational perspective, how did this happen, given your strong views on the topic?”

WARREN BUFFETT: Well, I’ve absolutely said what — many, many times through annual reports — and our managers know what I think about the attractiveness of having an index fund option. But they all have different plans, different histories. And they run their businesses.

And who knows, you know, which particular — if you go back to the older businesses, they have defined benefit pension plans, generally. Nobody puts them in anymore. And then the question is, you know, do you transition to something else.

In the end, we overwhelmingly thought our managers make those kind of decisions and others. And my guess is that a very high significant percentage of people who have — who work at a company that has a 401(k) plan will have an index fund option, but they may not, in some cases.

The only thing we — I think we have asked the companies to have a limit on the percentage, I think, that they might put in Berkshire’s stock through the 401(k). We don’t want people to lose jobs who are tied to Berkshire.

We certainly don’t want to be in the position of encouraging to put 100 percent or something of their savings in Berkshire itself. I don’t want to be in that position.

But I don’t think even there we’ve insisted on any company doing that. I think we’ve probably made that, when we’ve been asked about it once or twice, I think we’ve given that suggestion.

But the managers will run the companies. The employees, if they feel — and some of our companies have human relations departments — if they feel that they’d like different options or something like that, you know, they should make those views known to the managers. And in some cases the managers, I think, will pay attention to them and in others they probably won’t.

We’ve got a wide variety of managers that run our businesses. And we’re not going to start trying to run them from Omaha.

Charlie?

CHARLIE MUNGER: Well, you’re right. That has happened. That business of the high-fee choices, because we’ve delegated the whole subject to the managers of the subsidiaries. And so no attention at all is being given to the employee choices at headquarters.

And what you're pointing out is that a lot of the employees in the subsidiaries would do better if they indexed instead of choosing what they did choose. My guess is you're absolutely right about that. You know.

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: And if there are any people, managers, in the business today, I hope we'll do a little better at encouraging better choices.

WARREN BUFFETT: Yeah, although we don't want them to interfere too much in —

CHARLIE MUNGER: No.

WARREN BUFFETT: — directing what they, you know, we can take over human relations.

CHARLIE MUNGER: No, it's up to the managers. But we wouldn't object to a little different viewpoint.

WARREN BUFFETT: And we have made it very clear what we think. I mean, some of them don't listen to us. (Laughter)

16. Berkshire's culture will continue because "it works"

WARREN BUFFETT: OK, Gregg.

GREGG WARREN: Warren, you've noted time and again that there is a strong common culture shared across Berkshire subsidiaries built on a commitment to honesty and integrity, a focus on the long-term, and an emphasis on customer care. And it's also critical to find cultures that mesh well with Berkshire's when acquiring operating companies.

In most cases, the managers that are currently running these subsidiaries are the same individuals who are members of the families that originally sold their firms to Berkshire, leaving them with a vested interest in the businesses they are running and a strong connection to the culture they tend to share in common with Berkshire.

It seems to me that the greater challenge is in ensuring that the large publicly-traded firms that have been acquired and account for a meaningful and growing amount of Berkshire's overall value, stay the course. Could you comment on whether or not this is the case and what the greatest challenge is for you and Charlie when it comes to not only maintaining Berkshire's culture but in finding firms that would fit in well with what you've built?

WARREN BUFFETT: Yeah, I think the culture is very, very strong. And I think it gets reinforced — frankly, I think it gets reinforced by the shareholders we have. I mean, we have a different body

of shareholders and we look at those shareholders, I think, in a somewhat different way than a good many other companies do.

I mean, I think there are a fair number of public companies that wish they didn't have, you know, public shareholders. We're happy to have public shareholders. And we like having individual shareholders. And we don't favor institutions. And we're not going to, you know, give guidance and talk especially to them on investor calls and all that sort of thing. We want our — we want it to be directly with — we want shareholders who are partners, basically.

And it begins with that. It goes to the directors. We have directors who are not — well, I've been on 19 boards, and I've never seen another board like ours. And I think it's terrific that we've got the people who represent, in many cases, lots of shares themselves. They didn't gets special deals. It's a group of owner-oriented, Berkshire-conscious, business-savvy owners.

And we don't have anybody on the board because they're a leading, you know, educator or whatever it may be. We want people who, basically, think about how to run a business well for themselves and for their partners. And we've got managers who fit into that culture, who have chosen that culture in coming with us.

And sometimes we have the second or the third or fourth generation, say at the Nebraska Furniture Mart, that share that. Is it perfect? No, it's far from perfect. I mean, you don't get everybody thinking the same way. We have people — we have people that are very independently minded running a lot of businesses. And some of them have different political beliefs, they have different — they see through different lenses than we do, to some degree.

But in terms of having a common, strong, positive culture, I don't think there's any big public company that has it any better than Berkshire. And I think that will continue because people opt into it to a great deal. Cultures get passed along. You do things that are consistent with the culture, so you do — what you talk about is what you do.

And you don't find people saying, you know, "We're a wonderful partnership," and then voting themselves, you know, huge options. And then a whole bunch of other people will say options beneath them because they can't look like they're taking it all for themselves, and arranging — I read about some deal where it could pay off with many, many, many billions of dollars, the other day. We won't name names.

But we've got as good a culture as you can get. And I would say, net, it grows stronger. We have a few people all of the time that really don't buy into it entirely. I mean, it is not 100 percent. But it's as close to it.

And I think it gets closer all the time as we go along. And we will keep — we will try to keep behaving in a way that reinforces it and doesn't dilute it. And I think that will not only work for Charlie and me but it will work for our successors very well. It won't be perfect.

Charlie?

CHARLIE MUNGER: Every time I come to one of these meetings and sit in the manager's luncheon, I feel more strongly at the end of the luncheon that the culture and values of Berkshire Hathaway will go on and on for a long time after the present management is gone.

In fact, I think it'll go on after all of the present managers are gone. I think we've started something here that will work well enough that it will last. And one of the reasons it will last is it's not that damned easy to duplicate.

So the one that is present is likely to just keep going and going. Think of how little direct copying of the Berkshire system there's been.

WARREN BUFFETT: But it won't produce the returns it's produced in the past even.

CHARLIE MUNGER: No, I think it's going to last a long time for a very simple reason. It's going to —

WARREN BUFFETT: It works.

CHARLIE MUNGER: — deserve to last a long time.

WARREN BUFFETT: It works.

CHARLIE MUNGER: And it's going to work.

17. Cash needed to support Berkshire insurance operations

WARREN BUFFETT: OK. (Applause) Station 4.

CHRISTIAN MAX: My name is Christian Max (PH). I'm a proud shareholder from Cologne, Germany. It is my pleasure to be here.

My question relates to the Berkshire insurance operations. When I look at the quarterly billing sheets of the last two decades, I noticed a pattern that I kindly ask you to discuss.

The sum of cash plus fixed income always hovers around 100 percent of the amount of insurance float. Therefore, my question is, is it fair to say that from the 128 billion of consolidated cash plus fixed income as of March, 116 billion are actually needed to support the insurance operations?

WARREN BUFFETT: No, I appreciate —

CHARLIE MUNGER: The answer is no. Yes.

WARREN BUFFETT: The answer is no. But he deserves an explanation of how this — maybe I haven't looked at it the way he's looked at it.

We would much rather have a number closer to 20 than to have 116. And we do not correlate or, in effect, measure the float and then decide how much to put or leave in cash, in fixed income.

The fact —our float keeps growing. And lately our — which is by design and has been terrific for us — and our cash and cash equivalents have has grown because the competition for acquisitions has become much stronger as — both as money has piled up with the buyers of businesses and because debt has been so cheap and a variety of factors.

But I don't think those are necessarily permanent. In fact, it would be reasonably true they aren't permanent. It's just a question of when they change.

We are not tying, as Charlie said, we're not tying the cash and cash equivalents at all to float. The float is (inaudible).

The float went up $2 billion in the first quarter. And there is no way that that that float can shrink a lot in any short period. It just structurally has been set up in such a way that it will not — it cannot shrink. And actually, I think it'll grow a little bit for a while.

I mean, I've always been amazed by how much it has grown. We've got so much more float than any property-causality company in the world. And it's pretty amazing that it all came from that little building that Jack Ringwalt built and picked the location because it was near the tennis courts. (Laughs)

OK, Carol.

Oh, and Charlie.

CHARLIE MUNGER: There are encouraging recent developments. Some of the cash has gone out recently for securities we vastly prefer over the cash. And we have a lot of cash that could be — remaining — that could be deployed in securities we might like a lot better than Treasury notes. So stay tuned.

WARREN BUFFETT: Yeah, to make it very simple, in the first quarter we earned five and — from operations we earned a little over $5 billion. Now, we only spent about our depreciation. Normally we would spend somewhat more than that. But that's 5-and-a-fraction billion. Two billion came, in net, from float. So that's $7 billion that — basically in the first quarter — that would have been added to our cash if we hadn't done something with it. And instead our cash and equivalents went down, because we, net, invested more in equities by some margin than the seven that came in.

But we do have this position where, even absent a change in float, about 400 million comes into Berkshire every week, which is very comfortable. (Laughs)

And we will — we want to get it so that more than 400 million is going out into productive assets. And we succeeded in doing that in the first quarter. And, net, net we improved our position in the first quarter.

18. "Amazing" earnings in the new "asset-light economy"

WARREN BUFFETT: Carol?

CAROL LOOMIS: In your 1999 article in Fortune magazine, you stated your belief that after-tax corporate profits were unlikely to hold much above 6 percent for any sustained period, due not only to competition but also to public policy.

You stated in the article, "If corporate investors, in aggregate, are going to eat an ever-growing portion of the economic pie, some other group will have to settle for a smaller portion. That would justifiably raise political problems."

Since 2008, after-tax corporate profits have been 8 to 10 percent of GDP. Do you believe that is a permanent shift in the U.S. economy? And of course, we have to think about the latest tax bill. Or will corporate profits revert back to the 4 percent to 6 percent of GDP range that was normal in the 20th century?

WARREN BUFFETT: Well, it's been an interesting development during that period. It goes back a little bit before that period. But you now have the four largest companies, by market value, in the United States — a $30 trillion market — you have four companies that essentially don't need any net tangible assets.

And if you go back many years, I mean, if you looked to the largest companies — Carol used to put out the Fortune 500 list. And you know, it would be AT&T and General Motors, and it was companies that — Exxon Mobil — it was companies that just required lots of capital in order to produce earnings.

So American industry has gotten incredibly more profitable, in aggregate, in the last 20 or 30 years. You look at the return on the S&P 500, the earnings as a percent of net tangible assets, and the rest is just, you know, if you buy a company that has a million dollars' worth of net worth and you pay a billion for it, it still only had the million dollars' of net worth. I mean you just paid more for it. So the basic profitability of the company is huge, even though your investment may be at a significantly higher price.

So that what has happened is that, I think if you look at the earnings on tangible net worth of the S&P 500 and compare it to 20 years ago, it is amazing. And that is really due to the fact that this has become somewhat, you could call it an asset-light economy.

And you know, those four companies that earn 10 percent of the — they comprise close to 10 percent of the market value of the entire publicly-traded corporate America, they don't — and they don't take any money, basically. And that is a changing world. And they will earn even more money with the tax rate going down.

And I don't think people have quite processed all that information in terms of what has gone on in the market.

You don't — you know, [Andrew] Carnegie built a steel mill, and then he paid it off. Or he borrowed a little money, and then he built another steel mill, and all of that sort of thing. But it was enormously capital-intensive.

And one industry after another. AT&T was enormously capital-intensive. And now the money is in the asset-light — I mean, huge money is in the — not only asset-light business — but the negative asset.

You know, IBM even, you know, had — it has no tangible — it has a net — minus tangible net worth. There's nothing wrong with that. It's terrific. But it is not the world we lived in 30 years ago.

And in that sense, I didn't see that coming in 1999 when I wrote whatever I wrote there. It hasn't changed the profitability of the asset-heavy companies particularly. I mean, it isn't like oil.

If you take the five most capital-intensive industries in the '90s, I don't think you'll find that their earnings on tangible asset have increased a lot. But you will find that this group has moved in that really doesn't — they don't need any net tangible assets at all, or they need very minor amounts.

Charlie?

CHARLIE MUNGER: There's also a lot of financial engineering that's raised leverage, even in the capital-intense businesses. And you know, while Warren may have predicted a little wrong when he wrote that very scholarly article, he didn't invest wrong. And so it just shows that it's hard to make these economic predictions.

WARREN BUFFETT: OK, Jon —

CHARLIE MUNGER: We weren't very right on that one, Warren.

WARREN BUFFETT: Yeah, actually, the performance of the stock market since then has been pretty accurate. (Laughs)

CHARLIE MUNGER: Yes. That's true.

WARREN BUFFETT: Yeah. Being right for the wrong reason or something. (Laughs) Or wrong for the right reasons.

19. "We still feel OK" about AIG's $10.2 retroactive premium

WARREN BUFFETT: Anyway, Jonathan? (Laughs)

JONATHAN BRANDT: Berkshire received a 10.2 billion retroactive premium from AIG early last year. If the upwardly revised estimate of 18.2 billion of ultimate claims proves to be correct, will the cost of float, adjusted for favorable tax attributes, likely be lower or higher than what Berkshire would have paid to borrow 10 billion for a similar duration?

WARREN BUFFETT: Well, we certainly go in with the idea that it will be — the cost will be lower. And it's an interesting situation.

We — essentially, AIG, which is one of the largest property-casualty, particularly commercial property-casualty companies in the world, said, "We want to give you all of the losses that we incurred in a very big percentage of our domestic business before December 31st of 2015, and we will pay the first 25 billion. And then after we pay 25 billion and AIG pays $25 billion, then you pay 80 percent of the next 25 billion." And they gave us $10 billion for doing that. And that's —

If we are correct about our estimates of how much money will be paid and when it will be paid, we should come out being better off than if we had borrowed a similar amount.

We have a history of doing 10 or so — maybe 12 — big deals like that. We hold the record. We did it for Lloyd's of London 10 or more years ago, and we did it now with AIG.

And sometimes we've been on the low side in our estimate, and sometimes we've been on the high side so far.

AIG just said that they — I think they paid 15-and-a-fraction billion on these pre-12/31/2015 losses. They paid 15-and-a-fraction billion. But the payments tend to trickle down over years as you get further away from when the losses occurred.

So I would say that we still feel OK about it, and we'll be wrong one way or the other. Everybody is when you estimate losses that may not get settled for 20 or 30 years. But so far, on the group as a whole of these deals we've done, we've been OK. And I think on the AIG thing, we think we'll be OK. And I think AIG thinks we'll be OK. I mean, they entered into it for good reasons of their own. So it looks OK.

Sorry to get into this technical stuff, but Jonathan always asks me questions like that, so I have to be ready to — I want to answer them.

20. “We really want products where people feel like kissing you”

WARREN BUFFETT: OK. Station 5.

AUDIENCE MEMBER: Good afternoon. My name’s Adam Bergman with Sterling Capital in Virginia Beach, Virginia. I’m here with my daughter Michelle from Cape Henry Collegiate in Virginia Beach.

AUDIENCE MEMNBER: Hi Warren, hi Charlie.

AUDIENCE MEMBER: Our question for you is how you go about attempting to forecast the degree of future success of one specific product in a good business versus another, such that you invest in American Express and Coca-Cola rather than Diners Club or RC Cola, for example. Thanks.

WARREN BUFFETT: Well, with American Express — (laughs) — it was an interesting situation, because Diners Club got there first. I think American Express, in a certain sense — I mean, they did it for a lot of reasons — but they went into the credit card business because they were worried about what was going to happen to traveler’s checks. And — although traveler’s checks are — still exist in a significant way.

But the interesting thing when American Express went into competition with Diners Club, and with Carte Blanche, as I remember that — which also existed at the time — was that instead of charging less than Diners Club and going in figuring they were going against the established guy and they’d come in at a lower price, they went in it at a higher price, as I remember.

And the American Express centurion was on that card. I’ve got one that I got in 1964, but they were in it before that. It had more value in time. I mean, it got better representation. And frankly, if you were a salesperson out with somebody, and you could pull out that American Express card with that centurion, you looked you were JP Morgan. And if you pulled out the Diners Club, it had a whole bunch of flashy symbols, you looked like a guy that was kiting his checks from one month to the next, and — (Laughter)

A fellow named Ralph Schneider — Ralph Schneider and Al Bloomingdale developed the Diners Club. And they were very smart about getting there first, but they weren’t smart about how they merchandised it subsequently.

RC Cola, you know, it did — there are all kinds of colas that came after Coke. I mean, you know, you go back to 1886 and come up with something at Jacobs’ Pharmacy that’s incredibly successful, you know, fairly soon you’re going to get lots of imitators. But Coke really is the real thing. And you know, you offer me RC Cola and say, “I’ll give it to you at half the price of Coca-Cola,” in terms of drinking it,

I mean, just, this is a product that's 6 1/2 ounces, sold for a nickel in 1900, you know. And now if you buy it on the weekend and buy it in large quantities and everything, you're not paying that much more. This newspaper was three cents in 1942, you know. I mean, the amount of enjoyment per real — in terms of the real — of what you pay for this, has gone dramatically down in inflation-adjusted money. So it is a bargain product.

You know, you have to look at — See's Candy, you know, if you live in California and you were a teenage boy, and you went to your girlfriend's house and you gave the box of candy to her or to her mother or father and she kissed you, you know, you lose price sensitivity at that point. (Laughter)

So we really want products where people feel like kissing you, you know — (laughs) — rather than slapping you.

It's an interesting thing. I mean, you know, in effect we're betting on the ecosystem of Apple products, but — led by the iPhone. And I see characteristics in that that make me think that it's extraordinary. But I may be wrong.

And you know, so far we've been — I would say we've been right on American Express and Coca-Cola.

American Express had this huge salad oil scandal in 1960 happen — in '63, November, right around the time [President John] Kennedy was shot. And there was really worry about whether the company would survive.

But nobody quit using the card. Nobody quit using the traveler's checks. And they charged a premium price for their traveler's checks. So there are things you can see around consumer products that sometimes can give you a pretty good insight into the future. And then sometimes we make mistakes.

Charlie?

CHARLIE MUNGER: I've got nothing to add, except that if we'd been offered a chance to go into Coca-Cola right after it was invented, we probably would have said no.

WARREN BUFFETT: We'd have turned it down. Yeah.

CHARLIE MUNGER: It would've looked kind of silly to us.

WARREN BUFFETT: Well, unless we drank it, now, Charlie, listen. (Laughs)

No, he's right. I mean, we don't foresee things that we haven't got a lot of evidence in on. And —

CHARLIE MUNGER: No.

WARREN BUFFETT: We want to see a lot of — if we're talking about a consumer product — we want to see how a consumer product behaves under a lot of different circumstances, and then we want to use something — actually, there was a book by Phil Fisher written around 1960 called "Common Stocks and Uncommon Profits." It's one of the great books on investing.

And it talks about the "scuttlebutt method" of investing, which was quite a ways from what Ben Graham taught me in terms of figures. But it's a very, very good book. And you can learn a lot, you know, just by going out and using some shoe leather.

Now they call them channel checks now or something like that. But it's — you can get a feel for some products, and then there are others you can't. And then sometimes you're wrong. But it is a good technique. It's an important investing technique, I would say that. And Ted [Weschler] and Todd [Combs] do a lot of that. And they have people — some people that help them out on doing it, too.

Charlie's done it with Costco. I mean, he's — (Laughs)

I mean, all the time he is finding new virtues in Costco, you know, and then it — and he's right, incidentally. I mean, Costco has an enormous appeal to its constituency. They delight — they surprise and delight their customers. And there is nothing like that in business. You have delighted customers, you're a long way home.

21. Hostile bids aren't "evil" but Berkshire doesn't do them

WARREN BUFFETT: OK, Becky.

BECKY QUICK: This comes from John Hegarty (PH) at Brightstar Capital Partners, who writes, "Warren, you're stepping down from the Kraft Heinz board at a time when the company's looking to do a large acquisition: Unilever, for example. Do you fundamentally disagree with the combative nature of hostile bids, activist investing, and competitive proxy contests?"

WARREN BUFFETT: Well, we will not make hostile tenders ourselves. I do not believe that there's anything fundamentally wrong with the idea. I mean, if you take the Fortune 500 companies, I'm sure that all 500 are not managed by the best, or in some cases even the friendliest to investor managements in the world.

So I don't think it's evil or anything to conduct a hostile offer for a company. It's just we won't do it, and we don't want to get into that. We like being liked by the managements that we join, because we're counting on them to run the company, and we're not bringing in a whole bunch of people that know how to change businesses.

We seldom take a position opposite the management — very seldom — on anything involving a proxy, but — contest of sorts. But we don't rule it out. We don't think every management is entitled to be — you know, they don't have a lifetime hold on their business. But it's not our style at all to — well, we won't do it in terms of initiating it ourselves, and we'd be very, very, very unlikely to support a contest.

But we have voted against a couple of propositions over 50 years that managements have had — made — in relation to stocks options. We withheld a vote at Coca-Cola a few years ago to express our opinion.

But we don't think it's evil for the shareholders, in some cases, to have different opinions about who should run the company, or whether compensation's appropriate, or matters of that sort. The stockholders still own the company.

Charlie?

CHARLIE MUNGER: I've got nothing to add to that. I don't envy these people that are in these unfriendly uproars all the time. Imagine doing that after you're already rich. It's insane. (Laughter)

WARREN BUFFETT: Yeah. Yeah, we are definitely not looking for it. We don't —

There are certainly companies that deserve challenge. And they propose things that deserve challenge occasionally. But again, it's not our main activity.

And incidentally, this has — the question was asked in reference to Kraft Heinz.

The people at 3G are great, great managers. They've been wonderful partners. I had made a determination, before we got involved there, I was going to be on no more public boards. I'd been on 19 of them, and it takes a lot of time. And they asked me if I'd go on for a while, and I did.

But it really is, like, seven-and-a-half days or something. And if you're on a bank board, it may be quite a bit more than that. I mean, there just —

Being on a public board usually means quarterly meetings plus maybe an extra one. And, you know, at 87, I think I've now learned what happens, and it's fine, but I don't want to spend seven-and-a-half days a year when I — maybe I can call up people that I trust and admire who are on the board in five minutes, you know, and find out what's going on or whatever it may be, any questions that come up.

And so we are their partners, and delighted to be their partners. And now we have two people on the board of Kraft Heinz, and they can do the traveling and I can stay home.

Charlie, how many public — you're on Costco, of course, over the — your lifetime, how many public boards?

CHARLIE MUNGER: Oh, I — Costco — except for something —

WARREN BUFFETT: Kansas City Power.

CHARLIE MUNGER: — like The Daily Journal where I own part of it, Costco's the only public board —

WARREN BUFFETT: You were on Kansas City Power.

CHARLIE MUNGER: — if it wasn't Berkshire or something I owned personally.

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: I was on Kansas City Power and Light. Boy, that goes way back. But basically it hasn't happened. I don't envy people who float around to a lot of different board meetings.

WARREN BUFFETT: No, generally speaking you have very little influence and spend a lot of time. And the trouble is, if you're going to a board meeting, particularly if you get to the international, and sometimes they feel they have to have one that's international, you know, they feel they have to take up a fair amount of your time or it wouldn't have been worth coming, you know, thousands of miles for.

So you get a lot of the show and tell stuff and — that — I find my mind drifting. OK. (Laughter)

22. Berkshire still not on radar screen of international business sellers

WARREN BUFFETT: Gary.

GARY RANSOM: Yes, you've said that you are looking for non-insurance large acquisitions to put that cash to work. And when you've said that, I've usually thought of the United States, because you're a big fan of the U.S. business.

And I just was wondering whether you're seeing more opportunities as the rest of the world opens up, grows, whether there's opportunities for some of those mega-transactions in other parts of the world, say Asia or Europe.

WARREN BUFFETT: Yeah, Gary, I would say that I've been disappointed in that, because we do see some outside the United States, and thank heavens we saw the one we saw in Israel some years ago [ISCAR] when Eitan [Wertheimer] wrote me a letter. But — and you know, we bought a business which is a very important part of Berkshire now.

But we are still not — they're certainly aware of Berkshire Hathaway outside the United States. But they don't sort of pick up the phone automatically.

In the United States, I think any large — particularly private — company that thinks — is thinking about doing something, they at least think about Berkshire. But that — in Europe or Asia, that — we are not embedded in the minds the same way.

They know about us, they know we've got a lot of money and they know we like to buy things. But we really, we're on the radar screen big-time in the United States, and we're not as — we don't — the immediate desire to be sure that they've thought about the Berkshire option does not occur the same way outside the United States. And we've tried to encourage it a few ways. But I would say that the results have not been great at all.

But I hope tomorrow, you know, I get a call from Germany or Britain or Italy or you name it, and Australia, wherever it may be. And I hope I get a call and we get an opportunity to do it.

There's a good many countries we'd be quite happy to put substantial money into it. And like I say, our experience in Israel has been just terrific.

Charlie?

CHARLIE MUNGER: Yeah, but the corporate acquisition game now is so driven by the leveraged buyout and the so-called, whatever they call them, strategic, yes, strategic. I usually translate that into barnyard language. (Buffett laughs)

And we're so — there's so much craziness in price from our viewpoint. Of course, it's very hard for us to do it.

The people in the leveraged buyout game, who love massive leverage and don't mind high prices, even they are getting nosebleeds. It's hard. And it's not an environment that means that — that allows Berkshire just to go out and buy a whole lot of companies.

WARREN BUFFETT: Have you ever made a strategic deal that you —

CHARLIE MUNGER: We have to wait.

WARREN BUFFETT: We've made a strategic deal that you can remember?

CHARLIE MUNGER: Hmm?

WARREN BUFFETT: Have we ever made a deal that we would have regarded as strategic?

CHARLIE MUNGER: We've never had a strategic plan unless you've hidden it from me. (Laughter)

WARREN BUFFETT: OK. That answers that.

23. Investing "doesn't require advanced learning"

WARREN BUFFETT: Station 6.

AUDIENCE MEMBER: Hi, I'm Brady Ritchie (PH) from St. Louis, Missouri. Shareholder since 1996.

WARREN BUFFETT: Terrific.

AUDIENCE MEMBER: Warren, you and Charlie have been critical of business schools in the past and what they teach. With respect to value investing, in "Superinvestors of Graham-and-Doddsville," you featured the returns of many great investors with different backgrounds' work in education, with the lesson being, "Following the philosophy is the key."

To be successful today, does it still just fall back to chapter eight of "The Intelligent Investor?" And what do you think of programs and designations such as CFA, CFP, et cetera, which purport high standards yet root it heavily into academia? And I'd like to challenge you to a round of bridge tomorrow. (Laughter)

WARREN BUFFETT: And what was the last part?

CHARLIE MUNGER: Well, he was talk — what do we think about —

WARREN BUFFETT: Yeah, business schools and all that.

CHARLIE MUNGER: — business schools and all that.

WARREN BUFFETT: I didn't catch the last —

CHARLIE MUNGER: They're better —

WARREN BUFFETT: Oh, he's challenged me to a round of bridge. OK. The — (Laughter)

I went to three business schools, and at each I found a teacher or two. I went to one specifically to get a given teacher. But at each one of them I found a teacher or two that I really got a lot out of. The — so we're not anti-business school here at all.

We do think that the priesthood, say, 30 years ago, for example, in terms of — or 40 years ago — in terms of efficient market theory and everything. They strayed pretty far, in our view, from the reality of investing. And I would rather have a person — if I could hire somebody among the top five graduates of number one, two or three of the business schools, and my choice was somebody that had — was bright — but had chapter eight of "The Intelligent Investor"

absolutely — it just was natural to them — they had it in their bones, basically — I'd take the person from chapter eight.

This is not — what we do is not a complicated business. It's got to be a disciplined business, but it is — it does not require a super IQ or anything of the sort. And there are a few fundamentals that are incredibly important, and you do have to understand accounting. And it helps to get out and talk to consumers and start thinking like a consumer in many ways in certain — and all of that.

But it just doesn't require advanced learning. And — I — I certainly — you know, I didn't want to go to college, so I don't know whether I would have done better or worse if I'd just quit after high school, you know, and read the books I read and all of that.

I think that if you run into a few great teachers, and they really change the way you see the world to some degree, you know, you're lucky. And you can find them in — you can find them in academia and you can find them in ordinary life.

And I've been extraordinarily lucky in having great teachers, including Charlie. I mean, Charlie's been a wonderful teacher. And, you know —

Anyplace you can find somebody that gives you insights into things you didn't understand before, maybe makes you a better person than you would have been before, you know, you get — that's very lucky, and you want to make the most of it. If you can find it in academia, make the most of it. And if you can find it in the rest of your life, make the most of it.

Charlie?

CHARLIE MUNGER: Well, when you found Ben Graham he was unconventional, and he was very smart. And of course, that was very attractive to you. And then when you found out it worked and you could make a lot of money while you're sitting on your ass — (laughter) — of course you were an instant convert. And so —

WARREN BUFFETT: It still appeals to me, actually. I mean — (Laughter)

CHARLIE MUNGER: But the world changed. Before he died, Bill Graham — I mean, Ben Graham — recognized that the exact way he sought undervalued companies wouldn't necessarily work for all times under all conditions. And that's certainly the way it worked for us.

We gradually morphed into trying to buy the better companies when they were underpriced, instead of the lousy companies when they were underpriced. And of course, that worked pretty well for us.

And Ben Graham, he outlived the game that he played personally most of the time. He lived to see most of it fade away. I mean, just to find some company that's selling for one third of its

working capital, and figure out it could easily be liquidated and distribute $3 for every dollar of market price. Lots of luck if you can find those in the present market. And if you can find them, they're so small that Berkshire wouldn't find them of any use anyway.

So we've had to learn a different game. And that's a lesson for all the young people in the room. If you're going to live a long time, you have to keep learning.

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: What you formerly knew is never enough. So if you don't learn to constantly revise your earlier conclusions and get better (inaudible), you are — I always use the same metaphor. You're like a one-legged man in an ass-kicking contest. (Laughter)

WARREN BUFFETT: If anybody has suggestions for another metaphor, send them to me. (Laughter)

Graham, incidentally, one point, important point. Graham was not scalable. I mean, you could not do with really big money. And when I worked for Graham-Newman Corp, here he was, the dean of all analysts. And you know, he was an intellect above all others around that time.

But our — the investment fund was $6 million, and the partnership that worked in tandem with the investment company also had about $6 million in it. So we had 12 million bucks we were working with. Now, you can make adjustments for inflation and everything. But it was just a tiny amount. It wasn't really scalable.

And the truth is that Graham didn't care, because he really wasn't interested in making a lot of money for himself. So he had no reason to want to find something that could go on and on, become larger and larger.

And so the utility of chapter eight, in terms of looking at stocks as a business, is of enormous value. The utility of chapter 20 about a margin of safety is of enormous value. But that's not complicated stuff.

CHARLIE MUNGER: I finally figured out why the teachers of corporate finance often teach a lot of stuff that's wrong. When I had some eye troubles very early in life, I consulted a very famous eye doctor. And I realized that his place of business was doing a totally obsolete cataract operation. They were still cutting with a knife after better procedures had been invented.

I said, "Why are you in a great medical school performing absolute obsolete operations?" And he said, "Charlie, it's such a wonderful operation to teach." (Laughter)

Well, that's what happens in corporate finance. They get these formulas, and it's a fine teaching experience. (Laughter)

You give them a formula, you present the problem, they use the formula. You get a real feeling of worthwhile activity. (Laughter)

There's only one there. It's all balderdash.

WARREN BUFFETT: Yeah, whenever you hear a theory described as elegant, watch out, you know. (Laughter)

CHARLIE MUNGER: Right.

24. Buffett "bullish on human race" as women enter the workforce"

WARREN BUFFETT: OK, Andrew.

ANDREW ROSS SORKIN: This question — we got a couple like this one — comes from Lauren Taylor Wolfe. She's a managing partner at Impactive Capital.

"Warren, you've recently said that one of the things that makes you optimistic about America is women entering the workforce and the quote 'doubling of the talent that's effectively employed in that workforce.' When it comes to positions of leadership, however, women make up less than 21 percent of boards of S&P 500 companies, and an even smaller 5 percent of the CEOs.

"What can Berkshire do, and what is Berkshire specifically doing, as a major investor in many of these large companies, to advance gender equality, both at the board level and among senior leadership?"

WARREN BUFFETT: Yeah. Well, again — (applause) — you know, as I've pointed out in the past, one of my sisters is here. And I have two sisters that are absolutely as smart as I am. And they have better personalities, as anybody that knows both of us — or all of us — can attest. And they didn't remotely have the same opportunities I had.

And you have this 1942, or — New York Times — and you know, women could be nurses or teachers or retail clerks or stenographers. And that actually worked enormously to my advantage when I was a kid in Omaha in the '30s, because I had way better teachers, because they were — that was a job open to women, I didn't have a single male teacher in grammar school, and Charlie didn't when he went to Dundee, I don't think, either.

And we had this huge talent pool that was being funneled into very few opportunities, and therefore we got better than we deserved in terms of a market system producing it. The —

Again, our managers run their companies. But I've probably named — before we made this management change — I probably named only six or seven CEOs in the last five or six years. We

don't change that much. But I would say that half of them that I've named have been women, which is about what you would — what should turn out to be the case in terms of ability.

Now, there is a certain pipeline problem, but that gets cured with time, and you can't use that forever as an excuse.

And you know, I feel very good about the decisions we made for CEOs. I prefer all our CEOs to live forever. And one woman almost did that, that we hired. Mrs. B. [Nebraska Furniture Mart founder Rose Blumkin] lived to be 104. She retired at 103. And that's a lesson to our other managers, that if you retire prematurely, you know — (laughter) — no telling what'll happen.

But it is absolutely true. It does make me bullish. It makes me bullish on the human race. But it's certainly on our country. Because if you look at what happened, you know, before the 19th Amendment, and then after the 19th Amendment for a long time, and continuing to this day, but it's — that — there's been significant improvement.

And I do feel more optimistic about the future, because I think there will be more selection by merit, rather than, you know, by gender or by race or by inheritance.

I think that if you had a system where all businesses got passed on to the eldest son or something, I think it — I think that society would make a lot less progress than one that's merit-based.

Charlie?

CHARLIE MUNGER: Well, we did live in a different age. There's an old saying that the past is a very strange country. People behave quite differently there. And it was just totally different. And it was ridiculous that — I cannot remember — I had one or two male teachers in my high school. But almost none. And the world has really changed.

And within Berkshire, I've never seen any overt discrimination anywhere on the grounds of gender.

WARREN BUFFETT: There probably has been some, though. I mean —

CHARLIE MUNGER: No, no, I'm sure that we have our —

WARREN BUFFETT: Oh, there has —

CHARLIE MUNGER: —share of all the peculiarities of human nature.

WARREN BUFFETT: Sure.

CHARLIE MUNGER: But it's generally, it's — everything has always improved, wouldn't you agree with that?

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: And I think it'll keep improving.

25. Berkshire buybacks not limited by state insurance rules

WARREN BUFFETT: OK. Gregg?

GREGG WARREN: Warren, in this year's annual report it was noted, much as it is every year, that payments of dividends by the company's insurance subsidiaries are restricted by insurance statutes and other regulations, with Berkshire's insurance operations currently allowed to declare up to 16 billion as ordinary dividends during 2018.

My question here is, should we view this annual regulatory threshold for dividends as a benchmark for allowable share repurchases as well? And in the event that Berkshire wanted to buy back more stock than that, or pay out even more as dividends, would there be an issue with you using capital from operations that aren't held by the insurance operations to return additional capital?

With the side question here being, would the annual cash distribution from BNSF, which is held on National Indemnity's books, be excluded?

WARREN BUFFETT: Yeah. The — we will obviously follow the rules of the states in which we're domiciled, and all the rules, of course. But basically it's the state of domestication in the insurance companies, and they do restrict the amount of dividends in any given year. Although you could, if you wanted to, request some additional amount. But we don't ever consider that.

But repurchases — if repurchases were really attractive, we would do it in a very big way. And, you know, I wouldn't rule — there's all kinds of ways that we could arrange things to do either a very large acquisition, which is what I would prefer, or a very large repurchase, would I don't think is probably in the cards just because the way our stock trades, not because we wouldn't like it at a large discount.

So Charlie and I, we've got the appetite. And we would have — we've got a lot of cash — but we could have a lot more cash. We can make any deal of — even one of a very large size. We can make anything that came along — we could work out how to get it done.

We would — we would have — we're not going to be doing this, but we would have partners who would come in and give us a preferential part of a partnership. That's not going to happen, in all probability. But there's a lot of things that we could do. So don't rule out anything based on statutory limitations of distributions from insurance companies —

CHARLIE MUNGER: And that — we could get special permissions to —

WARREN BUFFETT: Oh, we can get —

CHARLIE MUNGER: — declare bigger dividends. We are not — you should not assume that we're constrained by the laws of nature to the amount that we can take out under the statutes now.

26. Munger: "I don't think the world is going to be changed that much by machine intelligence"

WARREN BUFFETT: OK, station 7.

AUDIENCE MEMBER: Hi, Warren and Charlie. Thank you for everything. I'm David (inaudible), an investment manager in Shanghai. I've been here for eight years.

If investment is a sport in the Olympics, you are our champion team. So my question is, facing the fast-growing machine challenges, how do you see the new competition impact the capital allocation productivity in the future?

For Charlie, what is the first principle of capital allocation from a general economic interest point of view? Thank you.

CHARLIE MUNGER: Well, two questions. Machine intelligence. I'm afraid the only intelligence I have is — is being provided by something that's not a machine. And I don't think I'm going to learn machine intelligence. Yeah. If you ask me how to beat the game of Go with my own intelligence, I couldn't do it. And I think it's too old for me to learn computer science.

Generally I'm — I think that the machine intelligence has worked. After all, a machine now can beat the best human player of Go. But I think there's more hype in that field than there is probable achievement.

So I don't think the world is going to be changed that much by machine intelligence. Some, but not hugely.

And what was the other question?

WARREN BUFFETT: Well —

CHARLIE MUNGER: One of them was machine intelligence.

WARREN BUFFETT: I think he was getting at capital allocation —

CHARLIE MUNGER: Oh yeah. That's such a general question. Generally speaking, we're always trying to get the best — to get something that's worth buying.

And the human mind rejects that if you're in academia, because you could come in and make one declaratory sentence at the opening of the semester and you wouldn't have anything to do for the rest of the — of your time. So people want to find some formula. It's what I call "physics envy." These people want the world to be like physics.

But the world isn't like physics, outside of physics. And that false precision just does nothing but get you in trouble.

So I would say you've got to master the general ideas, and you've got to work to improve your judgment slowly, the way all the rest of us had. And I don't think most individuals have much hope of individual gain from machine intelligence.

WARREN BUFFETT: No, I don't — I don't think that — I'm impressed when machines beat Go or something of the sort, or even win at chess or whatever it may be.

I don't really think they bring much to the table in terms of capital allocation or investing. And then I may be missing something entirely, you know, maybe I'm just blind to what's out there.

CHARLIE MUNGER: You're missing a lot of very remunerative, fee-earning twaddle. (Laughter)

WARREN BUFFETT: Yeah, well. Well, that takes care of that. So we'll go on to station 8. (Laughter)

27. Munger: "American investors are missing China"

AUDIENCE MEMBER: Dear Mr. Buffett and Mr. Munger, thank you very much for hosting the meeting. It's truly been remarkable. Thank you.

My name is Yen (PH), and I'm a partner at Tiger Brokers, a leading electronic brokerage firm from China.

Let me rephrase that. So, I and my colleagues flew half a way from the globe with (inaudible) to be here, and it is honor, just like everyone else in the stadium, we're honored to be here.

My question is, you mentioned earlier that investors don't really have to be struggling in picking the right stocks. They would do well in picking, probably, the right market and the right country.

China is the second-largest economy, and probably has the biggest growth potential. Just by passively weighting a portfolio — by passively valuating a portfolio — U.S. investors are significantly underweighting China. So in your opinion, what are stopping the investors from investing in China? Thank you.

CHARLIE MUNGER: Well, I think the answer is that you're absolutely right. That we are — American investors are missing China. And they're missing it because it's a long way away, it looks different, they're not used to it, it's complicated, the headlines confuse them.

In other words, it just looks too hard, sitting in Omaha, to outsmart the Chinese market. But I think you're absolutely right. It's where they should be looking.

WARREN BUFFETT: OK. (Laughter)

We've actually had a couple investments in China. We've done pretty well. But there were — well, if you go back a number of years, (inaudible).

In terms of getting a lot of money into something, you know, many billions, and we have to get billions into things in — to move any kind of a needle, that can be tougher in markets that you've got — you're unfamiliar working in. And it's difficult under any circumstances.

But accumulating a 6 or 8 or $10 billion position in investments outside the United States can be very difficult. For example, in U.K. and much of Europe we have to report when we own 3 percent of a company. In fact, we can be asked to report if we even have less than 3 percent. That really gets very tough when we get a bunch of followers and a lot of publicity that probably isn't deserved in terms of what we're doing in the markets and everything.

Some of the problems are, just by the nature of our size. It would be lot — it'd be a lot easier if we were running a smaller fund.

PetroChina, we managed to get a very big position. But the government owned 90 percent of it. So we bought 14 percent of what the government didn't own, but it was still only 1.4 percent of the company.

But Charlie, Charlie actually keeps pushing me to do more in China. And we've tried a couple of times, actually. And there was one operation that we got involved in —

CHARLIE MUNGER: Well, you did so poorly the first time, you put in 200,000 and got about 2 billion, so.

WARREN BUFFETT: Yeah. Yeah. Well.

CHARLIE MUNGER: Wasn't encouraging enough. (LAUGHTER)

28. "What Jeff Bezos has done is something close to a miracle"

WARREN BUFFETT: OK. Station 9.

AUDIENCE MEMBER: My name is Dr. Sherman Silber. I'm an infertility doctor from St. Louis. And I've been a shareholder and coming to this meeting for 23 years, and I want to thank you very much for making my grandchildren very rich. (Laughter and applause)

And they sometimes compare me in the medical world — infertility world — as the Berkshire Hathaway of infertility, because I'm so old and I come from a relatively small community.

But I'm wondering about your interests in not just Apple, but all of the tech stocks, like Amazon and Google. Because you've avoided them, you've stated in the past, because they're complicated, you should stick with something you understand.

On the other hand, Amazon and Google have what you call a very durable competitive advantage. They really hardly have any competitor. And that's true in China, too, of Alibaba and Tencent.

So it seems like it's a conflict, and I'm wondering if you're going to be turning the corner and going into these tech companies that seem to have no serious competition.

WARREN BUFFETT: Well, we certainly looked at them. And we don't think of whether we should be in tech companies or not, or that sort of thing. We are looking for things when we do get into the durability of the competitive advantage, and whether we think that our opinion might be better than other people's opinion in assessing the probability of the durability, so to speak.

But the truth is that I've watched Amazon from the start, and I think what Jeff Bezos has done is something close to a miracle. And the problem is, if I think something will be a miracle, I tend not to bet on it. (Laughs)

It would have been better — far better, obviously — if we — if I had some insights into certain businesses.

But you know, in fact, Bill told me early on — Bill Gates told me early on — you know, that I think I was on AltaVista and he suggested I turn to Google.

But the trouble is I saw that Google was skipping past AltaVista, and then I wondered if anybody could skip past Google. And I saw at GEICO that we were paying a lot of money for something that cost them nothing incrementally.

We've looked at it, and you know, I made a mistake in not being able to come to a conclusion where I really felt that at the present prices that the prospects were far better than the prices indicated.

And I didn't go into Apple because it was a tech stock in the least. I mean, I went into Apple because I made certain — came to certain conclusions about both the intelligence with which

the capital would be employed, but more important, about the value of an ecosystem and how permanent that ecosystem could be, and what the threats were to it, and a whole bunch of things.

And that didn't — I don't think that required me to, you know, take apart an iPhone or something and figure out what all the components were or anything. It's much more the nature of consumer behavior. And some things strike me as having a lot more permanence than others.

But the answer is, we'll miss a lot of things that — or I'll miss a lot of things — that I don't feel I understand well enough.

And there is no penalty in investing if you don't swing at a ball that's in the strike zone, as long as you swing at something at some point, then you know, eventually that you find the pitches you like. And that's the way we'll continue to do it. We'll try to stay within our circle of competence.

And Charlie and I generally agree on sort of where that circle ends, and what kind of situations where we might have some kind of an edge in our reasoning or our experience or something that — where we might evaluate something differently than other people.

But the answer is, we're going to miss a lot of things.

Charlie?

CHARLIE MUNGER: Yeah, we have a wonderful system. If one of us is stupid in some area, so is the other. (Laughter)

And of course, we were not ideally located to be high-tech wizards. How many people of our age quickly mastered Google? I've been to Google headquarters. They look to me like they're — it looks like a kindergarten. (Laughter)

WARREN BUFFETT: A very rich kindergarten.

CHARLIE MUNGER: Yes. (Laughter)

WARREN BUFFETT: No, it's extraordinarily impressive, what they've done. And like I say, at GEICO we were paying them a lot of money at the time they went public. And all three of the main characters — Eric [Schmidt] and Larry [Page] and Sergey [Brin] — they actually came and saw me. But they were more interested in talking about going public and the mechanics of it and various things along that line.

But it wasn't like what they were doing was a mystery to me. The mystery was how much competition would come along, and how effective they would be, and whether it would be a

game where four or five people were slugging it out without making as much money as they could if one company dominated.

Those are tough decisions to make. You can have industries where there's only two people in it, and they still don't (inaudible) very good because they beat each other's brains out. And that's one of the questions in the airline business. It's a better business now than it used to be, but it used to be suicide, so — (Laughs)

And you know that the competitive factors are extraordinary in airlines, and how much better business is it with four people operating at 85 percent capacity than it was at — with seven or eight operating in the mid-70s, and with more planes run. Those are tough decisions.

But I made the wrong decision on Google. And Amazon, I just — I really consider that a miracle, that you could be doing Amazon web services and changing retail at the same time, with — you know, without enormous amounts of capital, and with the speed and effectiveness of what Amazon has done.

I just — I underestimated — I had a very, very, very high opinion of Jeff's ability when I first met him. And I underestimated him. (Laughs)

Charlie?

CHARLIE MUNGER: Well, my comment would be that the shareholders have one thing to be thankful for.

Some of the age-related stupidity at headquarters has been ameliorated by Ted and Todd joining us. We are looking at the world with the aid of some younger eyes now. And they've had a contribution —

WARREN BUFFETT: Significant.

CHARLIE MUNGER: — beyond their own investments. And so you're very lucky to have them be shareholders. Because there's a lot of ignorance in the older generation that needs removal. (Applause)

29. "We already have a family office. It's sitting right here"

WARREN BUFFETT: OK, station 10.

AUDIENCE MEMBER: Hi, good afternoon. Good afternoon, Warren. Good afternoon, Charlie. And my name is Ujean (PH). I come from China, and I work for (foreign language) family office. And we are serving high-worth individual clients in China. And you two would be my dream customer.

I know your shareholder Bill Gates has a family office, which, helping his wealth. So my question is, do you have a family office, and what — can we know what they do, some — anything for you? And if not, are you planning to have a family office in the future?

CHARLIE MUNGER: We already have a family office. It's sitting right here. (Laughter)

WARREN BUFFETT: Yeah, we would be the last guys in the world to have a family office, actually. (Laughter)

There are a lot of them around, and — but it's not something that fits the Munger family or the Buffett family. (Laughs)

Charlie, you have anything?

CHARLIE MUNGER: No.

WARREN BUFFETT: OK.

30. No "precise formulas" on Berkshire's incentive plans

WARREN BUFFETT: Let's — we'll do one more. Station 11.

AUDIENCE MEMBER: Hi Warren, Charlie. My name is Adam Mead, Mead Capital Management from Derry, New Hampshire.

In the past you have touched on certain compensation arrangements with key executives. Could you please provide some specific examples of compensation arrangements within Berkshire that speak to incentivizing good behavior while not penalizing the manager for size or the relative ease or difficulty of the business or industry? Thank you.

WARREN BUFFETT: Well, that is a very, very good question, and a very, very tough question. Because some of our —

CHARLIE MUNGER: He really doesn't want to answer.

WARREN BUFFETT: Well, some of our managers — (Laughter)

No, some of our managers are in businesses that are just much easier. I mean, we bought into a variety of businesses. People are obviously influenced by what pay arrangements are elsewhere. They wouldn't be human if they weren't.

And trying to come to the right answer when you have different degrees of capital intensity, different degree — very different degrees — of basic profitability, and how much you scale up based on size, because there is an incentive to grow businesses. Usually if businesses get much

larger, everybody from the CEO down expects to earn more money for something that — where they really bring the same amount of intensity and work and (inaudible) to it.

It is really a tough question. I think that if you engage compensation consultants at public companies, which they all do, they're going to recommend things that cause them to have CEOs recommend them to other companies. (Laughs)

It's just, you're working against human nature when you have an arrangement like that.

I would say that we have obviously kept a very, very, very high percentage of the managers that we hoped to have stay with us. In fact, just about a hundred percent. It's —

And I think people do like — they do like to make their own decisions. They do like recognition. You know, they — most people respond — they like doing a good job, and they like the fact that we understand it. And compensation's part of that. But it's not the whole thing.

And I wish I could give you some precise formulas, but there aren't any —

CHARLIE MUNGER: No, you really don't, Warren.

WARREN BUFFETT: What?

CHARLIE MUNGER: It's an advantage at Berkshire to keep our individual deals private. There would be no advantage to just publishing them all.

WARREN BUFFETT: No, we're not going to do that.

CHARLIE MUNGER: No, of course not. So what we're saying, he makes all those decisions personally. He's got every formula in the book. And he keeps them all private. That's our system. (Laughter)

WARREN BUFFETT: Well, we do — (Laughter)

We publish what the directors are paid.

CHARLIE MUNGER: We publish what we have to, yes.

WARREN BUFFETT: OK. It's 3:30 now. We're going to reconvene at 3:45.

Charlie and I, we love the fact that our partners basically turn out for this. So we thank you for coming. I hope you've had a good time, both at the meeting and in Omaha. And we look forward to seeing you again next year. Thanks. (Applause)

31. Formal business meeting

WARREN BUFFETT: We're going to move it right along, with a little (inaudible) copy here.

If you'll please take your seat, thank you.

This is the formal meeting, so the meeting will now come to order.

I'm Warren Buffett, chairman of the board of directors of the company, and I welcome you to this 2018 annual meeting of shareholders.

This morning, I introduced the Berkshire Hathaway directors that are present and also with today are partners in the firm of Deloitte & Touche, our auditors.

Jennifer Tselentis is the assistant secretary of Berkshire Hathaway. She will make a written record of the proceedings.

Becki Amick has been appointed inspector of elections at this meeting, and she will certify to the count of votes cast in the election for directors and the motions to be voted upon at the meeting.

The named proxy holders for this meeting are Walter Scott and Marc Hamburg. Does the assistant secretary have a report of the number of Berkshire shares outstanding entitled to vote and represented at the meeting?

VOICE: This is the important part.

VOICE: You sit there.

WARREN BUFFETT: We're building the suspense here. (Laughs)

JENNIFER TSELENTIS: Yes, I do. As indicated in the proxy statement that accompanied the notice of this meeting that was sent to all shareholders of record on March 7th, 2018, the record date for this meeting, there were 748,347 shares of Class A Berkshire Hathaway common stock outstanding with each share entitled to one vote on motions considered at the meeting, and 1,344,969,701 shares of Class B Berkshire Hathaway common stock outstanding with each share entitled to 1/10,000th of one vote on motions considered at the meeting.

Of that number, 537,524 Class A shares and 823,145,874 Class B shares are represented at this meeting by proxies returned through Thursday evening May 3rd.

WARREN BUFFETT: Thank you. That number represents a quorum. And we will therefore directly proceed with the meeting.

First order of business will be a reading of the minutes of the last meeting of shareholders. I recognize Mr. Walter Scott who will place a motion before the meeting.

WALTER SCOTT: I move that the reading of the minutes of the last meeting of shareholders be dispensed with and the minutes be approved.

WARREN BUFFETT: Do I hear a second?

RON OLSON: I second the motion.

WARREN BUFFETT: Motion has been moved and seconded. We will vote on this motion by voice vote. All those in favor say aye.

VOICES: Aye.

WARREN BUFFETT: Opposed. The motion is carried.

The next item of business is to elect directors. If a shareholder is present who did not send in a proxy or wishes to withdraw a proxy previously sent in, you may vote in person on the election of directors and other matters to be considered at this meeting. Please identify yourself to one of the meeting officials in the aisles so that you can receive a ballot.

I recognize Mr. Walter Scott to place a motion before the meeting with respect to the election of directors.

WALTER SCOTT: I move that Warren Buffett, Charles Munger, Greg Abel, Howard Buffett, Stephen Burke, Susan Decker, William Gates, David Gottesman, Charlotte Guyman, Ajit Jain, Thomas Murphy, Ron Olson, Walter Scott, and Meryl Witmer be elected as directors.

WARREN BUFFETT: Is there a second?

RON OLSON: I second the motion.

WARREN BUFFETT: It has been moved and seconded that Warren Buffett, Charles Munger, Gregory Abel, Howard Buffett, Stephen Burke, Susan Decker, William Gates, David Gottesman, Charlotte Guyman, Ajit Jain, Thomas Murphy, Ronald Olson, Walter Scott, and Meryl Witmer be elected as directors. Are there any other nominations or any discussion?

The nominations are ready to be acted upon. If there are any shareholders voting in person, they should now mark their ballots on the election of directors and deliver their ballots to one of the meeting officials in the aisles. Miss Amick, when you are ready you may give your report.

BECKI AMICK: My report is ready. The ballot of the proxy holders in response to proxies that were received through last Thursday evening cast not less than 605,906 votes for each nominee. That number exceeds a majority of the number of the total votes of all Class A and Class B shares outstanding. The certification required by Delaware law of the precise count of the votes will be given to the secretary to be placed with the minutes of this meeting.

WARREN BUFFETT: Thank you, Miss Amick. Warren Buffett, Charles Munger, Gregory Abel, Howard Buffett, Steve Burke, Susan Decker, William Gates, David Gottesman, Charlotte Guyman, Ajit Jain, Thomas Murphy, Ron Olson, Walter Scott, and Meryl Witmer have been elected as directors.

32. Shareholder motion on methane emissions

WARREN BUFFETT: The next item of business is a motion put forth by Freeda Cathcart on behalf of shareholder Marcia Sage. The motion is set forth in the proxy statement. The motion requests that the company provide a report revealing the company's policies, actions, plans, and reduction targets related to methane emissions from all operations.

The directors have recommended that the shareholders vote against the proposal.

I will now recognize Miss Cathcart to present the motion. To allow all interested shareholders their views, I ask that the representative of the Baldwin Brothers limit the presentation of the motion to five minutes.

FREEDA CATHCART: Good morning Chairman Buffett, Mr. Munger, members of the board and fellow shareholders. I am presenting this proposal on behalf of Baldwin Brothers on the issue of methane asset risk. This is the second year for this methane-focused proposal. Last year 10 percent of shareholders approved of it.

Methane asset risk is a serious financial safety and environmental issue across the entire natural gas supply chain. The failure of a gas injection well at Southern California Gas Aliso Canyon Storage facility in Los Angeles revealed major vulnerabilities in the maintenance and safety of natural gas facilities.

In that situation, cleanup and containment costs have soared to close to $1 billion. Governor Jerry Brown of California has threatened to shut down the facility.

Berkshire Hathaway owns the largest interstate natural gas pipeline system in the United States. It has natural gas storage distribution and transportation facilities that may face similar safety risks through the Northern Natural Gas Company, Kern River Gas, and Mid-American Energy Corporations.

On an environmental front, research indicates methane leaks could erase the climate benefits of reducing coal use to meet internationally agreed upon climate change targets. Methane emissions have an impact on global temperature of roughly 84 times that of CO2 over a 20-year period.

Berkshire is a voluntary member of the EPA's Methane Challenge and ONE Future Emissions Intensity Commitment Framework and should be applauded for reducing its leakage rates to below the 1 percent target along its value chain.

Since this framework is a cost-effective versus prescriptive approach, shareholders would like to understand if this cost-effective approach employed at Berkshire is sufficient — maintenance and enhanced disclosure should help mitigate the potential for these financial and regulatory risks.

In closing, we think it prudent that Berkshire Hathaway issue a report revealing and disclosing the company's specific best practices, policies, and safety standards for methane assets and required upgrade costs to facilities to mitigate potential business risks.

The report would make it easier for investors, customers, and regulators to understand Berkshire's overall approach to managing methane emissions and risks. Thank you for your consideration.

WARREN BUFFETT: Miss Cathcart, could you help me out? Are there some other people that are there to speak? I can't quite see from here.

VOICE: No, there are no other shareholders who wish to speak on this issue.

FREEDA CATHCART: There's nobody behind me to speak.

WARREN BUFFETT: Did you get that, Charlie?

CHARLIE MUNGER: No.

WARREN BUFFETT: Greg — could we put up slide one and then if somebody will give Greg a microphone, that'd be helpful. He could elaborate some on this chart and knows what we're doing.

GREG ABEL: OK. Thanks, Warren and appreciate the comments there. What we've prepared here is in response to the proposal. It demonstrates the ONE Future Initiative goal as it was highlighted. They'd like to see our pipelines operating by 2025 at a 1 percent throughput — or a loss of throughput at 1 percent.

I'm happy to report, as this slide shows, that in 2017 our throughput loss was 0.046 percent, 20 times better than the request in 2025. (Applause)

Thank you. It's a great compliment to our operating team, obviously. They take the issue that has been highlighted very seriously. I would also add, as it was noted, we're part of the EPA program where we report on a voluntary basis. Our practices are disclosed and reviewed by the EPA and additionally added on our website.

Accordingly, I strongly feel we're getting the results and disclosing the appropriate information. Thank you.

WARREN BUFFETT: Yeah, and thanks Greg. And Miss Cathcart, we are on the same side you are on this basically. We just are not looking for ways to conduct more studies and prepare reports that may cost us money and generate more reports and all that. But I can tell you two things.

This is something that is reported to the board of directors of Berkshire Hathaway Energy quarterly. And I'm on that board. And we believe in achieving the same (inaudible) and we think Berkshire Hathaway Energy is both sensitive and effective — sensitive to and effective — in reducing methane emissions.

So if — I think we're now ready. The motion is now ready to be acted upon. If there are any shareholders voting in person, they should now mark their ballots on the motion and deliver their ballot to one of the meeting officials in the aisles. Miss Amick, when you're ready, you may give your report.

BECKI AMICK: My report is ready. The ballot of the proxy holders in response to proxies that were received through last Thursday evening cast 48,040 votes for the motion and 558,640 votes against the motion.

As the number of votes against the motion exceeds a majority of the number of votes of all Class A and Class B shares properly cast on the matter, as well as all votes outstanding, the motion has failed. The certification required by Delaware law of the precise count of the votes will be given to the secretary to be placed with the minutes of this meeting.

WARREN BUFFETT: Thank you, Miss Amick. The proposal fails.

33. Shareholder proposal on sustainability reports

WARREN BUFFETT: The next item of business is a motion put forth by shareholder Freeda Cathcart. The motion is set forth in the proxy statement. The motion requests that Berkshire adopt a policy to encourage more Berkshire subsidiary companies to issue annual sustainability reports.

I will now recognize Freeda Cathcart to present the motion, and to all interested shareholders to present their views I ask her to limit her remarks to five minutes. You have the floor, Miss Cathcart.

FREEDA CATHCART: Thank you so much. It is a privilege to be here and a privilege I can give thanks to my grandfather James Cathcart, who started out in the mailroom of Gen Re and worked himself up through the company to become the chair of Gen Re. During that time he accumulated a lot of Gen Re stock, which he bestowed generously upon his family.

And when he did so, he encouraged the members of his family to do good and to pay it forward, to do something that would make a difference in the world and in our communities. For my father, he did so by being philanthropic with educational institutions with the theory

that if you give a person a fish you feed them for a day, but if you teach them to fish, you feed them for a lifetime.

My focus has been on the environment with the thought that when people fish, it would be nice if they were able to eat the fish.

I want to take this opportunity to clarify my proposal about the sustainability reports and put the emphasis on the word encourage. It is evident that Berkshire Hathaway's management of allowing the subsidiaries to work without getting guidance — well, mandates from you is being very successful.

And I wouldn't recommend changing it. You're doing a great job. Please keep it up.

But I do think that there's something to be said to encourage them and support them, and in many ways you already are.

There is a high level of interest from investors and the public in corporate social responsibility. One-fifth of investments are based on socially responsible investment strategies. And back in 2012, I found an article by Planet Earth Herald where they wrote, "When Warren Buffett talks, people listen. He is now talking about the environment. He believes that companies need to have a triple bottom line. And respecting the environment is absolutely critical to a company's economic performance."

In times — and this is a direct quote from you, Mr. Buffett, "In times such as these a company must invest in the key ingredients of profitability: its people, communities, and the environment."

One-third of Berkshire Hathaway's subsidiaries already have a sustainability presence on the web. And one of them is Berkshire Energy that has the acronym respect, R-E-S-P-E-C-T, which stands for Responsibility, Efficiency, Stewardship, Performance, Communication, and Training.

And Berkshire Hathaway provides an annual sustainability summit to help bring the subsidiaries together so they can learn how to be more sustainable, how to share tips, and how to be profitable. And that's excellent.

But when I try to find a web presence about the sustainability summit, I wasn't able to find it. And that's where I think that we can do a better job in Berkshire Hathaway when it comes to communication with our shareholders and with the outside world about the good work that we're doing.

A simple solution to that would just be to create a link on the Berkshire Hathaway website to sustainability that people could click on and go and find out about initiatives like the sustainability summit. And from there, perhaps, they could click on to go to the subsidiaries that have a web presence about sustainability to see what they're doing.

In doing so, we give a window to the world where they can see what we're doing to make a difference that might inspire other corporations to follow the example. Or perhaps a college student working on a paper would read about it and think that that is a good business model, that that's something that he wants to bring forward when he goes into his career.

There is a Facebook page called "Berkshire Hathaway's Sustainability" that will be available for shareholders and the outside world to look at to see research and to encourage each other to learn how we can support sustainability practices. And that is available now.

I greatly appreciate this opportunity to speak with you today and to clarify what my proposal is. And I do greatly applaud and appreciate all the work that you're doing on behalf of our corporation and the world. Thank you so much.

WARREN BUFFETT: And thank you. (Applause)

Many of the managers — a great many of the managers — of Berkshire are here and are listening to you. And I suspect that a very high percentage of them agree with what you're saying. Whether they — what they do in terms of web pages and so on, in our view, is basically up to them.

But I can tell you that one leading proponent, as you mentioned, was Greg Abel, who until recently was running Berkshire Hathaway Energy and now is vice chairman. And Greg may want to say a few words on this, too. But I can assure you that the managers are listening to you.

GREG ABEL: Thanks, Warren. Yeah, we do everything that was touched on. I'll just maybe add a few points for our shareholders. Obviously, sustainability is a priority for Berkshire and each of our operating subsidiaries. It was highlighted that a number of them have sustainability reports. But I would go beyond that. If you go to our various companies' websites, you'll see specific actions they're taking relative to sustainability. So it may not be summarized in a specific report, but that type of information is available.

I can also add that when you think of the Berkshire Hathaway Energy Corporation, we're trying to lead by example with support from Warren, Charlie, Walter Scott. I'm happy to report, if you look at where our energy production is right now at the end of 2017, 50 percent of our energy that is produced and consumed by our customers comes from renewable energy.

That's something we're strongly communicating across the U.S. and globally as an example of what can be done in our industry. And I'm happy to report by the end of 2021, 100 percent of the energy utilized by our customers can be met through renewable energy in Iowa.

So I understand the concept of sustainability. We're working across our organizations to share best practices. But as Warren highlighted, it really resides in each of our companies. But it will be encouraged and you'll continue to see great results. Thank you.

WARREN BUFFETT: Thank you. (Applause)

The motion is now ready to be acted upon. If there are any shareholders voting in person they should now mark their ballot on the motion and deliver their ballot to one of the meeting officials in the aisles.

Miss Amick, when you're ready you may give your report.

BECKI AMICK: My report is ready. The ballot of the proxy holders in response to proxies that were received through last Thursday evening cast 67,282 votes for the motion and 544,256 votes against the motion.

As the number of votes against the motion exceeds a majority of the number of votes of all Class A and Class B shares properly cast on the matter, as well as all votes outstanding, the motion has failed. The certification required by Delaware law of the precise count of the votes will be given to the secretary to be placed with the minutes of this meeting.

WARREN BUFFETT: Thank you, Miss Amick. And I would say Miss Cathcart, our managers heard you. I mean, you have had an impact and I appreciate what you have done.

Walter, I guess we're now ready for a motion?

WALTER SCOTT: I move that this meeting be adjourned.

WARREN BUFFETT: Is there a second?

RON OLSON: I second the motion.

Berkshire's Performance vs. the S&P 500

Year	Annual Percentage Change in Per-Share Book Value of Berkshire	in Per-Share Market Value of Berkshire	in S&P 500 with Dividends Included
1965	23.8	49.5	10.0
1966	20.3	(3.4)	(11.7)
1967	11.0	13.3	30.9
1968	19.0	77.8	11.0
1969	16.2	19.4	(8.4)
1970	12.0	(4.6)	3.9
1971	16.4	80.5	14.6
1972	21.7	8.1	18.9
1973	4.7	(2.5)	(14.8)
1974	5.5	(48.7)	(26.4)
1975	21.9	2.5	37.2
1976	59.3	129.3	23.6
1977	31.9	46.8	(7.4)
1978	24.0	14.5	6.4
1979	35.7	102.5	18.2
1980	19.3	32.8	32.3
1981	31.4	31.8	(5.0)
1982	40.0	38.4	21.4
1983	32.3	69.0	22.4
1984	13.6	(2.7)	6.1
1985	48.2	93.7	31.6
1986	26.1	14.2	18.6
1987	19.5	4.6	5.1
1988	20.1	59.3	16.6
1989	44.4	84.6	31.7
1990	7.4	(23.1)	(3.1)
1991	39.6	35.6	30.5
1992	20.3	29.8	7.6
1993	14.3	38.9	10.1
1994	13.9	25.0	1.3
1995	43.1	57.4	37.6
1996	31.8	6.2	23.0
1997	34.1	34.9	33.4
1998	48.3	52.2	28.6
1999	0.5	(19.9)	21.0
2000	6.5	26.6	(9.1)
2001	(6.2)	6.5	(11.9)
2002	10.0	(3.8)	(22.1)
2003	21.0	15.8	28.7
2004	10.5	4.3	10.9
2005	6.4	0.8	4.9
2006	18.4	24.1	15.8
2007	11.0	28.7	5.5
2008	(9.6)	(31.8)	(37.0)
2009	19.8	2.7	26.5
2010	13.0	21.4	15.1
2011	4.6	(4.7)	2.1
2012	14.4	16.8	16.0
2013	18.2	32.7	32.4
2014	8.3	27.0	13.7
2015	6.4	(12.5)	1.4
2016	10.7	23.4	12.0
2017	23.0	21.9	21.8
2018	0.4	2.8	(4.4)
Compounded Annual Gain – 1965-2018	18.7%	20.5%	9.7%
Overall Gain – 1964-2018	1,091,899%	2,472,627%	15,019%

Note: Data are for calendar years with these exceptions: 1965 and 1966, year ended 9/30; 1967, 15 months ended 12/31. Starting in 1979, accounting rules required insurance companies to value the equity securities they hold at market rather than at the lower of cost or market, which was previously the requirement. In this table, Berkshire's results through 1978 have been restated to conform to the changed rules. In all other respects, the results are calculated using the numbers originally reported. The S&P 500 numbers are **pre-tax** whereas the Berkshire numbers are **after-tax**. If a corporation such as Berkshire were simply to have owned the S&P 500 and accrued the appropriate taxes, its results would have lagged the S&P 500 in years when that index showed a positive return, but would have exceeded the S&P 500 in years when the index showed a negative return. Over the years, the tax costs would have caused the aggregate lag to be substantial.

BERKSHIRE HATHAWAY INC.

To the Shareholders of Berkshire Hathaway Inc.:

Berkshire earned $4.0 billion in 2018 utilizing generally accepted accounting principles (commonly called "GAAP"). The components of that figure are $24.8 billion in operating earnings, a $3.0 billion non-cash loss from an impairment of intangible assets (arising almost entirely from our equity interest in Kraft Heinz), $2.8 billion in realized capital gains from the sale of investment securities and a $20.6 billion *loss* from a reduction in the amount of unrealized capital gains that existed in our investment holdings.

A new GAAP rule requires us to include that last item in earnings. As I emphasized in the 2017 annual report, neither Berkshire's Vice Chairman, Charlie Munger, nor I believe that rule to be sensible. Rather, both of us have consistently thought that at Berkshire this mark-to-market change would produce what I described as "wild and capricious swings in our bottom line."

The accuracy of that prediction can be suggested by our quarterly results during 2018. In the first and fourth quarters, we reported GAAP *losses* of $1.1 billion and $25.4 billion respectively. In the second and third quarters, we reported *profits* of $12 billion and $18.5 billion. In complete contrast to these gyrations, the many businesses that Berkshire owns delivered consistent and satisfactory operating earnings in *all* quarters. For the year, those earnings exceeded their 2016 high of $17.6 billion by 41%.

Wide swings in our quarterly GAAP earnings will inevitably continue. That's because our huge equity portfolio – valued at nearly $173 billion at the end of 2018 – will often experience one-day price fluctuations of $2 billion or more, all of which the new rule says must be dropped immediately to our bottom line. Indeed, in the fourth quarter, a period of high volatility in stock prices, we experienced several days with a "profit" or "loss" of more than $4 billion.

Our advice? Focus on operating earnings, paying little attention to gains or losses of any variety. My saying that in no way diminishes the importance of our investments to Berkshire. Over time, Charlie and I expect them to deliver substantial gains, albeit with highly irregular timing.

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Long-time readers of our annual reports will have spotted the different way in which I opened this letter. For nearly three decades, the initial paragraph featured the percentage change in Berkshire's per-share book value. It's now time to abandon that practice.

The fact is that the annual change in Berkshire's book value – which makes its farewell appearance on page 2 – is a metric that has lost the relevance it once had. Three circumstances have made that so. First, Berkshire has gradually morphed from a company whose assets are concentrated in marketable stocks into one whose major value resides in operating businesses. Charlie and I expect that reshaping to continue in an irregular manner. Second, while our *equity holdings* are valued at market prices, accounting rules require our collection of *operating companies* to be included in book value at an amount far below their current value, a mismark that has grown in recent years. Third, it is likely that – over time – Berkshire will be a significant repurchaser of its shares, transactions that will take place at prices above book value but below our estimate of intrinsic value. The math of such purchases is simple: Each transaction makes per-share intrinsic value go up, while per-share book value goes down. That combination causes the book-value scorecard to become increasingly out of touch with economic reality.

In future tabulations of our financial results, we expect to focus on Berkshire's market price. Markets can be extremely capricious: Just look at the 54-year history laid out on page 2. Over time, however, Berkshire's stock price will provide the best measure of business performance.

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Before moving on, I want to give you some good news – *really* good news – that is not reflected in our financial statements. It concerns the management changes we made in early 2018, when Ajit Jain was put in charge of all insurance activities and Greg Abel was given authority over all other operations. These moves were overdue. Berkshire is now far better managed than when I alone was supervising operations. Ajit and Greg have rare talents, and Berkshire blood flows through their veins.

Now let's take a look at what you own.

Focus on the Forest – Forget the Trees

Investors who evaluate Berkshire sometimes obsess on the details of our many and diverse businesses – our economic "trees," so to speak. Analysis of that type can be mind-numbing, given that we own a vast array of specimens, ranging from twigs to redwoods. A few of our trees are diseased and unlikely to be around a decade from now. Many others, though, are destined to grow in size and beauty.

Fortunately, it's not necessary to evaluate each tree individually to make a rough estimate of Berkshire's intrinsic business value. That's because our forest contains five "groves" of major importance, each of which can be appraised, with reasonable accuracy, in its entirety. Four of those groves are differentiated clusters of businesses and financial assets that are easy to understand. The fifth – our huge and diverse insurance operation – delivers great value to Berkshire in a less obvious manner, one I will explain later in this letter.

Before we look more closely at the first four groves, let me remind you of our prime goal in the deployment of your capital: to buy ably-managed businesses, *in whole or part*, that possess favorable and durable economic characteristics. We also need to make these purchases at sensible prices.

Sometimes we can buy control of companies that meet our tests. Far more often, we find the attributes we seek in publicly-traded businesses, in which we normally acquire a 5% to 10% interest. Our two-pronged approach to huge-scale capital allocation is rare in corporate America and, at times, gives us an important advantage.

In recent years, the sensible course for us to follow has been clear: Many stocks have offered far more for our money than we could obtain by purchasing businesses in their entirety. That disparity led us to buy about $43 billion of marketable equities last year, while selling only $19 billion. Charlie and I believe the companies in which we invested offered excellent value, far exceeding that available in takeover transactions.

Despite our recent additions to marketable equities, the most valuable grove in Berkshire's forest remains the many dozens of non-insurance businesses that Berkshire controls (usually with 100% ownership and never with less than 80%). Those subsidiaries earned $16.8 billion last year. When we say "earned," moreover, we are describing what remains after *all* income taxes, interest payments, managerial compensation (whether cash or stock-based), restructuring expenses, depreciation, amortization and home-office overhead.

That brand of earnings is a far cry from that frequently touted by Wall Street bankers and corporate CEOs. Too often, their presentations feature "adjusted EBITDA," a measure that redefines "earnings" to exclude a variety of all-too-real costs.

For example, managements sometimes assert that their company's stock-based compensation shouldn't be counted as an expense. (What else could it be – a *gift* from shareholders?) And restructuring expenses? Well, maybe last year's exact rearrangement won't recur. But restructurings of one sort or another are common in business – Berkshire has gone down that road dozens of times, and our shareholders have always borne the costs of doing so.

Abraham Lincoln once posed the question: "If you call a dog's tail a leg, how many legs does it have?" and then answered his own query: "Four, because calling a tail a leg doesn't make it one." Abe would have felt lonely on Wall Street.

Charlie and I do contend that our acquisition-related amortization expenses of $1.4 billion (detailed on page K-84) are not a true economic cost. We add back such amortization "costs" to GAAP earnings when we are evaluating both private businesses and marketable stocks.

In contrast, Berkshire's $8.4 billion depreciation charge understates our true economic cost. In fact, we need to spend *more* than this sum annually to simply remain competitive in our many operations. Beyond those "maintenance" capital expenditures, we spend large sums in pursuit of growth. Overall, Berkshire invested a record $14.5 billion last year in plant, equipment and other fixed assets, with 89% of that spent in America.

Berkshire's runner-up grove by value is its collection of equities, typically involving a 5% to 10% ownership position in a very large company. As noted earlier, our equity investments were worth nearly $173 billion at yearend, an amount far above their cost. If the portfolio had been sold at its yearend valuation, federal income tax of about $14.7 billion would have been payable on the gain. In all likelihood, we will hold most of these stocks for a long time. Eventually, however, gains generate taxes at whatever rate prevails at the time of sale.

Our investees paid us dividends of $3.8 billion last year, a sum that will increase in 2019. Far more important than the dividends, though, are the huge earnings that are annually retained by these companies. Consider, as an indicator, these figures that cover only our five largest holdings.

Company	Yearend Ownership	Berkshire's Share in $ millions of Dividends(1)	Berkshire's Share in $ millions of Retained Earnings(2)
American Express	17.9%	$ 237	$ 997
Apple	5.4%	745	2,502
Bank of America	9.5%	551	2,096
Coca-Cola	9.4%	624	(21)
Wells Fargo	9.8%	809	1,263
Total		$2,966	$6,837

(1) Based on current annual rate.
(2) Based on 2018 earnings minus common and preferred dividends paid.

GAAP – which dictates the earnings we report – does not allow us to include the retained earnings of investees in our financial accounts. But those earnings are of enormous value to us: Over the years, earnings retained by our investees (viewed as a group) have eventually delivered capital gains to Berkshire that totaled more than one dollar for each dollar these companies reinvested for us.

All of our major holdings enjoy excellent economics, and most use a portion of their retained earnings to repurchase their shares. We very much like that: If Charlie and I think an investee's stock is underpriced, we rejoice when management employs some of its earnings to increase Berkshire's ownership percentage.

Here's one example drawn from the table above: Berkshire's holdings of American Express have remained unchanged over the past eight years. Meanwhile, our ownership increased from 12.6% to 17.9% because of repurchases made by the company. Last year, Berkshire's portion of the $6.9 billion earned by American Express was $1.2 billion, about 96% of the $1.3 billion we paid for our stake in the company. When earnings increase and shares outstanding decrease, owners – over time – usually do well.

A third category of Berkshire's business ownership is a quartet of companies in which we share control with other parties. Our portion of the after-tax operating earnings of these businesses – 26.7% of Kraft Heinz, 50% of Berkadia and Electric Transmission Texas, and 38.6% of Pilot Flying J – totaled about $1.3 billion in 2018.

In our fourth grove, Berkshire held $112 billion at yearend in U.S. Treasury bills and other cash equivalents, and another $20 billion in miscellaneous fixed-income instruments. We consider a portion of that stash to be untouchable, having pledged to always hold at least $20 billion in cash equivalents to guard against external calamities. We have also promised to avoid *any* activities that could threaten our maintaining that buffer.

Berkshire will forever remain a financial fortress. In managing, I will make expensive mistakes of commission and will also miss many opportunities, some of which should have been obvious to me. At times, our stock will tumble as investors flee from equities. But I will never risk getting caught short of cash.

In the years ahead, we hope to move much of our excess liquidity into businesses that Berkshire will permanently own. The immediate prospects for that, however, are not good: Prices are sky-high for businesses possessing decent long-term prospects.

That disappointing reality means that 2019 will likely see us again expanding our holdings of marketable equities. We continue, nevertheless, to hope for an elephant-sized acquisition. Even at our ages of 88 and 95 – *I'm the young one* – that prospect is what causes my heart and Charlie's to beat faster. (Just writing about the possibility of a huge purchase has caused my pulse rate to soar.)

My expectation of more stock purchases is *not* a market call. Charlie and I have no idea as to how stocks will behave next week or next year. Predictions of that sort have *never* been a part of our activities. Our thinking, rather, is focused on calculating whether a portion of an attractive business is worth more than its market price.

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I believe Berkshire's intrinsic value can be *approximate*d by summing the values of our four asset-laden groves and then subtracting an appropriate amount for taxes eventually payable on the sale of marketable securities.

You may ask whether an allowance should not also be made for the major tax costs Berkshire would incur if we were to sell certain of our wholly-owned businesses. Forget that thought: It would be foolish for us to sell any of our wonderful companies even if *no* tax would be payable on its sale. Truly good businesses are exceptionally hard to find. Selling any you are lucky enough to own makes no sense at all.

The interest cost on *all* of our debt has been deducted as an expense in calculating the earnings at Berkshire's non-insurance businesses. Beyond that, much of our ownership of the first four groves is financed by funds generated from Berkshire's fifth grove – a collection of exceptional insurance companies. We call those funds "float," a source of financing that we expect to be cost-free – or maybe even better than that – over time. We will explain the characteristics of float later in this letter.

Finally, a point of key and lasting importance: Berkshire's value is maximized by our having assembled the five groves into a single entity. This arrangement allows us to seamlessly and objectively allocate major amounts of capital, eliminate enterprise risk, avoid insularity, fund assets at exceptionally low cost, occasionally take advantage of tax efficiencies, and minimize overhead.

At Berkshire, the whole is greater – considerably greater – than the sum of the parts.

Repurchases and Reporting

Earlier I mentioned that Berkshire will from time to time be repurchasing its own stock. Assuming that we buy at a discount to Berkshire's intrinsic value – which certainly will be our intention – repurchases will benefit both those shareholders leaving the company and those who stay.

True, the upside from repurchases is very slight for those who are leaving. That's because careful buying by us will minimize any impact on Berkshire's stock price. Nevertheless, there is *some* benefit to sellers in having an extra buyer in the market.

For continuing shareholders, the advantage is obvious: If the market prices a departing partner's interest at, say, 90¢ on the dollar, continuing shareholders reap an increase in per-share intrinsic value with every repurchase by the company. Obviously, repurchases should be price-sensitive: Blindly buying an overpriced stock is value-destructive, a fact lost on many promotional or ever-optimistic CEOs.

When a company says that it contemplates repurchases, it's vital that all shareholder-partners be given the information they need to make an intelligent estimate of value. Providing that information is what Charlie and I try to do in this report. We do not want a partner to sell shares back to the company because he or she has been misled or inadequately informed.

Some sellers, however, may disagree with our calculation of value and others may have found investments that they consider more attractive than Berkshire shares. Some of that second group will be right: There are unquestionably many stocks that will deliver far greater gains than ours.

In addition, certain shareholders will simply decide it's time for them or their families to become net consumers rather than continuing to build capital. Charlie and I have no current interest in joining that group. Perhaps we will become big spenders in our old age.

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For 54 years our managerial decisions at Berkshire have been made from the viewpoint of the shareholders who are staying, not those who are leaving. Consequently, Charlie and I have *never* focused on current-quarter results.

Berkshire, in fact, may be the only company in the Fortune 500 that does not prepare monthly earnings reports or balance sheets. I, of course, regularly view the monthly financial reports of most subsidiaries. But Charlie and I learn of Berkshire's overall earnings and financial position only on a quarterly basis.

Furthermore, Berkshire has no company-wide budget (though many of our subsidiaries find one useful). Our lack of such an instrument means that the parent company has *never* had a quarterly "number" to hit. Shunning the use of this bogey sends an important message to our many managers, reinforcing the culture we prize.

Over the years, Charlie and I have seen all sorts of bad corporate behavior, both accounting and operational, induced by the desire of management to meet Wall Street expectations. What starts as an "innocent" fudge in order to not disappoint "the Street" – say, trade-loading at quarter-end, turning a blind eye to rising insurance losses, or drawing down a "cookie-jar" reserve – can become the first step toward full-fledged fraud. Playing with the numbers "just this once" may well be the CEO's intent; it's seldom the end result. And if it's okay for the boss to cheat a little, it's easy for subordinates to rationalize similar behavior.

At Berkshire, our audience is neither analysts nor commentators: Charlie and I are working for our shareholder-partners. The numbers that flow up to us will be the ones we send on to you.

Non-Insurance Operations – From Lollipops to Locomotives

Let's now look further at Berkshire's most valuable grove – our collection of non-insurance businesses – keeping in mind that we do not wish to unnecessarily hand our competitors information that might be useful to them. Additional details about individual operations can be found on pages K-5 – K-22 and pages K-40 – K-51.

Viewed as a group, these businesses earned pre-tax income in 2018 of $20.8 billion, a 24% increase over 2017. Acquisitions we made in 2018 delivered only a trivial amount of that gain.

I will stick with pre-tax figures in this discussion. But our after-tax gain in 2018 from these businesses was *far* greater – 47% – thanks in large part to the cut in the corporate tax rate that became effective at the beginning of that year. Let's look at why the impact was so dramatic.

Begin with an economic reality: Like it or not, the U.S. Government "owns" an interest in Berkshire's earnings of a size determined by Congress. In effect, our country's Treasury Department holds a special class of our stock – call this holding the AA shares – that receives large "dividends" (that is, tax payments) from Berkshire. In 2017, as in many years before, the corporate tax rate was 35%, which meant that the Treasury was doing very well with its AA shares. Indeed, the Treasury's "stock," which was paying nothing when we took over in 1965, had evolved into a holding that delivered billions of dollars annually to the federal government.

Last year, however, 40% of the government's "ownership" (14/35^{ths}) was returned to Berkshire – free of charge – when the corporate tax rate was reduced to 21%. Consequently, our "A" and "B" shareholders received a major boost in the earnings attributable to *their* shares.

This happening materially increased the intrinsic value of the Berkshire shares you and I own. The same dynamic, moreover, enhanced the intrinsic value of almost all of the stocks Berkshire holds.

Those are the headlines. But there are other factors to consider that tempered our gain. For example, the tax benefits garnered by our large utility operation get passed along to its customers. Meanwhile, the tax rate applicable to the substantial dividends we receive from domestic corporations is little changed at about 13%. (This lower rate has long been logical because our investees have already paid tax on the earnings that they pay to us.) Overall, however, the new law made our businesses and the stocks we own *considerably* more valuable.

Which suggests that we return to the performance of our non-insurance businesses. Our two towering redwoods in this grove are BNSF and Berkshire Hathaway Energy (90.9% owned). Combined, they earned $9.3 billion before tax last year, up 6% from 2017. You can read more about these businesses on pages K-5 – K-10 and pages K-40 – K-45.

Our next five non-insurance subsidiaries, as ranked by earnings (but presented here alphabetically), Clayton Homes, International Metalworking, Lubrizol, Marmon and Precision Castparts, had aggregate pre-tax income in 2018 of $6.4 billion, up from the $5.5 billion these companies earned in 2017.

The next five, similarly ranked and listed (Forest River, Johns Manville, MiTek, Shaw and TTI) earned $2.4 billion pre-tax last year, up from $2.1 billion in 2017.

The remaining non-insurance businesses that Berkshire owns – and there are many – had pre-tax income of $3.6 billion in 2018 vs. $3.3 billion in 2017.

Insurance, "Float," and the Funding of Berkshire

Our property/casualty ("P/C") insurance business – our fifth grove – has been the engine propelling Berkshire's growth since 1967, the year we acquired National Indemnity and its sister company, National Fire & Marine, for $8.6 million. Today, National Indemnity is the largest property/casualty company in the world as measured by net worth.

One reason we were attracted to the P/C business was the industry's business model: P/C insurers receive premiums upfront and pay claims later. In extreme cases, such as claims arising from exposure to asbestos, or severe workplace accidents, payments can stretch over many decades.

This collect-now, pay-later model leaves P/C companies holding large sums – money we call "float" – that will eventually go to others. Meanwhile, insurers get to invest this float for their own benefit. Though individual policies and claims come and go, the amount of float an insurer holds usually remains fairly stable in relation to premium volume. Consequently, as our business grows, so does our float. And *how* it has grown, as the following table shows:

Year	*Float (in millions)**
1970	$ 39
1980	237
1990	1,632
2000	27,871
2010	65,832
2018	122,732

* *Includes float arising from life, annuity and health insurance businesses*.

We may in time experience a decline in float. If so, the decline will be *very* gradual – at the outside no more than 3% in any year. The nature of our insurance contracts is such that we can *never* be subject to immediate or near-term demands for sums that are of significance to our cash resources. That structure is by design and is a key component in the unequaled financial strength of our insurance companies. That strength will *never* be compromised.

If our premiums exceed the total of our expenses and eventual losses, our insurance operation registers an underwriting profit that adds to the investment income the float produces. When such a profit is earned, we enjoy the use of free money – and, better yet, get *paid* for holding it.

Unfortunately, the wish of all insurers to achieve this happy result creates intense competition, so vigorous indeed that it sometimes causes the P/C industry as a whole to operate at a significant underwriting *loss*. That loss, in effect, is what the industry pays to hold its float. Competitive dynamics almost guarantee that the insurance industry, despite the float income all its companies enjoy, will continue its dismal record of earning subnormal returns on tangible net worth as compared to other American businesses.

Nevertheless, I like our own prospects. Berkshire's unrivaled financial strength allows us far more flexibility in investing our float than that generally available to P/C companies. The many alternatives available to us are always an advantage and occasionally offer major opportunities. When other insurers are constrained, our choices expand.

Moreover, our P/C companies have an excellent underwriting record. Berkshire has now operated at an underwriting profit for 15 of the past 16 years, the exception being 2017, when our pre-tax loss was $3.2 billion. For the entire 16-year span, our pre-tax gain totaled $27 billion, of which $2 billion was recorded in 2018.

That record is no accident: Disciplined risk evaluation is the daily focus of our insurance managers, who know that the benefits of float can be drowned by poor underwriting results. All insurers give that message lip service. At Berkshire it is a religion, Old Testament style.

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In most cases, the funding of a business comes from two sources – debt and equity. At Berkshire, we have two additional arrows in the quiver to talk about, but let's first address the conventional components.

We use debt sparingly. Many managers, it should be noted, will disagree with this policy, arguing that significant debt juices the returns for equity owners. And these more venturesome CEOs will be right *most* of the time.

At rare and unpredictable intervals, however, credit vanishes and debt becomes financially fatal. A Russian-roulette equation – usually win, occasionally die – may make financial sense for someone who gets a piece of a company's upside but does not share in its downside. But that strategy would be madness for Berkshire. Rational people don't risk what they have and need for what they don't have and don't need.

Most of the debt you see on our consolidated balance sheet – see page K-65 – resides at our railroad and energy subsidiaries, both of them asset-heavy companies. During recessions, the cash generation of these businesses remains bountiful. The debt they use is both appropriate for their operations and *not* guaranteed by Berkshire.

Our level of equity capital is a different story: Berkshire's $349 billion is unmatched in corporate America. By retaining all earnings for a very long time, and allowing compound interest to work its magic, we have amassed funds that have enabled us to purchase and develop the valuable groves earlier described. Had we instead followed a 100% payout policy, we would still be working with the $22 *million* with which we began fiscal 1965.

Beyond using debt and equity, Berkshire has benefitted in a major way from two less-common sources of corporate funding. The larger is the float I have described. So far, those funds, though they are recorded as a huge net *liability* on our balance sheet, have been of more utility to us than an equivalent amount of equity. That's because they have usually been accompanied by underwriting earnings. In effect, we have been *paid* in most years for holding and using other people's money.

As I have often done before, I will emphasize that this happy outcome is far from a sure thing: Mistakes in assessing insurance risks can be huge and can take many years to surface. (Think asbestos.) A major catastrophe that will dwarf hurricanes Katrina and Michael *will* occur – perhaps tomorrow, perhaps many decades from now. "The Big One" may come from a traditional source, such as a hurricane or earthquake, or it may be a total surprise involving, say, a cyber attack having disastrous consequences beyond anything insurers now contemplate. When such a mega-catastrophe strikes, we will get our share of the losses and they will be big – *very* big. Unlike many other insurers, however, we will be looking to add business the next day.

The final funding source – which again Berkshire possesses to an unusual degree – is deferred income taxes. These are liabilities that we will eventually pay but that are meanwhile interest-free.

As I indicated earlier, about $14.7 billion of our $50.5 billion of deferred taxes arises from the unrealized gains in our equity holdings. These liabilities are accrued in our financial statements at the current 21% corporate tax rate but will be paid at the rates prevailing when our investments are sold. Between now and then, we in effect have an interest-free "loan" that allows us to have more money working for us in equities than would otherwise be the case.

A further $28.3 billion of deferred tax results from our being able to accelerate the depreciation of assets such as plant and equipment in calculating the tax we must currently pay. The front-ended savings in taxes that we record gradually reverse in future years. We regularly purchase additional assets, however. As long as the present tax law prevails, this source of funding should trend upward.

Over time, Berkshire's funding base – that's the right-hand side of our balance sheet – should grow, primarily through the earnings we retain. Our job is to put the money retained to good use on the left-hand side, by adding attractive assets.

GEICO and Tony Nicely

That title says it all: The company and the man are inseparable.

Tony joined GEICO in 1961 at the age of 18; I met him in the mid-1970s. At that time, GEICO, after a four-decade record of both rapid growth and outstanding underwriting results, suddenly found itself near bankruptcy. A recently-installed management had grossly underestimated GEICO's loss costs and consequently underpriced its product. It would take many months until those loss-generating policies on GEICO's books – there were no less than 2.3 million of them – would expire and could then be repriced. The company's net worth in the meantime was rapidly approaching zero.

In 1976, Jack Byrne was brought in as CEO to rescue GEICO. Soon after his arrival, I met him, concluded that he was the perfect man for the job, and began to aggressively buy GEICO shares. Within a few months, Berkshire bought about ⅓ of the company, a portion that later grew to roughly ½ without our spending a dime. That stunning accretion occurred because GEICO, after recovering its health, consistently repurchased its shares. All told, this half-interest in GEICO cost Berkshire $47 million, about what you might pay today for a trophy apartment in New York.

Let's now fast-forward 17 years to 1993, when Tony Nicely was promoted to CEO. At that point, GEICO's reputation and profitability had been restored – but not its growth. Indeed, at yearend 1992 the company had only 1.9 million auto policies on its books, far less than its pre-crisis high. In sales volume among U.S. auto insurers, GEICO then ranked an undistinguished seventh.

Late in 1995, after Tony had re-energized GEICO, Berkshire made an offer to buy the remaining 50% of the company for $2.3 billion, about 50 times what we had paid for the first half (and people say I never pay up!). Our offer was successful and brought Berkshire a wonderful, but underdeveloped, company and an equally wonderful CEO, who would move GEICO forward beyond my dreams.

GEICO is now America's Number Two auto insurer, with sales 1,200% greater than it recorded in 1995. Underwriting profits have totaled $15.5 billion (pre-tax) since our purchase, and float available for investment has grown from $2.5 billion to $22.1 billion.

By my estimate, Tony's management of GEICO has increased Berkshire's intrinsic value by more than $50 billion. On top of that, he is a model for everything a manager should be, helping his 40,000 associates to identify and polish abilities they didn't realize they possessed.

Last year, Tony decided to retire as CEO, and on June 30th he turned that position over to Bill Roberts, his long-time partner. I've known and watched Bill operate for several decades, and once again Tony made the right move. Tony remains Chairman and will be helpful to GEICO for the rest of his life. He's incapable of doing less.

All Berkshire shareholders owe Tony their thanks. *I* head the list.

Investments

Below we list our fifteen common stock investments that at yearend had the largest market value. We exclude our Kraft Heinz holding – 325,442,152 shares – because Berkshire is part of a control group and therefore must account for this investment on the "equity" method. On its balance sheet, Berkshire carries its Kraft Heinz holding at a GAAP figure of $13.8 billion, an amount reduced by our share of the large write-off of intangible assets taken by Kraft Heinz in 2018. At yearend, our Kraft Heinz holding had a market value of $14 billion and a cost basis of $9.8 billion.

			12/31/18	
*Shares**	*Company*	*Percentage of Company Owned*	*Cost***	*Market*
			(in millions)	
151,610,700	American Express Company	17.9	$ 1,287	$ 14,452
255,300,329	Apple Inc.	5.4	36,044	40,271
918,919,000	Bank of America Corp.	9.5	11,650	22,642
84,488,751	The Bank of New York Mellon Corp.	8.8	3,860	3,977
6,789,054	Charter Communications, Inc.	3.0	1,210	1,935
400,000,000	The Coca-Cola Company	9.4	1,299	18,940
65,535,000	Delta Air Lines, Inc.	9.6	2,860	3,270
18,784,698	The Goldman Sachs Group, Inc.	4.9	2,380	3,138
50,661,394	JPMorgan Chase & Co.	1.5	5,605	4,946
24,669,778	Moody's Corporation	12.9	248	3,455
47,890,899	Southwest Airlines Co.	8.7	2,005	2,226
21,938,642	United Continental Holdings Inc.	8.1	1,195	1,837
146,346,999	U.S. Bancorp	9.1	5,548	6,688
43,387,980	USG Corporation	31.0	836	1,851
449,349,102	Wells Fargo & Company	9.8	10,639	20,706
	Others		16,201	22,423
	Total Common Stocks Carried at Market		$ 102,867	$ 172,757

* Excludes shares held by pension funds of Berkshire subsidiaries.

** This is our actual purchase price and also our tax basis.

Charlie and I do *not* view the $172.8 billion detailed above as a collection of ticker symbols – a financial dalliance to be terminated because of downgrades by "the Street," expected Federal Reserve actions, possible political developments, forecasts by economists or whatever else might be the subject *du jour*.

What we see in our holdings, rather, is an assembly of companies that we partly own and that, on a weighted basis, are earning about *20%* on the net tangible equity capital required to run their businesses. These companies, also, earn their profits without employing excessive levels of debt.

Returns of that order by large, established and understandable businesses are remarkable under any circumstances. They are truly mind-blowing when compared against the return that many investors have accepted on bonds over the last decade – 3% or less on 30-year U.S. Treasury bonds, for example.

On occasion, a ridiculously-high purchase price for a given stock will cause a splendid business to become a poor investment – if not permanently, at least for a painfully long period. Over time, however, investment performance converges with business performance. And, as I will next spell out, the record of American business has been extraordinary.

The American Tailwind

On March 11th, it will be 77 years since I first invested in an American business. The year was 1942, I was 11, and I went all in, investing $114.75 I had begun accumulating at age six. What I bought was three shares of Cities Service preferred stock. I had become a capitalist, and it felt good.

Let's now travel back through the two 77-year periods that preceded my purchase. That leaves us starting in 1788, a year prior to George Washington's installation as our first president. Could anyone then have imagined what their new country would accomplish in only three 77-year lifetimes?

During the two 77-year periods prior to 1942, the United States had grown from four million people – about ½ of 1% of the world's population – into the most powerful country on earth. In that spring of 1942, though, it faced a crisis: The U.S. and its allies were suffering heavy losses in a war that we had entered only three months earlier. Bad news arrived daily.

Despite the alarming headlines, almost all Americans believed on that March 11th that the war would be won. Nor was their optimism limited to that victory. Leaving aside congenital pessimists, Americans believed that their children and generations beyond would live far better lives than they themselves had led.

The nation's citizens understood, of course, that the road ahead would not be a smooth ride. It never had been. Early in its history our country was tested by a Civil War that killed 4% of all American males and led President Lincoln to openly ponder whether "a nation so conceived and so dedicated could long endure." In the 1930s, America suffered through the Great Depression, a punishing period of massive unemployment.

Nevertheless, in 1942, when I made my purchase, the nation expected post-war growth, a belief that proved to be well-founded. In fact, the nation's achievements can best be described as breathtaking.

Let's put numbers to that claim: If my $114.75 had been invested in a no-fee S&P 500 index fund, and all dividends had been reinvested, my stake would have grown to be worth (pre-taxes) $606,811 on January 31, 2019 (the latest data available before the printing of this letter). That is a gain of *5,288 for 1*. Meanwhile, a $1 million investment by a tax-free institution of that time – say, a pension fund or college endowment – would have grown to about $5.3 *billion*.

Let me add one additional calculation that I believe will shock you: If that hypothetical institution had paid only *1%* of assets annually to various "helpers," such as investment managers and consultants, its gain would have been *cut in half*, to $2.65 billion. That's what happens over 77 years when the 11.8% annual return actually achieved by the S&P 500 is recalculated at a 10.8% rate.

Those who regularly preach doom because of government budget deficits (as I regularly did myself for many years) might note that our country's national debt has increased roughly 400-fold during the last of my 77-year periods. That's 40,000%! Suppose you had foreseen this increase and panicked at the prospect of runaway deficits and a worthless currency. To "protect" yourself, you might have eschewed stocks and opted instead to buy 3¼ ounces of gold with your $114.75.

And what would that supposed protection have delivered? You would now have an asset worth about $4,200, *less than 1% of what* would have been realized from a simple unmanaged investment in American business. The magical metal was no match for the American mettle.

Our country's almost unbelievable prosperity has been gained in a bipartisan manner. Since 1942, we have had seven Republican presidents and seven Democrats. In the years they served, the country contended at various times with a long period of viral inflation, a 21% prime rate, several controversial and costly wars, the resignation of a president, a pervasive collapse in home values, a paralyzing financial panic and a host of other problems. All engendered scary headlines; all are now history.

Christopher Wren, architect of St. Paul's Cathedral, lies buried within that London church. Near his tomb are posted these words of description (translated from Latin): "If you would seek my monument, look around you." Those skeptical of America's economic playbook should heed his message.

In 1788 – to go back to our starting point – there really wasn't much here *except* for a small band of ambitious people and an embryonic governing framework aimed at turning their dreams into reality. Today, the Federal Reserve estimates our household wealth at $108 *trillion*, an amount almost impossible to comprehend.

Remember, earlier in this letter, how I described retained earnings as having been the key to Berkshire's prosperity? So it has been with America. In the nation's accounting, the comparable item is labeled "savings." And save we have. If our forefathers had instead consumed all they produced, there would have been no investment, no productivity gains and no leap in living standards.

* * * * * * * * * * *

Charlie and I happily acknowledge that much of Berkshire's success has simply been a product of what I think should be called *The American Tailwind*. It is beyond arrogance for American businesses or individuals to boast that they have "done it alone." The tidy rows of simple white crosses at Normandy should shame those who make such claims.

There are also many other countries around the world that have bright futures. About that, we should rejoice: Americans will be both more prosperous and safer if *all* nations thrive. At Berkshire, we hope to invest significant sums across borders.

Over the next 77 years, however, the major source of our gains will almost certainly be provided by The American Tailwind. We are lucky – gloriously lucky – to have that force at our back.

The Annual Meeting

Berkshire's 2019 annual meeting will take place on Saturday, May 4th. If you are thinking about attending – and Charlie and I hope you come – check out the details on pages A-2 – A-3. They describe the same schedule we've followed for some years.

If you can't join us in Omaha, attend via Yahoo's webcast. Andy Serwer and his Yahoo associates do an outstanding job, both in covering the entire meeting and interviewing many Berkshire managers, celebrities, financial experts and shareholders from the U.S. and abroad. The world's knowledge of what goes on in Omaha the first Saturday of every May has grown dramatically since Yahoo came on board. Its coverage begins at 8:45 a.m. CDT and provides Mandarin translation.

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For 54 years, Charlie and I have loved our jobs. Daily, we do what we find interesting, working with people we like and trust. And now our new management structure has made our lives even more enjoyable.

With the whole ensemble – that is, with Ajit and Greg running operations, a great collection of businesses, a Niagara of cash-generation, a cadre of talented managers and a rock-solid culture – your company is in good shape for whatever the future brings.

February 23, 2019

Warren E. Buffett
Chairman of the Board

Morning Session - 2019 Meeting

1. Welcome and Munger's insurgency campaign

WARREN BUFFETT: Thank you.

Good morning and welcome to Berkshire Hathaway.

And for those of you who have come from out of state, welcome to Omaha. The city is delighted to have you here at this event.

And for those of you who came from outside of the country, welcome to the United States.

So, we've got people here from all over the world. We've got some overflow rooms that are taking care of people. And we will just have a few preliminaries and then we will move right into the Q&A period.

We'll break about noon for about an hour. We'll come back and do more Q&A until about 3:30. Then we'll adjourn for a few minutes, and then we'll conduct the meeting.

I understand that in the room adjacent, that Charlie has been conducting a little insurgency campaign.

I don't know whether you've seen these, but these are the buttons that are available for those of you — you keep asking questions about succession. And Charlie wants to answer that question by getting your vote today. So, it says — this one says, "Maturity, experience, why accept second best? Vote for Charlie." (Laughter)

I, however, have appointed the monitors who have — collect the votes, so I feel very secure. (Laughter)

2. Berkshire directors introduced

WARREN BUFFETT: The first thing I'd like to do — Charlie is my partner of 60 years, a director and vice chairman, and we make the big decisions jointly. It's just that we haven't had any big decisions. So, (laughter) we haven't — we're keeping him available for the next big one.

But now at the formal meeting today, we'll elect 14 directors, and you're looking at two of them. And I'd like to introduce the 12 that will be on the ballot at 3:45.

And I'm going to proceed alphabetically. And if they'll stand. If you'll withhold your applause because some of them get sensitive if certain people get more applause than others, and (Laughter) they'll — and if you'll withhold it till I'm finished, then you can applaud or not, as you see fit, having looked at these directors. (Laughter)

So, we'll start on my left. Greg Abel, who's both a chairman and a director. Greg? Yeah, oh, there we are. Right, OK. And going along alphabetically, Howard Buffett, Steve Burke, Sue Decker, Bill Gates, Sandy Gottesman— (applause) — Charlotte Guyman, Ajit Jain, who is also a vice chairman, Tom Murphy, Ron Olson, Walter Scott, and Meryl Witmer. Now you can applaud. (Applause)

3. Berkshire's Q1: Pay attention to operating earnings

WARREN BUFFETT: Now, this morning we posted on our website the quarterly, the 10Q that's required to be filed with the SEC. We published it at 7 o'clock Central Time. And we also published an accompanying press release.

And if we'll put slide one up — these figures as usual require some explanation. As we've mentioned in the annual report, the new GAAP rule of Generally Accepted Accounting Principles require that we mark our securities to market and then report any unrealized gains in our earnings.

And you can see, I've warned you about the distortions from this sort of thing. And, you know, the first quarter of 2019 actually was much like the first quarter of 2018, and I hope very much that newspapers do not read headlines saying that we made $21.6 billion in the first quarter this year against a loss of last year.

These — the bottom line figures are going to be totally capricious, and what I worry about is that not everybody studied accounting in school, or they can be very smart people but that doesn't mean that they've spent any real time on accounting.

And I really regard these bottom line figures, particularly if they're emphasized in the press, as doing — as potentially being harmful to our shareholders, and really not being helpful. So, I encourage you now, and I encourage all the press that's here, focus on what we call our operating earnings, which were up a bit. And forget about the capital gains or losses in any given period.

Now, they're enormously important over time. We've had substantial capital gains in the future; we have substantial unrealized capital gains at the present time; we expect to have more capital gains in the future.

They are an important part of Berkshire, but they have absolutely no predictive value or analytical value on a quarterly basis or an annual basis. And I just hope that nobody gets misled in some quarter when stocks are down and people say, "Berkshire loses money," or something of the sorts. It's really a shame that the rules got changed in that way, but we will report.

But we will also explain, and we will do our best to have the press understand the importance of focusing on operating earnings, and that we do not attract shareholders who think that there's some enormous gain because in the first quarter the stock market was up.

There's one other footnote to these figures that I should point out. It's already been picked up by the wires from our 7 o'clock filing.

We report on Kraft Heinz, of which we own about 27 percent or so. We report on what they call the equity method. Now, most stocks, when you get dividends, that goes into our earnings account, and their undistributed earnings don't affect us. They affect us in a real way, but they don't affect us in an accounting way.

We are part of a control group at Kraft Heinz, so instead of reporting dividends, we report what they call equity earnings.

Kraft Heinz has not filed their 10K for the 2018 year with the SEC. And therefore, they have not released the first quarter of 2019 earnings. Now, normally, we would include our percentage share of those earnings, and we've done that every quarter up till this quarter. But because we do not have those figures, we've just — we've not included anything.

We received 40 cents times — $130 million of dividends in the first quarter from our shares, but that reduces our carrying basis and it is not reflected in the earnings. So, that's an unusual item which we have mentioned, specifically pointed out in our press release as well as included in our own.

But there is nothing in here, plus or minus, for Kraft earnings, Kraft Heinz earnings this year, whereas there was last year. And when we have the figures, obviously we will report them. Let's see what beyond that I want to tell you.

4. Berkshire signs 20-year lease for its Omaha headquarters

WARREN BUFFETT: I think — oh yes, I'd wanted to mention to you, the Kiewit Company, which has been our landlord since 1962 — 57 years — has owned the building in which Berkshire is headquartered.

Kiewit Company is moving their headquarters and, in the process, will be doing something with the building. And they very generously, as they always have been, they came and said, "What kind of a lease would you like? Since we're leaving, and we've always sort of worked these things out as we've gone along." And so Bruce Grewcock, who runs Kiewit, said, "You just sort of — you name your terms and what you'd like. So, you — no matter with happens with the building, you're all set."

So, I was about to sign a ten-year lease for the present space, but Charlie said, "Ten years might be long enough for me but," he said he would like me to sign one for 20 years, considering.

And — so we are entering a 20-year lease, and I confess to you that we now occupy one full floor, as we have for decades, and the new lease provides for two floors. So, I just want you to know that your management is loosening up just a little bit. (Laughter)

And whether or not we fill them is another question. But we will have that, and I would like to say to Omaha that I think the fact that Berkshire has signed up for 20 years is very good news for the city over time. It — (Applause) OK.

5. Berkshire employees pitch in for annual meeting

WARREN BUFFETT: And now I would like to tell you something about the people that make all of this possible. This is totally a — this is a homegrown operation.

We started with a few people, meeting in the lunchroom at National Indemnity many years ago. And I think we will probably set another record for attendance today. Yesterday afternoon, 16,200 people came in five hours, and that broke the previous record by a couple thousand.

On Tuesday, the Nebraska Furniture Mart did $9.3 million worth of business. And if any of you are in the retail business, you'll know that that's the yearly volume for some furniture stores, and here in Omaha, the 50th or so largest market in the country, maybe even a little less, $9.3 billion (million) I think probably exceeds anything any home furnishing store's ever done in one day.

And we have people pitching, and we have all the people, virtually all of the people from the home office, some of them, you know, are — they'll take on any task. We have a bunch of people from National Indemnity, for example, that come over, and they've been some of the monitors around.

And in terms of the exhibit hall, more than 600 people from our various subsidiaries give up a weekend to come to Omaha, work very hard, and tomorrow, 4:00 or 4:30, or I should say today at 4:00 or 4:30, they will start packing up things and heading back home. And they come in, and I saw them all yesterday, and they were a bunch of very, very happy, smiling faces. And, you know, they work hard all year, and then they come in and help us out on this meeting.

And then, finally, if we could get a spotlight, I think Melissa Shapiro is someplace here — she runs the whole show. I mean, we — Melissa, where are you? (Applause)

Melissa's name was Melissa Shapiro before she got married, then she married a guy named Shapiro, so now she's Melissa Shapiro Shapiro. So — (Laughter) but she can handle that sort of thing. She handles everything, and never — totally unflappable. Totally organized. Everything gets done. Everybody likes her when they get through. So, I — it's marvelous to get a chance to work with people like this.

I think it's a special quality that — at Berkshire. I think other people would hire some group to put on the meeting and all be very professional and all of that. But I don't think you can get — I don't think you can buy the enthusiasm and energy and help-the-next-guy feeling that you've seen out on that exhibition floor, and you'll see as you meet people here at the hall, and as you meet the people around Omaha. They're very, very happy that you're here.

6. Q&A Begins

WARREN BUFFETT: And with that, I would like to start on the questions. We'll do it just as we've done it in recent years. We'll start with the press group. They've received emails from a great many people — perhaps they can tell you how many — and selected the questions they think would be most useful to the Berkshire shareholders.

Yahoo is webcasting this as they've done for several years now, they've done a terrific job for us.

So, this meeting is going out, both in English and in Mandarin, and I hope our results translate well, or our — (laughs) our comments translate well. Sometimes we have trouble with English. But we're going to — we'll start in with Carol Loomis, my friend of 50 years, but you'll never know it by the questions she's going to ask me. (Laughter)

CAROL LOOMIS: I'm going to start, very briefly — this is for the benefit of people who send us questions next year. There are kind of two things that you get wrong a lot of the time. You can't send two-part questions or three-part, et cetera. We need a one-part question. And the other thing is the questions all need to have some relevance to Berkshire, because Warren said when he started it that his hope was that shareholders would come out of the questions with a further education about the company. So, keep those in mind for next year.

7. Munger: "I predict we'll get a little more liberal in repurchasing shares"

CAROL LOOMIS (RETIRED FORTUNE MAGAZINE EDITOR): Many people — a number of people — wrote me about repurchases of stock. And, hence, the question I picked for my first one.

The question, this particular question comes from Ward Cookie (PH), who lives in Belgium and who was still emailing me this morning in reference to the first quarter report.

And he asked, "My question concerns your repurchase of Berkshire shares. In the third quarter of last year, you spent almost 1 billion buying Berkshire B stock at an average price of $207.

"But then you got to a period between December 26th and April 11th when the stock languished for almost four months under 207. And yet, you purchased what I think of as a very limited amount of stock, even as you were sitting on an enormous pile of 112 billion.

"My question is why you did not repurchase a lot more stock? Unless, of course, there was for a time an acquisition of, say, 80 billion to 90 billion on your radar."

WARREN BUFFETT: Yeah, the question — whether we had 100 billion or 200 billion would not make a difference — or 50 billion — would not make a difference in our approach to repurchase of shares.

We repurchase shares — we used to have a policy of tying it to book value. But that became — really became obsolete. It did not —

The real thing is to buy stock — repurchase shares — only when you think you're doing it at a price where the remaining shareholders have had — are worth more the moment after you repurchased it than they were the moment before.

It's very much like if you were running a partnership and you had three partners in it and the business was worth 3 million, and one of the partners came and said, "I'd like you to buy back my share of the partnership for a billion" — I started out with millions, so I'll stay with millions — "for $1.1 million?" And we said, "Forget it." And if he said, "1 million?" we'd probably say, "Forget it," unless — and if he said, "900,000," we'd take it because, at that point, the remaining business would be worth 2-million-1, and we'd have two owners, and our interest in value would have gone from a million to a million and fifty-thousand.

So, it's very simple arithmetic. Most companies adopt repurchase programs and they just say, "We're going to spend so much." That's like saying, you know, "We're going to buy XYZ stock, and we're going to spend so much here." "We're going to buy a company." "We're going to spend whatever it takes."

We will buy stock when we think it is selling below a conservative estimate of its intrinsic value. Now, the intrinsic value is not a specific point, it's probably a range in my mind that might have a band maybe of 10 percent. Charlie would have a band in his mind, and it would probably be 10 percent. And ours would not be identical, but they'd be very close. And sometimes he might figure a bit higher than I do, a bit lower.

But we want to be sure, when we repurchase shares, that those people who have not sold shares are better off than they were before we repurchased them. And it's very simple.

And in the first quarter of the year, they'll find we bought something over a billion worth of stock, and that's nothing like my ambitions. But it — what that means is that we feel that we're OK buying it, but we don't salivate over buying it.

We think that the shares we repurchased in the first quarter leave the shareholders better off than if we hadn't — the remaining shareholders — better off than if we hadn't bought it. But we don't think the difference is dramatic.

And you will — you could easily see periods where we would spend very substantial sums if we thought the stock was selling at, say, 25 or 30 percent less than it was worth, and we didn't have something else that was even better.

But we have no ambition in any given quarter to spend a dime unless we think you're going to be better off for us having done so. Charlie?

CHARLIE MUNGER: Well, I predict that we'll get a little more liberal in repurchasing shares. (Laughter)

WARREN BUFFETT: I was going to give you equal time, but then — (Laughter)

8. BNSF may adopt "precision-scheduled railroading"

WARREN BUFFETT: OK, Jon Brandt.

JONATHAN BRANDT (RESEARCH ANALYST, RUANE, CUNNIFF & GOLDFARB): Hi, Warren and Charlie. Thanks for having me, as always.

Every major North American railroad other than Burlington Northern has adopted at least some aspects of precision-scheduled railroading, generally to good effect to their bottom line.

Some believe that point-to-point schedule service and minimal in-transit switching is good for both returns on capital and customer service.

Others believe precision railroading has done little for on-time performance, and its rigidity has jeopardized the compact that railroads have had with both regulators and customers.

Do you and current BNSF management believe that it's now a good idea for BNSF to adopt precision railroading playbook? Or do you agree with its critics?

WARREN BUFFETT: Yeah, precision railroading, as it's labeled, was probably invented by a fellow named Hunter Harrison. I think maybe he was at the Illinois Central Railroad at the time; there's a book that came out about Hunter, who died maybe a year ago or thereabouts. And it describes the — his procedure toward railroading. It's an interesting read if you're interested in railroading.

And he took that to Canadian National, CN. There are six big railroads in North America, and he took that to CN, and he was very successful.

And actually, Bill Gates is probably the largest holder of CN, and I think he's done very well with that stock.

And then later, Canadian Pacific was the subject of an activist, and when they — as they proceeded, they got Hunter to join them and brought in an associate, Keith Creel, who — and they instituted a somewhat similar program. Now the same thing has happened at CSX.

And all of those companies dramatically improved their profit margins, and they had varying degrees of difficulty with customer service in the implementing of it.

But I would say that we watch very carefully — Union Pacific is doing a somewhat modified version. But the — we are not above copying anything that is successful. And I think that there's been a good deal that's been learned by watching these four railroads, and we will — if we think we can serve our customers well and get more efficient in the process, we will adopt whatever we observe.

But we don't have to do it today or tomorrow, but we do have to find something that gets at least equal, and hopefully better, customer satisfaction and that makes our railroad more efficient. And there's been growing evidence that — from the actions of these other four railroads — there's been growing evidence that we can learn something from what they do. Charlie?

CHARLIE MUNGER: Well, I doubt that anybody is very interested in un-precision in railroading. (Laughter)

WARREN BUFFETT: Well, Jonny, has Charlie answered your question? (Laughter)

JONATHAN BRANDT: Yes, thank you.

9. BNSF trying to improve energy efficiency

WARREN BUFFETT: OK. Station number 1, from the shareholder group up on my far right.

AUDIENCE MEMBER: Good morning. My name is Bill Moyer and I'm from Vashon Island, Washington. And I'm part of a team called "The Solutionary Rail Project."

Interestingly, only 3.5 percent of the value of freight in the U.S. moves on trains. Berkshire Hathaway is incredibly well positioned with its investments in the northern and southern trans-con through BNSF to grab far more of that freight traffic off of the roads and get diesel out of our communities, as well as harness transmission corridors for your Berkshire renewable energy assets, for which you're obviously very proud.

Would you consider meeting with us to look at a proposal for utilizing your assets and leveraging a public/private partnership to electrify your railroads and open those corridors for a renewable energy future?

WARREN BUFFETT: No, I — we've examined a lot of things in terms of LNG. I mean, they're — obviously, we want to become more energy efficient, as well as just generally efficient.

And I'm not sure about the value of freight. You mentioned 3 1/2 percent. I believe — I mean, I'm not sure what figure you're using as the denominator there.

Because if you look at movement of traffic by ton miles, rails are around 40 percent of the U.S. — we're not talking local deliveries or all kinds of things like that — but they're 40 percent, roughly, by rail.

And BNSF moves more ton miles than any other entity. We move 15 percent-plus of all the ton miles moved in the United States.

But if you take trucking, for example, on intermodal freight, we're extremely competitive on the longer hauls, but the shorter the haul, the more likely it is that the flexibility of freight, where a truck can go anyplace and we have rails. So, the equation changes depending on distance hauled and other factors, but distance hauled is a huge factor.

We can move a ton mile 500 — we can move 500-plus ton miles of freight for one gallon of diesel. And that is far more efficient than trucks.

So, the long-haul traffic, and the heavy traffic, is going to go to the rails, and we try to improve our part of the equation on that all the time.

But if you're going to transport something ten or 20 or 30 miles between a shipper and a receiver, and they're — you're not going to move that by rail.

So, we look at things all the time, I can assure you.

Carl Ice is in — well, he's probably here now, and he'll be in the other room — and he's running the railroad. You're free to talk to him, but I don't see any breakthrough like you're talking about. I do see us getting more efficient year-by-year-by-year.

And obviously, if driverless trucks become part of the equation, that moves things toward trucking. But on long-haul, heavy stuff, and there's a lot of it, you're looking at the railroad that carries more than any other mode of transportation. And BNSF is the leader. Charlie?

CHARLIE MUNGER: Well, over the long term, our questioner is on the side of the angels. Sooner or later, we'll have it more electrified. I think Greg (Abel) will decide when it happens.

WARREN BUFFETT: Yeah. But we're all working on the technology but —

And we're considerably more efficient than ten, 20, 30 years ago, if you look at the numbers. But it —

One interesting figure, I think right after World War II, when the country probably had about 140 million people against our 330 million now, so we had 40 percent of the population. We had over a million-and-a-half people employed in the railroad industry. Now there's less than 200,000 and we're carrying a whole lot more freight.

Now, obviously there's some change in passengers. But the efficiency of the railroads compared to — and the safety — compared to what it was even immediately after World War II has improved dramatically. Charlie, anything more?

CHARLIE MUNGER: No.

10. Bank CEOS who make bad mistakes should lose all their net worth

WARREN BUFFETT: OK, Becky?

BECKY QUICK (CNBC): This is a question that comes from Mike Hebel. He says, "The Star Performers Investment Club has 30 partners, all of whom are active or retired San Francisco police officers. Several of our members have worked in the fraud detail, and have often commented after the years-long fraudulent behavior of Wells Fargo employees, should have warranted jail sentences for several dozen, yet Wells just pays civil penalties and changes management.

"As proud shareholders of Berkshire, we cannot understand Mr. Buffett's relative silence compared to his vigorous public pronouncement many years ago on Salomon's misbehavior. Why so quiet?"

WARREN BUFFETT: Yeah, I would say this. The — (applause) — problem, well, as I see it — although, you know, I have read no reports internally or anything like that — but it looks like to me like Wells made some big mistakes in what they incentivized. And as Charlie says, there's nothing like incentives, but they can incentivize the wrong behavior. And I've seen that a lot of places. And that clearly existed at Wells.

The interesting thing is, to the extent that they set up fake accounts, a couple million of them, that had no balance in them, that could not possibly have been profitable to Wells. So, you can incentivize some crazy things.

The problem is — I'm sure is that — and I don't really have any inside information on it at all — but when you find a problem, you have to do something about it. And I think that's where they probably made a mistake at Wells Fargo.

They made it at Salomon. I mean, John Gutfreund would never have played around with the government. He was the CEO of Salomon in 1991. He never would have done what the bond trader did that played around with the rules that the federal government had about government bond bidding.

But when he heard about it, he didn't immediately notify the Federal Reserve. And he heard about it in late April, and May 15th, the government bond auction came along. And Paul Mozer did the same thing he'd done before, and gamed the auction.

And at this point, John Gutfreund — you know, the destiny of Salomon was straight downhill from that point forward. Because, essentially, he heard about a pyromaniac, and he let him keep the box of matches.

And at Wells, my understanding, there was an article in The Los Angeles Times maybe a couple years before the whole thing was exposed, and, you know, somebody ignored that article.

And Charlie has beaten me over the head all the years at Berkshire because we have 390,000 employees, and I will guarantee you that some of them are doing things that are wrong right now. There's no way to have a city of 390,000 people and not need a policeman or a court system. And some people don't follow the rules. And you can incentivize the wrong behavior. You've got to do something about it when it happens.

Wells has become, you know, exhibit one in recent years. But if you go back a few years, you know, you can almost go down — there's quite a list of banks where people behaved badly. And where they — I would not say — I don't know the specifics at Wells — but I've actually written in the annual report that they talk about moral hazard if they pay a lot of people.

The shareholders of Wells have paid a price. The shareholders of Citicorp paid a price. The shareholders of Goldman Sachs, the shareholders of Bank of America, they paid billions and billions of dollars, and they didn't commit the acts. And of course, nobody did go — there were no jail sentences. And that is infuriating.

But the lesson that was taught was not that the government bailed you out because the government got its money back, but the shareholders of the various banks paid many, many billions of dollars.

And I don't have any advice for anybody running a business except, when you find out something is leading to bad results or bad behavior, you know, you — if you're in the top job, you've got to take action fast.

And that's why we have hotlines. That's why we get — when we get certain anonymous letters, we turn them over to the audit committee or to outside investigators.

And we will have — I will guarantee you that we will have some people who do things that are wrong at Berkshire in the next year or five years, ten years, and 50 years. It's — you cannot have 390,000 people — and it's the one thing that always worries me about my job, but — because I've got to hear about those things, and I've got to do something about them when I do hear about them. Charlie?

CHARLIE MUNGER: Well, I don't think people ought to go to jail for honest errors of judgment. It's bad enough to lose your job. And I don't think that any of those top officers was deliberately malevolent in any way. I just — we're talking about honest errors in judgment.

And I don't think (former Wells Fargo CEO) Tim Sloan even committed honest errors of his judgment, I just think he was an accidental casualty that deserve the trouble. I wish Tim Sloan was still there.

WARREN BUFFETT: Yeah, there's no evidence that he did a thing. But he stepped up to take a job that — where he was going to be a piñata, basically, for all kinds of investigations.

And rightfully, Wells should be checked out on everything they do. All banks should. I mean, they get a government guarantee and they receive trillions of dollars in deposits. And they do that basically because of the FDIC. And if they abuse that, they should pay a price.

If anybody does anything like a Paul Mozier did, for example, with Salomon, they ought to go to jail. Paul Mozier only went to jail for four months. But if you're breaking laws, you should be prosecuted on it.

If you do a lot of dumb things, I wish they wouldn't go away — the CEOs wouldn't go away — so rich under those circumstances. But people will do dumb things. (Applause)

I actually proposed — think it may have been in one of the annual reports even. I proposed that, if a bank gets to where it needs government assistance, that basically the responsible CEO should lose his net worth and his spouse's net worth. If he doesn't want the job under those circumstances, you know (Applause)

And I think that the directors — I think they should come after the directors for the last five years — I think I proposed — of everything they'd received.

But it's the shareholders who pay. I mean, if we own 9 percent of Wells, whatever this has cost, 9 percent of it is being borne by us. And it's very hard to tie it directly.

One thing you should know, incidentally though, is that the FDIC, which was started — I think it was started January 1st, 1934 — but it was a New Deal proposal.

And the FDIC has not cost the United States government a penny. It now has about $100 billion in it. And that money has all been put in there by the banks. And that's covered all the losses of the hundreds and hundreds and hundreds of financial institutions.

And I think the impression is that the government guarantee saved the banks, but the government money did not save the banks. The banks' money, as an industry, not only has paid every loss, but they've accumulated an extra $100 billion, and that's the reason the FDIC. assessments now are going back down. They had them at a high level. And they had a higher level for the very big banks.

When you hear all the talk about — the political talk — about the banks, they had not cost the federal government a penny. There were a lot of actions that took place that should not have

taken place. And there's a lot fewer now, I think, than there were in the period leading up to 2008 and '09. But some banks will make big mistakes in the future. Charlie?

CHARLIE MUNGER: I've got nothing to add to that.

11. "We will spend a lot of money" on buybacks if price is right

WARREN BUFFETT: OK. Jay Gelb from Barclays. Barclays just had a proxy contest of sorts, didn't it?

JAY GELB (INSURANCE ANALYST, BARCLAYS): That's right, Warren. (Laughs)

I also have a question on Berkshire Hathaway — I'm sorry — on share buybacks.

Warren, in a recent Financial Times article, you were quoted as saying that the time may come when the company buys back as much as $100 billion of its shares, which equates to around 20 percent of Berkshire's current market cap. How did you arrive at that $100 billion figure? And over what time frame would you expect this to occur?

WARREN BUFFETT: Yeah. I probably arrived at that $100 billion figure in about three seconds when I got asked the question. (Laughter)

It was a nice round figure and we could do it. And we would like to do it if the stock was — we've got the money to buy in $100 billion worth of stock.

And bear in mind, if we're buying in $100 billion stock, it probably would be that the company wasn't selling at 500 billion. So, it might buy well over 20 percent.

We will spend a lot of money. We've been involved in companies where the number of shares has been reduced 70 or 80 percent over time. And we like the idea of buying shares at a discount.

We do feel, if shareholders — if we're going to be repurchasing shares from shareholders who are partners, and we think it's cheap, we ought to be very sure that they have the facts available to evaluate what they own.

I mean, just as if we had a partnership, it would not be good if there were three partners and two of them decided that they would sort of freeze out the third, maybe in terms of giving him material information that they knew that that third party didn't know.

So, it's very important that our disclosure be the same sort of disclosure that I would give to my sisters who are the imaginary — they're not imaginary — but they're the shareholders to whom I address the annual report every year.

Because I do feel that you, if you're going to sell your stock, should have the same information that's important, that's available to me and to Charlie.

But we will — if our stock gets cheap, relative to intrinsic value, we would not hesitate.

We wouldn't be able to buy that much in a very short period of time, in all likelihood. But we would certainly be willing to spend $100 billion. Charlie?

CHARLIE MUNGER: I think when it gets really obvious, we'll be very good at it. (Laughter)

WARREN BUFFETT: Let me get that straight. What'd you say, exactly?

CHARLIE MUNGER: When it gets really obvious, we'll be very good at it.

WARREN BUFFETT: Oh, yeah. I was hoping that's what you said. (Laughter)

Yeah, we will be good at it. We don't have any trouble being decisive. We don't say yes very often. But if it's something obvious — I mean, Jay, if you and I are partners, you know, and our business is worth a million dollars and you say you'll sell your half to me for 300,000, you'll have your 300,000 very quickly.

12. Buying one share in an oil-rich duck hunting club

WARREN BUFFETT: OK, station two.

AUDIENCE MEMBER: Good morning. My name is Patrick Donahue from Eden Prairie, Minnesota, and I'm with my ten-year-old daughter, Brooke Donahue.

AUDIENCE MEMBER: Hi, Warren. Hi, Charlie.

WARREN BUFFETT: Hi. It's Brooke, is it?

AUDIENCE MEMBER: It is.

WARREN BUFFETT: Yeah.

AUDIENCE MEMBER: First, I'm a proud graduate of Creighton University. And I need to say a personal thank you for coming over the years to share your insights. And it's been a tradition since I graduated in 1999 to come to the annual meeting, and thank you for a lifetime of memories.

WARREN BUFFETT: Thank you. (Applause)

AUDIENCE MEMBER: Brooke is a proud Berkshire shareholder and read the letter and had some questions regarding investments that have been made in the past. And she had made some interesting comments about what she thought was a lot of fun.

So, our question for both of you is: outside of Berkshire Hathaway, what is the most interesting or fun personal investment you have ever made? (Laughter)

WARREN BUFFETT: Well, they're always more fun when you make a lot of money off of them. (Laughter)

Well, one time, I bought one share of stock in the Atled Corp. That's spelled A-T-L-E-D. And Atled had 98 shares outstanding and I bought one. And not what you call a liquid security. (Laughter)

And Atled happened to be the word "delta" spelled backwards. And a hundred guys in St. Louis had each chipped in 50 or $100 or something to form a duck club in Louisiana and they bought some land down there.

Two guys didn't come up with their — there were a hundred of them — two of them defaulted on their obligation to come up with a hundred dollars — so there were 98 shares out. And they went down to Louisiana and they shot some ducks.

But apparently somebody shot — fired a few shots into the ground and oil spurted out. And — (laughter) — those Delta duck club shares — and I think the Delta duck club field is still producing. I bought stock in it 40 years ago for $29,200 a share.

And it had that amount in cash and it was producing a lot, and they sold it. If they kept it, that stock might've been worth 2 or $3 million a share, but they sold out to another oil company.

That was certainly — that was the most interesting —

Actually, I didn't have any cash at the time. And I went down and borrowed the money. I bought it for my wife. And I borrowed the money. And the loan officer said, "Would you like to borrow some money to buy a shotgun as well?" (Laughter)

Charlie, tell them about the one you missed. (Laughter)

CHARLIE MUNGER: Well, I got two investments that come to mind. When I was young and poor, I spent a thousand dollars once buying an oil royalty that paid me 100,000 a year for a great many years. But I only did that once in a lifetime.

On a later occasion, I bought a few shares of Belridge Oil, which went up 30 times rather quickly. But I turned down five times as much as I bought. It was the dumbest decision of my

whole life. So, if any of you have made any dumb decisions, look up here and feel good about yourselves. (Laughter)

WARREN BUFFETT: I could add a few, but — Andrew?

13. Buffett speaks for himself on politics, not for Berkshire

ANDREW ROSS SORKIN (NEW YORK TIMES/CNBC): Warren and Charlie, this is a question — actually, we got a handful of questions on this topic. This is probably the best formulation of it.

Warren, you have been a long-time, outspoken Democrat. With all the talk about socialism versus capitalism taking place among Democratic presidential candidates, do you anticipate an impact on Berkshire in the form of more regulations, higher corporate taxes, or even calls for breakups among the many companies we own if they were to win?

And how do you think about your own politics as a fiduciary of our company, and at the same time, as someone who has said that simply being a business leader doesn't mean you've put your citizenship in a blind trust?

WARREN BUFFETT: Yeah. I have said that you do not put your citizenship in a blind trust. But you also don't speak on behalf of your company. You do speak as a citizen if you speak. And therefore, you have to be careful about when you do speak, because it's going to be assumed you're speaking on behalf of your company.

Berkshire Hathaway certainly, in 54 years, has never — and will never — made a contribution to a presidential candidate. I don't think we've made a contribution to any political candidate. But I don't want to say, for 54 years, that — (Applause)

We don't do it now. We operate in several regulated industries. And our railroad and our utility, as a practical matter, they have to have a presence in Washington or in the state legislatures in which they operate.

So, we have some — a few — I don't know how many — political action committees which existed when we bought it — when we bought the companies at subsidiaries.

And I think, unquestionably, they make some contributions simply to achieve the same access as their competitors. I mean, if the trucking industry is going to lobby, I'm sure the railroad industry's going to lobby.

But — the general — well, the rule is, I mean, that people do not pursue their own political interests with your money here.

We've had one or two managers over the years, for example, that would do some fundraising where they were fundraising from people who were suppliers of them or something of the sort. And if I ever find out about it, that ends promptly.

My position, at Berkshire, is not to be used to further my own political beliefs. But my own political beliefs can be expressed as a person, not as a representative of Berkshire, when a campaign is important.

I try to minimize it. But it's no secret that in the last election, for example, I raised money.

I won't give money to PACs. I accidentally did it one time. I didn't know it was a PAC. But I don't do it.

But I've raised substantial sums. I don't like the way money is used in politics. I've written op-ed pieces for the New York Times in the past on the influence of money in politics.

I spent some time with John McCain many years ago before McCain-Feingold, on ways to try to limit it. But the world has developed in a different way.

14. Buffett: "I'm a card-carrying capitalist" but some regulations are needed

WARREN BUFFETT: On your question about the — I will just say I'm a card-carrying capitalist. (Applause)

But I — and I believe we wouldn't be sitting here except for the market system and the rule of law and some things that are embodied in this country. So, you don't have to worry about me changing in that manner.

But I also think that capitalism does involve regulation. It involves taking care of people who are left behind, particularly when the country gets enormously prosperous. But beyond that, I have no Berkshire podium for pushing anything. Charlie?

CHARLIE MUNGER: Well, I think we're all in favor of some kind of a government social safety net in a country as prosperous as ours.

What a lot of us don't like is the vast stupidity with which parts of that social safety net are managed by the government. It'd be much better if — (applause) — we could do it more wisely. But I think it also might be better if we did it more liberally.

WARREN BUFFETT: Yeah, one of the reasons we're involved in this effort along with J.P. Morgan and Amazon — with (J.P. Morgan CEO) Jamie Dimon and (Amazon CEO) Jeff Bezos — on the medical question, is we do have as much money going — 3.3 or 3.4 trillion — we have as much money going to medical care as we have funding the federal government.

And it's gone from 5 to 17 percent — or 18 percent — while actually the amount going to the federal government has stayed about the same at 17 percent.

So, we hope there's some major improvements from the private sector because I generally think the private sector does a better job than the public sector in most things.

But I also think that if the private sector doesn't do something, you'll get a different sort of answer. And I'd like to think that the private sector can come up with a better answer than the public sector in that respect.

I will probably — it depends who's nominated — but I voted for plenty of Republicans over the years. I even ran for delegate to the Republican National Convention in 1960. But — we are not —

I don't think the country will go into socialism in 2020 or in 2040 or 2060.

15. We don't try to push Berkshire stock higher or lower

WARREN BUFFETT: OK, Gregg Warren.

GREGG WARREN (FINANCIAL SERVICES ANALYST, MORNINGSTAR RESEARCH SERVICES): Warren, my first question, not surprisingly, is on share repurchases.

Stock buybacks in the open market are a function of both willing buyers and sellers. With Berkshire having two shares of classes, you should have more flexibility when buying back stock. But given the liquidity difference that exists between the two share classes — with an average of 313 Class A shares exchanging hands daily the past five years, equivalent to around $77 million a day, and an average of 3.7 million Class B shares doing the same, equivalent to around 622 million — Berkshire's likely to have more opportunities to buy back Class B shares than Class A, which is exactly what we saw during the back half of last year and the first quarter of 2019.

While it might be more ideal for Berkshire to buy back Class A shares, allowing you to retire shares with far greater voting rights, given that there's relatively little arbitrage between the two share classes and the number of Class B shares increase every year as you gift your Class A shares to the Bill and Melinda Gates Foundation and your children's foundations, can we assume that you're likely to be a far greater repurchaser of Class B shares, going forward, especially given your recent comments to the Financial Times about preferring to have loyal individuals on your shareholder list, which a price tag of $328,000 of Class A shares seems to engender?

WARREN BUFFETT: Yeah, we will - when we're repurchasing shares, if we're purchasing substantial amounts, we're going to spend a lot more on the Class B than the Class A, just because the trading volume is considerably higher.

We may, from time to time — well, we got offered a couple blocks in history, going back in history from the Yoshi (PH) estate and when we had a transaction exchanging our Washington Post stock for both a television station and shares held — A shares — held by the Washington Post.

So, we may see some blocks of A. We may see some blocks of B. But there's no question. If we are able to spend 25, 50, or a hundred billion dollars in repurchasing shares, more of the money is almost certainly going to be spent on the B than the A.

There's no master plan on that other than to buy aggressively when we like the price. And as I say, the trading volume in the B is just a lot higher than the A in dollar amounts. Charlie?

CHARLIE MUNGER: I don't think we care much which class we buy.

WARREN BUFFETT: Yeah. (Laughter)

We would like — we really want the stock — ideally, if we could do it if we were small — once a year we'd have a price and, you know, we'd do it like a private company. And it would be a fair price and people who want to get out could get out. And if other people wanted to buy their interest, fine. And if they didn't, and we thought the price was fair, we'd have the company repurchase it.

We can't do that. But that's — we don't want the stock to be either significantly underpriced or significantly overpriced. And we're probably unique on the overpriced part of it. But we don't want it.

I do not want the stock selling at twice what's it worth because I'm going to disappoint people, you know. I mean, we can't make it — there's no magic formula to make a stock worth what it's selling for, if it sells for way too much.

From a commercial standpoint, if it's selling very cheap, we have to like it when we repurchase it.

But ideally, we would hope the stock would sell in a range that more or less is its intrinsic business value. We have no desire to hype it in any way. And we have no desire to depress it so we can repurchase it cheap. But the nature of markets is that things get overpriced and they get underpriced. And we will — if it's underpriced, we'll take advantage of it.

16. We welcome change, but we won't always adapt to it

WARREN BUFFETT: OK, station 3.

AUDIENCE MEMBER: Hello Charlie Munger and Warren Buffett, (unintelligible). I am Terry (PH) from Shanghai (unintelligible), which aims to catch the best investment opportunities in that era.

So, my question is, as we all know, 5G is coming. It is said that the mode of all industry will be challenged in 5G era. So, what is the core competence that we should master, if (unintelligible) wants to catch the best investment opportunities in this era? Thank you.

WARREN BUFFETT: Well, there's no core competence at the very top of Berkshire. (Laughter)

The subsidiaries that will be involved in developments relating to 5G, or any one of all kinds of things that are going to happen in this world, you know, the utility of LNG in the railroad, or all those kinds of questions, we have people in those businesses that know a lot more about them than we do.

And we count on our managers to anticipate what is coming in their business. And sometimes they talk to us about it. But we do not run that on a centralized basis.

And Charlie, do you want to have anything to add to that?

Do you know anything about 5G I don't know? Well, you probably know a lot about 5G.

CHARLIE MUNGER: No, I know very little about 5G.

But I do know a little about China. And we have bought things in China. And my guess is we'll buy more. (Laughter)

WARREN BUFFETT: Yeah. But I mean, we basically want to have a group of managers, and we do have a group of managers, who are on top of their businesses.

I mean, you saw something that showed BNSF and Berkshire Hathaway Energy and Lubrizol all aware of that. Those people know their businesses. They know what changes are likely to be had.

Sometimes, they find things that they can cooperate on between their businesses. But we don't try to run those from headquarters.

And that may mean — that may have certain weaknesses at certain times. I think, net, it's been a terrific benefit for Berkshire.

Our managers, to a great degree, own their businesses. And we want them to feel a sense of ownership. We don't want them to be lost in some massive conglomerate, where they get directions from this group, which is a subgroup of that group.

And I could tell you a few horror stories from companies we bought, when they tell us about their experience under such an operation.

The world is going to change in dramatic ways. Just think how much it's changed in the 54 years that we've had Berkshire. And some of those changes hurt us.

They hurt us in textiles. They hurt us in shoes. They hurt us in the department store business. Hurt us in the trading stamp business. These were the founding businesses of this operation. But we do adjust. And we've got a group, overall, of very good businesses.

We've got some that will be, actually, destroyed by what happens in this world. But that's — I still am the card-carrying capitalist. And I believe that that's a good thing, but you have to make changes.

We had 80 percent of the people working on farms in 1800. And if there hadn't been a lot of changes, and you needed 80 percent of the people in the country producing the food and cotton we needed, we would have a whole different society.

So, we welcome change. And we certainly want to have managers that can anticipate and adapt to it. But sometimes, we'll be wrong. And those businesses will wither and die. And we'd better use the money someplace else. Charlie? OK, Carol.

Charlie, you haven't had any peanut brittle lately, you know. (Laughs)

17. Kraft Heinz is a good business, but we paid too much

CAROL LOOMIS: This question comes from Vincent James of Munich, Germany. "There has been a lot written about the recent impairment charge at Kraft Heinz. You were quoted as stating that you recognize that Berkshire overpaid for Kraft Heinz. Clearly, major retail chains are being more aggressive in developing house brands.

"In addition, Amazon has announced intentions to launch grocery outlets, being that, as Mr. Bezos has often stated, 'Your margin is my opportunity.' The more-fundamental question related to Kraft Heinz may be whether the advantages of the large brands and zero-based budgeting that 3G has applied are appropriate and defensible at all in consumer foods.

"In other words, will traditional consumer good brands, in general, and Kraft Heinz, in particular, have any moat in their future? My question is, to what extent do the changing dynamics in the consumer food market change your view on the long-term potential for Kraft Heinz?"

WARREN BUFFETT: Yeah, actually, what I said was, we paid too much for Heinz — I mean Kraft — I'm sorry — the Heinz part of the transaction, when we originally owned about half of Heinz,

we paid an appropriate price there. And we actually did well. We had some preferred redeemed and so on.

We paid too much money for Kraft. To some extent, our own actions had driven up the prices.

Now, Kraft Heinz, the profits of that business, 6 billion — we'll say very, very, very roughly, I'm not making forecasts — but 6 billion pretax on 7 billion of tangible assets, is a wonderful business. But you can pay too much for a wonderful business.

We bought See's Candy. And we made a great purchase, as it turned out. And we could've paid more. But there's some price at which we could've bought even See's Candy, and it wouldn't have worked. So, the business does not know how much you paid for it.

I mean, it's going to earn based on its fundamentals. And we paid too much for the Kraft side of Kraft Heinz.

Additionally, the profitability has basically been improved in those operations over the way they were operating before.

But you're quite correct that Amazon itself has become a brand. Kirkland, at Costco, is a $39 billion brand. All of Kraft Heinz is $26 billion. And it's been around for — on the Heinz side — it's been around for 150 years. And it's been advertised — billions and billions and billions of dollars, in terms of their products. And they go through tens of thousands of outlets.

And here's somebody like Costco, establishes a brand called Kirkland. And it's doing 39 billion, more than virtually any food company. And that brand moves from product to product, which is terrific, if a brand travels. I mean, Coca Cola moves it from Coke to Cherry Coke and Coke Zero and so on.

But to have a brand that can really move — and Kirkland does more business than Coca Cola does. And Kirkland operates through 775 or so stores. They call them warehouses at Costco. And Coca Cola is through millions of distribution outlets.

So, brands — the retailer and the brands have always struggled as to who gets the upper hand in moving a product to the consumers.

And there's no question, in my mind, that the position of the retailer, relative to the brands, which varies enormously around the world. In different countries, you've had 35 percent, even, maybe 40 percent, be private-label brands in soft drinks. And it's never gotten anywhere close to that in the United States. So, it varies a lot.

But basically, retailers — certain retailers — the retail system — has gained some power. And particularly in the case of Amazon and Walmart and their reaction to it, and Costco — and Aldi and some others I can name — has gained in power relative to brands.

Kraft Heinz is still doing very well, operationally. But we paid too much. If we paid 50 billion, you know, it would've been a different business. It'd still be earning the same amount.

You can turn any investment into a bad deal by paying too much. What you can't do is turn any investment into a good deal by paying little, which is sort of how I started out in this world.

But the idea of buying the cigar butts that are declining or poor businesses for a bargain price is not something that we try to do anymore. We try to buy good businesses at a decent price. And we made a mistake on the Kraft part of Kraft Heinz. Charlie?

CHARLIE MUNGER: Well, it's not a tragedy that, out of two transactions, one worked wonderfully, and the other didn't work so well. That happens.

WARREN BUFFETT: The reduction of costs, you know — there can always be mistakes made, when you've got places, and you're reorganizing them to do more business with the same number of people.

And we like buying businesses that are efficient to start with. But the management — the operations — of Kraft Heinz have been improved over the present management overall. But we paid a very high price, in terms of the Kraft part. We paid an appropriate price, in terms of Heinz.

18. Internet competition for Berkshire's furniture retailers

WARREN BUFFETT: Jonathan?

JONATHAN BRANDT: Internet-based furniture retailers, like Wayfair, appear willing to stomach large current losses acquiring customers in the hope of converting them to loyal online shoppers.

I've been wondering what this disruptive competition might do to our earnings from home-furnishing retail operations like Nebraska Furniture Mart.

If we have to transition to more of an online model, might we have to spend more heavily to keep shoppers without a corresponding increase in sales? The sharp decline in first-quarter earnings from home furnishings suggest, perhaps, some widening impact from intensifying competition.

Do you believe Wayfair's customers first, profits later model is unsustainable? Or do you think our furniture earnings will likely be permanently lower than they were in the past?

WARREN BUFFETT: I think furnishings — the jury's still out on that, whether the operations which have grown very rapidly in size but still are incurring losses, how they will do over time.

It is true that in the present market, partly because of some successes, like, most dramatically, Amazon, in the past, that investors are willing to look at losses as long as sales are increasing, and hope that there will be better days ahead.

We do a quite significant percentage of our sales online in the furniture operation. That might surprise you. We do the highest percentage in Omaha.

And what's interesting is that we — I won't give you the exact numbers, but it's large — we do a significant dollar volume, but a very significant portion of that volume, people come to the store to pick up, so that they will order something from us online, but they don't seem to mind at all — and they don't have to do it — but they get a pick up at the store.

So, you know, you learn what customers like, just like people learned in fast food, you know, that people would buy a lot of food by going through a drive-in, that they don't want to stop and go into the place. We learn about customer behavior as it unfolds.

But we did do, now — on Tuesday, we did 9.2 million of — or 9.3 million of profitable volume at the Nebraska Furniture Mart. And I think that company had paid-in capital of $2,500. And I don't think anything's been added since. So, it's working so far.

The first quarter — It's interesting — the first quarter was weak at all four of our furniture operations.

But there are certain other parts of the economy — well, just home building, generally — it's considerably below what you would've expected, considering the recovery we have had from the 2008-9 period. I mean, if you look at single-family home construction, the model has shifted more to people living in apartment rentals.

I think it's gone from 69-and-a-fraction percent. It got down to 63 percent. It's bounced up a little bit. But people are just not building — or moving to houses as rapidly as I would have guessed they would have, based on figures prior to 2008 and '09, and considering the recovery we've had, and considering the fact that money is so cheap. And that has some effect on our furniture stores.

But I think we've got a very good furniture operation, not only with the Nebraska Furniture Mart, but at other furniture operations. And we will see whether the models work over the long run.

But I think, you know, they have a reasonable chance. Some things people — we're learning that people will buy some things that they've always gone to the mall or to a retail outlet to buy, that they will do it online. And others don't work so well. Charlie?

CHARLIE MUNGER: I think that we'll do better than most furniture retailers.

WARREN BUFFETT: I think that's a certainty overall, overall. But we've got some good operations there.

But we don't want to become a showroom for the online operations and have people come and look around the place and then order someplace else. So, we have to have the right prices. And we're good at that at the Furniture Mart.

19. Pension funds should avoid "alternative" investments

WARREN BUFFETT: Station 4.

AUDIENCE MEMBER: Warren and Charlie, my name is Brent Muio. I'm from Winnipeg, Canada.

First, thank you for devoting so much time and energy to education. I'm a better investor because of your efforts. But more important, I'm a better partner, friend, son, brother, and soon-to-be first-time father.

There's nothing more important than these relationships. And my life is better, because you're willing to pass on your experience and wisdom.

My path into finance was unconventional. I worked as an engineer for 12 years, while two years ago, I began a career in finance, working for the Civil Service Superannuation Board, a $7 billion public pension fund in Winnipeg.

I work on alternative investments, which include infrastructure, private equity, and private credit. I go to work every day knowing that I'm there to benefit the hardworking current and future beneficiaries of the fund.

Like most asset classes, alternative purchase multiples have increased. More of these assets are funded with borrowed money. And the terms and covenants on this debt are essentially nonexistent.

With this in mind and knowing the constraints of illiquid, closed-end funds, please give me your thoughts on private, alternative investments, the relevancy in public pension funds, and your view on long-term return expectations.

WARREN BUFFETT: Yeah, if you leveraged up investments in just common stocks, and you'd figured a way so that you would have staying power, if there were any market dip, I mean, you'd obviously retain extraordinary returns.

I pointed out, in my investing lifetime, you know, if an index fund would do 11 percent, well, imagine how well you would've done if you'd leveraged that up 50 percent whatever the prevailing rates were over time.

So, a leveraged investment in a business is going to beat an unleveraged investment in a good business a good bit of the time. But as you point out, the covenants to protect debtholders have really deteriorated in the business. And of course, you've been in an upmarket for businesses. And you've got a period of low interest rates. So, it's been a very good time for it.

My personal opinion is, if you take unleveraged returns against unleveraged common stocks, I do not think what is being purchased today and marketed today would work well.

But if you can borrow money, if you can buy assets that will yield 7 or 8 percent, you can borrow enough money at 4 percent or 5 percent, and you don't have any covenants to meet, you're going to have some bankruptcies. But you're going to also have better results in many cases.

It's not something that interests us at all. We are not going to leverage up Berkshire. If we'd leveraged up Berkshire, we'd have made a whole lot more money, obviously, over the years.

But both Charlie and I, probably, have seen some more high-IQ people — really extraordinarily high-IQ people — destroyed by leverage. We saw Long-Term Capital Management, where we had people who could do in their sleep math that we couldn't do, at least I couldn't do, you know, working full time at it during the day and, I mean, really, really smart people working with their own money and with years and years of experience of what they were doing.

And you know, it all turned to pumpkins and mice in 1998. And actually, it was a source of national concern, just a few hundred people. And then we saw some of those same people, after that happened to them once, go on and do the same thing again.

So, I would not get excited about so-called alternative investments. You can get all kinds of different figures. But there may be — there's probably at least a trillion dollars committed to buying, in effect, buying businesses. And if you figure they're going to leverage them, you know, two for one on that, you may have 3 trillion of buying power trying to buy businesses in — well, the U.S. market may be something over 30 trillion now — but there's all kinds of businesses that aren't for sale and that thing.

So, the supply-demand situation for buying businesses privately and leveraging them up has changed dramatically from what it was ten or 20 years ago.

And I'm sure it doesn't happen with your Winnipeg operation, but we have seen a number of proposals from private equity funds, where the returns are really not calculated in a manner than — well, they're not calculated in a manner that I would regard as honest.

And so I — it's not something — if I were running a pension fund, I would be very careful about what was being offered to me.

If you have a choice in Wall Street between being a great analyst or being a great salesperson, salesperson is the way to make it.

If you can raise $10 billion in a fund, and you get a 1 1/2 percent fee, and you lock people up for ten years, you know, you and your children and your grandchildren will never have to do a thing, if you are the dumbest investor in the world. But —

Charlie?

CHARLIE MUNGER: Well, I think what we're doing will work more safely than what he's doing. And — but I wish him well.

WARREN BUFFETT: Yeah, Brent, you sound — actually, you sound like a guy that I would hope would be working for a public pension fund. Because frankly, most of the institutional funds, you know — well, we had this terrible — right here in Omaha — you can get a story of what happened with our Omaha Public Schools' retirement fund. And they were doing fine until the manager started going in a different direction. And the trustees here — perfectly decent people — and the manager had done OK to that point, and —

CHARLIE MUNGER: Yeah, but they are smarter in Winnipeg than they are here.

WARREN BUFFETT: Yeah. Well — (Laughter)

CHARLIE MUNGER: That was pretty bad here.

WARREN BUFFETT: It's not a fair fight, actually, usually, when a bunch of public officials are listening to people who are motivated to really just get paid for raising the money. Everything else is gravy after that.

But if you run a fund, and you get even 1 percent of a billion, you're getting $10 million a year coming in. And if you've got the money locked up for a long time, it's a very one-sided deal.

And you know, I've told the story of asking the guy one time, in the past, "How in the world can you — why in the world can you ask for 2-and-20 when you really haven't got any kind of evidence that you are going to do better with the money than you do in an index fund?" And he said, "Well, that's because I can't get 3-and-30," you know. (Laughter)

CHARLIE MUNGER: What I don't like about a lot of the pension fund investments is I think they like it because they don't have to mark it down as much as it should be in the middle of the panics. I think that's a silly reason to buy something. Because you're given leniency in marking it down.

WARREN BUFFETT: Yeah. And when you commit the money — in the case of private equity often — you — they don't take the money, but you pay a fee on the money that you've committed.

And of course, you really have to have that money to come up with at any time. And of course, it makes their return look better, if you sit there for a long time in Treasury bills, which you have to hold, because they can call you up and demand the money, and they don't count that.

They count it in terms of getting a fee on it. But they don't count it in terms of what the so-called internal rate of return is. It's not as good as it looks. And I really do think that when you have a group sitting as a state pension fund —

CHARLIE MUNGER: Warren, all they're doing is lying a little bit to make the money come in.

WARREN BUFFETT: Yeah. Yeah, well, that sums it up. (Laughter)

20. Amazon buy doesn't mean portfolio managers aren't "value" investors

WARREN BUFFETT: Becky?

BECKY QUICK: This question is from Ken Skarbeck in Indianapolis. He says, "With the full understanding that Warren had no input on the Amazon purchase, and that, relative to Berkshire, it's likely a small stake, the investment still caught me off guard.

"I'm wondering if I should begin to think differently about Berkshire looking out, say, 20 years. Might we be seeing a shift in investment philosophy away from value-investing principles that the current management has practiced for 70 years?

"Amazon is a great company. Yet, it would seem its heady shares ten years into a bull market appear to conflict with being fearful when others are greedy. Considering this and other recent investments, like StoneCo, should we be preparing for change in the price-versus-value decisions that built Berkshire?"

WARREN BUFFETT: Yeah. It's interesting that the term "value investing" came up. Because I can assure you that both managers who — and one of them bought some Amazon stock in the last quarter, which will get reported in another week or ten days — he is a value investor.

The idea that value is somehow connected to book value or low price/earnings ratios or anything — as Charlie has said, all investing is value investing. I mean, you're putting out some money now to get more later on. And you're making a calculation as to the probabilities of getting that money and when you'll get it and what interest rates will be in between.

And all the same calculation goes into it, whether you're buying some bank at 70 percent of book value, or you're buying Amazon at some very high multiple of reported earnings.

Amazon — the people making the decision on Amazon are absolutely as much value investors as I was when I was looking around for all these things selling below working capital, years ago. So, that has not changed.

The two people — one of whom made the investment in Amazon — they are looking at many hundreds of securities. And they can look at more than I can, because they're managing less money. And their universe — possible universes — is greater.

But they are looking for things that they feel they understand what will be developed by that business between now and Judgement Day, in cash.

And it's not — current sales can make some difference. Current profit margins can make some difference. Tangible assets, excess cash, excess debt, all of those things go into making a calculation as to whether they should buy A versus B versus C.

And they are absolutely following value principles. They don't necessarily agree with each other or agree with me. But they are very smart. They are totally committed to Berkshire. And they're very good human beings, on top of it.

So, I don't second guess them on anything. Charlie doesn't second guess me. In 60 years, he's never second guessed me on an investment.

And the considerations are identical when you buy Amazon versus some, say, bank stock that looks cheap, statistically, against book value or earnings or something of the sort.

In the end, it all goes back to Aesop, who, in 600 B.C., said, you know, that a bird in the hand is worth two in the bush.

And when we buy Amazon, we try and figure out whether the — the fellow that bought it — tries to figure out whether there's three or four or five in the bush and how long it'll take to get to the bush, how certain he is that he's going to get to the bush, you know, and then who else is going to come and try and take the bush away and all of that sort of thing. And we do the same thing.

And it really, despite a lot of equations you learn in business school, the basic equation is that of Aesop. And your success in investing depends on how well you were able to figure out how certain that bush is, how far away it is, and what the worst case is, instead of two birds being there, and only one being there, and the possibilities of four or five or ten or 20 being there.

And that will guide me. That will guide my successors in investment management at Berkshire. And I think they'll be right more often than they're wrong. Charlie?

CHARLIE MUNGER: Well I — Warren and I are a little older than some people, and —

WARREN BUFFETT: Damn near everybody. (Laughs)

CHARLIE MUNGER: And we're not the most flexible, probably, in the whole world. And of course, if something as extreme as this internet development happens, and you don't catch it, why, other people are going to blow by you.

And I don't mind not having caught Amazon early. The guy is kind of a miracle worker. It's very peculiar. I give myself a pass on that.

But I feel like a horse's ass for not identifying Google better. I think Warren feels the same way.

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: We screwed up.

WARREN BUFFETT: He's saying we blew it. (Laughter)

And we did have some insights into that, because we were using them at GEICO, and we were seeing the results produced. And we saw that we were paying $10 a click, or whatever it might've been, for something that had a marginal cost to them of exactly zero. And we saw it was working for us. So —

CHARLIE MUNGER: We could see in our own operations how well that Google advertising was working. And we just sat there sucking our thumbs. (Laughter)

So, we're ashamed. We're trying to atone. (Laughter)

Maybe Apple was atonement. (Laughter)

WARREN BUFFETT: When he says, "Sucking our thumbs," I'm just glad he didn't use some other example. (Laughter)

21. Buffett: Berkshire insurance businesses are worth more than you think

WARREN BUFFETT: OK, Jay?

JAY GELB: This question is on Berkshire's intrinsic value. Warren, in your most-recent annual letter, you discussed a methodology to estimate Berkshire's intrinsic value. However, a major component of Berkshire's value that many investors find challenging to estimate is that of the company's vast and unique insurance business.

Could you discuss how you value the company's insurance unit, based on information Berkshire provides, especially since GAAP book value is not disclosed, of the insurance unit?

WARREN BUFFETT: Well, our insurance business gives us a float that's other people's money, which we're temporarily holding, but which gets regenerated all the time, so as a practical matter, it has a very, very long life. And it's probably a little more likely to grow than shrink.

So, we have $124 billion that people have given us. And that's somewhat like having a bank that just consists of one guy. And people come in and deposit $124 billion and promise not to withdraw it forever.

And we've got a very good insurance business. It's taken a very long time to develop it, very long time. In fact, I think we probably have the best property-casualty operation, all things considered, in the world, that I know of, of any size. So, it's worth a lot of money.

It's probably — we think it's worth more to us, and we particularly think it's worth more while lodged inside Berkshire. We'd have a very, very high value on that. I don't want to give you an exact number, because I don't know the exact number. And any number I would have given you in the past would've turned out to be wrong, on the low side.

We have managed to earn money on money that was given to us for nothing and have (inaudible) earnings from underwriting and then have these large earnings from investing. And it's an integral part of Berkshire.

There's a certain irony to insurance that most people don't think about. But if you really are prepared, and you have a diversified property-casualty insurance business — a lot of property business in it — if you're really prepared to pay your claims under any circumstances that come along in the next hundred years, you have to have so much capital in the business that it's not a very good business.

And if you really think about a worst-case situation, the reinsurance — that's insurance you buy from other people, as an insurance company, to protect you against the extreme losses, among other things — that reinsurance probably — could likely be — not good at all.

So, even though you'd think you're laying off part of the risk, if you really take the worst-case examples, you may well not be laying off the risk. And if you keep the capital required to protect against that worst-case example, you'll have so much capital in the business that it isn't worthwhile.

Berkshire is really the ideal form for writing the business. Because we have this massive amount of assets that, in many cases, are largely uncorrelated with natural disasters. And we can — we don't need to buy reinsurance from anybody else. And we can use the money in a more efficient way than most insurance companies.

It's interesting. The three — In the last 30 years, the three largest reinsurance companies — and I'm counting Lloyd's as one company — although it isn't — it's a group of brokers assembled in — underwriters assembled at a given location. But people think of Lloyd's as a

massive reinsurance market, which it is, not technically one entity. But if you take the three largest companies — and they're all in fine shape now, they're first-class operations — but all three of them came close to extinction sometime in the last 30 years, or reasonably close.

And we didn't really have any truly extraordinary natural catastrophes. The worst we had was Katrina in, whatever it was, 2006 or thereabouts, 2005. But we didn't have any worst-case situation. And all three of those companies, which everybody looks at as totally good on the asset side, if you show a recoverable from them, two of the three actually made some deals with us to help them in some way. And they're all in fine shape now.

But it's really not a good business if you keep your — as a standalone insurer — if you keep enough capital to really be sure you can pay anything that comes along, under any kind of conditions.

And Berkshire can do that. And it can use the money in ways that it likes to use.

So, it's a very valuable asset. I don't want to give you a figure on it. But we would not sell it. We certainly wouldn't want to sell it for its float value. And that float is shown on the balance sheet as a liability. So, it's extraordinary.

And it's taken a long time to build. It'd be very, very, very hard for anybody to — I don't think they could build anything like it. It just takes so long.

And we continue to plow new ground. If you went in the next room, you would've seen something called "THREE," which is our movement toward small and medium business owners for commercial insurance. And there's an online operation.

And it will take all kind — we'll do all kinds of mid-course adjusting and that sort of thing — and we've only just started up in four states.

But we'll, you know — ten or 20 years from now, that will be a significant asset of Berkshire, just like Geico has grown from two and a fraction billion of premium to, you know, who knows, but well into the mid-30 billion, just with Tony Nicely. And when I said, in the annual report, that Tony Nicely, who's here today —

CHARLIE MUNGER: Warren, is there anybody in the world who has a big casualty insurance business that you'd trade our business for theirs?

WARREN BUFFETT: Yeah, oh, no, it's taken a long time. And it's taken some tremendous people. And Tony Nicely has created more than 50 billion — with his associates, and he's got 39,000 of them, probably more now, because he's growing this year — he's created more than $50 billion at GEICO — of value — for Berkshire. (Applause)

CHARLIE MUNGER: It's pretty much what you'd expect. It's such an easy business, taking in money now in cash and just keeping the books and giving a little of it back.

There's a lot of stupidity that gets into it. And if you're not way better than average at it, you're going to lose money in the end. It's a mediocre business for most people. And it's good at Berkshire only because we're a lot better at it. And if we ever stop being a lot better at it, it wouldn't be safe for us, either.

WARREN BUFFETT: And Ajit Jain has done a similar thing. He's done it in a variety of ways within the insurance business. But I would not want to undo — somebody would have to give me more than $50 billion to undo everything he has produced for Berkshire.

And he walked into my office on a Saturday in the mid-1980s. He'd never been in the insurance business before. And I don't think there's anybody in the insurance world that doesn't wish that he'd walked into their office instead of ours, at Berkshire. It's been extraordinary. It's truly been extraordinary.

But we have Tom Nerney. We have Tim Kenesey at MedPro. We have Tom Nerney at U.S. Lability.

We have — at GUARD Insurance — we only bought that a few years ago, and that's a terrific operation. It's based in Wilkes-Barre, Pennsylvania. Who would expect to find a great insurance operation in Wilkes-Barre?

But we've got a great insurance — really great — insurance operation right here in Omaha, about two miles from here. And it was bought by us in 1967. And you know, it changed Berkshire. We built on that base.

We've got a — we really got a great insurance business. And I won't give you a number, but it's probably a bigger number than you've got in your head for — and it's worth more within Berkshire than it would be worth as an independent operation.

Somebody can say, "Well, this little gem, if it was put out there, would sell at a higher multiple," or something of the sort. It works much better as being part of a whole, where we have had two tiny operations — two tiny insurance operations — many, many years ago. And they both went broke. The underwriting was bad. But we paid all the claims. We did not walk away. We paid every dime of claims.

And nobody worries about doing any kind of financial transaction with Berkshire. And you know that today — on Saturday — about 9 in the morning, I got a phone call. And we made a deal the next day committing Berkshire to pay out $10 billion, come hell or high water, no outs for, you know, material adverse change or anything like that. And people know we'll be there with $10 billion.

And they know, in the insurance business, when we write a policy that may come — be payable during the worst catastrophe in history, or may be payable 50 years from now, they know Berkshire will pay. And that's why we've got $124 billion of float.

22. "Don't go overboard on delayed gratification"

WARREN BUFFETT: OK, station 5.

AUDIENCE MEMBER: Hey, Warren and Charlie. I'm Neil Nerrono (PH). I'm 13 years old and from San Francisco.

I feel like I see you in our living room a lot. My dad is constantly playing these videos of you at these meetings. And he teaches me a lot of lessons about you guys. But many of them require the delayed gratification skill. (Laughter)

I want to know, is there any way that kids can develop the delayed gratification skill? (Laughter and applause)

CHARLIE MUNGER: I'll take it, if you want me to, Warren.

WARREN BUFFETT: Go to it.

CHARLIE MUNGER: I'll take that, because I'm a specialist in delayed gratification. I've had a lot of time to delay it. (Laughter)

And my answer is that they sort of come out of the womb with the delayed gratification thing, or they come out of the womb where they have to have everything right now. And I've never been able to change them at all. So, we identify it. We don't train it in.

WARREN BUFFETT: Charlie's had eight children, so he's become more and more of a believer in nature versus nurture. (Laughter)

CHARLIE MUNGER: You'll probably see some nice, old woman of about 95 out there, in threadbare clothing. And she's delaying gratification right to the end and probably has 4,000 A shares. (Laughter)

It's just these second- and third-generation types that are buying all the jewelry.

WARREN BUFFETT: It's interesting. If you think about — we'll take it to a broader point. But if you think of a 30-year government bond paying 3 percent, and you allow for, as an individual, paying some taxes on the 3 percent you'll receive, and you'll have the Federal Reserve Board saying that their objective is to have 2 percent inflation, you'll really see that delayed gratification, if you own a long government bond, is that, you know, you get to go to Disneyland and ride the same number of rides 30 years from now that you would if you did it now.

The low interest rates, for people who invest in fixed-dollar investments, really mean that you really aren't going to eat steak later on if you eat hamburgers now, which is what I used to preach to my wife and children and anybody else that would listen, many years ago. (Laughs)

So, it's — I don't necessarily think that, for all families, in all circumstances, that saving money is necessarily the best thing to do in life. I mean, you know, if you really tell your kids they can — whatever it may be — they never go to the movies, or we'll never go to Disneyland or something of the sort, because if I save this money, 30 years from now, you know, well, we'll be able to stay a week instead of two days.

I think there's a lot to be said for doing things that bring you and your family enjoyment, rather than trying to save every dime.

So, I — delayed gratification is not necessarily an unqualified course of action under all circumstances. I always believed in spending two or three cents out of every dollar I earn and saving the rest. (Laughter)

But I've always had everything I wanted. I mean, one thing you should understand, if you aren't happy having $50,000 or a hundred-thousand dollars, you're not going to be happy if you have 50 million or a hundred million.

I mean, a certain amount of money does make you feel — and those around you — feel better, just in terms of being more secure, in some cases.

But loads and loads of money — I probably know as many rich people as just about anybody. And I do not — I don't think they're happier because they get super rich. I think they are happier when they don't have to worry about money.

But you don't see a correlation between happiness and money, beyond a certain place. So, don't go overboard on delayed gratification. (Applause)

23. Munger on succession: "You're just going to have to endure us"

WARREN BUFFETT: Andrew?

ANDREW ROSS SORKIN: This question comes from a shareholder of yours for more than 20 years, who asked to remain anonymous, but wanted me to start by saying, "Warren and Charlie, I want to preface this question by saying it comes from a place of love for both of you and the beautiful painting you've drawn for us in the form of Berkshire."

WARREN BUFFETT: But. (Laughter)

ANDREW ROSS SORKIN: "Now, please update us on succession planning. And as you think about succession, would you ever consider having Greg (Abel) and Ajit (Jain) join you onstage at future

annual meetings and allow us to ask questions of them and Ted and Todd, as well, so we can get a better sense of their thinking?"

WARREN BUFFETT: That's probably a pretty good idea. And we've talked about it. (Applause)

We have Greg and Ajit here. And any questions that anybody wants to direct to them, it's very easy to move them over.

So, we thought about having four of us up here. And this format is not set in stone at all.

Because you — I can tell you that, actually, the truth is, Charlie and I are afraid of looking bad. Those guys are better than we are. (Laughs)

You could not have two better operating managers than Greg and Ajit. I mean, they are — it is just fantastic, what they accomplished.

They know the businesses better. They work harder, by far. And you are absolutely invited to ask questions to be directed over to them at this meeting. I don't think —

Yeah, this format will not be around forever. And if it's better to get them up on the stage, we'll be happy to do it.

Ted (Weschler) and Todd (Combs), they're basically not going to answer investment questions. We regard investment decisions as proprietary, basically. They belong to Berkshire. And we are not an investment advisory organization. So, that is counter to the interests of Berkshire for them to be talking about securities they own. It's counter to the interests of Berkshire for Charlie or me to be doing it.

We've done better because we don't publish every day what we're buying and selling. I mean, if somebody's working on a new product at Apple, or somebody's working on a new drug or they're assembling property or something of the sort, they do not go out and tell everybody in the world exactly what they're doing every day.

And we're trying to generate ideas in investment. And we do not believe in telling the world what we're doing every day, except to the extent that we're legally required. But it's a good idea. Charlie?

CHARLIE MUNGER: Well, one of the reasons we have trouble with these questions is because Berkshire is so very peculiar. There's only one thing like it.

We have a different kind of unbureaucratic way of making decisions. There aren't any people in headquarters. We don't have endless committees deliberating forever and making bad decisions. We just — we're radically different. And it's awkward being so different. But I don't

want to be like everybody else, because this has worked better. So, I think you're just going to have to endure us. (Laughter and applause)

WARREN BUFFETT: We do think that it's a huge corporate asset, which may only surface very occasionally and depending very much on how the world is around us. But to be the one place, I think, in the world, almost, where somebody can call on a Saturday morning and meet on Sunday morning and have a $10 billion commitment.

And nobody in the world doubts whether that commitment will be upheld. And it's not subject to any kind of welching on the part of the company that's doing it. It's got nothing involved over than Berkshire's word. And that's an asset that, every now and then, will be worth a lot of money to Berkshire. And I don't really think it will be subject to competition.

So — and Ted and Todd, in particular, are an additional pipeline, and have proven to be an additional pipeline, in terms of facilitating the exercise of that ability. I mean they — things come in through them that, for one reason or another, I might not hear about otherwise.

So, they have expanded our universe. In the markets we've had in recent years, that hasn't been important. I can see periods where they would be enormously valuable. Just take the question that was raised by the fellow from Winnipeg about weak covenants and bonds.

I mean, we could have a situation — who knows when, who knows where, or who knows whether — but we could have a situation where there could be massive defaults in the junk-bond-type market. We've had those a couple times. And we made a fair amount of money off of them.

But Ted and Todd would multiply our effectiveness in a big way, if such a period comes along, or some other types of periods come along. They are very, very, very useful to Berkshire.

The call happened to come in on Friday from Brian Moynihan, CEO of Bank of America. And he's done an incredible job. But we have a better chance of getting more calls and having them properly filtered and everything — appropriately filtered — the next time conditions get chaotic than we did last time. And that's important.

Charlie?

CHARLIE MUNGER: Well, I do think it's true that if the world goes to hell in a hand basket, that you people will be in the right company. We've got a lot of cash and we know how to behave well in a panic. And if the world doesn't go to hell, are things so bad now?

24. Munger invited to happy hour by the bitcoin people

CHARLIE MUNGER: And I also want to report that your vice chairman is getting new social distinction.

I've been invited during this gathering to go to a happy hour put on by the bitcoin people. (Laughter)

And I've tried to figure out what the bitcoin people do in their happy hour, and I finally figured it out. They celebrate the life and work of Judas Iscariot. (Laughter)

CHARLIE MUNGER: Is your invitation still good? (Laughter)

WARREN BUFFETT: Bitcoin — actually — on my honeymoon in 1952, my bride, 19, and I, 21 — stopped in Las Vegas. We just got in — my aunt Alice gave me the car and said, "Have a good time," and we went west.

So, we stopped in the Flamingo, and I looked around, and I saw all of these well-dressed — they dressed better in those days — well-dressed people who had come, in some cases, from thousands of miles away. And this was before jets, so transportation wasn't as good.

And they came to do something that every damn one of them knew was mathematically dumb. And I told Susie, I said, "We are going to make a lot of money." (Laughter)

I mean, imagine people going to stick money on some roulette number with a zero and a double-zero there and knowing the percent. They all could do it, and they — they just do it. And I have to say, bitcoin has rejuvenated that feeling in me. (Laughter)

25. Berkshire will probably increase stakes above 10% if regulations are eased

WARREN BUFFETT: OK, Gregg?

GREGG WARREN: Warren and Charlie. While I understand Berkshire's need to trim its stake in Wells Fargo and any other banks you hold, each year, in order to bring Berkshire's ownership stake below the 10 percent threshold required by the Federal Reserve for bank holdings, given the ongoing share repurchase activity that's taking place in the industry.

I was kind of surprised, though, to see you move to trim all of your holdings, where possible, on a regular basis to eliminate the regulatory requirements that come with ownership levels above 10 percent, which in my view limits the investment universe that Berkshire, or at least Warren, can meaningfully invest in longer term, given that Warren manages a large chunk of Berkshire's $200 billion equity portfolio.

Could you elaborate more on the regulatory impact for Berkshire of holding more than 10 percent of any company's stock, as well as how you feel about the Fed's recent proposal to allow investors like Berkshire to own up to 25 percent shares of a bank without triggering more restrictive rules and oversight?

Basically, if that proposal were to come to fruition, would you be willing to forego that 10 percent threshold self-imposed that you've done, and put money to work in names that you're already fairly comfortable with?

WARREN BUFFETT: Yeah, the 10 percent, there's a couple reasons —

CHARLIE MUNGER: That's the right answer. Yeah. (Laughter)

WARREN BUFFETT: We will — there's two factors beyond in the case of banks. There's the Federal Reserve requirement there. But many people probably don't even — might not know about this, but if you own over 10 percent of a security — common stock — and you sell it within six months at a profit, you give the money over to the company, the short-swing profit that you give them.

And you match your — any sale against your lowest purchase. And I think if you sell it and then buy it within six months — I'm not as positive about that, because I haven't reread the rule for a lot of years. But I think if you sell and then buy within six months, and the purchase is below the price at which you made the sale, you owe the money to the company.

There used to be lawyers that would scan that monthly SEC report that I used to get 30 or 40 years ago. They would scan it to find people that inadvertently had broken that rule, and they would get paid a fee for recovering it for the company.

So, it restricts enormous — it restricts significantly your ability to reverse a position or change your mind or something of the sort.

Secondly, I think you have to report within two or three business days every purchase you make once you're in that over 10 percent factor. So, you're advertising to the world, but the world tends to follow us some, so it really — it has a huge execution cost attached to it.

Nevertheless — and those are both significant minuses, and they're both things that people generally don't think about.

We did go over recently, for example, in Delta Airlines, that was actually an accident, but I don't mind the fact at all that we did.

And if the Federal Reserve changes its approach, we won't have to trim down below that. We don't want to become a bank holding company and we don't want to —

We went in many years ago and got permission with Wells, but then our permission expired, and we went in again a few — a couple years ago. And we spent a year or so, and there were just a million questions that Wells got asked about us and so on.

So, it's been a deterrent. It'll be less of a deterrent in the future, but it does have those two —

The short-swing thing is less onerous to us than it would be to most people who buy and sell stocks, because we don't really think in terms of doing much.

CHARLIE MUNGER: But if we didn't have all these damn rules, we would cheerfully buy more, wouldn't we?

WARREN BUFFETT: Sure, sure. Well, any time we buy we do it cheerfully, but —

Yeah. And we will — you'll probably see us at more than 10 percent in more things. And if the Fed should change its rules, there will be companies where we drift up over 10 percent simply because they're repurchasing their shares. That's been the case with Wells, and it's been the case with an airline or two in the last year or so.

So, if we like 9.5 percent of a company, we'd like 15 percent better, and you may see us behave a little differently on that in the future.

CHARLIE MUNGER: Well, one more awkward disadvantage of being extremely rich.

WARREN BUFFETT: Yeah. (Laughter)

And it really is. Yeah, and people following you. I mean, the followers problem can be a real problem.

26. Money managers need to set expectations for their investors

WARREN BUFFETT: OK, station 6.

AUDIENCE MEMBER: Hi. I'm Jeff Malloy (PH) from San Francisco. And this is my first shareholders meeting.

Mr. Buffett and Mr. Munger, I'm 27 years old and aspire to be a great money manager like you two one day.

I'm considering starting my own investment fund, but I also recognize that I am young and have a lot to learn. My question to both of you is, how did you know you were ready to manage other people's money? And what general advice would you give to someone in my shoes? Thank you.

WARREN BUFFETT: Well, that's a very interesting question, because I've faced that. And I sold securities for a while, but in May of 1956, I had a number of members of my family — I'd come back from New York, and they wanted me to help them out with stocks as I had earlier before I'd taken a job in New York. And I said, I did not want to get in the stock sales business, but I wanted to — I enjoyed investing. I was glad to figure out a way to do it, which I did through a partnership form.

But I would not have done that, if I thought there was any chance, really, that I would lose the money.

And what I was worried about was not how I would behave, but how they would behave, because I needed people who were in sync with me. So, when we sat down for dinner in May of 1956 with seven people who either were related to me, or one was a roommate in college and his mother.

And I showed them the partnership agreement, and I said, "You don't need to read this." You know, there's no way that I'm doing anything in the agreement that is any way that — you know, you don't need a lawyer to read it or anything of the sort.

But I said, "Here are the ground rules as to what I think I can do and how I want to be judged, and if you're in sync with me, I want to manage your money, because I won't worry about the fact that you will panic if the market goes down or somebody tells you to do something different. So, we have to be on the same page."

"And if we're on the same page, then I'm not worried about managing your money. And if we aren't on the same page, I don't want to manage your money, because you may be disappointed when I think that things are even better to be investing and so on."

So, I don't you want to manage other people's money until you have a vehicle and can reach the kind of people that will be in sync with you. I think you ought to have your own ground rules as to what your expectations are, when they should you roses and when they should throw bricks at you.

And you want to be on the same — and that's one reason I never — we didn't have a single institution in the partnership, because institutions meant committees, and committees meant that —

CHARLIE MUNGER: You had some aunts that trusted you.

WARREN BUFFETT: What's that?

CHARLIE MUNGER: You had some aunts who trusted you.

WARREN BUFFETT: Yeah, well, and a father-in-law who gave me everything he had in the world, you know. And I didn't mind taking everything he had in the world, as long as he would stick with me and wouldn't get panicked by headlines and that sort of thing.

And so, it's enormously important that you don't take people that have expectations of you that you can't meet. And that means you turn down a lot of people. It means you probably start very small, and you get an audited record.

And when you've got the confidence, where if your own parents came to you and they were going to give you all their money, and you were going to invest for them, I think that's the kind of confidence that you'll say, "I may not get the best record, but I'll be sure that you get a decent record over time," that's when you're ready to go on the —

CHARLIE MUNGER: Let me tell you story that I tell young lawyers who frequently come to me and say, "How can I quit practicing law and become a billionaire instead?" (Laughter)

So, I say, well, it reminds me of a story they tell about Mozart. A young man came to him, and he said, "I want to compose symphonies. I want to talk to you about that."

And Mozart said, "How old are you?" And the man said, "Twenty-two." And Mozart said, "You're too young to do symphonies." And the guy says, "But you were writing symphonies when you were ten years old." He says, "Yes, but I wasn't running around asking other people how to do it." (Laughter)

WARREN BUFFETT: Carol?

We wish you well. (Laughter)

And we, and actually, we really do, because the fact you asked that sort of a question is to some extent indicative of the fact you got the right attitude going in.

CHARLIE MUNGER: It isn't that easy to be a great investor. I don't think we'd have made it.

27. Berkshire doesn't have to disclose most foreign stock holdings, so it doesn't

CAROL LOOMIS: This question is from Franz Traumburger (PH) of Austria and his son, Leon, who are both Berkshire shareholders. And it's interesting to me that in the years we've been doing this, nobody has ever asked this question, as far as I know.

Their question is, "Mr. Buffett, I believe it is correct that in its SEC filings — that is the Securities and Exchange Commission — Berkshire does not have to give information about foreign stocks it holds.

"Assuming we hold foreign stocks, could you please tell us what our five largest positions are?"

WARREN BUFFETT: No, the fellow wants investment information. We really aren't in the investment information business. We disclose what we have to disclose, but we could set up an investment advisory firm and probably take in a lot of money, but we haven't done it. And we aren't giving away what belongs to our shareholders for nothing.

But he's correct that — I'm 99 percent sure he's correct, and Marc Hamburg can correct me from our office — but we do not have to report foreign stocks.

And we do have — in certain important countries, there's lower thresholds at which we have to report our holdings, as a percentage of the company stock outstanding — there's lower thresholds than there are in the United States.

So, in a sense — in certain stocks. I think when we bought Munich Re stock or bought Tesco stock, or there are certain stocks we've had to report at — before we would have had to report in the United States.

But we will never unnecessarily advise if we plan to buy some land some place, if we plan to develop a business — we are not about giving business information that's proprietary to Berkshire. We don't give it unless we're required by law.

And he is correct that, I'm virtually certain that we do not have to report our foreign stocks on the SEC filings. And he'll have to find his own holdings in Austria.

But I think this Mozart story may have encouraged that particular question from Austria, what stocks we're going to own in Austria. OK, Charlie, do you have any comments on that?

CHARLIE MUNGER: No.

WARREN BUFFETT: No, I didn't think you would. (Laughs)

28. Buffett expects Precision Castparts earnings will "improve fairly significantly"

WARREN BUFFETT: Jonny?

JONATHAN BRANDT: Precision Castparts' pre-tax profit margins, while perfectly fine relative to American industry as a whole, continue to be almost 10 percentage points below where they were in the years preceding the acquisition. And I'm guessing they're lower than contemplated when the purchase price was determined.

The annual report hints that unplanned shutdowns, the learning curve on new plane models, and a shift of oil and gas capacity to aerospace, might all be temporarily depressing margins. But it's unclear what a reasonable, long-term margin expectation is for this unit.

Now, I know you won't want to issue a specific margin target or forecast, but I do have a question that I hope you can answer.

Is the downward trend in earning since 2015 mostly due to these transitory items, or have the competitive structure of the industry and Precision's relationship with its customers changed to the point that meaningful increases from current margin levels are probably unlikely?

WARREN BUFFETT: Yeah. Your prelude is quite correct. I mean, they are below what we projected a few years ago. And my expectation — but I would have told you this a year ago — and they have improved somewhat.

My expectation is, based on the contracts we have and the fact that the initial years in anything in the aircraft industry, for example, tend to be less profitable as you go further down the learning curve and the volume curve, tend to be lower in the near-term. My expectation is that the earnings of Precision will improve fairly significantly.

And I think I mentioned maybe to you last year, in those earnings, there is about $400 million a year of purchase amortization, which are economic earnings in my viewpoint.

So — but even including that 400 million a year, which they would be reporting if they were independent, and we don't report, because we bought them and there's a purchase amortization charge. Even without that, they are below what I would anticipate by a fair margin within a year or two. That's the present expectation on my part. Charlie?

CHARLIE MUNGER: No, I don't have anything.

WARREN BUFFETT: You'll have that question for me next year, and I think I'll be giving you a different answer.

29. The older you get, the better you understand human behavior

WARREN BUFFETT: OK, station 7.

AUDIENCE MEMBER: Good morning Mr. Buffett, Mr. Munger. My name is JC. (PH) I am 11 years old, and I came from China. This is my second year at the meeting.

Mr. Munger, it's great to see you again after the Daily Journal meeting in February.

Mr. Buffett, you mentioned that the older you get, the more you understood about human nature. Could you elaborate more about what you've learned, and how can the differences of human nature help you make a better investment? I would also like Mr. Munger to comment on that, please. Thank you very much. (Applause)

WARREN BUFFETT: You should wait for Charlie's answer, because he's even older. (Laughter)

He can tell you more about being old than I can even.

It's absolutely true that virtually any yardstick you use, I'm going downhill. And, you know, if I would take an SAT test now, and you could compare it to a score of what I was in my early 20s, I think it'd be quite embarrassing. (Laughs)

And Charlie and I can give you a lot of examples, and there's others we won't tell you about how things decline as you get older.

But I would say this. It's absolutely true in my view that you can and should understand human behavior better as you do get older. You just have more experience with it. And I don't think you can read — Charlie and I read every book we could on every subject we were interested in, you know, when we were very young. And we learned an enormous amount just from studying the lives of other people.

And — but I don't think you can get to be an expert on human behavior at all by reading books, no matter what your I.Q. is, no matter who the teacher is. And I think that you really do learn a lot about human behavior. Sometimes you have to learn it by having multiple experiences.

I actually think I, despite all the other shortcomings — and I can't do mental arithmetic as fast as I used to, and I can't read as fast as I used to.

But I do think that I know a lot more about human behavior than I did when I was 25 or 30 —

CHARLIE MUNGER: I'll give you — do you want one mantra? It comes from a Chinese gentleman who just died, Lee Kuan Yew, who was the greatest nation builder probably that ever lived in the history of the world.

And he said one thing over and over and over again all his life. "Figure out what works, and do it." If you just go at life with that simple philosophy from your own national group, you will find it works wonderfully well. Figure out what works, and do it.

WARREN BUFFETT: And figuring out what works means figuring out how other people —

CHARLIE MUNGER: Of course.

WARREN BUFFETT: — behave.

CHARLIE MUNGER: Of course.

WARREN BUFFETT: And Charlie and I have seen the extremes in human behavior, in so many unexpected ways.

CHARLIE MUNGER: Now we get it every night, extremes in human behavior. All you got to do is turn on the television.

WARREN BUFFETT: Yeah. I'm glad he used that example. (Laughter)

30. Ajit Jain on pricing unconventional insurance contracts

WARREN BUFFETT: OK, Becky?

BECKY QUICK: Warren, you mentioned, in response to an earlier question, that Ajit (Jain) and Greg (Abel) are both here to answer questions, and so I thought I'd ask this question that comes from Will in Seattle. He says, his question is for Mr. Ajit Jain and Mr. Warren Buffett.

"You have said that you communicate regularly about unconventional insurance contracts that expose the company to extremely unlikely but highly costly events. I'm curious about how you think about and safely price these unconventional insurance contracts. What analyses and mental checks do you run through your head, to make sure that Berkshire Hathaway will profit without being unduly exposed to catastrophic risk?

"Furthermore, Mr. Buffett, would you want a future CEO to continue a similarly close collaboration with the chief underwriter?"

WARREN BUFFETT: We will get a microphone to Ajit and a spotlight in just a second. And there he is.

Ajit, why don't you answer first, if you'd like to?

AJIT JAIN: Hi. Obviously, the starting point, I mean, these situations where there's not enough data to hang your hat on, it's more of an art than a science.

We start off with as much science as we can use, looking at historical data that relates to the risk in particular, or something that comes close to relating to the risk that we're looking at.

And then beyond that, if there's not enough historical data we can look at, then clearly, we have to make a judgment in terms of, what are the odds of something like that happening?

We try — we absolutely, in situations like that, we absolutely make sure we cap our exposure. So, that if something bad happens or we've got something wrong, we absolutely know that how much money we can lose and whether we can absorb that loss without much pain to the income statement or the balance sheet.

In terms of art, it's a difficult situation. More often than not, it's impossible to have a point of view, and we end up passing on it.

But every now and then, we think we can get a price where the subjective odds we have of something like that happening has a significant margin of safety in it. So, we feel it's a risk that's worth taking.

Then finally, the absolute acid test is, I pick up the phone and call Warren. "Warren, here's a deal. What do you think?" (Laughter) OK. Your turn, Warren.

WARREN BUFFETT: OK. (Applause)

CHARLIE MUNGER: It's not easy, and you wouldn't want just anybody doing it for you.

WARREN BUFFETT: No, no. In fact, the only one I would want doing it for us on the kind of things we have sometimes received is Ajit. I mean, it's that simple. There isn't anybody like him.

And as Ajit said, we'll look at a worst case, but we are willing, if we like the odds, and like you say, there's no way to look these up.

We can tell you how many 6.0 or greater earthquakes have happened in the last hundred years in Alaska or California or so on. And there's a lot of things you can look up figures on. Sometimes those are useful, and sometimes they aren't. But there's a lot where you can get a lot of data.

And then there's others that — well, after 9/11, you know, was that going to be the first of several other attacks that were going to happen very quickly? There were planes flying that couldn't — well they couldn't land in Hong Kong, as I remember. I think it was Cathay Pacific couldn't land in Hong Kong the following Monday unless they had a big liability coverage placed with somebody.

I mean, the world had to go on. The people that held mortgages on the Sears Tower all of a sudden wanted coverage. —I think that actually was one — but they were just pouring in, of people that hadn't been worried about something a week earlier, and now they were worried about things involving huge sums.

And there were really only a couple people in the world that would even listen and had the capacity to take on a lot of the deals we were proposed. And there's no book to look up. So, you do — there's a big element of judgment.

Ajit and I — I mean, Ajit's a hundred times better at this than I am, but we do tend to think alike on this sort of thing. You don't want to think too much alike, but we think alike. I've got a willingness to lose a lot of money.

And most, well, virtually every insurance company if they get up to higher limits, they've got treaties in place, and they can only take this much. So, the world was paralyzed on that.

We don't get those, but now obviously. But we do occasionally get inquiries about doing things that really nobody else in the world can do. It's a little like our investment situation, only transferred over to insurance. We don't build a business around it, but we are ready when the time comes.

And Ajit is an asset that no other company in the world has. And we work him. And we actually enjoy a lot talking to each other about these kind of risks, because he'll ask me to think about

what the price should be. And he'll think about — we don't tell each other ahead of time. And then I'll name it, and then he'll say, "Have you lost your mind, Warren?" (Laughs)

And then he'll point something out to me that I've overlooked. And it's a lot of fun, and it's made us a lot of money.

And the shareholders of Berkshire Hathaway are extraordinarily lucky. You can't hire people like Ajit. I mean, you get them once in a lifetime. Charlie?

CHARLIE MUNGER: I don't think we helped him very much. It's really difficult.

WARREN BUFFETT: There will be a time when — I mean, I probably won't be around then — but there will be a time occasionally, just like in financial markets, when things are happening in the insurance world, and basically, Berkshire will be the only one — virtually the only one — people turn to.

CHARLIE MUNGER: But in the past, Ajit, talking to you, has added more than $50 billion to the balance sheet at Berkshire, by making these oddball calls.

WARREN BUFFETT: And if he hadn't talked to me, it'd be probably 49.9 billion, you know? (Laughs)

But you don't want to try — don't try this at home.

CHARLIE MUNGER: Yeah, that doesn't mean it's easy.

WARREN BUFFETT: No. And it's not very teachable.

CHARLIE MUNGER: No, it isn't very teachable, you're right.

WARREN BUFFETT: No, it is not something that Berkshire has some secret formula someplace for it. It basically is a very unusual talent with Ajit, and —

CHARLIE MUNGER: We're not holding anything back. It's hard.

31. Despite Kraft Heinz problems, Berkshire could partner with 3G again

WARREN BUFFETT: OK, Jay? (Applause)

JAY GELB: This question is on Berkshire's relationship with 3G Capital. Kraft Heinz's recent challenges have raised questions about whether Berkshire's partnership with 3G has become a weakness for Berkshire.

Warren, what are your thoughts on this? And would Berkshire be open to partnering again with 3G in a major acquisition?

WARREN BUFFETT: Yeah, they are our partners, and we joined them. We had a one-page agreement, which I haven't even actually ever reread. I mean, Jorge Paulo, I mean, is a good friend of mine. I think he's a marvelous human being. And I'm pleased that we are partners. It's conceivable that something would come up.

They have more of a taste for leverage than we do, and they probably have more of a taste for paying up, but they also are, in certain types of situations, they'd be way better operators than we would.

I mean, they go into situations that need improvement, and they have improved them. But I think both they and we, I know we did underestimate, not what the consumer is doing so much, but what the retailer is.

And at See's Candy, we sell directly to the consumer, but at Kraft Heinz, they're intermediaries. And those intermediaries are trying to make money. We're trying to make money.

And the brand is our protection against the intermediaries making all the money.

Costco tried to drop Coca-Cola back in, I think 2008, and you can't drop Coca-Cola, you know, and not disappoint a lot of customers.

Snickers bars are the number one candy that Mars makes. And they've been number one for 30 or 40 years. And if you walk into a drugstore, and the guy says, "The Snickers are 75 cents or whatever it might be, and I've got this special little bar my wife and I make in the back of the store, and it's only 50 cents, and it's just as good," you don't buy it, you know. When you're at some other place the next time, you buy the Snickers bar.

So, brands can be enormously valuable, but many of the brands are dependent, most of them — Geico is not, Geico goes directly to the consumer. If we save the consumer money on insurance, they're going to buy it from us.

And our brand, you know — and we'll spend well over a billion and a half on advertising this year, and you think, my God, we started this in 1936, and we were saying the same thing then about saving 15 percent in 15 minutes or something of the sort — not exactly the same — but that brand is huge, and we have to come through on the promise we give, which is to save people significant money on insurance — a great many people. That brand is huge, and we're dealing directly with the consumer.

And when you're selling Kool-Aid or ketchup or, you know, Heinz 57 sauce or something, you are going through a channel, and they would — the phrase was used earlier today. You know,

our gross margin is their opportunity, and we think that the ultimate consumer is going to force them to have our product, and that we will get the gross margin.

And that fight, that tension, has increased in the last five years and I think is likely to increase the next five or ten years. And Charlie is a director of a company that has caused me to think a lot about that subject. Charlie?

CHARLIE MUNGER: Well. What I think is interesting about the 3G situation, it was a long series of transactions that worked very well, and finally there was one transaction at the end that didn't work so well.

That is a very normal outcome of success in a big place with a lot of young men who want to get rich quick. And it just happens again and again. And you do want to be careful.

It's so much easier to take the good ideas and push them to wretched excess.

WARREN BUFFETT: Yeah, that is — no idea is good at any price, and the price settlement is probably something that we worry more about generally than our partners, but we are their partners in Kraft Heinz. And it's not at all inconceivable that we could be partners in some other transaction in the future.

32. Buffett's not worried about strength of Kraft Heinz's brands

WARREN BUFFETT: OK. Station 8.

AUDIENCE MEMBER: Hello Warren and Charlie. Consumer tastes are changing. I think if we asked how many people here in the arena have eaten Velveeta cheese in the last year or so, there'd be only a small handful, maybe more for Jell-O.

3G's playbook of cutting R&D looks to have stifled new product development amidst changing preferences.

So, here's my question. Why continue to hold when the moat appears to be dry? Or do you think it is filling back up?

CHARLIE MUNGER: Well, I don't think the problem was that they cut research or something. I think the problem was, they paid a little too much for the last acquisition.

WARREN BUFFETT: That Jell-O — I can't give you the exact figures. There are certain brands that may be declining 2 percent a year or 3 percent a year in unit sales, and there's others that are growing 1 or 2 percent. There's not dramatic changes taking place at all. I mean, Kraft Heinz is earning more money than Kraft and Heinz were earning six or seven years ago.

I mean, and the products are being used in a huge way. Now it's true that certain — that there are always trends going to some degree, but they have not fallen apart, remotely. And they have widened the margin somewhat.

But it is tougher, in terms of the margin and the price negotiations, probably to go through to the actual consumer. It's become a somewhat tougher passageway for all food companies, than it was ten years ago. It's still a terrific business.

I mean, you know, you mentioned Jell-O or Velveeta. Charlie worked at my grandfather's grocery store in 1940, I worked there in '41. And they were buying those products then, and they buy the products now. The margins are still very good. They earn terrific returns on invested capital. But we paid too much in the case of Kraft.

You can pay too much for a growing brand. I mean, you can pay way too much for a growing brand, probably be easier to be sucked into that. So, I basically don't worry about the brands.

A certain number are very strong, and a certain number are declining a bit. But that was the case 10 years ago. It'll be the case 10 years from now. There's nothing dramatic happening in that.

33. Buffett's biggest problem with Apple is the stock keeps going up

WARREN BUFFETT: OK, we'll take one more, and then we'll break for lunch. Andrew.

ANDREW ROSS SORKIN: Thank you, Warren. Question on technology and the company's biggest holding now.

"Given that Apple is now our largest holding, tell us more about your thinking. What do you think about the regulatory challenges the company faces, for example? Spotify has filed a complaint against Apple in Europe on antitrust grounds. Elizabeth Warren has proposed ending Apple's control over the App Store, which would impact the company's strategy to increase its services businesses. Are these criticisms fair?"

WARREN BUFFETT: Well, again, I will tell you that all of the points you've made I'm aware of, and I like our Apple holdings very much. I mean, it is our largest holdings.

And actually, what hurts, in the case of Apple, is that the stock has gone up. You know, we'd much rather have the stock — and I'm not proposing anything be done about it — but we'd much rather have the stock at a lower price so we could buy more stock.

And importantly, if Apple — I mean, they authorized another 75 billion the other day — but let's say they're going to spend a hundred billion dollars in buying in their stock in the next three years. You know, it's very simple. If they buy it at 200, they're going to get 500 million

shares. They've got 4 billion, 600 million out now. And so they'll end up with 4.1 billion under that circumstance.

If they're buying at 150, they buy in 667 million shares. And instead of owning what we would own in the first case, we'd now — the divisor would be less than 4 billion, and we'd own a greater percentage of it.

So, in effect, a major portion of earnings — at least possibly, it's at least been authorized — will be spent in terms of increasing our ownership without us paying out a dime, which I love for a wonderful business.

And the recent development, when the stock has moved up substantially, actually hurts Berkshire over time. We'll still do — In my opinion, we'll do fine, but we're not going to dissect our expectations about Apple, you know, for people who may be buying it against us tomorrow or something of the sort. We don't give away investment advice on that for nothing.

But we have — all the things you've mentioned, obviously we know about, and we've got a whole bunch of other variables that we crank into it. And we like the fact that it's our largest holding. Charlie?

CHARLIE MUNGER: Well, in my family, the people who have Apple phones, it's the last thing they'll give up. (Laughter)

Afternoon Session - 2019 Meeting

1. Union Pacific has higher profit margins than BNSF

WARREN BUFFETT: OK. If you'll take your seats, we'll proceed in a minute.

And it looks like we're ready for Gregg.

GREGG WARREN: Good morning, Charlie. I have a follow up on the railroad business.

By nearly all measures, BNSF had a solid year in 2018, full-year revenue growth of 11 1/2 percent was better than the 7 1/2 percent topline growth at Union Pacific — which is BNSF's largest direct competitor — came up with, with Burlington Northern seeing both larger increases in average revenue per car unit and total volumes than its closest peer.

Even so, Burlington Northern once again fell short of Union Pacific when it came to profitability, with its operating ratio declining 130 basis points to 66.9 percent, while Union Pacific's ratio fell only 120 basis points to 62.7, further cementing the spread that exists between the two companies' margins, at more than 400 basis points.

Can you explain what is driving the difference in profitability between Burlington Northern and Union Pacific, as theoretically we should not see that wide of a spread between two similar-sized companies that are basically competing for the same business, with the same customers in the western half of the United States?

And while you noted that Burlington Northern is in a wait and see mode with regards to precision-schedule railroading, we've kind of heard the same line historically with regards to GEICO's approach to telematics.

And what worries me here is that the potential now exists for a much wider gap to emerge between profitability levels at Burlington Northern and Union Pacific, which has recently adopted a version of PSR some of which Union Pacific could eventually use to get more price competitive.

CHARLIE MUNGER: Well, Warren knows the answer to that a lot better than I do. My guess is that they work a little harder than we do at billing the rates. But Warren, you answer that one.

WARREN BUFFETT: Yeah. Well, it's true that we receive the lowest ton mile revenue of any of the six big railroads in North America, and there's some explanation for that — obviously, a significant explanation — in the particular types of hauls we have and that sort of thing. We have longer hauls, generally.

But the answer — Union Pacific's profit margin, they talk about operating ratios, but that goes back to the Interstate Commerce Commission. It's really profit margin, pre-tax, pre-interest profit margin. And Union Pacific, at one time, probably 15 or maybe a little more years ago,

they really went off the tracks, so to speak. But they've done a very good job of getting — well, they got a lot of underpriced coal contracts that worked out, as did we.

But they've also — they've done a very good job on expenses. And there's no fundamental reason why the BNSF franchise — I always like the western railroads better than the eastern — not by a dramatic margin — but I think the west will do better in terms of ton miles over time than the eastern roads.

And we've got some great routes, some of which were underwater in March for a while. (Laughs)

We pay a lot of attention to what's going on at the Union Pacific, as we should.

And the future, it's not like we're losing business to anybody. But they have been operating more efficiently, in effect, than we have during the last few years. And like I said, we take notice of it.

They've cut a lot of people, right here in Omaha. And we'll see what that does in terms of passengers — or in terms of shipper satisfaction.

But we are measuring ourselves very carefully against what they do. And if changes are needed, we'll do that.

We've got a wonderful asset in that business. And when I bought it, I said it's for a hundred years. It's for a lot more than a hundred years. It is a very, very fundamental business. And we've got a wonderful franchise, and we should have margins comparable to other railroads. Charlie?

CHARLIE MUNGER: I don't know much about it.

WARREN BUFFETT: You don't? (Laughter)

2. Buffett: I'm lucky that I can "control my own time"

WARREN BUFFETT: Station 9.

AUDIENCE MEMBER: Hi, Warren and Charlie. My name is Rob Lee (PH) from Vancouver, Canada. Could you please share with us what you value the most in life now? Thank you.

WARREN BUFFETT: Well —

CHARLIE MUNGER: I'd like to have a little more of it. (Laughter and applause)

WARREN BUFFETT: It's the two things you can't buy, time and love. And that, I value those for a long time. And I've been very, very, very lucky in life, in being able to control my own time to an extreme degree. Charlie's always valued that, too.

That's why we really wanted to have money, was so we could do what we damn pleased, basically — (laughs) — in our life. It wasn't six houses or boats or anything. Well, Charlie's got a boat. But it doesn't do us that much good.

But time is valuable. And we are very, very lucky to be in jobs where physical ability doesn't make any difference.

And, you know, we've got the perfect job for a couple of guys with aging bodies. And we get to do what we love to do every day.

I mean, I literally could do anything that money could buy, pretty much. And I'm having more fun doing what I do than doing anything else, and Charlie is designing dormitories. And I mean, he's got an interesting life, and he brings a lot to it.

He still reads, you know, more books in a week than I get done in a month, and he remembers what he reads. So, we've got it very good, but we don't have unlimited time. And whatever we do to free up the time to do what we like to do — and we both maximize that in our lives — we do.

CHARLIE MUNGER: Anybody's lucky if he so that what he spends his time at, he really likes doing. That's a blessing.

WARREN BUFFETT: Yeah, we've had so much good luck in life. It sort of blows your mind. Starting with being born in the United States. And Canada would be fine too, incidentally. I don't want to offend anybody. (Laughter)

3. "We're not in the business of explaining why we own a stock"

WARREN BUFFETT: OK, Carol?

CAROL LOOMIS: This question is from Brian Neal (PH), who writes from the Mayo Clinic Education Site.

"Berkshire owns approximately 200 billion in publicly traded stocks. I appreciate the disclosure of Berkshire's holdings, but I am disappointed by the lack of specific performance information.

"Since investing in publicly owned stocks is so much a part of Berkshire's business, why do you not tell us every year how our portfolio performed?"

WARREN BUFFETT: Well, obviously it could be calculated fairly easily, and it's about 40 percent of Berkshire's value. But 60 percent is the businesses. And if you look at the top ten stocks I would guess, you know, you're down to where beyond those ten stocks you're talking about less than — probably less than 10 percent of Berkshire's value.

So, I — again — we're not in the business of explaining why we own a stock. We're not looking for people to compete to buy it. We have a portfolio of companies where I would say that, of that 200 billion or so, at least 150 billion of them are buying in their stock and increasing our interest every year.

And why in the world should we want to tell a whole bunch of people to go out and buy those stocks so that we end up paying — or the company on our behalf — ends up paying more money for them?

I mean, people get very happy when their stocks go up. But if we're going to own whatever, whether it's Bank of America, whether it's Apple, whether it's any of the big holdings, we will do considerably better in the next ten years if their stocks do terribly during certain periods and that they buy lots of stock in.

It's just exactly like buying it ourselves, except we're using their — they're using our money. But it's so elementary.

And why in the world would we want to go out and tell the world that these stocks should go up so that maybe they can sell or something when it costs us money? And we're not going to be able to move in and out of the stocks to our advantage.

So, our holdings are filed quarterly — our domestic holdings, as it was pointed out earlier — filed quarterly.

But we would rather not tell the world what we own, any more than we'd like to tell them what our strategy is at NetJets or what we're going to do with Lubrizol and what we're working on in the way of better advances in additives or whatever it may be, or where we plan to build a new store for the Furniture Mart or something.

That's proprietary information. And we have to disclose a certain amount, but we're certainly not going to be touting the stocks to other people.

In terms of calculating our performance, you can take the top ten or 12 stocks, and anybody could make the calculation. I mean, at the end of the year the Wall Street Journal runs — all the papers run something — where it says a year-to-date performance or something of the sort. So that's a simple calculation. Charlie?

CHARLIE MUNGER: I've got nothing to add to that.

4. FlightSafety probably won't get more demand for its simulators after Boeing MAX 737 crashes

WARREN BUFFETT: OK. Jonathan.

JONATHAN BRANDT: No one's ever asked a question about FlightSafety, but perhaps this year it's somewhat topical given the 737 MAX controversy. The New York Times spoke to engineers who said that Boeing explicitly designed the MAX in a manner that allowed airline customers to avoid paying for simulators to train their pilots.

Do you expect the worldwide regulatory and commercial response to the MAX's problems to result in increased demand for FlightSafety simulators? And could you please more generally discuss FlightSafety's competitive position and growth prospects?

WARREN BUFFETT: Yeah, well, FlightSafety is — their specialty would be with corporate pilots. They train our NetJets pilots, for example. They have a major facility with simulators for that.

I don't think what's happened with the 737 MAX will have any particular effect. I mean, we have — I don't know how many of the Fortune 100 companies that we do business with, but it's a very significant percentage.

And they train their pilots with FlightSafety because we've got the talent and the simulators like nobody else has for that business. And Charlie, didn't you have that friend of yours that was trying to get Al Ueltschi to pass him when he shouldn't?

CHARLIE MUNGER: What?

WARREN BUFFETT: You remember that story of your friend that wanted to have FlightSafety —

CHARLIE MUNGER: Oh yes.

WARREN BUFFETT: Yeah, why don't you tell them? I mean, Al Ueltschi, who started FlightSafety with a few thousand dollars and a little visual simulator, or whatever it may have been at, LaGuardia, I mean, he really cared about saving lives. And he made a lot of money in the process, but he was dedicated throughout his lifetime to truly train better pilots and reduce the chance of accidents dramatically.

It was a mission with him. And that spirit still continues.

And as I say we've got a — I can't tell you the percentages, I don't know, but I know it's very high — of certainly the corporate business. We have government business, we have some airline businesses and all of that.

But I don't expect any great change in the flight training business. But tell them about your friend, Charlie.

CHARLIE MUNGER: Well, of course, people pass those tests with flying colors, and then some of them just barely pass. And one of my friends just barely passed and they called me and told me. It's (inaudible) of the business.

WARREN BUFFETT: FlightSafety would not —

CHARLIE MUNGER: They care about everything.

WARREN BUFFETT: They care.

CHARLIE MUNGER: They watch the details.

WARREN BUFFETT: They care. And those simulators can cost over $10 million, I mean, just — and they're dedicated, obviously, to a given model of plane.

You might find it interesting, at NetJets our pilots only fly one model. I mean — most charters and all those, I'm sure they — and incidentally, I think they could fly other models and all that, but we just want them to be flying one model. And we give them the maximum amount of training annually.

And it's — when I bought the company for Berkshire in, I think it was 1998 or thereabouts, you know, the thought obviously bothered me that I would have a significant percentage of people who would be friends of mine that were using it, and you know, you'd hate to have anything happen.

I use it, my family uses it, our managers use it. And there's nobody that cares more about safety. But I don't see — other than at NetJets — it's a first-class operation.

CHARLIE MUNGER: They've never killed a passenger. They had one pilot who hit a glider at 16,000 feet, and it was kind of a difficult landing.

WARREN BUFFETT: It was more than difficult landing —

CHARLIE MUNGER: They've never killed a — it was a woman pilot, yeah.

WARREN BUFFETT: And she was flying the next day. The copilot was kind of taken out of operation for a while. But this woman ended up almost with the control panel in her lap because this guy turned off his battery and hit one of our Hawkers. And she had one shot at the runway and she brought it in.

And we've had some remarkable training and pilots there. You should ask for her if you're flying on NetJets. (Laugher)

5. Buffett on tech investing: "We won't go into something because somebody else tells us it's a good thing to do"

WARREN BUFFETT: Station 10.

AUDIENCE MEMBER: Mr. Buffett and Mr. Munger, hi. My name is Daphne. I'm from New York and I'm nine years old. And I'm excited to be at the Berkshire meeting, and this is my third year.

WARREN BUFFETT: Wow. (Applause)

You should be rich by now. (Laughter)

AUIENCE MEMBER: You have often said that investors are well-served by identifying businesses with a wide moat, where the castle behind the moat is run by a king or queen who can be trusted to make good decisions.

In the past, you have applied this advice by investing in businesses with world class strong brands, such as Coke, American Express, and See's, as well as media companies that has helped these brands protect and widen their moats, such as Cap Cities, ABC, and the Washington Post.

In the past, you have also generally avoided investing in technology companies, pointing out how quickly technology changes and how hard it is to build a circle of competence in it.

Today, we seem to be in a world where some of the most dominant companies in the world are technology companies. And we have built powerful platforms, such as Amazon, Google, Facebook, and Microsoft in America, and Alibaba and Tencent in China.

These companies all have wide moats, strong brands, and are led by brilliant — entrepreneurs.

WARREN BUFFETT: That's good. (Laughter)

AUDIENCE MEMBER: My question to you is this: if Berkshire is to honor its tradition of investing in wide moats and strong brands, and especially in companies that are also capital efficient, do you think that Berkshire needs to expand its investing lens to include more of these leading technology platforms?

In other words, do you believe that you need to adapt your model of wide moats and strong brands to embrace, not avoid, technology? (Applause)

CHARLIE MUNGER: I think the answer is maybe. (Laughter)

WARREN BUFFETT: I think the answer is to put her on the board and it'll bring down the average age enormously. We won't get criticized as much.

You're exactly right, in that we do like moats, and we used to be able to identify them in a newspaper that was the only newspaper in town, or in TV stations where we felt the dominant position, we felt the product was underpriced in terms of advertising. We saw it in brands, sometimes.

And it is true that in the tech world, if you can build a moat, it can be incredibly valuable. I've not felt the confidence that I was the best one to judge that in many cases.

It wasn't hard to figure out who was winning at any given time or what their business was about, but there were a huge number of people that knew more about the game than I did. And we don't want to try and win at a game we don't understand. We may hire people, such as Ted (Weschler) and Todd (Combs), that are better at understanding certain areas of investing than I am, or maybe even Charlie is.

But the principles haven't changed. You're right that some of the old ones have lost their moat and you're right that there are going to be companies in the future that have them that will be enormously valuable.

And we hope we can identify one every now and then. But we won't — we'll still stay within where we think we know what we're doing. And obviously, we'll make mistakes even within that area.

But we won't go into something because somebody else tells us it's a good thing to do. I mean, we are not going to subcontract your money to somebody else's judgment. You can take your money and follow somebody else's judgment, but we're not in the business of thinking that if we hire ten people with specialties in this area or that, that it will lead to superior investment results. And we do worry that we could blow a lot of money that way.

So, we'll do our best to enlarge the circle of competence of the people at Berkshire so that we don't miss so many. But we'll miss a lot in the future. We missed a lot in the past.

The main thing to do is to find things where our batting average is going to be high. And if we miss the biggest ones, that really doesn't bother us, as long as the things we do with money work out OK. Charlie?

CHARLIE MUNGER: Well, I think we've still got an awful lot of companies with big moats, and a lot of them are very — and some are industrial brands that are just incredibly strong in the niches we're in.

So, Berkshire shareholders don't need to worry about we're just one big morass of unprofitability or anything like that. But we have not covered ourselves with glory in the new fields.

WARREN BUFFETT: Yeah. We won't end up all in buggy whips, though, or anything. But it's a very good question, and it's what we focus on all the time. And I hope —

CHARLIE MUNGER: We're trying to improve.

WARREN BUFFETT: And we hope we see you back here for your fourth next year.

6. "In the end, Berkshire should prove itself over time"

WARREN BUFFETT: Becky? (Applause)

BECKY QUICK: This question comes from Stuart Boyd (PH), who's a chemical engineer from Australia.

He says, "Currently Berkshire would be incredibly difficult for an activist investor to target, because number one, Warren, your ownership stake is large. Number two, shareholders appreciate the business is more valuable operating under the Berkshire umbrella rather than being sold off in pieces.

"And number three, the sheer size or market capitalization of Berkshire is an entry barrier for most activist investors.

"Warren and Charlie, after your ownership has been completely distributed, will Berkshire be more vulnerable to activist investors? I'm guessing this isn't something that keeps you up at night, but thought it was worth asking."

CHARLIE MUNGER: No, it's going to happen quite a few decades after my death.

WARREN BUFFETT: Yeah. It —

CHARLIE MUNGER: I don't think I'll be bothered much by it. (Laughter)

WARREN BUFFETT: No, anything could happen. It's a low probability. It can't happen for a lot of years, in terms of the way my stock gets distributed and in terms of the way other stock is held.

But in the end, Berkshire should prove itself over time. I mean, there are no perpetuities. And it deserves to be continued in its present form. It has a lot of attributes that are maximized by being in one entity, which people don't fully understand.

I think if you spin off something that would command a high PE that therefore value has been unlocked, which is totally nonsense. I mean, it's already built in.

One day out, you know, you might have an extra 3 percent or 5 percent in price, but over the years, we want to keep the wonderful businesses.

But eventually I think the culture will remain one of a kind. I think that we will be able to do things other people can't do.

I think that the advantages of having them in one spot will likely be significant over time. And if that happens, then no activist is going to take it over.

And if the model doesn't work for some reason over a long period of time, then something else should happen. Charlie?

CHARLIE MUNGER: Nothing more.

WARREN BUFFETT: OK.

7. GEICO trying to improve its loss ratio as it competes with Progressive

WARREN BUFFETT: Jay.

JAY GELB: This question is on GEICO. Progressive is gaining the most market share among the major auto insurers, based on its presence in the direct and independent agency channels, as well as now bundling its auto and homeowners insurance coverage.

How does GEICO plan on responding to competitive threats so that it can retain its place as the second-largest auto insurer? I was hoping we could also hear on this topic from Ajit (Jain) or GEICO's management. Thank you.

WARREN BUFFETT: OK. Progressive is a very well-run business. GEICO is a very well-run business. And I think they will, for a long time, be the two companies that the rest of the auto insurance industry has trouble not losing share to. But there's, you know, I think — I've always thought for a long, long time, Progressive has been very well run.

They have an appetite for growth. Sometimes they copy us a little, sometimes we copy them a little. And I think that'll be true five years from now and 10 years from now.

And we sell substantial amounts of homeowners insurance. We have an agency arrangement with that. We were in the business of writing it ourselves, until Hurricane Andrew, when a decision was made — we didn't control it then — but the decision was made that the homeowners, essentially, you could lose as much in one year as you made in the previous 25 years. And the float isn't as large.

So, we became a company that placed our customers' desire for homeowners with several other large and solid organizations.

The big thing is auto insurance. And we grew in the first quarter about 340,000 policies, net, which will look quite good compared to anybody but Progressive.

And that was quite a bit more than last year, but not as good as two years ago. And the profit margin was in the nine-point area. So, I feel extremely good about GEICO, I mean, what has been built there by Tony (Nicely) and his people is perfect, but I would feel fine —

We don't own any Progressive, but I think that Progressive is an excellent company, and we will watch what they do, and they will watch what we do. And we will see, five years from now or 10 years from now, which one of us passes State Farm first. Charlie? Oh, and Ajit, would you like?

AJIT JAIN: Well, the underwriting profit is really a function of two major variables. One is the expense ratio and the other is the loss ratio, without getting too technical.

GEICO has a significant advantage over Progressive when it comes to the expense ratio, to the extent of about seven points or so.

On the loss ratio side, Progressive does a much better job than GEICO does. They have, I think, about a 12-point advantage over GEICO. So, net-net, Progressive is ahead by about five points.

GEICO is very aware of this disadvantage on the loss ratio that they are suffering, and they're very focused on trying to bridge that gap as quickly as they can. They have a few projects in place, and, you know, sometimes GEICO is ahead of Progressive. Right now, Progressive is ahead of GEICO. But I'm hopeful they'll catch up on the loss ratio side and maintain the expense ratio advantage as well. Thank you.

WARREN BUFFETT: GEICO has gained market share, essentially — I'd have to look at the figures for sure — but virtually every year since Tony took over. And I would bet significant money that GEICO increases its market share in the next five years. And I think it will, for sure, this year.

So, it is a terrific business. And — but Progressive is a terrific business. And we'll — as Ajit says, we've got the advantage in expenses, and we will have an advantage in expenses. And then the question is, are we —

They have a very sophisticated way of pricing business. And the question is whether we give some of that five points back — or six points back — in terms of loss ratio. We are working very hard at that, but I'm sure they're working very hard too to improve their system.

So, it's a — to some extent it's a two-horse race, and we've got a very good horse.

CHARLIE MUNGER: But Warren, in the nature of things, every once in a while, somebody's a little better at something than we are.

WARREN BUFFETT: Ha. You've noticed. (Laughter)

CHARLIE MUNGER: Yeah. I noticed.

WARREN BUFFETT: Yeah. I'd settle for second place in a lot of the businesses.

8. Try to have a big circle of competence but be realistic about its perimeter

WARREN BUFFETT: OK, station 11.

AUDIENCE MEMBER: Mr. Buffett and Mr. Munger, thank you for taking my question. My name is Feroz Qayyum and I'm from Mississauga in Canada, and now live in New York.

My question is how to best emulate your success in building your circle of competence. Given the environment today in investing is a lot more competitive than when you started out, what would you do differently, if anything at all, when building your circle?

Would you still build a very broad, generalist framework? Or would you build a much deeper but narrower focus, say on industries, markets, or even a country? And if so, which ones would interest you? Thank you.

WARREN BUFFETT: Yeah, well, you're right. It's much more competitive now than when I started. And you would — when I started, I literally could take the Moody's industrial manual and the Moody's banks and financial manual and I could go through page by page, at least run my eyes over every company and think about which ones I might think more about.

It's — it's important — I would just do a whole lot of reading. I'd try and learn as much as I could about as many businesses, and I would try to figure out which ones I really had some important knowledge and understanding that was probably different than, overwhelmingly, most of my competitors.

And I would also try and figure out which ones I didn't understand, and I would focus on having as big a circle as I could have, and also focus on being as realistic as I could about where the perimeters of my circle of competence were.

I knew when I met (GEICO executive) Lorimer Davidson in January of 1951, I could get insurance. I mean, what he said made so much sense to me in the three or four hours I spent with him on that Saturday.

So, I dug into it and I could understand it. My mind worked well in that respect.

I didn't think I could understand retailing. All I'd done is work for the same grocery store that Charlie had, and neither one of us learned that much about retailing, except it was harder work than we liked.

And you've got to do the same thing, and you've got way more competition now. But if you get to know even about a relatively small area more than the other people do, and you don't feel the compulsion to act too often, you just wait till the odds are strongly in your favor. It's still a very interesting game. It's harder than it used to be. Charlie?

CHARLIE MUNGER: Well, I think the great strategy, for the great mass of humanity, is to specialize. Nobody wants to go to a doctor that half-proctologist and half-dentist, you know? (Laughter)

And so, the ordinary way to succeed is to narrowly specialize. Warren and I really didn't do that. And that — and we didn't because we prefer the other type of activity. But I don't think we could recommend it to other people.

WARREN BUFFETT: Yeah, a little more treasure hunting in our day, and it was easy to spot the treasures —

CHARLIE MUNGER: We made it work, but it was kind of a lucky thing.

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: It's not the standard way to go.

WARREN BUFFETT: The business, at least I best understood, actually was insurance. I mean — and I had very little competition. You know, I went to the insurance department in Harrisburg, Pennsylvania. I remember one time I drove there just to check on some Pennsylvania company. And this is when you couldn't get all this information on the internet.

And I went in and I asked about some company, and the guy said, "You're the first one that's ever asked about that company." And there wasn't a lot.

I went over to the Standard and Poor's library on Houston — Houston — Street, I guess they call it. And I would go up there and ask for all this obscure information. And there wasn't anybody sitting around there. They had a whole bunch of tables that you could set and examine things through. So, there was less competition.

But if you know even one thing very well, it'll give you an edge at some point. You know, it's what Tom Watson Sr. said at IBM, you know. "I'm no genius, but I'm smart in spots and I stay around those spots." And that's basically what Charlie and I try and do. And I think that's probably what you can do. But you'll find those spots in —

CHARLIE MUNGER: Yeah, we did it in several fields. That's hard.

WARREN BUFFETT: And we got our head handed to us a few times, too.

9. Berkshire is strong on the environment but won't do expensive reports to prove it

WARREN BUFFETT: OK, Andrew?

ANDREW ROSS SORKIN: Thanks, Warren. Governance question from a shareholder.

Larry Fink of BlackRock has predicted that in the near future, all investors will be using ESG — environmental, social, governance — metrics to help determine the value of a company. I'm worried we don't score well on everything from climate to diversity to inclusion. How well do you think Berkshire measures up on those metrics, and are they valuable metrics?

WARREN BUFFETT: I think in reality we measure up well, but we don't participate in preparing reports for anybody that asks about it.

And we have this idea that even though all shareholders are equal, we sort of — we prefer individual shareholders. We actually prefer people we know as co-owners.

And we don't want to be preparing a lot of reports and asking 60 subsidiaries each to do something, where they'll set up a team, and they'll mail things to headquarters, and then we'll supply them to somebody who, if our stock goes up some, is probably going to sell it anyway.

We want our managers to do the right things. We give them enormous latitude to do that. And I think that our batting average really is quite good.

You saw that in the movie, we talked about having a hundred percent of the electricity we sell in Iowa come from, essentially, wind generation. Now that doesn't mean that we get to do it 24 hours a day. We sell some and we buy it. But essentially, we will be creating as much wind energy as all of our customers use in electricity.

There's one competitive — there's one other utility — electric utility — that's about our size — roughly our size — in Iowa, and they have practically no wind resources. And the wind blows where they exist, too. But we have — we will have that hundred percent — and as a matter of fact, it's a moving target, because we do so well — partly — we do so well on wind generation that a number of the high-tech companies want to locate in Iowa and get clean energy from us at very low prices. And therefore, the moving target becomes our growth in customers in that area.

But we are not going to put out a — we're not going to spend the time of the people at Berkshire Hathaway Energy responding to questionnaires or trying to score better with somebody that is working on that.

It's just, we trust our managers and I think the performance is at least decent. And we keep expenses and needless reporting down to a minimum at Berkshire.

We do not get — and I mentioned this in the annual report — I can't imagine another company like it — but here we are, with 500 billion of market capitalization — we do not have a consolidated P&L monthly. We don't need it.

Now I can't imagine any other organization doing that, but we don't need it. And we're not going to tie up resources — people resources — doing things we don't need to do just because it's the sort of standard procedure in corporate America.

And corporate America is very worried about, in general, they're very worried about whether somebody's going to upset their apple cart, you know, with activists and everything.

So, they want to be very sure that every shareholder is happy on issues like that. And in the end, fortunately, we don't have to worry about that. So, we don't have to run up a lot of expenses doing things that don't actually let us run the business better. Charlie?

CHARLIE MUNGER: Well, I think at Berkshire the environmental stuff is done one level down from us. And I think Greg Abel is just terrific at it. And so, I think we score very well.

When it gets to so-called best corporate practices, I think the people that talk about them don't really know what the best practices are. They just know what they think are the best practices. And they determine that based on what will sell, not what will work.

And so, I like our way of doing things better than theirs, and I hope to God we never follow their best practices. (Applause)

10. "Independent" board members aren't really independent

WARREN BUFFETT: I'd like to point out one thing on independent directors. I mean, I have been on 20 public company corporate boards, not counting any Berkshire subsidiaries. So, I've seen a lot of corporate boards operate. And the independent directors, in many cases, are the least independent.

I mean, if the income you receive as a corporate director — which typically may be around $250,000 a year — now, if that's an important part of your income, and you hope that some other corporation calls the CEO and says, "How's so-and-so as a director?" and the current CEO — your CEO — says, "Oh, he's fine and never raises any problems," and then you get on another board at 250,000 and that's an important part, how in the world is that independent? I mean, I really, just an observation. (Applause)

I can't recall, particularly, any independent director — where their income from the board was important to them — I can't recall them ever doing anything in board meetings or committee

meetings that actually was counter to the interest — you know, they put them on the comp committee.

They're just not going to upset the apple cart, because what they're — and I'd probably behave the same way in the same position. I mean, if $250,000 a year is important to you, why in the hell would you behave in a way that's going to cause your CEO to say to the next CEO, "This guy acts up a little bit too much. You really better get somebody else." It's the way it works. But they've —

CHARLIE MUNGER: I think it works a little worse than Warren's telling you. (Laughter)

WARREN BUFFETT: Yeah, Charlie and I —

CHARLIE MUNGER: It's really awful.

WARREN BUFFETT: It's awful. I mean, we —

CHARLIE MUNGER: And not only that, Warren and I are — we occupy the niche for pomposity very well ourselves. We don't need any more of it. (Laughter)

WARREN BUFFETT: Charlie and I were on one board. Well, I was on one board, actually, a long time ago where we owned a very significant percentage of the company. And the rest of the board was almost exclusively customers of the company. But not owners. They had absolutely token holdings. And at one point we were looking at something where a tax decision was being made in terms of the distribution of some securities.

And it was a lot of money that was involved. And one of the other directors said, "Well, let's just swallow the tax." Well, his swallowing amounted to about $15 or something — (Laughs)

I said, "Let's parse this sentence out. Let's swallow the tax. That's let us swallow the tax. So, who wants to swallow an equal amount, you know, to me?"

It's — you know, it's — you don't get invited to be on boards if you belch too often at the dinner table —

CHARLIE MUNGER: Well, at Blue Chip Stamps we had a director who said, "I don't see why you guys get to be so important just because you own all the shares."

WARREN BUFFETT: Yeah. (Laughter)

Charlie and I used to have to cool off after the Blue Chip Stamps meetings, because we and Rick Garrett owned what percent, probably?

CHARLIE MUNGER: Oh, 50 percent.

WARREN BUFFETT: Yeah, 50 percent, and they'd appointed all these —

CHARLIE MUNGER: They were all members of the Rotary Club.

WARREN BUFFETT: It came out of a government settlement or something. And it was not an ideal form of decision making. And they just had a different calculus in their mind than we did. And I can understand it, but I'm not going to replicate it. (Laughs)

11. "We will put a lot of money into energy" with capital spending at utilities

WARREN BUFFETT: OK, Gregg.

GREGG WARREN: Warren and Charlie, U.S. electricity demand has flatlined during the past decade, but could potentially pick up over the next decade with three emerging sources of demand — electric vehicle charging, datacenters, and cannabis cultivation — expected to account for more than 5 percent of total U.S. electricity demand.

Utilities will have to work hard to benefit from this new demand, though, much of which is likely to accrue to states in the South Atlantic, Central, West, and Mountain regions, with the greatest benefit going to firms that invest in grid expansion, smart networks, reliability, and renewable energy.

While Berkshire Energy has been aggressive with its capital investments, and already has some of the lowest electricity rates in the areas where it competes, it seems like the firm is winding down its annual spending at a time when more might actually be required.

With annual spending expected to fall from around 6 billion, on average, annually to around 4 billion in 2021, with two-thirds of that spending being more maintenance driven than growth.

Is there any one area where you feel Berkshire Energy might need to commit more capital over the next decade to ensure that it captures this future expected demand growth, much as it already has with wind power in western Iowa, which is now populated with a lot of data centers, and for territories where demand growth is expected to be the strongest but where Berkshire does not have a presence, are there any avenues aside from acquisitions for the company to put capital to work?

WARREN BUFFETT: I'm going to throw that over to Ajit in just a second. But I will tell you that we have three owners of Berkshire Hathaway Energy. We are the 91 percent owner. And there are no three owners that are more interested in pouring money into sensible deals within the utility industry or are better situated in terms of the people we have to maximize any opportunities. We have never had a penny of dividends in — whatever it is — close to 20 years of owning MidAmerican Energy.

And other utility companies pay high dividends. They really — they just don't have the capital appetite, essentially, that we do. So, it's just a question of finding sensible projects.

And I would say that there's no group that is as smart about it, as motivated about it as our group. And with that I'll turn it over to Greg.

CHARLIE MUNGER: In short, we're about as good as you can get, and you should worry about something else.

WARREN BUFFETT: Yeah. (Laughter)

But Greg, could you stand up and talk about —? We really hope to spend a lot of money in energy.

GREG ABEL: Yeah, yeah. Afternoon. Yeah, Gregg, you touched on it. A couple critical areas we go forward is to look realistically in the '21, 2022 timeframe. Because as you touched on, we've got a great portfolio as we finish out 2019, 2020. And it's really been focused on building new renewable energy projects in Iowa, expanding the grid.

But equally, we do have those opportunities in our other utilities. The footprint in Iowa, realistically, is getting pretty full. As we hit a hundred percent renewables — Warren touched on it — every time we get a new data center, that means we can build another 300 megawatts of renewables. We'll continue to do that.

But when you look at PacifiCorp, where we serve six states in the Northwest, we've really just embarked on an expansion program there.

The first part was to build significant transmission, so expand the grid, and then start to build renewables. But just to give you some perspective of the regulation that exists in place, we started that project in 2008. And we're realistically building the first third of it. But we do have the planning in place for the second phase and the third phase, and that's what you'll see coming into place in 2021 and in '23.

And the reality is we'll continue to do that at NV Energy, with really, again, the focus being on both grid expansion, so we can move the resources, and then supplementing it with renewables. So, it's exactly what you've touched on.

And we haven't identified the specific projects yet, so we never put them in our capital forecast that we disclose to folks. But as they firm up and we know that they will go forward, clearly you'll see some incremental capital. And that's capital we clearly earn on behalf of the Berkshire shareholders as we deploy it. Thank you.

WARREN BUFFETT: We will put a lot of money into energy. (Laughs)

CHARLIE MUNGER: Yeah, we're really in marvelous shape in this department.

WARREN BUFFETT: Incidentally, you know, Walter Scott, I mean, he gets excited looking at all these projects, and goes out and visits them. He knows way more about the business — and he's forgotten more about it than I'll ever know.

But we've got a great partnership. We've got unlimited capital. We'll continue to have it. And there's needs for huge capital in the industry.

So, I think 10 years from now or 20 years from now, our record will be looked at and there'll be nothing like it in the energy business.

CHARLIE MUNGER: Well, Greg, is there anybody ahead of where we are in Iowa in terms of energy?

GREG ABEL: Charlie, there's realistically no one ahead of us in the U.S., let alone in Iowa. When you look at the amount of energy we produce relative to what our customers consume, we really do lead the nation and Iowa.

CHARLIE MUNGER: And aren't our rates about half that of our leading competitor in Iowa to boot?

WARREN BUFFETT: About half. Close.

GREG ABEL: Exactly. We're right in that range.

CHARLIE MUNGER: If this isn't good enough for you, we can't help you. (Laughter)

WARREN BUFFETT: Incidentally, I mean, we sell electricity five miles from here. Greg, is that correct?

GREG ABEL: Right across the river.

WARREN BUFFETT: Yeah, right across the river. And, you know, the wind blows the same and all that sort of thing. And the public power district here, in Nebraska, going back to George Norris, has always been a public power state. There's no — capitalism doesn't exist in the electric utility field in Nebraska.

So, they have had the advantage of selling tax-exempt bonds. We have to sell taxable bonds, which raises cost to some degree. They have a big surplus, which they don't have to pay dividends on or anything else. And our rates are cheaper than theirs, you know, basically.

I mean, we're very proud of our utility operation.

12. Why Berkshire doesn't put its unspent cash into a stock index fund

WARREN BUFFETT: Carol?

CAROL LOOMIS: "Warren, you are a big advocate of index investing, and of not trying to time the market. But by your having Berkshire hold such a large amount of cash in T-bills, it seems to me you don't practice what you preach.

"I'm thinking that a good alternative would be for you to invest most of Berkshire's excess cash in a well-diversified index fund until you find an attractive acquisition or buy back stocks.

"Had you done that over the past 15 years, all the time keeping the $20 billion cash cushion you want, I estimate that at the end of 2018, the company's 112 billion balance in cash, cash equivalents, in short-term investments and T-bills, would've instead been worth about 155 billion.

The difference between the two figures is an opportunity cost equal to more than 12 percent of Berkshire's current book value. What is your response to what I say?" And I forgot to say the question is from Mike Elzahr, who is with the Colony Group, located in Boca Raton, Florida.

WARREN BUFFETT: That's a perfectly decent question, and I wouldn't quarrel with the numbers. And I would say that that is an alternative, for example, that my successor may wish to employ. Because, on balance, I would rather own an index fund than carry Treasury bills.

I would say that if we'd instituted that policy in 2007 or '08, we might have been in a different position in terms of our ability to move late in 2008 or 2009.

So, it has certain — it has certain execution problems with hundreds of billions of dollars than it does if you were having a similar policy with a billion or 2 billion or something of the sort.

But it's a perfectly rational observation. And certainly, looking back on ten years of a bull market, it really jumps out at you.

But I would argue that if you were working with smaller numbers, it would make a lot of sense. And if you're working with large numbers, it might well make sense in the future at Berkshire to operate that way.

You know, we committed 10 billion a week ago. And there are conditions under which— and they're not remote, they're not likely in any given week or month or year — but there are conditions under which we could spend a hundred billion dollars very, very quickly.

And if we did — if those conditions existed — it would be capital very well deployed, and much better than in an index fund.

So, we've been — we're operating on the basis that we will get chances to deploy capital. They will come in clumps in all likelihood. And they will come when other people don't want to allocate capital.

Charlie, what do you think about it?

CHARLIE MUNGER: Well, I plead guilty to being a little more conservative with the cash than other people. But I think that's all right.

We could have put all the money into a lot of securities that would've done better than the S&P with 20/20 hindsight. Remember, we had all that extra cash all that period, if something had come along in the way of opportunities and so on.

I don't think it's a sin to be a little strong on cash when you're as a big a company as we are. We don't have to —

I watched Harvard use the last ounce of their cash, including all their prepaid tuition from the parents, and plunge it into the market at exactly the wrong moment and make a lot of forward commitments to private equity. And they suffered, like, two or three years of absolute agony. We don't want to be like Harvard.

WARREN BUFFETT: Plus timber and a whole bunch of —

CHARLIE MUNGER: What?

WARREN BUFFETT: Plus timber. And I mean —

CHARLIE MUNGER: Yeah, yeah. We're not going to change. (Laughter and applause)

WARREN BUFFETT: We do like having a lot of money to be able to operate very fast and very big. And we know — and maybe we won't — we know we won't get those opportunities frequently.

I don't think — certainly, you know, in the next 20 or 30 years there'll be two or three times when it'll be raining gold and all you have to do is go outside. But we don't know when they will happen. And we have a lot of money to commit.

And I would say that if you told me I had to either carry short-term Treasury bills or have index funds and just let that money be invested in America generally, I would take the index funds.

But we still have hopes. And the one thing you should very definitely understand about Berkshire is that we run the business in a way that we think is consistent with serving shareholders who have virtually all of their net worth in Berkshire. I happen to be in that position myself, but I would do it that way under any circumstances.

We have a lot of people who trust us, who really have disproportionate amounts of Berkshire compared to their net worth, if you were to follow standard investment procedures.

And we want to make money for everybody, but we want to make very, very sure that we don't lose permanently money for anybody that buys our stock somewhere around intrinsic business value to begin with.

We just have an aversion to having a million-plus shareholders, maybe as many as two million, and having a lot of them ever really lose money, if they're willing to stay with us for a while.

And we know how people behave when the world, generally, is upset. And they want to be with something — I think they want to be with something they feel is like the Rock of Gibraltar. And we have a real disposition toward that group.

13. Fannie Mae and Freddie Mac should do more loans for manufactured housing, even if it hurts Clayton's profits

WARREN BUFFETT: Jonathan?

JONATHAN BRANDT: Freddie Mac and Fannie Mae have new financing programs for manufactured home loans that I'm guessing could finally put purchasers of those homes who need mortgages on a somewhat more level playing field with those buying site-built homes.

How positive an effect do you expect these new programs to have on manufactured home demand? And how might the programs affect Clayton's sizable profits from lending? Will Clayton sell more loans to Freddie and Fannie, and does that help profits even if spreads compress?

WARREN BUFFETT: Well, it may not help profits, but it would — it definitely is good if the Freddie and Fannie are authorized to do more lending against manufactured homes.

Manufactured homes are a very reasonable for people to get decent housing and have a home. And they are hard to finance to some degree. The local banks frequently do it, but the big lenders haven't wanted to do it. They are —

There is the possibility, or the likelihood, that Freddie and Fannie are going to expand. We already sell — I don't know whether it's 10 million a month of loans or something like that — to Freddie and Fannie.

But it would be very good for America, in my view, if Freddie and Fannie did more in that area. Obviously, we would sell some more homes, but we would lose financing, and we might come out behind, we might come out ahead. But I think it would a good thing to do. Charlie?

CHARLIE MUNGER: Well, I think Freddie and Fannie will finance more and more homes, and I think they'll do it more and more of it through Clayton. And they'll do it because Clayton is very trustworthy, and will do a very good job at making good housing at cheap prices for people.

And I think Clayton will get bigger and bigger and bigger as far ahead as you can see. And the guy's young, he doesn't look like Warren and me. Not at all.

WARREN BUFFETT: We've got a perfect managerial group at Clayton, and we're expanding our site-built homes. We just closed on a builder a couple — a few days ago. And we now have nine different — I believe — nine different site-built home operations, and we didn't have any a few years ago.

And we think extraordinarily well of Kevin Clayton and his group. Our directors met last year in Knoxville and viewed the Clayton operation for the second time. So, we like the idea of Clayton expanding, and we like the idea of more people having very affordable housing.

During the 2008 and '09 recession, our borrowers — who had very low FICO scores on average, I mean compared to typical home buyers, and they — if they kept their jobs, they made the payments. I mean, they wanted that home, and the home was an enormously important item to them. And we had various programs that helped them as well.

But our loan experience was far better than people anticipated under the stress that existed then. But it was because a home really means something to people. And absent losing jobs or sickness — and, like I say, we have some programs to help people — they make the payments, and they have very decent living.

But they would get that even cheaper if Freddie and Fannie expanded their programs. And, like I say, I hope they do.

14. "Ingenious" capitalism will replace jobs lost to automation

WARREN BUFFETT: OK, station 2.

AUDIENCE MEMBER: Hi. Hi Warren, hi Charlie. My name is Carrie and this is my daughter, Chloe. She's 11 weeks. It's her very first Berkshire meeting. (Laughter)

We're from San Francisco, and we have a question on employment for you. As both a major employer and a producer of consumer goods, what do you make of the uncertain outlook for good full-time jobs with the rise of automation and temporary employment?

WARREN BUFFETT: Well, if we'd asked that question 200 years ago, and somebody said, "With the outlook for development of farm machinery and tractors and combines and so on —" meaning that 90 percent of the people on farms were going to be — lose their job — it would look terrible, wouldn't it?

But our economy and our people, our system, has been remarkably ingenious in achieving whatever we have now — 160 million jobs — when throughout the period ever since 1776, we've been figuring out ways to get rid of jobs. That's what capitalism does, and it produces more and more goods per person.

And we never know exactly where they're going to come from. I mean, it — I don't know if you were whatever occupation — well, if you were in the passenger train business, I mean, you know, you were going to — that was going to change.

But we find ways, in this economy, to employ more and more people. And we've got now more people employed than ever in the history of the country, even though company after company in heavy industry and that sort of thing, has been trying to figure out, naturally, how to get more productive all the time, which means turning out the same number of goods with fewer people, or turning out more goods with the same number.

That is capitalism. I don't think you need to worry about American ingenuity running out. I mean, if you look at people in all kind of businesses, and they like to make money, but they really like to be inventive, you know. They like to do things.

And this economy, it works. It will continue to work. And it will be very — it's very tough in certain industries, and there will be dislocations. You know, we won't be making as many horseshoes and that sort of thing when cars come along and all that.

But we do find ways now to employ whatever we're employing — 155, whatever it is — million people, and supporting a population of 330 million people when we started with 4 million people, with 80 percent of the labor being employed on farms.

So, the system works and it will continue to work. And I don't know what the next big thing will be. I do know there will be a next big thing. Charlie?

CHARLIE MUNGER: Well, we want to shift the scut work to the robots to the extent we can. That's what we were doing, as Warren said, for 200 years.

Nobody wants to go back to being a blacksmith, or scooping along the street, picking up the horse manure, or whatever the hell people used to do. We're glad to have that work eliminated.

And a lot of this worry about the future comes from leftists who worry terribly that the people at the bottom of the economic pyramid have had a little stretch when the people at the top got ahead faster.

That happened by accident because we were in so much trouble that we had to flood the world with money and drive interest rates down to zero. And, of course, that drove asset prices up and helped the rich.

Nobody did that because they suddenly loved the rich, it was just an accident, and it will soon pass.

We want to have all this productivity improvement, and we shouldn't worry a little about the fact that one class or another is a little ahead at one stretch.

WARREN BUFFETT: Charlie and I — (applause) — we worked in a grocery store. And when people ordered a can of peas, we had ladders that we climbed up to reach the can of peas, and then we placed it in a folding box, and then we put it on a truck. And if you looked at the amount of food actually transferred between the producer and the person who consumed it, and the number of people involved in the transaction, you know, it was — I don't know whether it was one-third or one-quarter or one-fifth as efficient as the best way now to get food delivered to you. And —

CHARLIE MUNGER: And the food was worse.

WARREN BUFFETT: (Laughs) And my grandfather, you know, was distressed about the fact that this particular credit and delivery kind of store would be eliminated. And it was eliminated, but society —

CHARLIE MUNGER: It's coming back.

WARREN BUFFETT: —addressed the — pardon?

CHARLIE MUNGER: It's coming back.

WARREN BUFFETT: It's coming back, but more efficiently. (Laughter)

Anyway, we've seen a little creative destruction. And frankly, we're glad that it freed us up to go into the investment business. Worked out better for us.

15. Regulations can be "irritating," but they're needed for banks and insurance

WARREN BUFFETT: Becky?

BECKY QUICK: This question comes from Brian Gust of Grafton, Wisconsin. He's talking about regulators and politicians. It says, "The Berkshire Hathaway investment portfolio holds several large financial institutions that are heavily regulated and are politically charged.

"Do you feel that, in some cases, the regulators and/or politicians are running the big banks instead of the CEO and the board of directors?"

CHARLIE MUNGER: Sure. (Laughter) But not too much.

WARREN BUFFETT: No, insurance has been regulated — it happens to be regulated primarily on a state basis — but insurance has been regulated ever since we went into it, and it hasn't — you know, when I looked at GEICO, it was doing 7 million of business. And, you know, it will do 30-odd billion of — billion — of business now. And it's been regulated the whole time.

And regulation can be a pain in the neck, generally, but on the other hand, we don't want a bunch of charlatans operating in the insurance business. And insurance actually lends itself to charlatans because you get handed money and you give the other guy a promise.

And I like the fact that there is regulation in the insurance business, or the banking business. It doesn't mean it can't drive you crazy sometimes or anything of the sort, but those businesses should be regulated. It — they're too important.

And anytime you can take other people's money, and they go home with a promise and you go home with the money, I don't mind a certain amount of regulation in those businesses. Charlie?

CHARLIE MUNGER: Yeah. You're using the government's credit because you have deposit insurance, there's an implicit bargain. You can't be too crazy with what you do with the money. That's a perfectly reasonable —

And I absolutely believe that we should have a regulation system that involves supervision of risk-taking by banks.

It got particularly bad in the investment banks at the peak of the real estate crisis, and the behavior was — there's only word for the behavior — it was disgusting. And it was pretty much everybody.

Warren, you — it's hard to think of anybody who stayed sane in that boom. They felt the other guy's doing dumb things, I've got to do it, too, or I'll be left out. What a crazy way to behave.

And so, sure, there's some intervention, but there probably has to be.

WARREN BUFFETT: You want a Food and Drug Administration. Yeah. You'll be unhappy with how they do it, if you're in the business and all that, but — and, you know, I find any kind of regulation irritating. But nevertheless, it's good for the system.

And actually, a number of regulators, you know, I would say that they've really been quite sensible about regulation. But you don't feel that way when you're being told how to run your business.

But as Charlie says, you wouldn't want to be a bank that ran in an unregulated system where anybody could come in and do all kinds of things that would actually have consequences that drew you into the problems that they created themselves.

We had the Wild West in banking long ago, and it produced a lot of problems in the 19th century.

16. Shareholders don't want or need very detailed information on the subsidiaries

WARREN BUFFETT: Jay?

JAY GELB: For the past several years, in Berkshire's annual shareholder letter, there's been increasingly less detail provided on its operating businesses and financial performance.

For example, the company is no longer providing details on the finance and financial product segment, or a balance sheet for the manufacturing, service, and retail segment, or a breakdown of float by unit in the insurance business.

For a company as large and diversified as Berkshire, why are investors being provided less information than previously?

WARREN BUFFETT: Well, I don't think we actually provide less information. We may present it in a somewhat different form from year to year, just — and then this year, for example, you know, I started my letter, as usual, in my mind as saying, "Dear Doris and Birdie," my sisters, to tell them what I would tell anybody that had a very significant proportion of their net worth in Berkshire, who is intelligent, did not know all the lingo of our various businesses, that would read a lot of words, because they did have a large investment. So, if I explained anything, and did a decent job, that they would understand what I was talking about.

And I tell them that in the language that I think will be understandable to a significant percentage of a million-plus people who have all kinds of different understanding of accounting and all that sort of thing. I tell them the information I would want to hear on the other side.

Now, if I was a competitor, and I wanted to know what one of our furniture stores was earning or something of the sort, you know, I might love it, but it doesn't really make any difference.

If you're talking about a $500 billion organization, if you understand our insurance business, in terms of giving you the picture, I think, in three or four or five pages — you know, actually we've got a whole bunch of stuff required by the SEC about loss reserve development.

I think you can write a 300-page report that gives a whole lot less information than a 50-page report. And you lose people.

So, I try to tell them — like I say, in my mind, it's my sisters — I try to tell them what I would tell them if we had a private business and they owned a third of it each, and I owned a third, and once a year, they like to get filled in. And they don't know what a combined ratio means because it's a dumb term that everybody uses. And the important thing is to call it a profit margin.

They don't know what the operating ratio is in the railroad business, and it's an obsolete term. It'd be better to call that a profit margin. But the lingo — we're not writing it for analysts. We're writing it for shareholders, and we're trying to tell them something so they can make a — they can not only get the picture as to what we own now, but how we think about the operation, what we're trying to do over time. And we try to do the best job we can every year.

And I don't think it — I think if somebody is terribly interested in the details, they really are missing the whole picture. Because you could have known every detail of our textile business in 1965, and we could give you the information as to how much we made from linings and how much we made from handkerchiefs, and you'd be in a different world. I mean, the important thing was how we looked at running money and what we would do about things over time.

And it just — you could have gotten very misled — if you'd read it in 1980 or '85 and you looked for great detail on how See's candy was doing because they moved eastward, you know, we'll tell you that overall that failed, in terms of moving out the territory.

But going into a whole lot of detail that might be very interesting to an analyst, but really for the shareholder, they've got to make a decision as to who's running their money, and how they're running it, and what they've done over time, and what they hope to do in the future, and how to measure that. And again, we're writing it for the individual. Charlie?

CHARLIE MUNGER: Well, I suppose I should be watching every tiny little business down to the last nickel, but I don't. And I don't want that much detail. And I think our competitors would like it, and it wouldn't do our shareholders any good. So, we'll probably just keep reporting the way we do.

WARREN BUFFETT: You can see how flexible we are here. (Laughter)

17. Munger: "Climate getting better" for U.S. investments in China

WARREN BUFFETT: Station 3.

AUDIENCE MEMBER: Hello, Mr. Buffett and Mr. Munger. I'm Sasha Xixi (PH) from China International Capital Corporation Limited.

Last week, China announced 12 new measures further opening up the financial industry. All these measures will allow more invested institutions to enter into Chinese financial market, and to insure the policies of foreign investment to be consistent with those of domestic investment.

What do you think about these new measures? Do you believe the foreign financial institutions will have more pricing power over the Chinese stock markets in the future? Do you have any plans to set up a company in China? If so, what time? Thank you.

CHARLIE MUNGER: Well, we've got one now. Dairy Queen is all over China. (Laughter)

And it's working fine. And we didn't wait for new laws. We did it under the old laws. But we're not that big, net, in China, right, Warren?

WARREN BUFFETT: We're not that big what?

CHARLIE MUNGER: In China.

WARREN BUFFETT: No, but we had something, you know, that could have happened that would have been quite sizable.

But China, it's a big market, and we like big markets. I mean, we really can only deploy capital in a major way maybe in 15 or so countries just because of the size.

CHARLIE MUNGER: But generally, I think the climate is getting better. It really makes sense for the two countries to get along. Think of how stupid it would be if China and the United States didn't get along. Stupid on both sides, I might add.

WARREN BUFFETT: Yeah. We've done well in China. We haven't done enough, but — (Applause)

18. Buffett has "feeling" Brexit vote was a mistake, but he's still anxious for a U.K. deal

WARREN BUFFETT: Andrew?

ANDREW ROSS SORKIN: Warren, this is a question from a member of the House of Lords in Westminster, who happens to be here today, who also is a shareholder of the company.

This is Lord (Jitesh) Gadhia who says, "You've written, 'We hope to invest significant sums across borders. So, what's your appetite to invest in the U.K. and Europe, and how will Brexit impact that? And while we're at it, what's your advice for solving U.K.'s Brexit dilemma?" (Laughter)

CHARLIE MUNGER: That's yours, Warren. (Laughter)

WARREN BUFFETT: Well, I can — I will tell you this. I mean, I gave an interview to The Financial Times, and I don't do that very often.

But one of the considerations I have is that I would like to see Berkshire Hathaway better known in both the U.K. and Europe. And the FT audience was an audience that I hoped would think of Berkshire more often in terms of when businesses are for sale.

Our name is familiar, I think, pretty much around the world in, at least, financial circles. But there is no question if anybody's going to sell a large business in the United States, they're

going to think of Berkshire. They may decide, for other reasons, they'd rather do it differently. But they will think of Berkshire.

And I don't think — I mean, obviously that is not as true around the world. We've had some very good luck with a few people that have thought of Berkshire, I mean, such as at ISCAR. And actually, Berkshire Hathaway Energy had one of its base holdings from way back was in the U.K.

But I was looking, in doing that interview, I was willing to spend three hours with the FT reporters in the hope that when they write about — when they write the story — that somebody, someplace thinks of Berkshire that wouldn't otherwise think of it.

And we'd love to put more money into the U.K. I mean, if I get a call tomorrow and somebody says, you know, "I've got an X-billion-dollar — pound — company that I think might make sense for you to own," and that I would like to actually have as part of Berkshire, you know, I'll get on the plane and be over there.

But they'll have to name — they'll have to tell me what their price ideas are, and what its earnings — I'm not interested in going over and talking about it and pricing it for them and not making a deal. We like to make deals when we actually get into action. And we're hoping for it.

And we're hoping for a deal in the U.K., and/or in Europe, no matter how Brexit comes out.

I think it — I don't — I'm not an Englishman, but I have the feeling it was a mistake to vote to leave. But I don't think it's — I don't think it — it doesn't destroy my appetite in the least for making a very large acquisition in the U.K. Charlie?

CHARLIE MUNGER: Well, all my ancestors came from northern Europe so I'm very partial to the place. On the other hand, if you asked me how I would vote on Brexit if I lived in Britain, I don't even know. It just strikes me as a horrible problem. And I'm glad it's theirs, not mine. (Laughter)

WARREN BUFFETT: But if I called you tomorrow and said we had a deal in U.K., you'd tell me —

CHARLIE MUNGER: Oh, I would go in, in a minute.

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: Those are my kind of people. I understand them.

WARREN BUFFETT: Yeah. (Laughter)

19. We don't need "boots on the ground" to find foreign acquisitions, we need lower prices

WARREN BUFFETT: OK, Gregg. (Laughter)

GREGG WARREN: Yeah, Warren, just wanted to kind of maybe follow up on those past two questions, because there is sort of a theme there.

It seems to me that there's definitely more of a home country bias when we look at the acquisitions and investments that Berkshire's done historically.

And while there's definitely value in sticking with what you know and feel the most comfortable with, it seems like you've gone from a model that was originally focused on putting boots on the ground to find investment and acquisition opportunities to one where you're seemingly more content to have sellers or their representatives call you or drop by the office, basically more of a pull model than a push model.

There's nothing wrong with this, but I just wonder, if the opportunity cost that comes with this type of model is that Berkshire misses out on a lot of overseas business where owners are unaware of your willingness to step up and buy them outright and allow them to run their companies under the Berkshire umbrella, and missing stock investment opportunities because Berkshire if not necessarily familiar enough with the local market.

At this point, do you think Berkshire would benefit from putting more boots on the ground in these overseas markets?

WARREN BUFFETT: Yeah, we — actually, it must have been after we bought ISCAR, Eitan Wertheimer convinced me that we should get more exposure in Europe. And he helped out in doing that.

I went over, he arranged various meetings. We've had a lot of contact. It isn't that they're not aware, and we do hear about some.

But we do have the problem they've got to be sizable. I mean, if we do a billion-dollar acquisition, and it makes $100 million, or thereabouts, pretax, $80 million after tax, you know, it's — if we really know the business and we're sure we're not going to have a problem with the people running it being motivated in the future, and doing a similar job as to when they had their money in and everything, it's nice to add 80 million to 25 billion.

But you can't afford to spend lots of time doing that. And we gain something by having Todd (Combs) and Ted (Weschler) do some looking at things, screening them and that sort of thing.

But in the end, you want somebody that — you want some family that's held their business in Europe or in the U.K. for 50 or 100 years that can make a deal, and that wants to do it with Berkshire.

I mean, if they're looking to get the most money, if they want to have an auction, we're not going to win and we're not going to participate because we're not going to waste our time on it.

If we form an acquisition crew, they'll acquire something. I mean, I've watched so many institutions in operation that, you know, if your job every day is to go to work and screen a bunch of things with the idea that you're the strategic department or acquisition department, you're going to want to do something. I want to do something, but I don't want to do something unless — (laughs) — Berkshire benefits by it — truly benefits by it — and generally it's of a size.

CHARLIE MUNGER: Warren, our problem is not a lack of boots on the ground, our problem is the people on the ground are paying prices that we don't want to pay.

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: That's our problem. And that problem is not going to be cured by boots.

WARREN BUFFETT: We can spend $100 billion in the next year. That is not a problem.

CHARLIE MUNGER: No.

WARREN BUFFETT: Spending it intelligently is a huge problem. And the —

CHARLIE MUNGER: Our competitors are buying with somebody else's money, and they get part of the upside and take none of the downside.

WARREN BUFFETT: And a lot of them —

CHARLIE MUNGER: It is hard to compete with people like that.

WARREN BUFFETT: Yeah. They'll leverage it up, they'll make a lot of money if it fails, and they'll make even more money if it succeeds. And that's not our equation.

CHARLIE MUNGER: No.

WARREN BUFFETT: And that isn't always that way, but it's certainly that way now. It's probably —

CHARLIE MUNGER: And it's not in the shareholders' interest that we get to be like everybody else.

WARREN BUFFETT: Yeah. (Applause)

20. We feel good about Berkshire as a long-term "compounding machine"

WARREN BUFFETT: OK, station 4.

AUDIENCE MEMBER: Mr. Buffett and Mr. Munger, thank you so much for the wisdom you've shared with us over the years. This is Steven Wood from New York. And, Mr. Buffett, thank you very much for your feedback, your very generous feedback, last August on the book that I'm writing.

I just had one follow-up, if I may. In studying the most significant value creators of all time, it is very evident that the major compounding effect happened later — at the later stages of the careers. Or, in (Cornelius) Vanderbilt's case, even beyond his own career.

So, your recent investments have suggested to me that you are designing Berkshire to being a steady compounding machine that should continue to create value for a very long time.

Would you both please elaborate on this compounding machine? And the machine's ability to continue to adapt to keep this value creation durable. And then is this legacy one of your sort of primary motivations when you wake up every day?

WARREN BUFFETT: I would say it is the primary motivation, but it's been that for a very, very, very long time.

No matter what was going right in my life, if things were going badly at Berkshire, I would not feel good, you know. I don't need to be spending my time working on something — (laughs) — that makes me feel bad about the results when we get through.

And it's something that's doable. I mean, the culture is stronger now than it was 10 years ago, and it was stronger then than 10 years previously. It moves slowly, but it goes in the right direction.

And when we get chances to deploy the capital, we've always tried to make any entity, whether it was the partnership originally, or Berkshire now, or Blue Chip Stamps when we owned it, or even Diversified (inaudible), we wanted them all to be compounding, in effect, be compounding machines.

That's why people gave us capital. That's why we put our own capital in. And if we failed at it, we really felt like we'd failed. It didn't make any difference how much money we made from fees or anything like that, we knew what our yardstick was.

And so that will continue. I think Berkshire is better situated than it's ever been, except for the fact that size is a drag on performance, and I probably wrote that 40 years — well, I wrote it, actually, when I closed the partnership to new money when we had like $40 million in it.

I just said, really, that new — that additional capital would drag down returns from a $40 million base. So, you can imagine how I feel with a $368 billion — (laughs) — base of capital in Berkshire now.

But this culture is special. It can work. It won't be the highest compounder, by a long shot, against many other businesses. I think it will be one of the safest ways to make decent money over time. But that will depend on the people that follow us. Charlie?

CHARLIE MUNGER: Well, we came a long way from very small beginnings. And the fact that it slows down a little when it becomes monstrous is not my idea of a huge tragedy. And I think we will continue to do very well in the future.

We had nothing like the energy operation, you know, 20 years ago, and it's a powerhouse. We had nothing like Kevin's (Clayton) operation in home building 30 years ago, and it will soon be the biggest — well, even now, it's bigger than anybody else in the country, you know, both of types of housing. Isn't it — houses? I think so.

And we have a lot going for us, and I'm satisfied. I think it's going to continue reasonably.

WARREN BUFFETT: And it would ruin our life if we did terribly. (Laughs)

So, that's what we wake up thinking about in the morning. But I wouldn't want to be in a business where I was going to let down other people, and I think it would be crazy to do something like that, even if you weren't rich and 88. (Laughs)

But we are motivated to have something that is regarded as something different than others, and we're actually — in a world where so much money is institutionalized, you know, I like the idea of having something that's actually owned by individuals in very significant part, who basically trust us and, you know, don't worry about what the next quarter's earnings are going to be. I think it's different than much of capitalism, and I think it's something that Charlie and I feel good about. Isn't it, Charlie?

CHARLIE MUNGER: Yeah, absolutely. (Applause)

21. Berkshire vs the S&P, with taxes thrown in

WARREN BUFFETT: Carol?

CAROL LOOMIS: This question comes from Stephen De Bode of Danville, California, and it raises a question I've certainly never heard before.

"Mr. Buffett, in the past, you have recommended low-cost S&P — and again today — the S&P 500 Index funds as reliable, long-term investment vehicles. These funds have certain inherent structural advantages such as low costs, and automatic reshuffling of their holding.

"But Berkshire also has certain structural advantages, such as financial leverage from the float, and diverse capital allocation opportunities. I think of Berkshire as being ahead in this game.

“For example, it seems to me that if Berkshire’s overall operating business and investment performance were to exactly match the total return of the S&P Index over a 10-year period, Berkshire’s growth in intrinsic value would outperform the S&P 500.

“If you agree, could you estimate by how many percentage points?”

WARREN BUFFETT: (Laughs) Well, the answer is, I won’t estimate anything. But the — if we just owned stocks, and we owned the S&P, our performance would be significantly worse than the S&P because we would be incurring a corporate tax, which would now be 21 percent on capital gains, plus possibly some state income taxes. And effectively, our tax rate on dividends is — depends where they’re held — but somewhere between 10 1/2 or 11 and 13 percent.

So, Berkshire is a mistake — or it’s at a corporate disadvantage simply by the way the tax law runs, compared to owning an index fund, which has no tax at the corporate level, but just passes through to shareholders.

So, I wouldn’t — I don’t know whether we’ll outperform the S&P 500 or not. I know that we’ll behave with our shareholders’ money exactly as we would behave with our own money.

And we will have — we’ll basically tie our fortunes in life to this business, and we will be very cognizant of doing anything that can destroy value in any significant way. But we will probably —

If there were to be a very strong bull market from this point forward, we would probably underperform during that period. If the market five years from now or 10 years from now is at this level or below, we will probably overperform.

But I don’t think that I want to — I don’t quite understand the question in terms of when it said the total return of the S&P over a 10-year period and Berkshire’s growth in intrinsic value would outperform. I don’t know whether that will happen or not. Charlie?

CHARLIE MUNGER: Well, there would be one big advantage for the shareholders that pay taxes, and that is that the Berkshire shareholders, even if we just matched the S&P, we’d be way ahead after taxes. We all have a pretty decent role in life and a pretty good position. We shouldn’t be too disappointed.

WARREN BUFFETT: No. If we — we could have structured — going back to partnership days — we could have structured things so that actually, over a period of time, doing the same things we did, would have actually come out somewhat more favorably for shareholders if we had kept it to the original partnership group.

But the present form hasn’t worked badly, although we have had periods when our corporate capital gains tax, as opposed to the individual, I think it got up to 39 percent a couple of years

or one year, and certainly was 35 percent for a long time. And then, on top of that, we had the state income taxes in some cases.

And they exceeded — well, I mean, if you owned a pass-through fund, you did not have that level of possible double taxation. Now, if you hold your stock forever, you don't pay it. But if you actually sell your stock, you've had a double tax effect.

We're not complaining in any way, shape, or form. This country has treated us incredibly well, and we've added this huge tailwind, which I wrote about in the annual report. And it wouldn't have happened in any other country.

So, we've been very lucky that we've been operating in this country at this time. Charlie, anything?

CHARLIE MUNGER: No.

22. How NV Energy is working to recover from casino defections

WARREN BUFFETT: Jonathan?

JONATHAN BRANDT: In Nevada, several casinos have cut the cord with our NV Energy subsidiary and are seeking their electricity needs elsewhere, even though they had to pay huge exit fees. I have three questions about this phenomenon.

One: do you believe that these are rational choices, or were they made for non-economic reasons?

Two: what can NVD do, if anything, to stem the tide of defections?

And, three: is this something that could happen in other states where you operate regulated utilities? Or is the situation in Nevada somehow unique because of super-sized customers that have more leverage in the power market than smaller industrial customers in other states?

And I don't know whether that's a question for you or Greg, but I'd be happy to hear from either of you.

WARREN BUFFETT: It's a question for Greg. (Laughter)

GREG ABEL: Thanks, Jonathan. So just for everybody, I think they heard the question from Jonathan, but we've owned the utility there for approximately five years.

When we inherited the utility, we knew it had some fundamental issues around its customers. The relationships were really strained from day one because they'd had a history of continuing

to increase rates, and they really weren't delivering renewable energy or meeting the customers' needs or expectations. So, we knew we had some challenges there.

As we sit here today, we've had five customers leave our system. Those customers still use our distribution services. So, the only thing we do not provide them is the power. So, we have lost an opportunity to sell them power, and we've lost the associated margin on that. And we are disappointed with that. We do recover, you know, substantial fees, as you noted.

How the commission looked at it was, "Well, you lose this customer; we'll give you effectively six years of profit on that. And by then, you should have grown back into your normal load." And actually, it's a fair outcome. Our load is higher than it was relative to when those customers have left. So, we've grown through that, and it's consistent with their belief.

The fundamental issue, and you've touched on it, why are they leaving? There are economic reasons for them leaving. And the fundamental reason is, in year seven, they no longer bear sort of the societal costs that are being imposed by the state. They don't have to bear the costs of renewable energy. They don't bear the costs of energy efficiency. And they viewed it as sort of the time to exit out of that model.

We do have a variety of legislation that's going to levelize the playing field. We've had a number of customers that announced they were leaving now who've entered into long-term agreements with NV Energy. And I really do believe our team has the right model, which is we're much more focused on delivering a great value proposition to our customers. So, it has to include price.

But equally, we're building substantial renewable energy there now. And long term, our team will deliver a great proposition to them, and I think NV Energy will prosper in the long term. We're going to be happy with it as a long-term investment. Thank you.

WARREN BUFFETT: Greg, could you give them, give the audience a rough approximation of what, say, in the 10 years or whatever it may be before we bought Nevada Power, what had happened with rates; what had happened with rates under us; and what has happened with coal generation under us?

GREG: Right. Yeah. Yeah, that's great. So, you know, Warren's really expanding on what are — the focus we've brought to delivering something to the customer.

So, if you'd looked at the prior ten years, they pretty much had a rate strategy that, every second year, their rates would go up sort of by the cost of inflation. And that pretty much materialized year after year.

We came in immediately, just like we've done in Iowa — so we've built all that renewable in Iowa, and we've never increased rates since the date we acquired it, 1999. So, rates have been stable, and we don't ever see raising rates in Iowa till probably 2030 or 2031.

Our team took a very similar approach in Nevada, which was to, you know, stabilize it. So, rates are down probably 5-7 percent since we've owned them. So, we haven't had rate increases.

We've announced substantial rate increases (decreases) again that will take effect every two years. So just like we used to be able to have rate increases, we have a few of when we'll decrease their rates. Their rates will go down again in 2002. We've — pardon me, in two years.

And then on top of that, there's been an approach to eliminate coal, as Warren touched on. So fundamentally, when we acquired it, all their coal fleet was operating. We've retired a substantial portion of the coal fleet already. And by, I believe it's within a year of this, 2023, we'll have eliminated 100 percent of their use of coal in that state. And it was a substantial portion of their portfolio in the past. So — (applause) — team's done a great job. Thank you.

WARREN BUFFETT: Charlie, have anything?

CHARLIE MUNGER: No.

23. Portfolio managers Weschler and Combs roughly matching the S&P but making other contributions

WARREN BUFFETT: Station 5.

AUIDIENCE MEMBER: Yes, hi. My name is Aaron Lanni. I'm a portfolio manager at a company called Medici out of Montreal, Quebec.

My question is actually for Todd (Combs) and Ted (Weschler), if possible.

So according to Warren, you lagged slightly behind the S&P 500 since joining Berkshire. So what recent changes, if any, have you implemented to increase your odds of beating the S&P in your respective stock portfolios over the next 10 years?

WARREN BUFFETT: Yeah, I'm not sure whether Todd or Ted are here, but they — I will tell you, but then — I'll make this the final report on it.

But on March 31st, actually, one is modest ahead, one is modestly behind. But they are extraordinary managers. It has not been — it was a tough — it's been a tough period to beat the S&P and, like I say, one of them is now ahead of the S&P over that period, one's modestly behind.

They've also helped us in just all kinds of ways. What Todd has done in connection with the medical initiative, we have — with J.P. Morgan, Amazon, I mean, I don't know how many hours a week he's worked totally on that. The things they've brought to me, what Ted did in terms of the Home Capital Group where we have essentially, in a major way — well, we stabilized a

financial institution that was under attack and experiencing runs in Canada. And he did the whole thing.

I heard about that on a Monday, and on Wednesday, we put an offer before the company. And previously to that, they probably had dozens and dozens of people combing over them and, meanwhile, they were struggling. And, you know, it was remarkable what he did and I think it's appreciated in the Toronto area.

So, we are enormously better off because the two are with us. And while we have that measurement, like I say, I'll just put it this way, they're doing better than I am anyway. So, if you ask me to report on them all the time, I'll have to report and myself all the time, and I'm not — (laughs) — that would be embarrassing compared to how they do. They do better.

They're very, very smart. They've been smart with their own money over the years. They've been smart in running other people's money over the years. And they've made us a lot of money, but they made it during a market where you'd have made a lot of money in S&P as well. Charlie?

CHARLIE MUNGER: No, I'm fine.

24. Power of American Express's brand will help fend off heavy credit card competition

WARREN BUFFETT: OK. Becky?

BECKY QUICK: This question comes from Leiders Luff (PH), Yosis Luff (PH), and Dan Gorfung (PH) of Israel. And they write to both Mr. Buffett and Mr. Munger, "Do you think that AmEx's share of mind is enough to win the credit cards race? How do you see AmEx's competitive position now compared to the past? And who is the most threatening competitor now, compared to the past?

WARREN BUFFETT: Yeah, everybody's a competitor, including now Apple. It has just instituted a card, I guess, in conjunction with Goldman Sachs.

Everybody — there will always be, in my view, many, many competitors in the business. Banks can't afford to leave the field. It's a growing field. They build up receivables on it.

But I wouldn't think of the credit card business as a one-model business any more than I would think of the car business as essentially being one model. I mean, Ferrari is going to make a lot of money, but they're going to have just a portion of the market.

Well, AmEx is growing around the world with individuals, it's growing around the world with small businesses. You just saw the contract they made with Delta — which is probably the ideal partner— that runs, what, for eight or nine, whatever it may be, nine or 10 years, actually.

You know, the billings go up per capita, they go up — the coverage spreads. And they're going to have loads of competition, and they always will. But they had — you know, that's something — J.P. Morgan, you know, took on the Platinum Card. It was a competitor, and the Platinum Card had the highest renewal rates that they've had. And they increased the price I think from 450 to $550 during a competitive battle, and retention improved, and new business improved, and 68 percent or so of the new business was millennials.

I mean, it is a — it is not an identical product with anything else. And as a premium card, it has a clientele which is large. It may only be — it may be X percent of the market, it may be three-quarters of X percent, or whatever it may be. It isn't for the person that likes to have five cards and look every day at which one provides the most rewards that day or in what gas stations or something of the sort.

But it's got a very large constituency that has a renewal rate, a usage rate, that's the envy of everybody else in the industry. So, I like our American Express position very well. Charlie?

Charlie, anything on American Express?

CHARLIE MUNGER: No. (Laughter) No, I think we own the world as long as the technology stays the same.

WARREN BUFFETT: No, we — it's an interesting thing.

CHARLIE MUNGER: I have no opinion about technology.

WARREN BUFFETT: This year — (laughter) — the technology is not the whole thing. I mean, you know, fortunately. I mean, it —

If you look at credit card usage, there are a lot of different things motivating different people to use different various types of payment systems. And there's a lot of them that are growing. There are some of them that are marginal. And American Express is an extraordinary operation.

And I think this year, our share of the earnings — well, by next year, our share of the earnings of American Express will be equal to the cost of our position. We'll be earning a hundred percent on what that position cost us, and I think it will grow.

And I think the number of shares will go down and our interest will go up without us laying out a dime. So, it's —

CHARLIE MUNGER: As you say, we own the world if it doesn't change.

WARREN BUFFETT: Well, even if it changes some. The world has changed a lot. American Express was formed in 1850.

CHARLIE MUNGER: No, I'm talking about WeChat.

WARREN BUFFETT: You can talk about all kinds of competitors, but —

CHARLIE MUNGER: Yeah.

WARREN BUFFETT: But the — American Express actually was an express company, formed in 1850, like I say, by Wells and Fargo, of all people. And, you know, for a while they carried these big trunks around of valuables. And then the railroads came along and that wasn't going to work very well anymore, so they went into traveler's checks.

And it's a very interesting thing. In 1950, when I was living at 116th and Broadway, they were down at 65 Broadway, and they were the most important name in travel. They were synonymous with the integrity of their traveler's checks. And the whole company, in a record year for travel, earned $3 million. $3 million. What a bond trader earns now in my lifetime, that's what they've done with — and their hand going in was the traveler's check, which has more or less disappeared.

But American Express, the power of that brand, intelligently used, going into the credit card business, where they entered much later than the Diners Club, later than Carte Blanche, but they came to dominate the luxury end of the credit card business.

It's a fantastic story, and I'm glad we own 18 percent of it.

25. Occidental came to us for a $10B loan because we could do it quickly

WARREN BUFFETT: OK, Jay?

JAY GELB: Actually, I'm going to ask something about Occidental Petroleum. I'm surprised it hasn't been asked yet.

So, Berkshire has committed to providing $10 billion in financing in the form of an 8 percent preferred share and attached warrants for Occidental's proposed acquisition of Anadarko.

This is the first time Berkshire has committed to such a large preferred share investment since the acquisition of Heinz in 2013.

What did you find attractive about the Occidental deal, in terms of its business? And should we expect other large financing transactions in the future, as a way for Berkshire to deploy a portion of its excess cash?

WARREN BUFFETT: I don't think the Occidental transaction will be the last one we do. (Laughs)

There may be one, you know, in a month. They may be one three or four years from now. It won't be identical. I hope it's larger.

But the point is, we're very likely to get the call because we can do something that really I don't think — no institution can do it. I mean, they've got committees that have to pass on it, and they want to have so-called MAC clauses, Material Adverse Changes. They want to do this and that.

And if somebody wants a lot of certain money for a deal, you know, they've seen that I can get a call on Friday afternoon, and they can make a date with me on Saturday, and on Sunday, it's done. And they absolutely know that they have $10 billion and we're not going to tell them how to structure their transaction or do anything else. They've got it.

And there will be times in the future when something, not identical, but similar, comes along, and we're the one to call. And I hope its larger than 10 billion. But —

It could be — it could be we'll do — you know, in the next five years. It could be we'll do a lot of money, additional money in things similar to this, not identical. And it could be that nothing will happen.

But if there are any $10 billion, or $20 billion, or maybe even $50 billion two-day transactions, if there are any in the world, believe me, they'll think of Berkshire Hathaway for sure in terms of what number to call. Charlie?

CHARLIE MUNGER: Well, I like it. (Laughter)

WARREN BUFFETT: I called Charlie as soon as we made the — I called Ron Olson first because I was worried that he might have a conflict. And in about ten minutes, he had — I told him we — it had to be done by Monday night. And Cravath was being told the same thing by Occidental.

And it was very late on Monday light, but all the papers were put in order. And Munger, Tolles was in Los Angeles, and Cravath was in New York, and I was in Omaha. And I didn't do that much; Mark Hamburg did a lot of the work. He was at work on Sunday on other things when I went down (laughs) to meet with the Occidental people.

And it was the product of people who understood us, understood how we operate, and both with an incentive to put all the manpower necessary on the job.

And like I say, I think their board of directors met at 10 o'clock on Monday night to approve it. But they could announce it Tuesday morning, and that's what they wanted to do. And with Berkshire, they could do it.

26. We have no formula for assessing risk

WARREN BUFFETT: OK, station 6.

AUDIENCE MEMBER: Good afternoon, my name's Tony McCall and I'm from Montgomery, Alabama. And my question is about your disciplined risk evaluation approach and how you balance that with the fact that perseverance and determination and grit are often necessary for success.

WARREN BUFFETT: Well, I'm not — I certainly like determination and grit in the — with the people we work for.

But we don't have any formula that evaluates risk, but we certainly make our own calculation of risk versus reward in every transaction we do.

And that's true whether it's marketable securities, that's true whether it's private investments, that's true whether it's making an investment in a business.

And sometimes we're wrong, and we're going to be wrong sometimes in the future. You can't make a lot of decisions in this business without being wrong. But we don't think the procedure — or the results — would be changed favorably by having lots of committees and lots of spreadsheets and that sort of thing. It just — you know —

If I had a group under me, they would try and figure out what I wanted the answer to be, and they would tell me what I wanted to hear.

And I've watched that approach at 20 public companies. And what the CEO wants to do, they may spend a lot of time getting there, but the investment banker gets there, and the internal committees get there, — or the internal operations — get there.

The calculations are — it's the same as the insurance business with Ajit (Jain). Ajit gets calls on insurance deals, and you have to think through that deal.

The main thing is you have — are you reasonably sure that you know what you're doing? And if it gets past that hurdle, then we go on to figure out the math of gain versus loss and how much loss we can afford to take in anything. And we're willing to take what sounds like large losses if we think that the rewards are more likely and proportional. Charlie?

CHARLIE MUNGER: I've got nothing.

WARREN BUFFETT: It's very disappointing — we have no formulas around Berkshire. We don't sit down and write a bunch, you know — have people work till midnight calculating things and putting spreadsheets together.

And if the hurdle rate is 15 percent or something, having them all come out at 15.1 or 15.2, because that's what's going to happen. I mean, you're going to get the numbers you want to hear and to an extreme degree.

27. Buffett describes some of the dishonest business propositions it gets

WARREN BUFFETT: The proposals we see from the investment world — I've got to tell you about one because it illustrates what goes on.

We received a proposition the other day — and I'll disguise the numbers a little bit so somebody can pick it out — but it was a private company, and we'll say it was earning a hundred million dollars a year. But the seller of the business and the investment banker suggested that we should look at the earnings as being 110 million dollars a year, because as a private company they had to pay their top people in cash, which was expensed.

But we could pay them in stock options and things like that, which weren't expensed, or were explained as not really counting and therefore we could report 110 million dollars if we gave away something we didn't want to give away.

But by essentially — by sort of lying about our accounting, we could add 10 million dollars in earnings, and they wanted us to pay them because they couldn't do it and we could do it. And therefore — at this point, they're losing me of course, totally.

But it — it's just astounding the accounting games that are played. All the adjustments are why the place should really be — will be — earning more than before. It's a business.

We also had one that came in from a private equity firm and by a mistake we got the email that was sent to the manager from the email from the private equity firm that owned it, to the manager, in terms of making projections for it.

And they told them to add 15 percent because they said Buffett will discount it by 15 percent or 20 percent anyway. (Laughs)

So just add 15 percent to offset his conservatism. You know, it's not an elegant business, as Charlie will tell you. (Laughter)

You have any better stories, Charlie? (Laughter)

CHARLIE MUNGER: It's bad enough.

WARREN BUFFETT: OK, Andrew —

CHARLIE MUNGER: It's really very bad enough.

ANDREW ROSS SORKIN: Thank you, Warren. I think it's —

CHARLIE MUNGER: Why do we want our leading citizens lying and cheating?

28. Buffett would bet against a car company like Tesla being able to compete on auto insurance

WARREN BUFFETT: Andrew?

ANDREW: I believe it's my final question and admittedly it's a two-parter, but it's the same topic.

Elon Musk says that Tesla will start to offer insurance for its cars and can price it better than a typical insurance company because of the data it collects from all of the vehicles on the road.

You've talked about the threat of autonomous vehicles on the insurance business. But what about to GEICO of automobile themselves getting into the insurance business?

And on a very similar topic, Tesla recently announced that they are shifting to an online-only sales model. And several traditional auto dealerships are also reducing their property holdings as car buyers increasingly use smart phones and the internet to shop for cars. What does this portend for Berkshire Hathaway Automotive?

WARREN BUFFETT: Yeah. Actually, General Motors had a company for a long time called Motors Insurance Company and various companies have tried it.

I would say that the success of the auto companies getting insurance business are probably about as likely as the success of the insurance companies getting into the auto business. (Laughter)

I worry much more about Progressive than all of the auto company possibilities that I can see, in terms of getting insurance business. It's not an easy business at all.

And I would bet against any company in the auto business being any kind of an unusual success.

The idea of using telematics, in terms of studying people's drivers habits, that's spreading quite widely. And it is important to have data on how people drive, how hard they break, how much they swerve, all kinds of things.

So, I don't doubt the value of the data but I don't think that the — the auto companies will have any advantage to that. I don't think they'll make money in the insurance business.

Using the internet to shop for cars is like, you know, using the internet for shopping for everything. It's another competitor. And there's no question that people will look for better ways.

The gross margin on new cars is about 6 percent or thereabouts. So, there's not lots of room in the game. But that will be a method and that will sell some cars.

And if there are, you know — it's another competitor. But I don't think it destroys the auto dealer who takes good care of the customers and is there to service the customers.

It's not an overwhelming threat, but it's obviously something that's going to be around and will sell some cars. Charlie?

CHARLIE MUNGER: Again, nothing. (Laughter)

29. Buffett: I'm betting all my wealth on the survival of Berkshire's culture

WARREN BUFFETT: OK. Gregg?

GREGG WARREN: Warren, a lot of Berkshire's success over the years has come from the fact that you and Charlie have had the luxury of being patient, waiting for the right opportunities to come along to put excess capital to work, even if it has led to a buildup of large amounts of cash on the balance sheet.

This has historically worked out well for shareholders, as you and Charlie have been able to take full advantage of the disruptions in equity and credit markets or special situations like we saw with the Oxy deal, to negotiate deals on terms that ultimately benefit Berkshire shareholders.

That said, there is an opportunity cost attached to your decision to hold onto so much cash, one that investors have been willing to bear, primarily by forgoing a return of excess capital, dividends, and share repurchases, as well as seeing lower returns on cash holdings.

As we look forward, how certain can we be that this will still be the case once you're no longer running the show, especially if Berkshire's returns are expected to be lower over time. And is it not more likely that the next managers at Berkshire will have to manage the eventual migration of Berkshire from an acquisition and investment platform to a returning capital to shareholders vehicle?

WARREN BUFFETT: Yeah. Well, that's certainly a possibility. I mean, that's a possibility under me. It's a possibility under the successor. I mean, it's a question of can you invest truly large sums reasonably well. You can't do it as well as you can do small sums. There's no question about that.

But we will have to see how that works out over many years because certain years lots of opportunities, huge opportunities, present themselves and other years there are totally dry holes.

So that's not a judgment you can make in a one-year period or a three-year period. It's certainly a judgment you can make over time though.

And I personally — my estate will have basically nothing but Berkshire in it for some time as it gets disbursed to philanthropies. And I have a section in there which says to the trustees, in effect, to manage it — I have a section in there that says — ignore the — your exempt, from my standpoint, from the law that trustees normally should diversify and do all that sort of thing.

And I want the entire amount that they have to be kept in Berkshire as they distribute it over time to the philanthropies. And I don't worry at all about the fact — I would like to have a very large sum go to the philanthropies, and I don't worry at about the fact that it essentially will all be in Berkshire. And I'm willing to make that decision while I'm alive, which will continue for some years after I die.

So, I have a lot of confidence in the ability of the Berkshire culture to endure and that we have the right people to make sure that that happens. I'm betting my entire net worth on that. And that doesn't give me pause at all.

I rewrite my will every few years, and write it the same way in respect to the Berkshire holdings. Charlie?

CHARLIE MUNGER: I don't own any indexes. And I have always been willing to own just two or three stocks. And I have not minded that everybody who teaches finance in law school and business school teaches that what I'm doing is wrong. It isn't wrong. It's worked beautifully.

I don't think you need a portfolio of 50 stocks if you know what you're doing. And I hope my heirs will just sit.

WARREN BUFFETT: My heirs hope that I'll change my will. (Laughter)

30. "Having the right partners in life is enormously important"

WARREN BUFFETT: OK, station 7.

AUDIENCE MEMBER: Hi. Good afternoon, Mr. Buffett and Mr. Munger. My name is Bill He (PH), and I'm from Vancouver, Canada. You two make up an iconic duo. And growing up, I found your investment strategies very admirable. And so, my question is, how do you deal with conflicts when they arise between the two of you?

WARREN BUFFETT: Are you applying personal conflicts in terms of doing something ourselves versus having Berkshire, do it? Or — oh, between the two of you. I'm just in —

Charlie and I literally, and people find this hard to believe, but in 60 years we've never had an argument. We have disagreed about things and we'll probably keep occasionally disagreeing about this or that.

But if you define an argument as something where emotion starts entering into it, or anger or anything of the sort, it just doesn't happen.

I think that Charlie is smarter than I am, but I also think that there are certain things where I've spent more on them than he has. And sometimes we both think we're right. And generally, I get my way because Charlie is willing to do it that way and he's never second-guessed me when things have been wrong. And I wouldn't dream of second-guessing him if he were doing something that was wrong — that turned out to be wrong. We will never have a conflict, basically. Charlie?

CHARLIE MUNGER: Well, the issue isn't how long — how we get along, the issue is how is the company going to work when we're gone? And the answer is fine. It's going to work fine.

WARREN BUFFETT: We're lucky that, you know, I ran into him when I was, what, 28 years old. And — we both worked in the same grocery store and he grew up less than a block away from where I now live and everything. But I did not know who Charlie Munger was — (laughs) — until I was 28.

But clearly, we're in sync in how we see the world. And we're in sync on business decisions, basically.

Charlie would do fewer things than I would, but that's because I'm spending my time on this while he's designing dormitories or something. (Laughter)

And we both keep busy in our own ways. And we have a lot of fun dividing the labor like we do.

But you really want to work — I mean, having the right partners in life, particularly the right spouse, but having the right partners in life is enormously important. I mean, it's more fun with a partner, both in personal life and in business life. And you probably get more accomplished, too.

But you just have a better time. It would not be any fun to do work in a little room and make a ton of money trading around securities but never working with another human being.

So, I recommend finding — well, Charlie gave some advice in the movie, finding the best person that will have you or something like that. (Laughs) Sort of a limited objective.

CHARLIE MUNGER: But it's not hard to be happy if you're a collector and don't run out of money.

Collecting is intrinsically fun. Just think who — how many people who you've known your whole life who were collectors who didn't run out of money, who weren't happy collecting? That's why we've been collecting all our lives.

You know, it's a very interesting thing. There's always a new rock to be turned over. And it's interesting.

WARREN BUFFETT: Yeah. And in a certain way we've collected friends that make our lives better and that we have a good time with. And it's very important, you know, who you select as your heroes or friends. And I've been lucky in this. I mean, it was only because of the doctor named Eddie Davis and his wife that Charlie and I even met.

But if you keep doing enough things, some will work out very lucky. And the best ones are ones that involve lifelong involvement with other people.

We've got some in our directors, a number of our directors, that have had similar impacts on me.

So, I recommend that you look for somebody better than you are and then try to be like they are.

CHARLIE MUNGER: It's funny, you know, we've lost people along the way. And when I lost Warren's secretary I thought, "Oh, my God. She was so wonderful. Gladys (Kaiser). We'll never get another one." Becki (Amick) is better. (Laughter)

And then we had Verne McKenzie, who was a wonderful chief financial officer. He's gone and the current incumbent (Marc Hamburg) is better. We've been very lucky. And maybe the shareholders will be lucky a few more times. (Laughter)

31. Expand you circle of competence if you can, but don't force it

WARREN BUFFETT: OK. Station 8. (Laughter)

AUDIENCE MEMBER: Hi, Warren. Hi, Charlie. My name is Jacob (PH). I'm a shareholder from China and also a proud graduate of Columbia Business School. Thanks for having us here. (Cheers)

My question is, our world is changing at a faster pace today versus 40 years ago and even more so going forward. And in this context, for each of us individually, should we expand our circle of competence continuously over time? Or should we stick with the existing circle but risk having a shrinking investment universe? Thank you.

WARREN BUFFETT: Well, obviously you should, under any conditions, you should expand your circle of competence —

CHARLIE MUNGER: If you can.

WARREN BUFFETT: If you can. Yeah. (Laughter)

And I've expanded mine a little bit over time. But —

CHARLIE MUNGER: If you can't — I'd be pretty cautious.

WARREN BUFFETT: Yeah. You can't force it. You know. If you told me that I had to, you know, become an expert on physics or, you know —

CHARLIE MUNGER: Dance maybe the lead in a ballet, Warren. That would be a sight. (Laughter)

WARREN BUFFETT: Yeah, well. That's one I hadn't really —

CHARLIE MUNGER: (Inaudible) now.

WARREN BUFFETT: That's one you may be thinking about, but I— (laughter) — it hadn't even occurred to me. (Laughter)

But, you know, it's ridiculous. That doesn't mean you can't expand it at all. I mean, I did learn about some things as I've gone along in a few businesses.

In some cases, I've learned that I'm incompetent, which is actually a plus, then you've discarded that one.

But it doesn't really — the world is going to change. And it's going to keep changing. It's changing every day. And that makes it interesting. You know.

And as it changes, certainly within what you think is your present existing circle, you have to — you should be the master of figuring that one out or it really isn't your circle of competence.

And if you get a chance to expand it somewhat as you go along —

I've learned some about the energy business from Walter (Scott) and Greg (Abel) as we've worked together, but I'm not close to their level of competence on it. But I do know more than I used to know. And so, you get a chance to expand it a bit.

Usually, I would think normally your core competence is probably something that sort of fits the way the mind has worked.

Some people have what I call a “money mind.” And they will work well in certain types of money situations.

It isn’t so much a question of IQ. The mind is a very strange thing. And people have specialties, whether in chess or bridge. I see it in different people that can do impossible — what seem to me — impossible things. And they’re really kind of, as Charlie would say, stupid in other areas — (laughs) — you know.

So just keep working on it. But don’t think you have to increase it and therefore start bending the rules. Anything further, Charlie?

CHARLIE MUNGER: No.

32. It’s easy to make 50% on a million, but much more difficult on larger amounts

WARREN BUFFETT: Station 9. We’re just about — yeah, we got time for a couple more.

AUDIENCE MEMBER: My name is John Dorso (PH), and I’m from New York.

Mr. Buffett, you’ve said that you could return 50 percent per annum, if you were managing a one-million-dollar portfolio. What type of strategy would you use? Would you invest in cigar butts, i.e., average businesses at very cheap prices? Or would it be some type of arbitrage strategy? Thank you.

WARREN BUFFETT: It might well be the arbitrage strategy, but in a very different, perhaps, way than customary arbitrages, a lot of it.

One way or another, I can assure you, if Charlie was working with a million, or I was working with a million, we would find a way to make that with essentially no risk, not using a lot of leverage or anything of the sort.

But you change the one million to a hundred million and that 50 goes down like a rock.

There are little fringe inefficiencies that people don’t spot. And you do get opportunities occasionally to do. But they don’t really have any applicability to Berkshire. Charlie?

CHARLIE MUNGER: Well, I agree totally. It’s just you used to say that large amounts of money, they develop their own anchors. You’re just — it gets harder and harder.

I’ve just seen genius after genius with a great record and pretty soon they got 30 billion and two floors of young men and away goes the good record. That’s just the way it works.

WARREN BUFFETT: When Charlie —

CHARLIE MUNGER: It's hard as the money goes up.

WARREN BUFFETT: When Charlie was a lawyer, initially, I mean, you were developing a couple of real estate projects. I mean, if you really want to make a million dollars — or 50 percent on a million — and you're willing to work at it — that's doable. But it just has no applicability to managing huge sums. Wish it did, but it doesn't.

CHARLIE MUNGER: Yeah. Lee Louley (PH), using nothing but the float on his student loads, had a million dollars, practically, shortly after he graduated as a total scholarship student. He found just a few things to do. And did them.

33. We've tried, but See's Candies gets no traction outside California

WARREN BUFFETT: OK. Station 10.

AUDIENCE MEMBER: Hello, Warren and Charlie. I'm Luis Cobo (PH) from Panama. I'm a proud Berkshire Hathaway shareholder since 10 years ago.

I've been looking at See's Candies, and I'm a pretty good fan of them. And I see Charlie is as well throughout our meeting.

And even with all our consumption — and you know, the company has given us generous profits over the past decades.

Why do you think the company has not grown to the scale of Mars or Hershey's, and what do you think we could do to make this company grow and become a bigger part of our company, being such an amazing product?

WARREN BUFFETT: Well, we've probably had a dozen or so ideas over the years. And we used to really focus on it because it was a much more sizable part of our business. In fact, it was practically our only business aside from insurance.

And like I say, we've had 10 or 12 ideas. Some of them we tried more than once. And as we got a new manager they've tried them. And the truth is none of them really work.

And the business is extraordinarily good in a very small niche. Boxed chocolates are something that everybody likes to receive, or maybe give it as a gift, both sides of it.

And relatively few of the people go out and buy to consume themselves. If I leave a box of chocolates open at the office — we've only got 25 people — but it's gone, you know, almost immediately.

If I take it as a gift to somebody, they're happy to get it. And if you leave the box open at a dinner party again, they're all gone. But those same people that so readily grab it when it's right

there in front of them, do not walk out to a candy store very often and buy it just to eat themselves. They're not going to buy. It's very much a gift product.

It does not grow worldwide. Very interesting thing. People in these — last time I checked, people in the west prefer milk chocolate, people in the east prefer dark chocolate. People in the west like big, chunky pieces. People in the east will take miniatures.

We've tried to move it geographically many, many, many, many times. Because it would be so wonderful if it — when it works it works wonderfully. But it doesn't travel that well.

If we open a store in the east, we get enormous traffic for a while and everybody says, "We've been waiting for you to come." And then it finally — we end up with a store that does X pounds per year when we need one and a half X in the same square footage to make terrific returns.

And we've tried everything because the math is so good when it works. And overall, we have a business that doesn't — chocolate consumption generally doesn't grow that much. But yeah, go ahead Charlie —

CHARLIE MUNGER: Yeah, well, we failed in turning our little candy company into Mars or Hershey's for the same reason that you fail to get the Nobel Prize in physics and achieve immortality. (Laughter)

It's too tough for us. (Laughter)

WARREN BUFFETT: But we put 25 million dollars into it. And it's given us over two billion dollars of pre-tax income, well over two billion. And we've used it to buy other businesses. And if we were the typical company and had bought that business and tried desperately to use all the retained earnings within the candy business I think we'd have fallen on our face.

I think that it just illustrates that all these formulas, you know, you learn or that having a strategic plan to use all the capital or something — some businesses work in a fairly limited area. Others really play out over this —

Dr. Pepper, you know, has — I don't know what the percentage is now, but it might be at 10 or 12 percent market share or something like that in Dallas or maybe it's eight. And then you go to Detroit or Boston and it's less than 1 percent. I'm not sure about the numbers currently.

But you'd think in a mobile society, you know, with Dr. Pepper having been around since the time that Coke was founded in 1886 — it's amazing how certain things travel, certain things don't travel.

You know, candy bars — you mentioned Hershey. I mean, Cadbury doesn't do that well here and Hershey doesn't do that well in the U.K. And here we are, we all look alike. But somehow, we eat different candy bars. It's very interesting to observe.

And the idea that you have some formula for businesses that provide that each one should pursue the course they're on because they made it in X, they should try to find other ways to make it in X. We're quite willing to find it in A, B, C, D, E, or F — the money is fungible.

And I think, actually, it has worked very much to our advantage to have that philosophy. So, anything further, Charlie?

CHARLIE MUNGER: I once told a very great man at dinner after he'd written a very great book, I said, "You know, you're never going to write another great book like that." And he was deeply offended. And I've read his four subsequent books and I'm totally right. (Laughter)

To write one great book is a lot to do in one lifetime. And people aren't holding back on you when they don't do more. It's hard.

WARREN BUFFETT: Yeah. But you ought to make the most of the first one you got. (Laughs)

CHARLIE MUNGER: Yeah.

WARREN BUFFETT: Yeah, you're lucky. You know.

CHARLIE MUNGER: Yes.

WARREN BUFFETT: And we were very fortunate. I would've blown the chance to buy See's Candy, but Charlie said, "Don't be so cheap," basically. And we still got it at a pretty good price. And we learned a lot —

CHARLIE MUNGER: It's amazing how much we've learned over the years.

WARREN BUFFETT: Yeah, we've learned —

CHARLIE MUNGER: And if we hadn't, the record would be so much worse.

WARREN BUFFETT: Yeah.

CHARLIE MUNGER: At any given time, what we already knew was not going to be enough to take us to the next step. That's what makes it difficult. Think of all the people you know that have tried to take one extra step and have fallen off a cliff.

WARREN BUFFETT: Well, on that happy note — (laughter) — we will conclude the meeting. (Applause and cheering)

Thank you. Thank you.

Thank you.

Thank you, but save of it for next year. We may need it then.

Just give us a carry-forward on the rest of it, and thank you.

We'll come back at 3:45. We will conduct the business meeting, and it doesn't — we have no — nothing on the proxy to vote on, but we will be back here in 15 minutes.

And if you enjoy a process, you can stick around and watch us reelect our board.

Thank you. Thanks for coming.

34. Formal business meeting and election of board members

WARREN BUFFETT: The meeting will now come to order.

I'm Warren Buffett, chairman of the company and I welcome you to this 2019 — 2019 annual meeting of shareholders.

This morning I introduced the Berkshire Hathaway directors who are present.

Also with us today are partners in the firm of Deloitte and Touche, our auditors.

Jennifer Tselentis is the assistant secretary of Berkshire Hathaway and she will make a written record of the proceedings.

Becki Amick has been appointed inspector of elections at this meeting, and she will certify to the count of votes cast in the election for directors and the motions to be voted upon at this meeting.

The named proxy holders for this meeting are Walter Scott and Marc Hamburg.

Does the assistant secretary have a report of the number of Berkshire shares outstanding entitled to vote and represented at the meeting?

Jennifer?

JENNIFER TSELENTIS: Yes, I do. As indicated in the proxy statement that accompanied the notice of this meeting that was sent to all shareholders of record on March 6, 2019, the record date for this meeting, there were 724,765 shares of Class A Berkshire Hathaway common stock outstanding, with each share entitled to one vote on motions considered at the meeting, and 1,371,697,551 shares of Class B Berkshire Hathaway common stock outstanding, with each vote entitled to 1/10,000th of one vote on motions considered at the meeting.

Of that number 503,181 Class A shares and 839,707,642 Class B shares are represented at this meeting by proxies returned through Thursday evening, May 2nd.

WARREN BUFFETT: Thank you. That number represents a quorum and we will therefore directly proceed with the meeting.

First order of business will be a reading of the minutes of the last meeting of shareholders, and I recognize Mr. Walter Scott, who will place a motion before the meeting.

WALTER SCOTT: I move that the reading of the minutes of the last meeting of shareholders be dispensed with and the minutes be approved.

WARREN BUFFETT: Do I hear a second?

RON OLSON: I second the motion.

WARREN BUFFETT: Motion has been moved and seconded. We will vote on the motion by voice vote. All those in favor say aye.

VOICES: Aye.

WARREN BUFFETT: Opposed? The motion's carried.

Next item of business is to elect directors. If a shareholder is present who did not send in a proxy or wishes to withdraw a proxy previously sent in, you may vote in person for the election of directors and other matters to be considered in this meeting.

Please identify yourselves to one of the meeting officials in the aisles so that you can receive a ballot.

I recognize Mr. Walter Scott to place a motion before the meeting with respect to election of directors.

WALTER SCOTT: I move that Warren Buffett, Charles Munger, Greg Abel, Howard Buffett, Stephen Burke, Susan Decker, William Gates, David Gottesman, Charlotte Guyman, Ajit Jain, Thomas Murphy, Ronald Olson, Walter Scott, and Meryl Witmer be elected as directors.

WARREN BUFFETT: Is there a second?

RON OLSON: I second the motion.

WARREN BUFFETT: It's been moved and seconded that Warren Buffett, Charles Munger, Greg Abel, Howard Buffett, Steve Burke, Susan Decker, Bill Gates, David Gottesman, Charlotte

Guyman, Ajit Jain, Tom Murphy, Ron Olson, Walter Scott, and Meryl Witmer be elected as directors.

Are there any other nominations? Or any discussion? The nominations are ready to be acted upon. If there are any shareholders voting in person they should now mark the ballot on the election of directors and deliver that ballot to one of the meeting officials in the aisles.

Miss Amick, when you are ready you may give your report.

BECKI AMICK: My report is ready. The ballot of the proxy holders in response to proxies that were received through last Thursday evening, cast not less than 543,703 votes for each nominee. That number exceeds a majority of the number of the total votes of all Class A and Class B shares outstanding.

The certification required by Delaware law of the precise count of the votes will be given to the secretary to be placed with the minutes of this meeting.

WARREN BUFFETT: Thank you, Miss Amick. Warren Buffett, Charles Munger, Greg Abel, Howard Buffett, Steve Burke, Susan Decker, Bill Gates, David Gottesman, Charlotte Guyman, Ajit Jain, Tom Murphy, Ron Olson, Walter Scott, and Meryl Witmer have been elected as directors.

We now — we now have a motion from Walter Scott.

WALTER SCOTT: I move the meeting be adjourned.

WARREN BUFFETT: Is there a second?

RON OLSON: I second the motion.

WARREN BUFFETT: A motion to adjourn has been made and seconded. We will vote by voice. Is there any discussion? If not, all in favor say aye.

VOICES: Aye.

File this return with Collector of Internal Revenue on or before March 15, 1945. Any balance of tax due (item 8, below) must be paid in full with return. See separate Instructions for filling out return.

FORM 1040
Treasury Department
Internal Revenue Service

U. S. INDIVIDUAL INCOME TAX RETURN
FOR CALENDAR YEAR 1944

1944

or fiscal year beginning JANUARY 1, 1944, and ending JANUARY 1, 1945

EMPLOYEES.—Instead of this form, you may use your Withholding Receipt, Form W-2 (Rev.), as your return, if your total income was less than $5,000, consisting wholly of wages shown on Withholding Receipts or of such wages and not more than $100 of other wages, dividends, and interest.

Do not write in these spaces

File Code

Serial No.

District

(Cashier's Stamp)

NAME WARREN E. BUFFETT
(PLEASE PRINT. If this return is for a husband and wife, use both first names)

ADDRESS [redacted]
(PLEASE PRINT. Street and number or rural route)

Washington, D. C.
(City or town, postal zone number) (State)

Social Security No. (if any)

Your Exemptions

1. List your own name. If married and your wife (or husband) had no income, or if this is a joint return of husband and wife, list name of your wife (or husband). List names of other close relatives with 1944 incomes of less than $500 who received more than one-half of their support from you. If this is a joint return of husband and wife, list dependent relatives of both.

NAME (Please print)	Relationship	NAME (Please print)	Relationship
Your name Warren E. Buffett	x x x x x x x x		

Your Income

2. Enter your total wages, salaries, bonuses, commissions, and other compensation received in 1944, BEFORE PAY-ROLL DEDUCTIONS for taxes, dues, insurance, bonds, etc. Members of armed forces and persons claiming traveling or reimbursed expenses, see Instruction 2.

PRINT EMPLOYER'S NAME	WHERE EMPLOYED (CITY AND STATE)	AMOUNT
WASHINGTON Newspaper routes. Employed as		$
Independent merchant.		364 00

Enter total here → $ 364 00

3. Enter here the total amount of your dividends and interest (including interest from Government obligations unless wholly exempt from taxation) 228 50

4. If you received any other income, give details on page 3 and enter the total here 00

5. Add amounts in items 2, 3, and 4, and enter the total here $ 592 50

If item 5 includes income of both husband and wife, show husband's income here, $; wife's income here, $

How to Figure Your Tax

IF YOUR INCOME WAS LESS THAN $5,000.—You may find your tax in the tax table on page 2. This table, which is provided by law, is based on the same tax rates as are used in the Tax Computation on page 4. The table automatically allows about 10 percent of your total income for charitable contributions, interest, taxes, casualty losses, medical expenses, and miscellaneous expenses. If your expenditures and losses of these classes amount to more than 10 percent, it will usually be to your advantage to itemize them and compute your tax on page 4.

IF YOUR INCOME WAS $5,000 OR MORE.—Disregard the tax table and compute your tax on page 4. You may either take a standard deduction of $500 or itemize your deductions, whichever is to your advantage.

HUSBAND AND WIFE.—If husband and wife file separate returns, and one itemizes deductions, the other must also itemize deductions.

Tax Due or Refund

6. Enter your tax from table on page 2, or from line 15, page 4 $ 7 00

7. How much have you paid on your 1944 income tax?
   (A) By withholding from your wages (Attach Withholding Receipts, Form W-2) $ 00
   (B) By payments on 1944 Declaration of Estimated Tax 00

Enter total here →

8. If your tax (item 6) is larger than payments (item 7), enter BALANCE OF TAX DUE here $ 7 00

9. If your payments (item 7) are larger than your tax (item 6), enter the OVERPAYMENT here $

Check (✓) whether you want this overpayment: Refunded to you ☐; or Credited on your 1945 estimated tax ☐

If you filed a return for a prior year, what was the latest year? No

To which Collector's office was it sent? XX

To which Collector's office did you pay amount claimed in item 7 (B), above? XX

Is your wife (or husband) making a separate return for 1944? XX ("Yes" or "No")

If "Yes," write below:

Name of wife (or husband) XX

Collector's office to which sent XX

I declare under the penalties of perjury that this return (including any accompanying schedules and statements) has been examined by me and to the best of my knowledge and belief is a true, correct, and complete return.

(Signature of person (other than taxpayer or agent) preparing return) (Date)

(Signature of taxpayer) (Date)

PAPER ROUTES

July- 5 Sunday		$42.00
1511 Post	$32.00	
Afternoon Herald	$10.00	
August		$52.00
1511 Post	$42.00	
Afternoon Herald	$10.00	
September		$70.00
1511 Post	$42.00	
7 Herald	$18.00	
Afternoon Herald	$10.00	
October- 5 Sunday		$73.00
1511 Post	$32.00	
6 Herald	$14.00	
7 Herald	$17.00	
Afternoon Herald	$10.00	
November		$83.00
1511 Post	$42.00	
6 Herald	$15.00	
7 Herald	$19.00	
Afternoon Herald	$10.00	
Dedember-Same as November		$86.00
		$409.00

EXPENSES:

Watch repair	$10.	
Bicycle -Misc	$35	45.00
	Net	364.00

Reprinted from

The COMMERCIAL *and* FINANCIAL CHRONICLE

Thursday, December 6, 1951

The Security I Like Best

WARREN E. BUFFETT

Buffett-Falk & Co., Omaha, Nebr.

Government Employees Insurance Co.

Full employment, boomtime profits and record dividend payments do not set the stage for depressed security prices. Most industries have been riding this wave of prosperity during the past five years with few ripples to disturb the tide.

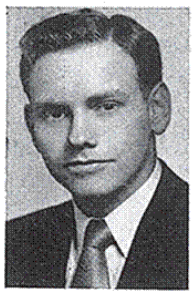

Warren E. Buffett

The auto insurance business has not shared in the boom. After the staggering losses of the immediate postwar period, the situation began to right itself in 1949. In 1950, stock casualty companies again took it on the chin with underwriting experience the second worst in 15 years. The recent earnings reports of casualty companies, particularly those with the bulk of writings in auto lines, have diverted bull market enthusiasm from their stocks. On the basis of normal earning power and asset factors, many of these stocks appear undervalued.

The nature of the industry is such as to ease cyclical bumps. Auto insurance is regarded as a necessity by the majority of purchasers. Contracts must be renewed yearly at rates based upon experience. The lag of rates behind costs, although detrimental in a period of rising prices as has characterized the 1945-1951 period, should prove beneficial if deflationary forces should be set in action.

Other industry advantages include lack of inventory, collection, labor and raw material problems. The hazard of product obsolescence and related equipment obsolescence is also absent.

Government Employees Insurance Corporation was organized in the mid-30's to provide complete auto insurance on a nationwide basis to an eligible class including: (1) Federal, State and municipal government employees; (2) active and reserve commissioned officers and the first three pay grades of non-commissioned officers of the Armed Forces; (3) veterans who were eligible when on active duty; (4) former policyholders; (5) faculty members of universities, colleges and schools; (6) government contractor employees engaged in defense work exclusively, and (7) stockholders.

The company has no agents or branch offices. As a result, policyholders receive standard auto insurance policies at premium discounts running as high as 30% off manual rates. Claims are handled promptly through approximately 500 representatives throughout the country.

The term "growth company" has been applied with abandon during the past few years to companies whose sales increases represented little more than inflation of prices and general easing of business competition. GEICO qualifies as a legitimate growth company based upon the following record:

Year—	Premiums Written	Policyholders
1936---	$103,696.31	3,754
1940---	768,057.86	25,514
1945---	1,638,562.09	51,697
1950---	8,016,975.79	143,944

Of course the investor of today does not profit from yesterday's growth. In GEICO's case, there is reason to believe the major portion of growth lies ahead. Prior to 1950, the company was only licensed in 15 of 50 jurisdictions including D. C. and Hawaii. At the beginning of the year there were less than 3,000 policyholders in New York State. Yet 25% saved on an insurance bill of $125 in New York should look bigger to the prospect than the 25% saved on the $50 rate in more sparsely settled regions.

As cost competition increases in importance during times of recession, GEICO's rate attraction should become even more effective in diverting business from the brother-in-law. With insurance rates moving higher due to inflation, the 25% spread in rates becomes wider in terms of dollars and cents.

There is no pressure from agents to accept questionable applicants or renew poor risks. In States where the rate structure is inadequate, new promotion may be halted.

Probably the biggest attraction of GEICO is the profit margin advantage it enjoys. The ratio of underwriting profit to premiums earned in 1949 was 27.5% for GEICO as compared to 6.7% for the 135 stock casualty and surety companies summarized by Best's. As experience turned for the worse in 1950, Best's aggregate's profit margin dropped to 3.0% and GEICO's dropped to 18.0%. GEICO does not write all casualty lines; however, bodily injury and property damage, both important lines for GEICO, were among the least profitable lines. GEICO also does a large amount of collision writing, which was a profitable line in 1950.

During the first half of 1951, practically all insurers operated in the red on casualty lines with bodily injury and property damage among the most unprofitable. Whereas GEICO's profit margin was cut to slightly above 9%, Massachusett's Bonding & Insurance showed a 16% loss, New Amsterdam Casualty an 8% loss, Standard Accident Insurance a 9% loss, etc.

Because of the rapid growth of GEICO, cash dividends have had to remain low. Stock dividends and a 25-for-1 split increased the outstanding shares from 3,000 on June 1, 1948, to 250,000 on Nov. 10, 1951. Valuable rights to subscribe to stock of affiliated companies have also been issued.

Benjamin Graham has been Chairman of the Board since his investment trust acquired and distributed a large block of the stock in 1948. Leo Goodwin, who has guided GEICO's growth since inception, is the able President. At the end of 1950, the 10 members of the Board of Directors owned approximately one-third of the outstanding stock.

Earnings in 1950 amounted to $3.92 as contrasted to $4.71 on the smaller amount of business in 1949. These figures include no allowance for the increase in the unearned premium reserve which was substantial in both years. Earnings in 1951 will be lower than 1950, but the wave of rate increases during the past summer should evidence themselves in 1952 earnings. Investment income quadrupled between 1947 and 1950, reflecting the growth of the company's assets.

At the present price of about eight times the earnings of 1950, a poor year for the industry, it appears that no price is being paid for the tremendous growth potential of the company.

This is part of a continuous forum appearing in the "Chronicle," in which each week, a different group of experts in the investment and advisory field from all sections of the country participate and give their reasons for favoring a particular security.

The Security I Like Best

A continuous forum in which, each week, a different group of experts in the investment and advisory field from all sections of the country participate and give their reasons for favoring a particular security

(The articles contained in this forum are not intended to be, nor are they to be regarded, as an offer to sell the securities discussed.)

WARREN E. BUFFETT
Buffett-Falk & Co., Omaha, Nebr.

Western Insurance Securities Common Stock

Again my favorite security is the equity stock of a young, rapidly growing and ably managed insurance company. Although Government Employees Insurance Co., my selection of 15 months ago, has had a price rise of more than 100%, it still appears very attractive as a vehicle for long-term capital growth.

Warren E. Buffett

Rarely is an investor offered the opportunity to participate in the growth of two excellently managed and expanding insurance companies on the grossly undervalued basis which appears possible in the case of the Western Insurance Securities Company. The two operating subsidiaries, Western Casualty & Surety and Western Fire, wrote a premium volume of $26,009,929 in 1952 on consolidated admitted assets of S29,590,142. Now licensed in 38 states, their impressive growth record, both absolutely and relative to the industry, is summarized in Table I below.

Western Insurance Securities owns 92% of Western Casualty and Surety, which in turn owns 99.95% of Western Fire Insurance. Other assets of Western Insurance Securities are minor, consisting of approximately $180,000 in net quick assets. The capitalization consists of 7,000 shares of $100 par 6% preferred, callable at $125; 35,000 shares of Class A preferred, callable at $60, which is entitled to a $2.50 regular dividend and participates further up to a maximum total of $4 per share; and 50,000 shares of common stock. The arrears on the Class A presently amount to $36.75.

The management headed by Ray DuBoc is of the highest grade. Mr. DuBoc has ably steered the company since its inception in 1924 and has a reputation in the insurance industry of being a man of outstanding integrity and ability. The second tier of executives is also of top caliber. During the formative years of the company, senior charges were out of line with the earning power of the enterprise. The reader can clearly perceive why the same senior charges that caused such great difficulty when premium volume ranged about the $3,000,000 mark

Formatted by Max Olson from the blog Stableboy Selections

would cause little trouble upon the attainment of premium volume in excess of $26,000,000.

Adjusting for only 25% of the increase in the unearned premium reserve, earnings of $1,367,063 in 1952, a very depressed year for auto insurers, were sufficient to cover total senior charges of $129,500 more than 10 times over, leaving earnings of $24.74 on each share of common stock.

It is quite evident that the common stock has finally arrived, although investors do not appear to realize it since the stock is quoted at less than twice earnings and at a discount of approximately 55% from the December 31, 1952 book value of $86.26 per share. Table II indicates the postwar record of earnings and dramatically illustrates the benefits being realized by the common stock because of the expanded earnings base. The book value is calculated with allowance for a 25% equity in the unearned premium reserve and is after allowance for call price plus arrears on the preferreds.

Since Western has achieved such an excellent record in increasing its industry share of premium volume, the reader may well wonder whether standards have been compromised. This is definitely not the case. During the past ten years Western's operating ratios have proved quite superior to the average multiple line company. The combined loss and expense ratios for the two Western companies as reported by the Alfred M. Best Co. on a case basis are compared in Table III with similar ratios for all stock fire and casualty companies.

The careful reader will not overlook the possibility that Western's superior performance has been due to a concentration of writings in unusually profitable lines. Actually the reverse is true. Although represented in all major lines, Western is still primarily an automobile insurer with 60% of its volume derived from auto lines. Since automobile underwriting has proven generally unsatisfactory in the postwar period, and particularly so in the last three years, Western's experience was even more favorable relative to the industry than the tabular comparison would indicate.

Western has always maintained ample loss reserves on unsettled claims. Underwriting results in the postwar period have shown Western to be overreserved at the end of each year. Triennial examinations conducted by the insurance commissioners have confirmed these findings.

Turning to their investment picture, we of course find a growth in invested assets and investment income paralleling the growth in premium volume. Consolidated net assets have risen from $5,154,367 in 1940 to their present level of $29,590,142. Western follows an extremely conservative investment policy, relying upon growth in premium volume for expansion in investment income. Of the year-end portfolio of $21,889,243, governments plus a list of well diversified high quality municipals total $20,141,246 or 92% and stocks only $1,747,997 or 8%. Net investment income of $474,472 in 1952 was equal to $6.14 per share of Western Insurance common after minority interest and assuming senior charges were covered entirely from investment income.

The casualty insurance industry during the past several years has suffered staggering losses on automobile

insurance lines. This trend was sharply reversed during late 1952. Substantial rate increases in 1951 and 1952 are being brought to bear on underwriting results with increasing force as policies are renewed at much higher premiums. Earnings within the casualty industry are expected to be on a very satisfactory basis in 1953 and 1954.

Western, while operating very profitably during the entire trying period, may be expected to report increased earnings as a result of expanding premium volume, increased assets, and the higher rate structure. An earned premium volume of $30,000,000 may be conservatively expected by 1954. Normal earning power on this volume should average about $30.00 per share, with investment income contributing approximately $8.40 per share after deducting all senior charges from investment income.

The patient investor in Western Insurance common can be reasonably assured of a tangible acknowledgement of his enormously strengthened equity position. It is well to bear in mind that the operating companies have expanded premium volume some 550% in the last 12 years. This has required an increase in surplus of 350% and consequently restricted the payment of dividends. Recent dividend increases by Western Casualty should pave the way for more prompt payment on arrearages. Any leveling off of premium volume will permit more liberal dividends while a continuation of the past rate of increase, which in my opinion is very unlikely, would of course make for much greater earnings.

Operating in a stable industry with an excellent record of growth and profitability, I believe Western Insurance common to be an outstanding vehicle for substantial capital appreciation at its present price of about 40. The stock is traded over-the-counter.

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Sports, Page 12)

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famed bolo punch was thrown often.

A slim crowd of 4,077, who paid a gross gate of $13,419.20, favored the Californian throughout, resulting in more boos than cheers during the bout.

Gavilan received 30 per cent of the net gate of $11,182.08, Fuentes 20 per cent. Each received $3,600 from the TV receipts.

The "Mosquito Coast" of Central America derives its name from the Miskito Indians and not from mosquitoes, says the National Geographic Society.

Restless Nights

When kidney function slows down, many folks complain of nagging backache, headaches, dizziness and loss of pep and energy. Don't suffer restless nights with these discomforts if reduced kidney function is getting you down—due to such common causes as stress and strain, over-exertion or exposure to cold. Minor bladder irritations due to cold or wrong diet may cause getting up nights or frequent passages.

Don't neglect your kidneys if these conditions bother you. Try Doan's Pills—a mild diuretic. Used successfully by millions for over 50 years. It's amazing how many times Doan's give happy relief from these discomforts—help the 15 miles of kidney tubes and filters flush out waste. Get Doan's Pills today!

FRIDAY, JULY
8 p. m.

Come early, so you can examine the merchandise. It will be on display after 5 p. m. Merchandise consigned by Universal Wholesale Co. offered for sale at

S. E. KANSAS SALES CO.
Fort Scott, Kansas

WESTERN INSURANCE SECURITIES

We will pay $60 per share for the common stock of the Western Insurance Securities Co. Should you have an interest in selling any stock at this price, write or call collect to Warren Buffett.

Buffet-Falk & Co.
Established 1931
445 Omaha Nat'l Bank Bldg. JAckson 3504
OMAHA, NEBR.

Operates in Ala., Del., D. C., Ky., S. C., N. Y., N. J., Pa., Md., Tenn., Mass., Me., N. H., Vt., Conn., Ill., Mich., Fla., R. I., Cal., Ind., Ohio, Va., Wis., W. Va., Ga., N. C., Kans., Mo., Ark., Ia., Minn., Neb., Miss., Tex., La. and Okla.

Officers: J. L. Train, Pres.; F. S. Kellogg, W. B. Foster, J. P. Craugh, Vice-Pres.; O. J. McKeown, Treas.; R. E. Hoffman, Sec.

Directors: J. F. Amos, W. B. Foster, M. K. Hart, F. S. Kellogg, J. P. Craugh, J. L. Train, A. H. Crossman, Gilbert Butler, O. J. McKeown, H. W. Millar, R. S. Eaton, H. J. Noble, N. J. Gould, D. J. Grant, J. R. Shoemaker, E. W. Dunmore, A. M. Evans, J. D. Hague, E. W. Shineman, Frederick Delany, R. E. Hoffman.

Annual Meeting: Fourth Monday in February.

No. of Employees: Dec. 31, 1953, 975.

Home Office: 28 Devereux St., Utica, N. Y.

Net Premium Volume:

	Written in 1954	In Force Dec. 31, '54
Fire	$15,270	$51,891
Ext. coverage	3,215	19,972
Torn., cyc., etc.	10	104
Sprinkler leak.	58	252
Impl. riot, etc.	cr 24	27
Earthquake	6	112
Inland marine	941	2,304
Workmen's comp.	10,147,648	6,216,448
Auto liability	11,072,380	11,570,141
Other liability	1,476,332	1,835,895
Auto. prop. dam.	4,921,260	3,161,594
Other prop. dam.	380,694	257,262
Burglary & theft	165,973	163,393
Plate glass	92,285	166,474
Auto. phys. dam.	1,631,182	1,701,651
Accident	20,588	22,695
Group acc. & hlth.	402,213	----------
Miscellaneous	32,860	3,144
Income taxes	251,094	360,760
Int. income	6,948,980	5,363,270
Gain in value of invest. (net)	214,179	dr 189,112
Div. to plcyhldrs.	4,383,570	3,132,498
Balance	2,069,589	2,645,860
Loss ratio	57.97%	60.32%
Expense ratio	33.20%	30.39%

"...I found Western Insurance in Fort Scott, Kansas. The price range in Moody's financial manual...was $12-$20. Earnings were $16 a share. I ran an ad in the Fort Scott paper to buy that stock."

Assets and Liabilities, as of Dec. 31:

Assets:	1954	1953
Real est. (bk. val.)	$2,378,985	$2,683,251
Mtge. ins. on r. e.	384,334	313,004
Bonds (bk. val.)	36,991,762	30,664,981
Stocks (bk. val.)	2,200,615	2,328,976
Cash	4,435,604	6,719,560
Premiums in coll.	5,210,390	5,390,738
Equity, mutual reinsur. fund	392,887	445,904
Oth. ledger assets	838,819	816,730
Int. due & accrd.	182,454	129,728
Mkt. val. of stks. over bk. value	1,548,367	939,266
Gross assets	55,972,679	50,244,135
Non-adm. assets	768,559	767,181
Adm. assets	$55,203,120	$49,476,954
Liabilities:		
Losses	$21,996,471	$20,748,781
Loss adjust. exp.	3,469,591	2,993,836
Taxes, fees, etc.	788,036	770,348
Unearn. prems.	13,841,482	12,796,604
Commissions, etc.	3,000	----------
Other expenses	346,218	41,224
Div. to plcyhldrs.	1,863,526	1,265,731
Empire State Ins. Co. acct.	10,732	10,952
Employers' Mutual Ins. Co. acct.	42,576	44,697
Allied Mutuals Liability account	193,346	222,242
Other liabilities	841,406	1,254,658
Other reserves	1,631,917	492,600
Plcyhldrs. surp.:		
Undecl. div. res.	881,155	806,403
Gen. vol. reserve	1,500,000	1,500,000
Spec. contg. surp.	950,000	950,000
Surplus	7,465,572	5,762,365
Total	10,796,727	9,025,768
Total	$55,203,120	$49,476,954

[1]Includes book value of bonds over amortized value: 1954, $750; 1953, $1,000.

[2]Excess of liability and compensation statutory and voluntary reserves over case items and loss expense reserves.

Note: For method of valuing securities, see "Definitions" on page viii.

Summary of Total Admitted Assets, Dec. 31, 1954 (in thousand dollars):

	Cost	Carry. Value	Mkt. Val. Amt.	Mkt. Val. %
Cash	4,436	4,436	4,436	8.0
Real estate	3,369	2,377	2,377	4.3
Mortgage loans	284	284	284	0.5
U. S. Govt. bds.	21,152	21,466	21,325	38.7
St. & mun. bds.	15,575	15,569	15,569	28.2
P. U. bonds	861	829	860	1.6
Misc. bonds	629	638	671	1.2
P. U. pfd. stks.	11	11	11	---
P. U. com. stks.	394	506	590	0.9
Bank stocks	158	155	155	0.3
Insur. stocks	541	1,194	1,194	2.2
Misc. pfd. stks.	366	383	383	.7
Misc. com. stks.	774	1,505	1,505	2.7
Misc. adm. assets	[1]5,856	5,856	[1]5,856	10.7
Total	54,386	55,203	55,126	100.0

[1]Carrying value.

Capital Stock: A mutual company, no capital stock.

ALLIED FIRE INSURANCE CO. OF UTICA (Utica, N. Y.)

(Controlled by Utica Mutual Insurance Co.)

Incorporated in New York, Feb. 28, 1923.

Fire, motor vehicle, tornado, windstorm, cyclone, sprinkler leakage and extended coverage insurance.

Operates on participating plan. Operates in Mass., N. J., N. Y., Pa., Me., Ohio, Conn., Del., Md., and D. of C.

Officers: J. L. Train, Pres.; F. S. Kellogg, W. B. Foster, Merwin K. Hart, Vice-Pres.; R. E. Hoffman, Sec.; O. J. McKeown, Treas.

Comparative Statistics:

Years to Dec. 31:	1954	1953
Net prems. writ.	$618,251	$697,577
Unearn. prem. res.	cr 98,556	cr 49,079
Net prems. earn.	716,807	746,656
Losses incurred	433,961	403,339
Underwrit. exp.	216,552	222,183
Underwrit. gain	66,294	120,751
Ind. p. & l. items	dr 46	dr 2
Combined gain	66,248	120,749
Net int. & rents	46,789	43,678
Total earnings	113,037	164,427
Income taxes	None	10,045
Policyhldrs. divs.	121,328	120,339
Loss ratio	60.53%	54.07%
Expense ratio	33.02%	31.65%
As of Dec. 31:		
Admitted assets	$2,014,257	$2,054,575
Mtge. ins. on r. e.	500	900
U. S. Govt. bonds	1,118,678	1,154,338
Other bonds	440,380	469,879
Preferred stocks	35,000	33,600
Common stocks	297,831	124,444
[1]Cap. stk., $100 par	400,000	400,000
Sur. & vol. res.	793,735	795,833
Unearned prems.	688,416	787,472

[1]All owned by Utica Mutual Insurance Co.

1955

WESTERN INSURANCE SECURITIES CO.

Incorporated in Delaware in 1925 as a holding company.

Owns 276,306 shares (61.3%) of the capital stock of Western Casualty & Surety Co. which in turn owns entire capital stock of the Western Fire Insurance Co. (see appended statements).

Officers: R. B. Duboc, Pres.; F. W. Duboc, K. H. Mead, E. H. Morrison, C. C. Otto, W. P. Sweet, Vice-Pres.; E. C. Gordon, Sec.; M. L. Hurst, Treas.; E. H. Morris, Aud.

Directors: R. B. Duboc, W. K. Calhoun, F. W. Duboc, E. C. Gordon, C. H. Gardiner, B. L. Hupp, A. L. Taylor, J. A. Prescott, K. H. Mead, E. H. Morrison.

Annual Meeting: Second Tuesday in March.

No. of Stockholders, Dec. 31, 1954: Preferred, 184; class A, 361; common, 294.

Office: 916 Walnut St., Kansas City, Mo.

Earnings: Company reported for 1954 income from dividends and interest, less taxes and expenses, $282,700, of which dividends of $280,000 were paid to stockholders. Earnings reported by Western Casualty & Surety Co. of $4.53 per share, applicable to holdings of Western Insurance Securities Co., plus interest earnings, less expenses and after allowing for taxes, amounted to $1,239,187, equal, after preferred dividends, to $34.00 per share on class A stock of the Securities company.

Balance Sheet, as of Dec. 31:

Assets:	1954	1953
Invests. in subs.	[1]$2,829,015	$2,829,234
Cash	135,281	106,832
Other assets	165,335	202,660
Total	$3,129,631	$3,138,528
Liabilities:		
6% pfd. stk. ($100)	$700,000	$700,000
[2]Class A stock	1,400,000	1,400,000
[2]Common	628,886	628,886
Fed. inc. tax res.	22,479	20,000
Dividends pay.	80,500	80,500
Bills & accts. pay.	76,316	45,919
Earned surplus	[3]221,450	263,223
Total	$3,129,631	$3,138,528

[1]35,000 class A and 50,000 common no par shares.

[2]Restating value of this investment at $32.56 per share, reported by Western Casualty & Surety Co. as capital stock equity at Dec. 31, 1954 would add $6,157,545 to assets and surplus.

Capital Stock: 1. Western Insurance Securities Co. 6% cumulative preferred:

AUTHORIZED—$1,300,000; outstanding, $700,000, par $100.

PREFERENCES—Has preference as to assets and dividends. In liquidation entitled to par and dividends.

CALLABLE—At $125 a share.

VOTING RIGHTS—Has no voting power.

DIVIDENDS—Regular dividends paid quarterly, Jan. 1, etc., to Apr. 1, 1932, incl.; none thereafter to Apr. 1, 1936, when $1 per share was paid; 1937, $4; 1938, none; 1939, $4; 1940, $7; 1941 to 1943, incl., $6; 1944, $9; 1945, $22; 1946, $22; Jan. 2, 1947, $1.50 and quarterly thereafter.

PRICE RANGE—	1953	1952	1951	1950	1949
High	115	114	115	115	120
Low	110	106	114	107	105

2. Western Insurance Securities Co. $2.50 cumulative participating class A stock:

AUTHORIZED—75,000 shares; outstanding, 35,000 shares; no par

PREFERENCES—Has preference as to assets and cumulative dividends of $2.50 per share and, after common has received $50,000 in dividends for any current calendar year, participates as a class in one-half of any additional cash dividends paid in such year up to a total of $4 per share in any one calendar year. In liquidation entitled to $50 per share and dividends, if voluntary, and to $50 per share and dividends, if involuntary.

CALLABLE—As a whole or in part on any dividend date on 60 days' notice at $60 per share.

VOTING RIGHTS—Entitled to elect a majority of directors on default of four quarterly dividends.

CONVERTIBLE—Formerly convertible into common stock; conversion right ceased Feb. 1, 1938.

OTHER PROVISIONS—Articles of Incorporation provides restrictions and protective features in relation to mortgaging property of the company, pledging assets, issuing long time obligations, issuing stock having priority or on a parity herewith, issuance of additional authorized preferred and additional authorized class A stock.

PURPOSE—Issued to purchase additional stock of Western Casualty & Surety Co. and Western Fire Insurance Co. and for other purposes.

DIVIDENDS—

1929	$2.87½	1930-31	$2.50	1932-46	Nil
1947-48	1.00	1949	2.62½	1950	3.00
1951-52	4.00	1953	4.00	1954	8.00
[1]1955	2.00				

[1]To Feb. 2.

Arrears, Feb. 2, 1955, $27,125.

OFFERED—(35,000 shares) at $43 per share in Feb., 1929 by Atlantic Corp. of Boston, Mass., and Prescott, Wright, Snider Co., Kansas City, Mo.

PRICE RANGE—	1953	1952	1951	1950	1949
High	80	66	73	78	72
Low	67	59	59	72	45

3. Western Insurance Securities Co. common:

Authorized, 150,000 shares; outstanding, 50,000 shares; no par.

Initial dividend of 25 cents paid Mar. 1, 1930, to stock of record Feb. 15; June 1, 1950, 25 cents; none thereafter.

Price Range:	1953	1952	1951	1950	1949
High	65	25	13½	13	3
Low	27	10	12	3	1

Transfer Agent and Registrar: First National Bank, Kansas City, Mo.

WESTERN CASUALTY & SURETY CO. (Fort Scott, Kans.)

(Controlled by Western Insurance Securities Co.)

Incorporated under Kansas laws in May, 1924; began business in July, 1924, as Western Automobile Casualty Co. Present title adopted in 1929. Controls Western Fire Insurance Co., Fort Scott, Kansas (see appended statement).

Types of insurance written: Casualty and surety and multiple lines.

Operates in Kan., Mo., Ill., Ia., Neb., Minn., Cal., Col., Okla., Tex., Ky., Tenn., Ohio, Ind., Ida., Mich., Wis., Miss., N. J., N. M., N. D., Ga., Nev., S. D., Ariz., Ala., Fla., La., Utah, Wyo., Mont., Ore., S. C., Wash., and Ark.; U. S. Treas. Dept.

Courtesy of Shai Dardashti

Control: Company is controlled by Western Insurance Securities Co. (a preceding statement).

Officers: R. B. Duboc, Chmn.; E. C. Gordon, Vice-Chmn.; C. C. Otto, Pres.; F. W. Duboc, K. H. Mead, E. H. Morrison, W. P. Sweet, Vice-Pres.; W. L. Gench, Sec.; M. L. Hurst, Treas.; E. H. Morris, Aud.

Directors: C. C. Otto, R. B. Duboc, E. C. Gordon, M. L. Hurst, C. H. Gardiner, W. K. Calhoun, B. L. Hupp, J. A. Prescott, W. L. Gench, W. P. Sweet.

Annual Meeting: First Tuesday after first Monday in March.

No. of Employees: Dec. 31, 1954, 578.

No. of Stockholders: Dec. 31, 1,400.

Office: 14 E. First St., Fort Scott, Kansas.

Net Premium Volume:	Written in 1954	In Force Dec. 31, '54
Accident & health	$549,577	$959,435
Hospitalization	122,583	301,276
Auto liability	6,971,169	6,802,227
Other liability	2,558,816	2,190,162
Workmen's comp.	2,399,735	1,624,786
Fidelity	131,101	226,053
Surety	770,466	868,822
Glass	297,090	542,824
Burglary & theft	358,882	495,328
Auto prop. dam.	4,495,631	4,437,698
Auto phys. dam.	110,624	174,657
Other prop. dam.	818,875	458,805
Total	$19,884,287	$19,412,964

Income Account, years ended Dec. 31:

	1954	1953
Net prems. writ.	$19,884,287	$19,054,392
Unearn. prem. res.	dr 443,279	dr 1,040,125
Premiums earned	19,241,008	18,014,267
Losses incurred	10,384,603	11,244,243
Underwrtg. exp.	7,146,771	6,785,233
Gain fr. undwrtg.	1,709,635	dr 25,209
Und. p. & l. items	dr 637	dr 633
Combined gain	1,708,998	dr 25,842
Net int. and rents	417,763	289,285
Realized gain on invest. (net)	dr 5,461	14
Other income	3,125	2,871
Total income	2,124,485	275,528
Income taxes	1,018,780	cr 145,332
Net income	1,105,705	420,891
Gain in value of invest. (net)	1,692,233	305,191
Cash dividend	472,500	300,000
Surplus credits	2,338,385	dr 105,647
Tr. to cap. stk.	750,000	----------
Incr. surplus	3,901,823	320,435
[1]Earned per sh.	$5.30	$2.31
Number of shares	450,000	300,000
Loss ratio	53.97%	62.42%
Expense ratio	36.34%	35.68%

[1]Before income taxes. After deducting Federal income taxes earned per share would be: 1954, $3.03; 1953, $2.39.

Assets and Liabilities, as of Dec. 31:

Assets:	1954	1953
Bonds (bk. val.)	$20,587,032	$15,393,153
Stocks (bk. val.)	2,759,496	2,258,209
Cash	1,812,078	1,102,285
Prems. in coll.	3,598,778	2,920,089
Mkt. val. stks. over book value	4,037,525	2,346,292
Int. and rents due and accrued	184,803	118,226
Reinsurance rec.	117,333	36,650
Other assets	389,885	346,368
Gross assets	33,446,930	25,517,771
Non-adm. assets	270,505	260,750
Admit. assets	$33,176,425	$25,257,021
Liabilities:		
Losses	$8,207,003	$7,608,541
Investig. exp., etc.	1,590,335	1,373,664
Unearned prems.	9,912,183	9,268,903
Salaries, etc., pay.	129,110	113,761
Taxes, fees, etc.	1,484,680	436,890
Other liabilities	1,308,571	573,232
Policyhldrs. surp.:		
Capital stock	2,250,000	1,500,000
[1]Surplus	8,294,544	4,382,721
Total	10,544,544	5,882,721
[1]Total	$33,176,425	$25,257,021

[1]On basis of Dec. 31 market quotations of respective years for all securities owned surplus and total admitted assets would each be decreased by $12,985 in 1954 and $38,014 in 1953.

Note: For method of valuing securities see "Definitions" on page viii.

Summary of Total Admitted Assets, Dec. 31, 1954 (in thousand dollars):

	Cost	Carry. Value	-Mkt. Val.- Amt.	%
Cash	1,812	1,812	1,812	5.5
U. S. Govt. bds.	1,705	1,697	1,676	5.1
St. & mun. bds.	18,931	18,570	18,577	55.9
Misc. bonds	332	320	320	1.0
P. U. pfd. stks.	20	21	21	0.1
P. U. com. stks.	202	249	249	0.7
Insur. stocks	1,935	5,570	5,570	16.8
Misc. pfd. stks.	142	141	141	0.4
Misc. com. stks.	470	816	816	2.5
Misc. adm. assets	[1]3,960	3,980	[1]3,980	12.0
Total	29,510	33,176	33,163	100.0

[1]Carrying value.

Capital Stock: Authorized, $3,000,000; outstanding, $2,250,000; par $5 (changed from $100 par to $10 par Sept., 1938; ten $10 shares issued for each $100 share and from $10 par in December 1953; two $5 shares issued for each $10 share).

275,000 (61.3%) shares owned by Western Insurance Securities Co.

Capital stock increased from $750,000 to $1,-500,000 in Dec., 1945 by 25% stock dividend and by subscription at $40 per share; to $1,200,000 in Dec. 1950 by 13% stock dividend and by subscription at $50 per share; to $1,500,000 in Dec. 1952 by a 25% stock dividend and to $2,-250,000 in Jan., 1954, by subscription.

Dividends (payments since 1926 follow):

On $100 par shares:

1926-27	$8.80	1928	$10.00

On $10 par shares:

1929	0.40	1930	1.75	1931	$1.50
1932	0.50	1933-36	Nil	1937	0.30
1938	Nil	1939	0.35	1940	0.90
1941	0.80	1942-43	0.70	1944	1.25
[1]1945	1.75	1946-47	1.50	1948	1.65
1949	1.80	[1]1950-52	2.00	1953	1.50

On $5 par shares:

1953	0.25	1954	1.05

[1]Also paid 25% in stock in 1945; 15% in 1950; 25% in 1952.

Price Range: 1954, 34-23.

Offered (5,000 shares) by company in Dec. 1950 at $50 per share in Kansas and Missouri only.

Transfer Agent and Registrar: First National Bank, Kansas City, Mo.

Subscription Rights: Stockholders had right to subscribe for 150,000 $5 par shares at $23 per share on basis of one share for each 8 shares held of record Jan. 19, 1954. Rights expired Feb. 1, 1954.

WESTERN FIRE INSURANCE CO.
(Fort Scott, Kans.)

(Controlled by Western Casualty & Surety Co.)

Incorporated under Kansas laws in December 1925; commenced business in Oct., 1926.

Type of insurance written: Fire and allied lines, automobile, inland marine and multiple lines.

Operates in Ala., Ariz., Ark., Cal., Colo., Conn., Fla., Ga., Idaho, La., Kans., Ky., Ill., Iowa, Ind., Minn., Miss., Mo., N. J., N. M., N. Y., Nev., U. S. Treas. Dept., Neb., N. D., Ohio, Okla., Tenn., Tex., Wis., Mich., S. C., S. D., Utah, Wyo., Mont., Ore. and Wash.

Officers: R. B. Duboc, Chmn.; E. C. Gordon, Vice-Chmn.; C. C. Otto, Pres.; F. W. Duboc, K. H. Mead, E. H. Morrison, W. P. Sweet, Vice-Pres.; W. L. Gench, Sec.; M. L. Hurst, Treas.; E. H. Morris, Aud.

Directors: W. K. Calhoun, R. B. Duboc, E. C. Gordon, C. C. Otto, F. W. Duboc.

Annual Meeting: First Tuesday after first Monday in March.

No. of Stockholders: Dec. 31, 1954, 6.

No. of Employees: Dec. 31, 1954, 578.

Office: 14 E. First St., Fort Scott, Kansas.

Net Premium Volume:

	Written in 1954	In Force Dec. 31, '54
Fire	$1,771,562	$3,741,317
Extend. coverage	811,056	1,822,191
Earthquake	362	2,568
Inland marine	192,969	313,159
Tornado, etc.	14,774	8,836
Sprinkler leakage	1,378	2,695
Riot, civ. com., etc.	43	234
Aircraft	1,885	737
Auto. phys. dam.	7,353,105	8,365,995
Glass	1,372	2,623
Burglary	5,261	7,777
Auto liability	1,776	1,996
Auto prop. dam.	1,249	1,413
Surety	2,287	2,282
Credit	21,736	11,089
Total	$10,180,805	$14,225,077

Income Account, years ended Dec. 31:

	1954	1953
Net prems. writ.	$10,180,805	$10,092,972
Unearn. prem. res.	dr 410,341	dr 919,947
Premiums earned	9,770,464	9,173,032
Losses incurred	4,765,946	4,833,547
Underwrtg. exp., etc.	4,080,985	4,007,439
Gain fr. undwrtg.	923,532	272,046
Und. p. & l. items	dr 738	dr 84
Combined gain	922,794	271,962
Net int. & rents	294,899	256,903
Realized gain on invest. (net)	3,621	----------
Other income	332	55
Total income	1,221,746	528,917
Fed. income tax	323,216	170,334
Net income	898,530	358,582
Gain in value of invest. (net)	114,589	dr 33,702
Pol. items	dr 517	cr 5,649
Balance	1,412,612	330,729
[1]Earn. per sh.	$13.82	$8.97
Number of shares	100,000	100,000
Loss ratio	48.78%	53.35%
Expense ratio	40.08%	39.70%

[1]Before Federal income tax. After such tax earned per share would be: 1954, $8.59; 1953, $7.27.

Assets and Liabilities, as of Dec. 31:

Assets:	1954	1953
Rl. est. (bk. val.)	$452,421	$473,370
Bonds (bk. val.)	9,984,110	9,087,019
Stocks (bk. val.)	1,647,292	1,095,899
Cash	726,137	796,731
Agents' balances	940,345	962,233
Reinsurance rec.	164,214	187,424
Oth. ledger assets	25,333	26,431
Int. & rents due & accrued	74,760	59,171
Market value stks. over book value	1,022,523	903,934
Gross assets	15,037,135	12,878,196
Non-adm. assets	20,967	23,530
Adm. assets	$15,016,168	$12,854,666
Liabilities:		
Losses	$970,571	$1,034,091
Loss adjust. exp.	96,353	94,846
Unearned prems.	7,404,845	6,394,034
Other expenses	83,950	59,048
Taxes, fees, etc.	794,173	266,460
Fed. income tax		171,433
Other liabilities	95,922	80,616
Policyhldrs. surp.:		
Capital stock	1,000,000	1,000,000
[1]Surplus	4,572,254	3,158,947
Total	5,572,254	4,159,947
[1]Total	$15,016,168	$12,854,666
Liq. val. per share	$85.17	$99.29

[1]On basis of Dec. 31 market quotations of respective years for all securities owned surplus and total admitted assets would each be decreased by $16,996 in 1954 and $35,014 in 1953.

Note: For method of valuing securities, see "Definitions" on page viii.

Summary of Total Admitted Assets, Dec. 31, 1954 (in thousand dollars):

	Cost	Carry. Value	-Mkt. Val.- Amt.	%
Cash	726	726	726	3.2
Real estate	614	452	550	2.4
U. S. Govt. bds.	2,261	2,264	2,236	10.0
St. & mun. bds.	7,640	7,558	7,509	33.1
Misc. bonds	162	162	162	0.7
R. R. pfd. stks.	64	60	60	0.3
P. U. com. stks.	255	396	396	2.0
Bank stocks	40	49	49	0.2
Misc. pfd. stks.	137	143	143	0.7
Misc. com. stks.	1,172	2,112	2,112	14.0
Misc. adm. assets	[1]1,183	1,184	[1]1,184	7.9
Total	14,234	15,016	15,097	100.0

[1]Carrying value.

Capital Stock: Authorized and outstanding, $1,000,000; par $10 (changed from $100 shares, 1928; ten $10 shares issued for each $100 share).

Original capital stock was $300,000; increased to $500,000 in Sept., 1928 to $750,000 in 1945; to $800,000 in 1947; to $1,000,000 in Dec., 1948 by sale of 40,000 shares to Western Casualty & Surety Co. (parent) at $20 per share.

All except directors' qualifying shares owned by Western Casualty & Surety Co.

Initial dividend of $1 per share paid in 1929; 1930, $1; 1937, 50 cents; 1938, $1.50; none thereafter.

COUNTRY MUTUAL CASUALTY CO.
(Chicago)

Incorporated Dec. 2, 1926; commenced business Apr. 1, 1927.

Insurance written: Liability other than auto, auto liability, property damage, physical damage, property damage other than auto, fidelity and surety, medical and livestock.

Operates in Illinois and Kansas.

Officers: C. B. Shuman, Pres.; Otto Steffen, Vice-Pres.; R. M. Frey, Treas.; C. J. Elliott, Sec.

Home Office: 43 E. Ohio St., Chicago 11.

Comparative Statistics:

Years ended Dec. 31:	1954	1953
Net prems. writ.	$17,918,110	$15,612,[illegible]
Unearn. prem. res.	dr 682,138	dr [illegible]
Net prems. earn.	16,335,972	15,530,[illegible]
Losses incurred	10,281,132	11,187,[illegible]
Underwrtg. exp.	1,283,323	1,356,[illegible]
Underwrtg. gain	4,671,517	3,149,[illegible]
P. & L. items	1,266	dr 3[illegible]
Combined gain	4,672,783	3,147,[illegible]
Net int. & rents	538,554	4[illegible]
Total earnings	5,211,337	3,[illegible]
Income taxes	145,726	[illegible]
Policyhldrs. div.	2,122,944	[illegible]
Loss ratio	62.94%	[illegible]
Expense ratio	8.13%	8.5[illegible]
As of Dec. 31:		
Admitted assets	$23,790,937	$19,[illegible]
U. S. Govt. bonds	6,950,532	6,[illegible]
Other bonds	15,249,965	[illegible]
Preferred stocks	152,830	[illegible]
Common stocks	[illegible]	[illegible]
Surplus & vol. res.	7,120,366	[illegible]
Unearned prems.	5,134,461	[illegible]

Courtesy of Shai Dardashti

Net Premium Volume:	Written in 1955	In Force Dec. 31, '55
Fire	$315,561	$393,343
Extended cov.	35,477	65,304
Other allied line	20,479	10,896
Earthquake	1,250	2,522
Ocean marine	1,742	519
Inland marine	129,455	132,621
Group A. & H.	2,540,488	515,319
Auto liability	3,526,451	3,173,882
Other liability	1,936,152	1,729,546
Workmen's comp.	280,128	86,129
Fidelity	419,260	762,238
Surety	2,690,557	2,915,811
Glass	96,286	152,140
Burglary & theft	268,990	469,625
Auto prop. dam.	2,282,707	2,606,589
Auto phys. dam.	2,787,252	2,616,267
Other prop. dam. & collision	907,996	549,932
Miscellaneous	--------	--------
Total	$18,040,229	$15,728,097

Income Account, years ended Dec. 31:

	1955	1954
Net prems. written	$18,040,229	$16,626,118
Unearn. prem. res.	dr 602,519	dr 601,438
Premiums earned	17,437,720	16,024,680
Losses incurred	10,501,925	8,821,613
Underwrit. exp.	7,207,128	6,782,460
Gain fr. undwrtg.	dr 71,328	420,586
Und. p. & l. items	dr 8,598	dr 2,749
Combined gain	dr 79,726	417,837
Net int. and rents earned	503,347	479,187
Realized gain on invest. (net)	1,160,110	dr 2,567
Total income	1,483,731	1,094,459
Income taxes	346,931	477,262
Net income	1,136,801	616,896
Gain in value of invest. (net)	104,472	536,424
Divs. to stkhldrs.	375,000	265,000
Balance	905,273	888,120
Earned per share:		
Bef. inc. taxes	$164.04	$121.59
After inc. taxes	132.59	78.17
Number of shares	11,000	11,000
Loss ratio	59.03%	53.78%
Expense ratio	39.93%	40.79%

Assets and Liabilities, as of Dec. 31:

Assets:	1955	1954
[1]Rl. est. (bk. val.)	$1,264,556	$1,051,874
Bonds (book val.)	12,304,324	11,780,379
Stocks (book val.)	3,007,433	2,668,979
Cash, etc.	2,301,199	2,753,906
Agents' balances	1,452,159	1,501,564
Furn. & eq., net	345,437	329,734
Reins. recoverable	230,651	211,608
Oth. ledger assets	351,322	241,672
Int. and rents due and accrued	69,842	51,332
Mkt. value of stk. over book value	1,155,362	1,050,896
Gross assets	23,574,987	22,346,698
Non-adm. assets	514,992	474,689
Adm. assets	$23,059,995	$21,770,009
Liabilities:		
Losses	$5,277,235	$5,534,756
Loss adjust. exp.	583,593	629,536
Unearned prems.	7,845,882	7,243,143
Taxes, fees, etc.	720,341	884,091
Commissions, etc.	126,249	120,120
Other expenses	101,649	109,668
[2]Other reserve	252,626	259,811
Other liabilities	1,034,595	713,860
Policyhldrs. surp.:		
Voluntary res.	2,568,000	1,650,000
Capital stock	1,100,000	1,100,000
Surplus	3,500,000	3,900,000
Total	7,168,000	6,250,000
Total	$23,059,995	$21,770,009
Liq. val. per share	$936.93	$851.57

[1]Represents investment in home and branch office buildings.

[2]Represents excess of liability and compensation statutory and voluntary reserves over case basis and loss expense reserves.

Note: For method of valuing securities, see "Definitions" on page viii.

Summary of Total Admitted Assets, Dec. 31, 1955 (in thousand dollars):

	Cost	Carry. Value	Mkt. Val. Amt.	Mkt. Val. %
Cash	2,504	2,504	2,504	10.9
Real estate	2,518	1,293	1,291	5.6
U. S. Govt. bds.	6,182	6,543	6,460	28.1
Can. Govt. bds.	751	744	780	3.4
St. & mun. bds.	4,722	4,680	4,820	20.1
R.R. bonds	102	102	108	0.5
Misc. bonds	120	120	138	0.6
P. U. pfd. stks.	493	489	489	2.1
P. U. com. stks.	180	183	183	0.8
Bank stocks	1,689	1,871	1,871	8.1
Insur. stocks	574	840	840	3.7
Misc. pfd. stks.	1,626	1,605	1,605	7.0
Misc. com. stks.	35	165	165	0.7
Misc. adm. assets	[1]1,934	1,934	[1]1,934	8.4
Total	22,830	23,080	22,978	100.0

[1]Carrying value.

Capital Stock: Authorized and outstanding, $1,100,000; par $100.

Original capital stock was $200,000; increased to $300,000 Apr. 30, 1923; to $400,000 Feb. 14, 1929; to $500,000 Dec. 3, 1941, by issuance of 2,000 additional shares at $350 a share; to $1,000,000 in 1949 by stock dividend; and to $1,100,000 in June, 1955 by sale of stock.

As of Dec. 31, 1955, United Pacific Corp. owned 10,915.

Dividends paid:

1932	$1.00	1933-38	2.00	1938	$5.00
1937	12.00	1939-41	5.00	1942	5.00
1943	13.00	1944-46	14.00	1947	18.00
1948	20.00	[1]1949	40.00	1950-53	16.00
1952	20.00	1954-55	25.00		

[1]Also paid 66 2/3% stock dividend.

Stock transferred and registered at company's office.

UTAH HOME FIRE INSURANCE CO. (Salt Lake City)

Incorporated in Utah, Sept. 30, 1886, as Home Fire Insurance Co. of Utah; present title adopted Mar. 20, 1912.

Types of insurance written: Fire, earthquake, marine (including war), inland navigation and transportation, tornado, explosion, riot and sprinkler leakage, extended coverage.

Operates in Ala., Ark., Ariz., Cal., Colo., Fla., Ga., Ida., Ky., La., Mich., Minn., Mont., Nev., N. M., N. Y., O., Okla., Ore., Tenn., Tex., Utah, Wash. and Wyo. Also operates in Alaska, Hawaii and in British Columbia.

Officers: D. O. McKay, Pres.; D. H. Smith, Exec. Vice-Pres. and Sec.; G. J. Cannon, Vice-Pres.; G. T. Willis, Treas.; D. H. Smith, Sec.

Directors: G. J. Cannon, E. S. Hills, J. H. Clark, Jr., D. O. McKay, R. H. Burton, D. D. Moffat, O. W. Adams, W. F. Bennett, M. S. Eccles, V. H. Smith, W. D. Nebeker, Jr., S. L. Richards, W. M. Smoot, Salt Lake City, Utah.

Annual Meeting: First Monday in March.

No. of Stockholders: Dec. 31, 1954, 445.

No. of Employees: Dec. 31, 1954, 43.

Home Office: 47 West South Temple St., Salt Lake City 1, Utah.

Net Premiums Written, years ended Dec. 31:

	1955	1954
Fire	$1,375,567	$1,187,361
Ocean marine	184,071	350,654
Auto phys. dam.	373,652	350,900
Earthquake	5,187	2,509
Hail	--------	28,131
Inland marine	362,474	386,832
Other allied lines	8,372	5,382
Extend. coverage	550,692	482,129
Miscellaneous	2,398	2,464
Homeowners	55,785	--------
Auto liability	39,570	--------
Auto prop. dam.	10,077	--------
Total	$2,968,634	$2,797,403

Net Premiums in Force, as of Dec. 31:

	1955	1954
Fire	$3,295,219	$3,221,322
Ocean marine	97,303	226,905
Auto phys. dam.	472,228	443,492
Earthquake	79,208	25,309
Hail	--------	--------
Inland marine	524,191	339,335
Other allied lines	17,459	15,282
Extend. coverage	1,449,613	1,434,942
Miscellaneous	4,184	4,075
Homeowners	85,719	--------
Auto liability	50,072	--------
Auto prop. dam.	18,309	--------
Total	$5,974,352	$5,911,571

Income Account, years ended Dec. 31:

	1955	1954
Net prems. writ.	$2,966,634	$2,797,403
Unearn. prems. res.	dr 114,818	cr 139,631
Premiums earned	2,851,796	2,913,034
Losses incurred	1,545,679	1,589,161
Underwrit. exp.	1,319,456	1,270,626
Gain fr. undwrtg.	dr 12,340	43,247
Combined gain	dr 12,340	43,247
Net int. & rents	187,688	180,139
Realized gain on invest. (net)	14,517	169,793
Other income	275	1
Total income	189,541	396,039
Income taxes	10,631	83,527
Net income	178,903	312,512
Gain in value of invest. (net)	287,459	373,248
Divs. to stkhldrs.	100,000	90,000
Balance	346,353	597,060
Earned per sh.:		
Bef. inc. taxes	$2.25	$3.89
After inc. taxes	$2.16	$6.06
No. of shares	100,000	100,000
Loss ratio	54.20%	54.80%
Expense ratio	44.44%	43.42%

Assets and Liabilities, as of Dec. 31:

Assets:	1955	1954
Real estate	$5,377	$17,707
Mtge. ins. on r. e.	5,813	5,372
Bonds (bk. val.)	2,962,532	2,214,977
Stocks (bk. val.)	1,003,788	1,396,668
Cash	675,899	1,036,102
Agents' balances	534,861	517,634
Reinsur. recov.	12,173	14,923
Oth. ledg. assets	--------	302
Interest & rents	32,349	37,230
Mt. val. of stocks over bk. value	1,469,487	1,197,672
Other non-ledger assets	38,941	--------
Gross assets	7,531,480	7,029,349
[1]Non-adm. assets	18,906	15,509
Adm. assets	$7,912,474	$7,613,840
Liabilities:		
Losses	$640,392	$584,245
Loss adjust. exp.	54,483	43,857
Unearned prems.	3,071,339	2,956,971
Other expenses	971	1,353
Taxes, fees, etc.	100,737	172,828
Commissions, etc.	8,590	dr 28,292
Other liabilities	87,388	81,861
Policyhldrs. surp.:		
Capital stock	1,000,000	1,000,000
Surplus	2,948,083	2,600,927
Total	3,948,083	3,600,927
Total	$7,912,474	$7,613,840
Liq. val. per sh.	$51.77	$47.34

[1]Includes book value of bonds over amortized value: 1955, $12,805; 1954, $8,400.

Summary of Total Admitted Assets, Dec. 31, 1955 (in thousand dollars):

	Cost	Carry. Value	Mkt. Val. Amt.	Mkt. Val. %
Cash	675	676	676	8.6
Real estate	6	6	6	0.1
U. S. Govt. bds.	1,116	1,115	1,083	13.7
Can. Govt. bds.	25	25	25	0.3
St. & mun. bds.	2,263	2,250	2,250	28.6
R.R. bonds	33	33	33	0.4
P. U. bonds	125	123	112	1.4
Misc. bonds	4	4	5	0.1
R.R. pfd. stks.	113	118	118	1.5
R.R. com. stks.	50	74	74	0.9
P. U. com. stks.	150	214	314	4.0
Bank stocks	374	392	392	5.0
Misc. pfd. stks.	780	872	872	11.1
Misc. com. stks.	315	1,304	1,304	16.5
Misc. adm. assets	[1]607	607	[1]607	7.8
Total	6,403	7,912	7,871	100.0

[1]Carrying value.

Capital Stock Authorized, and outstanding, $1,000,000, par $10 (changed from $100 par in Mar., 1954, ten $10 shares issued for each $100 share).

Capital Stock Increased from $700,000 to $800,000 in Apr. 1952 by sale of stock and to $1,000,000 in Dec. 1952 by 25% stock dividend.

Dividends paid (since 1933):

On $100 par shares:

1929-32	$48.00	1930	$16.00	1931	$12.00
1932	8.00	1933	Nil	1934	1.00
1935	6.00	1936	7.00	1937	6.00
1938-39	6.00	1940	6.00	1941	7.00
1942	5.00	1943-48	6.00	1949	7.00
1950	2.00				

On $10 par shares:

1950	0.60	[1]1951-53	0.80	1954	0.90
1955	1.00				

[1]Also 25% in stock in Dec., 1953.

Stock transferred and registered at company office.

1956

WESTERN INSURANCE SECURITIES CO.

Incorporated in Delaware in 1925 as a holding company.

Owns 276,600 shares (61.3%) of the capital stock of Western Casualty & Surety Co. which in turn owns entire capital stock of the Western Fire Insurance Co. (see appended statements).

Officers: R. B. Duboc, Pres.; W. K. Calhoun, Vice-Pres.; E. C. Gordon, Sec.-Treas.

Directors: R. B. Duboc, W. K. Calhoun, F. W. Duboc, E. C. Gordon, C. H. Gardiner, B. L. Hupp, R. M. Duboc, J. A. Prescott, K. H. Mead, E. H. Morrison.

Annual Meeting: Second Tuesday in March.

No. of Stockholders, Dec. 31, 1954: Preferred, 144; class A, 341; common, 294.

Office: 916 Walnut St., Kansas City, Mo.

Earnings: Company reported for 1955 income from dividends and interest, less taxes and expenses, $315,293, of which dividends of $322,400 were paid to stockholders. Earnings reported by Western Casualty & Surety Co. of $4.69 per share, applicable to holdings of Western Insurance Securities Co., plus interest earnings, less expenses and after allowing for taxes, amounted to $1,113,165 (1954, $1,259,-137), equal, after preferred dividends, to $10.58 (1954, $14.29) per share on class A stock of the Securities company.

Balance Sheet, as of Dec. 31:

Assets:	1955	1954
Invests. in subs.	[1]$2,829,015	$2,829,015
Cash	152,192	135,281
Other assets	134,504	165,335
Total	$3,115,713	$3,129,631
Liabilities:		
6% pfd. stk. ($100)	$700,000	$700,000
[2]Class A stock	1,400,000	1,400,000

Courtesy of Shai Derdashti

[1]Common	$28,866	$28,866
Fed. inc. tax res.	24,271	22,479
Dividends pay.	80,509	85,509
Bills & accts. pay.	57,310	76,316
Earned surplus	[1]214,744	221,459
Total	$1,116,513	$1,129,631

[1]55,005 class A and 50,000 common no par shares.

[2]Restating value of this investment at $27.43 per share, reported by Western Casualty & Surety Co. as capital stock equity at Dec. 31, 1955 would add $7,315,463 to assets and surplus.

Capital Stock: 1. Western Insurance Securities Co. 6% cumulative preferred:

AUTHORIZED—$1,300,000; outstanding, $705,000; par $105.

PREFERENCES—Has preference as to assets and dividends. In liquidation entitled to par and dividends.

CALLABLE—At $125 a share.

VOTING RIGHTS—Has no voting power.

DIVIDENDS—Regular dividends paid quarterly, Jan. 1, etc., to Apr. 1, 1932, incl.; none thereafter to Apr. 1, 1936, when $1 per share was paid; 1937, $4; 1938, none; 1939, $6; 1940, $7; 1941 to 1945, incl., $8; 1946, $9; 1947, $22; 1948, Jan. 2, 1947, $1.50 and quarterly thereafter.

PRICE RANGE—	1956	1955	1954	1953	1952	1951
High	116	119	115	114	115	
Low	103	105	110	105	114	

2. Western Insurance Securities Co. $1.50 cumulative participating class A stock:

AUTHORIZED—75,000 shares; outstanding, 35,000 shares; no par.

PREFERENCES—Has preference as to assets and cumulative dividends of $2.50 per share and, after common has received $30,000 in dividends for any current calendar year, participates as a class in one-half of any additional cash dividends paid in such year up to a total of $4 per share in any one calendar year. In liquidation entitled to $60 per share and dividends, if voluntary, and to $50 per share and dividends, if involuntary.

CALLABLE—As a whole or in part on any dividend date on 60 days' notice at $61 per share.

VOTING RIGHTS—Entitled to elect a majority of directors on default of four quarterly dividends.

CONVERTIBLE—Formerly convertible into common stock; conversion right ceased Feb. 1, 1938.

OTHER PROVISIONS—Articles of Incorporation provides restrictions and protective features in relation to mortgaging property of the company, pledging assets, issuing long time obligations, issuing stock having priority or on a parity herewith, issuance of additional authorized preferred and additional authorized class A stock.

PURPOSE—Issued to purchase additional stock of Western Casualty & Surety Co. and Western Fire Insurance Co. and for other purposes.

DIVIDENDS—

1929	$1.87½	1930-31	$1.50	1932-46	Nil
1947-48	1.00	1949	2.62½	1950	3.00
1951-52	4.00	1953	6.00	1954-55	3.00
[1]1956	2.00				

[1]To Feb. 1.

Arrears, Feb. 1, 1956, $21.62½ per share.

OFFERED—(11,000 shares) at $45 per share in Feb., 1929 by Atlantic Corp. of Boston, Mass., and Prescott, Wright, Snider Co., Kansas City, Mo.

PRICE RANGE—	1955	1954	1953	1952	1951
High	35	27	58	60	71
Low	22	23	27	30	58

3. Western Insurance Securities Co. common:

Authorized, 150,000 shares; outstanding, 50,000 shares; no par.

Initial dividend of 25 cents paid Mar. 1, 1930, to stock of record Feb. 15; June 1, 1930, 25 cents; none thereafter.

Price Range:	1956	1954	1953	1952	1951
High	85	90	65	38	13½
Low	75	50	27	10	11

Transfer Agent and Registrar: First National Bank, Kansas City, Mo.

WESTERN CASUALTY & SURETY CO. (Fort Scott, Kans.)

(Controlled by Western Insurance Securities Co.)

Incorporated under Kansas laws in May, 1924; began business in July, 1924, as Western Automobile Casualty Co. Present name adopted in 1929.

Types of insurance written: Casualty and surety and multiple lines.

Operates in Kan., Mo., Ill., Ia., Neb., Minn., Col., Col., Okla., Tex., Ky., Tenn., Ohio, Ind., Ida., Mich., Wis., Miss., N. J., N. M., N. D., Ga., Nev., S. D., Ariz., Ala., Fla., La., Utah, Wyo., Mont., Ore., S. C., Wash., and Ark.; U. S. Treas. Dept.

Control: Company is controlled by Western Insurance Securities Co. (a preceding statement).

Subsidiary (statement appended): Owns entire capital stock (except directors' qualifying shares) of Western Fire Insurance Co. (carrying value, Dec. 31, 1955, $6,000,000).

Officers: H. B. Duboc, Chmn.; E. C. Gordon, Vice-Chmn.; C. C. Otto, Pres.; F. W. Duboc, K. H. Mead, E. H. Morrison, W. P. Sweet, Vice-Pres.; W. L. Gench, Sec.; M. L. Hurst, Treas.; E. H. Morris, Aud.

Directors: C. C. Otto, R. B. Duboc, E. C. Gordon, M. L. Hurst, C. H. Gardiner, W. K. Calhoun, R. M. Duboc, J. A. Prescott, W. L. Gench, W. P. Sweet.

Annual Meeting: First Tuesday after first Monday in March.

No. of Stockholders: Dec. 31, 1955, 1,250.

No. of Employees: Dec. 31, 1955, 616.

Office: 14 E. First St., Fort Scott, Kansas.

Net Premiums Written, years ended Dec. 31:

	1955	1954
Accident & health	$626,398	$539,379
Hospitalization	126,069	132,585
Auto liability	7,161,453	6,931,109
Other liability	3,371,211	3,550,616
Workmen's comp.	3,847,238	3,939,735
Fidelity	138,222	131,181
Surety	891,652	774,466
Glass	328,923	237,099
Burglary & theft	423,762	351,187
Auto prop. dam.	4,318,347	4,495,831
Auto phys. dam.	dr 110,624	110,671
Other prop. dam.	611,271	616,373
Auto disability	7,388	.....
Total	$22,142,490	$19,884,237

Net Premiums in Force, as of Dec. 31:

	1955	1954
Accident & health	$932,991	$859,415
Hospitalization	106,226	101,279
Auto liability	7,084,248	6,882,227
Other liability	3,622,237	3,730,762
Workmen's comp.	2,588,582	2,624,756
Fidelity	264,099	276,073
Surety	1,101,464	909,612
Glass	586,951	542,373
Burglary & theft	578,638	485,525
Auto prop. dam.	4,424,235	4,422,649
Auto phys. dam.	.....	114,697
Other prop. dam.	653,369	458,968
Auto disability	8,289	.....
Total	$21,881,199	$19,412,031

Income Account, years ended Dec. 31:

	1955	1954
Net premi. writ.	$22,142,440	$19,884,237
Unearn. prem. res.	dr 2,064,193	dr 643,276
Premiums earned	20,078,247	19,241,061
Losses incurred	[1]13,369,456	10,381,603
Underwrtg. exp.	8,014,686	7,166,771
Gain fr. undwrtg.	693,105	1,708,687
Und. p. & l. items	305	dr 677
Combined gain	694,812	1,708,988
Net int. and rents	442,419	417,763
Realized gain on invest. (net)	37,349	dr 5,401
Other income	94,498	3,135
Total income	1,235,258	2,124,485
Income taxes	79,015	1,018,780
Net income	1,196,243	1,105,705
Gain in value of invest. (net)	1,217,837	1,692,233
Cash dividend	540,000	473,500
Balance	1,874,170	2,325,438
Loss ratio	56.62%	53.97%
Expense ratio	36.13%	36.24%

Consolidated Earnings and Liquidating Value per Share (in $):

	Earnings					Liquid. Value
	Und. Gain	Int. etc.	Prem. Res.	Total	Dec. 31
1955	0.57	1.15	2.41	[1]6.28	41.17
1954	1.63	1.58	0.94	[1]8.37	39.60
1953	2.52	1.85	2.33	[1]7.31	43.23

[1]Before income taxes; after such taxes total earned per share would be (in $):

1955 ... 5.26 1954 ... 4.94 1953 ... 6.62

Number of shares: 1955-54, 450,000; 1953, 300,000.

Assets and Liabilities, as of Dec. 31:

	1955	1954
Assets:		
Bonds (bk. val.)	$21,124,636	$20,567,070
Stocks (bk. val.)	2,727,234	2,759,496
Cash	2,026,838	1,832,078
Prems. in coll.	5,524,480	2,596,178
Mkt. val. stks. over book value	5,583,501	4,037,325
Int. and rents due and accrued	188,833	164,303
Reinsurance rec.	173,136	117,333
Other assets	853,303	569,195
Gross assets	38,016,857	33,446,820
Non-adm. assets	[2]336,845	270,586
Admit. assets	$37,680,011	$33,176,234
Liabilities:		
Losses	$9,131,356	$8,207,003
Investig. exp., etc.	1,895,373	1,589,335
Unearned prems.	11,976,573	9,912,187
Salaries, etc., pay.	200,220	128,110
Taxes, fees, etc.	865,731	1,414,580
Other liabilities	1,447,238	1,398,521
Policyhldr. surp.:		
Capital stock	3,250,000	3,250,000
[3]Surplus	9,913,505	8,294,548
Total	13,273,505	10,544,548
[3]Total	$37,680,011	$33,176,234

[1]On basis of Dec. 31 market quotations of respective years for all securities owned; surplus and total admitted assets would each be decreased by $12,905 in 1954 and $17,141 in 1955.

[2]Includes $28,054 book value of bonds over amortized value.

Note: For method of valuing securities see "Definitions" on page viii.

Summary of Total Admitted Assets, Dec. 31, 1955 (in thousand dollars):

	Cost	Carry. Value	Mkt. Val. Amt.	Mkt. Val. %
Cash	2,021	2,021	2,021	5.4
U. S. Govt. bds.	1,753	1,744	1,694	4.5
St. & mun. bds.	19,285	18,937	19,008	50.5
Misc. ind. bonds	361	294	366	1.0
P. U. pfd. stks.	29	21	21	0.1
P. U. com. stks.	218	211	311	0.8
Insur. stocks	1,525	6,661	6,661	17.7
Misc. pfd. stks.	81	72	72	0.2
Misc. com. stks.	485	1,026	1,026	2.7
Misc. adm. assets	[1]6,453	6,453	6,453	17.1
Total	32,706	37,885	37,651	100.0

[1]Carrying value.

Capital Stock: Authorized, $3,000,000; outstanding, $2,250,000; par $5 (changed from $100 par to $10 par Sept., 1948; ten $10 shares issued for each $100 share and from $10 par in December 1953; two $5 shares issued for each $10 share).

276,000 (61.3%) shares owned by Western Insurance Securities Co.

Capital stock increased from $750,000 to $1,500,000 in Dec., 1943 by 25% stock dividend and by subscription at $40 per share; to $1,200,000 in Dec. 1950 by 12% stock dividend and by subscription at $50 per share; to $1,500,000 in Dec. 1952 by a 25% stock dividend and to $2,250,000 in Jan., 1954, by subscription.

Dividends (payments since 1936 follow):

On $100 par shares:

1936-37	$8.80	1938	$10.00

On $10 par shares:

1939	0.60	1940	1.75	1941	$1.50
1942	0.50	1943-46	Nil	1947	0.30
1948	Nil	1949	0.55	1950	0.90
1951	0.80	1952-53	0.70	1954	1.35
[1]1945	1.75	1946-47	1.50	1948	1.65
1949	1.50	[1]1950-52	2.00	1953	1.50

On $5 per shares:

1953	0.25	1954	1.05	1955	1.30

[1]Also paid 25% in stock in 1945; 14% in 1950; 25% in 1952.

Price Range: 1955, 40-31½; 1954, 34-23.

Offered (5,000 shares) by company in Dec. 1950 at $50 per share in Kansas and Missouri only.

Transfer Agent and Registrar: First National Bank, Kansas City, Mo.

WESTERN FIRE INSURANCE CO. (Fort Scott, Kans.)

(Controlled by Western Casualty & Surety Co.)

Incorporated under Kansas laws in December, 1925; commenced business in Oct., 1926.

Types of insurance written: Fire and allied lines, automobile, inland marine and multiple lines.

Operates in Ala., Ariz., Ark., Col., Colo., Conn., Fla., Ga., Idaho, La., Kans., Ky., Ill., Iowa, Ind., Minn., Miss., Mo., N. J., N. M., N. Y., Neb., N. D., Ohio, Nev., U. S. Treas. Dept., Okla., Tenn., Tex., Wis., Mich., S. C., S. D., Utah, Wyo., Mont., Ore. and Wash.

Officers: R. B. Duboc, Chmn.; E. C. Gordon, Vice-Chmn.; C. C. Otto, Pres.; F. W. Duboc, K. H. Mead, E. H. Morrison, W. P. Sweet, Vice-Pres.; W. L. Gench, Sec.; M. L. Hurst, Treas.; E. H. Morris, Aud.

Directors: W. L. Gench, R. B. Duboc, E. C. Gordon, C. C. Otto, F. W. Duboc.

Annual Meeting: First Tuesday after first Monday in March.

No. of Stockholders: Dec. 31, 1955, 6.

No. of Employees: Dec. 31, 1955, 616.

Office: 14 E. First St., Fort Scott, Kansas.

Net Premium Volume:

	Written in 1955	In Force Dec. 31, 1955
Fire	$1,985,135	$1,579,034
Extend. coverage	1,038,405	2,344,558
Earthquake	1,031	1,915
Inland marine	217,212	293,193
Tornado, etc.	18,115	11,546
Auto phys. dam.	7,916,713	8,484,673
Glass	3,291	5,187
Burglary	7,913	13,783
Auto liability	216,635	185,589
Auto prop. dam.	114,771	93,210
Surety	15	1,950
Credit	19,413	7,421
Liab. oth. than auto	3,536	2,059

Courtesy of Shai Dardashti

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(The articles contained in this forum are not intended to be, nor are they to be regarded, as an offer to sell the securities discussed.)

WARREN E. BUFFETT

Manager—Several Private Investment Groups
Omaha, Nebr.

HOME PROTECTIVE CO.
(A Life Insurance Stock)

Home Protective Co. probably represents the last "undiscovered" equity security of a major life insurance company. This lack of investor awareness causes the security to sell at less than half of the lowest price-earnings ratio placed on comparable companies. Home Protective is currently selling at less than four times earnings. Any education of investors to the facts concerning the company should result in a substantially higher appraisal.

Warren E. Buffett

Home Protective has only 41,463 shares of stock outstanding. The company owns 98½% of the outstanding stock of the Home Life Insurance Co. of America, a leading Pennsylvania insurer with over 400,000 policyholders. After allowing for inter-company items, Home Protective has very little in the way of other assets and liabilities. As a practical matter, with only 1½% of the stock of Home Life held by others, Home Protective Co. is the Home Life Insurance Co. of America from a stockholder standpoint.

Whereas some years back the company had a very dubious financial position, strict adherence to the highest standards of investment in the placement of new funds plus utilization of retained earnings in very substantial charges against over-valued assets have given Home a very strong financial picture. While in 1940 government-guaranteed mortgages only accounted for about 12% of assets, they now represent over 50% of assets which is greatly above the industry average. During the same period the average rate earned on assets has increased from 2.04% to 2.60%. This gain based on present assets of $1,100 per share amounts to over $16 per share annually.

Home's business is entirely non-participating. The stockholder need make no guesses as to what belongs to him and what really belongs to the policyholder. Currently Home has close to $300 million of insurance in force with practically no low-profit group. The business is almost entirely ordinary and industrial with the latter fully as profitable as the former. The lapse ratio of the company has been very low indicating well-assorted business and experienced mortality has been excellent.

Dividends have been small while the company has been writing down assets to realistic values and the 30-cent annual rate will probably be continued for some years while the capital base is enlarged in line with the amount of business on the books. However, the earnings power has been maintaining a steady march upward and with a continuation of higher yields, low expansion and favorable mortality, a greater base of business should create further increases in earnings. With each share of Home Protective representing $1,100 in assets, a ½ of 1% change in interest rates represents a $5.50 per share change in earning power. While it takes considerable time to be fully effective, we have witnessed such a change within the past year and it has not yet been reflected in Home's earnings.

The company possesses an additional "kicker" in large holdings of contiguous undeveloped land on the Main Line to Philadelphia. Given proper zoning such holdings can have substantially greater value, particularly when related to only 41,463 shares outstanding.

Adjusting for changes in insurance in force at conservative rates, the following earnings are indicated for the past six years:

Year	Adjusted Earnings per Share
1951	$9.95
1952	12.12
1953	12.02
1954	15.09
1955	16.42
1956	22.12

A continuation of such increases which appears likely added to greater investor recognition should provide substantial capital gains to today's buyer at the 63 level in the Over-the-Counter market.

G. SHELBY FRIEDRICHS

Partner: Howard, Weil, Labouisse, Friedrichs & Co., New Orleans, La.
Members, New Orleans Stock Exchange and Midwest Stock Exchange

Southdown Sugars, Inc.

The security I like best offers stability, high intrinsic value and built-in growth of income which should have appeal during this time of unsettled market conditions generally.

Southdown Sugars, Inc., owns in fee over 46,000 acres of land located in the most attractive on-shore area for the exploration of oil and gas in the United States—south Louisiana. Although operating a stable and profitable cane sugar business, the mineral income, after taxes, from acreage leased to major oil companies last year exceeded net income from sugar operations, and will increase materially over the coming years. Southdown Sugars enjoys the advantages of participation in the results of production operations on its fee acreage without assuming any of the attendant risks. In addition, the land value of much of Southdown's property for industrial, commercial and residential purposes, adds substantially to the intrinsic value of the stock.

G. Shelby Friedrichs

The company is basically a completely integrated producer and refiner of cane sugar, operating three raw sugar factories and one refinery. Southdown has approximately 18,000 acres of cultivable land and purchases cane from other growers to supply the capacity requirements of its sugar factories. The company also imports Cuban raw sugar to fill refinery requirements. Income from this operation has been in the neighborhood of $1,500,000 per annum, before taxes.

The exploration for oil and gas in south Louisiana, dating back to the early 1930s, has had a marked effect on the company. Nearly all of the 46,000 acres of fee land have been under lease to major oil companies in recent years, and Southdown has been receiving royalty income since the discovery of the Gibson Field in Terrebonne Parish in 1932. Lease and royalty income has increased from $550,000 to $1,275,000 (before taxes) in the last five years (average 26% per annum) and gives every indication of continuing to increase at approximately this rate.

The development of the oil and gas industry, combined with the discovery of substantial sulphur deposits, plus large reserves of salt and an ample supply of fresh water, have combined to make south Louisiana a center for the petro-chemical industry. Plans have been announced by such companies as Dow Chemical, W. R. Grace, Kaiser Aluminum, Olin Mathieson and duPont for the investment of more than $230 million in plants located along the Mississippi River between New Orleans and Baton Rouge. Additions to the world's largest oil refinery—Esso's Baton Rouge plant—to the Shell plant at Norco and to Standard Oil of Indiana's refinery at Destrehan have also served to further industrialize this area. The discovery of oil and gas in the Gulf of Mexico, off the Louisiana coast, has also served to intensify activity in this area and has brought considerable expansion in oil field equipment and allied industries.

The result of all of this has been to bring about much improvement in land values, particularly those situated along strategic waterways, such as the Mississippi River, the Intra-Coastal Canal, etc., and the major highways. This influx of industry has also brought substantial increases in the population of the area, adding to the values of land for residential purposes. Approximately 13,000 acres of Southdown's land is located on the Mississippi River and all of the remainder is traversed by either main highways or other waterways, or both.

In an attempt to measure the intrinsic values that have thus been created, my firm (after consultation with oil geologists and land men and real estate experts) has made the accompanying appraisal of Southdown's properties. The values attributed are of the "horse-back variety and take into consideration mineral values as well as surface values. In my

Continued on page 119

This Week's Forum Participants and Their Selections

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Southdown Sugars, Inc. — G. Shelby Friedrichs, Partner, Howard, Weil, Labouisse, Friedrichs & Co., New Orleans, La. (Page 2).

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(The articles contained in this forum are not intended to be, nor are they to be regarded, as an offer to sell the securities discussed.)

This Week's Forum Participants and Their Selections

Oil and Gas Property Management, Inc.—Warren E. Buffett, Manager, General Private Investment Group, Omaha, Neb. (Page 2)

Century Engineers, Inc.—Robert D. Tucker, Research Dept., Morgan & Co., Los Angeles, Calif. (Page 2)

WARREN E. BUFFETT

Manager, Several Private Investment Groups, Omaha, Neb.

Oil and Gas Property Management, Inc.

A more fitting title for my selection would be "The Inflation Hedge I Like Best." Should inflation continue O & G may well be the vehicle to give the investor the same supercharged performance that highly leveraged investment trusts and warrants did in the early 40's.

Warren E. Buffett

O & G was organized in 1953 by interests affiliated with the Empire Trust to buy and manage producing oil and gas properties. The management is of the highest caliber and the Empire's reputation and experience in oil matters has undoubtedly been of considerable value. Purchases have been made subject to substantial oil payments with a large portion of income in early years used to extinguish these payments. This method might be compared to real estate purchased subject to large mortgages with rental income, exclusive of that portion needed for operating expenses, utilized for mortgage reduction. The tax laws facilitate this method very considerably when applied to oil by allowing oil payments as a direct exclusion from income. Accounting-wise, the result is to show a very small gross income while the equity is being built up substantially. Accordingly, the financial services do not show accurately the operating picture of O & G and the interested reader should study the annual reports of the company.

The equity money for O & G was originally raised by the sale of $10 million income debentures with 300,000 shares of stock attached. This issue was exceptionally well placed in large blocks with Wall Street houses, investment trusts, etc. The underwriting fee on the sale amounted to about ½ of 1%. An additional 80,000 shares of common were sold to the promoting group with the Empire Trust reputedly owning over 50,000 shares in a subsidiary. Large issues of warrants and options are conspicuous by their absence.

The equity money of O & G was invested by the end of 1954. Thus the company has acquired its properties on a somewhat more reasonable basis than might be expected at current higher prices for oil in the ground.

The table below shows the substantial reserves of the company and illustrates the dynamic possibilities of the small issue of common stock even should no increase in oil and gas prices occur. Figures are based on the 1955 annual report and we understand there has been little change since that date.

Item	Gross Reserves	Net Reserves for Int. & Divs.	Net Gross Value of Int. Reserves
Oil & Plant Products	[illegible]	[illegible]	[illegible]
Gas	[illegible]	[illegible]	[illegible]

The net reserves for stock and debentures reflect the reduction from gross reserves of amounts sufficient to retire all payments and loans. The debentures are income bonds and are not expected to pay their interest (which cumulates) until most of the oil payments have been liquidated. Accordingly, it may be estimated that approximately $15 million will be required to retire the debentures with interest. Operating expenses of course must be deducted from the gross values in the last column of the table and in the case of plant products, which represent half the oil reserves, will be more than average. Allowing $35 million for operating expenses and possible taxes still leaves a potential for the common of $40 million. Future acquisitions could increase this substantially.

The 380,000 shares of common have a total market value of about $5 million which makes the arithmetic of the picture fascinating. An increase in the price of oil of 15 cents per barrel or 1 cent per MCF in the case of gas is equal to the entire market value of the common. If oil over the next few years were to increase in price 50 cents per barrel, the gain in value would be equal to almost 400% of the current total market price of the common.

At the end of 1955 the company had about $49 million of oil payments and about $17 million of loans and debentures ahead of the 380,000 shares of common. However, over $33 million of the payments is applicable to one property and it is important to note that payments are obligations of only the specific property, not the company. The balance of payments amounted to less than $16 million and were reduced by $4 million in 1955 alone. Currently the average payout on these is probably less than three years away.

It is interesting to compare O & G with its more well-known counterpart — Producing Properties, Inc. This company also started with about $10 million of equity capital although it didn't get under way until early 1953. At a recent date PP's production was running about 2,200 barrels per day against over 7,000 for O & G and their net reserves were also less than a third those of O & G. On the other hand, they had invested only about half of their equity money so it is not to be implied that they were doing a poorer job of investing the money—it is just that they got off to a later start. However, PP common is selling in the market for about $14 million and, in our opinion, represents less value and potential than is present in O & G selling for $5 million. If O & G were to command only the same valuation, it would mean a price of over $35 per share.

O & G also owns a half interest in Yemen Development Corp. which holds a concession on two-thirds of Yemen covering 40,000 square miles including a large basin area. Geological reports are favorable although Suez unrest will undoubtedly delay testing this area. Offsetting this plus potential in the picture is a minus potential in that the largest property of O & G is involved in litigation concerning gas prices. O & G's position has been upheld by the FPC; however, the matter is now before the courts.

O & G common, selling around 14 in the Over-the-Counter Market, should do very well if present oil prices are maintained and presents outstanding possibilities should inflation continue. Behind $63 million of obligations with an estimated gross value of oil and gas offsetting these obligations of $130 million, the $5 million market valuation on the common seems to offer considerably higher chances for gain than for loss. A small investment in O & G should do the job that a many times larger investment in a non-leveraged oil holding would do while exposing the holder to a much smaller maximum loss.

ROBERT D. TUCKER

Research Department,
Morgan & Co., Los Angeles, Calif.
Member Los Angeles Stock Exchange

Century Engineers, Inc.

Century Engineers is a highly competent technical organization which was formed in 1949 with the express aim of getting together a group of engineers well qualified in several fields to be the over-flow engineering department for large companies and the overall engineering department for small companies. This was the basis of the company's beginning and its early activity. However, it soon became evident that to take advantage of the creative ability of the engineers they should be supplemented with prototype shop facilities and, eventually, with manufacturing facilities.

Robert D. Tucker

From the 1949 beginning wherein three engineers produced a total gross revenue of $10,000 to 1956 when a total company organization of approximately 360 people will gross approximately $6.5 million, this plan has been closely followed. The engineering and scientific personnel at Century are men who are well qualified to discuss theoretical problems with military scientists one minute and discuss fabrication problems with their own experimental mechanics the next.

Century is presently operating in five separate, but not unrelated, fields of activity. Their ultimate aim of having overall systems capability for a complete weapon system is presently subdivided into the following fields:

(1) **Aircraft Armament:** Century has designed and produced various airborne rocket launchers for all sizes of rockets now in production. Also launchers and pylons for missiles.

(2) **Electro-mechanical Division:** This field includes precision data recording cameras, timing devices and various servo mechanisms. Details of the military items in this field are classified.

(3) **Aircraft Structures:** Century Engineers has participated in the design of major structural components of current military aircraft. They have designed and

Continued on page 16

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December 13th, 1972

Mr. Charles N. Huggins, President,
See's Candy Shops, Inc.,
3423 Lacienega Boulevard,
Los Angeles, California. 90016.

Dear Chuck:

I was out at Brandeis a couple of days ago, and have a few strong impressions to pass along:

1. People are going to be affected not only by how our candy tastes but, obviously, by what they hear about it from others as well as the "retailing environment" in which it appears. The latter includes the class of store, the method of packaging, the condition in which it appears, and the surrounding merchandise. Just as the New Yorker creates a different "editorial environment" for a Lord & Taylor ad than does the Village Voice, so do the surroundings in which our candy is offered affect potential customers' mental - and even gastronomical - impression of our quality. You, of course, know this far better than I.

2. To date, we have always maintained an incredibly pure approach to distribution which undoubtedly contributes substantially to the public's image of our product.

3. At Brandeis, our product suffers in every comparative way against Stover's. They have an extremely well organized, well displayed and attractive area featuring nothing but their candy. Brandeis has taken a number of our boxes and placed them on a counter with 25 other offerings of cheap bulk candy, and other run-of-the-mill products. They have taken a standard card sign out of their own display department and put a few descriptive lines on it, which is not much different than the card next to it which might say "Jelly Beans, 99¢ a lb.". The one open package displaying the contents of our box has pieces out of place, empty wrappers, and generally presents a jumbled appearance.

4. In the case of the average customer at Brandeis, we are not maintaining an image but developing an image. It seems obvious to me that if we push further with department store distribution, we are going to

have to have very tight controls regarding merchandising conditions. They will have to be offered in a way that establishes them as something very special - and this probably means adequate display area insulated from inferior products, appropriate signs relating to the See's legend, and attractive open display boxes which are packaged so as to insure a first-class presentation.

All of this, of course, reflects the benefit of a first small scale test. If we decide to go ahead, we will have ample time to prepare for next year so that we can be sure we are represented only in quality stores in an absolutely quality manner.

When we get outside of our own territory, we may well want to have some descriptive material. Perhaps we could have a little booklet called "The Most Famous Kitchen in the World", or something of that sort. Coor's gets a lot of mileage out of the fact that all of their beer comes from one brewery, and I do think there is a certain mystique attached to products with a geographical uniqueness. Maybe grapes from one little eighty-acre vineyard in France are really the best in the whole world, but I have always had a suspicion that about 99% of it is in the telling and about 1% is in the drinking.

We might be able to tell quite a story about the little kitchen in California that has become the kitchen known 'round the world. If we prepare something along this line, it ought to be extremely well done and should form the basis of the legend that we eventually want to have permeate the country. Such a booklet, along with really classy display and appropriate advertising by Marshall Field's, Rich's, Jordan Marsh, etc., could well enhance our image rather than diminish it - which would be the case if we merchandised in the Brandeis manner. Incidentally, I also think we should put territorial limitations on the franchise. Younker's should not be allowed to come over to Omaha, nor Brandeis to go to Des Moines and sell the candy. It should be very hard to get, available only periodically, and then (to the consumer) apparently only in limited quantities.

With best personal regards,

Sincerely,

Warren E. Buffett

WEB/glk

c c: Mr. J. P. Guerin
Mr. C. T. Munger

WARREN E. BUFFETT
(b)(7)(C)

May 11th, 1973

Mr. Melvin S. Cohen, President,
National Presto Industries, Inc.,
Eau Claire, Wisconsin. 54701.

Dear Mr. Cohen:

In case you haven't seen the latest edition of The Intelligent Investor, I thought you might enjoy it - particularly because of the reference to National Presto.

I talked to Ben Graham on Wednesday - his 79th birthday - and he tells me that he owns 1,000 shares of National Presto. Ben has practically no active interest in the ownership of securities, so he has paid you the supreme compliment.

I hope that one of these days I have the chance to meet you personally. I am going to be on the West Coast during the summer and, should you find yourself in the Los Angeles area, please be sure to give me a call at (b)(7)(C) so we can get together.

Sincerely,

Warren E. Buffett

WEB/glk

PENSIONS

There are two aspects of the pension cost problem upon which management can have a significant impact: (1) maintaining rational control over pension plan promises to employees and (2) increasing investment returns on pension plan assets.

The Irreversible Nature of Pension Promises

To control promises rationally, it is necessary to understand the basic arithmetic and practical rules governing pension plans.

The first thing to recognize, with every pension benefit decision, is that you almost certainly are playing for keeps and won't be able to reverse your decision subsequently if it produces subnormal profitability.

As a practical matter, it is next to impossible to decrease pension benefits in a large profitable company - or even a large marginal one. The plan may embody language unequivocally declaring the company's right to terminate at any time and providing that contributions shall be solely at the option of the company. But the law has eroded much of the significance such "out" clauses were presumed to have, and operating practicalities render any residual rights to terminate moot.

So, rule number one regarding pension costs has to be to know what you are getting into before signing up. Look before you leap. There probably is more managerial ignorance on pension costs than any other cost item of remotely similar magnitude. And, as will become so expensively clear to citizens in future decades, there has been even greater electorate ignorance of governmental pension costs. Actuarial thinking simply is not intuitive to most minds. The lexicon is arcane, the numbers seem unreal, and making promises never quite triggers the visceral response evoked by writing a check.

In no other managerial area can such huge aggregate liabilities - which will be reflected in progressively increasing annual costs and cash requirements - be created so quickly and with so little immediate financial pain. Like pressroom labor practices, small errors will compound. Care and caution are in order.

Deceptive Arithmetic of "Promise Now - Pay Later"

If you promise to pay me $500 per month for life, you have just expended - actuarially but, nevertheless, in a totally tangible sense - about $65,000. If you are financially good for such a lifetime promise, you would be better off (if I have an average expectancy regarding longevity for my age) handing me a check for $50,000. But it wouldn't feel the same.

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In no other managerial area can such huge aggregate liabilities - which will be reflected in progressively increasing annual costs and cash requirements - be created so quickly and with so little immediate financial pain. Like pressroom labor practices, small errors will compound. Care and caution are in order.

Deceptive Arithmetic of "Promise Now - Pay Later"

If you promise to pay me $500 per month for life, you have just expended - actuarially but, nevertheless, in a totally tangible sense - about $65,000. If you are financially good for such a lifetime promise, you would be better off (if I have an average expectancy regarding longevity for my age) handing me a check for $50,000. But it wouldn't feel the same.

And, if you promise to pay me 1,000 hamburgers a month for life which, superficially, may sound equivalent to the previous proposition (assuming a present hamburger price of 50¢), you have created an obligation which, in an inflationary world, becomes most difficult to evaluate. This creates a risk we talk of later as an "earthquake risk". One thing is certain. You won't find an insurance company willing to take the 1,000-hamburgers-a month obligation off your hands for $65,000 - or even $130,000. While hamburgers equate to 50¢ now, the promise to pay hamburgers in the future does not equate to the promise to pay fifty-cent pieces in the future.

So, before plans are introduced or amended, the financial consequences (particularly in a world of significant inflation which I believe to be close to a certainty)* should be clearly understood by you. Consulting actuaries are very good at making calculations. They are frequently terrible at making the assumptions upon which the calculations are based. In fact, they well may be peculiarly ill-equipped to make the most important assumptions if the world is one of economic discontinuities. They are trained to be conventional. Their self-interest in obtaining and retaining business would be ill-served if they were to become more than mildly unconventional. And being conventional on the crucial assumptions basically means accepting historical experience adjusted by a moderate nudge from current events. This works fine in forecasting such factors as mortality and morbidity, works reasonably well on items such as employee turnover, and can be a disaster in estimating the two most important elements of the pension cost equation, which are fund earnings and salary escalation.

Illustrated Elemental Actuarial Principles

To illustrate a few actuarial principles worth understanding, but without employing the technical jargon and the asterisks, let's use the example of your household. Assume that you, personally, make irrevocable promises to pay pensions of $300 per month for life after they reach 65 to, say, four household employees. To make it easy, let's say that they each are 55 years of age at present. If you make that promise today, you have reduced your net worth today by about

* My views regarding inflationary possibilities are more extreme than those of most respected observers. It is difficult to substantiate a dogmatic view, since conclusions rest more upon social and political judgments than upon economic training and analysis. You should recognize the subjective nature of the reasoning leading to my pessimistic conclusions regarding inflation over the longer term - and not be reluctant to correct accordingly.

$70,000. (For simplicity's sake, I am ignoring some variables such as sex of employees - women live longer and therefore cost more - death before 65, etc. In calculating such factors the actuaries shine.)

Why are you immediately $70,000 poorer? Well, if you set aside a $70,000 fund now and invest it at 7% interest - and let all such interest remain in the fund to be compounded - the principal value of the fund will grow to about $100,000 in ten years when your employees reach 65. And to buy them a lifetime annuity of $3,000 per year will then cost about $35,000 each, utilizing the entire accumulated capital of the fund. So if you make the promise and it is binding - legally or morally - figure you have spent today $70,000, even though you don't have to pay out a dime of cash for ten years.

Now take it one step further and assume that your employees each are earning $600 per month but, instead of promising them $300 per month upon retirement, you promise them 50% of their salary at the time they retire. If their increases run 7.2% per year - and they probably will in the world I foresee - they will be earning $1,200 per month by the time they reach 65. And it will now cost you $70,000 each to purchase annuities for them to fulfill your promise. The actual cost, today, of modifying your promise from 50% of present pay to 50% of terminal pay was to exactly double the fund that needed to be set aside now from $70,000 to $140,000.

Many pension plans use final average pay (usually the average of the last five years, or the highest consecutive five years in the last ten years employed) and some use career average pay. I am not arguing here which should be used, but am illustrating the dramatic difference in costs that can occur because of rather minor-appearing changes in wording.

Pension costs in a labor intensive business clearly can be of major size and an important variable in the cost picture, particularly in a world characterized by high rates of inflation. I emphasize the latter factor to the point of redundancy because most managements I know - and virtually all elected officials in the case of governmental plans - simply never fully grasp the magnitude of liabilities they are incurring by relatively painless current promises. In many cases in the public area the bill in large part will be handed to the next generation, to be paid by increased taxes or by accelerated use of the printing press. But in a corporation the bill will have to be paid out of current and future revenues - with interest - and frequently with what is, in effect, a cost-of-living escalator.

The "Earthquake Risk"

In Germany, in the great inflation of the early 1920s, the entire Daimler Benz (Mercedes) Automobile Company was selling in the market for the price of 300 motor cars. Almost all past investments were nearly worthless, and current salary levels were astronomical in relation to past history. Under such conditions, or conditions far short of such an extreme, the burden of any pension benefits owed by a business, which are based on current salary levels though related to much earlier service in employment, must be backed almost exclusively by the current value (earning power) of the business. Advance funding simply evaporates.

For example, assume that salaries (and the cost of living) are moving upward at 25% per year and the pension fund is earning 10% per year - a set of assumptions not ridiculously different from what exists in England at the moment. Under such conditions, funds put aside for retirement immediately begin to shrink in relation to promised benefits. Every month fewer hamburgers can be purchased from the funds contributed to the pension plan - even after accumulating dividends and interest on the funds.

Almost no one chooses to think about this sort of "earthquake risk" in dealing with pension plans, any more than people choose to spend much time thinking about nuclear war. It may be my earlier-mentioned bias, or my mathematical bent, but I believe some "unthinkable" inflation related calculations should be made - and even considered - before any company assumes open-ended pension obligations guaranteeing a large number of persons absolute protection against inflation by gearing benefits without limit to final pay or escalating benefits to persons already retired, based on changes in the cost of living.

Thus, the really devastating possibility regarding private pension plans is sustained double-digit inflation. When salaries move ahead at a substantially higher rate than investment returns and benefits are tied to final salaries (or, even more expensively, cost-of-living increases <u>after</u> retirement as in recent rubber and aluminum contracts), it is virtually impossible to pre-fund obligations. Like it or not, you become much like the Social Security fund, absent the power to tax. Should that occur, future purchasers of the products of the company must be willing to do so at prices that reflect not only the wages of current workers, but the promises to past workers. Some businesses will have economic characteristics allowing them to pass along these costs, but others will have major troubles. On balance, I believe we are in relatively favorable businesses under

such circumstances. I do not believe this problem can be solved by the investment process. I mention it for completeness, not because I have answers - and to urge caution in making pension benefit promises subject to dramatic escalation through substantial attrition in the purchasing power of money.

Now let's look at funding and investment behavior appropriate to an economic world at least reasonably similar to the past, recognizing that such a world is far from a certainty.

The Investment Management Problem Inherent in All Pension Plans

Once having committed to provide pensions, how do we pay? The law and prudent business practice mandate that we start putting aside funds on a fairly orderly and consistent basis from which we can fulfill our promises. In this manner we pay the employee currently while he is being productive for the company, and we simultaneously set up a savings account (collectively, not individually) which will accumulate at interest so as to purchase an annuity (not actually "purchased" in most plans, of course, just assured by the pension fund) for him at retirement which will discharge our promise to pay him throughout his non-productive years. Thus, our current cost and current cash requirements (if our estimates are accurate as to what we will earn on the savings account as well as other estimates regarding turnover, salary escalation, longevity, etc.) will reflect his total lifetime employment costs to us spread rather evenly over his productive years.

(This advance funding treatment, matching full current costs against current production, contrasts with the Social Security Plan's program which essentially taxes current producers to pay current non-producers. This simply means moving a portion of current national output of goods and services over from those who produced it to those who are non-producing, and to whom promises have been made. If such a system had been in effect for a very long time, the demographic profile remained fairly constant, the promises remained fairly constant, and there was no inflation, the net effect from such a pay-as-you-go approach would not substantially differ from an advance funding basis. However, these conditions do not exist which may make for various problems - including some that exacerbate inflation and thus have negative fall-out for the economics of private plans.)

Because a business corporation, unlike the Federal government, has to create a "savings account" - an investment accumulating and investment

management operation of some sort - to properly fund its pension plan, it must make investment management decisions with respect to pension plan assets.

The History of Corporate Pension Plan Management
Act One : The Awakening

A few decades ago pensions were a relatively new thing at most companies, so that the "savings accounts" were in their formative stages and therefore much smaller. Furthermore, promises were functions of those presently made, so that the amount eventually required in the savings account to purchase the required annuity at retirement was correspondingly smaller.

Thus the amounts paid into pension funds ("savings accounts") were largely forgotten so far as managerial responsibility was concerned until the great awakening of the 1960s. At that time managements noticed:

(1) The funds had grown to the point where they sometimes were 25% to 50% of the net worth of the company - often making the assets employed in the savings account larger than those employed in the company's largest division. Here are a few figures which I have handy from year-end 1972:

Company	(In Millions) Corporate Net Worth	Pension Fund Assets
A & P	$ 509	$ 236
DuPont	3,268	1,817
Firestone	1,251	423
IBM	7,505	1,623
U. S. Steel	3,377	2,239

So, while U. S. Steel had a visible $3.6 billion in net operating assets which management probably spent 99% plus of their business hours thinking about, they had $2.2 billion in the "bank", whose economic results would impact future values for the shareholders, dollar for dollar, with the economic results of the steel assets. There literally were years when the savings account earned more than was earned out of all operating assets of the steel business. (In fairness to U. S. Steel, it should be mentioned that they were one of the pioneers in recognizing the importance of pension assets - and have done a better-than-average job through in-house management.)

(2) The returns actually realized on the "savings account" had an enormous impact on costs. A sustained 1% change in earning rate could easily swing the annual cost to the contributing company by 15%.

(3) During a period when equities had produced fabulous returns, many of the plans had been invested largely in bonds - which not only have low fixed rates of 3% to 5% in the earlier periods, but also had suffered significant shrinkages in market values as interest rates increased secularly. [If interest rates go up, bond prices must go down - and if the bonds are long-term and the rates rise sharply, prices go into a power dive.]

(4) Many managements thus saw their largest division earning dismal rates of return with substantial market value shrinkage in the bond component, while all around them high returns were being realized from stocks with little apparent effort or talent. If a company had $100 million invested in its engine division earning 12% by managerial zeal and ingenuity, why tolerate $100 million in its pension fund "division" poking along at only 4% because of inattention - particularly when increasing the $4 million to some larger figure would have the same impact in future earnings for owners as raising margins on engines. Intensive effort on production, research and sales might only produce an increase from 12% to 14% in the engine area, since decisions already had been so near to optimal, but it was easy to imagine 4% becoming 10% in the pension fund area if just average results were attained in equity investment. And, of course, who would settle for being just average?

<u>The History of Corporate Pension Plan Management</u>
<u>Act Two - The Great Leap</u>

And so the hunt was on. Wall Street abhors a commercial vacuum. If the will to believe sins within the customer, the merchandise will be supplied - without warranty. When franchise companies are wanted by investors, franchise companies will be found - and recommended by the underwriters. If there are none to be found, they will be created. Similarly, if above-average investment performance is sought, it will be promised in abundance - and at least the illusion will be produced.

Initially those who know better will resist promising the impossible. As the clientele first begins to drain away, advisors will argue the unsoundness of the new trend and the strengths of the old methods. But

when the trickle gives signs of turning into a flood, business Darwinism will prevail and most organizations will adapt. This is what happened in the money management field.

The banks had traditionally been the major money managers (leaving aside insured plans) and, by and large, their investing as well as their communication had been lacklustre. They felt obliged to seek improvement, or at least the appearance of improvement, as corporate managers searched for yardsticks by which to make their decisions as to when care of this newly discovered giant "division" should be granted. The corporate managers naturally looked for groups with impressive organizational charts, lots of young talent, hungry but appropriately conscious of responsibility, (heavy on MBAs from good schools), a capacity for speed in decision making and action - in short, organizations that looked something like they perceived themselves. And they looked for a record of recent performance.

Unfortunately, they found both.

A little thought, of course, would convince anyone that the composite area of professionally managed money can't perform above average. It simply is too large a portion of the entire investment universe. Estimates are that now about 70% of stock market trading is accounted for by professionally managed money. Any thought that 70% of the environment is going to substantially out-perform the total environment is analagous to the fellow sitting down with his friends at the poker table and announcing: "Well, fellows, if we all play carefully tonight, we all should be able to win a little."*

So, clearly the almost universal expectations of above-average performance in pension fund management were doomed to disappointment. These disappointments were certain to be amplified by a corollary affliction that frequently accompanies pressure for investment performance - higher turnover rates. It is difficult to measure turnover

* An interesting example of this line of thinking (sub species: wishful) occurs in the April, 1975, Conference Board "Trends in Pension Fund Administration" article which Marty sent me the other day. In a carefully written "Investment Guidelines" statement by a manufacturing company, it is announced: "We believe it is reasonable to expect long-term results superior to the usual market indexes, and the S & P 500 in particular. Specifically, we look for performance better than this index in all types of market environments." And yes, Virginia, maybe every football team can have a winning season this year.

costs with precision, but they certainly must run at least 2% on average when applied to the round trip of purchase and sale. If an investment manager, striving for not only acceptable quarterly performance but also for the appearance of behaving as other highly-thought-of managers are known to be behaving,* moves aggressively to keep his portfolio in the "right" stocks, he easily can average turnover rates of 25% per year. When the performance rage peaked, drastically higher turnover figures were recorded with some managers.

In any event, a 25% turnover rate among professionals as a group, with 2% costs attached to such turnover, reduces group performance by 1/2 of 1% per annum ($1½ billion per year on $300 billion of assets). This means that, instead of chance dispersal of results causing half of all managers to fall above the unmanaged performance level (which has no transaction costs) and half to be below, the frictional drag of turnover costs causes well over half to perform worse than what "average" might be assumed to be.

For the reasons set forth above, almost all recent investment management performance by pension funds of large corporations has been fair to poor. Specifically, the Becker study (most comprehensive of all pension investment measuring services) reports the following:

	Overall Annual Return	
	S & P 500	Becker Median Result*
Last 3 market cycles, (6/30/62 to 12/31/74)	5.3%	4.1%
Last 2 market cycles, (9/30/66 to 12/31/74)	2.1%	3.4%
Last single market cycle, (6/30/70 to 12/31/74)	2.2%	(0.3%)

*Excludes bond segment of portfolios so that equity management only is measured against the equity yardstick.

* In the short term, it frequently is better to look smart than to be smart, particularly if your employment is to be decided by a rather brief interview. If the fans are going to decide your hiring status based on only a few swings, it is prudent to develop a batting style that will remind them of Joe DiMaggio or Ted Williams, even if long-range your percentage of solid hits with that style is small and you know you obtain better results batting cross-handed.

Is There Hope? Can a Wise Corporation Assure Superior Investment Performance for its Pension Plan?

If above-average performance is to be their yardstick, the vast majority of investment managers must fail. Will a few succeed - due either to chance or skill? Of course. For some intermediate period of years a few are bound to look better than average due to chance - just as would be the case if 1,000 "coin managers" engaged in a coin-flipping contest. There would be some "winners" over a 5 or 10-flip measurement cycle. (After five flips, you would expect to have 31 with uniformly "successful" records - who, with their uncanny abilities confined in the crucible of the marketplace, would author pedantic essays on subjects such as pensions.)

In addition to the ones benefiting from short-term luck, I believe it possible that a few will succeed - in a modest way - because of skill. I do not believe they can be identified solely by a study of their past record. They may be operating with a coin that they know favors heads, and be calling heads each time, but their bare statistical record will not be distinguishable from the larger group who have been calling flips indiscriminately and have been lucky - so far.

It may be possible, if you know a good deal about investments as well as human personality, to talk with a manager who has a decent record and find that he is using methods which really give an advantage over other investors, and which appear to be likely to provide continued superiority in the future. This requires a very wise and informed client - and even then is not free from pitfalls.

For agencies, there is one huge, obvious pitfall. I am virtually certain that above-average performance cannot be maintained with large sums of managed money. It is nice to think that $20 billion managed under one roof will produce financial resources which can hire some of the world's most effective investment talent. After all, doesn't the big money at Las Vegas attract the most effective entertainers to its stages? Surely $50 million annually of fees on $20 billion of managed assets will allow (a) an array of industry specialists covering minute-by-minute developments affecting companies within their purview; (b) top-flight economists to study the movement of the tides; and (c) nimble, decisive portfolio managers to translate this wealth of information into appropriate market action.

It just doesn't work that way.

Down the street there is another $20 billion getting the same input. Each such organization has its own group of bridge experts comparing on identical hands - and they all have read the same book and consulted the same computers. Furthermore, you just don't move $20 billion or any significant fraction around easily or inexpensively - particularly not when all eyes tend to be focused on the same current investment problems and opportunities. An increase in funds managed dramatically reduces the number of investment opportunities, since only companies of very large size can be of any real use in filling portfolios. More money means fewer choices - and the restriction of those choices to exactly the same bill of fare offered to others with ravenous financial appetites.

In short, the rational expectation of assuming above average pension fund management is very close to nil.

Illustrations of Reality in Pension Fund Investment Management

I recently received some interesting figures from a pension fund involving about $250 million of assets. The 9-1/2 year record through June 30, 1975 of the three major banks involved (managing $20 - $50 million per bank) follows, compared to "average" as defined in two ways, the S & P 500 and the Dow Industrials:

	Annual Compounded Rate of Return (Including Dividends)
Dow-Jones Industrials	+2.8%
S & P 500	+3.6%
Continental Illinois	+1.8%
First National City	+1.0%
Morgan Guaranty	+3.0%

Until recently, Chase had managed a comparable segment of the funds but was terminated because of poor performance - probably worse than the other banks shown above. Each percentage point plus or minus affected this fund by about $2 to $4 million over the time period measured.

A further interesting calculation was made. On June 30, of the portfolio held by Continental, 60% of the securities held, measured by market value, also were in the Morgan portfolio and 40% were duplicated in the First National City portfolio. Similar overlap was demonstrated in other ways.

I am familiar enough with the record of this fund to state that no unusual constraints have been placed on the managers, and no special factors have to be recognized to interpret the numbers. I believe that Morgan's above-average record here, compared to that of other large banks, is typical of its relative performance at other pension funds. I also feel the predictive value of that relative standing to be low.

Pensions & Investments magazine recently rated the 35 largest banks for which five-year performance records of commingled equity funds were available. Ten did as well as or better than the S & P, consistent with what might be expected according to probability theory if everyone were operating solely according to chance and there was a modest drag on performance caused by transaction costs. More importantly, I know of no set of statistics which would demonstrate any opposite view relating to managers handling large amounts of money.

The evidence all seems to confirm that it is unwise to expect above-average investment results from a corporate pension plan, conventionally managed.

Major Options in Pension Fund Management

With respect to pension fund investments in securities, several paths can be followed, singly or in combination:

(1) One or more large conventional money managers may be retained, with the expectation that performance will be slightly poorer than "average" because of costs involved. If the manager is very large and conventional - any major bank will do - directors of the corporation should run no risk of imprudent behavior as fiduciaries under the new ERISA statute. Conventional behavior is safe - even when the potential litigants have the benefit of hindsight. If we should go this route, I see no reason to change from Morgan.

(2) Management in security selection can be, in essence, abandoned by simply creating a portfolio which is equivalent to "average". This minimizes turnover and management costs, and probably accomplishes about the same result as (1) - perhaps with just a touch more potential liability for results, since a tacit admission has been made that no effort is being expended to "manage". Several funds have been established fairly recently to duplicate the averages, quite explicitly embodying

the principle that no management is cheaper, and slightly better than average paid management after transaction costs. This policy could be implemented by participating in such funds, or on a do-it-yourself basis.

(3) A manager can be found handling smaller amounts whose record has been good for the right reasons.

Then hope that no one else finds him.

Good records of any type usually have attracted massive money flows - whether the record was based on unusual skill, luck, or even, occasionally, some fraudulent activity which has "manufactured" the record. Even those records which I believe to have been based at least partially on skill have wilted when subjected to torrents of money.

A further problem is that in no case were the superior records I have observed based upon institutional skills which could be maintained despite changes in the faces. Rather, the good results have been accomplished by a single individual or, at most, a few, working in fairly specialized areas in which the great bulk of investment money simply had no interest. It has been very difficult to out-think the pack on General Motors, IBM, Sears, etc. Rather, the unusual records - and there have been few that have been maintained - have been achieved by those who have worked relatively neglected fields in which competition was light.*

Many pension funds, including the fund to which I referred earlier, have attempted to find superior but relatively unknown managers still working with small sums. This often involves dozens of interviews and usually comes down to the past record,

* Your win-loss percentage in tennis will not be determined by the absolute level of ability that you possess. Rather, it will be determined by your ability to select inferior opponents. If you select with care it will be quite easy to attain a winning percentage higher than, say, Cliff Richey while he is playing on the tour. Application of this principle is the key element in bridge, poker, or investments. (Harder to apply in the latter, however - it is easier to identify a couple of patsies at the bridge table.)

particularly the recent past, plus an articulate practitioner who "looks" reasonable and respectable. In my opinion, based only on impressions, the overall record from this selection process has been poor and very likely worse than the mildly below-average record of the major money manager.

The reason isn't too hard to see (particularly with a rear view mirror). Much of Wall Street is a succession of fashions. Obviously some individuals will have hit the most recent fashion, and their record will look correspondingly good - maybe sensationally good if they have a reckless streak and have played a particular trend very hard. But fashion-hitting never has been successfully maintained, to my knowledge. And the manager primarily selected for recent hot performance knows what he is expected to do. He is to perform - and quickly. So the new small manager's decisions frequently are characterized by high turnover, major mistakes, even more furious activity to catch up, etc. It has not happened every time, but my hunch is that the sum total performance of the relatively unknown go-go managers for pension funds has been worse than the lumbering, still-logged minuet performed by the major banks.

(4) A fixed income (bonds) investment strategy can be followed, which presently allows returns of about 9% per annum that can be locked in for some time. This option currently is becoming somewhat more popular, should be quite defensible under ERISA, and will look good or bad, depending upon what returns from equity holdings develop over the next decade or two. This essentially is the same decision that was made by default several decades ago by many companies, except the rates then were 4% instead of 9%. I do not recommend an attempt by us to go back and forth from bonds to stocks. This is a skill possessed by few, if any - and certainly not by a group. If we could master this particular form of alchemy, there would be little reason to do anything else.

The comfort level produced by this option is likely to be high under any conditions except high rates of inflation - which will produce distress under all of the options discussed herein.

(5) My final option - and the one to which I lean, although not at anything like a 45-degree angle - is mildly unconventional, thereby causing somewhat more legal risk for directors.* It may differ from other common stock programs, more in attitude than in appearance, or even results. It involves treating portfolio management decisions much like business acquisition decisions by corporate managers.

The directors and officers of the company consider themselves to be quite capable of making business decisions, including decisions regarding the long-term attractiveness of specific business operations purchased at specific prices. We have made decisions to purchase several television businesses, a newspaper business, etc. And in other relationships we have made such judgments covering a much wider spectrum of business operations.

Negotiated prices for such purchases of entire businesses often are dramatically higher than stock market valuations attributable to well-managed similar operations. Longer term, rewards to owners in both cases will flow from such investments proportional to the economic results of the business. By buying small pieces of businesses through the stock market rather than entire businesses through negotiation, several disadvantages occur: (a) the right to manage, or select managers, is forfeited; (b) the right to determine dividend policy or direct the areas of internal reinvestment is absent; (c) ability to borrow long-term against the business assets (versus against the stock position) is greatly reduced; and (d) the opportunity to sell the business on a full-value, private-owner basis is forfeited.

These are important negative factors but, if a group of investments are carefully chosen at a bargain price, it can minimize the impact of a single bad experience in, say, the management area, which cannot be corrected. And occasionally there is an

* I am leaving most of the legal discussion out of this memo - partly due to space considerations and partly because it is not my field. In general, the safest course is to behave as most others are behaving - and to trust in the expertise of large, well-regarded conventional organizations. I also believe it is defensible - although not as automatically defensible - to diversify among a group of well-financed or trenched businesses purchased at reasonable valuations of earnings and assets.

offsetting advantage which can be of very substantial value - but for which nothing should be paid at the time of purchase. That relates to the periodic tendency of stock markets to experience excesses which cause businesses - when changing hands in small pieces through stock transactions - to sell at prices significantly above privately-determined negotiated values. At such times, holdings may be liquidated at better prices than if the whole business were owned - and, due to the impersonal nature of securities markets, no moral stigma need be attached to dealing with such unwitting buyers.

Stock market prices may bounce wildly and irrationally but, if decisions regarding internal rates of return of the business are reasonably correct - and a small portion of the business is bought at a fraction of its private-owner value - a good return for the fund should be assured over the time span against which pension fund results should be measured.

It might be asked what the difference is between this approach and simply picking stocks a la Morgan, Scudder, Stevens, etc. It is, in large part, a matter of attitude, whereby the results of the business become the standard against which measurements are made rather than quarterly stock prices. It embodies a long time span for judgment confirmation, just as does an investment by a corporation in a major new division, plant or product. It treats stock ownership as business ownership with the corresponding adjustment in mental set. And it demands an excess of value over price paid, not merely a favorable short term earnings or stock market outlook. General stock market considerations simply don't enter into the purchase decision.

Finally, it rests on a belief, which both seems logical and which has been borne out historically in securities markets, that intrinsic business value is the eventual prime determinant of stock prices. In the words of my former boss: "In the short run the market is a voting machine, but in the long run it is a weighing machine."

Specifically, it probably is possible to invest the $12 million in our pension fund in a dozen businesses (maybe more; ERISA emphasizes diversification) with current intrinsic value (measured by private-owner valuations and transactions) attributable to our investment of, say, $20 million and current earnings of at least $1.5 million. The portion of such earnings paid out to us clearly is worth 100 cents on the dollar, and a reasonable

batting average by the managements of companies in which we invest should result in the portion reinvested having similar value. If this is the case, such a "pension division" operation will produce better returns than bond investment at current rates.

The main long-term risk would be that future returns on capital obtained by our "division managers" would turn sour. In some individual case that undoubtedly would prove true. It might well be that there also would be a favorable surprise or two. That is true of any acquisition program. The one substantial advantage that this "division" would have would be attractive purchase prices - far below those available for purchasers of entire businesses. If purchases could not be made on such a "bargain" basis, we simply would wait until they could. A second advantage would be the flexibility provided by a public stock market, allowing portions of business operations to be acquired or divested much more easily than entire operating businesses.

It must be emphasized that measurement of this program would have to be based on the progress in our share of earnings and assets of the constituent companies - not short-term market movements. We would expect substantial increases in earnings, dividends and asset values over, say, a decade just as we expect with our operating divisions at Washington Post. We would, in mental approach, have created a new diversified division, currently capitalized at about $12 million, which is expected to earn a better-than-bond rate with which to eventually pay retired employees. In a sense, this is what was done in the profit-sharing fund when it accumulated Washington Post stock throughout earlier years - basically a wise decision because the business earned very well internally and thereby grew in value at a substantial rate. It was an attractive partially-owned business, acquired at an attractive price. Until market prices were introduced, which complicated things, the funds built up through this self-owning division were significantly larger than would have been achieved by buying bonds or the general run of common stocks.

If it should be decided to implement such a policy, recommendations should be obtained from qualified analysts who clearly understand our rather unusual selection criteria. This could be handled on a quite infrequent basis.

As mentioned earlier, a policy also could be followed combining more than one option. Most combinations have been (1) and (3), or (1) and (4), but (4) and (5) could well be more logical.

Pension Asset Management in the Scale of Business Priorities

Of course, the desirability of even considering something non-conventional (not to be equated with more risk; the exclusive benefit provision of ERISA requires fiduciaries to discharge their duties "solely in the interests of the participants and beneficiaries") relates to the relative impact pension results can have on overall earnings. One of my friends always reminds me: "If a thing's not worth doing at all, it's not worth doing well." If our pension assets were $1 million and likely to grow only a few hundred thousand dollars a year, it would be ridiculous to think of any activity that might cause even unwarranted criticism, let alone litigation. On the other hand, if we had U. S. Steel's pension situation, we might want to make a truly top priority project out of pension asset management (as they have), even if we might slightly increase personal risks to directors by so doing.

We fall in between although, if you look through to the plans to which we contribute but don't manage (Guild, mechanical, etc.)* we are moving more in the direction of U. S. Steel. It is likely that within ten years we will have $40 million in our direct pension "division" and further substantial sums in other plans presently on an indirect basis. Earnings of businesses purchased through this "division" should run at least $5 million per year.

* In prior years it was felt that by limiting contributions to union plans to so much per shift, or per hour, management was relieved of responsibility for any specific level of benefits, as well as pension fund administration. The shield of this "hands off" position is eroding and we should recognize that we may well have responsibility at some future date for benefits promised under these plans, which we originally thought involved only defined contributions. With this in prospect, we may wish to gain at least partial command over fund investments in this area.

Summing up:

(1) If the economic world turns out to be one of sustained double-digit inflation - probably still unlikely but not unthinkable - among the carnage will be private pension plans. The investment process can do little to modify that disaster. Hope lies mainly in the care with which past promises have been made, and the ownership of a business whose economic characteristics allow pass-through pricing which includes a large part of past labor costs, as well as full current costs.

(2) In a more orderly world, the care with which promises have been worded remains important, but on a scale that diminishes as inflation moderates. Conventional approaches to money management should not be expected to produce above average results. But average will be perfectly acceptable at low inflation rates.

(3) A mildly non-conventional investment approach, emphasizing a business approach to security selection, gives some opportunity for long-term results slightly above average without corresponding increase in investment risk.

Warren E. Buffett

October 14, 1975

July 22nd, 1975

Mr. George D. Young,
National Indemnity Company,
3024 Harney Street,
Omaha, Nebraska. 68131.

Dear George:

Thanks very much for your memo of July 15th regarding GEICO which I believe summarizes well the problems attendant to the specific property treaty we are discussing, as well as the general problems associated with reinsurance of any type at GEICO. I still am willing to explore further the GEICO property treaty - if they subsequently decide that it fits their needs - and today committed to Jack Byrne that we would take a 15 quota share of their entire book. This increase from .5 of 1% was pursuant to his request in order to help him attain the 25% mark by the shareholders meeting tomorrow.

I consider the overall quota share to be an acceptable - but not exciting - piece of business. Under normal conditions we would take nothing like 1.1, obviously, since that makes it by far the largest reinsurance treaty on our books, and involves substantial risks along with a limited prospect of profit. I also do not like the feature that provides for a credit to GEICO for interest earnings on funds held by us. In effect, we are making this contract number one in size for the reinsurance department, whereas the contractual terms make it less attractive than most of our other contracts.

However, I have three reasons for taking this unusually large portion of the quota share arrangement, and these same reasons also apply to my interest in the property treaty.

1. I hope it is not a governing factor in any way, but I do have some sentimental reasons for wishing GEICO to survive. GEICO has enumerated all of the hard headed reasons, such as the State Financial Guaranty funds, etc. I just have

pulled out of the bottom drawer of my desk a statement of my net worth at the end of 1951 when I was 21 years old. I showed net assets of $19,737, of which $13,125 was in GEICO stock. That was the year when I first started selling securities, and I told everyone who would listen to me that they should put every cent they could scrape together into GEICO. A number of friends and relatives did so, and enjoyed a significant change in their financial fortunes because of this. It provided the first big boost to my own small savings, as well as an even more important boost to my reputation in the Omaha investment community.

During those early years, when I followed the company, the people involved couldn't have been clear. Lou Goodwin was running things then and was helpful. Even moreso was L. A. Davidson. He was personally encouraging and forthcoming with information regarding the business, which enabled me to develop a depth of conviction which I have felt few times since about any security.

2. At that time I felt that GEICO possessed an extraordinary business advantage in a very large industry that was going to continue to grow. Since that time they never have lost that advantage - the ability to give the policyholder back in losses a greater percentage of the premium dollar than any other auto insurance company in the country, while still providing a profit to the company. I always have been attracted to the low cost operator in any business and, when you can find a combination of (i) an extremely large business, (ii) a more or less homogenous product, and (iii) a very large gap in operating costs between the low cost operator and all of the other companies in the industry, you have a really attractive investment situation. That situation prevailed twenty-five years ago when I first became interested in the company, and it still prevails.

The company managed to nullify this advantage - and even more than nullify it - by inadequate recognition of loss costs through poor techniques of loss reserving. This led to improper pricing of product, with the result that a product which <u>could</u> have been sold at a profit <u>was</u> sold at a loss. But the important point to note is that the company had not lost its position as a low cost operator; they merely had

mismanaged their loss information which caused the product to be priced inadequately. I believe the advantages of a 13% acquisition cost ratio are as important as ever. I also believe that practically no other companies are going to achieve costs near that figure in the future. Therefore, GEICO, properly managed, should prosper if they can pull themselves back from the financial precipice.

I like very much what Jack Byrne says about reducing policies in force. It seems to me that such an approach - rather than an obsession with growth - is very likely to reconstruct the situation whereby they can give the policyholder an unusually high percentage of the dollar back in losses and still make good profits for themselves

3. The crucial factor, then, becomes whether they can get past their present financial difficulties. Much of the press - witness Time last week - assumes that they can't. Until recently, I was unclear myself as to their possibilities in this regard. If they had been at all wishy-washy in obtaining rate increases or biting the bullet generally, I don't think they would have made it. However, the size of the rate increases they have instituted, along with the underwriting results they have published for April and May, have convinced me that their combined ratio will come down to tolerable limits within a fairly short time.

Even this would not have been enough if Mr. Wallace were inclined to put them into receivership because of the unwillingness of the industry to accept his 40% plan. When he did not move to do so after the June 23rd deadline, it convinced me that he was not going to act precipitously to terminate a business that fundamental economic logic still dictated had a bright future ahead of it. When he did not bow his back over the non-subscription to his 40% plan, I believe the company's future became assured. I decided then to buy stock, which is the most tangible evidence I can give you as to my assessment of the Company's chances for survival.

Therefore, George, I will take the responsibility for making the decision that GEICO survives as a business entity. You should make any underwriting judgments that you wish, with this as the premise - if I am wrong about their survival, it will be my fault and not yours. I do not want to go overboard because of sentiment,

but I certainly want us to make every effort to come up with proposals that make business sense to us and are useful to them. I do not want more of the overall quota share because I consider the terms too disadvantageous to the reinsurer, all things considered. But, if a prospect of gain that more than balances the risk of loss, let's proceed.

Sincerely,

Warren E. Buffett

WEB/gkk

The Collector: Investor Who Piled Up $100 Million in the '60s Piles ...
By JONATHAN R LAING Staff Reporter of THE WALL STREET JOURNAL
Wall Street Journal (1923 - Current file); Mar 31, 1977;
ProQuest Historical Newspapers: The Wall Street Journal
pg. 1

The Collector

Investor Who Piled Up $100 Million in the '60s Piles Up Firms Today

Warren Buffett Considers His New Life More Fun; The Country-Club Caper

From Stamps to Newspapers

By JONATHAN R. LAING
Staff Reporter of THE WALL STREET JOURNAL

OMAHA, Neb.—The soaring stock markets of the 1960s created many a star among professional portfolio managers, but few shone as brightly as Warren Buffet.

Operating quietly from his home town of Omaha, Mr. Buffett parlayed a $100,000 investment partnership into $100 million in just 13 years. Then, displaying a judicious sense of timing, he closed down the fund and distributed the gains among more than 100 partners in 1969, just before the market suffered the first of its periodic tumbles of the 1970s.

These days the 46-year-old Mr. Buffett is again attracting attention, but for a different reason. Pyramiding the $25 million that he himself made from the fund, he has bought control of a conglomeration of businesses—ranging from financial institutions and insurance companies to newspapers and candy stores—whose assets total more than $1 billion. Most recently, a company controlled by Mr. Buffett acquired the Buffalo Evening News, the largest newspaper in upstate New York, for $31 million.

Indeed, a major reason of Mr. Buffett's visibility lately has been his growing prominence in the newspaper field.

"A Tremendous Relief"

"I'm having a lot of fun because I'm only going into businesses that I find interesting and where I like the people running them, and their products," Mr. Buffett says. "It's a tremendous relief being out of money management. I'm not constantly thinking about business anymore. During the partnership my ego was on the line and I was trying to lead the league in hitting every year."

Mr. Buffett, a bespectacled man of medium height and medium build whose hairline is receding, is a curious mixture of the sophisticated and homespun. He dresses conservatively and drinks nothing harder than Pepsi-Cola. His talk is larded with sports imagery and Main Street colloquialisms, yet he frequently quotes Bertrand Russell. An editor at the Washington Post, where Mr. Buffett has considerable influence these days, says:

"There's a lot more to Warren than just his business ability and 'aw shucks' manner. He understands the First Amendment along with profit-and-loss statements."

The keystone of the Buffett empire is Berkshire Hathaway Inc., a once-moribund New England textile concern that the Buffett partnership bought control of in the mid-1960s after the company's stock had sunk below its liquidating value. Since then, Mr. Buffett, who is Berkshire Hathaway's chairman and controls 59% of its stock, has revived the company by using its excess cash to diversify into the auto and casualty insurance field and acquire Illinois National Bank & Trust Co. of Rockford, Ill., a highly profitable regional bank. In 1976, Berkshire Hathaway had operating earnings of $14.1 million on revenues of $139 million.

Stamps and Candy

Mr. Buffett also controls some 61% of the stock of Blue Chip Stamps, a Western trading-stamp concern that posted 1976 earnings of $11.7 million on revenues of [illegible] million. Blue Chip, in turn, owns 99% of See's Candy Shops Inc., a West Coast chocolate maker and retailer; 46% of Wesco Financial Corp. of Pasadena, Calif., a savings-and-loan association; and now the Buffalo Evening News. Finally, Mr. Buffett has a controlling interest in Diversified Retailing Co., operator of a discount women's-apparel chain of about 80 stores.

But his influence extends beyond the companies he controls. These companies, in turn, have large stockholdings, totaling $180 million, in a number of others. Among the holdings are a 10% interest in Washington Post Co.—owner of the Post, Newsweek magazine, the Trenton (N.J.) Times and five television and radio stations—25% of Pinkerton's Inc., the security concern, and a 15% slice of Government Employees Insurance Co.

These holdings also include substantial investment positions in Affiliated Publications Inc., publisher of the Boston Globe; Munsingwear Inc., the clothing manufacturer; and two advertising concerns; Ogilvy & Mather and Interpublic Group, the holding company for McCann-Erickson.

Mr. Buffett's management style is low-key. He rarely makes changes in management personnel and he takes little part in day-to-day operating decisions, preferring to concentrate on acquisitions and the management of his companies' assets.

"I Like Guys Who Forget"

"I usually don't need to get involved because I'm careful to buy well-run companies from owners who built the enterprises and stay on to run them," he says. "I like guys who forget that they sold the business to me and run the show like proprietors. When I marry the daughter, she continues to live with her parents."

Mr. Buffett's office reflects his unassuming attitude. Sheltered into three rooms of a new office building overlooking Omaha are Mr. Buffett; J. Vernon McKenzie, secretary-treasurer of Berkshire Hathaway; William Scott, a former investor in and assistant manager of the Buffett partnership, and two secretaries. Mr. Scott works only a five-hour day managing the $168 million municipal-bond portfolio of Berkshire Hathaway's insurance and bank subsidiaries.

"Most companies would have at least half a dozen full-time people running a bond fund of that size," Mr. Buffett observes. "But Bill illustrates the fact that money management doesn't take a lot of frenetic effort. He spends most of his day playing handball and rehearsing his polka band. I

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The Collector: Man Who Piled Up Millions Piles Up Companies Today

Continued From First Page

like to call him the world's richest polka player next to Lawrence Welk."

Wall Street sources close to Mr. Buffett say that his stock investments in the past few years have been largely dictated by his concern over inflation. David Gottesman, senior partner of the New York investment concern First Manhattan Corp., says:

"Warren has been largely restricting himself to companies which he feels offer some protection against inflation in that they have a unique product, low capital needs and the ability to generate cash. For example, Warren likes owning a monopoly or market-dominant newspaper to owning an unregulated toll bridge. You have relative freedom to increase rates when and as much as you want."

Such considerations prompted Mr. Buffett last summer to persuade fellow trustees of Grinnell College in Iowa to spend $18 million to buy the NBC television affiliate in Dayton, Ohio, for the school's endowment fund. "It seemed to me," he says, "that the station's profits would keep pace with the college's costs better than traditional investments. After all, the advertising budgets from which broadcasters derive most of their revenues tend to reflect current dollars and rise with the gross national product."

Mr. Buffett has taken some lumps. Several years ago, for example, Berkshire Hathaway lost half of a $6 million investment in Vornado Inc., a discount retailing concern based in New Jersey. "The stock looked undervalued when I bought it, but I proved to be incredibly wrong about the discount department-store business," Mr. Buffett says. "It turned out that the industry was over-stored, and Vornado and the rest of the discounters were getting killed by competition from K mart stores."

Also, Mr. Buffett's forays into the trading-stamp business have been less than signal successes. He took a substantial loss on a stock investment in Sperry & Hutchinson Co., in 1974, and his Blue Chip Stamps stockholding, acquired mainly in 1969 and 1970, has been a lackluster performer.

His First Newspapers

Mr. Buffett made his first newspaper acquisition in 1969 when Berkshire Hathaway bought the Sun Newspapers, neighborhood weeklies in Omaha. Two years later Blue Chip tried to buy the Cincinnati Enquirer but was outbid. Since then, in addition to the Washington Post and Buffalo Evening News foundations, Buffett companies have made profitable investments in Booth Newspapers Inc. of Michigan (the position now has been acquired by S. I. Newhouse, who has taken over Booth) and the Texas-based Harte-Hanks Newspapers Inc., which runs 25 dailies and 18 other papers around the country. Mr. Buffett describes his Harte-Hanks interest as well under 1%.

His interest in newspapers is more than just financial, Mr. Buffett says. "Let's face it," he says, "newspapers are a hell of a lot more interesting a business than, say, making couplers for rail cars. While I don't get involved in the editorial operations of the papers I own, I really enjoy being part of institutions that help shape society."

Despite his protestations to the contrary, Mr. Buffett has sometimes been more than a mere absentee owner. Five years ago he played a crucial role in an expose of the inordinate wealth of Omaha's fabled Boys Town, an expose that earned the Sun Newspapers a Pulitzer Prize. Mr. Buffett recalls:

"I knew of an IRS regulation that required charitable foundations to publicly disclose their assets for the first time, so I told our editor to get a copy of the Boys Town filing. I'd heard a lot of rumors during my fund days about Boys Town's large stockholdings, but even I was staggered when we found out that the home, which was constantly pleading poverty and caring for less than 700 kids, had accumulated assets of more than $300 million."

Role at the Post

According to insiders, Mr. Buffett has become increasingly influential at the Washington Post Co., which is headed and controlled by 39-year-old Katharine Graham. Mr. Buffett has been a director of the company since 1974 (a year after he bought his 10% nonvoting interest), and more recently he was named chairman of its finance committee. He has come to function as an unpaid executive, traveling to Washington at least once a month, often staying at Mrs. Graham's Georgetown home.

"Buffett has become Kay's financial guru and also acts as mentor for her son Donald, who is being groomed to take over eventually," says a former Post executive. "He started out by helping improve Post Co.'s image on Wall Street and revamping its pension plan. Now she consults him on every important decision."

"Of course I talk to him about potential acquisitions and other important matters," Mrs. Graham says. "I'd be silly not to, considering his superlative business acumen and analytical ability."

A Wall Street source close to Mr. Buffett says that his newspaper investments don't arise out of any desire to be a newspaper mogul. "Warren likes lively, interesting people, and he loves moving in the circle of politicians and other luminaries that Kay Graham has introduced him to," the source says. "He plays tennis with Ben Bradlee (the Post's executive editor). He gets to sit in the VIP area at the political conventions and presidential debates. He really revels in the whole scene."

Part of Mr. Buffett's fascination with newspapers arises from his intense interest in public affairs. Although his father, who served in the U.S. House of Representatives, was a conservative Republican, Mr. Buffett considers himself a Democrat and has given financial support to a number of liberal Democratic politicians.

An Early Interest

Mr. Buffett recalls being intrigued with the world of finance even as a youth. He soaked up much market lore from his father, who ran a small brokerage house in Omaha before winning his House seat when Warren was 12. After graduating from high school in Washington, Mr. Buffett sailed through college in three years. It was at the University of Nebraska that he chanced upon "The Intelligent Investor," a book by Benjamin Graham that Mr. Buffett says was at the root of his later investment success. In the book, Mr. Graham, no relation to Katharine Graham, preached a defensive, statistical approach to stock investment, based on companies' "intrinsic value" — what a private owner would be willing to pay for a business based on its net worth or, better yet, on only its cash and other current assets after deducting all liabilities.

Upon graduation from college in 1950, Mr. Buffett enrolled in Columbia University's graduate school of business where Mr. Graham was teaching a course on finance. The two men became friends, and in 1954 Mr. Buffett, after three years as a stockbroker in Omaha, went to work for Graham-Newman Corp., a New York investment fund headed by Mr. Graham.

Two years later Mr. Buffett and his wife, Susan, whom he had married in Omaha in 1952, returned to Omaha; Mr. Graham had retired from Graham-Newman. Mr. Buffett started his investment partnership shortly thereafter with four relatives and three friends. The lion's share of its trading profits came from investments in stocks that were undervalued according to Mr. Graham's criteria.

One of the partnership's outstanding successes was an investment in American Express Co. that more than tripled in value in two years, yielding the fund a $20 million trading gain. Mr. Buffett bought the stock in late 1963 following the shares' collapse in the wake of the company's involvement in a salad-oil scandal. Many bank trust departments and other institutions were selling the stock because they thought the scandal would shake public confidence in the company's traveler's checks.

Convinced by Talks

But Mr. Buffett's talks with a number of banks, restaurants, travel agencies and others convinced him otherwise. He found that use of American Express traveler's checks hadn't dropped; what's more, the company was fast developing a dominant share of the travel and entertainment credit-card market.

In 1969, Mr. Buffett sensed a change in the investment climate, so he folded the fund. The bargain issues were all but gone, casualties of the long bull market and the conglomerate acquisition boom. Anyway, Mr. Buffett was tired of the pressure to perform.

These days Mr. and Mrs. Buffett divide their time between their home in Omaha — a rambling house with an attached racketball court — and a ranch house in Laguna Beach, Calif. With two of their three children grown and the third at Stanford University, Mrs. Buffett has found time to pursue a singing career in several Omaha nightclubs.

Mr. and Mrs. Buffett have been involved in a number of civil-rights efforts. They were among the first gentiles to join an all-Jewish country club in Omaha in an attempt to force all-gentile clubs to admit Jews. "It was silly that many Jewish families that had been in Omaha for years and are important to the city were barred from some of our clubs," Mr. Buffett says. "Besides, the food was better at the Jewish club."

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How Inflation Swindles the Equity Investor

The central problem in the stock market is that the return on capital hasn't risen with inflation. It seems to be stuck at 12%.

By Warren E. Buffett

FORTUNE -- It is no longer a secret that stocks, like bonds, do poorly in an inflationary environment. We have been in such an environment for most of the past decade, and it has indeed been a time of troubles for stocks. But the reasons for the stock market's problems in this period are still imperfectly understood.

There is no mystery at all about the problems of bondholders in an era of inflation. When the value of the dollar deteriorates month after month, a security with income and principal payments denominated in those dollars isn't going to be a big winner. You hardly need a Ph.D. in economics to figure that one out.

It was long assumed that stocks were something else. For many years, the conventional wisdom insisted that stocks were a hedge against inflation. The proposition was rooted in the fact that stocks are not claims against dollars, as bonds are, but represent ownership of companies with productive facilities. These, investors believed, would retain their value in real terms, let the politicians print money as they might.

And why didn't it turn out that way? The main reason, I believe, is that stocks, in economic substance, are really very similar to bonds.

I know that this belief will seem eccentric to many investors. They will immediately observe that the return on a bond (the coupon) is fixed, while the return on an equity investment (the company's earnings) can vary substantially from one year to another. True enough. But anyone who examines the aggregate returns that have been earned by companies during the postwar years will discover something extraordinary: the returns on equity have in fact not varied much at all.

The coupon is sticky

In the first 10 years after the war -- the decade ending in 1955 -- the Dow Jones industrials had an average annual return on year-end equity of 12.8%. In the second decade, the figure was 10.1%. In the third decade it was 10.9%. Data for a larger universe, the **Fortune 500** (whose history goes back only to the mid-1950s), indicate somewhat similar results: 11.2% in the decade ending in 1965, 11.8% in the decade through 1975. The figures for a few exceptional years have been substantially higher (the high for the 500 was 14.1% in 1974) or lower (9.5% in 1958 and 1970), but over the years, and in the aggregate, the return in book value tends to keep coming back to a level around 12%. It shows no signs of exceeding that level significantly in inflationary years (or in years of stable prices, for that matter).

For the moment, let's think of those companies, not as listed stocks, but as productive enterprises. Let's also assume that the owners of those enterprises had acquired them at book value. In that case, their own return would have been around 12% too. And because the return has been so consistent, it seems reasonable to think of it as an "equity coupon."

In the real world, of course, investors in stocks don't just buy and hold. Instead, many try to outwit their fellow investors in order to maximize their own proportions of corporate earnings. This thrashing about, obviously fruitless in aggregate, has no impact on the equity coupon but reduces the investor's portion of it, because he incurs substantial frictional costs, such as advisory fees and brokerage charges. Throw in an active options market, which adds nothing to the productivity of American enterprise but requires a cast of thousands to man the casino, and frictional costs rise further.

Stocks are perpetual

It is also true that in the real world investors in stocks don't usually get to buy at book value. Sometimes they have been able to buy in below book; usually, however, they've had to pay more than book, and when that happens there is further pressure on that 12%. I'll talk more about these relationships later. Meanwhile, let's focus on the main point: as inflation has increased, the return on equity capital has not. Essentially, those who buy equities receive securities with an underlying fixed return just like those who buy bonds.

Of course, there are some important differences between the bond and stock forms. For openers, bonds eventually come due. It may require a long wait, but eventually the bond investor gets to renegotiate the terms of his contract. If current and prospective rates of inflation make his old coupon look inadequate, he can refuse to play further unless coupons currently being offered rekindle his interest. Something of this sort has been going on in recent years.

Stocks, on the other hand, are perpetual. They have a maturity date of infinity. Investors in stocks are stuck with whatever return corporate America happens to earn. If corporate America is destined to earn 12%, then that is the level investors must learn to live with. As a group, stock investors can neither opt out nor renegotiate. In the aggregate, their commitment is actually increasing. Individual companies can be sold or liquidated and corporations can repurchase their own shares; on balance, however, new equity flotations and retained earnings guarantee that the equity capital locked up in the corporate system will increase. So, score one for the bond form. Bond coupons eventually will be renegotiated; equity "coupons" won't. It is true, of course, that for a long time a 12% coupon did not appear in need of a whole lot of correction.

The bondholder gets it in cash

There is another major difference between the garden variety of bond and our new exotic 12% "equity bond" that comes to the Wall Street costume ball dressed in a stock certificate. In the usual case, a bond investor receives his entire coupon in cash and is left to reinvest it as best he can. Our stock investor's equity coupon, in contrast, is partially retained by the company and is reinvested at whatever rates the company happens to be earning. In other words, going back to our corporate

universe, part of the 12% earned annually is paid out in dividends and the balance is put right back into the universe to earn 12% also.

The good old days

This characteristic of stocks -- the reinvestment of part of the coupon -- can be good or bad news, depending on the relative attractiveness of that 12%. The news was very good indeed in the 1950s and early 1960s. With bonds yielding only 3 or 4%, the right to reinvest automatically a portion of the equity coupon at 12% was of enormous value. Note that investors could not just invest their own money and get that 12% return. Stock prices in this period ranged far above book value, and investors were prevented by the premium prices they had to pay from directly extracting out of the underlying corporate universe whatever rate that universe was earning. You can't pay far above par for a 12% bond and earn 12% for yourself.

But on their retained earnings, investors could earn 12%. In effect, earnings retention allowed investors to buy at book value part of an enterprise that, in the economic environment then existing, was worth a great deal more than book value.

It was a situation that left very little to be said for cash dividends and a lot to be said for earnings retention. Indeed, the more money that investors thought likely to be reinvested at the 12% rate, the more valuable they considered their reinvestment privilege, and the more they were willing to pay for it. In the early 19601s, investors eagerly paid top-scale prices for electric utilities situated in growth areas, knowing that these companies had the ability to re-invest very large proportions of their earnings. Utilities whose operating environment dictated a larger cash payout rated lower prices.

If, during this period, a high-grade, noncallable, long-term bond with a 12% coupon had existed, it would have sold far above par. And if it were a bond with a further unusual characteristic -- which was that most of the coupon payments could be automatically reinvested at par in similar bonds -- the issue would have commanded an even greater premium. In essence, growth stocks retaining most of their earnings represented just such a security. When their reinvestment rate on the added equity capital was 12% while interest rates generally were around 4%, investors became very happy -- and, of course, they paid happy prices.

Heading for the exits

Looking back, stock investors can think of themselves in the 1946-66 period as having been ladled a truly bountiful triple dip. First, they were the beneficiaries of an underlying corporate return on equity that was far above prevailing interest rates. Second, a significant portion of that return was reinvested for them at rates that were otherwise unattainable. And third, they were afforded an escalating appraisal of underlying equity capital as the first two benefits became widely recognized. This third dip meant that, on top of the basic 12% or so earned by corporations on their equity capital, investors were receiving a bonus as the Dow Jones industrials increased in price from 133% of book value in 1946 to 220% in 1966. Such a marking-up process temporarily allowed investors to achieve a return that exceeded the inherent earning power of the enterprises in which they had invested.

This heaven-on-earth situation finally was "discovered" in the mid-1960s by many major investing institutions. But just as these financial elephants began trampling on one another in their rush to equities, we entered an era of accelerating inflation and higher interest rates. Quite logically, the marking-up process began to reverse itself. Rising interest rates ruthlessly reduced the value of all existing fixed-coupon investments. And as long-term corporate bond rates began moving up (eventually reaching the 10% area), both the equity return of 12% and the reinvestment "privilege" began to look different.

Stocks are quite properly thought of as riskier than bonds. While that equity coupon is more or less fixed over periods of time, it does fluctuate somewhat from year to year. Investors' attitudes about the future can be affected substantially, although frequently erroneously, by those yearly changes. Stocks are also riskier because they come equipped with infinite maturities. (Even your friendly broker wouldn't have the nerve to peddle a 100-year bond, if he had any available, as "safe.") Because of the additional risk, the natural reaction of investors is to expect an equity return that is comfortably above the bond return -- and 12% on equity versus, say, 10% on bonds issued by the same corporate universe does not seem to qualify as comfortable. As the spread narrows, equity investors start looking for the exits.

But, of course, as a group they can't get out. All they can achieve is a lot of movement, substantial frictional costs, and a new, much lower level of valuation, reflecting the lessened attractiveness of the 12% equity coupon under inflationary conditions. Bond investors have had a succession of shocks over the past decade in the course of discovering that there is no magic attached to any given coupon level: at 6%, or 8%, or 10%, bonds can still collapse in price. Stock investors, who are in general not aware that they too have a "coupon," are still receiving their education on this point.

Five ways to improve earnings

Must we really view that 12% equity coupon as immutable? Is there any law that says the corporate return on equity capital cannot adjust itself upward in response to a permanently higher average rate of inflation? There is no such law, of course. On the other hand, corporate America cannot increase earnings by desire or decree. To raise that return on equity, corporations would need at least one of the following: (1) an increase in turnover, i.e., in the ratio between sales and total assets employed in the business; (2) cheaper leverage; (3) more leverage; (4) lower income taxes; (5) wider operating margins on sales.

And that's it. There simply are no other ways to increase returns on common equity. Let's see what can be done with these.

We'll begin with turnover. The three major categories of assets we have to think about for this exercise are accounts receivable, inventories, and fixed assets such as plants and machinery.

Accounts receivable go up proportionally as sales go up, whether the increase in dollar sales is produced by more physical volume or by inflation. No room for improvement here.

With inventories, the situation is not quite so simple. Over the long term, the trend in unit inventories may be expected to follow the trend in unit sales. Over the short term, however, the physical turnover rate may bob around because of special influences -- e.g., cost expectations, or bottlenecks.

The use of last-in, first-out (LIFO) inventory-valuation methods serves to increase the reported turnover rate during inflationary times. When dollar sales are rising because of inflation, inventory valuations of a LIFO company either will remain level (if unit sales are not rising) or will trail the rise in dollar sales (if unit sales are rising). In either case, dollar turnover will increase.

During the early 1970s, there was a pronounced swing by corporations toward LIFO accounting (which has the effect of lowering a company's reported earnings and tax bills). The trend now seems to have slowed. Still, the existence of a lot of LIFO companies, plus the likelihood that some others will join the crowd, ensures some further increase in the reported turnover of inventory.

The gains are apt to be modest

In the case of fixed assets, any rise in the inflation rate, assuming it affects all products equally, will initially have the effect of increasing turnover. That is true because sales will immediately reflect the new price level, while the fixed asset account will reflect the change only gradually, i.e., as existing assets are retired and replaced at the new prices. Obviously, the more slowly a company goes about this replacement process, the more the turnover ratio will rise. The action stops, however, when a replacement cycle is completed. Assuming a constant rate of inflation, sales and fixed assets will then begin to rise in concert at the rate of inflation.

To sum up, inflation will produce some gains in turnover ratios. Some improvement would be certain because of LIFO and some would be possible (if inflation accelerates) because of sales rising more rapidly than fixed assets. But the gains are apt to be modest and not of a magnitude to produce substantial improvement in returns on equity capital. During the decade ending in 1975, despite generally accelerating inflation and the extensive use of LIFO accounting, the turnover ratio of the Fortune 500 went only from 1.18/1 to 1.29/1.

Cheaper leverage? Not likely. High rates of inflation generally cause borrowing to become dearer, not cheaper. Galloping rates of inflation create galloping capital needs; and lenders, as they become increasingly distrustful of long-term contracts, become more demanding. But even if there is no further rise in interest rates, leverage will be getting more expensive because the average cost of the debt now on corporate books is less than would be the cost of replacing it. And replacement will be required as the existing debt matures. Overall, then, future changes in the cost of leverage seem likely to have a mildly depressing effect on the return on equity.

More leverage? American business already has fired many, if not most, of the more-leverage bullets once available to it. Proof of that proposition can be seen in some other Fortune 500 statistics: in the 20 years ending in 1975, stockholders' equity as a percentage of total assets declined for the 500 from 63% to just under 50%. In other words, each dollar of equity capital now is leveraged much more heavily than it used to be.

What the lenders learned

An irony of inflation-induced financial requirements is that the highly profitable companies -- generally the best credits -- require relatively little debt capital. But the laggards in profitability never can get enough. Lenders understand this problem much better than they did a decade ago -- and are correspondingly less willing to let capital-hungry, low-profitability enterprises leverage themselves to the sky.

Nevertheless, given inflationary conditions, many corporations seem sure in the future to turn to still more leverage as a means of shoring up equity returns. Their managements will make that move because they will need enormous amounts of capital -- often merely to do the same physical volume of business -- and will wish to get it without cutting dividends or making equity offerings that, because of inflation, are not apt to shape up as attractive. Their natural response will be to heap on debt, almost regardless of cost. They will tend to behave like those utility companies that argued over an eighth of a point in the 1960s and were grateful to find 12% debt financing in 1974.

Added debt at present interest rates, however, will do less for equity returns than did added debt at 4% rates in the early 1960s. There is also the problem that higher debt ratios cause credit ratings to be lowered, creating a further rise in interest costs.

So that is another way, to be added to those already discussed, in which the cost of leverage will be rising. In total, the higher costs of leverage are likely to offset the benefits of greater leverage.

Besides, there is already far more debt in corporate America than is conveyed by conventional balance sheets. Many companies have massive pension obligations geared to whatever pay levels will be in effect when present workers retire. At the low inflation rates of 1955-65, the liabilities arising from such plans were reasonably predictable. Today, nobody can really know the company's ultimate obligation. But if the inflation rate averages 7% in the future, a 25-year-old employee who is now earning $12,000, and whose raises do no more than match increases in living costs, will be making $180,000 when he retires at 65.

Of course, there is a marvelously precise figure in many annual reports each year, purporting to be the unfunded pension liability. If that figure were really believable, a corporation could simply ante up that sum, add to it the existing pension-fund assets, turn the total amount over to an insurance company, and have it assume all the corporation's present pension liabilities. In the real world, alas, it is impossible to find an insurance company willing even to listen to such a deal.

Virtually every corporate treasurer in America would recoil at the idea of issuing a "cost-of-living" bond -- a noncallable obligation with coupons tied to a price index. But through the private pension system, corporate America has in fact taken on a fantastic amount of debt that is the equivalent of such a bond.

More leverage, whether through conventional debt or unhooked and indexed "pension debt," should be viewed with skepticism by shareholders. A 12% return from an enterprise that is debt-free is far

superior to the same return achieved by a business hocked to its eyeballs. Which means that today's 12% equity returns may well be less valuable than the 12% returns of 20 years ago.

More fun in New York

Lower corporate income taxes seem unlikely. Investors in American corporations already own what might be thought of as a Class D stock. The Class A, B, and C stocks are represented by the income-tax claims of the federal, state, and municipal governments. It is true that these "investors" have no claim on the corporation's assets; however, they get a major share of the earnings, including earnings generated by the equity buildup resulting from retention of part of the earnings owned by the Class D shareholders.

A further charming characteristic of these wonderful Class A, B, and C stocks is that their share of the corporation's earnings can be increased immediately, abundantly, and without payment by the unilateral vote of any one of the "stockholder" classes, e.g., by congressional action in the case of the Class A. To add to the fun, one of the classes will sometimes vote to increase its ownership share in the business retroactively -- as companies operating in New York discovered to their dismay in 1975. Whenever the Class A, B, or C "stockholders" vote themselves a larger share of the business, the portion remaining for Class D -- that's the one held by the ordinary investor -- declines.

Looking ahead, it seems unwise to assume that those who control the A, B, and C shares will vote to reduce their own take over the long run. The Class D shares probably will have to struggle to hold their own.

Bad news from the FTC

The last of our five possible sources of increased returns on equity is *wider operating margins on sales*. Here is where some optimists would hope to achieve major gains. There is no proof that they are wrong. But there are only 100 cents in the sales dollar and a lot of demands on that dollar before we get down to the residual, pretax profits. The major claimants are labor, raw materials, energy, and various non-income taxes. The relative importance of these costs hardly seems likely to decline during an age of inflation.

Recent statistical evidence, furthermore, does not inspire confidence in the proposition that margins will widen in a period of inflation. In the decade ending in 1965, a period of relatively low inflation, the universe of manufacturing companies reported on quarterly by the Federal Trade Commission had an average annual pretax margin on sales of 8.6%. In the decade ending in 1975, the average margin was 8%. Margins were down, in other words, despite a very considerable increase in the inflation rate.

If business was able to base its prices on replacement costs, margins would widen in inflationary periods. But the simple fact is that most large businesses, despite a widespread belief in their market power, just don't manage to pull it off. Replacement cost accounting almost always shows that corporate earnings have declined significantly in the past decade. If such major industries as oil, steel, and aluminum really have the oligopolistic muscle imputed to them, one can only conclude that their pricing policies have been remarkably restrained.

There you have the complete lineup: five factors that can improve returns on common equity, none of which, by my analysis, are likely to take us very far in that direction in periods of high inflation. You may have emerged from this exercise more optimistic than I am. But remember, returns in the 12% area have been with us a long time.

The investor's equation

Even if you agree that the 12% equity coupon is more or less immutable, you still may hope to do well with it in the years ahead. It's conceivable that you will. After all, a lot of investors did well with it for a long time. But your future results will be governed by three variables: the relationship between book value and market value, the tax rate, and the inflation rate.

Let's wade through a little arithmetic about book and market value. When stocks consistently sell at book value, it's all very simple. If a stock has a book value of $100 and also an average market value of $100, 12% earnings by business will produce a 12% return for the investor (less those frictional costs, which we'll ignore for the moment). If the payout ratio is 50%, our investor will get $6 via dividends and a further $6 from the increase in the book value of the business, which will, of course, be reflected in the market value of his holdings.

If the stock sold at 150% of book value, the picture would change. The investor would receive the same $6 cash dividend, but it would now represent only a 4% return on his $150 cost. The book value of the business would still increase by 6% (to $106) and the market value of the investor's holdings, valued consistently at 150% of book value, would similarly increase by 6% (to $159). But the investor's total return, i.e., from appreciation plus dividends, would be only 10% versus the underlying 12% earned by the business.

When the investor buys in below book value, the process is reversed. For example, if the stock sells at 80% of book value, the same earnings and payout assumptions would yield 7.5% from dividends ($6 on an $80 price) and 6% from appreciation -- a total return of 13.5%. In other words, you do better by buying at a discount rather than a premium, just as common sense would suggest.

During the postwar years, the market value of the Dow Jones industrials has been as low as 84% of book value (in 1974) and as high as 232% (in 1965); most of the time the ratio has been well over 100%. (Early this spring, it was around 110%.) Let's assume that in the future the ratio will be something close to 100%, meaning that investors in stocks could earn the full 12%. At least, they could earn that figure before taxes and before inflation.

7% after taxes

How large a bite might taxes take out of the 12%? For individual investors, it seems reasonable to assume that federal, state, and local income taxes will average perhaps 50% on dividends and 30% on capital gains. A majority of investors may have marginal rates somewhat below these, but many with larger holdings will experience substantially higher rates. Under the new tax law,

as*Fortune* observed last month, a high-income investor in a heavily taxed city could have a marginal rate on capital gains as high as 56%.

So let's use 50% and 30% as representative for individual investors. Let's also assume, in line with recent experience, that corporations earning 12% on equity pay out 5% in cash dividends (2.5% after tax) and retain 7%, with those retained earnings producing a corresponding market-value growth (4.9% after the 30% tax). The after-tax return, then, would be 7.4%. Probably this should be rounded down to about 7% to allow for frictional costs. To push our stocks-as-disguised-bonds thesis one notch further, then, stocks might be regarded as the equivalent, for individuals, of 7% tax-exempt perpetual bonds.

The number nobody knows

Which brings us to the crucial question -- the inflation rate. No one knows the answer on this one -- including the politicians, economists, and Establishment pundits, who felt, a few years back, that with slight nudges here and there unemployment and inflation rates would respond like trained seals.

But many signs seem negative for stable prices: the fact that inflation is now worldwide; the propensity of major groups in our society to utilize their electoral muscle to shift, rather than solve, economic problems; the demonstrated unwillingness to tackle even the most vital problems (e.g., energy and nuclear proliferation) if they can be postponed; and a political system that rewards legislators with reelection if their actions appear to produce short-term benefits even though their ultimate imprint will be to compound long-term pain.

Most of those in political office, quite understandably, are firmly against inflation and firmly in favor of policies producing it. (This schizophrenia hasn't caused them to lose touch with reality, however; Congressmen have made sure that their pensions -- unlike practically all granted in the private sector -- are indexed to cost-of-living changes after retirement.)

Discussions regarding future inflation rates usually probe the subtleties of monetary and fiscal policies. These are important variables in determining the outcome of any specific inflationary equation. But, at the source, peacetime inflation is a political problem, not an economic problem. Human, behavior, not monetary behavior, is the key. And when very human politicians choose between the next election and the next generation, it's clear what usually happens.

Such broad generalizations do not produce precise numbers. However, it seems quite possible to me that inflation rates will average 7% in future years. I hope this forecast proves to be wrong. And it may well be. Forecasts usually tell us more of the forecaster than of the future. You are free to factor your own inflation rate into the investor's equation. But if you foresee a rate averaging 2% or 3%, you are wearing different glasses than I am.

So there we are: 12% before taxes and inflation; 7% after taxes and before inflation; and maybe zero percent after taxes and inflation. It hardly sounds like a formula that will keep all those cattle stampeding on TV.

As a common stockholder you will have more dollars, but you may have no more purchasing power. Out with Ben Franklin ("a penny saved is a penny earned") and in with Milton Friedman ("a man might as well consume his capital as invest it").

What widows don't notice

The arithmetic makes it plain that inflation is a far more devastating tax than anything that has been enacted by our legislatures. The inflation tax has a fantastic ability to simply consume capital. It makes no difference to a widow with her savings in a 5% passbook account whether she pays 100% income tax on her interest income during a period of zero inflation, or pays *no* income taxes during years of 5% inflation. Either way, she is "taxed" in a manner that leaves her no real income whatsoever. Any money she spends comes right out of capital. She would find outrageous a 120% income tax, but doesn't seem to notice that 6% inflation is the economic equivalent.

If my inflation assumption is close to correct, disappointing results will occur not because the market falls, but in spite of the fact that the market rises. At around 920 early last month, the Dow was up 55 points from where it was 10 years ago. But adjusted for inflation, the Dow is down almost 345 points -- from 865 to 520. And about half of the earnings of the Dow had to be withheld from their owners and reinvested in order to achieve even that result.

In the next 10 years, the Dow would be doubled just by a combination of the 12% equity coupon, a 40% payout ratio, and the present 110% ratio of market to book value. And with 7% inflation, investors who sold at 1800 would still be considerably worse off than they are today after paying their capital-gains taxes.

I can almost hear the reaction of some investors to these downbeat thoughts. It will be to assume that, whatever the difficulties presented by the new investment era, they will somehow contrive to turn in superior results for themselves. Their success is most unlikely. And, in aggregate, of course, impossible. If you feel you can dance in and out of securities in a way that defeats the inflation tax, I would like to be your broker -- but not your partner.

Even the so-called tax-exempt investors, such as pension funds and college endowment funds, do not escape the inflation tax. If my assumption of a 7% inflation rate is correct, a college treasurer should regard the first 7% earned each year merely as a replenishment of purchasing power. Endowment funds are earning *nothing* until they have outpaced the inflation treadmill. At 7% inflation and, say, overall investment returns of 8%, these institutions, which believe they are tax-exempt, are in fact paying "income taxes" of 87.5%.

The social equation

Unfortunately, the major problems from high inflation rates flow not to investors but to society as a whole. Investment income is a small portion of national income, and if per capita real income could grow at a healthy rate alongside zero real investment returns, social justice might well be advanced.
A market economy creates some lopsided payoffs to participants. The right endowment of vocal chords, anatomical structure, physical strength, or mental powers can produce enormous piles of

claim checks (stocks, bonds, and other forms of capital) on future national output. Proper selection of ancestors similarly can result in lifetime supplies of such tickets upon birth. If zero real investment returns diverted a bit greater portion of the national output from such stockholders to equally worthy and hardworking citizens lacking jackpot-producing talents, it would seem unlikely to pose such an insult to an equitable world as to risk Divine Intervention.

But the potential for real improvement in the welfare of workers at the expense of affluent stockholders is not significant. Employee compensation already totals 28 times the amount paid out in dividends, and a lot of those dividends now go to pension funds, nonprofit institutions such as universities, and individual stockholders who are not affluent. Under these circumstances, if we now shifted all dividends of wealthy stockholders into wages -- something we could do only once, like killing a cow (or, if you prefer, a pig) -- we would increase real wages by less than we used to obtain from one year's growth of the economy.

The Russians understand it too

Therefore, diminishment of the affluent, through the impact of inflation on their investments, will not even provide material *short-term* aid to those who are not affluent. Their economic well-being will rise or fall with the general effects of inflation on the economy. And those effects are not likely to be good.
Large gains in real capital, invested in modern production facilities, are required to produce large gains in economic well-being. Great labor availability, great consumer wants, and great government promises will lead to nothing but great frustration without continuous creation and employment of expensive new capital assets throughout industry. That's an equation understood by Russians as well as Rockefellers. And it's one that has been applied with stunning success in West Germany and Japan. High capital-accumulation rates have enabled those countries to achieve gains in living standards at rates far exceeding ours, even though we have enjoyed much the superior position in energy.

To understand the impact of inflation upon real capital accumulation, a little math is required. Come back for a moment to that 12% return on equity capital. Such earnings are stated after depreciation, which presumably will allow replacement of present productive capacity -- *if* that plant and equipment can be purchased in the future at prices similar to their original cost.

The way it was

Let's assume that about half of earnings are paid out in dividends, leaving 6% of equity capital available to finance future growth. If inflation is low -- say, 2% -- a large portion of that growth can be real growth in physical output. For under these conditions, 2% more will have to be invested in receivables, inventories, and fixed assets next year just to duplicate this year's physical output -- leaving 4% for investment in assets to produce more physical goods. The 2% finances illusory dollar growth reflecting inflation and the remaining 4% finances real growth. If population growth is 1%, the 4% gain in real output translates into a 3% gain in real per capita net income. That, very roughly, is what used to happen in our economy.

Now move the inflation rate to 7% and compute what is left for real growth after the financing of the mandatory inflation component. The answer is nothing -- if dividend policies and leverage ratios remain unchanged. After half of the 12% earnings are paid out, the same 6% is left, but it is all conscripted to provide the added dollars needed to transact last year's physical volume of business.
Many companies, faced with no real retained earnings with which to finance physical expansion after normal dividend payments, will improvise. How, they will ask themselves, can we stop or reduce dividends without risking stockholder wrath? I have good news for them: a ready-made set of blueprints is available.

In recent years the electric-utility industry has had little or no dividend-paying capacity. Or, rather, it has had the power to pay dividends if investors agree to buy stock from them. In 1975 electric utilities paid common dividends of $3.3 billion and asked investors to return $3.4 billion. Of course, they mixed in a little solicit-Peter-to-pay-Paul technique so as not to acquire a Con Ed (**ED**) reputation. Con Ed, you will remember, was unwise enough in 1974 to simply tell its shareholders it didn't have the money to pay the dividend. Candor was rewarded with calamity in the marketplace.

The more sophisticated utility maintains -- perhaps increases -- the quarterly dividend and then ask shareholders (either old or new) to mail back the money. In other words, the company issues new stock. This procedure diverts massive amounts of capital to the tax collector and substantial sums to underwriters. Everyone, however, seems to remain in good spirits (particularly the underwriters).

More joy at AT&T

Encouraged by such success, some utilities have devised a further shortcut. In this case, the company declares the dividend, the shareholder pays the tax, and -- presto -- more shares are issued. No cash changes hands, although the IRS, spoilsport as always, persists in treating the transaction as if it had.
AT&T (**T**), for example, instituted a dividend-reinvestment program in 1973. This company, in fairness, must be described as very stockholder-minded, and its adoption of this program, considering the folkways of finance, must be regarded as totally understandable. But the substance of the program is out of *Alice in Wonderland*.

In 1976, AT&T paid $2.3 billion in cash dividends to about 2.9 million owners of its common stock. At the end of the year, 648,000 holders (up from 601,000 the previous year) reinvested $432 million (up from $327 million) in additional shares supplied directly by the company.

Just for fun, let's assume that all AT&T shareholders ultimately sign up for this program. In that case, no cash at all would be mailed to shareholders -- just as when Con Ed passed a dividend. However, each of the 2.9 million owners would be notified that he should pay income taxes on his share of the retained earnings that had that year been called a "dividend." Assuming that "dividends" totaled $2.3 billion, as in 1976, and that shareholders paid an average tax of 30% on these, they would end up, courtesy of this marvelous plan, paying nearly $700 million to the IRS. Imagine the joy of shareholders, in such circumstances, if the directors were then to double the dividend.

The government will try to do it

We can expect to see more use of disguised payout reductions as business struggles with the problem of real capital accumulation. But throttling back shareholders somewhat will not entirely solve the problem. A combination of 7% inflation and 12% returns will reduce the stream of corporate capital available to finance real growth.

And so, as conventional private capital-accumulation methods falter under inflation, our government will increasingly attempt to influence capital flows to industry, either unsuccessfully as in England or successfully as in Japan. The necessary cultural and historical underpinning for a Japanese-style enthusiastic partnership of government, business, and labor seems lacking here. If we are lucky, we will avoid following the English path, where all segments fight over division of the pie rather than pool their energies to enlarge it.

On balance, however, it seems likely that we will hear a great deal more as the years unfold about underinvestment, stagflation, and the failures of the private sector to fulfill needs.

You Pay A Very High Price In The Stock Market For A Cheery Consensus

Pension-fund managers continue to make investment decisions with their eyes firmly fixed on the rearview mirror. This generals-fighting-the-last-war approach has proven costly in the past and will likely prove equally costly this time around.

Stocks now sell at levels that should produce long-term returns far superior to bonds. Yet pensions managers, usually encouraged by corporate sponsors they must necessarily please ("whose bread I eat, his song I sing"), are pouring funds in record proportions into bonds.

Meanwhile, orders for stocks are being placed with an eyedropper. Parkinson–of Parkinson's law fame–might conclude that the enthusiasm of professionals for stocks varies proportionately with the recent pleasure derived from ownership. This always was the way John Q. Public was expected to behave. John Q. Expert seems similarly afflicted. Here's the record.

In 1972, when the Dow earned $67.11, or 11% on beginning book value of 607, it closed the year selling at 1,020, and pension managers couldn't buy stocks fast enough. Purchases of equities in 1972 were 105% of net funds available (i.e., bonds were sold), a record except for the 122% of the even more buoyant prior year. This two-year stampede increased the equity portion of total pension assets from 61% to 74%–an all-time record that coincided nicely with a record-high price for the Dow. The more investment managers paid for stocks, the better they felt about them.

And then the market went into a tailspin in 1973-74. Although the Dow earned $99.04 in 1974, or 14% on beginning book value of 690, it finished the year selling at 616. A bargain? Alas, such bargain prices produced panic rather than purchases; only 21% of net investable funds went into equities that year, a 25-year record low. The proportion of equities held by private noninsured

pension plans fell to 54% of net assets, a full 20-point drop from the level deemed appropriate when the Dow was 400 points higher.

By 1976, the courage of pension managers rose in tandem with the price level, and 56% of available funds was committed to stocks. The Dow that year averaged close to 1,000, a level then about 25% above book value.

In 1978, stocks were valued far more reasonably, with the Dow selling below book value most of the time. Yet a new low of 9% of net funds was invested in equities during the year. The first quarter of 1979 continued at very close to the same level.

By these actions, pension managers, in record-setting manner, are voting for purchase of bonds–at interest rates of 9% to 10%–and against purchase of American equities at prices aggregating book value or less. But these same pension managers probably would concede that those American equities, in aggregate and over the longer term, would earn about 13% (the average in recent years) on book value. And, overwhelmingly, the managers of their corporate sponsors would agree.

Many corporate managers, in fact, exhibit a bit of schizophrenia regarding equities. They consider their own stocks to be screamingly attractive. But, concomitantly, they stamp approval on pension policies rejecting purchases of common stocks in general. And the boss, while wearing his acquisition hat, will eagerly bid 150% to 200% of book value for businesses typical of corporate America but, wearing his pension hat, will scorn investment in similar companies at book value. Can his own talents be so unique that he is justified both in paying 200 cents on the dollar for a business if he can get his hands on it, and in rejecting it as an unwise pension investment at 100 cents on the dollar if it must be left to be run by his companions at the Business Roundtable?

A simple Pavlovian response may be the major cause of this puzzling behavior. During the last decade, stocks have produced pain–both for corporate sponsors and for the investment managers the sponsors hire. Neither group wishes to return to the scene of the accident. But the pain has not been produced because business has performed badly, but rather because stocks

have underperformed business. Such underperformance cannot prevail indefinitely, any more than could the earlier overperformance of stocks versus business that lured pension money into equities at high prices.

Can better results be obtained over, say, 20 years from a group of 9 1/2% bonds of leading American companies maturing in 1999 than from a group of Dow-type equities purchased, in aggregate, at around book value and likely to earn, in aggregate, around 13% on that book value? The probabilities seem exceptionally low. The choice of equities would prove inferior only if either a major sustained decline in return on equity occurs or a ludicrously low valuation of earnings prevails at the end of the 20-year period. Should price/earnings ratios expand over the 20-year period–and that 13% return on equity be averaged–purchases made now at book value will result in better than a 13% annual return. How can bonds at only 9 1/2% be a better buy?

Think for a moment of book value of the Dow as equivalent to par, or the principal value of a bond. And think of the 13% or so expectable average rate of earnings on that book value as a sort of fluctuating coupon on the bond–a portion of which is retained to add to principal amount just like the interest return on U.S. Savings Bonds. Currently our "Dow Bond" can be purchased at a significant discount (at about 840 vs. 940 "principal amount," or book value of the Dow. Figures are based on the old Dow, prior to the recent substitutions. The returns would be moderately higher and the book values somewhat lower if the new Dow had been used.). That Dow Bond purchased at a discount with an average coupon of 13%–even though the coupon will fluctuate with business conditions–seems to me to be a long-term investment far superior to a conventional 9 1/2% 20-year bond purchased at par.

Of course, there is no guarantee that future corporate earnings will average 13%. It may be that some pension managers shun stocks because they expect reported returns on equity to fall sharply in the next decade. However, I don't believe such a view is widespread.

Instead, investment managers usually set forth two major objections to the thought that stocks should now be favored over bonds. Some say earnings currently are overstated, with real earnings after replacement-value depreciation far less than those reported. Thus, they say, real 13% earnings

aren't available. But that argument ignores the evidence in such investment areas as life insurance, banking, fire-casualty insurance, finance companies, service businesses, etc.

In those industries, replacement-value accounting would produce results virtually identical with those produced by conventional accounting. And yet, one can put together a very attractive package of large companies in those fields with an expectable return of 13% or better on book value and with a price which, in aggregate, approximates book value. Furthermore, I see no evidence that corporate managers turn their backs on 13% returns in their acquisition decisions because of replacement-value accounting considerations.

A second argument is made that there are just too many question marks about the near future; wouldn't it be better to wait until things clear up a bit? You know the prose: "Maintain buying reserves until current uncertainties are resolved," etc. Before reaching for that crutch, face up to two unpleasant facts: The future is never clear; you pay a very high price in the stock market for a cheery consensus. Uncertainty actually is the friend of the buyer of long-term values.

If anyone can afford to have such a long-term perspective in making investment decisions, it should be pension-fund managers. While corporate managers frequently incur large obligations in order to acquire businesses at premium prices, most pension plans have very minor flow-of-funds problems. If they wish to invest for the long term–as they do in buying those 20- and 30-year bonds they now embrace–they certainly are in a position to do so. They can, and should, buy stocks with the attitude and expectations of an investor entering into a long-term partnership.

Corporate managers who duck responsibility for pension management by making easy, conventional or faddish decisions are making an expensive mistake. Pension assets probably total about one-third of overall industrial net worth and, of course, bulk far larger in the case of many specific industrial corporations. Thus, poor management of those assets frequently equates to poor management of the largest single segment of the business. Soundly achieved higher returns will produce significantly greater earnings for the

corporate sponsors and will also enhance the security and prospective payments available to pensioners.

Managers currently opting for lower equity ratios either have a highly negative opinion of future American business results or expect to be nimble enough to dance back into stocks at even lower levels. There may well be some period in the near future when financial markets are demoralized and much better buys are available in equities; that possibility exists at all times. But you can be sure that at such a time the future will seem neither predictable nor pleasant. Those now awaiting a “better time” for equity investing are highly likely to maintain that posture until well into the next bull market.

March 5, 1982

The Honorable John Dingell,
U. S. House of Representatives,
Rayburn House Building,
Washington, D. C. 20515.

Dear Mr. Dingell:

This letter is to comment upon the likely sources for trading activity that will develop in any futures market involving stock indices. My background for this commentary is some thirty years of practice in various aspects of the investment business, including several years as a securities salesman. The last twenty-five years have been spent as a financial analyst, and I currently have the sole responsibility for an equity portfolio that totals over $600 million. I am enclosing copies of several articles that relate to my experience in the investment field.

It is impossible to predict precisely what will develop in investment or speculative markets, and you should be wary of any who claim precision. I think the following represents a reasonable expectancy:

1. A role can be performed by the stock index future contract in aiding the risk-reducing efforts of the true investor. An investor may quite logically conclude that he can identify undervalued securities, but also conclude that he has no ability whatsoever to predict the short-term movements of the stock market. This is the view I maintain in my own efforts in investment management. Such an investor may wish to "zero out" market fluctuations and the continual shorting of a representative index offers him the chance to do just that. Presumably an investor with $10 million of undervalued equities and a constant short position of $10 million in the index will achieve the net rewards or penalties attributable solely to his skill in selection of specific securities, and have no worries that these results will be swamped - or even influenced - by the fluctuations of the general market. Because there are costs involved - and because most investors believe that, over the long term, stock prices in general will advance - I think there are relatively few investment professionals who will operate in such a constantly hedged manner. But I also believe that it is a rational way to behave and that a few professionals, who wish always to be "market neutral" in their attitude and behavior, will do so.

2. As previously stated, I see a logical risk-reducing strategy that involves shorting the futures contract. I see no corresponding investment or hedging strategy whatsoever on the long side. By definition, therefore, a very maximum of 50% of the futures transactions can be entered into with the expectancy of risk reduction and not less than 50% (the long side) must act in a risk-accentuating or gambling manner.

3. The actual balance would be enormously different than this maximum 50/50 division between risk reducers and risk accentuators. The propensity to gamble is always increased by a large prize versus a small entry fee, no matter how poor the true odds may be. That's why Las Vegas casinos advertise big jackpots and why state lotteries headline big prizes. In securities, the unintelligent are seduced by the same approach in various ways, including: (a) "penny stocks", which are "manufactured" by promoters precisely because they snare the gullible - creating dreams of enormous payoffs but with an actual group result of disaster, and (b) low margin requirements through which financial experience attributable to a large investment is achieved by committing a relatively small stake.

4. We have had many earlier experiences in our history in which the high total commitment/low down payment phenomenon has led to trouble. The most familiar, of course, is the stock market boom in the late 20s that was accompanied and accentuated by 10% margins. Saner heads subsequently decided that there was nothing pro-social about such thin-margined speculation and that, rather than aiding capital markets, in the long run it hurt them. Accordingly, margin regulations were introduced and made a permanent part of the investing scene. The ability to speculate in stock indices with 10% down payments, of course, is simply a way around the margin requirements and will be immediately perceived as such by gamblers throughout the country.

Brokers, of course, favor new trading vehicles. Their enthusiasm tends to be in direct proportion to the amount of activity they expect. And the more the activity, the greater the cost to the public and the greater the amount of money that will be left behind by them to be spread among the brokerage industry. As each contract dies, the only business involved is that the loser pays the winner. Since the casino (the futures market and its supporting cast of brokers) gets paid a toll each time one of these transactions takes place, you can be sure that it will have a great interest in providing very large numbers of losers and winners. But it must be remembered that, for the players, it is the most clear sort of a "negative sum game". Losses and gains cancel out before expenses; after expenses the net loss is substantial. In fact, unless such losses are quite substantial, the casino will

terminate operations since the players' net losses comprise the casino's sole source of revenue. This "negative sum" aspect is in direct contrast to common stock investment generally, which has been a very substantial "positive sum game" over the years simply because the underlying companies, on balance, have earned substantial sums of money that eventually benefits their owners, the stockholders.

6. In my judgment, a very high percentage - probably at least 95% and more likely much higher - of the activity generated by these contracts will be strictly gambling in nature. You will have people wagering as to the short-term movements of the stock market and able to make fairly large wagers with fairly small sums. They will be encouraged to do so by brokers who will see rapid turnover of customers' capital - the best thing that can happen to a broker in terms of his immediate income. A great deal of money will be left behind by these 95% as the casino takes its bite from each transaction.

7. In the long run, gambling-dominated activities that are identified with traditional capital markets, and that leave a very high percentage of those exposed to the activity burned, are not going to be good for capital markets. Even though people participating in such gambling activity are not investors and what they are buying really are not stocks, they still will feel that they have had a bad experience with the stock market. And after having been exposed to the worst face of capital markets, they understandably may, in the future, take a dim view of capital markets generally. Certainly that has been the experience after previous waves of speculation. You might ask if the brokerage industry is not wise enough to look after its own long-term interests. History shows them to be myopic (witness the late 1960s); they often have been happiest when behavior was at its silliest. And many brokers are far more concerned with how much they gross this month than whether their clients - or, for that matter, the securities industry - prosper in the long run.

We do not need more people gambling in non-essential instruments identified with the stock market in this country, nor brokers who encourage them to do so. What we need are investors and advisors who look at the long-term prospects for an enterprise and invest accordingly. We need the intelligent commitment of investment capital, not leveraged market wagers. The propensity to operate in the intelligent, pro-social sector of capital markets is deterred, not enhanced, by an active and exciting casino operating in somewhat the same arena, utilizing somewhat similar language and serviced by the same work force.

In addition, low-margined activity in stock-equivalents is inconsistent with expressed public policy as embodied in margin requirements. Although index futures have slight benefits to the investment professional wishing to "hedge out" the market, the net effect of high-volume futures markets in stocks indices is likely to be overwhelmingly detrimental to the security-buying public and, therefore, in the long run to capital markets generally.

Sincerely,

Warren E. Buffett

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Appendixes

1. The Superinvestors of Graham-and-Doddsville

by Warren E. Buffett

EDITOR'S NOTE: *This article is an edited transcript of a talk given at Columbia University in 1984 commemorating the fiftieth anniversary of* Security Analysis, *written by Benjamin Graham and David L. Dodd. This specialized volume first introduced the ideas later popularized in* The Intelligent Investor. *Buffett's essay offers a fascinating study of how Graham's disciples have used Graham's value investing approach to realize phenomenal success in the stock market.*

Is the Graham and Dodd "look for values with a significant margin of safety relative to prices" approach to security analysis out of date? Many of the professors who write textbooks today say yes. They argue that the stock market is efficient; that is, that stock prices reflect everything that is known about a company's prospects and about the state of the economy. There are no undervalued stocks, these theorists argue, because there are smart security analysts who utilize all available information to ensure unfailingly appropriate prices. Investors who seem to beat the market year after year are just lucky. "If prices fully reflect available information, this sort of investment adeptness is ruled out," writes one of today's textbook authors.

Well, maybe. But I want to present to you a group of investors who have, year in and year out, beaten the Standard & Poor's 500 stock index. The hypothesis that they do this by pure chance is at

least worth examining. Crucial to this examination is the fact that these winners were all well known to me and pre-identified as superior investors, the most recent identification occurring over fifteen years ago. Absent this condition—that is, if I had just recently searched among thousands of records to select a few names for you this morning—I would advise you to stop reading right here. I should add that all these records have been audited. And I should further add that I have known many of those who have invested with these managers, and the checks received by those participants over the years have matched the stated records.

Before we begin this examination, I would like you to imagine a national coin-flipping contest. Let's assume we get 225 million Americans up tomorrow morning and we ask them all to wager a dollar. They go out in the morning at sunrise, and they all call the flip of a coin. If they call correctly, they win a dollar from those who called wrong. Each day the losers drop out, and on the subsequent day the stakes build as all previous winnings are put on the line. After ten flips on ten mornings, there will be approximately 220,000 people in the United States who have correctly called ten flips in a row. They each will have won a little over $1,000.

Now this group will probably start getting a little puffed up about this, human nature being what it is. They may try to be modest, but at cocktail parties they will occasionally admit to attractive members of the opposite sex what their technique is, and what marvelous insights they bring to the field of flipping.

Assuming that the winners are getting the appropriate rewards from the losers, in another ten days we will have 215 people who have successfully called their coin flips 20 times in a row and who, by this exercise, each have turned one dollar into a little over $1 million. $225 million would have been lost, $225 million would have been won.

By then, this group will really lose their heads. They will probably write books on "How I Turned a Dollar into a Million in Twenty Days Working Thirty Seconds a Morning." Worse yet, they'll probably start jetting around the country attending seminars on efficient coin-flipping and tackling skeptical professors with, "If it can't be done, why are there 215 of us?"

But then some business school professor will probably be rude enough to bring up the fact that if 225 million orangutans

had engaged in a similar exercise, the results would be much the same—215 egotistical orangutans with 20 straight winning flips.

I would argue, however, that there *are* some important differences in the examples I am going to present. For one thing, if (a) you had taken 225 million orangutans distributed roughly as the U.S. population is; if (b) 215 winners were left after 20 days; and if (c) you found that 40 came from a particular zoo in Omaha, you would be pretty sure you were on to something. So you would probably go out and ask the zookeeper about what he's feeding them, whether they had special exercises, what books they read, and who knows what else. That is, if you found any really extraordinary concentrations of success, you might want to see if you could identify concentrations of unusual characteristics that might be causal factors.

Scientific inquiry naturally follows such a pattern. If you were trying to analyze possible causes of a rare type of cancer—with, say, 1,500 cases a year in the United States—and you found that 400 of them occurred in some little mining town in Montana, you would get very interested in the water there, or the occupation of those afflicted, or other variables. You know that it's not random chance that 400 come from a small area. You would not necessarily know the causal factors, but you would know where to search.

I submit to you that there are ways of defining an origin other than geography. In addition to geographical origins, there can be what I call an *intellectual* origin. I think you will find that a disproportionate number of successful coin-flippers in the investment world came from a very small intellectual village that could be called Graham-and-Doddsville. A concentration of winners that simply cannot be explained by chance can be traced to this particular intellectual village.

Conditions could exist that would make even that concentration unimportant. Perhaps 100 people were simply imitating the coin-flipping call of some terribly persuasive personality. When he called heads, 100 followers automatically called that coin the same way. If the leader was part of the 215 left at the end, the fact that 100 came from the same intellectual origin would mean nothing. You would simply be identifying one case as a hundred cases. Similarly, let's assume that you lived in a strongly patriarchal society

and every family in the United States conveniently consisted of ten members. Further assume that the patriarchal culture was so strong that, when the 225 million people went out the first day, every member of the family identified with the father's call. Now, at the end of the 20-day period, you would have 215 winners, and you would find that they came from only 21.5 families. Some naive types might say that this indicates an enormous hereditary factor as an explanation of successful coin-flipping. But, of course, it would have no significance at all because it would simply mean that you didn't have 215 individual winners, but rather 21.5 randomly distributed families who were winners.

In this group of successful investors that I want to consider, there has been a common intellectual patriarch, Ben Graham. But the children who left the house of this intellectual patriarch have called their "flips" in very different ways. They have gone to different places and bought and sold different stocks and companies, yet they have had a combined record that simply can't be explained by random chance. It certainly cannot be explained by the fact that they are all calling flips identically because a leader is signaling the calls to make. The patriarch has merely set forth the intellectual theory for making coin-calling decisions, but each student has decided on his own manner of applying the theory.

The common intellectual theme of the investors from Graham-and-Doddsville is this: they search for discrepancies between the *value* of a business and the *price* of small pieces of that business in the market. Essentially, they exploit those discrepancies without the efficient market theorist's concern as to whether the stocks are bought on Monday or Thursday, or whether it is January or July, etc. Incidentally, when businessmen buy businesses—which is just what our Graham & Dodd investors are doing through the medium of marketable stocks—I doubt that many are cranking into their purchase decision the day of the week or the month in which the transaction is going to occur. If it doesn't make any difference whether all of a business is being bought on a Monday or a Friday, I am baffled why academicians invest extensive time and effort to see whether it makes a difference when buying small pieces of those same businesses. Our Graham & Dodd investors, needless to say, do not discuss beta, the capital asset pricing model, or covariance in returns among securities. These are not subjects of

any interest to them. In fact, most of them would have difficulty defining those terms. The investors simply focus on two variables: price and value.

I always find it extraordinary that so many studies are made of price and volume behavior, the stuff of chartists. Can you imagine buying an entire business simply because the price of the business had been marked *up* substantially last week and the week before? Of course, the reason a lot of studies are made of these price and volume variables is that now, in the age of computers, there are almost endless data available about them. It isn't necessarily because such studies have any utility; it's simply that the data are there and academicians have worked hard to learn the mathematical skills needed to manipulate them. Once these skills are acquired, it seems sinful not to use them, even if the usage has no utility or negative utility. As a friend said, to a man with a hammer, everything looks like a nail.

I think the group that we have identified by a common intellectual home is worthy of study. Incidentally, despite all the academic studies of the influence of such variables as price, volume, seasonality, capitalization size, etc., upon stock performance, no interest has been evidenced in studying the methods of this unusual concentration of value-oriented winners.

I begin this study of results by going back to a group of four of us who worked at Graham-Newman Corporation from 1954 through 1956. There were only four—I have not selected these names from among thousands. I offered to go to work at Graham-Newman for nothing after I took Ben Graham's class, but he turned me down as overvalued. He took this value stuff very seriously! After much pestering he finally hired me. There were three partners and four of us at the "peasant" level. All four left between 1955 and 1957 when the firm was wound up, and it's possible to trace the record of three.

The first example (see Table 1, pages 549–550) is that of Walter Schloss. Walter never went to college, but took a course from Ben Graham at night at the New York Institute of Finance. Walter left Graham-Newman in 1955 and achieved the record shown here over 28 years.

Here is what "Adam Smith"—after I told him about Walter—wrote about him in *Supermoney* (1972):

> He has no connections or access to useful information. Practically no one in Wall Street knows him and he is not fed any ideas. He looks up the numbers in the manuals and sends for the annual reports, and that's about it.
>
> In introducing me to [Schloss] Warren had also, to my mind, described himself. "He never forgets that he is handling other people's money and this reinforces his normal strong aversion to loss." He has total integrity and a realistic picture of himself. Money is real to him and stocks are real—and from this flows an attraction to the "margin of safety" principle.

Walter has diversified enormously, owning well over 100 stocks currently. He knows how to identify securities that sell at considerably less than their value to a private owner. *And that's all he does.* He doesn't worry about whether it's January, he doesn't worry about whether it's Monday, he doesn't worry about whether it's an election year. He simply says, if a business is worth a dollar and I can buy it for 40 cents, something good may happen to me. And he does it over and over and over again. He owns many more stocks than I do—and is far less interested in the underlying nature of the business: I don't seem to have very much influence on Walter. That's one of his strengths; no one has much influence on him.

The second case is Tom Knapp, who also worked at Graham-Newman with me. Tom was a chemistry major at Princeton before the war; when he came back from the war, he was a beach bum. And then one day he read that Dave Dodd was giving a night course in investments at Columbia. Tom took it on a noncredit basis, and he got so interested in the subject from taking that course that he came up and enrolled at Columbia Business School, where he got the MBA degree. He took Dodd's course again, and took Ben Graham's course. Incidentally, 35 years later I called Tom to ascertain some of the facts involved here and I found him on the beach again. The only difference is that now he owns the beach!

In 1968 Tom Knapp and Ed Anderson, also a Graham disciple, along with one or two other fellows of similar persuasion, formed Tweedy, Browne Partners, and their investment results appear in Table 2. Tweedy, Browne built that record with very wide diversification. They occasionally bought control of businesses, but the record of the passive investments is equal to the record of the control investments.

Table 3 describes the third member of the group who formed Buffett Partnership in 1957. The best thing he did was to quit in 1969. Since then, in a sense, Berkshire Hathaway has been a continuation of the partnership in some respects. There is no single index I can give you that I would feel would be a fair test of investment management at Berkshire. But I think that any way you figure it, it has been satisfactory.

Table 4 shows the record of the Sequoia Fund, which is managed by a man whom I met in 1951 in Ben Graham's class, Bill Ruane. After getting out of Harvard Business School, he went to Wall Street. Then he realized that he needed to get a real business education so he came up to take Ben's course at Columbia, where we met in early 1951. Bill's record from 1951 to 1970, working with relatively small sums, was far better than average. When I wound up Buffett Partnership I asked Bill if he would set up a fund to handle all our partners, so he set up the Sequoia Fund. He set it up at a terrible time, just when I was quitting. He went right into the two-tier market and all the difficulties that made for comparative performance for value-oriented investors. I am happy to say that my partners, to an amazing degree, not only stayed with him but added money, with the happy result shown.

There's no hindsight involved here. Bill was the only person I recommended to my partners, and I said at the time that if he achieved a four-point-per-annum advantage over the Standard & Poor's, that would be solid performance. Bill has achieved well over that, working with progressively larger sums of money. That makes things much more difficult. Size is the anchor of performance. There is no question about it. It doesn't mean you can't do better than average when you get larger, but the margin shrinks. And if you ever get so you're managing two trillion dollars, and that happens to be the amount of the total equity evaluation in the economy, don't think that you'll do better than average!

I should add that in the records we've looked at so far, throughout this whole period there was practically no duplication in these portfolios. These are men who select securities based on discrepancies between price and value, but they make their selections very differently. Walter's largest holdings have been such stalwarts as Hudson Pulp & Paper and Jeddo Highland Coal and New York Trap Rock Company and all those other names that come instantly to mind to even a casual reader of the business pages. Tweedy

Browne's selections have sunk even well below that level in terms of name recognition. On the other hand, Bill has worked with big companies. The overlap among these portfolios has been very, very low. These records do not reflect one guy calling the flip and fifty people yelling out the same thing after him.

Table 5 is the record of a friend of mine who is a Harvard Law graduate, who set up a major law firm. I ran into him in about 1960 and told him that law was fine as a hobby but he could do better. He set up a partnership quite the opposite of Walter's. His portfolio was concentrated in very few securities and therefore his record was much more volatile but it was based on the same discount-from-value approach. He was willing to accept greater peaks and valleys of performance, and he happens to be a fellow whose whole psyche goes toward concentration, with the results shown. Incidentally, this record belongs to Charlie Munger, my partner for a long time in the operation of Berkshire Hathaway. When he ran his partnership, however, his portfolio holdings were almost completely different from mine and the other fellows mentioned earlier.

Table 6 is the record of a fellow who was a pal of Charlie Munger's—another non–business school type—who was a math major at USC. He went to work for IBM after graduation and was an IBM salesman for a while. After I got to Charlie, Charlie got to him. This happens to be the record of Rick Guerin. Rick, from 1965 to 1983, against a compounded gain of 316 percent for the S&P, came off with 22,200 percent, which, probably because he lacks a business school education, he regards as statistically significant.

One sidelight here: it is extraordinary to me that the idea of buying dollar bills for 40 cents takes immediately with people or it doesn't take at all. It's like an inoculation. If it doesn't grab a person right away, I find that you can talk to him for years and show him records, and it doesn't make any difference. They just don't seem able to grasp the concept, simple as it is. A fellow like Rick Guerin, who had no formal education in business, understands immediately the value approach to investing and he's applying it five minutes later. I've never seen anyone who became a gradual convert over a ten-year period to this approach. It doesn't seem to be a matter of IQ or academic training. It's instant recognition, or it is nothing.

Table 7 is the record of Stan Perlmeter. Stan was a liberal arts major at the University of Michigan who was a partner in the advertising agency of Bozell & Jacobs. We happened to be in the same building in Omaha. In 1965 he figured out I had a better business than he did, so he left advertising. Again, it took five minutes for Stan to embrace the value approach.

Perlmeter does not own what Walter Schloss owns. He does not own what Bill Ruane owns. These are records made *independently.* But every time Perlmeter buys a stock it's because he's getting more for his money than he's paying. That's the only thing he's thinking about. He's not looking at quarterly earnings projections, he's not looking at next year's earnings, he's not thinking about what day of the week it is, he doesn't care what investment research from any place says, he's not interested in price momentum, volume, or anything. He's simply asking: What is the business worth?

Table 8 and Table 9 are the records of two pension funds I've been involved in. They are not selected from dozens of pension funds with which I have had involvement; they are the only two I have influenced. In both cases I have steered them toward value-oriented managers. Very, very few pension funds are managed from a value standpoint. Table 8 is the Washington Post Company's Pension Fund. It was with a large bank some years ago, and I suggested that they would do well to select managers who had a value orientation.

As you can see, overall they have been in the top percentile ever since they made the change. The Post told the managers to keep at least 25 percent of these funds in bonds, which would not have been necessarily the choice of these managers. So I've included the bond performance simply to illustrate that this group has no particular expertise about bonds. They wouldn't have said they did. Even with this drag of 25 percent of their fund in an area that was not their game, they were in the top percentile of fund management. The Washington Post experience does not cover a terribly long period but it does represent many investment decisions by three managers who were not identified retroactively.

Table 9 is the record of the FMC Corporation fund. I don't manage a dime of it myself but I did, in 1974, influence their decision to select value-oriented managers. Prior to that time they had selected managers much the same way as most larger companies. They now

rank number one in the Becker survey of pension funds for their size over the period of time subsequent to this "conversion" to the value approach. Last year they had eight equity managers of any duration beyond a year. Seven of them had a cumulative record better than the S&P. All eight had a better record last year than the S&P. The net difference now between a median performance and the actual performance of the FMC fund over this period is $243 million. FMC attributes this to the mindset given to them about the selection of managers. Those managers are not the managers I would necessarily select but they have the common denominator of selecting securities based on value.

So these are nine records of "coin-flippers" from Graham-and-Doddsville. I haven't selected them with hindsight from among thousands. It's not like I am reciting to you the names of a bunch of lottery winners—people I had never heard of before they won the lottery. I selected these men years ago based upon their framework for investment decision-making. I knew what they had been taught and additionally I had some personal knowledge of their intellect, character, and temperament. It's very important to understand that this group has assumed far less risk than average; note their record in years when the general market was weak. While they differ greatly in style, these investors are, mentally, always *buying the business, not buying the stock.* A few of them sometimes buy whole businesses. Far more often they simply buy small pieces of businesses. Their attitude, whether buying all or a tiny piece of a business, is the same. Some of them hold portfolios with dozens of stocks; others concentrate on a handful. But all exploit the difference between the market price of a business and its intrinsic value.

I'm convinced that there is much inefficiency in the market. These Graham-and-Doddsville investors have successfully exploited gaps between price and value. When the price of a stock can be influenced by a "herd" on Wall Street with prices set at the margin by the most emotional person, or the greediest person, or the most depressed person, it is hard to argue that the market always prices rationally. In fact, market prices are frequently nonsensical.

I would like to say one important thing about risk and reward. Sometimes risk and reward are correlated in a positive fashion. If someone were to say to me, "I have here a six-shooter and I have

slipped one cartridge into it. Why don't you just spin it and pull it once? If you survive, I will give you $1 million." I would decline—perhaps stating that $1 million is not enough. Then he might offer me $5 million to pull the trigger twice—now that would be a positive correlation between risk and reward!

The exact opposite is true with value investing. If you buy a dollar bill for 60 cents, it's riskier than if you buy a dollar bill for 40 cents, but the expectation of reward is greater in the latter case. The greater the potential for reward in the value portfolio, the less risk there is.

One quick example: The Washington Post Company in 1973 was selling for $80 million in the market. At the time, that day, you could have sold the assets to any one of ten buyers for not less than $400 million, probably appreciably more. The company owned the *Post, Newsweek,* plus several television stations in major markets. Those same properties are worth $2 billion now, so the person who would have paid $400 million would not have been crazy.

Now, if the stock had declined even further to a price that made the valuation $40 million instead of $80 million, its beta would have been greater. And to people who think beta measures risk, the cheaper price would have made it look riskier. This is truly Alice in Wonderland. I have never been able to figure out why it's riskier to buy $400 million worth of properties for $40 million than $80 million. And, as a matter of fact, if you buy a group of such securities and you know anything at all about business valuation, there is essentially no risk in buying $400 million for $80 million, particularly if you do it by buying ten $40 million piles for $8 million each. Since you don't have your hands on the $400 million, you want to be sure you are in with honest and reasonably competent people, but that's not a difficult job.

You also have to have the knowledge to enable you to make a very general estimate about the value of the underlying businesses. But you do not cut it close. That is what Ben Graham meant by having a margin of safety. You don't try and buy businesses worth $83 million for $80 million. You leave yourself an enormous margin. When you build a bridge, you insist it can carry 30,000 pounds, but you only drive 10,000-pound trucks across it. And that same principle works in investing.

In conclusion, some of the more commercially minded among

you may wonder why I am writing this article. Adding many converts to the value approach will perforce narrow the spreads between price and value. I can only tell you that the secret has been out for 50 years, ever since Ben Graham and Dave Dodd wrote *Security Analysis,* yet I have seen no trend toward value investing in the 35 years that I've practiced it. There seems to be some perverse human characteristic that likes to make easy things difficult. The academic world, if anything, has actually backed away from the teaching of value investing over the last 30 years. It's likely to continue that way. Ships will sail around the world but the Flat Earth Society will flourish. There will continue to be wide discrepancies between price and value in the marketplace, and those who read their Graham & Dodd will continue to prosper.

Tables 1–9 follow:

TABLE 1 Walter J. Schloss

Year	S&P Overall Gain, Including Dividends (%)	WJS Ltd Partners Overall Gain per year (%)	WJS Partnership Overall Gain per year (%)
1956	7.5	5.1	6.8
1957	–10.5	–4.7	–4.7
1958	42.1	42.1	54.6
1959	12.7	17.5	23.3
1960	–1.6	7.0	9.3
1961	26.4	21.6	28.8
1962	–10.2	8.3	11.1
1963	23.3	15.1	20.1
1964	16.5	17.1	22.8
1965	13.1	26.8	35.7
1966	–10.4	0.5	0.7
1967	26.8	25.8	34.4
1968	10.6	26.6	35.5

Standard & Poor's 28¼ year compounded gain	887.2%
WJS Limited Partners 28¼ year compounded gain	6,678.8%
WJS Partnership 28¼ year compounded gain	23,104.7%
Standard & Poor's 28¼ year annual compounded rate	8.4%
WJS Limited Partners 28¼ year annual compounded rate	16.1%
WJS Partnership 28¼ year annual compounded rate	21.3%

During the history of the Partnership it has owned over 800 issues and, at most times, has had at least 100 positions. Present assets under management approximate $45 million. The difference between returns of the partnership and returns of the limited partners is due to allocations to the general partner for management.

TABLE 1 Walter J. Schloss *(continued)*

Year	S&P Overall Gain, Including Dividends (%)	WJS Ltd Partners Overall Gain per year (%)	WJS Partnership Overall Gain per year (%)
1969	–7.5	–9.0	–9.0
1970	2.4	–8.2	–8.2
1971	14.9	25.5	28.3
1972	19.8	11.6	15.5
1973	–14.8	–8.0	–8.0
1974	–26.6	–6.2	–6.2
1975	36.9	42.7	52.2
1976	22.4	29.4	39.2
1977	–8.6	25.8	34.4
1978	7.0	36.6	48.8
1979	17.6	29.8	39.7
1980	32.1	23.3	31.1
1981	6.7	18.4	24.5
1982	20.2	24.1	32.1
1983	22.8	38.4	51.2
1984 1st Qtr.	2.3	0.8	1.1

TABLE 2 Tweedy, Browne Inc.

Period Ended (September 30)	Dow Jones* (%)	S & P 500* (%)	TBK Overall (%)	TBK Limited Partners (%)
1968 (9 mos.)	6.0	8.8	27.6	22.0
1969	–9.5	–6.2	12.7	10.0
1970	–2.5	–6.1	–1.3	–1.9
1971	20.7	20.4	20.9	16.1
1972	11.0	15.5	14.6	11.8
1973	2.9	1.0	8.3	7.5
1974	–31.8	–38.1	1.5	1.5
1975	36.9	37.8	28.8	22.0
1976	29.6	30.1	40.2	32.8
1977	–9.9	–4.0	23.4	18.7
1978	8.3	11.9	41.0	32.1
1979	7.9	12.7	25.5	20.5
1980	13.0	21.1	21.4	17.3
1981	–3.3	2.7	14.4	11.6
1982	12.5	10.1	10.2	8.2
1983	44.5	44.3	35.0	28.2
Total Return				
15¾ years	191.8%	238.5%	1,661.2%	936.4%
Standard & Poor's 15¾ year annual compounded rate				7.0%
TBK Limited Partners 15¾ year annual compounded rate				16.0%
TBK Overall 15¾ year annual compounded rate				20.0%

* Includes dividends paid for both Standard & Poor's 500 Composite Index and Dow Jones Industrial Average.

TABLE 3 Buffett Partnership, Ltd.

Year	Overall Results From Dow (%)	Partnership Results (%)	Limited Partners' Results (%)
1957	–8.4	10.4	9.3
1958	38.5	40.9	32.2
1959	20.0	25.9	20.9
1960	–6.2	22.8	18.6
1961	22.4	45.9	35.9
1962	–7.6	13.9	11.9
1963	20.6	38.7	30.5
1964	18.7	27.8	22.3
1965	14.2	47.2	36.9
1966	–15.6	20.4	16.8
1967	19.0	35.9	28.4
1968	7.7	58.8	45.6
1969	–11.6	6.8	6.6
On a cumulative or compounded basis, the results are:			
1957	–8.4	10.4	9.3
1957–58	26.9	55.6	44.5
1957–59	52.3	95.9	74.7
1957–60	42.9	140.6	107.2
1957–61	74.9	251.0	181.6
1957–62	61.6	299.8	215.1
1957–63	94.9	454.5	311.2
1957–64	131.3	608.7	402.9
1957–65	164.1	943.2	588.5
1957–66	122.9	1156.0	704.2
1957–67	165.3	1606.9	932.6
1957–68	185.7	2610.6	1403.5
1957–69	152.6	2794.9	1502.7
Annual Compounded Rate	7.4	29.5	23.8

TABLE 4 Sequoia Fund, Inc.

Year	*Annual Percentage Change*** Sequoia Fund (%)	S&P 500 Index * (%)
1970 (from July 15)	12.1	20.6
1971	13.5	14.3
1972	3.7	18.9
1973	–24.0	–14.8
1974	–15.7	–26.4
1975	60.5	37.2
1976	72.3	23.6
1977	19.9	–7.4
1978	23.9	6.4
1979	12.1	18.2
1980	12.6	32.3
1981	21.5	–5.0
1982	31.2	21.4
1983	27.3	22.4
1984 (first quarter)	–1.6	–2.4
Entire Period	775.3%	270.0%
Compound Annual Return	17.2%	10.0%
Plus 1% Management Fee	1.0%	
Gross Investment Return	18.2%	10.0%

* Includes dividends (and capital gains distributions in the case of Sequoia Fund) treated as though reinvested.

** These figures differ slightly from the S&P figures in Table 1 because of a difference in calculation of reinvested dividends.

TABLE 5 Charles Munger

Year	Mass. Inv. Trust (%)	Investors Stock (%)	Lehman (%)	Tri–Cont. (%)	Dow (%)	Overall Partnership (%)	Limited Partners (%)
Yearly Results (1)							
1962	–9.8	–13.4	–14.4	–12.2	–7.6	30.1	20.1
1963	20.0	16.5	23.8	20.3	20.6	71.7	47.8
1964	15.9	14.3	13.6	13.3	18.7	49.7	33.1
1965	10.2	9.8	19.0	10.7	14.2	8.4	6.0
1966	–7.7	–9.9	–2.6	–6.9	–15.7	12.4	8.3
1967	20.0	22.8	28.0	25.4	19.0	56.2	37.5
1968	10.3	8.1	6.7	6.8	7.7	40.4	27.0
1969	–4.8	–7.9	–1.9	0.1	–11.6	28.3	21.3
1970	0.6	–4.1	–7.2	–1.0	8.7	–0.1	–0.1
1971	9.0	16.8	26.6	22.4	9.8	25.4	20.6
1972	11.0	15.2	23.7	21.4	18.2	8.3	7.3
1973	–12.5	–17.6	–14.3	–21.3	–23.1	– 31.9	–31.9
1974	–25.5	–25.6	–30.3	–27.6	–13.1	–31.5	– 31.5
1975	32.9	33.3	30.8	35.4	44.4	73.2	73.2

Compound Results (2)							
1962	–9.8	–13.4	–14.4	–12.2	–7.6	30.1	20.1
1962–3	8.2	0.9	6.0	5.6	11.5	123.4	77.5
1962–4	25.4	15.3	20.4	19.6	32.4	234.4	136.3
1962–5	38.2	26.6	43.3	32.4	51.2	262.5	150.5
1962–6	27.5	14.1	39.5	23.2	27.5	307.5	171.3
1962–7	53.0	40.1	78.5	54.5	51.8	536.5	273.0
1962–8	68.8	51.4	90.5	65.0	63.5	793.6	373.7
1962–9	60.7	39.4	86.9	65.2	44.5	1046.5	474.6
1962–70	61.7	33.7	73.4	63.5	57.1	1045.4	474.0
1962–71	76.3	56.2	119.5	100.1	72.5	1336.3	592.2
1962–72	95.7	79.9	171.5	142.9	103.9	1455.5	642.7
1962–73	71.2	48.2	132.7	91.2	77.2	959.3	405.8
1962–74	27.5	40.3	62.2	38.4	36.3	625.6	246.5
1962–75	69.4	47.0	112.2	87.4	96.8	1156.7	500.1
Average Annual Compounded Rate	3.8	2.8	5.5	4.6	5.0	19.8	13.7

TABLE 6 Pacific Partners, Ltd.

Year	S & P 500 Index (%)	Limited Partnership Results (%)	Overall Partnership Results (%)
1965	12.4	21.2	32.0
1966	–10.1	24.5	36.7
1967	23.9	120.1	180.1
1968	11.0	114.6	171.9
1969	–8.4	64.7	97.1
1970	3.9	–7.2	–7.2
1971	14.6	10.9	16.4
1972	18.9	12.8	17.1
1973	–14.8	–42.1	–42.1
1974	–26.4	–34.4	–34.4
1975	37.2	23.4	31.2
1976	23.6	127.8	127.8
1977	–7.4	20.3	27.1
1978	6.4	28.4	37.9
1979	18.2	36.1	48.2
1980	32.3	18.1	24.1
1981	–5.0	6.0	8.0
1982	21.4	24.0	32.0
1983	22.4	18.6	24.8
Standard & Poor's 19 year compounded gain			316.4%
Limited Partners 19 year compounded gain			5,530.2%
Overall Partnership 19 year compounded gain			22,200.0%
Standard & Poor's 19 year annual compounded rate			7.8%
Limited Partners 19 year annual compounded rate			23.6%
Overall Partnership 19 year annual compounded rate			32.9%

TABLE 7 Perlmeter Investments

Year	PIL Overall (%)	Limited Partner (%)
8/1–12/31/65	40.6	32.5
1966	6.4	5.1
1967	73.5	58.8
1968	65.0	52.0
1969	–13.8	–13.8
1970	–6.0	–6.0
1971	55.7	49.3
1972	23.6	18.9
1973	–28.1	–28.1
1974	–12.0	–12.0
1975	38.5	38.5
1/1–10/31/76	38.2	34.5
11/1/76–10/31/77	30.3	25.5
11/1/77–10/31/78	31.8	26.6
11/1/78–10/31/79	34.7	28.9
11/1/79–10/31/80	41.8	34.7
11/1/80–10/31/81	4.0	3.3
11/1/81–10/31/82	29.8	25.4
11/1/82–10/31/83	22.2	18.4

Total Partnership Percentage Gain 8/1/65 through 10/31/83	4277.2%
Limited Partners Percentage Gain 8/1/65 through 10/31/83	2309.5%
Annual Compound Rate of Gain Overall Partnership	23.0%
Annual Compound Rate of Gain Limited Partners	19.0%
Dow Jones Industrial Average 7/31/65 (Approximate)	882
Dow Jones Industrial Average 10/31/83 (Approximate)	1225
Approximate Compound Rate of Gain of DJI including dividends	7%

TABLE 8 The Washington Post Company, Master Trust, December 31, 1983

	Current Quarter		Year Ended		2 Years Ended*		3 Years Ended*		5 Years Ended*	
	% Ret.	Rank	% Ret.	Rank	% Ret.	Rank	% Ret.	Rank	% Ret.	Rank
All Investments										
Manager A	4.1	2	22.5	10	20.6	40	18.0	10	20.2	3
Manager B	3.2	4	34.1	1	33.0	1	28.2	1	22.6	1
Manager C	5.4	1	22.2	11	28.4	3	24.5	1	—	—
Master Trust (All Managers)	3.9	1	28.1	1	28.2	1	24.3	1	21.8	1
Common Stock										
Manager A	5.2	1	32.1	9	26.1	27	21.2	11	26.5	7
Manager B	3.6	5	52.9	1	46.2	1	37.8	1	29.3	3
Manager C	6.2	1	29.3	14	30.8	10	29.3	3	—	—
Master Trust (All Managers)	4.7	1	41.2	1	37.0	1	30.4	1	27.6	1
Bonds										
Manager A	2.7	8	17.0	1	26.6	1	19.0	1	12.2	2
Manager B	1.6	46	7.6	48	18.3	53	12.7	84	7.4	86
Manager C	3.2	4	10.4	9	24.0	3	18.9	1	—	—
Master Trust (All Managers)	2.2	11	9.7	14	21.1	14	15.2	24	9.3	30
Bonds & Cash Equivalents										
Manager A	2.5	15	12.0	5	16.1	64	15.5	21	12.9	9
Manager B	2.1	28	9.2	29	17.1	47	14.7	41	10.8	44
Manager C	3.1	6	10.2	17	22.0	2	21.6	1	—	—
Master Trust (All Managers)	2.4	14	10.2	17	17.8	20	16.2	2	12.5	9

* Annualized
Rank indicates the fund's performance against the A.C. Becker universe.
Rank is stated as a percentile: 1 = best performance, 100 = worst.

TABLE 9 FMC Corporation Pension Fund, Annual Rate of Return (Percent)

Period ending	1 Year	2 Years	3 Years	4 Years	5 Years	6 Years	7 Years	8 Years	9 Years
FMC (Bonds and Equities Combined)									
1983	23.0								*17.1
1982	22.8	13.6	16.0	16.6	15.5	12.3	13.9	16.3	
1981	5.4	13.0	15.3	13.8	10.5	12.6	15.4		
1980	21.0	19.7	16.8	11.7	14.0	17.3			
1979	18.4	14.7	8.7	12.3	16.5				
1978	11.2	4.2	10.4	16.1					
1977	–2.3	9.8	17.8						
1976	23.8	29.3							
1975	35.0							* 18.5 from equities only	
Becker large plan median									
1983	15.6								12.6
1982	21.4	11.2	13.9	13.9	12.5	9.7	10.9	12.3	
1981	1.2	10.8	11.9	10.3	7.7	8.9	10.9		
1980	20.9	NA	NA	NA	10.8	NA			
1979	13.7	NA	NA	NA	11.1				
1978	6.5	NA	NA	NA					
1977	–3.3	NA	NA						
1976	17.0	NA							
1975	24.1								

TABLE 9 FMC Corporation Pension Fund, Annual Rate of Return (Percent) ***(continued)***

Period ending	1 Year	2 Years	3 Years	4 Years	5 Years	6 Years	7 Years	8 Years	9 Years
S&P 500									
1983	22.8								15.6
1982	21.5	7.3	15.1	16.0	14.0	10.2	12.0	14.9	
1981	–5.0	12.0	14.2	12.2	8.1	10.5	14.0		
1980	32.5	25.3	18.7	11.7	14.0	17.5			
1979	18.6	12.4	5.5	9.8	14.8				
1978	6.6	–0.8	6.8	13.7					
1977	7.7	6.9	16.1						
1976	23.7	30.3							
1975	37.2								

Three Lectures by Warren Buffett to Notre Dame Faculty, MBA Students and Undergraduate Students

Spring, 1991
Lightly edited by Whitney Tilson, WTilson@T2PartnersLLC.com

Highlights

[The transcript of Buffett's lectures is 39 pages. For those of you who don't have the time to read the entire transcript, we've pulled out some of the highlights – the most interesting things Buffett said and/or the things that we've never heard him say anywhere else.]

Keys to Investment Success

I found some strange things when I was 20 years old. I went through Moody's Bank and Finance Manual, about 1,000 pages. I went through it twice. The first time I went through, I saw a company called Western Insurance Security Company in Fort Scott, Kansas. They owned 92%, at that time, of the Western Casualty and Surety Company. Perfectly sound company. I knew people that represented them in Omaha. Earnings per share $20, stock price $16. (garbled) ... much more than that. I ran ads in the Fort Scott, Kansas paper to try and buy that stock – it had only 300 or 400 shareholders. It was selling at one times earnings, it had a first class [management team]...

[Tape ends here]

... Incidentally, I would say that almost everybody I know in Wall Street has had as many good ideas as I have, they just had a lot of [bad] ideas too. And I'm serious about that. I mean when I bought Western Insurance Security selling at $16 and earning $20 per share, I put half my net worth into it. I checked it out first – I went down to the insurance commission and got out the convention statements, I read Best's, and I did a lot of things first. But, I mean, my dad wasn't in it, I'd only had one insurance class at Columbia – but it was not beyond my capabilities to do that, and it isn't beyond your capabilities.

Now if I had some rare insight about software, or something like that – I would say that, maybe, other people couldn't do that – or biotechnology, or something. And I'm not saying that every insight that I have is an insight that somebody else could have, but there were all kinds of people that could have understood American Express Company as well as I understood it in '62. They may have been...they may have had a different temperament than I did, so that they were paralyzed by fear, or that they wanted the crowd to be with them, or something like that, but I didn't know anything about credit cards that they didn't know, or about travelers checks. Those are not hard products to understand. But what I did have was an intense interest and I was willing, when I saw something I wanted to do, to do it. And if I couldn't see something to do, to not do anything. By far, the most important quality is not how much IQ you've got. IQ is not the scarce factor. You need a reasonable amount of intelligence, but the *temperament* is 90% of it.

That's why Graham is so important. Graham's book [The Intelligent Investor] talks about the qualities of temperament you have to bring to the game, and that is the game.

Require a Statement Before Being Allowed to Buy a Stock
You shouldn't buy a stock, in my view, for any other reason than the fact that you think it's selling for less than it's worth, considering all the factors about the business.

I used to tell the stock exchange people that before a person bought 100 shares of General Motors they should have to write out on a [piece of paper:] "I'm buying 100 shares of General Motors at X" and multiply that by the number of shares "and therefore General Motors is worth more than $32 billion" or whatever it multiplies out to, "because ... [fill in the reasons]" And if they couldn't answer that question, their order wouldn't be accepted.

That test *should be applied*. I should never buy anything unless I can fill out that piece of paper. I may be wrong, but I would know the answer to that. "I'm buying Coca Cola right now, 660 million shares of stock, a little under $50. The whole company costs me about $32 billion dollars." Before you buy 100 shares of stock at $48 you ought to be able to answer "I'm paying $32 billion today for the Coca Cola Company because..." [Banging the podium for emphasis.] If you can't answer that question, you shouldn't buy it. If you *can* answer that question, and you do it a few times, you'll make a lot of money.

Tests of a Good Business
A couple of fast tests about how good a business is. First question is "how long does the management have to think before they decide to raise prices?" You're looking at marvelous business when you look in the mirror and say "mirror, mirror on the wall, how much should I charge for Coke this fall?" [And the mirror replies, "More."] That's a great business. When you say, like we used to in the textile business, when you get down on your knees, call in all the priests, rabbis, and everyone else, [and say] "just another half cent a yard." Then you get up and they say "We won't pay it." It's just night and day. I mean, if you walk into a drugstore, and you say "I'd like a Hershey bar" and the man says "I don't have any Hershey bars, but I've got this unmarked chocolate bar, and it's a nickel cheaper than a Hershey bar" you just go across the street and buy a Hershey bar. *That* is a good business.

The ability to raise prices – the ability to differentiate yourself in a real way, and a real way means you can charge a different price – *that* makes a great business.

I'll try this on the students later: What's the highest price of a daily newspaper in the United States? [Pause] [This is what he said to the students later: Most of you are familiar with it. The highest priced daily newspaper in the United States, with any circulation at all, is the *Daily Racing Form*. It sells about 150,000 copies a day, and it has for about 50 years, and it's either $2.00 or $2.25 (they keep raising prices) and it's essential. If you're heading to the racetrack and you've got a choice between betting on your wife's birthday, and Joe's Little Green Sheet, and the *Daily Racing Form*, if you're a serious racing handicapper, you want *The Form*. You can charge $2.00 for *The Form*, you can charge $1.50, you can charge $2.50 and people are going to buy it. It's like selling needles to addicts, basically. It's an essential business. It will be an essential business five or 10 years from now. You have to decide whether horse racing will be around five or 10 years from now, and you have to decide whether there's any way people will get their information about past performances of different horses from different sources. But

you've only got about two questions to answer, and if you answer them, you know the business will make a lot of money. *The Form* has huge profit margins, incidentally. Wider than any other newspaper. They charge what they want to basically. It's an easy to understand business – so easy to understand.]

There are products like that, and there are products like sheet steel. And they're night and day.

Agony vs. Ecstasy Businesses: Example 1

It does make a difference what kind of a business you get associated with. For that reason I've set forth in this little handout Company A and Company E. I'm not going to tell you for the moment what these companies are. I'm going to tell you one thing about the two companies. One of the companies, to the point of where this cuts off, lost its investors more money than virtually any business in the world. The other company made its owner more money than virtually any company in the world. So one of these two companies, Company A and Company E, has made one of its owners one of the five wealthiest people in the world, while the other company made its owners appreciably poorer, probably more so than any other company to that point in time.

Now I'll tell you a little bit about these companies (we're leading up to the question of whether the business makes a difference). Company A had thousands of MBAs working for it. Company E had none. I wanted to get your attention. Company A had all kinds of employee benefit programs, stock options, pensions, the works. Company E never had stock options. Company A had thousands of patents – they probably held more patents than just about any company in the United States. Company E never invented anything. Company A's product improved dramatically in this period, Company E's product just sat.

So far, based on what I've told you, does anybody have any idea of which company was the great success, and why?

If you get to buy one of these two companies, and this is all you know, and you get to ask me one question to decide on which one to buy. If you ask me the right question, you will probably make the right decision about the company's stock, and one will make you enormously wealthy.

[Audience asks questions]

Both companies make products used every day. They started as necessities, highly useful, nothing esoteric about either one, although company A does have all these patents. There's more technology involved in company A.

[How many companies compete with either one?]

Good question, very good question. In effect, neither company had any competition. And that might differentiate in some cases.

Well, I'll tell you a little more about it. Company A is known as company A because it was in agony, and Company E, as Company E, because it was in ecstasy. Company A is American Telephone and Telegraph. I've omitted eight zeros on the left hand side, and the American

Telephone and Telegraph Company, at the end of 1979, was selling for $10 billion less than the shareholders had either put in or left in the business. In other words, if shareholder's equity was "X" the market value was X minus $10 billion. So the money that shareholders had put in, or left in, the business had shrunk by $10 billion in terms of market value.

Company E, the excellent company, I left off only six zeros. And that happens to be a company called Thompson Newspapers. Thomson Newspapers, which most of you have probably never heard of, actually owns about 5% of the newspapers in the United States. But they're all small ones. And, as I said, it has no MBAs, no stock options – still doesn't – and it made its owner, Lord Thompson. He wasn't Lord Thompson when he started – he started with 1,500 bucks in North Bay, Ontario buying a little radio station but, when he got to be one of the five richest men, he became Lord Thompson.

…The telephone company, with the patents, the MBAs, the stock options, and everything else, had one problem, and that problem is illustrated by those figures on that lower left hand column. And those figures show the plant investment in the telephone business. That's $47 billion, starting off with, growing to $99 billion over an eight or nine year period. More and more and more money had to be tossed in, in order to make these increased earnings, going from $2.2 billion to $5.6 billion.

So, they got more money, but you can get more money from a savings account if you keep adding money to it every year. The progress in earnings that the telephone company made was only achievable because they kept on shoving more money into the savings account and the truth was, under the conditions of the '70s, they were not getting paid commensurate with the amount of money that they had to shove into the pot, whereas Lord Thompson, once he bought the paper in Council Bluffs, never put another dime in. They just mailed money every year. And as they got more money, he bought more newspapers. And, in fact, he said it was going to say on his tombstone that he bought newspapers in order to make more money in order to buy more newspapers [and so on].

The idea was that, essentially, he raised prices and raised earnings there every year without having to put more capital into the business.

One is a marvelous, absolutely sensational business, the other one is a terrible business. If you have a choice between going to work for a wonderful business that is not capital intensive, and one that is capital intensive, I suggest that you look at the one that is not capital intensive. I took 25 years to figure that out, incidentally.

Agony vs. Ecstasy Businesses: Example 2 (two Berkshire Hathaway companies)
On the next page, I've got a couple of other businesses here. Company E is the ecstasy on the left. You can see earnings went up nicely: they went from $4 million to $27 million. They only employed assets of $17 million, so that is really a wonderful business. On $17 million they earned $27 million, 150% on invested capital. That is a good business. The one on the right, Company A, the agony, had $11 or $12 million tied up, and some years made a few bucks, and in some years lost a few bucks.

Now, here again we might ask ourselves, “What differentiates these companies?” Does anybody have any idea why company E might have done so much better than Company A? Usually somebody says at this point “maybe company E was better managed than company A.” There’s only one problem with that conclusion and that is, Company E and Company A had the same manager – me!

The company E is our candy business, See’s Candies out in California. I don’t know how many of you come from the west, but it dominates the boxed chocolate business out there and the earnings went from $4 million to $27 million, and in the year that just ended they were about $38 million. In other words, they mail us all the money they make every year and they keep growing, and making more money, and everybody’s very happy.

Company A was our textile business. That’s a business that took me 22 years to figure out it wasn’t very good. Well, in the textile business, we made over half of the men’s suit linings in the United States. If you wore a men’s suit, chances were that it had a Hathaway lining. And we made them during World War II, when customers couldn’t get their linings from other people. Sears Roebuck voted us “Supplier of the Year.” They were wild about us. The thing was, they wouldn’t give us another half a cent a yard because nobody had ever gone into a men’s clothing store and asked for a pin striped suit with a Hathaway lining. You just don’t see that.

As a practical matter, if some guy’s going to offer them a lining for 79 cents, [it makes no difference] who’s going to take them fishing, and supplied them during World War II, and was personal friends with the Chairman of Sears. Because we charged 79½ cents a yard, it was “no dice.”

See’s Candies, on the other hand, made something that people had an emotional attraction to, and a physical attraction you might say. We’re almost to Valentine’s Day, so can you imagine going to your wife or sweetheart, handing her a box of candy and saying “Honey, I took the low bid.”

Essentially, every year for 19 years I’ve raised the price of candy on December 26. And 19 years goes by and everyone keeps buying candy. Every *ten* years I tried to raise the price of linings a fraction of a cent, and they’d throw the linings back at me. Our linings were just as good as our candies. It was much harder to run the linings factory than it was to run the candy company. The problem is, just because a business is lousy doesn’t mean it isn’t difficult.

In the end, I like to think anyway that if Alfred P. Sloan [the legendary CEO of General Motors during its heyday] came back and tried to run the lining business, it wouldn’t make as much money as a good business. The product was undifferentiated. The candy product is differentiated. (Garbled story of Hershey Bar and Coke versus unbranded but modestly cheaper products).

You really want something where, if they don’t have it in stock, you want to go across the street to get it. Nobody cares what kind of steel goes into a car. Have you ever gone into a car dealership to buy a Cadillac and said “I’d like a Cadillac with steel that came from the South Works of US Steel.” It just doesn’t work that way, so that when General Motors buys they call in

all the steel companies and say “here’s the best price we’ve got so far, and you’ve got to decide if you want to beat their price, or have your plant sit idle.”

The Importance of Management: Cap Cities vs. CBS

I put one business in here, CBS versus Cap Cities in 1957, when my friend Tom Murphy took over Cap Cities. They had a little bankrupt UHF station in Albany. They ran it out of a home for retired nuns. And it was very appropriate because they had to pray every day. At that time CBS was the largest advertising medium in the world: $385 million in revenues whereas Cap Cities had $900,000 in revenues. Cap Cities made $37,000 a year and they paid my friend Murph $12,000 a year. CBS made $48 million pretax. Cap Cities was selling for $5 million in the market and priced on the come, while CBS was selling for $500 million.

Now, if you look at the two companies, Cap Cities has a market value of about $7 billion and CBS has a market value of about $2 billion. They were both in the same business, broadcasting. Neither one had, certainly Cap Cities didn’t have, any patents. Cap Cities didn’t have anything that CBS didn’t have. And somehow CBS took a wonderful business that was worth $500 million, and over about 30 years they managed a little increase – peanuts – while my friend Murphy, with exactly the same business, with one little tiny UHF station in Albany, (bear in mind that CBS had the largest stations in New York City and Chicago) and my friend Murph just killed them. And you say “how can that happen?” And that’s what you ought to study in business school. You ought to study Tom Murphy at Cap Cities. And you also ought to study Bill Paley [who was the CEO] at CBS.

We have a saying around Berkshire that “all we ever want to know is where we’re going to die, so we’ll never go there.” And CBS is what you don’t want. It’s as important not to do what CBS did, and it is important to do what Cap Cities did. Cap Cities did a lot of things right, but if CBS had done the same things right, Cap Cities would have never come close.

They had all the IQ at CBS that they had at Cap Cities. They had 50 times as many people, and they were all coming to work early and going home late. They had all kinds of strategic planners, they had management consultants. They had more than I can say. Yet they *lost*. They lost to a guy that started out with a leaky rowboat, at the same time the other guy left in the QE II. By the time they got into New York, the guy in the rowboat brought in more cargo than the QE II did. There’s a real story in that. And you can understand broadcasting, so it’s really worth studying what two people in the same field did, and why one succeeded so much and one failed.

I couldn’t resist kicking in the last page: the only public offering Cap Cities ever made, back in 1957 which raised, as you can see, $300,000. And this was when they were going to buy the station in Raleigh/Durham. The only public offering of stock the company’s every made (aside: they sold us a block of stock when they bought ABC). And if you look very carefully you’ll see that the underwriting commission – they took two firms to get this sold – the total underwriting commission was $6,500 bucks.

The Perils of the “Mindless Imitation of One’s Peers”

The last thing I want to show you, before we get onto your questions, is an ad that was run June 16, 1969, for 1,000,000 shares of American Motors. This is a reproduction from the *Wall Street*

Journal of that day. Now does anybody notice anything unusual about that ad?

[Guesses from audience.]

Everybody in that ad has disappeared. There are 37 investment bankers that sold that issue, plus American Motors, and they are *all* gone. Maybe that's why they call them tombstone ads. Now the average business of the New York Stock exchange in 1969 was 11 million shares. Average volume now is *fifteen* times as large. Now here's an industry whose volume has grown 15 to 1 in 20 years. Marvelous growth in the financial world. And here are 37 out of 37, and those are some of the biggest names on Wall Street, and some of them had been around the longest, and 37 out of 37 have disappeared. And that's why I say you ought to think about [the long-term durability of a business?] because these people obviously didn't.

These were run by people with high IQs, by people that worked ungodly hard. They were people that had an intense interest in success. They worked long hours. They *all* thought they were going to be leaders on Wall Street at some point, and they all went around, incidentally, giving advice to other companies about how to run their business. That's sort of interesting.

You go to Wall Street today, and there's some company the guy hadn't heard of two weeks before and he's trying to sell you. He will lay out this computer run of the next 10 years, yet he doesn't have the faintest idea of what his own business is going to earn next week!

Here are a group of 37. And the question is, how can you get a result like that? That is not a result that you get by chance. How can people who are bright, who work hard, who have their own money in the business – these are not a bunch of absentee owners – how can they get such a bad result? And I suggest that's a good thing to think about before you get a job and go out into the world.

I would say that if you had to pick one thing that did it more than anything else, it's the mindless imitation of one's peers that produced this result. Whatever the other guy did, the other 36 were like a bunch of lemmings in terms of following. That's what's gotten all the big banks in trouble for the past 15 years. Every time somebody big does something dumb, other people can hardly wait to copy it. If you do nothing else when you get out of here, do things *only* when they make sense to you. You ought to be able to write "I am going to work for General Motors because ... "I am buying 100 shares of Coca Coals stock because..." And if you can't write an intelligent answer to those questions, don't do it.

I proposed this to the stock exchange some years ago: that everybody be able to write out "I am buying 100 shares of Coca Cola Company, market value $32 billion, because ...." and they wouldn't take your order until you filled that thing out.

I find this very useful when I write my annual report. I learn while I think when I write it out. Some of the things I think I think, I find don't make any sense when I start tying to write them down and explain them to people. You ought to be able to explain why you're taking the job you're taking, why you're making the investment you're making, or whatever it may be. And if it can't stand applying pencil to paper, you'd better think it through some more.

People in that ad did a lot of things that could not have stood that test. Some *major* bankers in the United States did a lot of things that could not meet that test. One of the bankers in the United States, who's in plenty of trouble now, bragged a few years ago he never made a loan. And, from the way things are starting to look, he's never going to collect on one either.

You should not be running one the major banks in the United States without having made loans. I mean, you learn about human nature, if nothing else, when you make loans.

The Perils of Leverage

The question is whether LBOs and junk bonds and so on have hurt the country in some fundamental way in terms of its competitiveness vis-à-vis the world. I wouldn't go that far, but I think on balance it's been a huge minus on the financial scene. Extreme leverage has been, generally speaking, a net minus. The analogy has been made (and there's just enough truth to it to get you in trouble) that in buying some company with enormous amounts of debt, that it's somewhat like driving a car down the road and placing a dagger on the steering wheel pointed at your heart. If you do that, you will be a better driver – that I can assure you. You will drive with unusual care. You also, someday, will hit a small pothole, or a piece of ice, and you will end up gasping. You will have fewer accidents, but when they come along, they'll be fatal. Essentially, that's what some of corporate America did in the last 10 years. And it was motivated by huge fees. And it was motivated by greed.

The most extreme case I saw was a television station. About three years ago, a television station in Tampa sold for an amount where, when they had to borrow the money, the interest amounted to more than the total sales of the station. If everybody donated their labor, if they donated their programming, if they donated their utilities, they still wouldn't have enough to pay the interest. They went crazy. And you can buy those bonds at 15 cents on the dollar. Charlie Keating's enterprise [Lincoln Savings and Loan Association in California, which became the nation's largest thrift failure] had a bunch of them too. There's a lot of crazy stuff that went on in the last five or six years. The fees on that deal, they paid $365 million for the station, they borrowed $385 million and you can guess where the extra money went. It went into the pockets of the people who put the deal together.

Donald Trump and the Perils of Leverage

Where did Donald Trump go wrong? The big problem with Donald Trump was he never went right. He basically overpaid for properties, but he got people to lend him the money. He was terrific at borrowing money. If you look at his assets, and what he paid for them, and what he borrowed to get them, there was never any real equity there. He owes, perhaps, $3.5 billion now, and, if you had to pick a figure as to the value of the assets, it might be more like $2.5 billion. He's a billion in the hole, which is a lot better than being $100 in the hole because if you're $100 in the hole, they come and take the TV set. If you're a billion in the hole, they say "hang in there Donald."

It's interesting why smart people go astray. That's one of the most interesting things in business. I've seen all sorts of people with terrific IQs that end up flopping in Wall Street or business because they beat themselves. They have 500 horsepower engines, and get 50 horsepower out of

them. Or, worse than that, they have their foot on the brake and the accelerator at the same time. They really manage to screw themselves up.

… I would suggest that the big successes I've met had a fair amount of Ben Franklin in them. And Donald Trump did not.

Life Tends to Snap You at Your Weakest Link

One of the things you will find, which is interesting and people don't think of it enough, with most businesses and with most individuals, life tends to snap you at your weakest link. So it isn't the strongest link you're looking for among the individuals in the room. It isn't even the average strength of the chain. It's the weakest link that causes the problem.

It may be alcohol, it may be gambling, it may be a lot of things, it may be nothing, which is terrific. But it is a real weakest link problem.

When I look at our managers, I'm not trying to look at the guy who wakes up at night and says "E = MC 2" or something. I am looking for people that function very, very well. And that means not having any weak links. The two biggest weak links in my experience: I've seen more people fail because of liquor and leverage – leverage being borrowed money. Donald Trump failed because of leverage. He simply got infatuated with how much money he could borrow, and he did not give enough thought to how much money he could pay back.

Keys to Avoiding Trouble and Leading a Happy Life

You really don't need leverage in this world much. If you're smart, you're going to make a lot of money without borrowing. I've never borrowed a significant amount of money in my life. Never. Never will. I've got no interest in it. The other reason is I never thought I would be way happier when I had 2X instead of X. You ought to have a good time all the time as you go along. If you say "I'm taking this job – I don't really like this job but in three years it will lead to this," forget it. Find one you like right now.

Full Transcripts

Lecture to Faculty

Thank you. When you asked me what I did, in this year's annual report I tried to describe what I do...

> [Told Beemer the Clown story; excerpt from 1990 Berkshire Hathaway annual letter:
>
> > Much of the extra value that exists in our businesses has been created by the managers now running them. Charlie and I feel free to brag about this group because we had nothing to do with developing the skills they possess: These superstars just came that way. Our job is merely to identify talented managers and provide an environment in which they can do their stuff. Having done it, they send their cash to headquarters and we face our only other task: the intelligent deployment of these funds.
> >
> > My own role in operations may best be illustrated by a small tale concerning my granddaughter, Emily, and her fourth birthday party last fall. Attending were other children, adoring relatives, and Beemer the Clown, a local entertainer who includes magic tricks in his act.
> >
> > Beginning these, Beemer asked Emily to help him by waving a "magic wand" over "the box of wonders." Green handkerchiefs went into the box, Emily waved the wand, and Beemer removed blue ones. Loose handkerchiefs went in and, upon a magisterial wave by Emily, emerged knotted. After four such transformations, each more amazing than its predecessor, Emily was unable to contain herself. Her face aglow, she exulted: "Gee, I'm really good at this."
> >
> > And that sums up my contribution to the performance of Berkshire's business magicians - the Blumkins, the Friedman family, Mike Goldberg, the Heldmans, Chuck Huggins, Stan Lipsey and Ralph Schey. They deserve your applause.]

We've never had a meeting of our managers. The fellow that runs the candy company we bought 19 years ago [See's Candies], last year came to Omaha because he and his wife wanted to see what the annual meeting was like, but he'd never come to Omaha [before that]. We've never had a meeting with his board. We moved the company's headquarters from Los Angeles to San Francisco because his wife liked living in San Francisco better than Los Angeles. We adapt our operations to the people that run our businesses.

We've got a uniform company in Cincinnati, Fechheimers. Does about $100 million. Bought it about five years ago. A fellow read the annual report where I list what I'm looking for. I run an ad in the annual report (I believe in advertising) and this fellow walked in and said "I fit those parameters, and the business does" and we made a deal with him. I've never visited Cincinnati. I've not seen that plant. It may be a [hoax] – for all I know, he makes up these little reports every five (garbled). But he sends me cash, and I like that.

So it's a very peculiar operation. I bought a business eight years ago from an 89-year-old woman who started with $500, never put in another dime, and it was making about $12 million before taxes (about $18 million now). She doesn't know what accruals are, she doesn't know any of that sort of thing. She got mad at her grandsons, who work at the company, a few years ago, so she quit and went into competition with us. This taught me that the next time I buy a business from an 89-year-old woman, I'm getting a non-compete agreement. This woman now runs another successful business.

She's a marvelous woman. She walked out of Russia. She landed in Seattle with a tag around her neck. She couldn't speak a word of English. Fort Dodge, Iowa was where her relatives were. She got to Fort Dodge about 1920 or 1919, and they didn't have a penny. She brought over seven siblings, as well as her mother and father, and that took her eight or 10 years, sending $50 bucks at a time. She made it selling used clothing. She started this company in 1937 with $500. She was boycotted by most of the suppliers, the main carpet companies in town. They took her into court on violation of fair trade laws. When she got before the judge, Judge Chase, she said "Judge, I paid $3 a yard for this. Brandeis (a carpet store) paid $3 too. They sell it for $6.99. I sell it for $3.99. Tell me how much you want me to rob people. If you tell me to rob them $1 a yard, I'll charge them $4.99." The newspaper picks up all this and the judge comes in and buys $1,400 worth of carpet. She beat them in court four times and every time she killed them.

This company is now the largest home furnishings store, by a factor of 2 to 1, over any home furnishings store in the United States. It does $160 million from one location. That one store makes about $18 million pretax. It has a 500,000 square foot warehouse (garbled).

That woman, who got an honorary degree from NYU business school about five or six years ago (garbled). You cannot beat her record. If you tell her this room is 38 by 16, she will tell you how many square yards it is, just like that. And she's 97. She'll tell you how many yards it is at $5.99, the extension, and she'll have the sales tax, and she'll knock off something if you're a nice fresh face. And that's it. She can do it all as fast as I've said that. She sold me the business in 30 seconds. She talked to me and told me how much she'd wanted. She'd never had an audit. I didn't need an audit. Her word was better than the Bank of England.

We make all our deals that way. Our total legal and accounting fees on that deal, which was a $60 million deal, we had to file a 10Q with the SEC, we had to file a Hart-Scott-Rodino filing, our total legal and accounting fee came to $1,400 bucks. All on one page. There's a mark where her name is. It says "Mrs. B on behalf of herself and her children." She only owned 20% of the business. She made her mark, and the deal was cut.

All our deals are done like that. We've made all our deals, essentially, on the first contact. We never get warranties, we never get anything.

These people are rich, and we have to figure out if they're the kind of people to keep working after they've sold out. We have to decide if they're working because they love the business, or because they love money. And, if they love money, they're not of any use to us because I can't give them enough money after they've got all the money [from selling us] their business.

They've got to love the business. I would say that if we do anything very well at Berkshire, it's spotting the kind of people that, after they are very rich, will work even harder. We get no budgets from them. We have one board of directors meeting a year, which follows the shareholders meeting. No one has to come in. All they have to do is run the businesses. And we've got a bunch of those now.

They mail me the money – that's the second part of their job. And it's my job to allocate capital. They can do whatever makes sense in the candy business, or the newspaper business, but they don't have to go out and do a bunch of foolish things. We like businesses that generate cash. Sometimes we have something to do with it, sometimes we don't. We prefer to buy businesses with it but if we can't buy businesses with it, we buy pieces of businesses called stocks.

Our biggest holdings: we own 7% of the Coca Cola Company, worth about $2 billion. Your Chairman here [referring to the President of Coca Cola, Don Keough, who was also Chairman of Notre Dame's board] used to live across the street from me in Omaha 30 years ago when he was a salesman for Butternut Coffee. He had six kids, making $200 bucks a week, and starving to death. He was telling at lunch how he went into his boss one day, and told him about the six kids, about the parochial school, paying him $200 bucks a week and "it just ain't easy pal", and while he was doing this his boss, Paul Gallagher [the owner of Butternut Coffee], reached into his desk and pulled out a scissors and starting cutting strands off his fraying shirt. He walked away. Fortunately, things have improved some.

We have 7% of Coke. There are 660 million eight ounce servings of Coca Cola products being served around the world today, so in effect, we've got a 45 million soft drink business with our 7%. We think of businesses that way. I say to myself "just increase the price a penny and that's another $450,000 a day for Berkshire." I mean, it's a nice sort of thing. When I go to bed at night I figure that by the time I wake up 200 million Cokes will have been consumed. We've got some Gillette too, and every night I think about two billion plus men's hair growing and four billion women's legs with hair. It goes all night when I sleep.

So we buy businesses I can understand, whether all of them or small parts of them. We never buy anything that I don't think I can understand. I may be wrong about whether I understand it or not, but we've never owned a share of a technology company. There's all kinds of businesses I don't understand. I don't worry about that. Why should I (garbled). You mentioned Cities Service Preferred, I didn't understand that very well when I bought it. Ever since I met Ben Graham, I was 19, I read his book when I was 18, it made nothing but sense to me. Buy pieces of businesses you can understand when they're offered to you for quite a bit less than they're worth. That's all there is to it. That's what we try to do with 100% of the business, 7% of the business, or whatever. My partner Charlie Munger and I have been together for about 15 years, and that's all we do. And we'll never do anything else.

Mrs. B is that way. I couldn't have given her $200 million worth of Berkshire Hathaway stock when I bought the business because she doesn't understand stock. She understands cash. She understands furniture. She understands real estate. She doesn't understand stocks, so she doesn't have anything to do with them. If you deal with Mrs. B in what I would call her circle of

competence... She is going to buy 5,000 end tables this afternoon (if the price is right). She is going to buy 20 different carpets in odd lots, and everything else like that [snaps fingers] because she understands carpet. She wouldn't buy 100 shares of General Motors if it was at 50 cents a share.

I would say that the most important thing in business, and investments, which I regard as the same thing, from our standpoint, is being able to accurately define your circle of competence. It isn't a question of having the biggest circle of competence. I've got friends who are competent in a whole lot bigger area than I am, but they stray outside of it.

In that book Father, Son & Co. [subtitle: My Life at IBM and Beyond] you may have read, that Tom Watson Junior recently wrote, he quoted his father as saying "I'm no genius. I'm smart in spots but I stay around those spots." And that's all there is to it in investments – and business. I always tell the students in business school they'd be better off when they got out of business school to have a punch card with 20 punches on it. And every time they made an investment decision they used up one of those punches, because they aren't going to get 20 great ideas in their lifetime. They're going to get five, or three, or sever, and you can get rich off five, or three, or seven. But what you can't get rich doing is trying to get one every day. The very fact that you have, in effect, an unlimited punch card, because that's the way the system works, you can change your mind every hour or every minute in this business, and it's kind of cheap and easy to do because we have markets with a lot of liquidity – you can't do that if you own farms or [real estate] – and that very availability, that huge liquidity which people prize so much is, for most people, a curse, because it tends to make them want to do more things than they can intelligently do.

If we can do one intelligent thing a year we are ecstatic. You can negotiate us down to one every two or three years without working very hard. That's all you need. You need very few good ideas in your lifetime. You have to be willing to have the discipline to say, "I'm not going to do something I don't understand." Why should I do something I don't understand? That's why I find it an advantage to be in Omaha instead of New York. I worked in New York for a few years, and people were coming up to me on the corner and whispering in my ear all the time. I was getting excited all the time. I was a wonderful customer for the brokers.

Let's talk about what you're interested in.

[Comment from audience]

That's a problem. It helps to have the efficient market out there. It's very nice to have people out there saying, "none of this does any good." It's a real advantage to have. I don't think it's as strong now, but you really had the revealed truths, for a decade or so, saying it didn't do any good to think. Investments presumably means businesses too. And once you say investments are all priced efficiently, you presumably have to go on and say businesses are priced efficiently, and you're just throwing darts all the time. If this group were a bunch of chess players, or a bunch of bridge players, and they were all convinced that it did not pay to think about what to do, you'd have an enormous advantage. We've had tens of thousands of students in business schools taught that it's [a waste of time to think].

You mentioned the five-sigma event; actually it was Bill Sharpe out at Stanford many years ago. My friend Charlie says that "as the record gets longer it's easier to add a sigma than it is to reevaluate the theory." Which is sort of true. I think it was Ken Galbraith that said "Economists are most economical about ideas. They make the ones they learn in school last a lifetime."

[Tape flipped here]

The market generally is pretty efficient. You take the 30 stocks in the Dow and a bunch of very smart minds all looking at them and having the same information and most of the time, not all of the time, they'll be priced efficiently. So what? You only have to be right a few times. Sometimes it's very strange things. Sometimes it's panic (garbled).

In '74 you could have bought the Washington Post when the whole company was valued at $80 million. Now at that time the company was debt free, it owned the *Washington Post* newspaper, it owned *Newsweek*, it owned the CBS stations in Washington D.C. and Jacksonville, Florida, the ABC station in Miami, the CBS station in Hartford/New Haven, a half interest in 800,000 acres of timberland in Canada, plus a 200,000-ton-a-year mill up there, a third of the *International Herald Tribune*, and probably some other things I forgot. If you asked any one of thousands of investment analysts or media specialists about how much those properties were worth, they would have said, if they added them up, they would have come up with $400, $500, $600 million.

Bob Woodward one time said to me "tell me how to make some money" back in the '70s, before he'd made some money himself on a movie and a book. I said "Bob, it's very simple. Assign yourself the right story. The problem is you're letting Bradley assign you all the stories. You go out and interview Jeb Magruder." I said "Assign yourself a story. The story is: what is the Washington Post Company worth? If Bradley gave you that story to go out and report on, you'd go out and come back in two weeks, and you'd write a story that would make perfectly good sense. You'd find out what a television station sells for, you'd find out what a newspaper sells for, you'd evaluate temperament." I said "You are perfectly capable of writing that story. It's much easier than finding out what Bill Casey is thinking about on his deathbed. All you've got to do is assign yourself that story."

"Now, if you come back, and the value you assign the company is $400 million, and the company is selling for $400 million in the market, you still have a story but it doesn't do you any good financially. But if you come back and say it's $400 million and it's selling for $80 million, that screams at you. Either you are saying that the people that are running it are so incompetent that they're going to blow the $400 million, or you're saying that they're crooked and that they're operating Bob Vesco style. Or, you've got a screaming buy when you can buy dollar bills for 20 cents. And, of course, that $400 million, within eight or 10 years, with essentially the same assets, [is now worth] $3 or $4 billion."

That is not a complicated story. We bought in 1974, from not more than 10 sellers, what was then 9% of the Washington Post Company, based on that valuation. And they were people like Scudder Stevens, and bank trust departments. And if you asked any of the people selling us the

stock what the business was worth, they would have come up with an answer of $400 million. And, incidentally, if it had gone down to $60 or $40 million, the beta would have been higher of course, and it would have therefore been [viewed as] a riskier asset. There is no risk in buying the stock at $80 million. If it sells for $400 [million] steadily, there's much more risk than if it goes from $400 million to $80 million.

But that's all there is to business. But now you say "I don't know how to evaluate the Washington Post." It isn't that hard to evaluate the Washington Post. You can look and see what newspapers and television stations sell for. If your fix is $400 and it's selling for $390, so what? You can't [invest safely with such a small margin of safety]. If your range is $300 to $500 and it's selling for $80 you don't need to be more accurate than that. It's a business where that happens.

At the time we bought Coca Cola just two years ago, [we ended up buying] 7% of the company. We paid a billion dollars, so we were paying $14 billion, essentially, for the whole thing. You can sit down in five minutes – I mean, everybody here understands Coca Cola. If Philip Morris were to buy Coca Cola that day, they would have paid $30 billion. And they wouldn't have sold it for that. And you wouldn't have sold it for that. The company's actually repurchasing stock at the time. So, in effect, they're buying for you. They're buying out your partners, at 50 cents on the dollar or less, which is a magnificent sort of business, and there are no morals to it. It's an easy business. There's no doubt about it.

I don't know a thing now that I didn't know at 19 when I read that book. For eight year prior to that I was a chartist. I loved all that stuff. I had charts coming out my ears. Then, all of a sudden a fellow explains to me that you don't need all that, just buy something for less than it's worth.

> [Question from audience]

The world, generally, is treated much more favorably in relation to buying businesses than we are because we're restricted now to buying big businesses, or pieces of big businesses. And that is a big disadvantage. As Charlie says "there could be worse things."

You'll find this interesting. At market, we've probably got $7 or $8 billion in equities. In 1970, Berkshire had about $15 million in equities. We owned more securities then than we own now. We do not have it solved by buying more things. Every now and then we find something. In our annual report this year [we disclosed that] we made two large purchases. Each one was $300 or $400 million. Every now and then you'll get an opportunity. And when they come, they come for 15 minutes [I think that's what he said]. Some days it's raining gold. Not very often, but when it is, you've got to be out there. And that will happen periodically. It'll happen, but you can't make it happen. In the meantime, you let the cash pile up if that's what happens.

> [Question from audience about how many of his investment ideas are pitched to him by others.]

Practically none. The *Wall Street Journal* is my deal source. There are 1,700 or 1,800 of America's companies that I'm generally familiar with – a good many of them. And every day

they move around the prices of them. So here's a business broker's office if you want to call it that. And sometimes they change them pretty dramatically, like October 19th of '87. But they change them dramatically. And that is a great start. Any business that I buy will be measured against the yardstick of that business brokers office in Section C of the *Wall Street Journal*.

In terms of deals, our standards are such that very few are going to meet it. We are much more likely to find one from an owner, who owns the business himself, who wants to sell it to someone like us, and if they want to sell to someone like us, we're the only one like us. I can promise them, a) since I control Berkshire, the only one who can double cross them or lie to them is me. If they start with the XYZ company, XYZ can be taken over tomorrow, the directors can get a new strategic [plan] tomorrow, they can have McKinsey come in and tell them to do something different tomorrow. And no one can really make them a promise there like I can make them a promise. I can tell them exactly what will and won't happen when I make a deal, and to some people that is very important.

It's important to me with Berkshire. I've got a lot of things in my will about (garbled) is better, and all kinds of things. I care where that goes, the same way I care about anything else I've spent my lifetime working on. When I run into somebody like that, we've got an advantage. To some extent, they know about us, and I'll hear about them, but not very many. They're very few. And they're usually older when it happens. Sometimes they've got other members of the family in the business that are inactive and want to take the money out. We've arraigned, in three of our businesses, with younger generations to take 18%, or 15%, or 20% of the equity. We can do a lot of things, in terms of meeting objectives, that some owners may [appreciate] although most owners [don't have complex requirements]. But it is not a question of answering the phone and taking an investment banker's call.

In terms of marketable securities or new offerings, we've never bought anything [that's been pitched to us by an investment banker or broker]. We don't pay any attention to investment bankers or brokers. It's not an efficient use of our time [to read their] reports. We read hundreds and hundreds of annual reports every year. I own 100 shares of everything. I find this much more reliable than asking to be put on a mailing list.

I was reading the Gillette report. I noticed that they'd bought in a bunch of stock. I'd known that before. Their net worth was below zero, which doesn't make a lot of difference, but I thought it might bother them, with the kind of history the company had. So I saw the name of a director that was a friend of mine, Joe Sisco. I called Joe and said "I don't know the people up there, but if they're interested in doing something in the way of financing I would be interested and, if they're not, I'll never bother them." Joe called me back in a couple of days, Coleman Mockler and I got together and we put $600 million in.

We bought Scott Fetzer (World Book, Kirby Vacuum, and all sorts of things). It had been mixed up for about a year and a half, being sort of in play. I'd never met Ralph Schey, never talked to him on the phone, never had any contact with him at all. And I wrote him a letter that said "here's our annual report. If you're interested in talking to me we'll pay cash, our check will clear, it will be a one-page deal. If you're not interested, I'll never bother you again, and you'll never hear again, and throw the letter out." He called me back, we met in Chicago on a Sunday

and we made a deal that night, [signed the documents the] next week, and that was it.

[Question from audience: Wwhat was it about Gillette that appealed to you?]

I can understand (garbled) and shaving, the price flexibility, what I call the moat around the business. The most important thing with me in evaluating businesses is figuring out how big the moat is around the business. I want to know how big the capital is on the inside and then I want to know how big the moat is around it. What you love is big capital and a big moat. Obviously. World Book has a real moat. Kirby has a real moat. You can figure that out if you [studied] the distribution process and everything.

I've been in the textile business. We made half of the men's linings in the United States for 25 years.

[re: Gillette] It was the kind of business we'd put capital into on the right basis.

One of the biggest early things was American Express back in 1962 at the time of the salad oil scam. There was a guy named De Angelis in Bayonne, New Jersey.

American Express had a field warehousing company which was a tiny, tiny, little subsidiary, with $12 [million] in capital. The field warehousing company's job was to certify that inventories really existed. That was their job. They stuck their name on it, and you could take those certificates that said there was a given amount of whatever there was, and you could borrow against these certificates. Tino De Angelis had this tank farm about 15 miles from lower Manhattan. And the American Express field warehousing company authenticated the existence of salad oil in these tanks. And, at one time, they were authenticating the existence of more salad oil than the Department of Agriculture, in its monthly reports, was saying existed in the United States. But they never told us of that discrepancy. Late in 1962, right at the time Kennedy was assassinated, within a day or two, the thing blew. A couple of New York Stock Exchange firms went broke – Ira Haupt, (garbled), maybe one other – because they lent on these phony certificates.

And American Express, which never even thought of this little field warehousing operation, it was nothing, compared to their money order business, credit card, and travel, all of a sudden, they've got this little subsidiary, not the parent company, but the subsidiary, that was on the hook for tens and tens of millions of dollars, and nobody knows how much. And that is the nice thing about fraud (garbled)…

There was one other little wrinkle which was terribly interesting. American Express was not a corporation. It then was the only major publicly traded security that was a joint stock association. As such, the ownership of the company was assessable. If it turned out that the liabilities were greater than the assets, [then] the ownership was assessable. So every trust department in the United States panicked. I remember the Continental Bank held over 5% of the company and all of a sudden not only do they see that the trust accounts were going to have stock worth zero, but it could get assessed. The stock just poured out, of course, and the market got slightly inefficient for a short period of time.

The American Express Company was a unique company to understand. You could look at that credit card and you knew it was a winner. Diner's Club had been the first, Carte Blanche had come along, but the American Express Card was killing them. They had raised prices every time. Their retention rate was higher. And finally, they raised prices, and Diner's Club didn't go along, and their growth far outstripped Diner's Club even though they were selling at a higher price. So this was a dynamite asset.

The traveler's check business had 60% of the traveler's check business in the world while selling their checks at a higher price than the banks, B of A and what was then First National Citibank, which were the two main competitions. So here were two guys, B of A and First National City, undercutting them on price for 60 years and they still had 2/3 of the market. That is a moat around the business. I went out and did a little check to make sure this thing wasn't affecting them and we bought 5% of the American Express Company for $20 million, which means the whole company was selling for about $150 million at that time. The whole American Express Company, synonymous with financial integrity and money substitutes around the world. When they closed the banks, when Roosevelt closed the banks, he exempted American Express Traveler's Checks, so they substituted as US currency. It was not a business that should have been selling for $150 million, but everyone was terrified. It was very hard to tell how it would all come out in the end. But, probably, it was going to be between $60 and $100 million, and that was a lot more money back then in '62 than it is now. I just took the attitude that they'd declared a dividend of $75 million, sent it out and it got lost. Would that have caused a panic – somebody else gets your dividend but you don't.

No one would have argued about the value of American Express. They just didn't want to own it for a while. That's what you're buying periodically. They didn't want to own the Washington Post in '74. All you've got to do is find one, two or three businesses like that in a lifetime, load up when you do, and not do anything in between. There will be bigger whales in the ocean and they'll (garbled). There will be more of those as we go along. It's harder when you're working with more money, but there'll always be something.

[Question from audience]

Well, I would say this. If we were working with $25 million – so we could sort of look at the whole universe of stocks – I would guess that you could find 15 or 20 out of three or four thousand that you would find that were A) selling for substantially less than they're worth, and B) that the intrinsic value of the business was going to grow at a compound rate which was very satisfactory.

You don't want to buy a dollar bill that's sitting for 50 cents, and it demands positive capital, and it's going to be a dollar bill ten years from now. You want a dollar bill that's going to compound at 12% for [a long time]. And, you want to be around some competent people. Just the same thing as if you went in and bought a Ford dealership in South Bend. The same exact thought processes goes through you mind if some friend called you tonight and said "I'd like you to go into the Ford dealership" or whatever, is exactly the kind of thought as goes through mind about all the other businesses that are in Standard and Poor's.

When I was 20, I went through Moody's and Standard and Poor's page by page – twice – because that is it, that's the universe. The universe is much smaller now, unfortunately.

I found some strange things when I was 20 years old. I went through Moody's Bank and Finance Manual, about 1,000 pages. I went through it twice. The first time I went through, I saw a company called Western Insurance Security Company in Fort Scott, Kansas. They owned 92%, at that time, of the Western Casualty and Surety Company. Perfectly sound company. I knew people that represented them in Omaha. Earnings per share $20, stock price $16. (garbled) ... much more than that. I ran ads in the Fort Scott, Kansas paper to try and buy that stock – it had only 300 or 400 shareholders. It was selling at one times earnings, it had a first class [management team]...

[Tape ends here]

... Incidentally, I would say that almost everybody I know in Wall Street has had as many good ideas as I have, they just had a lot of [bad] ideas too. And I'm serious about that. I mean when I bought Western Insurance Security selling at $16 and earning $20 per share, I put half my net worth into it. I checked it out first – I went down to the insurance commission and got out the convention statements, I read Best's, and I did a lot of things first. But, I mean, my dad wasn't in it, I'd only had one insurance class at Columbia – but it was not beyond my capabilities to do that, and it isn't beyond your capabilities.

Now if I had some rare insight about software, or something like that – I would say that, maybe, other people couldn't do that – or biotechnology, or something. And I'm not saying that every insight that I have is an insight that somebody else could have, but there were all kinds of people that could have understood American Express Company as well as I understood it in '62. They may have been...they may have had a different temperament than I did, so that they were paralyzed by fear, or that they wanted the crowd to be with them, or something like that, but I didn't know anything about credit cards that they didn't know, or about travelers checks. Those are not hard products to understand. But what I did have was an intense interest and I was willing, when I saw something I wanted to do, to do it. And if I couldn't see something to do, to not do anything. By far, the most important quality is not how much IQ you've got. IQ is not the scarce factor. You need a reasonable amount of intelligence, but the *temperament* is 90% of it.

That's why Graham is so important. Graham's book [The Intelligent Investor] talks about the qualities of temperament you have to bring to the game, and that is the game. Now I can (garbled).

He may not know anything about a Coca Cola, or something of that sort, but that isn't what makes you the money. What makes you the money is your attitude going in, your attitude toward stock market fluctuations. There's two chapters in The Intelligent Investor, chapter 8 and chapter 20, they're more important than everything that's been written on investments, in my view, before or since. And there's no specific technical knowledge in those things. It just tells you what frame of mind to be in when you come to the game. And people just don't get it. But that is not because I'm particularly skillful. And bear in mind that I didn't have that

(garbled). It's not like I was Mozart and sat down at five or something. I mean I was churning things, I was computing odd lot statistics, I mean I loved all that stuff because I always liked numbers and playing around with them. It was like baseball averages or something. But what I needed was a philosophical bedrock position from which I could then go out and look at businesses, and probe through that filter, and decide whether that's [a bargain or not]. And that's Ben Graham's contribution. And that's the game. You don't have to be that smart. You don't have to know advanced accounting. It may *help* if you know something, particularly accounting. But the fact that you don't know it may restrict your universe some.

[Garbled comment from audience]

It goes back to a debate I was having with Mike Jensen [a proponent of the efficient market theory who famously wrote in 1978 that "there is no other proposition in economics which has more solid empirical evidence supporting it than the Efficient Market Hypothesis"]. [I rebutted the efficient market hypothesis in] The [Super]Investors of Graham and Doddsville. It was an address I gave on the 50th anniversary of Security Analysis. Dave Dodd was there – 90 years old, marvelous guy. And in that room were a half a dozen or more of us who had gone on to study or work, or have some association with Ben Graham. We weren't all five-sigma types, but we've always gotten five-sigma, or three-sigma, or something results. So it isn't because he had carefully culled us out from all over the country, like the Notre Dame football team. We were there just because we kind of stumbled in. And we listened to the guy and then went out and applied it in different ways – totally different ways. I mean, Walter Schloss [has always] owned hundreds of different stocks. Walter is not a 150 IQ guy. Charlie Munger is. There were all different types of [people] with a common philosophical bond. They did not learn any little secrets of technique – they did not learn any systems.

Everybody wants a system. I mean they come to our annual meeting (garbled) the book guy, or the price/earnings, "do I buy them on Monday?" They all want some [system] that you can run through a computer and simulate it out. I mean I tell 'em if past performance were the key to it, the Forbes 400 would consist of librarians. Everybody would be looking it up. It doesn't work that way. They *want* it to work that way. It would be so nice if it did, but it is not that way. It's like picking out a basketball team. You look for guys who are seven feet tall, you look for a guy who can stay in school, there are a whole bunch of things. And there are certain things that point you toward getting the best five guys out there on the court. But I can't give them a formula. I can't say "here's a little formula and if you go to Emporia, Kansas and apply this formula without actually seeing the guys play basketball and working with them, you'll pick up the best basketball team." You won't.

[Garbled question from audience]

To me, it's absolutely fascinating that the teaching of investments has really retrogressed from 40 years ago, and I think it's probably because the teachers are more skillful. They learn all these huge mathematical techniques and (garbled) and they have so much fun manipulating numbers they're missing something very simple. And I think they have, on balance (aside: I say this at Stanford or Harvard), sent people off with the wrong message. And I get letters from students about it. I don't see what the reason for having an investment course is unless you teach people

how to analyze the value of investments. If people thought there was nothing of utility that you could impart on the subject, except for the fact that there is nothing you can do useful, then I don't understand... And I know it isn't true because I've seen people teach other people how to make unusual returns over a 30- or 40-year T-Note.

Phil Caret wrote a book on investing in 1924. He's still alive, he's a shareholder of Berkshire, he's 92 or 93 years old. He writes me letters that say "I approve of your no dividend policy because when I get older, then I want to start getting dividends." But Phil Caret has got a record of 70 years. That is a *lot* of investments and it is a superior investment record. Not done exactly the same as Graham, but it's the same general approach. Even Keynes came to that view. He started out as a market timer. But in the '30s he [changed approaches]. [Keynes later said: "As time goes on, I get more and more convinced that the right method in investment is to put fairly large sums into enterprises which one thinks one knows something about."]

You can't teach people a formula. You can't come in at the start of the term, and when they get all through, understand E=MC squared. It's not like teaching geometry or something.

You shouldn't buy a stock, in my view, for any other reason than the fact that you think it's selling for less than it's worth, considering all the factors about the business.

I used to tell the stock exchange people that before a person bought 100 shares of General Motors they should have to write out on a [piece of paper:] "I'm buying 100 shares of General Motors at X" and multiply that by the number of shares "and therefore General Motors is worth more than $32 billion" or whatever it multiplies out to, "because ... [fill in the reasons]" And if they couldn't answer that question, their order wouldn't be accepted.

That test *should be applied*. I should never buy anything unless I can fill out that piece of paper. I may be wrong, but I would know the answer to that. "I'm buying Coca Cola right now, 660 million shares of stock, a little under $50. The whole company costs me about $32 billion dollars." Before you buy 100 shares of stock at $48 you ought to be able to answer "I'm paying $32 billion today for the Coca Cola Company because..." [Banging the podium for emphasis.] If you can't answer that question, you shouldn't buy it. If you *can* answer that question, and you do it a few times, you'll make a lot of money.

> [From the audience: "Well, you bought it, how did you answer it?"]

Well, it was only $14 billion. I would say this: "If you added a penny to price of every Coca Cola sold in the world this year, that would add $2 billion to pretax earnings." Now you tell me whether you think there's a penny, worldwide, of price flexibility per serving of Coke. Well, the answer is "you *know* there is."

When they bought the Coca Cola Company, the Candler family bought it from Pembertons back in 1904 or 1906, they paid $2,000 for the company. If the Pemberton family had reserved a penny a serving royalty a serving, the Coca Cola company would be sending $2 *billion* to the Pemberton family every year and you wouldn't even see the difference in the figures. It's there.

Now that's not true when I was selling [men's suit] linings [Berkshire Hathaway's original business]. I sold men's suit linings for 20 years. We tried to raise our price a half a cent a yard, and on an 80-cent-a-yard product, people who'd done business with us for 80 years slammed the door in our face. (garbled) ... "but half a cent a yard"... Nobody ever went into a store and said "I'd like to buy a pinstripe suit with a Hathaway lining." Never. They say "I want a coat" all over the world.

Now in this country, Pepsi is, unfortunately, more or less coexistent with Coke. This is their weakest market. They make more in Japan, with less than half the people and way less per capita usage than they make in the United States. Around the world a guy says "I'll sell you an unmarked cola a penny cheaper" ... it isn't going to happen. That is the fastest test.

A couple of fast tests about how good a business is. First question is "how long does the management have to think before they decide to raise prices?" You're looking at marvelous business when you look in the mirror and say "mirror, mirror on the wall, how much should I charge for Coke this fall?" [And the mirror replies, "More."] That's a great business. When you say, like we used to in the textile business, when you get down on your knees, call in all the priests, rabbis, and everyone else, [and say] "just another half cent a yard." Then you get up and they say "We won't pay it." It's just night and day. I mean, if you walk into a drugstore, and you say "I'd like a Hershey bar" and the man says "I don't have any Hershey bars, but I've got this unmarked chocolate bar, and it's a nickel cheaper than a Hershey bar" you just go across the street and buy a Hershey bar. *That* is a good business.

The ability to raise prices – the ability to differentiate yourself in a real way, and a real way means you can charge a different price – *that* makes a great business.

I'll try this on the students later: What's the highest price of a daily newspaper in the United States? [Pause] The highest priced daily newspaper in the United States is the *Daily Racing Form*. 150,000 copies a day, $2.25 a copy, they go up in 25 cent intervals, and it doesn't affect circulation at all. Why? There is no substitute. If you go to the track, assuming you're a forms player, you don't want "Joe's Little Green Sheet", you want *The Form*. And it doesn't make any difference what it costs! There is no substitute. And that's why they've got a 65% pretax margin. It doesn't take a genius to figure it out.

There are products like that, and there are products like sheet steel. And they're night and day.

[From Audience: You said you only had to have a couple of good ideas, we at Notre Dame had a good one in having you here.] [Applause]

Lecture to MBA Students

I'll talk for a few minutes on some of the things that relate to this handout I've got, so if everybody has one, or looks with their neighbor, we'll get the (garbled) about how to make a lot of money in stocks as we go along.

Eddie Cantor had a problem with Goldman Sachs in the late '20s. [Cantor was a popular entertainer who lost his fortune in the crash.] He did not do very well in something he bought from them, so he worked them into his routine when he performed, and he told (garbled).

You know Wall Street is a place that people drive to in Rolls Royces to get advice from people who ride to work on the subway.

I'd like to talk to you for just a few minutes about what I regard as the most important thing in investments and also in terms of your career. Because in your career what train you get on makes a lot of difference. Because frequently, perhaps generally, when people get out of business school, they don't give enough thought to exactly what sort of train they're going to get on. And it makes a tremendous difference whether you get involved in a prosperous company, one that's going to really do well. On balance, you want to go with a company whose stock is going to be a good investment over the years because there's going to be much more opportunity, there's going to be more money made, you're going to (garbled). And if you get involved with some of the businesses I've been involved with like trading stamps (garbled).

[Buffett is warning students to stay away from declining businesses such as Blue Chip Stamps, though this was in fact a highly successful investment. In the book Damn Right!, Janet Lowe wrote: "During the late 1960s and early 1970s, Munger, Guerin and Buffett gradually acquired a controlling interest in Blue Chip Stamps. This small company issued trading stamps, which merchants distributed. Customers collected and redeemed the stamps for merchandise. The investors saw untapped potential in the company's float account – the difference between stamps issued and stamps redeemed. Using this pool of capital, Blue Chip's controlling investors acquired several other companies: Wesco Financial, See's Candies and The Buffalo Evening News."]

It does make a difference what kind of a business you get associated with. For that reason I've set forth in this little handout Company A and Company E. I'm not going to tell you for the moment what these companies are. I'm going to tell you one thing about the two companies. One of the companies, to the point of where this cuts off, lost its investors more money than virtually any business in the world. The other company made its owner more money than virtually any company in the world. So one of these two companies, Company A and Company E, has made one of its owners one of the five wealthiest people in the world, while the other company made its owners appreciably poorer, probably more so than any other company to that point in time.

Now I'll tell you a little bit about these companies (we're leading up to the question of whether the business makes a difference). Company A had thousands of MBAs working for it. Company E had none. I wanted to get your attention. Company A had all kinds of employee benefit programs, stock options, pensions, the works. Company E never had stock options. Company A

had thousands of patents – they probably held more patents than just about any company in the United States. Company E never invented anything. Company A's product improved dramatically in this period, Company E's product just sat.

So far, based on what I've told you, does anybody have any idea of which company was the great success, and why?

If you get to buy one of these two companies, and this is all you know, and you get to ask me one question to decide on which one to buy. If you ask me the right question, you will probably make the right decision about the company's stock, and one will make you enormously wealthy.

[Audience asks questions]

Both companies make products used every day. They started as necessities, highly useful, nothing esoteric about either one, although company A does have all these patents. There's more technology involved in company A.

[How many companies compete with either one?]

Good question, very good question. In effect, neither company had any competition. And that might differentiate in some cases.

Well, I'll tell you a little more about it. Company A is known as company A because it was in agony, and Company E, as Company E, because it was in ecstasy. Company A is American Telephone and Telegraph. I've omitted eight zeros on the left hand side, and the American Telephone and Telegraph Company, at the end of 1979, was selling for $10 billion less than the shareholders had either put in or left in the business. In other words, if shareholder's equity was "X" the market value was X minus $10 billion. So the money that shareholders had put in, or left in, the business had shrunk by $10 billion in terms of market value.

Company E, the excellent company, I left off only six zeros. And that happens to be a company called Thompson Newspapers. Thomson Newspapers, which most of you have probably never heard of, actually owns about 5% of the newspapers in the United States. But they're all small ones. And, as I said, it has no MBAs, no stock options – still doesn't – and it made its owner, Lord Thompson. He wasn't Lord Thompson when he started – he started with 1,500 bucks in North Bay, Ontario buying a little radio station but, when he got to be one of the five richest men, he became Lord Thompson. I met him one time in England as a matter of fact, in 1972, and went up to see him. He'd never heard of me, but he was a very important guy. (I'd heard of him!)

I said, "Lord Thompson, you own the newspaper in Council Bluffs, Iowa. Council Bluffs is right across the river from Omaha, where I live, four or five miles from my house. I said, "Lord Thompson, You own the Council Bluffs [Daily Nonpareil?]. I don't suppose you'd ever think of selling it?" He said "I wouldn't think of it."

I said "Lord Thompson, you've bought this paper in Council Bluffs, and you've never seen the paper, never seen the town, but I do notice that every year you raise prices." (garbled)

He's got the only way to talk to people – his was the only "megaphone" for merchants to announce commercial news in Council Bluffs. He said "I figured that out before you did."

I said, "If you ever raise prices to the point where it's counterproductive (garbled)."

Then [I said] "I've got only one other question: How do you figure out how much to charge people? You look like a man of awesome commercial instincts – you started with a $1,500 radio station, now you're worth $4 or $5 billion dollars."

He said "Well, that's another good question. I just tell my US managers to try and make 45% pretax and figure that's not gouging." And as I got to the elevator, he said "If you ever hear of a newspaper you don't want to buy, call me. Collect."

I rode down and that was two years of business school. I mean, try to make 45% and call me collect if you ever find a paper you don't want to buy.

The telephone company, with the patents, the MBAs, the stock options, and everything else, had one problem, and that problem is illustrated by those figures on that lower left hand column. And those figures show the plant investment in the telephone business. That's $47 billion, starting off with, growing to $99 billion over an eight or nine year period. More and more and more money had to be tossed in, in order to make these increased earnings, going from $2.2 billion to $5.6 billion.

So, they got more money, but you can get more money from a savings account if you keep adding money to it every year. The progress in earnings that the telephone company made was only achievable because they kept on shoving more money into the savings account and the truth was, under the conditions of the '70s, they were not getting paid commensurate with the amount of money that they had to shove into the pot, whereas Lord Thompson, once he bought the paper in Council Bluffs, never put another dime in. They just mailed money every year. And as they got more money, he bought more newspapers. And, in fact, he said it was going to say on his tombstone that he bought newspapers in order to make more money in order to buy more newspapers [and so on].

The idea was that, essentially, he raised prices and raised earnings there every year without having to put more capital into the business.

One is a marvelous, absolutely sensational business, the other one is a terrible business. If you have a choice between going to work for a wonderful business that is not capital intensive, and one that is capital intensive, I suggest that you look at the one that is not capital intensive. I took 25 years to figure that out, incidentally.

On the next page, I've got a couple of other businesses here. Company E is the ecstasy on the left. You can see earnings went up nicely: they went from $4 million to $27 million. They only employed assets of $17 million, so that is really a wonderful business. On $17 million they earned $27 million, 150% on invested capital. That is a good business. The one on the right, Company A, the agony, had $11 or $12 million tied up, and some years made a few

bucks, and in some years lost a few bucks.

Now, here again we might ask ourselves, “What differentiates these companies?” Does anybody have any idea why company E might have done so much better than Company A? Usually somebody says at this point “maybe company E was better managed than company A.” There’s only one problem with that conclusion and that is, Company E and Company A had the same manager – me!

The company E is our candy business, See’s Candies out in California. I don’t know how many of you come from the west, but it dominates the boxed chocolate business out there and the earnings went from $4 million to $27 million, and in the year that just ended they were about $38 million. In other words, they mail us all the money they make every year and they keep growing, and making more money, and everybody’s very happy.

Company A was our textile business. That’s a business that took me 22 years to figure out it wasn’t very good. Well, in the textile business, we made over half of the men’s suit linings in the United States. If you wore a men’s suit, chances were that it had a Hathaway lining. And we made them during World War II, when customers couldn’t get their linings from other people. Sears Roebuck voted us “Supplier of the Year.” They were wild about us. The thing was, they wouldn’t give us another half a cent a yard because nobody had ever gone into a men’s clothing store and asked for a pin striped suit with a Hathaway lining. You just don’t see that.

As a practical matter, if some guy’s going to offer them a lining for 79 cents, [it makes no difference] who’s going to take them fishing, and supplied them during World War II, and was personal friends with the Chairman of Sears. Because we charged 79½ cents a yard, it was “no dice.”

See’s Candies, on the other hand, made something that people had an emotional attraction to, and a physical attraction you might say. We’re almost to Valentine’s Day, so can you imagine going to your wife or sweetheart, handing her a box of candy and saying “Honey, I took the low bid.”

Essentially, every year for 19 years I’ve raised the price of candy on December 26. And 19 years goes by and everyone keeps buying candy. Every *ten* years I tried to raise the price of linings a fraction of a cent, and they’d throw the linings back at me. Our linings were just as good as our candies. It was much harder to run the linings factory than it was to run the candy company. The problem is, just because a business is lousy doesn’t mean it isn’t difficult.

In the end, I like to think anyway that if Alfred P. Sloan [the legendary CEO of General Motors during its heyday] came back and tried to run the lining business, it wouldn’t make as much money as a good business. The product was undifferentiated. The candy product is differentiated. (Garbled story of Hershey Bar and Coke versus unbranded but modestly cheaper products).

You really want something where, if they don’t have it in stock, you want to go across the street to get it. Nobody cares what kind of steel goes into a car. Have you ever gone into a car

dealership to buy a Cadillac and said “I’d like a Cadillac with steel that came from the South Works of US Steel.” It just doesn’t work that way, so that when General Motors buys they call in all the steel companies and say “here’s the best price we’ve got so far, and you’ve got to decide if you want to beat their price, or have your plant sit idle.”

I put one business in here, CBS versus Cap Cities in 1957, when my friend Tom Murphy took over Cap Cities. They had a little bankrupt UHF station in Albany. They ran it out of a home for retired nuns. And it was very appropriate because they had to pray every day. At that time CBS was the largest advertising medium in the world: $385 million in revenues whereas Cap Cities had $900,000 in revenues. Cap Cities made $37,000 a year and they paid my friend Murph $12,000 a year. CBS made $48 million pretax. Cap Cities was selling for $5 million in the market and priced on the come, while CBS was selling for $500 million.

Now, if you look at the two companies, Cap Cities has a market value of about $7 billion and CBS has a market value of about $2 billion. They were both in the same business, broadcasting. Neither one had, certainly Cap Cities didn’t have, any patents. Cap Cities didn’t have anything that CBS didn’t have. And somehow CBS took a wonderful business that was worth $500 million, and over about 30 years they managed a little increase – peanuts – while my friend Murphy, with exactly the same business, with one little tiny UHF station in Albany, (bear in mind that CBS had the largest stations in New York City and Chicago) and my friend Murph just killed them. And you say “how can that happen?” And that’s what you ought to study in business school. You ought to study Tom Murphy at Cap Cities. And you also ought to study Bill Paley [who was the CEO] at CBS.

We have a saying around Berkshire that “all we ever want to know is where we’re going to die, so we’ll never go there.” And CBS is what you don’t want. It’s as important not to do what CBS did, and it is important to do what Cap Cities did. Cap Cities did a lot of things right, but if CBS had done the same things right, Cap Cities would have never come close.

They had all the IQ at CBS that they had at Cap Cities. They had 50 times as many people, and they were all coming to work early and going home late. They had all kinds of strategic planners, they had management consultants. They had more than I can say. Yet they *lost*. They lost to a guy that started out with a leaky rowboat, at the same time the other guy left in the QE II. By the time they got into New York, the guy in the rowboat brought in more cargo than the QE II did. There’s a real story in that. And you can understand broadcasting, so it’s really worth studying what two people in the same field did, and why one succeeded so much and one failed.

I couldn’t resist kicking in the last page: the only public offering Cap Cities ever made, back in 1957 which raised, as you can see, $300,000. And this was when they were going to buy the station in Raleigh/Durham. The only public offering of stock the company’s every made (aside: they sold us a block of stock when they bought ABC). And if you look very carefully you’ll see that the underwriting commission – they took two firms to get this sold – the total underwriting commission was $6,500 bucks.

The last thing I want to show you, before we get onto your questions, is an ad that was run June 16, 1969, for 1,000,000 shares of American Motors. This is a reproduction from the *Wall Street*

Journal of that day. Now does anybody notice anything unusual about that ad?

[Guesses from audience.]

Everybody in that ad has disappeared. There are 37 investment bankers that sold that issue, plus American Motors, and they are *all* gone. Maybe that's why they call them tombstone ads. Now the average business of the New York Stock exchange in 1969 was 11 million shares. Average volume now is *fifteen* times as large. Now here's an industry whose volume has grown 15 to 1 in 20 years. Marvelous growth in the financial world. And here are 37 out of 37, and those are some of the biggest names on Wall Street, and some of them had been around the longest, and 37 out of 37 have disappeared. And that's why I say you ought to think about [the long-term durability of a business?] because these people obviously didn't.

These were run by people with high IQs, by people that worked ungodly hard. They were people that had an intense interest in success. They worked long hours. They *all* thought they were going to be leaders on Wall Street at some point, and they all went around, incidentally, giving advice to other companies about how to run their business. That's sort of interesting.

You go to Wall Street today, and there's some company the guy hadn't heard of two weeks before and he's trying to sell you. He will lay out this computer run of the next 10 years, yet he doesn't have the faintest idea of what his own business is going to earn next week!

Here are a group of 37. And the question is, how can you get a result like that? That is not a result that you get by chance. How can people who are bright, who work hard, who have their own money in the business – these are not a bunch of absentee owners – how can they get such a bad result? And I suggest that's a good thing to think about before you get a job and go out into the world.

I would say that if you had to pick one thing that did it more than anything else, it's the mindless imitation of one's peers that produced this result. Whatever the other guy did, the other 36 were like a bunch of lemmings in terms of following. That's what's gotten all the big banks in trouble for the past 15 years. Every time somebody big does something dumb, other people can hardly wait to copy it. If you do nothing else when you get out of here, do things *only* when they make sense to you. You ought to be able to write "I am going to work for General Motors because ... "I am buying 100 shares of Coca Coals stock because..." And if you can't write an intelligent answer to those questions, don't do it.

I proposed this to the stock exchange some years ago: that everybody be able to write out "I am buying 100 shares of Coca Cola Company, market value $32 billion, because ...." and they wouldn't take your order until you filled that thing out.

I find this very useful when I write my annual report. I learn while I think when I write it out. Some of the things I think I think, I find don't make any sense when I start tying to write them down and explain them to people. You ought to be able to explain why you're taking the job you're taking, why you're making the investment you're making, or whatever it may be. And if it can't stand applying pencil to paper, you'd better think it through some more.

People in that ad did a lot of things that could not have stood that test. Some *major* bankers in the United States did a lot of things that could not meet that test. One of the bankers in the United States, who's in plenty of trouble now, bragged a few years ago he never made a loan. And, from the way things are starting to look, he's never going to collect on one either.

You should not be running one the major banks in the United States without having made loans. I mean, you learn about human nature, if nothing else, when you make loans.

[Question and Answer With Students]

That jewelry store, it's an interesting story, I'll take an extra minute. We bought a furniture store about five or six years ago. We bought it from a woman who was 89 [Rose Blumkin, the legendary Mrs. B]. That woman came to this country with a tag around her neck from Russia. She walked out of Russia, and the Red Cross truck got her in Seattle and (garbled) then Fort Dodge, Iowa and sent her there. And she saved money. She sold used clothes and that sort of thing, and she brought over seven siblings, plus her mother and father. She sent over $50 bucks at a time to get the rest of the family over here.

In 1937, she would have been 44 at the time, she started a store with $500, a home furnishings store. That's all the money she ever put into it. Last year it made $18 million, pretax. It's become the largest home furnishings store in the country. And she put everybody out of business. She doesn't know accounting, she's never had an audit, she doesn't know what accruals mean, she doesn't know what depreciation means, but she knows how to run a business. And, unfortunately, two years ago she got mad at her grandchildren and she went out and quit and started competing with us, which shows you how stupid I was not to get a non-compete agreement from an 89-year-old woman! She is now in business right across the street, and works seven days a week at 97 years of age. And if you tell her that this room is 27 by 31, she will tell you how many square yards it is just like that, at $6.99 a yard, and how much that comes to plus tax. She can do it just like that. She cannot read or write. She has never been to school a day in her life. But she knows how to run a business.

One of the sisters she brought over, also to Omaha, was a woman named Rebecca. She went through Latvia, and the border guard took the money when she got to Latvia, and she had to sit in Latvia for a year until her sister got another $50 bucks to bring her over here. They got over here, and it took them 20 odd years to get enough money to buy into a tiny little jewelry store. And I bought that business a couple of years ago from the Friedman family, which is Mrs. B's sister. Incidentally, Mrs. B is 97, and her three other (garbled).

In any event, in that jewelry store last year, the sales were up 18%. I believe it's the second largest jewelry store in the United States, next to Tiffany's main location, and it uses *exactly* the same formula the furniture store used in building up the largest home furnishings store. The people that run them never went to business school, and they stress the things that Ben Franklin would stress. Essentially, their business is pure Ben Franklin. Tell truth and give people service. Ben Franklin said "take care of thy shop and it will take care of thee." Now that's old fashioned in terms of the phraseology, but it's that simple. And, the truth is that family... If you were at our

jewelry store last Saturday like I was, Ike Friedman who is 65, 66, was there. His mother, Mrs. Friedman, came in – she's 89 years old – *Wall Street Journal* under her arm. You've got his son there, his only son, two sons-in-law, two daughters in there, they're all busy. The family's worth tens and tens and tens of millions of dollars. They don't do it 'cause they have to, they do it 'cause they like to.

The one thing we've done well in buying businesses is the people who sold them were in love with their business and not in love with money. If they're in love with money we can't do it, but if they're in love with their business we get along very well because we leave them alone.

Actually Fran Blumkin, the wife of Louis Blumkin, who's now Chairman of the Furniture Mart, comes in on Saturday, and works Tuesday, to help out Louis' cousins. And she sells jewelry all the time there. It's a great business. Berkshire bought a great business. It gets better, and better, and better. And *no-one* can knock 'em off.

That's one of the things I always ask myself: If you give someone hundreds of millions of dollars, or billions of dollars, [can you hurt a particular business?] You can't hurt the Furniture Mart or Borsheim's.

[Question: When you look at a company, how do you value it, how do you decide how much to pay for it, and after that, would you say how much you'd sell it for.]

Well, we won't sell it. We just don't sell businesses. If we had a business that would permanently lose money, or we had a manager lie to us, or cheat us, or (garbled). But we will never sell a business just because we get a wonderful offer for it. My house isn't for sale. The children aren't for sale. The businesses aren't for sale. I tell shareholders that. That may make me crazy, but that's who they're getting in with, and they might as well know it. It is not a game we're playing, like gin rummy, where we pick up one card and discard another.

And I think good human relationships... I work with nothing but people I like. There's not one person I work with that causes my stomach to churn in the least. In fact, I feel like tap dancing. I work with nothing but people I like. Well, just think how fortunate you are if you're 60 years of age and that's the way you're going to be able to spend your life. These people are wonderful to work with. I mean, Ike Friedman...we never disagree. Charlie Munger, my partner, and I have never had a disagreement in 30 years. And, why in the world [would I sell businesses run by people I like] so that I can be worth 110% of X, instead of X, when I die? It will all be in the foundation anyway. Why should I go around discarding people like that who are in the business, for some people who might not turn out so well? So I'm not interested in selling at all.

Now, in terms of buying, a) I've got to like the people. I'm just not interested in marrying for money. That might have been great when I was 12, but it would be crazy now for me to marry someone for money. Why should I marry in business for money? It just doesn't make sense. I get associated with these people, so I want to buy the people I like, and I want to buy businesses I understand, and then I don't want to think too much. And, paying too much simply comes out.

If you can tell me what all of the cash in and cash out of a business will be, between now and

judgment day, I can tell you, assuming I know the proper interest rate, what it's worth. It doesn't make any difference whether you sell yo-yo's, hula hoops, or computers. Because there would be a stream of cash between now and judgment day, and the cash spends the same, no matter where it comes from. Now my job as an investment analyst, or a business analyst, is to figure out where I may have some knowledge, what that stream of cash will be over a period of time, and also where I don't know what the stream of cash will be. I don't have the faintest idea of where Digital Equipment will be in next week, let alone the next 10 years. I just don't know. I don't even know what they do. And I never would know what they did. Even if I thought I knew what they did, I wouldn't know what they did. Hershey bars I understand.

So, my job is to look at the universe of things I can understand – I can understand Ike Friedman's jewelry store – and then I try to figure what that stream of cash, in and out, is going to be over a period of time, just like we did with See's Candies, and discounting that back at an appropriate rate, which would be the long term Government rate. [Then,] I try to buy it at a price that is significantly below that. And that's about it. Theoretically, I'm doing that with all the businesses in the world – those that I can understand.

Every day, when I turn to the *Wall Street Journal*, back in the C Section, that's like a big business brokerage ad. It's just like a business broker saying "you can buy part of AT&T for this, part of General Motors for that, General Electric..." And unlike most business broker's ads, it's nice because they change the price every day. And you don't have to do business with any of them. So you just sit there, day by day, and you yawn, and you insult the broker if you want to, and talk to your newspaper, anything you want to, because someday, there's going to be some business I understand selling for way less than the value I arrived at. It doesn't have anything to do with book value, although it does have to do with earnings power over a period of time. It usually relates, fairly closely, to cash [flow]. And, when you find something you understand, if you find five ideas in your lifetime and you're right on those five, you're going to be very rich.

You know I always tell business students that if you got a punch card when you got out of here, and it only had 20 businesses on it, and every time you made an investment decision they took a punch, and when the 20 were gone you were all done, it would be wonderful. You're not going to get more than 20 investment ideas in a lifetime. I'm not going to get more than 20 great ideas. And the important thing is that you recognize them when you see them, and that you do something about them.

So, when we find something we understand, if we're buying all of the business, I want to like the people. If we're buying part of the business, it's less important. We want to buy things we understand, and we want to buy them very cheap. If we don't understand them, we don't buy them. If they're not cheap, we don't buy them. If we can buy them with Tom Murphy, my friend, at an attractive price, we do that in a second.

We bought 5% of the Walt Disney Company in 1966. It cost us $4 million dollars. $80 million bucks was the valuation of the whole thing. 300 and some acres in Anaheim. The Pirate's ride had just been put in. It cost $17 million bucks. The whole company was selling for $80 million. Mary Poppins had just come out. Mary Poppins *made* about $30 million that year, and seven years later you're going to show it to kids the same age. It's like having an oil well where all the

oil seeps back in. Now the [numbers today are] probably different, but in 1966 they had 220 pictures of one sort or another. They wrote them all down to zero – there were no residual values placed on the value of any Disney picture up through the '60s. So [you got all of this] for $80 million bucks, and you got Walt Disney to work for you. It was incredible. You didn't have to be a genius to know that the Walt Disney company was worth more than $80 million. $17 million for the Pirate's Ride. It's unbelievable. But there it was. And the reason was, in 1966 people said, "Well, Mary Poppins is terrific this year, but they're not going to have another Mary Poppins next year, so the earnings will be down." I don't care if the earnings are down like that. You know you've still got Mary Poppins to throw out in seven more years, assuming kids squawk a little. I mean there's no better system than to have something where, essentially, you get a new crop every seven years and you get to charge more each time.

$80 million dollars [sigh]. I went out to see Walt Disney (he'd never heard of me; I was 35 years old). We sat down and he told me the whole plan for the company – he couldn't have been a nicer guy. It was a joke. If he'd privately gone to some huge venture capitalist, or some major American corporation, if he'd been a private company, and said "I want you to buy into this. This is a deal," they would have bought in based on a valuation of $300 or $400 million dollars. The very fact that it was just sitting there in the market every day convinced [people that $80 million was an appropriate valuation]. Essentially, they ignored it because it was so familiar. But that happens periodically on Wall Street.

I wanted to go see Mary Poppins, to see if she'd be recycled, and she was showing at the Loews Theater on 45th and Broadway in New York, and here I am with a briefcase at 2:00 in the afternoon heading in to see Mary Poppins. I almost felt like I had to rent a kid.

[Question from audience.]

There's very little relationship between Walt Disney and Salomon. In Salomon we have lent them, in effect, $700 million on a preferred which matures in five equal installments, starting five years from now, which is also convertible. And this is primarily a fixed income investment with an interesting conversion privilege attached to it. But it is not primarily an equity investment. We get a 9% dividend which, because of the corporate dividend tax credit, converts to something over 7% on an after-tax basis. It's a form of lending money. It's an alternative to municipal bonds or something of that sort. It is *not* an investment like Coca Cola, or the Washington Post, or Cap Cities, which are pure equity investments.

We would rather, and this is nothing negative on Salomon, buy more things like Coca Cola. You know, those are the things that really cause excitement, because those are super businesses as far as the eye can see. Salomon is a perfectly decent business, but it's just not the same kind of business. Neither is Champion Paper or US Air, which we've done the same thing for. If we had way less money, we wouldn't be doing those things, as opposed to the Coca Cola thing. It's because we can't find more of those. And we should own some fixed income investments because of our [insurance business].

[Question from audience.]

Well, I started out when I was 20. I had just finished Ben Graham's course. And I took Moody's Manuals – they had investment manuals – and I took Standard and Poor's, where they put them all together, and do them all alphabetically, and I went through them all page by page. And things jumped out at me. I saw Western Insurance Services, in Fort Scott, Kansas, looking in Moody's Bank and Finance Manuals. I'd never heard of Western Insurance Services until I turned that page that said Western Insurance Services. It showed earnings per share of $20 and the high was $16. Now that may not turn out to be something you can make a lot of money on, but the odds are good. It's like a basketball coach seeing a guy 7'3" walk through the door. He may not be able to stay in school, and may be very uncoordinated, but he's very large. So I went down to the Nebraska Insurance Department, and I got the convention reports on their insurance companies, and I read Best's. I didn't have any background in insurance. But I knew I could understand it if I worked at it for a while. And all I was really trying to do was disprove this thing. I was really trying to figure out something that was wrong with this. Only there wasn't anything wrong. It was a perfectly good insurance company, a better than average underwriter, and you could buy it at one times earnings. I ran ads in the Fort Scott, Kansas paper to buy this stock when it was $20. But it came through turning the pages. No one tells you about it. You get 'em by looking.

I read hundreds of annual reports every year. I don't talk to any brokers – I don't want to talk to brokers. People are not going to give you great ideas. On the other hand, getting them is not that difficult. If you'd read the Disney report in 1966, believe me, you'd have known as much about Disney then as now. You wouldn't have Michael Eisner, you'd have Walt Disney running it. And you could have multiplied, at two million shares outstanding (garbled).

Cap Cities at that time was an act of faith. You had to believe in Tom Murphy. You could not see (garbled).

(Garbled) and some of you will be stars, and some of you will be less than stars. But it won't correlate with your IQ at all. But you have it already. And everybody in the room has it. I'll give you a little question. Let's think about this. Let's say that everyone here got a bonus when they left Notre Dame. Let's say for $25,000 you could buy a 10% interest in the income of any one of your classmates that you wanted to. Now, what are you thinking about? You can take anybody in this room, and for $25,000 buy a 10% interest in their income for life. If they make $25,000 the first year, you make $2,500. If they're unemployed, you don't get anything. If they get stock options, you get 10% of the stock options. What are you thinking about as you look around? Are you thinking about which ones are the smartest? It's interesting what ingredients you think now are what's going to produce that in the classroom. I would suggest that you start thinking about, assuming you have a 10% interest, what qualities you want to have. I know I would take Tom Murphy. Why? Well, he's got an IQ, there's no question about that. But, that's something one or two others might have as well.

Think about why you picked him or her, and how much of that is transferable to you. And it usually won't be anything you can't attain yourself. But if it's qualities of character, or qualities of enthusiasm, or whatever it may be, most of those things you can pick up.

[Question from audience.]

Well, we will do that anytime we feel that a dollar we retain in the company is not going to be worth more than a dollar in market price. And that can happen. I mean, as we get bigger, it's more likely to happen. But so far, every dollar we've kept in the company has translated into more than a dollar in market price, so that anybody who wanted to take $10 a share out, or $50 a share out, is better off having us keep the $50, having at appraised in the market at $60, $70, or $80 and selling a little piece. They actually come out dollars ahead by doing that. But, when we can't use the money for any extended period, not for a month or three months, but a period of years, when we find out that we don't have ways to use money in a way that creates more than a dollar of market value for each dollar reinvested, then we won't.

I couldn't attend the 50th birthday of one of my friends so I sent him a telegram "may you live until Berkshire splits." That doesn't apply to cash dividends. It will be a market failure but, nevertheless, that may be what happens.

[Question from audience.]

Well, I won't comment too much on that. The question is whether Security Pacific and Wells Fargo, two of the four largest banks in California, were in talks late last year, and a story appeared in the *Wall Street Journal* talking about this a week or two ago. They were in talks last year about merging. And that excited some people because Wells had done a particularly good job when they took over Crocker four years ago, or so. And then the deal, the Security Pacific/Wells Fargo thing, did not happen. And then the story leaked out so it's in the paper. Security Pacific is probably an $80 billion bank. Wells Fargo, I know, is a $50 billion bank. It would have created what would have been the second largest bank in the country, next to Citicorp.

My guess is there will be some bank mergers in the next few years, but they may be more suicide pacts than mergers. There's going to be a lot of action, not all good by a long shot, in banks, simply because there's so much trouble there. The big problem in merging two banks these days is that you don't know what's in the other guy's loan portfolio – because too often *he* doesn't know. And people didn't used to worry about that five or 10 years ago, and they worry about it a whole lot now because, if they merge with the wrong bank, they can go broke.

C&S, the Citizens and Southern Bank of Atlanta, merged with Sovereign earlier this year. Sovereign has got a lot of real estate problems in the Washington D.C. area, and that merger took place less than 12 months ago.

Al Lerner merged his Equitable Trust Company in Baltimore into the old Maryland National. Al Lerner is a very, very, smart fellow. And he merged his own company, which he had a lot of his own money in, her merged it in with MNC and in six months MNC was in huge trouble. The stock was 10% of what the value was when he merged it six months ago. And Al just got in with something where he didn't know how bad it was. But that was easy to do. So, everybody is super careful about that, and this is why there's a problem, because to look at a Wells Fargo with assets of $50 billion, and Security Pacific with $80 billion, and if there's $2 or $3 billion in there that's no good, that wipes out equity. That's a tough decision to make.

[Question from audience.]

Right now, in property/casualty insurance, generally speaking, prices are lousy, which means business is terrible. We have found a few things to do that will be in our annual report. We've found a few things that are OK, they're not like they were four or five years ago, but they're keeping us out of bars. And that's what we look for in times like this. But that is a *very* interesting business. When that guy was predicting an earthquake near New Madrid we wrote a two month policy against a $3 billion earthquake for some crazy rate as a percentage of everything. We ought to keep that guy out there.

We've had a chance to do some very interesting things in insurance. It's a very tricky business. We are getting in claims on policies we wrote in 1970. We're not getting in any premium, we're just getting in claims. They tell the story in insurance ...

[Told burying dad in a rented suit story. From the 2001 Berkshire Hathaway annual letter:

> Even when companies have the best of intentions, it's not easy to reserve properly. I've told the story in the past about the fellow traveling abroad whose sister called to tell him that their dad had died. The brother replied that it was impossible for him to get home for the funeral; he volunteered, however, to shoulder its cost. Upon returning, the brother received a bill from the mortuary for $4,500, which he promptly paid. A month later, and a month after that also, he paid $10 pursuant to an add-on invoice. When a third $10 invoice came, he called his sister for an explanation. "Oh," she replied, "I forgot to tell you. We buried dad in a rented suit."
>
> There are a lot of "rented suits" buried in the past operations of insurance companies. Sometimes the problems they signify lie dormant for decades, as was the case with asbestos liability, before virulently manifesting themselves. Difficult as the job may be, it's management's responsibility to adequately account for *all* possibilities. Conservatism is essential. When a claims manager walks into the CEO's office and says "Guess what just happened," his boss, if a veteran, does not expect to hear it's good news. Surprises in the insurance world have been far from symmetrical in their effect on earnings.]

We literally will pay hundreds of thousand of dollars for things that happened years back. On the other hand, overall, it can be a good business if you're disciplined. We have a rule, we're very Japanese in that, we never lay off anybody. We tell them, in times like this where we're writing way less than we were writing a few years ago, we tell them that under no conditions will they be laid off for lack of business because otherwise they'll go out an write some business. I mean, it's the easiest thing in the world to do. And we tell them we'll buy them golf memberships, country club memberships, if they'll promise to play golf during business hours, because we don't want them in the office during business under terms that are generally available these days. So we occasionally run into a good big deal, and we keep busy that way, but we are operating at 1/4 speed. We have a lot of people that are doing crossword puzzles, which is fine. It beats whatever

else they'd be doing. You do not want energetic people in a lousy business.

[Question from audience.]

I read all kinds of business publications. I read a lot of industry publications. Coming in today on the plane (garbled). I'll grab whatever comes in the morning. American Banker comes every day, so I'll read that. I'll read the *Wall Street Journal*. Obviously. I'll read Editor and Publisher, I'll read Broadcasting, I'll read Property Casualty Review, I'll read Jeffrey Meyer's Beverage Digest. I'll read everything. And I own 100 shares of almost every stock I can think of just so I know I'll get all the reports. And I carry around prospectuses and proxy material. Don't read broker's reports. You should be very careful with those.

[Question from audience.]

I think the *Wall Street Journal* is essential. I spend 45 minutes a day with the *Wall Street Journal*. Actually, I got up the night before, about 11:00... I frequently read it at night. But I'll read anything. Actually, I probably spend five or six hours a day on reading. We have no meetings at Berkshire. We have a directors meeting once a year, after the shareholders meeting, at lunch. And at the end, I say "I'll see you next year." It's a very economical operation. We don't have a slide projector. We don't have a calculator. We do not have meetings on anything. If I take Ike Friedman, and bring him to a meeting, I've probably lost $20,000 or something. He should be out there selling. There just isn't anything to meet about. He's having meetings in his head all the time about the jewelry store. I'm having meetings in my head about what to do with the money.

[Question from audience.]

We don't attend any seminars, or trade things. I get all this stuff about how to incorporate in the Cayman Islands or how to never write a check to the IRS. We don't do any of that stuff. There's not much goes on at the place, and that's probably just as well. Every now and then we get a chance to do something and we do it as best as we can.

When Coca Cola got to where it was attractive, for seven or eight months we bought every share of Coca Cola we could. We bought what, on the old stock, 23 million shares, we probably bought that on 150 trading days, that's 160,000 shares a day. You gotta do it when the time is right to do it.

[Question from audience about the possibility of buying British companies.]

I look at them. I read the Financial Times every day. We've looked at, and we've come close, very close, to one deal. There's another proposition I've got right now from somebody. But so far, we haven't done anything. But I don't rule it out.

If Coca Cola were located in London, and was an English company, and did business exactly like they do, it would be worth slightly less than [if it were a US company]. But overall, I'd do it. Obviously.

We've looked at a lot [at foreign companies]. [But] we've got a $3 trillion pond in terms of market value in this country. And if I can't make money in a $3 trillion pond, I can't make money in an $8 trillion pond. We tend to look in the $3 trillion pond mostly.

[Question from audience.]

Usually they won't. And I tell them, almost always, they shouldn't. I'm going to have a letter in the annual report this year which I've sent many times to possible sellers of businesses. And the one thing I tell them is you're not richer when you sell a business. You've got a wonderful asset that will be worth more money later on. I wouldn't be talking to you if I didn't think this was the case. If it takes care of a specific problem you have, and you want somebody that meets these certain parameters, we'll talk. If it doesn't, that great. You've got something better than I've got, because I've got cash, and I've got a problem, and you've got a good business, and you don't have a problem.

Mrs. B wasn't richer when she sold me the business. She did have one son and, at that time, three grandsons in the business, and she had three daughters and their husbands, and a bunch of their children who weren't in the business, and everybody owned 20% of it. So she thought there would be some sort of problem when she died. She was a strong enough matriarchal figure that there weren't and problems when she lived – she told them what to do, and that was it. But, when she was gone, she could see trouble. You saw it down at the Louisville Courier/Journal a couple of years ago with the Bingham family. You get a lot of money, but somebody gets unhappy. Sometimes the in-laws get unhappy. Some people prefer to solve that problem themselves, when they're alive, rather than have some trust department try and solve it when they dead. But, I don't want people selling to me because they think they're getting richer, I want them selling to me because it solves some particular problem, and I can help them solve it.

I can do things that other companies can't do. I can arrange the transfer of some of the ownership of the business to another generation. I can promise them it won't get resold. Virtually no other American company can do that. If the XYZ company goes out and buys See's or Borsheim's, the President of XYZ company can say "we're not going to sell it" but he may be taken over himself, his board of directors may tell him to do something, McKinsey may come in next week and say "get out of this business and get into some other business." You can get double crossed in a lot of ways that there's no moral stigma attached to, but that's just the way the cards fall. With me that can't happen. The only thing that can happen bad to them is if I double cross them. So they have to make a judgment whether I'm lying to them. I can't come back to them later and say the board's told me we've got to get out of the jewelry business, there's this great offer that's come in, I've got this fiduciary responsibility, blah, blah, blah, blah. That won't happen.

[Question from audience.]

They're rich because they've already gotten rich by having the company. All they're going to do, if they take money from me, is they're going pay some taxes, and they're going to invest in some other business. They might buy Berkshire, they might buy General Motors, they might buy

government bonds, but they already had a good business. And they don't have to pay the taxes. So they are not getting richer.

I can help them with some problems. When Ike at Borsheim's came to me I said "look, I will pay you X, and I will show you how to get more money than that, and here is how you can do it." He said "I'm not interested."

[Question from audience.]

We don't want what I call the used cigar butts, where you get one free puff and that's it (garbled comment from audience). Well, partly I don't have the people to stick in anyway. And I don't want to go through the human travail that's involved in that.

I don't want to go through it, basically. And, if you have your choice, we'll just think in terms of looks now, but marrying some gal that's the girl of your dreams and having another one and saying "If I send her to the psychotherapist for five years and have some plastic surgery" well maybe it will work [tape ends].

Lecture to Undergraduate Students

[Tape picks up in middle of lecture.]

...we let the operating managers run their businesses, and we have them send the money to Omaha. And then we try to buy more businesses. And sometimes we can buy all of a business, and sometimes we can only buy part of it. But we're the largest shareholder of the Coca Cola Company, we're the largest shareholder of Capital Cities/ABC Broadcasting, we're the largest shareholder of Gillette Company, and then probably Champion Paper, Geico, the insurance company, the Wells Fargo bank. There's quite a few.

We buy entire businesses, or we buy tiny pieces of businesses called "stocks" and we have the same approach to it. And if the capital comes in, we're willing to do either one. In this year's annual report, in answer to the question of what I do, I tell the story of my granddaughter's birthday party...

[Told Beemer the Clown story again]

I sit there in Omaha and wave my magic wand. But, I've got all these Beemers out there, running businesses. They run them exceptionally well. Our businesses are generally characterized by unusual market strength and terrific continuity of management. Almost everybody that works for us is independently rich because we've usually bought their business. And they've received a lot of money from us. And one of the main parts of my job is to figure out, when I'm sitting across the table from John Smith and I'm going to hand him a check for $50 or $100 million, I have to decide whether he's going to get out of bed the next morning. And it's very important to me that he is just as interested in running his business, and he thinks of it as his business, the next day, and the next year, and the next decade, as he was when he owned it all himself. With a lot of people, there's no way to buy that. You can't set up an incentive compensation scheme that accomplishes that because they've already got all the money they need. You really have to make a judgment as to whether they run their business because they love business or because they love money. If they love money, we don't have a chance. We can pay them a lot of money, but they've already got a lot of money. They never need to come to work another day in their life after they sell out to us, and yet virtually all of them works harder now than they've ever worked before. The main reason for this is that they're that type – that is the way they're put together.

Secondarily, we try to provide an environment for them which is exactly like what we'd want if we were running a business. The main thing we would want is we would not want a lot of second guessing, we would not want a lot of home office meetings, we would not want a lot of supervision from some group Vice President at headquarters. We just would not want a lot of nonsense. We would like to run our own business in our own way. If you were a great golfer, and let's just say, going back to my generation, you were Arnold Palmer, you'd basically play golf because you like to play golf. But if he was playing golf, and we were doing it for money, and in some way I owned him, and I kept saying "why don't you use a four iron instead of a five iron, and why don't you aim a littler further to the right" after a while he'd wrap the club around my neck. And rightly so. If you get really talented people, you've got to give them a chance to do their own thing.

We bought a uniform company in Cincinnati five years ago, a $100 million company. I've never been to Cincinnati. I've never seen a factory of theirs, I don't know what their offices look like. I know the people quite well.

We've got a candy company, See's Candies in California. We sold 13.5 million tons of boxed chocolates last year and made $39 million before taxes. The fellow that runs it has been running it from the day we bought it 19 years ago. We made a deal with him, and in 30 seconds worked out an incentive compensation agreement. In 30 seconds. Never wrote it down, never had a lawyer. That deal is still the same deal 19 years later. He's been to Omaha exactly once. Last year he came to the annual meeting to see whether their really was a Berkshire Hathaway in Omaha. We've never had a group meeting of any kind. We don't force anything on them. We actually moved the headquarters of the company from Los Angeles to San Francisco because his wife liked living in San Francisco better than she like Los Angeles. Instead of having a guy with a wife that was considerably less happy living in LA, it was a lot easier to move the business to San Francisco, so that's where it comes from now.

We have no retirement age. We had a woman running a business for us, we'd bought her business when she was 89, and she was Chairman of the Board, and she ran it for us until she got mad two years ago and left at 95, because, foolishly, I'd forgotten to get a non-compete agreement from this 89-year-old woman when we made the deal. She now competes with us across the street. She works seven days a week. We've never let anybody go because of age. We had one fellow, ran a savings and loan for us in Pasadena [Wesco Financial], he kept trying to get me to get somebody else, he was 75 years old. [He'd say] "you've got to get another guy in here" and I'd say "Louis, how's your mother?" She lived to be 93 and that ended the conversation.

So we have a business with very few rules. The only rules the managers have is to basically think like owners. We want those people thinking exactly like they own those businesses themselves. Psychologically, we don't even want them to think there is a Berkshire Hathaway. They know they will never get sold. They don't have to sit around and wonder if there's going to be a takeover raid on Berkshire.

Let's talk a little bit about what you're interested in . This is a little bit different group than I usually talk to, its almost always been MBAs in the past, and its quite refreshing to get a mixture of liberal arts people in, so you can throw anything at me that you care to – nothing's off limits.

[Question from audience.]

They hardly get richer because they sell to me. I tell them "If you come to me, and you've got a wonderful business, I can't make you richer than you are. If you sell to me for $100 million, it's only because your business is worth $100 million. And you'll pay a lot of taxes and you won't have $100 million. If you take the remainder after-tax and buy General Motors and AT&T you'll have a lot of businesses you don't understand, instead of one you do understand. There's no reason to sell to me to get richer. I always tell people the only reason I'm buying is because I think it's going to be worth more. If they are selling to me simply to stick a lot of money into

their own pocket, it's the wrong reason. But frequently....

One woman was 89 when she sold to me. She had four children. One worked in the business, three didn't work in the business. She had multitudes of grandchildren. three of them worked in the business, two of them didn't. The stock was divided equally, 20% with each branch, plus 20% she kept. As long as she was around, she was an enormously strong personality, there weren't going to be any problems because she was going to tell people what he answers were. The day she died, she felt that there would be a developing situation where people didn't work and wanted to get the money out of the business and that the people who did work would resent the fact that the people who didn't work were cashing in. You get a lot of that as families move along. So she preferred to solve it herself by getting cash for the members of the family that weren't involved in the business, and then I moved the ownership of the remaining people down to the lowest generation of the ones that were in the business. That happens a variety of times.

The uniform company we own in Cincinnati had an LBO some years earlier and there were four or five venture capital firms there and they just wanted to take a quick profit. The guy who ran it realized he'd made a mistake when he sold out to a group like that in the first place, so he steered it to us. He wrote me out of the blue.

I've got a little ad in my annual report every year. We're in advertising businesses (garbled) and this year it's under the section "Help, Help." I tell them the kinds of businesses we want to buy. This fellow had seen that in Cincinnati, wrote me a letter and said "I'm your guy." And I looked at him and said "You are my guy." We bought out all the venture capitalists, but we kept the family in. And they run the business. It's that kind of thing that comes along.

The Scott Fetzer company, which is 20 other businesses, World Book, Kirby, 20 others, Campbell Hausfeld, almost a billion of sales. They had been a New York Stock Exchange company and there was a takeover attempt, even Ivan Boesky was involved, they had a whole raft of things. I'd never met the fellow then. I wrote him a letter, I said "Dear Mr. Schey: Here's what we are..." I sent him an annual report and said "If you want to do businesses with someone whose checks will clear, who won't bother you, here's all the shoes that will drop (I told him all the bad things about us), a one-page letter. Sent it. (Kind of difficult to get all the bad things about us on one page.) I said "If you want to talk about it, I'll meet you, and if you don't, throw the letter away." He called me up, we met on a Sunday in Chicago, made a deal that night and, in a week, the deal was done. That was five or six years ago – I've been to Cleveland twice, not because I needed to be. He runs that business exactly like he [owned it himself]. $97 million pretax earnings.

[Question from audience.]

I don't know if everybody could hear that. In that past, at least in some departments, you've heard that there is no such thing as buying an undervalued stock, or making money in stocks, that the market is efficient, and that everything is priced right at all times relative to the known information about it. Therefore, there's no use thinking. And, of course, from my standpoint I'd like to have everyone believe that, because it's a terrific advantage to be in a game where your opponent has been taught not to think. I wish the people I played

bridge would. An appreciable percentage of the money in Wall Street is managed by people who believe that. It's the old story that if there's a $20 bill on the floor there's no sense picking it up because it can't be there. That thinking, I would say, prevailed extensively 10 years ago. I would say there's a little less of it now. All I can tell you is it simply isn't true.

The last class I told of how, in 1966 or so, we bought 5% of the Disney company for $4 million. The whole company was selling for $80 million! They'd written off all their films, Snow White, Three Little Pigs, Fantasia, all 220 some of them, written down to zero. You got 300 acres down in Anaheim and all of Disneyland for zero. The Pirate Ride had just been put in that year – $17 million it cost, yet the whole company was selling for $80 million. It was a joke. Mary Poppins made $30 million that year. They were going to recycle Mary Poppins seven years later, they were going to recycle Snow White seven years later. It's like an oil field where the oil seeps back in, and every seven years a new crop of kids comes along and they all want to see Snow White. And they drive their parents crazy until they get to see it. Well, that whole company was selling for $80 million. You don't have to be a financial analyst, you don't have to be finance major, to know that's a ridiculous valuation. Eleven million people a year go to Disneyland. That's seven bucks a person and you get the (garbled) thrown in free. It was a joke. And Walt Disney would tell you, if you went out to see him, would tell you all about the values, and what he had planned. It just happens occasionally in securities.

Now, an efficient market theorist would tell you that $80 million is the correct value on the Walt Disney company. And he's wrong. You do not have to have very many like that in a lifetime. It's not very esoteric, it does not require some insight into what's going to cure AIDS, or what's going to be the best computer five years from now, or the best software manufacturer – it doesn't require anything like that. It just requires figuring out whether people will be eating Hershey bars or drinking Coca Cola.

This company [Coke] you could have bought one share of stock for $40 in 1919, when they went public. If you reinvested the dividends, you'd be worth a million now. There are 150 countries in the world where they sell this and in every single one of them per capital consumption goes up every year. It's not that complicated. The Chairman of your [Notre Dame's] Board, Don Keough – I don't know if you're familiar with that; he is also the President of Coca Cola – used to live across the street from me in Omaha in 1960. He was a coffee salesman for Butternut Coffee, making $200 a week. And if you knew Don Keough there was no way that, if you put Don Keough together with Coke, you were going to miss. There really isn't any way they won't be selling a lot more Coca Cola products five years from now than they are now. And, they'll be making more money on each one. If you raise the price of each one of these a penny, it's $2 billion a year.

[Question from audience.]

The question is whether LBOs and junk bonds and so on have hurt the country in some fundamental way in terms of its competitiveness vis-à-vis the world. I wouldn't go that far, but I think on balance it's been a huge minus on the financial scene. Extreme leverage has been, generally speaking, a net minus. The analogy has been made (and there's just enough truth to it

to get you in trouble) that in buying some company with enormous amounts of debt, that it's somewhat like driving a car down the road and placing a dagger on the steering wheel pointed at your heart. If you do that, you will be a better driver – that I can assure you. You will drive with unusual care. You also, someday, will hit a small pothole, or a piece of ice, and you will end up gasping. You will have fewer accidents, but when they come along, they'll be fatal. Essentially, that's what some of corporate America did in the last 10 years. And it was motivated by huge fees. And it was motivated by greed.

The most extreme case I saw was a television station. About three years ago, a television station in Tampa sold for an amount where, when they had to borrow the money, the interest amounted to more than the total sales of the station. If everybody donated their labor, if they donated their programming, if they donated their utilities, they still wouldn't have enough to pay the interest. They went crazy. And you can buy those bonds at 15 cents on the dollar. Charlie Keating's enterprise [Lincoln Savings and Loan Association in California, which became the nation's largest thrift failure] had a bunch of them too. There's a lot of crazy stuff that went on in the last five or six years. The fees on that deal, they paid $365 million for the station, they borrowed $385 million and you can guess where the extra money went. It went into the pockets of the people who put the deal together.

[Question: Is it comparable to say the same thing about companies and our government debt?]

No, it really isn't comparable. The important thing on government debt is how much is owed externally. If this group landed on an island someplace, we were stranded, and the only person we could do business with was another islander, and we all went to work producing rice, and we worked hard eight hours, and we had just enough rice to stay alive. If we worked out some internal system where some people worked 10 hours a day, and some other people worked six hours a day, and the people who worked six hours a day "borrowed" two hours worth of rice daily from the people who worked 10 hours a day, as an island we wouldn't be getting poorer. We might have some class that owed future rice, plus interest, to the people that had saved, but we would not be any worse off. We would consume all the rice we produced each day, it's just that some of us would have claim chits on each other.

If, on the other hand, we all decided to quit working, because people on the other island would work 16 hours a day, and they would ship over eight hours a day of rice to us, so we would just eat and mail them IOU's (we'd send over a guy in a canoe each night with the IOUs, they'd send over rice every day), we'd all just sit around, but the little IOUs we sent them drew interest, and then after 10 years they said "we would just as soon quit producing rice the next 10 years and you guys work 16 hours a day." That won't work so well, particularly if it's a different generation that's being asked to work the 16 hours a day later on to pay back the rice from the first generation.

External debt, something our country owes the rest of the world, is a whole different question than internal debt. The national debt is largely held internally, but the game is changing as we run a trade deficit. So the trade deficit is a threat, essentially, to living as well as we live now. We are, essentially, selling off a little piece of the farm every day, as we run a trade deficit in

order to finance our own consumption. We've got a very big rich farm, so we can sell a little piece of that farm for a long time without hardly noticing it. It's a lot like eating a little too much over time. You never see it in any one day. You don't all of a sudden get up, all of your buttons pop, and people say "God, you look fat!" It just doesn't happen. What happens is you just keep doing it so pleasantly until, after a while, you've got a helluva waistline. And that is, essentially, the situation in our trade deficit. We are giving the rest of the world claim checks on us. That has consequences over time.

In fact, we sold our building to the Japanese, but it doesn't make any difference whether it's the Japanese or anybody else. We sold our buildings at ABC two years ago for about $175 million. That was equal to one day's trade defect with Japan. They sent up a bunch of VCRs and things, and we sent them the title to 54th Street and 6th Avenue. And we use up the one thing and they've got the other.

It's got sort of a poetic justice to it. As a matter of fact, in 1626 I think, Peter Minuet handed a bunch of trinkets to the Indians and they paid him the island. And now, people are handing us the trinkets, and we're giving them the island. It happens every day. The trade deficit will be $100 billion plus, and that means we are giving out IOUs to the rest of the world that will draw interest, which are claims of future production of everybody in this room.

Now the internal debt, that's an entirely different story. That person helps, but the help is commensurate with the hurt. When it goes abroad, the equation is not the same.

[Question from audience.]

The question is whether we just invest domestically or also abroad. The answer to that is, in terms of buying securities, everything we've bought, almost, has been domestic. It's not that I rule out other investments. We almost bought a pretty good sized investment in England a year or two ago, and we look at things elsewhere.

The United States is a $3 trillion equity pool, a $3 trillion pool of equity investments. If you can't make money in a $3 trillion pool, you're probably not going to make money in a $6 trillion pool.

Now, Coca Cola earns 80% of its money abroad and we hold 7% of that. Our 7% share is roughly $100 million. Of that, roughly $80 million comes from abroad. Coca Cola is spending an enormous amount of money in East Germany in the next year. They were in there big in March of 1990. Interestingly enough, the first Coca Cola they sold in East Germany, you may be too young for this, but it was shipped from Dunkirk where the Germans, essentially, drove the English into the sea 50 years ago. For a while all the Coca Cola was going from our big bottling plant in Dunkirk to East Germany. Now, the infrastructure has been built up within East Germany tremendously, and it will be a good market for Coke.

Coke is also in McDonald's in Moscow. The Moscow McDonald's is doing $235,000 in business a day, 50 times the average McDonald's in this country. You think of 50 McDonald's opening and that's how much business that Moscow McDonald's has done. That's a lot of people buying Coke.

[Question from audience.]

The question was, “Have I changed my ideas over the years as my bank account has increased?” The truth is, I used to have more ideas than money and now I’ve got more money than ideas. You’ve put your finger on that particular problem, but there are worse problems.

The only ideas we’re interested in now are big ideas. We are not interested in anything that we do not think we can put at least $100 million into, usually quite a bit more. We own fewer stocks now, with $7 or $8 billion, that we owned back when we had $15 million in 1970.

We do not try and buy more and more of everything. I call that the Noah’s Ark approach to investing – have two of everything. We’ve got a very selective ark, and we only want a couple of specimens on there. It makes it more difficult, but you don’t need very many good ideas. If we get one good idea a year, that would be terrific. And if you negotiate with me, you’d get me down to one every two or three years. That’s all you need. You do not have to keep hitting home runs all the time. That’s one of the nice things about this business. If you make one decision on something like that, it takes care of a lot.

I always tell classes that, in the investment world, if you had a punch card when you got when you got out of school, and there were only 20 punches on it, and when that was done, you were all done investing, you’d make more money than having one with unlimited punches. You’d make sure you used them for the right things.

The big things are not what you do, they’re what you don’t do. Basically, we’ve had very few things we’ve lost money on. We’ve had no more good ideas than other people. But we’ve not made big mistakes – that I learned from Ben Graham. He used to say there are two rules in investing. The first: don’t lose. The second: don’t forget the first.

[Question from audience.]

The first question was, “Does the current recession change our attitude toward investing?” It doesn’t change it a nickel’s worth. If something comes along tomorrow that’s interesting, I will do it tomorrow. And it will be by exactly the same yardsticks I used whenever the business cycle was at its peak. We don’t care what businesses are doing. If the Chairman of the Federal Reserve called me tonight and said “I am really panicking and things are terrible,” I don’t care. We will do exactly what we were going to do tomorrow morning. The truth is, on balance, we will do more business when people are pessimistic. Not because we like pessimism, but because it makes for prices that are much more attractive. If you all have filling stations to sell in South Bend, I want to do business with whomever is most negative about filling stations. And that’s were I’m going to make the best buy. Times are really good and times are really bad, over a period of time. We don’t quit selling candy in July just because it isn’t Christmas. We pay *no* attention to economic forecasts. I don’t read anything [along those lines]. I read annual reports, but I don’t read anybody’s opinion about what’s going to happen next week, or next month or next year.

The second question is whether there are any special industries we favor. The only thing we favor is industries we can understand. And then, we like businesses with what I call “moats” around them. We like businesses that are protected in some way from competition. If you go in the drugstore and say “I want to buy a Hershey bar” and the guy says “I’ve got an unmarked chocolate bar that’s a nickel cheaper,” you’ll buy the Hershey bar or you’ll go across the street.

One of the interesting things to do is walk through a supermarket sometime and think about who’s got pricing power, and who’s got a franchise, and who doesn’t. If you go buy Oreo cookies, and I’m going to take home Oreo cookies or something that looks like Oreo cookies for the kids, or your spouse, or whomever, you’ll buy the Oreo cookies. If the other is three cents a package cheaper, you’ll still buy the Oreo cookies. You’ll buy Jello instead of some other. You’ll buy Kool Aid instead of Wyler’s powdered soft drink. But, if you go to buy milk, it doesn’t make any difference whether its Borden’s, or Sealtest, or whatever. And you will not pay a premium to buy one milk over another. You will not pay a premium to buy one [brand of] frozen peas over another, probably. It’s the difference between having a wonderful business and not a wonderful business. The milk business is not a good business.

In our candy business, Valentine’s is coming up, and See’s candy on the West Coast is a very desirable item, and very few men will want to hand their girlfriend, or wife, or whatever, and say “Here honey, I took the low bid.” It just doesn’t sell. We want things where they’re not terribly price sensitive. And if you’re going to go out and buy a car this afternoon, you’re not going to say “I’d like that red job there, but I want to be sure it has steel that came from Bethlehem steel.” You don’t care where the steel came from. And, therefore, Bethlehem’s got nothing to say to General Motors, or Ford, except what wonderful guys they are. And General Motors says “We know you’re wonderful guys, and so, if Y sells it for X dollars a ton and you’d better be $5 under them.” Anything that differentiates your product – those are the businesses we like to be in.

We like to be in businesses I can understand. There are all kinds of businesses I don’t understand, but we’re not going to own them. Thomas Watson Sr., of IBM, in that book “Father, Son, and Company, that his son wrote, quoted his father as saying “I’m no genius, but I’m smart in spots, and I stay around those spots.” The real trick is knowing what you know, and what you don’t know. It isn’t how much you know, it’s whether you can define it well, so you know when you can take a swing at the ball, and you know when you’ve got no business swinging.

[Question from audience.]

The durability and strength of the franchise is the most important thing in figuring out [whether it’s a good business]. If you think a business is going to be around 10 or 20 years from now, and that they’re going to be able to price advantageously, that’s going to be a good business. And if somebody has to have a prayer session every time they want to raise the price a dollar a pound on whatever they’re selling, that’s not going to be a good business.

What’s the highest priced daily newspaper in the United States? Most of you are familiar with it. The highest priced daily newspaper in the United States, with any circulation at all, is the *Daily*

Racing Form. It sells about 150,000 copies a day, and it has for about 50 years, and it's either $2.00 or $2.25 (they keep raising prices) and it's essential. If you're heading to the racetrack and you've got a choice between betting on your wife's birthday, and Joe's Little Green Sheet, and the *Daily Racing Form*, if you're a serious racing handicapper, you want *The Form*. You can charge $2.00 for *The Form*, you can charge $1.50, you can charge $2.50 and people are going to buy it. It's like selling needles to addicts, basically. It's an essential business. It will be an essential business five or 10 years from now. You have to decide whether horse racing will be around five or 10 years from now, and you have to decide whether there's any way people will get their information about past performances of different horses from different sources. But you've only got about two questions to answer, and if you answer them, you know the business will make a lot of money. *The Form* has huge profit margins, incidentally. Wider than any other newspaper. They charge what they want to basically. It's an easy to understand business – so easy to understand.

Snow White is going to show up every so often, and when she shows up, millions of kids are going, and they'll make their money, and they don't have to make the picture again. Made back in 1937 or so. It's a perpetual royalty on youth. And that's not a bad business.

[Question from audience.]

Where did Donald Trump go wrong? The big problem with Donald Trump was he never went right. He basically overpaid for properties, but he got people to lend him the money. He was terrific at borrowing money. If you look at his assets, and what he paid for them, and what he borrowed to get them, there was never any real equity there. He owes, perhaps, $3.5 billion now, and, if you had to pick a figure as to the value of the assets, it might be more like $2.5 billion. He's a billion in the hole, which is a lot better than being $100 in the hole because if you're $100 in the hole, they come and take the TV set. If you're a billion in the hole, they say "hang in there Donald."

It's interesting why smart people go astray. That's one of the most interesting things in business. I've seen all sorts of people with terrific IQs that end up flopping in Wall Street or business because they beat themselves. They have 500 horsepower engines, and get 50 horsepower out of them. Or, worse than that, they have their foot on the brake and the accelerator at the same time. They really manage to screw themselves up.

I tried this with the last class. Let's say each one of you could buy 10% of the earnings, forever, of anybody else in this room, except me. Let's charge $50,000. And that means that if somebody gets out of here and earns $30,000 you get a $3,000 royalty off them. But, if they do extremely well, and become President of Coca Cola like Don Keough did, you'll make a fortune.

How are you going to think, in terms of the rest of the people here, of which one you want to buy the 10% of? Let's say we had Donald Trump here, and my friend Tom Murphy, who runs ABC, or Don Keough, and you're really betting on the lifetime of each of them, and let's say they're all in equally good health. Would you give them an IQ test? Well, you'd want to be certain they have a certain amount of IQ. Would you want to measure how strongly motivated

they were, how much they wanted to get rich? Donald Trump wanted to get rich. That might not be a great qualifier. What would you do to select that one person out of this whole crowd here, because there will be a huge difference in results here. There's not a huge difference in IQ. But there will be a huge difference in results. I would venture to say, I don't know how well this group knows each other, you come from two different schools, so I'd break it down into two groups, I would venture to say that your guesses would not be bad. They'd be better if you'd had more experience with the group, and if you've had more experience generally, but they will be way better than flipping coins. You would probably relate it to a lot of qualities, some of which would be straight from Ben Franklin – I would suggest that the big successes I've met had a fair amount of Ben Franklin in them. And Donald Trump did not.

One of the things you will find, which is interesting and people don't think of it enough, with most businesses and with most individuals, life tends to snap you at your weakest link. So it isn't the strongest link you're looking for among the individuals in the room. It isn't even the average strength of the chain. It's the weakest link that causes the problem.

It may be alcohol, it may be gambling, it may be a lot of things, it may be nothing, which is terrific. But it is a real weakest link problem.

When I look at our managers, I'm not trying to look at the guy who wakes up at night and says "E = MC 2" or something. I am looking for people that function very, very well. And that means not having any weak links. The two biggest weak links in my experience: I've seen more people fail because of liquor and leverage – leverage being borrowed money. Donald Trump failed because of leverage. He simply got infatuated with how much money he could borrow, and he did not give enough thought to how much money he could pay back.

You really don't need leverage in this world much. If you're smart, you're going to make a lot of money without borrowing. I've never borrowed a significant amount of money in my life. Never. Never will. I've got no interest in it. The other reason is I never thought I would be way happier when I had 2X instead of X. You ought to have a good time all the time as you go along. If you say "I'm taking this job – I don't really like this job but in three years it will lead to this," forget it. Find one you like right now.

[Tape runs out]

SALOMON INC – A report by the Chairman on the Company's Position and Outlook

Source - Asian Wall St Journal . 1st, November, 1991 (Advertisement)

To the Shareholders of Salomon Inc:

In this report, I want not only to tell you about Salomon Inc's third-quarter results but also to give you my thinking as to where the company must head.

From announcements we have made and from the media you have learned about the events that led to my appointment as interim Chairman of Salomon Inc on August 18. We have since continued to investigate Salomon's past actions in the Government securities market and in other areas as well. Our conclusion so far: A few Salomon employees behaved egregiously-a fact that will prove costly to you as shareholders-but the misconduct and misjudgments were limited to those few. In short, I believe that we had an extremely serious problem, but not a pervasive one.

..... CONTROLS AND COMPLIANCE

Since August 18, we have installed rules and procedures at Salomon Brothers Inc, our securities subsidiary, that we think set a standard for the industry. In addition, we have begun to monitor what goes on in Salomon Brothers in new ways-for example, by setting up a Compliance Committee of the Board-and expect in that area also to be a leader. Even so, an atmosphere encouraging exemplary behavior is probably even more important than rules, necessary though these are. During my tenure as Chairman, I will consider myself the firm's chief compliance officer and I have asked all 9,000 of Salomon's employees to assist me in that effort. I have also urged them to be guided by a test that goes beyond rules: Contemplating any business act, an employee should ask himself whether he would be willing to see it immediately described by an informed and critical reporter on the front page of his local paper, there to be read by his spouse, children and friends. At Salomon we simply want no part of any activities that pass legal tests but that we, as citizens, would find offensive.

. . . . . **OPERATING RESULTS** . . . . . .

Ordinary operations during the third quarter produced excellent profits, in large part because of exceptionally favorable trends in the fixed-income markets. I need to alert you, however, to two major adjustments that affected the bottom line, one negatively, one positively.

In the first instance, we have set up a pre-tax legal reserve of $200 million for potential settlements, judgments, penalties, fines, litigation expense and other related costs. In the second instance, the compensation expense we have recorded for Salomon Brothers is about $110 million less than what might normally be expected. Because certain legal

costs may not be deductible for tax purposes, different tax rates apply to the two unusual items. Their combined effect, therefore, was a reduction in net income of about $75 million.

LEGAL COSTS . . . . . .

I would like to elaborate on each of these unusual items, beginning with legal costs. No one can now estimate with any degree of certainty what the eventual direct costs of Salomon's past misdeeds and misjudgments will be to the company. (There are also very important secondary costs, such as loss of business and increased funding, costs; but, as I shall detail later, there may additionally be' secondary benefits, perhaps substantial.). Whatever these costs are , however, our large equity base - $ 4 billion – virtually insures that they will not be crippling.

We will pay any fines or penalties with dispatch and we will also try to settle valid legal claims promptly. However, we will litigate invalid or inflated claims, of which there will be many, to whatever extent necessary. That is, we will make appropriate amends for past conduct but we will be no one's patsy.

Accounting rules require that we review the size of our reserve with Our auditors and counsel. That has been, done and-based on the limited amount of information presently available-they agree with the present estimate. We will make upward or downward adjustments to the reserve ~s information and events clarify the situation.

..... **COMPENSATION**

Most of you have read articles about the high levels of compensation at Salomon Brothers. Some of you have also read discussions of incentive compensation that I have written in the Berkshire Hathaway annual report. In those, I have said that I believe a rational incentive compensation plan to be an excellent way to reward managers, and I have also embraced the concept of truly extraordinary pay for extraordinary managerial performance. I continue to subscribe to those views. But the problem at Salomon Brothers has been a compensation plan that was irrational in certain crucial respects. One irrationality has been compensation levels that overall have been too high in relation to overall results. For example, last year the securities unit earned about 10% oil equity capital-far tinder the average earned by American business-yet 106 individuals who worked for the unit earned $1 million or more. Many of these people pet-formed exceedingly well and clearly deserved their pay. But the overall result made no sense: Though 1990 operating profits. before compensation were flat versus 1989, pay jumped by more than $120 million. And that, of course, meant earnings for shareholders fell by the same amount.

A related irrationality is connected to the lopsided way in which Salomon has earned its profits-a matter, indeed, on which Salomon's directors were not supplied sufficient information. The data I now have available show that Salomon's lackluster overall profits of recent years resulted from a combination of excellent earnings in a few areas of the

business-operating in an honest and ethical manner, it should be added-with inadequate or non-existent earnings at the remainder. Yet the compensation plan did not take this extreme unevenness into account. In effect, the fine performance of some People Subsidized truly out-sized rewards for others. It would be understandable if a private partnership opted For such all egalitarian, share-the-wealth system. But Salomon is a publicly owned company depending on vast amounts of shareholders' capital. In such an operation, it is appropriate that the excess earnings of' the exceptional performers-that is, what they generate beyond what they are justly paid-go to the stockholders.

Of course, it is difficult to quantify performance in many vital jobs, such as compliance, audit, funding, and research. For these activities, and for operational and support jobs as well, Salomon employees should normally be paid in line with industry standards, whether profits are high or low. Our compensation plans must also both reward cooperative, for-the-good-of-the-firm behavior and recognize that some business units earn relatively little in profits but deliver valuable, if hard to quantify, collateral benefits to the firm.
All that said, there remain many jobs for which performance can be concretely measured and ought to, be. In these, employees who produce exceptional results for the firm, while operating both honorably and without excessive risk, should expect to receive first-class compensation. On the other hand, employees producing mediocre returns for owners should expect their pay to reflect this shortfall. In the past that has neither been the expectation at Salomon nor the practice.

Salomon Inc's directors have decided that total compensation at Salomon Brothers in 1991 will be slightly below the level of 1990. Through June 30, 1991, however, compensation accruals had been made at a rate that considerably exceeded 1990's. Therefore, a $110 million downward adjustment of the accrual was made in the third quarter.

In 1991 and in the future, the top-paid people at Salomon Brothers will get much of their compensation in the form of stock, pursuant to the Equity Partnership Plat] (EPP), which previous management instituted last year and which we heartily applaud. The EPP motivates managers to think like owners, since it obliges them to hold the stock they buy for at least five years and therefore exposes them to the risks of the business as well as the opportunities. Contrast this arrangement with stock-option plans, in which managers commit money only if the game has already been won and then often move quickly to sell their shares.

In Salomon Brothers' business, which combines leverage with earnings volatility, it is particularly necessary and appropriate that the financial equation applying personally to managers be comparable to that applying to the ordinary shareholder. We wish to see the unit's managers become wealthy through ownership, not by simply free-riding on the ownership of others, I think in fact that ownership can in time bring our best managers substantial wealth, perhaps in amounts well beyond what they now think possible.

To avoid dilution, the trustee of the EPP purchases stock for the plan in the market and at some point in the future the company may itself elect to make stock repurchases to reduce the shares outstanding. Within a relatively few years Salomon Inc's key employees could own 25% or more of the business, purchased with their own compensation. The better job each employee does for the company, the more stock he or she will own.

Our pay-for-performance philosophy will undoubtedly cause some managers to leave. But very importantly, this same philosophy may induce the top performers to stay, since these people may identify themselves as .350 hitters about to be paid appropriately instead of seeing their just rewards partially assigned to lesser performers. Indeed, I am pleased to report that certain of our very best managers have already asked that the EPP be modified to allow them to substantially increase the proportion of their earnings that can be invested through the plan.

Were an abnormal number of people to leave the firm, the results would not necessarily be bad. Other men and women who share our thinking and values would then be given added responsibilities and opportunities. In the end we must have people to match our principles, not the reverse.

..... LEVERAGE

Our September 30th balance sheet totals are down by over $37 billion from those of June 30th-from $134 billion to $97 billion. The pace of change, however, has been even more dramatic than these figures indicate: Total assets on August 16, just before I became Chairman, were about $150 billion.

In Salomon Brothers' business, I should point out, substantial amounts of' borrowed money are necessary and proper. We will continue, for example, to make large, short-term commitments to finance under-writings and block-purchases of equities, mortgages and bonds. Indeed, we expect to be a leader in these fields.

Nonetheless, we have deliberately brought our balance sheet totals down to reduce our leverage, and you will see the totals come down further in the months ahead. I am no fan of huge leverage in general, and in Salomon's case I believe that the swelling of the balance sheet that took place in the past was often done for the sake of all-too-marginal returns. Larger totals can actually lead to smaller profits: Undisciplined decision-making is a frequent consequence of ultra-easy access to funding, as both commercial and investment banks have learned in recent years.

One final, reassuring point about the balance sheet: Salomon's previous management strongly favored conservative reserving. Significant allowances for various risks of the business have been-and will be-maintained.

. . . . . **PHIBRO ENERGY** . . . . . .

Phibro, the other major business owned by Salomon Inc, is achieving only mediocre profits this year after a terrific performance in 1990. Many investors recognize Phibro as a world leader in the trading of oil and related derivative instruments but are unaware of the magnitude of Phibro's oil refinery business. Phibro's four refineries typically process about 330,000 barrels of oil per day, which is equal to more than a third of the U.S. refining output of Exxon. But refining spreads this year have been narrow and Phibro's profits from this business have fallen sharply.

The company has made excellent progress, however, with White Nights (WNJE), its Siberian oil project, in which our Russian partner is Varyeganneftegaz Production Association. I have met with Anatoli Sivak, the talented Director General of Varyeganneftegaz and Chairman of WNJE, and share his enthusiasm about developments to date.

Essentially, this venture is drilling new wells and reworking existing wells in three designated fields. In payment, it is entitled to the incremental output it succeeds in producing over what the output would have been had WNJE's development not occurred.

To date, WNJE has undertaken 37 workovers, of which 25 were successful. Additionally, one new well has recently been completed. In aggregate, these wells have increased production by about 4,700 barrels per day. WNJE is receiving hard currency for its oil and the pace of drilling will accelerate. Though the project entails political and petroleum engineering risks, WNJE's potential is large.

. . . . . **CONCLUSION** . . . . . .

In recent years both Salomon Inc, the parent, and Phibro Energy have been treated by top management as adjuncts to Salomon Brothers. That was understandable, given that the managers of the parent came from the securities unit. Now, however, we are viewing Salomon Inc as the owner of two independent and substantial businesses, each of which will be measured by return on the equity capital it requires.

I noted earlier that there may well be future benefits that arise from our current problems. We have the prospect of correcting certain weaknesses at Salomon Brothers that were likely to remain unaddressed absent a change in management; meanwhile, the firm's strengths in large part remain intact. Though earnings volatility will always be high, Salomon Inc has the capacity amid favorable market conditions to earn substantial slims. Furthermore, I believe that we can earn these Superior returns playing aggressively in the center of the court, without resorting to close-to-the-line acrobatics. Good profits simply are not inconsistent with good behavior.

Our goal is going to be that stated many decades ago by J.P. Morgan, who wished to see his bank transact "first-class business-in a first-class way." We will judge ourselves in fact not only by the business we do, but also by the business we decline to do. As is the case at all large organizations, there will be mistakes at Salomon and even failures, but to the best of our ability we will acknowledge our errors quickly and correct them with equal promptness.

The best decision I have made since assuming my post was my appointment of Deryck Maughan as Chief Operating Officer of Salomon Brothers Inc. He, along with the management of Phibro, join me in a pledge to make Salomon Inc a company that produces superior results for clients, employees and owners.

WARREN E. BUFFETT
1440 KIEWIT PLAZA
OMAHA NEBRASKA 68131
TELEPHONE 402 342 2940

February 3rd, 1975

To the Hilton Head Group

Dear Gang,

Normally, when you get a letter from the wife, partner or secretary of Joe Glutz saying, "Of course, Joe is too modest to tell you about this himself, but I know you would want to hear that...", it means that Joe is standing over the writer with a gun at his head, telling him not to look up from the xerox machine until the mailing has been completed.

This one is for real.

Today I received the 1975 annual letter of Walter J. Schloss Associates, which included a twenty-year compilation of Walter's record since he left Graham-Newman. You may remember that I went to work for Graham-Newman in 1954. Walter left in 1955. And then Graham-Newman closed up in 1956. I would prefer not to dwell on the implications of this sequence.

In any event, armed only with a monthly stock guide, a sophisticated style acquired largely from association with me, a sub-lease on a portion of a closet at Tweedy, Browne and a group of partners whose names were straight from a roll call at Ellis Island, Walter strode forth to do battle with the S & P.

On the following page is a re-cap of his yearly performance and calculations I have made regarding compounded results. The difference between the gross results and the limited partners' results is accounted for by the fact that, as General Partner, he takes 25% of the profits - a quaint and easy-to-calculate method of tribute not entirely foreign to many of you.

Walter has had five down years compared to seven for the S & P. His superiority in such down years would indicate that not only is he a man for all seasons, but that he has special strength when facing a head wind. Maybe all of you had better watch Ben Graham on Wall Street Week this Friday.

As for me, I'm going right out and buy some Hudson Pulp & Paper.

Best,

WEB/glk

WARREN E. BUFFETT
1440 KIEWIT PLAZA
OMAHA, NEBRASKA 68131
TELEPHONE (402) 346-1400

April 15, 1994

To the Lantana Group:

Eighteen years ago, I sent you the attached memo that recounted the results Walter Schloss had achieved since starting his partnership in 1955.

The other day I received Walter's 1993 tabulation which is also attached. Accompanying these performance figures is a financial statement that should inspire Ben Graham Productions to film Citizen Schloss. Please note that Walter's total office expense is about $11,000 as compared to net income of $19 million. Fixed assets are carried at $2,605 (000's not omitted), but Walter would like me to mention that the cost was $6,569 new.

I think Walter's operational style should be a lesson for us all (one Charlie has already mastered). In effect, Walter is running his office for a year on what it costs Berkshire to start the engines on The Indefensible.

Meanwhile, Walter continues to outperform managers who work in temples filled with paintings, staff and computers. And he accomplishes this feat by rummaging among the cigar butts on the floor of capitalism. It's quite a 38-year record, a tribute to Ben as a teacher, Walter as a student, and to the advantage of a free puff.

Best regards,

Warren E. Buffett

WEB/db

Enclosures

Walter - Please put me in the partnership — retroactively to 1955 — Warren

Walter & Edwin Schloss Associates, L.P.

52 VANDERBILT AVENUE · NEW YORK NY 10017
(212) 370-1844

Results of Walter & Edwin Schloss Associates
Compared to
The Standard & Poors Industrial Average
years 1956-1995

Year Ended Dec. 31st	ASSOCIATES Net Asset Value After Yearly Payments on 1 Unit	Total Distributed Annually Per Unit	Ltd Partners Overall Gain Per Year in Percent	Associates Overall Gain in %	INDUSTRIAL Gain Per Year Incl. Divds.	AVG. Ind. Avg. at Yr.
1955	$5,082.50					48.4
1956	5,034.85	$ 306.28	-5.1%	+6.8%	+7.5%	50.01
1957	4,423.30	377.10	-4.7%	-4.7%	-10.5%	42.8
1958	5,557.90	617.85	+42.1%	+54.6%	+42.1%	58.9
1959	5,954.50	704.04	17.5%	23.3%	12.7	64.5
1960	5,909.33	463.50	7.0%	9.3%	- 1.65%	61.4
1961	6,512.30	1,170.90	21.6%	28.8%	+26.4%	75.7
1962	6,185.93	323.50	8.3%	11.1%	-10.2%	66.0
1963	6,272.18	846.66	15.1%	20.1%	+23.3%	79.2
1964	6,440.56	902.06	17.1%	22.8%	16.5%	89.6
1965	6,505.14	1,263.38	26.8%	35.7%	13.1%	98.47
1966	6,192.35	749.78	0.5%	0.7%	-10.4%	85.20
1967	6,695.30	1,094.66	25.8%	34.4%	+26.8%	105.11
1968	7,372.94	1,103.60	26.6%	35.5%	10.6%	113.02
1969	6,103.80	606.20	- 9.0%	- 9.0%	- 7.5%	101.45
1970	5,483.85	119.90	- 8.2%	- 8.2%	+ 2.4%	100.90
1971	6,426.60	453.00	+25.5%	+28.3%	14.7%	112.75
1972	6,761.94	407.52	11.6%	15.5%	19.8%	131.87
1973	5,728.52	492.12	- 8.0%	- 8.0%	-14.8%	109.14
1974	4,978.37	391.96	- 6.2%	- 6.2%	-26.6%	76.47
1975	6,640.00	461.80	+42.7%	+52.2%	+36.9%	100.88
1976	7,799.00	793.03	29.4%	39.2%	22.4%	119.46
1977	9,074.00	734.34	25.8%	34.4%	- 8.6%	104.73
1978	11,166.00	1,233.40	36.6%	48.8%	+ 7.0%	107.23
1979	11,462.00	3,036.36	29.8%	39.7%	17.6%	121.02
1980	10,200.00	3,932.00 *	23.3%	31.1%	32.1%	154.45
1981	10,026.00	2,046.00	18.35%	24.5%	- 6.7%	137.12
1982	10,718.00	1,728.00	24.1%	32.4%	+20.2%	157.62
1983	12,512.00	2,322.00	38.4%	51.2%	22.8%	186.24
1984	11,480.00	1,820.00	6.3%	8.4%	4.1%	186.36
1985	11,336.00	2,380.00	19.5%	25.0%	30.0%	234.56
1986	10,362.00	2,306.60	11.9%	15.9%	18.5%	269.93
1987	10,548.00	1,632.00	20.2%	26.9	9.1	285.86
1988	11,516.00	2,161.00	29.8%	39.7%	15.8%	321.26
1989	10,548.00	1,334.00	2.2%	2.9%	29.1%	403.49
1990	9,332.00	206.00	-12.8%	-12.8%	- 3.4%	387.42
1991	10,518.00	1,714	+31.1%	+37.3%	+29.1%	497.72
1992	10,650.00	840.00	9.2%	12.3%	4.6%	507.46
1993	11,828.00	994.00	20.2%	26.9%	9.0%	540.19
1994	12,434.00	746.00	11.4%	15.2%	3.8%	547.51
1995	13,436.00	1,626.00	21.2%	28.3%	34.3%	721.19

* In 1980, $1,500. of our distribution was a return of capital.

For the 40 year period ended December 31, 1995, the compound rate of return for the Limited Partners was 337.0% or 15.7% per year compared to a gain for the Standard & Poors Industrial Average of 52.03% or a compound rate of return of 10.4% a year.

It should be noted that most of our distributions are in the form of long term capital gains.

1994 Lecture of
The E. J. Faulkner Lecture Series

A Colloquium with University of Nebraska-Lincoln Students

by
Warren E. Buffett
Chairman of the Board
Berkshire Hathaway, Inc.

Sponsored by
Woodmen Accident and Life Company
in conjunction with
The College of Business Administration-Lincoln

October 10, 1994

WARREN E. BUFFETT

Warren E. Buffett is Chairman of the Board and Chief Executive Officer of Berkshire Hathaway Inc., a company controlled by Buffett Partnerships, Ltd. from 1965. Berkshire Hathaway Inc.'s business activities include underwriting of property and casualty insurance, candy production and sales at retail, newspaper publishing, retailing home furnishings, sales of encyclopedias, sales of home cleaning units, manufacture and distribution of uniforms, retail jewelry, and manufacture, import, and distribution of furniture.

Mr. Buffett is perhaps the most highly regarded businessperson in the United States today. His advice is widely sought, and highly treasured. He serves as a Director of Capital City/ABC, the Coca-Cola Company, the Gillette Company, Salomon Inc. and USAir Group, Inc. Berkshire Hathaway has significant investments in each of these companies. His investment acumen, buttressed by the force of his reputation, honesty, and integrity were instrumental in the preservation of one of the oldest and largest investment banking houses in the world, Salomon Brothers.

Berkshire Hathaway's annual report, authored by Mr. Buffett, is widely read in the business and investment community for its sound advice, its creativity, and its humor in explaining important principles for achieving success in business. The Berkshire annual meeting has become an "event" which not only spreads the Buffett message, but enhances Berkshire's corporate coffers through visitations by shareholders to Omaha's Nebraska Furniture Mart and Borsheim's Jewelry Store, both of which are in the Berkshire Hathaway stable.

Mr. Buffett was born in Omaha to Howard H. Buffett and Leila Stahl Buffett. His father, an investment banker, served as congressman from Nebraska's second district from 1943-1949 and from 1951-1953. Mr. Buffett married Susan Thompson in April 1952. They have three children—Susan, Howard, and Peter.

Mr. Buffett graduated from Woodrow Wilson High School in Washington, D.C. in 1947, attended the Wharton School of Finance at the University of Pennsylvania from 1947-1949 and received a Bachelor of Science degree in Business Administration from the University of Nebraska in 1950. In 1951 he received a Masters degree in Economics from Columbia University. His mentor, Benjamin Graham, was one of his professors at Columbia.

Mr. Buffett serves as Life Trustee of Grinnell College; Life Trustee of the Urban Institute; Trustee of the Business Enterprise Trust, Stanford, California; Trustee of the Wellness Council of the Midlands, and as a member of the American Academy of Arts and Science. His foundation is reported to provide funding mainly on world population issues and nuclear disarmament.

Mr. Buffett resides in Omaha, Nebraska and presides over his financial empire from that city without the "luxury" of a large staff, computer modeling or Wall Street gossip.

The University of Nebraska Lincoln College of Business Administration and Woodmen Accident and Life Company take great pleasure in welcoming Warren E. Buffett as the 1994 E. J. Faulkner lecturer.

E. J. Faulkner Lecture
October 10, 1994
Warren E. Buffett

Introduction of Warren Buffett
by Mr. John Haessler,
President and Chief Executive Officer
Woodmen Accident and Life Company

It's a great pleasure for me, both personally and on behalf of Woodmen, to welcome you to this lecture, which is 16th in a series that Woodmen has sponsored in conjunction with the College of Business Administration. We have established this lecture, as I think many of you know, in honor of E. J. Faulkner, who served for 60 years with Woodmen, 44 years as a CEO. He was a great friend and a graduate of the campus and of the College of Business Administration. Through his estate, a gift has been made and it is now being translated into the writing lab at the College of Business Administration.

We are greatly privileged and especially pleased to have Warren Buffett here. From the size of this crowd and excitement, the anticipation that's been on campus is obviously honored in the halls of the academia as well as in business.

While he needs no introduction, I think he truly deserves one. And frankly, he deserves one that will be more laudatory and flattering than I will give him, because I don't think a flowery one would comport with his sense of comfort. He's a very basic man.

Much of the activity of Mr. Buffett is highlighted on the handout that you received. He is a native Nebraskan. He was born in Omaha. He went to high school in Washington D.C. His father, who was an investment banker, also served as a congressman from the second district–Republican by the way. (Warren Buffett and I are probably the only two Democrats in this whole room.)

He received his degree from the University of Nebraska College of Business Administration; he then went to Columbia University for a masters, where he studied under Benjamin Graham, who was a friend and mentor for his life. He started, as I think many of you know, modestly in the mid-50's with a limited partnership, some friends and some relatives and about $100,000 of his money. He's built that into the financial empire of Berkshire Hathaway, and he has now become the richest person in America.

Continued

Now, I know that some of you have seen *Forbes*, and Bill Gates has supposedly passed him in the last year. But nobody wants to tell Warren that. Today, we're going to say he is the richest person in the United States. Besides, we'd already invited him before he slipped.

But wealth is not a very good definer of the man. He has said he enjoys the process far more than the proceeds, and I think that's true. He got his wealth the old fashioned way—he earned it. And he did it not by the sweat of his brow, but by leveraging his brain. And he did it by using his own assets and not somebody else's, and certainly not somebody else's debt. He did it by thinking, and that doesn't sound too unique but in one of his annual reports, he quotes the observation of Burton Russell "that most men would rather die than think and many do." And he says this applies with unusual force in the financial world. Not only is he a thinker, he's an investor; he's not a speculator; he builds; he doesn't tear down. He creates jobs; he doesn't displace persons. And talking about investing and speculation, he writes, "Indeed, we believe that according the name 'investors' to institutions that trade actively is like calling someone who repeatedly engages in one-night stands' 'a romantic.'"

In his annual reports that you've read avidly, he quotes unusual people. Talking about diversity as not being necessarily good, he quotes Mae West, "Too much of a good thing can be wonderful." In talking about extracting himself from a bad deal that he felt was a bargain when he went into it, he refers to a gentleman in a country western song that said, "My wife ran away with my best friend and I still miss him a lot." His style, his humility, his lack of pretense is probably best represented or at least well represented in setting up some details for this lecture. One of the questions was, "Do you want extra security here?" His answer, "We don't need any security, just ask the attendees to check any soft fruit at the door."

Ladies and Gentlemen, it is a great pleasure to present a true legend in his own time, the oracle of Omaha, Warren E. Buffett.

Warren Buffett's opening remarks and conversation with students:

Testing. One million, two million, three million.... Somebody yelled out from the back, earlier, "I can't hear you." I was giving a speech a few weeks ago and the same thing happened. Somebody said, "I can't hear you." And, then someone in the front stood up and said, "I can. Let's change places."

It's really good to be here today. I have a lot of great memories of the University. My mother and father met here when my dad was editor of the *Daily Nebraskan* in 1924. My mother had worked for her father's tiny paper in West Point. And so, when she came here, she went into the *Daily Nebraskan* to apply for a job and met my dad there. Within a couple of years, they were married. Then about twenty-five years later or thereabouts, after two years at the Wharton School at the University of Pennsylvania, I transferred here and I must say that I thought that my year here was considerably superior to either of the years I'd had at Wharton. I got a lot of education. Ray Dein from here was a terrific accounting professor at that time. We were reminiscing earlier a little bit about Carl Arndt, who taught Economics. Professor Arndt, when he taught Economics, would leave the room during the exams. We thought that was very trusting of him. He explained that, well, he could do that because, although we had the same exam, he had different answers for the odd and even numbered seats.

I would like to talk to the students, primarily, a little bit about your future because an experience I had a couple of years ago may tie in with that. Then we'll get into questions and what's on your mind. But I did have an experience in 1991 that may have some applicability to you students in the room.

What happened then was that on a Friday, August 14, 1991, I received a phone call at a quarter of seven in the morning. And, it woke me up, I'm sorry to admit. That early-to-bed, early-to-rise stuff is, well, you can forget that. I'm not going to give you any of that. In any event, I got this call and on the other end were some people in a conference room, obviously on a speaker phone. They told me that the top management of Salomon had been told the previous night, by the President of the New York Federal Reserve Bank (and he is the most important man in financial markets in the world; he is not that well known, the Chairman of the Fed would be better known), but the President of the New York Fed, in terms of financial markets is number one, and his name is Jerry Corrigan. Mr. Corrigan had told the top management of Salomon that they were unacceptable to be running the institution; and he meant, immediately. So they decided the next morning that they were going to leave. They had to leave. And they were calling to say that as of that time there was no one there to run the institution.

That was a rather serious situation because at that time, Salomon owed more money than any other institution in the United States, with the exception of Citicorp, the big bank. Citicorp owed a little over $200 billion. Salomon's total liabilities were just under $150 billion. Now, $150 billion was roughly equal to the profits of all of the companies on the New York Stock Exchange in that year. So, it was more money than the Bank of America owed. It was more money than American Express owed. It was more money than Fannie Mae owed. Only Citicorp owed more money. The problem about this $150 billion was that basically, it almost all came due within the next couple of weeks. Unlike Citicorp or the Bank of America or Manny Hanny or the other big banks, people who had lent money to Salomon were not

protected by FDIC insurance, so they could not look to the government that way. And, they were also not protected by what's called the "Too Big To Fail Doctrine". Basically, people feel, although the Fed has not been terribly specific about it, that any of the really big banks will not be allowed to fail because the Fed is worried about a domino effect. So, if people were worried about the solvency of Citicorp or Chase or somebody like that, they didn't really worry about their deposits there because they had both FDIC insurance and they had this "Too Big To Fail Doctrine". Salomon had neither. So, we were faced with the fact all over the world, because this money was owed all over the world, that people on that Friday and the following Monday were going to want us to pay back $140 odd billion or something close to it, which is not the easiest thing to do.

I went to New York that afternoon, and I met with Mr. Corigan that night. I won't forget that because when I went in, in kind of a light way, I said to Mr. Corigan, "The only thing I owe personally is $70,000 on a second home I have in California and that is because the interest rate is cheap. I may need a little help," and I smiled kind of weakly. He gave me this steely look and he said, "Prepare for all eventualities". I didn't know exactly what he meant by that but I certainly thought of strychnine or something of the sort. So anyway, one immediate problem I had was that my basic job was going to be dealing with regulators and Congress and all that sort of thing. And, essentially, we had to reassure the world, between that Friday night and the following Monday morning, that Salomon was not going to collapse or we were going to have a run on the bank.

This is where the story starts becoming applicable to this group. One of the things I immediately had to do was to find somebody to run the place. This was a company with 8,000 employees; perhaps 500 or more in Tokyo and 1,000 or more in London. And, spread all over the world, we owed $10 or $15 billion in Japan and similar amounts in Europe. So, there was a real problem, in terms of who was actually going to run the place day to day.

This is a company that, because it has a very big government securities operation, now does over $200 billion of business a day. You don't make very much money on it, but that's close to three times as much business as Wal-Mart does in a year. Now, it is a different sort of business. But it does require someone who knows what is going on, and I didn't know the business or the details of the business at all. So, I was faced on that Friday night with the problem of deciding who would run this place and then making a recommendation to the Board, that was going to meet on Sunday. There were about a dozen candidates for that job who were high up in Salomon. I only knew four or five of them by their faces. I knew most of the twelve by name, but I only had met four or five of them. This was the most important hiring decision in my life.

I hope all of you are going to go out and get hired in the next few years. And, it might be interesting to know what went through my mind in making that important hiring decision because it may be going through the minds of some of the people that you will be facing in the next few years. What I did was interview those twelve people. We had one discussion on Friday night because they were in an uproar about something or other, and then the next morning, I interviewed these people serially over a three- or four-hour period. Now, the good news is that I did not ask them their grades in business school. You can relax. But, the bad news is, of course, that I didn't even ask them whether they went to business school. I did not ask for their résumé. I never saw a résumé on the fellow that I decided on. I really had to decide in that time who was going to be the best person for me to go into a fox hole with and who was going to be able to lead this organization during an extremely difficult period, when people would be quitting, when customers would be badgering them,

and when lenders would be pulling out—all of that sort of thing. I didn't give them an IQ test. I had twelve people there who all were smart enough to run the place. And, most of the people in this room, a very significant majority, would be smart enough to run the place.

Most businesses do not require somebody with a staggering IQ. I wasn't looking for Forrest Gump, either. But, the dozen or so had all the IQ necessary; they had all the drive necessary. These are people who were used to working twelve hour days and had lots of push. So, it was not a question of energy. It was a question of who, in my view, with both of those qualities already a given, really was the highest quality individual. It was the person who would not stick a gun to my head after he took the job, because I couldn't afford to fire whoever came in and I couldn't afford to have him quit on me when the going got tough a week or two weeks or month later, because with one more event like that, it would have been curtains. So, I really had to be sure of the steadfastness of the individual. I had to be sure he was up to it temperamentally, because the pressures would be enormous.

The person I decided on never asked me then; he never asked me a week later; he never asked me a month later, what the pay was. Basically, he was a battlefield promotion and he behaved like he was a battlefield promotion. He could have come to me and said, "Look, I could go over to Goldman Sachs and make 'X' this year and this is going to be much tougher so I want 150% of 'X' from you". He never said a word about that. As a matter a fact, in the first year, just to set an example, he reduced his pay, running the whole place for less than he had made running the Tokyo office the year before. He never asked me to indemnify him against the lawsuits that would be forthcoming if the place failed. If things had gone bad, and you couldn't tell whether they would or not, we were going to get sued by everybody in the world. And, if Salomon had gone under, its indemnification would have been no good.

So, it would have been perfectly reasonable for this person to say, "Well look, I'll take this job but who knows what's going to happen and if it happens, Salomon isn't going to be good for it. So why doesn't Berkshire Hathaway or why don't you personally indemnify me against the lawsuits I'll be facing the rest of my life if this goes sour?" He never said a word about it. It wasn't because he was dumb and didn't know enough to ask that. He just felt it was not the right thing to do under those circumstances. So, in the end, I picked out the individual there who I felt was an outstanding human being. He never let me down. He took on that job the next day. We came out of a directors' meeting at three in the afternoon. And, there were these twelve people out there and I just walked up to him and said to him, "You're it, pal". And, we went right from there down the elevator to meet a couple hundred reporters who had come in on a Sunday afternoon and who were plenty hostile in some ways. He sat up there on the stage with me and answered questions for three hours. And, I knew then I had made the right choice.

Now, the interesting thing about that choice is that the qualities that attracted me to him were not impossible for anyone to achieve. He didn't have to be able to jump seven feet. He didn't have to be able to throw a football sixty yards. He didn't have to be able to remember every bridge hand he played the previous year or something of the sort. There was no feat of intellect or something like that. What he did was bring qualities like steadfastness and honesty. I knew he would tell me the bad news. I always worry about that with people who work for me. They don't need to tell me the good news. I just want to hear the bad news. I knew he would not get his ego involved in decisions. I knew he would not be envious or greedy or all of those things that make people unattractive. And, the truth is, that anybody can have those same qualities that Deryck Maughan, the fellow I picked, exhibited. They are not feats that are beyond anyone. They are simply a matter of deciding what you are going

to do and what kind of person you are going to make out of yourself, and then doing it.

John mentioned Ben Graham, who was my teacher at Columbia University. When he was twelve years old, he sat down and made a list of the qualities he admired in other people; and he made a list also of the qualities that he found unattractive in other people. He decided that it was just an act of will and then habit to develop those attractive qualities and to get rid of the unattractive qualities. Anybody can show up on time; they cannot claim credit for ideas that are not their own; they cannot cut corners; they can avoid envy. All of those things are doable and they make an enormous difference in how you function, not only in your job but in society subsequently.

I'll give one more illustration. Let's just assume when you got out of school, that you won a lottery of some sort and you were entitled to pick one of your classmates, and you got 10% of the earnings of that classmate for the rest of his or her life. You had about an hour to make up your mind. Now we'll leave out picking the son or daughter of the richest person around or something of the sort; let's say we're all starting from scratch. Now, who would you pick? Just think about that for a moment. You wouldn't give them an IQ test. You probably wouldn't look at their grades. You'd probably think, who's going to function best when they get out there? If they had a 300 horsepower motor, who's going to get 300 horsepower out of it instead of 150 or 100? You'd look for who is going to function best And, you would look for people with those qualities that you admire, but which are also attainable by you and which become a matter of habit after time.

Somebody said that the chains of habit are too light to be felt until they're too heavy to be broken. It's absolutely true that the habits of behavior you start out with will follow you the rest of your life. And, as you think about that person whom you would like to buy the 10% of, the person whom you find admirable or attractive, the answer is that if you want to sit down and do it yourself, you can be the one that you would buy 10% of. It is not that difficult. One friend of mine said that in hiring they look for three things: intelligence, energy, and character. If they don't have the last one, the first two will kill you because, it's true, if you are going to hire somebody that doesn't have character, you had really better hope they are dumb and lazy, because, if they are smart and energetic, they'll get you in all kinds of trouble. Well, that's enough of the advice.

Let's tackle the questions that you are interested in. Make them as tough and impertinent as you like because it makes it more interesting for me and it probably makes it more interesting for the audience. So, feel free to throw your hard one.

Q. In a sentence or less, could you please tell me what is your personal philosophy of life? And then my follow-up question, why?

A. Well. I'm not sure I have any brilliant philosophy of life. I certainly enjoy life. I like my life as much as anybody possibly could. I mean, I love every day and one reason I do is that I am fortunate in that I only work with people I like. I consider myself very lucky to be in that position. If you work in a job where your stomach churns and you find yourself dreading going to work and all that sort of thing, essentially, that is really like marrying for money, which is probably a dumb idea under any circumstances. And, it's absolute madness if you are already rich. I've been very fortunate in that I have no stress whatsoever. I'm going to try and outlive Mrs. B. I mean it. I tap dance on the way to work. I do believe in working at something you enjoy. I gave this advice one time at Harvard when somebody asked me, "Who should I work for?" I said, "Well, go work for somebody you admire. You're bound to get a good result." A couple of weeks later, I received a call from the Dean, and he said, "What did you tell that group? They've all decided to become self-employed!"

Q. If you could look in your crystal ball, what kind of sector stocks would you look into in the next few years? What kind of stocks do you think will boom?

A. That's an academic question if I ever heard one. Just a little theoretical.

Q. What exactly do you do all day?

A. Getting right to the core here, aren't you? I spend an inordinate amount of time reading. I probably read at least six hours a day, maybe more. And I spend an hour or two on the telephone. And I think. That's about it. We have no meetings at Berkshire. We've never had. We have businesses around the country; we have some 20,000 employees, but we've only had one meeting of our managers in the twenty-some years I've been there, to talk about health care—one time. But, they never come to Omaha. We never have presentations. We don't have a slide projector. We don't do any of that sort of thing. Our board of directors meets once a year, right after the annual meeting. We have lunch and that's it, because I hate meetings, frankly. I have created something that I enjoy: I happen to enjoy reading a lot, and I happen to enjoy thinking about things. It is a little crazy, it seems to me, if you are building a business and creating a business, not to create something you are going to enjoy when you get through. It's like painting a painting. I mean, you ought to paint something you are going to enjoy looking at when you get through.

Now, I know I'm avoiding your first question about what I should buy this afternoon. I don't think much about that. I don't think at all about what the stock market will do or what given stocks will do in the very short term. We do try to own, and to look at stocks, as pieces of businesses. And, that is crucial in my view to the investing process; that is, to not think about a stock as a little ticker symbol or something that goes up or down, or something of the sort, but to think about the business that you own.... Same way if you were deciding on a business to buy in Lincoln. You might think about buying a dry cleaning store or a grocery store or whatever. You wouldn't think about what this business is going to be selling for tomorrow or next week or anything. You would think about whether it's going be a good business over a long period of time. And that's what we try and do. So, if you look at the portfolio of Berkshire, you will see the kind of businesses that we like to own.

Our biggest single holding is Coca-Cola. We own a lot of Gillette. Those are two of the most dominant companies in the world in their field. And they are also companies that are not subject to a lot of change. We don't want to own things where the world is going to

change rapidly because I don't think I can see change that well or any better than the next fellow. So, I really want something that I think is going to be quite stable, that has very good economics going for it. Coca-Cola sells 47% of all the soft drinks in the world. That is seven hundred and fifty million eight-ounce servings a day around the world. That means if you increase the price of Coke one penny, you would add two and a half billion dollars pre-tax to the earnings. So, that's the kind of thing I can figure out. And, Gillette, I mean Gillette is marvelous. Gillette supplies over 60% of the dollar value of razor blades in the world. When I go to bed at night and I think of all those billions of males sitting there with hair growing on their faces while I sleep, that can put you to sleep very comfortably.

Q. Have you ever thought of opening your own stock school?

A. No, I've got my occupation for the rest of my life. I plan to keep running Berkshire Hathaway.

Q. The problem with money is that it tends to flow toward the emotional part of the human being. And, I guess what fascinates me about you, in what I have observed in the media and so forth, is that you tend to keep a clear, cool head. For example, when you hired that fellow from the Tokyo office, you were adding up certain factors that were tangibles. I wonder if you do the same when you buy stocks, and what happens when they turn out to be "dogs", like USAir and Salomon Brothers. Obviously, those didn't pan out as expected when you bought them; however in the fullness of time, one can never tell.

A. You can probably tell on one of them, anyway.

Q. If you are talking about Salomon Brothers, I think you once referred to them as a cash cow; however, when you buy a stock like that, how much of it is just simply a result of Warren Buffett's many, many years of reading six hours, making phone calls, and thinking at night? Or, how much of it comes down to a gambler's feel or intuition? Is it that much?

A. I would say there is no hunch or intuitiveness or anything of the sort. I mean, I try to sit down and figure out what the future economic prospects of a business are. I try to figure out whether the management is someone or some group I both trust and admire, and I try to figure out whether the price is right. I mean that: It's the right business, the right people, and the right price. There are a whole bunch of businesses I don't know the answer on. If you take all the companies on the New York Stock Exchange, a couple thousand plus, I don't have a view on a great many of them. I am familiar with them but I just don't have the faintest idea what is going to happen in the future. So, I try to narrow it down to what I call my "circle of competence". The important thing in your circle of competence is not how big the circle is. It isn't the area of it. It's how well you define the perimeter. So you know when you are in it, and you know when you are outside of it. And, if I have any advantage, it's probably that I know when I know what I'm doing, and I know when I don't know what I'm doing. That's key in the securities business. You have to make very few correct decisions in securities to get very rich. You don't have to do a hundred smart things. If we do one smart thing a year, (a) my partner will be surprised, and (b) that's plenty. I mean, that's more than enough. And, that's all I want to do. So, I'm looking for the one idea.

But you are correct that everything I look at over the years, all the reading I do and everything, comes together at some point in terms of giving me the feeling that this particular decision is within my "circle of competence". And, when it is within it, I'm willing to go very big. I do not believe in taking baby steps when you see something that you really

understand. I never want to do anything on a small scale because, what's the reason? If I'm doing it on a small scale because I'm not that sure of my opinion, I'll forget it entirely and go onto something I'm sure about.

Q. Yesterday in the *World Herald*, it was reported that a multi-millionaire with no blood relatives left $5.6 million to the U.S. government.

A. I saw that.

Q. And that money would cover less than two minutes of government spending. If you had no blood relatives and no charitable foundation, would you leave your money to the government? Assuming, of course, it would take longer to spend your fortune.

A. Well, I have one of the blood relatives here today who's monitoring what I'm saying. I read the other day about a fellow who left all of his money to his wife on the condition that she would remarry, so at least one man would mourn his passing. I would say this, when you rule out the philanthropic, that gets tough. If you leave it to the government, you're leaving it to society, basically. I would rather leave it to people, very high-grade intelligent people, to spend in the interests of society rather than simply to reduce the debt or the deficit that year.

You know, if you told me that I couldn't leave it to an individual or to charity, I mean, at that point I would be pretty much stuck. It would be like having a 100% estate tax, in effect.

I would say that I got my money from society. If you stuck me down in the middle of Bangladesh or Peru, I wouldn't be worth a damn. I have some talents that are particularly suited to this particular economy. I get a lot from society. I get to live exactly the kind of life I want to live; and then not to give it back to society seems a little crazy to me. So, essentially, everything I have will go back. And, I will not try to direct what the trustees do ahead of time. I just want to pick very high grade people, smart people, very few people because if you get a large group, it will bureaucratize. I've got six trustees on the foundation and they will do a much better job above ground after I die than will be done if I start giving them instructions from beneath the ground. I'm very satisfied with the arrangement. The only thing I've instructed them to do is try and do something big. I don't believe in lots of little things.

Q. Well we certainly hope you live to be 150, 200. Someone with your character needs to stay around.

A. Thank you. Thank you.

Q. I was wondering if you had a role model.

A. Yes. I call them heroes, but I've had a half a dozen or so heroes in my live. I've been extremely fortunate in that none of my heroes ever let me down. I never, never had a situation where I was disappointed in any one of the half a dozen or so, starting number one with my dad. And, that's a great thing. I think it's very important to have the right heroes. Now they call them role models or whatever; but you're going to take your cues from somebody. You're going to pick up the habits, and qualities, like I talked about earlier, from somebody. Fortunately I had some terrific people who were helpful to me in that regard. I went through a period, when we first moved to Washington, where I was antisocial for awhile. And, really having the right heroes pulled me through that as well as anything.

So I say, choose your heroes carefully, and then figure out what it is about them that you admire. Then figure out how to do the same thing. It's not impossible.

Q. Was your investment with the Equity Fund of Nebraska a one time offering?

A. No. About a year or so ago, the Governor, or a group connected with the Governor, organized a fund to sponsor low income, affordable housing in the State. These funds have existed around the country and we had participated in those national funds; so he asked if we would participate in the Nebraska fund. We said yes, and we will participate in the future. I hope that the participation becomes broad, because it not only has a good social purpose, but it's a perfectly intelligent investment. So, it is not like there is any sacrifice on our part in doing this. This is something that makes economic sense for Berkshire Hathaway. And, I would hope that other businesses around the State would join in. It's not a one-time thing.

Q. How would a young entrepreneur, like myself, get start-up cash for my business?

A. Get start-up capital? Well, that's a tough question because compound interest is a little bit like rolling a snowball down a hill. You can start with a small snowball and if it rolls down a long enough hill (and my hill's now 53 years long—that's when I bought my first stock), and the snow is mildly sticky, you'll have a real snowball at the end. And then, somebody says, "How do you get the small snowball at the top of the hill?" I don't know any way to do it except spending less than you earn and saving some money, unless you are lucky enough to inherit some.

In my own case, you know that I was always interested in investing, so I started saving when I was about six and by the time I got out of school, I had about $10,000. It is much easier to save money, obviously, before you have a family than after you have a family. I've always felt that one way to do it, if you've got a job and it's meeting your needs (in my own case, I delivered papers and that's an ideal job for a couple hours a day), is to take a second job and save all the money from that. Getting the initial stake, being ahead of the game, is enormously important in life. It is so much better to be working from a position of strength and have a loaded gun. That may be a fairly small amount of money. Ten thousand dollars doesn't sound so big, although it was probably the equivalent of close to $100,000 now. That was my edge. If I hadn't had that, I wouldn't have had anything to work with subsequently. There isn't really any way to get capital except to spend less than you earn. That's easier when you are very young than at any other time—certainly before you have a family.

Q. Mr. Buffett, I'd just like to know if there is any truth to the rumor that you have been taking Cornhusker quarterback recruits out to dinner?

A. Nope. If I knew any good ones, I think I would, but.... If anybody here is healthy and feels like they can throw that ball sixty yards, stand up. I've got an intense interest. I think we have the best football coach in the United States. He and Nancy are both truly outstanding human beings. I know that personally. I would love to see everything come together. I think he has had a lot of bad luck this year.

Q. Mr. Buffett, I believe the Nation's tax code does not provide the incentives for businesses and individuals to save and invest. Without these incentives, the growth of the Nation's economy is limited. Would you support a broad-based consumption tax, such as a value-added tax, combined with offsetting reductions in the capital gains tax and corporate and individual tax rates, to encourage more savings and investment in our economy?

A. Well, I would say this, for various reasons, one of which is encouraging savings, but for other reasons I would favor a progressive consumption tax—a tax where the rates go up as you consume more. I would not favor a flat tax because that's proportional. That would be like having the same tax on everybody, paying the same percentage. And, I really feel, in terms of equity, that a progressive consumption tax is the most equitable tax. I also think it would have the greatest long-term benefits, although in the short term it would actually hurt the economy. But, over time, I think it would provide more investment and that will provide essentially a higher standard of living. Unless it is progressive though, it's unfair to have that or a national sales tax or anything that's strictly proportional, because it gets very regressive and, frankly, I think those people who consume far more than their fellow man are making withdrawals from society's bank effectively when they consume. I think they should pay higher rates as they get up in the high rates of consumption.

But, I've urged a progressive consumption tax and it's achieved somewhat more currency with economists and politicians now than it had 10 or 20 years ago. It was limited to a few academic areas a couple of decades ago. Senators Nunn and Domenici put out a report about 18 months ago, where they recommended something which was equivalent to that. I think they call it USA Unlimited Savings Account. I would say this, though: The tax rates are more conducive to savings now than they were when I was down here five or six years ago. It's not like the situation has gotten worse, in terms of savings. This will sound a little Pollyanna-ish, but it is still relatively easy to save money in this country compared to most economies in the world. A consumption tax or an unlimited IRA, in effect, would make it easier. But, this is not a tough economy compared to most of those around the world in which to save.

Q. Mr. Buffett, I was just wondering if Charlie authorized the flight over today or did you have to drive?

A. This gentleman is referring to the fact that I have a partner named Charlie Munger, whose grandfather was a Federal Judge in Lincoln. Charlie actually worked in my grandfather's store, but not at the same time I did. I met him later in life and he has become my partner. Charlie and I have been partners in business one way or another for decades. We've never had an argument. We have different opinions on things, but we get along extremely well. Charlie overdosed on Ben Franklin early in his life, so he thinks that a penny spent is a penny lost, or something like that. This is the guy who, you know, has a prayer session before he takes the bus and, therefore, when I bought a plane, I was going to put his name—"The Charles T. Munger"— on the plane just to stick it in him a little bit. Instead, I just decided to call the plane "The Indefensible." And that is sort of like the wolf, you know, baring his throat when he is losing to another wolf! So, I did not fly here today. But it is true that I contemplate flying to the drug store every night! I'm in love with this plane, and I'm the same person who gave all these speeches against planes in earlier years. Then I had this counter-revelation, as they call it, and now I've fallen in love with the plane and it's going to be buried with me!

Q. Mr. Buffett, does it bother you not being the richest man in America?

A. Well, as *Forbes* pointed out, they must have counted Bill Gates' house. I mean, he's got me in that department. He's a good friend of mine, incidently. We have a lot of fun together. Bill came in to Borsheim's—I can tell this because he tells it—to buy an engagement ring for Melinda, his wife. He came in to Borsheim's a year ago Easter. They were in Palm Springs, and he told Melinda it was time to go back to Seattle, and when they went to the plane, the

pilot reported the weather in Seattle, and everything else, so it sounded as if they were going to Seattle. Then Bill kept her occupied, so she didn't notice where the sun was. They landed in Omaha on Easter Sunday about four or five o'clock. We opened Borsheim's just for them. I said to Bill on his way out, "It's none of my business—who am I to give you advice?—but when I bought an engagement ring for my wife in 1951, I spent 6% of my net worth on it!" We didn't have quite as big a day that Sunday, as I'd hoped.

But as to not being the richest, the money is a by-product of something I enjoy. It's like somebody that enjoys painting; and if you can sell your paintings for a lot of money when you get through, great! If you enjoy the painting when you get through, great too! I've had as much fun working with small sums as large sums, but I have as much fun working with large sums as small sums, I might add. The same thing is true with Bill Gates. I mean, he loves what he does. He would do it if they gave him sharks' teeth instead of cash at the end of the day. And, my guess is, that helps him do it well and helps me do it well, too. But I'm keeping an eye on him. I had a dart board that somebody gave me to select stocks. I threw darts at it but it didn't work very well. So, I sent it to him last week.

Q. Mr. Buffett, I've been led to believe that you have some musical ability. And, I want to know: Do you still play the ukulele?

A. I play it very occasionally. A year from now, Mrs. B is going to attend, close to her 102nd birthday, the opening of the Rose Blumkin Performing Arts Center in Omaha, which was formerly the Astro movie theater. She bought that theater about 15 years ago, when it was going to be torn down. The reason she bought that theater is that it's the site of one of the first good things that happened to her in this country. Back in the mid-1920's, her daughter, Frances, won a prize there, a five-dollar gold piece for singing "Am I Blue?" And, at the opening a year from now, Frances is going to sing "Am I Blue?" I'll accompany her on the uke.

About my playing the ukulele—I did play it at the Press Club with the Governor. But my next appearance will be at the Astro next fall.

Q. The quality that I value most in any leader is integrity, whether that leader be in business or a leader in government or whatever. Do you feel that leaders in business today and the government do have a high degree of integrity? And, has it declined since you started your business?

A. It's very hard to say. I think the American public thinks it's probably declined as evidenced by polls. My own feeling from a fair amount of exposure to people in a lot of arenas, including political and business, is that the pattern is not terribly different from what you would find in the population. If you take any large group, you will have some kind of bell-shaped curve where you will find a lot of people in the middle, who, under most conditions, will behave well, but when they are in really difficult situations, they won't. You will find people who are just outstanding on the right-hand side of the curve and those are the people who are my heroes, frankly. I don't think it has changed much over the years; that's my impression. I think that's true in politics, too. A lot of people yearn for the good old days and all that sort of thing, but I don't think the human animal changes too much. I think the only way humans change is if they get into a new culture and adopt the mores of that culture. I think it's easier to drop down, unfortunately, if you get into a kind of jungle type culture, than to move up if you are in some monastic-type culture. But, I don't think that the culture is materially different from what I saw in politics or in business 30 years ago.

There are some outstanding people in both, and they're really the ones to focus on and try to emulate.

Q. What do you think the government is currently doing that they should stop doing? And, if you were President, what would be the first change you would make?

A. If I were President, the first thing I'd do is demand a recount. That is a job I would not like to have. There are a lot of jobs I would not like to have, but that would probably be tops on the list. I think it's very tough because I've seen a little of it, and I've even experienced a little tiny bit. It's very tough to manage any extremely large organization. Maybe Dr. Spanier will agree with me on that, too. You have a really complex organization with loads of people that have to be decision makers under you and huge budgets. That is very difficult to manage. Then think about the fact that the most time you are going to have to do the job in is eight years. Changing cultures is really tough. I've had a little experience with that. The trick in business is to get in with a culture that's already the right kind. And, we've had good luck doing that. When we invest in a Dexter Shoe or See's Candy, that is very easy, because they have grown in a certain way because the head people think about doing the right things. I think it would be very tough in government. If I had my way, there would be a progressive consumption tax. There wouldn't necessarily be a balanced budget. But, the national debt would grow at a rate that would be less than the growth of the Gross Domestic Product. In other words, I would make sure that debt in relation to income did not increase.

But, in terms of specific programs, you know I have no great ideas. I would probably—since I'm not running for office, and this is already scheduled to come in a couple of decades— I would probably extend the age at which Social Security kicks in, because I think the world is a lot different than in 1937 or whenever the retirement age was put in at 65. I think people are very productive at that age. If you look at demographics for people under 65 to support people over 65, it is a much different chore than it was 60 years ago. I just think there are more productive years, so I would have Social Security start somewhat later. That would save a lot of money. It would also not get the vote of the AARP or other organizations.

Q. I've heard that you feel that all universities should teach a course in common sense. I was just wondering: What is your definition of common sense? What should this course teach?

A. Well, I don't know whether I've said they ought to teach a course in common sense because I'm not sure you could teach it. But, I do find it amazing how many people with high IQs get off the track. It's astounding to me how people who are really very smart manage to engage in so many self-destructive actions, and I'm not just thinking in terms of business. I have no real prescription, as I look around at the people whom I think are extremely sensible. I don't know quite how to transplant that or teach that to other people. I think a lot of people make things more complicated than they need to. There is nothing complicated about the way we invest. It is very understandable. I've felt that before people buy a stock, they should take a piece of paper and simply write "I'm buying General Motors at 47," or "I'm buying US Steel at 83." They should just write out what their reasoning is, and they should be able to get it all on one side of one piece of paper. In fact, they should be able to get it into a paragraph. Almost all of the big, great ideas in business are very simple. Sam Walton's idea was very simple at Wal-Mart. It's not hard to do. If you want to accomplish something, and this ties in a little bit with common sense maybe, you have to have focus. Mrs. B had focus. Mrs. B never went to school a day in her life, and she ran rings around all kinds of people because she's smart and energetic. She was also focused. Tom

Watson, who started IBM, was the same way. He said, "I'm no genius. I'm smart in spots, but I stay around those spots," and there is a lot to that.

Q. I'm a doctoral student in the School of Music, and my question has to do with arts funding. I'm wondering where you think the responsibility for funding for arts programs would lie. Would that be with governmental programs or with businesses or private individuals?

A. I think it's with government programs and private individuals. I mean, I think it's probably a combination needed on that. If you go back 50 or 75 years, it was entirely private. But, I think, in terms of a lot of activities like that, there is a place for both the government and for private funding.

Q. I've heard that you refuse to assist your children financially. Is this true? And, what did you get from your parents financially?

A. Well, I got all kinds of good things. But, I didn't get money. And, I really didn't want it actually. I don't think I could have been raised with a better pair of parents. That was enormously important. I don't believe in making kids rich. I just think it's wrong in terms of society. I hear these people who lecture about the debilitating effects of food stamps on the poor. They say, "You know, you give them food stamps, and they get dependent, and then the next generation wants more food stamps," and all that sort of thing. What is the difference between that and some kid who gets a lifetime supply of food stamps at birth through inheritance, you know, except the food stamps are called stocks and bonds and the welfare officer is called a trust officer? They never seem to see the debilitating effects of having some big trust fund for themselves. I basically believe that if you are rich, you should leave your kids or give them enough so they can do anything but not enough so they can do nothing. I just think that makes sense. I don't think it should be like they were born into total poverty, and I don't think they should be entitled to live a life of doing nothing, essentially living off this stored-up supply of food stamps which somebody handed them. So, that is my own personal philosophy on it.

Q. Mr. Buffett, I would like to ask you about your political involvement. This year, we've seen a lot through the media of your being finance chair for Senator Kerrey and helping Congressman Hoagland in Omaha. My concern is, it seems like at least the business publications I read and the business organizations that I'm involved with aren't real supportive of those two individuals because of maybe increased taxes, regulation, and government-run health care. Can you explain to me your involvement with that and why you support those individuals that seem to be opposed to some business incentives?

(Aside. Mr. Buffett receives a can of Cherry Coke.)
Sure. Thank you. This stuff will do wonders for you. If you are wondering, we get the profit from one out of every 14 of these, so it does my heart good.

A. I was president of the Young Republicans Club at the University of Pennsylvania in 1948 and, of course, grew up in a Republican household. I vote for plenty of Republicans. I mean, I'm not a card-carrying Democrat, although I'm a registered Democrat and have probably voted for more Democrats than Republicans. It would be pretty close. I don't like to get mixed up in politics much, but in this particular case, I've supported the two you mentioned for precisely the reason that some people are opposed to them. I felt that both Hoagland and Kerrey made a vote that they knew would be politically disadvantageous, perhaps even politically fatal. And, they did that for what they thought was for the benefit of society, whether you agree with them or not.

Now, that is the hardest thing in the world for a politician to do. It would be hard for me to do. I love the job of running Berkshire Hathaway. If I knew I was going to make some vote that might cause me to lose that job, I'm not sure how I would behave. So, I saw both of those fellows make a vote, and there was no question that it was going to hurt them politically. They had no problem assessing the mood of their own voters or voters around the country. So, they did that and I thought that was exactly the way a legislator is supposed to behave. I felt it was very important. I would have had a much different deficit reduction act than came forth, but that is not the question because you'll never be happy with every aspect of the bill. I felt it was important to the country that something be done at the time, and that was the bill to be voted on. It was a very close vote, as you know, and both of these fellows stood up and voted for it. So, I felt under those circumstances if I could help in any way by identifying with them, I would be delighted to do so. They stood up when it counted and I felt that I should, too. That's the reason, but basically I'm not big on getting involved in politics and it's not because they are Democrats. That's immaterial to me.

Q. You keep a very lean machine going at Berkshire Hathaway. How do you keep it so lean when it grows so much?

A. Well, that's a good question, because now we have 22,000 employees or maybe 23,000 or even 24,000, I guess. We probably had 1,000 twenty years ago but we've still got 10 or 11 people in headquarters. I really believe in keeping things simple. We have no inside counsel. We have no public relations people. We have no guards. We have no cafeteria. And, it's a lot easier to run that way. Frankly, I think way more gets done than if you have floor after floor of people that are reporting to people on the floor above them. I see so much waste in most companies and once it gets there, it is very hard to get rid of. It's much easier never to get there. My pal Charlie says that, "All I want to know is where I'm going to die, so I'll never go there." And, that's the way I feel about a large organization. I mean, that would be business death as far as I'm concerned, so we're not going to get there. It's not a problem keeping it down. We just don't hire anybody and we won't. I buy and sell all the stocks myself. Some people say, "How many people can you have reporting to you in a business?" That's standard organizational management stuff. They say, "The optimum number is this" or something like that. The answer is, if you've got the right kind of people, you can have tons of people. You can have dozens and dozens and dozens of people, if they know what they are doing and they like their jobs. But if you have somebody who's a clown, one is too many. They will drive you crazy. The trick is having the right people. We have been very fortunate in getting in with people who are extremely able at doing their jobs.

We bought H. H. Brown, which is a work shoe company, three years ago. It has probably 4,000 employees, and two hundred and fifty million dollars in sales. I've never been to one of their plants. No one ever has. Maybe they don't even exist. I mean, maybe those guys sit there every month and say, "What figures should we send Warren this month? $2.8 million, will he like that? Yeah, he'll probably like that, let's mail it to him." I've got the right kind of people. If you've got the Blumkins running the Furniture Mart or something, what can I do, you know? Should I go out there and tell them we should price this stuff at $498 retail instead of $398? I don't know anything about it.

Three quarters of our managers are independently wealthy. They don't need to get up and go to work at all. Most of them have tens and tens of millions of dollars. So, I've got to create or I've got to maintain an environment where the thing they want to do most in the world is to go to work that day and the next day. And, I say to myself, "What would make me feel that way?" One way is to feel you are running your own show. If I had people second-guessing me all day, I would get sick of it. I would say, "What the hell do I need this

for?" And, that's exactly the way our managers would feel if I went around second-guessing them or telling them how to run their business. So, you can get by with very few people if they are good people. That's what we try to do.

Q. You said that you look at three things when you are looking at a firm. You look at management, price and people. Is your analysis of people what makes your stock prices exceptional?

A. It's one of three, but it's all three things. I think I said the "economics" of the business. I mean, you can have the most wonderful person in the world, but if they are running a textile business like we had 30 years ago, they're not going to do well. On the other hand, if they're running Coca-Cola, they are going to do sensationally. So, we want to be in a business that has fundamentally good economics like a Coca-Cola or a Gillette or something of the sort. And, then we want people and the price. But all three are very important.

Q. I've come from a family where my father works a lot and he's rather successful. How do you balance work with your family? Do you tie your wife into any of your work, or is it totally two different dimensions, two different worlds?

A. No, it's two different deals. My daughter, who is here, was doing an interview one time and explained that when she was in high school, she told people I was a securities analyst. She thought that meant I went around checking on homes or something to be sure they wouldn't be burglarized! No, work and family are two independent things. I don't consider what I do as work at all. I'm not doing this for a living, I'm doing it because I would rather do it than anything else I can think of in the world.

Q. You say in your annual report that you do not want to increase the number of investors you have through a stock swap or a split, but if you are, in a sense, a large mutual company, a large holding company, why would you not increase the amount of capital available to you?

A. Well, we haven't; we don't want to increase the amount of capital, which is different than increasing the number of shareholders, of course. We get a natural increase in capital just by the amount we earn from year to year, and that's plenty satisfactory. I do not have way more ideas than I have capital at the present. When I got out of school, I had way more ideas than capital. I was definitely capital short and at that point I did need more capital. So that's why I formed a partnership in 1956 to have some partners join with me. But, Berkshire will not need new capital as we go along. Now, the question is, "Who are going to be your shareholders?" "Who is going to sit in every seat?" If you have a million shares outstanding, somebody has to own them, preferably me. All the seats get filled and then the question is, "How do you encourage the people you want to have in those seats to attend?" It's very simple. If you stick a sign outside an auditorium and say "rock concert", you will get one group and if you say "opera", you will get another group. Either group is fine, but you'd better not have people coming who think they are going to the opera and find that they are at a rock concert, or vice versa.

So, I believe in communicating with the investment world about our objectives—how we think and the time horizons to draw a compatible group into Berkshire—and we've done that over time. That's why the turnover in Berkshire stock is so low. We have less turnover than any stock on the New York Stock Exchange. The New York Stock Exchange doesn't like it but I like that because it means that basically the people are there who want to be there. Splitting the stock or anything like that would tend to draw a slightly different crowd; not a terrible crowd, but not a better crowd than the crowd we have already. The only way

somebody can enter is for somebody to leave. And we want to make sure that we're not losing people who identified with our objectives and time horizons, to take on people who have some other different focus.

Q. What plans have you implemented for management succession when you and Mr. Munger slow down and retire?

A. Well, that's a polite way of saying when we die. We're not going to slow down and retire; we may slow down, but we won't retire. I'll put it that way because I plan to retire about five years after I die, actually. At the annual meeting somebody always says, "What happens if you...?", and then they stutter around a little bit and they finally get, "you know, you get hit by a truck?" I say, "Well, I'm glad you are asking that instead of asking what happens if you don't get hit by a truck." My job is fairly easy. All of our operating businesses would continue just as they are. The people that are running H.H. Brown or Dexter or See's or Scott Fetzer, all know what they are doing. All I do is allocate capital. They mail me the money and then I use it to go buy something else. I also try to maintain conditions so that they want to keep working. I've got in mind people beyond the two of us who can fulfill that function. I don't want to name them at present, but it's not as if Coca-Cola (where we own almost $5 billion worth of it, close to 8% of the company) will change when I die. People are going to keep drinking Coke the day after; in fact they will probably toast me at the funeral with Coke and so sales may spurt a little bit! There's no big slowdown that will take place. The job of the person who succeeds me will be to take that money which keeps coming in and find intelligent things to do with it in the future.

Q. What kind of management training or mentoring do you believe in and actually practice at Berkshire?

A. Well, that's interesting. We really don't do any. Perhaps half of our managers have MBAs or have had other kinds of business training. Probably half of them didn't. It's interesting to me what makes a good manager, because I think you have to understand the language of business, and you should have what I would call a "business mind" or "business orientation." But, we don't care about background at all. When I was at Salomon, I did not ask to see anyone's résumé. I didn't know where any of the dozen went to school. It just didn't make a difference to me. You know Mrs. B; if I asked her for her educational experience and she handed me a blank piece of paper, that would be fine with me. Ike Freidman, who built Borsheim's—I don't even know what he did in terms of school, or what he had done. It really is irrelevant to me. We basically like to buy into businesses where people have already succeeded and then keep them on. I would much rather have somebody who has been batting .350 or .375, buy their business and try and keep them happy than have to go out and start casting around the sandlots looking for people who tell me they are going to bat .350 or .375. I'm not saying I won't do the latter. We've done some of the latter, but when you can do the former, we like it. We find it's hard to teach a new dog old tricks. We've got some terrific managers, many of whom are over 65 and many of whom did not have a business education. I don't think a business education hurts, incidently. I got one at Penn, Nebraska and Columbia, so I went to three different business schools and learned a lot at each place. Actually, I learned more at the last two. It can be quite advantageous, but I don't think it is essential.

Q. What do you feel is the best way to get money to pay for college?

A. The best way is to have somebody give it to you. Actually, my parents paid for my college education, so I did not. I worked for Mark Seacrest at the Lincoln Journal, but I took

all that money and saved it to buy securities. You do it any way you can. If you've got a parent to give it to you, terrific. If you've got somebody that will give a scholarship to you, terrific. And, if you have to work for it, you know, that's what you have to do.

Q. I've heard the existence of a Buffett premium in regards to Berkshire Hathaway. Could you explain what that is and maybe comment on the reason for its existence.

A. Some people think we will do as well in the future as we have in the past. And, you can compare that to going out to the race track and betting on a 13-year-old horse that had a great record up to then. It's an extrapolation of the past and I don't think there is that much of a premium in it anyway, but that's just my own opinion.

Q. Mr. Buffett, I live in Los Angeles, California, which is generally regarded as being a horrible place to live anymore, but visiting my grandmother in Omaha, I find that the crime rate per capita is, I believe, worse than in Los Angeles. I don't know in the 50's and the 60's if crime was not such a forefront thing, but I'm wondering if you either politically or with your own personal fortune have any ideas on how to get us focused back on economic issues and not getting murdered on the way to the supermarket.

A. I don't necessarily want to accept the premise, and I'm not denying the premise. I just think when you compare the crime statistics of one community verses another, that can become quite tricky, because to some extent they are measuring the city, for example. Specifically, you become involved in how much of the population of the SMSA (Standard Metropolitan Statistical Area) is metropolitan in that city. I have no great answer or fast answers to any crime problems. I think the most important single thing society can do something about—although it gets very tough if you've lost it—is to maintain an outstanding public school system. I think it's essential that everyone comes as close to starting at the same starting point as possible in society.

Now, it isn't going to happen, because my kids are going to have all kinds of advantages that some low income person's kids aren't going to have. And, there is a huge disparity. There is also a disparity in the talents they are born with. There is a disparity in the environment they have. But, there shouldn't be a disparity in the education they receive from society. I think to the extent that one city after another—particularly the large ones—have lost a good public school system, that is a big contributing factor to a lot of social problems that follow. If I could do one thing, if I had a magic wand, I would try to figure out a way to have an outstanding public school system where there was no reason for anybody to send their kids, except for religious reasons, to private schools. Private schools wouldn't be needed in order to get a good education. But I know Los Angeles's public school system, at least in many parts, has deteriorated. I have friends out there and they will pay lip service to a good public school system, but they will send their kids to private school, just like our legislators do in Washington, D.C. Essentially, I don't think there is anybody in Congress who sends their kids to the public schools. I went to public school in Washington, D.C. 40 years ago, and it was first class. We had half a dozen or more kids of Senators or Congressmen at that school. Today in Washington, public school students are not getting the same shot at the opportunities in America, if they have been forced into a system that is second class. I don't have great solutions to this problem.

I know something about running business and investing, because I've been doing it for a long time. But, that does not give me great insight into a lot of the social problems of the day. One of the problems with philanthropy—and my foundation's board will have this problem with my funds—is that in business, I get to solve the easy problems. I get to wait

for fat pitches. I don't have to make a choice among 1,000 different companies. All I have to do is decide people are going to keep drinking Coke. And, there is a lot of money to be made in manufacturing and distributing it. In philanthropy and in social situations, it's just the reverse. All of the intractable problems--the ones that are really tough to solve, the ones that take decades—are the ones that get thrown at you. That's why I do feel empathy for people in politics, because they are dealing with the toughest problems. They are dealing with problems that people couldn't solve last year, or the year before, or the year before that.

Regarding philanthropy, after I die, the Buffett Foundation will be tackling problems that are terribly important, but also terribly difficult to solve, and I wish them well. And I'll understand how important the requests are that they'll receive, and how terribly difficult it will be to solve, to make decisions, and I wish them well. But I'll understand; wherever I am I'll understand, if they have difficulty accomplishing that.

Q. Mr. Buffett, how did you first get started and how did you deal with failure, if you had one?

A. How did I first get started? It depends. I bought my first stock when I was 11, but I'd been thinking about them for a long time before that. My dad was in the investment business and I used to go down to his office in the old Omaha National Bank building when I was seven or eight years old. I found out I was near-sighted because I couldn't read the quotations up on the stock board; otherwise I might have gone through life without glasses. I just got very interested in it. I started reading books on it when I was eight or nine and then I finally saved enough money to buy three shares of Cities Service preferred for $114 in 1942, and then I just kept doing it.

Failure depends on how you define it. A lot of things go wrong in life, but that doesn't necessarily mean that they're failures. I really don't look back. I try to learn from what I see around me, but I don't try to learn by going back over this decision or that decision or what did I do wrong or the sort. I don't think about that at all. You can make a lot of mistakes. The nice thing about it is you're going to make a lot of mistakes and still do very well. That's the encouraging thing. I write about my mistakes in the report. In fact, I have a section sometimes called "mistake du jour" and unfortunately it's plural most years, too. It's not the end of the world. You don't want to make any ones that are fatal. You do not want to own securities on borrowed money because that can wipe you out. I've never borrowed money of any significant amount because I just didn't want to go back to go. Borrowed money can magnify your mistakes, and it may magnify them to the point where they wipe you out. But, there's nothing wrong with making mistakes. You should try to pick things that you understand. That is the key to what I do. Occasionally I may make a mistake when I think I understand something I don't. Another mistake that you don't see is when I pass up something that I'm capable of understanding. Those are mistakes of omission and sometimes they have been huge. I could point to mistakes like that which have cost us over a billion dollars. I knew enough to do something but for one reason or another, I didn't. Fortunately, people don't see those.

Q. Mr. Buffett, after being the richest man in America, what are your major goals now?

A. Well, as I said at the Annual Meeting, now my goal is to be the oldest man in America. That's all I want said at my funeral. I just want someone to say, "My God, he was old!" I just want to keep doing what I'm doing, as long as I can. I have no desire to bring my golf handicap down five strokes particularly; it won't go down there by itself, and I'm not going to spend time to do it. It doesn't make that much difference to me. I feel like I can have as

much fun doing what I do at this level as anything else. I really, really, really have no goals other than to stay healthy enough to keep doing the same thing I've been doing.

Q. I have a two-part question. Number one, what do you think about the future of the two-party system in America? And, number two, what do you think about the candidacy of Colin Powell for President in '96?

A. Well, what has happened, as you know, is that party identifications and loyalties have changed dramatically. I'm probably typical in that I may be registered one way or the other, but I don't really think much about that. Certainly there is no party discipline or loyalty that can be called upon to get me to vote for somebody whom I think is inferior to another candidate. I think television has contributed to that very substantially. I think the parties will continue along; I don't think they will disappear or splinter in all likelihood.

Everything I know about Colin Powell is good. I do not know him personally. He is clearly an outstanding human being. If he starts offering his opinions on various subjects, his popularity will tend to diminish because that's the nature of politics. When you have to say whether you are for or against something, you start losing people pretty fast. But, in terms of the quality of that individual, I would think he would be first-class. I have no idea really what his views are on a lot of subjects. We may learn in the next year or so.

Q. Mr. Buffett, you said that people who are better off than society have a debt to society. I find this respectable. I just am wondering, what's your debt?

A. Well, I really think in terms of material goods that overwhelmingly eventually belong to society. I think it would be obscene if I tried to consume them all myself or have my family consuming like crazy forever just because I happen to be well-adjusted to this society. The interesting thing is that we live in a market society. If you can bat .375, if you can shoot sub-par golf, if you can do what I do, if you have certain kinds of talents, the market will pay enormously for those talents. Now, it didn't pay that well for ballplayers 25 years ago because the stadiums only held 50,000 people, but television and cable have made it possible for the stadiums to hold 250 million people and that changes the economics dramatically. This market system showers rewards on people with certain types of talents. Yet it does not shower rewards on other people with talents just as important to society, maybe more important to society. An outstanding teacher, outstanding nurse or researcher may not be paid dramatically more and maybe no more than the mediocre one. But the outstanding heavyweight fighter, or the outstanding center fielder, or the outstanding stock picker, or whoever, gets incredibly more because of the way the market system works. I would not tamper with that market system, because I do think that people benefit, because it delivers the goods that people want in this country.

It has been a great system for causing an outpouring of goods and services that people want. The market system works terrifically that way. I don't think it works terrifically in terms of distribution of the rewards. And, I think you solve that in two ways. One way is you solve it through your tax system and the other way is you solve it through philanthropy. You might call this a self-imposed tax. I think you could probably find 300 public school teachers in Omaha who have contributed absolutely as much to society as some fellow like myself or somebody that bats .350, or some guy that has won the light-heavyweight boxing championship. The teachers are never going to get paid properly. Society will not reward them that way. I don't see any way for society to do that. I don't have anything in mind about some "comparable worth" type of arrangement. I think the market system is the best system for delivering goods, but then I think in terms of distributing these goods and

services produced by that market system. Both philanthropy and a progressive tax system of some sort are the appropriate methods.

Q. My question concerns something that has come to the forefront in the last couple of years in politics especially—environmental issues. We have seen an increase in the concern of this country, and around the world, with environmental issues. People say a lot of the environmental problems are a result of businesses taking technologies that are not so benign to the environment and applying them in negative ways. In your opinion, as a corporate industrial leader, what would be some criteria that should be established so that corporations could find ways to apply more benign technologies?

A. I would say on environment that we've already got legislation in place which makes it extremely painful for companies who are doing things which are environmentally harmful. I don't know all the details, but I've seen enough of the Environmental Protection Agency's operation that I think that situation has changed dramatically from 25 years ago, at least in this country. What we do about the rest of the world is another question. In a world economy, to the extent that you apply any kind of restrictions, in terms of child labor or environment or workers compensation that other countries don't impose, you have a competitive cost disadvantage. That's a price that society has to pay here, but it is a real cost.

I personally think that population is probably one of the most important issues the world faces, except for the eventual problem of nuclear proliferation. I don't know how much the proper population of the world should be or will be. I know that number is different from what it would have looked like hundred years ago, and it probably will look different a hundred years from now. But, I do know there is a number and it may be affected by technology and it may be affected by the fact that our resources are greater than we think now. If we in this room were to all embark on a space ship journey some place, which was going to last a hundred years, and they were going to put provisions in the space ship that would be ample for this group, we might not know how many more people we could take on that space ship before we endangered the ability to survive and return in a hundred years. But we would know that the number was finite. And, we would certainly err on the low side. We would not say, "Well let's just take a shot at it and have 500 more join us." It is a finite world. Man's imagination is not necessarily finite, and we can do a lot of things that we haven't even thought of with resources. But in the end, there is only so much oil and gas in the ground. We're dealing with finite resources. They're not known, but they are finite. I would say it is a terrible mistake for the human race to test what the ultimate carrying capacity of this planet is. We had better have a margin of error. I believe that population is a terribly important issue.

Now, one of the problems in society is that the most important issues are often these incremental type things. The world is not going to come to an end because tomorrow there are 200 or 250 thousand more people on the planet than there were today. That's about the number it grows every day. There is nothing apocalyptic about it. People will go on making apocalyptic projections. But, it is like eating about 300 calories more each day than you burn up, it has no effect on you today. You don't get up from the table and all of a sudden everybody says, "My God, you look fat compared to when you sat down!" But, if you keep doing it over time, the incremental problems are hard to attack because that one extra piece of pie doesn't really seem to make a difference. The 250,000 people tomorrow don't seem to make any difference, but the cumulative effects of them will make a huge difference over time, just like overeating will make a huge difference over time. The time to attack those problems is early. It's a huge determiner of the kind of environment we have. I think the time to be thinking about those issues is now.

Q. Mr. Buffett, two of the Berkshire holdings that you have were mentioned today, Coke and Gillette. Another company that has repeat daily sales like that is Wrigley. Why has Berkshire not purchased that and what would make you purchase Wrigley?

A. Well, I won't comment on whether we own or don't own anything. I mean there are certain holdings we have to show in our report, but we don't have to show all of our holdings. There are certain threshold levels, but Wrigley is obviously a strong worldwide franchise. How you may feel about the growth in units sales in chewing gum verses the growth in units sales of soft drinks is one question. How you may feel about the pricing flexibility that they have verses the pricing flexibility that Coke or Gillette may have is another. And then how you feel about the price of a stock in the company would be a major factor. I'm not going to get specific on Wrigley because I don't get specific on stocks. But, it clearly has the kind of worldwide recognition that we like.

In the case of Gillette, they improve the product periodically. I hope you buy a new Sensor Excel because it produces a very smooth shave! The ticker abbreviation used to be "GS" on the New York Stock Exchange, which stood for "good shave". There are about 21 billion blades sold every year. Gillette sells only about 7 billion of them, but they've got about 60% value share because they've done it technologically. The Sensor took 11 years to develop; that is really some product. One thing you'd find interesting: the Sensor for women has become a very big product. More Sensor for women razors were sold in the first 18 months than Sensors were sold originally in their first 18 months. That's the first time a razor's become remotely that popular with women. Normally, women use disposables or they use their husband's or boyfriend's razor. But, one thing research has shown, which is kind of interesting (those of you in the audience will take this several ways). When a man gets a nick or a scrape or cuts himself with a razor, he blames the razor. But when a women does, she blames herself and that enters into the kind of product she wants to buy. It is also true, of course, there's only about one-tenth of the nerve receptors per square centimeter in the leg than there are in the face. So, the man tends to be more sensitive to the feel of the shave, and the women is more sensitive to whether she gets nicks or scrapes on her legs. (There are all kinds of interesting things about razors.) People originally started shaving with rocks because it was a disadvantage in combat with other humans or animals to have something the enemy could grab you by and snap your neck with. That's diminished over the years, but that was the original reason.

Q. Mr. Buffett, in recent years, several public accounting firms have been sued by their clients because they have not met their expectations on their auditing services. I was wondering what you and Berkshire Hathaway expect from your external auditors?

A. Well, that's a good question. I said to the Federal Financial Accounting Standards Boards some years ago that I thought accountants deserved to be sued, because I thought the typical accountant certificate in those days was overstated. I did not think they were in a position in many companies to deliver that opinion and when they have been held financially accountable for the fact that they couldn't back up that opinion, I really thought that was appropriate. It may have gone overboard in some cases, but they were stating something there that people relied on. In many cases—take banks or insurance companies—they were simply not in a position to attest as they did. In our own case, we are small and controlled, and we have an internal audit staff. I'm hoping, if an outside auditor comes up with anything, it may be a potential tax idea, or it might be things our internal auditors did not spot in terms of weaknesses in the control system, or they might spot outright fraud of some sort. We haven't had that, but that's what I'm paying them to do, aside from the fact I have

to have them anyway because I'm required to by the Securities and Exchange Commission and the New York Stock Exchange. Incidentally, we have bought big firms that never had an audit, and that doesn't bother me.

When I made the deal with Mrs. Blumkin, it was on August 30, 1983. I know that because it was my birthday. I didn't want to tell her that early on, because I thought she might think I was over-eager. I told her afterwards and she said, "You bought an oil well on your birthday!" She had no audit and she just told me she owned all the land, all the buildings, and all the inventory. She told me about what the receivables were, what the business was about, that all the bills were paid, and they didn't owe any money. We never had an audit. We bought that business with a contract that was one page long.

Q. Do you have any opinions or predictions on how health care reform is going to affect the economy, in general and Berkshire Hathaway, specifically?

A. Well, as I said earlier, we had our one general meeting on health care about six or seven years ago. When you are spending 14% of the Gross Domestic Product on something that other countries are spending 9% or less, it affects your competitive position. You would like to feel that you are getting a whole lot more for your money. I have no idea how the debate is going to come out because you are talking about one-seventh of the economy and something that is emotionally charged. I do think the rate of increase in health cost has dampened considerably, but I don't think that is necessarily permanent. I think it can last for a few years and it will come back if we start getting increases in health care costs significantly above the general rate of inflation. You are going to hear a lot about health care, again, and you should.

Q. You say that you don't like to look at résumés. What do you think businesses that *do* use them find impressive about résumés?

A. Well, I would say that, if you are talking about the typical large business, they look at labels. In other words, if you get an MBA, you have the label MBA. If you get it from a certain place, you know, it says that, too. There is an awful lot of hiring done based on that. The label definitely has an economic value. I can't quantify that exactly, but it has a significant economic value. It just doesn't happen to have it with us. But if you are getting hired by IBM or General Motors or Merrill Lynch, it's going to make a difference in the way they look at you initially. I don't think it makes that much difference five years out. But I *do* think it makes a difference in starting salary. It makes a difference in your likelihood of getting hired for a great many positions. Then, it's really what you show from that point forward. But it is a very useful label in getting hired by a large company.

We don't even think of ourselves as a large company. We think of ourselves as a collection of medium sized companies. Incidently, we've got a fellow that runs one of our larger subsidiaries, an MBA might mean quite a bit to him. And he's the one that hires for the group. I do no hiring, except if the top person in one of our companies dies or retires. I make maybe one hiring decision every three years. They also make hiring decisions all the time, and I don't get into what criteria they use. That's entirely up to them. I don't see how you can hold somebody responsible for an operation and then start telling them how to hire people. We have no human resources department at Berkshire. Some of our subsidiaries have somebody in that position, but we have nobody at the top who in turn supervises all that. Most companies do and once they do, they start building empires. They start going to all the conventions and seminars, and then they hire assistants to do this, and it just goes on and on. So we don't start it. Two more questions, okay?

Q. Mr. Buffett, this question deals with international investment. Since you are a key person in your corporations, when you make decisions on important international portfolios, what kind of factors come into your mind when selecting a nation to invest in? What do you think about China as a "hot market" right now?

A. Well, we like companies, obviously, that have big international potential. But we're perfectly willing to buy into a company that can never go outside the region. Nebraska Furniture Mart is not going to sell anything internationally, although they will sell a lot throughout the Midwest. It's just one variable that enters in. Gillette just bought 70% of the Shanghai Razor Company, which is the largest razor company over there. Coke will sell 135 million cases this year in China, which is only two per capita, roughly, as compared to 325 per capita in the United States. That's very encouraging and they are moving very fast in China. One problem Gillette has is that the Chinese do not shave as often as Americans. But we plan to put something in Coke to change that!

Q. You support a progressive consumption tax policy. I think your idea is the best and works when our economy is booming or overheated. What do you think if our economy is in a severe recession like in 1981-82?

A. A progressive consumption tax, if enacted, would hurt the economy in the following year or maybe a couple of years, regardless of when it was introduced, simply because: If we are consuming 100% of the goods produced in the country and all of the sudden you say we're going to start saving 5%, that would take consumption down to 95%, assuming no immediate increase in output, which there wouldn't be. If you're making $5,000 a month and you decide to save more in your family, you're going to cut consumption at that point. Later on, you may increase consumption because of the product of that investment. Any kind of a consumption tax that induces more investment will hurt the economy in the following year or two, which makes it tough to sell. That makes it tough to sell in your own household, too. If you say we're going to start saving more and consuming less, that's not necessarily a winning argument. But it is the way to build wealth over time. I would say no matter when it was introduced, it would have a bite for awhile.

Think back to 1790, when 90% of the people in the country were on farms. If some guy had come along and said we're going to develop tractors, combines, and cultivators that will put 80% of these people out of work so that a small percentage of people will be on farms, people would say, "That's terrifying, you know, we can't have that." Actually, saving and investment frees up people to do all kinds of other things, as you have seen on the long scale of 200 years of this country. It's a terrifying prospect to people in the short run, because they see the unemployment; they don't see those people being freed up to produce all kinds of other things over time. If you could have had a little video tape that you showed all the farmers in the country in 1790, and said, "Use this one tractor instead of needing all of your sons and sons-in-law and everybody else to farm this place, and you will be able to do it yourself. The other eight people will be unemployed," I would have hated to have a referendum on whether people wanted progress, in terms of better farm machinery. That is the problem with increasing the investment rate in the country. And, in a politically charged environment with sound bites on television, I'm not sure it could be sold.

Well, I want to thank you all for coming; it's been a real pleasure to return to the University of Nebraska and I hope we keep our quarterbacks healthy. Thanks.

In June 1996, Berkshire's Chairman, Warren E. Buffett, issued a booklet entitled **"An Owner's Manual*"** to Berkshire's Class A and Class B shareholders. The purpose of the manual was to explain Berkshire's broad economic principles of operation. An updated version is reproduced on this and the following pages.

OWNER-RELATED BUSINESS PRINCIPLES

At the time of the Blue Chip merger in 1983, I set down 13 owner-related business principles that I thought would help new shareholders understand our managerial approach. As is appropriate for "principles," all 13 remain alive and well today, and they are stated here in italics.

1. *Although our form is corporate, our attitude is partnership. Charlie Munger and I think of our shareholders as owner-partners, and of ourselves as managing partners. (Because of the size of our shareholdings we are also, for better or worse, controlling partners.) We do not view the company itself as the ultimate owner of our business assets but instead view the company as a conduit through which our shareholders own the assets.*

   Charlie and I hope that you do not think of yourself as merely owning a piece of paper whose price wiggles around daily and that is a candidate for sale when some economic or political event makes you nervous. We hope you instead visualize yourself as a part owner of a business that you expect to stay with indefinitely, much as you might if you owned a farm or apartment house in partnership with members of your family. For our part, we do not view Berkshire shareholders as faceless members of an ever-shifting crowd, but rather as co-venturers who have entrusted their funds to us for what may well turn out to be the remainder of their lives.

   The evidence suggests that most Berkshire shareholders have indeed embraced this long-term partnership concept. The annual percentage turnover in Berkshire's shares is a fraction of that occurring in the stocks of other major American corporations, even when the shares I own are excluded from the calculation.

   In effect, our shareholders behave in respect to their Berkshire stock much as Berkshire itself behaves in respect to companies in which it has an investment. As owners of, say, Coca-Cola or American Express shares, we think of Berkshire as being a non-managing partner in two extraordinary businesses, in which we measure our success by the long-term progress of the companies rather than by the month-to-month movements of their stocks. In fact, we would not care in the least if several years went by in which there was no trading, or quotation of prices, in the stocks of those companies. If we have good long-term expectations, short-term price changes are meaningless for us except to the extent they offer us an opportunity to increase our ownership at an attractive price.

2. *In line with Berkshire's owner-orientation, most of our directors have a major portion of their net worth invested in the company. We eat our own cooking.*

   Charlie's family has 80% or more of its net worth in Berkshire shares; I have more than 98%. In addition, many of my relatives – my sisters and cousins, for example – keep a huge portion of their net worth in Berkshire stock.

   Charlie and I feel totally comfortable with this eggs-in-one-basket situation because Berkshire itself owns a wide variety of truly extraordinary businesses. Indeed, we believe that Berkshire is close to being unique in the quality and diversity of the businesses in which it owns either a controlling interest or a minority interest of significance.

   Charlie and I cannot promise you results. But we can guarantee that your financial fortunes will move in lockstep with ours for whatever period of time you elect to be our partner. We have no interest in large salaries or options or other means of gaining an "edge" over you. We want to make money only when our partners do and in exactly the same proportion. Moreover, when I do something dumb, I want you to be able to derive some solace from the fact that my financial suffering is proportional to yours.

3. *Our long-term economic goal (subject to some qualifications mentioned later) is to maximize Berkshire's average annual rate of gain in intrinsic business value on a per-share basis. We do not measure the economic significance or performance of Berkshire by its size; we measure by per-share progress. We are certain that the rate of per-share progress will diminish in the future – a greatly enlarged capital base will see to that. But we will be disappointed if our rate does not exceed that of the average large American corporation.*

4. *Our preference would be to reach our goal by directly owning a diversified group of businesses that generate cash and consistently earn above-average returns on capital. Our second choice is to own parts of similar businesses, attained primarily through purchases of marketable common stocks by our insurance subsidiaries. The price and availability of businesses and the need for insurance capital determine any given year's capital allocation.*

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In recent years we have made a number of acquisitions. Though there will be dry years, we expect to make many more in the decades to come, and our hope is that they will be large. If these purchases approach the quality of those we have made in the past, Berkshire will be well served.

The challenge for us is to generate ideas as rapidly as we generate cash. In this respect, a depressed stock market is likely to present us with significant advantages. For one thing, it tends to reduce the prices at which entire companies become available for purchase. Second, a depressed market makes it easier for our insurance companies to buy small pieces of wonderful businesses – including additional pieces of businesses we already own – at attractive prices. And third, some of those same wonderful businesses, such as Coca-Cola, are consistent buyers of their own shares, which means that they, and we, gain from the cheaper prices at which they can buy.

Overall, Berkshire and its long-term shareholders benefit from a sinking stock market much as a regular purchaser of food benefits from declining food prices. So when the market plummets – as it will from time to time – neither panic nor mourn. It's good news for Berkshire.

5. *Because of our two-pronged approach to business ownership and because of the limitations of conventional accounting, consolidated reported earnings may reveal relatively little about our true economic performance. Charlie and I, both as owners and managers, virtually ignore such consolidated numbers. However, we will also report to you the earnings of each major business we control, numbers we consider of great importance. These figures, along with other information we will supply about the individual businesses, should generally aid you in making judgments about them.*

   To state things simply, we try to give you in the annual report the numbers and other information that really matter. Charlie and I pay a great deal of attention to how well our businesses are doing, and we also work to understand the environment in which each business is operating. For example, is one of our businesses enjoying an industry tailwind or is it facing a headwind? Charlie and I need to know exactly which situation prevails and to adjust our expectations accordingly. We will also pass along our conclusions to you.

   Over time, the large majority of our businesses have exceeded our expectations. But sometimes we have disappointments, and we will try to be as candid in informing you about those as we are in describing the happier experiences. When we use unconventional measures to chart our progress – for instance, you will be reading in our annual reports about insurance "float" – we will try to explain these concepts and why we regard them as important. In other words, we believe in telling you how we think so that you can evaluate not only Berkshire's businesses but also assess our approach to management and capital allocation.

6. *Accounting consequences do not influence our operating or capital-allocation decisions. When acquisition costs are similar, we much prefer to purchase $2 of earnings that is not reportable by us under standard accounting principles than to purchase $1 of earnings that is reportable. This is precisely the choice that often faces us since entire businesses (whose earnings will be fully reportable) frequently sell for double the pro-rata price of small portions (whose earnings will be largely unreportable). In aggregate and over time, we expect the unreported earnings to be fully reflected in our intrinsic business value through capital gains.*

   We have found over time that the undistributed earnings of our investees, in aggregate, have been fully as beneficial to Berkshire as if they had been distributed to us (and therefore had been included in the earnings we officially report). This pleasant result has occurred because most of our investees are engaged in truly outstanding businesses that can often employ incremental capital to great advantage, either by putting it to work in their businesses or by repurchasing their shares. Obviously, every capital decision that our investees have made has not benefitted us as shareholders, but overall we have garnered far more than a dollar of value for each dollar they have retained. We consequently regard look-through earnings as realistically portraying our yearly gain from operations.

7. *We use debt sparingly and, when we do borrow, we attempt to structure our loans on a long-term fixed-rate basis. We will reject interesting opportunities rather than over-leverage our balance sheet. This conservatism has penalized our results but it is the only behavior that leaves us comfortable, considering our fiduciary obligations to policyholders, lenders and the many equity holders who have committed unusually large portions of their net worth to our care. (As one of the Indianapolis "500" winners said: "To finish first, you must first finish.")*

   The financial calculus that Charlie and I employ would never permit our trading a good night's sleep for a shot at a few extra percentage points of return. I've never believed in risking what my family and friends have and need in order to pursue what they don't have and don't need.

   Besides, Berkshire has access to two low-cost, non-perilous sources of leverage that allow us to safely own far more assets than our equity capital alone would permit: deferred taxes and "float," the funds of others that our insurance business holds because it receives premiums before needing to pay out losses. Both of these funding sources have grown rapidly and now total about $117 billion.

Better yet, this funding to date has often been cost-free. Deferred tax liabilities bear no interest. And as long as we can break even in our insurance underwriting the cost of the float developed from that operation is zero. Neither item, of course, is equity; these are real liabilities. But they are liabilities without covenants or due dates attached to them. In effect, they give us the benefit of debt – an ability to have more assets working for us – but saddle us with none of its drawbacks.

Of course, there is no guarantee that we can obtain our float in the future at no cost. But we feel our chances of attaining that goal are as good as those of anyone in the insurance business. Not only have we reached the goal in the past (despite a number of important mistakes by your Chairman), our 1996 acquisition of GEICO, materially improved our prospects for getting there in the future.

In our present configuration (2012) we expect additional borrowings to be concentrated in our utilities and railroad businesses, loans that are non-recourse to Berkshire. Here, we will favor long-term, fixed-rate loans.

8. *A managerial "wish list" will not be filled at shareholder expense. We will not diversify by purchasing entire businesses at control prices that ignore long-term economic consequences to our shareholders. We will only do with your money what we would do with our own, weighing fully the values you can obtain by diversifying your own portfolios through direct purchases in the stock market.*

   Charlie and I are interested only in acquisitions that we believe will raise the *per-share* intrinsic value of Berkshire's stock. The size of our paychecks or our offices will never be related to the size of Berkshire's balance sheet.

9. *We feel noble intentions should be checked periodically against results. We test the wisdom of retaining earnings by assessing whether retention, over time, delivers shareholders at least $1 of market value for each $1 retained. To date, this test has been met. We will continue to apply it on a five-year rolling basis. As our net worth grows, it is more difficult to use retained earnings wisely.*

   I should have written the "five-year rolling basis" sentence differently, an error I didn't realize until I received a question about this subject at the 2009 annual meeting.

   When the stock market has declined sharply over a five-year stretch, our market-price premium to book value has sometimes shrunk. And when that happens, we fail the test as I improperly formulated it. In fact, we fell far short as early as 1971-75, well before I wrote this principle in 1983.

   The five-year test should be: (1) during the period did our book-value gain exceed the performance of the S&P; and (2) did our stock consistently sell at a premium to book, meaning that every $1 of retained earnings was always worth more than $1? If these tests are met, retaining earnings has made sense.

10. *We will issue common stock only when we receive as much in business value as we give. This rule applies to all forms of issuance – not only mergers or public stock offerings, but stock-for-debt swaps, stock options, and convertible securities as well. We will not sell small portions of your company – and that is what the issuance of shares amounts to – on a basis inconsistent with the value of the entire enterprise.*

    When we sold the Class B shares in 1996, we stated that Berkshire stock was not undervalued – and some people found that shocking. That reaction was not well-founded. Shock should have registered instead had we issued shares when our stock *was* undervalued. Managements that say or imply during a public offering that their stock is undervalued are usually being economical with the truth or uneconomical with their existing shareholders' money: Owners unfairly lose if their managers deliberately sell assets for 80¢ that in fact are worth $1. We didn't commit that kind of crime in our offering of Class B shares and we never will. (We did *not*, however, say at the time of the sale that our stock was overvalued, though many media have reported that we did.)

11. *You should be fully aware of one attitude Charlie and I share that hurts our financial performance: Regardless of price, we have no interest at all in selling any good businesses that Berkshire owns. We are also very reluctant to sell sub-par businesses as long as we expect them to generate at least some cash and as long as we feel good about their managers and labor relations. We hope not to repeat the capital-allocation mistakes that led us into such sub-par businesses. And we react with great caution to suggestions that our poor businesses can be restored to satisfactory profitability by major capital expenditures. (The projections will be dazzling and the advocates sincere, but, in the end, major additional investment in a terrible industry usually is about as rewarding as struggling in quicksand.) Nevertheless, gin rummy managerial behavior (discard your least promising business at each turn) is not our style. We would rather have our overall results penalized a bit than engage in that kind of behavior.*

    We continue to avoid gin rummy behavior. True, we closed our textile business in the mid-1980's after 20 years of struggling with it, but only because we felt it was doomed to run never-ending operating losses. We have not, however, given thought to selling operations that would command very fancy prices nor have we dumped our laggards, though we focus hard on curing the problems that cause them to lag.

12. *We will be candid in our reporting to you, emphasizing the pluses and minuses important in appraising business value. Our guideline is to tell you the business facts that we would want to know if our positions were reversed. We owe you no less. Moreover, as a company with a major communications business, it would be inexcusable for us to apply lesser standards of accuracy, balance and incisiveness when reporting on ourselves than we would expect our news people to apply when reporting on others. We also believe candor benefits us as managers: The CEO who misleads others in public may eventually mislead himself in private.*

    At Berkshire you will find no "big bath" accounting maneuvers or restructurings nor any "smoothing" of quarterly or annual results. We will always tell you how many strokes we have taken on each hole and never play around with the scorecard. When the numbers are a very rough "guesstimate," as they necessarily must be in insurance reserving, we will try to be both consistent and conservative in our approach.

    We will be communicating with you in several ways. Through the annual report, I try to give all shareholders as much value-defining information as can be conveyed in a document kept to reasonable length. We also try to convey a liberal quantity of condensed but important information in the quarterly reports we post on the internet, though I don't write those (one recital a year is enough). Still another important occasion for communication is our Annual Meeting, at which Charlie and I are delighted to spend five hours or more answering questions about Berkshire. But there is one way we *can't* communicate: on a one-on-one basis. That isn't feasible given Berkshire's many thousands of owners.

    In all of our communications, we try to make sure that no single shareholder gets an edge: We do not follow the usual practice of giving earnings "guidance" or other information of value to analysts or large shareholders. Our goal is to have all of our owners updated at the same time.

13. *Despite our policy of candor, we will discuss our activities in marketable securities only to the extent legally required. Good investment ideas are rare, valuable and subject to competitive appropriation just as good product or business acquisition ideas are. Therefore we normally will not talk about our investment ideas. This ban extends even to securities we have sold (because we may purchase them again) and to stocks we are incorrectly rumored to be buying. If we deny those reports but say "no comment" on other occasions, the no-comments become confirmation.*

    Though we continue to be unwilling to talk about specific stocks, we freely discuss our business and investment philosophy. I benefitted enormously from the intellectual generosity of Ben Graham, the greatest teacher in the history of finance, and I believe it appropriate to pass along what I learned from him, even if that creates new and able investment competitors for Berkshire just as Ben's teachings did for him.

TWO ADDED PRINCIPLES

14. *To the extent possible, we would like each Berkshire shareholder to record a gain or loss in market value during his period of ownership that is proportional to the gain or loss in per-share intrinsic value recorded by the company during that holding period. For this to come about, the relationship between the intrinsic value and the market price of a Berkshire share would need to remain constant, and by our preferences at 1-to-1. As that implies, we would rather see Berkshire's stock price at a* ***fair*** *level than a* ***high*** *level. Obviously, Charlie and I can't control Berkshire's price. But by our policies and communications, we can encourage informed, rational behavior by owners that, in turn, will tend to produce a stock price that is also rational. Our it's-as-bad-to-be-overvalued-as-to-be-undervalued approach may disappoint some shareholders. We believe, however, that it affords Berkshire the best prospect of attracting long-term investors who seek to profit from the progress of the company rather than from the investment mistakes of their partners.*

15. *We regularly compare the gain in Berkshire's per-share book value to the performance of the S&P 500. Over time, we hope to outpace this yardstick. Otherwise, why do our investors need us? The measurement, however, has certain shortcomings that are described in the next section. Moreover, it now is less meaningful on a year-to-year basis than was formerly the case. That is because our equity holdings, whose value tends to move with the S&P 500, are a far smaller portion of our net worth than they were in earlier years. Additionally, gains in the S&P stocks are counted in full in calculating that index, whereas gains in Berkshire's equity holdings are counted at 65% because of the federal tax we incur. We, therefore, expect to outperform the S&P in lackluster years for the stock market and underperform when the market has a strong year.*

INTRINSIC VALUE

Now let's focus on a term that I mentioned earlier and that you will encounter in future annual reports.

Intrinsic value is an all-important concept that offers the only logical approach to evaluating the relative attractiveness of investments and businesses. Intrinsic value can be defined simply: It is the discounted value of the cash that can be taken out of a business during its remaining life.

The calculation of intrinsic value, though, is not so simple. As our definition suggests, intrinsic value is an estimate rather than a precise figure, and it is additionally an estimate that must be changed if interest rates move or forecasts of future cash flows are revised. Two people looking at the same set of facts, moreover – and this would apply even to Charlie and me – will almost inevitably come up with at least slightly different intrinsic value figures. That is one reason we never give you our estimates of intrinsic value. What our annual reports do supply, though, are the facts that we ourselves use to calculate this value.

Meanwhile, we regularly report our per-share book value, an easily calculable number, though one of limited use. The limitations do not arise from our holdings of marketable securities, which are carried on our books at their current prices. Rather the inadequacies of book value have to do with the companies we control, whose values as stated on our books may be far different from their intrinsic values.

The disparity can go in either direction. For example, in 1964 we could state with certitude that Berkshire's per-share book value was $19.46. However, that figure considerably overstated the company's intrinsic value, since all of the company's resources were tied up in a sub-profitable textile business. Our textile assets had neither going-concern nor liquidation values equal to their carrying values. Today, however, Berkshire's situation is reversed: Now, our book value *far* understates Berkshire's intrinsic value, a point true because many of the businesses we control are worth much more than their carrying value.

Inadequate though they are in telling the story, we give you Berkshire's book-value figures because they today serve as a rough, albeit significantly understated, tracking measure for Berkshire's intrinsic value. In other words, the percentage change in book value in any given year is likely to be reasonably close to that year's change in intrinsic value.

You can gain some insight into the differences between book value and intrinsic value by looking at one form of investment, a college education. Think of the education's cost as its "book value." If this cost is to be accurate, it should include the earnings that were foregone by the student because he chose college rather than a job.

For this exercise, we will ignore the important non-economic benefits of an education and focus strictly on its economic value. First, we must estimate the earnings that the graduate will receive over his lifetime and subtract from that figure an estimate of what he would have earned had he lacked his education. That gives us an excess earnings figure, which must then be discounted, at an appropriate interest rate, back to graduation day. The dollar result equals the intrinsic economic value of the education.

Some graduates will find that the book value of their education exceeds its intrinsic value, which means that whoever paid for the education didn't get his money's worth. In other cases, the intrinsic value of an education will far exceed its book value, a result that proves capital was wisely deployed. In all cases, what is clear is that book value is meaningless as an indicator of intrinsic value.

THE MANAGING OF BERKSHIRE

I think it's appropriate that I conclude with a discussion of Berkshire's management, today and in the future. As our first owner-related principle tells you, Charlie and I are the managing partners of Berkshire. But we subcontract all of the heavy lifting in this business to the managers of our subsidiaries. In fact, we delegate almost to the point of abdication: Though Berkshire has about 288,000 employees, only 24 of these are at headquarters.

Charlie and I mainly attend to capital allocation and the care and feeding of our key managers. Most of these managers are happiest when they are left alone to run their businesses, and that is customarily just how we leave them. That puts them in charge of all operating decisions and of dispatching the excess cash they generate to headquarters. By sending it to us, they don't get diverted by the various enticements that would come their way were they responsible for deploying the cash their businesses throw off. Furthermore, Charlie and I are exposed to a much wider range of possibilities for investing these funds than any of our managers could find in his or her own industry.

Most of our managers are independently wealthy, and it's therefore up to us to create a climate that encourages them to choose working with Berkshire over golfing or fishing. This leaves us needing to treat them fairly and in the manner that we would wish to be treated if our positions were reversed.

As for the allocation of capital, that's an activity both Charlie and I enjoy and in which we have acquired some useful experience. In a general sense, grey hair doesn't hurt on this playing field: You don't need good hand-eye coordination or well-toned muscles to push money around (thank heavens). As long as our minds continue to function effectively, Charlie and I can keep on doing our jobs pretty much as we have in the past.

On my death, Berkshire's ownership picture will change but not in a disruptive way: None of my stock will have to be sold to take care of the cash bequests I have made or for taxes. Other assets of mine will take care of these requirements. All Berkshire shares will be left to foundations that will likely receive the stock in roughly equal installments over a dozen or so years.

At my death, the Buffett family will not be involved in managing the business but, as very substantial shareholders, will help in picking and overseeing the managers who do. Just who those managers will be, of course, depends on the date of my death. But I can anticipate what the management structure will be: Essentially my job will be split into two parts. One executive will become CEO and responsible for operations. The responsibility for investments will be given to one or more executives. If the acquisition of new businesses is in prospect, these executives will cooperate in making the decisions needed, subject, of course, to board approval. We will continue to have an extraordinarily shareholder-minded board, one whose interests are solidly aligned with yours.

Were we to need the management structure I have just described on an immediate basis, our directors know my recommendations for both posts. All candidates currently work for or are available to Berkshire and are people in whom I have total confidence. Our managerial roster has never been stronger.

I will continue to keep the directors posted on the succession issue. Since Berkshire stock will make up virtually my entire estate and will account for a similar portion of the assets of various foundations for a considerable period after my death, you can be sure that the directors and I have thought through the succession question carefully and that we are well prepared. You can be equally sure that the principles we have employed to date in running Berkshire will continue to guide the managers who succeed me and that our unusually strong and well-defined culture will remain intact. As an added assurance that this will be the case, I believe it would be wise when I am no longer CEO to have a member of the Buffett family serve as the non-paid, non-executive Chairman of the Board. That decision, however, will be the responsibility of the then Board of Directors.

Lest we end on a morbid note, I also want to assure you that I have never felt better. I love running Berkshire, and if enjoying life promotes longevity, Methuselah's record is in jeopardy.

Warren E. Buffett
Chairman

From: Jeff Raikes
To: Warren Buffett. Berkshire
Subject: Go Huskersl
Date: Sunday. August 17, 1997 9:37 PM

Warren, I apologize in advance for this being a long note. I do hope you find it interesting, and be certain I don't expect a long reply any reply at all for that matter). Perhaps sometime well get a few minutes where I can get your reaction to the thoughts on business below.

Go Huskers!

We're looking forward to seeing you in a few weeks for the Husker game. Please let me know if there is anything I can do to make your slay in Washington more enjoyable (and a little more Husker-oriented!), and I will also check with BiIIG on the plans and how I might help.

I'm sad to say I'm very pessimistic about our prospects. You've probably noted that Washington is very highly ranked this year. They have Huard, arguably one of the top 2 or 3 pro-style quarterbacks in the country - and only a sophomore. And they have an outstanding defense. In the meantime, the Huskers are replacing eight starters on defense, and the spring game showed that Frost still can't throw the ball well enough. Without a balanced attack on offense, we'll have difficulty against their speed. And Huard has the potential to pick apart our secondary - we'll need an outstanding plan on pass rush, equivalent to the "Philadelphia Blitz" employed at the Nebraska vs. Florida Fiesta Bowl championship game.

I hope you're hearing better news from fall practice. People here know I'm a huge Husker fan - I can't tell you how painful it would be for me to go through two more losses to the Huskies.

The Making of An American Capitalist...

Tricia and I took the kids to Disney World, followed by a short vacation to Nantucket and Cuttyhunk (a small Island off Martha's Vineyard). I spent part of the vacation reading lowenstein's book (The Making of an American Capitalist) - and really enjoyed It! On the way from Cuttyhunk to Boston/Logan airport, we drove down Cove Road in New Bedford trying to find the Berkshire-Hathaway mill. While I saw a few old mills, I'm not really sure which might have been the one - I was looking for the dock tower. Or perhaps it has been tom down.

The book got me thinking about your golf tournament, the after-dinner "Talk with Warren", and the inevitable question - why don't you invest in Microsoft or high technology? The Lowenstein book provided some stimulus to ponder the question, and I thought it would be fun to share some thoughts with you on the subject. But I should emphasize my intent in doing so is not to try to change your viewpoint (though I hope it doesn't reinforce your view!). I just view this as a fun discussion or intellectual exercise. While many people would see our business as complicated or hard to understand, I am absolutely convinced an astute investor can learn our business in only 3 to 4 hours (and probably less than two hours if BiIIG explained it!).

In some respects I see the business characteristics of Coca Cola or See's Candy as being very similar to Microsoft. I think you would love the simplicity of the operating system business. E.g. in FY96 there were 50 million PC's sold in the world, and about 80% of them were licensed for a Microsoft operating system. Although I would never write down the analogy of a "toll bridge", people outside our company might describe this business in that way. Those 40 million licenses averaged about $45 per, for a total of about $1.8B In revenue. By the way, the remaining 10M PC's were largely running Microsoft operating systems

– we just didn't get paid for them. This problem - piracy - if reduced, is one of the key upsides to our business.

In FY2000, there will be about 100M PC's sold. We think we can reduce piracy to 10% and license 90% or 90M of the PC's. But we also have pricing discretion- - I think I heard this term used in conjunction with your pricing decisions on See's Candy. We will be transitioning the world to a new version of our operating system, Windows NT. Today, we get more than $100 per system for NT, but only on a small percentage of the PC·s. But NT will be on closer to 70% of the PC's sold in FY2000. We can achieve average license revenue of $80. So 90M licenses at $80 per license totals about $7.2B, up from just under $2B in 3 to 4 years. And since there are effectively no COGs and a WW sales force of only 100-150 people this is a 90%+ margin business. There is an R&D charge to the business, but I'm sure the profits are probably as good as the syrup business!

There is actually upside in the number of PC's sold. Similar to your analysis of Coca Cola, the penetration of PC's in International markets leaves a lot of room for growth. In the US, the number of PC's per 1000 people is around 400 or so, but the number drops off rapidly to 100 or less in most countries, even in some of the European countries. (Unfortunately, I'm not in Seattle now so I don't have these numbers at my fingertips, but Steve Ballmer can recite them from memory.)

The business described above is what we call the OEM (Original Equipment Manufacturer) business, meaning our revenue comes from the manufacturers of the PC's. The majority of the rest of the business is called the "finished goods" business. It consists of businesses or individuals buying office productivity software, educational or entertainment software, etc. Again the structure is very simple. A PC is just a razor that needs blades, and we measure our revenue on the basis of $ per PC, In FY96, nearly 50M PC's were purchased and Microsoft averaged about $140 in software revenue per PC or $7B. This amount is in addition to the OEM royalty business described above. (Steve Ballmer can recite the number of PCs and $ per PC to you off the top of his head for just about any country in the world; BiIIG can probably do the same though he doesn't spend as much time on that as Steve.)

So in some sense that is it. There are a certain number of PC's that get sold, a growing amount of Microsoft software per PC, the power to use the brand to sell even more software, some pricing discretion, international market growth, and the opportunity to grow revenue by further reduction in piracy. Obviously I'm not going through all the details we'd discuss in a couple hour session, but that is the heart of the business. Of course there is the R&D invested to build the software, but that is similar to Disney continuing to produce new content, or Nebraska Furniture Mart continuing to keep their format fresh, and an Investment that BiliG manages very closely.

Even some of the new "media" businesses are really not that new or different. Take our WebTV acquisition or the Comcast deal. I see articles covering those investments and describing Microsoft as becoming a media company. The real goal is to figure out a way to get an "operating system" royalty per TV. 10's of millions of TV's per year at $10-$20 per TV is a nice little "operating system" business.

There is a tremendous strategic synergy between the "finished goods business" and the OEM operating system business. E.g. we have about 90% share of office productivity software with Microsoft Office, and that is a great business (about $58, also 85%+ operating margin). But also important is the fact that this software is heavily valued by the actual users (operating systems are a bit more invisible to the user), and they resist shifting brands. If we own the key "franchises" built on top or the operating system, we dramatically widen the "moat" that protects the operating system business. I.e. if J owned the most

successful daily newspaper in Buffalo, I wouldn't want to leave it to my competitor to own the Sunday edition.

Let's build on this analogy and the strategic synergy between the operating system and the software that runs on it. It helps explain the investments we are making In Pete Higgins business (Interactive Media, like MSN, MSNBC. Expedia, Sidewalk, etc.). Again, some newspaper and magazine articles would say that Microsoft IS trying to become a media company. But I prefer to view it as investing in the potential “user franchises" that will help protect our operating systems businesses in the future. We hope to make a lot of money off these franchises, but even more important is that they should protect our Windows royalty per PC, and hopefully our royalty per TV. And success in those businesses will help increase the opportunity for future pricing discretion.

So I really don't see our business as being significantly more difficult to understand than the other great businesses you've invested in. But there is one potential difference that worries me, and it is a key part of the reason I spent the time to share these thoughts with you. The difference I worry about is the "width of the moat. With Coca Cola, you can feel pretty confident that there won't be a fast shift in user preferences away from drinking sodas, and in particular Coke. In technology. We may more frequently see "paradigm shifts" where old leaders are displaced by new. Graphical user interface replaces character user interface, the Internet explodes, etc.

In the absence of a paradigm shift in technology, market shares seldom change by more than a few points. With a paradigm shift, the shares can rapidly change by dozens of points. I spent my first ten years at Microsoft building Microsoft Office. We were way behind in share most of that time (less than 10%). but the shift to graphical user interface was the paradigm shift that allowed us to displace the old leaders (Lotus 1-2-3 and WordPerfect) and now be at 90% share, of course key to this shift in share, was their failure to identify the computing paradigm shift and properly invest in it. They were the leaders and they could have chosen to cannibalize themselves. But they didn't act fast enough and were scared that investing in the new paradigm would open the door for us - ironically it was their slow pace that opened the door.

I remember one of our very first conversations in 1991. You asked me my view on what happened to IBM. I don't remember exactly what I said. I think their addiction to the power they had in the previous generations of computing, really blindsided them from the paradigm shift of the PC and client-server computing.

In technology, the moats may be narrower. It is amazing how fast the Internet exploded. Or how quickly Java gained notoriety. We have some great moats, but even so, 18 months ago analyst were questioning whether we could move quickly enough. (Obviously, that turned out to be a great time to buy Microsoft!)

I am very confident about our business for the next 5 to 10 years. But I will admit it is easier to be confident about Coke's business for the next 10 years. In short, I've long had this sneaking suspicion that it is not that you don't understand this business. In fact, BiIIG has probably already explained all of the above to you and I apologize for boring you with this, but it was fun and good for me to write it down.) My theory is that you don't invest in technology or Microsoft because you see the moats as narrower; too much risk and the potential for a fast paradigm shift that would too quickly undermine your equity position.

Since Microsoft is the business I understand (i.e. I have a narrow circle of competence!) and I subscribe to your Views on Investments, well over 90% of my net worth is tied up there. (Thanks to BiIIG, I'm well into the nine digit range.) I feel fine about having 90%+ tied up in Microsoft. We have a “safety net” of tax free municipal bonds so I know the family will be OK if something happens. And we don't intend to leave much to the kids, so I’m simply building a huge pile of chits to someday turn back to society. I do wonder about

the time period ten or twenty or more years down the road. If at some point then the outlook for Microsoft has changed, I hope I will have learned enough from your approach such that I will have the ability to identify new areas of intrinsic value and continue to grow the pile of chits at a high rate. But for now, I'm heads down selling more software…

I'm curious as to what you think about the Lowenstein book. I'm sure it is difficult to have so much of your life spread across the pages, on the other hand; there are so many things for you to be proud of. It was great to gain an understanding of Graham's approach, and more importantly your significant advancement of the approach. I found the arguments of the EMT (efficient market theoreticians) just laughable. They should spend a few days at Disney World so they can observe crowd theory in action. Believe me, the longest lines don't necessarily translate into the best value! But the best part of the book was to learn more about your values, and in particular the discipline of character that leads to your success in investing. I wish there were a magic formula for teaching this to our children!

This leaves me one final task for this note. I've done a very poor job of adequately thanking you for all the great things you've done for me - golf at Augusta, Seminole, the Buffett Classic, and in particular, the opportunity to listen in on great conversations and learn from you. I want you to know I've really appreciated your kindness, and if there is ever anything I might do to reciprocate, please let me know.

Thanks. Jeff Raikes

From: Warren Buffett
Sent: Thursday, August 21, 1997 3:13 PM
To: Jeff Raikes
Subject; Re: Go Huskers!
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hi, jeff;

i have so few friends who use e-mall that I only look for it once a week or so (and usually find nothing) so excsue the slowness in responding. I am also reasonably fast at typing but poor in the accuracy department and fine it easier just to plow ahead rather than correct, knowing i am always writing to those who will find a little deciphering an interesting but easy challenge.

I am afraid you have the Husker-Husky situation correctly handicapped. We need a miracle and it's unlikely to happen in a stadium in which Frost will not be able to hear a word he shouts. I hope Osborne has had him working on hand signals all summer. .

Your analysis of Microsoft, why I should invest in it, and why I don't could not be more on the money. In effect the company has a royalty on a communication stream that can do nothing but grow. It's as if you were getting paid for every gallon of water starting in a small stream but with added amounts received as tributaries turned the stream into an Amazon. The toughest question is how hard to push prices and I wrote a note to Bill on that after our December meeting last year. Bell should have anticipated Bill and let someone else put in the phone infrastructure while he collected by the minute and distance (and even importance of the call if he could have figured a wait to monitor it) in perpetuity.

Coke is now getting a royalty on swallows; probably 7.2 billion a day if these average gulp is one ounce. I feel 100% sure (perhaps mistakenly) that I know the odds of this continuing-again 100% as long as cola doesn't cause cancer. Bill has an even better royalty-one which I would never bet against but dont feel i am capable of assessing probabilities about, except to the extent that with a gun to my head and forced to make a guess, i would go with it rather than against. But to calibratre whether my certainty is 80% or 55%, say, for a 20-year run would be folly. If I had to make such decisions, i would do my best but I prefer to structure investing as a no-called-strikes game and just wait for the fat one!

I watched Ted Williams on cable the other day and he referred to a book called the science of hitting which i then ran down. It has a drawing of the batters box in it that he had referred to on the show with lots of little squares in it, all parts of the strike zone. In his favorite spot, the box showed .400 reflecting what he felt he would hit if he only swung at pitches in that area. Low and outsided, but still in the strike zone, he got down to .260. Of course, if he had two strikes on him, he was going to swing at that .260 pitch but otherwise he waited for one in the "happy zone" as he put it. I think the same approach makes sense in investing.

Your happy zone, because of the business experience you have had, what you see every day, your natural talents, etc. is going to be different than mine. I am sure, moreover that you can hit balls better in my happy zone than I can in yours just because they are fatter pitches in general. lets talk more about this when we get together. As a beginner I always feel that when i send off any e-mail, it is going to vanish into the ether and i would hate to have that happen with everything I know. GO HUSKERS-warren

The Bill & Warren Show

FORTUNE, 7/20/98

What do you get when you put a billionaire buddy act in front of 350 students? $84 billion of inspiration In a meeting of incomparable minds (and unspendable net worth), Buffett and Gates muse about taking risks, motivating employees, confronting mistakes, and giving back. The result: something pretty darn close to wisdom.

The queue of students stretched through the lobby and out the door of the University of Washington's Husky Union Building in Seattle on a balmy Friday afternoon in late May. You could tell by the abundance of pressed chinos and dress shirts (and the shortage of nose rings) that this wasn't the ticket line for a Phish concert. Instead, the well-groomed group was staking out prime seats for, of all things, a lecture--albeit a very special lecture. The students and a few lucky guests were to be treated to a rare, public dialogue between the two richest businessmen in the solar system: Microsoft founder and CEO Bill Gates and Warren Buffett, chairman of Berkshire Hathaway Inc.

The billionaire buddies conceived the event to coincide with Buffett's weekend visit to Gates' home, following Microsoft's annual summit meeting for CEOs. The superinvestor and the cybertycoon asked some 350 business school students to participate in the session and invited the Public Broadcasting System and FORTUNE to document the affair. (PBS filmed the interchange and will offer copies to its affiliates for broadcast during pledge drives this fall.)

While the students milled downstairs, Gates and Buffett bantered with their wives and a small group of friends that included, among others, Katharine Graham, the former CEO of the Washington Post Co., and Bill's dad and sister. They noshed on fresh fruit in a makeshift greenroom while a makeup artist powdered Bill's nose and trimmed Warren's unruly eyebrows, much to Susie Buffett's amusement. At one point the Oracle of Omaha entertained the group with a goofy imitation of Richard Nixon's "V for victory" sign.

As showtime approached, the two gamely posed for photos and traded barbs like old college roomies. The other guests' main concern was that the titans not be too long-winded, so everyone could get back to Gates' house in time to play bridge. It felt like a convivial family reunion--granted, of one very high-powered family.

For a guest in that greenroom, perhaps the most lasting impression was the cross-generational affection between America's best-known billionaires. (For the record, on that day the 42-year-old Gates' net worth hovered around $48 billion, compared with Buffett's $36 billion. Buffett, who only a few years ago was considerably richer than Gates, has managed to remain 25 years older, though.) Buffett's presence seemed to calm Gates, who acted loose and gregarious despite Microsoft's legal fisticuffs with federal trustbusters and the stress of hosting several dozen prominent CEOs for the previous two days. Although Bill has finally begun to look his age--nascent crow's-feet now crease the

corners of his eyes, and he's no longer the beanpole he was--the Buffetts and Graham still dote on him like a wunderkind. He, in turn, treats them with a warm hint of deference, quite a contrast to his usual debater's demeanor.

Finally the two made their way to the stage, pausing in the wings for University of Washington Business School dean Bill Bradford's introduction. Unfortunately, the dean's remarks, which mainly praised Microsoft for hiring University of Washington students, missed the point. The funny, philosophical, extraordinary conversation that followed would be much more than a pep talk from a local employer and his pal. See for yourself.

--Brent Schlender

1. How We Got Here Warren and Bill explain how they became richer than God.

BUFFETT: I thought I ought to start this off by announcing that Bill and I have a small bet as to who would get the most applause. I suggested that I bet my house against his. We settled on a small sum, but evidently it isn't such a small sum to Bill, because just before we came out he gave me this Nebraska Cornhusker shirt to wear, and then he puts on this purple University of Washington shirt himself.

They've asked us to start out talking, the two of us, about what got us here, but then it's on to your questions. How I got here is pretty simple in my case. It's not IQ, I'm sure you'll be glad to hear. The big thing is rationality. I always look at IQ and talent as representing the horsepower of the motor, but that the output--the efficiency with which that motor works--depends on rationality. A lot of people start out with 400-horsepower motors but only get a hundred horsepower of output. It's way better to have a 200-horsepower motor and get it all into output.

So why do smart people do things that interfere with getting the output they're entitled to? It gets into the habits and character and temperament, and behaving in a rational manner. Not getting in your own way. As I said, everybody here has the ability absolutely to do anything I do and much beyond. Some of you will, and some of you won't. For the ones who won't, it will be because you get in your own way, not because the world doesn't allow you.

So I have one little suggestion for you: Pick out the person you admire the most, and then write down why you admire them. You're not to name yourself in this. And then put down the person that, frankly, you can stand the least, and write down the qualities that turn you off in that person. The qualities of the one you admire are traits that you, with a little practice, can make your own, and that, if practiced, will become habit-forming.

The chains of habit are too light to be felt until they are too heavy to be broken. At my age, I can't change any of my habits. I'm stuck. But you will have the habits 20 years from now that you decide to put into practice today. So I suggest that you look at the behavior that you admire in others and make those your own habits, and look at what you

really find reprehensible in others and decide that those are things you are not going to do. If you do that, you'll find that you convert all of your horsepower into output.

GATES: I think Warren's absolutely right about habit. I was lucky enough when I was quite young to have an exposure to computers, which were very expensive and kind of limited in what they could do, but still they were fascinating. Some friends of mine and I talked about that a lot and decided that, because of the miracle of chip technology, they would change into something that everybody could use. We didn't see any limit to the computer's potential, and we really thought writing software was a neat thing. So we hired our friends who wrote software to see what kind of a tool this could really be--a tool for the Information Age that could magnify your brainpower instead of just your muscle power.

By pursuing that with a pretty incredible focus and by being there at the very beginning of the industry, we were able to build a company that has played a very central role in what's been a pretty big revolution. Now, fortunately, the revolution is still at the beginning. It was 23 years ago when we started the company. But there's no doubt that if we take the habits we formed and stick with them, the next 23 years should give us a lot more potential and maybe even get us pretty close to our original vision--"a computer on every desk and in every home."

I was wondering how you define success, personally?

BUFFETT: I can certainly define happiness, because happy is what I am. I get to do what I like to do every single day of the year. I get to do it with people I like, and I don't have to associate with anybody who causes my stomach to churn. I tap-dance to work, and when I get there I think I'm supposed to lie on my back and paint the ceiling. It's tremendous fun. The only thing in my job that I don't like--and this just happens every three or four years--is that occasionally I have to fire somebody.

They say success is getting what you want and happiness is wanting what you get. I don't know which one applies in this case, but I do know I wouldn't be doing anything else. I'd advise you that when you go out to work, work for an organization of people you admire, because it will turn you on. I always worry about people who say, "I'm going to do this for ten years; I really don't like it very well. And then I'll do this...." That's a little like saving up sex for your old age. Not a very good idea.

I have turned down business deals that were otherwise decent deals because I didn't like the people I would have to work with. I didn't see any sense in pretending. To get involved with people who cause your stomach to churn--I say it's a lot like marrying for money. It's probably a bad idea under any circumstances, but it's absolutely crazy if you're already rich, right?

GATES: I agree that the key point is that you've got to enjoy what you do every day. For me, that's working with very smart people and it's working on new problems. Every time we think, "Hey, we've had a little bit of success," we're pretty careful not to dwell on it

too much because the bar gets raised. We've always got customer feedback telling us that the machines are too complicated and they're not natural enough. The competition, the technological breakthroughs, and the research make the computer industry, and in particular software, the most exciting field there is, and I think I have the best job in that business.

BUFFETT: Don't you think Dairy Queen is more important than that? [Berkshire Hathaway bought International Dairy Queen last fall, for $585 million.]

GATES: You can manage Dairy Queen, Warren. I'll go and buy the Dilly Bars.

BUFFETT: We'll raise the price when you come.

Starting a new company is very risky. How do you determine when is the best opportunity to start a new company?

GATES: When I started Microsoft, I was so excited that I didn't think of it as being all that risky. It's true, I might have gone bankrupt, but I had a set of skills that were highly employable. And my parents were still willing to let me go back to Harvard and finish my education if I wanted to.

BUFFETT: You've always got a job with me, Bill.

GATES: The thing that was scary to me was when I started hiring my friends, and they expected to be paid. And then we had customers that went bankrupt--customers that I counted on to come through. And so I soon came up with this incredibly conservative approach that I wanted to have enough money in the bank to pay a year's worth of payroll, even if we didn't get any payments coming in. I've been almost true to that the whole time. We have about $10 billion now, which is pretty much enough for the next year.

Anyway, if you're going to start a company, it takes so much energy that you'd better overcome your feeling of risk. Also, I don't think that you should necessarily start a company at the beginning of your career. There's a lot to be said for working for a company and learning how they do things first. In our case, Paul Allen and I were afraid somebody else might get there before us. It turned out we probably could've waited another year, in fact, because things were a little slow to start out, but being on the ground floor seemed very important to us.

How do you get people to support you?

GATES: At first you'll run into some skepticism. If you're young, it's hard to go lease premises. You couldn't rent a car when you were under 25, so I was always taking taxis to go see customers. When people would ask me to go have discussions in the bar, well, I couldn't go to the bar.

That's fun, because when people are first skeptical, they say, "Oh, this kid doesn't know anything." But when you show them you've really got a good product and you know something, they actually tend to go overboard. So, at least in this country, our youth was a huge asset for us once we reached a certain threshold.

2. The World Is Our Oyster Why Warren is sure everyone in China will want to drink Coke.

How do you as businessmen take your companies global?

BUFFETT: [At Berkshire Hathaway] we don't take our businesses global directly. Our two largest commitments are Coke and Gillette. Coke has 80% of its earnings coming from abroad, and Gillette has two-thirds of its earnings coming from abroad. So they are participating in a worldwide improvement in living standards, and we go global by piggybacking on them. I can sit in Omaha and let Doug Ivester [CEO of Coca-Cola] fly all over the world.

GATES: Our business is truly global. The PC standard is a global standard. What you need in a spreadsheet in Korea or Egypt is about the same as what you need in the U.S. We have to do some adaptation for the local languages, and that's a fun part of our business--understanding bi-directional languages and the large alphabets that you have in Chinese, Japanese, and Korean.

In fact, our market share is much higher outside the U.S. than it is inside, because it's relatively hard to set up local subsidiaries and to understand local conditions, local distribution and relationships. Since most of our competitors are from the U.S. and aren't as good at doing international business, we thrive even better in these other countries.

Most of our growth will come from outside the U.S. Here it will get to the point where it is largely a replacement market. Now, that doesn't mean U.S. customers don't want better software that can see, listen, and learn. But outside the U.S. we still have that early-growth-slope phenomenon.

What impelled you to make a trip together to China in 1995, and how has that trip affected your global business decisions since?

GATES: We went to China for a lot of reasons. Partly to relax and have fun. We found a few McDonald's there, so we didn't feel too far away from home. It was also exciting to go and see all the changes taking place, to see different parts of the country, and to meet some of the leaders.

China is a market that Microsoft had already been investing in. We've upped that a lot since then. As a percentage of our sales, though, it's tiny--well under 1%--and so even though it will double every year for the next five years, it's really only by taking a ten-year view that we can say it's worth the emphasis we're putting on it.

Although about three million computers get sold every year in China, people don't pay for the software. Someday they will, though. And as long as they're going to steal it, we want them to steal ours. They'll get sort of addicted, and then we'll somehow figure out how to collect sometime in the next decade.

BUFFETT: My family was amazed that I went. I never traveled beyond the outer reaches of the county in Nebraska. I had a terrific time and also confirmed my feeling that there's going to be a lot of Coca-Cola sold there in the future. I told everyone over there that it acts as an aphrodisiac.

3. Innovations "r" Us Warren ponders Internet chewing gum.

Both of you are innovators in your given industries. I was wondering what your definition of innovation is?

BUFFETT: I don't do a lot of innovating in my work. I really have just two functions: One is to allocate capital, which I enjoy doing. And the second one is to help 15 or 20 senior managers keep a group of people enthused about what they do when they have no financial need whatsoever to do it. At least three-quarters of the managers that we have are rich beyond any possible financial need, and therefore my job is to help my senior people keep them interested enough to want to jump out of bed at six o'clock in the morning and work with all of the enthusiasm they did when they were poor and starting. If I do those two things, they do the innovation.

GATES: The technology business has a lot of twists and turns. Probably the reason it's such a fun business is that no company gets to rest on its laurels. IBM was more dominant than any company will ever be in technology, and yet they missed a few turns in the road. That makes you wake up every day thinking, "Hmm, let's try to make sure today's not the day we miss the turn in the road. Let's find out what's going on in speech recognition, or in artificial intelligence. Let's make sure we're hiring the kinds of people who can pull those things together, and let's make sure we don't get surprised."

Sometimes we do get taken by surprise. For example, when the Internet came along, we had it as a fifth or sixth priority. It wasn't like somebody told me about it and I said, "I don't know how to spell that." I said, "Yeah, I've got that on my list, so I'm okay." But there came a point when we realized it was happening faster and was a much deeper phenomenon than had been recognized in our strategy. So as an act of leadership I had to create a sense of crisis, and we spent a couple of months throwing ideas and E-mail around, and we went on some retreats. Eventually a new strategy coalesced, and we said, "Okay, here's what we're going to do; here's how we're going to measure ourselves internally; and here's what the world should think about what we're going to do."

That kind of crisis is going to come up every three or four years. You have to listen carefully to all the smart people in the company. That's why a company like ours has to attract a lot of people who think in different ways, it has to allow a lot of dissent, and then it has to recognize the right ideas and put some real energy behind them.

Which countries and companies are best prepared to take advantage of the information age that is revolutionizing society?

BUFFETT: When you think about it, 15 years ago this country almost had an inferiority complex about its ability to compete in the world.

GATES: Everybody was talking about how the Japanese had taken over consumer electronics and that the computer industry was going to be next, and that their system of hard work somehow was superior, and that we had to completely rethink what we were doing. Now, if you look at what's happened in personal computers or in business in general, or at how we allocate capital, and how we let labor move around, the U.S. has emerged in a very strong position. And so the first beneficiary of all this information technology has been the U.S.

In places like Singapore, Hong Kong, and the Scandinavian countries, people are adopting the technology at basically the same rate that we are. And there are a few countries that, relative to their level of income, are going after the technology at an even higher rate than we are because they believe so much in education. In Korea and in many parts of China we see incredible penetration of personal computers even at very low income levels, because people there have decided it's a tool to help their kids get ahead.

The whole world is going to benefit in a big way. There will be this shift where, instead of your income level being determined by what country you are from, it will be determined by your education level. Today, a Ph.D. in India doesn't make nearly as much as a Ph.D. in the U.S. When we get the Internet allowing services and advice to be transported as efficiently as goods are transported via shipping, then you'll get essentially open-market bidding for that engineer in India vs. an engineer here in the U.S. And that benefits everyone, because you're taking better advantage of those resources. So the developed countries will get the early benefit of these things. But in the long run, the people in developing countries who are lucky enough to get a good education should get absolutely the biggest boost from all this.

BUFFETT: I didn't grasp it at first, but it's huge. The technological revolution will change the world in dramatic ways, and quickly. Ironically, however, our approach to dealing with that is just the opposite of Bill's. I look for businesses in which I think I can predict what they're going to look like in ten or 15 or 20 years. That means businesses that will look more or less as they do today, except that they'll be larger and doing more business internationally.

So I focus on an absence of change. When I look at the Internet, for example, I try and figure out how an industry or a company can be hurt or changed by it, and then I avoid it. That doesn't mean I don't think there's a lot of money to be made from that change, I just don't think I'm the one to make a lot of money out of it.

Take Wrigley's chewing gum. I don't think the Internet is going to change how people are going to chew gum. Bill probably does. I don't think it's going to change the fact that Coke will be the drink of preference and will gain in per capita consumption around the world; I don't think it will change whether people shave or how they shave. So we are looking for the very predictable, and you won't find the very predictable in what Bill does. As a member of society, I applaud what he is doing, but as an investor, I keep a wary eye on it.

GATES: This is an area where I agree strongly with Warren. I think the multiples of technology stocks should be quite a bit lower than the multiples of stocks like Coke and Gillette, because we are subject to complete changes in the rules. I know very well that in the next ten years, if Microsoft is still a leader, we will have had to weather at least three crises.

4. See You in Court! Bill and Warren talk about tangling with trustbusters.

What is the appropriate role for antitrust law in American business?

BUFFETT: We had one civil antitrust case at the Buffalo Evening News in 1977. And believe it or not, in the Salomon situation in 1991, in addition to having problems with the Federal Reserve in New York, and the SEC, and the U.S. Treasury, and the U.S. Attorney for the Southern District of New York, we also had the Department of Justice antitrust division after us. I don't know what happened to the Bureau of Indian Affairs. They missed us for some reason. Those are the only two experiences I had, and in neither case did I feel that we had done anything wrong. I might add that there was never any adjudication against us either time.

I am no antitrust scholar. I met Bill eight years ago, and he's a terrific teacher. He spent six or seven hours explaining Microsoft to me. Here I am the world's biggest dummy on technology, and he explained it to me pretty darn well. When he got through with it, I bought a hundred shares of stock so I could keep track of it. That shows two things: One is that I've got an IQ of about 50, and the second is that I didn't think he had any monopoly.

GATES: The key role of competition law is to protect consumers and to make sure that new products get created and that those products are very innovative. And you can look at different sectors of the economy and ask, "where is that happening very well?" No matter how you score it, there's no doubt that one sector of economy would stand out as absolutely the best, and that's the personal computer industry. I don't say the computer industry at large, because you have to remember that before personal computers came along, the structure was very different. People were stuck. Once you bought a computer from Digital or IBM or Hewlett-Packard or anyone else, the software that you created only ran on that computer.

The vision of Microsoft was that all of these computers would work the same. The reason for that is that if you want to get a lot of great software, you have to have a lot of

computers out there--millions and millions of them. So you've got to make them cheap, and make them so you don't have to test the software on all the different ones. The goal of the PC industry was to have every company competing to make the most portable one, or the fastest one, or the cheapest one. That would be great for consumers, and it would spark a big software market.

The price of computing before the PC came along was going down at a certain rate, and since the PC came along it's gone down at an incredible rate. The variety and quality of software has also increased at a phenomenal rate. We're absolutely at the peak of that today. The number of new software companies being started, the number of new jobs being created, the level of investment, the number of companies going public, you name it. It's way beyond even what it was three years ago. So consumers are doing very well.

Part of the PC dynamic is that instead of asking software developers to duplicate one another's work, we take anything that's typical in all those applications and put those features in Windows. So for things like connecting to the Internet, instead of everybody having to do that themselves, we put that in. That's been the evolution--graphical user interfaces came in, hard-disk support, networking support, now Internet support, including the browser.

I think antitrust laws as written are fine. There are people who will debate whether they should be weaker, but that's of academic interest. When I come in to do business, I'm very careful to check with our lawyers to be sure we're steering a hundred miles away from anything that would be questionable. So it is somewhat of a surprise to find ourselves in an antitrust controversy. Thank goodness for the judiciary, which is an environment in which facts are tested and people can see if competition worked in the way it should and has been beneficial to consumers. There's no doubt in our minds where that is going to come out.

In the meantime, we're going to be the focus of a lot of controversy because the filing of a lawsuit is a very big deal. You've got the government taking on that challenge and saying a lot of righteous things, and that's just something we'll have to be sure doesn't distract us from what we're really all about.

5. What's a Company Really Worth? Warren explains why Berkshire stock costs more than a Lexus.

Mr. Buffett, I was told that you have a policy against splitting stock, and I wondered if you might comment on Microsoft's history of splitting stock?

BUFFETT: I've never really felt that if I went into a restaurant and said, "I want two hatchecks instead of one for my hat," I'd really be a lot better off. But I also don't have any quarrel with companies that do split their stock, and I don't think Microsoft's been hurt by it.

I think that our policy fits us very well. There's nothing in my religious upbringing that causes me to recoil from stock splits. I'm on the boards of three companies, two of which have split their stock in the last couple of years. I happen to think that by not splitting Berkshire stock, we attract a slightly more long-term-oriented group of investors. What you want to do is attract shareholders that are very much like you, with the same time horizons and expectations. We don't talk about quarterly earnings, we don't have an investor relations department, and we don't have conference calls with Wall Street analysts, because we don't want people who are focusing on what's going to happen next quarter or even next year. We want people to join us because they want to be with us until they die.

If I were to split the stock dramatically, would I change that shareholder composition much? No, but I'd change it just a little. And remember, all the shareholder seats are filled, just like this auditorium. If I say something that offends all of you, and you all leave and another group comes in, am I better off or worse off? Well, that depends upon what they're like and what you're like. But I think I already have a very good group of shareholders who are attracted to these policies, and I think this policy reinforces it slightly.

GATES: Warren has done something admirable by signaling to people that it's a "different stock" and that they ought to think of Berkshire Hathaway as being a little different from your typical company. Having that unusual stock price is probably a good thing, as long as the newspaper doesn't screw it up. He's caused a lot of problems, you know, with the widths of those columns in the stock tables.

Mr. Buffett, what's your response to those who say that traditional methods for valuing companies are obsolete in this market?

BUFFETT: I think it's hard to find companies that meet our tests of being undervalued in this market, but I don't think that the methods of valuation have changed. It's just that in some markets, like in the mid-1970s, every security you looked at was really dramatically undervalued.

I once ran an investment partnership for about 13 years, ending in 1969, and closed it up because I couldn't find anything. I hadn't lost the ability to value companies; there just weren't any left that were cheap enough, and I wasn't in the business of shorting stocks.

But I think that there's no magic to evaluating any financial asset. A financial asset means, by definition, that you lay out money now to get money back in the future. If every financial asset were valued properly, they would all sell at a price that reflected all of the cash that would be received from them forever until Judgment Day, discounted back to the present at the same interest rate. There wouldn't be any risk premium, because you'd know what coupons were printed on this "bond" between now and eternity. That method of valuation is exactly what should be used whether you're in 1974 or you're in 1998. If I can't do that, then I don't buy. So I'll wait.

Would you look for a higher price-to-earnings ratio at this point than you did in 1969?

BUFFETT: That ratio would be affected by interest rates. The difference between now and 1969 or any other time, in terms of calculating a valuation, wouldn't be affected by anything else. Now, if you looked at the overall market, returns on equity are much higher than they were in 1969 or 1974, or any other time in history. So if you're going to say you're going to value the overall market, the question becomes: "Do you crank in the present 20% returns on equity for American business in aggregate, and say that's a realistic figure to stick on for this future that runs out until eternity?" I'd say that's a fairly reckless assumption and doesn't leave much margin of safety. And I would say that present market levels discount a lot of that, and so that makes me quite cautious.

Do you feel that technology has made businesses more efficient to the point that you can pay more for them?

GATES: There's definitely a one-time lift when you start using technology, and particularly if U.S. companies are using it better than their competitors outside the U.S. You get the ability to communicate better, and you get global scale in a lot of businesses that wouldn't have had it before.

When you look at the really big earners, the ones generating this 20% return on equity and going to that worldwide marketplace--companies like Coca-Cola or Microsoft or Boeing or GE--I know that every one of those has been helped by technology. But that cannot explain why ten years from now they'd be getting that kind of return on equity. Almost certainly there's something ephemeral about current conditions.

BUFFETT: I'm sure technology has made companies more efficient, and if I thought otherwise, I'd be afraid to say so with Bill sitting right here beside me. But the question you might ponder is this: Let's just say that I found a way to clone Jack Welch, and ran off 499 clones of him. Jack continued to run General Electric, and these other 499 ran the rest of the FORTUNE 500. Is the FORTUNE 500 going to have a higher return on equity five years from now or not?

I don't think the answer to that is easy. Because if you get 500 Jack Welches out there, they are going to be doing things in a competitive way that may well produce lower returns for American business than if you've got a bunch of clods out there and a guy like Jack competing with them. If you've got great variation in the quality of management, it improves the chances enormously of a relatively significant number getting terrific returns.

So I would say that a lot of things in business, including technology, really have the same effect as if you went to a parade and the band started coming down the street and all of a sudden you stood up on tiptoe. In another 30 seconds everybody else is on tiptoe, and it would be hell on your legs and you still wouldn't be seeing any better.

Capitalism tends to be self-neutralizing like that in terms of improvements. That's marvelous because it means we have better everything than otherwise. But the real trick is to stand up on tiptoe and not have anyone notice you.

The recent wave of mergers has been staggering. Could you comment on how any of these mergers will create value for shareholders?

BUFFETT: Actually, the two of us have a small announcement we would like to make... [laughter].

It won't stop. Mergers will be motivated by very good considerations. There truly are synergies in a great many mergers. But whether there are synergies or not, they are going to keep happening. You don't get to be the CEO of a big company by being a milquetoast. You are not devoid of animal spirits. And it gets contagious. I've been a director of 19 different public companies over the years, and I can tell you that the conversation turns to acquisitions and mergers much more when the competitors of the particular company are engaging in those. As long as our economy works the way it does--and I think it works very well--you're going to see a lot of it. A generally buoyant market tends to encourage mergers, because everybody's currency is more useful in those circumstances. [A few weeks later, Berkshire Hathaway agreed to pay $23.5 billion in stock to acquire General Re, the world's third-largest reinsurance company.]

GATES: I think it's good to have a healthy skepticism. But General Motors was created out of a restructuring of the automobile industry from a specialized orientation to companies that did the whole job. And anybody who missed that was basically wiped out.

We've bought a lot of small companies, and I'd say that's been vital to us. These are companies that on their own probably wouldn't have made it, but when their abilities are combined with ours, both of us were able to create a much better set of products than we could've otherwise.

I think in banking today, if you're a medium-sized bank, you're probably going to need to participate in all this stuff that's going on. It doesn't make that much sense to have so many banks in this country, and so there will be certain ones going after scale. But there are a lot of silly mergers too.

At the end of the day, is the shareholder better off after a merger?

BUFFETT: In most acquisitions, it's better to be the target than the acquirer. The acquirer pays for the fact that he gets to haul back to his cave the carcass of the conquered animal.

I am suspicious of people who just keep acquiring almost by the week, though. If you look at the outstanding companies--say, a Microsoft or an Intel or a Wal-Mart--their growth overwhelmingly has been internal. Frequently, if some company is on a real acquisition binge, they feel they're using funny money, and it has certain aspects of a chain-letter game.

Beyond that, I'd like to see a period where merged companies just run by themselves after a deal, rather than moving around the accounting and putting up big restructuring charges. I get suspicious when there's too much activity. I like to see organic growth.

6. Aw, Shucks! Warren and Bill muse on their mistakes, their business partners, and managerial succession.

What was the best business decision you made?

BUFFETT: It was just jumping in the pool, basically. The nice thing about the investment business is that you don't need very many deals to succeed. In fact, if when you got out of business school here, you got a punch card with 20 punches on it, and every time you made an investment decision you used up one punch, and that's all you were going to get, you would make 20 very good investment decisions. And you could get very rich, incidentally. You don't need 50 good ideas at all.

I hope the one I made yesterday was a good one. But they've always been kind of simple and obvious to me. The truth is, you know them when you see them. They're so cheap. When I got out of Columbia University, I went through the Moody's manuals page by page--the industrial manual, the transportation manual, the banks and finance manual--just looking for things. And I found stocks at one times earnings. One was Genessee Valley Gas, a little tiny company up in upstate New York, a public utility selling at one times earnings. There were no brokerage reports on it, no nothing, but all you had to do was turn the page. It worked out so well I actually went through the book a second time. Bill was reading the World Book at that time. He's since put it out of business.

GATES: We were talking at breakfast this morning about which of all Warren's investment decisions was the worst one. They're tough to find because his track record is unbelievable. But we decided that, by some metric, buying the one that his company is named after--Berkshire Hathaway--was probably his worst investment decision.

BUFFETT: That's true. We went into a terrible business because it was cheap. It's what I refer to as the "used cigar butt" approach to investing. You see this cigar butt down there, it's soggy and terrible, but there's one puff left, and it's free. That's what Berkshire was when we bought it--it was selling below working capital--but it was a terrible, terrible mistake.

I've made all kinds of bad decisions that have cost us billions of dollars. They've been mistakes of omission rather than commission. I don't worry about not buying Microsoft, though, because I didn't understand that business. And I didn't understand Intel. But there are businesses that I did understand--Fannie Mae was one that was within my circle of competence. I made a decision to buy it, and I just didn't execute. We would've made many billions of dollars. But we didn't do it. Conventional accounting doesn't record that, but believe me, it happened.

GATES: In my case, I'd have to say my best business decisions have had to do with picking people. Deciding to go into business with Paul Allen is probably at the top of the list, and subsequently, hiring a friend--Steve Ballmer--who has been my primary business partner ever since. It's important to have someone who you totally trust, who is totally committed, who shares your vision, and yet who has a little bit different set of skills and who also acts as something of a check on you. Some of the ideas you run by him, you know he's going to say, "Hey, wait a minute, have you thought about this and that?" The benefit of sparking off somebody who's got that kind of brilliance is that it not only makes business more fun, but it really leads to a lot of success.

BUFFETT: I've had a partner like that--Charlie Munger--for a lot of years, and it does for me exactly what Bill is talking about. You have to calibrate with Charlie, though, because Charlie says everything I do is dumb. If he says it's really dumb, I know it is, but if he just says it's dumb, I take that as an affirmative vote.

It seems that in both of your companies, your success is driven by yourselves and your leadership skills. What will happen when you're gone?

BUFFETT: Your assumption is wrong. I will keep working until about five years after I die, and I've given the directors a Ouija board so they can keep in touch. But if the Ouija board doesn't work, we have outstanding people who can do what I do. People are not going to stop drinking Coca-Cola if I die tonight, they're not going to quit shaving tonight, they're not going to eat less See's candy, or fewer Dilly Bars, or anything of the sort. Those companies have terrific products, they've got outstanding managers, and all you'll need at the top of Berkshire is someone who can allocate capital and make sure you have the right managers down below. We've got the people identified to do that, and the board of directors of Berkshire knows who they are.

In fact, I've already sent out a letter that tells what should be done, and I've got another letter that's addressed that will go out at the time, and it starts out, "Yesterday I died," and then tells what the plans of the company are.

GATES: My attitude is a lot like Warren's. I want to keep doing what I'm doing for a long, long time. I think probably a decade from now or so, even though I'll still be totally involved with Microsoft because it's my career, I will pick somebody else to be CEO.

BUFFETT: I see some hands in the audience here.

GATES: That's a long time hence, and our top managers are always sitting down and talking about succession in general, because we want to make sure that we're giving people the opportunity to move up. We don't want to ever create a situation where they feel like it's clogged and they have to go off somewhere else to get big challenges. Our growth helps a lot. We're able to spawn off very, very big jobs for people. Picking that next person is something I give a lot of thought to, but it's probably five years before I have to do something very concrete about it. If there was a surprise, well, there's a contingency plan.

7. Charity Begins When I'm Ready Bill and Warren explain why they'll give away 99% of their wealth... someday.

As two of the world's most successful business people, what role do you see for yourselves in giving back to your communities? And how do you use your influence to get others to give back as well?

BUFFETT: We both have a similar philosophy on that. I know in my own case that 99%-plus will go back to society, just because we've been treated extraordinarily well by society.

I'm lucky. I don't run very fast, but I'm wired in a particular way that I thrive in a big capitalist economy with a lot of action. I'm not adapted for football, I'm not adapted for violin playing. I happen to be in something that pays off huge in this society. As Bill says, if I had been born some time ago I would've been some animal's lunch.

I do not believe in the divine right of the womb. Frankly, I don't think it's right that the quarterback of the Nebraska football team next year should be the eldest son of the quarterback of the Nebraska football team of 22 years ago. Nor do I think that our Olympic team in 2000 should be chosen from the same family that was on the Olympic team in the various respective sports in 1976.

We believe in a meritocracy when it comes to athletics and all sorts of things. Now, why not have a meritocracy in terms of what you go out into the world with in terms of the productive goods? Let the resources flow to those who use them best, and then I believe they should give them back to society when they get through.

GATES: That's a great philosophy, not to mention that passing along a lot of money can be bad for the people who receive it.

BUFFETT: You'd better not put it to a vote.

How do you use your role as successful businessmen in influencing others, even those who are not as successful, to give back?

BUFFETT: Let me suggest another way to think about this. Let's say that it was 24 hours before you were born, and a genie appeared and said, "You look like a winner. I have enormous confidence in you, and what I'm going to do is let you set the rules of the society into which you will be born. You can set the economic rules and the social rules, and whatever rules you set will apply during your lifetime and your children's lifetimes."

And you'll say, "Well, that's nice, but what's the catch?"

And the genie says, "Here's the catch. You don't know if you're going to be born rich or poor, white or black, male or female, able-bodied or infirm, intelligent or retarded." So all

you know is that you're going to get one ball out of a barrel with, say, 5.8 billion balls in it. You're going to participate in what I call the ovarian lottery. It's the most important thing that will happen to you in your life, but you have no control over it. It's going to determine far more than your grades at school or anything else that happens to you.

Now, what rules do you want to have? I'm not going to tell you the rules, and nobody will tell you; you have to make them up for yourself. But they will affect how you think about what you do in your will and things of that sort. That's because you're going to want to have a system that turns out more and more goods and services. You've got a great quantity of people out there, and you want them to live pretty well, and you want your kids to live better than you did, and you want your grandchildren to live better than your kids. You're going to want a system that keeps Bill Gates and Andy Grove and Jack Welch working long, long after they don't need to work. You're going to want the most able people working more than 12 hours a day. So you've got to have a system that gives them an incentive to turn out the goods and services.

But you're also going to want a system that takes care of the bad balls, the ones that aren't lucky. If you have a system that is turning out enough goods and services, you can take care of them. You don't want people worrying about being sick in their old age, or fearful about going home at night. You want a system where people are free of fear to some extent.

So you'll try to design something, assuming you have the goods and services to solve that sort of thing. You'll want equality of opportunity--namely a good public school system--to make you feel that every piece of talent out there will get the same shot at contributing. And your tax system will follow from your reasoning on that. And what you do with the money you make is another thing to think about. As you work through that, everybody comes up with something a little different. I just suggest you play that little game.

How do you see yourselves as leaders in facets of human experience other than business?

GATES: You have to be careful, if you're good at something, to make sure you don't think you're good at other things that you aren't necessarily so good at. I come in every day and work with a great team of people who are trying to figure out how to make great software, listening to the feedback and doing the research. And it's very typical that because I've been very successful at that, people come in and expect that I have wisdom about topics that I don't.

I do think there are some ways that we've run the company--the way we've hired people, and created an environment and used stock options--that would be good lessons for other businesses as well. But I always want to be careful not to suggest that we've found the solutions to all problems.

BUFFETT: You can learn a lot by studying Microsoft and Bill. And you can learn the most by studying what it is he does year after year. But if he devoted 5% or 10% to what

he's now doing, and then spread the remainder of his attention over a bunch of other things, well, society would be worse off, in my view.

Bill's right, occasionally there are things--like campaign finance reform--that he may want to take a position on. But you still don't want to say that the whole world ought to follow you on it. I'm very suspect of the person who is very good at one business--it also could be a good athlete or a good entertainer--who starts thinking they should tell the world how to behave on everything. For us to think that just because we made a lot of money, we're going to be better at giving advice on every subject--well, that's just crazy.

Having fielded their last question, the two billionaires briefly acknowledged the applause and bolted off the stage, leaving behind an audience that clearly would have relished another two hours of them. But no. Practically before the applause had died down, the two had jumped into Gates' Lexus and sped off. After all, they had a bridge game to play.

A Plain English Handbook

How to create clear SEC disclosure documents

By the Office of Investor Education and Assistance
U.S. Securities and Exchange Commission
450 5th Street, N.W.
Washington, DC 20549
August 1998

Preface

by Warren E. Buffett

This handbook, and Chairman Levitt's whole drive to encourage "plain English" in disclosure documents, are good news for me. For more than forty years, I've studied the documents that public companies file. Too often, I've been unable to decipher just what is being said or, worse yet, had to conclude that nothing was being said. If corporate lawyers and their clients follow the advice in this handbook, my life is going to become much easier.

There are several possible explanations as to why I and others sometimes stumble over an accounting note or indenture description. Maybe we simply don't have the technical knowledge to grasp what the writer wishes to convey. Or perhaps the writer doesn't understand what he or she is talking about. In some cases, moreover, I suspect that a less-than-scrupulous issuer doesn't want us to understand a subject it feels legally obligated to touch upon.

Perhaps the most common problem, however, is that a well-intentioned and informed writer simply fails to get the message across to an intelligent, interested reader. In that case, stilted jargon and complex constructions are usually the villains.

This handbook tells you how to free yourself of those impediments to effective communication. Write as this handbook instructs you and you will be amazed at how much smarter your readers will think you have become.

One unoriginal but useful tip: Write with a specific person in mind. When writing Berkshire Hathaway's annual report, I pretend that I'm talking to my sisters. I have no trouble picturing them: Though highly intelligent, they are not experts in accounting or finance. They will understand plain English, but jargon may puzzle them. My goal is simply to give them the information I would wish them to supply me if our positions were reversed. To succeed, I don't need to be Shakespeare; I must, though, have a sincere desire to inform.

No siblings to write to? Borrow mine: Just begin with "Dear Doris and Bertie." •

HIGHLY CONFIDENTIAL

September 23, 1998

Mr. John Meriwether
Chief Executive Officer
Long-Term Capital Management, L.P.
One East Weaver Street
Greenwich, CT 06331-5146

Dear Mr. Meriwether.

Subject to the following deal structure, the partnership described below proposes to purchase the assets of Long-Term Capital Management (and/or its affiliates and subsidiaries, collectively referred to as "Long-Term Capital") for $250 million.

To purchaser will be a limited partnership whose investors will be Berkshire Hathaway for $3 billion, American International Group for $700 million and Goldman Sachs for $300 million (or each of their respective affiliates). All management of the assets will be under the sole control of the partnership and will be transferred to the partnership in an orderly manner.

This bid is also subject to the following:

1) The limited partnership described herein will not assume any liabilities of Long-Term Capital arising from any activities prior to the purchase by the partnership
2) All current financing provided to Long-Term Capital will remain in place under current terms and conditions.

The names of the proposal participants may not be disclosed to anyone. If the names are disclosed, the bid will expire.

This bid will expire at 12:30 p.m. New York time on September 23, 1998.

Sincerely,

Warren E. Buffett /RK Maurice R. Greenberg /RK Jon S. Corzine /RK

Agreed and Accepted on behalf of Long-Term Capital

_____
John Meriwether

Copy of the $250 million offer for Long-Term Capital Management

Buffett Lecture at the University of Florida School of Business October 15, 1998

This speech was the first in a series sponsored by the Graham-Buffett Teaching Endowment, established in 1997 by a $1 million gift from (1970 UF graduate) Mason Hawkins.

http://Tinyurl.com/c85or

Introduction:

The *Graham-Buffett* Course sequence is important to this college because it enables us to attract students who want this perspective on investing and managing corporations—a perspective that has been successfully employed by Mr. *Buffett*, Mr. Hawkins and before them, *Benjamin Graham*.

This perspective is quite simple but is sometimes lost in the complexity of our University analysis. The perspective is that you have to understand the underlying economics of the businesses that you invest in, work in. You have to be clear-eyed and not be swayed by the crowd or passing fancies of the moment. And you have to learn and stick to disciplined principles of business valuation.

In the long run this disciplined approach will more often than not bring success or more importantly avoid spectacular failures.

Hopefully at the *University of Florida* we can successfully convey those principles and create a program for the very best students and in time the very best employers as well.

We thank *Mr. Hawkins* for his gift ($1 million) and share his thoughts today.

Mason Hawkins: He is someone I have admired tremendously for the last 30 years. In addition, he is someone each of us could pattern our lives after as a role model. It is my honor to introduce our lifetime's best long-term investor……

***Buffett*:** (holds mike) Testing: One million $, two million $….three million $.

I would like to say a few words primarily and then the highlight for me will be getting your questions. I want to talk about what is on your mind.

Your Future

I would like to talk for just one minute to the students about your future when you leave here. Because you will learn a tremendous amount about investments, you all have the ability to do well; you all have the IQ to do well. You all have the energy and initiative to do well or you wouldn't be here. Most of you will succeed in meeting your aspirations.

But in determining whether you succeed there is more to it than intellect and energy. I would like to talk just a second about that. In fact, there was a guy, *Pete Kiewit* in Omaha, who used to say, he looked for three things in hiring people: integrity, intelligence and energy. And he said if the person did not have the first two, the later two would kill him, because if they don't have integrity, you want them dumb and lazy.

We want to talk about the first two because we know you have the last two. You are all second-year MBA students, so you have gotten to know your classmates. Think for a moment that I granted you the right--you can buy 10% of one of your classmate's earnings for the rest of their lifetime. You can't pick someone with a rich father; you have to pick someone who is going to do it on his or her own merit. And I gave you an hour to think about it.

Will you give them an IQ test and pick the one with the highest IQ? I doubt it. Will you pick the one with the best grades? The most energetic? You will start looking for qualitative factors, in addition to (the quantitative) because everyone has enough brains and energy. You would probably pick the one you responded the best to, the one who has the leadership qualities, the one who is able to get other people to carry out their interests. That would be the person who is generous, honest and who gave credit to other people for their own ideas. All types of qualities. Whomever you admire the most in the class. Then I would throw in a hooker. In addition to this person you had to go short one of your classmates.

That is more fun. Who do I want to go short? You wouldn't pick the person with the lowest IQ, you would think about the person who turned you off, the person who is egotistical, who is greedy, who cuts corners, who is slightly dishonest.

As you look at those qualities on the left and right hand side, there is one interesting thing about them, it is not the ability to throw a football 60 yards, it is not the ability the run the 100 yard dash in 9.3 seconds, it is not being the best looking person in the class, they are all qualities that if you really want to have the ones on the left hand side, you can have them.

They are qualities of behavior, temperament, character that are achievable, they are not forbidden to anybody in this group. And if you look at the qualities on the right hand side the ones that turn you off in other people, there is not a quality there that you have to have. You can get rid of it. You can get rid of it a lot easier at your age than at my age, because most behaviors are habitual. The chains of habit are too light to be felt until they are too heavy to be broken. There is no question about it. I see people with these self-destructive behavior patterns at my age or even twenty years younger and they really are entrapped by them.

They go around and do things that turn off other people right and left. They don't need to be that way but by a certain point they get so they can hardly change it. But at your age you can have any habits, any patterns of behavior that you wish. It is simply a question of which you decide.

If you did this… *Ben Graham* looked around at the people he admired and *Ben Franklin* did this before him. *Ben Graham* did this in his low teens and he looked around at the people he admired and he said, "I want to be admired, so why don't I behave like them?" And he found out that there was nothing impossible about behaving like them. Similarly he did the same thing on the reverse side in terms of getting rid of those qualities. I would suggest is that if you write those qualities down and think about them a while and make them habitual, you will be the one you want to buy 10% of when you are all through. And the beauty of it is that you already own 100% of yourself and you are stuck with it. So you might as well be that person, that somebody else.

Well that is a short little sermon. So let's get on with what you are interested in. Let's start with questions……..

Question: What about Japan? Your thoughts about Japan?

***Buffett*:** My thoughts about Japan? I am not a macro guy. Now I say to myself *Berkshire Hathaway* can borrow money in Japan for 10 years at one percent. One percent! I say gee, I took *Graham*'s class 45 years ago and I have been working hard at this all my life maybe I can earn more than 1% annually, it doesn't seem impossible. I wouldn't want to get involved in currency risk, so it would have to be Yen-denominated. I would have to be in Japanese Real Estate or Japanese companies or something of the sort and all I have to do is beat one percent. That is all the money is going to cost me and I can get it for 10 years. So far I haven't found anything. It is kind of interesting. The Japanese businesses earn very low returns on equity - 4% to 5% - 6% on equity and it is very hard to earn a lot as an investor when the business you are in doesn't earn very much money.

Now some people do it. In fact, I have a friend, Walter Schloss, who worked at *Graham* at the same time I did. And it was the first way I went at stocks to buy stocks selling way below working capital. A very cheap, quantitative approach to stocks. I call it the cigar butt approach to investing. You walk down the street and you look around for a cigar butt someplace. Finally you see one and it is soggy and kind of repulsive, but there is one puff left in it. So you pick it up and the puff is free--it is a cigar butt stock. You get one free puff on it and then you throw it away and try another one. It is not elegant. But it works. Those are low return businesses.

But time is the friend of the wonderful business; it is the enemy of the lousy business. If you are in a lousy business for a long time, you will get a lousy result even if you buy it cheap. If you are in a wonderful business for a long time, even if you pay a little bit too much going in you will get a wonderful result if you stay in a long time.

I find very few wonderful businesses in Japan at present. They may change the culture in some way so that management gets more share holder responsive over there and stock returns are higher. At the present time you will find a lot of low return businesses and that was true even when the Japanese economy was booming. It is amazing; they had an

incredible market without incredible companies. They were incredible in terms of doing a lot of business, but they were not incredible in terms of the return on equity that they achieved and that has finally caught up with them. So we have so far done nothing there. But as long as money is 1% there, we will keep looking.

Question: You were rumored to be one of the rescue buyers of *Long Term Capital*, what was the play there, what did you see?

***Buffett*:** The *Fortune* Magazine that has *Rupert Murdoch* on the cover. It tells the whole story of our involvement; it is kind of an interesting story. I got the really serious call about *LTCM* on a Friday afternoon that things were getting serious. I know those people most of them pretty well--most of them at *Salomon* when I was there. And the place was imploding and the FED was sending people up that weekend. Between that Friday and the following Wed. when the NY Fed, in effect, orchestrated a rescue effort but without any Federal money involved. I was quite active but I was having a terrible time reaching anybody.

We put in a bid on Wednesday morning. I talked to *Bill McDonough* at the NY Fed. We made a bid for 250 million for the net assets but we would have put in 3 and 3/4 billion on top of that. $3 billion from *Berkshire*, $700 mil. from *AIG* and $300 million. from *Goldman Sachs*. And we submitted that but we put a very short time limit on that because when you are bidding on 100 billion worth of securities that are moving around, you don't want to leave a fixed price bid out there for very long.

In the end the bankers made the deal, but it was an interesting period. The whole LTCM is really fascinating because if you take *Larry Hillenbrand, Eric Rosenfeld, John Meriwether* and the two Nobel prize winners. If you take the 16 of them, they have about as high an IQ as any 16 people working together in one business in the country, including *Microsoft*. An incredible amount of intellect in one room. Now you combine that with the fact that those people had extensive experience in the field they were operating in. These were not a bunch of guys who had made their money selling men's clothing and all of a sudden went into the securities business. They had in aggregate, the 16, had 300 or 400 years of experience doing exactly what they were doing and then you throw in the third factor that most of them had most of their very substantial net worth's in the businesses. Hundreds and hundreds of millions of their own money up (at risk), super high intellect and working in a field that they knew. Essentially they went broke. That to me is absolutely fascinating.

If I ever write a book it will be called, <u>Why Smart People Do Dumb Things</u>. My partner says it should be autobiographical. But this might be an interesting illustration. They are perfectly decent guys. I respect them and they helped me out when I had problems at *Salomon*. They are not bad people at all.

But to make money they didn't have and didn't need, they risked what they did have and what they did need. That is just plain foolish; it doesn't matter what your IQ is. If you risk something that is important to you for something that is unimportant to you it just

doesn't make sense. I don't care if the odds you succeed are 99 to 1 or 1000 to 1 that you succeed. If you hand me a gun with a million chambers with one bullet in a chamber and put it up to your temple and I am paid to pull the trigger, it doesn't matter how much I would be paid. I would not pull the trigger. You can name any sum you want, but it doesn't do anything for me on the upside and I think the downside is fairly clear. Yet people do it financially very much without thinking.

There was a lousy book with a great title written by Walter Gutman—You Only Have to Get Rich Once. Now that seems pretty fundamental. If you have $100 million at the beginning of the year and you will make 10% if you are unleveraged and 20% if you are leveraged 99 times out of a 100, what difference if at the end of the year, you have $110 million or $120 million? It makes no difference. If you die at the end of the year, the guy who makes up the story may make a typo, he may have said 110 even though you had a 120. You have gained nothing at all. It makes absolutely no difference. It makes no difference to your family or anybody else.

The downside, especially if you are managing other people's money, is not only losing all your money, but it is disgrace, humiliation and facing friends whose money you have lost. Yet 16 guys with very high IQs entered into that game. I think it is madness. It is produced by an over reliance to some extent on things. Those guys would tell me back at Salomon; a six Si*gm*a event wouldn't touch us. But they were wrong. History does not tell you of future things happening. They had a great reliance on mathematics. They thought that the Beta of the stock told you something about the risk of the stock. It doesn't tell you a damn thing about the risk of the stock in my view.

Si*gm*a's do not tell you about the risk of going broke in my view and maybe now in their view too. But I don't like to use them as an example. The same thing in a different way could happen to any of us, where we really have a blind spot about something that is crucial, because we know a whole lot of something else. It is like *Henry Kauffman* said, "The ones who are going broke in this situation are of two types, the ones who know nothing and the ones who know everything." It is sad in a way.

I urge you. We basically never borrow money. I never borrowed money even when I had $10,000 basically, what difference did it make. I was having fun as I went along it didn't matter whether I had $10,000 or $100,000 or $1,000,000 unless I had a medical emergency come along.

I was going to do the same things when I had a little bit of money as when I had a lot of money. If you think of the difference between me and you, we wear the same clothes basically (SunTrust gives me mine), we eat similar food—we all go to *McDonald's* or better yet, *Dairy Queen*, and we live in a house that is warm in winter and cool in summer. We watch the Nebraska (football) game on big screen TV. You see it the same way I see it. We do everything the same—our lives are not that different. The only thing we do is we travel differently. What can I do that you can't do?

I get to work in a job that I love, but I have always worked at a job that I loved. I loved it just as much when I thought it was a big deal to make $1,000. I urge you to work in jobs that you love. I think you are out of your mind if you keep taking jobs that you don't like because you think it will look good on your resume. I was with a fellow at Harvard the other day who was taking me over to talk. He was 28 and he was telling me all that he had done in life, which was terrific. And then I said, "What will you do next?" "Well," he said, "Maybe after I get my MBA I will go to work for a consulting firm because it will look good on my resume." I said, "Look, you are 28 and you have been doing all these things, you have a resume 10 times than anybody I have ever seen. Isn't that a little like saving up sex for your old age?

There comes a time when you ought to start doing what you want. Take a job that you love. You will jump out of bed in the morning. When I first got out of *Columbia Business School*, I wanted to go to work for *Graham* immediately for nothing. He thought I was over-priced. But I kept pestering him. I sold securities for three years and I kept writing him and finally I went to work for him for a couple of years. It was a great experience. But I always worked in a job that I loved doing. You really should take a job that if you were independently wealthy that would be the job you would take. You will learn something, you will be excited about, and you will jump out of bed. You can't miss. You may try something else later on, but you will get way more out of it and I don't care what the starting salary is.

When you get out of here take a job you love, not a job you think will look good on your resume. You ought to find something you like.

If you think you will be happier getting 2x instead of 1x, you are probably making a mistake. You will get in trouble if you think making 10x or 20x will make you happier because then you will borrow money when you shouldn't or cut corners on things. It just doesn't make sense and you won't like it when you look back.

Question: What makes a company something that you like?

Buffett: I like businesses that I can understand. Let's start with that. That narrows it down by 90%. There are all types of things I don't understand, but fortunately, there is enough I do understand. You have this big wide world out there and almost every company is publicly owned. So you have all American business practically available to you. So it makes sense to go with things you can understand.

I can understand this, anyone can understand this (*Buffett* holds up a bottle of *Coca-Cola*). Since 1886, it is a simple business, but it is not an easy business—I don't want an easy business for competitors. I want a business with a moat around it. I want a very valuable castle in the middle and then I want the Duke who is in charge of that castle to be very honest and hard working and able. Then I want a moat around that castle. The moat can be various things: The moat around our auto insurance business, Geico, is low cost.

People have to buy auto insurance so everyone is going to have one auto insurance policy per car basically. I can't sell them 20, but they have to buy one. I can sell them 1. What are they going to buy it on? (based on what criteria?) They (customers) will buy based on service and cost. Most people will assume the service is identical among companies or close enough. So they will do it on cost. So I have to be a low cost producer--that is my moat. To the extent that my costs are further below the other guy, I have thrown a couple of sharks into the moat. All the time you have this wonderful castle, there are people out there who are going to attack it and try to take it away from you. I want a castle I can understand, but I want a castle with a moat around it.

Kodak

30 years ago, *Eastman Kodak's* moat was just as wide as *Coca-Cola*'s moat. I mean if you were going to take a picture of your six-month old baby and you want to look at that picture 20 years from now or 50 years from now. And you are never going to get a chance—you are not a professional photographer—so you can evaluate what is going to look good 20 or 50 years ago. What is in your mind about that photography company *(Share of Mind*) is what counts. Because they are promising you that the picture you take today is going to be terrific 20 to 50 years from now about something that is very important to you. Well, *Kodak* had that in spades 30 years ago, they owned that. They had what I call share of mind. Forget about share of market, share of mind. They had something—that little yellow box—that said *Kodak* is the best. That is priceless. They have lost some of that. They haven't lost it all.

It is not due to *George Fisher*. *George* is doing a great job, but they let that moat narrow. They let *Fuji* come and start narrowing the moat in various ways. They let them get into the Olympics and take away that special aspect that only *Kodak* was fit to photograph the Olympics. So *Fuji* gets there and immediately in people's minds, *Fuji* becomes more into parity with *Kodak*.

You haven't seen that with *Coke*; *Coke*'s moat is wider now than it was 30 years ago. You can't see the moat day by day but every time the infrastructure that gets built in some country that isn't yet profitable for *Coke* that will be 20 years from now. The moat is widening a little bit. Things are, all the time, changing a little in one direction or the other. Ten years from now, you will see the difference. Our managers of the businesses we run, I have one message to them, and we want to widen the moat. We want to throw crocs, sharks and gators—I guess—into the moat to keep away competitors. That comes about through service, through quality of product, it comes about through cost, some times through patents, and/or real estate location. So that is the business I am looking for.

Now what kind of businesses am I going to find like that? Well, I am going to find them in simple products because I am not going to be able to figure what the moat is going to look like for *Oracle*, *Lotus* or *Microsoft*, ten years from now. Gates is the best businessman I have ever run into and they have a hell of a position, but I really don't know what that business is going to look like ten years from now. I certainly don't know

what his competitors will look like ten years from now. I know what the chewing business will look like ten years from now. The Internet is not going to change how we chew gum and nothing much else is going to change how we chew gum. There will lots of new products. Is *Spearmint* or *Juicy Fruit* going to evaporate? It isn't going to happen. You give me a billion dollars and tell me to go into the chewing gum business and try to make a real dent in *Wrigley's*. I can't do it. That is how I think about businesses. I say to myself, give me a billion dollars and how much can I hurt the guy? Give me $10 billion dollars and how much can I hurt *Coca-Cola* around the world? I can't do it. Those are good businesses.

Now give me some money and tell me to hurt somebody in some other fields, and I can figure out how to do it.

So I want a simple business, easy to understand, great economics now, honest and able management, and then I can see about in a general way where they will be ten (10) years from now. If I can't see where they will be ten years from now, I don't want to buy it. Basically, I don't want to buy any stock where if they close the NYSE tomorrow for five years, I won't be happy owning it. I buy a farm and I don't get a quote on it for five years and I am happy if the farm does OK. I buy an apartment house and don't get a quote on it for five years, I am happy if the apartment house produces the returns that I expect. People buy a stock and they look at the price next morning and they decide to see if they are doing well or not doing well. It is crazy. They are buying a piece of the business. That is what *Graham*—the most fundamental part of what he taught me.

You are not buying a stock, you are buying part ownership in a business. You will do well if the business does well, if you didn't pay a totally silly price. That is what it is all about. You ought to buy businesses you understand. Just like if you buy farms, you ought to buy farms you understand. It is not complicated.

Incidentally, by the way, in calling this *Graham-Buffett*, this is pure *Graham*. I was very fortunate. I picked up his book (The Intelligent Investor) when I was nineteen; I got interested in stocks when I was 6 or 7. I bought my first stock when I was eleven. But I was playing around with all this stuff—I had charts and volume and I was making all types of technical calculations and everything. Then I picked up a little book that said you are not just buying some little ticker symbol, that bounces around every day, you are buying part of a business. Soon as I started thinking about it that way, everything else followed. It is very simple. So we buy businesses we think we can understand. There is no one here who can't understand *Coke*…….. (end of first side.)

If I was teaching a class at business school, on the final exam I would pass out the information on an Internet company and ask each student to value it. Anybody that gave me an answer, I'd flunk (Laughter).

I don't know how to do it. But people do it all the time; it is more exciting. If you look at it like you are going to the races--that is a different thing--but if you are investing…. Investing is putting out money to be sure of getting more back later at an appropriate rate.

And to do that you have to understand what you are doing at any time. You have to understand the business. You can understand some businesses but not all businesses.

Question: **You covered half of it which is trying to understand a business and buying a business. You also alluded to getting a return on the amount of capital invested in the business. How do you determine what is the proper price to pay for the business?**

***Buffett*:** It is a tough thing to decide but I don't want to buy into any business I am not terribly sure of. So if I am terribly sure of it, it probably won't offer incredible returns. Why should something that is essentially a cinch to do well, offer you 40% a year? We don't have huge returns in mind, but we do have in mind not losing anything. We bought *See's Candy* in 1972, *See's Candy* was then selling 16 m. pounds of candy at a $1.95 a pound and it was making 2 bits a pound or $4 million pre-tax. We paid $25 million for it—6.25 x pretax or about 10x after tax. It took no capital to speak of. When we looked at that business—basically, my partner, Charlie, and I—we needed to decide if there was some untapped pricing power there. Where that $1.95 box of candy could sell for $2 to $2.25. If it could sell for $2.25 or another $0.30 per pound that was $4.8 on 16 million pounds. Which on a $25 million purchase price was fine. We never hired a consultant in our lives; our idea of consulting was to go out and buy a box of candy and eat it.

What we did know was that they had share of mind in California. There was something special. Every person in Ca. has something in mind about *See's Candy* and overwhelmingly it was favorable. They had taken a box on Valentine's Day to some girl and she had kissed him. If she slapped him, we would have no business. As long as she kisses him, that is what we want in their minds. *See's Candy* means getting kissed. If we can get that in the minds of people, we can raise prices. I bought it in 1972, and every year I have raised prices on Dec. 26th, the day after Christmas, because we sell a lot on Christmas. In fact, we will make $60 million this year. We will make $2 per pound on 30 million pounds. Same business, same formulas, same everything--$60 million bucks and it still doesn't take any capital.

And we make more money 10 years from now. But of that $60 million, we make $55 million in the three weeks before Christmas. And our company song is: "What a friend we have in Jesus." (Laughter). It is a good business. Think about it a little. Most people do not buy boxed chocolate to consume themselves, they buy them as gifts—somebody's birthday or more likely it is a holiday. Valentine's Day is the single biggest day of the year. Christmas is the biggest season by far. Women buy for Christmas and they plan ahead and buy over a two or three week period. Men buy on Valentine's Day. They are driving home; we run ads on the Radio. Guilt, guilt, guilt—guys are veering off the highway right and left. They won't dare go home without a box of Chocolates by the time we get through with them on our radio ads. So that Valentine's Day is the biggest day.

Can you imagine going home on Valentine's Day—our *See's Candy* is now $11 a pound thanks to my brilliance. And let's say there is candy available at $6 a pound. Do you

really want to walk in on Valentine's Day and hand—she has all these positive images of *See's Candy* over the years—and say, "Honey, this year I took the low bid." And hand her a box of candy. It just isn't going to work. So in a sense, there is untapped pricing power—it is not price dependent.

Think of *Disney*. *Disney* is selling Home Videos for $16.95 or $18.95 or whatever. All over the world—people, and we will speak particularly about Mothers in this case, have something in their mind about *Disney*. Everyone in this room, when you say *Disney*, has something in their mind about *Disney*. When I say *Universal Pictures*, if I say *20th Century Fox*, you don't have anything special in your mind. Now if I say *Disney*, you have something special in your mind. That is true around the world.

Now picture yourself with a couple of young kids, whom you want to put away for a couple of hours every day and get some peace of mind. You know if you get one video, they will watch it twenty times. So you go to the video store or wherever to buy the video. Are you going to sit there and premier 10 different videos and watch them each for an hour and a half to decide which one your kid should watch? No. Let's say there is one there for $16.95 and the *Disney* one for $17.95—you know if you take the *Disney* video that you are going to be OK. So you buy it. You don't have to make a quality decision on something you don't want to spend the time to do. So you can get a little bit more money if you are *Disney* and you will sell a lot more videos. It makes it a wonderful business. It makes it very tough for the other guy.

How would you try to create a brand—*Dreamworks* is trying—that competes with *Disney* around the world and replaces the concept that people have in their minds about *Disney* with something that says, *Universal Pictures*? So a mother is going to walk in and pick out a *Universal Pictures* video in preference to a *Disney*. It is not going to happen.

Coca-Cola is associated with people being happy around the world. Everyplace – *Disne*yland, the *World Cup*, the *Olympics*—where people are happy. Happiness and *Coke* go together. Now you give me—I don't care how much money—and tell me that I am going to do that with *RC Cola* around the world and have five billion people have a favorable image in their mind about *RC Cola*. You can't get it done. You can fool around, you can do what you want to do. You can have price discounts on weekends. But you are not going to touch it. That is what you want to have in a business. That is the moat. You want that moat to widen.

If you are *See's Candy*, you want to do everything in the world to make sure that the experience basically of giving that gift leads to a favorable reaction. It means what is in the box, it means the person who sells it to you, because all of our business is done when we are terribly busy. People come in during theose weeks before Chirstmas, Valentine's Day and there are long lines. So at five o'clock in the afternoon some woman is selling someone the last box candy and that person has been waiting in line for maybe 20 or 30 customers. And if the salesperson smiles at that last customer, our moat has widened and if she snarls at 'em, our moat has narrowed. We can't see it, but it is going on everyday. But it is the key to it. It is the total part of the product delivery. It is having everything

associated with it say, *See's Candy* and something pleasant happening. That is what business is all about.

Question: If I have every bought a company where the numbers told me not to. How much is quantitative and how much is qualitative?

Buffett: The best buys have been when the numbers almost tell you not to. Because then you feel so strongly about the product. And not just the fact you are getting a used cigar butt cheap. Then it is compelling. I owned a windmill company at one time. Windmills are cigar butts, believe me. I bought it very cheap, I bought it at a third of working capital. And we made money out of it, but there is no repetitive money to be made on it. There is a one-time profit in something like that. And it is just not the thing to be doing. I went through that phase. I bought streetcar companies and all kinds of things. In terms of the qualitative, I probably understand the qualitative the moment I get the phone call. Almost every business we have bought has taken five or ten minutes in terms of analysis. We bought two businesses this year.

General Re is a $18 billion deal. I have never been to their home office. I hope it is there. (Laughter) "There could be a few guys there saying what numbers should we send *Buffett* this month?" I could see them going once a month and saying we have $20 billion in the bank instead of $18 billion. I have never been there.

Before I bought *Executive Jet*, which is fractional ownership of jets, before I bought it, I had never been there. I bought my family a quarter interest in the program three years earlier. And I have seen the service and it seems to develop well. And I got the numbers. But if you don't know enough to know about the business instantly, you won't know enough in a month or in two months. You have to have sort of the background of understanding and knowing what you do or don't understand. That is the key. It is defining your circle of competence.

Everybody has got a different circle of competence. The important thing is not how big the circle is, the important thing is the size of the circle; the important thing is staying inside the circle. And if that circle only has 30 companies in it out of 1000s on the big board, as long as you know which 30 they are, you will be OK. And you should know those businesses well enough so you don't need to read lots of work. Now I did a lot of work in the earlier years just getting familiar with businesses and the way I would do that is use what *Phil Fisher* would call, the "Scuttlebutt Approach." I would go out and talk to customers, suppliers, and maybe ex-employees in some cases. Everybody. Everytime I was interested in an industry, say it was coal, I would go around and see every coal company. I would ask every CEO, "If you could only buy stock in one coal company that was not your own, which one would it be and why? You piece those things together, you learn about the business after awhile.

Funny, you get very similar answers as long as you ask about competitors. If you had a silver bullet and you could put it through the head of one competitor, which competitor and why? You will find who the best guy is in the industry. So there are a lot of things

you can learn about a business. I have done that in the past on the business I felt I could understand so I don't have to do that anymore. The nice thing about investing is that you don't have to learn anything new. You can do it if you want to, but if you learn *Wrigley's* chewing gum forty years ago, you still understand *Wrigley's* chewing gum. There are not a lot of great insights to get of the sort as you go along. So you do get a database in your head.

I had a guy, *Frank Rooney*, who ran *Melville* for many years; his father-in-law died and had owned *H.H. Brown*, a shoe company. And he put it up with *Goldman Sachs*. But he was playing golf with a friend of mine here in Florida and he mentioned it to this friend, so my friend said "Why don't you call Warren?" He called me after the match and in five minutes I basically had a deal.

But I knew Frank, and I knew the business. I sort of knew the basic economics of the shoe business, so I could buy it. Quantitatively, I have to decide what the price is. But, you know, that is either yes or no. I don't fool a lot around with negotiations. If they name a price that makes sense to me, I buy it. If they don't, I was happy the day before, so I will be happy the day after without owning it.

Question: The Asian Crisis and how it affects a company like *Coke* that recently announced their earnings would be lower in the fourth quarter.

Buffett: Well, basically I love it, but because the market for *Coca-Cola* products will grow far faster over the next twenty years internationally than it will in the United States. It will grow in the U.S. on a per capita basis. The fact that it will be a tough period for who knows—three months or three years—but it won't be tough for twenty years. People will still be going to be working productively around the world and they are going to find this is a bargain product in terms of a portion of their working day that they have to give up in order to have one of these, better yet, five of them a day like I do.

This is a product that in 1936 when I first bought 6 of those for a quarter and sold them for a nickel each. It was in a 6.5 oz bottle and you paid a two cents deposit on the bottle. That was a 6.5 oz. bottle for a nickel at that time; it is now a 12 oz. can which if you buy it on Weekends or if you buy it in bigger quantities, so much money doesn't go to packaging—you essentially can buy the 12 ozs. for not much more than 20 cents. So you are paying not much more than twice the per oz. price of 1936. This is a product that has gotten cheaper and cheaper relative to people's earning power over the years. And which people love. And in 200 countries, you have the per capita consumption use going up every year for a product that is over 100 years old that dominates the market. That is unbelievable.

One thing that people don't understand is one thing that makes this product worth 10s and 10s of billions of dollars is one simple fact about really all colas, but we will call it *Coca-Cola* for the moment. It happens to be a name that I like. **Cola has no taste memory.** You can drink one of these at 9 O'clock, 10 O'clock, 1 O'clock and 5 O'clock. The one at 5 o'clock will taste as good to you as the one you drank early in the morning,

you can't do that with Cream Soda, Root Beer, Orange, Grape. All of those things accumulate on you. Most foods and beverages accumulate; you get sick of them after a while. And if you eat See's Candy—we get these people who go to work for us at See's Candy and the first day they go crazy, but after a week they are eating the same amount as if they were buying it, because chocolate accumulates on you. There is no taste memory to Cola and that means you get people around the world who will be heavy users—who will drink five a day, or for *Diet Coke*, 7 or even 8 a day. They will never do that with other products. So you get this incredible per capita consumption. The average person in this part of the world or maybe a little north of here drinks 64 ozs. of liquid a day. You can have 64 ozs. of that be *Coke* and you will not get fed up with *Coke* if you like it to start with in the least. But if you do that with anything else; if you eat just one product all day, you will get a little sick of it after a while.

It is a huge factor. So today over 1 billion of *Coca-Cola* product servings will be sold in the world and that will grow year by year. It will grow in every country virtually, and it will grow on a per capita basis. And twenty years from now it will grow a lot faster internationally than in the U.S., so I really like that market better, because there is more growth there over time. But it will hurt them in the short term right now, but that doesn't mean anything. *Coca-Cola* went public in 1919; the stock sold for $40 per share. The Chandler family bought the whole business for $2,000 back in the late 1880s. So now he goes public in 1919, $40 per share. One year later it is selling for $19 per share. It has gone down 50% in one year. You might think it is some kind of disaster and you might think sugar prices increased and the bottlers were rebellious. And a whole bunch of things. You can always find reasons that weren't the ideal moment to buy it. Years later you would have seen the Great Depression, WW II and sugar rationing and thermonuclear weapons and the whole thing—there is always a reason.

But in the end if you had bought one share at $40 per share and reinvested the dividends, it would be worth $5 million now ($40 compounding at 14.63% for 86 years!). That factor so overrides anything else. If you are right about the business you will make a lot of money. The timing part of it is very tricky thing so I don't worry about any given event if I got a wonderful business what it does next year or something of the sort. Price controls have been in this country at various times and that has fouled up even the best of businesses. I wouldn't be able to raise prices Dec 31st on See's Candy. But that doesn't make it a lousy business if that happens to happen, because you are not going to have price controls forever. We had price controls in the early 70s.

The wonderful business—you can figure what will happen, you can't figure out when it will happen. You don't want to focus too much on when but you want to focus on what. If you are right about what, you don't have to worry about when very much.

Question: What about your business mistakes?

***Buffett*:** How much time do you have? The interesting thing about investments for me and my partner, *Charlie Munger*, the biggest mistakes have not been mistakes of commission, but of omission. They are where we knew enough about the business to do

something and where, for one reason or another, sat they're sucking out thumbs instead of doing something. And so we have passed up things where we could have made billions and billions of dollars from things we understood, forget about things we don't understand. The fact I could have made billions of dollars from *Microsoft* doesn't mean anything because I never could understand *Microsoft*. But if I can make billions out of healthcare stocks, then I should make it. And I didn't when the Clinton health care program was proposed and they all went in the tank. We should have made a ton of money out of that because I could understand it. And didn't make it.

I should have made a ton of money out of *Fannie Mae* back the mid-1980s, but I didn't do it. Those are billion dollar mistakes or multi-billion dollar mistakes that generally accepted accounting principles don't pick up. The mistakes you see. I made a mistake when I bought *US Air Preferred* some years ago. I had a lot of money around. I make mistakes when I get cash. *Charlie* tells me to go to a bar instead. Don't hang around the office. But I hang around the office and I have money in my pocket, I do something dumb. It happens every time. So I bought this thing. Nobody made me buy it. I now have an 800 number I call every time I think about buying a stock in an airline. I say, "I am *Warren* and I am an air-aholic." They try to talk me down, "Keep talking don't do anything rash." Finally I got over it. But I bought it. And it looked like we would lose all our money in it. And we came very close to losing all our money in it. You can say we deserved to lose our money it.

We bought it because it was an attractive security. But it was not in an attractive industry. I did the same thing in *Salomon.* I bought an attractive security in a business I wouldn't have bought the equity in. So you could say that is one form of mistake. Buying something because you like the terms, but you don't like the business that well. I have done that in the past and will probably do that again. The bigger mistakes are the ones of omission. Back when I had $10,000 I put $2,000 of it into a *Sinclair Service Station* which I lost, so the opportunity cost on that money is about $6 billion right now--fairly big mistakes. It makes me feel good when my *Berkshire* goes down, because the cost of my Sinclair Station goes down too. My 20% opportunity cost. I will say this, it is better to learn from other people's mistakes as much as possible. But we don't spend any time looking back at *Berkshire*. I have a partner, *Charlie Munger*; we have been pals for forty years—never had an argument. We disagree on things a lot but we don't have arguments about it.

We never look back. We just figure there is so much to look forward to that there is no sense thinking of what we might have done. It just doesn't make any difference. You can only live life forward. You can learn something perhaps from the mistakes, but the big thing to do is to stick with the businesses you understand. So if there is a generic mistake outside your circle of competence like buying something that somebody tips you on or something of the sort. In an area you know nothing about, you should learn something from that which is to stay with what you can figure out yourself. You really want your decision making to be by looking in the mirror. Saying to yourself, "I am buying 100 shares of General Motors at $55 because……." It is your responsibility if you are buying it. There's gotta be a reason and if you can't state the reason, you

shouldn't buy it. If it is because someone told you about it at a cocktail party, not good enough. It can't be because of the volume or a reason like the chart looks good. It has to be a reason to buy the business. That we stick to pretty carefully. That is one of the things *Ben Graham* taught me.

Question: The current tenuous economic situation and interest rates? Where are we going?

***Buffett*:** I don't think about the macro stuff. What you really want to in investments is figure out <u>what is important and knowable</u>. If it is unimportant and unknowable, you forget about it. What you talk about is important but, in my view, it is not knowable. Understanding *Coca-Cola* is knowable or *Wrigley's* or *Eastman Kodak*. You can understand those businesses that are knowable. Whether it turns out to be important depends where your valuation leads you and the firm's price and all that. But we have never not bought or bought a business because of any Macro feeling of any kind because it doesn't make any difference. Let's say in 1972 when we bought *See's Candy*, I think *Nixon* put on the price controls a little bit later, but so what! We would have missed a chance to buy something for $25 million that is producing $60 million pre-tax now. We don't want to pass up the chance to do something intelligent because of some prediction about something we are no good on anyway. So we don't read or listen to in relation to macro factors at all. The typical investment counselor organization goes out and they bring out their economist and they trot him out and he gives you this big macro picture. And they start working from there on down. In our view that is nonsense.

If *Alan Greenspan* was on the one side of me and *Robert Rubin* on the other side and they both were whispering in my ear exactly what they were going to do the next twelve months, it wouldn't make any difference to me what I would pay for *Executive Jet* or *General Re* or anything else I do.

Question: What is the benefit of being an out-of-towner as opposed to being on Wall Street?

Buffett: I worked on Wall Street for a couple of years and I have my best friends on both coasts. I like seeing them. I get ideas when I go there. **But the best way to think about investments is to be in a room with no one else and just think.** And if that doesn't work, nothing else is going to work. The disadvantage of being in any type of market environment like Wall Street in the extreme is that you get over-stimulated. You think you have to do something every day. The *Chandler* family paid $2,000 for this company (*Coke*). You don't have to do much else if you pick one of those. And the trick then is <u>not</u> to do anything else. Even not to sell at 1919, which the family did later on. So what you are looking for is some way to get one good idea a year. And then ride it to its full potential and that is very hard to do in an environment where people are shouting prices back and forth every five minutes and shoving reports in front of your nose and all that. Wall Street makes its money on activity. <u>You make your money on inactivity.</u>

If everyone in this room trades their portfolio around every day with every other person, you will all end up broke. And the intermediary will end up with all the money. If you all own stock in a group of average businesses and just sit here for the next 50 years, you will end up with a fair amount of money and your broker will be broke. He is like the Doctor who gets paid on how often to get you to change pills. If he gave you one pill that cures you the rest of your life, he would make one sale, one transaction and that is it. But if he can convince you that changing pills every day is the way to great health, it will be great for him and the prescriptionists. You won't be any healthier and you will be a lot worse off financially. You want to stay away from any environment that stimulates activity. And Wall Street would have the effective of doing that.

When I went back to Omaha, I would go back with a whole list of companies I wanted to check out and I would get my money's worth out of those trips, but then I would go back to Omaha and think about it.

Question: How to evaluate *Berkshire* or *MSFT* if it does not pay dividends?

Buffett: It won't pay any dividends either. That is a promise I can keep. All you get with *Berkshire*, you stick it in your safe deposit box and then every year you go down and fondle it. You take it out and then you put it back. There is enormous psychic reward in that. Don't underestimate it.

The real question is if we can retain dollar bills and turn them into more than a dollar at a decent rate. That is what we try to do. And *Charlie Munger* and I have all our money in it to do that. That is all we will get paid for doing. We won't take any options or we won't take any salaries to speak of. But that is what we are trying to do. It gets harder all the time. The more money we manage the harder it is to do that. We would do way better percentage wise with Berkshire if it was 1/100th the present size. It is run for its owners, but it isn't run to give them dividends because so far every dollar that we earned or could have paid out, we have turned into more than a dollar. It is worth more than a dollar to keep it. Therefore, it would be silly to pay it out. Even if everyone was tax-free that owned it. It would have been a mistake to pay dividends at Berkshire. Because so far the dollar bills retained have turned into more than a dollar. But there is no guarantee that happens in the future. At some point the game runs out on that. That is what the business is about. Nothing else about the business do we judge ourselves by. We don't judge it by the size of its home office building or anything the like the number of people working there. We have 12 people working at headquarters and 45,000 employees at Berkshire, 12 people at HQ and 3,500 sq ft. and we won't change it.

But we will judge ourselves by the performance of the company and that is the only way we will get paid. But believe me, it is a lot harder than it used to be.

Question: What tells you when an investment has reached its full potential?

Buffett: I don't buy *Coke* with the idea it will be out of gas in 10 years or 50 years. There could be something that happens by I think the chances are almost nil. So what we

really want to do is buy businesses that we would be happy to own forever. It is the same way I fell about people who buy *Berkshire.* I want people who buy *Berkshire* to plan to hold it forever. They may not for one reason or the other but I want them at the time they buy it to think they are buying a business they are going to want to own forever.

And I don't say that is the only way to buy things. It is just the group to join me because I don't want to have a changing group all the time. I measure *Berkshire* by how little activity there is in it. If I had a church and I was the preacher and half the congregation left every Sunday. I wouldn't say, "It is marvelous to have all this liquidity among my members."

Terrific turnover… I would rather go to church where all the seats are filled every Sunday by the same people. Well that is the way we look at the businesses we buy. We want to buy something virtually forever. And we can't find a lot of those. And back when I started, I had way more ideas than money so I was just constantly having to sell what was the least attractive stock in order to buy something I just discovered that looked even cheaper. But that is not our problem really now. So we hope we are buying businesses that we are just as happy holding five years from now as now. And if we ever found a huge acquisition, then maybe we would have to sell something. Maybe to make that acquisition but that would be a very pleasant problem to have.

We never buy something with a price target in mind. We never buy something at 30 saying if it goes to 40 we'll sell it or 50 or 60 or 100. We just don't do it that way. Anymore than when we buy a private business like *See's Candy* for $25 million. We don't ever say if we ever get an offer of $50 million for this business we will sell it. That is not the way to look at a business.

The way to look at a business is this going to keep producing more and more money over time? And if the answer to that is yes, you don't need to ask any more questions.

Questions: How did you decide to invest in *Salomon*?

Buffett: *Salomon* like I said, I went into that because it was a 9% security in 1987 in September 1987 and the Dow was up 35% and we sold a lot of stuff. And I had a lot of money around and it looked to me like we would never get to do anything, so I took an attractive security form in a business I would never buy the common stock of. I went in because of that and I think generally it is a mistake. It worked out OK finally on that. But it is not what I should have been doing. I either should have waited in which case I could have bought more *Coca-Cola* a year later or thereabouts or I should have even bought *Coke* at the prices it was selling at even though it was selling at a pretty good price at the time. So that was a mistake.

On *Long-Term Capital* that is—we have owned other businesses associated with securities over the years-–One of them is arbitrage. I've done arbitrage for 45 years and Graham did it for 30 years before that. That is a business unfortunately I have to be near a phone for. I have to really run it (arbitrage operations) out of the office myself, because

it requires being more market-attuned because I don't want to do that anymore. So unless a really big arbitrage situation came along that I understood, I won't be doing much of that. But I've probably participated in about 300 arbitrage situations at least in my life maybe more. It was a good business, a perfectly good business.

LTCM has a bunch of positions, they have tons of positions, but the top ten are probably 90% of the money that is at risk, and I know something about those ten positions. I don't know everything about them by a long shot, but I know enough that I would feel OK at a big discount going in and we had the staying power to hold it out. We might lose money on something on that, but the odds are with us. That is a game that I understand. There are few other positions we have that are not that big because they can't get that big. But they could involve yield curve relationships or on the run/off the run governments that are just things you learn over time being around securities markets. They are not the base of our business. Probably on average, they have accounted for ½ - ¾ a percentage point of our return a year. They are little pluses you get for actually having been around a long time.

Arbitrage

One of the first arbitrages I did involved a company that offered cocoa beans in exchange for their stock. That was in 1955. I bought the stock, turned in the stock, got warehouse certificates for cocoa beans and they happen to be a different type but there was a basis differential and I sold them. That was something I was around at the time, so I learned about it. There hasn't been a cocoa deal since. 40 odd years, I have been waiting for a cocoa deal. I haven't seen it. It is there in my memory if it ever comes along. *LTCM* is that on a big scale.

Question: Diversification?

Buffett: The question is about diversification. I have a dual answer to that. If you are not a professional investor. If your goal is not to manage money to earn a significantly better return than the world, then I believe in extreme diversification. I believe 98% - 99% who invest should extensively diversify and not trade, so that leads them to an index fund type of decision with very low costs. All they are going to do is own part of America. And they have made a decision that owning a part of America is worthwhile. I don't quarrel with that at all. That is the way they should approach it unless they want to bring an intensity to the game to make a decision and start evaluating businesses. Once you are in the businesses of evaluating businesses and you decide that you are going to bring the effort and intensity and time involved to get that job done, then I think diversification is a terrible mistake to any degree. I got asked that question the other day at *SunTrust. If you really know businesses, you probably shouldn't own more than six of them.*

If you can identify six wonderful businesses, that is all the diversification you need. And you will make a lot of money. And I can guarantee that going into a seventh one instead of putting more money into your first one is gotta be a terrible mistake. Very few people have gotten rich on their seventh best idea. But a lot of people have gotten rich with their

best idea. So I would say for anyone working with normal capital who really knows the businesses they have gone into, six is plenty, and I probably have half of what I like best. I don't diversify personally. All the people I've known that have done well with the exception of *Walter Schloss*, *Walter* diversifies a lot. I call him Noah, he has two of everything.

Question: How do you distinguish the *Cokes* of the world from the *Proctor & Gambles* of this world?

Buffett: Well, *P&G* is a very, very good business with strong distribution capability and lots of brand names, but if you ask me and I am going to go away for twenty years and put all my family's net worth into one business, would I rather have *P&G* or *Coke*? Actually *P&G* is more diversified among product line, but I would feel more sure of *Coke* than *P&G*. I wouldn't be unhappy if someone told me I had to own *P&G* during the twenty-year period. I mean that would be in my top 5 percent. Because they are not going to get killed, but I would feel better about the unit growth and pricing power of a *Coke* over twenty or thirty years.

Right now the pricing power might be tough, but you think a billion servings a day for a penny each or $10 million per day. We own 8% of that, so that is $800,000 per day for *Berkshire Hathaway*. You could get another penny out of the stuff. It doesn't seem impossible. I think it is worth a penny more. Right now it would be a mistake to try and get it in most markets. But over time, *Coke* will make more per serving than it does now. Twenty years from now I guarantee they will make more per serving, and they will be selling a whole lot more servings. I don't know how many or how much more, but I know that.

P&G's main products--I don't think they have the kind of dominance, and they don't have the kind of unit growth, but they are good businesses. I would not be unhappy if you told me that I had to put my family's net worth into *P&G* and that was the only stock I would own. I might prefer some other name, but there are not 100 other names I would prefer.

Question: Would you buy *McDonald's* and go away for twenty years?

Buffett: *McDonald's* has a lot of things going for it, particularly abroad again. Thee position abroad in many countries is stronger than it is here. It is a tougher business over time. People don't want to be eating--exception to the kids when they are giving away beanie babies or something--at *McDonald's* every day. If people drink five *Cokes* a day, they probably will drink five of them tomorrow. The fast food business is tougher than that but if you had to pick one hand to have in the fast food business, which is going to be a huge business worldwide, you would pick *McDonald's*. I mean it has the strongest position.

It doesn't win taste test with adults. It does very well with children and it does fine with adults, but it is not like it is a clear winner. And it is gotten into the game in recent years of being more price promotional--you remember the experiment a year ago or so. It has

gotten more dependent on that rather than selling the product by itself. I like the product by itself. I feel better about *Gillette* if people buy the *Mach 3* because they like the *Mach 3* than if they get a *Beanie Baby* with it. So I think fundamentally it is a stronger product if that is the case. And that is probably the case.

We own a lot of *Gillette* and you can sleep pretty well at night if you think of a couple billion men with their hair growing on their faces. It is growing all night while you sleep. Women have two legs, it is even better. So it beats counting sheep. And those are the kinds of business…(you look for). But what type of promotion am I going to put out there against *Burger King* next month or what if they sign up *Disney* and I don't get *Disney*? I like the products that stand alone absent price promotion or appeals although you can build a very good business based on that. And *McDonald's* is a terrific business. It is not as good a business as *Coke*. There really hardly are any. It is a very good business and if you bet on one company in that field bet on *(garbled) McDonald's*. We bought *Dairy Queen* a while back that is why I am plugging it shamelessly here.

Question: What do I think about the utility industry?

Buffett: I have thought about that a lot because you can put big money in it. I have even thought of buying the entire businesses. There is a fellow in Omaha actually that has done a little of that through *Cal Energy*. But I don't quite understand the game in terms of how it is going to develop with deregulation. I can see how it destroys a lot of value through the high cost producer once they are not protected by a monopoly territory.

I don't for sure see who benefits and how much. Obviously the guy with very low cost power or some guy has hydro-power at two cents a KwH has a huge advantage. But how much of that he gets to keep or how extensively he can send that outside his natural territory, I haven't been able to figure that out so I really know what the Industry will look like in ten years. But it is something I think about and if I ever develop any insights that call for action, I will act on them. Because I think I can understand the attractiveness of the product. All the aspects of certainty of users need and the fact it is a bargain and all of that. I understand. I don't understand who is going to make the money in ten years. And that keeps me away.

Question: Why do large caps outperform small caps (1998)?

Buffett: We don't care if a company is large cap, small cap, middle cap, micro cap. It doesn't make any difference. The only questions that matter to us:

- Do we understand the business?
- Do we like the people running it?
- And does it sell for a price that is attractive?

From my personal standpoint running *Berkshire* now because we got, pro forma for *Gen. Re*, $75 to $80 billion to invest in and I only want to invest in five things, so I am really limited to very big companies. But if I were investing $100,000, I wouldn't care whether

something was large cap or small cap or anything. I would just look for businesses I understood.

Now, I think, on balance, large cap companies as businesses have done extraordinarily well the last ten years--way better than people anticipated they would do. You really have American businesses earning close to something 20% on equity. And that is something nobody dreamed of and that is being produced by very large companies in aggregate. So you have had this huge revaluation upwards because of lower interest rates and much higher returns on capital. If America business is really a disguised bond that earns 20%, a 20% coupon it is much better than a bond with a 13% coupon. And that has happened with big companies in recent years, whether it is permanent or not is another question. I am skeptical of that. I wouldn't even think about it--except for questions of how much money we run--I wouldn't even think about the size of the business. *See's Candy* was a $25 million business when we bought it. If I can find one now, as big as we are, I would love to buy it. It is the <u>certainty</u> of it that counts.

Question: The securitization of real estate?

Buffett: There has been enormous securitization of the debt too of real estate and that is one of the items right now that is really clogging up the capital markets. The mortgage back securities are just not moving, commercial, not residential mortgage backs. But I think you are directing your question at equities probably. The equities, if you leave out the corporate form, have been a lousy way to own equities. You have interjected a corporate income tax into something that people individually have been able to own with a single tax, and to have the normal corporate form you have a double taxation in there. You really don't need it and it takes too much of the return.

REITS have, in effect, created a conduit so you don't get the double taxation, but they also generally have fairly high operating expenses. If you get real estate, let's just say you can buy fairly simple types of real estate at an 8% yield, or thereabouts, and you take away close to 1% to 1.5% by the time you count stock options and everything, it is not a terribly attractive way to own real estate. Maybe the only way a guy with a $1,000 or $5,000 can own it but if you have $1 million or $10 million, you are better off owning the real estate properties yourself instead of sticking some intermediary in between who will get a sizable piece of the return for himself. So we have found very little in that field.

You will see an announcement in the next couple of weeks that may belie what I am telling you today. I don't want you to think I am double crossing you up here. But generally speaking we have seen very little in that field that gets us excited. People sometimes get very confused about--they will look at some huge land company, like *Texas Pacific Land Trust*, which has been around over 100 years and has got a couple of million acres in Texas. And they will sell 1% of their land every year and they will take that (as income? Garbled) and come up with some huge value compared to the market value. But that is nonsense if you really own the property. You can't move. You can't move 50% of the properties or 20% of the properties, it is way worse than an illiquid stock. So you get these, I think, you get some very silly valuations placed on a lot of real

estate companies by people who really don't understand what it is like to own one and try to move large quantity of properties.

REITS have behaved horribly in this market as you know and it is not at all inconceivable that they become a class that would get so unpopular that they would sell at significant discounts from what you could sell the properties for. And they could get interesting as a class and then the question is whether management would fight you in that process because they would be giving up their income stream for managing things and their interests might run counter to the shareholders on that. I have always wondered about REITS that have managements they say their assets are so wonderful, and they are so cheap and then they (management) go out and sell stock. There is a contradiction in that. They say our stock is very cheap at $28 and then they sell a lot of stock at $28 less an underwriting commission. There is a disconnect there. But it is a field we look at.

Charlie and I can understand real estate, and we would be open for very big transactions periodically. If there was a *LTCM* situation translated to real estate, we would be open to that, the trouble is so many other people would be too that it would unlikely go at a price that would get us really get us excited.

Question: A down market is good for you?

Buffett: I have no idea were the market is going to go. I prefer it going down. But my preferences have nothing to do with it. The market knows nothing about my feelings. That is one of the first things you have to learn about a stock. You buy 100 shares of *General Motors (GM).* Now all of a sudden you have this feeling about *GM*. It goes down, you may be mad at it. You may say, "Well, if it just goes up for what I paid for it, my life will be wonderful again." Or if it goes up, you may say how smart you were and how you and *GM* have this love affair. You have got all these feelings. <u>The stock doesn't know you own it</u>.

The stock just sits there; it doesn't care what you paid or the fact that you own it. Any feeling I have about the market is not reciprocated. I mean it is the ultimate cold shoulder we are talking about here. Practically anybody in this room is probably more likely to be a net buyer of stocks over the next ten years than they are a net seller, so everyone of you should prefer lower prices. If you are a net eater of hamburger over the next ten years, you want hamburger to go down unless you are a cattle producer. If you are going to be a buyer of *Coca-Cola* and you don't own *Coke* stock, you hope the price of *Coke* goes down. You are looking for it to be on sale this weekend at your Supermarket. You want it to be down on the weekends not up on the weekends when you tend the Supermarket.

The NYSE is one big supermarket of companies. And you are going to be buying stocks, what you want to have happen? You want to have those stocks go down, way down; you will make better buys then. Later on twenty or thirty years from now when you are in a period when you are dis-saving, or when your heirs dis-save for you, then you may care about higher prices. There is Chapter 8 in *Graham's* <u>Intelligent Investor</u> about the attitude toward stock market fluctuations, that and Chapter 20 on the Margin of Safety

are the two most important essays ever written on investing as far as I am concerned. Because when I read Chapter 8 when I was 19, I figured out what I just said but it is obvious, but I didn't figure it out myself. It was explained to me. I probably would have gone another 100 years and still thought it was good when my stocks were going up. We want things to go down, but I have no idea what the stock market is going to do. I never do and I never will. It is not something I think about at all.

When it goes down, I look harder at what I might buy that day because I know there is more likely to be some merchandise there to use my money effectively in.

Moderator: Ok, Warren, we will let you take one more question from the audience….

Buffett: I will let you pick who get it. You can be the guy…(laughter).

Question: What would you do to live a happier life if you could live over again?

Buffett: This will sound disgusting. The question is how would I live my life over again to live a happier life? The only thing would be to select a gene pool where people lived to 120 or something where I came from.

I have been extraordinarily lucky. I mean, I use this example and I will take a minute or two because I think it is worth thinking about a little bit. Let's just assume it was 24 hours before you were born and a genie came to you and he said, "Herb, you look very promising and I have a big problem. I got to design the world in which you are going to live in. I have decided it is too tough; you design it. So you have twenty-four hours, you figure out what the social rules should be, the economic rules and the governmental rules and you and your kids and their kids will live under those rules.

You say, "I can design anything? There must be a catch?" The genie says there is a catch. You don't know if you are going to be born black or white, rich or poor, male or female, infirm or able-bodied, bright or retarded. All you know is you are going to take one ball out of a barrel with 5.8 billion (balls). You are going to participate in the ovarian lottery. And that is going to be the most important thing in your life, because that is going to control whether you are born here or in Afghanistan or whether you are born with an IQ of 130 or an IQ of 70. It is going to determine a whole lot. What type of world are you going to design?

I think it is a good way to look at social questions, because not knowing which ball you are going to get, you are going to want to design a system that is going to provide lots of goods and services because you want people on balance to live well. And you want it to produce more and more so your kids live better than you do and your grandchildren live better than their parents. But you also want a system that does produce lots of goods and services that does not leave behind a person who accidentally got the wrong ball and is not well wired for this particular system. I am ideally wired for the system I fell into here. I came out and got into something that enables me to allocate capital. Nothing so

wonderful about that. If all of us were stranded on a desert island somewhere and we were never going to get off of it, the most valuable person there would be the one who could raise the most rice over time. I can say, "I can allocate capital!" You wouldn't be very excited about that. So I have been born in the right place.

Gates says that if I had been born three million years ago, I would have been some animal's lunch. He says, "You can't run very fast, you can't climb trees, you can't do anything." You would just be chewed up the first day. You are lucky; you were born today. And I am. The question getting back, here is this barrel with 6.5 billion balls, everybody in the world, if you could put your ball back, and they took out at random a 100 balls and you had to pick one of those, would you put your ball back in?

Now those 100 balls you are going to get out, roughly 5 of them will be American, 95/5. So if you want to be in this country, you will only have 5 balls, half of them will be women and half men--I will let you decide how you will vote on that one. Half of them will below average in intelligence and half above average in intelligence. Do you want to put your ball in there? Most of you will not want to put your ball back to get 100. So what you are saying is: I am in the luckiest one percent of the world right now sitting in this room--the top one percent of the world. Well, that is the way I feel. I am lucky to be born where I was because it was 50 to 1 in the United States when I was born. I have been lucky with parents, lucky with all kinds of things and lucky to be wired in a way that in a market economy, pays off like crazy for me. It doesn't pay off as well for someone who is absolutely as good a citizen as I am (by) leading Boy Scout troops, teaching Sunday School or whatever, raising fine families, but just doesn't happen to be wired in the same way that I am. So I have been extremely lucky so I would like to be lucky again.

Then the way to do it is to play out the game and do something you enjoy all your life and be associated with people you like. I only work with people I like. If I could make $100 million dollars with a guy who causes my stomach to churn, I would say no because in way that is very much like marrying for money which is probably not a very good idea in any circumstances, but if you are already rich, it is crazy. I am not going to marry for money. I would really do almost exactly what I have done except I wouldn't have bought the *US Air*.

Thank you.

END.

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WARREN E. BUFFETT, CHAIRMAN

March 29, 1999

Mr. Robert P. Miles
4532 W. Kennedy Blvd. #275
Tampa, FL 33609-2042

Dear Mr. Miles:

Thanks for your nice letter. By coincidence, just this weekend I saw your 101 reasons on the "Fool" bulletin board. You seem to be getting quite a bit of favorable comment from other viewers.

Anything you write about Berkshire Hathaway will be fine; you clearly understand the company well. I will be glad to sign your "101 Reasons," but I'm not sure if we'll be able to connect at the mall. It's likely to be a mob scene this year. I will be doing a lot of signing at the ballpark on Saturday night, but again the lines could be really long, and I won't be able to get to everybody during the game. Maybe the best bet is for you to send me a copy and I'll be delighted to sign it.

I wish you well — even *really* well — with your project.

Best regards.

Sincerely,

Warren E. Buffett

WEB/db

Mr. Buffett on the Stock Market

Fortune, 11/22/99

The most celebrated of investors says stocks can't possibly meet the public's expectations. As for the Internet? He notes how few people got rich from two other transforming industries, auto and aviation.

> Warren Buffett, chairman of Berkshire Hathaway, almost never talks publicly about the general level of stock prices--neither in his famed annual report nor at Berkshire's thronged annual meetings nor in the rare speeches he gives. But in the past few months, on four occasions, Buffett did step up to that subject, laying out his opinions, in ways both analytical and creative, about the long-term future for stocks. FORTUNE's Carol Loomis heard the last of those talks, given in September to a group of Buffett's friends (of whom she is one), and also watched a videotape of the first speech, given in July at Allen & Co.'s Sun Valley, Idaho, bash for business leaders. From those extemporaneous talks (the first made with the Dow Jones industrial average at 11,194), Loomis distilled the following account of what Buffett said. Buffett reviewed it and weighed in with some clarifications.

Investors in stocks these days are expecting far too much, and I'm going to explain why. That will inevitably set me to talking about the general stock market, a subject I'm usually unwilling to discuss. But I want to make one thing clear going in: Though I will be talking about the level of the market, I will not be predicting its next moves. At Berkshire we focus almost exclusively on the valuations of individual companies, looking only to a very limited extent at the valuation of the overall market. Even then, valuing the market has nothing to do with where it's going to go next week or next month or next year, a line of thought we never get into. The fact is that markets behave in ways, sometimes for a very long stretch, that are not linked to value. Sooner or later, though, value counts. So what I am going to be saying--assuming it's correct--will have implications for the long-term results to be realized by American stockholders.

Let's start by defining "investing." The definition is simple but often forgotten: Investing is laying out money now to get more money back in the future--more money in real terms, after taking inflation into account.

Now, to get some historical perspective, let's look back at the 34 years before this one--and here we are going to see an almost Biblical kind of symmetry, in the sense of lean years and fat years--to observe what happened in the stock market. Take, to begin with, the first 17 years of the period, from the end of 1964 through 1981. Here's what took place in that interval:

Dow Jones Industrial Average
Dec. 31, 1964: **874.12**
Dec. 31, 1981: **875.00**

Now I'm known as a long-term investor and a patient guy, but that is not my idea of a big move.

And here's a major and very opposite fact: During that same 17 years, the GDP of the U.S.--that is, the business being done in this country--almost quintupled, rising by 370%. Or, if we look at another measure, the sales of the FORTUNE 500 (a changing mix of companies, of course) more than sextupled. And yet the Dow went exactly nowhere.

To understand why that happened, we need first to look at one of the two important variables that affect investment results: interest rates. These act on financial valuations the way gravity acts on matter: The higher the rate, the greater the downward pull. That's because the rates of return that investors need from any kind of investment are directly tied to the risk-free rate that they can earn from government securities. So if the government rate rises, the prices of all other investments must adjust downward, to a level that brings their expected rates of return into line. Conversely, if government interest rates fall, the move pushes the prices of all other investments upward. The basic proposition is this: What an investor should pay today for a dollar to be received tomorrow can only be determined by first looking at the risk-free interest rate.

Consequently, every time the risk-free rate moves by one basis point--by 0.01%--the value of every investment in the country changes. People can see this easily in the case of bonds, whose value is normally affected only by

interest rates. In the case of equities or real estate or farms or whatever, other very important variables are almost always at work, and that means the effect of interest rate changes is usually obscured. Nonetheless, the effect--like the invisible pull of gravity--is constantly there.

In the 1964-81 period, there was a tremendous increase in the rates on long-term government bonds, which moved from just over 4% at year-end 1964 to more than 15% by late 1981. That rise in rates had a huge depressing effect on the value of all investments, but the one we noticed, of course, was the price of equities. So there--in that tripling of the gravitational pull of interest rates--lies the major explanation of why tremendous growth in the economy was accompanied by a stock market going nowhere.

Then, in the early 1980s, the situation reversed itself. You will remember Paul Volcker coming in as chairman of the Fed and remember also how unpopular he was. But the heroic things he did--his taking a two-by-four to the economy and breaking the back of inflation--caused the interest rate trend to reverse, with some rather spectacular results. Let's say you put $1 million into the 14% 30-year U.S. bond issued Nov. 16, 1981, and reinvested the coupons. That is, every time you got an interest payment, you used it to buy more of that same bond. At the end of 1998, with long-term governments by then selling at 5%, you would have had $8,181,219 and would have earned an annual return of more than 13%.

That 13% annual return is better than stocks have done in a great many 17-year periods in history--in most 17-year periods, in fact. It was a helluva result, and from none other than a stodgy bond.

The power of interest rates had the effect of pushing up equities as well, though other things that we will get to pushed additionally. And so here's what equities did in that same 17 years: If you'd invested $1 million in the Dow on Nov. 16, 1981, and reinvested all dividends, you'd have had $19,720,112 on Dec. 31, 1998. And your annual return would have been 19%.

The increase in equity values since 1981 beats anything you can find in history. This increase even surpasses what you would have realized if you'd bought stocks in 1932, at their Depression bottom--on its lowest day, July 8, 1932, the Dow closed at 41.22--and held them for 17 years.

The second thing bearing on stock prices during this 17 years was after-tax corporate profits, which the chart, After-Tax Corporate Profits as a Percentage of GDP, displays as a percentage of GDP. In effect, what this chart tells you is what portion of the GDP ended up every year with the shareholders of American business.

The chart, as you will see, starts in 1929. I'm quite fond of 1929, since that's when it all began for me. My dad was a stock salesman at the time, and after the Crash came, in the fall, he was afraid to call anyone--all those people who'd been burned. So he just stayed home in the afternoons. And there wasn't television then. Soooo ... I was conceived on or about Nov. 30, 1929 (and born nine months later, on Aug. 30, 1930), and I've forever had a kind of warm feeling about the Crash.

As you can see, corporate profits as a percentage of GDP peaked in 1929, and then they tanked. The left-hand side of the chart, in fact, is filled with aberrations: not only the Depression but also a wartime profits boom--sedated by the excess-profits tax--and another boom after the war. But from 1951 on, the percentage settled down pretty much to a 4% to 6.5% range.

By 1981, though, the trend was headed toward the bottom of that band, and in 1982 profits tumbled to 3.5%. So at that point investors were looking at two strong negatives: Profits were sub-par and interest rates were sky-high.

And as is so typical, investors projected out into the future what they were seeing. That's their unshakable habit: looking into the rear-view mirror instead of through the windshield. What they were observing, looking backward, made them very discouraged about the country. They were projecting high interest rates, they were projecting low profits, and they were therefore valuing the Dow at a level that was the same as 17 years earlier, even though GDP had nearly quintupled.

Now, what happened in the 17 years beginning with 1982? One thing that didn't happen was comparable growth in GDP: In this second 17-year period, GDP less than tripled. But interest rates began their descent, and after the Volcker effect wore off, profits began to climb--not steadily, but nonetheless with real power. You can see the profit trend in the chart, which shows that by the late 1990s, after-tax profits as a percent of GDP were running close to

6%, which is on the upper part of the “normalcy” band. And at the end of 1998, long-term government interest rates had made their way down to that 5%.

These dramatic changes in the two fundamentals that matter most to investors explain much, though not all, of the more than tenfold rise in equity prices--the Dow went from 875 to 9,181--during this 17-year period. What was at work also, of course, was market psychology. Once a bull market gets under way, and once you reach the point where everybody has made money no matter what system he or she followed, a crowd is attracted into the game that is responding not to interest rates and profits but simply to the fact that it seems a mistake to be out of stocks. In effect, these people superimpose an I-can’t-miss-the-party factor on top of the fundamental factors that drive the market. Like Pavlov’s dog, these “investors” learn that when the bell rings--in this case, the one that opens the New York Stock Exchange at 9:30 a.m.--they get fed. Through this daily reinforcement, they become convinced that there is a God and that He wants them to get rich.

Today, staring fixedly back at the road they just traveled, most investors have rosy expectations. A Paine Webber and Gallup Organization survey released in July shows that the least experienced investors--those who have invested for less than five years--expect annual returns over the next ten years of 22.6%. Even those who have invested for more than 20 years are expecting 12.9%.

Now, I’d like to argue that we can’t come even remotely close to that 12.9%, and make my case by examining the key value-determining factors. Today, if an investor is to achieve juicy profits in the market over ten years or 17 or 20, one or more of three things must happen. I’ll delay talking about the last of them for a bit, but here are the first two:

(1) Interest rates must fall further. If government interest rates, now at a level of about 6%, were to fall to 3%, that factor alone would come close to doubling the value of common stocks. Incidentally, if you think interest rates are going to do that--or fall to the 1% that Japan has experienced--you should head for where you can really make a bundle: bond options.

(2) Corporate profitability in relation to GDP must rise. You know, someone once told me that New York has more lawyers than people. I think that’s the same fellow who thinks profits will become larger than GDP. When you begin to expect the growth of a component factor to forever outpace that of the aggregate, you get into certain mathematical problems. In my opinion, you have to be wildly optimistic to believe that corporate profits as a percent of GDP can, for any sustained period, hold much above 6%. One thing keeping the percentage down will be competition, which is alive and well. In addition, there’s a public-policy point: If corporate investors, in aggregate, are going to eat an ever-growing portion of the American economic pie, some other group will have to settle for a smaller portion. That would justifiably raise political problems--and in my view a major reslicing of the pie just isn’t going to happen.

So where do some reasonable assumptions lead us? Let’s say that GDP grows at an average 5% a year--3% real growth, which is pretty darn good, plus 2% inflation. If GDP grows at 5%, and you don’t have some help from interest rates, the aggregate value of equities is not going to grow a whole lot more. Yes, you can add on a bit of return from dividends. But with stocks selling where they are today, the importance of dividends to total return is way down from what it used to be. Nor can investors expect to score because companies are busy boosting their per-share earnings by buying in their stock. The offset here is that the companies are just about as busy issuing new stock, both through primary offerings and those ever present stock options.

So I come back to my postulation of 5% growth in GDP and remind you that it is a limiting factor in the returns you’re going to get: You cannot expect to forever realize a 12% annual increase--much less 22%--in the valuation of American business if its profitability is growing only at 5%. The inescapable fact is that the value of an asset, whatever its character, cannot over the long term grow faster than its earnings do.

Now, maybe you’d like to argue a different case. Fair enough. But give me your assumptions. If you think the American public is going to make 12% a year in stocks, I think you have to say, for example, “Well, that’s because I expect GDP to grow at 10% a year, dividends to add two percentage points to returns, and interest rates to stay at a constant level.” Or you’ve got to rearrange these key variables in some other manner. The Tinker Bell approach--clap if you believe--just won’t cut it.

Beyond that, you need to remember that future returns are always affected by current valuations and give some thought to what you're getting for your money in the stock market right now. Here are two 1998 figures for the FORTUNE 500. The companies in this universe account for about 75% of the value of all publicly owned American businesses, so when you look at the 500, you're really talking about America Inc.

FORTUNE 500
1998 profits: **$334,335,000,000**
Market value on March 15, 1999: **$9,907,233,000,000**

As we focus on those two numbers, we need to be aware that the profits figure has its quirks. Profits in 1998 included one very unusual item--a $16 billion bookkeeping gain that Ford reported from its spinoff of Associates--and profits also included, as they always do in the 500, the earnings of a few mutual companies, such as State Farm, that do not have a market value. Additionally, one major corporate expense, stock-option compensation costs, is not deducted from profits. On the other hand, the profits figure has been reduced in some cases by write-offs that probably didn't reflect economic reality and could just as well be added back in. But leaving aside these qualifications, investors were saying on March 15 this year that they would pay a hefty $10 trillion for the $334 billion in profits.

Bear in mind--this is a critical fact often ignored--that investors as a whole cannot get anything out of their businesses except what the businesses earn. Sure, you and I can sell each other stocks at higher and higher prices. Let's say the FORTUNE 500 was just one business and that the people in this room each owned a piece of it. In that case, we could sit here and sell each other pieces at ever-ascending prices. You personally might outsmart the next fellow by buying low and selling high. But no money would leave the game when that happened: You'd simply take out what he put in. Meanwhile, the experience of the group wouldn't have been affected a whit, because its fate would still be tied to profits. The absolute most that the owners of a business, in aggregate, can get out of it in the end--between now and Judgment Day--is what that business earns over time.

And there's still another major qualification to be considered. If you and I were trading pieces of our business in this room, we could escape transactional costs because there would be no brokers around to take a bite out of every trade we made. But in the real world investors have a habit of wanting to change chairs, or of at least getting advice as to whether they should, and that costs money--big money. The expenses they bear--I call them frictional costs--are for a wide range of items. There's the market maker's spread, and commissions, and sales loads, and 12b-1 fees, and management fees, and custodial fees, and wrap fees, and even subscriptions to financial publications. And don't brush these expenses off as irrelevancies. If you were evaluating a piece of investment real estate, would you not deduct management costs in figuring your return? Yes, of course--and in exactly the same way, stock market investors who are figuring their returns must face up to the frictional costs they bear.

And what do they come to? My estimate is that investors in American stocks pay out well over $100 billion a year--say, $130 billion--to move around on those chairs or to buy advice as to whether they should! Perhaps $100 billion of that relates to the FORTUNE 500. In other words, investors are dissipating almost a third of everything that the FORTUNE 500 is earning for them--that $334 billion in 1998--by handing it over to various types of chair-changing and chair-advisory "helpers." And when that handoff is completed, the investors who own the 500 are reaping less than a $250 billion return on their $10 trillion investment. In my view, that's slim pickings.

Perhaps by now you're mentally quarreling with my estimate that $100 billion flows to those "helpers." How do they charge thee? Let me count the ways. Start with transaction costs, including commissions, the market maker's take, and the spread on underwritten offerings: With double counting stripped out, there will this year be at least 350 billion shares of stock traded in the U.S., and I would estimate that the transaction cost per share for each side--that is, for both the buyer and the seller--will average 6 cents. That adds up to $42 billion.

Move on to the additional costs: hefty charges for little guys who have wrap accounts; management fees for big guys; and, looming very large, a raft of expenses for the holders of domestic equity mutual funds. These funds now have assets of about $3.5 trillion, and you have to conclude that the annual cost of these to their investors--counting management fees, sales loads, 12b-1 fees, general operating costs--runs to at least 1%, or $35 billion.

And none of the damage I've so far described counts the commissions and spreads on options and futures, or the costs borne by holders of variable annuities, or the myriad other charges that the "helpers" manage to think up. In

short, $100 billion of frictional costs for the owners of the FORTUNE 500--which is 1% of the 500's market value--looks to me not only highly defensible as an estimate, but quite possibly on the low side.

It also looks like a horrendous cost. I heard once about a cartoon in which a news commentator says, "There was no trading on the New York Stock Exchange today. Everyone was happy with what they owned." Well, if that were really the case, investors would every year keep around $130 billion in their pockets.

Let me summarize what I've been saying about the stock market: I think it's very hard to come up with a persuasive case that equities will over the next 17 years perform anything like--anything like--they've performed in the past 17. If I had to pick the most probable return, from appreciation and dividends combined, that investors in aggregate--repeat, aggregate--would earn in a world of constant interest rates, 2% inflation, and those ever hurtful frictional costs, it would be 6%. If you strip out the inflation component from this nominal return (which you would need to do however inflation fluctuates), that's 4% in real terms. And if 4% is wrong, I believe that the percentage is just as likely to be less as more.

Let me come back to what I said earlier: that there are three things that might allow investors to realize significant profits in the market going forward. The first was that interest rates might fall, and the second was that corporate profits as a percent of GDP might rise dramatically. I get to the third point now: Perhaps you are an optimist who believes that though investors as a whole may slog along, you yourself will be a winner. That thought might be particularly seductive in these early days of the information revolution (which I wholeheartedly believe in). Just pick the obvious winners, your broker will tell you, and ride the wave.

Well, I thought it would be instructive to go back and look at a couple of industries that transformed this country much earlier in this century: automobiles and aviation. Take automobiles first: I have here one page, out of 70 in total, of car and truck manufacturers that have operated in this country. At one time, there was a Berkshire car and an Omaha car. Naturally I noticed those. But there was also a telephone book of others.

All told, there appear to have been at least 2,000 car makes, in an industry that had an incredible impact on people's lives. If you had foreseen in the early days of cars how this industry would develop, you would have said, "Here is the road to riches." So what did we progress to by the 1990s? After corporate carnage that never let up, we came down to three U.S. car companies--themselves no lollapaloozas for investors. So here is an industry that had an enormous impact on America--and also an enormous impact, though not the anticipated one, on investors.

Sometimes, incidentally, it's much easier in these transforming events to figure out the losers. You could have grasped the importance of the auto when it came along but still found it hard to pick companies that would make you money. But there was one obvious decision you could have made back then--it's better sometimes to turn these things upside down--and that was to short horses. Frankly, I'm disappointed that the Buffett family was not short horses through this entire period. And we really had no excuse: Living in Nebraska, we would have found it super-easy to borrow horses and avoid a "short squeeze."

U.S. Horse Population
1900: **21 million**
1998: **5 million**

The other truly transforming business invention of the first quarter of the century, besides the car, was the airplane--another industry whose plainly brilliant future would have caused investors to salivate. So I went back to check out aircraft manufacturers and found that in the 1919-39 period, there were about 300 companies, only a handful still breathing today. Among the planes made then--we must have been the Silicon Valley of that age--were both the Nebraska and the Omaha, two aircraft that even the most loyal Nebraskan no longer relies upon.

Move on to failures of airlines. Here's a list of 129 airlines that in the past 20 years filed for bankruptcy. Continental was smart enough to make that list twice. As of 1992, in fact--though the picture would have improved since then--the money that had been made since the dawn of aviation by all of this country's airline companies was zero. Absolutely zero.

Sizing all this up, I like to think that if I'd been at Kitty Hawk in 1903 when Orville Wright took off, I would have been farsighted enough, and public-spirited enough--I owed this to future capitalists--to shoot him down. I mean, Karl Marx couldn't have done as much damage to capitalists as Orville did.

I won’t dwell on other glamorous businesses that dramatically changed our lives but concurrently failed to deliver rewards to U.S. investors: the manufacture of radios and televisions, for example. But I will draw a lesson from these businesses: The key to investing is not assessing how much an industry is going to affect society, or how much it will grow, but rather determining the competitive advantage of any given company and, above all, the durability of that advantage. The products or services that have wide, sustainable moats around them are the ones that deliver rewards to investors.

This talk of 17-year periods makes me think--incongruously, I admit--of 17-year locusts. What could a current brood of these critters, scheduled to take flight in 2016, expect to encounter? I see them entering a world in which the public is less euphoric about stocks than it is now. Naturally, investors will be feeling disappointment--but only because they started out expecting too much.

Grumpy or not, they will have by then grown considerably wealthier, simply because the American business establishment that they own will have been chugging along, increasing its profits by 3% annually in real terms. Best of all, the rewards from this creation of wealth will have flowed through to Americans in general, who will be enjoying a far higher standard of living than they do today. That wouldn’t be a bad world at all--even if it doesn’t measure up to what investors got used to in the 17 years just passed.

Bezos on Buffett

Skeptical of Internet mania, the founder and CEO of Amazon.com is spreading the gospel according to Buffett.

Patricia Sellers

Warren Buffett doesn’t mention the Internet on these pages. But he does talk about two other transforming industries that failed to reward investors over time: autos and aviation. Only a fool would ignore his implicit warning: A lot of people will lose a lot of money betting on the Internet. Amazon.com founder and CEO Jeff Bezos was so intrigued by Buffett’s talk at Herb Allen’s gathering of business leaders in Sun Valley, Idaho, last July that he asked Buffett for his lists of the automakers and aircraft manufacturers that didn’t make it. “When new industries become phenomenons, a lot of investors bet on the wrong companies,” Bezos says. Referring to Buffett’s 70-page catalog of mostly dead car and truck makes, he adds, “I noticed that decades ago, it was de rigueur to use ‘Motors’ in the name, just as everybody uses ‘dot-com’ today. I thought, Wow, the parallel is interesting.”

Especially interesting to a billionaire like Bezos, who knows something about stock valuations from his previous career as a hedge fund manager. Interesting also to Bezos the history buff, who likes to talk about the Cambrian explosion about 550 million years ago, when multicelled life spawned unprecedented variation of species--and with it, a wave of extinctions. Given this perspective, Bezos says, Buffett’s analogies about bankrupt businesses “resonate deeply.” Now Bezos is spreading the gospel according to Buffett and urging Amazon employees to run scared every day. “We still have the opportunity to be a footnote in the e-commerce industry,” he says.

Speaker: Well, good morning and welcome. You're a nice crowd, you certainly got quiet quickly. That surprised me. Can you hear me all right? There in the back? Well, for business school, you know it doesn't get much better than this. Having the world's greatest investor come to your campus is quite an honor.

Warren Buffett is Chairman of Berkshire Hathaway, a holding company whose investments range from GEICO Insurance, to American Express and Coca-Cola, to Borsheims jewelry store in his hometown of Omaha, Nebraska.

Mr. Buffett has been described as 'the god of value investors' and 'the Michael Jordon of the investing game.' He began his first investment partnership in the mid-1950s with $100 of his own money. A few years later he began investing in a struggling Massachusetts textile mill called Berkshire Hathaway. Through Berkshire he started putting capital into other businesses, chiefly insurance, which generated cash streams for more investments which have done very well indeed as we all know.

From a share price of about $18 in 1965, Berkshire today trades around $69,100 a share. Think I'm going to go out and buy 500 shares. Over time the company has annualized performances more than double that of S&P 500, and Berkshire today is worth more than $100 billion. But Mr. Buffett is known as much for his unpretentious style as for his lofty success. He has become a champion of investors and is legendary for his aversion to corporate doublespeak. He is rare among CEOs in that he cheerfully admits his mistakes. Three years ago he wrote in his annual report that Berkshire would have done better if he'd simply had gone to the movies. There weren't very many years like that since 1965, believe me.

Berkshire was proudly, even defiantly absent from the dot-com hysteria of the last few years, and now that the bubble has burst as we all know, it's Warren Buffett who's having the last laugh. In his most recent letter to shareholders he wrote, quote, "We've embraced the 21 st century by entering such cutting-edge industries as brick, carpet, insulation, and paint." Try to control your excitement. You know, and personally from reading his letters, I mean it's just a joy. It's a business lesson in itself. I would encourage you, whenever you get an opportunity, to take one aside and read it carefully. You'll learn a tremendous amount.

His wisdom and insights are so valued that some investors buy a share of Berkshire stock just so they can hear him at his legendary annual meeting, or as he calls it, 'Woodstock for capitalists.' He doesn't make speaking appearances often, and we are extremely fortunate to have him with us

today. Earl Leonard of Coca-Cola, and our distinguished executive in residence had a lot to with that, Earl, and we're deeply indebted to you for helping to arrange this. Thank you very much.

Our format today will be primarily questions and answers. Mr. Buffett will make some brief remarks at the beginning and then we'll move into your phase. We will have a microphone set up over here. We would like to come around- we're videotaping, so we'd like you to use the microphone, please. So go ahead and begin to line up over there to ask your questions. So would you please give a very warm welcome to the oracle of Omaha, Warren Buffett .

Warren Buffett : Testing. 1 million. 2 million. Great, okay. I came in from Nebraska today, and you're probably all familiar with us, mainly by our football team. We have those fellows with the big white helmets with those red 'N's on them. I asked one of our starters the other day, "What's the 'N' stand for?" And he said, "Knowledge." We make it tough on them though. I mean you don't coast through Nebraska just because you're a football player. They major in agricultural economics, and there's a two question final for all of the players. And the first question is, "What did old MacDonald have?" And they were giving that to one of our potential Heisman Trophy winners the other day. He started to sweat. Finally he brightened up, he said, "Farm!" The professor, delighted of course, you don't want to flunk a Heisman candidate. So he said, "Now," he said. "You're halfway home. Just one more question. How do you spell 'farm'?" Now the guy really starts to sweat, and he looks at the ceiling and he looks around. Finally his face brightens up and he says, "Ee-i-ee-i-oh!" So watch for that guy this year, he'll be dynamite.

I really want to talk about what's on your mind, so we're going to do a Q and A in a minute. There are a couple questions I always get asked. You know, people always say, "Well who should I go to work for when I get out then?" I've got a very simple answer, we may elaborate more on this as we go along, but, you know the real thing to do is to get going for some institution or individual that you admire. I mean it's crazy to take in-between jobs just because they look good on your resume, or because you get a little higher starting pay.

I was up at Harvard a while back, and a very nice young guy, he picked me up at the airport, a Harvard Business School attendee. And he said, "Look. I went to undergrad here, and then I worked for X and Y and Z, and now I've come here." And he said, "I thought it would really round out my resume perfectly if I went to work now for a big management consulting firm." And I said, "Well, is that what you want to do?" And he said, "No," but he said, "That's the perfect resume." And I said, "Well when are you going to start doing what you like?" And he said, "Well I'll get to that someday."

And I said, “Well you know, your plan sounds to me a lot like saving up sex for your old age. It just doesn’t make a lot of sense.”

I told that same group, I said, “Go to work for whomever you admire the most.” I said, “You can’t get a bad result. You’ll jump out of bed in the morning and you’ll be having fun.” The Dean called me up a couple weeks later. He said, “What did you tell those kids? They’re all becoming self-employed.” So, you’ve got to temper that advice a little bit. Play one game a little bit with me for just a minute and then we’ll get to your questions.

I’d like for the moment to have you pretend I’ve made you a great offer, and I’ve told you that you could pick any one of your classmates- and you now know each other probably pretty well after being here for a while. You have 24 hours to think it over and you can pick any one of your classmates, and you get 10 percent of their earnings for the rest of their lives. And I ask you, what goes through your mind in determining which one of those you would pick? You can’t pick the one with the richest father, that doesn’t count. I mean, you’ve got to do this on merit. But, you probably wouldn’t pick the person that gets the highest grades in the class.

I mean, there’s nothing wrong with getting the highest grades in the class, but that isn’t going to be the quality that sets apart a big winner from the rest of the pack. Think about who you would pick and why. And I think you’ll find when you get through, you’ll pick some individual- you’ve all got the ability, you wouldn’t be here otherwise. And you’ve all got the energy. I mean, the initiative is here, the intelligence is here throughout the class. But some of you are going to be bigger winners than others.

And it gets down to a bunch of qualities that, interestingly enough, are self-made. I mean it’s not how tall you are. It’s not whether you can kick a football 60 yards. It’s not whether you can run the 100 yard dash in 10 seconds. It’s not whether you’re the best looking person in the room. It’s a whole bunch of qualities that really come out of Ben Franklin, or the Boy Scout coders, or whatever it may be. I mean, it’s integrity, it’s honesty, it’s generosity, it’s being willing to do more than your share, it’s just all those qualities that are self-selected.

And then if you look on the other side of the ledger, because there’s always a catch to these free gifts and genie jokes, so. You also have to -and this is the fun part- you also have to sell short one of your classmates and pay 10 percent of what they do. So, who do you think is going to do the worst in the class? This is a way more. And think about it again. And again, it isn’t the person with the lowest grades or anything of the sort. It’s the person who just doesn’t shape up in the character department.

We look for three things when we hire people. We look for intelligence, we look for initiative or energy, and we look for integrity. And if they don't have the latter, the first two will kill you, because if you're going to get someone without integrity, you want them lazy and dumb. I mean, you don't want a spark of energy out of them. So it's that third quality. But everything about that quality is your choice.

You know, you can't change the way you were wired much, but you can change a lot of what you do with that wiring. And it's the habits that you generate now on those qualities, or those negatives qualities. I mean the person who always claims credit for things they didn't do, that always cuts corners, that you can't count on. In the end those are habit patterns, and the time to form the right habits is when you're your age. I mean it doesn't do me much good to get golf lessons now. If I'd gotten golf lessons when I was your age I might be a decent golfer.

But, someone once said "the chains of habit are too light to be felt until they're too heavy to be broken." And I see that all the time. I see people with habit patterns that are self-destructive when they're 50 or 60 and they really can't change then, they're imprisoned by them. But you're not imprisoned by anything, so. When you write down the qualities of that person that you'd like to buy 10 percent of, look at that list and ask yourself, is there anything on that list I couldn't do?

And the answer is there won't be. And when you look at the person you sell short, and you look at those qualities that you don't like, if you see any of those in yourself -egotism, whatever it may be, selfishness- you can get rid of that. That is not ordained. And if you follow that, and Ben Franklin did this and my old boss Ben Graham did this at early ages in their young teens, Ben Graham looked around and he said, "Who do I admire?" And he wanted to be admired himself and he said, "Why do I admire these other people?" And he said, "If I admire them for these reasons, maybe other people would admire me if I behave in a similar manner." And he decided what kind of a person he wanted to be.

And if you follow that, at the end you'll be the person you want to buy 10 percent of. I mean that's the goal in the end, and it's something that's achievable by everybody in this room. So that's the end of the sermon. Now let's talk about what's on your mind, and you can ask anything. The only thing I won't tell you is what we're buying or selling. I don't even tell myself that. I mean I write it down and then it's like the Coca-Cola formula. There's only two people that can get into the trust department and find out what they are, and I don't know who the two are, so. We don't talk about what we're buying or selling, but anything else is fair game. Personal, business, anything you'd like to talk

about. And actually, the tougher the questions are, the more interesting it is for me. So don't spare my feelings, I mean just throw it at my head.

And with that, I guess we've got a microphone- is this the only microphone or is there one on this side?

Speaker: It's the only microphone right here. To ask a question you'll need to come down to this microphone.

Warren Buffett: Just stand in line, and I'll be Regis Philbin and you can- I have an old-fashioned belief that I can only should expect to make money in things that I understand. And when I say 'understand,' I don't mean understand what the product does or anything like that. I mean understand what the economics of the business are likely to look like 10 years from now or 20 years from now. I know in general what the economics of, say Wrigley chewing gum will look like 10 years from now. The internet isn't going to change the way people chew gum. It isn't going to change which gum they chew. If you own the chewing gum market in a big way, and you've got Doublemint, and Spearmint, and Juicy Fruit, those brands will be there 10 years from now. So I can pinpoint exactly what the numbers are going to look like on Wrigley, but I'm not going to be way off if I try to look forward on something like that.

Evaluating that company is within what I call 'my circle of competence.' I understand what they do, I understand the economics of it, I understand the competitive aspects of the business. There can be all kinds of companies that have wonderful futures but I don't know which ones they are. I've given talks in the past where I carry with me a 70-page tightly-printed list, and it shows 2000 auto companies. Now if at the start of the 20 th century you had seen what the auto was going to do to this country, the impact it would have on the lives of then your children and grandchildren and so on. It just, it transformed the American landscape. But of those 2000 companies, three basically survive. And they haven't done that well, many times.

So how do you pick three winners out of 2000? I mean it's not so easy to do. It's easy when you look back, but it's not so easy looking forward. So you could have been dead right on the fact that the auto industry- in fact, you probably couldn't have predicted how big of an impact it would have. But you wouldn't have- if you'd bought companies across the board you wouldn't have made any money, because the economic characteristics of that business were not easy to define.

I've always said the easier thing to do is figure out who loses. And what you really should have done in 1905 or so, when you saw what was going to happen with the auto is you should have gone short

horses. There were 20 million horses in 1900 and there's about 4 million horses now. So it's easy to figure out the losers, you know the loser is the horse. But the winner was the auto overall. But 2000 companies just about failed, a few merged out and so on.

There were three auto companies in the Dow Industrials in the 1920s and 30s: Studebaker, Nash-Kelvinator, and Hudson Motor. Now those names are all familiar to me, and maybe some of them are familiar to you, but they're not making any cars. They didn't make money. And yet at one time they were in the Dow 30, they were the aristocrats of American business. And they got creamed. So, figuring out the economic characteristics of the winners in a wonderful business is not easy.

In North Carolina, you know Orville and Wilbur took off- or I guess Orville took off and Wilbur watched. I'd have been Wilbur. But, if you could have seen the future of the airline business from that point forward and how that would transform things, it would have blown you away. And it's excited people incidentally ever since. But if there had been a capitalist in Kitty Hawk, he should have shot Orville down, because it's done nothing but cost investors money. There were over 400 airplane companies in the 1920s and 30s alone. There was in Omaha, there was in Nebraska, we were the Silicon Valley of apparently of aircraft, and they all disappeared. It's been a terrible business.

At the end of 1991 if you'd added up the aggregate earnings from all airline companies, with billions poured in since Wilbur and Orville were down there, they came to less than zero. The number of passengers went up every year. The importance of the industry was dramatically increased decade by decade, and nobody made any money. So, figuring out the economic consequences- T.V. I think there's, I don't know, 20-25 million sets a year sold in the United States. I don't think there's one of them made in the United States anymore. You'd say, T.V. set manufacturer, what a wonderful business. Nobody had a T.V. in 1950, thereabouts, '45-'50. Everybody has multiple sets now. Nobody in the United States has made any real money making the sets; they're all out of business. You know the Magnavoxs, the RCAs, all of those companies.

Radio was the equivalent in the 20s. Over 500 companies making radios in the 1920s. Again, I don't think there's a U.S. radio manufacturer at the present time. But Coca-Cola, you know. What was it, 1884 at Jacobs Pharmacy or whatever, a fellow comes up with something. A lot of copiers over the years, but now you've got a company that's selling roughly 1.1 billion 8 ounce servings of its product, not all Coke -Sprite and some others- daily throughout the world 117 years later.

So understanding the economic characteristics of a business is different than predicting the fact that an industry is going to do wonderfully. So when I look at the internet businesses or I look at tech

businesses, I say this is a marvelous thing and I love to play around on the computer, and I order my books from Amazon and all kinds of things. But I don't know who's going to win. Unless I know who's going to win, I'm not interested in investing; I'll just play around on the computer.

Defining your circle of competence is the most important aspect of investing. It's not how large your circle is, you don't have to be an expert on everything, but knowing where the perimeter of that circle of what you know and what you don't know is, and staying inside of it is all important. Tom Watson Senior who started IBM said in his book, he said, "I'm no genius. But I'm smart in spots, and I stay around those spots." And, you know that is the key. So if I understand a few things and stick in that arena, I'll do okay. And if I don't understand something but I get all excited about it because my neighbors are talking about, the stocks are going up, everything; I start fooling around someplace else, eventually I'll get creamed. And I should. So now let's go over here.

Audience: Hello, Mr. Buffett. I've got two short questions. One, is how do you find intrinsic value in a company?

Warren Buffett: Well intrinsic value is the number that if you were all-knowing about the future and could predict all the cash that a business would give you between now and judgement day, discounted at the proper discount rate that number is what the intrinsic value of a business is. In other words, the only reason for making an investment and laying out money now is to get more money later on, right? That's what investing is all about.

Now, when you look at a bond, so when you see a United States government bond it's very easy to tell what you're going to get back. It says it right on the bond. It says when you get the interest payments. It says when you get the principal. So, it's very easy to figure out the value of a bond. It can change tomorrow if interest rates change, but the cash flows are printed on the bond. The cash flows aren't printed on a stock certificate. That's the job of the analyst is to print out, change that stock certificate which represents an interest in the business, and change that into a bond and say this is what I think it's going to pay out in the future. When we buy some new machine for Shaw to make carpet, that's what we're thinking about obviously, and you'll learn that in business school.

But it's the same thing for a big business. If you buy Coca-Cola today, the company is selling for about $110-15 billion in the market. The question is, if you had 110 or 15 billion- you wouldn't be listening to me, but I'd be listening to you incidentally. But the question is would you lay it out today to get what the Coca-Cola Company is going to deliver to you over the next 2 or 300 years? The discount rate doesn't make much difference as you get further out. And that is a question of how much cash they're going to give you. It isn't a question of how many analysts are going to

recommend it, or what the volume of the stock is, or what the chart looks like or anything, it's a question of how much cash it's going to give you.

It's true whether if you're buying a farm, it's true if you're buying an apartment house, any financial asset. Oil in the ground, you're laying out cash now to get more cash back later on. And the question is is how much are you going to get, when are you going get it, and how sure are you? And when I calculate intrinsic value of a business when we buy businesses, and whether we're buying all of a business or a little piece of a business, I always think we're buying the whole business because that's my approach to it. I look at it and I say, what will come out of this business and when?

And, what you'd really like of course is then to be able to use the money that you earned, and earn higher returns on it as you go along. I mean, Berkshire has never distributed anything to its shareholders, but its ability to distribute goes up as the value of the businesses we own increases. We can compound it internally, but the real question is, Berkshire's selling for, we'll say 105 or so billion now. What can we distribute from that- if you're going to buy the whole company for 105 billion now, can we distribute enough cash to you soon enough to make it sensible at present interest rates to lay out that cash now.

And that's what it gets down to. And if you can't answer that question, you can't buy the stock. You can gamble in the stock if you want to, or your neighbors can buy it. But if you don't answer that question, and I can't answer that for internet companies for example, and a lot of companies, there are all kinds of companies I can't answer it for. But I just stay away from those. Number two.

Audience: So you've got formulas involved in finding intrinsic values on certain companies? I mean, you got a mathematical system?

Warren Buffett: Just kind of present value, future cash, yeah.

Audience: Second short question is why haven't you written down your set of formulas or your strategies in written form so you can share it with everyone else?

Warren Buffett: Well I think I actually have written about that. If you read the annual reports over the recent years, in fact the most recent annual report I used what I've just been talking about, I used the illustration of Aesop. Because here Aesop was in 600 BC- smart man, wasn't smart enough to know it was 600 BC though. Would have taken a little foresight. But Aesop, in between tortoises and hares, and all these other things he found time to write about birds. And he said, "A bird in the hand is worth two in the bush." Now that isn't quite complete because the question is, how sure are you

that there are two in the bush, and how long do you have to wait to get them out? Now, he probably knew that but he just didn't have time because he had all these other parables to write and had to get on with it. But he was halfway there in 600 BC. That's all there is to investing is, how many birds are in the bush, when are you going to get them out, and how sure are you?

Now if interest rates are 15 percent, roughly, you've got to get two birds out of the bush in five years to equal the bird in the hand. But if interest rates are 3 percent, and you can get two birds out in 20 years, it still makes sense to give up the bird in the hand, because it all gets back to discounting against an interest rate. The problem is often you don't know not only how many birds are in the bush, but in the case of the internet companies there weren't any birds in the bush. But they still take the bird that you give them if they're in the hand.

But I actually have written about this sort of thing, and stealing heavily from Aesop who wrote it some 2600 years ago, but I've been behind on my reading. Yeah?

Audience: Good morning. I know you're famed for your success, but I was curious if there were any particular moments in your life, or mistakes or failures that you've made that were particularly memorable, what you may have learned from them, and if you had any particular advice for the students here in dealing with discouraging circumstances.

Warren Buffett: Yeah. Well I've made a lot of mistakes. The biggest mistake- well not necessarily the biggest, but buying Berkshire Hathaway itself was a mistake, because Berkshire was a lousy textile business. And I bought it very cheap. I'd been taught by Ben Graham to buy things on a quantitative basis, look around for things that are cheap. And I was taught that say in 1940 or 1950; it made a big impression on me.

So I went around looking for what I call used cigar butts of stocks. And the cigar butt approach to buying stocks is that you walk down the street and you're looking around for cigar butts, and you find on the street this terrible-looking, soggy, ugly-looking cigar- one puff left in it. But you pick it up and you get your one puff. Disgusting, you throw it away, but it's free. I mean it's cheap. And then you look around for another soggy one-puff cigarette.

Well that's what I did for years. It's a mistake. Although, you can make money doing it, but you can't make it with big money, it's so much easier just to buy wonderful businesses. So now I'd rather buy a wonderful business at a fair price than a fair business at a wonderful price. But in those days I was buying cheap stocks, and Berkshire was selling below its working capital per share. You got the plants for nothing, you got the machinery for nothing, you got the inventory and receivables at a

discount. It was cheap, so I bought it. And 20 years later I was still running a lousy business and that money did not compound.

You really want to be in a wonderful business because the time is the friend of the wonderful business. You keep compounding, it keeps doing more business, and you keep making more money. Time is the enemy of the lousy business. I could have sold Berkshire, perhaps liquidated it and made a quick little profit, you know one puff. But staying with those kind of businesses is a big mistake.

So you might say I learned something out of that mistake. And I would have been way better off taking- what I did with Berkshire is I kept buying better businesses. I started an insurance business, See's Candy, the Buffalo- all kinds of things. I would have been way better doing that with a brand new little entity that I'd set up rather than using Berkshire as the platform. Now I've had a lot of fun out of it. I mean everything in life seems to turn out for the better, so I don't have any complaints about that, but it was a dumb thing to do.

I went into US Air; I bought a preferred stock in 1989. As soon as my check cleared, the company went into the red and never got out. I mean it was really dumb. I've got an 800 number I call now whenever I think about buying an airline stock. I call them up any hour, fortunately I can call them at three in the morning, and I just dial and I say, "My name's Warren and I'm an aero-holic. And I'm thinking about buying this thing." Then they talk me down. It takes hours sometimes but it's worth it, believe me. If you ever think about buying an airline stock, call me and I'll give you the 800 number because you don't want to do it.

But, we got lucky in terms of how we eventually came out on it. But it was a dumb, dumb decision- all mine. And I've done- biggest in terms of opportunity costs, eventual costs, I bought half interest on a Sinclair filling station when I was about 20 with a guy who I was in the National Guard with. And I had about $10,000 then and I put $2,000 in, and I lost it all. So, that was 20%, and that means that the opportunity cost is now $6 billion of that filling station which is a big price to pay for getting to wipe a few windows and a few windshields and things like that. So, actually I like it when Berkshire goes down because it reduces the cost of that mistake on an opportunity cost.

But, the biggest mistakes we've made by far- I've made, not we've made. The biggest mistakes I've made by far are mistakes of omission and not commission. I mean it's the things I knew enough to do, they were within my circle of competence, and I was sucking my thumb. And that is really, those are the ones that hurt. They don't show up any place. I probably cost

Berkshire at least $5 billion, for example, by sucking my thumb 20 years ago, or close to it when Fannie Mae was having some troubles. We could have bought the whole company for practically nothing.

And I don't worry about that if it's Microsoft because I don't know. Microsoft isn't in my circle of competence. So I don't have any reason to think I'm entitled to make money out of Microsoft or out of cocoa beans or whatever. But I did know enough to understand Fannie Mae and I blew it. And that never shows up under conventional accounting. But I know the cost of it. I passed it up. And those are the big, big mistakes, and I've got plenty of them. And unless I tell you about them in the annual report -and I resist the temptation sometimes- unless I tell you about them in the annual report you're not going to know it because it doesn't show up under conventional accounting.

But omission is way bigger than commission. Big opportunities in life have to be seized. We don't do very many things, but when we get the chance to do something that's right and big, we've got to do it. And even to do it in a small scale is just as big a mistake almost as not doing it at all. You've really got to grab them when they come, because you're not going to get 500 great opportunities. You would be off if when you got out of school here you got a punch card with 20 punches on it, and every financial decision you made you used up a punch. You'd get very rich because you'd think through very hard each one.

I mean I went to a cocktail party and somebody talked about a company he didn't even understand what they did or couldn't pronounce the name. But they'd made some money last week and another one like it. You wouldn't buy it if you only had 20 punches on that card. There's a temptation to dabble, particularly during bull markets, and stocks are so easy. It's easier now than ever because you can do it online. You know just you click it in and maybe it goes up a point and you get excited about that and you buy another one the next day and so on. You can't much money over time doing that. But if you had a punch card with only 20 punches, you weren't going to get another one for the rest of your life, you would think a long time before every investment decision. And you would make good ones and you'd make big ones, and you probably wouldn't even use all 20 punches in your lifetime. But you wouldn't need to. Yep?

Audience: Mr. Buffett, good morning. In your comments about making mistakes and errors like that, could you talk a little bit about your sell discipline? When you're in a position and you feel like it's no longer good. What criteria do you use when you just finally abandon it?

Warren Buffett: Yeah when I started out- the sell situation has changed over the years because when I started out I had way more ideas than money. I mean I would go through Moody's Manual, I

went through it page by page, and then I went through it again page by page. And I found stocks in there that I could understand that were selling at like two times earnings, even one times earnings. Well, when you only have 10,000 bucks that can get a little frustrating, and if you don't like to borrow money, which I never liked to borrow money.

So, I was always coming up with more ideas than I had money, so I had to sell whatever I liked least to buy something new that just was compelling to me. And for a long time I was in that mode. And now our problem is we have more money than ideas. So, if you look at our annual report which is on the internet at our homepage berkshirehathaway.com. You'll see something in the back called the economic principles of Berkshire, which I believe in setting out for my partners. They are my partners; I don't look at them as shareholders I look at them as partners. They're going to be my partners for life. So I want to tell them how I think. And if they disagree with the way I think that's fine, but I don't want them to be disappointed in me.

So I lay out there and I say, in terms of our wholly-owned businesses, we're not going to sell no matter how much anybody offers us for them. I mean if somebody offers us three times what something is worth- See's Candy, The Buffalo News, Borsheims, whatever it may be, we're not going to sell it. I may be wrong in having that approach. I know I'm not wrong if I owned 100 percent of Berkshire because that's the way I want to live my life. I've got all the money I could possibly need, it just amounts to a change in the newspaper story on my obituary and the amount of money the foundation has. And to break-off relationships with people I like and people that have joined me because they think it's a permanent home, to do that simply because somebody waves a big check at me would be like selling one of my children because somebody waved a big check. So I won't do that, and I want to tell my partners I won't do it so that they're not disappointed in me.

More and more with certain stocks we've got that approach. Now, if we were chronically short of funds and had all kinds of opportunities coming, we might have a somewhat different approach.

But our inclination is not to sell things unless we get really discouraged, perhaps with the management, or we think the economic characteristics of the business change in a big way, and that happens. But we're not going to sell simply because it looks too high. In all likelihood, you can't make that 100 percent but that's the principle under which we're operating.

We're generating right now 5 billion of cash a year at least, so that's 100 million bucks every week. We've been talking here half an hour and I haven't done a damn thing. So, the real question is how do you put it out intelligently, and if we were selling things it'd be just that much more, so. There may come a time when that would change. But we want to- and I have partners, shareholders, partners,

who would say, “If you can get three times what See’s Candy’s worth, why don’t you sell it?” And that’s why I want to be sure before they come in, they know how I think on that. I mean they’re entitled to know that.

But you really want- think for minute if you’re going to get married and you want a marriage that’s going to last, not necessarily the happiest marriage or one that Martha Stewart will talk about or anything, but you want a marriage that’s going to last. What quality do you look for in a spouse? One quality- do you look for brains? Do you look for humor? Do you look for character? Do you look for beauty? No. You look for low expectations. That is the marriage that’s going to last, if you both have low expectations. And I want my partners to be on the low side on expectations coming in because I want the marriage to last. It’s a financial marriage when they join me at Berkshire and I don’t want them to think I’m going to do things that I’m not going to do. So that’s our guiding principle.

TO: Berkshire Hathaway Managers ("The All-Stars")

FROM: Warren E. Buffett

DATE: September 26, 2001

The last few weeks have been tough times for all of us in our personal lives and for many of us in our business activities.

At Berkshire we have estimated our September 11 insurance loss was $2.2 billion. We've labeled this a "guess" because that's all it is. It will be many years before we can tell the world within a narrow range what the true figure was.

A very high percentage of the loss occurred in our U.S. insurance companies, with the balance in German and U.K. entities. Because we have regularly paid very large amounts of U.S. income taxes, we will bear 65% of the cost applicable to the U.S. operations; the government will bear 35%. Many insurers will not have their loss mitigated in this manner and some may not survive. Though much of our loss will be paid very soon, significant payments in the liability area will take a considerable time to settle.

Even with tax recoveries, our loss is huge. Nevertheless, it's one Berkshire can easily bear. We have long been in the super-cat business and we have been prepared, both financially and psychologically, to handle them when they occur. This won't be our last hit, though we fervently hope disasters in the future arise from natural causes, rather than be man-made. (We also would hope they would be of lesser magnitude.)

What should you be doing in running your business? Just what you always do: Widen the moat, build enduring competitive advantage, delight your customers, and relentlessly fight costs. With the exception of insurance pricing and coverages, almost all operating decisions that made sense a month ago make sense today.

For my part, I'll keep looking for sensible acquisitions and continue to manage our resources so that Berkshire remains a financial Rock of Gibraltar. I'm sure we are in a recession, probably a relatively deep and extended one, but they are part of business life and we are prepared.

In short, you do the managing and I'll do the worrying. That's a division of labor that's worked for us in the past, and it will continue to work well in the future.

Thanks, as always, for the great job all of you do that, in turn, makes my job so easy.

Warren

P.S. If you wish, share this message with any of your associates.

NEBRASKA

Business

FALL 2001

A Magazine for Alumni and Friends of the College of Business Administration at the University of Nebraska–Lincoln

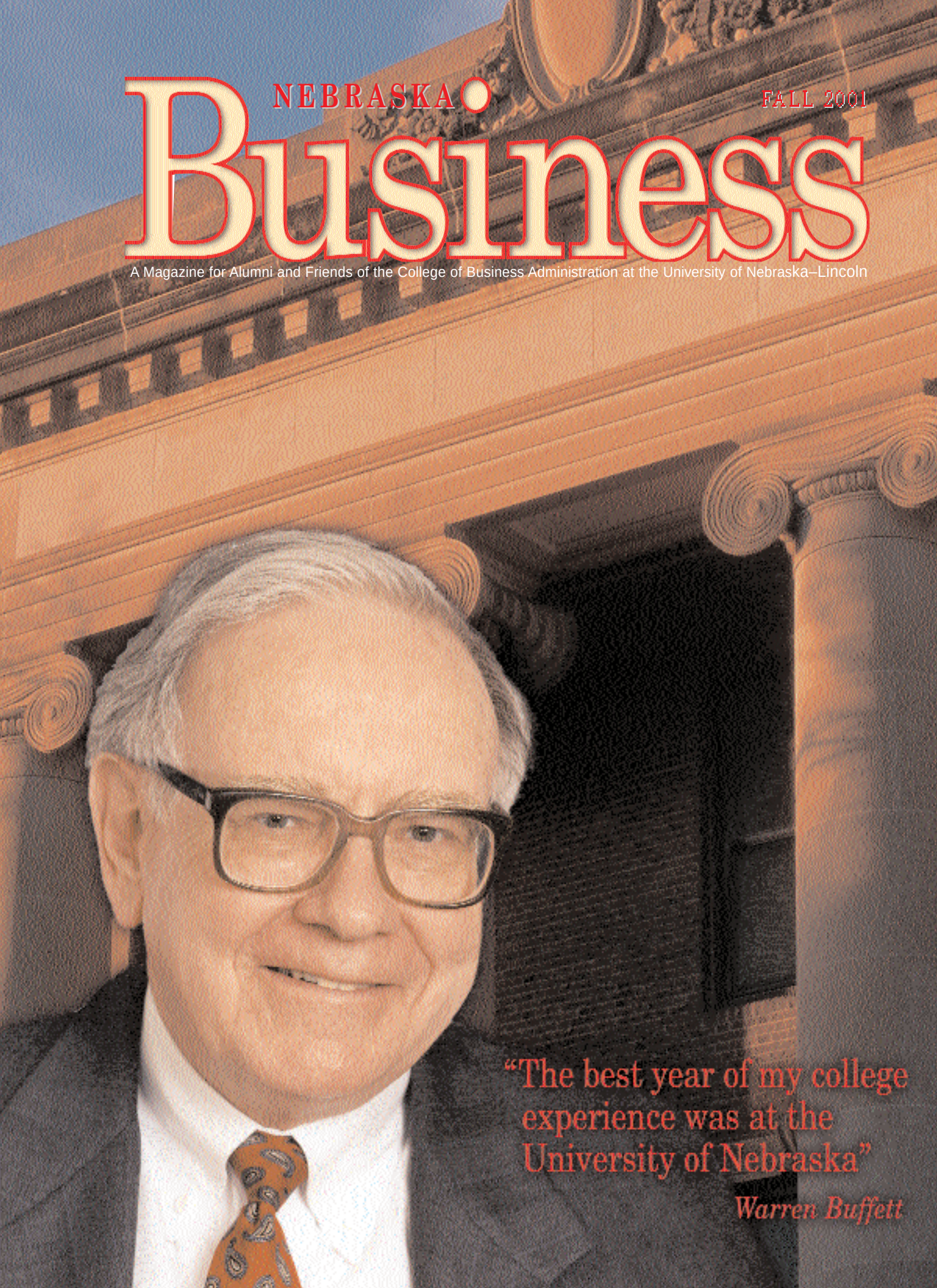

"The best year of my college experience was at the University of Nebraska"

Warren Buffett

Warren

A Conversatio

Arriving at Warren Buffett's office early on a Tuesday morning, Warren greeted me at the door. He was looking forward to the opportunity to discuss the College of Business Administration. As we toured his office, he chuckled when he recalled a puzzling income item of $4.00 on his latest tax return. With his usual thorough research, discovered it was a royalty payment for his appearance on "All My Children". A framed collage on his office wall documents his appearance on the soap opera, along with the check stub, which records the payment for the appearance, $55,000 plus a $10.00 wardrobe allowance. His family tells him that is enough wardrobe allowance to last several years.

Warren Buffett offering his wallet to Dean Cynthia Milligan

Other memorabilia that adorns his office are the original stock certificates signed by Wells and Fargo for American Express and the Wells Fargo Company. Along with those documents is a bank charter signed by Fargo. He also keeps two Coke machines and various other souvenirs, representing his businesses, such as a giant Dairy Queen ice cream sundae.

Cynthia: Talk about your Nebraska ties. Your parents were at the University, weren't they?

Warren: My great-grandfather started a grocery business in 1869 in Omaha. All of their children attended the University of Nebraska. When my father was at the University, he was the editor of The Daily Nebraskan. My mother was the granddaughter of the owner of the Cuming County Democrat in Westpoint, Nebraska. My mother could run a linotype when she was twelve; she used to interview people

Buffett

with Dean Cynthia H. Milligan

waiting for the train, just to have something to write about in the paper. When she went to the University, she naturally went to the Daily Nebraskan looking for a job, where she met my father.

Cynthia: What do you remember about your education at the University?
Warren: I had a great experience at Nebraska. Probably the best teacher I had was Ray Dein in accounting. I think everybody in business school should really know accounting; it is the language of business. If you are not comfortable with the language, you can' t be comfortable in the country. You just have to get it into your spinal cord. It is so valuable in business.

Cynthia: You began you university education at another institution, what are you thoughts on the education you received at the University of Nebraska?
Warren: The best year of my undergraduate work was at Nebraska; I would call it my best overall experience except for the year at Columbia, where I studied with Ben Graham. The teachers at the University turned me on. There wasn't a class that disappointed me. I was close to my professors, who actually taught the classes, At my previous undergraduate college, graduate students taught the classes.

One of the best things that happened was the day the University was going to award the "Nathan Gold Scholarship," a $500 scholarship to attend graduate school anywhere in the U.S. As it turned out, I was the only applicant that showed up for the interview. So I won the scholarship by default. My dad wanted me to apply to Harvard Business School. It was a 10-hour train ride to Chicago where I met with the person who was to interview me, and was told to come back another time when I was older. I was 19 at the time. So I rode 10 hours back, wondering what I was

"I had a great experience at the University of Nebraska. The teachers at the University turned me on. I was close to my professors. There wasn't a class I was disappointed in."

going to tell my Dad. In August of that year I was leafing through magazines and discovered that Ben Graham was teaching at Columbia, so I contacted the Dean at Columbia and even though it was very late to apply, was accepted.

Cynthia: Are you a goal oriented person? When you were in college did you set goals for yourself?
Warren: I have always liked business and wanted to be in business. This is my ledger from 1950, when I was at the University of Nebraska. It shows the investment in my golf ball business. I had $44 cash and half interest in a car. I also had a brokerage account, but had to buy stocks in my sister's name because I was underage.

Cynthia: Your goals were financial then?
Warren: Business, I like the process of business. Money is a way to be in business, but the real fun is the activity itself.

Nebraska's Most Illustrious Almunus

Cynthia: When you are looking at a business in which to invest, what are your priorities?
Warren: You have to really understand the economics of a business and the kind of people you are getting into business with. They have to love their business. They have to feel that they have been creative, that it is their painting, I am not going to disturb it, just give them more canvas and more brushes, but its their painting, from our standpoint any way. The whole place will reflect the attitude of the person at the top, if you have someone at the top who doesn't care, the people down below won't care. On the other hand, if you have someone at the top who cares a great deal, that will be evident across the organization.

Cynthia: The type of people managing the business is a very important criteria, then?
Warren: Yes, contracts don't protect you; you have to have confidence in the people.

Cynthia: We are making a big investment in ethics and leadership. We just hired a nationally known scholar in leadership to head our Center for Advanced Leadership Studies. We are searching for a faculty member with a reputation in the field of ethical leadership to work with our Center of Ethics and our Center for Leadership. Obviously, we see a need for our graduates to develop leadership skills and be aware of ethical issues in business. What is your opinion on the need for those entering business careers to have leadership skills and developed ethical values?
Warren: The best ethical leadership people receive is from their parents. Every kid wants heroes, and they may pick the wrong ones. The natural heroes are the parents. Kids usually emulate their parents, and if the parents behave well, the kids are very, very likely to behave well.

I think that what you do at school by emphasizing ethical values is that you will keep those kids on track and pull in a few that aren't.

"The younger you are when your start learning, the better. Anyone who understands compound interest can understand that."

“I like the process of business. Money is a way to be in business, but the real fun is the activity itself.”

Cynthia: What about the value of good leadership skills and ethics in business?
Warren: I have seen plenty of people succeed that don’t have either one. And I have also seen an awful lot of people succeed that do; and those are the ones I admire and they are the ones I want to associate with. Honesty is a terrific policy. What do you look back on in terms of whether you have been a success? You have certain things you want to achieve, but if you don’t have the love and respect of people, you are always a failure. That is the one thing you must earn, it can never be bought. No one that has the love and respect of others is ever a failure.

Cynthia: A donor gave us $1 million to develop an ethics program, and every year he asks us if we really think this makes a difference. I agree with you, often the students come with high ethical standards, but what we are doing is exposing them to some ethical issues that might trip them up at some point in their career. We want them to understand the issues and understand they can influence those around them with their own standards. Do you agree with that approach?
Warren: The simple test of good ethics, is how would you feel about any act, if a reasonably intelligent, but unfriendly reporter were to write it up and put it in tomorrow’s paper for everyone to see. If it passes that test, it’s okay, and if you have to think about it, it probably isn’t the right thing to do.

“ Economics should be part of everyone’s background, because it is the way the world works.”

Cynthia: You talk often about heroes, who are your heroes?
Warren: I have been extraordinarily lucky with my heroes, starting with my Dad. I have never been let down by one of my heroes. When I was about 13 or 14, we moved to Washington. I was all mixed up for a while, I ran away from home, stole things, but I got through it because I had the right heroes. If you have the wrong ones you have a real problem, because you are going to emulate your heroes. You will gravitate toward the people you admire. If you don’t choose those people carefully, you will very quickly develop situational ethics that can get you into trouble.

Cynthia: Let’s talk technology. I know that you have said you are not interested in investing in technology companies. However, we have a strong technology and e-business focus in our business curriculum, believing that our graduates will be more valuable to their future employers if they understand the use of technology in management, marketing, accounting and finance. What is your opinion of the importance of technology in business education today?
Warren: I love what technology is doing for the world, including me. I don’t think it is easy to pick who the technology winners will be in ten years, like it is with chewing gum or soft drinks. But, that is an investment decision. We are the world’s leaders in technology and it is an engine that will do wonders for this country over time.

Cynthia: Our philosophy is that technology is a part of every element in our curriculum. We do not have an e-commerce or an e-business major. It should be infused into everything; it has changed accounting, it has changed all aspects of business.
Warren: It's a tool. For a student to leave business school and not know how technology affects business and a mind to keep up with the progress of technology would be insupportable. Technology is the future of business. It is transforming society. If I were starting out in business today, I would be very focused on technology.

"I think everyone in business school should really know accounting. It is the language of business. It is the Rosetta Stone for Business."

Cynthia: Do you think an MBA is an important degree for students to have today?
Warren: If you are interested in business, or likely to be in business, an MBA is very useful. But, what is really important is what you bring to a class in terms of being interested in the subject. If you view a course like accounting as a drudge and a requirement, you are missing the whole game. Any course can be exciting. Mastering accounting is like mastering a new language, it can be so much fun. The attitude should be one of discovery, that you are coming there and discovering. Accounting is the Rosetta Stone of business.

Economics is fascinating, the first page of economics describes how mankind deals with insatiable wants and creates the systems to fulfill these wants. It's great stuff. Really how the world works. Business is a subsection, a fairly understandable subsection, not like black holes, which are fairly hard to visualize, but business is every day stuff and you are learning how the world works. You are 18-19 years old and learning about the world, understanding how this great world works. The GDP per capita in the 20th century increased 6 to 1. Think of that, six times. Why does that work here in the U.S., why doesn't it work other places? The U.S. is a small part of the universe, but a very important part and understanding that and seeing everything else against that backdrop for the rest of your life is fabulous.

Cynthia: What goals do you set for yourself today; do you have goals you still want to accomplish?
Warren: Berkshire is my canvas. The goal I have is to have Berkshire be generally admired for what it is. I am also proud that we do things at Berkshire that are different than other corporations. My partner, Charlie Munger, says that Berkshire is a didactic exercise, that it is a teaching platform. We do things differently at Berkshire than in other business which bring into question the generally accepted ways of doing business.

Cynthia: We have 3200 students in the Business College, just beginning their paths to a career. What advice would you give students who are preparing for a business career?
Warren: My advice generally is to sop up everything you can. You're not going to run out of storage room in your brain, so take advantage of everything that is of interest. You will never have another opportunity like this in your lifetime.

I ask students what they would do, if when they were sixteen, a genie came to them and told them that they could have the car of their dreams. The only catch is that it is the only car they will ever have. I know what I would do; I would study the owner's manual until I had it memorized, and do everything I could to keep the car in the best shape possible. When you are sixteen, you only have one brain and one body and that is all you are ever going to get.

Cynthia: What advice would you give students who are just starting out in a business career?
Warren: I would say, follow what you are passionate about. I think it is crazy to be someplace where you feel your ethics or whatever is out of sync with your work. You really want to be in a place where you jump out of bed in the morning and you are all fired up to get to work. I have always felt that way, basically,

Cynthia: Our students are always interested in knowing what you look for when you hire someone? What specific qualities do you seek?
Warren: You look for three things, you look for intelligence, you look for energy and you look for integrity. You don't need to be brilliant, just reasonably intelligent, Ray Kroc, for example, has good intelligence, which he combined with good business principles and passion for business and a passion for his particular business.

Every business student you have has the requisite intelligence and requisite energy. Integrity is not hard wired into your DNA. A student at that age can pretty much decide what kind a person they are going to be at sixty. If they don't have integrity, they never will. The chains of habit are sometimes too heavy to be broken. Students can forge their own chains. Just pick a person to admire and ask why you admire them, usually it is because they are generous, decent, kind people, and those are the kind of people to emulate.

Cynthia: Thank you for the generous amount of time you have given us today. I know that you are a great asset for the College and we appreciate your support.
Warren: Thank you for coming.

"Berkshire Hathaway is my canvas. I get to paint my own painting. The ultimate luxury."

Warren Buffett, 1948

Looking for more about Warren Buffett?
www.berkshirehathaway.com

An FDIC for Insurers

By Warren Buffett
Monday, November 19, 2001; Page A21

I'm in the insurance business -- an expensive place to be in the past couple of months. It was made costly for Berkshire Hathaway, the company I run, because I did something very dumb: allowed Berkshire to provide insurance coverage for a huge catastrophe loss without its getting a premium for doing so. The risk we unthinkingly assumed was a loss from terrorism.

Given the degree of my error, I was lucky: We estimate our Sept. 11 loss at Berkshire to have been "only" about $2.3 billion. That's more, by far, than we've ever lost from a single catastrophe, but the toll could have been far larger. Indeed, had a nuclear device been available to Osama bin Laden, the loss could have bankrupted most of the insurance industry, Berkshire very much included. Given that kind of horrendous, but not impossible, nuclear scenario, insured losses could have been $1 trillion, an amount that exceeds the net worth of all property-casualty insurers worldwide.

A potential loss of almost infinite magnitude can be assumed only by an entity of almost-infinite resources. That economic species doesn't exist in the private sector. Only the U.S. government fits the bill.

Washington has accepted this proposition to a point. Congress is now agonizingly trying to create some sort of industry-government coalition that would insure losses from terrorism. The motives of all concerned are admirable, but I believe the actions now being considered have disturbing implications for our society.

Some proposals limit the government's liability but leave the risk for the industry open-ended. These proposals won't work: If unlimited liability is left with insurers, they will necessarily refuse to renew policies they see potentially leading them to bankruptcy.

Equally bad, all of the proposals now being considered will engender pricing based upon risk exposure. That is, if a business is located in a high-risk spot it will be asked to pay a staggering price for insurance. Risk-based pricing is normally equitable and desirable. At Berkshire, we employ it constantly. In this case, though, it would have antisocial consequences.

For example, the terrorism risk per dollar of insured value may be 10 or more times for iconic or critical properties in New York City what it is for properties in less-populated areas. But great cities are central to our society. We don't want them to wither under the burden of hugely disadvantageous insurance costs. Indeed, it's in America's interest for them to thrive. Citizens of our leading cities almost certainly bear above-normal physical risks in the war being waged upon us by terrorists. We should not impose crippling economic costs on them as well.

In my opinion, we would arrive at a solution for this societal problem if we were to adopt the Federal Deposit Insurance Corp. as a model for where we want to head in the insurance industry. The rationale for the FDIC, formed 68 years ago, was clear-cut: The United States sorely needed to eliminate bank runs and the financial panics they caused. Prior to the FDIC,

the risk from bank failures resided with depositors, who had no way to shed it. Neither they nor their banks could lay that risk off on private insurers for two reasons: First, the dollar amounts involved were simply too large; second, losses were correlated, in the sense that the failure of a few banks frequently caused a chain reaction, in which good banks toppled with bad, leaving a mountain of economic damage. Fortunately for the country, these punishing disruptions to our economy were ended by the advent of FDIC insurance.

At the moment, leaving aside insurance policies soon due to run out, millions of business owners, individuals, landlords and lenders bear the economic risk of terrorist attacks. Insurers won't step up to assume the risk -- we were previously dumb, but we've learned. It isn't right, though, that these risk-laden millions should have to shoulder this burden themselves: That would be self-insurance, and the economic distortions it would cause would stagger our society. Who would ever build a skyscraper in a major city or lend against it? Or how could a mom-and-pop deli, bare of insurance, locate next to an iconic office tower?

If we were to adopt an FDIC model for handling terrorism, the insurance industry would not be permitted to earn a dime from the coverage. Instead, a premium tax, payable to the U.S. Treasury, would be levied on all insurance. This would have the equitable effect of spreading the terrorism-related cost to the country in general, just as we spread defense expenditures.

Were a proposal such as I suggest to be enacted, the new law should sharply limit private lawsuits seeking to place blame on some party involved -- an airline, say. We should want the Treasury to make payments to victims solely to compensate them for loss of property, life or direct earnings, without worrying about fault. The law also should cover war losses. War and terrorism both have the capacity to impose losses that private insurers simply can't bear. Most existing policies already have a war exclusion -- but not all by far.

Some people will argue that an FDIC model for insurance would be a socialistic intrusion into the private sector. Most surely would have argued the same about the FDIC itself -- and yet that institution is today generally regarded as having been enormously beneficial. The problem was once bank runs and economic panics, and we found an innovative solution. Today, the problem is terrorism and its capricious effects on insurance costs, and we need a solution of comparable efficacy.

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Warren Buffett on the Stock Market

What's in the future for investors--another roaring bull market or more upset stomach? Amazingly, the answer may come down to three simple factors. Here, the world's most celebrated investor talks about what really makes the market tick--and whether that ticking should make you nervous.

FORTUNE
Monday, December 10, 2001
By Carol Loomis
http://www.fortune.com/fortune/investing/articles/0,15114,372385,00.html

Two years ago, following a July 1999 speech by Warren Buffett, chairman of Berkshire Hathaway, on the stock market--a rare subject for him to discuss publicly--FORTUNE ran what he had to say under the title Mr. Buffett on the Stock Market (Nov. 22, 1999). His main points then concerned two consecutive and amazing periods that American investors had experienced, and his belief that returns from stocks were due to fall dramatically. Since the Dow Jones Industrial Average was 11194 when he gave his speech and recently was about 9900, no one yet has the goods to argue with him.

So where do we stand now--with the stock market seeming to reflect a dismal profit outlook, an unfamiliar war, and rattled consumer confidence? Who better to supply perspective on that question than Buffett?

The thoughts that follow come from a second Buffett speech, given last July at the site of the first talk, Allen & Co.'s annual Sun Valley bash for corporate executives. There, the renowned stockpicker returned to the themes he'd discussed before, bringing new data and insights to the subject. Working with FORTUNE's Carol Loomis, Buffett distilled that speech into this essay, a fitting opening for this year's Investor's Guide. Here again is Mr. Buffett on the Stock Market.

The last time I tackled this subject, in 1999, I broke down the previous 34 years into two 17-year periods, which in the sense of lean years and fat were astonishingly symmetrical. Here's the first period. As you can see, over 17 years the Dow gained exactly one-tenth of one percent.

• Dow Jones Industrial Average
Dec. 31, 1964: 874.12
Dec. 31, 1981: 875.00

And here's the second, marked by an incredible bull market that, as I laid out my thoughts, was about to end (though I didn't know that).

• Dow Industrials
Dec. 31, 1981: 875.00
Dec. 31, 1998: 9181.43

Now, you couldn't explain this remarkable divergence in markets by, say, differences in the growth of gross national product. In the first period--that dismal time for the market--GNP actually grew more than twice as fast as it did in the second period.

• Gain in Gross National Product
1964-1981: 373%
1981-1988: 177%

So what was the explanation? I concluded that the market's contrasting moves were caused by extraordinary changes in two critical economic variables--and by a related psychological force that eventually came into play.

Here I need to remind you about the definition of "investing," which though simple is often forgotten. Investing is laying out money today to receive more money tomorrow.

That gets to the first of the economic variables that affected stock prices in the two periods--interest rates. In economics, interest rates act as gravity behaves in the physical world. At all times, in all markets, in all parts of the world, the tiniest change in rates changes the value of every financial asset. You see that clearly with the fluctuating prices of bonds. But the rule applies as well to farmland, oil reserves, stocks, and every other financial asset. And the effects can be huge on values. If interest rates are, say, 13%, the present value of a dollar that you're going to receive in the future from an investment is not nearly as high as the present value of a dollar if rates are 4%.

So here's the record on interest rates at key dates in our 34-year span. They moved dramatically up--that was bad for investors--in the first half of that period and dramatically down--a boon for investors--in the second half.

• Interest Rates, Long-Term Government Bonds
Dec. 31, 1964: 4.20%
Dec. 31, 1981: 13.65%
Dec. 31, 1998: 5.09%

The other critical variable here is how many dollars investors expected to get from the companies in which they invested. During the first period expectations fell significantly because corporate profits weren't looking good. By the early 1980s Fed Chairman Paul Volcker's economic sledgehammer had, in fact, driven corporate profitability to a level that people hadn't seen since the 1930s.

The upshot is that investors lost their confidence in the American economy: They were looking at a future they believed would be plagued by two negatives. First, they didn't see much good coming in the way of corporate profits. Second, the sky-high interest rates prevailing caused them to discount those meager profits further. These two factors, working together, caused stagnation in the stock market from 1964 to 1981, even though

those years featured huge improvements in GNP. The business of the country grew while investors' valuation of that business shrank!

And then the reversal of those factors created a period during which much lower GNP gains were accompanied by a bonanza for the market. First, you got a major increase in the rate of profitability. Second, you got an enormous drop in interest rates, which made a dollar of future profit that much more valuable. Both phenomena were real and powerful fuels for a major bull market. And in time the psychological factor I mentioned was added to the equation: Speculative trading exploded, simply because of the market action that people had seen. Later, we'll look at the pathology of this dangerous and oft-recurring malady.

Two years ago I believed the favorable fundamental trends had largely run their course. For the market to go dramatically up from where it was then would have required long-term interest rates to drop much further (which is always possible) or for there to be a major improvement in corporate profitability (which seemed, at the time, considerably less possible). If you take a look at a 50-year chart of after-tax profits as a percent of gross domestic product, you find that the rate normally falls between 4%--that was its neighborhood in the bad year of 1981, for example--and 6.5%. For the rate to go above 6.5% is rare. In the very good profit years of 1999 and 2000, the rate was under 6% and this year it may well fall below 5%.

So there you have my explanation of those two wildly different 17-year periods. The question is, How much do those periods of the past for the market say about its future?

To suggest an answer, I'd like to look back over the 20th century. As you know, this was really the American century. We had the advent of autos, we had aircraft, we had radio, TV, and computers. It was an incredible period. Indeed, the per capita growth in U.S. output, measured in real dollars (that is, with no impact from inflation), was a breathtaking 702%.

The century included some very tough years, of course--like the Depression years of 1929 to 1933. But a decade-by-decade look at per capita GNP shows something remarkable: As a nation, we made relatively consistent progress throughout the century. So you might think that the economic value of the U.S.--at least as measured by its securities markets--would have grown at a reasonably consistent pace as well.

The U.S. Never Stopped Growing
Per capita GNP gains crept in the 20th century's early years. But if you think of the U.S. as a stock, it was overall one helluva mover.

Year	20th-Century growth in per capita GNP (constant dollars)
1900-10	29%
1910-20	1%
1920-30	13%
1930-40	21%
1940-50	50%
1950-60	18%
1960-70	33%
1970-80	24%
1980-90	24%
1990-2000	24%

That's not what happened. We know from our earlier examination of the 1964-98 period that parallelism broke down completely in that era. But the whole century makes this point as well. At its beginning, for example, between 1900 and 1920, the country was chugging ahead, explosively expanding its use of electricity, autos, and the telephone. Yet the market barely moved, recording a 0.4% annual increase that was roughly analogous to the slim pickings between 1964 and 1981.

• Dow Industrials
Dec. 31, 1899: 66.08
Dec. 31, 1920: 71.95

In the next period, we had the market boom of the '20s, when the Dow jumped 430% to 381 in September 1929. Then we go 19 years--19 years--and there is the Dow at 177, half the level where it began. That's true even though the 1940s displayed by far the largest gain in per capita GDP (50%) of any 20th-century decade. Following that came a 17-year period when stocks finally took off--making a great five-to-one gain. And then the two periods discussed at the start: stagnation until 1981, and the roaring boom that wrapped up this amazing century.

To break things down another way, we had three huge, secular bull markets that covered about 44 years, during which the Dow gained more than 11,000 points. And we had three periods of stagnation, covering some 56 years. During those 56 years the country made major economic progress and yet the Dow actually lost 292 points.

How could this have happened? In a flourishing country in which people are focused on making money, how could you have had three extended and anguishing periods of stagnation that in aggregate--leaving aside dividends--would have lost you money? The answer lies in the mistake that investors repeatedly make--that psychological force I mentioned above: People are habitually guided by the rear-view mirror and, for the most part, by the vistas immediately behind them.

The first part of the century offers a vivid illustration of that myopia. In the century's first 20 years, stocks normally yielded more than high-grade bonds. That relationship now seems quaint, but it was then almost axiomatic. Stocks were known to be riskier, so why buy them unless you were paid a premium?

And then came along a 1924 book--slim and initially unheralded, but destined to move markets as never before--written by a man named Edgar Lawrence Smith. The book, called Common Stocks as Long Term Investments, chronicled a study Smith had done of security price movements in the 56 years ended in 1922. Smith had started off his study with a hypothesis: Stocks would do better in times of inflation, and bonds would do better in times of deflation. It was a perfectly reasonable hypothesis.

But consider the first words in the book: "These studies are the record of a failure--the failure of facts to sustain a preconceived theory." Smith went on: "The facts assembled, however, seemed worthy of further examination. If they would not prove what we had hoped to have them prove, it seemed desirable to turn them loose and to follow them to whatever end they might lead."

Now, there was a smart man, who did just about the hardest thing in the world to do. Charles Darwin used to say that whenever he ran into something that contradicted a conclusion he cherished, he was obliged to write the new finding down within 30 minutes. Otherwise his mind would work to reject the discordant information, much as the body rejects transplants. Man's natural inclination is to cling to his beliefs, particularly if they are reinforced by recent experience--a flaw in our makeup that bears on what happens during secular bull markets and extended periods of stagnation.

To report what Edgar Lawrence Smith discovered, I will quote a legendary thinker--John Maynard Keynes, who in 1925 reviewed the book, thereby putting it on the map. In his review, Keynes described "perhaps Mr. Smith's most important point ... and certainly his most novel point. Well-managed industrial companies do not, as a rule, distribute to the shareholders the whole of their earned profits. In good years, if not in all years, they retain a part of their profits and put them back in the business. Thus there is an element of compound interest (Keynes' italics) operating in favor of a sound industrial investment."

It was that simple. It wasn't even news. People certainly knew that companies were not paying out 100% of their earnings. But investors hadn't thought through the implications of the point. Here, though, was this guy Smith saying, "Why do stocks typically outperform bonds? A major reason is that businesses retain earnings, with these going on to generate still more earnings--and dividends, too."

That finding ignited an unprecedented bull market. Galvanized by Smith's insight, investors piled into stocks, anticipating a double dip: their higher initial yield over bonds, and growth to boot. For the American public, this new understanding was like the discovery of fire.

But before long that same public was burned. Stocks were driven to prices that first pushed down their yield to that on bonds and ultimately drove their yield far lower. What happened then should strike readers as eerily familiar: The mere fact that share prices were rising so quickly became the main impetus for people to rush into stocks. What the few bought for the right reason in 1925, the many bought for the wrong reason in 1929.

Astutely, Keynes anticipated a perversity of this kind in his 1925 review. He wrote: "It is dangerous ... to apply to the future inductive arguments based on past experience, unless one can distinguish the broad reasons why past experience was what it was." If you can't do that, he said, you may fall into the trap of expecting results in the future that will materialize only if conditions are exactly the same as they were in the past. The special conditions he had in mind, of course, stemmed from the fact that Smith's study covered a half century during which stocks generally yielded more than high-grade bonds.

The colossal miscalculation that investors made in the 1920s has recurred in one form or another several times since. The public's monumental hangover from its stock binge of the 1920s lasted, as we have seen, through 1948. The country was then intrinsically far more valuable than it had been 20 years before; dividend yields were more than double the yield on bonds; and yet stock prices were at less than half their 1929 peak. The conditions that had produced Smith's wondrous results had reappeared--in spades. But rather than seeing what was in plain sight in the late 1940s, investors were transfixed by the frightening market of the early 1930s and were avoiding re-exposure to pain.

Don't think for a moment that small investors are the only ones guilty of too much attention to the rear-view mirror. Let's look at the behavior of professionally managed pension funds in recent decades. In 1971--this was Nifty Fifty time--pension managers, feeling great about the market, put more than 90% of their net cash flow into stocks, a record commitment at the time. And then, in a couple of years, the roof fell in and stocks got way cheaper. So what did the pension fund managers do? They quit buying because stocks got cheaper!

• Private Pension Funds
% of cash flow put into equities
1971: 91% (record high)
1974: 13%

This is the one thing I can never understand. To refer to a personal taste of mine, I'm going to buy hamburgers the rest of my life. When hamburgers go down in price, we sing the "Hallelujah Chorus" in the Buffett household. When hamburgers go up, we weep. For most people, it's the same way with everything in life they will be buying--except stocks.

When stocks go down and you can get more for your money, people don't like them anymore.

That sort of behavior is especially puzzling when engaged in by pension fund managers, who by all rights should have the longest time horizon of any investors. These managers are not going to need the money in their funds tomorrow, not next year, nor even next decade. So they have total freedom to sit back and relax. Since they are not operating with their own funds, moreover, raw greed should not distort their decisions. They should simply think about what makes the most sense. Yet they behave just like rank amateurs (getting paid, though, as if they had special expertise).

In 1979, when I felt stocks were a screaming buy, I wrote in an article, "Pension fund managers continue to make investment decisions with their eyes firmly fixed on the rear-view mirror. This generals-fighting-the-last-war approach has proved costly in the past and will likely prove equally costly this time around." That's true, I said, because "stocks now sell at levels that should produce long-term returns far superior to bonds."

Consider the circumstances in 1972, when pension fund managers were still loading up on stocks: The Dow ended the year at 1020, had an average book value of 625, and earned 11% on book. Six years later, the Dow was 20% cheaper, its book value had gained nearly 40%, and it had earned 13% on book. Or as I wrote then, "Stocks were demonstrably cheaper in 1978 when pension fund managers wouldn't buy them than they were in 1972, when they bought them at record rates."

At the time of the article, long-term corporate bonds were yielding about 9.5%. So I asked this seemingly obvious question: "Can better results be obtained, over 20 years, from a group of 9.5% bonds of leading American companies maturing in 1999 than from a group of Dow-type equities purchased, in aggregate, around book value and likely to earn, in aggregate, about 13% on that book value?" The question answered itself.

Now, if you had read that article in 1979, you would have suffered--oh, how you would have suffered!--for about three years. I was no good then at forecasting the near-term movements of stock prices, and I'm no good now. I never have the faintest idea what the stock market is going to do in the next six months, or the next year, or the next two.

But I think it is very easy to see what is likely to happen over the long term. Ben Graham told us why: "Though the stock market functions as a voting machine in the short run, it acts as a weighing machine in the long run." Fear and greed play important roles when votes are being cast, but they don't register on the scale.

By my thinking, it was not hard to say that, over a 20-year period, a 9.5% bond wasn't going to do as well as this disguised bond called the Dow that you could buy below par--that's book value--and that was earning 13% on par.

Let me explain what I mean by that term I slipped in there, "disguised bond." A bond, as most of you know, comes with a certain maturity and with a string of little coupons. A 6% bond, for example, pays a 3% coupon every six months.

A stock, in contrast, is a financial instrument that has a claim on future distributions made by a given business, whether they are paid out as dividends or to repurchase stock or to settle up after sale or liquidation. These payments are in effect "coupons." The set of owners getting them will change as shareholders come and go. But the financial outcome for the business' owners as a whole will be determined by the size and timing of these coupons. Estimating those particulars is what investment analysis is all about.

Now, gauging the size of those "coupons" gets very difficult for individual stocks. It's easier, though, for groups of stocks. Back in 1978, as I mentioned, we had the Dow earning 13% on its average book value of $850. The 13% could only be a benchmark, not a guarantee. Still, if you'd been willing then to invest for a period of time in stocks, you were in effect buying a bond--at prices that in 1979 seldom inched above par--with a principal value of $891 and a quite possible 13% coupon on the principal.

How could that not be better than a 9.5% bond? From that starting point, stocks had to outperform bonds over the long term. That, incidentally, has been true during most of my business lifetime. But as Keynes would remind us, the superiority of stocks isn't inevitable. They own the advantage only when certain conditions prevail.

Let me show you another point about the herd mentality among pension funds--a point perhaps accentuated by a little self-interest on the part of those who oversee the funds. In the table below are four well-known companies--typical of many others I could have selected--and the expected returns on their pension fund assets that they used in calculating what charge (or credit) they should make annually for pensions.

Now, the higher the expectation rate that a company uses for pensions, the higher its reported earnings will be. That's just the way that pension accounting works--and I hope, for the sake of relative brevity, that you'll just take my word for it.

As the table below shows, expectations in 1975 were modest: 7% for Exxon, 6% for GE and GM, and under 5% for IBM. The oddity of these assumptions is that investors could then buy long-term government noncallable bonds that paid 8%. In other words, these companies could have loaded up their entire portfolio with 8% no-risk bonds, but they nevertheless used lower assumptions. By 1982, as you can see, they had moved up their assumptions a little bit, most to around 7%. But now you could buy long-term governments at 10.4%. You could in fact have locked in that yield for decades by buying so-called strips that guaranteed you a 10.4% reinvestment rate. In effect, your idiot nephew could have managed the fund and achieved returns far higher than the investment assumptions corporations were using.

Why in the world would a company be assuming 7.5% when it could get nearly 10.5% on government bonds? The answer is that rear-view mirror again: Investors who'd been

through the collapse of the Nifty Fifty in the early 1970s were still feeling the pain of the period and were out of date in their thinking about returns. They couldn't make the necessary mental adjustment.

Now fast-forward to 2000, when we had long-term governments at 5.4%. And what were the four companies saying in their 2000 annual reports about expectations for their pension funds? They were using assumptions of 9.5% and even 10%.

I'm a sporting type, and I would love to make a large bet with the chief financial officer of any one of those four companies, or with their actuaries or auditors, that over the next 15 years they will not average the rates they've postulated. Just look at the math, for one thing. A fund's portfolio is very likely to be one-third bonds, on which--assuming a conservative mix of issues with an appropriate range of maturities--the fund cannot today expect to earn much more than 5%. It's simple to see then that the fund will need to average more than 11% on the two-thirds that's in stocks to earn about 9.5% overall. That's a pretty heroic assumption, particularly given the substantial investment expenses that a typical fund incurs.

Heroic assumptions do wonders, however, for the bottom line. By embracing those expectation rates shown in the far right column, these companies report much higher earnings--much higher--than if they were using lower rates. And that's certainly not lost on the people who set the rates. The actuaries who have roles in this game know nothing special about future investment returns. What they do know, however, is that their clients desire rates that are high. And a happy client is a continuing client.

Are we talking big numbers here? Let's take a look at General Electric, the country's most valuable and most admired company. I'm a huge admirer myself. GE has run its pension fund extraordinarily well for decades, and its assumptions about returns are typical of the crowd. I use the company as an example simply because of its prominence.

If we may retreat to 1982 again, GE recorded a pension charge of $570 million. That amount cost the company 20% of its pretax earnings. Last year GE recorded a $1.74 billion pension credit. That was 9% of the company's pretax earnings. And it was 2 1/2 times the appliance division's profit of $684 million. A $1.74 billion credit is simply a lot of money. Reduce that pension assumption enough and you wipe out most of the credit.

GE's pension credit, and that of many another corporation, owes its existence to a rule of the Financial Accounting Standards Board that went into effect in 1987. From that point on, companies equipped with the right assumptions and getting the fund performance they needed could start crediting pension income to their income statements. Last year, according to Goldman Sachs, 35 companies in the S&P 500 got more than 10% of their earnings from pension credits, even as, in many cases, the value of their pension investments shrank.

Shifting Views

	Expected pension fund returns

	1975	1982	2000
Exxon	7.0%	7.8%	9.5%
General Electric	6.0%	7.5%	9.5%
General Motors	6.0%	7.0%	10.0%
IBM	4.8%	5.5%	10.0%
Yield on long-term government bonds	*8.0%*	*10.4%*	*5.5%*

Unfortunately, the subject of pension assumptions, critically important though it is, almost never comes up in corporate board meetings. (I myself have been on 19 boards, and I've never heard a serious discussion of this subject.) And now, of course, the need for discussion is paramount because these assumptions that are being made, with all eyes looking backward at the glories of the 1990s, are so extreme. I invite you to ask the CFO of a company having a large defined-benefit pension fund what adjustment would need to be made to the company's earnings if its pension assumption was lowered to 6.5%. And then, if you want to be mean, ask what the company's assumptions were back in 1975 when both stocks and bonds had far higher prospective returns than they do now.

With 2001 annual reports soon to arrive, it will be interesting to see whether companies have reduced their assumptions about future pension returns. Considering how poor returns have been recently and the reprises that probably lie ahead, I think that anyone choosing not to lower assumptions--CEOs, auditors, and actuaries all--is risking litigation for misleading investors. And directors who don't question the optimism thus displayed simply won't be doing their job.

The tour we've taken through the last century proves that market irrationality of an extreme kind periodically erupts--and compellingly suggests that investors wanting to do well had better learn how to deal with the next outbreak. What's needed is an antidote, and in my opinion that's quantification. If you quantify, you won't necessarily rise to brilliance, but neither will you sink into craziness.

On a macro basis, quantification doesn't have to be complicated at all. Below is a chart, starting almost 80 years ago and really quite fundamental in what it says. The chart shows the market value of all publicly traded securities as a percentage of the country's business--that is, as a percentage of GNP. The ratio has certain limitations in telling you what you need to know. Still, it is probably the best single measure of where valuations stand at any given moment. And as you can see, nearly two years ago the ratio rose to an unprecedented level. That should have been a very strong warning signal.

For investors to gain wealth at a rate that exceeds the growth of U.S. business, the percentage relationship line on the chart must keep going up and up. If GNP is going to grow 5% a year and you want market values to go up 10%, then you need to have the line go straight off the top of the chart. That won't happen.

For me, the message of that chart is this: If the percentage relationship falls to the 70% or 80% area, buying stocks is likely to work very well for you. If the ratio approaches 200%--as it did in 1999 and a part of 2000--you are playing with fire. As you can see, the ratio was recently 133%.

Even so, that is a good-sized drop from when I was talking about the market in 1999. I ventured then that the American public should expect equity returns over the next decade or two (with dividends included and 2% inflation assumed) of perhaps 7%. That was a gross figure, not counting frictional costs, such as commissions and fees. Net, I thought returns might be 6%.

Today stock market "hamburgers," so to speak, are cheaper. The country's economy has grown and stocks are lower, which means that investors are getting more for their money. I would expect now to see long-term returns run somewhat higher, in the neighborhood of 7% after costs. Not bad at all--that is, unless you're still deriving your expectations from the 1990s.

Stock Options and Common Sense

By Warren E. Buffett, April 9, 2002

Opinion in The Washington Post

In 1994 seven slim accounting experts, all intelligent and experienced, unanimously decided that stock options granted to a company's employees were a corporate expense. Six fat CPAs, with similar credentials, unanimously declared these grants were no such thing.

Can it really be that girth, rather than intellect, determines one's accounting principles? Yes indeed, in this case. Obesity–of a monetary sort—almost certainly explained the split vote.

The seven proponents of expense recognition were the members of the Financial Accounting Standards Board, who earned $313,000 annually. Their six adversaries were the managing partners of the (then) Big Six accounting firms, who were raking in multiples of the pay received by their public-interest brethren.

In this duel the Big Six were prodded by corporate CEOs, who fought ferociously to bury the huge and growing cost of options, in order to keep their reported earnings artificially high. And in the pre-Enron world of client-influenced accounting, their auditors were only too happy to lend their support.

The members of Congress decided to adjudicate the fight -- who, after all, could be better equipped to evaluate accounting standards? -- and then watched as corporate CEOs and their auditors stormed the Capitol. These forces simply blew away the opposition. By an 88-9 vote, U.S. senators made a number of their largest campaign contributors ecstatic by declaring option grants to be expense-free. Darwin could have foreseen this result: It was survival of the fattest.

The argument, it should be emphasized, was not about the use of options. Companies could then, as now, compensate employees in any manner they wished. They could use cash, cars, trips to Hawaii or options as rewards—whatever they felt would be most effective in motivating employees.

But those other forms of compensation had to be recorded as an expense, whereas options -- which were, and still are, awarded in wildly disproportionate amounts to the top dogs -- simply weren't counted.

The CEOs wanting to keep it that way put forth several arguments. One was that options are hard to value. That is nonsense: I've bought and sold options for 40 years and know their pricing to be highly sophisticated. It's far more problematic to calculate the useful life of machinery, a difficulty that makes the annual depreciation charge merely a guess. No one, however, argues that this imprecision does away with a company's need to record depreciation expense. Likewise, pension expense in corporate America is calculated under wildly varying assumptions, and CPAs regularly allow whatever assumption management picks.

Believe me, CEOs know what their option grants are worth. That's why they fight for them.

It's also argued that options should not lead to a corporate expense being recorded because they do not involve a cash outlay by the company. But neither do grants of restricted stock cause cash to be disbursed—and yet the value of such grants is routinely expensed.

Furthermore, there is a hidden, but very real, cash cost to a company when it issues options. If my company, Berkshire, were to give me a 10-year option on 1,000 shares of A stock at today's market price, it would be compensating me with an asset that has a cash value of at least $20 million -- an amount the company could receive today if it sold a similar option in the marketplace. Giving an employee something that alternatively could be sold for hard cash has the same consequences for a company as giving him cash. Incidentally, the day an employee receives an option, he can engage in various market maneuvers that will deliver him immediate cash, even if the market price of his company's stock is below the option's exercise price.

Finally, those against expensing of options advance what I would call the "useful fairy-tale" argument. They say that because the country needs young, innovative companies, many of which are large issuers of options, it would harm the national interest to call option compensation an expense and thereby penalize the "earnings" of these budding enterprises.

Why, then, require cash compensation to be recorded as an expense given that it, too, penalizes earnings of young, promising companies? Indeed, why not have these companies issue options in place of cash for utility and rent payments—and then pretend that these expenses, as well, don't exist? Berkshire will be happy to receive options in lieu of cash for many of the goods and services that we sell corporate America.

At Berkshire we frequently buy companies that awarded options to their employees—and then we do away with the option program. When such a company is negotiating a sale to us, its management rightly expects us to proffer a new performance-based cash program to substitute for the option compensation being lost. These managers—and we—have no trouble calculating the cost to the company of the vanishing program. And in making the substitution, of course, we take on a substantial expense, even though the company that was acquired had never recorded a cost for its option program.

Companies tell their shareholders that options do more to attract, retain and motivate employees than does cash. I believe that's often true. These companies should keep issuing options. But they also should account for this expense just like any other.

A number of senators, led by Carl Levin and John McCain, are now revisiting the subject of properly accounting for options. They believe that American businesses, large or small, can stand honest reporting, and that after Enron-Andersen, no less will do.

I think it is normally unwise for Congress to meddle with accounting standards. In this case, though, Congress fathered an improper standard—and I cheer its return to the crime scene.

This time Congress should listen to the slim accountants. The logic behind their thinking is simple:

1. If options aren't a form of compensation, what are they?

2. If compensation isn't an expense, what is it?
3. And if expenses shouldn't go into the calculation of earnings, where in the world should they go?

Author: BigPimpyGuy Number: of 63714
Subject: Buffett speaks at Columbia Date: 5/10/02 2:00 AM
http://boards.fool.com/Message.asp?mid=17197137

On Thursday evening (5/9/02), Columbia Business School's Seminar on Value Investing welcomed Warren Buffett as the guest speaker. I was lucky enough to worm my way into it. Here are my notes. (I don't claim that everything is completely accurate, but I think I captured at least the proper meaning of everything).

5:55 pm – 5 minutes to go. The classroom looks like it was built to hold about 160 students and currently holds about 200 people – mainly students, with a few suit-and-tie types sprinkled in. There is some excitement, but not as much as the Berkshire annual meeting I went to 2 years ago. It was an interesting dynamic: In Omaha, everyone there made an effort to be there, which resulted in almost everyone knowing a good deal about Buffett and having some familiarity. In the classroom, there was a bit more curiosity, a "Do you think he'll have bodyguards?" kind of thing. I take my seat in the back and notice 3 cans of cherry coke lined up on the front table.

6:05 – Buffett walks in, picks up a can of cherry coke and holds it aloft. Everyone laughs. Bruce Greenwald (http://www.amazon.com/exec/obidos/ASIN/0471381985/104-9675556-5361512) acts as moderator. After a couple of class-related announcements, I get my first surprise – Walter Schloss is here, too. "If Warren Buffett can be thought of as the Babe Ruth of value investing, then Walter Schloss is the Ty Cobb and Satchel Paige combined." He notes Schloss' longevity – 47 years of remarkable performance. [Prompted by Buffett later on, Schloss claims a 20.9% (pre-fees) annual return over that time period.]

Greenwald then notes how peculiar it feels to be responsible for introducing someone who clearly needs no introduction. He identifies Warren Buffett as "The Rose Blumkin of the investment world." Buffett takes the microphone – "Testing, one billion, two billion".

Some early remarks:
- Speaking on the longevity brought up with regard to Schloss, Buffett knows what he wants people to be saying at his funeral: "My God, he was old!"
- Notes that he has now been married for 50 years and 3 weeks and says that being married to Susie is "the only thing that's happened better than taking Graham's class." He then points to Susie, who is sitting in the front row (surprise #2). [I think that Carol Loomis and Peter Buffett were also there, but I'm not positive.]

Next, the questions, which he leaves open to anything, whether business or personal related. As anyone who's ever seen Buffett speak can tell you, the questions were pretty standard. What makes the presentation interesting is the path that Buffett's answers take. Throughout this question and answer period, which lasts slightly over 2 hours, WEB is on his feet, leaning back onto a table, cherry coke at his side.

1. Options – We know you don't like them, but what about the companies you own?

WEB only knows of 2 companies that expense options (as is allowed under SFAS 123, but not practiced by many, for obvious reasons): Boeing and Winn-Dixie. He notes that a company (in Manhattan?) is currently voting on switching to an expensing convention. In most cases, options don't do a great job of providing the right incentives. Of all the employees in Berkshire Hathaway, Gen Re employees have made more, by far, from options in the last couple of years than anyone else in BRK. Looking at the dismal results of Gen Re indicates how capricious option rewards can be.

For BRK specifically, it doesn't make sense to give options to anyone. Anything that a division/subsidiary manager does to influence results is swamped by wiggles in the overall portfolio of businesses. Compensation arrangements at BRK are created and agreed upon in minutes – no consultants needed.

Across the spectrum, compensation plans are crazy.

WEB has an envelope with the name of his successor. (The first thing this note says is "Check my pulse again.") It makes sense for him to have options – he would be responsible for the overall business. However, 2 critical features of these options would be:
- They would be granted with an exercise price equal to the greater of intrinsic value or market value.
- They would include a cost of capital effect so that the exercise price would be increasing each year.

As generally done, options are terrible. There's nothing inherently wrong with options. In the Buffett Limited Partnership, he had options: 25% of any returns in excess of 6%. However, he drew no salary and those options included a cost of capital.

2. Will the Wall Street Journal erode their moat with their recent cosmetic changes [moving a little towards USA Today]?

WSJ is an interesting case. 30 years ago, Dow Jones & Co. owned the world with regard to financial information. They had no competition to speak of. Most newspapers at that time defined their population by geography. The WSJ editor (name?) built the circulation from 50,000 to 1.5 million by defining population by interest. Their population had amazing demographics.

Over the past 30 years, financial information has been a growth industry. Dow Jones missed the boat. Their business was taken away by CNBC and Bloomberg. They got very self-satisfied. In 15 years, they went from #2 on Fortune's "Most Admired Companies" list to about #200.

He compared it to Classic Coke vs. New Coke. In the 1980's, Pepsi was conducting their "Pepsi Challenge" across America – and winning. People at Coke wouldn't admit it, but in 1985, Pepsi was driving them buggy. Americans will always go for a sweeter product in a taste test. Pepsi simply had [has] more calories than Coke and was [is] sweeter. So

Coke decided to add some sweetness/calories to compete. They tested New Coke across 300,000 people in every conceivable demographic slice before they brought it out. Pepsi capitalized on New Coke by calling the introduction of New Coke a product recall of Old Coke. Pepsi actually declared a holiday in their company on that day and took out ads the day before the formal New Coke release: “The other guy just blinked.”

As it turns out, the mystique of the Coke formula is great. Only 2 people know it, it's locked in a Sun Trust vault, blah blah blah. In reality, Coke can make Pepsi and Pepsi can make Coke. You can break down the formula. At one point, Pepsi was moving towards introducing a product called Savannah Cola, which was equal in formula to the Old Coke. The only problem they faced was that one of the ingredients from the formula was hard to obtain because almost the entire production was purchased by the Coca Cola company. Little by little, they were able to obtain this ingredient and were within 2 weeks of bringing it out when Coke relented and made Classic Coke.

[Talk about how important the “feelings” are with Coke. The associations one has when thinking about Coke. The fact that he could say RC Cola and no one would have much of a response, but he could say Coke and every single one of us would have some type of reaction. Pepsi consistently beat Coke in a blind challenge. New Coke consistently beat Old Coke in a blind challenge. Yet for some reason, people went ballistic when Coke changed the formula. That's how embedded the Coke idea is.]

It's like See's Candy. It's not that well known in the East, but 33 million people in California will all have a reaction to the See's name. When people in California put a piece of See's Candy in their mouth, they like it a lot. When you tell them that it's See's, they like it even more. It's the combination of all the thoughts that go into the experience.

The Coke CEO a couple of years ago got into trouble when he spoke of a vending machine that could vary prices depending on the weather, increasing prices in hot weather. [WEB: At least say it in a way like you're lowering prices in cold weather.] That brought a lot of bad feelings with it. When you're making $0.01 per 8 oz. Serving and serving over 1 billion of those servings every single day, that's $4 billion in earnings per year – all because of $0.01 per serving. It's critical, huge to keep a favorable opinion in people's minds.

3. Concerning the comment about a nuclear attack made at the annual meeting – how is BRK insurance adapting?

BRK writing probably more terrorism insurance than anyone else. Amazingly it is almost all being sold with NCB (nuclear, chemical, and biological warfare) exclusion. A few policies have been sold without that exclusion, but not many. BRK can't sell very much insurance without NCB exclusion.

WTC is the largest workers' comp event in history – about $1.8 billion in workers' compensation claims. The other day, BRK wrote time-sensitive earthquake insurance – it

only pays if the earthquake occurs between 6 am and 6 pm. The Northridge earthquake in 1994 would have been a huge workers comp event, but it occurred at 4:30 in the morning.

With regard to his prediction about a nuclear attack on a major American city: The chance of anything (NCB) occurring in the next year is very low. Over the next 10 years, that likelihood increases – there are more people in the world, more people hate us, and technology is improving. Over 50, that chance increases to a virtual certainty. In the early 1960's, only 2 countries had nuclear capabilities, and we damn near screwed it up. [Noted there was a good movie on the Cuban missile crisis a couple of years ago. I assume he means 13 Days, which I thought was good.] Now the chances are higher – there are way more people.

4. BRK has a history of striking quick deals and deals done over a handshake. Has there been a change based on the Enron-type financial deceptions?

No. Talked about how he closed the deal with Larson-Juhl, the custom frames maker. Got called up, talked on the phone for 20 minutes, heard the financials and heard the price, flew the guy to Omaha. “I've never seen the Company. I hope it's there.” [This was actually pretty funny as WEB did an impression of some scam artist: “Hey, what numbers should we report to Warren this month? Hahaha”] It's a great business – price is not a factor in custom frame purchasing. There are a ton of small framing businesses, dozens in Omaha alone. LJ supplies them all, usually delivering the product within a day. [Is this right? For a custom frame?]

“I could give you $100 million (I'm not going to do that) to build a competing organization. You couldn't do it. It won't double in size, but it's a great business. I can see the durable advantage of that business. You can't mess it up.”

We just don't spend a lot of time researching deals. It's like teaching a class on the Efficient Markets Theory. You walk into class on the first day and say, “Everything's priced right.” Then what? What else do you need to say? You just don't need that much time. If it's not obvious right away, it won't be obvious with a year's worth of due diligence. (Used Chrysler and Ford as examples.)

Somehow moved into a Snickers and Wrigley's example. Snickers has been the top selling candy bar for 40 years and probably will be in 10 years. If you were chewing spearmint gum 10 years ago, you're still chewing it today. Those are great businesses. If you walked into a store for a Snickers bar and the guy behind the counter offered you a chocolate bar with the same taste and same gooeyness for 5 cents less, but it was “Joe's Chocolate Bar”, you wouldn't buy it. Due diligence – whether or not they have a bad lease or their bad debt reserve is too low – doesn't matter. It's about the durable advantage.

5. Do you see value in tech stocks today? Is there ever value? Where would BRK invest in tech?

If we could look out 5-10 years and see durable advantage and likelihood of high incremental ROE, that would be the place. We're not religious about not investing in tech stocks. ("In fact, I don't even know if there are religions against investing in tech stocks.") "There's no reason to look for a needle in a haystack if the haystack is made out of gold."

You could have bough the pharmaceutical industry in 1993 with a high degree of conviction. Maybe you couldn't identify the one or two winners, but the industry had marvelous economics and you know there wasn't going to be some new kid on the block to just completely up-end Merck or Schering Plough.

6. Can you speak about investments you made that didn't work out?

Errors tend to be of omission, not commission. Not necessarily Intel or Microsoft, but those situations where he knew the business and did nothing. "Thumb sucking". Often happens when he is buying a stock at $x and it goes to $x 1/8. He goes into paralysis. Fannie Mae is one example. Errors of omission have cost BRK billions and billions (20 – 30 billion).

BRK almost lost a lot on US Airways. "As the ink was drying on the check, they started losing and losing money." Salomon investment. 9/11 insurance – not the fact it was a catastrophe, but that the terrorism insurance wasn't built into the premiums.

The biggest mistake in management is not recognizing that very smart people will do dumb things – without trying to. [References Lowenstein book on LTCM.] Once an organization starts to gain momentum, it's impossible to stop them. Often happens with acquisitions. If the hurdle rate is 84.3%, the deal will be projected to return 84.4%. If the CEO wants it, it'll happen.

7. As you look at the entrepreneurs of the firms you've bought, what do you look for? What advise do you have for potential entrepreneurs?

We look for passion. WEB talked about Al Ueltschi for a while.

Sit down with them and find out if they love the business or love the money. We've never bought a business from a financial operative. We've never participated in an auction. If a guy auctions his business, we don't want him/it. There's nothing wrong with loving money, it's just not for us.

8. As the best professional in the industry, are you still getting better?

[At this point, Greenwald paraphrases the question as, "Do you still have the mental capacity to do the job?" I'm having flashbacks to Mycroft.]

Investing is great because you're always building a database. Every year you're adding a little bit more (new industries) and there's not that much leakage on the other end. GEICO purchase was a result of his existing database.

“I understand underwear”, so Fruit of the Loom wasn't a tough decision.

Everything is cumulative in investing. When he hears something today, it fits in some way into a model built by years of experience.

[Side note: This is an integral part of the whole “no due diligence” phenomenon. They don't necessarily perform due diligence prior to doing a deal precisely because they are performing an abstract version of due diligence on companies and industries every day by adding to their database.]

9. Asbestos payouts seem like they're being accelerated. Comments?

The claims acceleration has tended to be those companies that are in bankruptcy. For companies not in bankruptcy, claims rate hasn't really changed.

BRK has some asbestos claims out there (a lot from Gen Re) that arose under the normal course of business, and a lot of claims resulting from retro insurance. The deals rely upon timing of payments. BRK is conservative both in the premium demanded and the accounting for the deferred charges. Most asbestos claims are from policies where there is a finite limit.

Overall, payment rate is somewhat slower than anticipated. The results have been perfectly satisfactory so far. [The retro deals, I assume.]

10. What do you see in the underwear business that other people didn't and still don't in Sara Lee (owner of Hanes)? What EBITDA do you see for FoL? What stocks are cheap today?

[I'm cringing at the expected answer to the EBITDA and I expect a stonewall to the stock tips.]

Basically, EBITDA is worthless.

As far as underwear goes, Hanes and FoL own the market. There are higher-end makes (Calvin Klein, Jockey), but those two control the mass market. Sara Lee (Hanes) pursued an asset-light strategy. [Note: Enron pursued an asset-light strategy – a desire to take assets off balance sheet by removing ownership. Not that I'm really comparing the two.] We control the assets in place at FoL. You can't really buy another version of FoL because if you buy Hanes, you're buying the rest of Sara Lee's portfolio.

Wouldn't be surprised to see FoL earn $130-140 million pre-tax.

Again, we hate EBITDA. Depreciation is the worst kind of expense. (May have even called it despicable.) It's reverse float.

As far as what stocks are cheap, that sounds like a very theoretical question. [Laughs] That's one question I won't answer. Talks about how they keep their activities private.

As far as what companies are in the picture, WEB will never buy a glamorous stock. Money doesn't know where it came from. There's no sense paying more money for a glamorous company if you're getting the same amount of money, but paying more for it. It's the same money that you could have gotten from a bland company for a lower cost.

11. General question about the attractiveness of distressed debt.

There's nothing intrinsically good or bad about distressed debt.

FoL was bought at about $0.50 on the dollar. It was a very unusual kind of debt because it kept paying interest during the bankruptcy proceeding, so BRK got a lot of cash from it.

On the Finova transaction: They bought it before it was going to go bankrupt, but knew it was going to. The key there was to evaluate their receivables portfolio (about $14 billion?). WEB estimated a worst-case scenario for the receivables and used that to determine the purchase price.

Comparing the two, Finova hinged on an evaluation of the receivables portfolio. Fruit of the Loom hinged on an evaluation of the brand.

Distressed debt requires more expertise than common stock. There is money to be made on some issues. [At this point, WEB and Schloss start rehashing an old railroad bankruptcy where apparently everyone got rich. Phenomenal level of detail remembered by both of these guys.]

We have never bought a junk bond when it was initially offered because Wall St. has a special sales push. We buy them later when they get in trouble.

12. What's your take on companies re-incorporating offshore for tax reasons?

I don't like it. I don't like individuals who made the money here living offshore [without paying taxes]. One guy tried to get himself declared an ambassador so he could live in the US full-time and still be a foreign citizen. [I think I got that right.] I'd like to think that we (BRK) wouldn't take that opportunity if presented, in the same way I'd like to think I wouldn't walk into a bank and take $1 million if it was just sitting there. But you never know until it happens.

All of the big accounting firms have offered tax strategies, but we're not interested. We have a simple tax return.

On tax rates: Imagine that 24 hours before you're born, you and an effective twin (same DNA, etc.) will be born, one in the U.S. and one in Bangladesh. What percentage of your future income would you pledge to be born in the US? Most likely a pretty high amount. The US offers an extraordinary level of benefits.

13. Pro forma earnings are no good. But how can you look at a company like BRK with a 9/11 event without considering pro forma earnings?

You need to look at the long-term results, but you can't ignore the fact that management missed it (9/11 event). Look at the company's normalized earning power.

Look at this most recent quarter. One of the most benign quarters in insurance – nothing happened. No “cats” anywhere. You don't see insurance companies reporting good results and saying “Excluding the abnormally low level of claims, we actually would have reported a loss in this quarter”.

There are 2 keys to valuing BRK:
- How much cash will the current operating companies be kicking off over the next 10 years?
- What interesting things will be done with that cash in the next 10 years?
[I love it – WEB speaks of real options.]

14. On BRK investing abroad

We'd love to find businesses overseas similar to those we own. We have not had luck to date. 2 problems:
- Of the good businesses, most are in the US, so there's just not that many abroad.
- BRK is not as well-known overseas, so it's harder for them to get unsolicited calls.

Mentioned that 80% of Coke's earnings are from outside the US.

We own 15-20 stocks right now. 3 of those are entirely outside of the US. We'd be delighted to own any of those 3 in their entirety at the prices we paid for the piece we do own.

One issue is that reporting requirements are tough. In the US, you must disclose upon obtaining 5% of a firm. If you're an insurance company, you must disclose upon obtaining 10% of a firm – if you obtain between 5-10%, you can wait to disclose until year-end. In other countries, that threshold is lower. In the UK, 3% ownership requires disclosure, so our moves are limited.

15. In an investment partnership, how does lack of managerial control (over the firms you invest in) influence decisions)?

We have very little influence anyway, even as a director, so it is not a big deal. Very rarely can you change the course as a director and you can't attempt to very often. Someone invited to parties will find he is no longer invited if he is constantly belching at these parties. [<- Terrible paraphrase. More or less the same quote as he used at the annual meeting 2 years ago.]

Even with 100% owned companies, we accept decisions that we would not have made ourselves. In the long run, they probably balance out to be at least as good as what we would have done. More importantly, it allows the managers to treat the companies as "their" businesses. Do you think Al Ueltschi, who owns $1 billion in BRK stock, is going to want to keep running his business if I'm over his shoulder making decisions?

16. Why don't you sell things when they hit extremely high prices?

We're not selling a See's Candy for any amount of money, even if someone offered us 3-4 times its value. Why? It's a quirk of ours. We don't get many opportunities to form associations with good people. When we forge an association, we don't like to ruin it by turning it over to someone else. Small equity pieces are a different matter.

With Buffett Limited Partnership, it was a different matter. It was WEB's job to make the most money possible. Now it's his job to run a business in an agreeable way that hopes to perform well. It's no longer the goal to wring every last dollar out of every situation.

Also talked of the benefits of having a reputation for not selling. [Same masterpiece discussion as recorded elsewhere.] When someone builds a business, they're building their own masterpiece. If we purchase that painting, we're offering to hang it, not buy it and quickly sell it to someone else. I tell the prospective seller they can choose to hand it over to BRK, where I will never tell them to add more blue paint or less red paint, but simply hang it. Consider BRK the Metropolitan Museum. Your alternative is to hang it in a porn shop. [I must be delirious. Did he really say this or am I just imagining this whole conversation?]

17. Interest rates are extremely low. What's the lowest benchmark you set?

Good question. I want 13% pre-tax. Over the last couple of years, we made about 8-10 acquisitions, and I think they'll work out to 13% pre-tax. There have been times where the interest rate was 20%, and 13% would be unacceptable. But the opposite doesn't hold. I can't go arbitrarily low with a required return. I'd rather have short-term returns of 1 ¾% than buy stocks or companies returning 8-9% because I'm going to be holding on to those forever. Those returns are fine now, but enough acquisitions like that and you end up with a very average business.

So, in this low-interest environment, we have a lot of money in bonds right now. Either we expect to get more good opportunities or the environment will change.

By the way, the environment will change.

The financial markets have a long history of doing crazy things. You are all young, you'll see those things repeated. [Tells a story about how he has a very old newspaper clipping of a brewer/investor who drowned himself in a vat of hot beer because of troubles arising from excessive margin use.] Those things will happen again. You'll have a lot of opportunities to get rich, even if the environment doesn't look like it right now.

18. Describe the H&R Block competitive advantage.

They had a disappointing quarter several years ago, but their franchise was not impaired. The market drove the price down.

Everyone knows H&R. You think of tax preparation, you think of H&R. How many people here can name the #2. Not many. [Apparently Cendant owns it.] How much would it take to topple them? The only thing to kill it would be a radical change in the tax laws (e.g., a move to a consumption tax).

We were willing to buy the entire firm at 75% more than what we paid for the piece we bought. [I think he said large insider ownership prevented it, but I'm not sure.]

19. Greenwald: Last question – We moved away from using the first edition of Security Analysis. What are we missing by not using that?

The historical perspective. People will continue to do dumb things.

“History may not repeat itself, but it rhymes.” (Twain?)

The first edition is good for a sense of history.

[At this point, he kind of wrapped up.] There are 3 things that are key:
1. Margin of safety (Finova deal) is absolutely essential.
2. Look at a stock as a business. “I spent 8 years buying stock without thinking of it that way.” [“I started at age 11 – I don't know why I started so late.”]
3. Develop the proper attitude towards the market. It is there to serve you, not instruct you. Too many people are instructed by the market.

Who Really Cooks the Books?

By Warren E. Buffett
Published: July 24, 2002

There is a crisis of confidence today about corporate earnings reports and the credibility of chief executives. And it's justified.
For many years, I've had little confidence in the earnings numbers reported by most corporations. I'm not talking about Enron and WorldCom -- examples of outright crookedness. Rather, I am referring to the legal, but improper, accounting methods used by chief executives to inflate reported earnings.

The most flagrant deceptions have occurred in stock-option accounting and in assumptions about pension-fund returns. The aggregate misrepresentation in these two areas dwarfs the lies of Enron and WorldCom.

In calculating the pension costs that directly affect their earnings, companies in the Standard & Poor's index of 500 stocks are today using assumptions about investment return rates that go as high as 11 percent. The rate chosen is important: in many cases, an upward change of a single percentage point will increase the annual earnings a company reports by more than $100 million. It's no surprise, therefore, that many chief executives opt for assumptions that are wildly optimistic, even as their pension assets perform miserably. These C.E.O.'s simply ignore this unpleasant reality and their obliging actuaries and auditors bless whatever rate the company selects. How convenient: Client A, using a 6.5 percent rate, receives a clean audit opinion -- and so does client B, which opts for an 11 percent rate.

All that is bad, but the far greater sin has been option accounting. Options are a huge cost for many corporations and a huge benefit to executives. No wonder, then, that they have fought ferociously to avoid making a charge against their earnings. Without blushing, almost all C.E.O.'s have told their shareholders that options are cost-free.

For these C.E.O.'s I have a proposition: Berkshire Hathaway will sell you insurance, carpeting or any of our other products in exchange for options identical to those you grant yourselves. It'll all be cash-free. But do you really think your corporation will not have incurred a cost when you hand over the options in exchange for the carpeting? Or do you really think that placing a value on the option is just too difficult to do, one of your other excuses for not expensing them? If these are the opinions you honestly hold, call me collect. We can do business.

Chief executives frequently claim that options have no cost because their issuance is cashless. But when they do so, they ignore the fact that many C.E.O.'s regularly include pension income in their earnings, though this item doesn't deliver a dime to their companies. They also ignore another reality: When corporations grant restricted stock to their executives these grants are routinely, and properly, expensed, even though no cash changes hands.

When a company gives something of value to its employees in return for their services, it is clearly a compensation expense. And if expenses don't belong in the earnings statement, where in the world do they belong?

To clean up their act on these fronts, C.E.O.'s don't need "independent" directors, oversight committees or auditors absolutely free of conflicts of interest. They simply need to do what's right. As Alan Greenspan forcefully declared last week, the attitudes and actions of C.E.O.'s are what determine corporate conduct.

Indeed, actions by Congress and the Securities and Exchange Commission have the potential of creating a smoke screen that will prevent real accounting reform. The Senate itself is the major reason corporations have been able to duck option expensing. On May 3, 1994, the Senate, led by Senator Joseph Lieberman, pushed the Financial Accounting Standards Board and Arthur Levitt, then chairman of the S.E.C., into backing down from mandating that options be expensed. Mr. Levitt has said that he regrets this retreat more than any other move he made during his tenure as chairman. Unfortunately, current S.E.C. leadership seems uninterested in correcting this matter.

I don't believe in Congress setting accounting rules. But the Senate opened the floodgates in 1994 to an anything-goes reporting system, and it should close them now. Rather than holding hearings and fulminating, why doesn't the Senate just free the standards board by rescinding its 1994 action?

C.E.O.'s want to be respected and believed. They will be -- and should be -- only when they deserve to be. They should quit talking about some bad apples and reflect instead on their own behavior.

Recently, a few C.E.O.'s have stepped forward to adopt honest accounting. But most continue to spend their shareholders' money, directly or through trade associations, to lobby against real reform. They talk principle, but, for most, their motive is pocketbook.

For their shareholders' interest, and for the country's, C.E.O.'s should tell their accounting departments today to quit recording illusory pension-fund income and start recording all compensation costs. They don't need studies or new rules to do that. They just need to act.

Berkshire Hathaway and Junk Bonds

The company has been making ‘sensible investments’ in a few junk bonds and loans.

FORTUNE
Monday, March 3, 2003
By Warren Buffett

In a section of his upcoming annual letter to shareholders separate from the derivatives discussion, Buffett talks about stocks, cash, and the lure of junk bonds. A list of Berkshire’s major common stock investments (those with a market value of more than $500 million at the end of 2002) will be posted on March 8, on www.berkshirehathaway.com.

Last year we were ... able to make sensible investments in a few “junk” bonds and loans. Overall, our commitments in this sector sextupled, reaching $8.3 billion by year-end.

Investing in junk bonds and investing in stocks are alike in certain ways: Both activities require us to make a price-value calculation and also to scan hundreds of securities to find the very few that have attractive reward/risk ratios. But there are important differences between the two disciplines as well. In stocks, we expect every commitment to work out well because we concentrate on conservatively financed businesses with strong competitive strengths, run by able and honest people. If we buy into these companies at sensible prices, losses should be rare. Indeed, during the 38 years we have run the company’s affairs, gains from the equities we manage at Berkshire (that is, excluding those managed at General Re/Cologne and GEICO) have exceeded losses by a ratio of about 100 to one.

Purchasing junk bonds, we are dealing with enterprises that are far more marginal. These businesses are usually overloaded with debt and often operate in industries characterized by low returns on capital. Additionally, the quality of management is sometimes questionable. Management may even have interests that are directly counter to those of debtholders. Therefore, we expect that we will have occasional large losses in junk issues. So far, however, we have done reasonably well in this field.

Buffett on Investing in Stocks Today

'Unfortunately, the hangover from [the market bubble] may prove to be proportional to the binge.'
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We continue to do little in equities. Charlie and I are increasingly comfortable with our holdings in Berkshire's major investees because most of them have increased their earnings while their valuations have decreased. But we are not inclined to add to them. Though these enterprises have good prospects, we don't yet believe their shares are undervalued.

In our view, the same conclusion fits stocks generally. Despite three years of falling prices, which have significantly improved the attractiveness of common stocks, we still find very few that even mildly interest us. That dismal fact is testimony to the insanity of valuations reached during The Great Bubble. Unfortunately, the hangover may prove to be proportional to the binge.

The aversion to equities that Charlie and I exhibit today is far from congenital. We love owning common stocks--if they can be purchased at attractive prices. In my 61 years of investing, 50 or so years have offered that kind of opportunity. There will be years like that again. Unless, however, we see a very high probability of at least 10% pretax returns (which translate to 6% to 7% after corporate tax), we will sit on the sidelines. With short-term money returning less than 1% after-tax, sitting it out is no fun. But occasionally successful investing requires inactivity.

WHAT WORRIES WARREN

Avoiding a ‘Mega-Catastrophe’
Derivatives are financial weapons of mass destruction. The dangers are now latent--but they could be lethal.

FORTUNE
Monday, March 3, 2003
By Warren Buffett

Warren Buffett has been writing annual letters to Berkshire Hathaway shareholders since 1965. In the early years he followed a conventional format, but after serving on the SEC Advisory Board for Corporate Disclosure in 1976, he decided--as he puts it--to “get serious” about communicating with his shareholders.

He made another important decision in 1977: to recruit FORTUNE’s Carol Loomis, a friend and long-term Berkshire shareholder, to be his editor. Buffett says she has been invaluable--”very friendly, very helpful, and very tough.”

In this year’s letter to shareholders Buffett tells of the difficulties of exiting the derivatives business he inherited in his 1998 purchase of General Re. He also concludes that the explosion in derivatives contracts may have created serious systemic risks. Loomis suggested to Buffett that he publish his section on derivatives in FORTUNE, and what follows is excerpted from the 2002 Berkshire Hathaway annual report, which will appear at berkshirehathaway.com on March 8.

Charlie [Munger, Buffett’s partner in managing Berkshire Hathaway] and I are of one mind in how we feel about derivatives and the trading activities that go with them: We view them as time bombs, both for the parties that deal in them and the economic system.

Having delivered that thought, which I’ll get back to, let me retreat to explaining derivatives, though the explanation must be general because the word covers an extraordinarily wide range of financial contracts. Essentially, these instruments call for money to change hands at some future date, with the amount to be determined by one or more reference items, such as interest rates, stock prices, or currency values. If, for example, you are either long or short an S&P 500 futures contract, you are a party to a very simple derivatives transaction--with your gain or loss derived from movements in the index. Derivatives contracts are of varying duration (running sometimes to 20 or more years), and their value is often tied to several variables.

Unless derivatives contracts are collateralized or guaranteed, their ultimate value also depends on the creditworthiness of the counterparties to them. In the meantime, though, before a contract is settled, the counterparties record profits and losses--often huge in amount--in their current earnings statements without so much as a penny changing hands.

The range of derivatives contracts is limited only by the imagination of man (or sometimes, so it seems, madmen). At Enron, for example, newsprint and broadband derivatives, due to be settled many years in the future, were put on the books. Or say you want to write a contract speculating on the number of twins to be born in Nebraska in 2020. No problem--at a price, you will easily find an obliging counterparty.

When we purchased Gen Re, it came with General Re Securities, a derivatives dealer that Charlie and I didn't want, judging it to be dangerous. We failed in our attempts to sell the operation, however, and are now terminating it.

But closing down a derivatives business is easier said than done. It will be a great many years before we are totally out of this operation (though we reduce our exposure daily). In fact, the reinsurance and derivatives businesses are similar: Like Hell, both are easy to enter and almost impossible to exit. In either industry, once you write a contract--which may require a large payment decades later--you are usually stuck with it. True, there are methods by which the risk can be laid off with others. But most strategies of that kind leave you with residual liability.

Another commonality of reinsurance and derivatives is that both generate reported earnings that are often wildly overstated. That's true because today's earnings are in a significant way based on estimates whose inaccuracy may not be exposed for many years.

Errors will usually be honest, reflecting only the human tendency to take an optimistic view of one's commitments. But the parties to derivatives also have enormous incentives to cheat in accounting for them. Those who trade derivatives are usually paid (in whole or part) on "earnings" calculated by mark-to-market accounting. But often there is no real market (think about our contract involving twins) and "mark-to-model" is utilized. This substitution can bring on large-scale mischief. As a general rule, contracts involving multiple reference items and distant settlement dates increase the opportunities for counterparties to use fanciful assumptions. In the twins scenario, for example, the two parties to the contract might well use differing models allowing both to show substantial profits for many years. In extreme cases, mark-to-model degenerates into what I would call mark-to-myth.

Of course, both internal and outside auditors review the numbers, but that's no easy job. For example, General Re Securities at year-end (after ten months of winding down its operation) had 14,384 contracts outstanding, involving 672 counterparties around the world. Each contract had a plus or minus value derived from one or more reference items, including some of mind-boggling complexity. Valuing a portfolio like that, expert auditors could easily and honestly have widely varying opinions.

The valuation problem is far from academic: In recent years some huge-scale frauds and near-frauds have been facilitated by derivatives trades. In the energy and electric utility sectors, for example, companies used derivatives and trading activities to report great "earnings"--until the roof fell in when they actually tried to convert the derivatives-related receivables on their balance sheets into cash. "Mark-to-market" then turned out to be truly "mark-to-myth."

I can assure you that the marking errors in the derivatives business have not been symmetrical. Almost invariably, they have favored either the trader who was eyeing a multimillion-dollar bonus or the CEO who wanted to report impressive "earnings" (or both). The bonuses were paid, and the CEO profited from his options. Only much later did shareholders learn that the reported earnings were a sham.

Another problem about derivatives is that they can exacerbate trouble that a corporation has run into for completely unrelated reasons. This pile-on effect occurs because many derivatives contracts

require that a company suffering a credit downgrade immediately supply collateral to counterparties. Imagine, then, that a company is downgraded because of general adversity and that its derivatives instantly kick in with their requirement, imposing an unexpected and enormous demand for cash collateral on the company. The need to meet this demand can then throw the company into a liquidity crisis that may, in some cases, trigger still more downgrades. It all becomes a spiral that can lead to a corporate meltdown.

Derivatives also create a daisy-chain risk that is akin to the risk run by insurers or reinsurers that lay off much of their business with others. In both cases, huge receivables from many counterparties tend to build up over time. (At Gen Re Securities, we still have $6.5 billion of receivables, though we've been in a liquidation mode for nearly a year.) A participant may see himself as prudent, believing his large credit exposures to be diversified and therefore not dangerous. Under certain circumstances, though, an exogenous event that causes the receivable from Company A to go bad will also affect those from Companies B through Z. History teaches us that a crisis often causes problems to correlate in a manner undreamed of in more tranquil times.

In banking, the recognition of a "linkage" problem was one of the reasons for the formation of the Federal Reserve System. Before the Fed was established, the failure of weak banks would sometimes put sudden and unanticipated liquidity demands on previously strong banks, causing them to fail in turn. The Fed now insulates the strong from the troubles of the weak. But there is no central bank assigned to the job of preventing the dominoes toppling in insurance or derivatives. In these industries, firms that are fundamentally solid can become troubled simply because of the travails of other firms further down the chain. When a "chain reaction" threat exists within an industry, it pays to minimize links of any kind. That's how we conduct our reinsurance business, and it's one reason we are exiting derivatives.

Many people argue that derivatives reduce systemic problems, in that participants who can't bear certain risks are able to transfer them to stronger hands. These people believe that derivatives act to stabilize the economy, facilitate trade, and eliminate bumps for individual participants. And, on a micro level, what they say is often true. Indeed, at Berkshire, I sometimes engage in large-scale derivatives transactions in order to facilitate certain investment strategies.

Charlie and I believe, however, that the macro picture is dangerous and getting more so. Large amounts of risk, particularly credit risk, have become concentrated in the hands of relatively few derivatives dealers, who in addition trade extensively with one another. The troubles of one could quickly infect the others. On top of that, these dealers are owed huge amounts by nondealer counterparties. Some of these counterparties, as I've mentioned, are linked in ways that could cause them to contemporaneously run into a problem because of a single event (such as the implosion of the telecom industry or the precipitous decline in the value of merchant power projects). Linkage, when it suddenly surfaces, can trigger serious systemic problems.

Indeed, in 1998, the leveraged and derivatives-heavy activities of a single hedge fund, Long-Term Capital Management, caused the Federal Reserve anxieties so severe that it hastily orchestrated a rescue effort. In later congressional testimony, Fed officials acknowledged that, had they not intervened, the outstanding trades of LTCM--a firm unknown to the general public and employing only a few hundred people--could well have posed a serious threat to the stability of American markets. In other words, the Fed acted because its leaders were fearful of what might have

happened to other financial institutions had the LTCM domino toppled. And this affair, though it paralyzed many parts of the fixed-income market for weeks, was far from a worst-case scenario.

One of the derivatives instruments that LTCM used was total-return swaps, contracts that facilitate 100% leverage in various markets, including stocks. For example, Party A to a contract, usually a bank, puts up all of the money for the purchase of a stock, while Party B, without putting up any capital, agrees that at a future date it will receive any gain or pay any loss that the bank realizes.

Total-return swaps of this type make a joke of margin requirements. Beyond that, other types of derivatives severely curtail the ability of regulators to curb leverage and generally get their arms around the risk profiles of banks, insurers, and other financial institutions. Similarly, even experienced investors and analysts encounter major problems in analyzing the financial condition of firms that are heavily involved with derivatives contracts. When Charlie and I finish reading the long footnotes detailing the derivatives activities of major banks, the only thing we understand is that we don't understand how much risk the institution is running.

The derivatives genie is now well out of the bottle, and these instruments will almost certainly multiply in variety and number until some event makes their toxicity clear. Knowledge of how dangerous they are has already permeated the electricity and gas businesses, in which the eruption of major troubles caused the use of derivatives to diminish dramatically. Elsewhere, however, the derivatives business continues to expand unchecked. Central banks and governments have so far found no effective way to control, or even monitor, the risks posed by these contracts.

Charlie and I believe Berkshire should be a fortress of financial strength--for the sake of our owners, creditors, policyholders, and employees. We try to be alert to any sort of mega-catastrophe risk, and that posture may make us unduly apprehensive about the burgeoning quantities of long-term derivatives contracts and the massive amount of uncollateralized receivables that are growing alongside. In our view, however, derivatives are financial weapons of mass destruction, carrying dangers that, while now latent, are potentially lethal.

Dividend Voodoo

By Warren Buffett

Tuesday, May 20, 2003; Page A19

The annual Forbes 400 lists prove that -- with occasional blips -- the rich do indeed get richer. Nonetheless, the Senate voted last week to supply major aid to the rich in their pursuit of even greater wealth.

The Senate decided that the dividends an individual receives should be 50 percent free of tax in 2003, 100 percent tax-free in 2004 through 2006 and then again fully taxable in 2007. The mental flexibility the Senate demonstrated in crafting these zigzags is breathtaking. What it has put in motion, though, is clear: If enacted, these changes would further tilt the tax scales toward the rich.

Let me, as a member of that non-endangered species, give you an example of how the scales are currently balanced. The taxes I pay to the federal government, including the payroll tax that is paid for me by my employer, Berkshire Hathaway, are roughly the same proportion of my income -- about 30 percent -- as that paid by the receptionist in our office. My case is not atypical -- my earnings, like those of many rich people, are a mix of capital gains and ordinary income -- nor is it affected by tax shelters (I've never used any). As it works out, I pay a somewhat higher rate for my combination of salary, investment and capital gain income than our receptionist does. But she pays a far higher portion of her income in payroll taxes than I do.

She's not complaining: Both of us know we were lucky to be born in America. But I was luckier in that I came wired at birth with a talent for capital allocation -- a valuable ability to have had in this country during the past half-century. Credit America for most of this value, not me. If the receptionist and I had both been born in, say, Bangladesh, the story would have been far different. There, the market value of our respective talents would not have varied greatly.

Now the Senate says that dividends should be tax-free to recipients. Suppose this measure goes through and the directors of Berkshire Hathaway (which does not now pay a dividend) therefore decide to pay $1 billion in dividends next year. Owning 31 percent of Berkshire, I would receive $310 million in additional income, owe not another dime in federal tax, and see my tax rate plunge to 3 percent.

And our receptionist? She'd still be paying about 30 percent, which means she would be contributing about 10 times the proportion of her income that I would to such government pursuits as fighting terrorism, waging wars and supporting the elderly. Let me repeat the point: Her overall federal tax rate would be 10 times what my rate would be.

When I was young, President Kennedy asked Americans to "pay any price, bear any burden" for our country. Against that challenge, the 3 percent overall federal tax rate I would pay -- if a Berkshire dividend were to be tax-free -- seems a bit light.

Administration officials say that the $310 million suddenly added to my wallet would stimulate the economy because I would invest it and thereby create jobs. But they conveniently forget that if Berkshire kept the money, it would invest that same amount, creating jobs as well.

The Senate's plan invites corporations -- indeed, virtually commands them -- to contort their behavior in a major way. Were the plan to be enacted, shareholders would logically respond by asking the corporations they own to pay no more dividends in 2003, when they would be partially taxed, but instead to pay the skipped amounts in 2004, when they'd be tax-free. Similarly, in 2006, the last year of the plan, companies should pay double their normal dividend and then avoid dividends altogether in 2007.

Overall, it's hard to conceive of anything sillier than the schedule the Senate has laid out. Indeed, the first President Bush had a name for such activities: "voodoo economics." The manipulation of enactment and sunset dates of tax changes is Enron-style accounting, and a Congress that has recently demanded honest corporate numbers should now look hard at its own practices.

Proponents of cutting tax rates on dividends argue that the move will stimulate the economy. A large amount of stimulus, of course, should already be on the way from the huge and growing deficit the government is now running. I have no strong views on whether more action on this front is warranted. But if it is, don't cut the taxes of people with huge portfolios of stocks held directly. (Small investors owning stock held through 401(k)s are already tax-favored.) Instead, give reductions to those who both need and will spend the money gained. Enact a Social Security tax "holiday" or give a flat-sum rebate to people with low incomes. Putting $1,000 in the pockets of 310,000 families with urgent needs is going to provide far more stimulus to the economy than putting the same $310 million in my pockets.

When you listen to tax-cut rhetoric, remember that giving one class of taxpayer a "break" requires -- now or down the line -- that an equivalent burden be imposed on other parties. In other words, if I get a break, someone else pays. Government can't deliver a free lunch to the country as a whole. It can, however, determine who pays for lunch. And last week the Senate handed the bill to the wrong party.

Supporters of making dividends tax-free like to paint critics as promoters of class warfare. The fact is, however, that their proposal promotes class welfare. For my class.

The writer is chief executive officer of Berkshire Hathaway Inc., a diversified holding company, and a director of The Washington Post Co., which has an investment in Berkshire Hathaway.

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Notes on meeting with Warren Buffett on October 10, 2003

On living a successful life:
Look among your classmates/colleagues and ask yourself "If I could purchase 10% of anyone's income, who would I choose?.....If I could short 10% of someone's income, who would it be?"

Ben Graham used this exercise quite extensively.

Ask yourself the basis for your selection and write down on a piece of paper the qualities for each of these individuals – Understand that these are not God given qualities…they are based on determination and habit "Chains of habit are too light to be felt until they are too heavy to be broken". You don't want to wait until you're 50 or 60.

Ask yourself, would you be uncomfortable with your decisions being written on the front page of the newspaper by an unfriendly but intelligent reporter.

On what changes/additions he would make to The Intelligent Investor:
He wouldn't make many changes. The principles of the book are just as relevant today as they were when they were written. The important chapters are Chapters 8 and 20.

Key tenets of investing – think of stocks as businesses, don't be influenced by Mr. Market and always have a margin of safety. If you follow these simple principles you HAVE to do well. The biggest obstacle in following these simple principles is detaching yourself from the feelings of others.

You only need a few good ideas in a lifetime

Business are generally sound over time but the difference between low price and high price in any year can by 3x (over 3000 companies are priced once a day)…this provides tremendous opportunities.

Understanding and following the principles set out in the intelligent investor is not a function of intellect, people either catch on or they do not.

On value investing and what is the hardest aspect of its implementation:
Berkshire Hathaway has too much money which has caused the universe of acceptable investments to shrink. Value investing is always difficult as it is hard to detach oneself from the emotional aspect of investing. Pascal said, "Most of man's trouble rises from the inability to sit quietly in a room." It is not the toughest game and opportunities come in clumps. There are very few mistakes a smart guy can make, one if which is leverage. When Genius Failed is a good book which clearly shows the trouble with leverage. It is a terrible mistake to assume that you can reduce human behavior to mathematical formulas. It is also difficult to detach yourself from the crowd. WEB worked in NY for 2 years but

he would not have done as well as if he had continued to live there. He would have been "overstimulated" by the many ideas and the emotional charge.

His life has not changed dramatically with the accumulation of wealth. Our lives should not change with money.

Despite the fact that he is worth billions, his life is very similar to ours – we still sleep 7 hours, eat the same, watch sports, wear similar clothes…..the point is to keep perspective and don't let the money consume you. The key point is that you're having fun

Investing is simple, but it's not easy. One should not try to get rich too quick.

Stock market is liquid so it can also be highly volatile without the underlying fundamentals of a business changing.

Variance in price of farm land or other hard assets is generally low

Stock market opportunities come in clumps

On whether it's too late to get into the game:
Age is an advantage. From 8 to 19, I actually wasted years, a period during which I was not actively investing. Over time, you learn how to value businesses and how to realize when you can't value a business.

"It is not too late. There's plenty of time. You don't need many ideas."

You probably only need to know 4 or 5 industries really well.

"If you love the field, you want to immerse in it. You want to learn about businesses."

When he bought NFM, he knew the business. He knows which businesses are in his circle of competence.

On what books to read:
Outside of Ben Graham, read Phil Fisher's books from 1960's (Common Stocks and Uncommon Profits and Conservative Investors Sleep Well). You have to read a "zillion" annual reports.

Look for businesses that you think are very likely to succeed 10, 15 years from now. Do they have pricing power, exclusive franchise ("Maybe it's the only Cadillac distributor in Omaha.")

"I like to go for cinches."
"I like to shoot fish in a barrel. But I like to do it after the water has run out."

Three things to look for:

1. The business
2. Management
3. Price

Every year he raises prices at See's Candies the day after Christmas. "That is my Christmas present to myself." "Mirror, mirror on the wall, how much should I charge for candy this fall? More. That's my kind of mirror."

In this country, people buy chocolates as gifts. You're not going to buy cheaper chocolate and tell your girlfriend that you took the low bid.

On Katherine Graham:
The most important Buffett did for her is helping her have confidence.

When he was teaching her about business and reading 10Ks, "at first she fell asleep."

She had two basic misconceptions:

1. Men were smarter than women ("After she met me, she got away from that.")
2. She was inferior because she didn't go to b-school.

Katherine Graham was looking at a fun house mirror and I just had to put in a real mirror. All of that was the result of years of being told she was inferior – by her mother and a very domineering husband.

Most important thing in the world is what you teach kids in those first couple of years. "Make sure you deserve to be their hero. Because you'll be their hero." As a parent you are in a teaching position all the time.

An important thing in life is whom do you have as your heroes.

On hedge funds:
WEB stumbled into the partnership form having worked for Newman and Graham and that is the form he would use to attract capital.

It is unethical to take a fee <u>and</u> a share of profits.

"It's open to significant abuse." Asset gathering is more important than performance. There are wrong incentives. "It's also unethical not to have your money in it."

If you were investing smaller sums of money, say $10-20M, would you look for the fat pitches that are great, high ROE companies (like Coke), or ones that are statistically cheap, but possibly below average businesses? Which would you invest in--cigar butts, special situations of average businesses, or great but small-and-ignored companies?

"I would find more things looking at other things than Coke." You want to work where there is little competition. If you look at the smaller cigar butt investments, you have just eliminated some pretty serious competition: Buffett (because he's too big to dabble there), and all the people who listen only to sell-side research (because they don't cover those little things).

One of the secrets in life is weak competition.

Forbes reported in 1993 that you spend 5-6 hours per day reading. What in the world could take that long? Annual reports? Periodicals? Books? All of the above?
"I tend to read everything in sight. I used to read 5-6 hours a day." Now he's in the computer 12 hours a week playing bridge. That has to come out of something. "It's not coming out of sleeping, or eating. It's coming out of reading." Nevertheless, he still reads a lot.

Excluding email, he spends more time in the computer than Bill Gates.

He's willing to spend millions of dollars playing bridge on the Internet but they still haven't found a way to do it.

"Meg Whitman's got a very good business model."

"We have no meetings at Berkshire. We don't have a PowerPoint around here."

What models do you have/use that enable you to make a bid for a company in 15 minutes?
"Models. That's Charlie's word."
"If you know enough to do it, you know enough to do it immediately."
Models:

- Do I understand the business?
- What are the competitive advantages of the business and will they endure?
- Is there going to be change? "I don't like change." It is good for humanity but not for investing

Nebraska Furniture Mart

- Short time frame to investment
- Asked about receivables and how much she owed
- Looked at unaudited income statement and no balance sheet

Clayton Homes

- Good business in a tough industry
- Made bid on second call over the phone – he never visited the company
- Prepare your life for making these quick decisions (learn to spot the opportunity and pounce on it)

Larson Juhl

- Never thought about the business
- 15 minute phone call
- 18,000 locations with sales force that called on all clients 6x a year – difficult to compete (investment in sales force, distribution, low price sensitivity – want it tomorrow – don't care if it's $72 or $84)
- no brainer

MiTek

- Connector plate business
- Small item of cost relative to cost of home
- Contractor wants reliability, not the lowest price
- Internet not going to change the business
- Never went to see the business

We all know about your famous sins of omission which you say have cost Berkshire shareholders billions and billions of dollars. Could you talk about some of your less successful investments (that is, sins of commission) you've made and what you've learned from them?

Sins of commission:

1. Buying Berkshire
2. Department store in the partnership years (Hochschild, Kohn) bought by Diversified Retailing
3. Blue Chip Stamps. It did $120 million…this year $50K ("The old Buffett touch")

Oddly enough, these are the "three streams" out of which today's Berkshire flowed.

On China:

Too many variables in China that can translate into investment action.

You have to be right on 20 things for China to be profitable

There is nothing advantageous in looking for a silver needle in a golden haystack. Just take the haystack. The idea is to keep it simple.

Don't do triple dives. In investing, there is no score multiplier for making difficult investments. Just jump in the water at the low end of the pool – since there's no difficulty multiplier – the guy diving from the high platform gets the same amount of wet as you. He just worked more.

"We bought Petrochina because it was extremely cheap."

What would you consider the greatest misconception that intelligent investors have about you as it regards your investing approach/style?
"Well, I first need to know what people's perceptions are before knowing their misconceptions."

On Berkshire, that it is a mutual fund, although that is happening less now.
People may think that we get info from people, but we don't. We don't meet with managements. We used to. "I can figure it out by looking at the 10Ks."

WEB buys 100 shares of many, many companies just to get the annual report.

This question is regarding inflation.....in your 1980 letter, you stated that "the great bulk ... of corporate capital is not even partially indexed [to inflation]," and consequently must reinvest a certain level of earnings just to maintain its current level of real earnings power. My question is, why isn't more corporate capital be indexed to inflation?
Inflation is the friend, or at least not the enemy, of the business that doesn't take any capital, like See's.

In your 2002 letter to shareholders, you wrote that you and Mr. Munger "view [derivatives] as time bombs, both for the parties that deal in them and the economic system." Does the rather non-committal and in some cases even dismissive reaction to your warning concern you? Are you personally disappointed that people haven't heeded your warning?
No, because it is a low probability event. Gen Re was one example of a time bomb although now we are down to 500 counterparties, which in my opinion is still a lot. I am in the insurance business where I have to recognize that while the odds of an event happening may be 1 in 40, it is still certain that at some point, it will happen.

If there were three people you could meet (deceased or not), who would they be and why?
"My baby doctor so I could start all over again."
"The truth is everybody is pretty interesting."
"I have the greatest collection of friends you can imagine."

Charlie Munger is a very interesting person.

How will you handle the possibility of losing some of your mental edge? Ask Lou Simpson to slap you around when you start not making sense?
"How do I know I'm going ga-ga? That's an important question."
"I have assigned my family to do that."
"They have to tell me as a group. If only one tells me, he's out of the will."
"Occasionally, I have to fire somebody. That's the only thing I don't like."

Two things he enjoys:

1. "I come here every day. I get to paint the ceiling every day. I can do whatever I want." Nobody tells me how to paint it.
2. "The second thing I like is the applause. I like it that people like Berkshire."

On Arnold:
"I won the look-alike contest for Arnold."

Arnold has a very tough problem and is going to have to do some unpopular things.

Arnold is very smart; very financially smart.

Could you please talk about your view of the role of the firm in regards to corporate giving, especially in light of the recent Pampered Chef and Buffet Foundation developments?
The choice was simple because innocent people were losing their income because of us. Before that, we wanted to give people the choice of picking their own charities in a tax-effective way.

He mentioned specific donation such as Planned Parenthood. Women should have the right to make choices. "If I were a woman, I'd want to make my own choice."

How in business do you appraise people? What kind of due diligence, if any, do you conduct on people with whom you have business relationships, or are contemplating entering business relationships?
"I look at them in the eyes." He gets a sense of whether they like the money or the business. If they like the money they are going to leave. "I don't have any formulas, but you can feel it."

On what courses to take:
"Accounting is vital." It is the language of business. Accounting is substantially the most important.

Another asset: innate sense of probabilities. "I won't make a dumb bet. Not even for 50 cents."

"I'm wired to think in probabilistic way."

You must read Bob Rubin's upcoming book because he is a man who has excelled in probabilistic thinking.

Most CEOs are dumb about capital allocation. It is not their skill. As a CEO, he's buying businesses, but most of these guys won't even buy stock on their own. It is like

playing a violin your whole life and then getting to play at Carnegie Hall where they give you a piano.

On whether he follows other investors:
“Well, I read OID…but the answer is no.”

America's Growing Trade Deficit Is Selling the Nation Out From Under Us. Here's a Way to Fix the Problem—And We Need to Do It Now.

FORTUNE
Sunday, October 26, 2003
By Warren E. Buffett

I'm about to deliver a warning regarding the U.S. trade deficit and also suggest a remedy for the problem. But first I need to mention two reasons you might want to be skeptical about what I say. To begin, my forecasting record with respect to macroeconomics is far from inspiring. For example, over the past two decades I was excessively fearful of inflation. More to the point at hand, I started way back in 1987 to publicly worry about our mounting trade deficits—and, as you know, we've not only survived but also thrived. So on the trade front, score at least one "wolf" for me. Nevertheless, I am crying wolf again and this time backing it with Berkshire Hathaway's money. Through the spring of 2002, I had lived nearly 72 years without purchasing a foreign currency. Since then Berkshire has made significant investments in—and today holds—several currencies. I won't give you particulars; in fact, it is largely irrelevant which currencies they are. What does matter is the underlying point: To hold other currencies is to believe that the dollar will decline.

Both as an American and as an investor, I actually hope these commitments prove to be a mistake. Any profits Berkshire might make from currency trading would pale against the losses the company and our shareholders, in other aspects of their lives, would incur from a plunging dollar.

But as head of Berkshire Hathaway, I am in charge of investing its money in ways that make sense. And my reason for finally putting my money where my mouth has been so long is that our trade deficit has greatly worsened, to the point that our country's "net worth," so to speak, is now being transferred abroad at an alarming rate.

A perpetuation of this transfer will lead to major trouble. To understand why, take a wildly fanciful trip with me to two isolated, side-by-side islands of equal size, Squanderville and Thriftville. Land is the only capital asset on these islands, and their communities are primitive, needing only food and producing only food. Working eight hours a day, in fact, each inhabitant can produce enough food to sustain himself or herself. And for a long time that's how things go along. On each island everybody works the prescribed eight hours a day, which means that each society is self-sufficient.

Eventually, though, the industrious citizens of Thriftville decide to do some serious saving and investing, and they start to work 16 hours a day. In this mode they continue to live off the food they produce in eight hours of work but begin exporting an equal amount to their one and only trading outlet, Squanderville.

The citizens of Squanderville are ecstatic about this turn of events, since they can now live their lives free from toil but eat as well as ever. Oh, yes, there's a quid pro quo—but to the Squanders, it seems harmless: All that the Thrifts want in exchange for their food is Squanderbonds (which are denominated, naturally, in Squanderbucks).

Over time Thriftville accumulates an enormous amount of these bonds, which at their core represent claim checks on the future output of Squanderville. A few pundits in Squanderville smell trouble coming. They foresee that for the Squanders both to eat and to pay off—or simply service—the debt they're piling up will eventually require them to work more than eight hours a day. But the residents of Squanderville are in no mood to listen to such doomsaying.

Meanwhile, the citizens of Thriftville begin to get nervous. Just how good, they ask, are the IOUs of a shiftless island? So the Thrifts change strategy: Though they continue to hold some bonds, they sell most of them to Squanderville residents for Squanderbucks and use the proceeds to buy Squanderville land. And eventually the Thrifts own all of Squanderville.

At that point, the Squanders are forced to deal with an ugly equation: They must now not only return to working eight hours a day in order to eat—they have nothing left to trade—but must also work additional hours to service their debt and pay Thriftville rent on the land so imprudently sold. In effect, Squanderville has been colonized by purchase rather than conquest.

It can be argued, of course, that the present value of the future production that Squanderville must forever ship to Thriftville only equates to the production Thriftville initially gave up and that therefore both have received a fair deal. But since one generation of Squanders gets the free ride and future generations pay in perpetuity for it, there are—in economist talk—some pretty dramatic "intergenerational inequities."

Let's think of it in terms of a family: Imagine that I, Warren Buffett, can get the suppliers of all that I consume in my lifetime to take Buffett family IOUs that are payable, in goods and services and with interest added, by my descendants. This scenario may be viewed as effecting an even trade between the Buffett family unit and its creditors. But the generations of Buffetts following me are not likely to applaud the deal (and, heaven forbid, may even attempt to welsh on it).

Think again about those islands: Sooner or later the Squanderville government, facing ever greater payments to service debt, would decide to embrace highly inflationary policies—that is, issue more Squanderbucks to dilute the value of each. After all, the government would reason, those irritating Squanderbonds are simply claims on specific numbers of Squanderbucks, not on bucks of specific value. In short, making Squanderbucks less valuable would ease the island's fiscal pain.

That prospect is why I, were I a resident of Thriftville, would opt for direct ownership of Squanderville land rather than bonds of the island's government. Most governments find

it much harder morally to seize foreign-owned property than they do to dilute the purchasing power of claim checks foreigners hold. Theft by stealth is preferred to theft by force.

So what does all this island hopping have to do with the U.S.? Simply put, after World War II and up until the early 1970s we operated in the industrious Thriftville style, regularly selling more abroad than we purchased. We concurrently invested our surplus abroad, with the result that our net investment—that is, our holdings of foreign assets less foreign holdings of U.S. assets—increased (under methodology, since revised, that the government was then using) from $37 billion in 1950 to $68 billion in 1970. In those days, to sum up, our country's "net worth," viewed in totality, consisted of all the wealth within our borders plus a modest portion of the wealth in the rest of the world.

Additionally, because the U.S. was in a net ownership position with respect to the rest of the world, we realized net investment income that, piled on top of our trade surplus, became a second source of investable funds. Our fiscal situation was thus similar to that of an individual who was both saving some of his salary and reinvesting the dividends from his existing nest egg.

In the late 1970s the trade situation reversed, producing deficits that initially ran about 1% of GDP. That was hardly serious, particularly because net investment income remained positive. Indeed, with the power of compound interest working for us, our net ownership balance hit its high in 1980 at $360 billion.

Since then, however, it's been all downhill, with the pace of decline rapidly accelerating in the past five years. Our annual trade deficit now exceeds 4% of GDP. Equally ominous, the rest of the world owns a staggering $2.5 trillion more of the U.S. than we own of other countries. Some of this $2.5 trillion is invested in claim checks—U.S. bonds, both governmental and private—and some in such assets as property and equity securities.

In effect, our country has been behaving like an extraordinarily rich family that possesses an immense farm. In order to consume 4% more than we produce—that's the trade deficit—we have, day by day, been both selling pieces of the farm and increasing the mortgage on what we still own.

To put the $2.5 trillion of net foreign ownership in perspective, contrast it with the $12 trillion value of publicly owned U.S. stocks or the equal amount of U.S. residential real estate or what I would estimate as a grand total of $50 trillion in national wealth. Those comparisons show that what's already been transferred abroad is meaningful—in the area, for example, of 5% of our national wealth.

More important, however, is that foreign ownership of our assets will grow at about $500 billion per year at the present trade-deficit level, which means that the deficit will be adding about one percentage point annually to foreigners' net ownership of our national wealth. As that ownership grows, so will the annual net investment income flowing out of

this country. That will leave us paying ever-increasing dividends and interest to the world rather than being a net receiver of them, as in the past. We have entered the world of negative compounding—goodbye pleasure, hello pain.

We were taught in Economics 101 that countries could not for long sustain large, ever-growing trade deficits. At a point, so it was claimed, the spree of the consumption-happy nation would be braked by currency-rate adjustments and by the unwillingness of creditor countries to accept an endless flow of IOUs from the big spenders. And that's the way it has indeed worked for the rest of the world, as we can see by the abrupt shutoffs of credit that many profligate nations have suffered in recent decades.

The U.S., however, enjoys special status. In effect, we can behave today as we wish because our past financial behavior was so exemplary—and because we are so rich. Neither our capacity nor our intention to pay is questioned, and we continue to have a mountain of desirable assets to trade for consumables. In other words, our national credit card allows us to charge truly breathtaking amounts. But that card's credit line is not limitless.

The time to halt this trading of assets for consumables is now, and I have a plan to suggest for getting it done. My remedy may sound gimmicky, and in truth it is a tariff called by another name. But this is a tariff that retains most free-market virtues, neither protecting specific industries nor punishing specific countries nor encouraging trade wars. This plan would increase our exports and might well lead to increased overall world trade. And it would balance our books without there being a significant decline in the value of the dollar, which I believe is otherwise almost certain to occur.

We would achieve this balance by issuing what I will call Import Certificates (ICs) to all U.S. exporters in an amount equal to the dollar value of their exports. Each exporter would, in turn, sell the ICs to parties—either exporters abroad or importers here—wanting to get goods into the U.S. To import $1 million of goods, for example, an importer would need ICs that were the byproduct of $1 million of exports. The inevitable result: trade balance.

Because our exports total about $80 billion a month, ICs would be issued in huge, equivalent quantities—that is, 80 billion certificates a month—and would surely trade in an exceptionally liquid market. Competition would then determine who among those parties wanting to sell to us would buy the certificates and how much they would pay. (I visualize that the certificates would be issued with a short life, possibly of six months, so that speculators would be discouraged from accumulating them.)

For illustrative purposes, let's postulate that each IC would sell for 10 cents—that is, 10 cents per dollar of exports behind them. Other things being equal, this amount would mean a U.S. producer could realize 10% more by selling his goods in the export market than by selling them domestically, with the extra 10% coming from his sales of ICs.

In my opinion, many exporters would view this as a reduction in cost, one that would let them cut the prices of their products in international markets. Commodity-type products would particularly encourage this kind of behavior. If aluminum, for example, was selling for 66 cents per pound domestically and ICs were worth 10%, domestic aluminum producers could sell for about 60 cents per pound (plus transportation costs) in foreign markets and still earn normal margins. In this scenario, the output of the U.S. would become significantly more competitive and exports would expand. Along the way, the number of jobs would grow.

Foreigners selling to us, of course, would face tougher economics. But that's a problem they're up against no matter what trade "solution" is adopted—and make no mistake, a solution must come. (As Herb Stein said, "If something cannot go on forever, it will stop.") In one way the IC approach would give countries selling to us great flexibility, since the plan does not penalize any specific industry or product. In the end, the free market would determine what would be sold in the U.S. and who would sell it. The ICs would determine only the aggregate dollar volume of what was sold.

To see what would happen to imports, let's look at a car now entering the U.S. at a cost to the importer of $20,000. Under the new plan and the assumption that ICs sell for 10%, the importer's cost would rise to $22,000. If demand for the car was exceptionally strong, the importer might manage to pass all of this on to the American consumer. In the usual case, however, competitive forces would take hold, requiring the foreign manufacturer to absorb some, if not all, of the $2,000 IC cost.

There is no free lunch in the IC plan: It would have certain serious negative consequences for U.S. citizens. Prices of most imported products would increase, and so would the prices of certain competitive products manufactured domestically. The cost of the ICs, either in whole or in part, would therefore typically act as a tax on consumers.

That is a serious drawback. But there would be drawbacks also to the dollar continuing to lose value or to our increasing tariffs on specific products or instituting quotas on them—courses of action that in my opinion offer a smaller chance of success. Above all, the pain of higher prices on goods imported today dims beside the pain we will eventually suffer if we drift along and trade away ever larger portions of our country's net worth.

I believe that ICs would produce, rather promptly, a U.S. trade equilibrium well above present export levels but below present import levels. The certificates would moderately aid all our industries in world competition, even as the free market determined which of them ultimately met the test of "comparative advantage."

This plan would not be copied by nations that are net exporters, because their ICs would be valueless. Would major exporting countries retaliate in other ways? Would this start another Smoot-Hawley tariff war? Hardly. At the time of Smoot-Hawley we ran an unreasonable trade surplus that we wished to maintain. We now run a damaging deficit that the whole world knows we must correct.

For decades the world has struggled with a shifting maze of punitive tariffs, export subsidies, quotas, dollar-locked currencies, and the like. Many of these import-inhibiting and export-encouraging devices have long been employed by major exporting countries trying to amass ever larger surpluses—yet significant trade wars have not erupted. Surely one will not be precipitated by a proposal that simply aims at balancing the books of the world's largest trade debtor. Major exporting countries have behaved quite rationally in the past and they will continue to do so—though, as always, it may be in their interest to attempt to convince us that they will behave otherwise.

The likely outcome of an IC plan is that the exporting nations—after some initial posturing—will turn their ingenuity to encouraging imports from us. Take the position of China, which today sells us about $140 billion of goods and services annually while purchasing only $25 billion. Were ICs to exist, one course for China would be simply to fill the gap by buying 115 billion certificates annually. But it could alternatively reduce its need for ICs by cutting its exports to the U.S. or by increasing its purchases from us. This last choice would probably be the most palatable for China, and we should wish it to be so.

If our exports were to increase and the supply of ICs were therefore to be enlarged, their market price would be driven down. Indeed, if our exports expanded sufficiently, ICs would be rendered valueless and the entire plan made moot. Presented with the power to make this happen, important exporting countries might quickly eliminate the mechanisms they now use to inhibit exports from us.

Were we to install an IC plan, we might opt for some transition years in which we deliberately ran a relatively small deficit, a step that would enable the world to adjust as we gradually got where we need to be. Carrying this plan out, our government could either auction "bonus" ICs every month or simply give them, say, to less-developed countries needing to increase their exports. The latter course would deliver a form of foreign aid likely to be particularly effective and appreciated.

I will close by reminding you again that I cried wolf once before. In general, the batting average of doomsayers in the U.S. is terrible. Our country has consistently made fools of those who were skeptical about either our economic potential or our resiliency. Many pessimistic seers simply underestimated the dynamism that has allowed us to overcome problems that once seemed ominous. We still have a truly remarkable country and economy.

But I believe that in the trade deficit we also have a problem that is going to test all of our abilities to find a solution. A gently declining dollar will not provide the answer. True, it would reduce our trade deficit to a degree, but not by enough to halt the outflow of our country's net worth and the resulting growth in our investment-income deficit.

Perhaps there are other solutions that make more sense than mine. However, wishful thinking—and its usual companion, thumb sucking—is not among them. From what I now see, action to halt the rapid outflow of our national wealth is called for, and ICs

seem the least painful and most certain way to get the job done. Just keep remembering that this is not a small problem: For example, at the rate at which the rest of the world is now making net investments in the U.S., it could annually buy and sock away nearly 4% of our publicly traded stocks.

In evaluating business options at Berkshire, my partner, Charles Munger, suggests that we pay close attention to his jocular wish: “All I want to know is where I’m going to die, so I’ll never go there.” Framers of our trade policy should heed this caution—and steer clear of Squanderville.

FORTUNE editor at large Carol Loomis, who is a Berkshire Hathaway shareholder, worked with Warren Buffett on this article.

Why Foreigners Can’t Ditch Their Dollars
FORTUNE
Sunday, October 26, 2003

How often have you seen a comment like this in articles about the U.S. dollar? “Analysts say that what really worries them is that foreigners will start moving out of the dollar.”

Next time you see something like that, dismiss it. The fact is that foreigners—as a whole—cannot ditch their dollars. Indeed, because our trade deficit is constantly putting new dollars into the hands of foreigners, they have to just as constantly increase their U.S. investments.

It’s true, of course, that the rest of the world can choose which U.S. assets to hold. They can decide, for example, to sell U.S. bonds to buy U.S. stocks. Or they can make a move into real estate, as the Japanese did in the 1980s. Moreover, any of those moves, particularly if they are carried out by anxious sellers or buyers, can influence the price of the dollar.

But imagine that the Japanese both want to get out of their U.S. real estate and entirely away from dollar assets. They can’t accomplish that by selling their real estate to Americans, because they will get paid in dollars. And if they sell their real estate to non-Americans—say, the French, for euros—the property will remain in the hands of foreigners. With either kind of sale, the dollar assets held by the rest of the world will not (except for any concurrent shift in the price of the dollar) have changed.

The bottom line is that other nations simply can’t disinvest in the U.S. unless they, as a universe, buy more goods and services from us than we buy from them. That state of affairs would be called an American trade surplus, and we don’t have one.

You can dream up some radical plots for changing the situation. For example, the rest of the world could send the U.S. massive foreign aid that would serve to offset our trade deficit. But under any realistic view of things, our huge trade deficit guarantees that the rest of the world must not only hold the American assets it owns but consistently add to

them. And that’s why, of course, our national net worth is gradually shifting away from our shores.

Why Foreigners Can't Ditch Their (US) Dollars

November 10, 2003

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Fuzzy Math And Stock Options*

By Warren Buffett

Tuesday, July 6, 2004

Until now the record for mathematical lunacy by a legislative body has been held by the Indiana House of Representatives, which in 1897 decreed by a vote of 67 to 0 that pi—the ratio of the circumference of a circle to its diameter—would no longer be 3.14159 but instead be 3.2. Indiana schoolchildren momentarily rejoiced over this simplification of their lives. But the Indiana Senate, composed of cooler heads, referred the bill to the Committee for Temperance, and it eventually died.

What brings this episode to mind is that the U.S. House of Representatives is about to consider a bill that, if passed, could cause the mathematical lunacy record to move east from Indiana. First, the bill decrees that a coveted form of corporate pay—stock options—be counted as an expense when these go to the chief executive and the other four highest-paid officers in a company, but be disregarded as an expense when they are issued to other employees in the company. Second, the bill says that when a company is calculating the expense of the options issued to the mighty five, it shall assume that stock prices never fluctuate.

Give the bill's proponents an A for imagination—and for courting contributors—and a flat-out F for logic.

All seven members of the Financial Accounting Standards Board, all four of the big accounting firms and legions of investment professionals say the two proposals are nonsense. Nevertheless, many House members wish to ignore these informed voices and make Congress the Supreme Accounting Authority. Indeed, the House bill directs the Securities and Exchange Commission to "not recognize as 'generally accepted' any accounting principle established by a standard setting body" that disagrees with the House about the treatment of options.

The House's anointment of itself as the ultimate scorekeeper for investors, it should be noted, comes from an institution that in its own affairs favors Enronesque accounting. Witness the fanciful "sunset" provisions that are used to meet legislative "scoring" requirements. Or regard the unified budget protocol, which applies a portion of annual Social Security receipts to reducing the stated budget deficit while ignoring the concomitant annual costs for benefit accruals.

I have no objection to the granting of options. Companies should use whatever form of compensation best motivates employees—whether this be cash bonuses, trips to Hawaii, restricted stock grants or stock options. But aside from options, every other item of value given to employees is recorded as an expense. Can you imagine the derision that would be directed at a bill mandating that only five bonuses out of all those given to employees be expensed? Yet that is a true analogy to what the option bill is proposing.

Equally nonsensical is a section in the bill requiring companies to assume, when they are valuing the options granted to the mighty five, that their stocks have zero volatility. I've been investing for 62 years and have yet to meet a stock that doesn't fluctuate. The only reason for making such an Alice-in-Wonderland assumption is to significantly understate the value of the few options that the House wants counted. This undervaluation, in turn, enables chief executives to lie about what they are truly being paid and to overstate the earnings of the companies they run.

Some people contend that options cannot be precisely valued. So what? Estimates pervade accounting. Who knows with precision what the useful life of software, a corporate jet or a machine tool will be? Pension costs, moreover, are even fuzzier, because they require estimates of future mortality rates, pay increases and investment earnings. These guesses are almost invariably wrong, often substantially so. But the inherent uncertainties involved do not excuse companies from making their best estimate of these, or any other, expenses. Legislators should remember that it is better to be approximately right than precisely wrong.

If the House should ignore this logic and legislate that what is an expense for five is not an expense for thousands, there is reason to believe that the Senate—like the Indiana Senate 107 years ago—will prevent this folly from becoming law. Senator Richard Shelby (R-Ala.), chairman of the Senate Banking Committee, has firmly declared that accounting rules should be set by accountants, not by legislators.

Even so, House members who wish to escape the scorn of historians should render the Senate's task moot by killing the bill themselves. Or if they are absolutely determined to meddle with reality, they could attack the obesity problem by declaring that henceforth it will take 24 ounces to make a pound. If even that friendly standard seems unbearable to their constituents, they could exempt all but the fattest five in each congressional district from any measurement of weight.

In the late 1990s, too many managers found it easier to increase "profits" by accounting maneuvers than by operational excellence. But just as the schoolchildren of Indiana learned to work with honest math, so can option-issuing chief executives learn to live with honest accounting. It's high time they step up to that job.

The writer is chief executive officer of Berkshire Hathaway Inc., a diversified holding company, and a director of The Washington Post Co., which has an investment in Berkshire Hathaway.

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WARREN BUFFETT RESPONDS TO QUESTIONS FROM 85 WHARTON STUDENTS ON NOVEMBER 12, 2004

1) Is it more difficult to find predictable businesses today than it has been historically because the rate of change has increased within most industries? Has the accelerating rate of change within most industries caused you to reassess your buy and hold investment thesis, particularly given the inability for many consumer brands like Coke and Gillette to grow?

There are basically two ways to look at change. We see change as the enemy of investments, if it wasn't the richest people would be librarians. Some businesses will change very quickly. We are looking for ones that don't. If you can predict the change then you can become very rich, but the net investment (e.g. from what went on at Kitty Hawk – air flight) to equity investors is a huge negative. For example, I have a list of over 2000 companies that made automobiles, now the last two, GM and Ford, are in trouble. Hundreds are out of business – many people didn't know that Maytag and Du Pont made automobiles. The net investment for investors has not been a great deal. We look for certainty of what won't change. You mentioned Gillette. After 100 years, Gillette still has 70% market share, and yet the distribution, product and raw materials are not mysterious. It has survived within our capitalist system and you know its products will be used regularly.

Coke sells 50% of the carbonated beverages worldwide: about 1.3 billion 8 ounce servings, higher than last year and the year before. I guarantee Coke, Wrigleys and Gillette will dominate. The internet won't change what brands people like.

We are looking for the absence of change. Fruit of the Loom and Haynes together have 80% of boys underwear in the US. I guess we will keep wearing underwear. Bill Gates welcomes the absence of change, he just doesn't get it in his business. Microsoft and E-Bay have some moat. If you can identify change, that is great, but it is a lot riskier and so is the chance of our strategy not working. So we look for absence of change. We don't like to lose money. Capitalism is pretty brutal. We look for mundane products that everyone needs. Patents are the worst way to ensure demand. There is still plenty of opportunity to find predictable demand. The problem isn't the lack of opportunities, it's the prices.

2) You wound up the Buffett Partnership in 1969 due in part to the virtual disappearance of investment opportunities for the analyst who stresses quantitative factors. In your view, is today a better investing environment than 1969? How is it better and worse?

1969 was tough. It wasn't pleasant to do. I had grown from $105,000 to $100,000,000. I had a lot of propositions to take over the partnership. If I had a similar partnership I would have closed it around 2000 in the height of the internet boom.

We were all in REITS in March 2000 when NASDAQ was hitting its high. If I had had a large partnership I would have folded it, but not if it was small. It has to do both with how I feel and how the partners feel. I feel like a jerk (losing on a relative basis) and the jerks are making money. I won't persist in trying to make money when I don't

understand what is going on. It is harder to invest and risk other people's money than to invest your own money.

We still get opportunities: for example, we got $8 billion into the Junk Bond thing in 2002 and would have gone up to $22 billion if we had more time. We were buying as fast as we could.

Investing is the world's best game. I was in the department store business – you have to match you competitors – it's a business that throws defensive decisions at you all the time. We want a business with not defensive decisions. Investing is a perfect example. Just watch ball after ball come through and wait for your fat pitch. You can sit and wait for just the right pitch. Harder when you invest in public and the fans are screaming "swing you bum."

But at your age, you can fool around with small money and I see things to do there.

3) You made an argument for 7% returns over the next decade in Fortune. Given that (1) profit margins are at least 30% above historical averages, (2) the ratio of prices/GDP is at least 25% above historical averages, and (3) interest rates are ~25% below historical averages, assuming mean reversion, wouldn't one conclude that while economic earnings growth plus dividends may be 7%, that we are at an unsustainable valuation plateau?

We are near the high-end of the valuation band, but not really at an extreme. I have commented on the market 4 or 5 times in *Forbes* interviews previously (1969, 1974, 1981, and 1977 in *Fortune*). Most of you can say if something is overvalued or undervalued, you can spot the occasional extreme cases.

There is a big band of valuation and the idea is to calibrate extremes. When I look at a business, I look for people with passion. I can recognize a 98 or a 6, not a 63. This rule is good enough in life and investment. You refer to my 2001 article, but returns have not exceeded 7%, so I guess that this is not that precise of a band.

I suspect that stocks are too high now. Nothing is cheap and I am not finding a lot of now but there will be a day when you will be shooting fish in a barrel. The important thing is to be prepared to play heavily when the time comes and that means that you cannot play with everybody.

4) You have said in the past that you would rather buy a great business at a fair price than a fair business at a great price. If the price is fair to both the buyer and the seller and the buyer does not substantially improve the business, then it would be hard to see how the buyer would obtain superior returns from such an investment if the price already discounts the quality of the business. Since you clearly look for superior returns can you explain how you buy at a price that is both fair to the seller and still leaves you room for abnormal returns?

Periodically the stock market does not price rationally. Great businesses have been sold for ridiculously low prices in the past. Unlike negotiated sale of businesses, the market is like an auction and stocks traded on it are not perceived as ownership shares in business. While the price of farmland or apartments in Nebraska does not to vary a great deal around the mean, and have little chance of having wild aberrations, stock prices on the other hand may sometimes vary by as much as 50% to 100%. Accordingly, there are opportunities to buy stocks in businesses at low value.

So we really try to buy wonderful businesses at ridiculous prices. In the case of Washington Post, in 1973 the whole of the company was only selling for $80M (5M shares at $16 each). This is a business that owns a number of newspapers, four TV stations and several magazines (like Newsweek). Most analysts would have agreed that the intrinsic value of the assets was around $400 to $500 million. But you could buy little pieces of the business for much less. Seizing this opportunity, Mr. Buffett purchased around 9% of the shares for $10 million in 20-30 tickets from institutional investors who couldn't sell fast enough because they thought the share prices would keep falling. They wouldn't have argued that the business was not worth $400 million, just that the stock was going down. Subsequently, Mr. Buffett has steadily increased Berkshire's holding in the company (to around 22%) and today the company is worth about $10 billion dollars.

Making purchases through a negotiated markets for entire businesses is different. You may get a decent result. These transactions are to a mild degree effected by the auction market. As Peter Lynch often says, companies will cut the flowers and water the weeds – when a company is in trouble it often sells the crown jewels.

5) What value would you personally attach to $1 received 1 year from today with 100% certainty?

It depends on how much purchasing power $1 dollar has in one year. You need to find the present value of that $1 dollar, using the discount rate (i.e., Treasuries of equivalent maturity). It is very similar to analyzing the stream of a company's earning flow. How much long term earnings flow you would like to have using the discount rate? Also, you need to be aware of whether the interest rates over the medium-to-long term will change quite big or not. Your expectation of the "normal" interest rate will drive what discount rate you apply to the streams of a Japanese company in the mid-1990s, for example. If you think the interest rate will rise sharply, and do not want to buy long-term bonds, you need to think about whether you like to buy the company's long-term earnings yield. If you do like long term bonds, STRIPS are a good investment.

6) This week Eric Rosenfeld recounted the last days of LTCM and your participation in a potential bailout. He believes that if they could have gotten you back on your cell phone in Alaska the bailout would have been consummated: "to this day I think it would've gotten done if he [Mr. Buffett] was in town….however, nobody was willing to put in $4 billion without consulting [Mr. Buffett]". Could you share your version of the story?

Eric called me on Sunday while I was playing bridge. I could tell from the sound of his voice that something grave was transpiring. On Monday he was on vacation with Bill Gates in Alaska, so he was negotiating on a satellite phone, while Bill was looking on. Meanwhile the captain kept moving the boat closer to shore so they could see the bears or something. Gates thought the whole situation was very amusing.

On Tuesday, he was at Yellowstone, and negotiating using an intermediary at Goldman Sachs, and finally gave Goldman his terms on Wed morning. He told Peter (GS Banker) to put in the bid - $3bn from Mr. Buffett, $750mm from AIG, and $250mm from GS. He told Peter to sign his name on the (in)famous letter. Peter asked if he was crazy, but Mr. Buffett told him to just do it. So Peter signs my name, John Corzine's and Hank Greenberg's. He figured if he was on the hook, so he might as well sign Hank Greenberg's name. I don't think anybody's signed Hank's name before. I then went on the bus through Yellowstone (out of range for the satellite phone).

John (Merriwether) got $150mm ($250?). But it left a lot to work out between Wednesday and Monday. "If I'd been in NY, we'd have made the deal….that's [description of Eric Rosenfeld's version] a very accurate rendition of what happened."

They [LTCM] and [NY Fed Governor] McDonnough played the hand the way they should have….but I got to see Old Faithful. I've told Bill Gates lots of times he's cost us a lot of money.

I knew the stuff they were doing…these are the kind of positions I would've put on…I think we would have made multiple billions…I've made a lot of money on weekends.

I don't blame him [Merriwether] – he got an extra $150 million

7) You and Charlie Munger believe that the easiest person in the world to fool is yourself. Have you been fooling yourself by remaining committed to certain buy and hold doctrines, especially considering they are alluring because you have to work less since good investments work for you.

People believe what they want to believe. Everyone rationalizes their actions. A partner like Charlie can point it out to me. If we have a strength, it is that we think things through and we have the advantage of having each other. We are not influenced by other people. Charlie would say we are successful because we are rational and do our own work.

Paraphrasing Keynes', "The difficulty lies not in the new ideas but in escaping from the old ones," Mr. Buffett remarked: The problem is not holding onto the new [ideas]. The problem is escaping from the old. Darwin claimed he had to write down new ideas constantly. His mind would race to find new ideas. But if he did not write down his new findings within 30 minutes his subconscious would wipe them out and revert to old beliefs.

8) What do you believe is the top thing that will affect our great country's competitiveness in the future and what would you advise be done to address it? (can follow up with health care and social security/pension gap)

One of the biggest problems facing the country is weapons of mass destruction. But there isn't much that can be done about the problem (there will always be terrorists).

The trade deficit, of which current account deficit accounts for 90%, is the biggest economic problem facing the U.S. It is very complicated and not covered sufficiently in the debate. Social security and Healthcare are two issues tied in with the issue of the trade deficit. When there is no trade deficit, there is no net holding by foreigners. Currently government redistributes 22% of the US output to social security and healthcare. And these issues are eternal intra-family political squabbles over the redistribution between those who are producing and those who are not producing? Trade Deficit is a transfer of ownership or IOU on converted ownership, representing $1.8BN of outflow to foreign countries. It can't be easily addressed. If the trade deficit continues at the current rate for the next 6-10 years, foreigners will have a permanent call on 3% of the output.

Can we afford this? Potentially yes. Foreign aid administered after the Marshall Plan post-WWII can be appropriate. However this is an accumulated burden to be paid by future generations because their "parents" didn't want to pay for it. This could play a significant factor in future financial market disruption. "When someone fires in the theater on the stage" with significant amount of assets held by foreigners, along with other things happening at the same time, the trade deficit could be the #1 problem in the next financial event.

On healthcare, you have to rationalize healthcare demand when healthcare costs become higher and higher. The demand structure under the current system is not sustainable. We need to reframe some of the expectations of people and reframe what is the appropriate level of healthcare provisions. For example: Should we keep everyone alive for their last 3-6 months? Should people get the maximum amount of care to keep healthy? Government needs to ration it through government policy and people's willingness to wait.

9) Is there a significant portion of the value you generate from the portfolio derived through active investment (e.g., influence on management decision, etc.) If so, what do you think of the role and probability of long-term success of an investment manager with little influence over management decisions, i.e, a passive investor? Has passive investing lost some of its appeal for you because you have been personally disappointed with the management of major American corporations? If so, what implications does that have for America?

In short, Charlie and I do not and should not have a significant impact on the management of our companies. You would be surprised how little impact we have on management. They [CEOs] all have different batting stances and know what style works for them. There would be no point for us to tell them to alter their stance as you can still

be a good hitter even if you stand different to the next man - we hire them as they are good hitters.

In terms of our influence on the CEO's of our public holdings - we are "toothless tigers". We do not control the company and do never threaten to sell our stakes if our advice is not taken, therefore we are very much toothless tigers. We are holders of the stock for the long-term and therefore do not gain from short-term increases in the price. Moreover, we actually prefer for the price to go down in the near term so we can buy more stock and increase our stake in the company. However, the disclosure rules make it increasingly difficult for us to build up stakes in companies. For instance, we rarely invest in the UK as there is a 3% disclosure rule so we can not build a meaningful stake before it becomes public. So historically, we performed much better when the disclosure requirements were less stringent and they have been increased steadily over time. Our investment in PetroChina was another example of disclosure rules costing us hundreds of millions of dollars. We had to announce our ownership at a 1% level, after which the price shot up.

Stockholders should be able to think and behave like owners. The three things that a shareholder in a public company should focus on are: do you have the right CEO? does she/he overreach? are they too focused on acquisitions or empire building and stop thinking on a per share basis? Institutional owners need to focus on these three aspects.

Both Charlie and I say we would make a lot more money if we were anonymous. You'd be surprised how little impact we have on management. They're all different individuals with their own egos, money, and even control. You'd be surprised how much we don't steer them. We have very little influence on their investments, but it doesn't matter because we don't buy and sell. We don't gain anything from the stock price going up. Piggybacking doesn't do much.

It's a big minus to operate in a public arena where people are not likely to follow. I still have 99% of my net worth in Berkshire, but I try to buy some on my own anonymously -- I do much better that way.

We ask for confidential treatment in some areas, but the SEC doesn't allow that often.

Passive investor role: big institutional owners should act and behave like owners. The big thing to worry about is whether the company has the right CEO and if it does, does the CEO overreach even if he's a good manager? The only people who can stop that are the directors and owners...and the directors will only stop it if the owners make a case. CEOs will sometimes do things uneconomic to satisfy primal urges. My instinct is that the institutional investors behave better than they did 10 years ago.

10) I am also from Omaha. When I tell people at school about your frugal financial approach, they are stunned. What is your specific philosophy about wealth? And how do you think this discipline has contributed to your success running Berkshire?

Mr. Buffett feels he was lucky to be born in the US (he won the ovarian lottery). He believes that he's wired in a way that works well in a capitalistic society: he has the innate ability to allocate money. He believes that society has enabled him to earn this money and so he believes that the money should go back to society eventually. He believes in a graduated income tax. Society has contributed to his wealth so they should benefit.

He discussed the effect wealth has on an individual and the effect it has had on his life: It means that he can do whatever he wants to do. He has the luxury to make choices. But, he has no desire to be a greenskeeper- to own a 20 acre property which requires him to devote time to organizing and maintaining it. Further, spending the next 4yrs building a house doesn't appeal to him. He won't find a house where he'd be happier than the one he's live in since '58-59. He has no interest in owning a large yacht- he views this as more of a hassle than anything else. He prefers to use his wealth to do what he wants to do with the people he wants to do it with.
He likes his life. He likes the people he works with- nobody has left Berkshire voluntarily in 15 yrs. He won't buy a business owned by someone he doesn't like.

If one were to ask Charlie why they were successful, he would respond that it was due to "rational decision making" and being able to not depend and focus on what someone else thinks is important. Also stressed that he was very lucky to be born in the country that he was. Likened it to a lottery with a 1 in 50 chance. This is because he is "wired in a way to be very effective" in a large economy where capital allocation skills are needed and highly rewarded. He illustrated the counter example with a quote from Gates saying that if he were born a few thousand years earlier he "would be an animal's lunch".

As for the trappings of wealth, he believes he already lives the life he wants to live. He cautioned against backing into certain behaviors simply because that was what other rich people do. For example, he does not want to own a large boat as he simply does not derive enough utility out of it to justify the bother that would entail from owning and maintaining one. As it stands, he does benefit from his wealth in that he has the "ultimate luxury", that is to do what he wants to do everyday and he's having more fun than most 74 year olds. He doesn't want to build a bigger house and he gets to work with people he likes. Apparently, they like him too as none of the 18 people who work with him at Berk HQ has left in 15 years. He also will not do a deal simply for the money as it would be as perverse as someone already very wealthy marrying for the money. What money has ultimately given him is the power to choose because the luxury to choose is what being wealthy is all about.

Mr. Buffett continued and discussed the middleweight boxing match he watched on PPV at $54.95. He didn't think twice about the cost of it. He talked about how in the not too distant past the fight would have been limited to people at Madison Square Garden whereas the boxers there stood to gain the benefit from an audience of millions because of what society as a whole has enabled. Therefore he is, and he believes so should the boxers, be in favor of progressive taxes. That is they are able to make extraordinary

incomes because of society and should be willing to contribute a greater share to maintaining it.

11) It is clear that you would never resort to earnings smoothing etc for Berkshire. But you do sell insurance products that have helped other companies smooth their earnings, or at least make their problems look less severe. Is there a contradiction in this?

The whole idea of insurance is that you pay a premium each year to protect for a disaster every 20 years. The nature of the product is smoothing earnings. You personally do this with your auto insurance. You pay $400 (or $350 if you call Geico!) to protect yourself. Sometimes companies have used it incorrectly, but this is not inherent in the insurance product. If you get into "no risk transfer" deals with insurance you can get called on it. Berkshire Hathaway has written the two biggest retroactive insurance deals. One when White Mountain bought One Beacon and the other when ACE bought Cigna. Each paid ~$1.5 billion to reduce charges for old bad cases. Berkshire Hathaway was much better equipped to handle the risk than ACE or White Mountain (who were both stretching to pay for the deals). All of our policies are finite. There have been some cases of policies with zero risk transfer in the U.S., but they were very limited in the last five years because auditors must now sign off that there is adequate risk transfer and it is not just for accounting purposes. Generally, there is an understanding and a long relationship between the primary insurer and the reinsurer. If the reinsurer gets killed, the primary does not take the business elsewhere. They just build that experience into next year's quote. This is less prevalent now because it is less client orientated and more transaction oriented because of the introduction of brokers. There is no more relationship development, just a focus on the lowest price.

12) At our investment management conference a few weeks ago, one panel featured the CIOs from Barclays Global Investors, State Street and Vanguard, and we collectively discussed the use of derivatives in modern portfolio management. We understand you dealt with unknown exposures in a past acquisition, but wonder if you think in this environment certain institutions have the risk control and discipline to use derivatives to effectively mitigate their risks.

Berkshire uses derivatives. There is nothing evil about them per se. It is very hard to control risks without derivatives. But all mismarks on contracts are in the trader's favor, never our favor. These days, there is no money in plain vanilla stuff - the margins are too squeezed - so you get people writing very sophisticated derivatives.

Berkshire is still unwinding many of its positions. General Re had 23,000 contracts 3 yrs ago and 3000 are left. Derivatives are very tough for management. In situations like 9/11, with losses of unknown magnitude, anyone with big equity and big derivatives portfolio (when you don't know what's behind the derivatives) is in trouble. A big downgrade on the company would have followed with margin postings, etc. - trouble...

Another issue with derivatives is that the incentives of the guy writing the derivates are not aligned with the company. For example. one of the highest paid guys at Gen Re was

the guy that wrote complicated contracts - and those contracts were not necessarily good for the company.

Finally, the problem with large derivatives portfolios is that they tend to be directly related to equity positions that company has. This interdependence means that billions of dollars on your balance sheet are dependent on others performance (other equity performance) - not on your own company performance.

"Derivatives are like AIDS - its not who you slept with, but who they slept with"

13) You often talk about the importance of investing only with people you like, trust and admire. However, you've bought companies only days after you became aware of them. How do you evaluate the owners and managers of a company before investing?

After mentioning that he's actually bought companies after only brief telephone conversations, Mr. Buffett admitted that "every now and then you miss", but added that "it's better than the odds of marriage". He went on to say that "sometimes you size up people better with more time", but he didn't sound like he needed much time to recognize the type of character he looks for.

The key question for him when evaluating the management of a potential acquisition target is "do they love the money or the business". His concern is that he monetizes the owner/manager's wealth and that may cause the latter, if he doesn't truly love the business, not to work as hard after he's sold out to Berkshire. He said he looks for the "obvious cases" of owners who truly love their businesses and added that he's mostly been successful (has had "a good batting average") in identifying them.

For those owners, their businesses are their life's work, which Mr. Buffett compared to a painting: "You spent all your life painting this painting. You can sell it to us and see it hanging in a place of honor in a museum. Or you can sell it to an LBO operator and see it hanging in a porn shop.

"I once bought a jewelry business over the phone. I could tell that the current owner was the 'right' type of person. The owner's great grandfather had started the company and I could tell that the owner really loved the business."

Mr. Buffett said that he can usually "size someone up in less than a day". The most import question he poses in buying a business and looking at management is, "do they love the business?" He phrased it in this way: "If you spend your whole life painting a picture would you rather have that painting on exhibit at the Metropolitan Museum of Art, or would you rather earn 5% more on the sale of the painting and have it hanging in a porn shop?"

He has had a great batting average in picking companies and people. But he says that "we can't tell with everyone and once in a while we make a mistake."

14) The profits of financial companies as a % of total US corporate profits is at an all-time high (~40%) -- is this just the result of the carry trade, which will end, or perhaps bogus use of derivatives, or is there something more structural changing?

15) On his fears about US dollar weakness:

The dollar is not overvalued on a purchasing power basis. Macroeconomics is not our usual game, however if some economic facts are screaming at us, we jump on them. We don't usually do junk bonds, however if you cast your eye about, you can always find deals. I don't feel like doing macro bets as much with other people's money as my own. We work with big currencies-- eight of them. I don't have a view about which will move most against the dollar. My view is that the dollar will weaken. Countries support their own currency-- Japan wanted to keep their currency down which kept the US currency up. I don't know if China or HK will decouple their currency from the US. I like to have earnings in other currencies because they convert into more dollars, however I keep most of our cash in dollars.

16) On probabilistic thinking: while we would all love to do it, how does one distinguish between true subjective probabilistic thinking and bias induced guesswork?

Of course we try to make decisions based on probability and not guesswork. I agree strongly with the thoughts in Robert Rubin's book (In An Uncertain World). It's all probabilities. The one time when Charlie and I have trouble doing this is when it comes to firing people. I hate doing that and I avoid it as much as possible. We had one manager at one of our companies who developed Alzeimer's disease. It took us a long time to see it, and after we saw it, it took us a long time to act on it. Fortunately, the company still did well even while he had Alzeimer's, so we've developed a new rule around here: Only buy businesses that are so good that someone with Alzeimer's can manage them!

We all think we're doing the former – probabilistic thinking.

Mr. Buffett said he tries to always use probabilistic thinking. That's what he likes about the insurance business and investments. We try to think through every decision that comes to us. Some decisions are simple probabilities.

However, Mr. Buffett added that we're human and probabilistic thinking is not always possible. Mr. Buffett said that when dealing with other people, such as firing someone, is a time in his case that he may stray from probabilistic thinking. An example was when

Mr. Buffett denied that one employee who ran one of his businesses had Alzheimer's for one year beyond when anyone else would have picked up on it. He said how hard it was for him to fire him, especially since he loved the person but he was just no longer good at the job. He, therefore, unintentionally postponed the decision. Mr. Buffett said he looked for countering evidence because he hates to fire a CEO he likes. He said he will tolerate a lot from someone who has been an associate. Mr. Buffett then joked that now he buys business that even a person with Alzheimer's can run!

One thinks they know when they're getting way from probabilistic thinking, but you can not always detect it.

Mr. Buffett recommended Bob Rubin's book in which he recommends ways to think in the economic world

He concluded that business is all probabilistic thinking but some thinking is better not being calculated, for example in relation to people you love and humans in general.

17) You said a year or two ago that the ratio of US corporate profits as a % of GDP was historically high, at 6%, and would likely fall. Since then, the ratio has gone up (nearing 8%). Has something structurally changed, or are you confident that the ratio will still fall back?

Mr. Buffett responded that he doesn't believe the 8% rate will be sustainable, and he views 6% as a more reasonable figure in the long-run. Moreover, he has trouble reconciling high corporate profits % (even at 6% level) with the corresponding figure of federal taxes paid by corporations, which is currently also at a very high level – 1.5% of GDP.

After a brief discussion of corporate profits and corporate taxes as a percentage of GDP, Mr. Buffett shared an interesting view on federal taxation. In a way, federal government owns a special class of stock (let's call it Class AA stock) in every corporation. For example, last year Berkshire Hathaway paid ~ $3.4 bil. to federal government in relation to this "stock." The more the company reinvests in its business, the higher next year's earnings and tax payments are – i.e. the higher the dividends and the value of the AA stock are). Moreover, at any point in time, the federal government can change the % of earnings to be distributed to it (i.e. change the tax rate). If the government would ever decide to "go public" with a security of future Berkshire Hathaway tax payments, that stock would be very attractive. Wall Street would love it. In fact, at 35% tax rate, that stock could be worth as much as the entire Berkshire Hathaway.

Tuesday, January 25, 2005

The Wisdom of Warren Buffett

I spent 6 hours last week in Omaha with Warren Buffett. As I walked into the meeting I was pleasantly surprised to find Mr. Buffett dressed more like a scroungy sophomore chemistry student than the greatest investor of all time. It was an open Q&A session with some of my colleagues and me for about 3 hours.

Going into the meeting, I was thinking that I would receive a great deal of advice about investing and how to quantify intrinsic value. I figured he'd tell us all about "Mr. Market" and how his favorite holding period is forever. Then I figured we'd get around to his bet on the Euro or his belief that the market is irrational and inefficient. Or perhaps the second richest man in the world would, I don't know, talk about money?

Total time spent talking about any of the above: Zero. Zilch. Nada.

Let's get to what he DID talk about. As a big fan of "Top" lists, I've compiled the "Top 5" things (prioritized) I learned from Warren Buffett that day:

1. Be Grateful -

There are roughly 6 Billion people in the world. Imagine the worlds biggest lottery where every one of those 6 Billion people was required to draw a ticket. Printed on each ticket were the circumstances in which they would be required to live for the rest of their lives.

Printed on each ticket were the following items:

- Sex
- Race
- Place of Birth (Country, State, City, etc.)
- Type of Government
- Parents names, income levels & occupations
- IQ (a normal distribution, with a 66% chance of your IQ being 100 & a standard deviation of 20)
- Weight, height, eye color, hair color, etc.
- Personality traits, temperament, wit, sense of humor
- Health risks

If you are reading this blog right now, I'm guessing the ticket you drew when you were born wasn't too bad. The probability of you drawing a ticket that has the favorable circumstances you are in right now is incredibly small (say, 1 in 6 billion). The probability of you being born as your preferable sex, in the United States, with an average IQ, good health and supportive parents is miniscule.

Warren spent about an hour talking about how grateful we should all be for the circumstances we were born into and for the generous ticket we've been offered in life. He said that we should not take it for granted or think that it is the product of something we did - we just drew a lucky ticket. (He also pointed out that his skill of "allocating capital" would be useless if he would have been born in poverty in Bangladesh.)

2. Be Ethical & Fair

Continuing on the analogy above, consider this scenario:

Imagine that you were selected as the one person (out of 6 Billion) to create the systems of the world. This includes the type of government, social programs, tax systems, military systems, job markets, laws, regulations, etc.

The only catch was this: You had to come up with systems that you believed were fair and that you wanted to live with, before you were allowed to look at your ticket.

When Warren talked about this it made me reconsider the definition of ethical behavior - what type of system would you create if you didn't know what ticket you had drawn? Would you take a different position on some of the programs you are for or against if you were surrounded by a different set of circumstances?

3. Be Trustworthy

This may be a minor point that Mr. Buffett was trying to make, but he told a simple story that affected me greatly. He told of the Founder of the Nebraska Furniture Mart, one of his companies, and how she came from a poor Jewish family and couldn't read, write or speak English. She was had survived the Holocaust, spent 16 years bringing her family to the U.S. (at $50 per person), and grew the Nebraska Furniture Mart from a $500 initial investment to do $350 Million annually from a single location in Omaha.

She told Warren at one point that the way she evaluated people was simple: She simply asked herself, "Would they hide me?" What a great way to judge your instincts about whether to trust someone or not.

4. Invest in Your Circle of Competence

Warren talked at length about investing within your circle of competence. This applies as much to entrepreneurship as it does to investing in public securities. One thing that continually amazes me is how much discipline Warren has in never letting himself get excited about a deal that he doesn't understand. He understands his weaknesses, limitations, and the types of businesses that he gets.

He said that it is crucial that people clearly recognize what they don't understand, and place their effort and energy on businesses or career paths that allow them to bet big on

themselves doing something that they do understand. He said that it's "not so important how big the circle is, but it's important that you know where the perimeter is, and when you're outside of it."

5. Do What You Love

Perhaps the reason that we've heard this a million times is that it's true. Warren talked at length about how excited he is to wake up in the morning and to do what he loves. He talked about how important it is to have the freedom in your life to paint your own canvas any way that you like. He said that many people talk about how they are going to just work at a high-paying job "for a little while" and then go do what they love - he equated that to "saving up sex for old age." He said to "never do something that doesn't excite you or that you dislike."

Not the advice you'd expect from somebody worth over $40 Billion?

I only hope that as I gain success throughout my career that I can mirror the image of humility, charity, intelligence, optimism and justice that Warren Buffett represents.

Meeting with Warren Buffett 28Jan05 – synthesized notes by topic

<u>On investing…</u>

How Warren spends his day:

- Wakes up at 6:45, reads paper at home, often doesn't make it into the office until after the market opens
- No set schedule, WB hates having a full calendar
- Always takes reading material home
- Spends 80% of the day reading, 20% talking on the phone (he then said it might be more like 90/10)
- Phone conversations are generally short

Investment process:

- In the past some things were cheap enough WB could decide in a day (this was somewhat a function of a time period where companies would sell at 2-3x earnings)
- Decisions should be obvious to onlookers. You should be able to explain why you bought something in a paragraph.
- "I don't do DCF" (WB says he does a rough approximation in his mind)
- Finding ideas is a function of cumulative knowledge over time. Something just comes along – usually an event takes place, like a good management team screwing up – that creates the opportunity (WB seems to imply here that his reading isn't specifically targeted at finding ideas, but rather that ideas jump out at him as a natural consequence of vociferous reading)
- You must be patient…good ideas tend to be clustered together, and may not come at even time intervals…when you don't find anything for a while it can be irritating
- WB isn't bothered by missing something outside his circle of competence
- Missing things inside the circle is nerve racking…examples include WMT, FNM

Advice for new investors:

- Don't worry too much about your mistakes
- Don't learn too much from your mistakes
    - Don't become Mark Twain's frog that never sat again on a stove after being burned
    - BUT…never be willing to play a "fatal" game
- Don't confuse social progress with the chance to make money – look at airlines and autos for examples
- Law degree is not essential, but good if you think it will help in your specific career
- Learning to think like a lawyer is a valuable trait
- Allocate even more of your day to reading than he does
- Read lots of K's and Q's – there are no good substitutes for these
- Read every page
- Ask business managers the following question: "If you could buy the stock of one of your competitors, which one would you buy? If you could short, which one would you short?"
- Always read source (primary) data rather than secondary data
- If you are interested in one company, get reports for competitors. "You must act like you are actually going into that business, and if you were, you'd want to know what your competitors were doing."

Why more people don't follow his advice:

- The advice doesn't promise enough…it's not a "get rich quick" scheme, which is what a lot of other philosophies promise
- WB mentioned that when he was really young he started investing using technical analysis, but found that he never could make any money with it
- "I realized that technical analysis didn't work when I turned the chart upside down and didn't get a different answer."
- After seeing that charting didn't work, he switched to Graham…it made sense and it worked

What Warren reads:

- Most of reading includes K's, Q's and 5 newspapers daily
- Hasn't found much worthwhile book reading outside of Graham and Fisher

Advice to non-professional investors:

- If you like spending 6-8 hours per week working on investments, do it
- If you don't, then dollar cost average into index funds. This accomplishes diversification across assets and time, two very important things.
- "There is nothing wrong with a 'know nothing' investor who realizes it. The problem is when you are a 'know nothing' investor but you think you know something."
    - NOTE: this is analogous to the concept of 'metaknowledge' that Mauboussin talked about…there's also a Confucius quote on this

Avoiding human misjudgment:

- WB said repeatedly that it doesn't take above a 125 IQ to do this…in fact, IQ over this amount is pretty much wasted. It's not really about IQ.
- Staying within circle of competence is paramount
- When you are within the circle, keep these things in mind:
    - Don't get in a hurry
    - You are better off not talking to others
    - Just keep looking until you find something (don't give up)
    - Good ideas come in clumps – by time, by sector, by asset class

Discount rates used for valuation:

- Use a long term normalized interest rate for Treasuries…e.g. 6%
- Don't use different discount rates for different businesses…it doesn't really matter what rate you use as long as you are being intellectually honest and conservative about future cash flows.
- Only want one variable to compare in order to assess the viability of an investment – price versus value. If we allowed discount rates to change it would lead to more than one variable.
- WB's assessment of the risk of a company is baked into the probabilities for future cash flow scenarios of the company
- "I don't know what the true cost of capital is for a business unless we own it"

Starting a fund from scratch today:

- Probably would do the same thing he did before

On Berkshire…

Managing Berkshire:

- Focused hard on creating a company over time that he would like today…built the company around the way he likes to work
- Hates meetings, managing people, and company rituals
- BRK has no general counsel or IR
- Directors meet in person only once per year
- 17 people employed at HQ
- "I don't call managers of my businesses, they call me"

Buying businesses:

- The first question I ask is: "Does the owner love the business or does he/she love the money?" It's very easy to tell the difference.
- I am proud to be able to provide a good home for many businesses. It is like finding a home for a painting. Business owners who are looking to sell can either sell their businesses to Berkshire (like putting painting in the Metropolitan Museum of Art) or sell to an LBO and let them tear it up, dress up the accounting, and resell it (like selling a painting to a porn shop).

Why he has a large cash position:

- Can't find things to buy
- In the past there were times it was like shooting fish in a barrel…sometimes even like shooting idle fish in a barrel…it's not like that now, but there will be times in the future when it will be like that again
- Berkshire is currently putting a few billion to work buying a stock, but it wouldn't trouble him deeply if they were not able to take the position

On specific industries or companies…

Subprime mortgage industry:

- There are similarities between subprime and manufactured housing financing
- The most important factor for the subprime industry is the health of the economy, which has been good of late
- Securitization moves the ultimate lender farther away from borrower, which is what causes problems
- A shock will probably not occur unless we see materially higher long interest rates…200-300bps
- As long as participants in that industry are charging a high enough interest rate to account for the inherent credit risk, it should be okay.
- As far as housing prices go, there won't be a problem until the collateral value falls below the value of the loan
- "We haven't played in that [the subprime industry] yet, but we do own H&R Block, which does some of those loans, although they don't keep the paper."
- REIT structures in the subprime industry aren't necessarily a bad thing
- The economy is going to be far more important than the structure used

Competitive advantage and business model in banking:

- Banking is a good business - many banks earn high returns on tangible equity
- "Charlie and I have been surprised at how much profitability banks have, given that it seems like a commodity business."
- Underestimated how sticky customers are and how unaware they are of fees banks charge them
- WFC - $4.00 per share after full taxes on $15 of tangible equity
- If you have a well run bank, you don't need to be the #1 bank in an area
- Bank ROA is not highly correlated to size
- You may have to pay 3x tangible equity to buy a bank
- Only problem with banks is that sometimes they get crazy and do dumb things…'91 was a good example
- If a bank doesn't do dumb things on the asset side, it will make good money

Auto industry outlook (especially GM):

- GM bonds are currently selling at B spreads
- Auto industry is a very tough business
- In the '60's GM had over 50% of the US car market…people thought they were impenetrable
- GM did dumb labor deals when the accounting didn't require accruals for costs
- GM is now a terrible life/health benefits company with an auto business attached
    - Auto business is well managed, but labor issues are just killer
- 2000 auto companies were started after Henry Ford – there are now 3 left in the US – no money has been really made over time

Musings on Coke:

- The chance that Coke is not the leader in the carbonated beverage business in the future is very small
- Candy bars become very entrenched in their markets and are hard to unseat…they don't travel well into new markets
- Coke travels well into new markets
- One of the most important thing about Coke as a consumer product is that Coke does not have a "taste memory." In other words, the taste of Coke doesn't accumulate in your mouth. This is what makes it easy for some people to have 3,4,5+ Cokes each day. They never tire of it because there is no taste residue. Orange or grape soda accumulates and you get sick of it. Same thing with chocolate. There is no diminishing marginal utility of taste for Coke. WB doesn't believe there has ever been a word written about this phenomenon.

<u>On currencies…</u>

Bet against the dollar / currency hedging:

- Currently owns over $20B in foreign currency
- No strong feeling on which currencies will do best against the dollar
- Increasing interest rates will also add to debt service burden to foreigners

- Every day US consumes 5% more than we produce…US is like an enormously wealthy family with a very large farm, and we keep mortgaging larger and larger pieces of it to foreigners
- Foreigners own net $3T of US securities…goes up $2B per day
- This is no a "doom and gloom" bet on the US – still a great country with great infrastructure
- Formulated thesis after reading Bureau of Economic Analysis data
- In November trade imbalance with China was $16B ($190B annualized)
- This is not a short term bet…don't know where the dollar is going over the next year…this is a five year bet
- Typical investor should not make the same bet unless one found a foreign stock that was attractive…could buy the stock and leave the currency risk unhedged
- WB never hedges currency risk when he buys a foreign security because he likes the extra diversification it provides

Impacts of the potential revaluation of the Yuan:
- If it revalues 10-20% it probably won't have a material impact because the discrepancy between labor costs in China and US is so large
- It is unlikely that China will remove the peg
- Wal-Mart is opening up big in China

The future of the Euro:
- There will be strains, but it should be fine over the long term
- WB believes it has been a good thing for Europe and the world

On inflation…

Inflation and the CPI:
- CPI is flawed as a measure of inflation
- Average person's CPI has a very different composition than the weighted CPI used to calculate inflation
- CPI understates human consumption
- Businesses often have contracts that range from 90 to 360 days, therefore inflation lags substantially
- Eventually higher raw material costs will get passed through to the consumer
- Health care is 6% of CPI, but 14% of GDP
- Home ownership was taken out of the CPI 20 years ago and replaced by an imputed rent amount
    - Rental rates have not risen since then but home prices have…the increased burden of higher home prices has been fortunately offset for a while by lower interest rates

On commodities…

Oil and natural gas:
- Everyone thinks oil has moved a lot…you have to consider the weakening of the dollar…if you look at oil priced in Euros it has not moved a lot…same situation with gold

- We have seen a real increase in many raw materials…coal is a good example; very scarce right now
- WB doesn't play the game of betting on the price of oil or commodities often
- Natty – MidAmerican is looking at an Alaskan pipeline
- Alaska has 80T-90T cubic feet of natural gas (a lot)
- Trouble with Alaska opportunity:
    - $2/mcf transport costs
    - Takes 6-7 years to build pipeline – hard to make 6-7 year commitment with uncertain future price outlook
    - Same issue with LNG terminal build-out
- Most commodity companies don't trust current prices because they've been burned too many times on price
- Oil exploration in the US is tough
- Today our onshore production is 6MM barrels/day
- We used to be self-sufficient in oil production, to the point where we had to periodically shut down because we were producing too much
- US is the most explored oil province in the world – haven't found a real elephant in the lower 48 states in 30-40 years
- BRK is not tempted to bet in the oil exploration business in any material way

Aluminum:
- No real opinion on it
- The problem with raw materials businesses is that there's no brand identity…no one ever says, "I want a Coke only if it comes in an Alcoa aluminum can"
- Aluminum, to a large degree, is just stored up electricity, because power is such a huge component of its production cost

<u>On public policy…</u>

Privatizing social security:
- We must remember that social security is not for you or me
- 10-20 million people will not be able to support themselves when they are old
- A rich society like the US should provide that support for its citizens (before one is productive a society should provide good schools, and after one is productive, a society should provide financial support).
- Don't think it's good to let less competent investors do it on their own…they need help, they are not "wired" to be good investors, and it's our responsibility to help provide them with the highest SS base possible
- Privatization plan would lower the base and require you to invest to make up the difference

Miscellaneous…

Impact of emerging economies on US:

- Don't think it will be anything dramatic

Social activities:

- Spends 1-2 hours 4-5 times per week playing bridge

Charity:

- Doing charity work is the opposite of investing – with charity, we look for the most difficult problem to solve and the ones that have the lowest probability of success
- WB is giving guidelines to trustees (see above), but he's not dictating exactly where he wants to give. WB realizes that he will have no idea what the big problems will be in the distant future after he's gone

Warren's success:

- "I was born wired to allocate capital well." If I was born in Bangladesh and I walked down the street explaining that "I allocate capital well", the townspeople would say "get a job".
- Bill Gates says that if I was born 1000 years ago, I wouldn't survive because I am not fast or strong. I would find myself running from a lion screaming "I allocate capital well!!"

Warren Buffett

Chairman and CEO of Berkshire Hathaway

I had two mentors: my dad, Howard Buffett, and Ben Graham. Here were these two guys who I revered and who over the years gave me tons of good advice. But when I think about what they said to me, the truth is, the first thing that comes to mind is bad advice.

I was not quite 21 when this happened, in 1951, and just getting out of business school at Columbia. I had just taken Ben's class there -- and I was the most interested student you ever saw. I wanted to work for Ben at Graham-Newman Corp., and I had famously gone to him and offered to work for nothing. He said no.

But I still was determined to go into the securities business, and that's where Ben and my dad gave me the bad advice. They both thought it was a bad time to start. One thing on their minds was that the Dow Jones industrials had been above 200 all year, and yet there had never been a year when it didn't sell below 200. So they both said, "You'll do fine, but this is not a good time to start."

Now there's one thing that may have influenced my dad, and maybe Ben too. I was so immature. I was not only young-looking, I was young-acting. I was skinny. My hair looked awful. Maybe their advice was their polite way of saying that before I started selling stocks, I needed to mature a little, or I wasn't going to be successful. But they didn't say that to me; they said the other. Anyway, I didn't pay any attention. I went back to Omaha and started selling securities at my dad's firm, Buffett Falk.

My dad was a totally independent thinker. I suppose the fact that he was has influenced my own thinking some when it comes to buying stocks. Ben instructed me some there too. He said, "You're neither right nor wrong because others agree with you. You're right because your facts and reasoning are right."

Now, Ben -- I started learning from him when I read his books on investing at the University of Nebraska. I had tried all kinds of investing up to then, but what he said, particularly in The Intelligent Investor, just lifted the scales from my eyes -- things like "margin of safety" and how to use "Mr. Market" rather than letting him use you. I then went to Columbia just to take his class and later got that turndown when I asked him for a job. But I kept thinking about that idea when I went back to Omaha. I kept trying to sell Ben stocks and pestering him, sort of. And finally one day in 1954 I got a letter from him saying something to the effect of the next time you're in New York, I'd like to talk to you about something. I was elated! And I made a point of getting to New York immediately.

I went to work for Ben in August 1954, without ever having asked what my salary would be. It turned out to be $12,000, plus the next year I got a $2,000 bonus. I worked for both parts of the business: Graham-Newman was a regulated investment company, and Newman & Graham Ltd. was what we'd today call a hedge fund. But together they ran only $12 million!

Walter Schloss and I -- though he left before long to start a hedge fund -- worked together in a little room. We had a lot of fun with each other, plus we kept poring through the manuals, looking for

cheap stocks. We never went out to visit any companies. Ben thought that would be cheating. And when we found something terrific, Ben would put 50,000 bucks into it.

By early 1956, Ben was planning to leave the firm to go to California. And I had already decided by then to go back to Omaha. I had a terrible time telling Ben about that: I'd go into his office and come back, and then go in and not do it, for a really long time. But his reaction was kind of the same as my dad would have had: whatever's best for you.

I had $9,800 at the end of 1950, and by 1956 I had $150,000. I figured with that I could live like a king. And I didn't know what I was going to do in Omaha. Maybe go to law school. I did not have a plan. I certainly didn't know I was going to start an investing partnership. But then a couple of months later, seven people wanted me to invest their money for them, and a partnership was the way to do it. And that began it all.

--2005

Buffett: Cut your gains!

In his 2006 letter to Berkshire Hathaway shareholders, Warren Buffett explains how costly it can be to let advisors come between you and your money.

By Warren Buffett
March 6, 2006: 5:54 AM EST

(FORTUNE Magazine) - *Warren Buffett often uses his annual report to comment on subjects he believes of importance to today's markets. Here, from the report published Saturday, is an allegory about "How to Minimize Investment Returns."*

It's been an easy matter for Berkshire and other owners of American equities to prosper over the years.

Between Dec. 31, 1899, and Dec. 31, 1999, to give a really long-term example, the Dow rose from 66 to 11,497. (Guess what annual growth rate is required to produce this result; the surprising answer is at the end of this piece.)

This huge rise came about for a simple reason: Over the century, American businesses did extraordinarily well and investors rode the wave of their prosperity. Businesses continue to do well. But now shareholders, through a series of self-inflicted wounds, are in a major way cutting the returns they will realize from their investments.

The explanation of how this is happening begins with a fundamental truth: With unimportant exceptions, such as bankruptcies in which some of a company's losses are borne by creditors, the most that owners in aggregate can earn between now and Judgment Day is what their businesses in aggregate earn. True, by buying and selling that is clever or lucky, investor A may take more than his share of the pie at the expense of investor B.

And, yes, all investors feel richer when stocks soar. But an owner can exit only by having someone take his place. If one investor sells high, another must buy high. For owners as a whole, there is simply no magic -- no shower of money from outer space -- that will enable them to extract wealth from their companies beyond that created by the companies themselves.

Indeed, owners must earn less than their businesses earn because of "frictional" costs. And that's my point: These costs are now being incurred in amounts that will cause shareholders to earn far less than they historically have.

To understand how this toll has ballooned, imagine for a moment that all American corporations are, and always will be, owned by a single family. We'll call them the Gotrocks. After paying taxes on dividends, this family -- generation after generation -- becomes richer by the aggregate amount earned by its companies.

Today that amount is about $700 billion annually. Naturally, the family spends some of these dollars. But the portion it saves steadily compounds for its benefit. In the Gotrocks household everyone grows wealthier at the same pace, and all is harmonious.

But let's now assume that a few fast-talking Helpers approach the family and persuade each of its members to try to outsmart his relatives by buying certain of their holdings and selling them certain

others. The Helpers -- for a fee, of course -- obligingly agree to handle these transactions. The Gotrocks still own all of corporate America; the trades just rearrange who owns what.

So the family's annual gain in wealth diminishes, equaling the earnings of American business minus commissions paid. The more that family members trade, the smaller their share of the pie and the larger the slice received by the Helpers. This fact is not lost upon these broker-Helpers: Activity is their friend, and in a wide variety of ways, they urge it on.

After a while, most of the family members realize that they are not doing so well at this new "beat my brother" game. Enter another set of Helpers. These newcomers explain to each member of the Gotrocks clan that by himself he'll never outsmart the rest of the family. The suggested cure: "Hire a manager -- yes, us -- and get the job done professionally."

These manager-Helpers continue to use the broker-Helpers to execute trades; the managers may even increase their activity so as to permit the brokers to prosper still more. Overall, a bigger slice of the pie now goes to the two classes of Helpers.

The family's disappointment grows. Each of its members is now employing professionals. Yet overall, the group's finances have taken a turn for the worse. The solution? More help, of course.

It arrives in the form of financial planners and institutional consultants, who weigh in to advise the Gotrocks on selecting manager-Helpers. The befuddled family welcomes this assistance. By now its members know they can pick neither the right stocks nor the right stock pickers. Why, one might ask, should they expect success in picking the right consultant? But this question does not occur to the Gotrocks, and the consultant-Helpers certainly don't suggest it to them.

The Gotrocks, now supporting three classes of expensive Helpers, find that their results get worse, and they sink into despair. But just as hope seems lost, a fourth group -- we'll call them the hyper-Helpers -- appears. These friendly folk explain to the Gotrocks that their unsatisfactory results are occurring because the existing Helpers -- brokers, managers, consultants -- are not sufficiently motivated and are simply going through the motions. "What," the new Helpers ask, "can you expect from such a bunch of zombies?"

The new arrivals offer a breathtakingly simple solution: Pay more money. Brimming with self-confidence, the hyper-Helpers assert that huge contingent payments -- in addition to stiff fixed fees -- are what each family member must fork over in order to really outmaneuver his relatives.

The more observant members of the family see that some of the hyper-Helpers are really just manager Helpers wearing new uniforms, bearing sewn-on sexy names like HEDGE FUND or PRIVATE EQUITY. The new Helpers, however, assure the Gotrocks that this change of clothing is all-important, bestowing on its wearers magical powers similar to those acquired by mild-mannered Clark Kent when he changed into his Superman costume. Calmed by this explanation, the family decides to pay up.

And that's where we are today: A record portion of the earnings that would go in their entirety to owners -- if they all just stayed in their rocking chairs -- is now going to a swelling army of Helpers. Particularly expensive is the recent pandemic of profit arrangements under which Helpers receive large portions of the winnings when they are smart or lucky, and leave family members with all the losses -- and large fixed fees to boot -- when the Helpers are dumb or unlucky (or occasionally crooked).

A sufficient number of arrangements like this -- heads, the Helper takes much of the winnings; tails, the Gotrocks lose and pay dearly for the privilege of doing so -- may make it more accurate to call the family the Hadrocks. Today, in fact, the family's frictional costs of all sorts may well amount to 20 percent of the earnings of American business. In other words, the burden of paying Helpers may cause American equity investors, overall, to earn only 80 percent or so of what they would earn if they just sat still and listened to no one.

Long ago, Sir Isaac Newton gave us three laws of motion, which were the work of genius. But Sir Isaac's talents didn't extend to investing: He lost a bundle in the South Sea Bubble, explaining later, "I can calculate the movement of the stars, but not the madness of men." If he had not been traumatized by this loss, Sir Isaac might well have gone on to discover the fourth law of motion: *For investors as a whole, returns decrease as motion increases*.

Here's the answer to the question posed at the beginning of this piece: To get very specific, the Dow increased from 65.73 to 11,497.12 in the 20th century, and that amounts to a gain of 5.3 percent compounded annually. (Investors would also have received dividends, of course.) To achieve an equal rate of gain in the 21st century, the Dow will have to rise by Dec. 31, 2099, to -- brace yourself -- precisely 2,011,011.23. But I'm willing to settle for 2,000,000; six years into this century, the Dow has gained not at all.

To: Berkshire Hathaway Managers (“The All-Stars”)

From: Warren E. Buffett

Date: September 27, 2006

The five most dangerous words in business may be “Everybody else is doing it.” A lot of banks and insurance companies have suffered earnings disasters after relying on that rationale.

Even worse have been the consequences from using that phrase to justify the morality of proposed actions. More than 100 companies so far have been drawn into the stock option backdating scandal and the number is sure to go higher. My guess is that a great many of the people involved would not have behaved in the manner they did except for the fact that they felt others were doing so as well. The same goes for all of the accounting gimmicks to manipulate earnings – and deceive investors – that has taken place in recent years.

You would have been happy to have as an executor of your will or your son-in-law most of the people who engaged in these ill-conceived activities. But somewhere along the line they picked up the notion – perhaps suggested to them by their auditor or consultant – that a number of well-respected managers were engaging in such practices and therefore it must be OK to do so. It’s a seductive argument.

But it couldn’t be more wrong. In fact, every time you hear the phrase “Everybody else is doing it” it should raise a huge red flag. Why would somebody offer such a rationale for an act if there were a good reason available? Clearly the advocate harbors at least a small doubt about the act if he utilizes this verbal crutch.

So, at Berkshire, let’s start with what is legal, but always go on to what we would feel comfortable about being printed on the front page of our local paper, and never proceed forward simply on the basis of the fact that other people are doing it.

A final note: Somebody is doing something today at Berkshire that you and I would be unhappy about if we knew of it. That’s inevitable: We now employ well over 200,000 people and the chances of that number getting through the day without any bad behavior occurring is nil. But we can have a huge effect in minimizing such activities by jumping on anything immediately when there is the slightest odor of impropriety. Your attitude on such matters, expressed by behavior as well as words, will be the most important factor in how the culture of your business develops. And culture, more than rule books, determines how an organization behaves.

Thanks for your help on this. Berkshire’s reputation is in your hands.

Warren Buffett on Walter Schloss

Let me end this section by telling you about one of the good guys of Wall Street, my long-time friend Walter Schloss, who last year turned 90. From 1956 to 2002, Walter managed a remarkably successful investment partnership, from which he took not a dime unless his investors made money. My admiration for Walter, it should be noted, is not based on hindsight. A full fifty years ago, Walter was my sole recommendation to a St. Louis family who wanted an honest and able investment manager.

Walter did not go to business school, or for that matter, college. His office contained one file cabinet in 1956; the number mushroomed to four by 2002. Walter worked without a secretary, clerk or bookkeeper, his only associate being his son, Edwin, a graduate of the North Carolina School of the Arts.Walter and Edwin never came within a mile of inside information. Indeed, they used "outside" information only sparingly, generally selecting securities by certain simple statistical methods Walter learned while working for Ben Graham. When Walter and Edwin were asked in 1989 by Outstanding Investors Digest, "How would you summarize your approach?" Edwin replied, "We try to buy stocks cheap." So much for Modern Portfolio Theory, technical analysis, macroeconomic thoughts and complex algorithms.

Following a strategy that involved no real risk – defined as permanent loss of capital – Walter produced results over his 47 partnership years that dramatically surpassed those of the S&P 500. It's particularly noteworthy that he built this record by investing in about 1,000 securities, mostly of a lackluster type. A few big winners did not account for his success. It's safe to say that had millions of investment managers made trades by a) drawing stock names from a hat; b) purchasing these stocks in comparable amounts when Walter made a purchase; and then c) selling when Walter sold his pick, the luckiest of them would not have come close to equaling his record. There is simply no possibility that what Walter achieved over 47 years was due to chance.
I first publicly discussed Walter's remarkable record in 1984. At that time "efficient market theory" (EMT) was the centerpiece of investment instruction at most major business schools. This theory, as then most commonly taught, held that the price of any stock at any moment is not demonstrably mispriced, which means that no investor can be expected to overperform the stock market averages using only publicly-available information (though some will do so by luck). When I talked about Walter 23 years ago, his record forcefully contradicted this dogma.

And what did members of the academic community do when they were exposed to this new and important evidence? Unfortunately, they reacted in all-too-human fashion: Rather than opening their minds, they closed their eyes. To my knowledge no business school teaching EMT made any attempt to study Walter's performance and what it meant for the school's cherished theory. Instead, the faculties of the schools went merrily on their way presenting EMT as having the certainty of scripture. Typically, a finance instructor who had the nerve to question EMT had about as much chance of major promotion as Galileo had of being named Pope. Tens of thousands of students were therefore sent out into life believing that on every day the price of every stock was

“right” (or, more accurately, not demonstrably wrong) and that attempts to evaluate businesses – that is, stocks – were useless. Walter meanwhile went on over performing, his job made easier by the misguided instructions that had been given to those young minds. After all, if you are in the shipping business, it’s helpful to have all of your potential competitors be taught that the earth is flat.

Maybe it was a good thing for his investors that Walter didn’t go to college.

Study Visit to Berkshire Hathaway by MBA Students from Terry College of Business at the University of Georgia

January, 2007

This document is a transcript of some questions asked by the students and Warren Buffett's answers.

Compiled by Sham Gad

http://shamgad.blogspot.com

Opening Remarks by Warren Buffett

Everyone has the potential to achieve their dreams. The point is to get out of each of us what we are capable of producing. I will invite you to play a game. Suppose that when this class ends, you have one hour to pick a classmate that you will own 10% of his or her earnings for the rest of their life. Besides picking the one with the richest father (laughter) you would choose the person who is most effective. I would predict that you would not necessarily pick the student with the best grades or highest IQ. Instead, you would look for someone with the most integrity and intelligence. Think about the person that has a 300 horsepower motor and operates at 300hp and compare that person to someone who has a 400hp motor but operates at 150hp. You would pick the 300hp everyday.

My point is to suggest that you should become an effective human being...the chains of habit are too light to feel until they are too heavy to break!

Highlights of the Q&A

Given the steady decline in the textile industry in the Northeast and the economically depressed nature of New Bedford and other companies in the industry what made you purchase Berkshire Hathaway at the time that you did?

Buffett: Well in 1962 I learned from Ben Graham how to assess businesses. He also had the cigar butt analogy for buying businesses...you can usually get one good puff out of it and it's free. Berkshire made a lot of money after WWII (more than Pfizer and Merck) and then it steadily went downhill. Between 1955 and 1965 Berkshire went from 12 mills to 2 mills and they bought their own stock as mills closed. We bought 100,000 shares out of 1 million in 1962 at $7 3/8 and the company had $10-11/share in working capital. I knew I wouldn't lose money because of the working capital. It was losing money but it was also liquefying assets by closing mills.

Seabury Stanton was running Berkshire at the time and I went to go visit him. We had an agreement that Berkshire would tender $11-1/2 for my shares of the company. At this point, I could not buy any stock as I had inside information. A few weeks later I received a letter from Old Colony Trust containing a tender offer of $11-3/8. Early the following week, Seabury tendered the stock at 11 3/8. As result, I began buying more Berkshire. Other family members of Seabury Stanton sold their shares to me and I gained controlling interest in the company. The family members weren't very happy with Seabury either really. We ran the mills until 1985. .

See's Candy is an example of low rate of return on capital expenditures individually yet the company as a whole makes loads of money because of the great brand of See's. We bought See's in 1972 and every year since then we have raised the prices the day after Christmas and it never hurt the business. When we invest we ask one question, how long do you have to wait to raise the prices? If you are an airline today and you try to raise your prices, an

hour later, you will be lowering them because of competition. Not the case with a good brand like See's. If I were to give you a $100 million, I'm not going to, but if I did, you could not damage the See's brand in the minds of 30 or so million Californians. Only See's can do that. Their brand is their promise to provide the quality and service that people have grown to expect.

Mr. Buffett, you have described Berkshire Hathaway as your masterpiece painting, a masterful business entity that has compounded shareholders equity at 21.5% per year since you have taken over. You have described your work as being a capital allocator and that it has been a joy for you to do that work all your life. In July 2006 you allocated all the Berkshire Hathaway shares you accumulated to the Bill and Melinda Gates Foundation and four other foundations. This act was enormous in its scope, brilliant in execution, and magnanimous in its goal. It now becomes the Bill and Melinda Gates Foundations' job to allocate $15,000,000 each and every business day because of your donations. In your mind which part of this incredible act was most important or most concerning to you and why?

Buffett: I actually gave the stock away 15 years ago in my mind, created a trust mentally. When my wife died, I was forced to do something. Soon after I discussed my plans with Bill and Melinda they gave me an original copy of Adam Smith's Wealth of Nations. In the first chapter Adam Smith talks about "Specialization of Labor", which talks about markets and allowing countries to specialize and work on what they are good at. Mike Tyson doesn't try to run Berkshire, and I don't try to get in the ring with Mike Tyson. This is how I look at philanthropy. I started looking for people that were younger, smarter, more experienced, and doing it with their own money. I looked for people that had similar goals, who would do the best with the money. In effect, I outsourced the handling of my philanthropy. It was a no brainer.

In the Fortune article, I stated that business is a game that I love because I get to hit the easy pitches. Ted Williams had written a book about hitting and he said to succeed in baseball, you had to wait for the best pitch. See's Candies to me was an easy pitch. It is not like Olympic diving, where one could do a simple dive perfectly, but score lower than someone who might have made a big splash attempting a more difficult dive. In diving you are judged on the degree of difficulty.

Philanthropy is the opposite of investing with degree of difficulty. Philanthropy deals with trying to solve the toughest problems in society, so you expect to fail very often. I personally don't like failing, so I'd rather let someone else do it. I wouldn't personally enjoy working on something where I couldn't get any feedback on how I was doing and in fact, expected the project to fail. My lifespan is 12 years now and I should be able to add tens of billions of dollars to my "donation" in that time. I am going to stick with what I love doing and I am glad others will work on giving the money away.

I'm just lucky to have been in the right place at the right time. Another place, another time, I wouldn't have been as successful. Society enabled me to make my money and my money

should go to society.

You have said that the last 50 or so years were a unique time for investing in American securities markets—numerous mis-pricings. Do you believe that something like this will happen again? And if you were 26 today and you had only a $1,000,000 how would you generate the 50% returns that you said you might do with smaller amounts of capital?

Buffett: Attractive opportunities come from observing human behavior. In 1998, people behaved like frightened cavemen (referring to the Long Term Capital Management meltdown). People make their own opportunities. They will be frozen by fear, excited by greed and it doesn't matter what their IQ, degrees etc is. Growth of 50% per year is with small capitalization, not large cap. The point is I got rich looking for stock with strong earnings.

The last 50 years weren't unique. It's just capitalizing on human behavior. It's people that make opportunities when others are frozen by fear or excited by greed. Human behavior allows for success if you are able to detach yourself emotionally.

In 1951, I got out of school at 20 years old. At the time there were two publishers of stock information, Moody's and Standards and Poor's. I used Moody's and went through every manual. I recently bought a copy of the 1951 Moody off of Amazon. On page 1433, there's a stock you could have made some money on. The EPS was $29 and the Price Range was from $3-$21/share. On another page, there is a company that had an EPS of $29.5 and the price range was $27-28, 1x earnings. You can get rich finding things like this, things that aren't written about.

A couple of years ago I got this investment guide on Korean stocks. I began looking through it. It felt like 1974 all over again. Look here at this company...Dae Han, I don't know how you pronounce it, it's a flour company. It earned 12,879 won previously. It currently had a book value of 200,000 won and was earning 18,000 won. It had traded as high as 43,000 and as low as 35,000 won. At the time, the current price was 40,000 or 2 times earnings. In 4 hours I had found 20 companies like this.

The point is nobody is going to tell you about these companies. There are no broker reports on Dae Han Flour Company. When you invest like this, you will make money. Sure 1 or 2 companies may turn out to be poor choices, but the others will more than make up for any losses. Not all of them will be good, but some will and those will make you rich. And this didn't happen in 1932, this was in 2004! These opportunities will be there in the next 30 years. You'll have streaks where you'll find some bad companies and a few times where you'll make money with everything that you do.

The Wall Street analysts are brilliant people; they are better at math, but we know more about human nature.

In your investing life you will have several opportunities and one or two that can't go

wrong. For example, in 1998 the NY fed offered a 30-year treasury bonds yielding less then the 29-½ year treasury bonds by 30 basis points. What happened was LTCM put a trade on at 10 basis points and it was a crowded trade, they were 100% certain to make money but they could not afford any hiccups. I know more about human nature; these were MIT grads, really smart guys, and they almost toppled the system with their highly leveraged trading.

This was definitely a good time to act.

When looking at other countries Mr. Buffett, do you look at the country's overall financial status or do you look at the financials of that specific company in a foreign country? You mentioned investing in Korean companies – do you ever look at the state of the country you are investing in?

Buffett: We care about the country where the company is run. There is a disadvantage being outside of the US. A few years ago we were looking to invest in either PetroChina or Yukos in Russia. We ended up picking PetroChina because the political situation was more stable. It turned out to be a good decision. I care about the country and the geopolitical environment I am investing in.

The whole company was selling for $35 billion. It was selling for one-fourth of the price of Exxon, but was making profits equal to 80% of Exxon. I was reading the annual report one day and in it I saw a message from the Chairman saying that the company would pay out 45% of its profits as dividends. This was much more than any company like this, and I liked the reserves. If it were a US company, it would sell for $85 billion; it's a good, solid company. I don't understand the Chinese culture like I understand the US culture. However it said right in their annual report that they will payout 45% of their earnings as dividends, basically they say if they make money they will pay it out. I invested $450 million and its now worth $3.5 billion. I decided I'd rather be in China than Russia. I liked the investment climate better in China.

In July, the owner of Yukos, Mikhail Khodorkovsky (at that time, the richest man in Russia) had breakfast with me and was asking for my consultation if they should expand into New York and if this was too onerous considering the SEC regulations. Four months later, Mikhail Khodorkovsky was in prison. Putin put him in. He took on Putin and lost. His decision on geopolitical thinking was wrong and now the company is finished. PetroChina was the superior investment choice. 45% was a crazy amount of dividends to offer but China kept its word. I am never quite as happy as I am in the US, because the laws are more uncertain elsewhere, but the point is to buy things cheap. Russia is just a bad geopolitical environment. On the other hand, China has kept their word on paying the dividends. In fact, when the dividends check comes in, it is calculated out 10 or so decimals, these guys keep their word. I don't know the tax laws in China, but you can buy a good business cheap. At Berkshire Hathaway, you have to spend hundreds of millions of dollars to move the needle. We have a problem of finding things worth investing in.

In respect to Africa how would you find above average stocks given the information cots and limitations in Africa? What is your best advice about obtaining acceptable information?

Buffett: There aren't too many companies in Africa that are big enough for Berkshire to look at, except for maybe DeBeers, Anglo-American, or SAB Miller. Also, there isn't a lot of information on these companies. I know South Africa has stock information available. The key is to get good information.

In comparison, Korea has plenty of information available. There is Kissline online. Within seconds I can get Korean Stock Exchange Information, Annual and even quarterly information. I'm not sure if the same is available online for South Africa. This is OK because I don't need to win every game, just the ones I play.

I have three mailboxes in my office – IN, OUT, and TOO HARD. I was joking with the MIT students that I should have a TOO HARD bin and they made me one, so now I have it and I use it. I will only swing at pitches that I really like. If you do it 10 times in your life, you'll be rich. You should approach investing like you have a punch card with 20 punch-outs, one for each trade in your life. I think people would be better off if they only had 10 opportunities to buy stocks throughout their lifetime. You know what would happen? They would make sure that each buy was a good one. They would do lots and lots of research before they made the buy. You don't have to have many 4X growth opportunities to get rich. You don't need to do too much, but the environment makes you feel like you need to do something all the time.

How would you define your character? And what portion of your character do you believe contributed the most to your success?

Buffett: The important qualities you need are intelligence, patience, and interest, but the biggest thing is to be rational. In '97-8, people weren't rational. People got caught up with what other people were doing. Don't get caught up with what other people are doing. Being a contrarian isn't the key, but being a crowd follower isn't either. You need to detach yourself emotionally. You need to think about what is going on around you. Being in Omaha helps me in that regard. When I was in NYC, I had 50 people whispering in my ear before noon. It's hard sometimes, like when the Internet craze hit. Nobody likes to see their neighbor doing stupid things and getting rich. It was like Cinderella's ball, I think I'll just have one more dance, it's not midnight yet. Sounds simple – but it is hard to leave the party. The problem with stocks is they don't have clocks. You don't know when it will be midnight so you can leave the party. My partner Charlie Munger and Tony Nicely at Geico are always rational. 160 IQs can say stupid things that sound good. People do silly things, whether they have 120 IQ or 160. You can always improve your rational thought. Rationality is the only thing that helps you. One thing that could help would be to write down the reason you are buying a stock before your purchase. Write down "I am buying Microsoft @ $300B because…" Force yourself to write this down. It clarifies your mind and discipline. This exercise makes you more rational.

What is your opinion on exchange-traded funds and how to do you accurately judge them?

Buffett: ETF's are a fairly low cost way to get into a market or industry. We don't hold any and never will. I recommend index funds for people who don't want to spend time studying the market. They are good for 95% of the population. If you don't bring anything to the game, you shouldn't expect to win.

How do you hope to tackle administrative costs when it comes to Aids treatment in Africa?

Buffett: Bill and Melinda Gates can tackle these issues better then I can. I work on giving them more money so they can have more to work with. I am better suited to raise the capital, let others do the work they are good at. We can do a lot more with private charities than the government can. We judge our success on how intelligent we attack a problem rather than success or failure. Bill Gates regards every human life as valuable; we in the US need the help much less then other countries do.

The inheritance or estate tax has continued to be debated on Capital Hill, yet your position has not changed in the fact that you feel this tax should be maintained. Could you please share your views on why legislators should not change this tax law?

Buffett: Well it's not a death tax. 2.2 million people die in the US and out of that only 4,000 estates will be taxed. The federal government collects $30 billion in tax revenue per year from estate taxes and a high percentage of the heirs of these estates will receive $50 million or more.

We have to ask ourselves what is the proper tax policy for our society. Let me illustrate with a game. Imagine 24 hours before your birth a genie comes to you and lets you design the world into which you will come. You define all of the political, economic, and societal facets of the world. But there is one catch. You have to draw a ticket from a pool of 6 billion. On this ticket will be your characteristics in this world, i.e. if you are born in the US or Bangladesh, if you are male or female, black or white, retarded or normal, etc. What would you do? You would design a world with rules that would initially foster abundance.

A world that produces lots of output where everyone is productive. You would create an abundant society. Secondly, you would want justice. You would want the output to be spread out. You would design a world where there was freedom from fear, freedom from fear of old age. You would want equality of opportunity, a market system, and that the best people were in the right places. You would want a world that would take care of the people who got the bad tickets. This has nothing to do with religion, I'm agnostic. At the time that I was born, the odds were about 50 to 1 that I was born in the United States. I won the ovarian lottery.

You would make sure all of the lucky tickets are incentivized to keep working. Also you

would want others to have equality of opportunity, not equality of outcome though. One bigger thing would be a good system of the rule of law. You would also want to make sure you have people in the right places according to their talents. You would also want to help others that have no opportunity. I could set it up so that my descendants would not have to work for ten generations. So I would end up effectively taking my descendants out of the pool of proactive people. The descendants of wealthy people could potentially become welfare recipients. Lots of families (I won't name names) create dynasties where society contributes to them just because they are part of the "lucky sperm club". Instead of using food stamps, they would have stocks and bonds. The estate tax modifies the ability to create a family dynasty that takes the descendants out of the work pool, the group of productive citizens.

We all participated in the ovarian lottery, it's probably the most important thing we have ever done. In fact, you all are in business school, you are pretty smart and you have a bright future ahead of you; if you had the chance to trade in your lottery ticket for the chance to pick 100 tickets of which you would have to take one. Would you do it? I would argue you should not. Out of the 100, only 4 or 5 would be born in the US. Out of that only not many would be headed on the path you are headed down. So we are part of the top 1% in society, we are pretty lucky. My descendants are part of the top 1 tenth of one percent of society. This means that you are in the luckiest 1% of the world.

Early on in you career you bought some land and then rented this out to some local farmers? Why didn't you pursue this type of investment in real estate?

Buffett: I made an initial investment farm real estate when I was 14. Someone else handled the whole transaction; I just bought 40 acres. A guy would farm the land and harvest X number bushels of soybean and sell if for $X per bushel at the market and say here is your check. I did virtually nothing for this investment. I had no idea if he actually harvested what he said he did, or if he sold the bushels he said he sold, or for that matter what price he sold it at. It's kind of like the guys who kept all his cows in with a big herd. As they are taking them to market, the owner of the big herd says, sorry but all of your cows died. How would you know which cows were yours?

In 1980 with the S&L crisis, land was selling for $2,000 an acre. Well, an acre produced 120 bushels of corn or 45 bushels of soybeans. At a couple dollars a bushel, this was basically $80 an acre in revenue. At the time with the interest rates, you would pay $150 per acre in interest. So you were taking in $80 and paying out $150, it just did not make sense. The bankers went crazy lending money at $2,000 an acre prices for farms at 10% interest rates to produce $80 an acre in crops. Well after a bunch of people lost big time, the FDIC took control of the farms and ended up selling them at $600 an acre, which at the time was a good deal. The FDIC took over hundreds of farms because people went crazy and lost their shirts.

The S&L's lost their fundamentals and the Government owned $100 million worth of properties they needed to dump at a low cost. This was an opportunity to make some

money, however I still don't like farms because they are too passive.
I still don't like farming. My son likes farming, I don't.

Mr. Buffett it has been well documented that you don't manage your managers. Do you possess a strong intuition about people or do you have a process when you evaluate the management of companies that you are looking to possible purchase?

Buffett: Good question. The question I ask is will they still work after they have sold their business? Do they love the money or the business? If it's the business, then we have a deal. If it's the money, and that's ok, it's just not what we are looking for. I don't have to identify all of the ten's out there; I just have to make sure the ones I make deals with are tens. I can't look at the class and say, "You're a 6.5. You're an 8." I just need to find a few 10s. Do I have an intuition when judging a business owner? Sometimes. People give themselves away; I don't know what it is. We don't have any contracts at Berkshire; people stay because they have a passion for their business and I don't want to screw that up. Not much changes at 65 years old. I have 40 CEO's working for companies owned by Berkshire. Since 1965, not one of them has left Berkshire Hathaway. If I told Lou Simpson of Geico to be at the office at 9am and he could only get one hour for lunch, he would leave. I don't need to identify every ten out there, just the ones we invest in.

Machiavelli said that a man could be feared and loved. But one might want to be more feared than loved. Do you agree with this? Has there ever been a situation where you had to be more feared than loved?

Buffett: I don't believe in fear as a manager. Ben Graham, Don Keough, and my dad are the people I have worked for and they never tried to get people to respond by fear. Certain industries may be conducive – platoon operators maybe – but even then, if you turn back and desert your buddies...I don't operate like that. I don't like this life. Probably certain circumstances call for it: operate this way for a policeman. I believe the most powerful force is love and that is the most effective way of dealing with people. I would not want to live a life where people are afraid of me. People don't operate well under fear. Some circumstances where mutually assured destruction is the end result, fear is good. But not at Berkshire Hathaway, love is way better to operate. By the way, how did Machiavelli do? There is no religion of Machiavelli 500 years later, is there?

Sometimes we learn more from our failures than our successes. What do you consider your greatest mistake or failure?

Buffett: I have made lots of failures of omission more than failures of commission. Things that I understand, there have been a few, a couple that cost $10B. If a business was selling cheap and I did not buy, I consider that a failure. As Charlie would say, I was sucking my thumb on that one. I made a terrible deal buying Dexter Shoe. I did not learn much from it either. I bought it for $400M, but the biggest mistake is that I gave up stock that is now

worth $3B.

You're going to make mistakes. You can't play in the game without making any mistakes. I don't think about it, I just move on. Most business mistakes are irreversible setbacks, but you get another chance. There are two things in life that you don't get another chance at – marrying the wrong person and what you do with your children. Business, you just go on. It's a mistake to dwell on mistakes, it's unproductive. It's like Mark Twain's story about the cat that sat on a hot stove – he never sat on a hot stove again, but he never sat on a cold one again either.

Talking about values and morality, is there a moral connection to whom you give your money to and why?

Buffett: Charlie and I went to Memphis to look at a chewing tobacco company. In the end, we decided we didn't want to own it. We would buy stock in a tobacco company, but we didn't want to own it.

A good example is Charlie's favorite company, Costco. They are the #3 distributor in the US of cigarettes, but you wouldn't avoid buying it because of that. You'll drive yourself crazy trying to keep track of these things. Our philosophy is that it's impossible to grade marketable securities, but we'll buy the stocks without any problems, but we just won't be in certain businesses.

My view is that energy production should move to nuclear. It's clean, cheap and safe. Coal emissions are bad for the environment; however it's still a good company. It's impossible to grade marketable securities on moral activity. Berkshire Hathaway has and will buy what trades, but will not buy companies that engage in certain behaviors. PetroChina owns 40% of the oil in the Sudan that is government owned. If they did not own it, someone else would. Also, you have to keep in mind, if PetroChina did not buy it its possible the Sudan would own 100% of the oil rights and that's not so good either.

I find it funny that people find time to protest PetroChina for ownership of the Sudanese oil, but with the $300 billion or so of imported goods from China, these same people don't protest Chinese goods. They protest investment in Chinese companies though.

Besides the type of management that you look for, when you look at financials you make decisions rather quickly. In regards to the financial information and the business overall what factors do you look at?

Buffett: We make quick decisions because we have filters before we get to the point of making a decision.

Filter #1 – Can we understand the business? What will it look like in 10-20 years? Take Intel vs. chewing gum or toilet paper. We invest within our circle of competence. Jacob's

Pharmacy created Coke in 1886. Coke has increased per capita consumption every year it has been in existence. It's because there is no taste memory with soda. You don't get sick of it. It's just as good the 5th time of the day as it was the 1st time of the day.

Filter #2 – Does the business have a durable competitive advantage? This is why I won't buy into a hula-hoop, pet rock, or a Rubik's cube company. I will buy soft drinks and chewing gum. This is why I bought Gillette and Coke.

Filter #3 – Does it have management I can trust?

Filter #4 – Does the price make sense?

Since 1972 we have made no change in the marketing, process etc. Take See's candy. You cannot destroy the brand of See's candy. Only See's can do that. You have to look at the brand as a promise to the customer that we are going to offer the quality and service that is expected. We link the product with happiness. You don't see See's candy sponsoring the local funeral home. We are at the Thanksgiving Day Parades though.

The End

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On January 19, 2007 I flew to Omaha, Nebraska to hand deliver a written question to Warren Buffett. A copy of the letter included as Appendix I.

The letter essentially addressed Mr. Buffett's early investments and asked:

> *If you were today 20-something years old, again looking to allocate less than $10 million, and free to allocate capital into well over 8,000 opportunities (before even considering anything overseas), would your Latticework of Mental Models primarily be searching for:*
>
> *a) Situations reminiscent of 1957 – akin to Daehan Flour Mills, or*
> *b) Situations reminiscent of 1987 – akin to Moody's Corporation?*

In response to my 1,091 word question, Mr. Buffett handwrote a response of eight words. See Appendix II.

Respectfully,

Shai Dardashti

Appendix I: Text of Letter to Warren Buffett

January 19, 2007

Warren Buffett
1440 Kiewit Plaza
Omaha, Nebraska 68131

Dear Warren:

Like the thousands of other young people who try to contact you, I've always been the kid in school who used to read the business section of the paper rather than the sports section while in high school and would check "yahoo finance" rather than "yahoo sports" while in college.

I first read The Warren Buffett Way when I was 13 and I walked into the local library looking for a book about investing. I first wrote to you when I was 17 when I figured I actually had a reason to make a plea for your attention. I first had the privilege to shake your hand at age 21 when I organized a student trip from University of Maryland.

I just traveled 1,000 miles on 48 hours of notice to shake your hand for a second time. And to hand deliver this letter to you.

My father escaped from Iran in 1967 – as a 12 year old, leaving his parents behind and surviving on his own in Philadelphia with an aunt. My mother is from a small town in Pennsylvania – many in her family were victims of the Holocaust. If you are actually reading this message, I am indeed one of the luckier people in the world.

I consider the luck to be able to deliver this communication to you on par with that of a philosophy student conversing with Plato; the odds for "time, technology, and temperament" to all align is a statistical anomaly. I could not have been handed a better ticket in the Ovarian Lottery.

I've read your Partnership Letters, the Letters to Berkshire Shareholders, and my fair share of articles that you have written and books that have been written about you - *yet still have a single looming question.*

Any guidance would be deeply appreciated.

My sincerest thanks,

Shai Dardashti (signed)

Mr. Buffett, on June 23, 1999 you shared with Business Week:

> *If I was running $1 million today, or $10 million for that matter, I'd be fully invested. Anyone who says that size does not hurt investment performance is selling.* ***The highest rates of return I've ever achieved were in the 1950s.*** *I killed the Dow. You ought to see the numbers. But I was investing peanuts then. It's a huge structural advantage not to have a lot of money. I think I could make you 50% a year on $1 million. No, I know I could. I guarantee that.*

More recently, Morningstar reported:

> *Munger also recalled a comment made by Buffett at the Berkshire annual meeting concerning how cheap Korean stocks had become during that country's financial meltdown in 2002: "There were flour mills trading at two times earnings.* ***Warren thought he was young again****."*

As I understand things, I recognize two "mental models" from your investment patterns over the years:

The "1957" Graham Approach

At a talk to Columbia students in 1993 you shared:

> *When I got out of Columbia the first place I went to work was a five-person brokerage firm with operations in Omaha. It subscribed to Moody's industrial manual, banks and finance manual and public utilities manual. I went through all those page by page.*
>
> *I found a little company called* ***Genesee Valley Gas*** *near Rochester . It had 22,000 shares out. It was a public utility that was earning about $5 per share, and the nice thing about it was you could buy it at $5 per share.*[1]
>
> *I found* ***Western Insurance*** *in Fort Scott, Kansas. The price range in Moody's financial manual...was $12-$20. Earnings were $16 a share. I ran an ad in the Fort Scott paper to buy that stock.*
>
> *I found* ***the Union Street Railway****, in New Bedford, a bus company. At that time it was selling at about $45 and, as I remember, had $120 a share in cash and no liabilities.*

[1] Even adjusting for inflation, 22K shares at $5 each implies a market cap well below $1 million.

Along similar lines, in late 2005 I understand you explained to a group of Harvard students the following:

> *Citicorp sent a manual on Korean stocks. Within 5 or 6 hours, twenty stocks selling at 2 or 3x earnings with strong balance sheets were identified. Korea rebuilt itself in a big way post 1998. Companies overbuilt their balance sheets – including Daehan Flour Mill with 15,000 won/year earning power and selling at "2 and change" times earnings. The strategy was to buy the securities of twenty companies thereby spreading the risk that some of the companies will be run by crooks. $100 million was quickly put to work.*

The "1987" Fisher Approach

The following excerpts from an article written by Carol Loomis published on April 11, 1988 in Fortune provide interesting clarity on the modus-operandi of Berkshire circa 1987:

Unusual Profitability (High ROE with Low Debt; i.e. high ROIC)

> *…But in his 1987 annual report, Buffett the businessman comes out of the closet to point out just how good these enterprises and their managers are. Had the Sainted Seven operated as a single business in 1987, he says, they would have employed $175 million in equity capital, paid only a net $2 million in interest, and earned, after taxes, $100 million. That's a return on equity of 57%, and it is exceptional. As Buffett says, "You'll seldom see such a percentage anywhere, let alone at large, diversified companies with nominal leverage."*

Unusual Growth (Opportunities for Reinvestment of Retained Earnings)

> *…Some folks of the right sort, by the name of Heldman, read that ad and brought him their uniform business, Fechheimer, in 1986. The business had only about $6 million in profits, which is an operation smaller than Buffett thinks ideal.*
>
> *…A few hundred miles away at Fechheimer (…1987 sales: $75 million)*

Paying for Quality

> *…By 1972, Blue Chip Stamps, a Berkshire affiliate that has since been merged into the parent, was paying three times book value to buy See's Candies, and the good-business era was launched. "I have been shaped tremendously by Charlie," says Buffett. "Boy, if I had listened only to Ben, would I ever be a lot poorer.*

Appendix II: Warren Buffett's Eight Word Response
(Handwritten on final page of original letter)

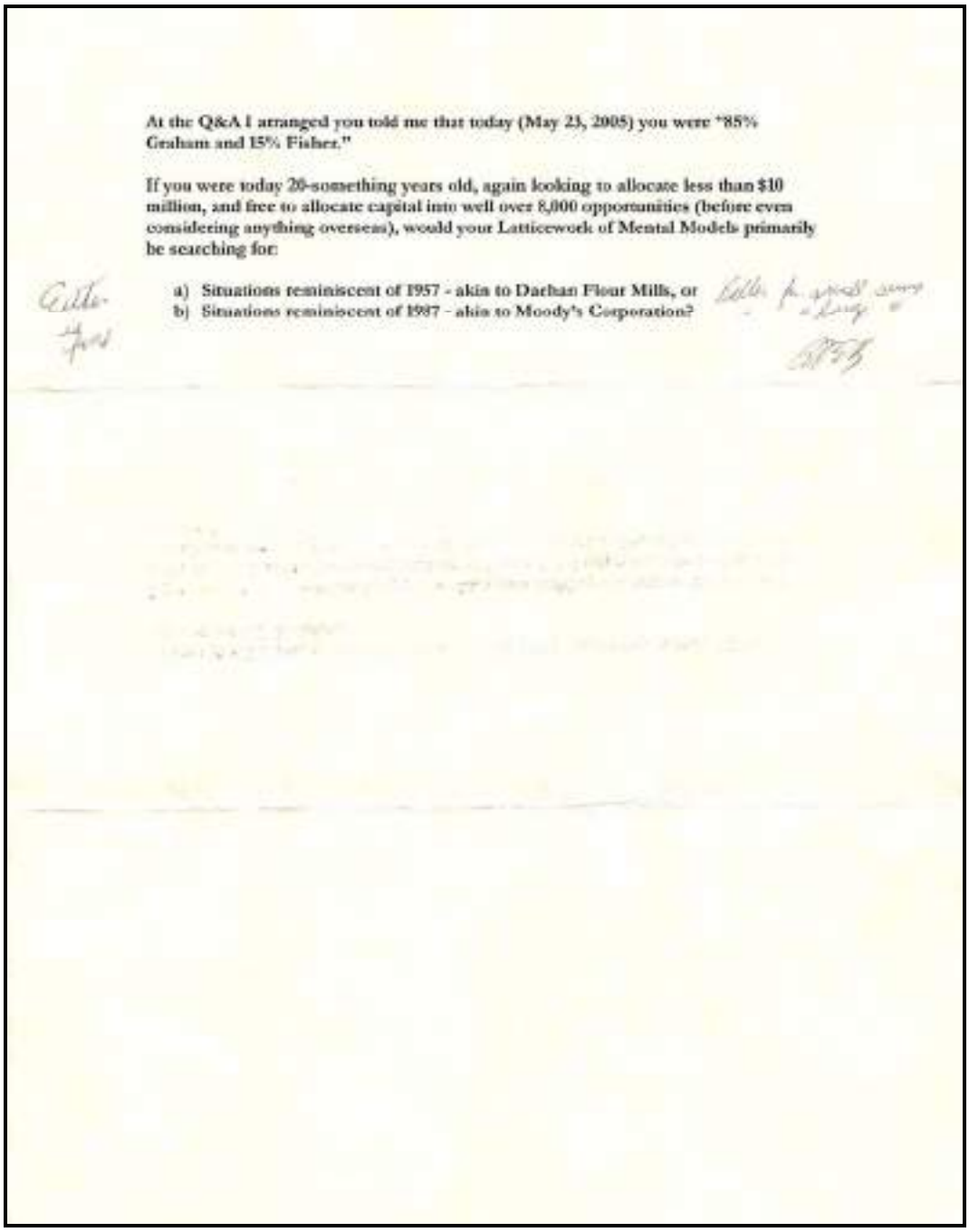

At the Q&A I arranged you told me that today (May 23, 2005) you were "85% Graham and 15% Fisher."

If you were today 20-something years old, again looking to allocate less than $10 million, and free to allocate capital into well over 8,000 opportunities (before even considering anything overseas), would your Latticework of Mental Models primarily be searching for:

a) Situations reminiscent of 1957 - akin to Darhan Flour Mills, or
b) Situations reminiscent of 1987 - akin to Moody's Corporation?

Either is fine.

Better for small sums.
" " large "

Marking to myth
Warren Buffett

Chairman and CEO, Berkshire Hathaway

Many institutions that publicly report precise market values for their holdings of CDOs and CMOs are in truth reporting fiction. They are marking to model rather than marking to market. The recent meltdown in much of the debt market, moreover, has transformed this process into marking to myth.

Because many of these institutions are highly leveraged, the difference between "model" and "market" could deliver a huge whack to shareholders' equity. Indeed, for a few institutions, the difference in valuations is the difference between what purports to be robust health and insolvency. For these institutions, pinning down market values would not be difficult: They should simply sell 5% of all the large positions they hold. That kind of sale would establish a true value, though one still higher, no doubt, than would be realized for 100% of an oversized and illiquid holding.

In one way, I'm sympathetic to the institutional reluctance to face the music. I'd give a lot to mark my weight to "model" rather than to "market."

What Warren thinks...

With Wall Street in chaos, Fortune naturally went to Omaha looking for wisdom. Warren Buffett talks about the economy, the credit crisis, Bear Stearns, and more.

By Nicholas Varchaver,

(Fortune Magazine) -- *If Berkshire Hathaway's annual meeting, scheduled for May 3 this year, is known as the Woodstock of Capitalism, then perhaps this is the equivalent of Bob Dylan playing a private show in his own house: Some 15 times a year Berkshire CEO Warren Buffett invites a group of business students for an intensive day of learning. The students tour one or two of the company's businesses and then proceed to Berkshire (BRKA, Fortune 500) headquarters in downtown Omaha, where Buffett opens the floor to two hours of questions and answers. Later everyone repairs to one of his favorite restaurants, where he treats them to lunch and root beer floats. Finally, each student gets the chance to pose for a photo with Buffett.*

PHOTO: BEN BAKER/REDUX

Buffett says he 'got a call' about Bear Stearns, but bailing out the investment bank with only two days for due diligence, he says, 'took some guts that I didn't want to match.'

In early April the megabillionaire hosted 150 students from the University of Pennsylvania's Wharton School (which Buffett attended) and offered Fortune the rare opportunity to sit in as he expounded on everything from the Bear Stearns (BSC, Fortune 500) bailout to the prognosis for the economy to whether he'd rather be CEO of GE (GE, Fortune 500) - or a paperboy. What follows are edited excerpts from his question-and-answer session with the students, his lunchtime chat with the Whartonites over chicken parmigiana at Piccolo Pete's, and an interview with Fortune in his office.

Buffett began by welcoming the students with an array of Coca-Cola products. ("Berkshire owns a little over 8% of Coke, so we get the profit on one out of 12 cans. I don't care whether you drink it, but just open the cans, if you will.") He then plunged into weightier matters:

More from Fortune

Buffett's annual letter: What you can learn from my real estate investments

Y Combinator's Paul Graham: 'Get a cofounder'

Morgan Creek's VC team spins out

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Before we start in on questions, I would like to tell you about one thing going on recently. It may have some meaning to you if you're still being taught efficient-market theory, which was standard procedure 25 years ago. But we've had a recent illustration of why the theory is misguided. In the past seven or eight or nine weeks, Berkshire has built up a position in auction-rate securities [bonds whose interest rates are periodically reset at auction; for more, see box on page 74] of about $4 billion. And what we have seen there is really quite phenomenal. Every day we get bid lists. The fascinating thing is that on these bid lists, frequently the same credit will appear more than once.

Here's one from yesterday. We bid on this particular issue - this happens to be Citizens Insurance, which is a creature of the state of Florida. It was set up to take care of hurricane insurance, and it's backed by premium taxes, and if they have a big hurricane and the fund becomes inadequate, they raise the premium taxes. There's nothing wrong with the credit. So we bid on three different Citizens securities that day. We got one bid at an 11.33% interest rate. One that we didn't buy went for 9.87%, and one went for 6.0%. It's the same bond, the same time, the same dealer. And a big issue. This is not some little anomaly, as they like to say in academic circles every time they find something that disagrees with their theory.

So wild things happen in the markets. And the markets have not gotten more rational over the years. They've become more followed. But when people panic, when fear takes over, or when greed takes over, people react just as irrationally as they have in the past.

Do you think the U.S. financial markets are losing their competitive edge? And what's the right balance between confidence-inspiring standards and ...

... between regulation and the Wild West? Well, I don't think we're losing our edge. I mean, there are costs to Sarbanes-Oxley, some of which are wasted. But they're not huge relative to the $20 trillion in total market value. I think we've got fabulous capital markets in this country, and they get screwed up often enough to make them even more fabulous. I mean, you don't want a capital market that functions perfectly if you're in my business. People continue to do foolish things no matter what the regulation is, and they always will. There are significant limits to what regulation can accomplish. As a dramatic illustration, take two of the biggest accounting disasters in the past ten years: Freddie Mac and Fannie Mae. We're talking billions and billions of dollars of misstatements at both places.

Now, these are two incredibly important institutions. I mean, they accounted for over 40% of the mortgage flow a few years back. Right now I think they're up to 70%. They're quasi-governmental in nature. So the government set up an organization called OFHEO. I'm not sure what all the letters stand for. [Note to Warren: They stand for Office of Federal Housing Enterprise Oversight.] But if you go to OFHEO's website, you'll find that its purpose was to just watch over these two companies. OFHEO had 200 employees. Their job was simply to look at two companies and say, "Are these guys behaving like they're supposed to?" And of course what happened were two of the greatest accounting misstatements in history while these 200 people had their jobs. It's incredible. I mean, two for two!

It's very, very, very hard to regulate people. If I were appointed a new regulator - if you gave me 100 of the smartest people you can imagine to work for me, and every day I got the positions from the biggest institutions, all their derivative positions, all their stock positions and currency positions, I wouldn't be able to tell you how they were doing. It's very, very hard to regulate when you get into very complex instruments where you've got hundreds of counterparties. The counterparty behavior and risk was a big part of why the Treasury and the Fed felt that they had to move in over a weekend at Bear Stearns. And I think they were right to do it, incidentally. Nobody knew what would be unleashed when you had thousands of counterparties with, I read someplace, contracts with a $14 trillion notional value. Those people would have tried to unwind all those contracts if there had been a bankruptcy. What that would have done to the markets, what that would have done to other counterparties in turn - it gets very, very complicated. So regulating is an important part of the system. The efficacy of it is really tough.

At Piccolo Pete's, where he has dined with everyone from Microsoft's Bill Gates to the New York Yankees'

Alex Rodriguez, Buffett sat at a table with 12 Whartonites and bantered over many topics.

How do you feel about the election?

Way before they both filed, I told Hillary that I would support her if she ran, and I told Barack I would support him if he ran. So I am now a political bigamist. But I feel either would be great. And actually, I feel that if a Republican wins, John McCain would be the one I would prefer. I think we've got three unusually good candidates this time.

They're all moderate in their approach.

Well, the one we don't know for sure about is Barack. On the other hand, he has the chance to be the most transformational too.

I know you had a paper route. Was that your first job?

Well, I worked for my grandfather, which was really tough, in the [family] grocery store. But if you gave me the choice of being CEO of General Electric or IBM or General Motors, you name it, or delivering papers, I would deliver papers. I would. I enjoyed doing that. I can think about what I want to think. I don't have to do anything I don't want to do. It might be wonderful to be head of GE, and Jeff Immelt is a friend of mine. And he's a great guy. But think of all the things he has to do whether he wants to do them or not.

How do you get your ideas?

I just read. I read all day. I mean, we put $500 million in PetroChina. All I did was read the annual report. [Editor's note: Berkshire purchased the shares five years ago and sold them in 2007 for $4 billion.]

What advice would you give to someone who is not a professional investor? Where should they put their money?

Well, if they're not going to be an active investor - and very few should try to do that - then they should just stay with index funds. Any low-cost index fund. And they should buy it over time. They're not going to be able to pick the right price and the right time. What they want to do is avoid the wrong price and wrong stock. You just make sure you own a piece of American business, and you don't buy all at one time.

When Buffett said he was ready to pose for photographs, all 150 students stampeded out of the room within seconds and formed a massive line. For the next half hour, each one took his or her turn with Buffett, often in hammy poses (wrestling for his wallet was a favorite). Then, as he started to leave, a 77-year-old's version of A Hard Day's Night ensued, with a pack of 30 students trailing him to his gold Cadillac. Once free, he drove this Fortune writer back to his office and continued fielding questions.

How does the current turmoil stack up against past crises?

Well, that's hard to say. Every one has so many variables in it. But there's no question that this time there's extreme leveraging and in some cases the extreme prices of residential housing or buyouts. You've got $20 trillion of residential real estate and you've got $11 trillion of mortgages, and a lot of that does not have a

problem, but a lot of it does. In 2006 you had $330 billion of cash taken out in mortgage refinancings in the United States. That's a hell of a lot - I mean, we talk about having $150 billion of stimulus now, but that was $330 billion of stimulus. And that's just from prime mortgages. That's not from subprime mortgages. So leveraging up was one hell of a stimulus for the economy.

If that was one hell of a stimulus, do you think the $150 billion government stimulus plan will make an impact?

Well, it's $150 billion more than we'd have otherwise. But it's not like we haven't had stimulus. And then the simultaneous, more or less, LBO boom, which was called private equity this time. The abuses keep coming back - and the terms got terrible and all that. You've got a banking system that's hung up with lots of that. You've got a mortgage industry that's deleveraging, and it's going to be painful.

The scenario you're describing suggests we're a long way from turning a corner.

I think so. I mean, it seems everybody says it'll be short and shallow, but it looks like it's just the opposite. You know, deleveraging by its nature takes a lot of time, a lot of pain. And the consequences kind of roll through in different ways. Now, I don't invest a dime based on macro forecasts, so I don't think people should sell stocks because of that. I also don't think they should buy stocks because of that.

Your OFHEO example implies you're not too optimistic about regulation.

Finance has gotten so complex, with so much interdependency. I argued with Alan Greenspan some about this at [Washington Post chairman] Don Graham's dinner. He would say that you've spread risk throughout the world by all these instruments, and now you didn't have it all concentrated in your banks. But what you've done is you've interconnected the solvency of institutions to a degree that probably nobody anticipated. And it's very hard to evaluate. If Bear Stearns had not had a derivatives book, my guess is the Fed wouldn't have had to do what it did.

Do you find it striking that banks keep looking into their investments and not knowing what they have?

I read a few prospectuses for residential-mortgage-backed securities - mortgages, thousands of mortgages backing them, and then those all tranched into maybe 30 slices. You create a CDO by taking one of the lower tranches of that one and 50 others like it. Now if you're going to understand that CDO, you've got 50-times-300 pages to read, it's 15,000. If you take one of the lower tranches of the CDO and take 50 of those and create a CDO squared, you're now up to 750,000 pages to read to understand one security. I mean, it can't be done. When you start buying tranches of other instruments, nobody knows what the hell they're doing. It's ridiculous. And of course, you took a lower tranche of a mortgage-backed security and did 100 of those and thought you were diversifying risk. Hell, they're all subject to the same thing. I mean, it may be a little different whether they're in California or Nebraska, but the idea that this is uncorrelated risk and therefore you can take the CDO and call the top 50% of it super-senior - it isn't super-senior or anything. It's a bunch of juniors all put together. And the juniors all correlate.

If big financial institutions don't seem to know what's in their portfolios, how will investors ever know when it's safe?

They can't, they can't. They've got to, in effect, try to read the DNA of the people running the companies. But I say that in any large financial organization, the CEO has to be the chief risk officer. I'm the chief risk officer at Berkshire. I think I know my limits in terms of how much I can sort of process. And the worst thing you can have is models and spreadsheets. I mean, at Salomon, they had all these models, and you know, they fell apart.

What should we say to investors now?

The answer is you don't want investors to think that what they read today is important in terms of their investment strategy. Their investment strategy should factor in that (a) if you knew what was going to happen in the economy, you still wouldn't necessarily know what was going to happen in the stock market. And (b) they can't pick stocks that are better than average. Stocks are a good thing to own over time. There's only two things you can do wrong: You can buy the wrong ones, and you can buy or sell them at the wrong time. And the truth is you never need to sell them, basically. But they could buy a cross section of American industry, and if a cross section of American industry doesn't work, certainly trying to pick the little beauties here and there isn't going to work either. Then they just have to worry about getting greedy. You know, I always say you should get greedy when others are fearful and fearful when others are greedy. But that's too much to expect. Of course, you shouldn't get greedy when others get greedy and fearful when others get fearful. At a minimum, try to stay away from that.

By your rule, now seems like a good time to be greedy. People are pretty fearful.

You're right. They are going in that direction. That's why stocks are cheaper. Stocks are a better buy today than they were a year ago. Or three years ago.

But you're still bullish about the U.S. for the long term?

The American economy is going to do fine. But it won't do fine every year and every week and every month. I mean, if you don't believe that, forget about buying stocks anyway. But it stands to reason. I mean, we get more productive every year, you know. It's a positive-sum game, long term. And the only way an investor can get killed is by high fees or by trying to outsmart the market.

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WARREN E. BUFFETT, CHAIRMAN

October 6, 2008

The Honorable Henry M. Paulson, Jr.
Secretary of the Treasury
1500 Pennsylvania Avenue, NW
Washington, DC 20220

Dear Hank:

I have previously mentioned to you my thought that an investment fund could be formed that would address some of the public's concerns about Treasury's plans to purchase illiquid mortgages. In this letter, I will spell out my thinking in greater detail.

Some critics have worried that Treasury won't buy mortgages at prices close to the market but will instead buy at higher "theoretical" prices that would please selling institutions. Critics have also questioned how Treasury would manage the mortgages purchased: Would Treasury act as a true investor or would it be overly influenced by pressures from Congress or the media? For example, would Treasury be slow to foreclose on properties or too bureaucratic in judging requests for loan forbearance? Additionally, many who are comfortable with a Department of the Treasury headed by someone with your market knowledge are worried about how the investment program would be administered by a future Treasury Secretary who had to rely on a bureaucracy to make important market decisions.

What I would like to suggest is a program that allows Treasury to buy more than the $700 billion of assets presently anticipated and allows it to do so in a way that dramatically reduces the risk – to almost zero – that Treasury will lose money on its purchases. Indeed, the program I recommend is highly likely to produce profits. Let's call my proposed entity the Public-Private Partnership Fund (PPPF).

This entity would initially be capitalized with $10 billion of common stock held by the private sector and $40 billion of notes owned by Treasury. The notes would be due in ten years and carry an interest rate equal to the rate being paid by Treasury on its ten-year bond at the time PPPF was created. These notes would have absolute seniority. That is, they would be paid in full before the common stock would receive a nickel.

PPPF would operate as a REIT, LLC or in some other form that would receive flow-through tax treatment.

With the funds it had raised, PPPF would buy $50 billion of mortgages (with a far greater principal amount of course). It would focus on whole loans and residential mortgage-backed securities (RMBS) and stay away from second mortgages and exotic instruments such as CDOs squared. Going by today's prices, much of what PPPF would buy would likely be priced at 50-80% of par.

In time, the mortgages and securities in the portfolio would produce cash, through paydowns or later sales, that could be paid to Treasury and the private investors. The cash would first go to pay off Treasury, until it had recovered its entire investment along with interest. That having been accomplished, the private shareholders would be entitled to recoup both their $10 billion and a rate of interest equal to that received by Treasury. Finally, any profits would be split with three-fourths going to the shareholders and one-fourth going to Treasury.

Let me sum up the effects of this plan: PPPF's capitalization would turn $40 billion of Treasury money into $50 billion of mortgage purchases. More important, Treasury would operate with a $10 billion "cushion" from loss, because the private money in PPPF would be on the front line, eating that amount of net loss if losses were sustained.

Given this structure, PPPF's shareholders would have every incentive to make intelligent purchases. It should be clear to the American public that purchases are not being made at "bail-out" prices for imprudent institutions, but rather at "intelligent investor" prices for Treasury and PPPF shareholders.

Exploring the merits of this plan, I have talked with Bill Gross and Mohamed El-Erian of PIMCO, and they have told me they would manage this operation on a pro-bono basis. The managing entity would need a small staff, of course. But overall costs would be minimal and, in any event, would be borne by the common stock, since all expenses and losses would go against their $10 billion.

I've also talked with Lloyd Blankfein at Goldman, Sachs, who says that firm would work on a pro-bono basis to secure the $10 billion of equity capital The company I head, Berkshire Hathaway, would be pleased to invest $500 million, and I think the remainder of the funds needed would be quickly committed by major institutional investors perhaps especially pension funds

The reason why I expect the funds to be readily available is simple: If mortgages are purchased at current levels by an entity employing significant leverage and working with dependable, low-cost funds supplied by the U. S Treasury, profits are very likely to be good—and perhaps even exceptional. That is true because prices have fallen to a level that reflects the inability of other buyers to obtain leverage. Thus returns for an investment operation that has access to long-term Treasury-type funding should be particularly interesting. Unlevered returns of 10% -- and present buyers are seeking more than this can turn into 25% returns with the leverage I propose.

Once this program is off the ground, I would suggest that the capitalization of PPPF -- both equity and debt -- be doubled. In this instance, however, Wall Street firms – again on a pro-bono basis – would offer $10 billion of PPPF's common stock to the American public on exactly the same terms as those granted the initial institutional investors. If PPPF is going to be a good deal for equity holders – and I believe it will be – I would want to be sure that the average American has a chance to share in such an investment on a basis equal to that secured by Berkshire Hathaway and other institutional investors. If this offer is fully subscribed, Treasury would purchase an additional $40 billion of notes, giving PPPF total buying power of $100 billion

I would be willing to personally buy $100 million of stock in this public offering. (This constitutes about 20% of my net worth outside of my Berkshire holdings, which as you know are promised to charity.)

Another detail: In the initial offering to institutions, I would bar hedge funds or other vehicles in which the manager receives an override of profits from investing. I think that in a government-connected enterprise such as this, you would want to have investors receive all of the profits available instead of splitting them with managers taking fat overrides.

* * * * * * * * * * * *

The most likely scenario under which PPPF would prove disappointing is one in which market prices make it impossible for it to buy the contemplated $100 billion of mortgages at risk-adjusted prices that promise good returns. To cover this possibility, the plan could stipulate that money be proportionately returned to Treasury and to common shareholders if after two years PPPF had been unsuccessful in reaching its goal for purchases.

Alternatively, PPPF could become a purchaser of new "non-conforming" mortgages – those whose size exceeds Freddie and Fannie limits. This move would stimulate the housing market and reduce the high interest rates that non-conforming mortgages now carry (compared to Treasury yields). Any move that PPPF made in this direction would need to be approved by both Treasury and the majority of the common stock. Were this plan to be put into effect, moreover, PPPF should only deal with borrowers putting up downpayments of size, earning comfortable incomes relative to debt service requirements, and supplying documentation of their creditworthiness.

Hank, these are all tentative ideas. But I think it's enormously important that the public have confidence that Treasury's activities in the mortgage field are sound and potentially profitable. The public is skeptical - indeed, disbelieving - about this point now, but I believe PPPF could go a long way toward correcting this misconception.

If this plan, or some variation, appears to be feasible, Bill, Mohamed, Lloyd and I – and I'm sure a myriad of others – are ready to help.

Sincerely,

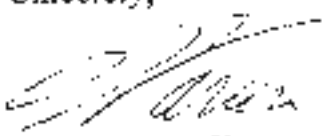

Warren E. Buffett

WED/db

Buy American. I Am.

By WARREN E. BUFFETT
Published: October 16, 2008

Omaha

THE financial world is a mess, both in the United States and abroad. Its problems, moreover, have been leaking into the general economy, and the leaks are now turning into a gusher. In the near term, unemployment will rise, business activity will falter and headlines will continue to be scary.

So ... I've been buying American stocks. This is my personal account I'm talking about, in which I previously owned nothing but United States government bonds. (This description leaves aside my Berkshire Hathaway holdings, which are all committed to philanthropy.) If prices keep looking attractive, my non-Berkshire net worth will soon be 100 percent in United States equities.

Why?

A simple rule dictates my buying: Be fearful when others are greedy, and be greedy when others are fearful. And most certainly, fear is now widespread, gripping even seasoned investors. To be sure, investors are right to be wary of highly leveraged entities or businesses in weak competitive positions. But fears regarding the long-term prosperity of the nation's many sound companies make no sense. These businesses will indeed suffer earnings hiccups, as they always have. But most major companies will be setting new profit records 5, 10 and 20 years from now.

Let me be clear on one point: I can't predict the short-term movements of the stock market. I haven't the faintest idea as to whether stocks will be higher or lower a month — or a year — from now. What is likely, however, is that the market will move higher, perhaps substantially so, well before either sentiment or the economy turns up. So if you wait for the robins, spring will be over.

A little history here: During the Depression, the Dow hit its low, 41, on July 8, 1932. Economic conditions, though, kept deteriorating until Franklin D. Roosevelt took office in March 1933. By that time, the market had already advanced 30 percent. Or think back to the early days of World War II, when things were going badly for the United States in Europe and the Pacific. The market hit bottom in April 1942, well before Allied fortunes turned. Again, in the early 1980s, the time to buy stocks was when inflation raged and the economy

was in the tank. In short, bad news is an investor's best friend. It lets you buy a slice of America's future at a marked-down price.

Over the long term, the stock market news will be good. In the 20th century, the United States endured two world wars and other traumatic and expensive military conflicts; the Depression; a dozen or so recessions and financial panics; oil shocks; a flu epidemic; and the resignation of a disgraced president. Yet the Dow rose from 66 to 11,497.

You might think it would have been impossible for an investor to lose money during a century marked by such an extraordinary gain. But some investors did. The hapless ones bought stocks only when they felt comfort in doing so and then proceeded to sell when the headlines made them queasy.

Today people who hold cash equivalents feel comfortable. They shouldn't. They have opted for a terrible long-term asset, one that pays virtually nothing and is certain to depreciate in value. Indeed, the policies that government will follow in its efforts to alleviate the current crisis will probably prove inflationary and therefore accelerate declines in the real value of cash accounts.

Equities will almost certainly outperform cash over the next decade, probably by a substantial degree. Those investors who cling now to cash are betting they can efficiently time their move away from it later. In waiting for the comfort of good news, they are ignoring Wayne Gretzky's advice: "I skate to where the puck is going to be, not to where it has been."

I don't like to opine on the stock market, and again I emphasize that I have no idea what the market will do in the short term. Nevertheless, I'll follow the lead of a restaurant that opened in an empty bank building and then advertised: "Put your mouth where your money was." Today my money and my mouth both say equities.

Warren E. Buffett is the chief executive of Berkshire Hathaway, a diversified holding company.

Buffett Speaks at Emory University's Goizueta Business School

The following are notes from Dang Le an MBA student at Emory University's Goizueta Business School on 2/26/09

Students from Emory and 5 other business schools were invited to come visit Mr. Buffett for a Q&A session. These notes were reproduced to the best of my ability as I heard and as I could recall them from a collection of mine and other students' notes. There is no guarantee that this was exactly what was said, but the intent was to preserve the spirit of the message. Enjoy.

Buffett:
Did you hear they called off the Wall Street Christmas Pageant this year? They had trouble finding three wise men…and a virgin. There are many opportunities right now. The markets are very inefficient at times, and this is one of those times.

Kansas:
Berkshire has invested in several insurance companies, would you go into the health insurance business?

Buffett:
No. Health insurance is so ingrained into national policy that it is a tough business. It's pretty adversarial. I'm not really that excited about it from a business perspective. I don't want to write policies with high loan loss ratios. That being said, I would buy the stock of an undervalued healthcare insurer.

Insurance is an interesting business. You know, we underwrote a two year life insurance policy on Mike Tyson. I wanted an exclusion against women shooting him, but they wouldn't let me.

South Dakota:
You've recently invested in Goldman Sachs and GE. Is the financial sector a good buy right now?

Buffett:
No sector is a good buy unless you understand the business. However, I do believe that there is good value and great opportunity now in the financial sector because it is extremely unpopular. Sector's themselves don't make good buys, companies that are undervalued make good buys. You know how to value a business, you project the future cash flows discounted to present and buy with a margin of safety. The earnings prospects need to be greater than the current value. Anything that is unpopular is always great to look at. If I was getting out of school right now, I would take a look.

Creighton:
How much and how does risk factor into your investment decisions? Would you invest in emerging markets?

Buffett:
In general, emerging markets are not great for me because I need to put a lot of money to work. Risk does not equal beta. Risk comes around because you don't understand things, not because of beta. There are normally 10 filters or so that I go through when I hear an idea. The first is can I understand the business and understand the downside not just today but five to ten years from now. There have

been very few times that I've lost 1% of my net worth. I might be risk averse but I am not action adverse. Mrs. B saved $500 over the course of 16 years to start and build Nebraska Furniture Mart. Tom Watson Sr of IBM said, "I'm smart in spots and I stay in those spots." I just stay within my circle of confidence. When I bought Nebraska Furniture Mart in 1983, Mrs. B took cash and not Berkshire stock. Why? She didn't understand the value of stock. She understood cash and that is what she took. I need only need to be right a few times and can let thousands of ideas go by.

Ted Williams, who wrote the "Science of Hitting," broke the strike zone into 92 ball shaped sections. He knew, if hit in his sweet spot, he'd hit 430, a little further out, and he'd hit 350. You have to know your sweet spot. The beautiful thing about investing is that it's a "No called strike game" where unlike baseball the only strikes in investing are when you swing. I don't have to swing.

When I do invest, I don't care if the stock price goes from $10 to $2 but I do care about if the value went from $10 to $2. Avoid debt. I decided early on that I never wanted to owe more than 25% of my net worth, and I haven't… exept for in the very beginning. I like to play from a position of strength. I always try to have the odds in my favor. When I go to Vegas, I don't go around putting $5 dollars on the blackjack tables. If someone wants to come to my room and put $5 on my bed, well that's fine. I like those odds better.

Emory:
How do you think about value?

Buffett:
The formula for value was handed down from 600 BC by a guy named Aesop. A bird in the hand is worth two in the bush. Investing is about laying out a bird now to get two or more out of the bush. The keys are to only look at the bushes you like and identify how long it will take to get them out. When interest rates are 20%, you need to get it out right now. When rates are 1%, you have 10 years. Think about what the asset will produce. Look at the asset, not the beta. I don't really care about volatility. Stock price is not that important to me, it just gives you the opportunity to buy at a great price. I don't care if they close the NYSE for 5 years. I care more about the business than I do about events. I care about if there's price flexibility and whether the company can gain more market share. I care about people drinking more Coke.

I bought a farm from the FDIC 20 years ago for $600 per acre. Now I don't know anything about farming but my son does. I asked him, how much it cost to buy corn, plow the field, harvest, how much an acre will yield, what price to expect. I haven't gotten a quote on that farm in 20 years.

If I were running a business school I would only have 2 courses. The first would obviously be an investing class about how to value a business. The second would be how to think about the stock market and how to deal with the volatility. The stock market is funny. You have no compulsion to act and a bunch of silly people setting prices all the time, it is great odds. I want the market to be like a manic depressive drunk. Graham's Ch. 8, in the book Intelligent Investor, on Mr. Market is the most important thing I have ever read. Now think about the NYSE. You have thousands of companies to choose from. For me, that universe has shrunk because I need to put large dollar amounts to work. Attitude is much more important than IQ. You can really get into trouble with a high IQ, i.e. Long-Term Capital. You need to have the right philosophical temperament.

Penn State:
Why did you invest in Harley-Davidson?

Buffett:
I like the 15%. I measured that 15% against other credits and it looked attractive on both a relative

basis and an absolute basis. Also, we have to have a certain amount of the portfolio go to debt. Lately, the government has become the guarantor for some companies but not for others and the "haves" and "have-nots" determined by certainty of government assistance rather than the credit quality. These finance companies have a problem getting funded, not with their customers. Any company where you can get your customers to tattoo your name on their body has quite a strong brand. For this investment I had to think what is the probability that they will not pay me back and would I want to own the company if they did not, basically that the equity isn't worth zero. Risk premiums in the corporate bond market went from real low to real high. Right now, they're out of whack. The flip side is that governments are overpriced. We have a bubble in governments. T-bills actually had a negative interest rate. I never thought I'd see that. A mattress is a better investment than the US 10 Year. Buying corporates and shorting the 10-year is a great idea and smart guys went broke doing it because even if you're right, you need to be able to play out your hand. I always think about what I would do if a nuclear bomb went off or if Bernanke ran off with Paris Hilton to South America.

Texas:
Do you feel that the might of America has changed?

Buffett:
You can bet against the dollar, but I would never bet against America. The system in the U.S. has allowed the country to unleash more for the world than any other country. Since 1776, the U.S. had a different system than the rest of the world and that system unleashed the human potential. We were not the smartest nor did we have the best resources. This is the same system we have in place today with people of similar intelligence. I have and would bet against the U.S. currency, stocks, etc. but the United States prevails over time. There are all kinds of rocky roads but we have rule of law, equality of opportunity, and a meritocracy. We have a market system and people apply energies and imagination to come up with things someone would want. Everyone in this room is working far below his/her potential.

Kansas:
We know that you are a big bridge player. Do you think that bridge correlates to investing? Are there any traits or characteristics that might carry over from one to the other?

Buffett:
Bridge is the best game there is. You're drawing inferences from every bid and play of a card, and every card that is or isn't played. It teaches you about partnership and other human skills. In bridge, you draw inferences from everything and that carries over well into investing. In bridge, similar to in life, you'll never get the same hand twice but the past does have a meaning. The past does not make the future definitive but you can draw from those experiences. I think the partnership aspect of bridge is a great lesson for life. If I'm going into battle, I want to partner with the best. I was playing with a world champion and we were playing against my sister and her husband. We lost, so I took the scorepad and I ate it.

South Dakota:
What are your views on derivatives and how do you think they have affected the global market?

Buffett:
In my 2002 letter to shareholders I referred to them as "weapons of mass destruction." Derivatives are really just a way to create a product with a very long fuse, for example, 100 years, as opposed to stocks which settle in 3 days. That kind of system allows claims to be built up. AIG called me in September and told me they were about to get downgraded which would have required higher posting requirements. Now this is an enterprise that has been built up over decades and was

effectively destroyed in 48 hours by these products. With derivatives, you're exposed to counterparties and thus reliant on others. These claims built up over time to the tune of billions of dollars and when one falls, the whole system falls. Derivatives are not evil by themselves but rather everyone needs to be able to handle them. System wide, they're rat poison. Berkshire holds many derivatives but we always hold the money at Berkshire.

Creighton:
What do you think about the stimulus package? Would you rather see tax cuts or government spending?

Buffett:
We obviously have a problem, but we'll come out of this just fine. The idea of a stimulus is to do things that will have an impact quickly and the current proposal won't do that. When dealing with situations like this, you can't do just one thing but always need to ask yourself what is the next question. We have utilized monetary policy and guaranteed everything in sight. It's a standard Keynesian prescription. Tax cuts benefit people differently in the short term. We are basically saying, we're not going to pay for what we're doing in terms of government spending and that we'll just mail you some money but it's better than doing nothing. In the end, you should buy stock in a business that any idiot could run because someday, one will. You know, our country is similar.

Emory:
How do you think differently today than you did twenty years ago? Where do you expect to see the greatest differences in 2030?

Buffett:
The fundamental things about investing that I learned when I was younger haven't changed. I am lucky to have picked up a book at 19, The Intelligent Investor, that gave structure to investing and investment decisions. Over time, I learned different ways to apply it. I have learned what it is outside my circle of confidence. I bought See's in 1972 and I think understanding the value of brand helped drive the decision to buy Coca-Cola in 1988. Through experience, I have gotten smarter on predicting and evaluating human behavior. My wife put me together in terms of human behavior. I really enjoy doing what I do and I get to do what I want. I enjoy talking to groups like these. Irv and Ron Blumkin are some of my best friends and I continue to add friends by buying businesses. I don't want a boat or 12 houses. I'm almost fully depreciated, down to my residual value. Age doesn't affect my ability to my job though, as opposed to Arnold Palmer, he can't play his game.

Penn State:
What advice would you give the average person in the U.S.?

Buffett:
It's hard to give advice to someone who might lose their job. My Dad went to work on August 13, 1931 to find out the bank where he worked and held all our money had closed. He had no job and no money and two kids. You want to be as prepared as you can and you just don't want to have debt. Medical problems cause a lot of the grief and lots of credit card debt. Credit cards are poison. If you make a dollar, only spend 95 cents, not $1.05. You should be ahead of the game all the time rather than behind as it is harder to work your way out of a hole. You want to play the game from strength, and you have to think ahead. People don't always want to hear advice when things are going well. People risked everything they had and needed for something they didn't have or need. Charlie once said, "The problem isn't getting rich, it's staying sane.

Texas:
What are the biggest challenges that this country faces?

Buffett:
The biggest problem is probably weapons of mass destruction. We have always had people who were ill-fitted to society and wished harm on others. In 1945 we unlocked the atom, and that changed everything. The human animal hasn't changed, you still have the same percentage that are maladjusted. The problem is knowledge, materials, and deliverability. What you could do with the wrong kind of infectious disease is incredible. You can transmit things much faster today. Governments, individuals and organizations can't control security. It's what I would spend all of my money on if I could fix it. Everyone here in this room won what I call the ovarian lottery. You were born at the right time and we were all very, very lucky. We are in the luckiest 1% of humanity.

Kansas:
What are some of the mistakes that Secretary Paulson made during the sub-prime crisis?

Buffett:
Hank is a great guy and great friend. He's extremely smart about markets but not so smart about politics. I sympathize with Hank. Hank Paulson was not the supreme commander. He had to work through at least 535 people with different incentives. The whole situation has developed faster and at an extreme pace, more than anyone thought. The first TARP program got voted down, which changed the dynamic. All variables affect other variables. Congress did not appreciate how severe the problem was. I call it an "Economic Pearl Harbor" in September. FDR essentially had a blank check and that what people think is important and believing it makes it so. He restored confidence in the banking system. Paulson's job may have been almost impossible given the circumstances. He was used to operating in a sphere that did not require consensus (Goldman Sachs). People that take that on [public service jobs] are laying themselves open to be unfairly attacked, criticized and scrutinized. In hindsight, letting Lehman fail was probably not the right thing but it was difficult to tell at the time. It created trust problems as money market funds fell apart soon thereafter. When people start to worry about the money in money markets, it's a problem. People want to be led at this point, but fall back into old habits very easily. When you think that Citi or Lehman is just a house of cards… I mean who would have even believed you. It's like Noah before the flood, building his ark. Can you imagine the reaction he got?

South Dakota:
What do you think about the U.S. trade deficit?

Buffett:
I talked to Barack back in August, and said: "I have good news and bad news. The good news is that the economy will be terrible, so you'll definitely get elected. The bad news is that the economy will be even worse at inauguration." He asked, "Do you think it's too late to throw the election?" The trade situation is there and it causes problem and could exacerbate the situation. However, all issues go on the back burner until we solve the big problem.

We create sovereign wealth funds, buying more goods and services than everyone else in the world. The decline in the oil price has helped the trade deficit but nothing will get better until everyone feels better. Every day, we buy $2 billion of goods and service more than we produce and export. We give the exporting nations USD. The trade deficit creates claims on the United States. Sometimes we're a little hypocritical. For example, three years ago, the Chinese wanted to buy Unocal (a small oil company in California) and Congress wanted to condemn China for wanting to buy the oil company with the money we gave them (through U.S. imports). That's a little disingenuous. The trade deficit creates a situation because we give people claim checks, then we get upset when they want to use them. The Japanese bought Rockefeller Center in the 80's. Did we think they were going to move it? It's not useful to fan those flames in a nuclear world, and that's what's wrong with "Buy America." The trade deficit will come up big time when we get past the current problems.

Creighton:
Why do you live the way that you do?

Buffett:
Do you mean, why am I frugal? You can't buy health and you can't buy love. I'm a member of every golf club that I want to be a member of. I'm the highest handicap member of Augusta National. I'd rather play golf here with people I like than at the fanciest golf course in the world. I can do anything that I want, and I do. I buy everything I want to have. I'm not interested in cars and my goal is not to make people envious. Don't confuse the cost of living with the standard of living. Bella Eidenberg was a Polish Jew who was at Auschwitz and some of her family didn't make it. Twenty years ago she said she was slow to make friends, and that the real question in her mind was always, "Would they hide me?" If you have a lot of people that would hide you, you've had a very successful life. That can't be bought. I know people that have billions of dollars and their children would say, "he's in the attic."

I estimate that I live on $100,000 per year, except for my plane which costs me about $1 to $1.5 million. I like the plane, it improves my life. My computer and my airplane changed my life in a big way and I'm not sure, if I had to choose, which one I'd give up. Anything beyond $50 Million doesn't improve my life. If I took out $3 billion of Berkshire stock, I could have paid 30,000 people $100,000 per year to paint my portrait every day. I could have paid 50,000 people $60,000 per year to dress in loin cloths and haul rocks to create the Buffett tomb. That's not me. I believe in giving my kids enough so they can do anything, but not so much that they can do nothing.

Penn State:
What do you think of the good bank, bad bank idea?

Buffett:
It is tough to do but if it were done well, it could do a lot. Call the bad bank an "Aggregator Bank." There is a lot to be said in cleaning out past problems. There are 7,000 banks in the U.S. with such varying degrees of conditions so it is tough to provide a sweeping overhaul. The biggest thing they're wrestling with is pricing what goes into the aggregator bank. These are smart, well-intentioned people working enormously hard on this.

Emory:
You take great pride in keeping your schedule wide open. Do you believe that corporate America is overscheduled and overstretched?

Buffett:
[Showed his blank schedule book]. Bill Gates is overscheduled. I am extremely lucky and I can say no to anything because there isn't an entity that can use economic pressure to make me do something. A lot of CEOs get into a lot of the rituals that are part of the job. I would rather deliver papers than be the CEO of GE. They have too much stuff to do that is a big pain. Don't get me wrong, CEOs have it pretty good. I'd imagine that every CEO in the Fortune 500 would be willing to take the job for half of the money. The 76 or so CEOs that run companies at Berkshire don't have to deal with bankers or lawyers. At Berkshire, we've never had a meeting for all of them anywhere. There are no presentations and no committees. They can be more productive, and it makes it attractive when they can do what they like to do best.

Kansas:
What are three traits of successful managers?

Buffett:
Passion is the number one thing that I look for in a manager. IQ is not really that important. They need to be able to work well with others and the ability to get people to do what you want them to do. I'd say intelligence, energy, integrity. If you don't have the last one, the first two will kill you. All you have is a crook who works hard. If a person doesn't have integrity, you want them dumb and lazy.

If you could put 10% of your future earnings on one of your classmates, you would pick the one that's most effective at working with people. These are qualities that are elective. If you could pick one to sell short, it would be the person that no one wants to work with. You can elect to be the kind of person you want to be. Look at those qualities of the two people you've selected (one long and one short). They're all qualities that you possess. It's like marriage. If you want a marriage that's going to last, look for someone with low expectations. Don't keep score. Keeping score doesn't build organizations, homes, etc. I have never had one fight with Charlie. When I took over Solomon I had to pick the best person to run it. I interviewed 12 people for 15 minutes each and I asked myself, "Who would I go into a foxhole with?" I never look at grades or where you went to school. When I picked Deryck Maughan, he never asked me about pay or options or indemnity. He went to work.

Chains of habit are too light to be felt until they're too heavy to be broken. In terms of picking people how do you lead your life in a way that I'd pick you?

The Greenback Effect

By WARREN E. BUFFETT
Published: August 18, 2009

Omaha

IN nature, every action has consequences, a phenomenon called the butterfly effect. These consequences, moreover, are not necessarily proportional. For example, doubling the carbon dioxide we belch into the atmosphere may far more than double the subsequent problems for society. Realizing this, the world properly worries about greenhouse emissions.

The butterfly effect reaches into the financial world as well. Here, the United States is spewing a potentially damaging substance into our economy — greenback emissions.

To be sure, we've been doing this for a reason I resoundingly applaud. Last fall, our financial system stood on the brink of a collapse that threatened a depression. The crisis required our government to display wisdom, courage and decisiveness. Fortunately, the Federal Reserve and key economic officials in both the Bush and Obama administrations responded more than ably to the need.

They made mistakes, of course. How could it have been otherwise when supposedly indestructible pillars of our economic structure were tumbling all around them? A meltdown, though, was avoided, with a gusher of federal money playing an essential role in the rescue.

The United States economy is now out of the emergency room and appears to be on a slow path to recovery. But enormous dosages of monetary medicine continue to be administered and, before long, we will need to deal with their side effects. For now, most of those effects are invisible and could indeed remain latent for a long time. Still, their threat may be as ominous as that posed by the financial crisis itself.

To understand this threat, we need to look at where we stand historically. If we leave aside the war-impacted years of 1942 to 1946, the largest annual deficit the United States has incurred since 1920 was 6 percent of gross domestic product. This fiscal year, though, the deficit will rise to about 13 percent of G.D.P., more than twice the non-wartime record. In dollars, that equates to a staggering $1.8 trillion. Fiscally, we are in uncharted territory.

Because of this gigantic deficit, our country's "net debt" (that is, the amount held publicly) is mushrooming. During this fiscal year, it will increase more than one percentage point per month, climbing to about 56 percent of G.D.P. from 41 percent. Admittedly, other countries, like Japan and Italy, have far higher ratios and no one can know the precise level of net debt to G.D.P. at which the United States will lose its reputation for financial integrity. But a few more years like this one and we will find out.

An increase in federal debt can be financed in three ways: borrowing from foreigners, borrowing from our own citizens or, through a roundabout process, printing money. Let's look at the prospects for each individually — and in combination.

The current account deficit — dollars that we force-feed to the rest of the world and that must then be invested — will be $400 billion or so this year. Assume, in a relatively benign scenario, that all of this is directed by the recipients — China leads the list — to purchases of United States debt. Never mind that this all-Treasuries allocation is no sure thing: some countries may decide that purchasing American stocks, real estate or entire companies makes more sense than soaking up dollar-denominated bonds. Rumblings to that effect have recently increased.

Then take the second element of the scenario — borrowing from our own citizens. Assume that Americans save $500 billion, far above what they've saved recently but perhaps consistent with the changing national mood. Finally, assume that these citizens opt to put all their savings into United States Treasuries (partly through intermediaries like banks).

Even with these heroic assumptions, the Treasury will be obliged to find another $900 billion to finance the remainder of the $1.8 trillion of debt it is issuing. Washington's printing presses will need to work overtime.

Slowing them down will require extraordinary political will. With government expenditures now running 185 percent of receipts, truly major changes in both taxes and outlays will be required. A revived economy can't come close to bridging that sort of gap.

Legislators will correctly perceive that either raising taxes or cutting expenditures will threaten their re-election. To avoid this fate, they can opt for high rates of inflation, which never require a recorded vote and cannot be attributed to a specific action that any elected official takes. In fact, John Maynard Keynes long ago laid out a road map for political survival amid an economic disaster of just this sort: "By a continuing process of inflation, governments can confiscate, secretly and unobserved, an important part of the wealth of

their citizens.... The process engages all the hidden forces of economic law on the side of destruction, and does it in a manner which not one man in a million is able to diagnose."

I want to emphasize that there is nothing evil or destructive in an increase in debt that is proportional to an increase in income or assets. As the resources of individuals, corporations and countries grow, each can handle more debt. The United States remains by far the most prosperous country on earth, and its debt-carrying capacity will grow in the future just as it has in the past.

But it was a wise man who said, "All I want to know is where I'm going to die so I'll never go there." We don't want our country to evolve into the banana-republic economy described by Keynes.

Our immediate problem is to get our country back on its feet and flourishing — "whatever it takes" still makes sense. Once recovery is gained, however, Congress must end the rise in the debt-to-G.D.P. ratio and keep our growth in obligations in line with our growth in resources.

Unchecked carbon emissions will likely cause icebergs to melt. Unchecked greenback emissions will certainly cause the purchasing power of currency to melt. The dollar's destiny lies with Congress.

Warren E. Buffett is the chief executive of Berkshire Hathaway, a diversified holding company.

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Financial Crisis Inquiry Commission Staff Audiotape of Interview with Warren Buffett, Berkshire Hathaway

May 26, 2010

INTERVIEWER:
Thank you. Mr. Buffett we're with the staff of the Financial Crisis Inquiry Commission. We were formed by Congress in 2009 to investigate the causes of the financial crisis both globally and domestically. And to do a report, due at the end of this year, December 15, 2010 to the President and to Congress which we also plan to release to the American public. We're tasked not only with investigating the causes of the financial crisis but looking at specific issues that Congress has enumerated in the Fraud Enforcement Recovery Act which formed the Commission. The Commission is a bi-partisan Commission, six Democrats and four Republican Commissioners and we are with the staff of the Commission. We wanted to ask you a few questions today and get your views and your insights so that we may better understand the causes of the financial crisis. In addition, we would like to ask you a few questions about Moody's as well since you are a significant shareholder in Moody's. And if you don't mind, let's ask first about Moody's specifically.

INTERVIEWER:
I understand sir, that in 1999 and in February of 2000 you invested in Dun and Bradstreet.

WARREN BUFFETT:
That's correct. I don't have the dates, but that sounds right.

INTERVIEWER:
Yes sir. And am I correct, sir, in saying that you made no purchases after Moody's spun off from Dun and Bradstreet?

WARREN BUFFETT:
I believe that's correct.

INTERVIEWER:
What kind of due diligence did you and your staff do when you first purchased Dun and Bradstreet in 1999 and then again in 2000?

WARREN BUFFETT:
There is no staff. I make all the investment decisions and I do all my own analysis. And basically it was an evaluation both of Dun and Bradstreet and Moody's but of the economics of their business. And I never met with anybody. Dun and Bradstreet had a very good business and Moody's had an even better business. And basically the single most important decision in evaluating a business is pricing power. You've got the power to raise prices without losing business to a competitor, and you've got a very good business. And if you have to have a prayer session before raising the price by a tenth of a cent (laughs), then you got a terrible business. And I've been in both and I know the difference.

INTERVIEWER:
Now, you've described the importance of quality management in your investing decisions and I know your mentor Benjamin Graham, I happen to have read his book as

well, has described the importance of management. What attracted you to the management of Moody's when you made your initial investments?

WARREN BUFFETT:
I knew nothing about the management of Moody's. I've also said many times in annual reports and elsewhere that one of the many, but with reputation of for brilliance in him gets hooked up with a business with a reputation of bad economics, it's the reputation of the business that remains intact. If you've got a good enough business, if you have a monopoly newspaper, if you have a network television station, I'm talking in the past, you know, your idiot nephew could run it. And if you've got a really good business, it doesn't make any difference. It makes some difference maybe in capital allocation or something of the sort, but the extraordinary business does not require good management.

WARREN BUFFETT:
I'm not making any reference to Moody's management, I didn't know them, but it really, you know, if you own the only newspaper in town up till the last five years or so, you have pricing power and you didn't have to go to the office.

INTERVIEWER:
And do you have any opinion, sir, of how well management of Moody's has performed?

WARREN BUFFETT:
It's hard to evaluate when you have a business that has that much pricing power. I mean, they have done very well in terms of huge returns on tangible assets, almost infinite. And they have, they have grown along with a business that generally capital markets became more active and all that. So in the end--and they've raised prices--we're a customer of Moody's too so I see this from both sides and an unwilling customer, but we're a customer nevertheless. And what I see as a customer is reflected in what's happened in their financial record.

INTERVIEWER:
And I've seen in many places where you've been referred to as a passive investor of Moody's. Is that a fair characterization and what sort of interactions and communications have you had with the Board and with management of Moody's?

WARREN BUFFETT:
At the very start there was a fellow named Cliff Alexander who was the Chairman of Dun and Bradstreet while they were breaking it up. He met me, I met him in connection with something else years earlier. So we had a lunch at one time, but he wasn't really an operating manager, he was there sort to oversee the breakup of the situation. Since we really owned stock in both Dun and Bradstreet and Moody's when they got split up, I'd never been in Moody's offices. I don't think I've ever initiated a call to them. I would say that three or four times as part of a general road show their CEO and the investor relations person would stop by and they think they have to do that. I have no interest in it basically and I never requested a meeting. It just, it was part of what they thought investor relations were all about. And we don't believe much in that.

INTERVIEWER:
What about any Board members? Have you pressed for the election of any Board members to Moody's Board?

WARREN BUFFETT:
No, I have no interest in it.

INTERVIEWER:
And, we've talked about just verbal communications. Have you sent any letters or submitted any memos or ideas for strategy decisions to Moody's?

WARREN BUFFETT:
No, no.

WARREN BUFFETT:
If I thought they needed me I wouldn't have bought the stock. (laughs)

INTERVIEWER:
In 2006 Moody's began to re-purchase its shares, buying back its shares that were outstanding and they did so from 2006 to 2008 according to our records. Why didn't you sell back your shares to Moody's at that time? I know subsequent in 2009 you've sold some shares but from '06 to '09 during the buy-back did you consider selling your shares back and if so, why didn't you?

WARREN BUFFETT:
Oh, I thought they had an extraordinary business and, you know, they still have an extraordinary business now subject to a different threat which we'll get into later, I'm sure. But I made a mistake in that it got to very lofty heights and we didn't sell. It wouldn't have made any difference whether we were selling to them or selling in the market. But there are very few businesses that had the competitive position that Moody's and Standard and Poor's had, they both had the same position essentially. Very few businesses like that in the world. It's a natural duopoly to some extent, now that may get changed, but it has historically been a natural duopoly where anybody coming in and offering to cut their price in half had no chance of success. And there are not many businesses where somebody could come in to cut the price in half. And if somebody doesn't think about shifting, but that's the nature of the ratings business and it's a naturally obtained one. I mean, it's assisted by the fact that the two of them became the standard for regulators and all of that. So it's been assisted by the governmental actions over time. But it's a natural duopoly.

INTERVIEWER:
Now, Mr. Buffett, you've been reported as saying that you don't use ratings.

WARREN BUFFETT:
That's right.

INTERVIEWER:
But the world does.

WARREN BUFFETT:
That's right.

WARREN BUFFETT:
But we pay for ratings which I don't like. (laughs)

INTERVIEWER:
My question is one of more policy and philosophy and that is, would the American economy be better off in the long run if credit ratings were not so embedded in our regulations and if market participants relied less on credit ratings?

WARREN BUFFETT:
Well, I think it might be better off if everybody that invested significant sums of money did their own analysis but that is not the way the world works. And regulators have a terrible problem in setting capital requirements all of that sort of thing without some kind of standards that they look to even if those are far from perfect standards. I can't really judge it perfectly from the regulators' standpoint. From the investors' standpoint, I think that investors should do their own analysis and we always do.

INTERVIEWER:
Would you support the removal of references to credit ratings from regulations?

WARREN BUFFETT:
That's a tough question. I mean, you get into, you get into, you know, how you regulate insurance companies and banks. And we are very significantly in the insurance business and we are told that we can only own triple B and above and different--there are all kinds of different rules in different states and even different countries. And those may serve as a crude tool to determine proper capital or to prevent buccaneers of one sort from going out and speculating in the case of banks with money that's obtained through a government guarantee. So that is not an easy question.

INTERVIEWER:
As I mentioned at the outset we're investigating the causes of the financial crisis and I would like to get your opinion as to whether credit ratings and their apparent failure to predict accurately credit quality of structured finance products like residential mortgage backed securities and collateralized debt obligations. Did that failure or apparent failure cause or contribute to the financial crisis?

WARREN BUFFETT:
It didn't cause it but there were a vast number of things that contributed to it. The basic cause was, you know, embedded in, partly in psychology, partly in reality in a growing and finally pervasive belief that house prices couldn't go down. And everybody succumbed, virtually everybody succumbed to that. But that's, the only way you get a bubble is when basically a very high percentage of the population buys into some originally sound premise--and it's quite interesting how that develops--originally sound premise that becomes distorted as time passes and people forget the original sound premise and start focusing solely on the price action. So the media, investors, mortgage bankers, the American public, me, you know, my neighbor, rating agencies, Congress, you name it. People overwhelmingly came to believe that house prices could not fall significantly. And since it was the biggest asset class in the country and it was the easiest class to borrow against it created, you know, probably the biggest bubble in our history. It'll be a bubble that will be remembered along with South Sea bubble and [unintelligible] bubble.

INTERVIEWER:
I do want to ask you some questions about the formation of that bubble, if I may ask a couple more on the rating agency side and then shift to that. And that is, do I take it, though, that you believe that at least the failure of the ratings contributed in some part to the financial crisis?

WARREN BUFFETT:
But I do think it was, I think every aspect of society contributed to it virtually. But they fell prey to the same delusion that existed throughout the country eventually. And it meant that the models they had were no good. They didn't contemplate, but neither did the models in the minds of 300 million Americans contemplate what was going to happen.

INTERVIEWER:
And similarly, sir, the ratings agencies, both Moody's and S&P downgraded securities en masse in July of 2007, July, roughly starting around July 10, 2007. And then again in mid October of 2007. Many have pointed to these downgrades as contributing to the crisis. Do you believe that these downgrades, the sudden downgrades contributed to uncertainty in the market or the looming crisis?

WARREN BUFFETT:
Well, I think that the realization by people that a bubble was starting to pop and, you know, everybody doesn't wake up a six a.m. on some morning and find it out. But Freddie Mac, Fannie Mae they all felt different in the middle of 2007 than they did in the middle of 2006 or 2005. So people were watching a movie and they thought the movie had a happy ending and all of a sudden the events on the screen started telling them something different. And different people in the audience picked it up maybe different hours, different days, different weeks. But at some point the bubble popped.

WARREN BUFFETT:
And for differently people it was, they were seeing it at slightly different times. But you can say the media's caused it too, if they say the bubble's popping, you know. The recognition of it by the rating agencies I would say, you know, may have pulled a whole bunch of people that previously hadn't been paying much attention that it was happening. The report's coming out of Freddie and Fannie may have told people what was happening country-wide and I think that was the summer of 2007 certainly was telling people that. So it was dawning on people in a way sort of that what they believed wasn't true.

INTERVIEWER:
Now, I read in one of your shareholder letters I thought you appropriately said, "A pin lies in wait for every bubble."

WARREN BUFFETT:
And this was the biggest one.

INTERVIEWER:
When did you realize that there was a mortgage melt down coming and if so, what steps did you take to prepare for it? And if not, why were you unable, as one of the purportedly wisest investors in the United States, why were you unable to spot this massive bubble growing?

WARREN BUFFETT:
The answer is to the first part was not soon enough. (laughs) And it was something we talked about at our annual meetings. And I think one point I referred to it as a bubblette, I don't remember what year that was. But, and I talked my home in Laguna where the implicit value of the land had gotten up to $30 million an acre or something like that, on that order. But the nature of bubbles is that, you know, with the internet bubble I was aware of it too, but I didn't go and shorten stocks. I never shorted internet stocks and I didn't short housing stocks. Looking back, you know, a) we don't short around here but, you know, if I'd seen what was coming, I might have behaved differently (laughs) including selling Moody's. Something's wrong.

INTERVIEWER:
And we've obviously had bubbles in the past. As you pointed with the internet bubble and others. But at least in recent times we've never had a financial crisis as severe as the one we're living through now. When did it dawn on you that this bubble bursting and this financial crisis was going to be different than none others in recent time?

WARREN BUFFETT:
Well, unfortunately, it's a gradual process and, you know, you get wise too late. When it really became apparent that, you know, that this was something like we'd never seen was in September 2008 that's when I said on CNBC, this is an economic Pearl Harbor. Well, it was an economic Pearl Harbor by definition I meant that I hadn't seen it three months earlier because I didn't see a Pearl Harbor three months earlier. There were all kinds of developments, but the degree to which it would stop the financial system, you know. And then with the consequent overflow into the economy, you know. Until September 2008, I didn't fully realize.

INTERVIEWER:
What do you think it was, if you were to point to one of the single driving causes behind this bubble? What would you say?

WARREN BUFFETT:
There's a really interesting aspect of this which will take a minute or two to explain, but my former boss Ben Graham in an observation 50 or so years ago to me that really stuck in my mind and now I've seen elements of it. He said you can get in a whole lot more trouble in investing with a sound premise than with a false premise. If you have some premise that the moon is made of green cheese or something, you know, it's ridiculous on its face. If you come up with a premise that common stocks have done better than bonds and I wrote about this in a Fortune article in 2001. Because it was, there was a famous little book in 2001 by Edgar Lawrence Smith, in 1924, I think, by Edgar Lawrence Smith that made a study of common stocks vs. bonds. And it showed, he started out with the idea that bonds would over-perform during deflation and common stocks would over-perform during inflation. He went back and studied a whole bunch of periods and lo and behold, his original hypothesis was wrong. He found that common stocks always over-performed. And he started to think about it and why was that. Well it was because there was a retained earnings factor. They sold, the dividend you got on stocks was the same as the yield on bonds and on top of that you had retained earnings. So they over-performed. That became the underlying bulwark for the '29 bubble. People thought stocks were starting to be wonderful and they forgot the limitations of the original premise which was that if stocks were yielding the same as bonds that they had this going for them.

So after a while the original premise which becomes sort of the impetus for what later turns out to be a bubble is forgotten and the price action takes over. Now we saw the same thing in housing. It's a totally sound premise that houses will become, worth more over time because the dollar becomes worth less. It isn't because, you know, construction costs go up. And it isn't because houses are so wonderful it's because the dollar becomes worth less that a house that was bought 40 years ago is worth more today than it was then. And since 66% or 67% of the people want to own their home and because you can borrow money

on it and you're dreaming of buying a home, if you really believe that houses are going to go up in value you buy one as soon as you can. And that's a very sound premise. It's related of course, though, to houses selling at something like replacement price and not [unintelligible] of stripping inflation. So the sound premise it's a good idea to buy a house this year because it will probably cost more next year and you're going to want a home and the fact that you can finance it gets distorted over time if housing prices are going up 10% a year and inflation is a couple of percent a year. Soon the price action, or at some point the price action takes over and you want to buy three houses and five houses and you want to buy with nothing down and you want to agree to payments that you can't make and all of that sort of thing because it doesn't make any difference, it's going to be worth more next year. And the lender feels the same way. Doesn't really make difference if it's a liar's loan or you don't have the income or something because even if they have to take it over, it'll be worth more next year. Once that gathers momentum and it gets reinforced by price action and the original premise is forgotten which it was in 1929. The internet, it's the same thing. The internet was going to change our lives, but it didn't mean that every company was worth $50 billion that could dream up a prospectus and the price action becomes so important to people that it takes over their minds. And because housing was the largest single asset around 22 trillion or something like on about, you know, a household wealth of 50 or 60 trillion or something like that in the United States, such a huge asset, so understandable to the public. They might not understand stocks or the internet, you know, they might not understand tulip bulbs, but they understood houses. And they wanted to buy one anyway and the financing, and you could leverage up to the sky, it created a bubble like we've never seen. I wish I'd figured that out in 2005.

INTERVIEWER:
This bubble, though, has been described as different from prior housing bubbles. And certainly the forces that you've described about prices and certainly the types of loans that you've described have been around for a while. What do you think, though, made this particular housing bubble different and what would you point to to the growth of this particular housing bubble? Some have pointed to cheap money, in essence, some have pointed to lack of regulation in the origination business, some have pointed to the drive from Wall Street for securitized mortgages and RMBS and then as collateral for CEOs. Others have pointed to government policy that created the housing bubble. What do you think created and caused this housing bubble?

WARREN BUFFETT:
It's a great question to which I don't have a great answer. Why did the, I don't know whether the tulip bulb bubble was in 1610 or 20 but tulips had been around before and they'd always looked beautiful and people had wanted them in their tables and all that. And for some reason it gets to a critical mass, this critical point where price action alone starts dominating people's minds. And when your neighbor has made a lot of money by buying internet stocks, you know, and your wife says that you're smarter than he is and he's richer than you are, you know, so why aren't you doing it. When that gets to a point, when day trading gets going, all of that sort of thing, very hard to point to what does it. I mean, it, you know, we've had hula hoops in this country, we've had pet rocks, I mean, you know, and this is the financial manifestation of, you know, a craze of sorts. And I, it's very hard to tell what got the--all the, you can name a lot of factors that contribute to it but to say what is the one that this time was different that made, why it didn't catch fire earlier, I can't give you the answer.

INTERVIEWER:
You don't make our job any easier. (laughs)

WARREN BUFFETT:
(laughs) No, well, no, listen, I don't have a great answer, I'd probably have written an essay or something on it by this point. I mean, you know, I think it's going to defy an answer to be perfectly honest. That doesn't mean that your time is wasted or anything. Understanding, you know, the pathology of bubbles is not an unimportant--we had one that was more severe, in fact there was an article in the Omaha World Herald about three months ago that described how it was more severe, we had a bubble in the Midwest in the early '80s in farmland that created much more financial dislocation, but it was limited to the farm belt than this particular bubble has which has not hit as hard in terms of housing in the Midwest. So Nebraska was much harder hit in the farmland bubble. And the farmland bubble had the same logic to it. Inflation was out of control, Volcker hadn't really come in with his, with his meat axe to the economy and people said, you know, you're not making more farmland, there are going to be more people eating, farmland gets more productive by the years, we learn more about it, fertilizers and all that sort of thing. And cash is trash so you should go to, and own something real which was a farm. And I bought a farm from the FDIC and well, no, it was the FDIC I think. They took over a bank 30 miles from here, I bought up a farm for $600 an acre that the bank had lent $2,000 an acre against. And the farm didn't know what I'd paid for it or the other guy had paid, or lent on it. And that farm had a productive capacity of probably $60 an acre in terms of what corn soybeans were selling for. To lend

$2,000 against it when interest rates were 10% was madness. And both the banks in [unintelligible] and Nebraska went broke because they went insane. They got through the '30s alright, but the psychology that farms could do nothing but go up took over. And that was a significant, but very miniature version of what could happen with houses country-wide.

INTERVIEWER:
Now earlier you referenced the GSEs and it's been reported that in 2000 you sold nearly all of your Freddie Mac and Fannie Mae shares. What persuaded you in 2000 to think that those were no longer good investments?

WARREN BUFFETT:
Well, I didn't know that they were not going to be good investments. But I was concerned about the management at both Freddie Mac and Fannie Mae although our holdings were concentrated in Freddie Mac. They were trying to and proclaiming that they could increase earnings per share in some low double digit range or something of the sort. And any time a large financial institution starts promising regular earnings increases you're going to have trouble. It isn't given to man to be able to run a financial institution where different interest rates scenarios will prevail and all of that comes to produce smooth regular earnings from a very large base to start with. So if people are thinking that way they're going to do things maybe in accounting it's turned out to be the case in both Freddie and Fannie but also in operations that I would regard as unsound. I don't know when it'll happen, I don't even know for sure if it'll happen. It will happen eventually if they keep up that policy and so, we, or I just decided to get out.

INTERVIEWER:
The Washington Post reported on October 31, 2007 that you had provided some testimony the day before in a case against Freddie Mac's CEO where you had indicated that you became troubled when Freddie Mac made an investment unrelated to its mission. And you were quoted in that article as saying that you didn't think that it made any sense at all and you were concerned about what they might be doing that I didn't know about. What was that investment unrelated to its mission?

WARREN BUFFETT:
As I remember it was Philip Morris bonds, I think, I could be wrong, it might be R.J. Reynolds or something. But they'd made a large investment in that. Now they're dealing essentially with government guaranteed credit. We knew that then, we've had it ratified subsequently by what's happened. So here was an institution that was trying to serve two masters, Wall Street and her investors, and Congress. And they were using this power to do something that was totally unrelated to the mission and then they gave me some half-baked explanation about how it increased liquidity which was just nonsense. And the truth was they were arbitraging the government's credit. And for something the government really didn't intend for them to do. And, you know, there's seldom just one cockroach in the kitchen, you know. You turn on the light and all those others all start scurrying around. And I wasn't, I couldn't find the light switch but I'd seen one.

INTERVIEWER:
Shifting to more recent times. You've made investments in Goldman Sachs in September of 2008 and in General Electric. What were your considerations when you made those investments and were you persuaded by any government official to make those investments?

WARREN BUFFETT:
I wasn't persuaded by, I was, in my own mind, there was only one way the, both the financial world and the economy was going to come out of this situation that, of paralysis in September of 2008 and I made the fundamental decision that we had really the right people in Bernanke and Paulson and in there with the President would back them up. That we had a government that would take the action and only the government could. It would take the action to get an economic machine that had become stalled basically back into action. And I didn't know what they would do, I didn't know what Congress would go. It didn't really make much difference. The important thing was the American public would come to believe that our government would do whatever it took. And I felt it would, it would have been suicide not to. But it hadn't been done in the early '30s and therefore those companies like General Electric or Goldman Sachs were going to be fine over time. But it was a bet, essentially, on the fact that the government would not really shirk its responsibility at a time like that to leverage up when the rest of the world was trying to de-leverage and panicked.

INTERVIEWER:
Around that same time on October 17, 2008 you wrote an op-ed piece in the New York Times on why you were buying American stocks. And did anyone from the federal government or Federal Reserve ask you to write that?

WARREN BUFFETT:
No, no.

INTERVIEWER:
And similarly, I know you weren't persuaded by anything the government asked you to do but did anyone ask you to make any investments in financial companies such as Goldman?

WARREN BUFFETT:
No. Well, Goldman asked me to and GE asked me to and a number of other

companies asked me to but nobody from government.

INTERVIEWER:
No one from government?

WARREN BUFFETT:
No.

WARREN BUFFETT:
I have, I have, actually, testified that in the connection with Lehman was trying to raise some money in the spring of 2008 and Dick Fuld was calling me and he did get Hank Paulson to call but Hank did not urge me to buy. He was responding to the entreaties of Fuld that he make a call but I was not asked to buy anything. Wouldn't have done any good if they'd asked. (laughs)

INTERVIEWER:
Do you believe that your prominence as an investor and your stock purchases could alleviate the financial crisis, was that--?

WARREN BUFFETT:
That was not a motivation.

INTERVIEWER:
Was that a consideration?

WARREN BUFFETT:
No, no, not a bit. (laughs) My public spirit has stopped short of $8 billion.

INTERVIEWER:
Would the American economy have been better off in the long run if there'd had been no exceptional government assistance to financial institutions? In other words do you think that we've increased the likelihood of moral hazard in the long run?

WARREN BUFFETT:
I think the moral hazard thing is misunderstood in a big way. There is no moral hazard existing with shareholders of Citigroup with Freddie Mac, with Fannie Mae, with WaMu, with Wachovia, you just go up and down the line. I mean, those people lost anywhere from 90% to 100% of their money. And the idea that they would walk away and think, ah, I've been saved by the federal government when I think just the companies I named there's a least a half a trillion dollars of loss that the common shareholders now--there's another question with managements which we might get into later. But in terms of moral hazard I don't even understand why people talk about that in terms of equity holdings.

INTERVIEWER:
Do you think we would have been better off though, if we had not the infusion of government assistance?

WARREN BUFFETT:
I think it would be a disaster, you know. It would have. It would have been the disaster of all time.

INTERVIEWER:
I'd like for you to try to help me square something you've been quoted as saying about credit default swaps and I'm sure my colleague Chris Seifer has been focusing in on these areas, he'll ask you additional questions. But you've been quoted as saying credit default swaps were financial weapons of mass destruction.

WARREN BUFFETT:
Well, I, I, no, I said derivatives.

INTERVIEWER:
Derivatives, excuse me.

WARREN BUFFETT:
Yeah, were financial--systemically they represented potential financial weapons of mass destruction. And I think, I don't think there's any question about that.

INTERVIEWER:
And in 2008 you began to invest in credit default swaps and I understand that--

WARREN BUFFETT:
Yeah, we've sold insurance for a lot of years and sometimes that's credit insurance. And, you know, I don't think the way--I don't see a connection between selling insurance and thinking something can be systemically dangerous if again carried to extremes in terms of the leverage produced and the scope of contracts entered in but I don't see anything improper about credit insurance.

WARREN BUFFETT:
Banks are doing that for decades with letters of credit and that sort of thing.

INTERVIEWER:
And in terms of though your concern with derivatives, is it a question of the type of product or is it a question of the use or both?

WARREN BUFFETT:
It's a question of being, it's the ability to inject enormous amounts of leverage into a system where leverage is dangerous. And without people fully appreciating the amount of leverage and as a handmaiden of leverage, a risk of counterparties running up huge amounts of receivables and payables. And one of the reasons stock markets work well is that you've got a three day settlement period. But if you have a one year settlement period--in fact, I think over in Kuwait they did some years ago, and they had a total debacle--you would have far more problems. Well, derivatives and bonds are very, very long settlement period and things can happen between when you write a contract and if you have a settlement period, there was one at Gen Re that was 100 years, very hard to predict the behavior of somebody else 100 years from now. (laughs) And derivatives present big problems. Now, if there's only a small amount in use it doesn't make that much difference to the system. But if they become more and more pervasive, more and more imaginative and less, and in effect very little attention being paid to them which is why I sounded a warning. I don't think they're evil per se, it's just,

they, I mean there's nothing wrong with having a futures contract or something of the sort but they do let people engage in massive mischief. And the thing I found really extraordinary--and Tracy, you might give them that letter-- I mean I wrote this letter in 1982, about the date--the, here, you've got a Commission that's doing what before I did, you know, many years ago. And when we had those hearings after '29 we decided leverage was dangerous for people and it could cause systemic problems when used in the stock market. And we had the Federal Reserve power to determine margin requirements. We said that was important and that if people got over leveraged in the stocks they could cause a problem not only for themselves but for others if it was done on a wide scale. And then we came along in 1982 and we in a sense opened up leverage to anybody in extreme measures and since that time, 28 years since then, I and perhaps others, but I know I pointed out at least 20 times the, really nonsense of saying somebody at the Federal Reserves telling people they can only borrow 50% against stocks or whatever the margin requirements have been at various times. And then at the same time telling them that you can go gamble, you know, in S&P futures or something, the 2% or 3% margin or whatever it might be and to this day, and I've talked to Congress about it and to this day we sit there with a system where the Federal Reserve is telling you how much you can borrow against stocks and we've got this parallel system where people can gamble anything they want virtually in terms of the most obvious one being the S& P futures. And I've seen no attempt by anybody to address that total contradiction. Might be a suggestion for your Commission.

INTERVIEWER:
On that vein we've been charged with talking about excess risk and excess speculation and I know you've commented on what you view as speculation in one of your letters. But we've had some internal conversations within the Commission itself about the use of the term speculation whether it's a--

WARREN BUFFETT:
It's an interesting--defining investment, speculation and gambling is an interesting question.

INTERVIEWER:
I'd be interested in, you know, what you think speculation is as opposed to investing which you've written about and also what you think excess speculation or excess risk is in that context.

WARREN BUFFETT:
It's a tricky definition, you know, it's like pornography (laughs) the famous quote and all that, but I look at it in terms of the intent of the person engaging in the transaction. And an investment operation and that's not the way Graham defines it in his book, but an investment operation in my view is one where you look to the asset itself to determine your decision to lay out some money now to get some more money back later on. So you look to the apartment house, you look to the stock, you look to the farm in terms of what that will produce. And you don't really care whether there's a quote under it all. You are basically committing some funds now to get more funds later on through the operation of the asset. Speculation, I would define, as much more focused on the price action of the stock, particularly that you buy or the indexed future or something of the sort. Because you are not really, you are counting on, for whatever factors, could be quarterly earnings, could be up or it's going to split or whatever it may be or increase the dividend, but you are not looking to the asset itself. And I say the real test of how you, what you're doing is whether you care whether the markets are open. When I buy a stock, I don't care whether they close the stock market tomorrow for a couple of years because I'm looking to the business, Coca-Cola or whatever it may be to produce returns for me in the future from the business. Now if I care whether the stock market is open tomorrow then I say to some extent I'm speculating because I'm thinking about whether the price is going to up tomorrow or not. I don't know where the price is going to go. And then gambling I would define as engaging in a transaction which doesn't need to be part of the system. I mean, if I want to bet on a football game, you know, the football game's operation is not dependent on whether I bet or not. Now, if I want to bet on October wheat or something of the sort people have to raise wheat and when they plant it they don't know what the price is going be later on. So you need activity on the other side of that and who may be speculating on it but it is not an artificial transaction that has no necessity for existing in an economic framework. And the gambling propensity with people is huge. I mean, you took a, you know, some terrible sand out in the west about 100 years ago and you created, you know, huge industry with people flying thousands of miles to do things which are mathematically unintelligent, you know. Now that is, shows something in mankind that has a strong, strong behavioral, has a strong behavioral aspect to it and think how much easier it is, you know, to sit there in front of a computer and have the same amount of fun without, you know, getting on a plane and going a 1,000 miles and having to make reservations and do all that sort of thing. So with this propensity to gamble encouraged incidentally by the state with lotteries, you know, with terrible odds attached to them, people don't have to be trained to want to gamble in this country but they, they have this instinct, a great many people. They're encouraged when they see some successes around, that's why

the bells and whistles go off in the casino when somebody hits a jackpot, you know. So, you know, you have all these things pushing to that including governmental urging to buy lottery tickets and all that sort of thing. And now you've got a vehicle like, you know, S&P futures or something where you can go in and out and where Congress has granted particularly favorable tax treatment to you if you win. I mean, you can be in for ten seconds and have 60% long term gain which I regard as, you know, extraordinary. But it exists.

WARREN BUFFETT:
That's all I know about gambling, actually speculation (laughs) but I do know it when I see it.

INTERVIEWER:
My last question before I turn things over is, you've mentioned management and people have observed that there has been failures of management at Wall Street banks. Similarly people have described there to be failures of regulators during this crisis.

WARREN BUFFETT:
Failures of the media, failures of, you know, Congress failures, you know. Commentators, you know.

INTERVIEWER:
How did management fail and what do you view as the essential failures in management of the Wall Street firms and similarly what would you view as the failures of the regulators leading up to and during the crisis?

WARREN BUFFETT:
Well, they didn't anticipate, you know, how extraordinary a bubble could be created, you know. And very difficult to fault them because so few people have a difficult time doing that when a crowd is rushing in one direction knowing the other direction is very hard. And usually the people that do that become discredited by the price action, you know. If you were a Cassandra in 2005 or 2006 and houses kept going up, you know, after a while people quit listening and it [unintelligible] because they're nuts anyway, you know, anything that's going on so you, you have a fringe element to Cassandras too. Conceivably, you know, if the President of the United States, you know, or the Chairman of the Fed or somebody made a strong statement, Greenspan made a strong statement I remember in 1996 you know about irrational consumers, you know, that didn't stop the stock market. When people think there's easy money available they're not inclined to change. Particularly if somebody said a month or two ago watch out for this easy money and then their neighbors made some more money in the ensuing month or two, it's just, it's overwhelming. And we've seen it.

INTERVIEWER:
And the failures of regulators? Were there any?

WARREN BUFFETT:
Well, oh, I mean they are failures of everybody in one sense. But the biggest failure is that were unable to act contrary to the way humans act in these situations. I mean, it would have, you can say regulators should have been out there screaming about the fact you people are doing foolish things and sure, regulators could have stopped it. If a regulator said, or Congress could have stopped--Freddie and Fannie, if Freddie and Fannie had said, you know, we will only accept mortgages with 30% down payments, verified income and the payments can't be more than 30% of your income, you know, that would have stopped it. But who, you know, who could do that.

INTERVIEWER:
Do you think if Fannie--

WARREN BUFFETT:
In fact, if I think you recommend that (laughs), of course for future mortgage actions you better get an unlisted phone number.

INTERVIEWER:
(laughs) Do you think if Fannie had tighter standards and tighter controls that we could have averted a financial crisis?

WARREN BUFFETT:
Well, Freddie and Fannie were in a position--whether they were practically in that position, whether Congress, you know, would have tolerated them coming out with really much stricter standards, I don't think it probably could have happened. I'm not sure they wanted it to happen either. I mean, they were enjoying the party too. And they didn't think the party was going to end like this. I mean, it wasn't like somebody was thinking this is going to end in a paralysis of the American economy, you know. They just, they started believing what other people believed. It's very tough to fight that. We will have other bubbles in the future, I mean, there's no question about that. I don't think the President of the United States, you know, could have stopped it by rhetoric. And I think if any President of the United States had said, you know, I'm campaigning on a program of 30% down payments, verified income and not more than 30, you know, they might not have impeached him but they sure as hell wouldn't have re-elected him. (laughs)

INTERVIEWER:
Thanks. I'm going to primarily ask you about derivatives generally but I want to ask you about a couple of things different first. In your most recent shareholder letter you talked about how Berkshire Hathaway--

INTERVIEWER:
That Berkshire Hathaway would never become dependent on the kindness of strangers.

WARREN BUFFETT:
Absolutely.

INTERVIEWER:
And too big to fail was not a fallback

position and that the company would always have sufficient cash apparently in the magnitude of $20 billion these days so that would not be a problem. Generally when you look at the issue of too big to fail, is it just a liquidity issue? Do you have enough cash? No one's too big to fail because the issue will never come up?

WARREN BUFFETT:
You'll have the institutions too big to fail. We still have them now, I mean, we'll have them after. Your Commission reports, certainly I mean Freddie and Fannie we've totally acknowledged we got--and incidentally are too big to fail. I'm not quarrelling with the policy on it and they aren't too big to wipe out the shareholders though, I mean. So it isn't, you know, society has done the right thing with Freddie and Fannie in my view. They've wiped out the shareholders, nobody's got any illusion that the government is protecting them as an equity holder. They do have the belief that they will be protected as debt holders but we were sending that message well before the bubble. I mean, you know, Congress would say technically we aren't backing them and they've only got this two and quarter million or whatever it was line of. But Freddie and Fannie paper was held all over the world and, you know, in a world where the other guy's got nuclear bombs (laughs) you're sort of implying to them that the government was standing behind this. I don't think you would have wanted to default on Freddie and Fannie, so I think we've done the right thing. But there will be institutions that are too big to fail but they're not too big to wipe out the shareholders--and I would argue that they're not too big to, I think there should be different incentives with institutions like that with the top, the top management. They're not too big to send away to the CEO that caused the problem, away without a dime.

INTERVIEWER:
And I understand that is, I'm just asking if, your opinion, is the answer to the too big to fail problem make them hold more cash?

WARREN BUFFETT:
The answer, and it isn't a perfect answer, you will always institutions too big to fail and sometimes they will fail in the next 100 years. But you will have fewer failures if the person on top and the Board of Directors who select that person and who set the terms of his or her employment if they have a lot to lose. And in this particular incident the shareholders have got probably it's well over half a trillion, maybe approaching a trillion, they've suffered the losses, society has suffered the losses from all the disruption in the second place. Directors and CEOs, CEOs, you know they only have 80% of what they had before, but they're all wealthy beyond the dream of most Americans. The Directors, you know, have collected their $200,000 or $300,000 a year and they're protected by insurance. And so the people that are in a position to make decisions day by day as to trading off the safety of the institution vs. the chance for improving quarterly earnings or something of the sort, you need different incentives in my view. And so far nothing's been done on that.

INTERVIEWER:
So let me ask you because another area we look at is a potential contributing cost of financial crisis are compensation structures and incentive structures within firms. And you have seen a lot of firms, you know, come out since the crisis and say, oh well, now we're doing things differently. Now we pay more of our executives in stock. Now the stock or cash bonuses are subject to claw back provisions and vesting periods or whatever. Do you have any thoughts on, you know, how you do make them have accountability for when things go wrong?

WARREN BUFFETT:
Well, all of that is good. I mean, that's better than what existed before. But I think it has to be far more Draconian than that, to really change behavior big time. And the difference is between a guy making $100 million and $50 million, you know, that, I don't think, or clawing back $25 million of it, sure, you know, it registers but it doesn't, I don't think it changes behavior that much compared to at least what I would have in mind.

INTERVIEWER:
Do you and the next I was going to ask you, what are the more Draconian--

WARREN BUFFETT:
I think it's enormously important when you get very big financial institutions and maybe in other cases too, well, we're in a building run by the Keywood Company. It's the most successful construction company in the world and it has been for decades. Nobody's ever heard of it but it's huge and it's got a set of management principles and basically it started with Pete Keywood saying that arranging a compensation system so that the company got in trouble not only he went broke but all the people that got him in trouble went broke. And you, when you have the ability to do things with government guaranteed money as the banks or something, or Freddie and Fannie whatever it may be, you need a person at the top who has all of the downside that somebody has that loses their job, you know, working in an auto factory or something of the sort. And that will change behavior. Now, you can argue it may make them too cautious, I mean that, so you want some upside for them, too, I mean, you want them to balance somehow their interest in a way that society might balance its interest. And as part of that with the CEO I think you need important but far less Draconian arrangements in terms of Directors. Because they can't evaluate risk in a large institution

or have risk committees telling them what's going on. But they can set the terms of employment for the CEO in a way that will make him terribly risk conscious and if they don't do that, if they haven't done it effectively, I think there should be significant downside to them. I've suggested to them that maybe they give back five times the highest compensation they received in the previous five years or something. It has to be meaningful but it can't be so Draconian that you don't get Directors. You'll get CEOs, you don't have to worry about that, if you've got a lot of upside for CEOs you can give them the downside of, you know, sack cloth and ashes and you'll still get CEOs that--

INTERVIEWER:
The downside of course is just zero because they file bankruptcy and that's it. I had a question for you though related to that, in the 50 years plus that you've been investing have you seen changes in compensation approaches, policies, attitudes with respect to senior management at these various--

WARREN BUFFETT:
Well, it's gradually, maybe not, yeah, it's changed over the years and you've seen it just in the relationship of top management compensation to the average employee. So it has gotten considerably more generous-- if you want to use that term - from 50 years ago. There used to be a few outstanding--Bethlehem Steel was famous for paying a lot of money and you go way, way back and all that, but in general it wasn't expected. And there's some ironic aspects to that because in a sense the SEC has required more exposure in pay packages and everything like that so you've got this envy factor, I mean, you know, the same thing that happens in baseball. I mean, if you bat .320 you expect to get more than .310 and nobody knows in business whether you're batting .320 or not so everybody says they're a .320 hitter. And the Board of Directors has to say, well, we've got a .320 hitter because they couldn't be responsible for picking a guy that bats .250. So you have this racheting effect which I've talked about a lot of times. And the more information that's published about compensation in a way, the worse it's gotten in terms of what people do. Because they look at the other guy and he's got personal use of the plane or whatever it may be (laughs) and that gets built into the next contract. So, it's changed over the years and the downside is not parallel, the upside in terms of innovation.

INTERVIEWER:
Well, let me ask you other than looking at perhaps more Draconian measures for money and compensation that is received, do you have any opinions on just the amounts that are paid in whatever form in the first place. And for example, one of things we see, and frankly I saw this before I came to the FCIC is you always read in a proxy statement that all these companies go out and hire somebody to do a survey and see, you know, to come up with executive compensation and they're looking at a bunch of companies that pay their executives a lot of money. And they say, okay, you should get a whole lot of money too.

WARREN BUFFETT:
Ratchet, ratchet, ratchet, that's the name of the comp board.

INTERVIEWER:
I mean, is, do you have any opinions on just the level of executive compensation?

WARREN BUFFETT:
Well, it's perfectly understandable, I mean, you've got a CEO that cares enormously about his compensation. You've got a compensation committee that meets, you know, for a few hours maybe every meeting. You've got a human relations vice president who is working for the CEO that probably suggests a compensation consultant. But a compensation consultant who is Draconian is not going to get hired, generally around, or even too innovative on the downside, there's just--so it is, you know, it's the agency problem that the economist would call it. But it's very, it's very hard, over time--and then you've got this comparison factor which embodies all the other things I just mentioned and then they get into the system and people say, well, we didn't hire a guy in the bottom quartile to be our CEO so we're not going to compare to the bottom quartile, we're not getting compared to the next to bottom quartile. So it just ratchets up and we've seen it. And I am the comp committee for 70-some companies which Berkshire owns. It's not rocket science. And we pay a lot of money to some of our CEOs but it's all performance. When they make a lot of money it's performance related. And we have different arrangements for different people. But we've never hired a compensation consultant, ever. And we never will. I mean, if I don't know enough to figure out the compensation for these people, you know, somebody else should be in my job. And the test is how do they perform and do they leave for other places and, you know, we've got the record on that. The problem, you know, I'm in a position of control, I am the stockholder of these subsidiary companies and when you get people in between who are getting paid, you know, $200,000 to $300,000 a year being on a Board which is important to some of them and where they're hoping that they get put on some other Board so they've got another $200,000-$300,000 a year, they are not exactly going to be doberman pinschers, you know, in policing things.

INTERVIEWER:
In terms of, we've seen Bear fail, Lehman fail, Merrill essentially fail and get acquired by BofA and Morgan Stanley and Goldman both received

government assistance and Goldman received the benefit of your investment too. All of those investment banking franchises, I believe the compensation structure was essentially minimum 45% of net revenues was getting paid out in comp, some years even higher. Any opinion on that structure?

WARREN BUFFETT:
I can tell you it's very hard to change. I was at Solomon (laughs) and it, the nature of Wall Street is that overall it makes a lot of money relative to the number of people involved, relative to the IQ of the people involved and relative to the energy expended. They work hard, they're bright, but they aren't, they don't work that much harder or that much brighter than somebody that, you know, is building a dam someplace, you know, or a whole lot of other jobs. But in a market system it pays off very, very big, you know. And it, in effect, you know, boxing pays off very big now compared to what it did when the only auditorium we had was 25,000 seats at Madison Square Garden and now you've cable television so you can put a couple of, you know, lightweights who you'll never of again, you know, on pay per view and they'll get millions for it now. Market systems produce strange results and Wall Street, in general, the capital markets are so big, there's so much money, taking a small percentage results in a huge amount of money per capita in terms of the people that work in it. And they're not inclined to give it up.

INTERVIEWER:
When you see the general compensation structure in terms of percentage payout and the types of structures they have with ever different levels of Draconian claw backs or whatever and the risks that were taken that resulted in failures and bailouts, I mean, do you see in the big, you know, the compensation picture in general as a contributing cause or part of the story of what happened on the street?

WARREN BUFFETT:
Comp, most of the comp, you're talking about individual trader or something, you know, and they have, you know, they call it trader's option. That they've got the upside, they have a good year and they have a bad year, you know. They might not have a good year again next year, they might go to a different firm but they really, their interests are not totally aligned with shareholders. And I would say this, I think most managements of Wall Street firms and I was around Solomon and I know what happens at [unintelligible], they're trying, they want to align them, I mean, it isn't, you know, it isn't like the top management is oblivious to this problem. But I can just tell you, being at Solomon personally, it's just, it's a real problem because the fellow can go next door or he can set up a hedge fund or whatever it may be. You don't, you don't have a good way of having some guy that produces x dollars of revenues to give him 10% of x because he'll figure out, he'll find some other place that will give him 20% of x or whatever it may be. It is a tough managerial problem, but I think the best thing again, if you're worrying about the Bear Stearnses of the world or anything is to have an arrangement in place that if they ever have to go to the federal government for help that the CEO and his spouse come away with nothing. And I think that can be done. And I think if society is required to step in and, you know, come up with all kinds of things, disrupt, you know, the lives of millions of Americans in various ways, I think there ought to be a lot of downside. And I think that would change behavior more than any, trying to write some terribly complicated thing, you know, that only 38% of us can (laughs). I just don't know how to write rules otherwise. This would get their attention and I wouldn't try to, I wouldn't know how to get more specific than that.

INTERVIEWER:
Well, then, let me ask you this then. If the CEOs and their spouse--unlucky marriage there--you know, have to give back everything--

WARREN BUFFETT:
You'd think the spouse would be a better police than the regulator (laughs)

INTERVIEWER:
You know, that they need to give everything back or be shown the door, if the company needs government assistance, there are CEOs at some firms that got government assistance that are still there including for example Mr. Blankfein that I've at least read you said, boy, if they're going to replace Blankfein I'd like to replace them with his brother.

WARREN BUFFETT:
Yeah, I don't think they needed assistance. The system needed assistance then but if, when they had that famous meeting at the treasury on Monday if they hadn't called on Goldman Sachs and they called on the others, Goldman would have been fine. The system needed to be supported, just, you know, it wasn't important the precise action. It was that the world had to see that the federal government was going to do whatever it took. And nobody knew whatever it took meant. But they did need to see conviction, action and all of that. And Bernanke and Paulson they could have called on nine different other institutions, these were particularly good names to have there, but had gone through the same mechanism and Goldman Sachs would have been fine, Wells Fargo would have been fine. They didn't need the money, the system needed the reassurance that the government was going to act.

INTERVIEWER:
It's, we've been reported when you made the investment in Goldman in September of '08 that you were, you know, somewhat betting on the government taking some type of action.

WARREN BUFFETT:
Not in relation to Goldman though, but in the, no, I was betting on the fact the federal government would show the will to the American people that they would, in effect, do whatever it took to re-start the engine.

INTERVIEWER:
So, I don't know if you can answer this question because it's somewhat of a hypothetical but if you knew then that the government was not going to put any money into Goldman would you have still made the investment?

WARREN BUFFETT:
Oh, yeah, it wouldn't bother me whether I'm going to put it in Goldman but if I thought the government was not going to reassure the American public through acts, speeches whatever it might be that they were going to do whatever it took to save the system, I would have, you know, got my mattress out. But, Goldman did not need the money, the system needed the reassurance. But Goldman would have been, if they'd ever been called down there they would have been fine. I wouldn't have put the money in if I thought Goldman needed specific government action. But I also would not have put the money in if I thought the government was going to stand by and watch things unfold.

INTERVIEWER:
Okay. So now let's actually turn to derivatives, I didn't think we'd spend that much time--the statute amongst other things tells us to look at the role of derivatives that it played in the financial crisis and we have been talking to "many" experts in the field that, whether they're academicians or market participants that work with derivatives. And, of course, we've read, you know, what you've written in the shareholder letters, the weapons of mass destruction, they can lead to excess risk and leverage and there's counterparty risk. At the same time if they're managed effectively they can be fine although I think in your shareholder letters you're primarily talking about credit derivatives there but I may be mistaken.

WARREN BUFFETT:
Well, when we buy the Burlington Northern, they're hedging diesel fuel. Now what I tell them is I wouldn't do it if I were them but it's entirely up to them. I mean, diesel fuel's a big cost for them and they've got pass-through costs to some of the people that use the railroad and they don't have pass-throughs so they're exposed partly. The only, I tell them if they really don't want diesel fuel on the market we'll just close up the railroad and then all trade diesel fuel all day, you know. And if they don't know it, they're going to be out the frictional costs over time. The reason many of them do it is that they want, the public companies, they want to smooth earnings. And I'm not saying there's anything wrong with that but that is the motivation. They're not going to, they're going to lose as much on the diesel fuel contracts over time as they make but they can protect themselves just like Coca-Cola does on foreign exchange and they make a big thing of this. I wouldn't do it, they do, but all kinds, most companies what to do that. Anheuser-Busch was just talking about it in Business Week a few weeks ago how they do it. It's a common practice. It's overdone in my view, but it is the response to the fact that the market doesn't like the fact that diesel fuel could affect the earnings of Burlington or Union Pacific up and down in some quarter when really over time they're not going to make any, you know, they're not going to save any money by doing it in my view.

INTERVIEWER:
And just broadly, whether it's interest rate, foreign exchange commodity equities or credit derivatives, do you have a view on whether they contributed or caused the financial crisis, what role they played whether it was a cause, a contributing cause, a propagating mechanism or anything?

WARREN BUFFETT:
Anything that increased leverage significantly tends to make, it can't even create a crisis, but it would tend to accentuate any crisis that occurs. So I think that if Lehman had been less leveraged there would have been less problems in the way of problems. And part of that leverage arose from the use of derivatives. And part of the dislocation that took place afterwards arose from that. And there's some interesting material if you look at, I don't exactly what Lehman material I was looking at, but they had a netting arrangement with the Bank of America as I remember and, you know, the day before they went broke and these are very, very, very rough figures from memory, but as I remember the day before they went broke Bank of America was in a minus position of $600 million or something like that they had deposited which I think J.P. Morgan in relation to Lehman and I think that the day they went broke it reversed to a billion and a half in the other direction and those are big numbers. And I think the numbers are, I think I'm right on just order of magnitude. So when things like that exist in the system, you know, that's under stress for other reasons, it becomes a magnifying factor. How big of one you don't know. But Lehman would have had less impact on the system if they had not had the derivative book they had. Now they had plenty of bad real estate investments and a whole bunch of other things as well.

INTERVIEWER:
And when you talk about the leverage and the counterparty risk from derivatives are you talking about certain types or derivatives, you know, there's the five categories we see. Do you have any opinion on--?

WARREN BUFFETT:
Unfortunately, yeah, unfortunately people were not really imaginative about derivatives. I mean it started out with the simple ones, you know, interest rates, swaps and that sort of thing, foreign currency. And then the profit got driven away from those. When I was at Solomon they talked about in the plain vanilla contracts there wasn't any money in it anymore because they were on the screens and everybody knew--but what they call sometimes the toxic waste, there was a lot of money in and, you know, the more complicated the derivative, well, you remember the situation with Proctor and Gamble thing from the Banker's Trust and American Greetings and all of that, if you read the nature of those contracts where they had these exploding factors, you know, when you got beyond a certain point, the CFO of a place like Proctor and Gamble or American Greetings was probably not understanding those things very well. And there's just more money in contracts that people don't understand. And so they get this proliferation of these things and who knows what's in the mind of the end user of the things that, you know, they're protecting themselves against the sort of Jefferson County in Alabama and all kinds of things. So, you know, it's, it's an instrument that's prone to lots of mischief because long settlement periods, complicated formulas for sometimes deriving the variables that are entering into the eventual payout, it's got a lot of possibilities for mischief. And a lot's been caused. And mischief doesn't make much difference if it's, you know, one guy, you know, rolling dice against another and one guy's loaded a dice they're doing for $5 a throw but it makes a lot of difference when you get into big numbers.

INTERVIEWER:
So let me ask you on the issue of transparency you wrote in your shareholder letter, not the recent one, but the one from the year before that it's simply impossible for investors to understand and analyze these. It was impossible or at least very difficult for auditors to audit them and for regulators to regulate them and after spending time with financial institutions 10K or whatever else you reached for a bottle of aspirin which I can very much appreciate.

(laughter)

But, and you also wrote, you know, that policymakers talk about transparency as being a great cure-all for--

WARREN BUFFETT:
It's a great word (laughs).

WARREN BUFFETT:
Nobody can be against transparency.

INTERVIEWER:
But, you said, you know, look, I don't know of any reporting system, you know, that can fix this. So, I mean, obviously, you know, we're not just looking at causes of the financial crisis but this whole lack of transparency particularly in the area of derivatives as you know from taking aspirin for your headaches after looking at 10Ks, is a problem. So I'm just wondering what, you know, your opinions are and how do we address that problem?

WARREN BUFFETT:
I think it's a terribly difficult problem, well, it was so difficult a problem I didn't think I could solve it. We bought Gen Re which had 23,000 derivative contracts. I could have hired 15 of the smartest people that, you know, math majors, PhDs and I could have given them carte blanche to devise any reporting system to me that would enable me to get my mind around what exposure that I had and it wouldn't have worked. I mean, it just, the only answer was to get out of it. Can you imagine 23,000 contracts with 900 institutions all over the world with probably 200 of them names I can't pronounce. And all of these contracts extending years into the future, multiple variables, you know, and all of these, you can't manage it. In my view, I wouldn't be able to manage something like that. And if I read a 10K that's 300 pages long and it describes notional values of all this, not to impugn anybody because probably one of the best managed really large institutions around, but if I look at J.P. Morgan I see two trillion in receivables, two trillion in payables, a trillion and seven netted off on each side of the 300 billion remaining maybe 200 billion collateralized. But that's all fine but I don't know what dis-continuities are going to do to those numbers overnight if there's a, if there's a major nuclear, chemical or biological terrorist action that really is disruptive to the whole financial system here, who the hell knows what happens to those numbers on both sides or thousands of counterparties around. So I don't think it's -- I think it's virtually unmanageable.

WARREN BUFFETT:
Certainly it is, would be for me.

INTERVIEWER:
And let me ask, well, Goldman's the K, I looked at recently and there I see over a million contracts.

WARREN BUFFETT:
Over a million contracts

INTERVIEWER:
They don't disclose notional values in the K, at least not that I found yet, but, you know, they do disclose when you take out the netting, it's about one and a half trillion dollars both assets and

liabilities go to BIS and get information from Goldman, it's not in their 10K, it's like 45 trillion when you add up all the numbers.

WARREN BUFFETT:
Its bigger at J.P. Morgan. (laughs)

INTERVIEWER:
And I don't see anything in the Ks and there is a question coming, I promise, (laughs) on who the counterparties are. So, I mean, does, would that help in transparency, some more disclosure on who the counterparties are?

WARREN BUFFETT:
You can't design the system, I don't believe, I mean, I couldn't design the system and I've got a smart partner, Charlie Munger and we, the two of us couldn't design a system or come close to designing a system that would have told us what we were doing. So we got out. And we do know what we're doing with the 250 contracts we've got. And frankly I think we do a better job of disclosure of our derivatives position than any company in the United States, you know. We just tell people what we've done but, that's easy to do with 250 contracts or thereabouts and they only fall into a couple of categories. But I want to know, I want to know every contract and I can do that with the way we've done it. But I can't do it with 23,000 that a bunch of traders are putting on. I'm putting these on myself and I really only about two or three decisions that go through my mind in doing that. But to have a group of traders putting on thousands of them and counting on the behavior of party A over here to be the offset to what might happen with party C and I'm in between, I just, I don't know how to do that. And I don't think really anybody knows how to do that. And I probably shouldn't talk about names on this but I've had discussions with very important people about this in the past before the crisis hit and those people were confident that risk committees could come in with spreadsheets and explain it all and I always thought that was total nonsense.

INTERVIEWER:
There's at least been some recent reports in the press that you've been lobbying against the retroactive, adjustment of the retroactive effect or at least some provisions in legislation that would require collateral to be--

WARREN BUFFETT:
Yeah, we're not against collateral being required at all as far as--we do say if you're changing contracts retroactively that if a change in any part of the contract is made that the party benefiting from that change should pay the appropriate amount to the party that's suffering from it. Now when we put on our contracts because we didn't want to get ourselves in a position where we were a problem to the country, we negotiated for non-collateral type contracts. Now the price of collateralized contracts we would have received considerably more in the way of premiums if we had agreed to collateral. Right now we're looking at one contract where we can get paid $11 million if we agree to put up collateral and we can get paid $7.5 million if we don't agree to put up collateral. Every other term of the contract is the same. So all we say is if these things are changed retroactively, we want to be paid for the difference in value between a collateralized contract and a non-collateralized contract. And otherwise, incidentally it isn't just us, Coca-Cola, Anheuser-Busch, you name it, will have to send money to Wall Street as part of the deal that will be changed from before. And there's nothing wrong with that, if it's a matter of public policy that they want all contracts collateralized including changing them retroactively. There may be a constitutional problem, I'm not sure about that. But if the difference was paid for the difference between a value of the collateralized contract we were over $150 million on, during the height of the crisis on just a relatively small piece of it. If we would accept, if we would change from non-collateralized contract to a collateralized contract, my Wall Street, big Wall Street firm and we just say if that's forced upon us to do that we want $150 million or whatever the appropriate number is. We sold a house in effect that was unfurnished and if we sold it furnished we would have gotten more money and if the government says now later on, two years after we made the deal, you've got to give the furniture too we want to get paid. And I think that would probably stand up in court incidentally, I mean, if it wasn't even addressed in the bill. But we'll see what happens on--

INTERVIEWER:
Sure. Other things we've heard from other folks that I'll ask your opinion on, a lot of people seem to think a lot of over the counter derivatives are really pretty standardized contracts that should be triggered on an exchange. Any opinions on that?

WARREN BUFFETT:
Well, I think it's very hard to do. I mean, you've got right now certain foreign exchange contracts that are traded on exchanges. The volume is practically nothing. Because there, let's just take a Swiss Franc contract. There's a September contract and a December contract and a March contract. But if we want to hedge some instrument we've got and we've done this with a few contracts, we want to hedge some contract that comes due December 16th, we probably want to have a contract, a forward contract expires December 16th. And so whereas it's easy to have and I don't know whether July corn or October corn of whatever it may be there's not a big delivery, there's not a big tailoring of the specific industry's requirements. You can get away with four different expiration dates or S&P

you can get away with four expiration dates or something but if you've got a power contract or something of the sort, to deliver electricity on July 15th and you worry about what you might have to buy in the merchant market to do it you're probably going to need one that contracted July 15th. And I don't know how you standardize, I mean, it's very easy to have standardized October copper and oil, I mean, you know, you got oil contracts extending out for many years or natural gas, but they are just periodic settlement dates. And I think that gets, that gets very tough with a great many derivative contracts. But I don't, I'm no expert on how all this works, I mean, there may be ways of solving that in terms of exchanges.

INTERVIEWER:
Let me ask you about regulation. One of the things that we know from doing some research is that, of course, back in the beginning of the decade or the beginning of 2000 was the Commodities Futures Modernization Act, that had terms in it that said you can't regulate credit derivatives. So they went unregulated. Any opinions on regulation of credit derivatives or derivatives in general?

WARREN BUFFETT:
I think it's very tough to do and I will tell you that whenever I hear the terms modernization or innovation in financial markets, I reach for my wallet (laughs). It's, usually what they mean is revenue producing and I think it's very tough. I mean that's what I got into in my letter of 1982, I mean, you are opening Pandora's box when you give people the right to either invest, speculate or gamble on very long term contracts, you know, with minimal margin requirements and all. I mean, it can pose dangers to the system but it gets down to leverage overall. I mean, if you don't have leverage, you don't get into trouble. That's the only way a smart person can go broke (laughs). And I've always said if you're smart you don't need it and if you're dumb you shouldn't be using it. So I'm not a big fan of leverage. But leverage and incentives are in my view things that, try to focus on. And recognizing that there's a lot of limitations on what you can do. But if, I mean, we've always felt that way with banks. The bank has the right to use government guaranteed money in effect. You've got to have some limitations on leverage so then they come up with SIVs and derivatives and all kinds of ways to increase leverage without breaking the rules. And then, it's a tough question but I would be fairly tough about how I would go at that. And I don't like to keep going back to it but I, it doesn't seem to be anything talked about much, but the CEO is the guy making the decisions, I'm making the decisions at Berkshire. When I make the decisions at Berkshire, I'm thinking about the fact that a) I've got 99% of my net worth in it and it's all going to charities so I mean, if I cause this place to go broke, there's a lot of downside to me. And there's a lot of downside to the Keywood Company if they do silly things in their construction business. And I think that downside has an effect on people.

INTERVIEWER:
Well, do you think that, I mean, you keep coming back to the CEO and accountability for perhaps unreasonable risks they are taking. Is that an area that you think regulation should address?

WARREN BUFFETT:
Yeah, I think, but, you know, I've never written a Bill in my life so I don't know how you do that. But I do think that if I were in charge I would have some, yeah, I would, wouldn't have to be very complicated. I mean, we're not talking about some small community bank or anything. We're talking about institutions that require government intervention. The FDIC will take care of the small banks and all that. I mean, a lot of those will be a lot of personal ownership anyway. But FDIC is not the federal government. I mean, that is banks paying for banks errors but when society, the U.S. government starts paying for specific errors that--I think there ought to be a lot of downside.

INTERVIEWER:
Can I follow up on that. You mentioned small banks and community banks. We've read stories and certainly heard reports about community banks investing in CDOs investing in--

WARREN BUFFETT:
They bought a lot of Freddie and Fannie preferreds, a lot of money lost in that.

INTERVIEWER:
Correct, correct. But with respect to CDOs and many of them bought what were rated as triple A tranches of CDOs. Over 90% of the ratings on CDOs have been downgraded to near or around junk status. How much, putting aside legal responsibility because credit rating agencies have asserted they have a First Amendment right, how much though responsibility in the moral sense or otherwise do credit rating agencies have for the decisions by the investment community to rely on their ratings, that triple A meant triple A. How much responsibility do you think the credit rating agencies have for these decisions that the community banks made and subsequently made to their demise?

WARREN BUFFETT:
What do you think if you're a banker? Your job is to assess the credit of whatever you're committing to. And the interesting thing about those CDOs and a lot of them consisted of hybrid bank securities. I mean, so they were actually benefiting and there were a lot of hybrid bank securities put in the CDOs and they were benefiting from

raising money from that forum. And that turned out to be a way poorer asset than they thought. They created the liability to some degree as they grew. But I would get back to the fact that if you run a bank, you know, I think your job is to assess the credit of when you lay out money whether you're buying U.S. treasuries, whether you're bonds of Greece, whether you're buying or lending money to, for construction and, I think I would not want to cop out really, I was relying on a rating agency. And the rating agencies they have models and we all have models in our mind, you know, when we're investing but they've got them all worked out, you know, with a lot of checklists and all of that sort of thing. I don't believe in those myself, only to say I've got a model in my mind, everybody has a model in their mind when they're making investments. But reliance on models, you know, work 98% of the time but it's, they never work 100% of the time. And everybody ought to realize that that's using them.

INTERVIEWER:
You mentioned transparency earlier as well. These CDO instruments were largely opaque in terms of compositions and the like to the investors who were investing in them. They were structured and created though around the ratings and in connection with the ratings and the rating agencies. Do you think, though, that because of the opaqueness of these instruments ratings became in the minds of investors more important than perhaps maybe they should have been?

WARREN BUFFETT:
Well, I would say that, you know, anybody that's investing in something they consider opaque should just walk away. I mean, whether it's a common stock or, you know, new invention or whatever it may be. You know, that's why Graham wrote books is to try and get people to, you know, invest, to take that investment, it's very tough to get that message across. And you'd think bankers however would have learned by the time they get to run a bank.

INTERVIEWER:
Okay. Let's move away from derivatives now and talk about, I mean, we talked about several areas already today about your views on causes or contributing causes to the financial crisis. Of course we have a statute with a gazillion things in there telling us to investigate and I know time's probably starting to run short so I'd like to first just ask you, you know, what haven't you told us in terms of do you think were, you know, important contributing causes of the crisis. And then I'm going to try to quickly go down the list in our statute and get your ideas on this.

WARREN BUFFETT:
Well, I think the primary cause was a almost universal belief among everybody, and I don't ascribe particular blame to any part of it, but it's Congress, media, regulators, home owners, mortgage bankers, Wall Street, everybody that house prices would go up. And you apply that to a 22 trillion dollar asset class that's leveraged up in many cases and when that goes wrong you're going to have all kinds of consequences and it's going to hit not only the people that did the unsound things but to some extent the people that did the semi-sound and then finally the sound things even if it is allowed to gather enough momentum of its own on the downside, the same kind of momentum it had on the upside. I think contributing to that, causing the bubble to pop even louder was and maybe even to blow it up some was improper incentive systems and leverage. I mean, those--but they will contribute to almost any bubble that you have whether it's the internet or anything else. Incentive systems during the internet were terrible. I mean, you just, you formed a company and you said I'm going to somehow deliver a billion eyeballs and somebody said well, that's $50 a piece or something. I mean, you get craziness that goes on there. Leverage was not as much a factor in the internet bubble but I think in this particular bubble because leverage is part of, so much a part of real estate that once you loosen up on that, you provide fuel because that bubble will get even bigger and you made the pop even bigger when it finally did pop.

INTERVIEWER:
Any views on the role of fraud, whether mortgage fraud or other types of fraud in the crisis?

WARREN BUFFETT:
No, I mean, it was obviously a lot of fraud. There was fraud on the parts of the borrowers and there were frauds on part of the intermediaries in some cases. And, but, you better not have a system that is dependent on the absence of fraud. (laughs) It will be with us.

INTERVIEWER:
What about, you know, another thing that we, I think we've seen in the last ten years was different was a lot of financial institutions before used to originate loans and, you know, how novel, carry them on their books. But now we see, you know, the proliferation of mortgage brokers, originate to distribute models, the street packages and securitizes, sends it off to someone else who maybe either keeps it or throws it into CDO and so on and so on. Any opinions on that relative change in the way that mortgage assets are originated?

WARREN Buffett:
No, people will be more careful with their own money than with other people's money. And you can argue that Freddie and Fannie were the ones, you know, they started securitizing in effect and in a huge way people got used to buying mortgage instruments where they were very

divorced from the origination of it. So there's no question that if there'd been a law against laying off mortgages to somebody else that you wouldn't have the same situation. You might not have as much, a lot of good things did happen in the country too, there was a--balancing the two, I'm not sure I could do but I can tell that more mischief will occur if somebody in Norway is buying a mortgage in Omaha than if some guy here is lending his own money. (laughs)

INTERVIEWER:
There certainly appeared to be a loosening of underwriting standards and certainly an increase in what we've termed non-traditional mortgage product whether it's lower down payments, whether it's the liar loans, stated income loans, whether it's option arms, whether it's 228s, 327s, etc., etc. Any views on whether that had any?

WARREN BUFFETT:
Oh, it had had plenty to do, I mean, it fuelled, it fuelled extreme leverage and it fuelled leverage that could only be paid out of the re-sale of the asset rather than the income of the borrower and once you start lending money big time to people where your hope of getting your money back is that the asset goes up rather than the asset produces enough to service the loan, I mean, that very nature whether it's farmland, whether it's oil in Texas, you know, it creates a lot of problems.

INTERVIEWER:
Any views on why we saw the growth in that kind of non-traditional mortgage product?

WARREN BUFFETT:
We believed that, you know, houses were going to go up. Once you think the asset will go up you don't look to anything to anything else. And it became, because it had been going up, an awful lot of people believed it had to keep going up. I mean, it gets back to the nature of bubbles.

INTERVIEWER:
We, I mean, from people we've talked to and articles we've read, I mean, we've heard people talk about or read that, you know, there was a lot of money coming into the U.S. chasing yield. There was the Street wanting it because of the change from buy and hold to the securitization model. Were Fannie and Freddie, you know, changing their purchasing patterns and increasing demand for non-traditional mortgage product for whatever reasons. Any comments on any of those possibilities?

WARREN BUFFETT:
The market system creates incentives to do more business. (laughs) That is the nature of it. And, but I, you know, and people talk about excess funds around the world and all that. I tend to discount that sort of thing. But I don't discount the incentives that everybody in the American public from wanting to do a piece of business if they can do it tomorrow. Doesn't mean that they're terrible people or anything but what, you know, if I'm a realtor and I've seen a house go from $250 to $500,000 do I say to the person, now, this buying the house at $500,000 is kind of dumb because--it just doesn't happen. They say, you know, you better do it today because it's going to be more tomorrow. And so everybody gets into the act, doesn't mean they're evil people. There are some crooks in the process, but overall what happened was not caused by the crooks. It may have caused the crooks to get rich (laughs), a lot of it but it in my view was caused by a mass delusion.

INTERVIEWER:
Throughout the '90s and the 2000s members of Congress, members of the administration were all encouraging home ownership.

WARREN BUFFETT:
Sure.

INTERVIEWER:
Both through statements, through plans and policies. How much of that do you think contributed to the bubble?

WARREN BUFFETT:
It all contributes, but the truth is I've told people, home is a good investment, you know. Particularly if, it's got values beyond what it will do in terms of possible appreciation over time. It really is a way to go short on the dollar. I mean, if you borrow a fair amount of money it gets and most people don't have a good way of being short on the dollar and it's a pretty sound policy to be short dollars as long as you're carrying costs aren't too high. And when interest rates get low the carrying costs are not high. So it is not an unintelligent thing to do. It's only, it's only when it gets into this bubble aspect that it becomes unintelligent. But I would recommend today, you know, if a couple can afford it and you're not paying silly prices in terms of replacement value or things like that and you want to buy a home in Omaha, I would say, you know, have you found the neighborhood you wanted and you're going to, your family's going to live there and right now I think mortgage rates are very attractive, I would say buy it. But I wouldn't say buy three more on speculation and I wouldn't say buy it if it's going to take 50% of your income to service the mortgage. It's a sound idea that went crazy.

INTERVIEWER:
Should it be a government policy to encourage home ownership?

WARREN BUFFETT:
Well, I don't think, I would say it should be a government policy and we've got it through and Fannie and Freddie, we say we're in the mortgage business as a country. To help people who are following sound practice in the one way, I do not see anything wrong with having

a government guarantee program that kicks in when people really have a 20% down payment, really only putting only 30% or so of their income into it. Still people are going to lose their homes for unemployment reasons and death and divorce and disability. I mean, the three Ds. But that's not going to cause a systemic problem. And more people are going to benefit from that program by far than anybody's going to be hurt by it. So I think that the government has a place in that and around the world has a place in it. But I don't think that if you're going to get 20% down payments that you should then take deals on the 3% down payments and then lay off that on some mortgage insurer or something like that. You don't want to encourage people to do things that are going to cause them pain later on. And you're going to have occasional pain for unemployment but, you know what, you don't want system-wide pain because you've encouraged them to do things that are stupid.

INTERVIEWER:
One of the areas in our statute is the role of monetary policy and of course a lot of folks have commented on the low level of interest rates throughout the 2000s. Any view on that as a contributing cause?

WARREN BUFFETT:
Well, it makes it obvious, it makes it easier but no, I don't think that was what caused this. You couldn't have had it if you'd had 15% rates obviously. But it all, you know, it all worked together, you know. And finally the fact that houses kept going up a lot. It just, you know, put a model in people's minds. You have 300 million Americans have got a economic model in their mind and you say, Moody's is dumb for having it and S&P is dumb for having it but it was pervasive.

INTERVIEWER:
Another area in the statute that we're directed to look at and we have been looking at of course is the role of accounting and specifically mark-to-market rules on accounting. I know you wrote in your shareholder letter or letters that, you know, the mark-to-market accounting rules result in wild swings in your derivative accounting but that you and Mr. Munger and what it is--

WARREN BUFFETT:
We explain it, it is our job to explain it.

INTERVIEWER:
Right, but do, and other people we've talked to and articles we've read have talked about, you know, the mark-to-market accounting rules if nothing else perhaps fueling the downward spiral, you know, in the '07 and '08 timeframe when folks got into liquidity crunches and had to sell assets, etc. Any views on the role of accounting and mark-to-market accounting?

WARREN BUFFETT:
I'm less religious about it than I used to be (laughs). I, because, well, you know, after '29 in the insurance business they put in so-called, I forget, they had a term for it but I think it was called, basically it commissioned evaluations of some sort. And they did not make insurance companies write their stuff down because they said, you know, you're basically putting them all out of business and these are temporary things. And the truth was it probably benefited the country that they didn't liquidate all the insurance companies in the early '30s based on what would have, in effect, been mark-to-market accounting. I still, there's so much mischief when you get away from mark-to-market that I, that I'm still a believer in it but I can see where, I can see certain situations where it might have sort of anti-social effects as well. Getting back to derivatives, I mean, what has always struck me as extraordinary is that you basically have four big auditing firms in the country. And I would guarantee you that they are attesting to the statements affirmed where they have both sides of a derivative transaction and there is a different value being put on them by the two parties. And they're signing them, I mean, we're talking big numbers sometimes, too. It'd be interesting to take the million contracts or whatever they, a couple of million J.P. Morgan, and find two firms that have the same auditor and compare the valuations. (laughs)

INTERVIEWER:
It might have been a good survey for us. You know, I mean, an area we somewhat touched on that's really, leverage and liquidity are just capital requirements for financial institutions. Were they too low, are they too low?

WARREN BUFFETT:
It's very tough, it's very tough because there's such a difference in how when institutions can be doing, you know, I mean, just take the derivatives book, I mean. How do you measure that compared to straight loans? I mean, are you going to only take the netted off, non-collateralized balance finally, I mean, the residual and say that's the only exposure you have or are you going to weight some for netting, you know, but only compounds it at 10%. It is very tough and, we're going to have higher capital standards in all likelihood but knowing what to measure against and all that, it's just a very difficult problem. And, of course, partly that was solved by people using ratings. And, you know, and the extraordinary thing, if you look at the AIG and my memory is and again, I'm doing all this from memory, my memory is that they got up to like a number of 300 billion of what they call regulatory arbitrage where it enabled largely German banks or certainly European banks to carry less capital against their loans since AIG was guaranteeing those loans against loss and AIG had a triple A rating therefore that carried over into lower capital requirements abroad. And they were getting paid practically

nothing for them and they thought they were running no risk at all. But it was a ratings arbitrage, basically, it was, they called it regulatory arbitrage. But it was based on what ratings required in the way of capital requirements. But, you know, the regulators got a terrible job too, I mean, how do you deal with all these people doing different things and come up with some kind of standard that says what they have to maintain in the way of capital. I don't envy them the job.

INTERVIEWER:
You, an argument you often hear on the other side from institutions that don't want higher capital requirements is it's going to impact us competitively across the globe. Any views on that response?

WARREN BUFFETT:
It would, it would. I mean, just take it to the extreme. If you said that every in the bank in the United States had to have 30% capital and every bank in Europe has 3% capital, you know. To earn the same returns on capital (laughs), they can work on much narrower margins than the American bank. That doesn't mean you don't do it but leverage is a competitive tool in terms of achieving returns on equity. That's why it has to be guarded against.

INTERVIEWER:
Any views on what the right capital levels are for financial institutions?

WARREN BUFFETT:
It's more complicated than that.

INTERVIEWER:
Believe me, I know.

WARREN BUFFETT:
Okay. (laughter)

INTERVIEWER:
Is imposing some kind of leverage restriction and [unintelligible] the risk something that, looking back before banks were able to get into more exotic businesses, you know, 30, 40, 50 years ago, is that something that you think should be a function of government through regulation or is that if Greenspan two years ago, is that something that the market could police itself in some way?

WARREN BUFFETT:
I don't believe the market polices itself, I mean, Greenspan is a friend of mine but he's read more of Ayn Rand than I have, I mean, I'll put it that way. (laughs) So I do not believe the markets police themselves in matters of leverage and other matters. I do, that's why I get back to the incentives of the person. I mean, that makes a difference. It doesn't solve everything, I mean, you can still get terribly optimistic managements that will do very stupid things and all that. But if I had a choice between setting the capital standards and setting the management incentives and that were my only choice with banks, I would rather set the management incentives.

INTERVIEWER:
One of the things we've seen and that I've seen from my previous life as a bank examiner, we particularly saw with the broker dealers was the liquidity issue of their asset liability mismatch. And particularly, you know, that they were, had a lot of short term money.

WARREN BUFFETT:
It's the nature of the national institutions both life insurance companies and banks. The, no capital requirements protect you against a real run. I mean, if your liabilities all are payable virtually that day or I should say virtually all your liabilities are payable that day, you can't run a financial institution and be prepared for that. And that's why we've got the Fed and the FDIC. I mean, you can't stand, if you're a life company or a bank, you can't stand around, you can be the most soundly capitalized firm in town but if I hire, if there were no FDIC and the Fed and you had a bank capitalized with 10% of capital and I had one with 5% of capital and I hired 50 people to go over and start standing right in front of your bank, you're the guy that's going to fail first. Then when get through with you they're going to come over to my bank too, that's why we don't do that sort of thing because you can't contain the fire over on the other guy's bank. But you can't, you can't stand a run. So you need the Federal Reserve and the FDIC. And even with Northern Rock, the UK government and came and said we guarantee everything they still had lines. I mean, when people are scared they're scared. And there is no reason to leave, I mean, if you see if it's uninsured and you see a line at a bank where you've got your money, get in line. (laughs). You know, buy a place from the guy that's first in line if necessary, you know. And even if you're at another bank, get in line there and take your mad money and put it under a mattress. You can always put it back a week later as long as there no penalties, why in the world, you know. That's why we got a Fed and an FDIC and I think it's one of the, you know, I think the FDIC and Social Security were the two most important things that came out of the '30s. I mean, the system needed an FDIC.

INTERVIEWER:
What did you do, you know, this is, you're raising the issue really of the shadow banking system, the parallels unregulated without FDIC insurance or any other form of insurance other than until they stepped in and guaranteed money market funds as the short term stability and confidence raiser. What did Berkshire Hathaway do with all of its cash, I mean, you don't have --.

WARREN BUFFETT:
That's a very good question because we were, for example, in September in 2008 we faced, I think it was October 6th or something like that we had to come up with six and a half billion for

our Wrigley deal. I was only going to have that in treasury bills even if I had got a minus yield because I had to come up with it. And I didn't know for sure, whether on October 6th, you know, what the situation would be with any bank. Now I thought it was 99.99% that it'd be fine, but I didn't think it was 100%. And I may bring along to the hearing, I sold a treasury bill in December 2008 for $5,000,090 and it was a $5,000,000 treasury bill due in April-something where the guy was going to get $5 million. So he was saying that the treasury bill was $90 better than his mattress. I mean, he could have put the $5 million under his mattress and then 90 bucks better off in April than he was by buying the treasury bill. Well, that's the way I felt too. I don't, I still feel that way incidentally. I mean, we don't have a whole list of approved short term investments around here. We have got treasury bills basically and treasury has the right, and is going to print money if necessary and that is triple A, I'm willing to go on the record on that. (laughs).

INTERVIEWER:
That'll give you a rating yourself. (laughter)

WARREN BUFFETT:
But nobody else is triple A in my mind, you know. And if we're really going to protect ourselves if we're not going to, we need to have real money. And now, I let the smaller operations just for matters of convenience do other things. But in terms of the vast chunk of what we have around here it's treasury and it will stay that way. Because I don't know what can happen tomorrow. I don't know if there's a, you know, pick any kind of a hugely disruptive--that's what you have to worry about are the discontinuities and there will be one someday. They closed the stock exchange in 1914, you know, for many months. They closed it for a few days after 9/11 but who knows what happens tomorrow.

INTERVIEWER:
Speaking of that uncertainty, do you think in the financial crisis the government created some uncertainty by for instance stepping in and orchestrating the deal between J.P. Morgan and Bear whereas not stepping in or at least not stepping in sufficiently to orchestrate a deal for Lehman. Do you think that created uncertainty in the market for market participants?

WARREN BUFFETT:
Yeah, there's no question that you would have expected, having seen them step in at Bear you would have expected to see them step in at Lehman. So when they didn't step in at Lehman, the world panicked. Now it had all these repercussions too in that Lehman commercial paper was held by money market funds and 30 million Americans held money market funds and if you get 30 million Americans worried about whether their money market funds are going to be worth 100 cents on the dollar, they're not going to buy anything, I mean. So they, you know, you create a tsunami, but, and most interestingly, of course, is if Ken Lewis hadn't have bought Merrill on Sunday, I think the system would have stopped, you know. He is (laughs) the guy that turned out to have saved the system. He paid a crazy price in my view, well he could have bought it the next day for nothing because Merrill was going to go when Lehman went. So the government was going to have to step in some place and you can argue that they probably should have stepped at Lehman but I would say this, I consider overall the behavior of Paulson and Bernanke and Sheila Bair and even though I'm not a Republican, even the President, I consider them to have done a terrific job during that period. I mean, you don't call everything right and if they made a mistake on Lehman they corrected it. And they did everything they could to correct it very quickly and if they hadn't have done that and if Ken Lewis the B of A, we would have, the system would have stopped. It stopped a little bit for a short period anyway. But what we saw fall off into the economy subsequently was nothing compared to I think what would have happened otherwise.

INTERVIEWER:
And following up on that the commercial paper market. You've alluded to what happened in the commercial paper market there. Any thoughts in terms of additional safeguards or anything that could remedy what had happened in--

WARREN BUFFETT:
Pretty tough. We don't buy commercial paper. But I do believe if you ran into a similar situation today the government would guarantee commercial paper, they'd have to. And that's the important part. You have to believe the federal government will act and they will act promptly, decisively and all that sort of thing. That became, I guess, a little bit of a, more than a little bit of a question, significant question after Lehman. The treasury and the Fed remedied that very quickly by taking, in my view, by taking action. I said it was economic Pearl Harbor, but we sent out, you know, we sent out the fleet the next day, but we had the ships in the harbor unfortunately when the day Lehman failed. (laughs) But you saw one of the first TARP type arrangement got defeated in Congress what happened in the market. I mean, Congress was the big fear with, I think, was the biggest fear with the American public at that time.

INTERVIEWER:
How do you draw the line for determining where the government should intervene for specific institutions and not.

WARREN BUFFETT:
Well, I think they did it right in Bear, I mean they wiped out the stockholders pretty much, I mean, you lost 180 down to 10 as it turned out. But if Paulson had his way it would have been $2 or less. You wiped out the shareholders. Now again, you know, the management, Jimmy Cayne lost a lot of money, but he's a rich man. And so that did not set a good lesson for the rest of the world in my idea but you send a big lesson in terms of the shareholders. And I think if the government has to decide, if troubles are brewing the government should err on the side of overkill.

INTERVIEWER:
How would you decide though between stepping in on Bear and not stepping in on ACME or another financial institution. How do you draw the line in your mind?

WARREN BUFFETT:
Well, with banks it's easy because the FDIC can handle everything except Citigroup and BofA, I mean. They handled Wachovia in their own way, they handled WaMu. I mean, we had 8% or 9% of the deposits of the United States change hands without the federal government getting involved even. But the FDIC could not have, they participated in the situation with Citi, but Citi would have been probably too much. Wachovia was the third largest in the country and they got it done. So, stepping in, you don't need to worry about stepping in on institutions around here, but the chance to step in on Freddie and Fannie there wasn't any question about that. And then you get--they really didn't need to step in, if they did with Morgan Stanley or Goldman Sachs or Wells Fargo. But they did need to get the system, they needed to give the American public the confidence that they would do whatever it took. Now those firms didn't need it as long as the system didn't totally collapse. But as part of convincing the world that the system wasn't going to totally collapse that they were part of the movie that took place.

INTERVIEWER:
We're very close to being done because we started a little bit early so I thank you. A couple of questions. Do you have any sense as to what the difference between what's going on in Europe is and what went on in Europe is and what happened here because clearly Europe didn't have the same kind of crisis happening.

WARREN BUFFETT:
It's true. It's very different, it's an even more interesting movie (laughs) and since this is on tape somebody will find how it all plays out. I don't know how it'll play out. It's a different situation in that in the United States we were saving ourselves. And we wanted to be saved and we wanted Washington, we knew only the government could save us basically at the time from a colossal collapse. And even with that a year and a half later a lot of people are mad at the people who participated in doing it when all we were doing was trying to save ourselves we weren't trying to save Mexico. It wasn't like we had a North American union where we all were tied to the same currency and Mexico's problems were--can you imagine what the reaction if we'd, if we'd been saving Mexico instead of the United States to the legislature or the regulators who were involved. So Europe, they have to act big but they have a, they have a system where a group of people are going to have to be helping another group. Now we all think we're Americans so when America is saving America we, that can be pretty cohesive. But although like I say, it's still recriminations, all kinds of things have come out of it. Now you picture Europe where you've got a group of people that are being asked perhaps to put up a lot of money and perhaps bear a lot of burdens perhaps incur inflation to help another group who they don't think have been behaving the way that they would have behaved. And they don't really have the, you know, ethnic social connection, I think it's really problematic what happens.

INTERVIEWER:
But do you think there are any parallels in how their problem developed or is it really a European problem as opposed to a housing bubble?

WARREN BUFFETT:
Probably [unintelligible] because in the end, for a long time everybody thought they were all equal and if you got a Euro denominated bond it didn't make difference or a deposit from any one of 16 countries it was the same then and all of sudden the market perceiving that it wasn't the case. And once people started thinking about it, they realized it really wasn't the case. And this thing's only been around for, you know, less than 15 years or whatever it is. And they start thinking maybe I better line up at that bank. And they don't have to do it physically they start pushing little buttons and the money starts moving around and all of a sudden 16 countries have a problem where they think, most of them think they weren't part of it. And that is, could be enormously contagious. No one has to buy a Greek bond, nobody has to buy a Spanish bond. Now usually when, in America, the central bank has to buy, it'd be a roundabout process but (laughs) we know somebody will buy U.S. bonds tomorrow because we've got a central bank that's totally in sync with the interests of the country. And we'll print money if necessary. And nobody, Greece doesn't have the power to print, you know, they'd be fine if their obligation [unintelligible] It's a very, very interesting problem and I won't predict how it will come out because you've got a tape (laughs) and I'd look very dumb later on.

INTERVIEWER:
So you have any books that you'd like that have been written on the crisis? I know that Sorkin has worked with--

WARREN BUFFETT:
Sorkin has written a very good book. I mean, there have been a number of good books. The book I would write if I was in the writing business, I would write a fictional book and my book would probably be titled something like, If Ken Lewis Hadn't Answered the Phone, and then I would go from there forward with Merrill falling on Monday and describing what the world would have looked like. It'd be a hell of a book. (laughs) I'm not sure what the ending would be but, you know, he got that call on Saturday, he gets a fairness opinion in 24 hours from two guys who are getting $10 million each. Is the fairness buy Merrill Lynch at $29 a share which, I mean--

INTERVIEWER:
Chris Flowers.

WARREN BUFFETT:
Chris Flowers and another firm that is affiliated with Chris Flowers. And do you think Chris Flowers would have paid $29 or $2.90 for Merrill Lynch on Sunday? (laughs) You know, it's an interesting world, but it may have saved the system some terrible acts. May have actually saved the system.

INTERVIEWER:
Okay. Well.

WARREN BUFFETT:
I don't expect, if you decide to write that book, I don't expect any royalties. (laughs)

INTERVIEWER:
At the rate we're going it'll take a long time. Well, thank you.

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A Message from Warren E. Buffett
Chairman, Berkshire Hathaway Inc.

What You Should Know About the Jewelry Business

You don't need to understand the economics of a generating plant in order to intelligently buy electricity. If your neighbor is an expert on that subject and you are a neophyte, your electric rates will be identical.

But jewelry purchases are different. What you pay for an item vs. what your neighbor pays for a comparable item can be, and often is, widely different. Understanding the economics of the business will tell you why.

To begin with, all jewelers turn their inventory very slowly, and that ties up a lot of capital. A once-a-year turn is par for the course. The reason is simple: People buy jewelry infrequently, and when they do, they are making both a major and very individual purchase. Therefore, they want to view a wide selection of pieces before zeroing in on a single item.

Given that their turnover is low, a jeweler must obtain a relatively wide profit margin on sales in order to achieve even a mediocre return on their investment. In this respect, the jewelry business is just the opposite of the grocery business, in which rapid turnover of inventory allows good returns on investment though profit margins are low.

In order to establish a selling price for their merchandise, a jeweler must add to the price they pay for that merchandise, both their operating costs and desired profit margin. Operating costs seldom run less than 40% of sales and often exceed that level. This fact requires most jewelers to price their merchandise at double its cost to them or even more. The math is simple: Jewelers charge $1 for merchandise that has cost them 50 cents. Then, from their gross profit of 50 cents they typically pay 40 cents for operating costs, which leaves 10 cents of pre-tax earnings for every $1 of sales. Taking into account the massive investment in inventory, the 10-cent profit is adequate but far from exciting.

At Borsheim's the equation is far different from what I have just described. Because of our single location and the huge volume we generate, our operating expense ratio is usually around 20% of sales. As a percentage of sales, our rent costs alone are fully five points below those of our typical competitor. Therefore, we can, and do, price our goods far below the prices charged by other jewelers. In fact, if they priced to match us, they would operate at very substantial losses. Moreover, in a virtuous circle, our low prices generate ever increasing sales, further driving down our expense ratio, which allows us to reduce prices still more.

How much difference does our cost advantage make? It varies by competitor but, by my calculation, what costs you $1,000 at Borsheim's will, on average, cost you about $1,350 elsewhere. This is called the "Borsheim's Price". There are very few instances where we are unable to offer you those great savings due to restrictions, but you will always know upfront if an item is non-discountable.

Of course, price means nothing unless you are sure of the quality of what you are getting. When products are branded, such as watches and chinaware are, comparisons are simple. But jewelry is usually a "blind" item – and that puts virtually all purchasers at the mercy of the seller.

I can remember well how helpless I used to feel in a Fifth Avenue or Rodeo Drive jewelry store, where the only thing I knew for sure was that the operator had extraordinarily high overhead – and that they had to cover it in their sales price. I was also wary of the "upstairs" solo operator who operated on consignment merchandise, since that would have cost them more than merchandise bought outright, and would necessarily have inflated their retail price. And, finally, I always worried about the quality of what I was getting I couldn't tell the difference between an emerald or a diamond worth $10,000 and one whose value was $100,000. (I still can't.)

My sense of helplessness led me to an obvious conclusion: “If you don’t know jewelry, know your jeweler.” For that reason, I made all of my jewelry purchases at Borsheim’s for many years before Berkshire Hathaway bought the company. I didn’t know stones, but I did know Ike Friedman, the retailing genius who had built the business from nothing into one of the nation’s largest independent jewelry stores. When I purchased Ike’s business, I did it without an audit but with full confidence that I was getting value received. And that’s just what I got – precisely as I had when I purchased a single piece of jewelry from him.

The main point of this letter is to tell you that you don’t have to live near Omaha to benefit from Borsheim’s. Our “shop-at-home” program brings Borsheim’s to our qualified customers. Simply contact Borsheim’s to describe what you’re looking for – to any degree of detail. We will assemble selections that best reflect your wishes and send them to you. Then, in the comfort of your own home or office, you can conveniently and leisurely select the item(s) you most prefer, or return the entire selection.

Our results from this “shop-at-home” program have been amazing. Customers have loved it and keep coming back for more. Each year, we send out several thousand packages, ranging in value from $100 to $500,000. Call us at 800-642-GIFT (4438) to learn how to qualify for Borsheim’s “shop-at-home” program.

At Borsheim’s the service will be exemplary, the price will be exceptional and the merchandise will always be what you are told that it is. You have my word.

Warren E. Buffett
Chairman of the Board

Warren Buffett's Meeting with University of Maryland MBA Students – November 15, 2013

December 8th, 2013 by dkass under Uncategorized. No Comments.

(Notes taken by Professor David Kass, Department of Finance, Robert H. Smith School of Business, University of Maryland and Rahul Shah, MBA student)

Warren Buffett (WB) met with 20 MBA students from each of eight universities, including the University of Maryland, on November 15, 2013. The MBA students asked 16 questions in the following order:

(1) Has Berkshire Hathaway (BRK) lowered its hurdle rate as it grew larger?

WB: BRK does not have a hurdle rate. The added capital makes it harder to achieve superior returns. If I manage $1 million I will get better returns than managing $210 billion (BRK's net worth). Size is the enemy of performance. I would still rather manage $210 billion than $1 million.

(2) In the past you said you attribute 85% of your investing to Benjamin Graham and 15% to Philip Fisher. Has that percentage changed?

WB: I developed my investment strategy under Graham. I went to Columbia and learned from Graham. With Graham's approach, you cannot lose money over time. It's very quantitative in nature, and you have to do reasonably well. On the other hand, it has less and less application as you get into bigger and bigger companies with larger sums of money. It's better to buy wonderful businesses at fair prices than so-so businesses at low prices.

With the "cigar approach", you can find a nasty cigar on the ground, with one puff left, can pick it up, light it and you get a free puff. You can keep doing this and get many free puffs. That's one approach, that's what I did. I looked for very cheap stocks quantitatively. After exposure to Fisher and Charlie, I started looking for better companies.

Previously I was doing both. Now we are looking for good companies, not just cheap companies. Railroads are huge, and they will be good in 10 years, and 100 years from now. Burlington Northern is now earning $6 billion pre-tax, as compared to $3 billion a few years ago before we bought it. Moving much towards Fisher now and less Ben Graham because we are working with larger sums. With smaller sums, we would be looking at better margins/cheaper stocks. When I got out of school, I went through Moody's manual page by page. Got to page 1433 and learned the good ones were in the back. Western insurance company in 1951 was earning $29.09 a share, the year before $21.66. The price of the stock had traded between 3 and 13 the previous 12 months. The price was at 16 when I saw it, less than 1 x earnings. A few years ago, in 2004, someone told me I should look at Korea. I got a book from Citigroup which had 1 stock to a page. Describes all the publicly traded companies in Korea. Went through it and found about 20 companies (ex. Day-Han flower mills) it had book value, eps, and securities. Didn't tell you anything about the share until you look at the price. Found about 20 like that in an afternoon and bought some of all of them, but didn't know enough about all of them to load up on them. If you buy 20 stocks selling at 2 times earnings, you're going to make money. That's Ben Graham and you can make money doing this. If you're working with bigger money, you have to do Fisher/Charlie style and buy big businesses. Berkshire now looks for large, very strong companies. Like Nebraska Furniture Mart – bought in 1983 and it's probably earning 20 times as much now. Charlie told me – "You're never going to disagree with me because you're smart and I'm always right".

(3) What is the process you follow in writing the annual shareholders letter? How do you decide what you're going to write about?

WB: I finished the 2013 letter already, but I will send it out on Feb 28. I already know what I'm going to say, just have to fill in some numbers and send it off.

I try to think of my shareholders as my partners. I try to think of the information I would want them to send me if they were running the place, and I was the shareholder. What would I want to know? This is what I tell them. In my first draft, I address it to my sisters who don't know a lot about finance. "Dear sisters"- I explain to them what they would want to know in their position. I also like to write one section that is a general teaching lesson that doesn't directly apply to Berkshire. This year 2600 words (out of 11,500) are thoughts about investing. I'm talking to all people thinking about investing and how they should go about it. I take one subject and just write a chapter on this, annually. Some people are interested, some are not. If they're going to have most of their money with me, I like to talk to them as if they are in the room with me — economic principles of BRK – so people know what we are all about.

In 1956 I bought a ledger for $0.49, two pieces of paper for a partnership document but didn't worry about the partnership agreement. I just explained the ground rules in about half a page: This is what I can do, this is what I can't do, this is how I intend to go about it, and this is how I measure my success. If this looks good to you, then buy in. If you don't want to buy in, then don't – we can still be friends. These ground rules are in the back of the Berkshire Hathaway report tailored to investors. In our ground rules, though our management is corporate our attitude is partnership. We consider you as partners. You need to have common ground, just like a marriage. It would be crazy to get married when you differ on important points. The annual shareholders report is ready now. BRK has unusual shareholders, many of whom have 80% of their net worth in BRK. I have almost 100% of my net worth in BRK. But if the market goes down 50% we might rewrite it (laughter).

(4) Why did you convert Goldman Sachs warrants into a smaller stake in the company?

WB: Goldman Sachs and GE, we helped finance them in 2008 which I never dreamt would happen (Imagine GE calling you, telling you they need your financing assistance). BRK received warrants with preferred stocks, expiring in 5 years (Sept 2013). Warrants to buy $5 billion Goldman Sachs common stock and $3 billion GE common stock. If we exercised, we would have had to invest an additional $8 billion. These two companies didn't want to issue all of those new shares. Earlier this year we decided, they didn't want to issue all of those shares, we didn't want to spend $8 billion. Let's do a settlement, both wanted to. We didn't have to lay out cash and they didn't need to issue all of those shares. BRK ended up with Goldman Sachs shares valued close to $2 billion without any outlay of BRK's cash. GE was only $200 million. BRK has only one big warrant issue remaining, with Bank of America. We have warrants that entitle us to buy 700 million shares at $7.14 a share ($5 billion) through August 2021. We'll hold the warrants until the dividend becomes high or we'll hold until right before the expiration. Goldman Sachs and GE deals are interesting – who would have guessed those 5 years ago. The money market failed because of Lehman. Money market funds held a lot of Lehman paper. It happened overnight, 30+ million Americans who believed money markets were safe, and then Lehman fails. This caused a major money market fund to "break the buck" and lose value. It became a great silent electronic run on money markets. There was $3 1/2 trillion in money market funds and $175 billion of funds flowed out in the first three days after Lehman failed. All money market funds held commercial paper. Companies like GE had a lot of commercial paper. After this, American industry literally stopped. George Bush said, "If money doesn't loosen up, this sucker will go down" – I believe this was the greatest economic statement of all time. This is

why he backed up Paulson and Bernanke. Companies were counting on the commercial paper market. In September 2008, we came right to the abyss. If Paulson and Bernanke had not intervened, in two more days it would have been all over. BRK always has $20 billion or more in cash. It sounds crazy, never need anything like it, but some day in the next 100 years when the world stops again, we will be ready. There will be some incident, it could be tomorrow. At that time, you need cash. Cash at that time is like oxygen. When you don't need it, you don't notice it. When you do need it, it's the only thing you need. We operate from a level of liquidity that no one else does. We don't want to operate on bank lines. There is no authority for the US Treasury to guarantee money market funds. Their power comes from Congress. Paulson set up an exchange stabilization fund in September 2008 to guarantee money market funds. This stopped the run of money market funds and it was all over. Something like that will happen maybe a couple of times in your lifetime. Two things when it happens again – don't let it ruin you, and if you have money/guts, you'll have an opportunity to buy things at prices that don't make sense. Fear spreads fast, it is contagious. Doesn't have anything to do with IQ. Confidence only comes back one at a time, not en masse. There are periods when fear paralyzes the investment world. You don't want to owe money at that time, and if you have money then you want to buy at those times. "Be greedy when others are fearful, and fearful when others are greedy".

(5) How has your understanding of markets contributed towards your political views?

WB: I wouldn't say knowledge of markets has. My political views were formed by this process. Just imagine that it is 24 hours before you are born. A genie comes and says to you in the womb, "You look like an extraordinarily responsible, intelligent, potential human being. Going to emerge in 24 hours and it is an enormous responsibility I am going to assign to you – determination of the political, economic and social system into which you are going to emerge. You set the rules, any political system, democracy, parliamentary, anything you wish, can set the economic structure, communistic, capitalistic, set anything in motion and I guarantee you that when you emerge this world will exist for you, your children and grandchildren. What's the catch? One catch – just before you emerge you have to go through a huge bucket with 7 billion slips, one for each human. Dip your hand in and that is what you get – you could be born intelligent or not intelligent, born healthy or disabled, born black or white, born in the US or in Bangladesh, etc. You have no idea which slip you will get. Not knowing which slip you are going to get, how would you design the world? Do you want men to push around females? It's a 50/50 chance you get female. If you think about the political world, you want a system that gets what people want. You want more and more output because you'll have more wealth to share around. The US is a great system, turns out $50,000 GDP per capita, 6 times the amount when I was born in just one lifetime. But not knowing what slip you get, you want a system that once it produces output, you don't want anyone to be left behind. You want to incentivize the top performers, don't want equality in results, but do want something that those who get the bad tickets still have a decent life. You also don't want fear in people's minds – fear of lack of money in old age, fear of cost of health care. I call this the "Ovarian Lottery". My sisters didn't get the same ticket. Expectations for them were that they would marry well, or if they work, would work as a nurse, teacher, etc. If you are designing the world knowing 50/50 male or female, you don't want this type of world for women – you could get female. Design your world this way; this should be your philosophy. I look at Forbes 400, look at their figures and see how it's gone up in the last 30 years. Americans at the bottom are also improving, and that is great, but we don't want that degree of inequality. Only governments can correct that. Right way to look at it is the standpoint of how you would view the world if you didn't know who you would be. If you're not willing to gamble with your slip out of 100 random slips, you are lucky! The top 1% of 7 billion people. Everyone is wired differently. You can't say you do everything yourself. We all have teachers, and people before us who led us to where we are. We can't let people fall too far behind. You all definitely got good slips.

(6) You are one of the few male CEO's who champions women in the workplace. Can you talk about your reasoning and how we can contribute our intelligence to the workplace? (from a woman speaker)

WB: We wrote the Declaration of Independence in 1776 – "All men are created equal" etc. In 1789 we wrote a Constitution – on second thoughts… blacks are only 3/5 of a person. They slipped up. They wrote in such a way that they didn't have to use gender pronouns. They gave themselves away in presidency, they said "He". Pretty soon all men are created equal became all males are created equal. Move forward to the Gettysburg address, Lincoln repeated the line about All men are created equal. Slipped over the fact that women couldn't vote, couldn't even inherit money in some states. Finally, in 1920, 131 years into this new venture of governance, "Oh yea, women should have a fair stake in vote." After this, many justices were appointed before O'Connor was. Everyone had expectations of me as a child, but my sisters who were just as smart, were delegated to something different. Here is this country, think about how far we came from using half our talent. Now we are beginning to unleash the potential of the other half. If we only allow people to be CEO's, accountants or lawyers if they are above 5'10″, and people under 5'10″ must become nurses, etc. that would be crazy, we could not unleash potential. Same thing was the case for women. No one realized it, my dad didn't, and my teachers didn't. Women are obviously just as smart and work just as hard. No one is better at running our annual meetings than Carrie. I think its nuts for a CEO to pass up the most talented person based on their gender. But we are going in the right direction. We're moving towards the ideals we set, but these ideals set by Jefferson weren't practiced until much later.

(7) How do you assess management when acquiring a company?

I handed Mrs. B (Nebraska Furniture Mart) a big check, and none of them (managers of acquired firms) had to work anymore. But will they behave the same after they get the money and I get the stock certificate? Will they work just as hard when they're putting money in their own pocket?

3/4 of our managers are independently wealthy. These people don't need to go to work, but they are putting the work in. If I give him 4 billion dollars, will it be the same results next month? Next year? I don't deal with contracts; I have to size up whether management is going to continue working that same way. Generally, I've been right in my assessments and I've gotten better. They don't need me, I need them.

Why do I come to work? I can do anything I want to do, and yet I come out every morning and can't wait to get into work. I enjoy working Saturdays, talking to students. Why do I do it? I get to paint my own painting. Berkshire Hathaway is my painting. People love creating things. I think I'm Michelangelo, painting the Sistine Chapel but it could look like a blob to someone else. Second thing – I want applause. I like it when people appreciate my painting. If others have their own paintings, then who am I to tell them how to paint it? (Just like management) I appreciate what they do. I know the game, so when I praise them, they know they're getting approval from a critic they like. I have their stock certificate, but it's still their business. It's a good culture when managers really care about the business.

(8) Now information is everywhere. If you were born in Peru today, could you have thrived in the same manner?

WB: Yes, I do. Things are changing around the world. People are able to move within and up through socio-economic classes. America didn't work harder when increasing GDP more than other countries, we allowed for equal opportunity. Didn't even work smarter, just unleashed greater potential. The world is allowing for opportunities for all.

(9) What career path would you advise someone who wants to go into investing today?

WB: You just want to learn everything about it. There's so much to learn. Learning what works and what doesn't work, where value resides and where value doesn't reside. Got my feet wet, at 11 years old (1942) I bought 3 shares of Cities Service Preferred at $38 1/4. At the same time, my older sister Doris bought also bought 3 shares and my dad bought 4 shares, so we had a round lot of 10 shares. My sister Doris complained about the price of the stock every day when going to school. So I sold it at $42. Two years later the shares sold for $200.

I would try to manage money with an audited record so that it would attract more people when doing well. I like running businesses better than investing. It is more fun building businesses than moving money around.
Todd Combs and Ted Weschler are each managing $6 1/2 billion. They each are earning less money than they would if they were running their own hedge funds. But they like being at Berkshire. They have enough money. They have the character that I admire.

(10) Question seeking advice for women.

WB: I recommend reading Personal History by Katherine Graham. Presidents came to see her. She overcame the handicap that her mother and husband told her she was nothing. Many women are succeeding today as CEO's. Susan Jacques, CEO of Borsheim's, is leaving to head the Worldwide Gem Association.

(11) You were the first person to use the term "moats" as competitive advantage. Morningstar has built on this. What do you think about Morningstar's work on moats?

WB: I think they're doing a great job. I came up with this term 40+ years ago because in capitalism, you have these economic castles. Apple, Microsoft, etc. Some have smaller castles. If you have a castle in capitalism, people are going to try to capture it. You need 2 things – a moat around the castle, and you need a knight in the castle who is trying to widen the moat around the castle. How did Coca-Cola build their moat? They deepened the thought in people's minds that Coca-Cola is where happiness is. The moat is what's in your mind. Railroad moats are barriers to entry. Geico's moat is low prices. Every day we try to widen the moat. See's Candies creates a moat in the minds of consumers. It is a more effective gift on Valentine's Day than Russell Stover. See's Candies has raised its price every year on December 26 for 41 years. BRK bought See's Candies for $25 million in 1972. Today it earns $80 million. Richard Branson failed 10 years ago with Virgin Cola. Snickers has been the number one candy bar for 40 years.

(12) How do you balance work/family life and what advice do you have for a young professional?

WB: The most important decision you're going make is who you're going to marry. What's important is that what your thoughts are on big things, must make sure that your spouse has the same thoughts on the same big things. Don't marry someone to change them. Marry someone who is a better person than you are. Always associate yourself with people who are better than you.

(13) Do you have a goal of beating the Dow Jones Industrials by 10 percentage points each year?

WB: Years ago, I was trying to beat the Dow (would be the S&P today). Goal was to beat the Dow by 10 points this year. If the Dow was down 20% and we were down 10%, that would be fine. We don't have some number we expect to make from some business or security. We do what we can that we think is the best at the time. Is this the most intelligent thing we can do, within our circle of competence, that doesn't strain our resources? Hopefully we say yes. We generally think the value of a company is the PV of cash flows until judgment day.

If you really get back to investments – 2600 year ago the expression was "A bird in the hand is worth two in the bush". But you need to question it – How sure are you that there are two in the bush? How far is the bush? What is the interest rate? (laughter)

In investments, you lay out money now and get more money later on. Berkshire is putting more birds in the bush all the time.

If you are managing only $1 million, then you should be able to beat the S&P 500 by 10 percentage points with no risk or leverage.

(14) What was the most difficult negotiation you were ever involved in? How did you develop your strategy going in?

WB: Only really learned negotiations from my dad. People have different styles of negotiation. I don't want to be in a negotiation where it "has to end" at some point. Don't want them to have me by the throat while I have them by the throat. Either we give up or one strangles the other. My style is different from most peoples, just say what I do. If you do that throughout your life then stick to it. I can walk away from anything. I say I'll pay $X, and normally this is the best deal. I don't want to lowball, then you counter, and get to $X anyway. You spend time and money doing that. I just say what I'll pay, and that works fine once you establish a reputation. You don't want to get in a negotiation that you can't afford to walk away from. Bargaining with people you love is a terrible mistake. It's destructive. The most powerful force in the world is unconditional love.

(15) What has been your biggest investment mistake and how did you learn from it?

WB: It is better to learn from other peoples mistakes rather than your own. Look at all kinds of business failures. I don't believe in beating yourself over it, you're going to make mistakes. My biggest mistake was buying Berkshire Hathaway and trying to make it better. We had all of our money in a bad business, had a drag on all of this capital for 20 years. Even after acquiring National Indemnity. BRK to be the base of what we wanted to grow, this was a mistake. You cannot play the game without making mistakes. We bought Dexter Shoe for $400 million in BRK stock

which is now worth $5 – $6 billion. Dexter Shoe went bankrupt as a result of foreign competition. We lost $2 billion in Energy Future Holding bonds which KKR had invested in. KKR lost $8 billion.

(16) When managing other peoples money and making mistakes, how do you deal with the responsibility/burden?

WB: I tell them I'm going to make mistakes, but the goal is to do this and this and this. I might make mistakes in order to do this, but I will still probably achieve this goal. I try to operate in a way where I can't lose significant sums over time. I might not make the most money this way, but I will minimize the risk of permanent loss. If there's 1 in 1000 chance that an investment decision can threaten permanent loss to other people, I just won't do it.

Notes from the Meeting Dr. George Athanassakos and Ivey MBA and HBA students had with Mr. Warren Buffett
Omaha, NB, January 31, 2014, 10:00 am - 12:00 pm

Question #1:
As we grow up, our motivations have changed. What is your motivation now and what motivates you every morning when you wake up?

Answer #1:
I want to be the oldest man! There are a lot of things I can do, and I love to work with the people here. I can do the job I love at Berkshire. I get to paint my own painting. I come to work and no one tells me what to do. It's a free canvas. I can choose the colour to paint with. It's the same with my managers. I give them their own brush, and they can paint their painting individually. They do a very good job. At Nebraska Furniture Mart they're expanding into Texas. The job won't change their lives significantly, but it's their painting.

You will want to find a place that you admire and work for them. I'm doing what I love doing. I took a job at the age of 23 with Ben Graham, I offered to work for free and he said I was overpriced. Eventually he did give me a job and I didn't ask about the pay. I loved it and that's the job I'm doing now.

Question #2:
You said in a 2010 interview that the best advice you ever received from your father was unconditional love. How has that impacted your business decisions?

Answer #2:
Yes, I said that the greatest gift that my father ever gave me was unconditional love. Now, that doesn't mean that you get applauded for everything that you do. My father definitely told me if he didn't agree with my actions, but I always knew that he would be there for me.

When I was 13 I moved to Washington. I didn't adjust well and my actions were not exemplary. My father talked to me and told me that I could do better. Throughout my life my father told me he supported me no matter what I wanted to do. It's an enormous factor. If you receive it from your parents that's great, if you don't, it's an uphill battle. That's why, for you guys, choosing a spouse is the most important decision in your life. You need to choose a spouse who believes in you and will give you that unconditional love. The best way to find a spouse like this, I think, is to be lovable.

I became very good friends with a woman who was a Polish Jew. She was in one of the camps during WWII and her sister and her mother were in different camps at the same time. Unfortunately, her sister and mother

never came out. After this experience, she was always very slow to make friends. She would always say to me, "Warren, every time I meet somebody, I always ask myself, would they hide me?" There are some very rich people whose children wouldn't hide them. There's the poem that reads:

A bell's not a bell 'til you ring it,
A song's not a song 'til you sing it,
Love in your heart wasn't put there to stay,
Love isn't love 'til you give it away!

Lots of rich people who don't understand this live very empty lives. No matter what, if you have unconditional love, you'll be alright.

Question #3:
In the acquisition of Heinz, you funded the purchase with debt and partnered with 3G Capital. 3G typically take activist roles, often changing management, while Berkshire Hathaway usually leaves management in place. What made you comfortable with welcoming 3G's strategy?

Answer #3:
The head of 3G Capital, Jorge Paulo, is a good friend and an amazing manager, and mentioned he was looking at Heinz and asked if I was interested. He sent me a two-page proposal, one page financial and one page addressing governance, and I didn't have to change a single word. They are great managers at 3G. No matter how well a business is doing, it can always do better, and 3G managers are the best managers I've ever seen.

At Berkshire Hathaway, we're hands off. We have 70+ businesses, and they generally run themselves. For example, Burlington Northern Railroad has a $4B capital budget, and I don't review this budget or its capital allocations because I trust their managers. People sell their businesses to Berkshire because they know they will retain control, in part, and won't have to give up what they love. They stay with Berkshire Hathaway forever and appreciate our hands off approach.

Our hands-off-strategy is opposite to that of Jorge Paulo's group. They run the businesses that they own, and they do an amazing job. 3G are great managers, and Jorge Paulo is a great man. We partnered up about a year ago, and we're likely to partner up again sometime in the future.

Question # 4:
Do you believe growth, quantitative and other passive styles of investing will eventually overtake the active investing style?

Answer #4:
There will always be opportunities in the market because of people doing extreme things. Long-Term Capital Management helped with the problems at Salomon. Humans created what happened there, but it wasn't because they didn't have knowledge of markets. In 2008 what happened was also man-made. What happened to Fannie and Freddie, and Lehman in September was man-made. All these things caused extreme valuations.

One of the trades at Long-Term Capital Management is that they would go short on the so-called "on the run" treasury and go long on the one that was slightly different in maturity when they had a spread of 10-15 bps. A new 30-year bond would come out and it would be the "on the run" issue, but there was nothing wrong with a 29-year and a half bond and basically they were the same instrument. They set this trade up to just keep working, but you would have to do it with extreme leverage to make a lot of money. The spread went out to 30 bps, which was crazy to have between the two treasuries, but it happened. That broke certain people, but it offered opportunities to other people who always made sure that extremes in markets could not kill them. That will happen again. You are going to see incredible opportunities. It won't be frequently, but you will see them in your lifetime.

When I got out of school in 1951, in those days they didn't have the Internet, so instead we had these big manuals. Standard & Poor's and Moody's put out some manuals. At the age of 20, I started going through these

books page by page. I also went through the Industrial manual, the Transportation manual, the Utility manual, about 10,000 pages in total. I was looking for things that were cheap. When I got to the back of the book, page 1433, there were companies I had never heard of, but here was a company called Western Insurance Securities. It showed they were earning $29.09 per share. The year before they only had earned $21.66. That didn't tell you much until you turned the page and looked at the common stock, and the price on the common stock for the previous year had a range of $3 to $13. By the time I saw it, the stock was $16 per share. I went to the local representatives, the people were good and they had good underwriting. There was nothing wrong with the company.

Somebody told me to take a look at Korea in 2004. They gave me this manual of all the Korean securities. One Sunday I went through this and picked about 20 or so stocks, which were similar to the ones I picked in Moody's. I found a company and presumably they make flour. I would look for good balance sheets and trading at 2 times or 3 times earnings and a business that wouldn't go obsolete. I didn't know enough about any specific ones to put half my money in them, but I knew if I bought 20 stocks I would make very good returns.

Money and courage is needed to invest like this, not even that much intelligence. You only need an IQ of 130, and then you should sell the excess to someone else. What you need is emotional stability and the guts to do things when others are petrified and frozen. It's happened many times in my life. The human animal will react the same. In the fall of 2008, you had 30 million Americans who owned Money Market funds. In aggregate they had three and a half trillion dollars in those funds. To put that money in context it was worth about half of all bank deposits. At the start of September, no one was afraid of these funds, because they it looked exactly the same as cash. Two or three weeks later, when Lehman failed and it went from zero people who were worried to 30 million worried. In the first 3 days following, 175 billion dollars flowed out of money market funds and they had to sell something. They sell the governments first, and it just cascades. When fear enters the room people panic. Confidence comes back one at a time, but fear is all at once.

You will see it again. The future won't be exactly the same, but it rhymes. There will be as much opportunity for value investors as there has ever been. It's just when the opportunity comes along you have to go do it and people won't be cheering you on.

Question # 5:
If you could invest in only one country -- other than the US -- what country would you choose and why?

Answer # 5:
It might well be China. But I would want a big market because we have big money to invest. I like Korea too, but again, it would have to be a big market. It might even be Japan.

We spent last year, in our businesses, over $10B on plant and equipment. It was a record year. And 90% of that was in the United States. We like the idea of investing outside of the United States, but A) the deals aren't as big, and B) they're not on the radar screen to the same extent.

Our largest investment outside of the United States, interestingly enough, was in Israel. But that was because I got a letter one day from a fellow I have never heard of. It was a page and a quarter long and in it he describes his company and he said 'our family owns it and we only want to sell to Berkshire. If you don't want to buy it, we're not going to sell it. If I've interested you, I'd be glad to come over from Israel and tell you about it.' Well the letter jumped out at me, so I invited him over and he came over. We bought the business for $4 billion.

We do buy things from all over the world, but they don't come up that often. It just isn't the same as it is in the United States.

But I would say you want to be in a big market and in a place where you have the prospect of a really big return. And you have to understand the game. I would want to know that I understand it. In Korea, I knew about 20 stocks with good balance sheets but those alone can't move the needle at Berkshire. We've got a

huge market value at Berkshire, and so to make real money at Berkshire we have to find big deals. Charlie and I have to go out with our elephant gun; the fly swatter won't cut it.

Question # 6:
What are the top three global problems that you are trying to tackle with the Bill & Melinda Gates Foundation?

Answer # 6:
The top three global problems cannot be tackled by the foundation. Today, we are all living better. Real GDP has increased and people bemoan the 2% GDP growth, but if the population increases at a rate of 10%, that's 20% more output. It is the cyber, nuclear, biological, and chemical attacks that are the problem. Few governments wish ill upon their neighbors. We have always had radicals and will always have them, but the number has increased, as has their ability to inflict damage. The threat is dependent on intent, knowledge, access to raw materials, and deliverability. Intent has always been there and will always be there. The spread of knowledge is increasing. The only complication is the raw materials. However, something will happen eventually because the offense is always ahead of the defense. The foundation cannot tackle these problems as they are governmental problems. When it comes to philanthropy, a person is forced to pick between something that you know you can do or pick something that you might fail at, but one time in four, you might make a big difference. There is equal value in every life; you have to determine how you can have the biggest impact. Right now, the foundation is working on improving medicine outside of the United States, specifically targeting polio. There are many health prospect changes that can be made around the world and a lot of educational opportunities within the United States.

Question # 7:
What is your opinion of the emerging economies like Brazil? Would you be looking to invest in companies in these types of markets, and if so, in which sectors?

Answer # 7:
I have made a number of trips to Brazil and have a fair number of contacts there. I don't have a favorite sector at this time. It's not for me to find ideal sectors; instead nations should promote their key sectors for their particular country. The only criterion I have at this point, is that the investment should be big enough to move the needle at Berkshire. The company from Israel is a good example, where I invested even without visiting the operations. I just try to find a good pitch from a business which is big and has efficient and trustworthy management. If someone can clearly tell me what he has as a business and what he can do as management, I'm willing to invest within 10 minutes (assuming I like the opportunity.

Question # 8:
How would you rate your own success on a scale of 1-10?

Answer # 8:
I don't believe I'm very different from others. I still eat the same food, have a good time when I go out with friends, just like others, the only difference is I travel a little better now. I take my jet when I travel. Success for me is doing what you love and are passionate about and as long as you are doing what you like you'll stand out and outperform. If I have to rate myself I'll always believe I'm a 10. I feel that the way the rich often show off their wealth as a form of "elephant bumping". Buying another house would only be an inconvenience, I'd feel obligated to stay in it instead of my current home which is quite comfortable. For example, I don't like yachts. They only offer the opportunity to do things with greater difficulty at sea, where I feel trapped, that I could have easily done on land (at the Y) for a fraction of the cost. Ultimately, money is not the ultimate measure of success, but rather, it is how many loved ones you have around you.

Question # 9:
What was the thinking behind the kids' series "Secret Millionaires Club"? What are you trying to teach kids about money through the series?

Answer # 9:
My father never pushed me into anything and I tried to do the same with my children. None of my three kids finished the college – we have one degree to pass around the family between the three of them. You got to find your true-self; no one can teach you that. For secret millionaire club I did a series of cartoons in (about) 14 episodes. I played myself and taught history and secret millionaire 'ideas' to all those kids who might otherwise grow without the 'right habits' in regard to money. Myself and the producers hoped to instil better (financial) habits and to help the kids develop. This initiative later caught on with few celebrities and some of them, including Bill Gates and Jay-Z, even appeared in few of the "Secret Millionaire Club" episodes. Some of the issues we tried to address included credit card use and bad debt.

Question # 10:
Females working in male dominated industries, what advice do you have to give young female professionals in an industry dominated by men?

Answer # 10:
Look at how far we came using only half the talent pool, think of what we can do with 100%. If you read the American constitution, when defining judges and congress, it doesn't use personal pronouns, but for presidency, it uses "he" and "his". Also, we had Thomas Jefferson saying "all men are created equal" and again repeated by Abraham Lincoln. But since then we had the 19th amendment, giving women the right to vote. Things are moving along.

Over the last 20 years we have seen a lot of industries change significantly. For instance, Tracy Britt, a 29 year woman, is the Chairman of 4 companies. When I was growing up I met a 98 year old woman in Seattle who was the first female to graduate from Cornell. She had to stand behind a curtain in anatomy class. There's still a long way to go, but we're moving quickly.

If you are working in a male dominated company, just hope that Berkshire Hathaway buys them. If you have a child, 9/10 times the women will do the house work and have a more interrupted life; life is tougher. However, a company that ignores half the talent won't be competitive over time.

Growing up I had teachers who had so much talent because at that time women had only a few options (teacher, clerk, secretary, and one other), so they were way over qualified, and should have been doing something else. I feel I got more than I deserved.

Question #11:
What is the one question you would want to ask if you had an oracle?

Answer #11:
The most important question of all humanity would be, is there a god? I'm agnostic, but I would still want to know. That's the greatest question in the world. Much sooner than you guys, I will find out (laughs).

I like the world it is now, because there is enough uncertainty. I can say I've seen this part of the movie before, but still won't be able to predict the ending. I like it that way as the past is relevant, but it's not determinant of the future. The game is very interesting the way it is now and I wouldn't want to change too much of it.

Question #12:
What do you think was your best non-financial investment in life?

Answer #12:
My two marriage licenses, which I don't know how much I paid for, but if I had to pay a million times that it would still be a bargain. I guess you are looking for a tangible asset, so I would say my home. At the time that I

purchased it, it used up a fair amount of my free capital. The reason why it was so worth it, is because everything has happened there. My kids grew up there, and it's where they and all their friends congregated. Their friends still come around when they're home. While there was a financial side to it, the main motive was not financial and every reason I had to buy the house was fulfilled.

A little while ago, we celebrated my good friend and business partner Charlie's 90th birthday there. We had about 280 people. For a while now I've suspected that Charlie's hearing has been going, but I didn't know how to tell him. I went to the doctor and asked what the best way was to find out and the doctor said to stand across the room, speak at a normal tone of voice, and see if he responds. So at the party, I stood across the room and in a normal tone of voice I asked, "Charlie, I think we should buy Microsoft for $35.00, do you agree?" He didn't respond so I walked half way across the room and again said, "Charlie, I think we should buy Microsoft for $35.00, do you agree?" Not a flicker. Finally I walked up almost right beside him and asked, "Charlie, I think we should buy Microsoft for $35.00, do you agree?" He looked me straight in the face and said, "For the third time, yes!"

Question #13:
Berkshire aims to buy companies that run themselves. When have you had to restructure a firm's operations or management team?

Answer #13:
We've had to change managers, but we've never really had to restructure entire businesses. Changing managers is my least favorite part of this job; however, it is inevitable. We have no retirement policy, and managers know what you're saying is that they're losing it. Most of these managers are friends, and I just hate it. Berkshire has definitely changed managers less than our peers. We own 70+ businesses, and we typically have to change 1-2 managers per year.

One example is an insurance company on the West Coast, where I was good friends with the owner. He developed Alzheimer's, and I delayed taking action for a few years because he was such a good friend. I didn't want to acknowledge it, and I didn't want to see it. I've almost always change managers late. I shouldn't do it late, but I will continue to do it late. In another situation, I had to confront a long time CEO about retirement and he told me: "If I was in your position, I would do the same thing."

Typically, I send a one to two page letter to managers each year with limited instructions, and I ask for a page back to tell me who should succeed them if something happened overnight. Changing managers is part of capitalism, and it is therefore my responsibility; however, this makes it no easier to do. It is also important for me to distinguish between bad investments, which are my fault, and poor management. The CEO is extremely important to a business, so we must take action to get the company back on track. The right CEO equals the right business.

Boards are also a social institution. It is hard to fire people who are good, genuine people but mediocre managers. This is actually the biggest problem in corporate America. I have sat on 19 boards, and it is hard to get rid of upper class mediocrity. It is hard to want to do it.

Question #14:
What is the biggest mistake you've made in your life and what have you learned from it?

Answer #14:
Using Berkshire as the vehicle for the company that has been built. At the time when I owned some shares in Berkshire they were closing down mills and buying back tender offers. The company had asked a price I would tender at, and we had both agreed by word on $11.50. A month or two later, when I received my tender, they went back on their word and offered at $11 and 3/8ths. So I went out and bought all the shares and he was no longer CEO. It was a lousy business, but doing well at the time for a short period. I was still running a partnership in Omaha and in early 1967, a local fellow, wanted to sell National Indemnity Insurance Company and I bought it. I bought it and instead of forming a new company to buy it, I put it in Berkshire. I put a good company in with a lousy business. If we had built what is now Berkshire around the insurance

company we would have owned 100% of it instead of what was later to become 70%. And we still had this textile business, which we lugged around for 29 years, which brought down the returns. It was a terrible base on which to build a business.

I made a mistake when I bought a shoe company in the 1990's up in Maine. I gave them $400M of Berkshire stock for a business that was worth zero. I should have paid cash. Now their shares are worth $5B. Every time Berkshire stock goes down I feel a little better about that deal. That was really dumb and it was a double play dumb.

In my personal life I just got enormously lucky. I was very lucky with parents, and in terms of the teachers, not just the formal ones, but also friends. The biggest piece of luck I've had is that I have developed 15 or so close friends in my life, and I have never been disappointed by any one of them. Beginning with my partner Charlie Munger, it's hard to find a partner like that and it's almost as important as a marriage. We are both strong-minded, we disagree, but we have never had an argument. These people are my heroes. It's terrible when you get let down, but that has not happened yet. I've made a point at associating with people who are better than I am. You will move towards the behavior of those who you associate with and you will become more like them.

I've had some bad business luck, but you pick yourself up and move on to the next thing. Maybe I'll have some bad luck with this basketball tournament and be out one billion. It'll be fun though, I'll go to the game with the one guy left and bring a cheque for a billion, and we'll probably cheer for different teams.

Question #15:
Since 2008, what's the best pitch you swung at and what's the worst?

Answer #15:

One challenge Berkshire faces is that the company is so large now that it must deal with large deals. Before the 2008 downturn, Berkshire made a commitment to buy a stake in Dow Chemicals for $3 Billion, but the deal came into effect after the events of October 2008. Berkshire stayed true to the commitment and made the purchase, but in hind sight, there were a lot of better deals to do with $3 billion. Another thing in hindsight is that Berkshire invested $15.5 billion between September 15 and October 15, 2008. However, this was pre-emptive by a few months. Had Berkshire not used up the powder early on there were likely better deals to do in early 2009. Burlington Northern has been a great investment and luckily Berkshire had enough money to get the deal and the company was fortunate to have gotten the business.

Question #16:
In 2010, along with Mr. Bill Gates, you publicly announced The Giving Pledge, encouraging the world's wealthiest people to give the majority of their wealth to philanthropic initiatives. Prior to the pledge, you had intended to give the majority of your personal wealth after your death. However, this mindset was changed and your giving now follows a planned schedule. What was the cause of this change in mind set and what is your view of social investing (investing not just solely for profit, but with social objectives)? Do you believe there is a place for social investing or do you believe profit and philanthropy should be separated?

Question #16:
When my wife passed away in 2004, my plans for giving changed. I decided early on that my wife and I had everything that we needed, and that we would give all the excess back to society. Originally, 85% of my wealth was to go to five foundations. I recently decided to double the amount that I'm going to give to my children. I have also pledged that all of my shares of Berkshire Hathaway will be given to the foundations and must be spent within 10 years. I want the current management to make the decisions, who knows who will be in charge after 10 years. The young successful generation, people like Zuckerberg, have the ability to influence the younger generation to socially invest. I do not personally believe that investing and social causes mix. Most proposals that mix these two are confusing and blurry, and as a result, perform poorly as investments and businesses.

Question #17:
Mr. Buffett, can you comment on the recent March Madness bracket competition and the use of Berkshire's name on real-estate? Is this the start of the commercialization of the Berkshire name?

Question #17:
The $1 Billion March Madness bracket is actually an insurance transaction. Quicken loans will give $1 Billion over 5 years to anyone who gets a perfect bracket. Berkshire is insuring Quicken Loans against the prize. Berkshire has done similar deals in the past, for example with PepsiCo, which did a contest for someone to draw a certain number. Abnormal insurance transactions are something that Berkshire does. For example, Berkshire insured Alex Rodriguez when he went to the Texas Rangers. Berkshire insured the NCAA tournament once. Berkshire will listen to any insurance proposition and do a deal if it makes sense.

With respect to the question about real-estate branding, Berkshire Hathaway HomeServices Network has grown steadily over recent years into the second largest brokerage in the US. Some of Berkshire's holdings include Clayton Homes as well as the rights to the Prudential's real estate franchise name which was acquired two years ago. The recent branding to operate as Berkshire Hathaway HomeServices Network just makes sense and isn't a big branding push to try and use the Berkshire name more.

Question #18:
What is different about your strategy in the "Private" market?

Question #18:
Under today's conditions, there are lots of deals in the private market, people are buying from each other. There's lots of competition and pressure to buy now or return the money. Berkshire Hathaway only buys if a controlling family/shareholder wants to sell to us. They will come to me and say they want to sell their business to Berkshire Hathaway. They can probably get more money selling to someone else, but they know when I say I am going to buy a company, the deal will close under any circumstances; I won't change the deal on you. Whereas PE firms, after doing due diligence, will change the deal on you. They know when they sell to Berkshire Hathaway it will be a part of Berkshire Hathaway forever. Employees won't have to worry about what will happen the next day.

If you have a good business, why sell it? There however are circumstances that may force you to sell, like family issues or a deep recession. For instance, we bought Burlington because we were in a deep recession. We, Berkshire Hathaway, are the best game in town, except for price. We stick to the price that we give, if I say $x, its $x. We don't negotiate and this saves time.

This is an unofficial transcript of Warren Buffett's three-hour March 3, 2014 "Ask Warren" live appearance on CNBC's "Squawk Box."

BECKY QUICK: The ruble is at an all-time low versus the dollar. It fell drastically today, not only against the dollar but also the euro. So investors are sitting up and taking notice. The-- MICE index in Russia was under quite a bit of pressure as well. So-- the-- it may not be playing out by more than just 150 points right now in the U.S., but there are some major moves happening in markets around the globe as investors try to figure this out.

Again, perhaps no better investor to sit down and speak with today than Warren Buffett. We are here in Omaha because-- Berkshire Hathaway's annual letter-- Warren Buffett's annual letter to the shareholders went out on Saturday morning. And, Warren, we've spent some time digesting-- a large annual letter.

WARREN BUFFETT: I get paid by the word.

BECKY: Yeah. So-- a very hefty annual letter that gives people a lot to think about. As you do every year you laid out a lot about your thoughts about investing in general-- and taking a look at the markets. And I would ask you for your macro view on the markets. But in your letter you pointed out that you don't give much credence to people offering macro views.

BUFFETT: No. No, I-- I've been buying businesses and stocks for a lot of years, stocks for-- 71 years and businesses for almost as long. And-- I've never really made a decision based on macro factors. If I find a business I like-- I buy it. I mean, the first stock I bought was in the spring of 1942. And I will tell you, the macro factors were not looking good.

You know, we- were-- it—was right after Pearl Harbor and we were getting clobbered-- in the South Pacific. And-- the war did not look good. Now, I think almost every American thought we were gonna win the war, but when I bought my first stock I spent-- I went in 100%. I spent-- all of my $120. I was not doing it based on headlines. I was doing it based on what I was getting for my money.

BECKY: But when you did that, when you bought into it, you say you don't look at macros. I can think of times from the past when you have looked at macro effects. When you looked back with stocks at a low you told Americans to buy stocks with both hands.

BUFFETT: Well, occasionally--

BECKY: Yeah.

BUFFETT: --stocks are just demonstratively cheap. I mean, really demonstratively cheap. And--I wrote an article in 1974-- or, I did an interview with Forbes—and in 2008 I wrote an article for The Times. And, I mean, there are occasionally when they're just ridiculously cheap. But-- most of the time they're good value.

BECKY: Uh-huh.

BUFFETT: But there have been a few times when I thought they were so cheap that I-- I should say something.

BECKY: You know, people have pointed out obviously stocks have come a long way since then. People have been analyzing your annual report and realizing that you didn't really say anything like you've said in years past where you said-- I-- one time a few years ago that stocks obviously were a much better value than gold.

This time, the excerpt that you-- put into Fortune a few days ago that people really focusing on had two examples that were both around real estate, 1) the farm that you bought here Nebraska. Another-- some real estate that you invested in just across the street from NYU, from New York University. And that has people speculating, do you think that real estate and other areas are better places for money than stocks right now?

BUFFETT: No, that's they're speculating wrong. I used those-- illustrations because I don't know that much about real estate or farms. And yet it was still possibly to successfully invest them. And--I feel the same way about people on stocks. If they you can have a great, long-- life-long experience in stocks and really not be a specialist in accounting or, you know, know all the ins and outs of capital structures and all of that sort of thing.

And-- I used-- I was just-- I was probably more ignorant of-- the realities of farming, the realities of that building in New York as most people are with stocks. And yet, it was perfectly possible to come to-- an intelligent decision that you could not lose money in those-- investments and that you were probably gonna make quite a bit of money.

BECKY: Yeah. I wondered that. Because there have been a lot of people recently who have raised questions about the stock market, who have worried that it is-- a fool's game to try to get involved. That it's-- the average investor can't get a fair shake. I've heard people like Bill O'Reilly say this very recently, that he doesn't trust the stock market and thinks it's rigged. What do you tell people?

BUFFETT: Well it isn't rigged at all. I mean, there have been occasions where given stocks were absolutely rigged. But-- but it's pretty hard to rig--$20-plus trillion (LAUGH). And the-- people should forget about calling it the stock market, even. I mean, it's American business.

And-if for some reason you think American business over the next 50 years is likely to be way less productive than it has been in the past-- then you can come to a negative conclusion on it. But I--came to a conclusion on that farm that it was likely to produce a little bit more over the years and that the crops would bring a little bit more over time and I bought it on a 10% yield-basis to start with.

So when you're buying a productive asset you don't wanna-- categorize it by some name or-- and then read in the paper that this or that's gonna go up or down. You wanna look at the business.

If you bought the house next to you to rent to somebody you'd look at the rent you were gonna get, the taxes you were going to pay and-- what you thought the neighborhood would do over a long period of time. And then you'd measure that against the purchase price. The purchase price is all-important. And the stock market just offers you so many opportunities-- the thousands and thousands of different businesses.

You don't have to be an expert on every one of 'em. You don't have to be an expert on 10% of them, even. You just have to have some conviction that either a given company or a group of companies, and I would suggest for most people it should be a group of companies you have to have every conviction that those companies are likely to earn more money five or ten or 20 years from now than they're earning now. And that is not a difficult decision to come to.

BECKY: You also-- revealed something in the annual letter this year, where you said-- you laid out the terms of your will, what you've set aside for your wife. Which, I didn't know any of this.

BUFFETT: Yeah.

BECKY: And--

BUFFETT: Well, I didn't lay out my whole will. There's hope for some of you who haven't been mentioned yet. The-- but I did explain, because I laid out what I thought the average person who is not an expert on stocks should do.

And my widow will not be an expert on stocks. And- I wanna be sure she gets a decent result. She isn't gonna get a sensational result, you know? And since all my Berkshire shares are going-- to philanthropy-- the question becomes what does she do with the cash that's left to her?

And I've been-- part of it goes outright, part of it goes to a trustee. But I've told the trustee to put 90% of it in an S&P 500 index fund and 10% in short-term governments. And the reason for the 10% in short-term governments is that if there's a terrible period in the market and she's withdrawing 3% or 4% a year you take it out of that instead of selling stocks at the wrong time. She'll do fine with that. And anybody will do fine with that. It's low-cost, it's in a bunch of wonderful businesses and it takes care of itself.

BECKY: You've specifically said a Vanguard index--

BUFFETT: Yeah, right. Yeah, well it's-- a very, very low-cost index fund. And there are others. But there are others that aren't so low-cost. And keeping costs to a minimum is enormously important in investing, whether it's farms or buildings in New York, or-- but particularly in stocks. I mean, if you're in effect paying out 1% or 2% annually--

BECKY: Yeah.

BUFFETT: -- of your portfolio, that's a big, big tax-- that you don't have to pay.

BECKY: And people who are at home who are listening to this, they just need to look at the expense ratio.

BUFFETT: That's right.

BECKY: And you could probably get one for 20 to 25 basis points versus 100 to 200 basis points.

BUFFETT: That's right. I think Vanguard's actually a little under 20 basis points. And-- if all of the people that had owned Berkshire 40 years ago had never traded, every day they tried to open the stock and they just wouldn't have been there to trade it, their returns at aggregate would've been exactly our returns.

Now, if they traded around like crazy, they pay people to tell them to own it and everything, their returns would become our returns, less expenses. So it-- you should look for a very, very low-expense-- way of participating. And incidentally at-- at Berkshire-- our expenses are very, very low in relation to the-- 100-plus billion of investments that we have.

BECKY: We do have the opportunity for viewers to write in and ask you their questions. One viewer did write in-- (I'm sorry, I'm looking for the number right now) wrote in the question asking about why-- did you lay out that you had said you set this money aside for your wife to be put into a Vanguard index instead of put back into Berkshire shares.

BUFFETT: Yeah. Well-- Berkshire would be okay. But like I say, I'm giving away all the Berkshire shares. And Vanguard is fine. And-- Berkshire would be fine. But-- I wouldn't-wanna be touting Berkshire to people, generally. I have no problem touting the S&P 500 at a low cost.

BECKY: Let's talk a little bit about what you see in the economy right now. Because through your businesses you have an incredibly good idea about what's happening. You have, not only in the Big Five that are doing things, you have massive investments, you have retail operations. Just, in general, where do you think-- the American economy is headed right now?

BUFFETT: It's-- from what I see, and I do see figures on at least 80 companies or so. And I like to get 'em, and I get 'em fast. It-- exactly what's been going on ever since the fall of 2009 continues. I mean, we've had this moderate but consistent growth-- now for four and a half years. And every now and then we get excited about it speeding up and every now and then we start worrying about a double-dip and all that.

And you-- you've heard all this different commentary over the four and a half years. It's been remarkably consistent. And the GDP figures may bounce around a little bit. In terms of what we see I would say that it's been almost a straight line, but not at-- the kinda slope that people would like. But not flat either. And-- that's exactly what I see to this point.

BECKY: So were we overly optimistic in the fourth quarter and now we're overly pessimistic in the first quarter?

BUFFETT: Probably. We'll know for sure later on. But that's-- it's been that way in my-- we haven't gotten wildly optimistic. And we haven't gotten wildly pessimistic. But over that period you've seen the small waves of optimism and pessimism. And really they-- you know, it's just been pretty darn steady-- improving.

BECKY: How much has weather played a role in fact, I mean, the numbers we've gotten over the last two months have been pretty lousy.

BUFFETT: Yeah.

BECKY: But-- the market's been writing it off saying, "Don't worry about it. It's been bad weather around the country."

BUFFETT: It's a factor. I mean-- our railroad does not work as well when there's lots of snow and extreme cold. NetJet doesn't work as well-- in extreme cold. And-- those things compound on themselves. I mean, if it's terrible weather in one part of the-- country, you know, getting the planes to take care of the people there, it all just pyramids. So there's no question it's been some factor.

BECKY: Every time we bring up weather as an excuse, though, somebody will point out, "Yes. But if you look at housing numbers in the housing market in California, that's been slower, and it hasn't been in-- because of weather there." What do you tell people?

BUFFETT: Well, I can't tell you for sure. But we--have a couple of large real estate brokers--

BECKY: Right.

BUFFETT: --working in California. In fact, the largest one in the lower three counties. We just bought-- we're buying another one in San Jose. It-- it's okay. I mean, and-- the prices are-- the prices have really been quite strong. But you always in the winter have less activity in real estate. But-- we bought several real estate brokerage firms last year. We've already bought one this year and we'll keep buying 'em. I like the business.

BECKY: Okay. We're gonna continue this conversation with Warren Buffett. We have him for the next three hours. Joe, I'll send it back to you in the studio though because I know we have a break we have to get to too.

JOE: Yes, we do. Yeah. I have often thought about-- about Warren's will.

BUFFETT: How do you spell your name again, Joe?

JOE: I mean, saying that-- that-- that I think of you as a father figure, or actually calling you Dad is probably too much. But-- you know, in the past you've given me-- you gave me a couple of bottles of ketchup. You gave me a brick. You gave me a little card-- a NetJet card that was absolutely useless. It had no money on it. And I'm just thinkin'-- are you-- you're sort of--

BUFFETT: I've been--

JOE: --waitin' for the big surprise, aren't you? Is that-- am I gonna find my name-- am I gonna find my name in there, God forbid, when-- when--

BUFFETT: Absolutely. Absolutely.

BUFFETT: No, I've been testin' you, Joe. And-- and what you'll see in my will, and-- it'll say, "To Joe, who wanted to be mentioned in my will, hi, Joe."

JOE: You know, Dad, that would be enough for me. I'd just like to say that. That would-- I'm not looking for anything else. And-- that would be good.

BUFFETT: I'm gonna make that one the record.

JOE: Okay. You're on Page Six (of *The New York Post)* today. I think maybe I'll talk about that a little bit later since-- I use my-- my will--

BECKY: Uh oh.

JOE: Yeah, he's on Page Six.

BUFFETT: Uh oh.

JOE: He's on Page Six. He's-- you know, he's liable to do anything at any time. So-- it's all in the gossip column. And--so let's save that for later. Coming up--

BECKY: There's a good tease.

JOE: Yep. Yep.

BUFFETT: Yeah.

JOE: Coming up, a special-- Ask Warren edition. I've just asked him to include me in his will. The Executive Edge and taking a look at the future. What would it matter, really? With all-- I mean, $60 billion, would it-- really? Is it that big a deal? Anyway, Squawk Box with Warren Buffett will return-- in just a moment.

BECKY: Welcome back everybody. Right now it is time for The Executive Edge. This is a special edition of The Executive Edge. This is the Ask Warren edition. We are joined this morning by legendary investor Warren Buffett. And he is answering some of your questions.

Warren, we got a lot of questions that came in from people. I'd like to focus on some that take a look right now at-- Berkshire and some of the things you pointed out in the letter. One came in from Ron Rogers in Ridgewood, New Jersey. And he says that in the Fall of 2013 news came out that you were ever so close to a major, multi-billion dollar acquisition of what would've been another elephant. I assume you would not disclose the name of the acquisition target, but would you tell us what industry group it's in?

BUFFETT: Yeah, I'm-- I better not even say what industry it was in. But incidentally-- because there aren't that many companies in the industry. And-by the size of it you could probably know down to two or three companies. It didn't happen.

But there's-- you're always seeing the leaves rustling, if-- nothing else. I mean, then-- then there's gotta be something behind those leaves. We will-- we have nothing real hot at the moment, but-- we have things we're working on.

BECKY: Yeah. You-- said also on the annual shareholder-- in the-- in the annual letter to shareholders that-- when it comes to taking a look at what happened with Heinz that this is a template for things--

BUFFETT: Right.

BECKY: --that Berkshire might do in the future. Have—you spoken with 3G about doing another type of acquisition like a Heinz?

BUFFETT: Well, we-- we've talked about generally-- yeah, so it-- we--don't have a name.

BECKY: Uh-huh

BUFFETT: But both George Palo Lemon, who was my partner in that, and I would love to do another one. And-- they have an appetite for-- making acquisitions. And they have an appetite for making big acquisitions. And--

BECKY: And so do you.

BUFFETT: And-- - yeah. And-- we're a good pair that way. And-- and-- and-- they also do the work and we do the financing. And that's-- an arrangement that I can get used to. So I-- everything that's happened with Heinz-- in terms of negotiating the contract, coming up with the buy whatever it may be, every experience has been 100% satisfactory. So I really look forward to doing something further with them. And I think we will.

BECKY: You--talked a little bit about the Heinz acquisition in the letter, but how are things going so far?

BUFFETT: Well, things are going very well. But the Bernardo-- Hees took over in June. He-- he's done everything logically that we're on the zero-base budgeting. As I put in the report, I--would expect the earnings of Heinz to be significantly better this year than any year in history.

BECKY: You-- pointed out that you're not somebody-- the difference between this and a private equity deal is that Berkshire plans on holding this for a long, long time.

BUFFETT: Forever. Yeah.

BECKY: Forever. Would you be surprised, though, to see a Heinz IPO sometime in the next five to seven years?

BUFFETT: Yeah, it could happen. Because-- the 3G people, they did that with Burger King. And--they have a number of investors. I don't know how many. The primary investors I know. But they-- no, but I just don't know the number. But the-- some of those people, undoubtedly will wanna get out.

And if the figures get good, as I would assume they would-- they might have a chance to get out with a significant profit. And-- when they do, we have no obligation to-- 'cause they have no obligation to sell the shares to us. And we, so it would be totally voluntary on their part. But-- if they were going to sell those shares and I found the price acceptable, I'd certainly offer to buy the shares from them. I--

BECKY: Because right now you're equal partners.

BUFFETT: Yeah. We're equal partners. And we'd be equal partners even if the number of shares were somewhat different. Psychologically we are equal partners, even if the -- share count isn't equal. But I would like-- I would like, over time, to increase it. Sure. It's our kinda business.

It's forever. It's will-- it will be a profitable business. It should-- it-- it'll be a worldwide business, and it is a worldwide business. And it just fits into Berkshire. And our problem is putting money to work. So we're not looking to take money out of things. We're looking to put more money to work.

BECKY: But did it create a problem to have the guys who are still on the board at Burger King selling ketchup to places like McDonald's?

BECKY: No. McDonald's sells itself. I'll put it that way. I'm not sure the customer felt that way. But-certain of the franchisees, as I understand it-- sort of objected to the fact that the guy across the street who was selling-- hamburgers against them also was CEO and come from Burger King. He had been the CEO of Burger King. And I-believe he's still vice chairman. And-- certain franchisees of McDonald's were not happy about that.

BECKY: That's a big account though, correct?

BUFFETT: It's a big account. But- Berkshire's gonna have a lot of crossed lines as we get larger. There will be times when-- that-- the actions of one subsidiary irritate the competitors of another subsidiary. So you got-- that's just gonna happen.

BECKY: All right. We're gonna continue this conversation. Let's get back to Joe in the studio right now though.

JOE: All right-- Becky. A big night in Hollywood. One of the big winners last night-- at the Academy Awards. 12 Years a Slave won best picture. The movie also picked up award for Best Adapted Screenplay and Supporting Actress. But it was Gravity that took home the most statues-- seven in all-- including Best Director.

And it-- it's in reference to this, Warren, that-- that you're in Page Six. And I'll just let you know that your story is in between a big-- a picture of Kim Kardashian-- in a low-cut dress where the thing says she's got her own version of the Golden Globes (this is, you know, The New York Post) and then-- this is ridicu-- and then on the right-- is a picture of Branjolina. Brad and Angie. And then you're in the middle. And-- it says--

BUFFETT: They probab--

JOE: But-- yeah, go ahead.

BUFFETT: They probably asked for that placement, Joe.

JOE: Yeah. Yeah, they asked for that placement. And it says that-- that Harvey Weinstein invited you-- to his pre-Oscars party but-- you were kinda snippy back to him and you said-- you really appreciate it but you weren't gonna go to the Oscars this year since you weren't nominated. So you were gonna stay home. And--

BUFFETT: I'm a sore loser.

JOE: You are. You-- and then I looked up-- I looked you up on IMDB to see what-- and itthis classic-- this movie database, "Warren Buffett was born on August 30th, 1930 in Omaha as Warren Edward Buffett. He is an actor known for Wall Street, money n--" it says this right here. "You are an actor known for Wall Street, Money Never Sleeps, and then Das-something. Some g-- German thing." But-- and then it's got all your appearances. And it does include Squawk Box as some of your-- (LAUGH) some of your best-- appearances. What kind of--

BUFFETT: I put it right at the top, always.

JOE: You have been offered roles, haven't you? I'm sure constantly. And you turn 'em down? It's just not the right-- the right role for you? Or?

BUFFETT: Actually, I may have a small one under-- consideration right now. But I am-- I have told my agent to feature the Squawk Box appearances as tops on my resume. That that is most likely to get attention in Hollywood.

JOE: Yes. But I'm trying to think. You could-- you could be different things. If you really wanted to be, you could break out a character. You could be, like, a Bond villain and I mean, you would think about it at-- at this point. I mean, it's not your forte. But, I mean, I'm sure you get a lot of offers. You would've been on Breaking Bad--

BUFFETT: Joe, I'm thinking more glamour roles, actually. That may be why they haven't stepped up yet.

JOE: Leading man. Leading man.

BUFFETT: I could probably get a lot of those villain roles.

JOE: Leading man-type yeah, fr-- leading man-type roles. That's an idea too. That's an idea too. All right. Coming up, we're gonna-- we'll be back with Warren and Buffett-- jeeze, with Warren and Becky. With Warren and Buffett-- in a minute. But first, the news from Ukraine this morning, a big impact-- having on the market. We'll have more questions-- for Mr. Buffett, think about more movie roles for him-- when Squawk Box is right back.

JOE: And the markets, obviously watching all the developments coming out of Ukraine this morning. Russian president Vladimir Putin sending forces into the Crimea region, in his words,

to protect Russian citizens. Western leaders almost universally condemning the actions and-- vowing to use economic and diplomatic measures to pressure Russia to withdraw.

The weekend events putting pressure on the global markets as well. The futures are down sharply this morning. European markets are also-- taking a hit. There's where we're down over 150 now on the-- the DOW. There are the European markets-- down across the board.

Russian markets are also lower-- at this hour-- as you can see down-- that's a significant number there, 12%. And-- so the dollar. Take a quick look, you can see against the yen, the euro-- especially the Russian rubel which hit a new all-time low. Gold has been in a little mini bull market on its own. And it's up another $23. You can see that-- just-- since-- the December lows. It's quite a move. Let's get back-- to Becky and Warren Buffett in Omaha. Becky-- you got the-- the oracle there. I guess-- the Ukraine is front and center.

BECKY: That's right. Now, Warren talked a little bit earlier about how difficult it is to try and look at some of these broader things and figure out what it's going to mean for the markets. But, Warren, you wouldn't be selling anything today based on this.

BUFFETT: No. I—if stocks are cheaper I'll be b-- more likely to be buying 'em. I we were-- we were buying, I think, one stock on Friday. And-- presumably selling lower today. And that's terrific.

BECKY: Was it Wells Fargo?

BUFFETT: Good try.

BECKY: I thought I'd give it a try. In fact, a lot of the questions that have come in from viewers and from Berkshire shareholders too have been related to your investments. And you did detail quite a bit of your big holdings and what you thought about some of these. But let me give you some of the questions that have come in.

Frank Ronnie-- writes in, "You've held Coca Cola, Wells Fargo and American Express for 20-plus years. If you didn't sell those stakes down during the great bubble of the late-90s or during the last financial crisis, is it fair to say that you will never sell these stocks? And can you envision a scenario that would actually make you sell any of these positions?"

BUFFETT: It's fair to say that-- it's very unlikely that we would sell 'em in any given year. Probably any given five-year period. But-- we need money to buy operating businesses. We could sell any one of those stocks, or maybe-- a group of them. Our preference at Berkshire is to keep buying operating-- big operating businesses.

And-- we like owning equities. We'll make money in the equities as an alternative. But in terms of building Berkshire for the long-term, we just like adding our earning power-- big chunks of earning power from operating businesses, which we are going to keep forever. So none of the stocks are forever. But they're for-- generally for very long terms.

BECKY: There have been a lot of questions that have come in regarding IBM. Let me go to one from Hong Kong. A gentleman named Rojesh Padjwani who writes that, "IBM has underperformed the S&P 500 by a big margin since you acquired a stake in it. While you've clearly mentioned in an earlier interview that you'd prefer that share price does not do so well so the company can buy back more of its share at a lower price, has the company's financial performance, especially revenue trend, disappointed you? And do you feel that you made a rare mistake by stepping outside of your circle of confidence?

BUFFETT: Well, the revenue trends have-- been less than-- anticipated. Although not dramatically less than anticipated. The financial numbers have been pretty good, but it's been helped by low tax rates and things of that sort. There is a transition going on in the business-- you know, particularly in-- in terms of the cloud.

And-- so I would say it's fair-- it's fair to say that I know less about the future of IBM than I might know about the future of Wells Fargo or-- Coca Cola or the businesses we own. I think I do know enough about it that I feel good about owning the stock. But-- -- my level of understanding of a company like IBM is not as high as my level of understanding of a Wells Fargo or a Coke.

In terms of the price action, that doesn't make any difference to me. That-- if-- IBM bought in a lot of stock last year. And if the stock had been even lower they would've bought-- they would've gotten more shares. So the fewer the shares outstanding the better I-- the better I like it. And they've continued to buy in shares. They buy 'em at a good clip, and I-- I like that. But I would like to see the revenues pick up.

BECKY: What do you think of the job (IBM CEO) Ginni Rometty is doing?

BUFFETT: Well, I think she got handed the company at the time of a real transition-- in the-- in the business. And--her record-- I feel fine with her at this point. I-- but her record will be judged, you know, five years from now. There's a lot going on in that business. And-- I think they're doing well. But—the final score will be five years or ten years from now.

BECKY: Are you buying more shares?

BUFFETT: We bought a few more shares last year. Not-- not very many. And-- I think we bought a few shares this year.

BECKY: Okay. Let me also ask you a question that came in. This is number 32, folks. It's Dan Youngberg who writes in, "Are you still as positive on rails? Which besides yours is good?" Meaning which besides Burlington Northern is good? "And what about the rail car companies?"

BUFFETT: Yeah. Well, there's four big railroads in the United States. And Kansas City Southern's another significant railroad. And two in the East, two in the West. And-- the rail business, over time, will be a very decent business. It's an enormous asset to the country.

And there won't be more-- yes, there may be more-- there could be some high-speed passenger and all that sort of thing railroad. But in terms of basic, freight railroads-- you've got the configuration in this country that's going to exist for a long time. And rail does move goods-- heavy goods very cheaply over long distances. And-- it's also in-- environmental-- environmentally friendly compared to-- highway traffic. So the future of railroads is very good.

BECKY: Also--

BUFFETT: And I would say that that's true of all the four railroads. And--

BECKY: A question came in from someone named Curtis Carter. He says, "Do you have any plans to use Burlington Northern and Santa Fe right of way for mid-America energy to move electricity East to West? And are you considering electrifying the railroads?

BUFFETT: Well, the answer to both is no.

BECKY: Okay. That's a question that I've heard from others before, so I--

BUFFETT: Yeah. Yeah.

BECKY: --kinda wondered about it.

BUFFETT: If anybody can figure out a way we can make a lot of money off the right of way that we haven't thought about I'd love to hear of it. But that isn't the way.

BECKY: In terms of how the railroad is doing though, you did take some time to really lay it out. The railroad-- has-- Burlington Northern has really benefitted from the shale boom that we've seen-- in parts of the country.

BUFFETT: It's benefited. And-- -- but all of the rails have done well recently. And, in fact, the Union Pacific, which is our direct competitor, has been-- has done very well. So it-- it's a business that-- has real economic advantages if you-- if you look at fuel costs, if you look at a driver's wages and on the highway. And-- as long as more goods move from place to place in this country rails are gonna get their share. And-- it should be good-- it should be a very profitable business.

BECKY: What about the Keystone Pipeline? That that question was raised several times by shareholders. And by--

BUFFETT: Well, I think that--

BECKY: --others who say, "Wait a second, do you really want the Keystone Pipeline to come? Because it's a direct contrib-- co-- a direct competitor to what would happen with Burlington--"

BUFFETT: It's not that big a competitor. It's moving—it would be moving-- crude down from Canada. And that-- no, I think probably the Keystone Pipeline's a good idea for the country.

BECKY: Do you expect that the president might actually pass it sometime?

BUFFETT: I have no idea.

BECKY: I had seen a study recently that came out from the State Department that suggested that if the Keystone Pipeline were put in it would end up saving lives, versus moving that oil via the railroad. I think it's something like six lives a year.

BUFFETT: Yeah. Well--

BECKY: Like, in--

BUFFETT: --both sides are gonna come up with that, certainly. They're--

BECKY: But that was from the State Department. It wasn't from--

BUFFETT: Yeah.

BECKY: --the key--

BUFFETT: Oh, yeah. Well, and they may well be right. There are leaks on pipelines. And, you know, occasional explosion, but that's very, very, very, very rare. But if you measure moving millions of barrels for a hundred years-- one versus the other, I-- I'm not sure how it would come out.

And it would-- and it depends on what's going on. They're gonna change rail cars, obviously. It is-- the-- particularly the oil from the Bakken and from the Eagle Ford as well-- has turned out to be more volatile than people anticipated. And that's going to require-- for one thing, we've lowered the speeds, you know-- in-- in that area. But it's gonna re-- it's-- it's gonna require the kinda tank car too.

BECKY: Yeah. Burlington just said that it was buying 5,000 new tank cars--

BUFFETT: Yeah.

BECKY: --that are higher--

BUFFETT: They're on the shelf there to go. They're an order. So it takes-- it takes time. We're-- with a different company, Marmon, we're in the tank car manufacturing business. And-- and there will be changes made. And there should be changes made.

And it's fair to say that we've found, in the last year or so, that it's more dangerous to move certain types of crude, certainly, than was thought previously. And, you know, that's-- there's no question about it. There's no question about it.

BECKY: You know-- a lot of the rail tank car companies rose on the announcement that Burlington Northern was going to be in the market for buying more of these things. Will they be buying them from mar-- from Marmon? Or are they gonna outsource that--

BUFFETT: They-- buy 'em from--

BECKY: --and buy them from wherever?

BUFFETT: --well, they-- yeah. But the problem with buying 'em is that there's a big backlog at not only Marmon's tank car subsidiary but Trinity and others that make-- make cars. So-- our backlog runs into the middle of 2015. Those aren't-- those aren't all for crude oil tank cars. Most tank cars don't carry crude oil.

BECKY: Right.

BUFFETT: When you see-- a train with a lot of tank cars on it, most of that is not crude oil. But some of it is. And more of it's-- has been in-- in recent years. So you can't just flip a switch and get 5,000 cars. There will be retrofitting that takes place, I'm sure.

BECKY: Right.

BUFFETT: And-- that's-- my guess is some of that will get moved to the-- to the front of the line because it-- there-- it's more important to get it done immediately. But-- but the tank car problem is a problem. And it should be addressed. It's being addressed. But you can't change the whole tank car fleet overnight.

BECKY: All right, we're gonna continue this conversation with Warren. Joe, we'll send it back to you right now.

JOE: Becky, is Buffett a Creighton fan? Hoops? Do you know? 'Cause they're in Omaha.

BUFFETT: You

BECKY: I don't know. I don't know.

BUFFETT: You bet. I'm-- I-- and there's a game against-- Providence next-- fri-- it's-- Saturday. It's our final game. I'm gonna be there to watch McDermott score about 60 points.

JOE: Oh, yeah? Yeah. Well, I-- because I guess you missed what happened over the weekend against my-- Xavier--

BUFFETT: Oh. Oh, no. Oh, no, let's not hear about that. No, don't tell me.

JOE: Number nine—

JOE: Number nine? I hope-- not any-- not any longer, my friend. It's tough to go into--

BUFFETT: I know. I know.

JOE: It's tough to go into Cintas Center. That was fun to watch. Anyway, I figured you were-- a hoops-- yeah, they're-- two good Jesuit schools, right, against each other? I like that.

BUFFETT: You bet.

JOE: All-- all right.

BUFFETT: You bet. We had-- we had-- we had-- we had a Cinderella team back in 1942 when I was a kid. And I've been waiting for a return.

JOE: Wow. I don't even remember that. All right-- coming up-- Apple and Microsoft in this-- in the news this morning. The futures-- are right now down less. I saw about 150, again, not quite as bad now. Now down 146. But more Squawk Box-- with Warren Buffett next.

BECKY: All right, Joe, we're going to continue our questions for Warren Buffett this morning. Again we've been taking questions from viewers. We've getting more this morning that have been coming in, but one of the things that happened over the last several months, Warren is there was a story out that suggested that the committee that looks at systemically important financial institutions said that it was considering Berkshire.

Now, again this was a story that was just kind of lightly sourced that went through. I wonder, first of all, if you've heard from them. And second of all, there's a question that came in from William Andersen in Salem, Oregon who said that, "Given Berkshire's policy to maintain a large surplus of capital, would Berkshire being declared too big to fail concern you? And would the increased regulation that could come with that designation be worth it to Berkshire to speed up the unwinding of the derivatives to below the threshold so that it would not be given that designation?"

BUFFETT: Yeah, our-- we've heard absolutely nothing from the people in charge of what's called sify. And our lawyers, I've checked that. And I would not think we would be under--our derivatives as a-- well, A) they're winding down to begin with.

But in nominal value, they're well, let's see Deutsche Bank has $60 trillion, so they're less than 1/10 of one percent of Deutsche Bank for example. And we have loads of liquidity. We have all these different streams of earning power. I think it's very unlikely.

BECKY: Those derivatives will wind down I think on average around 2020? Isn't that--

BUFFETT: Well the equity parts do. The credit ones all did wind down and we have very minor collateral requirements. We have no condition--we never have any significant short-term debt. We always have bundles of cash. We always have cash coming in every month.

It would seem very unlikely that we get categorized. We're large, but Exxon/Mobil's large. Apple is large. I mean, there's other large companies. It's not based on size. It's based on whether you're likely to get into trouble.

BECKY: All right, let's continue this focus on Washington. The president is coming out with his budget tomorrow, President Obama, and the early read that we've gotten on this is that it is going to be one that is maybe a little less inviting to Republicans, that he feels like he's already made his outreaches in the past, and that they haven't been effective. What do you think that does to the environment in Washington?

BUFFETT: Well, it's hard to imagine the environment getting much worse. As, you know, it's more or less a stalemate, in Washington, because there's a little loosening up, perhaps, but you have a significant portion of the Republican party that can hold the entire Republican party hostage, and that the Republican party can hold the legislative process hostage. So unless there's a real change in attitudes it's hard to see much happening.

BECKY: We did have a lot of questions that came in on the political front. One of the ones that came in under the ask Warren-- Twitter hashtag, was, "Warren, I know that you are concerned about the wealth gap. Are you supportive of raising the minimum wage, and tying it to inflation?"

BUFFETT: You're talking about the minimum wage for 60 years-- I used to work for minimum wage. That got my attention first when I was getting 75 cents an hour in pennies, but I-- it really cuts both ways. I mean, it-- you'd like to have people being paid more, but you also want to have as many people employed as possible. So that one cuts both ways. And I can argue either side of that.

I think the one thing that does make sense is to increase the earned income tax credit. I mean, that does increase the income of people who are working, and there's no question that the market system, which is the greatest system ever seen for producing lots of goods and services, also leaves more and more people behind as it gets more and more specialized. And we've seen that, and that's something that a very rich country should address. But I think the earned income tax credit is the better way.

BECKY: Meaning that you'd rather—and when I've asked people like Peter Orszag that question, he'd say, he'd like to see both of this things, the earned income tax credit, and a higher minimum wage.

BUFFETT: I wouldn't fight him on it-- on the minimum wage, but I think you can accomplish way more through the earned income tax credit without negative effects than the minimum wage. I mean, if you could have a minimum wage of $15 and it didn't hurt anything else, I would love it. But clearly that isn't the case. So there's tradeoffs on the minimum wage, and it's very hard to quantify those tradeoffs. People come out what these exact studies. They don't know.

BECKY: No, but the CBO recently came out with a study that suggested half a million jobs would be lost, 500,000, if the government were to go to $10.10 an hour by the year 2016. They said that it could be either zero or it could be a million jobs that were lost. Where do you think the likely falls?

BUFFETT: I agree with them. They don't know. I don't know. You know directionally that it goes-- the situation. Otherwise, you know, we'd have a $15 minimum wage if it wasn't going to affect employment, I'd be 100% for it. But, it would. So I don't know and it's very hard to quantify the tradeoffs. And usually you just get proponents of either side just pulling out the figures to substantiate their position.

The earned income tax credit I think is much clearer. I mean that puts more money in the pockets of people who are working for low wages. And that's what I'd like to see. And it doesn't distort the market system in any great way. But, you know, that's the way I would go.

BECKY: And Berkshire employs, what, 330,000 employees?

BUFFETT: About 330,000.

BECKY: How many of them make minimum wage?

BUFFETT: Very, very few. I mean, I can't give you the answer, but it'd be very, very few.

BECKY: Okay, let's ask a related question that comes in from Ian M. on Twitter. He says, "If you were advising Obama on economic policy, what's the greatest thing his administration could do right now to accelerate job growth?"

BUFFETT: Well, I think that obviously further fiscal stimulus would increase job growth but you pay a price for that. I think the market system will grow jobs over time, as it has been the last four years. It's just that we had such a shock to the system five years ago, and we really were in the emergency room. And the recovery has been slow. And I think most people expected that, but they're still disappointed with it as it happens.

BECKY: You know, we had Sam Zell on "Squawk Box" on Friday, and he came up with a really interesting analogy. He almost put some of the blame on the Federal Reserve at this point saying that when you have zero interest rates it's like not having a shot clock in a basketball game. That there's no severe incentive to get that money into investments at this point, that people think they have a lot of time.

BUFFETT: Well, I would disagree with that. I mean, if I've got money at zero interest rates, I want to get it out. And I'm looking for projects all the time, and we just in plant and equipment, we invested over $11 billion last year. That was a record for us. But I-- any project that comes to

me that has a reasonable payout, whether it's wind farms in Iowa or whatever it may be you know, I love building more freight cars-- whatever it may be.

And zero interest rates really pushes me. I mean, if interest rates were 15%, you know, I would be sitting here with a 15% alternative and it would be much tougher for capital projects to catch my eye. So I would argue just the reverse.

BECKY: Let me ask you one more on the political front. Stan Duzy writes in. He says, "How do you compare the President of the United States' performance with Brian Moynihan's performance over the last five years?" Obviously you own a big stake in Bank of America that Brian Moynihan runs.

BUFFETT: The U.S. of America and Bank of America. They both have very, very tough jobs, and they both settled down to do them. And you do things one thing at a time. And Brian Moynihan took something that was a big, big mess which he inherited and—the size was almost overwhelming. And he just methodically has worked on one problem after another. And-- but he did not have to get the United States congress to agree with him.

BECKY: We're going to continue this conversation-- again, Warren Buffett is with us for the remainder for the show. Joe, right now, though, we'll send it back over to you.

JOE: See, I'd be out there dreaming about Warren Buffett coming back to me. I don't know if I can kiss up --

BECKY: And work your way back in there again, aren't you.

JOE: I mean, we started talking about the will. When you start talking about the will again, that's all I can think about now. Take it away, Beck.

BECKY: If you're wondering--

BUFFETT: I've got it in there now. It says to Joe Kernen who wanted to be mentioned in my will, "Hi, Joe."

BECKY: There you are. Hey, Joe Kernen. And he did ask how to spell it, too, to make sure he gets it spelled the right way. But speaking of, if you're just wondering how big those numbers actually are that he'd be talking about, the Forbes 2014 world billionaires list is out.

And if you want to take a look at it this morning, we happen to have one of the gentlemen who is on that top of the list who's there. Bill Gates comes in at number one, with $76 billion. Carlos Slim has $72 billion. Amancio Ortega comes in at $64 billion and Warren Buffett, number four, at $58.2 billion. Warren, we were talking about it, how much have you given away over the last several years?

BUFFETT: Well, I gave away about 160,000 A shares, so--

BECKY: Which would be?

BUFFETT: Yeah, $16 billion--

BECKY: You're better at math than I am.

BUFFETT: $27 billion or so.

BECKY: $27 billion. So even after that, you still have $58.2 billion on the list. You're number four. Here's the list. We have it right here.

BUFFETT: Don't take it too seriously.

BECKY: I want to ask some questions that have continued to come in from viewers. Part of what you talk about every year in the annual report, or the annual letter is you lay out how each of the insurance companies have done. You lay out how each of the businesses have done. Someone named LatticeWork with M and G-- writes in and says, "How has the latest rise of extreme weather events changed the calculus faced by Ajit Jain in reinsurance?" And I know you talk to Ajit just about every day.

BUFFETT: Yeah, it's interesting. I think the public has the impression that because there's been so much talk about climate that events of the last ten years from an insurance standpoint in climate have been unusual. The answer is they haven't.

I mean, we-- you read about these events, but you were reading about events 30 or 40 or 50 years ago. And we've been remarkably free of hurricanes in the United States in the last five years. So if you were writing hurricane insurance, it's been all profit. There have been more -- some more tornadoes than normal, but it's not had any effect in terms, so far-- the effects of climate change if any have not affected our-- they have not affected the insurance market.

BECKY: They haven't. So that's not something at all that you guys have changed your calculus on --

BUFFETT: I have made no difference. I calculate the probabilities in terms of catastrophes no differently than a few years ago.

JOE: Hey Warren and--

BUFFETT: That may change in ten years.

JOE: I think it's been three thousand days since it something like a category two hit landfall. That's the longest in history for a hurricane. And you mentioned tornadoes. Last year it was actually well below. I don't know about if you add up all the recent years, but, I watched you after, you know, Al Gore's big year it was a horrible year, but the one that he said we're going to have-- that's going to be repeated year after year, the one where he had-- we went

through the whole Greek alphabet and started again, with hurricanes. I watched you, you knew. You knew. you knew, you knew, you knew. And you knew that that was going to be an opportunity to raise premiums, and then not really have any events over the -- and it played out, exactly like you thought. I don't know how you do it.

BUFFETT: Well I love the apocalyptic predictions on it, because-- you're right, it probably does affect rates. And the truth is that writing U.S. hurricane insurance has been very profitable in the last five or six years. Now the rates have come down very significantly, so, we aren't writing much-- if anything in the U.S. Our biggest single cat risk would be earthquakes in New Zealand.

JOE: And yeah, but what do you think of the perception right now, I mean it's-- I think it's from the mainstream media, but we are under the impression that adverse weather events are happening every couple a days, and that it's never been like this before in history. For some reason that's what people tell me.

And it's, you know, it's nice to be able to include them all into one thing, you know, when you include droughts, floods, too much snow, too little snow. When you can include it all into one big thing, it makes it look, you know, like you're pretty smart.

BUFFETT: It hasn't been true so far, Joe.

JOE: Yeah. All right. Well thank you --

BUFFETT: and you know, yeah.

JOE: I know, I know.

BUFFETT: We always think it's cold. But it was cold all about 50 years ago.

BECKY: Let me ask you --

JOE: The only thing that is weird is that the Great Lakes have-- I think they're almost totally frozen over. I don't know if we've ever seen that. I think we got one more to go, or something. So that's a little weird.

BUFFETT: Yeah.

JOE: Yeah, all right.

BUFFETT: Well, we don't insure against that.

BECKY: You know, Jim Cramer's been watching this morning as well, Warren, and he writes in a question too He says that in your shareholders letter, you always speak so positively about fabulous ways to transport goods. Do you think that keystone should be approved? I know we

talked a little bit about this earlier, but I didn't really put you on the line. Do you think Keystone should be approved?

BUFFETT: I'd vote yes.

BECKY: You would vote yes for the Keystone.

BUFFETT: Yeah.

BECKY: He always wonders about creation of jobs, too, so energy and job creation is really-- pipelines and energy renaissance is what Jim's pointing out.

BUFFETT: Well, yeah, but I don't believe in the Keystone pipeline because of the jobs you make building it. I mean, you could build anything and create jobs. But I believe that-- I just believe it's a useful pipeline.

BECKY: You do? Okay. Great. We're going to continue this conversation. Again, Joe, we've got Warren Buffett here. He's with us for the rest of the program.

BECKY: Well, Joe, I can't think of a better day to have Warren Buffett sitting right next to us. Warren Buffet, the Chairman and CEO of Berkshire Hathaway, to talk about what's happening. And Warren, I know you are a long term investor, but when people wake up and look at the futures, and see down 150 because of what's happening in Ukraine, and questions about the economy, I suppose, at this point, and whether what happens there spreads here, what do you tell them?

BUFFETT: Well, I tell them that when I got up this morning, I actually looked at a stock on the computer in the trades in London that we're buying and it's down and I felt good.

BECKY: What was the stock?

BUFFETT: It was an English stock.

BECKY: So you look at this, I mean would you have done that anyway, whether or not the futures were down? Would you still be buying?

BUFFETT: Well, I had a price limit on it and we were buying it on Friday, but it's cheaper this morning and that's good news.

BECKY: So you buy more.

BUFFETT: Absolutely.

BECKY: When people start to think, "Wow, this could be the beginning of something really bad, it could be even a World War III situation, it could be a return to the Cold War," does any of that ever go through your mind?

BUFFETT: Well, if you tell me all of that is going to happen, I will still be buying the stock. You're going to invest your money in something over time. The one thing you could be quite sure of is if we went into some very major war, the value of money would go down.

I mean, that's happened in virtually every war that I'm aware of. So the last thing you'd want to do is hold money during a war. And you might want own a farm. You might want to own an apartment house. You might want to own securities. But, I mean during World War II you know, the stock market advanced and stock markets advance over time.

American businesses are going to be worth more money. Dollars are going to be worth less so that money won't buy you quite as much. But you're going to be a lot better off owning productive assets over the next 50 years than you will be owning pieces of paper or I might throw in bitcoins.

BECKY: You know, I've been meaning to ask you your opinion about bitcoin. What do you think of it?

BUFFETT: It's not a currency. I mean, you know, it does not meet the test of a currency. I wouldn't be surprised if it's not around in ten or 20 years.

BECKY: Why does it not meet the definition of a currency?

BUFFETT: Well, because-- people say, "Well, I'll sell you goods in bitcoins." But they change the price of those every time the price of the dollar changes in relation to bitcoins. They're pricing off the dollar. They could say, "Well, I'll sell it to you in barrels of oil." But if every time the price of oil changes they change the number of barrels you have to have, that's not-- your oil is not the currency.

BECKY: Yeah, but the yuan does that, too. And people still look at that as a potential currency.

BUFFETT: Which one?

BECKY: The yuan, the Chinese yuan.

BUFFETT: Well, yeah, well it is a currency. But it is not a durable means of exchange. It's not a storer of value.

BECKY: And you said yourself you wouldn't be surprised if it's not around in ten years?

BUFFETT: I would not be surprised. I don't know that, but it's interesting to me. I mean, it's been a very speculative, you know, kind of Buck Rogers type thing and people buy and sell them because they hope they go up or down just like they did with tulip bulbs a long time ago.

BECKY: Well the situation in the Ukraine you have said you're not that worried about. But in the letter to shareholders, you did lay out something that's been on the horizon that you are concerned about and that's what's happening with pension funds, the promises that have been made. Question came in from the Disher, saying, "What impact will unfunded government pension and benefits have on economic health in ten to 20 years?"

BUFFETT: Well, the government pensions aren't the problem. The private pensions are. The government has the power to tax. And it has the power to print money. We are not in a dangerous U.S. fiscal situation. We at some-- we have to quit having our debt grow as a percentage of GDP. It made sense to have it happen during-- when things were terrible five years ago.

But we can have a deficit which creates more debt, but not at a rate that is-- grows faster than the GDP grows. So if GDP is going to grow at two percent. In real terms, but the Fed has a policy that is sort of shooting for two percent inflation on top of that. That would mean, like, four percent in terms of nominal GDP. And you literally could have debt grow at four percent and it would maintain the same relationship to nominal GDP as it does now.

We are not in-- the trend is wrong. There is a danger if that goes on, although a lot of countries have gone far beyond where we've gone. But I don't like seeing it go up as a percentage of GDP. But this country is in wonderful shape.

BECKY: If you say that government pensions aren't the problem because the government has the power to tax, what do you say to somebody who has a private pension? Should they be worried about it? Should they think that they're still going to get it when they retire?

BUFFETT: Well, if they've got a private pension from corporations, it's protected by the pension benefit guarantee corp.

BECKY: Guarantee, right.

BUFFETT: And that has come into play in many pension plans. But the state municipal pension plans-- well, the one right here in Omaha is in terrible shape and almost got a lot of resources and it's a healthy community and all that

I mean, we can work our way out of it, but people, both who have made the promises and the elected general-- generally have not understood what they were doing when they were making pension promises. And there's a long tail to the problem so it doesn't catch up for a while.

But it's inextricable over time, and we are starting to reap the problems that were sowed decades ago in pension plans. And you're going to be reading a lot more about them. Of course in Detroit, they're going to have to scale back the promises.

BECKY: What do you think about the decision in Detroit where at this point it looks like everyone's going to take a haircut. But the bondholders are going to take a much bigger haircut. In fact that prompted a question from Gary Gambino who writes in, "Are muni bonds safe given your concern about the public pensions?"

BUFFETT: Well, some muni bonds are safe and some aren't, just like some corporate bonds are safe and some aren't. It depends on the debt paying capacity of the entity that owes you money, and if you take the Omaha Public Power district, which runs the electric operation here, those bonds are safe. They've got enough debt paying capacity, they can take care of things. But if you take a city like Stockton, California or something where they just they borrowed too much money.

BECKY: But in the situation in Detroit, it looks at this point like municipal bondholders are going to take a much bigger haircut than those in the pensions. They're not going to be treated equally.

BUFFETT: Yeah, the pensions are going to take relative to pain inflicted, my guess is the pensions problems are going to take-- or pension holders are going to--

BECKY: Feel it more.

BUFFETT: Oh, absolutely. I mean if somebody's getting $1500 a month and it's cut to $750 a month, that is huge. The bondholders are going to take a big cut. The debt's just got way, way, way out of proportion to the taxable base. And the problem with a city or a state is that if the math gets kind of overwhelmingly bad you set a cycle in motion where people leave and go someplace else that doesn't have the trouble. So it's--there're plenty of problems ahead in municipal finance.

BECKY: All right, we're going to continue this conversation. But, Joe, we'll send it back to you right now.

BECKY: In just about 15 minutes, we'll be introducing our viewers to the three T's at Berkshire Hathaway. Investment managers Ted Weschler, Todd Combs, and financial assistant to Warren Buffett, Tracy Britt Cool. These are the three T's that Warren has talked about extensively, and there's an awful lot of public interest in these three figures. This is the first time that three of them will be sitting down together, and talking on camera. So, we do have a lot coming up. We're back with Warren Buffett in Omaha. And Warren, let's talk a little bit about why you chose the three T's, how you came up with these three individuals?

BUFFETT: Well, when I'm not around, my job will be broken into two pieces, and one is running the business, the CEO, but then the investment end will be run by others. And it became important to bring on the right kind of investment people and so Charlie and I had talked about that. We-- well, the first time we took a trip, I think I had hundreds and hundreds and hundreds of applications that I was reading on the trip to China.

And we found two terrific managers, and they're not only terrific in terms of their investment ability, which had been proven over time, been proven to me, but they are really the right kind of individuals. I mean, they want to be with Berkshire. They'll be with Berkshire forever. And they're the kind of fellows you'd want to have marry your daughter.

I mean basically, we-- Charlie and I care about that, and in Tracy I've tried with assistants once or twice in the past but she came along and she's just done a perfect job. I mean, there're all kinds of things at Berkshire that I should do that I don't want to do. So, I hand those off to her. And the three of them have -- they've been worth a very, very substantial amount to Berkshire. It's demonstrable in terms of the financial performance of the two that manage investments –

BECKY: Todd and Ted.

BUFFETT: But it's also been very clear in terms of Tracy's performance with the subsidiaries that have been turned over to her.

BECKY: Todd and Ted are each managing about $7 billion.

BUFFETT: $7 billion now.

BECKY: $7 billion a piece.

BUFFETT: Right.

BECKY: They started out on a lower base was it, like, two or three billion dollars, and you've built up more and more over time?

BUFFETT: Yeah, yeah, and even most of them three billion originally, yeah.

BECKY: So what is it that you see in each of them, that made you think that they think like you do when it comes to investments?

BUFFETT: Well, I talked to them some, but I looked at what they'd done. It isn't just an investment record that impresses me, it's how that investment record was achieved. And there are people that are just in tune with the, even kind of markets, and then when the market changes, they never-- they really can't adapt.

But Todd and Ted look at investments very much like I do. I mean, they look at stocks not as stocks. They look at them as pieces of businesses, and they evaluate business. They're really business analysts, when you get right down to it. And then they translate that into investment decisions.

And they both have a fundamental soundness to them but they're also-- it's a combination of soundness and brilliance. And you want both. And they think about things that haven't happened yet in terms of problems. They're-- not in terms of dreaming about great projects that are pie in the sky, but they're always thinking about the downside. And they've made

Berkshire billions of dollars already that we would have otherwise made, and they'll make us many billions more.

Tracy has gone into a variety of situations – usually the smaller companies that where one reason or another, we needed something done-- sometimes a management change. And she's done a lot better job than I could do. And she's done such a good job, that when one woman took over Johns Manville a year or two ago, she asked that Tracy be made the Chairman of the Board of that.

And Chairman of the Board of our subsidiaries, really, it's just an overseer from Berkshire's standpoint. They represent the shareholder, in a sense. And so she's taken on four of those, and she'll take on more as time goes along. And, she also will be a great repository of knowledge about all these companies for my successor.

BECKY: You know, let's talk about some of the succession notes that you made, in the annual letter. And you always do talk about this not only with the shareholders, but with the board. You say that the board-- something struck me this time around, where you said-- that the board knows who your choices would be, if there was an immediate need for a successor, when it comes to the CEO position, but you said that those people were either working at Berkshire right now, or were available to Berkshire. And that made me question that you're looking outside the company potentially for successors?

BUFFETT: No. No. No, the successor will be from within the company. All the candidates are now-- all of the candidates have been over the years and the successor will come from inside Berkshire. We've got you know, we've got so many businesses, we got a shot at evaluating a lot a talent. And there is a lot of talent there.

And some of them would have the talent to run the place overall. Others wouldn't. They're more specialists in their own business. But, particularly then, when combined with Todd and Ted, who bring an investment perspective, which is useful in acquisitions, analyzing acquisitions, I think we're as well equipped for the next century as anybody.

BECKY: And you mentioned both Todd and Ted, so I assume you look at the potential CIO part of your job be the investment part of your job as something that more than one person could take on as your successor?

BUFFETT: Well, those two could handle it, very well.

BECKY: Those two could handle it together.

BUFFETT: That doesn't preclude a third person, but I'm not looking for one.

BECKY: And also, when it comes to who the successor as CEO might be, I've asked you in the past, would it be a woman, and you said none of the candidates at that point were--

BUFFETT: Not at present.

BECKY: Not at present.

BUFFETT: No, I mean that doesn't rule it out. I hope I last long enough so we get some women on the list. But, there-- no, the top candidates now are men.

BECKY: And- those candidates, is that going to -- a list that's changed over the last year?

BUFFETT: Doesn't change very much. It's very slow to change. You know, they shouldn't be on the list if it's quite changeable.

BECKY: Right. Okay, let's talk about some other issues that people have written in about as well. In fact concerning Todd and Ted, we got a letter that came in from Bora Kostick, who writes, "In the letter you mentioned Todd and Ted created significant values in matters unrelated to portfolio activities. Can you give some examples?"

BUFFETT: Well in making an acquisition related in media general where we acquired a bunch of newspapers and also made an investment in the company Ted did all that. In terms of working in the RESCAP bankruptcy, Ted did that. He wasn't getting paid for these at all, I mean, this is extraneous work.

We just recently completed a deal in the last week or so where we exchange our Phillips 66 stock for a combination of cash plus a specialty chemical operation. That was Todd. I mean I may have partially conceived of the idea, but I just turned it over to him.

And those sort of things might not have gotten done if I had to do them myself. And there's some threshold at which I have to say, "The heck with it." And having them has been invaluable on that. I mean we're talking things that are worth hundreds and millions of dollars in addition to the billions of dollars they've made us on portfolio.

BECKY: And you've talked a lot about their compensation. Both of them were managing their own hedge funds before, and the compensation structure in Berkshire is very different than the two and 20 you would get if you were a hedge fund manager.

BUFFETT: That's right. If they-- last year they started with about five billion each. If they'd put it under the mattress under the standard hedge fund arrangement they each would've made about $100 million. I mean, that shows you how nutty the arrangement is.

But they would have literally made $100 million by sticking it under the mattress. If they put it in an index fund, and gotten the two and 20, they each would've made over $300 million. All they had to do was buy the vanguard index. And they each would've made over $300 million. They also would've gotten more favorable tax treatment on it then they got by getting a salary from Berkshire.

So imagine I mean, you can retire forever on $300 million. So one year you go, you put the money in an index fund so it just shows that the-- it shows you amounts you get by asset gathering rather than asset managing. I mean even though a great many hedge funds in recent years have not delivered high performance, they've delivered high fees.

But our arrangement is that they get a salary and then they get which to most hedge fund guys would look like nothing, and then they get paid on the excess. They get ten percent of the excess over the S&P performance. But it's done over a three year staggered period. So they can't have just one up year and then another down year, or something of the sort.

So that's the same arrangement I have with Lou Simpson at GEICO for 30 years. So, only if they do better than I can do by sticking the money in an S&P fund do they get paid a dime of performance. And it seems to me that's quite logical, but it's not something that the hedge fund community is out there pushing harder for.

BECKY: They both beat your performance last year, didn't they?

BUFFETT: I'm sorry you brought that up. They not only beat my performance, they smashed my performance.

BECKY: All right, up next, we're going to talk about the market's reacting to the situation in Ukraine, plus some stocks you need to watch at the open. And at the top of the hour, a behind the scenes look at what makes Berkshire Hathaway tic. We will have Tracy Britt Cool, Warren Buffett's financial assistant, plus Berkshire investment managers Todd Combs and Ted Weschler, all right here with us, right on set. Squawk Box will be right back.

JOE: Okay, thank you-- Jim Maceda, let's toss it back out to Becky. At this point-- the one thing that-- that we keep hearing, Becky, and that's somethin' I'd ma-- maybe take a little solace. He knows how expensive it would be to-if he-- if Russia needs to-- take all of Ukraine's problems.

And maybe money is the one thing that we can count on, you know, that-- that-- you know, these leaders aren't reasonable and absolute power corrupts absolutely. But it'd be a lot easier to have the-- West and Europe and United States sort of pitching in to help this-- this huge region's economy.

BECKY: Yeah, that-- I guess that was Michelle's point earlier this morning. Maybe the markets can step in and put a little pressure where that was done. I noticed some earlier coverage that noted that-- Ukraine, the guys who are in charge at Ukraine now, instead of sending in their military are sending in the oligarchs there, the wealthy, the influential people, to try and make the argument about why this should be done-- from a peaceful perspective. And that might make a difference, too.

JOE: Yeah, yeah. I kind of think of Buffett as kind of an oligarch. I guess that's probably-- that's a stretch to some extent, but-- you know, and we just-- actually, you know what? I don't think he's rich enough to be an oligarch in most of these-- these Eastern countries.

BECKY: Right, yeah. And some of these guys have built up an incredible stores of wealth. But you're right, it is a special morning here on Squawk Box. We have Warren Buffett here answering all of your questions. He's been doing that throughout the morning.

Right now, we also have a rare interview with Berkshire Hathaway investment managers Todd Combs and Ted Weschler, plus Tracy Britt Cool, who is Warren Buffett's financial assistant. All three of them are here. And this is a rare treat because, I don't think you three have ever sat down together for an interview, have you?

MULTIPLE VOICES: No. No.

BECKY: We-- we've talked in the last block about-- why Warren chose each of you. And he explained a little bit about-- what he finds so interesting in each of you. What I'd love to hear from you three is why you chose Berkshire Hathaway and maybe how you found your way to Berkshire, because each of you had a very different path. Todd, let's talk a little bit about w-- when you first w-- talked to Buffett. When did that happen, to Warren?

TODD COMBS: Well, I reached out to Charlie. And we had a series of conversations-- over the course of several months, before one day I was out visiting in L.A. and he said that-- just outta the blue after a three or four-hour breakfast that-- in classic Charlie style that Warren would really like to meet me, not that-- I'd really like to meet Warren.

But-- and then he went on for about five or ten minutes about how much Warren would like to meet me and so forth. And-- so, I came out to Omaha. And Warren and I spent the day together talking about everything from baseball to-- business and insurance. And-- and just very interesting.

BECKY: And you-- you've moved your whole family to Omaha. When did you move?

COMBS: That's right. After I joined-- the kids finished-- out the year in school back in Connecticut and we moved the entire family out right after I joined. And so we've been out here, I guess, coming up on about three years now.

BECKY: Okay.

COMBS: And it's been wonderful.

BECKY: And it's been wonderful, and you guys love Omaha.

COMBS: Absolutely. The-- my wife and the kids all love it. It's been an absolutely wonderful experience. Omaha's a great town. And the people really make it there. It's just been an excellent experience.

BECKY: Ted, I love your story, too, for how you came here. Because over the course of two years, you've paid $5.3 million for two lunches with Warren. How-- how'd that happen?

TED WESCHLER: Donated 5.3 million.

I like-- I like your version. And then, Becky, I go-- and when reading Warren's letters probably since '79 when I started college. And-- it was kind of a bucket list thing for me, that I always wanted to meet the guy. And, I think, as you know, Glide Foundation, terrific charity in San Francisco, does an annual auction. And I wanted to know more about Glide there, so we spent half a day out at Glide, understanding the charity. And I thought, "Hey, this is-- this a terrific charity to really help the otherwise helpless." And I bid on the auction and ended up winning. And--

BECKY: Did you keep hitting the button at the last minute, to try and make sure you were the high bid?

WESCHLER: Not quite. Not quite. Not quite. But it-- but I end-- ended up getting it and-- came out to-- like, my only condition on it that I asked for was I wanted to do it anonymously. And I-- I didn't want-- we were set up at Smith & Wollensky's and-- we opted to do it in Omaha, actually, I requested that.

And I came out and visited with Warren. And-- it was just fun. I mean, we really hit it off. And I was expecting kind of-- a stiff hour-or-so meeting. And it ended up being this, you know-- long visit at the office and a terrific-- dinner, where we had a lot of-- just, you know, common interests and laying-- thought about things very-- similarly.

And, you know, that was that. And-- I was pretty happy to have it checked off. And the following year-- I said, "You know, I really don't wanna see the price of this go down." So, mentally-- mentally, I said, "Well, if we-- if you're gonna go for the same price or less, I wanna make the donation again and help out Glide."

And it-- and that happened. And I came out the second time, and again, and we really just had-- had a terrific visit. And toward the end of the evening-- and I had my, you know, little yellow legal pad of questions I was asking Warren. And I wanted to make sure I hit all of 'em. And I said, "You know, you can ask me anything you want, too." Out of the blue, he said, "Well-- I think you might be a good fit at Berkshire. Would you have any interest?" And it was-- it was the last thing in my mind. It really just completely turned me off, but--

BECKY: Did it floor you to hear it?

WESCHLER: Totally. Totally. Yeah, I mean, y-- really, they had totally threw me off. And-- but I-- I didn't wanna be dismissive. I mean, you know, this guy is like a hero, you can't just say, "No way." And so I started thinking about it.

And-- you know, it-- it was right at that point, I'd run my own fund for 12 years. The regulations on hedge funds were changing. I was gonna-- had a staff of two people and me that ran my fund. I was gonna have to bring a compliance person in. And life was gonna get

complicated. Thought, "Wow, this is actually a way to simplify things and do what I love to do, which is be an analyst."

BECKY: And Tracy, your path to Berkshire-- is one that a lot of people-- I know when the students come out-- to meet with Warren, they always ask him-- "How did Tracy do that?" and, "Should I change my name to start with T?" I've heard that question last week, between you three. How did you find your way to Berkshire?

TRACY BRITT COOL: Well, meeting Warren was also on my bucket list but I didn't have $5.3 million. So, I had to take another path. And I came out with one of the student groups-- an organization that I was involved with called Smart Woman Securities. Warren loved to support women in investing and wa-- women in business.

And it was a great opportunity to meet-- Warren. I really enjoyed that experience. Like I said, it was once in a lifetime. And a couple years letter-- later, I decided to write a letter to Warren and just say, "Can I come out and spend a day, a week, a month, I'll do anything if you let me spend some time with you," fully assuming he would say no and I would say I tried and we'd go about our way. But fortunately he said yes. So, I-- came out that summer, worked on a small project for him, thought, "Wow," again, "this is a once in a lifetime--

BECKY: What was the project?

BRITT COOL: --"experience." I was looking at the-- looking at the Lehman bankruptcy. And so it was a very daunting task, and one where I don't think I ended up having-- too much value to add. But it was really interesting. And it allowed Warren and I to have an opportunity to have a variety of discussions about business management investing. And those are all great for me, and I think, my guess, a good opportunity for him as well to learn more about me.

BECKY: You know-- Warren, you must get letters all the time from people who wanna come to work here. You must meet people all the time. But- what about these three in particular really jumped out--

BUFFETT: Sometimes-- things jump out at you. I mean, it-same way as when we bought **Iscar**. You know, that was a one and a page-- one-and-a-quarter page letter from Israel, and we made a $5 billion purchase on it. And it-- it's-- to some extent, not perfectly, but people do give themselves away.

And I've had literally thousands of letters from people who wanted to do hedge fund type-- or—manage money force. And—they also had a longer record and everything. But it-- it's-- it's more than having had a good five years or something of the sort. You know, I've seen a lot of investment managers come and go. So, it's a judgment about their intellect. But it's also just as much a judgment about their character. And-- we've got the right three here. And they don't come along every day. You

BECKY: They don't. And-- in fact, there-- there's been a lot of interest in all three of you. We've gotten a lotta questions that have come in from our viewers. And we've been posing some of those questions to Warren this morning. But if you-- if you three don't mind, I'd like to ask you three some of the questions that have been coming in, too.

Part of what's really come up is just-- Todd and Ted, I'll ask you this first-- how you invest and how you see the world. Ted Ehrhardt writes in-- guys, this is number 82-- Ted Ehrhardt writes in, "When you identify a company, for example, that seems worth a deeper look, what does your investment process generally look like? What do you like to read? And how much time is typically spent before you're ready to actually make an investment?" And I'll start with you two on this.

COMBS: Go ahead, Ted.

WESCHLER: Okay. So, I'd say that it's-- investing well, not turning over a lotta stones. And the way that I spend my day-- is just reading-- annual reports, transcripts-- delta reports, regulatory filings, channel checks-- anything I can get my hands on, really-- trade magazines, etcetera. And so 99% of what you look at you can dismiss-- within five minutes. It

BECKY: What-- what's the magic thing that tells you, "There's no way that this is something"?

WESCHLER: Well, there's kind of-- you know, Charlie talked about mental models and-- and so forth. There-- there's a lotta things—Think about like a gating analysis or a flow chart. There's a lotta things that come along-- obviously, valuation being one.

And being able to understand the business-- and technology is an area that-- sector that I traditionally haven't done much in because I think it's very hard-- to know what a lotta the businesses will look like five years from now. So, there's a lotta things that you go through this gating process that are just completely eliminated.

And if you know that you can't get comfortable with it, you don't need to spend any more time on it. So, it's the 1% of ideas that are really exciting that you-- it's kinda like a needle in a haystack-- you know-- you just know when you've done this long enough when there's something there. And that's really exciting, because if you love investing that's what you can spend the next 500-- thousand hours on, really digging into--

BECKY: Five hundred thousand hours.

WESCHLER: Somethin' like that--

BECKY: How much do you read every day? Because didn't Warren tell you at one point that that's the most important thing you should be doing?

WESCHLER: Yeah, when he came to Columbia and spoke to the business school and-- Professor Bruce Greenwald's class and-- in either late '01 or early '02-- the very last question that was

posed to him was-- what his secret was. And he had this-- I'll never forget-- he had this giant pile of paper and he pulled it out.

It was a complete hodgepodge. And he said that he reads 500 pages a week. And-- anyone can do it. And-- you know, it's like compound knowledge. If you start today, you just build over time. And so that's when I started. And then somewhere around 500, sometimes a little bit more pages a week. And that can be all those things I mentioned before-- annual reports and transcripts and regulatory filings and so forth. But that-- that's really the process-- to answer your question--

BECKY: Yeah, there's-- no easy way to it. It's--

WESCHLER: No, no--

BECKY: --building up knowledge over years and years and years.

WESCHLER: That's right. That's right. And then, you know, as Warren had said before, it is compound knowledge. You get better and better at it. It's spotting those gating factors. I can look at a bank or-- you know, certain companies and certain sectors much faster than I would-- you know, five, ten years ago.

BECKY: Warren, that reminds me of something you said when you made that Bank of America investment. When did you first read Bank of America? I mean, you'd built that up over decades--

BUFFETT: Yeah, I read that probably 55 years ago I read a book called Biography of the Bank. But I probably read their annual report every year for 50 years. It-- I-- you know, the same things happen many times. I mean, itand the beauty of it is that it is knowledge is cumulative. And even what you're learning about Company A will help you thinking about Company B.

BECKY: Ted, how about you? How does your approach differ? Or is it the same?

WESCHLER: It's very similar. I think things that are distinguishing – I'm a little bit quirky. I typically don't meet management. I don't talk to management.

BECKY: Why?

WESCHLER: I-- historically, when-- I was in private equity for 15 years. And generally, if you become a CEO of a company or a really good salesman, one way or the other, and you're gonna probably spin people. And-- I made a couple big mistakes when I got involved in situations where I liked people too much.

And, I generally like people. So, the way to avoid that is put the filter on that rely on reading transcripts, 10ks, 10qs. And the other key thing-- and it-- I mean, plays off of everything-- Warren and Todd just said is, you know, know the situation. Wait for the right price.

BECKY: Right.

WESCHLER: You're just always reading about things. But, you know, people-- most of the times the price won't be right, but be ready.

BECKY: Be ready.

COMBS: Yeah.

BECKY: Tracy, people have a lotta interest as to what you've been doing with the company that you kind of parachuted in on. Warren talked earlier about how when he has a company that's in a little bit of trouble, with some of these ones that he hasn't spent the time with, he's asked you for some help. Tom Roth from New Jersey writes in and he says, "What are your plans for Benjamin Moore going forward?" I'm interested in that, but I'm also just interested in-- what is it you do when you parachute in.

BRITT COOL: Definitely. At Benjamin Moore, we have a tremendous quality of a brand there as well as a great company with great people. And it's just a situation where we need to give a little bit more attention to our dealers. So, over the last ten years or so we've underinvested in our dealer network.

And now what we're trying to do is reinvigorate them with trust and helping them understand-- that we're here for them for the long haul. We're not gonna be through other channels. We're not gonna make commitments in other directions, but really for them. And I would say when I go into a company, it's helping the management team identify the direction which we need to move. And in situations that I'm involved, typically there's been some sort of industry change, business shift, somewhere where we've lost a way a little bit.

And we can use resources within Berkshire. Other Berkshire companies are usually the first place I look to for knowledge and experience and asking, like, "Can you come in and help? Can you talk to us about how you manage that in your warehouse, how you went to market with a specific brand, how you approached some issue that was of specific significance to you, and how can you leverage that knowledge within Berkshire at our other companies?"

BECKY: Okay. Guys, another question that has come in-- this is directed to Ted and Todd. Both of your compensations are tied to each other in an 80/20 split. If you could pick any investment manager besides the ones you're sitting with to have a similar split, who would you pick? And I think Warren's sitting here, too, so you can't choose them.

COMBS: Ninety-nine/one they might go for it

WESCHLER: They can't pick Charlie either?

BECKY: No, I'm gonna take him outta the running. I'm gonna take him outta the running. But-- you both have long careers. You both have worked with a lotta people over the years. Is there somebody else who impressed you along the way? I think that's what they're trying to get at.

WESCHLER: You wanna go first?

COMBS: I have names that I've recommended people to. I'm just not 100% sure that they would necessarily wanna be recommended. I'll tell you, Lou Simpson was at-- at Geico for a very long time at Berkshire. And there's-- a fellow named Tom Bancroft that runs the fund-- out in La Jolla that worked for Lou for about 13 years. And he's done wonderful. I've referred people-- over to him before. And—

BUFFETT: Larry Putnam worked for-- La-- Larry Putnam died-- unfortunately. But he-- managed money very well after he left-- left us.

BECKY: Right

COMBS: Mary Wentler joined our board. I don't think she takes outside money, but cer-- I've known her for probably ten, 12 years. And she has a wonderful long-term track record-- as does Tom.

BECKY: And what do you think, Ted?

WESCHLER: I'm thinking-- I-- I've never met him, but David Tepper's got as good of--a 20-year track record as anybody out there. And he's proven able to, you know, do well in tough markets and do well in rising markets. And I-- I always respected that.

BECKY: All right, that's a great point. Another question for you. Do you own any Berkshire Hathaway shares personally? And if you were still running your hedge funds, would you buy it for your funds? If you do own shares, do you think that Berkshire shares would be better off if it were broken up due to the conglomerate discount it appears to have been stuck with the last five plus years? What do you guys think?

WESCHLER: I-- I do own-- some Berkshire. Owned it when I joined. I probably would not have it in the fund. Typically, when I manage my own fund, I- am-- a lotta what I do at Berkshire's, I like to become the largest shareholder on a given company. And that's kinda hard to do with Berkshire. And the third part of that question?

BECKY: The third part, would you break up the company?

WESCHLER: Oh, break-- no, no, no. No reason to break it up. That—

BECKY: That's what I thought—

WESCHLER: --would-- yeah—

BECKY: --you might say.

WESCHLER: --you don't wanna mess with it.

BECKY: Todd?

COMBS: Yes, same answer. I own it as well. I owned it-- when I ran Castle Point. And-- yeah, there-- there's-- there-- I don't think there's that much a conglomerate discount, but certainly doesn't need to be broken up.

BECKY: Ted, specifically, this question came in for you. And there's been a lotta talk about DaVita—

WESCHLER: Uh-huh.

BECKY: --recently. And you know that that was a stock that you identified. And Mark Blakely from Tulsa, Oklahoma, wrote in and said, "Would Ted Weschler explain what he likes about DaVita HealthCare Partners and why he finds this company such a great investment? Since Berkshire signed an agreement not to own more than 25% of DaVita, does Ted or Berkshire have any other intentions besides being a large shareholder?"

WESCHLER: Okay. I followed the dialysis industry for, mmmm 30 years now. Right outta college I started-- studying. And so I know the space reasonably well. And I think the broad filters that I apply for healthcare investment in general is-- number one, "Does the healthcare company deliver better quality of care than somebody could get anywhere else?" And DaVita falls into that.

Number two, "Do you-- does it deliver a net savings to the healthcare system?" In other words, is the total bill for U.S. healthcare cheaper because of the efficiency that the company provided? DaVita checks that box. And lastly, "Do you get a high return on capital, predictable growth-- and, you know, shareholder-friendly management?" Absolutely. And all three of those together-- you know, you've got healthcare is whatever, 17%, 18% of GDP. You got an incredibly talented team running that company. I'm not sure what the stock will do over the next year or the next two years, but very comfortable at five years from now it'll be-- a more valuable franchise.

BECKY: Uh-huh. Can I ask you both-- you both-- Direct TV. Is that right?

COMBS & WESCHLER: Yeah.

BECKY: You both like Direct TV. When did you see that? When did it first pop out at you? Todd?

COMBS: Well, yeah, I think I was-- in the name and my fund probably eight years ago and then bought it when I came onboard as well.

WESCHLER: I'd started following cable and satellite about ten years ago. Kept an eye on it the whole time. And it was one of the first things I bought when I got-- when I came to Berkshire.

BECKY: How much back and forth is there? I mean-- in terms of when you, like, see a stock you like and you identify it, do you talk to Warren before you buy it? Or do you just go ahead, buy it, and maybe tell him at some point down the road?

WESCHLER: Give him a heads-up-- just because there's a concern that he may we may know something institutionally that's inside. So, we know--

BECKY: Oh--

WESCHLER: --we don't want to create a problem.

BECKY: --right. Warren, you've talked about that before.

BUFFETT: Yeah--

BECKY: You just have to make sure that there's not a Berkshire conflict--

BUFFETT: Yeah, that we're not taking the place over tomorrow.

COMBS: But-- we do have total autonomy. And Warren, in fact, insists on it. So it's not a matter of going to him and asking him if we can buy it or anything like that, as Ted said. It's literally for compliance reasons, to make sure there isn't anything going on that we don't know about.

BECKY: Warren, anytime that there's an SEC filing that says Berkshire is compiling a stake in such and such company, everybody immediately runs out and says, "Warren Buffett is buying it."

BUFFETT: Yeah.

BECKY: How do we know what you're buying, what these guys are buying? How does it all—

BUFFETT: You don't know for sure, but the chances are-- you know, if it's-- if it's a multibillion dollar position-- although they have no multi-million – position to approach two billion-- but if it's really large, it's probably mine. And if it's really small, it's probably theirs. It's probably not mine that I'm just starting on although it could be.

BECKY: Uh-huh. Tracy, one of the things we've talked about this morning is Heinz and how that acquisition's been going. What have you seen from what you've been doing with the company and sitting onboard?

BRITT COOL: It's going very well. I think that it-- there again is a company where we have a tremendous brand and we have a great team with Bernardo and the-- rest of individuals there. And they're continuing to move forward. And I think that that company will be much stronger a couple years from now than it is today.

BECKY: Uh-huh. And-- Warren, just your thoughts about having these three in the office. This is a picture, by the way, that was in the annual report. You've never had a picture in the annual report before, but this is a picture--

BUFFETT: It shows how flexible we are.

BECKY: --yeah, which--

BUFFETT: Yeah.

BECKY: --when you realize there's 330,000 employees at Berkshire, this is the headquarter staff.

BUFFETT: The entire head office with the exception of two people who missed-- the lunch. Here's the most valuable person to Berkshire, this Don… my assistant, but this fella over here at Mark Millard's example. He's in charge of $40 billion of cash.

And-- he moves it around. And-- you know, I give him guidelines. But they-- it's a sensational group. And we're all on one floor. Our tax return is 23,000 pages. That's twice as high as I am. And they put out the 10Ks and the 10Qs and they handle the inquiries about Berkshire, the public relations, investor relation-- all sorts of things. And they do a sensational job. I couldn't be more proud of 'em.

BECKY: Well-- Todd, Ted, Tracy, I wanna thank you three for joining us today. We really appreciated your time. And it's been great getting to hear from all of you.

WESCHLER, COMBS & BRITT COOL: Thanks. Thanks for having us.

BECKY: --thank you so much. And this conversation with Warren Buffett is going to continue. In fact, when we come back, personal income and spending data are out. And then we'll get back to our interview with more of your questions for Warren Buffett. Right now, though, as we take-- as we head to a break, take a look at what's been happening with the U.S. equity futures.

JOE: This is Ask Warren day and I have been wanting to talk about the final four at some point because Warren is a huge here is going to the Creighton game I've sent you some stuff as hard as it is for me to believe

BECKY: --Yeah I'm still trying to look this up. Joe has a question on this. And- Joe, we should mention the news that is just out in the last half hour about the billion dollar bracket deal that Berkshire Hathaway is ensuring with-- Quicken Loans. And this is something we've heard about for a while. And this is all tied into March Madness. If you pick the perfect bracket, you win a billion dollars?

BUFFETT: Yeah. Well-- or $500 million immediate value or $25 million a year for 40 years.

BECKY: And-- Joe, the news that was out today is that Yahoo is also getting in on the deal, which Warren, that's pretty surprising looking at what had happened. It sounded like Yahoo had its own plans to go ahead with a deal like this. They didn't go ahead with that because Quicken Loans went out first.

BUFFETT: Right.

BECKY: And- now we heard today that Yahoo's joining up.

BUFFETT: And now they're joining forces. Yeah, yeah--

JOE: You know what, Warren?

BUFFETT: --it was new to me just a few --

JOE: You-- you got a better chance at Power Ball. Okay-- you're a genius. What-- is-- do you have a quick -- have you figured out the odds on this? Because I-you know, I think I could pick the team that wins. I think I might be okay pickin' the Final Four if I was really lucky. But just the very first round, pickin' those, you-- with-- what happens, and then pickin' 16, then pickin' eight, then pickin' four? That-- it's impossible! And some

BUFFETT: Yeah. Well--

JOE: --some autistic kid supposedly did it. I can't tell whether this is an urban legend or not that this kid actually did this.

BUFFETT: This defeatism is not like you, Joe. I mean-- if you could put in 15 million entries, which we expect to get-- then do you think you'd have a shot at it?

JOE: No. And I don't think you'd be--

BUFFETT: Oh

JOE: --I don't think you'd be puttin' up-- I don't think you'd be puttin' up a billion if you thought people had a shot at it, either.

BUFFETT: Well, oh, they have a shot at it. Yeah, no, the one thing I-- I've seen these calculations, for people will assume it's a random event so they take--

JOE: No.

BUFFETT: --two to the 63rd--

JOE: Yeah.

BUFFETT: --you know. But it is not a random event. I made calculations myself before entering into this insurance contract. And Ajit Jain-- also made calculations. And we were in the same ballpark and--

JOE: But did you s--

BUFFETT: --obviously went ahead with it.

JOE: --you see what's happened. I mean, B.C. beats Syracuse-- I mean, you look at-- it-- it's-- unbelievable-- I don't know who's good. I can't tell. I-- you know, one team I think is good is Florida. That's all I can figure out. Florida seems--

BUFFETT: Yeah.

JOE: --they seem really-- I don't know, after that, everybody seems like they've got-- you know, they've been killed by what is it, Goliath and-- you know, the giant. I mean, it

BUFFETT: Well, Joe, if you look at-- I think the last hundred and the last what-- 20-- it will be 27 years, maybe 28 years-- whatever it is-- they've had 64, there's been, like, 112 will say number one seed's playing number 16 seed and the number one seed has won every single--

JOE: Yeah, that's true.

BUFFETT: one of those games.

JOE: --who would you pick in the Final Four, Warren? You got Creighton in there?

BUFFETT: Well, I've got-- Creighton. Yeah, you bet. . Well, yeah, I would say maybe Arizona, too.

JOE: Yeah, Arizona. Florida. And-- and then Virginia looked good.

BUFFETT: Yeah--

JOE: 0Virginia who won their . Yeah.

WARREN BUFFETT –now that you've told me about Florida, yeah, Ithey're definitely gonna be in there.

JOE: Right. We're pickin' the number one. We're so good. Aren't we? We're pickin' the number one.

BUFFETT: Yeah.

JOE: Oh, pickin' the number one seed.

BUFFETT: Yeah.

JOE: All right-- well, we're gonna take--

BECKY: Hey, Joe, we--should point out, though-- before we go to break, we should point out when we have time to talk a lot much-- a lot more about the March Madness strategy, because both Warren and Dan Gilbert from Quicken Loans are gonna be joining us on set for Squawk Box on March 14th. So, we'll get into more depth with them on that day, too.

JOE: Wow, I can't-- that's--gonna be so much fun, isn't it? And-- and we'll--

JOE: --have our bracket--

BUFFETT: --a little more information then.

JOE: Yeah. And we'll have our brackets done by then-- you know, our TV news or brackets and all that stuff. Awesome. All right. We'll have-- much more of Omaha and Warren Buffett in just a couple a minutes. You got his Final Four. But first, a quick news headline.

BECKY: And welcome back to Squawk Box, this is a special edition in Omaha, Nebraska with Warren Buffett, who's been with us all morning long, answering your questions, and Warren, we continue to get questions that are coming in from viewers. Jeff Burton writes in: "What's your opinion on so-called 'activist investors'? Do you really think that they are acting in the best interest of the targeted companies and the shareholders, or are they more just interested in making a quick profit for themselves?

BUFFETT: Well, I think generally speaking-- they aren't just making a quick profit, and there's a law against making quick profits-- but our whole attitude in our own business and what we like to see with the business we own stock in, is we wanna for the people who are gonna stay in, rather than the ones who are going to get out. Now at any given time, you can make more money, usually selling the company than running.

I mean, most stocks-- most of the time, not all of time, sell at some discount to what you could actually sell the company for that day-- that day for. So you know, a little more activist activity might be just selling the company-- and I think that would be a big, big mistake.

I mean, I've seen cases-- where really good companies have sold for a third or a quarter what they were worth during-- and the answer isn't to sell the company, the answer is to keep running the company well. The answer may well be to buy in their own stock when they're selling at that kind of a discount. So I-- the money is flowing into activist funds because they've had good performance lately. And- so-- and that money will get put to work; so I think you're going to see a lot of activity in that field, that-- you know, I could do certain things to jiggle up the price of Berkshire-- in the short run, that would not be good for the company over five or ten years--

BECKY: Like what?

BUFFETT: Well, you can spin off one stock that might a hot type-- I mean, one-- of our divisions, it might be a pretty big, hot division, but it-- if it's a really good business, I just as soon keep it for Berkshire. And--there's a lot of efficiencies from a tax standpoint and a capital allocation standpoint, from being under one umbrella. So-- I am running the company for people who want to stick around, not for the ones who are leaving.

BECKY: All right, let's take what you just said and apply that to some specific instances. Nelson Peltz is right now pushing on Pepsi to split up the company so it makes more sense apart than together.

BUFFETT: Yeah. I don't think if I own Pepsi-- if I was the only holder of it or my family was the only holder of it I don't think I'd split it up.

BECKY: Because?

BUFFETT: I just-- I think that Frito Lay, it is an extremely good business, it's a better business than the soft drink business, but I think the soft drink business is good business, too, and I don't see a need to split 'em up.

BECKY: On that point, lemme point to a question that came in from a Neil Hagstrom . He said: "Are you worried about Coca Cola's declining in the near future?" Just the business of Coca Cola itself.

BUFFETT: Well, it's under a lot more pressure than it was ten or 15 years ago, particularly in the United States. But their sales went up last year, just as they go up almost every year, in terms of-- even in cases of carbonated soft drinks. And you know, right now, 3% of all the liquids people in their mouths, throughout the whole seven billion people, are Coca Cola products, and I think maybe that 3% will go up a little over time.

And I think they've got-- you know, wonderful brands and wonderful acceptance throughout the world. Coca Cola brand itself sold a hundred million more cases last year, I remember, than the year before, and they sold more that year than the year before.

It's a very, very good business-- but it's under more attack. Their-- the tax situation in Mexico, there's certainly-- a lot of groups that are working to-- certainly, not in the interest of Coke. The interesting thing is that diet soft drinks have actually gone down more in this country than--the-- sugar drinks, which you wouldn't think would be case, by which your—

BECKY: All the water drinks-- are not carbonated drinks--

BUFFETT: (UNINTEL) way up--

BECKY: --have gone way up.

BUFFETT: Well, water-- water's gone way up. But still, close to a quarter of all liquids consumed in the United States are carbonated soft drinks.

BECKY: Wow.

BUFFETT: You know, I drink five a day and I'm feeling good.

BECKY: Yeah, you had two on the set with you this morning.

BUFFETT: Yeah, well, and I'll finish 'em, too.

BECKY: Let's go back to activist investing, I want to apply it to another situation.

BUFFETT: Sure.

BECKY: Apple has also been the target of an activist investor, Carl Icahn, who was pushing for them to do something to bring back shareholder value, in terms of buying back stock. He's actually dropped his proxy-- request that he had on. The company has spent a lot of money buying back shares. What did you think of that whole situation--

BUFFETT: Well, I think that what they've done is probably pretty sound-- but shareholder value, taking shareholder value doesn't mean doing something to get the stock up tomorrow. I mean, shareholder value means building the most value over a five or ten-year period, that you can do with the resources, it's your command-- and that does not mean trying to-- every-- every day, to have the stock go up.

And-- the whole firm shareholder value sorta puzzles me a little. I mean, the way we build shareholder value at Berkshire is by building the earning power over 49 years and-- you know, any given day, that-- that he's splitting the stock, I'm not sure that that would mean anything, anyway, but I have a lot of suggestions along that line.

So what if the stock goes up? I mean, that's good for the stock people that are leaving. And it's bad for the people that are entering it, you know, basically. What you really want to do is build earning powers, sustainable earning power over time. And my guess is, at Apple, they're working very hard on that.

BECKY: Yeah, we had a question that came in from Simon Chow, and we know you're a huge fan of Breaking Bad. He writes in: "What lessons or situations from Breaking Bad do you think are most applicable to investing?"

BUFFETT: I'm not sure all I know is, I should call Saul if I'm in trouble.

BECKY: All right, well, we're going to continue this conversation in just a moment. Again, Warren Buffett is with us today and Joel, we'll send it back over to you.

JOE: All right, all right, Becky? I'm gonna ask about what he's watching now, but-- get-- maybe to get that, we gotta take a break.

BECKY: Well, welcome back to a special edition of Squawk Box, we are sitting down with Warren Buffett of Berkshire Hathaway this morning, wrapping up what has been three hours of him answering your questions. And Warren, we do have other questions that have come in, I know we're not going to get through all of them, but Ben Sigel wrote in with a specific question-- about-- a Berkshire company. He wants to know: "Were Warren and Charlie aware of, before the recent change in policy, that Business Wire was selling access to high frequency trading firms?"

BUFFETT: No, I--didn't know. It's-- important to realize though that Business Wire sells to thousands of people and they-- it's all simultaneous, so no high frequency trader ever was getting information a thousandth of a second before the others. But they apparently were working with it a little faster when they got it. So anyway, when we found that out, we cut 'em off, anyway. But they were-- they were getting simultaneous delivery not early delivery.

BECKY: And I guess the question would be, though, if they could get simultaneous delivery as the wire service, anybody relying on a wire service would have a slower of gateway, by a fraction of a second.

BUFFETT: By a fraction of a second.

BECKY: Yeah, and maybe that's where they were making hay with it. Another question came in from-- our Robert Frank, one of the reporters at CNBC, and-- he covers the wealthy, he-- brings up the question, "You and Gates have been number one and number two at the top of the Forbes U.S. Billionaire List for years now, what year do you think someone else will break the duopoly at the top and who will it most likely be?"

BUFFETT: I really-- I can't tell you who's-- you know, three four or five-- you know, I'm-giving away stock, Bill gave a way lot in the past and he'll give away more in the future. So it-- iwill be-- it will probably be somebody who isn't giving away as much. But I-- don't know who that'll be.

BECKY: Okay, Joe has a question.

JOE: Yeah, just a quicker one, just getting back one more time, that-- you know, if anyone would see the effect of climate change I would think Berkshire would, in terms of-- especially because we've built out the population so much bigger and we've built in areas where-- you know, years ago, maybe you wouldn't have seen property casualty claims and now it seems like you would see 'em.

With-where CO2 levels are, are you surprised you haven't seen an effect and would you be absolutely shocked if they have to pair back climate sensitivity models to CO2? I mean, are you-- a firm believer that you're gonna see events in the future?

BUFFETT: What I think—I'm no physicists-- Joe, and you know, so I-- all I'm doing is reading--

JOE: look there's no climate scientists aren't physicists, either, that's one thing we know for sure.

BUFFETT: Yeah, but I think-it's- the kinda question that deserves lots of attention. In terms of our insurance business, it has no effect, in terms of the prices we're charging this year versus five years ago, and I don't think it'll have any effect on what we're charging three years or five years from now. But I do think that-- that-- you know, we do have one planet, and I think we outta pay a lot of attention to what's going on--

JOE: I agree, I agree.

JOE: We've gotta make sure that-- that we're focusing on the right-- things, though, in terms of keeping the planet livable, I agree, wholeheartedly, thanks, Warren. Anyway, do you-- is there anyone that we don't have on our list of 25? Any outliers that you think that we should have that will revolutionize-- business and-- and just the world? You've probably seen that list. You're on it. I'm-- I'm sure you're gonna be there as a Graham and Dodd (PH) genius.

BUFFETT: Yeah, well, Charlie Munger is my man.

JOE: Yeah, that's good. Have you thought about me at all or no-- but probably-- not in your will or on this list, you haven't thought of me, have you? I'm just chopped liver--

BUFFETT: I'll tell ya this, I--agree that I'll put ya either in my will or on the list, one of the two.

JOE: Okay, all right.

BUFFETT: But - I'll make the decision.

JOE: All right.

BECKY: Warren, before we go again, for the people who weren't tuned in at the very top of the show at 6:00 AM Eastern-- your thoughts on what's happening with the economy right now? Because probably the biggest question that a lot of people are wondering in the economy is, have we seen a significant slowdown from the fourth quarter, third and fourth quarter of last year? What- do you think, based on what you're seeing in the businesses?

BUFFETT: I don't think so, except to the extent that whether it does hit certain types of industries. But my impression is that the American economy for five years, has been moving at a fairly steady rate, upwards, not as fast as people would like. But-- I think that absolutely continues now.

I mean, I think we're moving ahead at a couple of percent a year; and incidentally, a couple percent a year, if you have 1% population growth and 2% gain in output, it means that in a generation, you have a 20% gain of output per capita in the country.

That is not bad. I mean, at any other time in the history of the world almost, that would have been Nirvana. So if we have 20% more, I'll put for your children where we have today, and they have 20% more in the next generation. That is not bad, and we're on a cliff that's somewhat better than that.

BECKY: And-- finally, just looking at the stock market today, there have been a lot of people nervous about what's happened in-- in the situation in the Ukraine. You would tell them?

BUFFETT: I would tell them it doesn't change anything. If you've got-- if you've got a wonderful business of your own, you know, in Peoria, Illinois, why in the world would you sell it today because of what's happening in the Ukraine? If you've got a farm that's producing for you, if you've got an apartment or house that's fully occupied, why in the world would it sell it today because of what's happening in the Ukraine?

The same applies if you have a wonderful-- a piece of a wonderful business or a piece of many wonderful businesses. People do-- they react too much to short-term things in the stock market, whereas, they behave quite rationally when they get into other investments.

BECKY: Well, Warren, I want to thank you for being so generous with your time today.

BUFFETT: Thank you.

Warren Buffett: We took a stand on Coke's pay package

By Stephen Gandel, senior editor April 28, 2014: 5:00 AM ET

Recommend 41

In an interview with *Fortune*, Buffett defends high CEO pay, says his successor is a 'he' and says it's time to reexamine the corporate tax code.

PHOTO: PAUL MORIGI/GETTY

FORTUNE -- Last week, Warren Buffett declined to vote against a controversial stock option plan for Coca-Cola's (**KO**) top executives that he thought was excessive. That has unleashed a wave of criticism against the legendary investor and CEO of insurance conglomerate Berkshire Hathaway (**BRKA**), typically a media darling. *New York Times* columnist Joe Nocera **called Buffett** a coward. Shortly after the Coke vote, Buffett sat down with *Fortune* to defend himself.

Despite the criticism, Buffett says he believes he took a forceful stand against the Coke pay package. What's more, he says that he has little power to stop companies from handing out excessive pay. That's a big change from a few years ago, when Buffett wrote that large shareholders like himself were the only ones who could turn back runaway executive compensation within corporate America. Apparently, Buffett and others like him are outmatched as well.

Buffett also confirmed the widely held belief that, at least for now, his picked successor is male. Sorry, **Tracy Britt Cool**.

Fortune: Do you think executive compensation is out of whack with the rest of America?

Warren Buffett: Well, I don't think it is out of whack with the value an outstanding executive could bring. If you run a multibillion-dollar company the difference between a 10 and an eight is huge in terms of value. I don't think it is out of line in terms of entertainers or sports figures. Still, almost on a voluntary basis, I think it should be somewhat restrained in some cases.

MORE: How Warren Buffett helped save Harley-Davidson

In the past, you have said executive stock option plans are "a free lottery ticket" and "fair only by chance" and that they are compensation plans built for "managerial Rip Van Winkles who are looking to doze off."

All of that can be true.

In 2006, you said that the only way to change excessive executive compensation is if large shareholders like yourself take a stand -- demanding a fresh start. Why didn't you vote against the Coke [option] plan?

I think we did take a stand in abstaining. That's a very loud voice coming from Berkshire. It obviously means we don't approve of the plan.

Why not also abstain in the vote about the directors?

Because I actually think they have a good bunch of directors. What was done with their plan is so much the other guys doing it so we will do the same thing. The idea of fundamentally reexamining the whole thing doesn't occur to these companies, and it's very unlikely to, and their consultants are not likely to recommend it.

And what companies are doing with stock options is capitalizing executive compensation. It is shareholders years from now that are going to pay this expense.

I actually have written -- I may put it in the annual report next year -- a memo to the board of directors of Berkshire as to what I think would be a sensible option plan for the CEO of Berkshire who succeeds me. And he would be -- in this case it would be a he at the present time -- the only one who would receive options because he would be the only one who is responsible for the overall success of the operation.

One of the things Coke has said to defend its plan is that it's not just for its top executives but for its 6,500 employees. But you don't think that's a defense.

No, I don't think that's a defense.

And again, back to the Rip Van Winkle CEOs, according to the Coke plan, the company's return could go down 10% a year, and the executives would still qualify for billions?

It's a royalty on time.

Have you read the new book on inequality, Thomas Piketty's *Capital in the Twenty-First Century*?

I have read about six reviews on it. But not the book.

Are you planning to read it?

I don't know. I have read so many reviews I think I know what it says. I may or may not, but it is the kind of book that there is reasonable chance I will read.

The *New York Times* said recently, based on a study, that you have lost your alpha. Do you remember the last place you saw it, and if I find it, can I keep it?

Lost my what?

Lost your alpha. Your ability to outperform the market.

Yeah. But I think some fellow wrote a response to that. It wasn't me. We'll find out.

David Witt, who had been described as a mild-mannered accountant in Middle America and a Berkshire shareholder, and would like a little bit of his money back. Why won't you give it to him?

I wrote a long essay on dividends and repurchases in the annual report. It was just a year ago. And I explained in great detail why I think he is better off if he doesn't get [a dividend]. We are having the vote now, and you will find it interesting how the shareholders feel about that.

Why do you love paying individual taxes but hate paying corporate taxes?

I will not pay a dime more of individual taxes than I owe, and I won't pay a dime more of corporate taxes than we owe. And that's very simple. In my own case, I offered one time to match a voluntary payment that any Senators pay, and I offered to triple any voluntary payment that Mitch McConnell made, but they never took me up on it.

MORE: When grads are jobless, schools come to the rescue

Actually, [Berkshire's] tax rate is pretty high if you look at it. But if it could be lower, I would have it lower. I will do anything that is basically covered by the law to reduce Berkshire's tax rate. For example, on wind energy, we get a tax credit if we build a lot of wind farms. That's the only reason to build them. They don't make sense without the tax credit.

In the shareholder letter this year, you talked about a growing problem with public pension plans. What do you think the solution is?

The solution is to either change the promises or tax more. But the trouble is for any given politician he's only going to be there for a year or two. His best solution is to do nothing because he will be gone. And it isn't the kind of problem that you wake up tomorrow and causes the lights to go out or the streets to not get shoveled. It is the easiest problem in the world to postpone.

In Omaha, I would not like to change the promises that have been made to the people who work publicly. So I think we should probably tax more. But that won't work in many municipalities or states. The problems are too big relative to the tax base. You can't tax enough in Detroit to pay the pensions that have been promised. They have gone too far.

What do you think we should do, or should we do something about the offshoring of U.S. jobs, and U.S. corporations not paying taxes on goods they are producing and selling to Americans?

It has just gotten way out of hand because tax rates are so low in certain countries. And there are some companies, particularly when you are dealing with intellectual property, where you can set up a rationale to say your earnings are taking place in Ireland or Bermuda or something like that, when they are really originating in large part here. Those companies pile up huge cash balances overseas, and then they say, Give us a tax free period and we will bring it back. But that would of course just induce them to do more of that over there once they find out they can get away with it. It's a crazy situation, but it has developed over the years. That part of the tax code has really got to be looked at hard at some point.

At last year's annual meeting, you said you were concerned about the Federal Reserve's exit from quantitative easing and their monetary stimulus. How do you think the Fed has done exiting it, and are you still concerned about what might happen?

Well, I said it's a really interesting movie because the stakes are high and we don't know the ending. But I would say that's still the situation. But so far we haven't seen any big problems associated with it.

So are you less concerned about the end of QE?

No. It's still an interesting movie. I don't know how it comes out. That's why I find it so interesting.

Thanks.

Bill Gates, Charlie Munger and Warren Buffett participate in a "selfie" taken by CNBC's Becky Quick in Omaha. In this live interview, Buffett says that based on his experiences with college students who visit Omaha, selfies are "all the rage."

This is an unofficial transcript of Warren Buffett, Charlie Munger and Bill Gates appearing live with Becky Quick on CNBC's "Squawk Box," Monday, May 5, 2014.

BECKY QUICK, CNBC: We are live this morning from the Nebraska Furniture Mart, which is one of many Berkshire businesses. Warren, this business in particular, really sees a huge surge of business on the shareholders weekend. What kind of numbers have come through here and how many shareholders do you think were actually here this weekend?

WARREN BUFFETT, BERKSHIRE HATHAWAY CHAIRMAN & CEO: We'll do over $40 million in one week here at the Furniture Mart. That's a lot of business. Most furniture stores don't do that in a year, and it's our biggest week of the year. In fact, it's a normal month. We do about $450 million a year at this store. So it's a normal month, and we do it all in a week. And the stockholders get more excited every year. I mean, I run into people in the elevator a month or two ahead of time. They say thank you for holding the meeting, patting me on the back. They want to come on to the Furniture Mart.

BECKY: So you told us before you expected maybe 38,000 people this year. What do you think the numbers were?

BUFFETT: Not any less than that. This was the biggest meeting by quite a margin because we filled not only the main auditorium, but we filled all three overflow rooms and spilled over to the Hilton, and there were people in the exhibition hall. We can never get a perfect count, but I'm sure we beat anything in the past by at least 3,000. And I wouldn't be surprised if we beat it by 5,000.

BECKY: So somewhere between 38 and 40,000 is what you're guessing?

BUFFETT: Yes.

BECKY: Let's talk a little bit about what Joe was mentioning. I had not seen the ten-year (U.S. note yield) yet this morning. He talked about how it was 2.75 percent. Why do you think this is? Is this a sign of concern about what's happening? What would be your guess?

BUFFETT: I don't know. I'm not good on interest rates. One thing I know ten years from now they probably won't be at 2.57 or 3.57.

BECKY: Does it catch your attention, though, when you see the ten-year continue to decline? Most people thought it would definitely would have to go up this year.

BUFFETT: It's surprising, but I'm used to getting surprised in markets. And we issue bonds from time to time. So lower rates are, the more we like to issue them, and the longer we like to issue them.

BECKY: So would a ten-year at this level change any of your behavior in the business? Would you do anything differently?

BUFFETT: No, if it moved up or 50 basis points or down 50 basis points, we would not do anything differently. We don't react to macro factors at Berkshire. Our macro factor is the country will do better over time. That guides us in everything we do.

BECKY: If you had to make a guess right now, would you guess that the ten-year would end the year above or below the 3 percent?

BUFFETT: I don't think about that. If you told me I had to pick a figure, I would pick higher.

BECKY: Let's talk about one of the issues that came up repeatedly at the shareholders meeting, actually it only came up a couple times, but I did get a

lot of questions related to it in my email box where shareholders were sending things in. That's Coca-Cola. Joe (Kernen) already alluded to that this morning. And let's talk about what has happened. I know we've had a lot to say, but there was some criticism. Some people who didn't understand why if you thought Coca-Cola's equity plan was excessive, you didn't say something before the vote and you didn't take your 9.1 percent of the outstanding shares and vote no.

BUFFETT: Yeah. We had no desire, never will have a desire to go to war with Coca-Cola. It's a wonderful company, it's treated us wonderfully, the management has always been totally candid with us. I think we've got the right leader. I'm sure we've got the right leader, Muhtar Kent, but we did think the program was excessive. With those two beliefs we felt the best thing to do was express our opinions privately to the management who listened carefully and to abstain from voting at this meeting. And we think — I know we'll have some very constructive discussions with Coca-Cola between now and when they implement any plan.

BECKY: Barron's out over the weekend, there was an article in the back of it from Carl Icahn. I know you're friends with Carl and you're both on the Giving Pledge together, but this article says why Buffet is wrong on Coke. He's got a different style than you do.

BUFFETT: I hope so.

BECKY: Do you think — first of all, what do you think about what Carl said, and second of all, do you think that your style will be effective in this situation?

BUFFETT: I do think our styles will be effective. And I think our style actually will be more effective than the style that might be proposed by Carl. But Carl moves in other types of businesses and he goes in where — often, at least, he goes in where there's a problem. There isn't a problem at Coca-Cola. There was a plan that was proposed that was excessive. It's very easy to make it non-excessive. All you have to do is spread the authorization over more years than the four years they talked about having it in the proxy. And that's easy to do. Whether it actually turns out to be excessive will depend on the actions they take subsequent to this. They have not locked it in stone that they're going to use the stockholder four years.

I would say generally or frequently, at least, Carl is working with managements with different attitudes, and they probably have a different attitude toward him than Coke has towards me.

BECKY: Have you spoken with Muhtar Kent to this point? When we talked to you Thursday you had not.

BUFFETT: I have not talked to him since the meeting.

BECKY: Since the Coca-Cola meeting.

BUFFETT: Since Coca-Cola's meeting, which was on the 23rd.

BECKY: One other pointed question that came from shareholders this weekend — and I got several iterations of this, too, in my inbox — your son, Howard Buffet, is on the board. He voted in favor of this plan and there were some people who questioned. Howard is expected to be the chairman when you step away from the company to be the protector of the culture there. Does this raise any questions or should shareholders have questions about his ability to protect the culture when he voted for a plan that you, yourself, didn't like?

BUFFETT: Yeah. I voted for plans over the years — I've on the board for 55 years. I voted for plans I didn't like. I actually voted for acquisitions I didn't like. I opposed a few too, but there's only so many bullets you can use in the gun. If you start objecting to this and this and this, pretty soon people don't pay any attention to you. You want to save your bullets for when they really count. And I have never seen a comp committee come into a boardroom, in all my time, and hundreds of times, I've never seen them come in with a recommendation and heard a no vote.

The board delegates to a committee. They say you go out and work on this. They may say to the Governor's committee, you go out and work on getting directors, all kinds of things.

And once a board has delegated to a committee and they've spent hours working on something, and then they report it and there's 20 other items on the agenda and the Chairman calls on the comp committee to give his report and gives it in about 30 seconds, it never gets voted against. And it would be regarded as sort of usurping the power of the committee to all of a sudden say I've got a better idea. I haven't talked to the compensation consultants, I haven't looked at the figures, but I still have a better idea. It doesn't happen.

BECKY: A lot of people have been stunned by your comments on corporate governance. I don't think stunned by what you've said, but that you said it. There's been this idea that boards are clubby, basically come out and said that's the case.

BUFFETT: I've written that for 30 years. I've seen boards operate. It's always interesting to me to read academic discussions of boards. I have this theory — I could be in the movies or something. But boards are in part business organizations and in part social organizations. People walk into those with their behavior formed by dozens of — usually your people have

achieved some standing, perhaps, in the community. So they've learned how to get along with other people. And they don't suddenly change their stripes when they come into a board meeting. So there's a great tendency to behave in a socially acceptable way and not necessarily in a business maximization way. The motives are good; the behavior is formed by decades earlier.

And people like to get along with other people, most people. Carl, maybe not as strongly as others. I love Carl, but he may enjoy battle. Some people do that. Generally you don't get invited on boards if you've got a person that actually loves a fight.

BECKY: Your point is that this is not too much different than the rest of the world.

BUFFETT: Yeah, I think that's very true. And it doesn't mean because you don't get into fights that you can't get things done, and it doesn't mean there aren't certain issues that — I've been involved with a couple situations where a proposal to buy a company has come to the board and been shot down. What happens in that case is one person finally pipes up. It's a little like the kid saying the Emperor is wearing no clothes and everybody will come on board. But the first person to speak is like belching at the dinner table. And then sometimes other people start belching and the move away from you. Depends on the situation, but there are some people that have bravery to be followers in a situation like that but not to initiate it. You've seen that in other aspects of human behavior.

BECKY: Andrew has a question from back at CNBC headquarters, too. Andrew?

ANDREW ROSS SORKIN, CNBC: I was going to say it's remarkably honest what Warren is saying. The question is whether it should be this way. Whether from the outside there's a sense that people are more strident in the boardroom, more brave or willing to come forward, or that the social issues aren't supposed to impact the way people behave or the way they think. Even though of course they do. I hear you saying this is what happens. My question is should it happen this way?

BUFFETT: Well, no, obviously you know everybody would speak freely and all of that sort of thing, and dialogue would be encouraged and the chairman would love to hear reasons why his ideas were no good, but it isn't quite that way.

And I think it's probably — you will get some of that. I will give you a great example. I mean, we bought $700 million worth of Solomon Preferred in 1987. It was a big investment for Berkshire.

Charlie and I were put on the board. Our preferred was convertible at 38 because the stock had been selling in the mid 30s.

We went to the very first board meeting, was right after October 19th, 1987, here we are two brand-new directors. One of the first items on the agenda was the change, the option price of all the options outstanding at Solomon from prices in their 30s, down to $17 a share. Nobody proposed to change our conversion price from $38 down to 37.50, but the $35 options the employees were getting — including the people sitting at the table were going to get changed down to $17 a share. Charlie and I voted for it. We probably mumbled our vote. But those things happen. And we later on objected to a few things at Solomon, too. But you can't object a lot.

And bear in mind, too, Andrew, this is important. There are a number of directors at any company that are making two or three hundred thousand dollars a year, and that money is important to them. And what they really hope is they get invited to go on other boards.
Now if a CEO comes to another CEO and says I hear you've got so-and-so on the board, we need another woman or whatever it may be, oh, she will behave.

If they say she raises hell at every meeting, she's not going to be on the next board. On the other hand, if they say she's constructive, her compensation committee recommendations have been spot on, et cetera, she's got another $300,000 a year job. That's the real world.

ANDREW: One quick follow up. In the Wall Street Journal this morning, they were pointing out a comment you made in 2009, when you talked about speaking out on the most egregious cases of CEO compensation, and you said quote, the way to get big shots to change their behavior is to embarrass them. I was hoping you could try to explain the distinction between what you were talking about then in 2009 and, perhaps, this Coca-Cola situation today.

BUFFETT: Well, I don't really want to embarrass the Coca-Cola Company. I like the people and everything. But I think perhaps if you ask some people, I don't know whether they use the word "embarrass," but they would prefer I didn't do it, I'm sure.

Like I say, I used that word in 2009, so I'm stuck with it. I wasn't looking to embarrass them, but I was certainly looking to have them reexamine what they're doing. They're in a great position to reexamine it, because they haven't used a share in this authorization yet. And even though they said in the proxy statement that they expected to use it over four years, that could easily be changed.

They generally issue, I believe, their options in either January or February. So they have a lot of time to think about what's best. And they are. The one thing I can guarantee you, they are decent, high-grade people. They will do what's right. But I don't believe the best way to do that is to go to war with them.

BECKY: Warren, if I could ask just quickly, you said in the past there have been deals that you've shot down. My first thought is to Quaker Oats and Coca-Cola. How did that happen?

BUFFETT: Well, it got very public and basically the management sort of let the world know that Coca-Cola was buying Quaker Oats. And there was a meeting rather hastily called in New York, and directors went into that room. And I was not the first one to say that giving away 11 percent or so of the Coca-Cola Company to obtain Gatorade primarily, although a bunch of other foods came with it. But Coca-Cola really didn't want the foods, they wanted Gatorade.
We thought the first proposed opposition to it, I should say, said he didn't think that mathematically made sense, to giveaway 11 percent of Coca-Cola to get a single product, Gatorade.

I had come into the meeting feeling the same way. I just didn't speak first in that case. Then I spoke, and by the time I got through, the deal did not go through.

BECKY: And the whole table was belching?

BUFFETT: Most of them were belching. It was sort of a belching contest there. And the company had the whole thing to go through. The press people were there. It was in the evening, as I remember. Everybody was on deadline, and, you know, let's get this done.
There's usually that sort of momentum attached to any deal. You can't oppose five in a row. I mean, you become totally ineffective at that point. But that was a big deal. And a number of the directors had reservations about it, and that became apparent as this first director spoke up. But the other ones probably wouldn't have spoken up.

BECKY: Including yourself.

BUFFETT: I'm not sure. But we won't know that. I think I probably would have. I mean, that was not a deal that made sense to me.

BECKY: Okay, Warren, if you'll bear with us. We have to take a commercial break. But we have much more to come with Warren Buffet. We will be back after that very quick break.

Also starting at 8 a.m. Eastern time, Berkshire vice chairman, Charlie Munger, and Bill Gates will be our special guest. We will be sharing a stage. All three of those gentlemen will be with us live.

Andrew, I'll send it back over to you.

ANDREW: Okay, Becky.

(Commercial break)

BECKY: Okay. Thanks, Joe.

We are back again with Warren Buffett. And, Warren, after the shareholders meeting this weekend we talked about how they were thirty-eight to forty thousand shareholders here. There are always a number of interesting people to see in this audience. Kathy Ireland was there with you tossing newspapers on Saturday morning.

BUFFETT: She was a newspaper carrier herself.

BECKY: Right. She did a good job. Bill Ackman was here, David Winters, the glitterati of the financial world. Mario Gabelli, also Jorge Paulo was here from 3G. I ran into him a couple of times. The partnership that you with 3G when it comes to Heinz — first of all, how is Heinz doing? And second of all, would you do more deals like this with 3G with Jorge Paulo.

BUFFETT: Yeah. The Heinz deal is going well. Is that doesn't surprise me at all. We would not have done Heinz by ourselves, certainly at that price. There is no one I'm more impressed with than Jorge Paulo. I will add his associates in terms of their operating abilities. The chance to join him was terrific. I would love to join them again.

One thing I like about them, is they think big. They're likely to come up with a big one some day. Maybe next year, maybe the year after, who knows when. And I think if they need some financial — a financial partner, I think they'll do it with us.

So it's a big plus for Berkshire to have an association with Jorge Paulo, and his associates.

BECKY: Is there anything the two of you are cooking up right now?

BUFFETT: Well, he does the cooking and I do the tasting. His mind is incapable of not thinking about possible deals. And we will not do anything ever hostile at all, that's ruled out. But when the phone rings and they say it's Jorge calling, I feel good.

BECKY: So he was here this weekend. We talked about that. How much cash do you have on hand at Berkshire now?

BUFFETT: Well, counting everything except the regulated subsidiaries, we have probably have around 47 billion, something like this.

BECKY: You like to keep 20 billion on hand, so that still gives you 20 billion to play with.

BUFFETT: Yeah, and we could raise more pretty fast.

BECKY: How?

BUFFETT: We could raise them by debt, but we can also raise them by selling securities. We have well over 100 billion in securities. We have over 150 as far as that's concerned. But we could come up with — I like to be challenged on that.

BECKY: If that were the case, if we did have to come up with some money quickly because you saw a deal you really liked, what would be the security you would sell first?

BUFFETT: Well, if we had to do it very quickly, we might borrow some money and sell securities over a longer period of time. But we would look at the prices of the securities, which change daily, and we would look at what I think about the companies, which doesn't change daily but does change over time.

And if we needed a lot of money, we would have to be looking at some of the bigger things. But since I don't have a deal today, I don't have to think about what I would sell today.

BECKY: Just to get to some of those securities that you do own, you mentioned over the weekend that you met recently with Mary Barra of GM for lunch.

BUFFETT: Right.

BECKY: What did you think —

BUFFETT: I just met her at a conference.

BECKY: At that the Fortune Most Powerful Women conference?

BUFFETT: Yeah, exactly. And that was the first time I'd seen her. I don't own that stock, personally, at Berkshire. One of our two managers does.

But Mary was there, and I think she's terrific. She can run a company at Berkshire, that's for sure. She loves cars. I told her she was a car guy. Just all the way through, and she knows cars. Every aspect of it that you get into, she knows the impact, the tradeoffs involved between weight and style and price. I mean, she just has cars down forward and backward. And she loves General Motors. Her father was there a long period of time. She's made for the job.

BECKY: Have you had any concerns about the GM recall news? Obviously that happened before her time. Anything that made you reconsider whether you own the stock right now?

BUFFETT: Well, again, it wouldn't be my decision. Actually, it's Ted Weschler's decision, but she inherited a mess, and it's not a small one. It's a particular concern to the American public because the government did save General Motors in 2009, and these events which happened prior to that. But General Motors is in the forefront of most Americans. Buying cars are important to them.

So Mary is basically on a hot seat. But it's a not a seat of her own making. I don't think there's anybody that will be better at handling it. It won't be handled in a week or a month. It's the nature of problems like that to go on a while.

BECKY: Warren Buffett is our guest host. We will have a lot more coming up. We'll send it back to you guys.

(Commercial break.)

BECKY: Welcome back, everybody. We are with our guest host today, Warren Buffett, life in Omaha at the Nebraska Furniture Mart.

This weekend for Berkshire Hathaway is a lot of business, Warren, a lot of serious talk that comes out, but there's also some fun time. Yesterday you spent the day going to Borsheims and selling jewelry yourself.

BUFFETT: A couple hours.

BECKY: And the first thing you did —

BUFFETT: Crazy Warren, my prices can't be touched.

BECKY: So you were selling yourself. You also spent some time playing a little Bridge and playing some table tennis, ping-pong. I want to show you this shot. You were going up against Ariel (Hsing.)

BUFFETT: Yes, she is the women's national champ and played in the Olympics and won a couple matches.

BECKY: You got the great shot off. You said forget it. I'm sitting down. You get a shot on Ariel and you're out, right?

BUFFETT: One great shot a year.

BECKY: There has been a lot of stuff that we talked about that has been very serious business, though. One of the things that come up was another one of your holdings, Bank of America.

Bank of America very recently had to pull back their plan to increase the dividend and buy back more shares because there was a mess up in the regulatory capital. They were off by a big number. Was it 4 billion?

BUFFETT: Something like that.

BECKY: About $4 billion. I just wonder, as a shareholder, as someone who has a big stake in the company, did that concern you?

BUFFETT: No. The answer is no. It did not affect the Gap net worth, the GAP earnings or anything of that sort. And, actually, the change they're making with our preferred adds 5 billion to regulatory capital.

BECKY: Really?

BUFFETT: Yes. They are changing our preferred from a cumulative preferred to noncumulative preferred, and that changes that category of capital by 5 billion. I'm not saying that's a good reason for making the 4 billion error.

I've made mistakes. We've made mistakes. It doesn't involve any loss of money or anything. It's structured debt that they acquired when they took over Merrill Lynch.

Again, after I took over Solomon — Solomon was a merger I took over in 1991. When I took over, there was a plug item in the balance sheet. Some item that floated around every day. And that was because they had not been able to find — they had not been able to reconcile the books since 1981, ten years earlier. And Arthur Anderson were our auditors. They came in and explained to me as the new CEO, you'll see this 180 million or whatever it is, move around different amounts. But don't worry, someday we'll figure it out.

BECKY: Did that concern you?

BUFFETT: Sure, it concerned me. One of the companies had been on a cash basis and one on a trade-day basis and somehow they never got it worked out.
We had a situation in our savings and loan many, many years ago where we couldn't work it out. So we just ran out the bank account and started all over again.

BECKY: So you're not concerned. You think Brian Moynihan is doing a terrific job?

BUFFETT: I think Brian Moynihan is doing a terrific job. He's got a lot of problems to deal with, not of his making. He's just methodically worked his way through. And one of the problems is when he thinks he's worked his way through, there's a few more.

He's done the right things. He's simplified the bank dramatically, brought down the balance sheet. He's brought it back to the fundamentals. Bank of America has a wonderful deposit franchise, and it will do well over time. When I first bought the stock, when I was talking to Brian, I said you have a long period ahead of you. You'll work through all of this.

BECKY: Our guest host this morning is Warren Buffett. We have a lot more to talk about with him.

Coming up we are also waiting on quarterly results from Pfizer. We'll break out those numbers as soon as they're released.

Plus, we have two more headliners to our set right here at the Nebraska Furniture Mart in Omaha. Berkshire Hathaway's Charlie Munger and Microsoft's Bill Gates. Both of them, of course, board members at Berkshire Hathaway. They will be joining us starting at 8 a.m Eastern time.

"Squawk Box" returns right after this quick break.

(Commercial break.)

JOE: Let's get back to Becky in Omaha with special guest, Warren Buffett. I know Andrew mentioned that the "I" word, inversion, was discussed a little bit out there as well, and I'm sure in the broader context of what we should do here with corporate taxes and the whole tax code. Anyway, Becky, back to you.

BECKY: Joe, let's jump right into that. Pfizer is a good jumping off point for all of this. Warren, I know we've talked a lot about some the merger and acquisition activity. It's a little different this time around.

Some of the acquiring stocks have actually risen on some the news. But what's really caught our attention are situations like Pfizer, where Pfizer buying AstraZeneca, it has said that it would move its tax domicile if this deal goes through to the UK because they would be paying a lower tax rate there. What does that tell you about business, what does it tell you about the U.S. tax code, the corporate tax code?

BUFFETT: We're getting more mergers that are tax driven, and that's one of the reasons maybe the acquired stock goes up because you're actually talking not only about buying a business, but you're talking about bringing down the tax rate for the acquirer. And that's been coming along to some degree. You saw insurance companies go to Bermuda and you've seen Valiant pull off a number of these, and my guess is that as Valiant is going along, the people at Pfizer are probably just thinking, this is getting out of hand. We've got to bring our tax rate down too.

So it will gather momentum, and my guess is that when you get to companies of this size, this prominence, and with this speed-up of momentum, my guess is that Congress one way or another addresses this. But that could go either direction in terms of how they address it. And whether they just try to work on this little aspect of the code that allows this, which is not insignificant, or whether that forces them to rethink sort of all corporate taxes, we'll find out. But I do think it's going to get attention.

BECKY: The president has already put it in his budget for this year. It's not been closely focused on, except for potentially by some of these companies that are considering doing these things. The president has proposed to make it tougher to move your tax domicile. Right now if you have 20 percent of your shareholders outside the United States, you're allowed to do that, but the president has proposed moving that up to 50 percent. Some people look at that and say, wait a second, why don't you just deal with the tax code overall and make it a little more attractive for people to be here rather than moving somewhere else?

BUFFETT: Well, that's the fight that's going to go on, and —

BECKY: What's the right move?

BUFFETT: Well, everybody talks about tax reform. People love to use the word tax reform, and very few people are for tax reform that

increases their own taxes. They have all kinds of other things that they don't like in the code for helping other people, and they want to get that corrected. But I have yet to hear from anybody pretty much that wants to — equates tax reform with some set of proposals that increases their own taxes. And this whole thing on the foreign situation I think will cause one hell of a fight in corporate America.

BECKY: But you're talking about a policy that right now pushes companies like Pfizer that pay a relatively high tax rate, 27 percent, and pushes them away. It keeps the people who maybe aren't paying rates nearly as high. Isn't that an argument for simplifying the tax code, not handing away as many incentives or advantages to other people, and getting everybody to pay, like Simpson-Bowles suggested, closer to 28 percent?

BUFFETT: Yeah, you'd like to get everybody the same. We'd like to see that, but that's because we're paying more than 28 percent, bring us down. And somebody who's paying 20 percent — and I can name a lot of companies — they're not going to like it if that activity brings them up to 28 percent. So if you go for something that's revenue neutral, a lot of companies are going to get hurt, and they will probably squeal more than the people who are getting some benefit out of the changes.

I think there may be enough action going on now that despite what I've said, you will get some new resolution of the situation on corporate taxes generally beyond the question of just foreign tax rates. But it will take a lot, because as soon as company X's taxes are going to go up a couple points pro forma under some new proposal, they will have lobbyists lined up in Washington that will stretch to Baltimore.

BECKY: Andrew, you have a question, too?

ANDREW: Well, it was a question that I wanted to follow up with Warren on, which is that we asked a question of you on the panel over the weekend at the meeting whether Berkshire would ever pursue a deal like what Pfizer is doing, an inversion of some sort, and you said no. And I ran into a couple investors who wanted to know why wouldn't you do it. If, for example, I think you pay about $8.9 billion in taxes last year. If you could take that number down to $7 billion or $6 billion, you couldn't come up with a rationale for why that would make sense from a shareholder perspective?

BUFFETT: Well, for one, we do not come close to having 20 percent of our shareholders outside the United States, and you know, it might require me moving. I'm not sure that Charlie moving would get the job done.

So I ... I'm being half facetious with that. We do not feel that we are unduly burdened by federal income taxes. But it does get a little annoying to us when we see other people paying far lower tax rates while engaging in the same sort of business that we engage in. But Berkshire operated under 52 percent tax rates and 48 percent tax rates, and we make a lot of money under U.S. tax rates.

JOE: Warren, when you talk about the 20 percent, we've talked about this a lot too, a lot of companies have been induced to move operations overseas by the tax rate, and the 20 percent represents a blended rate that they're now paying because they've already reacted to what they see, so that's one thing.

Number two, I've been told that the president, in corporate tax reform, won't go for anything that is even revenue neutral. He wants to actually raise revenue in any type of reform that comes from corporate taxation. And you just mentioned that to keep it revenue neutral, taxes are going to go up on some companies, maybe they'll come down on other ones, so some people will like it, some people won't.

That sort of implies that this level of revenue right now is appropriate, which sort of goes against — I think that it goes against — in other words, the total number that we take from our corporations, if we need to keep it revenue neutral, then that means that our corporations are not overtaxed as far as the big picture goes. Who's to say that right now — I mean, there is another side that would say that corporations right now are competitively disadvantaged globally because they're just too high. So in fact if it's not revenue neutral, if it actually lowers taxes for the entire group, that that's not necessarily a bad thing, that would bring us more in line globally. And then you could get people signed on because most corporations would have lower taxes. Am I wrong?

BUFFETT: If you want to take corporate taxes down, just tell me again whose taxes you want to take up in terms of keeping the overall —

JOE: I don't want to keep it. I'm saying that we don't need to keep it neutral, that it should be a lower amount, because we're disadvantaged now globally because it's too high.

BUFFETT: Joe, we do almost $200 billion worth of business, and we pay normal rates on most. We have certain deals that are tax advantaged in terms of wind power and solar power. We are not at a competitive disadvantage with the rest of the world at Berkshire Hathaway —

JOE: Some companies are. Some are, and that's why they're doing some of these things, right —

BUFFETT: They're doing it to pay even lower taxes. Pfizer is a very profitable company. You look at the return on net tangible assets at Pfizer. It's terrific. They'd like to make even more money by not paying taxes. But they have a wonderful business paying U.S. corporate tax rates, and all you have to do is look at —

JOE: I don't know what profit's fair and what isn't. I don't know whether they make too much or they make too little. But if we're leaving trillions of dollars overseas and they're induced to do this and they're moving headquarters, and other companies that have lower tax rates can come in here and buy our assets because they can offer more money than domestic companies can, none of these things seem like it's the optimal way for us to be competing globally at this point.

BUFFETT: On balance, American companies have bought more foreign companies in the last 20 years than vice versa. So we have actually been net investing over there.

But beyond that, if you look at corporate taxes as a percentage of GDP, since World War II they've come down from 4 percent to about 2 percent. In fact, under 2 percent. That's while corporate profits have been hitting record levels. So if you look at the budget of the United States, individuals have paid more taxes, corporations have come down from 4 percent of GDP to 2 percent of GDP. No other group has come down as much percentage-wise as corporations. Corporations are doing fine in the United States.

JOE: We should acknowledge that then and not worry about it, but it does leave trillions of dollars that would be — we could bring it back and use it for infrastructure.

BUFFETT: They could bring it back now. They just don't want to pay the tax. And if you let them bring it back cheap, they're going to try and make even more over there with the idea they can bring it back cheap.

JOE: I know. That's why you need to change the overall rate. Go ahead.

BUFFETT: The number one industry with cash over there is the tech industry. There isn't a tech company I know of the major companies making lots of money that has got the least bit of a problem in financing their businesses. What they would rather do is borrow the money here and as Amazon — as Apple's doing. But that's because they've got loads of cash. They'll borrow it here, they'll borrow it very cheap. But they do not have a need for cash for their business. They have a need for cash to repurchase shares because the shareholders are pushing them for it. But they are not using that money to build plants and equipment in the United States. They are using it to repurchase shares.

BECKY: Warren, you yourself said that it's okay to follow the tax rules and not get out of taxes entirely, but if you can avoid taxes by doing something differently. In fact, you've done some deals recently, including the sale of the Washington Post shares that were tax advantaged.

BUFFETT: Sure. We've never lobbied for a tax advantage. But in terms of the tax code, we do not figure up our tax return for the year and then add a tip of 15 percent like on a restaurant check. We pay what we owe. And by paying what we owe, we've earned substantial returns on capital. We've never foregone a capital investment because we were here in the United States instead of some foreign country. And we've bought foreign businesses.

JOE: The (*Wall Street) Journal* today says the only reason that you're building wind farms at all, you know they're not economically feasible, is for the tax breaks.

ANDREW: He said that over the weekend.

BUFFETT: We've said that publicly for years.

JOE: That sounds like taking advantage of a little line here, line there in the tax code to actually invest and to have a whole wind farm unit just based on the tax advantages. That doesn't seem like in keeping in the spirit of the law.

BUFFETT: No, it is in keeping with the spirit of the law. The U.S. Congress decided that they wanted to encourage wind farms, they wanted to encourage solar, they wanted to encourage low-income housing. And all of those proponents of the law, actually it was President George Bush, 41, that had me in the Oval Office to congratulate me because we were investing in low-income housing tax credits.

JOE: Why do you make a distinction between that and what some of the U.S. companies are doing when it comes to an inversion?

BUFFETT: Well, I think they can do it with an inversion if they want. I think that is one that's likely to get — I'm not saying they're doing anything illegal at all in following the rules on inversion. I would personally change that part of the law. And other people might change the part of the law about wind tax credits, but I'm not attacking Pfizer for following the U.S. tax law. And that provision wasn't even put — I'm sure it wasn't put in there because of Pfizer. I'm just saying that it's probably a mistake to have that part of it. And people can argue whether it's a mistake to have the wind tax credits. But American business, I will tell you, whether it's Berkshire Hathaway or Pfizer or Apple, are doing wonderfully under this tax code and are not short of capital in any way, shape or form, or are having any trouble competing. Now, you can make other arguments for changing the tax code, but you can't really make those arguments, in my view.

BECKY: Great. We will continue this conversation. We do have a lot more with Warren Buffett. Guys, I will send it back to you. Also coming up at 8 a.m. Eastern time, we should point out, Berkshire Hathaway Vice Chairman Charlie Munger and Microsoft Founder Bill Gates will both be joining us live right here on the set with Warren Buffett. Andrew, right now, though, I'll send it back to you.

(Commercial break.)

BECKY: Thank you. Guys, again, we are spending the morning with Berkshire Hathaway Chairman and CEO Warren Buffett. Warren, one of the things that I saw last night, kind digging online, was an article in *The Economist*, where they suggested that maybe you should break up Berkshire Hathaway, that for your successor, it would be easier to run the company if it were smaller or broken into pieces. What do you think about that idea?

BUFFETT: Well, there are real advantages to having the company together. I mean, one big advantage is the ability to allocate capital from businesses where it can't be used effectively. Maybe frozen capital can be used effectively, but incremental capital has very little value and we can move that over to other areas, which have capital needs beyond the amount they're generating themselves. So capitalism is about capital allocation. The whole idea is putting resources in the right places. And we've got the ability to look at 70-plus companies, various industries and everything else, and allocate capital wherever it makes the most sense. And most companies, if they're in the XYZ business, they feel that they look at the opportunities in XYZ and if they can't find any good ones, they may do some ones that aren't quite so good. And if they need capital, if they have to go to capital markets and incur the expense of that.
So we have a seamless, very efficient way of rearranging capital among businesses, which in aggregate will spend like 12 billion on capital this year.

BECKY: You and Charlie Munger, your partner, are incredible capital allocators. You have proven that over decades and decades of time. It does raise the question, though, what are you doing to prepare your potential successors to make sure that they are equally good at allocating capital?

BUFFETT: The board will not put a person into the job as CEO of Berkshire that they don't think is terrific at allocating capital. And the candidates we have, I've got no worries about. There are plenty of people that are very good at something else and might meet a lot of the tests, but would not meet the capital allocation test and they should not be in the job.

BECKY: Is there an argument, though, that any potential successor spend time at more than just one unit, simply from the perspective that you don't want to look at that unit as the best place always just to make sure you get a broader view of the business.

BUFFETT: You want somebody in the top position that doesn't have favorites, doesn't have anybody on the blacklist, that doesn't feel way more comfortable in putting capital in area A than area B. But really, looking at it from the standpoint of the Berkshire shareholders and saying, where can this money be used best? And that money may be used in repurchasing shares.

BECKY: I was just going to bring that up. The other idea is that you want somebody who is allocating capital to businesses you own, but when there's not money that's put there, you would go out and buy other stock. So now you're going to have more than one person who's making that decision. (Portfolio managers) Todd (Combs) and Ted (Weschler) have been in the position of looking at stocks. How does that work? Is it a triumvirate?

BUFFETT: Here's a big plus. They're not the bosses, but we will have a lot of money in not only stocks, but bonds, various forms of securities. And we've got two terrific people to carry out that function. They will not be the Chief Executive Officer, but they will be there to help the Chief Executive Officer in that arena. Just like people that run given business are there to help in their areas. But the chief executive should think exactly like an owner. And an owner is trying to figure out where to put the capital to best advantage and we will generate a lot of capital. So it's a very important function.

BECKY: Todd Combs and Ted Weschler are the two individuals you've been talking about. There were several questions raised by shareholders this weekend, wondering when they were going to get to hear a little bit more from Todd and Ted. What do you think? Would they be in a position of maybe taking questions at an annual meeting down the road, too?

BUFFETT: That's not impossible. They're not publicity hounds or anything of the sort, and they like managing money. And the record of how they do on that will be available for the shareholders to see. But they are not interested at all, for example, in talking about their investment ideas. Why should they be? They worked hard to develop them. They're not about to pass them out.

BECKY: We're going to continue this conversation in just a moment. But Joe, Charlie Munger is here, he showed up early, so we're going to put him on the set when we come right back.

JOE: Excellent. That's going to be fun. And Warren has said that Charlie is doing very well in middle age, flourishing.

ANDREW: Can I tell you, he's amazing. This weekend, I mean, it's inspirational. He's sharper than anybody at this table.

JOE: Well, that's a low bar, as we've said many times. More Warren Buffett still ahead. And we have a special guest coming up in the next hour. Microsoft Founder Bill Gates is going to join us. He's a member of CNBC's top 25 leaders over the past 25 years in business. We're going to talk tech, the legacy of Microsoft, and of course, his plans to change the world. "Squawk Box" is coming right back.

(Commercial break.)

BECKY: We are spending the morning with Berkshire Hathaway chairman and CEO Warren Buffett, and now we're adding another special guest, Berkshire Hathaway vice chairman Charlie Munger. Charlie, it is a pleasure to see you this morning. Thank you so much for joining us.

CHARLIE MUNGER, BERKSHIRE HATHAWAY VICE CHAIRMAN: I'm delighted to be here.

BECKY: People come every year because they want to hear the two of you on stage together. I talked to so many shareholders this weekend about it. You guys have been doing this together for how long, being on stage, taking questions from the shareholders?

MUNGER: Mostly 50 years, more or less, isn't it, Warren?

BUFFETT: Yeah, about that.

BECKY: So I guess my question is other than being a year older for all of us, what's different or what did you learn this year, because I know the two of you say that you learn something just about every day? Did you learn anything this weekend?

MUNGER: I think you always learn something, but it's hard to put a finger on it. I very seldom have an ecstatic moment, like Archimedes.

BUFFETT: I always learn something. One of the things that I have fun with, I have a lot of fun with, is the annual meeting is just getting up there and hearing what Charlie's got to say.

BECKY: I was going to ask you this. Do you ever talk about it in advance?

BUFFETT: Never, ever.

MUNGER: Preparation would be cheating.

BECKY: You two have perfect comedic timing. Has it gotten better over the years? Did you hit that off the first day?

MUNGER: We are natural wise asses.

BUFFETT: That's what attracted us to each other.

BECKY: I've heard the story before, but I know a lot of our viewers haven't. You two met, Warren, when you were 29, and Charlie, you were 35?

BUFFETT: Correct, yes.

BECKY: Can you tell us a little bit about that meeting?

BUFFETT: It was at a local dinner, our wives were there, and after about five minutes Charlie was rolling on the floor laughing at his own jokes. I've been known to do that myself. There's not many guys like us in the world, so I better hook up with him.

BECKY: What is it that you two share in common. What similarities do you think you have? Charlie?

MUNGER: Well, the Omaha background, and I think we're both very intellectually curious. We both kind of like competing in games. And I think we both love ideas. And I like to ask Warren what he wants to be remembered as, and he says a teacher. Who else in America who is a CEO says he wants to be remembered as a teacher? I like it.

BECKY: Charlie, what do you want to be remembered as?

MUNGER: Well, I wouldn't mind being remembered as a teacher, but I won't be. (Laughter)

BUFFETT: I think he will be.

MUNGER: I may be remembered as a wise ass.

BECKY: One of the things I've always wondered is how Berkshire Hathaway really works with the Chairman and the vice chairman. How often do you two talk? Because, Charlie, you're in California.

MUNGER: Way less than we used to because we know what the other thinks. We're not wasting a lot of time checking what we already know.

BUFFETT: We're like an old married couple. We just sort of grunt at each other, but we know what the grunts mean. But originally, and this is when phone conversation was fairly expensive and we were not rich, we would talk for hours a lot of days. But now we may talk once every two weeks or something like that.

BECKY: You did say, though, Warren, that you spoke with Charlie about the Coca-Cola decision before you came to any conclusions.

BUFFETT: Right.

BECKY: What did you two think about that as you were talking?

MUNGER: It took about ten seconds.

BECKY: Really?

MUNGER: I do not find that a difficult decision.

BECKY: The abstention or the —

MUNGER: I thought he did it just right. He complained a little, but not too vociferously. I think that was just the right tone, and with compliments which were deserved to the management of Coca-Cola. I thought he handled it perfectly.

BECKY: Let me ask you two about the acquisition that you just did. There was a $3 billion acquisition that you announced for Berkshire

Energy last week. Do you guys talk about everything that comes through?

MUNGER: That wasn't even talked about by me.

BECKY: What do you mean?

MUNGER: Warren and (Berkshire Hathaway Energy CEO) Greg Abel did that one. My guess is Warren didn't talk about it for more than a minute or two.

BUFFETT: That's true. I got the facts on it and I liked the deal and I knew Charlie would like it. So why waste a phone call?

BECKY: So that's a $3 billion acquisition. What kind of rates, as the level that you think, oh, I really need to talk this through with Charlie?

BUFFETT: Well, usually if I talk it through it's because down deep I know I might be doing something dumb, and he'll tell me.

BECKY: Warren, you said over the weekend that you're probably more inclined towards actions than Charlie is. Charlie, you had a response to that.

MUNGER: Well it depends on the action. We're both very action pro when it's obvious.

BUFFETT: Depends on what kind of margin!

BECKY: But you said over the weekend that he's called you something before.

MUNGER: The Abominable "No" Man. He likes that. Kinda kidding.

BUFFETT: When we talked on a Thursday night about doing Burlington, Northern Santa Fe, and Charlie was on board, and you know, immediately he thinks, he sees the facts so fast and thinks so fast, and he doesn't waste any time making arguments just for the hell of it, you know, that are speeches or anything like that.
I would say that the quality that we share is that to a great extent, we're rational. And we don't waste a lot of time exploring things that are just nonsense.

BECKY: What is something that you thought was going to be a great idea until you talked to Charlie?

BUFFETT: Well, if you go back far enough, I called him one time on the Pittsburgh and West Virginia Railroad. This is 40 years ago. I said, Charlie, do you think we ought to put a lot of money on the Pittsburgh and West Virginia Railroad? And Charlie said to me, Warren, if you've studied it carefully, and you think you know all the facts, you're going to pay attention to it, if you're going to put a lot of your own money in it. He said, then I'll just shut my eyes and say no.

BECKY: And was he right?

BUFFETT: He was right. That's the irritating part. If you take the batting average of the times we disagreed, he's been right a very high percentage of the time.

BECKY: Charlie, I know that you are in California now, but you make it out every year for this meeting.

MUNGER: That's my hometown. I like coming.

BECKY: What's important to you about being here and about seeing the people at Berkshire?

MUNGER: Well, it's a very remarkable experience to go back to your hometown every year as part of something as big as Berkshire, which keeps getting bigger and more admired as the decades go by. It's very pleasant.

BECKY: You two have been excellent about knowing your circles of competency. There was a question from a shareholder this weekend asking how they could identify their own circles of competency. Charlie, do you have any advice to anybody who's trying to figure that out themselves?

MUNGER: Well I'm really better at determining my level of incompetency and then just avoiding that. And I prefer to think that question through in reverse.

BUFFETT: He likes to invert. He says, all I want to know is where I'm going to die so I'll never go there. I mean, that's his approach

generally is casting out a whole bunch of things. He's good at pointing out where my levels of competency ends.

BECKY: And Charlie, honestly, for somebody who was trying to figure that out, how do you know when you're getting out over your skis?

MUNGER: All I can say is we have a good batting average, and that is probably because we're probably a little more competent than we think we are. There's some modesty in what we're doing.

BUFFETT: It probably is very useful. There's a lot of reasons why the partnership works. But to have someone that you respect enormously say, you know, you're really out in an area where you don't belong, Warren. I mean, I will pay attention to him when he says that, and he'll say it.

So there's real utility in our functions together, for one to simply just say, are you sure you know what you're talking about?

BECKY: That raised another question at the shareholders meeting. I mean, you two work so well together. When you look at a potential successor for the CEO position at Berkshire, how do you help them along the way to try and make sure that they find someone who they can work equally well with and who can also point out when maybe they're making an incorrect decision?

MUNGER: I hardly know anybody who's done very well in life in terms of cognition that doesn't have somebody trusted to talk to. Einstein would not have been able to do what he did without people to talk to. Didn't need many, but he needed some.

You organize your own thoughts as you try and convince other people. It's a very necessary part of operations. If you had some hermit sitting on a mountain, he wouldn't do very good.

BUFFETT: And Charlie, by the way…

MUNGER: We have some of those, and they aren't very good. (Laughter)

BUFFETT: Charlie will always emphasize the fact that we ought to state the other guy's case as well as he can and better than he can if possible. That's when you get to where you can think through your

own case better, and that may be his legal training to some extent. But he starts out stating the opposite case.

BECKY: Gentlemen, we are going to continue this conversation in just a moment. Andrew, I'll send it back to you.

(Commercial break.)

BECKY: Welcome back to a special edition of "Squawk Box".

We do have some breaking news just hitting from the retail company Target. Target is saying its CEO Gregg Steinhafel is stepping down. His resignation takes effect immediately. In his resignation letter he says that Target has faced some unprecedented challenges in recent months, most notably that massive data breach where millions of Americans' information was briefed. And this all happened over the holiday season, started right around Thanksgiving, went through early December. And that is something that the stock took a huge hit on. Steinhafel says that he's been focusing on ensuring Target emerges from the data breach as a better company, and that now is the right time for new leadership.

Target CFO John Mulligan is going to be serving as interim CEO until a permanent successor is found. It also says that Roxanne Austin, who is a current member of Target Board of Directors, she has been appointed as the interim nonexecutive Chair of the Board. They say both will be serving in those roles until their permanent replacements are named.

The company also says that they've asked Steinhafel to serve in an advisory capacity during that transition and that he has agreed. The board says it's deeply grateful to Gregg for his significant contributions and outstanding service for his notable 35-year career with the company.

But our guest hosts today, again, Charlie Munger and Warren Buffett. Gentlemen, the news on Target comes not only after the data breach, but also after Target's expansion into Canada. That is something that has been a target for analysts who have said that that was the wrong move. You two have an awful lot of experience when it comes to retail.

BUFFETT: We have a lot of awful experience, actually.

BECKY: You guys have a long history with the department store and other stores. But Charlie, you're still on the board of directors at Costco.

MUNGER: Yes, but I'm not running it.

BECKY: But I wonder what you two think about news like this. Target has had a rough run over the last six months or so.

MUNGER: Well, I think these data breaches are so likely that we'll see more of them, and I don't think the CEO is necessarily at some terrible fault.

BECKY: I wonder if this has more to do with the Canadian expansion than the data breach itself, because Steinhafel has come out and tried to be very forthright.

MUNGER: I think Warren and I can match anybody's failures in retail.

BUFFETT: Yeah, we have a really bad record, starting in 1966. We bought what we thought was a second-rate department store in Baltimore at a third-rate price, but we found out very quickly that we bought a fourth-rate department store at a third-rate price. And we failed at it, and we failed …

MUNGER: Quickly.

BUFFETT: Yeah, quickly. That's true. We failed other times in retailing. Retailing is a tough, tough business, partly because your competitors are always attempting and very frequently successfully attempting to copy anything you do that's working. And so the world keeps moving. It's hard to establish a permanent moat that your competitor can't cross. And you've seen the giants of retail, the Sears, the Montgomery Wards, the Woolworth's, the Grants, the Kresges. I mean, over the years, a lot of giants have been toppled.

MUNGER: Most of the giants of yesteryear are done.

BUFFETT: Target went into Canada. It cost a lot of money to go there, and it can be tough. Everybody is already doing business with somebody there, and your competitor is never standing still. So that

even though you think they have vulnerability at this moment when you start in on something when your store is completed a year later, they're moving, too. It's always a moving target. It is a tough business.

BECKY: And yet here we are at the Nebraska Furniture Mart that Berkshire has done very well with.

BUFFETT: Nobody is going to be able to compete with the Nebraska Furniture Mart. I mean, this store does more home furnishing business than any store in the country. And what are we in, I don't know, the 50th market in the country? This store does $450 million annually. It's doing $40 million during the Berkshire shareholders week. There's no store that remotely can offer the variety. There's no store that can undersell us. But to achieve that kind of dominance, you can't do it with a chain of stores in Canada when you're competing with Wal-Mart up there and a whole bunch of other people.

BECKY: Warren, I know you use the internet a lot. But I wonder if Charlie, Warren, if either of you ever buys anything on Amazon?

MUNGER: My children buy it for me occasionally. I have never done it personally.

BUFFETT: My assistant.

BECKY: What do you think about the Amazon business model, though?

MUNGER: Well, I think it's very disruptive compared to everybody else, I think it's a formidable model that is going to change America.

BUFFETT: I agree. It's one of the most powerful models that I've seen in a lifetime, and it's being run by a fellow that has had a very clear view of what he wants to do, and does it every day when he goes to work, and is not hampered by external factors like people telling him what he should earn quarterly or something of the sort. And ungodly smart, focused. He's really got a powerful business, and he's got satisfied customers. That's hugely important.

BECKY: Charlie, earlier we got the chance to talk with Warren about some of the U.S. corporate tax code and some of the new acquisitions that we've seen. Pfizer reported earlier this morning, so we talked a

little bit about Pfizer's plan to buy AstraZeneca and use an inversion where they would move their tax domicile to the UK because I guess they pay about 27 percent here in the United States. If it was a UK tax domicile they would pay closer to 21 or 22 percent.
There was a little bit of conversation around —

MUNGER: Well, I think the pharmacy companies try and get to the tax rate, they're on their way to zero. That's the only one that would make them happy.

BECKY: What do you think about that whole practice, though? Berkshire has taken advantage of tax code in the past to make sure it's doing things in the most tax effective way.

MUNGER: We would never take our U.S. tax rate to zero on purpose, or even close to it. For other people that's sort of an ideal.

BECKY: Getting to 22 percent is still more than a lot of U.S. companies would be paying, if Pfizer does do that inversion and goes ahead and moves the tax domicile.

MUNGER: It's the rage now to get the tax rate down.

BECKY: I think Joe Kernen, my colleague, has a question back at home, too. Joe?

JOE: I'm just reading in the past that you have talked to Warren about this before, Charlie, right? You are on the record. Here's a headline: Buffet clashes with Munger over U.S. corporate taxes at a meeting.

I will quote what you said. "The corporate tax rate should be much lower. When the rest of the world keeps bringing the rates down, there's some disadvantage to us if we're much higher."

Did you change your opinion on that recently, Charlie, or do you still feel that way?

MUNGER: I would not — there's something to be said for making the tax rate a little lower, but going from 35 to 33 or something is not like taking it to zero by moving your pharmaceutical manufacturing to some tiny little place.

JOE: I'm not asking about a lot of places — go ahead.

MUNGER: I think the economy might work a little better if the corporate tax rate was low. But I think it would be a mistake for American corporations to get really low taxes.

BUFFETT: And when you talk about the tax rate being lower, you're not talking aggregate corporate tax rates being lower; you're just talking about evening out the rate, right?

MUNGER: Yes. I would like a consistent rate that everybody paid.

BECKY: Something more like Simpson-Bowles was talking about, getting rid of a lot of the —

MUNGER: Something more like Latvia.

BECKY: Latvia?

BUFFETT: Nobody knows what the hell Latvia means —

JOE: Charlie, what is the rate in Latvia? Do you know?

MUNGER: They have a single tax rate.

JOE: So does Lithuania. It's like 15 percent. I think it's 10 percent, but a 15 percent flat tax on everyone else. But I think the corporate rate is 10 percent in Lithuania.

MUNGER: Generally speaking, I would tax consumption higher and earning power of business a little lower. It just works so well in Hong Kong and various places. I don't think we deserve it, but maybe the economy would work better if we had it.

ANDREW: Can I follow up with you on something else you said over the weekend, and Warren did, too. Another sort of unconventional thought. We had a conversation in the question about compensation and the disclosure of compensation. You made a point that I think many of our viewers may find surprising about how disclosure may not be a good thing. Do you want to elaborate?

MUNGER: Well, I think envy is one of the major problems of the human condition, and that's why it figured so prominently in the laws

of Moses. Remember, he said you couldn't even covet your neighbor's donkey.

BUFFETT: I never have.

MUNGER: Yeah, but other people did. And so I think this race to have high compensation because other people do, has been fomented by all this publicity about higher earnings.

I think it's quite counterproductive for the nation. There's a natural reaction to all this disclosure because everybody wants to match the highest. Warren, I think that's a crazy race for us to get into.

BUFFETT: I've never been on a board of directors where the CEO came in and, waving the proxy statement of some competitor, and said, Here, this guy is making less. I probably should be making less, too.

It doesn't happen. There is a rationing effect that is produced by the publication of large salaries. And every comp committee is not hearing the comparison by the consultant to the fourth quartile or the third quartile. It's always to the second quartile, and that will produce a rationing. It's very natural to think if you're a director of the ABC Corp. and the CEO of the XYZ Corp is getting more, well, our guy is at least as good as theirs. And it goes on and on and on.
So publication of the top salaries has cost the American shareholder money. Maybe disclosure is the great disinfectant, all of that, sunshine is the great disinfectant. Sunshine has cost American shareholders money when it comes to paying their managers.

MUNGER: You're right, a peculiarity of ours, but we're right, just as Moses was.

(Laughter.)

BUFFETT: And other people in between.

BECKY: We're going to continue this conversation with Charlie and Warren.

In fact, when we come back, we are adding yet another amazing business leader to this conversation, Microsoft founder Bill Gates will join us live right after this break.

Our conversation will continue in just a moment. Also, as we head to the break, check out the "Squawk Box" market indicator. We have seen futures under a little bit of pressure this morning. You'll see right now futures are still in the read. We'll also take a look at the ten-year note, because the yield there dipped below 2.6 percent. Stick around. "Squawk Box" will be right back.

(Commercial break.)

BECKY: All right. Joe, thank you very much. Again, we are speaking to Warren Buffett, the Chairman and CEO of Berkshire Hathaway. Charlie Munger, the vice chairman, and now we are adding another powerful business leader to the roundtable: Bill Gates. He is the founder of Microsoft and the co-chair of the Bill and Melinda Gates Foundation. He's also a member of the CNBC First 25 list that was revealed last week and he is on the board of directors right here at Berkshire. That's why we have these gentlemen here today.
Bill, thank you for joining us this morning.

BILL GATES, MICROSOFT FOUNDER: Great to be here.

BECKY: One of the things I would love to hear from you three is just what it is you talk about. When you just sat down you were talking about Mongolia. You guys will talk about anything and everything. What do you know about Mongolia?

GATES: Well, business stories are fascinating to us and all the demand for minerals has meant that countries like Mongolia have opened up big new mines and the country's deciding what they're going to do with the revenues they're getting from that. A friend we have owns 10 percent of the retail operations in Ulan Bator so he was telling us how that's all working.

BECKY: When you were at the board of directors meeting today, obviously you can't talk about specifics on things, how do those board of directors go? How are things led?

MUNGER: It's a lovefest.

BUFFETT: (Laughs) I hope so.

MUNGER: It's not a highly critical place.

GATES: Are we supposed to say that?

(Laughter)

MUNGER: I don't care.

BECKY: Warren, you did make the comment over the weekend that when it comes to boards, too often they don't look for Dobermans, they look for Cocker Spaniels and then try to make sure their tails are wagging. Is that how the Berkshire board runs runs, too?

BUFFETT: No, Berkshire we look for directors that were shareholder-oriented, business-savvy, and interested in Berkshire. And we think those criteria make sense. Other people have a whole bunch of different checklists. But we have a group of directors that get paid virtually nothing, and they have to — their interest has to come about because they find the place interesting, and in many cases because they have huge investments. And they made those investments themselves. Nobody gave them shares. So it's a very unusual board. But it's a terrific board.

BECKY: We heard the story about how you and Charlie first met up. How about the story about how you and Bill first met?

BUFFETT: Well, he was forced to meet me.

GATES: That's true. My mom was having (former *Washington Post* publisher) Kate Graham and Warren over, and I was still sort of maniacal about not doing anything but working at Microsoft and so I agreed to come by. I actually — I made this mistake thinking that Warren's view of the world was just about charts and stock volumes and not about the fundamentals of business.

So when we met and he was asking me how do you compete with IBM, how do you price your stock, where is it going, it was fantastic. It was the most fun conversation I'd ever had. So that started an amazing friendship.

BUFFETT: We got to the bedroom, talking, and the governor of Washington had come. And Bill's dad was a wonderful man, but he got irritated with the fact that we were sitting in the bedroom talking.

And finally he came in very politely, he said, "Would you boys think about talking to the Governor?"

BECKY: So you stayed a little longer than maybe you planned?

GATES: Yeah, both sides wondered what these two groups were going to talk about, and had an amazing day. And it was only a few weeks later that I went up and Warren had a group of friends who were talking about business and stocks and so it's been a conversation ever since then.

BECKY: You know, Charlie, you made the comment over the weekend that when it comes to frugal people, you collect these type of people at Berkshire. You're looking for frugal people. But one thing I have noticed. You tend to collect friends and colleagues who have all those characteristics that Bill was just talking about. People who look at business and who think through it. How did that happen?

MUNGER: Well, when you like people who are intellectually curious, and I don't see how you can wise up all the time if you aren't working at it.

BECKY: How do you do that? Do you read every day?

MUNGER: Sure.

BUFFETT: I knew Charlie and Bill would hit it off.

GATES: Charlie's amazing.

BECKY: Let me ask each of you. What is something that you're reading now or you are you've read recently that you would recommend that other people read? Bill.

GATES: Zeke Emanuel wrote a book about medical costs in America and how we got to the complex situation we have. And he makes some predictions about the future. And people can disagree with him. Actually I disagree with some of it. But it's very well written, and we should have a more informed dialogue about that critical topic.

BECKY: Charlie, how about you?

MUNGER: Well, I have just read "Faraday, Maxwell, and the Electromagnetic Field."

BECKY: What is that?

MUNGER: It's a combination of scientific biography and explanation of the physics, particularly relating to electricity. It's just the best book of its kind I have ever read, and I just hugely enjoyed it. Couldn't put it down. It was a fabulous human achievement. And neither of the writers is a physicist.

BECKY: Neither of them. Okay. Warren?

BUFFETT: Why the light goes on when you hit the switch, but I couldn't understand the book. I had to move on.

I read (former U.S. Treasury Secretary) Tim Geithner's book which will be out in another week or so, and anybody, politician or financial manager, financial supervisor should read that book. Tim correctly says that you're going to run into more panics in the future, and there's not a thing about them and here is what to do. And it's a very, very good book.

BECKY: He thinks we'll run into more financial panics. How far down the road?

BUFFETT: He has no idea. And I have no idea. He just says humans are behaving the same way. And he describes how they behaved in various ways and how they behaved this time. And what has to be done. It's a good book.

BECKY: In other words, next time will not be different. There will be a next time?

BUFFETT: There will be a next time.

MUNGER: It may be led by the same people.

BECKY: By the same people meaning?

MUNGER: The financiers.

BECKY: The banks.

MUNGER: Other than a woman.

(Laughter)

(Commercial break.)

BECKY: Our special guests this morning will all be at the Berkshire board meeting later today: Warren Buffett, Charlie Munger, and Bill Gates.

Gentlemen, people would die for the opportunity to get here and sit and talk to you about business. What I would like to do is just throw some topics out to you and maybe you guys can respond on your thoughts on things.

First up, about activist investors. We have seen a rise of activist investing. Carl Icahn, Bill Ackman, who was actually here this weekend. I just wonder what the three of you think about activist investing. Is it a good thing for America or not?

Charlie?

MUNGER: Well, sometimes it's good, and sometimes it's awful. And I'm afraid that's just the way it is.

BECKY: Bill, what about you? What do you think about it?

GATES: Well, there's a level of discipline that shareholders, in the hierarchy, they should be viewing the actions of the board management. Sometimes it seems to get focused on very short-term things, like the dividend policy, as opposed to the strength of the management team and the long-term strategy.
But shareholders having power is a very important part of the system.

BECKY: Can shares get hijacked, though, by a shareholder who is very loud but who happens to have a small position in a stock?

GATES: Only if the press allows it to happen.

(Laughter)

BECKY: Well, you can say we've been guilty of that. We will certainly take any and all activist shareholders.

BUFFETT: You have thousands of corporations. Some of them are going to be poorly run and some of them are going to be run in a very self-interested manner by the managers. What is the correction for that? And activism can be a correction for some of that.

I think very often the activism — and they are attracting money on this basis. The money is pouring into activist-related-type investment vehicles. The measure really is whether you get the stock up in a very short period of time.

I can remember when the best-managed company I knew in the United States, Capital Cities, was selling for a third of what it was worth. And an activist might come around and say, 'Why don't you sell off the properties or something?'

So an immediate bump in the stock price should not be the measure of whether somebody has accomplished something successfully in a corporation. But there are times when change is needed in corporations and they're not going to do it themselves.

BECKY: Andrew has a question too. Andrew?

ANDREW: Warren, I want to follow up on something we talked about over the weekend, which is actually Bill Ackman's approach in this recent transaction between Valeant and Allergan, where he effectively teamed up with Valeant and bought shares of Allergan before they actually made the bid, knowing that the bid was coming. Some people have argued that is the equivalent of front-running or inside trading. I wanted to get your thoughts on that tactic from a policy perspective and what you think it means to the market.

BUFFETT: Well, I'm sure he had it well-lawyered. But, you know, if I bought that stock because I'd learned that somebody might be doing something and I learned it in certain way, I would be in trouble.
But if they join forces, you know, certainly a company that has in mind making a bid is entitled to buy some stock. And how big a group you can form, maybe you could form a group with a whole hedge fund community and have them all go out and buy stock like crazy for a couple weeks. And if they're part of a group, maybe it doesn't help.

But I would say this: If that should be the case, it probably should be changed.

BECKY: Joe?

JOE: Thanks, Beck. All three of these great gentlemen, I would like to just hear them opine quickly on this. I'm going to say his name again: Thomas Piketty. He's a French elitist academic that has the hottest book on economics right now. (*Capital in the Twenty-First Century.)* I'm sure you have read about it. It talked about capitalism in the down side in terms of income and quality. That capitalism he says by definition engenders, that we've just been lucky in recent years that it's not even worse.

So we're revisiting what system is the most appropriate. I think about you, Bill Gates, and what you're able to do with everything that you amass in your lifetime through capitalism in some respect, and certainly you're doing a lot of good with it now.

But in and of itself, is capitalism good or a bad thing?

GATES: Well, of course it's a fantastic thing versus any other system we've tried. And Piketty's mostly talking about retained wealth. That is, if you have high returns on capital for generations, then you get a group of people that have a disproportionate part of the money. If you think about the three fortunes represented here, these are first-generation fortunes that show there is dynamism in this system.
He makes some assumptions about returns that I'm not sure are true for the long-term. But the direct remedy for what he's talking about is some type of estate tax or well tax. He actually comes out for a well tax, which I think is hard to do. But an estate tax, which I happen to believe in, is something that would reduce the phenomena that he talks about.
But —

JOE: I've talked to Warren about this before too, and you guys can answer too, but to give all your money away beforehand, I think Warren has actually admitted to me that he thinks in the private sector that it will be better used by charitable organizations because it does avoid — when you give it all away, it does avoid it going to Uncle Sam in the end anyway, right?

ANDREW: Well, that's a problem too. It's still a generational issue. I don't get to answer for Bill.

BUFFETT: But you set it up in a case there in the sense that if I didn't give it all to philanthropy, I can arrange it so it's greater than this. But I could certainly create 60 percent that would be dynastic wealth. And if I was really concerned about dynastic wealth, as many people are, I could set it up so that far more than 60 percent went to —

JOE: You could bequeath it all to the federal government if you thought it was going to be a good use of the funds.

BUFFETT: That's a choice. I'm just saying the choice is not between philanthropy and — it's false to say you can't create —

JOE: That's not what I'm saying. I'm just saying you have never necessarily looked like you thought the government was the best place to allow capital to be utilized.

BUFFETT: I agree with you on that.

JOE: That's pretty good.

BECKY: Gentlemen, we're going to take a very quick break here. Of course, Joe, we do have more coming up after this.

(Commercial break.)

BECKY: Welcome back to a special edition with "Squawk Box". Our special guests this morning: Warren Buffett, Charlie Munger, and Bill Gates.

Gentlemen, another topic I would like to hear from you on. High-frequency trading. Charlie, I'd like to get your opinion about what you think about high-frequency traders. Is the book right, that lays out for Michael Lewis that they are — they're skimming off the top and it's a fixed market?

MUNGER: Well, of course they have an advantage. Cleverly obtained. Of course it does the rest of the civilization no good at all. It's the functional equivalent of letting rats into a grainery. (Pause) No, I don't like it.

(Laughter)

BUFFETT: I wondered what his point was.

BECKY: Charlie, Bill, do you agree or — Warren, Bill, do you agree or disagree with Charlie?

GATES: It doesn't seem like it's much value added because it's not, when you get — you really need the liquidity, it's not guaranteed to be there. So I'm not an expert on it, but it seems like a strange source of profit.

BUFFETT: It's not a liquidity provider. It may create more volume. But that's not the same as being a liquidity provider. To the extent that it's front-running, I think society generally has been against front-running for good reasons and where it's — in the old-fashioned front-running, they had rules against it.

Here they gained a natural advantage by speed just by figuring out how the system worked and then getting there first, and that adds nothing to GDP or anything, a real output of goods and services. On the other hand, the market isn't regulated. And for the small investor, they've never had it so good. And high-frequency trading I don't think costs them a penny probably.

BECKY: I see Bill nodding with that. Charlie, you agree with that too?

MUNGER: Somebody is paying it. God is not creating extra money.

BUFFETT: It's the big orders.

GATES: If you don't trade very often, then all these frictional costs can be quite modest.

BECKY: If you're a frequent day trader. Running in and out.

MUNGER: The big institutions operating on behalf of the little people. No, I think it's a curse, and I think the author of the book was basically right.

BECKY: Andrew has a question too. Andrew.

MUNGER: And he writes well, too.

ANDREW: Warren, related to this, one of the Berkshire companies is Business Wire. They reached a settlement along with PR Newswire and a couple of the others with the (New York State) Attorney General Eric Schneiderman about this idea of front-running — go ahead.

BUFFETT: I have to correct that, Andrew. They've reached no settlement. They had decided — I had decided, along with (CEO) Cathy Baron Tamraz, when an article appeared in the *Journal* about it, we always provided simultaneous distribution, and we continued to provide simultaneous distribution, but we did get rid of the five high-frequency traders who had no edge in the time at which they received things. But we got rid of them, in any event, but that was not pursuant to any settlement. That was a decision that was made at Business Wire.

ANDREW: I'm glad you cleared that up. What was the settlement part, then?

BUFFETT: There was no settlement. There was no settlement. We got — we made — I think there was an article late in the week in the *Journal*, and Cathy talked to me early the following week, and after assuring myself that they were getting totally simultaneous distribution, I said we don't need them. So we got rid of them.

BECKY: Gentlemen, let me ask a very quick — go ahead, Joe.

MUNGER: I said I love it. Wish there was more of it.

BECKY: Let me ask you quickly about the situation in Ukraine. How much time do any of you spend thinking about that? How concerned should we be from a geopolitical risk standpoint?

MUNGER: What in the hell do I know about the Ukraine? I — I'm glad I'm not making those decisions.

BECKY: Do you worry that it will spill over and affect business —

MUNGER: Well, of course you worry a little when you see a pattern that reminds you of Hitler.

BECKY: Right.

MUNGER: But basically, yeah, I regard myself as totally incompetent to judge what should be done.

BECKY: Bill, Warren, either of you want to follow up after that and say that you are more competent to make a decision on it?

BUFFETT: Totally. It's not hard to improve.

GATES: When you have a global economy, so when you have disputes between countries, like Europe's dependency on Russian gas, you sometimes will make — to make political points, you'll sometimes take economic pain, and it's a great debate, you know, what penalties should there be to discourage more take-over behavior. And you actually have the business community having one view and talking to the politicians.

I don't think it's going to get terrible, but it certainly would be high on the list of concerns right now.

BUFFETT: When you get a shift in boundaries, it can set other forces in motion and nobody knows what those forces may be. And there may be political popularity considerations. All kinds of things start happening.

So once you shake things up, you never can be sure, on international matters, what will be item 2, item 3, and item 4. They have their own dynamic.

So it's not a plus. And nobody knows how it's going to turn out. But something has been put in motion, and it would be nice to see it come to rest.

BECKY: We'll continue this conversation in just a moment. Andrew.

ANDREW: Thank you. And, Warren, I want to thank you for correcting me on the Business Wire issue. I also noticed some of the reporting has been bad on this. Eric Schneiderman applauded Business Wire and their decision to do this. It wasn't part of the settlement or any type of accord. Despite some of that reporting.

Coming up we've got a lot more coming up from Omaha, Warren Buffett, Charlie Munger, and Bill Gates. It doesn't get any better than that kind of conversation.

(Commercial break.)

BECKY: Welcome back, everybody. Some final thoughts right now from Warren Buffett, Charlie Munger, and Bill Gates. Gentlemen, in the commercial break I love your conversations that continue to go on. You were talking about Apple and Samsung; Apple just winning a minor court victory of $120 million to get paid. What I wonder is what you think of the patent wars. Charlie?

MUNGER: Well, when I was young, there wasn't much money that changed hands based on patents, and now they're hugely important. I think patents are too easily granted now. I don't think we need as much patent protection as we have. Bill will probably disagree.

BECKY: The patent office has had a hard time keeping up with technology. Bill, should people get paid for their creations and inventions?

GATES: Well, there's entire industries like the drug industry that only exist because if you invent something you're allowed some protection. The particulars of the system have gotten very complex, and you could talk about various improvements. But the idea that innovation in and of itself should be protected, you should get paid. That's been a very successful idea going all the way back to the steam engine.

BECKY: Bill, I do want to ask you, we talked a little bit this morning about how you are no longer the largest shareholder of Microsoft. You've been selling down that stake. Why is that?

GATES: I've sold for over a decade the same number of shares every quarter. That plan lasts through the end of this year. You know, I'm going to retain a lot of Microsoft stock, but the U.S. Treasury's done well, many billions of dollars. And you know, I'm excited about the stuff I'm doing at Microsoft right now, you know, re-examining all its strategies, and a lot of great work going on.

BECKY: Are you excited about the new CEO, Satya Nadella?

GATES: Yeah, Satya is off to an amazing start. He's drawing on a broad set of people in the company to get them to rethink how can Microsoft move a bit faster and really distinguish ourselves with things like Office 365.

BECKY: Let me ask you all about energy policy. I come back to this, Charlie, because you've said some things in previous meetings - maybe it was two or three years ago - that kind of changed my thinking about it, just the idea of whether or not we should be exporting natural gas and some of our natural resources. Your idea was that we should save it all.

MUNGER: Yeah, I'm totally against exporting natural gas. I don't like oil to be exported, either. I'm all for using up our oil more slowly and discovering it more slowly. I'm all by myself on this. I feel very lonely.

BECKY: Why is it that you think we shouldn't export it?

MUNGER: I think this stuff is utterly precious. I feel it's like the topsoil of Iowa. We don't want it to go away too fast. I also have old-fashioned capitalist ideas that intelligent, responsible people are always suffering now to make later better. I don't like making today great by making later worse.

BECKY: Warren, you agree with Charlie?

BUFFETT: Well, if I were in charge of running the United States for the next 500 years, I would want the ability to produce energy in a way that would take care of national defense under all circumstances. Because I would not want to be dependent on the rest of the world in that respect.

But if otherwise I could use up, you know, as important an item to the planet as energy and use the other guy's, and like I said, if I have responsibility for hundreds and hundreds of years, I would use the other guy's and trade him little pieces of paper for it. But I would always want to have an up-to-date national defense.

MUNGER: That's two of us, out of 300 million.

BECKY: Let me ask all three of you. All three of you are investors that spend a lot of time thinking about things. I wonder, with the

stock market hitting new highs, if that concerns any of the three of you, if things are starting to look expensive at these levels. Bill, what do you think?

GATES: Well, relative to interest rates, equities are still a bargain. And, you know, so you've really got to have an opinion about interest rates to be an investor of any kind in this market. It's such a key factor. You know, by historical measures, yes, interest rates were very different in most of those time periods.

BECKY: Have you been surprised that interest rates have stayed so low this year?

GATES: Well, the central banks are making sure that's the case. They are trying to stimulate these economies as best they can. The fact that it requires the gas pedal being pushed to the floor as much as it does is an amazing and even a little bit scary thing.

BECKY: Charlie, what do you think?

MUNGER: Well, I think under what Bill Gross calls the "new normal," common stocks may not do quite as well in the future as they did in the last 100 years. But that doesn't mean that the Mungers are going to sell their common stock in an effort to buy them back later cheaper.

BECKY: Warren, how about you?

BUFFETT: Well, the option is to own equities or own fixed dollars. I think it's clear you own equities. I do not think they're in crazy territory. But most of the time stocks have been in a zone of reasonableness over my lifetime. I think they're in the zone of reasonableness now. And certainly if you said to me it's either going to have to be long the 30-year bond and short an index fund for 30 years or vice versa, it would be long index fund. I would be long in stocks.

MUNGER: We all would.

BECKY: Gentlemen, I want to thank you all for your time today. We really appreciate it. That does it for us. Make sure you join us tomorrow. Right now it's time for Squawk on the Street.

Memo

To: Berkshire Hathaway Managers ("The All-Stars")

cc: Berkshire Directors

From: Warren E. Buffett

Date: December 19, 2014

This is my biennial letter to reemphasize Berkshire's top priority and to get your help on succession planning (yours, not mine!).

The top priority – trumping everything else, including profits – is that all of us continue to zealously guard Berkshire's reputation. We can't be perfect but we can try to be. As I've said in these memos for more than 25 years: "We can afford to lose money – even a lot of money. But we can't afford to lose reputation – even a shred of reputation." We *must* continue to measure every act against not only what is legal but also what we would be happy to have written about on the front page of a national newspaper in an article written by an unfriendly but intelligent reporter.

Sometimes your associates will say "Everybody else is doing it." This rationale is almost always a bad one if it is the main justification for a business action. It is totally unacceptable when evaluating a moral decision. Whenever somebody offers that phrase as a rationale, in effect they are saying that they can't come up with a *good* reason. If anyone gives this explanation, tell them to try using it with a reporter or a judge and see how far it gets them.

If you see anything whose propriety or legality causes you to hesitate, be sure to give me a call. However, it's very likely that if a given course of action evokes such hesitation, it's too close to the line and should be abandoned. There's plenty of money to be made in the center of the court. If it's questionable whether some action is close to the line, just assume it is outside and forget it.

As a corollary, let me know promptly if there's any significant bad news. I can handle bad news but I don't like to deal with it after it has festered for awhile. A reluctance to face up immediately to bad news is what turned a problem at Salomon from one that could have easily been disposed of into one that almost caused the demise of a firm with 8,000 employees.

Somebody is doing something today at Berkshire that you and I would be unhappy about if we knew of it. That's inevitable: We now employ more than 330,000 people and the chances of that number getting through the day without any bad behavior occurring is nil. But we can have a huge effect in minimizing such activities by jumping on anything immediately when there is the slightest odor of impropriety. Your attitude on such matters, expressed by behavior as well as words, will be the most important factor in how the culture of your business develops. Culture, more than rule books, determines how an organization behaves.

In other respects, talk to me about what is going on as little or as much as you wish. Each of you does a first-class job of running your operation with your own individual style and you don't need me to help. The only items you need to clear with me are any changes in post-retirement benefits, acquisitions, and any unusually large capital expenditures. But I like to read, so send along anything that you think I may find interesting.

* * * * * * * * * * * *

I need your help in respect to the question of succession. I'm not looking for any of you to retire and I hope you all live to 100. (In Charlie's case, 110.) But just in case you don't, please send me a letter or email giving your recommendation as who should take over tomorrow if you should become incapacitated overnight. These letters will be seen by no one but me unless I'm no longer CEO, in which case my successor will need the information. Please summarize the strengths and weaknesses of your primary candidate as well as any possible alternates you may wish to include. Most of you have participated in this exercise in the past and others have offered your ideas verbally. However, it's important to me to get a periodic update, and now that we have added so many businesses, I need to have your thoughts in writing rather than trying to carry them around in my memory. Of course, there are a few operations that are run by two or more of you – such as the Blumkins, the Merschmans, the pair at Applied Underwriters, etc. and in these cases, just forget about this item. Your note can be short, informal, handwritten, etc. Just mark it "Personal for Warren."

Thanks for your help on all of this. And thanks for the way you run your businesses. You make my job easy.

WEB/db

P.S. Another minor request: Please turn down all proposals for me to speak, make contributions, intercede with the Gates Foundation, etc. Sometimes these requests for you to act as intermediary will be accompanied by "It can't hurt to ask." It will be easier for both of us if you just say "no." As an added favor, don't suggest that they instead write or call me. Multiply 80 or so businesses by the periodic "I think he'll be interested in this one" and you can understand why it is better to say no firmly and immediately.

Notes from the Meeting Dr. George Athanassakos and Ivey MBA and HBA students had with Mr. Warren Buffett
Omaha, NB, February 27, 2015, 10:00 am - 12:00 pm

Question #1:
How do you pick winners (the right people)? How do you know they are the right fit for your company?

Answer #1:
I believe there are always winners but picking the right winner for my company is a challenge. I know an individual who is definitely going to outperform the S&P but he's the last guy on earth I'd want my daughter to marry. So first and foremost, you have to feel good around them, you must enjoy their company, like a friend or a family member. If you feel good around them, it means they have characteristics you admire and are moving in the direction you want to associate with. These people represent who you'd like to be and you may perceive them even as better than yourself. You can admire their behaviour or intellect but always judge them as a human being if you want to be their friend. These people do 10 things for every 1 thing you ask for; they go above and beyond what you expect of them. You want to associate with first-class people (like William Ruane, one of the classiest individuals).

Question 2#
What is your personal definition of 'success'? How has it changed over the course of your career?

Answer#2:
The saying goes that success is about getting what you want, while happiness is about wanting what you get. For myself happiness is more important. My goal was always financial independence; working for myself and finding a job where I admire the people I work with. I was interested in being in a position to control the decision making process. At age 25, I had enough money to live off of. I had two children and the equivalent of roughly $2M in today's money. Everything since then has been surplus.

As you move along in your career, you always want to consider your inner scorecard – how you feel about your own performance and success. You should worry more about how well you perform rather than how well the rest of the world perceives your performance. The success of Berkshire has always been more important than my own personal success in terms of financial returns. The most important takeaway is that you should always try to be a good person.

Question#3
How do you develop conviction for contrarian ideas? How do you perceive risk?

Answer#3:
At Berkshire we have certain filters that have been developed. If in the course of a presentation or evaluation part of a proposal or of an idea hits a filter then there is no way I will invest. Charlie has similar filters. We don't worry about a lot of things as we only have to be right about a certain number of things – things that are within our circle of competence. A great example is the Nebraska Furniture Mart that you visited this morning. Mrs. B took cash because she didn't understand stocks. It is important to know what I can do. I have no idea which company will dominate in the auto industry in the next 5 years so I don't pick. I prefer simple things in my circle of competence. Good decisions scream at you. For example in 2008 you shouldn't have been afraid just because assets were cheap. In your entire investment lifetime you may have 6 times when this happens and it is 'raining gold'.

With regards to risk, the Berkshire portfolio suffered a 2% loss once and had 1% losses twice in our history. This was all in 1974 and 1975 when we sold assets cheap to buy other assets cheaper. Stocks are riskless if held over a long time frame as you are simply giving up purchasing power now for later. Cash is the risky asset. Risk in stocks is not what the companies will do. Traditional finance teaches that Beta is a measure of risk but volatility isn't risk. Risk is loss of purchasing power. Volatility declines over a long enough timeframe. It is individuals that make investments risky. In our report that is due out tomorrow I talk about how risk needs to be rethought. People think stocks are riskier than bonds, which is not true for a long time horizon.

Question#4:
Have you ever made money on someone else's ideas?

My preference is for my own ideas. I prefer to find good companies trading at fair prices. You can make money on cigarette butt investing but this works better with small amounts of money and was more effective years ago. You can't build businesses out of cigar butts. I don't read analyst reports and, although I get served up many ideas I don't seek outside ideas. I stay within my circle of competence. Berkshire's AUM means the universe of potential investments is smaller even though good, attractively priced ideas are often poorly covered. For instance, recently I did screening of the Korean market and found a few interesting opportunities.

I used a 1950s (1951) Moody's manual by sector. There was some good stuff in the back on page 1433. Western Insurance was a company that I looked at. It had an EPS of $29 and the high price was $13. Nobody showed me this. So I checked it out with insurance brokers and it checked out OK so I bought into the company.

All in all, I prefer to read "raw" financial reports and talk to industry representatives.

Question 5: Both you and Mr. Munger are writing down your 50–year visions. What are these visions going to be?

Over the past 50 years, we've always focused on buying companies that are scalable. With the companies that we've acquired, we believe we have created something very scalable. We also have the right form, culture and business to grow at a reasonable rate over time.

Question #6:
How do you feel about income inequality?

Answer #6:
Income equality will get worse but the term income inequality is in itself flawed because implies that equality is something we should aspire to. We should aspire towards equal opportunity. But as capitalism moves forward, the bottom 10% or 20% will find themselves further and further behind. This is because society has become much more specialized. Back in the farming days, the income difference between someone with an IQ of 150 vs. someone with an IQ of 80 would not have been disastrous, since most people could do farm work. Then we moved into manufacturing, a bit more specialized, but still okay. Now the market structure is giving more advantage to people with particular skills. Take the example of boxing. Before the advent of TV, the best boxers may be getting six thousand dollars per fight. Now we have Manny and Mayweather, who will be fighting for hundreds of millions. Someone came along and invented TV, and then someone figured out how to promote the fight and make money.

Another big factor that affects income inequality is the tax code, which is largely skewed to favour the super rich. The top 400 gross income earners based on their tax returns pay less than 20% tax.

So the market system doesn't really address inequality. However, it is the best system that we have.

Question #7:
How would you characterize the state of corporate governance today? Do activist investors bring value to shareholders?

Answer #7:
If I were solely interested in attracting money as a new money manager, I would call myself activist investor as they are very popular now. As the numbers of activist investors grow, these managers are having more and more trouble finding companies to be active in. On the other hand, the self-cleansing method of management in companies has continuously failed.

One problem with activist investors is that they are sometimes only looking for a "pop" in the stock, so I personally do not like the short term horizon of some activists and would only back a small handful of activist investors.

The activist phase has not reached its peak yet and will be with us until activist funds stop making money. Wall Street pushes great ideas until they are silly. It is important to remember the limitations of ideas and once there are too many activist investors there will be problems.

Question #8:
With the rise of social media and constant information it seems students are losing the ability to sit down, think, and formulate their own thoughts like you have in the past. We prefer short bits of information to novels. Can you talk about whether you view this as a problem and the impact that deep and independent thought has had on your career?

Answer #8:
A good part of our success is that we spend a lot of time thinking. At Berkshire, we don't have any meetings or committees, and I can think of no better way to become more intelligent than sit down and read. In fact, that's what Charlie and I mostly do.

The teaching of efficient markets produces a disadvantage for students and a big advantage for those who read and try to find value. It personally give me an edge when other people are not paying attention to reading and thinking, and are instead on their phones. It means that I gain knowledge from reading a few 10-K's while others are tweeting what they had for breakfast.

I've seen a lot of change in my lifetime, especially among how people spend their time.

Question #9:
What are questions investors should ask but usually don't when evaluating companies

Answer #9:
Start by looking at 7-8 companies in the industry and ask the management typical due diligence questions. Also, ask the management of each company which competitor they would be willing to put their net worth in for the next 10 years. Then ask which of their competitors they would short. This will provide important insights into the industry that even those who work their whole life in the industry would not realize.

On a personal level, I recommend that people do this with the network of people they know.

Among your friends, who is one person you most want to emulate and who would you want to be least like. You can approach this by thinking about which of your peers you would want to own 10% of for the rest of their lives and which ones you would like to short. Then identify the qualities that make you want to emulate them and try to internalize those qualities. Do the opposite for the friends you would want to short. You are currently still young and can get rid of your bad habits, "The chains of habit are too light to be felt until they are too heavy to be broken".

Question #10:
Mr. Buffett, given Burger King's recent acquisition of Tim Hortons, can you comment on the potential for US companies to continue inverting into Canada?

Answer #10:
The primary reason for Berkshire being involved with 3G Capital was because they are good and trustworthy individuals, not for the tax benefit. The most federal income tax that Burger King has ever paid was approximately $30 million but their earnings are in the neighbourhood of $12 billion so the tax shelter benefits are negligible. Further, given that Tim Hortons earns 2x as much as Burger King and that the Canadian Government had to approve that the acquisition was a net benefit to Canada, this acquisition was not a typical tax inversion. That being said, to prevent further inversions in the future, I would not be surprised if corporate tax law in the United States were changed to prevent these inversions in the foreseeable future. However, as a result of numerous wealthy and influential individuals and organizations lobbying for preferential treatments the obstacles preventing such tax changes are large.

Question #11:
You mentioned Mrs. B earlier, and in your annual letter last year, you mentioned students like us could learn a lot from Mrs. B – what do you think are the top lessons we can learn from Mrs. B?

Answer #11:
Think about how improbable it is that a women walks out of Northern China, can't speak a word of English, and just out of proceeds of that $2,500 that she saved from selling used clothing for 16 years, she built a store worth close to $1B. There must be something to learn from that, because she didn't invent anything. She didn't have any money, store or training. Yet she won. Sam Walton is another example, compared to Sears in the late 1960s - 100 stores in Chicago, probably 20 million credit card customers, first call on every piece of real estate, unlimited financial resources, yet someone with a pick-up truck in Arkansas beat them.

Charlie and I love to read biographies, and what we like to ask is "what makes these people succeed and what makes the ones that fail?" I use Sears as an example to show the ABCs of failure – Arrogance, Bureaucracy and Complacency. And Sears had them all. When you build an organization that has been incredibly successful, you have to work extremely hard to fight off arrogance, bureaucracy and complacency.

One thing that Sam Walton and Mrs. B had in common is they had passion for the business. It isn't about the money, at all. It was about winning. Passion counts enormously; you have to really be doing it because you love the results, rather than the money. When we buy businesses, we are looking for people that will not lose an ounce of passion for the business even after their business is sold. And getting in bed with people like that is what it's all about.

Question #12:
In your 2013 essay, you stated that you were optimistic about the future of the US economy, in particular with regard to the role that women play in the economy. Could you expand on your thoughts from that essay?

Answer#12:
Before women and minorities were involved in the economy (i.e., pre 1920), America achieved a lot (GDP per capita increased, over a few decades, six times) with only half of its workforce. Imagine the types of gains that could be made using the full workforce. We have moved in the right direction over the past 15-20 years. My sisters have the same intellectual capacity, and have excellent personal attributes, but they never had the same opportunities being born at the same time as me, to reach the same level of success. Instead, they were expected to marry well. Even today there remains room for improvement. Only three of twelve directors at Berkshire are women. On March 5, 2015 I will release my sixth tweet ever which will have to do with an announcement related to female management.

Question #13:
What are some common traits of good investors?

Answer#13:
A firmly held philosophy and not subject to emotional flow. Good investors are data driven and enjoy the game. These are people doing what they love doing. It really is a game, a game they love. They are driven more by being right than making money, the money is a consequence of being right. Toughness is important. There is a lot of temptation to cave in or follow others but it is important to stick to your own convictions. I have seen so many smart people do dumb things because of what everyone else is doing. Finally good investors are forward looking and don't dwell on either past successes or failures but rather

look toward the future. Just look at history to see how bad things have been. We had World War 2 and a Civil War. This Country works!

Question #14
What customs have you witnessed overseas that American businesses should adopt?

Answer#14:
It is important to play with better players than you. The US is the best place to operate and you don't need to go beyond the US. It is easy to see success but it is more difficult to repeat the success. It is also important to study failure as much as you study success. In general, I find it very interesting to observe the market every day. For instance the 2008 crisis was a great movie and nobody knew how it would end. In my opinion China has changed their system to be more "US like".

Question#15
What will advance American competitiveness in the next 20 years? What are the biggest threats to that competitiveness?

Answer#15:
There is an abundance of information available these days, which is amazing. It's important to realize that everyone in this room is living a better life than John D. Rockefeller. In the next 20 years, we will be living incomparably better lives than we do now. I hesitate to think about the service my dentist provided me 20 years ago. At the same time, I'm sure that in 20 years people will feel the same way.

The drawback of growth, however, is that evil can leverage this progress to harm a significantly greater proportion of the population. I see the biggest threat to American competitiveness as represented by the acronym CNBC, namely Cyber, Nuclear, Biological and Chemical. By far the greatest threat to humanity is that of a Nuclear war. If I could allocate all my resources to effectively combat this threat, I would. Unfortunately there are very few effective channels that could effect this change.

Question #16:
Increasingly companies are reporting non-GAAP earnings that add amortization of intangible assets back to net earnings using the justification that intangibles such as software are 'non wasting' assets. Given that you have indicated in previous Berkshire annual meetings that companies try to dress up financial statements with EBITDA, could you provide your thoughts on this non-GAAP trend?

Answer #16:
This trend is seen to be more industry specific and management usually tries to convince you that some expenses aren't really expenses. It started with EBITDA. Depreciation is not only a real expense but the worst kind of expense because you pay it up front. Your plant and equipment is paid for upfront and companies record this cost over time as a non-cash expense. Amortization however may not always be a real economic expense, a strong example of this is customer relations as it doesn't diminish as fast as amortization if it does at all. Software development costs & stock options however, are a form of economic expense. When I hear companies talking about "Non-GAAP" I am very suspicious of what they do because "there really isn't only one cockroach in the kitchen."

Question #17:
What are the things that you need to be able to value a business?

Answer #17:
In order to best understand a company, you first have to understand the industry. Only focus on companies and industries you understand. Don't go outside your circle of competence. You need to know what the strengths of the company are in relation to the competition, if they have a good management team, and most importantly, what the moat is. If you don't know how many competitors the company has, do not invest in the company. Coke's moat is that it has no taste accumulation, and the moat of railroad companies are that no one can build anymore because of saturation. That is why I am currently invested in both industries.

Question #18:
You have expressed a commitment to philanthropy and have done this through the Gates Foundation and your children. Is there a particular cause that is important to you?

Answer #18:
I would ideally like to contribute to solving CNBC (Cyber Nuclear Biological Chemical) as I see it as the biggest existential threat to humans, but I have not found an appropriate vehicle to do so. In my early days, I had set up a fund to support my wife's foundation. Although she wanted to donate the excess cash that we had, I didn't want to lose the power of compounding. If I had donated $1 then, I could be giving up a $1000 in potential future donations, so it was really important to me to keep compounding my money.

I would not be efficient at all in doing philanthropy. That's why I outsource it to five foundations including the Gates Foundation and to my kids, who are a lot more passionate about solving world problems. I'd actually prefer to tackle a global issue and fail, than tackle a local one.

Money has no utility to me anymore as I am very happy with what I have but it has enormous utility to others in the world. More possessions to me would actually be a liability than an asset.

I am also trying to persuade more people to join the Giving Pledge, where individuals sign an agreement to donate more than 50% of their wealth after they die. So far, 127 people have signed up which is a great thing. The other day we got Mark Zuckerberg to sign up, which is a huge win for us because he'll go on to inspire many other young billionaires to donate their wealth, as they'll look up to him and do the same thing.

Better Than Raising the Minimum Wage

Help Americans who need it with a major, carefully crafted expansion of the Earned Income Tax Credit.

PHOTO: GETTY IMAGES/ILLUSTRATION WORKS

By **WARREN BUFFETT**

445 COMMENTS

May 21, 2015 7:12 p.m. ET

The American Dream promises that a combination of education, hard work and good behavior can move any citizen from humble beginnings to at least reasonable success. And for many, that promise has been fulfilled. At the extreme, we have the Forbes 400, most of whom did not come from privileged backgrounds.

Recently, however, the economic rewards flowing to people with specialized talents have grown dramatically faster than those going to equally decent men and women possessing more commonplace skills. In 1982, the first year the Forbes 400

was compiled, those listed had a combined net worth of $93 billion. Today, the 400 possess $2.3 trillion, up 2,400% in slightly more than three decades, a period in which the median household income rose only about 180%.

Meanwhile, a huge number of their fellow citizens have been living the American Nightmare—behaving well and working hard but barely getting by. In 1982, 15% of Americans were living below the poverty level; in 2013 the proportion was nearly the same, a dismaying 14.5%. In recent decades, our country's rising tide has not lifted the boats of the poor.

No conspiracy lies behind this depressing fact: The poor are most definitely not poor because the rich are rich. Nor are the rich undeserving. Most of them have contributed brilliant innovations or managerial expertise to America's well-being. We all live far better because of Henry Ford, Steve Jobs, Sam Walton and the like.

Instead, this widening gap is an inevitable consequence of an advanced market-based economy. Think back to the agrarian America of only 200 years ago. Most jobs could then be ably performed by most people. In a world where only primitive machinery and animals were available to aid farmers, the difference in productivity between the most talented among them and those with ordinary skills was modest.

Many other jobs of that time could also be carried out by almost any willing worker. True, some laborers would outdo others in intelligence or hustle, but the market value of their output would not differ much from that of the less talented.

Visualize an overlay graphic that positioned the job requirements of that day atop the skills of the early American labor force. Those two elements of employment would have lined up reasonably well. Not today. A comparable overlay would leave much of the labor force unmatched to the universe of attractive jobs.

That mismatch is neither the fault of the market system nor the fault of the disadvantaged individuals. It is simply a consequence of an economic engine that constantly requires more high-order talents while reducing the need for commodity-like tasks.

The remedy usually proposed for this mismatch is education. Indeed, a top-notch school system available to all is hugely important. But even with the finest educational system in the world, a significant portion of the population will continue, in a nation of great abundance, to earn no more than a bare subsistence.

To see why that is true, imagine we lived in a sports-based economy. In such a marketplace, I would be a flop. You could supply me with the world's best instruction, and I could endlessly strive to improve my skills. But, alas, on the gridiron or basketball court I would never command even a minimum wage. The brutal truth is that an advanced economic system, whether it be geared to physical or mental skills, will leave a great many people behind.

In my mind, the country's economic policies should have two main objectives. First, we should wish, in our rich society, for every person who is willing to work to receive income that will provide him or her a decent lifestyle. Second, any plan to do that should not distort our market system, the key element required for growth and prosperity.

That second goal crumbles in the face of any plan to sizably increase the minimum wage. I may wish to have all jobs pay at least $15 an hour. But that minimum would almost certainly reduce employment in a major way, crushing many workers possessing only basic skills. Smaller increases, though obviously welcome, will still leave many hardworking Americans mired in poverty.

The better answer is a major and carefully crafted expansion of the Earned Income Tax Credit (EITC), which currently goes to millions of low-income workers. Payments to eligible workers diminish as their earnings increase. But there is no disincentive effect: A gain in wages always produces a gain in overall income. The process is simple: You file a tax return, and the government sends you a check.

In essence, the EITC rewards work and provides an incentive for workers to improve their skills. Equally important, it does not distort market forces, thereby maximizing employment.

The existing EITC needs much improvement. Fraud is a big problem; penalties for

it should be stiffened. There should be widespread publicity that workers can receive free and convenient filing help. An annual payment is now the rule; monthly installments would make more sense, since they would discourage people from taking out loans while waiting for their refunds to come through. Dollar amounts should be increased, particularly for those earning the least.

There is no perfect system, and some people, of course, are unable or unwilling to work. But the goal of the EITC—a livable income for everyone who works—is both appropriate and achievable for a great and prosperous nation. Let's replace the American Nightmare with an American Promise: America will deliver a decent life for anyone willing to work.

Mr. Buffett is chairman and CEO of Berkshire Hathaway.

I have good news. First, most American children are going to live far better than their parents did. Second, large gains in the living standards of Americans will continue for many generations to come.

Some years back, people generally agreed with my optimism. Today, however, pollsters find that most Americans are pessimistic about their children's future. Politicians, business leaders and the press constantly tell us that our economic machine is sputtering. Their evidence: GDP growth of only 2% or so in recent years.

Before we shed tears over that figure, let's do a little math, recognizing that GDP per capita is what counts. If, for example, the U.S. population were to grow 3% annually while GDP grew 2%, prospects would indeed be bleak for our children.

But that's not the case. We can be confident that births minus deaths will add no more than 0.5% yearly to America's population. Immigration is more difficult to predict. I believe 1 million people annually is a reasonable estimate, an influx that will add 0.3% annually to population growth.

In total, therefore, you can expect America's population to increase about 0.8% a year. Under that assumption, gains of 2% in real GDP–that is, without nominal gains produced by inflation–will annually deliver 1.2% growth in per capita GDP.

This pace no doubt sounds paltry. But over time, it works wonders. In 25 years–a single generation–1.2% annual growth boosts our current $59,000 of GDP per capita to $79,000. This $20,000 increase guarantees a far better life for our children.

In America, it should be noted, there's nothing unusual about that sort of gain, magnificent though it will be. Just look at what has happened in my lifetime.

I was born in 1930, when the symbol of American wealth was John D. Rockefeller Sr. Today my upper-middle-class neighbors enjoy options in travel, entertainment, medicine and education that were simply not available to Rockefeller and his family. With all of his riches, John D. couldn't buy the pleasures and conveniences we now take for granted.

Two words explain this miracle: innovation and productivity. Conversely, were today's Americans doing the same things in the same ways as they did in 1776, we would be leading the same sort of lives as our forebears.

Replicating those early days would require that 80% or so of today's workers be employed on farms simply to provide the food and cotton we need. So why does it take only 2% of today's workers to do this job? Give the credit to those who brought us tractors, planters, cotton gins, combines, fertilizer, irrigation and a host of other productivity improvements.

To all this good news there is, of course, an important offset: in our 241 years, the progress that I've described has disrupted and displaced almost all of our country's labor force. If that level of upheaval had been foreseen–which it clearly wasn't–strong worker opposition would surely have formed and possibly doomed innovation. How, Americans would have asked, could all these unemployed farmers find work?

We know today that the staggering productivity gains in farming were a blessing. They freed nearly 80% of the nation's workforce to redeploy their efforts into new industries that have changed our way of life.

You can describe these developments as productivity gains or disruptions. Whatever the label, they explain why we now have our amazing $59,000 of GDP per capita.

This game of economic miracles is in its early innings. Americans will benefit from far more and better "stuff" in the future. The challenge will be to have this bounty deliver a better life to the disrupted as well as to the disrupters. And on this matter, many Americans are justifiably worried.

Let's think again about 1930. Imagine someone then predicting that real per capita GDP would increase sixfold during my lifetime. My parents would have immediately dismissed such a gain as impossible. If somehow, though, they could have imagined it actually transpiring, they would concurrently have predicted something close to universal prosperity.

Instead, another invention of the ensuing decades, the Forbes 400, paints a far different picture. Between the first computation in 1982 and today, the wealth of the 400 increased 29-fold–from $93 billion to $2.7 trillion–while many millions of hardworking citizens remained stuck on an economic treadmill. During this period, the tsunami of wealth didn't trickle down. It surged upward.

In 1776, America set off to unleash human potential by combining market economics, the rule of law and equality of opportunity. This foundation was an act of genius that in only 241 years converted our original villages and prairies into $96 trillion of wealth.

The market system, however, has also left many people hopelessly behind, particularly as it has become ever more specialized. These devastating side

effects can be ameliorated: a rich family takes care of all its children, not just those with talents valued by the marketplace.

In the years of growth that certainly lie ahead, I have no doubt that America can both deliver riches to many and a decent life to all. We must not settle for less.

Giverny Capital Inc.

2001 ANNUAL REPORT

[Note: This annual report has been translated from my native French for the benefit of English Canada, USA managers, friends, and potential clients.]

For the year ending December 31st 2001, our return was 15% compared to 0% for our benchmark (a weighted combination of five indexes, three American and two Canadian) and –6% for the S&P 500. These returns all include around +5% due to the variation of the Canadian dollar.

Since starting the fund, September 1st 1993, our annual return has been 23.5% compared to 13.6% for our benchmark and 15.9% for the S&P 500.

Year	Giverny	Benchmark *	+/-	S&P 500	Vs S&P
1993-1994	**25%**	4%	20%	8%	17%
1995	**50%**	24%	26%	36%	14%
1996	**27%**	23%	4%	21%	6%
1997	**40%**	29%	11%	39%	1%
1998	**20%**	19%	1%	38%	-18%
1999	**13%**	16%	-3%	14%	-1%
2000	**13%**	3%	10%	-6%	19%
2001	**15%**	0%	16%	-6%	21%
Total (in Canadian $)	**481%**	**190%**	**291%**	**242%**	**239%**
Annual return	**23.5%**	**13.6%**	**9.9%**	**15.9%**	**7.6%**

* : Weighted combination of 5 indexes including the S&P 500 in the US and the TSE 300 in Canada.

These results are good but not as good as they look. The continuous fall of the Canadian currency since 1993 has added around +3% per year to our annual return. It is interesting to note though that our return has been quite similar for our Canadian securities and our U.S. securities, which is about 20% a year.

These results are in line with our initial objectives, which were stated in 1993 as “a 20% annual return and/or 10% better than the indexes”. At that time, there were much more opportunities than today (we could then buy great companies at less than 10 times earnings). Also, I was younger and less realistic than I am today! To illustrate how ambitious (and unrealistic) this objective was, we can remind ourselves that very few money managers over the years have sustained 20% annually. Over the last 10 years, only 7 mutual funds in the U.S. (out of something like 7000) have returned 20% a year. And they are 7 specialized funds. For general equity funds, only 9 funds have returned more than 18% a year for the last decade.

In a recent Fortune article, Warren Buffett explained why stocks in aggregate are destined to return much lower gains in the next decade. Of course, it's hard to come out with precise figures but something like a range of 5 to 8% a year would look realistic to both Mr. Buffett and me. Making 20% a year in such an environment is close to impossible. Even making 5% more than indexes is a very ambitious goal. But this is what we'll aim for in the next decade. So we would be very happy to earn 10-12% on our capital in the next years.

Even if these new objectives look more realistic, I could be wrong in more than one way. I can't promise results, both for stocks in general and for our relative performance. You can be certain of at least one thing though: I have my own money in the same stocks as you. So we're in the same boat! Many investors would concur that they sometimes have their counselors ride in yachts as they are still sailing in rowboats. This is not the case at Giverny Capital.

The Year 2001

The year 2001 was the first one since we've started this fund that "our boat" sailed through the rough water of a recession. As soon as we decide to become a businessman (woman) – and this includes owning part of companies which are commonly know as "stocks" – we have to accept one fact of life: recessions are inevitable in our capitalist system. That's why I look for businesses that should survive these kinds of periods (although thinking they are "immune" is most of time an illusion) and even perhaps increase their market share as weaker competitors go under! It's during these periods that we can distinguish winning companies from the other kind.

The steep decline that followed the September 11 attacks and the subsequent rise of stocks remind us that, in the universe of stock markets, it is better to buy in rainy days than in sunny days. Because when the sky is all blue, stocks are often changing hands at prices that *reflect* the fact that a majority of investors (!) believe that the sky will stay blue forever. In recessions and other crisis, it's the opposite: many will sell their stocks at any price thinking that never again will the blue sky return. To be able to keep in perspective stock market's sunny days from rainy days is a quality that is quite useful to develop.

Technology stocks

In the fascinating world of technology stocks, the depth of the decline in 2001 is only equal to the boom years of 1999-2000. Fabulous excesses (see the 1999 annual report) that existed in the Internet universe have vanished. In fact, not only has the excesses vanished, many companies have vanished themselves. Businesses that are linked to the semi-conductor universe have seen their revenues fall by 50%. Those within the telecom industry have seen similar fall but they were worsened by the high level of leverage. Many of these companies are losing money and for a lot of them, survival is now a daily fight. At this moment, there are few signs of a recovery. But in the long run, there is no reason to believe that the "technological

revolution" has ended. It is – in my opinion – probably only a pause but it's a deep and long one. Patience seems in order.

In spite of this, over the years we have done quite well with our technology businesses. We had purchased some at very attractive level. For example, we bought Intel [Q:INTC] at 9 times earnings and Sun Microsystems [Q:SUNW] at 5 times in 1994. Although, we did sell at some point most of our shares of such enterprises (see the 1999 report again!) at prices that carried very high P/Es, the main problem in technology stocks is not valuation in itself. It is the changing nature of the businesses (and so the valuation that is attached subsequently to it). And it's even truer today than any time before: product cycles are now often less than a year. For example, Cisco Systems [Q:CSCO] had to take a $2 billion inventory charge in a single quarter. In such an environment, it is hard to have even a faint idea of what a technology company will look like in 10 years.

I still believe that the Internet is probably the most important industrial revolution in many decades. But we still have to be very selective because a growing industry is not synonymous with profitability. On the contrary. To have a little perspective on that, here is a passage of a *Reader's Digest* article published in October of 1983 entitled "The computer: the servant of the future":

It is believed that annual sales of personal computers will go from $350 million (M) in 1983 to some $2 billion (G) in 1987. In June 1982, Commodore was the market leader with 23,000 units sold for $28M followed by Apple and Tandy with $20M each. But new comers are plenty: Atari, Timex Sinclair and Coleco are now looking for a piece of the action. Also, Osborne is now putting on the market a portable computer that could be stored in an attaché-case.

This article – would you believe? - is only 18 years old. Sales growth of PCs turned out to be much higher than anticipated even by the most optimistic forecasters. And what kind of return would an investor had received would he had bought all the companies mentioned? Probably, he would have lost almost all of his investments? The best stock would have been Apple Computer [Q:AAPL], which is today still the same price as it was 15 years ago (and they stopped paying dividends in 1997).

But it is good to know that some technology companies did manage to do very well over the years and even overcome profound changes in their environment. Companies like Hewlett-Packard [N:HWP], Motorola [N:MOT] and Texas Instruments [N:TXN], which became public in the late 1950's, have rewarded their investors enormously. Motorola, for example, has returned 20,000% over 44 years (a stock that Philip Fisher has held – to my knowledge – since the beginning) even if the stock is at the same level as 8 years ago. Some companies did build business models that are quite solid and moats around their castle that are – in rare case – quite large. Microsoft [N:MSFT], Applied Material [Q:AMAT], Intel and even a smaller company like Cognex [Q:CGNX] comes to my mind.

But like "traditional" businesses, five factors have to be taken into consideration when judging the fundamentals of technology companies:

- The business model (market share, product innovation, etc.).
- The financial (balance sheet and profit margin) structure.
- Quality of management.
- Long-term growth perspectives (which are linked to the first three).
- Market valuation compared to intrinsic value.

Of course, without having clear views of the first four factors, the valuation exercise is futile. Past profits only rewards past investors not today's buyers. And it is future earnings that make up intrinsic value.

Even though it is an hard task, my electrical engineer background has helped us (so far) make decent returns in that universe. So we did take advantage of the "crash" in NASDAQ securities to buy back two companies that we sold almost entirely in 1999-2000: Cisco Systems [Q:CSCO] and JDS-Uniphase [Q:JDSU] (I've written in length about these two companies in the 1997 and 1998 annual reports). So we still have something like 20% of our capital invested within this fascinating universe.

Our businesses

I have the simplest of taste : I only like the best. - Oscar Wilde

M&T Bank [N:MTB]

Our largest holding is - as it was last year - M&T Bank. 2001 was another great year for our Buffalo bank: EPS were up 13%, return on assets were 1.7% and return on equity at 28%. It would be hard to find a better banker than Robert Wilmers (although Fifth Third Bancorp's management is quite outstanding). I've rarely seen such a strong business performance (EPS CAGR of 18% since 1982) that is so unknown. And M&T is much bigger now than a few years back (at that time, it was called First Empire State). M&T has now $27 Billion in assets and a market capitalization of around $5B. And even though they have this superb financial track record, outstanding management and rock-solid balance sheet, the stock still trades at 14 times earnings, even after an increase of 100% in the last months.

Cognex [Q:CGNX]

We have owned Cognex since 1996. I've talked to you about its CEO, Robert Shillman, many times over the years. After a great year in 2000, Cognex could not escape its industry problems in 2001: sales were down 50% and profits almost nil. But what matters really is the moat around its castle. And I can tell you this: before the current downturn, Cognex had little competition (now very few down from 120 when it started). After the current "depression", Cognex should emerge with an almost monopoly. But until that glorious day comes, it is good to keep in mind that the company has no debt and around $300 million in the bank ($6.6 per share

versus a year end close of $25.6 for the stock). The company bought back some stock in 2001 and so did we.

Bed Bath & Beyond [Q:BBBY]

The year 2001 was not easy for many retailers. But our most important weighting in that industry did quite well. Bed Bath & Beyond increased its EPS by 27%. We first acquired shares in 1998 during the "Asian" crisis (along with shares of another retailer, Fastenal). Since then, the stock has tripled: high growth in EPS combined with an expanded P/E is a joyful experience.

Those who know me, know how much I like good stories (particularly when the "hero" becomes rich!). The story of BB&B and of its two founders is quite interesting. At the end of the 1960's, Warren Eisenberg and Leonard Feinstein, two employees of Arlans, decided to start their own houseware store. In 1971, Eisenberg opened a small store in New Jersey near his house. Feinstein did the same in Long Island. The first years were hard (as it is for most businesses) but after six years, they decided to open a third store. Both men had a golden rule: never would the company use debt to finance its expansion. So the growth was – at first – quite slow. The business plan was simple: when they had enough money in the bank, they would open a new store. So in 1985 they had 22 stores and in 1987, the opened their first "superstore". The secret of the company was simple: they had a decentralized structure combined with a great level of autonomy for their store manager.

With 37 stores in operation, BB&B came public in 1992 at split-adjusted price of $1 per share. In 9 years, stores count increased 10 fold (still without debt). EPS grew 30% per year (12 fold) and market value increased 20 fold. To illustrate how rare such a performance is, we can look at old charts of Wal-Mart's [N:WMT] and see that they grew from 1985 to 1994 at a 27% annual rate. Even Kohl's [N:KSS], the latest superstar of retailers, has grown "only" by 28% a year since 1992. But, its growth potential is not as impressive as Wal-Mart's: management believes that they could grow to 800 stores in the U.S. So for the time being, growth projections are still quite good. Since 1992, the stock has changed hand at quite high P/Es. It looked warranted so far but a few times, every two years or so, the stock loses some ground and we can increase our investment at attractive levels (mostly for new partners). So we bought shares of BB&B again when the market reopened (following 9/11) at the end of September.

Yahoo! [Q:YHOO]

My purchase of a small weighting in Yahoo! at the end of 2000 was – to this day – not particularly rewarding. The company went from a "sure grower for many years" to one with sales down 30% and profits vanished. I still think that the company does have some important franchise value and that the long (long) term perspectives are impressive. But as for all other tech stocks, patience is needed. And it is also a little soon to view Yahoo!'s purchase as a mistake.

Progressive Corp [N:PGR]

In 1999, I've explained in length the reasons behind the purchase of shares of this Ohio car insurer. These reasons are unchanged. We are partners with great people that are building an impressive business that even challenges GEICO in direct selling. Progressive is now the number one car insurance seller on the Internet . After two difficult years, profits were solid in 2001 and the stock has more than doubled since our purchase.

Le Groupe BMTC [T:GBT.A]

In the U.S., there are much more quality companies than in Canada. On the other hand, disparities between intrinsic value and market value are often quite large in Canada. So "value" investors can make a good living in Canada although our own way of seeing value as a long-term economic wealth creation is more an handicap in Canada. That is because very few companies in Canada have sustained high EPS growth for many years. The ideal situation would be to find a great business by U.S. standard at a Canadian price! Many years ago, we did find it in BMTC Group.

We first purchased BMTC in 1995 (the day of the Quebec referendum) at $3.50 per share. In 7 years, the stock has increased 5 fold (26% a year) to close at $17.50 in 2001 (the company made a dutch tender offer of $18.50 to $21 at the beginning of 2002 and the stock climbed to $22). Not bad for a company that a client once referred as "dead wood" (isn't it the kind of wood that makes the best fire?). The secret of the success of BMTC? As most of the time, it is a great CEO: Yves Des Groseillers.

Although we did well over the years, the stock's rise has not been linear at all. At the beginning of 2001, the stock was at $9, its lowest level in three years. During that time frame, EPS had increased from $1.00 to $1.80. Since the company had around $2 a share in cash, BMTC was trading at something like 4 times earnings. It would have been quite a challenge to find such a business in the U.S. at these kinds of ratios. But our patience did prove rewarding. BMTC is now our largest Canadian investment.

The (few) transactions of 2001

We don't like to sell. Like Philip Fisher, we would like to research and buy so well we never have to sell, but we did some selling in 2001. First, we sold what was left of the shares of Hewlett-Packard we did not sell in 1999-2000. The company is in a kind of existential crisis and is looking for new ways to grow, not necessarily intelligent ways! Clearly, the PC business has not been good for HP. So instead of recognizing their mistake and get out, they decided to buy out Compaq (although I sold months before this announcement). Mr. Warren Buffett used to say: "When you're in a hole, the worst thing to do is continue to dig". I'm curious to see how the merger will work out…although we will watch the outcome from the stands.

We also sold, late in the year, our shares of Liquidation World [T:LQW]. We had held these shares for eight years and made five times our money. But I think that there could have been even more potential. When we bought the stock, LW had only 15 stores and they're up to 95 now. But lately, growth has slowed. From 1993 to 1998, annual EPS growth was 33% but from 1998 to 2001, it was only 4%. Philip Fisher insisted on one important factor that often prevents small companies from becoming large companies: depth in management. Liquidation's CEO, Dale Gillespie, is a great businessman (and a great human being) but running 50 stores is one thing; running 250 stores is another. I think that – in its present form - the company can probably grow 7 to 10% a year. That is not enough for us to attain our ambitious objectives.

We acquired shares of two new companies, both in the technology field. The first one is a company I've been following since 1998. In the annual report of that year, I've written in the section "Mistake *du jour*" that I considered buying shares of Vitesse Semiconductor [Q:VTSS] at $9 in October of that year. The stock had doubled quickly afterward. In the years that followed, the company continued to show impressive growth combined with net margins of 30%. The stock touched $100 at the beginning of 2000. It failed to $15 in April of this year and I started to buy some shares. Vitesse is a leader in high-speed integrated circuits. Lately, it has developed a new IC technology for products that could carry information at 48Gbs (48,000,000,000 bits per second) or OC-768. At such speeds, silicon begins to falter. Vitesse is using for such speed a new material called Indium phosphide. Although, Vitesse is a solid company, the risk is far from low. Applied Micro Circuits – for example – has a different approach (entirely based on silicon) and could eat Vitesse's lunch at some point. But up to this point, Vitesse has a tremendous track record.

We also acquired shares of Level 3 Communications [Q:LVLT]. Level 3 has built - at a cost of $14B - one of the World's best optical networks. The company is not profitable yet and has lots of debt. So, it is not typical of our holdings. It is my grand admiration for Walter Scott Jr. that made me break my own rules. James Crowe, Level 3's CEO, built a few years back the successful company MFS Communications (bought out by WorldCom – or was it still named LDDS Communications at that time? – in 1996). Mr. Scott Jr. is on the board of directors of another of our holdings, Warren Buffett's Berkshire Hathaway [N:BRKb].

Level 3 went from $130 in 2000 to $12 at the beginning of 2001. At that price, it seemed to me that the risk-reward ratio was in our favor. I knew that the risk level was high. And I was not wrong. The stock continued its slide to $2 to end the year at $5. Lately, the company bought back around a quarter of its debt at 30 cents on the dollar. So I felt a little more secure and increase our holding. Our cost is now $6.50. But considering the risk involved, I decided to limit the weight in our portfolios to 3%.

Owner's earnings

As you know by now, Giverny Capital is not like other money management firms. We evaluate the quality of an investment by focusing on the growth in intrinsic value instead on market price. Growth in intrinsic value in one year is based on the growth

in EPS and changes in the long-term perspective of this variable. In the long run, the stock market tends to reflect those two parameters.

In 2001, our portfolio return was 10% (without changes in currencies). Our owner's earnings were down 10%. It is – by far – our worst year since 1993 but we could find some comfort in the fact that the companies that make up the S&P 500 have seen their earnings, in aggregate, fall by around 23%. Our median ROE was around 18%, which is not too bad. Our long-term objective is a combined ROE of 20%.

For 2002, I expect strong growth in our earnings. Our stocks are trading at around 20 times those predicted earnings. This level of valuation compares to 19 times for long bonds (yield of 5.4%) and to 22 times for the S&P 500. So the near term potential for stocks in general (including our own) looks very limited (of course, it is not a market prediction in any way, a futile activity that is widely spread worldwide).

Our portfolio continues to be highly focused. Ten stocks make up 75% of our fund's value. We owned these ten companies last year. At Giverny Capital, focus and low turnover goes hand in hand. In fact, we have owned four of these ten stocks for more than five years now.

Our investment philosophy doesn't reflect the conventional approach toward portfolio management. To own few stocks, to avoid some industries that we know nothing about and to ignore market fluctuations is a sensible approach but that is far from being widely used in the industry. But that doesn't disturb us a bit: since our beginning we have known that "being different" is the first ingredient of success (although there are many other ingredients needed!). I was very much influenced by John Templeton's maxim: "It is impossible to obtain a performance superior to the average unless you do *something different* from the average".

Mistake *du jour*

This yearly tradition in our annual report was very much influenced by Berkshire Hathaway's 1989 annual report. In it, Warren Buffett itemized his most important mistakes "of the first 25 years". I enjoyed this chapter so much that I decided to work hard to create "material" for this section of our annual report (on an unconscious level).

Seriously, as usual, this section could be quite long. Last year, I decided to attribute three yearly medals in honor of our Olympic tradition!

Bronze Medal: Mattel [N:MAT]

I've had a long relationship with this company. First, as a child, I was in contact with many of its products. Barbie, Fisher-Price and Hot-Wheels are brands that I can understand their strengths and weaknesses (I want to add that I've never owned a Barbie!). When I bought shares of Mattel five years ago, I had studied its history since the beginning (I've even bought a nice pink book on the history of Barbie!). I had read old Value Lines and all the annual reports I could find. So I got to know all

about their problems in 1973 and in 1983 and the fantastic turnaround orchestrated by John Amerman in 1988 (in 10 years, earnings went up 10 fold). This turnaround was helped by a brilliant leader at the Barbie division: Jill Barad.

Miss Barad became CEO in 1998. Capital allocation is a different talent than salesmanship (or I should say saleswomanship). That could be the reason that she made a enormous mistake at that time by purchasing *The Learning Co.* I decided to sell all our shares at $24 at that moment. In 1999, the stock fell as low as $10. In our annual report of that year I wrote: "For now, we won't buy shares even at this depressed level. If there is some cleaning done at some point, we could become shareholders again in the future. We never know!".

And I've continued to follow the story from the stands. Miss Barad was kind of fired and Mr. Robert Eckert, ex-president of the Kraft division at Philip Morris [N:MO], took over. Since I had owned Philip Morris in the past, I was well aware of Mr. Eckert's brilliant work at Kraft. As Mattel's CEO, he quickly did the right things: he "gave away" The Learning Co. and focused the company back into promoting and building its strong brands. He also reduced the debt level. Strangely, for months, the stock did nothing and stagnated at $10. To me, the EPS power was at least $1.25 to some point in 2003. So, the stock looked to me as trading at half its intrinsic value. I've even talked about it to some friends as an example of a great turnaround. Suddenly, the stock went up 70% to attain $17. You and I did not make a dime on it because I never bought any shares back.

I'd like so much to give you some excuse for this mistake. But I can't find one.

Silver Medal: Health Management Associates [N:HMA]

We had owned shares of HMA (which owns and manages rural hospitals in Southern United-States) for a year or so in 1999. The company has a focused business plan and a long-term horizon in its management. Most importantly, they take good care of their clients (patients), the communities involved, their employees and their stockholders. I had sold in early 2000 because the company had released a so-so quarter but most importantly because there were some new laws for Medicare reimbursement being discussed in Washington for which I could not precisely weight the effects on HMA. Being a Canadian is a handicap in understanding U.S. legislation (although many Americans would perhaps admit they don't understand either). But HMA had a business model solid enough to withstand such changes and earnings rebounded. The stock went up 50%, which – in a year of a bear market – is quite impressive. So in light of the recent results and continued strong prospects, I decided to buy our shares back. But we paid 25% more than the price we had sold at. Clearly, I lacked patience toward a good company that deserves our capital.

Gold Medal: First Data Corporation [N:FDC]

Mattel and HMA were minor mistakes compared to my decision to sell First Data in 1999, at $45, a small profit compared to our 1997 purchased price of $35. This was a major mistake. If I had to teach a course on how to build an ideal business model

– with 4 or 5 other examples – I would first teach about First Data. First Data gets of few dollars for almost every card transaction (debit or credit) in the U.S., first from the card issuer and then from the merchant that sold the service or the product. Beyond intrinsic growth in the traditional consumer market, First Data is a strong player in Internet transactions. But – strangely – the best business of First Data is the old Western Union. WU has a near monopoly in the cash-transfer industry. It kind of sounds dull but this market is growing quite fast. Around 20% of Americans do not have a bank account. Most of these are immigrants that still send lots of money back to their former countries, where they often have families that are still there.

Back in 1997, I studied FDC's fundamentals in detailed. I had concluded that it looked like an investment with very promising long-term rewards. I started to buy shares. But in 1998-99, the company had some problems and had to do some changes in its business model. Certain businesses they had acquired from First Financial Management we're divested but still, FDC's growth seemed stalled. I decided to sell and invest in something else! Selling at that time was not that bad a mistake (just a small one!). But at the end of 2000, I was still following FDC and the fundamentals looked good again. Growth had returned to its former level but the stock was still trading at a very reasonable valuation. I then wrote an article in "Les Affaires" newspaper on the improved perspectives of the company. But why didn't I buy back the shares previously sold? I would have paid about 20% higher than the price at which I had sold. Suddenly, the stock moved up and almost doubled in an 18 months time frame.

Patience Patience Patience

In my free time, I listen to some old Wall-Street Week TV shows (I keep quite an extensive personal archive). In 1996, Louis Rukeyser interviewed the legendary Philip Carret and asked him what was the most important lesson of his 75 years of experience. Carret answered just one word: "Patience". As my three medals this year demonstrate clearly, lack of patience is still a main cause for economic losses.

Conclusion : «The Art of Investing »

Pierre Péladeau, the famous Quebec businessman (now deceased), used to say, « Business is an art ». It's a *cliché* but what he probably meant is that being a good businessman requires mind opening, creativity and lots of patience. Also, being a master artist is often being a contrarian (although you rarely see this label on art movements) or in other words: to rebel against what is perceived as conventional. The Montreal artist Marc Séguin said this very short phrase on Art: "It's an affirmation. Period". In that line of thinking, an artistic stock picking method would then be an affirmation by the manager on the kind of companies that are, in his eyes, at the *avant-garde* of businesses: Those companies (and people) that will create the wealth of tomorrow. And with time, the really artistic manager tends to develop his own personal way of selecting stocks and building portfolios. The famous investor Philip Fisher, then 89 years, said in a Forbes interview in 1996: "I want to know: Who is working on the things that others are barely aware of? I want companies that

welcome dissent, rather than stifle it, that don't penalize people who criticize what management is doing". Philip Fisher is not just a great artist, he is a master!

Like art, portfolio management can rarely be done in teams (or worst in committees). We can add experience but we lose in personal creativity. Like Warren Buffett once said: "My vision of a group decision is to look into a mirror". Good artists also know that their number one enemy is the comfort that celebrity and success can bring. Marc Séguin added that after a successful show, he then would start on a totally new pictorial path. So to really continue to move forward, as a money manager, we have to find a balance between two emotions that are seemingly opposite: Self-confidence and humility. Of course, self-confidence is crucial to properly judge a company and its leaders. Also, it is the cornerstone of the huge patience often needed for a stock to be rewarding. Moreover, without self-confidence, it can be quite challenging to be able to purchase a stock that Wall Street rejects (and these are sometimes the best buys).

But at the same time, humility is widely needed: at the moment of analysis (to be humble enough to recognize what you know from what you don't), when errors occurs and also – ironically – after one or two great years of performance. The market has a way of punishing, rapidly and severely, lack of humility.

Humility is important because it is the essence of reason. The famous philosopher Eric Fromm explained why in his marvelous book "The Art of Loving":

"*The main condition for the achievement of love is the overcoming of one's narcissism....The opposite pole of narcissism is objectivity; the faculty to see things as they are...The faculty to think objectively is reason; the emotional attitude behind reason is that of humility. To be objective, to use one's reason, is possible only if one has achieved an attitude of humility, if one has emerged from the dreams of omniscience and omnipotence which one has as a child. I must then try to see the difference between my picture of a person and his behavior, as it is narcissistically distorted, and the person's reality as it exists regardless of my interests, needs and fears*."

What can be said about the art of love is true in the art of investing. In fact, genuine love - in a more personal way – is an essential part of any human creation. Woody Allen once said: "In order to be a jazz musician, you have to listen to a lot of jazz. And that's an act of love. You don't think, I'm listening to study it. You just listen because you love it…and gradually you learn. You really learn everything valuable through osmosis. It's the same with play-writing or movie-directing or acting. You love either reading or watching films or plays or listening to music. And in some way, over the years, without making any attempt, it gets into your blood, into the fiber of your body".

The art of investing is made out of the same framework.

I wish you the best of times for 2002.

François Rochon

President and money manager.

Giverny Capital Inc.

We welcome additional clients so please pass this annual report along to interested parties.

Giverny Capital Inc.

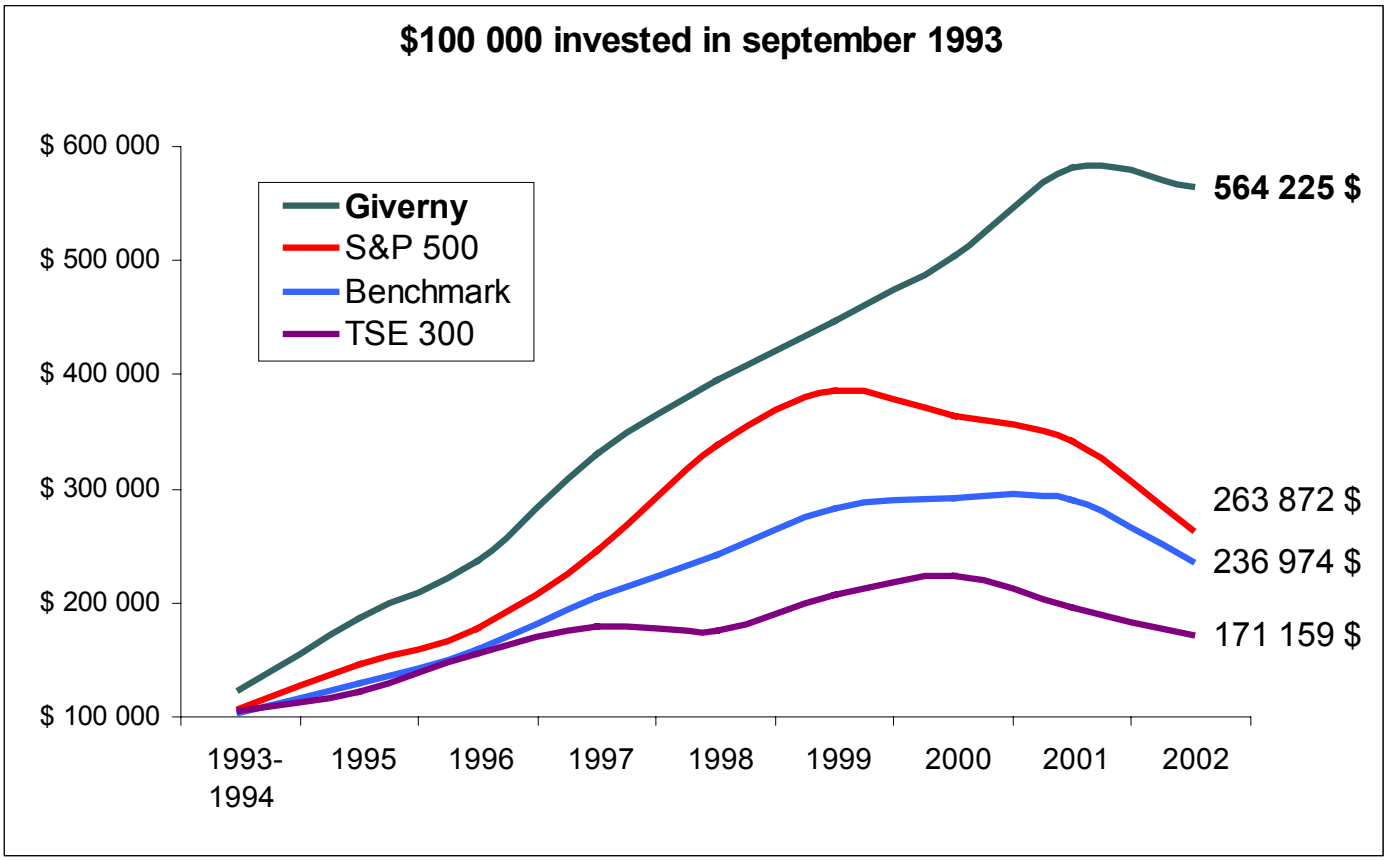

Annual Report 2002

Giverny Portfolio – Annual Report 2002

For the year ending December 31st 2002, our return was -3% compared to -18% for our benchmark and -23% for the S&P 500. These returns all include around -1% due to the fluctuation of the Canadian dollar.

Since starting the fund, September 1st 1993, our annual return has been 20% compared to 10% for our benchmark and 11 % for the S&P 500.

Year	Giverny	Benchmark *	+/-	$ Can/US	S&P 500	Vs S&P
1993-1994	25%	4%	**20%**	7%	8%	**17%**
1995	50%	24%	**26%**	-1%	36%	**14%**
1996	27%	23%	**4%**	-1%	21%	**6%**
1997	40%	29%	**11%**	4%	39%	**1%**
1998	20%	19%	**1%**	7%	38%	**-18%**
1999	13%	16%	**-3%**	1%	14%	**-1%**
2000	13%	3%	**10%**	4%	-6%	**19%**
2001	15%	0%	**16%**	6%	-6%	**21%**
2002	-3%	-18%	**15%**	-1%	-23%	**20%**
Total (in Can $)	**464%**	**137%**	**327%**	**29%**	**164%**	**300%**
Annual return	**20.4%**	**9.7%**	**10.7%**	**2.7%**	**11.0%**	**9.4%**

* : Weighted combination of 5 indexes including the S&P 500 and the TSE 300.

As I said last year, these results are good but not as good as they look. The continuous fall of the Canadian currency since 1993 has added around +2.7% per year to our annual return. It is interesting to note though that our return has been quite similar for our Canadian securities and our U.S. securities which is about 18% a year.

The year 2002

As you may have noticed, the year 2002 was again difficult, for corporations and investors alike. At the bottom of September, the total lost for the S&P 500 since March 2000 was more than 50%, its biggest decline since 1973-74.

On the other hand, our portfolio's return – although not positive in absolute dollars – was 15% better than our benchmark. These results should be considered satisfactory since our long-term objective is to obtain an annual return 5% better than the indexes. Also, for the third year in a row, we did almost 20% better than the S&P 500, a phenomenon we will probably never live again in our lifetime.

In a bear market, we can read all sorts of stories to explain stocks collapse. But in fact, the abrupt fall of the S&P 500 and the NASDAQ in the last three years can be linked primarily to a general shrinkage in P/E ratios. In the 1998 annual report, I explained why I believed that the "smaller stocks" would do better in the future than the largest capitalization of the S&P 500. I noted at that time that the valuation differences were astronomical. The largest 40 companies in market cap – which represented

50% of the weight of the index - were trading at 33 times earnings and all the other 460 were trading at around 18 times. Lately, this gap has been rectified. Now, stocks in general trade at around 17 times earnings which – in an environment of long-term bonds of 5% – looks quite reasonable.

As I often mentioned in the past, I must add this warning: It would be unrealistic to think that odds favor us in maintaining a 20% annual return in the future or even a 5% added value versus the indexes, our ambitious goal. But as I promised you since day one, I have my own money in the same stocks as you do, so we're in the same boat. Our boat, I must add, is bigger than last year. From 1993 to 1997, we were four partners (at that time the model portfolio was called the Key Fund). When I founded Giverny Capital in 1998, we were eight partners (the name we give to "clients"). At the end of last year, we were up to 20. At the end of 2002, we are now up to more than 100 partners (knock on wood!).

The Rule of Three

In every bear market, we see lots of investors throwing out the towel! They swear to never touch stocks again…until the next bull market. Since day one, I emphasized how inevitable stock market corrections are. I even wrote many times that they were "partners" in our quest for superior returns. So, we should not fear them but acknowledge right from the start that we will live through many corrections over the years. We should even try to benefit from them as much as we can.

In fact, I believe that there are stock market realities that should be accepted when we decide to become equity holders. I named those "The Rule of Three": One year out of three, the market will go down (by more than 10%). On stock out of three that we will buy will be somewhat disappointing. And one year out of three, we will under perform the indexes. I don't have scientific facts to offer you to explain this rule. That is why it is an empirical conclusion: it can be observed, it can't be explained. But it can be psychologically useful as knowing this rule will help us navigate through market storms. By accepting in advance that we will have tough years (in absolute terms or relative terms) and that stock mistakes are a cost of being in business, we are better prepared what they do happen. Being better prepared will help us to act in a rational way in such instances. Also, it is futile to try to predict the sequence of events. The best strategy is to be always invested in stocks and to focus on improving our selection process.

Another point: the Rule of Three is not linear. We can have three good years in a row (like 2000-2002) and then under perform for two or three years. For example, the Sequoia Fund – managed brilliantly by Bill Ruane's team – under performed the S&P 500 in the first four years of its existence from 1970 to 1973. After that, it delivered one of the best performances of all time. Another example is the Chest Fund managed by John Maynard Keynes from 1928 to 1945. After three years, its total performance was -48% compared to -36% for the British stock market. But over 18 years, he obtained an annual return of 9% compared to -1% for the British market. Keynes under performed six of those 18 years or one year out of three.

Ted Williams and the Art of hitting

Being selective and discipline are two essential qualities to become a good investor. And no one has illustrated it better that the fantastic baseball player Ted Williams, who sadly passed away in 2002.

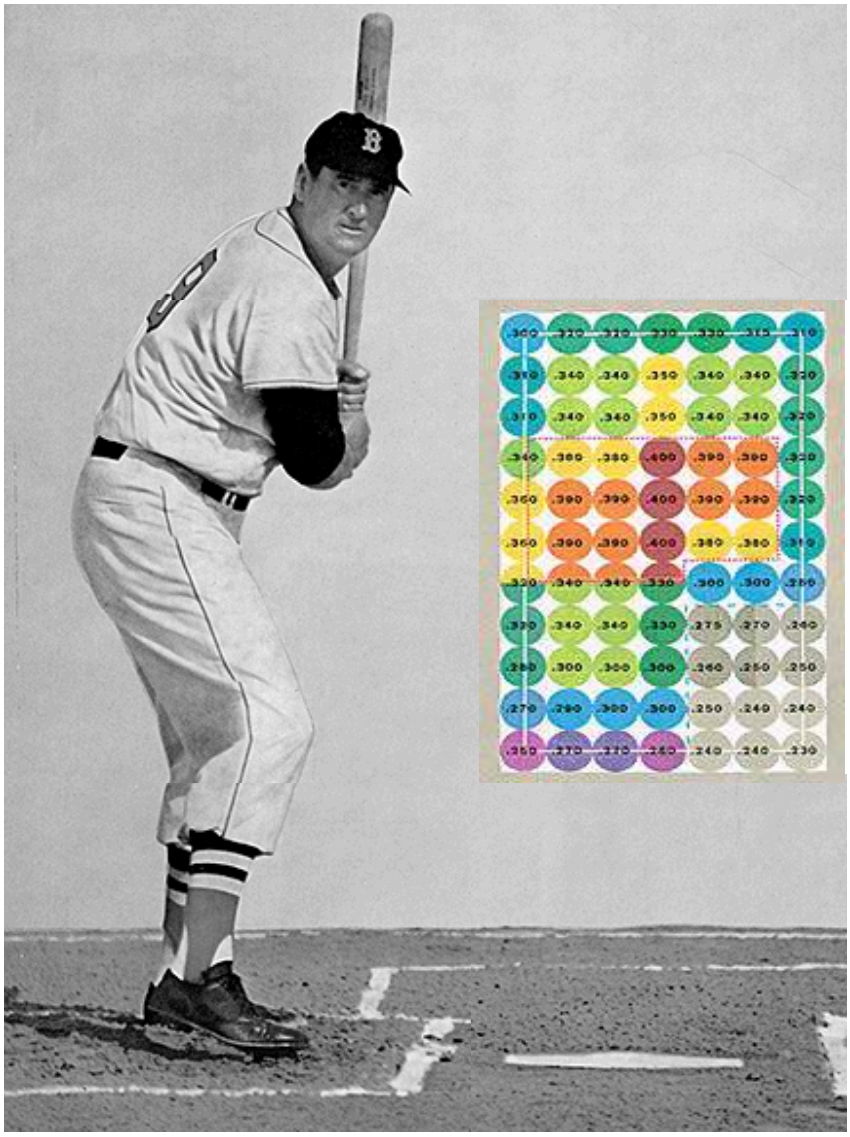

Source: The Science of Hitting

Ted Williams played with the Boston Red Sox from 1939 to 1960. Ted was obsessed by the art of hitting a baseball. He wanted to be the best at it. Obviously, he had great physical strengths but first and foremost he had great mental strengths.

He carefully studied each of his batting presence. He divided the strike zone into 77 sub-zones corresponding to a baseball surface (see figure above) and calculated his batting average for each zone. He then he became extremely discipline, swinging only the balls he knew were in his favorite spots. He finished his career with a .344 batting average, fourth on the all time list. He was also the last player to hit better than .400.

Ted's philosophy is not out of fashion in today's baseball, an era of homerun quests. If you followed Barry Bond's achievements lately (73 homeruns in 2001 and a batting average of .370 in 2002), you could notice how discipline a hitter Barry is. In 2002, he broke all historical records by obtaining 198 base on balls. The way he calmly looks at every pitch without swinging on bad balls is a pleasure for the eyes…and a nightmare for opposite pitchers.

For stocks investors, the lesson is simple: to maintain a superior average, we have to buy stocks that are in our favorite zone, that we can value. And the stock market gives us an incredible advantage that neither Ted or Barry could ever dreamed of: We can decide to let go a pitch that is in the center of the strike zone without having a strike being called upon us. Every day, the market throws us pitches: Bombardier at $5, GE at $30, Intel at $18, etc. We have the luxury to wait for a ball that is – for us – big as beach ball. And as Barry Bonds does it so well, there is nothing wrong in looking at pitches that are simply not in our favorite zone. For example, oil and gold stocks aren't in my radar, whatever their prices or the geopolitical climate.

Our businesses

Quality means doing it right when no one is looking. - Henry Ford

M&T Bank [N: MTB]

Our Buffalo Bank had another great year. Its return on assets reached 1.7% and its return on equity (ROE), 29%. Earnings per share (EPS) were up 11%. M&T also announced an important acquisition last fall: Allfirst Financial. It is difficult to evaluate the future impact of this merger but I have great confidence in the judgment of Robert Wilmers, M&T's CEO. In the banking industry, I trust Mr. Wilmers' judgment more than anyone else's. M&T stock did well in 2002, climbing 10% in line with intrinsic value. This superb bank is still our biggest holding.

Groupe BMTC [T: GBT.A]

Our furniture retailer had another great year in 2002. EPS were up by more than 50%. The strong real-estate market in the Province of Quebec gave a good push to sales but BMTC did also very well in tougher years. Since we first acquired shares in 1995, EPS are up 26% annually, or by a factor of five folds. The stock has faithfully rewarded shareholders by climbing from $2 to $14 in 7 years. The company is still debt-free with excess cash. Competition is increasing (more honey brings more bees) but I would not think of fighting in the same market as Mr. Des Groseillers, BMTC's CEO. He's the best at what it does. The newspaper *Les Affaires* recently published an all-star list of four Quebecker stocks. BMTC was one of them. And even after all this, the stock is still trading at around 10 times earnings. Some things never change! BMTC is still our biggest Canadian holding.

Progressive Corp [N: PGR]

Progressive is a car insurer located in Mayfield Village, Ohio. It was probably our company that had the best intrinsic performance in 2002. Premiums were up 30% and the combined ratio was down to 92%, an exceptional ratio. The industry's average is higher than 100%. EPS were 45% higher and its ROE reached 20%. Strangely, the stock was unchanged in 2002 (although in a year when the S&P 500 is down 22% it's not that bad). Still, PGR is twice the level we acquired it at the end of 1999. Long-term perspectives still look very good.

Cognex [Q: CGNX]

It's been six years since we first acquired shares of Cognex. So far, we had ups ands downs but it has not been very rewarding yet. It was another tough year for our "machine vision systems" company. Cognex could not escape the depression that has hit the entire high-technology field. It lost money for the first time in its history. In spite of all this, I still have great confidence in Robert Shillman,

Cognex's CEO. I believe that Cognex is increasing its market share and when the market recovers, it will fully benefit from its efforts and patience. No top manager got a bonus in 2001 and Mr. Shillman reduced his salary from $310 000 to $89 000. Stock options were also down. Mr. Shillman still owns 13% of the outstanding shares, so he's in the same boat as ours.

I really understand this company (after six years, you would hope so) and when the stock went under $15, it seemed to me like a ball right in the center of my favorite batting zone!. Cognex is our second largest holding. The only thing left to do it to be patient. The industry will turn, it's not a matter of "if", it's a matter of "when". Cognex has the balance sheet and cost structure to withstand the crisis.

Bed Bath & Beyond [Q: BBBY]

It was our fourth year of ownership in shares of Bed Bath & Beyond. The company had a fantastic year with EPS up 40% (after 10 years of consecutive growth of 30%). Since our first purchase in 1998, EPS are up three fold. The stock is up by 250% since then. We had acquired most of our shares during a market correction linked to an Asian crisis in October 1998. Hey, who remembers that one today? We did take double advantage of this correction by buying another of our retailer, Fastenal, at a third of its current quote.

Like I said before, market corrections do have their bright sides!

<u>Transactions of the year</u>

In 2002, no market sector was more depressed than technology. Although our purchases in this sector so far in this bear market has not prove very rewarding, I still believe that the "technological revolution" is not over. Andy Grove, Intel's chairman, said last year: "Just wait five years and you'll see!". And I can wait. But it is imperative that we do choose companies that have strong moats that will permit them to be still market leaders in five years. Many companies – which I believe are of that caliber – were trading at quite attractive level this year. It was even difficult to decide which ones to choose. So I decided to adopt a "basket" approach and buy eight of these businesses. I bought back shares of Intel I had sold a few years back. And for the first time, I bought shares of Microsoft and Applied Materials, two enterprises which I had admired for so many years. So, we still have around a quarter of our portfolio in technology companies.

Our focus approach, though, is still intact. We have around 70% of our assets invested in 10 stocks.

Johnson & Johnson [N: JNJ]

If you have a good memory, you'll remember that in 1994, I almost bought shares of J&J. At that time, growth prospects were great and market valuation very low (around 12 times earnings). My inaction was a terrible mistake. And I even found a way to do worse. I had bought shares of Cordis Corp in 1993 at around $27. In September 1995, J&J acquired Cordis in a stock transaction worth $109 per Cordis share. But since J&J had doubled that year, I thought that the stock was too expensive and decided to sell our stocks instead of exchanging shares (and I paid huge amounts of income taxes).

Since then, J&J is up 200% compared with an increase of 50% for the S&P 500. If I had took J&J's stock, we would have a total return on our Cordis purchase of more than 1100% in a period of almost 10 years (this is 28% annually). And we still would have not paid a single penny to the governments

besides taxes on dividends. In spite of heavy remorse toward J&J, for obvious reasons, I had always continued to follow the company closely. And last summer, we had a chance to acquire shares at a good price when there was an FDA investigation at their Puerto Rico plant.

J&J has tripled its earning power in the last 8 years and its growth prospects are still impressive. My only consolation is to say to myself that it is never too late to invest intelligently.

Sales in 2002

We did not do much selling in 2002. Sometimes, I decide to sell one stock because I simply found another company I want to acquire shares of. When I believed that Cognex was at a very attractive price, I sold shares of Yahoo!. It seemed to me that when valuations when taken into account, Cognex's stock was a better use of our capital.

Postmortem 1997

One of the things I admire at J&J is that the company always does a postmortem after an acquisition. Few companies do so for obvious reasons: in most cases, they would have to conclude that an error was perpetrated. It's not all managers that are "able" to assume such responsibilities.

In the section "Mistake du jour" in my annual reports, I force myself to review past purchases (and non-purchases) that did not turn as good as expected. It is good also to review past sells after a sufficient lapse of time has gone by. This year, I would like to do postmortems on two important selling decisions of 1997: Bombardier [T: BBD.B] and Sun Microsystems [Q:SUNW].

In 1997, Bombardier made up around 20% of our portfolio but in mid-year, I decided to cut this weight to 2%. This is what I wrote then to explain this bold move:

...lately, we sold most of our shares for three reasons:

1. *It seems that the future prospects are not as solid as in the last five years as the company looks more sensitive to economic slowdown.*
2. *The market valuation has become high, in spite of the point 1.*
3. *The departure of Raymond Royer – whom I consider the real brain behind the success of Bombardier – is definitively not positive.*

After, we had sold 90% of our stocks, Bombardier shares went up 300% in the three years that followed. I then considered this sale as a mistake and it was recognized as such in the "Mistake du jour" section in the 1999 annual report. But I added this comment at the end of the phrase: "…*But the real test for the long term business model of Bombardier would be a recession."*

In 2001-2002, a deep recession did hit the airline sector and Bombardier was strongly affected. The recessionary environment was amplified by the higher level of debt at Bombardier and some problems with acquisitions in the transport division (Adtranz). The stock fell from $25 to $5, a lower level than the one we sold at in 1997. Bombardier Capital also had "diworsefy" (Peter Lynch's expression for bad diversification) and had to take lots of charges. It is far from clear, as I write those lines, how long it will take for Bombardier to get back on the growth path.

There are lots of conclusions from this epic. First, it takes years to measure the impact of a top managerial change. So it can take years to judge the quality of an investment decision. Those who believe that they are quite witty because of a few years of strong performance – for a stock or for the owl portfolio – should develop a strong auto-scepticism reflex (and if from time to time I forget it, Bernard Mooney, my long-term friend and partner, is not far to put me back in line).

There is another important conclusion toward Bombardier or the stock market in general. In 1993, when growth prospects for the five years to come were strong, the stock was trading at around 10 times earnings. In 2001, with more leverage on the balance sheet and a tough environment starting to unfold, the stock was trading at 30 times. Too often, investors are more inclined to look at the rearview mirror than the windshield.

On Sun Microsystems, in 1997, I wrote this phrase: *"...In 1994, we acquired shares of Sun Microsystems at $5.25. At that time, the company was earning $0.50 a share and had $2.50 in cash (no debt). So the real P/E was around 5x. With new high-margin products being put on the market (servers), Sun prospects were better than ever. But its stock was trading at the lowest level it ever traded. In the three years that followed, EPS went up to $1.89, a 278% jump. In spite of this, I decided to sell our shares because I believed that Sun's future could be affected by Intel-HP alliance in developing a new 64 bits CPU (central processing unit). And Sun's stock is now trading at $52, a 900% rise. The uncertainty is not reflected in its higher P/E. I now prefer Intel's stock….*"

After this sale in 1997, Sun's stock went up ANOTHER 1000% in the three years that followed. At its October 2000 high, Sun's P/E had reached 100x. And that was a few months before EPS started to decline. The P/E was 10 times the level of 1994 in spite of quite lower growth prospects in the years to come. When I say that the market is manic-depressive, here is a clear example. And the re-evaluation that followed was abrupt for Sun's stockholders: the shares went from $60 to $3 in the last 24 months.

As for Intel, we did make a satisfactory profit even though the stock is now the same price as in 1997. When the stock reached high valuations in 2000, I started to sell. What is interesting is that it's only in 2002 that Intel finally put on the market its 64 bits chip (named Itanium) and is now threatening Sun's market share (Dell Computer servers are gaining market share at a rapid pace). Again, as for Bombardier, it took five years for the reasons I sold our shares to materialize As the legendary investor Phil Fisher would say: "*It is easier to know WHAT will happen than WHEN it will happen*."

Now I am not proud that these two companies have fallen from grace. That means that my initial buying was not that brilliant! I owned Bombardier and Sun for five and three years respectively. For a while, these were great businesses. But the lesson for me is that things change. Seldom do businesses stay great for decades. So we have to always keep an opened mind and not lose track of the fundamentals of a company we own shares in.

Owner's earnings

As you know, Giverny Capital is different from the other money management firm in some respect. We measure the quality of an investment not on short-term market gains but by focusing on yearly earnings growth and long-term fundamental prospects. Over a five years period, the stock market will tend to reflect those two variables. Warren Buffett has long used this method to measure the intrinsic value contribution of Berkshire's stock holdings. Besides W.P. Stewart & Co, I seldom seen other firms make such a calculation. For most of our competitors, the short-term market performance is the supreme judge. We try to be ourselves the judge of our underlying business performance.

In 2002, our stock's quotations were on average mostly unchanged. But our owner's earnings were up around 18-20% and our ROE was 18%, which is a very strong global performance from our businesses.

In some cases, the discrepancy between market performance for one of our stock and its underlying increase in intrinsic value was quite large. For example, as I wrote above, Bed Bath & Beyond increased its EPS by 40% but its stock was up only 3% for the year. Health Management Associates grew its earnings by 21% and the stock was actually down 3%. But in the long run, if the company does well, the market's quotation will eventually catch on. At Giverny Capital, we like such temporary gaps in valuations and we try – within a reasonable level of transactions – to profit from them.

***** WARNING *****
The following section contains sentences that could offend some readers

Mistake *du jour*

If you close the door to mistakes, the truth will stay outside - *Rabindranâth Tagore*

This section, as always, could be very long. I limit myself to Olympic like medals that are yearly attributed to the top three mistakes of the year. In 2002, we make a backward assessment of mistakes that happened in 1999-2000 but whose consequences on our return this year were awful.

Bronze medal: Heartland Express [Q:HTLD]

It's the second time that this company is mentioned in the "mistake" section. In 1999, I wrote: "…*Our adventures into the marvelous world of trucking, with the investment in Hearltand Express, were not very profitable. I should have learned my lessons about the competitive nature of the industry after we had been shareholders of Groupe Goyette in 1993. But as Malcom Forbes once said: To make a mistake is human. To repeat it is human too!…*"

The funny thing, retrospectively, is that the mistake was not to have invested in the trucking industry but – again – a cruel lack of patience.

I had invested in HTLD in 1998. I then believed that Heartland was an enterprise of the type I like to label "Oasis in the desert": a great company in a lousy industry. Net margins stood at 12% compared with 2-3% for the industry. Not counting the excess cash, Heartland was earning 40% on equity.

Such an extraordinary business performance was linked to Heartland's low cost operation. And the company was acquiring lots of competitors to sustain a high growth rate: In the last 15 years, the annual growth in EPS had been 20%. As usual, such an accomplishment was made possible by brilliant management. Heartland was led by Russel Gerdin, its CEO. Mr. Gerdin was earning $300 000 a year with no bonuses, a salary unchanged since 1986. He owned 40% of the outstanding shares. And the company had no stock options plan (I like that). Mr. Gerdin was clearly in the same boat as its shareholders.

So why – oh why – did I sold our shares in 1999? The company had a few flat quarters as management could not fin acquisition candidate at a reasonable price. I then thought that Heartland was becoming a

slow grower and I decided to sell. I simply lack patience. The company finally did make some acquisitions and EPS went from $0.57 in 1999 to $0.85 in 2002. The stock has increased by 200% in 3 years. Mr. Gerdin and the more patient shareholders were highly rewarded. But not us!

Silver Medal: Expedia [Q:EXPE]

When the stock market goes down 50%, there are few places to "hide". But Expedia's stock is up 500% in the last two years. I started to follow the company as soon as it went public in 1999. I knew the company well as I used their Internet site (plane ticket retailing at discount) quite often. The company was founded by Microsoft and looked well managed on its own. But I have this rule to wait for a small company to show a profit before investing. Nevertheless, I followed Expedia closely.

In the fall of 2000, the company had its first quarter with a positive cash flow and I believed that the company could become profitable in a quarter or two. The stock had fallen from $60 to $10. The company had $5 in cash and I believed it could earn $1 per share in a not too distant future. So at $10, the stock looked quite attractive. And as I was studying the company, a client called me to ask where to invest some excess cash. And I talked to him about Expedia and he acquired some shares at $10. And before I could decide what to sell in my other accounts to buy Expedia for all clients (including me), the stock started to climb. It reached $15 in a few weeks.

In a very childish reflex, I said to myself: "I missed it". So I waited – in vain – for the stock to fall back to $10. Expedia earned $0.89 in 2001 and around $1.80 in 2002. The stock is now at $65. Beside the client that called me that day, no one of us made money on it. It is interesting to note that I was disciplined in waiting for the company to make a profit but I should have been more perspicacious. Because if discipline is to respect one's own rules, wisdom is to know when to break them!

Gold Medal: Richelieu [T:RCH]

Five years ago, my good friend Bernard Mooney spoke to me about a company in which he had invested : Richelieu Hardware. The company is a distributor of various home products. I look at the numbers and they are impressive: Richelieu has a strong balance sheet and earns around 30% on equity. The growth rate is surprisingly high, more than 25% a year, with quite high margins for such an industry. Of course, there is always great people behind great numbers. Bernard tells me about his admiration for Richard Lord, Richelieu's CEO. Mr. Lord has a defined plan and a common sense managerial approach focused on the company's strengths. And another little thing to notice, the stock was trading at $3 (adjusted for splits) at a P/E ratio of only 9x.

It took me three years to decide to acquire some shares at the end of 2000. And I was worried that the recession that was starting out would affect the company and I decided to buy slowly, only for clients with cash in their accounts (I did want to sell some other stock). I started to buy at $5.5 but the stock climbed above $6 quickly and I did not want to pay a few points more. The stock then doubled in 2001, a down year for markets.

At the beginning of 2002, Bernard set up a meeting with Mr. Lord and us. I was very impressed by him but again I wanted to wait for a "lower" valuation before acquiring other shares. The stock has climbed another 50% since then (and 2002 was a worse year for the markets than 2001). So Richelieu's stock is now five times the level it was five years ago and almost three times the level of 2000. And I understood the company well (Bernard was an expert on the business) so there is no excuse. This mistake is gold caliber! But believe it or not, that is not all…

There are some strange coincidences in life. In 1993, I had bought my house in La Prairie. And the door lock is from Richelieu (it's even written on it). Every day for the last 9 years, the first thing I see when I get home is the name of the company! After Bernard talked to me about Richelieu, so often I said to myself I should study the company more closely. My punishment for my lack of perseverance was to see the name of the company again and again for the most part of 2002. I say "the most part" because in July, I changed my lock and this time I made sure to buy one without a name written on it!

Conclusion : « The gardener and the investor »

Last year, I described an analogy between investing and art. Three years ago, I used analogies with the psychology field. Charles Munger, Warren Buffett's wise sidekick and CEO of Wesco Financial, said many times how important it is not to see the world trough one mold but to have many different analytical models. For example, Ted Williams' analogy, is extremely pertinent.

When I named my money management firm Giverny Capital, it was in honor of Claude Monet and its creations, both his garden and his paintings. But there was also an analogy between the craft of investing and the work of building majestic gardens as the one Monet created in Giverny (France). To build such gardens, you first need a deep love for the gardening craft. You also have to really know the environment where you're setting up the garden: temperatures cycles, the sun's direction, the insects present, the soil, etc. Some plants just can't grow in Quebec. It's the same thing in investing: some sectors can't be understood by one money manager (as the aluminum and paper industry for me).

And it's a dynamic process: you always have to follow closely the flowers and trees that are cultivated in the garden. Some will blossom, some others not. Adjustments have to be made on a regular basis to maximize the space at our disposal. It's the same thing with our capital.

Peter Lynch on said that it is imperative that "*you do not remove the flowers and water the weed*". In stock language it means that we should not sell our winners to buy more of our losers. Furthermore, it is not illogical to make some experiments on a small soil surface to see what happens. A wise investor can acquire a few shares of a company to become more familiar with it.

But where the analogy is the most relevant is on the virtues of time and patience. Warren Buffett noted to Robert P. Miles (the author of the marvelous book *The Warren Buffett CEO*) that one of the main reasons that Berkshire was such a success is that he was CEO for a very long time (Mr. Buffett took control of Berkshire in 1965). Too often, a CEO is appointed late in his career and stays at the head of the business for 10 years or so, sometimes less. Frequently, great achievements are done over many decades. For example, at General Electric, the best performance was realized in the second decade that Jack Welch was CEO. That is why I like to invest with companies that exist for more than 10 years and are still managed by the founder(s) like Fastenal, Cognex, Bed Bath & Beyond, Applied Materials, Gentex, Costco, etc. A great garden needs years to become a masterpiece.

The legendary impatience of Wall-Street investors is a handicap to such blooming. Can you imagine a great gardener that would plant a tree and remove it after six months because it has not grown fast enough? Trees take time to grow; Companies are made from the same wood! Great entrepreneurs and great gardeners often have similar dreams: building a garden of tall trees that will give shades to many people for generations to come. And the gardener that genuinely love his craft, one day, realizes that his sense of purpose and happiness does not lie in the final results but in the daily journey.

Managing our portfolios give me such fulfillments.

I thank you again for your trust and I wish you a great year in 2003

François Rochon
President
Giverny Capital Inc.

Giverny Capital Inc.

Annual report 2003

10th anniversary

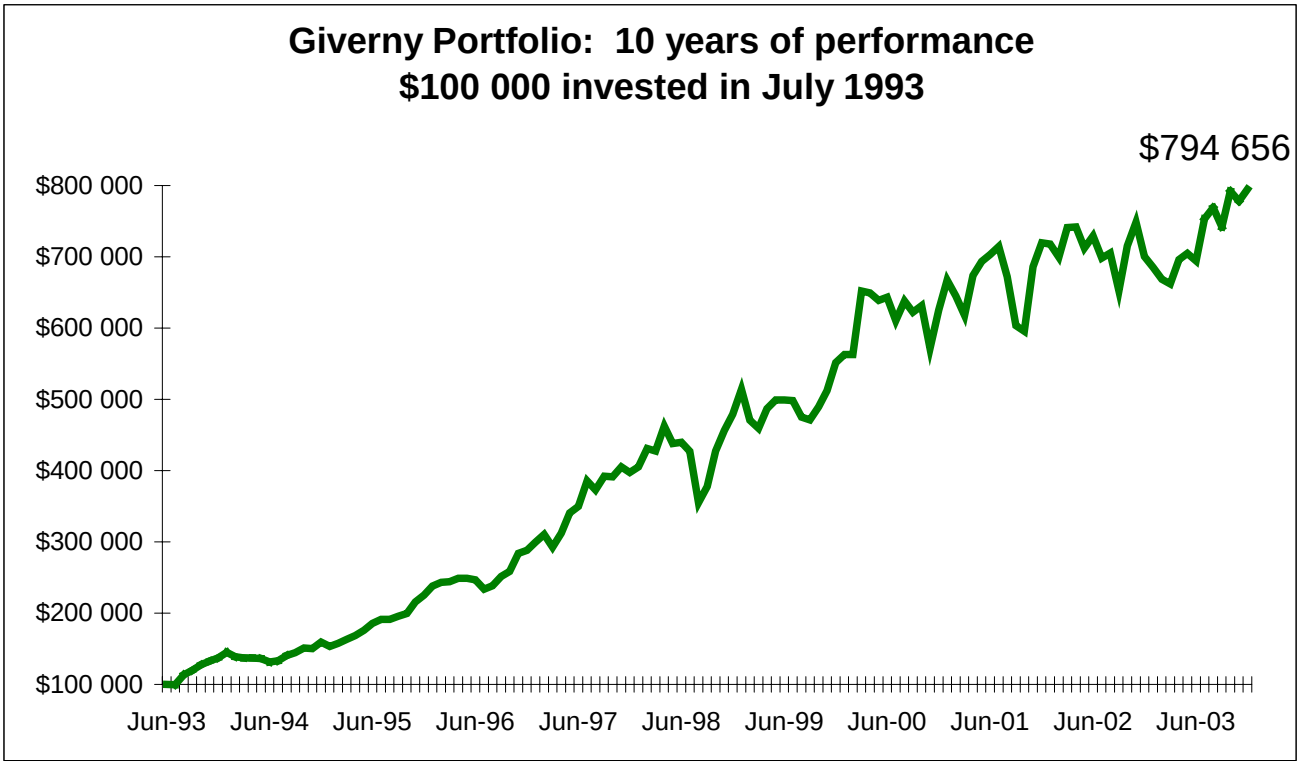

Giverny Capital Inc.
Annual report 2003 ©

For the year ending December 31th 2003, the combined return for our global portfolio was 14% compared to 14% for our benchmark. Both results include a loss of almost 20% on the Canadian currency exchange.

Our relative return for the year was -0.4%. Compared with the S&P 500 and TSX, our relative performance was positive. But we also include in our benchmark small cap indices which have done extraordinary well in 2003.

In 2001, I underlined the fact that our results were good, but not as good as they look. This year, it's the other way around: Our results (in absolute terms) are far better than they look. Our stocks did around +34% in 2003. Since 80% or so of our portfolio is invested in the US, the spectacular rise of the Canadian dollar had a non negligible effect on our returns.

How should we react to such a matter? First, we have to recall ourselves that from 1993 to 2002, the weakness of the Canadian Dollar favored us. We easily put up with the gains at that time. But we have to be ready to accept the losses when the reverse happens. In fact, in 2003, the Canadian Dollar is simply back to where it was at my beginnings in 1993. Over the years, currency moves had a moderate effect on our results (+1% on a +694% gain).

On a more philosophical side, we have to recognize that, in life, there are elements that can have some control over or events we can predict the outcome with a reasonable level of confidence. Some others are unforeseeable and totally out of our control. For me, currency movements are of the second type.

My investment approach is to acquire outstanding businesses managed by topnotch people which stock looks to me undervalued. This approach is rational and has showed its merits, to me and to many other portfolio managers. And the United-States of America continues to be the best pond to "fish" such businesses. It is the Mecca of capitalism, where small businesses can blossom into multinationals and shareholder's capital is treated with respect (most of the time). We won't deprived us of investing in a great American company because of the Canadian currency. So our attitude will be to live with currency fluctuations not to fear them.

I'd like to add that we're not talking about investing in a country with an unstable economy and a shaky currency. The US still has – by far – the best economy in the World. The fact that much more people want to immigrate than emigrate is quite revealing. Also, when Saddam Hussein was captured in December, what was the only thing that he brought with him in hiding? Answer: American Dollars ($750 000 of them). Moreover, Mr. Hussein is not known to be pro-American. But when his life was in jeopardy, he made a economic choice over a political one.

An educational mistake

There is a lot to learn from our mistake but it is a little less painful to learn from other's mistakes. In my early years, I strongly recommended shares of Cordis Corp to a money manager. In fact, Cordis was the subject of my first detailed recommendation. Cordis was the leader in catheters, medical devises used in cardiovascular operations. I even talked to a doctor to help my research and he confirmed to me that Cordis' products were far better than the ones from its competitors.

The company was growing 25% a year and the stock was a bargain at 13 times earnings (thanks to the Clinton health reform project that scared Wall Street). So I recommended purchasing the stock at $26 a share. The money manager liked my idea but he said that it was not a good time to invest in the US because the Canadian dollar was to low (at $0.80). I did not listen to him and bought shares, for myself the first time in February 1993. And Cordis went on to be acquired by Johnson & Johnson at $109 in October 1995. An investor who would have kept his stock for 10 years (swapping them for J&J stock in 1995) would have made 10 times his money. Even if the Canadian dollar were at par with its US counterpart today, Cordis' purchase would have turn out to be quite a rational decision.

In his book « *Common stocks and Uncommon Profits* », the legendary investor Philip Fisher devoted a complete chapter on "when to buy". His conclusion was that the best time to buy a great company is when we find it (and the price makes sense). His chapter ends with this major statement: **« Be undeterred by fears or hopes based on conjectures, or conclusions based on surmises »**

Our return over the last 10 years

The published returns have been audited by PriceWaterhouse Coopers. For the period of 1993-1997, they are a little different from the ones published in the past. They now include the 5 family portfolios that I manage since 1993 and the starting date has been moved to July 1st 1993. Also, I now divide the portfolio in two parts: the RRSP portfolio and the non-RRSP portfolio (Giverny International). The Giverny portfolio is simply the combination of the two parts.

Giverny portfolio (all returns in Canadian dollars) :

Year	Giverny	Index **	+ / -	S&P 500	+ / -	$ US / Can ***
1993 (Q3-Q4) *	37.0%	9.5%	27.6%	8.4%	28.6%	3.3%
1994	16.5%	3.7%	12.7%	7.3%	9.1%	6.0%
1995	41.2%	24.0%	17.2%	32.9%	8.3%	-2.7%
1996	28.0%	22.8%	5.2%	22.7%	5.4%	0.3%
1997	37.7%	28.5%	9.2%	36.7%	1.0%	4.3%
1998	20.6%	18.8%	1.8%	37.7%	-17.0%	7.1%
1999	15.1%	16.3%	-1.2%	14.1%	1.0%	-5.7%
2000	13.4%	3.2%	10.2%	-4.6%	18.0%	3.9%
2001	15.1%	-0.4%	15.5%	-5.7%	20.8%	6.2%
2002	-2.8%	-18.3%	15.6%	-22.0%	19.2%	-0.9%
2003	13.6%	14.0%	-0.4%	5.7%	7.9%	-17.8%
Total	694.8%	193.8%	501.0%	202.2%	492.6%	1.1%
Annualized	21.8%	10.8%	11.0%	11.1%	10.7%	0.1%

* From July to December 1993.
** An hybrid benchmark of 5 indexes (S&P/TSX, S&P 500, Russell 2000, etc.) which reflects approximately the asset allocation.
*** The US Dollar compared with its Canadian counterpart.

Giverny International (in US dollars) :

Year	Giverny Intl.	S&P 500	+ / -
1993	32.7%	5.0%	27.7%
1994	9.1%	1.5%	7.7%
1995	54.8%	36.6%	18.6%
1996	27.0%	22.2%	5.4%
1997	32.9%	31.0%	1.7%
1998	11.0%	28.5%	-17.4%
1999	15.9%	21.0%	-4.2%
2000	11.3%	-8.2%	20.0%
2001	8.1%	-11.1%	18.7%
2002	-4.4%	-21.4%	17.4%
2003	31.6%	28.6%	3.0%
Total ($US)	637.0%	198.9%	443.8%
Annualized	21.0%	11.0%	10.2%

Giverny RRSP (in Canadian dollars):

Year	Giverny RRSP	S&P / TSX	+/-
1995	0.4%	14.3%	-13.9%
1996	29.9%	27.8%	2.2%
1997	32.3%	15.0%	17.3%
1998	29.3%	-1.2%	30.5%
1999	42.7%	31.1%	11.6%
2000	5.2%	8.2%	-3.0%
2001	16.2%	-11.5%	27.7%
2002	6.3%	-11.6%	17.8%
2003	32.4%	26.7%	5.7%
Total	447.3%	133.3%	314.0%
Annualized	20.8%	9.9%	10.9%

Since the start of managing our capital, July 1st 1993, our annualized return is more than 21% compared with 11% for our benchmark. Also, our yearly compounded return is 10% better than the S&P 500, a performance with would put us in the top 1% of money managers in North America.

These results far exceed our objectives and what can be expected in the future. Our ambitious goal is to add 5% annually to the indices. If stocks in general return on average 6 to 9% per year in the future – which seems to me realistic – we would be more than happy to earn 11 to 14% per year.

The year in review

Once again in 2003, the stock market showed its manic-depressive character. During the first months of the year, pessimism ruled the markets. The media focused only on the war in Irak. There were lots of attractive stocks. It was hard to choose which ones to buy. I acquired small stakes in many companies I knew well for some time like Factset Reseach, Expeditors International of Washington, Harley

Davidson, Walgreen, Fifth Third Bank, Resmed and First Data (a stock I owned for two years before I mistakenly sold in 1999, see the "mistake du jour" section in the 2001 annual report).

The old saying that the military are always ready to fight the previous war fits like a glove to Wall Street strategists. They forget that each crisis is different in nature: tomorrow is always an unknown land. Because it is new and unforeseen, the present crisis always looks worst than the previous ones. I keep preciously old articles from 1962, 1974, 1982, 1987 and 1990 to remind myself how gloomy the future looks in the depressive phases of the stock market.

To the general surprise ("as always", a cynic could add), the S&P 500 climbed 40% from its March low. Some of our high-tech stocks purchased in 2001-02 were even more rewarding (Applied Materials, Cognex and Intel doubled in a few months).

The biggest mistake stock investors regularly make

This brings me to a fascinating subject: Stocks are the best asset class in the long run but still most investors never really make money investing in them. Why is that?

The author André Gosselin recently wrote an article on average returns for stock investors from 1984 to 2002. In an period where the S&P 500 returned a 12% average, the mutual fund owner has averaged around 3% per year (Source Dalbar Inc.). This is 6% less than the 9% that the average mutual fund returned. The first 3% differential between the funds and the S&P 500 can be mostly explained by fees paid to the many parties involved. But the other 6% is quite surprising. It's too high a number to be explained by entry (or exit) fees.

So there can be only one explanation: the great majority of stock investors trade their shares (funds or stocks) at the wrong time. They sell when quotations are low and buy when they're high! This could apply to funds, stocks, sectors or even styles. To summarize their flaw: they frequently make purchases or sells based on extrapolating recent market quotations.

Clearly, most participants in this performance chase think they can optimize their market entries and exits better than the others. This reminds me of a Swedish car drivers poll that Charlie Munger – Warren Buffett's partner - talked about in one of his famous speeches: 90% of drivers believed they were better than the average!

The simple fact is that many investors can't stand market corrections and want to avoid them at all costs. But as the great investor Peter Lynch once said: Market corrections are part of stock investing and they are the price to pay for higher returns. So forth, he added, the most important organ in investing is not the head but the stomach.

Since no one really knows what the market will do in the short run, the best strategy, I believe, is to simply stay invested (at least as long as we find businesses that meet our criteria). And one thing that 2003 showed us again is that the first ingredient to make money in the stock market is to be *present*.

Trying to predict market quotations – for a stock, a sector or the whole market – is futile. It is astounding to see how many investment "professionals" continue to waste their time and talent on an activity that has so many times proved its uselessness. And what is most surprising is that many investors still continue to read almost religiously market forecasts. In Greek mythology, Cassandra was condemned by Apollo to know the future but to be disbelieved when she foretold it. Hence the

agony of foreknowledge combined with the impotence to do anything about it. Wall Street gurus are in the reverse situation: They don't know the future but they are often blindly believed when they foretell it.

And there is something worst: brilliant investors that wait for a *better* moment to purchase shares of companies they like and admire. Bernard Mooney and I know very well a money manager that is truly an outstanding stock picker but that has been pessimistic about the stock market for 18 years. As he invested 100% of his portfolio in his favorites stocks and just forgot about the market, he would have done more than 20% a year for more than three decades.

In this line of thinking, to be humble toward the stock market becomes the supreme advantage. An investor that decides not to try to outsmart the market (in believing that HE will know when it's the best time to invest) can in the end beat 90% of his colleagues.

How to react to market volatility

The conclusion of the preceding paragraphs is that market volatility remains the greatest concern for most participants. Fifty five years ago, Ben Graham gave us the right framework to deal with stock fluctuations by stating that market quotes are "what others think the company is worth" not its true intrinsic value (at least in the short run). If we can see beyond quotations, market volatility can become our greatest allied in our noble quest for richness.

This reminds me of a movie quote from *The Matrix*. When Neo goes to meet the Oracle, he meets a young boy bending spoons. Neo tries on its own but fails. The boy then says: "Do not try to bend the spoon. That's impossible. Instead, only try to realize the truth…. There is no spoon…. Then you'll see, that it is not the spoon that bends, it is only yourself."

A similar wisdom can be applied to market quotations. Once we understand that they can often be mirages, we can transcend them and come to see stocks simply as shares of businesses…which in the end is the one and only reality.

Picking truly great companies and to become immune to stock market fluctuations is indeed hard to develop and to fully master (we're never really arrived at destination). But it is the key to succeed in the long run. To paraphrase Jimmy Dugan in the baseball movie *A league of their own*: "The hard is what makes it great".

Macro-economic comments

I have a minimalist attitude in the area of economic analysis. As usual, I don't make any prediction concerning the economy nor the market. But in general, it is not being rash to avoid what is popular, what I label the *flavor of the day* on Wall Street (or Bay Street in Canada).

These days, what is popular – its seems to me – are gold stocks and basic materials companies (particularly in Canada). China or not, a commodity remains a commodity. Basic materials companies in their aggregate are condemned to generate modest returns on capital in the long run. And the worst time not to avoid them is when they're popular.

Investment philosophy

It's "Dejà vu" all over gain
- Yogi Berra

Note : this section is mostly a repetition from old reports intended for new clients. The older ones can skip it!

The year 2003 was not only good for the stock market but also for Giverny Capital. The number of partners (what we call a client at Giverny Capital) has tripled to reach 360. We also got our first institutional mandate: a religious foundation. With all these new comers, it is imperative that we talk again (and again) about our investment philosophy.

Let's be honest: many clients have been attracted to our firm because of the portfolio returns. It's quite legitimate and it could be said that I got what I bargained for! But what is the most important thing to consider when choosing a money manager is the investment philosophy. Returns on capital is the result of the philosophy. To fully adhere to our approach is essential. Because if not, sooner or later, you're going to be disappointed.

Here are the key points:

- In the long run, stocks are the best investments (8-10%), better than bonds, real estate, gold, stamps and treasure bills.
- It is futile to predict when it will be the best time to begin buying stocks.
- A stock return will eventually echo the increase in per share intrinsic value of the underlying company (usually linked to the return on equity). We focus our capital on businesses that we believe can – in the long run – earn 15% on equity annually.
- To sustain a high level of profitability, a company must have intrinsic qualities that protect its market from competitors (what Warren Buffett calls a "franchise") that is the equivalent of a moat shielding an economic castle from invaders.
- A franchise doesn't emerge from nowhere. It is built by men (or women). The essential ingredient thus is the quality of top management. Becoming shareholder is becoming partner with them.
- Once a company has been selected for its exceptional qualities, a realistic valuation of its intrinsic value has to be grossly assessed.
- The stock market is dominated by participants that perceive stocks almost as casino chips. With that knowledge, we can buy great businesses sometimes well bellow their intrinsic value.
- But there can be some time before the market recognize the true value of our companies. But if we're right on the business, we will eventually be right on the stock.

One important point: Owning a few undervalued securities (20 or so) over many years doesn't yield linear returns. It is a certainty that in many years, our portfolio will underperform the index. The best managers usually underperform one year out of three (that is something like 10 times over 30 years). Our approach it to judge the quality of an investment over a five years period. I truly believe that such a similar horizon is necessary to judge a money manager.

So, your role as a partner is far from being negligible. The time I spend on reassuring clients and commenting on stock fluctuations is not devoted to analysis. So we have adopted a clear and specific mode of communication. I write a detailed annual report (and considered my many quite long) and three quarterly reports. If there is truly a bad news on one of our companies, we will inform you (good

news takes care of itself). If you genuinely adhere to our philosophy, you can do your share by trying not be affected by the market and by keeping your eyes on the long term.

Patience – from the money manager AND the clients – becomes the supreme quality in investing.

The example of BMTC Group

Here is a real-life example on the vital importance of patience.

I first bought shares of BMTC Group (the parent company of the furniture stores Brault & Martineau and Tanguay) on October 31st 1995, the day of the latest Quebec referendum. Quebec based companies were trading at very low valuations that day (go figure!). After our initial purchase, the stock did well, increasing by 200% in two and one half years. But after that, there was a three years period during when the stock did absolutely nothing (see the chart bellow) even though the underlying results continued to be exceptionally good. On its 2000 low, the P/E ratio was only four times, a very attractive valuation. In those days, Bay Street was only interested in tech stocks (Nortel being the all around favorite stock). A great deal of patience during those 1000 days of standstill was needed. Starting in 2001, the stock went up six folds in three years. To this day, our total return on the initial purchase is 1400%.

In the 1996 Wesco Financial's annual report, its CEO, Charlie Munger, wrote this phrase:

> *"…Being prepared, on a few occasions in a lifetime, to act promptly in scale in doing some simple and logical thing will often dramatically improve the financial results of that lifetime. A few major opportunities, clearly recognizable as such, will usually come to one who continuously searches and waits, with a curious mind, loving diagnosis involving multiple variables. And then all that is required is a willingness to bet heavily when the odds are extremely favorable, using ressources available as a result of prudence and patience in the past.…"*

BMTC was such an opportunity.

Five years postmortem: 1998 in review

Last year, I started a new yearly tradition: a five-year postmortem review. The idea is to go back five years in the past on my decisions (and writings) and study what did happen afterwards.

Johnson & Johnson does such reviews five years after an acquisition. And their results have been impressive. Also, five years is our time horizon when we acquire shares of a company. It is logical that we use such a time frame for a thoroughly analysis.

In October of 1998, we did lots of buying. The market had lost 30% because of the recession in Asia (who remembers that today?). We bought five stocks during that month: JDS-Fitel, Fastenal, Bed Bath & Beyond, Catalina Marketing and Templeton Dragon Fund. It turns out that two of those buys were mistakes and three delivered outstanding results.

First, JDS-Fitel (which was renamed later JDS-Uniphase). I bought shares at $4. At that time, the company was the leader in WDM (Wave-division multiplexers). It was growing very fast and was one of the most promising Canadian companies. I also admired its CEO Jozef Strauss. The stock had lost 50 % in a few weeks and was trading bellow 20 times earnings. After our purchase, the stock starting to climb. Rapidly, it looked very pricey and we sold 90% of our shares just a year later at around 8 times our cost (see the 1999 annual report). JDS continue to climb to reach the level of $250 in the tech bubble (trading at a lofty P/E of around 300x).

Today, the stock trades at $6. The company was devastated by the recession in its market and even seems to have change many of its products. Things were so bad for a while that, for some quarters, gross margin were negative. It is far from certain at this point that the long-term perspectives are good. It seems to me now that this purchase was a mistake. It's strange that a purchase that rapidly produced an important short-term gain turned out to be a mistake. It says a lot about the validation of short-term performance, doesn't it?

Catalina Marketing was an outstanding Floridian company. Its base business seems truly marvelous. Catalina's network leverages scanned UPC codes and/or loyalty card data to analyze consumer purchase behavior and automatically respond with strategic promotional messages (mostly discount coupons). This capability allows for more effective targeting, with average coupon redemption rates ranging from 8 to 11 percent, up to ten times that of other traditional promotion methods. This was a good business for everyone: the consumer, the retailer, the producer and Catalina's shareholders.

In just a few years, the company had built leading market share but at the same time started to face saturation. Clearly, growing at 25-30% looked more difficult. It's not that bad a destiny to dominate a market to a point that saturation arises. But when diversifications and acquisitions turn sour, the great basic business does not reward shareholders anymore. It seems today, after five years of being shareholders, that Catalina Marketing was not a company for us. So I sold my shares in 2003 at about the same level as the one we had purchased in 1998.

Our purchase of Fastenal was more rewarding. I knew Fastenal for a while when finally the stock traded in October 1998 at very attractive levels. I bought shares. And I became much more acquainted with its CEO Robert Kierlin. In the past, I've said nice words about Mr. Kierlin. They are totally deserved: he is one of the best CEO in the World. In fact, he's a great human being. In the last

few years, the recession in the manufacturing sector has slowed Fastenal growth but the company did very well in these tough circumstances. And the stock has increased by 300% in five years.

We had similar results with Bed Bath & Beyond. The company has been sustaining a 25-30% growth rate since our purchase and so the stock has followed the rise in intrinsic value, climbing 300% in five years. In the 2001 annual report, I told you the story of the two founders and how well the company is managed. Bed Bath & Beyond is earning extraordinary returns on capital of more than 24% and that even though the equity is 50% invested in cash.

Finally, we did very well with our shares of the closed-end fund Templeton Dragon (TDF). During the Asian crisis, I wanted to profit from the great pessimism in that part of the World by investing in it in some way. Since, I did not know Asian companies well enough to buy them directly, I looked for an indirect way. And I found it with TDF, a fund that invested in Chinese and Hong-Kong companies.

A closed-end fund is a fund that trades on the stock market. For every buyer, there must be a seller. And the other way around is true. In time of great pessimism, it is possible to find closed-end funds that trade at discount to their net asset value (NAV). I knew about TDF because it is managed by Mark Moebius, a money manager I admire a lot. He doesn't invest in the same way I do, but what he does, he does it very well. When I first started to buy TDF, the stock was at $6. The NAV was $9. So in addition to buy depressed stocks, I could buy them at a 33% discount to the market. But that was not all. In the $9 of NAV, there was $3 of cash. So in fact, I was paying $3 for $6 of value in stocks (which were already depressed I reminded myself). Wow ! I was like a kid in a candy store.

Moreover, to reduce the market discount, the fund management decided to pay a dividend equal to 10% of the NAV. So at $6, I was receiving $0.90 in yearly dividend (a yield of 15%). For a RRSP account – where revenues are not taxed – it was an ideal vehicle. Today, TDF trades at $18. So an investor that bought at $6 in 1998 and has hold it for all that time, has made a total return of 250%, not bad for a period where the market has went nowhere.

The best time to invest in China is not when it is popular (!).

Index funds : The flavor of the day in 1998

Strangely, what was the most popular in 1998 were index funds (and indirectly large capitalization stocks). I wrote in my 1998 annual report that a wide gap was created between large cap stocks and smaller cap stocks. If a company was in the top 40 of the S&P 500, it was trading at very high ratios since many money managers – active or passive – wanted to own it. So, the top 40 stocks of the index were trading at around 33 times earnings as the other 460 (which have the same index weight as the top 40) were trading at around 18 times.

In the last three years, the gap between small cap and large cap stocks has been rectified. In fact, since 1988, the returns of the S&P 500 and the Russell 2000 (RUT) have been very similar.

The two groups of stocks (large and small) trade today at around 19 times 2004 estimated earnings. Those that bought the S&P 500 index at the end of 1998 are still waiting for a profit. But now that blue chips valuations are back to normal, it is rational to believe that their future performance will be more in line with their underlying intrinsic performance. The same will hold true for small cap stocks which are much more popular these days.

Chart of the market performance of the S&P 500 compared to the Russell 2000 (1988-2003)

Our companies

We delight in being different from the rest and in taking creative approaches to solving problems.

- Dr. Robert Shillman, CEO of Cognex

Cognex (CGNX.Q)

After two years of misery, things are starting to improve at Cognex. Revenus were up 32% in 2003 et net margin climbed to 11%. After the red ink in 2002, it is refreashing to smell the odor of black ink in the bottom line. The stock has doubled since its 2002 low. We have been shareholders for 7 years now. Although, our results are OK, they have been bellow our expectations. But I have great confidence in the company and its CEO, Robert Shillman. I hope that the best is yet to come.

M&T Bank (MTB.N)

Our Buffalo bank – under the wing of Robert Wilmers – continue to perform very well. Its most recent acquisition, Allfirst Financial, seems to be going well so far. In 2003, EPS went up 11%.

Since we also own shares of Cincinnati based Fifth Third Bank, I can now say that we own shares of two of the best banks in America. For the fourth year in a row, M&T Bank is our top holding.

BMTC Group (GBTa.T)

Our furniture stores chain, BMTC, continued to deliver impressive results. After an outstanding year in 2002, which I believed could not be equaled for some time, BMTC did even better in 2003. The balance sheet is still without debt (with $50 millions in cash) and the company continued to buy back shares. Under Yves Des Groseillers, BMTC is the best public company in Quebec to my knowledge. But the market valuation is not as exciting as a few years back, although – to me – totally warranted.

Progressive Corp (PGR.N)

In our September quarterly report, I told you about my summer trip in Ohio, during which I met with the people of Progressive (in Cleveland). Progressive Corp, a superbly run car insurance company, had another outstanding year in 2003. EPS were up 77% thanks to a 26% increase in premium and a combined ratio well bellow 90%, an incredible achievement. It is hard to believe that Progressive can maintain such profitability in this highly competitive industry (with our friendly competitor GEICO not far away!). But this company has surprised us many times in the past….

Fairfax Financials (FFH.N)

The year 2003 was shaky for Fairfax, a Canadian insurance company. We began to buy shares in November 2002 at around $120 a share. Rumors of inadequate reserves and liquidity problems brought the stock down to $57 at the beginning of 2003. Bernard and I knew Prem Watsa, Fairfax's CEO, for quite some time through his annual reports. In March, I went to Toronto to meet Mr. Watsa (thanks to an introduction by my good friend John Zemanovich) and I was satisfied with the meeting. We bought more shares. The stock rebounded a few months later and ended the year at $226.

It is of course early to conclude anything because Fairfax has still too much debt to my likings. But its combined ratio has improved and the company has restructured its holding. For example, Northbridge Financial and Odyssey Re were spun-off. We also acquired shares of Northbridge during the year.

One thing is clear though: Farfaix stock's huge ups and downs in less than one year shows how violent Mr. Market mood changes can be and how cool we have to stay in such instances.

Expeditors International of Washington (EXPD.Q)

About two years ago, my young and dynamic assistant, Jean-Philippe Bouchard, recommended to me the company Expeditors International of Washington. Expeditors is engaged in the business of providing global logistics services. I already knew about the company, having read a few annual reports and been a witness of its spectacular rise in the 1990s (only a witness unfortunately).

My worries were that the company would be sensitive to recessions. But the company did very well in the 2000-2003 period and has showed the strength of his business model. Also, reading the 8-K reports (top management answers to shareholder's questions) clearly convinced me of the great integrity and leadership of the key people. Expeditors' CEO, Peter Rose (not to be confused with the famous ball player), is the kind of businessman I like to be partner with. The long-term potential of Expeditors looks very promising thanks to the huge increase in Asian commerce. The market valuation of EXPD is not low (25 times earnings) but I've learned that outstanding companies are worth paying for.

<u>Owner's earnings</u>

We have been plagiarizing Berkshire Hathaway's way of looking at their stock portfolio performance through owner's earnings increase. In our mind, we own the companies of which we bought stocks. We focus our attention not on market increase (or decrease) but on EPS growth and their perspectives over the next five years to judge the quality of our investments.

In 2003, our stocks went up 34% (without taking into account currency changes). Our owner's earnings went up 30%. Our median ROE was 18% (21% without excess cash) which is in line with our goals.

I've compiled in the table bellow the results for the last 8 years compared with the S&P 500. I did not include the year 1995 because the year was exceptionally good (39% increase in earnings and 41% market performance) and would increase the annualized return to an unsustainable level.

	Giverny			S&P 500		
Year ***	EPS Growth *	Market **	Difference	Earnings *	Market **	Difference
1996	13%	29%	16%	11%	22%	11%
1997	16%	35%	19%	10%	31%	21%
1998	10%	12%	2%	-2%	28%	31%
1999	15%	12%	-3%	16%	20%	4%
2000	18%	10%	-8%	8%	-9%	-17%
2001	-10%	10%	20%	-20%	-11%	9%
2002	18%	-2%	-20%	9%	-22%	-31%
2003	30%	34%	4%	13%	28%	15%
Total	170%	246%	76%	46%	101%	55%
Annualized	13%	17%	4%	5%	9%	4%

* Owner's earnings growth
** Market performance including dividend
*** All results are estimated without currency effects

As you can conclude from the table, our portfolio as done 8% better than the S&P 500 (17% compared with 9%) because our companies have grown their intrinsic value at a similar rate differential. The 4% difference between market performance and intrinsic performance is linked to dividends (1-2% on average) and an important increase in P/E ratios in general during that time. The latter was direcly linked with the sharp drop in interest rates in the last 8 years.

In the long run, stock market performance will follow hand in hand the intrinsic performance of the underlying companies. But in the short term, there can be huge gaps between the two. You can notice that some years, the market performance was bellow intrinsic performance (1999, 2000 and 2002). This is 3 years out of 8 (40% of the time).

At Giverny Capital, we love such valuation gaps and try to profit from them (withing a reasonable level of trading). The more irrational the market will be, the higher will our subsequent returns be. Volatily is not synonymous of risk but – for those who truly understand it – of wealth.

Mistake *du jour*

Managers who avoid risk and fear failure spend their entire careers cheating themselves, their people, and their companies.

- Ken Iverson, CEO of Nucor (1965-1995)

This section of the report is a yearly tradition and a favorite of our clients (I wonder why). What is a tradition also – unfortunately – is the huge amount of mistakes I come up with each and every year. Some times, the mistake is recognized rapidly (read: we lose money). In many cases, it takes years to

realize how a buying (or a non buying) decision was costly. Time brings something that nothing else in this world can bring: perspective.

This year, we present an honorable mention to my decision not to buy shares of McDonald's (MCD.N) in early 2003. McDo is easy for me to understand. In addition of being a loyal client, I knew the history of the company and of its builder, Ray Kroc, very well. For 40 years, the company had grown at high rates. But these last few years, sales growth had slowed. Like I wrote a few pages above, domination can eventually create saturation.

At its 1999 high of $49, MCD was trading at 35 times earnings. And the stock went down to $12 withing four years. At that level, the P/E was only 9. In a short period, the P/E contraction was spectacular (but how typical of Wall Street) and reflected a profound change in market perception. As much as the stock was way to expensive in 1999, it was clearly undervalued in 2003.

And I knew it perfectly. I did not buy shares because I believed that the company could not sustain my objective of intrinsic earnings growth. As you know, I look for businesses that can grow their EPS at twice the average rate (at least 12% a year). But from time to time, it is not totally insane to buy shares of a great business that doesn't totally qualify to our criterias but that looks undervalued by a huge margin.

Bronze Medal : Stryker (SYK.N)

Our first medal of 2003 goes to my decision NOT to buy shares of Stryker in 1998. I knew the Kalamazoo (Michigan) company from for many years. I understood its business and had come to realize over the years how brilliant its CEO John Brown is. In 1998, the company made an important acquisition that added $1.5 billion of debts to the balance sheet.

I met with the top management at that time at a Baltimore conference and thought that their business plan was rational and full of potential. The stock had lost 40% of its value and it seems like an opportunity to become shareholder. But the high level of debt scared me and I decided to follow my rule of avoiding companies with too much leverage even if sometimes we do make an exception (like I did in 2001 with Level 3). Discipline is to respect one's rules, wisdom is to know when to break them!

And I definitively should have used more of that wisdom with Stryker. The company delivered on all its promises: In five years, earnings tripled, the debt was paid off and fundamentals continue to look good. The stock has increased five fold. In a bear market, that's an incredible result. And I was a front-row witness…..but a passive witness like a turtle hidden in its shell.

Silver Medal: Vitesse Semiconductor (VTSS.Q)

In my 2001 annual report, I explained in length why I acquired a small weight in a californian company called Vitesse Semiconductor. We were lucky that the weight was small, because the mistake was huge.

Vitesse was a leader in Gallium Arsenide (GaAs) based integrated circuits. This compound enabled signals to be transmitted at very high speed (Vitesse means "speed" in French). But two major problems hit Vitesse a the same time: A depression in their clients' industry (telecommunication) and a technological change that made their product line obsolete.

And I knew about those two risks (probably more the second one). In just two years, would you believe?, the GaAs business became worthless. Since the company doesn't seem to have the competitive advantages it had a few years back, it is highly unlikely that they will again earn 30% on sales (or even 20%). It was a good thing that the balance sheet was solid because the company could have gone under.

I finally sold our shares with an horrible loss of 70%. Even if it represented "only" 1% of our capital, I'm far from being proud of that purchase. What's ironic is in that same 2001 annual report, I took the time to explain the dangers of investing in the highly changing technology sector.

And what is even worse - much worse - is that I sold some BMTC shares to fund the Vitesse purchase. Since BMTC has climbed 400% since then, the economical cost (non accounting) of that mistake is terrible.

Gold Medal: eBay (EBAY.Q)

Every good capitalist dreams to be present at the birth of a business that will become huge in just a few years time. To have the vision to invest in a unknown company but that we are able to gage the full potential before the others can be very rewarding. And I had such an opportunity and I blew it!

I like to collect many items (stamps, old adds, books, antique radios, etc.). My eternal problem is to find foreign items in my neighbourhood. It is not easy to find Latvian stamps in Montreal. I discovered eBay in its early years in 1997 or so. I instantly saw a huge market without limit, a revolution in trade between consumers, eliminating distance and middlemen.

Moreover, eBay displayed in its beginning the number of items listed (the first time I visited the site, there were something like 2.5 millions items on sale). And the growth rate was around 33% *per month*. And I found it pretty handy to be able to follow the company's growth that easily. But soon, eBay put a stop to that politic and I was frustrated of it. I said to myself that perhaps growth is slowing and the company doesn't want to show it!

The company went public in 1998 at $2 a share (adjusted for stock splits). The company was then earning around $0.02 a share so the price did not look cheap. I should have been more perspicacious at first but the really gold caliber mistake came about two years later. In the tech bubble, the stock reached $58 but fell in autumn of 2000 to $35. I then wrote an article in *Les Affaires* newspaper about the company. I tried to value the stock and came out with a target of $35 in 2005. So, I concluded that the stock was still too expensive and needed to fall 50% before becoming interesting. And the stock did it! It went to $14 in just a few months. The results were still great. That was the opportunity I was waiting for.

At the end of 2002, the company had 638 millions items on sale on its web site (an increase of only 30 000% since the my first visit to its site). Results from 2000 to 2003 were incredible and the stock has increased by five fold since its 2000 low. The stock does not look cheap at today's levels but still, I should have bought it in 2000. I have no excuses. I understood the business, I came up with a reasonable valuation and I had the discipline to wait for my price. But when the price came up, I was motionless.

Even more than a Galapagos Islands' giant turtle.

********** **PUBLICITY** **********

It is with great pride that I share with you the fact that Andy Kilpatrick devoted to me a chapter in his latest edition of his book « Of Permanent Value : The story of Warren Buffett – the 04 California edition ». With his generous permission, I include a copy of that chapter with this report . Of course, you should buy the book. You'll love it. It is 1500 pages long so you'll have ample reading materials for those long and cold Quebec winter nights.

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I wish you all a great year in 2004.

François Rochon
President and portfolio manager
Giverny Capital Inc.

Giverny Capital Inc.

Annual Report 2004

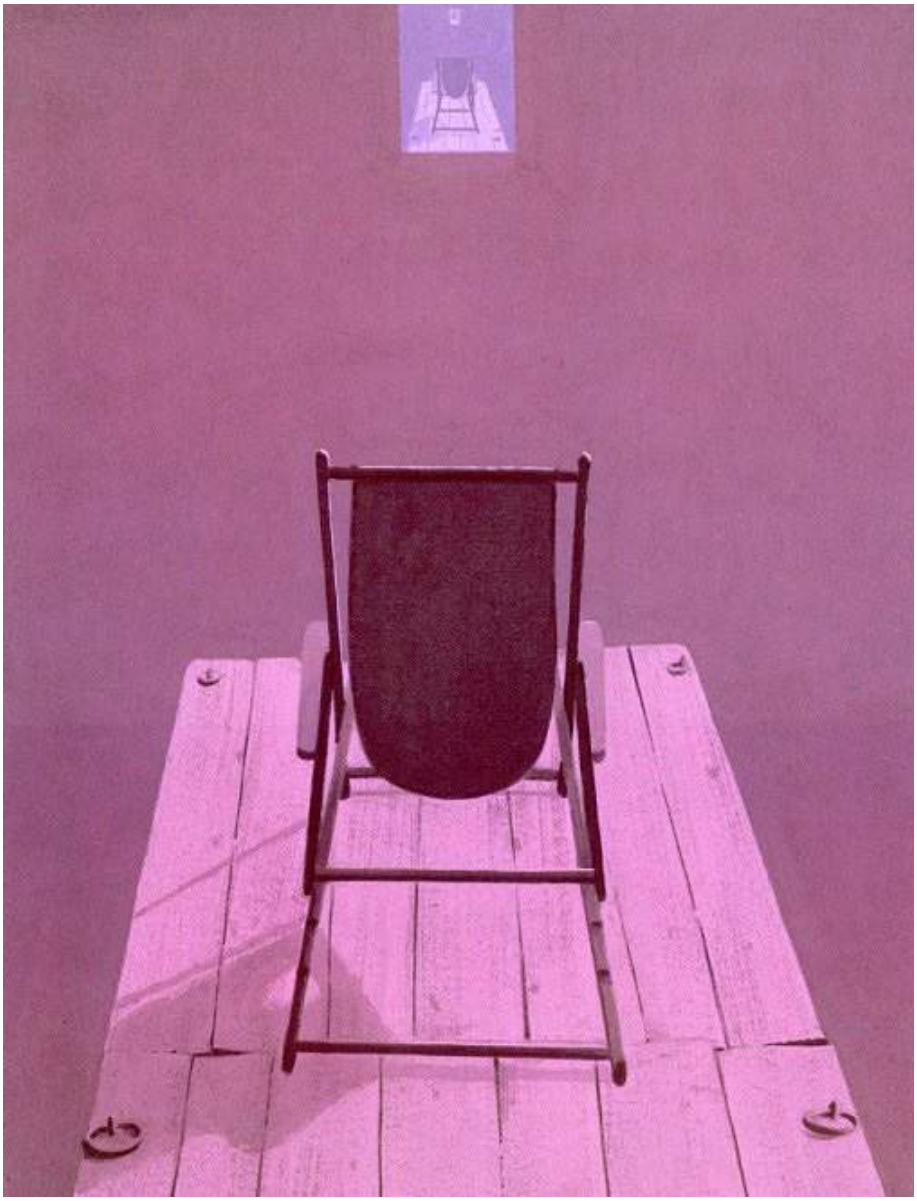

Edmund Alleyn (1931-2004)
Transat pour Giacometti, 1989

Giverny Capital Inc. – Annual report 2004 ©

For the year ending December 31st 2004, the return on our Global Giverny portfolio was 1.6% in Canadian currency. The International portfolio (in US currency) achieved 9.3% for the year. Our weighted benchmark had a return of 6.1% in Canadian currency and the S&P 500 achieved 10.7% (in US dollars). It is important to underline that our US stocks (80% of the Global portfolio) were impacted again by the fall of the US currency, losing 7% to its Canadian counterpart.

Since starting the fund, July 1st 1993, our annual return has been 19.9% compared to 10.4% for our benchmark and 10.4% for the S&P 500 (all in Canadian currency).

It's hard to be happy about our returns in 2004. What's important, though, is that our businesses had a great year, as their combined earnings increased 20% for the year (we'll go through the details in the "owner's earnings" section). As for the Canadian dollar effect, we won't - of course - be influenced by it. Over many years, the effects are almost negligible. Since 1993, the US dollar has lost 6%, the effect being an annual loss of 0.6%.

In fact, our underperformance in 2004 was due mainly to our Canadian stocks. Not to the extent to what we owned but to what *we didn't own*. The year 2004 was very good for the resources stocks, a sector which we avoid. As you know, our philosophy is to own companies that have a competitive advantage. So we tend to avoid enterprises that sell a commodity-like product or service (as Warren Buffett said: no one ever asks, "I want a Coke only if it comes in an Alcoa aluminum can"). We believe that our philosophy is prudent and rational. We also believe that it should yield superior returns over the long run. We will not change it because of one or two years of underperformance.

"It's a special episode of 'Fear Factor'. They're daring the contestants to get back into the stock market!"

Our returns since 1993

Our portfolio is « real » money. It is a family portfolio (most of the capital being my own). The portfolio is separted in two parts : Around 20% is a RRSP based part (limited to 30% in non-Canadian

content) and the other 80% is the International part (invested mostly in US stocks). Our returns have been audited by PriceWaterhouse Coopers.

Giverny portfolio (all in Canadian currency) :

Returns	Giverny	Benchmark *	+ / -	S&P 500	+ / -	$ US / Can
1993 (Q3-Q4)	**37.0%**	9.5%	**27.6%**	8.4%	**28.6%**	3.3%
1994	**16.5%**	3.7%	**12.7%**	7.3%	**9.1%**	6.0%
1995	**41.2%**	24.0%	**17.2%**	32.9%	**8.3%**	-2.7%
1996	**28.0%**	22.8%	**5.2%**	22.7%	**5.4%**	0.3%
1997	**37.8%**	28.5%	**9.2%**	36.7%	**1.1%**	4.3%
1998	**20.6%**	18.8%	**1.8%**	37.7%	**-17.1%**	7.1%
1999	**15.1%**	16.3%	**-1.2%**	14.1%	**1.0%**	-5.7%
2000	**13.4%**	3.2%	**10.2%**	-4.6%	**18.0%**	3.9%
2001	**15.1%**	-0.4%	**15.5%**	-5.7%	**20.8%**	6.2%
2002	**-2.8%**	-18.3%	**15.6%**	-22.0%	**19.2%**	-0.9%
2003	**13.6%**	14.0%	**-0.4%**	5.7%	**7.9%**	-17.8%
2004	**1.6%**	6.1%	**-4.5%**	2.8%	**-1.1%**	-7.3%
Total	**707.7%**	**211.9%**	**495.8%**	**210.5%**	**497.1%**	**-6.3%**
Annualized	**19.9%**	**10.4%**	**9.5%**	**10.4%**	**9.6%**	**-0.6%**

* The benchmark is made out of weighted indexes (S&P/TSX, S&P 500, Russell 2000, etc). in a way to reflect assets allocation

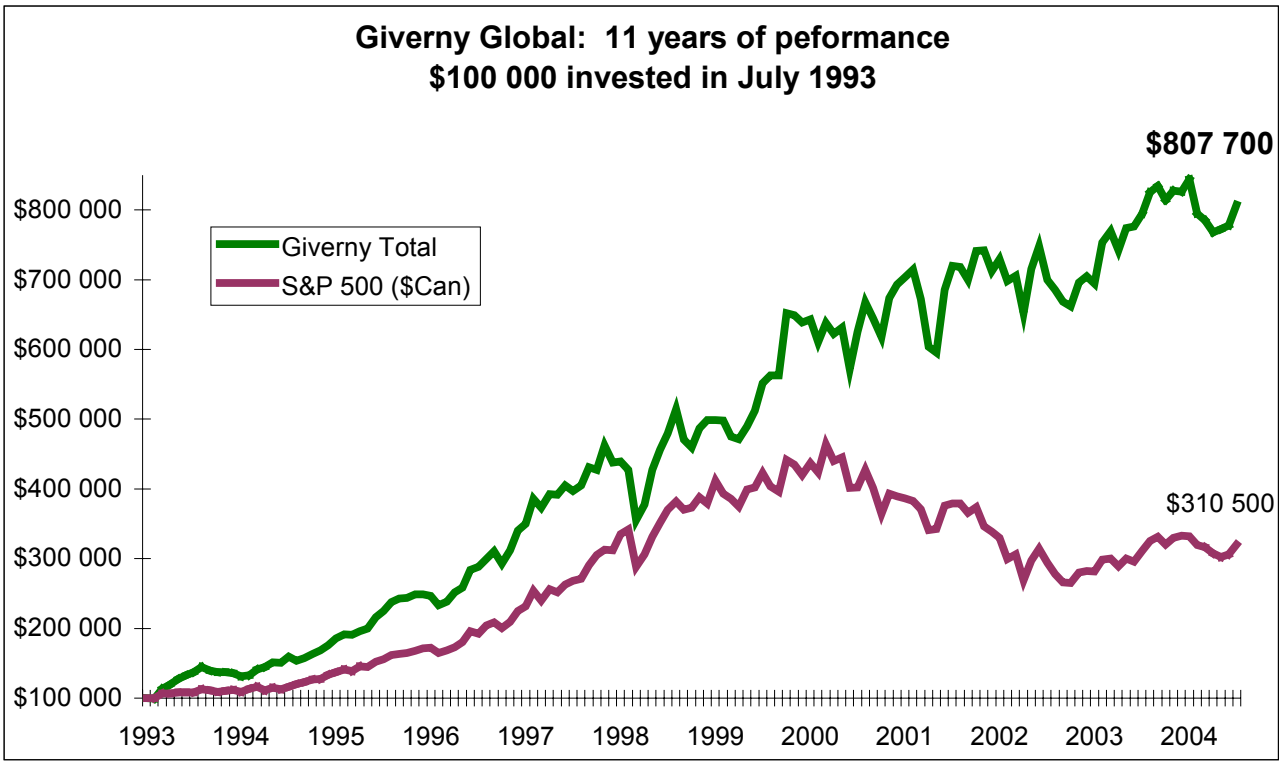

Giverny International portfolio (in US dollars)

Year	Giverny Intl.	S&P 500	+ / -
1993 (Q3-Q4)	32.7%	5.0%	27.7%
1994	9.9%	1.3%	8.6%
1995	54.8%	36.6%	18.2%
1996	27.0%	22.3%	4.8%
1997	32.9%	31.0%	1.9%
1998	11.0%	28.5%	-17.5%
1999	15.9%	21.0%	-5.1%
2000	11.3%	-8.2%	19.5%
2001	8.1%	-11.2%	19.3%
2002	-4.4%	-21.4%	16.9%
2003	31.6%	28.6%	3.0%
2004	9.3%	10.7%	-1.4%
Total ($US)	711.3%	230.3%	480.9%
Annualized	20.0%	10.9%	9.0%

Period	Giverny	S&P 500
1 year	9.3%	10.7%
3 years	11.2%	3.8%
5 years	10.6%	-1.8%
10 years	18.7%	12.0%
Since start	20.0%	10.9%

Giverny RRSP porfolio (in Canadian dollars)

Our RRSP portfolio underperformed the S&P/TSX in 2004. But we have to keep in mind that 25-30% of it is invested in US stocks (which were impacted by its currency). Secondly, since we avoid resources stocks (35% of the index) and we do not own, at this time, Canadian banks (25% of the index), our correlation to the TSX is quite low. To this day, our focused approach yielded good results although some years, the discrepancy with the index can be large.

Year	Giverny RRSP	S&P / TSX	+/-
1995	0.4%	14.3%	-13.9%
1996	29.9%	27.8%	2.2%
1997	32.3%	15.0%	17.3%
1998	29.3%	-1.2%	30.5%
1999	42.7%	31.1%	11.6%
2000	5.2%	8.2%	-3.0%
2001	16.2%	-11.5%	27.7%
2002	6.3%	-11.6%	17.8%
2003	32.4%	26.7%	5.7%
2004	2.9%	14.0%	-11.1%
Total	463.1%	165.8%	297.3%
Annualized	18.9%	10.3%	8.6%

Giverny RRSP porfolio: 10 years of return

This was our 10th year for the Giverny RRSP portfolio. Over 10 years, our return as 18.9%, an annualized added value of 8.6%. Also, we had no negative year (knock on wood)

Périod	Giverny RRSP	S&P / TSX	+/-
1 year	2.9%	14.0%	-11.1%
3 years	13.1%	8.5%	4.6%
5 years	12.1%	4.1%	8.0%
10 years	18.9%	10.3%	8.6%

Long term objectives

Our results since 1993 have been way better than anticipated and what can be expected in the future. Our ambitious objective is to sustain yearly returns of 5% better than the indexes. If stocks in general return something like 5 to 9% over the next decade – to me, a realistic assessment – we would be quite pleased to return 10 to 14% on our capital. We try to select companies that we believe should permit us to attain such goals, in other words that grow their intrinsic value at twice the average.

Review of the year 2004

In the US, corporate earnings were up on average an impressive 19%. Including the dividend, the S&P 500 returned around 11%. The increase in earnings was clouded by a sharp rise in basic material prices. On the other hand, we have to realize that basic material prices are not as important to the economy as it used to be. For example, recent studies have shown that over the last 34 years, oil needs in the US have gone down 50% : In 1970, the economy needed 1.31 barrel of oil to produce $1000 of GDP (in 2004 dollars). This ratio was down to 0.64 barrel in 2004[1].

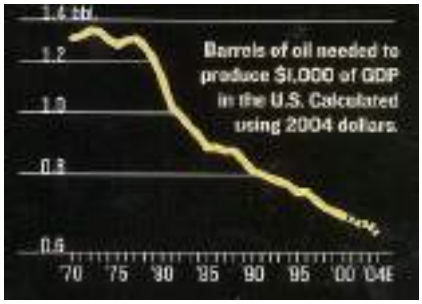

Source : Forbes

Low dependency on resources is important to me. I try to choose businesses to which "knowledge" and "brand" are the most important assets (both intangible). Companies like Astral Media, Johnson & Johnson, Cognex or Resmed do not see their costs go up in a significant way when oil or steel rises.

Cyclical stocks

In the long run, investing in cyclical stocks can yield – at best – modest returns. In my early days, I invested in many cyclical companies (that looked "cheap"). I've own, for example, shares of

[1] Source : Forbes Sept 2004. Calculations by Joel Darmstadter and Ian Parry, « Ressources for the Future».

Goodfellow, Héroux, Czar Ressources, Franco-Nevada, Pan-American Silver, Chrysler, Idéal Métal, Amisk, CCL Industries and Slater Industries. I've been there and I did not like the experience.

The most important investment I made in a cyclical stock was Nucor in 1997. Nucor is a steel producer whose costs are way lower than those of its competitors. Under Ken Inverson, the company increased its value by 20% annually for almost 30 years (the stock was up 250 fold). I also admired its successor John Correnti. But when Mr. Correnti left the company in 1999, I decided to sell our shares. But I was an owner for long enough to realize how much the company was struggling with cheap steel imports (from Russia at that time). So even if the company had the lowest cost in its industry, it was not good enough. And such parameters are beyond the control of any company, even the best managed ones. I've come to appreciate businesses where profit margins are not too dependant on external factors. The intelligence without the control to apply it is futile.

Nucor's EPS went nowhere for 10 years: They were $1.57 in 1995 and $0.40 in 2003. In fact, in 2003, the stock was at the same price as in 1993. But, in 2004, EPS exploded to more than $7 a share and the stock more than doubled. But 10 years is quite a long time to reap the reward of an investment. And many industry participants did not survive long enough (at least the stockholder's equity) to get their share of the reward: Bethlehem Steel, Birmingham Steel, Slater and Ivaco had to resort to Chapter 11 at some point in the last decade.

A luxury we can afford

The beauty of the stock market is that it gives us the luxury to avoid sectors and/or businesses that are outside our circle of understanding.

Since the start, I knew there were going to be ups and downs in the economy, corporate profits, interest rates and inflation level. That is why I choose companies that I believe can sail through the occasional storms that hit our "econo-system". We don't try to predict the sequence of those storms but rather select companies that we believe are so strong that we have the luxury to focus on the long term.

And at Giverny Capital, I have given myself means to afford such a luxury. When I worked for others, I had a pressure to beat the S&P 500 every quarter (every months if marketing had its way). Moreover, many clients expect their manager to be invested in every sector (particularly those which are doing well in the market) and that the biggest weights in the index (like GE for example) be an integral part of their portfolios (particularly in times – you've guessed it! – when the stock is going up).

We have no constraints or pressure of that manner. It could not be more simple: I buy for Giverny's partners the same stocks as for my own portfolio. And for me, I have the luxury to buy what I like, when I like and with the time horizon that I believe is sensible. In the end, such a managing style is more than a luxury, it becomes a competitive advantage. It's the equivalent – in baseball terms – of being at bat in front of the stock market pitcher and have no strike being called on us: We can choose the balls we'll swing at! Managers whose returns are scrutinize by clients and their consultants (sometime the brother in law) don't have my luck!

The flavor of the day 2004

It is usually common wisdom to avoid what's popular in the market. So we try to avoid what's the flavor of the day in Wall-Street (or Bay Street in Canada). It's hard not to be skeptical of the huge popularity (particularly in Canada) of the basic materials sectors. Not being objective in this manner

(since we do not own any of such securities), I will just share a little paragraph in Business Week magazine's edition of January 31st 2005:

> *In 2003, a seat on the Chicago Board of Trade sold for just $338,000 compared with 2 millions for one on the New York Stock Exchange. But in early January of 2005, a seat on the Chicago futures exchange changed hands for $1.25 million – just off a November high of $1.4 million. Meanwhile, the price of a seat at the NYSE has eroded to a nine-year low of $975,000, thanks in part to uncertainty over plans to automate more trading. It's the first time in roughly 20 years that a CBOT membership is priced higher than that of the NYSE.*

Investment philosophy

Note : this section is a repetition or old annual reports for the sake of the new clients.

The year 2004 was good for Giverny Capital. The number of partners (the term we use for a client at Giverny) has climbed to 525. With all these new comers, it is imperative that we talk again (and again) about our investment philosophy.

What is the most important thing to consider when choosing a money manager is the investment philosophy. Returns on capital is the result of the philosophy. To fully adhere to our approach is essential. Because if not, sooner or later, you're going to be disappointed.

Here the key points:

- It is futile to predict when it will be the best time to begin buying (or selling) stocks.
- A stock return will eventually echo the increase in per share intrinsic value of the underlying company (usually linked to the return on equity).
- We choose companies that have (sustainable) high margins and high returns on equity, good long term prospects and that are managed by brilliant and devoted people.
- Once a company has been selected for its exceptional qualities, a realistic valuation of its intrinsic value has to be grossly assessed.
- The stock market is dominated by participants that perceive stocks almost as casino chips. With that knowledge, we can then buy great businesses sometimes well bellow their intrinsic value.
- There can be quite some time before the market recognizes the true value of our companies. But if we're right on the business, we will eventually be right on the stock.

This discrepancy between the market quotes of a business and its underlying intrinsic value and the high volatility of the securities market are perceived by many participants as disadvantages. It's the other way around: market imbalances and fluctuations are our *allied* in our noble quest for wealth. In fact, the more irrational the stock market, the higher our chances are to attain our financial objectives.

But there is one important point: Owning a few undervalued securities (around 20) over many years doesn't yield linear returns. To stare at a freshly planted tree does not make it grow faster. Our approach is to judge the quality of an investment over a five years period. I truly believe that at least such a similar horizon is necessary to judge a money manager.

So patience – ours AND those of the partners – becomes the key ingredient for success. Real patience is neither easy nor that common. That is why many investors pray in those words: "Dear God, could you gratify me with patience? And if it is at all possible, RIGHT NOW"

The Rule of Three

In conjunction with our investment philosophy, I've added a market rule that I called : The Rule of Three. This rule comes from historical observations: it is not a scientific process that has come to its enunciation but an empirical one.

- One year out of three, the stock market will go down at least 10%.
- One stock out of three that we buy will be a disappointment.
- At least one year out of three, we will underperform the index.

What are the consequences of these rules? First, it is quite obvious that in the next 10 years, the market will go down 10% at least three times. It is important to be mentally ready for such corrections (those who panic can't be helped by even the best money manager). Secondly, out of 20 stocks or so that we buy, around 7 of them will yield deceiving results. So we should not judge the result of one investment but the whole portfolio. Thirdly, over a 10 years period, it would be a normal occurrence that our performance be lower than the index around three times.

The judgment that you – as partners – pose on my work should be in line with these parameters.

Creativity according to Erich Fromm

Beyond a sound investment philosophy, there is one element necessary to any art: creativity.

It is true that principles by definition do not change…because they're would not be principles! Paradoxically, a philosophy that seeks to echo human thinking must be in constant evolution. If not, it will rapidly not be able to depict adequately the world it wishes to reflect. In that sense, creativity, the capacity to build something "new" from the established, becomes the catalyst in any evolution process.

And some conditions are necessary for creativity to blossom. The great German philosopher Erich Fromm stated that theses conditions are at the opposite of what we instinctively cherish. By our nature, we hate insecurity and cherish what is familiar. The genuine creativity needs the courage to let go of some certainties to attain a constant state of mind opening.

Experience teaches us that investment success goes way beyond finance and numbers (otherwise all CFAs would be multimillionaires). It blossoms out of rationality and judgment but also in combination with the capacity of thinking independently, which needs more often than not creativity. And this, in light of the fundamental needs of security entrenched in those who have cumulated capital over the years. I know what I'm talking about!

Post Mortem 1999

For a third year in a row, we do a postmortem on my decisions (and writing) of five years ago. Since, five years is our general time horizon., it is fitting to do such yearly reviews.

The year 1999 is now known as the culminating moment of the high tech bubble (in fact the peak was reached in March of 2000). In my 1999 annual report, I had highlighted the fact that I believed that many investors not familiar with some notions of economic valuations were numerous in the stock market. And that I did not intended to participate in their "funfair". Unfortunately, the fair ended badly for many of them. And my decisions to sell most of our shares of Cisco Systems, JDS-Uniphase and Intel in 1999-2000 were appropriate.

Purchases : the class of 1999

In 1999, I wrote about three important purchases: Masco, Promatek and Progressive Corp. After our purchase, Masco acquired a few companies (mostly with debt) and it seemed to me that their growth plan was too aggressive. I've learned over the years that companies that seek a high growth rate – although a noble cause – are entitled to making huge mistakes. I believed that Masco was taking on too much debt and I decided to sell (at a small loss).

I sold Promatek – with a small gain – in 2000. You can read about this sale in the annual report of that year. I wrote then that I believed that the company had modest growth prospects and even though the stock was quite undervalued, our capital would be more wisely invested in other securities. In the end, shareholders were well enriched (with capital gains and huge dividends). It validated at least my belief that the stock was cheap. But, I must add that the stock is very illiquid and it would be have been impossible to buy this stock for more that 40 or 50 clients.

Progressive

My purchase of Progressive Corp of Ohio was a homerun! The story of this purchase is interesting, even instructive. We have to go back to 1993. When I read all I could find on the life and career of Warren Buffett, I've learned all about the history of GEICO, a car insurance company which was a major investment for Mr. Buffett.

In 1993, the *Wall Street Journal* published an interview with Philip Carret, a famous money manager who had a tremendous 65 years track record of returning 14% to its investors. Warren Buffett said of him that he was the "Lou Gehrig of investment" [2].

In the interview, Mr. Carret recommends a few stocks including Progressive which he labeled the "next GEICO". I immediately wrote to the company to get its annual reports. And in the six years subsequent, I followed the company closely and watch it climb in the market by 400%. I was biting my fingers so much that my friends taught that my girlfriend was cannibal.

In 1999, I finally got my chance: the stock went down 67% from a high of $58 to $25. Progressive was getting aggressively on the Internet as it decided to become the leader. At the same time, there was some underwriting margin pressure in the industry. So for a few quarters, EPS were down. I believed that these were temporary problems and decided to acquire shares. My purchase was not instantly rewarding as the stock went down to $16 just a few weeks afterward (a drop of 35%).

[2] Lou Gehrig was a baseball player who from 1925 to 1938 played in 2130 consecutive games. His record, for a long time believed to be unbreakable, was surpassed by Cal Ripken Jr. in 1995.

But five years latter, all that is forgotten. The combined ratio of Progressive has never been better and the company earned $7.40 per share in 2004, an incredible performance. It is now a clear leader in the car insurance sell through the Internet. And the stock has reached more than $85.

There are two important conclusions. First, the fact that PGR went down 35% just after I bought it ("the Rochon effect") shows us – once more – that the stock market can be irrational in the short term. And this fall was happening during a huge bull market as many young companies with no revenues were reaching many billions in market cap.

The other conclusion is equally important. We did not make money out of Masco and Promatek but the gains realized with Progressive more than compensated this. Judging a portfolio in its whole and over many years is wise. In fact, the combination of two mistakes and one success can be enough to earn decent returns (as this illustrates). In this line of thinking, selling quickly our losers and holding on to our winners is a constructive way to manage portfolios. Doing the other way around is the equivalent – to use Peter Lynch's words – of removing the flowers and watering the weeds.

Philip Fisher (1907-2004)

The legendary investor Philip Fisher passed away in 2004. I had the chance to talk to him two times on the telephone and to meet him briefly in San Francisco, many years ago. Over our conversations, I asked him many questions and at some point, he summarized his approach in these words : "*You know, Wall Street focuses on lots of unimportant things. But the quality of the management makes up 90 to 120% of the success of a business. Investors think with a such a short term horizon but in the end, management is the key factor*". I never forgot this advice.

I've read all of Mr. Fisher's books. There is a chapter in "Path to wealth through common stocks" that I want to recommend because few investors have heard about it ("How the greatest rise in stock prices comes about"). This book – I believed – has never been republished since its first edition in 1960; it is almost a historical treasure. And you would not believe how long I searched for it. Even Mr. Fisher could not help me find a copy.

Finally, I did find it at the central library in New York city. I could not take the book out but I did make photocopies (it's hard to invest $20 more wisely). The other three books of Mr. Fisher have been republished in a single book lately but "Path" is still a hidden gem.

I owe a lot to Mr. Fisher. He wrote books out of pure altruism (he was already wealthy at that time) to simply share his experience with us. I thanked him then and I thank him again. Giverny Capital owes a part of its existence to him.

A new purchase : Knight Transportation

In 1994, I bought shares of a small trucking company in St-Hyacinthe (Quebec) called Groupe Goyette (one of the first company I visited). Since then, I've been following the trucking industry closely. In the last two years, I purchase shares of Knight Transport, a Phoenix (AZ) company.

I discovered Knight in 1998 when I studied competitors of Heartland Express (which I owned at that time). Like Heartland, Knight is a small company that does well in this hyper competitive industry characterized by low margins and modest ROEs.

Let's first look at the numbers of a few players :

Companies	Margins	ROE *	EPS CAGR **
Arkansas Best	3%	11%	7%
CNF Inc.	2%	8%	8%
Heartland Express (HTLD)	13%	16%	15%
J.B. Hunt	4%	9%	9%
Knight Transportation (KNX)	11%	16%	26%
Ryder	3%	10%	3%
Swift Transport	3%	9%	16%
USF	2%	6%	1%
Werner Enterprises	5%	10%	8%
Yellow Roadway	2%	12%	12%
Average (without HTLD and KNX)	**3%**	**9%**	**8%**

* Return on equity

** Annual growth in EPS, last 10 years

Clearly, two companies stand out from the group : Heartland Express and Knight Transport. Both have cost structures well bellow the average (their cost ratio being 82% compared with 95% for the industry). But I think that Knight has a little intangible something better than Heartland.

The main difference lies in their business plan for growth. Heartland mostly grows through acquisitions. The negative side of that plan is that candidates are not always available at good prices but also – sometime – "surprises" can lie in the acquired business (and rarely are surprises positive).

Knight grows organically. It opens offices in new areas. Initially based in Phoenix , the company has opened 8 new operational centers in the last 10 years (not counting the new Knight Refrigerated division started this year). I believe this path should lead to a more stable and durable growth. Another important point for us: Knight is managed by four members of the same family (two pairs of brothers, cousins to each other). The four have a similar salary of $265 000 per year and are owners of 9% of the stock. Their interests are in line with ours.

We paid around $17 for our shares or a P/E ratio of around 20 times. It's not cheap but I believe it's warranted. Few companies – all sector included – has such a track record (10 years of 26% CAGR in EPS). And its balance sheet has stayed solid over the years.

Our businesses

Once again, I've made only minor changes in our portfolios this year. Our core holdings are the same as last year. We own shares of some of the best businesses in the World. Our attitude is that of a museum director: We only want to own masterpieces.

M&T Bank

Our Buffalo bank continues to reward its shareholders like a metronome. The acquisition of Allfirst Financial in 2003 has yielded good results. EPS went up 14% in 2004. We have been owners of M&T since 1998. In that timeframe, EPS have doubled from $3.08 to $6.38, a 13% annual growth rate (if

we use the same accounting in 1998 than in 2004, mostly expensing stock options, EPS would have grown at around 15% a year). The stock has followed EPS growth increasing from $45 to $107.

As it is so often the case, this investment was also not rewarded instantly. In fact, 18 months after our first purchase, the stock was at $36 (a drop of 20%). At that time, March 2000, only tech stocks were viewed as good long term investments (the "new economy" was the expression used). What an opportunity for true investors that acquire shares of such a great company at a price well bellow intrinsic value. And we bought more with enthusiasm. Can you imagine the consequences if we had let the market quotations undermine our judgment?

Groupe BMTC

2004 was the 10th year we where shareholders of BMTC Group, the leading furniture retailer in Québec. After a year 2003 where margins reached unbelievable level, it was realistic to lower our expectations. Moreover a 3 weeks strike hurt the company this summer as the arrival of a new competitor – The Brick – put some additional margin pressure. But even those events did not alter BMTC's strong business model (to this day at least). ESP were up 30% (5% if we take into account special charges in 2003) and prospects for 2005 are very positive.

BMTC is a much stronger company than The Brick. Its revenues per store are three times higher, their stock rotation is 12 times compared with 7 times for Brick and – most important of all – the ROE at BMTC is way higher than 20% compared with less than 10% for The Brick.

Cognex

Cognex had a very good year 2004 although the first 3 quarters were better than the last. I've been owning Cognex since 1996. I have to admit it's been a so-so investment. Our first purchase was made at $15. Since the stock trades at $27, we earned around 8% per year on this purchase, a similar return than the S&P 500 for the period.

We have to accept that Cognex revenues can be cyclical. On the other hand, the company has virtually a monopole in its industry (and in good years, earns 30% on sales). And Cognex has an outstanding balance sheet: It has $8 in cash, the sum of all its earnings since its foundation. I believe that Cognex has transformed itself in the last years and should be less sensitive to the semi-conductor industry in the future. And – as you know by now – I truly admire Bob Shillman, its CEO. So I do think that our patience will be rewarded in the next years.

Walgreens

It was another great year for our favorite drug store chains : EPS were up 19% and same store growth was around 9%. In fact, it was the 17th consecutive year of 10% or more EPS improvement. The company is the biggest player in its industry and has the best balance sheet. With only 12% of the prescriptions market, the growth potential still remains high.

Expeditors International of Washington

Our logistic Seattle company had a very good year : EPS were up 26%. The sharp rise in energy costs had a slight negative impact but overall, it was a banner year. This investment has proved very rewarding so far: the stock has doubled in less than 3 years. The P/E ratio is not low (around 30 times

2005 estimates). Using the word "overvaluation" would be simplistic but the margin of safety is not as high as I would hope for. But CEOs like Peter Rose are scarce. We are happy to be partner with him.

W.P. Stewart & Co.

Two years ago, I began acquiring shares of a money managing firm: W.P. Stewart (WPS). I've met with Mr. Stewart and I've known about his investment philosophy for many years. It is similar to ours. He had the courage and foresight to start his firm at the bottom of the 1973-74 bear market and has maintained great returns since then (for the 1993-2004 period, their results are not as good as ours, I must add!). In 2002, the stock was trading at $18. With a dividend of $1.20, the stock's yield was 6% which was quite attractive. I know most of the stock that make up their portfolios and I believe that in the next years, they should earn decent returns, probably better than the S&P 500.

In 2004, the company beat the market by a wide margin. Most important, over 5 years, it has overperformed the S&P 500 by 2% annually. This is impressive in the light that the company manages $9 billions in assets and does not have the flexibility of a smaller firm. EPS were up 41% in 2004 and the stock has done well, climbing to $24. The year 2005 looks promising.

Owner's earnings

At Giverny Capital, we do not judge the quality of an investment by its short term market performance. It our minds, we OWN the companies in which we acquire shares. So we focus on the growth in intrinsic value (mostly EPS growth) of our businesses and on their long term prospects. In 2004, our stocks were up 8% (in constant currencies). But the growth in our intrinsic earnings was 20%. These are satisfy results and they are similar to those of the S&P 500 in 2004.

Last year, I presented to you a table I consider almost as important as the ones of the yearly returns: the yearly growth in our owner's earnings. We compare those with the market performance of our portfolio and with the same numbers for the S&P 500.

	Giverny			S&P 500		
Year	Growth *	Market **	Difference	Growth *	Market **	Difference
1996	13%	29%	16%	11%	22%	11%
1997	16%	35%	19%	10%	31%	21%
1998	10%	12%	2%	-2%	28%	31%
1999	15%	12%	-3%	16%	20%	4%
2000	18%	10%	-8%	8%	-9%	-17%
2001	-10%	10%	20%	-20%	-11%	9%
2002	18%	-2%	-20%	9%	-22%	-31%
2003	30%	34%	4%	13%	28%	15%
2004	20%	8%	-12%	19%	11%	-8%
Total	224%	274%	50%	74%	123%	49%
Annualized	14%	16%	2%	6%	9%	3%

* Earnings growth (note : it is an approximation)
** Merket performance, dividend included (without currency effects)

The annual 2-3% difference between market performance and earnings growth is mostly due to dividends (the average P/E in 2004 is slightly higher than in 1996). As you may notice, we've done better than the S&P 500 for one reason only: our businesses intrinsically did better. In fact, since 1996,

our companies have grown their earnings at a rate of 8% better than the S&P 500. Our portfolio overperformed the index by a similar rate.

We aim at finding companies that grow their underlying value at around 12-14% per year, twice the market average. So far, we have been able to find such enterprises and usually at prices we felt comfortable with. Over many years, market performance will walk hands in hands with earnings growth. So focusing on our owner's earnings should lead to satisfying results. But in the short run, there can be wide gaps between market performance and EPS growth. You can see that in the 1996-2004 period, our portfolio underperformed the underlying businesses four years (1999, 2000, 2002 and 2004). We have to be able to be patient sometimes to reap the reward of good business selection.

Mistakes *du jour*

"*Experience is simply the name we give our mistakes*" - Oscar Wilde

Once again, candidates were numerous for our three mistake medals for the year.

Let's start with an honorable mention: Krispy Kreme. I took a starting position (around 1%) in this company in the spring of this year. Their donuts are divine but the stock was nothing like it in the year just passed. The company encountered serious problems and we decided to sell our shares at a 70% loss. My mistake was – with some hindsights – that I did not realize that their business model was so dependant on new stores openings. Peter Lynch once said "More companies die of indigestion than starvation". This was the case here (without any play on words intended).

You could conclude that an investment that turned out to be a 70% loss should at least qualify for a medal. Not necessarily: Losing 70% on a 1.5% investment represent a 1% loss of capital. I've done much worst in "omission" mistakes. For example, *not* investing our typical 4% weight of our portfolio in a stock that latter has increased by 200% has a cost to us of 8%. You don't see it in our reports but such opportunity costs are real.

For our first two medals, here are two great examples of such mistakes:

Bronze Medal : NVR Inc.

In 2000-01, I got interested in a home construction company based in Virginia: NVR. The company earns incredible returns on capital (in the 80%) and has increased their EPS from $1 in 1995 to $63 in 2004 (a 5000% increase in 9 years). Half of that growth was fueled by a major stock buyback plan (I usually prefer such a plan to an "acquisition" plan).

I thought about acquiring shares of NVR when the stock was $150, four years ago. Its P/E was 7 times. I had two main worries: a high level of stock options (which costs were inflated by the huge reduction in shares outstanding) and the cyclical nature of the construction market.

It was a mistake because I should have use more judgment. First, because even with the expense of stock options included, the valuation was still compelling. And when I find an outstanding business, well managed and with good long term prospects (even with some ups and downs), I should purchase it without worrying about short term events.

Since 2001, the results have continued to be outstanding and the stock is now $770.

Silver Medal: Pixar

In 1995, a new company, specializing in 3D animation movies, came public : Pixar. The new issue was in big demand (thanks to the huge success of “Toy Story”) and climbed to $40 the first few days of trading. This was more than 75 times estimated earnings for 1996 (which turned out to be $0.56), a level that had a very thin margin of safety.

In spite of this, I continued to follow the company closely. In 1996, we owned shares of Disney and I knew their history very well. So I did realize that Disney was losing some of its leadership in the animation industry but also that they had the foresight of making a distribution deal with Pixar. In 1998, “A bug’s life” was another hit. With “Toy Story 2”, this helped Pixar more than double their earnings in 2000 to $1.56 a share. Pixar released a movie every two years and the consequence was that the profits were not linear which clouded the earning power valuation (and so the intrinsic value).

In 2001, Pixar relased the marvelous movie : "Monsters Inc.". When I saw it, I knew instantly that this was the best animated movie of all time and that Pixar was not a fade. So I took a closer look at the stock. It was then trading at $30 (50% lower than its 1998 high). The company had $5 in cash so we were really paying $25 for the movie business which was the equivalent of 16 times 2000 earnings and 15 times those estimated for 2002 (2001 EPS were depressed, remember earnings were not linear!).

But I decided not to invest for two reasons: first because of my fear of profit instability but also because of its dependency on the Disney partnership.

Since then, Pixar has increased the number of movie releases: "Finding Nemo" in 2003, "The Incredibles" in 2004 and "Cars" in 2005. This has helped to stabilize profits. But I also realized that it was not Pixar who was dependant on Disney but the other way around. So in 2006, when Disney’s partnership will end, Pixar will be able to negotiate better profit sharing contracts and revenues per movie will probably be higher in the future. Clearly, I should have been more perspicacious and use better thinking about the long term economics of the business.

This year, "The Incredibles" was another great success (revenues of $340 millions, even more than "Finding Nemo"). The stock climbed almost 200% in the last three years to end the year at $85. I have no excuses: I knew the animation industry’s history in length and I understood Pixar’s strengths.

Gold medal: Yahoo !

The company Yahoo! as a unique privilege in my business career: it has been awarded two golden medals of "mistake *du jour*" in four years.

Let's go back four years in the past. In 2000, I bought shares of Yahoo! at $12. In the year's annual report, I underlined the fact that I made a huge mistake not to buy it way sooner (and so it got a gold medal mistake). In the quarters that followed, the company had disappointing results. And down the stock went, to a low of $4 in 2002. That price was the total value of their shares in Yahoo! Japan and the cash on hand. All the rest, the market gave it to you for free! What a bargain!!

But instead of buying aggressively more shares, without being disturbed by the general pessimism toward the Internet industry, I stayed still. I was disappointed by the departure of its CEO and by the 35% drop in revenues for the 2001 fiscal year. At the end of 2002, the stock rebounded to $8 and I decided to sell to buy more shares of Cognex (see the 2002 annual report). Since Cognex has almost doubled in the last two years, it was not a bad purchase. But Yahoo! did way better.

The new management team did a fabulous job. In only two years, revenues have tripled and EPS quadrupled. The stock is now $38, three times my initial purchase price and four times the level I sold it at. The stock trades at a very high P/E, it's true, but only time will time if it's warranted or not. For example, I expected in 2000 that at some point in the future Yahoo! would be able to charge its users fees that would translate their huge customer base in lots of revenues. In 2004, the number of paying users was 7.4 million, 80% more than in 2003 alone.

My mistake, of golden calibre, was simple : I was not patient enough!

That's why I use the expression "long term" so many times in this report!

I wish you all a great year 2005.

François Rochon
CEO and portfolio manager
Giverny Capital Inc.

Giverny Capital Inc.

Annual Report 2005

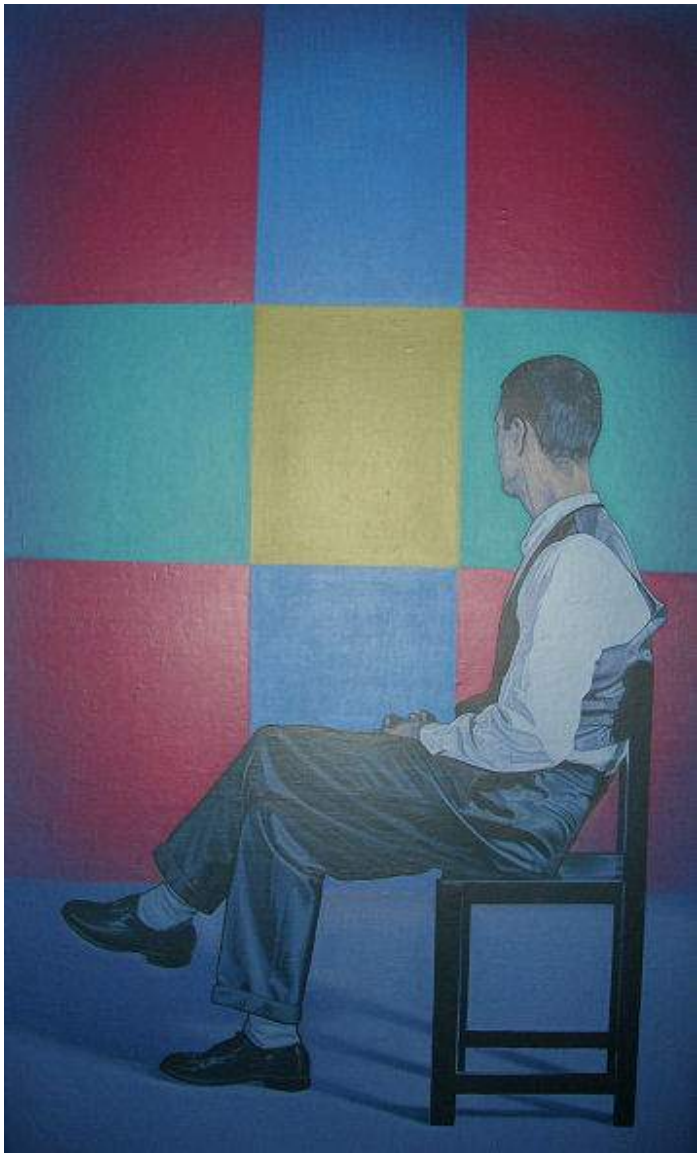

Pierre Dorion
Figure assise, 1993
Giverny Capital Inc. Collection

For the year ending December 31st 2005, the return on the Giverny Global portfolio was 11.5% in Canadian currency compared with 3.6% for our weighted benchmark. The Giverny US portfolio (in US currency) achieved 12.5% for the year compared with 4.9% for the S&P 500.

Since the start of our portfolio, July 1st 1993, our annual return has been 19.2% compared to 9.8% for our benchmark and 9.6% for the S&P 500 (all in Canadian currency). Our ambitious objective is to maintain an annual return 5% better than the indexes over any five years period. I believe that stocks in general (as measured by the S&P 500) will return 6 to 9% per year in the future. So our annualized target should be in the 11-14% area.

I am satisfied of our results in 2005. First, our stocks did better than our benchmark. Also, we made some changes in our portfolio that I believe will produce better returns in the future. What is still the most important factor is that our businesses continued to obtain outstanding intrinsic performances. This was reflected by a 13% increase in their combined earnings, a performance mostly in line with our 2005 market performance and also with our long term results. I'll come back with more details in the "Owner's earnings" section.

The Federal Budget of February 23rd 2005

Without any doubt, the last Federal Budget was the key event for us in 2005. By eliminating the foreign content limit for registered accounts, our "pound" where we can fish outstanding businesses has been extended to all the accounts we manage. Historically, RRSP portfolios made up 25% of the Giverny Global portfolio and so the Canadian securities content was around 20%. We reduced that weight during the year to around 10%. As you know, we don't have any country asset mix policy. We focused our energy in finding 20 or so outstanding companies, whatever their nationality. In the past, the country asset mix changed depending on the opportunities available. In 1995-97, we had more than 40% of the portfolio in Canadian Stocks. In 1998, we invested in Asia to profit from the high level of pessimism in that part of the World (who remembers the Asian crisis?). Recently, we acquired an Australian company.

Our approach is similar to the one of a hockey team General manager: Our goal is to win the Stanley Cup by selecting 20 all-star players to put on the ice. Their origin, whether it is Canadian, Russian, American, Swedish, Finish or Slovak, is not a criteria. We simply want the best players. And in the stock market, we have this incredible luxury to choose whoever fits in our team.

Consequences for our portfolios:

- Since our RRSP portfolio won't be materially different from the non-RRSP portfolio, we decided to stop differentiate it from the Global portfolio.
- Since we have many US mandate, we will continue to measure the Giverny US portfolio (which is mostly the US part of the Global Giverny portfolio).
- So, we will have two portfolios measured in our reports: The US Giverny portfolio and the Global Giverny portfolio. The later is the one started in 1993 and that regroups all my money. As always, we're in the same boat at Giverny: I have all my money in the same stocks as you!

Our Yearly Returns since 1993 [1]

Giverny Global Portfolio (in Canadian dollars):

Returns *	Giverny	Benchmark **	+ / -	S&P 500	+ / -	$ US / Can ***
1993 (Q3-Q4)	**37.0%**	9.5%	**27.6%**	8.4%	**28.6%**	3.3%
1994	**16.5%**	3.7%	**12.7%**	7.3%	**9.1%**	6.0%
1995	**41.2%**	24.0%	**17.2%**	32.9%	**8.3%**	-2.7%
1996	**28.0%**	22.8%	**5.2%**	22.7%	**5.4%**	0.3%
1997	**37.8%**	28.6%	**9.2%**	36.7%	**1.1%**	4.3%
1998	**20.6%**	18.8%	**1.8%**	37.7%	**-17.1%**	7.1%
1999	**15.1%**	16.3%	**-1.2%**	14.1%	**1.0%**	-5.7%
2000	**13.4%**	3.2%	**10.2%**	-4.6%	**18.0%**	3.9%
2001	**15.1%**	-0.4%	**15.5%**	-5.7%	**20.8%**	6.2%
2002	**-2.8%**	-18.3%	**15.6%**	-22.0%	**19.2%**	-0.9%
2003	**13.6%**	14.0%	**-0.4%**	5.7%	**7.9%**	-17.8%
2004	**1.6%**	6.2%	**-4.5%**	2.8%	**-1.1%**	-7.3%
2005	**11.5%**	3.6%	**7.9%**	1.5%	**10.0%**	-3.3%
Total	**800.3%**	**223.1%**	**577.2%**	**215.2%**	**585.1%**	**-9.4%**
Annualized	**19.2%**	**9.8%**	**9.4%**	**9.6%**	**9.6%**	**-0.8%**

* All return adjusted in Canadian currency
** The Benchmark is a group of indexes (S&P/TSX, S&P 500, Russell 2000, etc.) that reflects the asset mix of the portfolio.
*** Variation of the US currency compared with its Canadian counterpart.

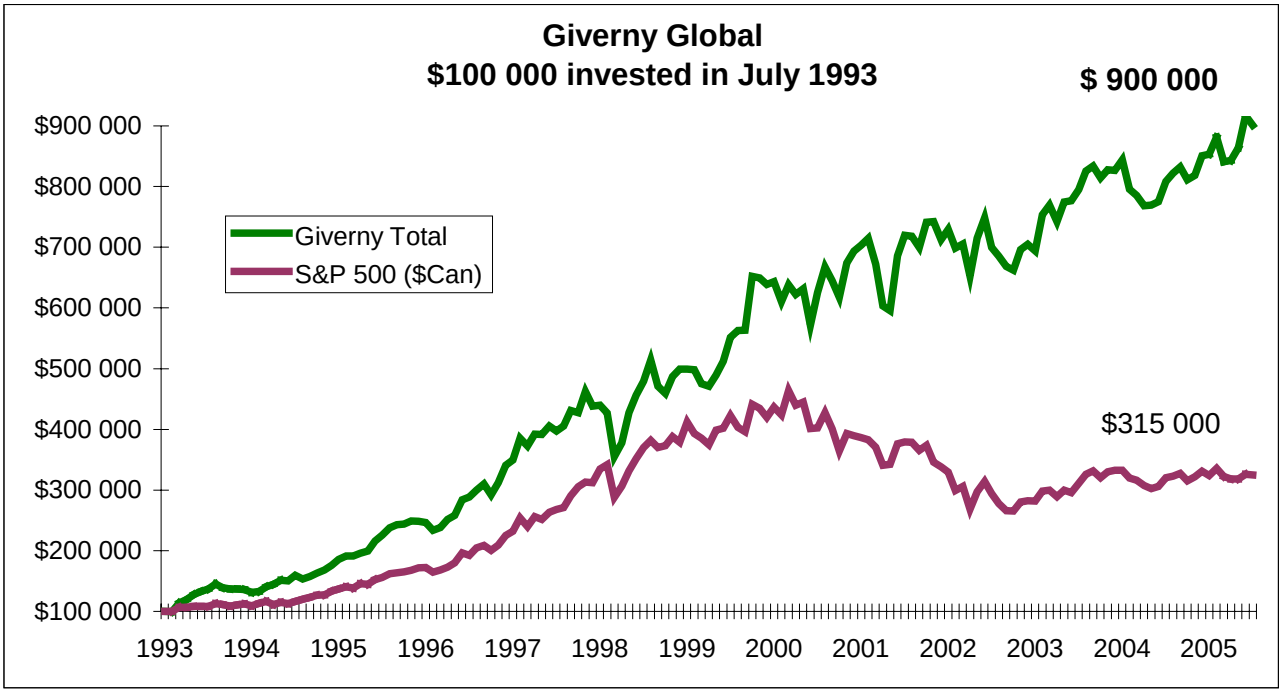

[1] All the returns have been audited by the accounting firm PriceWaterhouse Coopers.

Giverny US Portfolio (in US dollars):

Our US portfolio returned 12.5% in 2005, around 8% better than the S&P 500. Since 1993, our US portfolio had a 813% total return or 19.4% on an annualized basis. This compares to 247% and 10.5% for the S&P 500. Our annualized added value was 9%.

Year	Giverny US	S&P 500	+ / -
1993 (Q3-Q4)	32.7%	5.0%	27.7%
1994	9.9%	1.3%	8.6%
1995	54.8%	36.6%	18.2%
1996	27.0%	22.3%	4.8%
1997	32.9%	31.0%	1.9%
1998	11.0%	28.5%	-17.5%
1999	15.9%	21.0%	-5.1%
2000	11.3%	-8.2%	19.5%
2001	8.1%	-11.2%	19.3%
2002	-4.4%	-21.4%	16.9%
2003	31.6%	28.6%	3.0%
2004	9.3%	10.7%	-1.4%
2005	12.5%	4.9%	7.6%
Total	812.9%	246.5%	566.5%
Annualized	19.4%	10.5%	8.9%

Period	Giverny	S&P 500	+/-
1 year	12.5%	4.9%	7.6%
3 years	17.4%	14.3%	3.1%
5 years	10.8%	0.9%	10.0%
10 years	15.0%	9.1%	5.9%
Since the start	19.4%	10.5%	8.9%

We can observe in the second table that the last 5 years (from 2001 to 2005) were our worst absolute return but our best relative return since we did 10% better than the S&P 500. In the last 10 years, our yearly added value was 6%, in line with our long term objectives.

Currency fluctuations

These last few years, the impressive rise in the Canadian currency has been at the center of many debates in the financial industry as to the relevance of investing in foreign securities (even if foreign markets is the equivalent of 97% of the economic world). Those who focus on short term results tend to forget that in the long run the US/Canadian rate changes tend to normalize and is an insignificant parameter. At the same time, I can empathize with the partners that joined us three years ago and had to live through a 26% loss of the US currency.

It is important to have some perspective. In the following table, I have separated the Giverny portfolio returns in Canadian dollars and without currency effects. **We can see that the longer the time period, the less important is the currency effect.** Over 5 years, our 12% annual return was reduced to 8% in Canadian dollars. It is a major effect but still this 8% return is better than any indexes (including the TSX). Over 10 years, our 16% annual return was reduced to 15% in Canadian, a modest effect.

	In Canadian currency			Without currency effect		$ US / CAN	
Period	Giverny	Benchmark	+/-	Giverny	Benchmark	Total	Annualized
1 year	12%	4%	8%	15%	7%	-3%	-3%
3 years	9%	8%	1%	18%	17%	-26%	-10%
5 years	8%	0%	7%	12%	5%	-22%	-5%
10 years	15%	9%	6%	16%	10%	-15%	-2%
Total	19%	10%	9%	20%	11%	-9%	-1%

Should we hedge our portfolios against the US currency ?

Since 1993, the yearly effect of the Canadian dollar was a 1% loss. If I decided to hedge our portfolios against the US currency in 1993, our total returns would have been much lower. To hedge is costly. It varies depending on the size of the account but the yearly cost can easily reach 4%. So instead of having a 19% return since 1993, it would have been 16% (20% - 4%). In the last 10 years, it would have been 12% instead of 15%. And it would be irrational to hedge when the Canadian dollar is as high as it is now.

In fact, even if the Canadian currency would go at par with the US dollar in the next decade (which seems to me quite improbable), the yearly cost would be 1% from today's level. If we achieve our objective of yearly returns of 11-14% on our portfolios, this rise would reduce our returns to 10-13% per year. I can live with such a "risk".

The year 2005

Last year was marked by an important rise in oil prices. For a third consecutive year, the Canadian stock market did very well, mostly because of energy related securities. Energy stocks returned 63% in 2005 after returning 30% in 2004 and 25% in 2003. In three years, the energy weight in the TSX Index has climbed from 15% to 30%. In fact, more than 40% of the TSX is comprised of resources related stocks. These companies have experienced a huge profit rise in the last two years. These are cyclical businesses and it is wise to remind ourselves that their recent growth rate are not sustainable (and for the TSX by ricochet). By definition, cyclical businesses have ups and downs.

The TSX trades at around 17 times earnings. Considering the large weight of cyclical and bank stocks in the index – which usually trades at discount P/Es – the Canadian stock market in general looks pricey. There are some interesting securities, as always, but they're not in large numbers.

Our own Canadian securities have done extraordinary well lately and we reduced the ones that we believed were too richly valued. In contrast to some of our co-investors, patriotism is NOT a fundamental parameter in our analyses. In general, emotions should be left out of the investment process.

Since I started managing money, I used a "value" approach that gets me far away from stock market fads. It is quite amazing to hear today the same arguments for investing in oil that we heard about technology stocks only six years ago. It's the same song, the same jingle but with different couplets

South of our borders

American stocks look more undervalued than their Canadian counterparts. The S&P 500 trades at around 16 times earnings, a level that I would qualified as reasonable. In fact, the S&P 500 is at the same level it was 7 years ago although earnings are up almost 50% since then.

The key factor

Faithful to our investment philosophy, we look at our investments as part ownership of businesses. We own some of the best businesses in the World and they were selected knowing we will navigate through some good times and also through some storms. Tough periods have two good side effects. First, weaker competitors tend to fold during recessions or at least lose market share (usually to better managed companies like the ones we own). Second, a temporary stock market decline creates the opportunity to acquire more shares of the company we own at better prices. For example, in September, Knight Transport retracted to $15 for a week days. We took the opportunity to buy more shares. The stock rebounded to end the year at $20.

On the other hand, we don't have fresh money to invest all the time (we're not Berkshire Hathaway!). In such instances, the best thing to do is to be indifferent to market fluctuations and simply stay put. Going to the movies is often less dangerous than to read alarming headlines on the Internet or in the newspaper.

Wall-Street's forecasters

> *When it comes to predicting the market, the important skill is not listening, but snoring. The trick is not to learn to trust your gut feelings, but rather to discipline yourself to ignore them.*
>
> - Peter Lynch

Both Warren Buffett and Peter Lynch often said that disregarding headlines and market/economic forecasts is a wise thing. In spite of that, the favorite game in Wall-Street is to predict the short term future; I use the word "game" because obviously no one knows the future. Trying to foresee interest rates, currency fluctuations, market levels, commodity prices and economic cycles is futile. But still, there's no shortage of it on Wall-Street (and on Bay Street in Toronto). The reason is simple : "This is what the client asks for". It is not totally untrue: since the beginning of time, men have wanted to know their future. Forecasters and other fortune-tellers exist since then to reveal *it* to them !

To me it is so obvious that if someone could really predict the future of securities markets, he would become rapidly a billionaire. The fact that a forecaster still sells his "services" (especially after many years of "experience") seems to tell a lot about his real forecasting talent.

The Fog of the economy

The economy can't be predicted because there are to much parameters to account for (not counting the unknowable ones). The best analogy I heard about this came from a movie called "The Fog of War" which is an interview with Robert S. McNamara, who was the US Secretary of Defense from 1961 to

1968. If some comments are literally astonishing – the World came so close to a nuclear war in 1962 – it is the conclusion of Mr. McNamara, now 85 years old, that is of a grand wisdom:

> *"…There's a wonderful phrase: 'the fog of war.' What the fog of war means is: war is so complex it's beyond the ability of the human mind to comprehend all the variables. Our judgment, our understanding, are not adequate."*

Fortunately, the consequences of the fog of the economy are less tragic than those of war. But still, too many investors bet their financial future on parameters that are both unpredictable and uncontrollable.

The Good news !

Beyond economic hazes and misty predictions, we can focus on what investing really is. In one sentence: Investing is acquiring a participation in a business. If the business does well over many years, all fog tend to disappear and the stock market reflects in all its brightness the true intrinsic performance of the underlying enterprise. Without exception!

For example, let's look at the performance of Walgreen's over one generation (25 years). Since 1980, short term interest rates have fluctuated between 2% and 20%. We went through tree recessions in North America and numerous wars. In 1980, we were deep into the second oil choc and gold reached $850 an onze. The budget deficit reached new highs as a percentage of GDP in 1982. In the 25 years that followed, the stock market went up 1000% (10% a year) including 8 market corrections (a fall of 10% or more) and two great market drops (40% in 1987 and 50% in 2000-2002). The saying that "The market climbs a wall of worries" could not be more true.

During those 25 years, Walgreen's stock climbed 18 000%, a 23% annual rate. A $10 000 amount invested in 1980 would be worth close to $2 millions today, 20 times the level a same amount invested in the S&P 500 would have yielded. In 1996, the legendary investor Philip Fisher, then aged 89 years old, said in a Forbes interview: **« If you are in the right companies, the potential rise can be so enormous that everything else is secondary ».**

Walgreen's performance over 25 years (Source : BigCharts.com)

Five years Postmortem : The year 2000

Since five years is our time horizon, it is fitting and consequential that we go through a yearly quinquennial postmortem.

In March 2000, I made some important changes in the portfolio. I reduced some of our stocks that I felt were way too pricey to buy more shares of three of our stocks that I believed were undervalued: Berkshire Hathaway, M&T Bank and Lincare Holdings.

		Buys		Sells	
Stocks	**Today**	**Price**	**Difference**	**Price**	**Difference**
Berkshire Hathaway B	2 936$	1 367$	115%		
IMS Health	25$			21$	19%
Cisco Systems	17$			68$	-75%
Disney	24$			37$	-35%
Hewlett Packard	22$			73$	-70%
Intel	25$			60$	-58%
Lincare Holdings	42$	23$	80%		
JDS Uniphase	3$			137$	-98%
M&T Bank	109$	38$	189%		
Average			**128%**		**-53%**

Since then, stocks that were sold have yielded, on average, a market return of -53% and those bought +128%. Those results don't take into account portfolio weights (JDS Uniphase and Hewlett-Packard were then small weight). Also, I sold Lincare in 2004 at around $31 so I did not fully profit from this investment. In spite of that, these changes prove to be quite positive.

And these purchases and sales definitively went against the crowd in March 2000, which proved to be the top of the technology craze. At the time we purchased more shares of Berkshire at $1367, many believed that Warren Buffett, its CEO, had lost his magic touch and was out of date with the new way of investing. Like Berkshire, M&T Bank and Lincare were considered "old economy" stocks and were trading at very low P/Es. We don't hear that financial term anymore but it was used daily in those years.

Perhaps again today, the neglected stocks we're buying (Wal-Mart, Disney, HMA and Berkshire again) could turn out to be tomorrow's winners. We will see in 2010...

<u>Our businesses</u>

Although it's easy to forget sometimes, a share of a stock is not a lottery ticket. It's part ownership of a business.

- Peter Lynch

Disney

We bought shares of Disney in 1996 at around $20 a few months after its merger with Capital Cities ABC. We sold them in 2000 at around $37. I then believed that the company was diversifying too much (*Disney stores* for example). Moreover, they neglected their animation movie division. Michael Eisner seemed to lack some leadership qualities. Even though the stock had doubled in four years, EPS

had not grown accordingly. So the stock traded at more than 33 times earnings, a level I believed to be too high. Since then, EPS have increased 30% but the stock is 28% lower. Disney's market valuation is thereby much more attractive today.

It is not for that reason that I decided to repurchase shares lately. It is because of the new CEO: Mr. Eisner left in September and was succeeded by Mr. Robert Iger. I knew Mr. Iger at the time he worked at ABC under Mr. Tom Murphy, one of the best managers of all time. After reading a few interviews with Mr. Iger late in 2005, I decided that he would be the man to put Disney back on the right track. Already, the company had sold its stores to The Children's Place. Mr. Iger then worked on the number one priority: a deal with Pixar. A merger was announced in January 2006. Disney also recently spinned off its radio division by merging it with Citadel Broadcasting. In light of the radio satellite networks (XM and Sirius), it is hard to foresee how this industry will evolve in the next few years.

Disney, at its end of year price of $24, trades at 15 times 2006 EPS estimates. It has an excellent CEO. And it seems to focus on the right things to improve its growth prospects. On the other hand, Wall-Street seems to have thrown the towel (the stock is at the same price as in 1997). Ironically, the situation looks to be the reverse of the one that prevailed in 2000.

BMTC Group

Our Quebec based company BMTC Group (the furniture stores Brault & Martineau and Tanguay) had another good year. Earnings were not materially different but the good news come from competitors. Many had to close down. The Brick, their biggest competitor, had an so-so year and its stock is down this year. In fact, since its Quebec arrival in August 2004, The Brick's stock is down 12% and BMTC Group's stock is up 50%.

Sadly, BMTC's stock is not liquid and it has become difficult for us – with $115 millions under management – to buy large quantities of shares. Furthermore, the company is not making our life easier by buying back its stock aggressively. But we're not complaining….

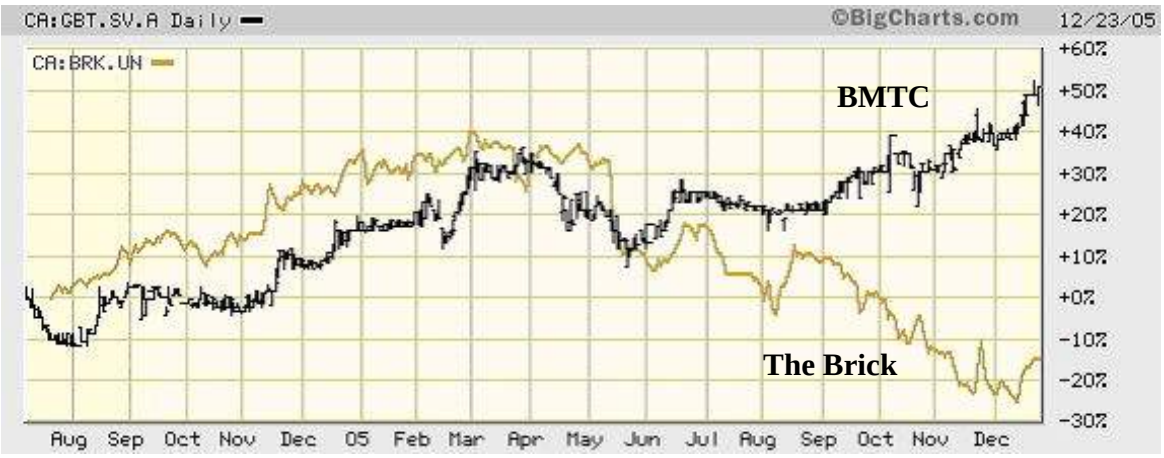

Chart of BMTC's stock performance compared to The Brick over 15 months (Source BigCharts.com)

Walgreen's

The best drugstore chain in the World had another great year: EPS were up 14% in 2005. Besides CVS, many competitors had a tough year. Walgreen's has increased its same store sales by 9% in 2005

(on the pharmacy side) compared with 4% for the industry. Pharmacy sales make up 64% of revenues. With 5000 stores, the company now owns 15% of the US market for retail prescription.

Walgreen's can use its clean balance sheet (no debt and $1.4 billion in cash) to continue its expansion. In 2005, the company opened 435 stores which is more than one a day. The company believe it can reach the level of 10 000 stores by 2015. It is therefore realistic to think that the company can maintain a good growth rate (12% or more) for many years to come.

Knight Transporation

Our Phoenix trucking company had another outstanding year. Revenues and EPS were up more than 28%. The company was wise to have a fuel surcharge clause in their client's contracts. Knight is now one of our top holdings. It is still a small company so we hope the best is yet to come.

Bed Bath & Beyond

Bed Bath &Beyond had a good year in 2005 but it's the destiny of any fast growing company to experience a growth rate slow down at some point. When we became owner of BB&B in 1998, the company was growing at 30% a year. In the last quarters of 2005, it was 11%.

It's still a very good performance and the company treats its shareholders in a perfect manner. The stock is up more than three fold since our first purchase but future returns looks more modest. We could decide to replace this investment in the months to come.

Pason Systems

Our Calgary company is doing very well these days. Pason Systems Inc. provides design, manufacturing and rental of specialized drilling instrumentation systems for use on land-based drilling rigs. Pason's products and services include data acquisition, wellsite reporting software, remote communications and Internet information management tools. Contrary to oil producers, Pason doesn't sell a commodity like product. In Canada, it has a 90% market share. Its net margins stand at 25% and its return on equity reaches 30%. In 2005, revenues and EPS were up 45%.

Although these growth rates are not sustainable, Pason's long term perspective still look impressive. In just five years, the company has increased its market share in the US from 10% to 37%. Pason also has entered Argentina, Australia and Mexico. I would add that Jim Hill, Pason's CEO, is our kind of manager (see later in the report our definition of a "good" manager).

ResMed

ResMed, the Sydney (Australia) company had another outstanding year. Revenues were up 33% and EPS 26% (stock options expenses decreased margins). ResMed is a leading respiratory medical device manufacturer, specializing in products for the diagnosis and treatment of sleep disordered breathing (SDB). It is not (yet) the biggest player in the industry - which is the American company Respironics - but it is the fastest growing.

When ResMed was formed in 1989, its primary purpose was to commercialize a device for treating obstructive sleep apnea (OSA), a major subset of SDB. OSA affects millions of people worldwide (approximately 20 million in the United States alone), its prevalence being comparable to that of asthma or diabetes. However, awareness is low with only around 5% of sufferers being

diagnosed and treated. Along with an increasing understanding of the morbidity and mortality caused by SDB, this discrepancy has created one of the fastest growing segments of the respiratory industry. There is also now a recognized association between SDB and common diseases such as chronic obstructive pulmonary disease, stroke, and cardiovascular disease.

The stock is not cheap (trading usually in the 30 times range) but the long term fundamentals are impressive. So far, it has done very well since we first purchased shares two years ago.

Berkshire Hathaway

Berkshire Hathaway, the company managed by the great Warren Buffett, has seen its stock move sideways for two years now. I believed that the company can grow its intrinsic value by around 12% a year. In other words, its value doubles every six years.

When I purchased more shares of Berkshire B in 2000 at $1400 (half today's level), I believed that it was worth 50% more or around $2100. Therefore, I believe that Berkshire B is worth $4200 today. The market discount seems to be similar to the one that existed in March 2000. Once again, Warren Buffett is not in fashion these days but if Berkshire Hathaway continues to increase its value by 12% a year, eventually its stock will follow. We just don't know when!

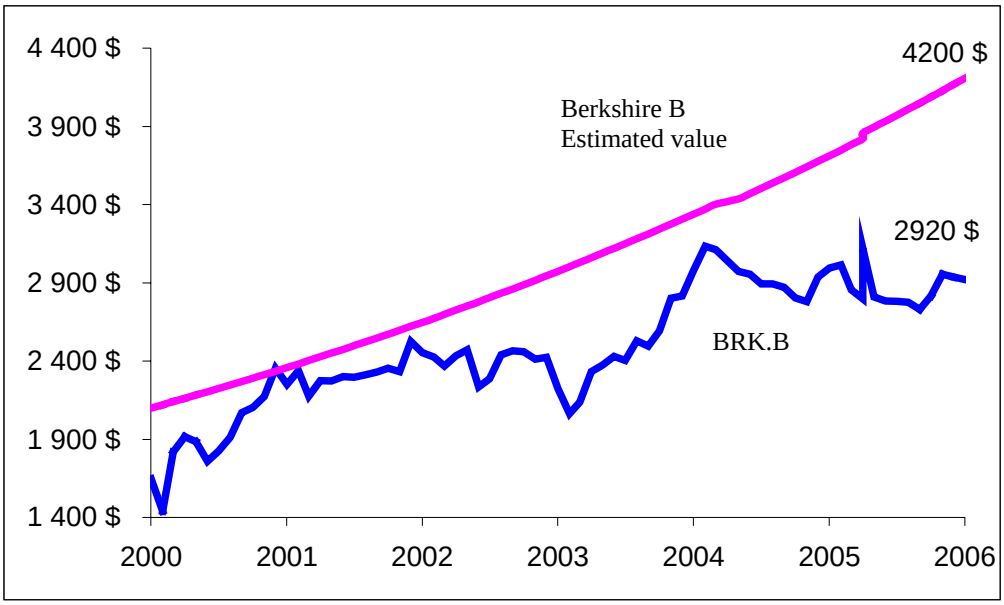

Berkshire Hathaway B: Stock prices compared with estimated intrinsic value over last 6 years

Wal-Mart

We acquired shares of Wal-Mart this summer. If sometimes we buy shares of some unknown company, the retail giant is more than well known. I started to follow the company in 1993. I have always admired their discipline to maintain a cost structure unequaled by any, its policy of "always low prices" and its devotion to long-term shareholders value. At the beginning of the 1990's, the company started to expand outside the US. I was sceptical that the company could succeed in other countries. To this day, it was a vast success in most of the region in which it expanded. The potential of growth in China is quite impressive and so far their store have been well received (although there are some tough competitors like "Wu-Mart").

On the other hand, the Bentonville (Arkansas) company is facing lots of critics. Even some of our partners raised questions about rumors and hearsays on Wal-Mart. Why is Wal-Mart so profitable? Well it is not *that* profitable since net margins are at around 3%. The return on equity is impressive at 20% but it is not that spectacular. They do have lower gross margins than competitors but in terms of salaries they are in the same ballpark Employees are not less paid than those of Target for example. On average, Wal-Mart associates are paid $10 an hour. On the benefits side, in Fiscal year 2006, Wal-Mart is projected to spend roughly $4.7 billion on associate benefits including, for example, contributions to health and dental plans, 401(K)/profit-sharing plans and associate discount cards. Wal-Mart offers health coverage to both full and part-time associates. Only 23% of all US employers offer coverage to their part-time employees.

Where Wal-Mart is king is on efficiency. Its offices are lean and mean and they have a thrift philosophy on everything. Even the CEO has a similar office than other directors. And in business trip, he shares his room ! Computer systems is where the company spend lots of money ! If the computer system detects a weather forecasts that will influence sales, automatically actions are taken. For example, if an hurricane is schedule to pass through a region in Florida, the computer sends instantly an order of "Poptarts" to Kellogg's for the targeted store (the computer made a link between hurricanes and sales of that item).

There were lots of bad press when Wal-Mart Canada closed its Jonquiere store because of unionization. The company is demonized by many way beyond reality. On the other hand, Wal-Mart Canada was named – again – on the list of "Canada's 50 best employers" published in the magazine "Report on Business" and "La Presse" newspaper. In fact, it was the fourth time in five years that Wal-Mart Canada was on the list. It is the number one retailer and it is even in higher ranks than companies like Pfizer, Glaxo, Wyeth and Abott Canada. Moreover, Wal-Mart Canada is on the 6th place for career opportunities and on the 5th place on work/personal life balance.

I certainly don't want to start a debate on the benefits of unions. But to have a different point of view doesn't hurt: with 1.5 million employees (1.3 million in America), Wal-Mart is a target of choice for unions. At $600 of annual fees per employee, this is a $1 billion "market" for them.

The company is growing at around 12% per year but its P/E ratio is only 15x . Pessimism that surrounds the company is – in my opinion – a good opportunity to become shareholders at a good price.

Owner's earnings

At Giverny Capital, we do not judge the quality of an investment by its short term market performance. In our mind, we OWN the companies in which we acquire shares. So we focus on the intrinsic value increase of our businesses (reflected by EPS growth) and on their long-term prospects. We also take into account market valuation in our decisions of buying or selling, although it is not our first criteria.

In 2005, our stocks were up 15% (without currency effects). Our owner's earnings were up 13%. So, including the dividend, our market performance was in line with our EPS growth.

Each year, I presente you a table I consider almost as important as the ones of the yearly returns: the yearly growth in our owner's earnings. We compare those with the market performance of our portfolio and with the same numbers for the S&P 500.

	Giverny			S&P 500		
Year	Growth *	Market **	+/-	Growth *	Market **	+/-
1996	13%	29%	16%	11%	22%	11%
1997	16%	35%	19%	10%	31%	21%
1998	10%	12%	2%	-2%	28%	31%
1999	15%	12%	-3%	16%	20%	4%
2000	18%	10%	-8%	8%	-9%	-17%
2001	-10%	10%	20%	-20%	-11%	9%
2002	18%	-2%	-20%	9%	-22%	-31%
2003	30%	34%	4%	13%	28%	15%
2004	20%	8%	-12%	19%	11%	-8%
2005	13%	15%	2%	11%	5%	-6%
Total	266%	328%	62%	92%	134%	42%
Annualized	14%	16%	2%	7%	9%	2%

* Earnings per share growth for the entire portfolio (note : it is an approximation)
** Market performance, dividend included (without currency effects)

The annual 2% difference between market performance and earnings growth (both for us and the S&P 500) is mostly due to dividends.

Many investors don't understand why the S&P 500 index has yielded almost no returns for the last 5 years even though we write that stock's intrinsic value has increased by a fair amount since then. This second table gives a better perspective to understand this phenomenon.

Annual basis	Giverny			S&P 500		
Year	Growth	Market	+/-	Growth	Market	+/-
1996-2000	14%	19%	5%	8%	18%	9%
2001-2005	13%	12%	-1%	5%	1%	-4%
1996-2005	14%	16%	2%	7%	9%	2%

As you can see, from 1996 to 2000, earnings for the S&P 500 companies grew by 8% a year but the market performance was 18% a year. This was due to a large (and exaggerated) increase in P/E ratios, mostly for the larger cap names. The market came back to reality in the five years that followed. In the end, over 10 years, the companies making up the S&P 500 increased their earnings by 7% a year, paid on average 2% in dividends. And the annual market performance was 9%. The first conclusion is no news: The stock market always ends up reflecting the intrinsic performance of businesses.

The second conclusion is more relevant: <u>our portfolio did better than the S&P 500 because our companies did better.</u> Since 1996, our companies increased their earnings by 14% a year, twice the level of S&P 500 companies. And in the 2001-05 period, we did way better than the S&P 500 because not only did our companies continue do perform outstandingly but the general P/E compression was not as severe for our stocks. The "value" dimension of our approach played a vital role.

The third conclusion is more empirical. If in the long run, market performance follows unrelentingly the performance of underlying businesses, in the short term, there can be large disparities between the two. The 1997 and 2002 results are good examples (20% difference).

We love such market disparities and we try to profit from them, within the limits of a reasonable level of transactions.

A « good » manager

Over the years, I insisted on the importance of choosing good managers for the business in which we invest. Of course, when we read hundreds of annual report, all top managers are "good" (particularly when their stock go up!). We have to use a little more sapience to adequately judge managers.

I've learned from experience – sometimes through pain – but also from writings by Warren Buffett (and by Robert P. Miles' great book "*The Warren Buffett CEO*"). Investing is becoming partners with top managers. We have to select people that share our values. Obviously, intelligence and competence are important but usually, once they have reached the high spheres of corporate management, all directors have those qualities. And their integrity must be without stain.

We look for deeper qualities. Warren Buffett often mentioned that in the end he asks himself this vital question: "Is this person loves more the business than money?". He adds : "There is nothing wrong in loving money but we want managers that like business better".

Business managers have lots of responsibilities, toward clients, employees, suppliers and shareholders. They must be able to conciliate appropriately the diverse interest of everyone involved. In a few words: <u>They must treat those who put their trust into them, the same way they would want to be treated if the roles were reversed</u>.

This is a philosophy I always keep in mind with those that trusted Giverny Capital with their capital.

Mistake *du jour*

Once again, here are our three mistake medals for the year. As it is so often the case, it is omission mistakes rather than commission ones that had the most tremendous consequences for our portfolio (even though they leave no clear trace).

Bronze medal : Gillette

I've bought some shares of Gillette in 1998. Some of the problems that then existed – mostly linked to acquisitions – continued and I decided to sell in 2000. In 2003, the situation looked better. James Kilt was just named CEO and I believed (after reading a *Fortune* article) that he was the right person to put Gillette back on the right track. Financial results were improving and I decided to buy a few shares at $32. But the stock started to climb and I decided to wait for a correction before continuing my purchases. And in 2005, the company was purchased by Procter & Gamble at around $52 a share.

I knew the company well. I had adequately judged Mr. Kilt qualities. And the market valuation was reasonable. I have no excuses: this 60% gain in two years should have been realized. Even without the P&G buyout, the stock would have done very well since results improved dramatically and long-term prospects are still very good. We bought shares of Gillette after the announcement since it was a way to acquire P&G at a small discount. But it would have been way more rewarding to buy earlier…

***** PUBLICITY ***** Fellow men: Have you tried the new Gillette *Fusion* razor ?

Silver Medal: Panera Bread

I have this long term friend, Caroline Banville, that I know has excellent business senses. She moved in the United States eight years ago. So, each time I see her, my second question (after I have inquired about the wellbeing of her family) is "Did you notice in your neighborhood a company that looks to be doing very well?".

Two years ago, she responded: "There is this nice sandwich shop that I like: *Panera Bread*". I instantly went on the Internet to get Panera's annual reports. I realized that Panera is a rebirth of the merger between *St-Louis Bread* and *Au Bon Pain*, a company I followed for a while a dozen years ago. Au Bon Pain was a good company that in 1993 got into too much debt and into a merger that did not work out. I decided to stop following the company.

A new managing team was brought in a few years later and did quite a turnaround. Au Bon Pain was sold in 1999 and the company was renamed Panera Bread. They also cleaned up the balance sheet. Since 2000, revenues went from $150 million to $640 million this year, a 33% annual growth rate. Net margins were increased to 8% and return on equity reached 18% (without leverage), an exceptional performance in such a competitive industry.

When Caroline talked about Panera, the stock was trading at around $35 which was 34 times earnings. EPS have just doubled and it seems to me that the company could not continue at such a rate. I decided to wait for a better price. Now, it seems the company will earn in 2006 twice what they earned in 2003. And guess what? The stock has doubled since then and I did not buy a single share.

I even had done my field research. When I was in Tampa (where we have a small office) in December of 2003, I visited a Panera Bread. I enjoyed my experience a lot. To a point where I returned twice during my trip (culinary diversification is not in my blood).

Gold Medal: Starbucks (1994-)

Our gold medal this year is a lifetime achievement award. I've erred for 12 years in a row about the investment merits of the company Starbucks Coffee.

Since 1994, I have followed with admiration the destiny of Starbucks. I have been a close witness of the 1800% rise in the stock market – 30% a year – without buying a single share. You surely know about this marvelous coffee chain (that started to "invade" Montreal this year).

When I started to invest in stocks in 1992, I went in the US in December and I noticed that there were less coffee shops than in Montreal. Howard Schultz changed that dramatically!

Starbucks was founded in 1971. The three founders opened the first coffee shop in Pikes Place in Seattle. In 1982, they hired Howard Schultz. He's the one that saw the real long term potential. Five years later, he bought the company with the help of a few local investors. In 1992, the company came public. And the stock is up 5000% since then.

The first Starbucks Coffee in Seattle's Pike Place Market

My good friend Bernard Mooney (another coffee lover) and I were in the front row. We both started to follow the company in 1994. Bernard bought the first book written on the company ten years ago and talked about it in length and with enthusiasm. But we never bought shares because of the high P/E (in the 40s) at which the stock has always traded. As good "value" investors, we decided to wait for a more modest valuation.

But as I always say : "Discipline is to respect one owns rules. Wisdom is to know when to break them". In the case of Starbucks, I've been lacking wisdom for 12 years. And each year, I say to myself that perhaps the stock will go down so I can buy shares.

In vain.

I wish you all a great year 2006.

Francois Rochon
President
Giverny Capital Inc.

APPENDIX

Investment philosophy

In 2005, we saw a large increase in the number of Giverny Capital partners (the term we use for a client). We are now more than 600 partners. With all these new comers, it is imperative that we write again (and again) about our investment philosophy.

Here the key points:

- We believe that over the long run, stocks are the best class of investments.
- It is futile to predict when it will be the best time to begin buying (or selling) stocks.
- A stock return will eventually echo the increase in per share intrinsic value of the underlying company (usually linked to the return on equity).
- We choose companies that have (sustainable) high margins and high returns on equity, good long term prospects and that are managed by brilliant, honest, dedicated and altruist people.
- Once a company has been selected for its exceptional qualities, a realistic valuation of its intrinsic value has to be grossly assessed.
- The stock market is dominated by participants that perceive stocks as casino chips. With that knowledge, we can then buy great businesses sometimes well bellow their intrinsic value.
- There can be quite some time before the market recognizes the true value of our companies. But if we're right on the business, we will eventually be right on the stock.

This discrepancy between the market quotes of a business and its underlying intrinsic value and the high volatility of the securities market are perceived by many participants as disadvantages. It's the other way around: market imbalances and fluctuations are our allies in our noble quest for wealth. In fact, the more irrational the stock market, the higher our chances are to attain our financial objectives.

But there is one important point: Owning a few undervalued securities (around 20) over many years doesn't yield linear returns. To stare at a freshly planted tree does not make it grow faster. Our approach is to judge the quality of an investment over a **five years period.** I truly believe that at least such a similar horizon is necessary to judge a money manager.

So patience – ours AND those of the partners – becomes the key ingredient for success.

Real patience is neither easy nor that common. That is why many investors pray in those words: "Dear God, could you gratify me with patience? And if it is at all possible, RIGHT NOW"

The Rule of Three

In conjunction with our investment philosophy, I've added a stock market rule that I called : The Rule of Three. This three parts rule comes from historical observations: it is not a scientific process that has come to its enunciation but an empirical one.

- One year out of three, the stock market will go down at least 10%.
- One stock out of three that we buy will be a disappointment.
- One year out of three, we will underperform the index.

The judgment that you – as partners – pose on our work should be in line with these parameters.

Giverny Capital Inc.

Annual Report 2006

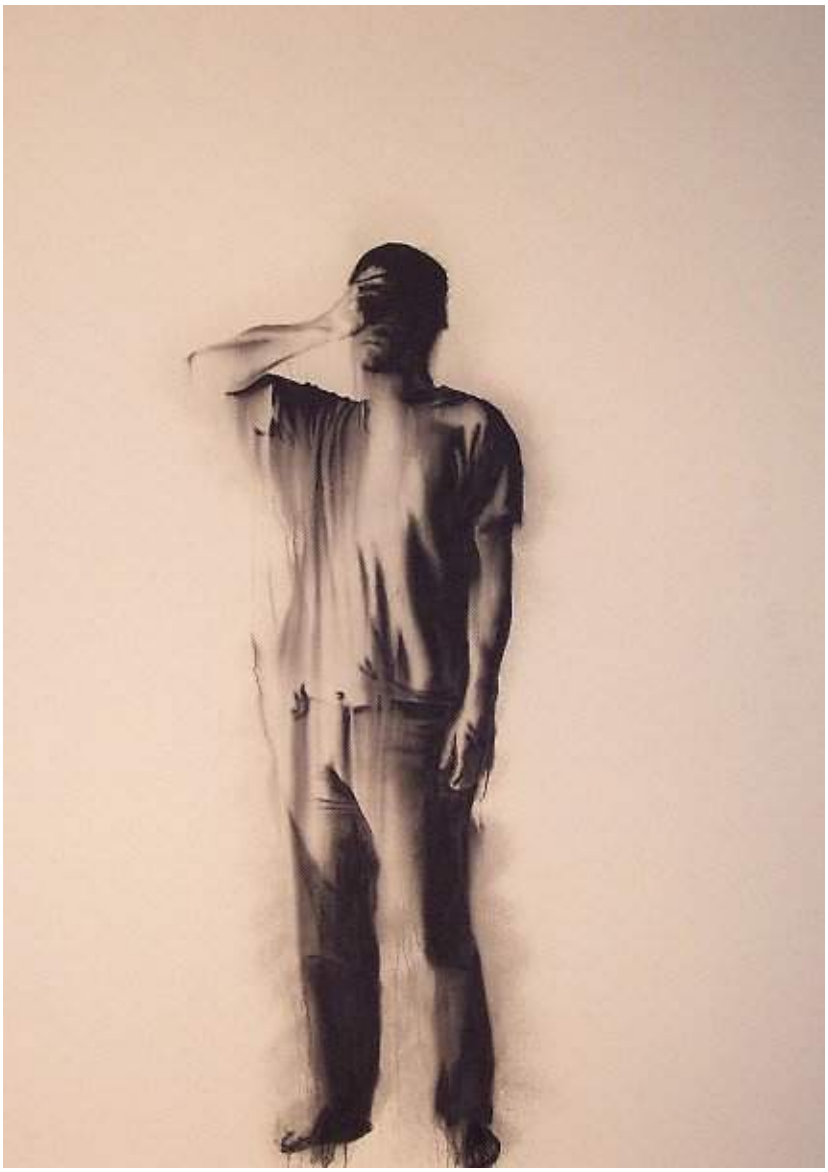

Marc Séguin
Autoportrait en dénie, 2002
Giverny Capital Inc. Collection

For the year ending December 31st 2006, the return of the Giverny Global portfolio was 3.5% in Canadian currency compared with 17.0% for our weighted benchmark. The Giverny US portfolio (in US currency) achieved 3.3% for the year compared with 15.4% for the S&P 500.

Since July 1st 1993, the start of our Global portfolio, our annual return has been 18.0% compared to 10.4% for our benchmark and 10.1% for the S&P 500 (all in Canadian currency).

Our ambitious objective is to maintain an annual return of 5% superior to the indexes over a long term period. We believe that stocks in general (as measured by the S&P 500) will return 7 to 9% per year in the future. In consequence, our long term annualized target should be in the 12-14% area.

We use the term "ambitious" with some insight since we know that less than 1% of managers succeed in achieving such a goal over a 10 years period.

A difficult year

If we are in the right path, the only thing left to do is to keep walking.

- Buddhist Wisdom

We obviously did not achieve our long-term goal in 2006. However, the intrinsic growth per share of our companies was good, an increase of approximately 13% compared to 2005 (14% including the dividends). We will discuss this further in the section "owner's earnings". Thus, contrary to the indexes, our companies' stocks under performed their intrinsic gains. On one hand, our US large-cap stocks group return was similar to the S&P 500. On the other hand, our US small-cap stocks have under-performed the Russell 2000.

Our investment philosophy is to consider ourselves as owners of the companies in which we have bought shares in. (We invite you to re-read the appendix on our investment philosophy at the end of this annual report). The consequence of this philosophy is that we shouldn't be affected by the stock quotes in the short term.

Warren Buffett said these words often: *"The stock market is not there to guide you but to serve you. The key to success is to have a good temperament in regards to its quotations. Sometimes they can be right but often, in the short run, they can be far from the economic reality"*.

Everyone embrace these noble words when the results are good. It is in difficult times – like today – that our commitment to this healthy philosophy is truly tested. It is during such times, that having the right temperament of which so often speaks Warren Buffett is absolutely necessary.

Any wise investor (or at the very least in a quest for wisdom) must at the same time be able to step back and analyze if it is the market that is wrong or if it's him that is blind to reality. One should never underestimate the power of denial. The art work on the cover of our annual report this year, created by the brilliant artist Marc Séguin, is entitled "Self-portrait in denial". In addition to being a masterpiece, it reminds us how important it is to always keep our eyes opened and to not fall into the many holes of denial that the human spirit digs, often unconsciously.

On several occasions this year, we re-examined all the stocks we own with a different perspective. As you know, we do not like to sell. If we look at our most important positions, we have owned them on average four and a half years. Six stocks for more than eight years. On the other hand, it is important to be rational - emotions and stocks don't mix well. We try, at least once a year, to revaluate the quality of all our investments. Because there is a difference between being patient and being stubborn.

Our Yearly Returns since 1993 [1]

Giverny Global Portfolio (in Canadian dollars):

Returns *	Giverny	Benchmark **	+ / -	$ US/Can ***	S&P 500	+ / -
1993 (Q3-Q4)	37.0%	9.5%	27.6%	3.3%	8.4%	28.6%
1994	16.5%	3.7%	12.7%	6.0%	7.3%	9.2%
1995	41.2%	24.0%	17.2%	-2.7%	32.9%	8.3%
1996	28.0%	22.8%	5.2%	0.3%	22.7%	5.3%
1997	37.8%	28.6%	9.2%	4.3%	36.7%	1.0%
1998	20.6%	18.8%	1.8%	7.1%	37.7%	-17.0%
1999	15.1%	16.3%	-1.2%	-5.7%	14.1%	1.0%
2000	13.4%	3.2%	10.2%	3.9%	-4.6%	18.0%
2001	15.1%	-0.4%	15.5%	6.2%	-5.7%	20.8%
2002	-2.8%	-18.3%	15.6%	-0.8%	-22.0%	19.3%
2003	13.6%	14.0%	-0.4%	-17.7%	5.7%	7.9%
2004	1.6%	6.2%	-4.5%	-7.3%	2.8%	-1.1%
2005	11.5%	3.6%	7.9%	-3.2%	1.5%	10.0%
2006	3.5%	17.0%	-13.5%	0.2%	15.7%	-12.1%
Total	831.9%	278.0%	533.9%	-8.8%	264.5%	567.4%
Annualized	18.0%	10.4%	7.6%	-0.7%	10.1%	7.9%

* All return adjusted in Canadian currency
** The Benchmark is a group of indexes (S&P/TSX, S&P 500, Russell 2000, etc.) that reflects the asset mix of the portfolio.
*** Variation of the US currency compared with its Canadian counterpart.

Over the last three years, two years were disappointing. We do not want to blur you with excuses. The losers find excuses, winners find ways! We'd rather go with some explanations:

- First of all, the rise in the Canadian currency erased part of our returns. Since 2003, the return of our stocks was 71% (14% annually) but once brought back in Canadian dollars, it drops to 33% (7% annually). Historically, the effect of the currency fluctuation between the US and the Canadian dollar tends to become insignificant. It is thus necessary to keep things in perspective. Since the beginning of the Giverny Capital portfolio in 1993, the Canadian dollar only reduced our annual returns by 0.7%, nothing really significant.
- Since 2004, our companies' intrinsic value increased by approximately 57% (16% annually) whereas their stocks only climbed 28% (8% annually). These differences are explained by a contraction of their P/E ratios. Our portfolio valuation is at a 10 year low. So we consider several of our stocks undervalued.

[1] All the returns have been audited by the accounting firm PriceWaterhouse Coopers.

- Finally, on a relative basis, the sectors which did best in the last 3 years are those related to the natural resources, industries which we tend to avoid in general.

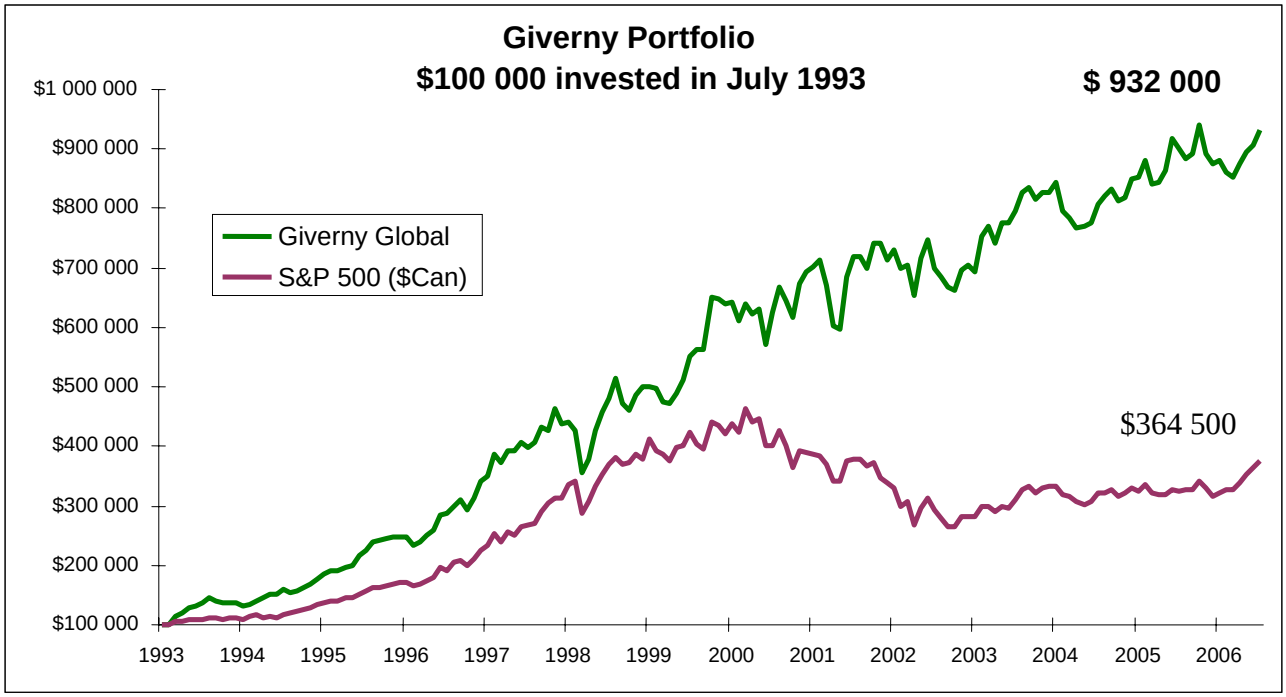

Giverny US Portfolio (in US dollars):

Our US portfolio returned 3.3% in 2006, 12% less than the S&P 500. Since 1993, our US portfolio had a 843% total return or 18.1% on an annualized basis. This compares to 300% and 10.8% for the S&P 500. Our annualized added value was 7.3%. Here are the details since 1993:

Year	Giverny US	S&P 500	+ / -
1993 (Q3-Q4)	32.7%	5.0%	27.7%
1994	9.9%	1.3%	8.6%
1995	54.8%	36.6%	18.2%
1996	27.0%	22.3%	4.8%
1997	32.9%	31.0%	1.9%
1998	11.0%	28.5%	-17.5%
1999	15.9%	21.0%	-5.1%
2000	11.3%	-8.2%	19.5%
2001	8.1%	-11.2%	19.3%
2002	-4.4%	-21.4%	16.9%
2003	31.6%	28.6%	3.0%
2004	9.3%	10.7%	-1.4%
2005	12.5%	4.9%	7.6%
2006	3.3%	15.4%	-12.1%
Total	843.3%	299.9%	543.3%
Annualized	18.1%	10.8%	7.3%

A memorable night 15 years ago!

In 1992, I bought the book "One Up one Wall Street" by Peter Lynch. I read it in a few hours and it was an unforgettable night. With "The intelligent investor", by Benjamin Graham, this book is likely one of the best written on investment. I discovered in it a passion for the stock market which has never left me since.

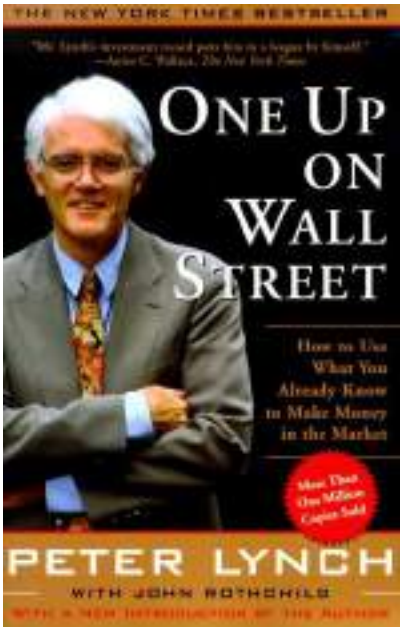

Peter Lynch particularly insisted in this book on the volatile nature of the stock market and that the only way to succeed was to have a long-term horizon. Here are some key points from the book.

- Sometime in the next month, year, or three years, the market will decline sharply.
- Trying to predict the direction of the market over one year, or even two years, is impossible.
- Trying to predict the economy is futile.
- Invest in companies not in the market.
- Forget about market fluctuations in short terms.
- Stock prices often move in opposite directions of the fundamentals but in the long term, the direction of profits per share will prevail.
- Just because the price of a stock goes up doesn't mean you're right.
- Just because the price of a stock goes down doesn't mean you' re wrong.
- There is always something to worry about.

Since reading this book 15 years ago, nothing has changed in the fundamental nature of the stock market (and in the human nature). Also, I quickly understood then that there would be ups and downs in a life dedicated to portfolio management.

To quote my favourite philosopher Erich Fromm: "The goal in life is not to overcome the inherent insecurity of existing; the goal is to learn to live with it".

The investors returns according to Dalbar (follow up from 2003)

Three years ago, we presented the results of a fascinating analysis by the firm Dalbar Inc. This firm specialized in studying behavioural patterns of market investors. The study showed huge differences between the returns of the S&P 500, of mutual funds in general and especially holders of these mutual funds. Here are the figures for the 20 years period ending in 2005.

Annual return of the S&P 500	12%
Average return of the stock mutual funds	9%
Average return of the holders of these funds	4%

How can such results be explained? The only possible answer is that investors collectively buy and sell their mutual funds (stocks, bonds, etc) at a bad time. They buy what has "worked" in the last few years and sell what hasn't. They have no trouble finding reasons to justify these moves (usually some kind of trend or fad). If they would base their decisions on intrinsic value analysis and not on the stock market quotations in the short run, they would most likely act differently. But that doesn't seem to be in the nature of the "human stock investor". In fact, the behaviour of extreme trading continues to degenerate instead of improving. The holding period of a stock on the New York stock exchange in the 1950s and 1960s was on average seven years. The holding period is now less then 7 months. In less than half a century, the average holding period of stocks by "investors" fell more than 90%.

Resisting the mermaids' enchanting songs

Although stocks in general are the best asset class on the long run, most investors earn low return when they invest in them. It is mostly linked to their behaviour: Switching from one fund to the other or from one asset class (cash) to the other (stocks) at the wrong time is a capital destructive activity. It would be useful to remember the classic adventures of the Greek-roman mythology hero Ulysse. After the Trojan wars, Ulysse wandered through the sea. He crossed the path of singing mermaids that tried to wreck

passing ships with their enchanting melody. Warned in advance, Ulysse ordered the crew to block their ears with wax and attached himself to the boat's mast.

Equity investors must also learn to resist the temping and enchanting songs from the "mermaids of short term returns". If not, the reefs of the Dalbar study could await many of them….

Our companies

Behind every stock, there is a company.

- Peter Lynch

Walgreen's

Walgreens had an excellent year in 2006. For the fiscal year ending in August, net income climbed 12%, same store sales 8% and earnings per share (EPS) 13%. The return on equity was 18%. The company still has no debt and $1.5 billion in cash. Few companies succeed in maintaining such a growth rate as long as Walgreen' s. (We invite you to read the chapter devoted to the company in the book "Good to Great"). We bought shares of Walgreen's four years ago at approximately $30. The stock ended the year 2006 at $45. Up to now, it has been a profitable investment (12% per year including the dividend).

This market return is however slightly lower than the intrinsic performance of the company. The stock dropped last fall following the announcement by Wal-Mart of offering generic drugs at $4. Also, the merger of Caremarx and CVS, the prime competitor of Walgreen's, worries many investors. I still believe that Walgreen's has the best game plan and remains the most solid company in its industry.

The first quarter of 2007 was extremely positive; sales climbed 17%, same store sales 10% and EPS 25%. The company also repurchased $343 million of its stock. Walgreen's also announced a new buyback program of $1 billion.

Disney

Disney had an outstanding year. Profits climbed more than 31%. These results are no accident: Robert Iger continues to do a fantastic job as the CEO. The stock has done well since our purchase in September 2005. It climbed from $24 to $35. The market valuation is a little higher than at the time we made our first purchase, but we are still very enthusiastic about the long-term prospects of the company.

Fastenal

Fastenal, of Winova, Minnesota, continues to reward us with impressive results. In 2006 revenues and net profits climbed more around 20%. Fastenal is part of our portfolio since 1998 (the stock climbed 500% in 8 years). We know the company very well and it fits perfectly with our philosophy: a company in a dull sector (nuts and bolts), with an excellent balance sheet, extremely profitable and with an outstanding management team.

Except for October 1998, when we first became shareholders, Fastenal's stock never traded bellow 20 times earnings. The high valuation of the stock, which seems to us justified, makes the stock volatile.

Thus, in spite of an excellent intrinsic performance, the stock dropped by 8% this year. We took advantage of this correction to increase our investment

Bank of the Ozarks

Last fall, we spent a day with the management team of our small bank from Little Rock (Arkansas). The company is in the process of completing an important expansion plan which was started at the beginning of 2006. The timing could have been better: The increase in expenses due to the opening of new branches was combined with pressures on the bank deposit interest rates and a decrease in interest margins (related to the flat yield curve).

Thus, in 2006, EPS slightly improved compared to 2005, in spite of an increase of 20% assets. The first two quarters of 2007 should be similar. In the long term, growth prospects seem to us excellent.

W.P. Stewart

The stock of the portfolio management firm *W.P. Stewart* was our most disappointing investment this year. After two difficult quarters at the beginning of the year, W.P. Stewart obtained adequate returns for the portfolios under management in the last two quarters of 2006. For the year 2006, the accounts returns were 7%, which is lower than the S&P 500. The company thus continues to lose assets.

By looking at the stocks held in the portfolio, we remain confident that the company will be able to beat the indexes in the long run. In the mean time, the dividend of $0.92 gives us a 7% yield.

Microsoft

The top software company in the world had a good year in 2006. EPS roughly increased by 10% and the stock increased by 14%. Profitability is finally in sight for the video game division. The X-Box 360 is without a doubt a great success. And I did my part by purchasing an X-Box system at Christmas.

Microsoft's stock was volatile this year. It went from $29 to $22 this summer when the company announced additional R&D expenses of $2 billion ($0.20 per action) to improve its competitive position against Google. We took advantage to buy more shares. The stock finished the year at $31.

The 2007-08 prospects are excellent with the near release of the Vista operating system. Microsoft is an extraordinarily profitable company. However, we believe that Google is an exceptional company too and it could become a tough competitor in certain market segments. We're following the story closely.

Wells-Fargo

This large San Francisco based bank had another excellent year in 2006. EPS climbed 11% in spite of the difficult flat yield curve (to our knowledge it is the bank that best managed the effect of the flat curve on its loan portfolio). After having been shareholders in the nineties, we repurchased shares in 2005 and continued to increase our position last year.

Wal-Mart

Wal-Mart had a more difficult year. EPS climbed only 9%, under our target of 12%. The weakness in retail sales (in part because of the rise in the price of gas) affected the company. The competition is

intense in the United States (Target is a solid competitor), in Great Britain (Tesco PLC) and in Germany (Metro AG).

On the other hand, the company is doing very well in Mexico and in Canada. In India, the company is about to sign an important partnership agreement with Bharti to develop stores in this country.

Wal-Mart also announced many environmental initiatives and an increase in benefit packages granted to employees. Even if the results are slightly weaker than anticipated, the stock seems undervalued: It trades at only 15 times the estimated profits for 2007.

Resmed

Once again, Resmed was our fastest growing company in 2006. Revenues climbed 32% and EPS 27% (including the stock options expenses). The stock did well in 2006: it climbed 28%. Since our purchase in 2004, the stock of this wonderful Australian company has doubled. It is not a cheap stock (trading at 30 times estimated EPS), but we believe that the long-term prospects are excellent.

Brown & Brown

Our Daytona Beach (Florida) insurance broker continues to carry out its ambitious objective to grow profits by 15% per year (over 5 years and 10 years, its annual growth rate exceeds 20%). We bought Brown and Brown shares in 2004 when the leader of the industry, Marsh & McLennan, found itself in a turmoil. At that time, the stock of BRO dropped by 20% in sympathy with M&M.

Since then, Brown & Brown EPS and its stock climbed 40%. As it is the case often, this raise was not linear. In 2006, for example, the stock went down by 8%. That is a 23% lower return than the increase in its intrinsic value. This had contributed to our underperformance to the Russell 2000. We believe that nothing has changed in this exceptional company.

Mohawk Industries

In Peter Lynch's second book "Beating the Street", written in 1992, he talks about *Shaw Industries*. It was one of the first companies which I studied in detail. In 1999, I even wrote an article in the newspaper "Les Affaires", about to the excellent prospects for the company. We did not buy any shares at the time (God knows why!). A few weeks later, Warren Buffett's company, Berkshire Hathaway, acquired Shaw.

When I studied Shaw, Mohawk Industries was its closest competitor. Over the years, Mohawk became as a dominant company as Shaw. Its diversity in the hard surface floors (hard wood, floating and ceramics floors) was very beneficial. Moreover, the company is very well managed.

The stock went from $90 at the beginning of 2006 to $75 this fall because of uncertainties regarding the slowdown in the US residential housing market. However, only 15% of the revenues are related to the new housing market. It was the opportunity we were waiting for to buy shares.

Owner's earnings

Each year, we present a table as important as the one of the returns: the growth of our owner's earnings. This year, we will go through the usual table. But we will also add another one that will detail the performance of our companies in 2006 compared to the growth in their respective owner's earnings.

	Giverny			S&P 500		
Year ***	Growth *	Market **	Difference	Growth *	Market **	Difference
1996	14%	29%	15%	13%	22%	9%
1997	17%	35%	18%	11%	31%	20%
1998	11%	12%	1%	-1%	28%	29%
1999	16%	12%	-4%	17%	20%	3%
2000	19%	10%	-9%	9%	-9%	-18%
2001	-9%	10%	19%	-18%	-11%	7%
2002	19%	-2%	-21%	11%	-22%	-33%
2003	31%	34%	3%	15%	28%	13%
2004	21%	8%	-12%	21%	11%	-8%
2005	14%	15%	0%	13%	5%	-8%
2006	14%	3%	-11%	15%	16%	1%
Total	356%	342%	-14%	161%	170%	10%
Annualized	15%	14%	0%	9%	9%	0%

* Earnings per share growth for the entire portfolio (note : it is an approximation) with dividend
** Market performance, dividend included (without currency effects)
*** All the results are estimated without the currency variations

There are two extremely different periods in the last 11 years: the five years period from 1996 to 2000 and the six following ones from 2001 to 2006.

	Giverny			S&P 500		
Year	Growth	Market	+/-	Growth	Market	+/-
1996-2000	15%	19%	4%	10%	18%	8%
2001-2006	14%	11%	-4%	9%	3%	-6%
1996-2006	15%	14%	0%	9%	9%	0%

During those two periods, the growth in intrinsic value was similar (ours like the one of the S&P 500). But the first period was characterized by an expansion of the price-to-earning ratios whereas it was the reverse during the second period.

Over the 11 years period, the stock market performance followed, as it rightfully should, the underlying intrinsic performance of companies. Both for our holdings and the ones of the S&P 500.

Market and intrinsic performance in 2006 details

This year, their has been enormous differences between the intrinsic performance (growth in EPS) of our businesses and their market performance. Here are the details for our top holdings:

Stock	2006 stock market	EPS 06/05 Est.	Difference
Berkshire Hathaway B	25%	21%	4%
Walgreen	4%	17%	-13%
O'Reilly Automotive	0%	11%	-11%
Knight Transportation	-18%	20%	-37%
ResMed Inc.	28%	27%	2%
Fastenal	-8%	21%	-29%
Brown & Brown	-8%	15%	-23%
Microsoft	14%	10%	5%
Disney	43%	31%	12%
M&T Bank	12%	10%	2%
American Express	18%	18%	0%
Pason Systems	-8%	38%	-46%
Wells-Fargo	13%	11%	2%
Progressive Corp	-17%	23%	-40%
W.P. Stewart & Co	-33%	-35%	2%
Wal-Mart	-1%	9%	-10%
Bank of the Ozarks	-10%	4%	-14%
Expeditors Intl.	20%	24%	-4%
Average	**4%**	**15%**	**-11%**

For these 18 stocks, they realized on average a 15 % growth in their EPS in 2006. This compares to a performance of only 4% in the stock market. We have discussed at several times this year, the special case of W.P. Stewart. Except for W.P.S., all our companies had a record year in profitability.

How should we react when facing such disparities? It isn't constructive to react with frustration. It is better to verify that the fundamental of our companies remain solid and then accept that certain factors in business are out of our control. Market quotations in the short run belong to that group.

This acceptance is not passive. In fact, it is the opposite. We make a constant effort to better understand the nature of our companies and of the stock market. The reality is that several of our stocks are simply not "in fashion" in spite of their excellent intrinsic qualities. The only sensible thing to do is to wait until the stock market reflects them.

Flavour of the day

We are often asked what is the most dangerous thing on the stock market (the "Flavour of the day"). A few years ago in Canada, Nortel and the other techno superstars were highly popular. Whereas today, nothing seems to us more popular than the Canadian banks. Ironically, at the time where Nortel was king of the Canadian market, we bought shares of two banks: the Scotia Bank and the Bank of Montreal, two stocks that were unpopular at the time.

We sold our shares approximately two years later at a price 60% higher but we would have done way better if we had kept them longer in the portfolio (it is easier said *afterwards*). On a comparative basis, here is a table which shows the fundamental differences between the situation in 2000 and in 2006.

Bank of Montreal	2000	2006		Scotia Bank	2000	2006
Return on assets	0.72%	0.82%		Return on assets	0.76%	0.95%
Reserves / net profits	21.4%	6.7%		Reserves / net profits	39.7%	6.0%
Tax rate	36.5%	23.1%		Tax rate	33.2%	19.2%
P/E ratio	8x	14x		P/E ratio	8x	14x

We can see that in six years, the level of profitability has strongly improved. It is in part linked to a decrease in the allowance for credit losses. In the case of the Scotia Bank, the rate went from 40% of net profits to 6%, a drop of 85% (in fact, in 2006, Scotia took reserves of only 0.1% of loans). Moreover, the tax rate was lowered by more than 1400 basis points which also contributed to improve the level of profitability, partly helped by an international diversification. Without a doubt, it will be impossible for the next years to reduce the rate of bad loans (it would become "gains for bad loans") nor to continue to reduce the tax rate in a substantial way.

How did the stock investors react to these gains realized in an ideal (and probably not sustainable) environment? The price-to-earning ratio climbed 75% passing from 8 times in 2000 to 14 times in 2006. In the long run, in a Canadian economy which grows at 5% per year, it seems to be unrealistic to believe that all the players of the banking industry will be able to do much better than this growth rate.

Five years Postmortem : the year 2001

Each year, we undergo a post-mortem of our decisions from five years ago (since it's our time horizon in general). In 2001, we were in the middle of the Enron scandal and the market crash of technology stocks. In the fall, the attacks of September 11 took place. Here is a graph of the S&P 500 since:

As you see in the graphics above, when the Stock Exchange reopened, a few days following September 11, it dropped 6% in one day. Unfortunately for those who sold at this moment, the S&P 500 is 40% higher today. To sell in a panic is not a winning strategy.

We had decided to make some purchases following this correction. We bought shares of American Express (it slipped from $50 to $25 in a few months) following 911. It was the stock that I recommended during an interview on the radio station Webfin following the attacks. As Amex is now at $58 (without counting the bonus "spin off" of Ameriprise), one can come to a conclusion, five years later, that it was a good purchase.

We had also bought shares from the Canadian company Wesjet Airlines after 9-11. Stocks of airline companies collapsed everywhere in the world at the end of 2001. Westjet was at the time a profitable company with a beautiful balance sheet. We sold our shares a few years later, doubling our money.

The Canadian Stock Market 2001-2006

Today, after the Canadian index TSX has doubled during the last five years (thanks to the bull market in the resource industries), several people want to invest in the Canadian market. All the risks they saw into 2001-2002 have disappeared like magic. Paradoxically, it is exactly then, when investors don't see any risk in a market that it becomes the riskiest. But this is usually realized later…

Mistake of the day

All men make mistakes. But only wise men do learn from their mistakes.

- Winston Churchill

Bronze medal: Cognex

We had own Cognex for 10 years. We bought and sold the stock at different prices, but I would say that on average our annual returns was around 4% per year, which is extremely disappointing. In this case, our patience was not rewarded. As you know, I always admired this beautiful Boston based company and its founder, Robert Shillman.

I hesitated a long time before classifying this investment in the error box. I knew the company well and had evaluated the potential and the risks. But I finally realized that Cognex was missing an important element. The managers at Cognex treat their employees extraordinarily well (what I had always admired). The "stock options" program is very generous. When the company had a growth of 25% per year, giving approximately 3% of the company to the employees each year didn't have a huge impact. But, when the growth rate slowed and the company did not reward its shareholders for several years, it seems to me that an important reduction in the option program to the employees would have been appropriate.

I always said that we look for managers who have reached a balance in treating fairly the customers, the suppliers, the employees and the shareholders. We have to admit that the last category did not receive the same degree of fairness as the others. For example, Cognex had $6 in cash per share on its balance sheet. Giving a special dividend or repurchasing its stocks (instead of giving away some) would have been rewarding for the shareholders.

When we started to realize that while reading the 2005 annual report, we reduced our position; Without selling it completely. Then we finally sold the remaining shares in the fall. It was a mistake because the stock slipped 20% between the two moments.

Silver medal: Ominicom

Omnicom is the second largest publicity agency in the World. Warren Buffett made great purchases in the 1970s with his investments in Interpublic Group of Cies (IPG) and Ogilvy & Mather, a company acquired by WPP some 20 years ago. I've always kept a close look at this industry.

At the beginning of the years 2000, IPG made some bad acquisitions and Omnicom became, in my opinion, the best company in the industry. In 2002, IPG had a rough year. At the same time Omnicom was at the center of an accounting controversy, which I considered minor.

But Omnicom's stock dropped from $97 to $37 in a few weeks (the market was very nervous at that time). At this price, Omnicom was trading at only 11 times earnings. It is not every day that we can purchase shares of such a solid multinational enterprise at such ratios. I studied the company's financial statements and everything seemed in order.

But in spite of this, I didn't buy any stock. Why? I believe I didn't want to take the chance that the company would be at the center of a scandal. Our partners were very worried about the quality of the financial statements of our companies (as Enron and Worldcom made the headlines daily).

It was an error because the probabilities were largely in our favour. I should have bought shares in spite of the alarmist headlines and worries of our clients. It is my responsibility to evaluate the risk/return ratio. When it seems to favour us by a wide margin, we must go forward. The stock today is $106. We could have had a return of nearly 200% in 4 years.

Gold medal: Children's Place

Two years ago, Disney decided to sell its Disney stores to Children' s Place. I had been following Disney for many years: I knew that the store chain would be more profitable if it would be run by a specialized retailer. This acquisition was important for Children' s Place: it increased by almost 50% its revenues. Moreover, the price paid was very reasonable.

I studied this company which I knew only by name. Children's Place had approximately 700 stores specialized in children's wears. Children's Place had had its shares of problems in 2002: margins went down and EPS had fallen drastically. But in 2004, the company had solved its margin problems and generated good return on equity. Its balance sheet was debt free and the company had a very good outlook. I believed that the combination with the Disney stores was particularly suitable.

The stock quickly climbed from $20 to $30 following the acquisition announcement. I thought - as an amateur - that I had missed the stock. In the last two years, EPS went from $1.67 to $3.15. The stock today trades at $57.

Conclusion

The next years are promising. Our companies are leaders in their respective industry, have excellent growth prospects and theirs stocks are reasonably valued in the market. We have all the reasons to be optimistic toward the future.

We want to thank you again for your trust.

We wish a great year 2007 to all our partners.

François Rochon and the Giverny Capital team.

APPENDIX

Investment philosophy

In 2006, we saw a large increase in the number of Giverny Capital partners (the term we use for a client). With all these new comers, it is imperative that we write again (and again) about our investment philosophy.

Here the key points:

- We believe that over the long run, stocks are the best class of investments.
- It is futile to predict when it will be the best time to begin buying (or selling) stocks.
- A stock return will eventually echo the increase in per share intrinsic value of the underlying company (usually linked to the return on equity).
- We choose companies that have (sustainable) high margins and high returns on equity, good long term prospects and that are managed by brilliant, honest, dedicated and altruist people.
- Once a company has been selected for its exceptional qualities, a realistic valuation of its intrinsic value has to be grossly assessed.
- The stock market is dominated by participants that perceive stocks as casino chips. With that knowledge, we can then buy great businesses sometimes well bellow their intrinsic value.
- There can be quite some time before the market recognizes the true value of our companies. But if we're right on the business, we will eventually be right on the stock.

This discrepancy between the market quotes of a business and its underlying intrinsic value and the high volatility of the securities market are perceived by many participants as disadvantages. It's the other way around: market imbalances and fluctuations are our allies in our noble quest for wealth. In fact, the more irrational the stock market, the higher our chances are to attain our financial objectives.

But there is one important point: Owning a few undervalued securities (around 20) over many years doesn't yield linear returns. To stare at a freshly planted tree does not make it grow faster. Our approach is to judge the quality of an investment over a **five years period.** I truly believe that at least such a similar horizon is necessary to judge a money manager.

So patience – ours AND those of the partners – becomes the key ingredient for success.

Real patience is neither easy nor that common. That is why many investors pray in those words: "Dear God, could you gratify me with patience? And if it is at all possible, RIGHT NOW"

The Rule of Three

In conjunction with our investment philosophy, I've added a stock market rule that I called : The Rule of Three. This three parts rule comes from historical observations: it is not a scientific process that has come to its enunciation but an empirical one.

- One year out of three, the stock market will go down at least 10%.
- One stock out of three that we buy will be a disappointment.
- One year out of three, we will underperform the index.

The judgment that you – as partners – pose on our work should be in line with these parameters.

Giverny Capital Inc.

2007 Annual Report

Pascal Grandmaison
Glass #7, 2004
Giverny Capital Collection

Giverny Capital Inc. – 2007 Annual Report ®

For the year ending December 31st 2007, the return of our portfolio was -14.4% compared to approximately -12.0% for our weighted benchmark. It is an added value of -2.4%. These returns both include a loss of 14.1% related to the fluctuation of the Canadian currency. Without the effect of the currency, our return was approximately -0.3% in 2007.

Since our beginning on July 1st1993, our annual compounded return is 15.4% compared to 8.6% for our comparative index group. If we exclude the increase of the Canadian currency, our portfolio would have generated an annual return of 17.4% compared to 10.5% for the indexes. Our long-term (and ambitious) goal is to maintain an annual return of 5% higher than the indexes. If stocks in general achieve an annual return of 7 to 9% in the future, our long term objective would be to maintain an annual return of 12 to 14%.

We are going through a rough phase. We want with this report to explain the causes of the disappointing results of the last two years. We will take the time to provide all the necessary information to understand these results, the measures taken to improve them, and mostly the potential of the coming years for our investments. The theme of our annual report will be "transparency", a quality we have always valued since the beginning of our business. Therefore, this year we have chosen to illustrate the cover page of our report with a artwork named "Glass" by Pascal Grandmaison, a Montreal artist.

The Giverny portfolio (in Canadian currency): Our returns since July 1st 1993.

Returns *	Giverny	Indexes **	+ / -	$US/Can	S&P 500	+ / -	Giverny ***	Indexes ***	+/-
1993 (Q3-Q4)	37.0%	9.5%	27.6%	3.3%	8.4%	28.6%	34.4%	7.4%	27.0%
1994	16.5%	3.7%	12.7%	6.0%	7.3%	9.2%	12.0%	-0.3%	12.3%
1995	41.2%	24.0%	17.2%	-2.7%	32.9%	8.3%	43.8%	26.3%	17.5%
1996	28.0%	22.8%	5.2%	0.3%	22.7%	5.3%	27.7%	22.5%	5.2%
1997	37.7%	28.6%	9.2%	4.3%	36.7%	1.0%	33.4%	24.5%	8.9%
1998	20.6%	18.8%	1.8%	7.1%	37.7%	-17.0%	14.5%	12.8%	1.7%
1999	15.1%	16.3%	-1.2%	-5.7%	14.1%	1.0%	20.6%	21.9%	-1.3%
2000	13.4%	3.2%	10.2%	3.9%	-4.6%	18.0%	9.7%	-0.2%	9.9%
2001	15.1%	-0.4%	15.5%	6.2%	-5.7%	20.8%	9.4%	-5.3%	14.7%
2002	-2.7%	-18.3%	15.6%	-0.8%	-22.0%	19.3%	-2.0%	-17.7%	15.7%
2003	13.6%	14.0%	-0.4%	-17.7%	5.7%	7.9%	33.7%	34.1%	-0.5%
2004	1.6%	6.2%	-4.5%	-7.3%	2.8%	-1.1%	8.3%	13.1%	-4.8%
2005	11.5%	3.6%	7.9%	-3.2%	1.5%	10.0%	14.5%	6.7%	7.8%
2006	3.5%	17.0%	-13.5%	0.2%	15.7%	-12.3%	3.3%	16.8%	-13.5%
2007	-14.4%	-12.0%	-2.4%	-14.9%	-10.0%	-4.4%	-0.3%	2.4%	-2.7%
Total	698.7%	234.7%	464.0%	-22.4%	228.3%	470.4%	922.1%	326.5%	595.5%
Annualized	15.4%	8.6%	6.8%	-1.7%	8.5%	6.9%	17.4%	10.5%	6.9%

* Green section: All the returns are adjusted in Canadian dollars
** Indexes are a hybrid index (S&P/TSX, S&P 500, Russel 2000) which reflects the asset class weight
*** Estimated without the effect of the currency.

Note: the returns in Canadian dollars were audited by Price Waterhouse Coopers.

The US Giverny portfolio

Since 2003, we also publish the Giverny portfolio returns in US dollars. It mostly corresponds to the American part of the Giverny portfolio. In 2007, the US Giverny portfolio returned -1.7% compared to 5.5% for the S&P 500. Since the beginning of the portfolio, our return is 827.3% which is 16.6% annualized. During the same period, S&P 500 returned 321.9%, which is 10.4% annualized. Our annual added value is therefore 6.2%.

Year	Giverny US	S&P 500	+ / -
1993 (Q3-Q4)	32.7%	5.0%	27.7%
1994	9.9%	1.3%	8.6%
1995	54.8%	36.6%	18.2%
1996	27.0%	22.3%	4.8%
1997	32.9%	31.0%	1.9%
1998	11.0%	28.5%	-17.5%
1999	15.9%	21.0%	-5.1%
2000	11.3%	-8.2%	19.5%
2001	8.1%	-11.2%	19.3%
2002	-4.4%	-21.4%	16.9%
2003	31.6%	28.6%	3.0%
2004	9.3%	10.7%	-1.4%
2005	12.5%	4.9%	7.6%
2006	3.3%	15.4%	-12.1%
2007	-1.7%	5.5%	-7.2%
Total ($US)	827.3%	321.9%	505.4%
Annualized	16.6%	10.4%	6.2%

Note: these returns were audited by Price Waterhouse Coopers.

Long term returns of equities

The S&P 500 return of 10.4% since our beginnings in 1993 is very much in line with the long term historical return of US equities. It is the average annual return of the last forty (40) years but also it is the same level than the longer term average. Indeed, since 1900, the annual return of American equities is 9.8%. No class of assets produced a return even close to this return over such a long period. In fact - adjusted for inflation – the real return of US equities is 6.6% since 1900, which is an incredible creation of wealth.

It is interesting to note that the real return of equities in different countries does not vary much over a long period of time. Since 1900, equities in countries other than United States generated an average real return of 5.3% per year. During the same period of time, bonds generated an average real return of 1.1% (and gold approximately 0%).

Country	Real return	Country	Real return	Country	Real return
United States	6.6%	Holland	5.4%	Japan *	4.5%
Great-Britain	5.6%	Spain	4.0%	Switzerland	4.6%
Canada	6.3%	France	3.7%	**World exc-US**	**5.3%**

Source: ABN AMRO

*including -96% in 1939-48

The year 2007

Even if we did not reach our return objective in 2007, the earnings growth of our businesses (see definition below) was quite good: a growth of approximately 9% compared to 2006. Adding an average dividend of 1%, we come up to a 10% increase of the intrinsic value of our businesses. Considering that companies making up the S&P 500 saw their earnings decrease by 3% this year, (intrinsic return of -1% if we include the dividend) our companies did better than the average.

2007 was characterized by a financial crisis created first by a drop in residential construction in the United States and then, by rebound, huge losses related to loans usually called "sub-prime". Also, the breathtaking raise of the price of oil affected even more the consumer already pressured by the real estate slowdown. As I am writing these lines, it is possible that the actual slowdown will develop into a recession. The forecasts of economic growth for the United States, Europe and Canada are reviewed downward. In the middle of January 2008, stock markets around the World went down on average 20% (the definition of "bear market"). Even if we do not own any residential construction businesses and that both our banks took low reserves, a lot of our businesses saw their stock market quotes suffer from this crisis.

We've been there before! We survived through the crisis of 2000-2002. Also, in the fall of 1998, the stock market took a plunge of over 20% during the Asian crisis (time passes by, so do crisis). There was lots of bargains then. We made investments which turned out to be excellent such as JDS Fitel (sold in 1999 with a large profit), Templeton Dragon Fund, Bed Bath & Beyond as well as Fastenal. Fastenal was the big winner: the stock went up 700% in nine years.

I wrote the following lines in the 1998 annual report :

> *…Such situations of crisis and panic that regularly affect the investors are our <u>partners</u> in the quest of our long term objectives…*
>
> *…To have good opportunities of enrichment, we therefore need a climate of pessimism that brings good businesses to prices well bellow their intrinsic value. The higher the pessimism and related market fluctuations better are the opportunities to enrich ourselves. So the next time someone asks you "does the stock correction affects you?" you can answer: "Certainly, it improves my chances of getting richer".*

I wrote these lines when we were eight partners at Giverny Capital. We are over 600 partners nine years later. Many of our new partners don't enjoy corrections to the same degree I did in 1998, when I wrote those lines.

But like it or not, we must all accept that market corrections are part of the life of an equity investor. The good temperament towards market quotations that Warren Buffett frequently talks about makes the difference in the end between those who get richer with equities and those who throw in the towel during crisis.

We don't belong in that last category.

Owner's earnings

It is not easy to have the right temperament toward market quotes. The vast majority of investors perceive the daily market quotes as an ultimate judge of value. At Giverny Capital, we do not

evaluate the quality of an investment this way. In our mind, we are owners of the businesses we invest in. Consequently, we study the growth in underlying earnings of our companies and their long-term perspectives. Every year, we submit a table showing the growth of the intrinsic value of our businesses that we measure using the term invented by Warren Buffett: owner's earnings.

We therefore come to an estimate of the intrinsic value increase of our portfolio by adding to the growth in owner's earnings, our average dividend rate (which is around 1% presently).

	Giverny			S&P 500		
Year ***	Intrisic Value *	Market **	+ / -	Intrinsic Value *	Market **	+ / -
1996	14%	29%	15%	13%	22%	9%
1997	17%	35%	18%	11%	31%	20%
1998	11%	12%	1%	-1%	28%	29%
1999	16%	12%	-4%	17%	20%	3%
2000	19%	10%	-9%	9%	-9%	-18%
2001	-9%	10%	19%	-18%	-11%	7%
2002	19%	-2%	-21%	11%	-22%	-33%
2003	31%	34%	3%	15%	28%	13%
2004	21%	8%	-12%	21%	11%	-8%
2005	14%	15%	0%	13%	5%	-8%
2006	14%	3%	-11%	15%	16%	1%
2007	10%	0%	-10%	-1%	6%	6%
Total	401%	342%	-60%	158%	184%	26%
Annualized	14%	13%	-1%	8%	9%	1%

* Owner's earnings growth (approximately) plus dividends
** Stock Market performance, including dividends
*** All the results are estimated without currency fluctuations

We can observe major differences between the growth in intrinsic value and the market performance over a short period of time. But after twelve years, the market performance – both for our securities and for the S&P 500 - has followed the intrinsic performance of the businesses.

Post-mortem: 2002

Every year, we go back five years in the past and do a post-mortem. During the period of 2000 to 2002, we had what we consider our best period (yet). We then beat the S&P 500 by 60% over those three years.

At the end of 2002, I then set forth a new rule that was labelled "the rule of three":

1. One of three years, the market will drop at least 10%
2. One of three securities bought will be disappointing
3. One of three years, our performance will be inferior to the indexes

I also added: "The rule of three is not linear. We can experience three good years in a row (as was our performance of the last three years) and afterwards have two, even four bad years in a row". It turned out that we underperformed the indexes for three of the last five years. Yet, we

are using the same approach we did at the beginning of the millennium. I also believe we improved the art of selecting market securities.

To understand our underperformance, there is no need to dig very far. The most recent bull-market was centered around the different sectors of natural resources, sectors in which we historically had very little participation. From 2003 to 2007, the S&P 500 achieved a return of +70% (84% including dividends) but the energy sub-index realized a return of +250%. In 2007, the energy and material sectors realized +26% and +20% respectively against -23% and -21% for the financial and retail industry, two sectors in which we have several investments.

In addition, our returns were distorted by the incredible rise of the Canadian currency which went from $0.65 US at the beginning of 2003 to $1.00 US at the end of 2007, an increase of more than 53%. Since approximately 90% of our assets are invested outside Canada, this last aspect affected our returns significantly.

Therefore, for the last five years, we come to this summary:

- Our businesses increased their intrinsic value by 128% (18% annually)
- Our portfolio market return was 71% (11% annually)
- In Canadian currency, our return decreased to 15% (3% annually)

Here is a diagram showing a theoretical amount of $100,000 invested with us at the end of 2002:

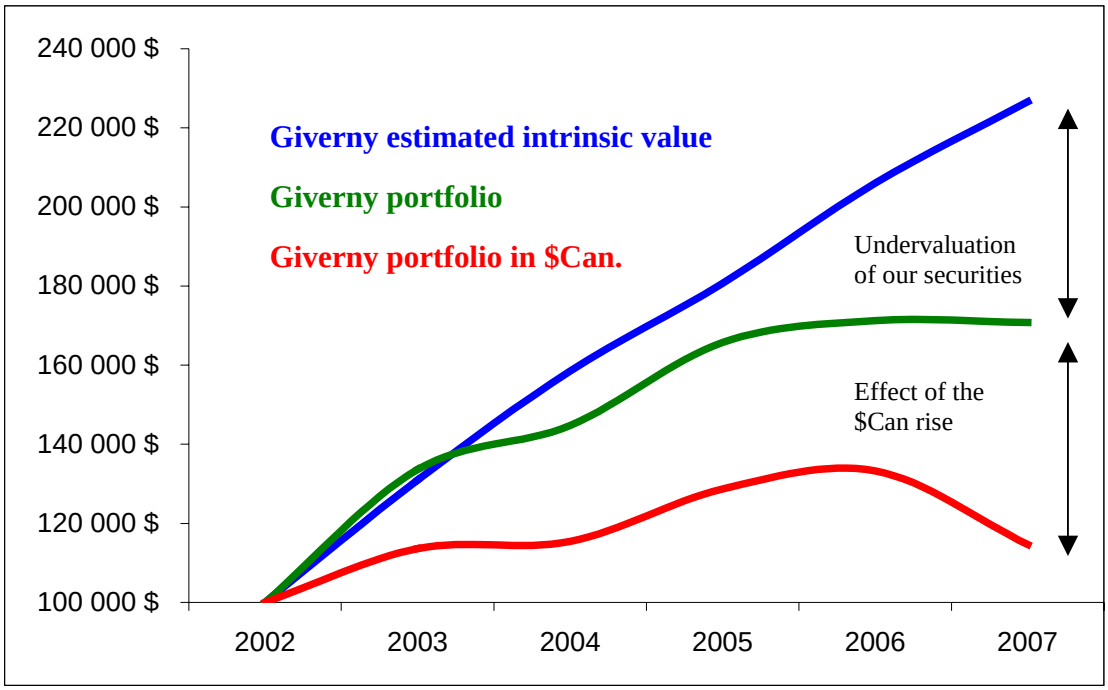

Our securities are presently traded at their lowest level since 1994 in terms of market valuations: the median P/E of our stocks stands at around 15x. But there is a great difference with 1994: at the time long-term interest rates were at 7% whereas today they are at around 4.67%. We believe our securities should be trading at around 20 times earnings, therefore approximately 30% more than their actual level.

The Canadian currency

The other element that affected us was the rise of the Canadian dollar which is no stranger to the bull-market of natural resources. We never believed that we could predict the fluctuation of currencies in general. In Canada, we believe that eventually it is an element that in the long run will have little effect. Over a long period of time the Canadian currency tends to stabilize compared to its American counterpart.

At the request of several partners, we took the time to make a study of the intrinsic value of the Canadian currency. An impartial international organization is taking care of this: The OECD (Organization for Economic Co-operation and Development). This organization reaches a PPP value (Purchasing Power Parities) of .81¢ US - .82¢ US. Another field study reaches a similar valuation: The Journal de Montréal made two identical purchases in Montreal and Plattsburgh and ended up with a shopping cart at 25% cheaper in the United States with the currency at par.

We don't pretend to be currency specialists or strategists, but it is thinkable that the Canadian currency may stabilize at approximately around its PPP at some point in the future.

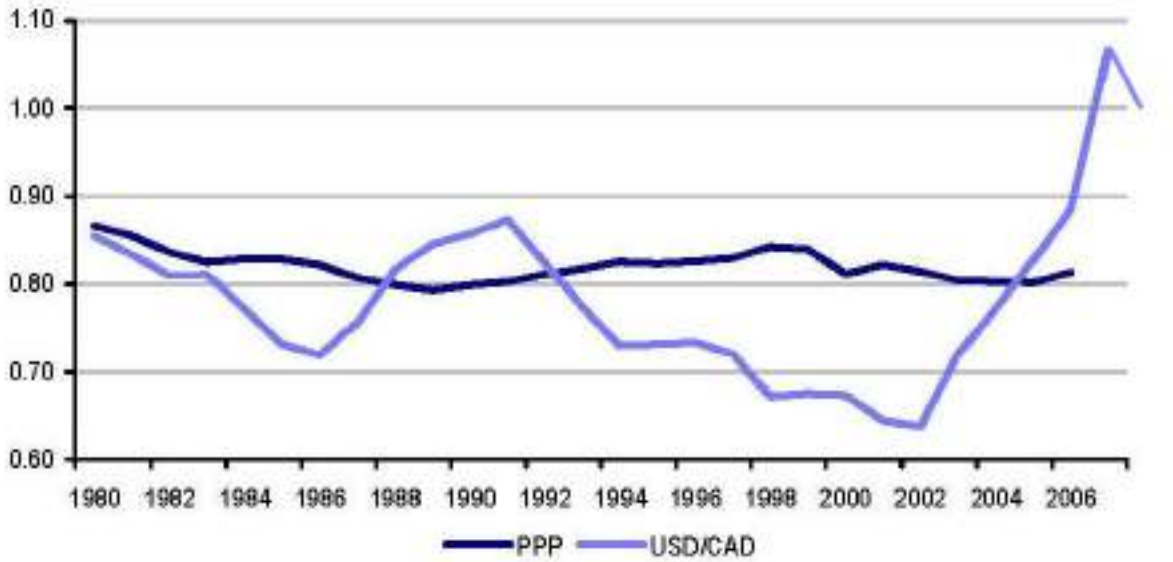

Source: Bank of Canada, OECD, UBS

Five years prospects for our portfolios

In this section, we will not try to predict the future but to give you an approximate outlook of the future potential return of our securities. As detailed above, there are mostly three factors to consider. The most important one is the long-term growth in the intrinsic value of our businesses. The second is the market valuations (P/E) of our securities. And the third is the Canadian currency level (for our Canadian partners).

In the following chart, we laid out three scenarios. The most cautious of the three anticipates that the actual situation will last: a smaller growth rate of increase in the intrinsic value of our businesses, a small P/E (compared to interest rates) and a Canadian currency remaining at par.

2007-2012 Scenario Annual return	Intrinsic value growth	Increase in the price-earnings ratio	Canadian dollar effect	Annual returns combined
1st scenario	10%	@ 16x (0%)	1,00$ (0%)	10%
2nd scenario	12%	@ 18x (3%)	0,90$ (2%)	17%
3rd scenario	14%	@ 20x (5%)	0,82$ (5%)	24%

The most optimistic scenario – which would provide an annual return of 24% - includes the historical intrinsic growth of our businesses in estimates, a historical average P/E for our securities and a Canadian currency level which would be back in line with its PPP. Therefore, without making any prediction what so ever, we believe that it is realistic to conclude that our securities can provide an annual return 17% per year by 2012.

Measures to improve the returns

The art of investing wisely in the stock market is complex and always in progress. At the last meeting of Berkshire Hathaway, Charlie Munger was saying that the greatest quality of Warren Buffett was his ability to always keep learning. We are therefore constantly working to improve our approach. During the next few years, this progress will be made by opening onto several other stock markets around the world. Also, we will try to discover new business candidates for our portfolios in different – sometimes new – industries. All this will be done within the boundaries of our expertise. And most important, we will continue to search for businesses with a competitive advantage, which remains the cornerstone of our investing philosophy.

Opening up to the World

We learned over the last few years that our portfolio was dependent of the US market (and the US currency). Although we always refused to see ourselves as "US specialists" only, it remains that the best businesses were found in the United States most of the time. Also, the US market has the most rigorous compliance rules and regulations in the world. Presently, we have 10% of the portfolio invested in Canada and approximately 10% in international businesses. We have to underline the fact that in our US securities, several businesses such as Johnson & Johnson, American Express and Procter and Gamble, have an important part of their revenues coming from outside the US. These businesses take great advantage of the weakness of the US dollar.

Canada corresponds to only 3% of the world capitalization: it is normal to find fewer opportunities than in the United States, a reservoir of businesses almost fifteen times greater. Still, we acquired three new businesses from the Quebec province this year.

We are resolutely turning towards the future: there are more and more investment opportunities everywhere on the globe. The Internet and the broaden use of the English language made access to information much easier. We also have access to more research from foreign brokerage firms than previously. In 1998, we invested in Hong-Kong during the Asian crisis. In 2004, we acquired shares from an Australian business and this year, shares from a Japanese company (see below). We are also looking at the Irish stock market which has the lowest price-earning ratio of the Occidental stock markets.

We will continue our selection of the best businesses in the World and it will be done in an expanding pond.

Railroad companies, aggregate quarries and solar energy

We took the time to analyze a sector that we always perceived as capital intensive (fixed and workforce based): the railroad sector. The incredible success of Canadian National Railway in the last ten years has opened our eyes on the fact that this industry has changed significantly. Warren Buffett recently mentioned their structural changes: operating costs were reduced, the utilization of double wagons and software allowed more optimized railroad networks and the increase in fuel prices affected the rails three times less than the motorized vehicles. Railroad is in many instances an alternative much more profitable than trucking. Therefore, we are looking at investment opportunities in this sector.

By ricochet to aggregate quarries, the increasing cost of freight charges makes the geographical location an important competitive advantage. Companies such as Martin Marietta and Vulcan Materials are therefore able to increase their price-per-ton by a large amount over the last few years. Growth prospects for the residential construction sector are not positive these days but the highway infrastructures investment scheduled (and necessary) for the next few years should over-compensate. Many years ago, we invested in Simard Beaudry. Consequently, it is an area we are familiar with.

Finally, solar energy seems destined to a promising future. The recent energy crisis is different than the one in the seventies. Even if the oil needed to produce $1000 of GDP were cut in half over the last 35 years, the fact remains that humanity will eventually have to find other sources of energy. Furthermore, the awakening of our civilization to environmental consequences (an awakening not evenly shared among all the citizens of the planet) leads towards solutions where GES (Greenhouse Effect Gas) will be lower compared to traditional ways of producing energy.

Solar energy is an obvious alternative (the sun should exist for another billion years). The problem is that solar panels made of silicon produce energy at a much higher cost than conventional methods. The American company First Solar, on the other hand, proposes a different solution: it manufactures thin-film photovoltaic solar modules. These modules allow the production of energy at a lesser cost than other solar procedures.

The problem with investing in this industry is similar to the Internet industry ten years ago: it is hard to predict which company will come out a winner and market valuations are very high. On the other hand, it is possible to find businesses that will benefit indirectly from this industry.

Oil sands in Alberta

We had quite a few “recommendations” from our partners to invest in the petroleum sector, more specifically the oils sands industry of Alberta. Even if we avoided the oil business historically, we are closely observing what is going on in this sector. With our investments in businesses servicing energy companies, such as Pason Systems, we are aware of the actual evolution of this industry in Western Canada. It is clear that oil sands in Alberta represent a source of fabulous wealth. The reserves are astronomical and everything seems to be in place for a profitable exploitation (after several years of difficulties). This industry could become the most important source of economic growth in Canada for the next decade.

But this exploitation is not as simple as conventional fuel: besides requiring a large quantity of capitals and a complex procedure, the transformation of oil sands into synthetic petroleum

requires a very polluting procedure. GES are produced in large quantities. Also, the disposal of wastewater could become a major environmental problem. Indeed, to produce a barrel of petroleum from oil sands requires two to four water barrels, and the waste must be stored somewhere (there are two gigantic lakes of wastewater existing already).

At the end of 2007, the American government passed the «Energy independence and Security Act». It stipulates that federal agencies cannot initial fuel procurement contracts anymore that are more polluting than conventional sources of oil. Experts estimate that GES emissions related to oil sands are approximately 20 to 25% higher than conventional petroleum sources. This political element is added to the increase of royalties ordered by the government of Alberta last fall. The growth prospects of this region are impressive but there are numerous possible unexpected circumstances (including huge reliance to the price of crude oil). We are monitoring the major players of this industry, but for now, we just remain curious spectators.

Our businesses

The best time to plant a tree was 20 years ago.
The second best time is today.

- Chinese proverb

Walgreen's

Walgreen's, the largest drugstore chain in the world, has experienced highs and lows in 2007. The business had a bad quarter (the one ending in August) with earnings slightly lower than the previous year. The company miscalculated the reimbursements of an important generic drug and gross earnings were under their forecasts. Things were stabilized the next quarter and the earnings increased by approximately 8% for the year. But the stock was punished by Wall Street and it dropped from a high of $50 to $37.

The good news is that Walgreen's increased the number of drugstores as planned to about 6000 (a 10% increase). It also succeeded in increasing its same stores sales by approximately 6%. In the actual environment of retail sales downturn, it demonstrates the strength of its business model. This organic growth was higher than its closest competitor, CVS Caremark. Its prescription revenues continue to be the highest in the industry (see below). Also, the sales of non-pharmaceutical products (front end) jumped to $282 per square foot, approximately 30% more than its competitors.

Revenues per drugstore

Walgreen's	5 600 000 $
Longs Drug	5 100 000 $
CVS	5 000 000 $
Rite-Aid	3 500 000 $
Duane Reade	3 000 000 $

Source: MVI, UBS

We believe that Walgreen's is a solid business and in a growing market sector for many years to come. Competition is fierce and the political part of medication reimbursements has an unpredictable side. Still, we believe that Walgreen's should continue to increase its long-term earnings by 12 to 14% every year.

American Express

AMEX is the oldest security in the portfolio. We own shares since 1995. We reduced our participation occasionally when the stock got a little pricey. And we bought some stock back after September 11th 2001 and finally a third time in the summer of 2005 after the company won its battle against VISA and Mastercard.

American Express owns probably the best brand of the financial industry in the world. Its international growth is very high and the long-term prospects, quite solid.

From 2004 to 2006, earnings per share increased 18% per year. In 2007, the growth went down to 13% because of the economic slowdown in the United States. AMEX should also experience a tougher year in 2008. Its clientele has a credit score higher than average: the company should then be less affected than its competitors as to potential payment defauls. But it is not immune from charges for bad loans during an economic slowdown. Wall Street, having its typical short-term vision, has severely punished the stock these last few months. On a longer term, the company continues to maintain a growth forecast of 12 to 15% per year.

Historically, the stock has traded at P/E ratios of about 18-20x, which makes sense for such a quality business. At the present time, the P/E is 13x, a level that we consider to be much lower than its intrinsic value.

Disney

Our history with Disney goes back to 1996. Following the acquisition of Capital Cities ABC, we decided to buy some stock. At the beginning of 2000, we sold for two reasons: first, the market valuations looked too high and we were also getting less comfortable with the top executives.

Five years later when Bob Iger became President of Disney, we bought shares again. We knew Bob Iger formerly from Capital Cities ABC: he was the choice of Thomas Murphy to replace him, the then CEO (Mr. Murphy was refered to as the best manager in the world by Warren Buffett). Since our acquisition at $24 in September 2005, earnings per action have increased by 50% but the stock is up only 25%.

On the graphic below, we can see that the price to cash-flow is at a low in the last fifteen years. In fact, at the present level, Disney is traded at 10 times cash-flow and 14 times earnings, a level quite inferior to its intrinsic value. Disney has everything to be an excellent investment: a magnificent business, an exceptional CEO and an attractive valuation.

Disney (DIS) valuations over 15 years: price to cash-flow

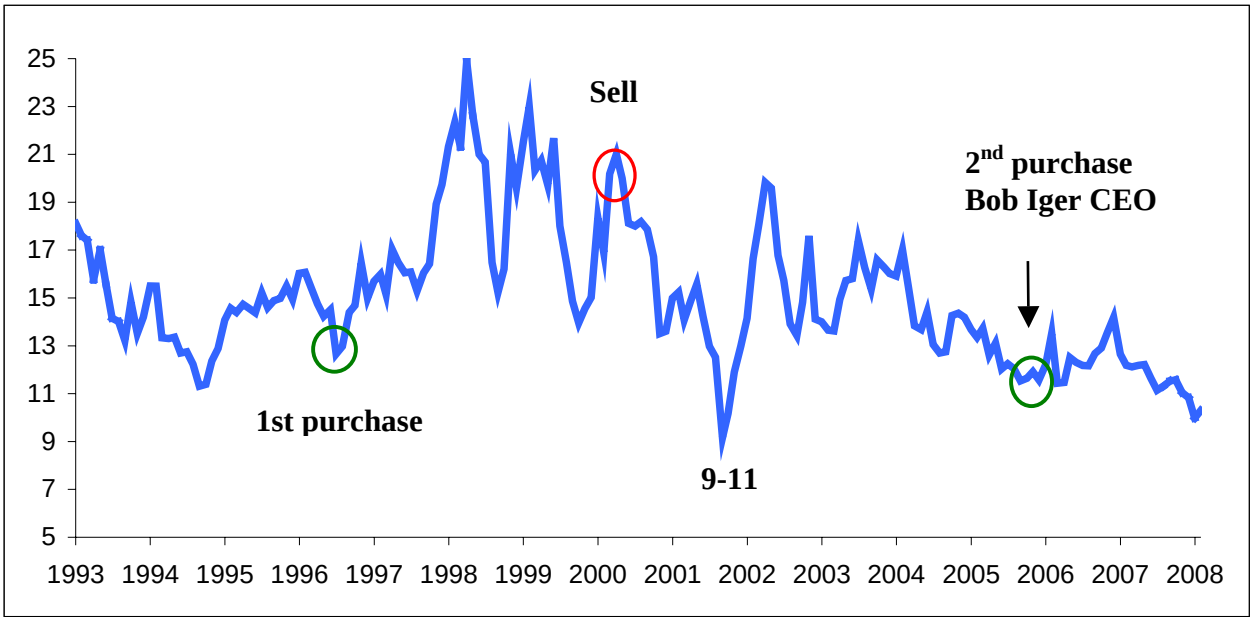

O'Reilly Automotive

Our auto parts retailer saw its revenues and earnings increase by 11% and 9% respectively in 2007. We believe that O'Reilly is the best business in this sector. We admire its leadership team and their discipline in the execution of their development plan. In spite of the retail sale slowdown in the US, O'Reilly continues to invest in new stores (200 are anticipated for 2008), in advertising and most importantly in customer service.

O'Reilly is a good example of what has happened to our portfolio in the last few years. We bought the first shares in August 2004 at $20. The company increased its earnings per shares from $0.92 in 2003 to $1.67 in 2007 for a total growth of 82% (16% annualized). The stock is trading at $28 today, only 40% higher. The average P/E was 21x for the last four years but is at 17x today (15x 2008 estimated earnings).

We believe O'Reilly's stock is undervalued. We don't know when it will go up but we think the company can double its intrinsic value in the next five to six years. The stock should at least follow. Should it return to its historical P/E of 21x, the total return would be 140% for that period. We are therefore quite optimistic.

Brown & Brown

Our insurance brokerage business has experienced a more difficult year in 2007. Earnings went up by 10%. Not bad, but it is far from the 25% annual rate of the five previous years (2001 to 2006). The problem was insurance premiums in Florida. A few years ago, the state government set up a company, Citizens Insurance, in order to offer property insurance to Floridians without insurance. The problem is the insurance was sold at a discount price (sort of disguised subvention). After the hurricanes of 2005, Citizens increased its volume at the expense of traditional competitors. As Brown & Brown receives a share of premiums from different players, if these amounts are decreasing, generally, the revenues of B&B are decreasing. This situation is probably temporary (Citizens will not be able to operate at a loss for very long) but this situation has affected the organic growth of B&B downward.

The company continues to grow by acquisition but this year it was not sufficient to prevent a drop in earnings during the 4th quarter and a small growth for the year. The stock went down. We still believe that B&B is the best business in the sector: its margins highly exceed its competitors. We also believe the possibilities to consolidate this huge fragmented market are excellent over the coming years.

MTY Food Inc.

For many years, I stipulated that the best public company in Quebec was BMTC Group. I still have BMTC – and the CEO Yves Desgroseillers – in high esteem. But I also became a great admirer of Stanley Ma, the President of MTY Food.

The company is a leader franchisor of restaurant chains (mainly located in shopping malls). The network consists of 809 restaurants through nineteen banners such as La Crémière, Thaï Express, Croissant Plus, Tiki Ming and Sushi Shop. MTY is very profitable and growing fast (approximately 30% per year). Mr. Ma takes a reasonable salary and owns an important part of the company shares (26%).

Bank of the Ozarks

Our bank from Arkansas had a good year in spite of the difficult environment. As anticipated, earnings per share were stable in 2007 because during most of the year the bank had to deal with a flattened yield curve. The good news is that recently the curve changed drastically (Fed lowered its short-term interest rate by 2%). We are expecting a more profitable year in 2008. Another good news is that the bank took no sub-prime reserve in 2007. This is no coincidence: we favoured this bank for its loan conservatism. The CEO, George Gleason, owns 23% of the shares. Therefore, it is in his best interest to nurture a culture based on cautiousness.

In spite of this, to this date, our investment in Bank of the Ozarks has been disappointing. The P/E we paid was a little higher than usual for a bank. On the other hand, we invested a weight of only 2% of the portfolios (approximately half of a typical weight) being aware of this valuation slightly higher. Our experience tells us that refusing to invest in an exceptional business because the price seems a little too high is often a mistake. On the other hand, when the growth scenario takes longer than expected to materialize, the security can be punished by Wall Street (not reputed for its patience). We believe that Bank of the Ozarks is an excellent bank and we are keeping our shares.

Knight Transport

Our trucking company in Phoenix (Arizona) has experienced a difficult year. Earnings per share went down 12%. The problems are not specific to Knight: the trucking industry in general had a difficult year. We believe Knight is an exceptionally well managed business in a difficult sector (an "oasis in the desert") and we think we will be rewarded when the cycle comes up again. Knight has a good balance sheet and could take advantage of the present downturn to make acquisitions at decent prices. We should also keep in mind that Knight's top management own a third of the shares. We're in the same vehicle as them !

Microsoft

Microsoft had a remarkable year. The release of Vista is a huge success. Earnings per share were 33% higher than in 2006. Also, the stock jumped 20% in the market during 2007.

In February 2008, MSFT dropped to $28 following the news of an unfriendly offer to acquire Yahoo!, an offer that was refused. Even if the conclusion of the saga is unpredictable, it does not change the fact that Microsoft (with or without Yahoo!) is probably worth $40 a share, according to us. Its P/E of 14x looks quite low to us.

Nitori

Nitori Co. is a Japanese retailer with 160 stores offering articles for the home (furniture and accessories). Their stores are similar to IKEA (which tried to challenge Nitori with little success so far). At a time when retail sales seem to have stagnated in Japan for several years, Nitori sustained an impressive growth. Its net income increases 18% per year and the return of equity stoods at 17%.

Unlike other Japanese exporters (vehicles and technology), Nitori takes advantage of the raise of the yen since their furniture are bought in China and sold in the domestic market. The company was founded in 1972 by Akio Nitori who was only 28 years old at the time. He is still the CEO and manages the company brilliantly (and he owns 12% of the shares).

During the last month, in spite of a difficult retail environment everywhere in the world, same store sales grew 6%. The company intends to continue opening twenty stores per year in Japan. We believe the company can increase its EPS by 15 to 20% per year in the future.

Johnson & Johnson

J&J had an excellent year in 2007. Revenues jumped 15% thanks to the acquisition of Pfizer's consumer product division, among other things. The weakness of the US currency also contributed to the growth of revenues. Earnings per share increased 10%. At the end of 2007, the company lost the exclusivity of the important drug Risperdal (approximately 6.5% of revenues). We expect a slower growth rate in 2008, which should be in the order of 7%.

J&J is one of the best health care companies in the world (and is almost immunized to economic cycles). Its market valuation is 14x and seems much lower than its intrinsic value and its P/E average of the last ten years (25x).

Morningstar

We acquired shares from Morningstar last spring. We mentioned it in the second quarter of this year (in reply to a question from a partner). For many years, we used the financial information services of Morningstar. We like the long-term vision they demonstrate in their research, a rare commodity at Wall Street. We are ready to pay for their different services, particularly their analysis of competitive advantages of the businesses they are appraising.

Reading the first annual report of Morningstar, we became great admirers of the CEO and founder Joe Mansueto. He takes an annual salary of $100,000 with no bonus and no options. He owns 68% of the Morningstar shares (you are beginning to see a common point in our company choices?). In 2007, Morningstar revenues increased by 37% and EPS by 40%. It is certainly one of our most profitable businesses we own and we hope to be partners with Mr. Mansueto for years to come.

Fastenal

We rarely keep an investment for ten years in our portfolio. But next October, it will be a decade since we became shareholders of this fabulous business in Minnesota. In 2007, the company ignored the economic slowdown and increased its profits by 17%. Since our acquisition, EPS

went from $0.35 to $1.55 (18% per year). The stock followed the profit growth and increased by 700% as indicated above.

But we had to be patient to get this huge reward. Earnings stagnated from 2000 to 2003 and the stock did nothing for three years. Recently, in spite of excellent results, the stock is at the same point it was two years ago.

We believe our patience should be – once again – rewarded in the future.

Mistake "du jour"

Success seems to be linked to action. Successful people keep moving.
They make mistakes, but they don't quit.

- Conrad Hilton

Keeping up with Giverny's tradition, here are our three annual medals for the "best" mistakes of 2007. As always, it is with a constructive attitude – hoping to always become better investors – that we make detailed analysis of these mistakes.

Bronze medal: Garmin

As often the case, the worst mistakes are not the securities we bought but the securities we did not buy. In 2004, we looked at Garmin, a leading company in the growing world of GPS (Global Positioning System). GPS are ever present in our life and Garmin seemed to be the best positioned player in the industry.

We had an apprehension that the high margins of the company could not be maintained in the long term. The anticipated volume increase of units sold could increase the risk of commoditization that would follow. From 2003 to 2007, operating margins did bend indeed from 43% to 37%. But the revenue growth largely compensated. From 2004 to 2007, earnings per share tripled and the stock did the same (including the recent 50% drop of the stock).

Silver medal: W.P. Stewart

Our investment in W.P. Stewart was extremely disappointing. WPS is an asset management firm with an approach similar to ours (even though they are more concentrated on US blue chips). It has been in existence since 1975 and has substantially enriched his clients during three decades (an investment of $10,000 with them in 1975 would be worth $2,000,000 today).

In the last few years, the returns are not as good as they were in the past. Indeed, from 2002 to 2007, the annual performance was 10% compared to 13% for S&P 500. In the last five years, the trend of investing in quality securities at a fair price was not as rewarding as in the past. Unfortunately, what emphasized the problem is that certain employees decided to leave the firm (taking part of the assets with them). WPS lost more than half of its clientele these last two years. Revenues dropped by half and earnings were reduced to almost zero in 2007.

Our investment in this company was about 4% of our capital and to this date, we cumulated a loss of 80%. Since we got a 5% dividend during many years, the actual loss is smaller. But nonetheless, we lost the equivalent of 3% of our capital, which is our worst loss ever.

I have no problems acknowledging my mistakes; there would be a problem if they would not be recognized and not acted upon. But in the WPS case, our analysis was well done. We perfectly understood the company and followed quite regularly their portfolios composition. At the beginning, I estimated the assets would yield around 10% a year and I was not far from reality. In our original scenario, the earning growth of 10% that would follow combined to the 6% dividend should have brought us a very acceptable total return.

What I underestimated was the impatience of their clientele, the pressure of the intermediaries and the attraction of Hedge Fund (and their often speculative method of realizing short-term high returns). Of course, a perspicacious partner could blame us for not selling as the bad news were coming. Certainly, the company made changes to rectify things. We thought the problems would be temporary and the situation would improve eventually. We were wrong.

At the very end of February, we learned that WPS hired Merrill-Lynch to find a potential buyer. So we should know the outcome of this investment probably in the months to come.

It is a good thing to learn from our mistakes. I can assure you that my knowledge of the investment management industry is much better than it was five years ago. It was a mistake but, at the same time, we have to recognize with humbleness and realism that it is in the nature of the business world to have occasional unsuccessful investments.

Gold medal: Shoppers Drug Mart

I've been following Shoppers Drug Mart since the time the business was part of Imasco many years ago. In November 2001, the company came public at $18 per share. I knew that, when becoming independent, SDM could greatly improve its margins. Therefore, the earnings per share of $0.41 realized in 2001 did not reflect the true earning power of SDM. Not even the EPS of $1 then expected for 2002. Therefore, I should have disregarded the high P/E of the stock. I knew the drugstore industry very well and thought SDM had the potential to become an even more dominant leader in Canada.

In 2003, we bought shares of Walgreen's. Its very long-term growth perspectives seemed higher than SDM. At that time, we observed Jean-Coutu venturing in the US, knew that they would meet more problems then expected and that it would be a good opportunity for SDM to take on Quebec's market even more aggressively. Jean Coutu did encounter difficulties in the United States eventually. During that time, in Quebec, SDM opened impressive drugstores that were really successful.

The fact that we invested in Walgreen's should not have prevented us from investing in SDM as well. Even if the growth rate of new drugstores was higher at Walgreen's than SDM, they succeeded better in improving their margins (due mostly to the success of their private label). In 2007, SDM earned $2.28 a share (more than double those of 2002) and the stock is at $51 today. We would have tripled our money in an investment where the risk was very small.

This deserves a gold medal.

Conclusion

Despite errors inherent to the investment world and the business world in general, we know that owning stocks is the best wealth creator in our capitalist world. On the long-term, equities have generated approximately 10% per year in return and our own experience since 1993 was even more positive. But the price to pay for better returns is to live with fluctuations – sometimes quite pronounced – of the stock market world. The other essential ingredient is patience, the catalyst to make it through difficult times.

If there is a recession in 2008, we are ready. Historically, recessions in North America were temporary. More importantly, they always represented incredible opportunities to buy shares from solid companies at great prices. It is futile to try to time these purchases: the stock market has a tendency to drop a lot sooner than the recession becomes official and to climb six to twelve months before recovery.

Our businesses have good balance sheets and they will profit from slowdowns by taking market shares from weaker competitors or make acquisitions at good prices. Moreover, a lot of our businesseses can take advantage of the market weakness to repurchase their own stock. We believe that presently our group of businesses is the most solid we ever owned and their market valuations have never been so low.

We are therefore very enthusiastic about the long-term return prospects of our portfolio.

I wish a very good year 2008 to all our partners!

François Rochon and the entire Giverny Capital team

Giverny Capital Inc.

Letter to our partners 2008

Dil Hildebrand
Untitled (dusk), 2008
Collection Giverny Capital Inc.

If you don't have time to read the complete letter, please read this :

The opportunity of a generation

To Giverny Capital's partners,

2008 was a difficult year in the stock market, to say the least. We believe that the market drop – and the high level of pessimism – has created great investment opportunities, to a degree we have seldom seen in the modern history of financial markets.

From these depressed levels, we believe that the potential rewards for stocks are very high. We believe that the potential returns for stocks in general have not been that promising since 1979:

- Valuation for stocks in general are very low. The price-earnings ratio to normalized profits is around 9 times for the S&P 500.
- Consumer confidence in the US is at an all-time low of 25 (1985=100). The lowest it had reached before was 42 in 1974.
- Just in the US, there are around 7000 billions of dollars in cash (waiting to get back in the market). This is a sufficient amount to acquire all the S&P 500 companies.
- Interest rates on treasury bills are almost zero. The bond alternative is far from attractive.
- Most investors are pessimistic. Institutions have a very low asset allocation for stocks. Historically, these were signs of future great returns for stocks.
- We can purchase shares of outstanding companies at a third of their intrinsic value, a situation we have rarely seen.
- Finally, the legendary investor Warren Buffett is very optimistic toward stocks: he urged investors to invest for the first time since 1979. He wrote: "*A simple rule dictates my buying: Be fearful when others are greedy, and be greedy when others are fearful. And most certainly, fear is now widespread, gripping even seasoned investors.*"

At Giverny Capital, we're ready for the next bull market !

François Rochon and the Giverny Capital team

Giverny Capital Inc. – Annual letter to partners 2008 ©

For the year ending December 31st 2008, the return of our portfolio was -5.5% compared to approximately -22.0% for our weighted benchmark. It is an added value of +16.5%. These returns both include a gain of 16% related to the fluctuation of the Canadian currency.

Since our beginning on July 1st1993, our annual compounded return is +14.0% compared to +6.4% for our comparative index group. If we exclude the increase of the Canadian currency, our portfolio would have generated an annual return of +14.4% compared to +6.7% for the indexes.

Our long-term (and ambitious) goal is to maintain an annual return of 5% higher than the indexes.

The art work on the cover of our letter

Since 2004, we illustrate our letter with an art work from our corporate collection. This year, we choose a work on paper by the Quebec artist Dil Hildebrand titled "Dusk". We do believe that the bear market could be near its end and we could soon see the lights of the next bull market.

The Giverny portfolio (in Canadian currency): Our returns since July 1st 1993.

Returns *	Giverny	Index **	+ / -	$US/Can	S&P 500	+ / -	Giverny ***	Index ***	+/-
1993 (Q3-Q4)	37.0%	9.5%	27.6%	3.3%	8.4%	28.6%	34.4%	7.4%	27.0%
1994	16.5%	3.7%	12.7%	6.0%	7.3%	9.2%	12.0%	-0.3%	12.3%
1995	41.2%	24.0%	17.2%	-2.7%	32.9%	8.3%	43.8%	26.3%	17.5%
1996	28.0%	22.8%	5.2%	0.3%	22.7%	5.3%	27.7%	22.5%	5.2%
1997	37.7%	28.6%	9.2%	4.3%	36.7%	1.0%	33.4%	24.5%	8.9%
1998	20.6%	18.8%	1.8%	7.1%	37.7%	-17.0%	14.5%	12.8%	1.7%
1999	15.1%	16.3%	-1.2%	-5.7%	14.1%	1.0%	20.6%	21.9%	-1.3%
2000	13.4%	3.2%	10.2%	3.9%	-4.6%	18.0%	9.7%	-0.2%	9.9%
2001	15.1%	-0.4%	15.5%	6.2%	-5.7%	20.8%	9.4%	-5.3%	14.7%
2002	-2.7%	-18.3%	15.6%	-0.8%	-22.0%	19.3%	-2.0%	-17.7%	15.7%
2003	13.6%	14.0%	-0.4%	-17.7%	5.7%	7.9%	33.7%	34.1%	-0.5%
2004	1.6%	6.2%	-4.5%	-7.3%	2.8%	-1.1%	8.3%	13.1%	-4.8%
2005	11.5%	3.6%	7.9%	-3.2%	1.5%	10.0%	14.5%	6.7%	7.8%
2006	3.5%	17.0%	-13.5%	0.2%	15.7%	-12.3%	3.3%	16.8%	-13.5%
2007	-14.4%	-12.0%	-2.4%	-14.9%	-10.0%	-4.4%	-0.3%	2.4%	-2.7%
2008	-5.5%	-22.0%	16.5%	23.1%	-21.7%	16.2%	-21.5%	-35.4%	13.9%
Total	654.7%	159.4%	496.8%	-4.5%	157.4%	500.1%	701.9%	175.2%	526.7%
Annualized	13.9%	6.3%	7.6%	-0.3%	6.3%	7.7%	14.4%	6.7%	7.6%

* Green section: All the returns are adjusted in Canadian dollars
** Indexes are a hybrid index (S&P/TSX, S&P 500, Russel 2000) which reflects the asset class weight
*** Estimated without the effect of the currency.

Note: the returns in Canadian dollars were audited by Price Waterhouse Coopers.

The US Giverny portfolio

Since 2003, we also publish the Giverny portfolio returns in US dollars. It mostly corresponds to the American part of the Giverny portfolio. In 2008, the US Giverny portfolio returned -24.3% compared to -35.7% for the S&P 500. Since the beginning of the portfolio, our return is 600.7% which is 13.4% on a annualized basis. During the same period, the S&P 500 returned 171.4%, which is 6.7% annualized. Our annual added value is therefore +6.7%.

Year	Giverny US	S&P 500	+ / -
1993 (Q3-Q4)	32.7%	5.0%	27.7%
1994	9.9%	1.3%	8.6%
1995	54.8%	36.6%	18.2%
1996	27.0%	22.3%	4.8%
1997	32.9%	31.0%	1.9%
1998	11.0%	28.5%	-17.5%
1999	15.9%	21.0%	-5.1%
2000	11.3%	-8.2%	19.5%
2001	8.1%	-11.2%	19.3%
2002	-4.4%	-21.4%	16.9%
2003	31.6%	28.6%	3.0%
2004	9.3%	10.7%	-1.4%
2005	12.5%	4.9%	7.6%
2006	3.3%	15.4%	-12.1%
2007	-1.7%	5.5%	-7.2%
2008	-24.3%	-35.7%	11.4%
Total (en $US)	600.7%	171.4%	429.3%
Annualized (en $US)	13.4%	6.7%	6.7%

Note: these returns were audited by Price Waterhouse Coopers.

Portefeuille Giverny Canada

In 2007, we started the Giverny Canada portfolio. It mostly corresponds to the Canadian part of the Giverny portfolio. In 2008, the Giverny Canada portfolio returned -24.6% compared to -32.9% for the S&P/TSX. Since the beginning of the portfolio, our return is -9.7% which is -5.0% on a annualized basis. During the same period, the S&P/TSX returned -26.3%, which is -14.2% annualized. Our annual added value is therefore +9.2%.

Year	Giverny Canada	S&P/TSX	+/-
2007	19.7%	9.8%	9.9%
2008	-24.6%	-32.9%	8.3%
Total	-9.7%	-26.3%	16.6%
Annualized	-5.0%	-14.2%	9.2%

Note: these returns were audited by Price Waterhouse Coopers.

The year 2008 in review

Last year, we ended our letter with these words : "If there is a recession in 2008, we are ready". We did enter into a recession last year. Here is a review of some of the main news of a year that was far from ordinary:

- From their peak, World markets were down by more than 50%. Even those that were considered (wrongly it seens) "decouple" from the US economy went down. Markets in China, Brasil, Russia and India were down form 50 to 75%.
- Most industrialised country went into recessions.
- Housing prices were down by 20% in most industrialised countries.
- Three of the top five stock brokers in the US have vanished or have been forced to merge into a new entity (Bear Stearns, Lehman Brothers and Merrill Lynch).
- The three financial titans AIG, Freddie Mac and Fannie Mae collapsed.
- Short term Interest rates in Canada and US are almost zero.
- The S&P 500 dividend yield is higher than 10 year treasury bonds by more than 1%, something that last happened in the mid 1950s.
- It is estimated that around one of three hedge funds could close because of the crisis.
- Oil prices went from a peak of 147$US in July to a low of 35$US in December.
- The Canadian dollar dropped 23% compared to its US countepart.
- The Canadian stock market was not immuned : from its peak, the S&P/TSX dropped 50%, the small-cap index by 60% and the TSX Venture by 75%.

We are always psychologically ready for recessions or market corrections. At the same time, we share the same agnosticism as Warren Buffett's as for the capacity to predict them (we leave that to astrologists, market strategist and other fortune-tellers). We have accepted since the start that market and economic cycles are parts of our capitalist systems and manage our assets accordingly.

Since 1945, there have been 11 recessions. Four times, the stock market dropped by more than 40%. And crisis have one thing in common: they all ended !

The recent economic crisis originated from the drop in real-estate prices and in the huge consequences on the financial institutions, worldwide. Afterward, the crisis spread to all industries. The market correction was then amplified by the huge number of speculators that crowded the investment world in the years 2006-2007. For example, we wrote to you last year that at some point, there were $200 billions of oil contracts owned by investors. These were not destined to utilisation. Speculators were hoping to find "other" buyers to purchase their contracts before the delivery date. Forced to sell, losses were tremendous for most of them. There was also, the private equity firms (a new name for LBOs) that acquire companies by leveraging them to a dangerous levels. Many of them were forced to sell securities to improve their balance sheet. All this deleveraging process is still hurting the economy.

And as always, market drops created by the selling of speculators have created more fears for many other investors (even those that don't need to sell). It is hard for many investors to keep a long term view during market corrections, especially when it lasts many months. But they have to. It is impossible to know when but this crisis will pass too we can be certain of that. Our civilization have went through tougher times! A wise man once said that history doesn't repeat itself exactly the same way but it rimes!

Our portfolio did pretty well in the circumstances. We always have focussed our capital in solid companies with great balance sheets and good profit margins. They also share an important ingredient: honest and accountable people at the helm. Our companies are not immuned to recessions. But we believe that they have what it takes to pass through them. Some of them will emerge even stronger! Finally, we are prudent in the price we pay for stocks. That helps in bear markets.

Some of our companies were quite hurt by the recession but in general our investment philosophy has helped us this year to beat the market, the same way we have done it since 1993. And we are taking advantage of the market crash to purchase great bargains. As Warren Buffett would say: "*be greedy when others are fearful*"

The level of undervaluation of stocks in general

Although we're stock pickers (not investors in the market per se), we do closely follow the general valuation level of the S&P 500 (in our opinion, the most important index in the World).

To value the S&P 500, we take into consideration three parameters: operating earnings, normalized earnings to smooth out the economical ups and downs and long term interest rates in the US. The last parameter is used to compare price-earnings ratio (P/E) to bond alternatives. Over a long period of time, the market P/E tends to follow the inverted yield of interest rates. Of course, in periods of optimism, the normalized P/E of the S&P 500 can be way higher than interest rates would justify. And in periods of pessimism (like right now!), P/Es can be way lower than their intrinsic value.

If we look at the following chart, the S&P 500 seems to us undervalued by more than 50%, a discount rarely seen (note: in 2008 we use a 4% level for the 10 years bond although it was 2.5% at year end).

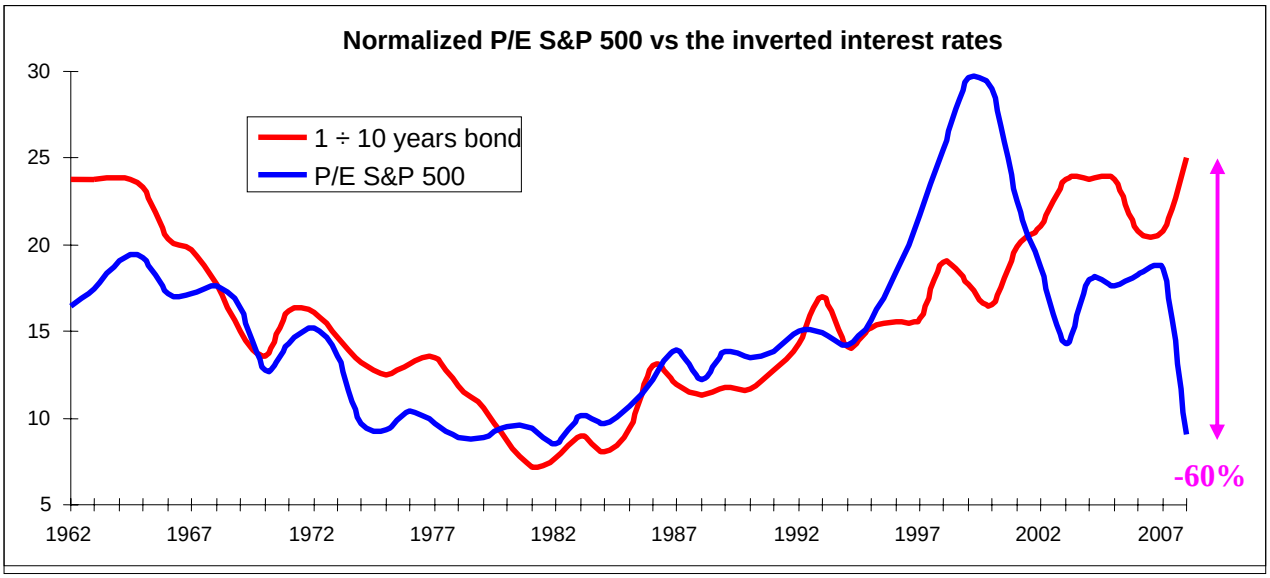

Figure 1 : Normalized P/E of the S&P 500 compared to the inverted interest rates of 10 year treasury bonds.

Such a level of undervaluation for stocks – and a huge potential of future appreciation attached to it – usually happens once per generation. So we are quite optimistic for the years to come. We don't know what the market will do in the next few quarters, but over the next 5 years or so, the potential returns seems to us way higher than the historical norms.

Historical returns and their fluctuations

There is one reason – and only one – that stocks have created so much wealth to their owners in the last century: on average, companies have maintained a 12% return on equity (ROE). After dividends, this ROE has translated into a 7% annual increase in corporate earnings. This annual increase, combined with the average dividend of 3%, have yielded a total annual return for stocks of 10%. This is better than any other asset class. All equity owners should then have been rewarded at such a rate over time. In reality, this is far from the case.

The stock market is an entity created and composed by human beings. So it has some of its qualities and flaws. The market has periods of huge optimism followed by periods of huge pessimism (although not in a linear fashion). For example, the S&P 500 increased by three fold in 5 years from 1995 to 1999. And it has dropped by 50% in 2008. Usually, the patern of behavior is more or less similar : in periods of increases, investors tend to forget that stocks can also go down and buy them at any level without consideration of their intrinsic values. And then, after a big drop, they sell believing that never again stocks will be a rewarding source of wealth (or they wait for a "better" time to buy time, meaning when they will have gone up a lot). They make the same mistake as in bull markets: they do not focus on intrinsic value.

We believe that the nature of financial markets do not favor such timing investment strategies. In fact, historically, 90% of stock returns happened during 1.5% of trading days. Statistics are way against those that think they can outsmart the market over a long period of time.

We do realize that the last 10 years have been quite difficult for investors in general. It even gives them the impression that stocks ownership is not a rewarding activity (and enjoyable even less). We can look at the following graphic to realize how tough were the last 10 years:

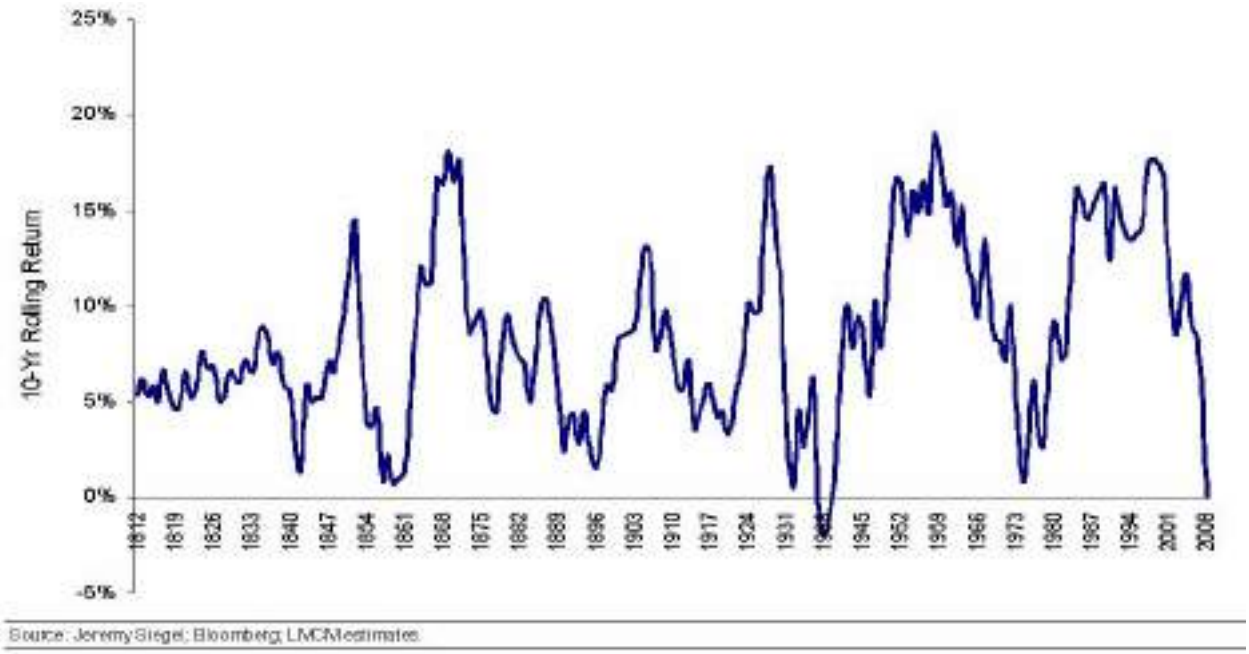

Figure 2 : The S&P 500 annual returns for the previous 10 years since 1812.

In 2008, the rolling 10 years average returns of the S&P 500 was less than -1%. It was only the second time in the last 200 years that this return was bellow 0% (the other time was for the 1929-1939 period). In 10 years, the market has gone from overvalued to undervalued.

But in the end, the only way to lose money in the stock market over the long run is to sell during corrections or recessions. So the emotional goal of the typical investor is not to fall into the "trap" of bear markets. This "trap" awaits those that can not be impervious to stock market fluctuations. Although it is far from easy, the key to attain such wisdom is to consider stocks as parts of businesses. And – big news ! – that's what they are. Nothing else!

Owner's earnings

If the vast majority of investors perceive the daily market quotes as an ultimate judge of value, we have a different view. At Giverny Capital, we do not evaluate the quality of an investment this way. In our mind, we are owners of the businesses we invest in. Consequently, we study the growth in underlying earnings of our companies and their long-term perspectives. Every year, we submit a table showing the growth of the intrinsic value of our businesses that we measure using the term invented by Warren Buffett: owner's earnings.

We therefore come to an estimate of the intrinsic value increase of our portfolio by adding to the growth in owner's earnings, our average dividend yield. In 2008, our owner's earnings decreased by 3%. It is not a great accomplishment but it was way better than the 30% drop in the S&P 500 operating earnings (note: earnings in 2008 for the S&P 500 varies a lot depending on how we account for them. We have used the one calculated by the firm Standard & Poor's)

	Giverny			S&P 500		
Year ***	Intrisic Value *	Market **	+ / -	Intrinsic Value *	Market **	+ / -
1996	14%	29%	15%	13%	22%	9%
1997	17%	35%	18%	11%	31%	20%
1998	11%	12%	1%	-1%	28%	29%
1999	16%	12%	-4%	17%	20%	3%
2000	19%	10%	-9%	9%	-9%	-18%
2001	-9%	10%	19%	-18%	-11%	7%
2002	19%	-2%	-21%	11%	-22%	-33%
2003	31%	34%	3%	15%	28%	13%
2004	21%	8%	-12%	21%	11%	-8%
2005	14%	15%	0%	13%	5%	-8%
2006	14%	3%	-11%	15%	16%	1%
2007	10%	0%	-10%	-1%	6%	6%
2008	-3%	-22%	-19%	-30%	-36%	-6%
Total	386%	247%	-140%	73%	82%	9%
Annualisé	13%	10%	-3%	4%	5%	0%

* Owner's earnings growth (approximately) plus dividends
** Stock Market performance, including dividends
*** All the results are estimated without currency fluctuations

According to this calculation, our companies have increased their intrinsic value by 386% (almost 5 fold) but their stocks – in aggregate – increased by 247%. The main difference can be explained by the median P/E contraction from 16x to 11x. We must add that this year's corporate earnings – ours and those of the companies making up the S&P 500 – are depressed because of the recession. In some way, they distort the calculation of intrinsic value. Only time will tell to which degree.

Besides ups and downs in the economy, over the long run, market quotes will follow the increase in the earnings of the underlying companies.

The flavour of the day in 2008: guaranteed impoverishment

Regularly, we try to assess what is the flavour of the day, in other words what needs to be avoided. The stock market tends to get excited from time to time by all sorts of financial assets: it could be a sector, a country, an asset class, a new major "trend", etc. In 1999-2000, it was all about tech stocks. In 2006-2008 (first six months), it was all about commodity and resources stocks. Today, what looks to us very dangerous are – ironically – the treasury bills.

Today, there are around $7000 billions in liquid assets in the US alone. This is enough money to purchase all the companies of the S&P 500 (or 5 times the complete Canadian stock market). At year's end, the interest rate on those liquid asset was 0.07%. The interest rate on 10 years government bonds was 2.2% and the 30 years bonds 2.7%. Those that purchase those assets – in a some sort of collective delusion – believe that they are acting in a prudent way while in fact it could be the riskiest! It is so because it guarantees yearly impoverishment because the yield that they receive will be lower than the inflation rate.

Historically, the inflation rate has been around 3% per year. Although, in 2009 it will probably be lower, investors have to realize that the politic of many governments to inject huge sums of money in the banking system will probably create inflation. In the next 10 years, it could even be a little higher than historical norms, perhaps around 4% a year on average. If we use 3.5%, it means that the bonds yielding 2% will in fact be creating a LOSS of 1.5% per year in real terms. Over 10 years, this is total loss of 14%. Moreover, if that 2% is taxed, the total loss climbs to 21% (not bad for a riskless asset). For 30 years bonds, it's even worse: a non-taxable account will lose 26% of its purchasing power and in a taxable one, 45% !!

That is why we believe that the risk of owning treasury bills has rarely been so high. Impoverishment is guaranteed !

<u>Our companies : 2008 in review and their future potential</u>

In 2008, many of our companies saw their earnings reduced or stagnated. In some cases, the reduction was significant. Some of our businesses, we must add, did increase their earnings and some other made important acquisitions while their competitors were paralysed with fear.

Nitori Co.

Our best stock in 2008 was Nitori, a Japanese company we acquired last year. Nitori is a retailer of household products (furniture and accessories). It has an everyday low price strategy so it has been

gaining market shares in these difficult times. In 2008, earnings were up 13%. The stock went up 30% (to 7000 yens) and we got a little bonus because the yen gained 40% against the Canadian dollar.

Wal-Mart

Wal-Mart increased its profits by 6% in 2008. Its same store sales (SSS) were up 3%. In this very tough environment, it was quite an accomplishment. For example, Target saw its SSS decreased by 3%. Wal-Mart is one of the rare retailers that increased its traffic and SSS in 2008.

The top management's decision to reduce the level of new store openings and instead buy back shares looks to us like a wise decision. The stock has been quite resilient this year as it increased by 18% compared to last January.

Bank of the Ozarks

Our little bank of Little Rock (Arkansas) accomplished what very few of the 4000 or so banks in the US did this year : increase profits. Assets were up 19% and earnings were up 9% (even after a large increase in loan reserves). The efficiency ratio was down to 42.3%, an exceptional performance. Return on assets was a solid 1.14%.

I've met with the management of Bank of the Ozarks in 2006. I came back from Little Rock quite enthusiastic. Its CEO, George Gleason, acquired the bank for $10 000 at age 25 some 29 years ago. Bank of the Ozarks had then 28 employees et $28 millions in assets. In 2008, assets were $3 billions (an increase of 10 000%) and the bank was worth $500 millions. Mr. Gleason still owns some 22% of the outstanding shares and is paid a very reasonable salary. The culture he has impregnated onto the bank is based on conservatism and a long term horizon. Ozarks did not participate in the "sub-prime" madness and was prudent with its real-estate loan portfolio (there was few speculation in Little Rock considering that the median price of a home is $130 000).

Mr. Gleason is our kind of businessman and we're happy to be partners with him!

Wells-Fargo

Wells-Fargo (WFC) made a bold acquisition in 2008 by acquiring Wachovia at a very good price. They paid around $15 billions. This was the equivalent of 17% of its own market cap. In return, WFC doubled its assets. Moreover, we believe that with the charges that they will make to Wachovia books, they could save billions in future income taxes, that could prove to be almost the level of the purchase price.

WFC is so big, it could hardly escape the recession linked problems in 2008. It increased its level of reserves but still was profitable. Earnings were down 25% and we believe they will be lower by as much – at the very least – in 2009.

As always, we look beyond the next few quarters. We believe that once the economy gets back on the growth track, WFC will be able to double its earnings. So we believe that in next cycle, WFC could earn $4 a share. The stock could then reach the $60 level. This is many times the current level of the stock so the potential of appreciation is quite high.

Allied Irish Bank

In 2008, we had acquired a small weight in the largest bank in Ireland: Allied Irish Bank (AIB). At its average price of $25 in 2008, the stock was trading at 3 times earnings! AIB had two large investments: $3 per share in a minority holding of M&T Bank and $4 per share in Zachodni WBK, one of the most important bank of Poland. So in fact, we were paying $18 for $6 of EPS. And the dividend was 10%. It looked to us as a very rewarding opportunity.

But it did not turned out the way we had hoped. The economy of Ireland went down in turmoil and its three banks collapsed in the stock market. AIB ended the year at $5. At this price, we were *paid* $2 to own the most important bank in Ireland (with 41% market share it is the Irish equivalent of a combined Bank of Montreal and Royal bank of Canada).

In the beginning of 2009, there was an incredible event: the Irish government nationalized the third most important bank, Anglo Irish Bank, something very unimaginable just a year ago. Ireland is not a socialist country or a third-world country. Its GDP per capita is 15% higher than in Canada! But political interference makes our analysis futile and predicting the outcome quite impossible. Clearly, at today's price, investors believe that AIB will be almost totally diluted. We follow the situation closely but for the moment, we decided to just keep our shares.

Disney

Walt Disney Co. had a good year in 2008. EPS were similar to those of 2007. The recession should impact 2009 EPS but in the long run, this is one of the best companies we own. Moreover, it is brilliantly managed by its current CEO Robert Iger. The stock was a bargain at $30 at the beginning of the year but that did not prevent it from going down to $20. Obviously, in times of great pessimism, a stock trading at half its intrinsic value can go down to a third of its value. At today's level, Disney trades at 10 times earnings, a level not seen since the mid 1960s. We are still buyers of the stock.

American Express

AMEX owns a solid brand name, probably one of the best in the financial sector. But the year 2008 was very difficult for the company. Reserves had to be increased and EPS went down by 28%. The year 2009 doesn't look better. The stock went down to $19. At this level, it trades at around 7 times earnings.

It is difficult to know how hard AMEX will be hurt by the recession. We do believe that the company's brand is intact and that in the next cycle, earnings should rebound. If it earns $4.25 and the P/E gets back to normal levels, this stock could reach $65, more than four times the current level.

O'Reilly Automotive

Four years ago, we acquired shares in O'Reilly Automotive, one of the most important retailers of auto parts in the US. We had paid around $20 and the company was earning $1.12 per share at that time. O'Reilly had grown by 20% a year since its IPO in 1993. Future prospects looked good to us. We had visited its headquarters in Springfield (Missouri) and were impressed by its top people. They built a strong culture and had a very long term horizon in their investment process.

In 2008, EPS reached $1.64. Even though it's 46% higher than in 2004, we believe that these earnings are not totally reflective of their true earning power. The store number has increased from 1200 to 3200 during those four years. The stock has been quite rewarding in this down market since it ended the year at $30.

Of the 2000 stores increase, a large part of it came from this year's acquisition of CSK Auto (1342 stores). It expanded the reach of O'Reilly to the whole country. And the price paid for CSK seems to us to be very reasonable. So the future of O'Reilly continues to look quite promising.

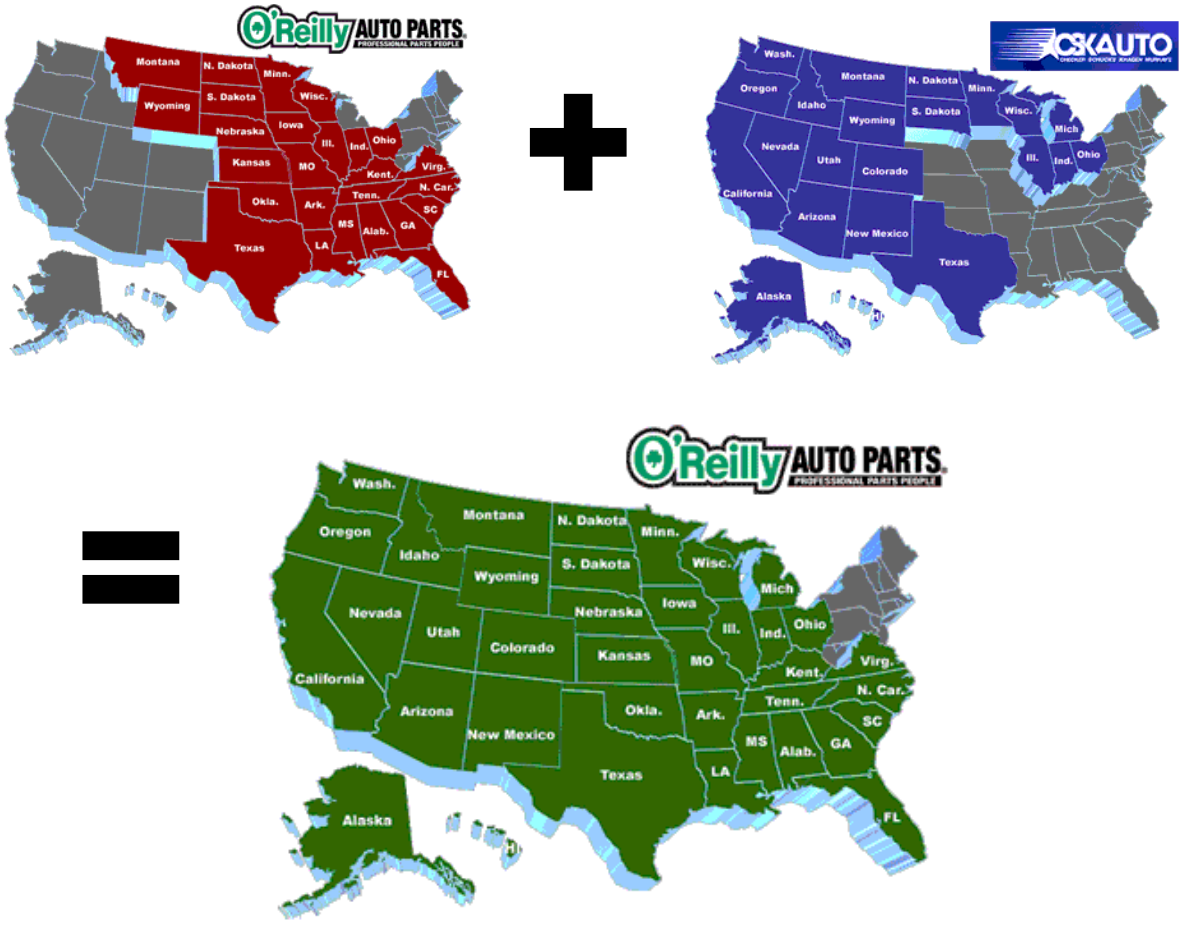

Fastenal

We are shareholders of Fastenal since 1998. So far, we have been rewarded to a large degree by this superb company from Winona (Minnesota). In the movie "*Other People's Money*", Lawrence Garfield (interpreted by Danny DeVito) likes businesses that are "*Dull but making a decent buck*!". At Giverny Capital, we share this admiration for such businesses. And Fastenal is making more than "decent" returns with its capital!

Fastenal started by selling fasteners but its CEO for many years, Robert Kierlin, diversified the company into many other lines of products as it expanded to around 2000 retail sites. My personal favorite line of products is the janitorial one.

We first purchased shares of Fastenal during the Asian crisis in October of 1998 at around $5 a share (adjusted for splits). In 1998, Fastenal earned $0.35 per share. In 2008, EPS reached $1.91, an increase of 450% in 10 years (18% annualized). The stock – as it should – has gone up by 500%.

The stock has been weak lately: the first few months of 2009 are difficult. But we do believe that in the next cycle, Fastenal will be able to again double sales and profits. And the stock should, at the very least, follow its underlying growth rate.

MTY Food

The Quebec based enterprise MTY Food had a good year in 2008. Its sales increased by 12% and EPS by 8%. MTY acquired two franchises: Tutti Frutti et Taco Time. The number of restaurants under the umbrella of MTY has crossed the 1000 level this year. The stock had a tough year as it went down from $12.6 to $7.3, a 42% drop. The company still has a great balance sheet. It shoud help to make other acquisitions in 2009 as the opportunities arise.

Pason Systems

Our Calgary oil services company, purchased four years ago, had a good year in 2008. Its US division is doing extremely well and helped the company earned record profits. EPS were up 25% in 2008 but 2009 looks much more difficult (the number of oil rigs are way down as of this writing). We admire Pason's CEO, Jim Hill, tremendously and we talk to him on a regular basis. We are optimistic about the long term prospects of this very impressive Canadian company.

5N Plus

5N Plus, a young and dynamic Quebec based company, is a World leader in metal purification. Their products are mostly used in photovoltaic cells for solar panels. For their last fiscal year (ending in May), revenues were up 41% and EPS 83%. After two quarters into 2009, revenues and profits are up 120%. The company has successfully completed its German plant and it's doing very well so far.

The stock was very volatile in the stock market. It started the year by going up from $8 to $13 and then went down the $4.6. The company – with some wisdom – issued more shares at $11 so it has a reserve of $1.2 per share in cash. So in fact, we're paying $3.4 for the company or around 10 times estimated profits for 2009. Such a low P/E for a fast growing company looks very attractive to us. Moreover, we know its founder and CEO very well and have great faith in his managerial skills.

Resmed

We purchased shares of Resmed in 2003, an Australian company that is the World leader in sleep disorder medical products. This segment is growing rapidly as more and more people are getting aware of the dangers of apnea. Resmed not only sells products, it helps the medical World and the population get more acquainted with the problem.

In 2008, sales were up 16% and EPS up 13%. Few companies had such a good performance in this economic environment. More importantly, it gained back some market shares from Respironics (now a division of the Dutch company Philips). The stock has over performed the indexes by going down only 29% (!). We believe that the company warrants its premium to the average company. So we are hanging on to ours shares even though they do not look as undervalued as some of our other holdings.

Knight Transportation

The trucking industry had to surf through a wave of problems in 2008: retail sales in constant descent, increase competition from railroads and high fuel prices (for a good part of the year). But that did not prevent Knight to continue to earn great returns: revenues were up 8% and EPS were down only 9%. Its efficiency ratio (the most important measure of competitive advantage) was maintained at 84%, more than 10% better than competitors. Its balance sheet is still without debt and with an excess cash level of $54 millions, even after having paid a dividend and repurchased shares.

This is why Knight Transportation was one of the few stocks to increase this year, ending up 9% compared to last year. When we first acquired shares of Knight in late 2003, we labeled it "an oasis in the desert" as it was a great company in a lousy industry. And it's in great drought that we recognize the best sources!

Walgreen's

It was a tough year for Walgreen's, the leading pharmacy chain in the US. SSS went up but at a lower growth rate than the company had accustomed its shareholders. EPS were similar to those of 2007. The stock should have done well in the stock market because of its "defensive" status. But there were few of those in 2008 in Wall Street: the stock went down 34% to $25, doing as poorly as the index.

As always, what counts is the increase in intrinsic value not what the stock does in the short run. It seems to us that long term fundamentals are not as good as they used to be. The company has reduced its long term target of store openings and decided to focus on increasing margins. Although it might be the wisest choice, this is not good news. When we purchase the stock some 6 years ago, the company was growing at a 16-17% growth rate and had maintained that rate for the previous 30 years. Very very few companies had such a track record!

A look at the industry leads us to believe that competition has increased lately. And from a larger base, Walgreen's growth rate should be lower going forward (probably 7-10%). The stock looks incredibly cheap (at a P/E of 11x) and has discounted even worse growth perspectives that we envision. But we are reconsidering this investment as we are finding even better opportunities in other stocks.

Carmax

Carmax is the US largest retailer of used cars. Headquartered in Richmond (Virginia), it currently operates 99 used car superstores in 46 markets. In addition, Carmax offers financing to most of its clients (through its CAF division). Loans from clients with good credit scores are pooled and sold on the securitization market. When FICO scores are low, they are sent to Bank of America. Carmax has been growing since its founding some 15 years ago. It went from one store to 99 stores as revenues reached $8 billions in 2007.

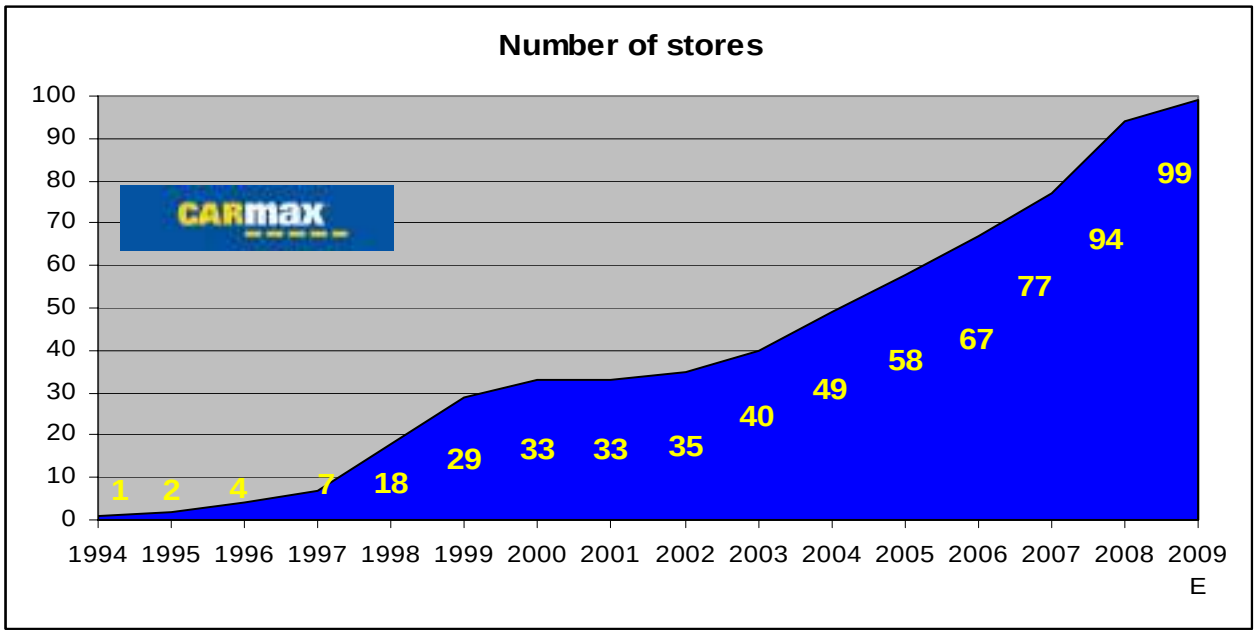

It is hard to imagine a worst economic flood for the auto industry than the year 2008 (although it looks like 2009 is going for the record). Sales of cars (both new and used) have gone down by 25%, a decrease rarely seen since its entry into our civilisation. In addition, Carmax had to cope with a terrible securitization market for most of the year and had to accept much lower margins. They also had to increase reserves for delinquencies. So the financial arm lost money in 2008. So in two years, EPS went from $0.92 to $0.11.

We had purchased a starting participation in 2007. As bad news were coming out, we decided to wait to purchase more shares. That does not change our view that the long term fundamentals of Carmax are great. Few companies have so much growth potential. The used car market is highly fragmented and the consumer can gain better services (and less problems) by purchasing at Carmax instead of the local dealer. In just a few years, Carmax has built an impressive brand name that is without equivalent in the industry. With only 2% of market shares, it could grow by 15-20% per year for the next decade and still own less than 10% of the market.

So we believe that we should be patient with that investment and even perhaps considering increasing our holding at some point in the future.

Mohawk Industries

Mohawk Industries is one of the two main players in the flooring industry in the US. It is also an important player worldwide. The year 2008 was very difficult for the industry and for Mohawk. EPS went down 50%. Sales of carpets, tiles and hardwood floors we're down across all segments (commercial, residential and new home construction). Moreover, the increase in oil prices (until August) had a huge impact on gross margins (carpets are made from oil based products). Margins should improve later in 2009 as the company goes through its FIFO inventory. It is worth noting that its main US competitor, Shaw industries (a division of Berkshire Hathaway) had a similar drop in profits. So, it seems that Mohawk has not lost market shares. The other important ingredient is its CEO, Jeff Lorberbaum, who we admire greatly.

The stock had a volatile year. It fluctuated between $83 and $24, ending the year at $43. At its low, it traded at 3 times the earnings of the last cycle peak (2006). If in 5 years, the company returns to a more normal profitability level and trades at a P/E more in line with its historical norm, this stock could reach $120. So Mohawk stock looks to us as being quite undervalued.

<u>New purchases in 2008</u>

Martin Marietta Materials

We acquired shares of Martin Marietta Materials (MMM), the leading US aggregate producer. The company has strong competitive advantages and long life reserves (84 years). Because of the recession – including the drop in new home sales – aggregates consumption has its worst drop since 1982 as shown in the following chart. So we believe that there is a strong recovery potential.

Moreover, according to our analysis, the mid and long term economics of this company are very promising. Around 50% of revenues come from infrastructure projects. This division should rebound in the next few quarters in light of the fact that the newly elected president Barack Obama has announced a major program of investments in that area. And, at some point, new home sales will go back up. So we believe that within the next 5 years or so, MMM earnings could more than double.

Omnicom

We have been following Omnicom since 1998. In fact, in 2006, the stock was in the "mistake *du jour*" section of our annual letter to partners. I explained that in 2002, the stock went from $49 to $18 on rumors of a financial scandal (that turned out to be unfunded). The stock had afterward rebounded to $53 in 2006. So I had lots of regrets to have stayed on the sideline four years earlier.

But in the stock market, we shall never lose patience. In 2008, the stock lost more than half its quoted value and was at $27 at year's end. The recession will have an impact on Omnicom's profitability but we believe that over the long term, its intrinsic value is intact.

It is interesting to note that in 2002, Omnicom realized EPS of $1.72 . In 2008, EPS reached $3.17. So the stock today is even more undervalued (at a P/E of 8x) than it was in 2002 at its low (P/E of 10x). Historically, Omnicom has traded at around 22 times earnings. So at its current level, we believe it is trading at a third of its underlying intrinsic value.

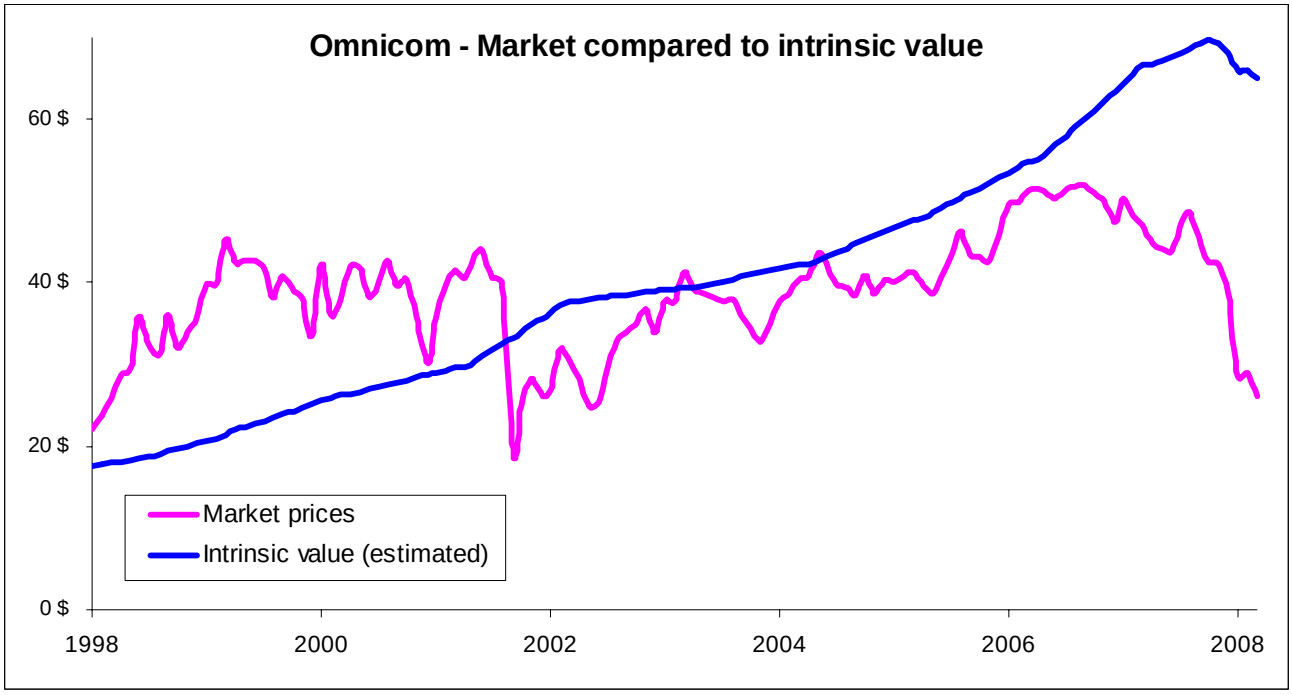

If you believe that decrease in stock value is bad for shareholders, we would tend to think otherwise. Since 2002, the company has bought back 60 millions of its own shares (or 16% of outstanding). It is way better for Omnicom to buy back its stock at 8 times earnings than at 16 times. So we think we will be rewarded from that investment in two ways: First by acquiring shares well bellow intrinsic value. Secondly, Omnicom increases shareholder's wealth by repurchasing its own shares at cheaper level.

Five years post-mortem : 2003

We try, on a regular basis, to do a post-mortem of our investment process when sufficient time has gone by. We believe that by studying our past decisions, we can learn from them.

In 2003, we had acquired shares of Factset Reseach, Expeditors International, Harley Davidson, Walgreen's, Fifth Third Bank, Resmed and bought back some First Data. Four of these companies were still in our portfolio at year's end (Factset, Expeditors, Walgreen's and Resmed).

Although we believe its brand to be solid, we sold Harley-Davidson a few months after our purchase. We were not comfortable with their finance division. Our fears were justified. Although it took a few years to materialize, the year 2008 was difficult for Harley. In addition to slower sales, the financial division is worrisome. And its stock went from a peak of $70 to $12 lately. This summer, I went to Milwaukee and visited the newly constructed Harley-Davidson museum. We can realize the strength of the company and of its brand. There are very few brands that people are ready to get tattooed on their body. Harley-Davidson is one of them!

First Data turned out ok. We sold our investment in 2005. The company was then split in two with the spin-off of Western Union. The other part was acquired by a private equity fund afterwards.

Finally, Fifth Third Bank was a poor investment. We sold our shares at around $40, two years after their purchase with a loss of 20%. The Cincinnati bank had a great history of outstanding returns for its shareholders. But sometimes, in capitalism, success creates its own anchor. When we look at today's price of $2 (I have to clean up my screen to be certain that there is not another digit in front of the "2"), we have no regrets that we sold our shares.

Mistakes *du jour*

Success *is a lousy teacher. It seduces smart people into thinking they can't lose.*

- Bill Gates

As we do every year, here are our three modals for "best" mistake of the year just passed. As usual, it is with a constructive attitude that we share them with our partners and go into detailed analysis. In the hope to always improve ourselves as investors.

Bronze Medal: First Cash Financial

We owned shares of First Cash Financial Services (FCFS) for a few months in 2007. We had purchased them at around $17 and sold them under $10. It was not a good transaction. FCFS had two divisions. The first one was a chain of pawn shops, in the US and in Mexico. This division is highly profitable and almost immune to recessions. But FCFS had a second division, much smaller, that sold used cars with "easy" payments. I was not a fan of that business but since it was a modest part of the profits, we decided to invest a small weight. As usual, we started with a small weight to slowly learn to know management a little better (there nothing like implication to learn about something).

In 2007, the car division turned out to be losing money. The stock fell in half on the news of the December quarter of that year. We believed that FCFS had to sell that division (even give it away, liabilities included). To my great disappointment, FCFS top management decided to keep the trouble division believing that they could solve its problems.

For a few days, I reflected on the situation. I believed that it is was a mistake to continue holding on to the car division. One important criteria when we acquire shares in a company is to have confidence in its top people. Once we are shareholders, if we do not agree with them, we are faced with a tough decision. Obviously, we have no chance on making them change their mind. We either have to accept their decisions or sell our participation. We decided to sell.

The car division continued to lose money in 2008 (and profits to increase in the pawn shops division). But after a few quarters into 2008, FCFS' management decided to depart from that business. The stock promptly rebounded to $17. It was hard to predict such a turnaround in a management decisions (ego sometimes block wisdom in many human beings in powerful positions). It was frustrating since FCFS did chose the path we believe was best.

Was it a mistake to sell? I don't think so. Our reasons were valid. Could we have been more patient with the management of the company? I believe the answer to that question is yes.

Silver Medal: Ritchie Brothers Auctioneers

Ten years ago, a fellow money manager recommended to me Ritchie Brothers Auctionneers (RBA), a Canadian company specialized in farm and industrial equipment auctions. A dull business if there is one! RBA gets a percentage on every transaction so their capital needs is quite low. The difficulty lies in the ability to built a strong reputation to attract a critical mass of buyers and sellers. Once that difficulty is surmounted, auctioneers can be a great business (we just have to think of the solidity of Christie's and Sotheby's).

I knew in 1998 that RBA a built a strong nice but I was worried that the farm and industrial equipment auctions would be a cyclical activity. So RBA's P/E of 15x seemed a little high at that time. During the recession of 2001-2002, the company did well and after that the stock continued to trade at high P/Es (sometimes in the high 20s). So far this year, RBA has held up fine.

So after 10 years of following from the stands – for a better price – we can look at the numbers since 1998: sales and earnings have increased three fold and the stock has quadrupled.

Gold Medal: Mastercard

In May 2006, Mastecard went public at $45 a share. I knew the company pretty well since we were shareholders of American Express since 1995 (although we have bought and sold the stock at a few occasions over the 14 year period). Mastercard is not as solid as Visa or AMEX but it is a good business that would do well as a newly independent entity. I knew that momentum was pretty good (because of their "priceless" ad campaign). And that margin expansion potential was high.

The stock looked a little high considering that the company earned $1.98 in 2005. But since I knew that margins could be improved, I should not have been too influenced by its high P/E.

I took the time to compare market shares, spending per card and profitabilites of all three most important card companies. I believed that AMEX had the best brand. But I also knew that Mastercard and Visa did not lend to consumers, as AMEX was. Mastercard and Visa were just transaction processors and that it was the banks that carried the loans on their books. The two companies just received a fee for their work. It is a pretty good economic model.

I considered reducing AMEX by half and acquire some shares of Mastercard. But I finally decided to keep all our shares of AMEX, believing the long term growth perspectives were better even if the sensibility to recessions was higher.

As noted above, today's recession has hurt AMEX a lot and the company had to increase its reserves for bad loans. Mastercard was immune to such charges. EPS in 2008 for Mastercard reached $9, a four and a half fold increase in three years. And the stock is up 200%.

Owning this stock in our portfolio would have been quite rewarding.

Conclusion : Warren Buffett recommends to buy stocks for the first time since 1979

By far, the best investor of all time is Warren Buffett. I have read everything I could find (past and present) about him. In only two instances in the past, Mr. Buffett had recommended to invest, with enthusiasm, in the stock market: in 1974 and 1979. Until this year.

In 1979, the stock market was depressed to a point that *Business Week* published its now famous edition entitled: "The Death of Equities". At about the same time, Warren Buffett published an article in *Forbes* entitled: "You pay a very high price in the stock market for a cheery consensus".

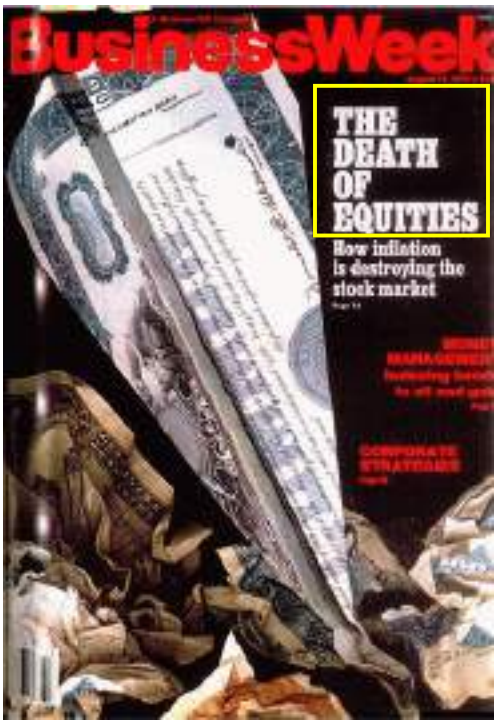

Source : Business Week (August 1979)

Source : Forbes (August 1979)

In its 1979 article, Warren Buffett explained that it was not optimism but pessimism that was the friend of the true long term investor. That it is pessimism that creates the bargains in the stock market that lead to enrichment in the years to follow.

What has that market done in the following 10 years of these two articles (from 1979 to 1989)? A total return of 400% or 17% on an annual basis, one of the best decade in market's history!

Almost 30 years later, Warren Buffett wrote a similar article in the *New York Times* edition of October 17th 2008. He strongly urged investors that take advantage of the recession and the high level of fears that were (and still are) present in the stock market.

He was once again an aggressive buyer of stocks when others were selling!

To our partners

We are deeply aware of your vote of confidence in us and look forward to reward it in the years to come. It is imperative for us to not only select outstanding companies but also to have great stewardship in the managing of your capital. So we never let our emotions dictate our decisions, particularly during financial crisis.

We wish all of our partners a great year 2009.

François Rochon and the Giverny Capital team

Giverny Capital Inc.

Annual Letter to our Partners
2009

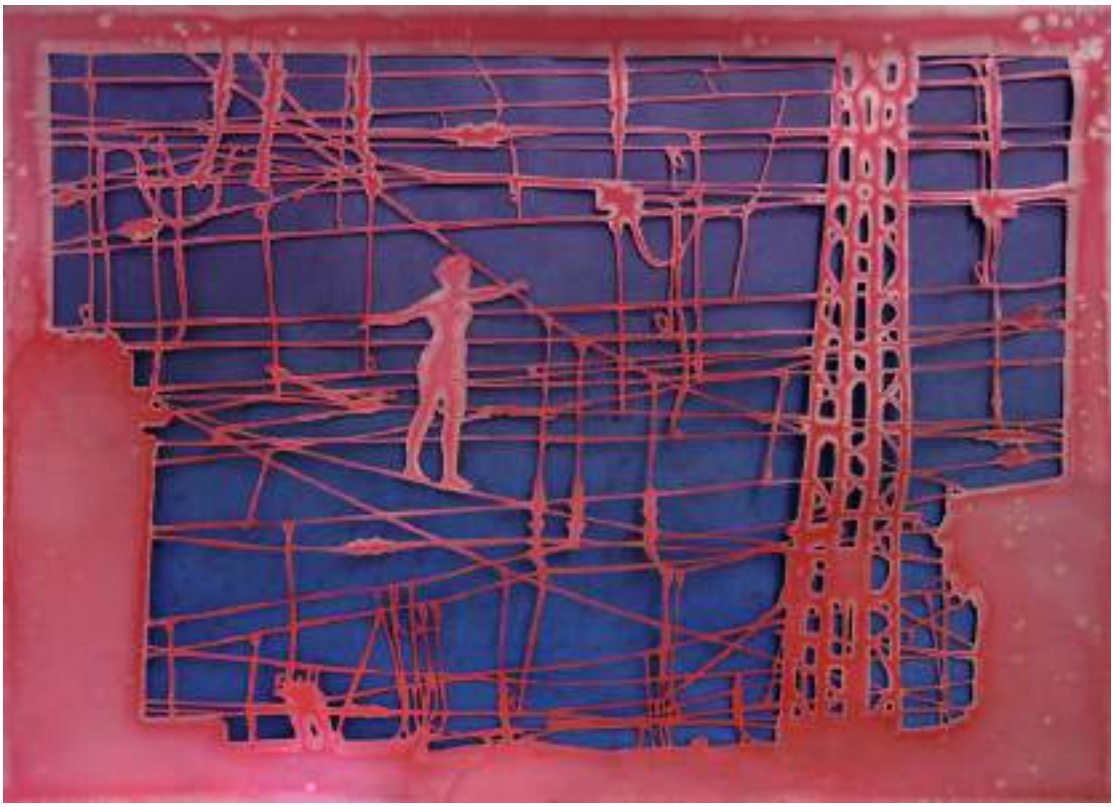

Ed Pien
Girl on a wire, 2009
Giverny Capital Collection

Giverny Capital Inc. – 2009 Annual Letter ©

For the year ending December 31st 2009, our portfolio's return was 11.8% versus 12.2% for our weighed benchmark. Our annual return, which included a loss of approximately 16% due to fluctuations in the Canadian currency, was therefore 0.4% lower than our benchmark.

Since our inception, on July 1st 1993, our annual compounded rate of return has been 13.8% versus 6.7% for our weighed benchmark, or an annualized outperformance of 7.1% over this period. When we exclude the effect caused by the appreciating Canadian currency since our inception, which represents an annualized increase of 1.2%, our portfolio has returned 15.1% annually versus 7.9% for our benchmark. Our long-term (and ambitious) objective is to maintain an annual return that is 5% higher than our benchmark.

The Artwork on the cover of our Letter

We illustrate the cover of our letter with a copy of an artwork from our corporate collection since 2004. We chose the work of Ed Pien, a Canadian artist of Taiwanese descent, for this year's cover. The piece, titled "Girl on a wire", seemed the perfect representation of 2009 which was an emotion-filled year when investors felt as though they were walking a tightrope across what seemed, at times, like an economic ravine.

The Giverny Portfolio (in Canadian dollars): Returns Since July 1st 1993.

Return *	Giverny	Index **	+ / -	$ US/Can	S&P 500	+ / -	Giverny ***	Index ***	+ / -
1993 (Q3-Q4)	37.0%	9.5%	27.6%	3.3%	8.4%	28.6%	34.4%	7.4%	27.0%
1994	16.5%	3.7%	12.7%	6.0%	7.3%	9.2%	12.0%	-0.3%	12.3%
1995	41.2%	24.0%	17.2%	-2.7%	32.9%	8.3%	43.8%	26.3%	17.5%
1996	28.0%	22.8%	5.2%	0.3%	22.7%	5.3%	27.7%	22.5%	5.2%
1997	37.7%	28.6%	9.2%	4.3%	36.7%	1.0%	33.4%	24.5%	8.9%
1998	20.6%	18.8%	1.8%	7.1%	37.7%	-17.0%	14.5%	12.8%	1.7%
1999	15.1%	16.3%	-1.2%	-5.7%	14.1%	1.0%	20.6%	21.9%	-1.3%
2000	13.4%	3.2%	10.2%	3.9%	-4.6%	18.0%	9.7%	-0.2%	9.9%
2001	15.1%	-0.4%	15.5%	6.2%	-5.7%	20.8%	9.4%	-5.3%	14.7%
2002	-2.7%	-18.3%	15.6%	-0.8%	-22.0%	19.3%	-2.0%	-17.7%	15.7%
2003	13.6%	14.0%	-0.4%	-17.7%	5.7%	7.9%	33.7%	34.1%	-0.5%
2004	1.6%	6.2%	-4.5%	-7.3%	2.8%	-1.1%	8.3%	13.1%	-4.8%
2005	11.5%	3.6%	7.9%	-3.2%	1.6%	9.9%	14.5%	6.7%	7.8%
2006	3.5%	17.0%	-13.5%	0.2%	15.7%	-12.3%	3.3%	16.8%	-13.5%
2007	-14.4%	-12.0%	-2.4%	-14.9%	-10.0%	-4.4%	-0.3%	2.2%	-2.5%
2008	-5.5%	-22.0%	16.5%	23.1%	-21.7%	16.3%	-21.5%	-35.4%	13.9%
2009	11.8%	12.2%	-0.4%	-13.7%	9.6%	2.9%	27.7%	27.7%	0.1%
Total	743.1%	191.1%	552.0%	-18.1%	179.2%	563.9%	924.9%	251.3%	673.6%
Annualized	13.8%	6.7%	7.1%	-1.2%	6.4%	7.4%	15.1%	7.9%	7.2%

* Green section: all returns are adjusted to Canadian dollars
** Index is a hybrid index (S&P/TSX, S&P 500, MSCI EAFE, Russell 2000) which reflects the weight of the underlying assets
*** Estimated without the effect of currency

Note: Canadian dollar returns audited by PricewaterhouseCoopers

The Giverny US Portfolio

We have been publishing the returns of the Giverny US Portfolio, which is entirely denominated in US dollars, since 2003. The Giverny US Portfolio corresponds to the American portion of the Giverny Portfolio. In 2009, the Giverny US Portfolio realized a return of 28.7% compared to 26.5% for our benchmark, the S&P 500. This return and our benchmark are all in US dollars and include dividends paid during the year. Since its inception in 1993, the Giverny US Portfolio has returned 803.8%, or 14.3% on an annualized basis. During this same period, the S&P 500 has returned 239.5%, or 7.7% on an annualized basis. Our added value has therefore been 6.6% annually.

Year	Giverny US	S&P 500	+/-
1993 (Q3-Q4)	32.7%	5.0%	27.7%
1994	9.9%	1.3%	8.6%
1995	54.8%	37.6%	17.2%
1996	27.0%	23.0%	4.1%
1997	32.9%	33.4%	-0.4%
1998	11.0%	28.6%	-17.6%
1999	15.9%	21.0%	-5.1%
2000	11.3%	-9.1%	20.4%
2001	8.1%	-11.9%	20.0%
2002	-4.4%	-22.1%	17.7%
2003	31.6%	28.7%	2.9%
2004	9.3%	10.9%	-1.6%
2005	12.5%	4.9%	7.5%
2006	3.3%	15.8%	-12.4%
2007	-1.7%	5.5%	-7.2%
2008	-24.3%	-37.0%	12.7%
2009	28.7%	26.5%	2.2%
Total	803.8%	239.5%	564.3%
Annualized	14.3%	7.7%	6.6%

Note: Giverny US returns audited by PricewaterhouseCoopers - S&P 500 returns comes from Standard & Poors

Giverny Canada Portfolio

We introduced a portfolio that is 100% focused on Canadian equities in 2007. This corresponds to the Canadian portion of the Giverny Portfolio. In 2009, the Giverny Canada Portfolio returned 28.2% versus 33.3% for our benchmark. Since 2007, the Giverny Canada Portfolio has returned 15.7%, or 5.0% on an annualized basis. During this same period, our benchmark had a loss of 1.8%, or a loss of 0.6% on an annualized basis. Our annual added value is therefore 5.6%.

Year	Giverny Canada	S&P/TSX	+/-
2007	19.7%	9.8%	9.9%
2008	-24.6%	-32.9%	8.3%
2009	28.2%	33.3%	-5.1%
Total	15.7%	-1.8%	17.9%
Annualized	5.0%	-0.6%	5.6%

Note: Returns audited by PricewaterhouseCoopers

Giverny International Portfolio

We introduced an international portfolio in 2008. This portfolio corresponds to the portion of the Giverny Portfolio that represents companies domiciled outside of North America. In 2009, the Giverny International Portfolio returned 12.9% versus 10.0% for our benchmark, the MSCI EAFE (adjusted to Canadian dollars). Since 2008, the Giverny International Portfolio has had a loss of 5.6%, or a loss of 2.9% on an annualized basis. The MSCI EAFE had a loss of 20.0%, or a loss of 10.7% annually, over the same period. Our annual added value was therefore 7.8%.

Year *	Giverny Intl	MSCI EAFE	+/-
2008	-16.3%	-27.3%	11.0%
2009	12.9%	10.0%	2.9%
Total	-5.6%	-20.0%	14.4%
Annualized	-2.9%	-10.7%	7.8%

* All returns are adjusted to Canadian dollars

Note: Returns audited by PricewaterhouseCoopers

2009: A Year in Review

We began our 2008 Annual Letter with a simple phrase: "The opportunity of a generation."

We wrote this in February of 2009 when the markets were freefalling to levels not seen since 1997. There were plenty of bargains and some of the world's best companies were trading at enormous discounts to their intrinsic values. We may never see these sorts of valuations again in our lifetime (except for maybe Jean-Philippe who, with his daily diet of kefir, is likely to live to 120).

During the first quarter of 2009, many of the companies in our portfolio were trading at a third, and in some cases, at a quarter of their intrinsic values. We invested every dollar we could find, our own as well as those of some of our courageous partners, into these bargains. The markets and our portfolio rebounded and our holdings rose nearly 28% for the year (12% when adjusted to Canadian dollars). This 28% return on the Giverny Capital Portfolio was slightly less than our corresponding benchmark due to the underperformance of three large holdings that spanned across our three portfolios: Berkshire Hathaway (US), MTY Food (Canada), and Nitori (International). Despite this underperformance in the stock prices of these holdings, it is important to note that these companies still had a good year in 2009 when we assess their progress in growing their intrinsic values.

The market's sharp rise since its March 9th bottom will not make us forget that 2009 was perhaps the worst year in economic history since the Great Depression of the 1930s. It was unthinkable just a few years ago that the aggregate revenue of all companies would drop by 20% in a single year. Never would we have heard chatter about a possible nationalization of the American banking system—the very foundation of the best capitalist society in history. The Irish banking system collapsed while the British banks, formerly the crown jewel of banking, struggled to survive. The stock markets in the BRIC (Brazil, Russia, India and China) tumbled between 55% and 75%.

I remember a conference last March where my longtime friend Bernard Mooney attempted to convince a skeptical audience that this was the time to invest in the market. Certain attendees were visibly hostile and shouted that this was the end of capitalism.

In the beginning of the year, many investors, including some of the most experienced, had a significant portion of their portfolio in cash and highly liquid investments, despite the fact that the return on these investment was essentially nil. For a short period of time, the return on US Treasury bonds was negative. Rarely, if ever, have we reached such a level of pessimism. At the bottom of the market, as we mentioned in last year's letter, there was enough liquidity in the US to purchase all the companies in the S&P 500. Still, there is little use having all this liquidity if you wait for an even lower level to buy into the market…

And at the end of the day, capitalism survived, the system did not collapse and those who were courageous to hold onto their shares were rewarded.

What lessons have been learned from the crisis of 2008-2009?

We find it helpful to read historical writings in times of pessimism in order to keep current events in perspective. Abraham Lincoln wrote in 1859:

> "It is said an Eastern monarch once charged his wise men to invent him a sentence to be ever in view, and which should be true and appropriate in all times and situations. They presented him the words: 'And this, too, shall pass away.' How much it expresses! How chastening in the hour of pride! How consoling in the depths of affliction!"

It is the nature of our civilization, for better or for worse, to have periods of both economic expansion and economic contraction. When we look at our scorecard, however, our civilization has made constant progress—progress towards a higher standard of living.

But one of the side effects of our system is that during periods of expansion, some participants try to hasten their journey towards greater wealth by using the lever of debt. This works for some time and the neighbor, who considers himself just as intelligent, concludes after considerable reflection: "Why not me?" This continues to work for a while… until a period of contraction presents itself, always without an official announcement. And those who were imprudent are punished. Unfortunately, during several quarters, all participants are punished whether they acted prudently or not.

Many people who have lost their jobs, for example, were forced to sell stock at abnormally low prices. But this wasn't the case for everyone. Those who have the opportunity to wait for better days should remain emotionally immune against market drops. Because, at some point, the market will rise and reach new heights as the upward human quest for progress return to its historical road.

Economists who attempt to predict such cycles and the market in the short term fail to realize that they need to keep track of several hundred million factors which are the several hundred million human beings who participate in this vast activity. What's involved here doesn't just entail tracking a dozen economic indicators. Such economists remind me of the scientists from a thousand years ago who simplistically separated all the elements into four: earth, water, air, and fire.

Here are the lessons we can draw from the crisis (note: some of these were principles already known):

- Everything that cannot rise forever will someday stop. This certainly occurred with the speculation on derivative products, technology stocks in 2000, American residential real estate

in 2005, Dubai real estate earlier this year, biotech companies in the early 1990s and with the price of oil in more recent years. These are just a few recent examples!

- It is the nature of things that with every economic cycle, some businesses disappear while new ones are born. This reminds us of the cycle of life here on Earth.
- Companies that went bankrupt all had faced a common pitfall: too much debt. The companies that withstand crises are most often the ones with solid balance sheets and with leadership that is prudent, trustworthy and devoted. Isn't this perfectly logical?
- Warren Buffett once said that investors should not be in the market if they are not willing to accept a temporary drop of 50% in the values of their portfolios. I always mention to our partners that that this was likely to happen once in their life as an investor—I knew it would happen but I didn't know "when".
- Many investors who were on margin at the beginning of 2009 were forced to sell at the worst possible time. An investor who uses margin to invest can do well for 30 years and then lose everything in a single day of irrational market movements.
- The irrationality of short-term market fluctuations makes derivative products extremely volatile (options, swaps, etc.) When many people try to sell these instruments at the same time, derivative products can become worthless overnight. When this is combined with leverage (debt), you end up with an explosive cocktail.
- The good news is that the market, as Ben Graham wrote 60 years ago, ultimately renders an accurate assessment of the intrinsic value of companies over the long term. To remain calm and rational in the face of wild fluctuations in stock prices is, beyond the shadow of a doubt, the most significant quality an investor can have or try to have.
- At the end of the day, in order to build wealth, there is a simple approach which we have followed for 17 years at Giverny Capital: investing for the long term in high-quality companies purchased at attractive valuations—investing in companies that will survive the crises of our civilization and the short-term irrationally of our economic system.

But even such a sound philosophy isn't enough to succeed in the market—another quality is necessary. In 1949, Ben Graham wrote the following in the conclusion to "The Intelligent Investor":

> "Have the courage of your knowledge and experience. If you have formed a conclusion from the facts and if you know your judgment is sound, act on it—even though others may hesitate or differ." (You are neither right nor wrong because the crowd disagrees with you. You are right because your data and reasoning are right.) Similarly, in the world of securities, courage becomes the supreme virtue after adequate knowledge and a tested judgment are at hand."

Review of the Decade

2009 wasn't the only difficult year in the last decade—quite to the contrary. The beginning of the decade started on a note of extreme overvaluations, particularly with technology stocks. The NASDAQ reached 5000 on March 6, 2000, a level not to be reached again anytime soon. Investing in the market, aside from a few sectors tied to natural resources, has not been a pleasant experience since. Over the course of the last 100 years, the last decade was the only decade when the S&P 500 actually lost value aside from the 1930s. The market that was highly overvalued in 1999 is one that became highly undervalued in 2009.

A significant number of companies disappeared almost overnight over the last decade (the corporate cemetery is full of companies formerly believed to be indestructible). Nevertheless, others were born

or reborn and became titans of industry within a few years (Google, Apple, Amazon, Intuitive Surgical, PetroChina, Tata Group, etc.) If there is one constant in the business world, it is change!

In the graph below, we can clearly see that the most important world indices experienced very modest gains over the last decade, well below their average 10% annualized returns. The market returns were further weakened by an additional 3% annually due to the strengthening Canadian dollar over the last 10 years. The Loonie climbed from $0.69 to $0.95 over the decade.

Out of the markets in the West, Canada was one of the only markets to counter this trend, with an approximate annual return of 5.6%. It is worth noting, however, that Canada only represents 3% of the world economy. While Canada benefited from its high concentration in natural resources over the last ten years, it is also important to consider that Canada is well behind many countries in terms of productivity and innovation in knowledge-based industries such as technology and medicine.

Decade 2000-2009	Annualized Returns	In $CAD
MSCI World	0.2%	-3.0%
UK	0.9%	-2.4%
Japan	-5.7%	-7.8%
US	-1.0%	-4.1%
Average	-2.3%	-5.3%
Canada	5.6%	5.6%
Giverny Global	**7.2%**	**4.4%**

The holdings in the Giverny Global Portfolio had an annualized return of 7.2% which outperformed our benchmark by over 6% on an annualized basis. In Canadian dollars, our annualized return was 4.4%. We are confident that the intrinsic value of the companies in our portfolio increased at a much higher rate than their average annual market performance of 7%.

We also believe that the current level of the Canadian dollar is higher than a level that would be in line with purchasing power parity between the Canada and the US (which would be around $USD 0.84). We are therefore confident that the appreciation of the Loonie since the year 2000 is unlikely to continue to such a degree (if any) in the next decade.

We can conclude that the next decade is likely to differ sharply from the preceding one in terms of returns, for both world indices as well as our portfolio.

Owner's Earnings

We do not evaluate the quality of an investment based on short-term stock quotations, but instead, take the perspective of ownership in the companies in which we invest. As such, we analyze the growth in earnings for our companies and study their long-term prospect.

Each year, we present to you a chart indicating the growth in the intrinsic value of the companies in our portfolio using a method created by Warren Buffett: owner's earnings. This enables us to estimate

the intrinsic value of our companies by adding the growth in earnings per share and the average dividend yield of our portfolio.

The intrinsic value of our portfolio companies remained flat for 2009. This is nothing to write home about but we are satisfied given the extremely challenging economic environment.

The market value of our companies, according to the stock quotes provided by the market, increased 28% in 2009. This increase in market values made up some of the lost ground in terms of the relative difference between intrinsic value and market value that had developed over the last several years.

	Giverny			S&P 500		
Year ***	Value *	Market **	Difference	Value *	Market **	Difference
1996	14%	29%	15%	13%	22%	9%
1997	17%	35%	18%	11%	31%	20%
1998	11%	12%	1%	-1%	28%	29%
1999	16%	12%	-4%	17%	20%	3%
2000	19%	10%	-9%	9%	-9%	-18%
2001	-9%	10%	19%	-18%	-11%	7%
2002	19%	-2%	-21%	11%	-22%	-33%
2003	31%	34%	3%	15%	28%	13%
2004	21%	8%	-12%	21%	11%	-8%
2005	14%	15%	0%	13%	5%	-8%
2006	14%	3%	-11%	15%	16%	1%
2007	10%	0%	-10%	-1%	6%	6%
2008	-3%	-22%	-19%	-30%	-36%	-6%
2009	0%	28%	28%	3%	27%	23%
Total	386%	344%	-42%	79%	132%	53%
Annualized	12%	11%	-1%	4%	6%	2%

* Estimated growth in earnings per share plus dividend yield
** Market performance, inclusive of dividends
*** Results estimated without consideration of currency fluctuations

Since 1996, according to our calculations, the intrinsic value of our companies has increased by 386% (nearly a fivefold increase) while their stock prices have increased by 344%. In the long term, despite the ups and downs of various economic cycles, the stock prices of companies will follow the growth in earnings per share of their underlying businesses fairly closely.

It should be noted that our stocks outperformed the S&P 500 since 1996 (by about 5% annually) for the primary (and simple) reason that their underlying businesses outperformed the S&P 500. It is in this manner, rather than through any speculation on market quotations, that we intend to continue meeting our objective of outperforming the market.

The Flavor of the Day for 2009: Canadian Residential Real Estate

We are asked regularly about the current flavor of the day—in other words, what we should avoid. After technology stocks in 1999-2000 and natural resource stocks in the last couple of years, the segment of the market which we consider alarming is the Canadian residential real estate market.

Warren Buffett likes to say that there is no greater sedative than money easily made. While Canadian residential real estate has been a tremendous source of wealth since 2000, those with a longer memory will recall that real estate prices didn't move one iota during the preceding decade. So, the first phase of this increase is a simple "catch up" on the price of the intrinsic value of a home (typically tied to disposable income per capita). Like all assets linked to supply and demand, a sharp increase often creates its own momentum which leads to a second phase of an increase when fundamentals can be left behind in favor of speculation.

The beauty of the capitalist system is that its invisible hand always ultimately equilibrates prices—each exaggerated rise is therefore followed by a readjustment. This occurred during the most recent recession in the US as well as nearly all countries in Europe. The decrease in the US was of a magnitude not seen since the Great Depression (-30%), with enormous consequences on the overall economy.

Canada, to this day, has avoided this readjustment in prices—with the reason seemingly more rooted in politics rather than economics. The federal government strongly encouraged banks to continue lending with the assistance of the Canadian Mortgage and Housing Corporation (CMHC) to support borrowers. Canadian consumers, boastful about the fact that housing prices had not fallen, continued to spend and even, in some cases, considered themselves immune to the global recession. Housing prices continued to rise.

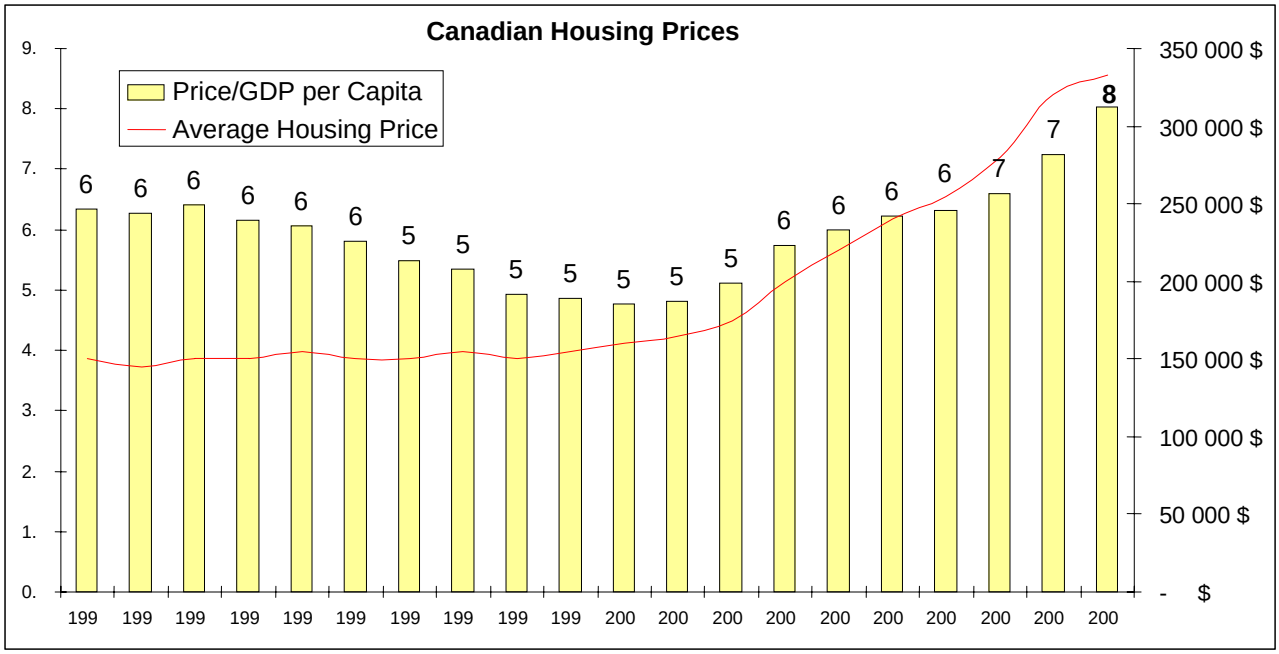

Source: Giverny Capital Inc.

We can see that the average price of a home sold in Canada reached $333,000 in 2009. If we look at this number through the lens of GDP per capita, this is a ratio of 8:1. The historical average for this ratio is 6:1. We conclude that current prices are roughly a third higher than their historical prices, especially in western Canada.

In the US, during the great real estate bubble, a large portion of mortgage titles were transferred from banks to the quasi-governmental agencies, Fannie Mae and Freddie Mac. These mortgage titles were subsequently securitized and sold on secondary markets. When housing prices collapsed, the

American government was forced, in order to save the system from floundering, to take over Fannie and Freddie and the billions of dollars in securitized mortgages that they stood behind.

Back in Canada: in order to counter the recession, the federal government decided to encourage the CMHC to increase its level of involvement in residential mortgages. The CMHC therefore increased its level of mortgage securitization and, with the seal of approval from the federal government, had no problem finding eager buyers thirsting for guaranteed fixed rate investments. From 2007 to 2009, in only two years, the total for securitized mortgages supported by the CMHC ballooned from $CAD 165 billion to $CAD 373 billion.

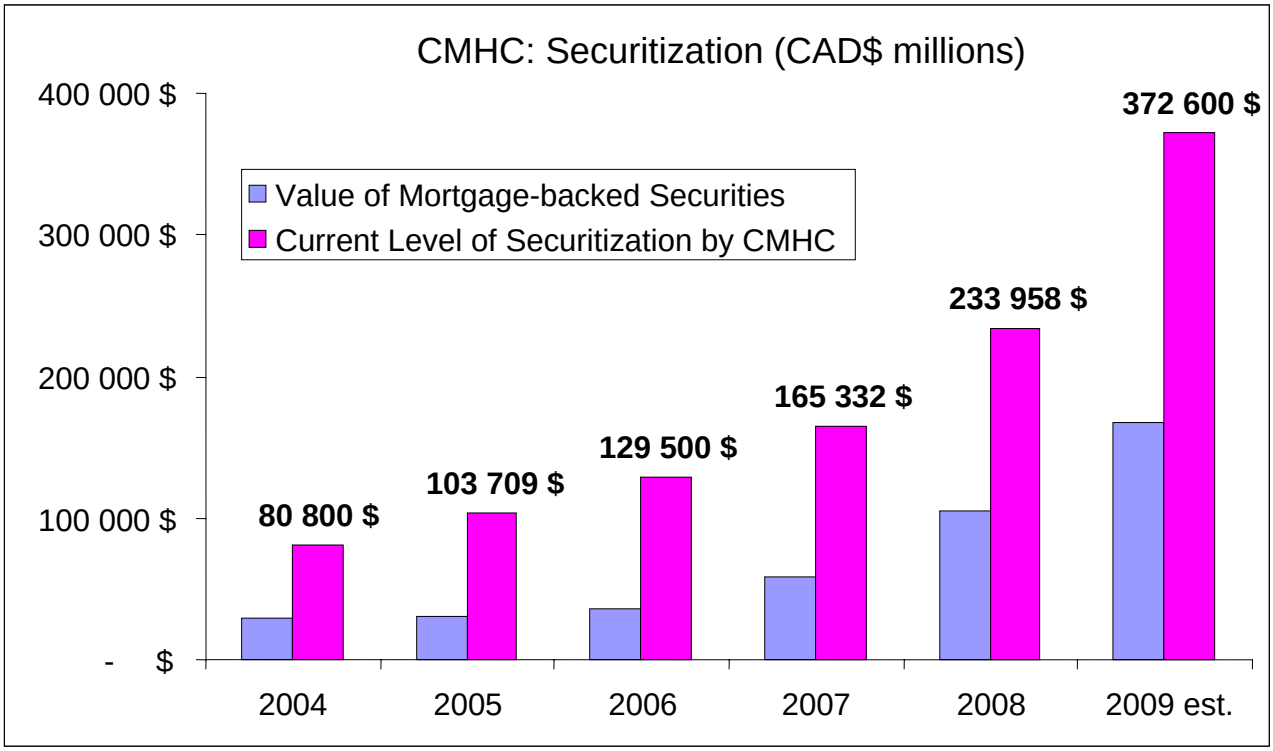

Source: 2008 CMHC Annual Report

This financial commitment on the part of the CMHC is a significant potential liability on the part of the Canadian federal government—and I think we all know who could end up with the bill. Canadian banks do not hesitate to provide loans to home buyers since they know that the CMHC is essentially guaranteeing a significant portion of the loan. Fueled by low interest rates and accessible money, Canadians continue to buy houses at ever-increasing prices. Here's how we summarize the situation:

- Canadian housing prices in relation to GDP per capita is at a record level
- Mortgage rates are at rock-bottom levels (many are able to borrow at 2%) which means that mortgage payments are abnormally low in relation to the cost of homes.
- Money is easy to borrow, thanks to the CMHC which repackages these debts and resells them to people looking for a savings vehicle.
- The percentage of equity to assets at the CMHC has dropped from 4.2% to 2.8% over the last five years.
- Home buyers are convinced that the price of their homes will never drop. Real estate is somehow viewed as an investment without risk. Our general experience in the markets tells us that real risks are at their apex when they are perceived to be at their low point.

No one knows the future and we are the last to want to play the prophets of doom. We just happen to believe that housing prices are high, especially in the west and in Ontario, and that these artificially high levels seems to us propped up by political rather than economic arrangements. We keep this in mind and our investment decisions are affected accordingly.

There is, of course, many non-financial advantages to owning your own home. There is no doubt that home ownership is a source of great personal fulfillment for human beings—and, in the long term, housing prices will continue on their upward movement. But it is important to realize that all the ingredients are in place for potentially several years of difficulty as prices are readjusted in this segment of the Canadian economy.

Our Companies

"Character: the virtue of hard times."

- Charles de Gaulle

In another year of recession, many of our companies have seen their earnings stagnate or decrease. Yet, like last year, some of our companies also achieved a veritable tour de force and increased their earnings. But, even more importantly, the majority of our companies continued to widen their competitive moats relative to their competition.

Wells Fargo (WFC, $27)

Wells Fargo ended 2009 on a strong note. Its acquisition of Wachovia in 2008 has so far proven quite profitable and the company's interest margin of 4.3% was more than 1% higher than that of its peers. The bank's profit before bad debt reserves reached $40 billion—more than double the $19 billion from 2008. The company has benefited from the recession and double its size at a reasonable cost in terms of dilution.

We believe that within a couple of years, once the recovery is well underway, that Wells Fargo should have roughly $1.5 trillion in assets. If the company is able to maintain a return on assets of 1.4%, this would translate into earnings per share (EPS) of approximately $4.50. We therefore believe that this stock could reach $60 within a couple of years and consider the possibility for stock appreciation at Wells Fargo as excellent.

Astral Media (ACM.A-T, $33)

Astral Media had an excellent year in 2009 despite weakness in the sale of TV and radio advertising. The company still increased net income by 7% which we considered very positive. Astral also substantially reduced its debt which had been necessary to complete the acquisition of Standard Radio two years ago. Astral also launched a number of new brands such as HBO Canada, Teletoon Retro and NRJ. We admire this outstanding Canadian enterprise and its founders, the Greenberg family.

We believe that the company's stock is trading at a level that does not accurately reflect the value of the business.

Nitori Co. (9843-Tokyo, ¥ 6930)

Nitori is a Japanese company in the home furniture retail market. The company's products are sold under a low-price policy that has enabled it to gain market share during these difficult times.

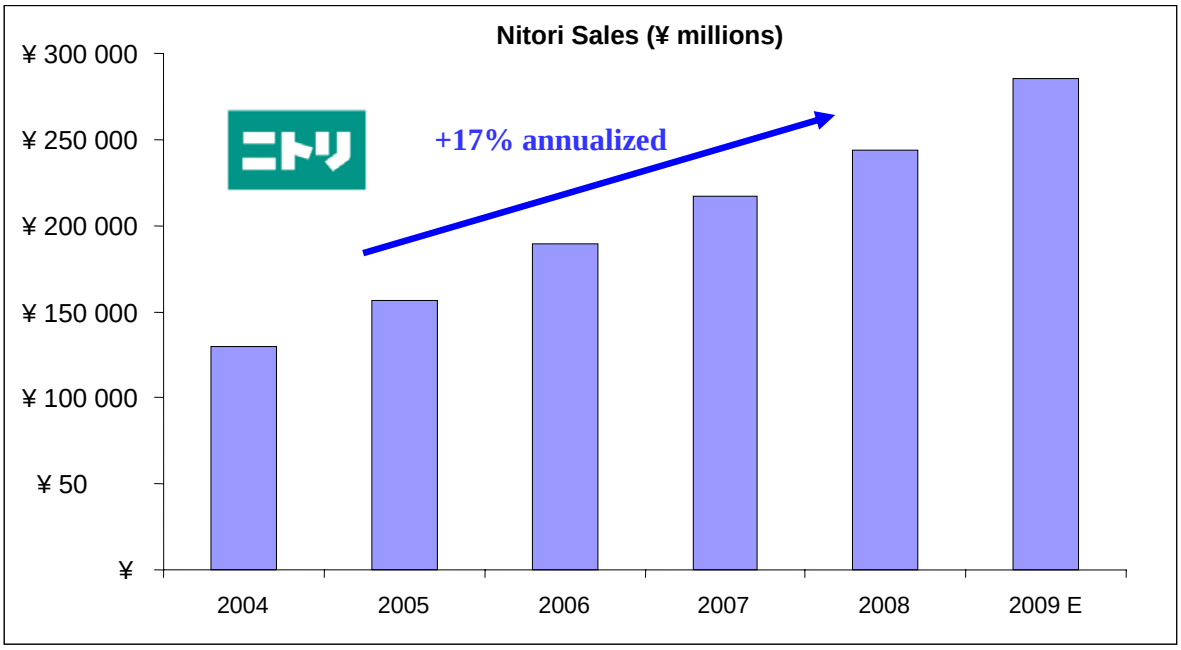

Nitori increased sales by 17% in 2009, reaching nearly ¥300 billion, and its profits increased 30%. Strangely, the company's stock price didn't budge during the year. In fact, since our purchase two years ago, the company's earnings have increased 60% while the company's stock has only risen 15% on the Tokyo market (in addition, the Yen has appreciated by roughly 25% against the Loonie since our purchase).

We are optimistic about the future returns of Nitori's stock price, not only because of the rise in the company's intrinsic value but also from the market assigning a greater multiple on the company's earnings.

Omnicom (OMC, $39)

It was a difficult year for marketing and advertising companies. Omnicom's earnings decreased 20%, although the company's stock price has still advanced 40% since our purchase.

A significant portion of advertising dollars is spent by auto companies and we don't need to remind anyone that these companies had a horrible year. Large agencies like Omnicom are also facing more and more competition from young dynamic firms as well as from new distribution channels. Nevertheless, we believe that the major players in this industry (Omnicom, WPP, Publicis and Interpublic) remain excellent businesses providing an essential service. These businesses also require very little incremental capital—and that's the type of economic model we like to own.

We consider Omnicom to be the best and most geographically diverse out of all the major advertising firms, with more than half of its revenue from outside the US

Bank of the Ozarks (OZRK, $29)

Our small bank in Little Rock, Arkansas, has yet again performed well despite the great difficulties of the American banking industry. Although assets decreased 14%, net interest revenue climbed 19%. While the bank had to significantly increase its bad debt reserves, like its peers in the industry, the company was able to compensate for its bad debt write-offs through investment gains (which was also a factor in the decrease of its assets). At the end of the day, profits rose 7% in 2009 and the bank's efficiency ratio reached an exceptional level of 38%. Its return on assets was 1.23% and its equity to asset ratio rose from 7.8% in 2008 to 9.7% in 2009. We believe that the company's balance sheet is stronger than last year.

George Gleason, the CEO, is also the type of leader we like to have as a partner.

Berkshire Hathaway (BRK.B, $3286)

The company led by Warren Buffett had an excellent year in 2009. The company's intrinsic value increased approximately 20% (using Berkshire's book value as a measure). The company's insurance division (General Re, GEICO, etc.) experienced a 40% decline in underwriting profits while its float increased to $62 billion. Berkshire's public utility division (MidAmerican Energy Holdings) also generated lower profits. The other divisions, as a whole, saw their profits drop by half. Even Buffett's companies are not immune to recessions but, as he often reminds shareholders, what matters most is that Berkshire's companies continue to increase their competitive advantages during these times.

The drop in profitability at Berkshire's companies was offset by gains in the investment portfolio. In the fall of 2008, Buffett invested approximately $21 billion in new securities which have thus far appreciated by $5 billion and generated another $2 billion in dividends and interest. At the end of 2009, the most important news on the acquisition front was the purchase of Burlington Northern Santa Fe. We'll come back to that in the conclusion of our letter.

Our view is that shares of Berkshire Hathaway, like the majority of our portfolio holdings, are undervalued by the market.

Disney (DIS, $32)

Disney had another good year. Net income per share decreased 6% from 2008—an impressive performance given the circumstances of the recession. The company finished the year on a strong note, with net income for the December quarter rising 15%.

Bob Iger, the talented CEO of Disney, continued his great work. In 2009, he announced the acquisition of Marvel, the company which owns the rights to a vast array of comic book superheroes (Spider-Man, Iron Man, Hulk, etc.) Marvel has performed extremely well in the last several years due to the onset of new digital technologies that have enabled the company's characters to come to life in a spectacular manner.

The synergy between Marvel and Disney seems self-evident. Like Mickey Mouse or the Lion King, Spider-Man and Iron Man are enduring characters with the profits they generate accruing to their owner: the company. One of the benefits of a company like Disney, as a former CEO used to say, is that "Mickey has no agent." Disney is well positioned to optimize the commercialization of the new cast of Marvel characters, as it has done so well with its own animated superstars.

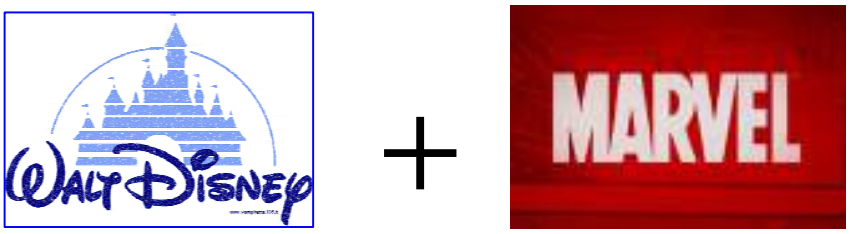

Disney's stock had a good year in 2009 and rose almost 40%, from $22 to $32. It is worth noting that this stock dropped to as low as $16 in March of 2009. We did everything we could to find every possible dollar to increase our stake in this outstanding company which very seldom trades at such a bargain price. We will not see Disney trading at eight times earnings very often!

American Express (AXP, $41)

Despite a difficult 2009, the outlook for AMEX has been improving. Write-offs on credit card debt have begun to ease and we are confident that the company's profits will strengthen and revert more closely to their historical mean in 2010.

American Express has more than a century of operating experience and a legendary brand. Yet, none of this helped prevent an extraordinarily volatile year for the company's stock. From a high of $65 in 2007, the stock tumbled to a low of $10 in March of 2009, only to the end the year at $41. We estimate EPS of $2.66 for 2010 and a return to the profitability of 2007 ($3.37 per share) is conceivable for 2011 or 2012.

We have been shareholders of American Express since 1995. Since then, the stock has appreciated 300% or 10% on an annualized basis. If we include dividends as well as the additional shares we received after the spin-off of Ameriprise, the stock has returned around 12% annually. This is roughly 5% more than the S&P 500 over the course of the same period. So, despite its ups and downs on the market, this has been a worthwhile investment.

Microsoft (MSFT, $30)

Microsoft had a strong finish to 2009, bolstered by the launch of its new operating system, Windows 7. During the last quarter of the year, sales of Windows 7 licenses reached 60 million which is a record for a new operating system. Revenues increased by 4% and net income rose by 28%. The company has a bright outlook for 2010.

This stock continues to appear undervalued to us. The company has $43 billion in cash (equivalent to almost $5 per share) and should earn close to $2.15 per share in 2010. So, at the current price, we are only paying 11 times earnings for a rock-solid and dominant business.

Resmed (RMD, $52)

We first purchased shares in Resmed in 2003. The company, started in Australia, specializes in medical products aimed at the sleep apnea market (primarily masks and humidifiers). Sleep apnea is not a minor medical condition, as it can lead to serious cardiovascular problems, and Resmed has played a significant role in educating the population about sleep apnea. This segment of the medical devices industry has been experiencing rapid growth.

Resmed had another good year in 2009, with an 18% increase in revenue along with a 41% increase in earnings. Reimbursements for sleep clinic studies were approved by Medicare in 2008 which helped increase knowledge of the health concerns related to sleep apnea. The company also brought to market several new products in 2009, including a gel-based mask (Mirage SoftGel) and the company's growth potential remains strong.

Martin Marietta Materials (MLM, $89)

2009 was a difficult year for Martin Marietta Materials. The volume of aggregates (gravel) sold fell 23%, which was only partially offset by a 2% increase in prices. Despite a 50% drop in earnings, free cash flow fell by only 8%. The company increased its dividend and reduced its long-term debt while also lowering its cost structure to 1997 levels.

The prospects for 2010 seem better for two of the company's segments: infrastructure and residential construction. Only 15% of the budget allocated for infrastructure projects under the economic recovery measures passed by the American government was actually spent in 2009. Commercial construction, on the other hand, seems likely to continue struggling in 2010 and should offset some of the gains made on the infrastructure side.

We believe that Martin Marietta Materials, in the long term, is very well positioned to profit from an economic recovery and we are confident that its competitive advantage as a business remained intact during the recession.

Mohawk Industries (MHK, $48)

Mohawk, our flooring covering products company, experienced a very difficult year. Earnings tumbled by half due to a combination of the slowdown in commercial real estate along with a weak residential construction market. Despite these challenges, Mohawk remained profitable and the company's balance sheet strengthened through lower inventory levels which bolstered its cash position. We are also beginning to see some early signs of improvement (at last) in residential construction.

Mohawk's stock is trading at six times the profits it earned during the last cycle and we see great potential for the stock's appreciation once a recovery is underway. We also know that Mohawk is in good hands under the leadership of Jeff Lorberbaum. We remain patient with this solid business despite the current headwinds in this sector.

5N Plus (VNP-T, $6)

5N Plus, a young and dynamic Quebec-based business, is a global leader in the purification of metals used in photovoltaic solar panels. Its primary product is purified Tellurium used by First Solar in its solar panels. These panels are considered more economical than those made from Silicon and are gaining market share.

The company had a strong start to 2009 and then experienced some challenging quarters in the last part of the year. Revenue and order backlog stopped growing while gross margins decreased upon the renewal of the First Solar contract. With 80% of 5N's revenue tied to First Solar, we see this as both a weakness and a strength for the company: strength in the fact that First Solar is probably the most solid

company in the industry, and weakness since relying too heavily on a single customer is never an ideal situation. 5N made an acquisition late last year which should help reduce its dependence on First Solar in the future.

We believe that the current stagnation in the photovoltaic solar panel industry is temporary and that we are in the very nascent stages of the solar energy business. We therefore see a bright future for panels made by First Solar with the help of 5N.

5N Plus remains highly profitable and has a pristine balance sheet with no debt and $69 million in cash. We also have high confidence in the company's management.

O'Reilly Automotive (ORLY, $38)

We acquired shares in O'Reilly Automotive, one of the largest retailers of auto parts, five year ago. At the time, the company had 1250 stores and we paid $20 when the company was earning $1.12 per share. The company nearly tripled its number of stores, to 3421 in 2009. Approximately 800 of those stores were from organic growth while 1400 were from acquisitions (primarily CSK Auto). Organic sales growth has been excellent:

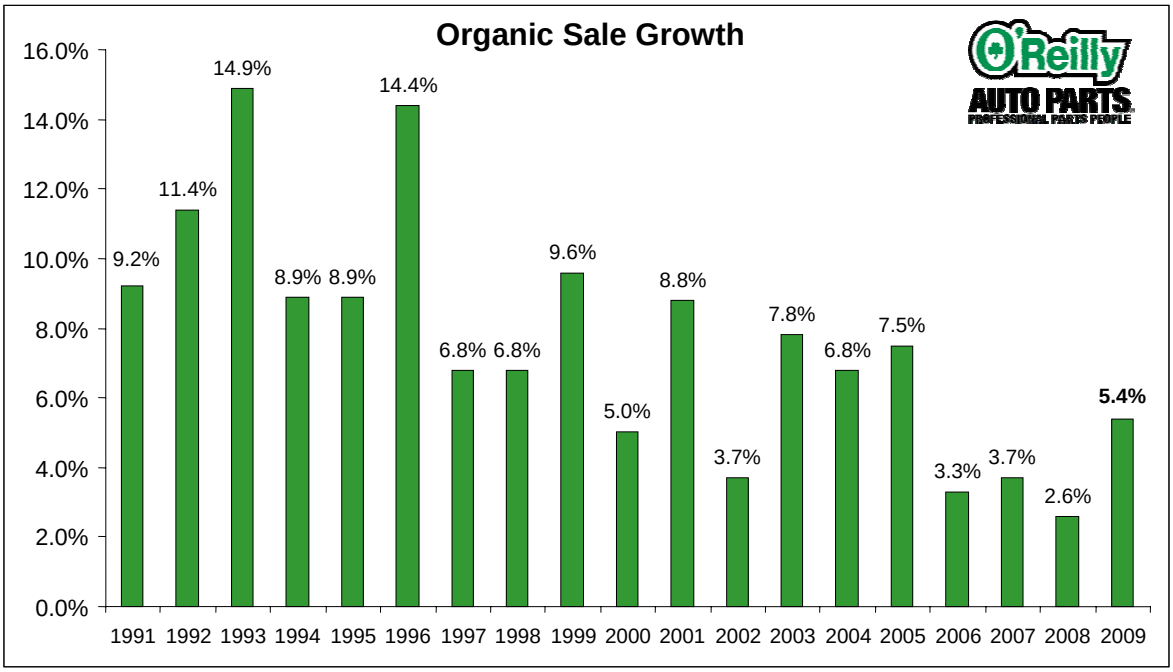

O'Reilly's revenue climbed 36% to $4.9 billion in 2009 and net income per share reached $2.26—38% higher than in 2008 and double what the company earned five years ago. The company's stock price rose to $38 during this period, which almost perfectly parallels its growth in earnings. We remain highly satisfied with this investment.

Fastenal (FAST, $42)

We have been shareholders in Fastenal for more than 11 years and have been handsomely rewarded by this terrific business based out of Winona, Minnesota. We first bought shares in the company in 1998 for approximately $5 per share (adjusted for splits). At the time, while the Asian financial crisis was

raging, the market offered us a great opportunity to buy shares in this outstanding company at a compelling price. Fastenal earned $0.35 per share in 1998 and earned $1.91 in 2008—a 450% increase in ten years (or 18% annually).

In 2009, however, revenues declined 17% while net income decreased by 35% to $1.24. Fastenal's stock price still increased from $36 to $42, though most of that increase was likely tied to a readjustment from the steep decline the stock experienced in the fall of 2008 when expectation for future profitability were lowered significantly. The current level of the stock price still corresponds to more than eight times our original cost.

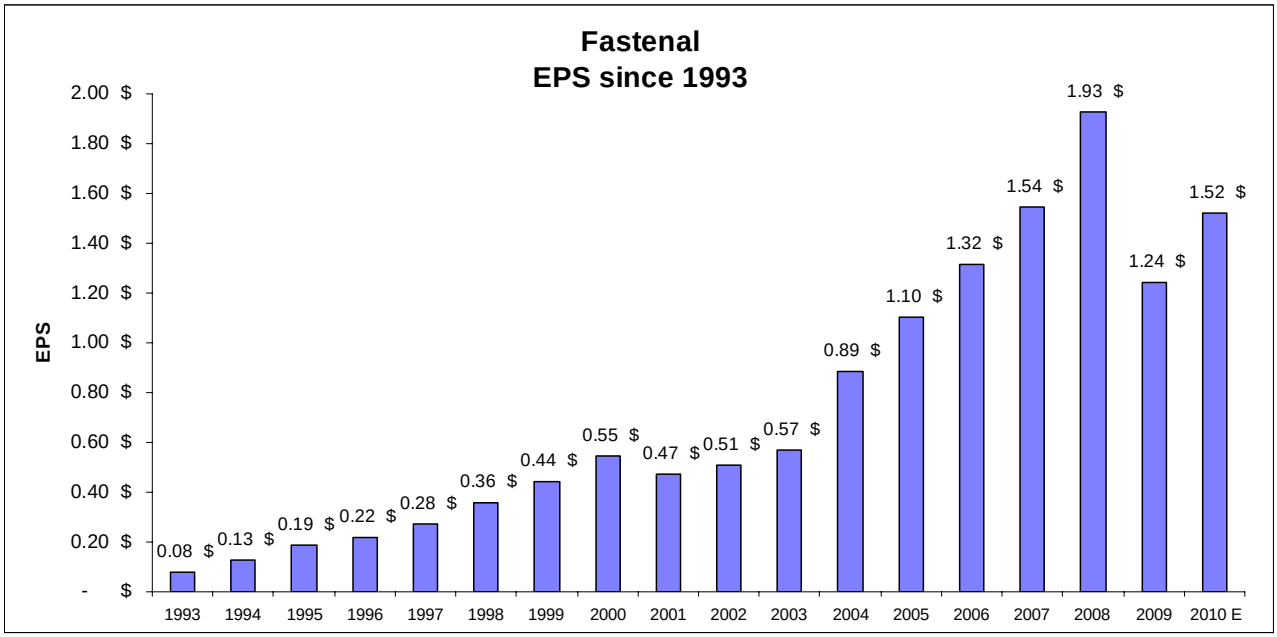

In January 2010, the company announced a 2% sales increase—the first since November 2008. This bodes well for 2010. We have high confidence in the leadership of Willard Oberton and the future outlook for Fastenal remains excellent.

Morningstar (MORN, $48)

All in all, Morningstar had an acceptable year. Revenues dropped by only 5% while EPS declined 11%. We are using the word "only" since Morningstar provides information to the financial services industry and it is fair to say that this universe has cooled considerably in the last years.

The company has attempted to benefit from this cooling off by completing no less than six acquisitions in 2009, including four outside the US. We enjoy using the tools provided by Morningstar for our own work and are admirers of the company's CEO, Joe Mansueto. We have only a small position in this company for the primary reason that its valuation still looks a little high.

Knight Transportation (KNX, $19)

The trucking industry had to yet again navigate through a number of challenges in 2009. Nevertheless, Knight remained profitable. Revenues (net of gas surcharges) were flat while EPS fell by 10%. The

company's efficiency ratio was 86% (costs over revenues), which is more than 10% better than the industry average.

Knight's balance sheet remains debt-free and the company finished the year with $96 million in cash, even after paying its dividend and repurchasing some of its own shares. Knight's stock price, to our astonishment, has remained flat throughout this recession and during the sharp decline in the markets. So, on a relative basis, it is fair to say that Knight is not as attractively valued as other businesses in our portfolio.

MTY Food Group (MTY-V, $9)

MTY Food, a Quebec company that owns restaurant franchises, had an exceptional year in 2009. The company's revenues rose 51% while adjusted EPS increased 32%. The company made three acquisitions: Tutti Frutti, Taco Time, and the most significant, Country Style. The company now operates 570 restaurants under 25 brands.

MTY Food has several attributes that characterize the majority of our companies:

- It owns several excellent brands.
- The nature of its business is unexciting and therefore attracts little competition.
- It has no debt on its balance sheet, has strong returns on its capital, and generates lots of cash.
- The company's leader, Stanley Ma, is brilliant, disciplined and totally dedicated to shareholders.

Further, the company's stock is trading at only ten times its estimated profits for 2010. Our experience prevents us from being blindly optimistic towards all investment in the market, but we would admit that we are very enthusiastic about owning shares of MTY Food.

Carmax (KMX, $24)

We didn't expect Carmax to have a record year in terms of profitability in 2009. Despite another difficult year for auto sales, earnings were bolstered by a return to profitability at the company's financial division. Carmax's EPS reached $1.15, a 25% increase from the prior record of $0.92 reached in 2006.

Carmax has 33% more stores than it did in 2006 (up to 100 stores) and only has 2% of the used car market. The company's long term growth prospects remain impressive.

<u>New Investments in 2009</u>

M&T Bank (MTB, $67)

M&T Bank isn't really a new holding for us. Quite to the contrary: we first purchased shares in the company at around $40 in 1998. Then, in 2007, we nearly sold our entire holding at $100 and held on to a very small (symbolic) position. Since our first criteria when purchasing stock in a company is the quality of management, we were less than enthusiastic when Robert Wilmers retired and new management took over M&T. We view Bob Wilmers as a living legend of the banking world and he was our primary reason for our 10-year stake in this Buffalo-based bank.

Bob was brought back to the helm of M&T following the crisis. We went to meet him in August of 2008 and came back reassured about M&T's prospects. We again became buyers of the stock when it dipped below $40 in the beginning of 2009. We paid an average of $38 per share—a price we considered approximately a third of the company's intrinsic value.

While earnings decreased 34% in 2009, we remain satisfied with these results given the economic climate. M&T profited, as we anticipated, from the debacle in the banking sector by taking market share at low costs. The bank acquired branches from Bradford Bank and also acquired Provident Bankshares, both based in the Baltimore-Washington market. These acquisitions helped M&T grow its asset base by 10%.

The company's shares performed very well and rose to $67, or an appreciation of 76% from our purchase price from about a year ago. We are very pleased to have partnered with Bob Wilmers again and are confident that there are several excellent years ahead for M&T.

China Fire & Security Group (CFSG, $14)

When the Chinese market crashed in the beginning of 2009 by dropping 75% from its high, we decided to look for companies that met our investment criteria. We studied many businesses but found that most were too young and only had a limited track record to analyze.

CFSG seemed to us as the most interesting. The company sells unexciting products: fire detection systems mostly used in steel mills. CFSG became the leader in this niche market with 7% of the market and we were also optimistic about the Chinese government having passed safety regulations mandating that steel mills adopt higher safety standards. The company's revenue had grown at 40% annually for five years.

We paid roughly $10 per share when we first purchased stock in early 2009. When adjusting for a net cash position of $1 per share, we ended up buying shares at a P/E ratio of 9! This looked as a very low valuation for such a fast growing company. Lately, CFSG obtained several large contracts and we decided to increase our holding. Despite a 40% increase in the price of its shares, the company's forward P/E ratio has remained the same as when we first bought shares of CFSG.

Buffalo Wild Wings (BWLD, $40)

It was back in 2007 when Jean-Philippe spoke to me, with great enthusiasm, about a young American restaurant chain similar to our popular Quebec chain, the "Cage aux Sports". We took the opportunity, while visiting M&T Bank in Buffalo, to go have lunch at Buffalo Wild Wings (why not eat while doing out financial research at the same time?) Their chicken wings are excellent by the way.

Although we liked their wings, it's the numbers that convinced us! The company has grown rapidly since its IPO at the end of 2003, with the number of restaurants rising from 245 to 660 and revenues quadrupling. The company is highly profitable, earning $31 million on $275 million in assets (which includes $50 million in net cash).

In 2009, a tough year for the industry, EPS climbed 24% and the company is confident that they can maintain growth of 15-20% for several years. We therefore decided to take a stake in this young and dynamic company from Minneapolis.

Medtronic (MDT, $44)

It was pure coincidence that another portfolio purchase from the end of 2009 was Medtronic, also based in Minneapolis. Medtronic is the largest manufacturer of medical products addressing cardiac problems (pacemakers, valves, defibrillators, etc.) Long-term partners of the firm will remember that we have already been shareholders in companies within this industry: Cordis (acquired by Johnson & Johnson in 1995) and St-Jude Medical which we owned from 1993 to 1996. I've been following Medtronic for more than 16 years now.

Over the course of the last several years, Medtronic has been diversifying their product mix into ancillary markets such spinal health and diabetes (with insulin pumps, glucose meters, etc.) The company's products address vital medical problems that will continue to grow as Western populations continue to age. Like many of our businesses, Medtronic has a significant portion of its revenue originating outside of North America.

The company has maintained its high level of growth by consistently leading the market with innovative products. Medtronic also has a solid balance sheet. What held us up in the past from buying a stake in this company was the high valuation that the market assigned to this superb business. The market's optimism reached its apex ten years ago when the stock reach $60 as the company was only generating $1 per share in earnings. We were able to purchase shares at $43 lately, which is 13 times the estimated EPS of $3.44 for 2010.

Five-year Post-mortem: 2004

Like we do every year, we go through a five-year port-mortem analysis. We believe that studying our decisions in a systematic manner, and with some hindsight, enables us to learn from both our achievements and our errors.

In the beginning of 2004, we bought shares in Knight Transportation at around $10 per share. With the stock at $19 today, this investment turned out to be a good one. Knight has performed better than just about everyone in the trucking industry, including Heartland Express (the company closest to Knight in terms of productivity). It seems that our competitive analysis of the industry was accurate.

Yet, we are still a bit disappointed with this investment since the company's growth rate, which was around 26% at the time of our purchase, dropped sharply during the recession. This is normal given the circumstances but we would have liked to see the company be more opportunistic about their growth given the numerous expansion opportunities available these days. We are nonetheless confident that the next economic cycle will offer us a better litmus test to judge the quality of this investment.

In a completely different line of reasoning, in our "Mistake du jour" section for 2004, we awarded ourselves a gold medal for selling Yahoo! at $8 when it subsequently climbed to $38. There are some interesting conclusions to be drawn, given that the stock is currently trading at $15 and that the company seems to have lost much of the competitive advantages I had mentioned back in 2004.

The first observation is that competitive advantages in the technological world are rare and often not durable. The rapid progress in technology, while delightful to consumers, is rarely a source of riches for shareholders. Yahoo! lost a good portion of its competitive advantage in 2004 to another business that went public that year: Google.

We learned to consider it dangerous to judge the merits of an investment too quickly. Years, many years, are often necessary to reach a valid conclusion. Even the most patient investors can reach a hasty conclusion. In the business world, as in the world of art, time remains the most objective (and often the most merciless) judge in regards to the durability of one's work.

Nothing gives more wisdom than perspective.

Mistake "du jour"

"Anyone who has never made a mistake has never tried anything new."

- Albert Einstein

Following in the "Givernian" tradition, here are our three annual medals for the "best" errors of 2009. It is with a constructive attitude, in order to always become better investors, that we provide this detailed analysis. As is often the case with stocks, errors from omission (non-purchases) are often more costly than errors from commission (purchases).

Bronze Medal: BYD

During the Berkshire Hathaway shareholder meeting last May, I listened attentively to Charlie Munger's discussion of BYD, a Chinese company led by Wang Chuan-Fu. Charlie said with great admiration that "Chuan-Fu is a combination of Thomas Edison and Jack Welch: I have never met such a businessman." When we consider that Charlie is 86 years old and that he has probably met the greatest businessmen of the last two generations, it's an extraordinary comment. His words didn't fall on deaf ears and I was instantly interested in BYD.

The company manufactures an array of products but the most important is a revolutionary battery used in electric cars. Based on this invention, BYD launched itself fearlessly into the car manufacturing business. As a fervent believer in the future of the electric car, I became enthralled with this high-potential company. Keep in mind that, with revenues of over $5 billion in 2009, BYD wasn't exactly the new kid on the block.

My enthusiasm was cooled when I saw the company's valuation on the market. The stock was trading at $15 on the Hong Kong market while the company only had EPS of $0.50 in 2008. A P/E ratio of 30 times seemed exaggerated in my mind. So being a persistent man, I woke up each morning to look at BYD's closing price in Asia hoping that the stock had dropped so I could buy a stake in the company at a more reasonable valuation. This was in vain.

The company had an exceptional year in 2009. After nine months, BYD's revenues climbed 39% and their new car division grew 50%. The company's EPS has yet to be announced but it's likely to have doubled to $1.06 for 2009 and analysts expect $1.84 in EPS for 2010.

The stock has soared 400% in a year, reaching its current level of $65. Sometimes, the artistic side of investing is to know when to let go, in a rare and exceptional moment, of market valuations and simply make a leap of faith based on an exceptional human being.

Silver Medal: TJX Companies

TJX owns chains of retail clothing stores. Its sweet spot in the marketplace is selling branded clothing at discount prices by buying discontinued apparel lines, surplus inventory, etc. In the US, the company's brands include T.J. Maxx, HomeGoods and Marshalls. In Canada, it owns Winners and Homesense. TJX is highly profitable and its returns on capital are unmatched by competitors. I have known this company for a decade or so. In 2000, the stock had fallen to $10 per share and was trading at 10 times earnings. I thought of buying shares at the time but decided to pass on the idea—with great regret.

The company grew its EPS at 12% annually during the decade. This rise in earnings seemed surprisingly high since sales were only growing at 5-7% per year and, with 2743 stores, this retail concept seemed quite mature.

The key to success at TJX is in the management of its capital. Through opportunistic buyback of its stock and continuous margin improvement, the company was able to create enormous wealth for its shareholders.

I knew two things when the stock lost half of its value at the end of 2008: that the company's business model was well suited for a recession (subsequently proven by the company's EPS soaring 48% in 2009), and that the company would buy back some its shares at these attractive valuations. The P/E ratio was once again at 10, and once again, I remained motionless.

The stock doubled in a year and is now trading at four times its price from 2000. Despite this rise, TJX is still only trading at 12 times its 2010 estimated earnings. When a stock doubles in a year and is still undervalued, it shows how much undervalued it was before.

Gold Medal: Cabela's

Cabela's became publicly traded in 2004. Since 1961, the company has been the leader in catalog sales (and now on the Internet) for products related to hunting, fishing, camping and scuba diving. The company more recently began operating "big box" retail stores. Michael Shearn, our friend from Austin (Texas), had spoken to us with great enthusiasm about this business based out of Sidney, Nebraska. Though the stock didn't seem attractively priced at the time of its IPO at $24 per share, we knew that this company's competitive advantage merited that we pay particular attention.

In the summer of 2004, I visited one of the company's new (and very impressive) stores in Kansas City. I was highly impressed with this retail concept.

Two years later, Michael and Jean-Philippe visited the company and spent the afternoon in Sidney meeting with upper management. They returned persuaded that the company had compelling competitive advantages and an able management team.

Still, we all shared some reservations about the high level of capital required to open the company's extremely large stores (and their low return on capital). We were also concerned that a substantial portion of the company's profits were from its financial division which issued credit cards to customers of Cabela's.

On the other hand, we also believed that the company could eventually realize certain economies of scale with a larger network of stores and that this should improve the company's returns on equity over time. We decided to buy a few shares, if anything to simply follow the company more closely.

The stock of Cabela's fell sharply in 2008, from a high of $28 in 2007 to a bottom of $4. The retail sector was practically torn apart by the drop in consumer spending. On top of that, everyone on Wall Street avoided companies with financial divisions like the plague, regardless of the quality of a company's loan portfolio. Cabela's was different, with its loyal (if not fanatical) customers. The company's customers were also wealthier than average and had higher credit scores.

It's not surprising then that EPS dropped relatively little, from $1.31 in 2007 to $1.14 in 2008. When it was trading between $4 and $5, the P/E ratio on Cabela's shares was only four times. Without any future growth, such a valuation corresponds to an annual return of 25%!!

To find a high-quality business that is dominant in its industry and is trading on the market for four times its earnings is a rare event in the life of an investor. I could have used the excuse that we were fully invested and that all our stocks were undervalued. But I certainly could have sold another stock in our portfolio that was trading at half of its intrinsic value to buy Cabela's that was trading at one fifth of its value. Selling a 50-cent dollar to buy a 20-cent dollar makes a lot of sense.

The company's earnings rose 18% to $1.35 per share in 2009. The company has performed extremely well despite the tremendously challenging economic headwinds. Wall Street regained its wits about the value of this business and the stock has risen to $16 in just a few months. This error of omission, with a price tag of 300%, merits a gold medal.

Conclusion: Warren Buffett's Big Wager

One of the most significant events of 2009 for our portfolio was the acquisition, through a tender offer, of Burlington Northern Santa Fe (BNSF). We had owned stock in BNSF since 2007-08 and, in November of 2009, Berkshire Hathaway offered $100 per share for Burlington—a 27% premium to the current price of the company's stock.

Warren Buffett and BNSF Chairman Matthew Rose (Source : CNBC.com)

This $34 billion acquisition is by far the largest over the course of Warren Buffett's long and illustrious career. In his press release, Buffett makes this pertinent comment:

> "Our country's future prosperity depends on its having an efficient and well-maintained rail system. Conversely, America must grow and prosper for railroads to do well. Berkshire's $34 billion investment in BNSF is a huge bet on that company, CEO Matt Rose and his team, and the railroad industry. Most important of all, however, it's an ALL-IN wager on the economic future of the United States. I love these bets."

M. Buffett, regardless of the metaphor used in the press release, is no gambler. In fact, the master of intelligent investing is faithful to a rule he laid out some 50 years ago: "To succeed in the stock market, be fearful when the others are greedy and greedy when the others are fearful".

We are, as M. Buffett, very optimistic about the future of our companies. Despite a satisfactory year in 2009 as far as our returns, we believe that the next few years will be quite rewarding for our businesses and their shareholders.

We also want you to know that we are fully aware and grateful for your vote of confidence. It is imperative for us to not only select outstanding companies for our portfolios, but to also remain outstanding stewards of your capital.

We wish a great 2010 to all our partners.

François Rochon and the Giverny Capital team

Giverny Capital Inc.

Annual Letter to our Partners

2010

Barry Allikas
Fly-over, 2010
Giverny Capital Collection

Giverny Capital Inc. – 2010 Annual Letter ©

For the year ending December 31st 2010, our portfolio's return was 16.1% versus 13.8% for our benchmark. Our return, including a loss of approximately 5% due to fluctuations in the Canadian currency, therefore outperformed our benchmark by 2.3%.

Since our inception, on July 1st 1993, our annual compounded rate of return has been 13.9% versus 7.1% for our weighed benchmark, or an annualized outperformance of 6.8% over this period. When we exclude the effect caused by the appreciating Canadian currency since our inception, which represents an annualized increase of 1.4%, our portfolio has returned 15.5% annually versus 8.5% for our benchmark. Our long-term (and ambitious) objective is to maintain an annual return that is 5% higher than our benchmark.

The Artwork on Our Letter

We have illustrated the cover of our letter with a copy of an artwork from our corporate collection since 2004. We chose the work of a Quebec artist, Barry Allikas, entitled "Fly-over". This work seemed fitting of the year 2010—a year when the companies in our portfolio continued to fly over much of the ambient doom and gloom and, as a group, generated record profits.

The Giverny Portfolio (in Canadian dollars): Returns Since July 1st 1993

Return *	Giverny	Index **	+ / -	$ US/Can	S&P 500	+ / -	Giverny ***	Indices ***	+ / -
1993 (Q3-Q4)	37.0%	9.5%	27.6%	3.3%	8.4%	28.6%	34.4%	7.4%	27.0%
1994	16.5%	3.7%	12.7%	6.0%	7.3%	9.2%	12.0%	-0.3%	12.3%
1995	41.2%	24.0%	17.2%	-2.7%	32.9%	8.3%	43.8%	26.3%	17.5%
1996	28.0%	22.8%	5.2%	0.3%	22.7%	5.3%	27.7%	22.5%	5.2%
1997	37.8%	28.6%	9.2%	4.3%	36.7%	1.0%	33.4%	24.5%	8.9%
1998	20.6%	18.8%	1.8%	7.1%	37.7%	-17.0%	14.5%	12.8%	1.7%
1999	15.1%	16.3%	-1.2%	-5.7%	14.1%	1.0%	20.6%	21.9%	-1.3%
2000	13.4%	3.2%	10.2%	3.9%	-4.6%	18.0%	9.7%	-0.2%	9.9%
2001	15.1%	-0.4%	15.5%	6.2%	-5.7%	20.8%	9.4%	-5.3%	14.7%
2002	-2.8%	-18.3%	15.6%	-0.8%	-22.0%	19.3%	-2.0%	-17.7%	15.7%
2003	13.6%	14.0%	-0.4%	-17.7%	5.7%	7.9%	33.7%	34.1%	-0.5%
2004	1.6%	6.2%	-4.5%	-7.3%	2.8%	-1.1%	8.3%	13.1%	-4.8%
2005	11.5%	3.6%	7.9%	-3.3%	1.5%	10.0%	14.5%	6.7%	7.8%
2006	3.5%	17.0%	-13.5%	0.2%	15.7%	-12.1%	3.3%	16.8%	-13.5%
2007	-14.4%	-11.6%	-2.8%	-14.9%	-10.0%	-4.2%	-0.3%	2.2%	-2.5%
2008	-5.5%	-22.0%	16.5%	22.9%	-22.2%	16.7%	-21.5%	-35.4%	13.9%
2009	11.8%	12.2%	-0.4%	-13.7%	9.6%	2.2%	27.7%	27.7%	0.1%
2010	16.1%	13.8%	2.3%	-5.3%	9.0%	7./%	21.7%	19.3%	2.5%
Total	878.4%	232.8%	645.6%	-22.4%	205.3%	673.2%	1149.6%	320.5%	829.2%
Annualized	13.9%	7.1%	6.8%	-1.4%	6.6%	7.3%	15.5%	8.6%	7.0%

* Green section: all returns are adjusted to Canadian dollars
** Index is a hybrid index (S&P/TSX, S&P 500, MSCI EAFE, Russell 2000) which reflects the weight of the underlying assets
*** Estimated without the effect of currency

Note: Canadian dollar returns audited by PricewaterhouseCoopers. See "notes on the returns" in the appendix.

The Giverny US Portfolio

We have been publishing the returns of the Giverny US Portfolio, which is entirely denominated in US dollars, since 2003. The Giverny US Portfolio corresponds to the American portion of the Giverny Portfolio. In 2010, the Giverny US Portfolio realized a return of 21.9% compared to 15.1% for our benchmark, the S&P 500. This return and our benchmark are all in US dollars and include dividends paid during the year.

Since its inception in 1993, the Giverny US Portfolio has returned 1002.0%, or 14.7% on an annualized basis. During this same period, the S&P 500 has returned 290.7%, or 8.1% on an annualized basis. Our added value has therefore been 6.6% annually.

Year	Giverny US	S&P 500	+/-
1993 (Q3-Q4)	32.7%	5.0%	27.7%
1994	9.9%	1.3%	8.6%
1995	54.8%	37.6%	17.2%
1996	27.0%	23.0%	4.1%
1997	32.9%	33.4%	-0.4%
1998	11.0%	28.6%	-17.6%
1999	15.9%	21.0%	-5.1%
2000	11.3%	-9.1%	20.4%
2001	8.1%	-11.9%	20.0%
2002	-4.4%	-22.1%	17.7%
2003	31.6%	28.7%	2.9%
2004	9.3%	10.9%	-1.6%
2005	12.5%	4.9%	7.5%
2006	3.3%	15.8%	-12.4%
2007	-1.7%	5.5%	-7.2%
2008	-24.3%	-37.0%	12.7%
2009	28.7%	26.5%	2.3%
2010	21.9%	15.1%	6.9%
Total	1002.0%	290.7%	711.4%
Annualized	14.7%	8.1%	6.6%

Note: Returns audited by PricewaterhouseCoopers
S&P 500 returns provided by Standard & Poors. See "notes on the returns" in the appendix.

We outperformed the S&P 500 for a third consecutive year and the smaller companies in our portfolio led the way in 2010: Fastenal, Resmed, Bank of the Ozarks and O'Reilly Automotive. It is now the larger companies in our portfolio that seem undervalued—and therefore with the greater potential for future appreciation.

We believe that American blue chips, relative to other stocks, are now trading at the kinds of compelling valuations that we have not seen in decades. If you take a moment to reread our 1998 letter (available on our website), you will see how these valuations are the exact opposite of what occurred 12 years ago when large capitalization companies were much more expensive (and, of course, much more popular). The average P/E ratio for companies in this category have dwindled from 33x at that time to 11x currently.

Giverny Canada Portfolio

We introduced a portfolio that is 100% focused on Canadian equities in 2007. This corresponds closely to the Canadian portion of the Giverny Portfolio. In 2010, the Giverny Canada Portfolio returned 26.7% versus 17.6% for our benchmark (a blend of the S&P 500 and the TSX). Since 2007, the Giverny Canada Portfolio has returned 46.6%, or 10.0% on an annualized basis. During this same period, our benchmark had a gain of 15.3%, or a gain of 3.6% on an annualized basis. Our annual added value is therefore 6.4%.

Year	Giverny Canada	S&P/TSX	+/-
2007	19.7%	9.8%	9.9%
2008	-24.6%	-32.9%	8.3%
2009	28.2%	33.1%	-4.9%
2010	26.7%	17.6%	9.1%
Total	46.6%	15.3%	31.2%
Annualized	10.0%	3.6%	6.4%

Note: Returns audited by PricewaterhouseCoopers. See "notes on the returns" in the appendix.

Our Canadian stocks performed very well in 2010 and we have outperformed the TSX for three out of four years. The largest holding in our Canadian portfolio is MTY Food Group which rose approximately 50% for the year.

2010: A Year in Review

We finished our 2009 letter with the following sentence: "Despite a satisfactory year in 2009 as far as our returns, we believe that we are only at the beginning of a bull market that will last for years to come." The bull market began to take hold in 2010 as Western economies began to recover. GDP growth in North America for 2010 likely neared 2.6%, which is about 1% less than historical averages but still a clear sign that the recession is behind us.

It seems that the apocalyptic scenarios and predictions of another Great Depression have not materialized, and the civilization of free enterprise survived another financial crisis! Like is often the case, solid companies endured while weak ones were restructured or simply disappeared.

Plenty of problems remain, however. Canadian consumers remain overly indebted (their debt/revenue ratio reached a record of 150%), Western governments continued to stretch their borrowing capacities (in North America and Europe), and global competition has never been more intense. If this wasn't enough, governments are also interfering more and more with the business models of those rare enterprises that have succeeded at building wide competitive moats. For example, Visa/Mastercard, Google, and many medical products companies, were all subject to more governmental scrutiny in 2010. While these actions have generally been good for the popularity of politicians in the eyes of their electorate (something so ephemeral), this may not turn out to be ideal for neither the long-term wellbeing of a country nor for human progress. Allowing excellence to bear the fruits of its labor is the only way to encourage future excellence.

But our opinion, regardless whether it is justified, is secondary to our role as stewards of your capital—we are required to face life as it is. Humility, realism, and reason, provide bearing to navigate the difficult waters of the business world. And an unwavering confidence in human potential

in the long term stands as a lighthouse guiding us towards our destination in the investing world—particularly when the storms are raging.

The loss of an investing legend: Roy Neuberger (1903-2010)

On December 24th, Roy Neuberger died at the age of 107. Mr. Neuberger was a Wall Street pioneer. He started his career in 1929, just a few months before the Crash. The stroke of genius of his youth was to sell short shares of one of the crowd's favorite stocks of this era: RCA (radio was the new technology of the time). Due to this transaction, he only lost 15% of his capital during the Crash and went on to cofound an investment management firm that became a titan in this industry: Neuberger Berman—which today has $180 billion under management.

Even well beyond the age of 100, Mr. Neuberger remained deeply passionate about the market. During the midst of the financial storm (in March 2009), he called Jeff Bolton—a Neuberger Berman executive—to his office. He told him: "Listen young man [Mr. Bolton was only 69], if you don't find a way to invest my cash, I'm going to find someone else to do it." Jeff Bolton, due to Mr. Neuberger, massively bought into the market at the bottom.

I was deeply struck by the first of two books written by Mr. Neuberger: "So Far, So Good: The First 94 Years". Although the market highs and lows are often described as bull markets or bear markets, Mr. Neuberger—with his unique sense of humor, liked to say that the market was most often a sheep market. According to him, most investors follow the crowd while as the same time attempting to predict the direction of the crowd.

Having lived through an incredible number of investing fads (like bowling alley companies in the 1950s) for a period of 80 years, he liked to say that it was wise to study the past and to become your own historian.

Bloomberg News
Mr. Neuberger in 2003

But my fondness of Mr. Neuberger also exists on another level. Aside from his passion for the market, he also had a great passion for art. He decided at age 25 that he wanted to become rich on Wall Street so that he could use his fortune to purchase works of art. He had the clairvoyance, for example, to purchase one of the earliest works by Jackson Pollock, as well as an extraordinary painting by Edward Hopper (Barber Shop, 1931). He was also a major patron of numerous burgeoning artists such as Milton Avery. In 1974, he opened his own museum at SUNY-Purchase with the help of the then

governor of New York, Nelson Rockefeller (another great philanthropist). Art within the workspace was always an integral part of the culture at Neuberger Berman—something that continues to this day.

Owner's Earnings

We do not evaluate the quality of an investment based on short-term stock quotations, but instead, take the perspective of ownership in the companies in which we invest. As such, we analyze the growth in earnings for our companies and study their long-term prospect (see the appendix for a review of our investment philosophy).

Each year, we present to you a chart indicating the growth in the intrinsic value of the companies in our portfolio using a method created by Warren Buffett: owner's earnings. This enables us to estimate the intrinsic value of our companies by adding the growth in earnings per share and the average dividend yield of our portfolio.

In 2010, the aggregated intrinsic value of the companies in our portfolio rose 22%. The stock market value of our portfolio also rose 22% (without the effect of currency fluctuation)—in line with the growth in intrinsic value of the underlying companies. You will note that this is only the third year (out of 15) when the two experienced a similar annual performance. Market performance and corporate performance are rarely synchronized over the course of a calendar year. But as more time goes by, the synchronization between the two begins to affirm itself.

	Giverny			S&P 500		
Year ***	Value *	Market **	Difference	Value *	Market **	Difference
1996	14%	29%	15%	13%	23%	10%
1997	17%	35%	18%	11%	33%	22%
1998	11%	12%	1%	-1%	29%	30%
1999	16%	12%	-4%	17%	21%	4%
2000	19%	10%	-9%	9%	-9%	-18%
2001	-9%	10%	19%	-18%	-12%	6%
2002	19%	-2%	-21%	11%	-22%	-33%
2003	31%	34%	3%	15%	29%	14%
2004	21%	8%	-12%	21%	11%	-10%
2005	14%	15%	0%	13%	5%	-8%
2006	14%	3%	-11%	15%	16%	1%
2007	10%	0%	-10%	-4%	5%	9%
2008	-3%	-22%	-19%	-30%	-37%	-7%
2009	0%	28%	28%	3%	26%	23%
2010	22%	22%	0%	45%	15%	-30%
Total	493%	440%	-53%	162%	167%	5%
Annualized	13%	12%	-1%	7%	7%	0%

* Estimated growth in earnings plus dividend yield
** Market performance, inclusive of dividends
*** Results estimated without currency effects

For 2010, the growth in owner's earnings for the S&P 500 was higher than that of our portfolio companies. One must bear in mind that the profits of the S&P 500 had fallen much further during

2007-08. If we do a quick calculation of the profit growth at our companies since 2007, we can see that it has considerably outpaced the growth of the companies included in the S&P 500.

	Giverny			S&P 500		
Recession	Value	Bourse	+/-	Value	Bourse	+/-
2007-2010	30%	22%	-8%	0%	-3%	-3%

Since the beginning of 2007, our companies have grown their owner's earnings by 30% while the S&P 500 experience 0% growth in its owner's earnings. The value of our companies on the stock market rose 22% (without currency effect) while the value of the S&P 500 lost 3%. The businesses that make up our portfolio, in aggregate, not only made it through the recession but were also able to increase their market share and increase their profitability.

When we look at it from a longer term perspective (since 1996), our companies have increased their intrinsic value by 493% according to our estimates—a factor of nearly 6 times—while the market value of these companies increased by 440% (without the effect of currency). During this same period, the companies in the S&P 500 saw their intrinsic values rise by 162% while their market values rose by 167%. Despite the economic highs and lows, in the long term, the market prices of companies approximately follow the growth in owner's earnings of its underlying business.

Our stock holdings have outperformed the S&P 500 by 5% annually for the simple reason that the underlying companies in our portfolio have increased their intrinsic value at a rate that is 5% greater than the average. It is in this manner—rather than by speculating on the market—that we anticipate continuing to meet our objective of adding value to your (and our) capital.

The flavor of the day for 2010: Gold

We've discussed the current popularity of gold on a few occasions over the course of the last years. We recently echoed a commentary from Warren Buffett on this topic. Gold seems a tenacious relic from another era—from a time when indefinite and successive warfare would make it impossible to have an effective currency without the mutual reference point of a precious metal.

Until very recently, for example, Canadian coins represented their fair value in silver. The five cents coins were twice as small as dimes (though during the 1920s, nickel was used to make the five cents coins larger since too many people were losing them).

Today, there exists a stability in our financial systems (especially when compared to prior centuries) and the need for currency to have their equivalent value in a precious metal is obsolete. The price of most commodities (wheat, copper, nickel, steel, etc) generally follows inflation rates. Actually, historical commodity prices (as represented by the CRB index) have failed to keep up with inflation by about 1% annually. The reason is simple: human ingenuity has made the extraction of these products more and more efficient.

At its current high of $1400 an ounce, gold prices are 74 times higher than they were 100 years ago—an annual return of 4.3% versus for 3.3% for inflation. So gold has slightly outperformed inflation over this period (though if we used gold prices from 5 years ago, we would have a return equal to inflation). It is worth noting that stocks have returned 1,300,000% over the same 100 years—approximately 200 times better than the performance of gold. An unequivocal truth stems from taking

an historical perspective: in the long term, gold has not been a better investment than stocks and barely outperforms Treasuries. Once inflation is taken into consideration, the source of wealth creation has been stocks.

There is a certain logic to all of this. The activity of lending money to governments does not create wealth. Owning a few kilograms of a yellow metal in a safe doesn't either. Businesses create products that meet the needs of consumers, new technological tools that improve our lives, new medicines that allow us to live longer, and services that help us better manage our activities. And we must admit that the capacity of businesses to develop new ways of entertaining us seems without limit. To own an economic participation in these businesses is an authentic source of wealth creation. And the long-term performance numbers adequately illustrate this.

But this doesn't prevent people from speculating on gold these days. The most often invoked reason behind the rise of gold prices is the loss of confidence in our capitalist system. No one knows the future (regardless of what "they" say) but, historically, betting against the progress of humanity and the improvement of our standard of living as always been a losing proposition. The desire to progress and build a better life for ourselves is bound within the genes of a human being. I believe that those who speculate on gold will eventually lose capital—or as a better outcome, hold on to an asset that will standstill for several years. Nothing gets built in the long term with pessimism.

I would be remiss to not share with you a quote from Charlie Munger, Warren Buffett's longtime partner:

> "I don't have the slightest interest in gold. I like to understand what works and what doesn't in human systems. To me that's not optional; that's a moral obligation. If you're capable of understanding the world, you have a moral obligation to become rational. And I don't see how you become rational hoarding gold."

The American and Canadian markets

This discussion on gold would not be complete without mentioning the Canadian stock market. In late 2010, about 14% of the TSX was comprised of gold stocks. This almost suggests that one in seven jobs in Canada is linked to gold extraction! Canada only produces three million ounces of gold annually, so at $1400 an ounces, this equals about $4.2 billion in annual revenue—or about 0.3% of Canadian Gross Domestic Product (GDP). Now it is true that large gold companies carry out the majority of their extraction activities outside of Canada, but the disparity between the economic weight and the value assigned by the stock market to these activities remains fascinating.

If we look at the Canadian stock market at its current level, it is 158% of its GDP (based on a currency constant with purchasing power parity). For the US market, the figure would be 103% which is much more in line with historical levels. One should note that approximately 25% of Canadian GDP is exported (three quarters of that going to the US), though this is also the case for American companies which export about a quarter of their revenue.

This disparity between Canadian and US markets is partly due to an overvaluation of the Canadian dollar by about 20% (the OECD estimates the fair value of purchasing power parity of the loonie to be $ 0.82). The other source of disparity is linked to the slightly higher P/E ratios for the Canadian market.

As always, we remain agnostic vis-à-vis fluctuations in the markets, the economy and currency levels. Our work, however, is to compare the relative valuations of the securities we can acquire. From this perspective, we believe that in the years to come, the 55% disparity between the two stock markets will diminish and that the Canadian market is at risk of underperforming its American counterpart.

This doesn't prevent us from finding terrific Canadian companies. In the last years, in fact, we have acquired three young and exceptional Quebec companies: MTY Food Group, Dollarama and 5N Plus (see the next section for more details).

Our companies

"To open a shop is easy, to keep it open is an art"

- Chinese proverb

Our companies, as a group, had an excellent year in 2010. While many of our companies reached record profits, even more important is the fact that many of them continued to widen their competitive moats relative to their competitors.

Wells Fargo (WFC, $31)

Wells Fargo had an excellent year, with adjusted earnings per share (EPS) of $2.54—an increase of 45% compared to 2009. Its balance sheet continued to improve with its equity ratio rising from 6.5% to 8.3% over the year. EPS for 2010 was actually better than EPS from 2006, before the crisis began. Assets have grown from $482 billion to $1,227 billion in four years (an increase of 155%). This growth was achieved by issuing an additional 55% of its shares outstanding (following the acquisition of Wachovia). Thereby, assets per share rose 64% during the worst period of the US banking sector since the Great Depression.

Return on assets (ROA) was 1.09% in 2010, compared for 1.76% in 2006. The earning power of Wells Fargo is therefore far from its peak. Our estimate is that in 2015, Wells Fargo could have assets of $1,800 billion and have an ROA of 1.5%. This would result in an EPS of $5.25—so shares in Wells Fargo seem bright with potential. We took advantage of the stock dropping to $23 last fall (for no reason) and increased our holding.

Bank of the Ozarks (OZRK, $43)

Our small bank from Little Rock (Arkansas) avoided, this year again, the slump that marred much of the US banking industry. Even better, Bank of the Ozarks benefited from the misfortunes of competitors and was able to be very active on the acquisition front during 2010. Why open new branches and raise new assets at great marketing costs when it's possible to acquire those of competitors at a fraction of the price? With the help of the Federal Deposit Insurance Corporation (FDIC), Bank of the Ozarks was able to get its hands on five struggling banks in a year. Here is a list of acquisitions with their respective asset bases:

- Unity National Bank of Cartersville (Georgia) in March ($295m)
- Woodlands Bank of Bluffton (South Carolina) in July ($390m)
- Horizon Bank of Bradenton (Florida) in September ($170m)

- Chestatee State Bank of Dawsonville (Georgia) in December ($240m)
- Oglethorpe Bank of Brunswick (Georgia) in January 2011 ($210m)

In short, Bank of the Ozarks was able to increase its asset base by $1.3 billion, an increase of 47% of its assets. Already in 2010, EPS blasted ahead from $2.18 to $3.75. Although certain components of this current level of profitability are not recurring in nature, we anticipate that the earning power per share for 2011 will be more than $3. The stock, therefore, still seems to us to be trading at a reasonable valuation.

M&T Bank (MTB, $87)

Like Wells Fargo and Bank of the Ozarks, M&T Bank has excellent year in 2010, with EPS rising 65% to $5.84. Charges related to bad debts dropped from 1.01% in 2009 to .67% in 2010, and ROA rose from .71% to 1.17%. Return on equity reached 19%.

M&T also made a significant acquisition towards the end of the year: Wilmington Trust. Wilmington Trust is the dominant bank in Delaware, with 23% of the market. This bank has $10 billion in assets—enabling M&T to increase its asset base by 15%. M&T paid $350 million for Wilmington Trust and assumed $330 million in loans from the government under the TARP program. This acquisition cost corresponds to only 7% of the market capitalization of M&T Bank.

M&T Bank is a truly exceptional bank. The bank has been profitable for 138 quarters in a row and, since Robert Wilmers took the helm in 1983, EPS has grown at an annual rate of 15% (for a total compounded growth of 4300%). During the crisis, M&T was the only bank in the S&P 500 to neither reduce its dividend nor issue equity.

Omnicom (OMC, $46)

The global economic recovery helped Omnicom improve its profitability in 2010. Revenues climbed 7% and EPS rose by 8%. We estimate that Omnicom will reach its pre-crisis profitability level in 2011. The stock has risen 80% since our purchase in 2008 but still trades at only 14 times its profit anticipated for 2011. This seems a reasonable ratio for a company that has strong returns on equity, offers a vital service for other businesses, dominates its industry and has a strong presence in numerous countries.

Berkshire Hathaway (BRK.B, $80)

Berkshire Hathaway and its legendary president, Warren Buffett, continued to reap the fruits of its investments from 2008-2009. All in all, Mr. Buffett invested more than $50 billion during the crisis, half in equity/debt instruments and the other half for the acquisition of Burlington Northern Santa Fe (see our 2009 Annual Letter). His investments in Goldman Sachs, GE and Swiss Re created very considerable wealth for Berkshire shareholders. BNSF had an outstanding year and it's already apparent that Mr. Buffett proved highly opportunistic in his acquisition from the year before.

Shares in Berkshire rose approximately 20% in 2010. Still, when looking at the company from a longer term perspective, the stock has failed to follow the growth in intrinsic value of the underlying company. According to our estimates, we consider the intrinsic value of Berkshire to be 30% higher than what it was before the crisis—meaning approximately $130 to $140 per share. We therefore continue to have a significant allocation of our portfolios to this company.

Microsoft (MSFT, $28)

Microsoft had an excellent 2010, with the migration towards Windows 7 leading the way. The company has already sold 300 million licenses for this operating system and Windows 7 is now installed on about 20% of PCs. On the entertainment front, the company's new gadget for its Xbox console, the Kinect sensor, has been a great success: the company sold no less than 8 million of them in 60 days! Always looking to work for the benefit of our partners, I tried the Kinect during the holidays (watching me waddle in front of the television, I couldn't help to think that the process of fundamental research has evolved over the years).

For the last twelve months ending in December, EPS at Microsoft rose by 25%. This growth in intrinsic value has yet to be reflected in the company's stock price, with its price finishing the year right around where it started. From another perspective, however, the company continued to benefit from the undervaluation of its shares by buying back some of its own shares. During the last quarter alone, Microsoft bought back $5 billion of its own shares. This stock seems a bargain to us.

Resmed (RMD, $35)

It's been six years since we first acquired shares in an exceptional Australian company: Resmed. The company is the global leader in medical equipment for sleep disorders (sleep apnea, etc). Resmed has tripled its profitability since we first acquired it and, in 2010, its EPS grew by 26%. The company is highly profitable, with net income of roughly $220 million on $1.8 billion in assets (with $600 million of those assets being in cash with no debt on its balance sheet). Resmed's stock price has followed its growth in earnings since 2004—climbing 200%.

Despite its rapid growth, problems with sleep apnea remain largely unknown, with a small percentage of those suffering from it actually being diagnosed. The company continues to work to increase awareness of this medical condition.

5N Plus (VNP-T, $7)

5N Plus, a young and dynamic Quebec company, is one of the worldwide leaders in the purification of metals needed to build photovoltaic solar panels. Its primary product is cadmium telluride used by companies like First Solar. Solar panels based on CdTe are gaining market share since they are more economical to manufacture than those based on silicon.

5N Plus experienced a difficult first half of the year with profits declining. The company's renewal contract with First Solar—its largest client— lowered margins but increased future volume commitments from First Solar. 5N Plus, however, did post very positive numbers for its latest quarter with a return to high growth and a rapid increase in its backlog.

Solar energy is not an easy industry to analyze and forecast. Still, we consider 5N Plus to possess durable competitive advantages and, more importantly, to be led by a CEO we greatly admire and trust.

O'Reilly Automotive (ORLY, $60)

O'Reilly had a fabulous 2010. EPS increased 35% due to improved same-store sales (+8.8%) and a successful integration of its CSK Auto acquisition from late 2007. This increase in EPS is not cyclical

in nature, with 2010 EPS roughly doubling from 2006 EPS. We first bought shares in O'Reilly in the summer of 2004. Since then, EPS has tripled and the stock price has followed suit (though not necessarily in a linear fashion), as depicted by this stock chart:

O'Reilly Auto 2004-2010 (Source: Bigcharts.com)

American Express (AXP, $43)

After two difficult years, Amex has returned to growth and profitability in 2010. Revenues increased by 13% and EPS reached $ 3.41—121% higher than in 2009 and higher than the 2007 EPS of $3.37 (the year before the start of the financial crisis).

Amex is the only company issuing fully integrated credit cards, meaning that they assume all of the following roles: banker, transaction provider, and card issuer. Its competitors are not only Visa and MasterCard but also banks like JP Morgan and Bank of America. On the banking side, Amex gained market share during the crisis. In 2010, the growth in transactions at Amex was 15%, versus 5% and 3% for JPM and BoA, respectively. The rate of bad loans in 2010 was also much lower than its competitors (approximately 5% versus 8% for JPM and BoA).

The company reiterated its goal to grow EPS by 12-15% annually. Although the crisis marked a "pause" in this noble and ambitious goal, we are confident that Amex will continue to grow its intrinsic value at a rate greater than the average. With this in mind, the current P/E ratio of Amex stock (12x) vis-à-vis the P/E of the S&P 500 (14x) seems unjustified.

Astral Media (ACM.A-T, $42)

Revenues at Astral Media rose 6% in 2010 while EPS rose by 12%. This growth in EPS for 2010 comes after 5% growth in 2009 and 10% growth in 2008. The television division experienced another year of robust growth with profits rising 12%, while radio (-4%) and outdoor advertising (-1%) were more stagnant. Astral is a high quality Quebec company with stable growth rates and, to this day, has more or less, been sheltered from economic cycles. It seems to us that this solid business deserves a higher P/E than its current P/E of 12x.

China Fire & Security Group (CFSG, $7)

It was a difficult year for CFSG. This young Chinese company (founded in 1995) dominates a niche market: fire prevention and detection systems used in industrial settings. Steel production in China, the primary market for CFSG's products, slowed in 2010—thus impacting the company's sales. We were used to CFSG growing at 40% annually. But EPS were down by 40% for 2010, at $0.52, though everything had been indicating a potential 50% growth at the beginning of the year (they had an impressive backlog). The stock therefore dropped by half.

It seems premature to us to conclude that the company's problems are permanent rather than temporary but we continue to follow the situation closely.

Mohawk Industries (MHK, $57)

Mohawk sells floor covering products (carpets, tiles, hardwood floors, etc). The company has remained profitable despite the severe impact of the recession on this industry. There was a 38% improvement in the level of profitability in 2010 versus 2009 (measured by adjusted earnings).

Though currently depressed, we believe that a turnaround is near for the residential construction industry. The good news is that there are a million new households created each year in the United States and buying a home there has rarely been so affordable. We anticipate that in a normalized environment, Mohawk should earn $8 in EPS—meaning that the current stock has excellent potential for appreciation.

Fastenal (FAST, $60)

Fastenal had an exceptional year, with sales growing 18% and EPS rising by 45%. The company opened 127 new stores (an increase of 5.4%) and continued to benefit from the recession by widening its competitive moat relative to competitors. Revenue has risen from $2.1 billion to $2.3 billion since the end of 2007—Fastenal has increased its revenue by 10% during the recession. As for EPS, they grew 16% in three years.

2011 is off to a good start, with 19% annual sales growth in January with 11% growth in employees. Fastenal is truly a well-oiled machine.

We bought Fastenal 12 years ago (during the Asian crisis) and the stock has gone up tenfold since then. We continue to believe, however, that the company has many great years of growth in its future and we are holding on to our shares.

Knight Transportation (KNX, $19)

Our trucking company based in Phoenix (AZ) had a strong year. Revenues climbed 12% while EPS rose 20%. Knight continued to take market share within an industry that was devastated by the recession (2000 companies disappeared!) The company's operating cost ratio decreased from 85.7% to 84.5% and Knight's cost structure is about 10% less than the average for the industry (in other words, profit margins are twice the industry average).

The company rewarded us at the end of the year with a special dividend of $0.75 (a yield of about 4% at the time). Since the company's stock seems appropriately valued by the market, we have reduced

the weight of this holding in our portfolio during the last couple of years. Knight once commanded a much greater allocation in our portfolio but we continue to believe that the company is exceptionally solid.

Medtronic (MDT, $37)

Medtronic, one of the largest medical manufacturing equipment companies in the world, experienced flat sales in 2010. EPS rose 8% which is acceptable but not spectacular. The CEO, William Hawkins, also announced that he would leave the company next spring and it is too early to know his successor's game plan for revitalizing growth. He will have to juggle, among many other things, the health care reform in the US.

This multinational company is an industry leader and its stock seems extremely undervalued by the market, trading at about 11 times earnings.

Carmax (KMX, $32)

Carmax broke all profitability records in 2010. This company, which primarily sells used cars, grew EPS by 43%. The crisis of 2008-09 was particularly harsh for the auto industry, but Carmax emerged stronger and is now 80% more profitable than before the recession!

We were not rewarded immediately though we acquired this stock in 2007 at about $21. During its low of November 2008, Carmax was trading at $7. But our patience has paid off and we believe that Carmax has a very bright future. Still, we should have bought more stock during that low had we had foresight in addition to patience.

MTY Food Group (MTY-T, $14)

MTY Food has been our largest Canadian investment for a few years already. The company has become the Canadian leader in restaurant franchises (with over 1700)—mainly located in food courts. MTY has achieved excellent growth in its number of restaurants, revenues and earnings. The company's EPS (adjusted for the amortization of intangible assets) reached $0.91 which is an increase of 23% from 2009 and 78% from 2007 (when we became shareholders). The company became listed on the Toronto Stock Exchange during the spring and also announced the acquisition of Valentine in August. Lastly, MTY acquired a food factory at the end of the year to become more vertically integrated.

During the year, we also met again with Stanley Ma, the CEO of MTY Food. We remained confident after our meeting that MTY remains in good hands and continues to have excellent growth prospects.

<u>Sales of 2010</u>

We sold our shares in Martin Marietta and Morningstar during the year. We deemed each of these stocks to be less undervalued than others and decided to sell them. We continue to believe that these two companies are excellent businesses.

Nitori

We sold our shares in Nitori in early 2011. We initially bought this superb Japanese retailer in June of 2007 at around ¥6000. One of our reasons for our purchase was the weakness of the Yen—we

believed the Yen to be undervalued by about 20% at the time, partly due to the "carry trade" where Japanese bonds were sold short in large quantities.[1] Since Nitori was buying most of its inventory from China (where the currency is tied to the US dollar) and then reselling it within Japan, an increase in the value of the yen would have had a very positive impact on the company's gross margins. Nitori also seemed well managed and had strong sales growth (around 15-17% annually).

We sold for two reasons. The most important was that sales growth had slowed during its latest quarters, to around 10% annually. This was a very acceptable rate but not the strong growth of prior years. Profits had grown even more rapidly, thanks to an increasing in margins from an appreciation of the Yen. The level of the Yen (and therefore the company's margins) now seemed difficult to sustain going forward—meaning that we anticipated EPS growth to dip below 10%.

The second reason for selling was due to the higher level of the Yen relative to the US dollar. The Yen had gained 50% in three and half years against the US dollar. Even relative to the strong Canadian dollar, the Yen rose by 33%. We locked in a 65% gain on our Nitori holding from 2007 and, due to the high level of both the company's stock and the Yen, we were confident that prospects for future returns were better elsewhere.

New investments for 2010

Dollarama (DOL-T, $29)

We discussed our purchase of Dollarama in our letter from the first quarter of 2010. We have always been admirers of its founder, Larry Rossy, and we were very disappointed when the company agreed to be acquired by a private equity fund (Bain Capital) in 2004 instead of having an initial public offering (IPO). The company then resurfaced on our radar screen when it announced an IPO in late 2009.

Dollarama is, by a wide margin, the leader in "dollar stores" (though many items are more expensive) in Canada, with over 620 stores across the country. Despite its dominance, we anticipate that there is still significant growth potential for this company. The penetration rate of dollar stores in Canada, for example, is about half of the rate of the US.

In its first year as a public company, sales at Dollarama jumped 14% and same store sales grew by 8%. EPS came in at $1.65. Based on its current price, the stock trades at about 15 times expected 2011 profits—this seems very reasonable.

Visa (V, $71)

We like companies in the credit card industry, dominated by Amex, Visa and MasterCard. Our interest is nothing new: we first purchased shares of American Express in 1995. In 2006, MasterCard had its IPO and were able to see firsthand the remarkable profitability of these companies (a triopoly is just a little less than a duopoly).

It's been 30 years since an excellent book was published on investment: The Money Masters (by John

[1] Financial transaction that exploits interest rate differentials between different currencies. The idea behind the *carry trade* is to borrow (and/or by selling short) in a currency from a country where interest rates are low and to invest these borrowed funds in another currency where interest rates are high.

Train). Warren Buffett, then totally unknown, was interviewed. Something he said always stuck in my mind: "The best types of businesses to be acquired are those which have the equivalent of a royalty on the growth of others." We believe that this applies to credit card companies.

Visa finally became a public company in 2008 and we were determined to follow this company closely. Shares shot up from $60 to $90 while EPS was only $2.47. We unfortunately couldn't say that this was an attractive P/E ratio. Two years later, however, the situation was different. The company had shown great resilience during the crisis (see chart below) and EPS reached $4.22 in 2010—an increase of 72% in two years. Meanwhile, the stock had dropped from a high of $97 to $70 during the second half of 2010.

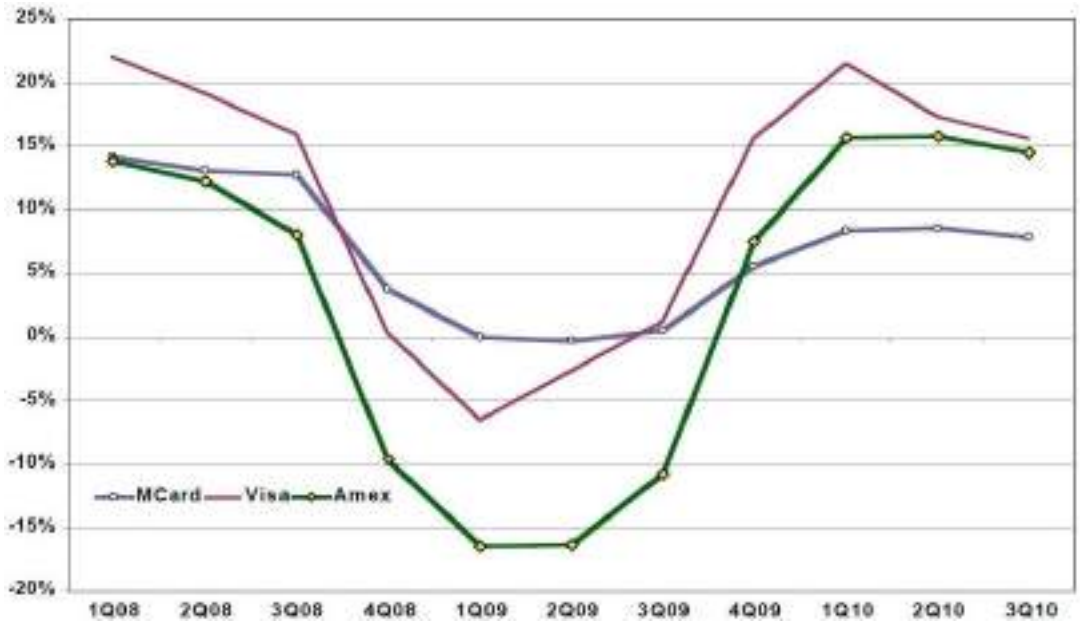

Growth rates of the three credit card companies 2008-2010 (Source : Argus Research)

Visa is the leader in terms of both market share and technological innovation (nothing against MasterCard and Amex). Visa's balance sheet is immaculate, with no debt and $3.5 billion in cash ($5 per share). So, we are paying $66 for about $5 in estimated EPS for 2011—about 13 times profits. The company is taking advantage of its stock valuation by buying back some of its own shares.

A company like Visa, however, doesn't see the value of its shares drop by 25% for no reason. The American senator, Dick Durbin, proposed a legislative amendment regarding transaction fees charged for debit cards. He is spearheading this movement (as though the banks won't be able to find other fees to strike back). In my humble opinion, Mr. Durbin would have another opinion towards all of this if he came to Canada to see if the higher regulatory environment here ever helped lower banking fees for consumers...

Regardless, it is therefore highly likely that the profits for Visa in 2012 will be 10% lower than what we initially anticipated. So, instead of earning almost $6 per share, we have lowered our estimate to $5.40. A P/E of 20x for this business seems totally justified in our opinion, even given the political risk, and we view this stock as undervalued at its current price.

Five-year Post-mortem: 2005

Like we do every year, we go through a five-year port-mortem analysis. We believe that studying our decisions in a systematic manner, and with some hindsight, enables us to learn from both our achievements and our errors. In 2005, we had acquired shares in two extremely high quality American companies: Wal-Mart and Disney.

Wal-Mart (WMT, $54)

We acquired shares in Wal-Mart in March of 2005 for about $50, which was equivalent to 18 times its profit at the time (the same P/E as the market back then). We had anticipated annual EPS growth of 12% which meant that the stock deserved its valuation—even a premium to the S&P.

From 2005 to 2010, EPS grew at 9% annually (including 11% in 2010). This compares favorably to the 2% annually earned by the S&P 500 over the same period. The company has outperformed the vast majority of businesses during very difficult economic times. But this 9% growth translated itself into only 2% growth in the company's stock value. The P/E is lower today than it was in 2005—it now has a discount of 12% relative to the market.

This has not been a very rewarding investment since, including dividends, our total annual return has been approximately 4%. In hindsight, we should have been more conservative with our growth expectations and/or allowed ourselves to have a greater margin of safety at the time of purchase.

But we must look ahead. If the company continues to grow at annual rates of 9% and adds a dividend of 2%, we're talking about an annual return of 11% in the intrinsic value of the company. And if the P/E ratio rises, at last, to a more reasonable level, then we could have a return in line with our objectives. For example, if by 2015, the P/E rises from 13x to 17x, the return on the stock would be around 16% annually from today onward.

Disney (DIS, $38)

Disney grew its EPS by 19% this year to $2.28 ($2.07 for the fiscal year ending in September). This is a record profit for Disney and represents a 71% increase (11% annualized) since we became shareholders again in September 2005—the day when Bob Iger became CEO. There are few leaders we admire as much.

Disney had several blockbusters in 2010. "Toy Story 3" broke sales records at the box office for animated films and "Alice in Wonderland" crossed the billion dollar mark at the box office.

"Alice in Wonderland" was a remake of an animated film from 1951 which was, at that time, a huge success for Disney. The modern version of the Tim Burton remake of this film was a great cinematographic achievement for Disney and, once again, the company greatly benefited from this film. Disney's business model is truly extraordinary. A movie like "Alice in Wonderland" is a little like having a giant oil well and pumping out all of its content… and then finding this well again 60 years later and pumping out even more oil, without any additional maintenance or extraction costs. The stars at Disney, like Mickey Mouse and Alice, are also immortal—without the need for capital and especially WITHOUT AN AGENT.

Few people know that "Alice in Wonderland" wasn't the second version of this film for Disney, but its third. At the age of 20, in 1922, Walt Disney had launched his first animated film business: Laugh-O-Gram Studio. In 1923, he went on to create a film based on the Lewis Carroll classic, but the company went bankrupt during that year and the production of this film was halted.

But Disney was a difficult man to discourage. He started a new animation studio and created his first star: "Oswalt the Lucky Rabbit" in 1927. His distributor in New York decided to continue the Oswalt series without Disney, taking with him the character and much of Disney's staff. Returning from New York on the train, back to square one, Disney drafted out a new character—a mouse. Disney's initial idea was to call the mouse "Mortimer" until his wife said: "why not Mickey?"

In 2006, the Walt Disney Company acquired all the rights to the character of Oswalt, then property of NBC Universal. No less than 78 years after Disney had created him.

Walt Disney was not only a fearless visionary but also a man with unmatched tenacity. Without the latter, we would have never heard of the former.

Mistake "du jour"

"Only those who are asleep make no mistakes"

- Ingvar Kamprad (founder of IKEA)

Following in the "Givernian" tradition, here are our three annual medals for the "best" errors of 2010. It is with a constructive attitude, in order to always become better investors, that we provide this detailed analysis. As is often the case with stocks, errors from omission (non-purchases) are often more costly than errors from commission (purchases). This year's list gave me shivers.

Bronze Medal: Coach

We bought a small amount of stock in Coach, the famous maker of luxury handbags, three years ago. It is not quite Louis Vuitton or Dolce & Gabbana but still a very solid brand. Coach is also very popular in Asia where the company has experienced rapid growth.

In 2007, while I was in Omaha for the Berkshire Hathaway shareholder meeting, I asked my girlfriend what I could bring back for her as a souvenir (I had in mind a pink Warren Buffett t-shirt or a box of

See's Candies). She answered, with enthusiasm, that she wanted a small bag from Coach (I had told her that I had visited a store as part of my research process). This is when I realized how many women held this brand in high regard.

Upon reading their annual report, I realized that Coach had impressive growth rates, along with exceptional profitability and a shareholder-friendly management team.

The company had belonged to Sara Lee for a number of years. In a restructuring of its finances in 2000, Sara Lee decided to distribute its ownership in Coach to its shareholders. As is often the case, this enabled the newly-independent Coach to considerably improve its profitability. In 2007, the stock had dropped from $51 to $35 and the company was trading at 15 times its profits, while companies such as Burberry, PPR (owner of Gucci) and LVMH (Louis Vuitton), were all trading at 20 times their earnings. Given the strength of these brands, such valuations were justified. But I would have preferred a better valuation so I only bought a small position in Coach, thinking that I might have a better valuation down the road…

And I had my chance. During the financial crisis, at its low, the stock had tumbled to $12. The company had $800 million in cash—equivalent to $2.50 per share. The stock market was effectively assigning a valuation of $9.50 per share for the business—and the company was still earning around $2 per share. We could buy one of the world greatest brands for five times its profit!!! But, worried that the recession would further hit the luxury goods industry, I passed on my chance. Even worse, when the stock bounced off its lows, I sold our few shares.

Today, the stock is trading at $54. Given that the Coach should earn $3 per share this year and that it has $3 per share in cash, the current valuation is still reasonable. Imagine it at $12.

Silver Medal: Google

Google went public in 2004 at $85 a share. We were naturally skeptical at the company's ability to continue dominating the search business on the Internet—a universe which historically evolved so quickly with market leaders changing just as quickly. Further, the stock was trading at about 50 times its profits at the time. We were, however, very impressed by the Shareholder Manual that that had been written by the company (inspired by the one written by Warren Buffett for Berkshire Hathaway). Google was definitely on our radar screen.

In 2005, when the stock was trading at $280, I was interviewed by La Presse and asked about Google. I actually described the company as a "Miracle of Capitalism" (difficult to have been more enthusiastic!) But I was not consistent in carrying out this admiration for Google into actually buying shares in the company. The stock continued to climb, reaching $700 in 2007.

During the big dip of 2008-09, the stock dropped to less than $300. At the time, the stock was trading at 15 times its profits. We decided to slowly begin buying shares in Google. The stock then quickly bounced back to $600.

The rise in the price of Google is totally justified. The company has become almost immovable in its leading position in the web search market (its moat is as big as it comes). YouTube is a worldwide success and its Smartphone operating system, Android, is a blockbuster. The company's EPS has grown from $1.50 in 2004 to more than $25 in 2010. Moreover, the company has accumulated $33 billion in cash in just a few years.

During the summer of 2010, the stock fell to $450 for no apparent reason—corresponding to a P/E of 15x. Jean-Philippe Bouchard, Vice-President at Giverny Capital, pleaded with me to wake up and buy shares in this unique business. But I wanted an even better prices and I decided to wait. The stock almost immediately bounced back to $600.

Gold Medal: Intuitive Surgical

About five years ago, my longtime friend Bernard Mooney talked to me about a company making revolutionary medical products: Intuitive Surgical (IS). IS had invented a robotic surgery system called "Da Vinci". This robotic system converted the movements of a surgeon into micro movements by the robotic tools inside a patient. In a few years, revenues at IS surged from $100 million to $1 billion. The beauty of the system is that the company earns more revenue from specialized accessories than from the robot itself (similar to Gillette with its razor blades). In fact, each surgery costs about $2000 in accessories. The company has little competition and its products have quickly become very popular with surgeons in a number of different specialties (such as prostate surgeries and hysterectomies).

Such innovative companies, with outstanding profitability and excellent growth prospects, seldom trade at bargain prices. Despite this, I followed this business closely. During the crisis of 2008-09, the stock dropped from a high of $350 in 2008 to a low of $85 at the beginning of 2009. The company had no debt and roughly $13 per share in cash, and had earnings per share in excess of $5. So, it was possible to buy one of the most promising businesses in the universe of stocks that we follow for about 14 times its profits. I bought a small starting position and waited for a better price (are you started to see a trend?)

After a quarter of lower profits, growth has come back with a vengeance. In 2010, revenues grew by 60% relative to 2008. EPS has climbed from $5 to almost $9 in two years. And the stock has quadrupled, reaching $345.

We should have bought shares in this company: we had front row seats and fully understood its business and the strengths of its model.

What is the lesson from our 2008-2009 errors?

Of course, many other stocks aside from Google and Intuitive Surgical were just as undervalued during the bottom of March 2009. We were fully invested since there was no shortage of bargains. In order to buy Google, we would have had to sell another stock—most likely one that was also undervalued.

We did, however, have more conservative holdings in our portfolio, such as Wal-Mart, Procter & Gamble and Johnson & Johnson, that had not decline as much as the market. Relative to other stocks, these holdings were less undervalued and should have been sold. We would have certainly added several percentage points of performance to our returns for 2009 and 2010.

The conclusion: one should not hesitate to sell stocks trading at 60 cents to the dollar to buy stocks trading a 40 cents to the dollar!

Conclusion: the wall of fear

During my most recent interview with La Presse newspaper, I spoke about the "wall of fear" when referring to the continuous rise of the market. The ambient pessimism is still very high these days: people were highly distressed by the crisis and remain skeptical.

One way to measure the pulse of the population is to follow the level of consumer confidence in the US. If I were a macroeconomic strategist and wanted to receive only one piece of economic data per year in order to predict the market in the short or medium term, this would be it! It's no doubt simplistic, but when consumers are pessimistic, the market is low and there are numerous opportunities to create wealth. When consumers are optimistic, the market is high and a pause is likely to come.

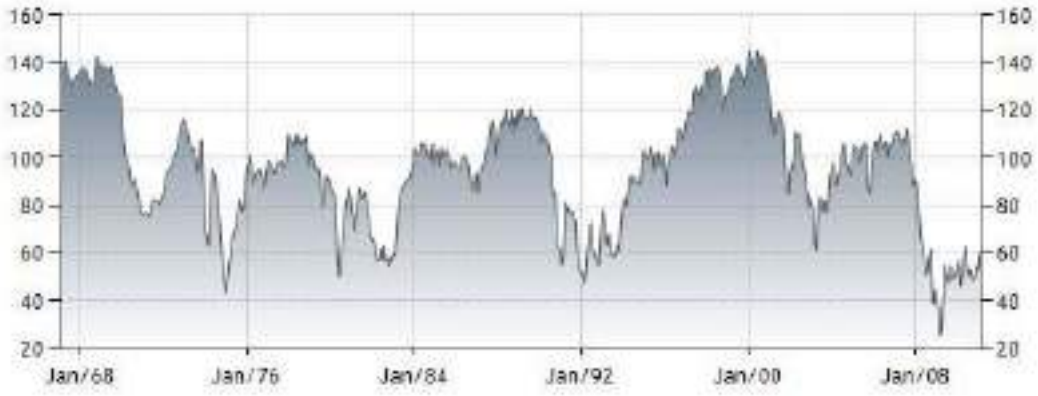

US consumer confidence from 1967 to 2010 (Source: TradingEconomics.com and Conference Board)

A normalized confidence level is 100. The level at the end of the year was 53. This level remains quite low despite that it was higher than the level from the beginning of 2009. In fact, the level is still as low as it was during the recessions of 1974, 1982 and 1992.

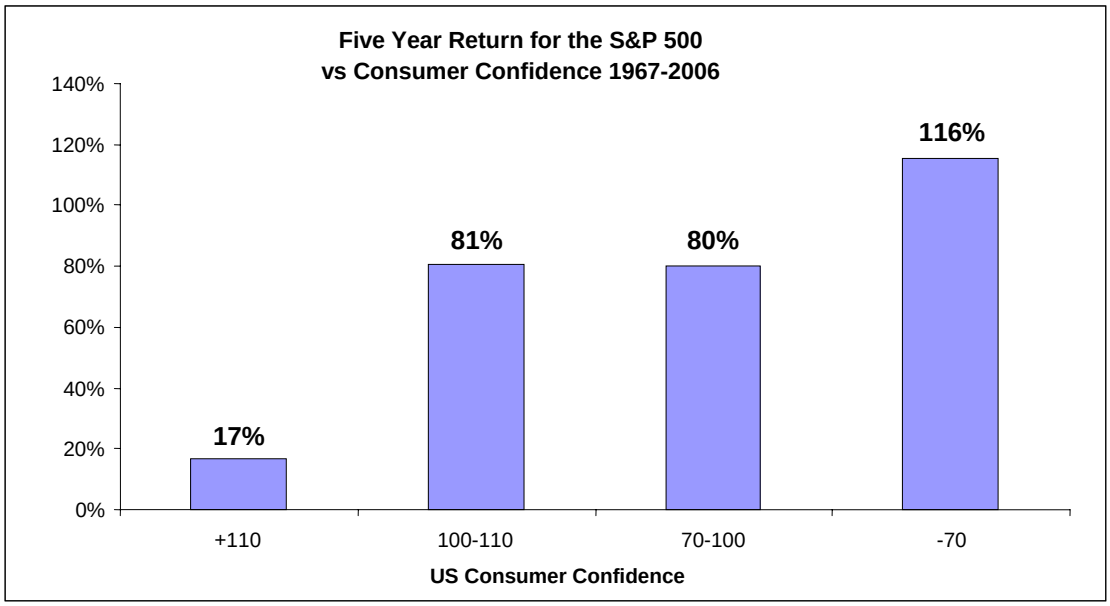

Five years forward total return of the S&P 500 depending of the level of US consumer confidence (1967-2006)

Historically, when the level of consumer confidence was high (such as during 1999-2000), the return of the S&P 500 during the following five years ends up being quite modest. And when the level of consumer confidence was low, the return of the S&P 500 during the following five years was high. The more the population is pessimistic, the greater the potential for stocks in the medium term. As indicated in the chart above, when the level of consumer confidence dropped below 70, the return for the S&P 500 in the following five years was 116% (or 17% on annualized basis).

So, we still see great potential for the market for the years to come, especially in more undervalued sectors of the market. Even more importantly, however, is that the companies in our portfolio are in excellent financial health and trade at compelling valuation.

We also want you to know that we are fully aware and grateful for your vote of confidence. It is imperative for us to not only select outstanding companies for our portfolios, but to also remain outstanding stewards of your capital.

We wish a great 2011 to all our partners.

François Rochon and the Giverny Capital team

APPENDIX 1

Investment philosophy

In 2010, we saw a large increase in the number of Giverny Capital partners (the term we use for a client). With all these new comers, it is imperative that we write again (and again) about our investment philosophy.

Here the key points:

- We believe that over the long run, stocks are the best class of investments.
- It is futile to predict when it will be the best time to begin buying (or selling) stocks.
- A stock return will eventually echo the increase in per share intrinsic value of the underlying company (usually linked to the return on equity).
- We choose companies that have (sustainable) high margins and high returns on equity, good long term prospects and that are managed by brilliant, honest, dedicated and altruist people.
- Once a company has been selected for its exceptional qualities, a realistic valuation of its intrinsic value has to be grossly assessed.
- The stock market is dominated by participants that perceive stocks as casino chips. With that knowledge, we can then buy great businesses sometimes well bellow their intrinsic value.
- There can be quite some time before the market recognizes the true value of our companies. But if we're right on the business, we will eventually be right on the stock.

This discrepancy between the market quotes of a business and its underlying intrinsic value and the high volatility of the securities market are perceived by many participants as disadvantages. It's the other way around: market imbalances and fluctuations are our allies in our noble quest for wealth. In fact, the more irrational the stock market, the higher our chances are to attain our financial objectives.

But there is one important point: Owning a few undervalued securities (around 20) over many years doesn't yield linear returns. To stare at a freshly planted tree does not make it grow faster. Our approach is to judge the quality of an investment over a minimum **five years period.**

So patience – ours AND those of the partners – becomes the key ingredient for success.

Real patience is neither easy nor that common. That is why many investors pray in those words: "Dear God, could you gratify me with patience? And if it is at all possible, RIGHT NOW"

The Rule of Three

In conjunction with our investment philosophy, I've added a stock market rule that I called : The Rule of Three. This three parts rule comes from historical observations: it is not a scientific process that has come to its enunciation but an empirical one.

- One year out of three, the stock market will go down at least 10%.
- One stock out of three that we buy will be a disappointment.
- One year out of three, we will underperform the index.

The judgment that you – as partners – pose on our work should be in line with these parameters.

APPENDIX 2

Notes on the returns of the Giverny portfolios

- The Giverny portfolio is a private family group of accounts managed by François Rochon since 1993. The returns of the period from 1993 to 1999 were realized before registration of Giverny Capital Inc. at the AMF in June of 2000.
- The returns indicated include trading commissions, dividends and other income but do not include management fees.
- The Giverny portfolio serves as a model for Giverny Capital's clients. But returns from one client to the other can vary depending on a multitude of factors, as for example the timing of their arrival.
- Past results do not guarantee future results.
- The index benchmark group is selected at the beginning of the year and tends to be a good reflection of the asset composition of the portfolio. In 2010 :

  - Giverny Global Portfolio: TSX 14% Russell 2000 39% S&P 500 39% MSCI EAFE 8%
  - Giverny US Portfolio : S&P 500 100%
  - Giverny Canada Portfolio : S&P / TSX 100%

- The returns are audited by Price Waterhouse Coopers (PWC) at the end of each year for each portfolio. PWC has audited all yearly results since 1993.
- The PWC data are those given by the fiduciary TD Waterhouse.
- The returns calculated by PWC are in compliance with ***generally accepted accounting norms in Canada.***
- The PWC report is available upon request.

Giverny Capital Inc.

Annual Letter to our Partners
2011

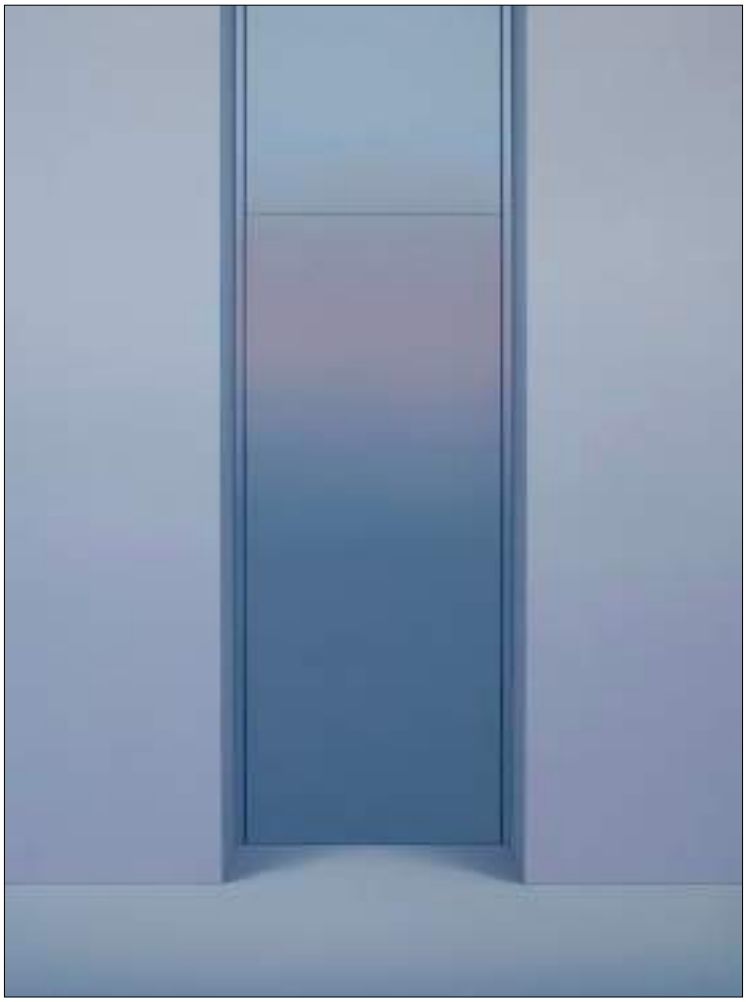

Pierre Dorion
Gate II - 2011
Giverny Capital Collection

Giverny Capital Inc. – 2011 Annual Letter ©

For the year ending December 31st 2011, our portfolio's return was +7.8% versus a loss of 1.1% for our benchmark. Our return, including a gain of approximately 2% due to fluctuations in the Canadian currency, therefore outperformed our benchmark by 8.9%.

Since our inception, on July 1st 1993, our compounded annual growth rate has been +13.6% versus +6.6% for our weighed benchmark, or an annualized outperformance of 6.9% over this period. When we exclude the effect caused by the appreciating Canadian currency since our inception, which represents an annualized increase of 1.2% since 1993, our portfolio has returned +15.0% annually versus +7.9% for our benchmark. Our long-term (and ambitious) objective is to maintain an annual return that is 5% higher than our benchmark.

The Artwork on Our Letter

We have illustrated the cover of our letter with a copy of an artwork from our corporate collection since 2004. This year, we selected a work by the Quebecois artist Pierre Dorion entitled "Gate II (22nd Street)".

The Giverny Portfolio (in Canadian dollars): Returns Since July 1st 1993

Return *	Giverny	Index **	+ / -	$ US/Can	S&P 500	+ / -	Giverny ***	Index ***	+ / -
1993 (Q3-Q4)	37.0%	9.5%	27.6%	3.3%	8.4%	28.6%	34.4%	7.4%	27.0%
1994	16.5%	3.7%	12.7%	6.0%	7.3%	9.2%	12.0%	-0.3%	12.3%
1995	41.2%	24.0%	17.2%	-2.7%	32.9%	8.3%	43.8%	26.3%	17.5%
1996	28.0%	22.8%	5.2%	0.3%	22.7%	5.3%	27.7%	22.5%	5.2%
1997	37.8%	28.6%	9.2%	4.3%	36.7%	1.0%	33.4%	24.5%	8.9%
1998	20.6%	18.8%	1.8%	7.1%	37.7%	-17.0%	14.5%	12.8%	1.7%
1999	15.1%	16.3%	-1.2%	-5.7%	14.1%	1.0%	20.6%	21.9%	-1.3%
2000	13.4%	3.2%	10.2%	3.9%	-4.6%	18.0%	9.7%	-0.2%	9.9%
2001	15.1%	-0.4%	15.5%	6.2%	-5.7%	20.8%	9.4%	-5.3%	14.7%
2002	-2.8%	-18.3%	15.6%	-0.8%	-22.0%	19.3%	-2.0%	-17.7%	15.7%
2003	13.6%	14.0%	-0.4%	-17.7%	5.7%	7.9%	33.7%	34.1%	-0.5%
2004	1.6%	6.2%	-4.5%	-7.3%	2.8%	-1.1%	8.3%	13.1%	-4.8%
2005	11.5%	3.6%	7.9%	-3.3%	1.5%	10.0%	14.5%	6.7%	7.8%
2006	3.5%	17.0%	-13.5%	0.2%	15.7%	-12.1%	3.3%	16.8%	-13.5%
2007	-14.4%	-11.6%	-2.8%	-14.9%	-10.0%	-4.2%	-0.3%	2.2%	-2.5%
2008	-5.5%	-22.0%	16.5%	22.9%	-22.2%	16.7%	-21.5%	-35.4%	13.9%
2009	11.8%	12.2%	-0.4%	-13.7%	9.6%	2.2%	27.7%	27.7%	0.1%
2010	16.1%	13.8%	2.3%	-5.3%	9.0%	7.1%	21.7%	19.3%	2.5%
2011	7.8%	-1.1%	8.9%	2.3%	4.4%	3.4%	5.8%	-2.9%	8.7%
Total	954.7%	229.0%	725.7%	-20.7%	217.7%	737.1%	1222.2%	308.5%	913.7%
Annualized	13.6%	6.6%	6.9%	-1.2%	6.4%	7.1%	15.0%	7.9%	7.1%

* Green section: all returns are adjusted to Canadian dollars
** Index is a hybrid index (S&P/TSX, S&P 500, MSCI EAFE, Russell 2000) which reflects the weight of the underlying assets
*** Estimated without the effect of currency
Note: Asset appraisal of the Giverny Global Portfolio performed by PricewaterhouseCoopers, in Canadian dollars.

The Giverny US Portfolio

We have been publishing the returns of the Giverny US Portfolio, which is entirely denominated in US dollars, since 2003. The Giverny US Portfolio corresponds to the American portion of the Giverny Portfolio. In 2011, the Giverny US Portfolio realized a return of +5.0% compared to +2.1% for our benchmark, the S&P 500. The Giverny US Portfolio therefore outperformed our benchmark by 2.9%

Since its inception in 1993, the Giverny US Portfolio has returned +1056.4%, or +14.1% on an annualized basis. During this same period, the S&P 500 has returned +298.9%, or +7.8% on an annualized basis. Our added value has therefore been 6.4% annually.

Year	Giverny US	S&P 500	+/-
1993 (Q3-Q4)	32.7%	5.0%	27.7%
1994	9.9%	1.3%	8.6%
1995	54.8%	37.6%	17.2%
1996	27.0%	23.0%	4.1%
1997	32.9%	33.4%	-0.4%
1998	11.0%	28.6%	-17.6%
1999	15.9%	21.0%	-5.1%
2000	11.3%	-9.1%	20.4%
2001	8.1%	-11.9%	20.0%
2002	-4.4%	-22.1%	17.7%
2003	31.6%	28.7%	2.9%
2004	9.3%	10.9%	-1.6%
2005	12.5%	4.9%	7.5%
2006	3.3%	15.8%	-12.4%
2007	-1.7%	5.5%	-7.2%
2008	-24.3%	-37.0%	12.7%
2009	28.7%	26.5%	2.3%
2010	21.9%	15.1%	6.9%
2011	5.0%	2.1%	2.9%
Total	1056.4%	298.9%	757.5%
Annualized	14.1%	7.8%	6.4%

Note: Asset appraisal of the Giverny US Portfolio performed by PricewaterhouseCoopers
S&P 500 returns provided by Standard & Poors

We outperformed the S&P 500 for a fourth consecutive year, led by strong performances from companies such as Fastenal, Bank of the Ozarks, Buffalo Wild Wings, Visa and O'Reilly Automotive.

Giverny Canada Portfolio

We introduced a portfolio that is 100% focused on Canadian equities in 2007. This corresponds closely to the Canadian portion of the Giverny Portfolio. In 2011, the Giverny Canada Portfolio returned +13.5% versus a loss of 8.7% for our benchmark (the S&P/TSX), therefore outperforming our benchmark by 22.2%.

Since 2007, the Giverny Canada Portfolio has returned +66.4%, or +10.7% on an annualized basis. During this same period, our benchmark had a gain of +5.2%, or a gain of +1.0% on an annualized basis. Our annual added value was therefore 9.7%.

Year	Giverny Canada	S&P/TSX	+/-
2007	19.7%	9.8%	9.9%
2008	-24.6%	-32.9%	8.3%
2009	28.2%	33.1%	-4.9%
2010	26.7%	17.6%	9.1%
2011	13.5%	-8.7%	22.2%
Total	66.4%	5.2%	61.2%
Annualized	10.7%	1.0%	9.7%

Note: Asset appraisal of the Giverny Canada performed by PricewaterhouseCoopers

Our Canadian stocks performed very well in 2011. The all-star in our portfolio was Dollarama which rose 55%. MTY Foods and Computer Modelling Group also had solid years. As a result, we were able to outperform the TSX. Our Giverny Canada Portfolio has nearly no correlation with the TSX and, as the legendary John Templeton was fond of saying, "It is impossible to do better than the average without doing something different from the average."

2011: A Year in Review

The European financial crisis affected stock markets throughout the world, with nearly every major market outside of the US finishing the year in the red. For example, the Chinese market which is perceived as a bastion of economic growth, dropped nearly 20%. The Shanghai market reached a high of 6092 on October 16, 2007 and closed 2011 at 2199—a 64% decline in four years.

The TSX in Canada lost 8.7% in 2011—an underperformance of 10.8% relative to the S&P 500 in the US (actually a 13.1% difference if we consider the appreciating value of the US Dollar during the year). Last year, we wrote that US markets offered brighter prospects than the Canadian markets. We believe this to still be the case.

We are investors, not economic strategists or other soothsayers. From this perspective, 2011 was a "Grand Cru" year. Our companies, as a whole, had exceptional financial results and their stock prices resisted the widespread slump of many equity markets.

The Irony of Treasuries

2011 was a year when the media, and many people with savings (note that the word "investor" is not used), continued their near obsession with the debt problems of Western governments. But I will not engage in the easy game of social criticism. It's like in hockey: from the stands, everything seems so simple to fix.

During these times, corporations have managed their finances in a rational manner (at least for the most part). These companies don't have the luxury of dealing in large long-term liabilities while running short-term deficits. Ironically, corporate securities (stocks) are shunned in favor of governmental debt securities (treasuries)—and this has been the case for many years now. This has therefore created a rare situation where we observe a wide disparity between the valuation of stocks, with the S&P 500 trading at 12 times its earning power (corresponding to a earning yield of 8%), and the valuation of 10-year Treasury notes, which are trading at 50 times their interest payment (or a yield of 2%). During 2011, and despite this disparity, the majority of people sold their equity funds to put their savings into funds holding Treasuries.

The ultimate irony is that these "investors" are avoiding stocks for the simplistic reason that governmental debt is too high. They are ranting against government debt but yet buy more government debt at measly interest rates with their hard-earned dollars. They stand against indebted governments by lending them more money. And they do this with no additional reward to compensate for the inflation risk they assume. To the contrary, a 10-year note yielding 2% annually is almost certain to lose its real value over time. An annual inflation rate of 3% would create a loss of purchasing power of 10% over ten years, even after pocketing the interest.

The ultimate argument by buyers of government debt is that their investment is guaranteed. It is in fact a guarantee…. a guarantee of impoverishment.

Profiting from Pessimism

In August and September, the market was heading for another bear market (a drop of 20% of more). The majority of market participants, still feeling the sting from the crisis of 2008-2009, became drastically pessimistic (in a way that doesn't happen very often historically). From my experience over the last 20 years, I have never seen such a wide disparity between the perception of the market and its underlying economic reality.

We decided to profit from the many bargains that could be found at the time. Though we typically trade very little (with an average holding period of five years), we had a number of buys and sells in 2011. We increased our holdings in existing positions that seemed even more undervalued and also purchased new positions (see subsequent section). We also sold holdings that had less potential. In other words, we sold holdings that were trading at 60% of their intrinsic value (according to our estimate) to buy holdings trading at 40% of their intrinsic value.

A (Rare) Prediction in 2011

> *"I think the future of equities will be roughly the same as their past; in particular, common stock purchases will prove satisfactory when made at appropriate price levels. It may be objected that it is far too cursory and superficial a conclusion; that it fails to take into account the new factors and problems that have entered the economic picture in recent years – especially those of the movement toward less consumption and zero growth. Perhaps I should add to the list the widespread public mistrust of Wall Street as a whole, engendered by its well-night scandalous behavior during recent years in the areas of ethics, financial practices of all sorts, and plain business sense."*

These words perfectly summarize the overall sentiment towards the market these days. These words, however, were spoken by Benjamin Graham during a speech in 1974.[1] In 1973-74, the market had tumbled 50% and pessimism ran high. Western economies were sapped by the parasitic force of soaring inflation. The skyrocketing price of oil, fueled by war in the Middle East, permanently altered the North American model for transportation. Many at the time, with the fall of Saigon in 1975, believed that the end of the American capitalistic hegemony was near.

$10,000 invested in the Dow in 1974 would be worth more than $500,000 today (including the reinvestment of dividends). Over 37 years, the annual return has been 11%, which is pretty much in

[1] Published in *Financial Analyst Journal*, September/October, 1974

line with the 10% historical return of stocks. The prediction of Warren Buffett's mentor proved unquestionably accurate.

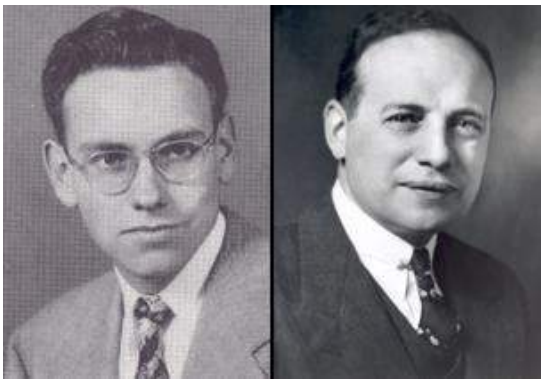

Figure 1: Warren Buffett as a student and Professor Ben Graham
(Source: Columbia University; circa 1951)

I also made a prediction this year which was published in the Montreal Gazette newspaper on August 30th (I have a bi-weekly column since January of 2011). During the panic of August/September, I predicted that within five years (by 2016), the Dow would rise to 17,000. My prediction isn't based on some fancy formula, but rather, by assuming corporate earnings would grow at an annual rate of 6.5% between 2011 and 2016 and then applying a P/E multiple of 15 to those earnings. Including dividends, this translates into an annual return of more than 10%.

Many experts, and many lesser experts, predict all sorts of things without facing their audience once their prediction are proven far-fetched (as they often do). At Giverny Capital, we don't play this game of predictions without a post-mortem assessment. We look forward to revisiting this prediction in the 2016 Annual Letter to our partners.

A Memorable Meeting in February 2011

It's not often you have the opportunity to meet one of your childhood heroes. Twenty years ago, fresh out of university, I started to get interested in the market. In November 1992, after juggling with all sorts of investing approaches, I read "One Up on Wall Street" by Peter Lynch.

Afterwards, I read everything I could find about Mr. Lynch and subsequently, on Warren Buffett (since Mr. Lynch had said that he was the best investor of all). These readings engraved the investment philosophy that has been behind the management of our portfolios since.

Last February, we received a very special invitation: Peter and his wife Carolyn invited us to their apartment in Boston to discuss about the stock market. Nicolas, Jean-Philippe and I had the chance to meet this legendary investor.

Mr. Lynch hasn't been involved in the management of mutual funds for several years now, but he does continue to manage a few portfolios with the same enthusiasm that has always been part of his approach. We talked about our favorite ideas, particularly within the retail and restaurant industries—a sector that Mr. Lynch has always enjoyed following.

Figure 2 : Jean-Philippe, François, Peter and Nicolas

The Flavor of the Day for 2011

Each year, we elect our "flavor of the day" for the year. In other words, what is popular (and what will eventually likely yield little financial reward). In the last three Annual Letters, I have named the following "flavors": bonds, Canadian real estate and gold. These assets continue to remain popular.

I would dare to say that the "flavor of the day" is to detest stocks and the markets (the "Occupy Wall Street" movement embodies this quite well). Since our premise is to advocate caution and to not let ourselves be charmed by the "flavor of the day", the little sympathy garnered by stocks these days only reinforces our enthusiasm. Our enthusiasm is, of course, tied to the compelling market valuations of the stocks we own. But it is amplified (if not confirmed) by the negativity of most market participants.

Owner's Earnings

At Giverny Capital, we do not evaluate the quality of an investment by the short-term fluctuations in its stock price. Our wiring is such that we consider ourselves owners of the companies in which we invest. Consequently, we study the growth in earnings of our companies and their long-term outlook. Since 1996, we have presented a chart depicting the growth in the intrinsic value of our companies using a measurement developed by Warren Buffett: "owner's earnings". We arrive at our estimate of the increase in intrinsic value of our companies by adding the growth in earnings per share (EPS) and the average dividend yield of our portfolio. This analysis is not exactly precise but approximately correct. In the non-scientific world of the market, and as Keynes said: "it is better to be roughly right than precisely wrong."

This year, the intrinsic value of our companies, as a whole, rose by 17% (16% from the growth in earnings and 1% from the average dividend). Despite changes to our portfolio during the year, we consider this growth in earnings to appropriately reflect the economic reality of our group of companies. The stocks of our companies rose 6% (without the effect of currency), which can only

mean one thing: our companies are more undervalued at the current moment than they were at the beginning of the year. And it was the same story for the S&P 500: the underlying earnings growth of its companies was 17% and the index only rose by 2%.

	Giverny			S&P 500		
Year ***	Value *	Stock **	Difference	Value *	Stock **	Difference
1996	14%	29%	15%	13%	23%	10%
1997	17%	35%	18%	11%	33%	22%
1998	11%	12%	1%	-1%	29%	30%
1999	16%	12%	-4%	17%	21%	4%
2000	19%	10%	-9%	9%	-9%	-18%
2001	-9%	10%	19%	-18%	-12%	6%
2002	19%	-2%	-21%	11%	-22%	-33%
2003	31%	34%	3%	15%	29%	14%
2004	21%	8%	-12%	21%	11%	-10%
2005	14%	15%	0%	13%	5%	-8%
2006	14%	3%	-11%	15%	16%	1%
2007	10%	0%	-10%	-4%	5%	9%
2008	-3%	-22%	-19%	-30%	-37%	-7%
2009	0%	28%	28%	3%	26%	23%
2010	22%	22%	0%	45%	15%	-30%
2011	17%	6%	-11%	17%	2%	-15%
Total	594%	474%	-120%	206%	172%	-34%
Annualized	12.9%	11.5%	-1.3%	7.2%	6.5%	-0.8%

* Estimated growth in earnings plus dividend yield
** Market performance, inclusive of dividends
*** Results estimated without currency effects

Since 1996, our companies have increased their intrinsic value by 594%, or about a sevenfold increase. Meanwhile, the value of their stocks has increased 474% (without currency effect). During this same period, the companies comprising the S&P 500 increased their aggregated intrinsic value by 206% and saw their stock prices rise by 172%. Market performance and corporate performance are rarely synchronized over the course of a calendar year. But as more time passes, the synchronization between the two begins to reveal itself.

Over 16 years, our portfolio has realized a return that is 5% higher than the S&P 500 for the simple reason that the underlying companies in our portfolio have increased their intrinsic value at a rate that is 5% higher than the average.

Five-year Post-mortem: 2006

Like we do every year, we go through a five-year post-mortem analysis. We believe that studying our decisions in a systematic manner, and with the benefit of hindsight, enables us to learn from both our achievements and our errors. 2006 was a difficult year for our investment style and we had our worst year relative to market indices. Our reaction was to remain loyal to our philosophy. *"If we are on right path, the only thing left to do is to keep walking"* is what we wrote in the beginning of our Annual Letter that year. Many companies in our portfolio saw their stock prices decline despite their

EPS increasing. Fastenal's stock, for example, declined 8% even though its earnings increasing by 21%. Fastenal's stock price has doubled since… because its EPS has doubled.
Over the course of the five years since 2006, our holdings have returned +5.1% annually versus an annual loss of 0.4% for the indices (without considering the effect of currency). During the economic tempest of the last years, the ship built from our portfolio companies held fast and our capital was adequately protected. We are back on the path to reach our ambitious goal of outperforming the indices by 5% on an annual basis.

In 2006, in the "flavor of the day" section, we discussed Canadian banks. Canadian banking stocks were climbing 15% annually at the time and many investors were in love with them. I explained that stocks such as Scotiabank and the Bank of Montreal had done well primarily because their P/E multiples had expanded from 8x in 2000 to 14x in 2006. I added that *"In the long run, in a Canadian economy which grows at 5% per year, it seems to be unrealistic to believe that all the players of the banking industry will be able to do much better than this growth rate."* Since then, over the last five years, the stock of the Bank of Montreal has gone from $69 to $56, while Scotiabank's stock threaded water—going from $52 to $51.

Significant Buys from 2006

In 2006, we bought shares in two new companies: Mohawk Industries located in Georgia, and Bank of the Ozarks located in Arkansas.

Mohawk is the largest floor covering company in the US (includes carpeting, wood flooring, and tiles). I've always admired its CEO, Jeff Lorberbaum. In 2006, the stock dropped and I saw an opportunity to buy shares at $75. Today, the stock is trading around $64. Therefore, this has not been a good investment so far. The company was heavily affected by the depression in residential construction in the US. We were aware at the time that this sector was experiencing some difficulty, but since this segment was only 15% of the company's revenue, we were confident that the company's prospects remained bright. But the recession of 2008-09 affected the company's earning power more than anticipated and—as a result—its stock price followed suit.

EPS dropped from $7.31 in 2006 to $2.53 in 2009, and then bounced back to $3.77 in 2011. The company is still a long ways from the profitability level it enjoyed before the crisis. Despite this, we still like the company's management and are convinced that a rebound in this industry is around the corner.

Bank of the Ozarks has been a more rewarding investment. We bought this stock at the end of 2006 and it doubled over the next five years.

Bank of the Ozarks is a bank in Arkansas (the Ozarks is a region in the north of this state). Although Bank of the Ozarks has existed since 1903, it wasn't until 1979 that the company started to shine, when 25-year old George Gleason took control of the bank. The company only had $28 million in assets at the time. It now has more than $3.8 billion in assets. The company went public in 1997 at $2 per share (adjusted for stock splits) and the company's stock price has increased fifteen fold since (an annualized return of 21%).

I met Mr. Gleason in November 2006 at their headquarters in Little Rock. I was very impressed by his easygoing manner and that of his upper management (about fifteen VPs welcomed me that day). I had the feeling that Mr. Gleason knew each loan on the bank's books. Nothing exotic (or esoteric), no subprime mortgages, no incomprehensible derivative products: only traditional banking activities. The

company had a low cost structure and very few bad loans. Its conservatism enabled the bank to not only survive the financial crisis of 2008-2009, but to also make excellent acquisitions at very compelling prices in the aftermath.

In fact, Ozarks was able to increase its assets by 50% due to the crisis (thanks to many acquisitions made at bargain prices and aided by the FDIC[2]). We bought shares in 2006 at $15, when the company was earning $.95 per share. We paid a premium to the typical P/E multiple we would pay for a bank but believed it deserved such a premium.

While the majority of banks are earning less in 2011 than they did in 2006, Ozarks has doubled its EPS over five years—and the stock price has followed suit. More interestingly is that Ozarks, with its prudent management, is probably one of the least risky banks in the US. Despite the widespread stereotype, risk and reward don't necessarily always go hand in hand.

Graph 1: Shares of Bank of the Ozarks from 2006 to 2011

Market volatility is a whole other thing. Two years after buying Ozarks, the stock dropped by 50%. If you have a good memory, you will remember that in the quarterly letter from June 2008 (when we were answering questions from our partners), we had this question: *"What explains the crumbling stock of Bank of the Ozarks? In today's trading session alone, for example, the stock lost another 10%."* I responded that nothing explained this drop and that the fundamentals of the bank seemed intact and that we should not let ourselves by affected by short-term market fluctuations.

[2] The Federal Deposit Insurance Corporation (FDIC) is a governmental entity guaranteeing banking deposits in the US and that can, when necessary, take temporary control of struggling banks.

Our Companies

"Wealth is the product of Man's capacity to think."

- Ayn Rand

American Express (AXP, $47)

Amex had an excellent year: revenues climbed 9%, cards issued rose 7%, and EPS increased 22% to $4.09. The average amount spent by cardholders was $14,881—12% higher than in 2010. This figure is about five times more than Visa or MasterCard. But the best news was that the level of write-offs for bad loans has been gradually declining from 4.3% at the end of 2010 to 2.3% during the last quarter of 2011.

Amex earned 21% more in profits than in 2007—the year before the financial crisis. Strangely, its stock price has decreased from $65 to $47: the P/E multiple has therefore been tumbling from 19x to 11x. The financial crisis was a benefit for Amex. The company was able to adopt the structure of bank and lower its borrowing costs (by being able to pay less interest on its deposits). The company was also able to gain market share relative to other card issuers. Above all, Amex demonstrated that it was able to navigate through one of the worst financial crises in history and that its business model (which is more integrated than that of Visa or MasterCard) was intact.

We consider American Express one of the strongest brands worldwide and we believe this company is worth far more than 11 times earnings.

Bank of the Ozarks (OZRK, $30)

For 2011, shares of Bank of the Ozarks rose 17%. Non-performing loans decreased from 1.72% in 2010 to 1.17% in 2011. EPS climbed by 56%, to $2.94, though there were some non-recurring items. I estimate that its earning power is about $2 per share.

Berkshire Hathaway (BRK.B, $76)

The company led by the legendary Warren Buffett was very active in 2011. Berkshire made several significant acquisitions (the largest of which was the $9 billion purchase of Lubrizol). The company also made massive purchases in its stock portfolio and announced a share buyback (see the conclusion of this letter). A second co-manager, Ted Weschler, was hired to potentially succeed Warren Buffett. The financial titan of Omaha is stronger than ever.

With its stock price threading water, Wall Street remains myopic to the company's intrinsic value and its long-term potential (it is still trading for 20% less than it did in 2007). That's just fine with us: we bought more shares throughout the year at very good prices.

Buffalo Wild Wings (BWLD, $68)

We bought shares in this interesting American restaurant chain two years ago. As its name suggests, this company specializes in selling chicken wings and a number of accompanying sauces. The theme of the restaurant is one of a sports bar (a bit like the "Cage aux Sports" which we know quite well here in Quebec). The company is growing quickly and now has 824 restaurants (with 519 operating as franchises). Revenues for 2011 grew by 28% and EPS rose 32%. The company maintains a return on equity of 20% which is excellent for the restaurant industry. From 2007 to 2010, the restaurant

industry experienced four consecutive negative years of comparable sales. Buffalo Wild Wings, however, maintained an average organic growth rate of 3%. In 2011, their organic growth rate was 5% while the industry overall grew at only 1%.

Of course, like any company that relies on cloning its concept (for a restaurant or a retail store), there is a maturity plateau that eventually needs to be reckoned with. We believe that the company can at least double its restaurant base before reaching such a saturation point. The company even now has four restaurants in Canada and is aiming to open 16 new locations here in 2012 and hopes to reach 100 restaurants within a couple of years.

Carmax (KMX, $31)

The fiscal year at Carmax ends on the last day of February. We are anticipating EPS and sales growth of 10% for fiscal 2011-2012. The company now has 107 stores in the US but still only has 3% of the used car market. Carmax is planning on opening 10 to 16 stores per year for the next five years (or about a 60% increase in the size of its current retail footprint).

We have been shareholders in Carmax since 2007. Although it hasn't been an easy time for American consumers, Carmax still managed to double its earnings per share since our purchase and the stock has risen by 50%. Few companies have an annual growth potential of 15% for the next decade and when we have the opportunity to buy such a company at less than 15 times earnings (like we did during the year), we become even more enthusiastic.

5N Plus (VNP-T, $5)

2011 was a transformative year for 5N Plus. The company quadrupled in size by acquiring the Belgian company, MCP Group SA. The latter is world's largest producer and distributor of bismuth (with 50% of the market), gallium, indium, selenium, and tellurium. 5N Plus paid $317m for this business by using cash, selling debt and issuing more shares. This allowed 5N Plus to reduce its dependency on the American firm First Solar and on solar energy in general—which experienced a horrible 2011!

Since the acquisition, the company's shares have slid from $8 to $5 due to the falling prices of a number of metals that the 5N Plus sells. The company is the leader in the markets for bismuth and cadmium telluride (used in solar panels) and we believe that the company will be able to maintain attractive margins despite fluctuations in base metal prices. The company adds value through its purification activities. The company is trading at nine times its 2012 estimated earnings and seems undervalued.

Disney (DIS, $38)

Disney had an excellent 2011. Earnings rose by 17% and ESPN continued to spearhead the company's strong earnings. Strong theatrical releases (such as Cars 2, Pirates of the Caribbean 4 and Thor) also contributed significantly. The number of subscribers to the Disney Channel reached 100 million and the company started construction of its theme park in Shanghai.

Bob Iger remains, in my opinion, one of the best CEOs in the US. For 2012, we are estimating EPS of more than $3. The stock is therefore trading at only 13 times estimated earnings.

Dollarama (DOL-T, $45)

Two years ago, we were thrilled by the IPO of a company we had long admired: Dollarama. The reason for this admiration is simple: for us the company's founder and CEO, Larry Rossy, is one of the best businessmen in Canada. We bought shares after the IPO and the stock has done very well—doubling in value since.

Figure 3: Larry Rossy, CEO of Dollarama (Photo: Globe and Mail)

After the first three quarters of 2011 (its fiscal year ends on January 31), revenues rose by 12%, same-store sales increase 4.4%, and EPS surged 46%. We knew that net margin could expand but the performance of 2011 exceeded our expectations. EPS should reach $2.45 in 2012 and the stock seems reasonably valued at the current level. We are keeping our shares with enthusiasm.

Fastenal (FAST, $44)

Fastenal hit a grand slam in 2011. Revenues rose by 22% and EPS climbed by 34%. This company from Winona (Minnesota) opened 122 new stores (selling nuts and bolts) in 2011—the company now operates 2585 stores.

We bought Fastenal in 1998 and it has been our most rewarding investment to date. This company has everything: a most boring primary business activity, a profitability level unrivaled in the industry, and a unique culture. Above all, the company is led by a management team dedicated to creating value with a long-term time horizon while always taking to heart its customers, employees and shareholders.

M&T Bank (MTB, $76)

M&T Bank had a good year. After extraordinary items, we estimate 2011 earnings per share of $6.74 which is 15% higher than 2010. Like Ozarks and Wells Fargo, bad loans are decreasing while profitability is increasing. M&T's return on its assets is about 1.2%. We believe that its return on asset could reach 1.5% in the long term, meaning that EPS could reach $11 in a few years.

MTY Food Group (MTY-T, $15)

MTY continued to acquire more brands in the quick service restaurant industry (with its restaurants primarily located in retail malls). In 2011, the company acquired:

- Koryo Korean BBQ (20 restaurants)
- Mr. Submarine (338)
- Jugo Juice (136)

Figure 4: Stanley Ma, CEO of MTY (Source: Canadian Business; Photo: Sylvain Dumas)

MTY now operates 2263 restaurants throughout Canada. In 2011, revenues rose by 17% and EPS increased 9%. Although the company significantly increased its operating expenses (after the acquisition of a production facility), we believe that these lower margins are temporary.

We remain admirers of Stanley Ma, the CEO of MTY, and we believe that the company's long-term prospects are very bright. The company also distributes now roughly a quarter of its profits in dividends.

Omnicom (OMC, $45)

Omnicom, the largest advertising firm in the world, had an excellent year in 2011. Revenues rose by 11% and EPS by 24% (partly boosted by the company buying back 7% of its shares outstanding during the year). Omnicom also raised its dividend by 25%.

We have been shareholders in Omnicom since 2008 and have earned a good return since. The stock is only trading at 12 times earnings. So, it seems to us that its potential for appreciation is excellent.

O'Reilly Automotive (ORLY, $80)

In 2011, O'Reilly continues to reap the benefits of its courageous acquisition of 1492 CSK stores in 2007-2008 (courageous because this acquisition was completed in an environment of great pessimism towards the retail sector). In four years, the number of stores has increased from 1830 to 3707 and

sales have risen from $2.5b to $5.8b. Above all, EPS has climbed from $1.67 to $3.81. In 2011, sales rose by 10%, with 5% coming from same-store sales. EPS increased by 22%.

Since our purchase in the summer for 2004, the total growth in earnings has been 350% (or 20% annually). The stock has quadrupled.

Resmed (RMD, $26)

2011 was a difficult year for Resmed. Revenues rose 12% and EPS increased about 7%. These results are good but we are beginning to see a significant slowdown in the company's growth. Since we bought shares in this Australian company back in 2004, it has grown its revenue from $340m to $1.2b—an annualized growth rate of 20%. It has been a satisfactory investment.

We decreased our position in this company during 2011. The company's growth rate, as mentioned, has been slowing over the last couple of years (while its valuation by the market remained fairly high). The company's founder, Peter Farrell, has also been looking for a successor for some time now—without much success. We would consider increasing our position if we see a clear path to returned growth.

Stryker (SYK, $50)

Sales at Stryker rose by 11% in 2011, to $8.3b, while EPS increased by 14%. The most significant news of the year was Stryker's purchase of the neurovascular division of Boston Scientific. This acquisition enabled Stryker to grow its neurology revenue by 49%. This segment now represents 17% of the company's revenue and Stryker continues to diversify its medical products portfolio.

We anticipate another 10%+ increase in earnings for 2012. In 2013, however, the company will have to begin paying a new 2.3% medical products tax for its US revenue (about two thirds of its business). This will have a minor impact on Stryker and the company, with its excess cash, should be able to acquire new sources of revenue.

Visa (V, $102)

Visa's 2011 revenue and EPS increased by 14% and 24%, respectively. The stock rose from $70 to $102 as the worry about the Durbin financial reforms began to dissipate. Regulations regarding debit card transaction charges turned out to be less harsh than initially anticipated.

Our purchase of Visa, which occurred last year when its shares dropped precipitously, has so far been quite rewarding. The company also benefited from its shares dropping at the time by buying back 43 million shares of its stock at an average price of $75 (effectively returning $3.2b to shareholders). Despite the lower debit card transaction fees anticipated for 2012, Visa estimates that EPS will grow 15% or more during the current fiscal year.

Wells Fargo (WFC, $28)

Wells Fargo had an excellent year. EPS climbed to $2.82—a new record. Deposits increased from $838b to $912b, (with an average interest rate of .22%). Non-performing assets (bad loans) continued to drop during the year and the bank's return on assets continued to increase. Wells Fargo's Tier 1 ratio (an indicator of its financial strength) rose from 8.3% last year to 9.5% at the end of 2011.

We expect EPS of $3.35 for 2012. We therefore continue to believe that the stock is highly undervalued. It's trading at 10% less than what it did at the same time last year even though we think that its earning power has increased by 20%.

New investments for 2011

Google (GOOG, $646)

We bought a position in Google, as we wrote in our quarterly letter from last June. We are generally not fond of technology companies. We have observed over the course of several years a number of technological shifts that rendered obsolete once outrageously dominant companies.

But in our eyes, Google isn't really a tech company. It is first and foremost a service provider with the type of dominant brand we have seldom seen in our careers. Using Google to find something on the Internet has become the norm and has now even become a verb in our language (to "google"). We love these types of dominant brands because they are so well entrenched and because they cannot just be attacked by money and are not as prone to fad.

We bought our shares when the company's stock experienced a market correction during the year.

Valeant Pharmaceuticals (VRX.T, $47)

We have followed the pharmaceutical industry for some years and have owned shares in a diverse group of companies in this space at various times over the last 19 years. For some time now, the economic model of this industry—based on the constant discovery and marketing of new drugs—hasn't been working as well as it once did. A former consultant from McKinsey, Michael Pearson, proposed a new model for the industry. Armed with a pro-shareholder attitude and a value investing mindset, Pearson took over at the helm of Valeant in 2008.

Since then, due to numerous acquisitions coupled with disciplined resource optimization, revenues at Valeant have increased from $872m to more than $2.5b. Operating margins have risen from 19% to 35%. Mr. Pearson seems to be an exceptional CEO, despite the inherent complexity of this industry, and he has our vote of confidence to continue creating shareholder value. When the stock price had a correction last fall, the company bought back its own shares (and Mr. Pearson himself also increased his ownership). We did the same: we first bought shares in Valeant at the beginning of the summer and doubled our position during the fall.

Due to its merger with Biovail, Valeant became a Canadian corporation. Despite the company's excellent performance on the market (tripling in two years), we believe that this stock is still undervalued. With our estimated profit of $4 per share for 2012, the stock's P/E is still only 12 times.

IBM (IBM, $184)

In 1995, I wrote an article for the Journal Les Affaires entitled *"IBM's Turnaround Largely Goes Unnoticed by Wall Street"*. For those who might remember, the company had some very serious problems a couple of years prior. In 1993, Louis V. Gerstner became CEO and orchestrated one of the greatest turnarounds in corporate history. At the beginning, Wall Street—still licking its wounds with the company—avoided the stock. IBM was trading at $20 (adjusted for splits) at the time, which was eight times its EPS. I considered this a very a very compelling valuation. For some odd reason, I only bought shares for one partner (who is still with us today and who must recognize himself) and I only

kept those shares for a brief period of time. I don't really have an explanation for not buying more shares aside that I must have found other even more appealing companies at the time.

But I continued to follow the work of Mr. Gerstner until his retirement in 2002. The stock had risen from $20 in 1995 to $135 in 2000 (at the top of the tech bubble) and then tumbled back to $60 in 2002. I continued to follow the company under the new management team. EPS went from $2.76 in 1995 to $6.01 in 2006 (a 7% annual growth rate). Then, in the five years that followed, EPS more than doubled and topped $13 in 2011 (a 17% annual growth rate). The company's accelerating earnings growth during the last years is the fruit of an optimal (and exemplary) use of its corporate and financial resources. Aside from brilliantly managing its operating activities, IBM also aggressively bought back its own shares.

In 2011, I finally stepped on my pride and we decided to buy shares in IBM, after comparing it with other blue chips we owned in our portfolio. It seemed to us that IBM was better managed while its market valuation was just as compelling as the other companies.

It is worth noting that, aside from 1995-1996 and 2008-2009, IBM's P/E has never been as low as it is now (12 times). It seems to us that Wall Street still hasn't fully realized the extent of the company's performance.

The Podium of Errors

"A life spent making mistakes is not only more honorable, but more useful than a life spent doing nothing."

- George Bernard Shaw

Following in the "Givernian" tradition, here are our three annual medals for the "best" errors of 2011 (or from past years). It is with a constructive attitude, in order to always improve as investors, that we provide this detailed analysis. As is often the case with stocks, errors from omission (non-purchases) are often more costly than errors from commission (purchases)… even if we don't see those on our statements.

Bronze Medal: Hansen Natural (now Monster Beverage)

About five years ago, a longtime friend, Jean-Louis Gauvreau, spoke to me with great enthusiasm about Hansen Natural. The company manufactures and markets an energy drink called Monster. The company's products are very popular and Hansen is highly profitable. Although Red Bull is the leader in this market, there seems to be ample space for other beverages in this industry. Jean-Philippe and I decided to push our research beyond its financial statements: we drank this beverage. After finding the taste rather strange, we just couldn't see the appeal of the product. But we decided to continue to study the company anyway!

In 2008, Hansen ran into a couple of tough quarters but managed to reinvigorate its growth due to, among other things, a distribution deal with Anheuser-Bush from 2007 and the introduction of new products. I knew that the deal with the behemoth behind Budweiser would prove highly beneficial and Hansen's plummeting stock price (which cratered from $34 to $11) offered an excellent occasion for us to buy. But I decided to pass.

In 2011, the company is twice as profitable as it was four years before. The stock has recently reached $50—about four times the price at which I had considered buying. I should have drank more of their product to stay awake!

Silver Medal: Healthcare Services Group

This error has been a long time in the making. In 1994, I discovered this interesting business: Healthcare Services Group. HSG is a provider of cleaning and janitorial services primarily for hospitals and healthcare facilities. It is difficult to find a more boring business. No one on Wall Street followed this company. But the company had terrific potential with little competition and a very reasonable valuation (with a P/E of 14x). The company had solid sales growth but its margins were low (and weakening). Its return on equity was therefore modest (return on equity is a key criteria at Giverny Capital). I lost interest.

HSG recently appeared in Value Line and I noticed the progress the company had made during the 16 years after I stopped following it. During many years, margins continued to weaken (reaching a low of 2% in 2000) and EPS went nowhere. Starting in 2001, however, the company started to grow again and EPS increased fivefold over the next 10 years. Even better, the company started paying a dividend in 2003 and has increased its payment every year since. Today, all of the company's earnings are actually paid out in dividends. For a company to continue to grow while no capital is retained is quite an accomplishment.

Over 10 years, revenues have risen from $284m to $865m and EPS rose from $.13 to $.60. The stock has risen from $1.40 to $19—a 1200% increase. The current market valuation is high (27 times its estimated earnings for 2012) but the dividend payment helps maintain such a rich valuation. High tech companies generating lots of cash and not giving any of it back to shareholders would have a lot to learn by looking at the Value Line report on HSG.

What was my error? It was to stop following this company. Starting in 2005, it would have been obvious that the company was significantly improving its business model. I would have missed the first wave of appreciation in the stock but we still would have tripled our investment in six years. Not counting an average dividend payment of 3%.

Gold Medal: Restaurant Companies in 2008

At the beginning of 2008, all sectors linked to consumer spending in the US (retail chains, restaurants, etc.) were depressed. Wall Street was worried—with reason—about a deep recession caused by the high debt levels of American families. Stocks in these sectors had dropped significantly.

In February 2008, well before the great market decline from the fall of that year, restaurant stocks seemed attractively priced and I went ahead and made a list of three potential candidates. The list was published in an article in the Journal Les Affaires about the restaurant sector. I was quoted as saying: *"Mr. Rochon believes that the worry concerning consumer spending will create purchasing opportunities in the US. He likes Cheesecake Factory, Buffalo Wild Wings and Panera Bread. Their concepts are working well and they can open many more locations."*

I knew Cheesecake Factory well. It's a chain I discovered while I was in Kansas City in 2004 (during my trip to Missouri to visit O'Reilly Automotive). I had also been a fan of Panera Bread for many years. Here is the performance of these three stocks relative to the S&P 500 (since the date that the article in Journal Les Affaires was published almost three years ago):

Stock	Feb 15, 2008	Dec 31, 2011	Gain *
Buffalo Wild Wings Inc.	$25.0	$67.5	170%
Cheesecake Factory	$20.5	$29.4	43%
Panera Bread	$38.3	$141.5	269%
Average			161%
S&P 500	1350	1258	-7%

* market returns not including dividends

These three stocks have, on average, risen 161% over 46 months. This is a phenomenal performance, especially when compared to the S&P 500 which decreased 7% during the same period (not inclusive of dividends). Sadly, we only slightly benefited from this surge by buying Buffalo Wild Wings in 2009 at $40—and then only putting to work a very modest sum of capital (about 2% our portfolio).

I knew that it was a perfect occasion to buy these high growth companies at good prices. But unfortunately, I remained seated in the bleachers and didn't act on my enthusiasm.

Conclusion: the First Share Buyback for Warren Buffett in 47 years!

The financial crisis of 2008-09 created the opportunity for Mr. Buffett to make billions of dollars by making sound investments at good prices and shareholders in Berkshire Hathaway profited enormously from these purchases. The value of these investments has already been realized in some cases (such as preferred shares he already resold in 2011), and others are still being realized. Regardless, the assets recently purchased at well below their intrinsic values will be a source of great financial reward in the years to come.

Strangely, the market has yet to adequately reflect the growth in intrinsic value at Berkshire Hathaway since 2008. During last September, the stock was trading near the level of $70. At that time, we increased our position in Berkshire by 50% and we consider this perhaps one of the best occasions to have bought this stock in our lifetime. If Mr. Buffett was a few years younger, we probably would have bought even more.

Warren Buffett also announced at the time that Berkshire Hathaway would be buying back some of its own shares. The reason he provided was very simple: "the stock seems undervalued". Mr. Buffett had announced a buyback in March of 2000 but the stock proceeded to climb so quickly that he was never able to carry out his announcement. This time around, we were a bit more "lucky": the stock didn't rise much and the company was able to buy back a good portion of its stock for the first time since Mr. Buffett became president in 1965. This should prove very rewarding to us.

To Our Partners

The rigor of our investment selection process enabled us to get past the great crisis of 2008-09 and also through the market correction of last summer. Our companies have the balance sheets and management teams in place to not only survive these types of crises, but to also increase their market share and competitiveness during these difficult times. The outlook for our companies is excellent and we believe that this is an opportune time to invest should you have excess capital.

We also want you to know that we are fully aware and grateful for your vote of confidence. It is imperative for us to not only select outstanding companies for our portfolios, but to also remain outstanding stewards of your capital.

The entire team at Giverny Capital thanks you.

We wish a great 2012 to all our partners.

François Rochon and the Giverny Capital team

APPENDIX 1

Investment philosophy

Note: This section is repeated from prior annual letters and is aimed at new partners.

In 2011, we saw a large increase in the number of Giverny Capital partners (the term we use for our clients). With all these newcomers, it is imperative that we write again (and again) about our investment philosophy.

Here are the key points:

- We believe that over the long run, stocks are the best class of investments.
- It is futile to predict when it will be the best time to begin buying (or selling) stocks.
- A stock return will eventually echo the increase in per share intrinsic value of the underlying company (usually linked to the return on equity).
- We choose companies that have high (and sustainable) margins and high returns on equity, good long term prospects and are managed by brilliant, honest, dedicated and altruistic people.
- Once a company has been selected for its exceptional qualities, a realistic valuation of its intrinsic value has to be approximately assessed.
- The stock market is dominated by participants that perceive stocks as casino chips. With that knowledge, we can then sometimes buy great businesses well below their intrinsic values.
- There can be quite some time before the market recognizes the true value of our companies. But if we're right on the business, we will eventually be right on the stock.

Experience and common sense teach us that an investment philosophy based on buying shares in companies that are undervalued, and holding these companies for several years, will not generate linear returns. Some years, our portfolio will have a return that is below average. This is a certainty that we must accept.

Another important point: the significant volatility of the market is often perceived negatively by many investors. It's actually the contrary. When we see stock prices as *"what other people believe the company is worth"* rather than the real value (at least in the short term), these fluctuations become our allies in our noble quest for creating wealth. Instead of fearing them, we can profit from them by acquiring superb businesses at attractive prices. The more that markets (the "other" participants) are irrational, the more likely we are to reach our ambitious performance objectives.

Benjamin Graham liked to say that the irrationality of the market was an extraordinary advantage to the intelligent investor. The person, however, who becomes affected by short-term market fluctuations (less than 5 years) and who take decisions based on them transforms this advantage into a disadvantage. His or her own perception of stock quotes becomes their own worst enemy. Our approach at Giverny Capital is to judge the quality of an investment over a long period of time.

So patience – ours AND that of our partners – becomes the keystone for success.

APPENDIX 2

Notes on the returns of the Giverny portfolios

- The Giverny portfolio is a private family group of accounts managed by François Rochon since 1993. The returns of the period from 1993 to 1999 were realized before registration of Giverny Capital Inc. at the AMF in June of 2000.
- The Giverny portfolio serves as a model for Giverny Capital's clients. But returns from one client to the other can vary depending on a multitude of factors, such as the timing of the opening and funding of a client's account.
- Past results do not guarantee future results.
- The returns indicated include trading commissions, dividends and other income but do not include management fees.
- The index benchmark group is selected at the beginning of the year and tends to be a good reflection of the asset composition of the portfolio. In 2010 :

  - Giverny Global Portfolio: TSX 14% Russell 2000 39% S&P 500 39% MSCI EAFE 8%
  - Giverny US Portfolio : S&P 500 100%
  - Giverny Canada Portfolio : S&P/TSX 100%

- An asset appraisal of the three portfolios is performed by PricewaterhouseCoopers (PwC) at the end of each year for each portfolio. PwC has audited all yearly statements since 1993.
- The PwC data are those provided by our custodian TD Waterhouse.
- An appraisal of each portfolio under management is sent by TD Waterhouse on a monthly basis.
- The PwC reports are available upon request.
- For more information, please see the "returns" section of our website.

Giverny Capital Inc.

Annual Letter to our Partners 2012

Lynne Cohen
Untitled (smiling couch) - 2011
Giverny Capital Collection

Giverny Capital Inc. – 2012 Annual Letter ©

For the year ending December 31st 2012, our portfolio's return was 21.5% versus 12.5% for our benchmark. Our return, including a loss of approximately 2% due to fluctuations in the Canadian currency, therefore outperformed our benchmark by 9.0%.

Since our inception, on July 1st 1993, our compounded annual growth rate has been 14.0% versus 7.0% for our weighted benchmark, representing an annualized outperformance of 7.0% over this period. When we exclude the effect caused by the appreciating Canadian currency since our inception, which represents an annualized increase of 1.3% since 1993, our portfolio has returned 15.4% annually versus 8.3% for our benchmark. Our long-term (and ambitious) objective is to maintain an annual return that is 5% higher than our benchmark.

The Artwork on Our Letter

Since 2004, we have illustrated the cover of our letter with a copy of an artwork from our corporate collection. This year we selected a photographic artwork by Lynne Cohen entitled "Untitled (smiling couch)".

The Giverny Portfolio (in Canadian dollars): Returns Since July 1st 1993

Return *	Giverny	Index **	+ / -	$ US/Can	Giverny ***	Index ***	+ / -
1993 (Q3-Q4)	37.0%	9.5%	27.6%	3.3%	34.4%	7.4%	27.0%
1994	16.5%	3.7%	12.7%	6.0%	12.0%	-0.3%	12.3%
1995	41.2%	24.0%	17.2%	-2.7%	43.8%	26.3%	17.5%
1996	28.0%	22.8%	5.2%	0.3%	27.7%	22.5%	5.2%
1997	37.8%	28.6%	9.2%	4.3%	33.4%	24.5%	8.9%
1998	20.6%	18.8%	1.8%	7.1%	14.5%	12.8%	1.7%
1999	15.1%	16.3%	-1.2%	-5.7%	20.6%	21.9%	-1.3%
2000	13.4%	3.2%	10.2%	3.9%	9.7%	-0.2%	9.9%
2001	15.1%	-0.4%	15.5%	6.2%	9.4%	-5.3%	14.7%
2002	-2.8%	-18.3%	15.6%	-0.9%	-2.0%	-17.7%	15.7%
2003	13.6%	14.0%	-0.4%	-17.8%	33.9%	34.3%	-0.5%
2004	1.6%	6.2%	-4.5%	-7.3%	8.3%	13.1%	-4.8%
2005	11.5%	3.6%	7.9%	-3.2%	14.5%	6.7%	7.8%
2006	3.5%	17.3%	-13.8%	0.2%	3.3%	17.1%	-13.8%
2007	-14.4%	-11.9%	-2.5%	-14.9%	-0.3%	2.4%	-2.7%
2008	-5.5%	-22.4%	16.9%	22.9%	-21.5%	-35.6%	13.9%
2009	11.8%	12.8%	-1.0%	-13.7%	27.7%	28.2%	-0.5%
2010	16.1%	13.9%	2.2%	-5.4%	21.7%	19.5%	2.2%
2011	7.8%	-1.0%	8.8%	2.3%	5.8%	-2.8%	8.6%
2012	21.5%	12.5%	9.0%	-2.2%	23.7%	14.6%	9.1%
Total	**1182.2%**	**270.8%**	**911.4%**	**-22.4%**	**1536.1%**	**371.5%**	**1164.6%**
Annualized	**14.0%**	**7.0%**	**7.0%**	**-1.3%**	**15.4%**	**8.3%**	**7.1%**

* Green section: all returns are adjusted to Canadian dollars
** Index is a hybrid index (S&P/TSX, S&P 500, MSCI EAFE, Russell 2000) which reflects the weight of the underlying assets
*** Estimated without the effect of currency

Note: Please refer to Appendix B for disclosure statements on the Giverny portfolios and their corresponding indices.

The Giverny US Portfolio

We have been publishing the returns of the Giverny US Portfolio, which is entirely denominated in US dollars, since 2003. The Giverny US Portfolio corresponds to the American portion of the Giverny Portfolio. In 2012, the Giverny US Portfolio realized a return of 22.8% compared to 16.0% for our benchmark, the S&P 500. The Giverny US Portfolio therefore outperformed our benchmark by 6.8%

Since its inception in 1993, the Giverny US Portfolio has returned 1318.7%, or 14.6% on an annualized basis. During this same period, the S&P 500 has returned 362.8%, or 8.2% on an annualized basis. Our added value has therefore been 6.4% annually.

Year	Giverny US	S&P 500	+/-
1993 (Q3-Q4)	32.7%	5.0%	27.7%
1994	9.9%	1.3%	8.6%
1995	54.8%	37.6%	17.2%
1996	27.0%	23.0%	4.1%
1997	32.9%	33.4%	-0.4%
1998	11.0%	28.6%	-17.6%
1999	15.9%	21.0%	-5.1%
2000	11.3%	-9.1%	20.4%
2001	8.1%	-11.9%	20.0%
2002	-4.4%	-22.1%	17.7%
2003	31.6%	28.7%	2.9%
2004	9.3%	10.9%	-1.6%
2005	12.5%	4.9%	7.5%
2006	3.3%	15.8%	-12.4%
2007	-1.7%	5.5%	-7.2%
2008	-24.3%	-37.0%	12.7%
2009	28.7%	26.5%	2.3%
2010	21.9%	15.1%	6.9%
2011	4.9%	2.1%	2.8%
2012	22.8%	16.0%	6.8%
Total	**1318.7%**	**362.8%**	**955.9%**
Annualized	**14.6%**	**8.2%**	**6.4%**

Note: Please refer to Appendix B for disclosure statements on the Giverny portfolios and their corresponding indices.

We outperformed the S&P 500 for a fifth consecutive year. No single stock was a factor to this outperformance and, when we looked to our performance attribution for 2012, we noted that nine out of our top ten holdings outperformed the S&P 500.

Giverny Canada Portfolio

We introduced a portfolio that is 100% focused on Canadian equities in 2007. This corresponds closely to the Canadian portion of the Giverny Portfolio. In 2012, the Giverny Canada Portfolio returned 24.2% versus 7.2% for the S&P/TSX, therefore outperforming the index by 17.0%.

Since 2007, the Giverny Canada Portfolio has returned 106.6%, or 12.9% on an annualized basis. During this same period, our benchmark had a gain of 14.4%, or a gain of 2.3% on an annualized basis. Our annual added value was therefore 10.6%.

Year	Giverny Canada	S&P/TSX	+/-
2007	19.7%	9.8%	9.9%
2008	-24.6%	-33.0%	8.4%
2009	28.2%	35.1%	-6.9%
2010	26.7%	17.6%	9.1%
2011	13.5%	-8.7%	22.2%
2012	24.2%	7.2%	17.0%
Total	**106.6%**	**14.4%**	**92.2%**
Annualized	**12.9%**	**2.3%**	**10.6%**

Note: Please refer to Appendix B for disclosure statements on the Giverny portfolios and their corresponding indices.

Our primary Canadian holdings performed very well in 2012. The all-star in our portfolio was MTY Foods, which rose 45%. Dollarama (+33%) and Valeant Pharmaceuticals (+28%) also performed well.

For five out of the last six years, the Giverny Canada Portfolio outperformed the TSX. It is also worth repeating that our Canadian portfolio is very concentrated and has little correlation to the TSX. So the relative performance, whether positive or negative, will therefore often be high.

2012: A Year in Review

Our portfolio companies, despite slowing Western and to some extent Eastern economies, continued to grow their profits and intrinsic values at a very satisfying pace. The market also adequately reflected this wealth creation in the case of the majority of our companies. We thought that 2012 was the "year of the stock picker" (in market astrology) and many investors who favor a diligent and rational method for selecting holdings for their portfolios were rewarded.

In the US, the residential real estate market has finally begun to show signs of a rebound, after six years of misery. And, despite a deep rooted skepticism from many people, the S&P 500 posted a total return of 16% for the year. The old adage about the market climbing a wall of fear (even a fiscal wall) never seems to have been more true.

The situation is different in Canada as companies linked to natural resources had a difficult year. Furthermore, the Canadian real estate market is showing signs that it is beginning to run out of steam. The S&P/TSX index only climbed 7% in 2012 and is still 13% lower than what it was in April 2011.

The economic situation in China plays an increasingly important role in the global arena. Yet, it is difficult to get a clear idea of the exact situation. Despite excellent GDP growth announced by the government, stock market investors in China have not been rewarded: in 2012, the Shanghai Stock Exchange (SSE Composite) was flat and it is still down 63% from its October 2007 high.

Looking towards Europe, several countries are mired in problems that will likely take years to resolve. In the case of some of these countries, the problems seem more cultural rather than economic. Moreover, the use of a common currency further complicates the situation. Yet, this does not prevent

us from admiring several European companies located in countries such as the United Kingdom, Sweden, Denmark, Italy, etc. Quality has no nationality.

An Energy Revolution in the US

Media outlets are quick to present us with one crisis after another, along with constant economic and political worries. With the help of the Internet and many television stations, bad news circles the planet in no time. With the right twist, plain old bad news begins to look more and more like an imminent catastrophe and for many investors, the perfect reason to sell their stocks! Good news, on the other hand, remains largely unnoticed since it seems to represent a less valuable source for ratings and clicks.

One piece of good news, which could have major consequences for several decades to come, is what we could call the American energy revolution. Five years ago, when oil was selling for $140 a barrel, a significant problem in the US was its trade deficit in global energy markets. The country's high energy demand couldn't be met by domestic supply which resulted in massive energy imports. The problem was also exacerbated by China's growing demand for energy resources. But the economic crisis of 2008-2009 reset the supply and demand equation. New oil reserves in the US have also been developed to the point where for each barrel produced between 2007 and 2009, there was 1.6 barrels of new reserves added. Oil prices collapsed to $40 in 2008 and have recently bounced back to $91—still quite a bit lower from its high just a few years prior.

Meanwhile, as supply and demand for oil has found a new equilibrium on a global level, new discoveries of oil and gas reserves in the American west (and the ability to extract it from shale), has the potential to completely change the energy balance in the US. In 2012, the US produced 6.4 million barrels of crude oil, an increase of 760,000 barrels from the prior year (a 14% increase). And the estimates predict an additional 25% increase within the next two years. As for natural gas, the amount of new reserves is simply astronomical. The International Energy Agency, in a report released last November, now predicts that the US will be energy independent by 2035.

So the US seems destined to significantly change the dynamics of its trade balance for energy. A decrease in its trade deficit (relative to GDP) will likely be the most important consequence. This should bolster the value of the US dollar and foster continued growth in states like Wyoming, North Dakota, and Montana.

Despite the optimistic tone of this section, none of this changes the fact that the energy industry is – to us – difficult to predict. The fact that it has changed so much since 2007 (and we did not foresee it) serves as evidence. This simply means that companies that operate in the energy industry are difficult for us to evaluate. We are quite disciplined in sticking within the boundaries of our circle of competence. On the other hand, we believe that we can indirectly benefit from this US energy boom through our investments in companies such as Union Pacific and Burlington Northern Santa Fe (now a part of Berkshire Hathaway).

Owner's Earnings

At Giverny Capital, we do not evaluate the quality of an investment by the short-term fluctuations in its stock price. Our wiring is such that we consider ourselves owners of the companies in which we invest. Consequently, we study the growth in earnings of our companies and their long-term outlook.

Since 1996, we have presented a chart depicting the growth in the intrinsic value of our companies using a measurement developed by Warren Buffett: "owner's earnings". We arrive at our estimate of the increase in intrinsic value of our companies by adding the growth in earnings per share (EPS) and the average dividend yield of the portfolio. This analysis is not exactly precise but, we believe, approximately correct. In the non-scientific world of the stock market, and as Keynes would have said: "It is better to be roughly right than precisely wrong."

This year, the intrinsic value of our companies, as a whole, rose by 19% (18% from the growth in earnings and 1% from the average dividend). Despite changes to our portfolio during the year, we consider this growth in earnings to appropriately reflect economic reality. The stocks of our companies rose approximately 23% (without the effect of currency). As for the S&P 500, the underlying earnings growth of its companies was 5% (8% including dividends) and the total return of the index was 16%.

	Giverny			S&P 500		
Year ***	Value *	Market **	Difference	Value *	Market **	Difference
1996	14%	29%	15%	13%	23%	10%
1997	17%	35%	18%	11%	33%	22%
1998	11%	12%	1%	-1%	29%	30%
1999	16%	12%	-4%	17%	21%	4%
2000	19%	10%	-9%	9%	-9%	-18%
2001	-9%	10%	19%	-18%	-12%	6%
2002	19%	-2%	-21%	11%	-22%	-33%
2003	31%	34%	3%	15%	29%	14%
2004	21%	8%	-12%	21%	11%	-10%
2005	14%	15%	0%	13%	5%	-8%
2006	14%	3%	-11%	15%	16%	1%
2007	10%	0%	-10%	-4%	5%	9%
2008	-3%	-22%	-19%	-30%	-37%	-7%
2009	0%	28%	28%	3%	26%	23%
2010	22%	22%	0%	45%	15%	-30%
2011	17%	6%	-11%	17%	2%	-15%
2012	19%	23%	4%	8%	16%	8%
Total	726%	606%	-120%	229%	216%	-13%
Annualized	13.2%	12.2%	-1.0%	7.3%	7.0%	-0.3%

* Estimated growth in earnings plus dividend yield
** Market performance, inclusive of dividends
*** Results estimated without currency effects

Since 1996, our companies have increased their intrinsic value by 726%, or about an eightfold increase. Meanwhile, the value of their stocks has increased 606% (including dividends but without currency effects). During this same period, the companies comprising the S&P 500 increased their aggregated intrinsic value by 229% and saw their stock prices rise by 216%. Market performance and corporate performance are rarely synchronized over the course of a calendar year. But as more time passes, the synchronization between the two inevitably begins to reveal itself.

Over 17 years, our portfolio has realized a return that is 5% higher than the S&P 500 for the simple reason that the underlying companies in our portfolio have increased their intrinsic value at a rate that

is 5% higher than the average. This is how we plan on continuing to reach our performance objectives in the future, rather than trying to speculate on the highs and lows of the market or trying to read the tea leaves of economic or political trends.

Five-year Post-mortem: 2007

Like we do every year, we go through a five-year post-mortem analysis. We believe that studying our decisions in a systematic manner, and with the benefit of hindsight, enables us to learn from both our achievements and our errors.

2007 was a very difficult year for our investment style. The soaring Canadian dollar weighed heavily on our portfolio returns that year. Furthermore, our holdings underperformed the index (it was difficult to outperform that year if you didn't own companies focused on natural resources). We wrote in our 2007 letter that the headwinds facings our companies seemed temporary in nature and that the next five years should bode well for our portfolios.

We added the following to the end of our 2007 letter: *"If there is a recession in 2008, we are ready. Historically, recessions in North America have been temporary. Our businesses have good balance sheets and they will profit from slowdowns by taking market share from weaker competitors or by making acquisitions at good prices."*

There was quite a recession in 2008-2009 and, as we had hoped, our companies weathered the storm and—in many cases—benefited by making advantageous acquisitions at bargain prices. Our portfolio has performed well since the beginning of 2008: the Giverny Global Portfolio has had a total return of 61% while its benchmark returned 11% (in Canadian dollars).

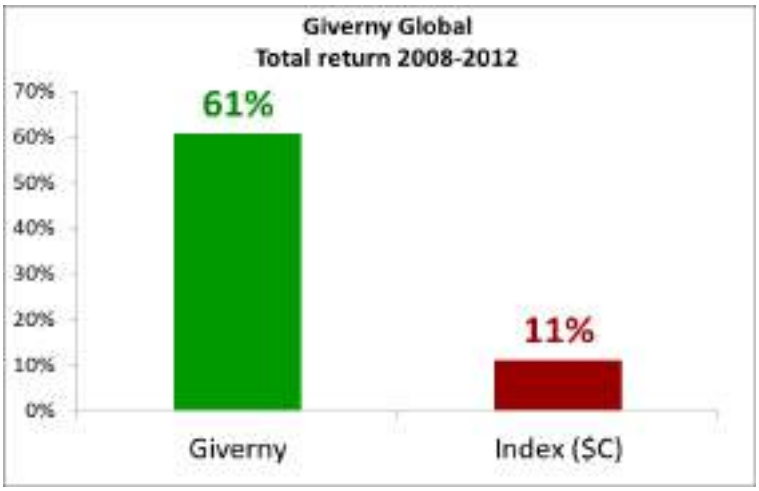

Note: Please refer to Appendix B for disclosure statements on the Giverny portfolios and their corresponding indices.

The Flavor of the Day for 2012

Each year, we select our "flavor of the day" for the year. In other words, we look for what is (too) popular and will eventually yield little financial reward. In the last three Annual Letters, we named bonds, Canadian real estate and gold as posing risks to fellow investors. While we remain confident that these asset classes will disappoint many, we don't see any other segments of the market that seem to suffer from exaggerated popularity these days.

A New Book on Benjamin Graham

We had a nice surprise this year: a new book on the father of value investing, Benjamin Graham. Joe Carlen's "The Einstein of Money" is an exceptional biography of Warren Buffett's mentor. I am convinced that all fans of value investing will find this book a fascinating read.

Our Companies

"Quality is never an accident; it is always the result of intelligent effort."

- John Ruskin

American Express (AXP, $58)

Amex had an excellent year: revenues climbed 5% and earnings per share (EPS) increased 8% to $4.40. The company also repurchased $4 billion worth of its own shares during the year. We consider American Express an exceptionally high quality international business. The stock also seems reasonably priced, trading at 12 times the company's estimated earnings for 2013.

Bank of the Ozarks (OZRK, $34)

2012 was yet another exceptional year for Bank of the Ozarks. Our bank, based in Little Rock, had EPS of $2.21. The profits from last year had a number of non-recurring items, making them more difficult to interpret comparatively. What is significant for 2012, however, is the bank posting a solid return on assets of 2.04% and an efficiency ratio (a measure of the bank's cost structure) of 46.6%. Its balance sheet also remains strong: the bank increased its equity to assets ratio from 10% to 12%.

We consider Ozarks to be one of the best banks in the US. Since 2006, EPS have risen from $0.95 to $2.21, an annualized increase of 15%. Very few banks can brag about having that kind of performance within the difficult economic climate of the last few years.

Berkshire Hathaway (BRK.B, $90)

The company led by the legendary Warren Buffett had an excellent 2012. The uptick in residential construction helped many of Berkshire's holding companies. We remain confident that Wall Street is still nearsighted about the intrinsic value of Berkshire and its long term potential. That's good news for us (since we're regular buyers) and we were happy to see the company continue to buy back its own shares at very compelling prices.

Buffalo Wild Wings (BWLD, $73)

Buffalo Wild Wings (BWW) is a chain of sports-oriented restaurants which, as its name suggests, specializes in selling chicken wings. We have been shareholders for three years and the company is growing very quickly, with the number of restaurants increasing from 493 at the end of 2007 to 891 at the end of 2012. The company is aiming for 1700 restaurants within a few years.

Revenues for 2011 grew by 33% but EPS rose by only 12%. Rising prices of chicken wings gnawed away at the company's margins. We are confident that BWW's long-term business model is sound and that margins should stabilize despite year to year fluctuations.

Carmax (KMX, $38)

The fiscal year at Carmax ends on the last day of February. For fiscal 2012-2013, we are anticipating sales and EPS growth of 10% and 7%, respectively. The company now has 117 stores in the US but still only has 3% of the used car market (and only 6% share in existing markets). The company is also launching smaller concept retail stores.

Carmax is planning on opening 10 to 15 units per year for the foreseeable future and aims to reach 160 stores in three years.

Disney (DIS, $50)

Disney had another excellent year in 2012. Earnings rose by 17% and the company's stock price rose by 32%. The film "Wreck-It Ralph" was a blockbuster, becoming the 75th film by Disney to gross more than $100 million. But the biggest news of the year was Disney's acquisition of *Lucas Film*, the famed studio started by George Lucas, the creator of the Star Wars empire. Disney plans to launch "Star Wars Episode 7" in 2015. This seems like a terrific acquisition for Disney and, vice versa, we think that George Lucas couldn't have found a better home to ensure the perpetuity of his work.

Bob Iger and George Lucas (Source: Disney)

We bought our first shares in Disney in September 2005 (the day that Bob Iger was named CEO). Since then, EPS has climbed 135% (an annualized growth rate of 13%) and the stock has risen from $24 to $50 (or 108%).

Dollarama (DOL-T, $59)

Three years ago, we were thrilled by the IPO of a company we had long admired: Dollarama. The reason our admiration is simple: for us the company's founder and CEO, Larry Rossy, is one of the best businessmen in Canada. We bought shares immediately and the stock has done very well, tripling in value since.

In 2012, Dollarama introduced two new fixed price levels for its goods: $2.50 and $3.00. This enabled the company to vastly expand its product offering.

The company's performance in 2012 exceeded our expectation. After the first three quarters of 2012 (the company's fiscal year ends January 31st), revenues increased 14%, same-store sales increased 7%, and EPS surged 33%. The company also increased its dividend and started buying back shares.

With EPS possibly reaching $3.50 in 2013, the stock seems reasonably valued at the current level.

Fastenal (FAST, $47)

Fastenal had another good year in 2012. Revenues rose by 13% and EPS climbed by 17%. One of the primary areas of growth for the company has come from the installation of vending machines at client sites. The number of vending machines has increased from 7,453 at the end of 2011 to 21,095 at the end of 2012.

The other factor to the company's growth in recent years has been significant productivity improvements at its existing stores. During the last quarter of 2012, sales per store reached $83,098, compared to $78,781 per store for the same quarter in 2011. The company's operating margins have increased from 20.2% to 20.9%.

We bought Fastenal in 1998 and it has been a very rewarding investment, even if the stock seemed on many occasions richly valued (trading at 30 times its earnings). For the last ten years, the annualized growth rate of Fastenal's earnings has been a whopping 19%. It may not be the latest technological craze of the day, but Fastenal sure knows how to sell nuts and bolts while delivering top notch customer service!

Google (GOOG, $707)

Google had a good year in 2012. Revenues rose 34% and EPS (according to our estimate) increased by 8%. The company continues its dominance of the search engine market, while its mobile operating system, Android, is rapidly taking market share from other competitors.

Google is a small position in our portfolio because we believe that the company could be a better allocator of excess cash flows (such as IBM, for example). Aside from this, we consider Google an exceptional company.

IBM (IBM, $192)

IBM had flat revenues in 2012 (without currency effect). EPS still rose by 10% for the year. This dominant information services company does a brilliant job at managing its capital, which is the primary reason why we are shareholders. It's so rare!

LKQ Corp (LKQ, $21)

LKQ is a new purchase. The company is the North American leader in the manufacturing and distribution of refurbished auto parts. The acronym for the company's name stands for "Like Kind and Quality", referring to the high quality of its recycled products.

Before buying shares in LKQ, I wanted to meet with the CEO at their offices in Chicago. His assistant explained to me that he was seldom at the headquarters and that he preferred being on-site at the company's other locations. I was curious to know more and eventually met the management team at a conference in New York. I was impressed with its quality and the growth outlook for this business, along with the prospect of industry consolidation, which made a compelling case to own shares in this company. The company has also just expanded overseas with a significant acquisition in the UK.

LKQ is growing very quickly: from 2007 to 2012, revenues rose from $1.1 billion to $4.1 billion. EPS has climbed from $0.27 to $0.84 (a 25% compounded annual growth rate). We estimate EPS for 2013 to come in around $1.05.

M&T Bank (MTB, $99)

M&T Bank had a phenomenal year. Net interest revenues rose 9% and reserves for bad debt dropped by 24%. Return on assets rose from 1.26% to 1.40% and its efficiency ratio dropped to 56%. EPS climbed by 20% to $7.88—a record level for our Buffalo-based bank.

M&T also completed another significant acquisition: Hudson City Bancorp. HCB has branches in New Jersey, Connecticut, Long Island, and regions north of New York City. This bank has a good track record, but had a very difficult year in 2011. We think the integration of HCB within M&T should go smoothly as M&T has done a great job at this for 30 years.

M&T Bank was rated one of the best banks for 2012 by Money Magazine

We bought shares for the second time in M&T Bank in 2009 for about $38 and the stock has performed well since. We had previously been shareholders between 1998 and 2007 for one single reason: we had deep admiration for the bank's CEO, Robert Wilmers. In 2007, Mr. Wilmers decided to retire and we sold. During the crisis of 2008, he decided to return to take back the helm at M&T Bank so we decided to buy again. Mr. Wilmers is now 78 and we hope he can stay another decade at M&T Bank.

MTY Food Group (MTY-T, $22)

MTY Food is an operator and franchisor of multiple quick service restaurant concepts. We have been shareholders in this superb Montreal-based company since 2007. MTY grew rapidly in 2012, with revenues rising 31% while EPS climbed 33%. The company acquired the "Mr. Souvlaki" chain in 2012 and also began signing international development agreements in places such as the UK, Lebanon, the UAE, and Saudi Arabia.

We continue to deeply admire the company's CEO, Stanley Ma, and remain confident in the company's future prospects.

Omnicom (OMC, $50)

Omnicom, one of the largest advertising firms in the world, saw revenues rise by 3% in 2012. EPS increased by 9%, with the company increasing its dividend and actively buying back roughly 5% of its shares. Omnicom remains a very stable player in this industry and its stock valuation is attractive.

O'Reilly Automotive (ORLY, $89)

O'Reilly had an excellent year, with revenue climbing 7% and net income increasing 15%. EPS surged 25% due to the company aggressively buying back its own shares. By returning excess cash flows to shareholders through its share buyback, the company was able to greatly improve its return on equity. The company's ROE topped 20% for the first time in its history.

Since our purchase in the summer for 2004, the total growth in earnings has been 324%, or 20% annually, and the stock has quadrupled. Who says that "buy and hold" no longer works?

Resmed (RMD, $42)

After a difficult 2011, Resmed had an exceptional 2012. This leader in medical equipment used for sleep disorders saw its revenues rise by 10% and its EPS surge by 34%. Since 2008, Resmed has maintained a revenue growth rate in excess of 14% annually. Since our first purchase in 2004, EPS has grown by 367% (or 21% annually).

We decreased our position in this company in 2011 when the company's founder, Peter Farrell, retired and the company was looking for a successor. To this day, the company has proved us wrong on this decision by continuing to grow its profits at admirable rates of return.

Union Pacific (UNP, $126)

At the end of 2009, Berkshire Hathaway acquired Burlington Northern Santa Fe (BNSF). This allowed us to exchange parts of our existing shares in BNSF for additional shares in Berkshire. But we still like the industry fundamentals for railroad companies.

Last summer, we met with the CEO of a very successful Los Angeles based business. This brilliant businessman had had dinner the night before with the CEO of BNSF, Matthew Rose, and he further convinced us of the outstanding economics of the rail industry. He explained how Union Pacific and BNSF became dominant in the western part of the US to the point where there is now a quasi-duopoly in this region. With the energy boom in this area, in particular with shale oil, these two companies are benefiting from an increase in rail cargo. So we decided to buy shares in Union Pacific after returning from California. We see a bright future for the company.

Valeant Pharmaceuticals (VRX, $60)

Valeant is a bit different from the typical business we are drawn to at Giverny Capital. Based in the Montreal region, Valeant has become a sizable pharmaceutical company on a global level. However its accounting isn't simple and the company has a vast array of different products.

The reason we decided to invest in Valeant is our admiration for its CEO, Michael Pearson. The company's results for 2012 were impressive. Sales reached $3.6 billion—double the sales from three years ago. EPS followed suit, rising 57% to $4.14.

The most important acquisition of the year for Valeant was Medicis Corp, a leader in dermatological drugs. In 2008, Valeant was in 11th place in the dermatology segment in the US. With the Medicis acquisition, Valeant is now in first place, with more than twice the revenue than its closest competitor.

Visa (V, $152)

Visa had a terrific year in 2012: operating revenues increased 15% and EPS rose 24%. Visa returned the majority of its profit back to shareholders, with dividends and share buybacks to the tune of $3 billion. It's difficult to ask for more.

We bought Visa two years ago, when the stock fell by 25%. The Durbin reforms from the US congress and the potential impact on transaction fees for debit cards was a great worry on Wall Street. But, as we had thought, the impact of these reforms turned out to be modest and the stock has doubled since.

Wells Fargo (WFC, $34)

Wells Fargo continued to improve its profitability in 2012: the bank's return on asset rose from 1.25% to 1.41% while its return on equity reached 13%. EPS increased by 19% to $3.36. The company also increased its dividend by 83% and bought back 120 million of its shares—equivalent to a non-taxable dividend of $3.9 billion.

We expect EPS of $3.75 for 2013. We think that Wells Fargo is one of the best large banks in the US and its stock is still trading well below its intrinsic value.

The Podium of Errors

"Mistakes are the usual bridge between inexperience and wisdom."

- Phyllis Theroux

Following in the "Givernian" tradition, here are our three annual medals for the "best" errors of 2012 (or from past years). It is with a constructive attitude, in order to always improve as investors, that we provide this detailed analysis. As is often the case with stocks, errors from omission (non-purchases) are often more costly than errors from commission (purchases)… even if we don't see those on our statements.

Bronze Medal: JP Morgan

Here is a recent error with opportunity costs that were quick to materialize. We've followed JP Morgan for some time and are fans of its CEO, James Dimon. This summer, the bank announced an unexpected loss of a couple of billion dollars. JP Morgan found itself at the center of an exaggerated media frenzy that is oh-so-typical of our era. The stock quickly tumbled from $44 to $32—this represented a decrease of $40 billion in the bank's market valuation and seemed out of line with a loss realistically assessed in the $4-5 billion range.

The stock seemed undervalued to us before the drop, so imagine afterwards: at $32, the PE ratio for JP Morgan was now seven. Given that JP Morgan is one of the top banks in the US and it was now possible to buy shares at prices that had an earnings yield of more than 15%.

I even went ahead and enthusiastically recommended the stock on television and in the Montreal Gazette newspaper. But with our own money, I stayed on the sidelines. It was difficult to choose which of our other holdings to sell and I thought that we already had a large exposure to financial services in our current portfolio. But such an opportunity is rare and these excuses are regrettable.

Wall Street's worry quickly ebbed and the stock went back to trading at its levels from last Spring. As I write this paragraph, the stock is trading at $48. We therefore missed out on a 50% rise. And the stock is still trading an only 9 times the estimated earnings for 2013. When a stock rises by 50% in just a few months and is still attractively priced, there isn't much more that needs to be said about how deeply discounted this stock was when it was at its low.

Silver Medal: Lumber Liquidators

The sale of Lumber Liquidators (LL) in 2011 was one of the worst mistakes in recent years. We bought shares in the company in 2010, after visiting the company in Toano, Virginia. This is probably one of the most out-of-the-way places we've visited in our noble goal to realize good returns on our capital. We were very impressed by this company which sells hardwood floors and other flooring products directly to customers. LL has a low cost structure and is able to offer more value to its customers than if they made their purchase at a retailer such as Lowe's of Home Depot. LL has been growing very quickly but in 2010, the company implemented a new IT system that affected it profitability. The stock dropped in price as a result of this and we jumped at the chance to become shareholders at around $25.

In 2011, the company continued to have some difficulties and same-store sales fell significantly (by 7% in the second quarter). EPS were flat for a second consecutive year, while operating margins fell from 8.9% in 2009 to 7.4% in 2011. Further, the CEO decided to leave his post. We were surprised by this news and decided to sell since the original investment thesis no longer seemed valid.

The company has, just opposite to our errant prognosticating, turned itself around. Sales rose 17% in 2012 and EPS surged from $0.94 to $1.61, while operating margins reached 9.5%. And as for its share price? Since our sale at around $17, the stock has more than tripled, to $60 (as of February 2013). Analysts expect more than $2 in EPS this year (twice the level of 2010). While the stock is hardly a bargain (now trading at 30 times estimated profits), we have stomped on our pride and continue to follow the company closely. But I have to admit that this goes to show that I showed a flagrant lack of patience on this one.

Gold Medal: Stericycle

About a decade ago, a fellow portfolio manager spoke to me, with great enthusiasm, about a company called Stericycle. The company is a leader in the collection of medical waste and thereby absolutely being my kind of business: unexciting, tending not to attract competition, and not affected by technological change. While the business isn't exciting, its financial results most definitely are. Over ten years, annual revenues have increased from $400 million to nearly $2 billion. EPS has risen from $0.55 to $3.30 this year, with an annualized growth rate of 20%. The stock has risen from $16 to $92.

You might have noticed − given your usual perceptiveness − that the stock's P/E ratio was 29 times in 2002 and is still 28 times at the current moment. The stock has always traded at lofty P/E ratios. I have therefore made an error that I have, unfortunately, made many times: avoiding a high quality enterprise due to a valuation that seemed higher than what I would have liked to pay. I waited in vain for a better price… for a decade. It's very difficult to find a company that can maintain an annual growth rate of more than 20% over a long period of time. When we find one and we have confidence that the future outlook is promising, refusing to pay a slight premium relative to average companies often becomes a very costly mistake. It was an error of almost 500% in this case.

Conclusion: The Current Potential for Stocks

In recent years, we have regularly emphasized our enthusiasm for the stock market and, even more specifically, for our businesses. We don't have a crystal ball, but we know that the potential for the appreciation of stocks is inversely proportional to the valuation assessment reflected by the market. From this perspective, the news is good: the S&P 500 is trading at only 13-14 times the earnings estimate for 2013.

The other ingredient, which is often associated with low valuations, is the pessimism of the financial community. On this level, we could not ask for better news. Since 2008, investors have been fleeing the stock market. Indeed, over the last five years, they sold half a trillion ($500 billion) worth of equities and injected a trillion dollars into bond funds.

Furthermore, the consumer confidence index in the United States (my favorite contrarian indicator) ended the year at 67 (normal is 100) and even dropped to 59 in January. This level is usually found during a recession.

This tendency towards pessimism for stock is not limited to individual investors. Many institutional investors have also reduced their allocation to equity markets, in favor of bonds and "alternative" investments (real estate, private equity, commodities, etc.) For example, the endowment funds at the top American universities (those with more than a billion under management) have reduced their exposure to equities to 27% from 45% ten years ago, while their exposure to "alternatives" is now 61%.

We believe that equities will be the best asset class in the coming years for the simple reason that it seems to be the most undervalued.

To Our Partners

Using rationality, along with our unwavering optimism, we trust that the companies we own are exceptional, led by top-notch people, and destined for a great future. They should continue to prudently navigate the often troubled waters of the global economy. Furthermore, the valuation assigned by the market to these outstanding companies is very similar to the valuation of an average company in S&P 500, despite the fact that our companies have better growth prospects than average. Therefore we consider the appreciation potential for our portfolio, both in absolute and relative terms, to be excellent.

We also want you to know that we are fully aware of and grateful for your votes of confidence. It is imperative for us to not only select outstanding companies for our portfolios, but to also remain outstanding stewards of your capital. We certainly like to achieve good returns, but it must not come at the cost of taking undue risk. Our philosophy to favor companies with solid balance sheets and dominant business models, along with purchasing these companies at reasonable valuations, is central to the risk management of our portfolios.

We wish a great 2013 to all our partners.

François Rochon and the Giverny Capital team

APPENDIX A

Investment philosophy

Note: This section is repeated from prior annual letters and is aimed at new partners.

In 2012, we saw a large increase in the number of Giverny Capital partners (the term we use for our clients). With all these newcomers, it is imperative that we write again (and again) about our investment philosophy.

Here are the key points:

- We believe that over the long run, stocks are the best class of investments.
- It is futile to predict when it will be the best time to begin buying (or selling) stocks.
- A stock return will eventually echo the increase in per share intrinsic value of the underlying company (usually linked to the return on equity).
- We choose companies that have high (and sustainable) margins and high returns on equity, good long term prospects and are managed by brilliant, honest, dedicated and altruistic people.
- Once a company has been selected for its exceptional qualities, a realistic valuation of its intrinsic value has to be approximately assessed.
- The stock market is dominated by participants that perceive stocks as casino chips. With that knowledge, we can then sometimes buy great businesses well below their intrinsic values.
- There can be quite some time before the market recognizes the true value of our companies. But if we're right on the business, we will eventually be right on the stock.

Experience and common sense teach us that an investment philosophy based on buying shares in companies that are undervalued, and holding these companies for several years, will not generate linear returns. Some years, our portfolio will have a return that is below average. This is a certainty that we must accept.

Another important point: the significant volatility of the market is often perceived negatively by many investors. It's actually the contrary. When we see stock prices as *"what other people believe the company is worth"* rather than the real value (at least in the short term), these fluctuations become our allies in our noble quest for creating wealth. Instead of fearing them, we can profit from them by acquiring superb businesses at attractive prices. The more that markets (the "other" participants) are irrational, the more likely we are to reach our ambitious performance objectives.

Benjamin Graham liked to say that the irrationality of the market was an extraordinary advantage to the intelligent investor. The person, however, who becomes affected by short-term market fluctuations (less than 5 years) and who take decisions based on them transforms this advantage into a disadvantage. His or her own perception of stock quotes becomes their own worst enemy. Our approach at Giverny Capital is to judge the quality of an investment over a long period of time.

So patience – ours AND that of our partners – becomes the keystone for success.

APPENDIX B

Notes on the returns of the Giverny portfolios

- The Giverny portfolio is a private family group of accounts managed by François Rochon since 1993. The returns of the period from 1993 to 1999 were realized before registration of Giverny Capital Inc. at the AMF in June of 2000.
- The Giverny portfolios serve as a model for Giverny Capital's clients, but returns from one client to the other can vary depending on a multitude of factors, such as the timing of the opening and funding of a client's account.
- Past results do not guarantee future results.
- The Giverny Canada and Giverny US portfolios are parts of the Giverny Global portfolio.
- The returns indicated include trading commissions, dividends (including foreign withholding income taxes) and other income but do not include management fees.
- The index benchmark group is selected at the beginning of the year and tends to be a good reflection of the asset composition of the portfolio. In 2012 :

  - Giverny Global Portfolio: TSX 18% Russell 2000 40% S&P 500 40% MSCI EAFE 2%
  - Giverny US Portfolio : S&P 500 100%
  - Giverny Canada Portfolio : S&P/TSX 100%

- The returns for the S&P 500 (in $USD) are provided by Standard & Poors.
- The returns for the various indices used for comparable purposes are deemed reliable by Giverny Capital. It should be noted that currency effects and the impact of dividends on the returns for indices are estimated. Despite its best effort, Giverny Capital cannot guarantee that this information is accurate and complete at all times.
- The custodian of our client portfolio is TD Waterhouse in Canada and TD Ameritrade Institutional in the US.
- The financial statements of the three portfolios are audited by PricewaterhouseCoopers (PwC) at the end of each year. The PwC data are those provided by our custodian TD Waterhouse. The PwC reports are available upon request.
- For more information, please see the "returns" section of our website.

GIVERNY CAPITAL

Annual Letter to our Partners 2013

20th Anniversary of the Giverny portfolio

Gabor Szilasi
Giverny - 1998
Giverny Capital Collection

Giverny Capital Inc. – Annual letter 2013 ©

For the year ending December 31st 2013, our portfolio's return was 50.2% versus 38.9% for our benchmark. Both returns include a gain of approximately 8% due to fluctuations in the Canadian currency. So in 2013, we have outperformed our benchmark by 11.3%.

Since our inception on July 1st 1993, our compounded annual growth rate has been 15.5% versus 8.3% for our weighted benchmark, representing an annualized outperformance of 7.2% over this period. When we exclude the effect caused by the appreciating Canadian currency since our inception, which represents an annualized increase of 0.9% since 1993, our portfolio has returned 16.6% annually versus 9.3% for our benchmark. Our long-term and ambitious objective is to maintain an annual return that is 5% higher than our benchmark.

The Artwork on Our Letter

Since 2004, we have illustrated the cover of our letter with a copy of an artwork from our corporate collection. This year we selected a photographic artwork by Gabor Szilasi entitled "Giverny".

The Giverny Portfolio (in Canadian dollars): Returns Since July 1st 1993

Return *	Giverny	Index **	+ / -	$ US/Can	Giverny ***	Index ***	+ / -
1993 (Q3-Q4)	37.0%	9.5%	27.6%	3.3%	34.4%	7.4%	27.0%
1994	16.5%	3.7%	12.7%	6.0%	12.0%	-0.3%	12.3%
1995	41.2%	24.0%	17.2%	-2.7%	43.8%	26.3%	17.5%
1996	28.0%	22.8%	5.2%	0.3%	27.7%	22.5%	5.2%
1997	37.8%	28.6%	9.2%	4.3%	33.4%	24.5%	8.9%
1998	20.6%	18.8%	1.8%	7.1%	14.5%	12.8%	1.7%
1999	15.1%	16.3%	-1.2%	-5.7%	20.6%	21.9%	-1.3%
2000	13.4%	3.2%	10.2%	3.9%	9.7%	-0.2%	9.9%
2001	15.1%	-0.4%	15.5%	6.2%	9.4%	-5.3%	14.7%
2002	-2.8%	-18.3%	15.6%	-0.8%	-2.0%	-17.7%	15.7%
2003	13.6%	14.0%	-0.4%	-17.7%	33.7%	34.1%	-0.5%
2004	1.6%	6.2%	-4.5%	-7.3%	8.3%	13.1%	-4.8%
2005	11.5%	3.6%	7.9%	-3.3%	14.5%	6.7%	7.8%
2006	3.5%	17.0%	-13.5%	0.2%	3.3%	16.8%	-13.5%
2007	-14.4%	-11.6%	-2.8%	-14.9%	-0.3%	2.2%	-2.5%
2008	-5.5%	-22.0%	16.5%	22.9%	-21.5%	-35.4%	13.9%
2009	11.8%	12.2%	-0.4%	-13.7%	27.7%	27.7%	0.1%
2010	16.1%	13.8%	2.3%	-5.3%	21.7%	19.3%	2.5%
2011	7.6%	-1.1%	8.7%	2.2%	5.5%	-2.9%	8.4%
2012	21.2%	12.5%	8.7%	-2.2%	23.4%	14.6%	8.8%
2013	50.2%	38.9%	11.3%	6.9%	42.2%	31.3%	10.9%
Total	1825.9%	415.2%	1410.7%	-17.0%	2226.1%	519.0%	1707.1%
Annualized	15.5%	8.3%	7.2%	-0.9%	16.6%	9.3%	7.3%

* Green section: all returns are adjusted to Canadian dollars
** Index is a hybrid index (S&P/TSX, S&P 500, MSCI EAFE, Russell 2000) which reflects the weight of the underlying assets
*** Estimated without the effect of currency

Note: Refer to Appendix C for disclosure statements on the Giverny portfolios and their corresponding indices.

The Giverny US Portfolio

We have been publishing the returns of the Giverny US Portfolio, which is entirely denominated in US dollars, since 2003. The Giverny US Portfolio corresponds to the American portion of the Giverny Portfolio. In 2013, it realized a return of 40.6% compared to 32.4% for our benchmark, the S&P 500. The Giverny US Portfolio therefore outperformed our benchmark by 8.2%

Since its inception in 1993, the Giverny US Portfolio has returned 1893.7%, or 15.7% on an annualized basis. During this same period, the S&P 500 has returned 512.7%, or 9.2% on an annualized basis. Our added value has therefore been 6.5% annually.

Year	Giverny US	S&P 500	+/-
1993 (Q3-Q4)	32.7%	5.0%	27.7%
1994	9.9%	1.3%	8.6%
1995	54.8%	37.6%	17.2%
1996	27.0%	23.0%	4.1%
1997	32.9%	33.4%	-0.4%
1998	11.0%	28.6%	-17.6%
1999	15.9%	21.0%	-5.1%
2000	11.3%	-9.1%	20.4%
2001	8.1%	-11.9%	20.0%
2002	-4.4%	-22.1%	17.7%
2003	31.6%	28.7%	2.9%
2004	9.3%	10.9%	-1.6%
2005	12.5%	4.9%	7.5%
2006	3.3%	15.8%	-12.4%
2007	-1.7%	5.5%	-7.2%
2008	-24.3%	-37.0%	12.7%
2009	28.7%	26.5%	2.3%
2010	21.9%	15.1%	6.9%
2011	4.7%	2.1%	2.6%
2012	22.3%	16.0%	6.3%
2013	40.6%	32.4%	8.2%
Total	**1893.7%**	**512.7%**	**1381.1%**
Annualized	**15.7%**	**9.2%**	**6.5%**

Note: Please refer to Appendix C for disclosure statements on the Giverny portfolios and their corresponding indices.

We outperformed the S&P 500 for a sixth consecutive year. No single stock alone was a factor for this outperformance and, when we looked to our performance attribution for 2013, we noted that seven out of our top ten holdings outperformed the S&P 500.

Giverny Canada Portfolio

We introduced a portfolio that is 100% focused on Canadian equities in 2007. This corresponds closely to the Canadian portion of the Giverny Portfolio. In 2013, the Giverny Canada Portfolio returned 49.4% versus 13.0% for the S&P/TSX, therefore outperforming the index by 36.4%.

Since 2007, the Giverny Canada Portfolio has returned 208.6%, or 17.5% on an annualized basis. During this same period, our benchmark had a gain of 29.3%, or a gain of 3.7% on an annualized basis. Our annual added value was therefore 13.7%.

Year	Giverny Canada	S&P/TSX	+/-
2007	19.7%	9.8%	9.9%
2008	-24.6%	-32.9%	8.3%
2009	28.2%	33.1%	-4.9%
2010	26.7%	17.6%	9.1%
2011	13.5%	-8.7%	22.2%
2012	24.0%	7.2%	16.8%
2013	49.4%	13.0%	36.4%
Total	**208.6%**	**29.3%**	**179.3%**
Annualized	**17.5%**	**3.7%**	**13.7%**

Note: Please refer to Appendix C for disclosure statements on the Giverny portfolios and their corresponding indices.

Our primary Canadian holdings performed very well in 2013. The all-star in our portfolio was Valeant Pharmaceuticals, which rose 96%. Dollarama (+50%) and MTY Foods (+54%) also excelled.

For six out of the last seven years, the Giverny Canada Portfolio outperformed the TSX. It is also worth repeating that our Canadian portfolio is very concentrated and has little correlation to the TSX. So the relative performance, whether positive or negative, will therefore often be high.

2013: The year of the "triple play"

Legendary investor Peter Lynch always emphasized the importance of being patient: "Frequently, years of patience are rewarded in a single year". The year 2013 was such a year. We could qualify it with the baseball term: "triple play". Our 50% return includes three components:

- An earnings growth rate of 15% for our companies with an additional 1% from dividends
- An increase of the average Price to Earnings ratio (P/E) of our stocks from 14x to 17x
- A currency gain of 8% linked to the drop of the Canadian dollar from 0.99$ to 0.94$.

We believe our return for 2013 was justified. It reflects a return to a more normal valuation level for our holdings. We went through a period from 2006 to 2009 where we had to cope with a P/E compression for our stocks and a huge rise in the Canadian currency. As we stipulated in our annual letters during those years, we believed those events were temporary in nature and were not justified by our long term fundamental analysis.

Yet, it would be unrealistic to extrapolate our 2013 return into the future. In the the long run, the number one factor influencing a portfolio's return is the overall intrinsic value increase of the companies owned. But we believe that our stocks are still undervalued and that the Canadian dollar is still overpriced by 10 to 16%. So the next few years could also bring additional rewards to the intrinsic value of our holdings, but not at the same level as this year.

Since 1993, the cornerstone of our investment philosophy is based on Benjamin Graham's book "The Intelligent Investor", first published in 1949. In it, Graham wrote: "In the short term, the stock market reflects the irrationality and unpredictability of human investors. But in the long term, it reflects adequately the intrinsic value of companies".

Over the last two decades, we have been witnesses to strange market movements and numerous irrational behaviors from investors (the list would be too long to mention here). But in the end, the strangeness cleared up and common sense prevailed. If there is one thing that we have learned since 1993 is that market fads come and go but fundamental principles endure.

Twenty years of the Giverny Portfolio

I started to manage the Giverny portfolio in July 1993. So we celebrate our twenty year anniversary with this letter. Results over those two decades have been more than satisfactory. But most important, I've learned some valuable lessons which should be useful in enhancing portfolio values going forward. Last summer, I wrote in my Gazette column an article highlighting the ten most important lessons learned since 1993. You will find the article in Appendix A at the end of this letter.

I would like to emphasize the most important lesson of the last twenty years: It is futile to try to predict the stock market over the short run. All previous lessons are useless if you try to predict the stock market over the short run. I have heard people say hundreds of times that they were waiting to buy great companies because they had negative views on the short-term direction of the stock market. Owning great businesses, managed by great people and acquired at reasonable prices is the winning recipe. The rest is just noise.

The stock market and Bridge

Investing in the stock market has similarities with the game of bridge. As you probably know, a member of the Giverny Capital team, Nicolas L'Écuyer, is a great bridge player. He was Canadian champion six times. To succeed in bridge, you have to be able to combine logic and rationality. Another important point: in duplicate bridge, the points are never given in absolute terms but relative to what others have done with the same hand being played. As with the stock market, what counts is the result relative to the average.

Nicolas likes to say that two things are important in bridge: to have a plan to play the hand and always favor the play that has the best chance of success. The fact that a particular decision has worked or not at a particular time is irrelevant if the thought process was correct. In other words, if a play has a 75% chance to be the right one, do not blame yourself when it does not work (which will be one time out of four times). In addition, when playing in a bridge club where players of various levels of play are present, it is interesting to look at the results at the end of the evening. Very often, the best team plays for 60% and the worse one for 40%. The difference is not that large.

An analogy applies to the stock market: managing a portfolio of equities requires a specific plan (a philosophy of securities selection) and a decision-making process that favors the better odds. If we look at the history of the stock market in the long run, stocks have returned 10% per year compared to roughly 5% for bonds and 3% for treasury bills. So to be 100% invested in equities is the most favorable statistical approach. Some will tell you that a portfolio thus formed will be more volatile and more "risky". Obviously, it is true that an equity portfolio will fluctuate, sometimes widely as we saw in 2008-2009. But it is not really "risky" if its owner is patient and allows enough time for the odds to play out in their favor.

As important, we have to accept the 60-40 rule. To be wrong (or not totally right) 40% of the time can produce excellent results in arenas such as bridge and the stock market. In fact, we stipulated many years ago in our "Rule of three" that we have to accept that one year out of three, we will underperform the index and that one stock purchased out of three will not perform as expected. If one studies the

table of the Giverny portfolio since 1994 (excluding the half-year of 1993), we observe that our portfolio has underperformed the S&P 500 six years out of twenty, the equivalent of 30% of the time. To be aware of this fact is vital so we can be psychologically prepared for the inevitable periods when we will have results that are worse than average. We have to accept from the start that it is impossible to be always the best in that field even if one is competent and loaded with motivation and efforts.

It is important to realize that our "Rule of three" is not linear and totally unpredictable. Some of our partners would love to know in advance the years we will underperform so that they can wait on the sidelines. In the long run, the stock market will eventually reflects the intrinsic values of the companies owned. But all temporal parameters are unknown. Few investors, professional or not, can do better than the average. In our opinion, one simple but crucial quality is needed: humility. Humility is needed to recognize that we can't predict the economy and the stock market (and why even try with politics?) Humility is needed to recognize that, even with our own stocks, we can't know in advance which ones will do well and when they are going to do well.

Nicolas would add that one key to succeed in bridge is to play often so odds can eventually win over luck. Persistence eventually trumps luck!

The Flavor of the Day for 2013

Many of the financial (and less financial) assets that we labelled "flavor of the day" in the last years have turned sour in 2013. Bonds lost value as interest rates increased. The price of gold is down 34% since its 2011 high. The Canadian Dollar has started to fall to a level closer to its Purchasing Power Parity or PPP (as evaluated by the OECD). Even housing prices in Canada show signs of getting back to more reasonable levels.

So where are we seeing popularity (and consequently danger)? Recently, we have observed the popularity of some new names in the technology field. A dozen or so years have passed since the tech bubble crash of 2000-2002. A new generation of young investors, and some older ones with "young memory", have become infatuated with outstanding companies with a great potential future but that trade at high P/Es in the stock market. Facebook and LinkedIn are good examples but we could also add Netflix and Tesla Motors, the terrific electrical car manufacturer.

These are all outstanding companies with great CEOs. But in the stock market, it does not guarantee outstanding investment results if one pays a too high price for them. With an average P/E of more than 100 times for these four stocks, we would advise prudence.

Here is a little table on the new "Fantastic Four"

Company	**Quote[1]**	**EPS 2014**	**P/E 14**
Facebook	68 $	1,25 $	55
Netflix	446 $	4,10 $	109
LinkedIn	204 $	1,58 $	129
Tesla Motors	245 $	1,90 $	129
Average			**105**

We could add a few words on Twitter, which came public last November. The stock quickly flew away (!) and now has a $30 billion dollar market value[1]. The company is not yet profitable so we could not include it in the preceding table. Analysts estimate that the company will have $1.2 billion in revenues

[1] As of February 28th 2014

in 2014. So theoretically, if the company had a 25% net margin level that would translate into $300 million dollars in profits. At its present level, the P/E would then be the equivalent of 100 times this hypothetical scenario. As for the four other securities mentioned, we would advise caution.

Owner's Earnings

At Giverny Capital, we do not evaluate the quality of an investment by the short-term fluctuations in its stock price. Our wiring is such that we consider ourselves owners of the companies in which we invest. Consequently, we study the growth in earnings of our companies and their long-term outlook.

Since 1996, we have presented a chart depicting the growth in the intrinsic value of our companies using a measurement developed by Warren Buffett: "owner's earnings". We arrive at our estimate of the increase in intrinsic value of our companies by adding the growth in earnings per share (EPS) and the average dividend yield of the portfolio. This analysis is not exactly precise but, we believe, approximately correct. In the non-scientific world of the stock market, and as Keynes would have said: "It is better to be roughly right than precisely wrong."

This year, the intrinsic value of our companies, as a whole, rose by 16% (15% from the growth in earnings and 1% from the average dividend). Despite changes to our portfolio during the year, we consider this growth in earnings to appropriately reflect economic reality. The stocks of our companies rose approximately 42% (without the effect of currency). As for the S&P 500, the underlying earnings growth of its companies was 7% (9% including dividends) and the total return of the index was 32%.

	Giverny			S&P 500		
Year ***	Value *	Market **	Difference	Value *	Market **	Difference
1996	14%	29%	15%	13%	23%	10%
1997	17%	35%	18%	11%	33%	22%
1998	11%	12%	1%	-1%	29%	30%
1999	16%	12%	-4%	17%	21%	4%
2000	19%	10%	-9%	9%	-9%	-18%
2001	-9%	10%	19%	-18%	-12%	6%
2002	19%	-2%	-21%	11%	-22%	-33%
2003	31%	34%	3%	15%	29%	14%
2004	21%	8%	-12%	21%	11%	-10%
2005	14%	15%	0%	13%	5%	-8%
2006	14%	3%	-11%	15%	16%	1%
2007	10%	0%	-10%	-4%	5%	9%
2008	-3%	-22%	-19%	-30%	-37%	-7%
2009	0%	28%	28%	3%	26%	23%
2010	22%	22%	0%	45%	15%	-30%
2011	17%	6%	-11%	17%	2%	-15%
2012	19%	23%	4%	7%	16%	9%
2013	16%	42%	26%	9%	32%	23%
Total	867%	903%	45%	259%	317%	58%
Annualized	13.4%	13.7%	0.3%	7.4%	8.3%	0.9%

* Estimated growth in earnings plus dividend yield
** Market performance, inclusive of dividends
*** Results estimated without currency effects

Since 1996, our companies have increased their intrinsic value by 867%, or about a tenfold increase. Meanwhile, the value of their stocks has increased 903% (including dividends but without currency

effects). On an annualized basis, our companies increased their intrinsic value by 13.4% and our stock returned 13.7% per year. The similarity between those two numbers is not a coincidence. During this same period, the companies comprising the S&P 500 increased their aggregated intrinsic value by 259% and saw their stock prices rise by 317%. Market performance and corporate performance are rarely synchronized over the course of a calendar year. But as more time passes, the synchronization between the two inevitably begins to reveal itself.

Over 18 years, our portfolio has realized a return that is 5% higher than the S&P 500 primarily because the underlying companies in our portfolio have increased their intrinsic value at a rate that is 5% higher than the average. This is how we plan on continuing to reach our performance objectives in the future, rather than trying to speculate on the highs and lows of the market or trying to read the tea leaves of economic or political trends.

Five-year Post-mortem: 2008

Like we do every year, we go through a five-year post-mortem analysis. We believe that studying our decisions in a systematic manner, and with the benefit of hindsight, enables us to learn from both our achievements and our errors.

The year 2008 was tumultuous, which is an understatement. We have never seen so much pessimism as in late 2008 and early 2009—to a point that many questioned the very survival of capitalism. Peter Lynch liked to say that the most important organ in the stock market is not the brain but the stomach. To have the right temperament toward stock quotes was vital during the 2008-09 crisis. We witnessed incredibly irrational behaviors on the part of many investors, even from seasoned investors.

At Giverny Capital, we did not panic. We stayed 100% invested in stocks and we made new purchases to the best of our capabilities. We also tried, with little success, to rally investors to our noble cause. I was interviewed in the Montreal newspaper "La Presse" on February 14th 2009 and I labelled the market environment as the "Opportunity of a generation" (in French, it is a little more poetic since it rhymes). We even set up a web site to encourage stock purchases and organized conferences (www.occasiongeneration.com). It was so popular that we had to cancel many conferences because of a lack of registration.

New buy in 2008: Omnicom

We bought shares of Omnicom in 2008 at $24. The big ad firm was on our radar for more than 15 years (yes, we are patient people). In 2008, we bought shares at approximately seven time normalized earnings, a level we believed to be at least a third of its intrinsic value. We held on to the stock for five years and sold it this year at $64 after it announced its merger with Publicis. We had a return of 167% for an investment that we believed had very low risk. In fact, we believe the stock is still undervalued today but we chose to invest our capital in another company that we believed to be even more undervalued.

Mistakes of 2008

In 2008-09, there were lots of great bargains. Many outstanding companies were trading at a third – even a fourth – of their fair value. Some of our own stocks like Carmax, Disney, American Express and Wells Fargo, went down to such attractive levels. We made additional share purchases but not to a level we should have. We would have shown fortitude if we had sold some our then more stable blue chips like Johnson & Johnson, Wal-Mart and Procter & Gamble to cash in on such opportunities. To

sell a stock that trades at 66 cents on the dollar to buy a similar stock that trades at 33 cents on the dollar is an intelligent transaction. It is pointless to be too severe in castigating ourselves. But we could conclude that our lack of opportunism has cost us something like 10% of missed returns over the last few years.

Our total return since 2008

The good news, however, is that the Giverny Global portfolio had a total return of 141% since January of 2008 (*before* the start of the great bear market of 2008-2009), which compares to a total return of 54% for our benchmark.

Our Companies

"In my books, I've always placed the emphasis on the importance of the management team in selecting companies… and yet, I didn't do it enough"

- Philip A. Fisher

Bank of the Ozarks (OZRK, $57)

2013, yet again, was an exceptional year for Bank of the Ozarks, our bank from Little Rock, Arkansas. The company generated a 9% growth in EPS, reaching $2.41. Here are the highlights from 2013:

- The bank's efficiency ratio (a measure of its cost structure), was an impressive 46%.
- Return on Assets reached 2.04%
- Non-performing loans fell from .57% to .43%.
- The bank's balance sheet continues to strengthen with returns on equity of 13%.
- Ozarks completed its acquisition of First National Bank of Shelby, based in North Carolina.
- In December, Ozarks acquired Bancshares, a Houston-based bank.
- Deposits increased by 20% to $3.7 billion.
- Total assets grew by 18.5% to $4.8 billion.

The company also announced its acquisition of Summit Bancorp at the end of January 2014. This bank has $1.2 billion in assets and 24 branches in Arkansas. After this announcement, Bank of the Ozarks now operates 90 branches in this state (see map below). Given these acquisitions, Bank of the Ozarks now has $6.3 billion in assets.

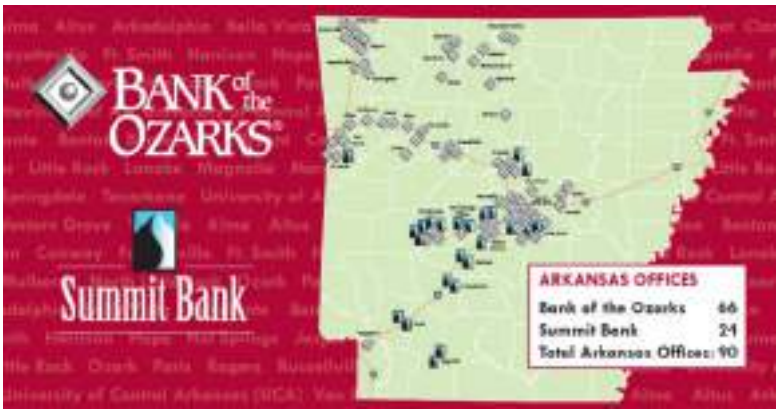

Since our purchase in 2006, EPS has increased by 154%, or a 14% compounded annual return. Few banks can tout this kind of performance given the difficult economic context of the past years. For the third year in a row, Bank of the Ozarks has been named the best performing bank in the U.S. by *Bank Director* magazine. We remain optimistic about the company's prospect for continued growth.

Berkshire Hathaway (BRK.B, $119)

The company led by the legendary Warren Buffett had another excellent year in 2013. It's difficult to precisely measure the growth in the company's intrinsic value for the year, but we estimate it close to the 18% mark, which in line with their growth in book value.

The greatest asset for Berkshire is its float on insurance premiums which now tops $77 billion. This is the amount of funds set aside to pay for future insurance liabilities. Since the company has a profitable insurance business (with an underwriting ratio of less than 100%), this float is acquired for free. What could be better than having nearly $80 billion in interest-free dollars in the hands of the greatest investor in the history of capitalism? If Mr. Buffett can achieve a 10% return on this capital, this translates itself in $8 billion in annual pre-tax profit that is generated for shareholders. In our opinion, this business activity alone is worth roughly $80 billion, or $34 per share.

We continue to consider shares in Berkshire as undervalued by the market. Mr. Buffett's advanced age certainly plays into the equation. We believe that the company has become the strongest company in the world and is prepared to survive the genius who composed the symphony of capitalism which is Berkshire (though, like Mr. Buffett, we hope that this day is far into the future). We have no idea when this will happen but we see this stock someday trading at a price more representative of its intrinsic value.

Buffalo Wild Wings (BWLD, $147)

Buffalo Wild Wings (BWW) is a sports-oriented restaurant chain which primarily serves chicken wings, as its name reveals. We have been shareholders in the BWW for four years and have been handsomely rewarded for our ownership in this company. The company grew revenue by 22% in 2013 and its EPS climbed by 24%. In the beginning of 2014, the company surpassed 1000 restaurants (with 560 operating as franchises). We continue to see a bright outlook for this concept.

Cabela's (CAB, $67)

We bought shares in Cabela's during the year. This company operates a large chain of retail stores serving the hunting, fishing and outdoor apparel market. While it's been around for 50 years, Cabela's became a public company about 10 years ago. Jean-Philippe, an avid hunter and fisherman, and I have followed the company since.

The company recently adopted a more high-performing business model which grabbed our attention. By reducing the square footage of its new stores, Cabela's was able to significantly improve its return on equity. Profits per square foot are 62% higher in its newer stores relative to its older and larger ones. The company has gone ahead and put in place an ambitious expansion program to expand the number of smaller footprint stores. Cabela's only has a 3.6% market share and could double or triple this figure over the course of the next decade.

The Cabela's store in Louisville, Kentucky

Same-store sales increased almost 4% in 2013, while revenues grew by 16% to $3.6 billion. EPS increased by 22% to $3.32. We believe that Cabela's has an excellent brand and has a bright long-term future.

Carmax (KMX, $47)

Carmax's fiscal year ends in February. We estimate that sales and EPS will grow by 15%. While the company operates 124 stores in the US, it only has roughly 3% of the used car market. Carmax is planning on opening between 10 and 15 stores annually within the coming years.

We have been shareholders since 2007, when we purchased the stock for $21. The stock subsequently tumbled by 67% during the crisis (such things happen in the market). Yet, Carmax remained profitable during 2008 and 2009. Our patience was rewarded and the company generated earnings in 2013 that were more than twice that of 2007 (or an annualized growth rate of 18%). And the stock followed suit by rising in a commensurate manner to its EPS growth.

Disney (DIS, $76)

Disney had an excellent 2013, with EPS climbing 16% and the stock appreciating by 50%. Bob Iger remains in our judgment one of the best CEOs in the US. We bought shares in Disney the very day Bob Iger was named CEO in September of 2005. Since his arrival at the helm of Disney, the company's stock has increased by 200%, or 150% more than the performance of the S&P 500 over the course of the same period. The difference to shareholders is an added value of $70 billion (yes, I should repeat this one: 70 billion dollars). It's not even worth mentioning what a bargain Bob Iger has been for shareholders of Disney. We welcome the news from the company that Iger was going to postpone his retirement by 18 months. He will remain in his position until June 2016. Sigh of relief!

Dollarama (DOL-T, $88)

Four years ago, we were thrilled to see one of the company's we had always admired go public: Dollarama. The reason for this admiration is simple: we think that Larry Rossy, the company's founder and CEO, is one of the best businessmen in Canada. The stock has quadrupled since its IPO.

After its first three quarters of 2013 (the company's fiscal year ends on January 31st), revenues have risen by 14% and same-store sales has increased by 5%. EPS has climbed 22%. December was a bit difficult for the company due to inclement weather. The depreciation of the Canadian dollar could also have a minor impact on the company's gross margins for 2014. Dollarama now has more than 800 stores in Canada and is preparing for international expansion. We believe that the company's outlook is excellent and we are happy to continue owning our shares.

Fastenal (FAST, $47)

Fastenal had a more challenging year, with revenue and EPS only increasing by 6%. The good news is that most of Fastenal's growth was organic, since its store count only increased by 1%. After a few good years of solid growth, the number of new vending machines installed decreased relative to 2012.

We have been shareholders in Fastenal for more than 15 years and have been handsomely rewarded. In 2013, EPS was eight times higher than they were in 1998—equivalent to an annualized growth rate of 15%. We continue to admire the company's culture and management team.

Google (GOOG, $1121)

Google had a great 2013, with revenues climbing 19% and adjusted EPS rising by 12%. The company seems to have succeeded in stabilizing its margins and the transition from revenue derived from traditional Internet towards mobile seems to be occurring harmoniously.

The company dominates the search engine market and its mobile operating system, Android, continues to gain market share. Google continues to be a smaller weight in our portfolio as we would appreciate a better allocation of excess cash flows.

IBM (IBM, $188)

Although IBM's revenue slightly declined (using a constant currency) in 2013, the company's EPS grew by 12%. The company's hardware revenue continues to represent a smaller and smaller portion of its overall revenue—IBM announced the sale of its x86 server division to Lenovo at the beginning of 2014.

This company which dominates information services does a brilliant job at managing its capital. This is a primary reason why we are shareholders. On top of it, the stock is trading at roughly 10 times its estimated earnings for 2014 which seems to us as highly undervalued.

LKQ Corp (LKQ, $33)

We invested in LKQ in 2012. This Chicago-based company refurbishes used automotive parts. The company became the leader in its industry by offering very compelling prices relative to new parts (which pleases the insurance companies) along with an unrivaled distribution network. LKQ has

diversified in Europe over the last years by making some acquisitions in the United Kingdom, Belgium, France and the Netherlands.

Revenues grew at an annualized rate of 22% from 2008 to 2013, from less than $2 billion to more than $5 billion. In 2013, EPS rose by 22% relative to last year and we see a bright future for the company's growth prospects.

M&T Bank (MTB, $116)

EPS at M&T Bank grew by 10% in 2013, to $8.66. The bank's return on asset reached 1.5% and its return on equity was 18%. The merger with Hudson City Bancorp, however, is taking a bit more time than anticipated. Once complete, we believe this acquisition will be highly beneficial to M&T.

Robert Wilmers has led M&T since 1983 and has done a phenomenal job and, despite being 79, we hope he'll remain as CEO of this Buffalo-based bank for years to come. I would also be remiss to not add that I often travel to Buffalo and I can say firsthand that M&T plays an outstanding role in its community.

Mohawk Industries (MHK, $149)

When we speak of phenomenal CEOs, we would have to include Jeffrey S. Lorberbaum of Mohawk in this same league. He has led this company, a leader in floor covering based in Georgia, with great skill and agility through the residential real estate crisis of 2006-2011. The company improved its balance sheet, made good acquisitions at compelling prices, and substantially improved its cost structure.

2013 was an exceptional year, with revenues rising 27% and adjusted EPS surging by 45% to $6.90. The acquisition of Marazzi, Pergo and Spano contributed significantly to this growth. We had to remain patient with Mohawk but we were finally rewarded, with the stock doubling since our first purchase more than six years ago.

MTY Food Group (MTY-T, $34)

MTY grew its adjusted EPS by 15% in 2013. The company also completed some important acquisitions, with Extreme Brandz the most significant. This company has roughly 235 Extreme Pita and more than 70 Mucho Burrito restaurants in Canada and the US. The 40 location in the US are the first foray by MTY on American soil. MTY begins its much-anticipated American expansion.

The Mucho Burrito at the *Bay Adelaide Centre* in Toronto

We have been shareholders in MTY for six years. From 2007 to 2013, adjusted EPS increased from $.51 to $1.50—a growth of nearly 200%. We are great admirers of Stanley Ma, the company's CEO, and we continue to see a bright future for the company.

O'Reilly Automotive (ORLY, $129)

O'Reilly had another excellent year in 2013, with revenues climbing 8%, same-store sales rising by 4% and EPS increasing by 27%. O'Reilly's surge in EPS was amplified by the fact that the company bought back approximately 10% of its shares outstanding in 2013.

Since our purchase in the summer of 2004, EPS has quintupled (equivalent to a 21% annualized growth rate) and the stock has gone up six fold. It's difficult to not be highly satisfied from this investment.

Precision Castparts (PCP, $269)

Precision Castparts manufactures complex metal composite parts sold primarily to the aerospace industry. The company is a leader in this market and benefits from highly durable competitive advantages which enable it to generate net margins of 18%. This is an exceptional level for an industrial company.

2013 was an excellent year, with EPS rising by 26%. We estimate that 2014 revenues will be $11 billion and that net income will come in at $2 billion (or roughly $14 per share). We would like for the stock to have a more compelling P/E multiple which is the reason why we don't have a greater allocation to PCP in our portfolios!

Union Pacific (UNP, $168)

Union Pacific had an excellent year. EPS rose by 14% in 2013 and we anticipate a similar growth for 2014. The most important factor for shareholders of Union Pacific is the company's capacity to increase its prices. The company increased its prices by 3.75% in 2013—surpassing inflation and exceeding the company's rise in its own costs (of less than 1%). The company's operating cost ratio decreased from 67.8% in 2012 to 66.1%, with company aiming for 65% in the near term. The company also increased its dividend by 19% and bought back $2 billion of its own shares. So everything is rolling along (!) for our railroad company based out of Omaha.

Valeant Pharmaceuticals (VRX, $117)

It was another year of solid growth for our Laval-based pharmaceutical. The company completed many acquisitions, with the purchase of Bausch & Lomb the most significant. Valeant has complex accounting but we believe that adjusted EPS will be $6.24 in 2013 compared to $4.51 for the prior year (a 38% increase). 2014 also looks promising, with a growth rate estimated to surpass 30%. The stock has nearly tripled since our purchase two years ago.

The pharmaceutical industry is not easy to predict and analyze. The reason behind this investment is simple: we greatly admire Valeant's CEO, Michael Pearson.

Visa (V, $222)

Visa had another exceptional year. Revenues increased by 13% and EPS climbed by 21% (this EPS growth is magnified by the company buying back 5% of its shares). Our purchase of Visa three years ago, after a sharp decline in the stock, has proven to be very rewarding with the stock tripling since.

Wells Fargo (WFC, $45)

Wells Fargo had another very solid year. EPS rose by 16% to $3.89—a record level. We estimate that the adjusted EPS for Wells Fargo, while compensating for the amortization of intangible assets, reached $4.08. Chargeoffs related to non-performing loans also significantly decreased. The bank's return on asset was 1.51% and its return on equity was 13.9%. The company increased its dividend by 31% in 2013.

We estimate adjusted EPS of $4.45 for 2014 and continue to consider this stock as highly undervalued.

The Podium of Errors

"There's no way that you can live an adequate life without many mistakes.
In fact, one trick in life is to get so you can handle mistakes"

- Charlie Munger, Vice-Chairman of Berkshire Hathaway

Following in the "Givernian" tradition, here are our three annual medals for the "best" errors of 2012 (or from past years). It is with a constructive attitude, in order to always improve as investors, that we provide this detailed analysis. As is often the case with stocks, errors from omission (non-purchases) are often more costly than errors from commission (purchases)… even if we don't see them on our statements.

Bronze Medal: Tripadvisor

As you can imagine, I spend a great deal of the year on the road visiting companies, attending conferences and meeting partners. Having had all sorts of hotel experiences over the course of the past decades, I really like to be able to choose hotels which can make my travels more enjoyable. I discovered the website Tripadvisor a few years ago and became a loyal fan. To paraphrase an American Express advertising, I never leave home without vetting out my destination on Tripadvisor ahead of time. The company also owns another very useful site called webseatguru.com which helps you choose the best seat on any commercial flight.

Tripadvisor went public at the end of 2011 and I was very impressed with the company's financial performance after reading the prospectus. Unfortunately, the stock rapidly climbed to $45 and was trading at 30 times its earnings. Then, in the fall of 2012, the stock tumbled by 33% to $30 and I seriously thought about buying it. The P/E seemed reasonable (20x) for a company with a dominant brand that was growing at 20% a year. Yet, as often the case, I decided to wait for an even better price. And the stock surged by 180% in the following year and is now trading at $84. It's too bad that I didn't convert my admiration into profits as it would have paid for a few five star hotels…for both you and me.

Silver Medal: Buffalo Wild Wings

You are likely surprised to find Buffalo Wild Wings in this section about errors as we have quadrupled our money since becoming shareholders. Difficult to ask for more? Well, it could have been better.

In the middle of 2012, the company had a disappointed quarter due to a substantial increase in the price of chicken wings that weakened gross margins. True to its typical myopia, Wall Street punished the stock which dropped by 24% thereafter.

We had a 2% weight on this stock in our portfolio at that moment. We thought about doubling our holding, believing that these margin problems would be temporary. I decided to go to Minneapolis to meet the executive team at BWW to look into this. I was (yet again) highly impressed by their vision and game plan for the company. I came back convinced that we should not only keep our shares but that we should add to our position. But I didn't act on this conviction and when the stock started to climb, I waited on the sidelines. The stock doubled over the next 15 months. If we had had twice the weight in our portfolio, we would have been even more rewarded this year.

Gold Medal: Church & Dwight

Church & Dwight was first known for its Arm & Hammer brand, the baking soda often placed in our refrigerators to capture odors. About 15 years ago, the company decided to develop an ambitious growth plan by developing new products for Arm & Hammer and also by acquiring new brands. In 2001, the company purchased Carter-Wallace which has many brands including Trojan (the famous condoms), Nair (to remove superfluous body hair) and First Response (the pregnancy test).

As soon as 2003, I could observe the success of this strategy. In only five years, EPS increased from $.26 to $.62 and the stock was trading at $11 (or a P/E of 19x). I hoped that the stock would drop to a more interesting level which never really happened. In 2013, the company generated $2.89 in EPS, meaning that the company grew at an annualized rate of 17% over the course of the last decade. The stock is now trading at $61, a gain of 455% in 10 years (19% annually). And the P/E increased rather than decreased.

This was a great error because I understood the nature of the company's product and brands (allow me to make a juvenile joke by mentioning that *Trojan is an ideal repeat business*). Additionally, after following the company closely for five years, I also realized by 2003 that the company was led by a brilliant team dedicated to serving and creating wealth for its shareholders. I don't have any excuses to even mention and this error is certainly in the gold camp.

Conclusion: the Missing Gene Hypothesis!

We've repeated on numerous occasions throughout the years the importance of having a good attitude towards market fluctuations in order to realize returns that are above the average. We like to repeatedly cite the wise words of the great money manager John Templeton: "It is impossible to produce superior performance unless you do something different from the majority." This something different, in our opinion, is to be able to buy stocks without being affected by the opinions and behaviors of other investors.

Over the course of the last 20 years, we have noticed how few market participants actually achieve this. Warren Buffett even said a few years ago that the capacity to have a good attitude towards stock prices might be an innate trait not acquired with experience (or good arguments). This statement made us think about another way to look at things.

Clearly, the capacity to do better than average is not just linked to intelligence, work or financial resources (if this were the case, all the great financial institutions would achieve it). We came to the conclusion that those rare investors who are able to do better than average over a long period of time might have something that others do not have.

Actually, it's the contrary; they are actually missing something that is present in others: the hypothetical "tribal gene". Like animals, our genetic code was developed over hundreds of thousands of years, with the primary objective being survival. As humans, we learned early (more than 200,000 years ago) that living in a tribal unit offered protection. Following the tribe became a survival instinct well-entrenched in the core of our being. This unconscious instinct is extremely powerful, primarily in moments of crisis or when our survival is in jeopardy. So, when stocks tumble and those around you sell in a panic, it's almost impossible for someone with an intact genetic code to resist the tendency to follow the tribe towards a safe haven (in this case, towards the liquidity of cash).

From our empirical observations, it seems that some members of our species are immune to this call of the herd. They can go left when the rest of the tribe goes towards the right. Their attitude isn't influenced by the behavior of the tribe. Their genetic code seems to not have the "tribal gene". It's difficult to evaluate what percentage of humans have this particularity but it's a minority. And it's probably those who eventually become creators (artists, scientists, writers, entrepreneurs, etc), as the act of creation requires the capacity to make something new and to forge a new path different from others. To create is to go where there was nothing before. Creating is the antonym of following.

Such a theory, which is of course impossible to prove, probably sounds arrogant despite that not being our intent. We are simply on a quest for learning.

Subjectively, we believe that our team at Giverny Capital doesn't have this tribal gene. This line of thinking enables us to answer the question of why we didn't panic during the crisis of 2008-09 and remained optimistic while nearly all others sought refuge.

Many decades ago, Warren Buffett told a group of students: "To succeed in the market, be fearful when others are greedy and greedy when others are fearful." This simple phrase captures the essence of success in the market.

To Our Partners

Using rationality, along with our unwavering optimism, we trust that the companies we own are exceptional, led by top-notch people, and destined for a great future. They should continue to prudently navigate the often troubled waters of the global economy. Furthermore, the valuation assigned by the market to these outstanding companies is very similar to the valuation of an average company in the S&P 500, despite the fact that our companies have better growth prospects than average. Therefore we consider the appreciation potential for our portfolio, both in absolute and relative terms, to be well above average.

We also want you to know that we are fully aware of and grateful for your votes of confidence. It is imperative for us to not only select outstanding companies for our portfolios, but to also remain outstanding stewards of your capital. We certainly like to achieve good returns (and have developed a taste for it), but it must not come at the cost of taking undue risk. Our philosophy to favor companies with solid balance sheets and dominant business models, along with purchasing these companies at reasonable valuations, is central to the risk management of our portfolios.

We wish a great 2014 to all our partners.

François Rochon and the Giverny Capital team

APPENDIX A

The Gazette

Published on July 9th 2013

Twenty years of the Giverny Portfolio

By François Rochon

I started to manage the Giverny Portfolio in July 1993 (and have thoroughly measured results since). The results over twenty years are very satisfactory. More importantly, I have learned lots of lessons that should be useful going forward. Here are the top 10 things I have learned since 1993:

10- Investing in the stock market is not a game.

Investing in the stock market is about acquiring partial ownership in companies. It is not a game. Those who approach the market as if it were a casino end up with the results of gamblers.

9- Beating the market is harder than most people think

The vast majority of investors don't come close to beating the market. Even professional managers, as a whole, don't beat the market because they are the market. But some investors are able to do it. In my experience, it requires a total devotion to the art of investing in addition to the right temperament toward market fluctuations.

8- Short-term results can be caused by luck as much as by skill

Most great investors I know have, on average, underperformed the market one year out of three. Results over a few years don't mean much. But over the long term, chance evens out and sound investment principles prevail. So patience is a key quality to investment success.

7- The more an industry changes, the riskier it is to invest in

I am astonished to see that many leading tech companies of the nineties don't exist anymore (or have lost 80% of their values). Industries that change quickly can be good for customers but bad for shareholders. It applies to technology stocks as well as stocks in some medical fields or government regulated sectors. On the other hand, a company like Coca-Cola will still exists in 50 years!

6- Beware of IPOs

Initial Public Offerings are usually popular at the end of a bull market. When you hear about new exciting IPOs, raise your shields! Although some IPOs do very well (I did buy Dollarama when it

came public a few years back), the majority do poorly. The main reason is that the price set is rarely advantageous to the buyer.

5- Most people are wrong most of the time

I don't have much scientific data to explain this one. But my observations over the years have led me to believe that, in the stock market, most people are wrong most of the time. And the irony is that most people think they know more than the others!

4- Price and value are not the same thing

Price is what you pay, value is what you get. I have seen over the years many stocks sell at half what they were worth. And I've seen overvalued stocks by the bucket. A great business is not always a great stock. Although it is a mistake to solely focus on price, it is an important factor.

3- Look for a company with a competitive advantage

It is a ferociously competitive business world out there. Companies that do better than average - over many years - have a competitive advantage. Look for such advantages.

2- One key ingredient is the management

A great business model is one key ingredient. A great management team is the other one. Most of my big winners were linked to the fact that the management of the company was outstanding.

1- It is futile to try to predict the stock market over the short run

All the previous lessons are useless if you try to predict the stock market over the short run. I have heard people say hundreds of times that they are waiting to buy great companies because they had some views on the short-term direction of the stock market. Owning great businesses, managed by great people and acquired at reasonable prices is the winning recipe.

APPENDIX B

Investment philosophy

Note: This section is repeated from prior annual letters and is aimed at new partners.

In 2013, we saw a large increase in the number of Giverny Capital partners (the term we use for our clients). With all these newcomers, it is imperative that we write again (and again) about our investment philosophy.

Here are the key points:

- We believe that over the long run, stocks are the best class of investments.
- It is futile to predict when it will be the best time to begin buying (or selling) stocks.
- A stock return will eventually echo the increase in per share intrinsic value of the underlying company (usually linked to the return on equity).
- We choose companies that have high (and sustainable) margins and high returns on equity, good long term prospects and are managed by brilliant, honest, dedicated and altruistic people.
- Once a company has been selected for its exceptional qualities, a realistic valuation of its intrinsic value has to be approximately assessed.
- The stock market is dominated by participants that perceive stocks as casino chips. With that knowledge, we can then sometimes buy great businesses well below their intrinsic values.
- There can be quite some time before the market recognizes the true value of our companies. But if we're right on the business, we will eventually be right on the stock.

Experience and common sense teach us that an investment philosophy based on buying shares in companies that are undervalued, and holding these companies for several years, will not generate linear returns. Some years, our portfolio will have a return that is below average. This is a certainty that we must accept.

Another important point: the significant volatility of the market is often perceived negatively by many investors. It's actually the contrary. When we see stock prices as *"what other people believe the company is worth"* rather than the real value (at least in the short term), these fluctuations become our allies in our noble quest for creating wealth. Instead of fearing them, we can profit from them by acquiring superb businesses at attractive prices. The more that markets (the "other" participants) are irrational, the more likely we are to reach our ambitious performance objectives.

Benjamin Graham liked to say that the irrationality of the market was an extraordinary advantage to the intelligent investor. The person, however, who becomes affected by short-term market fluctuations (less than 5 years) and who take decisions based on them transforms this advantage into a disadvantage. His or her own perception of stock quotes becomes their own worst enemy. Our approach at Giverny Capital is to judge the quality of an investment over a long period of time.

So patience – ours AND that of our partners – becomes the keystone for success.

APPENDIX C

Notes on the returns of the Giverny portfolios

- The Giverny portfolio is a private family group of accounts managed by François Rochon since 1993. The returns of the period from 1993 to 1999 were realized before registration of Giverny Capital Inc. at the AMF in June of 2000.
- The Giverny portfolios serve as a model for Giverny Capital's clients, but returns from one client to the other can vary depending on a multitude of factors, such as the timing of the opening and funding of a client's account.
- Past results do not guarantee future results.
- The Giverny Canada and Giverny US portfolios are parts of the Giverny Global portfolio.
- The returns indicated include trading commissions, dividends (including foreign withholding income taxes) and other income but do not include management fees.
- The index benchmark group is selected at the beginning of the year and tends to be a good reflection of the asset composition of the portfolio. In 2013 :

  - Giverny Global Portfolio: TSX 18% Russell 2000 40% S&P 500 40% MSCI EAFE 2%
  - Giverny US Portfolio : S&P 500 100%
  - Giverny Canada Portfolio : S&P/TSX 100%

- The returns for the S&P 500 (in $USD) are provided by Standard & Poors.
- The returns for the various indices used for comparable purposes are deemed reliable by Giverny Capital. It should be noted that currency effects and the impact of dividends on the returns for indices are estimated. Despite its best effort, Giverny Capital cannot guarantee that this information is accurate and complete at all times.
- The custodian of our client portfolio is TD Waterhouse in Canada and TD Ameritrade Institutional in the US.
- The financial statements of the three portfolios are audited by PricewaterhouseCoopers (PwC) at the end of each year. The PwC data are those provided by our custodian TD Waterhouse. The PwC reports are available upon request.
- For more information, please see the "returns" section of our website.

GIVERNY CAPITAL

Annual Letter to our Partners 2014

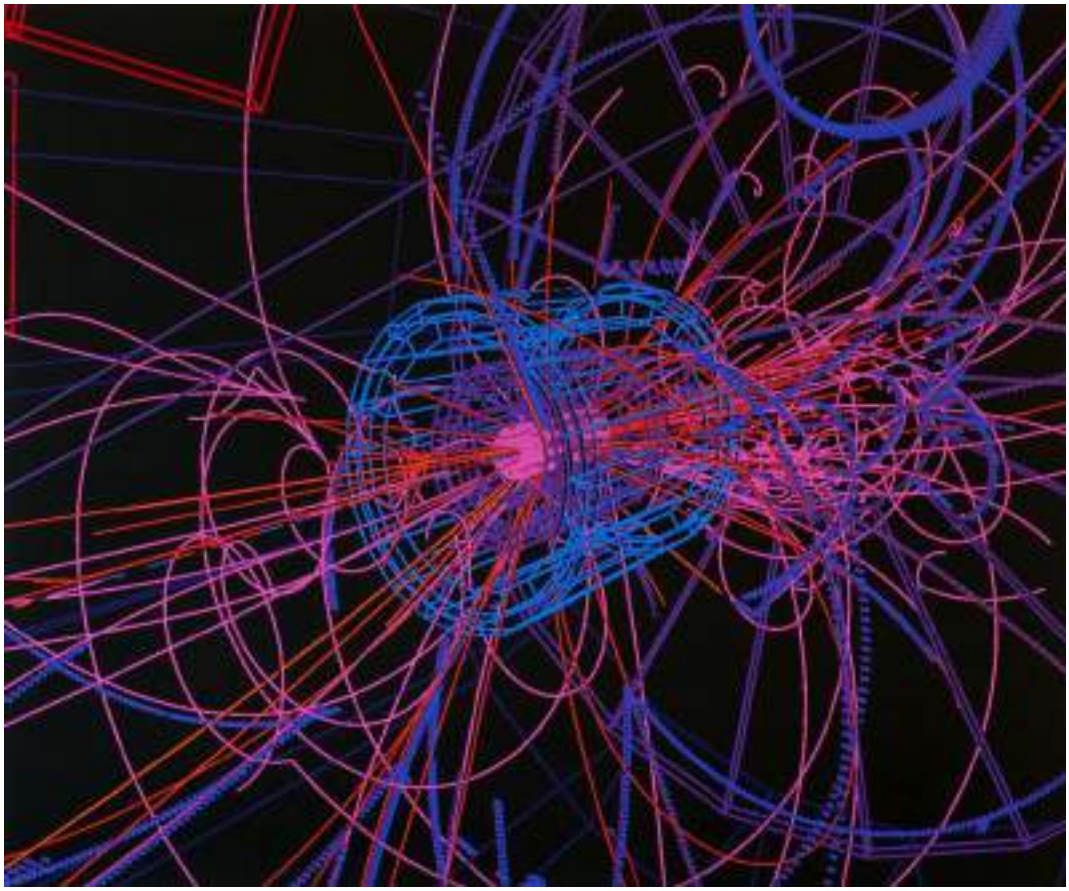

Nicolas Baier
Production de masse, A08 – 2014
peinture/reproduction d'un graphique du CERN
Acrylic on Canvas
Giverny Capital Collection

Historical Summary

It has been more than two decades since I discovered the writings of Warren Buffett, Benjamin Graham, John Templeton, Philip Fisher and Peter Lynch. I then decided to begin managing a family portfolio based on an investment approach synthesized from these great money managers. By the end of 1998, after five years of satisfactory results, I decided to launch an investment management firm offering asset management services aligned with my own investment philosophy. Giverny Capital Inc. came into existence.

In 2002, Giverny hired its first employee: Jean-Philippe Bouchard (JP for those who know him well). A few years later, JP became a partner and participates actively in the investment selection process for the Giverny portfolio. In 2005, two new persons joined the firm who eventually became partners: Nicolas L' Écuyer and Karine Primeau. Finally, in 2009, we launched a US office in Princeton, New Jersey. The director of our Princeton office, Patrick Léger, shares in the culture and long-term time horizon inherent to Giverny.

We are Partners!

From the very first days of Giverny, the cornerstone of our portfolio management philosophy was to manage client portfolios in the same way that I was managing my own money. Thus, the family portfolio I've managed since 1993 (the "Rochon Global Portfolio") serves as a model for our client accounts. It is crucial to me that clients of Giverny and its portfolio managers are in the same boat! That is why we call our clients "partners".

The Purpose of our Annual Letter

The primary objective of this annual letter is to discuss the results of our portfolio companies over the course of the prior year. But even more importantly, our goal is to explain in detail the long-term investment philosophy behind the selection process for the companies in our portfolio. Our wish is for our partners to fully understand the nature of our investment process since long-term portfolio returns are the fruits of this philosophy. Over the short term, the stock market is irrational and unpredictable (though some may think otherwise). Over the long term, however, the market adequately reflects the intrinsic value of companies. If the stock selection process is sound and rational, investment returns will eventually follow. Through this letter, we give you the information required to understand this process. You will hopefully notice that we are transparent and comprehensive in our discussion. The reason for this is very simple: we treat you the way we would want to be treated if our roles were reversed.

The Artwork on Our 2014 Letter

Since 2004, we have illustrated the cover of our letter with a copy of an artwork from our corporate collection. This year we selected a recent work by the Quebec artist Nicolas Baier.

For the year ending December 31st 2014, the return for the Rochon Global Portfolio was 28.1% versus 17.8% for our benchmark, which represents an outperformance of 10.2%. The return of the Rochon Global Portfolio and the one of our benchmark include a gain of approximately 9% due to fluctuations in the Canadian currency.

Since our inception on July 1st 1993, our compounded annual growth rate has been 16.1% versus 8.7% for our weighted benchmark, representing an annualized outperformance of 7.3% over this period.

Our long-term and ambitious objective is to maintain an annual return that is 5% higher than our benchmark.

The Rochon Global Portfolio: Returns since July 1st 1993

Return *	Rochon	Index **	+ / -	$ US/Can ***
1993 (Q3-Q4)	37.0%	9.5%	27.6%	3.3%
1994	16.5%	3.7%	12.7%	6.0%
1995	41.2%	24.0%	17.2%	-2.7%
1996	28.0%	22.8%	5.2%	0.3%
1997	37.8%	28.6%	9.2%	4.3%
1998	20.6%	18.8%	1.8%	7.1%
1999	15.1%	16.3%	-1.2%	-5.7%
2000	13.4%	3.2%	10.2%	3.9%
2001	15.1%	-0.4%	15.5%	6.2%
2002	-2.8%	-18.3%	15.6%	-0.8%
2003	13.6%	14.0%	-0.4%	-17.7%
2004	1.6%	6.2%	-4.5%	-7.3%
2005	11.5%	3.6%	7.9%	-3.3%
2006	3.5%	17.0%	-13.5%	0.2%
2007	-14.4%	-11.6%	-2.8%	-14.9%
2008	-5.5%	-22.0%	16.5%	22.9%
2009	11.8%	12.2%	-0.4%	-13.7%
2010	16.1%	13.9%	2.2%	-5.4%
2011	7.8%	-1.0%	8.8%	2.3%
2012	21.5%	12.5%	9.0%	-2.2%
2013	50.2%	38.9%	11.3%	6.9%
2014	28.1%	17.8%	10.2%	9.1%
Total	**2366.3%**	**507.0%**	**1859.3%**	**-9.5%**
Annualized	**16.1%**	**8.7%**	**7.3%**	**-0.5%**

* All returns are adjusted to Canadian dollars
** Index is a hybrid index (S&P/TSX, S&P 500, MSCI EAFE, Russell 2000) which reflects the weight of the underlying assets
*** Variation of the US dollar compared to the Canadian dollar

Note: Refer to Appendix C for disclosure statements on the Rochon portfolios and their corresponding indices.

The Rochon US Portfolio

We have been publishing the returns of the Giverny US Portfolio, which is entirely denominated in US dollars, since 2003. The Giverny US Portfolio corresponds to the American portion of the Giverny Portfolio. In 2014, it realized a return of 18.0% compared to 13.7% for our benchmark, the S&P 500. The Giverny US Portfolio therefore outperformed our benchmark by 4.3%

Since its inception in 1993, the Giverny US Portfolio has returned 2253%, or 15.8% on an annualized basis. During this same period, the S&P 500 has returned 597%, or 9.4% on an annualized basis. Our added value has therefore been 6.4% annually.

Year	Rochon US	S&P 500	+/-
1993 (Q3-Q4)	32.7%	5.0%	27.7%
1994	9.9%	1.3%	8.6%
1995	54.8%	37.6%	17.2%
1996	27.0%	23.0%	4.1%
1997	32.9%	33.4%	-0.4%
1998	11.0%	28.6%	-17.6%
1999	15.9%	21.0%	-5.1%
2000	11.3%	-9.1%	20.4%
2001	8.1%	-11.9%	20.0%
2002	-4.4%	-22.1%	17.7%
2003	31.6%	28.7%	2.9%
2004	9.3%	10.9%	-1.6%
2005	12.5%	4.9%	7.5%
2006	3.3%	15.8%	-12.4%
2007	-1.7%	5.5%	-7.2%
2008	-24.3%	-37.0%	12.7%
2009	28.7%	26.5%	2.3%
2010	21.9%	15.1%	6.8%
2011	4.9%	2.1%	2.8%
2012	22.8%	16.0%	6.8%
2013	40.6%	32.4%	8.2%
2014	18.0%	13.7%	4.3%
Total	**2252.5%**	**596.5%**	**1656.0%**
Annualized	**15.8%**	**9.4%**	**6.4%**

Note: Please refer to Appendix C for disclosure statements on the Rochon portfolios and their corresponding indices.

We outperformed the S&P 500 for a seventh consecutive year. Our objective is to outperform the S&P 500 over the long term. Over a long period of time, the vast majority of managers fail to beat the S&P 500 and those who do typically underperform one year out of three. You will notice that over the 21 years of its track record, our US portfolio has underperformed the S&P 500 on six occasions (or 29% of the time).

We accept the fact that we will sometimes underperform the index over the short term when our investment style or specific companies are out of favor with mainstream thinking. We welcome rewarding periods of portfolio performance with humility—and with joy. While it's not always easy, we try to remain unaffected by short term results, both good and bad.

Rochon Canada Portfolio

We introduced a portfolio that is 100% focused on Canadian equities in 2007. This corresponds roughly to the Canadian portion of the Giverny Portfolio. In 2014, the Giverny Canada Portfolio returned 20.3% versus 10.6% for the S&P/TSX, therefore outperforming the index by 9.7%.

Since 2007, the Rochon Canada Portfolio has returned 271%, or 17.8% on an annualized basis. During this same period, our benchmark had a gain of 43%, or 4.6% on an annualized basis. Our annual added value was therefore 13.2%.

Year	Giverny Canada	S&P/TSX	+/-
2007	19.7%	9.8%	9.9%
2008	-24.6%	-32.9%	8.3%
2009	28.2%	33.1%	-4.9%
2010	26.7%	17.6%	9.1%
2011	13.5%	-8.7%	22.2%
2012	24.1%	7.2%	16.9%
2013	49.4%	13.0%	36.5%
2014	20.3%	10.6%	9.7%
Total	271.0%	42.9%	228.1%
Annualized	17.8%	4.6%	13.2%

Note: Please refer to Appendix C for disclosure statements on the Rochon portfolios and their corresponding indices.

Our primary Canadian holdings performed very well in 2014. The all-star in our portfolio was Dollarama, which rose 35%. While it was a volatile year for Valeant, the stock still rose nearly 22%. Finally, our most recent purchase, Constellation Software, increased by approximately 27%.

For seven out of the last eight years, the Rochon Canada Portfolio outperformed the TSX. It is also worth repeating that our Canadian portfolio is very concentrated and has little correlation to the TSX. So the relative performance, whether positive or negative, will therefore often be high.

2014: The Year of the "Return to Normal"

2014 was another exceptional year for us. Our companies increased their intrinsic values by approximately 13% which is well above the average rate. Further, our portfolio again generated a market return that was higher than the aggregate increase in the intrinsic values of our portfolio companies. The reason is simple: it is the result of a recovery to more appropriate valuations based on the price-earnings ratios of our companies as well as a more appropriate valuation for the Canadian dollar.

The foundation of our investment approach is to consider stocks as if they represent a fractional ownership in real businesses. While this may seem obvious, the vast majority of market participants do not approach stocks in this manner (unconsciously or otherwise) and the predominant emphasis is almost entirely based on the price of stocks over the short term. From our perspective, we try to remain impervious to market fluctuations and focus our efforts on analyzing the intrinsic performance of our companies. We discuss this intrinsic performance in the "Owner Earnings" section of our Annual Letter.

Let's review the last decade for our portfolio as well as for the stock market in general. It's an interesting exercise because we can see two distinct periods by analyzing the intrinsic performance of our companies and stock market since the beginning of 2005.

The first period, from 2005 to 2011, was characterized by a weaker economy, a contraction of the price-earnings ratio (both for out stocks as well as the S&P 500) and a rising Canadian dollar (which further reduced the performance of our US stocks). For this period, our companies increased their intrinsic values approximately 98% or 10% on an annual basis. The stock prices of our companies, however, rose by only 54% or 6% annually (including dividends). Further, the stronger Canadian dollar reduced this return to 32% or 4% on an annual basis. During these years, we explained that we considered the underlying performance of our companies to be below their long-term economic potential. The compression of price-earnings ratios for our securities also seemed unjustified. Finally, the high Canadian dollar seemed artificially high to us. These three temporary factors impeded the performance of our portfolios during this period.

The period from 2012 to 2014 brought an equilibrium to these factors. Over these three years, our companies increased their intrinsic value by 56% or 16% on an annual basis. Our securities on the stock market rose by 108% or 28% on an annual basis. The Canadian dollar returned to Earth which amplified our performance denominated in Canadian currency by 137% or 33% on an annual basis.

Some might believe that our companies are trading at unsustainably high levels. We don't believe that this is the case and, according to our analysis, the last three years have only corrected an abnormal past imbalance. In other words, the stock market pendulum has simply returned to the middle. Indeed, if we look at the ten year period from 2005 to 2014, our companies have increased their intrinsic values by 209% or 12% on an annual basis. Our stocks have achieved a total return of 219% during this period and, when considering the effect of the Canadian currency, the return is about 214%. Here is a summary table of the past decade:

Period	Intrinsic	Market	In $C
2005-2011	98%	54%	32%
Annualized	**10%**	**6%**	**4%**
2012-2014	56%	108%	137%
Annualized	**16%**	**28%**	**33%**
2005-2014	209%	219%	214%
Annualized	**12%**	**12%**	**12%**

It is obviously important to compare these results with the overall experience of stock market investors. During the last decade, companies in the S&P 500 increased their intrinsic values by about 7% per year and the S&P 500 generated an annual return of 7.7%. In Canada, during the same period, the S&P/TSX Composite Index generated an approximate annual return of 7.4%. Relative to the indices, the portfolio has achieved an outperformance in the 4-5% range per year over the last decade which is in line with our objective.

The market data above also points out that North American stock markets generated returns below the historical average of 10% over the last decade. However, we must remember that the S&P 500 achieved an annual return of 12% from 1995 to 2004. So one could argue that the last decade has simply "normalized" the prior decade.

Benjamin Graham wrote in his 1949 book, "The Intelligent Investor", that the stock market often behaves like a voting machine over the short term—a machine that reflects the sometimes irrational "votes" of investors. But in the long term, the market behaves like a weighing machine that eventually properly reflects the fair value of companies.

The Drop in Oil Prices

We've received several questions regarding the drop in oil prices beginning in late 2014. We have repeatedly affirmed our agnosticism vis-à-vis the price of oil during its past increases and we have the same view regarding the price of oil when it tumbles. If there is one thing that seems clear to us is that the price of oil is highly unpredictable and depends on myriad parameters. Companies that are directly dependent on the price of oil are therefore difficult to value and therefore fall outside of our circle of competence.

On the other hand, we own shares in companies, such as Union Pacific and Precision Castparts, that have part of their business linked to companies operating in various part of the energy sector. We believe that over the long term, their business models are solid and have significant economic benefits allowing them to maintain above-average returns on equity. We do not believe that their long-term economic models are affected by the recent drop in oil prices.

Outlook for 2015

As you know, we have a minimalist attitude towards economic forecasts. The economic outlook for 2015 seems good to us for the United States and, at best, modest for Canada. At this point, it is difficult to measure the impact of the sharp fall in oil prices on the Canadian economy and the Bank of Canada has lowered its growth outlook for 2015 as well as its interest rates.

In the United States, the decline in oil prices could lower the profits of energy companies in the S&P 500 by 50% in 2015. The recent sharp rise in the US dollar should also affect earnings growth of US multinationals. Yet, the drop in gas prices will have a beneficial effect on consumer spending. The combined effect of these various economic drivers on the profits of the S&P 500 for 2015 could lead to a growth rate of only 3%.

As for our companies, the effect of the decline in oil prices should be minimal. Still, many of our US companies generate revenues from various countries, so the rise of the US dollar will affect their level of earnings growth. Nevertheless, we believe that our companies can increase their profits by about 10-13% in the coming year.

Owner's Earnings

At Giverny Capital, we do not evaluate the quality of an investment by the short-term fluctuations in its stock price. Our wiring is such that we consider ourselves owners of the companies in which we invest. Consequently, we study the growth in earnings of our companies and their long-term outlook.

Since 1996, we have presented a chart depicting the growth in the intrinsic value of our companies using a measurement developed by Warren Buffett: "owner's earnings". We arrive at our estimate of the increase in intrinsic value of our companies by adding the growth in earnings per share (EPS) and the average dividend yield of the portfolio. This analysis is not precise but, we believe, approximately correct. In the non-scientific world of the stock market, we believe in the old saying: "It is better to be roughly right than precisely wrong."

This year, the intrinsic value of our companies, as a whole, rose by 13% (12% from the growth in earnings and 1% from the average dividend). Despite changes to our portfolio during the year, we consider this growth in earnings to appropriately reflect economic reality. The stocks of our companies rose approximately 19% (without the effect of currency).

	Rochon Global Portfolio			S&P 500		
Year ***	Value *	Market **	Difference	Value *	Market **	Difference
1996	14%	29%	15%	13%	23%	10%
1997	17%	35%	18%	11%	33%	22%
1998	11%	12%	1%	-1%	29%	30%
1999	16%	12%	-4%	17%	21%	4%
2000	19%	10%	-9%	9%	-9%	-18%
2001	-9%	10%	19%	-18%	-12%	6%
2002	19%	-2%	-21%	11%	-22%	-33%
2003	31%	34%	3%	15%	29%	14%
2004	21%	8%	-12%	21%	11%	-10%
2005	14%	15%	0%	13%	5%	-8%
2006	14%	3%	-11%	15%	16%	1%
2007	10%	0%	-10%	-4%	5%	9%
2008	-3%	-22%	-19%	-30%	-37%	-7%
2009	0%	28%	28%	3%	26%	23%
2010	22%	22%	0%	45%	15%	-30%
2011	17%	6%	-11%	17%	2%	-15%
2012	19%	23%	4%	7%	16%	9%
2013	16%	42%	26%	9%	32%	23%
2014	13%	19%	6%	9%	14%	5%
Total	983%	1094%	111%	293%	375%	83%
Annualized	13.4%	13.9%	0.6%	7.5%	8.6%	1.1%

Since 1996, our companies have increased their intrinsic value by 983%, or close to an eleven fold increase. Meanwhile, the value of their stocks has increased 1094% (including dividends but without currency effects). On an annualized basis, our companies increased their intrinsic value by 13.4% and our stock returned 13.9% per year. The similarity between those two numbers is not a coincidence.

During this same period, the companies comprising the S&P 500 increased their aggregated intrinsic value by 293% and saw their stock prices rise by 375%, or 7.5% and 8.6% annually, respectively.

Market performance and corporate performance are rarely synchronized over the course of a calendar year (as seen in the chart above). In fact, the aggregate stock prices for our portfolio has only been within 1% of the change in aggregate intrinsic value for any given year on only three occasions. But as more time passes, the synchronization between the two inevitably begins to reveal itself.

Over 19 years, our portfolio has realized a return that is 5% higher than the S&P 500 primarily because the underlying companies in our portfolio have increased their intrinsic value at a rate that is 5% higher than the average. This is how we plan on continuing to reach our performance objectives in the future, rather than trying to speculate on the highs and lows of the market or trying to predict economic or political trends.

The Flavor of the Day for 2014

Nearly all areas where we've seen excesses for the last decade have returned to earth. The list of popular "flavors" during the past decade is long. One can think of income trusts in the mid-2000s, and the worldwide euphoria over natural resources (oil comes to mind) during 2006-2007 and then the gold fever of 2010-2011. As we discussed above, even the Canadian dollar is beginning to slowly return to its fair value after a trip to the stratosphere.

One economic segment that still seems flavorful in the eyes of many Canadians is residential real estate. We believe that Canadian home prices continue to be out of sync with historical valuation norms.

But if we had to choose one asset class to avoid it would be government bonds. It is hard to believe that a 10-year bond yielding less than 2% will cover the inflation to come over the next decade. This is even worse when we consider that tax is paid on interest income (inflation, despite being a real cost does not offer tax deductibility on interest received). Our view is that the only benefit to this type of asset is that its principal is guaranteed. We consider that there is another guaranty that comes with government bonds—one which is seldom discussed in advertising for such investments—a guaranty for impoverishment.

Five-year Post-mortem: 2009

Like we do every year, we go through a five-year post-mortem analysis. We believe that studying our decisions in a systematic manner, and with the benefit of hindsight, enables us to learn from both our achievements and our errors.

We experienced a stock market low of rare magnitude in March of 2009. Many believed no less that is was the end of capitalism! We did not panic and remained 100% invested in equities. We then called the stock market at the time as "The opportunity of a generation." I was interviewed in La Presse newspaper on February 14, 2009 and could not help my excitement at the many bargains available at the time (see Appendix A for a copy of this interview in French… time to dust of your French-English dictionary!) More than five years have passed since that interview and the Dow Jones Industrial Average has risen from 7,500 to 18,000 points (+136%). I also recommended in the interview two stocks: Wells Fargo at $17 (in late 2014, it was trading at $55, or +227%) and Walt Disney at $18 (in late 2014, at $94 or +422%). I also recommended avoiding gold—and the price of gold is trading at the same level as five years later.

Among new stocks from 2009, we purchased shares in Buffalo Wild Wings—a company that Jean-Philippe had enthusiastically recommended. The company operated a network of 560 sports-themed restaurants (you guessed it: their flagship product is their delicious chicken wings). Today, the number of BWW stores exceeds 1082 and the stock has soared 400% in five years. My only regret is not having bought more shares.

Errors from 2009

We didn't just pick good stocks in 2009—we also made some epic errors of omission (non-purchases). The first that comes to mind is Harley-Davidson. We owned a few shares in Harley-Davidson about ten years ago. I always found the brand to be without equal (do you know any other brands that people freely tattoo on their bodies?) I even visited the company's museum in 2008 in Milwaukee and was amazed by the solid history of the company. I thoroughly understood the strengths of this business.

We sold our few shares in 2006 after finding the stock a bit expensive. During the financial crisis, the stock tumbled from a high of $75 to less than $10 in February of 2009. Berkshire Hathaway announced that it would lend the company some capital at a 15% annual interest rate. I told myself at the time that I should buy shares in HD since I wholeheartedly believed that the company would survive the crisis and find its way back to high profitability. But I didn't act on this belief. Keith Wandell became CEO in May 2009 and has done exceptionally well in that role. The stock now trades around $70 and I have much remorse for having stayed on the sidelines.

The errors of omission for 2009 were not limited to securities that are not part of our portfolio. We had securities in our portfolio such as American Express, Carmax, Mohawk Industries and Wells Fargo, which all reached incredibly attractive valuation levels during the depths of the crisis. We knew this at the time. We could have sold shares of other holdings such as Wal-Mart, Procter & Gamble and Johnson & Johnson, all of which had better withstood the market decline, to increase our investments in our most attractively-valued stocks. To give you an idea of the additional potential that we could have realized, here is a picture of the market performance of the four companies between the trough in February 2009 and their price at the end of 2014.

	Feb. 2009	Dec. 2014	Return
American Express	$11.0	$93.0	746%
Carmax Inc.	$7.8	$65.7	742%
Mohawk Industries	$22.4	$168.3	651%
Wells-Fargo	$8.8	$54.6	519%
Average			**665%**
S&P 500	734	2059	**181%**

Our Companies

O'Reilly Automotive (ORLY, $193)

The year 2014 marked an important anniversary: we've owned O'Reilly Automotive for a decade. At the start of 2004, we studied a company that we considered well managed and highly profitable: Autozone. Our usual investment process led us to study the company's competitors which led us to O'Reilly. The latter seemed even more interesting to us than Autozone so I decided to go visit the company in Springfield, Missouri. I was highly impressed by the company's game plan, its extensive distribution network, and the company's management. We decided to invest in O'Reilly despite the fact that the company's P/E ratio was considerably higher than Autozone's.

In 2007, while the retail environment was greatly depressed in the United States, O'Reilly made the largest acquisition in its history: CSK Auto. The company expanded its retail footprint from 1830 to 3179 locations despite the general economic malaise of the time. Subsequently, O'Reilly has primarily used excess cash to aggressively buy back its own shares. We certainly enjoyed that too and over ten years, EPS grew from $1.12 to $7.34, at an annualized growth rate of 21%.

O'Reilly had another outstanding year in 2014, with revenues climbing 9%, same-store sales rising by 6%, and net income increasing by 16%. The rise in earnings per share (EPS) was also boosted by the repurchase of approximately 5% of the company's outstanding shares in 2014. EPS therefore

increased by 22%. Here is a graph of the stock for the ten years since our first purchase in August of 2004.

Source: BigCharts.com

As you can see, we were not immediately rewarded and the stock went sideways for a couple of years. But in the end, the stock followed the increase in the intrinsic value of the business. It's difficult to not be highly satisfied from this investment.

Bank of the Ozarks (OZRK, $38)

2014 was an exceptional year for Bank of the Ozarks, our bank from Little Rock, Arkansas. The company generated a 26% growth in EPS, reaching $1.52. Here are the highlights from 2014:

- The bank's efficiency ratio (a measure of its cost structure), was an impressive 45%.
- Return on Assets reached 2.01%
- The bank's balance sheet continues to strengthen with returns on equity of 13.4%.
- In March, Bank of the Ozarks completed its acquisition of OMNIBANK Bank, based in Texas.
- In May, Ozarks acquired Summit Bank, based in Arizona.
- After New York City in 2013, Ozarks opened a branch in Los Angeles in 2014.
- Deposits increased by 48% to $5.5 billion.
- Total assets grew by 41% to $6.8 billion.

Since our purchase in 2006, EPS has increased by 217%, or a 15% compounded annual return. Few banks can tout this kind of performance given the difficult economic context of the past years. We anticipate a solid increase in EPS in 2015 and we remain optimistic about the company's prospect for continued growth.

Berkshire Hathaway (BRK.B, $150)

The company led by the legendary Warren Buffett had another excellent year in 2014. It's difficult to precisely measure the growth in the company's intrinsic value for the year, but we estimate it close to the 12% mark.

The most important news of the year for us was the acquisition of Duracell. Berkshire exchanged its shares in Procter & Gamble for this solid business. This transaction seems to have been intelligently orchestrated and looks like it will bear fruit in both the short and long term. Another significant transaction was the purchase of Van Tuyl Group which is the largest privately-owned network of car dealerships in the US (and the fifth largest in the industry).

We continue to consider shares in Berkshire as undervalued by the market.

Buffalo Wild Wings (BWLD, $180)

Buffalo Wild Wings (BWW) is a sports-oriented restaurant chain which primarily serves chicken wings, as its name suggests. We have been shareholders in the BWW for five years and have been handsomely rewarded for our ownership. The number of restaurant locations reached 1082 in 2014. The company grew revenue by 20% in 2014, same-store sales rose by 6.5% (5.6% for franchised locations) and its EPS climbed by 31%.

The company anticipates opening 90 new restaurants in 2015 and looks to reach 1700 locations within a few years. We anticipate that earnings will grow at 18% for the coming year.

Cabela's (CAB, $53)

We bought shares in Cabela's in 2013. This company operates a large chain of retail stores serving the hunting, fishing and outdoor apparel market. Cabela's recently adopted a higher-performing business model which drew our attention. By significantly reducing the square footage of its retail locations, the company has been able to significantly improve its return on shareholder equity. This Nebraska-based business only has 4.3% of the market share and could double or maybe triple this number in the next decade.

Still, 2014 was a difficult year for Cabela's. Same-store sales fell by 12%, revenues were flat at $3.6 billion, and EPS decreased by 13% to $2.88. Revenue growth did improve in the fourth quarter, when sales grew by 7%. The company, however, invested heavily in advertising to stimulate growth and its profitability was affected as a result. EPS dropped by 16% for the quarter.

We believe that the company has a solid brand and that its long-term growth prospects should find its prior levels within a few quarters.

Carmax (KMX, $67)

Carmax's fiscal year ends in February. We estimate that sales and EPS will grow by 15%. While the company operates 143 stores in the US, it only has roughly 3% of the used car market. So we see lots of room for growth in this business.

We have been shareholders since 2007, when we purchased the stock for $21. The stock subsequently tumbled by 67% during the crisis (such things happen in the stock market). Yet, Carmax remained profitable during 2008 and 2009. Our patience was rewarded as the company generated earnings in 2014 that were more than three times that of 2007 (or an annualized growth of 18%). And the stock followed suit by rising in a commensurate manner to its EPS growth.

Constellation Software (CSU-T, $345)

We've owned a few software companies over the years. Historically, it was a changing and challenging industry to predict. But in recent years, as this segment of the economy has become more mature, it's become easier to find companies with stable product lines and durable sustainable competitive advantages. We discovered Constellation Software a little while ago. Founded in Toronto in 1995, the company focuses on acquiring software companies with a dominant product in its market.

We consider the CEO of Constellation, Mark Leonard, an exceptional businessman. Its business management philosophy is entirely consistent with our own. The majority of CEOs are in "selling" mode when it comes time to talk about their companies. With Mark, we feel a genuine sense of authenticity when informing us about the company and he seems like he has nothing to sell us (he would rather focus on talking about the kind of companies that he would like to acquire).

The past performance of Constellation is impressive and its long-term prospects seem excellent.

Disney (DIS, $94)

Disney had an excellent 2014, with EPS climbing 25% and the stock appreciating by 23%. "Frozen" was a phenomenal success, with an estimated $1.3 billion in revenues that was contributed to the company over the course of the year.

Source: frozen.disney.com

In 2016, Disney plans to open a theme park based on Frozen in Orlando. No, it is not too early to book your hotel now at one of Disney's!

In 2015, Disney will release a "real" version of the film Cinderella and, at the end of the year, the highly anticipated sequel to Star Wars will be released in theaters. In 2016, Disney expects a "real" version of The Jungle Book and a sequel to Finding Nemo (Finding Dory). So you can spend the money saved at the pump with several family outings at the cinema. I would be remiss not to add that Disney also makes money when you buy figurines and stuffed animals of your favorite Disney characters for your children (or for you).

Bob Iger remains in our judgment one of the best CEOs in the US. We bought shares in Disney the very day Bob Iger was named CEO in September of 2005. Since his arrival at the helm of Disney, the

company's stock has increased by 300%, or 230% more than the performance of the S&P 500 over the course of the same period.

Dollarama (DOL-T, $59)

Five years ago, we were thrilled to see one of the company's we had always admired go public: Dollarama. The reason for this admiration is simple: we think that Larry Rossy, the company's founder and CEO, is one of the best businessmen in Canada. The stock has quntupled since its IPO.

After its first three quarters of 2014 (the company's fiscal year ends on January 31st), revenues have risen by 12% and same-store sales has increased by 4.5%. EPS has climbed 26%. Dollarama now has more than 928 stores in Canada and is preparing for international expansion. December was a bit more difficult for the company due to inclement weather. Also, the depreciation of the Canadian dollar could have a slight impact on gross margins for 2015.

Fastenal (FAST, $48)

Fastenal had a good year in 2014, with revenues rising by 12% and EPS by 11%. The majority of this growth was organic, with the number of stores decreasing by 2% while the number of employees increased by 7%.

We have been shareholders in Fastenal for more than 16 years and have been handsomely rewarded. In 2014, EPS was 9.5 times higher than they were in 1998—equivalent to an annualized growth rate of 15%. We continue to admire the company's culture and management team.

Google (GOOG, $526)

Google grew its revenues by 19%, to $66 billion. The company generates an increasingly significant portion of its revenue from its mobile division which has lower margins, so EPS growth was 10% in 2014. The company also now has 56% of its revenues from outside the United States and is therefore affected by the appreciating US dollar.

We might add that we would appreciate a better capital allocation of the company's excess capital. Aside from this, Google seems to us an exceptional company.

IBM (IBM, $160)

IBM had a difficult year. Revenue decreased 6% (or 1% using a constant currency). Net income dropped by 9% and EPS was down 1%. The company repurchased approximately $14 billion of its own shares but this was not enough to offset the decrease in its operating activities. We are disappointed with these results.

IBM manages its capital brilliantly, which is the primary reason why we became shareholders in the first place. Also, the stock is trading at about 10 times expected earnings for 2015 which seems to be greatly undervalued.

We would clearly like to see some positive growth trends but are keeping our shares for now.

LKQ Corp (LKQ, $28)

We invested in LKQ in 2012. This Chicago-based company refurbishes used automotive parts. The company became the leader in its industry by offering very compelling prices relative to new parts (which pleases the insurance companies) along with an unrivaled distribution network. LKQ has diversified in Europe over the last years by making acquisitions in the United Kingdom, Belgium, France and the Netherlands.

From 2008 to 2014, revenues grew at an annualized rate of 22%, from less than $2 billion to $6.7 billion. In 2014, EPS rose by 21% compared to 2013. In 2015, we expect a lower EPS growth (about 15%) since the profitability will be affected, among other things, by the appreciation of the US dollar.

We believe that the company has excellent long-term growth prospects.

M&T Bank (MTB, $126)

M & T Bank had a difficult year in 2014 and EPS declined by 13%. Low interest rates affected the margins of this Buffalo-based bank and its interest margins decreased from 3.65% in 2013 to 3.31% in 2014. In addition, regulatory costs have risen considerably in recent years. The efficiency ratio increased to over 60%, return on asset was 1.2%, and the return on equity came in at 14%. We believe that these numbers are well below the actual earning power of M&T Bank. The merger with Hudson City Bancorp has also taken significantly more time than expected in receiving approval by regulatory bodies. Once completed, we believe that this acquisition will be beneficial for M&T.

Robert Wilmers has led M&T since 1983 and has done a phenomenal job and, despite turning 80 this year, we hope he'll remain as CEO of this Buffalo-based bank for years to come.

Markel Corporation (MKL, $683)

Markel is an insurance company specializing in various niche markets. The company also manages a private equity division that operates various operating companies and has a significant stock portfolio in public companies (similar to Berkshire Hathaway). We've known the company for several years and we admire its conservative approach to its insurance underwriting. The company's equity portfolio is managed masterfully by Tom Gayner.

We first bought shares in 2013 when Markel announced its large acquisition of Alterra Reinsurance Company. Wall Street was skeptical of the benefits of this acquisition and the stock was trading at a compelling valuation. We seized the opportunity to become shareholders.

2014 was an excellent year for Markel. Two ratios are very important to us: the combined ratio of underwriting profits at the insurance business and the growth in the book value of the company. In 2014, the combined ratio decreased from 97% to 95% (the lower the better). More importantly, the newly-acquired reinsurance division saw its combined ratio improve from 109% to 96%, in line with Markel's other insurance divisions. Book value also increased by 16% in 2014.

Mohawk Industries (MHK, $155)

When we speak of phenomenal CEOs, we would have to include Jeffrey S. Lorberbaum of Mohawk in this league. He has led this company, a leader in floor covering based in Georgia, with great skill and

agility through the residential real estate crisis of 2006-2011. The company improved its balance sheet, made good acquisitions at compelling prices, and substantially improved its cost structure.

2014 was an exceptional year, with revenues rising 6% and adjusted EPS increasing 22% to $8.43 (adjusted for amortization of intangible assets). In January 2015, Mohawk announced another major acquisition: IVC Group. Based in Belgium, IVC manufactures vinyl floors and laminates and the company should add about $700 million of revenue to Mohawk.

We had to remain patient with Mohawk but were finally rewarded. We believe that the company is as solid as ever.

MTY Food Group (MTY-T, $34)

MTY grew its revenues by 14% in 2014, to $115 million. The last quarter of the year was weaker than expected and revenues only increased by 6%. The company's adjusted EPS increased by 7% in 2014.

MTY completed numerous acquisitions in 2014. The company acquired Van Houtte, the chain of coffee shops that was owned by the American company Keurig Green Mountain. MTY now owns more than 30 brands and operates a network of more than 2727 franchised restaurants.

We have been shareholders in MTY for seven years. From 2007 to 2014, adjusted EPS increased from $0.51 to $1.60. We remain great admirers of Stanley Ma, the company's CEO, and we continue to see a bright future for the company.

Precision Castparts (PCP, $241)

Precision Castparts manufactures complex metal composite parts sold primarily to the aerospace industry. The company is a leader in this market and benefits from highly durable competitive advantages which enable it to generate net margins of 18%. This is an exceptional level for an industrial company.

EPS increased by 9% in 2014. The company expects a drop in revenue from its oil and gas customers. So we expect that 2015 will be fairly similar to 2014 as far as EPS growth—below the historical growth rate for Precision Castparts. Despite this, in our view, the company's long term growth prospects are still higher than the average company and the company trades at a discount to the average P/E ratio of the S&P 500. So we believe that the stock is undervalued.

Union Pacific (UNP, $119)

Union Pacific had an exceptional year. EPS rose by 22% versus 2013. The most important factor for shareholders of Union Pacific is the company's capacity to increase its prices. The company increased its prices by 2.5% in 2014 and its operating costs rose by 4% less than its revenues. The company's operating cost ratio decreased from 66.1% in 2013 to 63.5% which is one of the lowest in the North American railroad industry. The company also increased its dividend by 10% and bought back $3.2 billion of its own shares.

Valeant Pharmaceuticals (VRX, $143)

It was another year of solid growth for our Laval-based pharmaceutical. The company continued the acquisition strategy it started a few years ago. Its revenue stream is increasingly diversified, with its

20 most significant sources of revenue only representing 36% of its sales. The company's patent portfolio also remains strong, with only 2% of its 2015 revenue affected by generic versions of patent-protected drugs.

Valeant introduced several new products in 2014, with 20 new products in the United States alone. One example is Jublia, a drug used to combat toenail fungus (why invest in high tech companies when we can find ever-growing businesses such as those providing health care for toenails?)

What really made headlines this year was Valeant's failed attempt to acquire Allergan. The latter is a great company but the price ultimately paid by Actavis seems too high. In our opinion, the management of Valeant was wise not to bid (note: Valeant announced in February 2015 that it had acquired Salix for close to $16 billion).

Adjusted EPS was $8.34 in 2014 compared to $6.24 in 2013, an increase of 34%. 2015 promises to be as healthy, with anticipated growth in excess of 20%. Since we first bought shares in Valeant three years ago, the stock has more than tripled.

The pharmaceutical industry is not easy to predict and analyze. The key reason behind this investment is simple: we greatly admire Valeant's CEO, Michael Pearson.

Visa (V, $262)

Visa had another good year. Revenues increased by 9% and EPS by 17%. Visa has 7% more cards in circulation and the number of transactions increased by 9%. With roughly 48% of the company's revenues generated outside the United States, the appreciation of the US dollar reduced revenue growth in the first quarter 2015 from 11% to 7% (its fiscal year ends on September 30). We nevertheless expect EPS growth of 14% in 2015.

Our purchase of Visa four years ago, after a sharp decline in the stock, has proven to be very rewarding with the stock tripling since.

Wells Fargo (WFC, $55)

Wells Fargo had another good year in 2014. EPS rose 5% to $ 4.10—a record level. We believe that the adjusted EPS of Wells Fargo, taking into account the amortization of certain intangible assets, reached $4.29.

This is not an easy time for banks since the low interest rates reduces the profit margin between the rate charged to customers and the rates paid to lenders (such as what's paid on deposits). Clearly, there is a limit to the low rates that banks can pay to depositors (currently 0.09% at WFC). So the net interest margin has decreased from 3.27% in 2013 to 3.04% in 2014. This ratio, while low, is still higher than many WFC competitors like Bank of America (2.18%) and JP Morgan Chase (2.14%).

The adjusted return on asset was 1.45% and return on equity of 13.4%. We believe that the company has the ability to generate significantly more profit in a more "normal" interest rate environment.

The Podium of Errors

Following in the "Givernian" tradition, here are our three annual medals for the "best" errors of 2014 (or from past years). It is with a constructive attitude, in order to always improve as investors, that we provide this detailed analysis.

As is often the case with stocks, errors from omission (non-purchases) are often more costly than errors from commission (purchases)… even if we don't see those on our statements.

Bronze Medal: Tim Hortons

Last summer, I was interviewed on television (on Canal Argent which is the Quebec's equivalent to CNBC). I discussed the three primary players in the donut industry: Dunkin Brands, Tim Hortons and Krispy Kreme. I explained that it was an industry that I understood very well (being a loyal consumer of all three) and that all three players seemed in excellent financial health. The interviewer then pointed out the large number of calories contained in a donut, to which I replied tit for tat "Yes, but there are no calories in the hole!" I then added that I thought that best stock out of the three was Tim Hortons.

I have always followed the Tim story. In 1995, Tim was acquired by Wendy's and, in 2006, was separated from Wendy's and became a public company. I was finally able to buy a few shares and begin following it more closely. I then repeatedly expressed my opinion that Tim was the strongest business in Canada. However, with the high number of restaurants already present in Canada (in the 3000s), I could not see how the company could continue its high growth rate in the future. Also, true to my bad habits, I hoped that the company's stock traded at a lower P/E ratio. So I never actually invested a significant portion of our portfolio in the business, even after highly recommended it on television this summer.

Then a few weeks after this interview, Burger King announced its intent to acquire Tim Hortons for $11 billion; on top of it, with Berkshire Hathaway's financial assistance! We could have made a gain of 270% over 8 years or 60% in a few weeks this summer if I had been able to convert my own advice (and culinary tastes) into a meaningful investment.

Silver Medal: Signet Group

In 2007, a fellow money manager from Los Angeles named Eric Ende introduced me to a British company that operates a jewelry retail chain in the UK and the US. Before its merger with Zales, Signet operated two retail chains in the United States (Kay and Jared) and two in the UK. Like the entire retail sector, the stock fell sharply in 2007-2008. From a high of $50 in 2007, the stock fell to $20 by the end of the year. Since the company's business model is less focused on the high end jewelry market (such as Tiffany for example), the company seemed fairly resilient to recession. So I studied the company in detail.

Signet generated EPS of $3.08 in 2007 and, by the end of 2008, EPS had slipped to $1.57. I suspected that 2008-09 would be difficult. But I told myself at the end of 2007 that, if the company increased its profits by 50% during the next cycle, that this would result in a potential EPS of over $4.50. So with a P/E ratio of 15x, this would result in a stock price of $67 within 5 or 6 years. So Signet's stock seemed attractive to me when it was trading at $20. I might add that the stock has even fallen below $10 in late 2008 (it's not because a stock is highly undervalued it cannot continue to decline in the short term).

Ultimately, profitability returned to its pre-recession level and then some. The company recently acquired its largest competitor in the United States and greatly increased its competitive advantage in the marketplace. EPS reached $5.60 in 2014 and analysts expect $6.72 for 2015. The stock reached $130 at the end of the year. So we could have made a gain of more than 500% in seven years.

And, believe it or not, this is only the silver medal...

Gold Medal: Hanesbrands

I read Peter Lynch's "One Up On Wall Street" in 1992. In this book, the author talks about L'eggs—the famous pantyhose which was first marketed in 1969 by Hanes, a subsidiary of Sara Lee. Mr. Lynch explained in great detail how the product was a great success. This had not fallen on deaf ears and I have been interested in Sara Lee ever since.

Hanesbrands became a public company in 2006 and I started to follow the company even more closely. Hanes' brands are exceptional: in addition to L'eggs, it owns Champion, Bali, Just My Size and Wonderbra.

On the Financial front, the company had unfortunately inherited a fair amount of debt ($2.5 billion)—a level that seemed high relative to its profit at the time. All companies with high levels of debt fell sharply during the financial crisis of 2008-2009 and Hanes was no exception. Hanes declined from a high of $37 in 2008 to $5 in 2009. The company seemed too risky for us at the time.

It's only in 2011 that I seriously considered becoming a shareholder. Hanes had regained its pre-recession profitability level and the company generated EPS of $ 2.69 (compared to $2.09 in 2008). The balance sheet was also greatly improved, with its level of debt having been greatly reduced to $1.8 billion which was approximately six times the level of net profits. Strangely, the stock was trading for only $22 at the end of 2011—about eight times earnings. In three years, EPS had climbed by nearly 30% and the stock was trading for 40% less than in early 2008.

It is rare to find companies with such strong consumer brands trading at such valuation ratios. It is true that many of our stocks were also undervalued at the end of 2011 and it was hard to choose what to sell to buy Hanes. But we should have been more proactive and done it.

Hanes made a significant acquisition at the end of 2013 when it acquired Maidenform. The company has also greatly increased its revenue and operating margins. Since 2011, EPS has more than doubled at Hanes, to $5.66, and analysts expect $6.44 for 2015.

During these three years, shares in Hanes have increased from $22 to $111. Quintupling your money in three years is not a common thing (in case you're wondering, that's an annualized return of 72%). But I remained on the sidelines and watched the Hanes parade go by, waving a flag instead of filling our pockets!

Conclusion: The Greatest Error of Stock Investors (Part 3)

For the over 21 years I've invested in the stock market, the question that comes up most often is always the same: "Is this the right time to invest in stocks?"

To answer this, let us return to a topic we discussed in previous annual letters. In the 2003 letter, I presented an article by André Gosselin on the results of investors versus the performance of the S&P

500. Mr. Gosselin was inspired by the results of the research firm Dalbar on the behavior of stock market investors. Each year, the firm publishes a fascinating research report on the results of all US investors invested in mutual funds compared to the indices. We have also written on the subject in the 2006 letter (our worst year in terms of relative returns).

In 2014, Dalbar released its 20th report QAIB (Quantitative Analysis of Investor Behavior) and the results for the two decades are very instructive. From 1994 to 2013, the average return of investors in equity funds was 5.02% compared to 9.22% for the S&P 500. Over 20 years, the total return to investors was 166% versus 484% for the S&P 500. This is an astronomical difference. And this shortfall is what might be called a "behavioral penalty."

This loss in annual gains of 4.2% cannot be explained by management fees and transaction costs. The only plausible explanation is that investors, as a whole, buy and sell their fund shares at the wrong time. Like weathervanes, they alternate between two emotions: desire for better returns in bull markets and the fear of losing their savings in bear markets. Their oscillation between these two emotional poles becomes the source of their own underperformance.

This self-destructive behavior is reflected in the average holding period of equity mutual funds in the United States: 3.33 years. This is the equivalent of a third of an economic cycle. We have made many times our money with O'Reilly Automotive over 10 years (see above). But after the initial four years of owning O'Reilly, we had not yet made a profit. Just a few years is not a long time in the world of business and investment.

You might be tempted to believe that investors in bond funds are more rational. Think again! Dalbar shows us otherwise. Over 20 years, the bond fund holder has obtained an average yield of 0.71% compared to 5.74% for the Barclays Index. And the average holding period of such funds was 3.05 years.

The returns of investors in Exchange Traded Funds (ETF) are not studied by Dalbar. Index funds have a very high turnover rate (the SPDR S&P 500 ETF would have an average turnover rate of 8,000%). So it's likely that the same behavioral penalty that diminishes the returns of mutual fund investors also diminishes the returns of index fund investors.

The only solution for the investor who wants to avoid falling into the trap of this behavioral penalty is not to try to predict the stock market. Indeed, the first ingredient for success in the stock market is to be invested in it. So the answer to the original question of whether this is a good time to invest in stocks is simple: it is a long-term winning strategy to always be invested in the stock market. The worst thing to do is to constantly be asking yourself this question since it can lead to behaviors that are destructive to wealth.

Postscript

There is good news even though we've highlighted the self-destructive behaviors of many investors. Just as there is a majority of investors, professional and amateur, who penalize their returns by their behaviors, there is also a minority of investors who have the opposite attitude. Those, like us, who have decided to view stocks as ownership in real businesses within the context of a long-term investment horizon rather than chips in an enormous global casino have a considerably greater chance of success.

Warren Buffett wrote this important phrase a few years ago: "The stock market is a system that transfers money from the active to the patient." You certainly know that we wish to remain in the second category. In fact, we love it when other investors sell us shares in companies we admire at good prices simply because of their lack of patience (or their attempts to take advantage of market highs and lows). The irrationality of the majority of investors turns out to be an ally for us.

They provide us with the right assets at the right prices and we provide the patience.

To Our Partners

Using rationality, along with our unwavering optimism, we trust that the companies we own are exceptional, led by top-notch people, and destined for a great future. They should continue to prudently navigate the often troubled waters of the global economy. Furthermore, the valuation assigned by the market to these outstanding companies is very similar to the valuation of an average company in the S&P 500, despite the fact that our companies have better growth prospects than average. Therefore we consider the appreciation potential for our portfolio, both in absolute and relative terms, to be well above average, especially when compared to other alternative asset classes, such as bonds.

We also want you to know that we are fully aware of and grateful for your votes of confidence. It is imperative for us to not only select outstanding companies for our portfolios, but to also remain outstanding stewards of your capital. We certainly like to achieve good returns (and have developed a taste for it), but it must not come at the cost of taking undue risk. Our philosophy to favor companies with solid balance sheets and dominant business models, along with purchasing these companies at reasonable valuations, is central to the risk management of our portfolios.

Thank you from the entire Giverny Capital team.

We wish a great 2015 to all our partners.

François Rochon and the Giverny Capital team

APPENDIX A

Interview in La Presse from February 14, 2009

SUR LE RADAR

Chaque samedi, un financier différent répond à nos questions. Il donne sa lecture des marchés, offre son point de vue sur la Bourse et lance quelques conseils d'investissement. Cette semaine, François Rochon, de Giverny Capital.

La plus belle occasion de s'enrichir d'une génération

STÉPHANIE GRAMMOND

Q : À votre avis, quel est l'événement le plus significatif de la semaine en Bourse ?

Ce qui m'a frappé, ce sont les statistiques sur la balance commerciale (la différence entre les exportations et les importations). D'une part, le Canada a affiché un premier déficit en plus de 30 ans, ce qui est un peu inquiétant pour notre économie dont la croissance dépend beaucoup des exportations. Et d'autre part, le déficit des États-Unis était en forte baisse, ce qui est un bon signe car c'était un de leurs problèmes majeurs. Ce sont de gros changements de tendance par rapport aux cinq dernières années.

Q : Que surveillez-vous le plus attentivement en ce moment ?

Notre critère numéro 1, c'est la qualité du bilan. Et c'est encore plus vrai ces temps-ci, car il y a des entreprises dont les profits baissent, d'autres qui deviennent déficitaires. Si elles n'ont pas un beau bilan, elles ne passeront pas à travers la récession.

Q : Que feriez-vous avec 10 000 $ à investir ?

Je regarderais les banques aux États-Unis. Leurs titres sont extraordinairement déprimés. Certaines vont disparaître, mais celles qui vont s'en sortir vont ramasser tout le marché.

Par exemple, des actions de Wells Fargo constituent un excellent placement. C'est une banque solide, dont le titre est très bon marché. Dans le prochain cycle, elle dégagera environ 4 $US de bénéfices par action et son titre se situe autour de 17 $. Il peut facilement quadrupler.

Par contre, il est un peu tôt pour regarder du côté des banques canadiennes. Certains de leurs éléments d'actifs, de leurs prêts à risque, n'ont pas encore été dépréciés. Il y a un décalage par rapport aux États-Unis. Et au Canada, la correction du prix des maisons ne fait que commencer.

Par ailleurs, j'achèterais certainement du Walt Disney. C'est une des meilleures entreprises au monde et on peut l'acheter au tiers de sa valeur intrinsèque ces jours-ci.

Q : Quel placement évitez-vous à tout prix ?

Si j'avais une chose à éviter, ce serait les titres aurifères et l'or en tant que tel. Il y a un engouement pour ça. Mais la mode risque de passer.

Et j'éviterais aussi comme la peste les obligations : les bons du Trésor de toutes les échéances, surtout celles de plus de cinq ans. Les gens ne le réalisent pas, mais les obligations donnent une garantie d'appauvrissement, en considérant l'inflation et l'impôt. Je trouve ça ridicule.

Moi, j'ai une approche assez différente. Je me dis qu'en ce moment, les investisseurs ont le choix entre les obligations qui rapportent 2 % ou les actions qui vont faire au moins 15 % par année, d'ici cinq ans. C'est le temps d'être à 100 % en actions.

Q : Que lisez-vous en ce moment ?

Je suis en train de relire *L'investisseur intelligent*, de Benjamin Graham.

C'est fascinant de voir à quel point ce qu'il a écrit en 1949 est encore vrai aujourd'hui. Le comportement des investisseurs reste le même. Dans les périodes d'euphorie, les gens achètent des actions à n'importe prix, dont ils sont prêts à se débarrasser à n'importe prix durant les périodes de crise.

On pense que la crise actuelle, c'est du jamais vu. Ben non ! La nature humaine ne change pas. En lisant un livre qui a été écrit il y a 60 ans, ça aide à voir plus clair.

Q : Comment entrevoyez-vous l'avenir sur les marchés ?

Il ne faut pas avoir peur des mots : c'est l'occasion d'une génération pour investir en Bourse. Il y en a eu une belle en 1974. Une autre dans les années 40. Chaque fois que les investisseurs ont eu le courage d'acheter, alors que l'évaluation des actions étaient tombée aux niveaux actuels, ils ont une eu occasion d'enrichissement extraordinaire.

FRANÇOIS ROCHON

Président de Giverny Capital qu'il a fondé en 1998. La société gère des actifs de 80 millions de dollars, pour le compte de clients fortunés, selon une approche qui repose sur la sélection de titres de qualité pour un horizon de long terme.

PHOTO MARTIN TREMBLAY, ARCHIVE LA PRESSE

APPENDIX B

Investment philosophy

Note: This section is repeated from prior annual letters and is aimed at new partners.

In 2014, we saw a large increase in the number of Giverny Capital partners (the term we use for our clients). With all these newcomers, it is imperative that we write again (and again) about our investment philosophy.

Here are the key points:

- We believe that over the long run, stocks are the best class of investments.
- It is futile to predict when it will be the best time to begin buying (or selling) stocks.
- A stock return will eventually echo the increase in per share intrinsic value of the underlying company (usually linked to the return on equity).
- We choose companies that have high (and sustainable) margins and high returns on equity, good long term prospects and are managed by brilliant, honest, dedicated and altruistic people.
- Once a company has been selected for its exceptional qualities, a realistic valuation of its intrinsic value has to be approximately assessed.
- The stock market is dominated by participants that perceive stocks as casino chips. With that knowledge, we can then sometimes buy great businesses well below their intrinsic values.
- There can be quite some time before the market recognizes the true value of our companies. But if we're right on the business, we will eventually be right on the stock.

Experience and common sense teach us that an investment philosophy based on buying shares in companies that are undervalued, and holding these companies for several years, will not generate linear returns. Some years, our portfolio will have a return that is below average. This is a certainty that we must accept.

Another important point: the significant volatility of the market is often perceived negatively by many investors. It's actually the contrary. When we see stock prices as *"what other people believe the company is worth"* rather than the real value (at least in the short term), these fluctuations become our allies in our noble quest for creating wealth. Instead of fearing them, we can profit from them by acquiring superb businesses at attractive prices. The more that markets (the "other" participants) are irrational, the more likely we are to reach our ambitious performance objectives.

Benjamin Graham liked to say that the irrationality of the market provides an extraordinary advantage to the intelligent investor. The person, however, who becomes affected by short-term market fluctuations (less than 5 years) and who makes decisions based on them transforms this advantage into a disadvantage. His or her own perception of stock quotes becomes their own worst enemy. Our approach at Giverny Capital is to judge the quality of an investment over a long period of time.

So patience – ours AND that of our partners – becomes the keystone for success.

APPENDIX C

Notes on the returns of the Rochon portfolios

- The Rochon portfolio is a private family group of accounts managed by François Rochon since 1993. The returns of the period from 1993 to 1999 were realized before registration of Giverny Capital Inc. at the AMF in June of 2000.
- The Rochon Global portfolio serves as a model for Giverny Capital's clients, but returns from one client to the other can vary depending on a multitude of factors. The returns indicated include trading commissions, dividends (including foreign withholding income taxes) and other income but do not include management fees. Portfolio returns of the Rochon Global portfolio have been generated in a different environment than Giverny Capital's clients and this environment is considered controlled. For example, cash deposits and withdrawals can increase the returns of the Rochon Global portfolio. Thus, the portfolio returns of the Rochon Global portfolio are often higher than the returns realized by clients of Giverny Capital.
- Past results do not guarantee future results.
- The Rochon Canada and Rochon US portfolios are parts of the Rochon Global portfolio.
- The index benchmark group is selected at the beginning of the year and tends to be a good reflection of the asset composition of the portfolio. Weighted indices presented may not be representative of the Rochon Global portfolio. In 2014 :

  - Giverny Global Portfolio: TSX 16% Russell 2000 42% S&P 500 42%
  - Giverny US Portfolio : S&P 500 100%
  - Giverny Canada Portfolio : S&P/TSX 100%

- The returns for the S&P 500 (in $USD) are provided by Standard & Poors.
- The returns for the various indices used for comparable purposes are deemed reliable by Giverny Capital.
- It should be noted that currency effects on the returns of the Rochon portfolio and indices are estimated to our best effort.
- The custodian of our client portfolios is National Bank Correspondent Network (NBCN) in Canada and TD Ameritrade Institutional in the US.
- The financial statements of the three portfolios are audited at the end of each year. The auditor's data are those provided by our custodian (NBCN). The auditor's annual reports are available upon request.
- For more information, please see the "returns" section of our website.

GIVERNY CAPITAL

Annual Letter to our Partners 2015

David Altmejd
The Flux and the Puddle (detail), 2014
Giverny Capital Collection
On Loan to the Musée National des Beaux-Arts du Québec

Historical Summary

It has been more than two decades since I discovered the writings of Warren Buffett, Benjamin Graham, John Templeton, Philip Fisher and Peter Lynch. I then decided to begin managing a family portfolio based on an investment approach synthesized from these great money managers. By the end of 1998, after five years of satisfactory results, I decided to launch an investment management firm offering asset management services aligned with my own investment philosophy. Giverny Capital Inc. came into existence.

In 2002, Giverny hired its first employee: Jean-Philippe Bouchard (JP for those who know him well). A few years later, JP became a partner and participates actively in the investment selection process for the Giverny portfolio. In 2005, two new persons joined the firm who eventually became partners: Nicolas L'Écuyer and Karine Primeau. Finally, in 2009, we launched a US office in Princeton, New Jersey. The director of our Princeton office, Patrick Léger, shares in the culture and long-term time horizon inherent to Giverny.

We are Partners!

From the very first days of Giverny, the cornerstone of our portfolio management philosophy was to manage client portfolios in the same way that I was managing my own money. Thus, the family portfolio I've managed since 1993 (the "Rochon Global Portfolio") serves as a model for our client accounts. It is crucial to me that clients of Giverny and its portfolio managers are in the same boat! That is why we call our clients "partners".

The Purpose of our Annual Letter

The primary objective of this annual letter is to discuss the results of our portfolio companies over the course of the prior year. But even more importantly, our goal is to explain in detail the long-term investment philosophy behind the selection process for the companies in our portfolio. Our wish is for our partners to fully understand the nature of our investment process since long-term portfolio returns are the fruits of this philosophy. Over the short term, the stock market is irrational and unpredictable (though some may think otherwise). Over the long term, however, the market adequately reflects the intrinsic value of companies. If the stock selection process is sound and rational, investment returns will eventually follow. Through this letter, we give you the information required to understand this process. You will hopefully notice that we are transparent and comprehensive in our discussion. The reason for this is very simple: we treat you the way we would want to be treated if our roles were reversed.

The Artwork on Our 2015 Letter

Since 2004, we have illustrated the cover of our letters with a copy of artwork from our corporate collection. This year we selected a detail of a sculptural installation by the Quebec artist David Altmejd entitled "The Flux and the Puddle". After a summer at the Musée d'art contemporain de Montréal, this work by Mr. Altmejd was exhibited at the Louisiana Museum in Denmark last Fall and will be on exhibit for the next 10 years at the Musée National des Beaux-Arts du Québec beginning on June 24, 2016.

For the year ending December 31st 2015, the return for the Rochon Global Portfolio was 20.2% versus 13.4% for our benchmark, which represents an outperformance of 6.8%. The return of the Rochon Global Portfolio and the one of our benchmark include a gain of approximately 16.3% due to fluctuations in the Canadian currency.

Since its inception on July 1st 1993, the compounded annual return of the Global Rochon Portoflio has been 16.3% versus 9.0% for our weighted benchmark, representing an annualized outperformance of 7.3% over this period. Our ambitious long-term objective is to maintain an annual return that is 5% higher than our benchmark.

The Rochon Global Portfolio: Returns since July 1st 1993

Return *	Rochon	Index **	+ / -	$ US/Can ***
1993 (Q3-Q4)	37.0%	9.5%	27.6%	3.3%
1994	16.5%	3.7%	12.7%	6.0%
1995	41.2%	24.0%	17.2%	-2.7%
1996	28.0%	22.8%	5.2%	0.3%
1997	37.8%	28.6%	9.2%	4.3%
1998	20.6%	18.8%	1.8%	7.1%
1999	15.1%	16.3%	-1.2%	-5.7%
2000	13.4%	3.2%	10.2%	3.9%
2001	15.1%	-0.4%	15.5%	6.2%
2002	-2.8%	-18.3%	15.6%	-0.8%
2003	13.6%	14.0%	-0.4%	-17.7%
2004	1.6%	6.2%	-4.5%	-7.3%
2005	11.5%	3.6%	7.9%	-3.3%
2006	3.5%	17.0%	-13.5%	0.2%
2007	-14.4%	-11.6%	-2.8%	-14.9%
2008	-5.5%	-22.0%	16.5%	22.9%
2009	11.8%	12.2%	-0.4%	-13.7%
2010	16.1%	13.8%	2.3%	-5.3%
2011	7.6%	-1.1%	8.7%	2.2%
2012	21.2%	12.5%	8.7%	-2.2%
2013	50.2%	38.9%	11.3%	6.9%
2014	28.1%	17.8%	10.2%	9.1%
2015	20.2%	13.4%	6.8%	19.3%
Total	**2864.3%**	**588.1%**	**2276.2%**	**8.0%**
Annualized	**16.3%**	**9.0%**	**7.3%**	**0.3%**

* All returns are adjusted to Canadian dollars
** Index is a hybrid index (S&P/TSX, S&P 500, MSCI EAFE, Russell 2000) which reflects the weight of the underlying assets
*** Variation of the US dollar compared to the Canadian dollar

Note: Refer to Appendix B for disclosure statements on the Rochon portfolios and their corresponding indices.

The Rochon US Portfolio

We have been publishing the returns of the Rochon US Portfolio, which is entirely denominated in US dollars, since 2003. The Rochon US Portfolio corresponds to the American portion of the Rochon Global Portfolio. In 2015, it realized a return of 1.7% compared to 1.4% for our benchmark, the S&P 500. The Rochon US Portfolio therefore outperformed our benchmark by 0.4%

Since its inception in 1993, the Rochon US Portfolio has returned 2294%, or 15.2% on an annualized basis. During this same period, the S&P 500 has returned 606%, or 9.1% on an annualized basis. Our added value has therefore been 6.1% annually.

Year	Rochon US	S&P 500	+/-
1993 (Q3-Q4)	32.7%	5.0%	27.7%
1994	9.9%	1.3%	8.6%
1995	54.8%	37.6%	17.2%
1996	27.0%	23.0%	4.1%
1997	32.9%	33.4%	-0.4%
1998	11.0%	28.6%	-17.6%
1999	15.9%	21.0%	-5.1%
2000	11.3%	-9.1%	20.4%
2001	8.1%	-11.9%	20.0%
2002	-4.4%	-22.1%	17.7%
2003	31.6%	28.7%	2.9%
2004	9.3%	10.9%	-1.6%
2005	12.5%	4.9%	7.5%
2006	3.3%	15.8%	-12.4%
2007	-1.7%	5.5%	-7.2%
2008	-24.3%	-37.0%	12.7%
2009	28.7%	26.5%	2.3%
2010	21.9%	15.1%	6.9%
2011	4.7%	2.1%	2.6%
2012	22.3%	16.0%	6.3%
2013	40.6%	32.4%	8.2%
2014	18.0%	13.7%	4.3%
2015	1.7%	1.4%	0.4%
Total	**2293.6%**	**606.2%**	**1687.4%**
Annualized	**15.2%**	**9.1%**	**6.1%**

Note: Please refer to Appendix B for disclosure statements on the Rochon portfolios and their corresponding indices.

We outperformed the S&P 500 for an eighth consecutive year (just barely). Our objective is to outperform the S&P 500 over the long term.

You will notice that over the 22 years of its track record, our US portfolio has underperformed the S&P 500 on six occasions (or 27% of the time). This is in line with our "Rule of Three" which stipulates that we accept to underperform the index one year out of three on average. This average, if we can maintain it, would be far superior to the overall performance of portfolio managers. It is a difficult task to maintain outperforming the S&P 500 but it is our mission.

We must accept the fact that we will sometimes underperform the index over the short term when our investment style or specific companies are out of favor with mainstream thinking. And we try to welcome rewarding periods of portfolio outperformance with humility.

While it is not always easy, we try to remain impervious to short term results, both good and bad.

Rochon Canada Portfolio

We introduced a portfolio that is 100% focused on Canadian equities in 2007. This corresponds roughly to the Canadian portion of the Rochon Global Portfolio. In 2014, the Rochon Canada Portfolio returned 16.0% versus -8.3% for the S&P/TSX, therefore outperforming the index by 24.3%.

Since 2007, the Rochon Canada Portfolio has returned 331%, or 17.6% on an annualized basis. During this same period, our Canadian benchmark had a gain of 31%, or 3.0% on an annualized basis. Our annual added value is therefore 14.6%.

Year	Rochon Canada	S&P/TSX	+/-
2007	19.7%	9.8%	9.9%
2008	-24.6%	-32.9%	8.3%
2009	28.2%	33.1%	-4.9%
2010	26.7%	17.6%	9.1%
2011	13.5%	-8.7%	22.2%
2012	24.0%	7.2%	16.8%
2013	49.4%	13.0%	36.4%
2014	20.3%	10.6%	9.7%
2015	16.0%	-8.3%	24.3%
Total	330.5%	31.0%	299.4%
Annualized	17.6%	3.0%	14.6%

Note: Please refer to Appendix B for disclosure statements on the Rochon portfolios and their corresponding indices.

Our main Canadian holdings performed very well in 2015 and the all-star in our portfolio was Constellation Software which rose 67%. Dollarama also performed well, rising 35%. Of course, the stock dominating the headlines in Canada in 2015 was Valeant Pharmaceuticals (the stock decreased by 15%). We'll come back to that story later on.

For eight out of the last nine years, the Rochon Canada Portfolio outperformed the TSX. It is also worth repeating that our Canadian portfolio is highly concentrated and has little correlation to the TSX. So the relative performance, whether positive or negative, will therefore often be high.

2015

2015 was a difficult year for investors in the stock market. The dramatic drop in oil prices weakened the economy of many countries from East to West. In fact, nearly all industries linked to natural resources experienced a disastrous year. Consequently, many companies with revenue streams tied to these industries also had a portion of their revenue affected.

Additionally, the strength of the US dollar also had a negative effect on the profitability of many US companies doing business abroad. The combination of these factors created a stagnation in profits for

the companies in the S&P 500—a trend which was ultimately reflected in the market indices (with the Russell 2000 small cap Index suffering a little more, with a decline of 8%).

The situation was worse in Canada. The S&P/TSX declined from a high of 15,625 in 2014 to end 2015 at 13,010. The Canadian market is roughly at the same level it was back in 2007.

2015 was a good year for us. Our companies increased their intrinsic values by approximately 11% (dividend included) which is well above the average rate of earnings growth. And our stocks rose approximately 4% which is also above average. Since this modest absolute performance was still better than our benchmark, we are satisfied with our results.

The recent modest market performance of our companies only means that they have become more undervalued than they were at the same time last year.

Tender Offer for Precision Castparts

It is with mixed emotions that we welcomed the acquisition of Precision Castparts (PCP) by Berkshire Hathaway. As shareholders in Berkshire, we believe that this represents the acquisition of an extraordinary business for a very reasonable price. It's difficult for Berkshire to grow the immense level of capital it manages, and PCP provides both a sizeable capital base as well as a company with significant competitive advantages. The company's growth potential over the long term strikes us as vastly superior to the average and, in our opinion, the company should become a significant division within Berkshire.

As shareholders in PCP, we found ourselves in the difficult position of having to replace a company of rare quality. We resolved the problem pragmatically, by buying more shares in companies already in our portfolio… including Berkshire.

Effect of the Canadian Currency

It should be highlighted that the steep decline in the value of the Canadian dollar contributed significantly to the excellent appreciation of our portfolio in 2015. Our view is that the Canadian dollar has returned to a level that is more in line with its fair value, so we don't anticipate much as far as currency gains in the years to come. This does not mean that a Canadian investor should avoid US companies. It simply means that we don't have the opportunity to buy US companies at an additional discount such as the one that was offered to us in the recent past.

With more than 22 years of historical perspective, we can highlight the fact that the Rochon Global portfolio returned 16.3% on an annualized basis and that the decline in the Canadian currency contributed to only 0.3% of this return. The Loonie has experienced wild fluctuations throughout the years, but ultimately has had a negligible impact on our returns over the long term.

Portfolio Turnover

Our portfolio turnover was less than 10% in 2015 and we estimate that our average turnover during the last several years has been around 15%. In other words, we keep our stocks for 6 to 7 years on average. This compares to an average holding period of 6 months for the average investor (professional or not). So we keep our shares something like 12 times longer than the average investor. Our long holding period is also consistent with our investment philosophy: to generate exceptional returns over the long term, you must own exceptional companies over the long term.

We can ascertain two facts if we look at the 15 most significant holdings in our portfolio. The first is that these holdings represent about 80% of the value of our portfolio. We therefore have a concentrated investment approach. Second, we can see the average holding period for these stocks exceeds 7 years. Here are the details:

Company	Since	Years
Berkshire Hathaway B	2000	15
Bank of the Ozarks	2006	9
Disney (Walt) Co.	2005	10
Carmax Inc.	2007	8
LKQ Corp.	2012	3
Wells-Fargo	2005	10
Visa Inc.	2010	5
M&T Bank	2009	6
O'Reilly Automotive	2004	11
MTY Food Group	2007	8
Markel Corp	2013	2
Dollarama Inc.	2010	5
Ametek Inc.	2015	0
Union-Pacific	2012	3
Constellation Software	2014	1
Top 15 (average)		7

The Keystone of our Philosophy

We believe that exceptional returns can only be obtained by owning assets that intrinsically generate exceptional returns. There are all sorts of assets that an investor can own. In our opinion, the best assets to own are productive assets—ones that are a source of continuous wealth creation. We've learned throughout the years that a company with a durable competitive advantage is an asset that falls in this category.

The basis of our investment approach is that we consider stocks as fractional ownership in real businesses. While this may seem perfectly obvious, the majority of market participants do not approach stocks in this manner (whether consciously or not) and the emphasis is placed almost exclusively on short-term stock quotes. From our perspective, we prefer to remain impervious to stock quotes and favor an analysis based on the intrinsic performance of our companies.

Owner's Earnings

At Giverny Capital, we do not evaluate the quality of an investment by the short-term fluctuations in its stock price. Our wiring is such that we consider ourselves owners of the companies in which we invest. Consequently, we study the growth in earnings of our companies and their long-term outlook.

Since 1996, we have presented a chart depicting the growth in the intrinsic value of our companies using a measurement developed by Warren Buffett: "owner's earnings". We arrive at our estimate of the

increase in intrinsic value of our companies by adding the growth in earnings per share (EPS) of our entire group of companies and the average dividend yield of the portfolio. We believe that this analysis is not exactly precise but approximately correct. In the non-scientific world of the stock market, we believe in the old saying: "It is better to be roughly right than precisely wrong."

This year, the intrinsic value of our companies, as a whole, rose by 11% (10% from the growth in earnings per share and 1% from the average dividend). Despite some of the changes to our portfolio during the year, we consider this estimate to adequately reflect its underlying economic reality.

The market performance of our portfolio was a gain of roughly 4% (including dividends and estimated without currency effects).

	Rochon Global Portfolio			S&P 500		
Year ***	Value *	Market **	Difference	Value *	Market **	Difference
1996	14%	29%	15%	13%	23%	10%
1997	17%	35%	18%	11%	33%	22%
1998	11%	12%	1%	-1%	29%	30%
1999	16%	12%	-4%	17%	21%	4%
2000	19%	10%	-9%	9%	-9%	-18%
2001	-9%	10%	19%	-18%	-12%	6%
2002	19%	-2%	-21%	11%	-22%	-33%
2003	31%	34%	3%	15%	29%	14%
2004	21%	8%	-12%	21%	11%	-10%
2005	14%	15%	0%	13%	5%	-8%
2006	14%	3%	-11%	15%	16%	1%
2007	10%	0%	-10%	-4%	5%	9%
2008	-3%	-22%	-19%	-30%	-37%	-7%
2009	0%	28%	28%	3%	26%	23%
2010	22%	22%	0%	45%	15%	-30%
2011	17%	6%	-11%	17%	2%	-15%
2012	19%	23%	4%	7%	16%	9%
2013	16%	42%	26%	9%	32%	23%
2014	13%	19%	6%	9%	14%	5%
2015	11%	4%	-7%	1%	1%	0%
Total	1102%	1141%	39%	297%	380%	84%
Annualized	13.2%	13.4%	0.2%	7.1%	8.2%	1.0%

* Estimated growth in earnings plus dividend yield
** Market performance, dividend included (please refer to Appendix B for disclosure statements on the Rochon portfolios)
*** All results estimated without currency effects

20 Years of Owner's Earnings

We have presented this chart for 20 years now. As it demonstrates, market performance and company performance are rarely in sync over the course of a single year. In fact, the aggregate stock price for our portfolio has only been within 1% of the change in aggregate (estimated) intrinsic value for any given year for only 3 years out of 20. But as more time passes, the synchronization between the two inevitably begins to reveal itself.

Significant and educational conclusions can be drawn from a 20-year period. Since 1996, our companies have increased their intrinsic value by 1102%, or close to a twelvefold increase. Meanwhile, the value of their stocks has increased 1141% (net of estimated currency effects). On an annualized basis, our

companies increased their intrinsic value by 13.2% and our stock portfolio returned 13.4% per year. The similarity between those two numbers is not a coincidence.

During this same period, the companies comprising the S&P 500 increased their aggregated intrinsic value by 297% and saw their stock prices rise by 380% (dividend included), or 7.1% and 8.2% annually, respectively.

We could split this 20-year period into two distinct decades. The first from 1996 to 2005, and the second from 2006 to 2015. We can see in the chart below that the performance of our stocks during the second period was inferior than that of the first period, in regards to their stock performance as well as the S&P 500. In our opinion, this reflects that corporate profits were slightly higher than their true long-term earning power during 2005-2006 (probably due to higher than normal profits generated from residential real estate). On the other hand, we believe that corporate profits in 2015 were slightly below their long-term earning potential. This combination led to the second decade having slightly lower profits growth than the historical average.

	Rochon Global Portfolio			S&P 500		
Périod ***	Value *	Market **	+/-	Value *	Market **	+/-
1996-2005	14.9%	15.7%	0.8%	8.5%	9.1%	0.5%
2006-2015	11.6%	11.2%	-0.4%	5.8%	7.3%	1.5%

* Estimated growth in earnings plus dividend yield
** Market performance, dividend included (please refer to Appendix B for disclosure statements on the Rochon portfolios)
*** All results estimated without currency effects

The Sound Conclusion

Over 20 years, our stocks have outperformed the S&P 500 by 5% annually for the simple reason that the underlying companies in our portfolio have increased their intrinsic value at a rate that is 5% superior than the average. It is in this matter that we intend to continue reaching our goals of outperformance rather than any sort of speculation on the highs and lows of the market, the economy, and/or the political environment. We leave this futile activity to those who don't realize that a stock is simply an ownership stake in a business.

The Flavor of the Day for 2015

Since 2015 was a difficult year for stocks, we were hard pressed to find popular segments of the market. Once again, it's in regards to bonds that we're seeing unbridled optimism. We'll come back to this at the end of our letter.

Housing prices in Canada have also continued to increase in 2015, primarily in British Columbia and Ontario. The average home price in Vancouver now exceeds one million dollars[1]. In Toronto, the average price is $631,000. A significant drop in Canadian real estate prices could have major consequences on various segments of the Canadian economy. We consequently try to stay clear of any businesses that could be affected.

2016 Outlook

As you likely know, we have a minimalistic attitude towards making economic predictions (and a nihilistic attitude regarding short-term stock market predictions). Our opinion is that the outlook for

[1] According to the Canadian Real Estate Association website for January 2016.

economic growth on most parts of the globe will be modest for the year to come. A highly selective investment process for finding truly above-average companies is as critical as ever.

In the US, the strength of the dollar should have less of a dampening effect on the growth of earnings in 2016 versus 2015. We believe that US companies should grow their profits by roughly 6-8% annually. The S&P 500 is now trading at 15-16 times its anticipated profit for the year to come which seems to us a reasonable ratio.

More important to our financial well-being, we believe that our companies should increase their profits by about 12-16% this year, a rate that is roughly twice the one of the average company in the S&P 500. Our stocks are trading at approximately 14-15 times estimated profits. So, not only are our companies offering better-than-average growth prospects in our view, but their shares are actually trading at a slight discount to the P/E of the market.

Closer to home, the economic outlook in Canada seems bleak. Various forces affecting the Canadian economy, such as weak commodity prices, the elevated level of Canadian real estate and a rise in income tax rates do not bode well and are unlikely to improve in the year to come. The significant increase in the federal budget deficit could soften this short-term situation, but it does not seem constructive (to us) over the long term. We are, however, satisfied with the Canadian companies held in our portfolio. Their long-term growth prospects seem very solid.

The year 2016 kicked off with market volatility. We welcome volatility because it allows us to acquire shares of the companies we like at more attractive valuations. We can either invest new capital at good prices or rebalance our portfolio to take advantage of compelling relative opportunities. It's perfectly rational to sell a stock trading at 67% of its fair value to invest the proceed in an existing holding trading at 50% of its fair value. We are all richer today because of past market corrections.

Five-year Post-mortem: 2010

Like we do every year, we go through a five-year post-mortem analysis. We believe that studying our decisions in such a systematic manner, and with the benefit of hindsight, enables us to learn from both our achievements and our errors.

First, in the 2010 Annual Letter, we labeled the price of gold as the "flavor of the day" when it was nearing $1400 per ounce. Five years later, gold is trading at $1065, or 24% lower than the 2010 level. We had no idea how to evaluate the price of gold but we had observed a craze that seemed worthy of highlighting in 2010. We could add that since I started in 1993, the price of gold has risen from $392 to $1065, which is an annual return of 4.6%. This is roughly half the annual return of the S&P 500 over the same period.

In the 2010 letter, we presented two new portfolio purchases: Dollarama and Visa.

Dollarama

Dollarama is the largest dollar store chain in Canada, with over 1000 locations across the country. Founded in 1992, the company's stores offer a vast inventory of consumer products, general merchandise and seasonal items. Products are sold individually or in bulk at fixed prices up to a maximum of $3.

We had gotten to know the company quite well even before it became a public company since Dollarama is a Montreal-based company. We knew that the company's founder and president, Larry Rossy, was

an exceptional businessman and we were saddened when the company was sold to the private equity firm Bain Capital in 2004 instead of going public.

The good news is that there's no sense losing hope in the world of the stock market and Dollarama finally went public in 2009 at $17.50 per share ($8.75 when we adjust for a stock split). A few months later, in 2010, we became shareholders in the company despite the company having a P/E of 18x and having some debt on its balance sheet. This was an act of faith based on Mr. Rossy. EPS rose from $0.82 in 2010 to $2.96 in 2015 (estimated), which represents a 29% annual growth rate. The company's stock rose from $12 to $80 (an annual return of 46%). Dollarama is one of our best investments since the inception of this portfolio 22 ½ years ago. All partners at Giverny Capital owe a debt of gratitude to Larry Rossy.

Visa

We were shareholders of American Express from 1995 to 2013 so we understood quite well the solid competitive advantages of credit card companies. MasterCard went public in 2006 and was an exceptional investment (one which we lamentably missed). We were anxiously waiting for Visa to also go public, which occurred with its 2008 initial public offering. We waited on the sidelines as its shares were trading at $20 when the company was earning $0.62 per share (a P/E of more than 30x).

The stock tumbled to $13 during the crisis of 2008-2009 and then climbed back to $23 in 2010. However, during the summer of 2010, the stock dropped 25% when Senator Dick Durbin introduced a bill which amended the Dodd-Frank bill to limit debit card transaction fees for retailers (interchange fees). The stock fell to $17 and we purchased shares. At that time, the company was earning $1.06 so the P/E had fallen from 23x to 17x within a few weeks. This was a very compelling valuation for this business as we believed that the company's long-term prospects seemed exceptional.

Source du graphique : Bigcharts.com

EPS 2010	EPS 2011	EPS 2012	EPS 2013	EPS 2014	EPS 2015
$1.06	$1.31	$1.62	$1.96	$2.35	$2.68

In the chart above, you can see the incredible performance of Visa over the last five years: EPS has risen from $1.06 to $2.68—or a 20% annual growth rate. You can also see that the company's shares rose from $17 to $78 during this period, or a 350% increase. This has been a very satisfying investment.

I must add a post-script to this port-mortem. We were lucky to have made this investment. Our luck was to have had the 25% drop linked to the Durbin reform as it's highly unlikely that we would have purchased this stock without this unexpected fall. I had followed the company closely and held my nose at the P/E of 23x which was prevalent before the stock's correction in the summer of 2010.

Is the fact that I didn't buy the stock in the beginning of 2010 an error? Absolutely. Imagine if the company's shares hadn't dropped in 2010: by buying at $23, we still would have tripled our money in 5 years. We will still savor the fruits of this investment even if it's a stroke of luck that eventually camouflaged this error.

Our Companies

The Walt Disney Company (DIS, $105): 10 years in our portfolio

We have held shares in Walt Disney for a decade now. Actually, we first bought shares in the company in 1996, following the acquisition of Capital Cities ABC. We sold our shares in early 2000, however. Then, in September 2005, a new CEO was named: Bob Iger. We knew Mr. Iger through his reputation and had great respect for him. He struck us as the perfect leader to bring Disney back to the path of earnings growth. We bought shares in Disney the very day he was named to his new post.

The first challenge he tackled was Pixar. The partnership agreement was about to end and it was it was imperative (this is too weak a word) that it should be renewed. Disney decided to simply acquire Pixar with the approval of its then president, Steve Jobs. This is likely the most important acquisition in the history of Disney. The company's dominance in the production of animated films literally returned to its former glory.

Mr. Iger eventually also acquired Marvel. He understood that with the technical capabilities that now existed, superheroes such as *Iron-Man, Hulk, Thor and Captain America* could take on a totally new dimension at the cinema. This was a homerun for Disney and Marvel's superhero franchises became significant sources of profits for the company.

Lastly, three years ago, Disney acquired Lucasfilm and became the owner of the brand Star Wars. The seventh episode, *The Force Awakens*, premiered on December 18th of last year and within 12 days surpassed the billion dollar mark at the box office on its way to becoming the greatest financial success in the film industry (surpassing *Avatar*).

So within a few years, the entire corporate culture at Disney was transformed and the company found the magic it once had during the decades it was led by its founder. The culmination of this new culture was the creation of *Frozen* which became the greatest success in the history of animated films (I have tears of joy in my eyes when I see all the beautiful Frozen related merchandise sold in stores).

This transformation at Disney is reflected in its financial performance. From 2005 to 2015, EPS surged from $1.33 to $5.51, representing an annualized growth rate of 15%—a phenomenal performance for a company of its size. The company's stock rose from $24 to $105, or a 16% annualized growth rate (not including dividends).

Source: BigCharts.com

Though the incredible performance at Disney is based on the hard work of thousands of people, Bob Iger deserves to be singled out as deserving the credit for leading the company's turnaround. In our opinion, more than $100 billion in shareholder value was created as a result of his leadership.

Walt Disney would likely add: "I only hope that we don't lose sight of one thing - that it was all started by a mouse."

Anecdote on Bob Iger

Before joining Disney, Bob Iger worked with Tom Murphy at Capital Cities ABC. Mr. Murphy is now retired but sits on the board of Berkshire Hathaway. Warren Buffett once said that he was one of the greatest CEO he had ever known in his career (it's tough to get a better compliment). During the 2006 Berkshire shareholder meeting, Jean-Philippe and I crossed paths with Mr. Murphy in the lobby of our hotel. After saluting him with admiration, we dared ask him what he thought of the recent appointment of Bob Iger as CEO of Disney. He spoke about him with great enthusiasm which confirmed our initial judgement. As you can see, our annual visits to Omaha are educational on many fronts.

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Alphabet Inc. (GOOG, $759)

Alphabet (formerly Google) had an excellent year in 2015. Revenues were up 13% despite more than half of its sales originating outside the United States (and therefore strongly affected by the rising US dollar). Adjusted EPS grew by 16% which is a spectacular performance for a large US multinational. The company continued its transition to mobile and profit margins appear to have stabilized. The enormous competitive advantage of Google's web search seems to have transposed itself from desktop (PC) to mobile. This is great news for the intrinsic long-term value of the company.

We maintain a modest weight (about 2-3%) in Alphabet as we find the company to be very generous with its stock option program. We might also add that we would appreciate better allocation of excess capital. Aside from these two factors, Alphabet seems to be an exceptional company.

Ametek (AME, $54)

Ametek is one of two new companies in our portfolio for 2015. This manufacturer of electronic instruments and electromechanical devices was founded in Pennsylvania in 1930 as American Machine and Metals. The company changed its name to Ametek in the early 1960s and is one of the oldest companies listed on the New York Stock Exchange (since its inception in 1930). Yet the company remains largely unknown and isn't closely followed. Its electronic instruments division manufactures products used for monitoring, measuring, testing, and calibrating for markets including aerospace and energy. The electromechanical devices division produces interconnection equipment, engines and systems.

Over the last decade, revenues increased from $1.4 billion to $4 billion and EPS climbed from $0.59 to $2.73, or an annual growth rate of 17%. The company is growing in part by new product introductions and also through acquisitions (23 since 2011).

As is often the case with exceptional companies, it's the corporate culture that really stands out. The first of the four pillars of its business model is "operational excellence" and the company is diligent in reducing its cost structure and improving efficiency while managing its asset base.

The company believes it can double revenues within five years and we share their optimism.

Bank of the Ozarks (OZRK, $49)

2015 was an exceptional year for Bank of the Ozarks, our bank from Little Rock, Arkansas. The company generated a 38% growth in EPS, reaching $2.09. Here are the highlights from 2015:

- The bank's efficiency ratio (a measure of its cost structure), was an impressive 38%.
- Return on Assets reached 2.11%.
- The bank's balance sheet continued to strengthen with returns on equity of 14.8%.
- In February, Ozarks completed its acquisition of Intervest National Bank.
- In August, Ozarks acquired Bank of the Carolinas.
- In October, Ozarks announced its largest acquisition to date: Community & Southern Bank (with 47 branches in Georgia and Florida).
- Deposits increased by 45% to $8.0 billion.
- Total assets grew by 46% to $9.9 billion.

Over the last decade, Ozarks has grown EPS by an annual compounded rate of 16%. Few banks can tout this kind of performance given the difficult economic context of the past years. We anticipate a solid increase in EPS in 2016 and remain optimistic about the company's prospect for continued growth.

Berkshire Hathaway (BRK.B, $132)

The company led by the legendary Warren Buffett had an excellent year in 2015. It's difficult to precisely measure the increase in the company's intrinsic value for the year, but we believe that it was

within the order of 6-8%. The most important news of 2015 was the acquisition of Precision Castparts (see the beginning of the letter).

We believe that Berkshire's shares are undervalued by the market.

Buffalo Wild Wings (BWLD, $160)

Buffalo Wild Wings (BWW) is a sports-oriented restaurant chain which primarily serves chicken wings, as its name suggests. We have been shareholders in the BWW for six years. The number of restaurant locations reached 1175 in 2015, with 93 opening within the last year. The company grew revenue by 21% in 2015, same-store sales rose by 4.2% (2.5% for franchised locations) but its EPS remained flat at $4.97. The company had to deal with pressure on its net margins in 2015 but we believe the situation to be temporary.

The company anticipates opening 87 to 100 new restaurants in 2016 and we forecast that earnings will grow at more than 20% for the coming year.

Carmax (KMX, $54)

Carmax's fiscal year ends in February and we estimate that sales and EPS will grow by about 8% for 2015-16. While the company operates 160 stores in the US, it only has roughly 3% of the used car market. So we see lots of room for growth in this business.

The company's stock fell in 2015 (a fall which continued in the beginning of 2016). The stock seems to be greatly undervalued and we took advantage of the recent decrease to increase our holding.

Constellation Software (CSU-T, $577)

We've been shareholders in Constellation Software for two years. We consider the CEO of Constellation, Mark Leonard, an exceptional businessman. Past performance has been impressive at Constellation and we believe that the long-term prospects are equally excellent. While the company is based in Canada, the majority of its revenue is based in the US and financial results are reported in US dollars.

Revenues grew by 10% in 2015 and losses on currency reduced organic growth by 6%. EPS climbed by 35% and the stock did quite well, surging 67% for the year (in Canadian dollars).

Dollarama (DOL-T, $80)

After its first three quarters of 2015 (the company's fiscal year ends on January 31st), revenues rose by 13% and same-store sales increased by 7.1%. EPS climbed 39% and we anticipate a rise of 34% for the year 2015.

Dollarama now has more than 1005 stores in Canada and we consider the company to be one of the best managed businesses in Canada.

Knight Transportation (KNX, $24)

Older partners might remember being shareholders of Knight Transportation for several years from 2003 to 2011. Knight Transportation is a large trucking company based in Phoenix (AZ). In addition to

offering road transportation services over short and medium distances, it also offers logistic services. We had sold our shares of Knight in 2011 to purchase another security that seemed more undervalued.

The company appointed a new CEO, David A. Jackson in early 2015 and we met him shortly thereafter. As the company's CFO before taking the CEO role, Mr. Jackson reinvigorated the growth strategy for Knight. We were very impressed with this young leader (40) and decided to become shareholders once again.

2015 was difficult for the trucking business (more than we would have thought given an environment of low gas prices). Knight's revenues grew by 7.3% (14.7% excluding the effect of fuel surcharges) and EPS grew by 17%. 2015 ended with a slight decline in profitability that is likely to last a few more quarters. Still, we believe that the company's long-term growth prospects are solid.

LKQ Corp (LKQ, $28)

We invested in LKQ in 2012. This Chicago-based company refurbishes used automotive parts. The company became the leader in its industry by offering very compelling prices relative to new parts (which pleases the insurance companies) along with an unrivaled distribution network. LKQ has diversified in Europe over the last years by making acquisitions in the United Kingdom, Belgium, France, the Netherlands and, more recently, Italy.

From 2008 to 2015, revenues grew at an annualized rate of 20%, from less than $2 billion to $7.2 billion. In 2015, EPS rose by 11% compared to the prior year. The appreciation of the US dollar affected profitability, along with lower prices for scrap metal (what's left of the cars when the company has taken out all the parts to refurbish).

In 2016, we expect EPS growth of 12-15%, We believe that the company has excellent long-term growth prospects and the stock's valuation on the market has rarely been so low!

M&T Bank (MTB, $121)

After three years of regulatory delays, the merger between M&T Bank and Hudson City Bank was finalized in November of 2015. M&T acquired nearly $35 billion in assets.

In 2015, adjusted EPS grew 2%, to $7.74. We believe that M&T Bank should now be able to earn higher returns going forward. We anticipate a significant improvement on the bank's return on assets in 2016, fueled by a lower efficiency ratio and the anticipated synergies from the integration of Hudson City. We believe that the company can generate EPS in excess of $9 in the coming year.

Markel Corporation (MKL, $883)

We first bought shares in Markel in 2013 when the company announced its large acquisition of Alterra Reinsurance Company. Wall Street was skeptical of the benefits of this acquisition and the stock was trading at a compelling valuation. We seized the opportunity to become shareholders.

2015 was an excellent year for Markel. The combined ratio decreased from 95% to 89% (the lower the better). More importantly, the newly-acquired reinsurance division saw its combined ratio improve from 96% to 90%. Book value, however, only increased by 3%. It's worth noting that the market value of the company's stock portfolio has a direct impact on the company's book value. In 2015, Markel took

a $300 million write down on some of its investments, but we believe that these are temporary in nature and will eventually be transformed to gains.

Mohawk Industries (MHK, $189)

We have been shareholders in Mohawk since 2006. 2015 was another good year for Mohawk: revenues grew 3% (10% without a loss related to exchange rates) and EPS rose 25% to $10.51 (adjusted for the amortization of intangible assets).

Mohawk has become a world leader in the floor covering business and we believe that the company is stronger than ever.

MTY Food Group (MTY-T, $32)

Stanley Ma, founder of MTY Group, opened his first restaurant in Montreal in 1979 which was called The Paradise of the Pacific. Then in 1983, MTY developed Tiki-Ming which serves Chinese cuisine. In 1999, the company made its first acquisition when it bought Fontaine Santé which soon assumed the name Veggirama and was gradually converted into restaurants called Cultures. MTY now has 30 brands with nearly 2800 locations in its network of restaurants.

It was another remarkable year for MTY Food. Revenues grew by 26% to $145 million and adjusted EPS rose by 18%. The company's balance sheet remains strong, with nearly no debt and $33 million in cash ready to be used for acquisitions.

One day, I was told that MTY did not spend enough on R&D. I replied that it was the beauty of an egg roll from Tiki-Ming: it hasn't changed in 30 years. There's no need to modernize it. We like companies with simple products that aren't threatened by obsolescence. Notwithstanding, MTY has done a remarkable job with culinary innovation at Thaï Express and Sushi Shop.

We have been shareholders in MTY for eight years. From 2007 to 2015, adjusted EPS increased from $0.51 to $1.87, or an annualized growth rate of 18%. We are huge fans of Stanley Ma, CEO of MTY and believe the company's long term prospects remain excellent.

MTY's stock is currently trading at the same level it did two years ago so we think its valuation has become even more attractive.

O'Reilly Automotive (ORLY, $253)

O'Reilly had another sensational year. Revenue grew by 10% to reach $8 billion, with same store sale growth of 7.5%. Net income rose by 20% and EPS increased 25%, to $9.17 (with 5% of the EPS growth coming from the company's share buyback program).

We anticipate a more moderate EPS growth for 2016, though still within the 12-14% range. We should also add that O'Reilly has made our estimates look too conservative throughout the years!

Stericycle (SRCL, $121)

We decided to become shareholders in Stericycle in 2015 after following the company for many years. The industrial waste division was affected by weakness in the energy sector and the stock fell 20% after

announcing results that disappointed Wall Street. We look further ahead than a quarter or two and believe that the long-term growth prospects of the business are still solid.

Stericycle acquired the Canadian company Shred-it for $2.3 billion in 2015. Shred-it is a leader in the document destruction industry and we know the quality of this company firsthand since we use its services at Giverny Capital. Shred-it was to have an IPO in 2015 and we were looking forward to the roadshow after reading the prospectus, but Stericycle decided to acquire the company just before its IPO.

Stericycle's revenues climbed 17% in 2015 (mainly due to the acquisition of Shred-it). Adjusted EPS, however, rose only 6%. 2016 will probably be similar to 2015 in terms of growth (as the company will continue the integration of Shred-it) but we expect a return to a higher level of growth in 2017.

Union Pacific (UNP, $78)

It was a difficult year for the rail industry and Union Pacific was not spared. UP saw its revenues decline by 9% and its EPS drop by 5%. It should be noted, however, that with dividends and share buybacks, UP returned more than $5.8 billion to shareholders in 2015.

The good news is that the company was able to increase its prices by about 3.5% in 2015 which is a better growth rate than in 2014. UP also achieved an operating ratio of 63.1% in 2015 and the company is more efficient than ever.

UP and BNSF (owned by Berkshire Hathaway) have the equivalent of a duopoly in the western railroad market of the United States. First, a duopoly is the second best thing after a monopoly. But to have a rational competitor is also definitely a good thing over the long run. Still, BNSF had a better year in 2015 than UP after a few years of the reverse situation.

We expect 2016 will still be difficult for UP but we continue to believe that the company has great potential for higher returns on its capital over the long term. The stock has fallen in the stock market over recent quarters and seems to us to be quite undervalued.

Valeant Pharmaceuticals (VRX, $102)

In 22 ½ years of portfolio management, I have never liked to own companies that are in the headlines of newspapers (and/or the Internet). We like “low profile”. For most of the first 22 years, we were fortunate to have this wish granted. However, we had a turbulent end of 2015 with our shares in Valeant (and the beginning of 2016 was certainly similar).

We became shareholders in Valeant in 2011. Michael Pearson took over Valeant in 2008 and we followed the phenomenal transformation he led with the company. Instead of spending a large portion of revenues on R&D that often generated low returns on invested capital (something which is almost done out of tradition in this industry), Pearson instead relied on the acquisition of drugs and consumer products that were stable and/or whose likelihood of success was high. The company does spend on R&D (unlike what many say) but only when it believes that the odds are high to achieve success. It is actually one of the most productive companies in the industry in terms of R&D as measured by the number of approvals for new compounds per billion dollars spent.

The optimization of financial resources at the businesses it acquired enabled Valeant to achieve very high operating margins and returns on equity. EPS grew from $2.93 in 2011 to $10.16 in 2015—an

annualized growth rate of 36% over four years. Initially, analysts expected EPS of about $16 for 2016. This explains why the stock went from $40[2] during our initial purchase to a high of $264 last summer.

Valeant also used debt to fuel its growth plan. Following the acquisition of Salix Pharmaceuticals in early 2015 for $11 billion, the level of debt had risen considerably. Due primarily to its debt level, we knew the risk in Valeant was higher than our other investments. So, as the stock rose, we decided to reduce our position on two occasions to limit its weight in the portfolio to about 5%.

At the end of last summer, Valeant had become the target of politicians concerned with the rising price of some of its newly acquired drugs. It should be noted that such increases are often tempered by discounts negotiated by different purchasing groups. Ultimately, despite the income of the three drugs in question corresponded to only 4% of revenues of the company, the public image of Valeant was severely tarnished. In our view, the high price increases of certain drugs, justified or not, fueled the anger of the general public and was unnecessary. Its consequences are far more negative than positive for the company.

Then in October, some short seller suggested that the company had questionable books based on the "complicity" of one of its distributors, Philidor. The company decided to terminate its relationship with this distributor and a few weeks later signed a major distribution agreement with Walgreen's. The company then reduced its estimated profits for 2016 to around $13.50. To make matters worse, Mr. Pearson became seriously ill in late December and was on medical leave for two months.

We waited a few weeks to publish this letter because we wanted to have an update on the financial condition of the company before making a decision about our shares and give you the most accurate information available. At last, the company released its results for 2015 and, more importantly, updated its estimates for 2016. Valeant now expects $9.50 to $10.50 in EPS for the year ahead.

We consider this level of profitability as no longer meeting our criteria in regards to the company's earnings power relative to its debt. So we took the difficult decision to sell our shares in Valeant.

Clearly, we would have liked to have sold earlier but we were bound by the facts rather than the rumors. In light of the updated forecast, we believe that the risk inherent to the company is now too high for us.

Visa (V, $78)

Visa had another good year, with EPS growing by 14% despite a significant decline in revenues due to the strong US dollar. The company announced in November that it was acquiring its European division (Visa Europe) for over $23 billion.

The stock is trading at a P/E that is slightly higher than our other holdings, but its long-term growth prospects are excellent. The company is highly profitable and uses its enormous cash flow to repurchase shares.

Wells Fargo (WFC, $54)

Wells Fargo had a somewhat disappointing year in 2015. EPS was flat in comparison to 2014. This is not an easy time for banks since very low interest rates reduce the profit margin between the rates banks

[2] All figures for Valeant are listed in US dollars

charge customers relative to the rates paid to lenders (such as for deposits). Thus, net interest margin fell from 3.11% in 2014 to 2.95% in 2015.

Adjusted return on assets was 1.3% and the return on equity of 12.7%. We believe the company has the ability to be much more profitable in a more “normal” interest rate environment.

Sales in 2015

Fastenal

We sold our remaining shares of Fastenal in early 2016, after having held the company in our portfolio for over 17 years. Fastenal is a large retailer of fasteners and other equipment mainly used in manufacturing. Fastenal was founded in 1967 by Robert Kierlin in the small town of Winona, Minnesota (population 27,000). The company has over 2600 locations across the United States, Canada and Mexico.

In 1998, we had been following the company for many years and had great admiration for its CEO, Robert Kierlin. Unfortunately, the stock was always trading at very high valuations (with a P/E in the 30s or even more). But we had our chance during the Asian crisis in October 1998 (few people remember this one!) as the stock market declined by almost 20%. Fastenal’s stock tumbled from $7 to $3 (price adjusted for subsequent stock splits). We paid 18 times earnings for our first shares in Fastenal—an attractive valuation for a company that was growing at 20% annually.

Having Robert Kierlin as president of one of the companies in our portfolio was a great moment in my investor’s life. He was one of the best businessmen of his time and he knew how to establish a phenomenal corporate culture. Fastenal generated strong profit margins and exceptional returns on capital in a very competitive industry. His attention to operating costs became legendary. In 1997, an article was published on Mr. Kierlin in Inc. magazine entitled "The Cheapest CEO in America". The author explained that net margins at Fastenal were 11.3% in 1996 compared to 5.9% for one of its main competitors, W. W. Grainger. This was a very significant difference.

Mr. Kierlin also led by example: he was paid a salary of only $120,000 per year and the company had no stock option program. Most importantly, Mr. Kierlin owned about 12% of the shares of Fastenal. He was very much in the same boat as his fellow shareholders.

The values of Mr. Kierlin went far beyond frugality. Soon after we became shareholders, members of the management team suggested that Fastenal provide a stock option program for employees. Mr. Kierlin agreed but decided to give his own shares in the company to fund the program rather than issuing options that would dilute all shareholders. The number of shares thus remained the same. We had never seen such a thing in a public company and this strengthened our enthusiasm to be partners with Mr. Kierlin.

After Mr. Kierlin stepped down in 2002, it was the turn of Willard Oberton to take over the helm at Fastenal. He also did an outstanding job. Over the 17 years we were shareholders of Fastenal, EPS increased from $0.18 to $1.77—a tenfold increase (equivalent to an annualized growth rate of 15%). We sold our shares for more than 12 times the initial price that was paid in 1998. The company no longer has the same growth rate as in the past and we concluded that, relative to other securities in our portfolio, the company’s shares seemed fairly valued. But it is not to say that we will not return again as shareholders one day...

Other Sales

In 2015 and early 2016, we also sold our shares of Cabela's, PRA Group and IBM. Similar to the case of Fastenal, we sold these positions primarily for the simple reason that we were more confident that other securities in our portfolio offered better growth prospects.

The Podium of Errors

Following in the "Givernian" tradition, here are our three annual medals for the "best" errors of 2015 (or from past years). It is with a constructive attitude, in order to always improve as investors, that we provide this detailed analysis.

As is often the case with stocks, errors from omission (non-purchases) are often more costly than errors from commission (purchases)… even if we don't see those on our statements.

Bronze Medal: Amazon

I have been an avid fan of Amazon since the launch of its retail website. However, it was very difficult to see when the company would become profitable when it went public in 1997. Sales increased rapidly but losses followed suit. Slowly, the company has become slightly profitable. The company has a policy of investing heavily in its future and is always willing to sacrifice short-term profits. Amazon spends billions of dollars on a very important activity and a potential source of wealth: to dig a huge economic moat around its business to keep far away competitors. This is the best way that a CEO can spend money (when the moat is real and not imaginary as is so often the case). In our opinion, Jeff Bezos is one of the greatest businessmen in history and we would have liked to become partners with him for many years now.

Historically, Amazon has benefited from Wall Street's support of its bold strategy focused on the long term. In 2014, the stock had corrected from $400 to under $300. With EPS of little over $1, the stock seemed very far from a bargain. I nonetheless took the time to look more closely into their business model and tried to assess the earning power going forward to 2020. My estimates seemed plausible: I arrived at an EPS potential of $28 in 2020. Using a P/E ratio of 25 times, this would justify a stock price of $700 six years later (a potential annualized return of 15%). But hoping for a greater margin of safety, I preferred to wait for a lower price. Today, a little over a year after my analysis, the stock is at $575, or 92% more than the price at which I considered buying shares.

I realize fully that the company is difficult to value with its current level of profitability. The "value investor" in me makes me reluctant to bet too much on the future. But I have often said that "being disciplined is to follow your rules; but being wise is knowing when to break them." Buying shares of Amazon requires an act of faith in Jeff Bezos. With a good enough margin of safety, it might be wise to invest with him.

And we missed that opportunity in 2014.

Silver Medal: O'Reilly Automotive

We have been shareholders in O'Reilly Automotive since 2004 and acquired our first shares for about $20. Shares are trading at $263 as I write this letter. Yet, the stock is only about 4% of the value of our portfolios. If we had kept all our shares, the stock would represent about 11-12% of our portfolios. The

reason is simple: over the years, I have repeatedly reduced our holding in this extraordinary company. My excuse is simple: I found the stock, at times, to be slightly expensive.

My motivation to reduce the number of our shares may seem noble: do not expose too much of our capital to a single stock. First, I could have stuck to our rule of having a maximum weight of 10% for any given holding (with the exception of Berkshire Hathaway). But I thought I should optimize the management of our capital by selling a portion of our position in O'Reilly to buy shares of another company that seemed more undervalued (important nuance: that *seemed* more undervalued).

In 1930, Philip Carrett wrote one of the first books on the stock market entitled "The Art of Speculation." In this book, he lists 12 Commandments of Investing. One in particular has always stuck in my head: "Be quick to take losses and reluctant to take profits." Peter Lynch also mentioned this rule in his own words in 1989 (in the book "One Up on Wall Street") by writing: "Don't pull out the flowers to water the weeds."

I followed this rule only partially with O'Reilly and we paid a high price for this even though it doesn't show up in our account statements.

Gold Medal: Stella Jones

In early 2008, I discovered a Quebec company called Stella Jones. This Montreal-based enterprise is a leader in the production and marketing of pressure treated wood products. Stella Jones provides railway ties and timbers to North American railway operators, as well as posts to electrical utilities and telecommunications companies. Sella Jones also provides lumber for residential use as well as industrial products. Its CEO, Brian McManus, then seemed to be of very high caliber.

As a shareholder at the time in Burlington Northern Santa Fe (subsequently acquired by Berkshire in 2010), I was aware of the strong fundamentals of the railway industry, which is the primary customer base of Stella Jones. The sale of railway ties and poles is my kind of business (glamorous!) The stock was trading around $6-7 in mid-2008 when the company had earned $0.51 for 2007. The P/E of 12-13x was not particularly high, but my fear was that the company was cyclical and would be affected by the recession that had begun. In other words, I wanted a lower P/E. Well, I had my chance: the stock fell to $3.50 in March 2009 but I still ignored the stock despite the P/E having dropped to 6x (because EPS not only did not shrink in 2008, they increased to $0.58 and again in 2009 to $0.62).

Later, in June 2012, Jean-Philippe Décarie of La Presse wrote an excellent article on Mr. McManus. It read: "Brian McManus is a follower of the slimming diet. As proof, the headquarters of the company in the borough of Saint-Laurent has 14 employees to supervise 19 plants, 1 tar distillery, 3 centers for used railways tie collection, 2 distribution centers, 3 plants use for pole production, in 6 provinces and 15 US states." It was music to my ears! The stock was then trading at $14.

Ultimately, Brian McManus continued to manage the business masterfully and took advantage of gloomy times to make many smart acquisitions. In 2015, EPS reached $2, or four times the level of 2007 (a growth rate of 19% on an annualized basis). The stock is now trading at around $45.

Conclusion: The Financial Maginot Line

There is an old military adage that "generals are always ready to fight the previous war". It means that often generals base their strategy on lessons learned during the prior war. Of course, subsequent wars are often different and so such strategies learned from the past can turn out to be ineffective.

After the First World War (called the "Great War" before the second), France decided to set in motion a plan to thwart a future invasion by Germany. The Maginot Line was built. It was a line of fortifications along the border of France and Belgium, Luxembourg, Germany, Switzerland and Italy. In total, the Maginot Line cost over five billion francs when it was built from 1930 to 1936. Unfortunately, during the German invasion of May-June 1940, the Maginot Line brought only little protection to France. Technological advances (primarily the aviation) had rendered this type of fortification almost obsolete.

What is the link with the world of finance? After every financial crisis, our civilization attempts to implement mechanisms to prevent the recurrence of another crisis. This is often set in place through various government regulations. The goal is laudable and the motivations are sincere, but like the Maginot Line, they often prove futile when there are new factors leading to the next financial crisis.

For example, one of the lessons from the 1987 crash was to put mechanisms in place to prevent automated trading programs from potentially crashing the market. So, after falling 500 points on the Dow Jones, the Stock Exchange shuts down (much like a circuit breaker) in the hope of calming the emotions. This did not prevent the tech bubble crash of 2000-2002 or the long bear market of 2008-2009. The manic-depressive behavior of stock market investors is immutable. It is inherent to the nature of human beings and no system is going to change that.

One of the lessons of the latest financial crisis is that US banks should be severely reined in (at least when they exceed $50 billion in assets and become considered "too big to fail"). The goals are quite valid. However, a side effect of these measures is that US big banks are now spending billions of dollars to meet these new regulations—billions that are not devoted to economic growth (through loans and investments). If we look to history for guidance, it is unlikely that the next crisis will have the same origin as the crisis of 2008-2009.

Investors have also created their own form of a Maginot Line. Traumatized by the large market declines of 2008-2009, many investors see a repeat of the previous financial crisis in each market correction. This happened in the fall of 2011 when equities reached very attractive valuations. In our opinion, this is the case again in the beginning of 2016.

The very low interest rates currently available reflect a level of demand for bonds that is absurdly high. Safety at all costs becomes the paramount motivation. Many investors are flocking to GICs (Guaranteed Investment Certificates) and bonds. The emphasis, from both the buyer and the seller, is entirely placed on the "G" in the acronym. Yet, in our opinion, the only thing that is guaranteed with a bond that has a lower interest rate than the rate of inflation is impoverishment. Generating negative real returns goes against the very concept of investment. With each passing year, the holders of this asset class have their capital slowly crumble. From our perspective, the certainty of capital loss in purchasing power is the very definition of risk.

The danger for many bond investors is higher interest rates (more *when* than *if*). A return to a more "normal" economic environment could drive up interest rates on 10-year note from 1.75% to 5% (important note: this is not a prediction). A 10-year note with a coupon of 1.75% in a 5% rate environment would lose a quarter of its market value. Now imagine a 30-year bond with a coupon of 2.5% (the current rate). A rapid rise of rates to 5% would create a decrease in market value of around 38%. Many investors and financial institutions who believe their capital is safe in this type of asset could quickly fall back to Earth.

So, as the Maginot Line in the interwar period, a fortified portfolio of long-term bonds might not keep its promise (or illusion?) of future protection.

P.S.

What would happen to stocks in the event of a significant increase in interest rates? Obviously, we are not soothsayers. Some businesses will be adversely affected by rising interest rates and others will benefit from them. In terms of market valuations in general, with an average P/E of 15-16 times, stocks already reflect long-term interest rates of 6.5% (1 divided by 15.5). So even with a rise of long term interest rates to 5%, stocks would still be attractive relative to bonds. This goes to show the great disparity between these two asset classes at the moment.

To Our Partners

Using rationality, along with our unwavering optimism, we trust that the companies we own are exceptional, led by top-notch people, and destined for a great future. They should continue to prudently navigate the often troubled waters of the global economy. Furthermore, the valuation assigned by the market to these outstanding companies is very similar to the valuation of an average company in the S&P 500, despite the fact that our companies have better growth prospects than average. Therefore we consider the appreciation potential for our portfolio, both in absolute and relative terms, to be well above average, especially when compared to other alternative asset classes, such as bonds.

We also want you to know that we are fully aware of and grateful for your votes of confidence. It is imperative for us to not only select outstanding companies for our portfolios, but to also remain outstanding stewards of your capital. We certainly like to achieve good returns and have developed a taste for it, but it must not come at the cost of taking undue risk. Our philosophy to favor companies with solid balance sheets and dominant business models, along with purchasing these companies at reasonable valuations, is central to the risk management of our portfolios.

Thank you from the entire Giverny Capital team.

We wish a great 2016 to all our partners.

François Rochon and the Giverny Capital team

APPENDIX A

Investment philosophy

Note: This section is repeated from prior annual letters and is aimed at new partners.

In 2015, we saw a large increase in the number of Giverny Capital partners (the term we use for our clients). With all these newcomers, it is imperative that we write again (and again) about our investment philosophy.

Here are the key points:

- We believe that over the long run, stocks are the best class of investments.
- It is futile to predict when it will be the best time to begin buying (or selling) stocks.
- A stock return will eventually echo the increase in per share intrinsic value of the underlying company (usually linked to the return on equity).
- We choose companies that have high (and sustainable) margins and high returns on equity, good long term prospects and are managed by brilliant, honest, dedicated and altruistic people.
- Once a company has been selected for its exceptional qualities, a realistic valuation of its intrinsic value has to be approximately assessed.
- The stock market is dominated by participants that perceive stocks as casino chips. With that knowledge, we can then sometimes buy great businesses well below their intrinsic values.
- There can be quite some time before the market recognizes the true value of our companies. But if we're right on the business, we will eventually be right on the stock.

Experience and common sense teach us that an investment philosophy based on buying shares in companies that are undervalued, and holding these companies for several years, will not generate linear returns. Some years, our portfolio will have a return that is below average. This is a certainty that we must accept.

Another important point: the significant volatility of the market is often perceived negatively by many investors. It's actually the contrary. When we see stock prices as *"what other people believe the company is worth"* rather than the real value (at least in the short term), these fluctuations become our allies in our noble quest for creating wealth. Instead of fearing them, we can profit from them by acquiring superb businesses at attractive prices. The more that markets (the "other" participants) are irrational, the more likely we are to reach our ambitious performance objectives.

Benjamin Graham liked to say that the irrationality of the market provides an extraordinary advantage to the intelligent investor. The person, however, who becomes affected by short-term market fluctuations (less than 5 years) and who makes decisions based on them transforms this advantage into a disadvantage. His or her own perception of stock quotes becomes their own worst enemy. Our approach at Giverny Capital is to judge the quality of an investment over a long period of time.

So patience – ours AND that of our partners – becomes the keystone for success.

APPENDIX B

Notes on the returns of the Rochon portfolios

- The Rochon portfolio is a private family group of accounts managed by François Rochon since 1993. The returns of the period from 1993 to 1999 were realized before registration of Giverny Capital Inc. at the AMF in June of 2000.
- The Rochon Global portfolio serves as a model for Giverny Capital's clients, but returns from one client to the other can vary depending on a multitude of factors. The returns indicated include trading commissions, dividends (including foreign withholding income taxes) and other income but do not include management fees. Portfolio returns of the Rochon Global portfolio have been generated in a different environment than Giverny Capital's clients and this environment is considered controlled. For example, cash deposits and withdrawals can increase the returns of the Rochon Global portfolio. Thus, the portfolio returns of the Rochon Global portfolio are often higher than the returns realized by clients of Giverny Capital.
- Past results do not guarantee future results.
- The Rochon Canada and Rochon US portfolios are parts of the Rochon Global portfolio.
- The index benchmark group is selected at the beginning of the year and tends to be a good reflection of the asset composition of the portfolio. Weighted indices presented may not be representative of the Rochon Global portfolio. In 2015 :

  - Rochon Global Portfolio: TSX 16% Russell 2000 42% S&P 500 42%
  - Rochon US Portfolio : S&P 500 100%
  - Rochon Canada Portfolio : S&P/TSX 100%

- The returns for the S&P 500 (in $USD) are provided by Standard & Poors.
- The returns for the various indices used for comparable purposes are deemed reliable by Giverny Capital.
- It should be noted that currency effects on the returns of the Rochon portfolio and indices are estimated to our best effort.
- The custodian of our client portfolios is National Bank Correspondent Network (NBCN) in Canada and TD Ameritrade Institutional in the US.
- The financial statements of the three portfolios are audited at the end of each year. The auditor's data are those provided by our custodian (NBCN). The auditor's annual reports are available upon request.
- For more information, please see the "returns" section of our website.

GIVERNY CAPITAL

Annual Letter to our Partners 2016

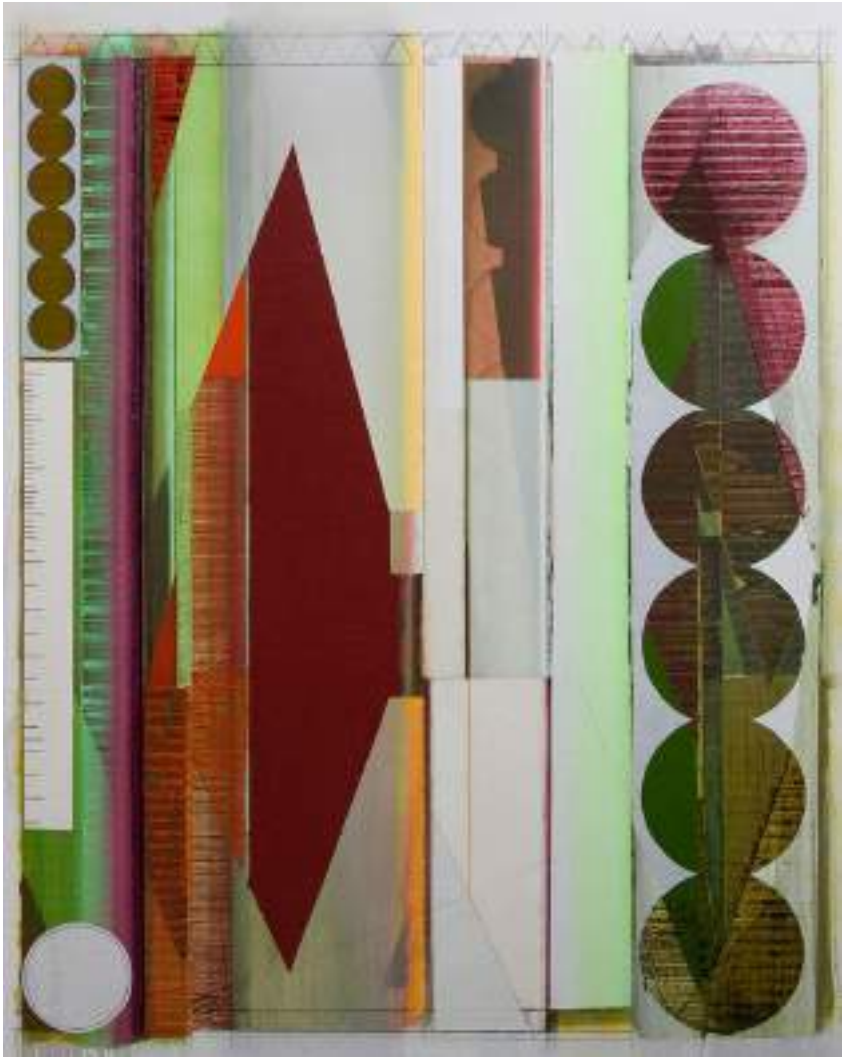

Dil Hildebrand
This is not what I want but I want this also, 2015
Giverny Capital Collection

Historical Summary

It has been more than two decades since I discovered the writings of Warren Buffett, Benjamin Graham, John Templeton, Philip Fisher and Peter Lynch. I then decided to begin managing a family portfolio based on an investment approach synthesized from these great money managers. By the end of 1998, after five years of satisfactory results, I decided to launch an investment management firm offering asset management services aligned with my own investment philosophy. Giverny Capital Inc. came into existence.

In 2002, Giverny hired its first employee: Jean-Philippe Bouchard (JP for those who know him well). A few years later, JP became a partner and participates actively in the investment selection process for the Giverny portfolio. In 2005, two new persons joined the firm who eventually became partners: Nicolas L'Écuyer and Karine Primeau. Finally, in 2009, we launched a US office in Princeton, New Jersey. The director of our Princeton office, Patrick Léger, shares in the culture and long-term time horizon inherent to Giverny.

We are Partners!

From the very first days of Giverny, the cornerstone of our portfolio management philosophy was to manage client portfolios in the same way that I was managing my own money. Thus, the family portfolio I've managed since 1993 (the "Rochon Global Portfolio") serves as a model for our client accounts. It is crucial to me that clients of Giverny and its portfolio managers are in the same boat! That is why we call our clients "partners".

The Purpose of our Annual Letter

The primary objective of this annual letter is to discuss the results of our portfolio companies over the course of the prior year. But even more importantly, our goal is to explain in detail the long-term investment philosophy behind the selection process for the companies in our portfolio. Our wish is for our partners to fully understand the nature of our investment process since long-term portfolio returns are the fruits of this philosophy. Over the short term, the stock market is irrational and unpredictable (though some may think otherwise). Over the long term, however, the market adequately reflects the intrinsic value of companies. If the stock selection process is sound and rational, investment returns will eventually follow. Through this letter, we provide you with the information required to understand this process. You will hopefully notice that we are transparent and comprehensive in our discussion. The reason for this is very simple: we treat you the way we would want to be treated if our roles were reversed.

The Artwork on Our 2016 Letter

Since 2004, we have illustrated the cover of our letters with a copy of artwork from our corporate collection. This year we selected a painting by the Quebec artist Dil Hildebrand entitled "*This is not what I want but I want this also*".

For the year ending December 31st 2016, the return for the Rochon Global Portfolio was 7.3% versus 14.3% for our benchmark, which represents a relative performance of -7.0%. The return of the Rochon Global Portfolio and the one of our benchmark include a loss of approximately 2.8% due to fluctuations in the Canadian currency.

Since its inception on July 1st 1993, our compounded annual growth rate has been 15.9% versus 9.2% for our weighted benchmark, representing an annualized outperformance of 6.7% over this period. Our long-term (and quite ambitious) objective is to maintain an annual return that is 5% higher than our benchmark.

The Rochon Global Portfolio: Returns since July 1st 1993

Year *	Rochon	Index **	+ / -	$ US/Can ***
1993 (Q3-Q4)	37.0%	9.5%	27.6%	3.3%
1994	16.5%	3.7%	12.7%	6.0%
1995	41.2%	24.0%	17.2%	-2.7%
1996	28.0%	22.8%	5.2%	0.3%
1997	37.8%	28.6%	9.2%	4.3%
1998	20.6%	18.8%	1.8%	7.1%
1999	15.1%	16.3%	-1.2%	-5.7%
2000	13.4%	3.2%	10.2%	3.9%
2001	15.1%	-0.4%	15.5%	6.2%
2002	-2.8%	-18.3%	15.6%	-0.8%
2003	13.6%	14.0%	-0.4%	-17.7%
2004	1.6%	6.2%	-4.5%	-7.3%
2005	11.5%	3.6%	7.9%	-3.3%
2006	3.5%	17.0%	-13.5%	0.2%
2007	-14.4%	-11.6%	-2.8%	-14.9%
2008	-5.5%	-22.0%	16.5%	22.9%
2009	11.8%	12.2%	-0.4%	-13.7%
2010	16.1%	13.8%	2.3%	-5.3%
2011	7.6%	-1.1%	8.7%	2.2%
2012	21.2%	12.5%	8.7%	-2.2%
2013	50.2%	38.9%	11.3%	6.9%
2014	28.1%	17.8%	10.2%	9.1%
2015	20.2%	13.4%	6.8%	19.3%
2016	7.3%	14.3%	-7.0%	-3.0%
Total	**3080.3%**	**686.2%**	**2394.1%**	**4.8%**
Annualized	**15.9%**	**9.2%**	**6.7%**	**0.2%**

* All returns are adjusted to Canadian dollars
** Index is a hybrid index (S&P/TSX, S&P 500, MSCI EAFE, Russell 2000) which reflects the weight of the underlying assets
*** Variation of the US dollar compared to the Canadian dollar

Refer to Appendix B for disclosure statements on the Rochon portfolios.

The Rochon US Portfolio

The Rochon US Portfolio corresponds to the American portion of the Rochon Global Portfolio. In 2016, it realized a return of 7.5% compared to 12.0% for our benchmark, the S&P 500. The Rochon US Portfolio therefore underperformed the benchmark by 4.5%.

Since its inception in 1993, the Rochon US Portfolio has returned 2473%, or 14.8% on an annualized basis. During this same period, the S&P 500 has returned 691%, or 9.2% on an annualized basis. Our added value has therefore been 5.6% annually.

Year	Rochon US	S&P 500	+/-
1993 (Q3-Q4)	32.7%	5.0%	27.7%
1994	9.9%	1.3%	8.6%
1995	54.8%	37.6%	17.2%
1996	27.0%	23.0%	4.1%
1997	32.9%	33.4%	-0.4%
1998	11.0%	28.6%	-17.6%
1999	15.9%	21.0%	-5.1%
2000	11.3%	-9.1%	20.4%
2001	8.1%	-11.9%	20.0%
2002	-4.4%	-22.1%	17.7%
2003	31.6%	28.7%	2.9%
2004	9.3%	10.9%	-1.6%
2005	12.5%	4.9%	7.5%
2006	3.3%	15.8%	-12.4%
2007	-1.7%	5.5%	-7.2%
2008	-24.3%	-37.0%	12.7%
2009	28.7%	26.5%	2.3%
2010	21.9%	15.1%	6.9%
2011	4.7%	2.1%	2.6%
2012	22.3%	16.0%	6.3%
2013	40.6%	32.4%	8.2%
2014	18.0%	13.7%	4.3%
2015	1.7%	1.4%	0.4%
2016	7.5%	12.0%	-4.5%
Total	**2472.8%**	**690.6%**	**1782.2%**
Annualized	**14.8%**	**9.2%**	**5.6%**

Refer to Appendix B for disclosure statements on the Rochon portfolios.

For the first time since 2007, the Rochon US Portfolio underperformed its benchmark, the S&P 500. No individual holding contributed significantly to this underperformance. In fact, out of the 20 stocks in the portfolio, 14 underperformed the S&P 500. We have held the stocks in our portfolio for an average of almost seven years and the majority of them have accumulated high returns over the years (justified by their exceptional intrinsic performance). This year, the stocks of our companies as a whole, increased roughly in line with their earnings growth. It is the market indices that grew faster than the profits of their underlying companies (we will return to this in the "Owner's Earnings" section).

You will note that over 23 years, the Rochon US Portfolio underperformed the S&P 500 on seven occasions (or roughly 30% of the time). This is very much in line with our "rule of three" where we

anticipate underperforming the indices at least one year out of three on average. And such an average, if we can maintain it, is much better than that of the average fund manager.

We accept in advance that we will sometimes underperform the S&P 500 in the short term when our style and/or our companies are out of favor (and sometimes for no reason). While it is not always easy, we try to remain impervious to short-term results, both in good times and in bad.

Rochon Canada Portfolio

We introduced a portfolio that is 100% focused on Canadian equities in 2007. This corresponds to the Canadian portion of the Rochon Global Portfolio. In 2016, the Rochon Canada Portfolio returned 11.0% versus 21.1% for the S&P/TSX, therefore underperforming its index by 10.1%.

Since 2007, the Rochon Canada Portfolio has returned 378%, or 16.9% on an annualized basis. During this same period, our benchmark had a gain of 59%, or 4.7% on an annualized basis. Our annual added value is therefore 12.2%.

Year	Rochon Canada	S&P/TSX	+/-
2007	19.7%	9.8%	9.9%
2008	-24,6%	-33,0%	8,4%
2009	28,2%	35,1%	-6,9%
2010	26.7%	17.6%	9.1%
2011	13.5%	-8.7%	22.2%
2012	24.0%	7.2%	16.8%
2013	49.4%	13.0%	36.4%
2014	20.3%	10.6%	9.7%
2015	16.0%	-8.3%	24.3%
2016	11.0%	21.1%	-10.1%
Total	**377.8%**	**58.7%**	**319.1%**
Annualized	**16.9%**	**4.7%**	**12.2%**

Refer to Appendix B for disclosure statements on the Rochon portfolios.

10 Years of Returns for the Rochon Canada Portfolio

The Rochon Canada portfolio was created in early 2007. It is not a separate portfolio from the Rochon Global portfolio, but rather represents its Canadian component.

In 2006, some partners wrongly perceived us as managers specialized only in the American market and they concluded, simplistically, that we didn't know the Canadian market well. We have, however, always held Canadian equities in our portfolio. Our overarching goal is to find the best companies for our portfolio, regardless of their location. Consequently, about 80% of our companies have historically been in the US. If you objectively selected 100 North American companies at random, you would likely have about 93 American companies and seven Canadian ones. So a portfolio comprised of 80% American companies is therefore not abnormal on a statistical level. Moreover, our investment philosophy which excludes companies focused on natural resources further reduces investments candidates located in Canada.

In response to the inaccurate perception of certain partners, we therefore launched a separate measure of Canadian securities held in the Global portfolio in January of 2007. The Rochon Canada Portfolio is

therefore highly concentrated, with the vast majority of the portfolio invested in three stocks: MTY Food Group, Constellation Software and Dollarama.

Such a concentrated portfolio results in two consequences. First, it is an insufficient number of holdings to be considered a sufficiently diversified portfolio. Second, the correlation with the Canadian benchmark (the S&P/TSX) is essentially nonexistent, so the stock market performance of this portfolio will always be very different from that of its benchmark.

It's time for a post-mortem after a decade of returns. Here is a chart illustrating the performance of the Rochon Canada Portfolio versus its benchmark, the S&P/TSX:

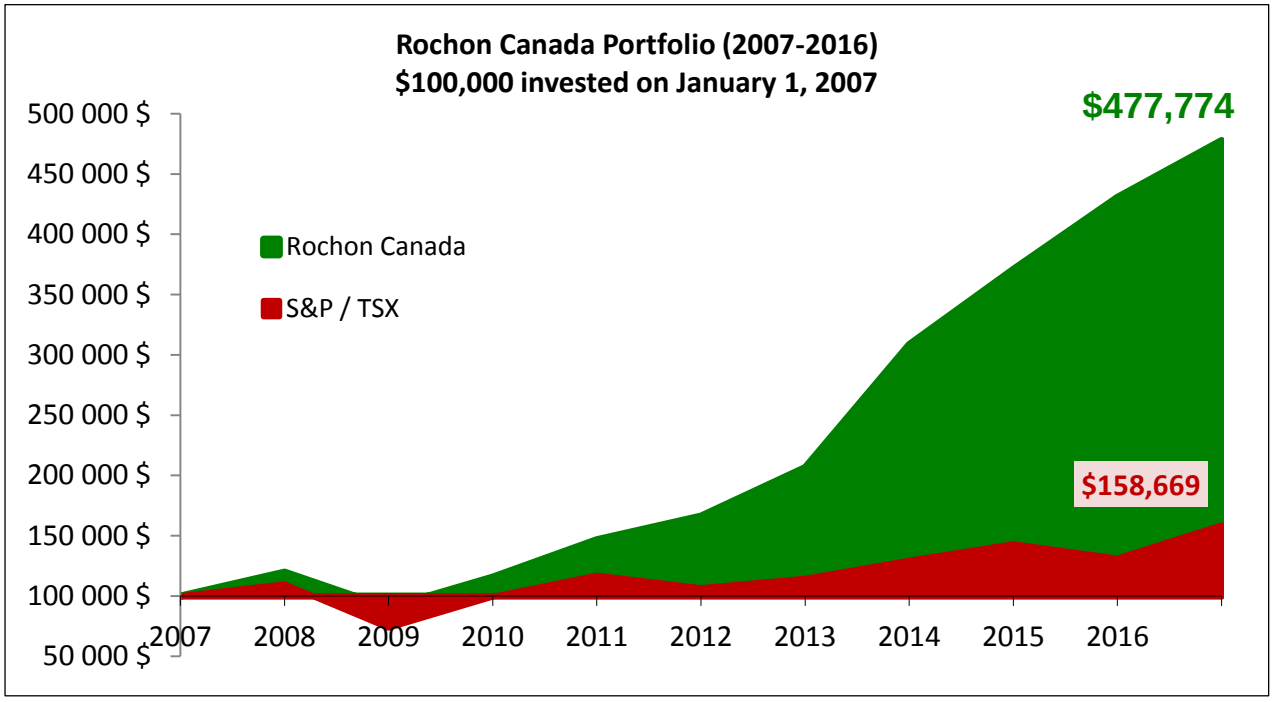

Refer to Appendix B for disclosure statements on the Rochon portfolios.

Over 10 years, the performance of our Canadian securities has been significantly higher than that of the S&P/TSX and even higher than that of our US stocks. A concentrated portfolio can drastically exceed the performance of the indices but the risks inherent to high concentration is not appropriate for a portfolio that is to be managed prudently. In fact, we consider that a portfolio of about 20 securities is the right balance between having a minimum diversification level to reduce company-specific risk while also having few enough companies to improve the odds of beating the market indices. Since this portfolio represents only a portion (approximately 15%) of the Rochon Global Portfolio, our diversification requirements are met.

The Canadian portfolio has, however, achieved the original objective of invalidating the idea that we were exclusively "American managers".

I would like to add that the three most significant Canadian companies we own in this portfolio are of the utmost quality and all have one thing in common: they are led by exceptional CEOs.

2016

There are three periods that can sum up the year 2016. The beginning of the year was marked by a stock market correction of 13%. After the recovery that followed, the stock market was confronted by the Brexit vote in June (the vote by the United Kingdom to leave the Eurozone) and another stock market correction occurred followed quickly by another rebound in stock prices.

The last stage of the year started on November 8, when the United States elected a new president. Taking all the "experts" by surprise, the stock market rose dramatically in the days following the election. By the end of the year, the S&P 500 generated a return of 12% (including dividends). We have repeatedly stated that the stock market is unpredictable over the short term and the market did everything in 2016 to prove us right.

The Canadian market did even better than its US counterpart in 2016, with the TSX increasing by 21% (including dividends). But it should be pointed out that the TSX made up what it had lost during the previous year. Over the past two years, the TSX has achieved a total return of 11% versus 14% for the S&P 500 (without currency effect).

Looking at economic fundamentals, the profits of American companies stagnated in 2016 for the second year in a row. Several causes explain this stagnation of profits on a global scale and we see this economic sluggishness as temporary. As we wrote in our first quarterly letter, we believe that corporate earnings power in the US is higher than what 2016 suggests.

A longer-term horizon provides more perspective on the profit growth of the companies in the S&P 500. Since I started in 1993, the companies comprising the S&P 500 have increased their profits by 450%, which is equivalent to an annual growth rate of 7.3%. The stock market rose from 423 at the end of 1992 to 2239 at the end of 2016, which is an increase of 429% or 7.2% annually. In the long run, there is a direct correlation between the performance of the stock market and the performance of the underlying companies. If dividends are included, the annual return of the S&P 500 has been over 9% per year since 1993.

Imagine everything that has happened since 1993 (when the Internet was still in its infancy). There were two recessions, six US elections (with three Democratic terms and three Republican terms). There have been wars, economic and political crises, horrendous terrorist attacks and worries of all sorts (remember the "Y2K bug" or concerns about the "US debt ceiling" and the "fiscal cliff" of 2012?) Yet, markets did well for the simple reason that all of the companies that make up the index did well. This was achieved despite all the crises and calamities that plagued our civilization. DESPITE is the key word in this sentence.

It was ten years ago…

Giverny Capital went through a difficult time in 2006-2007, when we underperformed the indices for two years in a row. In fact, the only sectors that "worked" at the time were those related to natural resources (with oil leading the way). As you know, we have always avoided these types of companies because we believe that it is extremely difficult to have a competitive advantage in these types of industries.

In addition, the dizzying rise of the Canadian dollar at that time also contributed to our weak short-term results. Many investors and "experts" predicted a bleak future for the United States and its currency at

the time. China, Europe (and the Euro) and Canada (and its dollar) were popular with investors around the world.

We stayed the course of our investment philosophy even though we were under a certain (very certain) pressure from several partners to "invest in what worked". We had a similar situation in 1999 when the only sector that buoyed the stock market was technology. With the stock market, you have to be able to do nothing when almost everyone else wants to do something at the same time! We knew then that our philosophy of selecting high quality companies was sound and we also believed that the Canadian dollar trading at par with its US counterpart made no sense. Patience was therefore the key, as we wrote at the time.

This patience proved rewarding for us and our partners. Here is a chart that shows the performance of the Rochon Global portfolio (with and without currency effect) compared to the S&P 500 (with and without currency effect) and the S&P/TSX for the 10-year period beginning January 1, 2007:

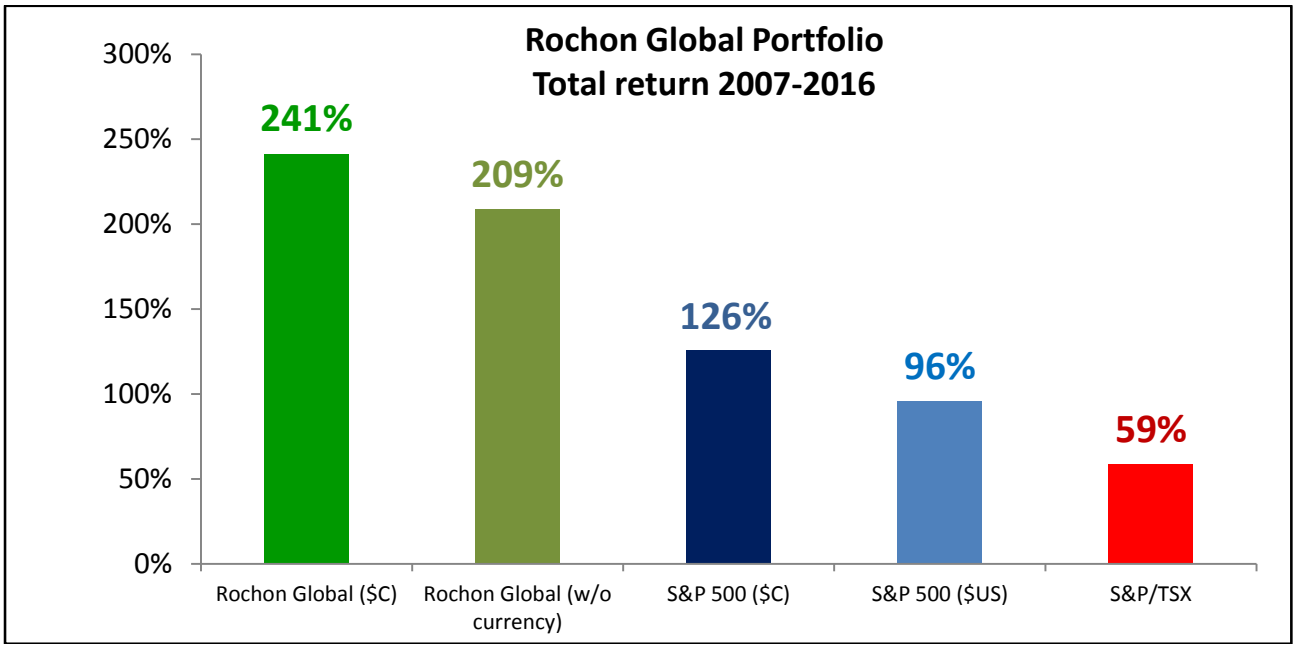

Refer to Appendix B for disclosure statements on the Rochon portfolios.

The S&P/TSX achieved a return of only 59% over 10 years, or 4.7% on an annualized basis compared to 126% for the S&P 500 (8.5% annualized) and 241% for the Rochon Global Portfolio, or 13.1% on an annualized basis.

How did the European market fare over this same period? The MSCI Europe Index returned approximately 27%, or 2.4% annualized (in Canadian dollars). Finally, the SSE Index of the Shanghai Stock Exchange achieved only 13% in total over ten years (excluding dividends). And what about the price of oil? It is lower today than it was in early 2007. As is so often the case, following the herd in the financial markets is rarely a winning strategy.

Owner's Earnings

At Giverny Capital, we do not evaluate the quality of an investment by the short-term fluctuations in its stock price. Our wiring is such that we consider ourselves owners of the companies in which we invest. Consequently, we study the growth in earnings of our companies and their long-term outlook.

Since 1996, we have presented a chart depicting the growth in the intrinsic value of our companies using a measurement developed by Warren Buffett: "owner's earnings". We arrive at our estimate of the increase in intrinsic value of our companies by adding the growth in earnings per share (EPS) and the average dividend yield of the portfolio. We believe that analysis is not exactly precise but approximately correct. In the non-scientific world of the stock market, we believe in the old saying: "It is better to be roughly right than precisely wrong."

This year, the intrinsic value of our companies, as a whole, rose by about 9% (8% from the growth in earnings and 1% from the average dividend). Despite some of the changes to our portfolio during the year, we consider the estimate of the EPS growth at our companies during 2016 to adequately reflect their economic reality. The market value of our portfolio increased by roughly 10% (without any currency effect). It was therefore the fourth year (out of 21) where the market performance of our holdings followed closely their intrinsic performance.

The companies in the S&P 500, however, experienced a second consecutive year of weak earnings growth. Still, the index performed better than what can be justified by its fundamentals. So the S&P 500 seems to already reflect a significant improvement in earnings growth for 2017.

	Rochon Global Portfolio			S&P 500		
Year ***	Value *	Market **	Difference	Value *	Market **	Difference
1996	14%	29%	15%	13%	23%	10%
1997	17%	35%	18%	11%	33%	22%
1998	11%	12%	1%	-1%	29%	30%
1999	16%	12%	-4%	17%	21%	4%
2000	19%	10%	-9%	9%	-9%	-18%
2001	-9%	10%	19%	-18%	-12%	6%
2002	19%	-2%	-21%	11%	-22%	-33%
2003	31%	34%	3%	15%	29%	14%
2004	21%	8%	-12%	21%	11%	-10%
2005	14%	15%	0%	13%	5%	-8%
2006	14%	3%	-11%	15%	16%	1%
2007	10%	0%	-10%	-4%	5%	9%
2008	-3%	-22%	-19%	-30%	-37%	-7%
2009	0%	28%	28%	3%	26%	23%
2010	22%	22%	0%	45%	15%	-30%
2011	17%	6%	-11%	17%	2%	-15%
2012	19%	23%	4%	7%	16%	9%
2013	16%	42%	26%	9%	32%	23%
2014	13%	19%	6%	9%	14%	5%
2015	11%	4%	-7%	1%	1%	0%
2016	9%	10%	1%	3%	12%	9%
Total	1210%	1266%	55%	309%	436%	127%
Annualized	13.0%	13.3%	0.2%	6.9%	8.3%	1.4%

* Estimated growth in earnings plus dividend yield
** Market performance, inclusive of dividends (refer to Appendix B for disclosure statements on our returns)
*** Results estimated without currency effects

For the last 21 years, our companies have grown their value by about 1210% and their stocks have achieved a total return of approximately 1266%. On an annualized basis, our companies achieved an

intrinsic return of 13.0% versus 13.3% for their stock market performance (dividend included in both cases). The correlation between the two figures over a long period is not accidental since the stock market always reflects the fair value of companies in the long run.

Our stocks have outperformed the S&P 500 by 5% annually over the last 21 years for the simple reason that our companies grew their intrinsic values at a rate that was 5% greater than that of the group of companies that make up the S&P 500.

The Flavor of the Day for 2016

Every year, we present to you what we consider the "flavor of the day" in the financial world. In our opinion, the top prize for 2016 goes to index funds.

It's not a coincidence if you have a feeling of *déjà vu*, since we proclaimed index funds as our "flavor of the day" in our 1998 annual letter. At the time, several investors, both institutional and private, had abdicated from active management and moved towards passive investing. The S&P 500 was then perceived by many investors as "unbeatable" and, as always, the trend of the day eventually subsided. The period from 1999 to 2002 was our best relative period to date, with the Rochon Global portfolio achieving a total return of +46% versus -22% for the S&P 500 over those four years.

At the risk of repeating what I wrote 18 years ago, the basic principle behind the purchase of index funds is perfectly legitimate. Indeed, the vast majority of portfolio managers do not beat their benchmarks so therefore an investment approach that favors investing in all the holdings making up market indices makes a lot of sense for those who do not know how to choose superior companies or managers capable of creating value. Obviously, I would be remiss if I did not point out that because our primary mission is to do better than the indices, which we have done since 1993, we are therefore in favor of an active (and assiduous) stock selection process.

The problem with passive management is that it is not really "passive" for the vast majority of its followers. First, several investors act like weathervanes with the market by buying after good years and selling after bad ones. Indexing will not solve anything for these part-time market players. Second, even those who are always present with the stock market tend to change styles, index fund types, or managers according to what's most in favor. Basically, they tend to sell funds that have underperformed in the short term to buy those that have done well more recently.

It is therefore not surprising that when passive management has done well relative to active management for a few years, investors tend to favor the former. Further, moving out of active management towards passive management, when carried out on a large scale, continues to fuel the divergence between the two approaches. The larger stocks within the indices, now more in demand, continue to increase making active management seems even less effective.

The best parameter to illustrate how passive management can be unsuccessful is the average turnover rate of exchange traded funds (ETFs), which is 880% per year[1]. In other words, average "passive" investors hold their ETFs only about 47 days! It's even worse with the SPY index fund (linked to the S&P 500), with an average holding period of around 12 days, or an annual turnover rate of around 3,000%. This compares with an average turnover rate of 120% for stocks in general. Just to give you an order of magnitude for the purpose of comparison, the turnover rate of our model portfolio is around 14%, which means that we keep our stocks on average for about 2,500 days at Giverny Capital!

[1] Source: Financial Times: *Jack Bogle: the lessons we must take from ETFs* (December 11, 2016)

High turnover leads to lower returns (the second principle of thermodynamics applied to the stock market). For example, the SPY index fund has achieved an annual return of 6.9% over the last decade. Yet, the holders of this fund, as a whole, only achieved an annual return of 3.5%[2]. Half of the return has literally "evaporated" into transactional activities.

Of course, Wall Street is always on the lookout for what is popular (and sources of income from issuing shares and trading), and has benefited from the passive investing windfall: there are now more than 6000 different ETFs (Exchange Traded Funds) compared to 1000 a decade ago. The large amount of choice and ease of transaction inherent to ETFs make their owners even more irrational.

In short, whether it is “robots” or passive funds, the problem is not the financial product but rather the self-destructive behavior of investors. By their impatience and willy-nilly behavior, investors are often paradoxically the cause of their own underperformance.

At Giverny Capital, we believe that a cautious selection of securities with a clear long-term horizon will eventually generate higher than average returns. We’ve met this goal so far.

Five-year Post-mortem: 2011

Like we do every year, we go through a five-year post-mortem analysis. We believe that studying our decisions in a systematic manner, and with the benefit of hindsight, enables us to learn from both our achievements and our errors.

We acquired shares in Google (now Alphabet) in May 2011 when the stock was particularly attractive to us. Since then, the stock has risen by almost 195% versus 65% for the S&P 500. We also made other transactions in the fall of 2011 during the stock market correction of that time. We first sold securities with a more limited appreciation potential to increase our stake in Berkshire Hathaway and Wells Fargo, which we considered quite undervalued. These two stocks rose by approximately 130% versus 100% for the S&P 500 (without dividend) from the end of September 2011 to the end of 2016.

Unfortunately, we didn’t have clairvoyance for all of our portfolio holdings in the fall of 2011. If we had instead increased our holdings in Bank of the Ozarks and/or O'Reilly Automotive instead of increasing our ownership in Wells Fargo, the result would have been considerably better. Shares of Bank of the Ozarks increased by 420% from the end of September 2011 to the end of 2016, while O'Reilly more than quadrupled over the same period.

Revisiting a prediction from 2011

Wall Street strategists have understood something for a long time: the key to predictions is to make them often. As you might have guessed, a strong marketing team is then in charge of flying balloons for those predictions that have proven to come true. We take the opposite approach at Giverny Capital by rarely making predictions and evaluating our prediction regardless of their outcome.

I wrote a column in the Montreal Gazette with a rare prediction on August 30, 2011[3]. The market experienced a crisis between August and October of that year and the equities tumbled 19% from their high of March 2011 (quick quiz: what was one of the main causes of this panic?). I then publicly

[2] Source: Morningstar; www.seeitmarket.com; Credit Suisse
[3] You can find this article on our website, under the “In the News” section.

predicted that within five years (in 2016), the Dow Jones would climb to 17,000 points compared to 11,280 when I wrote the column.

I repeated this prediction in our 2011 annual letter and I promised to come back to you regarding this prediction in 2016. Keeping to my word, five years to the day, on August 30, 2016, the Dow Jones was at 18,454. And that was before the "post-election" stock market rally of November.

We remain highly skeptical about stock market predictions. Yet, when we make them, it is within the scope of a very long time horizon and when the margin of error seems very wide.

Quiz Answer: On August 8, 2011, the Dow Jones declined 635 points to 10,809 as a result of the decision by Standard & Poors to lower the credit rating of US debt from AAA to AA+. This news was in conjunction with the significant problems with government debt in Europe, with Greece at the top of the list.

Our Companies

"Money is made by sitting, not trading."

Jesse Livermore

Bank of the Ozarks (OZRK, $53): 10 years in our portfolio

We've now owned shares in Bank of the Ozarks for more than 10 years. The bank, located in Little Rock, Arkansas, was often listed as the top bank in American Banker magazine for its return on assets (among all small banks in the US). Since I had never heard of this company before (and had no idea that the Ozarks is a region of northern Arkansas), I decided to go and meet with the bank's management in November 2006.

President George Gleason greeted me with twenty or so vice presidents in the boardroom of the bank's headquarters in Little Rock (his daughter even picked me up at the airport). Mr. Gleason explained the culture of Bank of the Ozarks to me and its history. What struck me most was that he seemed to know almost every loan on the bank's books.

George Gleason *Source: Democrat Gazette*

We then went to visit several local branches and he showed me some of the buildings that the bank had financed. While the major US banks were adopting complex lending strategies and muddling their balance sheets with esoteric derivatives at the time, Bank of the Ozarks kept its traditional approach to banking. There also was no real estate speculation in Little Rock, with the average price of a house in 2006 coming in at a whopping $130,000.

We decided to buy shares in the bank upon my return to Montreal, when the stock traded at $8 (adjusted for splits). The company earned $0.48 per share in 2006 so its P/E multiple was 17 times. Never would I have thought of paying such a rich ratio for a bank but Bank of the Ozarks was no ordinary bank!

Source: BigCharts.com

As you can see from the chart above, we were not immediately rewarded with this investment. During the 2008 crisis, the stock fell by 50% when all bank stocks were tarred with the same brush. We knew that the bank was very prudently managed and we kept the course.

After four years of stagnation, the stock began to climb and we made about seven times our money in 10 years. The reason for this performance is simple: EPS increased from $0.48 in 2006 to $ 2.62 in 2016, or an annualized growth rate of 18%. To my knowledge, no bank in the United States has achieved such a growth rate during this extremely difficult period for the banking sector. The bank's efficiency ratio (under 36%) is nearly unparalleled and its return on assets (around 1.9%) still ranks among the best. Its bad debt ratio is one of the lowest in the industry.

We have George Gleason to thank for this phenomenal performance. He's visited us twice in Montreal over the years and we were able to properly welcome him to Quebec, with smoked meat, poutine and *pouding chômeur*.

The growth prospects for Bank of the Ozarks' look solid and the valuation of its stock seems reasonable.

Alphabet Inc. (GOOG, $772)

Alphabet (formerly Google) had an excellent year in 2016. Revenues grew by 21% and adjusted EPS rose by 18%. We include stock options expenses to arrive at our profit estimates for Alphabet, unlike many Wall Street analysts who often like to present figures excluding them.

We have been Google shareholders since 2011 and, in our opinion, the company has an extremely strong competitive advantage. The verb "google" has even entered our vocabulary for searching the Internet and visiting google.com has become a reflex of our thought process.

The idea came to us thanks to Charlie Munger, the longtime partner of Warren Buffett. Mr. Munger explained at a conference that many companies that historically had wide competitive moats had seen their moats "filled up with sand" (an analogy meaning that their competitive advantage was deteriorating). I then asked him if he saw new companies with a wide moat and, after reflection, he replied Google. His comments did not fall on deaf ears and Jean-Philippe and I started looking at the company from a whole new perspective.

We were able to buy the stock at very good prices in 2011 when Wall Street was fearful of the company's transition of its users from PCs to mobile devices. There was a readjustment of profit margins when Google migrated to mobile applications but this transition was a success. Earnings have grown by 12% on an annualized basis since 2011 and the stock has more than tripled since our purchase.

The stock is currently trading at about 24 times its expected profits for 2017. This is a justified valuation, in our opinion, given the high quality of the competitive advantages of Google's wide range of producing assets.

AMETEK (AME, $49)

AMETEK has two divisions. The electronic instruments segment produces instruments for monitoring, measuring, testing, calibrating, displaying, etc. for the aeronautics, energy and various industrial markets. The electromechanical division produces interconnection equipment, motors, motion control systems and thermal management systems.

It was a tough year for Ametek, with revenues decreasing by 3% and EPS falling by 9%. Sales from the energy sector had another difficult year. The company continued to make acquisitions (five in 2016) and developed a number of new products.

The company expects a return to growth in 2017.

Berkshire Hathaway (BRK.B, $163)

We estimate that Berkshire achieved an 11% increase in its intrinsic value, so it was another great year for the conglomerate led by Warren Buffett. Although some divisions experienced a decline in profitability (such as BNSF), Berkshire nevertheless slightly increased its operating profits.

Mr. Buffett and his two assistant investment managers (Ted and Todd) deployed several billion dollars in the purchase of stocks, with approximately $20 billion invested after the US election.

We believe that Berkshire's growth outlook remains above average.

Carmax (KMX, $64)

We have been shareholders in Carmax since 2007. Carmax has revolutionized the used car retail industry and its *raison d'être* is simple: to bring integrity to the world of second-hand cars by being honest and transparent in every transaction. Its brand has become synonymous with a good warranty

and reliability in an industry where consumers previously had very little recourse. The company now operates 169 megastores and has a market share of over 3%.

A friend of ours who's a portfolio manager told us that he went to Carmax to sell his car stipulating that he wanted to be out of there in 10 minutes. He had his check in hand within that time! Carmax had a good year, albeit slightly below our expectations. After the first three quarters, revenues were up 3% and EPS rose 6%. The company opened 15 new stores in 2016 and is planning a similar opening in 2017.

The stock has been volatile in recent months, dropping from a high of $74 in 2015 to less than $45 in early 2016. We took the opportunity to increase our investment and the stock subsequently bounced back to finish the year at $64. We believe that the market valuation of Carmax's shares does not adequately reflect the company's excellent long-term growth prospects.

Constellation Software (CSU-T, $610)

Our Toronto-based software company had another good year, with revenues growing by over 15%. The majority of this growth was attributable to acquisitions and organic revenues, on the other hand, grew by 2%. The company has a significant share of its revenues from maintenance activities, which had organic growth of 4% in 2016. Constellation spent approximately $175 million on acquisitions, compared to $235 million in 2015. EPS in US dollars grew by 6% and we expect growth of around 15% for 2017.

Mark Leonard continues to be an exceptional CEO, though he is extremely low-key and discreet in today's world of flashy corporate CEOs. We are very pleased to be associated with him.

Walt Disney (DIS, $104)

It was a tough year for Disney. For its fiscal year ended September 30, revenues increased by 6% and EPS by 11%. But if we look at the same figures for a calendar year (January to December), EPS increased only by about 2%.

The television revenue division experienced a 1% decline in profitability (with -13% in the September quarter and -11% in the first quarter of 2017). The primary cause was the decline in profitability of the sports channel ESPN, with the increase in licensing costs (including the NFL) and a decline in subscribers and advertising revenue the primary culprits. Worried about this trend, we met last summer with the person who (in our opinion) knows the most about the history of the media industry in the United States. According to him, the situation at ESPN, although far from catastrophic, could be improved but with difficulty. So it is quite possible that Disney and its shareholders will have to accept that this great division could become less and less an important source of profits.

Now let's talk about the good news. The film division experienced a spectacular year with operating profits rising 37%. The movie *Star Wars: The Force Awakens* was a huge success. Three other Disney movies reached the billion dollar mark: *Finding Dory, Captain America: Civil War and Zootopia.*

Finally, the company opened its new theme park in Shanghai and the resort division increased its profits by 9%.

Bob Iger, the fabulous CEO of Disney, is confident that the next few years will be better. We share in his optimism and we expect EPS growth of 9% in 2017. We believe that the core of Disney remains the

production of family-friendly films and this source of revenue, along with amusement parks, will become the primary source of profitability for Disney and offset the gradual decline in television profits.

Dollarama (DOL-T, $98)

We have been shareholders of Dollarama for almost seven years now. We temper our expectations every year and see the company exceed our expectations every year. After three quarters, sales increased by 12% and same-store sales grew by nearly 6%. EPS rose by 22%, helped by a repurchase of approximately 7% of the company's shares outstanding.

On the first of May of last year, Larry Rossy transferred his position as President and Chief Executive Officer to his son Neil, while continuing to serve as Chairman of the Board. Neil (46 years old) has worked at the company since 1992 when the company opened its first stores, and served as Chief Marketing Officer and Member of the Board of Directors since 2004. We believe that the company's culture is part of its DNA (literally and figuratively) and we thank Larry Rossy for his extraordinary work over the last few decades. The partners of Giverny Capital are wealthier thanks to him. We would retire the number on his jersey if he had one.

Fortune Brands Home & Services (FBHS, $54)

Fortune Brands Home & Services operates four manufacturing divisions for the home: cabinets (kitchen and bathroom), plumbing (mainly the Moen brand), doors and security products (padlocks).

FBHS had another excellent year, with sales growing by 9% and EPS increasing by 33%. The company realized a significant improvement in its operating margins and also repurchased approximately 4% of its shares outstanding. We believe that the prospect for earnings growth remains solid and that the stock's valuation is reasonable.

Heico (HEI.A, $68)

We acquired a stake in this Florida-based company over the course of the year. Heico has two manufacturing divisions: equipment for the aviation industry and an electronics group.

The first division is the one that caught our attention. Heico sells alternative aircraft equipment (non-OEM) to aviation companies. The difficulty in obtaining approval from the Federal Aviation Administration (FAA) for these aircraft parts, along with extensive catalog of parts available from the company that was built over several years, provide a very significant competitive advantage for Heico.

Revenues rose 16% and EPS climbed 17% in 2016. EPS has grown by about 19% annually over the last decade—an exceptional performance.

LKQ Corp (LKQ, $31)

LKQ specializes in the distribution of "alternative" car parts, meaning either original or refurbished auto parts, as well specialized accessories primarily for the auto repair market. Basically, the company offer products equivalent to original auto parts at lower costs.

This Chicago-based business had another good year and continued its expansion plan in Europe with a major acquisition in Italy. The company now generates about a third of its revenues from overseas. It also made a sizable acquisition in the United States when it bought Pittsburgh Glass Works (PGW). The

latter specializes, among other things, in the windshield market. LKQ subsequently resold the OEM (Original Equipment Manufacturer) portion of PGW's operations.

Sales increased 19% in 2016 (nearly 5% organically). EPS grew by 21% to $1.80 (13% to $1.69 excluding PGW's discontinued operations). It's worth noting that the company was slightly affected by the decline of the British Pound in its British division (decreasing EPS by approximately of $0.05).

The potential for LKQ increasing its profitability in future years is high, especially if the company fully succeeds in its plan to become as dominant in Europe as in the United States. The company has done an excellent job of consolidating this fragmented industry.

M&T Bank (MTB, $156)

Buffalo-based M&T Bank didn't meet our expectations in 2016. Adjusted EPS increased by 4% and return on assets declined slightly from 1.18% to 1.14%. Still, we believe that several projects bode well for the bank over the next few years. First, the integration of Hudson City Bancorp should help improve operating margins. Also, the new US banking regulatory policy is expected to be very positive for M&T (which has invested enormous resources in recent years in this activity). Finally, a rise in interest rates should help improve its interest income margins.

We therefore expect a 14% increase in EPS in 2017.

Markel Corporation (MKL, $905)

Markel had a good year 2016, but not as good as 2015. While the underwriting ratio of its insurance divisions increased from 89% to 92% (a lower rate is better), this Richmond (Virginia) company remains very profitable.

Book value climbed from $561 to $606 in 2016, or an increase of only 8%. We believe that the company can maintain an increase of about 12% annually over the long term. We have great admiration for Markel's co-CEO, Tom Gayner, and are very pleased to be long-term partners with him.

Mohawk Industries (MHK, $200)

We have owned shares of Mohawk, a floor covering company, since 2007. The Calhoun (Georgia) company had an exceptional year in 2016, with revenues increasing 11% (reaching $ 9 billion) and adjusted EPS rising 24%. Jeff Lorberbaum is a high-caliber CEO and we trust his management style which masterfully combines dynamism and prudence.

MTY Food Group (MTY-T, $51)

MTY Food franchises chain restaurants of all kinds, primarily located in shopping centers. We have been shareholders of MTY Food since 2007 and have great confidence in the qualities of its CEO, Stanley Ma. We believe him to be one of Canada's top executives.

2016 was a very busy year for MTY Food. At the end of May, MTY announced the acquisition of Kahala Brands for approximately US$ 300 million. Kahala is located in Scottsdale, Arizona, and franchises and operates approximately 2,800 locations under 18 brands in 25 countries. This acquisition represented an important milestone for MTY as it solidified its presence in the United States which will become one of the primary avenues for growth for the company, both for the brands already operating

in the United States as well as for other MTY brands. This Montreal company now has a portfolio of approximately 5500 locations under 57 brands.

The company thus increased its revenues from $145 million to $ 196 million in 2016. We estimate its adjusted EPS to be approximately $2.36, or an increase of 27% from 2015.

Since becoming shareholders, EPS has more than quadrupled (an annualized growth rate of 18%) and we believe the company continues to have exceptional future prospects and we are happy to keep our shares.

O'Reilly Automotive (ORLY, $278)

We have been O'Reilly's shareholders since 2004. The Springfield (Missouri) company consistently defies our most optimistic expectations and this was again the case in 2016. Revenues rose 8%, driven by excellent organic growth of 4.8%. EPS grew by 17% to $10.73—representing the eighth consecutive year that O'Reilly increases its EPS by more than 15%.

Our only regret is that we reduced our portfolio allocation to this stock over the years when its valuation seemed too high. But such a valuation is greatly deserved.

Union Pacific (UNP, $104)

Union Pacific had a tough year in 2016. Revenues dropped by 9% and EPS declined by 8%. The good news is that the fourth quarter showed a return to growth (EPS grew by 6%). We believe that the downturn in its business in 2016 is cyclical in nature and that its strong competitive advantages remain intact. Along with BNSF (owned by Berkshire Hathaway), Union Pacific continues to dominate the rail transportation market in the western United States.

Union Pacific's growth prospects for 2017 are better and we expect a return to increased profitability. The stock market has already anticipated this turnaround (the stock rose 33% in 2016) but we believe that the company's solid long-term outlook justifies its current price.

Visa (V, $78)

We bought shares in Visa back in 2010 when Senator Richard Dubin led a legislative overhaul of the fees charged by credit card companies. We believed then that the effects on Visa would be benign and temporary. The fears on Wall Street allowed us to buy shares of this dominant company at an excellent price.

2016 was a transitional year for Visa, following the major acquisition of its European activities. EPS growth was still 12% in 2016. We expect even better growth in 2017. Visa's stock price has increased fivefold since our purchase in the summer of 2010.

Wells Fargo (WFC, $55)

It was a tough year for Wells Fargo. Last September, the company revealed an unacceptable practice in its ranks: bank advisors were opening accounts for customers for the sole purpose of meeting their sales objectives (and getting bonuses that went along with it). Management fired the guilty parties, paid a fine and resolved to put in place a new formula for compensation. Approximately 5% of the accounts in question had fees and were reimbursed to customers (for a total of $2.6 million).

CEO John Stumpf faced the music and has done everything to restore WFC's prestigious reputation in the banking world. Ultimately, Mr. Stumpf decided to take a big part of the blame by announcing his retirement on October 12th.

For the year, revenues grew by 3%, with loans rising by 7% and deposits by 5%. The company succeeded in maintaining its customer base despite its challenges. Adjusted EPS decreased slightly by around 2%.

The new US administration plans to significantly reduce bank regulation. This, along with a reduction in the corporate tax rate and a possible rise in interest rates, greatly improves the profitability prospects for US banks, including Wells Fargo. We believe that the worst is behind for Wells Fargo and that the next few years bode well.

The Podium of Errors

"I like people admitting they were complete stupid horses' asses. I know I'll perform better if I rub my nose in my mistakes. This is a wonderful trick to learn."

Charlie Munger

Following in the "Givernian" tradition, here are our three annual medals for the "best" errors of 2016 (or from past years). It is with a constructive attitude, in order to always improve as investors, that we provide this detailed analysis.

As is often the case with stocks, errors from omission (non-purchases) are often more costly than errors from commission (purchases)… even if we don't see those on our statements.

However, the first error for this year fell into the second category.

Bronze Medal: Valeant Pharmaceuticals

We discussed the sale of our shares in Valeant at the beginning of 2016 in great detail in our 2015 annual letter. We also answered a large number of questions about this investment during the annual evenings with our partners. I have nevertheless decided to return to this error and close this chapter by awarding it a medal.

We acquired our first shares in Valeant in 2011 at approximately US$45. At the time, the pharmaceutical company had a fairly simple business model and few of its products had patent protection (and therefore wasn't subject to generic competition). The acquisition of Bausch & Lomb in early 2013 further strengthened our enthusiasm and this company, which we have known for a long time, seemed of the highest quality and with stable and recurring revenues.

We knew that Valeant had aggressive accounting and a higher level of debt than the typical companies in which we invest. So it was not consistent with our usual type of investment. We still decided to invest in the company because of our confidence in its CEO Michael Pearson. We believed that he had a solid plan to improve the profitability of the numerous pharmaceutical companies that Valeant was acquiring. The industry needed (and still needs, in our opinion) to refocus on better returns on capital and Mr. Pearson had a credible plan to make this shift at Valeant.

Realizing that Valeant was more risky than our usual investments, we decided to manage this investment risk by initially allocating a 3% weight to this position and more importantly, limiting the maximum weight in the portfolio to 5% regardless of appreciation in the company's shares or how good its financial results were.

In early 2015, a few months after a failed takeover bid for Allergan, Valeant completed the major $15 billion acquisition of Salix Pharmaceuticals. This acquisition doubled the level of debt for Valeant. Salix had obtained approval from the FDA for a drug that had the potential to become a blockbuster. Valeant also made a smaller acquisition that proved to be a mistake: Marathon Pharmaceuticals. The company then acquired drugs that, according to management, had prices that could be increased drastically. The contribution of these drugs was minor to Valeant's overall operations (about 3-4% of revenues) but the consequence of the sharp rise in prices on the company's image was catastrophic. For a slim financial benefit, the company significantly tarnished its reputation. There is a social dimension to the price of drugs that needs to be considered. The company, and us in parallel, very poorly assessed the impact of rising drug prices on Valeant's image and reputation.

On two occasions, in 2013 and in 2015, we sold Valeant shares as the stock exceeded the 5% limit we had set. In March 2016, the company greatly reduced its profitability estimates for the current year (and therefore the debt-to-profit ratio increased to a worrying level), and we decided that the stock had become too risky for us and sold everything at about US$52. If we include the two sales of the stock over the years and the gains in the US currency, the overall result is that we achieved a return of approximately 190% in five years in Canadian currency. Even without the currency gain, we more than doubled our investment in less than 5 years.

Regardless, this was an important mistake on our part. Our confidence in the CEO was, in retrospect, a serious misjudgment of the person and his leadership qualities. Clearly, under pressure to maintain a high rate of growth, deleterious decisions were made. This was coupled with a significant increase in indebtedness.

It may seem surprising to list as a mistake an investment decision that resulted in doubling our money in five years. We have often stated that the stock selection process is more important than the result. A very important part of our process, the judgment of the qualities of management, proved to be wrong in this case.

Silver Medal: Alimentation Couche-Tard

**** Warning: some of the following statements may be offensive to readers ****

I have followed Alimentation Couche-Tard since my very beginnings in 1993. The history of the convenience store industry in Quebec is complex and I will try to sum it up. For years, laws in Quebec prevented major food chains (such as Steinberg and Provigo) from opening in the evenings and Sundays. The convenience stores stepped in to provide a retail option during hours not covered by the grocery stores. This legislation was repealed in the early 1990s and many predicted the almost end of convenience stores. As the big players left the industry, Alimentation Couche-Tard took advantage of this to slowly consolidate the Canadian market.

I've never been a big fan of part of Couche-Tard's operations: gas retail. This activity is hyper competitive and, in my opinion, lacks any competitive advantage. Despite my skepticism, Couche-Tard

did a remarkable job and achieved solid profitability and the stock rose by about 2000% from 1993 to 2003.

In 2003, the company made a major acquisition in the United States when it bought Circle K. Fascinated by this incursion south of our border, I went to listen to the CEO, Alain Bouchard, at the annual meeting in early 2004. I was very impressed by Mr. Bouchard and decided to buy a small stake in Couche-Tard to better follow the company.

About a year later, I decided to sell our shares for a very simplistic reason: I did not like the way financial results were presented (it is a bit complex to go into details in this letter). Needless to say, it was a stupendous mistake.

I continued to monitor Couche-Tard's progress in the United States and subsequently in Norway. Since 2005, the stock has climbed by nearly 1000%. In 23 years, the stock has multiplied by more than 200 times. You read that correctly… there is not one zero too many.

Mr. Bouchard has certainly been the maestro of this phenomenal performance for over two decades. An autobiography was published this year and I strongly recommend reading it.

This omission mistake has been haunting me for more than 20 years. Although, our return has been satisfactory since 1993, they could have been even better if I had translated my admiration for M. Bouchard into a sizable investment.

Gold Medal: Mohawk Industries (in 2008)

After the majestic silver medal, you may be wondering how I could have possibly done worse for the gold medal. In my defense, Couche-Tard did not perfectly fit our investment philosophy. But this is sadly not the case for this next company.

Our current investment in Mohawk Industries had exceptional results in 2016 which highlighted an error that occurred approximately eight years ago.

I discovered Mohawk when I read an article by Peter Lynch in the magazine *Worth*. He talked about the company in very good terms, comparing it with Shaw Industries. Shaw is a leading company in the carpet manufacturing industry and is the main competitor to Mohawk. I already knew Shaw well enough, as Mr. Lynch had discussed it in the book *Beating the Street* published in 1992 (which I must have read ten times in my youth).

In 1998, I wrote a complimentary article on Shaw Industries in *Le Journal Les Affaires*. A few months later, the company was acquired by Berkshire Hathaway. I then focused on its main competitor, Mohawk. The company, initially focused on carpet manufacturing, has diversified into various forms of floor covering (ceramic tiles, vinyl, laminate flooring, etc.). By studying Mohawk in more detail, I realized the exceptional qualities of its CEO, Jeff Lorberbaum. Along with Shaw, Mohawk has come to dominate the flooring industry (each with about a 22% market share).

In 2007, when the housing market was already in a deep recession, Mohawk's share declined from $102 to $75 and we took the opportunity to buy shares in the company. Today, the stock is trading at $226. We therefore realized a gain of approximately 200% or 12% annualized (before currency gains), representing a 5% annual increase over the S&P 500 over the same period.

But we could have made a much higher return. First my conviction in Mohawk and its president was not reflected in the small allocation of this stock in our portfolio (about 2%). But worse still, the stock fell sharply in the fall of 2008 during the financial crisis to hit a low of $24 (even at $17 for a brief moment). At our annual meeting that year, in November 2008, a partner from Giverny asked whether Mohawk was a bargain at this price. I replied: "as the company earned more than $7 per share before the crisis, and I believe that in the next cycle it will earn at least that much, so yes the stock looks extremely attractive." Unfortunately, I did not convert these beautiful words into dollars. We kept our shares without adding more to our position. If we had only doubled our investment and thus lowered our average cost from $75 to $50, our return on that investment would have been 17% annualized over 9 years. If we had increased the weight of the portfolio to 4% at that time, our annual return on the stock would have been more than 20%.

It is an error of "golden" caliber because I understood Mohawk very well and knew that it fit perfectly within our investment philosophy. I knew that Mr. Lorberbaum was a brilliant manager and that he would lead the company through the recession with brilliance and utmost leadership. I also knew that the stock market valuation in November 2008 was extraordinarily low. We could have taken advantage of the irrational behavior of the stock market at that time to drastically lower our acquisition cost and thus greatly amplify the return on our capital.

Conclusion: What About Politics?

We have received several questions about the newly elected US president, Donald Trump. Our role is to manage and be good stewards of your capital. It would be a mistake to let our political ideas, as valid as they may seem in our point of view, to blurry our investment decisions.

For example, I remember the 2004 US election very well, when the reelection of George W Bush in early November of that year scared many Canadian investors (for whatever reasons). From November 2004 to today, the total return of the Rochon Global portfolio has been over 400% (12% on an annualized basis). Without taking anything away from Mr. Bush, I sincerely believe that this performance has been achieved because of the exceptional companies we have owned over the past twelve years, with the vast majority of them based in the United States.

Investing in the stock market is not about betting on the vicissitudes of the political world (and voters). Rather, investing is about owning businesses and nothing else. Strong companies do well because they create unique products and services that serve their customers and potentially enrich their shareholders. Political trends pass but good companies endure. I believe that the vast majority of companies that are doing well do so not because of politicians but in spite of them.

We will surely face another set of political uncertainties and economic worries over the next decade. They will have one thing in common: they will all be unpredictable. Despite this, what is predictable for a seasoned investor is that owning shares of quality companies will give rise to positive financial rewards over the long run.

To Our Partners

Using rationality, along with our unwavering optimism, we trust that the companies we own are exceptional, led by top-notch people, and destined for a great future. They should continue to prudently

navigate the often troubled waters of the global economy. Furthermore, the valuation assigned by the market to these outstanding companies is very similar to the valuation of an average company in the S&P 500, despite the fact that our companies have better growth prospects than average. Therefore we consider the appreciation potential for our portfolio, both in absolute and relative terms, to be well above average, especially when compared to other alternative asset classes, such as bonds.

We also want you to know that we are fully aware of and grateful for your votes of confidence. It is imperative for us to not only select outstanding companies for our portfolios, but to also remain outstanding stewards of your capital. We certainly like to achieve good returns and have developed a taste for it, but it must not come at the cost of taking undue risk. Our philosophy to favor companies with solid balance sheets and dominant business models, along with purchasing these companies at reasonable valuations, is central to the risk management of our portfolios.

Thank you from the entire Giverny Capital team and we wish a great 2017 to all our partners.

François Rochon and the Giverny Capital team

APPENDIX A

Investment philosophy

Note: This section is repeated from prior annual letters and is aimed at new partners.

In 2016, we saw a large increase in the number of Giverny Capital partners (the term we use for our clients). With all these newcomers, it is imperative that we write again (and again) about our investment philosophy.

Here are the key points:

- We believe that over the long run, stocks are the best class of investments.
- It is futile to predict when it will be the best time to begin buying (or selling) stocks.
- A stock return will eventually echo the increase in per share intrinsic value of the underlying company (usually linked to the return on equity).
- We choose companies that have high (and sustainable) margins and high returns on equity, good long term prospects and are managed by brilliant, honest, dedicated and altruistic people.
- Once a company has been selected for its exceptional qualities, a realistic valuation of its intrinsic value has to be approximately assessed.
- The stock market is dominated by participants that perceive stocks as casino chips. With that knowledge, we can then sometimes buy great businesses well below their intrinsic values.
- There can be quite some time before the market recognizes the true value of our companies. But if we're right on the business, we will eventually be right on the stock.

Experience and common sense teach us that an investment philosophy based on buying shares in companies that are undervalued, and holding these companies for several years, will not generate linear returns. Some years, our portfolio will have a return that is below average. This is a certainty that we must accept.

Another important point: the significant volatility of the market is often perceived negatively by many investors. It's actually the contrary. When we see stock prices as *"what other people believe the company is worth"* rather than the real value (at least in the short term), these fluctuations become our allies in our noble quest for creating wealth. Instead of fearing them, we can profit from them by acquiring superb businesses at attractive prices. The more that markets (the "other" participants) are irrational, the more likely we are to reach our ambitious performance objectives.

Benjamin Graham liked to say that the irrationality of the market provides an extraordinary advantage to the intelligent investor. The person, however, who becomes affected by short-term market fluctuations (less than 5 years) and who makes decisions based on them transforms this advantage into a disadvantage. His or her own perception of stock quotes becomes their own worst enemy. Our approach at Giverny Capital is to judge the quality of an investment over a long period of time.

So patience – ours AND that of our partners – becomes the keystone for success.

APPENDIX B

Notes on the returns of the Rochon portfolios

- The Rochon portfolio is a private family group of accounts managed by François Rochon since 1993. The returns of the period from 1993 to 1999 were realized before registration of Giverny Capital Inc. at the AMF in June of 2000.
- The Rochon Global portfolio serves as a model for Giverny Capital's clients, but returns from one client to the other can vary depending on a multitude of factors. The returns indicated include trading commissions, dividends (including foreign withholding income taxes) and other income but do not include management fees. Portfolio returns of the Rochon Global portfolio have been generated in a different environment than Giverny Capital's clients and this environment is considered controlled. For example, cash deposits and withdrawals can increase the returns of the Rochon Global portfolio. Thus, the portfolio returns of the Rochon Global portfolio are often higher than the returns realized by clients of Giverny Capital.
- Past results do not guarantee future results.
- The Rochon Canada and Rochon US portfolios are parts of the Rochon Global portfolio.
- The index benchmark group is selected at the beginning of the year and tends to be a good reflection of the asset composition of the portfolio. Weighted indices presented may not be representative of the Rochon Global portfolio. In 2016 :

  - Giverny Global Portfolio: TSX 14% Russell 2000 43% S&P 500 43%
  - Giverny US Portfolio : S&P 500 100%
  - Giverny Canada Portfolio : S&P/TSX 100%

- The returns for the S&P 500 (in $USD) are provided by Standard & Poors.
- The returns for the various indices used for comparable purposes are deemed reliable by Giverny Capital.
- It should be noted that currency effects on the returns of the Rochon portfolio and indices are estimated to our best effort.
- The custodian of our client portfolios is National Bank Correspondent Network (NBCN) in Canada and TD Ameritrade Institutional in the US.
- The financial statements of the three portfolios are audited at the end of each year. The auditor's data are those provided by our custodian (NBCN). The auditor's annual reports are available upon request.
- For more information, please see the "returns" section of our website.

GIVERNY CAPITAL

Annual Letter to our Partners 2017

Anthony Burnham
Beside itself, 2017
Giverny Capital Collection

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Historical Summary

It has been more than two decades since I discovered the writings of Warren Buffett, Benjamin Graham, John Templeton, Philip Fisher and Peter Lynch. I then decided to begin managing a family portfolio based on an investment approach synthesized from these great money managers. By the end of 1998, after five years of satisfactory results, I decided to launch an investment management firm offering asset management services aligned with my own investment philosophy. Giverny Capital Inc. came into existence.

In 2002, Giverny hired its first employee: Jean-Philippe Bouchard (JP for those who know him well). A few years later, JP became a partner and participates actively in the investment selection process for the Giverny portfolio. In 2005, two new persons joined the firm who eventually became partners: Nicolas L'Écuyer and Karine Primeau. Finally, in 2009, we launched a US office in Princeton, New Jersey. The director of our Princeton office, Patrick Léger, shares in the culture and long-term time horizon inherent to Giverny.

We are Partners!

From the very first days of Giverny, the cornerstone of our portfolio management philosophy was to manage client portfolios in the same way that I was managing my own money. Thus, the family portfolio I've managed since 1993 (the "Rochon Global Portfolio") serves as a model for our client accounts. It is crucial to me that clients of Giverny and its portfolio managers are in the same boat! That is why we call our clients "partners".

The Purpose of our Annual Letter

The primary objective of this annual letter is to discuss the results of our portfolio companies over the course of the prior year. But even more importantly, our goal is to explain in detail the long-term investment philosophy behind the selection process for the companies in our portfolio. Our wish is for our partners to fully understand the nature of our investment process since long-term portfolio returns are the fruits of this philosophy. Over the short term, the stock market is irrational and unpredictable (though some may think otherwise). Over the long term, however, the market adequately reflects the intrinsic value of companies. If the stock selection process is sound and rational, investment returns will eventually follow. Through this letter, we provide you with the information required to understand this process. You will hopefully notice that we are transparent and comprehensive in our discussion. The reason for this is very simple: we treat you the way we would want to be treated if our roles were reversed.

The Artwork on Our 2017 Letter

Since 2004, we have illustrated the cover of our letters with a copy of artwork from our corporate collection. This year we selected a recent painting by the Quebec artist Anthony Burnham entitled "*Beside itself*".

Giverny Capital Inc. – Annual Letter 2017 ©

For the year ending December 31st 2017, the return for the Rochon Global Portfolio was 13.1% versus 10.2% for our benchmark, which represents a relative outperformance of 2.9%. The return of the Rochon Global Portfolio and the one of our benchmark include a loss of approximately 7% due to fluctuations in the Canadian currency.

Since its inception on July 1st 1993, our compounded annual growth rate has been 15.7% versus 9.2% for our weighted benchmark, representing an annualized outperformance of 6.5% over this period. It's worth noting that the effect of the fluctuations in the value of the US Dollar has been nearly nonexistent on our returns. Over 24 years, the US currency has depreciated by 2.1% relative to the Canadian Dollar, which corresponds to an effect of -0.1% on our annualized returns. Our long-term – and quite ambitious – objective is to maintain an annual return 5% higher than our benchmark.

The Rochon Global Portfolio: Returns since July 1st 1993

Year *	Rochon	Index **	+ / -	$ US/Can ***
1993 (Q3-Q4)	37.0%	9.5%	27.6%	3.3%
1994	16.5%	3.7%	12.7%	6.0%
1995	41.2%	24.0%	17.2%	-2.7%
1996	28.0%	22.8%	5.2%	0.3%
1997	37.8%	28.6%	9.2%	4.3%
1998	20.6%	18.8%	1.8%	7.1%
1999	15.1%	16.3%	-1.2%	-5.7%
2000	13.4%	3.2%	10.2%	3.9%
2001	15.1%	-0.4%	15.5%	6.2%
2002	-2.8%	-18.3%	15.6%	-0.8%
2003	13.6%	14.0%	-0.4%	-17.7%
2004	1.6%	6.2%	-4.5%	-7.3%
2005	11.5%	3.6%	7.9%	-3.3%
2006	3.5%	17.0%	-13.5%	0.2%
2007	-14.4%	-11.6%	-2.8%	-14.9%
2008	-5.5%	-22.0%	16.5%	22.9%
2009	11.8%	12.2%	-0.4%	-13.7%
2010	16.1%	13.8%	2.3%	-5.3%
2011	7.6%	-1.1%	8.7%	2.2%
2012	21.2%	12.5%	8.7%	-2.2%
2013	50.2%	38.9%	11.3%	6.9%
2014	28.1%	17.8%	10.2%	9.1%
2015	20.2%	13.4%	6.8%	19.3%
2016	7.3%	14.3%	-7.0%	-3.0%
2017	13.1%	10.3%	2.9%	-6.6%
Total	**3498.5%**	**767.0%**	**2731.0%**	**-2.1%**
Annualized	**15.7%**	**9.2%**	**6.5%**	**-0.1%**

* All returns are adjusted to Canadian dollars
** Index is a hybrid index (S&P/TSX, S&P 500, Russell 2000) which reflects the weight of the underlying assets at the beginning of the year.
*** Variation of the US dollar compared to the Canadian dollar

Refer to Appendix B for disclosure statements on the Rochon portfolios.

The Rochon US Portfolio

We have been publishing the returns of the Rochon US Portfolio, which is denominated in US dollars, since 2003. The Rochon US Portfolio corresponds to the American portion of the Rochon Global Portfolio. In 2017, it realized a return of 19.7% compared to 21.8% for our benchmark, the S&P 500. The Rochon US Portfolio therefore underperformed our benchmark by 2.1%.

Since its inception in 1993, the Rochon US Portfolio has returned 2980%, or 15.0% on an annualized basis. During this same period, the S&P 500 has returned 863%, or 9.7% on an annualized basis. Our added value has therefore been 5.3% annually.

Year	Rochon US	S&P 500	+/-
1993 (Q3-Q4)	32.7%	5.0%	27.7%
1994	9.9%	1.3%	8.6%
1995	54.8%	37.6%	17.2%
1996	27.0%	23.0%	4.1%
1997	32.9%	33.4%	-0.4%
1998	11.0%	28.6%	-17.6%
1999	15.9%	21.0%	-5.1%
2000	11.3%	-9.1%	20.4%
2001	8.1%	-11.9%	20.0%
2002	-4.4%	-22.1%	17.7%
2003	31.6%	28.7%	2.9%
2004	9.3%	10.9%	-1.6%
2005	12.5%	4.9%	7.5%
2006	3.3%	15.8%	-12.4%
2007	-1.7%	5.5%	-7.2%
2008	-24.3%	-37.0%	12.7%
2009	28.7%	26.5%	2.3%
2010	21.9%	15.1%	6.9%
2011	4.7%	2.1%	2.6%
2012	22.3%	16.0%	6.3%
2013	40.6%	32.4%	8.2%
2014	18.0%	13.7%	4.3%
2015	1.7%	1.4%	0.4%
2016	7.5%	12.0%	-4.5%
2017	19.7%	21.8%	-2.1%
Total	**2979.8%**	**863.2%**	**2116.7%**
Annualized	**15.0%**	**9.7%**	**5.3%**

Refer to Appendix B for disclosure statements on the Rochon portfolios.

No individual holding contributed significantly to this underperformance. Many stocks that were all-stars within the S&P 500 in 2017 were not in our portfolio and the slight relative underperformance of the Rochon US Portfolio this year can be primarily explained by this factor.

You will note that the Rochon US Portfolio underperformed the S&P 500 on eight occasions (or roughly 33% of the time) over 24 years. This is very much in line with our "rule of three" where we anticipate underperforming the indices at least one year out of three on average. Such an average, if we can maintain it, is much better than that of the average fund manager.

We accept in advance that we will sometimes underperform the S&P 500 in the short term when our style and/or our companies are out of favor (and sometimes for no reason). While it is not always easy, we try to remain impervious to short-term results, both in good and not-so-good times.

Rochon Canada Portfolio

We introduced a portfolio that is 100% focused on Canadian equities in 2007. This corresponds approximately to the Canadian portion of the Rochon Global Portfolio. In 2017, the Rochon Canada Portfolio returned 27.4% versus 9.1% for the S&P/TSX, therefore overperforming its index by 18.3%.

Since 2007, the Rochon Canada Portfolio has returned 509%, or 17.8% on an annualized basis. During this same period, our benchmark had a gain of 73%, or 5.1% on an annualized basis. Our annual added value was therefore 12.7%.

Year	Giverny Canada	S&P/TSX	+/-
2007	19.7%	9.8%	9.9%
2008	-24.6%	-32.9%	8.3%
2009	28.2%	33.1%	-4.9%
2010	26.7%	17.6%	9.1%
2011	13.5%	-8.7%	22.2%
2012	24.0%	7.2%	16.8%
2013	49.4%	13.0%	36.4%
2014	20.3%	10.6%	9.7%
2015	16.0%	-8.3%	24.3%
2016	11.0%	21.1%	-10.1%
2017	27.4%	9.1%	18.3%
Total	**508.8%**	**73.1%**	**435.7%**
Annualized	**17.8%**	**5.1%**	**12.7%**

Refer to Appendix B for disclosure statements on the Rochon portfolios.

Over 11 years, the performance of our Canadian securities has been significantly higher than that of the S&P/TSX and even higher than that of our US stocks. A concentrated portfolio can drastically exceed the performance of the indices but the risks inherent to high concentration is not appropriate for a portfolio that is to be managed prudently. In fact, we consider that a portfolio of about 20 securities is the right balance between having a minimum diversification level to reduce company-specific risk while also having few enough companies to improve the odds of beating the market indices. Since this portfolio represents only a portion (approximately 15%) of the Rochon Global Portfolio, our diversification requirements are met.

The three most important Canadian companies we own in this portfolio are of the utmost quality and all have one thing in common: they are led by exceptional CEOs.

2017

2017 was a year of strong economic growth, with profits for the companies making up the S&P 500 rising by nearly 12%.

The American tech giants (Apple, Facebook, Amazon, etc.) continued to carry the US stock market in 2017. The five stocks in the table below rose by 47% during the year, or more than twice the return of the S&P 500. Furthermore, these five stocks are the five most important weights within the S&P 500. So it was hard to beat the S&P 500 in 2017 without these stocks in a portfolio (Alphabet is the only one in ours).

Stock	**2017 Gain**
Apple	48%
Microsoft	40%
Amazon.com	56%
Facebook	53%
Alphabet	36%
Average	**47%**

Tax Reform in the US

The American president managed to pass his tax reforms at the end of the year. So in addition to benefiting from an environment of GDP growth, US companies will see their tax rates drop substantially in 2018. We believe that the estimates for profit growth for companies in the S&P 500, which are in the neighborhood of 15% to 18%, could even be conservative given these reforms.

Roughly 80% of our portfolio is invested in the United States. Additionally, our US companies will likely see their corporate tax rates drop in a manner that is even greater than the average company in the S&P 500. Indeed, we have always been wary of investing in companies with low tax rates for the simple reason that we have always feared that governments could change the rules. Our past conservatism will be rewarded in 2018: the majority of our American companies pay significant taxes and will be greatly favored by the lower corporate rate. Considering all factors, we estimate that the profit growth prospects for our companies are above the 20% mark for 2018. The tax reform will even help our Canadian companies, such as , which generate a large share of their profits from the United States.

Meanwhile in Canada

It was a quiet year in Canada. The Canadian stock market did well with the S&P/TSX posting gains of 9%, though below the US stock market. The price of oil dropped from $56 a barrel early in the year to a low of $44, ending the year at $60. This price is still below the total cost of production for several Canadian oil companies, especially those operating in the oil sands. The growing popularity of electric cars is also not a good omen for the oil industry in general.

Canadian residential real estate continued to hold up despite various new and more restrictive rules put in place by governments. The average price of a house in Canada is roughly $500,000, or about 5% more than in 2016. This level seems unsustainable, in our opinion, compared to the current GDP per capita of Canadian households. The level of indebtedness of Canadian has become the highest of the

OECD countries (101% of GDP per capita compared to the average of 80%). When this returns to normal ("when" and not "if" in our opinion) it will likely be difficult for the Canadian economy to absorb without creating additional aftershocks to various segments of the economy.

As a result of US tax reforms, Canadian corporations may well become less competitive relative to their American counterparts. Regardless of what politicians say, a high level of taxation has the same effect on investors as the cold on the geese: they fly off towards more favorable climate.

New segments of the Canadian industry have done particularly well in 2017: artificial intelligence and cannabis agriculture. It seems early to assess the business model and the long-term financial potential of AI-related companies. As for the cannabis industry, it is quickly becoming a major business. Of course, speculators have already taken notice (we can smell it!) and companies in this sector are trading at high valuations which seem to have already discounted many years of future growth.

You likely concluded, if you're reading between the lines, that our philosophy of selecting companies with a strong track record of high profitability and a reasonable stock market valuation keeps us away from these types of industries.

A Few Words on the United Kingdom

As for the United Kingdom in 2017, predictions of economic apocalypses following Brexit did not materialize. GDP growth was close to 1.5% for the year, which is lower than the European average (around 2.4%) but still acceptable given the circumstances. We took advantage of the stock market gloominess that prevailed to buy two British companies for our portfolio.

The Flavor of the Day for 2017: Bitcoin

Every year, we present to you what we consider the "flavor of the day" from the financial world. In our opinion, the top prize for 2017 goes to bitcoin.

Several people asked us throughout the year what we thought about bitcoin, the most popular cryptocurrency. We recognize that this new way of transmitting money is difficult to fully understand. We quote Warren Buffett, who explained that bitcoin is "*…a very effective way of transmitting money and you can do it anonymously and all that. A check is a way of transmitting money too. Are checks worth a whole lot of money?*"

Such a rational statement does not hinder the innate nature of the human being from being seduced by speculative activities. Things ends badly whenever a speculative fever sets in, with those who are burnt by it swearing to never get caught again.

But mix a new generation of humans with a new form of speculation and you get a brand new explosive cocktail. The bitcoin cocktail is spiced with brilliant marketing: it is aimed at those who want to rebel against the system (oh so seductive is this idea!) while also using their intelligence to understand a complex cyber currency concocted by other people just as smart. But intelligence and rationality are two different qualities.

In our opinion, reason and experience dictate avoiding this trend.

Robert Wilmers (1934-2017)

We unfortunately lost Robert Wilmers, CEO of M&T Bank, in December. He had been head of this Buffalo-based bank since 1983, and we have been shareholders M&T for more than 18 years.

I have in my archives the 1993 annual report for the First Empire State Bank (before the name of the bank was changed to M&T). It was the first of many annual reports written by Bob that I read over the years. I became a great admirer of not only of Bob as a banker but also as an incredibly generous human being.

We bought our first shares in M&T in 1998. Then we added to our position at the beginning of the 2000, while Wall Street seemed only interested in tech stocks. M&T's stock did very well during the 2000-2002 market correction and it became our biggest holding. Bob always managed the company extremely cautiously while maintaining a high rate of growth in the company's intrinsic value. We slept peacefully with Bob at the helm.

In 2007, at the age of 73, Bob decided to retire. We met with the company and weren't as comfortable with the bank's new management team and we sold our shares (at around $100).

Then came the great crisis of 2008 and Bob decided to return to run M&T. JP and I met him in August 2008 and bought shares again a few months later, in February 2009, for about $36 a share. The stock is currently trading at $190. There is no doubt whatsoever that Giverny's partners owe Bob a huge debt of gratitude. We are all richer because of his boundless devotion to M&T's customers, employees and shareholders.

I would like to add a personal note about another form of enrichment that Bob indirectly gave me, which is a cultural enrichment. It was a Monday when we travelled to Buffalo in 2008 and the famous Albright-Knox museum was closed. I asked Bob if he knew anyone at the museum who could open its doors. When we arrived at Bob's office, his assistant said: "After the meeting, the museum director

will be waiting for you to take a guided tour." I then met Louis Grachos, the then director of the Albright-Knox, who gave us a very memorable visit. When I told him about my passion for collecting contemporary art, Louis confided in me his admiration for an Italian collector, Count Giuseppe Panza di Biumo.

The first thing I did after the meeting was order Count Panza's autobiography on Amazon and I devoured it in a few days. In my opinion, Count Panza was the greatest collector of contemporary art in history. He quickly became a mentor for me through his writings. Louis then put me in touch with the count and a few months later, in November 2009, I went to meet him at his home in Varese, in northern Italy. It was a wonderful meeting. Six months later, Count Panza died.

I saw Louis a few times afterwards. He also introduced me to some people of the Albright-Knox Museum Board of Directors. Without the great generosity of Bob Wilmers, I would have never met Count Panza or known several very warm people in Buffalo who have become good friends.

I owe a lot of marvelous things in my life to Bob and I will miss him very much.

Five-year Post-mortem: 2012

Like we do every year, we go through a five-year post-mortem analysis. We believe that studying our decisions in a systematic manner, and with the benefit of hindsight, enables us to learn from both our achievements and our errors. We wrote in our 2012 annual letter: "*We believe that equities will be the best asset class in the coming years for the simple reason that it seems to be the most undervalued.*" Over five years, the S&P 500 has risen more than 87% (it has doubled if we include dividends).

In 2012, we acquired shares in LKQ and Union Pacific (UP). We still hold these two companies in our portfolio. To assess these investments, here is a table measuring their performance, in absolute terms, relative to the S&P 500.

Stock	Date of 1st Purchase	2012 EPS	2017 EPS	Growth Rate	Price at 1st Purchase	Price at end of 2017	Avg. Div.	Annualized Return	S&P 500 Annualized	+/-
LKQ	Apr-12	0.87 $	1.88 $	17%	15.0 $	40.7 $	0%	19%	15%	4%
UP	Jul-12	4.13 $	5.79 $	7%	60.0 $	134.1 $	2%	18%	14%	3%
S&P 500		104	133	5%	-	2674	2%			

Both stocks did very well, with LKQ and UP generating annualized returns of 19% and 18%, respectively, or about 3 to 4% better than the S&P 500 during the same period. LKQ grew its EPS by 17% from 2012 to 2017 and the stock has broadly followed the growth in its intrinsic value. Although we believe that the company will have difficulty maintaining this rate of growth in the future, we are of course satisfied with this investment so far.

On the other hand, UP has grown its EPS by only 7% per year, a rate that is slightly higher than that of the companies in the S&P 500. The strong performance of the stock therefore originates from a significant increase in its P/E multiple over the last five years (just like the S&P 500, by the way). We believe that UP's valuation premium is justified by its excellent long-term fundamentals (it must also be taken into account that EPS will likely increase sharply in 2018). Our opinion, however, is that we will no longer count on such a stock market revaluation in the years to come.

Owner's Earnings

At Giverny Capital, we do not evaluate the quality of an investment by the short-term fluctuations in its stock price. Our wiring is such that we consider ourselves owners of the companies in which we invest. Consequently, we study the growth in earnings of our companies and their long-term outlook. Since 1996, we have presented a chart depicting the growth in the intrinsic value of our companies using a measurement developed by Warren Buffett: "owner's earnings". We arrive at our estimate of the increase in intrinsic value of our companies by adding the growth in earnings per share (EPS) and the average dividend yield of the portfolio. We believe that analysis is not exactly precise but approximately correct. In the non-scientific world of equity investing, we believe in the old saying: "It is better to be roughly right than precisely wrong."

This year, the intrinsic value of our companies, as a whole, rose by about 14% (13% from the growth in earnings and around 1% from the average dividend). Despite some of the changes to our portfolio during the year, we consider the estimate of the EPS growth at our companies during 2017 to adequately reflect their economic reality. The performance of our portfolio in terms of market value was a gain of roughly 20% (net of any currency effect).

The companies in the S&P 500 also saw strong growth, with growth in the order of 12% (about 14% when we add the dividend). The S&P 500 had a total performance figure of 22% (in $USD).

	Rochon Global Portfolio			S&P 500		
Year ***	Value *	Market **	Difference	Value *	Market **	Difference
1996	14%	29%	15%	13%	23%	10%
1997	17%	35%	18%	11%	33%	22%
1998	11%	12%	1%	-1%	29%	30%
1999	16%	12%	-4%	17%	21%	4%
2000	19%	10%	-9%	9%	-9%	-18%
2001	-9%	10%	19%	-18%	-12%	6%
2002	19%	-2%	-21%	11%	-22%	-33%
2003	31%	34%	3%	15%	29%	14%
2004	21%	8%	-12%	21%	11%	-10%
2005	14%	15%	0%	13%	5%	-8%
2006	14%	3%	-11%	15%	16%	1%
2007	10%	0%	-10%	-4%	5%	9%
2008	-3%	-22%	-19%	-30%	-37%	-7%
2009	0%	28%	28%	3%	26%	23%
2010	22%	22%	0%	45%	15%	-30%
2011	17%	6%	-11%	17%	2%	-15%
2012	19%	23%	4%	7%	16%	9%
2013	16%	42%	26%	9%	32%	23%
2014	13%	19%	6%	9%	14%	5%
2015	11%	4%	-7%	1%	1%	0%
2016	9%	10%	1%	3%	12%	9%
2017	14%	20%	7%	14%	22%	8%
Total	1391%	1544%	153%	365%	552%	188%
Annualized	13.1%	13.6%	0.5%	7.2%	8.9%	1.7%

* Estimated growth in earnings plus dividend yield
** Market performance, inclusive of dividends (refer to Appendix B for disclosure statements on our returns)
*** Results estimated without currency effects

Over 22 years, we believe our companies have grown their intrinsic value by about 1391%; and their stocks have achieved a total return of approximately 1544%. On an annualized basis, we achieved an intrinsic performance of 13.1% versus 13.6% for their stock market performance (dividend included in both cases). The correlation between the two figures over a long period is not accidental since the stock market always reflects the fair value of companies over the long term.

Our stocks have outperformed the S&P 500 by 4.7% annually over the last 22 years for the simple reason that our companies grew their intrinsic values at a rate that was 5% greater than that of the companies that make up the S&P 500.

Our Companies

"It is remarkable how much long-term advantage people like us have gotten by trying to be consistently not stupid, instead of trying to be very intelligent."

- Charlie Munger (Vice Chairman of Berkshire Hathaway)

Section for Giverny Capital's partners only

The Podium of Errors

"The man who does things makes many mistakes, but he never makes the biggest mistake of all—doing nothing."

- Benjamin Franklin

Following in the "Givernian" tradition, here are our three annual medals for the "best" errors of 2014 (or from past years). It is with a constructive attitude, in order to always improve as investors, that we provide this detailed analysis. As is often the case with stocks, errors from omission (non-purchases) are often more costly than errors from commission (purchases)… even if we don't see those on our statements.

Bronze Medal: Knight Transportation

Our older partners will remember that we were shareholders of Knight Transportation for several years, from 2003 to 2011. Knight Transport is a large truck transportation company located in Phoenix, Arizona. We sold our shares in 2011 to buy another stock that seemed more undervalued.

In early 2015, the company appointed a new CEO, David A. Jackson, and we met with him. Mr. Jackson was previously CFO of the company and reinvigorated Knight's growth plans. We were very impressed by this young leader (40 years old at that time) and decided to become shareholders again. Then in March of 2017, after holding the stock for about two years, we sold our shares for about $33, netting a small gain. Once again, I preferred to invest our capital in another stock that seemed more interesting.

It seems like it was a mistake. Shortly after our sale, David Jackson led the company in its acquisition of Swift Transportation which, at first glance, seems very promising. The growth outlook for 2018 is excellent and we expect a 58% increase in EPS. The stock did well on the stock market, climbing nearly 50% after we sold it. It looks like I lacked patience.

Silver Medal: Intuit

I discovered Intuit and its Quicken software about 25 years ago. I found the product excellent and very practical. I knew that the company was listed on the stock market but found the stock too expensive. In October 1994, Microsoft announced a takeover bid for Intuit for $1.5 billion. From memory, it was the equivalent of around 30 times the profits of that time—a level that I found exorbitant (I was still quite inexperienced). In April 1995, the US Department of Justice opposed the transaction for antitrust reasons and Intuit's stock dropped to less than $5 (adjusted for subsequent splits).

I decided to follow Intuit more closely after this failed acquisition. I liked the product and I thought that if Microsoft saw so much value in it that the company certainly deserved my attention. Obviously, I always found the stock too expensive because I never bought any shares of the company. I only admired the company from the bleachers.

A few years later, the company launched a second flagship product: Quickbook (bookkeeping software). We even started using this product a few years ago at Giverny. I could not be more in the front row! Today, the stock is trading at $164. Yes, you calculated correctly: the stock has risen 3200% since 1995, or the equivalent of an annualized return of 17%.

Gold Medal: FactSet Research Systems

This year's gold medal is one of high caliber and one that was many years in the making. It is necessary to return to 1998 to find the origin of this error. In early 1998 (a few months before founding Giverny Capital), I went to a high-tech conference in San Francisco. No need to tell you that the word on everyone's lips was: "Internet". The young business leaders were daring, flashy and excellent presenters with beautiful computer presentations. The sole exception to this was the president of FactSet Research.

I had never heard of this company but I looked at its numbers in the documents provided to conference attendees. The company was very profitable (one of the few in the group) and I went to the company's presentation. The president and co-founder was the speaker and he must have been about 70 years old and had no computer or projector. Near the end of his presentation, he pulled out sheets of paper taped together (yes, I was wondering "what are these strange things?"). In this stack of unfolded sheets, one could see the sales and profit growth of the company over 20 years (the company was founded in 1978). Of course, from my seat in the audience, I couldn’t really see anything. But I liked the old fashioned manner of the president and took the time to study the company in detail upon my return to Montreal.

FactSet sells financial information software and competes with giants like Bloomberg and Thomson Reuters. The company has a successful product, a loyal customer base and is continually gaining market share. It has exceptional profitability and an exemplary balance sheet.

After following the company a few years, we bought shares of FactSet in 2003. Then we sold them after a slight increase. We briefly rode on the same carousel in 2006. The reason that made me sell was always the same: after a small rise, I found the stock's valuations too expensive. In fact, the market valuation, without being exaggerated, always seemed too high and that is the main reason we did not have this company in the portfolio for longer periods of time. Yet the company continued to generate exceptional results and the company continued to grow its profits even during the great recession of 2008-2009.

At the beginning of 1998, the stock traded at less than $8. The stock hit the $200 level twenty years later. We could have made more than 25 times our money over two decades (an annual return of 18%).

What makes me to blame even more is that we are loyal customers of FactSet Research at Giverny Capital. I love to use this product! Our familiarity with the product and our loyalty to the company should have turned the light on in my brain!

Conclusion: it was 10 years ago

A decade ago, in 2007, Giverny Capital had a difficult year. The only sectors that were "working" were those related to natural resources (with oil leading the way). As you know, we avoid this universe because, in our opinion, it is extremely difficult to have a competitive advantage. In addition, the sharp rise in the Canadian dollar at that time also decreased our short-term results. The Canadian stock market (especially the sectors linked to natural resources) was then at its peak of popularity.

We stayed the course on our stock selection process as we knew that our philosophy of selecting high quality companies was sound. We also believed that the level of the Canadian dollar, at par with its American counterpart at the time, did not make sense. We wrote at the time: "Patience is in order."

This patience was rewarding for us and our partners. The following is a chart of the performance of the Rochon Global Portfolio (in Canadian dollars and without currency effect) compared to our benchmark, the S&P 500 and the S&P/TSX (in Canadian dollars and without currency effect) for the 10-year period, beginning January 1, 2008.

2008-2017 Period	In $CAD		Estimated w/o currency	
Return	Total	Annualized	Total	Annualized
Rochon Global	351.0%	16.3%	271.6%	14.0%
Index **	159.4%	10.0%	111.0%	7.8%
S&P 500	186.1%	11.1%	126.0%	8.5%
S&P/TSX	58.1%	4.7%	58.1%	4.7%

** "Index" is a hybrid index (S&P/TSX, S&P 500, Russell 2000) which reflects the weight of the underlying assets at the beginning of the year.

Refer to Appendix B for disclosure statements on the Rochon portfolios.

The Rochon Global portfolio thus achieved a total return of 351% (16.3% on an annualized basis) compared to 186% for the S&P 500 in Canadian dollars (11.1% annualized). The S&P/TSX Canadian Index returned 58% over 10 years (4.7% annualized). The Canadian dollar lost 21% of its value over the decade and returned to a level we consider normal. Without currency effect, we estimate the total return of the Rochon Global portfolio at 272% (14.0% annualized) and 126% (8.5% annualized) for the S&P 500.

It should be noted that these returns were obtained by starting the clock at the BEGINNING of 2008, so BEFORE the big fall of the stock market that followed. Our companies are not immune to recessions but have had the strength to go through hard times.

Two ingredients are therefore necessary to succeed on the stock market: a rational stock selection process and patience (often, a good dose of it).

I would add that the first ingredient is futile without the second.

To Our Partners

We believe that the companies we own are exceptional, led by top-notch people, and destined for a great future. They should continue to prudently navigate the often troubled waters of the global economy. Furthermore, the valuation assigned by the market to these outstanding companies is very similar to the valuation of an average company in the S&P 500, despite the fact that we believe our companies have better growth prospects than average. Therefore we consider the appreciation potential for our portfolio, both in absolute and relative terms, to be well above average, especially when compared to other alternative asset classes, such as bonds.

We also want you to know that we are fully aware of and grateful for your votes of confidence. It is imperative for us to not only select outstanding companies for our portfolios, but to also remain outstanding stewards of your capital. We certainly like to achieve good returns and have developed a taste for it, but it must not come at the cost of taking undue risk. Our philosophy to favor companies with solid balance sheets and dominant business models, along with purchasing these companies at reasonable valuations, is central to the risk management of our portfolios.

Thank you from the entire Giverny Capital team and we wish a great 2018 to all our partners.

François Rochon and the Giverny Capital team

APPENDIX A

Investment philosophy

Note: This section is repeated from prior annual letters and is aimed at new partners.

In 2017, we saw a large increase in the number of Giverny Capital partners (the term we use for our clients). With all these newcomers, it is imperative that we write again (and again) about our investment philosophy.

Here are the key points:

- We believe that over the long run, stocks are the best class of investments.
- It is futile to predict when it will be the best time to begin buying (or selling) stocks.
- A stock return will eventually echo the increase in per share intrinsic value of the underlying company (usually linked to the return on equity).
- We choose companies that have high (and sustainable) margins and high returns on equity, good long term prospects and are managed by brilliant, honest, dedicated and altruistic people.
- Once a company has been selected for its exceptional qualities, a realistic valuation of its intrinsic value has to be approximately assessed.
- The stock market is dominated by participants that perceive stocks as casino chips. With that knowledge, we can then sometimes buy great businesses well below their intrinsic values.
- There can be quite some time before the market recognizes the true value of our companies. But if we're right on the business, we will eventually be right on the stock.

Experience and common sense teach us that an investment philosophy based on buying shares in companies that are undervalued, and holding these companies for several years, will not generate linear returns. Some years, our portfolio will have a return that is below average. This is a certainty that we must accept.

Another important point: the significant volatility of the market is often perceived negatively by many investors. It's actually the contrary. When we see stock prices as *"what other people believe the company is worth"* rather than the real value (at least in the short term), these fluctuations become our allies in our noble quest for creating wealth. Instead of fearing them, we can profit from them by acquiring superb businesses at attractive prices. The more that markets (the "other" participants) are irrational, the more likely we are to reach our ambitious performance objectives.

Benjamin Graham liked to say that the irrationality of the market provides an extraordinary advantage to the intelligent investor. The person, however, who becomes affected by short-term market fluctuations (less than 5 years) and who makes decisions based on them transforms this advantage into a disadvantage. His or her own perception of stock quotes becomes their own worst enemy. Our approach at Giverny Capital is to judge the quality of an investment over a long period of time.

So patience – ours AND that of our partners – becomes the keystone for success.

APPENDIX B

Notes on the returns of the Rochon portfolios

- The Rochon portfolio is a private family group of accounts managed by François Rochon since 1993. The returns of the period from 1993 to 1999 were realized before registration of Giverny Capital Inc. at the AMF in June of 2000.
- The Rochon Global portfolio serves as a model for Giverny Capital's clients, but returns from one client to the other can vary depending on a multitude of factors. The returns indicated include trading commissions, dividends (including foreign withholding income taxes) and other income but do not include management fees. Portfolio returns of the Rochon Global portfolio have been generated in a different environment than Giverny Capital's clients and this environment is considered controlled. For example, cash deposits and withdrawals can increase the returns of the Rochon Global portfolio. Thus, the portfolio returns of the Rochon Global portfolio are often higher than the returns realized by clients of Giverny Capital.
- Past results do not guarantee future results.
- The Rochon Canada and Rochon US portfolios are parts of the Rochon Global portfolio.
- The index benchmark group is selected at the beginning of the year and tends to be a good reflection of the asset composition of the portfolio. Weighted indices presented may not be representative of the Rochon Global portfolio. In 2017 :

  - Giverny Global Portfolio: TSX 14% Russell 2000 43% S&P 500 43%
  - Giverny US Portfolio : S&P 500 100%
  - Giverny Canada Portfolio : S&P/TSX 100%

- The returns for the S&P 500 (in $USD) are provided by Standard & Poors.
- The returns for the various indices used for comparable purposes are deemed reliable by Giverny Capital.
- It should be noted that currency effects on the returns of the Rochon portfolio and indices are estimated to our best effort.
- The custodian of our client portfolios is National Bank Independent Network (NBIN) in Canada and TD Ameritrade Institutional in the US.
- The financial statements of the three portfolios are audited at the end of each year. The auditor's data are those provided by our custodian (NBIN). The auditor's annual reports are available upon request.
- For more information, please see the "returns" section of our website.

GIVERNY CAPITAL

Annual Letter to our Partners 2018

ROCHON GLOBAL PORTFOLIO

25 years

Gabor Szilasi
Monet's garden in Giverny; the water garden in summer, Giverny, 1998
Giverny Capital Collection

Giverny Capital Inc. – Annual Letter 2018 ©

Historical Summary

It has been more than 25 years since I discovered the writings of Warren Buffett, Benjamin Graham, John Templeton, Philip Fisher and Peter Lynch. I then decided to begin managing a family portfolio based on an investment approach synthesized from these great money managers. By the end of 1998, after five years of satisfactory results, I decided to launch an investment management firm offering asset management services aligned with my own investment philosophy. Giverny Capital Inc. came into existence.

In 2002, Giverny hired its first employee: Jean-Philippe Bouchard (JP for those who know him well). A few years later, JP became a partner and participates actively in the investment selection process for the Giverny portfolio. In 2005, two new persons joined the firm who eventually became partners: Nicolas L'Écuyer and Karine Primeau. Finally, in 2009, we launched a US office in Princeton, New Jersey. The director of our Princeton office, Patrick Léger, shares in the culture and long-term time horizon inherent to Giverny.

We are Partners!

From the very first days of Giverny, the cornerstone of our portfolio management philosophy was to manage client portfolios in the same way that I was managing my own money. Thus, the family portfolio I've managed since 1993 (the "Rochon Global Portfolio") serves as a model for our client accounts. It is crucial to me that clients of Giverny and its portfolio managers are in the same boat! That is why we call our clients "partners".

The Purpose of our Annual Letter

The primary objective of this annual letter is to discuss the results of our portfolio companies over the course of the prior year. But even more important, our goal is to explain in detail the long-term investment philosophy behind the selection process for the companies in our portfolio. Our wish is for our partners to fully understand the nature of our investment process since long-term portfolio returns are the fruits of this philosophy. Over the short term, the stock market is irrational and unpredictable (though some may think otherwise). Over the long term, however, the market adequately reflects the intrinsic value of companies. If the stock selection process is sound and rational, investment returns will eventually follow. Through this letter, we provide you with the information required to understand this process. You will hopefully notice that we are transparent and comprehensive in our discussion. The reason for this is very simple: we treat you the way we would want to be treated if our roles were reversed.

The Artwork on Our 2018 Letter

Since 2004, we have illustrated the cover of our letters with a copy of an artwork from our corporate collection. This year we selected an artwork by the Quebec artist Gabor Szilasi. It is a photography taken at Giverny in 1998.

Giverny Capital Inc. – Annual Letter 2018 ©

For the year ending December 31st 2018, the return for the Rochon Global Portfolio was -0.6% versus -1.4% for our benchmark, which represents a relative outperformance of 0.8%. The return of the Rochon Global Portfolio and the one of our benchmark include a gain of approximately 6.7% due to fluctuations in the Canadian currency.

Since its inception on July 1st 1993, our compounded annual growth rate has been 15.1% versus 8.8% for our weighted benchmark, representing an annualized outperformance of 6.3% over this period. It's worth noting that the effect of the fluctuations in the value of the US Dollar has been nearly nonexistent on our returns. Over 25 years, the US currency has appreciated by 6.5% relative to the Canadian Dollar, which corresponds to an effect of 0.2% on our annualized returns. Our long-term (and ambitious) objective is to maintain an annual return 5% higher than our benchmark.

The Rochon Global Portfolio: Returns since July 1st 1993

Year *	Rochon	Index **	+ / -	$ US/Can ***
1993 (Q3-Q4)	37.0%	9.5%	27.6%	3.3%
1994	16.5%	3.7%	12.7%	6.0%
1995	41.2%	24.0%	17.2%	-2.7%
1996	28.0%	22.8%	5.2%	0.3%
1997	37.8%	28.6%	9.2%	4.3%
1998	20.6%	18.8%	1.8%	7.1%
1999	15.1%	16.3%	-1.2%	-5.7%
2000	13.4%	3.2%	10.2%	3.9%
2001	15.1%	-0.4%	15.5%	6.2%
2002	-2.8%	-18.3%	15.6%	-0.8%
2003	13.6%	14.0%	-0.4%	-17.7%
2004	1.6%	6.2%	-4.5%	-7.3%
2005	11.5%	3.6%	7.9%	-3.3%
2006	3.5%	17.0%	-13.5%	0.2%
2007	-14.4%	-11.6%	-2.8%	-14.9%
2008	-5.5%	-22.0%	16.5%	22.9%
2009	11.8%	12.2%	-0.4%	-13.7%
2010	16.1%	13.8%	2.3%	-5.3%
2011	7.6%	-1.1%	8.7%	2.2%
2012	21.2%	12.5%	8.7%	-2.2%
2013	50.2%	38.9%	11.3%	6.9%
2014	28.1%	17.8%	10.2%	9.1%
2015	20.2%	13.4%	6.8%	19.3%
2016	7.3%	14.3%	-7.0%	-3.0%
2017	13.1%	10.3%	2.9%	-6.6%
2018	-0.6%	-1.4%	0.8%	8.7%
Total	**3477.1%**	**755.2%**	**2722.0%**	**6.5%**
Annualized	**15.1%**	**8.8%**	**6.3%**	**0.2%**

* All returns are adjusted to Canadian dollars
** Index is a hybrid index (S&P/TSX, S&P 500, Russell 2000) which reflects the weight of the underlying assets at the beginning of the year.
*** Variation of the US dollar compared to the Canadian dollar

Refer to Appendix B for disclosure statements on the Rochon portfolios.

The Rochon US Portfolio

We have been publishing the returns of the Rochon US Portfolio, which is entirely denominated in US dollars, since 2003. The Rochon US Portfolio corresponds to the American portion of the Rochon Global Portfolio. In 2018, it realized a return of -8.3% compared to -4.4% for our benchmark, the S&P 500. The Rochon US Portfolio therefore underperformed the S&P 500 by 3.9%.

Since its inception in 1993, the Rochon US Portfolio has returned 2724%, or 14.0% on an annualized basis. During this same period, the S&P 500 has returned 821%, or 9.1% on an annualized basis. Our added value has therefore been 4.9% annually.

Year	Rochon US	S&P 500	+/-
1993 (Q3-Q4)	32.7%	5.0%	27.7%
1994	9.9%	1.3%	8.6%
1995	54.8%	37.6%	17.2%
1996	27.0%	23.0%	4.1%
1997	32.9%	33.4%	-0.4%
1998	11.0%	28.6%	-17.6%
1999	15.9%	21.0%	-5.1%
2000	11.3%	-9.1%	20.4%
2001	8.1%	-11.9%	20.0%
2002	-4.4%	-22.1%	17.7%
2003	31.6%	28.7%	2.9%
2004	9.3%	10.9%	-1.6%
2005	12.5%	4.9%	7.5%
2006	3.3%	15.8%	-12.4%
2007	-1.7%	5.5%	-7.2%
2008	-24.3%	-37.0%	12.7%
2009	28.7%	26.5%	2.3%
2010	21.9%	15.1%	6.9%
2011	4.7%	2.1%	2.6%
2012	22.3%	16.0%	6.3%
2013	40.6%	32.4%	8.2%
2014	18.0%	13.7%	4.3%
2015	1.7%	1.4%	0.4%
2016	7.5%	12.0%	-4.5%
2017	19.7%	21.8%	-2.1%
2018	-8.3%	-4.4%	-3.9%
Total	**2724.2%**	**821.0%**	**1903.2%**
Annualized	**14.0%**	**9.1%**	**4.9%**

Refer to Appendix B for disclosure statements on the Rochon portfolios.

After eight years of consecutive outperformance (a statistical event unlikely to reoccur), the Rochon US Portfolio underperformed the S&P 500 for the third year in a row. Once again this year, a few of the all-star stocks in the S&P 500 contributed in an outsized manner to the performance of the index. Relative to the Russell 2000 (an index composed of smaller cap companies), the S&P 500 was up 6.6%

in 2018. In fact, over the last five years, the S&P 500 has achieved an annual return of 8.5% vs. 4.4% for the Russell 2000.

Over a long period of time, the returns of the S&P 500 and Russell 2000 tend to be similar. Since 1993, the S&P 500 generated annual returns of 9.1% versus 8.7% for the Russell 2000. The stock market tends to accurately reflect the intrinsic value of companies, whether large or small.

We accept in advance that we will sometimes underperform the S&P 500 in the short term when our style and/or our companies are out of favor (and sometimes for no reason). While it is not always easy, we try to remain impervious to short-term results, both in good and not-so-good times.

Rochon Canada Portfolio

We introduced a portfolio that is 100% focused on Canadian equities in 2007. This corresponds approximately to the Canadian portion of the Rochon Global Portfolio. In 2018, the Rochon Canada Portfolio returned -7.6% versus -8.9% for the S&P/TSX, therefore outperforming its index by 1.3%.

Since 2007, the Rochon Canada Portfolio has returned 462%, or 15.5% on an annualized basis. During this same period, our benchmark had a gain of 58%, or 3.9% on an annualized basis. Our annual added value was therefore 11.6%.

Year	Giverny Canada	S&P/TSX	+/-
2007	19.7%	9.8%	9.9%
2008	-24.6%	-32.9%	8.3%
2009	28.2%	33.1%	-4.9%
2010	26.7%	17.6%	9.1%
2011	13.5%	-8.7%	22.2%
2012	24.0%	7.2%	16.8%
2013	49.4%	13.0%	36.4%
2014	20.3%	10.6%	9.7%
2015	16.0%	-8.3%	24.3%
2016	11.0%	21.1%	-10.1%
2017	27.4%	9.1%	18.3%
2018	-7.6%	-8.9%	1.3%
Total	462.4%	57.7%	404.6%
Annualized	15.5%	3.9%	11.6%

Refer to Appendix B for disclosure statements on the Rochon portfolios.

The holding that contributed most significantly to our loss in 2018 was Dollarama. Despite its sharp decline in 2018, we have had a cumulative gain of more than 700% on this stock since our initial purchase in 2010. We will go in more detail regarding Dollarama in our "company" section below.

Over 12 years, the performance of our Canadian securities has been significantly higher than that of the S&P/TSX. A concentrated portfolio can drastically exceed the performance of an index but the risks inherent to high concentration is not appropriate for a portfolio that is to be managed prudently. In fact, we consider that a portfolio of about 20 securities is the right balance between having a minimum diversification level to reduce company-specific risk while also having few enough

companies to improve the odds of beating the market indices. Since this portfolio represents only a portion (approximately 15%) of the Rochon Global Portfolio, our diversification requirements are met.

2018

The year unfolded in two parts. Over the first two quarters, the US market did very well and reflected a sharp increase in corporate profits bolstered by a significant drop in corporate tax rates. The rest of the world, however, did not have the same experience and had marked stagnation in places such as Canada, Europe and Asia.

Then in the fall, the sentiment of US investors turned 180 degrees and the S&P 500 and the Russell 2000 fell by 20% and 27%, respectively, from their high of September to their low of December 24th. The sharp decline in December resulted in a bear market (a drop of more than 20%) which was the fifth since my debut in 1993, some 25 years ago.

We've been around the block!

We've known for a long time that the stock market, in the short term, behaves like a manic-depressive entity. No medicine can cure it or even stabilize it. The market is a network of millions of emotional human beings interacting with each other (imagine millions of people trying to predict what the other millions of people will do and vice versa).

Increased transaction efficiency and near instantaneous access to information has dramatically changed the way in which the investors approach the market since 1993, just before the large-scale implementation of the Internet. But what has not changed is human nature. When it comes to money, humans over and over flip flop from fear to greed like wind vanes armed with cell phones.

Here are the 2018 returns for different indices around the world and annualized over 5 years:

Return (in $US)	2018	2018 $Can	5 year
Russell 2000	-11.0%	-3.2%	4.4%
S&P 500	-4.4%	4.0%	8.5%
MSCI EAFE	-13.8%	-6.3%	0.5%
MSCI Europe	-14.9%	-7.5%	-0.6%
MSCI China + HK + Taiwan	-22.4%	-15.6%	2.9%
MSCI AC Asia	-13.7%	-6.2%	3.6%
Average	**-13.4%**	**-5.8%**	**3.2%**

S&P/TSX (in $Can)	-8.9%	-8.9%	4.1%

With a fall of 4% for 2018, the S&P 500 was the index that performed best among the main indices of the World. Furthermore, over the past three years, the S&P 500's returns have been extremely polarized, with software and internet-related stocks increasing by about 60% while those related to more traditional industries increasing by about 20%. In other words, if you had been underweighted the software and internet segments over the last few years, it would have been very difficult to achieve the S&P 500's performance.

Some of the companies in these sectors are clearly exceptional and have drastically changed the world we live in just a few years. On the other hand, one must bear in mind that all companies have an intrinsic value and that it can be risky to pay too much for even the best of companies.

A few words about big American banks

Many companies have slowly increased their debt levels during this economic cycle. The reason is very simple—the very low cost of capital (low interest rates). This prevailing appetite for debt is also very present in the world of private equity, as they have a business model which requires significant leverage.

We believe that it is not the big American banks that are financing the current level of leveraged loans. If we go back 25 years, about 30% of leveraged loans were owned by US banks and 40% by institutional investors. Recently, this ratio is about 5% for US banks and more than 85% for institutional investors (Source: S&P, Goldman Sachs).

Most major US banks, still scalded by the 2008 financial crisis, are stronger than ever and their stock market valuations seem very attractive to us. That's why we own shares in four US banks at the time of writing this letter.

Outlook for 2019

The prospects for earnings growth could certainly be much lower in 2019 than in 2018. We believe that US companies could increase their earnings per share (EPS) by an average of about 4% this year.

Even in the event of a more pronounced slowdown, the growth of corporate profits will eventually pick up again. Over the long run, stocks remain the best asset class to own for the simple reason that corporate profits are always growing (albeit not linearly).

If the stock market continues to behave like a manic-depressive entity in the short term (as 2018 so eloquently demonstrated), it nonetheless still always accurately reflects the intrinsic value of companies over the long term. Is this not a good premise for investing our savings?

The popularity of index funds

> *"….The idea behind buying an index fund is that the average manager - by definition - gets an average performance. But because of the management fees and transaction costs, their collective result can only be lower than the indices (which incur only little expense)... Many investors have concluded that investing in an index fund is statistically the best option for someone who cannot distinguish a good investment from another or a good manager from another... Thus, in recent years, capital has gradually shifted from active management to passive management. The side effect of this is that money moves to the largest companies that have the most weight in the index (the S&P 500). This movement of capital has had the effect of pushing the S&P 500 higher, which has the effect of making active management look even worse, which has the effect of transferring even more money from active to passive strategies. Some managers see the threat of not owning the largest stocks for their performance and they therefore make sure to have these securities with at*

least the weight of the S&P 500 in their portfolios (which has the effect of driving up these few securities once again). As one well-known manager said: "Many have capitulated". "

Do you think this is a good summary for 2018? And yet, I wrote these words 20 years ago for the 1998 annual letter. I then explained in detail the significant difference in valuation between large cap stocks (bought massively by index funds) and all others. I then added these sentences:

"…In the long run, the stock market reflects the intrinsic value of companies - large and small - and this imbalance between larger companies and smaller ones should be rectified on its own in the future.... In the stock exchange, as in life, common sense ends up triumphing even if it can test the patience of the wise man…"

What happened in the two decades that followed this text?

From 1999 to 2018, the S&P 500 achieved an annual return of 5.6%, while the Russell 2000 achieved an annual return of 7.4%. So, as I predicted, the S&P 500 returned to normal and smaller cap stocks did better than larger ones (a total return of 317% for the Russell 2000 vs. 197% for the S&P 500).

In 1998, many managers (and their clients) threw in the towel and resorted to index funds. Many observers argued that it was almost impossible to beat the S&P 500 over a long period. From this perspective, what was the performance of the Rochon Global Portfolio for the same period of 20 years? Here is a summary table:

Return in $Can	S&P 500	Russell 2000	S&P / TSX	**Rochon Global**	**Added value**
1999-2018	5.0%	6.8%	6.6%	**10.6%**	**4.6%**

Refer to Appendix B for disclosure statements on the Rochon portfolios.

You will note that the Canadian dollar appreciated from 1998 to 2018 and had the effect of reducing the annual return of US indices by 0.6% when presented in Canadian currency. The Rochon Global Portfolio results are calculated in Canadian dollars. As you can see, our annual return of 10.6% outperformed the S&P 500 by 5.6% annually, the Russell 2000 by 3.8% annually and the TSX by 4.0% on the same basis. This gives a weighted annual added value of 4.6% by combining the three indices (with 43% / 43% / 14% of respective weight).

As in 1998, I do not want to denigrate an investment approach based on indexing. For the vast majority of investors, this is a winning solution since most managers (amateurs and professionals) do not outperform the indices over the long term.

On the other hand, I have observed some investors generate returns that were much higher than the indices over the long term (such as Ben Graham, Peter Lynch, Lou Simpson, Warren Buffett, Charlie Munger, Bill Ruane, John Neff, Philip Carret, John Templeton, etc.) So I took the time to study the source of their outperformance and they all had one thing in common: they considered buying a stock as the purchase of a business and were all trying to buy these businesses at a meaningful discount to their intrinsic values.

I adopted this approach right from the start in 1993 and we have been validated (and rewarded) by this value investing philosophy so far.

A great quote from Ben Graham from 1958

I read Ben Graham's *The Intelligent Investor* late in 1992—this was the book that converted a young Warren Buffett in 1949 to value investing. For Buffett, this was the starting point for his immense success as an investor. I also read at the time the appendices of the book (the fourth revised edition) which includes a transcription of a speech by Ben Graham of 1958 entitled *The New Speculation in Common Stocks*. I found this text arid and of little interest at the time.

Although I've been reading *The Intelligent Investor* on a regular basis over the years, I never reread the 1958 speech, until I came across a Latin quote from Ben Graham and searched far and wide for its origin. I finally found the quote and its context in this speech from 1958. In my rereading, and also now armed with 25 years of new perspectives, I realized the profound nature of this quote and the highly nuanced writing ability of Ben Graham (a trait that seems extremely rare in the clouds of the social cyberworld of the 21st century).

This famous quote comes from Ovid's Metamorphoses (a classical author from 2000 years ago). Phaeton was the son of the sun god Phoebus—the god flying across the sky in his solar chariot. One day, Phaeton asked his father for permission to drive the famous chariot himself. Phoebus warned him to stay well in the middle of his trajectory—too low and he would ignite the Earth and too high he would ignite the heavens. Phaeton showed little prudence and lost control of his horses and crashed down to Earth in a fiery hell, nearly setting the World on fire.

Peter Paul Rubens, The fall of Phaeton (c 1636)
Musées royaux des Beaux-Arts de Belgique, Bruxelles / photo : F. Maes (MRBAB)

The words of caution which Phoebus spoke to Phaeton were:

medius tutissimus ibis
you will go safer in the middle road

As we mark the 25th anniversary of the beginning of the Rochon Global Portfolio and the 20th anniversary of the founding of Giverny Capital, I think it is worth reconsidering these words of wisdom that have survived since Roman times. Consciously or not, I realize that we have consistently followed the middle road in investing and assimilated the teachings of Ben Graham. At Giverny Capital, we have an approach that could be summarized as follows:

- We have an open mind but at the same time an independence of thought. We try to maintain a balance between humility and confidence in our judgment.
- We like to invest in companies that are growing quickly but not too quickly (knowing the dangers of growing too fast or falling prey to shifting trends).
- We understand the economic benefits of using some debt, but we stay away from companies that use it too aggressively.
- We can invest in companies related to new technologies but not in their very beginnings (we want to make sure that the business model is sound and sustainable).
- We are willing to pay a higher P/E multiple than when we began investing but there is a limit we are not ready to cross.
- We are patient but also know that there is a difference between being patient and stubborn.

We have very ambitious long-term performance targets that have been achieved so far. But we have always wanted to reach them without taking on inappropriate level of risk. We want to be good stewards of our capital and that of our partners. To constantly keep in mind the wisdom of Phoebus is the equivalent of having a lighthouse illuminating the path to enrichment in the stock market while also remaining cautious.

Owner's Earnings

At Giverny Capital, we do not evaluate the quality of an investment by the short-term fluctuations in its stock price. Our wiring is such that we consider ourselves owners of the companies in which we invest. Consequently, we study the growth in earnings of our companies and their long-term outlook.

Since 1996, we have presented a chart depicting the growth in the intrinsic value of our companies using a measurement developed by Warren Buffett: "owner's earnings". We arrive at our estimate of the increase in intrinsic value of our companies by adding the growth in EPS and the average dividend yield of the portfolio. We believe that analysis is not exactly precise but approximately correct. In the non-scientific world of the stock market, we believe in the old saying: "It is better to be roughly right than precisely wrong."

This year, the intrinsic value of our companies, as a whole, rose by about 22% (21% from the growth in earnings and 1% from the average dividend). Despite some of the changes to our portfolio during the year, we consider the estimate of the EPS growth at our companies during 2018 to adequately reflect their economic reality.

The market performance of the Rochon Global portfolio in 2018 was a decline of roughly 7% (estimated without currency effects). Our stocks therefore realized a price performance that was far less than their underlying economic performance.

In fact, in 23 years of tracking owner earnings, this is the most significant disparity between the estimated increase in intrinsic value and the stock market value we have experienced. There are two

possibilities that present themselves: either our securities were overvalued at the beginning of 2018 (and therefore already factored in the rise in the upcoming growth of their intrinsic value) or that our securities at the end of the year were more undervalued than in beginning of the year. We believe the latter to be the case.

The companies in the S&P 500 also saw strong growth, with growth in the order of 21% (about 23% when we add the dividend). The S&P 500 had a total performance of -4% (in $USD).

	Rochon Global Portfolio			S&P 500		
Year ***	Value *	Market **	Difference	Value *	Market **	Difference
1996	14%	29%	15%	13%	23%	10%
1997	17%	35%	18%	11%	33%	22%
1998	11%	12%	1%	-1%	29%	30%
1999	16%	12%	-4%	17%	21%	4%
2000	19%	10%	-9%	9%	-9%	-18%
2001	-9%	10%	19%	-18%	-12%	6%
2002	19%	-2%	-21%	11%	-22%	-33%
2003	31%	34%	3%	15%	29%	14%
2004	21%	8%	-12%	21%	11%	-10%
2005	14%	15%	0%	13%	5%	-8%
2006	14%	3%	-11%	15%	16%	1%
2007	10%	0%	-10%	-4%	5%	9%
2008	-3%	-22%	-19%	-30%	-37%	-7%
2009	0%	28%	28%	3%	26%	23%
2010	22%	22%	0%	45%	15%	-30%
2011	17%	6%	-11%	17%	2%	-15%
2012	19%	23%	4%	7%	16%	9%
2013	16%	42%	26%	9%	32%	23%
2014	13%	19%	6%	9%	14%	5%
2015	11%	4%	-7%	1%	1%	0%
2016	9%	10%	1%	3%	12%	9%
2017	14%	20%	7%	14%	22%	8%
2018	22%	-7%	-29%	23%	-4%	-27%
Total	1723%	1424%	-298%	474%	524%	50%
Annualized	13.5%	12.6%	-0.9%	7.9%	8.3%	0.4%

* Estimated growth in earnings plus dividend yield
** Market performance, inclusive of dividends (refer to Appendix B for disclosure statements on our returns)
*** Results estimated without currency effects

Since 1996, our companies have grown their value by about 1723% and their stocks have achieved a total return of approximately 1424%. On an annualized basis, we achieved an intrinsic performance of 13.5% versus 12.6% for their stock market performance (dividend included in both cases). The correlation between the two figures over a long period is not accidental since the stock market always reflects the fair value of companies over the long term.

Our stocks have outperformed the S&P 500 by 4.3% annually over the last 23 years for the simple reason that our companies grew their intrinsic values at a rate that was around 5% greater than that of the companies that make up the S&P 500.

Five-year Post-mortem: 2013

Like we do every year, we go through a five-year post-mortem analysis. We believe that studying our decisions in a systematic manner, and with the benefit of hindsight, enables us to learn from both our achievements and our errors.

We made few changes to the portfolio in 2013, but here are a few remarks from reviewing the annual letter from that year.

- In 2013, we acquired shares in Cabela's, a chain of outdoor, hunting and fishing stores. It was a disappointing investment. In 2013, we wrote that the "the company recently adopted a more high-performing business model which grabbed our attention." But in the end, the financial performance of these retail stores did not live up to our expectations and we resigned ourselves to selling our investment at a loss.
- In 2013, we invested in Precision Castparts. We liked the management of the company and the significant competitive advantages of its products. Berkshire Hathaway acquired the business in 2015 and this investment proved very rewarding over a relatively short period.
- In 2013, I gave a gold medal to the mistake of not buying shares in Church & Dwight. I explained that I had studied the stock in 2003 and that it had risen by 455% during those ten years. The growth rate of this company slowed afterwards but, during the five years that followed, the stock returned 93% versus 34% for the S&P 500 (gross of dividends).

Frutarom Acquisition

We purchased shares in the Israeli company Frutarom in 2017. This company specializes in the manufacturing of essences and flavors with a focus on natural-based flavors. It is an industry that we have always appreciated because of its great stability. Moreover, Frutarom had an exceptional track record, maintaining a growth rate of more than 20% over the last decade.

During the year, Frutarom was acquired by the American company International Flavors & Fragrances, a leader in this sector. We achieved a gain of about 45% over a period of just over a year.

<u>Our Companies</u>

" Trees with deep roots are those that grow higher "

- Frédéric Mistral (Les îles d'or)

Section for Giverny Capital's partners only

The Podium of Errors

" How do you become better tomorrow? By improving yourself, the world is made better. Forget your mistakes, but remember what they taught you. "

- Benjamin Franklin

Following in the "Givernian" tradition, here are our three annual medals for the "best" errors of 2018 (or from past years). It is with a constructive attitude, in order to always improve as investors, that we provide this detailed analysis. As is often the case with stocks, errors from omission (non-purchases) are often more costly than errors from commission (purchases)… even if we don't see those on our statements.

Bronze Medal: Lululemon

I've followed the Canadian company Lululemon since its IPO in 2007. I admire the quality of their products, their marketing strategies and the loyalty of their customers. Lululemon addresses, among others, the yoga clothing market. I'm not a fan of this activity (I prefer to go to museums to recharge my battery) but I can see that Lululemon is dominant in this market segment. The stock has often commanded a high P/E so I followed its performance from afar.

The company had issues with some of its products a few years ago and also made management changes. In 2017, the issues seemed to have been addressed and the prospects for growth and profitability had greatly improved. The stock market did not reflect, in our opinion, these better prospects. So we decided to become shareholders in early 2018.

But the day we were about to buy, the CEO resigned for "lack of leadership". So I opted to wait to see who the new appointee would be. Meanwhile, financial results came out and were very strong. The share price then climbed quickly and I decided to wait for a better price. At the time of writing this, the stock is 88% higher.

Silver Medal: Boyd Group

We starting paying attention to the Canadian company Boyd Group in July 2011 when the stock was trading for around $14. Boyd Group has a network of 575 body shops. Its collision repair centers are located in Canada and the United States mainly under the respective names of Boyd and Gerber. Boyd's beautiful track record and attractive growth prospects caught our attention.

We were also attracted by the inherent characteristics of the industry in which Boyd operated. It's a highly fragmented industry with many small independent local players which created an opportunity for consolidation for a company like Boyd. The stock then traded at a reasonable multiple, about 14-15 times the estimated profits for 2011. At about the same time, we were also studying LKQ, a

distributor of refurbished body parts. LKQ seemed to have greater competitive advantages than Boyd. So we eventually decided to invest in LKQ in 2012.

We also chose to pass on Boyd because we found it odd that the company was structured as a corporate income trust (a patently simplistic excuse). From 2012 to 2018, LKQ increased its EPS by 17% annually but the stock did not follow suit (rightly or wrongly, the P/E decreased). As for Boyd, EPS has grown by 32% annually and the stock is now trading around $125—it has appreciated by nine times.

Gold Medal: Bright Horizons Family

We discovered Bright Horizons Family about fifteen years ago. The company operates private daycare facilities within companies. It responds to a vital need of our era. Bright Horizons had strong growth (in the 25% range) and seemed to have strong competitive advantages. Because of its high valuation (often trading at 25 to 30 times earnings), we never became shareholders. In early 2008, the company was privatized by a private equity fund at about three times the price I had considered investing five years prior.

But we must always keep our eyes open: the company went public again in 2013. Unfortunately, the company had a lot of debt at the time. The stock was issued at approximately $28 and the company only earned $0.80 per share. I knew, however, that the company could increase its profit margins and certainly improve its balance sheet. I told myself that I would not miss my chance a second time and I have followed the company very closely since.

The stock never truly corrected on the stock market (even late last year) and the company realized EPS of $3.15 in 2018. The stock traded at the end of the year at $111, (i.e. at a P/E of 31x EPS forecast for 2019). This is a high valuation but justified by their impressive track record. We could have made four times our money in five years (in addition to the first triple from 2003 to 2008). As we have stated on a regular basis, we want to be cautious by waiting for a price for a stock that allows for a sufficient margin of safety. But wisdom is knowing how to discern when a high price is really justified. And in this case, we should have shown more wisdom. We even had two chances!

Conclusion: The 10th anniversary of "The opportunity of a generation"

A decade ago, I added a special page at the beginning of our annual letter which explained that we believed that the sharp drop in the market during 2008 and early 2009 represented “The opportunity of a generation”.

Is is true that the economic situation in 2008-2009 was quite worrisome. A time horizon of a few years was needed to see beyond the grey clouds. While many investors were paralyzed in the face of the financial market meltdown, we saw it as a fantastic opportunity. We did everything we could to spread the word. I went on CBC television. I was also interviewed in the newspaper La Presse (February 14, 2009) and we even created a website (it still exists: www.occasiongeneration.com). We also organized a series of conferences throughout Quebec in early 2009. But we had to cancel several for lack of participants.

Ultimately, the capitalist world did not collapse and our portfolio did very well. Here are the returns of the Rochon Global Portfolio for the 10 years from January 1, 2009 to December 31, 2018:

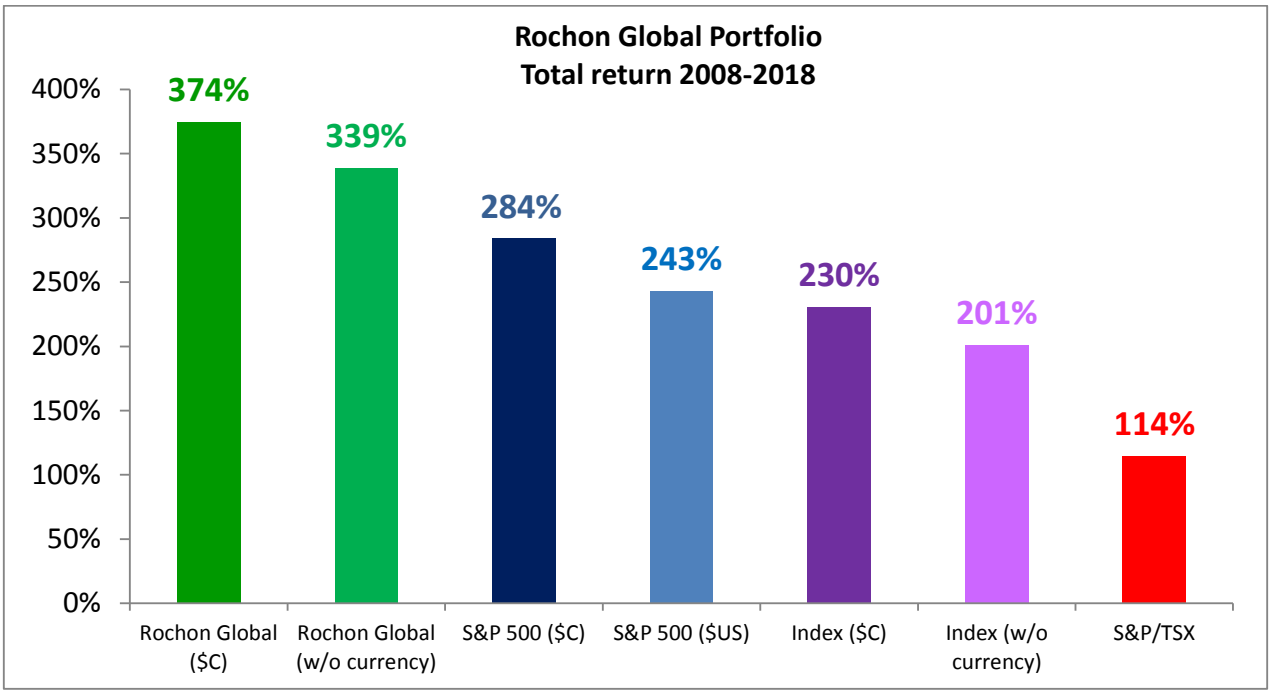

Refer to Appendix B for disclosure statements on the Rochon portfolios. Index is a hybrid index (S&P/TSX, S&P 500, Russell 2000) which reflects the weight of the underlying assets at the beginning of the year.

Over 10 years, the Rochon Global portfolio generated a total return of 374% (16.8% on an annualized basis). Our comparative index group generated 230%, adjusted in Canadian currency, during the same period (12.7% annualized).

It was necessary to be optimistic vis-à-vis the capitalist system in late 2008 to invest in the stock market (or even just remain invested). But this optimism has been rewarded.

To Our Partners

We believe that the companies we own are exceptional, led by top-notch people, and destined for a great future. They should continue to prudently navigate the often troubled waters of the global economy. Furthermore, the valuation assigned by the market to these outstanding companies is very similar to the valuation of an average company in the S&P 500, despite the fact that our companies have better growth prospects than average in our opinion. Therefore we consider the appreciation potential for our portfolio, both in absolute and relative terms, to be well above average, especially when compared to other alternative asset classes, such as bonds.

We also want you to know that we are fully aware of and grateful for your votes of confidence. It is imperative for us to not only select outstanding companies for our portfolios, but to also remain outstanding stewards of your capital. We certainly like to achieve good returns and have developed a

taste for it, but it must not come at the cost of taking undue risk. Our philosophy to favor companies with solid balance sheets and dominant business models, along with purchasing these companies at reasonable valuations, is central to the risk management of our portfolios.

Thank you from the entire Giverny Capital team and we wish a great 2019 to all our partners.

François Rochon and the Giverny Capital team

APPENDIX A

Investment philosophy

Note: This section is repeated from prior annual letters and is aimed at new partners.

In 2018, we saw a large increase in the number of Giverny Capital partners (the term we use for our clients). With all these newcomers, it is imperative that we write again (and again) about our investment philosophy.

Here are the key points:

- We believe that over the long run, stocks are the best class of investments.
- It is futile to predict when it will be the best time to begin buying (or selling) stocks.
- A stock return will eventually echo the increase in per share intrinsic value of the underlying company (usually linked to the return on equity).
- We choose companies that have high (and sustainable) margins and high returns on equity, good long term prospects and are managed by brilliant, honest, dedicated and altruistic people.
- Once a company has been selected for its exceptional qualities, a realistic valuation of its intrinsic value has to be approximately assessed.
- The stock market is dominated by participants that perceive stocks as casino chips. With that knowledge, we can then sometimes buy great businesses well below their intrinsic values.
- There can be quite some time before the market recognizes the true value of our companies. But if we're right on the business, we will eventually be right on the stock.

Experience and common sense teach us that an investment philosophy based on buying shares in companies that are undervalued, and holding these companies for several years, will not generate linear returns. Some years, our portfolio will have a return that is below average. This is a certainty that we must accept.

Another important point: the significant volatility of the market is often perceived negatively by many investors. It's actually the contrary. When we see stock prices as *"what other people believe the company is worth"* rather than the real value (at least in the short term), these fluctuations become our allies in our noble quest for creating wealth. Instead of fearing them, we can profit from them by acquiring superb businesses at attractive prices. The more that markets (the "other" participants) are irrational, the more likely we are to reach our ambitious performance objectives.

Benjamin Graham liked to say that the irrationality of the market provides an extraordinary advantage to the intelligent investor. The person, however, who becomes affected by short-term market fluctuations (less than 5 years) and who makes decisions based on them transforms this advantage into a disadvantage. His or her own perception of stock quotes becomes their own worst enemy. Our approach at Giverny Capital is to judge the quality of an investment over a long period of time.

So patience – ours AND that of our partners – becomes the keystone for success.

APPENDIX B

Notes on the returns of the Rochon portfolios

- The Rochon portfolio is a private family group of accounts managed by François Rochon since 1993. The returns of the period from 1993 to 1999 were realized before registration of Giverny Capital Inc. at the AMF in June of 2000.
- The Rochon Global portfolio serves as a model for Giverny Capital's clients, but returns from one client to the other can vary depending on a multitude of factors. The returns indicated include trading commissions, dividends (including foreign withholding income taxes) and other income but do not include management fees. Portfolio returns of the Rochon Global portfolio have been generated in a different environment than Giverny Capital's clients and this environment is considered controlled. For example, cash deposits and withdrawals can increase the returns of the Rochon Global portfolio. Thus, the portfolio returns of the Rochon Global portfolio are often higher than the returns realized by clients of Giverny Capital.
- Past results do not guarantee future results.
- The Rochon Canada and Rochon US portfolios are parts of the Rochon Global portfolio.
- The index benchmark group is selected at the beginning of the year and tends to be a good reflection of the asset composition of the portfolio. Weighted indices presented may not be representative of the Rochon Global portfolio. In 2018 :

  - Giverny Global Portfolio: TSX 16% Russell 2000 40% S&P 500 40% MSCI EAFE 4%
  - Giverny US Portfolio : S&P 500 100%
  - Giverny Canada Portfolio : S&P/TSX 100%

- The returns for the S&P 500 (in $USD) are provided by Standard & Poors.
- The returns for the various indices used for comparable purposes are deemed reliable by Giverny Capital.
- It should be noted that currency effects on the returns of the Rochon portfolio and indices are estimated to our best effort.
- The custodian of our client portfolios is National Bank Correspondent Network (NBCN) in Canada and TD Ameritrade Institutional in the US.
- The financial statements of the three portfolios are audited at the end of each year. The auditor's data are those provided by our custodian (NBCN). The auditor's annual reports are available upon request.
- For more information, please see the "returns" section of our website.

GIVERNY CAPITAL

Annual Letter to our Partners 2019

Ice Shelf, 2013 © Wanda Koop,
license issued by Copyright Visual Arts - CARCC, 2020.
Giverny Capital Collection

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Historical Summary

It has been more than 27 years since I discovered the writings of Warren Buffett, Benjamin Graham, John Templeton, Philip Fisher and Peter Lynch. I then decided to begin managing a family portfolio based on an investment approach synthesized from these great money managers. By the end of 1998, after five years of satisfactory results, I decided to launch an investment management firm offering asset management services aligned with my own investment philosophy. Giverny Capital Inc. came into existence.

In 2002, Giverny hired its first employee: Jean-Philippe Bouchard (JP for those who know him well). A few years later, JP became a partner; he participates actively in the investment selection process for the Giverny portfolio. In 2005, two new persons joined the firm who eventually became partners: Nicolas L'Écuyer and Karine Primeau. In 2009, we launched a US office in Princeton, New Jersey. Moreover, in early 2020, we established a partnership with a portfolio manager based in New York City who will head the office of the firm Giverny Capital Asset Management LLC in Manhattan. The directors of the US offices, Patrick Léger and David Poppe, share in the culture and long-term time horizon inherent to Giverny.

We are Partners!

From the very first days of Giverny, the cornerstone of our portfolio management philosophy was to manage client portfolios in the same way that I was managing my own money. Thus, the family portfolio I've managed since 1993 (the "Rochon Global Portfolio") serves as a model for our client accounts. It is crucial to me that clients of Giverny and its portfolio managers are in the same boat! That is why we call our clients "partners".

The Purpose of our Annual Letter

The primary objective of this annual letter is to discuss the results of our portfolio companies over the course of the prior year. But even more importantly, our goal is to explain in detail the long-term investment philosophy behind the selection process of the companies in our portfolio. Our wish is for our partners to fully understand the nature of our investment process since long-term portfolio returns are the fruits of this philosophy. Over the short term, the stock market is irrational and unpredictable (though some may think otherwise). Over the long term, however, the market adequately reflects the intrinsic value of companies. If the stock selection process is sound and rational, investment returns will eventually follow. Through this letter, we provide you with the information required to understand this process. You will hopefully notice that we are transparent and comprehensive in our discussion. The reason for this is very simple: we treat you the way we would want to be treated if our roles were reversed.

The Artwork on Our 2019 Letter

Since 2004, we have illustrated the cover of our letters with a copy of artwork from our corporate collection. This year we selected a 2013 painting by the Canadian artist, Wanda Koop, entitled "*Ice Shelf*".

Giverny Capital Inc. – Annual Letter 2019 ©

For the year ending December 31st 2019, the return for the Rochon Global Portfolio was 25.6% versus 22.3% for our benchmark, which represents a relative outperformance of 3.3%. The return of the Rochon Global Portfolio and the one of our benchmark include a loss of approximately 5% due to fluctuations in the Canadian currency.

Since its inception on July 1st 1993, the compounded annual return of the Rochon Global Portfolio has been 15.4% versus 9.3% for our weighted benchmark, representing an annualized outperformance of 6.2% over this period. It's worth noting that the effect of the fluctuations in the value of the US Dollar has been nearly nonexistent on our returns. Over 26 years, the US currency has appreciated by 1.4% relative to the Canadian Dollar, which corresponds to an effect of 0.1% on our annualized returns. Our long-term and ambitious objective is to maintain an annual return 5% higher than our benchmark.

The Rochon Global Portfolio: Returns since July 1st 1993

Year *	Rochon	Index **	+ / -	$ US/Can ***
1993 (Q3-Q4)	37.0%	9.5%	27.6%	3.3%
1994	16.5%	3.7%	12.7%	6.0%
1995	41.2%	24.0%	17.2%	-2.7%
1996	28.0%	22.8%	5.2%	0.3%
1997	37.8%	28.6%	9.2%	4.3%
1998	20.6%	18.8%	1.8%	7.1%
1999	15.1%	16.3%	-1.2%	-5.7%
2000	13.4%	3.2%	10.2%	3.9%
2001	15.1%	-0.4%	15.5%	6.2%
2002	-2.8%	-18.3%	15.6%	-0.8%
2003	13.6%	14.0%	-0.4%	-17.7%
2004	1.6%	6.2%	-4.5%	-7.3%
2005	11.5%	3.6%	7.9%	-3.3%
2006	3.5%	17.0%	-13.5%	0.2%
2007	-14.4%	-11.6%	-2.8%	-14.9%
2008	-5.5%	-22.0%	16.5%	22.9%
2009	11.8%	12.2%	-0.4%	-13.7%
2010	16.1%	13.8%	2.3%	-5.3%
2011	7.6%	-1.1%	8.7%	2.2%
2012	21.2%	12.5%	8.7%	-2.2%
2013	50.2%	38.9%	11.3%	6.9%
2014	28.1%	17.8%	10.2%	9.1%
2015	20.2%	13.4%	6.8%	19.3%
2016	7.3%	14.3%	-7.0%	-3.0%
2017	13.1%	10.3%	2.9%	-6.6%
2018	-0.6%	-1.4%	0.8%	8.7%
2019	25.6%	22.3%	3.3%	-4.8%
Total	**4391.2%**	**945.8%**	**3445.4%**	**1.4%**
Annualized	**15.4%**	**9.3%**	**6.2%**	**0.1%**

* All returns are adjusted to Canadian dollars
** Index is a hybrid index (S&P/TSX, S&P 500, Russell 2000) which reflects the weight of the underlying assets at the beginning of the year.
*** Variation of the US dollar compared to the Canadian dollar
Refer to Appendix B for disclosure statements on the Rochon portfolios.

The adjective "ambitious" in relation to of our performance objectives is chosen with care. A very small number of managers succeed over a very long period (say 20 years) in outperforming the indices. Maintaining such a goal will remain difficult. In Alexandre Dumas' famous novel, *The Count of Monte Cristo*, the author states that the expression that defines him is *cupitor impossibilium*. At Giverny, our ambitions for outperformance are cut from the same cloth: to desire the impossible.

The Rochon US Portfolio

We have been publishing the returns of the Rochon US Portfolio, which is entirely denominated in US dollars, since 2003. The Rochon US Portfolio corresponds to the American portion of the Rochon Global Portfolio. In 2019, it realized a return of 32.1% compared to 31.5% for our benchmark, the S&P 500. The Rochon US Portfolio therefore outperformed the benchmark by 0.6%.

Since its inception in 1993, the Rochon US Portfolio has returned 3631%, or 14.6% on an annualized basis. During this same period, the S&P 500 has returned 1111%, or 9.9% on an annualized basis. Our added value has therefore been 4.8% annually.

Year	Rochon US	S&P 500	+/-
1993 (Q3-Q4)	32.7%	5.0%	27.7%
1994	9.9%	1.3%	8.6%
1995	54.8%	37.6%	17.2%
1996	27.0%	23.0%	4.1%
1997	32.9%	33.4%	-0.4%
1998	11.0%	28.6%	-17.6%
1999	15.9%	21.0%	-5.1%
2000	11.3%	-9.1%	20.4%
2001	8.1%	-11.9%	20.0%
2002	-4.4%	-22.1%	17.7%
2003	31.6%	28.7%	2.9%
2004	9.3%	10.9%	-1.6%
2005	12.5%	4.9%	7.5%
2006	3.3%	15.8%	-12.4%
2007	-1.7%	5.5%	-7.2%
2008	-24.3%	-37.0%	12.7%
2009	28.7%	26.5%	2.3%
2010	21.9%	15.1%	6.9%
2011	4.7%	2.1%	2.6%
2012	22.3%	16.0%	6.3%
2013	40.6%	32.4%	8.2%
2014	18.0%	13.7%	4.3%
2015	1.7%	1.4%	0.4%
2016	7.5%	12.0%	-4.5%
2017	19.7%	21.8%	-2.1%
2018	-8.3%	-4.4%	-3.9%
2019	32.1%	31.5%	0.6%
Total	3631.2%	1111.0%	2520.2%
Annualized	14.6%	9.9%	4.8%

Refer to Appendix B for disclosure statements on the Rochon portfolios.

In 2019, the Rochon US portfolio slightly outperformed the S&P 500. This was despite the significant underperformance of our shares in Berkshire Hathaway, the largest weight in our portfolio.

It has been difficult to outperform the S&P 500 in recent years, probably one of the best performing indices in the world over the past five years. The all-stars of the S&P (Apple and Amazon, for example) played a major role in this polarized performance. In addition, the tremendous popularity of index funds also contributed to the outperformance of the S&P 500. Indeed, indices that have performed the best over the short term tend to attract the most capital from passive investors and are further bolstered.

This is the nature of short-term stock market behavior: recent past outperformance propels current outperformance. But, without exception, the stock market always ends up eventually reflecting the intrinsic value of companies.

Rochon Canada Portfolio

We introduced a portfolio that is 100% focused on Canadian equities in 2007. This corresponds approximately to the Canadian portion of the Rochon Global Portfolio. In 2019, the Rochon Canada Portfolio returned 29.0% versus 22.9% for the S&P/TSX, therefore outperforming its index by 6.1%.

Over 13 years, the Rochon Canada Portfolio has returned 625%, or 16.5% on an annualized basis. During this same period, our benchmark had a gain of 94%, or 5.2% on an annualized basis. Our annual added value was therefore 11.2%.

Year	Rochon Canada	S&P/TSX	+/-
2007	19.7%	9.8%	9.9%
2008	-24.6%	-32.9%	8.3%
2009	28.2%	33.1%	-4.9%
2010	26.7%	17.6%	9.1%
2011	13.5%	-8.7%	22.2%
2012	24.0%	7.2%	16.8%
2013	49.4%	13.0%	36.4%
2014	20.3%	10.6%	9.7%
2015	16.0%	-8.3%	24.3%
2016	11.0%	21.1%	-10.1%
2017	27.4%	9.1%	18.3%
2018	-7.6	-8.9%	1.3%
2019	29.0%	22.9%	6.1%
Total	625.3%	93.8%	531.4%
Annualized	16.5%	5.2%	11.2%

Refer to Appendix B for disclosure statements on the Rochon portfolios.

Since 2007, the performance of our Canadian securities has been significantly higher than that of the S&P/TSX. We would like to repeat, once again this year, that a concentrated portfolio can drastically exceed the performance of the indices.

However, in our opinion, the risk inherent to high concentration is not appropriate for a portfolio that is to be managed prudently. In fact, we consider that a portfolio of about 20 securities is the right balance between having a minimum diversification level to reduce company-specific risk while also owning a low enough number of companies to improve the odds of beating the market indices. Since this portfolio represents only a portion (approximately 14%) of the Rochon Global Portfolio, our diversification requirements are met.

2019

Years follow each other but are never alike.

In 2018, American companies had greatly improved their level of profitability (thanks to, among other things, the reduction in corporate tax rates). However, the stock market experienced a decline that year. It was the opposite in 2019: for most compagnies, profits stagnated but the stock market did very well. One could therefore conclude that stock prices in 2019 caught up with the undervaluation created in 2018.

Over the long run, stocks inevitably reflect increased corporate profits. A certain synchronicity between the underlying intrinsic performance of companies and their stock prices therefore always eventually materializes.

The temporality of this stock market justice, on the other hand, is completely unpredictable. Of course, that doesn't stop numerous Wall Street strategists from venturing their predictions, as random as they may be. The reason is simple: their customers keep asking for such predictions despite all the historical data that demonstrate their futility.

Trade disputes

Trade tensions between the United States and China continued to feed the media. We obviously have no idea the outcome or consequences of these tensions, but in general, we are for the free movement of goods and services and a market unshackled from various government interventions. But we also realize that we live in a complex world where there are various parameters which interact on many levels. If it were simple to solve, our civilization would have already found the solution. This line of thinking also applies to many facets of humanity.

Our investment approach is therefore to not try to predict macroeconomics (and the even less predictable political world) but rather to focus on the activity of selecting high quality companies.

The last decade: 2010-2019

10 years ago, we emerged (with a few scars) from the financial crisis of 2008-2009. Few investors liked the idea of investing in stocks and everything seemed like a good reason to stay away from the stock market. Here are some of the geopolitical and macroeconomic events that took place during the last decade:

- The anti-stock-market movement of “Occupy Wall Street” (2011)
- The downgrade of American bonds (2011)
- Financial crisis in Europe, particularly in Greece (2011)
- The debt ceiling crisis with the US government (2012)

- The “fiscal cliff” in the US (2012)
- The start of the conflict between Russia and Ukraine (2013)
- Lawsuits by the US government against large banks (2013)
- Oil price collapse (2014)
- Economic slowdown in China (2015)
- Brexit (2016)
- The trade conflict with China (2018)

If they had known in advance everything that had happened in the past 10 years, many investors would have waited on the sidelines before investing in the stock market... and many did. We can even read everywhere that we had not had a bear market over the decade (another excuse to sell shares!) Strangely, the two bear markets - a 20% drop in the stock market in 2011 and 2018 are often overlooked. I called these “ghost bear markets”.

From 2010 to 2019, the return on the Rochon Global portfolio was 18.2% on an annualized basis, or a total return of 433%. Imagine the opportunity cost if we had let fears of the future hold us back in our business of acquiring high quality companies.

We can break down our annual performance for the decade into three parts:

Growth in corporate profits (including dividends)	+15.0%
Increase in P/E ratio of our holdings	+1.0%
Foreign currency gain related to $CAD depreciation	+2.2%
Total annual return for Rochon Global portfolio	**+18.2%**

Refer to Appendix B for disclosure statements on the Rochon portfolios.

As you can see, most of our performance resulted from the growth in underlying profits from the companies in our portfolio. Over the long term, in our view, owning stocks of above-average companies remains the key to success in the investment world.

What does the next decade hold for us? Obviously, we are not soothsayers. We believe that growth in corporate profits will be weaker in the years to come as we estimate that after-tax profit margins are at a level that will be difficult to improve. For the companies making up the S&P 500, we believe that profit growth will be around 5 to 6% per year in the years to come.

If we continue to own companies that, as a whole, increase earnings per share (EPS) by more than 10% per year on average, over many years, we believe that our overall portfolio will generate an annual return of this magnitude.

In order to reap such return, however, it is essential to remain undistracted by the various headlines of the media. To obtain the strong long-term results of equities, one has to stay invested in equities.

An energy revolution in the United States (part two)

Seven years ago, in the 2012 annual letter, I presented a section on the energy revolution in the United States. I was explaining that new discoveries of shale gas and oil in the western United States (and, most importantly, the technology to extract them) had completely changed the energy balance in the US. I noted that the US appeared poised to dramatically improve the dynamics of its energy trade.

But I took the trouble to add: “despite the optimistic tone of this section, none of this changes the fact that the energy industry is – to us – difficult to predict… this simply means that companies that operate in the energy industry are difficult for us to evaluate.”

What has happened since? The energy revolution in the United States continued to the point that in 2019, for the first time in several decades, the United States became a net exporter of oil (see Chart 1).

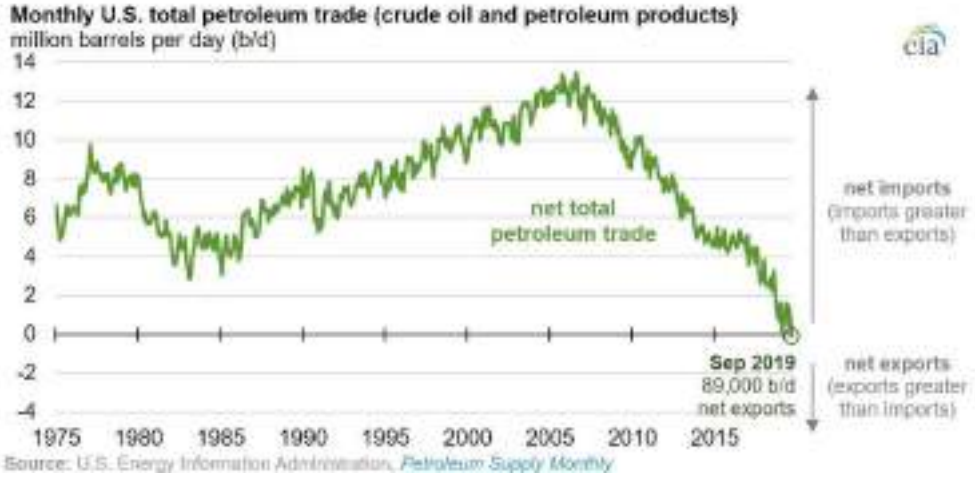

Chart 1: Petroleum trade in the US over the last 45 years.

Oil production in the US increased from 6 million barrels per day in early 2012 to almost 13 million last year. However, this was not necessarily a source of enrichment for the producers. The price of a barrel of oil dropped from $91 in 2012 to $52 recently. The energy sector had a difficult decade (see Chart 2). Few people in 2007 (when oil prices hit $140 a barrel) would have predicted such a thing. There are so many factors that interact, sometimes even in a contradictory manner to each other, that it makes the prediction of the future of this industry very complex.

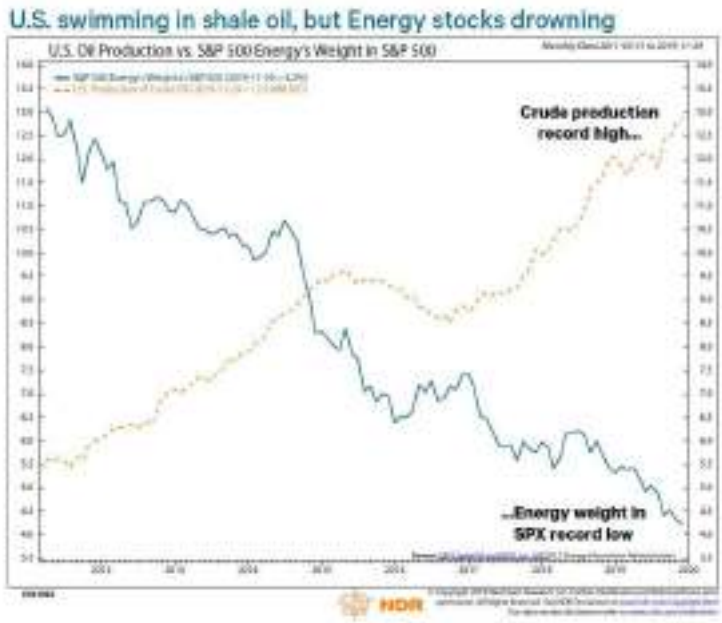

Chart 2: Oil production in the US since 2011 versus the weight of the energy sector within the S&P 500. Source: Ned Davis Research

A first for renewable energy in the United States

Another dimension of the American energy revolution also continued. In 2019, the production of electricity from renewable energy exceeded, for the first time in history, that from coal (Chart 3).

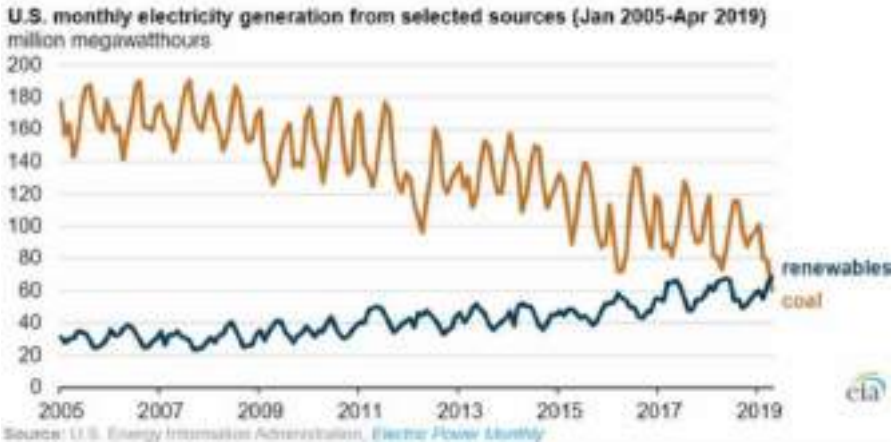

Chart 3: Monthly production of electricity generated from coal versus renewable sources.

This great news for the environment went completely unnoticed on social media. One could argue that a prolonged observation of the media in our society reveals that bad news and prophets of doom have always had excellent press agents...

Conclusion

We continue to avoid the oil sector for several reasons. First, we believe this is an area where competitive advantages are rare and seldom sustainable (excuse the pun). Over the long term, we also believe that humanity will continue to evolve towards more sustainable ways of producing the vast amount of energy we need. We own a few companies in our portfolio that should benefit from the growth of electric car in the years to come.

The flavor of the day

When you consider that a 10-year US government bond (and also that of Canada) carries an interest rate of less than 1%, the alternatives to stocks are clearly unattractive. Such rates are unlikely to be sufficient to cover inflation and it's even worse in Europe where interest rates are often negative. The only guarantee that comes with such low yielding bonds is that of getting poorer. Their popularity is difficult to understand.

The iconic example from this period is the now famous issue by the Austrian government of "century" bonds. These bonds were issued at €100 in 2017 with a 2.1% coupon and maturing on September 20, 2117. This security, in our opinion, already risky at par, rose 55% in less than two years. A second tranche of these bonds was then issued at €154 in June of 2019. At this price, the yield to maturity (in 98 years) was 1.17% annually. But a few months later, in August 2019, the price of these bonds hit a high of €210. The annual yield to maturity was then 0.61%.[1]

[1] Source: Barron's

At the current time, there is $17 trillion (or $17,000 billion) in negative interest bonds worldwide. These negative interest bonds represent, in our opinion, an aberration that is hard to comprehend.

Owner's Earnings

At Giverny Capital, we do not evaluate the quality of an investment by the short-term fluctuations in its stock price. Our wiring is such that we consider ourselves owners of the companies in which we invest. Consequently, we study the growth in earnings of our companies and their long-term outlook.

Since 1996, we have presented a chart depicting the growth in the intrinsic value of our companies using a measurement inspired by Warren Buffett: "owner's earnings". We arrive at our estimate of the increase in intrinsic value of our companies by adding the growth in earnings per share (EPS) and the average dividend yield of the portfolio. We believe that analysis is not exactly precise but approximately correct. In the non-scientific world of the stock market, we believe in the old saying: "It is better to be roughly right than precisely wrong."

	Rochon Global Portfolio			S&P 500		
Year ***	Value *	Market **	Difference	Value *	Market **	Difference
1996	14%	29%	15%	13%	23%	10%
1997	17%	35%	18%	11%	33%	22%
1998	11%	12%	1%	4%	29%	25%
1999	16%	12%	-4%	12%	21%	9%
2000	19%	10%	-9%	15%	-9%	-24%
2001	-9%	10%	19%	-21%	-12%	9%
2002	19%	-2%	-21%	13%	-22%	-35%
2003	31%	34%	3%	12%	29%	16%
2004	21%	8%	-12%	20%	11%	-10%
2005	14%	15%	0%	15%	5%	-10%
2006	14%	3%	-11%	24%	16%	-8%
2007	10%	0%	-10%	-4%	5%	9%
2008	-3%	-22%	-19%	-31%	-37%	-6%
2009	0%	28%	28%	6%	26%	20%
2010	22%	22%	0%	50%	15%	-35%
2011	17%	6%	-11%	18%	2%	-16%
2012	19%	23%	4%	9%	16%	7%
2013	16%	42%	26%	8%	32%	24%
2014	13%	19%	6%	10%	14%	4%
2015	11%	4%	-7%	1%	1%	0%
2016	9%	10%	1%	4%	12%	8%
2017	14%	20%	7%	14%	22%	11%
2018	20%	-8%	-28%	23%	-4%	-26%
2019	10%	31%	20%	3%	31%	29%
Total	1876%	1889%	13%	608%	720%	111%
Annualized	13.2%	13.3%	0.0%	8.5%	9.2%	0.7%

* Estimated growth in earnings plus dividend yield
** Market performance, inclusive of dividends (refer to Appendix B for disclosure statements on our returns)
*** Results estimated without currency effects

Note: The results of the increase in the value of the S&P 500 since 1996 were revised compared to previous letters

This year, the intrinsic value of our companies, as a whole, rose by about 10% (with dividends included). Despite some of the changes to our portfolio during the year, we consider the estimate of the EPS growth at our companies during 2019 to adequately reflect their economic reality. The market performance of our portfolio was a gain of roughly 31% (net of any currency effect). Our stocks therefore realized a price performance that was far greater than their underlying economic performance.

The companies in the S&P 500 also experience weak growth in their corporate earnings, with growth in the order of less than 1% (about 3% when we add dividends). The S&P 500 still had a total performance figure of 31% (in $USD).

Since 1996, our companies have grown their value by about 1876% and their stocks have achieved a total return of approximately 1889%. On an annualized basis, we achieved an intrinsic performance of 13.2% versus 13.3% for their stock market performance (dividend included in both cases). The correlation between the two figures over a long period is not accidental since the stock market always reflects the fair value of companies over the long term.

Our stocks have outperformed the S&P 500 by 4.1% annually over the last 24 years for the simple reason that our companies grew their intrinsic values at a rate that was 4.8% greater than that of the companies that make up the S&P 500.

A book on the life of Joseph Rosenfield

Twenty years ago, I read an article that made a significant impression on me: *The Best Investor you've never heard of* by Jason Zweig of the magazine Money. The article painted a fascinating portrait of Joseph Rosenfield. Then aged 96, Mr. Rosenfield had grown the endowment fund of Grinnell University (in Iowa) from $11 million dollars to $1 billion dollars from 1968 to 2000. Warren Buffett was among the members on his investment committee. The latter had nothing but praise for Rosenfield: "A triumph of rationality over conformism". Despite his advanced age, Mr. Rosenfield emphasized the importance of patience in the investment world throughout the interview.

I have reread this article several times since (obviously not often enough as evidenced by my occasional lack of patience). I tried in vain to find a biography of Mr. Rosenfield for years and years.

But my patience was rewarded last year when I came across a new book written by George Drake: *Mentor: Life and Legacy of Joe Rosenfield*. I've never pressed so quickly on Amazon's "Buy Now" button. I wholeheartedly recommend it to you. You will find that Mr. Rosenfield was much more than just a great investor.

Source: grinnel.edu

Five-year Post-mortem: 2014

Like we do every year, we go through a five-year post-mortem analysis. We believe that studying our decisions in a systematic manner, and with the benefit of hindsight, enables us to learn from both our achievements and our errors.

We made few changes to the portfolio in 2014, but here are a few remarks from reviewing the annual letter from that year.

- In 2014, we made our first investment in Constellation Software. When I read the company's annual report, I knew instantly that Mark Leonard was our kind of leader. The stock has climbed 500% since our first purchase.
- In 2014, we took a small stake in PRA Group. The company remained in the portfolio for just over a year. The results were disappointing and we sold it in 2015.
- On the other hand, we sold the last shares we owned of Resmed, an Australian company for which we always had great admiration. We found its shares too "expensive" at the time. We will come back to this later on in "error medals" section (and yes, it was a very bad sale).

Our Companies

"… Mr. Morrel was a prudent and rather a timid man, as are all those who have built, slowly and laboriously, a business fortune over many years…".

- Extract from *The Count of Monte Cristo*

Section for Giverny Capital's partners only

The Podium of Errors

"Misfortune is needed to bring to light the treasures of the human intellect."

- Extract from *The Count of Monte Cristo*

Following in the "Givernian" tradition, here are our three annual medals for the "best" errors of 2019 (or from past years). It is with a constructive attitude, in order to always improve as investors, that we

provide this detailed analysis. As is often the case with stocks, errors from omission (non-purchases) are often more costly than errors from commission (purchases)… even if we don't see those on our statements.

Bronze Medal: Microsoft

We had been shareholders of Microsoft for a few years before selling in 2011 with a very modest gain. But a new CEO, Satya Nadella, arrived in 2014 and completely transformed the culture of Microsoft. He knew how to take the company towards cloud computing and did so brilliantly. We were at the forefront of being able to see this transformation, but were skeptical of the degree level of effect on Microsoft's EPS growth rate.

The stock has multiplied by seven times in eight years.

Silver Medal: Resmed

We invested in Resmed, an Australian company specializing in medical devices to help sleep disorders, in 2003. We were shareholders for about 11 years and sold in early 2014. I then found that the growth of EPS had slowed (we were used to 20% per year) and that the stock seemed too expensive given the circumstances. I did know, however, that sleep apnea was a widespread problem that is still poorly diagnosed and even more poorly treated. Long-term growth prospects were therefore intact.

From 2014 to 2019, EPS increased by about 10% annually and the stock price climbed from $44 to $155. Today's share price reflects better growth prospects expected in the years to come.

We acquired our first shares in 2003 at around $8. We could have achieved a total return of almost 20 times our money if we had been more patient. Peter Lynch liked to say: "you should not pull out the flowers to water the weed". I clearly pulled out a full patch of roses by selling our shares in Resmed.

Gold Medal: Copart

Recently, I ran into a portfolio manager friend I have known for years. We talked about our favorite stocks and she told me she owned shares in Copart. It reopened an old wound—I had almost managed to forget this terrible mistake I made a few years ago.

Copart is a company that sells cars reported by auto insurance companies as total losses. A few years ago, the company started auctioning on the Internet and was able to reach customers worldwide. It is rare to find a company that has a simple business to understand, strong competitive advantages and high returns on equity—all with good prospects for expanding its addressable market.

The management of the company also has a very pro-shareholder approach towards the management of excess capital. In 2011, I not only noticed that the company was doing well but also that the company had gone into debt (modestly) to buy back around 10% of its shares. Copart made $0.63 in EPS in 2011 and the stock was trading at around $11 or 18 times its profits. I loved everything about this company except the valuation. So I decided to wait for a better price.

In 2014, a book was published on the story of Copart founder Willis Johnson entitled *From Junk to Gold*. Again, I found the story fascinating ... without buying the stock.

In 2019, the company made EPS of $2.47. This is the equivalent of an annual growth rate of 19% achieved over eight years. And the stock trades, as of this writing, at $80. That's 27 times the estimated profit for 2020. We could have made about eight times our money in eight and a half years, or an annual return of 26%. And even without the expansion of the P/E ratio, the stock would have done very well.

I have no excuses. The company was in my area of expertise and the value was not at all extravagant. It was a big mistake.

Ah yes, I forgot a little postscript: in early 2016, the stock corrected by 25% and traded for a few weeks at $16. At that time, the stock's P/E was 15 times. So I had the long-awaited opportunity to get a better price!

I think that I will finally give a platinum medal for this error.

Conclusion: the wisdom of Alexandre Dumas

Do you remember the episode of the TV series *Cheers* in which Sam Malone reads the Russian classic *War and Peace* to impress Diane? And at the very end of his long literary journey, he learns to his great despair, that there is a movie!

I experienced the situation in reverse last year. I watched the French mini-TV series on the classic novel by Alexandre Dumas: *The Count of Monte Cristo*. It left me hungry for more so I decided to read the 1,400-page novel. I really loved the book. First, I found in it a vast portrait of the economic world of France from 1815 to 1840. The Stock Exchange already existed at the time (the first exchange was created in Paris in 1639). But most importantly, there are deep reflections on human nature.

Obviously, to highlight just a few sentences does not do justice to this monument of literature. As you can see, I have already used some of them in other sections of this letter. My favorite sentence in the book comes from a lesson by Father Faria to Dantes (the original name of the Count of Monte Cristo):

"To learn it not to know; there are the learners and the learned. Memory makes the one, philosophy the other. But how can someone learn philosophy? Philosophy cannot be taught; it is the application of the science to truth."

Obviously, we can quickly draw a parallel with the world of stock market investment. The knowledgeable are those who assimilate a large amount of information on the economy and companies. But it must be admitted that knowledge and wisdom are two very different things.

Those who are wise (those using philosophy) try to understand the world authentically, beyond the simple accumulation of information. The word philosophy, from the ancient Greek φιλοσοφία (composed of φιλεῖν, philein: "to love"; and of σοφία, sophia: "wisdom" or "to know"), literally means "love of wisdom". It is a process of critical reflection and questioning about the world, knowledge and human existence.

A portfolio manager wanting to achieve long-term success must constantly develop such a critical thinking process.

But any investment philosophy, however thoughtful, is futile without the presence of a human quality which must be paramount: patience.

I leave the final words of this letter to Alexandre Dumas with an extract from his novel *Queen Margot*:

"To wait. All human wisdom is in this single word. The greatest, the strongest, the most skilful is he who knows how to wait."

To Our Partners

We believe that the companies we own are exceptional, led by top-notch people, and destined for a great future. They should continue to prudently navigate the often troubled waters of the global economy. Furthermore, the valuation assigned by the market to these outstanding companies is very similar to the valuation of an average company in the S&P 500, despite the fact that our companies have better growth prospects than average.

We also want you to know that we are fully aware of and grateful for your votes of confidence. It is imperative for us to not only select outstanding companies for our portfolios, but to also remain outstanding stewards of your capital. We certainly like to achieve good returns and have developed a taste for it, but it must not come at the cost of taking undue risk. Our philosophy to favor businesses with solid balance sheets and dominant business models, along with purchasing their shares at reasonable valuations, is central to the risk management of our portfolios.

Thank you from the entire Giverny Capital team and we wish a great 2020 to all our partners.

François Rochon and the Giverny Capital team

APPENDIX A

Investment philosophy

Note: This section is repeated from prior annual letters and is aimed at new partners.

In 2019, we saw a large increase in the number of Giverny Capital partners (the term we use for our clients). With all these newcomers, it is imperative that we write again (and again) about our investment philosophy.

Here are the key points:

- We believe that over the long run, stocks are the best class of investments.
- It is futile to predict when it will be the best time to begin buying (or selling) stocks.
- A stock return will eventually echo the increase in per share intrinsic value of the underlying company (usually linked to the return on equity).
- We choose companies that have high (and sustainable) margins and high returns on equity, good long term prospects and are managed by brilliant, honest, dedicated and altruistic people.
- Once a company has been selected for its exceptional qualities, a realistic valuation of its intrinsic value has to be approximately assessed.
- The stock market is dominated by participants that perceive stocks as casino chips. With that knowledge, we can then sometimes buy great businesses well below their intrinsic values.
- There can be quite some time before the market recognizes the true value of our companies. But if we're right on the business, we will eventually be right on the stock.

Experience and common sense teach us that an investment philosophy based on buying shares in companies that are undervalued, and holding these companies for several years, will not generate linear returns. Some years, our portfolio will have a return that is below average. This is a certainty that we must accept.

Another important point: the significant volatility of the market is often perceived negatively by many investors. It's actually the contrary. When we see stock prices as *"what other people believe the company is worth"* rather than the real value (at least in the short term), these fluctuations become our allies in our noble quest for creating wealth. Instead of fearing them, we can profit from them by acquiring superb businesses at attractive prices. The more that markets (the "other" participants) are irrational, the more likely we are to reach our ambitious performance objectives.

Benjamin Graham liked to say that the irrationality of the market provides an extraordinary advantage to the intelligent investor. The person, however, who becomes affected by short-term market fluctuations (less than 5 years) and who makes decisions based on them transforms this advantage into a disadvantage. His or her own perception of stock quotes becomes their own worst enemy. Our approach at Giverny Capital is to judge the quality of an investment over a long period of time.

So patience – ours AND that of our partners – becomes the keystone for success.

APPENDIX B

Notes on the returns of the Rochon portfolios

- The Rochon portfolio is a private family group of accounts managed by François Rochon since 1993. The returns of the period from 1993 to 1999 were realized before registration of Giverny Capital Inc. at the AMF in June of 2000.
- The Rochon Global portfolio serves as a model for Giverny Capital's clients, but returns from one client to the other can vary depending on a multitude of factors. The returns indicated include trading commissions, dividends (including foreign withholding income taxes) and other income but do not include management fees. Portfolio returns of the Rochon Global portfolio have been generated in a different environment than Giverny Capital's clients and this environment is considered controlled. For example, cash deposits and withdrawals can increase the returns of the Rochon Global portfolio. Thus, the portfolio returns of the Rochon Global portfolio are often higher than the returns realized by clients of Giverny Capital.
- Past results do not guarantee future results.
- The Rochon Canada and Rochon US portfolios are parts of the Rochon Global portfolio.
- The index benchmark group is selected at the beginning of the year and tends to be a good reflection of the asset composition of the portfolio. Weighted indices presented may not be representative of the Rochon Global portfolio. In 2019 :

  - Giverny Global Portfolio: TSX 16% Russell 2000 41% S&P 500 41% MSCI EAFE 2%
  - Giverny US Portfolio : S&P 500 100%
  - Giverny Canada Portfolio : S&P/TSX 100%

- The returns for the S&P 500 (in $USD) are provided by Standard & Poors.
- The returns for the various indices used for comparable purposes are deemed reliable by Giverny Capital.
- It should be noted that currency effects on the returns of the Rochon portfolio and indices are estimated to our best effort.
- The custodian of our client portfolios is National Bank Correspondent Network (NBCN) in Canada and TD Ameritrade Institutional and Charles Schwab in the US.
- The financial statements of the three portfolios are audited at the end of each year. The auditor's data are those provided by our custodian (NBCN). The auditor's annual reports are available upon request.
- For more information, please see the "returns" section of our website.

GIVERNY CAPITAL

Annual letter to partners 2020

Geneviève Cadieux
Elle et Lui (avec main de femme), 1997, diptych
Chromogenic print, mounted on plexiglass, aluminum frame
Each panel 195,5 x 159 cm, photo credit : Geneviève Cadieux
Giverny Capital Collection

Giverny Capital Inc. – Annual Letter 2020 ©

Historical Summary

It has been more than 28 years since I discovered the writings of Warren Buffett, Benjamin Graham, John Templeton, Philip Fisher and Peter Lynch. I then decided to begin managing a family portfolio based on an investment approach synthesized from these great money managers. By the end of 1998, after five years of satisfactory results, I decided to launch an investment management firm offering asset management services aligned with my own investment philosophy. Giverny Capital Inc. came into existence.

In 2002, Giverny hired its first employee: Jean-Philippe Bouchard (JP for those who know him well). A few years later, JP became a partner; he participates actively in the investment selection process for the Rochon portfolio. In 2005, two new persons joined the firm who eventually became partners: Nicolas L'Écuyer and Karine Primeau. In 2009, we launched a US office in Princeton, New Jersey. Moreover, in early 2020, we established a partnership with a portfolio manager based in New York City who will head the office of the firm Giverny Capital Asset Management LLC in Manhattan. The directors of the US offices, Patrick Léger and David Poppe, share in the culture and long-term time horizon inherent to Giverny.

We are Partners!

From the very first days of Giverny, the cornerstone of our portfolio management philosophy was to manage client portfolios in the same way that I was managing my own money. Thus, the family portfolio I've managed since 1993 (the "Rochon Global Portfolio") serves as a model for our client accounts. It is crucial to me that clients of Giverny and its portfolio managers are in the same boat! That is why we call our clients "partners".

The Purpose of our Annual Letter

The primary objective of this annual letter is to discuss the results of our portfolio companies over the course of the prior year. But even more importantly, our goal is to explain in detail the long-term investment philosophy behind the selection process of the companies in our portfolio. Our wish is for our partners to fully understand the nature of our investment process since long-term portfolio returns are the fruits of this philosophy. Over the short term, the stock market is irrational and unpredictable (though some may think otherwise). Over the long term, however, the market adequately reflects the intrinsic value of companies. If the stock selection process is sound and rational, investment returns will eventually follow. Through this letter, we provide you with the information required to understand this process. You will hopefully notice that we are transparent and comprehensive in our discussion. The reason for this is very simple: we treat you the way we would want to be treated if our roles were reversed.

The Artwork on Our 2020 Letter

Since 2004, we have illustrated the cover of our letters with a copy of artwork from our corporate collection. This year we selected a photographic diptych by the Quebec artist Geneviève Cadieux entitled "Elle et Lui (avec main de femme)". It seemed to me like a fitting work in this year marked, among other things, by social distancing.

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For the year ending December 31st 2020, the return for the Rochon Global Portfolio was 12.9% versus 15.1% for our benchmark, which represents a relative underperformance of 2.2%. The return of the Rochon Global Portfolio and the one of our benchmark include a loss of approximately 2% due to fluctuations in the Canadian currency.

Since its inception on July 1st 1993, our compounded annual growth rate has been 15.3% versus 9.5% for our weighted benchmark, representing an annualized outperformance of 5.9% over this period. It's worth noting that the effect of the fluctuations in the value of the US Dollar has been nearly nonexistent on our returns. Since 1993, the US currency has depreciated by 0.6% relative to the Canadian Dollar, which corresponds to an effect of 0.0% on our annualized returns. Our long-term and ambitious objective is to maintain an annual return 5% higher than our benchmark.

The Rochon Global Portfolio: Returns since July 1st 1993

Year *	Rochon	Index **	+ / -	$ US/Can ***
1993 (Q3-Q4)	37.0%	9.5%	27.6%	3.3%
1994	16.5%	3.7%	12.7%	6.0%
1995	41.2%	24.0%	17.2%	-2.7%
1996	28.0%	22.8%	5.2%	0.3%
1997	37.8%	28.6%	9.2%	4.3%
1998	20.6%	18.8%	1.8%	7.1%
1999	15.1%	16.3%	-1.2%	-5.7%
2000	13.4%	3.2%	10.2%	3.9%
2001	15.1%	-0.4%	15.5%	6.2%
2002	-2.8%	-18.3%	15.6%	-0.8%
2003	13.6%	14.0%	-0.4%	-17.7%
2004	1.6%	6.2%	-4.5%	-7.3%
2005	11.5%	3.6%	7.9%	-3.3%
2006	3.5%	17.0%	-13.5%	0.2%
2007	-14.4%	-11.6%	-2.8%	-14.9%
2008	-5.5%	-22.0%	16.5%	22.9%
2009	11.8%	12.2%	-0.4%	-13.7%
2010	16.1%	13.8%	2.3%	-5.3%
2011	7.6%	-1.1%	8.7%	2.2%
2012	21.2%	12.5%	8.7%	-2.2%
2013	50.2%	38.9%	11.3%	6.9%
2014	28.1%	17.8%	10.2%	9.1%
2015	20.2%	13.4%	6.8%	19.3%
2016	7.3%	14.3%	-7.0%	-3.0%
2017	13.1%	10.3%	2.9%	-6.6%
2018	-0.6%	-1.4%	0.8%	8.7%
2019	25.6%	22.3%	3.3%	-4.8%
2020	12.9%	15.1%	-2.2%	-2.0%
Total	**4969.2%**	**1103.5%**	**3865.6%**	**-0.6%**
Annualized	**15.3%**	**9.5%**	**5.9%**	**0.0%**

* All returns are adjusted to Canadian dollars
** Index is a hybrid index (S&P/TSX, S&P 500, Russell 2000, MSCI EAFE) which reflects weights of the assets at the beginning of the year.
*** Variation of the US dollar compared to the Canadian dollar

Refer to Appendix B for disclosure statements on the Rochon portfolios.

The Rochon US Portfolio

We have been publishing the returns of the Rochon US Portfolio, which is entirely denominated in US dollars, since 2003. The Rochon US Portfolio corresponds to the American portion of the Rochon Global Portfolio. In 2020, it realized a return of 16.0% compared to 18.4% for the S&P 500. The Rochon US Portfolio therefore underperformed by 2.4%.

Since its inception in 1993, the Rochon US Portfolio has returned 4230%, or 14.7% on an annualized basis. During this same period, the S&P 500 has returned 1334%, or 10.2% on an annualized basis. Our added value has therefore been 4.5% annually.

Year	Rochon US	S&P 500	+/-
1993 (Q3-Q4)	32.7%	5.0%	27.7%
1994	9.9%	1.3%	8.6%
1995	54.8%	37.6%	17.2%
1996	27.0%	23.0%	4.1%
1997	32.9%	33.4%	-0.4%
1998	11.0%	28.6%	-17.6%
1999	15.9%	21.0%	-5.1%
2000	11.3%	-9.1%	20.4%
2001	8.1%	-11.9%	20.0%
2002	-4.4%	-22.1%	17.7%
2003	31.6%	28.7%	2.9%
2004	9.3%	10.9%	-1.6%
2005	12.5%	4.9%	7.5%
2006	3.3%	15.8%	-12.4%
2007	-1.7%	5.5%	-7.2%
2008	-24.3%	-37.0%	12.7%
2009	28.7%	26.5%	2.3%
2010	21.9%	15.1%	6.9%
2011	4.7%	2.1%	2.6%
2012	22.3%	16.0%	6.3%
2013	40.6%	32.4%	8.2%
2014	18.0%	13.7%	4.3%
2015	1.7%	1.4%	0.4%
2016	7.5%	12.0%	-4.5%
2017	19.7%	21.8%	-2.1%
2018	-8.3%	-4.4%	-3.9%
2019	32.1%	31.5%	0.6%
2020	16.0%	18.4%	-2.4%
Total	**4229.7%**	**1333.9%**	**2895.8%**
Annualized	**14.7%**	**10.2%**	**4.5%**

Refer to Appendix B for disclosure statements on the Rochon portfolios.

In 2020, the Rochon US portfolio slightly underperformed the S&P 500. While we owned several high-tech holdings, our weight to this sector was less than that of the index which also led to slightly weaker relative performance.

Rochon Canada Portfolio

We introduced a portfolio that is 100% focused on Canadian equities in 2007. This corresponds approximately to the Canadian portion of the Rochon Global Portfolio. In 2020, the Rochon Canada Portfolio returned 12.1% versus 5.6% for the S&P/TSX, therefore outperforming by 6.5%.

Over 14 years, the Rochon Canada Portfolio has returned 713%, or 16.1% on an annualized basis. During this same period, the S&P/TSX had a gain of 105%, or 5.2% on an annualized basis. Our annual added value was therefore 10.9%.

Year	Rochon Canada	S&P/TSX	+/-
2007	19.7%	9.8%	9.9%
2008	-24.6%	-32.9%	8.3%
2009	28.2%	33.1%	-4.9%
2010	26.7%	17.6%	9.1%
2011	13.5%	-8.7%	22.2%
2012	24.0%	7.2%	16.8%
2013	49.4%	13.0%	36.4%
2014	20.3%	10.6%	9.7%
2015	16.0%	-8.3%	24.3%
2016	11.0%	21.1%	-10.1%
2017	27.4%	9.1%	18.3%
2018	-7.6	-8.9%	1.3%
2019	29.0%	22.9%	6.1%
2020	12.1%	5.6%	6.5%
Total	712.9%	104.7%	608.2%
Annualized	16.1%	5.2%	10.9%

Refer to Appendix B for disclosure statements on the Rochon portfolios.

Our largest Canadian holding is which rose 31% in 2020—the primary source of the higher returns for our Canadian portfolio.

Since 2007, the performance of our Canadian securities has been significantly higher than that of the S&P/TSX. We would like to repeat, once again this year, that a concentrated portfolio can drastically exceed the performance of the indices.

2020

Last year I wrote that "years follow each other but are never alike." We could certainly repeat this phrase to characterize 2020. The COVID-19 virus has hit us hard—our society, our loved ones, our freedom of movement and our economy.

The stock market fell dramatically in mid-March 2020 when the World Health Organization (WHO) announced that we were officially in a pandemic. In just a few weeks, the S&P 500 had fallen 35% from its high and the Russell 2000 had tumbled 40%. The rapidity of the decline was probably only matched by the crash of 1987. Several stocks dropped to very attractive valuations and we took the

opportunity to make a new acquisition: (we will discuss individual holdings further in the "Our Companies" section)

Then on March 23rd, the US government stepped in to support the economy in such a massive manner it made the bailout of the 2008 financial crisis seem like a dress rehearsal. The stock market subsequently rebounded in a dramatic fashion. Ultimately, US markets reached record highs at the end of the year. I have not found another instance in the history of the stock market where the market has corrected at least 33% and recovered everything in the same year. Who could have predicted this at the end of March? Investors who missed the best five trading days of March and April missed much of the recovery for the year.

We unfortunately lack the necessary perspective at this time to come to any valid conclusions regarding the long-term effects of this pandemic It certainly appears that the pandemic accelerated already strong trends toward online commerce. And telecommuting may remain part of our lives and impact various segments of the economy.

As always, our philosophy remains very simple: we own approximately twenty companies with solid balance sheets, conservative accounting, a durable competitive advantage and a management team dedicated to shareholders. And, of course, we are always cautious about the price that we are willing to pay for such companies.

Our companies performed extremely well given the very significant challenges of 2020. First, about half of our companies had record earnings per share (EPS). Our holdings in aggregate will have seen their profitability decline by roughly 3%. This is significantly better than the drop in expected profits for the companies making up the S&P 500 (which is a decline of around 11%).

None of our companies had to issue shares or go into significant debt to meet their obligations. They have therefore managed to do well in a very difficult year.

A Strange Thing

Warren Buffett has often said that "strange things can happen in financial markets". On April 20, 2020, a very strange thing did indeed happen: the price of a futures contract for a barrel of West Texas Intermediate crude oil deliverable for May fell from $18 to -$37 during the day. It was certainly strange to see the price of oil trading at a negative level. Sellers were presumably willing to pay buyers to get rid of their oil contracts (so they wouldn't have to receive barrels at home!)

Such a thing has never happened before to my knowledge and it completely defies common sense. This anomaly was certainly very short lived but it was certainly long enough to ruin speculators using margin to buy these contracts. This shows us all that almost anything is possible in the world of financial markets in the short term and that using margin always carries a small probability of disaster. Even if the odds are 0.01% of losing all your capital, why take such a chance? And it seems even more baffling to me for someone who is already rich.

The fact that nonsense sometimes happens in financial markets obviously does not change our philosophy of behaving as owners of businesses. It is those who focus exclusively on short-term market quotes who put their financial future in the hands *of others*. We must never forget that while in the long term, the stock market adequately reflects the intrinsic value of companies, the stock market only reflects the opinion of what *others* think a company is worth in the short term. This opinion is

generally pretty fair and reasonable but, for strange reasons, can sometimes turn out to be downright ludicrous. This brings me to the next section of the letter.

The flavor of the day

What seems peculiar to us in recent months is that in this world where the comfort of our certainties has been turned upside down, we are witnessing a level of stock market speculation that is not unlike that of the end of 1999 and early 2000. This speculation seems localized mostly in certain sectors of the economy which have experienced strong growth during the pandemic: software, cloud computing, electronic commerce, etc.

As in the past, these euphoric segments have realistic strong anticipated growth rates. It is the almost infinite extrapolation by many investors that is unrealistic and in turn can create danger. It is not uncommon to see companies trading at 60, 80, or even 100 times their profits (and these profits are often not even adjusted to exclude actual expenses such as stock options). And this is when there actually is a profit! Otherwise, analysts can come up with an alternative: the price-to-sales ratio.

In the 1999 annual letter, I had raised the issue of high valuations of many tech companies. I then told a little fable to illustrate the low regard for stock valuations by many analysts back then: *a farmer bragged about owning a pig worth a million dollars. A friend of his asked him how he could be so sure of his pig's worth. He replied: "Nothing could be easier: I got it in exchange for two chickens worth $500,000 each."*

Two decades later, a whole new generation of speculators is invading the markets these days. For many, the intrinsic value of a business is irrelevant. A stock that goes up and an exciting story are often the only fundamental parameters guiding their choices.

There is of course nothing immoral about speculating. But a dose of realism is appropriate: the consequences of speculation are similar to those who spend their evenings at the casino. A few lucky people come home in a limousine while the majority return barefoot. As Mark Twain would probably say: "History doesn't repeat itself but it often rhymes."

A few segments of the stock market would qualify this year for this section of the annual letter. It can be delicate to point to a particularly trendy segment. The goal is not to denigrate a company or to be condescending to certain fellow investors. Our goal is simply to share with our partners our vision of what seems risky in terms of stock market valuations.

I dare to take the example of Tesla, a phenomenal company if there ever is one. It is interesting to raise the point that Tesla stock, at its current level, has a market capitalization of approximately $800 billion which is higher than all other car manufacturing companies in the world <u>combined</u>. Yet all the other companies in the sector sell 120 times more cars annually than Tesla.

This graph sums it all up:

Market Capitalization

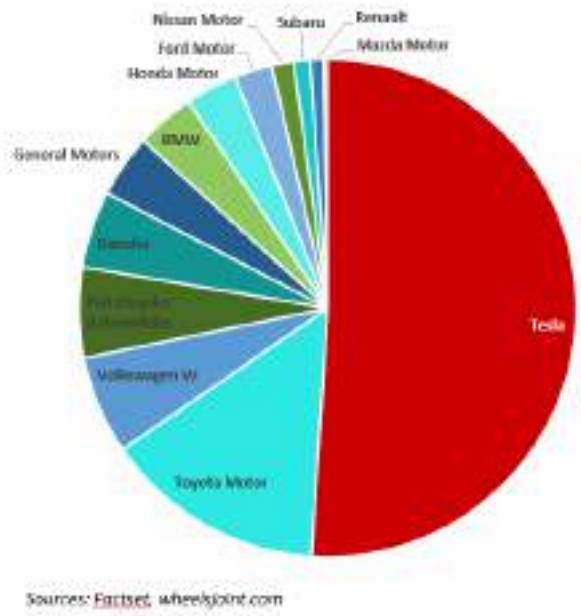

Unit sales

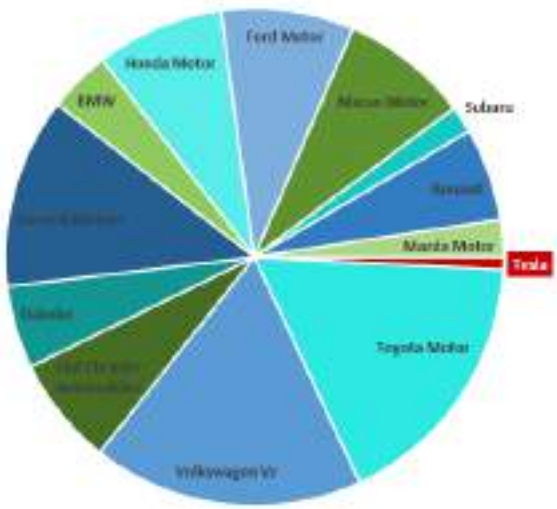

Five-year Post-mortem: 2015

Like we do every year, we go through a five-year post-mortem analysis. We believe that studying our decisions in a systematic manner, and with the benefit of hindsight, enables us to learn from both our achievements and our errors. We made few changes to the portfolio in 2015, but here are a few remarks from reviewing the annual letter from that year.

In 2015, we acquired our first shares in AMETEK. EPS grew by 50% between 2015 and 2019—the stock has more than doubled. The share's P/E ratio on the stock market is therefore higher than when we first bought it. It reflects, in our opinion, the fact that AMETEK is a high quality business.

We also invested in Stericycle back in 2015 which was not a good investment for us. The company faced great pressure on its operating margins and we had to resign ourselves to selling, unfortunately at a loss. It was still a good decision to cut this investment short as the stock is lower today than when we sold it four years ago.

Keeping AMETEK and quickly selling Stericycle is in line with the rule stated by the legendary investor Philip Carret in his book published in 1930: “Be quick to take your losses, reluctant to take your profits”.

Owner’s Earnings

At Giverny Capital, we do not evaluate the quality of an investment by the short-term fluctuations in its stock price. Our wiring is such that we consider ourselves owners of the companies in which we invest. Consequently, we study the growth in earnings of our companies and their long-term outlook.

Since 1996, we have presented a chart depicting the growth in the intrinsic value of our companies using a measurement developed by Warren Buffett: "owner's earnings". We arrive at our estimate of the increase in intrinsic value of our companies by adding the growth in earnings per share (EPS) and the average dividend yield of the portfolio. We believe that analysis is not exactly precise but approximately correct. In the non-scientific world of the stock market, we believe in the old saying: "It is better to be roughly right than precisely wrong."

	Rochon Global Portfolio			S&P 500		
Year ***	Value *	Market **	Difference	Value *	Market **	Difference
1996	14%	29%	15%	13%	23%	10%
1997	17%	35%	18%	11%	33%	22%
1998	11%	12%	1%	4%	29%	25%
1999	16%	12%	-4%	12%	21%	9%
2000	19%	10%	-9%	15%	-9%	-24%
2001	-9%	10%	19%	-21%	-12%	9%
2002	19%	-2%	-21%	13%	-22%	-35%
2003	31%	34%	3%	12%	29%	16%
2004	21%	8%	-12%	20%	11%	-10%
2005	14%	15%	0%	15%	5%	-10%
2006	14%	3%	-11%	24%	16%	-8%
2007	10%	0%	-10%	-4%	5%	9%
2008	-3%	-22%	-19%	-31%	-37%	-6%
2009	0%	28%	28%	6%	26%	20%
2010	22%	22%	0%	50%	15%	-35%
2011	17%	6%	-11%	18%	2%	-16%
2012	19%	23%	4%	9%	16%	7%
2013	16%	42%	26%	8%	32%	24%
2014	13%	19%	6%	10%	14%	4%
2015	11%	4%	-7%	1%	1%	0%
2016	9%	10%	1%	4%	12%	8%
2017	14%	20%	7%	14%	22%	11%
2018	20%	-8%	-28%	23%	-4%	-26%
2019	10%	31%	20%	3%	31%	29%
2020	-2%	15%	17%	-9%	18%	27%
Total	1850%	2179%	329%	436%	871%	435%
Annualized	12.6%	13.3%	0.7%	6.9%	9.5%	2.6%

* Estimated growth in earnings plus dividend yield
** Market performance, inclusive of dividends (refer to Appendix B for disclosure statements on our returns)
*** Results estimated without currency effects

This year, the intrinsic value of our companies, as a whole, declined by about 2% (with dividends included). Despite some of the changes to our portfolio during the year, we consider our estimate of the EPS growth at our companies during 2020 to adequately reflect their economic realities. The performance of our portfolio on the market was a gain of roughly 15% (excluding currency effects). Our stocks therefore realized a price performance that was far greater than their underlying economic performance.

The companies in the S&P 500 experienced weaker growth in their corporate earnings, with profits dropping by approximately 11% (about a drop of 9% when we add dividends). The S&P 500 still had

a total performance figure of 18% (in $USD). The difference between the intrinsic performance of the companies in the S&P 500 and the performance of the index is hence greater than ours.

Profits of companies in aggregate decline during a recession. But this drop is always temporary in nature and corporate profits should hit new records during the next economic cycle (possibly as early as 2021).

Since 1996, by our calculations, our companies have grown their intrinsic value by about 1850% and their stocks have achieved a total return of approximately 2179%. On an annualized basis, the estimated intrinsic performance was 12.6% versus 13.3% for their stock market performance (dividend included in both cases).

The correlation between the two figures over a long period is not accidental since the stock market always reflects the fair value of companies over the long term.

Stock market equations

Last year was overwhelming on so many levels that it would be good to review our basic principles regarding stock market investing with our partners. Since we have described our investment philosophy on various occasions in the past, I thought of going there this time with a different approach inspired by my scientific upbringing (and with a bit of humor added).

During my university studies at the École Polytechnique of Montreal, I was a big fan of electromagnetic physics. And I was fascinated by Maxwell's equations. These are a set of coupled partial differential equations that, together with the Lorentz force law, form the foundation of classical electromagnetism, classical optics, and electric circuits. They describe how electric and magnetic fields are generated by charges, currents, and changes of the fields. The equations are named after the Scottish physicist and mathematician James Clerk Maxwell,

In the same vein, wouldn't it be interesting to try to simplify and unify the complex world of the stock market into four equations?

Here is therefore a proposal of four formulas which could, in my opinion, summarize the main lines which govern rational investment in the stock market.

1. Equation of convergence between Intrinsic Value and Market Value

$$\lim_{n\to\infty} (Vm)_n = Vi$$

This equation states that in the long run (*n* being the unknown number of years), a company's stock market value (*Vm*) eventually converges to its intrinsic value (*Vi*).

2. Equation of wealth increase

$$\triangle \mathrm{W} = \sum \mathrm{P}\ (\mathrm{y})$$

This equation states that the level of increase in stock market wealth (W) is the sum of the aggregate patience (P) over a time variable (y).

3. Risk decrement measurement equation

$$D = \ln\left(\frac{\theta}{\delta}\right) x^2$$

This equation states that D represents the logarithmic decrement of the risk of an investment which is proportional to the level of profit margins (θ) of a company which is reduced by its level of debt (δ) multiplied by the level of the competitive advantages squared (x^2).

4. Equation for the normalization of parameters influencing returns

$$R_S = \frac{1}{\sqrt{2\pi\sigma}} \; e^{\left(\frac{\mu}{\sigma}\right)^2}$$

This equation simply states that stock market returns (R_S) eventually follow a normalized curve proportional to the rationality (μ) of an investor and inversely proportional to the parameter of his (or her) *crowd following instinct* (σ).

<u>Our Companies</u>

Note: This section of the annual letter is always long. We want to provide you with an accurate update of the companies in our portfolio companies. In fact, we are trying to present you with the information we would like to know if our roles were reversed. Stock prices are as of December 31st, 2020.

Section of the letter reserved for Giverny Capital's partners

The Podium of Errors

"It is not sufficient to say that we were wrong; we must say how we were wrong."

- Claude Bernard

Following in the "Givernian" tradition, here are our three annual medals for the "best" errors of 2020 (or from past years). It is with a constructive attitude, in order to always improve as investors, that we provide this detailed analysis. As is often the case with stocks, errors from omission (non-purchases) are often much more costly than errors from commission (purchases)… even if we don't see those on our statements.

Bronze Medal: Floor & Decor

As you know, we purchased shares in Five Below in March 2020. At the same time, we also considered another chain of retail stores: the Floor & Decor flooring company. We knew the company well because it has benefited from the popularity of new LVT (Luxury Vinyl Tile) flooring. This new coating method is experiencing strong growth and we were very aware of it because it had negatively affected the competitive advantage of a company that we held in the portfolio for several years, Mohawk Industries. We knew the strength of the Floor & Decor business model as well as the senior management. Unfortunately, since we had started to follow the company, the stock was regularly trading at high multiples.

That changed last March. The stock fell from a high of $60 to $25 in a matter of weeks. In early April, after speaking with senior management, we made the decision to buy shares at around $30. We were anticipating EPS of $1.50 for 2021 and therefore the valuation seemed reasonable to us considering the excellent long-term growth prospects.

The stock then climbed more than 10% on the very day we wanted to buy it and we hence decided to wait for a return to "our" price. Results improved quickly and the stock never returned to "our" price. The stock is currently trading for $102 and we now expect EPS of around $2 for 2021.

Silver Medal: Taiwan Semiconductor

When François Campeau joined the Giverny team, a stock he loved was Taiwan Semiconductor (TSM)—the world's leading semiconductor foundry. I looked at the company in detail and liked its balance sheet, strong competitive advantages and the culture established by senior management. Historically, its annual growth rate had been around 10-12% but its stock valuation was rarely high (around 15 times earnings on average). The reason is that its profits are cyclical (because they are linked to the capital expenditure of the sector) and its business model requires regular and significant capital expenditures (several billion dollars per year).

TSM's outlook in late 2019 and early 2020 looked better than ever. For new foundry technologies of 5nm (I won't go into detail because it is complex) and possibly 3nm, the company seemed to have little competition. It even seemed plausible that Intel could eventually subcontract TSM for its production of microprocessors which would be phenomenal for the latter. At the end of 2019, the stock was

trading in the $50 range which was a record high and also at a slightly higher P/E than normal. I still decided that the company should be part of the portfolio because its competitive advantage moat seemed to widen drastically. We just had to wait for a "better" price....

...2020 was an extraordinary year for TSM with EPS growing by over 50% and the stock has more than doubled (TSM is currently trading at $127).

Gold Medal: Pool Corp.

I met a prospective client about 14 years ago who had just sold his swimming pool service business. We had discussed the industry in detail and one company stood out as dominant: Pool Corp. It is a highly competitive industry with few competitive advantages. But consolidation and economies of scale can help reduce a company's cost structure (and therefore develop an advantage). Also, reputation for quality can also create an advantage. I had studied Pool Corp in detail but found its business to be too sensitive to the economy as well to the residential construction market (and in 2006 that was a real cause for concern).

The company had EPS of $1.74 in 2006 and the stock was trading around $36. My fears were valid because EPS fell to $0.95 in 2008-2009 but the good news was that company nevertheless remained profitable despite the cyclical volatility. The stock fell to a low of $11 in 2009. So I had the opportunity to buy the stock at a very good price (6 times the profit earned in 2006).

I never bought a share. Among other things, I had misjudged the recurring nature of the services linked to the maintenance of a swimming pool. The company went quickly back on the path of growth and achieved EPS of $8.42 by 2020, an annualized growth rate of 12% compared to 2006. Part of the 2020 results are probably magnified by the fact that most people spent the summer at home. Still, the fact remains that Pool Corp has done an exceptional job.

The stock is now trading at $325. It is true that the stock market valuation is quite high (35x the expected profits for 2021). But this does not change the fact that the company has quintupled its intrinsic value in 14 years. And that we missed the opportunity to achieve a stock return of more than 800% over this period.

And of course, we also missed a potential gain of almost 3000% if we had bought it in 2009.

Conclusion: The Big Picture

After almost three decades of investing in the stock market, I am convinced that the biggest mistake investors make is the propensity to want to predict financial markets. Whether it is waiting for a "better" time to buy or selling in anticipation of buying "lower". Or simply selling while waiting for the situation to be "clearer".

Still, investing in stocks is a winning strategy in the long run. Historically, US companies increase their profits by about 6-7% per year and pay a dividend of around 2%. This generates an annual return of 8-9% from simply owning a solid group of companies. And if we decide to be selective about the companies we choose and pay attention to stock market valuations, it is possible to do even better (which has been our experience for almost 28 years now).

Of course, over the decades, our civilization has encountered its share of challenges—the list is too long to go through. The 2020 pandemic is just one calamity that humans have had to overcome. When a new crisis arrives, the stock market can drop quickly and drastically. Many investors then lose any long-term perspective and focus only on the crisis and the short-term uncertainty it engenders.

Peter Lynch wrote an excellent paragraph on this subject in “Beating the Street”, an exceptional book that I read when I started out in 1992. He talks about always keeping “The Big Picture” in mind. And when that's not enough to hone in his thinking, he then focusses on an even broader perspective on things ("The Even Bigger Picture"). He explains that during crises, we must refocus our attention on the great progress of our civilization, on the resilience of our capitalist system and on the capacity of humans to find solutions to their problems. And don't lose sight of the extraordinary rewards generated by stocks over many years—and this, against all odds.

It is not easy in our world of immediacy to keep an eye on the long term and not be affected by the sometime huge short term fluctuations of the stock markets. In the age of smartphones and ubiquitous social media, it is almost inhuman to remain indifferent to the countless opinions of others. But impassive to outside opinions and the resulting stock market fluctuations, one must remain. The easiest way to do this is to give yourself a golden rule that I have followed since the very start: do not try to predict the stock market, stay invested in solid companies and only focus on their intrinsic value.

When you rule out the possibility of trying to forecast the markets, when you constantly keep a positive long-term outlook in mind, you remove a major potential drag on your own returns. Wittingly, you make a conscious decision to let time do its work.

To Our Partners

We believe that the companies we own are exceptional, led by top-notch people, and destined for a great future. They should continue to prudently navigate the often troubled waters of the global economy. Furthermore, the valuation assigned by the market to these outstanding companies is very similar to the valuation of an average company in the S&P 500, despite the fact that our companies have better growth prospects than average.

We also want you to know that we are fully aware of and grateful for your votes of confidence. It is imperative for us to not only select outstanding companies for our portfolios, but to also remain outstanding stewards of your capital. We certainly like to achieve good returns (and have developed a taste for it), but it must not come at the cost of taking undue risk. Our philosophy to favor companies with solid balance sheets and dominant business models, along with purchasing these companies at reasonable valuations, is central to the risk management of our portfolios.

Thank you from the entire Giverny Capital team and we wish a great 2021 to all our partners.

François Rochon and the Giverny Capital team

APPENDIX A

Investment philosophy

Note: This section is repeated from prior annual letters and is aimed at new partners.

In 2020, we saw a large increase in the number of Giverny Capital partners (the term we use for our clients). With all these newcomers, it is imperative that we write again (and again) about our investment philosophy.

Here are the key points:

- We believe that over the long run, stocks are the best class of investments.
- It is futile to predict when it will be the best time to begin buying (or selling) stocks.
- A stock return will eventually echo the increase in per share intrinsic value of the underlying company (usually linked to the return on equity).
- We choose companies that have high (and sustainable) margins and high returns on equity, good long term prospects and are managed by brilliant, honest, dedicated and altruistic people.
- Once a company has been selected for its exceptional qualities, a realistic valuation of its intrinsic value has to be approximately assessed.
- The stock market is dominated by participants that perceive stocks as casino chips. With that knowledge, we can then sometimes buy great businesses well below their intrinsic values.
- There can be quite some time before the market recognizes the true value of our companies. But if we're right on the business, we will eventually be right on the stock.

Experience and common sense teach us that an investment philosophy based on buying shares in companies that are undervalued, and holding these companies for several years, will not generate linear returns. Some years, our portfolio will have a return that is below average. This is a certainty that we must accept.

Another important point: the significant volatility of the market is often perceived negatively by many investors. It's actually the contrary. When we see stock prices as *"what other people believe the company is worth"* rather than the real value (at least in the short term), these fluctuations become our allies in our noble quest for creating wealth. Instead of fearing them, we can profit from them by acquiring superb businesses at attractive prices. The more that markets (the "other" participants) are irrational, the more likely we are to reach our ambitious performance objectives.

Benjamin Graham liked to say that the irrationality of the market provides an extraordinary advantage to the intelligent investor. The person, however, who becomes affected by short-term market fluctuations (less than 5 years) and who makes decisions based on them transforms this advantage into a disadvantage. His or her own perception of stock quotes becomes their own worst enemy. Our approach at Giverny Capital is to judge the quality of an investment over a long period of time.

So patience – ours AND that of our partners – becomes the keystone for success.

APPENDIX B

Notes on the returns of the Rochon portfolios

- The Rochon portfolio is a private family group of accounts managed by François Rochon since 1993. The returns of the period from 1993 to 1999 were realized before registration of Giverny Capital Inc. at the AMF in June of 2000.
- The Rochon Global portfolio serves as a model for Giverny Capital's clients, but returns from one client to the other can vary depending on a multitude of factors. The returns indicated include trading commissions, dividends (including foreign withholding income taxes) and other income but do not include management fees. Portfolio returns of the Rochon Global portfolio have been generated in a different environment than Giverny Capital's clients and this environment is considered controlled. For example, cash deposits and withdrawals can increase the returns of the Rochon Global portfolio. Thus, the portfolio returns of the Rochon Global portfolio are often higher than the returns realized by clients of Giverny Capital.
- Past results do not guarantee future results.
- The Rochon Canada and Rochon US portfolios are parts of the Rochon Global portfolio.
- The index benchmark group is selected at the beginning of the year and tends to be a good reflection of the asset composition of the portfolio. Weighted indices presented may not be representative of the Rochon Global portfolio. In 2020 :
  - Rochon Global Portfolio : S&P/TSX 13% S&P 500 42% Russell 2000 42% MSCI EAFE 3%
  - Rochon US Portfolio : S&P 500 100%
  - Rochon Canada Portfolio : S&P/TSX 100%

- The returns for the S&P 500 (in $USD) are provided by Standard & Poors.
- The returns for the various indices used for comparable purposes are deemed reliable by Giverny Capital.
- It should be noted that currency effects on the returns of the Rochon portfolio and indices are estimated to our best effort.
- The custodian of our client portfolios is National Bank Correspondent Network (NBCN) in Canada and TD Ameritrade Institutional and Charles Schwab in the US.
- The financial statements of the three portfolios are audited at the end of each year. The auditor's data are those provided by our custodian (NBCN). The auditor's annual reports are available upon request.
- For more information, please see the "returns" section of our website.

Forward-looking information

Some information set forth in this letter constitutes forward-looking information which involves uncertainties and other known and unknown factors that may cause actual results or events to differ materially from those anticipated in such forward-looking information. When used in this letter, words such as "expects", "anticipates", "intends", "may", "believes" and similar expressions generally identify forward-looking information. In developing the forward-looking information contained in this letter, the manager has made assumptions (for ex.: with respect to the outlook for the global economy and publicly traded companies).These assumptions are based on the manager's perception of factors believed to be relevant (for ex.: historical trends, current conditions, expected future developments). Although the manager believes that the assumptions made and the expectations represented by such information are reasonable, there can be no assurance that the forward-looking information will prove to be accurate. Actual results or events may differ materially from those expressed or implied in the forward-looking information. Giverny Capital Inc. undertakes no obligation to publicly update or revise these forward-looking statements.

GIVERNY CAPITAL

Annual Letter to our Partners 2021

Manuel Mathieu
To begin where I end, 2021
Acrylic, chalk, charcoal, and tape on canvas
Giverny Capital Collection
Photo : Guy L'Heureux

Giverny Capital Inc. – Annual Letter 2021 ©

Historical Summary

It has been nearly 30 years since I discovered the writings of Warren Buffett, Benjamin Graham, John Templeton, Philip Fisher and Peter Lynch. I then decided to begin managing a family portfolio based on an investment approach synthesized from these great money managers. By the end of 1998, after five years of satisfactory results, I decided to launch an investment management firm offering asset management services aligned with my own investment philosophy. Giverny Capital Inc. came into existence.

In 2002, Giverny hired its first employee: Jean-Philippe Bouchard (JP). A few years later, JP became a partner and participates actively in the investment selection process for the Giverny portfolio. In 2005, two new persons joined the firm who eventually became partners: Nicolas L'Écuyer and Karine Primeau. François Campeau, who joined the Giverny team in 2018, also participates in the investment selection process. In 2009, we launched a US office in Princeton, New Jersey. We also partnered with a manager from New York, David Poppe, in early 2020. He manages Giverny Capital Asset Management, based in Manhattan. Our two directors of our US offices, Patrick Léger and David Poppe, share in the culture and long-term time horizon inherent to Giverny.

We are Partners!

From the very first days of Giverny, the cornerstone of our portfolio management philosophy was to manage client portfolios in the same way that I was managing my own money. Thus, the family portfolio I've managed since 1993 (the "Rochon Global Portfolio") serves as a model for our client accounts. It is crucial to me that clients of Giverny and its portfolio managers are in the same boat! That is why we call our clients "partners".

The Purpose of our Annual Letter

The primary objective of this annual letter is to discuss the results of our portfolio companies over the course of the prior year. But even more importantly, our goal is to explain in detail the long-term investment philosophy behind the selection process for the companies in our portfolio. Our wish is for our partners to fully understand the nature of our investment process since long-term portfolio returns are the fruits of this philosophy. Over the short term, the stock market is irrational and unpredictable (though some may think otherwise). Over the long term, however, the market adequately reflects the intrinsic value of companies. If the stock selection process is sound and rational, investment returns will eventually follow. Through this letter, we provide you with the information required to understand this process. You will hopefully notice that we are transparent and comprehensive in our discussion. The reason for this is very simple: we treat you the way we would want to be treated if our roles were reversed.

The Artwork on the cover of the 2021 Letter

We illustrate the cover page of our annual letters with a reproduction of a work from the Giverny Capital Collection. This year, we have selected a painting by Quebec artist Manuel Mathieu entitled "To begin where I end".

Giverny Capital Inc. – Annual Letter 2021 ©

For the year ending December 31st 2021, the return for the Rochon Global Portfolio was 27.0% versus 21.0% for our benchmark, which represents a relative outperformance of 5.9%. The returns of the Rochon Global Portfolio and our benchmark include a loss of approximately 0.4% due to fluctuations in the Canadian currency.

Since its inception on July 1st 1993, the compounded annual return of the Rochon Global Portfolio has been 15.7% versus 9.9% for our weighted benchmark, representing an annualized outperformance of 5.9% over this period of 28 years. Our long-term and ambitious objective is to maintain an annual return 5% higher than our benchmark.

The Rochon Global Portfolio: Returns since July 1st 1993

Year *	Rochon	Index **	+ / -	$ US/Can ***
1993 (Q3-Q4)	37.0%	9.5%	27.6%	3.3%
1994	16.5%	3.7%	12.7%	6.0%
1995	41.2%	24.0%	17.2%	-2.7%
1996	28.0%	22.8%	5.2%	0.3%
1997	37.8%	28.6%	9.2%	4.3%
1998	20.6%	18.8%	1.8%	7.1%
1999	15.1%	16.3%	-1.2%	-5.7%
2000	13.4%	3.2%	10.2%	3.9%
2001	15.1%	-0.4%	15.5%	6.2%
2002	-2.8%	-18.3%	15.6%	-0.8%
2003	13.6%	14.0%	-0.4%	-17.7%
2004	1.6%	6.2%	-4.5%	-7.3%
2005	11.5%	3.6%	7.9%	-3.3%
2006	3.5%	17.0%	-13.5%	0.2%
2007	-14.4%	-11.6%	-2.8%	-14.9%
2008	-5.5%	-22.0%	16.5%	22.9%
2009	11.8%	12.2%	-0.4%	-13.7%
2010	16.1%	13.8%	2.3%	-5.3%
2011	7.6%	-1.1%	8.7%	2.2%
2012	21.2%	12.5%	8.7%	-2.2%
2013	50.2%	38.9%	11.3%	6.9%
2014	28.1%	17.8%	10.2%	9.1%
2015	20.2%	13.4%	6.8%	19.3%
2016	7.3%	14.3%	-7.0%	-3.0%
2017	13.1%	10.3%	2.9%	-6.6%
2018	-0.6%	-1.4%	0.8%	8.7%
2019	25.6%	22.3%	3.3%	-4.8%
2020	12.9%	15.1%	-2.2%	-2.0%
2021	27.0%	21.0%	5.9%	-0.4%
Total	6335.8%	1356.4%	4979.4%	-1.1%
Annualized	15.7%	9.9%	5.9%	0.0%

* All returns are adjusted to Canadian dollars
** Index is a hybrid index (S&P/TSX, S&P 500, Russell 2000, MSCI EAFE) which reflects weights of the assets at the beginning of the year.
*** Variation of the US dollar compared to the Canadian dollar

Refer to Appendix B for disclosure statements on the Rochon portfolios.

Effect of the Canadian dollar versus the US dollar on our returns

The second question I've heard most often since my start as a portfolio manager concerns the potential effect of fluctuations in the Canadian currency compared to its American counterpart (the first question is, of course, *is it a good time to invest in the stock market*?) It is informative to observe in the table above that the currency fluctuation effect ultimately had virtually no impact on our returns: since 1993, the Canadian dollar has appreciated a total of 1.1% against the US dollar—corresponding to an annualized effect of -0.04% on our returns.

The Rochon US Portfolio

We have been publishing the returns of the Rochon US Portfolio, which is entirely denominated in US dollars, since 2003. The Rochon US Portfolio corresponds approximately to the US portion of the Rochon Global Portfolio. In 2021, it realized a return of 27.9% compared to 28.7% for the S&P 500. The Rochon US Portfolio therefore underperformed its benchmark by 0.8%.

Since its inception in 1993, the Rochon US Portfolio has returned 5438%, or 15.1% on an annualized basis. During this same period, the S&P 500 has returned 1746%, or 10.8% on an annualized basis. Our added value has therefore been 4.3% annually.

Year	Rochon US	S&P 500	+/-
1993 (Q3-Q4)	32.7%	5.0%	27.7%
1994	9.9%	1.3%	8.6%
1995	54.8%	37.6%	17.2%
1996	27.0%	23.0%	4.1%
1997	32.9%	33.4%	-0.4%
1998	11.0%	28.6%	-17.6%
1999	15.9%	21.0%	-5.1%
2000	11.3%	-9.1%	20.4%
2001	8.1%	-11.9%	20.0%
2002	-4.4%	-22.1%	17.7%
2003	31.6%	28.7%	2.9%
2004	9.3%	10.9%	-1.6%
2005	12.5%	4.9%	7.5%
2006	3.3%	15.8%	-12.4%
2007	-1.7%	5.5%	-7.2%
2008	-24.3%	-37.0%	12.7%
2009	28.7%	26.5%	2.3%
2010	21.9%	15.1%	6.9%
2011	4.7%	2.1%	2.6%
2012	22.3%	16.0%	6.3%
2013	40.6%	32.4%	8.2%
2014	18.0%	13.7%	4.3%
2015	1.7%	1.4%	0.4%
2016	7.5%	12.0%	-4.5%
2017	19.7%	21.8%	-2.1%
2018	-8.3%	-4.4%	-3.9%
2019	32.1%	31.5%	0.6%
2020	16.0%	18.4%	-2.4%
2021	27.9%	28.7%	-0.8%
Total	**5438.1%**	**1745.6%**	**3692.5%**
Annualized	**15.1%**	**10.8%**	**4.3%**

Refer to Appendix B for disclosure statements on the Rochon portfolios.

Rochon Canada Portfolio

We introduced a portfolio that is 100% focused on Canadian equities in 2007. This corresponds approximately to the Canadian portion of the Rochon Global Portfolio. In 2021, the Rochon Canada Portfolio returned 30.9% versus 25.1% for the S&P/TSX, therefore outperforming its index by 5.8%.

Over 15 years, the Rochon Canada Portfolio has returned 964%, or 17.1% on an annualized basis. During this same period, our benchmark had a gain of 156%, or 6.5% on an annualized basis. Our annual added value was therefore 10.6%.

Year	Rochon Canada	S&P/TSX	+/-
2007	19.7%	9.8%	9.9%
2008	-24.6%	-32.9%	8.3%
2009	28.2%	33.1%	-4.9%
2010	26.7%	17.6%	9.1%
2011	13.5%	-8.7%	22.2%
2012	24.0%	7.2%	16.8%
2013	49.4%	13.0%	36.4%
2014	20.3%	10.6%	9.7%
2015	16.0%	-8.3%	24.3%
2016	11.0%	21.1%	-10.1%
2017	27.4%	9.1%	18.3%
2018	-7.6	-8.9%	1.3%
2019	29.0%	22.9%	6.1%
2020	12.1%	5.6%	6.5%
2021	30.9%	25.1%	5.8%
Total	964.3%	156.0%	808.3%
Annualized	17.1%	6.5%	10.6%

Refer to Appendix B for disclosure statements on the Rochon portfolios.

Our largest Canadian holding is which rose 42% in 2021—the primary source of the higher returns for our Canadian portfolio (we'll return to this corporation in the "Our Companies" section).

Since 2007, the performance of our Canadian securities has been significantly higher than that of the S&P/TSX. We would like to repeat, once again this year, that a concentrated portfolio can drastically exceed the performance of the indices.

2021

> *"It was the best of times, it was the worst of times, it was the age of wisdom, it was the age of foolishness, it was the epoch of belief, it was the epoch of incredulity, it was the season of Light, it was the season of Darkness, it was the spring of hope, it was the winter of despair, we had everything before us, we had nothing before us, we were all going direct to Heaven, we were all going direct the other way--in short, the period was so far like the present period that some of its noisiest authorities insisted on its being received, for good or for evil, in the superlative degree of comparison only."*

You probably recognize the famous first paragraph of *A Tale of Two Cities* by Charles Dickens. Written in 1859, these words still ring true in our world turned upside down by COVID-19 (Dickens' story is set at the time of the French Revolution).

It's hard not to be pleased with a 27% return this year as an investor. It was the 6th best year out of 28 for our portfolio (excluding the half year for 1993).

The companies that make up the S&P 500, as a whole, reached a record level of profitability (as measured by their profit margins). Dominant companies—like Amazon, Apple, Facebook, Google, Microsoft and Netflix—created revolutionary products and services that transformed our lives. They have economic models with almost unparalleled competitive advantages in the history of our civilization. Other companies—like Pfizer/BioNtech, Moderna and Astra Zeneca—created coronavirus vaccines at lightning speed and helped save millions of lives. The benefits of American-style capitalism are more evident than ever.

On the other hand, however, COVID-19 has greatly affected our lives for two years—first and foremost in terms of the many fatalities it caused.

The pandemic also profoundly affected the nature of what freedom and the entrepreneurial spirit mean to us. While some sectors experienced good growth in spite of the lockdown of citizens, other sectors — such as restaurants, hotels, commercial real estate, the arts, air transportation, everything related to tourism, etc. — suffered greatly. The level of dichotomy between diverse "economic cities" has been unprecedented.

And the magnitude of the challenges that await us does not stop with a pandemic. Global warming continues to be a major issue that we are slow to tackle ardently. In addition, the invasion of Ukraine in early 2022 further increases our concern about the legitimacy of democracies around the world.

Humanity's search for plenitude has faced challenges for as long humanity has existed. Just over the course of the last century—think of the Spanish flu, Nazi Germany, Soviet totalitarianism, and the proliferation of nuclear weapons—some of these challenges seemed insurmountable at the time.

It is obviously not the role of Giverny Capital to venture into the fragile and slippery terrain of political and social debates. Our mission is to be good stewards of our partners' capital. We have always been capitalists who value integrity, transparency, meritocracy, and entrepreneurial freedom. And it is these values that continue to be our beacons during these cloudy times.

No crises, whether economic, geopolitical, or social, have managed to undermine Benjamin Graham's fundamental investment approach by one iota. Almost a century ago, in 1934, Ben Graham and David Dodd published a book called *Security Analysis*. The authors stipulated that investing in the stock market is first and foremost about acquiring fractional ownership in businesses and that a business' intrinsic value will eventually be reflected in a company's stock price over the long term.

I would add that I have always been keen to emphasize the importance of another vital ingredient in the business world: optimism. Over the centuries, nothing has ever been built with pessimism. It is essential to constantly put forward a positive attitude even if, at times, it can become difficult not to succumb to feelings of fatalism.

Large numbers of citizens of London lived in abject poverty at the time of Charles Dickens. The infant mortality rate was 20% and life expectancy was 37 years in impoverished neighborhoods. Tuberculosis, cholera, rickets, scarlet fever, typhoid fever, and smallpox wreaked havoc on an annual basis.

Our capitalist civilization, despite its flaws, has enabled its citizens over the course of two centuries to double their standard of living every 36 years (an annual increase of approximately 2%). Believe it or not, this means that the average standard of living likely increased by a factor of more than 25 times since the publication of *A Tale of Two Cities*.

The percentage of people living in extreme poverty in the world has fallen from 87% in 1850 to less than 10% today. I do not believe that Charles Dickens could have envisioned such a world as we have today back in 1859.

The market in 2021

Financial markets did very well in 2021. Once again, the S&P 500, powered by a few dominant companies, outperformed the majority of indices around the world. The companies in our portfolio have also been able to hold their own.

Companies, both those in the S&P 500 and in our portfolio, saw their profits increase substantially. Part of this increase is linked to a rebound in the economy relative to 2020, a year of declining profits, and another part is related to a sharp increase in profit margins.

Inflation has certainly played a role in the rise of corporate profits. It should be noted, however, that the usual side effect of inflation, namely a probable increase in interest rates, has not yet had an effect on the economy and on interest expenses borne by companies.

Inflation is an integral part of our capitalist system. Although the rate varies from one period to another, it has continually been a factor within our system. This is why we have always favored companies that, in our opinion, have significant competitive advantages that allow them to increase the price of their products and/or services.

The Rochon Global portfolio slightly underperformed the S&P 500 in 2021. One of the reasons is that we had a lower weight than the index in technology stocks and this was the source of weaker relative returns. We of course still have investments in technology companies like

But we didn't own some of the big market stars of recent years.

In 2021, of the 27% rise in the S&P 500 (excluding dividends), Microsoft, Nvidia, Apple, Alphabet and Tesla contributed one third of the return. The other two thirds of the increase came from the other 495 companies. Of these five giga-cap stocks, which disproportionately influence the S&P 500, two seem to us to be valued extremely optimistically by the market: Nvidia and Tesla.

Nvidia had a market value of $735 billion dollars at the end of the year. Analysts predict revenues of $35 billion in 2022 and about $14 billion in profits. The estimated price-earnings is therefore more than 50x. As for Tesla, the company's market value was over $1 trillion dollars (1000 billion) at the end of the year. Its estimated revenues in 2022 are $84 billion and its profits estimated at around $11 billion for a price-earnings of around 90x.

For more than 28 years, we have always advocated an approach favoring a selection of exceptional companies with a level of intrinsic risk, both in terms of the business model and the stock market valuation, that we've appraised to be lower than average.

And there are always opportunities to do better than average for investors who have taken a "value" approach. We thus continue to unearth securities for our portfolio which—we believe—should be able to continue generating higher returns than the indices.

The flavor of the day

Each year, this section addresses securities or segments of the investment world that seem dangerously popular to us. The purpose, of course, is not to criticize fellow investors. We are aware that investing wisely is not easy. Our objective is to simply point out valuations levels to our partners that appear to us as reflecting overly optimistic scenarios and therefore present a higher level of risk to investors given an eventual normalization of valuations.

A strange trend over the last few years is that of stocks that have been called "meme stocks" (the best known being GameStop). Groups of investors believe that they can control the price of a stock without any correlation to its intrinsic value[1]. This strategy is doomed to failure in our opinion because our fundamental principle is that the price of a stock invariably ends up trading at a level close to its intrinsic value over the long term. But this craze is only limited to a few stocks.

Everything related to cryptocurrencies still seems to be the flavor of the day and on a much larger scale. The total value of all these virtual currencies reached $2 trillion (2000 billion) dollars by the end of the year. In our humble opinion, an entire financial sector seems to have been created on an asset whose intrinsic value seems completely arbitrary. Wall Street is obviously on board, sniffing out a whole new source of commissions, and several financial institutions followed for fear of missing the gravy train.

Even a few entities from the art world have joined this universe with the creation of NFTs (non-fungible tokens) which is—to put it simply—a form of digital securitization for works of art. It seems to me that some dangers also exist for this new product which has similarities to cryptocurrencies.

There is a nebulous line between what could be considered an investment and what could be considered speculation. One way to discern them is to ask yourself the following: if the stock market were closed for 10 years, would I be happy owning this security?

An investor believes that if the company in which he is a shareholder increases its intrinsic value by increasing its profits at a rate of (say) 10% per year, in 10 years, his or her investment will have increased its intrinsic value by 160%. Owning a productive asset (and being able to value it) does not require a short-term stock price; in the same way that the value of a dairy farm is measured by the amount of milk it produces. If the only objective, however, is the hope to sell the security to someone else for more in a fairly short period of time, this requires a short-term price and this resembles more a form of speculation.

[1] A practice similar to the activity known as "cornering the market".

Speculation is, of course, neither illegal nor immoral. But speculating can be a perilous activity—at any time during human history. This is obviously not the first time that an asset has become dangerously popular. One of the most famous speculative bubbles was that of tulip bulbs in Holland during the 17th century. At its height, in early 1637, the price of a single tulip bulb corresponded to the price of 12 acres of land[2]. The value of the most beautiful tulip bulb at the time has been estimated at more than 5,500 guilders—or the equivalent of approximately $750,000 in today's US dollars.

The (financial) history of The Angelus by Jean-François Millet

The Angelus is a painting by the great French painter Jean-François Millet, produced between 1857 and 1859. It is a masterpiece which is exhibited at the Musée d'Orsay in Paris and is also one of my favorite paintings in the history of art.

Jean-François Millet, *L'Angélus*, 1857-1859; Oil on canvas; 56x66 cm
Bequest of Alfred Chauchard, 1909; Paris, Musée d'Orsay; Photo: F.R.

You are probably wondering where I'm going with this at this point—isn't this a letter intended for financial investors? Leaving aside the incredible artistic contribution of this painting, I would like to tell you about the misadventures of one of its owners.

Before ending up at the Louvre (and then eventually at the Musée d'Orsay), the painting had several owners. Although he never took delivery, Thomas Gold Appleton commissioned the work around 1857. The piece was initially acquired in 1860 for 1,800 francs by Alfred Feydeau. The painting then changed hands a few times, eventually to be acquired for 160,000 francs in 1881 by a copper industrialist, Eugène Secrétan.

Of humble origins, Mr. Secrétan was self-taught. Through hard work, he became one of the French specialists in the processing of non-ferrous metals and became head of the *Société industrielle et commerciale des métaux*, a holding company comprised of six companies and more than 3,000 employees. These companies were specialized in the mining of copper, lead and tin. In 1878, he was one of the donors of the copper used to create the Statue of Liberty (300 tons donated) and was named Knight of the Legion of Honor.

[2] According to the book *Extraordinary Popular Delusions and the Madness of Crowds* by Charles Mackay

He then created an exceptional collection of works of art (including The Angelus) with his fortune.

Mr. Secrétan, attracted to speculation, began to acquire tin and lead in the fourth quarter of 1886. He then discovered that the world supply of copper had been reduced to 40,000 tons and that prices fell below 36 pounds sterling per ton. He gathered up around sixty million francs to control the supply of copper with the help of a group of financiers. In three months, prices rose to 84 pounds per ton. In 1888, his company had to raise 37.5 million francs in capital to cope with higher prices and to fund additional mining activities.

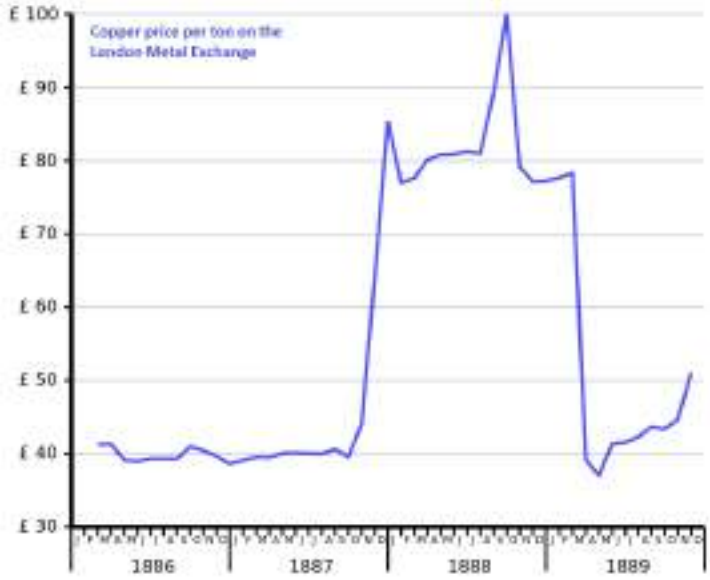

Copper prices at the London Metal Exchange, during the cornering of the copper market[3].

In early March 1889, following the greatest financial speculation in the history of copper production, the price of copper collapsed, and with it the shares of *Société industrielle et commerciale des métaux*. In financial difficulties, Mr. Secrétan had to part ways with his extensive art collection, including The Angelus. The businessman and collector Alfred Chauchard acquired it for the incredible sum of 750,000 francs—a price that held the record for the most expensive modern painting ever purchase for quite some time. Mr. Chauchard bequeathed The Angelus to the Louvre upon his death in 1909.

Mr. Secrétant, however, managed to recover from his losses and began rebuilding his business using a new technology for manufacturing copper tubes by electrolysis. But despite his end-of-life success, copper speculation caused him tremendous troubles, as well as the loss of The Angelus.

It is such a shame to see people who are already rich speculate to the point of endangering their fortunes. As Warren Buffett says, “You just need to be rich once.” Speculation today (with bitcoin or otherwise) is certainly more sophisticated than before, but the very nature of speculation remains just as dangerous.

[3] Source: Wikipedia

Lou Simpson (1936-2022)

Source: Crain's Chicago Business

It is with great sadness that we learned of the passing of Louis Simpson in January 2022. Lou had a fantastic career in the investment world. He worked as a portfolio manager at GEICO (a subsidiary of Berkshire Hathaway since 1996) for more than 30 years, from 1979 to 2010. He obtained exceptional returns during these four decades.

For several years, Warren Buffett pointed to Lou as his potential successor as fund manager under Berkshire. I invite you to read (or re-read) the excellent book "The Warren Buffett CEO" by Robert Miles in which a chapter is devoted to Lou. Our colleague Allen Benello also devoted a chapter to Lou in the book "Concentrated Investing".

Lou decided to leave Berkshire Hathaway in the early 2010s and founded his own firm with his wife Kimberly: SQ Advisors. Jean-Philippe and I had the good fortune to meet him at his home in 2014. We've had long conversations with Lou and Kimberly about equity investments a few times since then. We also shared other passions with them, such as the arts and wine. In their constant great generosity, Lou and Kimberly shared their best bottles when JP and I went to visit them in Chicago. It's not every day that you get to share a Château Margaux with one of our heroes!

Lou has created a lot of wealth for GEICO shareholders, for Berkshire and for its clients. Lou and Kimberly have also been very generous with their fortune through numerous philanthropic activities. I will miss him very much.

Owner's Earnings

At Giverny Capital, we do not evaluate the quality of an investment by the short-term fluctuations in its stock price. Our wiring is such that we consider ourselves owners of the companies in which we invest. Consequently, we study the growth in earnings of our companies and their long-term outlook.

Since 1996, we have presented a chart depicting the growth in the intrinsic value of our companies using a measurement developed by Warren Buffett: "owner's earnings". We arrive at our estimate of the increase in intrinsic value of our companies by adding the growth in earnings per share (EPS) and the average dividend yield of the portfolio. We believe that analysis is not exactly precise but approximately correct. In the non-scientific world of the stock market, we believe in the old saying: "It is better to be roughly right than precisely wrong."

	Rochon Global Portfolio			S&P 500		
Year ***	Value *	Market **	Difference	Value *	Market **	Difference
1996	14%	29%	15%	13%	23%	10%
1997	17%	35%	18%	11%	33%	22%
1998	11%	12%	1%	4%	29%	25%
1999	16%	12%	-4%	12%	21%	9%
2000	19%	10%	-9%	15%	-9%	-24%
2001	-9%	10%	19%	-21%	-12%	9%
2002	19%	-2%	-21%	13%	-22%	-35%
2003	31%	34%	3%	12%	29%	16%
2004	21%	8%	-12%	20%	11%	-10%
2005	14%	15%	0%	15%	5%	-10%
2006	14%	3%	-11%	24%	16%	-8%
2007	10%	0%	-10%	-4%	5%	9%
2008	-3%	-22%	-19%	-31%	-37%	-6%
2009	0%	28%	28%	6%	26%	20%
2010	22%	22%	0%	50%	15%	-35%
2011	17%	6%	-11%	18%	2%	-16%
2012	19%	23%	4%	9%	16%	7%
2013	16%	42%	26%	8%	32%	24%
2014	13%	19%	6%	10%	14%	4%
2015	11%	4%	-7%	1%	1%	0%
2016	9%	10%	1%	4%	12%	8%
2017	14%	20%	7%	14%	22%	11%
2018	20%	-8%	-28%	23%	-4%	-26%
2019	10%	31%	20%	3%	31%	29%
2020	-2%	15%	17%	-9%	18%	27%
2021	32%	28%	-4%	48%	29%	-19%
Total	2474%	2817%	343%	676%	1152%	476%
Annualized	13.3%	13.9%	0.5%	8.2%	10.2%	2.0%

* Estimated growth in earnings plus dividend yield
** Market performance, inclusive of dividends (refer to Appendix B for disclosure statements on our returns)
*** Results estimated without currency effects

This year, the intrinsic value of our companies, as a whole, increased by about 32% (with dividends included). Despite some of the changes to our portfolio during the year, we consider our estimate of EPS growth at our companies during 2021 to adequately reflect their economic realities. The performance of our portfolio on the stock market was a gain of roughly 28% (net of any currency effect). Our stocks therefore realized a price performance that was less than their underlying economic performance. This corrects, in part, the inverse situation which occurred in 2020.

The companies that make up the S&P 500 index also experienced a sharp increase in their profits this year, rising by around 48%. The index achieved a total performance of 29% (in US dollars).

Since 1996, our companies have grown their value by about 2474% and their stocks have achieved a total return of approximately 2817%. On an annualized basis, we achieved an intrinsic performance of 13.3% versus 13.9% for their stock market performance (dividend included in both cases).

Here are the figures over the course of the last decade, from the end of 2011 to the end of 2021:

	Rochon Global Portfolio			S&P 500		
Annualized	Value *	Market **	Difference	Value *	Market **	Difference
2011-2021 ***	14.0%	17.6%	3.6%	9.8%	16.5%	6.7%

* Estimated growth in earnings plus dividend yield
** Market performance, inclusive of dividends (refer to Appendix B for disclosure statements on our returns)
*** Results estimated without currency effects

It is interesting to note that over the last decade our companies have increased their intrinsic value by 14% annually compared to almost 10% annually for the companies in the S&P 500 (roughly in line with our long-term historical figures). Our stocks have done well, increasing by approximately 17.6% per year (net of any currency effect). Thus, our companies on the stock market have done about 3.6% per year better than the intrinsic performance of the underlying companies. This reflects an increase in the price-earnings ratio of our companies during this decade. Indeed, in 2011, equities in general were greatly undervalued and the subsequent revaluation seems justified to us.

However, for the S&P 500, the increase in valuation was much greater (around 6.7% annually). So the stock market revaluation for the index was much more pronounced than for our companies and probably also vis-à-vis most of the other indices in the world. In our opinion, it is very unlikely that this will continue in the future.

We are confident that if our companies continue to grow their intrinsic value at higher-than-average rates, the market performance of their shares will follow suit—in absolute terms and also relative to indices, as it has since 1996.

Five-year Post-mortem: 2016

Like we do every year, we go through a five-year post-mortem analysis. We believe that studying our decisions in a systematic manner, and with the benefit of hindsight, enables us to learn from both our achievements and our errors. We made few changes to the portfolio in 2016, but here are a few remarks from reviewing the annual letter from that year.

In 2016, we acquired shares in Heico company. This company has two divisions: the manufacturing of parts for the aviation industry and an electronic products division. The first is the one that caught our attention. Heico sells alternative (non-original) aeronautical parts to aviation companies. It is very difficult to obtain Federal Aviation Administration (FAA) approvals to supply aircraft parts. With its vast number of approved products, developed and commercialized over several years, Heico has a very significant competitive advantage.

Of course, Heico has been greatly affected by the major recent issues affecting the airline industry around the world. Despite this, from 2016 to 2021, Heico's EPS grew from $1.39 to $2.51, the equivalent of an annual growth rate of 13%. The stock has done even better in the stock market, climbing more than 200% since our first purchase. One of the reasons for our purchase in 2016 was our admiration for the members of the Mendelson family who run the company—this admiration has only increased since.

Our Companies

Note: This section of the annual letter is always long. We want to provide you with an accurate update of the companies in our portfolio companies. In fact, we are trying to present you with the information we would like to know if our roles were reversed. Prices are as of December 31, 2021.

Section of the letter reserved for Giverny Capital's partners

The Podium of Errors

Following in the "Givernian" tradition, here are our three annual medals for the "best" errors of 2021 (or from past years). It is with a constructive attitude, in order to always improve as investors, that we provide this detailed analysis. As is often the case with stocks, errors from omission (non-purchases) are often more costly than errors from commission (purchases)… even if we don't see those on our statements.

Bronze Medal: A2 Milk

We acquired A2 Milk during the summer of 2020. Based in New Zealand, the company manufactures milk and milk products (primarily infant formula) based on a variant of milk that many consumers find easier to digest than conventional milk. The A2 beta casein protein is present in breast milk and some breeds of dairy cows, although most dairy cows produce both A1 and A2 beta casein protein. It is the A1 protein that may cause discomfort in some consumers. The company has become a leader in this niche and had experienced strong growth in recent years. One of the key markets for the company is China.

Some of its sales in China were through independent distributors who traveled to Australia to buy the company's infant formulas and bring them back to China (a distribution method called *daigou*). During the first part of 2020, this mode of distribution continued despite the pandemic and reassured us of the solidity of this business model. But then, the daigou slowed considerably later in 2020. The company had to reduce its sales and profitability forecasts and the stock fell.

We thought at the time that it was a temporary problem that should resolve itself within a few quarters. We realized in 2021 that A2 Milk's challenges were more persistent than anticipated and we decided to sell our shares.

We had invested about 2% of the portfolio in this company and sold at a loss—it was a very disappointing investment.

Silver Medal: Old Dominion Freight Line

I have always followed the trucking industry since the beginning of my investment career. We once held shares in the Quebec company Groupe Goyette. Subsequently, we had shares in Heartland Express and then Knight Transportation in the early 2000s. It's an industry that, when well managed can have good fundamentals despite its cyclical tendencies and its dependence on various factors such as finding qualified drivers and dealing with the price of fuel.

The stock market experienced (another) correction in 2018 and I had studied Old Dominion Freight Line, based in North Carolina. The company's track record was phenomenal. From 2006 to 2018, EPS had grown from $0.58 to $4.97, or an annual growth rate of nearly 20%. Its net profit margins reached 15% which is a rare level in the industry. The management team seemed to me competent and motivated (management owns 12% of the shares). The stock was trading at around $90, or 18 times the company's profits. This valuation seemed high to me for a trucking company, even for the best, so I decided to wait.

In 2021, the company achieved EPS of $8.86 and the outlook is for over $10 in 2022. EPS will likely have doubled in four years and the stock is currently trading at $288. We could therefore have tripled our money in a little over three years if I had agreed to pay a slightly high evaluation (justified *a posteriori*) for this exceptional company.

Gold Medal: Fox Factory Holding

Jean-Philippe and I frequently attended the ICR investment conference in Orlando before the pandemic. Several dozen companies present their outlooks and no one needs to twist our arms to warm up for a few days in early February.

At the 2016 conference, I listened to a presentation from a company I had never heard of: Fox Factory Holding. The company was a leader in a niche product: shock absorbers for mountain bikes. It had also started selling products for utility trucks and the company was very profitable and had good growth prospects. The stock was trading at around $16, which was a reasonable valuation for the expected EPS of $0.96 in 2016. The stock then quickly climbed to $20 and I chose to wait for a *better price*.

I have continued to follow the company closely and its performance has been nothing short of phenomenal. It has developed many new products and new markets and, in only five years, its revenues have more than tripled and its EPS reached $4.50 in 2021—or more than four times the level of 2016. Analysts forecast EPS greater than $5 for 2022.

The stock has soared 500% in six years and reached $100.

Conclusion: The greatest mistakes by investors (take 4).

As I stated at the beginning of this letter, the question that comes up most often is always the same: "Is this the right time to invest in the stock market?" It is good to come back to this important question in these (once again) uncertain and worrying times.

Let's first go back to our 2003 letter to partners to answer this question, when I presented an article by André Gosselin on investor results versus the performance of the S&P 500. He explained that there was a huge difference between the results of mutual fund holders in the United States and the leading stock market index.

André was inspired by the results of the research firm Dalbar on the behavior of stock market investors. This firm publishes a fascinating research report annually on the results of all US investors invested in mutual funds compared to indices. We also referred to this data in the 2006 and 2014 annual letters.

The underperformance of investors vis-à-vis the indices over a long period is such that André published a book in 2004 on this subject entitled "An open letter to irresponsible investors". The title is a little harsh, but André

nevertheless presents several important points for investors. I am talking again about this book because a second edition has just been published[4]. André hence provides an update on Dalbar's figures.

"According to the financial information firm Dalbar, the holder of equity funds in the United States achieved an average annual return of 6.24% between 1990 and 2020, while the return of the S&P 500 index has been 10.7%; a shortfall of 4.46% per year in terms of annualized return. .... For the holder of fixed-income mutual funds, the situation is worse. Also between 1990 and 2020, investors who invested in fixed-income funds settled for an annual return of 0.45%, while the benchmark Bloomberg-Barclays Aggregate Bond Index provided an average annual return of 5.86%".

This 4.5% annual underperformance over three decades for holders of equity mutual funds (and even more so for bond funds) cannot be explained by management fees. The only plausible explanation is that investors, as a whole, consistently buy and sell their funds at inopportune times. In other words, they veer from stocks to bonds and back inappropriately. This underperformance is therefore mainly behavioral in origin.

The only solution for the investor who wants to avoid falling into the trap of this behavioral penalty is not to try to predict the stock market. It is vital to always keep this in mind, especially in periods of declines and/or crises.

From the start, I made the decision to always be 100% invested in the stock market. Rather than futilely attempting to predict the market, I focused my efforts on finding high quality companies for our portfolios. It is the opinion of all of us at Giverny Capital that this remains the strategy with the best probability of success.

To Our Partners

We believe that the companies we own are exceptional, led by top-notch people, and destined for a great future. They should continue to prudently navigate the often-troubled waters of the global economy. Furthermore, the valuation assigned by the market to these outstanding companies is very similar to the valuation of an average company in the S&P 500, despite the fact that our companies have better growth prospects than average.

We realize that we live in uncertain times, although a wise observer of human history might ask the question: "Were they ever certain?". We want you to know that we are fully aware of and grateful for your vote of confidence. It is imperative for us to not only select outstanding companies for our portfolios, but to also remain outstanding stewards of your capital. We certainly like to achieve good returns (and have taken a liking to it), but it must not come at the cost of taking undue risk. Our philosophy is to favor companies with solid balance sheets and dominant business models, along with purchasing these companies at reasonable valuations.

Thank you from the entire Giverny Capital team and we wish a great 2022 to all our partners.

François Rochon and the Giverny Capital team

[4] André Gosselin – *Lettre ouverte aux investisseurs irresponsables* – 2022 edition – Éditions Guy Saint-Jean.

APPENDIX A

Investment philosophy

Note: This section is repeated from prior annual letters and is aimed at new partners.

In 2021, we saw a large increase in the number of Giverny Capital partners (the term we use for our clients). With all these newcomers, it is imperative that we write again (and again) about our investment philosophy.

Here are the key points:

- We believe that over the long run, stocks are the best class of investments.
- It is futile to predict when it will be the best time to begin buying (or selling) stocks.
- A stock return will eventually echo the increase in per share intrinsic value of the underlying company (usually linked to the return on equity).
- We choose companies that have high (and sustainable) margins and high returns on equity, good long term prospects and are managed by brilliant, honest, dedicated and altruistic people.
- Once a company has been selected for its exceptional qualities, a realistic valuation of its intrinsic value has to be approximately assessed.
- The stock market is dominated by participants that perceive stocks as casino chips. With that knowledge, we can then sometimes buy great businesses well below their intrinsic values.
- There can be quite some time before the market recognizes the true value of our companies. But if we're right on the business, we will eventually be right on the stock.

Experience and common sense teach us that an investment philosophy based on buying shares in companies that are undervalued, and holding these companies for several years, will not generate linear returns. Some years, our portfolio will have a return that is below average. This is a certainty that we must accept.

Another important point: the significant volatility of the market is often perceived negatively by many investors. It's actually the contrary. When we see stock prices as *"what other people believe the company is worth"* rather than the real value (at least in the short term), these fluctuations become our allies in our noble quest for creating wealth. Instead of fearing them, we can profit from them by acquiring superb businesses at attractive prices. The more that markets (the "other" participants) are irrational, the more likely we are to reach our ambitious performance objectives.

Benjamin Graham liked to say that the irrationality of the market provides an extraordinary advantage to the intelligent investor. The person, however, who becomes affected by short-term market fluctuations (less than 5 years) and who makes decisions based on them transforms this advantage into a disadvantage. His or her own perception of stock quotes becomes their own worst enemy. Our approach at Giverny Capital is to judge the quality of an investment over a long period of time.

So patience – ours AND that of our partners – becomes the keystone for success.

APPENDIX B

Notes on the returns of the Rochon portfolios

- The Rochon portfolio is a private family group of accounts managed by François Rochon since 1993. The returns of the period from 1993 to 1999 were realized before registration of Giverny Capital Inc. at the AMF in June of 2000.
- The Rochon Global portfolio serves as a model for Giverny Capital's clients, but returns from one client to the other can vary depending on a multitude of factors. The returns indicated include trading commissions, dividends (including foreign withholding income taxes) and other income but do not include management fees. Portfolio returns of the Rochon Global portfolio have been generated in a different environment than Giverny Capital's clients and this environment is considered controlled. For example, cash deposits and withdrawals can increase the returns of the Rochon Global portfolio. Thus, the portfolio returns of the Rochon Global portfolio are often higher than the returns realized by clients of Giverny Capital.
- Past results do not guarantee future results.
- The Rochon Canada and Rochon US portfolios are parts of the Rochon Global portfolio.
- The index benchmark group is selected at the beginning of the year and tends to be a good reflection of the asset composition of the portfolio. Weighted indices presented may not be representative of the Rochon Global portfolio. In 2021:
  - Rochon Global Portfolio : S&P/TSX 13% S&P 500 40% Russell 2000 40% MSCI EAFE 7%
  - Rochon US Portfolio : S&P 500 100%
  - Rochon Canada Portfolio : S&P/TSX 100%

- The returns for the S&P 500 (in $USD) are provided by Standard & Poors.
- The returns for the various indices used for comparable purposes are deemed reliable by Giverny Capital.
- It should be noted that currency effects on the returns of the Rochon portfolio and indices are estimated to our best effort.
- The custodian of our client portfolios is National Bank Correspondent Network (NBCN) in Canada and TD Ameritrade Institutional and Charles Schwab in the US.
- The financial statements of the three portfolios are audited at the end of each year. The auditor's data are those provided by our custodian (NBCN). The auditor's annual reports are available upon request.
- For more information, please see the "returns" section of our website.

Forward-looking information

Some information set forth in this letter constitutes forward-looking information which involves uncertainties and other known and unknown factors that may cause actual results or events to differ materially from those anticipated in such forward-looking information. When used in this letter, words such as "expects", "anticipates", "intends", "may", "believes" and similar expressions generally identify forward-looking information. In developing the forward-looking information contained in this letter, the manager has made assumptions (for ex.: with respect to the outlook for the global economy and publicly traded companies). These assumptions are based on the manager's perception of factors believed to be relevant (for ex.: historical trends, current conditions, expected future developments). Although the manager believes that the assumptions made and the expectations represented by such information are reasonable, there can be no assurance that the forward-looking information will prove to be accurate. Actual results or events may differ materially from those expressed or implied in the forward-looking information. Giverny Capital Inc. undertakes no obligation to publicly update or revise these forward-looking statements.

The Psychology of Human Misjudgment

by Charles T. Munger

PREFACE

When I read transcripts of my psychology talks given about fifteen years ago, I realized that I could now create a more logical but much longer "talk," including most of what I had earlier said. But I immediately saw four big disadvantages.

First, the longer "talk," because it was written out with more logical completeness, would be more boring and confusing to many people than my earlier talk. This would happen because I would use idiosyncratic definitions of psychological tendencies in a manner reminiscent of both psychology textbooks and Euclid. And who reads textbooks for fun or revisits Euclid?

Second, because my formal psychological knowledge came only from skimming three psychology textbooks about fifteen years ago, I know virtually nothing about any academic psychology later developed. Yet, in a longer talk containing guesses, I would be criticizing much academic psychology. This sort of intrusion into a professional territory by an amateur would be sure to be resented by professors who would rejoice in finding my errors and might be prompted to respond to my published criticism by providing them. Why should I care about new criticism? Well, who likes new hostility from articulate critics with an information advantage?

Third, a longer version of my ideas would surely draw some disapproval from people formerly disposed to like me. Not only would there be stylistic and substantive objections, but also there would be perceptions of arrogance in an old man who displayed much disregard for conventional wisdom while "popping-off" on a subject in which he had never taken a course. My old Harvard Law classmate, Ed Rothschild, always called such a popping off "the shoe button complex," named for the condition of a family friend who spoke in oracular style on all subjects after becoming dominant in the shoe button business.

Fourth, I might make a fool of myself. Despite these four very considerable objections, I decided to publish the much-expanded version. Thus, after many decades in which I have succeeded mostly by restricting action to jobs and methods at which I was unlikely to fail, I have now chosen a course of action in which (1) I have no significant personal benefit to gain, (2) I will surely give some pain to family members and friends, and (3) I may make myself ridiculous. Why am I doing this?

One reason may be that my nature makes me incline toward disparaging and talking about errors in conventional wisdom. And despite years of being smoothed out by the hard knocks that were inevitable for one with my attitude, I don't believe life ever knocked all the boy's brashness out of the man.

A second reason for my decision is my approval of the attitude of Diogenes when he asked: "Of what use is a philosopher who never offends anybody?"

My third and final reason is the strongest. I have fallen in love with my way of looking out psychology because it has been so useful for me. And so, before I die, I want to tribute to some extent the largest practices of three characters: the protagonist in John Bunyan's Pilgrim's Progress, Benjamin Franklin, and my first employer, Ernest Buffett. Bunyan's character, the knight wonderfully named "Old Valiant-for-Truth," makes the only practical bequest available to him when he sets at the end of his life: "My sword I leave to him who can wear it." And like this man, I don't mind if I have misappraised my sword, provided I have tried to see it correctly, or that many will not wish to try it, or that some who try to wield it may find it serves them not. Ben Franklin, to my great benefit, left behind his autobiography, his *Almanacks*, and much else. And Ernest Buffett did the best he could in the same mode when he left behind "How to Run a Grocery Store and a Few Things I Have Learned about Fishing." Whether or not this last contribution to the genre was the best, I will not say. But I will report that I have now known four generations of Ernest Buffett's descendants and that the results have encouraged my imitation of the founder.

I have long been very interested in avoiding thinking errors. However, I was educated in an era wherein the contributions of non-patient-treating psychology to an understanding of misjudgment met little approval from members of the mainstream elite. Instead, interest in psychology was pretty well confined to a group of professors who talked and published mostly for themselves, with much natural detriment from isolation and groupthink. And so, right after my time at Caltech and Harvard Law School, I possessed a vast ignorance of psychology. Those institutions failed to require knowledge of the subject. And, of course, they couldn't integrate psychology with their other subject matter when they didn't know psychology. Also, like the Nietzsche character who was proud of his lame leg, the institutions were proud of their willful avoidance of "fuzzy" psychology and "fuzzy" psychology professors.

I shared this ignorant mindset for a considerable time. And so did a lot of other people. What are we to think, for instance, of the Caltech course catalogue that for years listed just one psychology professor, self-described as a "Professor of Psychoanalytical Studies," who taught both "Abnormal Psychology" and "Psychoanalysis in Literature"?

Soon after leaving Harvard, I began a long struggle to get rid of the most dysfunctional part of my psychological ignorance. Today, I will describe my long struggle for elementary wisdom and a brief summary of my endeavor notions. After that, I will give examples, many quite vivid and interesting to me, of both psychology at work and antidotes to psychology based dysfunction. Then, I will end by asking and answering some general questions

raised by what I have said. This will be a long talk.

When I started law practice, I had respect for the power of genetic evolution and appreciation of man's many evolution-based resemblances to less cognitively gifted animals and insects. I was aware that man was a "social animal," gregarious and automatically influenced by behavior he observed in men around him. I also knew that man lived, like barnyard animals and monkeys, in limited size dominance hierarchies, wherein he tended to respect authority and to like and cooperate with his own hierarchic members while displaying considerable distrust and dislike for competing men not in his own hierarchy.

But this generalized, evolution-based theory structure was inadequate to enable me to cope properly with the cognition I encountered. I was soon surrounded by much extreme irrationality, displayed in patterns and subpatterns. So surrounded, I could see that I was not going to cope as well as I wished with life unless I could acquire a better theory-structure on which to hang my observations and experiences. By then, my craving for more theory had a long history. Partly, I had always loved theory as an aid in puzzle solving and as a means of satisfying my monkey-like curiosity. And, partly, I had found that theory-structure was a superpower in helping one get what one wanted. As I had early discovered in school wherein I had excelled without labor, guided by theory, while many others, without mastery of theory, failed despite monstrous effort. Better theory, I thought, had always worked for me and, if now available, could make me acquire capital and independence faster and better again everything I loved. And so I slowly developed my own system of psychology, more or less in the self-help style of Ben Franklin and with the determination displayed in the refrain of the nursery story, "'Then I'll do it myself,' said the little red hen."

I was greatly helped in my quest by two turns of mind. First, I had long looked for assistance by inversion in the intense manner counseled by the great algebraist, Jacobi: "Invert, always invert." I sought good judgment mostly by collecting instances of bad judgment, then pondering ways to avoid such outcomes. Second, I became so avid a collector of instances of bad judgment that I paid no attention to boundaries between professional territories. After all, why should I search for some tiny, unimportant, hard-to-find new stupidity in my own field when some large, important, easy to find stupidity was just over the fence in the other fellow's professional territory? Besides, I could already see that real-world problems didn't nearly fit within territorial boundaries. They jumped right across. And I was as delicious of any approach that, when two things were inextricably intertwined and interconnected, would try and think about one thing but not the other. I was afraid, if I tried any such restricted approach, that I would end up, in the immortal words of John L. Lewis, "with no brain at all, just a neck that had healed over."

Pure curiosity, somewhat later, made me wonder how and why destructive cults were often able, over a single long weekend, to turn many tolerably normal people into brainwashed zombies and thereafter keep them in that state indefinitely. I resolved that I would eventually find a good answer to this cult question if I could do so by general reading and much musing.

I also got curious about social insects. It fascinated me that both the fertile female honeybee and the fertile female harvester ant could multiply their quite different normal life expectancies by exactly twenty by engaging in one gangbang in the air. The extreme success of the ants also fascinated me—how a few behavioral algorithms caused such extreme evolutionary success grounded in extremes of cooperation within the breeding colony and, almost always, extremes of lethal hostility toward ants outside the breeding colony, even ants of the same species.

Motivated as I was, by midlife I should probably have turned to psychology textbooks, but I didn't, displaying my share of the outcome predicted by the German folk saying, "We are too soon old and too late smart." However, as I later found out, I may have been lucky to avoid for so long the academic psychology that was then laid out in most textbooks. These would not then have guided me well with respect to cults and were often written as if the authors were collecting psychology experiments as a bow collects butterflies—with a passion for more butterflies and more contact with fellow collectors and little craving for synthesis in what is already possessed. When I finally got to the psychology texts, I was reminded of the observation of Jacob Viner, the great economist, that poor an academic is like the ruffle bound, an animal so trained and bred for one narrow purpose that it is no good at anything else. I was also appalled by hundreds of pages of extremely nonsensical musing about comparative weights of nature and nurture in human outcomes. And I found that introductory psychology texts, by and large, didn't deal appropriately with a fundamental issue. Psychological tendencies tend to be both numerous and inseparably intertwined, now and forever, as they interplay in life. Yet the complex parsing out of effects from intervened tendencies was usually avoided by the writers of the elementary texts. Possibly the authors did not wish, through complexity, to repel entry of new devotees to their discipline. And, possibly, the cause of their inadequacy was the one given by Samuel Johnson in response to a woman who inquired as to what accounted for his dictionary's misdefinition of the word "pastern." "Pure ignorance," Johnson replied. And, finally, the new writers showed little interest in describing standard antidotes to standard psychology-driven folly, and they thus avoided most discussion of exactly what most interested me.

But academic psychology has some very important merits alongside its defects. I learned this eventually, to

the course of general reading, from a book, *Influence*, aimed at a popular audience, by a distinguished psychology professor, Robert Cialdini, at Arizona State, a very big university. Cialdini had made himself into a superrenowned "Regents' Professor" at a very young age by devising, describing, and explaining a vast group of clever experiments in which man manipulated man to his detriment. With all of this made possible by man's intrinsic thinking flaws.

I immediately sent copies of Cialdini's book to all my children. I also gave Cialdini a share of Berkshire stock [Class A] to thank him for what he had done for me and the rubes. Incidentally, the sale by Cialdini of hundreds of thousands of copies of a book about social psychology was a huge feat, considering that Cialdini didn't claim that he was going to improve your sex life or make you any money.

Part of Cialdini's large book-buying audience came because, like me, it wanted to learn how to become less often tricked by salesmen and circumstances. However, as an outcome not sought by Cialdini, who is a profoundly ethical man, a huge number of his books were bought by salesmen who wanted to learn how to become more effective in misleading customers. Please remember this perverse outcome when my discussion comes to incentive-caused bias as a consequence of the superpower of incentives.

With the push given by Cialdini's book, I soon skimmed through three much used textbooks covering introductory psychology. I also pondered considerably while crafting synthesis and taking into account all my previous reading and experience. The result was Munger's partial summary of the non-patient-treating, non-nature vs. nurture weighing parts of nondevelopmental psychology. This material was stolen from its various discoverers (most of whose names I did not even try to learn), often with new descriptions and rules selected to fit Munger's notion of what makes recall easy for Munger, then revised to make Munger's use easy as he seeks to avoid errors.

I will start my summary with a general observation that helps explain what follows. This observation is grounded in what we know about social insects. The limitations inherent in evolution's development of the nervous-system cells that control behavior are beautifully demonstrated by these insects, which often have a mere 100,000 or so cells in their entire nervous systems, compared to man's multiple billions of cells in his brain alone.

Each ant, like each human, is composed of a living physical structure plus behavioral algorithms in its nerve cells. In the ant's case, the behavioral algorithms are few in number and almost entirely genetic in origin. The ant learns a little behavior from experiences, but mostly it merely responds to ten or so stimuli with a few simple responses programmed into its nervous system by its genes, sometimes walk round and round until they perish.

It seems obvious, to me at least, that the human brain must often operate counterproductively just like the ant's, from unavoidable oversimplicity in its mental process, albeit usually in trying to solve problems more difficult than those faced by ants that don't have to design airplanes.

Naturally, the simple ant behavior system has experience limitations because of its limited nerve system repertoire. For instance, one type of ant, when it smells a pheromone given off by a dead ant's body in the hive, immediately responds by cooperating with other ants in carrying the dead body out of the hive. And Harvard's great E.O. Wilson performed one of the best psychology experiments ever done when he painted dead-ant pheromone on a live ant. Quite naturally, the other ants dragged that useful live ant out of the hive even though it kicked and otherwise protested throughout the entire process. Such is the brain of the ant. It has a simple program of responses that generally work out all right, but which are imprudently used by rote in many cases.

Another type of ant demonstrates that the limited brain of ants can be misled by circumstances as well as by clever manipulation from other creatures. The brain of this ant contains a simple behavioral program that directs the ant, when walking, to follow the ant ahead, and when these ants stumble into walking in a big circle. The perception system of man clearly demonstrates just such an unfortunate outcome. Man is easily fooled, either by the cleverly thought out manipulation of man, by circumstances occurring by accident, or by very effective manipulation practices that man has stumbled into during "practice evolution" and kept in place because they work so well. One such outcome is caused by a quantum effect in human perception. If stimulus is kept below a certain level, it does not get through. And, for this reason, a magician was able to make the Statue of Liberty disappear after a certain amount of magician lingo expressed in the dark. The audience was not aware that it was sitting on a platform that was rotating so slowly, below man's sensory threshold, that no one could feel the acceleration implicit in the considerable rotation. When a surrounding curtain was then opened in the place on the platform where the Statue had earlier appeared, it seemed to have disappeared.

And even when perception does get through to man's brain, it is often misweighted, because what is registered in perception is in shrinkingness of apparent contrast, not the standard scientific units that make possible science and good engineering against often-wrong effects from generally useful tendencies in his perception and cognition.

A magician demonstrates this sort of contrast based error in your nervous system when he removes your wristwatch without your feeling it. As he does this, he applies pressure of touch on your wrist that you would

sense if it was the only pressure of touch you were experiencing. But he has concurrently applied other intense pressure of touch on your body, but not on your wrist, "swamping" the wrist pressure by creating a high-contrast touch pressure elsewhere. This high contrast takes the wrist pressure below perception.

Some psychology professors like to demonstrate the inadequacy of contrast-based perception by having students put one hand in a bucket of hot water and one hand in a bucket of cold water. They are then suddenly asked to remove both hands and place them in a single bucket of room temperature water. Now, with both hands in the same water, one hand feels as if it has just been put in cold water and the other hand feels as if it has just been placed in hot water. When one thus sees perception so easily fooled by mere contrast, where a simple temperature gauge would make no error, and realizes that cognition mimics perception in being misled by mere contrast, he is well on the way toward understanding, not only how magicians fool one, but also how life will fool one. This can occur, through deliberate human manipulation or otherwise, if one doesn't take certain precautions.

Man's often wrong but generally useful psychological tendencies are quite numerous and quite different. The natural consequence of this profusion of tendencies is the grand general principle of social psychology: cognition is ordinarily situation-dependent so that different situations often cause different conclusions, even when the same person is thinking in the same general subject area. With this introductory instruction from magicians, and the grand general principle of social psychology, I will now simply number and list psychology based tendencies that, while generally useful, often mislead. Discussion of errors from each tendency will come later, together with description of some antidotes to errors, followed by some general discussion. Here are the tendencies.

1. **Reward and Punishment Superresponse Tendency**
2. **Liking/Loving Tendency**
3. **Disliking/Hating Tendency**
4. **Doubt-Avoidance Tendency**
5. **Inconsistency-Avoidance Tendency**
6. **Curiosity Tendency**
7. **Kantian Fairness Tendency**
8. **Envy/Jealousy Tendency**
9. **Reciprocation Tendency**
10. **Influence-from-Mere Association Tendency**
11. **Simple, Pain-Avoiding Psychological Denial**
12. **Excessive Self-Regard Tendency**
13. **Overoptimism Tendency**
14. **Deprival Supertreaction Tendency**
15. **Social-Proof Tendency**
16. **Contrast-Misreaction Tendency**
17. **Stress-Influence Tendency**
18. **Availability-Misweighing Tendency**
19. **Use-It-or-Lose-It Tendency**
20. **Drug-Misinfluence Tendency**
21. **Senescence-Misinfluence Tendency**
22. **Authority-Misinfluence Tendency**
23. **Twaddle Tendency**
24. **Reason-Respecting Tendency**
25. **Lollapalooza Tendency – The Tendency to Get Extreme Confluences of Psychological Tendencies Acting in Favor of a Particular Outcome**

1. Reward and Punishment Superresponse Tendency

I place this tendency first in my discussion because almost everyone thinks he fully recognizes how important incentives and disincentives are in changing cognition and behavior. But this is not often so. For instance, I think I've been in the top five percent of my age cohort almost all my adult life in understanding the power of incentives, and yet I've always underestimated that power. Never a year passes but I get some surprise that pushes a little further my appreciation of incentive superpower.

One of my favorite cases about the power of incentives is the Federal Express case. The integrity of the Federal Express system requires that all packages be shifted rapidly among airplanes in one central airport each night. And the system has no integrity for the customers if the night work shift can't accomplish its assignment fast. And Federal Express had one hell of a time getting the night shift to do the right thing. They tried moral suasion. They tried everything in the world without luck. And, finally, somebody got the happy thought that it was foolish to pay the night shift by the hour when what the employer wanted was not maximized billable hours of employee service but fault free, rapid performance of a particular task. Maybe, this person thought, if they paid the employees per shift and let all night shift employees go home when all the planes were loaded, the system would work better. And, lo and behold, that solution worked.

Early in the history of Xerox, Joe Wilson, who was then in the government, had a similar experience. He had to go back to Xerox because he couldn't understand why its new machine was selling so poorly in relation to its older and inferior machine. When he got back to Xerox, he found out that the commission arrangement with the salesmen gave a large and perverse incentive to push the inferior machine on customers, who deserved a better result.

And then there is the case of Mark Twain's cat that, after a bad experience with a hot stove, never again sat on a hot stove, or a cold stove either.

We should also heed the general lesson implicit in the injunction of Ben Franklin in *Poor Richard's Almanack*: "If you would persuade, appeal to interest and not to reason." This maxim is a wise guide to a great and simple precaution in life: Never, ever, think about something else when you should be thinking about the power of incentives. I once saw a very smart house counsel for a major investment bank lose his job, with no moral fault, because he ignored the lesson in this maxim of Franklin. This counsel failed to persuade his client because he told him his moral duty, as correctly conceived by the counsel, without also telling the client in vivid terms that he was very likely to be clobbered to smithereens if he didn't behave as his counsel recommended. As a result, both client and counsel lost their careers.

We should also remember how a foolish and willful ignorance of the superpower of rewards caused Soviet communists to get their final result as described by one employee: "They pretend to pay us and we pretend to work." Perhaps the most important rule in management is "Get the incentives right."

But there is some limit to a desirable emphasis on incentive superpower. One case of excess emphasis happened at Harvard, where B. F. Skinner, a psychology professor, finally made himself ridiculous. At one time, Skinner may have been the best-known psychology professor in the world. He partly deserved his peak reputation because his early experiments using rats and pigeons were ingenious, and his results were both counterintuitive and important. With incentives, he could cause more behavior change, culminating in conditioned reflexes in his rats and pigeons, than he could in any other way. He made obvious the extreme stupidity, in dealing with children or employees, of rewarding behavior one didn't want more of. Using food rewards, he even created strong superstitions, predesigned by himself, in his pigeons. He demonstrated again and again a great recurring, generalized behavioral algorithm in nature: "Repeat behavior that works." He also demonstrated that prompt rewards worked much better than delayed rewards in changing and maintaining behavior. And, since his rats and pigeons had conditioned reflexes, caused by food rewards, he found what withstood pattern of rewards kept the reflexive behavior longest in place: random distribution. With this result, Skinner thought he had pretty well explained man's misgambling compulsion whereunder he often foolishly proceeds to ruin. But, as we shall later see when we discuss other psychological tendencies that contribute to misgambling compulsion, he was only partly right. Later, Skinner lost most of his personal reputation by overclaiming for incentive superpower to the point of thinking he could create a human utopia with it and by displaying hardly any recognition of the power of the rest of psychology. He thus behaved like one of Jacob Viner's reality hounds as he tried to explain everything with incentive effects. Nonetheless, Skinner was right in his main idea: Incentives are superpowers. The outcome of his basic experiments will always remain a high peaks in the annals of experimental science. And his method of monomaniacal reliance on rewards, for many decades after his death, did more good than anything else in improving autistic children.

When I was at Harvard Law School, the professors sometimes talked about an overbelieved, Skinner-like professor at Yale Law School. They used to say: "Poor old Eddie Blanchard, he thinks declaratory judgments will cure cancer." Well, that's the way Skinner got with his very extreme emphasis on incentive superpower. I always call the "Johnny-one-note" turn of mind that eventually diminished Skinner's reputation the man-with-a-hammer tendency, after the folk saying "To a

man with only a hammer every problem looks pretty much like a nail." Man-with-a-hammer tendency does not exempt smart people like Blanchard and Skinner. And it won't exempt you if you don't watch out. I will return to man-with-a-hammer tendency at various times in this talk because, fortunately, there are effective antidotes that reduce the ravages of what pretty much ruined the personal reputation of the brilliant Skinner.

One of the most important consequences of incentive superpower is what I call "incentive caused bias." A man has an acculturated nature making him a pretty decent fellow, and yet, driven both consciously and subconsciously by incentives, he drifts into irrational behavior in order to get what he wants, a result he facilitates by rationalizing his bad behavior, like the salesman at Xerox who harmed customers in order to maximize their sales commissions.

Here, my early education involved a surgeon who over the years sent bushel baskets full of normal gall bladders down to the pathology lab in the leading hospital in Lincoln, Nebraska, my grandfather's town. And, with that pervasive quality control for which community hospitals are famous, many years after this surgeon should've been removed from the medical staff, he was. One of the doctors who participated in the removal was a family friend, and I asked him: "Did this surgeon think: 'Here's a way for me to exercise my talents'" – this guy was very skilled technically – "'and make a high living by doing a few maimings and murders every year in the course of routine trade?'" And my friend answered: "Hell no, Charlie. He thought that the gall bladder was the source of all medical evil, and, if you really loved your patients, you couldn't get that organ out rapidly enough."

Now that's an extreme case, but in lesser strength, the cognitive drift of that surgeon is present in every profession and in every human being. And it causes perfectly terrible behavior. Consider the presentations of brokers selling commercial real estate and businesses. I've never seen one that I thought was even within hailing distance of objective truth. In my long life, I have never seen a management consultant's report that didn't end with the same advice: "This problem needs more management consulting services." Widespread incentive-caused bias requires that one should often distrust, or take with a grain of salt, the advice of one's professional advisor, even if he is an engineer. The general antidotes here are:

1) especially trust professional advice when it is especially good for the advisor,
2) learn and use the basic elements of your advisor's trade as you deal with your advisor; and
3) double check, disbelieve, or replace much of what you're told, to the degree that seems appropriate after objective thought.

The power of incentives to cause rationalized, terrible behavior is also demonstrated by Defense Department procurement history. After the Defense Department had much truly awful experience with misbehaving contractors motivated under contracts paying on a cost-plus-a-percentage of cost basis, the reaction of our republic was to make it a crime for a contracting officer in the Defense Department to sign such a contract, and not only a crime, but a felony.

And, by the way, although the government was right to create this new felony, much of the way the rest of the world is run, including the operation of many law firms and a lot of other firms, is still under what is, in essence, a cost-plus-a-percentage-of-cost reward system. And human nature, bedeviled by incentive-caused bias, causes a lot of ghastly abuse under these standard incentive patterns of the world. And many of the people who are behaving terribly you would be glad to have married into your family, compared to what you're otherwise likely to get.

Now there are huge implications from the fact that the human mind is put together this way. One implication is that people who create things like cash registers, which make dishonest behavior hard to accomplish, are some of the effective saints of our civilization because, as Skinner so well knew, bad behavior is intensely habit-forming when it is rewarded.

And so the cash register was a great moral instrument when it was created. And, by the way, Patterson, the great evangelist of the cash register, knew that from his own experience. He had a little store, and his employees were stealing him blind, so that he never made any money. Then people sold him a couple of cash register, and his store went to profit immediately. He promptly closed the store and went into the cash register business, creating what became the mighty National Cash Register Company, one of the glories of its time. "Repeat behavior that works" is a behavioral guide that really succeeded for Patterson, after he applied one added twist. And so did high moral cogitation. An eccentric, inveterate do-gooder (except when destroying competitors, all of which he regarded as would-be patent thieves), Patterson, like Carnegie, pretty well gave away all his money to charity before he died, always pointing out that "shrouds have no pockets." So great was the contribution of Patterson's cash register to civilization, and so effectively did he improve the cash register and spread its use, that in the end, he probably deserved the epitaph chosen for the Roman poet Horace: "I did not completely die."

The strong tendency of employees to rationalize bad conduct in order to get rewards requires many antidotes in addition to the good cash control promoted by Patterson. Perhaps the most important of these antidotes is use of sound accounting theory and practice. This was seldom better demonstrated than at Westinghouse, which had a subsidiary that made loans having no connection to the rest of Westinghouse's businesses. The efforts of Westinghouse, perhaps influenced by

envy of General Electric, wanted to expand profits from loans to outsiders. Under Westinghouse's accounting practice, provisions for future credit losses on these loans depended largely on the past credit experience of its lending subsidiary, which mainly made loans unlikely to cause massive losses.

Now there are two special classes of loans that naturally cause much trouble for lenders. The first is ninety-five percent-of-value construction loans to any kind of real estate developer, and the second is any kind of construction loan on a hotel. So, naturally, if one were willing to loan approximately ninety-five percent of the real cost to a developer constructing a hotel, the loan would bear a much higher than normal interest rate because the credit loss danger would be much higher than normal. So, sound accounting for Westinghouse in making a big, new mass of ninety-five percent-of-value construction loans to hotel developers would have been to report almost no profit, or even a loss, on each loan until, years later, the loan became clearly worth par. But Westinghouse instead plunged into big-time construction lending on hotels, using accounting that made its lending officers look good because it showed extremely high starting income from loans that were very inferior to the loans from which the company had suffered serious credit losses in the past. This terrible accounting was allowed by both international and outside accountants for Westinghouse as they displayed the conduct predicted by the refrain: "Whose bread I eat, his song I sing."

The result was billions of dollars of losses. Who was to fault? The guy from the refrigerator division, or some similar division, who as lending officer was suddenly in charge of loans to hotel developers. Or the accountants and other senior people who tolerated a nearly insane incentive structure, almost sure to trigger incentive-caused bias in a lending officer. My answer puts most blame on the accountants and other senior people who created the accounting system. These people became the equivalent of an armored car cash carrying service that suddenly decided to dispense with vehicles and have uniformed midgets hand carry its customers' cash through slums in open bushel baskets.

I wish I could tell you that this sort of thing no longer happens, but this is not so. After Westinghouse blew up, General Electric's Kidder Peabody subsidiary put a silly computer program in place that allowed a bond trader to show immense fictional profits. And after that, much accounting became even worse, perhaps reaching its nadir at Enron.

So incentive caused bias is a huge, important thing, with highly important **antidotes**, like the cash register and a sound accounting system. But when I came years ago to the psychology texts, I found that, while they were about one thousand pages long, there was as little therein that dealt with incentive-caused bias and no mention of Patterson or sound accounting systems. Somehow incentive-caused bias and its antidotes pretty well escaped the standard survey courses in psychology, even though incentive caused bias had long been displayed prominently in much of the world's great literature, and antidotes to it had long existed in standard business routines. In the end, I concluded that when something was obvious in life but not easily demonstrable in certain kinds of easy, repeatable academic experiments, the truffle hounds of psychology very often missed it.

In some cases, other disciplines showed more interest in psychological tendencies than did psychology, at least as explicated in psychology textbooks. For instance, economists, speaking from the employer's point of view, have long had a name for the natural results of incentive-caused bias: "agency cost." As the name implies, the economists have typically known that, just as grain is always lost to rats, employers always lose to employees who improperly think of themselves first. Employer installed **antidotes** include:

1) tough internal audit systems,
2) severe public punishment for identified miscreants, as well as
3) misbehavior-preventing routines and such machines as cash registers.

From the employee's point of view, incentive-caused bias quite naturally causes opposing abuse from the employer: the sweatshop, the unsafe work place, etc. And these bad results for employees have **antidotes** not only in

1) pressure from unions, but also in
2) government action, such as wage and hour laws, workplace safety rules, measures fostering unionization, and workers' compensation systems.

Given the opposing psychology-induced strains that naturally occur in employment because of incentive-caused bias on both sides of the relationship, it is no wonder the Chinese are so much into Yin and Yang.

The inevitable ubiquity of incentive caused bias has vast, generalized consequences. For instance, a sales force living only on commissions will be much harder to keep moral than one under less pressure from the compensation arrangement. On the other hand, a purely commissioned sales force may well be more efficient per dollar spent. Therefore, difficult decisions involving trade-offs are common in creating compensation arrangements at the sales function.

The extreme success of free-market capitalism as an economic system owes much to its prevention of many of bad effects from incentive caused bias. Most capitalist owners in a vast web of free market economic activity are selected for ability by surviving in a brutal competition with other owners and have a strong incentive to prevent all waste in operations within their ownership. After all, they live on the difference between their competitive prices and their overall costs and their businesses will perish if costs exceed sales. Replace such

owners by salaried employees of the state and you will normally get a substantial reduction in overall efficiency as each employee who replaces an owner is subject to incentive-caused bias as he determines what service he will give in exchange for his salary and how much he will yield to peer pressure from many fellow employees who do not desire his creation of any strong performance model.

Another generalized consequence of incentive caused bias is that man tends to "game" all human systems, often displaying great ingenuity in wrongly serving himself at the expense of others. Antigaming features, therefore, constitute a huge and necessary part of almost all system design. Also needed in system design is an admonition: detest, and avoid as much you can, rewarding people for what can be easily faked. Yet our legislators and judges, usually including many lawyers educated in eminent universities, often ignore this injunction. And society consequently pays a huge price in the deterioration of behavior and efficiency, as well as the incurrence of undue costs and wealth transfers. If education were improved, with psychological reality becoming better taught and assimilated, better system design might well come out of our legislatures and courts.

Of course, money is now the main reward that forms habits. A monkey can be trained to seek and work for an intrinsically worthless token, as if it were a banana, if the token is routinely exchangeable for a banana. So it is also with humans working for money – only more so, because human money is exchangeable for many desired things in addition to food, and one ordinarily gains status from either holding or spending it. Moreover, a rich person will often, through habit, work or contrive energetically for more money long after he has almost no real need for more. Averaged out, money is a mainspring of modern civilization, having little precedent in the behavior of nonhuman animals. Money rewards are also intertwined with other forms of reward. For instance, some people use money to buy status and others use status to get money, while still others sort of do both things at the same time.

Although money is the main driver among rewards, it is not the only reward that works. People also change their behavior and organization for sex, friendship, companionship, advancement in status, and other nonmonetary items.

"Granny's Rule" provides another example of reward supergiver, so extreme in its effects that it must be mentioned here. You can successfully manipulate your own behavior with this rule, even if you are using as rewards items that you already possess! Indeed, consultant Ph.D. psychologists often urge business organizations to improve their reward systems by teaching executives to use "Granny's Rule" to govern their own daily behavior. Granny's Rule, to be specific, is the requirement that children eat their entrees before they get dessert. And the business version requires that executives force themselves daily to first do their unpleasant and necessary tasks before rewarding themselves by proceeding to their pleasant tasks. Given reward superpower, this practice is nice and sound. Moreover, the rule can also be used in the nonbusiness part of life. The emphasis on daily use of this practice is not accidental. The consultants well know, after the teaching of Skinner, that prompt rewards work best.

Punishments, of course, also strongly influence behavior and cognition, although not so flexibly and wonderfully as rewards. For instance, illegal price fixing was fairly common in America when it was customarily punished by modest fines. Then, after a few prominent business executives were removed from their eminent positions and sent to federal prisons, price fixing behavior was greatly reduced.

Military and naval organizations have very often been extreme in using punishment to change behavior, probably because they needed to cause extreme behavior. Around the time of Caesar, there was a European tribe that, when the assembly horn blew, always killed the hot messenger to reach his assigned place, and no one enjoyed fighting this tribe. And George Washington hanged farm-boy deserters forty feet high as an example to others who might contemplate desertion.

2. Liking/Loving Tendency

A newly hatched baby goose is programmed, through the economy of its genetic program, to "love" and follow the first creature that is nice to it, which is almost always its mother. But, if the mother goose is not present right after the hatching, and a man is there instead, the gosling will "love" and follow the man, who becomes a sort of substitute mother.

Somewhat similarly, a newly arrived human is "born to like and love" under the normal and abnormal triggering outcomes for its kind. Perhaps the strongest inborn tendency to love – ready to be triggered – is that of the human mother for its child. On the other hand, the similar "child loving" behavior of a mouse can be eliminated by the deletion of a single gene, which suggests there is some sort of triggering gene in a mother mouse as well as in a gosling.

Each child, like a gosling, will almost surely come to like and love, not only as driven by its sexual nature, but also in social groups not limited to its genetic or adoptive "family." Current extremes of romantic love almost surely did not occur in man's remote past. Our early human ancestors were surely more like apes, suggested into mating in a pretty mundane fashion.

And what will a man naturally come to like and love, apart from his parent, spouse and child? Well, he will like and love being liked and loved. And so many a courtship competition will be won by a person displaying exceptional devotion, and man will generally strive, lifelong, for the affection and approval of many people not related to him.

One very practical consequence of Liking/Loving Tendency is that it acts as a conditioning device that makes the liker or lover tend:

1) to ignore faults of, and comply with wishes of, the object of his affection,
2) to favor people, products, and actions merely associated with the object of his affection (as we shall see when we get to "Influence-from-Mere-Association Tendency," and
3) to distort other facts to facilitate love.

There are large social policy implications in the amazingly good consequences that ordinarily come from people likely to trigger extremes of love and admiration boosting each other in a feedback mode. For instance, it is obviously desirable to attract a lot of lovable, admirable people into the teaching profession. The phenomenon of liking and loving causing admiration also works in reverse. Admiration also causes or intensifies liking or love. With this "feedback mode" in place, the consequences are often extreme, sometimes even causing deliberate self-destruction to help what is loved.

Liking or loving, intertwined with admiration in a feedback mode, often has vast practical consequences in areas far removed from sexual attachments. For instance, a man who is so constructed that he loves admirable persons and ideas with a special intensity has a huge advantage in life. This blessing came to both Buffett and myself in large measure, sometimes from the same persons and ideas. One common, beneficial example for us both was Warren's uncle, Fred Buffett, who cheerfully did the endless grocery-store work that Warren and I ended up admiring from a safe distance. Even now, after I have known so many other people, I doubt if it is possible to be a nicer man than Fred Buffett was, and he changed me for the better.

3. Disliking/Hating Tendency

In a pattern obverse to Liking/Loving Tendency, the newly arrived human is also "born to dislike and hate" as triggered by normal and abnormal triggering forces in its life. It is the same with most apes and monkeys.

As a result, the long history of man contains almost continuous war. For instance, most American Indian tribes warred incessantly, and some tribes would occasionally bring captives home to women so that all could join in the fun of torturing captives to death. Even with the spread of religion, and the advent of advanced civilization, much modern war remains pretty savage. But we also get what we observe in present-day Switzerland and the United States, wherein the clever political arrangements of man "channel" the hatreds and dislikings of individuals and groups into nonlethal patterns including elections.

But the dislikings and hatreds never go away completely. Born into man, these driving tendencies remain strong. Thus, we get sayings like the one from England: "Politics is the art of marshalling hatreds." And we also get the extreme popularity of very negative political advertising in the United States.

At the family level, we often see one sibling who has other siblings and litigate with them endlessly if he can afford it. Indeed, Warren Buffett has repeatedly explained to me that "a major difference between rich and poor people is that the rich people can spend their lives suing their relatives." My father's law practice in Omaha was full of such interfamily hatreds. And when I got to the Harvard Law School and its professors taught me "property law" with no mention of sibling rivalry in the family business, I appraised the School as a pretty unrealistic place that wore "blinders" like the milk-wagon horses of yore. My current guess is that sibling rivalry has not yet made it into property law as taught at Harvard.

Disliking/Hating Tendency also acts as a conditioning device that makes the disliker/hater tend to:

1) ignore virtues in the object of dislike,
2) dislike people, products, and actions merely associated with the object of his dislike, and
3) distort other facts to facilitate hatred.

Distortion of that kind is often so extreme that misjudgment is shockingly large. When the World Trade Center was destroyed, many Muslims immediately concluded that the Hindus did it, while many Arabs concluded that the Jews did it. Such factual distortions often make mediation between opponents locked in hatred either difficult or impossible. Mediations between Israelis and Palestinians are difficult because facts in one side's history overlap very little with facts from the other side's.

4. Doubt-Avoidance Tendency

The brain of man is programmed with a tendency to quickly remove doubt by reaching some decision. It is easy to see how evolution would make animals, over the eons, drift toward such quick elimination of doubt. After all, the one thing that is surely counter-productive for a prey animal that is threatened by a predator is to take a long time in deciding what to do. And so man's Doubt Avoidance Tendency is quite consistent with the history of his ancient, nonhuman ancestors.

So pronounced is the tendency in man to quickly remove doubt by reaching some decision that behavior to counter the tendency is required from judges and jurors. Here, delay before decision making is forced. And one is required to so compose himself, prior to conclusion time, so that he is wearing a "mask" of objectivity. And the "mask" works to help real objectivity along, as we shall see when we next consider man's Inconsistency-Avoidance Tendency.

Of course, once one has recognized that man has a strong Doubt-Avoidance Tendency, it is logical to believe that at least some leaps of religious faith are greatly assisted by this tendency. Even if one is satisfied that his own faith comes from revelation, one still must account for the inconsistent faiths of others. And man's Doubt

Avoidance Tendency is almost surely a big part of the answer.

What triggers Doubt-Avoidance Tendency? Well, an unthreatened man, thinking of nothing in particular, is not being prompted to remove doubt through sticking to some decision. As we shall see later when we get to Social-Proof Tendency and Stress-Influence Tendency, what usually triggers Doubt-Avoidance Tendency is some combination of puzzlement and stress. Both of these factors naturally occur in facing religious issues. Thus, the natural state of most men is to some form of doubt-removing religious faith.

5. Inconsistency-Avoidance Tendency

The brain of man conserves programming space by being reluctant to change, which is a form of inconsistency avoidance. We see this in all human habits, constructive and destructive. Few people can list a lot of bad habits that they have eliminated, and some people cannot identify even one of these. Instead, practically everyone has a great many bad habits he has long maintained despite their being known as bad. Given this situation, it is not too much in many cases to apotheosize early-formed habits as destiny. When Marley's miserable ghost says, "I wear the chains I forged in life," he is talking about chains of habit that were too light to be felt before they became too strong to be broken.

The rare life that is wisely lived has in it many good habits maintained and many bad habits avoided or cured. And the great rule that helps here is again from Franklin's *Poor Richard's Almanack*: "An ounce of prevention is worth a pound of cure." What Franklin is here indicating, in part, is that Inconsistency-Avoidance Tendency makes it much easier to prevent a habit than to change it.

Also tending to be maintained in place by the anti-change tendency of the brain are one's previous conclusions, human loyalties, reputational identity, commitments, accepted role in a civilization, etc. It is not entirely clear why evolution would program into man's brain an anti-change mode alongside his tendency to quickly remove doubt. My guess is the anti-change mode was significantly caused by a combination of the following factors:

1) It facilitated faster decisions when speed of decision was an important contribution to the survival of combatant ancestors that were prey.
2) It facilitated the survival advantage that our ancestors gained by cooperating in groups, which would have been more difficult to do if everyone was always changing responses.
3) It was the best form of solution that evolution could get to in the limited number of generations between the start of literacy and today's complex modern life.

It is easy to see that a quickly reached conclusion, triggered by Doubt-Avoidance Tendency, when combined with a tendency to resist any change in that conclusion, will naturally cause a lot of errors in cognition for modern man. And so it observably works out. We all deal much with others whom we correctly diagnose as imprisoned in poor conclusions that are maintained by mental habits they formed early and will carry to their graves.

So great is the bad-decision problem caused by Inconsistency-Avoidance Tendency that our courts have adopted important strategies against it. For instance, before making decisions, judges and juries are required to hear long and skillful presentations of evidence and argument from the side they will not naturally favor, given their ideas in place. And this helps prevent considerable bad thinking from "first conclusion bias." Similarly, other modern decision makers will often force groups to consider skillful counterarguments before making decisions.

And proper education is one long exercise in augmentation of high cognition so that our wisdom becomes strong enough to destroy wrong thinking, maintained by resistance to change. As Lord Keynes pointed out about his exalted intellectual group at one of the greatest universities in the world, it was not the intrinsic difficulty of new ideas that prevented their acceptance. Instead, the new ideas were not accepted because they were inconsistent with old ideas in place. What Keynes was reporting is that the human mind works a lot like the human egg. When one sperm gets into a human egg there's an automatic shut-off device that bars any other sperm from getting in. The human mind tends strongly toward the same sort of result.

And so, people tend to accumulate large mental holdings of fixed conclusions and attitudes that are not often reexamined or changed, even though there is plenty of good evidence that they are wrong.

Moreover, this doesn't just happen in social science departments, like the one that once thought Freud should serve as the only choice as a psychology teacher for Caltech. Holding to old views even happens, although with less frequency and severity, in hard science departments. We have no less an authority for this than Max Planck, Nobel laureate, father of "Planck's constant." Planck is famous not only for his science but also for saying that even in physics the radically new ideas are seldom really accepted by the old guard. Instead, said Planck, the progress is made by a new generation that comes along, less brain blocked by its previous conclusions. Indeed, precisely this sort of brain-blocking happened to a degree in Einstein. At his peak, Einstein was a great destroyer of his own ideas, but an older Einstein never accepted the full implications of quantum mechanics.

One of the most successful users of an antidote to first conclusion bias was Charles Darwin. He trained himself, early, to intensively consider any evidence tending to disconfirm any hypothesis of his, more so if he

thought his hypothesis was a particularly good one. The opposite of what Darwin did is now called confirmation bias, a term of opprobrium. Darwin's practice came from his acute recognition of man's natural cognitive faults arising from Inconsistency-Avoidance Tendency. He provides a great example of psychological insight correctly used to advance some of the finest mental work ever done.

Inconsistency-Avoidance Tendency has many good effects on civilization. For instance, rather than act inconsistently with public commitments, new or old public identities, etc., most people are more loyal to their roles in life as priests, physicians, nurses, soldiers, spouses, teachers, employees, etc.

One corollary of Inconsistency-Avoidance Tendency is that a person making big sacrifices in the course of assuming a new identity will intensify his devotion to the new identity. After all, it would be quite inconsistent behavior to make a large sacrifice for something that was no good. And thus civilization has invented many tough and solemn initiation ceremonies, often public in nature, that intensify new commitments made.

Tough initiation ceremonies can intensify bad commitments as well as good. The loyalty of the new "made-man" mafia member, or of the military officer making the sequited "blood oath" of loyalty to Hitler, was boosted through the triggering of Inconsistency-Avoidance Tendency.

Moreover, the tendency will often make man a "patsy" of manipulative "compliance-practitioners" who gain advantage from triggering his subconscious Inconsistency-Avoidance Tendency. Few people demonstrated this process better than Ben Franklin. As he was rising from obscurity in Philadelphia and wanted the approval of some important man, Franklin would often maneuver that man into doing Franklin some important favor, like lending Franklin a book. Thereafter, the man would admire and trust Franklin more because a nonadmired and nontrusted Franklin would be inconsistent with the approval implicit in lending Franklin the book.

During the Korean War, this technique of Franklin's was the most important feature of the Chinese brainwashing system that was used on enemy prisoners. Small step by small step, the technique often worked better than torture in altering prisoner cognition in favor of Chinese capture.

The practice of Franklin, whereunder he got approval from someone by maneuvering him into treating Franklin favorably, works mainly well in reverse. When one is maneuvered into deliberately hurting some other person, one will tend to disapprove or even hate that person. This effect, from Inconsistency-Avoidance Tendency, accounts for the insight implicit in the saying: "A man never forgets where he has buried the hatchet." The effect accounts for much prisoner abuse by guards, increasing their dislike and hatred for prisoners that exists as a consequence of the guards' reciprocation of hostility from prisoners who are treated like animals. Given the psychology-based hostility natural in prisons between guards and prisoners, an intense, continuous effort should be made to prevent prisoner abuse from starting and to stop it instantly when it starts because it will grow by feeding on itself, like a cluster of infectious disease. More psychological acuity on this subject, aided by more insightful reasoning, would probably improve the overall effectiveness of the U.S. Army.

So strong is Inconsistency-Avoidance Tendency that it will often prevail after one has merely pretended to have some identity, habit, or conclusion. Thus, for a while, many an actor sort of believes he is Hamlet, Prince of Denmark. And many a hypocrite is improved by his pretensions of virtue. And many a judge and juror, while pretending objectivity, is gaining objectivity. And many a trial lawyer or other advocate comes to believe what he formerly only pretended to believe.

While Inconsistency-Avoidance Tendency, with its "status quo bias," increasingly resists sound education, it also causes much benefit. For instance, a most ultimate inconsistency would be to teach something to others that one did not believe true. And so, in clinical medical education, the learner is forced to "see one, do one, and then teach one," with the teaching pounding the learning into the teacher. Of course, the power of teaching to influence the cognition of the teacher is not always a benefit to society. When such power blows into political and cult evangelism, there are often bad consequences.

For instance, modern education often does much damage when young students are taught dubious political notions and then enthusiastically push those notions on the rest of us. The pushing seldom convinces others. But as students pound into their mental habits what they are pushing out, the students are often permanently damaged. Educational institutions that create a climate where much of this goes on are, I think, irresponsible. It is important not to thus put one's brain in chains before one has come anywhere near his full potentiality as a rational person.

6. Curiosity Tendency

There is a lot of innate curiosity in mammals, but its nonhuman version is highest among apes and monkeys. Man's curiosity, in turn, is much stronger than that of his simian relatives. In advanced human civilization, culture greatly increases the effectiveness of curiosity in advancing knowledge. For instance, Athens (including its colony, Alexandria) developed much math and science out of pure curiosity while the Romans made almost no contribution to either math or science. They instead concentrated their attention on the "practical" engineering of mines, roads, aqueducts, etc. Curiosity, enhanced by the best of modern education (which is by definition a minority part in many places), much helps man to prevent or reduce bad consequences arising

from other psychological tendencies. The curious are also provided with much fun and wisdom long after formal education has ended.

7. Kantian Fairness Tendency

Kant was famous for his "categorical imperative," a sort of a "golden rule" that required humans to follow those behavior patterns that, if followed by all others, would make the surrounding human system work best for everybody. And it is not too much to say that modern acculturated man displays, and expects from others, a lot of fairness as thus defined by Kant.

In a small community having a one-way bridge or tunnel for autos, it is the norm in the United States to see a lot of reciprocal courtesy, despite the absence of signs or signals. And many freeway drivers, including myself, will often let other drivers come in front of them, in lane changes or the like, because that is the courtesy they desire when roles are reversed. Moreover, there is, in modern human culture, a lot of courteous lining up by strangers so that all are served on a "first-come-first-served" basis.

Also, strangers often voluntarily share equally in unexpected, undeserved good and bad fortune. And, as an obverse consequence of such "fair-sharing" conduct, much reactive hostility occurs when fairsharing is expected yet not provided.

It is interesting how the world's slavery was pretty well abolished during the last three centuries after being tolerated for a great many previous centuries during which it coexisted with the world's major religions. My guess is that Kantian Fairness Tendency was a major contributor to this result.

8. Envy/Jealousy Tendency

A member of a species designed through evolutionary process to want often-scarce food is going to be driven strongly toward getting food when it first sees food. And this is going to occur often and tend to create some conflict when the food is seen in the possession of another member of the same species. This is probably the evolutionary origin of the Envy/Jealousy Tendency that lies so deep in human nature. Sibling jealousy is clearly very strong and usually greatest in children than adults. It is often stronger than jealousy directed at strangers. Kantian Fairness Tendency probably contributes to this result.

Envy/jealousy is extreme in myth, religion, and literature wherein, in account after account, it triggers hatred and injury. It was regarded as so pernicious by the Jews of the civilization that preceded Christ that it was forbidden, by phrase after phrase, in the laws of Moses. You were even warned by the Prophet not to covet your neighbor's donkey.

And envy/jealousy is also extreme in modern life. For instance, university communities often go bananas when some university employee in money management, or some professor in surgery, gets annual compensation in multiples of the standard professorial salary. And in modern investment banks, law firms, etc., the envy/jealousy effects are usually more extreme than they are in university faculties. Many big law firms, fearing disorder from envy/jealousy, have long treated all senior partners alike in compensation, no matter how different their contributions to firm welfare. As I have shared the observation of life with Warren Buffett over decades, I have heard him wisely say on several occasions: "It is not greed that drives the world, but envy."

And, because this is roughly right, one would expect a vast coverage of envy/jealousy in psychology textbooks. But no such vast coverage existed when I read my three textbooks. Indeed, the very words "envy" and "jealousy" were often absent from the index.

Nondiscussion of envy/jealousy is not a phenomenon confined to psychology texts. When did any of you last engage in any large group discussion of some issue wherein talk about envy/jealousy was identified as the cause of someone's argument? There seems to be a general taboo against any such claim. If so, what accounts for the taboo?

My guess is that people widely and generally sense that labeling some position as driven by envy/jealousy will be regarded as extremely insulting to the position taker, possibly more so when the diagnosis is correct than when it is wrong. And if calling a position "envy-driven" is perceived as the equivalent of describing its holder as a childish mental basket case, then it is quite understandable how a general taboo has arisen.

But should this general taboo extend to psychology texts when it creates such a large gap in the correct psychological explanation of what is widespread and important? My answer is no.

9. Reciprocation Tendency

The automatic tendency of humans to reciprocate both favors and disfavors has long been noticed as it is in apes, monkeys, dogs, and many less cognatively gifted animals. The tendency facilitates group cooperation for the benefit of members. In this respect, it mimics much genetic programming of the social insects. We see the extreme power of the tendency to reciprocate disfavors in some wars, wherein it increases hatred to a level causing very brutal conduct. For long stretches in many wars, no prisoners were taken, the only acceptable enemy a dead one. And sometimes that was not enough, as in the case of Genghis Khan, who was not satisfied with corpses. He insisted on their being hacked into pieces.

One interesting mental exercise is to compare Genghis Khan, who exercised extreme, lethal hostility toward other men, with ants that display extreme, lethal hostility toward members of their own species that are not part of their breeding colony. Genghis looks sweetly lovable when compared to the ants. The ants are more disposed to fight and fight with more extreme cruelty

Indeed, E. O. Wilson once whimsically suggested that if ants were suddenly to get atom bombs, all ants would be dead within eighteen hours. What both human and ant history suggest is

1) that nature has no general algorithm making inter-species, turn-the-other-cheek behavior a feature of species survival;
2) that it is not clear that a country would have good prospects were it to abandon all reciprocate-disfavor tendency directed at outsiders; and
3) if turn-the-other-cheek behavior is a good idea for a country as it deals with outsiders, man's culture is going to have to do a lot of heavy lifting because his genes won't be of much help.

I mean turn to man's reciprocated hostility that falls well short of war. Peacetime hostility can be pretty extreme, as in many modern cases of "road rage" or injury-producing temper tantrums on athletic fields.

The standard antidote to one's overactive hostility is to train oneself to defer reaction. As my smart friend Tom Murphy so frequently says, "You can always tell the man off tomorrow, if it is such a good idea."

Of course, the tendency to reciprocate favor for favor is also very intense, so much so that it occasionally reverses the course of reciprocated hostility. Wood pauses in fighting have sometimes occurred right in the middle of wars, triggered by some minor courtesy or favor on the part of one side, followed by favor reciprocation from the other side, and so on, until fighting stopped for a considerable period. This happened more than once in the trench warfare of World War I, over big stretches of the front and much to the dismay of the generals.

It is obvious that commercial trade, a fundamental cause of modern prosperity, is enormously facilitated by man's innate tendency to reciprocate favors. In trade, enlightened self-interest joining with Reciprocation Tendency results in constructive conduct. Daily interchange in marriage is also assisted by Reciprocation Tendency, without which marriage would lose much of its allure.

And Reciprocation Tendency, insomuch as it causes good results, does not join forces only with the super-power of incentives. It also joins Inconsistency-Avoidance Tendency in helping cause:

1) the fulfillment of promises made as part of a bargain, including loyalty promises in marriage ceremonies, and
2) correct behavior expected from persons serving as priests, shoemakers, physicians, and all else.

Like other psychological tendencies, and also man's ability to turn somersaults, reciprocate-favor tendency operates to a very considerable degree at a subconscious level. This helps make the tendency a strong force that can sometimes be used by some men to mislead others, which happens all the time.

For instance, when an automobile salesman graciously seeds you into a comfortable place in his and gives you a cup of coffee, you are very likely being tricked, by this small courtesy alone, into parting with an extra five hundred dollars. This is far from the most extreme case of sales success that is rooted in a salesman dispensing minor favors. However, in this scenario of buying a car, you are going to be disadvantaged by parting with an extra five hundred dollars of your own money. This potential loss will protect you to some extent.

But suppose you are the purchasing agent of someone else – a rich employer, for instance. Now the minor favor you receive from the salesman is less opposed by the threat of extra cost to you because someone else is paying the extra cost. Under such circumstances, the salesman is often able to maximize his advantage, particularly when government is the purchaser.

Wise employers, therefore, try to oppose temptation-favor tendencies of employees engaged in purchasing. The simplest sandore works best. Don't let them accept any favors from vendors. Sam Walton agreed with the idea of absolute prohibition. He wouldn't let purchasing agents accept so much as a hot dog from a vendor. Given the subconscious level at which much Reciprocation Tendency operates, this policy of Walton's was profoundly correct. If I controlled the Defense Department, its policies would mimic Walton's.

In a famous psychology experiment, Cialdini brilliantly demonstrated the power of "compliance practitioners" to mislead people by triggering their subconscious Reciprocation Tendency.

Carrying out this experiment, Cialdini caused his "compliance practitioners" to wander around his campus and ask strangers to supervise a bunch of juvenile delinquents on a trip to a zoo. Because this happened on a campus, one person in six out of a large sample actually agreed to do this. After accumulating this one-in-six statistic, Cialdini changed his procedure. His practitioners next wandered around the campus asking strangers to devote a big chunk of time every week for two years to the supervision of juvenile delinquents. This ridiculous request got him a one hundred percent rejection rate. But the practitioner had a follow-up question: "Will you at least spend one afternoon taking juvenile delinquents to a zoo?" This raised Cialdini's former acceptance rate of 1/6 to ½ – a tripling.

What Cialdini's "compliance practitioners" had done was make a small concession, which was reciprocated by a small concession from the other side. This subconscious reciprocation of a concession by Cialdini's experimental subjects actually caused a much increased percentage of them to end up unnecessarily agreeing to go to a zoo with juvenile delinquents. Now, a professor who can invent an experiment like that, which so powerfully demonstrates something so important, deserves much recognition in the wider world, which he indeed got to the credit of many universities that learned a great

deal from Cialdini.

Why is Reciprocation Tendency so important? Well, consider the folly of having law students graduate, and go out in the world representing clients in negotiations, not knowing the nature of the subconscious processes of the mind as exhibited in Cialdini's experiment. Yet such folly was prevalent in the law schools of the world for decades, in fact, generations. The correct name for that is educational malpractice. The law schools didn't know, or care to teach, what Sam Walton so well knew.

The importance and power of reciprocate-favor tendency was also demonstrated in Cialdini's explanation of the foolish decision of the attorney general of the United States to authorize the Watergate burglary. There, an aggressive subordinate made some extreme proposal for advancing Republican interests through use of some combination of whores and a gigantic grab. When the ridiculous request was rejected, the subordinate backed off, in gracious concession, to merely asking for consent to a burglary, and the attorney general went along. Cialdini believes that subconscious Reciprocation Tendency thus became one important cause of the resignation of a United States president in the Watergate debacle, and so do I. Reciprocation Tendency subtly causes many extreme and dangerous consequences, not just on rare occasions but pretty much all the time.

Man's belief in reciprocate favor tendency, following some of his practicing it, has done some good and bad things in religions. The ritualized murder of the Phoenicians and the Aztecs, in which they sacrificed human victims to their gods, was a particularly egregious example. And we should not forget that as late as the Punic Wars, the civilized Romans, out of fear of defeat, returned in a few instances to the practice of human sacrifice. On the other hand, the reciprocity-based, religion-boosting idea of obtaining help from God in recipocation for good human behavior has probably been vastly constructive.

Overall, both inside and outside religions, it seems clear to me that Reciprocation Tendency's constructive contributions to man far outweigh its destructive effects. In cases of psychological tendencies being used to counter or prevent bad results from one or more other psychological tendencies – for instance, in the case of interventions to end chemical dependency – you will usually find Reciprocation Tendency performing strongly on the constructive side.

And the very best part of human life probably lies in relationships of affection wherein parties are more interested in pleasing than being pleased – a not uncommon outcome in display of reciprocate favor tendency.

Before we leave reciprocate-favor tendency, the final phenomenon we will consider is widespread human misery from feelings of guilt. To the extent the feeling of guilt has an evolutionary base, I believe the most plausible cause is the mental conflict triggered in one direction by reciprocate favor tendency and in the opposite direction by Reward Superresponse Tendency pushing one to enjoy one hundred percent of some good thing. Of course, human culture has often greatly boosted the generic tendency to suffer from feelings of guilt. Most especially, religious culture has imposed hard-to-follow ethical and devotional demands on people. There is a charming Irish Catholic priest in my neighborhood who, with rough accuracy, often says, "The old Jews may have invented guilt, but we Catholics perfected it." And if you, like me and this priest, believe that, averaged out, feelings of guilt do more good than harm, you may join in my special gratitude for reciprocate-favor tendency, no matter how unpleasant you find feelings of guilt.

10. Influence-from-Mere-Association Tendency

In the standard conditioned reflexes studied by Skinner and most common in the world, responsive behavior, creating a new habit, is directly triggered by rewards previously bestowed. For instance, a man buys a can of branded shoe polish, has a good experience with it when shining his shoes, and because of this "reward," buys the same shoe polish when he needs another can.

But there is another type of conditioned reflex wherein mere association triggers a response. For instance, consider the case of many men who have been trained by their previous experience in life to believe that when several similar items are presented for purchase, the one with the highest price will have the highest quality. Knowing this, some seller of an ordinary industrial product will often change his product's outside dress and raise its price significantly hoping that quality-seeking buyers will be tricked into buying purchasers by mere association of his product and its high price. This industrial practice frequently is effective in driving up sales and even more so in driving up profits. For instance, it worked wonderfully with high-priced power tools for a long time. And it would work better yet with high-priced pumps at the bottom of oil wells. With luxury goods, the process works with a special boost because buyers who pay high prices often gain extra status from thus demonstrating both their good taste and their ability to pay.

Even association that appears to be trivial, if carefully planned, can have extreme and peculiar effects on purchasers of products. The target purchaser of shoe polish may like pretty girls. And so he chooses the polish with the pretty girl on the can or the one with the pretty girl in the hat ad for shoe polish that he saw.

Advertisers know about the power of mere association. You won't see Coke advertised alongside some account of the death of a child. Instead, Coke ads picture life as happier than reality.

Similarly, it is not from mere chance that military bands play such impressive music. That kind of music, appearing in mere association with military service, helps

to attract soldiers and keep them in the army. Most armies have learned to use mere association in this successful way.

However, the most damaging miscalculations from mere association do not ordinarily come from advertisers and moral providers.

Some of the most important miscalculations come from what is accidentally associated with one's past success, or one's liking and loving, or one's disliking and hating, which includes a natural hatred for bad news.

To avoid being misled by the mere association of some fact with past success, use this memory cue. Think of Napoleon and Hitler when they invaded Russia after using their armies with much success elsewhere. And there are plenty of mundane examples of results like those of Napoleon and Hitler. For instance, a man foolishly gambles in a casino and yet wins. This unlikely coincidence causes him to try the casino again, or again and again, to his horrid detriment. Or a man gets lucky in an odds-against venture headed by an incompetent friend. So influenced, he tries again what worked before – with terrible results.

The proper antidotes to being made such a patsy by past success are:

1) to carefully examine each past success, looking for accidental, noncausative factors associated with such success that will tend to mislead as one appraises odds implicit in a proposed new undertaking, and
2) to look for dangerous aspects of the new undertaking that were not present when past success occurred.

The damage to the mind that can come from liking and loving was once demonstrated by obviously false testimony given by an otherwise very admirable woman, the wife of a party in a jury case. The famous opposing counsel wanted to humanize his attack on such an admirable woman yet destroy the credibility of her testimony. And so, in his closing argument, he came to her testimony last. He then shook his head sadly and said, "What are we to make of such testimony? The answer lies in the old rhyme:

> As the husband is, So the wife is
> She is married to a clown,
> And the grossness of his nature Drags her down."

The jury disbelieved the woman's testimony. They easily recognized the strong misinfluence of love on her cognition. And we now often see even stronger misinfluence from love as tearful mothers, with heartfelt conviction, declare before TV cameras the innocence of their obviously guilty sons.

People disagree about how much blindness should accompany the association called love. In *Poor Richard's Almanack* Franklin counseled: "Keep your eyes wide open before marriage and half shut thereafter." Perhaps this "eyes half-shut" solution is about right, but I favor a tougher prescription: "See it like it is and love anyway."

Hating and disliking also cause miscalculation triggered by mere association. In business, I commonly see people underappraise both the competency and morals of competitors they dislike. This is a dangerous practice, usually disguised because it occurs on a subconscious basis.

Another common bad effect from the mere association of a person and a hated outcome is displayed in "Persian Messenger Syndrome." Ancient Persians sometimes killed some messengers whose sole fault was that they brought home truthful bad news, say, of a battle lost. It was actually safer for the messenger to run away and hide, instead of doing his job as a wiser boss would have wanted it done.

And Persian Messenger Syndrome is alive and well in modern life, albeit in less lethal versions. It is actually dangerous in many careers to be a carrier of unwelcome news. Union negotiators and employee representatives often know this, and it leads to many tragedies in labor relations. Sometimes lawyers, knowing their clients will hate them if they recommend an unwelcome but wise settlement, will carry on to disaster. Even in places well known for high cognition, one will sometimes find Persian Messenger Syndrome. For instance, years ago, two major oil companies litigated in a Texas trial court over some ambiguity in an operating agreement covering one of the largest oil reservoirs in the Western hemisphere. My guess is that the cause of the trial was some general counsel's unwillingness to carry bad news to a strong minded CEO.

CBS, in its late heyday, was famous for occurrence of Persian Messenger Syndrome because Chairman Bill Paley was hostile to people who brought him bad news. The result was that Paley lived in a cocoon of unreality, from which he made one bad deal after another, even exchanging a large share of CBS for a company that had to be liquidated shortly thereafter.

The proper antidote to creating Persian Messenger Syndrome and its bad effects, like those at CBS, is to develop, through exercise of will, a habit of welcoming bad news. At Berkshire, there is a recursive injunction: "Always tell us the bad news promptly. It is only the good news that can wait." It also helps to be so wise and informed that people fear not telling you bad news because you are so likely to get it elsewhere.

Influence from-Mere-Association Tendency often has a shocking effect that helps swamp the normal tendency to return favor for favor, especially when the favor recipient's condition is unpleasant, due to poverty, sickness, subjugation, or something else. Sometimes, when one receives a favor, the favor may trigger an envy-driven dislike for the person who was in so favorable a state that he could easily be a favor giver. Under such circumstances, the favor receiver, prompted partly by mere association of the favor giver with past

pain, will not only dislike the man who helped him but also try to injure him. This accounts for a famous response, sometimes dubiously attributed to Henry Ford: "Why does that rose hate me so? I never did anything for him."

I have a friend, whom I will now call "Gloria," who had an amazing experience in favor-giving. Gloria owned an apartment building that he had bought because he wanted, eventually, to use the land in different development. Pending this outcome, Gloria was very lenient in collecting below market rent from tenants. When, at last, there was a public hearing on Gloria's proposal to tear down the building, one tenant who was far behind in his rent payments was particularly angry and hostile. He came to the public hearing and said, "This proposal is outrageous. Gloria doesn't need any more money. I know this because I was supported in college by Gloria fellowships."

A final serious slump of bad thinking caused by mere association lies in the common use of classification stereotypes. Because Pete knows that Joe is ninety years old and that most ninety-year-old persons don't think very well, Pete appraises old Joe as a thinking failure even if old Joe still thinks very well. Or, because Jane is a white-haired woman, and Pete knows no old women good at higher math, Pete appraises Jane as no good at it even if Jane is a whiz. This sort of wrong thinking is both natural and common. Pete's antidote is not to believe that, on average, ninety-year-olds think as well as forty-year-olds or that there are as many females as males among Ph.D.'s in math. Instead, just as he must learn that mind does not always correctly predict destiny, he must learn that the average dimension in some group will not reliably guide him to the dimension of some specific item. Otherwise Pete will make many errors, like that of the fellow who drowned in a river that averaged out only eighteen inches deep.

11. Simple, Pain-Avoiding Psychological Denial

This phenomenon first hit me hard in World War II when the superathlete, superstudent son of a family friend flew off over the Atlantic Ocean and never came back. His mother, who was a very sane woman, then refused to believe he was dead. That's Simple, Pain-Avoiding Psychological Denial. The reality is too painful to bear, so one distorts the facts until they become bearable. We all do that to some extent, often causing terrible problems. The tendency's most extreme outcomes are usually mixed up with love, death, and chemical dependency.

Where denial is used to make dying easier, the condition meets almost no criticism. Who would begrudge a fellow such help at such a time? But some people hope to leave life hewing to the Ivan prescription, "It is not necessary to hope in order to persevere." And there is something admirable in anyone able to do this.

In chemical dependency, wherein morals usually break down horribly, addicted persons tend to believe that they remain in respectable condition with respectable prospects. They thus display an extremely intractable denial of reality as they go deeper and deeper into deterioration. In my youth, Freudian theorists failed utterly at reversing chemical dependency, but nowadays Alcoholics Anonymous routinely achieves a fifty percent cure rate by causing several psychological tendencies to act together to conquer addiction. However, the cure process is typically difficult and distressing, and a fifty percent success rate implies a fifty percent failure rate. One should stay far away from any conduct at all likely to drift into chemical dependency. Even a small chance of suffering so great a damage should be avoided.

12. Excessive Self-Regard Tendency

We all commonly observe the excessive self-regard of man. He mostly misappraises himself on the high side, like the ninety percent of Swedish drivers that judge themselves to be above average. Such misappraisals also apply to a person's major "possessions." One spouse usually overappraises the other spouse. And a man's children are likewise appraised higher by him than they are likely to be in a more objective view. Even man's minor possessions tend to be overappraised. Once owned, they suddenly become worth more to him than he would pay if they were offered for sale to him and he didn't already own them. There is a name in psychology for this overappraisal of our own possessions: predominant: the "endowment effect." And all man's decisions are suddenly regarded by him as better than would have been the case just before he made them.

Man's excess of self-regard typically makes him strongly prefer people like himself. Psychology professors have had much fun demonstrating this effect in "lost-wallet" experiments. Their experiments all show that the finder of a lost wallet containing identity clues will be most likely to return the wallet when the owner most closely resembles the finder. Given this quality in psychosocial nature, cliquish groups of similar persons will always be a very influential part of human culture, even after we wisely try to dampen the worst effects.

Some of the worst consequences in modern life come when dysfunctional groups of cliquish persons, dominated by Excessive Self-Regard Tendency, select as new members of their organizations persons who are very much like themselves. Thus if the English department at an elite university becomes mentally dysfunctional or the sales department of a brokerage firm slips into routine fraud, the problem will have a natural tendency to get worse and to be quite resistant to change for the better. So also with a police department or prison-guard unit or political group gone sour and countless other places mired in evil and folly, such as the worst of our big-city teachers' unions that harm our children by preventing discharge of ineffective teachers.

Therefore, some of the most useful members of our civilization are those who are willing to "clean house" when they find a mess under their aegis of control.

Well, naturally, all forms of excess of self-regard cause much error. How could it be otherwise?

Let us consider some foolish gambling decisions. In lotteries, the play is much lower when numbers are distributed randomly than it is when the player picks his own number. This is quite irrational. The odds are almost exactly the same and much against the player. Because state lotteries take advantage of man's unusual love of self-picked numbers, modern man buys more lottery tickets than he otherwise would have, with each purchase foolish.

Intensify man's love of his own conclusions by adding the possessory wallop from the "endowment effect," and you will find that a man who has already bought a pork-belly future on a commodity exchange now foolishly believes, even more strongly than before, in the merits of his speculative bet.

And foolish sports betting, by people who love sports and think they know a lot about relative merits of teams, is a lot more addictive than race track betting – partly because of man's automatic overappraisal of his own complicated conclusions.

Also extremely counterproductive is man's tendency to bet, time after time, in games of skill, like golf or poker, against people who are obviously much better players. Excessive Self-Regard Tendency diminishes the foolish bettor's accuracy in appraising his relative degree of talent.

More counterproductive yet are man's appraisals, typically excessive, of the quality of the future service he is to provide to his business. His overappraisal of these prospective contributions will frequently cause disaster.

Excesses of self-regard often cause bad hiring decisions because employers grossly overappraise the worth of their own conclusions that rely on impressions in face-to-face contact. The correct antidote to this sort of folly is to underweigh face-to-face impressions and overweigh the applicant's past record.

I once chose exactly this course of action while I served as chairman of an academic search committee. I convinced fellow committee members to stop all further interviews and simply appoint a person whose achievement record was much better than that of any other applicant. And when it was suggested to me that I wasn't giving "academic due process," I replied that I was the one being true to academic values because I was using academic research showing poor predictive value of impressions from face-to-face interviews.

Because man is likely to be overinfluenced by face-to-face impressions that by definition involve his active participation, a slick candidate who is a marvelous "presenter" often causes great danger under modern executive-search practice. In my opinion, Hewlett-Packard faced just such a danger when it interviewed the articulate, dynamic Carly Fiorina in its search for a new CEO. And I believe that Hewlett Packard made a bad decision when it chose Ms. Fiorina, and that this bad decision would not have been made if Hewlett Packard had taken the methodological precautions it would have taken if it knew more psychology.

There is a famous passage somewhere in Tolstoy that illuminates the power of Excessive Self-Regard Tendency. According to Tolstoy, the worst criminals don't appraise themselves as all that bad. They come to believe either (1) that they didn't commit their crimes or (2) that, considering the pressures and disadvantages of their lives, it is understandable and forgivable that they behaved as they did and became what they became.

The second half of the "Tolstoy effect," where the man makes excuses for his fixable poor performance, instead of providing the fix, is enormously important. Because a majority of mankind will try to get along by making way too many unreasonable excuses for fixable poor performance, it is very important to have personal and institutional antidotes limiting the ravages of such folly. Or, the personal level, a man should try to face the two simple facts:

1) fixable but unfixed bad performance is bad character and tends to create more of itself, causing more damage to the excuse giver with each tolerated instance, and
2) in demanding places, like athletic teams and General Electric, you are almost sure to be discarded in due course if you keep giving excuses instead of behaving as you should.

The main institutional antidotes to this part of the "Tolstoy effect" are:

1) a fair, meritocratic, demanding culture plus personnel handling methods that build up morale, and
2) severance of the worst offenders.

Of course, when you can't sever – as in the case of your own child – you must try to fix the child as best you can. I once heard of child-teaching method so effective that the child remembered the learning experience over fifty years later. The child later became Dean of the USC School of Music and then related to me what father said when he saw his child taking candy from the stock of his employer with the excuse that he intended to reimburse it later. The father said, "Son, it would be better for you to simply take all you want and call yourself a thief every time you do it."

The best antidote to folly from an excess of self-regard is to force yourself to be more objective when you are thinking about yourself, your family and friends, your property, and the value of your past and future activity. This isn't easy to do well won't work perfectly, but it will work much better than simply letting psychological nature take its normal course.

While an excess of self-regard is often counterproductive in its effects on cognition, it can cause some weird successes from overconfidence that happens to

cause success. This factor accounts for the adage: "Never underestimate the man who overestimates himself."

Of course, some high self-appraisals are correct and serve better than false modesty. Moreover, self-regard in the form of a justified pride in a job well done, or a life well lived, is a large constructive force. Without such justified pride, many more surpluses would crash. "Pride" is another word generally left out of psychology textbooks, and this omission is not a good idea. It is also not a good idea to construe the bible's parable about the Pharisee and the Publican as condemning all pride.

Of all forms of useful pride, perhaps the most desirable is a justified pride in being trustworthy. Moreover, the trustworthy man, even after allowing for the inconveniences of his chosen course, ordinarily has a life that averages out better than he would have if he provided less reliability.

13. Overoptimism Tendency

About three centuries before the birth of Christ, Demosthenes, the most famous Greek orator, said, "What a man wishes, that also will he believe."

Demosthenes, pared out, was thus saying that man displays not only Simple, Pain Avoiding Psychological Denial but also an excess of optimism even when he is already doing well.

The Greek orator was clearly right about an excess of optimism being the normal human condition, even when pain or the threat of pain is absent. Witness happy people buying lottery tickets or believing that credit-furnishing, delivery-making grocery stores were going to displace a great many superefficient cash and carry supermarkets.

One standard antidote to foolish optimism is trained, habitual use of the simple probability mesh of Fermat and Pascal, taught in my youth to high school sophomores. The mental rules of thumb that evolution gives you to deal with risk are not adequate. They resemble the dysfunctional golf grip you would have if you relied on a grip driven by evolution instead of golf lessons.

14. Deprival Superreaction Tendency

The quantity of man's measure from a ten dollar gain does not exactly match the quantity of his displeasure from a ten dollar loss. That is, the loss seems to hurt much more than the gain seems to help. Moreover, if a man almost gets something he greatly wants and has it jerked away from him at the last moment, he will react much as if he had long owned the reward and had it jerked away. I include the natural human reactions to both kind of loss experience – the loss of the possessed reward and the loss of the almost possessed reward – under one description, Deprival Superreaction Tendency.

In displaying Deprival Superreaction Tendency, man frequently incurs disadvantage by misframing his problems. He will often compare what is near instead of what really matters. For instance, a man with $10 million in his brokerage account will often be extremely irritated by the accidental loss of $100 out of the $300 in his wallet.

The Mungers once owned a tame and good-natured dog that displayed the canine version of Deprival Superreaction Tendency. There was only one way to get bitten by this dog. And that was to try and take some food away from him after he already had it in his mouth. If you did that, this friendly dog would automatically bite. He couldn't help it. Nothing could be more stupid than for the dog to bite his master. But the dog couldn't help being foolish. He had an automatic Deprival Superreaction Tendency in his nature.

Humans are much the same as this Munger dog. A man ordinarily reacts with irrational intensity to even a small loss, or threatened loss, of property, love, friendship, dominated territory, opportunity, status, or any other valued thing. As a natural result, overreaction in fighting over the threatened loss of dominated territory often causes immense damage to an institution as a whole. This factor among others, accounts for much of the wisdom in Jack Welch's long fight against bureaucratic ills at General Electric. Few business leaders have ever conducted wiser campaigns.

Deprival Superreaction Tendency often protects ideological or religious views by triggering and biased attacks toward vocal nonbelievers. This happens, in part, because the ideas of the nonbelievers, if they spread, will diminish the influence of views that are now supported by a comfortable environment including a strong relief-maintenance system. University liberal arts departments, law schools, and business organizations all display plenty of such ideology based groupthink that rejects almost all conflicting inputs. When the vocal critic is a former believer, hostility is often boosted both by:

1) a concept of betrayal that triggers additional Deprival Superreaction Tendency because a colleague is lost, and
2) fears that conflicting views will have extra persuasive power when they come from a former colleague.

The foregoing considerations help account for the old idea of heresy, which for centuries justified much killing of heretics, frequently after torture and frequently accomplished by burning the victim alive.

It is almost everywhere the case that extremes of ideology are maintained with great intensity and with great antipathy to non-believers, causing extremes of cognitive dysfunction. This happens, I believe, because two psychological tendencies are usually acting consistently toward this same sad result: Inconsistency-Avoidance Tendency, plus Deprival Superreaction Tendency.

One antidote to intense, deliberate maintenance of groupthink is an extreme culture of courtesy, kept in place despite ideological differences, like the behavior of the justices now serving on the U.S. Supreme Court. Another antidote is to deliberately bring in aliens and arrivistes disbelievers of incumbent groupthink. Successful corrective measures to evil examples of groupthink maintenance have included actions like that of Derek Bok when, as president of Harvard, he started disappointing tenure appointments proposed by ideologues at Harvard Law School.

Even a one-degree loss from a 180-degree view will sometimes create enough Deprival Superreaction Tendency to turn a neighbor into an enemy, as I once observed when I bought a house from one of two neighbors locked into hatred by a tiny tree newly installed by one of them.

As the case of these two neighbors illustrated, the chance of almost any group of neighbors displaying irrational, extreme deprival superreaction over some trifle in a zoning hearing is not a pretty thing to watch. Such bad behavior drives some people from the zoning field. I once bought some golf clubs from an artist who was formerly a lawyer. When I asked him what kind of law he had practiced, I expected to hear him say, "divorce law." But his answer was, "zoning law."

Deprival Superreaction Tendency has ghastly effects in labor relations. Most of the deaths in the labor strife that occurred before World War I came when employers tried to reduce wages. Nowadays, we see fewer deaths and more occasions when whole companies disappear, as competition requires either takeaways from labor – which it will not consent to – or death of the business. Deprival Superreaction Tendency causes much of this labor resistance, often in cases where it would be in labor's interest to make a different decision.

In contexts other than labor relations, takeaways are also difficult to get. Many tragedies, therefore, occur that could have been avoided had there been more rational, and less subconscious, heed of the imperative from Deprival Superreaction Tendency.

Deprival Superreaction Tendency and Inconsistency-Avoidance Tendency often join to cause one form of business failure. In this form of ruin, a man gradually uses up all his good assets in a fruitless attempt to rescue a big venture going bad. One of the best antidotes to this folly is good poker skill learned young. The teaching value of poker demonstrates that not all effective teaching occurs on a standard academic path.

Deprival Superreaction Tendency is also a huge contributor to ruin from compulsion to gamble. First, it causes the gambler to have a passion to get even once he has suffered loss, and the passion grows with the loss. Second, the most addictive forms of gambling provide a lot of near misses and each one triggers Deprival Superreaction Tendency. Some slot machine creators are vicious in exploiting this weakness of man. Electronic machines enable these creators to produce a lot of meaningless bar-bar action results that greatly increase play by fools who think they have very nearly won large rewards.

Deprival Superreaction Tendency often does much damage to man in open-outcry auctions. The "social proof" that we will next consider tends to convince man that the last price from another bidder was reasonable, and then Deprival Superreaction Tendency prompts him strongly to top the last bid. The best antidote to being thus triggered into paying foolish prices at open-outcry auctions is the simple Buffett practice: Don't go to such auctions.

I myself, the would-be instructor here, many decades ago made a big mistake caused in part by subconscious operation of my Deprival Superreaction Tendency. A friendly broker called and offered me 500 shares of ridiculously underpriced, very thinly traded Belridge Oil at $115 per share, which I purchased using cash I had on hand. The next day, he offered me 1,500 more shares at the same price, which I declined to buy, partly because I could only have made the purchase and I sold something or borrowed the required $173,000. This was a very irrational decision. I was a well-to-do man with no debt; there was no risk of loss; and similar no risk opportunities were not likely to come along. Within two years, Belridge Oil sold out to Shell at a price of about $3,706 per share, which made me about $5.4 million poorer than I would have been had I then been psychologically acute. As this tale demonstrates, psychological ignorance can be very expensive.

Some people may question my defining Deprival Superreaction Tendency to include reaction to profit barely missed, as in the well-documented responses of slot machine players. However, I believe that I haven't defined the tendency as broadly as I should. My reason for suggesting an even broader definition is that many Berkshire Hathaway shareholders I know never sell or give away a single share after immense gains in market value have occurred. Some of this reaction is caused by rational calculation, and some is, no doubt, attributable to some combination of (1) reward superresponse, (2) "status quo bias" from Inconsistency-Avoidance Tendency, and (3) "the endowment effect" from Excessive Self-Regard Tendency. But I believe the single strongest irrational explanation is a form of Deprival Superreaction Tendency. Many of these shareholders simply can't stand the idea of having their Berkshire Hathaway holdings smaller. Partly they dislike facing what they consider an impairment of identity, but mostly they fear missing out on future gains from stock sold or given away.

15. Social-Proof Tendency

The otherwise complex behavior of man is much simplified when he automatically thinks and does what he observes to be thought and done around him. And such followership often works fine. For instance, when sim-

ple way could there be to find out how to walk to a big football game in a strange city than by following the flow of the crowd. For some such reason, man's evolution left him with Social-Proof Tendency, an automatic tendency to think and act as he sees others around him thinking and acting.

Psychology professors love Social-Proof Tendency because in their experiments it causes ridiculous results. For instance, if a professor arranges for some stranger to enter an elevator wherein ten "compliance practitioners" are all silently standing so that they face the rear of the elevator, the stranger will often turn around and do the same. The psychology professors can also use Social-Proof Tendency to cause people to make large and ridiculous measurement errors.

And, of course, teenagers' parents usually learn more than they would like about teenagers' aggressive errors from Social-Proof Tendency. This phenomenon was recently involved in a breakthrough by Judith Rich Harris who demonstrated that superrespect by young people for their peers rather than for parents or other adults, is ordained to some considerable extent by the genes of the young people. This makes it wise for parents to rely more on manipulating the quality of the peers than on exhortations to their own offspring. A person like Ms. Harris, who can provide an insight of this quality and utility, backed by new research, has not lived in vain.

And in the highest reaches of business, it is not all uncommon to find leaders who display followership akin to that of teenagers. If one oil company foolishly buys a mine, other oil companies often quickly join in buying mines. So also if the purchased company makes fertilizer. Both of these oil company buying fads actually bloomed, with bad results.

Of course, it is difficult to identify and correctly weigh all the possible ways to deploy the cash flow of an oil company. So oil company executives, like everyone else, have made many bad decisions that were quickly triggered by discomfort from doubt. Going along with social proof provided by the action of other oil companies ends this discomfort in a natural way.

When will Social-Proof Tendency be most easily triggered? Here the answer is clear from many experiments. Triggering most readily occurs in the presence of puzzlement or stress, and particularly when both exist.

Because stress intensifies Social-Proof Tendency, disreputable sales organizations, engaged, for instance, in such action as selling champagne to schoolteachers, manipulate targets into situations combining isolation and stress. The isolation strengthens the social proof provided by both the knaves and the people who buy first, and the stress, often increased by fatigue, augments the targets' susceptibility to the social proof. And, of course, the techniques of our worst "religious" cults imitate those of the knavish salesmen. One cult even used earthenware to heighten the stress felt by conversion targets.

Because both bad and good behavior are made contagious by Social-Proof Tendency, it is highly important that human societies stop any bad behavior before it spreads and foster and display all good behavior.

My father once told me that just after commencing law practice in Omaha, he went with a large group from Nebraska to South Dakota to hunt pheasants. A South Dakota hunting license was, say, $2 for South Dakota residents and $5 for nonresidents. All the Nebraska residents, one by one, signed up for South Dakota licenses with phony South Dakota addresses until it was my father's turn. Then, according to him, he barely prevented himself from doing what the others were doing, which was some sort of criminal offense.

Not everyone so resists the social contagion of bad behavior. And, therefore, we often get "Serpico Syndrome," named to commemorate the state of a near-totally corrupt New York police division, joined by Frank Serpico. He was then nearly murdered by gunfire because of his resistance to going along with the corruption in the division. Such corruption was being driven by social proof plus incentives, the combination that creates Serpico Syndrome. The Serpico story should be taught more than it now is because the ridiculous power of its horror is aimed at a very important evil, driven substantially by a very important force: social proof.

In social proof, it is not only action by others that misleads but also their inaction. In the presence of drama, inaction by others becomes social proof that inaction is the right course. Thus, the inaction of a great many bystanders led to the death of Kitty Genovese in a famous incident much discussed in introductory psychology courses.

In the ambit of social proof, the outside raters on a corporate board usually display the near ultimate form of inaction. They fail to object to anything much short of an axe murder until some public embarrassment of the board finally causes their intervention. A typical board-of-directors' colloquy was once well described by my friend, Joe Rosenfield, as he said, "They asked me if I wanted become a director of Northwest Bell, and it was the last thing they ever asked me."

In advertising and sales promotion, Social-Proof Tendency is about as strong a factor as one could imagine. "Monkey-see, monkey-do" is the old phrase that reminds one of how strongly John will often wish to do something, or have something, just because Joe does or has it. One interesting consequence is that an advertiser will pay a lot to have its soup can, instead of someone else's, in a movie scene involving soup consumption only in a peripheral way.

Social-Proof Tendency often interacts in a perverse way with Envy/Jealousy and Deprival Superreaction Tendency. One such interaction amused my family for years as people recalled the time when my cousin Russ and I, at ages three and four, fought and howled over a

single surplus shingle while surrounded by a visual sea of surplus shingles.

But the adult versions of this occasion, boosted by psychological tendencies preserving ideologies, are not funny – and can bring down whole civilizations. The Middle East now presents just such a threat. By now the resources spent by Jews, Arabs and all others over a small amount of disputed land if divided arbitrarily among land claimants, would have made everyone better off, even before taking into account any benefit from reduced threat of war, possibly nuclear.

Outside domestic relations it is rare now to try to resolve disputes by techniques including discussion of impacts from psychological tendencies. Considering the implications of childishness that would be raised by such inclusion, and the defects of psychology as now taught, this result may be sound. But, given the nuclear stakes now involved and the many failures of important negotiations lasting decades, I often wonder if some day, in some way, more use of psychological insight will eventually improve outcomes. If so, correct teaching of psychology matters a lot. And, if old psychology professors are even less likely than old physics professors to learn new ways, which seems nearly certain, then we may, as Max Planck predicted, need a new generation of psychology professors who have grown up to think in a different way.

If only one lesson is to be chosen from a package of lessons involving Social-Proof Tendency, and used in self improvement, my favorite would be: Learn how to ignore the examples from others when they are wrong, because few skills are more worth having.

16. Contrast-Misreaction Tendency

Because the nervous system of man does not naturally measure in absolute scientific units, it must instead rely on something simple. The eyes have a solution that limits their programming needs: the contrast in what is seen is registered. And as to sight, so does it go largely, in the other senses. Moreover, as perception goes, so goes cognition. The result is man's Contrast-Misreaction Tendency. Few psychological tendencies do more damage to correct thinking. Small-scale damages involve instances such as man's buying an overpriced $1,000 leather dashboard merely because the price is so low compared to his concurrent purchase of a $65,000 car. Large-scale damages often ruin lives, as when a wonderful woman having terrible parents marries a man who would be judged satisfactory only in comparison to her parents. Or as when a man takes wife number two who would be appraised as all right only in comparison to wife number one.

A particularly reprehensible form of sales practice occurs in the offices of some real estate brokers. A buyer from out of the city, perhaps needing to shift his family there, visits the office with little time available. The salesman deliberately shows the customer three awful houses at ridiculously high prices. Then he shows him a merely bad house at a price only moderately too high. And, boom, the broker often makes an easy sale.

Contrast-Misreaction Tendency is routinely used to cause disadvantage for customers buying merchandise and services. To make an ordinary price seem low, the vendor will very frequently create a highly artificial price that is much higher than the price always sought. Then advertise his standard price as a big reduction from his phony price. Even when people know that this sort of customer manipulation is being attempted, it will often work to trigger buying. This phenomenon accounts in part for much advertising in newspapers. It also demonstrates that being aware of psychological ploys is not a perfect defense. When a man's steps are consecutively taken toward disaster, with each step being very small, the brain's Contrast-Misreaction Tendency will often let the man go too far toward disaster to be able to avoid it. This happens because each step presents small a contrast from his present position.

A bridge-playing pal of mine once told me that a frog tossed into very hot water would jump out, but that the same frog would end up dying if placed in room-temperature water that was later heated at a very slow rate. My few shreds of physiological knowledge make me doubt this account. But no matter, because many foolishnesses die in just the manner claimed by my friend for the frog. Cognition, misled by tiny changes involving low contrast, will often miss a trend that is destiny.

One of Ben Franklin's best remembered and most useful aphorisms is "A small leak will sink great ship." The utility of the aphorism is large precisely because the brain so often misses the functional equivalent of a small leak in a great ship.

17. Stress-Influence Tendency

Everyone recognizes that sudden stress, for instance from a threat, will cause a rush of adrenaline in the human body, prompting faster and more extreme reaction. And everyone who has taken Psych 101 knows that stress makes Social-Proof Tendency more powerful.

In a phenomenon less well recognized, but still widely known, light stress can slightly improve performance – say, in examinations – whereas heavy stress causes dysfunction.

But few people know more about really heavy stress than that it can cause depression. For instance, most people know that an "acute stress depression" makes thinking dysfunctional because it causes an extreme of pessimism, often extended in length and usually accompanied by activity stopping fatigue. Fortunately, as most people also know, such a depression is one of mankind's more reversible ailments. Even before modern drugs were available, many people afflicted by depression, such as Winston Churchill and Samuel Johnson, gained great achievement in life.

Most people know very little about nondepressive

mental breakdowns influenced by heavy stress. But there is at least one exception, involving the work of Pavlov when he was in his seventies and eighties. Pavlov had won a Nobel Prize early in life by using dogs to work out the physiology of digestion. Then he became world-famous by working out mere-association responses in dogs, mainly salivating dogs - so much so that changes in behavior triggered by mere-association, like those caused by more modern advertisement, are today often said to come from "Pavlovian" conditioning.

What happened to cause Pavlov's last work was especially interesting. During the great Leningrad Flood of the 1920s, Pavlov had many dogs in cages. Their habits had been transformed, by a combination of his "Pavlovian conditioning" plus standard reward responses, into distinct and different patterns. As the waters of the flood came up and receded, many dogs reached a point where they had almost no airspace between their noses and the tops of their cages. This subjected them to maximum stress. Immediately thereafter, Pavlov noticed that many of the dogs were no longer behaving as they had. For example, the dog that formerly had liked his trainer now disliked him. This result reminds one of modern cognition-reversals in which a person's love of his parents suddenly becomes rare, as new love has been shifted suddenly to a cult. The unanticipated, extreme changes in Pavlov's dogs would have driven any good experimental scientist into a near-frenzy of curiosity. That was indeed Pavlov's reaction. But not many scientists would have done what Pavlov next did.

And that was to spend the rest of his long life giving stress-induced nervous breakdowns to dogs, after which he would try to reverse the breakdowns, all the while keeping careful experimental records. He found

1) that he could classify dogs so as to predict how easily a particular dog would breakdown;
2) that the dogs hardest to break down were also the hardest to return to their pre-breakdown state;
3) that any dog could be broken down; and
4) that he couldn't reverse a breakdown except by superposing stress.

Now, practically everyone is revolted by such experimental treatment of man's friend, the dog. Moreover, Pavlov was Russian and did his last work under the Communists. And maybe those facts account for the present extreme, widespread ignorance of Pavlov's last work. The two Freudian psychiatrists with whom I tried many years ago to discuss this work had never heard of it. And the dean of a major medical school actually asked me, several years ago, if any of Pavlov's experiments were "repeatable" in experiments of other researchers. Obviously, Pavlov is now a sort of forgotten hero in medical science.

I first found a description of Pavlov's last work in a popular paperback, written by some Rockefeller-financed psychiatrist, when I was trying to figure out how cults worked their horrible mischief and what should the law say about what parents could do to "deprogram" children who had become brainwashed zombies. Naturally, mainstream law objected to the zombies being physically captured by their parents and subjected to stress that would help to deprogram the effects of the stress they had endured in cult conversions.

I never wanted to get into the legal controversy that existed about this subject. But I did conclude that the controversy couldn't be handled with maximum rationality without considering whether as Pavlov's last work suggests, the heavy-handed imposition of stress might be the only several method that would work to remedy one of the worst evils imaginable: a stolen mind. I have included this discussion of Pavlov partly out of general antagonism toward taboos, partly to make my talk reasonably complete as it considers stress and partly because I hope some listener may continue my inquiry with more success.

18. Availability-Misweighing Tendency

This mental tendency echoes the words of the song, "When I'm not near the girl I love, I love the girl I'm near." Man's imperfect, limited-capacity brain easily drifts into working with what's easily available to it. And the brain can't use what it can't remember or what it is blocked from recognizing because it is heavily influenced by one or more psychological tendencies bearing strongly on it, as the fellow is influenced by the nearby girl in the song. And so the mind overweighs what is easily available and thus displays Availability-Misweighing Tendency.

The main antidotes to mistakes from Availability-Misweighing Tendency often involve procedures, including use of checklists, which are almost always helpful.

Another antidote is to behave somewhat like Darwin did when he emphasized disconfirming evidence. What should be done is to especially emphasize factors that don't produce scores of easily available numbers, instead of drifting mostly or entirely into considering factors that do produce such numbers. Still another antidote is to find and hire some skeptical, articulate people with far-reaching minds to act as advocates for notions that are opposite to the incumbent notions.

One consequence of this tendency is that extra vivid evidence, being so memorable and thus more available to cognition, should often consciously be underweighted while less vivid evidence should be overweighed.

Still, the special strength of extra-vivid images in influencing the mind can be constructively used:

1) in persuading someone else to reach a correct conclusion or
2) as a device for improving one's own memory by attaching vivid images, one after the other, to many items one doesn't want to forget.

Indeed, such use of vivid images as memory boosters is

what enabled the great orators of classical Greece and Rome to give such long, organized speeches without using notes.

The great algorithm to remember in dealing with this tendency is simple: An idea or a fact is not worth more merely because it is easily available to you.

19. Use-It-or-Lose-It Tendency

All skills atrophy with disuse. I was a whiz at calculus until age twenty, after which the skill was soon obliterated by total nonuse. The right antidote to such a loss is to make use of the functional equivalent of the aircraft simulator employed in pilot training. This allows a pilot to continuously practice all of the rarely used skills that he can't afford to lose.

Throughout his life, a wise man engages in practice of all his useful, rarely used skills, many of them outside his discipline, as a sort of duty to his better self. If he reduces the number of skills he practices and, therefore, the number of skills he retains, he will naturally drift into error from man with a hammer tendency. His learning capacity will also shrink as he creates gaps in the latticework of theory he needs as a framework for understanding new experience. It is also essential for a thinking man to assemble his skills into a checklist that he routinely uses. Any other mode of operation will cause him to miss much that is important.

Skills of a very high order can be maintained only with daily practice. The pianist Paderewski once said that if he failed to practice for a single day, he could notice his performance deterioration and that, after a week's gap in practice, the audience could notice it as well.

The hard rule of Use-It-or-Lose-It Tendency tempers its harshness for the diligent. If a skill is raised to fluency, instead of merely being crammed in briefly to enable one to pass some test, then the skill: (1) will be lost more slowly and (2) will come back faster when refreshed with new learning. These are not minor advantages, and a wise man engaged in learning some important skill will not stop until he is really fluent in it.

20. Drug-Misinfluence Tendency

This tendency's destructive power is so widely known to be intense, with frequent tragic consequences for cognition and the outcome of life, that it needs no discussion here to supplement that previously given under "Simple, Pain-Avoiding Psychological Denial."

21. Senescence-Misinfluence Tendency

With advanced age, there comes a natural cognitive decay, differing among individuals in the earliness of its arrival and the speed of its progression. Practically no one is good at learning complex new skills when very old. But some people retain pretty good at maintaining intensely practiced old skills and late in life, as one can notice in many a bridge tournament.

Old people like me get pretty skilled, without working at it, at disguising age-related deterioration because social convention, like clothing, hides much decline.

Continuous thinking and learning, done with joy, can somewhat help delay what is inevitable.

22. Authority-Misinfluence Tendency

Living in dominance hierarchies as he does, like all his ancestors before him, man was born mostly to follow leaders, with only a few people doing the leading. And so, human society is formally organized into dominance hierarchies, with their culture augmenting the natural follow-the-leader tendency of man.

But automatic as most human reactions are, with the tendency to follow leaders being no exception, man is often destined to suffer greatly when the leader is wrong or when his leader's ideas don't get through properly in the hustle of life and are misunderstood. And so, we find much misconduction from man's Authority-Misinfluence Tendency.

Some of the misinfluences are amusing, as in a case described by Cialdini. A physician left a written order for a nurse treating an earache, as follows: "Two drops, twice a day, *in ear*." The nurse then directed the patient to turn over and put the eardrops in his anus.

Other versions of confused instructions from authority figures are tragic. In World War II, a new pilot for a general, who sat beside him in the copilot's seat, was so anxious to please his boss that he misinterpreted some minor shift in the general's position as a direction to do some foolish thing. The pilot crashed the plane and became a paraplegic.

Well, naturally, cases like this one get the attention of careful thinkers like Boss Buffett, who always sets aside an overspent mouse around his pilots.

Such cases are also given attention in the simulator training of copilots who have to learn to ignore certain really foolish orders from boss pilots because boss pilots will sometimes err disastrously. Even after going through such a training regime, however, copilots in simulator exercises will too often allow the simulated plane to crash because of some extreme and perfectly obvious simulated error of the chief pilot.

After Corporal Hitler had risen to dominate Germany, leading a bunch of believing Lutherans and Catholics into orgies of genocide and other mass destruction, one clever psychology professor, Stanley Milgram, decided to do an experiment to determine exactly how far authority figures could lead ordinary people into gross misbehavior. In this experiment, a man posing as an authority figure, namely a professor governing a respectable experiment, was able to trick a great many ordinary people into giving what they had every reason to believe were massive electric shocks that inflicted heavy torture on innocent fellow citizens. This experiment did demonstrate a terrible result contributed to by Authority-Misinfluence Tendency, but it also demon-

strated extreme ignorance of the psychology professoriate right after World War II.

Almost any intelligent person with my checklist of psychological tendencies in his hand would, by simply going down the checklist, have seen that Milgram's experiment involved about six powerful psychological tendencies acting in confluence to bring about his extreme experimental result. For instance, the person pulling Milgram's shock lever was given much social proof from presence of inactive bystanders whose silence communicated that his behavior was okay. Yet it took over a thousand psychological papers, published before I got to Milgram, for the professoriate to get his experiment only about ninety percent as well understood as it would have immediately been by any intelligent person who used (1) any sensible organization of psychology along the lines of this talk, plus (2) a checklist procedure. This outcome displaying the dysfunctional thinking of long-dead professors deserves a better explanation. I will later deal with the subject in a very hesitant fashion.

We can be pleased that the psychology professoriate of a former era wasn't quite as dysfunctional as the angler in my next-to-last illustration of Authority-Misinfluence Tendency.

When I once fished in the Rio Colorado in Costa Rica, my guide, in a state of shock, told me a story about an angler who'd earlier come to the river without ever having fished for tarpon. A fishing guide like the one I had runs the boat and gives fishing advice, establishing himself in this context as the ultimate authority figure. In the case of this guide, his native language was Spanish, while the angler's native language was English. The angler got a big tarpon on and began screaming to many directions from this authority figure called guide: tip up, tip down, reel in, etc. Finally, when it was necessary to put more pressure on the fish by causing more bending of the angler's rod, the guide said in English: "Give him the rod, give him the rod." Well, the angler threw his expensive rod at the fish, and when last seen, it was going down the Rio Colorado toward the ocean. This example shows how powerful is the tendency to go along with an authority figure and how it can turn ones brain into mush.

My final example comes from business. A psychology Ph.D. once became a CEO of a major company and went wild, creating an expensive headquarters, with a great wine cellar, at an isolated site. At some point, his underlings remonstrated that money was running short. "Take the money out of the depreciation reserves," said the CEO. Not too easy because a depreciation reserve is a liability account.

So strong is undue respect for authority that this CEO, and many even worse examples, have actually been allowed to remain in control of important business institutions for long periods after it was clear they should be removed. The obvious implication: be careful whom you appoint to power because a dominant authority figure will often be hard to remove, aided as it will be by Authority-Misinfluence Tendency.

23. Twaddle Tendency

Man, as a social animal who has the gift of language, is born to prattle and to pour out twaddle that does much damage when serious work is being attempted. Some people produce copious amounts of twaddle and others very little.

A trouble from the honeybee version of twaddle once demonstrated in an interesting experiment. A honeybee normally goes out and finds nectar and then comes back and does a dance that communicates to the other bees where the nectar is. The other bees then go out and get it. Well some scientist – clever, like B. F. Skinner – decided to see how well a honeybee would do with a handicap. He put the nectar straight up. Way up. Well, in a natural setting, there is no nectar a long way straight up, and the poor honeybee doesn't have a genetic program that is adequate to handle what she now has to communicate. You might guess that the honeybee would come back to the hive and slink into a corner, but she doesn't. She comes into the hive and does an incoherent dance. Well, all my life I've been dealing with the human equivalent of that honeybee. And it's a very important part of wise administration to keep prattling people, pouring out twaddle, far away from the serious work.

A rightly famous Caltech engineering professor, exhibiting more insight than tact, once expressed his version of this idea as follows: "The principal job of an academic administration is to keep the people who don't matter from interfering with the work of the people that do." I include this quotation partly because I long suffered from backlash caused by my version of this professor's conversational manner. After much effort, I was able to improve only slightly, so one of my reasons for supplying the quotation is my hope that, at least in comparison, I will appear tactful.

24. Reason-Respecting Tendency

There is in man, particularly one in an advanced culture, a natural love of accurate cognition and a joy in its exercise. This accounts for the widespread popularity of crossword puzzles, other puzzles, and bridge and chess columns, as well as all games requiring mental skill.

This tendency has an obvious implication. It makes man especially prone to learn well when a would-be teacher gives correct reasons for what is taught, instead of simply laying out the desired belief or attitude with no reasons given. Few practices, therefore, are wiser than not only thinking through reasons before giving orders but also communicating these reasons to the recipient of the order.

No one knew this better than Carl Braun, who designed oil refineries with spectacular skill and integrity.

He had a very simple rule, one of many in his large, Teutonic company: You had to tell Who was to do What, Where, When, and Why. And if you wrote a communication leaving out your explanation of why the addressee was to do what was ordered, Braun was likely to fire you because Braun well knew that ideas got through best when reasons for the ideas were meticulously set out.

In general, learning is most easily assimilated and used when, life long, people consistently hang their experience, actual and vicarious, on a latticework of theory answering the question, Why? Indeed, the question "Why?" is a sort of Rosetta stone opening up the entire potentiality of mental life.

Unfortunately, Reason-Respecting Tendency is so strong that even a person's giving of meaningless or incorrect reasons will increase compliance with his orders and requests. This has been demonstrated in psychology experiments wherein "compliance practitioners" successfully jump to the head of the lines in front of copying machines by explaining their reason: "I have to make some copies." This sort of unfortunate byproduct of Reason-Respecting Tendency is a conditioned reflex, based on a widespread appreciation of the importance of reasons. And, naturally, the practice of laying out various claptrap reasons is much used by commercial and cult "compliance practitioners" to help them get what they don't deserve.

25. Lollapalooza Tendency – The Tendency to Get Extreme Consequences from Confluences of Psychological Tendencies Acting in Favor of a Particular Outcome

This tendency was not in any of the psychology texts I once examined, at least in any coherent fashion, yet it dominates life. It accounts for the extreme result in the Milgram experiment and the extreme success of some cults that have stumbled through practice evolution into bringing pressure from many psychological tendencies to bear at the same time on conversion targets. The targets vary in susceptibility, like the dogs Pavlov worked with in his old age, but some of the minds that are targeted simply snap into zombiedom under cult pressure. Indeed, that is one cult's name for the conversion phenomenon: snapping.

What are we to make of the extreme ignorance of the psychology textbook writers of yesteryear? How could anyone who had taken a freshman course in physics or chemistry not be driven to consider, above all, how psychological tendencies combine and with what effects? Why would anyone think his study of psychology was adequate without his having endured the complexity involved in dealing with intertwined psychological tendencies? What could be more inane than professors using oversimplified notions while studying bad cognitive effects grounded in the mind's tendency to use oversimplified algorithms?

I will make a few tentative suggestions. Maybe many of the long-eared professors wanted to create a whole science from one narrow type of repeatable psychology experiment that was conducible in a university setting and that aimed at one psychological tendency at a time. If so, these early psychology professors made a massive error in so restricting their approach to their subject. It would be like physics ignoring astrophysics because it couldn't happen in a physics lab, plus all compound effects. What psychological tendencies could account for early psychology professors adopting an over-restricted approach to their own subject matter? One candidate would be Availability Misweighing Tendency grounded in a preference for easy-to-control data. And then the restrictions would eventually create an extreme case of man with a hammer tendency. Another candidate might be Envy/Jealousy Tendency through which early psychology professors displayed some weird form of envy of a physics that was misunderstood. And this possibility tends to demonstrate that leaving envy/jealousy out of modern psychology was never a good idea. I now quit chain of all these historical mysteries to my betters.

Well, that ends my brief description of psychological tendencies.

QUESTIONS AND ANSWERS

Now, as promised, I will ask and answer a few general questions.

Q. Isn't this list of psychological tendencies tautological to some extent compared to the system of Euclid? That is, aren't there overlaps in the tendencies? And couldn't the system be laid out just as plausibly in a somewhat different way?

The answers are yes, yes, and yes, but this matters only moderately. Further refinement of these tendencies, while desirable, has a limited practical potential because a significant amount of messiness is unavoidable in a soft science like psychology.

Q. Can you supply a real world model, instead of a Milgram-type controlled psychology experiment, that uses your system to illustrate multiple psychological tendencies interacting in a plausibly diagnosable way?

The answer is yes. One of my favorite cases involves the McDonnell Douglas airliner evacuation test. Before a new airliner can be sold, the government requires that it pass an evacuation test, during which a full load of passengers must get out in some short period of time. The government directs that the test be realistic. So you can't pass by evacuating only twenty-year-old athletes. So McDonnell Douglas scheduled such a test in a darkened hangar using a lot of old people as evacuees. The passenger cabin was, say, twenty feet above the concrete floor of the hangar and was to be evacuated through

moderately flimsy rubber chutes. The first test was made in the morning. There were about twenty very serious injuries, and the evacuation took so long it flunked the time test. So what did McDonnell Douglas next do? It repeated the test in the afternoon, and this time there was another failure, with about twenty more serious injuries, including one case of permanent paralysis.

What psychological tendencies contributed to this terrible result? Well, using my tendency list as a checklist, I come up with the following explanation. Reward-Superresponse Tendency drove McDonnell Douglas to act fast. It couldn't sell its airliner and it passed the test. Also pushing the company was Doubt-Avoidance Tendency with its natural drive to arrive at a decision and run with it. Then the government's direction that the test be realistic drove Authority-Misinfluence Tendency into the mischief of causing McDonnell Douglas to overrun by using what was obviously too dangerous a test method. By now the course of action had been decided, so Inconsistency-Avoidance Tendency helped preserve the now insane plan. When all the old people got to the back hangar, with its high airline cabin and concrete floor, the situation must have made McDonnell Douglas employees very queasy, but they saw other employees and supervisors not objecting. Social Proof Tendency, therefore, swamped the queasiness. And this allowed continued action as planned, a continuation that was aided by more Authority Overinfluence Tendency. Then came the disaster of the morning test with its failure, plus serious injuries. McDonnell Douglas ignored the strong disconfirming evidence from the failure of the first test because confirmation bias, aided by the triggering of strong Deprival Superreaction Tendency favored maintaining the original plan. McDonnell Douglas' Deprival Superreaction Tendency was now like that which causes a gambler, bent on getting even after a huge loss, to make his final big bet. After all, McDonnell Douglas was going to lose a lot if it didn't pass its test as scheduled. More psychology-based explanation can probably be made, but the foregoing discussion is complete enough to demonstrate the utility of my system when used in a checklist mode.

Q. In the practical world, what good is the thought system laid out in this list of tendencies? Isn't practical benefit prevented because these psychological tendencies are so thoroughly programmed into the human mind by broad evolution [the combination of genetic and cultural evolution] that we can't get rid of them?

Well, the answer is that the tendencies are probably much more good than bad. Otherwise, they wouldn't be there, working pretty well for man, given his condition and his limited brain capacity. So the tendencies can't be simply washed out automatically, and shouldn't be. Nevertheless, the psychological thought system described, when properly understood and used, enables the spread of wisdom and good conduct and facilitates the avoidance of disaster. Tendency is not always destiny, and knowing the tendencies and their antidotes can often help prevent trouble that would otherwise occur.

Here's a short list of examples reminding us of the great utility of elementary psychological knowledge:

1) Carl Braun's communication practices

2) The use of simulators in pilot training

3) The system of Alcoholics Anonymous.

4) Clinical training methods in medical schools.

5) The rules of the U.S. Constitutional Convention: totally secret meetings, no recorded vote by name until the final vote, votes revocable at any time before the end of the convention, then just one vote on the whole Constitution. These are very clever psychology-respecting rules. If the founders had used a different procedure, many people would have been pushed by various psychological tendencies into inconsistent, hardened positions. The elite founders got our Constitution through by a whisker only because they were psychologically astute.

6) The use of Granny's incentive driven rule to manipulate oneself toward better performance of one's duties

7) The Harvard Business School's emphasis on decision trees. When I was young and foolish I used to laugh at the Harvard Business School. I said, "They're teaching twenty-eight year-old people that high school algebra works in real life!" But later, I wised up and realized that it was very important that they do that to counter some bad effects from psychological tendencies. Better late than never.

8) The use of autopsy conferences at Johnson & Johnson. At most corporations, if you make an acquisition and it turns out to be a disaster, all the people, paperwork, and presentations that caused the foolish acquisition are quickly forgotten. Nobody wants to be associated with the poor outcome by mentioning it. But at Johnson & Johnson, the rules make everybody revisit old acquisitions, comparing predictions with outcomes. That is a very smart thing to do.

9) The great example of Charles Darwin as he avoided confirmation bias, which has morphed into the extreme anti-confirmation bias method of the "double blind" studies widely required in drug research by the FDA.

10) The Warren Buffett rule for open-outcry auctions: Don't go.

Q. What special knowledge problems lie buried in the thought system demonstrated by your list?

Well, one answer is paradox. In social psychology, the more people learn about the system, the less it is true, and this is what gives the system its great value as a preventer of bad outcomes and a driver of good outcomes. This result is paradoxical, and doesn't remind one of elementary physics, but so what. One can't get all the paradox out of pure matter, so why should psychology be shocked by some paradox?

There is also some paradox in cognition change that works even when the manipulated person knows he is being manipulated. This creates a kind of paradox in a paradox, but, again, so what. I once much enjoyed an occasion of this sort. I drew this beautiful woman as my dinner partner many years ago. I'd never seen her before. She was married to a prominent Los Angeles area. She sat down next to me, turned her beautiful face up, and said, "Charlie, what one word accounts for your remarkable success in life?" I knew I was being manipulated by a practiced routine, and I just loved it. I never see this woman without a little lift in my spirits. And, by the way, I told her I was rational. You'll have to judge yourself whether that's true. I may be demonstrating some psychological tendency I hadn't planned on demonstrating.

Q. Don't we need more reconciliation of psychology and economics?

My answer is yes, and I suspect that some slight progress is being made. I have heard of one such example. Colin Camerer of Caltech, who works in "experimental economics," devised an interesting experiment in which he caused high I.Q. students, playing for real money, to pay price A+B for a "security" they knew would turn into A dollars at the end of the day. This foolish action occurred because the students were allowed to trade with each other in liquid market for the security. And some students then paid price A+B because they hoped to unload on other students at a higher price before the day was over. What I will now confidently predict is that, despite Camerer's experimental outcome, most economics and corporate finance professors who still believe in the "hard-form efficient market hypothesis" will retain their original belief. If so, this will be one more indication of how irrational sewer people can be when influenced by psychological tendencies.

Q. Don't moral and prudential problems come with knowledge of these psychological tendencies?

The answer is yes. For instance, psychologists' knowledge improves persuasive power and, like other power, it can be used for good or ill. Captain Cook once played a psychology-based trick on his seamen to cause them to eat sauerkraut and avoid scurvy. In my opinion, this action was both ethical and wise under the circumstances, despite the deliberate manipulation involved. But ordinarily, when you try to use your knowledge of psychological tendencies in the actual manipulation of someone whose trust you need, you will be making both a moral and prudential error. The moral error is obvious. The prudential error comes because many intelligent people, targeted for conscious manipulation, are likely to figure out what you are trying to do and resent your action.

Q. Aren't there factual and reasoning errors in this talk?

The answer is yes, almost surely yes. The final revision was made from memory over about fifty hours by a man eighty-one years old, who never took a course in psychology and has read none of it, except one book on developmental psychology, for nearly fifteen years. Even so, I think the totality of my talk will stand up very well, and I hope all my descendants and friends will carefully consider what I have said. I even hope that more psychology professors will join me in:

1) making heavy use of inversion;
2) striving for a complete description of the psychological system so that it works better as a checklist; and
3) especially emphasizing effects from combinations of psychological tendencies.

Well that ends my talk. If in considering what I have said you had ten percent the fun I had saying it, you were lucky recipients.

Selection from three of Charlie Munger's talks, contrived into one talk never made, after revision by Charlie in 2005 that included considerable new material. The three talks were

(1) The Bray Lecture at the Caltech Faculty Club, February 3, 1992;

(2) Talk under the Sponsorship of the Cambridge Center for Behavioral Studies at the Harvard Faculty Club, October 6, 1994; and the extensive revision by Charlie in 2005, made from memory unassisted by any research, occurred because Charlie thought he could do better at age eighty-one than he did more than ten years earlier when he knew less and was more burned by a wounded lip and speaking from notes instead of reading transcript.

(3) Talk under the Sponsorship of the Cambridge Center for Behavioral Studies at the Racine Harbor Hotel, April 24, 1995

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Art of Stock Picking

By Charlie Munger, *(Warren Buffett's partner at Berkshire Hathaway)*

I'm going to play a minor trick on you today because the subject of my talk is the art of stock picking as a subdivision of the art of worldly wisdom. That enables me to start talking about worldly wisdom a much broader topic that interests me because I think all too little of it is delivered by modern educational systems, at least in an effective way.

And therefore, the talk is sort of along the lines that some behaviorist psychologists call Grandma's rule after the wisdom of Grandma when she said that you have to eat the carrots before you get the dessert.

The carrot part of this talk is about the general subject of worldly wisdom which is a pretty good way to start. After all, the theory of modern education is that you need a *general* education before you *specialize.* And I think to some extent, before you're going to be a great stock picker, you need some general education.

So, emphasizing what I sometimes waggishly call *remedial* worldly wisdom, I'm going to start by waltzing you through a few basic notions.

What is elementary, worldly wisdom? Well, the first rule is that you can't really know anything if you just remember isolated facts and try and bang 'em back. If the facts don't hang together on a latticework of theory, you don't have them in a usable form.

You've got to have *models* in your head. And you've got to array your experience both vicarious and direct on this latticework of models. You may have noticed students who just try to remember and pound back what is remembered. Well, they fail in school and in life. You've got to hang experience on a latticework of models in your head.

What are the models? Well, the first rule is that you've got to have *multiple* models because if you just have one or two that you're using, the nature of human psychology is such that you'll *torture* reality so that it fits your models, or at least you'll think it does. You become the equivalent of a chiropractor who, of course, is the great boob in medicine.

It's like the old saying, "To the man with only a hammer, every problem looks like a nail. "And of course, that's the way the chiropractor goes about practicing medicine. But that's a perfectly disastrous way to think and a perfectly disastrous way to operate in the world. So you've got to have multiple models.

And the models have to come from multiple disciplines because all the wisdom of the world is not to be found in one little academic department. That's why poetry professors, by and large, are so unwise in a worldly sense. They don't have enough models in their heads. So you've got to have models across a fair array of disciplines.

You may say, "My God, this is already getting way too tough. "But, fortunately, it *isn't* that tough because 80 or 90 important models will carry about 90% of the freight in making you a worldly wise person. And, of those, only a mere handful really carry very heavy freight.

So let's briefly review what kind of models and techniques constitute this basic knowledge that everybody has to have before they proceed to being really good at a narrow art like stock picking.

First there's mathematics. Obviously, you've got to be able to handle numbers and quantities basic arithmetic. And the great useful model, after compound interest, is the elementary math of permutations and combinations. And that was taught in my day in the sophomore year in high school. I suppose by now in great private schools, it's probably down to the eighth grade or so.

It's very simple algebra. It was all worked out in the course of about one year between Pascal and Fermat. They worked it out casually in a series of letters.

It's not that hard to learn. What is hard is to get so you use it routinely almost everyday of your life. The Fermat/Pascal system is dramatically consonant with the way that the world works. And it's fundamental truth. So you simply have to have the technique.

Many educational institutions - although not nearly enough have realized this. At Harvard Business School, the great quantitative thing that bonds the first year class together is what they call decision tree theory. All they do is take high school algebra and apply it to real life problems. And the students love it. They're amazed to find that high school algebra works in life....

By and large, as it works out, people can't naturally and automatically do this. If you understand elementary psychology, the reason they can't is really quite simple: The basic neural network of the brain is there through broad genetic and cultural evolution. And it's not Fermat / Pascal. It uses a very crude, shortcut type of approximation. It's got elements of Fermat / Pascal in it. However, it's not good.

So you have to learn in a very usable way this very elementary math and use it routinely in life - just the way if you want to become a golfer, you can't use the natural swing that broad evolution gave you. You have to *learn*to have a certain grip and swing in a different way to realize your full potential as a golfer.

If you don't get this elementary, but mildly unnatural, mathematics of elementary probability into your repertoire, then you go through a long life like a one-legged man in an ass-kicking contest. You're giving a *huge* advantage to everybody else.

One of the advantages of a fellow like Buffett, whom I've worked with all these years, is that he *automatically* thinks in terms of decision trees and the elementary math of permutations and combinations....

Obviously, you have to know accounting. It's the language of practical business life. It was a *very* useful thing to deliver to civilization. I've heard it came to civilization through Venice which of course was once the great commercial power in the Mediterranean. However, double-entry bookkeeping was a hell of an invention.

And it's not that hard to understand.

But you have to know enough about it to understand its limitations - because although accounting is the starting place, it's only a crude approximation. And it's not very hard to understand its limitations. For example, everyone can see that you have to more or less just guess at the useful life of a jet airplane or anything like that. Just because you express the depreciation rate in neat numbers doesn't make it anything you really know.

In terms of the limitations of accounting, one of my favorite stories involves a very great businessman named Carl Braun who created the CF Braun Engineering Company. It designed and built oil refineries - which is very hard to do. And Braun would get them to come in on time and not blow up and have efficiencies and so forth. This is a major art.

And Braun, being the thorough Teutonic type that he was, had a number of quirks. And one of them was that he took a look at standard accounting and the way it was applied to building oil refineries and he said, "This is asinine."

So he threw all of his accountants out and he took his engineers and said, "Now, we'll devise our *own* system of accounting to handle this process. "And in due time, accounting adopted a lot of Carl Braun's notions. So he was a formidably willful and talented man who demonstrated both the importance of accounting and the importance of knowing its limitations.

He had another rule, from psychology, which, if you're interested in wisdom, ought to be part of your repertoire - like the elementary mathematics of permutations and combinations.

His rule for all the Braun Company's communications was called the five W's - you had to tell *who* was going to do *what, where, when* and *why.* And if you wrote a letter or directive in the Braun Company telling somebody to do something, and you didn't tell him why, you could get fired. In fact, you would get fired if you did it twice.

You might ask why that is so important? Well, again that's a rule of psychology. Just as you think better if you array knowledge on a bunch of models that are basically answers to the question, *why, why, why,* if you always tell people why, they'll understand it better, they'll consider it more important, and they'll be more likely to comply. Even if they don't understand your reason, they'll be more likely to comply.

So there's an iron rule that just as you want to start getting worldly wisdom by asking why, why, why, in communicating with other people about everything, you want to include why, why, why. Even if it's obvious, it's wise to stick in the why.

Which models are the most reliable? Well, obviously, the models that come from hard science and engineering are the most reliable models on this Earth. And engineering quality control - at least the guts of it that matters to you and me and people who are not professional engineers - is very much based on the elementary mathematics of Fermat and Pascal:

It costs so much and you get so much less likelihood of it breaking if you spend this much. It's all elementary high school mathematics. And an elaboration of that is what Deming brought to Japan for all of that quality control stuff.

I don't think it's necessary for most people to be terribly facile in statistics. For example, I'm not sure that I can even pronounce the Poisson distribution. But I know what a Gaussian or normal distribution looks like and I know that events and huge aspects of reality end up distributed that way. So I can do a rough calculation.

But if you ask me to work out something involving a Gaussian distribution to ten decimal points, I can't sit down and do the math. I'm like a poker player who's learned to play pretty well without mastering Pascal.

And by the way, that works well enough. But you have to understand that bell-shaped curve at least roughly as well as I do.

And, of course, the engineering idea of a backup system is a very powerful idea. The engineering idea of breakpoints that's a very powerful model, too. The notion of a critical mass that comes out of physics is a very powerful model.

All of these things have great utility in looking at ordinary reality. And all of this cost-benefit analysis - hell, that's all elementary high school algebra, too. It's just been dolled up a little bit with fancy lingo.

I suppose the next most reliable models are from biology/ physiology because, after all, all of us are programmed by our genetic makeup to be much the same.

And then when you get into psychology, of course, it gets very much more complicated. But it's an ungodly important subject if you're going to have any worldly wisdom.

And you can demonstrate that point quite simply: There's not a person in this room viewing the work of a very ordinary professional magician who doesn't see a lot of things happening that aren't happening and not see a lot of things happening that are happening.

And the reason why is that the perceptual apparatus of man has shortcuts in it. The brain cannot have unlimited circuitry. So someone who knows how to take advantage of those shortcuts and cause the brain to miscalculate in certain ways can cause you to see things that aren't there.

Now you get into the cognitive function as distinguished from the perceptual function. And there, you are equally more than equally in fact likely to be misled. Again, your brain has a shortage of circuitry and so forth and it's taking all kinds of little automatic shortcuts.

So when circumstances combine in certain ways or more commonly, your fellow man starts acting like the magician and manipulates you on purpose by causing your cognitive dysfunction you're a patsy.

And so just as a man working with a tool has to know its limitations, a man working with his cognitive apparatus has to know its limitations. And this knowledge, by the way, can be used to control and motivate other people....

So the most useful and practical part of psychology which I personally think can be taught to any intelligent person in a week is ungodly important. And nobody taught it to me by the way. I had to learn it later in life, one piece at a time. And it was fairly laborious. It's so elementary though that, when it was all over, I felt like a fool.

And yeah, I'd been educated at Cal Tech and the Harvard Law School and so forth. So very eminent places mis-educated people like you and me.

The elementary part of psychology - the psychology of misjudgment, as I call it is a terribly important thing to learn. There are about 20 little principles. And they interact, so it gets slightly complicated. But the guts of it is unbelievably important.

Terribly smart people make totally bonkers mistakes by failing to pay heed to it. In fact, I've done it several times during

the last two or three years in a very important way. You never get totally over making silly mistakes.

There's another saying that comes from Pascal which I've always considered one of the really accurate observations in the history of thought. Pascal said in essence, "The mind of man at one and the same time is both the glory and the shame of the universe."

And that's exactly right. It has this enormous power. However, it also has these standard malfunctions that often cause it to reach wrong conclusions. It also makes man extraordinarily subject to manipulation by others. For example, roughly half of the army of Adolf Hitler was composed of believing Catholics. Given enough clever psychological manipulation, what human beings will do is quite interesting.

Personally, I've gotten so that I now use a kind of two-track analysis. First, what are the factors that really govern the *interests* involved, rationally considered? And second, what are the *subconscious* influences where the brain at a subconscious level is automatically doing these things which by and large are useful, but which often malfunction.

One approach is rationality the way you'd work out a bridge problem: by evaluating the real interests, the real probabilities and so forth. And the other is to evaluate the psychological factors that cause subconscious conclusions many of which are wrong.

Now we come to another somewhat less reliable form of human wisdom microeconomics. And here, I find it quite useful to think of a free market economy or partly free market economy as sort of the equivalent of an ecosystem....

This is a very unfashionable way of thinking because early in the days after Darwin came along, people like the robber barons assumed that the doctrine of the survival of the fittest authenticated them as deserving power you know, "I'm the richest. Therefore, I'm the best. God's in his heaven, etc."

And that reaction of the robber barons was so irritating to people that it made it unfashionable to think of an economy as an ecosystem. But the truth is that it is a lot like an ecosystem. And you get many of the same results.

Just as in an ecosystem, people who narrowly specialize can get terribly good at occupying some little niche. Just as animals flourish in niches, similarly, people who specialize in the business world - and get very good because they specialize frequently find good economics that they wouldn't get any other way.

And once we get into microeconomics, we get into the concept of advantages of scale. Now we're getting closer to investment analysis because in terms of which businesses succeed and which businesses fail, advantages of scale are ungodly important.

For example, one great advantage of scale taught in all of the business schools of the world is cost reductions along the so-called experience curve. Just doing something complicated in more and more volume enables human beings, who are trying to improve and are motivated by the incentives of capitalism, to do it more and more efficiently.

The very nature of things is that if you get a whole lot of volume through your joint, you get better at processing that volume. That's an enormous advantage. And it has a lot to do with which businesses succeed and fail....

Let's go through a list albeit an incomplete one of possible advantages of scale. Some come from simple geometry. If you're building a great spherical tank, obviously as you build it bigger, the amount of steel you use in the surface goes up with the square and the cubic volume goes up with the cube. So as you increase the dimensions, you can hold a lot more volume per unit area of steel.

And there are all kinds of things like that where the simple geometry the simple reality gives you an advantage of scale.

For example, you can get advantages of scale from TV advertising. When TV advertising first arrived when talking color pictures first came into our living rooms it was an unbelievably powerful thing. And in the early days, we had three networks that had whatever it was say 90% of the audience.

Well, if you were Proctor & Gamble, you could afford to use this new method of advertising. You could afford the very expensive cost of network television because you were selling so many cans and bottles. Some little guy couldn't. And there was no way of buying it in part. Therefore, he couldn't use it. In effect, if you didn't have a big volume, you couldn't use network TV advertising which was the most effective technique.

So when TV came in, the branded companies that were already big got a huge tail wind. Indeed, they prospered and prospered and prospered until some of them got fat and foolish, which happens with prosperity - at least to some people....

And your advantage of scale can be an informational advantage. If I go to some remote place, I may see Wrigley chewing gum alongside Glotz's chewing gum. Well, I know that Wrigley is a satisfactory product, whereas I don't know anything about Glotz's. So if one is 40 cents and the other is 30 cents, am I going to take something I don't know and put it in my mouth which is a pretty personal place, after all for a lousy dime?

So, in effect, Wrigley , simply by being so well known, has advantages of scale what you might call an informational advantage.

Another advantage of scale comes from psychology. The psychologists use the term “social proof”. We are all influenced subconsciously and to some extent consciously by what we see others do and approve. Therefore, if everybody's buying something, we think it's better. We don't like to be the one guy who's out of step.

Again, some of this is at a subconscious level and some of it isn't. Sometimes, we consciously and rationally think, "Gee, I don't know much about this. They know more than I do. Therefore, why shouldn't I follow them?"

The social proof phenomenon which comes right out of psychology gives huge advantages to scale - for example, with very wide distribution, which of course is hard to get. One advantage of Coca-Cola is that it's *available* almost everywhere in the world.

Well, suppose you have a little soft drink. Exactly how do you make it available all over the Earth? The worldwide distribution setup which is slowly won by a big enterprise gets to be a *huge* advantage.... And if you think about it, once you get enough advantages of that type, it can become very hard for anybody to dislodge you.

There's *another* kind of advantage to scale. In some businesses, the very nature of things is to sort of cascade toward the overwhelming dominance of one firm.

The most obvious one is daily newspapers. There's practically no city left in the U.S., aside from a few very big ones, where there's more than one daily newspaper.

And again, that's a scale thing. Once I get most of the circulation, I get most of the advertising. And once I get most of the advertising and circulation, why would anyone want the thinner paper with less information in it? So it tends to cascade to a winner take all situation. And that's a separate form of the advantages of scale phenomenon.

Similarly, all these huge advantages of scale allow greater specialization within the firm. Therefore, each person can be better at what he does.

And these advantages of scale are so great, for example, that when Jack Welch came into General Electric, he just said, "To hell with it. We're either going to be # 1 or #2 in every field we're in or we're going to be out. I don't care how many people I have to fire and what I have to sell. We're going to be #I or #2 or out."

That was a very tough-minded thing to do, but I think it was a very correct decision if you're thinking about maximizing shareholder wealth. And I don't think it's a bad thing to do for a civilization either, because I think that General Electric is stronger for having Jack Welch there.

And there are also disadvantages of scale. For example, we by which I mean Berkshire Hathaway - are the largest shareholder in Capital Cities /ABC. And we had trade publications there that got murdered where our competitors beat us. And the way they beat us was by going to a narrower specialization.

We'd have a travel magazine for business travel. So somebody would create one which was addressed solely at corporate travel departments. Like an ecosystem, you're getting a narrower and narrower specialization.

Well, they got much more efficient. They could tell more to the guys who ran corporate travel departments. Plus, they didn't have to waste the ink and paper mailing out stuff that corporate travel departments weren't interested in reading. It was a more efficient system. And they beat our brains out as we relied on our broader magazine.

That's what happened to *The* Saturday Evening Post and all those things. They're gone. What we have now is Motorcross which is read by a bunch of nuts who like to participate in tournaments where they turn somersaults on their motorcycles. But they care about it. For them, it's the principle purpose of life. A magazine called Motorcross is a total necessity to those people. Arid its profit margins would make you salivate.

Just think of how narrowcast that kind of publishing is. So occasionally, scaling down and intensifying gives you the big advantage. Bigger is not always better.

The great defect of scale, of course, which makes the game interesting - so that the big people don't always win - is that as you get big, you get the bureaucracy. And with the bureaucracy comes the territoriality - which is again grounded in human nature.

And the incentives are perverse. For example, if you worked for AT&T in my day, it was a great bureaucracy. Who in the hell was really thinking about the shareholder or anything else? And in a bureaucracy, you think the work is done when it goes out of your in-basket into somebody else's in-basket. But, of course, it isn't. It's not done until AT&T delivers what it's supposed to deliver. So you get big, fat, dumb, unmotivated bureaucracies.

They also tend to become somewhat corrupt. In other words, if I've got a department and you've got a department and we kind of share power running this thing, there's sort of an unwritten rule: "If you won't bother me, I won't bother you and we're both happy. "So you get layers of management and associated costs that nobody needs. Then, while people are justifying all these layers, it takes forever to get anything done. They're too slow to make decisions and nimbler people run circles around them.

The constant curse of scale is that it leads to big, dumb bureaucracy - which, of course, reaches its highest and worst form in government where the incentives are really awful. That doesn't mean we don't need governments - because we do. But it's a terrible problem to get big bureaucracies to behave.

So people go to stratagems. They create little decentralized units and fancy motivation and training programs. For example, for a big company, General Electric has fought bureaucracy with amazing skill. But that's because they have a combination of a genius and a fanatic running it. And they put him in young enough so he gets a long run. Of course, that's Jack Welch.

But bureaucracy is terrible.... And as things get very powerful and very big, you can get some really dysfunctional behavior. Look at Westinghouse. They blew billions of dollars on a bunch of dumb loans to real estate developers. They put some guy who'd come up by some career path - I don't know exactly what it was, but it could have been refrigerators or something - and all of a sudden, he's loaning money to real estate developers building hotels. It's a very unequal contest. And in due time, they lost all those billions of dollars.

CBS provides an interesting example of another rule of psychology namely, Pavlovian association. If people tell you what you really don't want to hear what's unpleasant there's an almost automatic reaction of antipathy. You have to train yourself out of it. It isn't foredestined that you have to be this way. But you will tend to be this way if you don't think about it.

Television was dominated by one network - CBS in its early days. And Paley was a god. But he didn't like to hear what he didn't like to hear. And people soon learned that. So they told Paley only what he liked to hear. Therefore, he was soon living in a little cocoon of unreality and everything else was corrupt although it was a great business.

So the idiocy that crept into the system was carried along by this huge tide. It was a Mad Hatter's tea party the last ten years under Bill Paley.

And that is not the only example by any means. You can get severe malfunction in the high ranks of business. And of course, if you're investing, it can make a lot of difference. If you take all the acquisitions that CBS made under Paley, after the acquisition of the network itself, with all his advisors his investment bankers, management consultants and so forth who were getting paid very handsomely it was absolutely *terrible.*

For example, he gave something like 20% of CBS to the Dumont Company for a television set manufacturer which was destined to go broke. I think it lasted all of two or three years or something like that. So very soon after he'd issued all of that stock, Dumont was history. You get a lot of dysfunction in a big fat, powerful place where no one will bring

unwelcome reality to the boss.

So life is an everlasting battle between those two forces - to get these advantages of scale on one side and a tendency to get a lot like the U.S. Agriculture Department on the other side - where they just sit around and so forth. I don't know exactly what they do. However, I do know that they do very little useful work.

On the subject of advantages of economies of scale, I find chain stores quite interesting. Just think about it. The concept of a chain store was a fascinating invention. You get this huge purchasing power which means that you have lower merchandise costs. You get a whole bunch of little laboratories out there in which you can conduct experiments. And you get specialization.

If one little guy is trying to buy across 27 different merchandise categories influenced by traveling salesmen, he's going to make a lot of poor decisions. But if your buying is done in headquarters for a huge bunch of stores, you can get very bright people that know a lot about refrigerators and so forth to do the buying.

The reverse is demonstrated by the little store where one guy is doing all the buying. It's like the old story about the little store with salt all over its walls. And a stranger comes in and says to the storeowner, "You must sell a lot of salt." And he replies, "No, I don't. But you should see the guy who *sells* me salt."

So there are huge purchasing advantages. And then there are the slick systems of forcing everyone to do what works. So a chain store can be a fantastic enterprise.

It's quite interesting to think about Wal-Mart starting from a single store in Bentonville, Arkansas against Sears, Roebuck with its name, reputation and all of its billions. How does a guy in Bentonville, Arkansas with no money blow right by Sears, Roebuck? And he does it in his own lifetime - in fact, during his own *late* lifetime because he was already pretty old by the time he started out with one little store....

He played the chain store game harder and better than anyone else. Walton invented practically *nothing.* But he copied everything anybody else ever did that was smart - and he did it with more fanaticism and better employee manipulation. So he just blew right by them all.

He also had a very interesting competitive strategy in the early days. He was like a prizefighter who wanted a great record so he could be in the finals and make a big TV hit. So what did he do? He went out and fought 42 palookas. Right? And the result was knockout, knockout, knockout 42 times.

Walton, being as shrewd as he was, basically broke other small town merchants in the early days. With his more efficient system, he might not have been able to tackle some titan head-on at the time. But with his better system, he could destroy those small town merchants. And he went around doing it time after time after time. Then, as he got bigger, he started destroying the *big* boys.

Well, that was a very, very shrewd strategy.

You can say, "Is this a nice way to behave? "Well, capitalism is a pretty brutal place. But I personally think that the world is *better* for having Wal-Mart. I mean you can idealize small town life. But I've spent a fair amount of time in small towns. And let me tell you - you shouldn't get too idealistic about all those businesses he destroyed.

Plus, a lot of people who work at Wal-Mart are very high grade, bouncy people who are raising nice children. I have no feeling that an inferior culture destroyed a superior culture. I think that is nothing more than nostalgia and delusion. But, at any rate, it's an interesting model of how the scale of things and fanaticism combine to be very powerful.

And it's also an interesting model on the other side how with all its great advantages, the disadvantages of bureaucracy did such terrible damage to Sears, Roebuck. Sears had layers and layers of people it didn't need. It was very bureaucratic. It was slow to think. And there was an established way of thinking. If you poked your head up with a new thought, the system kind of turned against you. It was everything in the way of a dysfunctional big bureaucracy that you would expect.

In all fairness, there was also much that was good about it. But it just wasn't as lean and mean and shrewd and effective as Sam Walton. And, in due time, all its advantages of scale were not enough to prevent Sears from losing heavily to Wal-Mart and other similar retailers.

Here's a model that we've had trouble with. Maybe you'll be able to figure it out better. Many markets get down to two or three big competitors or five or six. And in some of those markets, nobody makes any money to speak of. But in others, everybody does very well.

Over the years, we've tried to figure out why the competition in some markets gets sort of rational from the investor's point of view so that the shareholders do well, and in other markets, there's destructive competition that destroys shareholder wealth.

If it's a pure commodity like airline seats, you can understand why no one makes any money. As we sit here, just think of what airlines have given to the world safe travel, greater experience, time with your loved ones, you name it. Yet, the net amount of money that's been made by the shareholders of airlines since Kitty Hawk, is now a negative figure - a substantial negative figure. Competition was so intense that, once it was unleashed by deregulation, it ravaged shareholder wealth in the airline business.

Yet, in other fields like cereals, for example almost all the big boys make out. If you're some kind of a medium grade cereal maker, you might make 15% on your capital. And if you're really good, you might make 40%.But why are cereals so profitable despite the fact that it looks to me like they're competing like crazy with promotions, coupons and everything else? I don't fully understand it.

Obviously, there's a brand identity factor in cereals that doesn't exist in airlines. That must be the main factor that accounts for it.

And maybe the cereal makers by and large have learned to be less crazy about fighting for market share - because if you get even one person who's hell-bent on gaining market share.... For example, if I were Kellogg and I decided that I had to have 60% of the market, I think I could take most of the profit out of cereals. I'd ruin Kellogg in the process. But I think I could do it.

In some businesses, the participants behave like a demented Kellogg. In other businesses, they don't. Unfortunately, I do not have a perfect model for predicting how that's going to happen.

For example, if you look around at bottler markets, you'll find many markets where bottlers of Pepsi and Coke both make a lot of money and many others where they destroy most of the profitability of the two franchises. That must get down to the peculiarities of individual adjustment to market capitalism. I think you'd have to know the people involved to fully understand what was happening.

In microeconomics, of course, you've got the concept of patents, trademarks, exclusive franchises and so forth. Patents are quite interesting. When I was young, I think more money went into patents than came out. Judges tended to throw them out based on arguments about what was really invented and what relied on prior art. That isn't altogether clear.

But they changed that. They didn't change the laws. They just changed the administration - so that it all goes to one patent court. And that court is now very much more pro-patent. So I think people are now starting to make a lot of money out of owning patents.

Trademarks, of course, have always made people a lot of money. A trademark system is a wonderful thing for a big operation if it's well known.

The exclusive franchise can also be wonderful. If there were only three television channels awarded in a big city and you owned one of them, there were only so many hours a day that you could be on.So you had a natural position in an oligopoly in the pre-cable days.

And if you get the franchise for the only food stand in an airport, you have a captive clientele and you have a small monopoly of a sort.

The great lesson in microeconomics is to discriminate between when technology is going to *help you* and when it's going to kill you.And most people do not get this straight in their heads. But a fellow like Buffett does.

For example, when we were in the textile business, which is a terrible commodity business, we were making low-end textiles which are a real commodity product. And one day, the people came to Warren and said, "They've invented a

new loom that we think will do twice as much work as our old ones."

And Warren said, "Gee, I hope this doesn't work because if it does, I'm going to close the mill." And he meant it.

What was he thinking? He was thinking, "It's a lousy business. We're earning substandard returns and keeping it open just to be nice to the elderly workers.B ut we're not going to put huge amounts of new capital into a lousy business."

And he knew that the huge productivity increases that would come from a better machine introduced into the production of a commodity product would all go to the benefit of the buyers of the textiles. Nothing was going to stick to our ribs as owners.

That's such an obvious concept - that there are all kinds of wonderful new inventions that give you nothing as owners except the opportunity to spend a lot more money in a business that's still going to be lousy. The money still won't come to you. All of the advantages from great improvements are going to flow through to the customers.

Conversely, if you own the only newspaper in Oshkosh and they were to invent more efficient ways of composing the whole newspaper, then when you got rid of the old technology and got new fancy computers and so forth, all of the savings would come right through to the bottom line.

In all cases, the people who sell the machinery - and, by and large, even the internal bureaucrats urging you to buy the equipment show you projections with the amount you'll save at current prices with the new technology. However, they don't do the second step of the analysis which is to determine how much is going stay home and how much is just going to flow through to the customer. I've never seen a single projection incorporating that second step in my life. And I see them all the time. Rather, they always read: "This capital outlay will save you so much money that it will pay for itself in three years."

So you keep buying things that will pay for themselves in three years. And after 20 years of doing it, somehow you've earned a return of only about 4% per annum. That's the textile business.

And it isn't that the machines weren't better. It's just that the savings didn't go to you. The cost reductions came through all right. But the benefit of the cost reductions didn't go to the guy who bought the equipment. It's such a simple idea. It's so basic. And yet it's so often forgotten.

Then there's another model from microeconomics which I find very interesting. When technology moves as fast as it does in a civilization like ours, you get a phenomenon which I call competitive destruction. You know, you have the finest buggy whip factory and all of a sudden in comes this little horseless carriage. And before too many years go by, your buggy whip business is dead. You either get into a different business or you're dead - you're destroyed. It happens again and again and again.

And when these new businesses come in, there are *huge* advantages for the early birds.And when you're an early bird, there's a model that I call "surfing" - when a surfer gets up and catches the wave and just stays there, he can go a long, long time. But if he gets off the wave, he becomes mired in shallows....

But people get long runs when they're right on the edge of the wave - whether it's Microsoft or Intel or all kinds of people, including National Cash Register in the early days.

The cash register was one of the great contributions to civilization. It's a wonderful story. Patterson was a small retail merchant who didn't make any money. One day, somebody sold him a crude cash register which he put into his retail operation. And it instantly changed from losing money to earning a profit because it made it so much harder for the employees to steal....

But Patterson, having the kind of mind that he did, didn't think, "Oh, good for my retail business." He thought, "I'm going into the cash register business. "And, of course, he created National Cash Register.

And he "surfed". He got the best distribution system, the biggest collection of patents and the best of everything. He was a fanatic about everything important as the technology developed. I have in my files an early National Cash Register Company report in which Patterson described his methods and objectives. And a well-educated orangutan could see that buying into partnership with Patterson in those early days, given his notions about the cash register business, was a total 100% cinch.

And, of course, that's exactly what an investor should be looking for. In a long life, you can expect to profit heavily from at least a few of those opportunities if you develop the wisdom and will to seize them. At any rate, "surfing" is a very powerful model.

However, Berkshire Hathaway , by and large, does not invest in these people that are "surfing" on complicated technology. After all, we're cranky and idiosyncratic - as you may have noticed.

And Warren and I don't feel like we have any great advantage in the high-tech sector. In fact, we feel like we're at a big disadvantage in trying to understand the nature of technical developments in software, computer chips or what have you. So we tend to avoid that stuff, based on our personal inadequacies.

Again, that is a very, very powerful idea. Every person is going to have a circle of competence. And it's going to be very hard to advance that circle. If I had to make my living as a musician.... I can't even *think* of a level low enough to describe where I would be sorted out to if music were the measuring standard of the civilization.

So you have to figure out what your own aptitudes are. If you play games where other people have the aptitudes and you don't, you're going to lose. And that's as close to certain as any prediction that you can make. You have to figure out where *you've* got an edge. And you've got to play within your *own* circle of competence.

If you want to be the best tennis player in the world, you may start out trying and soon find out that it's hopeless - that other people blow right by you. However, if you want to become the best plumbing contractor in Bemidji, that is probably doable by two-thirds of you. It takes a will.I t takes the intelligence. But after a while, you'd gradually know all about the plumbing business in Bemidji and *master* the art. That is an attainable objective, given enough discipline. And people who could never win a chess tournament or stand in center court in a respectable tennis tournament can rise quite high in life by slowly developing a circle of competence - which results partly from what they were born with and partly from what they slowly develop through work.

So some edges can be acquired. And the game of life to some extent for most of us is trying to be something like a good plumbing contractor in Bemidji. Very few of us are chosen to win the world's chess tournaments.

Some of you may find opportunities "surfing" along in the new high-tech fields the Intels, the Microsofts and so on. The fact that we don't think we're very good at it and have pretty well stayed out of it doesn't mean that it's irrational for you to do it.

Well, so much for the basic microeconomics models, a little bit of psychology, a little bit of mathematics, helping create what I call the general substructure of worldly wisdom. Now, if you want to go on from carrots to dessert, I'll turn to stock picking - trying to draw on this general worldly wisdom as we go.

I don't want to get into emerging markets, bond arbitrage and so forth. I'm talking about nothing but plain vanilla stock picking. That, believe me, is complicated enough. And I'm talking about *common* stock picking.

The first question is, "What is the nature of the stock market?" And that gets you directly to this efficient market theory that got to be the rage a *total* rage long after I graduated from law school.

And it's rather interesting because one of the greatest economists of the world is a substantial shareholder in Berkshire Hathaway and has been for a long time. His textbook always taught that the stock market was perfectly efficient and that nobody could beat it. But his *own* money went into Berkshire and made him wealthy. So, like Pascal in his famous wager, he hedged his bet.

Is the stock market so efficient that people can't beat it? Well, the efficient market theory is obviously *roughly* right meaning that markets are *quite* efficient and it's *quite* hard for anybody to beat the market by significant margins as a stock picker by just being intelligent and working in a disciplined way.

Indeed, the average result has to be the average result. By definition, *everybody* can't beat the market. As I always say, the iron rule of life is that only 20% of the people can be in the top fifth. That's just the way it is. So the answer is that it's partly efficient and partly inefficient.

And, by the way, I have a name for people who went to the extreme efficient market theory which is "bonkers". It was an

intellectually consistent theory that enabled them to do pretty mathematics. So I understand its seductiveness to people with large mathematical gifts. It just had a difficulty in that the fundamental assumption did not tie properly to reality.

Again, to the man with a hammer, every problem looks like a nail. If you're good at manipulating higher mathematics in a consistent way, why not make an assumption which enables you to use your tool?

The model I like to sort of simplify the notion of what goes on in a market for common stocks is the pari-mutuel system at the racetrack. If you stop to think about it, a pari-mutuel system is a *market.* Everybody goes there and bets and the odds change based on what's bet. That's what happens in the stock market.

Any damn fool can see that a horse carrying a light weight with a wonderful win rate and a good post position etc., etc. is way more likely to win than a horse with a terrible record and extra weight and so on and so on.But if you look at the odds, the bad horse pays 100 to 1, whereas the good horse pays 3 to 2.Then it's not clear which is statistically the best bet using the mathematics of Fermat and Pascal. The prices have changed in such a way that it's very hard to beat the system.

And then the track is taking 17% off the top. So not only do you have to outwit all the other betters, but you've got to outwit them by such a big margin that on average, you can afford to take 17% of your gross bets off the top and give it to the house before the rest of your money can be put to work.

Given those mathematics, is it possible to beat the horses only using one's intelligence? Intelligence should give some edge, because lots of people who don't know anything go out and bet lucky numbers and so forth. Therefore, somebody who really thinks about nothing but horse performance and is shrewd and mathematical could have a very considerable edge, in the absence of the frictional cost caused by the house take.

Unfortunately, what a shrewd horseplayer's edge does in most cases is to reduce his average loss over a season of betting from the 17% that he would lose if he got the average result to maybe 10%.However, there are actually a few people who can beat the game after paying the full 17%.

I used to play poker when I was young with a guy who made a substantial living doing nothing but bet harness races.... Now, harness racing is a relatively inefficient market. You don't have the depth of intelligence betting on harness races that you do on regular races. What my poker pal would do was to think about harness races as his main profession. And he would bet only occasionally when he saw some mispriced bet available. And by doing that, after paying the full handle to the house - which I presume was around 17% - he made a substantial living.

You have to say that's rare. However, the market was not perfectly efficient. And if it weren't for that big 17% handle, lots of people would regularly be beating lots of other people at the horse races. It's efficient, yes. But it's not perfectly efficient. And with enough shrewdness and fanaticism, some people will get better results than others.

The stock market is the same way except that the house handle is so much lower. If you take transaction costs - the spread between the bid and the ask plus the commissions and if you don't trade too actively, you're talking about fairly low transaction costs. So that with enough fanaticism and enough discipline, some of the shrewd people are going to get way better results than average in the nature of things.

It is not a bit easy. And, of course, 50% will end up in the bottom half and 70% will end up in the bottom 70%.But some people will have an advantage. And in a fairly low transaction cost operation, they will get better than average results in stock picking.

How do you get to be one of those who is a winner - in a relative sense - instead of a loser?

Here again, look at the pari-mutuel system. I had dinner last night by absolute accident with the president of Santa Anita. He says that there are two or three betters who have a credit arrangement with them, now that they have off-track betting, who are actually beating the house. They're sending money out net after the full handle a lot of it to Las Vegas, by the way to people who are actually winning slightly, net, after paying the full handle. They're that shrewd about something with as much unpredictability as horse racing.

And the one thing that all those winning betters in the whole history of people who've beaten the pari-mutuel system have is quite simple. They bet very seldom.

It's not given to human beings to have such talent that they can just know everything about everything all the time. But it is given to human beings who work hard at it - who look and sift the world for a mispriced be that they can occasionally find one.

And the wise ones bet heavily when the world offers them that opportunity. They bet big when they have the odds. And the rest of the time, they don't. It's just that simple.

That is a very simple concept. And to me it's obviously right based on experience not only from the pari-mutuel system, but everywhere else.

And yet, in investment management, practically nobody operates that way. We operate that way - I'm talking about Buffett and Munger. And we're not alone in the world. But a huge majority of people have some other crazy construct in their heads And instead of waiting for a near cinch and loading up, they apparently ascribe to the theory that if they work a little harder or hire more business school students, they'll come to know everything about everything all the time.

To me, that's totally insane. The way to win is to work, work, work, work and hope to have a few insights.

How many insights do you need? Well, I'd argue: that you don't need many in a lifetime. If you look at Berkshire Hathaway and all of its accumulated billions, the top ten insights account for most of it. And that's with a very brilliant man Warren's a lot more able than I am and very disciplined devoting his lifetime to it. I don't mean to say that he's only had ten insights. I'm just saying, that most of the money came from ten insights.

So you can get very remarkable investment results if you think more like a winning pari-mutuel player. Just think of it as a heavy odds against game full of craziness with an occasional mispriced something or other. And you're probably not going to be smart enough to find thousands in a lifetime. And when you get a few, you really load up. It's just that simple.

When Warren lectures at business schools, he says, "I could improve your ultimate financial welfare by giving you a ticket with only 20 slots in it so that you had 20 punches - representing all the investments that you got to make in a lifetime. And once you'd punched through the card, you couldn't make any more investments at all."

He says, "Under those rules, you'd really think carefully about what you did and you'd be forced to load up on what you'd really thought about. So you'd do so much better."

Again, this is a concept that seems perfectly obvious to me. And to Warren, it seems perfectly obvious. But this is one of the very few business classes in the U.S. where anybody will be saying so. It just isn't the conventional wisdom.

To me, it's obvious that the winner has to bet very selectively. It's been obvious to me since very early in life. I don't know why it's not obvious to very many other people.

I think the reason why we got into such idiocy in investment management is best illustrated by a story that I tell about the guy who sold fishing tackle. I asked him, "My God, they're purple and green. Do fish really take these lures?" And he said, "Mister, I don't sell to fish."

Investment managers are in the position of that fishing tackle salesman. They're like the guy who was selling salt to the guy who already had too much salt. And as long as the guy will buy salt, why they'll *sell* salt. But that isn't what ordinarily works for the *buyer* of investment advice.

If you invested Berkshire Hathaway-style, it would be hard to get paid as an investment manager as well as they're currently paid - because you'd be holding a block of Wal-Mart and a block of Coca-Cola and a block of something else. You'd just sit there. And the client would be getting rich. And, after a while, the client would think, "Why am I paying this guy half a percent a year on my wonderful passive holdings?"

So what makes sense for the investor is different from what makes sense for the manager. And, as usual in human affairs, what determines the behavior are incentives for the decision maker.

From all business, my favorite case on incentives is Federal Express. The heart and soul of their system which creates the integrity of the product is having all their airplanes come to one place in the middle of the night and shift all the packages from plane to plane. If there are delays, the whole operation can't deliver a product full of integrity to Federal Express customers.

And it was always screwed up. They could never get it done on time. They tried everything moral suasion, threats, you name it. And nothing worked.

Finally, somebody got the idea to pay all these people not so much an *hour,* but so much a *shift* and when it's all done, they can all go home. Well, their problems cleared up overnight.

So getting the incentives right is a very, very important lesson. It was not obvious to Federal Express what the solution was. But maybe now, it will hereafter more often be obvious to you.

All right, we've now recognized that the market is efficient as a pari-mutuel system is efficient with the favorite more likely than the long shot to do well in racing, but not necessarily give any betting advantage to those that bet on the favorite.

In the stock market, some railroad that's beset by better competitors and tough unions may be available at one-third of its book value. In contrast, IBM in its heyday might be selling at 6 times book value. So it's just like the pari-mutuel system. Any damn fool could plainly see that IBM had better business prospects than the railroad. But once you put the *price* into the formula, it wasn't so clear anymore what was going to work best for a buyer choosing between the stocks. So it's a lot like a pari-mutuel system. And, therefore, it gets very hard to beat.

What style should the investor use as a picker of common stocks in order to try to beat the market - in other words, to get an above average long-term result? A standard technique that appeals to a lot of people is called "sector rotation". You simply figure out when oils are going to outperform retailers, etc., etc., etc. You just kind of flit around being in the hot sector of the market making better choices than other people. And presumably, over a long period of time, you get ahead.

However, I know of no really rich sector rotator. Maybe some people can do it. I'm not saying they can't. All I know is that all the people I know who got rich and I know a lot of them did not do it that way.

The second basic approach is the one that Ben Graham used much admired by Warren and me. As one factor, Graham had this concept of value to a private owner what the whole enterprise would sell for if it were available. And that was calculable in many cases.

Then, if you could take the stock price and multiply it by the number of shares and get something that was one third or less of sellout value, he would say that you've got a lot of edge going for you.Even with an elderly alcoholic running a stodgy business, this significant excess of real value per share working for you means that all kinds of good things can happen to you. You had a *huge* margin of safety - as he put it - by having this big excess value going for you.

But he was, by and large, operating when the world was in shell shock from the 1930s - which was the worst contraction in the English-speaking world in about 600 years. Wheat in Liverpool, I believe, got down to something like a 600-year low, adjusted for inflation. People were so shell-shocked for a long time thereafter that Ben Graham could run his Geiger counter over this detritus from the collapse of the 1930s and find things selling below their working capital per share and so on.

And in those days, working capital actually belonged to the shareholders. If the employees were no longer useful, you just sacked them all, took the working capital and stuck it in the owners' pockets. That was the way capitalism then worked.

Nowadays, of course, the accounting is not realistic because the minute the business starts contracting, significant assets are not there. Under social norms and the new legal rules of the civilization, so much is owed to the employees that, the minute the enterprise goes into reverse, some of the assets on the balance sheet aren't *there* anymore.

Now, that might not be true if you run a little auto dealership yourself. You may be able to run it in such a way that there's no health plan and this and that so that if the business gets lousy, you can take your working capital and go home. But IBM can't, or at least didn't. Just look at what disappeared from its balance sheet when it decided that it had to change size both because the world had changed technologically and because its market position had deteriorated.

And in terms of blowing it, IBM is some example. Those were brilliant, disciplined people. But there was enough turmoil in technological change that IBM got bounced off the wave after "surfing" successfully for 60 years. And that was some

collapse an object lesson in the difficulties of technology and one of the reasons why Buffett and Munger don't like technology very much. We don't think we're any good at it, and strange things can happen.

At any rate, the trouble with what I call the classic Ben Graham concept is that gradually the world wised up and those real obvious bargains disappeared. You could run your Geiger counter over the rubble and it wouldn't click.

But such is the nature of people who have a hammer - to whom, as I mentioned, every problem looks like a nail that the Ben Graham followers responded by changing the calibration on their Geiger counters. In effect, they started defining a bargain in a different way. And they kept changing the definition so that they could keep doing what they'd always done. And it *still* worked pretty well. So the Ben Graham intellectual system was a very good one.

Of course, the best part of it all was his concept of "Mr. Market". Instead of thinking the market was efficient, he treated it as a manic-depressive who comes by every day. And some days he says, "I'll sell you some of my interest for way less than you think it's worth." And other days, "Mr. Market" comes by and says, "I'll buy your interest at a price that's way higher than you think it's worth. "And you get the *option* of deciding whether you want to buy more, sell part of what you already have or do nothing at all.

To Graham, it was a blessing to be in business with a manic-depressive who gave you this series of options all the time. That was a very significant mental construct. And it's been very useful to Buffett, for instance, over his whole adult lifetime.

However, if we'd stayed with classic Graham the way Ben Graham did it, we would never have had the record we have. And that's because Graham wasn't *trying* to do what we did.

For example, Graham didn't want to ever talk to management. And his reason was that, like the best sort of professor aiming his teaching at a mass audience, he was trying to invent a system that *anybody* could use. And he didn't feel that the man in the street could run around and talk to managements and learn things. He also had a concept that the management would often couch the information very shrewdly to mislead. Therefore, it was very difficult. And that is still true, of course human nature being what it is.

And so having started out as Grahamites which, by the way, worked fine we gradually got what I would call better insights. And we realized that some company that was selling at 2 or 3 times book value could *still* be a hell of a bargain because of momentums implicit in its position, sometimes combined with an unusual managerial skill plainly present in some individual or other, or some system or other.

And once we'd gotten over the hurdle of recognizing that a thing could be a bargain based on quantitative measures that would have *horrified* Graham, we started thinking about better businesses.

And, by the way, the bulk of the billions in Berkshire Hathaway have come from the better businesses. Much of the first $200 or $300 million came from scrambling around with our Geiger counter. But the great bulk of the money has come from the great businesses.

And even some of the early money was made by being temporarily present in great businesses. Buffett Partnership, for example, owned American Express and Disney when they got pounded down.

Most investment managers are in a game where the clients expect them to know a lot about a lot of things. We didn't have any clients who could fire us at Berkshire Hathaway. So we didn't have to be governed by any such construct. And we came to this notion of finding a mispriced bet and loading up when we were very confident that we were right. So we're way less diversified. And I think our system is miles better.

However, in all fairness, I don't think a lot of money managers could successfully sell their services if they used our system. But if you're investing for 40 years in some pension fund, what difference does it make if the path from start to finish is a little more bumpy or a little different than everybody else's so long as it's all going to work out well in the end? So what if there's a little extra volatility.

In investment management today, everybody wants not only to win, but to have a yearly outcome path that never diverges very much from a standard path except on the upside. Well, that is a very artificial, crazy construct. That's the equivalent in investment management to the custom of binding the feet of Chinese women. It's the equivalent of what Nietzsche meant when he criticized the man who had a lame leg and was proud of it.

That is really hobbling yourself. Now, investment managers would say, "We *have* to be that way. That's how we're *measured.* "And they may be right in terms of the way the business is now constructed. But from the viewpoint of a rational consumer, the whole system's "bonkers" and draws a lot of talented people into socially useless activity.

And the Berkshire system is not "bonkers". It's so damned elementary that even bright people are going to have limited, really valuable insights in a very competitive world when they're fighting against other very bright, hardworking people.

And it makes sense to load up on the very few good insights you have instead of pretending to know everything about everything at all times. You're much more likely to do well if you start out to do something *feasible* instead of something that isn't feasible. Isn't that perfectly obvious?

How many of you have 56 brilliant ideas in which you have equal confidence? Raise your hands, please. How many of you have two or three insights that you have some confidence in? I rest my case.

I'd say that Berkshire Hathaway's system is adapting to the nature of the investment problem as it really is.

We've really made the money out of high quality businesses. In some cases, we bought the whole business. And in some cases, we just bought a big block of stock. But when you analyze what happened, the big money's been made in the high quality businesses. And most of the other people who've made a lot of money have done so in high quality businesses.

Over the long term, it's hard for a stock to earn a much better return than the business which underlies it earns. If the business earns 6% on capital over 40 years and you hold it for that 40 years, you're not going to make much different than a 6% return even if you originally buy it at a huge discount. Conversely, if a business earns 18% on capital over 20 or 30 years, even if you pay an expensive looking price, you'll end up with a fine result.

So the trick is getting into better businesses. And that involves all of these advantages of scale that you could consider momentum effects.

How do you get into these great companies? One method is what I'd call the method of finding them small get 'em when they're little. For example, buy Wal-Mart when Sam Walton first goes public and so forth. And a lot of people try to do just that. And it's a very beguiling idea. If I were a young man, I might actually go into it.

But it doesn't work for Berkshire Hathaway anymore because we've got too much money. We can't find anything that fits our size parameter that way. Besides, we're set in our ways. But I regard finding them small as a perfectly intelligent approach for somebody to try with discipline. It's just not something that I've done.

Finding 'em big obviously is very hard because of the competition. So far, Berkshire's managed to do it. But can we continue to do it? What's the next Coca-Cola investment for us? Well, the answer to that is I don't know. I think it gets harder for us all the time....

And ideally and we've done a lot of this you get into a great business which also has a great manager because management matters. For example, it's made a great difference to General Electric that Jack Welch came in instead of the guy who took over Westinghouse - a very great difference. So management matters, too.

And some of it is predictable. I do not think it takes a genius to understand that Jack Welch was a more insightful person and a better manager than his peers in other companies. Nor do I think it took tremendous genius to understand that Disney had basic momentums in place which are very powerful and that Eisner and Wells were very unusual managers.

So you do get an occasional opportunity to get into a wonderful business that's being run by a wonderful manager. And, of course, that's hog heaven day. If you don't load up when you get those opportunities, it's a *big* mistake.

Occasionally, you'll find a human being who's so talented that he can do things that ordinary skilled mortals can't. I would argue that Simon Marks who was second generation in Marks & Spencer of England was such a man. Patterson was such a man at National Cash Register. And Sam Walton was such a man.

These people do come along and in many cases, they're not all that hard to identify. If they've got a reasonable hand with the fanaticism and intelligence and so on that these people generally bring to the party then management can matter

much.

However, averaged out, betting on the quality of a business is better than betting on the quality of management. In other words, if you have to choose one, bet on the business momentum, not the brilliance of the manager.

But, very rarely. you find a manager who's so good that you're wise to follow him into what looks like a mediocre business.

Another very simple effect I very seldom see discussed either by investment managers or anybody else is the effect of taxes. If you're going to buy something which compounds for 30 years at 15% per annum and you pay one 35% tax at the very end, the way that works out is that after taxes, you keep 13.3% per annum.

In contrast, if you bought the same investment, but had to pay taxes every year of 35% out of the 15% that you earned, then your return would be 15% minus 35% of 15% or only 9.75% per year compounded. So the difference there is over 3.5%.And what 3.5% does to the numbers over long holding periods like 30 years is truly eye-opening. If you sit back for long, long stretches in great companies, you can get a huge edge from nothing but the way that income taxes work.

Even with a 10% per annum investment, paying a 35% tax at the end gives you 8.3% after taxes as an annual compounded result after 30 years. In contrast, if you pay the 35% each year instead of at the end, your annual result goes down to 6.5%.So you add nearly 2% of after-tax return per annum if you only achieve an average return by historical standards from common stock investments in companies with tiny dividend payout ratios.

But in terms of business mistakes that I've seen over a long lifetime, I would say that trying to minimize taxes too much is one of the great standard causes of really dumb mistakes. I see *terrible* mistakes from people being overly motivated by tax considerations.

Warren and I personally don't drill oil wells. We pay our taxes. And we've done pretty well, so far. Anytime somebody offers you a tax shelter from here on in life, my advice would be don't buy it.

In fact, any time anybody offers you *anything* with a big commission and a 200-page prospectus, don't buy it. Occasionally, you'll be wrong if you adopt "Munger's Rule". However, over a lifetime, you'll be a long way ahead - and you will miss a lot of unhappy experiences that might otherwise reduce your love for your fellow man.

There are *huge* advantages for an individual to get into a position where you make a few great investments and just sit back and wait: You're paying less to brokers. You're listening to less nonsense. And if it works, the governmental tax system gives you an extra 1, 2 or 3 percentage points per annum compounded.

And you think that most of you are going to get that much advantage by hiring investment counselors and paying them 1% to run around, incurring a lot of taxes on your behalf'? Lots of luck.

Are there any dangers in this philosophy? Yes. Everything in life has dangers. Since it's so obvious that investing in great companies works, it gets horribly overdone from time to time. In the "Nifty-Fifty" days, everybody could tell which companies were the great ones. So they got up to 50, 60 and 70 times earnings. And just as IBM fell off the wave, other companies did, too. Thus, a large investment disaster resulted from too high prices. And you've got to be aware of that danger....

So there are risks .Nothing is automatic and easy. But if you can find some fairly-priced great company and buy it and sit, that tends to work out very, very well indeed especially for an individual,

Within the growth stock model, there's a sub-position: There are actually businesses, that you will find a few times in a lifetime, where any manager could raise the return enormously just by raising prices and yet they haven't done it. So they have *huge* untapped pricing power that they're not using. That is the *ultimate* no-brainer.

That existed in Disney. It's such a unique experience to take your grandchild to Disneyland. You're not doing it that often .And there are lots of people in the country. And Disney found that it could raise those prices a lot and the attendance stayed right up.

So a lot of the great record of Eisner and Wells was utter brilliance but the rest came from just raising prices at Disneyland and Disneyworld and through video cassette sales of classic animated movies.

At Berkshire Hathaway, Warren and I raised the prices of See's Candy a little faster than others might have. And, of course, we invested in Coca-Cola - which had some untapped pricing power. And it also had brilliant management. So a Goizueta and Keough could do much more than raise prices.It was *perfect.*

You will get a few opportunities to profit from finding underpricing. There are actually people out there who don't price everything as high as the market will easily stand. And once you figure that out, it's like finding in the street - if you have the courage of your convictions.

If you look at Berkshire's investments where a lot of the money's been made and you look for the models, you can see that we twice bought into two newspaper towns which have since become one newspaper towns. So we made a bet to some extent....

In one of those The Washington Post we bought it at about 20% of the value to a private owner. So we bought it on a Ben Graham style basis at one fifth of obvious value and, in addition, we faced a situation where you had both the top hand in a game that was clearly going to end up with one winner and a management with a lot of integrity and intelligence. That one was a real dream. They're very high class people - the Katharine Graham family. That's why it was a dream an absolute, damn dream.

Of course, that came about back in '73 - 74.And that was almost like 1932. That was probably a once-in-40-years type denouement in the markets. That investment's up about 50 times over our cost.

If I were you, I wouldn't count on getting any investment in your lifetime quite as good as The Washington Post was in '73 and '74.

But it doesn't *have* to be that good to take care of you.

Let me mention another model. Of course, Gillette and Coke make fairly low-priced items and have a tremendous marketing advantage all over the world. And in Gillette's case, they keep surfing along new technology which is fairly simple by the standards of microchips. But it's hard for competitors to do.

So they've been able to stay constantly near the edge of improvements in shaving. There are whole countries where Gillette has more than 90% of the shaving market.

GEICO is a very interesting model. It's another one of the 100 or so models you ought to have in your head. I've had many friends in the sick business fix up game over a long lifetime. And they practically all use the following formula I call it the cancer surgery formula:

They look at this mess. And they figure out if there ' s anything sound left that can live on its own if they cut away everything else. And if they find anything sound, they just cut away everything else. Of course, if that doesn't work, they liquidate the business. But it frequently does work.

And GEICO had a perfectly *magnificent* business -submerged in a mess, but still working. Misled by success, GEICO had done some foolish things. They got to thinking that, because they were making a lot of money, they knew everything. And they suffered huge losses.

All they had to do was to cut out all the folly and go back to the perfectly wonderful business that was lying there. And when you think about it, that's a very simple model. And it's repeated over and over again.

And, in GEICO's case, think about all the money we passively made....It was a wonderful business combined with a bunch of foolishness that could easily be cut out. And people were coming in who were temperamentally and intellectually designed so they were going to cut it out. That is a model you want to look for.

And you may find one or two or three in a long lifetime that are very good. And you may find 20 or 30 that are good enough to be quite useful.

Finally, I'd like to once again talk about investment management. That is a funny business because on a net basis, the whole investment management business together gives no value added to all buyers combined. That's the way it has to work.

Of course, that isn't true of plumbing and it isn't true of medicine .If you're going to make your careers in the investment management business, you face a very peculiar situation. And most investment managers handle it with psychological denial just like a chiropractor. That is the standard method of handling the limitations of the investment management process. But if you want to live the best sort of life, I would urge each of you *not* to use the psychological denial mode.

I think a select few a small percentage of the investment managers can deliver value added. But I don't think brilliance alone is enough to do it. I think that you have to have a little of this discipline of calling your shots and loading up if you want to maximize your chances of becoming one who provides above average real returns for clients over the long pull.

But I'm just talking about investment managers engaged in common stock picking. I am agnostic elsewhere. I think there may well be people who are so shrewd about currencies and this, that and the other thing that they can achieve good long-term records operating on a pretty big scale in that way. But that doesn't happen to be my milieu. I'm talking about stock picking in American stocks.

I think it's hard to provide a lot of value added to the investment management client, but it's not impossible.

Document Link - http://www.vinvesting.com/docs/munger/art_stockpicking.html

amazon.com

To our shareholders:

Amazon.com passed many milestones in 1997: by year-end, we had served more than 1.5 million customers, yielding 838% revenue growth to $147.8 million, and extended our market leadership despite aggressive competitive entry.

But this is Day 1 for the Internet and, if we execute well, for Amazon.com. Today, online commerce saves customers money and precious time. Tomorrow, through personalization, online commerce will accelerate the very process of discovery. Amazon.com uses the Internet to create real value for its customers and, by doing so, hopes to create an enduring franchise, even in established and large markets.

We have a window of opportunity as larger players marshal the resources to pursue the online opportunity and as customers, new to purchasing online, are receptive to forming new relationships. The competitive landscape has continued to evolve at a fast pace. Many large players have moved online with credible offerings and have devoted substantial energy and resources to building awareness, traffic, and sales. Our goal is to move quickly to solidify and extend our current position while we begin to pursue the online commerce opportunities in other areas. We see substantial opportunity in the large markets we are targeting. This strategy is not without risk: it requires serious investment and crisp execution against established franchise leaders.

It's All About the Long Term

We believe that a fundamental measure of our success will be the shareholder value we create over the *long term*. This value will be a direct result of our ability to extend and solidify our current market leadership position. The stronger our market leadership, the more powerful our economic model. Market leadership can translate directly to higher revenue, higher profitability, greater capital velocity, and correspondingly stronger returns on invested capital.

Our decisions have consistently reflected this focus. We first measure ourselves in terms of the metrics most indicative of our market leadership: customer and revenue growth, the degree to which our customers continue to purchase from us on a repeat basis, and the strength of our brand. We have invested and will continue to invest aggressively to expand and leverage our customer base, brand, and infrastructure as we move to establish an enduring franchise.

Because of our emphasis on the long term, we may make decisions and weigh tradeoffs differently than some companies. Accordingly, we want to share with you our fundamental management and decision-making approach so that you, our shareholders, may confirm that it is consistent with your investment philosophy:

We will continue to focus relentlessly on our customers.

- We will continue to make investment decisions in light of long-term market leadership considerations rather than short-term profitability considerations or short-term Wall Street reactions.

- We will continue to measure our programs and the effectiveness of our investments analytically, to jettison those that do not provide acceptable returns, and to step up our investment in those that work best. We will continue to learn from both our successes and our failures.

- We will make bold rather than timid investment decisions where we see a sufficient probability of gaining market leadership advantages. Some of these investments will pay off, others will not, and we will have learned another valuable lesson in either case.

- When forced to choose between optimizing the appearance of our GAAP accounting and maximizing the present value of future cash flows, we'll take the cash flows.

- We will share our strategic thought processes with you when we make bold choices (to the extent competitive pressures allow), so that you may evaluate for yourselves whether we are making rational long-term leadership investments.

- We will work hard to spend wisely and maintain our lean culture. We understand the importance of continually reinforcing a cost-conscious culture, particularly in a business incurring net losses.

- We will balance our focus on growth with emphasis on long-term profitability and capital management. At this stage, we choose to prioritize growth because we believe that scale is central to achieving the potential of our business model.

- We will continue to focus on hiring and retaining versatile and talented employees, and continue to weight their compensation to stock options rather than cash. We know our success will be largely affected by our ability to attract and retain a motivated employee base, each of whom must think like, and therefore must actually be, an owner.

We aren't so bold as to claim that the above is the "right" investment philosophy, but it's ours, and we would be remiss if we weren't clear in the approach we have taken and will continue to take.

With this foundation, we would like to turn to a review of our business focus, our progress in 1997, and our outlook for the future.

Obsess Over Customers

From the beginning, our focus has been on offering our customers compelling value. We realized that the Web was, and still is, the World Wide Wait. Therefore, we set out to offer customers something they simply could not get any other way, and began serving them with books. We brought them much more selection than was possible in a physical store (our store would now occupy 6 football fields), and presented it in a useful, easy-to-search, and easy-to-browse format in a store open 365 days a year, 24 hours a day. We maintained a dogged focus on improving the shopping experience, and in 1997 substantially enhanced our store. We now offer customers gift certificates, 1-Click(SM) shopping, and vastly more reviews, content, browsing options, and recommendation features. We dramatically lowered prices, further increasing customer value. Word of mouth remains the most powerful customer acquisition tool we have, and we are grateful for the trust our customers have placed in us. Repeat purchases and word of mouth have combined to make Amazon.com the market leader in online bookselling.

By many measures, Amazon.com came a long way in 1997:

- Sales grew from $15.7 million in 1996 to $147.8 million -- an 838% increase.

- Cumulative customer accounts grew from 180,000 to 1,510,000 -- a 738% increase.

- The percentage of orders from repeat customers grew from over 46% in the fourth quarter of 1996 to over 58% in the same period in 1997.

- In terms of audience reach, per Media Metrix, our Web site went from a rank of 90th to within the top 20.

- We established long-term relationships with many important strategic partners, including America Online, Yahoo!, Excite, Netscape, GeoCities, AltaVista, @Home, and Prodigy.

Infrastructure

During 1997, we worked hard to expand our business infrastructure to support these greatly increased traffic, sales, and service levels:

- Amazon.com's employee base grew from 158 to 614, and we significantly strengthened our management team.

- Distribution center capacity grew from 50,000 to 285,000 square feet, including a 70% expansion of our Seattle facilities and the launch of our second distribution center in Delaware in November.

- Inventories rose to over 200,000 titles at year-end, enabling us to improve availability for our customers.

- Our cash and investment balances at year-end were $125 million, thanks to our initial public offering in May 1997 and our $75 million loan, affording us substantial strategic flexibility.

Our Employees

The past year's success is the product of a talented, smart, hard-working group, and I take great pride in being a part of this team. Setting the bar high in our approach to hiring has been, and will continue to be, the single most important element of Amazon.com's success.

It's not easy to work here (when I interview people I tell them, “You can work long, hard, or smart, but at Amazon.com you can't choose two out of three”), but we are working to build something important, something that matters to our customers, something that we can all tell our grandchildren about. Such things aren't meant to be easy. We are incredibly fortunate to have this group of dedicated employees whose sacrifices and passion build Amazon.com.

Goals for 1998

We are still in the early stages of learning how to bring new value to our customers through Internet commerce and merchandising. Our goal remains to continue to solidify and extend our brand and customer base. This requires sustained investment in systems and infrastructure to support outstanding customer convenience, selection, and service while we grow. We are planning to add music to our product offering, and over time we believe that other products may be prudent investments. We also believe there are significant opportunities to better serve our customers overseas, such as reducing delivery times and better tailoring the customer experience. To be certain, a big part of the challenge for us will lie not in finding new ways to expand our business, but in prioritizing our investments.

We now know vastly more about online commerce than when Amazon.com was founded, but we still have so much to learn. Though we are optimistic, we must remain vigilant and maintain a sense of urgency. The challenges and hurdles we will face to make our long-term vision for Amazon.com a reality are several: aggressive, capable, well-funded competition; considerable growth challenges and execution risk; the risks of product and geographic expansion; and the need for large continuing investments to meet an expanding market opportunity. However, as we've long said, online bookselling, and online commerce in general, should prove to be a very large market, and it's likely that a number of companies will see significant benefit. We feel good about what we've done, and even more excited about what we want to do.

1997 was indeed an incredible year. We at Amazon.com are grateful to our customers for their business and trust, to each other for our hard work, and to our shareholders for their support and encouragement.

/s/ JEFFREY P. BEZOS
Jeffrey P. Bezos
Founder and Chief Executive Officer
Amazon.com, Inc.

amazon.com

To our shareholders, customers, and employees:

The last 3½ years have been exciting. We've served a cumulative 6.2 million customers, exited 1998 with a $1 billion revenue run rate, launched music, video, and gift stores in the U.S., opened shop in the U.K. and Germany, and, just recently, launched Amazon.com Auctions.

We predict the next 3½ years will be even more exciting. We are working to build a place where tens of millions of customers can come to find and discover anything they might want to buy online. It is truly Day 1 for the Internet and, if we execute our business plan well, it remains Day 1 for Amazon.com. Given what's happened, it may be difficult to conceive, but we think the opportunities and risks ahead of us are even greater than those behind us. We will have to make many conscious and deliberate choices, some of which will be bold and unconventional. Hopefully, some will turn out to be winners. Certainly, some will turn out to be mistakes.

A Recap of 1998

Heads-down focus on customers helped us make substantial progress in 1998:

- Sales grew from $148 million in 1997 to $610 million – a 313% increase.
- Cumulative customer accounts grew from 1.5 million at the end of 1997 to 6.2 million at the end of 1998 – an increase of over 300%.
- Despite this strong new customer growth, the percentage of orders placed on the Amazon.com Web site by repeat customers grew from over 58% in the fourth quarter of 1997 to over 64% in the same period in 1998.
- Our first major product expansion, the Amazon.com music store, became the leading online music retailer in its first full quarter.
- Following their October launch under the Amazon brand and with Amazon.com technology, the combined fourth-quarter sales in the U.K. and German stores nearly quadrupled over the third quarter, establishing Amazon.co.uk and Amazon.de as the leading online booksellers in their markets.
- The addition of music was followed by the addition of video and gifts in November, and we became the leading online video retailer in only 6 weeks.
- 25% of our fourth-quarter 1998 sales was derived from Amazon.co.uk, Amazon.de, and music, video, and gift sales on Amazon.com, all very new businesses.
- We significantly improved the customer experience, with innovations like 1-Click℠ shopping, Gift Click, store-wide sales rank, and instant recommendations.

1998's revenue and customer growth and achievement of continued growth in 1999 were and are dependent on expansion of our infrastructure. Some highlights:

- In 1998 our employee base grew from approximately 600 to over 2,100, and we significantly strengthened our management team.
- We opened distribution and customer service centers in the U.K. and Germany, and in early 1999, announced the lease of a highly-mechanized distribution center of approximately 323,000 square feet in Fernley, Nevada. This latest addition will more than double our total distribution capacity and allows us to even further improve time-to-mailbox for customers.
- Inventories rose from $9 million at the beginning of the year to $30 million by year end, enabling us to improve product availability for our customers and improve product costs through direct purchasing from manufacturers.
- Our cash and investment balances, following our May 1998 high yield debt offering and early 1999 convertible debt offering, now stand at well over $1.5 billion (on a pro forma basis), affording us substantial financial strength and strategic flexibility.

We're fortunate to benefit from a business model that is cash-favored and capital efficient. As we do not need to build physical stores or stock those stores with inventory, our centralized distribution model has allowed us to build our business to a billion-dollar sales rate with just $30 million in inventory and $30 million in net plant and equipment. In 1998, we generated $31 million in operating cash flow which more than offset net fixed asset additions of $28 million.

Our Customers

We intend to build the world's most customer-centric company. We hold as axiomatic that customers are perceptive and smart, and that brand image follows reality and not the other way around. Our customers tell us that they choose Amazon.com and tell their friends about us because of the selection, ease-of-use, low prices, and service that we deliver.

But there is no rest for the weary. I constantly remind our employees to be afraid, to wake up every morning terrified. Not of our competition, but of our customers. Our customers have made our business what it is, they are the ones with whom we have a relationship, and they are the ones to whom we owe a great obligation. And we consider them to be loyal to us – right up until the second that someone else offers them a better service.

We must be committed to constant improvement, experimentation, and innovation in every initiative. We love to be pioneers, it's in the DNA of the company, and it's a good thing, too, because we'll need that pioneering spirit to succeed. We're proud of the differentiation we've built through constant innovation and relentless focus on customer experience, and we believe our initiatives in 1998 reflect it: our music, video, U.K. and German stores, like our U.S. bookstore, are best of breed.

Work Hard, Have Fun, Make History

It would be impossible to produce results in an environment as dynamic as the Internet without extraordinary people. Working to create a little bit of history isn't supposed to be easy, and, well, we're finding that things are as they're supposed to be! We now have a team of 2,100 smart, hard-working, passionate folks who put customers first. Setting the bar high in our approach to hiring has been, and will continue to be, the single most important element of Amazon.com's success.

During our hiring meetings, we ask people to consider three questions before making a decision:

- *Will you admire this person?* If you think about the people you've admired in your life, they are probably people you've been able to learn from or take an example from. For myself, I've always tried hard to work only with people I admire, and I encourage folks here to be just as demanding. Life is definitely too short to do otherwise.

- *Will this person raise the average level of effectiveness of the group they're entering?* We want to fight entropy. The bar has to continuously go up. I ask people to visualize the company 5 years from now. At that point, each of us should look around and say, "The standards are so high now -- boy, I'm glad I got in when I did!"

- *Along what dimension might this person be a superstar?* Many people have unique skills, interests, and perspectives that enrich the work environment for all of us. It's often something that's not even related to their jobs. One person here is a National Spelling Bee champion (1978, I believe). I suspect it doesn't help her in her everyday work, but it does make working here more fun if you can occasionally snag her in the hall with a quick challenge: "onomatopoeia!"

Goals for 1999

As we look forward, we believe that the overall e-commerce opportunity is enormous, and 1999 will be an important year. Although Amazon.com has established a strong leadership position, it is certain that competition will even further accelerate. We plan to invest aggressively to build the foundation for a multi-billion-dollar revenue company serving tens of millions of customers with operational excellence and high efficiency. Although this level of forward investment is costly and carries many inherent risks, we believe it will provide the best end-to-end experience for customers, and actually offer the least risky long-term value creation approach for investors.

The elements of our 1999 plan may not surprise you:

Distribution capacity – We intend to build out a significant distribution infrastructure to ensure that we can support all the sales our customers demand, with speedy access to a deep product inventory.

Systems capacity – We'll be expanding our systems capacity to support similar growth levels. The systems group has a significant task: expand to meet near term growth, restructure systems for multi-billion dollar scale and tens of millions of customers, build out features and systems for new initiatives and new innovations, and increase operational excellence and efficiency. All while keeping a billion dollar, 8 million customer store up and available on a 24x7 basis.

Brand promise – Amazon.com is still a small and young company relative to the major offline retailers, and we must ensure that we build wide, strong customer relationships during this critical period.

Expanded product and service offerings – In 1999, we will continue to enhance the scope of our current product and service offerings, as well as add new initiatives. Amazon.com Auctions is our most recent addition. If any of you have not tried this new service, I encourage you to run – not walk – to www.amazon.com and click on the Auctions tab. As an Amazon.com customer, you are pre-registered to both bid and sell. As a seller, you have access to Amazon.com's 8 million experienced online shoppers.

Bench strength and processes – We've complicated our business dramatically with new products, services, geographies, acquisitions and additions to our business model. We intend to invest in teams, processes, communication and people development practices. Scaling in this way is among the most challenging and difficult elements of our plan.

Amazon.com has made a number of strides forward in the past year, but there is still an enormous amount to learn and to do. We remain optimistic, but we also know we must remain vigilant and maintain a sense of urgency. We face many challenges and hurdles. Among them, aggressive, capable and well-funded competition; the growth challenges and execution risk associated with our own expansion; and the need for large continuing investments to meet an expanding market opportunity.

The most important thing I could say in this letter was said in last years' letter, which detailed our long-term investment approach. Because we have so many new shareholders (this year we're printing more than 200,000 of these letters – last year we printed about 13,000), we've appended last year's letter immediately after this year's. I invite you to please read the section entitled *It's All About the Long Term*. You might want to read it twice to make sure we're the kind of company you want to be invested in. As it says there, we don't claim it's the right philosophy, we just claim it's ours!

All the best and sincere thanks once again to our customers and shareholders and all the folks here who are working passionately every day to build an important and lasting company.

Jeffrey P. Bezos
Founder and Chief Executive Officer
Amazon.com, Inc.

To our shareholders:

The first 4½ years of our journey have yielded some amazing results: we've now served over 17 million customers in over 150 countries and built the leading global e-commerce brand and platform.

In the coming years we expect to benefit from the continued adoption of online commerce around the world as millions of new consumers connect to the Internet for the first time. As the online shopping experience continues to improve, consumer trust and confidence will increase, driving further adoption. And, if we at Amazon.com do our job right, we can be uniquely positioned to serve these new customers best and benefit as a result.

A Recap of 1999

During 1999, our relentless focus on customers worked:

- Sales grew from $610 million in 1998 to $1.64 billion – a 169 percent increase.
- We added 10.7 million new customers, increasing cumulative customer accounts from 6.2 million to 16.9 million.
- The percentage of orders placed by repeat customers grew from over 64 percent in the fourth quarter of 1998 to greater than 73 percent in the same period in 1999.
- Customers around the world are now choosing Amazon.com for a wide array of products. Only two years ago, Amazon.com's U.S. Books business represented 100 percent of our sales. Today, despite strong growth in U.S. Books, other areas account for more than half our sales. Major 1999 initiatives included Auctions, zShops, Toys, Consumer Electronics, Home Improvement, Software, Video Games, Payments and our wireless initiative, Amazon Anywhere.
- We've continued to be recognized as best-of-breed not only in our more established areas such as books, but in our newer stores as well. Just to focus on one area, Amazon Toys has received multiple awards, including being rated the best online toy store in an MSNBC survey, a ranking as the No. 1 on-line toy store by Forrester Research, and the top e-Rating from Consumer Reports in the toys category, in each case beating out a number of longer-established players.
- Sales outside of the US accounted for 22 percent of our business, totaling $358 million. In the U.K. and Germany, we added Music, Auctions and zShops. In fact, Amazon.co.uk, Amazon.de, and Amazon.com are now the #1, #2, and #3 most popular online retail domains in Europe.
- We grew worldwide distribution capacity from roughly 300,000 square feet to over 5 million square feet in less than 12 months.

- In part because of this infrastructure, we were able to grow revenues 90 percent in just three months, while shipping well over 99 percent of our holiday orders in time for the holidays. As far as we can determine, no other company has ever grown 90 percent in three months on a sales base of over $1 billion.

I'm incredibly proud of everyone at Amazon.com for their tireless efforts to deliver what has become the standard-setting, Amazon.com-class customer experience while simultaneously handling such extraordinary growth rates. If any of you shareholders would like to thank this incredible worldwide team of Amazonians, please feel free to send an email to jeff@amazon.com. With help from my astounding office staff, I'll compile them and send them to the company. I know it would be appreciated. (As a side benefit I'll get to see if anyone reads these letters!)

In 1999, we continued to benefit from a business model that is inherently capital efficient. We don't need to build physical stores or stock those stores with inventory, and our centralized distribution model has allowed us to build a business with over $2 billion in annualized sales but requiring just $220 million in inventory and $318 million in fixed assets. Over the last five years, we've cumulatively used just $62 million in operating cash.

What Do You Own?

At a recent event at the Stanford University campus, a young woman came to the microphone and asked me a great question: "I have 100 shares of Amazon.com. What do I own?"

I was surprised I hadn't heard it before, at least not so simply put. What do you own? You own a piece of the leading e-commerce platform.

The Amazon.com platform is comprised of brand, customers, technology, distribution capability, deep e-commerce expertise, and a great team with a passion for innovation and a passion for serving customers well. We begin the year 2000 with 17 million customers, a world-wide reputation for customer focus, the best e-commerce software systems, and purpose-built distribution and customer service infrastructure. We believe we have reached a "tipping point," where this platform allows us to launch new e-commerce businesses faster, with a higher quality of customer experience, a lower incremental cost, a higher chance of success, and a faster path to scale and profitability than any other company.

Our vision is to use this platform to build Earth's most customer-centric company, a place where customers can come to find and discover anything and everything they might want to buy online. We won't do so alone, but together with what will be thousands of partners of all sizes. We'll listen to customers, invent on their behalf, and personalize the store for each of them, all while working hard to continue to earn their trust. As is probably clear, this platform affords an unusually large scale opportunity, one that should

prove very valuable for both customers and shareholders if we can make the most of it. Despite the many risks and complexities, we are deeply committed to doing so.

Goals for 2000

In the year 2000, Amazon.com has six major goals: growth in both the number of our customers and the strength of the relationship we have with each of them; continued rapid expansion of the products and services we offer; driving operational excellence in all areas of the company; international expansion; expanding our partnership programs; and last, importantly, driving toward profitability in each and every business we are in. I'll spend a moment on each goal.

Growing and strengthening customer relationships — We will continue to invest heavily in introductions to new customers. Though it's sometimes hard to imagine with all that has happened in the last five years, this remains Day 1 for e-commerce, and these are the early days of category formation where many customers are forming relationships for the first time. We must work hard to grow the number of customers who shop with us, the number of products they purchase, the frequency with which they shop, and the level of satisfaction they have when they do so.

Product and service expansion — We are working to build a place where customers can find and discover anything they want to buy, anytime, anywhere. Each new product and service we offer makes us more relevant to a wider group of customers and can increase the frequency with which they visit our store. So, as we expand our offering, we create a virtuous cycle for the whole business. The more frequently customers visit our store, the less time, energy, and marketing investment is required to get them to come back again. In sight, in mind.

Further, as we expand, each new store has a dedicated team working to make it best-of-breed in its category; thus each new store is also a new opportunity to demonstrate to customers our focus on them. Finally, each new product or service further leverages our investments in distribution, customer service, technology, and brand, and can yield increased leverage on our bottom line.

Operational excellence — To us, operational excellence implies two things: delivering continuous improvement in customer experience and driving productivity, margin, efficiency, and asset velocity across all our businesses.

Often, the best way to drive one of these is to deliver the other. For instance, more efficient distribution yields faster delivery times, which in turn lowers contacts per order and customer service costs. These, in turn, improve customer experience and build brand, which in turn decreases customer acquisition and retention costs.

Our whole company is highly focused on driving operational excellence in each area of our business in 2000. Being world class in both customer experience and operations will allow us to grow faster and deliver even higher service levels.

International expansion — We think that consumers outside the U.S. are even more under-served by retail than those within it, and, with our platform in place, Amazon.com is well positioned to be a leading global retailer. We already have significant brand, sales and customer presence around the world, as we've been shipping into over 150 countries for almost five years. I'm pleased to report that our stores in the UK and Germany are off to a strong start – they are already in the top 10 Web properties and the # 1 e-commerce site in each of their respective countries. Our customers and shareholders around the world can look forward to further geographic expansion from this base during the coming year.

Expanding our partnership program — Through our platform, we are able to bring tremendous value to our partners, such as drugstore.com. In fact, our experience so far suggests that Amazon.com may easily be the most efficient, effective means for our partners to build their businesses. In many areas, partnering is the best way for us to rapidly expand our store in a customer-focused, cost-effective manner. One point worth emphasizing: the quality of customer experience a partner delivers is the single most important criteria in our selection process – we simply won't build a partnership with any company that does not share our passion for serving customers.

We love these kinds of partnerships because they please customers, please our partners, and are financially attractive, pleasing our shareholders – you and us.

Drive toward profitability in each business we are in — Each of the previous goals I've outlined contribute to our long-standing objective of building the best, most profitable, highest return on capital, long-term franchise. So in a way, driving profitability is the foundation underlying all of these goals. In the coming year, we expect to deliver substantial margin improvement and cost leverage as we drive continuous improvement in our partnerships with suppliers, in our own productivity and efficiency, in our management of fixed and working capital, and our expertise in managing product mix and price.

Each successive product and service we launch this year should build on our platform, so our investment curve can be less steep and the time to profitability for each business should, in general, continue to shorten.

It's All About the Long Term

In our 1997 letter to shareholders (our first), we detailed our long-term investment approach. Because we continue to add many new shareholders, we've appended that letter immediately after this year's. I invite you to please read the section entitled *It's All About the Long Term*, as it is the best way I know to help make sure we're the kind of company you want to be invested in. As we wrote there, we don't claim it's the right philosophy, we just claim it's ours!

In closing, consider this most important point: the current online shopping experience is the worst it will ever be. It's good enough today to attract 17 million customers, but it will get so much better. Increased bandwidth will result in faster page views and richer content. Further improvements will lead to "always-on access" (which I expect will be a strong boost to online shopping at home, as opposed to the office) and we'll see significant growth in non-PC devices and wireless access. Moreover, it's great to be participating in what is a multi-trillion dollar global market, in which we are so very, very tiny. We are doubly-blessed. We have a market-size unconstrained opportunity in an area where the underlying foundational technology we employ improves every day. That is not normal.

As always, we at Amazon.com remain grateful to our customers for their business and trust, to each other for our hard work, and to our shareholders for their support and encouragement. Many, many thanks.

Jeffrey P. Bezos
Founder and Chief Executive Officer
Amazon.com, Inc.

amazon.com

To our shareholders:

Ouch. It's been a brutal year for many in the capital markets and certainly for Amazon.com shareholders. As of this writing, our shares are down more than 80% from when I wrote you last year. Nevertheless, by almost any measure, Amazon.com the company is in a stronger position now than at any time in its past.

- We served 20 million customers in 2000, up from 14 million in 1999.
- Sales grew to $2.76 billion in 2000 from $1.64 billion in 1999.
- Pro forma operating loss shrank to 6% of sales in Q4 2000, from 26% of sales in Q4 1999.
- Pro forma operating loss in the U.S. shrank to 2% of sales in Q4 2000, from 24% of sales in Q4 1999.
- Average spend per customer in 2000 was $134, up 19%.
- Gross profit grew to $656 million in 2000, from $291 million in 1999, up 125%.
- Almost 36% of Q4 2000 U.S. customers purchased from one of our ''non-BMV'' stores such as electronics, tools, and kitchen.
- International sales grew to $381 million in 2000, from $168 million in 1999.
- We helped our partner Toysrus.com sell more than $125 million of toys and video games in Q4 2000.
- We ended 2000 with cash and marketable securities of $1.1 billion, up from $706 million at the end of 1999, thanks to our early 2000 euroconvert financing.
- And, most importantly, our heads-down focus on the customer was reflected in a score of 84 on the American Customer Satisfaction Index. We are told this is the highest score ever recorded for a service company in any industry.

So, if the company is better positioned today than it was a year ago, why is the stock price so much lower than it was a year ago? As the famed investor Benjamin Graham said, ''In the short term, the stock market is a voting machine; in the long term, it's a weighing machine.'' Clearly there was a lot of voting going on in the boom year of '99—and much less weighing. We're a company that wants to be weighed, and over time, we will be—over the long term, all companies are. In the meantime, we have our heads down working to build a heavier and heavier company.

Many of you have heard me talk about the ''bold bets'' that we as a company have made and will continue to make—these bold bets have included everything from our investment in digital and wireless technologies, to our decision to invest in smaller e-commerce companies, including living.com and Pets.com, both of which shut down operations in 2000. We were significant shareholders in both and lost a significant amount of money on both.

We made these investments because we knew we wouldn't ourselves be entering these particular categories any time soon, and we believed passionately in the ''land rush'' metaphor for the Internet. Indeed, that metaphor was an extraordinarily useful decision aid for several years starting in 1994, but we now believe its usefulness largely faded away over the last couple of years. In retrospect, we significantly underestimated how much time would be available to enter these categories and underestimated how difficult it would be for single-category e-commerce companies to achieve the scale necessary to succeed.

Online selling (relative to traditional retailing) is a scale business characterized by high fixed costs and relatively low variable costs. This makes it difficult to be a medium-sized e-commerce company. With a long

enough financing runway, Pets.com and living.com may have been able to acquire enough customers to achieve the needed scale. But when the capital markets closed the door on financing Internet companies, these companies simply had no choice but to close their doors. As painful as that was, the alternative—investing more of our own capital in these companies to keep them afloat—would have been an even bigger mistake.

Future: Real Estate Doesn't Obey Moore's Law.

Let's move to the future. Why should you be optimistic about the future of e-commerce and the future of Amazon.com?

Industry growth and new customer adoption will be driven over the coming years by relentless improvements in the customer experience of online shopping. These improvements in customer experience will be driven by innovations made possible by dramatic increases in available bandwidth, disk space, and processing power, all of which are getting cheap fast.

Price performance of processing power is doubling about every 18 months (Moore's Law), price performance of disk space is doubling about every 12 months, and price performance of bandwidth is doubling about every 9 months. Given that last doubling rate, Amazon.com will be able to use 60 times as much bandwidth per customer 5 years from now while holding our bandwidth cost per customer constant. Similarly, price performance improvements in disk space and processing power will allow us to, for example, do ever more and better real-time personalization of our Web site.

In the physical world, retailers will continue to use technology to reduce costs, but not to transform the customer experience. We too will use technology to reduce costs, but the bigger effect will be using technology to drive adoption and revenue. We still believe that some 15% of retail commerce may ultimately move online.

While there are no foregone conclusions, and we still have much to prove, Amazon.com today is a unique asset. We have the brand, the customer relationships, the technology, the fulfillment infrastructure, the financial strength, the people, and the determination to extend our leadership in this infant industry and to build an important and lasting company. And we will do so by keeping the customer first.

The year 2001 will be an important one in our development. Like 2000, this year will be a year of focus and execution. As a first step, we've set the goal of achieving a pro forma operating profit in the fourth quarter. While we have a tremendous amount of work to do and there can be no guarantees, we have a plan to get there, it's our top priority, and every person in this company is committed to helping with that goal. I look forward to reporting to you our progress in the coming year.

As I usually do, I've appended our 1997 letter, our first letter to shareholders. It gets more interesting every year that goes by, in part because so little has changed. I especially draw your attention to the section entitled ''It's All About the Long Term.''

We at Amazon.com remain grateful to our customers for their business and trust, to each other for our hard work, and to our shareholders for their support and encouragement. Many, many thanks.

Jeffrey P. Bezos
Founder and Chief Executive Officer
Amazon.com, Inc.

amazon.com®

To our shareholders:

In July of last year, Amazon.com reached an important way station. After four years of single-minded focus on growth, and then just under two years spent almost exclusively on lowering costs, we reached a point where we could afford to balance growth and cost improvement, dedicating resources and staffed projects to both. Our major price reduction in July, moving to discount books over $20 by 30% off list, marked this change.

This balance began to pay off in the fourth quarter, when we both significantly exceeded our own goals on the bottom line and simultaneously reaccelerated growth in our business. We lowered prices again in January when we offered a new class of shipping that is free (year-round) on orders over $99. Focus on cost improvement makes it possible for us to afford to lower prices, which drives growth. Growth spreads fixed costs across more sales, reducing cost per unit, which makes possible more price reductions. Customers like this, and it's good for shareholders. Please expect us to repeat this loop.

As I mentioned, we exceeded our goals for the fourth quarter with pro forma operating profit of $59 million and pro forma net profit of $35 million. Thousands of Amazon.com employees around the world worked hard to achieve that goal; they are, and should be, proud of the accomplishment. More highlights from a notable year:

- Sales grew 13% from $2.76 billion in 2000 to $3.12 billion in 2001, and we achieved our first billion-dollar quarter on reaccelerated sales in Q4.
- We served 25 million customer accounts in 2001, compared to 20 million in 2000 and 14 million in 1999.
- International sales grew 74% in 2001, and more than one-quarter of sales came from outside the U.S. The U.K. and Germany, our largest international markets, had a combined pro forma operating profit for the first time in Q4. Open only a year, Japan grew to a $100 million annual run rate in Q4.
- Hundreds of thousands of small businesses and individuals made money by selling new and used products to our customers directly from our highly trafficked product detail pages. These Marketplace orders grew to 15% of U.S. orders in Q4, far surpassing our expectations when we launched Marketplace in November 2000.
- Inventory turns increased from 12 in 2000 to 16 in 2001.
- Most important, we stayed relentlessly focused on the customer, as reflected in a chart-topping score of 84 for the second year in a row on the widely followed American Customer Satisfaction Index conducted by the University of Michigan. We are told this is the highest score ever recorded--not just for any retailer, but for any service company.

Obsess over customers: our commitment continues

Until July, Amazon.com had been primarily built on two pillars of customer experience: selection and convenience. In July, as I already discussed, we added a third customer experience pillar: relentlessly lowering prices. You should know that our commitment to the first two pillars remains as strong as ever.

We now have more than 45,000 items in our electronics store (about seven times the selection you're likely to find in a big-box electronics store), we've tripled our kitchen selection (you'll find all the best brands), we've launched computer and magazine subscriptions stores, and we've added selection with strategic partners such as Target and Circuit City.

We've improved convenience with features like Instant Order Update which warns you if you're about to buy the same item twice (people are busy--they forget that they've already bought it!).

We've dramatically improved customer self-service capabilities. Customers can now easily find, cancel, or modify their own orders. To find an order, just make sure you are signed in and recognized by the site, and do a regular search on any product in your order. When you get to that product's detail page, a link to your order will be at the top of the page.

We built a new feature called Look Inside the Book. Customers can view large high-resolution images of not only the front cover of a book, but also the back cover, index, table of contents, and a reasonable sample of the inside pages. They can Look Inside the Book before making a buying decision. It's available on over 200,000 of our millions of titles (as a point of comparison, a typical book superstore carries about 100,000 titles).

As my last example, I'll just point out that one of the most important things we've done to improve convenience and experience for customers also happens to be a huge driver of variable cost productivity: eliminating mistakes and errors at their root. Every year that's gone by since Amazon.com's founding, we've done a better and better job of eliminating errors, and this past year was our best ever. Eliminating the root causes of errors saves us money and saves customers time.

Our consumer franchise is our most valuable asset, and we will nourish it with innovation and hard work.

An investment framework

In every annual letter (including this one), we attach a copy of our original 1997 letter to shareholders to help investors decide if Amazon.com is the right kind of investment for them, and to help us determine if we have remained true to our original goals and values. I think we have.

In that 1997 letter, we wrote, "When forced to choose between optimizing the appearance of our GAAP accounting and maximizing the present value of future cash flows, we'll take the cash flows."

Why focus on cash flows? Because a share of stock is a share of a company's future cash flows, and, as a result, cash flows more than any other single variable seem to do the best job of explaining a company's stock price over the long term.

If you could know for certain just two things--a company's future cash flows and its future number of shares outstanding--you would have an excellent idea of the fair value of a share of that company's stock today. (You'd also need to know appropriate discount rates, but if you knew the future cash flows *for certain*, it would also be reasonably easy to know which discount rates to use.) It's not easy, but you can make an informed forecast of future cash flows by examining a company's performance in the past and by looking at factors such as the leverage points and scalability in that company's model. Estimating the number of shares outstanding in the future requires you to forecast items such as option grants to employees or other potential capital transactions. Ultimately, your determination of cash flow per share will be a strong indicator of the price you might be willing to pay for a share of ownership in any company.

Since we expect to keep our fixed costs largely fixed, even at significantly higher unit volumes, we believe Amazon.com is poised over the coming years to generate meaningful, sustained, free cash flow. Our goal for 2002 reflects just that. As we said in January when we reported our fourth quarter results, we plan this year to generate positive operating cash flow, leading to free cash flow (the difference between the two is up to $75 million of planned capital expenditures). Our trailing twelve-month pro forma net income should, roughly but not perfectly, trend like trailing twelve-month cash flow.

Limiting share count means more cash flow per share and more long-term value for owners. Our current objective is to target net dilution from employee stock options (grants net of cancellations) to an average of 3% per year over the next five years, although in any given year it might be higher or lower.

Relentless commitment to long-term shareholder value

As I've discussed many times before, we are firm believers that the long-term interests of shareholders are tightly linked to the interests of our customers: if we do our jobs right, today's customers will buy more tomorrow, we'll add more customers in the process, and it will all add up to more cash flow and more long-term value for our shareholders. To that end, we are committed to extending our leadership in e-commerce in a way that benefits customers and therefore, inherently, investors--you can't do one without the other.

As we kick off 2002, I am happy to report that I am as enthusiastic as ever about this business. There is more innovation ahead of us than behind us, we are close to demonstrating the operating leverage of our business model, and I get to work with this amazing team of Amazonians all over the world. I am lucky and grateful. We thank you, our owners, for your support, your encouragement, and for joining us on this adventure. If you're a customer, we thank you again!

Jeffrey P. Bezos
Founder and Chief Executive Officer
Amazon.com, Inc.

amazon.com®

To our shareholders:

In many ways, Amazon.com is not a normal store. We have deep selection that is unconstrained by shelf space. We turn our inventory 19 times in a year. We personalize the store for each and every customer. We trade real estate for technology (which gets cheaper and more capable every year). We display customer reviews critical of our products. You can make a purchase with a few seconds and one click. We put used products next to new ones so you can choose. We share our prime real estate—our product detail pages—with third parties, and, if they can offer better value, we let them.

One of our most exciting peculiarities is poorly understood. People see that we're determined to offer both world-leading customer experience *and* the lowest possible prices, but to some this dual goal seems paradoxical if not downright quixotic. Traditional stores face a time-tested tradeoff between offering high-touch customer experience on the one hand and the lowest possible prices on the other. How can Amazon.com be trying to do both?

The answer is that we transform much of customer experience—such as unmatched selection, extensive product information, personalized recommendations, and other new software features—into largely a fixed expense. With customer experience costs largely fixed (more like a publishing model than a retailing model), our costs as a percentage of sales can shrink rapidly as we grow our business. Moreover, customer experience costs that remain variable—such as the variable portion of fulfillment costs—improve in our model as we reduce defects. Eliminating defects improves costs and leads to better customer experience.

We believe our ability to lower prices and simultaneously drive customer experience is a big deal, and this past year offers evidence that the strategy is working.

First, we do continue to drive customer experience. The holiday season this year is one example. While delivering a record number of units to customers, we also delivered our best-ever experience. Cycle time, the amount of time taken by our fulfillment centers to process an order, improved 17% compared with last year. And our most sensitive measure of customer satisfaction, contacts per order, saw a 13% improvement.

Inside existing product categories, we've worked hard to increase selection. Electronics selection is up over 40% in the U.S. alone over the prior year, and we now offer 10 times the selection of a typical big box electronics store. Even in U.S. books, where we've been working for 8 years, we increased selection by 15%, mostly in harder-to-find and out-of-print titles. And, of course, we've added new categories. Our Apparel and Accessories store has more than 500 top clothing brands, and in its first 60 days, customers bought 153,000 shirts, 106,000 pairs of pants, and 31,000 pairs of underwear.

In this year's American Customer Satisfaction Index, the most authoritative study of customer satisfaction, Amazon.com scored an 88, the highest score ever recorded—not just online, not just in retailing—but the highest score ever recorded in any service industry. In ACSI's words:

> "Amazon.com continues to show remarkably high levels of customer satisfaction. With a score of 88 (up 5%), it is generating satisfaction at a level unheard of in the service industry…. Can customer satisfaction for Amazon climb more? The latest ACSI data suggest that it is indeed possible. Both service and the value proposition offered by Amazon have increased at a steep rate."

Second, while focused on customer experience, we've also been lowering price substantially. We've been doing so broadly across product categories, from books to electronics, and we've eliminated shipping fees with our 365 day-per-year Free Super Saver Shipping on orders over $25. We've been taking similar actions in every country in which we do business.

Our pricing objective is not to discount a small number of products for a limited period of time, but to offer low prices everyday and apply them broadly across our entire product range. To illustrate this point, we recently did a price comparison versus a major well-known chain of book superstores. We did not hand pick a choice group of books against which we wanted to compare. Instead, we used their published list of their 100 bestsellers for 2002. It was a good representation of the kinds of books people buy most, consisting of 45 hardcover titles and 55 paperbacks across many different categories, including Literature, Romance, Mystery and Thrillers, Nonfiction, Children's, Self-Help, and so on.

We priced all 100 titles by visiting their superstores in both Seattle and New York City. It took us six hours in four of their different superstores to find all 100 books on their list. When we added up everything we spent, we discovered that:

- At their stores, these 100 bestselling books cost $1,561. At Amazon.com, the same books cost $1,195 for a total savings of $366, or 23%.

- For 72 of the 100 books, our price was cheaper. On 25 of the books, our price was the same. On 3 of the 100, their prices were better (we subsequently reduced our prices on these three books).

- In these physical-world superstores, only 15 of their 100 titles were discounted—they were selling the other 85 at full list price. At Amazon.com, 76 of the 100 were discounted and 24 were sold at list price.

To be sure, you may find reasons to shop in the physical world—for instance, if you need something immediately—but, if you do so, you'll be paying a premium. If you want to save money and time, you'll do better by shopping at Amazon.com.

Third, our determination to deliver low price *and* customer experience is generating financial results. Net sales this year increased 26% to a record $3.9 billion, and unit sales

grew at an even faster 34%. Free cash flow—our most important financial measure—reached $135 million, a $305 million improvement over the prior year.[1]

In short, what's good for customers is good for shareholders.

Once again this year, I attach a copy of our original 1997 letter and encourage current and prospective shareowners to take a look at it. Given how much we've grown and how much the Internet has evolved, it's notable that the fundamentals of how we do business remain the same.

As always, we at Amazon.com are grateful to our customers for their business and trust, to each other for our hard work, and to our shareholders for their support and encouragement.

Jeffrey P. Bezos
Founder and Chief Executive Officer
Amazon.com, Inc.

[1] Free cash flow for 2002 of $135 million is net cash provided by operating activities of $174 million less purchases of fixed assets of $39 million. Free cash flow for 2001 of negative $170 million is net cash used in operating activities of $120 million less purchases of fixed assets of $50 million.

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To our shareholders:

Long-term thinking is both a requirement and an outcome of true ownership. Owners are different from tenants. I know of a couple who rented out their house, and the family who moved in nailed their Christmas tree to the hardwood floors instead of using a tree stand. Expedient, I suppose, and admittedly these were particularly bad tenants, but no owner would be so short-sighted. Similarly, many investors are effectively short-term tenants, turning their portfolios so quickly they are really just renting the stocks that they temporarily "own."

We emphasized our long-term views in our 1997 letter to shareholders, our first as a public company, because that approach really does drive making many concrete, non-abstract decisions. I'd like to discuss a few of these non-abstract decisions in the context of customer experience. At Amazon.com, we use the term customer experience broadly. It includes every customer-facing aspect of our business—from our product prices to our selection, from our website's user interface to how we package and ship items. The customer experience we create is by far the most important driver of our business.

As we design our customer experience, we do so with long-term owners in mind. We try to make all of our customer experience decisions—big and small—in that framework.

For instance, shortly after launching Amazon.com in 1995, we empowered customers to review products. While now a routine Amazon.com practice, at the time we received complaints from a few vendors, basically wondering if we understood our business: "You make money when you sell things—why would you allow negative reviews on your website?" Speaking as a focus group of one, I know I've sometimes changed my mind before making purchases on Amazon.com as a result of negative or lukewarm customer reviews. Though negative reviews cost us some sales in the short term, helping customers make better purchase decisions ultimately pays off for the company.

Another example is our Instant Order Update feature, which reminds you that you've already bought a particular item. Customers lead busy lives and cannot always remember if they've already purchased a particular item, say a DVD or CD they bought a year earlier. When we launched Instant Order Update, we were able to measure with statistical significance that the feature slightly reduced sales. Good for customers? Definitely. Good for shareowners? Yes, in the long run.

Among the most expensive customer experience improvements we're focused on are our everyday free-shipping offers and our ongoing product price reductions. Eliminating defects, improving productivity, and passing the resulting cost savings back to customers in the form of lower prices is a long-term decision. Increased volumes take time to materialize, and price reductions almost always hurt current results. In the long term, however, relentlessly driving the "price-cost structure loop" will leave us with a stronger, more valuable business. Since many of our costs, such as software engineering, are relatively fixed and many of our variable costs can also be better managed at larger scale, driving more volume through our cost structure reduces those costs as a percentage of sales. To give one small example, engineering a feature like Instant Order Update for use by 40 million customers costs nowhere near 40 times what it would cost to do the same for 1 million customers.

Our pricing strategy does not attempt to maximize margin *percentages*, but instead seeks to drive maximum value for customers and thereby create a much larger bottom line—in the long term. For example, we're targeting gross margins on our jewelry sales to be substantially lower than industry norms because we believe over time—customers figure these things out—this approach will produce more value for shareholders.

We have a strong team of hard-working, innovative folks building Amazon.com. They are focused on the customer and focused on the long term. On that time scale, the interests of shareowners and customers are aligned.

As always, I attach our 1997 letter and believe it is still worth a read. Here's to not being a tenant!

Jeffrey P. Bezos
Founder and Chief Executive Officer
Amazon.com, Inc.

P.S. Again this year, the widely-followed American Customer Satisfaction Index gave Amazon.com a score of 88—the highest customer satisfaction score ever recorded in any service industry, online or off. A representative of the ACSI was quoted as saying, "If they go any higher, they will get a nose bleed." We're working on that.

amazon.com

To our shareholders:

Our ultimate financial measure, and the one we most want to drive over the long-term, is free cash flow per share.

Why not focus first and foremost, as many do, on earnings, earnings per share or earnings growth? The simple answer is that earnings don't directly translate into cash flows, and shares are worth only the present value of their future cash flows, not the present value of their future earnings. Future earnings are a component—but not the only important component—of future cash flow per share. Working capital and capital expenditures are also important, as is future share dilution.

Though some may find it counterintuitive, a company can actually impair shareholder value in certain circumstances by growing earnings. This happens when the capital investments required for growth exceed the present value of the cash flow derived from those investments.

To illustrate with a hypothetical and very simplified example, imagine that an entrepreneur invents a machine that can quickly transport people from one location to another. The machine is expensive—$160 million with an annual capacity of 100,000 passenger trips and a four year useful life. Each trip sells for $1,000 and requires $450 in cost of goods for energy and materials and $50 in labor and other costs.

Continue to imagine that business is booming, with 100,000 trips in Year 1, completely and perfectly utilizing the capacity of one machine. This leads to earnings of $10 million after deducting operating expenses including depreciation—a 10% net margin. The company's primary focus is on earnings; so based on initial results the entrepreneur decides to invest more capital to fuel sales and earnings growth, adding additional machines in Years 2 through 4.

Here are the income statements for the first four years of business:

	Earnings			
	Year 1	**Year 2**	**Year 3**	**Year 4**
		(in thousands)		
Sales	$100,000	$200,000	$400,000	$800,000
Units sold	100	200	400	800
Growth	N/A	100%	100%	100%
Gross profit	55,000	110,000	220,000	440,000
Gross margin	55%	55%	55%	55%
Depreciation	40,000	80,000	160,000	320,000
Labor & other costs	5,000	10,000	20,000	40,000
Earnings	$ 10,000	$ 20,000	$ 40,000	$ 80,000
Margin	10%	10%	10%	10%
Growth	N/A	100%	100%	100%

It's impressive: 100% compound earnings growth and $150 million of cumulative earnings. Investors considering only the above income statement would be delighted.

However, looking at cash flows tells a different story. Over the same four years, the transportation business generates cumulative negative free cash flow of $530 million.

	Cash Flows			
	Year 1	Year 2	Year 3	Year 4
	(in thousands)			
Earnings	$ 10,000	$ 20,000	$ 40,000	$ 80,000
Depreciation	40,000	80,000	160,000	320,000
Working capital	—	—	—	—
Operating Cash Flow	50,000	100,000	200,000	400,000
Capital expenditures	160,000	160,000	320,000	640,000
Free Cash Flow	$(110,000)	$ (60,000)	$(120,000)	$(240,000)

There are of course other business models where earnings more closely approximate cash flows. But as our transportation example illustrates, one cannot assess the creation or destruction of shareholder value with certainty by looking at the income statement alone.

Notice, too, that a focus on EBITDA—Earnings Before Interest, Taxes, Depreciation and Amortization—would lead to the same faulty conclusion about the health of the business. Sequential annual EBITDA would have been $50, $100, $200 and $400 million—100% growth for three straight years. But without taking into account the $1.28 billion in capital expenditures necessary to generate this ‘cash flow,’ we’re getting only part of the story—EBITDA isn’t cash flow.

What if we modified the growth rates and, correspondingly, capital expenditures for machinery—would cash flows have deteriorated or improved?

Year 2, 3 and 4 Sales and Earnings Growth Rate	Number of Machines in Year 4	Year 1 to 4 Cumulative Earnings	Year 1 to 4 Cumulative Free Cash Flow
		(in thousands)	
0%, 0%, 0%	1	$ 40,000	$ 40,000
100%, 50%, 33%	4	$100,000	$(140,000)
100%, 100%, 100%	8	$150,000	$(530,000)

Paradoxically, from a cash flow perspective, the slower this business grows the better off it is. Once the initial capital outlay has been made for the first machine, the ideal growth trajectory is to scale to 100% of capacity quickly, then stop growing. However, even with only one piece of machinery, the gross cumulative cash flow doesn’t surpass the initial machine cost until Year 4 and the net present value of this stream of cash flows (using 12% cost of capital) is still negative.

Unfortunately our transportation business is fundamentally flawed. There is no growth rate at which it makes sense to invest initial or subsequent capital to operate the business. In fact, our example is so simple and clear as to be obvious. Investors would run a net present value analysis on the economics and quickly determine it doesn’t pencil out. Though it’s more subtle and complex in the real world, this issue—the duality between earnings and cash flows—comes up all the time.

Cash flow statements often don’t receive as much attention as they deserve. Discerning investors don’t stop with the income statement.

Our Most Important Financial Measure: Free Cash Flow Per Share

Amazon.com’s financial focus is on long-term growth in free cash flow per share.

Amazon.com’s free cash flow is driven primarily by increasing operating profit dollars and efficiently managing both working capital and capital expenditures. We work to increase operating profit by focusing on improving all aspects of the customer experience to grow sales and by maintaining a lean cost structure.

We have a cash generative operating cycle[1] because we turn our inventory quickly, collecting payments from our customers before payments are due to suppliers. Our high inventory turnover means we maintain relatively low levels of investment in inventory—$480 million at year end on a sales base of nearly $7 billion.

The capital efficiency of our business model is illustrated by our modest investments in fixed assets, which were $246 million at year end or 4% of 2004 sales.

Free cash flow[2] grew 38% to $477 million in 2004, a $131 million improvement over the prior year. We are confident that if we continue to improve customer experience—including increasing selection and lowering prices—and execute efficiently, our value proposition, as well as our free cash flow, will further expand.

As to dilution, total shares outstanding plus stock-based awards are essentially unchanged at the end of 2004 compared with 2003, and are down 1% over the last three years. During that same period, we've also eliminated over six million shares of potential future dilution by repaying more than $600 million of convertible debt that was due in 2009 and 2010. Efficiently managing share count means more cash flow per share and more long-term value for owners.

This focus on free cash flow isn't new for Amazon.com. We made it clear in our 1997 letter to shareholders—our first as a public company—that when "forced to choose between optimizing GAAP accounting and maximizing the present value of future cash flows, we'll take the cash flows." I'm attaching a copy of our complete 1997 letter and encourage current and prospective shareowners to take a look at it.

As always, we at Amazon.com are grateful to our customers for their business and trust, to each other for our hard work, and to our shareholders for their support and encouragement.

Jeffrey P. Bezos
Founder and Chief Executive Officer
Amazon.com, Inc.

April 2005

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1 The operating cycle is number of days of sales in inventory plus number of days of sales in accounts receivable minus accounts payable days.

2 Free cash flow is defined as net cash provided by operating activities less purchases of fixed assets, including capitalized internal-use software and website development, both of which are presented on our statements of cash flows. Free cash flow for 2004 of $477 million is net cash provided by operating activities of $567 million less purchases of fixed assets, including capitalized internal-use software and website development costs, of $89 million. Free cash flow for 2003 of $346 million is net cash provided by operating activities of $392 million less purchases of fixed assets, including capitalized internal-use software and website development costs, of $46 million.

To our shareholders:

Many of the important decisions we make at Amazon.com can be made with data. There is a right answer or a wrong answer, a better answer or a worse answer, and math tells us which is which. These are our favorite kinds of decisions.

Opening a new fulfillment center is an example. We use history from our existing fulfillment network to estimate seasonal peaks and to model alternatives for new capacity. We look at anticipated product mix, including product dimensions and weight, to decide how much space we need and whether we need a facility for smaller "sortable" items or for larger items that usually ship alone. To shorten delivery times and reduce outbound transportation costs, we analyze prospective locations based on proximity to customers, transportation hubs, and existing facilities. Quantitative analysis improves the customer's experience and our cost structure.

Similarly, most of our inventory purchase decisions can be numerically modeled and analyzed. We want products in stock and immediately available to customers, and we want minimal total inventory in order to keep associated holding costs, and thus prices, low. To achieve both, there is a right amount of inventory. We use historical purchase data to forecast customer demand for a product and expected variability in that demand. We use data on the historical performance of vendors to estimate replenishment times. We can determine where to stock the product within our fulfillment network based on inbound and outbound transportation costs, storage costs, and anticipated customer locations. With this approach, we keep over one million unique items under our own roof, immediately available for customers, while still turning inventory more than fourteen times per year.

The above decisions require us to make some assumptions and judgments, but in such decisions, judgment and opinion come into play only as junior partners. The heavy lifting is done by the math.

As you would expect, however, not all of our important decisions can be made in this enviable, math-based way. Sometimes we have little or no historical data to guide us and proactive experimentation is impossible, impractical, or tantamount to a decision to proceed. Though data, analysis, and math play a role, the prime ingredient in these decisions is judgment.[1]

As our shareholders know, we have made a decision to continuously and significantly lower prices for customers year after year as our efficiency and scale make it possible. This is an example of a very important decision that cannot be made in a math-based way. In fact, when we lower prices, we go against the math that we can do, which always says that the smart move is to *raise* prices. We have significant data related to price elasticity. With fair accuracy, we can predict that a price reduction of a certain percentage will result in an increase in units sold of a certain percentage. With rare exceptions, the volume increase in the short term is never enough to pay for the price decrease. However, our quantitative understanding of elasticity is short-term. We can estimate what a price reduction will do this week and this quarter. But we cannot numerically estimate the effect that consistently lowering prices will have on our business over five years or ten years or more. Our *judgment* is that relentlessly returning efficiency improvements and scale economies to customers in the form of lower prices

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[1] "The Structure of 'Unstructured' Decision Processes" is a fascinating 1976 paper by Henry Mintzberg, Duru Raisinghani, and Andre Theoret. They look at how institutions make strategic, "unstructured" decisions as opposed to more quantifiable "operating" decisions. Among other gems you will find in the paper is this: "Excessive attention by management scientists to operating decisions may well cause organizations to pursue inappropriate courses of action more efficiently." They are not debating the importance of rigorous and quantitative analysis, but only noting that it gets a lopsided amount of study and attention, probably because of the very fact that it is more quantifiable. The whole paper is available at www.amazon.com/ir/mintzberg.

creates a virtuous cycle that leads over the long term to a much larger dollar amount of free cash flow, and thereby to a much more valuable Amazon.com. We've made similar judgments around Free Super Saver Shipping and Amazon Prime, both of which are expensive in the short term and—we believe—important and valuable in the long term.

As another example, in 2000 we invited third parties to compete directly against us on our "prime retail real estate"—our product detail pages. Launching a single detail page for both Amazon retail and third-party items seemed risky. Well-meaning people internally and externally worried it would cannibalize Amazon's retail business, and—as is often the case with consumer-focused innovations—there was no way to prove in advance that it would work. Our buyers pointed out that inviting third parties onto Amazon.com would make inventory forecasting more difficult and that we could get "stuck" with excess inventory if we "lost the detail page" to one of our third-party sellers. However, our judgment was simple. If a third party could offer a better price or better availability on a particular item, then we wanted our customer to get easy access to that offer. Over time, third-party sales have become a successful and significant part of our business. Third-party units have grown from 6% of total units sold in 2000 to 28% in 2005, even as retail revenues have grown three-fold.

Math-based decisions command wide agreement, whereas judgment-based decisions are rightly debated and often controversial, at least until put into practice and demonstrated. Any institution unwilling to endure controversy must limit itself to decisions of the first type. In our view, doing so would not only limit controversy—it would also significantly limit innovation and long-term value creation.

The foundation of our decision-making philosophy was laid out in our 1997 letter to shareholders, a copy of which is attached:

- We will continue to focus relentlessly on our customers.
- We will continue to make investment decisions in light of long-term market leadership considerations rather than short-term profitability considerations or short-term Wall Street reactions.
- We will continue to measure our programs and the effectiveness of our investments analytically, to jettison those that do not provide acceptable returns, and to step up our investment in those that work best. We will continue to learn from both our successes and our failures.
- We will make bold rather than timid investment decisions where we see a sufficient probability of gaining market leadership advantages. Some of these investments will pay off, others will not, and we will have learned another valuable lesson in either case.

You can count on us to combine a strong quantitative and analytical culture with a willingness to make bold decisions. As we do so, we'll start with the customer and work backwards. In our judgment, that is the best way to create shareholder value.

Jeffrey P. Bezos
Founder and Chief Executive Officer

To our shareholders:

At Amazon's current scale, planting seeds that will grow into meaningful new businesses takes some discipline, a bit of patience, and a nurturing culture.

Our established businesses are well-rooted young trees. They are growing, enjoy high returns on capital, and operate in very large market segments. These characteristics set a high bar for any new business we would start. Before we invest our shareholders' money in a new business, we must convince ourselves that the new opportunity can generate the returns on capital our investors expected when they invested in Amazon. And we must convince ourselves that the new business can grow to a scale where it can be significant in the context of our overall company.

Furthermore, we must believe that the opportunity is currently underserved and that we have the capabilities needed to bring strong customer-facing differentiation to the marketplace. Without that, it's unlikely we'd get to scale in that new business.

I often get asked, "When are you going to open physical stores?" That's an expansion opportunity we've resisted. It fails all but one of the tests outlined above. The potential size of a network of physical stores is exciting. However: we don't know how to do it with low capital and high returns; physical-world retailing is a cagey and ancient business that's already well served; and we don't have any ideas for how to build a physical world store experience that's meaningfully differentiated for customers.

When you do see us enter new businesses, it's because we believe the above tests have been passed. Our acquisition of Joyo.com is a first step in serving the most populous country in the world. E-commerce in China is still in its early days, and we believe it's an excellent business opportunity. Shoes, apparel, groceries: these are big segments where we have the right skills to invent and grow large-scale, high-return businesses that genuinely improve customer experience.

Fulfillment by Amazon is a set of web services API's that turns our 12 million square foot fulfillment center network into a gigantic and sophisticated computer peripheral. Pay us 45 cents per month per cubic foot of fulfillment center space, and you can stow your products in our network. You make web services calls to alert us to expect inventory to arrive, to tell us to pick and pack one or more items, and to tell us where to ship those items. You never have to talk to us. It's differentiated, can be large, and passes our returns bar.

Amazon Web Services is another example. With AWS, we're building a new business focused on a new customer set … software developers. We currently offer ten different web services and have built a community of over 240,000 registered developers. We're targeting broad needs universally faced by developers, such as storage and compute capacity—areas in which developers have asked for help, and in which we have deep expertise from scaling Amazon.com over the last twelve years. We're well positioned to do it, it's highly differentiated, and it can be a significant, financially attractive business over time.

In some large companies, it might be difficult to grow new businesses from tiny seeds because of the patience and nurturing required. In my view, Amazon's culture is unusually supportive of small businesses with big potential, and I believe that's a source of competitive advantage.

Like any company, we have a corporate culture formed not only by our intentions but also as a result of our history. For Amazon, that history is fairly fresh and, fortunately, it includes several examples of tiny seeds growing into big trees. We have many people at our company who have watched multiple $10 million seeds turn into billion dollar businesses. That first-hand experience and the culture that has grown up around those

successes is, in my opinion, a big part of why we can start businesses from scratch. The culture demands that these new businesses be high potential and that they be innovative and differentiated, but it does not demand that they be large on the day that they are born.

I remember how excited we were in 1996 as we crossed $10 million in book sales. It wasn't hard to be excited—we had grown to $10 million from zero. Today, when a new business inside Amazon grows to $10 million, the overall company is growing from $10 billion to $10.01 billion. It would be easy for the senior executives who run our established billion dollar businesses to scoff. But they don't. They watch the growth rates of the emerging businesses and send emails of congratulations. That's pretty cool, and we're proud it's a part of our culture.

In our experience, if a new business enjoys runaway success, it can only *begin* to be meaningful to the overall company economics in something like three to seven years. We've seen those time frames with our international businesses, our earlier non-media businesses, and our third party seller businesses. Today, international is 45% of sales, non-media is 34% of sales, and our third party seller businesses account for 28% of our units sold. We will be happy indeed if some of the new seeds we're planting enjoy similar successes.

We've come a distance since we celebrated our first $10 million in sales. As we continue to grow, we'll work to maintain a culture that embraces new businesses. We will do so in a disciplined way, with an eye on returns, potential size, and the ability to create differentiation that customers care about. We won't always choose right, and we won't always succeed. But we will be choosy, and we will work hard and patiently.

As always, I attach our 1997 letter to shareholders. You'll see that our philosophy and approach have not changed. Many thanks for your support and encouragement.

Jeffrey P. Bezos
Founder and Chief Executive Officer
Amazon.com, Inc.

To our shareowners:

November 19, 2007, was a special day. After three years of work, we introduced Amazon Kindle to our customers.

Many of you may already know something of Kindle—we're fortunate (and grateful) that it has been broadly written and talked about. Briefly, Kindle is a purpose-built reading device with wireless access to more than 110,000 books, blogs, magazines, and newspapers. The wireless connectivity isn't WiFi—instead it uses the same wireless network as advanced cell phones, which means it works when you're at home in bed or out and moving around. You can buy a book directly from the device, and the whole book will be downloaded wirelessly, ready for reading, in less than 60 seconds. There is no "wireless plan," no year-long contract you must commit to, and no monthly service fee. It has a paper-like electronic-ink display that's easy to read even in bright daylight. Folks who see the display for the first time do a double-take. It's thinner and lighter than a paperback, and can hold 200 books. Take a look at the Kindle detail page on Amazon.com to see what customers think—Kindle has already been reviewed more than 2,000 times.

As you might expect after three years of work, we had sincere hopes that Kindle would be well received, but we did not expect the level of demand that actually materialized. We sold out in the first 5½ hours, and our supply chain and manufacturing teams have had to scramble to increase production capacity.

We started by setting ourselves the admittedly audacious goal of improving upon the physical book. We did not choose that goal lightly. Anything that has persisted in roughly the same form and resisted change for 500 years is unlikely to be improved easily. At the beginning of our design process, we identified what we believe is the book's most important feature. It *disappears*. When you read a book, you don't notice the paper and the ink and the glue and the stitching. All of that dissolves, and what remains is the author's world.

We knew Kindle would have to *get out of the way*, just like a physical book, so readers could become engrossed in the words and forget they're reading on a device. We also knew we shouldn't try to copy every last feature of a book—we could never out-book the book. We'd have to add *new* capabilities—ones that could never be possible with a traditional book.

The early days of Amazon.com provide an analog. It was tempting back then to believe that an online bookstore should have all the features of a physical bookstore. I was asked about a particular feature dozens of times: "How are you going to do electronic book signings?" Thirteen years later, we still haven't figured that one out! Instead of trying to duplicate physical bookstores, we've been inspired by them and worked to find things we could do in the new medium that could never be done in the old one. We don't have electronic book signings, and similarly we can't provide a comfortable spot to sip coffee and relax. However, we can offer literally *millions* of titles, help with purchase decisions through customer reviews, and provide discovery features like "customers who bought this item also bought." The list of useful things that can be done only in the new medium is a long one.

I'll highlight a few of the useful features we built into Kindle that go beyond what you could ever do with a physical book. If you come across a word you don't recognize, you can look it up easily. You can search your books. Your margin notes and underlinings are stored on the server-side in the "cloud," where they can't be lost. Kindle keeps your place in each of the books you're reading, automatically. If your eyes are tired, you can change the font size. Most important is the seamless, simple ability to find a book and have it in 60 seconds. When I've watched people do this for the first time, it's clear the capability has a profound effect on them. Our vision for Kindle is every book ever printed in any language, all available in less than 60 seconds.

Publishers—including all the major publishers—have embraced Kindle, and we're thankful for that. From a publisher's point of view, there are a lot of advantages to Kindle. Books never go out of print, and they never go out of stock. Nor is there ever waste from over-printing. Most important, Kindle makes it more convenient for readers to buy more books. Anytime you make something simpler and lower friction, you get more of it.

We humans co-evolve with our tools. We change our tools, and then our tools change us. Writing, invented thousands of years ago, is a grand whopper of a tool, and I have no doubt that it changed us dramatically. Five hundred years ago, Gutenberg's invention led to a significant step-change in the cost of books. Physical books ushered in a new way of collaborating and learning. Lately, networked tools such as desktop computers, laptops, cell phones and PDAs have changed us too. They've shifted us more toward *information snacking*, and I would argue toward shorter attention spans. I value my BlackBerry—I'm convinced it makes me more productive—but I don't want to read a three-hundred-page document on it. Nor do I want to read something hundreds of pages long on my desktop computer or my laptop. As I've already mentioned in this letter, people do more of what's convenient and friction-free. If our tools make information snacking easier, we'll shift more toward information snacking and away from long-form reading. Kindle is purpose-built for long-form reading. We hope Kindle and its successors may gradually and incrementally move us over years into a world with longer spans of attention, providing a counterbalance to the recent proliferation of info-snacking tools. I realize my tone here tends toward the missionary, and I can assure you it's heartfelt. It's also not unique to me but is shared by a large group of folks here. I'm glad about that because missionaries build better products. I'll also point out that, while I'm convinced books are on the verge of being improved upon, Amazon has no sinecure as that agent. It will happen, but if we don't execute well, it will be done by others.

Your team of missionaries here is fervent about driving free cash flow per share and returns on capital. We know we can do that by putting customers first. I guarantee you there is more innovation ahead of us than behind us, and we do not expect the road to be an easy one. We're hopeful, and I'd even say optimistic, that Kindle, true to its name, will "start a fire" and improve the world of reading.

As always, I attach our 1997 letter to shareholders. You'll see that Kindle exemplifies our philosophy and long-term investment approach as discussed in that letter. Happy reading and many thanks!

Jeffrey P. Bezos
Founder and Chief Executive Officer
Amazon.com, Inc.

April 2008

To our shareowners:

In this turbulent global economy, our fundamental approach remains the same. Stay heads down, focused on the long term and obsessed over customers. Long-term thinking levers our existing abilities and lets us do new things we couldn't otherwise contemplate. It supports the failure and iteration required for invention, and it frees us to pioneer in unexplored spaces. Seek instant gratification – or the elusive promise of it – and chances are you'll find a crowd there ahead of you. Long-term orientation interacts well with customer obsession. If we can identify a customer need and if we can further develop conviction that that need is meaningful and durable, our approach permits us to work patiently for multiple years to deliver a solution. "Working backwards" from customer needs can be contrasted with a "skills-forward" approach where existing skills and competencies are used to drive business opportunities. The skills-forward approach says, "We are really good at X. What else can we do with X?" That's a useful and rewarding business approach. However, if used exclusively, the company employing it will never be driven to develop fresh skills. Eventually the existing skills will become outmoded. Working backwards from customer needs often *demands* that we acquire new competencies and exercise new muscles, never mind how uncomfortable and awkward-feeling those first steps might be.

Kindle is a good example of our fundamental approach. More than four years ago, we began with a long-term vision: every book, ever printed, in any language, all available in less than 60 seconds. The customer experience we envisioned didn't allow for any hard lines of demarcation between Kindle the device and Kindle the service – the two had to blend together seamlessly. Amazon had never designed or built a hardware device, but rather than change the vision to accommodate our then-existing skills, we hired a number of talented (and missionary!) hardware engineers and got started learning a new institutional skill, one that we needed to better serve readers in the future.

We're grateful and excited that Kindle sales have exceeded our most optimistic expectations. On February 23, we began shipping Kindle 2. If you haven't seen it, Kindle 2 is everything customers loved about the original Kindle, only thinner, faster, with a crisper display, and longer battery life, and capable of holding 1,500 books. You can choose from more than 250,000 of the most popular books, magazines, and newspapers. Wireless delivery is free, and you'll have your book in less than 60 seconds. We've received thousands of feedback emails from customers about Kindle, and – remarkably – 26% of them contain the word "love."

Customer Experience Pillars

In our retail business, we have strong conviction that customers value low prices, vast selection, and fast, convenient delivery and that these needs will remain stable over time. It is difficult for us to imagine that ten years from now, customers will want higher prices, less selection, or slower delivery. Our belief in the durability of these pillars is what gives us the confidence required to invest in strengthening them. We know that the energy we put in now will continue to pay dividends well into the future.

Our pricing objective is to earn customer trust, not to optimize short-term profit dollars. We take it as an article of faith that pricing in this manner is the best way to grow our aggregate profit dollars over the long term. We may make less per item, but by consistently earning trust we will sell many more items. Therefore, we offer low prices across our entire product range. For the same reason, we continue to invest in our free shipping programs, including Amazon Prime. Customers are well-informed and smart, and they evaluate the total cost, including delivery charges, when making their purchasing decisions. In the last 12 months, customers worldwide have saved more than $800 million by taking advantage of our free shipping offers.

We're relentlessly focused on adding selection, both by increasing selection inside existing categories and by adding new categories. We've added 28 new categories since 2007. One business that is rapidly growing and continues to surprise me is our shoe store, Endless.com, which we launched in 2007.

Fast, reliable delivery is important to customers. In 2005, we launched Amazon Prime. For $79 per year,[1] Prime members get unlimited express two-day shipping for free and upgrades to one-day delivery for just $3.99. In 2007, we launched Fulfillment by Amazon, a new service for third-party sellers. With FBA, sellers warehouse their inventory in our global fulfillment network, and we pick, pack, and ship to the end customer on the sellers' behalf. FBA items are eligible for Amazon Prime and Super Saver Shipping – just as if the items were Amazon-owned inventory. As a result, FBA both improves the customer experience and drives seller sales. In the fourth quarter of 2008, we shipped more than 3 million units on behalf of sellers who use Fulfillment by Amazon, a win-win for customers and sellers.

Prudent Spending

The customer-experience path we've chosen requires us to have an efficient cost structure. The good news for shareowners is that we see much opportunity for improvement in that regard. Everywhere we look (and we all look), we find what experienced Japanese manufacturers would call "muda" or waste.[2] I find this incredibly energizing. I see it as potential – years and years of variable and fixed productivity gains and more efficient, higher velocity, more flexible capital expenditures.

Our primary financial goal remains maximizing long-term free cash flow and doing so with high rates of return on invested capital. We are investing heartily in Amazon Web Services, in tools for third-party sellers, in digital media, in China, and in new product categories. And we make these investments with the belief that they can be of meaningful scale and can clear our high bar for returns.

Around the world, amazing, inventive, and hard-working Amazonians are putting customers first. I take great pride in being part of this team. We thank you, our owners, for your support, for your encouragement, and for joining us on our continuing adventure.

As always, I attach our 1997 letter to shareowners. Even as the rate of change accelerates, we hope and believe our focus on what stays the same should serve us well.

Jeffrey P. Bezos
Founder and Chief Executive Officer
Amazon.com, Inc.

April 2009

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1 Prime is a global program. ¥3,900 in Japan, £48 in the UK, €29 in Germany, and €49 in France.

2 At a fulfillment center recently, one of our Kaizen experts asked me, "I'm in favor of a clean fulfillment center, but why are you cleaning? Why don't you eliminate the source of dirt?" I felt like the Karate Kid.

To our shareowners:

The financial results for 2009 reflect the cumulative effect of 15 years of customer experience improvements: increasing selection, speeding delivery, reducing cost structure so we can afford to offer customers ever-lower prices, and many others. This work has been done by a large number of smart, relentless, customer-devoted people across all areas of the company. We are proud of our low prices, our reliable delivery, and our in-stock position on even obscure and hard-to-find items. We also know that we can still be much better, and we're dedicated to improving further.

Some notable highlights from 2009:

- Net sales increased 28% year-over-year to $24.51 billion in 2009. This is 15 times higher than net sales 10 years ago when they were $1.64 billion in 1999.
- Free cash flow increased 114% year-over-year to $2.92 billion in 2009.
- More customers are taking advantage of Amazon Prime, with worldwide memberships up significantly over last year. The number of different items available for immediate shipment grew more than 50% in 2009.
- We added 21 new product categories around the world in 2009, including Automotive in Japan, Baby in France, and Shoes and Apparel in China.
- It was a busy year for our shoes business. In November we acquired Zappos, a leader in online apparel and footwear sales that strives to provide shoppers with the best possible service and selection. Zappos is a terrific addition to our Endless, Javari, Amazon, and Shopbop selection.
- The apparel team continued to enhance customer experience with the launch of our Denim Shop offering 100 brands, including Joe's Jeans, Lucky Brand, 7 For All Mankind, and Levi's.
- The shoes and apparel teams created over 121,000 product descriptions and uploaded over 2.2 million images to the website providing customers with a vivid shopping experience.
- Approximately 7 million customer reviews were added to websites worldwide.
- Sales of products by third party sellers on our websites represented 30% of unit sales in 2009. Active seller accounts increased 24% to 1.9 million for the year. Globally, sellers using Fulfillment By Amazon stowed more than one million unique items in our fulfillment center network, thereby making these items available for Free Super Saver Shipping and Amazon Prime.
- Amazon Web Services continued its rapid pace of innovation, launching many new services and features, including the Amazon Relational Database Service, Virtual Private Cloud, Elastic MapReduce, High-Memory EC2 Instances, Reserved and Spot Instances, Streaming for Amazon CloudFront, and Versioning for Amazon S3. AWS also continued to expand its global footprint to include additional services in the EU, a new Northern California Region and plans for a presence in the Asia-Pacific Region in 2010. The continued innovation and track record for operational performance helped AWS add more customers in 2009 than ever before, including many large enterprise customers.
- The U.S. Kindle Store now has more than 460,000 books, an increase from 250,000 last year, and includes 103 of the 110 New York Times Bestsellers, more than 8,900 blogs, and 171 top U.S. and International newspapers and magazines. We have shipped Kindles to more than 120 countries, and we now provide content in six different languages.

Senior leaders that are new to Amazon are often surprised by how little time we spend discussing actual financial results or debating projected financial outputs. To be clear, we take these financial outputs seriously, but we believe that focusing our energy on the controllable inputs to our business is the most effective way to maximize

financial outputs over time. Our annual goal setting process begins in the fall, and concludes early in the new year after we've completed our peak holiday quarter. Our goal setting sessions are lengthy, spirited, and detail-oriented. We have a high bar for the experience our customers deserve and a sense of urgency to improve that experience.

We've been using this same annual process for many years. For 2010, we have 452 detailed goals with owners, deliverables, and targeted completion dates. These are not the only goals our teams set for themselves, but they are the ones we feel are most important to monitor. None of these goals are easy and many will not be achieved without invention. We review the status of each of these goals several times per year among our senior leadership team and add, remove, and modify goals as we proceed.

A review of our current goals reveals some interesting statistics:

- 360 of the 452 goals will have a direct impact on customer experience.
- The word *revenue* is used eight times and *free cash flow* is used only four times.
- In the 452 goals, the terms *net income*, *gross profit* or *margin*, and *operating profit* are not used once.

Taken as a whole, the set of goals is indicative of our fundamental approach. Start with customers, and work backwards. Listen to customers, but don't *just* listen to customers – also invent on their behalf. We can't assure you that we'll meet all of this year's goals. We haven't in past years. However, we can assure you that we'll continue to obsess over customers. We have strong conviction that that approach – in the long term – is every bit as good for owners as it is for customers.

As always, I attach a copy of our original 1997 letter. Our approach remains the same, and it's still Day 1.

Jeffrey P. Bezos
Founder and Chief Executive Officer
Amazon.com, Inc.
April 2010

To our shareowners:

Random forests, naïve Bayesian estimators, RESTful services, gossip protocols, eventual consistency, data sharding, anti-entropy, Byzantine quorum, erasure coding, vector clocks … walk into certain Amazon meetings, and you may momentarily think you've stumbled into a computer science lecture.

Look inside a current textbook on software architecture, and you'll find few patterns that we don't apply at Amazon. We use high-performance transactions systems, complex rendering and object caching, workflow and queuing systems, business intelligence and data analytics, machine learning and pattern recognition, neural networks and probabilistic decision making, and a wide variety of other techniques. And while many of our systems are based on the latest in computer science research, this often hasn't been sufficient: our architects and engineers have had to advance research in directions that no academic had yet taken. Many of the problems we face have no textbook solutions, and so we -- happily -- invent new approaches.

Our technologies are almost exclusively implemented as *services*: bits of logic that encapsulate the data they operate on and provide hardened interfaces as the only way to access their functionality. This approach reduces side effects and allows services to evolve at their own pace without impacting the other components of the overall system. Service-oriented architecture -- or SOA -- is the fundamental building abstraction for Amazon technologies. Thanks to a thoughtful and far-sighted team of engineers and architects, this approach was applied at Amazon long before SOA became a buzzword in the industry. Our e-commerce platform is composed of a federation of hundreds of software services that work in concert to deliver functionality ranging from recommendations to order fulfillment to inventory tracking. For example, to construct a product detail page for a customer visiting Amazon.com, our software calls on between 200 and 300 services to present a highly personalized experience for that customer.

State management is the heart of any system that needs to grow to very large size. Many years ago, Amazon's requirements reached a point where many of our systems could no longer be served by any commercial solution: our key data services store many petabytes of data and handle millions of requests per second. To meet these demanding and unusual requirements, we've developed several alternative, purpose-built persistence solutions, including our own key-value store and single table store. To do so, we've leaned heavily on the core principles from the distributed systems and database research communities and invented from there. The storage systems we've pioneered demonstrate extreme scalability while maintaining tight control over performance, availability, and cost. To achieve their ultra-scale properties these systems take a novel approach to data update management: by relaxing the synchronization requirements of updates that need to be disseminated to large numbers of replicas, these systems are able to survive under the harshest performance and availability conditions. These implementations are based on the concept of eventual consistency. The advances in data management developed by Amazon engineers have been the starting point for the architectures underneath the cloud storage and data management services offered by Amazon Web Services (AWS). For example, our Simple Storage Service, Elastic Block Store, and SimpleDB all derive their basic architecture from unique Amazon technologies.

Other areas of Amazon's business face similarly complex data processing and decision problems, such as product data ingestion and categorization, demand forecasting, inventory allocation, and fraud detection. Rule-based systems can be used successfully, but they can be hard to maintain and can become brittle over time. In many cases, advanced machine learning techniques provide more accurate classification and can self-heal to adapt to changing conditions. For example, our search engine employs data mining and machine learning algorithms that run in the background to build topic models, and we apply information extraction algorithms to identify attributes and extract entities from unstructured descriptions, allowing customers to narrow their searches and quickly find the desired product. We consider a large number of factors in search relevance to

predict the probability of a customer's interest and optimize the ranking of results. The diversity of products demands that we employ modern regression techniques like trained random forests of decision trees to flexibly incorporate thousands of product attributes at rank time. The end result of all this behind-the-scenes software? Fast, accurate search results that help you find what you want.

All the effort we put into technology might not matter that much if we kept technology off to the side in some sort of R&D department, but we don't take that approach. Technology infuses all of our teams, all of our processes, our decision-making, and our approach to innovation in each of our businesses. It is deeply integrated into everything we do.

One example is Whispersync, our Kindle service designed to ensure that everywhere you go, no matter what devices you have with you, you can access your reading library and all of your highlights, notes, and bookmarks, all in sync across your Kindle devices and mobile apps. The technical challenge is making this a reality for millions of Kindle owners, with hundreds of millions of books, and hundreds of device types, living in over 100 countries around the world—at 24x7 reliability. At the heart of Whispersync is an eventually consistent replicated data store, with application defined conflict resolution that must and can deal with device isolation lasting weeks or longer. As a Kindle customer, of course, we hide all this technology from you. So when you open your Kindle, it's in sync and on the right page. To paraphrase Arthur C. Clarke, like any sufficiently advanced technology, it's indistinguishable from magic.

Now, if the eyes of some shareowners dutifully reading this letter are by this point glazing over, I will awaken you by pointing out that, in my opinion, these techniques are not idly pursued – they lead directly to free cash flow.

We live in an era of extraordinary increases in available bandwidth, disk space, and processing power, all of which continue to get cheap fast. We have on our team some of the most sophisticated technologists in the world – helping to solve challenges that are right on the edge of what's possible today. As I've discussed many times before, we have unshakeable conviction that the long-term interests of shareowners are perfectly aligned with the interests of customers.

And we like it that way. Invention is in our DNA and technology is the fundamental tool we wield to evolve and improve every aspect of the experience we provide our customers. We still have a lot to learn, and I expect and hope we'll continue to have so much fun learning it. I take great pride in being part of this team.

As always, I attach a copy of our original 1997 letter. Our approach remains the same, and it's still Day 1.

Jeff P Bezos

Jeffrey P. Bezos
Founder and Chief Executive Officer
Amazon.com, Inc.

To our shareowners:

The Power of Invention

"To us, the value of Amazon Web Services is undeniable – in twenty seconds, we can double our server capacity. In a high-growth environment like ours and with a small team of developers, it's very important for us to trust that we have the best support to give to the music community around the world. Five years ago, we would have crashed and been down without knowing when we would be back. Now, because of Amazon's continued innovation, we can provide the best technology and continue to grow." That's Christopher Tholen, the Chief Technology Officer of BandPage. His comments about how AWS helps with the critical need to scale compute capacity quickly and reliably are not hypothetical: BandPage now helps 500,000 bands and artists connect with tens of millions of fans.

"So, I started selling on Amazon in April of 2011, and by the time we became the top Amazon lunchbox seller in June, we had between 50 and 75 orders a day. When we hit August and September – our busiest time, with the start of the school year – we had 300, sometimes 500 orders a day. It was just phenomenal… I'm using Amazon to fulfill my orders, which makes my life easier. Plus, when my customers found out they could get free shipping with Prime subscriptions, the lunchboxes began selling like crazy." Kelly Lester is the "mom entrepreneur" of EasyLunchboxes, her own innovative line of easy-to-pack, environmentally friendly lunchbox containers.

"I sort of stumbled onto it, and it opened a whole new world for me. Since I had over a thousand [book] titles at my house, I thought, 'I'll give this a try.' I sold some and I kept expanding it and expanding it, and come to find out this was so much fun I decided I don't ever want to get another job again. And I've got no boss – other than my wife, that is. What could be better than that? We actually work together on this. We both go out hunting, so it's a team effort that's worked out very well. We sell about 700 books a month. We ship between 800 and 900 to Amazon each month and Amazon ships out the 700 that people buy. Without Amazon handling shipping and customer service, my wife and I would have to be running to the post office or someplace every day with dozens of packages. With that part taken care of for us, life is much simpler… This is a terrific program and I love it. After all, Amazon supplies the customers and even ships the books. I mean, how can it get better than that?" Bob Frank founded RJF Books and More after getting laid off in the midst of the economic downturn. He and his wife split their time between Phoenix and Minneapolis, and he describes finding the books he sells like "a treasure hunt every day."

"Because of Kindle Direct Publishing, I earn more royalties in one month than I ever did in a year of writing for a traditional house. I have gone from worrying about if I will be able to pay the bills – and there were many months when I couldn't – to finally having real savings, even thinking about a vacation; something I haven't done in years… Amazon has allowed me to really spread my wings. Prior, I was boxed into a genre, yet I had all of these other books I wanted to write. Now I can do just that. I manage my career. I feel as if I finally have a partner in Amazon. They understand this business and have changed the face of publishing for the good of the writer and the reader, putting choices back into our hands." That's A. K. Alexander, author of *Daddy's Home*, one of the top 100 best-selling Kindle books in March.

"I had no idea that March of 2010, the first month I decided to publish on KDP, would be a defining moment in my life. Within a year of doing so, I was making enough on a monthly basis to quit my day job and focus on writing full time! The rewards that have sprung out of deciding to publish through KDP have been nothing short of life changing. Financially. Personally. Emotionally. Creatively. The ability to write full time, to be home with my family, and to write exactly what I want without the input of a legacy publisher marketing committee wanting to have a say in every detail of my writing, has made me a stronger writer, a more prolific writer, and most importantly a far happier one…. Amazon and KDP are literally enabling creativity in the

publishing world and giving writers like me a shot at their dream, and for that I am forever grateful." That's Blake Crouch, author of several thrillers, including the Kindle best seller *Run.*

"Amazon has made it possible for authors like me to get their work in front of readers and has changed my life. In a little over a year, I have sold nearly 250,000 books through the Kindle and have traded in old dreams for bigger and better ones. Four of my books have hit the Top 100 Kindle Best Sellers List. Also, I have been approached by agents, foreign sales people, and two movie producers, and have received mentions in the LA Times, Wall Street Journal, and PC Magazine, and was recently interviewed by USA Today. Mostly, I am excited that all writers now have the opportunity to get their work in front of readers without jumping through insurmountable hoops. Writers have more options and readers have more choices. The publishing world is changing fast, and I plan to enjoy every minute of the ride." Theresa Ragan is the KDP author of multiple Kindle best sellers including *Abducted*.

"Past age 60 and in the midst of the recession, my wife and I found our income options severely limited. KDP was my one shot at a lifelong dream – our only chance at financial salvation. Within months of publishing, KDP has completely changed our lives, enabling this aging nonfiction writer to launch a brand-new career as a best-selling novelist. I can't say enough on behalf of Amazon and the many tools that they make available to independent authors. Without reservation, I urge fellow writers to investigate and seize the opportunities that KDP offers. As I've happily discovered, there is zero downside risk – and the potential is virtually unlimited." Robert Bidinotto is the author of the Kindle best seller *Hunter: A Thriller*.

"I leveraged KDP's technology to blow through all the traditional gatekeepers. Can you imagine how that feels, after struggling so hard, for so long, for every … single … reader? Now, inspirational fiction lovers I never would have reached are enjoying *Nobody* and my other two novels from the Kindle Store at $2.99. I've always wanted to write a Cinderella story. Now I have. And, thanks to Prince Charming (KDP), there will be more to come…" Creston Mapes is the author of the Kindle best seller *Nobody*.

Invention comes in many forms and at many scales. The most radical and transformative of inventions are often those that empower *others* to unleash *their* creativity – to pursue *their* dreams. That's a big part of what's going on with Amazon Web Services, Fulfillment by Amazon, and Kindle Direct Publishing. With AWS, FBA, and KDP, we are creating powerful self-service platforms that allow thousands of people to boldly experiment and accomplish things that would otherwise be impossible or impractical. These innovative, large-scale platforms are not zero-sum – they create win-win situations and create significant value for developers, entrepreneurs, customers, authors, and readers.

Amazon Web Services has grown to have thirty different services and thousands of large and small businesses and individual developers as customers. One of the first AWS offerings, the Simple Storage Service, or S3, now holds over 900 billion data objects, with more than a billion new objects being added every day. S3 routinely handles more than 500,000 transactions per second and has peaked at close to a million transactions per second. All AWS services are pay-as-you-go and radically transform capital expense into a variable cost. AWS is self-service: you don't need to negotiate a contract or engage with a salesperson – you can just read the online documentation and get started. AWS services are elastic – they easily scale up and easily scale down.

In just the last quarter of 2011, Fulfillment by Amazon shipped tens of millions of items on behalf of sellers. When sellers use FBA, their items become eligible for Amazon Prime, for Super Saver Shipping, and for Amazon returns processing and customer service. FBA is self-service and comes with an easy-to-use inventory management console as part of Amazon Seller Central. For the more technically inclined, it also comes with a set of APIs so that you can use our global fulfillment center network like a giant computer peripheral.

I am emphasizing the self-service nature of these platforms because it's important for a reason I think is somewhat non-obvious: even well-meaning gatekeepers slow innovation. When a platform is self-service, even the improbable ideas can get tried, because there's no expert gatekeeper ready to say "that will never work!" And guess what – many of those improbable ideas do work, and society is the beneficiary of that diversity.

Kindle Direct Publishing has quickly taken on astonishing scale – more than a thousand KDP authors now each sell more than a thousand copies a month, some have already reached hundreds of thousands of sales, and two have already joined the Kindle Million Club. KDP is a big win for authors. Authors who use KDP get to keep their copyrights, keep their derivative rights, get to publish on their schedule – a typical delay in traditional publishing can be a year or more from the time the book is finished – and … saving the best for last … KDP authors can get paid royalties of 70%. The largest traditional publishers pay royalties of only 17.5% on ebooks (they pay 25% of 70% of the selling price which works out to be 17.5% of the selling price). The KDP royalty structure is completely transformative for authors. A typical selling price for a KDP book is a reader-friendly $2.99 – authors get approximately $2 of that! With the legacy royalty of 17.5%, the selling price would have to be $11.43 to yield the same $2 per unit royalty. I assure you that authors sell many, many more copies at $2.99 than they would at $11.43.

Kindle Direct Publishing is good for readers because they get lower prices, but perhaps just as important, readers also get access to more diversity since authors that might have been rejected by establishment publishing channels now get their chance in the marketplace. You can get a pretty good window into this. Take a look at the Kindle best-seller list, and compare it to the New York Times best-seller list – which is more diverse? The Kindle list is chock-full of books from small presses and self-published authors, while the New York Times list is dominated by successful and established authors.

Amazonians are leaning into the future, with radical and transformational innovations that create value for thousands of authors, entrepreneurs, and developers. Invention has become second nature at Amazon, and in my view the team's pace of innovation is even accelerating – I can assure you it's very energizing. I'm extremely proud of the whole team, and feel lucky to have a front row seat.

As always, I attach a copy of our original 1997 letter. Our approach remains the same, and it's still Day 1!

Jeff P Bezos

Jeffrey P. Bezos
Founder and Chief Executive Officer
Amazon.com, Inc.

amazon.com

To our shareowners:

As regular readers of this letter will know, our energy at Amazon comes from the desire to impress customers rather than the zeal to best competitors. We don't take a view on which of these approaches is more likely to maximize business success. There are pros and cons to both and many examples of highly successful competitor-focused companies. We do work to pay attention to competitors and be inspired by them, but it is a fact that the customer-centric way is at this point a defining element of our culture.

One advantage – perhaps a somewhat subtle one – of a customer-driven focus is that it aids a certain type of proactivity. When we're at our best, we don't wait for external pressures. We are *internally* driven to improve our services, adding benefits and features, before we have to. We lower prices and increase value for customers before we have to. We invent before we have to. These investments are motivated by customer focus rather than by reaction to competition. We think this approach earns more trust with customers and drives rapid improvements in customer experience – importantly – even in those areas where we are already the leader.

"Thank you. Every time I see that white paper on the front page of Amazon, I know that I'm about to get more for my money than I thought I would. I signed up for Prime for the shipping, yet now I get movies, and TV and books. You keep adding more, but not charging more. So thanks again for the additions." We now have more than 15 million items in Prime, up 15x since we launched in 2005. Prime Instant Video selection tripled in just over a year to more than 38,000 movies and TV episodes. The Kindle Owners' Lending Library has also more than tripled to over 300,000 books, including an investment of millions of dollars to make the entire *Harry Potter* series available as part of that selection. We didn't "have to" make these improvements in Prime. We did so proactively. A related investment – a major, multi-year one – is Fulfillment by Amazon. FBA gives third-party sellers the option of warehousing their inventory alongside ours in our fulfillment center network. It has been a game changer for our seller customers because their items become eligible for Prime benefits, which drives their sales, while at the same time benefitting consumers with additional Prime selection.

We build automated systems that look for occasions when we've provided a customer experience that isn't up to our standards, and those systems then proactively refund customers. One industry observer recently received an automated email from us that said, "We noticed that you experienced poor video playback while watching the following rental on Amazon Video On Demand: Casablanca. We're sorry for the inconvenience and have issued you a refund for the following amount: $2.99. We hope to see you again soon." Surprised by the proactive refund, he ended up writing about the experience: "Amazon 'noticed that I experienced poor video playback…' And they decided to give me a refund because of that? Wow…Talk about putting customers first."

When you pre-order something from Amazon, we guarantee you the lowest price offered by us between your order time and the end of the day of the release date. "I just received notice of a $5 refund to my credit card for pre-order price protection. . . What a great way to do business! Thank you very much for your fair and honest dealings." Most customers are too busy themselves to monitor the price of an item after they pre-order it, and our policy could be to require the customer to contact us and ask for the refund. Doing it proactively is more expensive for us, but it also surprises, delights, and earns trust.

We also have authors as customers. Amazon Publishing has just announced it will start paying authors their royalties monthly, sixty days in arrears. The industry standard is twice a year, and that has been the standard for a long time. Yet when we interview authors as customers, infrequent payment is a major dissatisfier. Imagine how you'd like it if you were paid twice a year. There isn't competitive pressure to pay authors more than once every six months, but we're proactively doing so. By the way – though the research was taxing, I struggled through and am happy to report that I recently saw many Kindles in use at a Florida beach. There are five generations of Kindle, and I believe I saw every generation in use except for the first. Our business approach is to sell premium

hardware at roughly breakeven prices. We want to make money when people use our devices – not when people buy our devices. We think this aligns us better with customers. For example, we don't need our customers to be on the upgrade treadmill. We can be very happy to see people still using four-year-old Kindles!

I can keep going – Kindle Fire's FreeTime, our customer service Andon Cord, Amazon MP3's AutoRip – but will finish up with a very clear example of internally driven motivation: Amazon Web Services. In 2012, AWS announced 159 new features and services. We've reduced AWS prices 27 times since launching 7 years ago, added enterprise service support enhancements, and created innovative tools to help customers be more efficient. AWS Trusted Advisor monitors customer configurations, compares them to known best practices, and then notifies customers where opportunities exist to improve performance, enhance security, or save money. Yes, we are actively telling customers they're paying us more than they need to. In the last 90 days, customers have saved millions of dollars through Trusted Advisor, and the service is only getting started. All of this progress comes in the context of AWS being the widely recognized leader in its area – a situation where you might worry that external motivation could fail. On the other hand, internal motivation – the drive to get the customer to say "Wow" – keeps the pace of innovation fast.

Our heavy investments in Prime, AWS, Kindle, digital media, and customer experience in general strike some as too generous, shareholder indifferent, or even at odds with being a for-profit company. "Amazon, as far as I can tell, is a charitable organization being run by elements of the investment community for the benefit of consumers," writes one outside observer. But I don't think so. To me, trying to dole out improvements in a just-in-time fashion would be too clever by half. It would be risky in a world as fast-moving as the one we all live in. More fundamentally, I think long-term thinking squares the circle. Proactively delighting customers earns trust, which earns more business from those customers, even in new business arenas. Take a long-term view, and the interests of customers and shareholders align.

As I write this, our recent stock performance has been positive, but we constantly remind ourselves of an important point – as I frequently quote famed investor Benjamin Graham in our employee all-hands meetings – "In the short run, the market is a voting machine but in the long run, it is a weighing machine." We don't celebrate a 10% increase in the stock price like we celebrate excellent customer experience. We aren't 10% smarter when that happens and conversely aren't 10% dumber when the stock goes the other way. We want to be weighed, and we're always working to build a heavier company.

As proud as I am of our progress and our inventions, I know that we will make mistakes along the way – some will be self-inflicted, some will be served up by smart and hard-working competitors. Our passion for pioneering will drive us to explore narrow passages, and, unavoidably, many will turn out to be blind alleys. But – with a bit of good fortune – there will also be a few that open up into broad avenues.

I am incredibly lucky to be a part of this large team of outstanding missionaries who value our customers as much as I do and who demonstrate that every day with their hard work. As always, I attach a copy of our original 1997 letter. Our approach remains the same, and it's still Day 1.

Jeffrey P. Bezos
Founder and Chief Executive Officer
Amazon.com, Inc.
April 2013

amazon.com

To our shareowners:

I'm so proud of what all the teams here at Amazon have accomplished on behalf of customers this past year. Amazonians around the world are polishing products and services to a degree that is beyond what's expected or required, taking the long view, reinventing normal, and getting customers to say "Wow."

I'd like to take you on a tour that samples a small subset of our various initiatives, ranging from Prime to Amazon Smile to Mayday. The goal is to give you a sense for how much is going on across Amazon and how exciting it is to work on these programs. This broad array of initiatives is only possible because a large team of talented people at every level are exercising their good judgment every day and always asking, how do we make this better?

Ok, let's get started on the tour.

Prime

Customers love Prime. More than one million customers joined Prime in the third week of December alone, and there are now tens of millions of Prime members worldwide. On a per customer basis, Prime members are ordering more items, across more categories, than ever before. Even internally, it's easy for us to forget that Prime was a new, unproven (some even said foolhardy) concept when we launched it nine years ago: all-you-can-eat, two-day shipping for a flat annual fee. At that time, we had one million eligible Prime products. This year, we passed 20 million eligible products, and we continue to add more. We've made Prime better in other ways too, adding new digital benefits – including the Kindle Owners' Lending Library and Prime Instant Video. And we're not done. We have many ideas for how to make Prime even better.

Readers & Authors

We're investing heavily on behalf of readers. The all-new, high-resolution, high-contrast Kindle Paperwhite launched to rave reviews. We integrated the very impressive Goodreads into Kindle, introduced FreeTime for Kindle, and launched Kindle in India, Mexico, and Australia. Bringing joy to air travelers, the FAA approved the use of electronic devices during takeoff and landing. Our public policy team, with the help of many allies, worked patiently for four years on this, at one point loading a test plane with 150 active Kindles. Yes, it all worked fine!

Joining CreateSpace, Kindle Singles, and Kindle Direct Publishing, is the new service Kindle Worlds, the literary journal Day One, eight new Amazon Publishing imprints, and the launch of Amazon Publishing in the UK and Germany. Thousands of authors are already using these services to build fulfilling writing careers. Many write and tell us how we have helped them send their children to college, pay off medical bills, or purchase a home. We are missionaries for reading and these stories inspire and encourage us to keep inventing on behalf of writers and readers.

Prime Instant Video

Prime Instant Video is experiencing tremendous growth across all metrics – including new customers, repeat usage, and total number of streams. These are output metrics and they suggest we are on a good path, focusing on the right inputs. Two of the key inputs are the growth of selection and the desirability of that selection. Since we launched PIV in 2011 with 5,000 titles, we've grown selection to more than 40,000 movies and TV episodes – all included in your Prime membership. PIV has exclusives on hundreds of sought after TV seasons including *Downton Abbey*, the ratings blockbuster *Under the Dome*, *The Americans*, *Justified*, *Grimm*, *Orphan Black*, *Suits*, and kids programs such as *SpongeBob SquarePants*, *Dora the Explorer*, and *Blue's Clues*. In addition, our Amazon Studios team continues to invest heavily in original content. Garry Trudeau's *Alpha House*, starring John Goodman, debuted last year and quickly became the most-watched show on Amazon. We

recently greenlit six more originals, including *Bosch*, by Michael Connelly, *The After*, from Chris Carter of *The X-Files*, *Mozart in the Jungle*, from Roman Coppola and Jason Schwartzman, and Jill Soloway's beautiful *Transparent*, which some have called the best pilot in years. We like our approach and are replicating it with our recent rollout of PIV in both the UK and Germany. The early customer response in those countries has been terrific, surpassing our expectations.

Fire TV

Just this past week, after two years of hard work, our hardware team launched Fire TV. Not only is Fire TV the best way to watch Amazon's video offerings, it also embraces non-Amazon content services like Netflix, Hulu Plus, VEVO, WatchESPN, and many more. Fire TV has big hardware specs in a category that's previously been hardware-light. It shows. Fire TV is fast and fluid. And our ASAP technology predicts what you might want to watch and pre-buffers it, so shows start instantly. Our team also put a small microphone in the remote control. Hold down the mic button on the remote, and you can speak your search term rather than type it into an alphabet grid. The team has done a terrific job – the voice search actually works.

In addition to Prime Instant Video, Fire TV gives you instant access to over 200,000 movies and TV episodes available a la carte, including new releases like *Gravity*, *12 Years a Slave*, *Dallas Buyers Club*, *Frozen*, and more. As a bonus, Fire TV also lets you play high-quality, inexpensive games on your living room TV. We hope you try it out. If you do, let us know what you think. The team would love to hear your feedback.

Amazon Game Studios

> *It's early in the twenty-second century and Earth is threatened by an alien species, the Ne'ahtu. The aliens infected Earth's energy grid with a computer virus to disable the planet's defenses. Before they could strike, computer science prodigy Amy Ramanujan neutralized the alien virus and saved the planet. Now, the Ne'ahtu are back and Dr. Ramanujan must prevent them from launching an all-out invasion on Earth. She needs your help.*

That's how *Sev Zero*, the first Fire TV exclusive from Amazon Game Studios, begins. The team combined tower defense with shooter gameplay and created a co-op mode where one player leads on the ground with their gamepad controller while a second player provides air support from a tablet. I can assure you that there are some intense moments when you'll appreciate a well-timed air-strike. When you see it, you may be surprised that this level of game play is possible on an inexpensive streaming media device. *Sev Zero* is only the first of a collection of innovative and graphically beautiful games we're building from the ground up for Fire tablets and Fire TV.

Amazon Appstore

The Amazon Appstore now serves customers in almost 200 countries. Selection has grown to include over 200,000 apps and games from top developers around the globe – nearly tripling in size over the past year. We introduced Amazon Coins, a virtual currency that saves customers up to 10% on app and in-app purchases. Our Whispersync for Games technology lets you start a game on one device and continue it on another without losing your progress. Developers can use the Mobile Associates program to offer millions of physical products from Amazon inside their apps, and earn referral fees when customers buy those items. We introduced Appstore Developer Select, a marketing program that promotes new apps and games on Kindle Fire tablets and on Amazon's Mobile Ad Network. We created Analytics and A/B Testing services – free services that empower developers to track user engagement and optimize their apps for iOS, Android, and Fire OS. Also this year, we embraced HTML5 web app developers. They too can now offer their apps on Kindle Fire and through the Amazon Appstore.

Spoken Word Audio

2013 was a landmark year for Audible, the world's largest seller and producer of audiobooks. Audible makes it possible for you to read when your eyes are busy. Millions of customers download hundreds of millions of audiobooks and other spoken-word programming from Audible. Audible customers downloaded close to 600 million listening hours in 2013. Thanks to Audible Studios, people drive to work listening to Kate Winslet, Colin Firth, Anne Hathaway, and many other stars. One big hit in 2013 was Jake Gyllenhaal's performance of

The Great Gatsby, which has already sold 100,000 copies. Whispersync for Voice allows customers to switch seamlessly back and forth between reading a book on their Kindle and listening to the corresponding Audible book on their smart phone. The Wall Street Journal called Whispersync for Voice "Amazon's new killer app for books." If you haven't already, I recommend you give it a try – it's fun and expands the amount of time you have available to read.

Fresh Grocery

After trialing the service for five years in Seattle (no one accuses us of a lack of patience), we expanded Amazon Fresh to Los Angeles and San Francisco. Prime Fresh members pay $299 a year and receive same-day and early morning delivery not only on fresh grocery items but also on over 500,000 other items ranging from toys to electronics to household goods. We're also partnering with favorite local merchants (the Cheese Store of Beverly Hills, Pike Place Fish Market, San Francisco Wine Trading Company, and many more) to provide the same convenient home delivery on a great selection of prepared foods and specialty items. We'll continue our methodical approach – measuring and refining Amazon Fresh – with the goal of bringing this incredible service to more cities over time.

Amazon Web Services

AWS is eight years old, and the team's pace of innovation is actually accelerating. In 2010, we launched 61 significant services and features. In 2011, that number was 82. In 2012, it was 159. In 2013: 280. We're also expanding our geographic footprint. We now have 10 AWS regions around the world, including the East Coast of the U.S., two on the West Coast, Europe, Singapore, Tokyo, Sydney, Brazil, China, and a government-only region called GovCloud. We have 26 availability zones across regions and 51 edge locations for our content distribution network. The development teams work directly with customers and are empowered to design, build, and launch based on what they learn. We iterate continuously, and when a feature or enhancement is ready, we push it out and make it instantly available to all. This approach is fast, customer-centric, and efficient – it's allowed us to reduce prices more than 40 times in the past 8 years – and the teams have no plans to slow down.

Employee Empowerment

We challenge ourselves to not only invent outward facing features, but also to find better ways to do things internally – things that will both make us more effective and benefit our thousands of employees around the world.

Career Choice is a program where we pre-pay 95% of tuition for our employees to take courses for in-demand fields, such as airplane mechanic or nursing, regardless of whether the skills are relevant to a career at Amazon. The goal is to enable choice. We know that for some of our fulfillment center employees, Amazon will be a career. For others, Amazon might be a stepping stone on the way to a job somewhere else – a job that may require new skills. If the right training can make the difference, we want to help.

The second program is called *Pay to Quit*. It was invented by the clever people at Zappos, and the Amazon fulfillment centers have been iterating on it. Pay to Quit is pretty simple. Once a year, we offer to pay our associates to quit. The first year the offer is made, it's for $2,000. Then it goes up one thousand dollars a year until it reaches $5,000. The headline on the offer is "Please Don't Take This Offer." We hope they don't take the offer; we want them to stay. Why do we make this offer? The goal is to encourage folks to take a moment and think about what they really want. In the long-run, an employee staying somewhere they don't want to be isn't healthy for the employee or the company.

A third inward innovation is our *Virtual Contact Center*. It's an idea we started a few years back and have continued to grow with terrific results. Under this program, employees provide customer service support for Amazon and Kindle customers while working from home. This flexibility is ideal for many employees who, perhaps because they have young children or for another reason, either cannot or prefer not to work outside the home. Our Virtual Contact Center is our fastest growing "site" in the U.S., operating in more than ten states today. This growth will continue as we hope to double our state footprint in 2014.

Veteran Hiring

We seek leaders who can invent, think big, have a bias for action, and deliver results on behalf of customers. These principles look familiar to men and women who've served our country in the armed forces, and we find that their experience leading people is invaluable in our fast-paced work environment. We're a member of Joining Forces and the 100,000 Jobs Mission – two national efforts that encourage businesses to offer service members and their families career opportunities and support. Our Military Talent team attended more than 50 recruiting events last year to help veterans find job opportunities at Amazon. In 2013, we hired more than 1,900 veterans. And once veterans join our team, we offer several programs that help them transition more easily into the civilian workforce and that connect them with our internal network of veterans for mentoring and support. These programs have earned us recognition as a top employer by G.I. Jobs Magazine, U.S. Veterans Magazine, and Military Spouse Magazine, and we'll continue to invest in military veteran hiring as we grow.

Fulfillment Innovation

Nineteen years ago, I drove the Amazon packages to the post office every evening in the back of my Chevy Blazer. My vision extended so far that I dreamed we might one day get a forklift. Fast-forward to today and we have 96 fulfillment centers and are on our 7th generation of fulfillment center design. Our operations team is extraordinary – methodical and ingenious. Through our Kaizen program, named for the Japanese term "change for the better," employees work in small teams to streamline processes and reduce defects and waste. Our Earth Kaizens set energy reduction, recycling, and other green goals. In 2013, more than 4,700 associates participated in 1,100 Kaizens.

Sophisticated software is key in our FCs. This year, we rolled out 280 major software improvements across the FC network. Our goal is to continue to iterate and improve on the design, layout, technology, and operations in these buildings, ensuring that each new facility we build is better than the last. I invite you to come see one for yourself. We offer fulfillment center tours open to the public, ages six and above. You can find info on the available tours at www.amazon.com/fctours. I'm always amazed when I visit one of our FCs, and I hope you'll arrange a tour. I think you'll be impressed.

Urban Campus

In 2013, we added 420,000 square feet of new headquarters space in Seattle and broke ground on what will become four city blocks and several million square feet of new construction. It is a fact that we could have saved money by instead building in the suburbs, but for us, it was important to stay in the city. Urban campuses are much greener. Our employees are able to take advantage of existing communities and public transit infrastructure, with less dependence on cars. We're investing in dedicated bike lanes to provide safe, pollution-free, easy access to our offices. Many of our employees can live nearby, skip the commute altogether, and walk to work. Though I can't prove it, I also believe an urban headquarters will help keep Amazon vibrant, attract the right talent, and be great for the health and wellbeing of our employees and the city of Seattle.

Fast Delivery

In partnership with the United States Postal Service, we've begun for the first time to offer Sunday delivery to select cities. Sunday delivery is a win for Amazon customers, and we plan to roll it out to a large portion of the U.S. population throughout 2014. We've created our own fast, last-mile delivery networks in the UK where commercial carriers couldn't support our peak volumes. In India and China, where delivery infrastructure isn't yet mature, you can see Amazon bike couriers delivering packages throughout the major cities. And there is more invention to come. The Prime Air team is already flight testing our 5th and 6th generation aerial vehicles, and we are in the design phase on generations 7 and 8.

Experiments and More Experiments

We have our own internal experimentation platform called "Weblab" that we use to evaluate improvements to our websites and products. In 2013, we ran 1,976 Weblabs worldwide, up from 1,092 in 2012, and 546 in 2011. One recent success is our new feature called "Ask an owner". It was many years ago that we pioneered the

idea of online customer reviews – customers sharing their opinion on a product to help other customers make an informed purchase decision. “Ask” is in that same tradition. From a product page, customers can ask any question related to the product. *Is the product compatible with my TV/Stereo/PC? Is it easy to assemble? How long does the battery last?* We then route these questions to *owners* of the product. As is the case with reviews, customers are happy to share their knowledge to directly help other customers. Millions of questions have already been asked and answered.

Apparel and Shoes

Amazon Fashion is booming. Premium brands are recognizing that they can use Amazon to reach fashion-conscious, high-demo customers, and customers are enjoying the selection, free returns, detailed photos, and video clips that let them see how clothes move and drape as the models walk and turn. We opened a new 40,000 square foot photo studio in Brooklyn and now shoot an average of 10,413 photos every day in the studio’s 28 bays. To celebrate the opening, we hosted a design contest with students from Pratt, Parsons, School of Visual Arts, and the Fashion Institute of Technology that was judged by a panel of industry leaders including Steven Kolb, Eva Chen, Derek Lam, Tracy Reese, and Steven Alan. Kudos to Parsons who took home the top prize.

Frustration-Free Packaging

Our battle against annoying wire ties and plastic clamshells rages on. An initiative that began five years ago with a simple idea that you shouldn’t have to risk bodily injury opening your new electronics or toys, has now grown to over 200,000 products, all available in easy-to-open, recyclable packaging designed to alleviate “wrap rage” and help the planet by reducing packaging waste. We have over 2,000 manufacturers in our Frustration-Free Packaging program, including Fisher-Price, Mattel, Unilever, Belkin, Victorinox Swiss Army, Logitech, and many more. We’ve now shipped many millions of Frustration-Free items to 175 countries. We are also reducing waste for customers – eliminating 33 million pounds of excess packaging to date. This program is a perfect example of a missionary team staying heads-down focused on serving customers. Through hard work and perseverance, an idea that started with only 19 products is now available on hundreds of thousands and benefiting millions of customers.

Fulfillment by Amazon

The number of sellers using Fulfillment by Amazon grew more than 65% last year. Growth like that at such large scale is unusual. FBA is unique in many ways. It’s not often you get to delight two customer sets with one program. With FBA, sellers can store their products in our fulfillment centers, and we pick, pack, ship, and provide customer service for these products. Sellers benefit from one of the most advanced fulfillment networks in the world, easily scaling their businesses to reach millions of customers. And not just any customers – Prime members. FBA products can be eligible for Prime free two-day shipping. Customers benefit from this additional selection – they get even more value out of their Prime membership. And, unsurprisingly, sellers see increased sales when they join FBA. In a 2013 survey, nearly three out of four FBA respondents reported that their unit sales increased on Amazon.com more than 20% after joining FBA. It’s a win-win.

> *“FBA is the best employee I have ever had. … One morning I woke up and realized FBA had shipped 50 units. As soon as I realized I could sell products while I sleep, it was a no-brainer.”*
> – Thanny Schuck, Action Sports LLC

> *“Starting out as an unknown brand, it was difficult to find retailers willing to stock our goods. No such barriers existed at Amazon. The beauty of Amazon is that someone can say, ‘I want to start a business,’ and they can go on Amazon and really start a business. You don’t have to get a lease on a building or even have any employees at first. You can just do it on your own. And that’s what I did.”*
> – Wendell Morris, YogaRat

Login and Pay with Amazon

For several years we’ve enabled Amazon customers to pay on other sites, such as Kickstarter, SmugMug, and Gogo Inflight, using the credit cards and shipping addresses already stored in their Amazon account. This

year, we expanded that capability so customers can also sign in using their Amazon account credentials, saving them the annoyance of needing to remember yet another account name and password. It's convenient for the customer and a business builder for the merchant. Cymax Stores, the online furniture retailer, has seen tremendous success with Login and Pay. It now accounts for 20% of their orders, tripling their new account registrations, and increasing purchase conversion 3.15% in the first three months. This example isn't unusual. We are seeing results like these with many partners, and the team is excited and encouraged. You should look for more in 2014.

Amazon Smile

In 2013 we launched Amazon Smile – a simple way for customers to support their favorite charitable organizations every time they shop. When you shop at smile.amazon.com, Amazon donates a portion of the purchase price to the charity of your choice. You'll find the same selection, prices, shipping options, and Prime eligibility on smile.amazon.com as you do on Amazon.com – you'll even find your same shopping cart and wish lists. In addition to the large, national charities you would expect, you can also designate your local children's hospital, your school's PTA, or practically any other cause you might like. There are almost a million charities to choose from. I hope you'll find your favorite on the list.

The Mayday Button

"Not only is the device awesome but the Mayday feature is absolutely FANTASTIC!!!!! The Kindle team has hit it out of the park with this one."

"Just tried the mayday button on my hdx. 15 second response time…amazon has done it again. Thoroughly impressed."

Nothing gives us more pleasure at Amazon than "*reinventing normal*" – creating inventions that customers love and resetting their expectations for what normal should be. Mayday reimagines and revolutionizes the idea of on-device tech support. Tap the Mayday button, and an Amazon expert will appear on your Fire HDX and can co-pilot you through any feature by drawing on your screen, walking you through how to do something yourself, or doing it for you – whatever works best. Mayday is available 24x7, 365 days a year, and our response time goal is 15 seconds or less. We beat that goal – with an average response time of only 9 seconds on our busiest day, Christmas.

A few of the Maydays have been amusing. Mayday Tech Advisors have received 35 marriage proposals from customers. 475 customers have asked to talk to Amy, our Mayday television personality. 109 Maydays have been customers asking for assistance with ordering a pizza. By a slim margin, Pizza Hut wins customer preference over Domino's. There are 44 instances where the Mayday Tech Advisor has sung Happy Birthday to the customer. Mayday Tech Advisors have been serenaded by customers 648 times. And 3 customers have asked for a bedtime story. Pretty cool.

I hope that gives you some sense of the scope of our opportunity and initiatives, as well the inventive spirit and push for exceptional quality with which they're undertaken. I should underscore again that this is a subset. There are many programs I've omitted in this letter that are just as promising, consequential, and interesting as those I've highlighted.

We have the good fortune of a large, inventive team and a patient, pioneering, customer-obsessed culture – great innovations, large and small, are happening everyday on behalf of customers, and at all levels throughout the company. This decentralized distribution of invention throughout the company – not limited to the company's senior leaders – is the only way to get robust, high-throughput innovation. What we're doing is challenging and fun – we get to work in the future.

Failure comes part and parcel with invention. It's not optional. We understand that and believe in failing early and iterating until we get it right. When this process works, it means our failures are relatively small in size

(most experiments can start small), and when we hit on something that is really working for customers, we double-down on it with hopes to turn it into an even bigger success. However, it's not always as clean as that. Inventing is messy, and over time, it's certain that we'll fail at some big bets too.

I'd like to close by remembering Joy Covey. Joy was Amazon's CFO in the early days, and she left an indelible mark on the company. Joy was brilliant, intense, and so fun. She smiled a lot and her eyes were always wide, missing nothing. She was substance over optics. She was a long-term thinker. She had a deep keel. Joy was bold. She had a profound impact on all of us on the senior team and on the company's entire culture. Part of her will always be here, making sure we watch the details, see the world around us, and all have fun.

I feel super lucky to be a part of the Amazon team. As always, I attach a copy of our original 1997 letter. Our approach remains the same, and it's still Day 1.

Jeffrey P. Bezos
Founder and Chief Executive Officer
Amazon.com, Inc.
April 2014

amazon.com

To our shareowners:

A dreamy business offering has at least four characteristics. Customers love it, it can grow to very large size, it has strong returns on capital, and it's durable in time – with the potential to endure for decades. When you find one of these, don't just swipe right, get married.

Well, I'm pleased to report that Amazon hasn't been monogamous in this regard. After two decades of risk taking and teamwork, and with generous helpings of good fortune all along the way, we are now happily wed to what I believe are three such life partners: Marketplace, Prime, and AWS. Each of these offerings was a bold bet at first, and sensible people worried (often!) that they could not work. But at this point, it's become pretty clear how special they are and how lucky we are to have them. It's also clear that there are no sinecures in business. We know it's our job to always nourish and fortify them.

We'll approach the job with our usual tools: customer obsession rather than competitor focus, heartfelt passion for invention, commitment to operational excellence, and a willingness to think long-term. With good execution and a bit of continuing good luck, Marketplace, Prime, and AWS can be serving customers and earning financial returns for many years to come.

Marketplace

Marketplace's early days were not easy. First, we launched Amazon Auctions. I think seven people came, if you count my parents and siblings. Auctions transformed into zShops, which was basically a fixed price version of Auctions. Again, no customers. But then we morphed zShops into Marketplace. Internally, Marketplace was known as SDP for Single Detail Page. The idea was to take our most valuable retail real estate – our product detail pages – and let third-party sellers compete against our own retail category managers. It was more convenient for customers, and within a year, it accounted for 5% of units. Today, more than 40% of our units are sold by more than two million third-party sellers worldwide. Customers ordered more than two billion units from sellers in 2014.

The success of this hybrid model accelerated the Amazon flywheel. Customers were initially drawn by our fast-growing selection of Amazon-sold products at great prices with a great customer experience. By then allowing third parties to offer products side-by-side, we became more attractive to customers, which drew even more sellers. This also added to our economies of scale, which we passed along by lowering prices and eliminating shipping fees for qualifying orders. Having introduced these programs in the U.S., we rolled them out as quickly as we could to our other geographies. The result was a marketplace that became seamlessly integrated with all of our global websites.

We work hard to reduce the workload for sellers and increase the success of their businesses. Through our Selling Coach program, we generate a steady stream of automated machine-learned "nudges" (more than 70 million in a typical week) – alerting sellers about opportunities to avoid going out-of-stock, add selection that's selling, and sharpen their prices to be more competitive. These nudges translate to billions in increased sales to sellers.

To further globalize Marketplace, we're now helping sellers in each of our geographies – and in countries where we don't have a presence – reach out to our customers in countries outside their home geographies. We hosted merchants from more than 100 different countries last year, and helped them connect with customers in 185 nations.

Almost one-fifth of our overall third-party sales now occur outside the sellers' home countries, and our merchants' cross-border sales nearly doubled last year. In the EU, sellers can open a single account, manage their

business in multiple languages, and make products available across our five EU websites. More recently, we've started consolidating cross-border shipments for sellers and helping them obtain ocean shipping from Asia to Europe and North America at preferential, bulk rates.

Marketplace is the heart of our fast-growing operations in India, since all of our selection in India is offered by third-party sellers. Amazon.in now offers more selection than any other e-commerce site in India – with more than 20 million products offered from over 21,000 sellers. With our Easy Ship service, we pick up products from a seller and handle delivery all the way to the end customer. Building upon Easy Ship, the India team recently piloted Kirana Now, a service that delivers everyday essentials from local kirana (mom and pop) stores to customers in two to four hours, adding convenience for our customers and increasing sales for the stores participating in the service.

Perhaps most important for sellers, we've created Fulfillment by Amazon. But I'll save that for after we discuss Prime.

Amazon Prime

Ten years ago, we launched Amazon Prime, originally designed as an all-you-can-eat free and fast shipping program. We were told repeatedly that it was a risky move, and in some ways it was. In its first year, we gave up many millions of dollars in shipping revenue, and there was no simple math to show that it would be worth it. Our decision to go ahead was built on the positive results we'd seen earlier when we introduced Free Super Saver Shipping, and an intuition that customers would quickly grasp that they were being offered the best deal in the history of shopping. In addition, analysis told us that, if we achieved scale, we would be able to significantly lower the cost of fast shipping.

Our owned-inventory retail business was the foundation of Prime. In addition to creating retail teams to build each of our category-specific online "stores," we have created large-scale systems to automate much of inventory replenishment, inventory placement, and product pricing. The precise delivery-date promise of Prime required operating our fulfillment centers in a new way, and pulling all of this together is one of the great accomplishments of our global operations team. Our worldwide network of fulfillment centers has expanded from 13 in 2005, when we launched Prime, to 109 this year. We are now on our eighth generation of fulfillment center design, employing proprietary software to manage receipt, stowing, picking, and shipment. Amazon Robotics, which began with our acquisition of Kiva in 2012, has now deployed more than 15,000 robots to support the stowing and retrieval of products at a higher density and lower cost than ever before. Our owned-inventory retail business remains our best customer-acquisition vehicle for Prime and a critical part of building out categories that attract traffic and third-party sellers.

Though fast delivery remains a core Prime benefit, we are finding new ways to pump energy into Prime. Two of the most important are digital and devices.

In 2011 we added Prime Instant Video as a benefit, now with tens of thousands of movies and TV episodes available for unlimited streaming in the U.S., and we've started expanding the program into the U.K. and Germany as well. We're investing a significant amount on this content, and it's important that we monitor its impact. We ask ourselves, is it worth it? Is it driving Prime? Among other things, we watch Prime free trial starts, conversion to paid membership, renewal rates, and product purchase rates by members entering through this channel. We like what we see so far and plan to keep investing here.

While most of our PIV spend is on licensed content, we're also starting to develop original content. The team is off to a strong start. Our show *Transparent* became the first from a streaming service to win a Golden Globe for best series and *Tumble Leaf* won the Annie for best animated series for preschoolers. In addition to the critical acclaim, the numbers are promising. An advantage of our original programming is that its first run is on Prime – it hasn't already appeared anywhere else. Together with the quality of the shows, that first run status appears to be one of the factors leading to the attractive numbers. We also like the fixed cost nature of original programming. We get to spread that fixed cost across our large membership base. Finally, our business model for original content is unique. I'm pretty sure we're the first company to have figured out how to make winning a Golden Globe pay off in increased sales of power tools and baby wipes!

Amazon designed and manufactured devices – from Kindle to Fire TV to Echo – also pump energy into Prime services such as Prime Instant Video and Prime Music, and generally drive higher engagement with every element of the Amazon ecosystem. And there's more to come – our device team has a strong and exciting roadmap ahead.

Prime isn't done improving on its original fast and free shipping promise either. The recently launched Prime Now offers Prime members free two-hour delivery on tens of thousands of items or one-hour delivery for a $7.99 fee. Lots of early reviews read like this one, "In the past six weeks my husband and I have made an embarrassing number of orders through Amazon Prime Now. It's cheap, easy, and insanely fast." We've launched in Manhattan, Brooklyn, Miami, Baltimore, Dallas, Atlanta, and Austin, and more cities are coming soon.

Now, I'd like to talk about Fulfillment by Amazon. FBA is so important because it is glue that inextricably links Marketplace and Prime. Thanks to FBA, Marketplace and Prime are no longer two things. In fact, at this point, I can't really think about them separately. Their economics and customer experiences are now happily and deeply intertwined.

FBA is a service for Marketplace sellers. When a seller decides to use FBA, they stow their inventory in our fulfillment centers. We take on all logistics, customer service, and product returns. If a customer orders an FBA item and an Amazon owned-inventory item, we can ship both items to the customer in one box – a huge efficiency gain. But even more important, when a seller joins FBA, their items can become Prime eligible.

Maintaining a firm grasp of the obvious is more difficult than one would think it should be. But it's useful to try. If you ask, what do sellers want? The correct (and obvious) answer is: they want more sales. So, what happens when sellers join FBA and their items become Prime eligible? They get more sales.

Notice also what happens from a Prime member's point of view. Every time a seller joins FBA, Prime members get more Prime eligible selection. The value of membership goes up. This is powerful for our flywheel. FBA completes the circle: Marketplace pumps energy into Prime, and Prime pumps energy into Marketplace.

In a 2014 survey of U.S. sellers, 71% of FBA merchants reported more than a 20% increase in unit sales after joining FBA. In the holiday period, worldwide FBA units shipped grew 50% over the prior year and represented more than 40% of paid third-party units. Paid Prime memberships grew more than 50% in the U.S. last year and 53% worldwide. FBA is a win for customers and a win for sellers.

Amazon Web Services

A radical idea when it was launched nine years ago, Amazon Web Services is now big and growing fast. Startups were the early adopters. On-demand, pay-as-you-go cloud storage and compute resources dramatically increased the speed of starting a new business. Companies like Pinterest, Dropbox, and Airbnb all used AWS services and remain customers today.

Since then, large enterprises have been coming on board as well, and they're choosing to use AWS for the same primary reason the startups did: speed and agility. Having lower IT cost is attractive, and sometimes the absolute cost savings can be enormous. But cost savings alone could never overcome deficiencies in performance or functionality. Enterprises are dependent on IT – it's mission critical. So, the proposition, "I can save you a significant amount on your annual IT bill and my service is almost as good as what you have now," won't get too many customers. What customers really want in this arena is "better and faster," and if "better and faster" can come with a side dish of cost savings, terrific. But the cost savings is the gravy, not the steak.

IT is so high leverage. You don't want to imagine a competitor whose IT department is more nimble than yours. Every company has a list of technology projects that the business would like to see implemented as soon as possible. The painful reality is that tough triage decisions are always made, and many projects never get done. Even those that get resourced are often delivered late or with incomplete functionality. If an IT department can figure out how to deliver a larger number of business-enabling technology projects faster, they'll be creating significant and real value for their organization.

These are the main reasons AWS is growing so quickly. IT departments are recognizing that when they adopt AWS, they get more done. They spend less time on low value-add activities like managing datacenters, networking, operating system patches, capacity planning, database scaling, and so on and so on. Just as important, they get access to powerful APIs and tools that dramatically simplify building scalable, secure, robust, high-performance systems. And those APIs and tools are continuously and seamlessly upgraded behind the scenes, without customer effort.

Today, AWS has more than a million active customers as companies and organizations of all sizes use AWS in every imaginable business segment. AWS usage grew by approximately 90% in the fourth quarter of 2014 versus the prior year. Companies like GE, Major League Baseball, Tata Motors, and Qantas are building new applications on AWS – these range from apps for crowdsourcing and personalized healthcare to mobile apps for managing fleets of trucks. Other customers, like NTT DOCOMO, the Financial Times, and the Securities and Exchange Commission are using AWS to analyze and take action on vast amounts of data. And many customers like Condé Nast, Kellogg's, and News Corp are migrating legacy critical applications and, in some cases, entire datacenters to AWS.

We've increased our pace of innovation as we've gone along – from nearly 160 new features and services in 2012, to 280 in 2013, and 516 last year. There are many that would be interesting to talk about – from WorkDocs and WorkMail to AWS Lambda and the EC2 Container Service to the AWS Marketplace – but for purposes of brevity, I'm going to limit myself to one: our recently introduced Amazon Aurora. We hope Aurora will offer customers a new normal for a very important (but also very problematic) technology that is a critical underpinning of many applications: the relational database. Aurora is a MySQL-compatible database engine that offers the speed and availability of high-end commercial databases with the simplicity and cost effectiveness of open source databases. Aurora's performance is up to 5x better than typical MySQL databases, at one-tenth the cost of commercial database packages. Relational databases is an arena that's been a pain point for organizations and developers for a long time, and we're very excited about Aurora.

I believe AWS is one of those dreamy business offerings that can be serving customers and earning financial returns for many years into the future. Why am I optimistic? For one thing, the size of the opportunity is big, ultimately encompassing global spend on servers, networking, datacenters, infrastructure software, databases, data warehouses, and more. Similar to the way I think about Amazon retail, for all practical purposes, I believe AWS is market-size unconstrained.

Second, its current leadership position (which is significant) is a strong ongoing advantage. We work hard – very hard – to make AWS as easy to use as possible. Even so, it's still a necessarily complex set of tools with rich functionality and a non-trivial learning curve. Once you've become proficient at building complex systems with AWS, you do not want to have to learn a new set of tools and APIs assuming the set you already understand works for you. This is in no way something we can rest on, but if we continue to serve our customers in a truly outstanding way, they will have a rational preference to stick with us.

In addition, also because of our leadership position, we now have thousands of what are effectively AWS ambassadors roaming the world. Software developers changing jobs, moving from one company to another, become our best sales people: "We used AWS where I used to work, and we should consider it here. I think we'd get more done." It's a good sign that proficiency with AWS and its services is already something software developers are adding to their resumes.

Finally, I'm optimistic that AWS will have strong returns on capital. This is one we as a team examine because AWS is capital intensive. The good news is we like what we see when we do these analyses. Structurally, AWS is far less capital intensive than the mode it's replacing – do-it-yourself datacenters – which have low utilization rates, almost always below 20%. Pooling of workloads across customers gives AWS much higher utilization rates, and correspondingly higher capital efficiency. Further, once again our leadership position helps: scale economies can provide us a relative advantage on capital efficiency. We'll continue to watch and shape the business for good returns on capital.

AWS is young, and it is still growing and evolving. We think we can continue to lead if we continue to execute with our customers' needs foremost in mind.

Career Choice

Before closing, I want to take a moment to update shareowners on something we're excited about and proud of. Three years ago we launched an innovative employee benefit – the Career Choice program, where we pre-pay 95% of tuition for employees to take courses for in-demand fields, such as airplane mechanic or nursing, regardless of whether the skills are relevant to a career at Amazon. The idea was simple: enable choice.

We know that, for some of our fulfillment and customer service center employees, Amazon will be a career. For others, Amazon might be a stepping stone on the way to a job somewhere else – a job that may require new skills. If the right training can make the difference, we want to help, and so far we have been able to help over 2,000 employees who have participated in the program in eight different countries. There's been so much interest that we are now building onsite classrooms so college and technical classes can be taught inside our fulfillment centers, making it even easier for associates to achieve these goals.

There are now eight FCs offering 15 classes taught onsite in our purpose-built classrooms with high-end technology features, and designed with glass walls to inspire others to participate and generate encouragement from peers. We believe Career Choice is an innovative way to draw great talent to serve customers in our fulfillment and customer service centers. These jobs can become gateways to great careers with Amazon as we expand around the world or enable employees the opportunity to follow their passion in other in-demand technical fields, like our very first Career Choice graduate did when she started a new career as a nurse in her community.

I would also like to invite you to come join the more than 24,000 people who have signed up so far to see the magic that happens after you click buy on Amazon.com by touring one of our fulfillment centers. In addition to U.S. tours, we are now offering tours at sites around the world, including Rugeley in the U.K. and Graben in Germany and continuing to expand. You can sign up for a tour at www.amazon.com/fctours.

* * *

Marketplace, Prime, and Amazon Web Services are three big ideas. We're lucky to have them, and we're determined to improve and nurture them – make them even better for customers. You can also count on us to work hard to find a fourth. We've already got a number of candidates in work, and as we promised some twenty years ago, we'll continue to make bold bets. With the opportunities unfolding in front of us to serve customers better through invention, we assure you we won't stop trying.

As always, I attach a copy of our original 1997 letter. Our approach remains the same, because it's still Day 1.

Jeffrey P. Bezos
Founder and Chief Executive Officer
Amazon.com, Inc.

amazon.com

2015

To our shareowners:

This year, Amazon became the fastest company ever to reach $100 billion in annual sales. Also this year, Amazon Web Services is reaching $10 billion in annual sales … doing so at a pace even faster than Amazon achieved that milestone.

What's going on here? Both were planted as tiny seeds and both have grown organically without significant acquisitions into meaningful and large businesses, quickly. Superficially, the two could hardly be more different. One serves consumers and the other serves enterprises. One is famous for brown boxes and the other for APIs. Is it only a coincidence that two such dissimilar offerings grew so quickly under one roof? Luck plays an outsized role in every endeavor, and I can assure you we've had a bountiful supply. But beyond that, there is a connection between these two businesses. Under the surface, the two are not so different after all. They share a distinctive organizational culture that cares deeply about and acts with conviction on a small number of principles. I'm talking about customer obsession rather than competitor obsession, eagerness to invent and pioneer, willingness to fail, the patience to think long-term, and the taking of professional pride in operational excellence. Through that lens, AWS and Amazon retail are very similar indeed.

A word about corporate cultures: for better or for worse, they are enduring, stable, hard to change. They can be a source of advantage or disadvantage. You can write down your corporate culture, but when you do so, you're discovering it, uncovering it – not creating it. It is created slowly over time by the people and by events – by the stories of past success and failure that become a deep part of the company lore. If it's a distinctive culture, it will fit certain people like a custom-made glove. The reason cultures are so stable in time is because people self-select. Someone energized by competitive zeal may select and be happy in one culture, while someone who loves to pioneer and invent may choose another. The world, thankfully, is full of many high-performing, highly distinctive corporate cultures. We never claim that our approach is the right one – just that it's ours – and over the last two decades, we've collected a large group of like-minded people. Folks who find our approach energizing and meaningful.

One area where I think we are especially distinctive is failure. I believe we are the best place in the world to fail (we have plenty of practice!), and failure and invention are inseparable twins. To invent you have to experiment, and if you know in advance that it's going to work, it's not an experiment. Most large organizations embrace the idea of invention, but are not willing to suffer the string of failed experiments necessary to get there. Outsized returns often come from betting against conventional wisdom, and conventional wisdom is usually right. Given a ten percent chance of a 100 times payoff, you should take that bet every time. But you're still going to be wrong nine times out of ten. We all know that if you swing for the fences, you're going to strike out a lot, but you're also going to hit some home runs. The difference between baseball and business, however, is that baseball has a truncated outcome distribution. When you swing, no matter how well you connect with the ball, the most runs you can get is four. In business, every once in a while, when you step up to the plate, you can score 1,000 runs. This long-tailed distribution of returns is why it's important to be bold. Big winners pay for so many experiments.

AWS, Marketplace and Prime are all examples of bold bets at Amazon that worked, and we're fortunate to have those three big pillars. They have helped us grow into a large company, and there are certain things that only large companies can do. With a tip of the hat to our Seattle neighbors, no matter how good an entrepreneur you are, you're not going to build an all-composite 787 in your garage startup – not one you'd want to fly in anyway. Used well, our scale enables us to build services for customers that we could otherwise never even contemplate. But also, if we're not vigilant and thoughtful, size could slow us down and diminish our inventiveness.

As I meet with teams across Amazon, I am continually amazed at the passion, intelligence and creativity on display. Our teams accomplished a lot in the last year, and I'd like to share a few of the highlights of our efforts to nourish and globalize our three big offerings – Prime, Marketplace and AWS. And while I'll focus on those three, I assure you that we also remain hard at work on finding a fourth.

Prime

We want Prime to be such a good value, you'd be irresponsible not to be a member.

We've grown Prime two-day delivery selection from 1 million items to over 30 million, added Sunday Delivery, and introduced Free Same-Day Delivery on hundreds of thousands of products for customers in more than 35 cities around the world. We've added music, photo storage, the Kindle Owners' Lending Library, and streaming films and TV.

Prime Now offers members one-hour delivery on an important subset of selection, and was launched only 111 days after it was dreamed up. In that time, a small team built a customer-facing app, secured a location for an urban warehouse, determined which 25,000 items to sell, got those items stocked, recruited and on-boarded new staff, tested, iterated, designed new software for internal use – both a warehouse management system and a driver-facing app – and launched in time for the holidays. Today, just 15 months after that first city launch, Prime Now is serving members in more than 30 cities around the world.

Prime Video offers exclusives from some of the world's most passionate storytellers. We want brilliant creators like Jill Soloway, Jason Schwartzman and Spike Lee to take risks and push boundaries. Our original series have already earned more than 120 nominations and won nearly 60 awards, including Golden Globe and Emmy awards. Many of these are stories that might never have been told in the traditional linear programming model. In the pipeline and coming soon are new series and movies from creators like Jeremy Clarkson, David E. Kelley, Woody Allen and Kenneth Lonergan.

The Man in the High Castle, based on the Philip K. Dick novel, explores an alternate history where the U.S. lost World War II. It debuted on Prime Video on November 20th and in four weeks became our most-viewed show – receiving acclaim from critics like "...Amazon has the best new drama of the season in *The Man in the High Castle*" and "*The Man in the High Castle* accomplishes so much, where most new broadcast TV dramas these days don't even try."

These shows are great for customers, and they feed the Prime flywheel – Prime members who watch Prime Video are more likely to convert from a free trial to a paid membership, and more likely to renew their annual subscriptions.

Finally, our first ever Prime Day surpassed all our expectations – more new members tried Prime that day than any other day in our history. Worldwide order growth increased 266% over the same day the year before, and sellers whose products are Prime-eligible through FBA saw record-breaking sales – with growth nearing 300%.

Prime has become an all-you-can-eat, physical-digital hybrid that members love. Membership grew 51% last year – including 47% growth in the U.S. and even faster internationally – and there are now tens of millions of members worldwide. There's a good chance you're already one of them, but if you're not – please be responsible – join Prime.

Marketplace

We took two big swings and missed – with Auctions and zShops – before we launched Marketplace over 15 years ago. We learned from our failures and stayed stubborn on the vision, and today close to 50% of units sold on Amazon are sold by third-party sellers. Marketplace is great for customers because it adds unique selection, and it's great for sellers – there are over 70,000 entrepreneurs with sales of more than $100,000 a year selling on

Amazon, and they've created over 600,000 new jobs. With FBA, that flywheel spins faster because sellers' inventory becomes Prime-eligible – Prime becomes more valuable for members, and sellers sell more.

This year, we created a new program called Seller Fulfilled Prime. We invited sellers who are able to meet a high bar for shipping speed and consistency in service to be part of the Prime program and ship their own orders at Prime speed directly. Those sellers have already seen a significant bump in sales, and the program has led to hundreds of thousands of additional items that are available to Prime customers via free two-day or next-day shipping in the U.S., U.K. and Germany.

We also created the Amazon Lending program to help sellers grow. Since the program launched, we've provided aggregate funding of over $1.5 billion to micro, small and medium businesses across the U.S., U.K. and Japan through short-term loans, with a total outstanding loan balance of about $400 million. Stephen Aarstol, surfer and owner of Tower Paddle Boards, is one beneficiary. His business has become one of the fastest-growing companies in San Diego, in part with a little help from Amazon Lending. Click-to-cash access to capital helps these small enterprises grow, benefits customers with greater selection, and benefits Amazon since our marketplace revenue grows along with the sellers' sales. We hope to expand Amazon Lending and are now working on ways to partner with banks so they can use their expertise to take and manage the bulk of the credit risk.

In addition to nourishing our big offerings, we work to globalize them. Our Marketplace creates opportunities for sellers anywhere to reach buyers around the world. In the past, many sellers would limit their customer base to their home country due to the practical challenges of selling internationally. To globalize Marketplace and expand the opportunities available to sellers, we built selling tools that empowered entrepreneurs in 172 countries to reach customers in 189 countries last year. These cross-border sales are now nearly a quarter of all third-party units sold on Amazon. To make this possible, we translated hundreds of millions of product listings and provided conversion services among 44 currencies. Even small and niche sellers can now tap into our global customer base and global logistics network. The end result is very different from sellers handling their own one-at-a-time, cross-border fulfillment. Plugable Technologies' CEO, Bernie Thompson, put it this way: "It really changes the paradigm when you're able to ship the goods in bulk to a warehouse in Europe or Japan and have those goods be fulfilled in one day or two days."

India is another example of how we globalize an offering like Marketplace through customer obsession and a passion for invention. Last year we ran a program called Amazon Chai Cart where we deployed three-wheeled mobile carts to navigate in a city's business districts, serve tea, water and lemon juice to small business owners and teach them about selling online. In a period of four months, the team traveled 15,280 km across 31 cities, served 37,200 cups of tea and engaged with over 10,000 sellers. Through this program and other conversations with sellers, we found out there was a lot of interest in selling online, but that sellers struggled with the belief that the process was time-consuming, tedious and complex. So, we invented Amazon Tatkal, which enables small businesses to get online in less than 60 minutes. Amazon Tatkal is a specially designed studio-on-wheels offering a suite of launch services including registration, imaging and cataloguing services, as well as basic seller training mechanisms. Since its launch on February 17th, we have reached sellers in 25 cities.

We're also globalizing Fulfillment by Amazon, adapting the service to local customer needs. In India, we launched a program called Seller Flex to combine Amazon's logistics capabilities with sellers' selection at the local neighborhood level. Sellers set aside a part of their warehouse for storing items to be sold on Amazon, and we configure it as a fulfillment center in our network that can receive and fulfill customer orders. Our team provides guidance on warehouse layout, IT and operational infrastructure, and trains the seller on standard operating procedures to be followed onsite. We've now launched 25 operational Seller Flex sites across ten cities.

Amazon Web Services

Just over 10 years ago, AWS started in the U.S. with its first major service, a simple storage service. Today, AWS offers more than 70 services for compute, storage, databases, analytics, mobile, Internet of Things, and enterprise applications. We also offer 33 Availability Zones across 12 geographic regions worldwide, with

another five regions and 11 Availability Zones in Canada, China, India, the U.S., and the U.K. to be available in the coming year. AWS started with developers and startups, and now is used by more than a million customers from organizations of every size across nearly every industry – companies like Pinterest, Airbnb, GE, Enel, Capital One, Intuit, Johnson & Johnson, Philips, Hess, Adobe, McDonald's, and Time Inc.

AWS is bigger than Amazon.com was at 10 years old, growing at a faster rate, and – most noteworthy in my view – the pace of innovation continues to accelerate – we announced 722 significant new features and services in 2015, a 40% increase over 2014.

Many characterized AWS as a bold – and unusual – bet when we started. "What does this have to do with selling books?" We could have stuck to the knitting. I'm glad we didn't. Or did we? Maybe the knitting has as much to do with our approach as the arena. AWS is customer obsessed, inventive and experimental, long-term oriented, and cares deeply about operational excellence.

Given 10 years and many iterations, that approach has allowed AWS to rapidly expand into the world's most comprehensive, widely adopted cloud service. As with our retail business, AWS is made up of many small teams with single-threaded owners, enabling rapid innovation. The team rolls out new functionality almost daily across 70 services, and that new functionality just "shows up" for customers – there's no upgrading.

Many companies describe themselves as customer-focused, but few walk the walk. Most big technology companies are competitor focused. They see what others are doing, and then work to fast follow. In contrast, 90 to 95% of what we build in AWS is driven by what customers tell us they want. A good example is our new database engine, Amazon Aurora. Customers have been frustrated by the proprietary nature, high cost, and licensing terms of traditional, commercial-grade database providers. And while many companies have started moving toward more open engines like MySQL and Postgres, they often struggle to get the performance they need. Customers asked us if we could eliminate that inconvenient trade-off, and that's why we built Aurora. It has commercial-grade durability and availability, is fully compatible with MySQL, has up to 5 times better performance than the typical MySQL implementation, but is 1/10th the price of the traditional, commercial-grade database engines. This has struck a resonant chord with customers, and Aurora is the fastest-growing service in the history of AWS. Nearly this same story could be told about Redshift, our managed data warehouse service, which is the second fastest growing service in AWS history – both small and large companies are moving their data warehouses to Redshift.

Our approach to pricing is also driven by our customer-centric culture – we've dropped prices 51 times, in many cases before there was any competitive pressure to do so. In addition to price reductions, we've also continued to launch new lower cost services like Aurora, Redshift, QuickSight (our new Business Intelligence service), EC2 Container Service (our new compute container service), and Lambda (our pioneering server-less computing capability), while extending our services to offer a range of highly cost-effective options for running just about every type of application or IT use case imaginable. We even roll out and continuously improve services like Trusted Advisor, which alerts customers when they can save money – resulting in hundreds of millions of dollars in savings for our customers. I'm pretty sure we're the only IT vendor telling customers how to stop spending money with us.

Whether you are a startup founded yesterday or a business that has been around for 140 years, the cloud is providing all of us with unbelievable opportunities to reinvent our businesses, add new customer experiences, redeploy capital to fuel growth, increase security, and do all of this so much faster than before. MLB Advanced Media is an example of an AWS customer that is constantly reinventing the customer experience. MLB's Statcast tracking technology is a new feature for baseball fans that measures the position of each player, the baserunners, and the ball as they move during every play on the field, giving viewers on any screen access to empirical data that answers age-old questions like "what could have happened if…" while also bringing new questions to life. Turning baseball into rocket science, Statcast uses a missile radar system to measure every pitched ball's movements more than 2,000 times per second, streams and collects data in real-time through Amazon Kinesis (our service for processing real-time streaming data), stores the data on Amazon S3, and then performs analytics in Amazon EC2. The suite of services will generate nearly 7 TB of raw statistical data per game and up to 17 PB per season, shedding quantitative light on age-old, but never verified, baseball pearls of wisdom like "never slide into first."

About seven years ago, Netflix announced that they were going to move all their applications to the cloud. Netflix chose AWS because it provided them with the greatest scale and the broadest set of services and features. Netflix recently completed their cloud migration, and stories like theirs are becoming increasingly common as companies like Infor, Intuit, and Time Inc., have made plans to move all of their applications to AWS.

AWS is already good enough today to attract more than 1 million customers, and the service is only going to get better from here. As the team continues their rapid pace of innovation, we'll offer more and more capabilities to let builders build unfettered, it will get easier and easier to collect, store and analyze data, we'll continue to add more geographic locations, and we'll continue to see growth in mobile and "connected" device applications. Over time, it's likely that most companies will choose not to run their own data centers, opting for the cloud instead.

Invention Machine

We want to be a large company that's also an invention machine. We want to combine the extraordinary customer-serving capabilities that are enabled by size with the speed of movement, nimbleness, and risk-acceptance mentality normally associated with entrepreneurial start-ups.

Can we do it? I'm optimistic. We have a good start on it, and I think our culture puts us in a position to achieve the goal. But I don't think it'll be easy. There are some subtle traps that even high-performing large organizations can fall into as a matter of course, and we'll have to learn as an institution how to guard against them. One common pitfall for large organizations – one that hurts speed and inventiveness – is "one-size-fits-all" decision making.

Some decisions are consequential and irreversible or nearly irreversible – one-way doors – and these decisions must be made methodically, carefully, slowly, with great deliberation and consultation. If you walk through and don't like what you see on the other side, you can't get back to where you were before. We can call these Type 1 decisions. But most decisions aren't like that – they are changeable, reversible – they're two-way doors. If you've made a suboptimal Type 2 decision, you don't have to live with the consequences for that long. You can reopen the door and go back through. Type 2 decisions can and should be made quickly by high judgment individuals or small groups.

As organizations get larger, there seems to be a tendency to use the heavy-weight Type 1 decision-making *process* on most decisions, including many Type 2 decisions. The end result of this is slowness, unthoughtful risk aversion, failure to experiment sufficiently, and consequently diminished invention.[1] We'll have to figure out how to fight that tendency.

And one-size-fits-all thinking will turn out to be only one of the pitfalls. We'll work hard to avoid it… and any other large organization maladies we can identify.

Sustainability and Social Invention

Our growth has happened fast. Twenty years ago, I was driving boxes to the post office in my Chevy Blazer and dreaming of a forklift. In absolute numbers (as opposed to percentages), the past few years have been especially significant. We've grown from 30,000 employees in 2010 to more than 230,000 now. We're a bit like parents who look around one day and realize their kids are grown – you blink and it happens.

One thing that's exciting about our current scale is that we can put our inventive culture to work on moving the needle on sustainability and social issues.

Two years ago we set a long-term goal to use 100% renewable energy across our global AWS infrastructure. We've since announced four significant wind and solar farms that will deliver 1.6 million megawatt hours per

[1] The opposite situation is less interesting and there is undoubtedly some survivorship bias. Any companies that habitually use the light-weight Type 2 decision-making process to make Type 1 decisions go extinct before they get large.

year of additional renewable energy into the electric grids that supply AWS data centers. Amazon Wind Farm Fowler Ridge has already come online. We reached 25% sustainable energy use across AWS last year, are on track to reach 40% this year, and are working on goals that will cover all of Amazon's facilities around the world, including our fulfillment centers.

We'll keep expanding our efforts in areas like packaging, where our culture of invention led to a big winner – the Frustration-Free Packaging program. Seven years ago we introduced the initiative with 19 products. Today, there are more than 400,000 globally. In 2015, the program eliminated tens of millions of pounds of excess packaging material. Frustration-Free Packaging is a customer delighter because the packages are easier to open. It's good for the planet because it creates less waste. And it's good for shareholders because, with tighter packaging, we ship less "air" and save on transportation costs.

We also continue to pioneer new programs for employees – like Career Choice, Leave Share, and Ramp Back. Career Choice pre-pays 95% of tuition for courses that teach in-demand skills, regardless of whether those skills are relevant to a career at Amazon. We'll pay for nursing certifications, airplane mechanic courses, and many others. We're building classrooms with glass walls right in our fulfillment centers as a way to encourage employees to participate in the program and to make it easy. We see the impact through stories like Sharie Warmack – a single mother of eight who worked in one of our Phoenix fulfillment centers. Career Choice paid for Sharie to get licensed to drive an 18-wheeler. Sharie worked hard, passed her tests, and she's now a long-haul driver for Schneider Trucking – and loving it. This coming year, we're launching a program to teach other interested companies the benefits of Career Choice and how to implement it.

Leave Share and Ramp Back are programs that give new parents flexibility with their growing families. Leave Share lets employees share their Amazon paid leave with their spouse or domestic partner if their spouse's employer doesn't offer paid leave. Ramp Back gives birth mothers additional control over the pace at which they return to work. Just as with our health care plan, these benefits are egalitarian – they're the same for our fulfillment center and customer service employees as they are for our most senior executives.

Renewable energy, Frustration-Free Packaging, Career Choice, Leave Share, and Ramp Back are examples of a culture that embraces invention and long-term thinking. It's very energizing to think that our scale provides opportunities to create impact in these areas.

I can tell you it's a great joy for me to get to work every day with a team of such smart, imaginative, and passionate people. On behalf of all of us at Amazon, thank you for your support as shareholders. As always, I attach a copy of our original 1997 letter. Our approach remains the same, and it's still Day 1.

Jeffrey P. Bezos
Founder and Chief Executive Officer
Amazon.com, Inc.

amazon.com

2016

“Jeff, what does Day 2 look like?”

That’s a question I just got at our most recent all-hands meeting. I’ve been reminding people that it’s Day 1 for a couple of decades. I work in an Amazon building named Day 1, and when I moved buildings, I took the name with me. I spend time thinking about this topic.

“Day 2 is stasis. Followed by irrelevance. Followed by excruciating, painful decline. Followed by death. And *that* is why it is *always* Day 1.”

To be sure, this kind of decline would happen in extreme slow motion. An established company might harvest Day 2 for decades, but the final result would still come.

I’m interested in the question, how do you fend off Day 2? What are the techniques and tactics? How do you keep the vitality of Day 1, even inside a large organization?

Such a question can’t have a simple answer. There will be many elements, multiple paths, and many traps. I don’t know the whole answer, but I may know bits of it. Here’s a starter pack of essentials for Day 1 defense: customer obsession, a skeptical view of proxies, the eager adoption of external trends, and high-velocity decision making.

True Customer Obsession

There are many ways to center a business. You can be competitor focused, you can be product focused, you can be technology focused, you can be business model focused, and there are more. But in my view, obsessive customer focus is by far the most protective of Day 1 vitality.

Why? There are many advantages to a customer-centric approach, but here’s the big one: customers are *always* beautifully, wonderfully dissatisfied, even when they report being happy and business is great. Even when they don’t yet know it, customers want something better, and your desire to delight customers will drive you to invent on their behalf. No customer ever asked Amazon to create the Prime membership program, but it sure turns out they wanted it, and I could give you many such examples.

Staying in Day 1 requires you to experiment patiently, accept failures, plant seeds, protect saplings, and double down when you see customer delight. A customer-obsessed culture best creates the conditions where all of that can happen.

Resist Proxies

As companies get larger and more complex, there’s a tendency to manage to proxies. This comes in many shapes and sizes, and it’s dangerous, subtle, and very Day 2.

A common example is process as proxy. Good process serves you so you can serve customers. But if you’re not watchful, the process can become the thing. This can happen very easily in large organizations. The process becomes the proxy for the result you want. You stop looking at outcomes and just make sure you’re doing the process right. Gulp. It’s not that rare to hear a junior leader defend a bad outcome with something like, “Well, we followed the process.” A more experienced leader will use it as an opportunity to investigate and improve the process. The process is not the thing. It’s always worth asking, do we own the process or does the process own us? In a Day 2 company, you might find it’s the second.

Another example: market research and customer surveys can become proxies for customers – something that’s especially dangerous when you’re inventing and designing products. “Fifty-five percent of beta testers report being satisfied with this feature. That is up from 47% in the first survey.” That’s hard to interpret and could unintentionally mislead.

Good inventors and designers *deeply* understand their customer. They spend tremendous energy developing that intuition. They study and understand many anecdotes rather than only the averages you'll find on surveys. They *live* with the design.

I'm not against beta testing or surveys. But you, the product or service owner, must understand the customer, have a vision, and love the offering. Then, beta testing and research can help you find your blind spots. A remarkable customer experience starts with heart, intuition, curiosity, play, guts, taste. You won't find any of it in a survey.

Embrace External Trends

The outside world can push you into Day 2 if you won't or can't embrace powerful trends quickly. If you fight them, you're probably fighting the future. Embrace them and you have a tailwind.

These big trends are not that hard to spot (they get talked and written about a lot), but they can be strangely hard for large organizations to embrace. We're in the middle of an obvious one right now: machine learning and artificial intelligence.

Over the past decades computers have broadly automated tasks that programmers could describe with clear rules and algorithms. Modern machine learning techniques now allow us to do the same for tasks where describing the precise rules is much harder.

At Amazon, we've been engaged in the practical application of machine learning for many years now. Some of this work is highly visible: our autonomous Prime Air delivery drones; the Amazon Go convenience store that uses machine vision to eliminate checkout lines; and Alexa,[1] our cloud-based AI assistant. (We still struggle to keep Echo in stock, despite our best efforts. A high-quality problem, but a problem. We're working on it.)

But much of what we do with machine learning happens beneath the surface. Machine learning drives our algorithms for demand forecasting, product search ranking, product and deals recommendations, merchandising placements, fraud detection, translations, and much more. Though less visible, much of the impact of machine learning will be of this type – quietly but meaningfully improving core operations.

Inside AWS, we're excited to lower the costs and barriers to machine learning and AI so organizations of all sizes can take advantage of these advanced techniques.

Using our pre-packaged versions of popular deep learning frameworks running on P2 compute instances (optimized for this workload), customers are already developing powerful systems ranging everywhere from early disease detection to increasing crop yields. And we've also made Amazon's higher level services available in a convenient form. Amazon Lex (what's inside Alexa), Amazon Polly, and Amazon Rekognition remove the heavy lifting from natural language understanding, speech generation, and image analysis. They can be accessed with simple API calls – no machine learning expertise required. Watch this space. Much more to come.

High-Velocity Decision Making

Day 2 companies make high-*quality* decisions, but they make high-quality decisions *slowly*. To keep the energy and dynamism of Day 1, you have to somehow make high-quality, *high-velocity* decisions. Easy for start-ups and very challenging for large organizations. The senior team at Amazon is determined to keep our decision-making velocity high. Speed matters in business – plus a high-velocity decision making environment is more fun too. We don't know all the answers, but here are some thoughts.

First, never use a one-size-fits-all decision-making process. Many decisions are reversible, two-way doors. Those decisions can use a light-weight process. For those, so what if you're wrong? I wrote about this in more detail in last year's letter.

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[1] For something amusing, try asking, "Alexa, what is sixty factorial?"

Second, most decisions should probably be made with somewhere around 70% of the information you wish you had. If you wait for 90%, in most cases, you're probably being slow. Plus, either way, you need to be good at quickly recognizing and correcting bad decisions. If you're good at course correcting, being wrong may be less costly than you think, whereas being slow is going to be expensive for sure.

Third, use the phrase "disagree and commit." This phrase will save a lot of time. If you have conviction on a particular direction even though there's no consensus, it's helpful to say, "Look, I know we disagree on this but will you gamble with me on it? Disagree and commit?" By the time you're at this point, no one can know the answer for sure, and you'll probably get a quick yes.

This isn't one way. If you're the boss, you should do this too. I disagree and commit all the time. We recently greenlit a particular Amazon Studios original. I told the team my view: debatable whether it would be interesting enough, complicated to produce, the business terms aren't that good, and we have lots of other opportunities. They had a completely different opinion and wanted to go ahead. I wrote back right away with "I disagree and commit and hope it becomes the most watched thing we've ever made." Consider how much slower this decision cycle would have been if the team had actually had to *convince* me rather than simply get my commitment.

Note what this example is not: it's not me thinking to myself "well, these guys are wrong and missing the point, but this isn't worth me chasing." It's a genuine disagreement of opinion, a candid expression of my view, a chance for the team to weigh my view, and a quick, sincere commitment to go their way. And given that this team has already brought home 11 Emmys, 6 Golden Globes, and 3 Oscars, I'm just glad they let me in the room at all!

Fourth, recognize true *misalignment* issues early and escalate them *immediately*. Sometimes teams have different objectives and fundamentally different views. They are not aligned. No amount of discussion, no number of meetings will resolve that deep misalignment. Without escalation, the default dispute resolution mechanism for this scenario is exhaustion. Whoever has more stamina carries the decision.

I've seen many examples of sincere misalignment at Amazon over the years. When we decided to invite third party sellers to compete directly against us on our own product detail pages – that was a big one. Many smart, well-intentioned Amazonians were simply not at all aligned with the direction. The big decision set up hundreds of smaller decisions, many of which needed to be escalated to the senior team.

"You've worn me down" is an awful decision-making process. It's slow and de-energizing. Go for quick escalation instead – it's better.

So, have you settled only for decision quality, or are you mindful of decision velocity too? Are the world's trends tailwinds for you? Are you falling prey to proxies, or do they serve you? And most important of all, are you delighting customers? We can have the scope and capabilities of a large company and the spirit and heart of a small one. But we have to choose it.

A huge thank you to each and every customer for allowing us to serve you, to our shareowners for your support, and to Amazonians everywhere for your hard work, your ingenuity, and your passion.

As always, I attach a copy of our original 1997 letter. It remains Day 1.

Sincerely,

Jeff

Jeffrey P. Bezos
Founder and Chief Executive Officer
Amazon.com, Inc.

2017

To our shareowners:

The American Customer Satisfaction Index recently announced the results of its annual survey, and for the 8th year in a row customers ranked Amazon #1. The United Kingdom has a similar index, The U.K. Customer Satisfaction Index, put out by the Institute of Customer Service. For the 5th time in a row Amazon U.K. ranked #1 in that survey. Amazon was also just named the #1 business on LinkedIn's 2018 Top Companies list, which ranks the most sought after places to work for professionals in the United States. And just a few weeks ago, Harris Poll released its annual Reputation Quotient, which surveys over 25,000 consumers on a broad range of topics from workplace environment to social responsibility to products and services, and for the 3rd year in a row Amazon ranked #1.

Congratulations and thank you to the now over 560,000 Amazonians who come to work every day with unrelenting customer obsession, ingenuity, and commitment to operational excellence. And on behalf of Amazonians everywhere, I want to extend a huge thank you to customers. It's incredibly energizing for us to see your responses to these surveys.

One thing I love about customers is that they are divinely discontent. Their expectations are never static – they go up. It's human nature. We didn't ascend from our hunter-gatherer days by being satisfied. People have a voracious appetite for a better way, and yesterday's 'wow' quickly becomes today's 'ordinary'. I see that cycle of improvement happening at a faster rate than ever before. It may be because customers have such easy access to more information than ever before – in only a few seconds and with a couple taps on their phones, customers can read reviews, compare prices from multiple retailers, see whether something's in stock, find out how fast it will ship or be available for pick-up, and more. These examples are from retail, but I sense that the same customer empowerment phenomenon is happening broadly across everything we do at Amazon and most other industries as well. You cannot rest on your laurels in this world. Customers won't have it.

How do you stay ahead of ever-rising customer expectations? There's no single way to do it – it's a combination of many things. But *high standards* (widely deployed and at all levels of detail) are certainly a big part of it. We've had some successes over the years in our quest to meet the high expectations of customers. We've also had billions of dollars' worth of failures along the way. With those experiences as backdrop, I'd like to share with you the essentials of what we've learned (so far) about high standards inside an organization.

Intrinsic or Teachable?

First, there's a foundational question: are high standards intrinsic or teachable? If you take me on your basketball team, you can teach me many things, but you can't teach me to be taller. Do we first and foremost need to *select* for "high standards" people? If so, this letter would need to be mostly about hiring practices, but I don't think so. I believe high standards are teachable. In fact, people are pretty good at learning high standards simply through exposure. High standards are contagious. Bring a new person onto a high standards team, and they'll quickly adapt. The opposite is also true. If low standards prevail, those too will quickly spread. And though exposure works well to teach high standards, I believe you can accelerate that rate of learning by articulating a few core principles of high standards, which I hope to share in this letter.

Universal or Domain Specific?

Another important question is whether high standards are universal or domain specific. In other words, if you have high standards in one area, do you automatically have high standards elsewhere? I believe high standards are domain specific, and that you have to learn high standards separately in every arena of interest. When I started Amazon, I had high standards on inventing, on customer care, and (thankfully) on hiring. But I didn't have high standards on operational process: how to keep fixed problems fixed, how to eliminate defects at the root, how to inspect processes, and much more. I had to learn and develop high standards on all of that (my colleagues were my tutors).

Understanding this point is important because it keeps you humble. You can consider yourself a person of high standards *in general* and still have debilitating blind spots. There can be whole arenas of endeavor where you may not even *know* that your standards are low or non-existent, and certainly not world class. It's critical to be open to that likelihood.

Recognition and Scope

What do you need to achieve high standards in a particular domain area? First, you have to be able to *recognize* what good looks like in that domain. Second, you must have realistic expectations for how hard it should be (how much work it will take) to achieve that result – the *scope*.

Let me give you two examples. One is a sort of toy illustration but it makes the point clearly, and another is a real one that comes up at Amazon all the time.

Perfect Handstands

A close friend recently decided to learn to do a perfect free-standing handstand. No leaning against a wall. Not for just a few seconds. Instagram good. She decided to start her journey by taking a handstand workshop at her yoga studio. She then practiced for a while but wasn't getting the results she wanted. So, she hired a handstand coach. Yes, I know what you're thinking, but evidently this is an actual thing that exists. In the very first lesson, the coach gave her some wonderful advice. "Most people," he said, "think that if they work hard, they should be able to master a handstand in about two weeks. The reality is that it takes about six months of daily practice. If you think you should be able to do it in two weeks, you're just going to end up quitting." Unrealistic beliefs on scope – often hidden and undiscussed – kill high standards. To achieve high standards yourself or as part of a team, you need to form and proactively communicate realistic beliefs about how hard something is going to be – something this coach understood well.

Six-Page Narratives

We don't do PowerPoint (or any other slide-oriented) presentations at Amazon. Instead, we write narratively structured six-page memos. We silently read one at the beginning of each meeting in a kind of "study hall." Not surprisingly, the quality of these memos varies widely. Some have the clarity of angels singing. They are brilliant and thoughtful and set up the meeting for high-quality discussion. Sometimes they come in at the other end of the spectrum.

In the handstand example, it's pretty straightforward to *recognize* high standards. It wouldn't be difficult to lay out in detail the requirements of a well-executed handstand, and then you're either doing it or you're not. The writing example is very different. The difference between a great memo and an average one is much squishier. It would be extremely hard to write down the detailed requirements that make up a great memo. Nevertheless, I find that much of the time, readers react to great memos very similarly. They know it when they see it. The standard is there, and it is real, even if it's not easily describable.

Here's what we've figured out. Often, when a memo isn't great, it's not the writer's inability to *recognize* the high standard, but instead a wrong expectation on *scope*: they mistakenly believe a high-standards, six-page memo can be written in one or two days or even a few hours, when really it might take a week or more! They're trying to perfect a handstand in just two weeks, and we're not coaching them right. The great memos are written and re-written, shared with colleagues who are asked to improve the work, set aside for a couple of days, and then edited again with a fresh mind. They simply can't be done in a day or two. The key point here is that you can improve results through the simple act of teaching scope – that a great memo probably should take a week or more.

Skill

Beyond recognizing the standard and having realistic expectations on scope, how about *skill*? Surely to write a world class memo, you have to be an extremely skilled writer? Is it another required element? In my view, not so much, at least not for the individual in the context of teams. The football coach doesn't need to be able to throw, and a film director doesn't need to be able to act. But they both do need to recognize high standards for those things and teach realistic expectations on scope. Even in the example of writing a six-page memo, that's

teamwork. *Someone* on the team needs to have the skill, but it doesn't have to be you. (As a side note, by tradition at Amazon, authors' names never appear on the memos – the memo is from the whole team.)

Benefits of High Standards

Building a culture of high standards is well worth the effort, and there are many benefits. Naturally and most obviously, you're going to build better products and services for customers – this would be reason enough! Perhaps a little less obvious: people are drawn to high standards – they help with recruiting and retention. More subtle: a culture of high standards is protective of all the "invisible" but crucial work that goes on in every company. I'm talking about the work that no one sees. The work that gets done when no one is watching. In a high standards culture, doing that work well is its own reward – it's part of what it means to be a professional.

And finally, high standards are fun! Once you've tasted high standards, there's no going back.

So, the four elements of high standards as we see it: they are *teachable*, they are *domain specific*, you must *recognize* them, and you must explicitly coach realistic *scope*. For us, these work at all levels of detail. Everything from writing memos to whole new, clean-sheet business initiatives. We hope they help you too.

Insist on the Highest Standards
Leaders have relentlessly high standards – many people may think these standards are unreasonably high.
-- *from the Amazon Leadership Principles*

Recent Milestones

The high standards our leaders strive for have served us well. And while I certainly can't do a handstand myself, I'm extremely proud to share some of the milestones we hit last year, each of which represents the fruition of many years of collective effort. We take none of them for granted.

- Prime – 13 years post-launch, we have exceeded 100 million paid Prime members globally. In 2017 Amazon shipped more than five billion items with Prime worldwide, and more new members joined Prime than in any previous year – both worldwide and in the U.S. Members in the U.S. now receive unlimited free two-day shipping on over 100 million different items. We expanded Prime to Mexico, Singapore, the Netherlands, and Luxembourg, and introduced Business Prime Shipping in the U.S. and Germany. We keep making Prime shipping faster as well, with Prime Free Same-Day and Prime Free One-Day delivery now in more than 8,000 cities and towns. Prime Now is available in more than 50 cities worldwide across nine countries. Prime Day 2017 was our biggest global shopping event ever (until surpassed by Cyber Monday), with more new Prime members joining Prime than any other day in our history.
- AWS – It's exciting to see Amazon Web Services, a $20 billion revenue run rate business, accelerate its already healthy growth. AWS has also accelerated its pace of innovation – especially in new areas such as machine learning and artificial intelligence, Internet of Things, and serverless computing. In 2017, AWS announced more than 1,400 significant services and features, including Amazon SageMaker, which radically changes the accessibility and ease of use for everyday developers to build sophisticated machine learning models. Tens of thousands of customers are also using a broad range of AWS machine learning services, with active users increasing more than 250 percent in the last year, spurred by the broad adoption of Amazon SageMaker. And in November, we held our sixth re:Invent conference with more than 40,000 attendees and over 60,000 streaming participants.
- Marketplace – In 2017, for the first time in our history, more than half of the units sold on Amazon worldwide were from our third-party sellers, including small and medium-sized businesses (SMBs). Over 300,000 U.S.-based SMBs started selling on Amazon in 2017, and Fulfillment by Amazon shipped billions of items for SMBs worldwide. Customers ordered more than 40 million items from SMBs worldwide during Prime Day 2017, growing their sales by more than 60 percent over Prime Day 2016. Our Global Selling program (enabling SMBs to sell products across national borders) grew by over 50% in 2017 and cross-border ecommerce by SMBs now represents more than 25% of total third-party sales.

- Alexa – Customer embrace of Alexa continues, with Alexa-enabled devices among the best-selling items across all of Amazon. We're seeing extremely strong adoption by other companies and developers that want to create their own experiences with Alexa. There are now more than 30,000 skills for Alexa from outside developers, and customers can control more than 4,000 smart home devices from 1,200 unique brands with Alexa. The foundations of Alexa continue to get smarter every day too. We've developed and implemented an on-device fingerprinting technique, which keeps your device from waking up when it hears an Alexa commercial on TV. (This technology ensured that our Alexa Super Bowl commercial didn't wake up millions of devices.) Far-field speech recognition (already very good) has improved by 15% over the last year; and in the U.S., U.K., and Germany, we've improved Alexa's spoken language understanding by more than 25% over the last 12 months through enhancements in Alexa's machine learning components and the use of semi-supervised learning techniques. (These semi-supervised learning techniques reduced the amount of labeled data needed to achieve the same accuracy improvement by 40 times!) Finally, we've dramatically reduced the amount of time required to teach Alexa new languages by using machine translation and transfer learning techniques, which allows us to serve customers in more countries (like India and Japan).
- Amazon devices – 2017 was our best year yet for hardware sales. Customers bought tens of millions of Echo devices, and Echo Dot and Fire TV Stick with Alexa were the best-selling products across all of Amazon – across all categories and all manufacturers. Customers bought twice as many Fire TV Sticks and Kids Edition Fire Tablets this holiday season versus last year. 2017 marked the release of our all-new Echo with an improved design, better sound, and a lower price; Echo Plus with a built-in smart home hub; and Echo Spot, which is compact and beautiful with a circular screen. We released our next generation Fire TV, featuring 4K Ultra HD and HDR; and the Fire HD 10 Tablet, with 1080p Full HD display. And we celebrated the 10th anniversary of Kindle by releasing the all-new Kindle Oasis, our most advanced reader ever. It's waterproof – take it in the bathtub – with a bigger 7" high-resolution 300 ppi display and has built-in audio so you can also listen to your books with Audible.
- Prime Video – Prime Video continues to drive Prime member adoption and retention. In the last year we made Prime Video even better for customers by adding new, award-winning Prime Originals to the service, like *The Marvelous Mrs. Maisel*, winner of two Critics' Choice Awards and two Golden Globes, and the Oscar-nominated movie *The Big Sick*. We've expanded our slate of programming across the globe, launching new seasons of *Bosch* and *Sneaky Pete* from the U.S., *The Grand Tour* from the U.K., and *You Are Wanted* from Germany, while adding new *Sentosha* shows from Japan, along with *Breathe* and the award-winning *Inside Edge* from India. Also this year, we expanded our Prime Channels offerings, adding CBS All Access in the U.S. and launching Channels in the U.K. and Germany. We debuted *NFL Thursday Night Football* on Prime Video, with more than 18 million total viewers over 11 games. In 2017, Prime Video Direct secured subscription video rights for more than 3,000 feature films and committed over $18 million in royalties to independent filmmakers and other rights holders. Looking forward, we're also excited about our upcoming Prime Original series pipeline, which includes *Tom Clancy's Jack Ryan* starring John Krasinski; *King Lear*, starring Anthony Hopkins and Emma Thompson; *The Romanoffs*, executive produced by Matt Weiner; *Carnival Row* starring Orlando Bloom and Cara Delevingne; *Good Omens* starring Jon Hamm; and *Homecoming*, executive produced by Sam Esmail and starring Julia Roberts in her first television series. We acquired the global television rights for a multi-season production of *The Lord of the Rings*, as well as *Cortés*, a miniseries based on the epic saga of Hernán Cortés from executive producer Steven Spielberg, starring Javier Bardem, and we look forward to beginning work on those shows this year.
- Amazon Music – Amazon Music continues to grow fast and now has tens of millions of paid customers. Amazon Music Unlimited, our on-demand, ad-free offering, expanded to more than 30 new countries in 2017, and membership has more than doubled over the past six months.
- Fashion – Amazon has become the destination for tens of millions of customers to shop for fashion. In 2017, we introduced our first fashion-oriented Prime benefit, Prime Wardrobe – a new service that brings the fitting room directly to the homes of Prime members so they can try on the latest styles before they buy. We introduced Nike and UGG on Amazon along with new celebrity collections by Drew Barrymore and Dwyane Wade, as well as dozens of new private brands, like Goodthreads and

Core10. We're also continuing to enable thousands of designers and artists to offer their exclusive designs and prints on demand through Merch by Amazon. We finished 2017 with the launch of our interactive shopping experience with Calvin Klein, including pop-up shops, on-site product customization, and fitting rooms with Alexa-controlled lighting, music, and more.

- Whole Foods – When we closed our acquisition of Whole Foods Market last year, we announced our commitment to making high-quality, natural and organic food available for everyone, then immediately lowered prices on a selection of best-selling grocery staples, including avocados, organic brown eggs, and responsibly-farmed salmon. We followed this with a second round of price reductions in November, and our Prime member exclusive promotion broke Whole Foods' all-time record for turkeys sold during the Thanksgiving season. In February, we introduced free two-hour delivery on orders over $35 for Prime members in select cities, followed by additional cities in March and April, and plan continued expansion across the U.S. throughout this year. We also expanded the benefits of the Amazon Prime Rewards Visa Card, enabling Prime members to get 5% back when shopping at Whole Foods Market. Beyond that, customers can purchase Whole Foods' private label products like 365 Everyday Value on Amazon, purchase Echo and other Amazon devices in over a hundred Whole Foods stores, and pick-up or return Amazon packages at Amazon Lockers in hundreds of Whole Foods stores. We've also begun the technical work needed to recognize Prime members at the point of sale and look forward to offering more Prime benefits to Whole Foods shoppers once that work is completed.
- Amazon Go – Amazon Go, a new kind of store with no checkout required, opened to the public in January in Seattle. Since opening, we've been thrilled to hear many customers refer to their shopping experience as "magical." What makes the magic possible is a custom-built combination of computer vision, sensor fusion, and deep learning, which come together to create Just Walk Out shopping. With JWO, customers are able to grab their favorite breakfast, lunch, dinner, snack, and grocery essentials more conveniently than ever before. Some of our top-selling items are not surprising – caffeinated beverages and water are popular – but our customers also love the Chicken Banh Mi sandwich, chocolate chip cookies, cut fruit, gummy bears, and our Amazon Meal Kits.
- Treasure Truck – Treasure Truck expanded from a single truck in Seattle to a fleet of 35 trucks across 25 U.S. cities and 12 U.K. cities. Our bubble-blowing, music-pumping trucks fulfilled hundreds of thousands of orders, from porterhouse steaks to the latest Nintendo releases. Throughout the year, Treasure Truck also partnered with local communities to lift spirits and help those in need, including donating and delivering hundreds of car seats, thousands of toys, tens of thousands of socks, and many other essentials to community members needing relief, from those displaced by Hurricane Harvey, to the homeless, to kids needing holiday cheer.
- India – Amazon.in is the fastest growing marketplace in India, and the most visited site on both desktop and mobile, according to comScore and SimilarWeb. The Amazon.in mobile shopping app was also the most downloaded shopping app in India in 2017, according to App Annie. Prime added more members in India in its first year than any previous geography in Amazon's history. Prime selection in India now includes more than 40 million local products from third-party sellers, and Prime Video is investing in India original video content in a big way, including two recent premiers and over a dozen new shows in production.
- Sustainability – We are committed to minimizing carbon emissions by optimizing our transportation network, improving product packaging, and enhancing energy efficiency in our operations, and we have a long-term goal to power our global infrastructure using 100% renewable energy. We recently launched Amazon Wind Farm Texas, our largest wind farm yet, which generates more than 1,000,000 megawatt hours of clean energy annually from over 100 turbines. We have plans to host solar energy systems at 50 fulfillment centers by 2020, and have launched 24 wind and solar projects across the U.S. with more than 29 additional projects to come. Together, Amazon's renewable energy projects now produce enough clean energy to power over 330,000 homes annually. In 2017 we celebrated the 10-year anniversary of Frustration-Free Packaging, the first of a suite of sustainable packaging initiatives that have eliminated more than 244,000 tons of packaging materials over the past 10 years. In addition, in 2017 alone our programs significantly reduced packaging waste, eliminating the

equivalent of 305 million shipping boxes. And across the world, Amazon is contracting with our service providers to launch our first low-pollution last-mile fleet. Already today, a portion of our European delivery fleet is comprised of low-pollution electric and natural gas vans and cars, and we have over 40 electric scooters and e-cargo bikes that complete local urban deliveries.

- Empowering Small Business – Millions of small and medium-sized businesses worldwide now sell their products through Amazon to reach new customers around the globe. SMBs selling on Amazon come from every state in the U.S., and from more than 130 different countries around the world. More than 140,000 SMBs surpassed $100,000 in sales on Amazon in 2017, and over a thousand independent authors surpassed $100,000 in royalties in 2017 through Kindle Direct Publishing.
- Investment & Job Creation – Since 2011, we have invested over $150 billion worldwide in our fulfillment networks, transportation capabilities, and technology infrastructure, including AWS data centers. Amazon has created over 1.7 million direct and indirect jobs around the world. In 2017 alone, we directly created more than 130,000 new Amazon jobs, not including acquisitions, bringing our global employee base to over 560,000. Our new jobs cover a wide range of professions, from artificial intelligence scientists to packaging specialists to fulfillment center associates. In addition to these direct hires, we estimate that Amazon Marketplace has created 900,000 more jobs worldwide, and that Amazon's investments have created an additional 260,000 jobs in areas like construction, logistics, and other professional services.
- Career Choice – One employee program we're particularly proud of is Amazon Career Choice. For hourly associates with more than one year of tenure, we pre-pay 95% of tuition, fees, and textbooks (up to $12,000) for certificates and associate degrees in high-demand occupations such as aircraft mechanics, computer-aided design, machine tool technologies, medical lab technologies, and nursing. We fund education in areas that are in high demand and do so regardless of whether those skills are relevant to a career at Amazon. Globally more than 16,000 associates (including more than 12,000 in the U.S.) have joined Career Choice since the program launched in 2012. Career Choice is live in ten countries and expanding to South Africa, Costa Rica, and Slovakia later this year. Commercial truck driving, healthcare, and information technology are the program's most popular fields of study. We've built 39 Career Choice classrooms so far, and we locate them behind glass walls in high traffic areas inside our fulfillment centers so associates can be inspired by seeing their peers pursue new skills.

The credit for these milestones is deserved by many. Amazon is 560,000 employees. It's also 2 million sellers, hundreds of thousands of authors, millions of AWS developers, and hundreds of millions of divinely discontent customers around the world who push to make us better each and every day.

Path Ahead

This year marks the 20th anniversary of our first shareholder letter, and our core values and approach remain unchanged. We continue to aspire to be Earth's most customer-centric company, and we recognize this to be no small or easy challenge. We know there is much we can do better, and we find tremendous energy in the many challenges and opportunities that lie ahead.

A huge thank you to each and every customer for allowing us to serve you, to our shareowners for your support, and to Amazonians everywhere for your ingenuity, your passion, and your high standards.

As always, I attach a copy of our original 1997 letter. It remains Day 1.

Sincerely,

Jeffrey P. Bezos
Founder and Chief Executive Officer
Amazon.com, Inc.

amazon 2018

To our shareowners:

Something strange and remarkable has happened over the last 20 years. Take a look at these numbers:

1999	3%
2000	3%
2001	6%
2002	17%
2003	22%
2004	25%
2005	28%
2006	28%
2007	29%
2008	30%
2009	31%
2010	34%
2011	38%
2012	42%
2013	46%
2014	49%
2015	51%
2016	54%
2017	56%
2018	58%

The percentages represent the share of physical gross merchandise sales sold on Amazon by independent third-party sellers – mostly small- and medium-sized businesses – as opposed to Amazon retail's own first party sales. Third-party sales have grown from 3% of the total to 58%. To put it bluntly:

Third-party sellers are kicking our first party butt. Badly.

And it's a high bar too because our first-party business has grown dramatically over that period, from $1.6 billion in 1999 to $117 billion this past year. The compound annual growth rate for our first-party business in that time period is 25%. But in that same time, third-party sales have grown from $0.1 billion to $160 billion – a compound annual growth rate of 52%. To provide an external benchmark, eBay's gross merchandise sales in that period have grown at a compound rate of 20%, from $2.8 billion to $95 billion.

Why did independent sellers do so much better selling on Amazon than they did on eBay? And why were independent sellers able to grow so much faster than Amazon's own highly organized first-party sales organization? There isn't one answer, but we do know one extremely important part of the answer:

We helped independent sellers compete against our first-party business by investing in and offering them *the very best selling tools we could imagine and build.* There are many such tools, including tools that help sellers manage inventory, process payments, track shipments, create reports, and sell across borders – and we're inventing more every year. But of great importance are Fulfillment by Amazon and the Prime membership program. In combination, these two programs meaningfully improved the customer experience of buying from independent sellers. With the success of these two programs now so well established, it's difficult for most people to fully appreciate today just how radical those two offerings were at the time we launched them. We invested in both of these programs at significant financial risk and after much internal debate. We had to continue investing

significantly over time as we experimented with different ideas and iterations. We could not foresee with certainty what those programs would eventually look like, let alone whether they would succeed, but they were pushed forward with intuition and heart, and nourished with optimism.

Intuition, curiosity, and the power of wandering

From very early on in Amazon's life, we knew we wanted to create a culture of builders – people who are curious, explorers. They like to invent. Even when they're experts, they are "fresh" with a beginner's mind. They see the way we do things as just the way we do things *now*. A builder's mentality helps us approach big, hard-to-solve opportunities with a humble conviction that success can come through iteration: invent, launch, reinvent, relaunch, start over, rinse, repeat, again and again. They know the path to success is anything but straight.

Sometimes (often actually) in business, you *do* know where you're going, and when you do, you can be efficient. Put in place a plan and execute. In contrast, wandering in business is not efficient … but it's also not random. It's *guided* – by hunch, gut, intuition, curiosity, and powered by a deep conviction that the prize for customers is big enough that it's worth being a little messy and tangential to find our way there. Wandering is an essential counter-balance to efficiency. You need to employ both. The outsized discoveries – the "non-linear" ones – are highly likely to require wandering.

AWS's millions of customers range from startups to large enterprises, government entities to nonprofits, each looking to build better solutions for their end users. We spend a lot of time thinking about what those organizations want and what the people inside them – developers, dev managers, ops managers, CIOs, chief digital officers, chief information security officers, etc. – want.

Much of what we build at AWS is based on *listening* to customers. It's critical to ask customers what they want, listen carefully to their answers, and figure out a plan to provide it thoughtfully and quickly (speed matters in business!). No business could thrive without that kind of customer obsession. But it's also not enough. The biggest needle movers will be things that customers don't know to ask for. We must invent on their behalf. We have to tap into our own inner imagination about what's possible.

AWS itself – as a whole – is an example. No one asked for AWS. No one. Turns out the world was in fact ready and hungry for an offering like AWS but didn't know it. We had a hunch, followed our curiosity, took the necessary financial risks, and began building – reworking, experimenting, and iterating countless times as we proceeded.

Within AWS, that same pattern has recurred many times. For example, we invented DynamoDB, a highly scalable, low latency key-value database now used by thousands of AWS customers. And on the listening-carefully-to-customers side, we heard loudly that companies felt constrained by their commercial database options and had been unhappy with their database providers for decades – these offerings are expensive, proprietary, have high-lock-in and punitive licensing terms. We spent several years building our own database engine, Amazon Aurora, a fully-managed MySQL and PostgreSQL-compatible service with the same or better durability and availability as the commercial engines, but at one-tenth of the cost. We were *not* surprised when this worked.

But we're also optimistic about specialized databases for specialized workloads. Over the past 20 to 30 years, companies ran most of their workloads using relational databases. The broad familiarity with relational databases among developers made this technology the go-to even when it wasn't ideal. Though sub-optimal, the data set sizes were often small enough and the acceptable query latencies long enough that you could make it work. But today, many applications are storing very large amounts of data – terabytes and petabytes. And the requirements for apps have changed. Modern applications are driving the need for low latencies, real-time processing, and the ability to process millions of requests per second. It's not just key-value stores like DynamoDB, but also in-memory databases like Amazon ElastiCache, time series databases like Amazon Timestream, and ledger solutions like Amazon Quantum Ledger Database – the right tool for the right job saves money and gets your product to market faster.

We're also plunging into helping companies harness Machine Learning. We've been working on this for a long time, and, as with other important advances, our initial attempts to externalize some of our early internal Machine Learning tools were failures. It took years of wandering – experimentation, iteration, and refinement, as well as valuable insights from our customers – to enable us to find SageMaker, which launched just 18 months ago. SageMaker removes the heavy lifting, complexity, and guesswork from each step of the machine learning process – democratizing AI. Today, thousands of customers are building machine learning models on top of AWS with SageMaker. We continue to enhance the service, including by adding new reinforcement learning capabilities. Reinforcement learning has a steep learning curve and many moving parts, which has largely put it out of reach of all but the most well-funded and technical organizations, until now. None of this would be possible without a culture of curiosity and a willingness to try totally new things on behalf of customers. And customers are responding to our customer-centric wandering and listening – AWS is now a $30 billion annual run rate business and growing fast.

Imagining the impossible

Amazon today remains a small player in global retail. We represent a low single-digit percentage of the retail market, and there are much larger retailers in every country where we operate. And that's largely because nearly 90% of retail remains offline, in brick and mortar stores. For many years, we considered how we might serve customers in physical stores, but felt we needed first to invent something that would really delight customers in that environment. With Amazon Go, we had a clear vision. Get rid of the worst thing about physical retail: checkout lines. No one likes to wait in line. Instead, we imagined a store where you could walk in, pick up what you wanted, and leave.

Getting there was hard. Technically hard. It required the efforts of hundreds of smart, dedicated computer scientists and engineers around the world. We had to design and build our own proprietary cameras and shelves and invent new computer vision algorithms, including the ability to stitch together imagery from hundreds of cooperating cameras. And we had to do it in a way where the technology worked so well that it simply receded into the background, invisible. The reward has been the response from customers, who've described the experience of shopping at Amazon Go as "magical." We now have 10 stores in Chicago, San Francisco, and Seattle, and are excited about the future.

Failure needs to scale too

As a company grows, *everything* needs to scale, including the size of your failed experiments. If the size of your failures isn't growing, you're not going to be inventing at a size that can actually move the needle. Amazon will be experimenting at the right scale for a company of our size if we occasionally have multibillion-dollar failures. Of course, we won't undertake such experiments cavalierly. We will work hard to make them good bets, but not all good bets will ultimately pay out. This kind of large-scale risk taking is part of the service we as a large company can provide to our customers and to society. The good news for shareowners is that a single big winning bet can more than cover the cost of many losers.

Development of the Fire phone and Echo was started around the same time. While the Fire phone was a failure, we were able to take our learnings (as well as the developers) and accelerate our efforts building Echo and Alexa. The vision for Echo and Alexa was inspired by the Star Trek computer. The idea also had origins in two other arenas where we'd been building and wandering for years: machine learning and the cloud. From Amazon's early days, machine learning was an essential part of our product recommendations, and AWS gave us a front row seat to the capabilities of the cloud. After many years of development, Echo debuted in 2014, powered by Alexa, who lives in the AWS cloud.

No customer was asking for Echo. This was definitely us wandering. Market research doesn't help. If you had gone to a customer in 2013 and said "Would you like a black, always-on cylinder in your kitchen about the size of a Pringles can that you can talk to and ask questions, that also turns on your lights and plays music?" I guarantee you they'd have looked at you strangely and said "No, thank you."

Since that first-generation Echo, customers have purchased more than 100 million Alexa-enabled devices. Last year, we improved Alexa's ability to understand requests and answer questions by more than 20%, while adding billions of facts to make Alexa more knowledgeable than ever. Developers doubled the number of Alexa skills to over 80,000, and customers spoke to Alexa tens of billions more times in 2018 compared to 2017. The number of devices with Alexa built-in more than doubled in 2018. There are now more than 150 different products available with Alexa built-in, from headphones and PCs to cars and smart home devices. Much more to come!

One last thing before closing. As I said in the first shareholder letter more than 20 years ago, our focus is on hiring and retaining versatile and talented employees who can think like owners. Achieving that requires investing in our employees, and, as with so many other things at Amazon, we use not just analysis but also intuition and heart to find our way forward.

Last year, we raised our minimum wage to $15-an-hour for all full-time, part-time, temporary, and seasonal employees across the U.S. This wage hike benefitted more than 250,000 Amazon employees, as well as over 100,000 seasonal employees who worked at Amazon sites across the country last holiday. We strongly believe that this will benefit our business as we invest in our employees. But that is not what drove the decision. We had always offered competitive wages. But we decided it was time to lead – to offer wages that went beyond competitive. We did it because it seemed like the right thing to do.

Today I challenge our top retail competitors (you know who you are!) to match our employee benefits and our $15 minimum wage. Do it! Better yet, go to $16 and throw the gauntlet back at us. It's a kind of competition that will benefit everyone.

Many of the other programs we have introduced for our employees came as much from the heart as the head. I've mentioned before the Career Choice program, which pays up to 95% of tuition and fees towards a certificate or diploma in qualified fields of study, leading to in-demand careers for our associates, even if those careers take them away from Amazon. More than 16,000 employees have now taken advantage of the program, which continues to grow. Similarly, our Career Skills program trains hourly associates in critical job skills like resume writing, how to communicate effectively, and computer basics. In October of last year, in continuation of these commitments, we signed the President's Pledge to America's Workers and announced we will be upskilling 50,000 U.S. employees through our range of innovative training programs.

Our investments are not limited to our current employees or even to the present. To train tomorrow's workforce, we have pledged $50 million, including through our recently announced Amazon Future Engineer program, to support STEM and CS education around the country for elementary, high school, and university students, with a particular focus on attracting more girls and minorities to these professions. We also continue to take advantage of the incredible talents of our veterans. We are well on our way to meeting our pledge to hire 25,000 veterans and military spouses by 2021. And through the Amazon Technical Veterans Apprenticeship program, we are providing veterans on-the-job training in fields like cloud computing.

A huge thank you to our customers for allowing us to serve you while always challenging us to do even better, to our shareowners for your continuing support, and to all our employees worldwide for your hard work and pioneering spirit. Teams all across Amazon are *listening* to customers and *wandering* on their behalf!

As always, I attach a copy of our original 1997 letter. It remains Day 1.

Sincerely,

Jeffrey P. Bezos
Founder and Chief Executive Officer
Amazon.com, Inc.

amazon

2019

To our shareowners:

One thing we've learned from the COVID-19 crisis is how important Amazon has become to our customers. We want you to know we take this responsibility seriously, and we're proud of the work our teams are doing to help customers through this difficult time.

Amazonians are working around the clock to get necessary supplies delivered directly to the doorsteps of people who need them. The demand we are seeing for essential products has been and remains high. But unlike a predictable holiday surge, this spike occurred with little warning, creating major challenges for our suppliers and delivery network. We quickly prioritized the stocking and delivery of essential household staples, medical supplies, and other critical products.

Our Whole Foods Market stores have remained open, providing fresh food and other vital goods for customers. We are taking steps to help those most vulnerable to the virus, setting aside the first hour of shopping at Whole Foods each day for seniors. We have temporarily closed Amazon Books, Amazon 4-star, and Amazon Pop Up stores because they don't sell essential products, and we offered associates from those closed stores the opportunity to continue working in other parts of Amazon.

Crucially, while providing these essential services, we are focused on the safety of our employees and contractors around the world—we are deeply grateful for their heroic work and are committed to their health and well-being. Consulting closely with medical experts and health authorities, we've made over 150 significant process changes in our operations network and Whole Foods Market stores to help teams stay healthy, and we conduct daily audits of the measures we've put into place. We've distributed face masks and implemented temperature checks at sites around the world to help protect employees and support staff. We regularly sanitize door handles, stairway handrails, lockers, elevator buttons, and touch screens, and disinfectant wipes and hand sanitizer are standard across our network.

We've also introduced extensive social distancing measures to help protect our associates. We have eliminated stand-up meetings during shifts, moved information sharing to bulletin boards, staggered break times, and spread out chairs in breakrooms. While training new hires is challenging with new distancing requirements, we continue to ensure that every new employee gets six hours of safety training. We've shifted training protocols so we don't have employees gathering in one spot, and we've adjusted our hiring processes to allow for social distancing.

A next step in protecting our employees might be regular testing of all Amazonians, including those showing no symptoms. Regular testing on a global scale, across all industries, would both help keep people safe and help get the economy back up and running. For this to work, we as a society would need vastly more testing capacity than is currently available. If every person could be tested regularly, it would make a huge difference in how we fight this virus. Those who test positive could be quarantined and cared for, and everyone who tests negative could re-enter the economy with confidence.

We've begun the work of building incremental testing capacity. A team of Amazonians—from research scientists and program managers to procurement specialists and software engineers—moved from their normal day jobs onto a dedicated team to work on this initiative. We have begun assembling the equipment we need to build our first lab and hope to start testing small numbers of our frontline employees soon. We are not sure how far we will get in the relevant timeframe, but we think it's worth trying, and we stand ready to share anything we learn.

While we explore longer-term solutions, we are also committed to helping support employees now. We increased our minimum wage through the end of April by $2 per hour in the U.S., $2 per hour in Canada, £2 per hour in the UK, and €2 per hour in many European countries. And we are paying associates double our regular rate for any overtime worked—a minimum of $34 an hour—an increase from time and a half. These wage increases will cost more than $500 million, just through the end of April, and likely more than that over time. While we recognize this is expensive, we believe it's the right thing to do under the circumstances. We also established the Amazon Relief Fund—with an initial $25 million in funding—to support our independent delivery service partners and their drivers, Amazon Flex participants, and temporary employees under financial distress.

In March, we opened 100,000 new positions across our fulfillment and delivery network. Earlier this week, after successfully filling those roles, we announced we were creating another 75,000 jobs to respond to customer demand. These new hires are helping customers who depend on us to meet their critical needs. We know that many people around the world have suffered financially as jobs are lost or furloughed. We are happy to have them on our teams until things return to normal and either their former employer can bring them back or new jobs become available. We've welcomed Joe Duffy, who joined after losing his job as a mechanic at Newark airport and learned about an opening from a friend who is an Amazon operations analyst. Dallas preschool teacher Darby Griffin joined after her school closed on March 9th and now helps manage new inventory. We're happy to have Darby with us until she can return to the classroom.

Amazon is acting aggressively to protect our customers from bad actors looking to exploit the crisis. We've removed over half a million offers from our stores due to COVID-based price gouging, and we've suspended more than 6,000 selling accounts globally for violating our fair-pricing policies. Amazon turned over information about sellers we suspect engaged in price gouging of products related to COVID-19 to 42 state attorneys general offices. To accelerate our response to price-gouging incidents, we created a special communication channel for state attorneys general to quickly and easily escalate consumer complaints to us.

Amazon Web Services is also playing an important role in this crisis. The ability for organizations to access scalable, dependable, and highly secure computing power—whether for vital healthcare work, to help students continue learning, or to keep unprecedented numbers of employees online and productive from home—is critical in this situation. Hospital networks, pharmaceutical companies, and research labs are using AWS to care for patients, explore treatments, and mitigate the impacts of COVID-19 in many other ways. Academic institutions around the world are transitioning from in-person to virtual classrooms and are running on AWS to help ensure continuity of learning. And governments are leveraging AWS as a secure platform to build out new capabilities in their efforts to end this pandemic.

We are collaborating with the World Health Organization, supplying advanced cloud technologies and technical expertise to track the virus, understand the outbreak, and better contain its spread. WHO is leveraging our cloud to build large-scale data lakes, aggregate epidemiological country data, rapidly translate medical training videos into different languages, and help global healthcare workers better treat patients. We are separately making a public AWS COVID-19 data lake available as a centralized repository for up-to-date and curated information related to the spread and characteristics of the virus and its associated illness so experts can access and analyze the latest data in their battle against the disease.

We also launched the AWS Diagnostic Development Initiative, a program to support customers working to bring more accurate diagnostic solutions to market for COVID-19. Better diagnostics help accelerate treatment and containment of this pandemic. We committed $20 million to accelerate this work and help our customers harness the cloud to tackle this challenge. While the program was established in response to COVID-19, we also are looking toward the future, and we will fund diagnostic research projects that have the potential to blunt future infectious disease outbreaks.

Customers around the world have leveraged the cloud to scale up services and stand up responses to COVID-19. We joined the New York City COVID-19 Rapid Response Coalition to develop a conversational agent to enable at-risk and elderly New Yorkers to receive accurate, timely information about medical and other important needs. In response to a request from the Los Angeles Unified School District to transition 700,000 students to remote learning, AWS helped establish a call center to field IT questions, provide remote support, and enable staff to answer calls. We are providing cloud services to the CDC to help thousands of public health practitioners and clinicians gather data related to COVID-19 and inform response efforts. In the UK, AWS provides the cloud computing infrastructure for a project that analyzes hospital occupancy levels, emergency room capacity, and patient wait times to help the country's National Health Service decide where best to allocate resources. In Canada, OTN—one of the world's largest virtual care networks—is scaling its AWS-powered video service to accommodate a 4,000% spike in demand to support citizens as the pandemic continues. In Brazil, AWS will provide the São Paulo State Government with cloud computing infrastructure to guarantee online classes to 1 million students in public schools across the state.

Following CDC guidance, our Alexa health team built an experience that lets U.S. customers check their risk level for COVID-19 at home. Customers can ask, "Alexa, what do I do if I think I have COVID-19?" or "Alexa, what do I do if I think I have coronavirus?" Alexa then asks a series of questions about the person's symptoms and possible exposure. Based on those responses, Alexa then provides CDC-sourced guidance. We created a similar service in Japan, based on guidance from the Japanese Ministry of Health, Labor, and Welfare.

We're making it easy for customers to use Amazon.com or Alexa to donate directly to charities on the front lines of the COVID-19 crisis, including Feeding America, the American Red Cross, and Save the Children. Echo users have the option to say, "Alexa, make a donation to Feeding America COVID-19 Response Fund." In Seattle, we've partnered with a catering business to distribute 73,000 meals to 2,700 elderly and medically vulnerable residents in Seattle and King County during the outbreak, and we donated 8,200 laptops to help Seattle Public Schools students gain access to a device while classes are conducted virtually.

Beyond COVID

Although these are incredibly difficult times, they are an important reminder that what we do as a company can make a big difference in people's lives. Customers count on us to be there, and we are fortunate to be able to help. With our scale and ability to innovate quickly, Amazon can make a positive impact and be an organizing force for progress.

Last year, we co-founded The Climate Pledge with Christiana Figueres, the UN's former climate change chief and founder of Global Optimism, and became the first signatory to the pledge. The pledge commits Amazon to meet the goals of the Paris Agreement 10 years early—and be net zero carbon by 2040. Amazon faces significant challenges in achieving this goal because we don't just move information around—we have extensive physical infrastructure and deliver more than 10 billion items worldwide a year. And we believe if Amazon can get to net zero carbon ten years early, any company can—and we want to work together with all companies to make it a reality.

To that end, we are recruiting other companies to sign The Climate Pledge. Signatories agree to measure and report greenhouse gas emissions regularly, implement decarbonization strategies in line with the Paris Agreement, and achieve net zero annual carbon emissions by 2040. (We'll be announcing new signatories soon.)

We plan to meet the pledge, in part, by purchasing 100,000 electric delivery vans from Rivian—a Michigan-based producer of electric vehicles. Amazon aims to have 10,000 of Rivian's new electric vans on the road as early as 2022, and all 100,000 vehicles on the road by 2030. That's good for the environment, but the promise is even greater. This type of investment sends a signal to the marketplace to start inventing and developing new technologies that large, global companies need to transition to a low-carbon economy.

We've also committed to reaching 80% renewable energy by 2024 and 100% renewable energy by 2030. (The team is actually pushing to get to 100% by 2025 and has a challenging but credible plan to pull that off.) Globally, Amazon has 86 solar and wind projects that have the capacity to generate over 2,300 MW and deliver more than 6.3 million MWh of energy annually—enough to power more than 580,000 U.S. homes.

We've made tremendous progress cutting packaging waste. More than a decade ago, we created the Frustration-Free Packaging program to encourage manufacturers to package their products in easy-to-open, 100% recyclable packaging that is ready to ship to customers without the need for an additional shipping box. Since 2008, this program has saved more than 810,000 tons of packaging material and eliminated the use of 1.4 billion shipping boxes.

We are making these significant investments to drive our carbon footprint to zero despite the fact that shopping online is already inherently more carbon efficient than going to the store. Amazon's sustainability scientists have spent more than three years developing the models, tools, and metrics to measure our carbon footprint. Their detailed analysis has found that shopping online consistently generates less carbon than driving to a store, since a single delivery van trip can take approximately 100 roundtrip car journeys off the road on average. Our scientists developed a model to compare the carbon intensity of ordering Whole Foods Market groceries online versus driving to your nearest Whole Foods Market store. The study found that, averaged across all basket sizes, online grocery deliveries generate 43% lower carbon emissions per item compared to shopping in stores. Smaller basket sizes generate even greater carbon savings.

AWS is also inherently more efficient than the traditional in-house data center. That's primarily due to two things—higher utilization, and the fact that our servers and facilities are more efficient than what most companies can achieve running their own data centers. Typical single-company data centers operate at roughly 18% server utilization. They need that excess capacity to handle large usage spikes. AWS benefits from multi-tenant usage patterns and operates at far higher server utilization rates. In addition, AWS has been successful in increasing the energy efficiency of its facilities and equipment, for instance by using more efficient evaporative cooling in certain data centers instead of traditional air conditioning. A study by 451 Research found that AWS's infrastructure is 3.6 times more energy efficient than the median U.S. enterprise data center surveyed. Along with our use of renewable energy, these factors enable AWS to do the same tasks as traditional data centers with an 88% lower carbon footprint. And don't think we're not going to get those last 12 points—we'll make AWS 100% carbon free through more investments in renewable energy projects.

Leveraging scale for good

Over the last decade, no company has created more jobs than Amazon. Amazon directly employs 840,000 workers worldwide, including over 590,000 in the U.S., 115,000 in Europe, and 95,000 in Asia. In total, Amazon directly and indirectly supports 2 million jobs in the U.S., including 680,000-plus jobs created by Amazon's investments in areas like construction, logistics, and professional services, plus another 830,000 jobs created by small and medium-sized businesses selling on Amazon. Globally, we support nearly 4 million jobs. We are especially proud of the fact that many of these are entry-level jobs that give people their first opportunity to participate in the workforce.

And Amazon's jobs come with an industry-leading $15 minimum wage and comprehensive benefits. More than 40 million Americans—many making the federal minimum wage of $7.25 an hour—earn less than the lowest-paid Amazon associate. When we raised our starting minimum wage to $15 an hour in 2018, it had an immediate and meaningful impact on the hundreds of thousands of people working in our fulfillment centers. We want other big employers to join us by raising their own minimum pay rates, and we continue to lobby for a $15 federal minimum wage.

We want to improve workers' lives beyond pay. Amazon provides every full-time employee with health insurance, a 401(k) plan, 20 weeks paid maternity leave, and other benefits. These are the same benefits that Amazon's most senior executives receive. And with our rapidly changing economy, we see more clearly than ever the need for workers to evolve their skills continually to keep up with technology. That's why we're spending $700 million to provide more than 100,000 Amazonians access to training programs, at their places of work, in high-demand fields such as healthcare, cloud computing, and machine learning. Since 2012, we have offered Career Choice, a pre-paid tuition program for fulfillment center associates looking to move into high-demand occupations. Amazon pays up to 95% of tuition and fees toward a certificate or diploma in qualified fields of study, leading to enhanced employment opportunities in high-demand jobs. Since its launch, more than 25,000 Amazonians have received training for in-demand occupations.

To ensure that future generations have the skills they need to thrive in a technology-driven economy, we started a program last year called Amazon Future Engineer, which is designed to educate and train low-income and disadvantaged young people to pursue careers in computer science. We have an ambitious goal: to help hundreds of thousands of students each year learn computer science and coding. Amazon Future Engineer currently funds Introduction to Computer Science and AP Computer Science classes for more than 2,000 schools in underserved communities across the country. Each year, Amazon Future Engineer also gives 100 four-year, $40,000 college scholarships to computer science students from low-income backgrounds. Those scholarship recipients also receive guaranteed, paid internships at Amazon after their first year of college. Our program in the UK funds 120 engineering apprenticeships and helps students from disadvantaged backgrounds pursue technology careers.

For now, my own time and thinking continues to be focused on COVID-19 and how Amazon can help while we're in the middle of it. I am extremely grateful to my fellow Amazonians for all the grit and ingenuity they are showing as we move through this. You can count on all of us to look beyond the immediate crisis for insights and lessons and how to apply them going forward.

Reflect on this from Theodor Seuss Geisel:

> *"When something bad happens you have three choices. You can either let it define you, let it destroy you, or you can let it strengthen you."*

I am very optimistic about which of these civilization is going to choose.

Even in these circumstances, it remains Day 1. As always, I attach a copy of our original 1997 letter.

Sincerely,

Jeffrey P. Bezos
Founder and Chief Executive Officer
Amazon.com, Inc.

amazon

To our shareowners:

In Amazon's 1997 letter to shareholders, our first, I talked about our hope to create an "enduring franchise," one that would reinvent what it means to serve customers by unlocking the internet's power. I noted that Amazon had grown from having 158 employees to 614, and that we had surpassed 1.5 million customer accounts. We had just gone public at a split-adjusted stock price of $1.50 per share. I wrote that it was Day 1.

We've come a long way since then, and we are working harder than ever to serve and delight customers. Last year, we hired 500,000 employees and now directly employ 1.3 million people around the world. We have more than 200 million Prime members worldwide. More than 1.9 million small and medium-sized businesses sell in our store, and they make up close to 60% of our retail sales. Customers have connected more than 100 million smart home devices to Alexa. Amazon Web Services serves millions of customers and ended 2020 with a $50 billion annualized run rate. In 1997, we hadn't invented Prime, Marketplace, Alexa, or AWS. They weren't even ideas then, and none was preordained. We took great risk with each one and put sweat and ingenuity into each one.

Along the way, we've created $1.6 trillion of wealth for shareowners. Who are they? Your Chair is one, and my Amazon shares have made me wealthy. But more than 7/8ths of the shares, representing $1.4 trillion of wealth creation, are owned by others. Who are they? They're pension funds, universities, and 401(k)s, and they're Mary and Larry, who sent me this note out of the blue just as I was sitting down to write this shareholder letter:

March 5, 2021

Mr. Jeff Bezos
Executive Chairman
Amazon.com, Inc.
410 Terry Avenue North
Seattle, WA 98109

Dear Mr. Bezos,

Thanks for making Amazon a great company! We thought you would like to know how it has benefited our family.

Back in 1997 when you made Amazon public, our son, Ryan, was 12 years old and a voracious reader. For his birthday, , 1997, we bought two shares of your new book selling company, which was all we could afford at the time. Within a year or so, the shares split 2 for 1, then 3 for 1, then 2 for 1 again, giving him 24 shares. The shares were in our names because of his age. We meant to put it in custody for him but we never got around to it but he knew they were for him.

Several times over the years, Ryan would want to cash in the stock but we always said we would "buy" it from him and then eventually turn around and give it back to him as a "gift". It was kind of a running joke in the family.

Due to the exponential growth in value, we decided to split the stock between ourselves and both of our children, Ryan and Katy.

This year Ryan is buying a house and would like to sell some shares. After searching for the original certificates, we needed to convert the paper shares into digital before selling them. We noticed that the first share certificate was a very low number, issue # . I can't image how many more shares have been issued since that date!

Included is a copy of the th certificate of Amazon on , 1997 - 24 years ago. Those two shares have had a wonderful influence on our family. We all enjoyed watching Amazon value grow year after year and it's a story we love to tell others.

Congratulations on a great career as CEO of Amazon. We can't even imagine how hard you and your team have worked to make Amazon the most successful and inventive company on the planet. Now may you have time to relax and catch up on things you want to do, like space exploration!

We cannot wait to see where Amazon delivers next! Next Day to Mars!

Sincerely,

Mary and Larry

P.S. We wished we had bought 10 shares!

I am approached with similar stories all the time. I know people who've used their Amazon money for college, for emergencies, for houses, for vacations, to start their own business, for charity – and the list goes on. I'm proud of the wealth we've created for shareowners. It's significant, and it improves their lives. But I also know something else: it's not the largest part of the value we've created.

Create More Than You Consume

If you want to be successful in business (in life, actually), you have to create more than you consume. Your goal should be to create value for everyone you interact with. Any business that doesn't create value for those it touches, even if it appears successful on the surface, isn't long for this world. It's on the way out.

Remember that stock prices are not about the past. They are a prediction of *future* cash flows discounted back to the present. The stock market anticipates. I'm going to switch gears for a moment and talk about the past. How much value did we create for shareowners in 2020? This is a relatively easy question to answer because accounting systems are set up to answer it. Our net income in 2020 was $21.3 billion. If, instead of being a publicly traded company with thousands of owners, Amazon were a sole proprietorship with a single owner, that's how much the owner would have earned in 2020.

How about employees? This is also a reasonably easy value creation question to answer because we can look at compensation expense. What is an expense for a company is income for employees. In 2020, employees earned $80 billion, plus another $11 billion to include benefits and various payroll taxes, for a total of $91 billion.

How about third-party sellers? We have an internal team (the Selling Partner Services team) that works to answer that question. They estimate that, in 2020, third-party seller profits from selling on Amazon were between $25 billion and $39 billion, and to be conservative here I'll go with $25 billion.

For customers, we have to break it down into consumer customers and AWS customers.

We'll do consumers first. We offer low prices, vast selection, and fast delivery, but imagine we ignore all of that for the purpose of this estimate and value only one thing: we save customers time.

Customers complete 28% of purchases on Amazon in three minutes or less, and half of all purchases are finished in less than 15 minutes. Compare that to the typical shopping trip to a physical store – driving, parking, searching store aisles, waiting in the checkout line, finding your car, and driving home. Research suggests the typical physical store trip takes about an hour. If you assume that a typical Amazon purchase takes 15 minutes and that it saves you a couple of trips to a physical store a week, that's more than 75 hours a year saved. That's important. We're all busy in the early 21st century.

So that we can get a dollar figure, let's value the time savings at $10 per hour, which is conservative. Seventy-five hours multiplied by $10 an hour and subtracting the cost of Prime gives you value creation for each Prime member of about $630. We have 200 million Prime members, for a total in 2020 of $126 billion of value creation.

AWS is challenging to estimate because each customer's workload is so different, but we'll do it anyway, acknowledging up front that the error bars are high. Direct cost improvements from operating in the cloud versus on premises vary, but a reasonable estimate is 30%. Across AWS's entire 2020 revenue of $45 billion, that 30% would imply customer value creation of $19 billion (what would have cost them $64 billion on their own cost $45 billion from AWS). The difficult part of this estimation exercise is that the direct cost reduction is the smallest portion of the customer benefit of moving to the cloud. The bigger benefit is the increased speed of software development – something that can significantly improve the customer's competitiveness and top line. We have no reasonable way of estimating that portion of customer value except to say that it's almost certainly larger than the direct cost savings. To be conservative here (and remembering we're really only trying to get ballpark estimates), I'll say it's the same and call AWS customer value creation $38 billion in 2020.

Adding AWS and consumer together gives us total customer value creation in 2020 of $164 billion.

Summarizing:

Shareholders	$21B
Employees	$91B
3P Sellers	$25B
Customers	$164B
Total	$301B

If each group had an income statement representing their interactions with Amazon, the numbers above would be the "bottom lines" from those income statements. These numbers are part of the reason why people work for us, why sellers sell through us, and why customers buy from us. We create value for them. And this value creation is not a zero-sum game. It is not just moving money from one pocket to another. Draw the box big around all of society, and you'll find that invention is the root of all real value creation. And value created is best thought of as a metric for innovation.

Of course, our relationship with these constituencies and the value we create isn't exclusively dollars and cents. Money doesn't tell the whole story. Our relationship with shareholders, for example, is relatively simple. They invest and hold shares for a duration of their choosing. We provide direction to shareowners infrequently on matters such as annual meetings and the right process to vote their shares. And even then they can ignore those directions and just skip voting.

Our relationship with employees is a very different example. We have processes they follow and standards they meet. We require training and various certifications. Employees have to show up at appointed times. Our interactions with employees are many, and they're fine-grained. It's not just about the pay and the benefits. It's about all the other detailed aspects of the relationship too.

Does your Chair take comfort in the outcome of the recent union vote in Bessemer? No, he doesn't. I think we need to do a better job for our employees. While the voting results were lopsided and our direct relationship with employees is strong, it's clear to me that we need a better *vision* for how we create value for employees – a vision for their success.

If you read some of the news reports, you might think we have no care for employees. In those reports, our employees are sometimes accused of being desperate souls and treated as robots. That's not accurate. They're sophisticated and thoughtful people who have options for where to work. When we survey fulfillment center employees, 94% say they would recommend Amazon to a friend as a place to work.

Employees are able to take informal breaks throughout their shifts to stretch, get water, use the rest room, or talk to a manager, all without impacting their performance. These informal work breaks are in addition to the 30-minute lunch and 30-minute break built into their normal schedule.

We don't set unreasonable performance goals. We set achievable performance goals that take into account tenure and actual employee performance data. Performance is evaluated over a long period of time as we know that a variety of things can impact performance in any given week, day, or hour. If employees are on track to miss a performance target over a period of time, their manager talks with them and provides coaching.

Coaching is also extended to employees who are excelling and in line for increased responsibilities. In fact, 82% of coaching is positive, provided to employees who are meeting or exceeding expectations. We terminate the employment of less than 2.6% of employees due to their inability to perform their jobs (and that number was even lower in 2020 because of operational impacts of COVID-19).

Earth's Best Employer and Earth's Safest Place to Work

The fact is, the large team of thousands of people who lead operations at Amazon have always cared deeply for our hourly employees, and we're proud of the work environment we've created. We're also proud of the fact that Amazon is a company that does more than just create jobs for computer scientists and people with advanced degrees. We create jobs for people who never got that advantage.

Despite what we've accomplished, it's clear to me that we need a better vision for our employees' success. We have always wanted to be Earth's Most Customer-Centric Company. We won't change that. It's what got us here. But I am committing us to an addition. We are going to be Earth's Best Employer and Earth's Safest Place to Work.

In my upcoming role as Executive Chair, I'm going to focus on new initiatives. I'm an inventor. It's what I enjoy the most and what I do best. It's where I create the most value. I'm excited to work alongside the large team of passionate people we have in Ops and help invent in this arena of Earth's Best Employer and Earth's Safest Place to Work. On the details, we at Amazon are always flexible, but on matters of vision we are stubborn and relentless. We have never failed when we set our minds to something, and we're not going to fail at this either.

We dive deep into safety issues. For example, about 40% of work-related injuries at Amazon are related to musculoskeletal disorders (MSDs), things like sprains or strains that can be caused by repetitive motions. MSDs are common in the type of work that we do and are more likely to occur during an employee's first six months. We need to invent solutions to reduce MSDs for new employees, many of whom might be working in a physical role for the first time.

One such program is WorkingWell – which we launched to 859,000 employees at 350 sites across North America and Europe in 2020 – where we coach small groups of employees on body mechanics, proactive wellness, and safety. In addition to reducing workplace injuries, these concepts have a positive impact on regular day-to-day activities outside work.

We're developing new automated staffing schedules that use sophisticated algorithms to rotate employees among jobs that use different muscle-tendon groups to decrease repetitive motion and help protect employees from MSD risks. This new technology is central to a job rotation program that we're rolling out throughout 2021.

Our increased attention to early MSD prevention is already achieving results. From 2019 to 2020, overall MSDs decreased by 32%, and MSDs resulting in time away from work decreased by more than half.

We employ 6,200 safety professionals at Amazon. They use the science of safety to solve complex problems and establish new industry best practices. In 2021, we'll invest more than $300 million into safety projects, including an initial $66 million to create technology that will help prevent collisions of forklifts and other types of industrial vehicles.

When we lead, others follow. Two and a half years ago, when we set a $15 minimum wage for our hourly employees, we did so because we wanted to lead on wages – not just run with the pack – and because we believed it was the right thing to do. A recent paper by economists at the University of California-Berkeley and Brandeis University analyzed the impact of our decision to raise our minimum starting pay to $15 per hour. Their assessment reflects what we've heard from employees, their families, and the communities they live in.

Our increase in starting wage boosted local economies across the country by benefiting not only our own employees but also other workers in the same community. The study showed that our pay raise resulted in a 4.7% increase in the average hourly wage among other employers in the same labor market.

And we're not done leading. If we want to be Earth's Best Employer, we shouldn't settle for 94% of employees saying they would recommend Amazon to a friend as a place to work. We have to aim for 100%. And we'll do that by continuing to lead on wages, on benefits, on upskilling opportunities, and in other ways that we will figure out over time.

If any shareowners are concerned that Earth's Best Employer and Earth's Safest Place to Work might dilute our focus on Earth's Most Customer-Centric Company, let me set your mind at ease. Think of it this way. If we can operate two businesses as different as consumer ecommerce and AWS, and do both at the highest level, we can certainly do the same with these two vision statements. In fact, I'm confident they will reinforce each other.

The Climate Pledge

In an earlier draft of this letter, I started this section with arguments and examples designed to demonstrate that human-induced climate change is real. But, bluntly, I think we can stop saying that now. You don't have to say that photosynthesis is real, or make the case that gravity is real, or that water boils at 100 degrees Celsius at sea level. These things are simply true, as is the reality of climate change.

Not long ago, most people believed that it would be good to address climate change, but they also thought it would cost a lot and would threaten jobs, competitiveness, and economic growth. We now know better. Smart action on climate change will not only stop bad things from happening, it will also make our economy more efficient, help drive technological change, and reduce risks. Combined, these can lead to more and better jobs, healthier and happier children, more productive workers, and a more prosperous future. This doesn't mean it will be easy. It won't be. The coming decade will be decisive. The economy in 2030 will need to be vastly different from what it is today, and Amazon plans to be at the heart of the change. We launched The Climate Pledge together with Global Optimism in September 2019 because we wanted to help drive this positive revolution. We need to be part of a growing team of corporations that understand the imperatives and the opportunities of the 21st century.

Now, less than two years later, 53 companies representing almost every sector of the economy have signed The Climate Pledge. Signatories such as Best Buy, IBM, Infosys, Mercedes-Benz, Microsoft, Siemens, and Verizon have committed to achieve net-zero carbon in their worldwide businesses by 2040, 10 years ahead of the Paris Agreement. The Pledge also requires them to measure and report greenhouse gas emissions on a regular basis; implement decarbonization strategies through real business changes and innovations; and neutralize any remaining emissions with additional, quantifiable, real, permanent, and socially beneficial offsets. Credible, quality offsets are precious, and we should reserve them to compensate for economic activities where low-carbon alternatives don't exist.

The Climate Pledge signatories are making meaningful, tangible, and ambitious commitments. Uber has a goal of operating as a zero-emission platform in Canada, Europe, and the U.S. by 2030, and Henkel plans to source 100% of the electricity it uses for production from renewable sources. Amazon is making progress toward our own goal of 100% renewable energy by 2025, five years ahead of our initial 2030 target. Amazon is the largest corporate buyer of renewable energy in the world. We have 62 utility-scale wind and solar projects and 125 solar rooftops on fulfillment and sort centers around the globe. These projects have the capacity to generate over 6.9 gigawatts and deliver more than 20 million megawatt-hours of energy annually.

Transportation is a major component of Amazon's business operations and the toughest part of our plan to meet net-zero carbon by 2040. To help rapidly accelerate the market for electric vehicle technology, and to help all companies transition to greener technologies, we invested more than $1 billion in Rivian – and ordered 100,000 electric delivery vans from the company. We've also partnered with Mahindra in India and Mercedes-Benz in Europe. These custom electric delivery vehicles from Rivian are already operational, and they first hit the road in Los Angeles this past February. Ten thousand new vehicles will be on the road as early as next year, and all 100,000 vehicles will be on the road by 2030 – saving millions of metric tons of carbon. A big reason we want companies to join The Climate Pledge is to signal to the marketplace that businesses should start inventing and developing new technologies that signatories need to make good on the Pledge. Our purchase of 100,000 Rivian electric vans is a perfect example.

To further accelerate investment in new technologies needed to build a zero-carbon economy, we introduced the Climate Pledge Fund last June. The investment program started with $2 billion to invest in visionary companies that aim to facilitate the transition to a low-carbon economy. Amazon has already announced investments in CarbonCure Technologies, Pachama, Redwood Materials, Rivian, Turntide Technologies, ZeroAvia, and Infinium – and these are just some of the innovative companies we hope will build the zero-carbon economy of the future.

I have also personally allocated $10 billion to provide grants to help catalyze the systemic change we will need in the coming decade. We'll be supporting leading scientists, activists, NGOs, environmental justice organizations, and others working to fight climate change and protect the natural world. Late last year, I made my first round of grants to 16 organizations working on innovative and needle-moving solutions. It's going

to take collective action from big companies, small companies, nation states, global organizations, and individuals, and I'm excited to be part of this journey and optimistic that humanity can come together to solve this challenge.

Differentiation is Survival and the Universe Wants You to be Typical

This is my last annual shareholder letter as the CEO of Amazon, and I have one last thing of utmost importance I feel compelled to teach. I hope all Amazonians take it to heart.

Here is a passage from Richard Dawkins' (extraordinary) book The Blind Watchmaker. It's about a basic fact of biology.

> *"Staving off death is a thing that you have to work at. Left to itself – and that is what it is when it dies – the body tends to revert to a state of equilibrium with its environment. If you measure some quantity such as the temperature, the acidity, the water content or the electrical potential in a living body, you will typically find that it is markedly different from the corresponding measure in the surroundings. Our bodies, for instance, are usually hotter than our surroundings, and in cold climates they have to work hard to maintain the differential. When we die the work stops, the temperature differential starts to disappear, and we end up the same temperature as our surroundings. Not all animals work so hard to avoid coming into equilibrium with their surrounding temperature, but all animals do some comparable work. For instance, in a dry country, animals and plants work to maintain the fluid content of their cells, work against a natural tendency for water to flow from them into the dry outside world. If they fail they die. More generally, if living things didn't work actively to prevent it, they would eventually merge into their surroundings, and cease to exist as autonomous beings. That is what happens when they die."*

While the passage is not intended as a metaphor, it's nevertheless a fantastic one, and very relevant to Amazon. I would argue that it's relevant to all companies and all institutions and to each of our individual lives too. In what ways does the world pull at you in an attempt to make you normal? How much work does it take to maintain your distinctiveness? To keep alive the thing or things that make you special?

I know a happily married couple who have a running joke in their relationship. Not infrequently, the husband looks at the wife with faux distress and says to her, "Can't you just be normal?" They both smile and laugh, and of course the deep truth is that her distinctiveness is something he loves about her. But, at the same time, it's also true that things would often be easier – take less energy – if we were a little more normal.

This phenomenon happens at all scale levels. Democracies are not normal. Tyranny is the historical norm. If we stopped doing all of the continuous hard work that is needed to maintain our distinctiveness in that regard, we would quickly come into equilibrium with tyranny.

We all know that distinctiveness – originality – is valuable. We are all taught to "be yourself." What I'm really asking you to do is to embrace and be realistic about how much energy it takes to maintain that distinctiveness. The world wants you to be typical – in a thousand ways, it pulls at you. Don't let it happen.

You have to pay a price for your distinctiveness, and it's worth it. The fairy tale version of "be yourself" is that all the pain stops as soon as you allow your distinctiveness to shine. That version is misleading. Being yourself is worth it, but don't expect it to be easy or free. You'll have to put energy into it continuously.

The world will always try to make Amazon more typical – to bring us into equilibrium with our environment. It will take continuous effort, but we can and must be better than that.

* * *

As always, I attach our 1997 shareholder letter. It concluded with this: "We at Amazon.com are grateful to our customers for their business and trust, to each other for our hard work, and to our shareholders for their support and encouragement." That hasn't changed a bit. I want to especially thank Andy Jassy for agreeing to take on the CEO role. It's a hard job with a lot of responsibility. Andy is brilliant and has the highest

of high standards. I guarantee you that Andy won't let the universe make us typical. He will muster the energy needed to keep alive in us what makes us special. That won't be easy, but it is critical. I also predict it will be satisfying and oftentimes fun. Thank you, Andy.

To all of you: be kind, be original, create more than you consume, and never, never, never let the universe smooth you into your surroundings. It remains Day 1.

Sincerely,

Jeffrey P. Bezos
Founder and Chief Executive Officer
Amazon.com, Inc.

Dear shareholders:

Over the past 25 years at Amazon, I've had the opportunity to write many narratives, emails, letters, and keynotes for employees, customers, and partners. But, this is the first time I've had the honor of writing our annual shareholder letter as CEO of Amazon. Jeff set the bar high on these letters, and I will try to keep them worth reading.

When the pandemic started in early 2020, few people thought it would be as expansive or long-running as it's been. Whatever role Amazon played in the world up to that point became further magnified as most physical venues shut down for long periods of time and people spent their days at home. This meant that hundreds of millions of people relied on Amazon for PPE, food, clothing, and various other items that helped them navigate this unprecedented time. Businesses and governments also had to shift, practically overnight, from working with colleagues and technology on-premises to working remotely. AWS played a major role in enabling this business continuity. Whether companies saw extraordinary demand spikes, or demand diminish quickly with reduced external consumption, the cloud's elasticity to scale capacity up and down quickly, as well as AWS's unusually broad functionality helped millions of companies adjust to these difficult circumstances.

Our AWS and Consumer businesses have had different demand trajectories during the pandemic. In the first year of the pandemic, AWS revenue continued to grow at a rapid clip—30% year over year ("YoY") in 2020 on a $35 billion annual revenue base in 2019—but slower than the 37% YoY growth in 2019. This was due in part to the uncertainty and slowing demand that so many businesses encountered, but also in part to our helping companies optimize their AWS footprint to save money. Concurrently, companies were stepping back and determining what they wanted to change coming out of the pandemic. Many concluded that they didn't want to continue managing their technology infrastructure themselves, and made the decision to accelerate their move to the cloud. This shift by so many companies (along with the economy recovering) helped re-accelerate AWS's revenue growth to 37% YoY in 2021.

Conversely, our Consumer revenue grew dramatically in 2020. In 2020, Amazon's North America and International Consumer revenue grew 39% YoY on the very large 2019 revenue base of $245 billion; and, this extraordinary growth extended into 2021 with revenue increasing 43% YoY in Q1 2021. These are astounding numbers. We realized the equivalent of three years' forecasted growth in about 15 months.

As the world opened up again starting in late Q2 2021, and more people ventured out to eat, shop, and travel, consumer spending returned to being spread over many more entities. We weren't sure what to expect in 2021, but the fact that we continued to grow at double digit rates (with a two-year Consumer compounded annual growth rate of 29%) was encouraging as customers appreciated the role Amazon played for them during the pandemic, and started using Amazon for a larger amount of their household purchases.

This growth also created short-term logistics and cost challenges. We spent Amazon's first 25 years building a very large fulfillment network, and then had to double it in the last 24 months to meet customer demand. As we were bringing this new capacity online, the labor market tightened considerably, making it challenging both to receive all of the inventory our vendors and sellers wanted to send us and to place that inventory as close to customers as we typically do. Combined with ocean, air, and trucking capacity becoming scarcer and more expensive, this created extra transportation and productivity costs. Supply chains were disrupted in ways none of us had seen previously. We hoped that the major impact from COVID-19 would recede as 2021 drew to a close, but then omicron reared its head in December, which had worldwide ramifications, including impacting people's ability to work. And then in late February, with Russia's invasion of Ukraine, fuel costs and inflation became bigger issues with which to contend.

So, 2021 was a crazy and unpredictable year, continuing a trend from 2020. But, I'm proud of the incredible commitment and effort from our employees all over the world. I'm not sure any of us would have gotten

through the pandemic the same way without the dedication and extraordinary efforts shown by our teams during this period, and I'm eternally grateful.

It's not normal for a company of any size to be able to respond to something as discontinuous and unpredictable as this pandemic turned out to be. What is it about Amazon that made it possible for us to do so? It's because we weren't starting from a standing start. We had been iterating on and remaking our fulfillment capabilities for nearly two decades. In every business we pursue, we're constantly experimenting and inventing. We're divinely discontented with customer experiences, whether they're our own or not. We believe these customer experiences can always be better, and we strive to make customers' lives better and easier every day. The beauty of this mission is that you never run out of runway; customers always want better, and our job is both to listen to their feedback and to imagine what else is possible and invent on their behalf.

People often assume that the game-changing inventions they admire just pop out of somebody's head, a light bulb goes off, a team executes to that idea, and presto—you have a new invention that's a breakaway success for a long time. That's rarely, if ever, how it happens. One of the lesser known facts about innovative companies like Amazon is that they are relentlessly debating, re-defining, tinkering, iterating, and experimenting to take the seed of a big idea and make it into something that resonates with customers and meaningfully changes their customer experience over a long period of time.

Let me give you some Amazon examples.

Our Fulfillment Network: Going back to the pandemic, there's no way we could have started working on our fulfillment network in March 2020 and satisfied anything close to what our customers needed. We'd been innovating in our fulfillment network for 20 years, constantly trying to shorten the time to get items to customers. In the early 2000s, it took us an average of 18 hours to get an item through our fulfillment centers and on the right truck for shipment. Now, it takes us two. To deliver as reliably and cost-effectively as we desire, and to serve Amazon Prime members expecting shipments in a couple of days, we spent years building out an expansive set of fulfillment centers, a substantial logistics and transportation capability, and reconfigured how we did virtually everything in our facilities. For perspective, in 2004, we had seven fulfillment centers in the U.S. and four in other parts of the world, and we hadn't yet added delivery stations, which connect our fulfillment and sortation centers to the last-mile delivery vans you see driving around your neighborhood. Fast forward to the end of 2021, we had 253 fulfillment centers, 110 sortation centers, and 467 delivery stations in North America, with an additional 157 fulfillment centers, 58 sortation centers, and 588 delivery stations across the globe. Our delivery network grew to more than 260,000 drivers worldwide, and our Amazon Air cargo fleet has more than 100 aircraft. This has represented a capital investment of over $100 billion and countless iterations and small process improvements by over a million Amazonians in the last decade and a half.

Ironically, just before COVID started, we'd made the decision to invest billions of incremental dollars over several years to deliver an increasing number of Prime shipments in one day. This initiative was slowed by the challenges of the pandemic, but we've since resumed our focus here. Delivering a substantial amount of shipments in one day is hard (especially across the millions of items that we offer) and initially expensive as we build out the infrastructure to scale this efficiently. But, we believe our over 200 million Prime customers, who will tell you very clearly that faster is almost always better, will love this. So, this capability to ship millions of items within a couple days (and increasingly one day) was not from one aha moment and not developed in a year or two. It's been hard-earned by putting ourselves in the shoes of our customers, knowing what they wanted, organizing Amazonians to work together to invent better solutions, and investing a large amount of financial and people resources over 20 years (often well in advance of when it would pay out). This type of iterative innovation is never finished and has periodic peaks in investment years, but leads to better long-term customer experiences, customer loyalty, and returns for our shareholders.

AWS: As we were defining AWS and working backwards on the services we thought customers wanted, we kept triggering one of the biggest tensions in product development—where to draw the line on functionality in V1. One early meeting in particular—for our core compute service called Elastic Compute Cloud ("EC2")—was scheduled for an hour, and took three, as we animatedly debated whether we could launch a compute service without an accompanying persistent block storage companion (a form of network attached storage).

Everybody agreed that having a persistent block store was important to a complete compute service; however, to have one ready would take an extra year. The question became could we offer customers a useful service where they could get meaningful value before we had all the features we thought they wanted? We decided that the initial launch of EC2 could be feature-poor if we also organized ourselves to listen to customers and iterate quickly. This approach works well if you indeed iterate quickly; but, is disastrous if you can't. We launched EC2 in 2006 with one instance size, in one data center, in one region of the world, with Linux operating system instances only (no Windows), without monitoring, load balancing, auto-scaling, or yes, persistent storage. EC2 was an initial success, but nowhere near the multi-billion-dollar service it's become until we added the missing capabilities listed above, and then some.

In the early days of AWS, people sometimes asked us why compute wouldn't just be an undifferentiated commodity. But, there's a lot more to compute than just a server. Customers want various flavors of compute (e.g. server configurations optimized for storage, memory, high-performance compute, graphics rendering, machine learning), multiple form factors (e.g. fixed instance sizes, portable containers, serverless functions), various sizes and optimizations of persistent storage, and a slew of networking capabilities. Then, there's the CPU chip that runs in your compute. For many years, the industry had used Intel or AMD x86 processors. We have important partnerships with these companies, but realized that if we wanted to push price and performance further (as customers requested), we'd have to develop our own chips, too. Our first generalized chip was Graviton, which we announced in 2018. This helped a subset of customer workloads run more cost-effectively than prior options. But, it wasn't until 2020, after taking the learnings from Graviton and innovating on a new chip, that we had something remarkable with our Graviton2 chip, which provides up to 40% better price-performance than the comparable latest generation x86 processors. Think about how much of an impact 40% improvement on compute is. Compute is used for every bit of technology. That's a huge deal for customers. And, while Graviton2 has been a significant success thus far (48 of the top 50 AWS EC2 customers have already adopted it), the AWS Chips team was already learning from what customers said could be better, and announced Graviton3 this past December (offering a 25% improvement on top of Graviton2's relative gains). The list of what we've invented and delivered for customers in EC2 (and AWS in general) is pretty mind-boggling, and this iterative approach to innovation has not only given customers much more functionality in AWS than they can find anywhere else (which is a significant differentiator), but also allowed us to arrive at the much more game-changing offering that AWS is today.

Devices: Our first foray into devices was the Kindle, released in 2007. It was not the most sophisticated industrial design (it was creamy white in color and the corners were uncomfortable for some people to hold), but revolutionary because it offered customers the ability to download any of over 90,000 books (now millions) in 60 seconds—and we got better and faster at building attractive designs. Shortly thereafter, we launched a tablet, and then a phone (with the distinguishing feature of having front-facing cameras and a gyroscope to give customers a dynamic perspective along with varied 3D experiences). The phone was unsuccessful, and though we determined we were probably too late to this party and directed these resources elsewhere, we hired some fantastic long-term builders and learned valuable lessons from this failure that have served us well in devices like Echo and FireTV.

When I think of the first Echo device—and what Alexa could do for customers at that point—it was noteworthy, yet so much less capable than what's possible today. Today, there are hundreds of millions of Alexa-enabled devices out there (in homes, offices, cars, hotel rooms, Amazon Echo devices, and third-party manufacturer devices); you can listen to music—or watch videos now; you can control your lights and home automation; you can create routines like "Start My Day" where Alexa tells you the weather, your estimated commute time based on current traffic, then plays the news; you can easily order retail items on Amazon; you can get general or customized news, updates on sporting events and related stats—and we're still quite early with respect to what Alexa and Alexa-related devices will do for customers. Our goal is for Alexa to be the world's most helpful and resourceful personal assistant, who makes people's lives meaningfully easier and better. We have a lot more inventing and iterating to go, but customers continue to indicate that we're on the right path. We have several other devices at varying stages of evolution (e.g. Ring and Blink provide the leading digital home security solutions, Astro is a brand new home robot that we just launched in late 2021), but it's safe to say that every one of our devices, whether you're talking about Kindle, FireTV, Alexa/Echo, Ring, Blink, or Astro is an invention-in-process with a lot more coming that will keep improving customers' lives.

Prime Video: We started in 2006 with an offering called Amazon Unbox where customers could download about a thousand movies from major studios. This made sense as bandwidth was slower those days (it would take an hour to download a video). But, as bandwidth got much faster to people's homes and mobile devices, along with the advent of connected TVs, streaming was going to be a much better customer solution, and we focused our efforts on streaming. In 2011, we started offering over 5,000 streaming movies and shows as part of customers' Amazon Prime subscriptions. Initially, all of our content was produced by other studios and entertainment companies. These deals were expensive, country-specific, and only available to us for a limited period; so, to expand our options, we started creating our own original shows. Our early efforts included short-lived shows like *Alpha House* and *Betas*, before we had our first award-winning series in *Transparent*, and eventually created multi-year franchises in *The Marvelous Mrs. Maisel*, *The Boys*, *Bosch*, and *Jack Ryan*. Along the way, we've learned a lot about producing compelling entertainment with memorable moments and using machine learning and other inventive technology to provide a superior-quality streaming experience (with useful, relevant data about actors, TV shows, movies, music, or sports stats a click away in our unique X-Ray feature). You might have seen some of this in action in our recent new hit series, *Reacher*, and you'll hopefully see it in our upcoming Lord of the Rings series launch (coming Labor Day 2022). We also expect that you'll see this iterative invention when we launch *Thursday Night Football*, the NFL's first weekly, prime time, streaming-only broadcast, airing exclusively on Prime Video starting in September 2022. Our agreement with the NFL is for 11 years, and we will work relentlessly over the next several years to reinvent the NFL viewing experience for football fans.

This track record of frequent invention is not only why more sports entities are choosing to work with Prime Video, but also why so many large entertainment companies have become Prime Video Channels partners. Channels is a program that enables entertainment companies to leverage Prime Video's unique technology and viewing experience, as well as its very large member base to offer monthly subscriptions to their content. Companies like Warner Bros. Discovery, Paramount, Starz, Corus Entertainment, and Globo have found that they're driving substantial incremental membership and better customer experience through Channels. While there is so much progress in Prime Video from where we started, we have more invention in front of us in the next 15 years than the last 15—and our team is passionately committed to providing customers with the most expansive collection of compelling content anywhere in the world.

This same sort of iterative invention can be applied to efforts supporting people and communities. Last summer, we added two new Leadership Principles: **Strive to be Earth's Best Employer** and **Success and Scale Bring Broad Responsibility**. These concepts were always implicit at Amazon, but explicit Leadership Principles help us ask ourselves—and empower more Amazonians at all levels to ask—whether we're living up to these principles.

For example, more than a million Amazonians work in our fulfillment network. In 2018, we championed the $15 minimum wage (which is more than double the federal minimum wage), but haven't stopped there. We continued to increase compensation such that our average starting hourly salary is currently over $18. Along with this compensation, we offer very robust benefits, including full health insurance, a 401K plan, up to 20 weeks of parental leave, and full tuition coverage for associates who want to get a college education (whether they remain with us or not). We're not close to being done in how we improve the lives of our employees. We've researched and created a list of what we believe are the top 100 employee experience pain points and are systematically solving them. We're also passionate about further improving safety in our fulfillment network, with a focus on reducing strains, sprains, falls, and repetitive stress injuries. Our injury rates are sometimes misunderstood. We have operations jobs that fit both the "warehousing" and "courier and delivery" categories. In the last U.S. public numbers, our recordable incident rates were a little higher than the average of our warehousing peers (6.4 vs. 5.5), and a little lower than the average of our courier and delivery peers (7.6 vs. 9.1). This makes us about average relative to peers, but we don't seek to be average. We want to be best in class. When I first started in my new role, I spent significant time in our fulfillment centers and with our safety team, and hoped there might be a silver bullet that could change the numbers quickly. I didn't find that. At our scale (we hired over 300,000 people in 2021 alone, many of whom were new to this sort of work and needed training), it takes rigorous analysis, thoughtful problem-solving, and a willingness to invent to get to where you want. We've been dissecting every process path to discern how we can further improve. We have a variety of programs in flight (e.g. rotational programs that help employees avoid spending too much time doing the same repetitive motions, wearables that prompt employees when

they're moving in a dangerous way, improved shoes to provide better toe protection, training programs on body mechanics, wellness, and safety practices). But, we still have a ways to go, and we'll approach it like we do other customer experiences—we'll keep learning, inventing, and iterating until we have more transformational results. We won't be satisfied until we do.

Similarly, at our scale, we have a significant carbon footprint. It's a big part of why we created The Climate Pledge a few years ago (a pledge to be net-zero carbon by 2040, ten years ahead of the Paris Agreement). We're making significant progress on this effort (we're committed to powering our operations with 100% renewable energy by 2025—five years ahead of our original target of 2030, we have ordered over 100,000 electric vans to deliver packages, and have over 300 companies who've joined us in The Climate Pledge). But, we have a different challenge than most companies given the diversity and intensity of our operations (including shipping billions of packages per year). We're committed to the challenge, but it will take relentless invention.

We also are trying to increase the amount of affordable housing in the communities in which we have a large presence. Our more than $2 billion Housing Equity Fund that we started a year ago has already allocated $1.2 billion toward affordable housing initiatives in the areas around Washington state's Puget Sound region, Arlington (Virginia), and Nashville (Tennessee).

A final quick example is Kuiper, our low Earth orbit satellite network that we're spending over $10 billion to build in the next several years. Kuiper will serve customers with minimal to no fixed broadband connectivity, changing access to information and resources for many communities (analysts estimate approximately 300-400 million customers globally are in this category). We're optimistic that there is a pretty good business model for us too, but we'll see—and it's a real game changer for underserved families and businesses that will unfold over many years as we keep evolving its capabilities.

This type of iterative innovation is pervasive across every team at Amazon. I could have given comparable examples in Advertising, Grocery, Gaming, Amazon Music, Amazon Care (our telemedicine offering), or Pharmacy, to name a few. All of these stories are still being written as we rapidly experiment, learn, and continue to try to make our customer experience better every day.

If this approach sounds appealing, a natural question is what's required to get good at it? It's easier said than done, but here are some components that have helped us:

1/ **Hire the Right Builders**: We disproportionately index in hiring builders. We think of builders as people who like to invent, who look at customer experiences, dissect what doesn't work well about them, and seek to reinvent them. We want people who keep asking why can't it be done? We want people who like to experiment and tinker, and who realize launch is the starting line, not the finish line.

2/ **Organize Builders into Teams That Are as Separable and Autonomous as Possible**: It's hard for teams to be deep in what customers care about in multiple areas. It's also hard to spend enough time on the new initiatives when there's resource contention with the more mature businesses; the surer bets usually win out. Single-threaded teams will know their customers' needs better, spend all their waking work hours inventing for them, and develop context and tempo to keep iterating quickly.

3/ **Give Teams the Right Tools and Permission to Move Fast**: Speed is not pre-ordained. It's a leadership choice. It has trade-offs, but you can't wake up one day and start moving fast. It requires having the right tools to experiment and build fast (a major part of why we started AWS), allowing teams to make two-way door decisions themselves, and setting an expectation that speed matters. And, it does. Speed is disproportionally important to every business at every stage of its evolution. Those that move slower than their competitive peers fall away over time.

4/ **You Need Blind Faith, But No False Hope**: This is a lyric from one of my favorite Foo Fighters songs ("Congregation"). When you invent, you come up with new ideas that people will reject because they haven't been done before (that's where the blind faith comes in), but it's also important to step back and make sure you have a viable plan that'll resonate with customers (avoid false hope). We're lucky that we have builders who challenge each other, feedback loops that give us access to customer feedback, and a product

development process of working backwards from the customer where having to write a Press Release (to flesh out the customer benefits) and a Frequently Asked Questions document (to detail how we'd build it) helps us have blind faith without false hope (at least usually).

5/ **Define a Minimum Loveable Product (MLP), and Be Willing to Iterate Fast**: Figuring out where to draw the line for launch is one of the most difficult decisions teams must make. Often, teams wait too long, and insist on too many bells and whistles, before launching. And, they miss the first mover advantage or opportunity to build mindshare in fast-moving market segments before well-executing peers get too far ahead. The launch product must be good enough that you believe it'll be loved from the get-go (why we call it a "Minimum Loveable Product" vs. a "Minimum Viable Product"), but in newer market segments, teams are often better off getting this MLP to customers and iterating quickly thereafter.

6/ **Adopt a Long-term Orientation**: We're sometimes criticized at Amazon for not shutting much down. It's true that we have a longer tolerance for our investments than most companies. But, we know that transformational invention takes multiple years, and if you're making big bets that you believe could substantially change customer experience (and your company), you have to be in it for the long-haul or you'll give up too quickly.

7/ **Brace Yourself for Failure**: If you invent a lot, you will fail more often than you wish. Nobody likes this part, but it comes with the territory. When it's clear that we've launched something that won't work, we make sure we've learned from what didn't go well, and secure great landing places for team members who delivered well—or your best people will hesitate to work on new initiatives.

Albert Einstein is sometimes credited with describing compound interest as the eighth wonder of the world ("He who understands it, earns it. He who doesn't, pays it"). We think of iterative innovation in much the same way. Iterative innovation creates magic for customers. Constantly inventing and improving products for customers has a compounding effect on the customer experience, and in turn on a business's prospects.

Time is your friend when you are compounding gains. Amazon is a big company with some large businesses, but it's still early days for us. We will continue to be insurgent—inventing in businesses that we're in, in new businesses that we've yet to launch, and in new ideas that we haven't even imagined yet. It remains Day 1.

Sincerely,

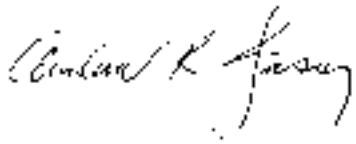

Andy Jassy
President and Chief Executive Officer
Amazon.com, Inc.

P.S. As we have always done, our original 1997 Shareholder Letter follows. What's written there is as true today as it was in 1997.

amazon.com

1997 LETTER TO SHAREHOLDERS

(Reprinted from the 1997 Annual Report)

To our shareholders:

Amazon.com passed many milestones in 1997: by year-end, we had served more than 1.5 million customers, yielding 838% revenue growth to $147.8 million, and extended our market leadership despite aggressive competitive entry.

But this is Day 1 for the Internet and, if we execute well, for Amazon.com. Today, online commerce saves customers money and precious time. Tomorrow, through personalization, online commerce will accelerate the very process of discovery. Amazon.com uses the Internet to create real value for its customers and, by doing so, hopes to create an enduring franchise, even in established and large markets.

We have a window of opportunity as larger players marshal the resources to pursue the online opportunity and as customers, new to purchasing online, are receptive to forming new relationships. The competitive landscape has continued to evolve at a fast pace. Many large players have moved online with credible offerings and have devoted substantial energy and resources to building awareness, traffic, and sales. Our goal is to move quickly to solidify and extend our current position while we begin to pursue the online commerce opportunities in other areas. We see substantial opportunity in the large markets we are targeting. This strategy is not without risk: it requires serious investment and crisp execution against established franchise leaders.

It's All About the Long Term

We believe that a fundamental measure of our success will be the shareholder value we create over the *long term*. This value will be a direct result of our ability to extend and solidify our current market leadership position. The stronger our market leadership, the more powerful our economic model. Market leadership can translate directly to higher revenue, higher profitability, greater capital velocity, and correspondingly stronger returns on invested capital.

Our decisions have consistently reflected this focus. We first measure ourselves in terms of the metrics most indicative of our market leadership: customer and revenue growth, the degree to which our customers continue to purchase from us on a repeat basis, and the strength of our brand. We have invested and will continue to invest aggressively to expand and leverage our customer base, brand, and infrastructure as we move to establish an enduring franchise.

Because of our emphasis on the long term, we may make decisions and weigh tradeoffs differently than some companies. Accordingly, we want to share with you our fundamental management and decision-making approach so that you, our shareholders, may confirm that it is consistent with your investment philosophy:

- We will continue to focus relentlessly on our customers.
- We will continue to make investment decisions in light of long-term market leadership considerations rather than short-term profitability considerations or short-term Wall Street reactions.
- We will continue to measure our programs and the effectiveness of our investments analytically, to jettison those that do not provide acceptable returns, and to step up our investment in those that work best. We will continue to learn from both our successes and our failures.

- We will make bold rather than timid investment decisions where we see a sufficient probability of gaining market leadership advantages. Some of these investments will pay off, others will not, and we will have learned another valuable lesson in either case.
- When forced to choose between optimizing the appearance of our GAAP accounting and maximizing the present value of future cash flows, we'll take the cash flows.
- We will share our strategic thought processes with you when we make bold choices (to the extent competitive pressures allow), so that you may evaluate for yourselves whether we are making rational long-term leadership investments.
- We will work hard to spend wisely and maintain our lean culture. We understand the importance of continually reinforcing a cost-conscious culture, particularly in a business incurring net losses.
- We will balance our focus on growth with emphasis on long-term profitability and capital management. At this stage, we choose to prioritize growth because we believe that scale is central to achieving the potential of our business model.
- We will continue to focus on hiring and retaining versatile and talented employees, and continue to weight their compensation to stock options rather than cash. We know our success will be largely affected by our ability to attract and retain a motivated employee base, each of whom must think like, and therefore must actually be, an owner.

We aren't so bold as to claim that the above is the "right" investment philosophy, but it's ours, and we would be remiss if we weren't clear in the approach we have taken and will continue to take.

With this foundation, we would like to turn to a review of our business focus, our progress in 1997, and our outlook for the future.

Obsess Over Customers

From the beginning, our focus has been on offering our customers compelling value. We realized that the Web was, and still is, the World Wide Wait. Therefore, we set out to offer customers something they simply could not get any other way, and began serving them with books. We brought them much more selection than was possible in a physical store (our store would now occupy 6 football fields), and presented it in a useful, easy-to-search, and easy-to-browse format in a store open 365 days a year, 24 hours a day. We maintained a dogged focus on improving the shopping experience, and in 1997 substantially enhanced our store. We now offer customers gift certificates, 1-Click^{SM} shopping, and vastly more reviews, content, browsing options, and recommendation features. We dramatically lowered prices, further increasing customer value. Word of mouth remains the most powerful customer acquisition tool we have, and we are grateful for the trust our customers have placed in us. Repeat purchases and word of mouth have combined to make Amazon.com the market leader in online bookselling.

By many measures, Amazon.com came a long way in 1997:

- Sales grew from $15.7 million in 1996 to $147.8 million – an 838% increase.
- Cumulative customer accounts grew from 180,000 to 1,510,000 – a 738% increase.
- The percentage of orders from repeat customers grew from over 46% in the fourth quarter of 1996 to over 58% in the same period in 1997.
- In terms of audience reach, per Media Metrix, our Web site went from a rank of 90th to within the top 20.
- We established long-term relationships with many important strategic partners, including America Online, Yahoo!, Excite, Netscape, GeoCities, AltaVista, @Home, and Prodigy.

Infrastructure

During 1997, we worked hard to expand our business infrastructure to support these greatly increased traffic, sales, and service levels:

- Amazon.com's employee base grew from 158 to 614, and we significantly strengthened our management team.
- Distribution center capacity grew from 50,000 to 285,000 square feet, including a 70% expansion of our Seattle facilities and the launch of our second distribution center in Delaware in November.
- Inventories rose to over 200,000 titles at year-end, enabling us to improve availability for our customers.
- Our cash and investment balances at year-end were $125 million, thanks to our initial public offering in May 1997 and our $75 million loan, affording us substantial strategic flexibility.

Our Employees

The past year's success is the product of a talented, smart, hard-working group, and I take great pride in being a part of this team. Setting the bar high in our approach to hiring has been, and will continue to be, the single most important element of Amazon.com's success.

It's not easy to work here (when I interview people I tell them, "You can work long, hard, or smart, but at Amazon.com you can't choose two out of three"), but we are working to build something important, something that matters to our customers, something that we can all tell our grandchildren about. Such things aren't meant to be easy. We are incredibly fortunate to have this group of dedicated employees whose sacrifices and passion build Amazon.com.

Goals for 1998

We are still in the early stages of learning how to bring new value to our customers through Internet commerce and merchandising. Our goal remains to continue to solidify and extend our brand and customer base. This requires sustained investment in systems and infrastructure to support outstanding customer convenience, selection, and service while we grow. We are planning to add music to our product offering, and over time we believe that other products may be prudent investments. We also believe there are significant opportunities to better serve our customers overseas, such as reducing delivery times and better tailoring the customer experience. To be certain, a big part of the challenge for us will lie not in finding new ways to expand our business, but in prioritizing our investments.

We now know vastly more about online commerce than when Amazon.com was founded, but we still have so much to learn. Though we are optimistic, we must remain vigilant and maintain a sense of urgency. The challenges and hurdles we will face to make our long-term vision for Amazon.com a reality are several: aggressive, capable, well-funded competition; considerable growth challenges and execution risk; the risks of product and geographic expansion; and the need for large continuing investments to meet an expanding market opportunity. However, as we've long said, online bookselling, and online commerce in general, should prove to be a very large market, and it's likely that a number of companies will see significant benefit. We feel good about what we've done, and even more excited about what we want to do.

1997 was indeed an incredible year. We at Amazon.com are grateful to our customers for their business and trust, to each other for our hard work, and to our shareholders for their support and encouragement.

Jeffrey P. Bezos
Founder and Chief Executive Officer
Amazon.com, Inc.

The full collection of the

NOMAD INVESTMENT PARTNERSHIP LETTERS TO PARTNERS

2001 – 2014

Nick Sleep and Qais Zakaria

Preamble

Below you will find a copy of the full collection of the Nomad Letters to Partners, our magnum opus, as it were. These letters were written every six months, from the end of 2001 to early 2014, and sent to Partners in the Nomad Investment Partnership. More recently, they have enjoyed a life of their own in the financial press and internet, quite without our knowledge or, in some cases, approval. Indeed, these bootleg copies were never intended for wide circulation, let alone involuntary publishing, and contain our personal details. We would ask that readers of those hooky letters please respect our privacy and preference to maintain our low profile (think deep-burrowing earthworms). The approved letters that follow have been lightly edited mainly for privacy purposes (and topped and tailed with this preamble and a postamble) but otherwise remain unchanged from the original. We hope that you enjoy the read and would ask only that we are attributed where required and that any web links used in reference are to the approved version found on the IGY Foundation website (not back to the bootleggers), please. Those that do wish to get in touch may do so through the "contact us" function on the IGY Foundation website.

The Nomad letters themselves have been reproduced here in chronological order to help the reader who has the stamina to make it through the next hundred and ten thousand words (what did we find to say?), understand our journey from cigar butt investing to near permanent holdings. With just a few months to go to the twentieth anniversary of the inception of Nomad, it is now all but inevitable that our annual performance will be around twenty percent for twenty years; evidence, perhaps, that investors don't have to go changing their holdings with their underwear and, forgive us if we continue the theme, they really can make their money sitting on their assets!

Our motivation for publishing the letters on Nick's charitable foundation website, is to raise the "and what then" issue: that is, if you are blessed with some success from investing, what then? Elsewhere on this website we have described our "what then" thinking in a drop down tab entitled "X-amount". But that is our journey and everyone is different. (As an aside, these may be the only investment letters published on a charity website, which asks the question, why aren't there more? And, if there were, might it help put the investment activity in more productive psychic space?)

Investing is a wonderful, thoughtful, adventure but it can also be self-centered, a tendency that can be reinforced by the wealth that can follow. We think it is true that, once past X-amount, real meaning comes with reinvesting in society through charitable giving, which can also be a thoughtful, challenging, wonderful adventure, but with the added bonus that it feels like the world working properly. We hope that you can join us.

Nick Sleep and Qais Zakaria, Spring 2021.

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3rd June 2014

Mr Warren Buffett
Berkshire Hathaway Inc
3555 Farnam Street
Omaha
NE 68131
USA

Dear Mr Buffett

After thirteen happy years of running the Nomad Investment Partnership, Zak and I have decided to close the fund. The process requires us to return cash to our investors and so, after many years as shareholders in Berkshire (ten, I think), we have recently sold our shares.

It appears to all the world that the performance that Nomad has enjoyed over the years was created by Zak and me. That is not the case. As time goes by, the performance that our clients have received is the capitalisation of the success of the firms in which we have invested. In other words, the real work is done by you and the good people of Berkshire.

The purpose of this letter is to say a very big thank you, and to let you know that you have made a real difference. Nomad was not a particularly large fund, but over the years it did make around U$2bn for its clients, which were predominantly charities and educational endowments. Berkshire was a big part of that. That strikes us as capitalism working well.

For our part, Zak and I are keen to leave the professional industry behind, and spend our time in more caring pursuits. Zak has his various charitable causes and I have it in mind to set up a centre to provide respite care. Both of these activities will require long term funding, and so whilst you will lose us as professional investors, we will be able to repurchase our shares both privately and for the charities that we run. You don't get rid of us that easily!

We will be keeping the office, and a new sign will be hung above (our somewhat shabby) front door. We look forward to seeing you at the next AGM, and extend an invitation to visit us at Burnsall Street.

With the warmest regards

Nick Sleep

SLEEP, ZAKARIA AND COMPANY, LTD. IS THE INVESTMENT ADVISOR TO THE NOMAD INVESTMENT PARTNERSHIP AND IS AUTHORISED AND REGULATED BY THE FINANCIAL CONDUCT AUTHORITY, NO 451772.

BERKSHIRE HATHAWAY INC.
[illegible] FARNAM STREET
SUITE [illegible]
OMAHA, NEBRASKA [illegible]
TELEPHONE [illegible]
FAX [illegible]

WARREN E. BUFFETT, CHAIRMAN

June 12, 2014

Mr. Nick Sleep
Sleep, Zakaria and Company, Ltd.
1A, Burnsall Street
London, SW3 3SR
England

Dear Nick:

Thanks for sending along the update. You and Zak have made the right choice. I predict you will find life is just beginning.

Best regards.

Sincerely,

Warren E. Buffett

WEB/db

18th January 2002

To the Partners of the Nomad Investment Partnership.

The Nomad Investment Partnership was launched in early September 2001 and began investing on September 10th. In the brief period since inception the fund has risen 10.1%, which compares with a gain of 3.9% for the MSCI World Index. Unaudited gross NAV per share at the end of December was U$1101.42. Nomad is an absolute return fund and reference here to an index is simply to place our performance, short term as it is, in context. We expect to beat the index handsomely over time, but only as a byproduct of our absolute return orientation. We also expect the absolute return of the main indices to be modest over the next decade and so the index is not likely to be much of a return hurdle.

You can expect from us an annual and interim letter (this is our inaugural annual letter), and Global Investment Reviews eight times a year in which we discuss our investment thoughts. From Nomad's administrator (Daiwa Securities Trust and Banking, contact Dane Schmidt +353 1603 9921 with your inquires) you can expect a monthly statement of your account and annual and interim financial statements starting in June 2002. We are considering hosting an open day once a year (any feedback on whether this would be a good idea would be appreciated) and we are always available for your inquiries by phone or letter. Nomad's orientation is genuinely long term, and more regular reports, daily, weekly, monthly or otherwise, are likely to be of little value to you, and may even be counterproductive for us.

As it turns out our launch date was rather fortuitous. The price of businesses fell almost immediately and despite regular additional contributions by new investors we were able to invest a sizeable portion of the fund much faster than we would have anticipated and at prices which we feel will produce very satisfactory returns. We have made 18 investments to date which Bloomberg classify in 16 different sectors which are detailed overleaf. The Bloomberg sectoral categories are rather narrow and there is in fact a notable concentration in media (TV, newspapers and publishing) at around 21% of the portfolio and hotels, resorts and casinos which make up 12% of the fund. The next largest grouping is telecom services (mobile and cable) which make up 10% of the fund. The geographical distribution is as follows: south east Asia 32.8%; North America 23.6%; Europe 12.7% and other emerging markets 2.9%.

When we evaluate potential investments, we are looking for businesses trading at around half of their real business value, companies run by owner-oriented management and employing capital allocation strategies consistent with long term shareholder wealth creation. Finding all three is rare, and that is why we think Nomad has a material advantage in being a global fund. We can look far and wide for candidates and simply are not required to invest in anything that does not fit. Chris Browne of Tweedy Browne has likened the research process to detective work or perhaps investigative journalism, and we could not agree more.

One feature of our investment letters will be to highlight one or two of our investments or discuss investment issues at large. For those of a particularly inquisitive or analytic nature we may in the future enclose some meeting notes as well. This time we have selected two current holdings which we hope will be typical of Nomad's stock picks. The first is International Speedway in the US, and second is Matichon in Thailand.

International Speedway (approx. 3.7% of the portfolio at year end) owns and operates 12

motor racing circuits in the US including Daytona, Watkin's Glen and Talladega, and plays host to 20 of the 39 Nascar races. The National Association for Stock Car Auto Racing (Nascar) was founded in 1948 by Bill France who had organised motor races at Daytona Beach in the period before the war. During the war the beach circuit fell into disrepair and so on his return France set about renting local circuits to host races, but he felt that the sport really required a sanctioning body to set common standards for competitors and track safety (a relative rarity at the time) to lift its image from its moonshine legacy. After the American Automobile Association refused to endorse his idea France established Nascar himself and was announced its first president in 1948. From the beginning France intended Nascar to be exciting and publicly accessible, as well as sponsor friendly, and the formula evolved toward big fields of very fast cars (200mph+) on banked circuits surrounded by large atmospheric stadia.

Until quite recently motor racing has been a very fragmented sport: sanctioning bodies have tended to splinter into rival factions which form their own leagues, and the racetracks have developed on an ad hoc basis (some were originally perimeter roads to local airstrips) and remained under family ownership. Formula One with its dominant sanctioning body and almost totalitarian leadership under Bernie Ecclestone is both the exception, and due to its huge commercial success, the benchmark. International Speedway has grown through building and buying circuits throughout the south east and more recently elsewhere in the US. But the real prize from consolidation is that the firm has substantially improved its bargaining position with the broadcasting companies. Instead of their being more tracks and sanctioning bodies than media buyers, the tables have now been reversed. The attraction to advertisers is that Nascar runs races most weekends (good for filling programming schedules), is US only (unlike Formula One) and attracts middle America in droves. When the industry recently negotiated an exclusive seven-year media rights contract the rate doubled in year one, and for the period to 2007 are contracted to rise by a further 17% per annum. Whilst this is promising in itself such events are quickly discounted by the markets, and the shares rose to a peak at U$70 two years ago.

Our interest is in how the windfall is being distributed: the France family (which owns Nascar) will take 10%, note this sum compares with much closer to 100% for Mr. Ecclestone's take of Formula One revenues, 65% is divided between the tracks (of which ISCA earns the lion's share), and 25% goes in prize money to the drivers and teams. This final point may be important because as prize money increases it may establish a virtuous cycle of new entrants attracted by the increased "pot", which in turn may raise viewing audiences and media attention. It is encouraging that the Chrysler racing team have recently announced their return to Nascar after a multiyear absence. In other words, the firm may be deferring part of the windfall to fund future growth, which will be incremental to the escalating media income.

The price of ISCA shares at the time of Nomad's investment (around half their peak level) was a small premium to replacement cost of the circuits and a valuation which discounted only low single digit growth in profits. Cash flow growth will likely be cyclically subdued in the near term and investors with a short-term time horizon, which appears to us to be the majority of professional investors, will have little to excite them. This is fine by us, because the outlook for the next five to ten years is very positive. Finally, how do CBS and Fox feel about their new Nascar contracts? They claim they are very encouraged; they now have to negotiate with one party to fill 40 weekend programming schedules and viewing audiences have exceeded their budgeted projections. Fox has recently bought a dedicated motorsport cable channel to host their Nascar coverage. Roll on contract negotiation in 2006! In

discounting growth of just 3% to 4% the market valued the business as if it was just an average firm, when in our opinion International Speedway is a rock-solid franchise with improving economics and could be a multiyear winner for investors that are patient enough to wait.

Matichon (3.2% of fund at year end) is Thailand's second Thai language newspaper and is a company we have known for many years and in which Marathon is also the third largest shareholder. We do not read Thai and take it on trust from Thai friends that the editorial content is pro-reform, and it is certainly tabloid in style which sets it aside from Thailand's largest newspaper (Thai Rat) which is more "old Thailand". Matichon is probably not the Washington Post, but it's healthily questioning, nonetheless. The paper appeals to the new generation of Thais that have grown up with a much higher living standards and more western values than their parents and it is interesting that circulation has grown at an accelerated rate since the Asian crisis. The firm is family run and has avoided the pitfalls of straying into new media or gambling on new titles. Instead, the firm has focused on raising longer term readership and margins. In an effort to promote circulation the cover price has been kept low, but this has the effect that the majority of revenues comes from advertising which is far more cyclical and means that revenues declined by a third peak to trough. The cost cutting effort however has been amazing, with the effect that cash flow in 2000 is 40% higher than 1996, on sales one third less! 2000 is the first year of a cyclical recovery in advertising, and rates are now 20% above their trough but around 50% below the previous cyclical peak. In other words, there may be a long way to go.

So, what is Matichon worth? The shares peaked at Tb300 (U$12) in 1994 and have now declined to Tb50 (U$1, adjusting for the decline in the currency). The share price decline is all the more amazing as the firm is without debt. Our company is presently valued at 0.75x revenues or four times our estimate of normalised free cash flow. This is approx. one third of our estimate of its worth and may be as low as one quarter of the valuation of its western peers. The family owns 25% of the shares and has taken the gains from cost cutting to raise the dividend threefold since the trough, and so investors now have a 9% dividend yield whilst they wait for the cycle to improve. And improve slowly it is, rates are expected to rise gently this year and next, so patience is likely to be rewarded here too.

So, nearly four months since inception where are we now? Our investments are presently priced in the markets at considerable discounts to our assessment of their real worth, performance is satisfactory, and we remain with substantial cash holdings of approximately 28% of the fund at year end, although you can expect this to decline markedly. Whilst we are conscious that holding cash does not meet our long-term investment goals (to say little of earning our incentive fees) we are in no hurry to invest the money in companies that do not meet our criteria. The markets are very volatile, and we expect to operate with some cash or bond holdings as a matter of course. We also have many ideas that we are working through. You can also be assured that Marathon insiders are the largest group of investors in Nomad.

As always, we value your support and welcome your comments.

Yours sincerely

Nick Sleep

Nomad Investment Partnership.

Interim Report
For the period ended June 30th, 2002.

The Nomad Investment Partnership's gross results for the second quarter and first half of 2002 as well as since inception are shown below, together with comparable results for a leading global stock market index:

To June 30th 2002	Nomad Investment	MSCI World Index US$
3 months	-4.67%	-8.99%
6 months	+3.99	-8.60
Since inception (10/09/01)	+14.54	-5.22

In the context of the time frame of the Partnership, I'm afraid the above results are not that meaningful as they are, after all, just nine months in the making. They are perhaps a reasonable start, certainly compared to the alternatives presented by the main indices. Even so it is absolute returns that we are after, and on this score our results are fair.

Some insight into our performance can be gleaned from the early Buffett Partnership letters to investors which we were fortunate enough to be sent recently. In the 1960 letter Buffett writes:

"I have pointed out that any superior record which we might accomplish should not be expected to be evidenced by a relatively constant advantage in performance compared to the Average. Rather it is likely that if such an advantage is achieved, it will be through better-than-average performance in stable or declining markets and average, or perhaps even poorer-than-average performance in rising markets."

We had not explicitly thought of investment outcomes in this way, although it is axiomatic that results for value investors during booms will be poorer than average and results after booms, better than average. Marathon's long term track record demonstrates the same pattern, and Nomad's performance since inception is also in line with this phenomenon. You should therefore be expecting us to do relatively well as the bubble collapses.

Some investors have asked for statistics to help describe the characteristics of the fund. We have included here what may be useful: The Partnership has been invested in twenty-one companies in seven countries. Bloomberg classify these businesses into eighteen different industries although their classification is perhaps rather narrow. In our opinion, the Partnership has a notable concentration in relatively few sectors: media and publishing; leisure, entertainment and casinos; and hotels and real estate. Smaller investments have been made in telecoms and cable; consumer durables and finance; and computer services and office automation. The distribution of investments by geography and industry is illustrated pictorially below.

Chart 1: Distribution of Investments by Geography and Industry

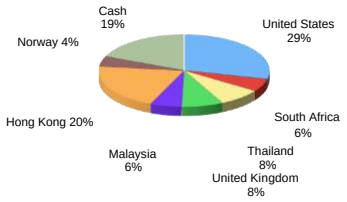

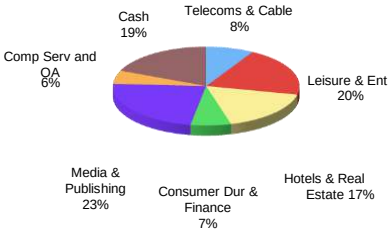

Source: Marathon Asset Management

The fund has a profit on eighteen of its twenty-one investments compared to average purchase price. For those shares that have fallen we have bought more. This reminds us of "A Little Wonderful Advice" Fred Schwed gives in his book "Where are the customers yachts?" (recommended reading for those with a healthy disdain for Wall Street and its practices as well as an interest in post-boom psychology).

"When there is a stock-market boom, and everyone is scrambling for common stocks, take all your common stocks and sell them. Take the proceeds and buy conservative bonds. No doubt the stocks you sold will go higher. Pay no attention to this – just wait for the depression which will come sooner or later. When this depression – or panic – becomes a national catastrophe, sell out the bonds (perhaps at a loss) and buy back the stocks. No doubt the stocks will go lower still. Again, pay no attention. Wait for the next boom. Continue to repeat this operation as long as you live, and you'll have the pleasure of dying rich".

The operative phrase here is "pay no attention". This is not easily done. Many investors are professionally required to "pay attention" to the latest trend for fear of missing out (pay attention and be invested!). The dysfunctionality of the short-term investor was neatly described to us recently by a fellow long term value investor. Imagine, he said, that you knew with 100% certainty of outcome, that on January 1st next year a company would come by some good fortune, perhaps a government contract or license award, which would result in the price of the share quickly rising tenfold. You and I would buy the shares today and wait. However, to the short-term investor the utility of this piece of information would be nought until after this year is ended. This is because he feels he is required to perform this quarter, next and by year end through fear that sub-par performance might cost him his job. A share which may be flat for the balance of the year is therefore of no use to him. This tale illustrates the dominant dynamic in the markets today: investment time frames are very compressed, and few investors it seems bother to assess the real value of a business but instead respond to the latest data point to determine share price direction. This is momentum investing and is the mechanism by which expensive shares become very expensive, just as cheap shares may become very cheap. In the above example both sets of investors may even have privately agreed that the share in question was an outstanding investment, but only one would have bought. You can bank on us being the buyer.

This is not a wholly theoretical discussion. Only this week Estée Lauder, a company which we much admire and would consider owning if only someone would sell it to us at a reasonable price, announced that earnings would decline as the firm had decided to invest in brand building instead. Such investment could be expected to raise long term revenue growth and pricing power but, even so, the share price declined 15% on the news. The reason was that short term investors responded to the warning about next quarter's profits and missed the long-term outlook. As Fred Schwed would say "pay no attention to this". In effect the company had been punished by the markets for being sensible. It is this behaviour that gets us excited and sets up investment opportunities.

A few final statistics on the fund's characteristics. Approximately 37% of the fund is invested in quality, difficult to copy, franchise operations such as newspapers, a TV station, motor racetracks, consumer brand names and casinos; 27% is invested in what could be described as discounted asset based businesses such as property, hotels, or conglomerates where fixed assets or cash makes up a large portion of appraised value, and finally 17% is invested in deep value workouts such as Xerox (see below) where prices are depressed by temporary factors such as short term profits, debt or the legacy of previous management. It is the first category that contains our current winners and the latter that contains our losers. In time both will contain winners. In aggregate we estimate our investments are currently priced by the market at 51% of their real worth, that is to say in our opinion we have bought dollar bills for 51 cents.

In our last letter we described our investment in International Speedway (the Nascar racetrack operator) and Matichon (Thailand's second largest newspaper business), and in recent Global Investment Reviews we have discussed investments in Saks and Primedia. That's 20% of the portfolio covered. In this edition I thought we might discuss an investment you are likely to have read about in the press, Xerox Corporation, and an error in analysis, Monsanto Company, which we sold. That way you will be under no illusion about the fallibility of your manager.

Xerox will be familiar to many as the manufacturer of presses, copiers and printers. The firm has annual revenues of U$17bn and a niche in high end (U$100,000+) printers where the firm has around 70% market share. It is a reasonably profitable but modest growth operation. The firm enjoyed several good years in the early and mid 1990s following the introduction of a new generation of machines but by the late 1990s growth had declined markedly. Perhaps aware that Wall Street rewarded earnings growth above all other metrics, management asserted that earnings per share would rise by 15% per annum and the shares began to rise to discount the near certainty they would. However, 15% growth in earnings is tricky to achieve for any length of time especially from a 5% revenue growth business and management began, and indeed was egged on by Wall Street, to find growth from an alternative source.

In a cartoon carried in the Wall Street Journal two accountants sit opposite each other in a prison cell. You know, one says to the other, in accounting it is best to think inside the box! Xerox management would have done well to read this cartoon in 1996 or 1997 as it was about that time that management began to push too hard to grow earnings. One of the ways this was achieved was through booking profits from long term lease contracts upfront. It is quite possible, indeed likely, that one could have a happy and successful life without knowing about lease and sale accounting, so if the topic bores you, skip the next paragraph.

For everyone else, welcome to the Statement of Financial Accounting Standards No. 13 "Accounting for Leases". We will try to be brief. There are two types of leases, operating and

sale-type. Under an operating lease a lessee rents an item for a short period and the total rent payments are usually a fraction of the value of the rented item. Car rental contracts are usually of this type. The difference between an operating lease and a sale-type lease is a matter of scale. A sale-type lease is usually for a much longer period and in effect transfers a much larger portion of the economic value of the asset to the lessee, a contract for the use of an airplane for the rest of its economic life would be a sale-type lease. The former is rental contract, the latter more of a sale. Now for the accounting. The accountants differentiate between the two using SFAS 13 which states that that contracts which transfer 75% or more of the economic life of the leased asset, or where minimum lease payments are 90% or greater than the fair value of the asset, be treated as a sale-type lease, with lesser values treated as an operating lease. The crucial difference is how they are recorded in the accounts. Sale-type leases require the leased asset to be booked as if sold outright, in effect bringing forward revenues and profits. In contrast, payments under an operating lease are booked incrementally over the lease term. It is important to note that whether a transaction is deemed an operating lease or a sale-type lease, cash -flow is unaffected. The customer still pays the rental, as required, it is only the accounting that implies something else has happened.

When Xerox leases an expensive printer, it is often in the form of a five-year contract which bundles equipment, a service contract and financing. However, in a bundled contract there is some discretion as to how much is attributable to the value of the equipment and how much should be deferred to later years in recognition of financing, maintenance and service. One can therefore understand how management, plump with stock options and growth in earnings per share related bonuses, were strongly incented to recognise earnings up front and SFAS 13 allowed them to do this. The value of the equipment was incorrectly raised relative to service, financing and maintenance which allowed the firm to treat the transaction as a sale-type lease and required that the inflated equipment value be booked as if sold. A double whammy of inflated revenues and profits recognised early. This does not appear to be illegal, although it is hardly conservative. It may even have mattered less if Xerox had not relied upon the commercial paper market to fund its receivables business. When the company announced that earnings would be below Wall Street expectations, the SEC announced an investigation into the firm's accounting and the auditors were replaced, the result was that the credit markets all but closed to the firm, and the shares declined to 7% of their peak price.

It is important to put this in perspective. In the five years to 2001, cumulative revenues at Xerox approached U$90bn, of which U$6.4bn was incorrectly booked. Cash flow and free cash flow, the basis of our valuation of the firm, is completely unaffected. Customers continued to pay their bills monthly as arranged. Operating blunders associated with product extensions, again designed to raise the growth rate, have been reversed and investment in research and development maintained at around U$1bn per annum regardless of the turmoil all around. Earlier this year the firm completed negotiations with its banks to repay the debts over the next few years in easily digested increments that should be funded from internally generated cash flow and U$1.8bn of cash on hand. The operating turnaround is now well under way, and a new product cycle, in some lines the first new products for ten years, will see products launched at twice the rate of the late 1990s. Even after new auditors have been appointed the debate about the accounting continues. It is with some irony that the replaced accountants protest that Xerox's profit is now understated. Xerox might be alone in corporate America in this regard. And, as if to prove that truth is stranger than fiction, the new accounting methodology will result in higher revenues and profits over the next few years than under the previous discredited policy. This matters not a jot to us, note again: cash flow is unchanged.

So, what is the business worth? The firm has around U$1bn in free cash flow per annum after interest, taxes and maintenance levels of investment spending (capex, marketing and R&D) which should permit the net debt of around U$2bn (U$17bn of total debts are offset against U$15bn of trade and long-term receivables and cash) to be repaid over the next few years. Indeed, if the apple cart is to be upset, it is likely to come from a dilutive share issuance, something we are lobbying management to resist, hopefully more effectively than the bankers who are egging them on. The current market valuation of U$4.5bn is just four and a half years free cash flow or four and a half years research and development spending. We estimate the capitalised value of the R&D asset may be around U$7bn or approximately 50% more than the current market capitalisation. As a cash cow the firm may be worth around U$14 per share in our opinion, although the increase in new product launches from two per annum to four per annum during the next three years may result in modest growth as well. Presently the firm is valued at U$6 per share, less than half our appraisal of its real worth. Trading volume of Xerox stock implies investors own the shares for under four months on average, a time horizon which implies few investors are focused on the long-term value of the business but rather are betting on the next quarter's outcome. Rich pickings, we suspect, for the patient.

Now for our analytical error. Monsanto manufactures and markets genetically modified seeds and fertilizers and is a business with good economics, good growth potential, good management and a low share price. It is right up Nomad's street. However, it is also a business with a past. In the mid 1990s Monsanto consisted of the seed business, a commodity chemical business (Solutia) and the G.D. Searle drug operations. In 1997 Solutia was spun off to shareholders in Monsanto and early in 2000 Pharmacia Corp bought the remaining Monsanto operations, before spinning out the seed business in order to retain the Searle drug business. The wrinkle however comes in the form of potential environmental clean-up costs and punitive damages relating to Solutia's PCB plant in Alabama. Solutia's own balance sheet is encumbered with healthcare liabilities and debt and any award which cannot be met by Solutia passes on to the parent company, in this case Pharmacia. However, and here is the catch, Monsanto has indemnified Pharmacia for any environmental or punitive damages incurred as a result of Solutia's operations. We do not know if any, or indeed the size of any damages that may be awarded, and legal counsel cannot ascertain where an award would rank in the list of creditors in the event of Solutia's bankruptcy. This means we do not know how much, if any, of the liabilities would revert to Monsanto. What we are aware of is that value for us, the Monsanto shareholder, may be decided by a judge in an Alabama court, and on that basis we are nervous. In our original analysis we missed the indemnification, and it was only on reading recent company filings with the SEC that the indemnification buried in the notes to the accounts came to our attention. The effect is that we are no longer confident of valuing Monsanto with any certainty and the prudent thing to do was to sell our shares for approximately the price we had paid. We have indeed been fortunate as the shares have since declined to half our sale price.

So where have we got to? The fund is 81% invested, and investment performance is reasonable in absolute terms and considerably better than the market averages. In the West investors are very short term oriented, skittish and share prices are volatile. It seems quite likely to us that over the next few years businesses will be very mis- priced in the market, and already there are pockets of real value emerging in the most despised industries. In Asia the profits cycle is only just beginning, if anything the bias is to understate profits for tax reasons and valuations remain modest.

A final word on the need for patience. We are aware that several investors are new to the fund since the beginning of the year and so it may be worth reiterating some ground rules so that we all know where we stand. One of Nomad's key advantages will be the aggregate patience of its investor base. We are genuinely investing for the long term (few are!), in modestly valued firms run by management teams who may be making decisions the fruits of which may not be apparent for several years to come. Mr. Buffett's comments notwithstanding, in the near term our results are likely to be as bad as they may be good, but we are confident that in the long run they will prove satisfactory. If Nomad is to have a competitive advantage over our peers this will come from the capital allocation skills of your manager (if any) and the patience of our investor base. Only by looking further out than the short-term crowd can we expect to beat them. It is for this reason we named Nomad an Investment Partnership and not a fund. The relationship we seek is quite different.

As always, we thank you for your confidence, value your support and welcome your questions.

Yours sincerely

Nicholas Sleep

Nomad Investment Partnership.

Year End Report
For the period ended December 31st, 2002.

The Nomad Investment Partnership's gross results for the six and twelve months to December 2002 as well as since inception are shown below, together with comparable results for a leading global stock market index:

To December 31st, 2002:	Nomad Investment Partnership	MSCI World Index US$
6 months	-2.59%	-11.97%
One year	+1.30	-19.54
Since inception (10/09/01)	+11.57	-16.28

It is never rewarding to report on a period when the market price of your investment in the Partnership has declined, as it has in the last six months. Nor do we derive much pleasure from pointing out that the alternatives presented by the leading stock market indices have fared much worse, but as we stated in the interim letter published in July, "in weak or flat markets you should be expecting us to do relatively well".

It is almost certain however, that over any time frame the investment performance of the Partnership will only approximate the change in the real value of our companies and, even then, it may be only a very general approximation. Some years our investment performance will exceed growth in the value of our businesses, in others the reverse may be true, as we believe to have been the case in 2002 and shall discuss in more detail in this letter.

It is worth noting also that the Partnership results have been achieved without leverage, shorting or financial derivatives of any kind, nor do we wish to employ such techniques. Rather our results have been achieved the old-fashioned way, through buying securities in reasonable businesses at discounted prices. It may be instructive perhaps that these old techniques, though deeply unfashionable in modern financial circles, work just fine. For example, our results include the demise of Conseco, which filed for Chapter 11 bankruptcy protection in December. We have retained our shares in the company, and you will find them included in the statement of investments at the end of this letter although we expect them to be all but worthless. Investment mistakes are inevitable and indeed to some extent desirable, and we have no interest in hiding them from you (or in portfolio window dressing) - as they say, it is what it is. A full Conseco mea-culpa was published in September's Global Investment Review (Volume 16, No.6). All that said, we derive little pleasure, to say nothing of performance fees, from earning the equivalent of money market rates whilst investing in the equity market. It is absolute returns that we are after, and on this score our results since inception are only fair.

During the late summer and autumn, when investors were at their most depressed, we made several new investments and, in some cases, added to existing holdings. Although time will tell, this period may mark the end of investors' mood swing from euphoric at the turn of the millennium to manic depressive almost three years later. Anecdotal evidence suggests that investors are not thinking straight. Take for example recent events at one of our UK investments, Georgica Plc. One day in early November the company issued a press release

which began as follows:

"Georgica Plc has today noted that an administrator has been appointed to Riley Leisure Limited. Georgica wishes to emphasize that Riley Leisure limited is not a member of the Georgica group although Georgica's Cue Sports businesses do trade under the name Riley's".

That announcement did not stop the share price from declining over 6% that day. Presumably somebody, somewhere had decided that the company now in administration was owned by Georgica and without checking, hurriedly sold their shares. Nervous investors tend to shoot first and ask questions later. As the saying goes, act in haste - repent at leisure. We were particularly heartened that Georgica resumed its share repurchase program the following week. A cool head under pressure is what is required.

The result of our recent purchases is that cash as a proportion of the overall fund has been reduced from over 20% during the summer to around 5%, with much of the remaining balance ear-marked for an investment we would like to describe in our next letter, that is when we have finished acquiring our shares. (Discretion whilst investing is normally an advantage.) This means that in effect we are close to fully invested. We also feel that there are many undervalued investments available to us, to which we could put incremental capital to work. You can expect us to caution you when the opposite is true, and we find little available at reasonable prices. But for now, for those with a long-time horizon, we think it is a good time to be making investments.

After our recent purchases the characteristics of the Partnership are as follows: 41% of assets are invested in "difficult to copy" franchises such as TV stations, newspapers, magazines or a motor-racing track; 31% of the fund is invested in asset backed businesses such as hotels, casinos, conglomerates or those companies where balance sheet cash forms a large portion of the current valuation; and finally 22% of the fund is invested in deep value work outs where profitability is temporarily depressed, and where the firm has sizeable amounts of debt. In aggregate these investments are priced in the market at around 50% of what we believe the businesses to be worth, that is to say we believe we have bought dollar bills for around fifty cents. It is worth noting also that nearly half of our companies (by number, more by value) are buying back debt or repurchasing shares and at two thirds of our firms there has been notable insider buying. At one third of our investments there has been both insider buying and debt or equity repurchase.

Nomad has as broad an investment mandate as we could imagine. We can, for example, buy common shares, preferred shares, debt or convertible bonds. In analysing a company, we assess the merits of investing in all levels of the capital structure but to date we have concluded that the common and preferred shares have been the more attractive investments. We have however attempted to buy the bonds of two companies which were trading at large, and in our opinion unwarranted, discounts to face value. How does one attempt, but fail, to buy a bond? One way is for the company to be more aggressive in bidding for the bonds than we were. Indeed, it appears in one case that the company, as part of a debt repurchase program, may have had a standing order with all the market makers on Wall Street to buy any of its bonds that were offered and to let none remain in the hands of third parties. This might seem unfair, but management score highly for gusto, and their equity holders, of which Nomad is one, should applaud such actions. In the light of the record credit spreads available in the US and widespread investor irrationality this is exactly how we want our company management to

behave. A cool head under pressure once again.

Some final requested statistics to help describe the characteristics of the fund: The Partnership is invested in twenty-five companies from eight countries. Bloomberg classify these in twenty-two different industries although their industry definitions are rather narrow. In our opinion there remain notable concentrations in publishing, broadcasting and media (27% of partnership assets); hotels, casinos and real estate (23%); consumer goods and retailers (18%); and telephony, cable and equipment suppliers (12%). There are also holdings in transport (9%) and office automation and information services (6%), with a now diminished balance in cash. Geographically the distribution is as follows: US 41%, Hong Kong 14%, UK 12%, Thailand 9%, South Africa 6%, Malaysia 5%, and Norway and Singapore 4% each.

In previous letters and Global Investment Reviews we have discussed the investment case for Saks, International Speedway, Matichon, Xerox, Hong Kong and Shanghai Hotels, Conseco (augh!), Kersaf, and one of our sales Monsanto. That's approximately 30% of the portfolio covered. This time I would like to discuss our investment in Stagecoach (8.6% of Partnership assets) and Costco Wholesale (3.1% of Partnership assets).

Stagecoach is the largest bus operating company in the UK, operates the commuter train services from London's Waterloo station, and bus services in Scandinavia, Hong Kong, New Zealand and the US. The firm was listed in London when shares were sold to the public at 20p in 1993. In the early 1990s and after years of national ownership, the UK bus system was deregulated with the right to operate services, depots and buses sold in auction to private companies such as Stagecoach. The system was ripe for an overhaul, buses were poorly time-tabled and run for the convenience of the driver and conductor rather than the passengers and fares irregularly collected. Brian Souter, Stagecoach's entrepreneurial and straight-talking CEO, started his career as a bus conductor and was good at doing the simple things right, such as collecting fares, putting on more buses during the rush hour, handing out mugs and flags to passengers on new services, painting buses bright colours and most of all undercutting the remaining state-owned competition. Bus deregulation proved to be a huge success in the UK as passenger numbers grew and was copied abroad with the result that Stagecoach had a natural advantage exporting its brand of deregulated bus services. By 1996 as the firm developed businesses in Scandinavia, Hong Kong and parts of Africa, and within ten years of listing revenues and profits grew ten-fold and the share price reached a peak of £2.85 in 1998. One City research note struggled with the price of the shares at the time but concluded a "Souter premium" might be appropriate! Souter went into semi-retirement in the late 1990s as one of the richest men in Britain and handed day to day operations to the next generation of management, apparently leaving them with instruction to maintain the dividend.

It was about the same time that the problems started. It was no secret that running buses could be a reasonable business and as deregulation spread bus companies from around the world wanted to be running bus operations elsewhere and the price of franchises rose. A similar pattern has followed the deregulation of US utilities and telephone services in the late 1990s. Stagecoach began looking for growth elsewhere and purchased a minority stake in a Chinese toll road operator, and control of a train leasing business which it sold shortly afterwards. However, the big mistake came with the hubristic top-of-the-cycle purchase of Coach USA, itself a debt funded roll-up of several disparate bus, taxi and charter coach operations which had been assembled by investment bankers and a leveraged buy-out (LBO) fund. The price paid was too high, the operations had little economic merit on their own, let alone bundled together, and the acquisition had been debt funded. In short, the company had geared up to

buy a company worth a fraction of the purchase price. It then got worse. Improving the operations of Coach USA required a heavy investment program (thank you, LBO fund) at the same time as the firm had committed to renew the UK bus fleet. The US operations were quite unlike the simple time-tabled commuter bus operations the firm had operated in the UK, and required more management time, to the detriment of the UK business, which was ignored and began to flag. It is not hard to run a profitable bus company "but you do need to keep the plates spinning [do the simple things right]" claimed Souter, and management had stopped spinning plates. The shares which peaked at £2.85 in 1998 reached 10p in late 2002, or half their IPO price ten years earlier. When the final dividend was cut in July 2002, management were sacked, and Souter returned from semi-retirement.

Souter began cutting away the weak businesses, a process Charlie Munger, vice Chairman of Berkshire Hathaway refers to as the "cancer surgery approach". This often works because there is normally a jewel at the heart of most companies that has often been used to fund new ventures or is taken for granted by impatient management. As the jewel becomes diluted by less successful projects aggregate performance declines and valuations atrophy or even fall. The star in this regard and in which Mr. Munger invested, is Coca-Cola, which in the mid 1980s had become a poorly defined conglomerate including a shrimp farm, winery, film studio and shudder to think, even owned its own bottling plants! As the poorer businesses were cut away, to reveal the jewel that is the syrup manufacturing and marketing operation, the shares of Coca-Cola rose over ten-fold in the succeeding decade.

At Stagecoach the fix is relatively simple: cease investment in poor US operations, sell the worst businesses for asset value, repay the debt and in doing so return the business to its jewel, the UK bus operation. When Marathon met Souter in early December, he referred to the UK operations as being under the shadow of more recent acquisitions (a "Cinderella Business") but that "they [management and employees of UK Bus] were the only people happy to see me back": Souter is looking forward to spinning plates again. The firm has the relative luxury of a modern bus fleet and so the firm's high levels of free cash flow can be used to repay debt. The banks have been supportive, even to the extent of allowing the company to repurchase its public debt (at sizeable discounts to face value) even though the public debt is due after the bank's own debt facilities expire. All creditors are unsecured, and there remains debt capacity at some subsidiaries such as in Hong Kong and New Zealand. In our opinion the business is worth approximately 60p per share, a valuation contingent upon modest levels of debt repayment and no growth in the UK operations. This compares with Nomad's purchase price of 14p (in late November), and the current market price of 33p (early January). Souter's sacred dividend (with his sister he continues to own around 25% of the equity) is being maintained and implies a gross yield of over 12% at Nomad's purchase price. Having analysed many complicated and highly indebted businesses especially in the US recently, Stagecoach's problems are relatively simple, and we have made the firm our largest investment to date.

At Costco Wholesale there is no need to fix the business which is performing well already. Costco is one half of the wholesale club warehouse duopoly (with Sam's Club) and had annual revenues of U$35bn in 2001. The retail concept is as follows: customers pay an annual membership fee (standard U$45) which provides entry to the stores for a year, and in exchange Costco operates an every-day-low-pricing strategy (EDLP) by marking up 14% on branded goods and 15% on private label with the result that prices are very, very low. This is a very simple and honest consumer proposition in the sense that the membership fee buys the customer's loyalty (and is almost all profit) and Costco in exchange sells goods whilst just covering operating costs. In addition, by sticking to a standard mark-up savings achieved

through purchasing or scale are returned to the customer in the form of lower prices, which in turn encourages growth and extends scale advantages. This is retail's version of perpetual motion and has been widely employed by Wal-Mart among others. To understand how important EDLP is to Jim Sinegal, the firm's founder, consider the following story which was recounted to us by a company director. Costco bought 2m designer jeans from an exporter and shipped them into international waters and re- imported the jeans for an all-in price of U$22 or so per pair. This was U$10 less than the firm had sold the jeans for in the past (offering the potential for a 50% mark-up) and half the cost of most other retailers. One buyer recommended taking a higher gross margin than was usual (i.e., more than the usual 14% mark-up) as no one would know. Apparently Sinegal insisted on the standard mark up, arguing that if "I let you do it this time, you will do it again". The contract with the customer (very low prices) must not be broken.

Many retailers do not operate in such a way, and instead employ high-low price strategies, that is to say they take prices up and down in an attempt to influence store traffic. The consumer goods companies then add to the confusion through running their own promotional campaigns. Although many of us are used to this behaviour, consider for a moment how confusing a proposition to the consumer it is. For example, is a bottle of shampoo worth U$2 if it is periodically available through a couponing campaign for U$1? The high-low strategy may even backfire: do consumers feel taken advantage of when paying U$5 for tissues that were available last week for U$4? They should. At Costco the consumer knows the price is 14 or 15% above wholesale, period.

Costco management describe the strategy as "easy to understand and hard to operate" perhaps because the temptation is to mark up the goods and break the contract with the customer. Costco is profitable enough to self-fund growth of around 14% per annum and not to have to resort to leases for expansion (The Gap's mistake). This means that growth will be more measured (none of the 30% per annum purges that populate the retail industry) and should be more sustainable. As to the potential for growth the firm has 21 stores in Washington State which houses just 2% of the US population. This density coast to coast implies room for around 1,000 US stores (currently 284) and 200 stores in the UK (currently 14) although planning regulations may not allow for this. Even then Home Depot, the largest DIY store in the US currently has 1,500 stores. At 10% growth per annum, this implies the firm has another 13 years of growth ahead. The share price has declined from a year 2000 high of U$55 to U$30 (Nomad's purchase price) as margins declined slightly (they are measured in basis points at this firm) with the cost of several new distribution centers which will support the next few year's growth. For example, in the UK the firm has warehousing and logistics capacity for 40 locations but only has 14 stores. At U$30 the firm is valued as a cash cow, with higher levels of profitability (as capacity utilisation increases) and modest levels of growth justifying a valuation over U$50 per share. Costco is as perfect a growth stock as we have analysed and is available in the stock market at a close to half price.

A few pieces of housekeeping and a final word on the need for patience. We are aware that several investors are new to the fund and so it may be worth reiterating some ground rules so that we all know where we stand. You can expect from us an annual and interim letter (this is our second annual letter), and Global Investment Reviews eight times a year in which we discuss our investment thoughts. In our opinion these documents, once digested, provide the information needed to form a judgement about what and how we are doing. From Nomad's administrator (Daiwa Securities Trust and Banking, +353 1603 9921 for your inquires) you can expect a monthly statement of your account and annual and interim financial statements.

Nomad's orientation is genuinely long term, and more regular reports, daily, weekly, monthly or otherwise, are likely to be of little value to you, and may even be counterproductive for us.

One of Nomad's key competitive advantages will be the aggregate patience of its investors. We are genuinely investing for the long term (few are!), in undervalued firms run by management teams who may be making decisions the fruits of which may not be apparent for several years to come. In the near term our results are as likely to be bad as good, but we are confident that in the long run they will prove satisfactory. If Nomad is to have a competitive advantage over our peers this will come from the capital allocation skills of your manager and the patience of our investors. In the latter we have started well, with no investor turnover since we began and almost no enquires into performance despite the general decline in market prices. This is very unusual and a huge credit to our investors and implies a similar long-term outlook. Only by looking further out than the short-term crowd can we expect to beat them. It is for this reason we named Nomad an Investment Partnership and not a fund. The relationship we seek is quite different.

As always, we thank you for your confidence and value your support.

Yours sincerely

Nick Sleep

Nomad Investment Partnership.

Interim Report
For the period ended June 30th, 2003.

The Nomad Investment Partnership and Nomad Investment Company Class A share gross results (i.e., net of management fees and costs, but before performance fees) since the end of December 2002, the end of December 2001, as well as since inception are tabled below, together with comparable results for a leading global stock market index:

To June 30th, 2003:	Nomad Investment Partnership	MSCI World Index (net) US$
From: December 31st 2002	+26.0%	+11.1%
December 31st 2001	+27.7	-11.0
Since inception (10/09/01)	+40.6	-7.8
Annualised since inception	+20.4	-4.3

In January we sought permission to change Nomad's investment policy to include unlisted equity and in February the proposal was unanimously approved, and the policy changed. This permitted a sizeable investment in Weetabix Limited, a manufacturer of breakfast cereals and bars in the UK. Your prompt response permitted investment whilst the price was particularly depressed with the effect that the Partnership has a 20% profit compared to purchase price. This gain was in part a product of the speed of the Partners' collective response and the administrative process, neither of which is under your manager's control. So, thank you and well done. You may even want to discount the results above for the Weetabix gain (but don't ask for a rebate on fees!). We shall return to Weetabix later in this letter.

In December's annual letter to Partners we wrote:

"During the late summer and autumn, when investors were at their most depressed, we made several new investments and, in some cases, added to existing holdings. Although time will tell, this period may mark the end of investors' mood swing from euphoric at the turn of the millennium to manic depressive almost three years later…We also feel that there are many undervalued investments available to us, to which we could put incremental capital to work. You can expect us to caution you when the opposite is true, and we find little available at reasonable prices. But for now, for those with a long-time horizon, we think it is a good time to be making investments".

That seems to have been the case, but for the record, and in case there is any misunderstanding, we do not have the faintest idea what share prices will do in the short term - nor do we think it is important for the long-term investor. All that we observed in the autumn was that barring a catastrophe, indeed in some cases perhaps even including a catastrophe, prices were so low that long-term success was almost inevitable. Even though these are still early days, the Partnership now enjoys a 52% advantage over the investment averages, as presented by the MSCI World Index (for mathematicians the calculation is (((1+0.406)/(1-0.078))-1)x100)! This is a reasonable absolute gain, and large relative gain over a short period of time, so may we provide some simple philosophy and maths as guidance in how to think about results so far?

We were rather struck by some of the early Buffett Partnership letters in which Warren Buffett offers the following advice: return for a moment to the table above *"and shuffle the years around and the compounded result will stay the same. If the next four years are going to involve, say, a +40%, -30%, +10%, -6%, the order in which they fall is completely unimportant for our purposes as long as we all are around at the end of the four years",* as we, at Marathon, intend to be. *"The course of the market will determine, to a great degree, when we will be right"* (the sequence of annual outcomes), *"but the accuracy of our analysis of the company will largely determine whether we will be right. In other words, we tend to concentrate on what should happen"* rather than when it may occur.

Our preference is for results to be measured over a five-year time frame, and even this may be a little short compared to the average holding period of the underlying investments which is presently around ten years (inflated by a dearth of sales). In this context the short-term results remain just that, short-term, and you should be as indifferent toward results so far as the annual sequence in which they have occurred. A stoical disposition to short-term results is both the right way to think (never mark emotions to market) but it also prepares one for results that may be reasonable but are unlikely to be an extrapolation of the last two years.

Indeed, future results are almost certain to be different. The index is unlikely to continue to decline, and even though absolute returns may be favorable, our advantage over the index will in all likelihood erode somewhat. We are prepared for this and are recycling shares that have performed well (in aggregate the portfolio is valued at around 65c on the dollar of intrinsic value, up from 50 cents in December) into new fifty-cent dollars.

We are always on the lookout for companies with corporate character that are pursuing strategies designed to create sustainable value. This is no mean feat, and we work hard reading annual reports and proxy statements and interviewing management trying to answer the questions: what are returns on incremental capital and the longevity of those returns, are management correctly incented to allocate capital appropriately, and what is discounted by prices? Once these businesses are found they can be multiyear winners provided capital allocation remains consistent with value creation. All too often however management become sidetracked and misallocate capital usually through diversification or in the words of Peter Lynch, "diworsification". The result of which is that aggregate returns on capital decline and the share price falls to discount poor performance. Quality of managerial character is therefore important to avoid capital misallocation and it is in the search for such character that we asked an investment bank to perform a simple company search earlier this year (the first search this manager has employed in twelve years).

The criterion was for companies with no increase or decrease in shares outstanding in the last ten years. This simple screen it was hoped would yield companies that had resisted the fashions for share repurchase, stock options and share issuance to fund growth. In short it was hoped that the search would lead us to firms that had not allowed the bubble to affect the way they operated their businesses. We knew of two companies that would make the list (Fastenal and Wesco Financial) but were amazed that there were just five others in the US with a market cap above U$50m. One of these was Erie Family Life, the life insurance subsidiary of the Erie Indemnity Company founded by H.O. Hirt in the 1920s. Management kindly obliged us with requests for an interview and when we explained why we thought the business may be of interest the response came,

"Hell, we have not issued a share since 1925!!!"

There are not many companies like that. In a similar vein we stumbled across Hershey Creamery, another business with reasonable economics, a low valuation and seemingly stubborn resistance to outside influence. So stubborn in fact that we found it difficult to obtain annual reports or proxy statements and resorted to asking the CFO for a copy only to be told "these are mailed out to our shareholders". How then might a potential investor form a judgment whether they would like to become a shareholder without the benefit of an annual report?

"It's a common complaint", came the reply.

This analytical Catch 22 may not be helpful, but it does reveal that some firms remain resolutely independent of mind, despite the twenty-year bull market that has raged around them. As if to prove Groucho Marx right ("I do not care to belong to any club that would accept me as a member"), we have not given up on Hershey Creamery yet, if only to satisfy our curiosity.

Per share discipline is much misunderstood by investors. The long-term rate of share issuance in the US is over three percent per annum, comparable to the trend growth in the economy and far exceeding population growth. And whilst it can be argued that something is normally being bought with the shares issued, it is also true that some items, such as incentive compensation, have a shorter shelf life than newly issued shares that may remain outstanding forever. Buying transitory outcomes (e.g., a manager with a one-year employment contract) with permanent capital is a duration mismatch a bond investor might understand, but short-term equity investors care little about, and so the dripping tap of share issuance is rarely turned off.

There are two ways to tackle this phenomenon: first is to be a beneficiary of share issuance, usually through other investment liabilities such as bonds or redeemable preferred stock, witness Nomad's investment in Lucent 8% Preferreds (more later). Second is to be an owner of a business capable of compounding value from a static share base, such as Weetabix. What is required is an understanding and mandate to invest across the capital structure (bonds and equities).

The modern investment management industry generally lacks this ability. The system has become rules-based and managers straight-jacketed into geography, sector, style, market capitalisation or security type specific mandates (this list is not exhaustive). These managers are unable to purchase investments outside these narrow constraints, regardless of the case for doing so. H.O. Hirt, the founder of Erie Indemnity, posted the following notice to staff:

"RULES
Are for INFANTS**, INCOMPETENTS,**
INCARCERATED CRIMINALS and **IMBECILES**
- NONE of WHOM should have any place in the
ERIE FAMILY."

Source: "In His Own Words" by H.O. Hirt, original emphasis.

We would not go quite as far as H.O., but when it comes to the modern fund management industry he is on the right lines. At Nomad we have as broad an investment mandate as

possible, which has allowed us to make investments as diverse as the preferred shares of a US technology business (Lucent), the common equity of a Scandinavian newspaper business (Schibsted), unlisted UK equity (Weetabix), a small capitalisation Thai newspaper (Matichon), a South African casino (Kersaf), a Hong Kong mobile phone operator (Smartone) and even a large US discount retailer (Costco). This breadth of scope is why we named the Partnership "Nomad".

The point is that there are more tools in Nomad's box than are available to most fund managers and to help illustrate the point we would like to describe investments in Weetabix and Lucent 8% Redeemable Convertible Preferred stock. Nomad may be unique in the industry in having both investments in one portfolio.

Weetabix was established by the George family in 1932 as Britain's answer to the growing popularity of imported cereals, notably from the Kellogg Company. The firm was initially capitalised by the family and, as may have been common at the time, by a group of local farmers to secure their supply of commodities. The company has required no further equity capital and the share count is essentially unchanged since the 1930s although some farmers have chosen to sell their shares and it is these that form the free float that trades on Ofex. Weetabix manufactures and markets Weetabix, Alpen, Ready Brek and Weetos and has a total market share of around 22% of UK breakfast cereals. The company spends heavily behind its brands through advertising and marketing, a cost the Chairman refers to as "investment in the future". This has been in contrast to some of Weetabix's competitors who have cut spending in order to meet Wall Street's short-term earnings expectations. The effect is that Weetabix's share of voice (share of industry marketing spend) has exceeded the firm's share of market. For a consumer goods company this is often a powerful combination, as market share tends to rise or fall in the direction of share of voice. The high marketing spend also has the effect of creating a direct relationship with the customer which retailers find hard to break. In a recent test of the strength of the franchise a large UK supermarket suspended Weetabix in favour of own branded goods only to change their minds after disappointing own-brand sales and resume stocking Weetabix cereals. We particularly enjoyed this Weetabix advert run in the 1940s that could be applied to the firm's negotiating stance with retailers today.

Source: Weetabix Limited

The firm does not skip on capex either and runs its factories with fifty percent capacity redundancy in an effort to maintain standards of production and delivery reliability. This belt and braces approach lowers short-term returns on capital, something the City would also frown upon, but builds the reputation of the firm in the long run. Value creation is often most sustainable when it is built slowly, and notably last year Weetabix became the largest selling breakfast cereal, overtaking Corn Flakes seventy years after the company's foundation.

The investment case is sealed, as the shares are ludicrously cheap. If one assumes modest levels of growth in free cash flow as the advertising spend bears fruit, then the firm might be worth around £70 per share compared to Nomad's purchase price around £20. In a rare indiscretion, Sir Richard George, Chairman, let slip that on his death a search of his wallet will reveal a multitude of rejected offers for the business over the last thirty years from a host of international food groups. And what might these prices be? At the price PepsiCo paid for Quaker Oats (ex Gatorade) or Hershey was bid for more recently, the implied private market value of Weetabix is around £75 per share. Both valuations are depressed by the weight of cash on the balance sheet, which amounts to £5 per share, and ignores the value of property, which is in the books at 1988 prices.

So, the real issue is why is the business so cheap? The answer may be found in the firm's listing status, that is to say it does not have one, as the firm's shares trade on Ofex (similar to the pink sheets in the US) rather than on the London Stock Exchange. Big institutions are often not permitted by their mandates to invest via Ofex, and the shares remain relatively illiquid and the market capitalisation modest, further depressing City interest. And whilst the free float may have been an accident of history, management do care enough about the share price to have included it as a component of incentive compensation. In other words, Weetabix is just our sort of company.

In the autumn of 2002 Nomad purchased a sizeable investment in 8% Redeemable, Convertible Preferred stock issued by Lucent Technologies. The prefs, purchased for U$350 per share, are an unusual security as they can be put back to the company at par (U$1,000 per share) in August 2004 for payment in cash or a variable number of common shares. As at the time the market capitalisation of the firm was so low, the put risked (from a common equity holder's perspective) delivering half of the common shares to the pref holders if the share price failed to rise. The put also made the prefs the first of Lucent's fixed liabilities to come due (so they were at the top of management's to do list) and just as important pref holders would receive almost half of their investment back through cumulative dividends before the put became due! In effect, one half of Lucent's proforma common equity could be purchased for U$500m (the market value of the prefs) a figure equivalent to only a few months' research and development spending. The capital markets had all but given up on the company even though they had enough cash on deposit to redeem the prefs and all outstanding debt entirely.

The investment controversy was how would management respond to the dire prognosis delivered by the market? Management presented two choices: (a) continue as before and hope that operating cash flow would turn positive with further cost savings and perhaps an upturn in orders. This had been management's preferred route since the bubble burst. Or (b) dilute the existing shareholders whose investment had already fallen 98% from the peak three years earlier and issue more equity to fund redemption of the prefs. Management's assessment might have been something like Woody Allen's prognosis:

"More than any time in history mankind is at a crossroads. One path leads to despair and utter hopelessness, the other to total extinction. Let us pray we have the wisdom to choose correctly".

But there was a third choice which, as common shareholders, Marathon was urging the company to pursue: (c) conclude the market was wrong and buy back the prefs and common shares and repay debt with cash on hand and return the firm to an un- leveraged balance sheet. This would have preserved the upside for existing common shareholders and restored value for the pref holders but would have left management without a cash cushion, but this, we argued, could be restored through a rights issue if necessary. Management chose (b) the sleep-at-night choice. In short, management marked their emotions and the company's balance sheet to market at the weakest point in the cycle, and although time will tell this is likely to be a huge source of value foregone for the common equity holder. For the pref holders issuance of new common shares has provided the resources to meet the put (which is now covered many times with cash on hand) and the prefs have risen three-fold to trade at a premium to par, as the 8% yield is deemed attractive by fixed income investors. The investment has reached full value and will be sold as new investments become available.

Our results to date place Nomad at or very near the top of any investment fund league table over the same time period, regardless of whether the opposition employed leverage, options, shorting or such like – again, we employ none of these techniques. The effect is that, in all likelihood, Nomad's funds could be grown quite rapidly if we allowed the floodgates to open and take all comers. This we will not do. We have only one chance to grow Nomad to a reasonable size before it is closed, and the quality of investors when the doors are shut is of great importance to us. To date, we have declined almost as many investment dollars as we have let in, a ratio that the industry does not track and a habit that the industry is not good at keeping. But even so, whilst we hope that the fund will grow over time, we are in no hurry to do so, and will endeavor to maintain the quality of the Partners with whom we will share results, bad and good.

May we finish with the usual reminder of housekeeping issues and a final word on the need for patience? Several investors are new to the fund and so it may be worth reiterating some ground rules so that we all know where we stand. You can expect from us an annual and interim letter (this is our second interim letter), and Global Investment Reviews eight times a year in which we discuss our investment thoughts. In our opinion these documents, once digested, provide the information needed to form a judgement about what and how we are doing. From Nomad's administrator (Daiwa Securities Trust and Banking, +353 1603 9921 for your inquires) you can expect a monthly statement of your account and annual and interim financial statements. Nomad's orientation is genuinely long-term, and more regular reports, daily, weekly, monthly or otherwise, are likely to be of little value to you, and may even be counterproductive.

One of Nomad's key competitive advantages will be the aggregate patience of its Partners. We are genuinely investing for the long-term, in undervalued firms run by management teams who may be making decisions the fruits of which may not be apparent for several years to come. In the near term our results are as likely to be bad as good, but we are confident that in the long run they will prove satisfactory. If Nomad is to have a sustainable comparative advantage this will come from the capital allocation skills of your manager and the patience of our Partners. In the latter we have started well, with no Partner turnover since we began and almost no enquires

into performance despite the general decline in market prices. This is very unusual and a huge credit to our Partners and implies a similar long-term outlook. Only by looking further out than the short-term crowd can we expect to beat them. It is for this reason we named Nomad an Investment Partnership and not a fund. The relationship we seek is quite different.

As always, we thank you for your confidence and value your support.

Yours sincerely

Nicholas Sleep.

Nomad Investment Partnership.

Annual Letter.
For the period ended December 31st, 2003.

There are two ways to present results: either in discrete annual increments or on a compounded basis. The former is industry standard, useful in demonstrating consistency of results (which your manager makes no pretense of being able to achieve), and for helping to assess outcomes for those that invested part way through. Our preferred route however is to be assessed on a compounded, multi-year basis for the reason that the only event we control is whether we are right, not when we are right. It is quite possible that our annual results will be inferior to the market for a period, but this will only convey information about the timing of outcomes, whilst saying little about the end result itself. We would therefore encourage you to be indifferent to the results below.

It may also be worth reiterating that the results have been achieved without leverage, shorting, contracts for difference, options, synthetic structures (LYONs, PRIDEs, LEAPs, MASTs - we are not making these names up) or financial exotica of any sort. If we ever write to you asking for permission to invest in any of the above, sell your shares. And call us to sell ours. Nomad is not a hedge fund, it is an Investment Partnership, and the results below have been achieved without the investment Viagras that have become so popular with the get-rich-quick-crowd. The results have been earned the old-fashioned way, through contrarian stock picking.

With that in mind, the Nomad Investment Partnership and Nomad Investment Company Class A share gross results (i.e., net of management fees and costs, but before performance fees) for the last six months, trailing one and two years, as well as since inception are tabled below on a compounded basis, together with comparable results for a leading global stock market index (also see appendix):

To December 31st, 2003	Nomad Investment Partnership	MSCI World Index (net) US$
6 months	+42.5%	+19.8%
One year	+79.6	+33.1
Two years	+82.0	+6.6
Since inception (10/09/01)	+100.4	+10.5
Annualised since inception	+34.7	+4.4

For those investors that joined part way through, or are closet short-term oriented, the table below describes performance in increments (again, see appendix):

To December 31st, 2003:	Nomad Investment Partnership	MSCI World Index (net) US$
6 months	+42.5%	+19.8%
2003	+79.6	+33.1
2002	+1.3	-19.9
2001 (inception 10/09/01)	+10.1	+3.6

In previous letters we have tended to concentrate on describing some of the investments. In this letter we would like to change subject somewhat and describe some of the principles applied in managing the Partnership and explain its policies. These will be obvious to some of you and less clear to others, but it is increasingly important that we all know where we stand as the Partnership grows in size.

Accounting for Performance

In his autobiography Charles Darwin made an uncharacteristic error: as a young man at Cambridge, he recalled that,

"…My time was sadly wasted there, and worse than wasted. From my passion for shooting and for hunting, and, when I failed, for riding across country, I got into a sporting set, including some dissipated low-minded young men. We used often to dine together in the evening, though these dinners often included men of higher stamp, and we sometimes drank too much, with jolly singing and playing at cards afterwards. I know that I ought to feel ashamed of days and evenings thus spent, but as some of my friends were very pleasant, and we were all in the highest spirits, I cannot help looking back to these times with much pleasure".

However, in a footnote to the original text, Darwin's son, Francis, explains,

"I gather from some of my father's contemporaries that he has exaggerated the Bacchanalian nature of these parties".

Oh, dear! We all do that to some extent. It is at least comforting to know that even Darwin, a man whose great insights came from his ability not to fool himself, was capable of a little exaggeration. Perhaps he was just good at telling a story. At the inaugural Legg Mason Investor Conference Bill Miller, whose investment skills we much admire, confessed to analysing his mistakes more thoroughly than his successes. The latter he automatically presumed to have gone up for the very reason the shares were bought. As investors we all do this to some extent, winners flatter the ego regardless of the reason they went up, whilst we all feel bad about the losers. Several academic studies argue that mistakes hurt up to three times more than gains satisfy, a product of primordial environmental conditioning designed to prevent us from repeatedly eating poisonous food, apparently. For investors the implication of this asymmetry is great as it is often the favorable outcomes that drive performance more than losers destroy it. The Partnership's investment in Stagecoach has in effect paid for the failure of Conseco six times over and yet it was Conseco that we wrote to you about first. These biases are very ingrained.

So, in this letter we will take Bill Miller's advice and start by attempting to explain why the Partnership has performed well, whilst trying as best we can to avoid Darwin's error of fooling oneself. The reason, of which we are certain, is the decline in the level of fear felt by other investors. We can analyse and quantify this phenomenon. Take the interest rate that the market demanded from Stagecoach Plc, a relatively cash generative and asset rich business. At the peak the cost of debt reached 15% per annum and in the last annual letter we explained that the Partnership had made an investment in the common equity and attempted, but curiously failed, to make an investment in the firm's public bonds. (Readers may recall that we failed in this regard as the company had cornered the market in its own undervalued bonds). Thirteen months later the bonds trade above par (investors are paying more than 100c on the dollar to

receive 100c at a pre-defined date in the future, and interest in the meantime). What has changed opinions of this firm in such a short period? The answer lies in the huge levels of free cash flow that has followed the decline in capital spending, restructuring and asset sales. By changing strategy and capital allocation on a six-pence the balance sheet has been repaired, the business shrunk to its cash cow operations and the market now anticipates, with almost 100% probability of outcome that the bonds will be repaid. Indeed, the firm's standing is so good today as to be able to borrow money at a slight premium to the UK government and the share price at the time of writing has risen six-fold from our original purchase price.

This sea change in company behaviour is not limited to Stagecoach. The Partnership's investments in Primedia, Xerox, New World Development, Schibsted, Lucent, Georgica, Hong Kong and Shanghai Hotels, Telewest, BIL International, Jardine Strategic and Kersaf can all be described in this way (even after the sale of Lucent Preferred shares, that's over 40% of Partnership assets). According to Empirical Research Partners, an independent research boutique in New York, in 2003 the ratio of capital spending to revenues at US companies was at its lowest level since at least 1965 and free cash flow the highest compared to market capitalisation. The predominance of free cash flow has allowed market interest rates charged to the most indebted businesses (the so-called junk bond spread), the highest for a generation between the end of 1999 and 2003, to decline to more normalised levels and it is the shares of businesses perceived to be in the worst condition that have bounced the most. Nomad has been heavily concentrated in this category.

So, performance to date has been a product of investments made in the most despised businesses, where temporary issues have depressed prices. We hope to be able to report that fact to you in most letters, although the names of the companies and circumstances will no doubt change. Over the coming years, although less so in the short term, it is possible that the other half of our portfolio, the higher quality portion, will contribute the most to performance. It is possible also that some of our successful turnarounds may find themselves in this higher quality category if current management behaviour is sustained. We travel hopefully in this regard.

A Typical Purchase, Expected Returns and Portfolio Management

An index has been included along with results at the beginning of this letter, not for the purpose of explicit benchmarking but in order to place performance in context. Nomad is an absolute return Partnership, which raises the question: what returns are we trying to achieve? At this point regular readers may feel that in trying to discuss prospective returns we are skiing off-piste. However, we would rather expectations were sensible rather than risk any mental extrapolation of historic results. To help illustrate the returns we aim to achieve, it may be helpful to explain what we are thinking when we buy a share.

Our aim is to make investments at prices we consider to be fifty cents on the dollar of what a typical firm is worth. Capital allocation by investee companies must be consistent with value creation and, if this is the case, we expect that the real value of the business (the 100 cents value) could grow at around 10% per annum. The effect over five years will be to compound U$1 of value into U$1.62, and companies that can build value like this are normally rewarded in the market with a fair valuation (i.e., are priced close to U$1.62). This happy outcome would imply a return from purchase price (50 cents) of around 26% per annum. So, what happens when we are wrong? Our most common mistake is to misjudge capital allocation decisions by our companies: firms which articulate a share repurchase/debt repayment

strategy and have incentives to reinforce that outcome, throw caution to the wind and make acquisitions instead. The Partnership's investment in Readers Digest falls into this category. Capital allocation mistakes such as these often prevent the compounding of value but to date have rarely resulted in a permanent decline in the share price to below our purchase price (50 cents). We have therefore tended to find that our mistakes atrophy (stay cheap) rather than collapse, although we can all name one collapse!

If over five years our mistakes are on aggregate flat, and our mistakes total half of Partnership assets, then this implies a compounded annual return of 13% for the portfolio as a whole3. Not each year, and maybe not for several consecutive years, but over time this level of expectations appears reasonable to us. This model is daftly precise, a little too neat and the one thing we can almost guarantee is that returns will not be exactly 13%. It is important however that we all understand the investment process and time frames involved.

The prime determinants of outcome are price (sticking to 50 cents on the dollar) and capital allocation by management. The first is in our control, that is, it is in our control to be patient and wait for the right price. The second involves a subjective judgment about the quality of management, and an assessment about the sustainability of business returns in the long run. It is these factors that occupy almost all our time.

One Partner confessed to us that his wife viewed Nomad gains as jewelry in waiting and wanted to know what advice could we give him to delay the shopping spree? We offer no advice here but lay out some simple facts. Today, your manager's job is to reinvest the successful investments (dollar bills) back into more companies trading at half price. At the time of writing our internal calculation of the price to value ratio of the Partnership is 65 cents on the dollar, approximately the same as at the end of June despite fund performance. We have done this through investing incremental funding into new companies such as New World Development, Telewest, Midland Realty, and UnitedGlobal Communications, and through the sale of the Lucent Preferred shares (at above par value), the partial sale of Stagecoach and the pending sale of Weetabix (more later on this investment). Rest assured, nothing occupies your manager more than reducing the price to value ratio of the Partnership, as we believe this to be the best indicator of latent value and future performance. In the interests of fair disclosure Warren Buffett was asked a similar, jewelry-related question at the 2002 annual general meeting of shareholders of Berkshire Hathaway to which he replied with a grin that in his experience he had never been disappointed by what had happened after he bought the jewelry.

Partnership Growth

At the time of writing the Partnership is nearly five times bigger than at inception, with the smallest contribution having come from investment performance! The balance is due to subscriptions made by new and existing investors. These contributions have been welcome, from the viewpoint of making Nomad a viable commercial activity, but it has only been appropriate to accept subscriptions as we have been able to put incremental capital to good use. It is only fair to report that due to a quirk in your manager's character, growth in assets from this source drives him mad. The reason is the dilutive effect it has on overall performance. Take, for example, our investment in Resorts World, a Malaysian casino. At the time of purchase the holding was 5% of assets and yet despite the shares doubling in the last two years the holding today is smaller as a proportion of the Partnership than two years ago. Likewise, Kersaf and Television Broadcast, whilst Stagecoach would have peaked at around 25% of fund

assets but peaked at 15% due to dilution. So, what is to be done?

There are three alternatives:

1. Accept subscriptions as they come and place cash on deposit until suitable investments can be found. The problem here is that money can easily arrive faster than good investments, almost inevitably so, with dilutive consequences for existing investors, and suboptimal outcomes for new investors.

2. Accept subscriptions as they come and buy a little of everything to replicate the existing portfolio. This sounds attractive as, dealing costs and liquidity constraints aside, prospective returns from the Partnership as a whole are broadly maintained. But it does have one major, subtle drawback. There are very few absolutes in investing, but one thing about which we can be certain is that as prices rise prospective returns go down. If a business is worth U$40, the purchase of shares at U$30 has to be inferior to their purchase at U$20. We expend a great deal of mental effort preserving the integrity of our purchase decisions and would rather not have the thinking muddied by purchases made at ever-higher prices due to subscriptions. In our opinion, this alternative risks devolving the initial investment decision back to the subscribing party, who are likely-as-not unaware of their additional role as stock picker.

3. Match subscriptions to new ideas with a right to draw down or defer subscriptions as necessary. In our opinion this is the superior strategy as incremental funding is invested in new fifty cent dollars, thereby lowering the price to value ratio of the fund and with the effect that new investors bring something to the party. We have guestimated that we may be able to find incremental investments at the rate of one per month. This is a best guess on our part and if pushed we will concede that it looks high; ideas may be far less frequent than that. New holdings average 5% of Partnership assets at purchase, a fact that dictates incremental funding is limited to around 5% of assets per month.

Route 3 is the most equitable way to run the Partnership in our opinion but does require patience on the part of new investors whose subscriptions may need to be staggered over several quarters. Even so we have been surprised by the support this eccentric regime has received. The largest non-Marathon investor in the Partnership noted that one of the reasons they chose to invest was precisely because of the emphasis placed on performance over asset gathering. This investor then offered to pro-rata their subscription should we request, in effect extending their subscription period to make way for other co-investors. Such courtesy is exceptional in this industry but captures the spirit in which we are trying to run the Partnership. Bravo! We have no interest in diluting the quality of our Partners from what we believe to be a very high level.

Partnership Closure

Our preferred state of affairs is to close and for growth in assets to be investment-led. We will close when any of the following conditions are reached: it is no longer possible to invest a unit size; time spent marketing rises above a very low level, say 1% of the working year; or when we feel the quality of the client base is being diluted. In all likelihood this means closure when the Partnership is still small by industry standards and we are very comfortable with

that.

Weetabix

Many of you will have read that Hicks, Muse, Tate and Furst Inc., a private equity firm, bid £53.75 for each Weetabix share at the end of last year. We have received several e-mails from Partners offering congratulations. As detailed in the June 2002 Partnership letter your broadminded approach to investing and approval of the amendment to the investment objectives facilitated this investment and so you too should be congratulated. Freud might conclude that that is why the e-mails were sent. However, may we caution against euphoria?

Take the structure of the transaction, which is a Scheme of Arrangement rather than General Offer. The threshold of approval under a Scheme of Arrangement is 75% of the shareholders rather than 90% in the case of a General Offer. Proponents favour the lower threshold as it makes it harder for minority shareholders to block the transaction – but why be so defensive? The George family have signed irrevocable undertakings to sell to Hicks, Muse which would only be broken in the event of a bid at greater than a 25% premium to the Hicks, Muse offer. Why are the irrevocables necessary if the business has been properly auctioned, as the bankers claim? The family and board have a deal that is not available to shareholders through their continued employment with the firm post sale. It strikes us as odd that the highest bid for the company should come from a private equity firm who have an eye on selling the business at a profit, rather than a natural competitor who would enjoy the benefits of removing duplicate costs over many years. All this reinforces the notion that the price is low, in our opinion by around 25%, and note that Hicks, Muse will no doubt feel they have a good deal too.

We have written to Sir Richard George, Weetabix's Chairman, met the investment bankers who purportedly represent our interests, listened to their responses and voted against the deal. This is a cry in the dark, as even the largest non-family shareholder publicly supports the deal. Our shareholding is too small to make a difference to the outcome and although our preference is to retain the shares, in private unlisted form alongside Hicks, Muse, that option is not available under a Scheme of Arrangement and the Court will require us to sell our shares.

The Weetabix offer is only one of many privatisations of cheap, small and mid capitalisation businesses in the UK. Institutional shareholders have abandoned these firms in favor of mega-caps, and the shareholder base is left dominated by one or two inside interests and a tail of small holders. Our view is that the discount that the shares trade at in the market is an asset to be harvested for the benefit of all shareholders through share repurchase. But human nature being as it is, insiders will be incented by the low valuation to buy the shares for themselves. A Scheme of Arrangement is the most ruthless method of asserting one party's will over a fragmented and non- professional shareholder base and, coupled with irrevocable acceptances allows take-over offers to be presented as a fait accompli to shareholders. Please note: bad practice spreads. Despite this, and the almost daily occurrence of privatization proposals in the UK, there has been almost no criticism by shareholders, the authorities or in the media. In no other sphere of capitalism can your property be seized in exchange for cents on the dollar (except compulsory purchase on the grounds of national interest). But fund managers, who in their private capacity would be insulted if someone offered less than their house was worth, happily sell shares in their professional capacity at discounted prices to smart buyers. And no one cries foul.

The indifference shown by those in positions of influence reminds us of Horatio Nelson who,

when ordered by semaphore to withdraw from the Battle of Copenhagen, placed a spyglass to his blind eye and said, "I really do not see the signal!" Whilst we have a profit on our investment in Weetabix, shareholders should be careful what they wish for. Before congratulations are in order, Partners need to weigh in their minds short-term profits against value forgone in the discounted offer price and the incentive provided by the success of seizure for potentially more of the same in the future.

So, what is to be done? The best defense is to own enough of the company to influence the outcome. In most cases in excess of 10% of the shares outstanding would suffice. Those that advocate market liquidity of their investments over other considerations might like to bear in mind an investor's inability to influence outcomes whilst owning a deminimus proportion of a company. Should Nomad continue to grow in size, we intend not to make this mistake.

Housekeeping and a reminder on the Need for Patience

You can expect from us an annual and interim letter (this is our third annual letter) and Global Investment Reviews eight times a year in which we discuss our investment thoughts. In our opinion these documents, once digested, provide the information needed to form a judgement about what and how we are doing. From Nomad's administrator (Daiwa Securities Trust and Banking, +353 1603 9921 for your inquires) you can expect a monthly statement of your account and annual and interim financial statements. Do call them if you are not receiving all you should. Nomad's orientation is genuinely long-term, and more regular reports, daily, weekly, monthly or otherwise, are likely to be of little value to you, and may even be counterproductive.

One of Nomad's key competitive advantages will be the aggregate patience of its Partners. We are genuinely investing for the long-term, in undervalued firms run by management teams who may be making decisions, the fruits of which may not be apparent for several years to come. In the near term our results are as likely to be bad as good, but we are confident that in the long run they will prove satisfactory. If Nomad is to have a sustainable comparative advantage this will come from the capital allocation skills of your manager and the patience of our Partners. In the latter we have started well, with no Partner turnover since we began and almost no enquires into performance despite the swings in general market prices. This is very unusual and a huge credit to our Partners and implies a similar long-term outlook. Only by looking further out than the short-term crowd can we expect to beat them. It is for this reason we named Nomad an Investment Partnership and not a fund (and certainly not a hedge fund!). The relationship we seek is quite different.

As always, we thank you for your confidence and value your support.

Yours sincerely

Nicholas Sleep

Nomad Investment Partnership.

Interim Letter.
For the period ended June 30th, 2004.

Nomad's year to date performance is sufficiently close to the index (at the time of writing the differential is just 2%) to raise an eyebrow given the disdain with which we hold closet index managers. These are a sub-specie of professional fund managers that charge high active management fees whilst delivering index-like (i.e., non-active) performance. We can promise you that any resemblance Nomad may have to the closet index trackers is entirely coincidental. Our portfolio is nothing like the index. Indeed, it is not quite like anyone else's. And note, unlike the closet index trackers, at Nomad, no performance means no fees. That is the way it should be. (A notion to be slipped into your mutual fund manager's suggestion box!).

That said, the Nomad Investment Partnership Limited Partners interest and Nomad Investment Company Class A share gross results (i.e., net of management fees and costs, but before performance fees) for the last six months, trailing one and two years, as well as since inception (before and after performance fees) are tabled below on a compounded basis, together with comparable results for a leading global stock market index (also see appendix):

To June 30th, 2004	Nomad Investment Partnership*	MSCI World Index (net) US$
6 months	-0.97%	+3.52%
One year	+41.14	+24.00
Two years	+73.48	+21.06
Since inception (10/09/01)	+98.50	+14.37
Annualized since inception		
Before performance fees	+27.38%	+4.85
After performance fees	+23.14	

For those investors that joined part way through, or who despite our haranguing remain closet short-term oriented, the table below describes performance in increments (again, see appendix):

To June 30th, 2004:	Nomad Investment Partnership	MSCI World Index (net) US$
2004	-0.97%	+3.52%
2003	+79.64	+33.11
2002	+1.30	-19.89
2001 (inception 10/09/01)	+10.14	+3.61

Partnership Governance

In May, the balance of the funds waiting to be invested in Nomad were drawn down at a time when stock prices allowed us to lower the price to value ratio of the Partnership, and when insider buying, and share repurchase picked up at investee companies. The bulk of this

incremental capital was invested and leaves a cash balance of around 16% of assets. This too will be invested as and when prices allow. The Partnership has grown considerably in the last eighteen months to just over U$100m and should now be considered closed. This is our natural state of affairs, and one that will be punctuated with open periods in response to price opportunities.

Job one, two and three for your manager is investment performance, not asset gathering. Few practice this approach. We work under the assumption that if performance is reasonable then the level of interest in what we are doing will increase and, if appropriate, the Partnership will grow in time. Common sense and simple maths dictate that it will be opportune if growth can be channeled to coincide with depressed prices, and not market tops. We must aim for this standard, even though it is contrary to common practice in the industry. Had we adopted the industry standard open house approach the Partnership would be approximately three times its current size, but the results worse, and the quality of Partners meaningfully impaired. It is important to us that we all understand the investment process (a reminder is contained in the appendix, in the form of an interview published in the Outstanding Investor Digest), try hard to keep a healthy indifference to results achieved (certainly no extrapolation of annual results please) and maintain a patient temperament. Investment dollars work best when they occupy a different psychic space to almost any other form of savings you may have.

The size of any future reopening will be proportionate to the opportunity set: a melt- down in large capitalization shares (please), a debt market swoon like the one recently experienced in the US, or an emerging market crisis as occurred a few years earlier, would allow the Partnership to be many times its current size and improve its potential returns. Today, the opportunities are mainly small and mid-capitalization companies, especially in Asia, and mainly turnarounds in nature (which bring with them reinvestment risk once the stock is sold). And so, for the time being the Partnership will retain its modest size. Over time this may change, but the timing of that change is outside our control. When we do reopen, we will write to those that have expressed an interest in investing more. This is likely to occur during periods of market stress and we will have to trust that indications made during rosier times turn into contrarian subscriptions. Very few organizations practice this common-sense approach because they understand how human nature works. They suspect (or know!) the average investor will be bearish at the bottom. There is no point taking that particular horse to water. At Nomad, we believe our Partners to be exceptional. Take the drawn down of the queue in May. Within forty-eight hours of indicating our preference, all those in the queue had consented to subscribe their full amount, at little notice, and with several offers for more if we wished. Wonderful. And thank you. You have quietly let us get on with the job of investing without the prodding and poking that is commonplace throughout the industry. In turn, we have felt trusted and free to invest in ways we think is appropriate to the benefit of all our results. We are aware that the industry's record in raising capital at market lows is not good. But we are happy to trust you to be contrarian at the next market swoon.

Current State of Partnership Investments

Growth in the Partnership and disparate performance of individual holdings means that the distribution of Partnership investments is a little more diffuse than would normally be the case. Ten holdings still make up almost half of the Partnership, but there is a tail of smaller investments from the early days, which were sizeable at one time, and now bring the total number of holdings to just over thirty. In effect, we are building a new portfolio (the ten large holdings) within the old portfolio (the tail). Around one third of Partnership assets are invested

in companies in South East Asia, one fifth each in the UK and the US and one-tenth in Europe. Approximately seventy percent of the Partnership is invested in common shares, ten percent in corporate bonds (distressed) and the balance held in cash on deposit. The estimated price to value ratio of the Partnership is 61c on the dollar, down slightly from the end of the year due to the new investments.

We have holdings ranging from almost 7% to 0.3% of assets. At the time of writing, Jardine Matheson/Strategic and Costco Wholesale are around 6.5% of Partnership assets each, Xerox 3.1%, but Union Cement around 1% and Velcro 0.6%. Why? A consequence of price discipline is that one cannot be certain of the size of the investment opportunity in advance. We simply cannot be sure how many people will be prepared to sell to us at our price: it may be 20 shares or 20% of the company. We hope for the latter but more recently have found it to be the former. An extreme example has been our attempt to purchase shares in Union Cement. This is the Philippines' largest cement company and has been priced in the market at around one quarter of the replacement cost of its assets. The assets are world scale and reasonably new, or at least were constructed during the Asian tiger boom of the early 1990s. The low valuation of the company in the markets had the desired effect in reducing capital investment (why spend discretionary resources on shiny new assets when the market valued them at 25% of cost?) and free cash flow was instead used to repay debt. Despite the turnaround in strategy, investors barely seemed to notice and the shares, which had already fallen from U$0.30, bounced around between 1 and 2c a share. We started buying and in doing so raised the price over a six-month period from 1.5c to 2.5c and despite being almost the only buyer of shares we managed to purchase just U$1m worth of stock. This is remarkably little when one considers that Union Cement is a large company with a market value of U$200m and around U$700m in gross assets. The shares simply would not trade, indeed the average holding period indicated by share turnover during much of this period implied a 40+ year outlook by investors, coincidentally comparable to the life of a cement plant. Of course, the more undervalued the company became the less the shares traded, as more holders understood the under-valuation. But still we plugged along in the hope that as the price rose, we would be able to secure some more stock. This was not to be. By the time Holcim, one of the world's largest cement companies, purchased a control block in the firm at an effective price for Union Cement of close to 10c (US) a share, five times our average purchase price, we had secured only a small holding. It is possible that we could have made Union Cement a meaningful ten percent investment in the Partnership. As it was, and despite our best efforts, we managed to achieve a miserable 1% investment. Charlie Munger is right when he says, "it is aggravating to just buy a bit".

Our thoughts on Portfolio Concentration

As the cash is invested, portfolio concentration will rise. In theory, if we could find fifty ideas at equal discounts to value, with equal probability (conviction) of value being realized, then they could all be equally weighted in the Partnership. We could all then look forward to a nice smooth rise in the value of our shares in Nomad, free from the swings a more concentrated portfolio might create. But life is not like that. In reality opportunities in which we are comfortable to deploy capital are rare, and the highest conviction ideas the rarest of them all. The issue then is how much to invest in each idea? Bill Miller, who has run the Legg Mason Value Trust so brilliantly for many years, suggests the use of a system devised in 1956 by J. L. Kelly. A simplified version of the Kelly criterion is that investors should bet a proportion of the portfolio equal to 2.1 x p - 1.1, where p is the probability of being right. The common-sense outcome of this equation is that if one is certain of being right, one should invest the

entire portfolio in that idea. Even if one is say, 75% certain of being right the correct weighting remains high at 47.5% ((2.1 x 0.75) – 1.1). But does anyone do that? As far as we are aware, only the early Buffett Partnership portfolios had anywhere near this level of concentration, and then mainly in companies in which Buffett was a controlling shareholder. But is this not the right way to think? If you know you are right, why would you not bet a high proportion of the portfolio in that idea? The logical extension of this line of thought is that Nomad's portfolio concentration has at times been too low. And if it has been too low at Nomad, what has been going on at the large mutual fund complexes with many hundred stocks in a single country portfolio? Apply the Kelly criterion, and the average fund manager would appear to have almost no clue as to the likely success of any one idea. In our opinion, the massive over-diversification that is commonplace in the industry has more to do with marketing, making the clients feel comfortable, and the smoothing of results than it does with investment excellence. At Nomad we would rather results were more volatile year to year but maximized our rolling five-year outcome. If you do not share this view, think long and hard about your investment in Nomad.

One of the consequences of industry-wide over-diversification

Parents will understand when I say that when children are born, they seem to bring their own love with them. However, stocks are not like children. The more stocks you own the less you care about each one individually. Attention paid to corporate governance, capital allocation, incentive compensation, accounting, and strategy has to be diluted as the number of stocks rises. Alternatively, armies of analysts are drafted in, risking a decline into committee-based decision-making. When over- diversification becomes the industry norm then in aggregate investors risk failing to police bad corporate behavior. Would fund managers be so liberal with dysfunctional management if the holding was 20% of the portfolio rather than 0.2%? Of course not. Perhaps some of the scandals of the last few years would have been averted if fund managers had been more proprietorial about their holdings.

However, there are some glimmers of hope. We have been inclined to think of the largest shareholders in publicly listed companies as general partners. This works better with some fund management organizations than others, but the influence that a large properly oriented outside shareholder can have over corporate behavior should not be under-estimated. At Jardine Matheson, Brandes Investment Partners (the largest outside shareholder) proposed, and Marathon seconded, a motion to reorganize the firm. Although this proposal failed as management voted against via their shares in sister company Jardine Strategic, a watered-down version of the Brandes strategy has been pursued ever since and with wonderful results. At Kersaf, Allan Gray Limited and Marathon combined votes to propose an about-turn in company strategy. The strategy (all Allan Gray's work, not ours!) has proved to be excellent, and the share price of Kersaf has doubled in rand (and risen almost four-fold in dollars). At Hollinger International, Tweedy, Browne Company have professionally and selflessly pursued former Chairman Conrad Black to recover funds paid to him, and in the process have realized the private market value of the newspaper properties resulting in a doubling of the shares from Nomad's purchase. Our input has been limited to private correspondence with Lord Black, which is framed and may be viewed at Marathon's offices. Should you meet representatives from any of these fine investment-oriented fund management organizations buy them a drink. They have added greatly to your returns.

And lest you think Marathon has not been pulling its weight, at HCI, the owner of eTV, South

Africa's independent commercial TV station, Marathon is in the process of resisting in Court, an attempt by management to buy the firm against our wishes at what is demonstrably (and management agree) a massive discount to its real value. These actions are time consuming and expensive, but appropriate. To stand by and watch whilst we are having our wallet lifted makes little sense to us. Selling the shares and buying something else does no one any good either, even though this is common practice in the industry. As we wrote in the last letter:

"…the best defense is to own enough of the company to influence the outcome. In most cases in excess of 10% of the shares outstanding would suffice. Those that advocate market liquidity of their investments over other considerations might like to bear in mind an investor's inability to influence outcomes whilst owning a de minimus proportion of a company. Should Nomad continue to grow in size, we intend not to make this mistake".

The likely evolution of Partnership Investments.

In the office we keep a list of companies assembled under the title "super high-quality thinkers". This is not an easy club to join, and the list currently runs to fifteen businesses. Entry is reserved for the intellectually honest and economically rational, but that alone is not enough. There are many companies that do the right thing when their backs are against the wall, and this list excludes those temporarily attending church. The anointed few are there because they have chosen to out-think their competition and allocate capital over many years with discipline to reinforce their firm's competitive advantage. Good capital allocation takes many forms and does not necessarily require a firm to grow. The Partnership's successful investment in Stagecoach has been due to the firm's shrink strategy, not its growth, although that may come in time. At National Indemnity (an insurance subsidiary of Berkshire Hathaway), the firm's ability to write insurance only when pricing is good and stand back when pricing is poor, even if revenues decline by 80% and remain depressed for many years, is a wonderful example of capital discipline and good capital allocation. After all, why grow if returns are going to be poor? However, surprisingly few companies have the strength to just sit it out, or shrink, as the pressure to grow is often overwhelming. The clamor comes from within the company (reinforced by poorly constructed incentive compensation), Wall Street promoters and short-term shareholders. When faced with this barrage, the voice of the long-term shareholder often goes unheard. We ask companies with poor economics why they want to grow. And senior management, with their hands on our purse strings, look back at us incredulous at our line of questioning. It is just not that easy to resist the urge to grow, even if economic results look so so. The "super high-quality thinkers" are our best guess of those firms whose shareholders could abdicate their right to trade stock (allocate capital themselves) sure in the knowledge that their capital will be well allocated for years to come within the businesses. This list is a group of wonderful, honestly run compounding machines. We call this the "terminal portfolio". This is where we want to go. The question is, why is this list not the same as the current Nomad portfolio?

This is not an easy question to answer. But let us return to the church analogy for a moment. When we think about companies, the over-riding analytical consideration is the quality of the business and quality of management's capital allocation decisions. The longer investors own shares the more their outcome is linked to these two metrics. What separates a corporate hero from a loon is an intellectually honest appraisal of business prospects and armed with that knowledge an appropriate allocation of discretionary resources. There are only two reasons companies behave well. Because they want to, and because they have to. Our preference is to invest in those that want to. If we can find enough of these heavenly opportunities, they will

in effect put us out of a job, and you should be pleased with this happy outcome (even we will be pleased, if a little bored). The problem of course is price. In paying up for excellent businesses today, investors are already paying for many years growth to come, in the hope that, as the saying goes, "*time is the friend of a good business*".

We can all observe that stock prices, set in an auction market, are more volatile than business values. Several studies and casual observation reveal that individual prices oscillate widely around a central price year in year out, and for no apparent reason. Certainly, business values don't do this. Over time, this offers the prospect that any business, indeed all businesses, will be meaningfully mispriced. Even the mighty Berkshire Hathaway with its stalwart long-term shareholder base was demonstrably half priced in early 2000. And Marathon bought shares (unfortunately pre-Nomad inception). It is just a matter of time. Those that chase high prices today, leave less gunpowder for the future. In effect, they value future opportunities close to nil. So, opportunity cost is partly behind our decision as well. Today, we have made two investments in wonderful compounding machines, and only one of those is meaningfully represented in the portfolio (Costco Wholesale). What is the probability that say, over the next ten years, a good portion of these "super high-quality thinkers" will be priced at 50c? Our betting is that the odds are reasonable. Even though prices are generally high, the trick is to do the work today, so that we are ready.

<u>And finally, the usual Housekeeping and a reminder on the Need for Patience</u>

This final section may look familiar, as it is in part repeated from previous letters. However, this time we have included some thoughts on how we would like to be measured. The section may also be worth reiterating for those that have invested recently or are reaching the end of the letter for the first time (congratulations).

You can expect from us an annual and interim letter (this is our third interim letter) and Global Investment Reviews eight times a year in which we discuss our investment thoughts. In our opinion these documents, once digested, provide the information needed to form a judgement about what and how we are doing. From Nomad's administrator (Daiwa Securities Trust and Banking, +353 1603 9921 for your inquires) you can expect a monthly statement of your account and annual and interim financial statements. Do call them if you are not receiving all you should. Nomad's orientation is genuinely long-term, and more regular reports, daily, weekly, monthly, or otherwise, are likely to be of little value to you, and may even be counterproductive.

One of Nomad's key competitive advantages will be the aggregate patience of its Partners. We are genuinely investing for the long-term, in undervalued firms run by management teams who may be making decisions, the fruits of which may not be apparent for several years to come. Our preference is to be measured over a rolling five-year basis; consistent with time it takes for many large capital allocation decisions to bear fruit and the average period that we expect to own an investment. (Our framework for thinking about a typical purchase and expected returns was laid out in the December 2003 letter and is contained in the appendix to this letter.) If Nomad is to have a sustainable comparative advantage, this will come from the capital allocation skills of your manager and the patience of our Partners. In the latter we have started well, with no Partner turnover since we began and almost no enquires into performance despite the swings in general market prices. This is very unusual and a huge credit to our Partners and implies a similar long-term outlook. Only by looking further out than the short-term crowd can we expect to beat them. It is for this reason we named Nomad an Investment

Partnership and not a fund (and certainly not a hedge fund!). The relationship we seek is quite different.

We work hard at being as thorough and thoughtful as we can in making investment decisions. We do this conscientiously and have our own money on the line with you. It seems a considerable anomaly to us that the plethora of new investment boutiques and hedge funds that have emerged in the last few years have ostensibly the same investment process – short term, leveraged and news flow dominated. For our part we have no interest in such get-rich-quick schemes, and prefer to make money the old-fashioned way, through thoroughly researched and thoughtful stock picking, with a bias toward portfolio concentration and very low levels of turnover. This approach requires patience but suits our temperament and we believe will lead to satisfactory results in the long run.

As always, we thank you for your confidence and value your support.

Yours sincerely

Nicholas Sleep

Appendix 1: A Typical Purchase, Expected Returns, and Portfolio Management

This section was originally contained in the December 2003 letter to Partners.

An index has been included along with results at the beginning of this letter, not for the purpose of explicit benchmarking but in order to place performance in context. Nomad is an absolute return Partnership, which raises the question: what returns are we trying to achieve? At this point regular readers may feel that in trying to discuss prospective returns we are skiing off-piste. However, we would rather expectations were sensible rather than risk any mental extrapolation of historic results. To help illustrate the returns we aim to achieve, it may be helpful to explain what we are thinking when we buy a share.

Our aim is to make investments at prices we consider to be fifty cents on the dollar of what a typical firm is worth. Capital allocation by investee companies must be consistent with value creation and, if this is the case, we expect that the real value of the business (the 100 cents value) could grow at around 10% per annum. The effect over five years will be to compound U$1 of value into U$1.62, and companies that can build value like this are normally rewarded in the market with a fair valuation (i.e., are priced close to U$1.62). This happy outcome would imply a return from purchase price (50 cents) of around 26% per annum. So, what happens when we are wrong? Our most common mistake is to misjudge capital allocation decisions by our companies: firms which articulate a share repurchase/debt repayment strategy and have incentives to reinforce that outcome, throw caution to the wind and make acquisitions instead. The Partnership's investment in Readers Digest falls into this category. Capital allocation mistakes such as these often prevent the compounding of value but to date have rarely resulted in a permanent decline in the share price to below our purchase price (50

cents). We have therefore tended to find that our mistakes atrophy (stay cheap) rather than collapse, although we can all name one collapse!

If over five years our mistakes are on aggregate flat, and our mistakes total half of Partnership assets, then this implies a compounded annual return of 13% for the portfolio as a whole2. Not each year, and maybe not for several consecutive years, but
over time this level of expectations appears reasonable to us. This model is daftly precise, a little too neat and the one thing we can almost guarantee is that returns will not be exactly 13%. It is important however that we all understand the investment process and time frames involved.

The prime determinants of outcome are price (sticking to 50 cents on the dollar) and capital allocation by management. The first is in our control, that is, it is in our control to be patient and wait for the right price. The second involves a subjective judgment about the quality of management, and an assessment about the sustainability of business returns in the long run. It is these factors that occupy almost all our time.

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*Marathon Counsel: This is a hypothetical illustration only based on the assumptions set out above and is neither an indication or guarantee of the actual performance of the Partnership nor is it intended to form part of the investment objective of the Partnership.

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London WC2H 9EA
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(and more.)

OID MAILBAG
"ANYBODY CAN OWN WHAT THEY LIKE.
THE CHALLENGE IS TO OWN WHAT YOU *HATE*."

In his first letter to Heritage Value Equity Fund shareholders since taking over management of the fund, David Dreman discusses his investment approach, his current outlook and some of his favorite equity selections.

And then, in his most recent *Global Investment Review*, first-time contributor Nicholas Sleep touches on the concept of the equity yield curve and how to take advantage of it.

(continued on page 2)

OAKMARK FUNDS'
BILL NYGREN
"IN 2003, IT PAID TO AVOID EARNINGS AND DIVIDENDS.
BUT I WOULDN'T COUNT ON THAT CONTINUING."

From its inception on 11/1/96 through 12/31/03, Oakmark Select's shareholders have earned a compound return nearly three times that of the S&P 500 —22.2% vs. 8.1% —thanks to manager Bill Nygren (and co-manager Henry Berghoef since March 2000). Of course, we wouldn't ordinarily put too much weight on a seven-year record —

(continued on page 6)

BERKSHIRE AND WESCO ANNUAL MEETINGS
WARREN BUFFETT & CHARLIE MUNGER
"WHAT MAKES THE INVESTMENT GAME GREAT
IS YOU DON'T HAVE TO BE RIGHT ON *EVERYTHING*."

Anyone investing $10,000 in Buffett Partnership, Ltd. at its inception in 1956 who reinvested the proceeds into Berkshire Hathaway at the partnership's termination in 1969 would today own shares worth over $340 million. And that's *after all taxes, fees and expenses*. Just in case that's not sufficiently mind numbing for you, consider that before fees, but after taxes, the value would've been closer to $800 million.

(continued on page 23)

SEMPER VIC PARTNERS' TOM RUSSO
"SOME CHEAP, HIGH-RETURN COMPANIES
SET TO CAPTURE LOTS OF INCREMENTAL GROWTH"

Under the direction of Gardner Russo & Gardner's Tom Russo, Semper Vic Partners has earned a compound annual return net of all fees and expenses for the 20 years ended December 31st of 18.5% versus 13.0% for the S&P 500. As we told you last time, its worst loss for any year was 2.1%. And during the the three years ending 12/31/02 — a period in which the S&P was down 14.6% per year — his clients were actually up over 4.6% per year after all fees and expenses.

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MARATHON — LONDON'S NICHOLAS SLEEP
(cont'd from page 1)

Global Investment Review
September 30, 2003

THERE'S A YIELD CURVE IN EQUITIES, TOO, AND TODAY, IT'S PRETTY STEEP....

We agree with Bill Miller. We own what we hate....

Nicholas Sleep: Regular readers [of our *Global Investment Review*] will be familiar with our contention that there are two areas of persistent mis-pricing. First are high quality, high return, high growth businesses where the stock price anticipates a decline in corporate performance that fails to materialize. Examples within current U.S. portfolios include Moody's Corporation, Costco, International Speedway and Ethan Allen.

Second are disasters (other people's that is) where business valuations anticipate dreadful performance for years to come. These companies are usually despised by investors and seen as controversial. And examples such as Primedia, Xerox, Nortel and Solutia populate our portfolios. Bill Miller, fund manager of the Legg Mason Value Trust, is fond of saying that "most fund managers own what they like to own. We own what we hate to own".

There is a strong element of this kind of thinking to the Marathon portfolios at the moment....

There's a yield curve in equities, too.

Sleep: Why do these anomalies persist? A critical role is played by the ever-shortening timeframes adopted by institutional investors. In consequence, longer-term opportunities are typically forgone. The problem with shorter holding periods is elucidated by the notion of the "equity yield curve". For this, we are indebted to Murray Stahl and Steven Bregman at Horizon Asset Management who brought the concept of an equity yield curve to life in [New York-based] *Grant's Interest Rate Observer* [in their] December 22, 2000 [issue]....

A yield curve will be familiar to bond investors, but is rarely used to describe the stock market — the main conundrum being that equities have uncertain cash flows and no fixed redemption date. Equity, after all, is equity.

And the equity yield curve rises steeply after 18 months....

Sleep: But it is possible to plot the expected return for mandatory redeemable preferred shares where yield and duration are known and credit risk is minimal. In the original article, Bregman argues that the yield curve starts at Treasury rates of return and rises gently in line with bond yields for 18 months — i.e. it's "pretty efficient".

However, after 18 months the curve rises steeply to as high as 35 at two years (his study was performed at the end of 2000). We can't say we have seen too many 35% per annum propositions recently — at least not without taking on credit risk too. But Bregman's observation is important as it provides some theoretical underpinning for the structure of equity returns.

The question is, "Why?" And here's the answer....

Sleep: Why do mutual fund managers — who own shares on average for 11 months — invest at the Treasury end of the equity yield curve where returns are the lowest?

The answer probably lies in the error of their trying too hard to remove short-term share price volatility from portfolios (often referred to as, or confused with, "risk"). The effect is to prize the near term, more certain outcome. Furthermore, a liquid stock enables a swift exit just in case the investment decision proves wrong.

It is not surprising that General Electric is admired by investors for its low volatility of earnings growth and its huge and liquid market capitalization. Conversely, the dislike of earnings volatility is evidenced by the decline in the share price of Estee Lauder after the firm announced that earnings would fall short of expectations because advertising and marketing were being raised. It's not so much the advertising spend (surely the sellers that day did not really think advertising and marketing destroys value?) — rather it is the earnings disappointment that the ad spend creates which investors object to.

PORTFOLIO REPORTS estimates the following were Marathon Asset Mgm't Ltd's largest U.S. equity purchases during the 3 months ended 9/30/03:

1. SABRE HOLDINGS CORP CL A
2. SCHERING-PLOUGH CORP
3. SOLUTIA INC
4. WASTE MGMT INC
5. SUN MICROSYSTEMS INC
6. NEXTEL COMMUNICATIONS CL A
7. LUXOTTICA GROUP SPA ADR
8. IMS HEALTH INC
9. XEROX CORP
10. BERKSHIRE HATHAWAY CL B

FOR EXAMPLE, TAKE SCHERING-PLOUGH — PLEASE. WHEN IT RAINS, IT POURS. MURPHY WAS AN OPTIMIST.

SGP has a pretty steep yield curve. And here's why....

Sleep: What is the shape of the "equity yield curve" today? There are several mandatory redeemable preference shares that are priced to yield 8-15% to maturity in four to eight years. But these, unsurprisingly, are fairly illiquid. However there are several U.S. businesses that imply that the shape of the curve is still pretty steep. Take for example Marathon's recent investment in Schering-Plough. [Ed. note: All the following figures are in U.S. dollars.]

During the late 1990s Schering-Plough, along with Pfizer, was many portfolio managers' "big pharma" growth stock of choice, and in 1999 the firm's valuation peaked at $88 billion ($60 per share) to discount growth of around 15% per annum until 2008. The reason for this stellar valuation was that investors observed and extrapolated past successes: first, the growth in two company-developed proprietary drugs, Intron A — an "alpha interferon" for treatment for Hepatitis B, C and cancer; and Claritin — a non-sedating antihistamine with widespread applications.

(continued on next page)

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MARATHON — LONDON'S NICHOLAS SLEEP
(cont'd from preceding page)

It used to be clear sailing for Schering-Plough....

Sleep: The second reason was the extension of the economic life of Claritin through the company's innovative use of line extensions that focused on new delivery routes (syringes, tablets, lozenges, inhalers etc.) marketed directly at the consumer: Schering-Plough thinks of itself as the preeminent drug stock in this regard.

The effect was that its revenues doubled between 1994 and 1999 (with low product risk), its operating margins rose by 400 basis points and its operating cash flow nearly tripled. As capital spending remained almost unchanged, the company's free cash flow rose almost *four* fold.

SGP did nothing wrong. It just couldn't prove it....

Sleep: It was this latter metric that appears to have caused the company's downfall, as in May 2002 the FDA closed down the firm's Claritin factories for what it termed "compliance failures". In particular, the firm was unable to provide documentary evidence for each stage of the manufacturing process — although there was no suggestion that the quality of the product was faulty.

The firm has been fined $500 million and entered into a consent decree [which expires in] 2005. This came at a time when Claritin was finally coming off patent and prevented production of a Clarinex line extension.

When it rains, it pours....

Sleep: The generics have had a field day. During the second quarter of 2003 alone, revenues declined from $3.2 billion to $2.7 billion and cash flow halved. The timing could not have been worse. Next came an investigation by several states into the marketing and pricing of products. The investigation's turned criminal (the first criminal case in the sector) and may result in a fine of between $100 and $900 million according to various Wall Street estimates.

In the autumn of 2002, the SEC began an investigation into Schering-Plough's communications with investors following a meeting with a large mutual fund manager which presumably fell outside of Reg. FD. All of this has taken the share price down from $60 to $15.

HOW FAR OUT CAN ANALYSTS SEE?
LESS THAN THREE YEARS, APPARENTLY.

Under Fred Hassan, the turnaround begins....

Sleep: Richard Kogan, CEO and chairman since '98, resigned.... The successor's turned out to be Fred Hassan — formerly of American Home Products and then Pharmacia and Pfizer. Hassan's bias is to effect an operating turnaround with limited cost cutting rather than slash burn and sell.

Hope for a revenue-based turnaround comes in the form of Zetia which, when used in combination with statins such as Merck's Zocor, reduces cholesterol at a lower dosage than Zocor alone. A 50/50 joint venture's been established. But as Zocor does not come off patent until '06, Merck are in little hurry to cannibalize their own revenues just yet.

A one pill Zetia/Zocor combination is in the phase III clinical trials necessary to license a one-pill product and thus allow one insurance claim (and co-pay) as opposed to the current two.

It seems that 23 of 29 analysts can't look out three years.

Sleep: Unlike most pipeline drugs, the efficacy and demand for the Zetia/Zocor combination is already known. It's tried and tested and used today by those who can afford the cost of the extra co-pay pill. And the project would appear lower risk than the normal, jam-tomorrow pipeline drug. According to various Wall Street estimates, Schering-Plough's share of Zocor/Zetia earnings is expected to be about $600 million post tax in '07 — roughly double the current profits for all of Schering-Plough.

But despite acknowledging the probability of Zocor/Zetia earnings in '07, Wall Street isn't prepared to wait. Of the 29 analysts covering the firm, only six — none of whom work for the main stockbrokerage firms — think it's a buy. It appears that with a reasonable degree of certainty, attributable operating profits (note Zetia/Zocor is a joint venture) will be in the neighborhood of $2 billion in '07.

Schering's current price discounts no growth in cash flow.

Sleep: Whenever we value any business, we subtract maintenance capex, taxes and normalized interest costs and make assumptions for growth and its longevity and add back non-core assets and the value of fixed assets plus cash, net of liabilities. Assuming modest growth of 5-7% in '07 this would imply a value for the business of around $38 billion ($28 billion growth stock plus $10 billion in residual assets).

[Editor's note: Dividing by the 1.45 billion shares that *Value Line* expects Schering-Plough to have outstanding in 2007, that would be equivalent to about $26 per share....]

Sleep: As the market tends to discount near-term events in advance, this valuation may be achieved in '05 — which would imply an annual return of 20% per annum from Marathon's purchase price. In other words, the equity yield curve looks pretty steep.

Of course, Zetia/Zocor may not be a success, its launch may be delayed, it may cost more than anticipated to market or Pfizer may trump it with a better product. Despite this, as the current valuation of Schering-Plough discounts no growth in cash flow for the foreseeable future, the downside appears modest.

We didn't think we'd have the opportunity to own SGP.

Sleep: To conclude, despite our recent performance, we remain optimistic for future relative returns. The reason is that structural price anomalies persist in keeping with the theoretical insight provided by the equity yield curve concept described above. Indeed, as the average holding period of shares has declined, it is our opinion that long-term mispricing has become more widespread as investors allow their actions to be driven by false stimuli. Investment opportunities may not be in the same sectors as in 1999 and 2000, but the prospective returns, (i.e. the steepness of the "equity yield curve"), remain attractive.

Five years ago we would have thought it unlikely that we would own shares in Schering-Plough, but events have conspired to make the shares an attractive investment.

—OID

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Nomad Investment Partnership

Annual Letter
For the period ended December 31st, 2004

To December 31st, 2004	Nomad Investment Partnership	MSCI World Index (net) US$
6 months	+23.2%	+11.5%
One year	+22.0	+15.2
Two years	+119.2	+54.4
Three years	+122.1	+22.6
Since inception (10/09/01)	+144.6	+29.4
Annualized since inception		
Before performance fees	+30.8%	+8.0%
After performance fees	+25.7	+8.0

The figures above are presented on a cumulative basis (for the "A" shares, after management fees and before performance fees). Below the same results are presented in discrete annual increments. It is the upper table that is most useful in assessing long-term investment performance (see appendix):

To December 31, 2004:	Nomad Investment Partnership	MSCI World Index (net) US$
2004	+22.0%	+15.2%
2003	+79.6	+34.0
2002	+1.3	-19.3
2001 (inception 10/09/01)	+10.1	+3.9

2005 is the fifth calendar year of the Partnership. This is important only in as much as we asked you to measure our performance over rolling five-year periods and we are now in the final stretch to our first five-year anniversary. Since inception we have turned a dollar into two dollars and forty-four cents before performance fees, and two dollars and fourteen cents after fees, compared to an index that would have added around twenty-nine cents to the original dollar. But there is some way to go yet, and as always, please, no mental extrapolation of historic performance, that is simply a recipe for everyone to get upset.

There has been much comment in the press of the recent success of so called "value investors". In general, the commentary has described the last few years as suiting "value investors", just as the last few years of the previous decade are described as suiting "growth investors". We will discuss growth and value some more in this letter. Certainly, it is fair to say that our results indicate they have been fruitful for contrarian investors. But now with prices higher it is a little harder. A word of warning: the current market is not like the end of the 1990s when a bubble in high priced mainly technology stocks was balanced with Zen like symmetry by an anti-bubble of cheap, slower growth business. Today, prices are evenly high across the various opportunity sets, and there are few readily apparent pockets of under-valuation of size. We particularly enjoyed an editorial in the Investor's Business Daily carried in December, which captures the mood of the markets quite well,

"The Fed tightens, stocks go up.
The dollar falls, stocks go up.
Oil soars, stocks go up.
Retail sales wobble, stocks go up.
Is this a great country or what?"

It is probably fair to say that reinvestment risk (the risk from investing the incremental dollar poorly) is probably higher today than normal. But then, with the Partnership closed, we do not have many incremental dollars to reinvest.

Growth and Value

The debate over growth and value is perennial, and quite unnecessary. Warren Buffett got it right years ago:

"Whether appropriate or not, the term "value investing" is widely used. Typically, it connotes the purchase of stocks having attributes such as a low ratio of price to book value, a low price-earnings ratio, or a high dividend yield. Unfortunately, such characteristics, even if they appear in combination, are far from determinative as to whether an investor is indeed buying something for what it is worth and is therefore truly operating on the principle of obtaining value in his investments. Correspondingly, opposite characteristics – a high ratio of price to book value, a high price-earnings ratio, a low dividend yield – are in no way inconsistent with a "value" purchase."

Source: Berkshire Hathaway 1992 Annual Report

We won't end the debate here but, so that we all understand, our definition is that a business is worth the free cash flow that it can be expected to generate between now and judgment day, discounted back at a reasonable rate. Period. Growth is therefore inherently part of the value judgment, not a separate discipline. If it is that simple, and it is, (at least, the definition is simple) then how has the industry got in such a muddle, and why do commentators continue to use price to book ratios, price to earnings ratios or their modern equivalents such as EV to Ebitda, as a proxy for value. We all know that it does not mean a thing. So why do we do it?

Psychologists refer to simple rules of thumb as heuristics. In normal life heuristics generally work. We do not consciously process all the possible combinations of clothes in our wardrobe when dressing in the morning, instead we subconsciously use heuristics to narrow the options. However, in the stock market, doing half the work (only observing a portion of the wardrobe) is of limited benefit if successful investment requires more work. Price to book, price to cash flow etc., cannot be an accurate substitute for the definition we provided above. The wide use of valuation heuristics in the industry is quite bizarre. Their informational value, leaving aside inaccuracy for a moment, can be limited if only because successful investing is a minority sport. Their survival can probably be attributed to intellectual laziness on the part of the investment professional, and spin on the part of the industry's marketing departments. It certainly has little to do with investment excellence. So, when commentators suggest that "value" has beaten "growth", or "growth" has beaten "value", please note that little of real substance is being imparted. It certainly has little to do with our Partnership's results.

Why we think what we think

It is only in such a topsy-turvy world that a common-sense Investment Partnership, such as Nomad, can be seen as lunatic fringe – trust me, we are. The industry has a dreadful time pigeon-holing our Partnership. Not that we mind one jot. Nomad is a value investor in the sense that we like to buy stocks at half price. But the largest holdings would be described by most of our peers as growth stocks. We have the ability to invest globally, but 40% of Partnership assets are in South East Asia. We are concentrated (the top ten holdings make up around 65% of Partnership assets), but we have investments as small as 0.5% of assets. This year we held company meetings in California, Johannesburg and Hong Kong, where we have investments, but also in Zimbabwe, where we have none, just because we were curious. We asked the London office of Rio Tinto plc., a large global mining business, if they could help arrange a meeting with their Zimbabwe subsidiary quoted on the Harare Stock Exchange, only for their investor relations officer to ask, "is it listed?"! We can own listed and unlisted equity and bonds, like a hedge fund, but we can't go short. We have a performance fee that is equitable, not egregious, in an era when egregious is the norm. It is so equitable that a famed US investor told us "you won't make money like that", meaning the management fee is too low. But we have made money, we have earned it through performance, not asset gathering. But most important of all, we do not resort to "belief" statements to justify our actions (look out for the use of that particular word when discussing investments, particularly when "belief" is attached to a heuristic). Ayn Rand had it about right when she wrote John Galt's famous speech in Atlas Shrugged that "no substitute can do your thinking". Watch out, this industry is full of the non-thought of received ideas, starting with the value, growth debate and valuation heuristics. We think we try harder than most to be rational and creative. The combination of the two is important. It is nearly seventy years since John Maynard Keynes wrote his "General Theory". Surprisingly little has changed:

"Finally, it is the long-term investor, he who most promotes the public interest, who will in practice come in for the most criticism, wherever investment funds are managed by committees or boards or banks. For it is in the essence of his behavior that he should be eccentric, unconventional and rash in the eyes of average opinion. If he is successful, that will only confirm the general belief in his rashness; and if in the short run he is unsuccessful, which is very likely, he will not receive much mercy. Worldly wisdom teaches that it is better for reputation to fail conventionally than to succeed unconventionally."

Source: The General Theory of Employment, Interest and Money
John Maynard Keynes

Why is no one doing a good job?

Among the best performing stocks of the 1990s were EMC, Dell, PMC Sierra and Microsoft. These were the cheapest stocks a decade ago, but no value investor owned them. But then again, none of the large growth investors (excluding insiders) owned the shares all the way through the decade either. Why is this? Why weren't value investors, those who claim to be good at pricing a business, invested in Dell in 1990? Why is no one doing a really good job?

No, we weren't invested in Dell either. Worse still, we weren't looking. Although Dell was not expensive at the time, I am sure we would have concluded that its probability of failure over the next decade would have been high, or at least high enough to stop us owning the shares. A study by Michael Goldstein at Empirical Research, a research boutique, claims that

the probability of growth stock failure (company growth slowing) is as high as four in five over five years and nine out of ten over ten years. And in the case of Dell, we would have been wrong. We take no comfort from the fact that not seeing success is a perennial investment mistake: in the 1950s a large Baltimore based fund management company sold their clients' shares in IBM only for the shares to appreciate to the point that the value of the shares sold would become bigger than the whole fund management company itself. What we are trying to do today is avoid the Baltimore company's second mistake, which was to sell an equally big stake in Wal-Mart in the 1970s!

When investors describe themselves as growth or value it might be helpful to have two questions in mind. To the value investor ask, "what is it about your approach that would have stopped you owning K-Mart for much of the last twenty years?" (K-Mart was a "cheap" stock, as measured by say price to book value – but a dreadful investment, recent performance notwithstanding), and to the growth investor ask, "what is it about your approach that would have stopped you selling Wal-Mart?". So how does one avoid these mistakes? The answer lies in analyzing not the effects and outputs of a business, but, digging down to the underlying reality of the company, the engine of its success. That is, one must see an investment not as a static balance sheet but as an evolving, compounding machine.

Deconstructing the Business case for Costco Wholesale

We have written about Costco before (December 2002) but make no apologies for its inclusion again. The reason is that it is important to us that you understand not only what we do, but why we do what we do. This is not easily done, as I am sure I will now demonstrate. In our experience very few investors understand what their managers really do. We know this because fund managers are often sacked at the trough of their relative performance, and invariably just as performance is about to turn. Clients that sacked Marathon at the end of 1999 (you know who you are) have missed out on a 12% annual gain compared to the index since, a gain which far outstrips any deficit against the benchmark during previous years. So, education is important. It helps both parties make rational decisions. Costco is also an important investment for the Partnership at close to 10% of assets. I am also conscious that in the September issue of the Global Investment Review, your manager wrote an article explaining the risks of doing precisely what he is about to do. That is, by publicly committing to an investment it may become harder subsequently to change one's mind. A copy of the essay is contained in the appendix. However, on the basis that fore-warned is fore-armed, I shall continue. You will understand if we don't sell our shares just yet!

Costco Wholesale is a member-only wholesaler of consumer goods. Membership is available to the public at a price of U$45 per annum. The act of purchasing membership has the effect of raising the company's share of mind with the customer in the same way that consumer goods companies hope to achieve with conventional advertising. At Costco, the consumer has chosen to commit to the retailer. In other words, people shop at Costco because it is Costco, not because Costco stocks Coke. And the reason they shop is that goods are priced at a fixed maximum 14% mark up over cost. The fixed mark-up is referred to in the industry as "every-day-low-pricing" or EDLP, in order to differentiate it from normal industry practice of changing prices in an attempt to influence traffic, or so-called high-low pricing. At Costco the consumer pays no more than 14% over what the company paid, period. In the December 2002 letter to shareholders, we wrote:

"To understand how important EDLP is to Jim Sinegal, the firm's founder, consider the following story which was recounted to us by a company director. Costco bought 2m designer jeans from an exporter and shipped them into international waters and re-imported the jeans for an all-in price of U$22 or so per pair. This was U$10 less than the firm had sold the jeans for in the past (offering the potential for a 50% mark-up) and half the cost of most other retailers. One buyer recommended taking a higher gross margin than was usual (i.e., more than the usual 14% mark-up) as no one would know. Apparently Sinegal insisted on the standard mark up, arguing that if 'I let you do it this time, you will do it again'."

Most supermarkets mark-up goods in aggregate by twice as much (in margin terms) as Costco and even the mighty Wal-Mart marks up by half as much again as Costco. In order to make money at such low (gross) margins Costco must ensure that: (1) Operating costs are low, indeed very low. It is indicative of the paranoia with which the company is run that costs are measured in basis points (there are 100 basis points in one percentage point). This makes life difficult for Wal-Mart and the hypermarkets who cannot price at aggregate Costco levels and make money as their cost bases (approximately 15% and 25% of revenues respectively) are too high. (2) That the wholesale price is as competitive as can be. The key to negotiating terms is that the number of items in a store (stock keeping units) are fixed at 4,000, and the right to fill one of these spaces is auctioned, with the supplier that provides the best value proposition to the consumer winning space on the shop floor! Contrast this to normal industry practice whereby the supermarket assumes the role of landlord, auctions space to the highest bidder and pockets the rents ("slotting fees" in industry parlance). Many supermarkets make their money from buying from the supplier. Costco makes money from selling to the consumer. The firm publishes the criteria required to become a Costco supplier on its UK web site. After setting out the definitions of quality, pricing, packaging and gratuities ("expressly prohibited" for reasons we can all understand) there is the following statement about purchasing quotes:

"We expect all vendors to consistently and voluntarily quote the lowest possible acquisition price available on all items. A vendor who does not consistently and voluntarily quote its lowest prices to our buyers will be permanently discontinued as a purchasing source for Costco."

Source: Costco.co.uk

Grief. One strike and you're out!

(3) Revenues need to be very high. This last factor is partly a self-fulfilling prophesy – revenues will be high if the other factors, (1) and (2), are favorable. The issue is what the company then does with this revenue advantage. In the case of Costco scale efficiency gains are passed back to the consumer in order to drive further revenue growth. That way customers at one of the first Costco stores (outside Seattle) benefit from the firm's expansion (into say Ohio) as they also gain from the decline in supplier prices. This keeps the old stores growing too. The point is that having shared the cost savings, the customer reciprocates, with the result that revenues per foot of retailing space at Costco exceed that at the next highest rival (Wal-Mart's Sam's Club) by about fifty percent.

The stores are mainly owned rather than leased. This makes sense in terms of controlling costs (no greedy landlords putting up rents) but also means that growth is measured and predictable, if slower than Wall Street might like. But this is fine with us if it means that the probability

of continued success is higher than under a going- for-broke expansion plan.

In the office we have a white board on which we have listed the (very few) investment models that work and that we can understand. Costco is the best example we can find of one of them: scale efficiencies shared. Most companies pursue scale efficiencies, but few share them. It's the sharing that makes the model so powerful. But in the center of the model is a paradox: the company grows through giving more back. We often ask companies what they would do with windfall profits, and most spend it on something or other, or return the cash to shareholders. Almost no one replies give it back to customers – how would that go down with Wall Street? That is why competing with Costco is so hard to do. The firm is not interested in today's static assessment of performance. It is managing the business as if to raise the probability of long-term success.

Deconstructing the Investment Case for Costco Wholesale

What is it about growth stocks that dooms them to failure? In other words, why is Michael Goldstein's growth stock failure rate, and our shunning of Dell, normally right? The answer is that success encourages competition, and capital flows into an industry to compete away the excess returns. Like all heuristics, this works most of the time, and we can all think of businesses that were super profitable for a while before the competition caught on. But what of those that don't fail? Michael Dell succeeded by keeping costs low and passing back his scale benefits to the buyer of his PCs. By the time the competition had matched him in pricing he had moved on. And on and on. (Perhaps someone could slip this letter into Carly Fiorina, Chairman and CEO of Hewlett Packard's suggestion box). Amazon.com may be following this path as well. So, the first point is that whilst Costco continues to recycle cost savings to the consumer, it is lowering the probability of failure.

So, what heuristics do investors incorrectly apply to Costco (why might the shares be mis-priced?). Heuristic One: "the company has low margins" (net profit margin is 1.7%, compared to Wal Mart at 3.6% and Target at 4.2%). True, but that's the point. The firm is deferring profits today in order to extend the life of the franchise. Of course, Wall Street would love profits today but that's just Wall Street's obsession with short term outcomes. Heuristic Two: "it's expensive at 24x earnings". Really? Net income is a small residual, as discussed above. The firm could earn Wal-Mart margins by taking pricing up a little, in which case the firm would be on 11x earnings, but would it be a better business as a result? We think not, if it allowed the competition to catch up. Heuristic Three: "Costco has a cost problem". Costs have risen as a percentage of revenues in the last few years due to the expense of a warehouse and distribution system associated with the next phase of the firm's growth and the cost of employee benefits and insurance, especially in California. This has people fooled who really should not be. At the annual general meeting for an investment company that we hugely admire, the investment firm's founder (and industry hero) was asked by a client why their holding in Costco was just 1% of the fund, especially when they have a reputation for portfolio concentration. The answer given was that of the firm's three constituencies (labour, customers and shareholders) the first two had been ascendant. This sounds nice and neat, but the phenomenon is cyclical: labour are "happy" according to Sinegal, Costco's founder and CEO, incremental stores will leverage fixed costs, and in the letter to shareholders Sinegal describes costs as "unacceptable". In short, they are on to it. Our investment hero was mistaken, by about U$20 per share so far, or a gain of 65%.

Is it perfect?

No. But that suggests an interesting question: What characteristics could one bestow on a company that would make it the most valuable in the world? What would it look like? Such a firm would have a huge marketplace (offering size), high barriers to entry (offering longevity) and very low levels of capital employed (offering free cash flow). Costco has some of these attributes. The range of products is as wide as any retailer, and by-passing savings back it is building a formidable moat. It is also more asset light than its peers, but it is not the lightest of them all. For that one must turn to the Internet. In our opinion a business such as eBay could be the most valuable in the world. It has a huge marketplace, the biggest, an auction marketplace naturally aggregates to one player, offering high market share and high barriers to entry to the winner. Product pricing may be supported by the incumbent local newspapers and publishing businesses which have expensive machinery to replace and usually unionised labour and may provide a price umbrella for eBay. Better still eBay makes the customer pay for a high proportion of the assets used in the transaction such as PCs, modems, phone lines and so forth. But best of all, the incremental assets required to grow are so small. At Costco the firm will spend around U$15m per incremental store which will serve a radius of perhaps thirty miles. U$15m is a lot of servers for eBay, and whilst we are not experts, that may be enough to serve some countries. So no, Costco is not perfect. Perhaps we should own eBay as well.

What are the economics of our purchase of shares in Costco?

Readers that don't enjoy sweating the maths can resume at the next paragraph. Those that like a work-out, read on. Analysis of the annual report (disgraceful lack of colour pictures) reveals that revenues of U$47.2bn (year to August 2004) represented a 12% mark up on "merchandising costs" and left enough to pay for operating costs (SG&A) of 9.8% of sales (one third of the hi-lo supermarkets). Profits from retailing are therefore around U$456m per annum to which one should add the membership fees of U$961m = U$1.41bn, pre-taxes. Taxes approximate depreciation most years, so pre- tax income equates to gross cash flow before maintenance capex which at around U$250m per annum implies around U$1.17bn in free cash flow as a cash cow. This compares to a fixed asset base of company owned real estate of U$9.6bn (depreciated value U$7.3bn). Working capital is "supplier funded" and means that the U$1.17bn free cash flow represents a yield of around 12% on fixed assets. A bear argument is that if the real estate was leased, free cash flow would be nought: this looks right but may miss two things: (1) Rents provide a return to their owners, not just break even on the cost of capital and (2) The store base is under-earning, perhaps significantly. Evidence for this is as follows: revenue per store at the oldest stores is twice this year's new openings, revenues per store at the oldest stores are still rising at 3 to 4% per annum, costs per new store suffer from low capacity utilisation of warehouses, and penetration in California is six times US State average. Store growth will be around 5% per annum and management confess to "always under-estimating saturation": in LA post the merger with Price Club in 1993 they thought 31 stores were too many for the market, but today there are 36. Likewise, in Seattle and Alaska the penetration of cards (membership) is 65% of households (gosh) but in most markets it is below 10%. Note also that one third of the store base remains in California, and almost half on the West Coast. This is a very young franchise. Half of the store base is over ten years old and earns 65% of the revenues whilst using approximately 40% of the asset base. What this means is that the oldest stores earn around 16.5% on assets and the youngest earn 6%. In other words, there is an approximate 50% rise in aggregate profits to come as the store base matures (4% growth per annum), plus same store sales growth at the mature stores (approx. 4% per annum) implying 8% growth before new store openings, which will add 5%

to the store base and can easily be funded through free cash flow. This suggests normalised growth of 13%, and I don't think it is a stretch.

How do we think about valuation? There is a range of possible outcomes for the business, some are more likely than others and, in our mind, they have various probabilities attached. What we present below is our assessment of central value for Costco, but you should bear in mind that it is not the only value for Costco. Our average purchase price of U$39 per share (a blend of U$30 per share when the Partnership was small, and U$40 per share following the draw-down of the Nomad subscription queue in the summer) discounts modest growth of 5 to 6% per annum and is too low for a business that will be pushed not to grow earnings 10% per annum. A price of U$43 per share discounts 7% growth and U$85 to U$90 per share 15% growth. There is a very real possibility that the business could be priced to discount growth of 10% which would imply a price of U$62 per share today (and that price should rise by our 10% discount rate per annum). If it takes five years for the shares to converge on a price which discounts 10% growth per annum, then the shares would need to rise by 20% per annum from our average purchase price of U$39 per share.

Such a gain would add around 2% per annum to Partnership assets. And it is this that makes me think the weighting in the portfolio is too small. If Dell is the appropriate model for Costco, then the probability of failure is lower than for most growth stocks. It is lower again when one considers self-funded, as opposed to, rented growth. And lower again when one considers the fixity of mark up. To a far greater extent than for many businesses the company controls its own destiny. So, what attracted us to Costco is the predictability of outcome: we don't think it is going to fail for many years. But is a 2% gain per annum optimal? If one applies the Kelly criterion (discussed in the last letter) the weighting should be much higher. So already your manager may have made his first mistake investing in Costco. From not buying enough. Perhaps I will get my opportunity to make amends.

So, the consensus has it that Costco is a low margin, expensive retailer with a cost problem. That is certainly one description. In our judgement it is a cost disciplined, intellectually honest, high product integrity, perpetual motion machine trading at a discount to value. The weighting in the Partnership may be too small, but even so as the description of the business migrates in the minds of the average investor from the former to the latter, I think we will do quite well.

A Short Word on thinking about Business Values as opposed to Stock Prices

We go through this analytical process with each investment and have expressed our thoughts on Costco here to help illustrate that transient stock price quotations mean little to us (except as an opportunity set for incremental capital). And they should mean little to you. Ignore Nomad's performance so far. We own shares for multi-year periods and so our continued investment success has far more to do with the economics of the underlying businesses than it has to do with their last share price quote. In the last year or three, share price quotes happen to have been in our favour and they flatter your manager's input. You should not always expect this to be the case. There is no reason why business values and share prices should move hand in glove. You should expect that there will be a time when prices, and Nomad's performance, significantly lags the performance of our underlying businesses. It is then that we will ask you to be contrarian and invest more.

How big is Nomad?

There is no getting around it, Nomad is stapled to a fund management organisation three hundred times its size. This was important for Nomad's genesis, and I wonder if it would have survived this long if truly independent. But it is a problem also. Particularly when picking stocks. This is because your manager wears two hats, that of analyst to the main Marathon funds, and that of Portfolio Manager to Nomad. The problem comes when an order for Nomad is aggregated with those of the main funds. Then Nomad, whose own size is small, in effect behaves as if it was a U$30bn fund (Marathon's total assets under management). This is not ideal, but it is hard to devise a system which does not amount to a worse outcome for one party or the other. We struggle with a satisfactory system, but you should be under no illusion that Nomad's returns, such as they are, are a product of its size alone. We look like a mouse but move like an elephant. It is not a good combination, but it is what it is.

Thank you

We don't write to you that often, as measured by number of letters per annum. But the sum of the letters we write amounts to around ten per stock holding period (two annual letters times five years). On this measure we may be more communicative than many investors who write more often, but trade shares more frequently still. Even so, we like the balance as it is, and are hesitant to fall into "say-something" territory. We are very conscious that investors in the Partnership have reciprocated and allowed us to get on with our job of roaming the globe looking for value. Thank you.

On the administration side, please do call Daiwa Securities Trust and Banking in Dublin with your enquiries (+353 1603 9921). I am aware that there have been issues with the timely receipt of statements and accounts. We are on to it. Please do press them if you are not fully satisfied. They are here to help you, and you have paid for their services. Don't be shy, we aren't. Likewise, Alexandra Aitken at this office (+44 207 497 2211) is employed to help with basic performance and statement enquiries.

As always it is an absolute pleasure running this Partnership. We value your confidence in us very highly and thank you for your patience.

…back to the annual reports.

Yours sincerely

Nicholas Sleep

Appendix

Introduction to the Global Investment Review, September 2004.

"…this is a superpower in error-causing psychological tendency: bias from consistency and commitment tendency, including the tendency to avoid or promptly resolve cognitive dissonance. Includes the self-confirmatory tendency of all conclusions, particularly

expressed conclusions, and with a special persistence for conclusions that are hard-won".

Charles T. Munger, speech at Harvard Law School, estimated date June 1995

It is not uncommon for plan sponsors and other clients to ask their fund managers to discuss their latest stock purchases. Perhaps the supposition is that these are the investments on which the manager is most bullish. Perhaps it is a test of conviction. Perhaps the client is looking for a tip, who knows? No matter how good the relationship between fund manager and client there is inevitably a bias at least to defend and at worse promote the purchase decision. We have all done this to some extent. It's only natural; the manager has made the decision to invest and is talking to the client, how can he not be upbeat? Promotion is one thing, and we can all adjust more or less for its effects, decades of company visits have honed that particular skill, but that is not the issue at hand. The issue is whether, in trying to convince the client of the merits of the case, the manager convinces himself. The danger is highlighted by Munger in the passage below:

"And of course, if you make public disclosure of your conclusions, you're pounding into your own head. Many of these students that are screaming at us, they aren't convincing us, but they are forming mental chains for themselves, because what they are shouting out, they are pounding in. And I think that educational institutions that create a climate where too much of that goes on are…in a fundamental sense, they are irresponsible institutions".

It is for this reason that in its purest form a fund management company's sales function (whose basic technique is to "shout out and pound in") can be counter- productive. And it is why the most successful salesmen (as measured by commissions earned over the short-term) are frequently void of rooted-in-reality objective thinking, such as is vital for good long-term investment performance. Either fund management companies are investment companies or marketing companies. Not both. At Marathon we think we understand this conflict but even we struggle, and we make no claim to maximise both functions. The fact is that sales and size are the two main detractors of long-term performance, after inability. To paraphrase Mr. Buffett, should you come across individuals suggesting otherwise our advice is watch their noses, for signs of abnormal growth.

This is not to say that investors do not have the right to question their managers about stock picking – far from it. But both parties must be aware of what they are doing. Our thinking is that fund managers should have absolute conviction on the philosophy and methodology of their investment principles, providing of course that those principles reflect reality. But they should be circumspect about expressing these tenets as they relate to individual stocks. Evangelism is not healthy. The reason is that, whilst fund managers have it in their powers to control the way they think, they are unable to control how their companies behave. Businesses evolve, companies make mistakes, business managers change their minds, share prices depart from reality – the investment manager can control none of these factors but needs to assess objectively each one for the risk of misanalysis. The issue is: in publicly disclosing his stock picking commitments, does the investment manager subtly and no doubt subconsciously rob himself of his objectivity and the option to change his mind? To deny this takes place seems foolhardy. The question is, how many recognise the risk of dysfunctionality, and adjust their behaviour? Certainly, those consultants and plan sponsors that insist upon frequent, detailed, blow-by-blow reporting may be surprised to learn that their seemingly reasonable request risks being counterproductive. Consultant meetings, which aggressively bear down on the microeconomics of an individual business, seem designed to form mental chains that neither

side needs to bear. But where does that leave monthly reporting, quarterly reporting, annual reporting, and even this publication?

Fund management errors are not the only ones that result from over-promotion activity. Quarterly, or even monthly, client reporting routinely marks fund management performance to market and these result snapshots acquire an extra validity, simply by virtue of their being reported. At Marathon a full holding cycle can exceed 5 years, so any quarter individually considered could be poor without affecting long-term outcomes. For those keen on monthly results there will be 60 such data points in a full holding cycle. These data points, in the hands of an inexperienced investment committee, could be misconstrued or worse. After all, most of Marathon's client termination events occurred after, rather than before, a period of underperformance. According to Munger, it is a common psychological tendency that people overweigh the vivid evidence (or recent experiences). This is clearly what can happen via the mark-to-market effects of quarterly reporting. The "Pavlovian" association of poor short-term results with long-term incompetence and confusion between the two can lead to disastrous decisions. Today this risk is greater than ever because, relative to history, consistency of investment performance is an attribute prized almost above all others in some parts of our industry.

At a New York cocktail party populated by investment professionals this author clumsily asked one fund manager what his largest holding was. My acquaintance's response was to decline to answer for reasons that this essay makes plain. His response seemed rude in a social setting, at least to this author, but having thought about the issues for about a year, it was perhaps the highest quality answer he could have made. He certainly understood elementary psychology.

CONFIDENTIAL DRAFT

Perpetual Growth Machine

While Costco shares aren't cheap, value investor Nicholas Sleep shares some fascinating insights about the company and makes an excellent case for its long-term prospects.

Value investors have long been intrigued by Costco Wholesale Corp. It has a fabulous long-term record of steady growth, it's old-school in its management and compensation practices, Berkshire Hathaway's Charlie Munger is on the board – plus, any bargain hunter loves to shop there. Not so many value investors own the stock, however, in part because it has extremely low margins – less than 2% after tax – and the stock rarely looks cheap, trading today at 25x trailing earnings per share.

So we didn't expect anything particularly new when we sat down to read the discussion of Costco in the annual letter of Nicholas Sleep of London's Marathon Asset Management. But Sleep's fresh insights, arguments and analysis – "Mungeresque" in tone and content – persuaded us that Costco's intrinsic value is probably quite a bit higher than we'd thought. We followed up with him to learn more on why he believes, even if it's not a 50-cent dollar, Costco is an outstanding long-term investment.

Customer really is king

Retailers love to boast that the "customer is king," but none live it like Costco. It starts with how the company negotiates with suppliers. As Sleep notes:

"Costco's key to negotiating terms is that the number of items in a store (SKUs) is fixed at around 4,000, with those suppliers that provide the best value proposition to the consumer winning space on the shop floor. Contrast this to normal industry practice, where the supermarket assumes the role of landlord, auctions space to the highest bidder and pockets the rents ("slotting fees" in industry parlance). Many supermarkets make their money from buying from the supplier. Costco makes money from selling to the consumer."

Costco fixes its retail prices at a maximum of only 14% over the company's cost – with no exceptions. This pricing discipline – even Wal-Mart's mark-ups are around 20% – engenders outstanding customer loyalty. As the company has raised its annual membership fee over time, to $45, membership renewal rates have barely budged from an enviable 85%.

The real power of Costco's strategy – and the source of its competitive advantage, according to Sleep – is how the benefits of growth are reinvested in the relationship with the consumer. As Costco opens new stores, supplier and other scale cost savings are passed back to customers through even more compet-

INVESTMENT SNAPSHOT

Costco Wholesale Corp.
(Nasdaq: COST)

Business: Membership warehouse retailer offering members low prices on limited selection of branded and private-label products across multiple product categories. Primary operations in U.S. and Canada.

Share Information
(@2/17/05)

Price	48.10
52-Week Range	35.05 - 50.48
Dividend Yield	0.85%
Market Cap	$21.81 billion

Short Interest:
(@1/10/05)

Shares Short/Float	2.07%

Financials (TTM):

Revenue	$48.16 billion
Operating Profit Margin	2.51%
Net Profit Margin	1.86%

Valuation Metrics:
(Current Price vs. TTM)

	COST	S&P 500
P/E	24.0	23.1
P/CF	18.0	13.9

Largest Institutional Owners:

Company	% Owned (@ 9/30/04)
Davis Selected Advisers	7.86%
Barclays Bank Plc	3.64%
State Street Corp.	2.73%
Capital Guardian Trust Co.	2.32%
Vanguard Group	2.16%

COST PRICE HISTORY

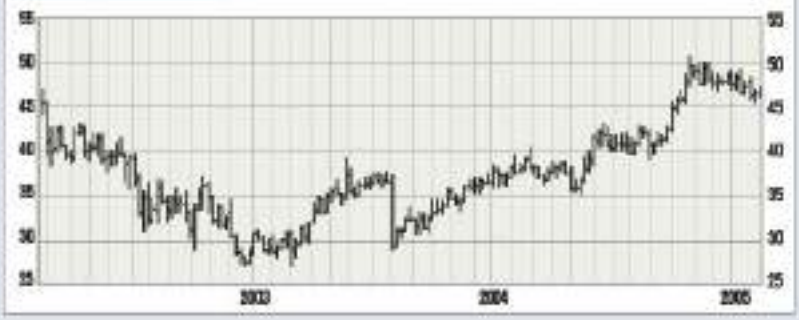

THE BOTTOM LINE

Costco's "perpetual machine" of growth is capable of keeping company revenue and cash flow growing 13% annually, says Nicholas Sleep of London's Marathon Asset Management. If the market price reflected even a 10% growth expectation, he says, COST would trade at $62, a 34% premium to the current market price.

Sources: Company reports, other publicly available information.

CONFIDENTIAL DRAFT

itive prices. Customers then respond to the better prices, driving incremental revenue at both new and old stores. As Sleep writes:

"In the office we have a white board on which we've listed the very few investment models that work and that we can understand. Costco is the best example we can find of one of them: scale efficiencies shared with customers. We often ask companies what they would do with windfall profits, and almost no one replies 'give it back to customers'. How would that go down with Wall Street? That is why competing with Costco is so hard to do. The firm is not interested in today's static assessment of performance. It is managing the business to raise the probability of long-term success."

By sharing the cost savings of growth, Costco earns revenues per square foot – around $830 – that are the envy of the industry. Wal-Mart's Sam's Club checks in at around $500 per square foot, while BJ's Wholesale Club is about $400. Even more importantly, Sleep estimates that mature Costco stores – open at least five years – generate revenue of over $1,000 per square foot.

Margin trouble?

Costco's pricing discipline, by definition, keeps margins low – at 1.9%, they are roughly half those of Wal-Mart (3.6%) and Target (4.1%). Sleep argues that Wall Street's focus on margins is short sighted:

"True, the company has low margins, but that's the point. The firm is deferring profits today in order to extend the life of the franchise. Of course Wall Street would love profits today, but that's just Wall Street's obsession with short-term outcomes. The firm could earn Wal-Mart margins by taking pricing up a little and the stock would then trade at 11x earnings, but would it be a better business as a result? We think not, because it might allow the competition to catch up."

Contributing to margin pressure in recent years has also been a rise in SG&A costs as a percentage of revenues, fueled in large part by spending on a new warehousing and distribution system and rising employee wages and benefits. A sign of trouble? No, explains Sleep: "We clearly differentiate between 'good' and 'bad' SG&A spending," he says. "In both of these cases, Costco is investing in areas critical to its growth." With the new warehousing system in place, efficiency gains will start showing up in the financials this year. And the slightly higher wage base helps Costco retain its employees twice as long as competitors do, which Sleep sees as positively impacting customer service and contributing to its very high customer retention.

Still an early life-cycle company

Even with annual sales of nearly $50 billion, Sleep makes a compelling case for Costco as a growth company, through geographic expansion, increased market penetration, and the virtuous cycle of growth in maturing-store asset turns as scale efficiencies result in even lower prices.

"One-third of the store base remains in California, and almost half on the West Coast. Management always confesses to underestimating saturation. In Los Angeles, for example, after merging with Price Club in 1993, Costco thought 31 stores were too many for the market, but today there are 36. Likewise, in Seattle and Alaska, the penetration of membership cards is an astonishing 65% of households, but in most markets it is below 10%."

All told, Sleep estimates that Costco can conservatively increase revenue and free cash flow by 13% per year into the foreseeable future – 4% from the increasing asset turns of newer stores as they mature, 4% from same-store growth at already-mature stores, and 5% from new stores.

"This is an early life-cycle company whose competitive moat gets deeper as the company gets bigger and the consumer is consistently cut-in on the benefits of the company's growth," Sleep says, terming this cycle a "perpetual machine" of growth.

The market, which currently prices Costco shares at around $46, is not so generous in its growth expectation. Sleep calculates that if Costco shares were priced to reflect just 10% annual growth, the stock would trade at $62 today. Even at that price he wouldn't sell, he says, given his expectation for even faster growth.

What could go wrong? Wal-Mart, with Sam's Club, could mount a sustained direct attack to undercut Costco's prices. Sleep considers that unlikely, as Costco has shown itself more than capable of competing head-to-head with the discounting giant. The departure of CEO James Sinegal, 68, the architect of Costco's unique and disciplined culture, could also be a blow. Sleep points out that Sinegal shows no sign of slowing down, and that Costco's experienced board can be counted on to appoint a worthy successor.

We'll leave to Marathon's Nicholas Sleep the final word on Costco: "The consensus has it that Costco is a low-margin retailer with an expensive stock and a cost problem. That is certainly one description. But in our judgment it is a cost-disciplined, intellectually honest, high-product-integrity, perpetual motion machine trading at a discount to value."

PRIVILEGES OF MEMBERSHIP

Costco's membership-only model helps foster a unique relationship with its customers. People shop there because it's Costco, not because it stocks Pepsi or Pampers. As Costco has raised its basic annual membership fee over time, to $45 currently, membership renewal rates have barely budged from an enviable 85%.

Nomad Investment Partnership

Interim Letter
For the period ended June 30th, 2005

To June 30th, 2005	Nomad Investment Partnership	MSCI All Country World Index (net) US$
6 months	+2.4%	-0.3%
One year	+26.2%	+11.2%
Two years	+78.1%	+38.3%
Three years	+118.7%	+35.4%
Since inception (Sept. 10th 2001)	+150.5%	+28.9%
Annualized since inception		
Before performance fees	+27.1%	+6.9%
After performance fees	+22.6%	+6.9%

The figures above are presented on a cumulative basis (for the "A" shares, after management fees and before performance fees). Below the same results are presented in discrete annual increments. In our opinion, it is the upper table that is most useful in assessing long-term investment performance (see appendix).

To June 30th, 2005:	Nomad Investment Partnership	MSCI All Country World Index (net) US$
6 months	+2.4%	-0.3%
2004	+22.1%	+15.2%
2003	+79.6%	+34.0%
2002	+1.3%	-19.3%
2001 (inception Sept. 10th 2001)	+10.1%	+3.9%

When we said we expect to get rich slowly, we did not quite have the first half of 2005 in mind. Even so, a 2% gain is at least in the right direction and is a little better than the alternatives represented by global stock market indices. But more important, the value of the companies in which we have invested rose by more than 2% and we were able to add to some of the cheapest investments with the effect that, by our analysis, the price to value ratio of the Partnership declined from the low seventy cents on the dollar at the end of the year, to the upper sixty cents. A rational analysis would conclude that we are richer twice over, once from the gain in the price of the Partnership to date, and second from the rise in the value of the Partnership compared to its price.

It is a constant feature of the investment landscape that people applaud recent gains when they should be thinking more about the future. We all do this to some extent. We all like rewards and like to be associated with success. And it is hard not to be drawn toward the crowd. One of our favourite cartoons, carried by Punch in the 1970s (and reproduced in the book "Influence: The Psychology of Persuasion" by Robert Cialdini some years later) makes the point.

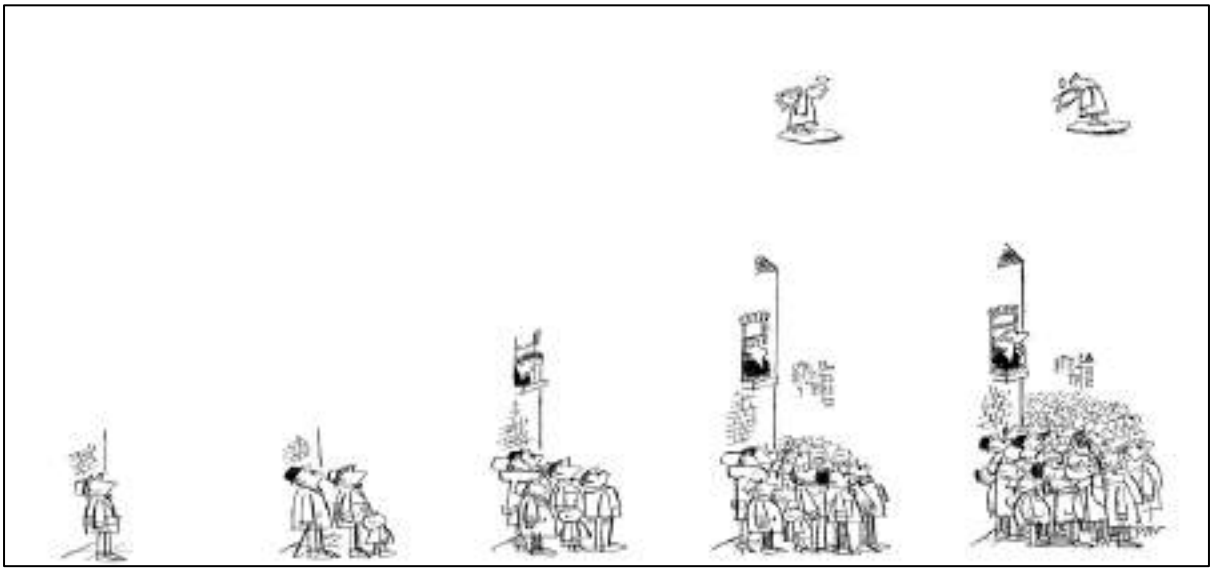

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Following what everyone else is doing may be hard to resist, but it is also unlikely to be associated with good investment results. Zak and I concentrate on the price to value ratio of the Partnership and ignore its performance as much as is practical, and we would encourage you to do the same. In our opinion you should be more pleased with the improvement in the price to value ratio of the Partnership than the gain in the price of the Partnership this year. That's easy to say when results have been reasonable. But it would feel quite different if the Partnership had declined in price instead. Unfortunately, nature does not always help us to think rationally. Psychologists (McClure, Laibson, Loewenstein and Cohen 2004) have found that the brain perceives immediate rewards differently to deferred rewards because two different parts of the brain are involved. Immediate gains are perceived positively compared to larger deferred gains as the limbic (survival) system has the ability to over-ride the fronto-parietal (analytical) system. Interestingly, stress induces this over- ride, and of course, money induces stress. So, the more stressed we are, the more we value short-term outcomes! This is not without reason, for if starving is a real possibility, a meal today is more important than a feast in a week's time, and the brain's wiring reflects that survival bias. Such notions are embedded in popular phrases such as "a bird in the hand is worth two in the bush". But at Nomad we try to be more analytical: it is the two birds in the bush we are concerned with and how they compare to the bird in the hand. In our opinion, today, the birds in the bush are around 47% (68c/100c) bigger than the bird in the hand. This compares with only around 37% (73c/100c) bigger at the end of last year. The Partnership is up this year, but you can see that it also does not mean very much compared to the deferred gains. It is price to value that's important.

Competitive Advantage

As a young(ish) man there is something slightly depressing about thinking things through for a while, arriving at a somewhat reasoned conclusion only to find that others have been there before, and years earlier. In some respects, we are fifty years behind Buffett, but that's ok so long as the average investor is at least fifty-one years behind! I would estimate we were some way behind Bill Miller as well, as evidenced by his recent speech to students at the Columbia

Business School in which he posed the question – what is your competitive advantage in investing? It was the elegance of the answer that grabbed us. Broadly Bill Miller argued that there are three competitive advantages in investing: informational (I know a meaningful fact nobody else does); analytical (I have cut up the public information to arrive at a superior conclusion) and psychological (that is to say, behavioural). Sustainable competitive advantages are usually a product of analytical and or psychological factors, and the overwhelming advantage with regard to Nomad is the patience of the investor base and the alignment of that disposition with the analytical and psychological traits of your manager. It simply would not work otherwise. In the investment objective section of the Nomad prospectus, we say that our job is to "*pass custody* [of your investment] *over at the right price and to the right people*" and that "*the approach will require patience*". That's what investing is, at least for us. But let me return to the speech for a moment.

"Think of how the future will be different from the past. Most people default to the directions and trends that they are currently observing…The important thing is that most things change. In longer term projections, Peter Bernstein tells us, that cone of uncertainty gets wider as time goes out. What are the chances that IBM will be bankrupt tomorrow morning? Probably none. A year from now? Five years from now? What about one hundred years from now? The point being that the possibilities increase as time goes out. So, what you are trying to do as an investor is exploit the fact that fewer things will happen than can happen. So, you are trying to figure out how that probability distribution works and stay in the middle of what will happen. The market has to worry about all the things that can happen."

To repeat: "*what you are trying to do as an investor is exploit the fact that fewer things will happen than can happen*". That is exactly what we are trying to do. We spend a considerable portion of our waking hours thinking about how company behaviour can make the future more predictable and lower the risk of investment. Costco's obsession with sharing scale benefits with the customer makes that company's future much more predictable and less risky than the average business and that is why it is our largest holding. Our smaller holdings are less predictable but in certain circumstances could do much better as investments. We are just not sure that they will as their "*cone of uncertainty*" has a much greater radius than at Costco. Bill Miller got there years ago. We are just getting there today.

<u>The Robustness Ratio</u>

At the risk of mildly boring some readers, it may be worth completing the analysis of Costco here by introducing the robustness ratio. (Avid readers will recognise that this ratio was introduced in a Global Investment Review, contained in the appendix to this letter). The robustness ratio is a framework we use to help think about the size of the moat around a company. It is the amount of money a customer saves compared to the amount earned by shareholders. This ratio is more appropriate for some companies than others, the prime criteria being that the customer proposition is based on price, such as exists at Costco, as opposed to an advertising-reinforced purchase such as Nike trainers. In the Berkshire Hathaway annual report this year, the Chairman tells us that Geico policyholders saved U$1bn on their policies compared to the next cheapest carrier. It also turns out that Geico earned around U$1bn as well. So that's one dollar saving to the customers and one dollar retained for shareholders. At Costco we think the customer saving is around five dollars, compared to shopping at most supermarkets, for every dollar retained by the company.

So what? Well, it is probably fair to argue that the higher the ratio, the harder it would be to compete against Costco on a like for like basis. Also, a higher ratio may imply a somewhat inequitable distribution of system rewards between customer and shareholder than a lower ratio. There is a tension here between the size of the moat on the one hand and the distribution of rewards on the other. In the last few years, the pendulum has swung in favour of the customer, with the result that the stock is cheap enough to be vulnerable to a leveraged buy-out (completely unobserved by Wall Street where only one in five analysts rate the stock a buy, which solves for the shares being cheap enough to fund a buy out in the first place – the two are of course linked). This is a huge source of risk for current shareholders since being taken out at a low-price amounts to theft. It's that serious, and you can rely upon us to see it that way. We think the board understands this, and the way to bet is that the pendulum will swing back in favour of the shareholders over the next few years. Look around you. How many companies save five dollars for their customers for every one dollar they keep?

It does not happen in the investment industry where fees can be levied regardless of performance – that's not much of a robustness ratio and does not take into account the asymmetry of the risks involved. You can't lose money shopping at Costco, but you can investing. This would argue that robustness ratios need to be much higher in the investment industry than for normal businesses to compensate for the risks involved. We have tried to some extent to account for this asymmetry through Nomad's six percent performance hurdle. It is not perfect, there is no science behind the number, although it is meant to represent a generous proxy for deposit rates. And besides having a hurdle rate helps us sleep at night.

Zimbabwe as an Example of a Second Investment Model.

We have begun making some investments in Zimbabwe and wrote about the background to these in a recent Global Investment Review (also contained in the appendix). The investment case relies upon extreme undervaluation compared to normalised values, so much so that a wait of ten years for normalisation would still yield wonderful results. It makes little sense to discuss stocks we may or are buying (Costco is likely to be a rare exception in this regard) but I can illustrate the investment case by describing Zimcem. This is the country's largest cement producer (after the local division of Pretoria Portland Cement), with around 700,000 tons of cement capacity and a replacement cost of around U$70 to U$100m. The firm has no debt and business conditions are awful (general inflation exceeds cement price inflation and product demand is low) but the company is priced on the Harare stock exchange at one seventieth (1/70th!) of its replacement cost.

Why is this relevant? So far, we have only discussed one model we use to pick good investments which we call "scale efficiencies shared" as evidenced by Costco (and to a lesser extent Amazon.com). We have little more than a handful of distinct investment models, which overlap to some extent, and Zimcem is a good example of a second model namely, "deep discount to replacement cost with latent pricing power". Indeed, these two models combined can be used to describe around 45% of total Partnership assets. It was this model that led to many investments during the Asian crisis (such as Siam Cement which has risen twenty-fold from the trough in eight years) and to neighbouring South Africa where Pretoria Portland Cement could be bought at a price of U$20 per ton of capacity in 1998 and is now valued at U$180 per ton. The model is premised upon the observation that the business needs to replace its assets and will require prices which 1. fund the capex, and 2. economically justify the spending. Either that or Zimbabwe will have to go without cement or import from abroad (tricky for this land locked country). In any event, provided discretionary capital is not

invested to exacerbate the situation, the supply side remains muted (industry capex is zero) and the business is not nationalised, then the shares ought to do well, in time.

This last point, along with other confiscation events, does not have a zero probability, and is the main reason our investments in the country will be modest in size. Even if we were able to secure all the shares we desire (which we seem incapable of doing) it is unlikely that the total investment would be much more than a few percent of the Partnership at cost. There is no a priori reason why Zimbabwean businesses should not trade at a premium to replacement cost. Just over the northern border Zambia's dominant cement company is now valued at a premium to replacement cost following recovery in the economy after years of mismanagement. In Zimbabwe this may require "*regime change*", or even regime changes. Perhaps the investment case rests in your manager being fifty years younger than Bob Mugabe.

The Pricing of Shares in Zimbabwe

The official exchange rate at the time of writing is Z$9,100 to the U$1. The unofficial, street rate is around Z$17,000 to the U$1. In other words, the Central Bank values its own currency at over twice the price set by the public with the effect that money entering the country via the Central Bank buys approximately half as much as at the street rate. Fortunately, there is an alternative to the Central Bank for foreign investors, which is to purchase Old Mutual shares in Johannesburg, re-register the same shares in Harare and then sell the shares in Harare. This we have done. But it creates a problem in valuing our Zimbabwean shares as Bloomberg, Reuters and the other main sources of currency prices use feeds from the Central Bank. In other words, if we solely relied upon the official rate of exchange our investments would immediately show an 86% gain. This gain is entirely illusory. Were we to reverse the process by re-registering the shares in Johannesburg and selling our stock there, the proceeds would approximate the money we first put in (minus frictional costs and any change in the price of Old Mutual shares). The only way we could realise the 86% gain would be to present our Zim dollars to the Central Bank and ask for US dollars at a rate of Z$9,100. And we would be waiting for Godot. There are almost no transactions taking place at the Central Bank and priority is given to trade and working capital requirements, not foreign investment portfolios. So, we could try, but I don't think it is prudent to value the portfolio on the basis of a warm response from the Zimbabwean Central Bank. So, our solution has been to value the Zimbabwean investments at the rate of exchange implied by the Old Mutual share price in Harare divided by the price of exactly the same share in Johannesburg (note that the shares are fungible in both directions). The effect is to approximate the street rate of exchange and remove the artificial book gain implied by the official exchange rate, and hopefully the worst of any pricing distortions should be minimised as a result. This is a somewhat unusual solution, but one that I think is fair, and the auditors, board and administrators have decided to agree with my methodology. Please do call however, if all is not clear.

"*Any year that you don't destroy one of your best loved ideas is probably a wasted year*", Charles T. Munger.

In January this year, the market town of Carlisle (located between the English Lake District and the border with Scotland and incidentally home to your manager's family-in-law) was flooded when the River Eden broke its banks. Parts of the city center were under many feet of water and residents were shown on national TV being evacuated from roof tops by

helicopter. As the water receded the city slowly returned to normal, although the damage remained extensive, and included the traffic light system at Hardwicke Circus, a junction of seven roads controlled by a series of traffic lights dotted throughout approaching roads and a central roundabout. Although the lights remained out of use, the authorities opened the roads and trusted the residents to drive with care. Soon afterwards, drivers began to suspect that the traffic flowed better through the complex junction without the traffic lights than before, and in March this year the City Council began a trial in which the lights were covered up, and drivers left to get on with it. What they found confirmed public suspicions, the speed of traffic through the intersection had indeed risen, and better still, it appeared that the number of accidents may actually have fallen as well. What they found was entirely contrary to accepted wisdom in council planning, that the roundabout was faster and may also be safer without the traffic lights! Ayn Rand would recognise what was happening, as may members of the Santa Fe Institute (which recently published a study entitled "*How Individuals Learn to Take Turns: Emergence of Alternating Cooperation in a Congestion Game and the Prisoner's Dilemma*"). The point is that, often, if one removes the rules, and instead ask people to think for themselves, the system works better.

We criticise hedge funds for their fee scales and short investment time frames, but they have a point when it comes to investment rules and certain regulations. Traditional investment management can become heavily burdened by bureaucracy, compliance and corrupted by marketing expediency. These business forces can work at the expense of the investment process, and the trick for any growing investment firm is not to sap the life out of the investment team through stapling them to the bureaucratic equivalent of the US Department of Agriculture. We think of ourselves as reasonably entrepreneurial, but even we suffer to some extent from this culture-drift. The solution is not hard to come by. What is required is for people to behave in such a way that, in the words of Charlie Munger, one builds "*a seamless web of deserved trust*". The operative word is "*deserved*". The problem is that rules do not require people to think, and how are people to deserve trust if first they don't think? Degenerative spirals of behaviour do not build good results (or fast roundabouts), but that is where the industry is going, and it is a destination we will all do well to avoid.

We try not to be too hard and fast about rules. In previous letters we have quoted H.O. Hirt, founder of Erie Indemnity, and it would be a shame not to do so again. Hirt posted the following notice to staff:

"*RULES*
Are for INFANTS, ***INCOMPETENTS,***
INCARCERATED CRIMINALS *and* ***IMBECILES***
- NONE *of WHOM should have any place in the*
***ERIE FAMILY*.**"

Even so a few rules end up slipping in overtime and need to be viewed with great suspicion. One was that a low share price was better than a high share price, all other things being equal, which proved unwise when the low market capitalisation undermined shareholders' bargaining position in the recapitalisation of Conseco a few years ago. This year we shall have to discard another strongly held bias which is that high inside ownership is a good thing. This too is not always helpful, as shareholders in Northwest Airlines are finding out. In this instance the unions appear to reason that management (who are the largest group of shareholders) will not risk placing the company in bankruptcy and are holding out for the last dollar in negotiations. Oddly here, high inside ownership is hindering the process that would

lead to a more viable airline. Who would have thought that a low share price and high inside ownership could be bearish? But they can. I wonder what other "*best loved ideas*" we will need to rethink in the coming years.

Thank you

We don't write to you that often, as measured by number of letters per annum. But the sum of the letters we write amounts to around ten per stock holding period (two annual letters times five years). On this measure we may be more communicative than many investors who write more often, but trade shares more frequently still. Even so, we like the balance as it is, and are hesitant to fall into say-something territory. We are very conscious that investors in the Partnership have reciprocated and allowed us to get on with our job of roaming the globe looking for value. Thank you.

To date we have appended a copy of the schedule of investments with our letters. This is not necessarily in Partners' interests. There are powerful psychological reasons for not doing so associated with commitment and consistency tendency (covered in previous letters), and then there is the issue of others piggy backing on ideas. This is not so much a problem today as few care what we do and the Partnership is small, but it could become an issue should the Partnership grow. Only the other week I received a request from a London based hedge fund (with a reputation for short term punts) for another copy of our Global Investment Review. Think of that! We did not know they had one copy, and they were casually asking for another? What are they going to do with the information? If Partners wish to circulate our schedule of investments to others, then they must understand that their actions are contrary to their (and our) economic interests in Nomad. The same cannot be said for those that are not invested. So, if you are a Partner then you will find a copy of the schedule of investments attached to this letter, and we ask you to use that information wisely.

On the administration side, please do call Daiwa Securities Trust and Banking in Dublin with your enquiries (+353 1603 9921). The 2004 Nomad annual report and accounts were mailed to shareholders in May, considerably earlier than last year. I am also aware that there have been issues with the timely receipt of statements. We are on to it, and nag Daiwa constantly. Please do press them if you are not fully satisfied. They are here to help you, and you have paid for their services. Don't be shy, we aren't. Likewise, Alexandra Aitken at this office (+44 207 497 2211) is employed to help Partners with basic performance and statement enquiries.

As always it is a tonic running this Partnership. We value your confidence in us very highly and thank you for your patience.

…back to the company annual reports.

Yours sincerely

Nicholas Sleep

In this article, we use the term "Partners" as a generic term referring to all Nomad investors, whether shareholders in the feeder fund or limited partners in the Partnership and not, in

the strict, legal sense of the word, to imply the creation of a partnership between shareholders in the feeder fund, Nomad and/or Marathon Asset Management.

Appendix 1

"Measuring the Moat". Global Investment Review, May 2005.

The phrase "business moat" is often banded around when discussing the absolute or comparative strength of a franchise. That there are businesses with defendable positions is of little doubt; but what these discussions often lack is any empirical method by which moat size or longevity can be measured, compared or monitored over time. In addition, stock investors (particularly those who, for their sins, have been labelled growth investors) face an important task, namely, how can one recognise the creation of a business moat well in advance of its value being discounted in the stock market? While reading the 2005 Berkshire Hathaway Annual Report, one paragraph stood out for us as Warren Buffett referred in passing to the division of operating and underwriting cost savings at motor insurer GEICO. These "benefits" were divided between shareholders, policy holders and employees and the statistics spelt out in some detail. This simple breakdown struck a chord with our continuing analysis of Costco, a significant Marathon shareholding in the United States. What is becoming clearer in our minds is that one can empirically measure the strength of a business franchise through such an analysis of the division of benefits, what we have come to call its "robustness ratio".

First, a brief recap of Buffett's comments with respect to GEICO.

> *"Indeed, GEICO delivers all of its constituents major benefits: In 2004 its customers saved $1 billion or so compared to what they would otherwise have paid for coverage, its associates earned a $191 million profit-sharing bonus that averaged 24.3% of salary, and its owner – that's us – enjoyed excellent financial returns."*

Source: Berkshire Hathaway, 2005 Annual Report

These financial returns, measured in terms of an underwriting profit, were close to US$1 billion pre-tax last year but this excludes the investment returns earned on the US$5-6 billion of float generated by GEICO throughout the year (on which we may want to assign subjectively a return of 5%). These benefits, of course, only accrue to the three groups as a result of scale (if one assumes that underwriting skill can be developed or acquired). This allows us to construct a pie chart (Figure 1) representing how these scale economies are shared. The robustness ratio, defined as the combined distribution to customers and employees (through a profit share or the like) divided by the distribution to shareholders, is in GEICO's case about 1:1.

Figure 1: GEICO: A fair division of spoils

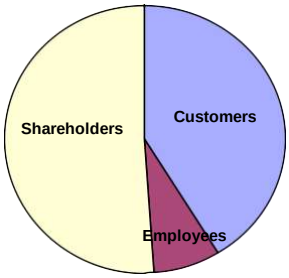

Source: Marathon

This picture, of course, represents a snapshot; just as important is how this division of benefits develops over time, a subject we will touch on later. Tracking back to Costco, we are able to construct a similar pie chart using the following facts and figures. On average, a Costco cardholder (as opposed to household; on average each household holds 2 cards) spends US$1,100 per year in the store. Costco spends US$980 at cost to supply these goods which, if one assumes similar buying power and a comparable basket make up, would cost US$1,300 at a competing supermarket such as Kroger or US$1,250 at Wal-Mart (gross margins of 26% and 23% respectively, compared with 11% at Costco). Now these comparisons are not quite so straightforward as Costco's members must "pay to play", currently US$23 per cardholder on average, and this annual fee is fixed whatever a cardholder spends (this implies the distribution of customer savings is not even across the membership base, a fascinating influence on customer behaviour and itself worthy of analysis). But we can estimate that, on average, a Costco cardholder saves somewhere in the region of US$175 per year by shopping at Costco in return for an annual fee investment of US$23, or a net gain in the region of US$150 per cardholder per year.

Now we turn to employees. From recent management meetings, we have gained some clarity on the difference between Costco's wage/benefit scales and those available from competitors (this difference being the functional equivalent of GEICO's profit related bonus). If we assume that 70% of Costco's SG&A is made up of wages/benefits and that Costco's wage/benefit scales are 55% higher than the competition, then Costco, in a sense, "overpays" its employees to the tune of US$1.1bn per year, or US$26 per cardholder per year. Finally, shareholders. On Wall Street, there has been a suspicion that the return to shareholders has been a "residual" after customers and employees have been well cared for. And at US$32 per cardholder pre-tax, or 15% of the distributable pie, the shareholders' share is not in the same league as at GEICO. In any case, Costco's pie chart (Figure 2) looks something like this, and its robustness ratio is of the order of 5:1.

Figure 2: Happiness is… being a Costco customer.

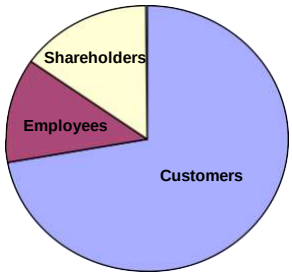

Source: Marathon

While the standard Wall Street view is that such a picture is retailing's equivalent of collectivism, in our view it represents an excitingly wide and unassailable moat. While "unassailable" may seem like a bold assertion, an analysis of the limited disclosure of financials at Sam's Club suggests that the size of the distribution to Costco customers is so large that any attempt to match its prices would cost Sam's somewhere in the region of US$1.4 billion annually while matching Costco's pay scales would set them back another US$750million. Such numbers are not insignificant even to Wal-Mart which last year earned net profits of US$9 billion. Such a chasm of competitiveness is, of course, difficult to capture using traditional analytical tools. After all, both Costco and Sam's Club generate thin profit margins, both are growing revenues, and both are placing enormous pressure on traditional supermarkets and smaller wholesale clubs. But it seems inevitable that the long-term outcome for the two businesses will be significantly different particularly as measured by the growth of *revenue per unit of selling space* over the long-term. And Costco's business model dictates that this competitive gap should expand over time as a fall in Costco's relative asset intensity and increasing buying power will lead to greater scale efficiencies, which in turn are handed back to the customer in the form of lower prices. Game over.

Having come to such a robust conclusion we should offer a word of warning. Both Costco and GEICO have strong corporate cultures, embedded in which is the inspirational thought that the rational (and equitable?) division of benefits is the only appropriate way of ensuring these businesses will *grow* in strength as they grow in size. And while culture slippage at GEICO is hard to envisage, courtesy of its place in the Berkshire Hathaway corporate museum, the same may not be true of Costco. An unpleasant output of this apparent disregard for shareholder returns is that the Costco share price is broadly unchanged on levels reached six years ago. And Wall Street is, by all accounts, not happy. Even a culture built up over forty years is not immune to this pressure and Costco's senior management team are beginning to feel the heat. Indications are that the company is gently tinkering with the division of benefits in favour of shareholders in part to satisfy the quarterly EPS junkies but also in recognition that an asset-rich Costco represents an attractive target for private equity buyers. Long-term shareholders should view such slippage as worrying and unnecessary. In our view, the correct response to a six-year share price famine is for the company to use its balance sheet to buy back shares at prevailing prices and allow the long-term growth in free cash flow per share (an inescapable function of steady margins, falling asset intensity, growing revenues and a shrinking base of shares outstanding) to translate into a higher share price over time. The argument for allowing the robustness ratio to drift gently ignores the impact on future generations of managers who will have been presented with a precedent for tweaking the model when expedient. We do not presume to lecture the remarkable managers at Costco on what the appropriate robustness ratio should be, just that any changes to the division of benefits should be made for purely competitive reasons and not driven by a wish to pander to investors.

We wouldn't wish readers to come away with the view that robustness ratios are a numerical magic bullet to measure moats. They are plainly not. There are numerous reasons why Costco's 5:1 and GEICO's 1:1 ratios may be equally powerful barriers to competition and why a ratio even finer than that at GEICO may be perfectly sufficient to repel competitive marauders. Also, falling ratios are not necessarily a sign of shrinking moats, just that moats are not being made as wide as they could be. Where robustness comes into its own is in identifying companies, such as Costco, which may be under-earning when compared to their potential. This generates super long-term investment opportunities for those willing to look beyond reported earnings.

Early in a firm's development it makes sense to reward customers disproportionately as customer referrals and repeat business are so essential to the development of a valuable franchise. With maturity this bias can be reduced, and shareholders can reasonably take a greater slice of the pie. Too much, however, and the moat is drained with negative consequences for longevity. The temptations are enormous because capital markets will reward profiteering. There are many examples of companies which "harvest" excessively, when perhaps they should focus on longevity. This may have been what happened at Coca Cola which has leant excessively on bottlers, or Gillette where advertising has been cut, or even at Home Depot which has boosted gross margins in recent years. Shareholders often suffer a double whammy as highly rated companies enter "growth purgatory", because growth slows just at the time when shareholders spot their misanalysis of reported profitability.

Appendix 2

"Zimbabwe". Global Investment Review, February 2005.

"That's what brothers are for, brother."

Gil Scott-Heron, "Small Talk at 125th and Lenox"

Some commentators believe that the current condition of stock markets is now more dangerous than the bubble of the late 1990s. Then at least there was the anti-bubble formed from cheap low growth companies. Today there is no Zen-like symmetry to stock prices; and there are few obvious pockets of undervaluation for the contrarian. A cheer all round then for Zimbabwe. The clients will hate it. Compliance will hate it. The consultants will hate it. Marketing will hate it. The size of the investment opportunity is tiny. It is not part of the benchmark. It is not even part of the Commonwealth. It's perfect.

Not that it is exactly risk free. Not "risky" in a tracking error, index relative, transient stock price quotation, quarterly reporting sense. The real risk comes in the form of a sleepy, quick to smile, want to get on with people apathy that pervades the population. The financial pages of Harare's Daily Mirror newspaper continue to publish the exchange rates for the deutschmark, French franc, Spanish peseta and Italian lira. Presumably it is someone's daily task to take one number and multiply it by another for the purpose of completing the next day's currency table. No one has noticed that the currencies no longer exist. This is not a good precedent for reform. Neither was the paper's headline which read – "Officials Grab Cell Phone Lines". First, there is the physical impossibility of the act; one could in theory grab a land line, but a wireless phone line? Secondly the problem is few people in Zimbabwe appear politically active, let alone angry. The editorial was not angry. And if no one is angry then what is the prospect of the Meikles Hotel occupancy exceeding its current 30%, except during the occasional English cricket team tour, which was controversial in England but locally ignored.

The most valuable company in the country as measured by the price of traded shares at the stock exchange is worth U$150m at the official exchange rate, and U$100m at the unofficial. That is less than one tenth of the quarterly dividend payment from the ExxonMobil Corporation. The price earnings ratio of the index constituent stocks is less than three. Most industrial concerns are valued at less than the replacement cost of their assets, not that anyone is replacing assets. And that's bullish. The ungeared Lafarge cement subsidiary has a market

capitalisation of U$2.5m. There is some difficulty precisely assessing the size of plant capacity but bearing in mind that replacement cost for a cement plant is around US$120m per ton, we don't need to be too accurate.

Zimbabwe is not a good advert for black capitalism. But it is not a good advert for white capitalism either. The occupation of white-owned farms looks racially motivated but note, it has been followed with the intimidation of black bankers as well. Zimbabwe can be described as a fascist state, in denial. Not only is not encouraging, but it is also not sustainable. Destroying the agricultural sector because it is white-controlled is stupid to the point of evil, when agriculture makes up 65% of the economy. It's the poor blacks that will be affected the most. The closest parallel may be that of Indonesia where the minority Chinese population control a large share of the economy. That is not necessarily a disproportionate share of the economy, as one likes to think they earned it. But the point is that the majority resent the rich minority, black or white, and the politicians feed on the distrust when their own policies have failed.

But unlike Indonesia, there was no boom to precede the bust. Zimbabwe has never been a tiger economy. This bust is political not economic. It is not predicated upon over-investment, over-borrowing or over-enthusiasm. But that means there is almost no bad debt in the economy. A visit to the publicly listed Barclays Zimbabwe revealed bad debts at 4% of the loan book. So, there is no recapitalisation needed here, no Argentinean default situation. One reason is that the dispossessed white farmers have repaid their mortgages and working capital loans in order to take title to their land. In most cases their farms have not been compulsorily purchased by the government, although the government has tried. Most farms have been occupied by mobs whose interest has been to loot, not produce. One farmer we spoke to had been given twenty-four hours to collect his belongings and arrange his affairs before occupation. The looters then looted, taking the 2,000 head of cattle to market in the nearby villages and apparently feasting on the cattle not sold. Yet the agricultural equipment was left untouched. There is no market for the kit with few productive outlets for its use domestically, and so it is left idle, waiting for its owner's return. In the meantime, the farm lies fallow, the equipment sits in storage, the economy is denied its exports and the currency spirals downward to reflect the country's new worth. When and if the regime changes some farmers will return, armed with their title certificates and reclaim their property – just as the Chinese have in Indonesia, and the West Germans in East Germany. Meikles Financial Services, a retail credit operation, claim bad debts of just 1% of receivables. Their loan book is lent to those that are staying in Zimbabwe. With debts this low, the economy could recover quickly when confidence returns. But what is to be done about the apathy?

In the early 1970s the black American poet and musician Gil Scott-Heron was an angry man. Unlike his fellow activists he was not just angry at the white establishment, he was also angry at the insincerity of his fellow black men: especially "those that hung out on street corners in Harlem with a 'blacker-than-thou' attitude" who felt that everyone-else owed them a living. This is the attitude of the political class in Zimbabwe. These are Ayn Rand's "looters". In contrast to some of his fellow activists, Scott-Heron wanted his black peers to have integrity, be sincere, and be capitalists. Zimbabwe could do with a few Scott-Herons right now. Perhaps the lyrics to Scott-Heron's song "Brother" could be slipped into Robert Mugabe's suggestion box.

"We deal in too many externals, brother
Always afros, handshakes and dashikis
Never can a man build a working structure for black capitalism,
Always does the man rebound off a known.
I think I know you would-be black revolutionaries too well

Standing on a box, on the corner, talking about blowing the white boy away, But
that's not where it is at yet, brother.

...You need to get your memory banks organised, brother Show
that man you call an Uncle Tom just where he is wrong Show that
woman you are a sincere black man
All we need to do is see you shut up and be black Help
that woman!
Help that man!
That's what brothers are for, brother."

Nomad Investment Partnership

Annual Letter
For the period ended December 31st, 2005

To Dec. 31st, 2005	Nomad Investment Partnership	MSCI World Index (net) US$
One year	+9.2%	+9.5%
Two years	+33.3	+25.6
Three years	+139.5	+67.2
Four years	+142.6	+33.9
Since inception (Sept. 10th 2001)	+167.2	+38.8
Annualized since inception		
Before performance fees	+25.6%	+7.9%
After performance fees	+21.4%	

The figures above are presented on a cumulative basis (for the "A" shares, after allowing for management fees and the cost of running the Partnership (auditors, administration, custody etc.) but before performance fees. We present results in this way as performance fees are earned once returns exceed 6% compound per annum from the time of subscription, and therefore net returns can vary from investor to investor). A large global index is also presented to place Partnership results in context, and inception refers to opening prices on the 10th. Overleaf the same results are presented in discrete annual increments. In our opinion, it is the table above that is most useful in assessing long-term investment performance (see appendix).

To Dec. 31st, 2005:	Nomad Investment Partnership	MSCI World Index (net) US$
Six months	+6.8%	+10.3%
2005	+9.2	+9.5
2004	+22.1	+14.7
2003	+79.6	+33.1
2002	+1.3	-19.9
2001 (inception Sept. 10th 2001)	+10.1	+3.6

2005 was the fifth calendar year of the Partnership's operation and since inception we have turned U$1 into U$2.67 before performance fees and approximately U$2.30 after fees, compared to a gain of around U$0.39 for the average, one dollar stock over the same period. It is aesthetically annoying to under-perform a broad global stock market index by a piddly amount as we did last year (if you are going to under-perform, do it properly!) but given the concentration and eclectic composition of our Partnership (ten stocks account for around 70% of the Partnership, with operations from Seattle to Harare and Huddersfield to Manila) it is perhaps a little anomalous that we should be anywhere near the index at all, with its 1,801 large stocks. Indeed, according to a maths guru at a large investment bank the chance of Partnership results being as close to the index as they were last year, given the disparity of holdings, was once in a long lifetime (approximately one year in seventy). Make of that statistic what you will, but even so we are now within stabbing distance of tripling the original dollar in our first five years. Contrast this with poor Bill Ruane who launched his Sequoia

Fund straight into the nifty-fifty, two tier market of the early 1970s, with the effect that at the end of his fifth-year cumulative returns were close to zero! Can you imagine such a fund surviving in today's business-oriented investment world? So that there is no confusion: we are not more skilled than Bill Ruane.

Our starting point has been more fortunate.

In our opinion, there have been two outstanding periods to make investments in the last ten years: Asia, in the aftermath of the Asian crisis, and during the US junk bond crisis which immediately followed the Partnership's launch. We therefore walked straight into a super opportunity set and our results reflect that. However, there is not much distress around today (Zimbabwe excepted) and continuing to compound at 25% per annum, without the requisite amount of investor distress necessary to create good prices, is improbable. As we have said in previous letters "*no extrapolation of results, please: that is just a recipe for everyone to get upset*".

In May 2004, we drew down part of the queue that was waiting to invest in Nomad, and since then the Partnership has gained around 35%, compared to a gain of around 25% for most stocks. When we look back at the investments we made, there was, in practice, a very high limit to the amount of money we could have invested and still maintained performance. Several hundred million dollars could have been invested in each of Costco (US), New World Developments (Hong Kong), Amazon.com (US), Telewest (UK) and Liberty Media (Europe and Japan). But as each idea came one at a time, with a lag in between, we were reluctant to open the Partnership for the sake of one new idea. We erred on the side of investment performance rather than maximising fund size. I know this is not how the industry thinks and behaves, but at Nomad we see our job as running an investment partnership first and commercial enterprise second. Which raises an interesting wrinkle: if we had opened Nomad, drawn down the whole queue, and invested the capital well, then in five years-time Nomad would be billions of dollars in size. Say we then found that the opportunity set was small: could we give the money back?

There is a difference between investment returns measured as a percentage gain, and results when measured in dollars. Doubling a hundred dollars through stock picking is not economically equivalent to a ten percent gain on a thousand dollars, although the dollar profits are the same. It is for this reason that investment results are rightly presented in percentage terms, however, in some respects this is only half the equation, as doubling a billion dollars is clearly a better outcome than doubling a hundred dollars. The key ingredient for evaluating the case for taking on more funds must be that the incremental, new dollars do not inhibit performance in percentage terms for the first dollars. That way the bus is always running at full speed with the number of passenger optimised to maintain maximum speed. The industry skirts around this point and talks about relative performance instead, as commercial pressures encourage lesser performance on vastly increased pools than better performance on smaller pools. It is as if the industry aspires to run the equivalent of the Calcutta commuter bus, so burdened with paying passengers piled on the roof that all it can manage is to trundle, unsafely, in the slow lane!

But let's turn the proposition on its head: the intrinsically low-cost structure of the investment business, so often used to earn super normal profits for business owners, would instead allow a shrinking of the investment pool for the purpose of protecting investment returns. I don't think many managers have thought about it this way, most in the industry have taken to heart

Winston Churchill's instruction to "*keep buggering on*". They hope that declining returns go unnoticed, and besides, they argue, who knows how fast the bus would be going if they let some passengers off. But what we are asking is, in practice, how would you feel about us returning capital to you on investment grounds? At Nomad we hope that it would never come to that, but it may. And it is important that we all understand a road map that allows for a shrinkage before we first grow the Partnership. And to add another layer of complexity, how would you feel about us changing our mind some time thereafter if the opportunity set improved markedly and we could take more money? This raises the interesting notion that if we returned capital to you would Zak and I have some moral responsibility for the dividended funds? I think we might. In other words, as investment results are maximised by Nomad expanding and contracting with the opportunity set, how can we reflect this reality in the structure of our Partnership? It's amazing to us that most investment companies are silent on such an obvious, common sense issue, but such is industry obfuscation of uncomfortable facts these issues go undiscussed. Even so, our ability to expand and shrink will be an important tool sometime in the next twenty years. I guarantee it. And it seems silly to set off without it. I would value your thoughts on this greatly.

<u>More on the principal/agent conflict</u>

What I am describing is one aspect of the principal agent conflict, that is, the interests of you, the principals, are different from ours, your manager, the agent. There are two ways to approach this situation: 1. maximise the conflict for the sake of maximising short-term agent revenues (standard industry practice), or 2. set about minimising the difference through behaving and thinking like principals. Zak and I have followed the second path. I know we are agents by virtue of the Nomad performance fee and perhaps that is the lot of young men with mortgages and families. But I do not think it is our natural disposition. There comes a point when turbo charging is counter- productive and there will come a day when we will be able to waive the performance fee. Before you start rubbing your hands, it's not around the corner, no, really, it isn't! But we mention this in writing now so that hopefully you will remind us of it in years to come and hold us to account! Our motivation is to do a good job. If we do that then the mortgages will take care of themselves.

Which brings me to the subject of the existing performance fee. Eagle-eyed investors will not have failed but notice the near 200 basis point difference between gross and net performance this year, reflecting the performance fee earned. We are in this position because performance for all investors is in excess of 6% per annum compounded. But given historic performance, that may be the case for a very long time. Indeed, we are so far ahead of the hurdle that if the Partnership now earned pass-book rates of return, say 5% per annum, we would continue to "earn" 20% performance fees (1% of assets) for thirty years, that is, until the hurdle caught up with actual results. During those thirty years, which would see me through to retirement, we would have added no value over the money market rates you can earn yourself, but we would still have been paid a "performance fee". We are only in this position because we have done so well, and one could argue that contractually we have earned the right by dint of performance, but just look at the conflicts!

Given the incentives, we should buy treasuries, and to keep us on our toes, you should rightly withdraw your investment and immediately reinvest to reset the base line. That's not the relationship we want. Now, we are not going to buy treasuries (at least not for that reason), or equities that look like treasuries for that matter (check your other managers for those!) and to your great credit, no one has tried to game the system through withdrawing and reinvesting,

and we would be mortified if you did. And given the way both investors and your manager appear to think and behave, I may be guilty of fixing a problem that does not exist. But even so, and at the risk of a belt and braces approach, I would like to propose that from this year the performance fee be amended so that the high-water mark also compounds at 6% per annum, and I will write to you shortly to ask approval for that amendment to the prospectus. That way each new year has a hurdle of 6%, and the hypothetical pass-book return goes unrewarded. No one has criticised the status quo. We are under no pressure to change anything. But I simply do not want to earn a "performance fee" if future returns are below 6% each year, that is not what we are about, and I want to be able to shave in peace in the morning!

Comparative Advantage Revisited

It is an interesting psychological phenomenon to observe that if our annual results were reordered, we might feel differently about them. For example, place the results in descending order (+80%, +22%, +10%, +9%, +1%) and one is depressed by the decline; place them in ascending order (+1%...+80%), and we tend to think of them more favourably, even though the end result (the destination) is identical. Recent success feels better than distant success, as the brain perceives recent rewards more vividly. Psychologists call this the "availability heuristic" and it is this phenomenon that has sold a thousand mediocre mutual funds that appear, momentarily, to have a pulse! But that is not the way to invest. Annual results will bounce around all over the place, and for Nomad more so than more diversified funds. But does that matter if the destination is secure? Indeed, if we could turn U$1 into U$16, does it matter if it takes 18 years or 22 years? There is a difference in the annual compound rate of appreciation (over 3% per annum, and I do not wish to make light of that), but securing the destination is also important.

And securing the destination is much harder to do if you are trying to beat the index in annual increments at the same time. Nassim Nicholas Taleb (author of "Fooled by Randomness") published an interesting paper (free, on the internet) which also linked the sequence in which returns occurred to how they made investors feel. He argued that investors often accept the risk of an occasional large loss for a steady small profit as the recurrence of the gains made them feel better. This occurred even when an opposite strategy, of steady small losses followed by a large gain, generated superior end results. Travelling comfortably dominates people's thinking when they should be thinking about destinations.

To our way of thinking the question is, what good habits and techniques ensure that the destination is secure (even if the ride is bumpy), and that U$16 will be realised? This comes down to the sustainability of an investor's comparative advantage. In the last letter we discussed the comparative advantages an investor may have. To recall, "*there are three competitive advantages in investing: informational (I know a meaningful fact nobody else does); analytical (I have cut up the public information to arrive at a superior conclusion) and psychological (that is to say, behavioural).*" We concluded that the enduring advantages are mainly psychological. In this letter I thought I might describe some of the largest, common psychological causes of investor mis-judgement, and apply these to some of our investments.

Social Proof/Group Psychology.

We all know that social decisions can be suboptimal, but even so, that is how most decisions are made. In the last letter we reproduced one of our favourite Punch cartoons and make no

apologies for doing so again here.

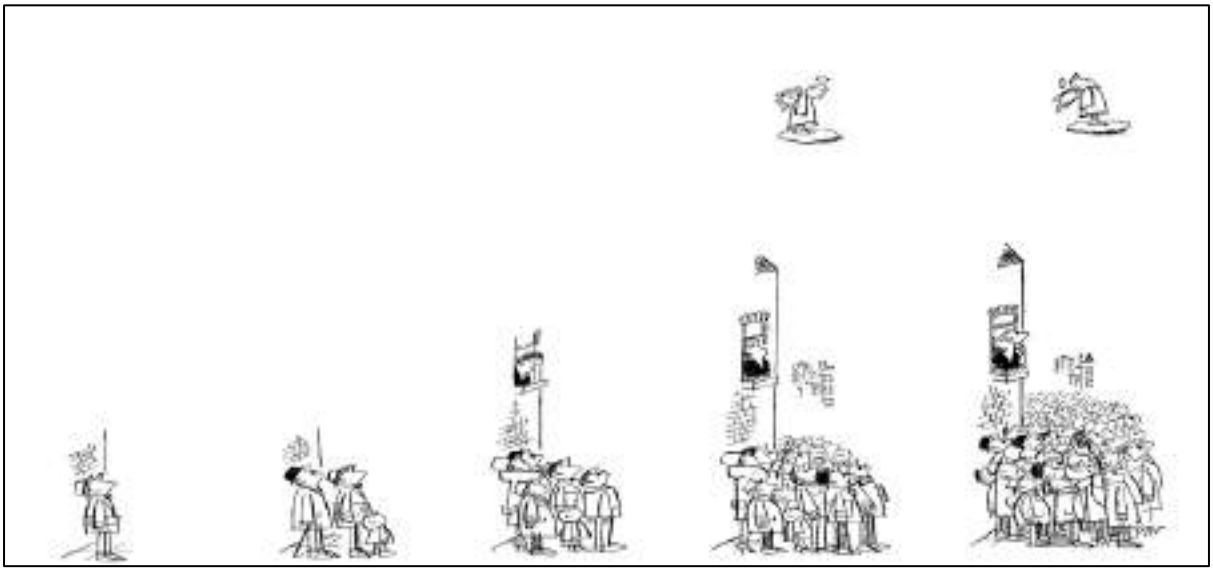

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Look at the angel in the last frame: think of her as a metaphor for the investment management industry. We sit at the top of the capitalist pyramid, collecting our rent from the layers below, and we should be thinking differently from the crowd. We should behave with some integrity. But what is the angel doing? Stanley Milgram performed an experiment very similar to the Punch cartoon and found that as the size of the crowd increased, so the proportion of passers-by that stopped and looked up increased too. I have not seen the study, but I bet the relationship wasn't linear, that instead it had these step functions to it. No one stops if there's just one guy standing there, but perhaps a group of three would get some passers-by looking up, and by the time it's a big group almost everyone is stopping: that's the way it works in the markets. Witness the waves of massive overinvestment such as occurred in the Thai cement industry in the mid 1990s, and the US telecom and technology companies in the late 1990s. It appears to us that once one company starts building, they all do through fear of missing out. Once Siam Cement had built all the capacity Thailand could need there was no need for Siam City Cement to join in. Let alone TPI Polene. But they all went mad. Combine social proof with envy and the financial incentives available in the stock market and that's a recipe for a sizeable mistake.

Availability

A second source of mis-judgement is availability, or the tendency to over-weight the vivid evidence or the evidence easily obtained. We discussed this somewhat above in relation to annual performance. We all do this to some extent, as the tendency is to concentrate at the task in hand and miss the bigger picture. Looking around you is the most important skill, and is largely innate, although Professor John Stilgoe at Harvard is trying to teach it and wrote an interesting book recently entitled "Outside Lies Magic". In the markets, investors tend to latch on to what can be measured, aided by the accountants and to some extent by their own laziness. But there is a wealth of information in items expensed by accountants, such as advertising, marketing and research and development, or in items auditors ignore entirely such as product integrity, product life cycles, market share and management character (this is not an exhaustive list!).

Probability based thinking

Third is an inability to perform probability-based thinking. In one of Charlie Munger's talks he makes the statement *"the right way to think is the way Zeckhauser plays bridge, it's just that simple*". Well, to a young man in London that is a very infuriating statement as it took me about a year to track down Richard Zeckhauser. He was world bridge champion in '66 and, amongst other things, now runs a brilliant Behavioural Finance course at the Kennedy School of Government at Harvard. So, how does he play bridge? He thinks via decision trees and attaches probabilities to the various branches. And as the facts change, change the probabilities. And when you are comfortable dealing with probabilities, and the vast expanse of opportunities such as the global stock and bond markets, you don't have to be too conservative with your bets.

But people don't think clearly when faced with probability trees. Take the following example, one person in a thousand suffers from a particular disease. The test for that disease is 99% accurate. What is the chance that your friend, who has tested positive for the disease, actually has the disease? The answer is one in eleven. However, many people mistakenly think the answer is one in a hundred (hint for the confused: one in a hundred is the accuracy of the test). As the tests aren't as accurate as they sound, and many doctors miscalculate the probabilities of disease, the General Medical Council (in the UK) requires that doctors test for dreadful diseases like HIV twice! Understanding the value of a company involves assessing the likely outcomes given management behaviour and competitive forces and weighing the probable outcomes in a valuation. So, an inability to arrange outcomes in probabilities is a considerable error causing bias in investors decision making processes and is behind many mis- valuations.

Patience

Finally, patience, or the lack thereof. At the beginning of the annual general meeting of the Berkshire Hathaway Company they show a video in which Buffett is asked what the main difference between and himself the average investor is, and he answers "*patience*". There is so little of it about these days: has anyone heard of getting rich slowly? Jack Bogle, founder of the Vanguard Group, claims that the holding period for stocks is down to 10 months and the average mutual fund is held for 2 years. What's that all about? And this behaviour feeds back into how managers then report to their clients, to the extent that quarterly reporting borders on an obsessive-compulsive disorder. And how did we get to this state of affairs?

I think the problem is that two agents, the fund manager and his immediate client, try to eke out some value added in the mind of their clients, and it creates these counter-productive consequences. Few people honestly believe this is the right way to behave, but they think that is what is expected of them by others, and so a spiral of dysfunctional behaviour is established. You would never get this level of reporting nonsense if it was on a principal-to-principal basis! And who is to blame? I side against the investment institutions. These are largely rich organisations and should behave with integrity, not bow to dysfunctional requests. And it is so unnecessary: as investors we own the only permanent capital in a company's capital structure, everything else in the company: management, assets, board, employees, can change but, absent bankruptcy, our equity will still be there! Institutional investors have never really reconciled their ability to trade daily with the permanence of equity. Are they long-term or short-term?

A worked example of Current Institutional Dysfunctionality

Our returns over the next twenty years will, in part, be derived as a consequence of the failings of the institutions that dominate the markets. The good news is these companies are stuffed with internal rules and contradictions necessary for them to perform as businesses, but which foster the psychological mistakes mentioned above that compromise investment returns. Take an institutional favourite, liquidity (the number of shares of a company that trade on the stock market, crucially this is usually measured over a short time period). The institutional desire is to have high liquidity, it appears, so to lower the probability of being caught in a poorly performing share, and dare we say, having to explain that to clients and their agents (another strike for the principal agent conflict)! Being in the wrong stock strikes me as an analytical mistake, not a liquidity mistake (if there is such a thing) and hiding analytical mistakes through selling shares in my opinion borders on fraud. But even so, the point is that companies with poor liquidity can be sold by institutions because they have poor liquidity and regardless of price, and that creates opportunities for those less constrained. Take for example one of our holdings, Matichon Pcl, a Thai newspaper which we described in the first Nomad letter to Partners as follows:

"*We do not read Thai and take it on trust from Thai friends that the editorial content is pro-reform, and it is certainly tabloid in style which sets it aside from Thailand's largest newspaper (Thai Rat) which is more "old Thailand". Matichon is probably not the Washington Post, but it's healthily questioning, nonetheless".*

Perhaps a little too "*healthily questioning*" as, in September last year, the firm was subject to a takeover attempt backed by, it is reported, the Thai Prime Minister, who had been regularly criticised in Matichon's pages! The offer was debt financed and orchestrated through another local media business which was making the bid. In the weeks before the attempted takeover we were approached by several other sizeable shareholders and asked if we wished to sell our shares in a block with theirs to the bidding party. We were a little surprised at the role reversal, as one might expect the bidding party to make the pitch, not one's fellow shareholders, and besides the price seemed low!

What could these other institutions be thinking? There had been no analytical mistake, we had all done quite well with our Matichon holdings, and yet as the stock had become increasingly illiquid (in part because we all owned so much of the company) one of our fellow shareholders confessed to us that there was a business pressure to sell, and it was for this reason they had called us. Just look at the psychological mistakes these institutions may be making, their thinking would appear to be as follows: the stock has risen in price so it is OK to sell (vivid evidence), our peers want to sell (social proof), therefore it must be OK for us to sell too (group psychology), there is a business reason to sell (principal agent conflict), the shares are illiquid (vivid evidence), we do not want to get stuck in an illiquid holding (impatience, more principal agent conflict and poor probability based thinking – highly priced shares are rarely illiquid!).

To our way of thinking in-market insiders buying on leverage are unlikely to provide the highest offer for our shares, and we declined on the grounds that the economics of buying looked good to us! But everyone else sold, except it seems Nomad, the company founder, allegedly the Thai Prime Minister and his associates, and other members of management. Following the institutional exit, the firm has begun a sizeable share repurchase program, not good for liquidity perhaps, but the repurchase program does imply a healthy compounding of

value per share for the remaining owners. Time will tell whether these investment institutions were right to sell but, if they turn out to be, it will be for the wrong reason: they did not make an investment decision, they sold because it was commercially expedient, and that may be to our great advantage.

Our work for the next period

We are very conscious of the destination (U$16 after twenty years) and raising the probability of reaching the destination involves understanding the psychological mistakes mentioned above and thinking in evolutionary terms to stay ahead of the crowd. If people learn and the economy is adaptive one would expect that over time price anomalies may diminish. You might have thought people would notice! But it is also true that some of the behavioural mistakes listed above are as old as the stars and were as valid when Graham wrote the first edition of Security Analysis in 1934 as they are today. Indeed, it is quite possible, in our opinion, that today's business-oriented investment world is leading to a widening of the principal agent conflict and this may increase the psychological mistakes investors make. If so, the opportunity set should be increasing. This may be conjecture on our part, but that seems to be the way the industry is going. Know of any hedge funds that own stocks long-term? That want to own illiquid stock? That don't price gouge? And we are told these guys are the future! At its heart we are trying to be people of good judgement and do intelligent things with money and this necessitates that our stock picks are contrarian. This approach has served us well in the first five years. But we regard it as only a start, and if we are to turn U$1 into U$16 over 20 years, which would be stunning, then sitting at just below U$3, as we do today, is not much to crow about. There is still much to do.

Matichon is one of six Nomad investments that have been bid for in the last eighteen months! By number that is one quarter of the portfolio. And whilst most of these have either failed (Brierley and Matichon), are pending (Telewest) or remain somewhat inconclusive (Thornton's and Holcim Philippines which is in dispute in the high court) there is likely to be some recycling of investments in the coming period and we remain vigilant for stocks that others despise. It was put to us recently that we have a "*told you so*" portfolio (stocks which others will be dying to point out the idiocy thereof) and that pretty much sums it up. The task in hand is to find some more *"everybody knows that's a bad idea"* stocks.

Thank you

Attached to this letter is the transcript of a speech I gave recently which relates some of the psychological traps mentioned above to our experience of investing in Asia (more punishment for the curious). I have also attached a copy of the Nomad Letters to Partners since inception. That is an awful lot of reading. Don't worry there will not be a test, but having everything in one place is usually helpful, especially as we often refer to previous letters.

Make no mistake of the role you play in any success the Partnership may have. We are simply delighted that you have let us get on with driving the bus (not always successfully) free of noisy passengers. We are pursuing the road less traveled in both stock picking and Partnership governance and conscious that that requires some effort on your part to stay the course with us. As such we are not an easy ride, but we are respectful of the effort you put in and I promise that we do not take your confidence in us lightly. Thank you. The destination will be worth it.

Zak and I love running the Partnership. Truth be told, perhaps a little too much! To our minds it is what investing should be.

The annual report pile now threatens the light levels in our office, and the annual general meeting season awaits…

Yours sincerely

Nicholas Sleep

Marathon Counsel writes: In this letter, we use the term "Partners" as a generic term referring to all Nomad investors, whether shareholders in the feeder fund or limited partners in the Partnership and not, in the strict, legal sense of the word, to imply the creation of a partnership between shareholders in the feeder fund, Nomad and/or Marathon Asset Management.

Speech given to the board of The Investment Fund for Foundations at the invitation of Mike Costa and David Salem, September 26th 2005, New York City.

"So, how does Zeckhauser play bridge?"

In his brief for this talk, Mike asked me to talk about emerging markets. This may have something to do with my firms' track record of investing in emerging markets, principally south east Asia, but also serendipitously in places like South Africa and Mexico. When I sat down and started writing, I found that I had a lot to say. I tried to cut it down a little, but it lost something. Now if I was a great orator, like Bill Clinton, perhaps I could deliver my talk off the cuff and look cool and nonchalant? But the truth is I pick stocks for a vocation, and that puts me at the geek end of the spectrum: so, if you will forgive me, for the most part I will read what I have to say. Some of this stuff is important and I want you to understand it.

In main established markets of the world our output, that is to say our track record, has been to beat the indices in almost all geographies, over almost all-time frames by 4 to 500 basis points per annum. But if one burrows down to look at our experience in emerging markets it is much, much better than that. And that is a very interesting phenomenon. I mean how is it that three guys (Jeremy, Zak and myself) in a room in London, doing broadly what we do elsewhere in the world do much better in one territory than in the other? And how is it that we have done better than our peers with armies of analysts stationed in capitol cities throughout the region? I mean, how can this be? And how sustainable is it? And as you have money invested with us, I am sure you will want to know how sustainable it is too!

At this point I should probably explain something about my background. I studied Geography at Edinburgh University, Scotland. Geography is a subject that hardly exists in north America. A Harvard Professor once told me that they had a Geography course at Harvard but it had a reputation for homosexual lecturers and was closed down. I am not sure what to make of that particularly, I suspect it is not cause and effect, but at any rate Geography is a subject with an identity crisis – it is the confluence of geology, physics, chemistry, oceanography, climatology, biology and that is just physical geography. Human geography deals with sociology, psychology, statistics, economics – so it is the ultimate polymath course. Geography just reached into other subjects and grabbed what it thought it had to have. Indeed, the reason I studied Geography at all was because of this polymathic quality although I got there through an odd route…

I went to Edinburgh to study Geology, because that's where the best Geology course was, and in my first year I developed an interest in Architecture and IT but I was discouraged from studying these off subject courses by the Geology department who thought I ought to be doing the hard sciences, and so I transferred to Geography and began a dissertation of architecture and business parks! But because Geography is so broad, it claims little territory of its own, that's why Harvard closed it down, and at various times in its history the subject goes through identity crises. Because Geography is seen as an academic gatecrasher, practitioners have had to ask themselves questions that other more homogenous subjects such as physics or chemistry have not.

And so, at Edinburgh we spent a whole year on the philosophy and methodology of what we were doing, and that year opened my eyes. I just loved it. I mean it really changed my thinking. And I was reading "Zen and the Art of Motorcycle Maintenance" by Robert Pirsig at the time, and the two just combined to change how I viewed the world. So, I have this tendency to return to the basic questions. And what I am going to do here is talk about the philosophy and methodology of what we do as investors, and assess why performance is better in Asia as a logical subset of a much more important question, which is "what is your competitive advantage in investing?"

Bill Miller was asked that question recently and gave the following answer: there are broadly three advantages one may have: informational, analytical and psychological:

An informational advantage would be that I know a piece of information that the market does not, and that information has value. Nathaniel Rothschild built one of Europe's great banking fortunes that way. He had faster couriers and carrier pigeons than everyone else, and everyone knew that, and so he was first to market with the knowledge of the war won (or lost). And because everyone knew that he knew, it was hard for him to fail. That advantage is pretty much dissipated today. It is either illegal following insider trading and Reg FD like regulations, or the information is instantaneous and omnipresent. I have tried not to look, but I guess some of you will have checked your blackberries since I started talking?

The second is analytical, that is one can cut up the information everyone else has in a different way to arrive at different conclusions. Let's see what Wittgenstein had to say on the subject. **Slide 2.** Wittgenstein's point is the description you use, will frame how you think? So, is it a coat hanger or a door wedge? If someone described it to you as a piece of cheese, you would think about it differently than if they had told it was a mountain, or a pyramid that's fallen over. The point is that perceptions change as descriptions change – and they change independent of the facts. My favourite example here is the way advertising and marketing budgets are treated in public accounts. That is, they are expensed as a debit to earnings. Because the accountants have this sound overriding bias to draw up accounts with reference to conservative values, and don't know how to capitalise it, its valued at nil. Estee Lauder has a huge advertising and marketing budget which dominates its profits statements. So much so that the residual cash flow that drops down to the profits of the business is almost a rounding error on the larger amount. But it's that little residual that the markets use to value the company.

In the case of the Estee Lauder Company the share price fell! when they announced a rise in the ad spend. In other words, the market viewed "all costs as bad costs" – well they had to have been buying something with the money! And so, the question is: what have Estee Lauder bought with that advertising budget? Ditto Nike, Coke or one of our investments, Scotts Miracle Grow. And this factor goes on again and again. And it can be applied to other expensed investment spending such as R&D. So, we do a fair amount of turning numbers around, looking at things no one else looks at, such as share of voice versus share of market, which is a way of assessing advertising spend, we assess customer loyalty, we cover up the name of the company and analyse the business and so on.

You have to array the information in such a way as to be able to properly weigh its value, and that is not always the same way the accountants use. And I think we have some analytical advantage in that compared to the crowd. But I like it most when it is combined with the final source of competitive advantage and those are…

Behavioural and psychological. At this stage my talk could turn into a variant of Charlie Munger's "Psychology of Human Mis-judgement" speech given at the Harvard Law School in the mid 1990s and which is the finest investment speech ever given. Not that he talked directly about investments. And that tells you something. But the most enduring advantages are psychological. And the trick here is to first understand them. And then train yourself out of them!

Well, the list here is just so many: over-confidence, incentives, commitment and consistency tendency, deprival super-reaction, anchoring, jealousy/envy, I could go on and on, and Charlie had 24! But what I will do here is focus on four that I think lead to more mis-judgements than most, especially when they combine with each other.

First, Social Proof/Group psychology. Well, we all know something about the dysfunctionality of group-based decision making, you've got one guy leading the debate, he's the authority figure, he suggests a course of action, everyone anchors off that suggestion, maybe bonus time is looming so no one wants to object. You are all aware that a competitor across the road has just taken the same course of action. And nobody objected. Social Proof. And, of course, it's a perfect disaster. We all know that social decisions can be suboptimal, but even so, that is how most decisions are made… At least on the boards of public companies and investment firms I know.

Slide 3. This is a chance to bring in one of my favourite cartoons which was carried in the book "Influence: The Psychology of Persuasion" by Bob Cialdini. I can't look at this cartoon without seeing that angel as a metaphor for the investment management industry. We sit at the top of the capitalist pyramid, collecting our rent from the layers below, and we should be thinking differently from the crowd. We should behave with some integrity. But what is the angel doing? …I was at a Santa Fe Institute meeting the other day, and Jim Surowiecki the author of "the Wisdom of Crowds" told me that Stanley Milgram actually performed this as an experiment. And what he found was, as the size of the crowd increased, so the proportion of passers-by that stopped and looked up, at nothing, increased too. I have not seen the study but, I bet the relationship wasn't linear. That it had these step functions to it. No one stops if there's just one guy standing there, but perhaps a group of three would get some passers-by looking up…and by the time it's a big group almost everyone is stopping…anyhow, that's the way it works in the markets…

In Cialdini's book he talks about the unhappy case of Kitty Genovese who was slowly murdered whilst people just stood by watching each other? And because no one was running to her aid no one else did?

And how many people bought tech stocks in 1999 because everyone else was?

How else do you explain how you get these waves of massive overinvestment such as occurred in the Thai cement industry in the mid 1990s. In my opinion what happens is once

one company starts building, they all do through fear of missing out. Once Siam Cement had built all the capacity Thailand could need there was no need for Siam City Cement to join in. Let alone TPI Polene. But they all went mad. Combine social proof with envy jealousy, and financial incentives and boom, there you go.

My second source of mis-judgement is availability, or the tendency to over-weight the vivid evidence or the evidence easily obtained. Here my favourite example is given by Dick Thaler, who runs an investment company and teaches behavioural finance at the Chicago School of Business. And Dick uses a short video clip of 20 seconds or so, which shows three people dressed in white and three people dressed in back. And each team passes a ball between them whilst moving around the floor. And Dick asks, count the number of passes made by the white team. At the end he asks the audience how many passes they observed. 18? A few hands. 19? More hands. 20 and so on. It is interesting that we can't all agree on that! That tells you something. Then he asks did anybody see anything else? Now I have seen this done a few times now and in only one class did someone spot what actually happened. Dick asks, did anyone see a man dressed in a gorilla suit walk into the middle of the screen beat his chest and walk off?! Almost no one sees this.

Well, we all do this to some extent. We tend to look hard at the task in hand and miss the bigger picture. Looking around you is the most important skill, and is largely innate, although Prof. John Stilgoe who is also at Harvard is trying to teach it and wrote an interesting book recently entitled "Outside Lies Magic". And in the markets investors tend to latch on to what can be measured, aided by the accountants as we discussed just now and to some extent by their own laziness.

The adage that "*if it's in the headlines it's in the price*" is very largely correct. I mean who would want to put up with this. **Slide 4.** There are over 640,000 headlines under Xerox and bankruptcy on Google! I know investors that screen for that by the way, but there are not too many people that want to own the most despised company in the market, which any Joe on the street that reads a newspaper knows is in some kind of trouble, as anyone who has owned Asia at the pit, or Xerox, Lucent and Primedia these last few years will know.

My third mis-judgement is from an inability to perform probability-based thinking. In one of Charlie Munger's talks he makes the statement *"the right way to think is the way Zeckhauser plays bridge, it's just that simple*". Well, to a young man in London that is a very infuriating statement. I mean, who is Zeckhauser, and how does he play bridge? Well, it took me about a year to track down Richard Zeckhauser and answer that question.

He was world bridge champion in '66 and runs a brilliant Behavioural Finance course at the Kennedy School of Government at Harvard. And the reason that his course is at the Kennedy School at all is very interesting. I mean what is a Behavioural Finance course doing at a "School of Government" in the first place? Well, the reason is that his course was rejected by the deans of the economics department who claimed it was not economics. Instead, he took the course to the Kennedy School where it has been held ever since.

Zeckhauser's split with the economists' view of the world is their reliance on a rational utility-maximising framework. The old guard are hostile to assertions of non-rational behaviour, I mean the idea that we are all rational is just so beautiful, as I'm sure Ayn Rand would agree.

Well, this does not sit easily with the psychologists' view of the world that there are systematic biases to individual decisions – that is we have these little wobbles in our decision-making processes. Or a biologist's view of the world that individuals act in self-interest, make mistakes, learn and evolve. Well Brian Arthur at the Santa Fe Institute refers to the economy as a complex adaptive system that learns as agents learn. And that seems like a way better model to me…

So, Behavioural Finance takes a pragmatic, multidisciplinary approach (a little like Geography!) and puts the rational economists' view of the world together with that of the psychologist and biologist. After all, how can economics not be behavioural – who is making the decisions after all?

It is my personal opinion that the thinking presented by Zeckhauser, and at the Santa Fe Institute should be thought of as the new economics in waiting, but it will likely only become mainstream consensus once the old guard has died off. The fact that these courses are still considered Moonie conventions and are rejected by the Harvard economics department shows how far away establishment, consensus thinking is. I am aware of only one large fund management organisation that has internalised these ideas and when Zak and I joined the Santa Fe Institute last year we represented only the second European investment company to do so.

And even we have trouble getting these ideas adopted – there is a tendency for people to say, "thanks Nick, that behavioural finance stuff was really great", but then they go back to their desks and carry on as they did before. Articulating this stuff is easy, internalising it is not. That's the hard work. Einstein's theory that space and time were relative had already been thought of by Lorenz. But what Einstein did was put it central to everything – whilst everyone else kept the concept peripheral. And it changed the word. That's how behaviour finance should be used. But it probably won't…Murray Gell-Mann at the Santa Fe Institute is fond of saying "one scientist would rather use another's toothbrush than his nomenclature". But those that can adopt these ideas will be streaks ahead of the competition in my opinion. But I'll come to that later.

So, anyhow, how does Zeckhauser play bridge? Well ,he thinks via decision trees and attaches probabilities to the various branches. And as the facts change, change the probabilities. Now I've been droning on a bit, so let me say it again, because its key…Zeckhauser thinks via decision trees and attaches probabilities to the various branches. And when you are dealing with probabilities you can be indifferent to gain or loss outcomes, but that's normally a trained response. And when you are dealing with probabilities, and the vast expanse of opportunities such as the global stock and bond markets, you don't have to be too conservative with your bets.

But people don't think well with probabilities. This was famously demonstrated in the Monty Hall problem, named after the host of a 1970s game show "Let's make a deal". The contestant chooses one of three doors. One contains the keys to a car and the other two a picture of a goat. The choice made, Monty opens one of the two other doors, and the rules of the game require him to show you a goat. The question is should the guest switch to the remaining closed door? And why? When this problem was posed in the New York Times they received 10,000 letters insisting that the wrong answer was right! I mean the mind is not naturally arranged in a way to answer probability-based questions. It is not instinctive.

I'll give you another example. One person in a 1000 suffers from a particular disease. Your friend tests positive for the disease with a 99% probability that the test is accurate. What is the chance that your friend has the disease? The answer is one in eleven, but according to surveys that's not what most doctors think! They think your friend is toast! – well the chances are he isn't! It takes just a little thinking through. And this is why they test for dreadful diseases like HIV twice, because the tests aren't that accurate and doctors aren't good at maths! So, an inability to think like Zeckhauser and arrange outcomes in probabilities is a considerable error causing bias in investors decision making processes. It is interesting that this was essentially the central message in Rob Rubin's autobiography and Buffett's Chairman's statement this year.

So ,for example, the biggest mistake an investor can make is to sell a stock that goes on to rise ten -old! ' not from owning something into bankruptcy. But that's what everyone thinks, at least judging by the questions we get from clients. Only last week we got questions about our holding in Northwest Airlines rather than the sale of Apple earlier this year. But selling Apple has cost us more. People look at actual costs, not opportunity costs, and what did we say about over-weighing the vivid evidence? And if you understand that, and you understand probabilities, then you'll know Northwest wasn't worth calling us about.

My last psychological hurdle is patience, or the lack thereof. At the beginning of the AGM of the Berkshire Hathaway Company they show this little video and each year Buffett is asked what's the main difference between himself and the average investor, and he answers patience. And there is so little of it about these days. Has anyone heard of getting rich slowly?

What is it Jack Bogle tells us? That the holding period for stocks is down to 10 months and the average mutual fund is held for 2 years? What's that all about? In my opinion quarterly reporting borders on an obsessive-compulsive disorder. And how did we get to this state of affairs?

Well, I think that the problem is you get two agents – the fund manager, and his immediate client – and they try to eke out some value added in the mind of their clients and it creates these counterproductive consequences. You would never get this level of reporting nonsense if it was on a principal-to-principal basis! And who is to blame? Well, I side against the investment institutions. These are largely rich organisations and should behave with integrity, not bow to dysfunctional requests. Behaving like Molly Malone and flashing your knickers at the boys on a Dublin Friday night is not the right way to build a lasting reputation, but that's how these institutions behave.

And it is so unnecessary: we own the only permanent capital in a company's capital structure – everything else in the company, management, assets, board, employees can change but our equity can still be there! Institutional investors have never really reconciled their ability to trade daily with the permanence of equity. I mean are they long-term or short-term? Zak told me a joke I really enjoyed: two hedge fund managers meet at a cocktail party and one asks, "how are you?" – and the other replies "yeah, I'm up 3% this month". Good investment process is not apparent in one quarter's worth of transient stock price quotations, or one year for that matter!

In a small investment partnership that I run we make people sign a form saying they understand that the fund is not suitable for those with time frames less than five years. No one else does that. We make them do it by the way, to try and put the investment in a different psychic space than other savings they may have. And to avoid the pressures of social proof and jealousy/envy I mentioned earlier. Incidentally we have average holding periods well over five years as judged by recent results.

So, patience, social proof, vividness and probability-based thinking are the four psychological hurdles I have chosen to highlight and I think we understand these perhaps a little better than the average investor out there…and I'm not always sure about that. I certainly blew Argentina three years ago, mainly due to over-weighing the vivid evidence - especially the temporary vivid evidence - and that has cost us. I mean, you think you understand this stuff, but you have to keep at it…

But if so, so what? What does all this have to do with our emerging market performance.

Well let's go through some of these psychological mis-judgements from an Asian perspective: Well, the Asian emerging markets are Chinese, even in Thailand, Indonesia, the Philippines and Malaysia, which have large indigenous populations, the business elite is Chinese. And the Chinese like to gamble – one of our largest investments is in an old Malaysian casino and its chocked with Malaysian Chinese from KL on a weekday, and you should see it at the weekend! - well that does not sound like "patient money" to me. And what have we just learned that patience matters.

There is very high social cohesion to Asian societies. That is people think alike, and they think literally. This is true in the west, but I think it is probably more true in the east as eastern societies tend not to celebrate the individual to the extent we do in the west. So social proof and herd mentality may be more acute. That is, contrarian thinking seems to be more rare. And at the trough things are very, very cheap.

There may also be a foreign angle to the cheapness too. Most of our competition comes from regional specialists – these people suffer from the same restrictions that tech fund managers suffered in 1999 – they have nowhere else to go. When they are given funds to manage the covert instruction is to buy growth, not value. The vivid evidence is that Asia is growing – just look at China!

And they have a principal/agent conflict. That's Zeckhauser's other pet subject, the principal agent conflict. They have set up offices in every capitol city as if in a marketing exercise to assert local expertise – well it's all there on the Bloomberg, at the end of a phone line and in annual accounts. You don't need local correspondents as well. And you certainly don't need the drift into group decision making that implies.

So, the foreigners in the region typically think like bullish agents, but that is not how the main shareholders think! the families that control Asian companies view is not the institutional agent capitalism we grow up with in the west (and the self-promotion that goes with that) – its dynastic, confusion capitalism - that is they think like principals. So, in Asia there is this huge dispersion in orientation, between the Chinese gambling mentality of the masses and the tycoons dynastic orientation. The way to bet is not to align yourself with the market patsy,

but to think like the tycoons – and our long holding period helps in that regard – back to patience.

In my opinion there is a "false asset class" element to demand for investment product in the region, and this has bred "fake specialisation" in my peers. I mean they know the shape of the economy, but they don't know what a company is worth. Westerners do not invest in Asia to be contrarian! The point is that specialising by geography is not the same thing as specialising in investing.

And we try to specialise in investing. So, we don't sell dedicated funds, and we don't go marketing Asian specialisation and when things are unattractive, we go looking elsewhere on the planet, and I think that helps. We don't have to be there. Our generalisation by geography and specialisation by discipline is a huge help.

We are trying to be people of good judgement and do intelligent things with money. And so, we go to Asia looking for businesses that fit our experience of being in situations that will work, at prices we like. But few people start with that bias. Our peers seem not to be looking at what we are looking at. Like Siam Cement or Jardine Matheson for example, these are huge businesses (JM is the largest private employer in the region, and SCC represented 4% of the Thai economy at one point) and they were priced at sizeable discounts to replacement cost, with better than replacement cost normalised economics, and they have been ten baggers for us. You could not look at Asia and not see these companies. They dominate.

But the point is our performance is better because there is less competition for our shares. Period. And that's because there are less people with our approach. We have found that when we are buying shares our competition is the trade buyer who cannot negotiate 100% of the company at the price at which we can buy a fraction on the stock market. Take a look at Siam City Cement. The day Holderbank bought control of the company, from the family, for Tb170 per share, which equated to replacement cost of the assets – the stock that day close up one baht to Tb48 – less than one third of what the trade buyers were paying. That stock has risen ten-fold since.

Well, is this sustainable? Perhaps not, what is it Brian Arthur at the Santa Fe Institute tells us: that people learn and the economy is adaptive. It seems reasonable to expect that over time that advantage will may diminish. As Buffett joked at one AGM – "*the secret to a successful marriage is not looks or money…its low expectations".* And I think that is a healthy starting point when thinking about our emerging market performance.

However, it is true to say that some of the behavioural traits I have mentioned here are as old as the stars and were as valid when Graham wrote the first edition of Security Analysis in 1934 as it is today. Even so, and whilst I recognise that fact, I think it is healthy to think in evolutionary terms and to plan to stay ahead, and we have some clues to where the leading edge in investment thought is going. Let me read you what Mike Mauboussin at Legg Mason, who is streets ahead, had to say on the subject of decision making:

Slide 5

"*Individuals who achieve the most satisfactory long-term results across various*

probabilistic fields (gambling, cards, horses, investing in common stocks, investing in a new plant) *have more in common with one another than they do with participants in their own field."*

Well that just has to be true. Amarillo Slim was the world poker champion in 1972, and his autobiography was published last year into the new poker boom, and is entitled "Amarillo Slim, in a world of fat people" – and if you understand Michael's point, you can see why Slim called his book that. Puggy Pearson was also a world card champion, and he argued that to win you needed to understand the 60/40 end of the bet (when the odds are on your side), know money management (how much to bet), and know yourself. Well, that sounds awfully like good investment decision making to me.

Mauboussin again…

"Distinguishing features of probabilistic players include a focus on process versus outcome (I hope I have done some of that today), *a constant search for favourable odds and an understanding of the role of time*." That is Patience.

It is still amazing to me that everyone assesses a fund manager on his output, not his process. They don't admit that of course. But that's what happens.

"Success in a probabilistic field requires weighing probabilities and outcomes – that is an expected value mindset." Well…think like Zeckhauser.

I'll let Mauboussin have the last word…

"One key to success is a high degree of awareness of the factors that distort judgement". Well, amen to that.

And now I will take any questions you may have…

Slide 1: Speech Title “So how does Zeckhauser play bridge?”

Slide 2:

“Take as an example the aspects of a triangle. This triangle

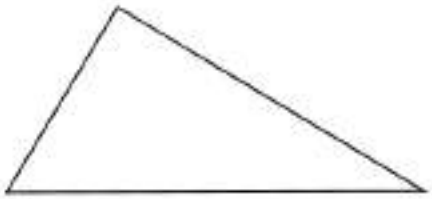

can be seen as a triangular hole, as a solid, as a geometrical drawing standing on its base, as hanging from its apex, as a mountain, as a wedge, as an arrow or a pointer, as an overturned object which is meant to stand on the shorter side of the right angle, as a half parallelogram, and as various other things.”

Source: Ludwig Wittgenstein, Philosophical Investigations

Slide 3: The Punch Cartoon

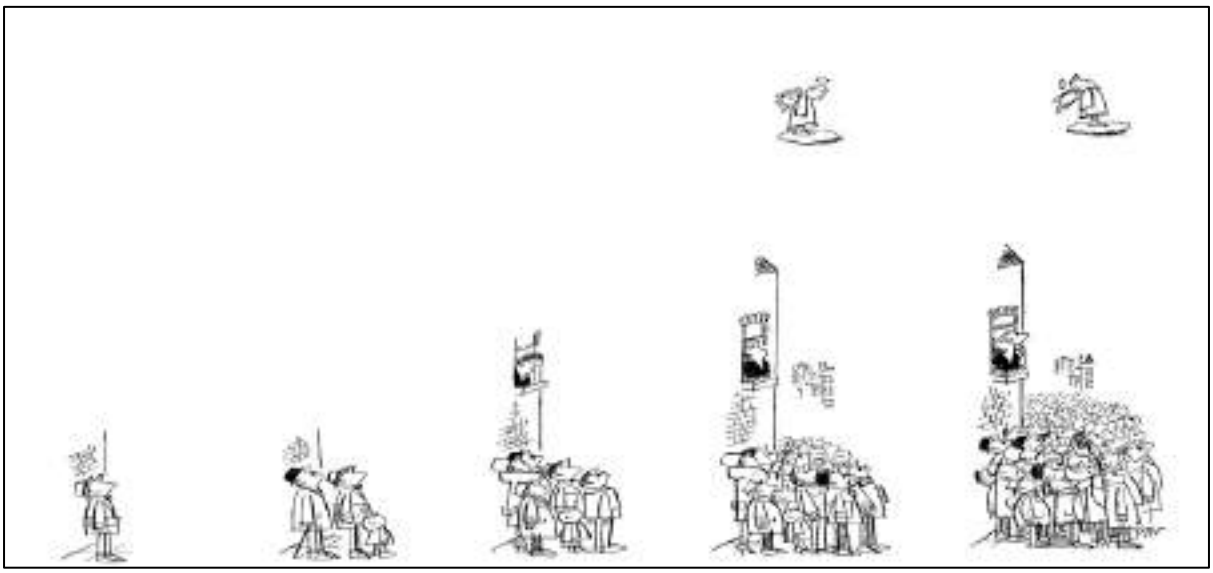

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Slide 4

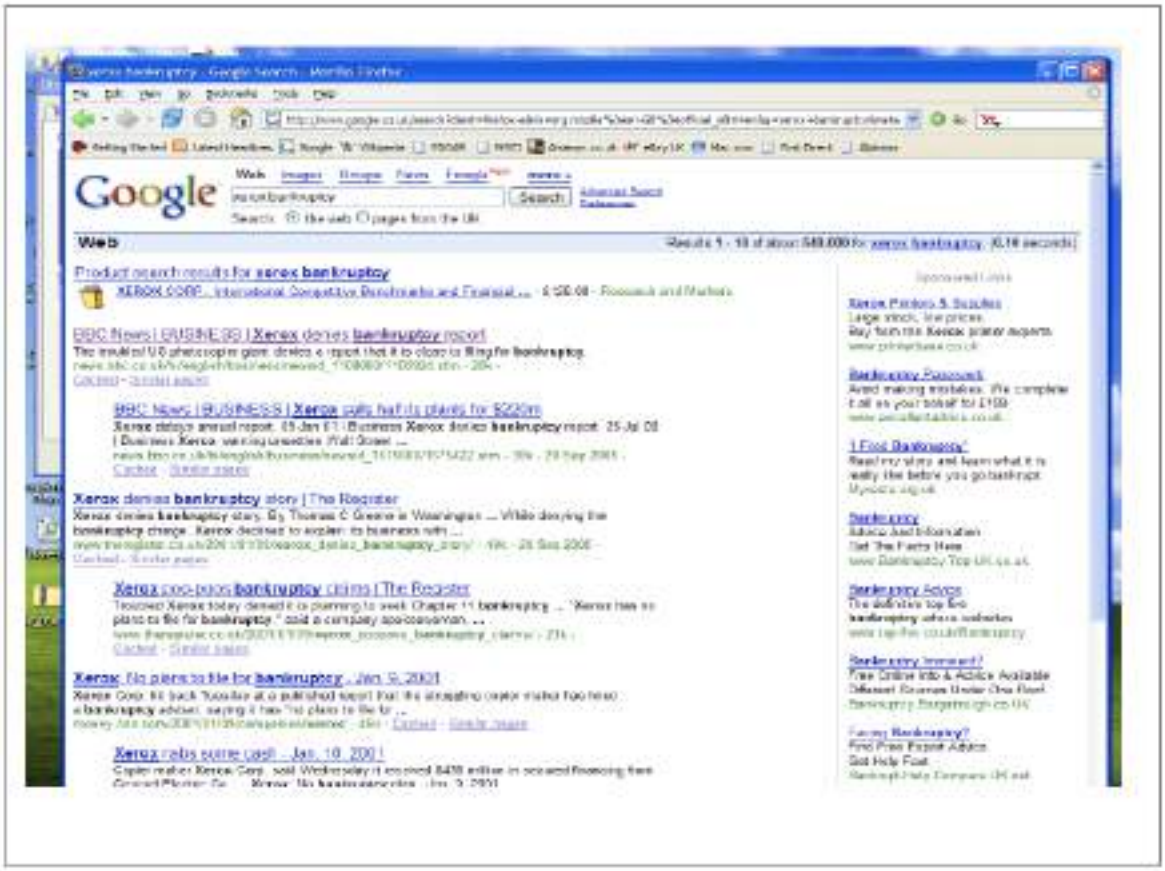

Slide 5

- *"Individuals who achieve the most satisfactory long-term results across various probabilistic fields have more in common with one another than they do with participants in their own field."*
- *"Distinguishing features of probabilistic players include a focus on process versus outcome, a constant search for favourable odds and an understanding of the role of time."*
- *"Success in a probabilistic field requires weighing probabilities and outcomes – that is an expected value mindset."*
- *"One key to success is a high degree of awareness of the factors that distort judgement."*

Source: Michael Mauboussin, Legg Mason Funds Management

Slide 6: Final slide, “The right way to think is the way Zeckhauser plays bridge, it’s just that simple” Charlie Munger.

Sleep, Zakaria and Company, Ltd.

Nomad Investment Partnership

Interim Letter
For the period ended June 30th, 2006

This is the inaugural Nomad Investment Partnership letter written under the letter-heading Sleep, Zakaria and Company, Limited. The address may be temporary (it's Zak's home, office to follow in September) but Sleep, Zakaria and Company is where we expect Nomad to rest until we are all old and grey. We write this letter in our capacity as both managers of Nomad in the past, whilst employees of Marathon, and future, with the handing over of the management contact to Zak and my company effective early September 2006. For the period from our resignation from Marathon in March to the completion of the handover of Nomad in September, it is Marathon that is responsible for the portfolio. For this reason, Marathon will be sending you the performance numbers under separate cover whilst Zak and I have written this commentary. This somewhat artificial separation should only be necessary for this letter whilst the handover is pending. From early September head and body will be reunited and we will assume full responsibility for your Partnership. From early September the buck stops here. We can't wait!

This interim letter will also be reasonably brief (do I hear a cheer?) as it falls between two far more important documents which require your attention: the transition letter sent in April (also contained in the appendix to this letter) which outlines the philosophy of our approach, and the prospectus, which will follow shortly, outlining the methodology. In this letter I would like to concentrate on two items, the state of the handover of Nomad to Zak and my company and second, an investment controversy.

<u>An Update on the Handover.</u>

"What's the excuse this time?
Not my fault, sir.
Whose fault is it then?
Grandma's, sir.
Grandma's? What did she do?
She died, sir.
Died?
She's seriously dead all right, sir.
That makes four grandmothers this term, Blenkinsopp.
And all on P.E. days.
I know. It's very upsetting, sir.
How many grandmothers have you got, Blenkinsopp?
Grandmothers, sir? None, sir.
You said you had four.
All dead, sir.
And what about yesterday, Blenkinsopp?
What about yesterday, sir?
You were absent yesterday.
That was the dentist, sir.

The dentist died?
"No, sir. My teeth, sir.
You missed the maths test, Blenkinsopp!
I'd been looking forward to it, sir.
Right, line up for P.E.
Can't sir.
No such word as "can't", Blenkinsopp.
No kit, sir.
Where is it?
Home, sir.
What's it doing at home?
Not ironed, sir.
Couldn't you iron it?
Can't, sir.
Why not?
Bad hand, sir.
Who usually does it?
Grandma, sir.
Why couldn't she do it?
Dead, sir."

"Excuses, Excuses" by Gareth Owen

Anyone who has attempted to set up a fund management organisation will immediately recognise Blenkinsopp. The cookie cutter nature of the fund management services industry (accounting, administration, legal, tax, information technology and so on) means that those attempting to break from the status quo come across more than their fair share of excuses. It will surprise few that our proposed refundable performance fee is not one widely adopted by hedge or mutual funds, or indeed institutional investors, and so no off-the-shelf cookie cutter solution exists. The problem, I shall whisper this next part, may have been that in the not-too-distant past (that is before ninety percent of the world's hedge funds came into existence) pricing in various parts of the financial services industry may have been too low! Modest slither fee scales have changed little in a decade and ten years ago required product standardisation to stretch a clerk and his computer over many clients, in order to earn a reasonable return on capital for his bank. Today, that is, ten thousand hedge funds later, demand is white-hot and having struggled with per client economics in the early days the cookie cutters now earn super-normal profits.

This Henry Ford (any colour so long as it is black) standardisation also has a nastier side, in the sense that it stifles innovation: Hedge funds can duck the equitable performance fee question (mouth upturned they can validly and conveniently claim that 1% and 20%, 2% and 30% and so on are industry standard fee scales) whilst simultaneously the cookie-cutter accomplice earns super normal profits too. One of the world's most successful banks told us that they do not have the capacity to service Nomad's refundable performance fee scheme. A cursory glance at their accounts reveals a twenty-five percent return on equity, of which fifteen percent on equity is retained each year for the purpose of growing capacity! Hubris amongst the service providers abounds: I feel a letter to the Chairman coming on.

Sleep, Zakaria and Company Ltd., which will provide investment management advice to the

Nomad Investment Partnership, has recently been authorised by the Financial Services Authority, and in what may turn out to be record time. As the usual authorisation process takes three to four months and we know of some firms that have taken one year, our four-week approval is testament to Nomad's simplicity. In one delightful exchange with the FSA, they thought we had mistakenly reported in our filing an average of three trades per month (a trade is an individual purchase or sale of a stock or bond, including those triggered by subscriptions). Surely, they asked, you have missed off the noughts? But we had not and indeed the three trades per month statistic (we did argue that we do not trade, we invest: this fell on deaf ears!) misrepresents the facts as our average holding period is around five years.

At the risk of sounding like Blenkinsopp the prospectus will be with you shortly, and we will save a discussion and explanation of its intricacies until then. Marathon's resignation of the management of Nomad (with a forty-five-day notice period) and our appointment as managers immediately thereafter means that Nomad will be managed by Sleep, Zakaria and Co Ltd from September 12th. By then we should be in our new office, and there will be a new prospectus. Hooray!

We have been asked many times about reopening the Partnership, so much so that I fear we must have taken a leaf from the Hershey Creamery school of investor relations. Readers may recall that a few years ago we found it difficult to obtain Hershey Creamery annual reports or proxy statements and so we resorted to asking the CFO for a copy, only to be told "these are mailed out to our shareholders". How then might potential investors form a judgement whether they would like to become shareholders without the benefit of an annual report?

"It's a common complaint", came the reply.

We do not mean to be so evasive, so let me explain the conditions under which we may reopen. The golden rule is that we will only reopen if incremental dollars bring something to the party, through lowering the price to value ratio of the Partnership as a whole. This aside, any increase in size is also accretive to performance as the management fee in dollars is, within certain parameters, fixed and will decline as a percentage of assets as the Partnership grows. That way growth also offers a saving to all investors. Capital raising will first take place by a rights issue to existing investors with rights not taken up returned to us and then offered to those that have indicated an interest in investing and satisfactorily completed a due diligence questionnaire. The queue is ordered with principals ranked above agents, and agents ranked according to various criteria. However, it is not ranked according to the size of the investor's pot. It is far more important to us, and our existing partners, that we all see Nomad in the same light – we simply do not have the will or inclination to offer bespoke services, cater to a different crowd or to be particularly large. When it comes to the Partnership opening, we are happy to adopt the motto of the Brooklands Motor Racing Circuit whose pre-war posters showed cars speeding around its famous banked corner whilst well-dressed spectators ate picnics on leafy verges, with the slogan "*the right crowd, and no crowding*". We are very respectful of the trust existing partners have placed in our ability to compound their savings and have no appetite to pack in all and sundry, regardless of the incentives.

I am sure we would make poorer investments if we did and be unhappier to boot!

When we find a pool of good ideas of reasonable size, we will be in touch. However, we will

not open just because Nomad will be independent or due to some dreadful manifestation of the principal agent conflict. The cost-reimbursement management fee means we do not need to open to put bread on the table. To date, we have turned U$1 into around U$2.70. Our aim is to turn this onto U$10 within a decade (approximately fifteen percent compound per annum) and we are somewhat indifferent as to how much money we carry with us during the process: For Zak and I, it is all about the destination.

Non-Transitive Dice and some of the things they tell us about investing

If a > b and b > c, then it would normally follow that a is also > c. This is a transitive sequence and is embedded deeply in our mental problem-solving apparatus. It all seems quite logical. Non-transitive, or "magic", dice challenge this assumption. A set of magic dice contains four dice whose faces are labelled as follows:

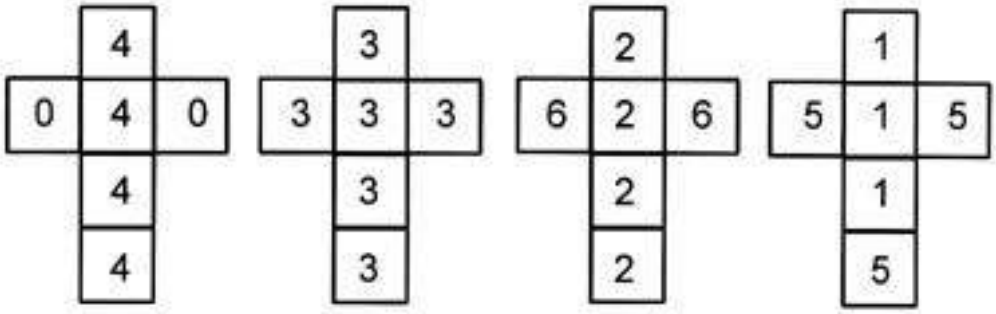

To play magic dice a host invites an opponent to choose one dice, which the opponent will roll against the host, the one with the highest number wins. The process is repeated and it's best out of ten. Some players might choose the dice with the numbers five or six, without observing the number's frequency. Others may reject the dice with zeros (surely that can't win a round?) without observing that the dice's four fours beat the number three dice two-thirds of the time. As displayed in the diagram above, the dice on the left beats the one on its right, and so on across the diagram, but the dice on the far right also beats the one of the far left! It would appear that if a > b and b > c that c is also > a!

Of course, there is nothing magic about it, but at first the circularity appears counter- intuitive. A winning dice thrower must correctly assess the probability or frequency with which a dice will produce a superior number, after all a winning dice may not win on the first throw. And the dice thrower can only answer that question if first he knows what dice he is up against. The trick is to allow your opponent to unwittingly reveal some more information and get him to pick a dice first!

Non-transitive dice offer two handy investment models: first, just as any dice can win for a while, so any superiority an investment process may have will only emerge with time, so patience is important. Second, the stock market posts prices every day, this is the equivalent of making your opponent chose his dice first. The prices the market sets reveals information about a company's prospects which may or may not provide an opportunity, it is up to investors to either take the market up on its offer, or wait for another price, another day.

The 1960 Buffett Partnership letter to investors included the following observation that we

also carried in the June 2002 Nomad interim letter:

> *"I have pointed out that any superior record which we might accomplish should not be expected to be evidenced by a relatively constant advantage in performance compared to the Average. Rather it is likely that if such an advantage is achieved, it will be through better-than-average performance in stable or declining markets and average, or perhaps poorer-than-average performance in rising markets".*

Our performance is following a similar path of superior results during market swoons and now reasonable absolute, if a little less than average, results during market booms. Indeed, the only time we have been ahead of the index year-to-date was during the market swoon in May and early June. The stock market is booming, perhaps more than is apparent in the indices as the action is taking place in lowly represented sectors and the privatisation of smaller companies (as the cycle develops this is sure to end is a truly big privatisation). There has been much market commentary offering evidence for a bubble in commodity prices and the valuation of commodity stocks. The evidence, as such, has centered on the high price of commodities compared to history, the resurgence of investment banking activity in the sector, media column inches devoted to the subject, the price of real estate in northern Alberta and so on. New Era theorists argue that China and India offer a here- to-unexperienced demand boost, whilst protagonists throw up their hands in disbelieve at commentary referring to a New Era so soon after the last ended in collapse.

What strikes us was the evidence for stock market excess: in short, something is up in the global capital markets when investors' average holding period for Phelps Dodge stock, a relatively sober copper mining company, is three months. This is not normal for any business let alone one whose assets last for decades. Investors typically hold stock for around two years, although the average mutual fund manager holds shares for around eleven months according to Vanguard founder, Jack Bogle. However, frenzied trading is not uncommon, witness six week holding periods for Yahoo in 1999, or in the Malaysian Second Section in 1997, but it is frequently associated with investor uncertainty, and speculation.

Prices are a language, and the U$20bn equity market valuation of Phelps Dodge states that, with no margin for error, the business will earn record levels of free cash flow for the best part of the next decade and with no decline (in nominal terms) in terminal value. Maybe so, but the frequency with which investors change their mind implies this is hardly a stable statement of fact. Let's be more blunt. There is an inconsistency between the multi-decade New Era-like prediction embedded in the share price, and the lack of will to see that prediction through. It is almost as if investors know it's a lie. This is not an isolated event, according to the research boutique, Empirical Research Partners, oil service companies holding periods are equally truncated and the firms are valued three or four times more highly than their customers (shades of Cisco circa 1999?).

In a traditional capital cycle framework, the high valuation of these businesses encourages a supply side response, which eventually undermines the economics discounted in the stock price. The operative word here is "eventually", so how long is eventually? Company reports this year show an expected increase in capital spending of around forty percent compared to 2005. However, in our opinion, managements tend to low-ball forward capital spending plans for fear of upsetting investors, and so it may be reasonable to expect that spending will surprise on the upside. One Wall Street guru used an American football analogy "management used to be blocking and tackling for us, now they see themselves in the

glamorous receiver position". Indeed, human nature being as it is, we can almost guarantee that capital spending will continue to grow until share prices decline.

We cannot be certain when the tipping point will come. For such stocks to be a viable investment for Nomad we would have to feel confident that sector economics are not discounted in prices several years out and, given the rise in capital spending plans, that is not the way to bet. And this is Nomad's great strength. By looking out five years we do not have to invest in shorter-term phenomena in order to look good this year. And in our opinion that is at the heart of what is driving the frenzied trading in Phelps Dodge – the desire to look good this year, quarter, month, week, or just today.

When there is a frenzy of activity in one area of the market there is very often an anti- bubble of discarded companies. In the dot com era these were companies with steady cash flow. Where is today's anti-bubble? Perhaps in large high quality growth businesses that appear cheaper to us than for many years. It is for this reason that Nomad's largest holdings are dominated by traditional growth stocks, in contrast to five years ago when we owned the detritus of the New Era boom. It is interesting to note that five years ago although the most despised stocks were extremely cheap, each individual opportunity was relatively small (our investments in Stagecoach and Midland Realty were seven-baggers but the opportunity size was perhaps U$20m each). Today the discount to fair value of the most despised stocks would appear to be much less (doubles over five years are more likely than spectacular multi-baggers) but the dollar size of each opportunity may be greater. The case for a Nomad reopening rests on this observation, and our job over the next few months will be to analyse this proposition.

We will write to you shortly introducing the new prospectus, and hopefully our change of address, new office phone numbers and so on. In the meantime, our contact details remain unchanged and are listed in the appendix. At Marathon, Amanda Joss (ajoss@marathon.co.uk) can help you with your enquiries.

As ever, it is an absolute pleasure to be associated with this Partnership. Zak and I value your confidence in us very highly and thank you for your patience.

…off to deal with Blenkinsopp.

Yours sincerely

Nicholas Sleep

Counsel writes: In this letter, we use the term "Partners" as a generic term referring to all Nomad investors, whether shareholders in the feeder fund or limited partners in the Partnership and not, in the strict, legal sense of the word, to imply the creation of a partnership between shareholders in the feeder fund, Nomad and/or Sleep, Zakaria and Company, Ltd.

This document is issued by Sleep, Zakaria and Company, Ltd., which is authorised and regulated by the FSA. The Fund is not a recognised scheme under the Financial Services and Markets Act 2000 ("FSMA") and accordingly, investors in the Fund will not benefit from the rules and regulations made under FSMA for the protection of investors nor from the Financial Services Compensation Scheme. The value of the Shares, and any income from them, may go down as well as up and an investor may not receive back, on redemption of his Shares, the amount invested. Past performance is not necessarily a guide to future performance. Neither Sleep, Zakaria and Company, Ltd., nor its directors or employees warrant the accuracy, adequacy or completeness of the information contained herein and Sleep, Zakaria and Company, Ltd., expressly disclaims liability for errors or omissions in such information. No warranty of any kind implied, express or statutory is given by Sleep, Zakaria and Company, Ltd., or any of its directors or employees in connection with the information contained herein. Under no circumstances may this document, or any part thereof, be copied, reproduced or redistributed without the express permission of a director of Sleep, Zakaria and Company, Ltd. Registered in England No. 5636487. Registered office: One, Saint Paul's Churchyard, London, England EC4M 8SH. © Sleep, Zakaria and Company, Ltd.

Appendix

Letter sent to Nomad Shareholders, April 2006

As you may already know, Zak and I recently left Marathon to manage the Nomad Investment Partnership full time. In some respects, this does not represent much of a change from the status quo, as Nomad had come to dominate our time and thinking. However, some things will be new, and the purpose of this letter is to set out the philosophy of our new operations. This will give you time to think about their implications before we set out the methodology in a revised prospectus. The changes in the prospectus will require your vote, and of course, at any stage Zak and I will be free to answer any questions you may have and our contact details are at the bottom of this letter.

Between us, Zak and I have spent sixteen happy years at Marathon. It was a superb education, and in many important respects working with Jeremy has made us the investors we are today. We all remain close and indeed attended the Berkshire Hathaway AGM together last week. It is perhaps indicative of the friendship and out- of-the-box, non-consensual thinking that is typical of Marathon that an amicable, common sense arrangement, such as the spin of Nomad, has been proposed. Few institutions would behave so well.

Zak and I will only be in a position to manage Nomad once we have FSA authorisation to operate as a regulated fund management company. This largely administrative process is expected to take at least three months and along with the remaining duration of our employment contracts (until June 30th) means that, at soonest, we will be in a position to run Nomad from early July. In the meantime, Jeremy will be in charge and will liaise with Zak and me when appropriate. For the next two months we will be setting up a somewhat modest office (it appears that galactic headquarters is likely to be above a shop and opposite a Chinese restaurant in west London!), and configuring the necessary IT, legal and accounting systems. There will be time for research, and Jeremy has been kind enough to send on a formidable pile of annual reports! So, Nomad is being looked after in the meantime.

Our new company will be called Sleep, Zakaria and Company, Limited (catchy) and we will manage one fund, the Nomad Investment Partnership. I expect this statement to be as true in twenty-years' time, as it is today – Zak and I are not in the product diversification business. Indeed, we don't really see the new company as a business in the usual way: for example, we have asked our lawyers to structure the arrangement so that Zak and I could not sell Nomad to another fund manager – that way you will not wake up with someone else managing your money whilst your manager catches a plane to Hawaii! You can sack us, but we won't sell you. Perhaps an explanation of our proposed fee scale will make clear our orientation.

The Nomad Investment Partnership currently charges a management fee of 10 basis points per annum, a levy which leans somewhat on the in-place infrastructure at Marathon and which is insufficient to sustain a stand-alone operation. We would therefore like to propose a new management fee that will reimburse the operating company (Sleep, Zakaria and Company, Limited) for its costs incurred in running the operation (salary, rent, accounting, research, legal etc.). We guestimate this will be between 0.7% and 1% of the Partnership per annum at its current size, and we will cap the reimbursement at 1% of NAV and fund any deficit out of pocket if need be. Philosophically our position is that the management fee should not be a profits centre (although a small surplus float is prudent). This is not a blank cheque: Zak and I will take a salary cut to run Nomad, and a total remuneration cut that questions our sanity, but as I have said, this is not a traditional business. As the Partnership grows in size the management fee will decline as a percentage of assets and, that way, all investors share in the natural scale economics of the operation.

The performance fee also needs addressing, as there is an inconsistency between multi-year investments, multi-year orientation by investors and an annual payout for the manager! The performance fee should be appropriately calculated for the job, be at risk for subsequent poor performance and reflect the cost of capital. We will therefore propose that the existing six percent cost of capital hurdle remain (approximating five-year bond rates) and that the performance fee be deferred and subject to repayment in the event of subsequent underperformance. There are several ways this could be achieved, the easiest of which may be to bank the performance fees, and for the bank to drip fees to us if performance remains reasonable, or drip reimbursements back to you to the extent we fail to maintain our advantage. One way our advantage may be compromised is if size becomes a meaningful drag on performance, as I said in the last letter to investors "*our ability to expand and shrink will be an important tool sometime in the next twenty years. I guarantee it...".* Our intention is that *"the bus is always running at full speed with the number of passengers optimised to maintain maximum speed"*, and so we will also take powers to return cash to you should we find the opportunity set is small. I don't expect that we will return cash to you that much, and I would be delighted if we did not at all, but it seems silly to set off without the ability to do so. Again, the prospectus will elaborate.

The investment philosophy and methodology will be unchanged. All that changes is that Zak and I will be dedicating one hundred percent of our time to Nomad, rather than something less than one hundred percent, and that one hundred percent of our personal investments will be in Nomad, rather than something less than one hundred percent. Otherwise, it is business as usual and there will be no change in our fund administrator (Daiwa Securities Trust and Banking in Ireland) or auditor (Ernst and Young).

Zak and I are delighted that Marathon has allowed us to continue running Nomad; it is a

generous gesture on their part. We are proud of what we have achieved at Nomad (as well as at Marathon) but no matter how noble Marathon's gesture is, it will mean nothing if it is not endorsed by you. Keeping existing investors has always been more important to us than acquiring new, and this transition will only be a success if you make it so. So, I encourage you to read through the Collection of Letter to Partners sent to you in January (Amanda Joss ajoss@marathon.co.uk can help you with reprints) and the prospectus you will receive shortly. And if anything is unclear then Zak and I await your call. You may also wish to contact Karl McEneff or Martin Byrne who are the independent directors of the Nomad Investment Company and Marathon (Cayman), which is the General Partner of the Nomad Investment Partnership. Karl and Martin are superb council and have your best interests at heart.

Zak and I are skipping happy about the new arrangements. We hope you will be too.

Yours faithfully

Nicholas Sleep

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Nomad Investment Partnership

Annual Letter
For the period ended December 31st, 2006

To December 31st, 2006	Nomad Investment Partnership	MSCI World Index (net) US$
One year*	+13.6%	+20.1%
Two years	+24.1	+31.5
Three years	+51.3	+51.5
Four years	+171.8	+103.0
Five years	+175.3	+63.8
Since inception (Sept 10th 2001)	+203.2	+70.2
Annualized since inception		
Before performance fees	+23.2%	+10.6%
After performance fees	+20.4	

The figures above are unaudited and presented on a cumulative basis (after management fees, the cost of running the Partnership including custodian, auditor and administrator fees, but before performance fees). Below the same results are presented in discrete annual increments. In our opinion it is the upper table that is most useful in assessing long-term investment performance.

To December 31st, 2006:	Nomad Investment Partnership	MSCI World Index (net) US$
2006	+13.6%	+20.1%
2005	+9.2	+9.5
2004	+22.0	+15.2
2003	+79.6	+34.0
2002	+1.3	-19.3
2001 (inception Sept 10th 2001)	+10.1	+3.9

The Benchmark

2006 was quite a year for Zak and me in all respects bar one: Nomad was successfully separated from its alma mater, the new refundable performance fee and cost reimbursement management fees were (perhaps unsurprisingly!) accepted by Partners**, and we seem, broadly, to have all the systems we need to operate an effective investment function

established in Galactic headquarters at Burnsall Street. Even so performance, certainly relative to one alternative presented by the index described above, was only so-so. Alright in absolute terms, and reasonable perhaps as we compound our way along but, I'm afraid, in 2006 you would have done better buying an index fund (if only we knew which to buy in advance?)

So, there is no confusion: the index is not our benchmark. Zak and I spend no time at all thinking about the index (indeed we were unaware of the index return until I set about writing this letter) and its inclusion at the top of this letter reflects our genesis in an index-relative investment firm more than our orientation. If we started Nomad again today, I'm not sure we would present results this way but, be that as it may, we will leave the index at the top of this letter for now, as for some Partners it may be helpful in placing our results in context.

Zak and I have witnessed many investors make terrible investment decisions from thinking via the index. The most common mistake is to view the index (indeed any index?) as a risk-free "home". That this disposition still exists after the irrational index bubbles that preceded the Asian crisis and technology collapse may be testament to the strength of the marketing skills of the financial establishment. Once the index is seen as risk free the mistakes that follow cascade and include: requirement to have an opinion on everything inside the index regardless of one's circle of competence, an unwillingness to invest in other better opportunities, and over diversification. These three mistakes destroy a lot of capital. We came across one country manager's report claiming that although his country had done poorly it had proved valuable as a "portfolio diversifier" in a global fund: Many a furrowed brow these last few weeks figuring out what that means! Even so, index relative funds are the industry norm because they sell. And they sell because the client does not trust their manager with the keys to the Ferrari. It is a ghastly Faustian pact.

We are walking down the road less traveled when we argue that the index is not risk free, it is one, of many, opportunity sets. This year that opportunity set beat us. It may do so again next year too. And the year after that. We should all be prepared for that possibility and stoic at its occurrence. A rational mind understands that it is the destination that is important, and if we have some skill in picking stocks (please, no answers on a post card!) then, whilst annual returns may bounce around, our destination will be some way ahead of the index. Zak and I are not envious of index returns and we encourage you not to be either. We see our goal as far more personal than that. Our goal is a track record to be proud of, we wish to accomplish something meaningful, and to do that we aim to earn returns, over time, on par with those investors we greatly admire (Ruane, Tweedy, Klarman, Whitman, Hawkins, Miller, Schloss, Berkowitz). In no way do we guarantee returns, but if we can approach their results then, over time, we will beat the index too.

The fifth anniversary of the inception of Nomad occurred in September 2006 and represents a suitable milestone from which to assess the journey so far. A few weeks after the anniversary the share price rose through U$3000 (before performance fees) and this means that it took a little over five years to triple the original dollar invested. (We usually quote performance before performance fees. We do this as many Partners have different subscription dates and, due to the 6% performance hurdle used to calculate fees, will therefore have various net-of-performance-fee experiences. The net-of-performance-fee share price was U$2680 at year-end). 23% per cent compound per annum for five years in a 5% interest rate world is perhaps ahead of what we might consider normal performance and, as we have said in the past, reflects the opportunity set in the early days.

There are two reasons for our relative performance this year – the first is that our companies, by and large, are reinvesting heavily in their businesses at a time when the market, taking its cue from the private equity buyers, have rewarded firms with high levels of current free cash flow. Second, it is also possible that the one-off workload associated with the transition of Nomad to SZ and Co, a very high proportion of which was bespoke work (notably the refundable performance fee), diverted attention from the day job. Zak and I consider non-investment distractions to be the single biggest risk to our operation and we are on to it. Amanda has the budget she needs to allow us to devolve duties but this process is new to us and we are learning as we go.

In 1948, Freddie Settrington (he rarely used the title Lord March) hosted his first motor racing event on the perimeter road of the airfield that lay in one corner of his Sussex estate. At first it was a modest affair, as the foreword to the first race card makes clear:

"We'll be quite frank with you from the start. This race meeting is an experiment. We cannot, on this occasion, offer you a seat in a grandstand – or even a seat at all. You'll be able to obtain some refreshments, and the loudspeaker people will do their best to make certain you hear the numbers of non-starters and of the winners.

"We think you will see some quite good racing and share our surprise if the programme keeps up to time. But if all the refinements of a fully developed sporting arena are missing take our word for it, they will appear eventually- particularly if we have any success with the show today.

"Meanwhile, months of negotiations have been necessary, just to make to-day's meeting possible. Government Departments have been involved – and you know what that means – but we've stuck manfully to the job, and here we are. To do justice to those with whom we have been called upon to negotiate, we must say that Government people have been more than helpful. Ministry of Works officials wear collars and ties, drink and eat just like you or I, and smoke cigarettes at 3s.6d. a packet. Sometimes, though, they do a little better with petrol.

"We've been greatly assisted, too, by local farmers, who do not subscribe to the view that dairy cows refuse to come across with the milk if they are within earshot of a racing car.

"Naturally, in the J.C.C. we are more than pleased to be staging our first race meeting in England since the war. As someone said the other day, we are a little lucky in having a President with an airfield in his back garden, but it's better to be born lucky than have to pay 19s. 6d. in the £."

Today, the Goodwood Revival is a unique, world-class motor racing event. In the last year we have also spent our fair share of time with the bureaucrats and, like Freddie, at times we would have struggled to offer you a seat (the office fit-out rumbles on). But, in time, we aim to produce something we can all be proud of and, we expect that at Nomad you will also see some quite good racing.

<u>An Overview of the Partnership.</u>

Good investing is a minority sport, which means that in order to earn returns better than everyone else we need to be doing things different to the crowd. And one of the things the

crowd is not, is patient. Readers of our letters (there must be some) may be familiar with the notion of the equity yield curve, and our thoughts were covered in an interview for the Outstanding Investor Digest (reprints available upon request, do ask Amanda) a few years ago. (In brief, the equity yield curve is a concept that argues that patience has a value, and that returns increase with time in the equity market as they do on a normal bond market yield curve). In the bond market the higher yield is there to compensate for the increase in risk that the principal will not be repaid, or that the principal may be devalued by inflation. That is not how it works in the equity market: in our opinion business outcomes can be more predictable several years out than they are in the near term. For example, we have no idea where the market will end this year but given corporate strategies, capital allocation and starting valuations, I think we have some idea of how our companies will evolve over the next few years. In other words (at this point economics students may wish to cover their ears) the return from investing in shares can be both increased and de-risked by time.

There may be a blind spot in academia as the overwhelming methodology for research in Economics has been to take observations over short time periods, as if cause and effect sit on top of each other. Habits can take years to form. What, we wonder, would academics have to say of Coke's century long advertising program and the eventual establishment of the World's most valuable brand?

It is interesting to us that Nomad's performance by vintage bears evidence of the equity yield curve. Take the current portfolio: stocks held for over four years have superior *annualized* returns compared to those held for between three and four years, which have higher *annualized* returns compared to those held for two to three years and so on down to stocks purchased last year, which are a pretty mixed affair and contain several losses! The numbers are skewed by survivorship bias (no Conseco) but exclude stocks sold that have continued to do well (notably Stagecoach, which has risen ever since we sold it!). There is opportunity set bias in these numbers too ('02 may be a better year for making new investments than '06) but even so, the steepness of the curve (over 1000 basis points per annum) is cause for optimism, as it implies patience is rewarded. It is with some interest that, on average and weighted by size of holding, the investments in the Partnership today are just over one year old. In other words, Nomad is a young portfolio, perhaps one fifth of the way through its normal life expectancy. The competition is so great that we have little advantage at the short end of the equity yield curve – after all the average holding period of US mutual funds is less than one year – and so one might expect current returns to be so-so. However, if the past is our guide and as the portfolio matures, its best years may yet lie ahead.

How do we know we are taking a different view to the crowd? A clue can be gleaned from the period that other investors typically hold the shares of the companies in the Partnership. If Berkshire Hathaway (US), Jardine Matheson (Hong Kong) and Next Media (also Hong Kong) are excluded (these firms are in a class of their own due to either stock illiquidity or investor education) then other investors hold stocks in our portfolio for on average twenty weeks. We expect to own shares for around two hundred and sixty weeks! So, what is going on? It seems to us that most investors look at the accounting outputs of a company (the reported financial data) as a guide to near term price movements and play the market accordingly. As stated in the investment objective section of the Nomad prospectus our goal is to "*pass custody* (of your investment) *over at the right price and to the right people*". That's what investing is. Zak and I concentrate on a deeper reality: the inputs to future value moves. Our peers are trading shares at the short end of the equity yield curve where the competition

is the greatest, and we are investing at the long end where competition is the least. We respond to completely different stimuli.

Take for example the current controversy at Amazon.com. Last year the company reported free cash flow of just over U$500m, indeed it has been around this number for the last few years. What is important is that the U$500m is after all investment spending on growth initiatives such as capital spending, but also research and development, shipping subsidy, marketing and advertising and price givebacks. The firm has been investing in these items today to grow the business in the future so that free cash flow in years to come will be meaningfully greater than it would be otherwise. By our estimates these discretionary investments, over and above that required to maintain the business, are in the region of a further U$500m, excluding the price givebacks. This is our subjective assessment of the discretionary investment spend and implies that management could, if so inclined, cancel the discretionary growth spending and instead return around U$800m per annum to investors after taxes. An operation that was able to produce cash flow on such a basis might be worth U$10bn or so, and along with Amazon's other assets would imply a share price of around U$26. In valuing the business at these prices, as occurred last summer, investors are saying to Amazon management "your growth spending has no value, you may as well turn yourself into a cash cow"! This is an odd statement to make for a business growing revenues in excess of twenty percent per annum.

How should we think about the price givebacks? Here is what Jeff Bezos, Amazon's founder, had to say in last year's annual report:

"As our shareholders know, we have made a decision to continuously and significantly lower prices for customers year after year as our efficiency and scale make it possible. This is an example of a very important decision that cannot be made in a math-based way. In fact, when we lower prices, we go against the math that we can do, which always says that the smart move is to raise prices. We have significant data related to price elasticity. With fair accuracy, we can predict that a price reduction of a certain percentage will result in an increase in units sold of a certain percentage. With rare exceptions, the volume increase in the short-term is never enough to pay for the price decease. However, our quantitative understanding of elasticity is short-term. We can estimate what a price reduction will do this week and this quarter. But we cannot numerically estimate the effect that consistently lowering prices will have on our business over five years or ten years. Our judgment is that relentlessly returning efficiency improvements and scale economies to customers in the form of lower prices creates a virtuous cycle that leads over the long-term to a much larger dollar amount of free cash flow, and thereby to a much more valuable Amazon.com. We have made similar judgments around Free Super Saver Shipping and Amazon Prime, both of which are expensive in the short term and – we believe – important and valuable in the long term."

This is a précis of the scale efficiencies shared model that we dealt with in some detail in our analysis of Costco (Nomad Letter to Investors, December 2004, please ask Amanda for reprints) and is deployed by companies which have now come to dominate Nomad: Costco, Dell, Amazon and Berkshire (Geico, Nebraska Furniture Mart). The controversy is in the first four words "*As our shareholders know*", judging by the share volumes - they don't! And that's the opportunity. If the share price is being set by those with an eye on the next data point, then they can't also be looking out for long-term value. There are few traders that disagree with

Bezos' value creation process, but they don't think it will show up in the numbers just yet. And if you only own shares for a month or two then you may get away with several trades before Amazon's success becomes apparent. In short, the traders have many small ideas, and we have one big idea. Good luck to them. Picking up pennies in front of a juggernaut is just not how we behave.

Notice also that the decision to lower free cash flow this year through sharing scale benefits with customers through price givebacks is based on a subjective judgment of future returns and their timing. It is not a strictly maths based equation and there is no guarantee that investment spending will always work. Bezos again:

"*Math-based decisions command wide agreement, whereas judgment-based decisions are rightly debated and often controversial, at least until put into practice and demonstrated. Any institution unwilling to endure controversy must limit itself to decisions of the first type. In our view, doing so would not only limit controversy – it would also significantly limit innovation and long-term value creation*". Amen.

I think Bezos would run a good investment fund: but that is the point, good investing and good business decisions are synonymous. Mr. Bezos does not control the timing of the payback, just as we do not control the timing of Nomad's performance but, in our judgment, the ever widening of the moat surrounding Amazon largely determines whether our investment will be a success. We must now have the patience to wait.

Today Nomad is close to fully invested and notably concentrated: the five largest holdings account for half the portfolio and the top ten around three quarters. The tail of around twenty other holdings includes baskets (such as Zimbabwe), several distressed turnarounds and rats and mice from the early days. The polarity of the portfolio, with several large, simple, high conviction holdings, and a tail of more complicated and less certain ideas (but which may have more upside) is likely to be a feature of Nomad for some time. There is a notable concentration in US stocks, a factor that also contributed to relative performance last year, while there are some interesting UK investments where we may have some influence on corporate development. The price to value ratio of the Partnership as a whole is in the upper 60 cents on the dollar, having risen from the low 60s in October.

Why do Problems go Unsolved? Because they Fall Across Disciplines

Whilst Zak and I are delighted at the doubling of the value of Nomad shares between 2001 and 2004, this would be for nothing if returns had been given back in the last two years. As it is, we have been able to reinvest the portfolio in new opportunities and the fund has continued its rise. There are several funds that, over the last few years, have created a similar track record to ours by investing in specific countries (Russia, India, Egypt etc.) or sectors (gold, oil, basic materials). Investors with holdings in the fields listed above should be aware that more narrowly focused funds will find it hard to maintain their performance if the bull market in their fields starts to fail.

What we are saying is that because so many fund managers are constrained by their mandates excess returns ought to exist for the unconstrained. The turn-of-the- millennia technology fund manager could not invest in Stagecoach (a bus operator) even if he had wanted to. For this reason, it seems to us that there is more to the private equity boom than just low interest rates.

In a world where traditional fund management is compartmentalised by attributes such as geography, sectors, investment styles (value, growth, garp, momentum), tracking errors, beta, listed or unlisted status, (stay awake at the back) equity or debt, bankruptcy or solvency then those with broader powers, such as private equity, and indeed Nomad, should have an advantage over constrained incumbents. Woody Allen once quipped that being bi- sexual doubled the chances of a date on Saturday night, curiously that principle also applies to investing.

Rules based systems always contribute to societal non-thinking, but it's not the mandates so much that are the source of risk to investors in constrained funds. It's the attitude of the non-thinkers running the funds that is so destructive. The following excerpt taken from the December 2003 Nomad Letter to Shareholders summarizes our views:

"The Weetabix offer is only one of many privatisations of cheap, small and mid capitalisation businesses in the UK. Institutional shareholders have abandoned these firms in favor of mega-caps, and the shareholder base is left dominated by one or two inside interests and a tail of small holders. Our view is that the discount that the shares trade at in the market is an asset to be harvested for the benefit of all shareholders through share repurchase. But human nature being as it is, insiders will be incented by the low valuation to buy the shares for themselves. A Scheme of Arrangement is the most ruthless method of asserting one party's will over a fragmented and non-professional shareholder base and coupled with irrevocable acceptances allows takeover offers to be presented as a fait accompli to shareholders. Please note: bad practice spreads. Despite this, and the almost daily occurrence of privatization proposals in the UK, there has been almost no criticism by shareholders, the authorities or in the media. In no other sphere of capitalism can your property be seized in exchange for cents on the dollar (except compulsory purchase on the grounds of national interest). But fund managers, who in their private capacity would be insulted if someone offered less than their house was worth, happily sell shares in their professional capacity at discounted prices to smart buyers. And no one cries foul."

The fund managers understand what is going on. These are intelligent, highly paid individuals who could defend their clients' interests much more vigorously. They could, for example, own much more of the target company and block the bid. Or, if mandate constrained to only invest in listed equity, why not explain the situation to their clients and seek to change the rules of their funds to allow ownership of, say, unlisted equity? But not a squeak. Many fund managers would rather sell your shares for a small takeover premium now (and market their short-term performance to new investors) whilst turning a blind eye to the doubling in the value of the sold business over the next few years. It's a scandal.

The December 2003 letter again,

"Whilst we have a profit on our investment in Weetabix, shareholders should be careful what they wish for. Before congratulations are in order, Partners need to weigh in their minds short-term profits against value forgone in the discounted offer price and the incentive provided by the success of seizure for potentially more of the same in the future."

Just look at what is happening in the markets now: 2006 was a record year for private equity funds. As the bids often come from the private equity fund operating in joint venture with

management then, in our opinion, they are best understood as insider trading with the takeover rules being used as a bulk purchasing facility. In the UK (and some former colonies) there is some protection against corporate wallet lifting as dissenters (those wishing not to sell) cannot be compulsory acquired if they own more than 10% of a company. The situation is far worse in many other countries – for example in the United States there is no universal protection against compulsory purchase! Back to the December '03 letter:

"So, what is to be done? The best defense is to own enough of the company to influence the outcome. In most cases [in the UK] in excess of 10% of the shares outstanding would suffice. Those that advocate market liquidity of their investments over other considerations might like to bear in mind an investor's inability to influence outcomes whilst owning a de-minimus proportion of a company. Should Nomad continue to grow in size, we intend not to make this mistake."

To this end Nomad is now the largest shareholder in Games Workshop Plc., a significant shareholder in Jarvis Plc., and part of the dissenting group at Whitehead Mann Plc.

Whitehead Mann has a reasonably entrenched position as the largest headhunter to FTSE 100 CEOs and used this cyclical revenue stream to fund the acquisition of several competitors (often with insiders cashing out!). As revenues declined the interest burden overwhelmed failing cash flow and the share price declined from a peak of £4 to around 50p when we first went to meet management two years ago. At the time the firm was seeking more capital in the form of a bankruptcy avoiding rights issue and placing. It seemed odd to us that the insiders were not buying shares in the firm along with their shareholders and so we declined to participate, "we'll be bullish when you are bullish" we told the MD. Even so, capital was raised at 40p per share from other investors and we sat and watched from the sidelines. Then last year the company announced that management, along with a private equity fund, were offering 42p to buy the whole company and had secured irrevocable undertakings from shareholders to purchase around seventy percent of the shares outstanding. In other words, having saved the company investors were being offered a return of 2p (five percent) for their trouble! And insiders, who had chosen not to invest in the bankruptcy-avoiding placing, now wished to buy as much as they could (via the bulk purchasing facility) and so we also made an investment. Today we are part of a dissenting shareholder group that own around 19% of the shares, enough not to be compulsory acquired. As we will continue to own our unlisted shares we propose, in the absence of more information, that the shares be valued in Nomad at the takeover price (42p) plus (or minus) retained earnings. We look forward to seeing what management can do for us, now they have (leveraged) skin in the game.

Some Housekeeping

Contained in the appendix of this letter is a copy of the schedule of investments at year-end (please hide under your mattress) and the two letters we sent to Partners last year, one that outlines the philosophy of our operation and the second the methodology of the performance and management fees. These are important letters and are reprinted here for your reference.

Your first port of call with enquiries as to performance and valuations should go to Gavin Gray and his team at Phoenix Financial Services in Dublin, Ireland. They can be reached at +353 1 845 8161, do call them! Gavin was one of the few administrators prepared to rise to the challenge of our non-standard cost-reimbursement management fee and redeemable

performance fee. Whilst other administrators wished to shoe-horn Nomad into an existing cookie cutter, for the same money Phoenix will administrate our bespoke arrangement. Over time that will prove to be a considerable saving in fees paid by Partners. We have found Gavin and his team to be intelligent and helpful and we are glad to have them along. Amanda Joss (+44 20 7101 1960 and amanda@sleepzakaria.co.uk) can help with literature, reprints and diaries, and directions to the office can be found on our, somewhat homespun, web site (www.sleepzakaria.co.uk). On viewing our web site some friends, perhaps with higher technical aspirations than ourselves, asked: "is that what you want?" It is! We will leave the web-pyrotechnics to Amazon.

We write these letters and hope to provide you all the useful-to-know information about Nomad and us. This is the information we would want to know if we were in your position. We shy away from more frequent reporting which risks say-something syndrome and at worst may provide a meaningless comfort blanket. Any psychological security you receive from us should be a product of our attempts to be more rational than the crowd.

The portfolio feels fresh and young and is healthily out of step with consensus. Many holdings are companies of real character and product integrity, in contrast to stocks held a few years ago. New ideas are coming into the hopper at a good rate and Zak and I are unrestrained to think and research in a way that has not been possible for some time. We are acutely aware that whilst our record may be the tripling in the share price (before performance fees), one in seven Partners and around seventy percent of the dollars invested in Nomad are new since September 30th 2006. Nomad is up around ten percent since then and, in the scheme of what we do, that is hardly worth the comment. It seems healthy to us to see the clock as substantially reset by the increase in funds under management, and in no way are we resting on our rolling performance numbers. In many respects it is day one all over again.

As ever, it is an absolute pleasure running the Partnership. We thank you for the opportunity to do so under our own steam and for your patience and confidence in us,

Yours sincerely,

Nicholas Sleep

*Sleep, Zakaria and Company was appointed as investment advisor to the Nomad Investment Partnership with effect from September 12th 2006, replacing Marathon Asset Management who had been investment advisor to the Partnership since inception. Prior to September Nicholas Sleep and Qais Zakaria were responsible for the investment management of Nomad whilst employed by Marathon Asset Management. Partners should note that the very nature of the transition from Marathon to Sleep, Zakaria and Company means that Zak and I are not operating with the back office infrastructure we used to receive.

**In this letter, we use the term "Partners" as a generic term referring to all Nomad investors, whether shareholders in the feeder fund or limited partners in the Partnership and not, in the strict, legal sense of the word, to imply the creation of a partnership between shareholders in the feeder fund, Nomad and/or Sleep, Zakaria and Company, Ltd.

Appendix II

As you may already know, Zak and I recently left Marathon to manage the Nomad Investment Partnership full time. In some respects, this does not represent much of a change from the status quo, as Nomad had come to dominate our time and thinking. However, some things will be new, and the purpose of this letter is to set out the philosophy of our new operations. This will give you time to think about their implications before we set out the methodology in a revised prospectus. The changes in the prospectus will require your vote, and of course, at any stage Zak and I will be free to answer any questions you may have and our contact details are at the bottom of this letter.

Between us, Zak and I have spent sixteen happy years at Marathon. It was a superb education, and in many important respects working with Jeremy has made us the investors we are today. We all remain close and indeed attended the Berkshire Hathaway AGM together last week. It is perhaps indicative of the friendship and out- of-the-box, non-consensual thinking that is typical of Marathon that an amicable, common sense arrangement, such as the spin of Nomad, has been proposed. Few institutions would behave so well.

Zak and I will only be in a position to manage Nomad once we have FSA authorisation to operate as a regulated fund management company. This largely administrative process is expected to take at least three months and along with the remaining duration of our employment contracts (until June 30th) means that, at soonest, we will be in a position to run Nomad from early July. In the meantime, Jeremy will be in charge and will liaise with Zak and me when appropriate. For the next two months we will be setting up a somewhat modest office (it appears that galactic headquarters is likely to be above a shop and opposite a Chinese restaurant in west London!), and configuring the necessary IT, legal and accounting systems. There will be time for research, and Jeremy has been kind enough to send on a formidable pile of annual reports! So, Nomad is being looked after in the meantime.

Our new company will be called Sleep, Zakaria and Company, Limited (catchy) and we will manage one fund, the Nomad Investment Partnership. I expect this statement to be as true in twenty-years' time as it is today – Zak and I are not in the product diversification business. Indeed, we don't really see the new company as a business in the usual way: for example, we have asked our lawyers to structure the arrangement so that Zak and I could not sell Nomad to another fund manager – that way you will not wake up with someone else managing your money whilst your manager catches a plane to Hawaii! You can sack us, but we won't sell you. Perhaps an explanation of our proposed fee scale will make clear our orientation.

The Nomad Investment Partnership currently charges a management fee of 10 basis points per annum, a levy which leans somewhat on the in-place infrastructure at Marathon and which is insufficient to sustain a stand-alone operation. We would therefore like to propose a new management fee that will reimburse the operating company (Sleep, Zakaria and Company, Limited) for its costs incurred in running the operation (salary, rent, accounting, research, legal etc.). We guestimate this will be between 0.7% and 1% of the Partnership per annum at

its current size, and we will cap the reimbursement at 1% of NAV and fund any deficit out of pocket if need be. Philosophically our position is that the management fee should not be a profits centre (although a small surplus float is prudent). This is not a blank cheque: Zak and I will take a salary cut to run Nomad, and a total remuneration cut that questions our sanity, but as I have said, this is not a traditional business. As the Partnership grows in size the management fee will decline as a percentage of assets and, that way, all investors share in the natural scale economics of the operation.

The performance fee also needs addressing, as there is an inconsistency between multi-year investments, multi-year orientation by investors and an annual payout for the manager! The performance fee should be appropriately calculated for the job, be at risk for subsequent poor performance and reflect the cost of capital. We will therefore propose that the existing six percent cost of capital hurdle remain (approximating five-year bond rates) and that the performance fee be deferred and subject to repayment in the event of subsequent underperformance. There are several ways this could be achieved, the easiest of which may be to bank the performance fees, and for the bank to drip fees to us if performance remains reasonable, or drip reimbursements back to you to the extent we fail to maintain our advantage. One way our advantage may be compromised is if size becomes a meaningful drag on performance, as I said in the last letter to investors "*our ability to expand and shrink will be an important tool sometime in the next twenty years. I guarantee it...".* Our intention is that *"the bus is always running at full speed with the number of passengers optimised to maintain maximum speed"*, and so we will also take powers to return cash to you should we find the opportunity set is small. I don't expect that we will return cash to you that much, and I would be delighted if we did not at all, but it seems silly to set off without the ability to do so. Again, the prospectus will elaborate.

The investment philosophy and methodology will be unchanged. All that changes is that Zak and I will be dedicating one hundred percent of our time to Nomad, rather than something less than one hundred percent, and that one hundred percent of our personal investments will be in Nomad, rather than something less than one hundred percent. Otherwise, it is business as usual and there will be no change in our fund administrator (Daiwa Securities Trust and Banking in Ireland) or auditor (Ernst and Young).

Zak and I are delighted that Marathon has allowed us to continue running Nomad; it is a generous gesture on their part. We are proud of what we have achieved at Nomad (as well as at Marathon) but no matter how noble Marathon's gesture is, it will mean nothing if it is not endorsed by you. Keeping existing investors has always been more important to us than acquiring new, and this transition will only be a success if you make it so. So, I encourage you to read through the Collection of Letter to Partners sent to you in January (Amanda Joss ajoss@marathon.co.uk can help you with reprints) and the prospectus you will receive shortly. And if anything is unclear then Zak and I await your call. You may also wish to contact Karl McEneff or Martin Byrne who are the independent directors of the Nomad Investment Company and Marathon (Cayman), which is the General Partner of the Nomad Investment Partnership. Karl and Martin are superb council and have your best interests at heart.

Zak and I are skipping happy about the new arrangements. We hope you will be too.

Yours faithfully

Nicholas Sleep

Appendix III

Since Nick last wrote to you in July, he and I have been busy dotting countless i's and crossing innumerable t's allowing us to place before you the changes we would like to make to Nomad's fee arrangements and structure now that its management is to be transferred to our company, Sleep, Zakaria & Co. Ltd (SZ & Co). The changes will become part of the Nomad Investment Partnership's (NIP) new partnership agreement and it is our intention, following the handover from Marathon on the 12th of September, to put these changes before the NIP partners seeking their approval. The largest partner is, of course, the Nomad Investment Company (NIC) itself and that's why the board of NIC are writing to you to seek your authorisation to vote in favour of the changes to the NIP partnership agreement. It is part and parcel of the madness that permeates the investment world that there is no requirement that they seek your vote! But we all (Nick and I, as well as Martin Byrne and Karl McEneff, your company's two independent directors) feel it entirely appropriate that your views count. After all, we are proposing to change the contract you have with us, the basis on which we are entrusted to invest your money. Nick, Martin, Karl and I are happy and available to field any questions you have.

The Changes

First, why make these changes and why now? Nomad will move from under the wings of Marathon to our company on the 12th of September, allowing Nick and I the freedom to put into practice our philosophy to minimise wherever possible the conflict between principal and agent. This is easier said than done. It's disconcerting how invasive the conflict has become in the field of investment management (students of Jack Bogle will not need reminding) and, as you might expect, money lies at the root of this particular evil. So "job one" for Nick and I is to establish an equitable fee structure which reflects our wish that partners (the principals) and Nick and I (the agents) can sit across a table in twenty years with both sides feeling the relationship has been symmetrical and fair. Plainly, this symmetrical form bears no relation to what is now considered the fee structure norm amongst hedge funds and the like. That's fine by us, we wouldn't have it any other way.

Let me explain the changes by way of example…

First, the management fee. Currently, a simple, flat rate of 10 basis points per annum (leaning heavily on Marathon's infrastructure), this fails to pay the basic running costs of a stand-alone firm such as SZ & Co and needs to change. The question is, is a higher flat rate equitable? The answer here is plainly, no. An equitable solution is a management fee that doesn't generate a profit for SZ & Co while at the same time accreting economies of scale directly to investment performance. This is achieved by moving to a variable fee, capped at 1%, which re-coups SZ & Co's running costs while management fees, as a percentage of assets, decline as the partnership grows in size. The table below should illustrate…

Partnership assets	SZ's running costs	Management fees as a % of assets
US$50m	US$1.5m	1%
US$150m	US$1.5m	1%
US$250m	US$1.5m	0.6%
US$500m	US$1.5m	0.3%
US$500m	US$2.0m	0.4%

That's the simple part over… now to the performance fee. Currently the partnership pays a performance fee to the investment manager if compounded performance, since subscription, exceeds a 6% per annum hurdle, our proxy for long term deposit rates. The fee earned is one fifth (or 20%) of all investment gains in such a year. Although a huge improvement on the industry standard fee structure that fails to assign any cost to investors' capital, the flaw here is easy to spot. We take a great deal of care stressing that Nomad is an investment only suitable for partners with timeframes in excess of five years, matching our average stock holding period. At the same time, your manager is taking an annual fee, a clear mismatch in the duration of rewards. And what of periods of poor performance? Up to now Nomad has adopted the industry standard "high water mark", which solely avoids double charging investors for the same performance… this, heads-I-win, tails-I-don't-lose construct is, to our mind, clearly inequitable. But there's little out there that improves on this.

Our solution to this quandary (our special thanks to our friends at Orbis in Bermuda who have trail-blazed this path) involves some Heath-Robertson-like innovation, something we like to call a performance fee bucket or, what our lawyers more elegantly term, a "Contingent Performance Reserve" (CPR). What we propose is that each year a 20% contingent performance fee is charged on investment gains in excess of 6% (after the management fee) achieved in that year. Unlike previously, that's not 6% compounded since subscription, it's a more demanding 6% bogie each year. And, more importantly, this fee is not paid directly to SZ & Co at the year end. Instead, it is paid into a reserve account, the CPR, the running balance of which is available to ***refund*** to partners in subsequent years when performance falls short of the 6% hurdle. So, tails we lose and rightly so. To recap, the bucket fills and empties as our investment performance exceeds or falls short of the 6% annual hurdle. So, if Nick and I do a decent job investing, over time, the money flowing into the CPR will exceed that flowing out in refunds, and a positive balance will be created.

The next stage to consider is how the CPR is distributed to our company. What we propose is that SZ & Co is paid, from the bucket, 20% of its running balance each year (on a declining balance basis). This places the performance fees you pay into the CPR at risk of refund for subsequent sub-hurdle performance for, on average, five years. This aligns the duration of our rewards with yours. The picture below illustrates the dynamics.

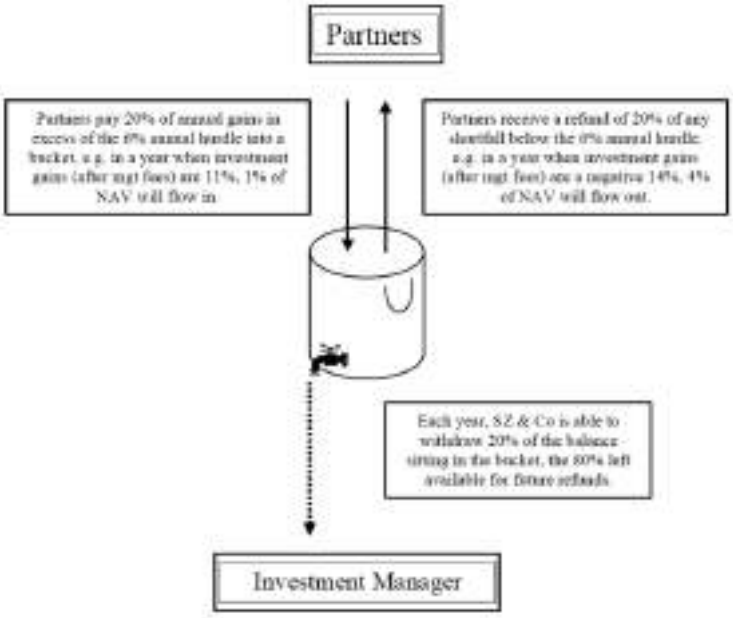

So, there you have the meat of the changes to the Partnership Agreement. Two secondary effects come from these changes. First, a change of fund administrator from Daiwa to Phoenix Financial Services Limited who, we feel, are best placed to deal with the bespoke nature of our new fee arrangements. We plan to take a performance fee "snapshot" at the end of September, allowing Phoenix to take on Nomad's administration with a clean sheet in October. Second, and a result of the Daiwa/Phoenix handover, is the resignation of Karl McEneff, Daiwa's representative on your board, and the appointment of Andrew Galloway as your second independent director alongside Martin Byrne. We thank Karl for his valuable guidance during the handover period and welcome Andrew on board.

We hope to complete the administrative changes to the partnership by the end of September, allowing Nick and I to return to the "day job", investing…roll on October!

Yours sincerely

Qais Zakaria

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Nomad Investment Partnership

Interim Letter
For the period ended June 30th, 2007

To June 30th, 2007	Nomad Investment Partnership	MSCI World Index (net) US$
Trailing:		
One year*	+29.5%	+23.6%
Two years	+42.6	+33.8
Three years	+80.1	+59.0
Four years	+154.0	+97.2
Five years	+212.4	+92.5
Since inception (Sept 10th 2001)	+258.1	+81.9
Annualized since inception		
Before performance fees	+27.2%	+11.9%
After performance fees	+23.2	

The figures above are unaudited and presented on a cumulative basis. Below the same results are presented in discrete annual increments. In our opinion it is the upper table that is most useful in assessing long-term investment performance.

To June 30th 2007:	Nomad Investment Partnership	MSCI World Index (net) US$
Calendar Year Results:		
2007 (year to date)	+17.6%	+ 9.2%
2006	+13.6	+20.1
2005	+9.2	+9.5
2004	+22.1	+14.7
2003	+79.6	+33.1
2002	+1.3	-19.9
2001 (inception Sept 10th 2001)	+10.1	+3.6

Since the Partnership opened, and almost simultaneously closed, to new subscriptions (technically) at midnight on September 28th 2006 (blink and you missed it), the gross net asset value has risen over twenty-eight percent and means that a dollar invested in Nomad at inception would now be worth around $3.58. We usually quote performance after the cost of running the Partnership such as custodian, director, auditor and administrator fees,

but before fees earned by the investment advisor. We quote results this way as many Partners** have different subscription dates and, due to the six percent performance hurdle used to calculate performance fees, will have various net-of-performance-fee experiences. The results above are also before our cost-reimbursement management fee, which does not make much of a dent to the net- of-all-fees result.

The circa forty percent annualized gain for Nomad since September last year is quite normal in the sense of being within an expected distribution of short-term results, but even so it is ahead of our averaged-out, multiyear return, which has been in the order of half as great. As ever, a stoic indifference to these short-term steps, both up and down, is the right way to think, and Zak and I would encourage you to mentally reallocate recent excess to leaner periods. Make that, future leaner periods! As Mrs. Zakaria and Mrs. Sleep remind us, we are no cleverer today than we were last year, although our results recently have been far superior.

The lag that often exists between investment decision and eventual reward is a problem for long-term investors, as the brain is wired to learn from immediate feedback. The biological presumption (and, as mentioned in the last Nomad letter, the academic presumption too) is that cause and effect sit chronologically on top of each other – after all, you would want to know that the plant you have just eaten is poisonous now (so you can stop eating it) rather than in a week's time, when it would be too late. Stock traders benefit from the same immediate feedback, but not so long-term investors who run the investment equivalent risk of continuing to eat the hemlock. The real world is messy, and moves in a messy sort of way, and means that long term investors probably have to work harder at intellectual honesty so as not to mis-analyse cause and effect. We all fool ourselves to some extent and so this hair-shirted attitude is hard work. Perhaps it is the biggest investment challenge of them all!

An Introduction to the Santa Fe Institute

One way not to fool oneself is to spend time with one's intellectual superiors and it is in this spirit that Zak and I became members of the Santa Fe Institute (SFI) some years ago. The SFI was founded by Murray Gell-Mann and seven, principally Los Alamos, scientists who were frustrated with the gaps between contemporary academic disciplines. To this group, traditional academia discouraged broader interests (physicists study physics, not biology) and this left many problems unsolved because they fell across disciplines. Their solution was an interdisciplinary, collaborative approach to problem solving.

Witness the SFI's description of the economy. Traditional economists argue that people are rational beings who seek, what economists call, utility maximization, that is, the maximum output for any one input. This old guard are hostile to assertions of non-rational behavior, perhaps because the idea that we are all rational is just so elegant. Scientist and External SFI Professor W. Brian Arthur argues that this static, equilibrium-based model of the world does not sit easily with the biologist's view that individuals act in self-interest, make mistakes, learn and evolve. Or the psychologists' view of the world that there are systematic biases to individual decisions – that is, we have these little wobbles in our decision-making processes. Brian Arthur's approach is to borrow what he needs from all the academic disciplines to describe a reality that is a little wayward compared to that the traditional economists would expect. As Gell- Mann puts it, the real world "is not just a look up table". Instead, Arthur describes the economy as a Complex Adaptive System that evolves as agents (people) learn.

The SFI describes itself as studying the Science of Complexity and, in our opinion, that seems like a better model to explain reality. After all, how can economics not be behavioral – who

is making the decisions after all? In our opinion, Brian Arthur's Complex Adaptive System and the behavioral finance work pursued by the likes of Professor Richard Zeckhauser at Harvard are the new economics in waiting. As the saying goes, one scientist would rather borrow another's toothbrush than his ideas and it is with this attitude that, and with apologies to MBA students, the new economics of Complexity Science is unlikely to be taught to any great degree in academia until the utility maximizing old guard, that dominate academic institutions, die off.

After a recent speech Gell-Mann was asked, "So, how do you have creative thinking?" His answer was: 1. Start thinking about something, gather data to the point of saturation, recognise anomalies and recognise that you are now stuck; 2. Retreat and simmer, mull it over and a period of incubation ensues with the unconscious mind deployed; 3. Whilst doing something else a solution to the problem surfaces (Archimedes' eureka revelation); 4. Go and verify the new solution. To Gell-Mann, taking time is important in creative thinking. The landscape architect Charles Jencks, who designed the "Garden of Cosmic Speculation", echoes this sentiment. Jencks's garden is an attempt to put the new Science of Complexity into garden design and symbolism. (If in Dumfries, Scotland in June we thoroughly recommend a visit, and take us with you! – but note it is only open to the public for one day a year). To Jencks "understanding requires a certain slowing of time. Why else enter a garden?" There is a lot to be said for gentle contemplation. And of course, a long investment holding period allows one time between decisions to "retreat and simmer" a little.

An Introduction to Scaling Laws

It is perhaps only in a supportive, interdisciplinary institute such as the SFI that Geoff West could embark on a study of scaling laws. Two questions concerned West: why do small animals live for less time than bigger animals, and why do humans live for around one hundred years rather than say, one thousand years, or one year? The simplest of scaling laws concerns body-mass and skeletal strength. As an organism increases in size its body-mass grows with volume (to the cubed) whilst the shear strength of the skeleton only increases with the width of the bones (to the squared, or a power law of 3/2). Without a bigger bone structure, mass soon overwhelms strength, and the organism collapses under its own weight! (A few companies we know have followed a similar pattern). Metabolic rates (as measured by oxygen used) also rise with body mass, but at a declining rate (a power law of 3/4). This implies there is an economy of scale to mass in animals, further evidence of which might be that heartbeats per minute also decline with mass. This is Kleiber's Law and it states that literally a kilo of mouse costs more energy to live than a kilo of say, whale. West put the two power laws together and realized that if longevity increases with mass, and the heart rate decreases with mass, then it follows that all life shares a common number of heartbeats (indeed, around one billion). A mouse uses up its billion heartbeats in about four years (at a rate of five hundred beats per minute) whilst an elephant uses up its billion heartbeats in seventy years (at a rate of twenty-five beats per minute). It seems that evolution has not changed this basic constraint: a billion heartbeats it is, careful how you use them!

Chart1: A billion heartbeats it is: careful how you use them!

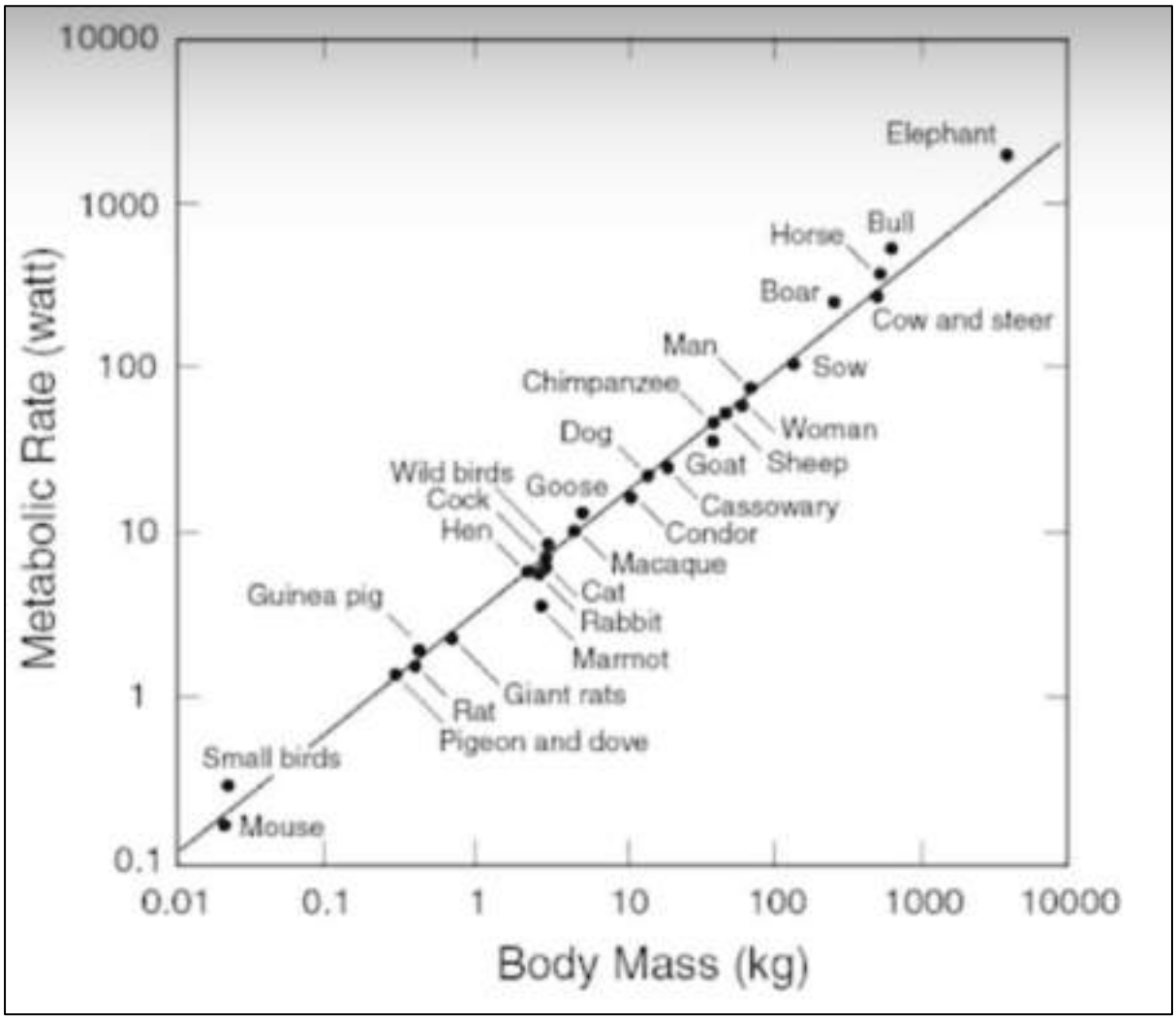

Source: Santa Fe Institute

But even so, why does the mouse heart beat so quickly? In all animals the aggregate cross-sectional area of the blood vessels increases with distance from the heart. The purpose of this is to overcome the viscous drag created by blood coming into contact with vessel walls. Smaller animals do not have the space in their body to allow for much cross sectional widening, and so the mouse heart works harder to overcome the blood's resistance to flow. In larger animals the distance between the heart and the body's cells is much greater and so the cross-sectional area can be increased much more.

In other words, there is a very basic function to longevity with skeletal strength allowing for size, size allowing for circulatory efficiency, and efficiency allowing for longevity. The answer to West's question is that man lives for around a hundred years as this is all his heart can cope with, given body-mass and skeletal strength.

What can Investors learn from Scaling Laws?

This might be the right way to think about scaling in organisms, but does it tell us anything about companies, and especially firms as they grow? The question that needs to be answered is: why is it predictable that a business will grow from a mouse to an elephant? This is a little like asking the meaning of life, and we will try hard not to give an answer as intractable as Douglas Adams' suggestion in The Hitch-Hiker's Guide to the Galaxy (where the answer to life, the universe and everything was "42"!). Several tenets are important. A business ought to be able to self-fund its own growth, and if the opportunity set is large, then the return on capital needs to be suitably high. Second, barriers to entry should increase with size; that way a company's moat is widened as the firm grows. To do this, the basic building block of the business, its skeletal structure, is probably best kept very simple. In short, we want a skeletal structure that can support growth from mouse to elephant without too much skeletal re-engineering.

Let's consider traditional high street retailing. Goods are sent from the supplier to the retailers' central warehouse, where they are stored until demanded by the shops. Goods are then sent to the high street stores. These are expensive pieces of real estate and have high operating costs. Price aside for a moment, the quality of service the consumer perceives is largely a function of staff levels, staff helpfulness, product range, shop furnishings and so on. So, there are lots of constantly variable elements to service quality at the most expensive end of the distribution system. It seems to us that the skeletal structure is highly complex, and many things can go wrong.

Contrast this to the internet model. Goods are sent from the supplier to a central warehouse, but often only after the order has been taken. The goods are then sent direct to the customer with the expensive high street real estate missed out. The quality of service perceived by the customer is the speed of delivery, the feel of the web site, functionality of the web site (such as recommendations), breadth of product range and so on and these factors are inherently more controllable. They are fixed in terms of expense and also customer experience (a web site viewed in New York looks the same as the same website viewed in London or Hong Kong). So, whilst quality is inherently patchy at most high street retailers, it is fixed at Amazon. This is important as it is complexity that is one of the main reasons firms fail as they try to grow.

It seems to us that the basic building block of internet retailing, its skeletal structure, is far more robust, scalable and cheaper than the high street equivalent. In other words, its power law is very high, and implies that businesses with the simplicity of operation as say, Amazon.com, have a shot at being far bigger, quicker and more profitable than their high street equivalents. Nomad has an investment in Amazon for more reasons than the firm's simplicity of operations. But when this basic building block is combined with the scale efficiencies shared model (which increases the moat as the firm grows), customer centric orientation of the firm's founder, as well as his healthy disdain for Wall Street, this combination makes us think that we may have a mouse that can turn into an elephant. To those who argue Amazon is large already we ask two questions: what do you think e-commerce will be as a proportion of US retailing in ten-years' time, and what do you think it was last year? Write both numbers down and turn to the end of this letter*** for the answer to the second question.

After the doubling in the share price and the weighty resultant position in the Partnership it would be easy for Zak and me to claim victory, high five, and sell our shares in Amazon. However, the high weighting makes sense given our understanding of the destination of the businesses and the probability of reaching that destination. In previous Nomad letters we have argued that the biggest error an investor can make is the sale of a Wal-Mart or a Microsoft in the early stages of the company's growth. Mathematically this error is far greater than the equivalent sum invested in a firm that goes bankrupt. The industry tends to gloss over this fact, perhaps because opportunity costs go unrecorded in performance records. For example, our greatest error was the sale of Stagecoach (which has risen ever since sold), not the purchase of Conseco! We wonder, would selling Amazon today would be the equivalent mistake of selling Wal- Mart in 1980 (a similar time period after both companies' IPOs)?

Short-term result volatility and stock weighting

It is commonplace for overall portfolio construction to be as a result of stock weightings built up from one to two to three percent of a portfolio and so on up to a target holding. This means that weightings are anchored at a small number with only outliers reaching double digits. There is another way to construct a portfolio, which is to invert and start at a hundred percent weighting and work down! If fund managers did this, I am sure they would end up with completely different portfolios. Now we are not advocating all the fund in Amazon (well, not just yet at least), but in allowing past habits to anchor portfolio construction we have probably made the mistake of a starting holding that was almost certainly too low. Be that as it may, one effect of having one sixth of the Partnership invested in a volatile stock, such as Amazon, is that our results will also be more variable over the short term. Please bear that in mind in future performance. The volatility does not bother Zak and me one jot.

Our results since inception have been large, out-sized multi-year gains during periods of market distress (2001 to 2004) and reasonable, index matching/bettering multi-year results during stock market boom periods (2005 to 2007). This follows the predicted path outlined in the June 2002 Nomad letter when we quoted a Buffett Partnership letter from 1960:

> *"I have pointed out that any superior record which we might accomplish should not be expected to be evidenced by a relatively constant advantage in performance compared to the Average. Rather it is likely that if such an advantage is achieved, it will be through better-than-average performance in stable or declining markets and average, or perhaps even poorer-than-average performance in rising markets."*

And we certainly do not have a relatively constant advantage compared to the index!

The Deep Reality of the Markets

It was recently reported that oil had been found, not in the far flung reaches of the globe, but under the headquarters of the Exxon Mobil Corporation in Irving, Texas, and not by Exxon! Sometimes, what you are looking for is right in front of you. If Exxon can make this mistake, we all can. Investors are often guilty of chasing the new-new thing far from home sometimes in the name of diversification, or higher returns, or both. To our way of thinking such activity often has more to do with marketing than it does with underlying investment reality. Selling

the new thing in order to buy the new-new thing is a common human habit (as a society we trade houses, cars, wives rather than try to fix roofs, gearboxes, marriages) and it almost always raises the question, why are people dissatisfied with what they have? In the spirit of trying not to make Exxon's mistake, we suspect that Nomad portfolio turnover will be particularly low going forward: we are quite happy with what we are currently sitting on. One reason for this is that the fund is over-whelmingly (over eighty-five percent) invested in firms run by their founders or first-generation management. Just as interesting is that Zak and I did not plan for this! We have ended up with a portfolio of owner-managed businesses as a by-product of our assessment of the quality of the people involved. In other words, these managers earned their way into the portfolio. We feel slightly foolish for not recognizing this trait in advance, but, of course, we *would* have a bias toward founder-managed businesses (duh!).

By the standards of the industry, we do not own very many shares (ten stocks account for over eighty percent of the Partnership) and we own them for long periods. If the existing portfolio is to be successful then our results will come from the mismatch between the orientation of the founders and the mark to market mentality of the quarterly holding period investors that set the price of the companies on the stock market. This principal (founder) agent (trading oriented fund manager) conflict is the deep reality of the markets and probably the dominant characteristic of our careers. I also think we understand it far better than our peers.

The Terms of Future Capital Raising.

Before there is any sucking of teeth, we do not have any plans to raise capital. Really. But we do wish to set out our stall now for the next investment crisis, and that crisis could come quickly. As we have always said in the past, capital should only be raised in response to investment opportunity sets (to be slipped into the suggestion box of marketing-oriented fund management operations). Rightly or wrongly (and there is a perfectly rational case that we are wrong) we have an over-riding bias to keep our operation small. However, we are also conscious that a repeat of the Asian crisis or the junk bond crisis would allow us to invest multiples the current size of Nomad with better results for all concerned. So, for illustration, let's say Nomad is a U$1bn Partnership and there is a new crisis and we raise a further U$1bn with the result that after the crisis has abated, Nomad is say, U$4bn in value. U$4bn is not a small amount of capital, especially in a concentrated portfolio. The rational thing may be to return the crisis capital to investors and right size back to the original capital. So, our suggestion is that a future capital raising would, in effect, be a rights issue of redeemable shares, which would give Zak and me the option of shrinking. We are flagging this now, and we welcome your thoughts on the subject. Speak up or forever hold your peace!

Housekeeping

We write these letters and hope to provide all the useful-to-know information to allow you to draw meaningful conclusions about our ability to manage your money. This is the information we would want if the tables were turned, and you managed our money. In our opinion, more regular reporting of a long-term fund is meaningless at best, and counter-productive at worst. It is only in the Alice-in-Wonderland world of the modern investment profession that incessant gathering of puerile data points can pass for best practice reporting. There's that principal agent conflict again! It is to the very great credit of our Partners who, almost to a man and regardless of demands made of other managers, abide by this simple rule. Thank you.

We have excluded a copy of the portfolio from the appendix, and instead it will follow under separate post, or email. This is a precaution against our letter being circulated beyond our investor base. Included in the appendix you will find a copy of our response to a Partner's request that we consider divesting of businesses with operations in the Sudan. The letter makes our position on the issue clear, and there is little point in repeating the words here. Sudan is not so much the point, as previous requests have been made relating to arms, tobacco, alcohol, or certain South African and Irish businesses. The wider issue is the governance of our Partnership, and whether a minority group should be allowed to assert an agenda over the majority. For better or worse, the Partnership structure means that Nomad is a cooperative (of sorts), albeit with a mandate for the long-term growth of capital. In our analysis of investments, we may well take into account the factors raised by those that seek a ban on certain companies but, so all is clear, we may still buy the shares. Of course, how investors then allocate any profits they may have from their investment in Nomad is entirely up to them.

It is nine months now since Nomad was handed to the new company and operations appear to be bedding down well. We are gently reviewing the old, inherited relationships and contracts and there may be some changes to subcontracted parties to come. It is interesting how attitudes change now that Nomad is no longer part of a large organization. These changes are very often for the better, but occasionally those firms with a cookie-cutter business model struggle with our more bespoke approach and they need to be swapped out. The cost-reimbursement management fee is settling down in the low 30 basis points. This is at the high end of our (back of the envelope, not done this before) expectations, and we expect it now to stay flat in dollars and decline as a proportion of the Partnership in time.

Performance has been strong since we raised new capital (we weren't making it up!), but Partners should not extrapolate recent trends in their expectations of us. That is simply a recipe for everyone to get upset. That said, the portfolio is young and fresh and is populated with businesses that are healthily out of step with Wall Street or City expectations. Instead, our founders are planning for growth in five-years' time. This "founder's portfolio" will serve us well in the absence of investment crises.

In my first week as a trainee investment analyst (having just abandoned a landscape architecture apprentiship) one of the founders and fund managers of my new employer sat me down for some homely advice. In his broad Scottish accent he said, "well, young Nick", there was then a long pause and he began to smile "this job is the best fun you can have with your clothes on". He was right. Zak and I love running Nomad, and to do so under our own steam is special to us. Thank you.

We prize your patience, support and confidence in us, and we are working hard preparing the ground for further increases in the Nomad share price.

Yours sincerely,

Nicholas Sleep

* Sleep, Zakaria and Company was appointed as investment advisor to the Nomad Investment Partnership with effect from September 12th 2006, replacing Marathon Asset Management who had been investment advisor to the Partnership since inception. Prior to September, Nicholas Sleep and Qais Zakaria were responsible for the investment management of Nomad whilst employed by Marathon Asset Management. Partners should note that the very nature of the transition from Marathon to Sleep, Zakaria and Company means that Zak and I are not operating with the back office infrastructure we used to receive.

** In this letter we use the term "Partners" as a generic term referring to all Nomad investors, whether shareholders in the feeder fund (the Nomad Investment Company) or limited partners in the Partnership and not, in the strict, legal sense of the word, to imply the creation of a partnership between shareholders in the feeder fund, Nomad and/or Sleep, Zakaria and Company, Ltd.

*** The US Census Bureau estimates that e-commerce sales grew from 2.7% to 3.1% of all retail sales in the United States during the quarters of 2006. The source document can be found at www.census.gov/mrts/www/data/html/07Q1table1.html.

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Nomad Investment Partnership

Annual Letter
For the period ended December 31st, 2007

To December 31st, 2007	Nomad Investment Partnership *	MSCI World Index (net) US$
Trailing:		
One year	+21.2%	+9.0%
Two years	37.7	30.9
Three years	50.4	43.3
Four years	83.6	64.4
Five years	229.7	118.8
Six years	234.0	75.3
Since inception (Sept 10th 2001)	269.0	81.6
Annualized since inception		
Before performance fees	+23.0%	
After performance fees	+19.1%	+9.9%

The figures above are unaudited, presented on a cumulative basis and, as ever, the results are presented before performance fees. We present results in this way as the time dependent performance fee hurdle means that partners will have different net-of- all-fees results. Below the same results are presented in discrete annual increments. In our opinion it is the upper table that is most useful in assessing long-term investment performance.

To December 31st, 2007:	Nomad Investment Partnership	MSCI World Index (net) US$
Calendar Year Results:		
2007	+21.2%	+ 9.0%
2006	+13.6	+20.1
2005	+9.2	+9.5
2004	+22.1	+14.7
2003	+79.6	+33.1
2002	+1.3	-19.9
2001 (inception Sept 10th 2001)	+10.1	+3.6

The effect of the performance noted above is that the value of a dollar invested in Nomad at inception would now be worth around U$3.70 before performance fees and just over U$3 after fees. A similar amount invested in the index mentioned above would be worth around U$1.80.

When I finish writing these letters, I am happy with them, at least happy enough to send them out. I make a habit of re-reading them sometime later and frequently they disappoint. It is as if the letters have a short shelf life. I am not sure they do go downhill particularly, it's just that they did not start that high up the hill in the first place: the mind thinks they are better when just finished than they really are. It is like the freshly painted wall; it looks good as you reach for the cup of tea at the end of the day but give it a week and all you can see are the bits you missed.

The last letter, for example, is very complicated. There are many heavy concepts introduced one on top of another and it is hard going to read. This is particularly annoying as investing is, at its heart, a very simple discipline. Simple, perhaps, but not easy. And judging by my efforts, certainly hard to communicate. So why are letters more complicated than they need be? Probably because we feel a self-imposed pressure to say something, especially something new or (better and) impressive. The truth is that there is not that much to say, at least, not much that hasn't been said before. That's the curse of being two thousand years younger than Saint Paul, forty- four years younger than Charlie Munger and twenty-nine years younger than my father.

We will return to this topic later in the letter. Today, however, we do have something to add, at least we think we do, and the topic for this letter is mistakes. In this letter we will discuss how we think about mistakes, why the response to the mistake is often more important than the mistake itself, and some of our investment mistakes. We will then discuss why client reporting pressures encourage non-rational thought (a mistake in the making?), provide further encouragement to partners to focus on what we control, and announce a change in housekeeping that may be of interest.

<u>How we think about mistakes.</u>

"If I had to live my life again, I'd make the same mistakes, only sooner".

Tallulah Bankhead (actress)

In our opinion, in dealing with mistakes the best state of mind is non-judgmental forgiveness. Parents will recognise that if their child thinks right, they will make mistakes, work it out for themselves and learn. They do not need to be judged or punished: instead, they need support, from themselves and others. If they do learn, then the mistakes are likely to be small compared to the value of what has been learnt. In investment terms, once lessons have been learnt, mistakes can be put on a price earnings ratio of one and the resultant, conditioned, good behaviour on a ratio of more than one. In other words, mistakes become net present value positive.

So why is it that investors are so unforgiving when a company disappoints? If we apply the model above then there is not a problem. If the market was rational and the company an organisation that learns, then the stock price should rise after a mistake. But this is seldom the

way the world works. It is as if investors presume that companies do not learn from their mistakes. And that makes some sense, as many organisations struggle with rational behaviour. We wonder if investors' anger is a sub- conscious admission that they invested in a non-learning organisation? An unintended consequence of this is that the financial services industry is structured to allow the embarrassment, frustration and anger to vent through the various asset classes. It is structured to allow investors to be judgmental rather than forgiving. You can just hear people justifying their purchase of a gold fund because that idiot who ran their technology fund made a mistake. And he may have. However, if he learnt from his mistake then the value of the fund, properly calibrated, is likely to be rising just at the time investors are selling. There is not a lot of love going around, in the sense of love for one's fellow man, and because of this there is less learning than there could be.

That is not our model.

We (strapping on the protective armour of the first-person plural) have made lots of mistakes. (I will be less cowardly) I have made lots of mistakes. Sometimes we made the mistakes ourselves. Sometimes we learnt from others. Sometimes they were direct investment mistakes. Sometimes they were part of growing up (look out for those private mistakes, they are full of investment lessons). But there they are. Warts and all. This is how life is. We do not justify them, but we do not condemn them either. Indeed, they are best not judged. Our model is to learn from our mistakes and what we learn we hope to give to you, in better performance results (in exchange for a performance fee!).

One way we do this is to practice what we preach and invest in businesses that have made mistakes. Our current investments in Liberty Global, Games Workshop, Dell, Sony and Ford fit into this category, as do previous investments in firms in bankruptcy such as Telewest (now Virgin Media) and Calpine. For these investments to work over the long haul, what is required is a rational, honest mea-culpa and a low share price. The unforgiving nature of the markets often provides the latter. The former is much harder to come by.

Why the response is more important than the original error

"Life is ten percent what you make it and ninety percent how you take it."
William James (philosopher)

We all make mistakes. What is often more important is how one responds. Take for example the response of two firms to the same mistake. The mistake was to be caught out by the last major property downturn in the early 1990s. The two firms are: MDC a residential property developer, and a sizeable European bank with a large commercial property loan book which, being far better capitalised than SZ and Co, we will refer to as Bank X.

MDC was founded in 1972 by Larry Mizel with U$50,000 in capital. In the 1980s his firm built condominiums and apartments and as the property cycle matured reinvested profits and available borrowings in land for development. This is a classic property cycle error and dooms the purchaser to buying at high prices and leaves little financial flexibility during a downturn. By the early 1990s, revenues had almost halved from the 1988 peak and the firm was left with too much debt and tracts of undeveloped land. The firm averted bankruptcy by selling assets, issuing shares and repurchasing debt at cents on the dollar. The family learnt from its experiences and since then the land bank has been kept to a minimum, debt has been used with great reluctance, and equity capital freed from house sales has been used to equity fund

the next venture, pay dividends or, to a greater extent, retained on balance sheet. Whilst management may have learnt their lesson it must have been galling to have pointed out by an investor at a recent presentation "*you are going to run out of land*"! Plus ca change. The MDC share price has risen ten-fold in the last ten years, despite recent industry wide declines in share prices, and today the firm is one of the best capitalised in the industry. It will be interesting to see how they respond to the current industry crisis.

Bank X made similar mistakes in the late 1980s through extending loans to commercial property businesses, although here only a dividend cut was required to repair the capital deficit. According to a company spokesman the lesson learnt from the debacle was that the bank "*could not do commercial property*". Companies often misclassify their mistakes in terms of outputs rather than inputs, and in so doing allow the original mistake to go unchecked. Psychologists call this denial, and we all do it to some extent. But it was a false lesson. It was not commercial property per se that was the source of the losses, there is no a priori reason why a lending institution cannot make loans to commercial property as this bank continued to in say, residential property, or credit cards. In our opinion, the mistake was in how the company approached commercial lending: it was in how they thought and how senior management were incented to think. However, instead of responding to the mistake by rewiring the corporate cognitive functions the firm condemned the output and diversified internationally and developed investment banking and an investment management operation, as if to dilute the risk. This is a take-three-wives-just-in-case approach and it works in terms of corporate longevity but is rarely equated with share price success: in the trailing ten years the shares of the bank have risen in the order of ten percent, or around one percent per annum. A deposit account at the institution would have returned far more.

There is a second lesson embedded in the contrast between MDC and Bank X, and that is the popular wisdom that diversification lowers risk. This maxim, as homely as apple pie, is fraught with danger. Its ascendancy into the unchallengeable heights of received wisdom comes from the vivid image of seeing one's nest egg disappear because of one mistake. What is not recorded is the cost of the suboptimal outcomes that result from over-diversification which range from lack of investment work, high fees and, most dangerous of all, complacency which allows one to ignore the only real, long term risk, which is the risk of misanalysing a company's destination. Take for example the salami slicing of loans that are embedded in securitisation trusts. Diversification used in this way tries to turn ignorance into an asset. There is something of the zeitgeist in this behaviour: companies routinely subcontract parts of their operation in the name of efficiency, in effect salami slicing their operations into narrow functions. This looks efficient, at least as captured by the profit and loss statements in the early years, but few firms ask: what is lost in this process? Sometimes what is lost is control of subcontracted operations such as Mattel's Chinese sourced toys, or the BBC's documentary of The Queen. But mostly it is a lack of trust in the institution by the customer and, unfortunately, this sentiment is often reciprocated. If you know a mortgage sold to you by a commissioned pimply youth now resides in one of many hedge funds' balance sheets you will feel differently about it than if your branch manager, who has known your Dad for fifty years, still has it on his books. And the pimply youth feels differently if all he has to do is sell your mortgage. Depersonalisation inevitably leads to customer disloyalty and commoditisation, and that is not good for long term profitability, regardless of what the profits account reads today.

How mistakes can become net present value positive.

"It is always a delight to observe other people's mistakes".
Anon (Rather, I have not found the source before publishing!)

There is a philosophical argument that a mistake is only a mistake if you call it so, otherwise it is a learning opportunity. That seems like the right spirit to us. Our two biggest analytical mistakes (sorry, learning opportunities) to date were probably Conseco and Stagecoach. We have written about these errors extensively in the past, but in the spirit of the quote above I will précis: Conseco went bankrupt after losses in its manufactured housing loan securitisation trusts impaired capital at its insurance company and A.M. Best, the insurance industry rating agency, declared the business inadequately capitalised. Our analytical mistakes were multifarious, but the most serious was to anchor on analysis at the time of purchase to justify continued holding. The immediate dollar loss was around U$5m for investors in Nomad. However, the opportunity cost loss, the dollar loss adjusted for subsequent Nomad performance (a fairer reflection of real costs) is around U$10m.

Stagecoach was a success in the sense that shares purchased at 14p were sold at a high of around 90p. That is until one looks in the Financial Times to be reminded that the shares currently trade above £2.50. The mistake was to leave £1.60 on the table and was also caused by anchoring on the original purchase decision analysis (which required a value above 14p), rather than thinking about the destination for the business in years to come. The opportunity cost of the Stagecoach mistake is broadly U$12m today (and counting).

The analytical mistake in both cases was to have a static view of a firm formed at the time of purchase, which failed to evolve as the facts changed. This error was reinforced by misjudgments such as denial (the facts had changed) and ego (we can't be wrong). There was also an over-reliance on price to value ratio type analysis, which can encourage a tighter range of outcomes than occurs in reality. And what did we learn in Investing 101 from Lord Keynes: "*better to be generally right than precisely wrong*"! At the time we were making these errors we would have held Keynes' quote as true. One has to be so careful; sometimes these mistakes are very insidious. Keynes' dying words were reported to be "*I should have had more champagne*". No doubt he is right on both accounts.

Destination analysis is consciously central to how we analyse businesses these days. It helps us ask better questions and get to a firm's DNA. What we learnt at Conseco may well have kept us out of the US banks last year, and what we learnt at Stagecoach has helped us continue to own Amazon. These two benefits have been a combined gain in the order of U$60m during 2007 to investors in Nomad. The maths behind this assumption is a little finger-in-the-air and is unadjusted for subscriptions post mistakes, but it is directionally correct and implies that a large proportion of Nomad's performance in 2007 came from the lessons learnt from mistakes in 2003 and 2004. Think of it as a return on prior year losses. And that is just one year's gain. If we have really learnt our lesson, then the gains will continue in future years too. In the meantime, we continue to bear down on denial and ego too!

Tips on how to avoid making mistakes

Understanding how the intellect can become corrupted is probably a life's work, some mystics

would argue many lives' work. Noticing the mistakes is a huge advantage and so rarely done. What follows are three mistakes that, in our opinion, contribute to more unhappy outcomes than most. These are: denial, that is the reinvention of reality in the mind because the truth is too painful to bear; anchoring, that is a static, historic vision of a problem; and drift, that is how small, incremental changes in thinking build into a big mistake. Add judging to the list as well, in the sense of condemning or exalting: that disposition stops a lot of rational thought, and it is almost ubiquitous. One of our favourite Buffett stories came from an interview with Walter Schloss carried in the Outstanding Investor Digest (June 23rd 1989, www.oid.com)

Walter: *"Warren (Buffett) was playing golf at Pebble Beach with Charlie Munger (Berkshire Hathaway vice-Chairman), Jack Byrne (Fireman's Fund Chairman) and another person. One of them proposed,*
"Warren, if you shoot a hole-in-one on this 18 hole course, we'll give you U$10,000. If you don't shoot a hole-in-one, you owe us U$10".
Warren thought about it and said, "I'm not taking the bet."
The others said, "Why don't you? The most you can lose is U$10. You can make U$10,000". Warren replied, "If you are not disciplined in the little things, you won't be disciplined in the big things"."

I have thought about this story for years, and two things strike me: first, Buffett had to think about the answer, no doubt calculating odds and price. I am always relieved that Buffett's skills had to be learnt and honed, they were not simply innate! Second, Buffett recognised that little lapses in discipline themselves have implications: in other words, he was watching out for drift.

One trick to help see the world more clearly is to invert situations. A newspaper headline claiming that one third of the population wants something, also tells you that two-thirds don't! In our opinion, the best book to hone the skills of inverting was written by Terry Arthur in 1975 and is entitled "95% is Crap – A plain man's guide to British politics". Terry is one of the most modest and thoughtful people Zak and I have had the pleasure of meeting, and he was one of the first investors in Nomad. Enclosed with this letter is a copy of the second edition of Terry's book, updated for modern crap. Once you have read this book, we promise you will not see presented facts the same way again. For those with an interest in such things, we purchased our copies at a discounted price on Amazon. We recommend you buy a copy for everyone you love, on Amazon too, of course.

Mistakes in the Making. Myth: Say-something syndrome lowers risk

In John Rockefeller's biography, "Titan", Ron Chernow describes how Rockefeller equated silence with strength. In one incident Rockefeller was reported as saying that "*weak men had loose tongues and blabbed to reporters, whilst prudent businessmen kept their own counsel*". Standard Oil's acquisition led growth could be a problem therefore, as taciturn management could become diluted with a more loquacious, acquired intake. In one acquisition Rockefeller was therefore especially delighted to snare Charles Lockhart, a bearded Scot with a frosty manner who was, in Rockefeller's words "*one of the most experienced, self-contained men in business*". During negotiations to purchase his firm, Lockhart had listened attentively but hardly breathed a syllable. This elicited Rockefeller's highest praise, "*That kind of man I'd like to have go fishing with me*".

Taking a leaf from Lockhart's book, the question is, do Zak and I say too much? For example, it is interesting that two of the best performing funds of all time did not disclose their holdings to investors. These were the Buffett Partnership and Walter Schloss Associates, although Buffett wrote extensively about how he thought and approached investing in general. And it was for a good reason that they did not disclose their holdings, they did not wish to be judged, second-guessed or worse (!) as Walter Schloss revealed in the same interview with the Outstanding Investor Digest,

OID (interviewer): *Is it true that even your clients don't know what you're buying for them?*

Walter Schloss: *That's correct. And a little story might help explain why we don't tell them what we own. One of our partners said,*
"Walter, I have a lot of money with you. I'm nervous about what you own."
So, I made an exception and said,
"I'll tell you a few things that we own".
I mentioned the bankrupt rail bonds and couple of other things we owned. He said,
"I can't stand knowing that you own those kind of stocks. I have to withdraw from the partnership."
He died about a year later. That's one of the reasons we don't like to give people specifics."

OID: *You should not blame yourself. He might have died anyway.*

(Then again, he might not!) Let's invert for a moment: when we think of our investee companies, the firms which we would quite happily own with no word from them for years are those businesses in which we have the highest confidence of reaching a favourable destination: they are the firms we think we know will work. They are also the largest holdings in Nomad. It is the less certain businesses about which we are more insecure that appear to demand more regular attention. If there is demand for our holdings list, is that what our clients are sub-consciously asking? A bit of handholding please because the trust is lacking? And what does that say of the monthly reporting that passes for industry norm? Thank you for helping us avoid that mistake. Our six-monthly writing may be as irrational as monthly reporting, but at what frequency does letter writing become rational? Presumably when one has something meaningful to say. Gosh, that is not very often! A Charles Lockhart disposition would argue for an ad hoc, rather than diarised, schedule to letter writing. Perhaps this is something to pursue in the future.

In previous letters we have discussed the dysfunctionality of disclosing specific investment ideas. The problems are mainly psychological and include the locking in of an idea, the desire to seem consistent, the wish to seem prudent in other people's eyes and so forth. There is then the effect of copy-cat investing, brokers trading against us and, as Walter Schloss found out, dealing with nervous-Nellies and so on. In this letter we have expanded on the topic somewhat.

It is tempting to see the free distribution of our holdings list as an unforced and unnecessary mistake, and so one course of action would be to stop sending them out. However, if we did stop that would also presume that the list was only used for the worst (and I have gone on about being judgmental in this letter already!). We know that some partners have a natural healthy curiosity to see how their money is being invested (if the tables were turned, we would too!) and Zak and I have learnt a great deal from reverse engineering others' holdings, and so we will continue to disclose our holdings, although under separate post.

We ask you to examine your motivation for studying our holdings list. If, for example, you think you are monitoring investment risk in monitoring the share prices of investee firms, then perhaps Nomad is not for you. In our opinion, transient, historic, stock price quotation volatility is not the same as investment risk. Indeed, quite the opposite. If, however, you study our holdings through a joy for the art of investing, our books are open to you (well, with a lag).

Investors will understand that the further distribution of our ideas is contrary to all partners' interests. As ever, our preference is that the holdings list remains private and we remind you that the contents of these letters are not to be reproduced without permission. We do hope you understand.

We focus on what we control

The following excerpt is taken from Reverend Norman O'Neal's account of the life of Saint Ignatius Loyola. Prior to conversion, Ignatius had been a soldier in the Spanish army and was injured in a battle with the French.

"During the long weeks of his [Ignatius'] *recuperation, he was extremely bored and asked for some romance novels to pass the time. Luckily there were none in the castle of Loyola, but there was a copy of the life of Christ and a book on the saints. Desperate, Ignatius began to read them. The more he read, the more he considered the exploits of the saints worth imitating. However, at the same time, he continued to have daydreams of fame and glory, along with fantasies of winning the love of a certain noble lady of the court. The identity of this lady has never been discovered but she seems to have been of royal blood. He noticed, however, that after reading and thinking of the saints and Christ he was at peace and satisfied. Yet when he finished his long daydreams of his noble lady, he would feel restless and unsatisfied."*

Poor Ignatius. One can see how he is credited, by some, with the following prayer:

"Give me the strength to accept that which I cannot change, The
courage to change that which I can,
And the wisdom to tell the difference."

It is a very beautiful statement and is helpful in thinking about the Partnership. In our opinion, the biggest risk in investing is the risk of misanalysis. We seek to control this risk through the quality of our research, especially through applying what we have learnt. The quality of our research-based decisions overwhelmingly determines whether we will do well in the long run. But it has almost no influence over the timing of these results. Zak and I do not control the annual performance figures. It might be nice if we did. But we don't.

We encourage you to focus on what we control too!

To our partners great credit we have never had hand-holding requests and, with the exception of a friend of mine who studies share price charts rather than companies and shall therefore remain nameless, no redemptions. It would be wonderful if this was because our partners have a stoic indifference to short term results. And better still if this was because partners read our letters, know the philosophy and methodology of what we do, and know that this is the engine

of future success.

Our aim is have the same relationship with partners during periods of poor performance as we do during the good times. And we aim to do this through encouraging our partners to focus on the things we control. That is quite a goal, and we understand that what we are asking goes against human nature. My father worked as a geologist for the Abu Dhabi Oil Company in the early 1960s, and the unofficial motto amongst the engineers there was "*aim high and grab what you can as you fall*". It is in the spirit of aiming high that we ask you to focus on inputs rather than outputs. It is the rational thing to do. If we were all focused on what can be controlled then that would be something special!

A trick to help the rational mind is to put our periods of good performance together with our poor performance. We encourage you to mentally shuffle the surplus from the good years and allocate it to the deficit of the bad years. Especially any future bad years, please! Better still, take away the adjectives used to describe the years. That way one can accept life as it is. After all, regardless of the order in which annual results fall, the destination will be just the same.

Housekeeping

Northern Trust has been appointed as custodian bank, the transition from the incumbent operative took place in November and it all went without a hitch. This completes the transition started two years ago with the replacement of the incumbent administrator (the same provider) by the excellent folks at Phoenix Financial Services (do call Phoenix +353 1 845 8161 with your statement enquiries). Hopefully there should be little contact with Northern Trust, however, should the need arise, do call Marcia Denham on +44 207 982 2213.

Nomad means far more to us than simply managing a fund. As a younger man I separated investing from the rest of my life, as if they were different worlds. This is a false construct. Another mistake. What we learn from home-life helps us be better investors, and what we learn as investors helps us be better husbands and fathers. In the end, all reality has to respect all other reality.

Nomad is a rational, metaphysical, almost spiritual journey (without the sand and camels, although Zak may be happier with them). And that's what a full life is all about. Thank you for your support.

Yours sincerely

Nicholas Sleep

* Sleep, Zakaria and Company, Ltd., was appointed as investment advisor to the Nomad Investment Partnership

with effect from September 12th 2006, replacing Marathon Asset Management who had been investment advisor to the Partnership since inception. Prior to this transition Nicholas Sleep and Qais Zakaria were responsible for the investment management of Nomad whilst employed by Marathon Asset Management. Partners should note that the very nature of the transition from Marathon to Sleep, Zakaria and Company, Ltd., means that the Partnership does not benefit from the same back office infrastructure support it used to receive. In this letter we use the term "Partners" as a generic term referring to all Nomad investors, whether shareholders in the feeder fund (the Nomad Investment Company) or limited partners in the Partnership and not, in the strict, legal sense of the word, to imply the creation of a partnership between shareholders in the feeder fund, Nomad and/or Sleep, Zakaria and Company, Ltd.

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Appendix

Dear …….

Thank you for your letter informing us of your concerns with conditions in the Sudan and linking this to any investments Nomad may have. Zak and I agree that conditions in Darfur are appalling and we sympathise with the desire to do something about it.

As Nomad has no investments among the list of companies provided, it would be easy for us to just leave it at that. (Phew!) However, the logic of the proposition raised an eyebrow or two here, and there are some interesting principles at foot, so may I elaborate?

We do not necessarily divest our shares in companies because we disagree with a particular activity of that company. Heaven forbid – there would be nothing left to invest in! I am sure that as I write this someone, somewhere in an investee business is doing something Zak and I would very much regret, and we live with that reality.

Even if we did choose to take exception to a company's activity, would divesting our shares work? In our experience being inside a company is far more likely to influence behaviour than being outside. After all, shares come with votes! Indeed, if all those that agreed with the

proposal sold their shares to those that disagreed, would that not risk entrenching the activities of the company? It seems to us that an open debate both inside and outside a firm has a greater hope of influence than a scenario where management can hide in the boardroom protected by their shareholders' support.

Nomad is a pooled fund (not a bespoke, segregated fund) and, if we did divest an otherwise sound investment, perhaps at a price depressed by others pursuing the proposed strategy, we may be rightly criticised by other Nomad investors for placing the proposer's interests above their own. That is not a conversation I would relish! Let's invert the situation: how would the proposer feel if another investor in Nomad proposed to divest a series of companies on the grounds of an issue they did not feel strongly about?

I am sure some investors in Nomad have different views to our own on, say, tobacco, alcohol and arms (all permissible) and we all get along quite well under the general mandate to grow capital over the long term. Of course, how investors then choose to spend their profits from investing in Nomad is up to them.

Whilst the motivation is understandable, the consequences of the proposal, and the consequences of the consequences (the "what thens" of the situation) may not be what was wished for.

So to be clear, Zak and I disagree with the rational logic of the proposal, and we would consider making an investment in, say, Rolls Royce, if we came in tomorrow and the share price was £1.

Indeed, we should all be so lucky!

With all best wishes

Yours sincerely

Nicholas Sleep

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Nomad Investment Partnership

Interim Letter
For the period ended June 30th, 2008

To June 30th, 2008	Nomad Investment Partnership *	MSCI World Index (net) US$
Trailing:		
One year	-18.2%	-10.7%
Two years	5.9	10.4
Three years	16.7	29.1
Four years	47.3	42.1
Five years	107.8	76.1
Six years	155.6	71.9
Since inception (Sept 10th 2001)	193.0	62.5
Annualized since inception		
Before performance fees	+17.1%	
After performance fees	+14.1	+7.4%

The figures above are unaudited, presented on a cumulative basis and, as ever, are before performance fees. Below the same results are presented in discrete annual increments. In our opinion it is the upper table that is most useful in assessing long- term investment performance.

To June 30th, 2008:	Nomad Investment Partnership	MSCI World Index (net) US$
Calendar Year Results:		
2008 (year to date)	-20.8%	-10.6%
2007	+21.2	+ 9.0
2006	+13.6	+20.1
2005	+9.2	+9.5
2004	+22.1	+14.7
2003	+79.6	+33.1
2002	+1.3	-19.9
2001 (inception Sept 10th 2001)	+10.1	+3.6

Since the beginning of the year limited partnership interests in the Nomad Investment Partnership and shareholder interests in the Nomad Investment Company have declined around twenty percent in price and means that a dollar invested in the Partnership at inception would now be valued at around two dollars and ninety-three cents. As usual we quote performance before performance fee payments, as Nomad's time dependent hurdle means that investors with different purchase dates will also have different net-of-all fees experiences. The subtraction of performance fees from the figures above means that, whatever the experience, it will be less favourable than those presented. The sole exception being the first six months of this year, when the refundable performance fee reserve was, indeed, refunded to the credit of limited partners and shareholders. In effect, investors as of January 1st got something back, and that something was a gain of around two and a half percent of net asset value (NAV). At the end of 2007, that same two and a half percent of NAV looked like performance fees in waiting to be paid to Zak and me over time. Today, if you were with us on January 1st, it sits in your account. This equitable system might be good for the soul, but it is not great for cocktail party bragging rights – Zak and I look at our shoes as we are asked *"let me get this straight: you paid money back to your clients?"* Whilst we don't care particularly for our peers' approval, we are working hard to at least be able to look them in the eye. And there is only one-way to do that: better performance over time.

All this compares with an index return of around minus eleven percent and means that a dollar invested in the markets at Nomad's inception is worth around one dollar and sixty-two cents today. We were a little surprised to discover the index had done so well when some of the country indices are down between thirteen percent (for the S&P500) and twenty-four percent (for the DJ Euro Stoxx 50, in local currency terms, source, Bloomberg), although the weakness of the dollar means that returns to a US investor from assets held abroad will be somewhat better. Our curiosity for decomposing index returns, fleeting at the best of times, was tempered by Morgan Stanley's request for a subscription fee to unlock their index composition methodology. Too expensive at any price was our conclusion; it makes little difference to us what the indices are doing, and we decided to save the money and keep expenses down. Index envy is not a route to outsized returns and at the end of the day it is blindingly obvious that our relative returns are what they are because we don't own what everyone else is chasing, but more on that later in this letter.

Not since the Asian crisis do I think that Zak and I have been so "wrong" as measured by subsequent declines in share prices, so quickly after purchase as we have been in the last twelve months. We consider ourselves contrarian, value-based investors. Ordinarily what we are buying is hated and reasonable value. When investments go from hated and reasonable to despised and cheap something is normally up in the markets. And what is up will be the subject of this letter.

In our experience investment managers tend to discuss individual stocks as a marketing tool. People like stock names. Others do not discuss stocks at all, either they understand the powerful psychological reasons for not doing so, or perhaps own shares for such short periods that there is little to be imparted. We would like to aim for a third route. I came across this Chinese proverb in a cookbook, of all places, but it sums up our approach to imparting information: "*Tell me and I'll forget, show me and I may remember, involve me and I'll understand*". It is in this spirit that we will discuss three recent "wrong" purchases, of firms in three different industries on three different continents. (It seems our deft, kiss-of-death-purchasing-skills know no industrial or geographical bounds. A note to company management: if you receive a call from us asking for an exploratory meeting with a view to

Nomad making an investment and you care about your stock's short-term performance – don't take our call!) In this letter we will describe the greatest source of risk (as we define risk: the permanent loss of value per share) in the portfolio today. Finally, we will discuss perhaps the most important issue for all investors: duration – or, to put it another way, knowing who you are. First of all, let's illustrate the state of the portfolio with three stock examples. Nomad is the largest foreign shareholder in the first; the largest overall shareholder in the second, and Nomad is no longer a shareholder in the final company, although it was during the last six months.

Air Asia, Games Workshop and MBIA

"There must be some way out of here, said the joker to the thief,
There's too much confusion, I can't get no relief.
Businessmen, they drink my wine, plowmen dig my earth, None of
them along the line know what any of it is worth."

Source: "All Along the Watchtower" from the album "John Wesley Harding"
by Bob Dylan, 1967

Air Asia is Asia's largest low-cost airline and is probably the lowest cost airline in the world. The firm has borrowed heavily from Southwest Airline's model of operations (a point-to-point network configuration, on-line ticket sales, no reserved seating, one plane type). The effect is that costs including fuel are around 3c (US) per seat per kilometer (as of December 2007). Costs are very important when the product is, more or less, an undifferentiated commodity, and 3c compares with around 4.5c at Ryanair, 5.5c at Southwest or more importantly 4.5c at rival Malaysian Airlines. This cost advantage is shared with the customers in the form of low fares, although the firm has borrowed from Ryanair as well who extended the Southwest model to include revenue enhancements such as sales incentives for cabin staff, ancillary products and charging for complexity such as multiple bags. Even after allowing for these add-ons average revenue per seat kilometer at Air Asia is less than costs per seat kilometer at Malaysian Airlines! For example, our first enquiry on-line revealed that a flight between Kuala Lumpur and Bangkok, a distance of 730 miles (roughly the same as New York to Chicago), one way, booked a few months in advance can be had for M$75, or U$22. That's U$8 per ticket cheaper than Malaysian Airline's super discounted fare, or U$120 cheaper than the normal Malaysian fare. The product is relaxed and cheerful and the image is not unlike the early days of Southwest Airlines when "*Southwest's low fares and service were as outrageous as its uniforms*", (source: "Nuts! Southwest Airline's Crazy Recipe for Business and Personal success" by Freiberg and Freiberg), although Zak tells me the knee-length, high-heeled boots worn by 1970s Southwest cabin staff were not evident when we visited Air Asia (and boy, did he look!). The customer, unsurprisingly, reciprocates, and the planes run (in airline terms) full.

Air Asia is an example of scale-economics shared, which like Amazon, Costco, Carpetright and elements of other businesses in the portfolio (Geico, Nebraska Furniture Mart) have come to dominate Nomad (around 45% of the portfolio). Air Asia is the first sizeable, professional, entrepreneur owned and run low-cost airline to operate in Asia and as the firm began operations in 2002 these are pioneering days. For example, we do not know how big the market for low-cost travel is in Asia, although U$22 to Bangkok strikes us as market stimulating. Joint venture operations in Thailand and Indonesia offer a population base seven times the domestic Malaysian market and it is for this reason that the firm has 175 A320

aircraft on order. The negotiated price of the A320s is, as far as we can tell, the lowest price paid by anybody for A320s and the firm has secured a guaranteed lowest price for an Asian carrier from Airbus for its planes. On paper then, Air Asia could be the most fantastic business.

But there are wrinkles: funding for the new planes is not entirely secured, and lenders are twitchy. 175 aircraft is a huge amount of capacity (one third the size of Southwest which has been in operation for 40 years). Asian nations all feel they must have a flag, a song, a national car and a flag carrier. Malaysian Airline Systems, long the government supported inefficient flag carrier is resurgent and is leading a price war. Oil is U$140 a barrel.

Even so, the firm earns a reasonable spread over the cost of capital on its aircraft, whilst forcing pricing on other airlines which leaves them operating at sub economic returns. This is a powerful combination and implies that the business will win in the marketplace in the end. We have no ego invested our analysis (at least, I don't think we do: if you want to make rational decisions leave your ego behind), outcomes are leveraged and perfectly reasonable people could come to different conclusions as to the firm's investment merits. However, we do struggle with the price of the shares in the stock market today, which appears to value the firm at a meaningful discount to the value of the company owned fleet of planes. In short, the market has concluded that Air Asia, despite the potential outlined above, should not exist. This is nonsense; as such a valuation would imply that Southeast Asians, who are some of the most price conscious people on the planet, don't want cheap airfares!

Games Workshop

Games Workshop makes, distributes, retails and fosters the Warhammer family of tabletop games, think: modern equivalent of tin military soldiers. It is the largest firm of its kind in the world, although this is a small, but growing market. The customers are mainly boys between the age of 11 and 14 (no longer children, but before an interest in girls takes over!) and growth comes, in part, from word of mouth. Hobbyists must have the same soldiers as each other to comply with the stories that surround the battle scenes (otherwise, why are these sides fighting?) and so Warhammer is a standard and, if you want to play with your friends, you have to come to our shops. The firm grew steadily and profitably, if unspectacularly for many years until, that is, the Lord of the Rings line of models. These were very successful from the perspective of revenues and cash flow. However, windfall Lord of the Rings profits were invested in huge manufacturing facilities (that now run at 30% utilisation), funded new shops in marginal geographies, and a general complacency with the business set in, as the following excerpt from the Chairman's preamble to the 2007 accounts makes clear:

"So who was the enemy?

"Is the world turning in such a way that mankind no longer wants or needs hobbies? No. All the evidence I see, with growing prosperity and increasing leisure time, is an increase in hobbies. Perhaps it is just collecting, painting and wargaming with miniatures that is passé? The evidence again says no. Too many of our stores around the world and their neighbouring independent accounts are in good healthy growth for that to be true. Have computer games, and especially these new online role- playing games, finally bitten Games Workshop? We have lived in happy harmony with computer games for our entire business life, our customers play computer games (they also eat meals and watch movies) but not at the expense of their hobby. The recent extraordinarily popular MMORPGs

[massively multiplayer on-line role- playing games] would not, I think, have trimmed a little from us at the edges had they been in direct competition, they would have wiped us out. Are our overheads killing us? Well, yes, they could have, but they don't stop us selling things. Is it a change in society? No. Demographics? No. World recession? No, no, no. It was us.

"We grew fat and lazy on the back of easy success. We forgot about customer service and forgot that hard work is and always has been the route to success. We forgot that we are a company which pursues profit and likes paying surplus cash to its owners.
What was not expected was that it would take two poor years and a management reorganisation to get the problems taken seriously. Somewhere along the line too many of us thought that selling, sweating and saving were someone else's job. Well they aren't.
That's my job and the job of all of us here at Games Workshop."

If the problems are self-inflicted, they are usually within the powers of the firm to fix. According to the Chairman the firm is "*seriously well-funded*" and this implies that free cash flow will be meaningfully in excess of net profits and will rise faster than revenues: all good then, for prospective profitability. Even so, the current valuation implies that the firm is worth little more than its investment in plant and equipment. To put it another way, like Air Asia, the market is saying that the company should not exist. We will leave it to the parents to break that news to their Warhammer-playing sons.

MBIA

The Municipal Bond Insurance Association (MBIA) is the largest bond insurance company in the world. Insurance is provided against the principal and interest payments of a bond in the event of non-payment by the bond issuer. The recent problem has been that when premium prices declined, the Municipal Bond Insurance Association did not stick to municipal bonds and began underwriting the losses of other types of credit, most notoriously bonds issued against, not the tax raising powers of a municipality, but the static value of securitized mortgages. Well, it has been a perfect disaster. We purchased shares after the firm took a sizeable write down on its equity value, raised capital twice, changed management and after new management bought shares themselves, and that has been a disaster too (as judged by the subsequent decline in the share price). Much of the debate has centered on the size of the credit losses, whether they are U$2bn as indicated by the firm, or U$6 to U$8bn as indicated by some skeptics, or U$13.6bn as implied by Moody's worst-case scenario, or greater than that as implied by the stock price discount to the firm's claims paying resources. There would appear to be considerable leverage to the upside considering the current market value, however we question our, indeed, anybody's, ability to so finely judge the losses on U$680bn of insured assets. Both sides (longs and shorts) will think they are right, and it is perhaps the insecurity of their own positions that leads both to assert their cases so vocally in the media, at investment conferences and on the internet.

Whilst our interest was piqued by the stock's apparent discount to anything but the worst-case loss scenarios, in other words the odds looked attractive, the investment case from our perspective was somewhat different. The market value of the firm approximated the capital retained at the holding company and readily distributed from the insurance subsidiaries and attributes de-minimus value to the in-place insurance contracts written by the subsidiaries. The possibility exists therefore for a new insurance firm to be set up separate from the old. The old can be left in runoff with any eventual surpluses used to fund share repurchase at the

holding company or new business at a subsidiary level. So, at first blush there appear to be lots of options open to the firm, but to understand why we sold our MBIA, one must first discuss dilution risk.

Dilution Risk

Dilution risk occurs when companies issue equity at less than the firm is worth. This risk is always with us but is most pernicious at stock market troughs. Let's take a, not wholly, theoretical example: a firm is worth, under normal market conditions, say U$2bn, divided by 60m shares or U$33 per share. A value-oriented buyer may start to buy shares at around U$15, thinking he has bought dollar bills for less than 50c. But what if the firm issues say, 30m new shares at U$10 to fund U$300m of cyclical losses. Under this scenario intrinsic value per share, adjusting for the U$300m in loses, falls from U$28 to U$22. Purchases made at U$15, thought to be at 47c on the dollar of value, turn out to have been made at 68c on the dollar. Worse still, dilution risk accelerates as the share price declines: if the firm raises the same amount of new capital (U$300m) at U$5 per share, then intrinsic value after the capital raising falls to U$16 per share; and if capital is raised at a price of U$1 per share then intrinsic value afterwards falls to U$5.50. In the final example, original purchases made at U$15, at what was thought to be less than half value, end up proving to have been made at three times intrinsic value! Investors can protect themselves from this risk by putting in their proportional share in any new capital raising. The problem comes when investors start to question the size of the capital raising. Perhaps the firm needs more than U$300m? Is the business really worth U$2bn? How can we know for sure? The doubt manifests itself in further share price declines and increases the dilution from not participating in a capital raising. Dilution risk comes from doubt about one's original analysis.

Short sellers know this and whilst it is tempting to criticize their widely circulated 150 page marketing documents (it is interesting that, in contrast, the longs tend to keep their best ideas to themselves), the shorts' regulated anonymity, their desire to keep the doubt going and create an outcome (i.e. share placing) what the shorts are really testing is the shareholders' conviction, and on this level, in our opinion, institutional holders also have much to answer. For example, dilution risk virtually disappears if large institutional shareholders backstop capital raising at reasonable prices. This would require a firmly held view of what a company is worth, shareholders and management that do not game the system (rarer than hen's teeth) and is best done, in our opinion, by way of rights (with rights not taken up underwritten by large holders). Take for example the arrangement between Assured Guaranty and Wilbur Ross. It appears that Ross has agreed to provide up to U$750m to the company as, when and if the company requires. Management are free to raise capital elsewhere if they choose. In effect, Ross has gone a long way to under-writing the equity value (although not entirely) and for the time being the shares trade around book value. None of the other bond insurance companies, including MBIA, have this arrangement and all trade well below book.

The shorts know the institutions are weak minded. And the institutions themselves know they are weak. They are weak because, although equity is permanent capital, the owners of the equity are short term oriented. Institutional money managers appear to reason: why take a stand today when the shares could be half this price if I wait, and why buy shares today when I might get some shares in a placing at an even lower price? It is as if they suddenly do not know what a firm is worth. In taking such a timid view they sell their investments, themselves and their fellow shareholders down the river. Worse still, the preference in the United States for placings over right issues (gosh, the investment banks are good at marketing) means that

current shareholders can be cut out of the capital-raising loop entirely. Under this model of stock market participant behaviour the early contrarian buyer, who by himself is too small to influence the outcome by providing the capital required, is severely punished. So, however cheap MBIA may appear, the prospect of a future capital raising means that one cannot place a valuation on the business per share without knowing the number of shares outstanding, and we cannot know that until we know the size of the losses and the price of any future capital raising. In this Alice in Wonderland world, the stock's biggest attraction, its apparent cheapness, becomes the investor's Achilles heel, and it was for this reason that we sold our MBIA shares. And it is also for this reason that recent purchases by Nomad, which are not enough to recap businesses in their own right, and where there is meaningful dilution risk, have been modest in size.

So where have all the long-term investors that could be backstopping businesses gone? In our opinion, what we are witnessing is the effect of a generation or two of the ascendancy of the marketing people and risk managers in the investment management function. The business model at many firms is not to make investments, to research and provide permanent capital; instead, the business model is to gather and retain assets. Fund managers at such organizations may have a strong financial incentive not to stick their neck out, and instead wrap themselves in a grey cocoon of rented stock portfolios. In other words, the marketing guys have won. When I described this conclusion to one fund manager he replied "*but, dear boy, they always do*".

Duration

Tom Stoppard, the playwright, is credited with saying "*If an idea is worth having once, it's worth having twice*" and it is in this spirit that we will quote Jack Bogle's work again. Investment holding periods by institutional investors have declined from an average of seven years in the 1950s to less than a year by 2006, according to the Bogle Institute. Well, I am sure Jack and his colleagues are right, but we can't see it in our investments. The average holding period for the US stocks held in Nomad (excluding Berkshire Hathaway) is fifty-one days! That is approximately one twenty- fifth of the time that we expect to hold an investment. Those that set the current prices for our investments (the renters) cannot have an eye on long term value, and that, in a nutshell, is the investment case for Nomad.

And that raises an important point: the costs of short-termism, such as dilution risk, are borne by investors when management mark the share price to market and issue equity. In other words, it is borne early in Nomad's expected holding cycle. The gains from short-termism, such as our ability to purchase shares for meaningfully less than they are worth, will take far longer to materialize. In the example above, the buyer of 10% of the company at U$15 a share and 10% of the capital raising at U$1 per share would in the end see an overall profit of U$80m on his U$120m invested, even though his book loss at the time of the capital raising would be 93.4%! It is pain today and gain tomorrow. Our misanalysis of dilution risk at MBIA for example has cost Nomad investors about 1.5% of NAV this year, but the gains from our continued investment in Air Asia will, we expect, earn Nomad investors 20% of NAV in years to come.

Jack Bogle refers to his senior thesis at Princeton University regularly, even though it was written in 1951, and did so again in the following excerpt from a speech given to the Haas School of Business at the University of California in October 2006:

"Then, prophetically, Lord Keynes predicted that this trend would intensify as even 'expert professionals, possessing judgment and knowledge beyond that of the average private investor, would be concerned, not with making superior long-term forecasts of the probable yield on an investment over its entire life, but with forecasting changes in the conventional valuation a short time ahead of the general public.' As a result, Keynes warned, the stock market would become 'a battle of wits to anticipate the basis of conventional valuation a few months hence rather than the prospective yield of an investment over a long term of years.'

"Simply put, what went wrong was a pathological mutation in capitalism—from traditional owners' capitalism, where the rewards of investing went primarily to those who put up the capital and took the risks—to a new and virulent managers' capitalism, where an excessive share of the rewards of capital investment went to corporate managers and financial intermediaries."

Be that as it may, and although we are financial intermediaries ourselves, we don't like it. One reason we don't like it is we cannot for the life of us figure out why society at large is served by having company owners swap seats every few months? We all know it is pursued in the name of the efficient allocation of capital and liquidity, but it fails at the former and the latter is prized by the insecure. Has this reached an extreme? We do not know, but we did enjoy the following exchange between an analyst and the CEO of one of our investee firms recently:

Analyst: "*Was the exit* [in terms of business performance] *from March stronger or weaker than the entrance?"*

CEO: "*Sorry this is getting ridiculous, next question, please?"*

It is not our system. The point of equity is that it is the only permanent capital in the balance sheet. It is there to weather storms, such as the current economic backdrop, and provide a stable base, and of course to earn the rewards of enterprise. This basic building block of society is broken when those with their hands on the permanent capital change their minds with their underwear. It is no coincidence perhaps that pass-the-parcel and musical chairs are children's games.

Charlie Munger described an alternative model at this year's Wesco Financial annual general meeting. According to Munger the English establishment was so outraged by the speculation of the South Sea bubble and subsequent share price collapses, that in the early eighteenth century Parliament passed the Bubble Act, which outlawed the issuance of shares! That ban remained in place for over a century (1720 to 1825) and, it could be argued, during that century Britain set the stage for the Industrial Revolution, the greatest step forward in modern society. It is not clear we need to trade shares to be successful.

But trade shares we do. According to Empirical Research Partners, an independent investment research firm, the current period is the greatest momentum market since the dot com era, which was one of the greatest momentum markets on record. (A momentum market is one where the best performing stocks this month were those that did best last month and so on. It is unusual because rationally one would expect shares to become less attractive as prices rise.

However, currently investors chase stocks in order to own today what they should have owned yesterday. In effect prices rise just because they have already risen. Economics students will recognise this as a "Giffen good").

It is unusual for investors to repeat the last mistake (dot com behavior) so soon. Psychologists argue that the last mistake is so vivid that, if anything, we tend to over- correct, as anyone with a whisky-hangover will tell you. The insanity of bubble-like valuations was well captured by Scott McNealy in a 2002 interview in Business Week when he was still CEO of Sun Microsystems (source: James Montier, Société Générale, Cross Asset Research Group),

> *"But two years ago we were selling at ten times revenues when we were at U$64. At ten times revenues, to give you a ten-year payback, I have to pay you 100% of revenues for ten straight years in dividends. That assumes I can get that by my shareholders. That assumes I have zero cost of goods sold, which is very hard for a computer company. That assumes zero expenses, which is really hard with 39,000 employees. That assumes I pay no taxes, which is very hard. And that assumes you pay no taxes on your dividends, which is kind of illegal. And that assumes that, with zero R&D for the next ten years, I can maintain the current revenue run rate. Now, having done that, would any of you like to buy my stock at U$64? Do you realize how ridiculous those basic assumptions are? You don't need transparency. You don't need footnotes. What were you thinking?"*

More to the point, what do they continue to think? Why has, say, Potash Corporation of Saskatchewan, a miner of potash and manufacturer of fertilizer (share price up ten-fold in three years, to twelve times sales) taken over from Sun Microsystems, a manufacturer of servers (share price up ten-fold in the two years to 2000, peak valuation around ten times sales)? The answer, along with an unshakable belief in the sustainability and longevity of Chinese urbanization, emerging market demand, resource booms, search for inflation hedges and so on, may have something to do with the decline in investor time horizons – the average holding period for shares of Potash has declined from nearly two years to six weeks as the share price has risen, and if you own the shares for just six weeks, then what do you care if, in two years' time, current prices turn out have been a bubble? Lord Keynes was spot on.

Rules, Roundabouts and IFRS 7

Even though the partnership has lost money so far this year, Zak and I have almost no stress from investing. All our stress comes from the business side of the operation: that is compliance, reporting, auditors, accounting and so on. Take for example IFRS 7, which requires directors to describe the risks embedded in their operation and how they manage those risks. At first blush this seems like motherhood and apple pie – who could argue with that? But let's take Nomad. The risks the accountants are concerned with are, predominantly, interest rates, currency and credit risk, which is sensible enough. But then they ask, not how we manage these risks over the holding period of an investment (say selling foreign currency to match the expected five-year holding period of a foreign stock) but how these risks will be managed in the next 12 months! In effect the accounting rules ask how do we manage the risk that interest rates will rise in Thailand in 2008? On many of these issues, in the context of our investment time horizon, we don't see the point. If interest rates do rise in Thailand in 2008, then the short term prospects for our shopping mall, Mah Boon Krong Holdings, may temporarily decline, but it is far from clear that that event is a risk to business value in five years' time. Indeed, it looks like an opportunity to us! In other words, the accounting tries to bend Nomad out of shape. So all is clear, Zak and I see our job as controlling the risk of mis-

analysis of the big things – value per share of an investment many years out – not spotting wiggles on the path along the way. Everyone else does wiggle guessing. Whilst we respect the intentions behind the rules, and our candid response is contained in note 4 of Nomad's accounts, one is left feeling the exercise has been nothing but a tax on time: a cost disproportionately borne by small investment firms; a barrier to entry. It is partly through dealing with IFRS7 that the Nomad audit was completed at the end of June rather than earlier in the year.

In previous letters we have described the events that surrounded the flood in Carlisle, England a few years ago. Readers that make it to the end of our letters (there must be some) may remember that after the flood the main traffic lights on a busy two roundabout junction (grief, one roundabout on top of the other!) had failed, and that despite this, the police had allowed the traffic through, only for the town planners to discover that, months later, and with the lights still not working, the intersection was safer despite higher average traffic speeds compared to before the flood. One can imagine how we cheered at a recent newspaper article, which reported that the Dutch town of Drachten had borrowed a leaf from Carlisle's book, and removed most of their traffic signals. The project was the brainchild of Hans Monderman, a traffic planner who claimed in an interview that "*it works well because it is dangerous, which is exactly what we want. It shifts the emphasis away from the Government taking the risk, to the driver being responsible for his or her own risk*". Bravo, sir!

Should readers think that England is at the forefront of such open-minded initiatives please observe the efforts of workmen in Coventry, England who recently built a roundabout and placed "no-exit" signs before every exit, with the effect that once drivers entered the roundabout, there was no way off! The non-thought of those following orders never ceases to amaze. There are two routes to follow in investing: Drachten or Coventry. And we are following Drachten. The future is uncertain, nothing is perfect, and Zak and I may make huge mistakes. And it is because of this risk that Nomad will operate at its best.

Momentum Investing Revisited

In December last year the contents of the Savoy Hotel in London were auctioned to the public. There were several interesting lots: silver trays, pepper and salt pots stamped with the hotel's insignia and so on, although one that caught my eye was a chrome wall protector in the shape of an 'S'. 'S' for Savoy, 'S' for Sleep (such vanity – first mistake), and well, I have always had a soft spot for the hotel (second mistake) and whilst I had no idea what the intrinsic value of such an item might be (third mistake), I placed a bid (fourth mistake). There were a dozen 'S's for sale with lots available over three days. On the first day the prices rose from £350 to £500. On the second day they started down a little at £400 but rose to £800. And on the final day they started at £600 and rose to £850. Notice that the lowest price of each day was the first price and how prices rose steadily throughout the three days. Why? The answer, it seems to us, is first, scarcity, as the auction continued the stock of available 'S's declined. Second, social proof, once one person had set a high price it was seen by others to endorse the value of the item and they too could pay a higher price knowing they were not alone. And what price did your author pay? Well, let's just say I bought on the last day…and I justified it by telling myself that it was a one off, the Savoy is special, I won't get this chance again, 'S' for Savoy, 'S' for Sleep, and so on. And I just know I overpaid (Mrs. Sleep's withering what-have-you-done-now-look said it all). We can all do momentum investing, but it is emotional investing and I just don't think it is that intelligent, or profitable.

Current performance notwithstanding, Nomad is in good health, despite our "senior moment" in mis-analysing dilution risk (Zak and my aggregate age is, after all, 79!) Almost ninety percent of the portfolio is invested in firms run by founders or the largest shareholder, and their average investment in the firms they run is just over twenty percent of the shares outstanding. Fifty-five percent of portfolio companies are either repurchasing shares or have had meaningful insider buying. There is huge growth embedded in the portfolio and normalized profitability is high. Despite these attractive prospects the average investor rents shares in our firms for fifty-one days. They simply cannot be looking at what we are looking at. Our shares are cheap because investors prefer to chase the new booms surrounding Chinese urbanization and associated natural resources demand. We have no idea whether purchases of resource stocks at current prices will prove profitable for these investors. However, we do know that our stocks are selling at bargain prices. Since September 2001 the Nomad share price has risen from U$1000 to around U$3000 today. Zak and I see our job as getting it to U$10,000 in time, and the current portfolio should get us substantially there.

There are times when it is easy to feel good about investing, and there are times when it is much harder. The emotions usually go with outputs. After Nomad's share price tripled, it was easy to feel that God was in heaven but, as prices decline, spirits sag. We would counsel you to think about the inputs to investing rather than the outputs. It is in times like these that the hard psychological and analytical work is done and the partnership is filled with future capital gains: this is our input. The output will come in time. Those with a rational disposition may not find it too hard to feel good today.

As always, we thank you for your confidence in us, and most of all, we value your quiet patience.

Yours sincerely

Nicholas Sleep

* Sleep, Zakaria and Company, Ltd., was appointed as investment advisor to the Nomad Investment Partnership with effect from September 12th 2006, replacing Marathon Asset Management who had been investment advisor to the Partnership since inception. Prior to this transition Nicholas Sleep and Qais Zakaria were responsible for the investment management of Nomad whilst employed by Marathon Asset Management. Partners should note that the very nature of the transition from Marathon to Sleep, Zakaria and Company, Ltd., means that the Partnership does not benefit from the same back office infrastructure support it used to receive. In this letter we use the term "partners" as a generic term referring to all Nomad investors, whether shareholders in the feeder fund (the Nomad Investment Company) or limited partners in the Partnership and not, in the strict, legal sense of the word, to imply the creation of a partnership between shareholders in the feeder fund, Nomad and/or Sleep, Zakaria and Company, Ltd.

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Nomad Investment Partnership

Annual Letter
For the period ended December 31st, 2008

To December 31st, 2008	Nomad Investment Partnership *	MSCI World Index (net) US$
Trailing:		
One year	-45.3%	-40.7%
Two years	-33.7	-35.4
Three years	-24.7	-22.4
Four years	-17.8	-15.0
Five years	+0.4	-2.5
Six years	+80.3	+29.8
Seven years	+82.7	+3.9
Since inception (Sept 10th 2001)	+101.1	+7.7
Annualized since inception		
Before performance fees	+10.1	
After performance fees	+7.1	+1.0

The figures above are unaudited, presented on a cumulative basis and are before fees, most notably, performance fees. As usual we quote performance before fee payments as Nomad's time dependent hurdle means that investors with different purchase dates will also have different net-of-all fees experiences. Below the same pre-fee results are presented in discrete annual increments. In our opinion it is the upper table that is most useful in assessing long-term investment performance.

To December 31st, 2008:	Nomad Investment Partnership	MSCI World Index (net) US$
Calendar Year Results:		
2008	-45.3%	-40.7%
2007	+21.2	+9.0
2006	+13.6	+20.1
2005	+9.2	+9.5
2004	+22.1	+14.7
2003	+79.6	+33.1
2002	+1.3	-19.9
2001 (inception Sept 10th 2001)	+10.1	+3.6

Thinking about Inputs: The Price to Value Ratio

It is quite something to arrive at the end of a five-year period and for Nomad's returns to be all but zero, and precious little better than the index to boot. This is a very interesting statistic. All that work and effort! Quite what are we doing with our lives, and with other people's money? Please don't answer that just yet! One could compare market trough to market trough, broadly equivalent to our performance since inception (suspend judgement if you will and call today a trough) in which case returns are in the order of 10% per annum, and 9% per annum superior at Nomad compared to the average share or broadly a doubling in Nomad's share price whilst the index did nothing. That is more like it. And it could be argued that, since inception the price to value ratio of the partnership has been meaningfully lowered, implying healthy deferred returns to come. Even so, bear markets are tough and make you test the most basic assumptions. When moments like these arise grace under pressure all- round is the order of the day.

The following excerpt is taken from the June 2005 Nomad letter to Partners:

"Zak and I concentrate on the price to value ratio of the Partnership and ignore its performance as much as is practical, and we would encourage you to do the same. In our opinion you should be more pleased with the improvement in the price to value ratio of the Partnership than the gain in the price of the Partnership this year. That's easy to say when results have been reasonable. But it would feel quite different if the Partnership had declined in price instead. Unfortunately nature does not always help us to think rationally. Psychologists (McClure, Laibson, Loewenstein and Cohen 2004) have found that the brain perceives immediate rewards differently to deferred rewards because two different parts of the brain are involved. Immediate gains are perceived positively compared to larger deferred gains as the limbic (survival) system has the ability to over-ride the fronto-parietal (analytical) system. Interestingly, stress induces this over-ride, and of course, money induces stress. So, the more stressed we are, the more we value short-term outcomes! This is not without reason, for if starving is a real possibility, a meal today is more important than a feast in a week's time, and the brain's wiring reflects that survival bias. Such notions are embedded in popular phrases such as "a bird in the hand is worth two in the bush". But at Nomad we try to be more analytical: it is the two birds in the bush we are concerned with and how they compare to the bird in the hand...It is price to value that's important."

Whether business values rise faster than share prices, or share prices fall faster than business values, either way the effect is the same: a growing differential between the price of a business in the stock market and its real value. It does indeed "*feel different*" when performance has been as poor as it was in 2008, but the rational mind will anchor on the notion that today the birds in the bush are very large indeed. It may not feel like it but, in many respects, these are the best of times for an investor, and we shall lay out why in this letter. The reason opportunity abounds and there are so few takers (indeed the two are necessary bedfellows) is the headline to every newspaper, leads every news channel, is on the lips of every politician and we have all been subjected to so much economic prognostication that we will spare you its repetition here. Crises such as these do not reveal mankind at its best, far too much limbic thinking for our liking, and the sooner we can learn and move on the better. It does not feel like it, but crises like these are a force for good, and we will discuss this point too later in this letter. First, what can we learn?

Using up the Safety Net

One of the things this crisis reveals, at least in our opinion, is that there has been little give-in-the-system: that is to say, a lack of slack. Slack in time to think things through, or capital for investment for example. In a recent interview the author Nassim Taleb put it succinctly: "*Capitalism does not teach slack, it teaches optimisation*". That is capitalism teaches that assets must be worked hard, outputs maximised, returns as high as can be. We all see so much of this line of thinking that it has become part of the landscape so familiar as to not be noticed any more. Itineraries must be filled with meetings, school children's days must be filled with activities (I know my daughters' are), borrowing capacity must be used (or risk an "inefficient capital structure" – we have never really understood what that is), investors answer emails instead of listening to presentations, holidays are to be taken with Blackberries rather than books, or nothing: outputs must be maximised today! And for most of the decade, there has been nothing as sinful in an investor's mind as money idly slouching on deposit, "*on the couch*" as the investor Seth Klarman put it. Instead, cash must be put to work: its yield maximised. Indeed, and in the parlance of bond investors, "*chasing yield*" has been one of the maxims of the noughties.

Output maximisation looks efficient at least in the short term, but that is not the same as being long term optimal. The flaw to putting money to work immediately, for instance, is to presume that all relevant opportunity sets are available immediately. By accepting, say, a promoter's promise of eight percent returns (six hundred basis points better than money on deposit), the investor denies himself the right to future opportunity sets which may be far better, like public equity circa 2008 and 2009, we would argue. This is an easy concept to grasp when applied in hindsight, but much harder to see prospectively. A plan sponsor who argued that contrary to the income statement, his cash was not earning two percent but ten percent (a blend of two percent on deposit now and twelve percent from an as yet undefined opportunity set sometime in the future) risks being perceived by his peers as away with the fairies – the lawyers and auditors would not endorse his view - but he was right. That is why, in the hands of Warren Buffett for example, one could rationally argue that cash is worth more than cash. That is not an argument for hoarding cash, as many do today. For the cash to be worth more than cash it must be invested intelligently. It is, however, an argument for a cash buffer, just in case, a little slack in the system.

Charlie Munger, Berkshire Hathaway Vice-Chairman, was once asked how to get rich, presumably by someone of youth and modest means. Being of relatively modest means if not youthful ourselves Zak and I were keen to hear the answer: "*wait for an opportunity and invest the spare million dollars you have lying around*". What Charlie was telling us was that slack cash is worth more than cash. It was not what we wanted to hear. Now all we had to do was come up with a million dollars of slack cash!

A little slack would also have avoided fifty-to-one gearing ratios at the investment banks, burnt out school children, wasted holidays, and nothing-learnt business meetings. "*When someone says he is busy, he means that he is incompetent*", Nassim Taleb again, "*having a stupidly busy schedule isn't a sign of being important. It means that you have become insulated from the world*". And we wonder, if you are too "s*tupidly busy*" to think, which part of the brain is making the decisions? Not the rational outer cortex, we suspect. All this busy behaviour looks short term efficient (ten meetings a day!) but, in our opinion, the cost is that things are not being thought through; the end result of a thousand small steps in the current direction not assessed and long-term bad habits creep in. The biggest mistakes are the ones

that did not look like mistakes at the beginning, after all bank robbers don't start out robbing banks, they pinch sweets, get away with it, and drift their way up. I suspect many robbers' behaviour later in life would be inconceivable to them when they started. We all drift to some extent. Notice, for example, how company spokesmen use words. To hide reality, the embarrassed use acceptable words to replace accurate words. This is how companies end up talking about "*negative growth*" rather than declines, and how bank investor relations spokespeople talk of "*market turbulence*", when what they are referring to, we would suggest, is their own bad lending. If businesspeople are too busy to notice that their use of everyday language has drifted into, let's face it, low level lying, how were they to be honest enough with themselves to recognise the inevitable asymmetry embedded in securitised mortgages? All they were doing was making the next loan and selling it: No assessment of the destination of such behaviour required.

The thinking – or non-thinking – was contagious, and if it was good enough for bank X then it must be good enough for bank Y, and both companies reinforced these attitudes through quarterly reporting and annual incentives. The point is that the drift toward poor long-term outcomes is so much harder to spot if your reference periods are short, and one is too busy being busy to notice a lack of real world thinking. Many publicly listed bank executives are certainly subject to these two factors. Is it any wonder these firms are at the epicentre of the financial crisis?

All this is a far cry from the early years of Rolls-Royce Limited, the manufacturer of motor cars, where Frederick "Henry" Royce made the engineers personally sign the parts they were responsible for making. That way, if any component proved faulty, he knew who was responsible and he made them correct the fault in their own, unpaid time – *I paid you to make a working part, not a faulty part,* he would argue. And that is how he ended up making the best motorcars in the world. That level of personal accountability has been largely lost inside organisations today and has instead been replaced with "*efficiency*" to the point of Taleb's *"busy incompetence"* and *"real world isolation"*. Zak and I do not see the ethics behind securitisation trusts, for example, building the reputation of any bank the way that Henry Royce's engineers built the reputation of Rolls-Royce, the manufacturer of the world's finest cars. What passes for industry standard best practice today may look short term efficient but, in any lasting sense of the word, and from the perspective of the long-term business owner, it does not really get the job done.

The Case for Slack

We do try and run Nomad with some slack in the system. In the June 2007 letter to partners we suggested that one of the benefits of a long holding period was that it allowed time for gentle contemplation, to "*retreat and simmer*" a little, and we quoted the gardener Charles Jencks: "*understanding requires a certain slowing of time. Why else enter a garden?*" Notice, "*slowing*", it is important. Slack is provided in our company structure: Zak is perfectly capable of running Nomad on his own (*someone tell him I do! Zak*). This means that straight away we are running at something less than fifty percent capacity utilisation on a normal day, and so we can gear up, in effect, when opportunities arise as they have recently. Capacity utilisation is also kept low by few investments, held for long periods. We have had the blessing of learning some big lessons early in life (there will be more). And we have worked out that, in any real sense, we do not know that much. In our opinion we have the right environment to think things through, think rationally, and come to meaningful long- term insights. Whether our insights are economic or not will be our fault, it will not be due to the environment in

which we work. Zak and I don't want to be busy; we want to be right.

Once it has been created, what is to be done with the slack? The best activities might be those that refresh the mind, broaden horizons and reinforce good habits, and it is in this spirit that I have become a governor of a failed school in south east London. What is interesting is not the reasons for the school's failure which seem common enough (unionised teachers employing 1970s teaching techniques, awful facilities and so on). What is interesting is the route out of the soup: incentives. Teachers who previously had no incentive compensation are being given bonuses for attendance (!) and improvements in class results. The children are being rewarded with house points for good work and behaviour, and deductions for poor work. But importantly, there are many more positive house points awarded than negative. This is a desire to be better system, not a punishment and condemnation system. There are other factors involved: new head teacher, new governors, school uniform, five-day teaching week (the previous failed school took Friday afternoons off – unbelievable!), but it is the incentives that reinforce the good behaviour. Other schools have undergone such a reformation with terrific results: for example at one south London school, which is run by the same team as my school, exam results for sixteen year olds have improved from a pass rate of 14% to over 90% in just over a decade. A good incentive scheme is so cheap compared to what is created.

Incentives. Incentives. Incentives.

In business the question then arises: what do incentives encourage? From the perspective of investors in Nomad, the incentives are helpful if they raise the probability of a favourable destination for our investee firms. Let's take the incentives around high low retailing as compared to scale economics shared retailing. Under the first strategy operating costs are generally high as a result of operating inefficiencies, and prices are high to compensate. To attract customers some products are reduced in price on a temporary basis in the hope that whilst the customer is in the store, they may buy some non-discounted items too (some prices are therefore high and others low, hence the name). The incentives here are awful: customers are trained to buy on deal, be disloyal and shop around, and for the retailer the inefficiencies of pricing and repricing and the volatility of volumes are meaningful. The effect is that, after adjusting for one off reductions in price, sales are lower on a normalised basis than they would be otherwise, which in turn exacerbates operating cost inefficiencies. Yuck.

Scale economics shared operations are quite different. As the firm grows in size, scale savings are given back to the customer in the form of lower prices. The customer then reciprocates by purchasing more goods, which provides greater scale for the retailer who passes on the new savings as well. Yippee. This is why firms such as Costco enjoy sales per foot of retailing space four times greater than run-of-the-mill supermarkets. Scale economics shared incentivises customer reciprocation, and customer reciprocation is a super-factor in business performance.

Scale economics shared works across industries too with the effect that load factors at the low-price Malaysian airline, AirAsia, are superior to high-low flag carrying airlines. And it works online: Amazon have deployed it so well that Amazon's operating costs (per dollar of sales) plus its operating margin are less than some of its high street peers' costs (per dollar of sales). This offers the prospect that, in theory, Amazon's high street peers could price their products at net income breakeven and still not undercut Amazon's prices or profitability. For these high street competitors the game is over. They will leak revenues to more efficient rivals as customers respond to the incentive of consistently low prices and convenience. Over time

high street rivals, and less successful online rivals, will need to restructure, change their product, or go out of business. We estimate Amazon's immediate hinterland of high street rivals have combined revenues of U$150bn in the US alone. If these firms go away over the next ten years, as Circuit City, Woolworths, Zavvi and others have recently, and Amazon picks up one dollar in ten of their sales, then this alone would be enough to quadruple Amazon's US revenues over the next decade.

Scale economics works well in bad economic times as well as good. On the busiest day in the run up to Christmas this year, order volumes at Amazon were 16% higher than the previous year and note this compares to industry-wide US retail sales which declined nearly ten percent in December, according to the commerce department! And at AirAsia revenues per seat per kilometer flown rose 33%, whilst costs per seat per kilometer flown excluding fuel declined 10% in the latest quarterly period. Our businesses are surging ahead, even if, in some cases, their share prices are half what they were twelve months ago. In the last few months Amazon has been priced in the market as if it would not grow in the future, despite some of the best growth prospects we can imagine. That is a very rare combination and, combined with other similarly cheap stocks in the partnership, was the basis for Nomad's reopening at the end of last year.

Nomad Reopening

Whilst we had few redemptions as a result of the crisis, we also had few subscriptions. Indeed, if one ranked the subscribers by size, Zak and I were the second and third largest in October (!) and whilst it may have been a lot of money to us, it wasn't very much in the scheme of things! And still the opportunity set remains. The rational thing to do is to open Nomad whilst the price to value ratio remains very favourable and so, for the meantime, Nomad will remain open for subscriptions.

A Word on Zimbabwe

Richard Zeckhauser, at his brilliant behavioural finance course at Harvard, asks attendees to answer various questions to which they are not likely to know the answer, for example, the surface area of Norway. The answer is to be expressed in five numbers: a median best guess, two numbers which represent the 25th and 75th percentile of what you think the answer may be, and two more representing the 99th and 1st percentile of what the number may be. The more confident one is of the answer the more bunched the figures would be. The less confident the wider the distribution. So, for the size of Norway a student's line of thinking may be as follows: I'm not sure how big Norway is but it looks kind of smallish (first mistake, our minds may picture a globe as if we were looking from above the equator, this has the effect of visually squashing the landmasses toward the poles. If we visualised the world as if we were hovering above the poles, on the other hand, we may form quite a different impression), so, I think Norway may be 250 miles long by 75 miles wide say, or 18,250 sq miles. I cannot be out by that much (oh yes you can) so I'll double and halve my best guess and that will be my range, so Norway is no bigger than say 40,000 miles and no smaller than 10,000 square miles, and I'll halve and double those answers for the 99th and 1st percentile. Turn to the end of this letter for the actual answer (but watch out, even the fact that I have led you through a worked example may affect your thinking!). It is a great test, and what it reveals is that, in aggregate, we tend to be far too confident that we know the answer to something that we don't.

If you had asked us for the range of possible outcomes to events in Zimbabwe, we would have given you a very wide distribution indeed, from immediate international rehabilitation to, well, continued looting, and I do not think our distribution would have been wide enough (Zak now tells me he forecast events exactly!) Most recently, the factor that effects Nomad is the suspension of trading on the Harare Stock Exchange. The market is not suspended as such, but as all the stockbrokers have failed to meet the minimum regulatory capital required by their licenses, this applies even to the international banks, the exchange might as well be suspended. The reason for the sudden impasse is that the settlement period for transactions in the banking system as a whole has been extended enormously as investigators, responding to the alleged presence of fraudulent cheques, have chosen to, perhaps personally we don't know, check the cheques in the banking system themselves. Nothing is settling or clearing in a hurry. As a concession to the stock exchange, the authorities have allowed the brokers to trade, but only if the Chairman of the custodian bank, in our case Barclays Plc., personally underwrites settlement in the event Nomad fails to deliver. Hmmm. We have not placed a call to Mr. Agius yet, or his CEO, John Varley, but we are not optimistic of a favourable response. As you may imagine, the financial system has stopped. And if there are no prices on the stock market, we cannot price our shares, nor price the unofficial exchange rate for the Zimbabwean dollar. We have no idea when trading will resume, it could be quite a long haul, and so the independent directors of Nomad's General Partner have taken the view that our Zimbabwean holdings should be valued at zero, as compared to 0.28% of Nomad at the end of November. Zak and I don't think our businesses are worth nought, indeed we know they are not but, then again, we cannot give you anything for your Zim shares either. So, for the meantime, zero it is.

Happier Times

Let me finish with a story told by the radio presenter and car collector Chris Evans that has parallels to the stock market bargains of today and helps demonstrate the merits of doing some proprietary work, sniffing out a great investment, and holding forever. First a little background. In the late 1950s Ferrari motor cars successfully competed and won almost all the major GTO class races of the time, but by the early 1960s they had started to lose ground to new slippery shaped Aston Martins and the AC Cobra, amongst others. The solution was Ferrari's first wind tunnel designed car: the 250 GTO, which was launched in 1962. It was an instant success, and beautiful to boot. 250 GTO owner Paul Vesty recalls childhood memories of seeing five GTOs line up on the start of the Goodwood TT in Sussex, England "*immediately all the other cars looked ancient – instantly we all wanted one*". The car won almost everything going and became an immediate classic. It was also very rare: one hundred cars should have been built to qualify the vehicle for GT class racing but, in the end, only thirty-six were actually produced. The effect today is that fifty and sixty year olds, looking to buy their boyhood dream car, may have to pay world record prices, think U$10 to U$15m, the next time one sells at auction. After some successful seasons the GTO was replaced with faster models and during the mid 1960s Ferrari sold off its racing vehicles to enthusiasts. At about this time the third James Bond film, Goldfinger, was launched which featured the now iconic Aston Martin DB5. Back to Evan's story:

[In the mid 1960's]*"a very famous collector, who has one of the finest noses for sniffing out a deal, hears a whisper that the first James Bond Aston Martin DB5 may be for sale…The word is that for the right money, the original James Bond car can be bought directly from the movie studio. So he makes a few calls, he tracks down the production guy…*

"It's gonna have to be 15 for the pair"
"You mean there are two?"
"Hey man this is show business, there is always two… at least"
"But 15 for the pair" says our man. "I wasn't counting on spending that much and I don't really want two – I just want one"
"When that is the deal. Take it or leave it."

…"Fifteen thousand pounds – a lot of money now, a load of money then. Our hero hesitates for a moment, but his nose knows better. It tells him to deal. He buys the car. The cash is to be paid on delivery of both vehicles. The day arrives, the trailer pulls up, the cars roll off. The invoice reads: FIFTEEN HUNDRED POUNDS. Yes, friends both original Bond cars for £1500, but it does not end there. Be prepared to run for the hills screaming. Our man then swaps one of the Bond cars for a GTO. That's a GTO for £750. That's the cheapest GTO ever and…he still has it today."

Of such stuff are dreams made. Now, let me rephrase this story from the perspective of an equity investor. The collector thought outside the box, rolled up his sleeves, did some proprietary analytical work, and found a contrarian investment opportunity with great growth potential that few of his peers recognised at the time, lucked into a low price, owned it forever and, in the end, it did not matter what price he paid particularly, as the growth in underlying value made his purchase one of the best investments of all time. Zak and I aspire to such a road map.

Thank You

To your eternal credit, Nomad's quirky approach to investing is respected by Nomad's partners. I do not think we have done our investors many favours as judged by Mr. Market's erratic marking of our investments last year and indeed our own avoidable mistakes such as those discussed in the last letter. Be that as it may, we have had no enquiries as to performance during a year in which Mr. Market and the media gave you lots of provocation. Net redemptions due to the crisis were less than two percent of the Partnership. Indeed, we received some lovely notes of support during the year, which are special to us, and mean more than funds under management any day. Thank you. Please do not underestimate the value of your considered patience and support to the Nomad ecosystem.

The commentary in the press is uniformly gloomy and this is serving to depress share prices. What we know is that prices are lower than a few years ago and corporate behaviour is improving. We mean no disrespect to those unfortunate enough to lose their jobs or caught up in other people's too-busy-to-think mistakes and scandals, but from the perspective of an investor there is less to worry about today than there was a few years ago. Indeed, I doubt that worrying is the solution to anything particularly: far better planning. We are reminded of Winston Churchill's story of a man on his deathbed: *I have had a lot of trouble in my life*, says the dying man, *most of which never happened*. It may not feel like it but for a long-term

investor this is the best of times not the worst. It is in this environment that people sell their GTOs for £750. Take heart and look to the horizon.

Yours sincerely

Nicholas Sleep

The surface area of Norway is 148,746 square miles, according to Wikipedia.

* Sleep, Zakaria and Company, Ltd., was appointed as investment advisor to the Nomad Investment Partnership with effect from September 12th 2006, replacing Marathon Asset Management who had been investment advisor to the Partnership since inception. Prior to this transition Nicholas Sleep and Qais Zakaria were responsible for the investment management of Nomad whilst employed by Marathon Asset Management. Partners should note that the very nature of the transition from Marathon to Sleep, Zakaria and Company, Ltd., means that the Partnership does not benefit from the same back office infrastructure support it used to receive. In this letter we use the term "partners" as a generic term referring to all Nomad investors, whether shareholders in the feeder fund (the Nomad Investment Company) or limited partners in the Partnership and not, in the strict, legal sense of the word, to imply the creation of a partnership between shareholders in the feeder fund, Nomad and/or Sleep, Zakaria and Company, Ltd.

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Portfolio returns are based on the increase in asset value per unit before a deduction for fees and have been independently verified by the Administrator. Some presented figures may differ from actual results due to rounding. The value of the Shares, and any income from them, may go down as well as up and an investor may not receive back, on redemption of his Shares, the amount invested. Past performance is not necessarily a guide to future performance. Neither Sleep, Zakaria and Company, Ltd., nor its directors or employees warrant the accuracy, adequacy, or completeness of the information contained herein. Sleep, Zakaria and Company, Ltd. expressly disclaims liability for errors or omissions in such information. No warranty of any kind implied, express or statutory is given by Sleep, Zakaria and Company, Ltd. or any of its directors or employees in connection with the information contained herein. Under no circumstances may this document, or any part thereof, be copied, reproduced, or redistributed without the express permission of a director of Sleep, Zakaria and Company, Ltd. Registered office: 1a, Burnsall Street, London, SW3 3SR, England © Sleep, Zakaria and Company, Ltd.

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Nomad Investment Partnership

Interim Letter
For the period ended June 30th, 2009

To June 30th, 2009	Nomad Investment Partnership *	MSCI World Index (net) US$
Trailing:		
Year to date	+20.9%	+6.4
One year	-16.5	-29.5
Two years	-31.7	-37.0
Three years	-11.5	-22.2
Four years	-2.5	-9.0
Five years	+23.1	+0.2
Six years	+73.6	+24.2
Seven years	+113.5	+21.2
Since inception (Sept 10th 2001)	+144.8	+14.6
Annualized since inception:		
Before performance fees	+12.1%	+1.8%
After performance fees including performance fees reimbursed	+9.6	

The figures above are unaudited, presented on a cumulative basis and, as ever, are before performance fees. Below the same results are presented in discrete annual increments. In our opinion it is the upper table that is most useful in assessing long- term investment performance.

To June 30th, 2009:	Nomad Investment Partnership	MSCI World Index (net) US$
Calendar Year Results:		
2009 (year to date)	+20.9%	+6.4%
2008	-45.3	-40.7
2007	+21.2	+ 9.0
2006	+13.6	+20.1
2005	+9.2	+9.5
2004	+22.1	+14.7
2003	+79.6	+33.1
2002	+1.3	-19.9
2001	+10.1	+3.6

"This Abstract, which I now publish, must necessarily be imperfect. I cannot here give references and authorities for my several statements; and I must trust to the reader reposing some confidence in my accuracy. No doubt errors will have crept in, though I hope I have always been cautious in trusting to good authorities alone. I can here give only the general conclusions at which I have arrived, with a few facts in illustration, but which, I hope, in most cases will suffice. No one can feel more sensible than I do of the necessity of hereafter publishing in detail all the facts, with references, on which my conclusions have been grounded; and I hope in a future work to do this. For I am well aware that scarcely a single point is discussed in this volume on which facts cannot be adduced, often apparently leading to conclusions directly opposite to those at which I have arrived. A fair result can be obtained only by fully stating and balancing the facts and arguments on both sides of each question; and this cannot possibly be here done."

So begins paragraph three of "On the Origin of Species by Means of Natural Selection" by Charles Darwin, the bicentenary of whose birth falls this year. The book took Darwin twenty years to write and may have done more than any, with the exception of the Bible, to shape man's self-perception. But just look, if you will, at the language of the introduction:

"This Abstract must necessarily be imperfect…no doubt errors have crept in… I can here only give the general conclusions…I am well aware that scarcely a single point is discussed on which facts cannot be adduced, often apparently leading to conclusions directly opposite to those at which I have arrived…A fair result can only be obtained by fully stating and balancing the facts on both sides".

One can hardly accuse the man of promotion! Darwin knew he was right but his findings troubled him personally. He was a Christian, in a Christian society, indeed he had considered studying theology before setting sail on HMS Beagle, and his new ideas challenged the church, his countrymen and his conscience. At major turning points in society, such as he was suggesting, how many of us, we wonder, would be modest about what we had discovered? Darwin's humility is an attractive human quality, perhaps because such understatement recognizes that the ideas were bigger than the man. Which, of course, they were. It is an interesting subconscious psychological tendency that truths are often spoken with a whispered voice whilst shaky suppositions are shouted for all to hear. It is not so much us that the shouters are convincing, as the need to convince themselves. We all shout to some extent, with agents usually shouting louder than principals: and that should tell us something. In the Nomad ecosystem we do try to keep the volume down somewhat. Like Darwin, perhaps, but on a very different scale, we recognize a few simple truths and we are conscious that our views, in the eyes of our peers, may not be very popular.

Empty Vessels and a Quieter Approach.

Upon reflection, it is curious that this quiet attitude extends, in its own way, to the companies in which we have entrusted your dollars: Amazon and Costco do not advertise (no shouting here); Berkshire Hathaway and Games Workshop do not provide earnings guidance (popular with baying fund managers and stockbrokers); Amazon, Costco, AirAsia, Carpetright, and parts of Berkshire give back margin to the customer, we would argue that is a pretty humble strategy too. In other words, around two thirds of the portfolio is invested in firms that in some major way shun commonplace promotional activity and they are no less successful as a result.

If one steps outside of stock market listed companies to instead observe private firms run by proprietors and founders, it is the quiet approach that is far closer to the norm. Let's invert: why are publicly listed companies so promotional about their affairs? Are these companies shouting to inform shareholders and customers or convince themselves?

Nomad's investments may be in publicly listed firms but these firms are also overwhelmingly run by proprietors who think and behave as if they ran private firms. Amazon for example struggles with institutional investor relations so much so that the good people that man the IR department do so knowing that the firm's founder, Jeff Bezos, thinks their role is all but a waste of time! Poor souls. Bezos was also quite forthright on the subject of product promotion and advertising at this year's annual general meeting:

"*Advertising is the price you pay for having an unremarkable product or service*".

It is interesting to note that the other end of the promotional scale is exemplified by the pop star razzle of General Motors which had the largest advertising budget of any company whose annual report we read this year (actually that title went to GM last year, and the year before, and the year before…). The advertising spend was U$5.3bn in 2008, or U$630 per car delivered. It is fun to muse that had the company made cars that required little advertising support, then the firm's last five-years' advertising spend may have been sufficient to retire half of the company's debt, at par, instead! But, it seems, it was easier to call Madison Avenue than build cars that sold themselves. In our opinion, GM is very much the empty vessel making the most noise, in this regard. Our portfolio takes a different path. The whispered voice of price givebacks is economically fruitful but only if the customer reciprocates in the form of more spending, even in the face of more promotional approaches by competitors. For evidence that this is the case with our whisperers look no further than the average revenue growth rate of the largest investments in Nomad (including some of the companies mentioned above, err, not GM!) which, in the most recent reporting period, was in excess of ten percent!

Why? In a word, price. It is in times like these that the hyper-efficient low-cost providers, who share the benefits with their customers, often take permanent market share. This fact rather reminded us of a quip by Wal-Mart founder, Sam Walton, who, when asked about the recession of the early 1990s, stated:

"*I've thought about it and decided not to participate*".

Amazon, for example, is choosing "*not to participate*" in as much as trailing twelve- month revenues have risen by over sixty percent since the onset of the credit crisis, say mid 2007. Not that the steady growth in revenues has always been apparent in its stock price, as the chart below describes. As a youthful analyst I used to have a notice on my desk that read, "*share prices are more volatile than corporate cash flow, which is more volatile than asset replacement cost*". It was reminder to concentrate on non-transitory items. Today I would update such a notice to read, "*share prices are more volatile than business values*", but the gist is the same: a reminder to focus on lasting value, not transitory prices. More on this subject later in this letter.

Chart 1: Make up your mind, U$100 or U$40? Amazon.com trailing twelve month revenues (in billions of dollars, rhs) and share price (lhs).

Source: Company accounts, Bloomberg, Sleep, Zakaria and Company, Ltd.

The Investment Industry and Over-Diversification, again.

In business, thoughtful whispering works, which makes it all the more remarkable that the investment industry, as well as many economic commentators, spend so much time shouting. So much commentary espouses certainty on a multitude of issues, and so little of what is said is, at least in our opinion, knowable. The absolute certainty in the voice of the proponent so often seeks to mask the weakness of the argument. If Zak and I spot this, we metaphorically tune out. In our opinion, just a few big things in life are knowable. And it is because just a few things are knowable that Nomad has just a few investments.

The church of diversification, in whose pews the professional fund management industry sits, proposes many holdings. They do this not because managers have so many insights, but so few! Diversity, in this context, is seen as insurance against any one idea being wrong. Like Darwin, we find ourselves disagreeing with the theocracy. We would propose that if knowledge is a source of value added, and few things can be known for sure, then it logically follows that owning more stocks does not lower risk but raises it! Real diversification is offered by index funds at a fraction of the price of active management.

Sam Walton did not make his money through diversifying his holdings. Nor did Gates, Carnegie, McMurtry, Rockefeller, Slim, Li Ka-shing or Buffett. Great businesses are not built that way. Indeed, the portfolios of these men were, more or less, one hundred percent in one company and they did not consider it risky! Suggest that to your average mutual fund manager. And it is interesting to note that none of the great fund management organizations got rich on the back of the most successful companies of the modern era either!

This failure goes largely unrecognized, and certainly ignored, perhaps because it is the elephant in the room. (Quick, change the subject). It is ignored because some fund managers are not trying to make clients rich per se, but instead their goal is to beat their peers or a benchmark. Fine, but what strikes us about such a disposition is that, somewhere in that frame of mind, one ceases to be an investor and starts to be a business manager and, to borrow a phrase from a popular UK TV advert, "*that's not what is says on the tin*". When investment skills share a seat with business management, in time, it's the commercial genes that tend to thrive, and investment skills that are not used end up atrophying. Is that why the fund management industry finds itself, like GM, relying so heavily on marketing?

Back to real investing! The trick, it seems to us, if one is to be a successful long-term investor, is to recognize the sources of enduring business success, get in early and own enough to make a difference. Which raises two questions: what are the sources of success and second, if these are so readily recognized up front why are they not discounted in prices already? We will spend the balance of this letter answering these two questions.

Seeing, but not Understanding.

How might corporate success be predictable? There are some clues in the world around us. Zak and I observe several business models that work in the long run, and scale economics shared is one of these, witness Ryanair, Wal-Mart, Geico, Southeast Airlines, Tesco, Nebraska Furniture Mart, Direct Line et al. And that is why companies that share scale with the customer such as Carpetright, Costco, Berkshire Hathaway, Amazon and AirAsia make up around sixty percent of the Partnership. It works because it turns size, normally an anchor to growth and returns, into an asset. But I also don't think this is a great secret.

Investors are broadly rational people (they all knew that Wal-Mart was a wonderful business) and fund managers operate under healthy profit incentives that ought to foster good outcomes, so why is it that no one but the founding Walton family-owned Wal-Mart all the way through? Zak and I were told a story by one of the industry's most senior fund managers which we enjoyed enormously and might help illustrate the point. In the early 1970s a then, and still today, large successful fund management company analysed its portfolio and discovered that their sale of IBM thirty years earlier had been a huge error of omission. If they had instead kept their IBM shares for the last thirty years, that stake alone would have been larger than total funds under management. No doubt they all agreed to learn from that particular mistake and, as so often happens, went back to their desks and got on with life as before, as if nothing had happened. It is fun to note that, at about the same time, they also made the decision to sell their stake in Wal-Mart, which, thirty years later, would be worth more than their then-to-be funds under management! In terms of dollars of opportunity lost, it is likely to be the biggest single error this firm will make.

We offer the following reasons for this mistake:

1. Misanalysis, or using the wrong mental model: Investors are used to firms which have one good idea, such as a new product, but then struggle to replicate success and end up diluting returns (Zak and I call this the Barbie problem, as Mattel has struggled to replicate the economics of its famous doll). Taking this model and applying it to Wal-Mart would miss the company's source of success entirely as the strategy of price givebacks did not change from year to year; culture plays a part in the continuity of a successful price giveback strategy and factors such as culture, because they are hard to quantify, often go undervalued by

investors; investors presume regression to the mean starts at the time of their analysis or, as CFA students may recognize, in year three or five of a DCF analysis! Investors use valuation heuristics rather than assess the real value of the business.

2. Structural or behavioral: Active fund managers have to look active. One way to do this is to sell Wal-Mart, which appeared expensive (but actually wasn't), to buy something that appeared cheaper (but err, also wasn't); investors are not long-term and did not look further than the next few years or, more recently, few quarters. Evidence for this can be gleaned from the average holding periods for shares which stands at just a few months; fund managers wish to keep their jobs and espousing a ten-year view on a firm risks being a hostage to fortune; marketing folks require new stories to tell and new stocks in the portfolio provide new stories; fund managers sell their winners in order to appear diversified in the eyes of their clients.

3. Odds or incorrectly weighing the bet: In the words of my first boss, investors tend not to believe in "*longevity of compound*". Conventional thinking has it that good things do not last, and indeed, on average that's right! Empirical Research Partners, an investment research boutique, discovered that the chance of a growth stock keeping its status as a growth stock for five years is one in five, and for ten years just one in ten. On average, companies fail.

The list above is far from exhaustive and we can all pick our favorites. No doubt some combination of these, plus others, acted in the minds of sellers. It matters not particularly. What matters is the effect of this collective mis-cognition. Investors know that in time average companies fail, and so stocks are discounted for that risk.

However, this discount is applied to all stocks even those that, in the end, do not fail. The shares of great companies can therefore be cheap, in some cases, for decades. To illustrate the point, consider the graph below. The blue line represents the share price of Wal-Mart and the red line the price that one could have paid at any time since 1972 (the firm's initial public offering) and then earned a return of ten percent (a proxy for a reasonable equity return) through to today. The red line can be thought of as what the firm was really worth.

Chart 2: Cheap for Decades. Share price of Wal-Mart (blue) and the price one could have paid and still earned a ten percent return (red).

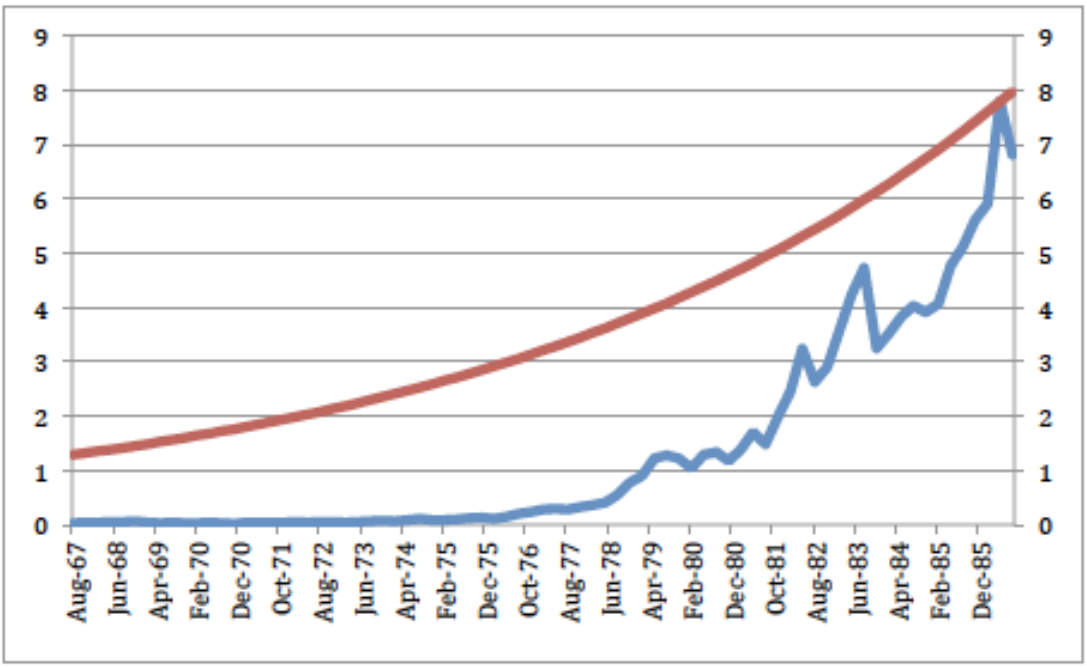

Source: Company accounts, Bloomberg, Sleep, Zakaria and Company, Ltd.

Just look how long the undervaluation persisted! If, in 1972, upon reading that year's twelve page annual report (!) an investor chose to make a purchase of shares, he could have paid over one hundred and fifty times the prevailing share price (a price to earnings ratio of over fifteen-hundred times, a ratio far in excess of what professional fund managers would consider prudent. They would be mistaken, as it turns out) and he would have still earned a ten percent return on his investment through to today. If, instead, the investor thought about it for a while and decided to purchase shares ten years later he could still have paid over two hundred times earnings for his shares (beware heuristics) and still earned ten percent on his investment. And ten years after that could also have paid a premium over the prevailing Wal-Mart share price and done well subsequently. The market struggled to appreciate the magnitude and longevity of the business' success. But why?

Weighting the Information

Investors see the information (on conference calls they cheer "*great quarter, Wal- Mart*") but, in our opinion, they incorrectly weigh the information. It could be argued that lots of things had to go right for Wal-Mart to grow for forty years. That is certainly true but, at its heart, a very few simple things really mattered. In our opinion, the central engine of success at Wal-Mart was a thrift orientation fueling growth with the savings shared with the customer. The culture of the firm celebrated this orientation and reinforced the good behaviour. This is the deep reality of the business. This should have had the greatest weighting in the minds of long-term investors even if other things looked more important at the time. Instead, investors may place too much emphasis on valuation heuristics, or margin trends, or incremental growth

rates in revenues or any of the list above, but these items are transitory and anecdotal in nature.

There are very few business models where growth begets growth. Scale economics turns size into an asset. Companies that follow this path are at a huge advantage compared to those, for example, that suffer from Barbie syndrome. Put simply: average companies do not do scale economics shared. Average companies do not have a healthy culture. After all, average companies are more like GM than Wal-Mart! The removal of a portion of failure risk from the investment equation creates a huge opportunity for those investors that can see the company in its true perspective and act with a bit of patience. It is a huge anomaly that investors recognize success incrementally when the factors that lead to success, such as scale economics shared reinforced by a strong culture, may be constant. If the early investors in Wal-Mart had understood this, they may have retained their holding along with the, now billionaire, Walton family.

The fund management industry has it that owning shares for a long time is futile as the future is unknowable and what is known is discounted. We respectfully disagree. Indeed, the evidence may suggest that investors rarely appropriately value truly great companies. We can hear the howls of derision from the professional cynics "that's twenty-twenty hindsight, guys!" Dare we whisper it but, in some cases, we think that greatness may be knowable in, shhh, FORSIGHT! This "*longevity of compound*" opportunity exists precisely because the average fund manager is attending a different church. Thank God!

Simple, but not Easy

When Zak and I trawled through the detritus of the stock market these last eighteen months (around a thousand annual reports read and three hundred companies interviewed) we had four main choices: add to existing holdings, invest in new firms, invest in growth businesses, invest in cigar butts. Overwhelmingly we have preferred our existing businesses to the alternatives. Of course, such a conclusion will only make sense if the businesses in which we have invested have great prospects and the shares are cheap. Like Darwin, perhaps, we are well aware that we live in an ambiguous world. And we are not saying, for example, that Amazon is the next Wal- Mart. Time will tell on this front. But we are asking the question, what if? The portfolio weightings are sizeable in the firms we consider to be the pick of the bunch, and Nomad should do well if our firms grow from acorns to oaks. It is this rational will to believe and be patient that perhaps marks Nomad out from its peers.

What we are doing is investing at its most honest and most simple. But it is not easy. It is hard because one first has to reject industry dogma. The non-thought of received wisdom is shouted from the rooftops and it is safe and comfortable, glamorous, exciting even, being part of the crowd. The road less travelled is hard as there is lots of heavy lifting involved in the homework, although we happen to rather like the workout. As Darwin found, it is hard to let the facts speak for themselves, reject the established way of thinking and to do so in good conscience. And it is a blessing for us that the crowd have rejected something so obviously right as investing at its simplest. Phew, that was just as well! Indeed, such is the lure of, what might be called, professional fund management techniques (!) that we find there is, albeit with a few notable exceptions, almost no competition for the long-term investor who has done his homework. Isn't it exciting that honest, simple, long-term investing is so, well, un-exciting.

The State of our Partnership

Some facts and figures may help paint a useful aggregate picture of the Partnership. Zak and I think of the Partnership in terms of business models deployed by our investee firms. The names we use to describe these models are not that catchy but please bear with us. The largest group making up over half the Partnership are, no drum roll required, scale-economics-shared; next comes discounts-to-replacement- cost-with-pricing-power (I warned you) at around fifteen percent; hated-agencies fifteen percent; super-high-quality-thinkers just under ten percent. The Partnership has twenty investments but a noticeable concentration in ten, which make up around eighty percent of the portfolio, and for those with sharp eyes around thirty percent of the Partnership in one investment. Although the bulk of the Partnership is listed in the United States, look-through revenues are far more diversified: US dollar revenues forty-seven percent, Euro and Swiss Franc revenues twenty-one percent, South East Asian currencies sixteen percent, Sterling ten percent, Yen three percent and others three percent. There are perhaps six main industry groups and their weightings are as follows: internet thirty percent, consumer staples sixteen percent, consumer discretionary fourteen, business services thirteen, insurance and finance eleven, and airlines eight percent, with a tail of smaller groupings.

Return on capital in the portfolio is extremely high, as are endemic growth rates. We estimate that around three-quarters of the portfolio is invested in growth businesses, which have the potential to compound for many years, and the balance in more cigar butt like investments (we just could not help it!). In aggregate the portfolio is priced in the market at meaningfully less than half our appraisal of what our firms are really worth. The Partnership will remain open to incremental subscriptions whilst this is the case. Here ends the marketing pitch from the chief marketing officer, who now announces his retirement!

One common psychological trap that agents may fall into is that clients expect action, or to be more accurate, fund managers expect their clients to expect action! The investor Seth Klarman was once challenged on whether Buffett's track record was statistically significant as he traded so little? To which Klarman answered that each day Buffett chose not to do anything was a decision taken too. It is quite possible that we may not change the companies in which we have invested very much over the next few years. Indeed, that is our preference. Zak and I expect that we have built a portfolio not just for the recovery out of recession but for many years after that too. At least, we aim for such a Zen-like state.

Housekeeping

Our cost reimbursement management fees are running at around twenty basis points per annum. We could get it lower, but not by much, and would rather let it fall naturally as the fund grows in size. It is a fair estimate that, if Nomad was a billion dollars in size, the management fee would halve in basis point terms. We target single digit basis points in time. The reimbursable performance fee was, indeed, reimbursed to investors last year. And so it should be.

Thank You

It is with the greatest delight, and respect, that we report that Nomad has had net subscriptions as a result of the credit crisis. I think that is a fact of which we can all be proud. And we have had nothing but notes of support during a period when the market, and gyrations in Nomad's share price, could have given much cause for concern. That ecosystem is special. Thank you.

As always, we thank you for your confidence and most especially your patience. Back to those annual reports.

Yours sincerely,

Nicholas Sleep

* Sleep, Zakaria and Company, Ltd., was appointed as investment advisor to the Nomad Investment Partnership with effect from September 12th 2006, replacing Marathon Asset Management who had been investment advisor to the Partnership since inception. Prior to this transition Nicholas Sleep and Qais Zakaria were responsible for the investment management of Nomad whilst employed by Marathon Asset Management. Partners should note that the very nature of the transition from Marathon to Sleep, Zakaria and Company, Ltd., means that the Partnership does not benefit from the same back office infrastructure support it used to receive. In this letter we use the term "partners" as a generic term referring to all Nomad investors, whether shareholders in the feeder fund (the Nomad Investment Company) or limited partners in the Partnership and not, in the strict, legal sense of the word, to imply the creation of a partnership between shareholders in the feeder fund, Nomad and/or Sleep, Zakaria and Company, Ltd.

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Nomad Investment Partnership

Annual Letter

For the period ended December 31st 2009

To December 31st 2009	Nomad Investment Partnership	MSCI World Index (net) US$
Trailing:		
One year	+71.5%	+30.0%
Two years	-6.2	-22.9
Three years	+13.7	-16.0
Four years	+29.2	+0.9
Five years	+41.0	+10.5
Six years	+72.2	+26.7
Seven years	+209.3	+68.7
Eight years	+213.3	+35.1
Since inception (Sept 10th 2001)	+245.0	+40.0
Annualized since inception		
Before performance fees	+16.1%	
After performance fees	+13.7%	+4.1%

The figures above are unaudited, presented on a cumulative basis and, as ever, are before fees. We present results in this way as Nomad's refundable performance fee and time dependent performance fee hurdle mean that the net-of-all-fees results will vary with subscription date and from investor to investor. Whilst investors will, therefore, have their own unique net-of-all fees experience of investing in Nomad, as a guide we have also detailed overleaf the net-of-all-fees result from one point in time, in this case since inception. An index is used in the table to place our results in context with a broad swathe of share prices from around the world. We do not feel strongly about the merits of the index we have chosen, and Partners may wish to use another. Whatever the yardstick, we ask only that Nomad be compared over the very long term. Below, the same pre-fee results are presented in discrete annual increments. In our opinion, it is the upper table that is most useful in assessing long term investment performance.

To December 31st :	Nomad Investment Partnership	MSCI World Index (net) US$
Calendar Year Results:		
2009	+71.5%	+30.0%
2008	-45.3	-40.7
2007	+21.2	+9.0
2006	+13.6	+20.1
2005	+9.2	+9.5
2004	+22.1	+14.7
2003	+79.6	+33.1
2002	+1.3	-19.9
2001 (inception Sept 10th 2001)	+10.1	+3.6

The New Year brings Nomad's tenth calendar year of operations. Since we began, a dollar invested in Nomad at inception has grown to be worth $2.90 net-of-all-fees as of January 1st, whilst a dollar invested over the same period in the average share, as reflected in the index above, would be worth around $1.40. Put another way, net asset value has compounded at 13.7% per annum, whilst the index has managed 4.1%.

Trust and Thank You!

A sixteen percent per annum investment return (i.e. pre-fees) has been achieved without leverage, derivatives, options, selling short, contracts for difference, LYONs, PRIDES (a pride of lions, perhaps?), TYGRs, STRYPES (we are not making these names up) or any of the other exotica the investment industry uses but, instead, it has been achieved the old fashioned way, through stock-picking. However, Zak and I do not operate alone in our stock-picking efforts. There were two important events in the last few years where you, our Partners, meaningfully added to returns. The first was to vote in early 2008 for Nomad's delisting from the Irish Stock Exchange. This motion allowed us to make much larger single-company investments than had been the case up to that point. Today, net asset value is approximately twenty percent greater than had the size of our investments remained artificially capped by the stroke of a bureaucrat's pen. Bravo!

Second, last year you did not redeem. The return to date from that action alone will be in the order of seventy percent (and counting!). Trusting people is not easy, but even so, you have trusted us far more than I am aware occurs at any other fund management organisation, and we thank you. Do not dismiss the effect your calming influence has on the Nomad ecosystem. These results are yours, as much as ours. Indeed, given the parlous balance of the refundable performance fee account for our long -erm investors, they are all yours! Well, all yours in exchange for around twenty basis points in management fee. Bargain.

Even though it may be tempting to flatter oneself, it is the businesses we invest in that do almost all the heavy lifting in the wealth creating process. If Zak and I bring something to the investment party, and I may be stretching things a little here, it is to be more rational than other investors. At least, we hope that is the case. Your trust, in turn, allows us to invest in firms that are misunderstood by many. For example, we invest in firms that pay their employees 80% more than rival companies (Costco); firms that lower prices as an article of faith (Amazon.com); firms that force an equitable distribution of commissions in an industry

dominated by an eat-what-you- kill culture (Michael Page); a low-cost airline for the masses in a region served by airlines for the rich (AirAsia); and a company that thinks table top figurine games are cool, really, (Games Workshop). Isn't it wonderful that these firms are behaving in this way despite being misunderstood by the outside world? All the social pressure will be to conform with industry norm but these companies have a deep keel that keeps them upright.

Your trust allows us to make mistakes (Conseco, Fleetwood Enterprises – please don't point out they are from the same industry!) and change our mind quickly and without fear of rebuke (MBIA); invest in brilliant businesses (Amazon, Berkshire Hathaway, Costco et al) and so-so businesses (Stagecoach Group, Holcim Philippines, USG); invest with great concentration (Stagecoach, Amazon, Michael Page) and in baskets of several small holdings (four companies in Zimbabwe). We do these things because it is rational to invest that way and, if our results are a guide, it works! Nomad would be ranked in the top cohort of almost any peer group league table for our cumulative performance since inception.

Careful what you wish for

In previous letters we have described the split that exists between Nomad's approach and that of the industry in terms of the principal-agent conflict, or manifestations thereof, such as short investment holding periods. I don't want to make too much of these as, in part, I do not think we are saying much that is new and I think it should also fall on the so-called "*professional fund management industry*" to defend its practices. Indeed, it seems to us that it is the industry that has to constantly say something new to keep the game going: new funds, new products, new investment stories, new "*aligned*" performance fees, new firms. Each new new thing is in turn supported with lots of marketing, perhaps in an attempt to give the new things extra oomph over the, now demoted, old things. At any rate, one cumulative effect of years of the industry's shouted marketing claims has been to elevate well-meaning concepts to the status of industry dogma. In part, this happens through the crowding out of contrary argument. For example, "*specialisation*" and "*diversification*" are at the heart of many marketing claims and sound wholesome and prudent enough, a little like motherhood and apple pie. However, such notions, if run to extremes, can be counter- productive. For example, a widely held view in the noughties mortgage market was that the risk of "*specialised"* lending to the less credit-worthy could be removed through "*diversification*". It was all sales talk, but it worked, in part, as the salesmen were able to promote their products as "*safe*" because specialisation and diversification were traits so highly prized by the rube investor. False traits, it turned out, as the products were not diversified and their complexity made them all but un-analysable. Specialised indeed! A U$1 trillion case of 'careful what you wish for'. Such a ruse does not just exist in the credit markets: many equity portfolios are constructed using similar principles.

The Locker Room Culture

The attitude of the builders and sellers of these new things may be akin to what Charlie Munger called the "*locker room culture*". This is an attitude whereby the players just have to win, and they are not too squeamish about the means. And if winning, for some, meant securing a bigger bonus than others, then, in the case of the mortgage market, any way to get people to buy expensive paper was just fine, and to hell with the consequences. This is a proud, manipulative, points-scoring orientation that manifests itself in all walks of life, but may be especially evident on Wall Street, although some salesmen, sportsmen, chief executives, politicians, warlords and hedge fund types are notably not exempt. It is perhaps

the dominant, get-ahead mindset of our times and it is inherently focused on vivid, short term outputs. Sales targets and profit margins achieved through cutting corners may be inherently worthless in the end, but they can dazzle for a while, and that is their value to the locker room set.

If we are honest, we have all been tricked by the unscrupulous salesman and his short-term promises. It is, perhaps, part of growing up. Zak and I have certainly responded, with order sheet and pen at the ready, to firms that have explicitly promised revenue and margins targets, without really considering how those targets were to be earned or whether they were sustainable. Oh dear! One-nil to the locker room set. In the end though, the sin and folly of the locker room culture, with its win at any costs attitude, does huge damage to us all.

A great deal has been penned on why the locker room mindset exists in listed businesses. However, it is interesting that the commentary has, to date, been almost deferential towards shareholders, who are cast more as victims of scandals rather than sowers of their own misfortune. We would argue a contrary view: if the shareholder base of a listed firm is dominated by, say, mutual funds that, in turn, are seeking short term performance, then that too will be what they will seek in their investments. An odd pact may, therefore, develop between the immediate business imperatives of the salesforce-controlled mutual fund and, say, the consumer goods company with earnings to hit. Both parties will care for short term outputs and will take from the long-term to meet their needs. All parties will invariably be in denial that this is the case, at least to their clients but, we ask, how are the incentives aligned? We would argue that not only do companies get the investors they deserve, but investors also get the companies they deserve.

Schlock begets schlock, as it were.

Operating inside the bubble, it is hard for many participants to see this. The author Upton Sinclair, commenting on the attitude of businessmen and almost one hundred years to the day before the current credit crisis, had it about right, "*it is difficult to get a man to understand something when his salary (or bonus) depends on his not understanding it*". So, the mindset is prevalent because it pays in the short term. But this does not make it the right thing to do, nor does it make it profitable over the long-term.

Doing what is right rather than what plays well

Zak and I far prefer a different approach. We would argue that locker room behaviour is more likely to be spotted by patient, generalist investors deploying common sense, as it helps to be outside the bubble to see the bubble. It may also aid one's thinking if the investor is prepared to make a meaningful, long term investment as this breaks the in-out, get-rich-quick spell of the salesman (and, let's face it, the salesman in one's own head!). Our anti-locker room disposition was echoed by the founder of one of Nomad's investee firms, who, in a private meeting, put it as follows: "*if you want to be successful, and we do, then you have to be willing to be misunderstood, and do things that do not seem sensible to most people*". For example, "*if you* (employees) *come into the office in the morning thinking how you are going to beat number one, two or three in the industry"* - how many times have we heard companies articulate that view? - *"then, our firm is the wrong place for you. We start with the customer and work backwards*." Oh, sweet nectar! He continued that rather than set your standards by what others do, the firm benefited from a "*divine discontent*" with the status quo, which kept colleagues on their toes and the firm improving, irrespective of what the competition were

doing. In other words, his company had an internal compass with true north pointing to what was right for the customer.

This orientation strikes us as the antithesis of the locker room set.

Character as a way of reducing reinvestment risk

Judging by our hit rate with companies interviewed, Zak and I would guestimate that fewer than five percent of publicly listed firms do what they think is right, rather than what they think plays well with the outside world (media, Wall Street, investors). Even so, the vast majority of Nomad's firms do what is right long term. But I suspect we have a predilection for such people. Which brings us on to an important characteristic of Nomad today that we hope will affect results for years to come.

There are, broadly, two ways to behave as an investor. First, buy something cheap in anticipation of a rise in price, sell at a profit, and repeat. Almost everybody does this to some extent. And for some fund managers it requires, depending upon the number of shares in a portfolio and the time they are held, perhaps many hundred decisions a year. Alternatively, the second way to invest is to buy shares in a great business at a reasonable price and let the business grow. This appears to require just one decision (to buy the shares) but, in reality, it requires daily decisions not to sell the shares as well! Almost no one does this, in part because it requires patience - and the locker room set does not do patience - but also because inactivity is the enemy of high fees.

Regardless of how it may appear, Zak and I are drifting toward inactivity, at least as judged by our industry. As we have set out in earlier letters, in part this is because we realise through vicarious, and not so vicarious (!), experience that we do not know that much. We certainly do not have an opinion on many hundred shares, at least, not an opinion in which we would invest money. Second, we have learned or, rather, come to appreciate, that the character of a firm - call it the ability to resist locker room temptation - is far more important than first we realised. This is an important insight. In the long run it may be all that matters. And note,

Nomad is overwhelmingly invested in businesses of great character.

Third, if our firms can successfully grow, and we can resist the temptation to fiddle, then we can meaningfully reduce the reinvestment risk embedded in lots of share buying and selling. Finally, great businesses have been "on sale" and were, in our opinion, the investment opportunity of the credit crisis period. When we wrote to you a year ago, we said, "*It may not feel like it but for a long term investor this is the best of times not the worst…Take heart and look to the horizon.*" Today we have a portfolio of exceptional, iconoclastic businesses that we could own for many years.

This is investment heaven.

We wish you a very successful new decade.

Yours sincerely,

Nicholas Sleep

Our Footnotes - "No Bamboozlement Here"

There is, we are told, a ticket kiosk at a railway station somewhere in India with a sign above the window that reads, "*No Bamboozlement Here*". It is in the same spirit that we attempt these cautionary words. Disclaimers boil down to the following statement – if you choose to believe any of this, then you are on your own. It will be hard for us to escape this conclusion too, and it makes little sense for us to do anything but disclaim liability for errors, omissions and offer no warranties – please, check everything we say, let us know when we are wrong and forgive our errors. We do promise you this: we are human, we make mistakes, but our mistakes, we hope, are honest mistakes. Although we do not intend to mislead, we also cannot guarantee the information in these letters, or that some of our ideas may be interpreted in ways we do not intend. As investors we are trying to do as good as job as we can and we write these letters in good faith to inform and educate investors on our actions and thinking in the context of the Partnership. We hope that they will be read in the same spirit in which they are written. As authors we assert our copyright. However, we also understand that our letters are passed on. We ask only that you attribute our work to us.

Common sense tells you that the price and value of shares can vary greatly, and whilst we do not aim for this, we also recognize that permanent impairment of capital is possible. Our fund is concentrated, perhaps more than many other funds, and as such our results will be more volatile than many of our peers. Nomad is also a very long term fund. We do not think it is suitable for those with time frames less than five years. We also do not think Nomad is suitable for investors overly conflicted with principal-agent issues. If you are at all uncomfortable, then Nomad is not for you.

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Legal Footnotes

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In our letters we refer to both limited partners in the Partnership, and common shareholders in the Nomad Investment Company (feeder fund) as "Partners". We do this to convey a relationship we seek in which our investors are partners in a shared experience and destiny, in which they too have something to contribute. We do not mean to suggest that there is a partnership, in the strict, legal, sense of the word, between the shareholders in the feeder fund and Nomad, or Sleep, Zakaria and Company, Ltd.

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Nomad Investment Partnership

Interim Letter

For the period ended June 30th, 2010.

Cumulative results to June 30th, 2010.	Nomad Investment Partnership	MSCI World Index (net) US$
Trailing:		
One year	+38.1%	+10.2%
Two years	+15.4	-22.3
Three years	-5.6	-30.6
Four years	+22.3	-13.9
Five years	+34.7	+0.3
Six years	+70.0	+10.4
Seven years	+139.8	+36.9
Eight years	+195.0	+33.6
Since inception (Sept 10th 2001)	+238.2	+26.2
Annualized since inception		
Before performance fees	+14.8%	
After performance fees	+12.5	+2.7%

The figures above are unaudited, presented on a cumulative basis and, as ever, are before fees. Nomad's refundable performance fee and time dependent performance fee hurdle mean that the net-of-all-fees results will vary with subscription date and from investor to investor. Investors will, therefore, have their own unique net-of-all fees experience of investing in Nomad. As a guide we have also detailed overleaf the net-of-all-fees result from one point in time, in this case since inception. An index is used in the table to place our results in context with a broad swathe of share prices from around the world. We do not feel strongly about the merits of the index we have chosen, and Partners may wish to use another. Whatever the yardstick, we ask only that Nomad be compared over the very long-term. Below, the same pre-fee results are presented in discrete annual increments. In our opinion, it is the upper table that is most useful in assessing long-term investment performance.

Calendar Year Results to June 30th:	Nomad Investment Partnership	MSCI World Index (net) US$
2010 year to date	-2.7%	-9.8%
2009	+71.5	+30.0
2008	-45.3	-40.7
2007	+21.2	+9.0
2006	+13.6	+20.1
2005	+9.2	+9.5
2004	+22.1	+14.7
2003	+79.6	+33.1
2002	+1.3	-19.9
2001 (inception Sept 10th 2001)	+10.1	+3.6

The New Year brought Nomad's tenth calendar year of operations. Since we began, a dollar invested in Nomad at inception has grown to be worth $2.82 net-of-all-fees, as of June 30th, whilst a dollar invested over the same period in the average share, as reflected in the index above, would be worth around $1.26. Put another way, net asset value has compounded at 12.5% per annum, whilst the index has managed 2.7%.

Some Observations on the Nature of Comparative Advantages

There are, perhaps, few things finer than the pleasure of finding out something new. Discovery is one of the joys of life and, in our opinion, is one of the real thrills of the investment process. The cumulative learning that results leads to what Berkshire Hathaway Vice-Chairman Charlie Munger calls *"worldly wisdom".* Worldly wisdom is a good phrase for the intellectual capital with which investment decisions are made and, at the end of the day, it is the source of any superior investment results we may enjoy. So, when analysing a firm, one just knows one is on to a good thing when one learns something new and the penny finally drops. And many times more fortunate if that insight can be applied more generally across businesses.

Take, for example, a recent research trip to a Welsh insurance company. The firm's products are nothing special, primary auto insurance sold to customers who buy mainly due to the legal requirement to be insured on the public roads. There is little product differentiation across the industry and the customer purchase decision is usually driven by price. This is a soul-less relationship: it is near on impossible to get customers to love their insurance companies and, for their part, insurance companies don't give the impression they love their customers much either. Be that as it may, the firm we visited has a wonderful track record of financial results going back decades. Not just good by insurance industry standards (a low hurdle to jump if ever there was one), but good by any standards. So, what is going on?

It is tempting when analysing such situations to look for the big thing the firm does right. In effect, one is looking for the smoking gun that explains the firm's success. A smoking gun may be a vivid image, but the world does not always work like that. I should have known better when I asked what big idea had led to the firm's success: "*No, no, Nick, there is no secret sauce here*", one senior executive explained, "*we don't do one thing brilliantly, we do many, many things slightly better than others*". I have heard this line frequently over the last

twenty or so years, and I have always dismissed it as a fig leaf covering the lack of any real corporate advantage. And I think that all this time I may have been wrong.

Take Costco Wholesale: Costco's advantage is its very low-cost base, but where does that come from? Not from low-cost land, or cheap wages or any one big thing but from a thousand daily decisions to save money where it need not be spent. This saving is then returned to customers in the form of lower prices, the customer reciprocates and purchases more goods and so begins a virtuous feedback loop. The firm's advantage starts with 147,000 employees at 566 warehouses making multiple daily decisions regarding U$68bn worth of annual costs. It's thousands of people caring about thousands of things a little more, perhaps, than may occur at other retailers. No fig leaf here. When Zak and I met Jim Sinegal, Costco's CEO, Jim suddenly stopped in mid-sentence, his face lit up, "*I must show you this*" he said and disappeared into a filling cabinet. He emerged with a memo from 1967 written by Sol Price, Fed-Mart's founder (the predecessor firm to Costco), "*here you can have a copy of this*" he said, and that copy is framed on our office wall. The memo says this,

> *"Although we are all interested in margin, it must never be done at the expense of our philosophy. Margin must be obtained by better buying, emphasis on selling the kind of goods we want to sell, operating efficiencies, lower markdowns, greater turnover, etc. Increasing the retail prices and justifying it on the basis that we are still "competitive" could lead to a rude awakening as it has with so many. Let us concentrate on how cheap we can bring things to the people, rather than how much the traffic will bear, and when the race is over Fed-Mart will be there".* [The best summary of the business case for scale economics shared we have come across].

Forty-three years later, almost to the day, and Costco is the most valuable retailer of its type in the world. Cultures that care about the little things <u>all the time</u> are very hard to create and, in the opinion of Amazon.com founder Jeff Bezos, almost impossible to create if not put in place at the firm's genesis. (It may be worth noting that, in contrast, most businesses cut costs sporadically, often-in response to a crisis, as part of plan B as it were. With their backs to the wall, good costs (investment spending) may be cut as well as bad costs (bloat), with the result that the savings prove counter- productive in the long run). The Welsh insurance company was founded by a man who cared passionately about the little savings, and he institutionalised this orientation into the culture of the firm from the beginning. It was the way they lived; it was part of their raison d'être: it was plan A. And they shared that saving with their customers. Although I was slow to grasp the point, the insurance firm's advantage was very similar to that which had built Costco and builds Amazon today.

My mistake in not recognising that these businesses share similar roots (*"D'oh!"* as Homer Simpson might say) might be termed by psychologists as a *"framing"* error. When looking for an explanation to a situation the brain tends to latch on to what can be easily found to "frame" the situation, and if what is easily found is also vivid, then the brain stops looking for another explanation. I had gone looking for what I thought ought to be there, a vivid smoking gun such as a brand name, a location, a clever re- insurance contract, or a patent. However, there is no a priori reason why a comparative advantage should be one big thing, any more than many smaller things. Indeed, an interlocking, self-reinforcing network of small actions may be more successful than one big thing. Let me explain.

Take a one-big-thing-firm, such as a drug company, for example. A successful drug firm does

not need to be particularly good at marketing, manufacturing, or research and development for that matter if, through a patent, it has a legal monopoly on a drug. But just look, if you will, at how fragile the drug company ecosystem is. A rival could displace it at any time with a better chemical and the firm would be left with little to fall back on, certainly not marketing, R&D, and manufacturing. Its period of exceptional profitability may therefore be quite finite and the big drug firms wrestle with this issue today.

Contrast this with a scale economics business: To better an incumbent's cost base a rival would have to be superior at, not one thing, but a million little actions – a far harder task. Amazon's letter to shareholders this year contains the following section:

> *"…We believe that focusing our energy on the controllable inputs to our business is the most effective way to maximise our financial outputs over time…we've been using this same annual [goal setting] process for many years. For 2010, we have 452 detailed goals, with owners, deliverables and targeted completion dates".*

At Amazon one employee initiative to remove the light bulbs from the vending machines (really!) saves the firm U$20,000 per annum! At the Welsh insurance company the penny dropped: firms that have a process to do many things a little better than their rivals may be less risky than firms that do one thing right because their future success is more predictable. They are simply harder to beat. And if they are harder to beat then they may be very valuable businesses indeed.

The Subtle Implication for Long-Term Investors

The opportunity for Nomad's investors comes from realising to whom these firms are more valuable. Certainly not the short-term investor, who will be indifferent as to whether Amazon, Asos or Air Asia will be the most valuable retailer/fashion e-tailer/airline in the world in ten years' time. The institutional fund manager may be similarly indifferent. This collective professional myopia presents the true long-term investor with the spoils, but the mechanism for this wealth transfer from short-term holder to long-term investor is subtle.

When investors value a business they have in their minds, consciously or not, a decision tree with the various branches leading to all possible futures and probabilities attached to those branches. The share price can be thought of as an aggregate of the probability weighted value of these branches. The problem, as Santa-Fe Institute scientist Ole Peters most recently pointed out (SFI Bulletin 2009, volume 24), is that this is not an accurate representation of what the future will be! The next step for the company will not be to visit all of those branches simultaneously. In reality the firm in question will only visit one of those branches before proceeding to the next and so on. Short-term investors spend their time trying to handicap the odds of each branch.

Guessing which-branch-next can be a crowded trade, but it's fine, as far as it goes. However, it rather misses the big picture, in our opinion. We would propose that some businesses, once they have progressed down the first favourable branch, stand a much greater chance of progressing down the second favourable branch, and then the third, as a virtuous feedback loop builds. The process takes time, but a favourable result at any one stage increases the chances of success further down the line, as it were. Think of it as a business' culture.

Take Air Asia: The firm was born with a no frills, cost culture with the result that, we estimate, it is the lowest cost airline in the world: this is favourable branch one. Favourable branch two: the employees take pride in the firm, suggest their own savings and the savings are implemented. Branch three: the savings exceed the peer group and are given back to customers in the form of lower prices. Branch four: the customer reciprocates and revenues rise. Branch five: further scale advantages lead to more savings per seat flown. Branch six: further customer reciprocation. Branch seven: the network builds and crowds out other, less efficient airlines. Branch eight: competitors go out of business?

The point is that the odds associated with any of these branches are not static but, in a hugely important way, they improve as one travels from branch to branch. Imagine the payoff in a game with these attributes? If investors recognise the inevitability of these improving odds they are also usually indifferent to them, perhaps viewing the eventual greatness of a business as simply outside their time horizon. Nevertheless, the effect of this indifference on share prices is to leave long-term success undiscounted (note, share prices are an aggregate of all possible future worlds, not the actual future) and the rewards from that observation may be enormous for the patient few. We certainly expect so.

The Following Paragraph is Important

The thoughtful, easy patience of our clients therefore has an important part to play in the process. It is the rational way to respond to our investment in firms that are playing a long game, as it completes the favourable ecosystem. Please do not under- estimate the importance of your role in the process. You do us a great honour by being a calm hand on the tiller. Thank you.

Readers that make it to the end of our letters (we may be flattering ourselves), including the footnotes (we may be deluding ourselves!), may recall the story we retold of the Ferrari 250 GTO bought by a collector in the 1960s for the effective price of £750. The beauty of the story is that although the car is one of the most valuable in the world, the collector still has his car today. A different 250 GTO has recently changed hands, and the price…US$20m! It makes Nomad's tripling look rather pedestrian. Better get back to those annual reports.

As always, *"take heart and look to the horizon…"*. Enjoy the summer.

Yours sincerely

Nicholas Sleep

Our Footnotes

There is, we are told, a ticket kiosk at a railway station somewhere in India with a sign above the window that reads, "*No Bamboozlement Here*". It is in the same spirit that we attempt these cautionary words. Disclaimers boil down to the following statement – if you choose to believe any of this, then you are on your own. Yikes! It will be hard for us to escape this

conclusion too, and it makes little sense for us to do anything but disclaim liability for errors, omissions and offer no warranties – please, check everything we say, let us know when we are wrong and forgive our errors. We do promise you this: we are human, we make mistakes, but our mistakes are honest ones. Although we do not intend to mislead, we also cannot guarantee the information in these letters, or that some of our ideas may be interpreted in ways we do not intend. As investors we are trying to do as good a job as we can and we write these letters in good faith to inform and educate investors on our actions and thinking in the context of the Partnership. We hope that they will be read in the same spirit in which they are written.

Common sense tells you that the price and value of shares can vary greatly, and whilst we do not aim for this, we also recognize that permanent impairment of capital is possible. Our Partnership is concentrated in relatively few investments, perhaps more concentrated than many others, and as such our results will be more volatile than many of our peers. Nomad is also a very long-term Partnership. We do not think it is suitable for investors with time frames less than five years. We also do not think Nomad is suitable for investors overly conflicted with principal-agent issues. If you are at all uncomfortable then, we suspect, Nomad is not for you.

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Some notes on Housekeeping (stay awake at the back!)

This is the interim letter and, combined with the annual letter sent to investors in January, is the main format we use to communicate to our investors. In these letters we have tried to honestly and thoroughly provide all the information we would seek if the tables were turned and we were investors in someone else's fund. We own shares for very long periods and we are conscious that more frequent or detailed reporting may be unnecessary and even counterproductive. A copy of our magnum opus, the full Collection of Letters, is available upon request from Amanda at Galactic HQ (amanda@sleepzakaria.co.uk). Lots of coffee required. Investors in Nomad will also receive a full copy of our Schedule of Investments by separate post, every six months, which lists all of our investments in detail. In addition, in the spring you will receive Nomad's annual accounts, audited by Ernst and Young, which was produced in record time this year and sent to investors in early March. Each month statements of account are sent to you by Nomad's administrator (not us!), Phoenix Financial Services in Dublin, Ireland. Please call Gavin Gray and his team (+353 18 450 8161) with your statement queries. As should taxable US investors as Gavin and his team prepare their tax certificates (1099s) as well. Clients should always consider Zak and me to be available at the end of the phone, and our (somewhat shabby) front door open to visitors. And whilst we welcome your company, please don't be too disappointed if we don't have much that is new to say: we hope it is in the letters already.

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which they too have something to contribute. We do not mean to suggest that there is a partnership, in the strict, legal, sense of the word, between the shareholders in the feeder fund and Nomad, or Sleep, Zakaria and Company, Ltd.

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Nomad Investment Partnership

Interim Letter

For the period ended June 30th, 2011.

Cumulative results to June 30th, 2011.	Nomad Investment Partnership	MSCI World Index (net) US$
Trailing:		
One year	73.7%	30.5%
Two years	139.9	43.8
Three years	100.5	1.4
Four years	64.0	-9.4
Five years	112.5	12.4
Six years	134.0	30.9
Seven years	195.3	44.1
Eight years	316.6	78.7
Nine years	412.5	74.3
Since inception (Sept 10th 2001)	487.5	64.7
Annualized since inception		
Before performance fees	20.9%	5.5%
After performance fees	17.7	
Value of a dollar invested at inception (pre fees)	$5.87	$1.65

The figures above are unaudited, presented on a cumulative, percentage gain basis and, as ever, are before fees. We present results in this way as Nomad's refundable performance fee and time dependent performance fee hurdle mean that the net-of-all- fees results will vary with subscription date, and from investor to investor. Partners will, therefore, each have their own, unique, net-of-all fees experience of investing in Nomad. As a guide, we have also detailed the net-of-all-fees results from one point in time, in this case since inception. An index is used in the table to place our results in context with a broad swathe of share prices from around the world. We do not feel strongly about the merits of the index we have chosen, and partners may wish to use another. Whatever the yardstick, we ask only that Nomad be compared over the very long-term. Below, the same pre-fee results are presented in discrete annual increments. In our opinion, it is probably the upper table that is most useful in assessing long-term investment performance.

Calendar Year Results:	Nomad Investment Partnership	MSCI World Index (net) US$
2011 year to date	17.5%	6.3%
2010	43.9	11.8
2009	71.5	30.0
2008	-45.3	-40.7
2007	21.2	9.0
2006	13.6	20.1
2005	9.2	9.5
2004	22.1	14.7
2003	79.6	33.1
2002	1.3	-19.9
2001 (inception Sept 10th 2001)	10.1	3.6

A US dollar invested in Nomad at inception has grown to be worth $5.87 before fees, as of June 30th, whilst a dollar invested over the same period in the average share, as reflected in the index above, would be worth around $1.65. Put a slightly different way, net asset value (i.e. after fees) has compounded at 17.7% per annum, whilst the index has managed 5.5%.

Some observations on mental shortcuts

At Professor Richard Zeckhauser's Behavioural Finance course at the JFK School of Government at Harvard University, the following note was scribbled by Professor Zeckhauser and passed to a fellow panelist, whilst both men hosted a discussion group with an audience of investment professionals.

Zeckhauser: *One of our participants is buying Zimbabwean securities, which are priced at a small percentage of Net Asset Value. Would you try to invest with him?*

Other panelist: *No!* (the exclamation mark is original)

Oh dear! We suspect that the other panelist made up his mind the moment he saw the word Zimbabwe and that blocked his thinking of the gain that could be made from such low prices. We all do this to some extent. It is so easy to screen out a good idea because of a bad association. As Charlie Munger quipped at a speech given at the same course a few years earlier "*the human mind is a lot like the human egg*": once one sperm has entered then all the other sperm are locked out. A market research company we visited recently told us that most car advertising is read after the purchase decision for the car has already been made! And it was read only then to gather information to convince other people the purchase decision was rational *("no, no it wasn't the car's sexy shape – this car has twelve airbags and emits 170g of carbon per mile!")* We have all done it. The human mind has these learnt biases, short cuts, fears, habits, and associations and, in the case of the panelist above, they can stop us from making rational decisions.

An odd question popped into our heads the other day: why are internet retailers growing so slowly? Unlike traditional retailing, where growth is bounded by the physical constraints of a

building's size, location, and opening hours, internet retailing has no such constraints. We could all, for the sake of argument, decide to do all our shopping online next week, and Amazon et al would take the orders. Odd, then, that the growth rate in revenues at the main internet-based retailers is, very broadly, comparable to that enjoyed by a physically constrained retailer, say, Wal-Mart, at a similar stage in its development. So, what is going on?

If Frank Capra is right that "*a hunch is creativity trying to tell you something*" then our hunch is that the growth rate in online retailing is held back by consumers' psychological biases. We are all creatures of habit, and most of us give up comfort blankets quite reluctantly. It therefore takes time for a new regime to be adopted and, for instance, to buy books online instead of buying them at the local store. Perhaps then, after we have become comfortable with buying books online, we may experiment with something else, trainers say, or magazine subscriptions, or plant pots, or bike saddles or grocery. The process requires a good retail experience (price, convenience, selection etc.), the building of trust, and is often fanned with personal recommendations (social proof) and even bragging rights for the early adopters. The process is more of a drift than epiphany. Our hunch is that the growth rate in online retailing is regulated, not by physical capacity, although that can be a limiting factor, but more by the rate at which our own incumbent habits and associations are replaced with more rational behaviour.

<u>The models we use may not be the right ones</u>

In high street retailing we can estimate, broadly, what revenue growth for each firm will be next year: it is a product of same store sales growth plus any new stores. We might not be precisely correct about either number, but the range is bounded and so we can make a reasonable, "*generally-right*" (as opposed to "*precisely wrong*") estimate. When investors think about the future of a business, they often have in mind the assumption that growth rates slow with time, as competition ekes away advantages and market places become saturated. Predicted revenue growth rates (used in valuation models) therefore start high and end low. This is especially true for firms that are quite large already.

However, if the rate of growth in internet retailing is a product of attitude, rather than assets, then, the fact that a firm is quite large already does not necessarily tell you that its growth rate is set to slow. The widely held presumption that regression to the mean begins the moment the analyst picks up their pen, risks being wrong footed as a result. Two years of forty percent revenue growth, for example, will result in revenues doubling in twenty-four months and regression to the mean based estimates would be out by almost a factor of two! That did not take long. In other words, although some online retailing firms may be quite large, they may also be quite young. In our opinion, it is this realisation that has partially driven the revaluation of internet retailers these last few years.

<u>More on the principal agent conflict, and the lack of trust…</u>

Whilst Zak and I do enjoy solving the investment problem, as it were, we are less enraptured with the tone of the investment industry, especially the state of industry governance. The rules embedded in regulation, accounting and "due diligence" may be well meaning and appear justified by past fund managers' rogue behaviour (and our industry has some choice rogues!), but their enforcement and adherence drains the life out of the innocent and would challenge the patience of Job. Just as sapping is that it is impossible for practitioners to earn their way

out of over-bearing governance through good behaviour. Trust, once the cornerstone of the industry and derivation of words such as unit trust, investment trust, trustee and so on, has been all but lost. It is a great shame.
The cynicism may be endemic, but it is no substitute for wisdom. We enjoyed the following paraphrased exchange related to us by one of the fund management industry's stars of a conversation he had had with an analyst:

Analyst: *your performance is without peer in recent times, but if you did not own company x and company y over the last few years your performance would have been only average.*

Star fund manager: *but that's the point, I did!*

The spirit in which the industry conducts its affairs is not always mankind at its best, and sometimes it does not bring out the best in people. What is required, in our opinion, is the rebuilding of a web of deserved trust between participants. We hope that the Nomad model, with its patience, reciprocated trust, and calm, is a small step in the right direction. It is rather wonderful that it is also a financially profitable way to behave.

There is a lot to celebrate.

There is a lot to celebrate at Galactic HQ. It might be that the weather has turned, it might be the bumper honey harvest from the bees on HQ roof (I kid you not, ask Zak), it might be Nomad's performance (but I don't think so). In the next few months we have lots to be grateful for: we celebrate five years of Sleep, Zakaria and Company, ten years since Nomad's formation and twenty years for each of us in the industry. We are grateful to be here, and we recognise that our genesis was pretty unique (thank you, Jeremy). We also have a pretty special group of investors: thank you for the trusting and wise role you play in the Nomad ecosystem. We shall raise a glass (of honey tea!) to you all when the crop is in.

Yours sincerely

Nicholas Sleep

Our Footnotes

There is, we are told, a ticket kiosk at a railway station somewhere in India with a sign above the window that reads, "*No Bamboozlement Here*". It is in the same spirit that we attempt these cautionary words. Disclaimers boil down to the following statement – if you choose to believe any of this, then you are on your own. Yikes! It will be hard for us to escape this conclusion too, and it makes little sense for us to do anything but disclaim liability for errors, omissions and offer no warranties – please, check everything we say, let us know when we are wrong and forgive our errors. We do promise you this: we are human, we make mistakes, but our mistakes are honest ones. Although we do not intend to mislead, we also cannot guarantee the information in these letters, or that some of our ideas may be interpreted in ways we do not intend. As investors we are trying to do as good a job as we can and we write these letters in good faith to inform and educate partners on our actions and thinking in the context of the Partnership. We hope that they will be read in the same spirit in which they are written.

Common sense tells you that the price and value of shares can vary greatly, and whilst we do not aim for this, we also recognize that permanent impairment of capital is possible. Our Partnership is concentrated in relatively few investments, perhaps more concentrated than many others, and as such our results will be more volatile than many of our peers. Nomad is also a very long-term Partnership. We do not think it is suitable for investors with time frames less than five years. We also do not think Nomad is suitable for investors overly conflicted with principal-agent issues. If you are at all uncomfortable then, we suspect, Nomad is not for you.

The Nomad Investment Partnership has had two General Partners, Marathon Asset Management for the period from inception in 2001 to September 2006, and Sleep, Zakaria and Company from September 2006 until the present day. Zak and I have been responsible for the investment decisions of the Partnership since inception, formerly as employees of Marathon and then at our own firm, which was set up for the purpose of managing Nomad. The adventure continues…

Some Notes on Housekeeping (stay awake at the back!)

This is the interim letter and, combined with the annual letter sent to investors in January, is the main format we use to communicate to our partners. In these letters we have tried to honestly and thoroughly provide all the information we would seek if the tables were turned and we were investors in someone else's fund. We own shares for very long periods and we are conscious that more frequent or detailed reporting may be unnecessary and even counterproductive. A copy of our magnum opus, the full Collection of Letters, is available upon request from Amanda at Galactic HQ (amanda@sleepzakaria.co.uk). Lots of coffee required. Partners in Nomad will also receive a full copy of our Schedule of Investments by separate post, every six months, which lists all of our investments in detail. In addition, in the Spring you will receive Nomad's annual accounts, audited by Ernst and Young. Each month statements of account are sent to you by Nomad's administrator (not us!), Phoenix Financial Services in Dublin, Ireland. Please call Gavin Gray and his team (+353 18 450 8161) with your statement queries. As should taxable US investors as Gavin and his team prepare their tax certificates (1099s) as well.

Partners should always consider Zak and me to be available at the end of the phone and our (somewhat shabby) front door open to visitors. And whilst we welcome your company, please don't be too disappointed if we don't have much that is new to say: we hope it is in the letters already.

Legal Footnotes

Performance numbers are produced by Phoenix Fund Services, Nomad's administrator, and are audited by Ernst and Young in their annual audit, which follows publication of our letters.

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Nomad Investment Partnership

Annual Letter

For the period ended December 31st, 2011

To December 31st, 2011:	Nomad Investment Partnership	MSCI World Index (net) US$
Trailing:	%	%
One year	-9.9	-5.5
Two years	29.7	5.7
Three years	122.5	37.3
Four years	21.7	-18.6
Five years	47.5	-11.2
Six years	67.6	6.6
Seven years	83.0	16.7
Eight years	123.4	33.9
Nine years	301.3	78.2
Ten years	306.5	42.8
Since inception (Sept 10th, 2001)	347.6	47.9
Annualized since inception:	%	%
Before performance fees	15.7	3.9
After performance fees	13.6	

The figures above are unaudited, presented on a cumulative, percentage gain basis and, as ever, are before fees. We present results in this way as Nomad's refundable performance fee and time-dependent performance fee hurdle means that the net-of-all- fees results will vary with subscription date and so from investor to investor. Partners will, therefore, each have their own, unique, net-of-all fees experience of investing in Nomad. As a guide, we have also detailed the net-of-all-fees results from one point in time, in this case since inception. An index is used in the table to place our results in context with a broad swathe of share prices from around the world. We do not feel strongly about the merits of the index we have chosen, and partners may wish to use another. Whatever the yardstick, we ask only that Nomad be compared over the very long-term. Below, the same pre-fee results are presented in discrete annual increments. In our opinion, however, it is probably the table overleaf that is most useful in assessing long-term investment performance.

To December 31st:	Nomad Investment Partnership	MSCI World Index (net) US$
Calendar Year Results:	%	%
2011	-9.9	-5.5
2010	43.9	11.8
2009	71.5	30.0
2008	-45.3	-40.7
2007	21.2	9.0
2006	13.6	20.1
2005	9.2	9.5
2004	22.1	14.7
2003	79.6	33.1
2002	1.3	-19.9
2001 (inception Sept 10th, 2001)	10.1	3.6

A US dollar invested in Nomad at inception has grown to be worth $3.71, after fees, as of January 1st, 2012, whilst a dollar invested over the same period in the average share, as reflected in the index above, would be worth around $1.48. Put another way, net asset value (i.e. after fees) has compounded at 13.6% per annum, whilst the index has managed 3.9%.

As a young(er) investment analyst, I once met with the CFO of a large US West Coast bank. I was anxious beforehand, it is not easy for a young man to hold his own with a senior executive of any business, let alone one as opaque as a bank. I forget which question I asked, no doubt it was cloaked in the latest management buzzwords of the day but, at any rate, it was so overly complicated that it elicited the following response,

"*Look, son, at the end of the day it is all about cash-in, and cash-out*".

Oh dear! Well, the put down could have been worse, and probably deserved to be worse. That was a lesson learnt: keep it simple, it is all about cash-in, and cash-out.

Zak and I run a single partnership that has long-term investments in the shares of, for all that matters, ten companies, all paid for with cash. We own the investment advisor that manages the partnership and, ordinarily, we are closed to incremental subscriptions and so free of marketing obligations. That's it. It is terribly, terribly simple, but it is not easy. It is not easy because there are so many distractions: news items, the soap opera of the stock market, macro-economic events, politics, currencies, interest rates, principal/agent temptations, regulation, compliance, administration and so on - this list is not exhaustive! It is all too easy to make things more complicated than they need to be or, to invert, it is not easy to maintain discipline. One trick that Zak and I use when sieving the data that passes over our desks is to ask the question: does any of this make a meaningful difference to the relationship our businesses have with their customers? This bond (or not!) between customers and companies is one of the most important factors in determining long-term business success. Recognising this can be very helpful to the long-term investor.

For example, what investors needed to understand, and attribute sufficient weight to, in order to hold Colgate-Palmolive shares for the last thirty years, and so enjoy the fifty-fold uplift in share price, was the economics of incremental products (often referred to as "line extensions", from the first "Winterfresh" blue minty gel in 1981 to "Total Advanced Whitening" today)

and the psychology of advertising. Other items were important too, discipline in capital spending in particular, and there were lots of other things that seemed important along the way (stock market crises, country crises, management crises and so on) but it was the success and economics of line extensions and advertising that, in our opinion, was what the long-term investor really needed to embrace. A similar story can be told at Nike and Coca-Cola (manufacturing savings funneled into dominant advertising) or Wal-Mart and Costco (scale savings shared with the customer). Recognising and correctly weighing this information in-spite of the latest news flow is a matter of discipline, and it is that discipline that is so richly rewarded in the end.

The simple deep reality for many of our firms is the virtuous spiral established when companies keep costs down, margins low and in doing so share their growing scale with their customers. In the long run this will be more important in determining the destination for our firms than the distractions of the day. Jeff Bezos, founder of Amazon, made the following point in a recent interview in Wired magazine:

> *"There are two ways to build a successful company. One is to work very, very hard to convince customers to pay high margins [the Colgate, Nike, Coca-Cola model alluded to above]. The other is to work very, very hard to be able to offer customers low margins [the Wal-Mart, Costco, AirAsia, Amazon, Asos model]. They both work. We're firmly in the second camp. It's difficult – you have to eliminate defects and be very efficient. But it's also a point of view. We'd rather have a very large customer base and low margins than a small customer base and higher margins."*

Although Mr. Bezos does not mention it, one reason he prefers Amazon to be a large company with small margins is that if he shares the efficiency benefits that come with growth with his customers, he turns size, frequently an anchor on business performance, into an asset. In other words, the moat surrounding the firm deepens as the firm grows. So, having shared low costs with their customers, how are our firms' relationships with their customers going? One way to look at this is revenue growth. The weighted average revenue growth of Nomad's firms is currently over thirty percent per annum. Note: this is organic growth with, if anything, falling prices and no acquisitions in a time of austerity and little economic growth. It would appear to us that the company – customer relationship is in rude health. That's the cash-in. And the cash-out? Keeping it simple again: return on capital at Nomad's firms is over twice that of competing businesses.

<u>The real risks are not those in the newspapers</u>

It is not that the garden will always be rosy. There are lots of ways that our firms could drain the moats that surround them. One example might be wide-scale credit card fraud following the loss of customer information (perhaps say after a careless employee left a laptop in a taxi). Yikes! If the neglectful firm made light of the situation, pretending it was a small loss and no harm was done, then they had better be telling the truth. Making light of a far more serious situation, perhaps as News International may be finding out today, risks breaking even a long-standing bond of trust. So, in our opinion, it won't be the on-line fraud, per se, or, heaven forbid, an airplane crash at AirAsia, that could ruin our firms, but a disingenuous response to a problem.

One of the lovely aspects of human nature is the ability to forgive. If, for example in our hypothetical on-line fraud situation, the firm comes clean, is candid in explaining the problem,

learns its lesson, makes good on the losses and say, puts twenty dollars into each of its customer's accounts, or buys them chocolates or roses, then the long- term relationship with the customers has probably not been harmed too much and, if done properly, may even have been enhanced. When we asked the founder of AirAsia what he would do if his firm put a plane in a swamp (!), he raised both hands in a gesture of having nothing to hide. That response strikes us as very healthy.

Indeed, a greater risk to our businesses may come as a by-product of success – be it bubble valuations in the stock market and/or, political risk in the form of anti-trust like pressures. For example, as retailing moves increasingly on-line what is the probability of an on-line retailing tax? Or an on-line retailing tax that is higher than VAT or GST? This is conjecture, of course, but we mention this to illustrate that the long-term risks our companies face are not those that dominate the newspapers and headlines today (credit crises, housing crises, budget crises, Euro crises and so on) but those events that could prevent them from reaching their potential. It is these risks that Zak and I try to identify and understand.

Black Arrow and Accounting

Eagle-eyed investors may have noticed that Black Arrow Group plc, a firm valued at nil in the Partnership, has recently declared a dividend of one pence per share. A one- penny dividend from a worthless holding means that, in accounting terms, we have created money out of nothing! The Alchemists were not that good, so what has been going on? Black Arrow was founded and continues to be run by the octogenarian Arnold brothers, who own or control around eighty-eight percent of the shares outstanding. The shares were de-listed from AIM (a UK stock exchange) in February 2010. At the time, book value approximated one pound per share, although the last traded share price was fifty-two pence. There is no market for the shares, and no prospect of a market for the shares as the brothers do not wish to own more (we have tried), and so the investment has been valued at nil in the Partnership (with a paper loss of around one tenth of one percent of net asset value). Zak and I know the business is troubled but it is also not worth nothing; then again to assign a positive value would be just as arbitrary as we could not give you cash for your shares either - so zero it is. Almost all valuations are wrong, in effect, and in the case of Black Arrow, although de-listed and in poor health, the firm has continued to operate with the resultant one pence dividend. Enjoy it whilst it lasts. We remain hopeful, but not optimistic, that the dividend alchemy will continue.

Accountants

Nomad has had the same accountants for eleven years. As with many outsourced relationships the quality of service has a tendency to decline with the passing of time, even as the price charged rises with the years. In the end the rubber snaps, and we have recently appointed a senior partner at a new accounting firm for approximately two-thirds of the money we were paying for the services of the old accounting firm. You should expect the Nomad accounts to be with you in late March as usual and, as we have retained the incumbent accountant for the US and UK tax filings, these should also run as normal.

A Word on Education

Readers may recall that a few years ago I became involved in a failed school in South East London. Academic standards at the school had slipped to the point that the government had taken back control of the school from the local education authority and handed its running to

an independent foundation. The school's new status as an "academy" has allowed it to be governed relatively free from constraints and with the result that, now in its fourth year, the eighty-five percent exam failure rate that was inherited, will soon be turned into an eighty-five percent pass rate. The UK school inspectorate recently awarded the school an "outstanding" rating. I don't think they knew what to do with me as a governor, and so I was put in charge of the finance committee (type-cast again). From this vantage point I can see that the turnaround has been achieved with no extra funding – the school's revenues this year match that of its failed predecessor. It can be tempting to think that more money is the answer to problems but it strikes us that it is not the money you have, but the choices you make, that count.

Keep your eyes on the horizon.

It is not the easiest time to be an equity investor. The factors that have led to the devaluation of equities relative to almost all other investment possibilities (perhaps with the exception of housing) have little to do with how well companies have been managed. Be that as it may, Nomad's firms are, on average, so cost advantaged compared to many of their competitors that the worse it gets for the economy, the better it gets for our firms from a competitive position. The trick to being a good investor, over the long-term, is to maintain your long-term oriented discipline. Bezos again:

> *"Our first shareholder letter, in 1997, was entitled, "It's all about the long-term". If everything you do needs to work on a three-year time horizon, then you're competing against a lot of people. But if you are willing to invest on a seven-year time horizon, you're now competing against a fraction of those people, because very few companies are willing to do that. Just by lengthening the time horizon, you can engage in endeavours that you could never otherwise pursue. At Amazon we like things to work in five to seven years. We're willing to plant seeds, let them grow – and we're very stubborn. We say we are stubborn on the vision and flexible on the details".*

The uniqueness of Nomad's ecosystem is the look-through consistency of approach of its participants, from Mr. Bezos and the good folks that run Nomad's other businesses, to Zak and me and on to our investing partners. We are all choosing to see the world in the same way. It is very simple and, because it is the road-less-travelled, it is also very valuable, but it is not always easy. Please, never underestimate the importance of your role in the ecosystem. It is for that reason we named Nomad a Partnership, not a fund.

We wish you a very Happy New Year

Yours sincerely

Nicholas Sleep

Our footnotes

There is, we are told, a ticket kiosk at a railway station somewhere in India with a sign above the window that reads, "*No Bamboozlement Here*". It is in the same spirit that we attempt

these cautionary words. Disclaimers boil down to the following statement – if you choose to believe any of this, then you are on your own. Yikes! It will be hard for us to escape this conclusion too, and it makes little sense for us to do anything but disclaim liability for errors, omissions and offer no warranties – please, check everything we say, let us know when we are wrong and forgive our errors. We do promise you this: we are human, we make mistakes, but our mistakes are honest ones. Although we do not intend to mislead, we also cannot guarantee the information in these letters, or that some of our ideas may be interpreted in ways we do not intend. As investors we are trying to do as good a job as we can and we write these letters in good faith to inform and educate partners on our actions and thinking in the context of the Partnership. We hope that they will be read in the same spirit in which they are written.

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Some notes on housekeeping (stay awake at the back!)

This is the annual letter and, combined with the interim letter sent to investors in July, is the main format we use to communicate to our partners. In these letters we have tried to honestly and thoroughly provide all the information we would seek if the tables were turned and we were investors in someone else's fund. We own shares for very long periods and we are conscious that more frequent or detailed reporting may be unnecessary and even counterproductive. A copy of our magnum opus, the full Collection of Letters, is available upon request from Amanda at Galactic HQ (amanda@sleepzakaria.co.uk). Lots of coffee required. Partners in Nomad will also receive a full copy of our Schedule of Investments by separate post, every six months, which lists all of our investments in detail. In addition, in the Spring you will receive Nomad's annual accounts, audited by our new accountant Grant Thornton. Each month statements of account are sent to you by Nomad's administrator (not us!), Phoenix Financial Services in Dublin, Eire. Please call Gavin Gray and his team (+353 18 45 8161) with your statement queries. As should taxable US investors as Gavin and his team prepare their tax certificates (1099s) as well.

Clients should always consider Zak and me to be available at the end of the phone and our (somewhat shabby) front door open to visitors. And whilst we welcome your company, please don't be too disappointed if we don't have much that is new to say: we hope it is in these letters already.

Legal footnotes

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Nomad Investment Partnership

Interim Letter

For the period ended June 30th, 2012.

Cumulative results to June 30th, 2012.	Nomad Investment Partnership	MSCI World Index (net) US$
Trailing:		
One year	-5.4%	-5.0%
Two years	64.2	24.0
Three years	126.8	36.6
Four years	89.5	-3.7
Five years	55.0	-13.9
Six years	100.7	6.8
Seven years	121.1	24.4
Eight years	179.2	36.9
Nine years	293.7	69.8
Ten years	384.2	65.6
Since inception (Sept 10th 2001)	455.2	56.5
Annualized since inception:		
Before performance fees	17.2%	4.2%
After performance fees	15.1	
Value of a dollar invested at inception (pre-fees)	$5.55	$1.56

The figures above are unaudited, presented on a cumulative, percentage gain basis and, as ever, are before fees. We present results in this way as Nomad's refundable performance fee and time dependent performance fee hurdle mean that the net-of-all- fees results will vary with subscription date, and from investor to investor. Partners will, therefore, each have their own, unique, net-of-all fees experience of investing in Nomad. As a guide, we have also detailed the net-of-all-fees results from one point in time, in this case since inception. An index is used in the table to place our results in context with a broad swathe of share prices from around the world. One of the reasons that Nomad is Nomad is that Zak and I spend almost no time thinking about stock market indices. We do not feel strongly about the merits, or otherwise, of this particular index and we would encourage partners to employ another if they feel it is more appropriate. Whatever the yardstick, we ask only that Nomad be compared over the very long-term. Below, the same pre-fee results are presented in discrete annual increments. In our opinion, it is probably the upper table that is most useful in assessing long-term investment performance.

Calendar Year Results:	Nomad Investment Partnership	MSCI World Index (net) US$
2012 year to date	23.3%	5.9%
2011	-9.9	-5.5
2010	43.9	11.8
2009	71.5	30.0
2008	-45.3	-40.7
2007	21.2	9.0
2006	13.6	20.1
2005	9.2	9.5
2004	22.1	14.7
2003	79.6	33.1
2002	1.3	-19.9
2001 (inception Sept 10th 2001)	10.1	3.6

A US dollar invested in Nomad on September 10th 2001, when Zak and I began managing the Partnership, has grown to be worth $5.55 before fees, as of June 30th, whilst a dollar invested over the same period in the average share, as reflected in the index above, would be worth around $1.56. Put a slightly different way, net asset value (i.e. after fees) has compounded at 15.1% per annum, whilst the index has managed 4.2%.

Information as Food

The castaway for the seventieth anniversary edition of BBC Radio 4's Desert Island Discs was the naturalist, David Attenborough. Kirsty Young, the host, introduced David Attenborough as follows:

> Kirsty Young: *"He has seen more of the world than any person who has ever lived. The depth of his knowledge and breadth of his enthusiasm have had a fundamental effect on how we view our planet. From sitting hugger-mugger with the mountain gorillas of Rwanda, to describing the fragilities of the flightless Kakapo: the wonders of the natural world are his stock-in-trade. His passion can be traced right back to the days as a lad when he cycled his bike through the Leicestershire countryside trawling for fossils. He says he knows of no deeper pleasure than the contemplation of the natural world. David Attenborough, you visited the North and South Poles, you witnessed all of life in-between from the canopies of the tropical rainforest to giant earthworms in Australia, it must be true, must it not, and it is a quite staggering thought, that you have seen more of the world than anybody else who has ever lived?"*

> David Attenborough: *"Well…I suppose so…but then on the other hand it is fairly salutary to remember that perhaps the greatest naturalist that ever lived and had more effect on our thinking than anybody, Charles Darwin, only spent four years travelling and the rest of the time thinking."*

Oh!

David Attenborough's modesty is delightful but notice also, if you will, the model of behaviour he observed in Charles Darwin: study intensely, go away, and really think. It is

Darwin, he argues, who has contributed more. In other words, Attenborough is saying that the human mind trumps endless data collection. We could be more specific: the frontal cortex of the brain, which is charged with rational thought and information processing, can make more sense of the world, given enough time to think it through, than the senses themselves can make sense of the world.

In today's information-soaked world there may be stock market professionals who would argue that constant data collection is the job. Indeed, it could be tempting to conclude that today there is so much data to collect and so much change to observe that we hardly have time to think at all. Some market practitioners may even concur with John Kearon, CEO of Brainjuicer (a market research firm), who makes the serious point, "*we think far less than we think we think*" - so don't fool yourself!

Whilst Zak and I applaud John Kearnon, we try to take Charles Darwin's approach: de-emphasise the data collection and think. When we study truly great businesses, we find that very often it has been simple human attributes that have led to their success: you feel differently drinking a Coke than a no brand cola or, you may feel differently towards a business that consistently undercuts the competition in price or, a delivery service that literally goes the extra mile and picks up returned items – and the reason you have these feelings, and the stimuli that produce them, have hardly changed in millennia. When we try to understand the factors that made great businesses great, in our opinion, there is lots of time to think.

For example, it is interesting to note that the business model that built the Ford empire a hundred years ago and is illustrated in the chart below (dated 1927), is the same that built Sam Walton's (Wal-Mart) in the 1970s, Herb Kelleher's (Southwest Airlines) in the 1990s or Jeff Bezos's (Amazon.com) today. And it will build empires in the future too. The longevity of the model is not difficult to understand as Jeff Bezos pointed out "*I can't imagine that in ten years from now customers are going to say: I really love Amazon, but I wish their prices were a little higher*" or Amazon was less convenient, or they had less selection.

Chart 1: Production Volumes and Cost (to the consumer) of Ford Cars 1908 to 1924.

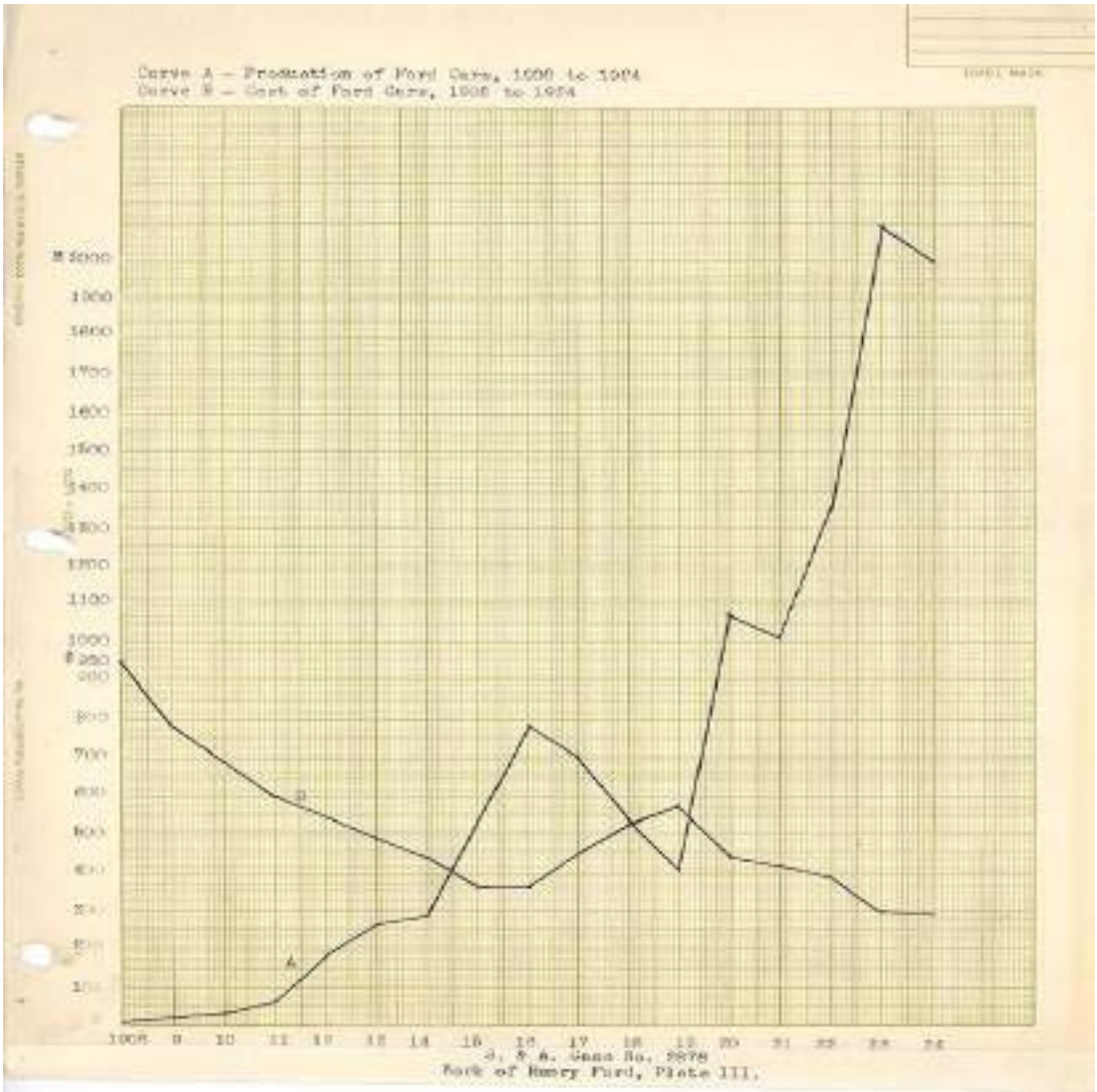

Source: The original 1927 report of the Franklin Institute of the State of Pennsylvania for the Promotion of the Mechanical Arts, recommending "Mr. Henry Ford, of Detroit, Michigan" for the Institute's Elliott Cresson Medal. Line A illustrates the volumes of cars produced, in this case from zero to just over two million per annum. Line B describes the decline in cost (probably to the consumer) of the Model T Ford from U$950 to around U$300. The x-axis refers to the calendar years 1908 to 1924.

Whilst the basic business models that lead to success don't change that much and there aren't that many of them, there is still all that data to deal with. So, how should we think about information?

The journalist and technologist, JP Rangaswami, argues that the most helpful way to think about information is the same way we think about food. His analogy may even have some scientific grounding. In the "Expensive Tissue Hypothesis" anthropologists Leslie Aiello and Peter Wheeler state that for a given body size a primate's metabolic rate is relatively static, what differs from primate to primate is the balance of tissues, most notably the tissues that are expensive to operate, principally the nervous system (including the brain) and the digestive system. In man we have small stomachs and large brains, in pigs the opposite is true. If you want a larger brain you have to live with a smaller gut, and of course the large brain provides the thinking power to organise the world in such a way that one is not required

to constantly graze.

Leaving the science aside, Rangaswami's analogy is wonderfully provocative: in the cultivation of food there are hunter gatherers who are free to roam, or farmers who put up fences to define ownership; the same is true in information, is this not what patent and copyright law is all about? In the preparation of food we can either choose distilled nutrition (a beef steak, for example) or a smorgasbord that allows for the mixing of raw nutrients; the same is true when we are served with a conclusion or instead ask for the underlying data.

And then there are the differences, for instance information does not always have food-like quality standards. There is little-to-no labelling of information presented on television, so fact and fiction can be deliberately fused and have given rise to "docudramas" and "mocumentaries". In literature the same phenomenon exits and has been popularised following the success of books such as Dan Brown's "The Da Vinci Code". To avoid confusion, one solution may be to label information for its fact content, in the same way we label food for its fat content.

And what of the implications of over-consuming? Clay Shirky, the writer and internet consultant, claimed that "*there is no such animal as information overload, only filter failure*" which, using Rangaswami's analogy, implies we need to think about data diets and information exercise to prevent the buildup of toxins and disease. "*When I saw* [Morgan Spurlock's documentary film] *'Super-Size Me'"* joked Rangaswami in a recent speech "*I started thinking, now what would happen if an individual had thirty- one days nonstop Fox News?*" What, indeed?

Information, like food, has a sell by date, after all, next quarter's earnings are worthless after next quarter. And it is for this reason that the information that Zak and I weigh most heavily in thinking about a firm is that which has the longest shelf life, with the highest weighting going to information that is almost axiomatic: it is, in our opinion, the most valuable information. No doubt Charles Darwin would agree.

Our Management Fee

Nomad's cost-reimbursement management fee (Zak and I meet the costs of running the operation each month and are reimbursed at the beginning of the following month) will have an annual run rate of fewer than ten basis points in the near future. We may not quite get there this year, but we are going in that direction. Our management fee was a philosophical decision for us. We thought that in managing the Partnership we had not added value per se, and so the management fee should meet the Partnership's costs, but not be a source of profit. A by-product of this is that as the Partnership grows in size the management fee declines as a percentage of assets, and so the incremental dollar brings something to the party, as it were. In the last six years the management fee has fallen from circa fifty basis points to close to ten, and with little scrimping of costs: Zak's and my salaries have normalised after several years of being in family-holdback-start-up mode, we travel all we need, we purchase the research resources we value, and the rent has just gone up. The saving to our partners, who are mainly charities and endowments for charitable causes, is not trivial: approximately U$15m per annum compared to the industry standard one percent management fee, or over U$30m per annum compared to the hedge fund standard. We mention this to pop the illusion that investment management is a Giffen good (one where, paradoxically, demand rises with price). Indeed, Zak and I would take it a step further and say that incentives (and rules) can de-

moralise behaviour, and what the industry needs more than anything, perhaps, is a sense of right and wrong. It can be hard to separate right from wrong when there is so much money sloshing around. It is a contentious thought but, if one could lower management fees across our peer group, one may end up improving aggregate industry behaviour in the process!

Housekeeping

In March this year we registered as an Exempt Reporting Advisor with the Securities and Exchange Commission. Also earlier in the year Martin Byrne, who has been an independent director of Nomad since its formation, announced his semi-retirement and so resigned as a director. As Martin's firm housed the Partnership's registered office that has also moved (to: 1st floor, Landmark Square, 64 Earth Close, P.O. Box 715, KY1-1107, Grand Cayman, Cayman Islands). Martin has been excellent council over the years, and he knows we wish him well. His replacement is Ralph Woodford, a British Caymanian, former fund manager with Edinburgh Fund Managers and a private banker for Coutts. And of course, he knows we welcome him too.

Lastly, thank you for your patience and the trust implied in continued subscriptions. The last time we wrote to you announcing Nomad's reopening was in October 2008, in the pit of the stock market cycle and, with the exception of a few hardy types who subscribed, you could have heard a pin drop! We had that experience in mind when we decided to reopen in the New Year, but this time demand was such that within two weeks we had to close again – quite a contrast! Zak and I do not like being open, and we are happy with our hermit-like state, minding our own business and getting the job done. Nomad is also of such a size that we may risk storing up problems for the future should we grow too large. We do not think we are navigating those waters yet but we keep an eye out for rocks, nonetheless.

As always, we thank you for your gentle approach,

Yours sincerely

Nicholas Sleep

Our Footnotes

There is, we are told, a ticket kiosk at a railway station somewhere in India with a sign above the window that reads, "*No Bamboozlement Here*". It is in the same spirit that we attempt these cautionary words. Disclaimers boil down to the following statement – if you choose to believe any of this, then you are on your own. Yikes! It will be hard for us to escape this conclusion too, and it makes little sense for us to do anything but disclaim liability for errors, omissions and offer no warranties – please, check everything we say, let us know when we are wrong and forgive our errors. We do promise you this: we are human, we make mistakes, but our mistakes are honest ones. Although we do not intend to mislead, we also cannot guarantee the information in these letters, or that some of our ideas may be interpreted in ways we do not intend. As investors we are trying to do as good a job as we can and we write these letters in good faith to inform and educate partners on our actions and thinking in the context of the Partnership. We hope that they will be read in the same spirit in which they are written.

Common sense tells you that the price and value of shares can vary greatly, and whilst we do not aim for this, we also recognize that permanent impairment of capital is possible. Our Partnership is concentrated in relatively few investments, perhaps more concentrated than many others, and as such our results will be more volatile than

many of our peers. Nomad is also a very long-term Partnership. We do not think it is suitable for investors with time frames less than five years. We also do not think Nomad is suitable for investors overly conflicted with principal-agent issues. If you are at all uncomfortable then, we suspect, Nomad is not for you.

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Nomad Investment Partnership

Annual Letter

Cumulative returns for the period ended December 31st, 2012

To December 31st, 2012:	Nomad Investment Partnership	MSCI World Index (net) US$
Trailing:	%	%
One year	39.8	15.8
Two years	25.9	9.4
Three years	81.2	22.3
Four years	210.7	59.0
Five years	70.5	-5.7
Six years	106.7	2.8
Seven years	134.8	23.5
Eight years	156.7	35.2
Nine years	214.2	55.1
Ten years	464.3	106.4
Eleven years	471.6	63.3
Since inception (September 10th, 2001)	529.4	71.3
Annualized since inception:	%	%
Before performance fees	17.7	4.9
After performance fees	15.1	
Value of a dollar invested at inception (pre-fees)	$6.29	$1.71

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To December 31st:	Nomad Investment Partnership	MSCI World Index (net) US$
Calendar Year Results:	%	%
2012	39.8	15.8
2011	-9.9	-5.5
2010	43.9	11.8
2009	71.5	30.0
2008	-45.3	-40.7
2007	21.2	9.0
2006	13.6	20.1
2005	9.2	9.5
2004	22.1	14.7
2003	79.6	33.1
2002	1.3	-19.9
2001 (inception September 10th)	10.1	3.6

A US dollar invested in Nomad at inception has grown to be worth $4.93, after fees, as of January 1st, 2013, whilst a dollar invested over the same period in the average share, as reflected in the index above, would be worth around $1.71. Put another way, net asset value (i.e. after fees) has compounded at 15.1% per annum, whilst the index has managed 4.9%.

"Don't just do something, stand there!"

The White Rabbit, Alice in Wonderland.

All is quiet at Galactic HQ.

Each day Zak and I shuffle in, swop trainers for slippers, pull up a pile of annual reports and set about analysing and re-analysing our investments. Routinely we try to kill our companies (they can be killed!), and we sift prospective investments. This week: a Glaswegian office property (in administration) – running yield 22%, we kid you not; a Thai big box retailer – scaling laws work in Thailand just as they do in Seattle; and a large pharmaceutical business (whose Chief Executive does not think it worth mentioning a multi-billion dollar acquisition a year after it was made!). The research continues but, as far as purchase or sale transactions in Nomad are concerned, we are inactive. Inactive except, perhaps, for the observation, seldom made, that the decision not to do something is still an active decision; it is just that the accountants don't capture it. We have, broadly, the businesses we want in Nomad and see little advantage to fiddling.

And so it should be. If you did not buy the companies you always wished you had owned when they were on fire sale over the last few years then, when exactly are you going to buy them?

Nomad's businesses, to generalise, are run by their founders and the businesses are blessed with cultures that see part of their identity in low operating costs: Costco Wholesale measures costs in basis points and at Amazon.com they take the light bulbs out of the vending machines

to save money. In another sphere, the Olympic Team GB Cycling coach and Sky Tour de France Chief (now Sir) Dave Brailsford might refer to this type of behaviour as seeking "*the aggregation of marginal gains*". Just as it leads to gold medals and yellow jerseys, its effect is that AirAsia, for example, is the lowest cost airline in the world. Good things follow when you care about the pennies.

Zak and I have come to appreciate the value in retreating a little from endless stock analysis. From time to time we swap slippers for brogues and head out into the world with the expectation that what we learn through investing helps us in other activities outside the office, and what we learn doing other activities helps us as investors. I have my school turnaround project, Zak has various charity projects and, together with members of his family, has set up a children's activity center. In this letter I thought I might describe some of these activities.

When we visited Carpetright, a UK carpet retailer, a few years ago we spent the morning with its founder, Lord Harris, discussing his firm and the industry. Lord Harris is a great advocate of watching the pennies. One of his store managers told us that his boss had baulked at the cost of new price tags whenever the shops had a sale. To begin with he made the store managers use both sides of the old price tags, at least this would halve the tag budget, but the real saving came from using the same card with replaceable, reusable numbers. It may seem trivial, but the saving has been in the tens of thousands of pounds. Lord Harris is a wealthy, successful man who does not need to work and so, over lunch, we asked him what still gets him motivated, at the age of 66, "*Oh*", he said "*you should see the academies*".

When schools fail in the UK, and the definition of failure is appallingly low exam results sustained through three annual warnings, oversight of the school is taken away from the local education authority and given to an independent body, in this case Lord Harris' Federation of Academies. Once inside the Federation the school (now called an academy) is free to hire a new head, new governors and set its own employment contracts. In the case of the school I became involved with, all three were necessary, the result being an almost complete turnover in staff and governors. It is brutal, but necessary, in order to change the culture. Gone are protected, high salaried employment, a clock watching mentality, and indifference to the pupils' education, and instead teachers are provided with bonuses for attendance and improved exam results.

Not that there is a lot of money to go around. The school does not receive the additional funding that may come with a location in inner London (the school is just over the border and classified, unlike some other local schools, as outer London), and the catchment area is not sufficiently poor to warrant aid, but then it is not wealthy either. The effect is that funding per pupil is one of the lowest in South London and, to put the figure in perspective, funding per child is around one third of the school fees paid for private education at nearby London day schools. The comparison is not quite apples to apples as private schools have to fund their property, but quite how the school runs inside its budget is extraordinary. Every penny is watched, and resources are spent on the right things such as rewarding good practice in teachers and funding extra-curricular activities. It is amazing to see the result: after five years - and with no more funding than the predecessor school - an exam failure rate of around 85% will in the near future, become an 85% pass rate (fingers crossed!). It is quite something to witness.

Zak's family's activity centre is an interesting tale. The centre is located in a light industrial building and consists of climbing structures and slides set in a three story netted frame, a

restaurant for the parents and separate entertainment rooms for birthday parties. There is little endemically proprietary about the business, real estate is relatively cheap, the climbing frames are easily purchased and catering is catering. The operation has relatively high fixed costs, which means that incremental revenues appear disproportionately valuable and so centres usually compete on price in the hope of attracting customers. The problem is the supply-side, which periodically gets out of control, as a hopeful newcomer sets up another operation in the same catchment area.

It is tempting in managing such an operation to pay the minimum wage. However, after a short while the family found that the quality of staff improved noticeably if, Costco–like, they paid a bit more. Instead of employing relatively young, unskilled (shop) assistants, the centre began attracting people with experience of working with young children, such as nursery school assistants, who cared about the children. The centre polled customers to find out who had made the decision to visit. Contrary to expectations it wasn't child nagging that forced a decision, but parents wanting something to do with (out!) the kids. What parents care about is cleanliness, new fittings and a decent cup of coffee, so money was spent on these items, not on wowing the children with the newest slide. The activities were keenly priced but the centre found that customers responded more to relative prices and so rates were kept just under those of the competition, rather than ruinously low.

At the end of the first year the centre was running at a loss, but one of the competing centres had closed down. Last year the business was breakeven and, just recently, after the demise of a second competitor (with sizeable debts and which had, interestingly, been run by hired hands and not the proprietor) revenues have jumped by a quarter and the activity centre is now earning proper profits.

It is tempting for Zak's relatives to think the battle has been won and, in line with many a business school case study, now gently raise prices to earn a monopolist's rent. However, Zak's advice to his relatives is counter-intuitive: take prices down (he is a hard man to have on your board). The risk with super-normal profitability is that the profits are an incentive for a new competitor: far better, Zak argues, to earn less, but for a much longer time. This is tough advice for the family members who have been cleaning loos and hoovering floors at eight o'clock at night, but the long-term logic is undeniable. To their very great credit the family are once again lowering prices just a little.

Zak's family's activity centre beat the competition because they understood the difference between good costs (nice staff, clean loos, good coffee) and bad costs (a whizzo new slide) and invested appropriately. They were smart enough to poll customers and observe the influence of pricing (there was no need to over-discount). The operation was equity funded and did not include a third party in the capital structure (bank debt). But most of all it was founder managed and they cared. Watching the pennies and investing carefully has led to the "*aggregation of marginal gains*" and financial success, and as such it has much in common with the investments that populate Nomad. It has been fun for Zak and me to practice in the real world, what we preach in investing.

Not that we get it right all the time. The agent behind the high yielding Glaswegian office property told us that he had just re-let his first building, twenty-five years later.

"*The rent then was £4.26 per foot; it was never going to sell for a round number because both parties cared about the pennies. I have just re-let it for £42 per foot, a round number.*

You only ever deal in round numbers these days. People don't care about the pennies anymore, that's why no one has got any money," he told us.

Zak and I spend all our time thinking about good business practices and we greatly admire firms that watch the pennies but we looked at our shoes as we were told this story - the rent at Galactic HQ is…ahem…I will whisper this…a round number.

We still have much to learn.

Housekeeping.

Earlier this month Phoenix Financial Services in Dublin, Nomad's administrator, announced that they have agreed to a management buy-out from the Phoenix Group. Phoenix Dublin's CEO, Gavin Gray, and his team have done a first rate job for Nomad's partners over the years. Zak and I, and Nomad's independent directors wish, indeed, Gavin and his team deserve, every success in the future. The transaction, which is subject to regulatory approval, will result in Nomad rising from approximately one-quarter of group revenues, to around three-quarters of the new (MBO) firm's revenues. Gavin does not want it to stay that way and will look to grow his new firm free from the demands of a parent company (sound familiar?). Zak and I, and Nomad's independent directors, support the idea of Nomad's administrator being owner managed (normally terrific for service quality) and hope that Nomad's future good performance will stop our proportionate share of Gavin's business from falling too fast! I don't think it is a fair race, Gavin is far too good an administrator to remain small for long. We wish them all the best.

As always, thank you for your quiet, gentle hand on the tiller. It is important to Zak and me to be in an ecosystem that gives us the mental freedom to think rationally and avoid the psychological pitfalls that pepper the industry. Do not underestimate the important role you play in maintaining a healthy ecosystem.

We wish you a very Happy New Year,

Nicholas Sleep

Our footnotes

There is, we are told, a ticket kiosk at a railway station somewhere in India with a sign above the window that reads, "*No Bamboozlement Here*". It is in the same spirit that we attempt these cautionary words. Disclaimers boil down to the following statement – if you choose to believe any of this, then you are on your own. Yikes! It will be hard for us to escape this conclusion too, and it makes little sense for us to do anything but disclaim liability for errors, omissions and offer no warranties – please, check everything we say, let us know when we are wrong and forgive our errors. We do promise you this: we are human, we make mistakes, but our mistakes are honest ones. Although we do not intend to mislead, we also cannot guarantee the information in these letters, or that some of our ideas may be interpreted in ways we do not intend. As investors we are trying to do as good a job as we can and we write these letters in good faith to inform and educate partners on our actions and thinking in the context of the Partnership. We hope that they will be read in the same spirit in which they are written.

Common sense tells you that the price and value of shares can vary greatly, and whilst we do not aim for this, we also recognize that permanent impairment of capital is possible. Our Partnership is concentrated in relatively few investments, perhaps more concentrated than many others, and as such our results will be more volatile than

many of our peers. Nomad is also a very long-term Partnership. We do not think it is suitable for investors with time frames less than five years. We also do not think Nomad is suitable for investors overly conflicted with principal-agent issues. If you are at all uncomfortable then, we suspect, Nomad is not for you.

The Nomad Investment Partnership has had two General Partners: Marathon Asset Management for the period from inception in 2001 to September 2006, and Sleep, Zakaria and Company from September 2006 until the present day. Zak and I have been responsible for the investment decisions of the Partnership since inception, formerly as employees of Marathon and then at our own firm, which was set up for the purpose of managing Nomad. The adventure continues…

Some notes on housekeeping (stay awake at the back!)

This is the annual letter and, combined with the interim letter sent to investors in July, is the main format we use to communicate to our partners. In these letters we have tried to honestly and thoroughly provide all the information we would seek if the tables were turned and we were investors in someone else's fund. We own shares for very long periods and we are conscious that more frequent or detailed reporting may be unnecessary and even counterproductive. A copy of our magnum opus, the full Collection of Letters, is available upon request from Amanda at Galactic HQ (amanda@sleepzakaria.co.uk). Lots of coffee required. Partners in Nomad will also receive a full copy of our Schedule of Investments by separate post, every six months, which lists all of our investments in detail. In addition, in the spring you will receive Nomad's annual accounts, audited by Grant Thornton. Each month statements of account are sent to you by Nomad's administrator (not us!), Phoenix Financial Services in Dublin, Eire. Please call Gavin Gray and his team (+353 18 450 8161) with your statement queries. As should taxable US investors as Gavin and his team prepare their tax certificates (1099s) as well.

Clients should always consider Zak and me to be available at the end of the phone, and our (somewhat shabby) front door open to visitors. And whilst we welcome your company, please don't be too disappointed if we don't have much that is new to say: we hope it is in these letters already.

Legal footnotes

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In our letters we refer to both limited partners in the Partnership, and common shareholders in the Nomad Investment Company (feeder fund) as "partners". We do this to convey a relationship we seek in which our investors are partners in a shared experience and destiny, in which they too have something to contribute. We do not mean to suggest that there is a partnership, in the strict legal sense of the word, between the shareholders in the feeder fund and Nomad, or Sleep, Zakaria and Company, Ltd.

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The Nomad Investment Partnership is not a recognized scheme under the Financial Services and Markets Act 2000 ("FSMA"). Given the nature of Nomad's investor base, recourse to the FSA and the Financial Services Compensation Scheme may be limited

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Nomad Investment Partnership

Interim Letter

For the period ended June 30th, 2013.

Cumulative results to June 30th, 2013.	Nomad Investment Partnership	MSCI World Index (net) US$
Trailing:	%	%
One year	36.9	18.6
Two years	29.4	12.7
Three years	124.8	47.0
Four years	210.5	62.1
Five years	159.4	14.3
Six years	112.3	2.1
Seven years	174.8	26.1
Eight years	202.7	47.5
Nine years	282.2	62.3
Ten years	439.1	101.3
Eleven years	563.0	96.5
Since inception (Sept 10th 2001)	660.2	85.6
Annualized since inception:		
Before performance fees	18.7	5.4
After performance fees	16.3	
Value of a dollar invested at inception (pre-fees)	$7.60	$1.86

The figures above are unaudited, presented on a cumulative, percentage gain basis and, as ever, are before fees. We present results in this way as Nomad's refundable performance fee and time dependent performance fee hurdle mean that the net-of-all- fees results will vary with subscription date, and from investor to investor. Partners will, therefore, each have their own, unique, net-of-all fees experience of investing in Nomad. As a guide, we have also detailed the net-of-all-fees results from one point in time, in this case since inception. An index is used in the table to crudely place our results in context with a broad swathe of share prices from around the world. One of the reasons that Nomad is Nomad is that Zak and I spend almost no time thinking about stock market indices. We do not feel strongly about the merits, or otherwise, of this particular index, indeed its continued inclusion here may have more to do with continuity than relevance, and we would encourage partners to employ another benchmark if they feel it is more helpful to them. Whatever the yardstick, we ask only that Nomad be compared over the very long-term. Below, the same pre-fee results are presented

in discrete annual increments. In our opinion, it is probably the upper table that is most useful in assessing long-term investment performance.

Calendar Year Results:	Nomad Investment Partnership %	MSCI World Index (net) US$ %
2013 (year to date)	20.8	8.4
2012	39.8	15.8
2011	-9.9	-5.5
2010	43.9	11.8
2009	71.5	30.0
2008	-45.3	-40.7
2007	21.2	9.0
2006	13.6	20.1
2005	9.2	9.5
2004	22.1	14.7
2003	79.6	33.1
2002	1.3	-19.9
2001 (inception Sept 10th 2001)	10.1	3.6

The annualised return (i.e. before fees) of an investment made in Nomad on September 10th 2001, when Zak and I began managing the Partnership, has been 18.7% per annum, as of June 30th this year, whilst the average share, as reflected in the index above, would have seen a return over the same period of around 5.4% per annum. This thirteen percent or so annual advantage, multiplied out over many years, means that a dollar invested in Nomad all the way through has now grown to be worth $7.60, whilst a dollar invested in the index over the same period would now be worth around $1.86. Put a slightly different way, and in net asset value terms (i.e. after fees), Nomad has compounded at 16.3% per annum, whilst the index has managed 5.4%.

A Different Take on Incentives.

When is six percent, not six percent? Stuck? May we suggest an answer: when it is Nomad's performance fee hurdle? That raised an eyebrow here too, not least because the hurdle is always more than six percent, sometimes a lot more than six percent! Perhaps I should explain.

Zak and I sat down about ten years ago, over a sundown glass of Chardonnay at a bar in a Californian hotel and penciled the Nomad fee arrangements on a spare sheet of paper. It did not take long. We concentrated on the correct philosophical approach to incentives, and so the job was easy: the management fee should not be a profit centre as we do not create value through managing the Partnership per se (hence our break- even cost reimbursement management fee); the performance fee should respect the notion of the opportunity cost of capital (and long bonds had been six percent or so); and if we owned shares for long periods, then performance fees should be at risk for an extended period too. Done, now where did the waiter go?

We did not dwell too long on the heinously complicated practical implications of accounting and administering the arrangement, nor did we foresee the need for a new administrator, a new director associated with the administrator, huge legal fees, and that a six percent hurdle

is hardly ever six percent. Oh well, the best laid plans etc.… The reason that six percent is not six percent is two-fold: a linked ten percent loss and a ten percent gain are not mathematically equivalent (duh), and Nomad's performance fee reserve is itself invested in Nomad shares and so is doomed to, in effect, buy high (accrue) and sell low (reimburse). Zak has set himself the task of finding a case when the six percent hurdle might be less than six percent. He may be some time.

If our naivety had been pointed out to us on that sunny evening, we would have recognised the issues but I don't think we would have changed anything. It is not very important to us that a six percent hurdle has been well over ten percent in the recent past, and we would certainly never do anything to lower it. Our slightly unconventional approach to being paid may be worth explaining, and so in this letter I will try to describe our attitude to the financial rewards that can come with running the Partnership.

We have written quite a lot about the power of financial incentives over the years, most recently the extent to which incentives (and rules) can de-moralise behaviour. You could describe the cause of the financial crisis in these terms. And whilst conventional wisdom has, in our view, quite correctly drawn a Pavlovian link between financial incentives and behaviour, money is not the only reason that people behave the way they do. Those tasked with setting compensation arrangements may first wish to ask themselves, why do people climb mountains? After all, it is not for the financial rewards – there is more to life than that.

The author, professor and founder of "The Institute for Advanced Hindsight", Dan Ariely, has studied the power of non-monetary incentives. In a recent talk (TED, Buenos Aires, Argentina, October 2012) he described how early academic experiments looking at motivation attempted to record the effect of taking the meaning out of work. This they did by asking people to build model robots from Lego-like blocks in return for a nominal fee. The fee was lowered for each successive robot built until the builder no longer wished to participate. For one group (the "rewards" group), the finished robots were placed carefully on a shelf for all to see.

For the other group (the "Sisypheans[1]") finished robots were broken up in front of the builder and the parts given back with the invitation to build the next robot (again for a lower fee). The researchers found that the Sisypheans built fewer robots and so stopped at a much higher price than the rewards group. This was broadly expected. What they had not anticipated was the magnitude of the difference, as the rewards group produced more than fifty percent more robots and for a much lower price compared to the Sisypheans. The researchers concluded that having their models destroyed took away some of the meaning the Sisypheans saw in their work, and that the lack of meaning was not outweighed by the pay. On the other hand, the rewards group did not see their role as pointless and were happier making models even though the pay was much less.

In the 1940s the food companies began manufacturing a new product, the powdered cake mix, which was marketed as a time saving innovation as the mix required only the addition of water before baking. To the marketer's great surprise - sales were terrible! Something had to be done and so, almost as an experiment, a new product was launched which required the cook to add fresh eggs, milk and sugar and although it took longer to make, paradoxically, sales

[1] In the Greek myth Sisyphus was tasked by the gods with rolling a boulder to the top of a hill. Each time he reached

the top the boulder rolled to the bottom and Sisyphus had to start again. As a punishment for deceitfulness, Sisyphus had to repeat the task for all time.

improved! Anyone who has laboured through assembling Ikea furniture may understand why. To the builder of flat pack furniture or the baker of cakes, the perceived value of the end product is influenced by the input of the consumer's own efforts. In doing some work themselves the builder, or cook, puts a little bit of meaning, perhaps even a little bit of love, into the product.

Ariely was so taken with this observation that he developed a further experiment. One group was tasked with building a complicated origami model and were given instruction on how to do so. When the group had finished the researcher took the model away and asked the builders how much they would be prepared to pay the researcher to keep their model. A second group Ariely tasked with building an origami model, this time without instruction, and when they were finished, he asked them the same question: how much would you pay to keep your model? The findings were interesting: both groups were prepared to pay much more than the market price for origami models built by professionals, even though their own models were inferior. Moreover, those who had laboured without instruction (and built the worst origami!) were prepared to pay the most to have their models returned. In other words, the normal relationship between price and quality had been inverted by the value one placed on one's own work.

In traditional capitalist thinking, Ariely surmised, we tend to have Adam Smith in mind, and the gains from subdividing pin manufacturing into twelve distinct steps. The efficiency embedded in this approach won the day over Karl Marx's concerns about the estrangement felt by workers from becoming an anonymous cog in a larger process. The debate then, and ever since, has been the battle between efficiency and meaning.

The best entrepreneurs we know don't particularly care about the terms of their compensation packages, and some, such as Jeff Bezos (Amazon) and Warren Buffett (Berkshire Hathaway) have substantially and permanently waived their salaries, bonuses, or option packages. We would surmise that the founders of the firms Nomad has invested in are not particularly motivated by the incremental dollar of personal wealth. When we asked Nick Robertson, the founder of Asos, whose paper net worth has increased hugely since we have known him, whether, now he is a rich man, he has thoughts of leaving, his face lights up with the future possibilities of his firm and says he is having more fun now than ever before. In this aspect of his life he has moved on from monetary rewards driving his behaviour, and we are sure the business will be better for it.

The same is probably true for Jim Sinegal before his retirement (Costco), Lord Harris (Carpetright) and some of the other founders of the firms in which Nomad has invested. These people derive meaning from the challenge, identity, creativity, ethos (this list is not exhaustive) of their work, and not from the incentive packages their compensation committees have devised for them. The point is that financial incentives may be necessary, but they may also not be sufficient in themselves to bring out the best in people. In its own little way, this is why Zak and I are quite relaxed about six percent not being six percent. It was an arbitrary number in the first place, and we derive a great deal of value from the meaning of the work we do (challenge, sense of job well done, identity, creativity and so on) not just from the financial rewards (although we will learn to live with those too!). By having an attitude that is somewhat independent of financial rewards, we are sure that Nomad's performance in the long run will be far better too.

Inactivity as a Source of Value Added.

Our portfolio inaction continues and we are delighted to report that purchase and sale transactions have all but ground to a halt. Our expectation is that this is a considerable source of value added! At the time of our initial investments in Nomad's investee businesses, the firms were, on average, around fifteen years old. Take out the two grandparents (Berkshire Hathaway and Costco) and the average falls to twelve years. It is hard to know how this compares to businesses at large (what is the average age of a listed company?), but we do know that the average time S&P500 constituent stocks have been included in that index is twenty-five years. One could guestimate that those firms might have been say, twenty years old on inclusion? At any rate, the statistic helps to illustrate how youthful Nomad's firms are. The runway ahead for our businesses may be very long indeed. In action on our part is counter-cultural and deliberate and is easier said than done. Really. For those used to a more industry-standard level of trading activity, we hope to update you in real time on our level of inaction through our planned "Nomad Inactivity App.", available only in the Amazon App. store, of course. As Berkshire Hathaway Vice-Chairman, Charlie Munger, says, you make your real money sitting on your assets!

As always, we thank you for your gentle approach,

Yours sincerely,

Nicholas Sleep

Our footnotes

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Nomad Investment Partnership

Annual Letter

Cumulative returns for the period ended December 31st, 2013

To December 31st, 2013:	Nomad Investment Partnership	MSCI World Index (net) US$
Trailing:	%	%
One year	62.2	26.7
Two years	126.8	46.7
Three years	104.3	38.6
Four years	194.0	54.9
Five years	404.1	101.3
Six years	176.6	19.4
Seven years	235.3	30.2
Eight years	280.9	56.3
Nine years	316.5	71.1
Ten years	409.8	96.3
Eleven years	815.5	161.3
Twelve years	827.4	109.3
Since inception (September 10th, 2001)	921.1	116.9
Annualized since inception:	%	%
Before performance fees	20.8	6.5
After performance fees	18.4	
Value of a dollar invested at inception (pre-fees)	$10.21	$2.17

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almost no time thinking about stock market indices. We do not feel strongly about the merits, or otherwise, of this particular index, indeed its continued inclusion here may have more to do with continuity than relevance, and we would encourage partners to employ another benchmark if they feel it is more helpful to them. Whatever the yardstick, we ask only that Nomad be compared over the very long-term. Below, the same pre-fee results are presented in discrete annual increments. In our opinion, it is probably the upper table that is most useful in assessing long-term investment performance.

To December 31st:	Nomad Investment Partnership	MSCI World Index (net) US$
Calendar Year Results:	%	%
2013	62.2	26.7
2012	39.8	15.8
2011	-9.9	-5.5
2010	43.9	11.8
2009	71.5	30.0
2008	-45.3	-40.7
2007	21.2	9.0
2006	13.6	20.1
2005	9.2	9.5
2004	22.1	14.7
2003	79.6	33.1
2002	1.3	-19.9
2001 (inception September 10th)	10.1	3.6

The annualised return (i.e. before fees) of an investment made in Nomad on September 10th 2001, when Zak and I began managing the Partnership, has been just over twenty percent per annum, as of January 1st this year, whilst the average share, as reflected in the index above, would have seen a return over the same period of around six and a half percent per annum. This fourteen percent or so annual advantage, multiplied out over many years, means that a dollar invested in Nomad all the way through has now grown to be worth just over ten dollars, whilst a dollar invested in the index over the same period would now be worth just over two dollars. Put a slightly different way, and in net asset value terms (i.e. after fees), Nomad has compounded at over eighteen percent per annum, whilst the index has managed an annual six and a half percent.

It appears to all the world that the performance detailed above has been created by Zak and me. That is not the case. In the sense that we could have picked different stocks and performance been poor, then we did avoid a worse outcome. That argument runs in reverse too: performance could always have been better. Even so, in aggregate, the fund management function, evened out over all shareholder experiences, does not add value per se: it only shuffles wealth created elsewhere. As time goes by, the performance that you receive, as partners in Nomad, is the capitalisation of the success of the firms in which we have invested (minus our fees!). To be precise, the wealth you receive as partners came from the relationship our companies' employees (using the company as a conduit) have with their customers. It is this relationship that is the source of aggregate wealth created in capitalism. If you see them at the bar buy a drink for Messrs. Bezos, Robertson, Fernandes, Sinegal, Buffett, Steiner et al, (then call us, that would be quite some bar!). All Zak and I have done is catch some better waves and try to ride them to the shore. Riding waves is not an expensive activity and Nomad's (cost reimbursement) management fee remains around ten basis points

per annum.

This is the twenty-fifth letter to investors over fourteen calendar years. In these letters we have tried to cover the philosophy and methodology Zak and I use to approach the problem of investing. We keep our discussions to as high a level as we can manage in the belief that, in the long run, the high level is all that matters. In these letters we have therefore discussed business models, incentive compensation, capital allocation, mistakes, more mistakes, even more mistakes, lots on psychology and how to think, lots on attitude and so on. Whilst we may only write twice a year, we own shares for such long periods (if the current rate of portfolio activity should persist) that we write around twenty letters during the life of the average investment – that's a huge amount! In previous letters we have also discussed the psychological traps inherent in a more loquacious approach (been there, done that, don't want to do it again!). At its heart, investing is simple, and to make it seem anything but, with the frequent repartition of short-lived facts and data points, may be a conceit. Indeed, it could be argued that a running commentary obfuscates a discussion of the things that really matter. Whilst we have covered many of the topics relevant to long-term investing in these letters already, there is a topic that we have not discussed too much and that now affects the Partnership in a significant way. That is regulation (no moaning at the back).

Since 2001, the number of regulators claiming oversight over the Nomad ecosystem has doubled to four, and the scope of the regulation is up by, we estimate, one order of magnitude. The new Financial Conduct Authority, the fourth iteration of the UK regulator since Zak and I have been in the industry (the others being: the Investment Management Regulatory Organisation, IMRO; the Securities and Futures Authority, SFA; and the Financial Services Authority, FSA), may soon require various parts of the Nomad ecosystem to re-register for authorisation to function as investment service providers. Whilst the process of re-registration can be seen as an expensive form filling exercise, and we are happy to disclose whatever is required (less so about writing the cheques), the nature of the new regulation is unlike its predecessors. Gone is the light touch of self-regulation and instead the mechanism, and perhaps the political will, exists to be far more controlling. For instance, the new regulation seeks a separation of risk management from portfolio management (we are scratching our heads a little on what that means and the regulation does not define the terms) and has already taken the form of mandating remuneration policies (but is oddly silent on dividend payments). As with all new rules there seem to be some anomalies: it appears that an investment advisor in London may be treated as if it is an offshore partnership's general partner for the purpose of regulation, but the same government would view the London entity as a subcontracted investment adviser for the purpose of taxation and control – a contradiction that may not be long lived, especially as governments seek to balance their budgets.

It seems to us that the regulatory landscape is not supportive of small, simple investment boutiques that are not part of whatever problem the regulation seeks to solve. We might wish otherwise, but the halcyon days of the budding stock picker running his friends and family partnership from the sunroom at home at 5505, Farnam Street, Omaha (an image so important to Zak and me) are long gone. In our opinion, given time, the barrier to entry presented by the new rules may cause considerable industry consolidation (a desired outcome from a regulatory standpoint – let's face it, regulation is expensive to do) but consolidation will, in the end, bring with it an unintended, concomitant increase in market fragility, to paraphrase Nassim Taleb. It also seems to us, on an anecdotal basis, that those who increasingly populate

the industry are the types who pay others to do their work for them (just witness the Cambrian explosion of service providers offering to act as intermediaries). As some complex financial institutions may be discovering today, if the proprietor has abdicated responsibility to the point of not knowing what is going on, then that is not healthy either.

All this has come about because other people have lied and stolen. In essence we are required to now prove that we are not Bernard Madoff but, unlike Mr. Madoff, there is no potential for us to earn our way to a lighter regime through good behaviour. Nor is any allowance made for the fact that we invest for the very long term or that we are a simple fund. Indeed, Nomad is treated the same as a leveraged, long/short hedge fund complex that deals in exotica and trades constantly. Like traffic speed limits, the regulation seeks to moderate all behaviour for the general good, and we have lived with those restrictions quite happily (well, almost). Even so, in our opinion, what is really required in order to bear down on the liars and cheats are empowered, detectives-cum-regulators asking questions of those whose practices don't sniff right. And if you really want to change industry behaviour, I'll whisper this, tax short term investing. Instead, we get more blanket rules for everyone.

Housekeeping

One of the effects of being closed to subscriptions and only open periodically is that, especially in the current regulatory climate, the Partnership's governing documents can be soon outdated. The investment advisory agreement and prospectus will now be reviewed to reflect (this list is not exhaustive): our status with the SEC; the American FATCA and European AIFMD requirements; our de-listing from the Irish Stock Exchange (which, eh hum, occurred several years ago), and the appointment of Ralph as Nomad's new director following Martin's retirement. That should do it for 2014! The refreshed documents will be sent to partners in due course.

Zimbabwe

In the mid noughties, economic conditions were almost uniformly favourable around the world, and equity market prices reflected the prevailing conditions. In a perfect world, Zimbabwe was a glaring anomaly. In Zimbabwe one could purchase industrial assets, often monopoly or near monopoly operations, for much less than the cost of those assets: cement plants for ten cents on the dollar and breweries for one quarter of the cost of the stills and lorries.

So, we rolled up our sleeves, crossed the border from South Africa, and set about our work. We identified some reasonable investment candidates but the first wrinkle to overcome were exchange controls that artificially over-valued the Zimbabwean dollar. These controls could be legally side stepped through buying shares in firms listed on the Johannesburg (South Africa) stock exchange that also had a listing in Harare (Zimbabwe), re-registering the Jo'berg shares in Harare, and then selling the shares on the Harare stock exchange. The process took some time, but the uplift in purchasing power was many fold above the rate offered by the central bank for cash transactions. With Zimbabwean dollars we could then make investments. We chose three sectors in an attempt to diversify from nationalisation risk, and to invest in businesses with large, powerful, major shareholders who could protect their/our business interests. At least we hoped. To this end we purchased shares in a cement company, brewery and construction/engineering firm.

In the years that followed, the country has lived through: a decline in economic activity of, at one stage, perhaps as much as one half; hyperinflation; the abandonment of the local currency by the central bank as a means of exchange; the suspension of the stock market (and associated zero value attributed to our investments); violent, forced nationalisation of privately owned farms; the attempted assassination of political opponents; and a coalition government which included, and continues to include, the incumbent President Mugabe. Even though Zimbabwe is far from normalised, Nomad's investments have risen in price between three and eight-fold in US dollars and, following the sale of our final Zimbabwean investments last year, the dollars have been remitted to Nomad's bank accounts in London. It is quite a story but, not one we would repeat in a hurry (we can do better with the compounding businesses these days – and they are much less stressful). Enclosed with (the analogue version of) this letter is a one hundred trillion Zimbabwean dollar bank note issued at the peak in hyperinflation (we have a limited number, and so only one note has been enclosed per limited partner. If your letter did not contain a note it is because we may have multiple addressees per limited partner interest, and so the note will be with one of your colleagues). Today the note is worthless (absent an eBay novelty value). But we thought you might like a hundred trillion dollar bill (and who wouldn't?) as a souvenir of Nomad's adventures in capitalism (frame it for the study/boardroom?). (Partners who are more digital in their reading habits may claim their note with an email to Amanda at Galactic HQ – we only have so many, so one application per limited partner, please.)

A final note on Psychology

It is almost ten years since Barry Schwartz published his popular psychology book "The Paradox of Choice". To précis part of the book: Schwartz observed that western society tends to view choice as a good thing, and more choice as better still. In his local supermarket Schwartz counted one hundred and thirty or so different salad dressings, excluding the dozen olive oils and balsamic vinegars should the pre-made salad dressings not offer enough choice! In his local electronics store he found over six million possible combinations of hi-fi components. Even though consumers were being offered what seemed to Schwartz to be an ever-increasing plethora of choice to meet their needs, he could find no correlation with increased happiness. Instead, he hypothesised, that with all the choice came the (subconscious) expectation that the outcome ought to be perfect, and this expectation rendered the actual choice made as disappointing in comparison. It was as if too much choice was making us unhappy.

Schwartz does not make mention of it directly, but the problem is not confined to consumer decision-making. The public stock markets have many tens of thousands of potential investments, and the price of each of those changes almost constantly. The number of possible profit or loss combinations would make Schwartz's hi-fi store look like a multiple-choice test. It is very easy, therefore, to feel unhappy about one's investments. Indeed, on any one day, month, year it is highly likely, indeed statistically almost certain, that one's chosen combination of investments will lag alternatives – there will always be someone who did better.

In a recent Nomad letter (June 2010) we wrote…

"*Readers that make it to the end of our letters (we may be flattering ourselves), including the footnotes (we may be deluding ourselves!), may recall the story we retold of the Ferrari 250 GTO bought by a collector in the 1960s for the effective price of £750. The beauty of*

the story is that although the car is one of the most valuable in the world, the collector still has his car today. A different 250 GTO has recently changed hands, and the price…US$20m!"

…Stop Press: a Ferrari 250 GTO changed hands recently for U$52m! That represents an annual return of over twenty percent for around fifty years. There is always something going on that makes Nomad's performance look a bit weedy! Before you show your disappointment and reach for the rotten fruit to throw our way, I think it is time we got back to dealing with the regulations (x4).

We wish you a very Happy New Year,

Nicholas Sleep

Our footnotes

There is, we are told, a ticket kiosk at a railway station somewhere in India with a sign above the window that reads, "*No Bamboozlement Here*". It is in the same spirit that we attempt these cautionary words. Disclaimers boil down to the following statement – if you choose to believe any of this, then you are on your own. Yikes! It will be hard for us to escape this conclusion too, and it makes little sense for us to do anything but disclaim liability for errors, omissions and offer no warranties – please, check everything we say, let us know when we are wrong and forgive our errors. We do promise you this: we are human, we make mistakes, but our mistakes are honest ones. Although we do not intend to mislead, we also cannot guarantee the information in these letters, or that some of our ideas may be interpreted in ways we do not intend. As investors we are trying to do as good a job as we can and we write these letters in good faith to inform and educate partners about our actions and thinking in the context of the Partnership. We hope that they will be read in the same spirit in which they are written.

Common sense tells you that the price and value of shares can vary greatly, and whilst we do not aim for this, we also recognize that permanent impairment of capital is possible. Our Partnership is concentrated in relatively few investments, perhaps more concentrated than many others, and as such our results will be more volatile than many of our peers. Nomad is also a very long-term Partnership. We do not think it is suitable for investors with time frames less than five years. We also do not think Nomad is suitable for investors overly conflicted with principal-agent issues. If you are at all uncomfortable then, we suspect, Nomad is not for you.

The Nomad Investment Partnership has had two General Partners: Marathon Asset Management for the period from inception in 2001 to September 2006, and Sleep, Zakaria and Company from September 2006 until the present day. Zak and I have been responsible for the investment decisions of the Partnership since inception, formerly as employees of Marathon and then at our own firm, which was set up for the purpose of managing Nomad. The adventure continues…

Some notes on housekeeping (stay awake at the back!)

This is the annual letter and, combined with the interim letter sent to investors in July, is the main format we use to communicate with our partners. In these letters we have tried to honestly and thoroughly provide all the information we would seek if the tables were turned and we were investors in someone else's fund. We own shares for very long periods and we are conscious that more frequent or detailed reporting may be unnecessary and even counterproductive. A copy of our magnum opus, the full Collection of Letters, is available upon request from Amanda at Galactic HQ (amanda@sleepzakaria.co.uk). Lots of coffee required. Partners in Nomad will also receive a full copy of our Schedule of Investments by separate post, every six months, which lists all of our investments in detail. In addition, in the spring you will receive Nomad's annual accounts, audited by Grant Thornton. Each month statements of account are sent to you by Nomad's administrator (not us!), Phoenix Financial Services in Dublin, Eire. Please call Gavin Gray and his team (+353 18 450 8161) with your statement

queries. As should taxable US investors as Gavin and his team prepare their tax certificates (1099s) as well.

Clients should always consider Zak and me to be available at the end of the phone, and our (somewhat shabby) front door open to visitors. And whilst we welcome your company, please don't be too disappointed if we don't have much that is new to say: we hope it is in these letters already.

Legal footnotes

Performance numbers are produced by Phoenix Fund Services, Nomad's administrator, and have been audited by Ernst and Young to 2011, and from then on by Grant Thornton in their annual audits that follow publication of our letters.

In our letters we refer to both limited partners in the Partnership, and common shareholders in the Nomad Investment Company (feeder fund) as "partners". We do this to convey a relationship we seek in which our investors are partners in a shared experience and destiny, in which they too have something to contribute. We do not mean to suggest that there is a partnership, in the strict legal sense of the word, between the shareholders in the feeder fund and Nomad, or Sleep, Zakaria and Company, Ltd.

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The Nomad Investment Partnership is not a recognized scheme under the Financial Services and Markets Act 2000 ("FSMA"). Given the nature of Nomad's investor base, recourse to the FCA and the Financial Services Compensation Scheme may be limited.

Postamble

We may be flattering ourselves to think that anyone will get this far but, for those that struggled through, congratulations are probably in order. And there they are, the Nomad Letters, our magnum opus (or, having read them, some might prefer "magnificent octopus" as Baldrick's malapropism goes in Rowan Atkinson's Black Adder series). Those that wish to read more (we are definitely flattering ourselves) can do so in William Green's book "Richer, Wiser, Happier". William has written the kind of book that we would love to have written but know that we lack the requisite skills. We are sure you will enjoy the read.

When we wrote the December 2013 letter, we did not know that it would be our last but, a few months later, the portfolio had been liquidated, funds returned to our partners and on we go. We did not like that final phase one bit: selling stakes built up over years felt wrong, the clients were grace itself but, even so, it is still an awkward conversation to take something away from someone, especially people that you like, and there was the administrative headaches of winding up an operation. Psychologically it all felt wrong.

So, why did we close? With big decisions like that there is often a mixture of forces pushing and pulling: The direction of regulation was certainly irksome and the tools of regulation unnecessarily blunt but, also, we wanted to feel that we did not have to justify actions, and inactions, on an ongoing basis to a revolving door of interested parties. We also felt we had wrung all that we could out of the investment process and to continue would have been to rinse and repeat, as it were. After all, we had what we needed, just a few superb businesses and we were unlikely to sell any of those to fund the purchase of another cigar butt, Philippine cement company, were we? The pull was the prospect of independence and a new adventure, this time working out how to recycle the funds for others to benefit. We wound up at an age (mid 40s) when it forced us to build something new (you can't sit on the beach forever) and, hopefully, we would live long enough to also see the consequences of our actions; we would have to eat our own cooking, as it were. Previous generations that retired in old age and died soon after, have not always had that opportunity. And, as we said in the preamble, we have not entirely left investing behind either.

Many of the successful and wealthy people we know are a little mystified by what the money really means. Investors can think their way to success without seeming to work in the traditional sense and the payoff in capitalism from stock picking can be extraordinary. It is one thing for capital allocators to be rewarded for their efforts but, in our opinion, taking personal identity in everything above X-amount is not a route to building a better world. We suspect that if you made it to the end of our letters, then you are one of the good guys and know that already. If good investing is a minority sport, then good philanthropy is a minority sport for those that do minority sports. Our band could do with moving from the fringes of society to becoming the norm. We hope you will join us on the journey.

Nick Sleep and Qais Zakaria, Spring 2021.

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Monday 10th January 2011

Dear Fellow Investor,

This is the first annual letter to owners of The Fundsmith Equity Fund.

Fundsmith opened for business on 1st November 2010, and we are critical of attempts to measure investment performance over short periods of time. Two months is not a short period, it is a ludicrously short period to do so. However, I thought that this letter is a good opportunity to give you a flavour of the reporting which is likely to occur in years to come.

From 1st November to 31st December 2010, The Fundsmith Equity Fund rose by 6.14% net of fees. This compares with some common benchmarks as follows:

Fundsmith Equity Fund	**6.14%**
MSCI	**7.99%**
MSCI EAFE	**5.76%**
FTSE100	**4.40%**
Long Bond (10 year UK Treasury)	**-2.57%**

Benchmarks are useful for measuring performance, provided a long enough time scale is used. Problems arise when fund managers start to use them for portfolio construction. At Fundsmith we do not endeavour to track any index or to minimise our "tracking error" versus any index (even the use of the expression tracking "error" tells you that an active fund manager has the wrong mindset).

The Fund underperformed the MSCI and outperformed the MSCI EAFE-the difference being in the performance of US stocks which are included in the former but not the latter. It outperformed the FTSE100 and long bonds.

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The main positive contributors to that performance were:

1. Del Monte Foods
2. Becton Dickinson
3. Domino's Pizza Inc
4. Nestle
5. Stryker Corp

The main contributor was Del Monte Foods. Del Monte could almost be a case study in how investment opportunities arise. We were attracted to Del Monte by its main product-pet food.

Pet food is typical of the sort of product we seek to invest in. It is a small ticket, consumer, non-durable. As a small ticket purchase, no credit is required to buy it. The consumer has no opportunity to bargain on price - the price the supermarket or pet store displays is the price you pay. Consumers are typically brand loyal, and once it has been consumed there must be a replenishment purchase-there is no opportunity to defer this by prolonging the life or ownership of the product as there is with a consumer durable, like a car. Moreover, research clearly shows that if times are hard, consumers will reduce their spending on food for themselves or their children rather than cut back on their pets' food.

However, the fact that pet food is Del Monte's main product line seemed to be lost on most investors, many of whom were assessing it on the basis of their folk memory of its main historic product range in canned fruit and veg. This is what produced the opportunity to buy Del Monte stock on a free cash flow yield which was generous for its likely financial performance. On one occasion this misunderstanding was compounded when Bloomberg managed to publish an article from the Galveston County Daily News about a strike at Fresh Del Monte Produce Inc - an entirely different company which sells fresh produce - against Del Monte Foods. Such events can create opportunities to buy great companies at good prices.

Eighteen days after the Fund opened and we purchased our initial holding in Del Monte it was bid for by private equity firm KKR at a significant premium to the price we had paid.

Whilst it would be churlish to suggest that we do not like receiving a premium for our investments in cash, such events are not without their downside as we have to find an equivalent investment for our cash. The fact is we really want to own our stakes in the companies in our portfolio and benefit from the good cash returns on capital which they generate. We are not simply hoping to on-sell the investment at a higher price. This changes perspectives on events such as takeovers.

Just as we counsel you not to become overly enthusiastic about share price rises, even those which relate to cash bids for our holdings at a premium which represents a good return on our investment, we hope that you will understand when we are explaining that price falls within the portfolio will often represent an opportunity for investment on even more rewarding ratings rather than an opportunity for soul searching and recriminations. Often but not always.

The detractors from the Fund's performance were:

1. Serco Group
2. Imperial Tobacco
3. Dr Pepper Snapple
4. Reckitt Benckiser

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In no case do we believe that the fall in the price alters our view of the investment (other than the obvious point that we wish we had made it at the lower price) nor do we believe it reflects an adverse change in the intrinsic worth of the business.

The historic dividend yield on the Fund at year end was 2.47%. This dividend was covered over 2.5 times by earnings. Only one stock in the fund does not currently pay a dividend. This is significant: dividends have historically provided a significant portion of the total return on equities. The current yield on the Fund may not fully reflect its dividend paying capabilities as some of the companies also utilise share buybacks. These can contribute to shareholder value creation when they are used correctly (to purchase shares which are under-valued when no better investment opportunity presents itself).

At the end of 2010 we held a portfolio of 22 stocks including Del Monte.

The average company in our portfolio was founded in 1883. We are investing in businesses which have shown great resilience over a long period of time-in most cases surviving two world wars and the Great Depression.

The trailing free cash flow ("FCF") yield was about 7%. This free cash flow was either distributed as dividends, used for share buybacks, or invested by the companies in order to generate further returns. As our portfolio had an average return on operating assets of 50% this reinvestment of cash flows should produce compounding of value for us as shareholders.

This FCF yield compares with a FCF yield on the S&P 500 of a bit less than 7%. The median (250thranked) FCF yield in the S&P is 6.6%.

What we can say with a high degree of certainty is that our portfolio has a FCF yield higher than the average for the market. Yet it is inconceivable in our view that it is not of higher than average quality in terms of longevity, resilience, predictability, profit margins, return on operating capital and the conversion of profits into cash. Put simply this means that we own shares in businesses which are higher quality than the market on a valuation lower than the average for the market. Whilst that is not a total solution to successful investing, it strikes us as at least a good start.

We regard an equity holding as a claim on a share of the cash flow produced by a business. In the Fund we seek to own companies which produce high cash returns on capital and distribute part of those returns as dividends and re-invest the remainder at similar rates of return. And we want to own those companies shares at prices which at best under-value their returns and at worst value them fairly.

We do not regard equity investment as a sophisticated game of pass the parcel in which we buy shares in companies that we don't understand, which may be poorly performing businesses and/or which are over-valued, hoping to sell them to a greater fool when they have become even more expensive as a result of some fad or share price ramp. Such games are best left to video consoles unless your hobby is losing money whilst investing, which I rather suspect it is for some people.

I aim to restrict myself to one rant per letter about a subject relevant to investment. Frankly given the behaviour of much of the wealth/asset management industry, I regard this as a model of self restraint given the target rich environment.

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This year's rant is a warning about the misunderstanding and misuse of Exchange Traded Funds ("ETFs"). I think this is relevant as The Fundsmith Equity Fund launch was somewhat against the tide of events as we launched an active equity fund at the end of a decade in which a) equities have performed badly; and b) the average active fund manager has again underperformed the index and so made a bad performance by the asset class worse.

Faced with this failure of active management, it is hardly surprising that investors have turned their backs on active management and headed for lower cost, passive alternatives. As a result, the rise of ETFs has been a major feature of the investment landscape in recent years. By the third quarter of 2010, there were 2,379 ETFs with 5,204 listings on 45 exchanges managing $1,181.3bn of assets.

So what's the problem? I suspect that the average investor regards all ETFs as just another form of index fund, and indeed many of them are. But many aren't and therein lies the potential for misunderstanding. Or worse.

Some ETFs do indeed replicate the performance of an index by purchasing a weighted package of all or most of its constituent securities. But many so-called synthetic ETFs do not do so and instead use so-called swap agreements with counterparties who agree to provide a monetary return which matches the underlying asset class or the index the ETF is seeking to track.

Anyone who has studied the events of the Credit Crisis should be able to spot a potential problem here: what if the counterparty supplying the swaps defaults? This risk may once have been considered theoretical, but after the collapse of Lehman and the need to rescue AIG in order to prevent the contagion from a default it surely no longer is. True the ETF should be holding collateral against such a failure, but collateral is an imperfect science even where it is held which is not in all cases. Moreover, in some cases the sole counterparty

Moreover, synthetic ETFs are often used at access markets which are not directly accessible to retail investors such as the Chinese A-share market or where liquidity in the underlying investments is poor such as equities in some emerging markets. The opportunity for the performance of the ETF to diverge from the performance of the underlying assets and therefore from the investors' expectations in these cases seems obvious. The idea that a counterparty will provide you with a contract which matches the returns from underlying illiquid assets which you cannot directly own should give pause for thought-not least about how the counterparty will fulfil those obligations, for example in the case of extreme market movement and a liquidity crisis-a not unlikely combination.

Of course not all ETFs are used to simply match the performance of an index. There are leveraged ETFs which multiply index performance, inverse ETFs which replicate a short position in an index and of course, leveraged inverse ETFs. The issue with these ETFs is that their returns are compounded daily. These problems maybe best illustrated by a couple of tables;

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	Day 1	Day 2	Day 3	Day 4
Index	100	125	90	103
Daily Change		25%	-28%	14%
Cumulative Change		25%	-10%	3%

Leveraged ETF (+2X)	100	150	66	85
Daily Change		50%	-56%	29%
Cumulative Change		50%	-34%	-15%

The first table shows the movement in an index in a highly volatile period in which it rises sharply then falls to finish just 3% up over the period. The second table shows the performance of a 2x leveraged ETF over the same period. With daily compounding the leveraged ETF produces a cumulative loss of 15% of value over the period versus a 3% rise in the index.

How about an inverse ETF?

	Index	% Movement	Short Position	ETF (Short)
Day 1	100		100	100
Day 2	80	-20.0%	120	120
Day 3	60	-25.0%	140	150
Day 4	55	-8.3%	145	162.5
Day 5	100	81.8%	100	29.5

In a week where the index was volatile on the downside but got back to par by the end of the week an inverse ETF with daily compounding would turn in a 70.5% loss. You can imagine what a leveraged inverse ETF would do!

I would bet that a large proportion of ETF investors do not realise that leveraged and inverse ETFs can produce these apparently perverse results. The moral of this is that these sort of ETFs are really day trading tools. If they are held for more than one day, they will begin to diverge from the performance of the underlying index or asset class. However, it would not be surprising if in many cases they were being used inappropriately as if they are index funds.

Investors in ETFs may be quite logical in avoiding most active management, but many of their ETFs are not as inactive as they think.

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Finally, returning to our own active fund, we look forward to the year ahead. This is not because we have any faith in a sustained recovery in major economies and/or that we regard equities in general as cheap or equity markets as a whole as good value or well placed to track improvements in corporate profitability which in any event may not be forthcoming.

It is firstly because we believe our Fund contains a portfolio of shareholdings in great businesses which we have purchased at reasonable prices or better and which we intend to hold onto in order for them to deliver the benefits of such investments.

Secondly, it is because we enjoy running The Fundsmith Equity Fund. Robson Walton, the Chairman of Wal-Mart and son of its founder Sam Walton said, "My dad did not set out to make Walmart the world's largest retailer. His goal was simply to make Walmart better every day, and he thought constantly about how to do just that."

Please be assured we are doing the same with Fundsmith.

Yours sincerely,

Terry Smith
CEO
Fundsmith LLP

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Should you feel you need advice please contact a financial adviser. Past performance is not necessarily a guide to future performance.
The value of investments and the income from them may fall as well as rise and be affected by changes in exchange rates, and you may not get back the amount of your original investment.

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Wednesday 11th January 2012

Dear Fellow Investor,

This is the second annual letter to owners of The Fundsmith Equity Fund.

Fundsmith opened for business on 1st November 2010, and so completed its first year on 31st October 2011. We have presented two sets of performance figures this year- the performance since inception and the last calendar year.

We remain critical of attempts to measure investment performance over short periods of time. Even a calendar year is too short for this purpose-it is the time it takes the Earth to go around the Sun and has no natural link to the investment or business cycle.

However this proviso notwithstanding, The Fundsmith Equity Fund rose by 8.4% net of fees for the year. This compares with some relevant benchmarks as follows:

	Since Inception	2011
Fundsmith Equity Fund	15.0%	8.4%
MSCI World £	3.2%	-4.5%
MSCI EAFE £	-6.1%	-11.2%
FTSE 100	2.8%	-1.5%
FTSE Actuarial Gilt Index	14.7%	15.6%

The Fund outperformed the MSCI World Index, which we regard as the most relevant comparator, by 12.9% for the year.

This strikes us as a good performance. It was achieved against the background of a year in which it gradually dawned on many people that the financial crisis of 2008-09 had not been solved but had rather been transformed into a sovereign debt crisis: if 2008 was the year in which governments saved banks, 2011 was the year in which the main question which emerged was who would save the governments. Against this backdrop it is hardly surprising that equity markets performed poorly and so has the average fund.

Only six other funds in the IMA Global Growth sector (into which the Fund is classified) achieved a positive return in 2011. This performance for the year took the Fund to third place in the Morningstar performance rankings for global equity funds.

The main positive contributors to that performance were: Domino's Pizza, Philip Morris, Imperial Tobacco, Colgate Palmolive and Unilever.

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The main detractors from the Fund's performance were: Serco, Stryker, Kone, Becton Dickinson and Intercontinental Hotels.

Turnover in the Fund in 2011 was 15%. This was higher than we would ideally like although still significantly lower than most funds.

Part of this turnover was really involuntary. We sold Del Monte Foods prior to the closing of the cash bid from KKR, and sold our holding in Clorox after a bid approach from Carl Icahn which we correctly judged would not result in an actual takeover but which drove the share price to a valuation which we regarded as offering poor value.

Excluding dealing in Del Monte and Clorox, the turnover was 4% which is much closer to the level we seek (zero ideally).

The only voluntary turnover during the year were sales of our holdings in Kimberly-Clark Corporation and Domino's Pizza, Inc. Kimberly-Clark began to show adverse results from our regular calculation of the incremental return on capital. We sold the shares at a small profit. They have subsequently performed poorly in terms of fundamental performance although the share price has ironically been quite firm. We prefer to judge our investments by what is happening in their financial statements than by the share price. Domino's shares rose in price by 113% during the year and had reached a point at which they no longer represented good value. Domino's also has a re-financing of debt due by 2014. There is nothing in the performance of Domino's which causes us the slightest concern about this but there is plenty wrong with the banking system which will be required to provide the refinancing. As a result we hope to have the opportunity to become investors in Domino's again.

The net result this was that the Total Expense Ratio of the Fund was 1.2%. We hope to reduce that in future.

The historic dividend yield on the Fund at year end was 2.4%. This dividend was covered 2.6 times by earnings. There is only one stock in the Fund that does not currently pay a dividend. This is significant: it is becoming clear that dividends are likely to provide a more significant portion of the total return on equities in the future than they did in the equity bull markets of 1982-2000 and 2003-07.

The current yield on the Fund may not fully reflect its dividend paying capabilities as some of the companies also utilise share buybacks. During the course of the year we published some research on share buybacks ("Share Buybacks-Friend or Foe?" April 2011-available on the Fundsmith website) in which we concluded that buybacks were rarely accompanied by any reasoned justification; that they had become almost universally regarded as a good thing and contributing to shareholder value irrespective of the price paid or the valuation implied, which simply cannot be true; and in many cases their timing was poor.

During the year we wrote to the management of those companies within our portfolio which have engaged in share buybacks to ask for some insight into their rationale. The responses ranged from prompt, personalized (by the CEO) and well reasoned to being completely ignored. We regard the greatest risk for our investors after the obvious potential for us to buy the wrong shares or pay too much for shares in the right companies, as being reinvestment risk: we seek to buy companies which deliver high returns on capital in cash. What the management then does with these cash returns is one of the major factors affecting future returns on the portfolio. Management faces three main options for deploying these cash returns: return cash to shareholders, invest to grow the business organically or make acquisitions. The criteria they use for

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choosing between these options are important. So are the ways in which they operate each option. So, for example, having determined to return a portion of earnings to shareholders, how does a management decide between a dividend and a buyback? In many cases we do not know as the management does not give any detailed rationale and we suspect that the answer is with the “benefit” of advice from their investment bankers who get fees, commissions, bid-offer spreads and maybe proprietary trading profits for advising companies to pursue buybacks but get nothing when a dividend is used. No prizes for guessing which way the advice is slanted.

At the end of 2011 we held a portfolio of 24 stocks.

On average companies in our portfolio were founded in 1894. We continue to invest in businesses which have shown great resilience over a long period of time-in most cases surviving two world wars and the Great Depression.

The trailing free cash flow (“FCF”) yield at the start of the year was about 7% and about 5.8% at the end. The fall in the FCF yield was caused by a combination of the rise of share prices in the portfolio, changes in the portfolio and higher capital expenditure and working capital invested by the portfolio companies. This FCF yield compares with a median FCF yield on the S&P 500 of 6.1%. We have used the median by the way as the average is distorted by inclusion, for example, of a free cash flow yield of 76% on shares in Bank of America (“B of A”). Before you rush to buy B of A shares however you might like to know that cash flows at banks are not the same as they are at non banking businesses. So, for example, in the calculation of B of A’s cash flow the computation adds back the provisions for bad debts and impaired assets which is a deduction from profits. This is strictly true-a provision is a non cash item-but it means that comparisons of banks with other company’s cash flow in this manner is truly a case of comparing apples and ugli fruit (I chose a fruit which was more alphabetically remote from A for Apples than the commonly used P for Pears and which exemplifies our view of banks).

Our portfolio has a FCF yield about the same as the average for the market. Yet it is inconceivable in our view that it is not of higher than average quality in terms of longevity, resilience, predictability, gross margins, operating margins, return on operating capital and the conversion of profits into cash. Put simply this means that we own shares in businesses which are higher quality than the market on a valuation about the same as the average for the market.

Last year I started a policy of allowing myself one rant per letter about a subject relevant to investment. I thought I would provide an update on how that went. Last year I sounded a warning about the perils of Exchange Traded Funds (“ETFs”). What happened next even surprised me and I thought I had lost the capacity for such an emotion in the face of the shenanigans of the financial services industry.

Practitioners within the ETF sector reacted with a fury which can only be generated by two factors: 1) the criticism was accurate and/or hit a nerve; and 2) it was in danger of derailing a large gravy train.

Some ETF practitioners suggested that I was criticizing ETFs because of concerns about the impact the growth of ETFs would have on the active fund management sector in general and Fundsmith in particular. This response is not just wrong it is preposterous for two reasons: 1) Fundsmith’s market share of the active fund management sector is so small that I do not possess a calculator capable of getting enough zeroes to the right of the decimal point to calculate it. As a result, ETFs could

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continue growing to the point where they had replaced most active funds and still leave Fundsmith with an insignificant share of the remaining sector, so they are unlikely to affect us; and 2) I have long and publically maintained that the best equity investment for most investors most of the time is an index fund because of its low cost and outperformance of most active fund managers.

In an effort to be clear, my criticisms of ETFs are:

1. ETFs are almost certainly being mis-sold. My straw poll of investment professionals suggests that many investors think that ETFs are simply index funds. Many are not. Synthetic ETFs do not hold underlying securities of the sector or market they are supposed to replicate. Inverse ETFs can lose money even when the market sector they track has gone down, and leveraged long ETFs can lose money when their market or sector has gone up. None of these is consistent with the performance of a simple index fund.

2. Synthetic ETFs are of particular concern. If a fund which is described by the words synthetic, derivative, swap and counterparty does not cause you obvious concerns, I suggest you may need to study the events of the credit crisis of the past four years more carefully.

3. Because ETFs are tradable on markets unlike mutual funds, traders can sell them short. Relying upon the assumed ability to create more shares in the ETF in order to close these short sales, it is not unknown for the short interest in certain ETFs to reach ten times the size of the underlying ETF's assets. In these circumstances, the average ETF holder may be unaware that only some 10% of their holding in the ETF is represented by assets of the type they expect-the other 90% is a promise to deliver units from the short sellers. All will be well unless the short sellers find it difficult or impossible to buy enough of the underlying securities to deliver the required ETF shares which in some illiquid index or sector ETFs is entirely possible.

My own warnings on ETFs were followed by warnings from amongst others, the Bank of England, the Financial Services Authority, the International Monetary Fund and the U.S. Securities and Exchange Commission in a rare example of closing the door on a stable which may still contain a horse. Since regulators have come in for so much criticism of their loose handling of the financial sector prior to the credit crisis it would be churlish to criticize them for these warnings, and foolish to ignore them.

One more problem with ETFs became apparent to me in the course of this debate. ETFs are represented as low cost investments. Yet research published during the year demonstrated that ETFs were amongst the largest profit generators for some banks. This seems counter intuitive: how does a low cost product become a major profit contributor? The answer of course is that synthetic ETFs in particular provide banks with innumerable ways to "clip the ticket" of the ETF. The fees paid by the ETF investor are a very small portion of the total revenues which operating the ETF provides. They also deal for the ETF, provide the swap agreements by which it holds its synthetic positions (I wonder who works out whether the bank is providing them a fair price?), and maybe earn leverage, prime brokerage, custodian and registrar fees. The banks also deal for the hedge funds and traders who want to trade the ETF. At about this point, I began to realise why my critique of ETFs had caused so much fury.

My advice on this matter is simple. A broadly-based index fund is often the best investment you can make in the equity markets. But if you decide this is correct, buy

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precisely that, an index fund, not an ETF. The only difference between a physical ETF (which frankly is the only sort you should contemplate unless you like the risk of synthetic derivative swaps with counterparty risk) and an index fund is that the ETF is traded on the market as the term “Exchange Traded” implies. Every piece of research I have encountered and all my experience shows that frequent dealing is the enemy of a good investment performance. So why buy an ETF rather than an index fund? You can deal daily in most index funds. The only people who want to deal more frequently than daily are hedge funds, high frequency traders, algorithmic traders and idiots (these terms are not mutually exclusive). Why join them? If you don’t want active management, and mostly you shouldn’t, buy an index fund.

During 2010 Fundsmith also launched a SICAV and a US LLP. Neither of these affects your investment in The Fundsmith Equity Fund but I feel that you should be informed about this and it affords me an opportunity to raise another subject-currencies.

The SICAV is denominated in Euros and based in Luxembourg. It is a so-called “feeder” fund-the only assets it holds are units in The Fundsmith Equity Fund. The US LLP is a Delaware partnership denominated in US dollars which is invested with exactly the same strategy as The Fundsmith Equity Fund but it cannot be run as a feeder fund.

We launched these two funds in response to investor demand. US based investors face a massive tax disadvantage in investing in a UK fund as it cannot issue a Form K1 for IRS reporting, and offshore investors wanted a non UK vehicle for investment. But in neither case does the denomination of the fund in a currency other than sterling affect the investments currency exposure.

We are often asked by investors whether we hedge currencies. The answer is a firm ‘No’. How would we do so? Should we base it on the currency of the country in which the companies are listed? This obviously would not work. There may be no connection between the country in which a company is listed and its area of operations. The same is true of its country of incorporation or headquarters. Nestle is an example we often cite in this respect. Although it is headquartered in Switzerland, has its main listing there and reports in Swiss francs, it has only about 2% of its revenues in Switzerland, so hedging our holding by selling Swiss francs forward against sterling would surely not be a hedge at all. It is also far from unknown for companies to report in a different currency to that of the country in which they are headquartered or listed.

Perhaps we should hedge currencies based upon the country in which each of our investee companies has its revenues? The problem with this approach is twofold. Firstly, most of the companies supply low value items and so manufacture and sell locally or at least regionally. No one exports significant amounts of bulky low value items such as detergent. So the exposure, if there is any, relates only to the profit margin. Secondly, the corporate treasurer may already have taken out a currency hedge for the translation and/or transmission of those profits so that any currency hedge by us would in fact be creating an exposure.

A lot of nonsense is talked about currency exposure and hedging. Our new funds denominated in Euros and US Dollars do not change the currency risks of those funds which are driven by the underlying investments. For those who don’t believe this, we are prepared to launch a new class of our Fund which will change its currency denomination each year to the worst performing currency. In 2011 it would have even denominated in Turkish Lira and would have risen by 32%. However, since you would receive this depreciated currency when you sell the Fund units, you won’t be any

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wealthier as a result. If you think you would be, let us know and we will set up the Money Illusion class of the Fund.

We view the year ahead with some trepidation. It seems that it has yet to dawn on many of the key participants in the financial crisis that you cannot borrow and spend your way out of a crisis caused by over leverage, and that there is no higher authority than the governments who's credit is now in doubt which can extend further funds to provide a painless "solution" or maybe even a temporary respite. The dawning of this reality is sure to have some very painful consequences.

However, in contrast the Credit Default Swaps of Nestle have been less expensive than the cost of insuring against default on the debt of European governments and the US Treasury for some time. We are far from believers that the market is always right, but this does suggest that holding shares in major, conservatively financed companies which make their profits from a large number of small, everyday, predictable events is a relatively safe place to be if you have the patience, fortitude and liquidity to ride out the share price volatility which is likely to occur in such circumstances. And that's exactly where and how our Fund is invested.

Yours sincerely,

Terry Smith
CEO
Fundsmith LLP

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January 2013

Dear Fellow Investor,

This is the third annual letter to owners of The Fundsmith Equity Fund.

We have presented three periods of performance figures this year - the performance since inception, the annualised returns and the last calendar year.

T Accumulation Shares, Total Return	2012 %	Since Inception to 31.12.12 %	Annualised %
Fundsmith Equity Fund £	12.5	29.4	12.6
MSCI World Index £	11.4	14.8	6.6

We remain critical of attempts to measure investment performance over short periods of time. Even a calendar year is too short for this purpose. It is the time it takes the Earth to go around the Sun and has no natural link to the investment or business cycle other than for agricultural businesses.

However this proviso notwithstanding, how did we do in 2012?

The Fund rose by 12.5% in 2012 and modestly outperformed the market (which we take as the Morgan Stanley Capital International World Index - or MSCI World - in sterling with dividends reinvested) by 1.1%.

I'm rather surprised that we managed to outperform the market at all in this reporting period. 2012 was a year in which so-called risk assets performed well. This is unsurprising in a year in which the major central banks in the developed world supplied increasing amounts of liquidity through their Quantitative Easing programmes in increasingly desperate attempts to keep some modest amount of economic growth. All that liquidity has to go somewhere and indeed the supply of liquidity by central banks' purchases of bonds helps to push investors towards the purchase of riskier assets, as does the regime of record low interest rates, of which more anon.

This is not an environment in which I would expect our Fund to perform well relative to the market as the rising tide of liquidity floats all ships, many of which we would not consider owning.

Moreover, the year was characterised by what is in my opinion is a naïve view that the words spoken or (more rarely) actions taken have somehow helped to resolve the financial crisis which we have been living with since 2007. I cannot see how the supply of liquidity can solve a crisis caused by over leverage and insolvency. These events were exemplified for me when the Financial Times declared Mario Draghi, the President of the European Central Bank as its Man of the Year. This was based upon

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the fact that in July Mr Draghi pledged to do ‘whatever it takes’ to save the Euro, which was followed by him doing precisely nothing and yet the borrowing costs of the major European problem countries, and most notably Spain, dropped and the Eurozone crisis went into remission.

Depending upon your point of view, this is either an example of the perfect action by a central banker - the mere threat of action producing the desired result; or another episode in kicking for touch without any attempt to solve the underlying problems. No prizes for guessing which camp I am in, but in any event positive reactions to such events are far more likely to buoy the share prices of financial stocks, cyclical companies, those who might otherwise be bust or at least in difficulty and indeed a whole series of assets which we will never own in our Fund. For example, the MSCI World Bank Index in sterling with dividends reinvested was up 22.3% in 2012. We do not own any banks stocks and will never do so. The Financial Times also reported that a number of hedge funds doubled their money by investing in Greek bonds in 2012. Clearly such a double or quits trade is not ever going to attract us, and it is hard to see how a fund manager can hope to repeat such trades consistently enough to warrant the risk, which is presumably one of the reasons why HSBC reported that 88% of hedge funds underperformed their relevant benchmarks in 2012. With assets such as this performing well I hope you can see why I am surprised that our Fund outperformed the market.

It is also worth bearing in mind that we do not seek to outperform in every reporting period or in all market conditions, rather we seek to outperform the market and other funds over longer periods of time.

The analogy I use for this is the Tour de France, which topically was won by a British rider - the now ‘Sir’ Bradley Wiggins - for the first time in 2012. The Tour is the greatest of cycling Grand Tours, with 21 stages run over 23 days. In the 100 years since the Tour was first run, no rider has ever succeeded in winning every stage of a Tour. Nor in my view will anyone ever achieve this. This is because the Tour encompasses three distinct types of stage:

- the stages in which the riders form a peloton and riders can gain vital aerodynamic assistance by slipstreaming (or getting “a wheel”) from the rider(s) in front of them. A team can carry a sprinter (like Mark Cavendish) in the peloton and release him close to the line for the final sprint in an effort to win the stage;

- time trials in which the riders are released individually and so cannot gain any assistance from each other. In order to maximise their own aerodynamic efficiency, the riders use tri handlebars, wear skin suits and aerodynamic helmets and often have solid rear wheels and wide rims on the front wheel. This is a test of individual riding ability over the whole stage; and

- mountain stages which are run as a team but involve significant climbs unlike the main peloton stages which are much flatter.

A rider needs a very different physique to win as a sprinter to a time trialist or a mountain climber - compare Bradley Wiggins with Mark Cavendish - which is why no one can win all stages. The rider who wins the Tour is likely to be one who excels at one discipline - Wiggins is a time trialist, the discipline in which he also won a Gold medal at the 2012 Olympics - and is not too bad at, and obtains help from his team with, the other stages. Indeed on two occasions, the Tour has been won by riders who did not win a single stage.

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In my view there is a moral here for investors. What we are trying to achieve with Fundsmith is to win the investment equivalent of the Tour de France for you-to outperform over a long period of time. However, we do not expect to outperform all the time or in all markets conditions. Rather our expectation is that we will perform relatively well in bear market conditions, and may struggle to keep pace in more bullish conditions, which is why I am surprised that we outperformed the market albeit modestly in 2012.

It is important that our investors recognise that this is what we are aiming for. Too often investors seek to find fund managers who can outperform all the time and in all market conditions. The trouble is that no such person exists. But the attempt to find this mythical creature leads to some investors moving their assets between managers, incurring costs and most frequently ditching a manager who's investment style is out of step with the current market in favour of one with recent good performance just as they are about to switch positions.

Having said all that, how are we doing at winning the Tour? Since inception our Fund has managed an annualised return in Sterling of 12.6% p.a. versus a return of 6.6% p.a. for the MSCI. This seems like a satisfactory start on our investment Tour campaign.

Our Fund remains the best performing fund in the IMA Global Sector since inception to the end of December 2012.

The main positive contributors to that performance in 2012 were: Intercontinental Hotels, L'Oreal, Reckitt Benckiser, Kone and Diageo.

The main detractors from the Fund's performance were: Procter & Gamble, McDonald's, Imperial Tobacco, Becton Dickinson, and a Consumer Company which we are in the course of buying a position in and so would prefer not to name at this point. McDonald's is a small position as it has only recently come within valuation range for us after reporting a number of periods with poor sales performance. We believe it is a business of the quality which we seek and therefore are willing to use this as an opportunity to buy stock. It might be worth thinking about the implications when a business which sells some meals for one dollar is struggling to grow sales. Clearly this is not because consumers are feeling flush and trading up.

Portfolio turnover in the Fund in 2012 was 0.48%. This figure is flattered by the inflow of funds over the period which is not included in the calculation otherwise a new fund would have 100% turnover from investing cash inflows, but even so it is exceptionally low.

Our only outright sale during the year was of SGS, the Swiss testing company. We remain convinced that it and the sector are good quality businesses, but the shares had reached the point at which they were one of the most highly rated within our Investable Universe and so we thought that there was better value to be found elsewhere.

We finished the year with 28 holdings up from 24 holdings at the end of 2011, which is towards the top end of our range but we are in the course of selling a holding which will reduce this number.

Our outright purchases for the year were Choice Hotels, Domino's Pizza, McDonald's, Visa and the aforementioned Consumer Company. Our purchase of Domino's is perhaps the one which requires most explanation since we sold it the year before. The sale was partly based upon apprehension about Domino's debt refinancing which had

been postponed. We took this as a bad sign in a banking market which is exemplified by a cartoon which shows a man sitting in front of a bank manager (you can tell this because there's a sign on the desk saying "Bank Manager") who says "I'd like to borrow some money" to which the Bank Manager replies "What a coincidence, so would we." There is clearly nothing wrong with Domino's but plenty wrong with the banking industry on which it was reliant for its refinancing.

In the event, Domino's proved us comprehensively wrong. Not only did it manage to refinance but they did so on terms which enabled it to pay a $3 per share special dividend. So I did what you should always do, but we so rarely manage to do, when we get it wrong a) admit this - most importantly to yourself; and b) reverse the decision. So Domino's was repurchased

Fortunately there was a period of share price weakness after the refinancing which enabled us to do this on reasonable terms but frankly that does not matter as much as whether the shares were still good value when we repurchased them, which we believe they were. It is always a mistaken strategy to wait for the shares to get below the point at which you sold them before repurchasing, or the even more common trait of waiting for a loss-making share purchase to get back to break even before selling. As I am fond of saying, the shares are unlikely to follow this desired pattern since they do not know whether you own them or not or at what price you bought or sold.

There are several morals to the Domino's trades but the main one is that almost every time we sell a position in a quality company we get to regret it in terms of subsequent share price performance. The good news is that we don't do it very often.

This brings me onto the wider subject of the expenses borne by the Fund. The Ongoing Charges Figure (or "OCF" as it is now called) for the year is likely to be 16bps or 0.16% in addition to the Annual Management Charge. This is a 4bp reduction compared to 2011 figure. These expenses are often ignored both by investors and other fund managers. But, like all charges, they detract from the performance of the Fund, deserve proper attention and should be minimised. The Fund can only perform as well as the performance of the shares it owns and to the extent that performance is absorbed by expenses, the returns for investors will suffer.

The majority of the costs borne by the Fund are the costs of running and maintaining the share register. These costs are driven by numbers of shareholders and transactions. We continue to focus on reducing these charges, ensuring the Fund benefits from economies of scale as it grows and does not overpay for services simply because of the increase in its size. If the Fund remains at its current size, we would expect the Ongoing Charges Figure to fall by another 3bps in 2013.

Perhaps surprisingly, the Ongoing Charges Figure does not include all charges the Fund has paid in the year. The commission paid on share purchases and sales are not included and neither is Stamp Duty or the bid/offer spread which is incurred in dealing. During the year, the Fund paid £231,000 in commission-less than 4bp on the value of the total trades. The vast majority of those trades were due to inflows into the Fund. Stripping out the commission on trades caused by the inflow, the amount of commission paid on trades executed voluntarily was under 1bp of the average funds under management. This compares with estimated charges incurred by the average UK mutual fund manager of about 1% pa excluding Stamp Duty.

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Turning to the characteristics of our portfolio, probably the question I am asked most frequently is whether the strong performance of most shares in the Fund to date means that they are now over-valued.

The weighted average free cash flow ("FCF") yield, which is our primary valuation yardstick, of the companies in the portfolio started the year at about 5.8% and finished it at about 5.7%.

This 5.7% FCF yield compares with a median yield on the non-financial stocks in the S&P 500 of about 6.1% and an average of 5.4%; or a median for the non-financial stocks in the FTSE 100 of 4.6% and an average of 4.9%. The valuation of our stocks on this basis therefore looks about the same or a bit better (cheaper) than the average.

The yield is also significantly higher than the yield on government bonds which was previously known as the risk free rate before investors started to relearn that governments default. This is significant. The coupon on those bonds cannot grow over time whereas the free cash flow from our companies can. So if we can buy them with a higher FCF yield than the bond yield then we have probably created value.

We should perhaps compare the FCF yield of the portfolio not with the yield on major government bonds but what we think that bond yield should be since government bond yields across the developed world are distorted by Quantitative Easing in which the central banks, controlled by the government, are the main or even the sole buyer of bonds. We work on the assumption that government bonds would need to yield at least 1% over the expected rate of inflation to attract rational investors, and so we seek to invest in companies only when their FCF yield is the same as or more than that required bond yield.

The return on capital of the companies in our portfolio averaged about 32% p.a. This compares to an average of about 20% p.a. for the non-financial stocks in both the S&P 500 and the FTSE 100. Bearing in mind the longevity and resilience of our portfolio companies I think we can remain confident that we own stocks with a superior fundamental performance to the average which is not fully reflected in their valuation relative to bonds or other equities.

It may seem surprising that we can buy shares in quality companies at reasonable or even cheap valuations and thereby expect to generate superior investment performance. I have written a short research note in an effort to explain this entitled "Return Free Risk" which can be downloaded from our website at www.fundsmith.co.uk/research. The title is not a mis-type, rather it's a pun. As investors we are taught that to obtain higher returns you must assume higher risk, but much of the evidence contradicts this assumption. The fact is that for much of the time you get better returns from investing in predictable high quality companies than in smaller, riskier, more obscure company shares. But there appears to be a human desire to indulge in excitement and back the 100-1 shot rather than the favourite, and to engage in complicated bets such as the Yankee defined as "four selections and consisting of 11 separate bets: 6 doubles, 4 trebles and a fourfold accumulator". Can you accurately calculate whether the odds on such a bet are fair, in your favour or the bookmakers favour? If you can't, then the bookmaker has the advantage. For bookmaker, read "market". The principle is the same.

At Fundsmith we obtain excitement not from the delusion that we have discovered an investment that no other investors have found or from a long shot winning, but from delivering predictable, superior investment returns.

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The marginal fall in free cash flow yield of our portfolio is a result of the rise in the share prices of the companies in the portfolio nearly offset by a 9.6% increase in the free cash flows per share produced by our companies.

On the whole, we would prefer that the share price performance of our stocks tracked the underlying free cash flow performance of the companies since performance from increasing valuations is a finite game which also tends to even out over long periods of time, and we intend to run this portfolio for a long period of time.

Similarly, we would prefer that the increase in free cash flow from our portfolio companies was derived from top line volume growth, albeit from companies which are able to maintain good prices and high margins on their sales. However, in the low growth environment which we occupy, free cash flow growth is increasingly a result of cost cutting and/or share buybacks. These are also finite sources of growth even when share buybacks are executed in a way which creates value for remaining shareholders, which is not always the case. But it is better to be invested in companies which can maintain growth in free cash flow per share by these means in these circumstances than in companies which can't.

The historical dividend yield of the portfolio is 2.3% and we forecast the prospective yield is 2.5%. Dividend cover remains 2.6 times. Yield is an important element of investment return. Over the long run, it has contributed a higher percentage of equity performance than share price appreciation. But I would caution against a blind search for higher yields.

The current record low interest rates and bond yields have produced a desperate search by investors for yield. The investment industry stands ready to supply products to satisfy any craving by investors, not always to their advantage. Investment flows have started to gravitate to higher risk bonds such as junk bonds and emerging market debt as government bond yields in the supposed safe haven countries have shrunk towards zero. The yield on US high yield or junk bonds sank to 6% at the beginning of 2013, the lowest ever recorded. New issuance has boomed in high yielding real estate investment trusts, and so-called master limited partnerships in energy stocks and pipeline companies (I wonder how many investors can explain how they work). Even Collateralised Loan Obligations ("CLO"s), part of the toxic alphabet soup of instruments which helped start the Credit Crisis have been making a comeback with issuance trebling in 2012. How soon we forget.

Equity investors are far from immune from this trend. For many investors the search for yield is satisfied by investing in an income fund which invests in high yielding equities. This can be a mistake. At certain levels of yield all that is happening is that the investor is being paid back some of the capital value of his or her investment as income, and taxed upon it. All bar one of the income funds in the IMA Global Equity Income sector apply their charges not to income but to capital in order to maximise their stated yield. This has some obvious disadvantages, not the least of which is that it maximizes the investor's tax bill as Income Tax is higher than Capital Gains Tax and much more difficult to avoid or defer. It also exaggerates the true yield, which has obvious marketing advantages for the funds.

We think that investors should not focus solely upon yield but rather on the total return they derive from a share or a portfolio, and should not take the dividend yield as an exact indicator of what they can afford to remove from the fund periodically and spend. To this end we have recently launched a Regular Withdrawal Facility for Fundsmith investors which enables you to draw down whatever figure you want in a regular

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income from your investment in the Fund without reference to the dividend yield. I am convinced that this, rather than buying high yielding shares which may have poor overall returns and managing them in a fund which overstates the yield by applying charges to capital, is the right way to address this need. It seems like an odd innovation for a fund manager to devise a way to make it easier for investors to withdraw money, so I doubt this will catch on with other managers.

The average company in the portfolio was founded in 1902 – this time last year it was 1894. Clearly some of our purchases have shortened the average age of our companies which has produced a worrying leap on average into the twentieth century.

Looking forward to 2013, one reasonably likely outcome is that we might experience "Groundhog Year" in which there are more EU summits, further commitments to do "whatever it takes" whilst actually doing nothing, another "rescue" deal for Greece, wrangling over the US debt ceiling to follow the Fiscal Cliff, and more QE to keep an otherwise stagnant economy across the developed world alive on life support.

However, it seems likely that one thing is changing: the mandate of central banks in the developed world. The Fed recently doubled its monthly QE programme to $85bn and said it would maintain this programme **at least** (emphasis added) until unemployment falls below 6.5%. Shinzo Abe became Prime Minister of Japan for the second time with the stated intention of making the Bank of Japan target an increase in inflation. Mark Carney, the much heralded new Governor of the Bank of England, got off to an unusual start by announcing seven months before he starts work that he thinks there should be a debate about whether central bankers should currently be targeting nominal GDP growth i.e. ignoring inflation.

Now depending upon your point of view this is either good news because it means yet more stimulus will be applied or bad news because you do not think that the additional stimulus will do much to achieve economic growth or increased employment but it will risk side effects which can be as bad or worse than the ailment they are seeking to treat.

I am in the latter camp. I think that central bankers should be independent of government and should be concerned with the soundness of the currency, and if they have the regulatory authority, the soundness of the banking system. Allowing them to stray outside that is dangerous as it will lead to confusion of fiscal and monetary policy, or in plain English, governments will be able to fund their profligate spending programmes by getting the central bankers to print more money and buy their bonds until the employment or nominal growth targets are achieved, or even beyond (note the term 'at least' used by the Fed).

At some point, the inevitable consequence of this is inflation and currency depreciation. The newer generation of central bankers such as Mr Carney have yet to experience that. When they do, they may discover that when inflation takes hold it does not conveniently stop at some predetermined target rate. They may also find that the only device they have to control inflation is the blunt instrument of interest rates, and a significant rise in rates would have some interesting effects on the affordability of government debt, private debt and the economy in its current condition.

You might legitimately point out that depreciation of the major currencies is a bit tricky as they are all trying to depreciate against each other in order to achieve some competitive advantage. But maybe they will all depreciate against hard assets, or to put it more simply-inflation.

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Still whilst we wait to see if or when this scenario comes to pass, the good news is that macro views and developments have no bearing on our strategy; increasingly desperate attempts to stimulate the economy are far more likely to stimulate the valuation of our portfolio (not that we like to make money that way); and our stocks are likely to be a relatively good hedge against a resurrection of inflation.

Happy New Year.

Yours sincerely,

Terry Smith
CEO
Fundsmith LLP

Important information:
An English language prospectus for the Fundsmith Equity Fund is available on request and via the Fundsmith website and investors should consult this document before purchasing shares in the fund. Past performance is not necessarily a guide to future performance. The value of investments and the income from them may fall as well as rise and be affected by changes in exchange rates, and you may not get back the amount of your original investment. Fundsmith LLP does not offer investment advice or make any recommendations regarding the suitability of its product. This financial promotion is intended for UK residents only and is communicated by Fundsmith LLP which is authorised and regulated by the Financial Services Authority.

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January 2014

Dear Fellow Investor,

This is the fourth annual letter to owners of The Fundsmith Equity Fund ("the Fund").

The table shows performance figures for the last calendar year and the cumulative and annualised performance since inception on 1st November 2010.

% Total Return	1st Jan to 31st Dec 2013	Inception to 31st Dec 2013	
		Cumulative	Annualised
Fundsmith Equity Fund[1]	+25.3	+62.2	+16.5
Equities[2]	+24.3	+40.5	+11.3
UK Bonds[3]	-4.3	+11.9	+3.6
Cash[4]	+0.5	+2.3	+0.7

[1]T Class Acc Shares, net of fees, priced at noon UK time.
[3]Bloomberg/EFFAS Bond Indices UK Govt 5-10 yr.
[1,3,4]Source: Bloomberg,
[2]MSCI World Index, £ net, priced at close of business US time.
[4]3 Month £ LIBOR Interest Rate.
[2]Source:www.msci.com

We remain critical of attempts to measure investment performance over short periods of time. However this proviso notwithstanding, the table shows the performance of the T Class Accumulation shares which rose by 25.3% in 2013 and compares that with 24.3% for the MSCI World Index in Sterling with dividends reinvested. The Fund therefore outperformed the market in 2013 by 1%.

You (and we) may find this surprising given that 2013 was a bullish period for equity markets and our portfolio could reasonably be categorised as "defensive". The year in stock market terms was, to use the football cliché, "a game of (roughly) two halves". The market, as measured by the MSCI World Index[2], rose by 19.1% from 1st January to 22nd May, where it hit a temporary peak from which it fell by 9.4% after Ben Bernanke spoke on 22nd May and indicated that the Federal Reserve Bank was considering so-called "tapering" of its Quantitative Easing ("QE") programme of purchasing bonds, then running at no less than $85bn per month. It began to recover from July as it became evident that even the suggestion of tapering would have adverse consequences, not least for Emerging Markets which have been the recipients of an estimated $4 trillion dollars in capital since QE began after the financial crisis of 2007-08. A much smaller tapering than originally anticipated started in December, and has been accompanied by soothing

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statements about the long term continuance of that other policy measure - a Zero Interest Rate Policy (or "ZIRP"). It is clear that the authorities took fright at the impact of their plans to moderate the stimulus and backed down, leaving the markets to resume their bullish mood.

The market dip which began in May also coincided with the market sensing economic recovery in the GDP numbers for the US and the UK at least, so that in the second and third quarters the sectors which performed well were all those which you would expect to do well in such conditions - Consumer Discretionary, Industrials, Finance, Information Technology and Energy - most of which we will never own. Consumer Staples, which are the bedrock of our strategy and portfolio, were one of the worst performing sectors in this period.

Now this might strike you as odd, that a sell-off in the market coincided with increasing evidence of economic recovery, but apart from the fact that no one has ever established a correlation between GDP growth and the performance of stock markets, one of the more apparently perverse aspects of markets has been the growing view that "good news is bad news". It all comes down to QE - the markets were more concerned that economic recovery would lead to the withdrawal of this stimulus than they were bullish about the recovery itself.

Although we have an interest in this subject, these market shenanigans have no bearing on the manner in which our portfolio is invested. People often ask us what we think the outlook is for the economy and/or the market. Apart from prefacing any response with the phrase, "we don't know", we usually point out that whatever the outlook it will not alter our methodology of investment. We mention this because we sometimes feel that the questioner supposes that if we too scent economic recovery we might switch the portfolio into cyclicals, financials and highly leveraged companies which might benefit from a recovery most (but which might otherwise go bust). Whatever our view on the economy, The Fundsmith Equity Fund will always be fully invested in high quality companies which satisfy our exacting criteria on financial performance and have done so for many decades.

However, at least one aspect of the debate about economic recovery and so-called tapering of QE puzzles us. If we are in an economic recovery, why is the growth rate of our investee companies slowing? We both understand and accept that in an economic recovery, companies in areas of discretionary spending and big ticket durable items such as cars and houses will fare better than the companies in our portfolio, as will companies in the cyclical industries which supply them. But we keep track of the "underlying" (excluding acquisitions, currency effects and exceptional items) revenue growth rate at all the companies in our Investable Universe (currently 64 stocks) and there is no doubt that it has slowed by a couple of percentage points over the past year. Remarks from several of their CEOs make it clear that consumer markets are not becoming significantly better. We can see why they would lag cyclical stocks in an upturn but not why their performance would start to deteriorate. This leaves us feeling sceptical about the nature and strength of the recovery.

For the year, the top five contributors to the Fund's performance were:

Domino's Pizza	+3.02%
Microsoft	+2.05%
Stryker	+1.98%
Becton Dickinson	+1.96%
3M	+1.93%

The bottom five were:

Swedish Match	-0.06%
Serco	+0.03%
Imperial Tobacco	+0.14%
Schindler	+0.14%
Philip Morris Intl.	+0.21%

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It is worth noting the following about the bottom five contributors: only one actually had a negative performance, Swedish Match, which we began buying during the year in response to share price weakness and a resulting more attractive valuation. Three of the five are tobacco companies which suffered from concerns about plain packaging and e-cigarettes. We suspect that these concerns are overdone but nonetheless have a self-imposed limit on our exposure to the sector, as we do to most sectors, in order to ensure that the effects are limited if we are wrong. Schindler and Serco, two of the other bottom five performers, were sold during the year.

Minimising portfolio turnover is one of our objectives and this was again achieved with a negative turnover of -17.6% during the period. Negative turnover occurs because the method of calculating turnover excludes flows into or out of the fund, otherwise a newly established fund would automatically have 100% or more turnover. However, it is not very helpful in judging our activities. It is perhaps therefore more helpful to know that we spent a total of £351,227 or just 0.025% (2.5bps) of the Fund on dealing other than that associated with flows into the Fund which was involuntary.

Why is this important? It helps to minimise costs, and minimising the costs of investment is a vital contribution to achieving a satisfactory outcome as an investor. Too often investors, commentators and advisers focus on the Annual Management Charge ("AMC") or the Ongoing Charges Figure ("OCF"), which includes some costs over and above the AMC, which are charged to the fund. The OCF for 2013 for the T Class Shares was 1.11%. The trouble is that the OCF does not include an important element of costs - the costs of dealing. When a fund manager deals by buying or selling investments for a fund, the fund typically incurs commission paid to a broker, the bid-offer spread on the stocks dealt in and, in some cases, Stamp Duty. This can add significantly to the costs of a fund yet it is not included in the OCF.

I find that investors are often confused by this and in my view do not pay enough attention to it. The fact is that as an investor you can only benefit from the price appreciation of shares in your fund and dividends paid. Costs of dealing detract from those returns and therefore need to be taken into account when you are comparing funds.

We have published our own version of this total cost including dealing costs, which we have termed the Total Cost of Investment, or TCI. For the T Class Shares in 2013 this amounted to a TCI of 1.2%, including all costs of dealing for flows into and out of the Fund, not just our voluntary dealing. As a result of the Investment Management Association's campaign for fuller disclosure I am hopeful that we will eventually get such disclosure from many more funds so that investors can make a well informed comparison between funds. When they are able to do so, I fully expect that the Fundsmith Equity Fund will compare favourably.

Although our turnover was once again very low in 2013, we sold five holdings: McDonald's, Schindler, Serco, Sigma-Aldrich and Waters Corporation. There may seem to be an inherent contradiction between the fact that we sold five holdings yet our turnover was low. Part of the explanation is that some of these holdings had already become an insignificant proportion of our portfolio because we had been struggling to add to them as their valuations had become too high to represent good value in our view. Once this point is reached it begs the obvious question of whether we should in fact sell our holding to make way for an investment which offers better value, either within our existing portfolio stocks or from within our wider Investable Universe of stocks on which we maintain research.

There were also individual reasons for sale in each case:

McDonald's valuation had held up despite a run of poor sales figures which made it hard to add to our holding. The poor sales also arose despite McDonald's offering meal options for as little as $1. This began to convince us that McDonald's had started to become a business which was selling solely on price, which we seek to avoid, and it seems that its Dollar Menu has perhaps unsurprisingly handicapped its attempts to sell premium items. Its performance was in sharp contrast to Domino's Pizza which has had no trouble

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growing sales with price points close to $6 for a pizza, and we took comfort in the fact that we retained our Domino's holding and with it a continued exposure to the franchised fast food business which we like.

Schindler had simply become too expensive for us to add to our holding and we were able to retain an exposure to the attractive elevator and escalator sector via Kone.

Serco seemed to fit the profile of businesses we seek to invest in as it depends on a large number of everyday repeat transactions: if you ride a Boris bike, take the Docklands Light Railway, see a traffic light being repaired in London, get a parking ticket in San Francisco, have the misfortune to be incarcerated in certain UK prisons or transported to court in a prison van, pass through airspace governed by US air traffic control or encounter the Australian immigration authorities, you are dealing with Serco. But we had always been troubled by the fact that these transactions emanated from much larger contracts, typically with governments, which gave rise to the risk that large contracts could be lost and in so doing could adversely affect Serco's relationship with its government customers. Then early in 2013 it became apparent that a significant acquisition of an Indian-based business process outsourcing business, which Serco had undertaken, had changed its cash flow generation and capital intensity in a way which was adverse and we sold our holding in February. Serco's problems with electronic tagging of offenders followed some months later and confirmed our concerns.

Sigma-Aldrich is a company based in the US Midwest which supplies chemicals and equipment to researchers and manufacturers in the life sciences, high tech industries and R&D. It supplies a large number of items in small ticket sizes to a large number of purchasers, and so fitted our investment profile, not least because it also has an excellent record in terms of return on capital and cash conversion (turning profits into cash, in plain English). However, Sigma-Aldrich attempted to acquire Life Technologies, a company which is much larger in every sense - revenues and market valuation. This worried us a lot. With our low portfolio turnover we are in effect leaving the allocation of capital generated by the wonderful returns earned by our portfolio companies to the management of those companies. When one of them looks likely to take a business with good, predictable returns and do something large, exciting and risky, we have a strong impulse to run away.

Waters Corporation makes and services liquid chromatography, mass spectrometry and thermal analysis equipment. The company's main customers are in the pharmaceutical and biotechnology industries but it also supplies industrial, food and environmental customers. Its revenues are partly a play on the growth in the requirement for testing in these areas. Although its equipment represents large ticket capital items, it makes nearly half its revenues from consumables, service and spares, so satisfying our criteria on repeat purchases. But it has significant sales to Asia including the Indian generic pharmaceutical industry and we were fearful that the slowdown in Emerging Markets would adversely impact the equipment sales which underpin its revenue model. Waters was also the only non-dividend paying stock which we held. Whilst we are prepared to hold such stocks, we need to be convinced that their reinvestment opportunities warrant the absence of a dividend and we were increasingly wary of this with Waters.

So much for the sales.

The Fund purchased a holding in C.R. Bard which makes medical devices, particularly catheters for use in oncology, urology and vascular conditions. It is to some extent a play on the medical needs of an aging population. Its business is centred on the developed world at present and we believe it may have a significant opportunity to grow in Emerging Markets. Unlike Waters, Bard's opportunities in Emerging Markets are not linked to the capital expenditure cycle of its customers which is by definition lumpy and cyclical as it does not sell high value equipment but mainly consumables.

We also began to acquire a holding in a transaction services company but this has not yet reached a size where we feel that our buying is complete and so do not wish to disclose the name at present.

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Perhaps the question we faced most frequently from investors or prospective investors over the year was whether companies of the sort we invest in have become too expensive.

There has certainly been a growing fashion for investing in the type of large, well established companies whose business consists of selling or supplying goods and services which are characterised by the small ticket, repeat, relatively predictable everyday events which we seek. Whilst this may seem like a welcome development insofar as it means that the Fund's shares have risen in value faster than the market, it also means that an increasing proportion of the Fund's performance has been delivered by rising valuations of those stocks rather than growth in their revenues, profits and cash flows. As we cautioned in this letter last year, 'increasingly desperate attempts to stimulate the economy are far more likely to stimulate the valuation of our portfolio'. That this happened in 2013 - not just for our portfolio, but for the whole market - is demonstrated by this chart which looks as though it was drawn by and/or for a child:

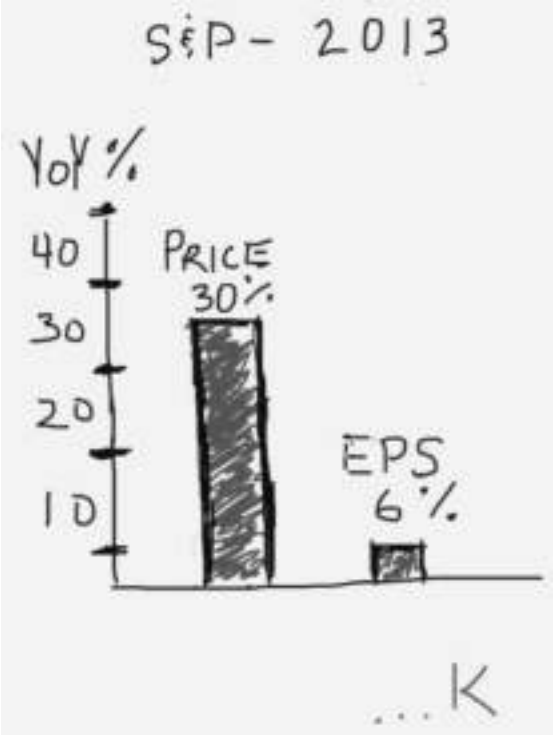

Whilst such increases in valuation may seem like cause for celebration it is not always so as we intend to be long term or even indefinite investors and such valuation changes are certainly finite and maybe even temporary. They are the result of the massive injection of liquidity from QE and a sustained period of zero interest rates. Apart from the fact that we intend to be long term investors, even if we were trying to guess the timing of the withdrawal of these factors in order to exit from markets, we would point out that there is no certainty that such increases in valuations may not be sustained or even go further as QE continues. The so-called taper is a token - US QE continues at $75bn per month, $900bn p.a. - and it seems that most major central banks are targeting a further sustained period of ZIRP. At the moment stories of QE's demise are at least exaggerated. Fortunately seeking to profit from short term valuation anomalies or changes is not part of our strategy but given the upside which has been generated from these policies, I have little doubt that we will have to live through some character testing times when they are withdrawn.

There are many ways of looking at valuation, but here are a few thoughts:

1. We seek to buy our portfolio companies when their free cash flow ("FCF") yield (the free cash flow they generate divided by their market value) is at or above the yield we would expect to get on long term government bonds in the same currency. Please note; not the current yield on bonds, which in most cases has been depressed by governments buying their own bonds, but the yield we think might apply if this were to stop and all bonds had to be sold to third party investors. Our

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starting guess for the yield that might then be required is one percent over the expected rate of inflation. If we can buy shares with FCF yields higher than that and which will grow, unlike the coupon on the bonds, we should have captured some value. There are still shares within our portfolio which look good value on this basis, albeit not as many or as cheap as they were a year or two ago.

The weighted average FCF yield of the portfolio started the year at 5.7% and ended it at 5.1% - still above the level we would find acceptable on the basis of the comparison with expected bond yields. Our companies on average grew their free cash flow per share by 6.6% during the year. They actually grew their operating cash flow by 8.1% but also spent 21% more on capital expenditure ("capex"). We find the fact that they have significantly increased their capex as encouraging as we have yet to find an industry which can grow without committing additional capital in order to do so.

This 5.1% FCF yield compares with a median FCF yield for the non-financial stocks in the S&P 500 of 4.6% and a mean of 4.1% or a median for the non-financial stocks in the FTSE 100 of 4.0% and a mean of 3.7%. Our stocks do not look bad value in comparison to the market. Although of course, both may be expensive, but both may continue to be so or become more expensive.

2. Consumer Staples, in particular, have been more highly rated in the past than they are now. We mention this because we frequently read or are told that they are more expensive than ever. This is simply not so - they were more highly rated in the 1990s, for example. Moreover, whilst commentators seem to focus on Consumer Staples stocks, these are less than half of our portfolio, and some of our medical equipment stocks are much closer to the low end of their historic valuation range.

3. We examined the relative performance of Colgate-Palmolive and Coca-Cola over a 30 year time period from 1979-2009. Why 30 years? Because we thought it was long enough to simulate an investment lifetime in which individuals save for their retirement after which they seek to live on the income from their investment. Why 1979-2009? We wanted a recent period and in 1979 it so happens that Coca-Cola was on exactly the same Price Earnings Ratio ("PE") as the market – 10 and Colgate was a little cheaper on 7x. The question we posed is what PE could you have paid for those shares in 1979 and still performed in line with the market, which we took as the S&P 500 Index, over the next 30 years? We found the answer rather surprising - it was 36x in the case of Coke and 34x in the case of Colgate when the market was on 10x. Another way of looking at it is that you could therefore have paid a PE of 3.6x the market PE for Coke and 4.9x the market PE for Colgate in 1979 and still matched the market performance over the next 30 years. The reason is the differential rate of compound growth in the share prices (to a large extent driven by growth in the earnings) of those companies over the 30 years. They compounded at about 5% p.a. faster than the market. You may be surprised that this differential can have such a profound effect upon the outcome. It's the magic of compounding.

   Albert Einstein said that he thought compound interest was the eighth wonder of the world. It is certainly one of the concepts least understood by investors. The simplest illustration of this is to ask how long it takes to double your capital at 10% p.a. compound return. The whole point is that we are talking about compound returns in which the gains are added to the capital sum to which each successive period's rate of return is applied. Consequently, the answer is a counterintuitive seven years. It only takes a compound return of 7% p.a. to double your money in ten years.

   That is a simple enough example, but how about this one: starting with the same initial sum, what is the difference in final capital from 30 years of investment at 10% p.a. compound versus 30 years at 12.5% p.a.? I ask this because it may represent a reasonable range of outcomes from an investment lifetime. The answer, rather surprisingly, is that the extra 2.5% of compound return would double the final sum.

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As discussed earlier Coke & Colgate's total returns grew at about 5% p.a. faster than the market over the period 1979-2009, this 5% differential multiplied their share prices four times more than the market over that period. Of course, the next 30 years may be different to the 1979-2009 period. However, if I had to guess how it would affect this calculation it would be that companies like Coke and Colgate will fare even better versus the rest of the market in terms of growth given that the cyclical stocks are unlikely to benefit from a repetition of the growth which was stimulated by the credit bubble. But what do I know?

It is also fair to point out that quality stocks may indeed not be too expensive relative to the rest of the market but that both will prove to be expensive, particularly when interest rates rise. But even so, I suggest you consider how you might have reacted if someone had suggested that you invest in Coke or Colgate at say twice the market PE in 1979. In rejecting that idea you would have missed the chance to make nearly twice as much money as an investment in the market indices over that period which included some periods of very high interest rates. Of course, capturing this opportunity would have required you to have the fortitude to sit on your hands during those periods of high interest rates and poor performance (hint: we will be reminding you about this when interest rates rise). As at 31st December 2013 they were trading at PE's slightly above the market – our portfolio was on a PE of 20.6x versus 17.4x for the S&P 500, which doesn't sound quite so expensive when you look at their historical performance and quality.

4. In fact, we rarely look at PE's, usually only doing so to make such comparisons as other market commentators use them. We prefer instead to rely upon free cash flow yields when evaluating our investments as not all E's, or Earnings, are created equal. Our portfolio companies' businesses are less capital intensive than the market as whole. As their earnings are generated with less capital, their Return on Capital Employed is much higher than the average, which we regard as the primary test of their performance. The return on capital of the companies in our portfolio averages 34%. This compares with an average of about 19% for the non-financial stocks in both the S&P 500 and the FTSE 100. They also deliver more of their earnings in cash than the market as a whole, typically 90-100%. And we like cash - it is the main way of paying bills and earnings delivered in cash are of higher quality than those which aren't.

   We remain confident that we own stocks with a superior fundamental performance to the average which is not fully reflected in their valuation relative to bonds or other equities.

5. A striking and direct comparison is between the dividend yield on some of our stocks and the redemption yield on their bonds. Take Nestle for example, at the end of December 2013 its 2018 bonds had a redemption yield of 0.21% whilst its ordinary shares yielded 3.1%. Leaving aside fund managers who are limited to investing in bonds by their mandate, why would anybody in their right mind own the bonds rather than the shares? The answer is that some investors are willing to overpay for the apparent certainty which the bonds bring. They have a fixed coupon, a redemption date and a par value which will be repaid to the holder on redemption. The shares have none of those things. Although it has to be said that the dividend is pretty safe given that Nestle has only reported one loss in 146 years, but it is still not a fixed charge, as the interest coupon is. And you cannot rely on the shares being a particular price if you need to dispose of them. But this does seem to suggest that the shares are at least good value relative to the bonds. Although that does not mean that either of them is cheap, it does raise the question of where you would invest the money as an alternative to the shares with a better risk/reward relationship in the current environment.

6. As at 31st December 2013 the weighted historic dividend yield of the Fund was 2.3% and the weighted prospective yield was 2.5% and the prospective dividend cover was 2.4x.

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Although all of our portfolio companies are headquartered and listed in Europe and North America, some 32% of their underlying revenues are from Emerging Markets. This is generally considered a positive attribute as Emerging Markets have generally outperformed developed markets in terms of economic growth in recent years.

We are often asked why we do not invest directly in Emerging Markets if we like exposure to their superior growth. The reasons are complex but one of the main ones is liquidity. The Fundsmith Equity Fund is an open ended fund with daily liquidity. We hope that if you invest with us you will be a long term investor because we believe that this delivers the best results, but you can redeem your investment on any business day. This would be incompatible with direct investment in the companies of the sort we seek but which are headquartered and listed in Emerging Markets. Although some of these companies are not small, there is not enough liquidity in their shares in local markets to hold them responsibly through an open ended fund. Especially one with daily dealing.

In order to overcome this problem we have decided to launch a new fund, the Fundsmith Emerging Equities Trust ("FEET"), in 2014. This will be an investment trust investing in the same strategy as our existing Fund but mostly in companies which are listed in Emerging Markets. Its focus will be on consumer stocks since a) this is the largest area of focus of our strategy, and b) there is an established trend for the emergence of consumer classes in Emerging Markets which looks likely to last several decades and which should provide a tailwind for its performance.

We have identified an Investable Universe of over 150 companies for FEET, many are already known to us as they are quoted subsidiaries, associates or franchisees of companies which we already research for the Fundsmith Equity Fund. This also helps with the corporate governance issues which can plague Emerging Markets.

For reasons which we will detail in the soon to be published FEET Owners' Manual we believe that this approach should produce better results for investors compared to many of the other investment products and approaches which have sought to capitalise on the growth in Emerging Markets.

As an investment trust, FEET will overcome the issue of combining an open ended fund with stocks which have limited liquidity in the underlying investments since it will raise an initial fixed amount of capital, to which I will subscribe. Thereafter investor liquidity will be provided by trading in the trust's shares thus removing the costly need to liquidate or add to the portfolio on investor demand.

You can expect to hear more from us about the opportunity which we feel FEET provides later in the year. But in the interim, I wish you a Happy New Year and thank you for your continued support for our Fund.

Yours sincerely,

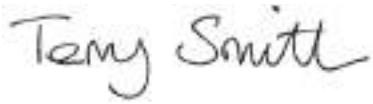

Terry Smith
CEO
Fundsmith LLP

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January 2015

Dear Fellow Investor,

This is the fifth annual letter to owners of the Fundsmith Equity Fund ('Fund').

The table shows performance figures for the last calendar year and the cumulative and annualised performance since inception on 1st November 2010 compared with various benchmarks.

% Total Return	1st Jan to 31st Dec 2014	Inception to 31st Dec 2014	
		Cumulative	Annualised
Fundsmith Equity Fund[1]	+23.3	+100.0	+18.1
Equities[2]	+11.5	+56.6	+11.4
UK Bonds[3]	+10.0	+23.1	+5.1
Cash[4]	+0.5	+2.9	+0.7

[1]T Class Acc Shares, net of fees, priced at noon UK time.
[3]Bloomberg/EFFAS Bond Indices UK Govt 5-10 yr.
[3,4]Source: Bloomberg
[2]MSCI World Index, £ net, priced at close of business US time.
[4]3 Month £ LIBOR Interest Rate.
[2]Source: www.msci.com

We never tire of reminding people that we remain critical of attempts to measure investment performance over short periods of time, such as a year. However, this proviso notwithstanding, the table shows the performance of the T Class Accumulation shares which rose by 23.3% in 2014 and compares that with 11.5% for the MSCI World Index in sterling with dividends reinvested. The Fund therefore outperformed the market in 2014 by 11.8%. However, we are assisted in forming a longer term perspective on the Fund's performance by the fact that it finished 2014 with the improbably precise outcome of having doubled investors' capital since inception.

2014 was another bullish period for equity markets. In this letter last year we wrote about the so-called 'taper tantrum' in which markets fell in May 2013 when the Federal Reserve Bank first mooted that it was planning to begin reducing its programme of Quantitative Easing ('QE') - 'printing' money (or at least clicking a mouse to create it) with which to buy bonds. Although US QE has now ended, equity markets had a somewhat bullish year (at least in sterling and in the US - the FTSE 100 and Emerging Markets fared badly) and the US and UK economies are growing, it is tempting to conclude that the market wobble of May 2013 was just an example of the so-called 'wall of worry' which a bull market is said to climb.

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This may be so, but this economic recovery is neither uniform nor unaided. The core countries of the Eurozone - Italy, France and even Germany - are now struggling, as is a large part of the developing world, much of which is still driven by commodity exports, at a time when China's seemingly insatiable demand for commodities to fuel its industrialisation has slackened markedly. Nor is such anaemic growth being achieved without considerable stimulus. Japan is engaged in a QE experiment of epic proportions as it tries to stimulate its way out of a slump which innumerate commentators have described as a 'lost decade' with no economic growth. It has in fact gone on for the better part of two decades. Even the growth in the US and the UK is being achieved against a backdrop of record low interest rates and continuing government deficit spending, the necessity for which is unusual and worrying this far into a recovery.

I do not think it would add much for me to weigh in on the debate about the reasoning behind QE, its effectiveness and possible consequences except to observe that many of its proponents seem to assume that inflating asset values will lead to prosperity. I suspect this is the reverse of what should occur which may not bode well.

We are often asked what our view is of the economic outlook for the world and how our Fund is positioned to take advantage of, or cope with, those conditions. Our investment approach is thankfully not based upon our view of the global economic outlook. I say thankfully because we do not profess any great expertise in this area, and we are not particularly optimistic. This is in contrast to many others in the industry who certainly profess to such expertise, often it seems without any obvious justification. We are at least one step ahead of most of them in recognising that we do not know what will happen.

The desire of people to rely on forecasting despite its obvious drawbacks is illustrated by an anecdote from the Nobel laureate and retired Stanford University economist Kenneth Arrow. Arrow did a tour of duty as a weather forecaster for the US Air Force during World War Two. Ordered to evaluate mathematical models for predicting the weather one month ahead, he found that they were worthless. Informed of that, his superiors sent back another order: 'The Commanding General is well aware that the forecasts are no good. However, he needs them for planning purposes.'

Our investment strategy is based first and foremost on buying shares in good companies. We cannot promise you much about our Fund. But one thing we are clear about is that we seek to own shares in good companies and at least most of the time we succeed in that objective.

You may think that this part of our strategy is so obvious that it must surely be the case that all fund managers seek to invest in good companies. However, this is certainly not the case. Fund managers will buy shares in bad companies, by which I mean companies which do not consistently create value for their shareholders or even worse which destroy value some or even all of the time. If they have a reason for doing this it usually boils down to some expectation that the performance of the companies will improve at least temporarily because they think that the economic or business cycle will improve and those companies will start to make adequate returns, or there will be a change of management which will improve their performance or a takeover bid, all of which may benefit the share price. Or they may just think that the shares are cheap.

One problem with this approach to investing is that companies rarely go through a transformational improvement (a phrase involving leopards and spots springs to mind) and these events are also difficult to predict. But in our view the main problem with this investment strategy, other than the fact that we have no expectation that we could make it work, is that whilst fund managers await the kiss that will turn their corporate frogs into princes, they steadily erode value. The companies in our portfolio are certainly not immune to periodic downturns in business and/or management errors, and their share prices are subject to the usual factors which affect the stock market, but we can at least be reasonably sure that they are adding to their intrinsic value over time.

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To demonstrate this we thought of a new way to inform you about the portfolio of companies which we own. The table below shows what the Fundsmith Equity Fund would be like if instead of being a mutual fund it was a company ('Company') and accounted for the stakes which it owns in the portfolio and compares this with the market (in this case the FTSE 100 and the S&P 500):

	Fundsmith Equity Fund [1]	FTSE 100 Index [2]	S&P 500 Index [2]
Return on Capital Employed ('ROCE')	29%	18%	18%
Gross Margin	60%	39%	44%
Operating Profit Margin	25%	16%	16%
Cash Conversion	102%	79%	81%
Leverage	28%	40%	38%
Interest Cover	15x	9x	9x

[1] Source: Fundsmith Research. [2] Source: Bloomberg.
ROCE, Gross Margin, Operating Profit Margin and Cash Conversion are the weighted mean of the underling companies invested in by the Fundsmith Equity Fund and mean for the FTSE 100 and S&P 500 Indices. The FTSE 100 and S&P 500 numbers exclude financial stocks. The Leverage and Interest Cover numbers are both median. All ratios are based on last reported fiscal year accounts and as defined by Bloomberg. Cash Conversion compares Free Cashflow per Share with Net Income per Share.

What does this table demonstrate? Taking each of the measures in turn:

Return on Capital Employed: The legendary investor Warren Buffett in his 1979 annual letter as Chairman of Berkshire Hathaway described ROCE as 'The primary test of managerial economic performance'. In our Company it was 29% versus an average of 18% for the market. For every pound of capital which we own our companies produce 29p of profits versus 18p for the market.

Gross Margin: The difference between sales revenue and cost of goods sold for our Company was 60% versus about 40% for the market. Our Company makes things for £4 and sells them for £10. The market makes things which cost £6 and sells them for £10.

Operating Profit Margin: Our Company's operating profit margin is 25% versus an average of 16% for the market.

Cash Conversion: Our Company converts just over 100p out of every £1 of profit into cash whereas the market manages about 80p as its businesses require more capital expenditure and working capital to function.

Leverage: Our Company has net debt (net of cash) of about a quarter of shareholders' funds whereas the market has around 40%.

Interest Cover: Our Company's profits are 15 times its interest charge which means there is little doubt that it can service its debt even in a dramatic downturn. The market looks quite safe too but its interest cover is below 10 times.

In short, our Company has much better financial performance than the market as a whole and is more conservatively funded.

So when it comes to quality we are confident that we have selected good companies, but one of the questions which most frequently arises when we are talking to investors is that of valuation. The companies we invest in may be high quality businesses, but perhaps their shares have become too expensive. There is no doubt that the shares in our portfolio have become more highly rated over the past four years. It is also true that this is not the way we would prefer the performance of the portfolio to be delivered as increases in the multiples which company shares trade on are finite and reversible.

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But there is no certainty that such improvements in valuation will reverse any time soon or indeed that they won't continue. We remain unimpressed by those who tell us about their concerns about valuation and who have been doing so for several years. No doubt they may prove to be right at some point but following their advice would have been very expensive in the interim. We do not attempt to make any so-called 'market timing' judgments. We aim to have our Fund fully invested in companies of the sort we like, thereby acknowledging that we do not possess any expertise in guessing the right moment or even the right year in which to invest or to sell. In this we seem to have an advantage over those investors who think they can accomplish this, exemplified in my mind by at least one investor who refused to invest with us at the launch of our Fund because he thought our timing was not propitious and who now ascribes our performance to our good timing. I have news for him: we took no account of such timing when we launched and neither do we now.

Having said all of that, where are we on valuation? The weighted average Free Cash Flow ('FCF') yield of the portfolio (the free cash flow generated by the companies divided by their market value) started the year at 5.1% and ended it at 4.5% so we had a tailwind from increased valuations again, but the yield is still above the level that we would find acceptable on the basis of the comparison with expected bond yields. Our companies on average grew their free cash flow per share by 7.0% during the year but also spent 7.8% more on capital expenditure ('capex'). We find the fact that they continue to increase their capex as encouraging as we have yet to find an industry which can grow without committing additional capital in order to do so.

This 4.5% FCF yield compares with a median FCF yield for the non-financial stocks in the S&P 500 of 4.2% and a mean of 3.4% or a median for the non-financial stocks in the FTSE 100 of 4.4% and a mean of 3.8%. Our stocks do not look bad value in comparison to the market especially when their relatively high quality is taken into account. Although of course, both may be expensive, but then both may continue to be so or even become more expensive.

For 2014 the top five contributors* to the Fund's performance were:

Dr Pepper Snapple	+3.3%
Microsoft	+2.3%
Domino's Pizza	+2.0%
Stryker	+2.0%
Becton Dickinson	+1.7%

Of the top five contributors it is perhaps worth noting that no less than four - Becton Dickinson, Domino's Pizza, Microsoft and Stryker - were in this position last year as well. So much for the theory that no-one ever did badly by taking a profit.

The bottom five were:

Diageo	-0.08%
Swedish Match	-0.05%
L'Oreal	+0.01%
Amadeus	+0.22%
Colgate Palmolive	+0.24%

* Contribution shows the gross contribution to the Fund's return by stock as calculated by State Street Investment Analytics. The list excludes stocks held for less than one month so as to be more meaningful.

Only two of the bottom five produced negative contributions, Diageo and Swedish Match. We sold the latter, which had also been our worst contributor in 2013, during 2014. We took the view that the e-cigarette development, whilst not necessarily harmful to the cigarette companies, was a potentially disruptive change which could adversely impact its Snus smokeless product. We are sensitive to the possibility of permanent loss of value which disruptive change can cause and on the whole we seek to avoid

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investing in companies which could be affected by it. We also feared another disruptive change which could affect Swedish Match - a thawing of relations between the US and Cuba as Swedish Match distributes non Havana cigars in America. We did not think that its business would fare well in the event that the US embargo on trade with Cuba was lifted which we thought was likely. It appeared to us that most people would struggle to explain the rationale for this Cold War measure whose lack of coherence has been lampooned and its relevance to Swedish Match was encapsulated in the saying we are fond of: that it is the first attempt in history to bring about regime change by smoking inferior cigars. Since we sold our holding in Swedish Match the events we foresaw have indeed begun to unfold. Our only other disposals during 2014 were our holdings in CDK, a supplier of software to motor dealers, which was spun out of ADP during the year and a small holding in Indivior, the pharmaceutical company, which we received when it was demerged by Reckitt Benckiser.

We started three new holdings during the year, two of which are within the technology sector. You may think this fits awkwardly with our professed desire to avoid businesses which might be subject to disruptive change for which the technology sector is renowned. However, in neither case are our new investee companies operating in areas at the leading edge of technology.

eBay is probably well known to you through one or both of its two major businesses - the Marketplaces business through which you can buy and sell new or second hand articles, and PayPal the leader in online payments. Whilst so-called activist investing has its place in ensuring that company managements pay due attention to shareholders' interests, we are not fans of the commonest form of this activity, the modus operandi of which could be described as:

- Activist acquires stake in company.
- Activist campaigns noisily and publicly for change, which can consist of the company trying to sell itself to an acquirer, splitting the company into a number of listed entities for each of its activities, taking on more debt, share buybacks, or some combination of these.
- Shares go up as a result of excitement amongst the 'analytical' community about this activity.
- Activist sells stake at a profit.
- Long term shareholders are left trying to make sense of fragmented businesses, new management teams, higher leverage, costs of separation or integration and financial statements which are rendered incomprehensible by many adjustments.

However, in the case of eBay an activist acquired a stake and pushed the company to agree to separate its Marketplaces and PayPal business and we tend to agree that they may be better separated so that PayPal can develop its payment service with other online businesses. I should add that we started buying our stake before this was announced and it was not part of the rationale for our investment.

In the case of Sage we started buying a stake in the UK's largest software business. Sage has an installed base of software used by millions of small and medium sized businesses which makes it the dominant supplier of accounting software outside America. Like many software businesses it is transitioning from selling software in the form of a disc in a box, which is paid for upfront, to an online subscription model which we think will ultimately make it an even better business.

Close to the end of the year we also began acquiring a stake in an international testing and inspection company the name of which we are yet to reveal as we are in the process of buying our position.

That is the sum total of our outright sales and purchases for 2014, at least part of which was involuntary in that we received the CDK holding as a result of our stake in ADP and the Indivior holding from Reckitt Benckiser. Which is just as well since minimising portfolio turnover remains one of our objectives and this was again achieved with a negative turnover of -8.4% during the period. Negative turnover occurs because the method of calculating turnover excludes flows into or out of the Fund, otherwise a newly established fund would automatically have 100% or more turnover. However, it is not very helpful in judging our

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activities. It is perhaps therefore more helpful to know that we spent a total of £98,081 or just 0.005% (0.5bp) of the Fund on voluntary dealing.

Why is this important? It helps to minimise costs, and minimising the costs of investment is a vital contribution to achieving a satisfactory outcome as an investor. Too often investors, commentators and advisers focus on the Annual Management Charge ('AMC') or the Ongoing Charges Figure ('OCF'), which includes some costs over and above the AMC, which are charged to the Fund. The OCF for 2014 for the T Class Shares was 1.09%. The trouble is that the OCF does not include an important element of costs - the costs of dealing. When a fund manager deals by buying or selling investments for a fund, the fund typically incurs commission paid to a broker, the bid-offer spread on the stocks dealt in and, in some cases, Stamp Duty. This can add significantly to the costs of a fund yet it is not included in the OCF.

I find that investors remain confused by this no matter how many times I attempt to explain it, or maybe because of my attempts to explain it. The fact is that as an investor you can only benefit from the price appreciation of shares in your fund and dividends paid. Costs of dealing detract from those returns and therefore need to be taken into account when you are comparing funds.

We have published our own version of this total cost including dealing costs, which we have termed the Total Cost of Investment, or TCI. For the T Class Shares in 2014 this amounted to a TCI of 1.18%, including all costs of dealing for Fund inflows and outflows, not just our voluntary dealing.

In order to minimise the cost of dealing and avoid the mistakes which seem to result when we sell stakes in good businesses our mantra is: 'Don't just do something, sit there.'

As I foreshadowed in this letter last year we launched the Fundsmith Emerging Equities Trust (or 'FEET' which is its stock market ticker symbol) in June 2014. This is an investment trust investing in the same strategy as our existing Fund but investing in companies which have the majority of their revenues from the developing world and which are mostly listed in Emerging Markets. They do not have enough liquidity in their shares in local markets for us to consider holding them through an open ended fund with daily dealing like the Fundsmith Equity Fund. For those of you who are invested in FEET there will be a separate update on its progress with its annual results in March.

Finally, I wish you a Happy New Year and thank you for your continued support for our Fund.

Yours sincerely,

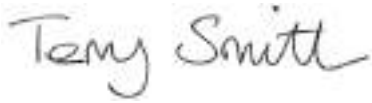

Terry Smith
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January 2016

Dear Fellow Investor,

This is the sixth annual letter to owners of the Fundsmith Equity Fund ('Fund').

The table below shows performance figures for the last calendar year and the cumulative and annualised performance since inception on 1st November 2010 compared with various benchmarks.

% Total Return	1st Jan to 31st Dec 2015	Inception to 31st Dec 2015 Cumulative	Inception to 31st Dec 2015 Annualised
Fundsmith Equity Fund[1]	+15.7	+131.4	+17.6
Equities[2]	+4.9	+64.3	+10.1
UK Bonds[3]	+1.0	+24.3	+4.3
Cash[4]	+0.0	+3.5	+0.7

[1]T Class Acc shares, net of fees, priced at noon UK time.
[2]MSCI World Index, £ net, priced at close of business US time.
[3]Bloomberg/EFFAS Bond Indices UK Govt 5-10 yr.
[4]3 Month £ LIBOR Interest Rate.
[1,3,4]Source: Bloomberg
[2]Source: www.msci.com

The table shows the performance of the T Class Accumulation shares which rose by 15.7% in 2015 and compares that with 4.9% for the MSCI World Index in Sterling with dividends reinvested. The Fund therefore outperformed the market in 2015 by 10.8%, its fifth consecutive year of outperformance, which is ironic given that outperforming the market in any given reporting period is not what we are seeking to achieve.

However, we realise that many or indeed most of our investors do not use the MSCI World Index as the natural benchmark for their investments.

Those of you who are based in the UK and look to the FTSE 100 Index as the natural yardstick for measuring your investments and/or who hold funds which are benchmarked to the FTSE 100 Index and often hug it will have had a much worse experience than the performance of the MSCI World Index. The FTSE 100 Index was down -4.9% in 2015 and the total return including dividends reinvested was still negative at -1.0%.

Similarly, for US dollar investors, the S&P 500 finished the year down -0.7% and only delivered a return of +1.4% with dividends reinvested.

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2015 was also the fifth anniversary for our Fund and so maybe a good moment to pause and reflect on the longer term performance. As well as outperforming the market with a compound return of +17.6% against +10.1% for the MSCI World Index, our Fund was the third best performing fund out of 203 in the Investment Association's Global Sector. Why only third, you might ask? The two funds which performed better than ours are specialist healthcare funds which have benefited from the extraordinary boom in takeovers within the biotech sector in recent years. That won't last indefinitely, at which point anyone who has benefited from investment in those companies and funds needs to find the next hot sector if that is their investment strategy. This is a game we profess no skill at and therefore will not be playing. This skill also seems to elude most other investors but that does not seem to stop them trying.

2015 was not a particularly bullish year for equity markets which were held back by the slowdown in China, setbacks in other Emerging Markets and the move on from the end of quantitative easing in America to the first rise in interest rates by the Federal Reserve ('the Fed') in nearly ten years. After all that the S&P 500 Index was down by -0.7% for the year.

Trillions of pixels have been expended on the likely impact of this increase in interest rates and I do not intend to add much, if anything, to the debate. However, one aspect may be worth commenting upon. For at least the past three years we have been reading comments which suggested that investors in our Fund faced at least one problem: the shares we own are highly rated and have become more highly rated in recent years. This has often been linked with the observation that these stocks are 'bond proxies' - that the relative certainty of their returns and dividends compared with most equities makes them a substitute for bonds, which many investors now seek to avoid, and so they may fare badly along with bonds as and when interest rates rise.

There are several points to consider in response to this.

One is that during the period that these commentators have been sounding this warning, these stocks and our Fund have continued to outperform the market significantly. So if, like the proverbial stopped clock which is right twice a day, the scenario which they paint eventually comes to pass, it will be worth remembering what you would have missed out on if you had followed their advice when they gave it. They will certainly forget to mention it when they proclaim the brilliance of their foresight and the accuracy of their predictions.

There are also reasons to doubt both their predictions and the efficacy of their proposed solutions.

Firstly, the assumption that all US interest rates are set by the Federal Reserve ('Fed') is too simplistic. The target federal funds rate is a short term rate and was increased from 0-0.25% to 0.25-0.50% on 17th December 2015. Longer term rates are set by the US Treasury bond market and the swap market in which banks, companies, people with mortgages and investors can switch between fixed and floating interest rates. The current 30 year US Treasury bond has a yield just under 3% which does not look quite so low.

It is possible that the main surprise with the Fed's rate rise (I refuse to use the popular term 'hike' as 'to hike an object' is described in the dictionary as a sharp or unexpected increase - a description which clearly does not apply to the Fed's decision) is the limited

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scope for subsequent increases and the lack of effect on long term rates. In which case worries about the effect on so-called bond proxies may prove to be overdone.

Secondly, what would these commentators have you do about this possible adverse impact on so-called 'bond proxies'? Presumably they recommend selling them in view of this predicted disaster and investing your money elsewhere. Leaving aside the commentator who suggested that the answer was to invest in a fund which is 'more immune to future market performance' (seems like an overly modest target - why not just find one that only ever goes up?), the most common suggestion, it seems, is that you should consider switching into more cyclical stocks because they are more lowly rated and their returns are too volatile to be considered as bond proxies. Switching into cyclical stocks in anticipation of a rise in interest rates, what could possibly go wrong?

As ever, spotting potential problems with our or any other investment strategy is not that difficult. In all my years in business I have never found that identifying a problem is quite as difficult as solving it. Likewise, suggesting what it is you should switch into that is immune from problems which may result from an interest rate rise is a bit more difficult.

However, it seems likely that sooner or later the 'stopped clock' commentators will prove to be right and our Fund will experience a period of underperformance. What to do about that? You could try some so-called market timing and redeem your shares in the Fund in advance of this event and maybe re-invest later when you think the time is right for it to begin outperforming again. If you do so I hope you have better luck and/or skill than I have because I know that I can't accomplish that successfully.

If you intend to remain invested in the Fund, as I do, including through any periods of underperformance, you might also, like me, take comfort in the fact that our investment strategy is based first and foremost on buying shares in good companies. We cannot promise you much about our Fund. But one thing we are clear about is that we seek to own shares in good companies and at least most of the time we succeed in that objective.

Repeating an approach we took last year to demonstrate this, the table below shows what Fundsmith would be like if instead of being a mutual fund it was a company and accounted for the stakes which it owns in the portfolio on a 'look through' basis and compares this with the market (in this case the FTSE 100 Index and the S&P 500 Index).

	Fundsmith Equity Fund*	**FTSE 100 Index+**	**S&P 500 Index+**
ROCE	26.0%	14.8%	17.5%
Gross Margin	61.1%	40.2%	43.7%
Operating Profit Margin	25.0%	14.3%	15.3%
Cash Conversion	98.4%	69.8%	70.9%
Leverage	29.3%	38.5%	52.5%
Interest Cover	16.1x	8.2x	8.7x

Note: ROCE, Gross Margin, Operating Margin and Cash Conversion are the weighted average for the Fundsmith Equity Fund and averages for the FTSE 100 Index and S&P 500 Index. The FTSE 100 and S&P 500 numbers exclude financial stocks. The Leverage and Interest Cover numbers are medians.

*Source: Fundsmith LLP +Source: Bloomberg

What does this table demonstrate? In short, that our companies have much better financial performance than the market as a whole and are more conservatively funded.

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The companies in our portfolio are certainly not immune to periodic downturns in business and/or management errors, and their share prices are subject to the usual factors which affect the stock market, but we can at least be reasonably sure that they are adding to their intrinsic value over time by continuing to invest at wonderful rates of return.

If I gave you an exhaustive list of all the subjects in investment and the ways in which investors and commentators behave that perplex me then this annual letter would be considerably longer. However, one of these subjects is the obsession with share prices. Ultimately, of course, a focus on share price movements must be correct. It is no use owning shares in good companies if the strength of their business is never reflected in the share price, but a continuous focus on share price movements to the exclusion of the underlying fundamental economics of the companies is neither healthy nor useful. In the long term one will follow the other, and it is not the fundamentals which will follow the share price.

Returning to the subject of valuation, what are the facts as opposed to commentators' views? The weighted average Free Cash Flow ('FCF') yield of the portfolio (the free cash flow generated by the companies divided by their market value) started the year at 4.5%* and ended it at 4.3%* so the overall portfolio saw little increase in valuation in 2015. Our companies on average grew their free cash flow per share by 9.7%* during the year which was a much more significant contribution to performance.

This 4.3% FCF yield compares with a median FCF yield for the non-financial stocks in the S&P 500 Index of 4.4%+ and a mean of 2.7%+ or a median for the non-financial stocks in the FTSE 100 Index of 3.8%+ and a mean of 3.9%+. Our stocks do not look bad value in comparison to the market especially when their relatively high quality is taken into account. Although of course, both may be expensive, but then both may continue to be so or even become more expensive.

For the year, the top five contributors to the Fund's performance were:

Dr Pepper Snapple	+1.94%
Imperial Tobacco	+1.79%
Microsoft	+1.69%
Sage	+1.36%
Reckitt Benckiser	+1.05%

The bottom five were:

Procter & Gamble	- 0.22%
PayPal	- 0.15%
3M	- 0.02%
Kone	+0.02%
Colgate Palmolive	+0.05%

Of the bottom five performers, the only one which gives us significant cause for concern is Procter & Gamble which is on its third internally sourced CEO in as many years.

We sold our holding in Domino's Pizza during the year since it had reached a valuation which we felt was only justifiable if the current rapid rate of growth is sustainable, which we would doubt. However, we sold it with some regret and trepidation. Regret since it is

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undoubtedly a fine business and had been our best performing share since the inception of our Fund. Trepidation since selling shares in good companies is something we are justifiably reluctant to do. Still we believe that you 'make money with old friends' which is to say that we would be keen to own Domino's again if the opportunity arises at a valuation which we regard as at least reasonable.

We also sold our holding in Choice Hotels in 2015 as we did not like the risk/reward potential from the company's investment in developing a third party reservations system called SkyTouch. As we do not do much trading to reallocate the Fund's capital between our holdings we are reliant on the management of our investee companies to make decisions to reinvest part of their companies' cash flows for us. When they do things which are different, exciting and outside their core area of competence we become worried. Hence our sale of Choice Hotels.

We also sold the holding in eBay which we obtained when eBay split the eponymous online marketplace business and PayPal, the online payments processor, which we have retained.

During the year we built a holding in Waters Corporation, a US based manufacturer of mass spectrometry, liquid chromatography and thermal imaging equipment, which makes much of its returns from the sales of consumables, service, spares and software to the operators who have installed its equipment. It should have a clear source of growth from the seemingly inexorable trend for more testing and certification of products.

We also began building a stake in another testing company with a similar source of growth and a new consumer staples company, both of which will be revealed in due course.

Minimising portfolio turnover remains one of our objectives and this was again achieved with a portfolio turnover of 2%* during the period. It is perhaps more helpful to know that we spent a total of £496,507 or just 0.014% (1.4 basis points) of the Fund on voluntary dealing which excludes dealing costs associated with fund subscriptions and redemptions as these are involuntary.

Why is this important? It helps to minimise costs, and minimising the costs of investment is a vital contribution to achieving a satisfactory outcome as an investor. Too often investors, commentators and advisers focus on the Annual Management Charge ('AMC') or the Ongoing Charges Figure ('OCF'), which includes some costs over and above the AMC, which are charged to the Fund. The OCF for 2015 for the T Class Accumulation shares was 1.07%*. The trouble is that the OCF does not include an important element of costs - the costs of dealing. When a fund manager deals by buying or selling investments for a fund, the fund typically incurs the cost of commission paid to a broker, the bid-offer spread on the stocks dealt in and, in some cases, Stamp Duty. This can add significantly to the costs of a fund yet it is not included in the OCF.

We have published our own version of this total cost including dealing costs, which we have termed the Total Cost of Investment ('TCI'). For the T Class Accumulation shares in 2015 this amounted to a TCI of 1.13%*, including all costs of dealing for flows into and out of the Fund, not just our voluntary dealing. We think that figure will prove to be low if or when other funds produce comparable numbers, although we are not holding our breath whilst we await this. However, just as we think an obsession with share prices to the exclusion of companies' fundamental performance is unhealthy, we would caution against becoming obsessed with charges to such an extent that you lose focus on the

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performance of a fund. It is worth pointing out that the performance of the Fund at the beginning of this letter is after charging all fees, or as someone expressed it more elegantly “You get what you pay for”, or at least you should aim to.

Finally, I wish you a Happy New Year and thank you for your continued support for our Fund. I and my colleagues look forward to seeing many of you at our Annual Shareholders’ Meeting on 1st March and to trying to answer your questions.

Yours sincerely,

Terry Smith
CEO
Fundsmith LLP

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*Source: Fundsmith LLP +Source: Bloomberg

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January 2017

Dear Fellow Investor,

This is the seventh annual letter to owners of the Fundsmith Equity Fund ("Fund").

The table below shows performance figures for the last calendar year and the cumulative and annualised performance since inception on 1st November 2010 compared with various benchmarks.

% Total Return	**1st Jan to 31st Dec 2016**	**Inception to 31st Dec 2016**	
		Cumulative	**Annualised**
Fundsmith Equity Fund[1]	+28.2	+196.6	+19.3
Equities[2]	+28.2	+110.6	+12.8
UK Bonds[3]	+6.5	+32.4	+4.7
Cash[4]	+0.6	+4.0	+0.6

[1]T Class Acc shares, net of fees, priced at noon UK time.
[2]MSCI World Index, £ net, priced at close of business US time.
[3]Bloomberg/EFFAS Bond Indices UK Govt 5-10 yr.
[4]3 Month £ LIBOR Interest Rate.
[1,3,4]Source: Bloomberg
[2]Source: www.msci.com

The table shows the performance of the T Class Accumulation shares, the most commonly held Class and one in which I am invested, which rose by +28.2% in 2016 and compares with +28.2% for the MSCI World Index in Sterling with dividends reinvested. The Fund therefore equaled the performance of this benchmark in 2016, and our Fund is still currently the No.1 performer since its inception in the Investment Association Global sector by a cumulative margin of 15% over the second best fund and 127% above the average.

However, we realise that many or indeed most of our investors do not use the MSCI World Index as the natural benchmark for their investments.

Those of you who are based in the UK and look to the FTSE 100 Index as the natural yardstick for measuring your investments and/or who hold funds which are benchmarked to the FTSE 100 Index and often hug it will have had a much worse experience than the performance of the MSCI World Index. The FTSE 100 Index was up +14.4% in 2016 and the total return including dividends reinvested was +19.2%. The Fund outperformed this by +9%.

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It is a commentator's cliché that football is a game of two halves, and that was certainly true of our relative performance in 2016. At half time on 30th June our Fund (T Class Accumulation shares) was up +16.4% versus +11.0% for the MSCI World Index, aided by the sharp fall in the Pound after the Brexit result in the referendum of 23rd June as the majority of the shares in our portfolio are listed in the United States. Even though this is not an accurate reflection of the Fund's currency exposure, which really depends upon where the companies generate their revenues and profits, the fact is that the US Dollar is still the largest currency exposure we have.

So what happened in the second half of the year? We experienced what stock market commentators often describe as a sector "rotation" in which the sectors in which we are invested mostly fell out of favour and share prices of those companies underperformed, whilst other sectors which we do not own performed well, and in particular the bank sector.

This "rotation" seems to have occurred as a result of expectations about a pick-up in economic growth which focused attention on a potential recovery in the performance of cyclical stocks. This became more intense after the election (it is common to qualify this with the word "surprise" - "surprising to some" might be a better descriptor as indeed it might for Brexit) of Donald Trump as US President in early November as a result of predictions that his economic policies would stimulate more rapid growth in the US economy.

I have no way of knowing whether this "rotation" will continue but then again neither do any of the analysts or commentators who are involved in opining on the matter.

When judging this situation I think it is worth bearing in mind a number of points:

I can trace back four years of market commentary which warned that shares of the sort we invest in, our strategy and our Fund would underperform. During that time the Fund has risen in value by about 100%. The fact that you would have foregone this gain if you had followed their advice will of course be forgotten by them at the very least.

Much of the commentary is simplistic, for example, concentrating on the Consumer Staples sector as an easily identifiable set of stocks of the sort we invest in, as in a recent note by Deutsche Bank which said "the party's over" in Consumer Staples. Even if this is true, these represent only about a third of our portfolio.

The predictions of underperformance also focus on so-called "bond proxies" - stocks of companies with relatively predictable returns - which investors have supposedly turned to as a substitute for bonds as bond yields have declined to and even below zero. We are told that these bond proxies will do badly when rates rise and that they are starting to do so. As I write the US Federal Reserve has raised the Fed Funds rate by a total of 0.5% from its record low in a whole year (the first 0.25% rise was on 17th December 2015 - how time flies!). As I pointed out last year, this glacial rate of increase does not seem to justify the popular term 'hike' described in the dictionary as a sharp or unexpected increase - a description which clearly does not apply to the Fed's decision. Of course I have no idea when or by how much the Fed or any other central bank will subsequently increase interest rates. Neither I suspect do any of the commentators or analysts judging by their track record thus far, but that will not stop them making predictions and suggesting that you should make investment decisions based upon them.

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There is also the question of what we might invest in as an alternative if we chose to sell the Fund's holdings in defensive so-called bond proxy stocks or if you chose to redeem your shares in our Fund. The obvious suggestion, and it is one which would have worked well in the second half of 2016, is that you should switch into cyclical stocks such as banks. Buying cyclical stocks in anticipation of a rise in interest rates does pose a fairly obvious problem - won't they perform worse than defensive stocks if the rise in rates causes an economic slowdown? There is also the fact that these stocks are in companies which over time do not create shareholder value by generating returns on capital above their cost of capital and growing by deploying more capital at such favorable returns, which is what the companies we seek to invest in accomplish. If you choose to invest in such companies then I would suggest it is not because you want to hold their shares indefinitely and allow them to compound in value but because you think you perceive an opportunity for a trade in which you buy them and then sell them for a higher price. If so I hope you have better luck with your timing in this game of Greater Fool Theory (in which you hope to buy from a seller who is less competent than you at spotting this opportunity and when the time comes you need to sell to a buyer who is similarly ill informed) than most people seem to have. As we do not profess to possess this skill, our Fund will not be attempting it.

I remain amazed (I could stop this sentence there) by the number of commentators, analysts, fund managers and investors who seem to be obsessed with trying to predict macro events on which to base their investment decisions. The fact that they are seemingly unable to predict events does not seem to stop them trying. During 2016 we had the spectacle of all the major polling organisations and the mainstream media failing to predict the outcome of the EU referendum in the UK or the US presidential election. Yet many of the same people are now busy telling us what the effect of Mr Trump's economic policies will be and how they will affect our investments.

I spend little time worrying about the macro trends and even less time trying to apply predictions about them in order to manage our portfolios. Here's a short list of possible macro factors which may affect companies and markets in the near future:

- Brexit
- China
- "Demonetisation" in India
- French presidential elections
- German elections
- Interest rates
- Korea
- President Trump
- Quantitative Easing by the European Central Bank
- Syria
- The oil price

Even if you could correctly predict how these matters would develop, and the timing of that, this would not enable you to use this as a basis of investment decisions. Markets are a so-called second-order system - to usefully employ your predictions you would not only have to make mostly correct predictions but you would also need to gauge what the markets expected to occur in order to predict how they would react. Good luck with that.

Rather like the management of some of the companies we most admire, I waste little or no time trying to guess what will happen to factors I cannot control or predict and deploy

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most of my time and effort on things I can control. Two of those are whether we own good companies and what valuation we pay to own their shares.

As usual, we seek to give some insight into the first of those - whether we own good companies - by giving you the following table which shows what Fundsmith would be like if instead of being a fund it was a company and accounted for the stakes which it owns in the portfolio on a 'look through' basis, and compares this with the market (in this case the FTSE 100 Index and the S&P 500 Index).

As at 31.12.16	**Fundsmith Equity Fund***	**FTSE 100 Index+**	**S&P 500 Index+**
ROCE	26.7%	13.5%	14.7%
Gross Margin	61.9%	40.0%	43.2%
Operating Profit Margin	25.5%	12.9%	13.9%
Cash Conversion	99.4%	81.4%	83.6%
Leverage	37.7%	48.9%	52.1%
Interest Cover	17.0x	7.9x	7.9x

Note: ROCE, Gross Margin, Operating Margin and Cash Conversion are the weighted average for the Fundsmith Equity Fund and averages for the FTSE 100 Index and S&P 500 Index. The FTSE 100 and S&P 500 numbers exclude financial stocks. The Leverage and Interest Cover numbers are medians. All data as last reported.

*Source: Fundsmith LLP +Source: Bloomberg

The companies in our portfolio have significantly higher returns on capital and better profit margins than the average for the indices. They convert more of their profits into cash and achieve this with a much lower level of borrowing than the average company. Nor is this a one off - they have been achieving these superior results for many years. The average year of foundation of our portfolio companies at the year end was 1912.

Consistently high returns on capital are one sign we look for when seeking companies to invest in. Another is a source of growth - high returns are not much use if the business is not able to grow and deploy more capital at these high rates. So how did our companies fare in that respect in 2016? The weighted average free cash flow (the cash the companies generate after paying for everything except the dividend, and our preferred measure) grew by just over 11%* in 2016. We regard this as a rather good result given the generally lackluster growth which the world is experiencing and which led to earnings falling on the FTSE 100 and S&P 500 companies in the past year.

This leads onto the question of valuation. The Free Cash Flow ("FCF") yield (the free cash flow generated by the companies divided by their market value) on the portfolio at the outset of the year was 4.3%* and ended it at 4.4%* so they did not become any more highly rated. The mean FCF yield on the FTSE 100 is 4.7%+ and the median is 4.6%+. The mean FCF yield on the S&P 500 is 4.3%+ and the median 4.8%+. To try to cut through all these means and medians, our portfolio consists of companies which are fundamentally a lot better than those in the index and are valued a little more highly than the average FTSE 100 company and about the same as the average S&P 500 company, and they grew more rapidly in the past year. I would suggest that is not a bad situation for our portfolio to be in.

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For the year, the top five contributors to the Fund's performance were:

IDEXX Laboratories	+3.10%
Stryker	+2.54%
CR Bard	+2.06%
InterContinental Hotels	+1.71%
Johnson & Johnson	+1.68%

The bottom five were:

Estée Lauder	- 0.06%
Procter & Gamble	- 0.02%
Novo Nordisk	+0.07%
Colgate Palmolive	+0.23%
Imperial Brands	+0.37%

The largest contributor, IDEXX, is a company which we began buying in 2015. It is the world's largest maker of veterinary testing equipment. In contrast, we have held stakes in Stryker, InterContinental Hotels and Johnson & Johnson since inception.

Of the bottom five performers we sold our stake in Procter & Gamble in January 2016. You may note that out of the five worst contributors to our performance last year, four were consumer stocks and at least three are regularly cited as "bond proxies". It seems strange to be accused of having benefitted from the popularity of these stocks when in fact they have underperformed.

We only recently began buying stakes in Estée Lauder, the US cosmetics business and even more recently in Novo Nordisk, a Danish company, which is the world's leading supplier of insulins.

Turning to the third leg of our strategy which we succinctly describe as "do nothing", minimising portfolio turnover remains one of our objectives and this was again achieved with a portfolio turnover of -15.6%* during the period. It is perhaps more helpful to know that we have held 14 of our portfolio companies since inception and we spent a total of £181,025 or just 0.003% (0.3 of a single basis point) of the Fund on voluntary dealing which excludes dealing costs associated with fund subscriptions and redemptions as these are involuntary.

Why is this important? It helps to minimise costs, and minimising the costs of investment is a vital contribution to achieving a satisfactory outcome as an investor. Too often investors, commentators and advisers focus on the Annual Management Charge ("AMC") or the Ongoing Charges Figure ("OCF"), which includes some costs over and above the AMC, which are charged to the Fund. The OCF for 2016 for the T Class Accumulation shares was 1.06%*. The trouble is that the OCF does not include an important element of costs - the costs of dealing. When a fund manager deals by buying or selling investments for a fund, the fund typically incurs the cost of commission paid to a broker, the bid-offer spread on the stocks dealt in and, in some cases, Stamp Duty. This can add significantly to the costs of a fund yet it is not included in the OCF.

We provide our own version of this total cost including dealing costs, which we have termed the Total Cost of Investment ("TCI"). For the T Class Accumulation shares in 2016 this amounted to a TCI of 1.11%*, including all costs of dealing for flows into and out of the Fund, not just our voluntary dealing. We think that figure will prove to be low if

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or when other funds produce comparable numbers. However, we would caution against becoming obsessed with charges to such an extent that you lose focus on the performance of a fund. It is worth pointing out that the performance of the Fund at the beginning of this letter is after charging all fees.

As a cautionary tale about the merits of doing nothing, you may recall that in 2015 we sold our holding in Domino's Pizza since it had reached a valuation which we felt was only justifiable if its rapid rate of growth was sustainable, which we doubted was likely. In my annual letter last year I said that I "sold it with some regret and trepidation. Regret since it is undoubtedly a fine business and had been our best performing share since the inception of our Fund. Trepidation since selling shares in good companies is something we are justifiably reluctant to do." Domino's managed to prove these fears right in the most painful way as the share price rose by +45%[+] in 2016. Apart from demonstrating that I am, could we agree on "fallible" as a descriptor, I hope this illustrates why I am reluctant to agree with the commentators who suggest that you or I should sell our portfolio of great companies and invest in a portfolio of assorted junk in the hope that it will go up, the great companies share prices will go down and we can then profitably reverse the trade.

Finally, I wish you a Happy New Year and thank you for your continued support for our Fund. My colleagues and I look forward to seeing many of you at our Annual Shareholders' Meeting on 20th March and to trying to answer your questions.

Yours sincerely,

Terry Smith
CEO
Fundsmith LLP

P.S. As part of the Financial Conduct Authority's (FCA) review of investor communications (Policy Statement 16/23 - Smarter Consumer Communications: Removing ineffective disclosure requirements in our Handbook) they have consulted and concluded that the half-yearly Short Form Report that we send you in March and September, for the periods ending 31st December and 30th June respectively, does not fulfill its purpose. I agree in that the format and complexity of this document was difficult to understand and I welcome the FCA's decision that we are no longer required to send you one. Not only will this save the fund the costs of physically producing and sending it to you but it will also reduce the already excess amount of paperwork that you are required to receive and that I know many of you find frustrating. For those of you that remain interested in the detail, we will continue to produce the report and post it on our website. I believe that our annual letter to shareholders, our Annual Shareholders' Meeting, the monthly factsheets on our website and the semi-annual Investment Statements, that coincide with the tax year end, are all more effective in evaluating how your investment has performed and we continually seek to improve the levels of these communications.

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*Source: Fundsmith LLP +Source: Bloomberg

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January 2018

Dear Fellow Investor,

This is the eighth annual letter to owners of the Fundsmith Equity Fund ('Fund').

The table below shows performance figures for the last calendar year and the cumulative and annualised performance since inception on 1st November 2010 compared with various benchmarks.

% Total Return	**1st Jan to 31st Dec 2017**	**Inception to 31st Dec 2017**	
		Cumulative	**Annualised**
Fundsmith Equity Fund[1]	+22.0	+261.7	+19.7
Equities[2]	+11.8	+135.5	+12.7
UK Bonds[3]	+1.4	+34.2	+4.2
Cash[4]	+0.4	+4.4	+0.6

[1]T Class Acc shares, net of fees, priced at noon UK time.
[2]MSCI World Index, £ net, priced at close of business US time.
[3]Bloomberg/Barclays Bond Indices UK Gov. 5–10 yr.
[4]3 Month £ LIBOR Interest Rate.
[1,3,4]Source: Bloomberg.
[2]Source: www.msci.com.

The table shows the performance of the T Class Accumulation shares, the most commonly held class and one in which I am invested, which rose by +22.0% in 2017 and compares with +11.8% for the MSCI World Index in sterling with dividends reinvested. The Fund therefore beat this benchmark in 2017, and our Fund remains the No.1 performer since its inception in the Investment Association Global sector by a cumulative margin of 40 percentage points over the second best fund and 160 percentage points above the average for the sector which delivered +101.2%.

However, I realise that many or indeed most of our investors do not use the MSCI World Index as the natural benchmark for their investments. Those of you who are based in the UK may look to the FTSE 100 Index ('FTSE' or 'FTSE 100') as the yardstick for measuring your investments and may hold funds which are benchmarked to this index and often hug it. The FTSE delivered a total return of +12.0% in 2017 so our Fund outperformed this by a margin of 10.0%. I will come back to the subject of the FTSE 100 Index later.

Last year in order to describe our Fund's performance for the year I quoted the commentator's cliché that football is a game of two halves, because in 2016 a strong first half performance by our Fund contrasted with a weaker second half of the year. In 2017 we experienced what stock market commentators often describe as a sector 'rotation' in which the sectors in which we are invested mostly fell out of favour and share prices of those companies underperformed, whilst other sectors which we do not own performed well—in particular the bank sector.

This 'rotation' seems to have occurred as a result of expectations about a pick-up in economic growth leading to a potential recovery in the performance of cyclical stocks, especially after the election of Donald Trump as US President in early November with predictions that his economic policies would stimulate more rapid growth in the US economy.

The commentator's quote I wish to use to describe this year's performance is from Yogi Berra, the American baseball player, manager and coach, who had some deceptively simplistic or seemingly illogical aphorisms. One of my favourites is 'You can observe a lot by watching' which I think some people would do well to consider. However, the one which I think expresses the performance of the Fund and market in 2017 is 'It's déjà vu all over again'. What have we experienced in December? A fall in technology sector shares and a rise in bank shares in anticipation of the next rise in interest rates by the Federal Reserve Bank (being a stickler for at least attempting to use language correctly, I refuse to use the popular term 'hike' to describe the Fed's actions as the dictionary definition of this in context is a sharp increase. I am fairly confident that is not what we are getting. My concern about correct usage may not be to everybody's liking but in my view we should use language more carefully than many modern commentators do as it is after all our main means of communication).

When judging these events, the fact that we seem to have seen this movie before might lead us to conclude that we know how it will end.

I can now trace back five years of market commentary that has warned that shares of the sort we invest in, our strategy and our Fund would underperform. During that time the Fund has risen in value by over 175%. The fact that you would have foregone this gain if you had followed their advice will of course be forgotten by them if or when their predictions that our strategy will underperform the 'value' strategy of buying cyclicals, financials and assorted junk pays off for a period.

You or they might well counter by saying that this past outperformance is all very well but it does not help you in making a decision on whether to own our Fund from today, which must surely be determined by its future performance or as the legalese goes 'Past performance is not necessarily a guide to future performance'. I think the key word in that sentence is 'necessarily'.

Let me offer a couple of thoughts on that.

The first problem is of course that the commentators upon whom you might rely may simply be wrong. I have lost track of the number of analysts, commentators and pundits who predicted that:

- The UK would vote for ‘Remain’ in the Brexit referendum
- The UK would enter a recession immediately if it voted to ‘Leave’ the EU
- Donald Trump would not become President
- Narendra Modi would not become Prime Minister of India
- Narendra Modi’s economic reforms would fail
- Theresa May would have such a resounding victory in the 2017 election that Labour would disintegrate
- Angela Merkel would sweep to victory in the German elections
- President Trump’s tax reform bill would not be passed by the US legislature

In some cases, they have a ‘Full House’ having made all these predictions. The fact that they have been shown to be comprehensively wrong does not seem to stop them from giving us the dubious benefit of further predictions. In this regard they remind me of the broker who was always wrong and who is mentioned in the book ‘Hedgehogging’ by Barton Biggs, the strategist and hedge fund manager. Biggs found him useful to talk to because once the broker had given his views on what would happen or what to do, Biggs knew that the opposite was bound to be correct. For what it’s worth, my diagnosis of the problem for these commentators who seem to emulate this broker is that they are experiencing role confusion. They seem to have forgotten that their role is to report events accurately and have decided that instead they need to influence the outcome to one they desire. They also seem to have missed the point that voicing your views in an echo chamber is not likely to lead to a challenging debate in which to test your opinions.

Thankfully, I spend little or no time trying to apply predictions about macro events in order to manage our portfolio. However, that does not mean that I do not think about them. As I have maintained for most of the decade since the Financial Crisis, looking back to the Great Depression for an analogy that would enable us to understand these events and form a view of how they may unfold is probably a mistake.

A better analogy may be the Long Depression of 1873–96 when a new industrial power came on stream and caused a wave of deflation as it could manufacture goods cheaper than in the Old World. That industrial power was America after the Civil War. The Long Depression was also preceded by a collapse of part of the banking system. Sound familiar?

The wave of deflation we have been experiencing has been caused by a number of factors. These include the rise of China as the world’s greatest industrial power, other cheap manufacturers (South Korea, Thailand, Vietnam, India and Malaysia for example) and the offshoring of manufacturing to cheap manufacturers under free trade agreements, such as Mexico under NAFTA, which so exorcises President Trump. The situation now is probably worse than it was during the Long Depression

insofar as then there was virtually no international competition in services whereas now in our connected world there is in software (India) and call centres (the Philippines), for example. Plus there is the rise of the so-called gig economy in which the internet, casual employment and the sharing of assets have made price comparisons easier, and have driven down prices and returns in retail (Amazon), transport (Uber) and lodging (Airbnb), for example.

If the closest analogy for the events which we have experienced since the Financial Crisis is the Long Depression, we may be barely half way through it simply on the basis of elapsed time. In which case, the period of sluggish economic growth and low interest rates which we have experienced over the past decade may persist for some considerable time. I think this is likely for the simplest of reasons: little or nothing has been done to correct the problems which led to the Financial Crisis. The unsupportable expansion of credit that sparked the crisis has not been resolved. There is in fact more debt in existence now than there was in 2007. Admittedly, some of it is in different hands—China has more debt now and much of the debt in the developed world has been 'socialised' and assumed by governments. However, governments are just us collectively, contrary to the fevered imaginings of the 'magic money tree' devotees. What seems to have happened over the past decade is a prolonged experiment in borrowing your way out of a debt problem. Maybe it will work, although I am amongst those who would bet against it, but it certainly is not the sort of circumstance which would suggest that a 'normal' economic recovery or a rapid rise or 'hike' in interest rates is likely.

As an aside, I would suggest that the headlong expansion of credit in much of the western world which preceded the Financial Crisis was an attempt to compensate for the effects of deflation. Instead of accepting that the loss of manufacturing and service jobs to the developing world meant we had to accept lower pay and lower standards of living to compete we opted for an expansion of the state, the mushrooming of non-productive jobs and borrowing to maintain our spending patterns.

Secondly, if you nonetheless take the view that our Fund's strategy has indeed delivered a good performance but that valuations (which I will come to later) for stocks of the sort it owns are high and that this will limit their share price performance at least in the near term, the obvious problem this poses is what you or we might invest in as an alternative.

This presents several problems. One is that the valuation of the Fund's stocks are not all that much higher than the market, especially when their relative quality is taken into account. Of course, all this may prove is that everything is expensive or at least highly rated, and there are plenty of pundits and fund managers who have indeed suggested that we are in a so-called 'bubble' which will end badly with everything falling a long way. So far, they have only managed to demonstrate the difficulty in making predictions and implementing actions based upon them. Even if they are eventually proven right, why will a basket of cyclical stocks and financials prove to perform better in these circumstances than a group of companies which are high quality and defensive in terms of supplying everyday consumables and necessities? The events of 2007–09 suggest that the opposite is true.

There is also the fact that the alternative of investing in cyclicals, financials and so-called ‘value’ stocks involves investing in companies, which over time do not create shareholder value by generating returns on capital above their cost of capital and growing by deploying more capital at such favourable returns. We seek to invest in companies which accomplish this.

Quoting Warren Buffett, the ‘Sage of Omaha’ and arguably the best investor over the past fifty or so years has in my view become somewhat passé. It is frequently done by acolytes or imitators many of whom seem to have done only the most cursory study of what he actually does, if anything at all. So instead I am going to quote his business partner and Berkshire Hathaway’s Vice Chairman, Charlie Munger:

‘Over the long term, it's hard for a stock to earn a much better return than the business which underlies it earns. If the business earns 6% on capital over 40 years and you hold it for that 40 years, you're not going to make much different than a 6% return—*even if you originally buy it at a huge discount.* Conversely, if a business earns 18% on capital over 20 or 30 years, *even if you pay an expensive looking price, you'll end up with a fine result’* (emphasis added).

I have no idea why Mr. Munger chose those particular rates of return but what I do know is that he is not voicing an opinion. What he is describing is a mathematical certainty. If you invest for the long term in companies which can deliver high returns on capital, and which invest at least a significant portion of the cash flows they generate to earn similarly high returns, over time that has far more impact on the performance of the shares than the price you pay for them. Yet I have been asked far more frequently whether a share, a strategy or a fund is cheap or expensive than I am asked about what returns the companies involved deliver and whether they are good companies which create value or not.

Even though Mr. Munger is right it requires a long-term investment perspective to capture that compounding by high return companies, and finding those companies is not easy especially as you need to assess their ability to grow and ward off competition. But the most difficult part of applying the investment strategy suggested by Mr. Munger’s quote, and which we seek to apply, is us. Our inability to take a really long-term view, particularly through the periods when our chosen strategy and companies are not performing as well as less good companies, which are enjoying their period in the sun, is our greatest enemy.

I will leave this subject with a sporting analogy. We are often told that life is a marathon not a sprint. So is investing. Most of us will be investors for the majority of our lives. If we start investing in our 30’s with current average life expectancy most of us will be investing for over half a century. It makes Mr. Munger’s 40 year example seem a bit short. So why we should think about what happens over shorter time periods, like quarters or even years is a bit of a puzzle.

However, some people behave as though the best way to win this marathon is to engage the services of one hundred and five 400-metre runners (26 miles 385 yards or 42.195 kilometres divided by 0.4=105.5) who could surely run the distance faster than a single marathon runner. The analogy in investment is a strategy in which every so often you change the fund manager or stocks in your portfolio to suit whatever

change you expect in market conditions. The problem is this; if you choose the one hundred and five 400-metre runner route I presume that to make the contest against the marathon runner realistic you have to carry a baton that you hand over to the next runner. This is the equivalent of you making the decision to sell all your high quality stocks and switch into somewhat cheaper (although maybe not cheap) cyclicals and value stocks. However, I seem to recall that very often that baton gets dropped, or the changeover is not made within the allowed zone and the team is disqualified. I suppose the investment version of this is that you get the timing of your switch wrong or you sell one strategy but remain in cash.

The problem in trying to apply this sprint strategy in the real world of investment is even worse. In a relay race the runners for each stage are selected in advance. Whereas in an attempt to apply this technique in investment you would need to select whom you wish to receive the baton as you enter the changeover area each time. After all do you know in advance whether you want to go from high quality consumer staples to financials, commodity stocks or industrials, emerging markets, bonds or some combination of these? The scope for fumbled handovers is endless. And you have to do it many times to succeed with this approach.

Moving on to review the outcome for 2017 in terms of our Fund's strategy. As you hopefully know by now, we have a simple three step investment strategy:

- Buy good companies
- Don't overpay
- Do nothing

I intend to review how we are doing against each of these in turn.

As usual, we seek to give some insight into the first of those—whether we own good companies—by giving you the following table which shows what Fundsmith would be like if instead of being a fund it was a company and accounted for the stakes which it owns in the portfolio on a 'look through' basis, and compares this with the market, in this case the FTSE 100 Index and the S&P 500 Index ('S&P 500').

This year we not only show you how the portfolio compares with the major indices but also how it has evolved over time.

	Fundsmith Equity Fund Portfolio								**S&P 500**	**FTSE 100**
Year ended	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2017**	**2017**
ROCE	29%	28%	29%	31%	29%	26%	27%	28%	15%	14%
Gross margin	54%	58%	58%	63%	60%	61%	62%	63%	44%	41%
Operating margin	20%	22%	23%	24%	25%	25%	26%	26%	13%	13%
Cash conversion	117%	103%	101%	108%	102%	98%	99%	102%	97%	96%
Leverage	63%	15%	44%	40%	28%	29%	38%	37%	52%	46%
Interest cover	15x	27x	18x	16x	15x	16x	17x	17x	7x	8x

Source: Fundsmith LLP/Bloomberg.
ROCE, Gross Margin, Operating Profit Margin and Cash Conversion are the weighted mean of the underlying companies invested in by the Fundsmith Equity Fund and the mean for the FTSE 100 and S&P 500 Indices. The FTSE 100 and S&P 500 numbers exclude financial stocks. The Leverage and Interest Cover numbers are both median. All ratios are based on last reported fiscal year accounts as at 31st December and as defined by Bloomberg. Cash Conversion compares Free Cash Flow per Share with Net Income per Share.

The companies in our portfolio have consistently had significantly higher returns on capital and better profit margins than the average for the indices. They convert more of their profits into cash and achieve this with a much lower level of borrowing than the average company. Moreover, their average level of borrowing is significantly lower than it was when we started the Fund. The world at large may not have de-geared much but the companies in our portfolio have. Nor is this a one off—they have been achieving these superior results for many years. The average year of foundation of our portfolio companies at the year end was 1916.

Consistently high returns on capital are one sign we look for when seeking companies to invest in. Another is a source of growth—high returns are not much use if the business is not able to grow and deploy more capital at these high rates. So how did our companies fare in that respect in 2017? The weighted average free cash flow (the cash the companies generate after paying for everything except the dividend, and our preferred measure) grew by 13% in 2017. We regard this as a very good result given the generally lackluster growth which the world continues to experience.

This leads onto the question of valuation. The weighted average free cash flow ('FCF') yield (the free cash flow generated by the companies divided by their market value) on the portfolio at the outset of the year was 4.4% and ended it at 3.7% so they did become more highly rated. However, it is important to bear in mind that this is not a like-for-like comparison as our portfolio did not remain static over the year. In fact the two shares we sold—Imperial Brands and J M Smucker—had by far the highest FCF yields in the portfolio and much higher than the FCF yields of the one we purchased—Intuit. If we had not made these changes the portfolio FCF yield would have remained at 4.0% (although it is worth noting that the growth rate would have been significantly lower—the FCF of both companies fell in 2017) so some of the fall in yield was a result of our action rather than any rise in market valuations.

The year end mean FCF yield on the S&P 500 was 3.9% and the median 4.1%. The year end mean FCF yield on the FTSE 100 was 5.6% and the median 4.9%. More of our stocks are in the former index than the latter. To try to cut through all these means and medians, our portfolio consists of companies that are fundamentally a lot better than those in the index and are valued more highly than the average FTSE 100 company and slightly higher than the average S&P 500 company.

In the case of the FTSE 100 Index this is because the valuation of the index is dominated by what I would regard as uninvestable companies like Anglo American and Centrica which traded on FCF yields of around 15% as at 31st December 2017. They may be lowly rated but that does not mean that they are necessarily cheap given their poor quality. The past may not be a perfect guide but their return on capital has averaged 3% and 6% respectively since 2011 and they have achieved a total shareholder return of -35.3% and -40.7% respectively from 1st November 2010 to 31st December 2017, when our Fund (T Class Accumulation shares) has returned 261.7%. Maybe all this is about to change. It had better if you are thinking of owning them or the FTSE 100 Index.

The characteristics of the FTSE 100 Index make me marvel (as is often the case, I could stop the sentence there) at people who use the index as a product or guide to

enable them to ‘invest in the UK’. Firstly, I have to question why you would want to restrict your investments to the UK. You may live in the UK as most of our investors do, but to quote Arthur Daley ‘The world’s your lobster’. You can invest outside it and it is unlikely that all or even many of the good companies in the world that you might benefit by investing in are headquartered or listed in a country which constitutes about 3% of world GDP.

There is also the question of how representative the FTSE 100 Index is of the UK economy. As at 31st December 2017, of the 10 largest market cap (non-financial) companies in the FTSE 100, only three report in sterling. Only numbers 6, 8, 9 and 10 gave any UK numbers in their last reported accounts:

- For No. 6, Rio Tinto, the UK is 1% of sales. Australia is bigger.
- For No. 8, GSK, the UK is 3.8% of sales. The US is bigger.
- For No. 9, AstraZeneca, the UK is 8% of sales. Japan is bigger.
- For No. 10, Vodafone, the UK is 14.5% of sales. Germany is bigger.

Which is all a clue that investing in the FTSE 100 Index is not investing in the UK. So if you are doing so you have already, perhaps inadvertently, made the decision to invest internationally. If so, you may as well do it properly and look at companies listed abroad.

Finally, what sort of companies are in the FTSE 100? An insight into this is provided by the fact that as at 31st December 2017 just 1.8% of the FTSE is in Information Technology. This compares with 23.9% in the S&P 500 Index, not the technology centric Nasdaq Composite Index. I am not suggesting that Information Technology is the only sector to invest in to capture future growth nor is it immune from becoming over-valued and delivering poor returns to investors from time to time. But if you were to ask which two sets of stocks were more likely to capture the benefit of future growth, one with 1.8% in Information Technology or one with 23.9%, I think the answer would be pretty obvious.

So for all those reasons I do not really regard the FTSE 100 as a genuine benchmark for our Fund and neither am I at all concerned about the Fund’s valuation relative to it.

However, that should not be taken to mean that we are entirely comfortable with the seemingly ever higher rating which the shares in our portfolio are achieving. It is clearly a finite and reversible source of performance. However, the growth in the free cash flows of the portfolio are providing a greater portion of the performance which is how we would prefer it and what Mr. Munger might have predicted.

One aspect of our performance which we have often been asked about in the past is the degree to which it has benefited from the strength of the US dollar as the majority of the stocks we own are listed in the United States. This is a complex subject as currency exposure is driven by where a company derives its revenues rather than where it is headquartered or listed. However, this year there has been a noticeable absence of such questions. Could this perhaps be because in 2017 the best estimate we have is that the weakness of the US dollar cost our Fund some -5.9%. The performance in 2017 was attained despite this headwind.

For the year the top five contributors to the Fund's performance were:

Paypal	+2.9%
Amadeus	+2.3%
CR Bard	+1.8%
Novo Nordisk	+1.5%
Waters Corp	+1.4%

CR Bard is making an appearance for the second year running, at least partly because it was bid for by Becton Dickinson, another of our portfolio companies.

The bottom five were:

JM Smucker	- 0.3%
Imperial Brands	- 0.2%
Dr Pepper Snapple	0.0%
Colgate Palmolive	+0.1%
Reckitt Benckiser	+0.1%

We sold our holdings in JM Smucker and Imperial Brands during the year.

JM Smucker was a disappointment. One half of the business is in ambient packaged food in which it is a struggle to generate growth—Folgers coffee, Jif peanut butter and Smucker's jams (jellies if you are American). However, what attracted our interest was when JM Smucker acquired the Big Heart Pet Brands pet food business from private equity. We are keen on businesses which sell to pet owners, such as IDEXX, albeit indirectly, and we had made a very good return on the Big Heart business when it was owned by Del Monte before it was acquired by private equity. However, the outcome in terms of the margins and returns achieved on the business by JM Smucker proved to be disappointing and we were concerned by the management's reaction to this especially as JM Smucker is a family controlled company.

Imperial Brands is the former Imperial Tobacco that we had held since the inception of the Fund. We had become increasingly concerned about the company's positioning in terms of its lack of exposure to the developing world and to the next generation reduced risk products such as heat not burn devices, all of which has led to volumes falling at a rate that it is difficult to cope with. We were even more concerned by the management reaction which we literally could not understand.

Colgate makes the table of our five worst performers for the second year running even though it is our smallest position. It has been facing a tough time with its largest market being Brazil.

Turning to the third leg of our strategy which we succinctly describe as 'do nothing', minimising portfolio turnover remains one of our objectives and this was again achieved with a portfolio turnover of 5.4%^ during the period. It is perhaps more helpful to know that we have held 13 of our portfolio companies since inception and we spent a total of £1.3m or just 0.011% (1.1 basis points) of the Fund's average value over the year on voluntary dealing (which excludes dealing costs associated with fund subscriptions and redemptions as these are involuntary).

Why is this important? It helps to minimise costs, and minimising the costs of investment is a vital contribution to achieving a satisfactory outcome as an investor. Too often investors, commentators and advisers focus on or in some cases obsess about the Annual Management Charge ('AMC') or the Ongoing Charges Figure ('OCF'), which includes some costs over and above the AMC, which are charged to the Fund. The OCF for 2017 for the T Class Accumulation shares was 1.05%. The trouble is that the OCF does not include an important element of costs—the costs of dealing. When a fund manager deals by buying or selling investments for a fund, the fund typically incurs the cost of commission paid to a broker, the bid-offer spread on the stocks dealt in and, in some cases, transaction taxes such as stamp duty in the UK. This can add significantly to the costs of a fund yet it is not included in the OCF.

We provide our own version of this total cost including dealing costs, which we have termed the Total Cost of Investment ('TCI'). For the T Class Accumulation shares in 2017 this amounted to a TCI of 1.08%, including all costs of dealing for flows into and out of the Fund, not just our voluntary dealing. We think that figure will prove to be low if or when other funds produce comparable numbers. However, we would caution against becoming obsessed with charges to such an extent that you lose focus on the performance of a fund. It is worth pointing out that the performance of the Fund tabled at the beginning of this letter is after charging all fees which should surely be the main focus.

This year I thought I would use the opportunity afforded by this letter to talk about so-called activism and takeovers since we have seen a lot of events in these areas in the past year which have affected the companies we own and follow.

Investment is a world in which words get used in confusing ways. Take the words active and activism. Active investors are the opposite of passive investors who simply seek to replicate the performance of an index. At Fundsmith we are active investors—our Fund will only own a maximum of 30 shares (it owned 27 as at 31st December 2017) and we limit it to a few sectors which have the characteristics we seek: consumer staples, some consumer discretionary products, healthcare and technology being the main sectors. So we are far removed from a passive investor. However, we change our portfolio positions very infrequently which I suppose makes us an inactive active investor. You can see why people are often confused.

Activists are a different animal. They seek to benefit by causing change in corporations they invest in. Activists are usually active managers but some of them are passive (I'm not making this up) as they seek to improve the returns on their index fund by agitating for change where they feel it is necessary. So I suppose they could be described as passive activists. Still with me?

On the whole we are not fans of activism. Too often it seems to follow a playbook that has the following steps:

1. The activist 'buys' a stake in a company. I have put 'buys' in inverted commas because often much or all of the stake is held through derivative products which means that the activist can announce a seemingly large position in the company's stock whilst risking and committing relatively little actual cash. This

methodology also gives some clue as to the activist's time horizon which may not coincide with ours, as derivatives have an expiry date whereas stocks don't.

2. Engage in a public row with the target company and seek board representation, a spin-off of part of the business, a merger with or sale to a competitor, raise debt to execute a share buyback (the activist can helpfully tender stock to assist with this) etc.

3. If the company responds by following the activist's demands they then sell their stake.

4. We and other long term shareholders are left with a company that has incurred fees and diverted time from running the business to respond to the activist and execute the changes, which is now potentially more fragmented, more highly leveraged and has had to install new management.

5. Rinse and repeat with another ~~victim~~ investment.

We have many possible objections to this process. In our experience a dialogue in which you seek to change someone's behavior is best at least started in private. Seeking a public spat at the outset seems to us to be more closely aligned with a desire to seek a certain public profile rather than to effect corporate change. Often the proposals hinge on a misconception or two. We have often been told that if a company has two divisions and one is in a slow growing segment and one is faster growing (like PepsiCo with soft drinks and snacks) then if the two are separated (as Nelson Peltz suggested to PepsiCo) the faster growing one will attain a higher stock market rating once on its own. This is probably true, but won't that be compensated by a lower rating on the slower growth division? Of course not for the activist who intends to sell out as soon as possible. Thankfully in our view, on this occasion Mr. Peltz was unsuccessful and PepsiCo remains a drinks and snack business, which is not to say that we think everything is fine with PepsiCo's management or that Mr. Peltz is always wrong, of which more later.

Leveraging up the balance sheet to buy back stock is a frequent demand of activists and is invariably described as 'returning cash to shareholders' and not only when it is suggested by activists. The correct description for this action should be 'returning cash to exiting shareholders' as we remaining shareholders don't receive any of it and this perhaps best encapsulates the problem we identify with this practice. Those of us who actually seek to own the company and remain shareholders see debt raised to take out shareholders who wish to exit. It is beyond us why we would want that to happen unless the shares purchased are demonstrably cheap.

However, whilst we question the motivation and methods of activists, and how companies respond to them, we do not always disagree with them. For example, we agreed with Carl Icahn's view that separation of the two businesses which were part of eBay (the eBay marketplaces business and PayPal the payment service provider) would set PayPal free to grow more rapidly, and as you can see PayPal is the largest contributor to our Fund's performance over the past year.

Quite a lot happened to affect our portfolio companies and we have seen some takeover activity in the past year. In addition to the bid for CR Bard and the bid approach from Kraft Heinz for Unilever, activists became involved in ADP and Nestlé, which we own, and P&G, which we had already sold, but which remains in our Investable Universe of stocks we would own given certain conditions. I thought it might therefore be helpful to investors if I described our reaction to each of these in turn, since we may not be very active in the sense of changing portfolio positions but we are often engaged in thinking about situations such as these.

Automatic Data Processing ('ADP') / Pershing Square

Payroll and HR services company ADP was approached by activist fund Pershing Square, led by Bill Ackman, who had 'bought' an 8.3% stake. The inverted commas are because this stake involved 36.8m shares, 28.0m of which were in fact call options and not actual shares. This did not amount to true ownership in our view since Pershing Square had no right to vote the shares covered by those call options and neither had they expended the cash to purchase the shares.

Pershing Square's approach to ADP became a public row and proxy contest with Pershing Square delivering a 168 page presentation, several letters suggesting ways to improve operating efficiency, which might be summarized as 'cut costs quickly', and demanding three board seats.

The reaction of the ADP management was interesting. They did not do what so many managements do when faced with an activist by issuing new guidance showing an increase in forecast profits or margins, increasing the dividend and/or share buybacks. Instead they challenged the analysis and assumptions underlying the Pershing Square proposals. We found this direct and refreshingly honest.

The stock had significantly outperformed the S&P 500 Index over the past five years even before Pershing Square became involved. Maybe it could have done even better if Mr. Ackman is right, but during this period the management has also had to oversee a transition of the business from one which was mainly paper based to one where its products are delivered by a variety of electronic means, and it is not as though Pershing Square's suggestions were without risk. We therefore decided to give the ADP management something rather old-fashioned, called the benefit of the doubt, and so voted with them and against Pershing Square's proposals. We suspect there are far worthier targets for Mr. Ackman to attack even within our portfolio.

Nestlé / Third Point

Hedge fund Third Point, run by Dan Loeb, purchased a $3.5bn stake in Nestlé and in his June letter to investors Mr. Loeb talked of Nestlé's 'unrealized potential for margin improvement and innovation in its core businesses, an un-optimized balance sheet, a number of non-core assets'.

Third Point's approach to Nestlé strikes us as close to the activist playbook which I described earlier in that it calls for 'improving productivity'; 'returning capital to shareholders'; 're-shaping the portfolio'; and 'monetizing its L'Oréal stake'.

In respect of productivity, Mr. Loeb said Nestlé should ‘adopt a formal margin target’. He went on to specify the margin level he believes Nestlé should formally target as ‘18–20%’ by 2020. There is more to attaining an improvement in profitability than committing to a target. The approach reminds me of the G20 meeting in 2014 at which the countries committed to attaining GDP growth of more than 2%. If it’s that simple, why not commit 3% or even 4%? Some people seem to believe that GDP growth or profit margins can be conjured up by a commitment. Sadly it may take rather more than that.

In respect of returning capital, Mr. Loeb says that ‘capital return in conjunction with a formal leverage target makes sense as well’. He goes on to say that raised leverage would provide share buyback capacity, which would probably be a better use of cash than acquisitions given high valuations (remember that bit please).

Mr. Loeb mentions ‘Re-shaping the portfolio’ and invokes the fact that the company has over 2,000 brands, some of which he believes could fetch ‘above-market multiples’ given ‘large synergies to potential acquirers’. He also thinks Nestlé should consider ‘accretive, bolt-on acquisitions in high growth and advantaged categories’ (presumably despite the ‘high multiples in Nestlé’s sector’ he already mentioned).

His proposal for ‘Monetizing the L’Oréal stake’ is based on his belief that the stake is ‘not strategic and shareholders should be free to choose whether they want to invest in Nestlé or some combination of Nestlé and L’Oréal’. He ended by saying that divestiture ‘via an exchange offer for Nestlé shares…would accelerate efforts to optimize its capital return policies, immediately enhance the company’s return on equity (‘ROE’) and meaningfully increase its share value in the long run as earnings improve over a reduced share count’. Fairly obviously the enhancement of ROE from disposal of a stake which is equity accounted is purely cosmetic but then again some people are impressed by cosmetic changes. We are not amongst them and if I had managed to acquire a 23% stake in the world’s leading cosmetic company, as Nestlé has, I would need some more compelling arguments to persuade me to dispose of it.

Nestlé’s first response to Third Point came only two days after Mr. Loeb’s letter. This talked about ‘value creation’. However it did include one specific, namely the announcement of a CHF 20bn share buyback program.

A more detailed response came when Nestlé CEO Mark Schneider and other executives presented at the Nestlé investor day on 26th September. The company set a new formal margin target—up 150–250bps from the underlying 16% in 2016 to 17.5–18.5% by 2020; and said that it would accelerate share buyback activity. It also said that as well as the already announced decision to ‘explore strategic options’ for the US confectionery business, it was ‘actively adjusting its product portfolio...as shown by the recent investments in Blue Bottle Coffee, Sweet Earth and Freshly’. However the company defended the L’Oréal stake.

On the whole we are not impressed when a company announces new margin targets, share buybacks and acquisitions and/or disposals in response to activists or takeover approaches. The question which always springs to our mind is ‘If these things are possible and desirable, why weren’t you already doing them?’ In the case of Nestlé,

however, the CEO Mark Schneider should probably not be criticised for this as he is new in the role so he can't be blamed for any past dilatoriness.

To date Third Point's approach to Nestlé has not lead to anything we are required to vote on which may be just as well.

Procter & Gamble ('P&G') / Trian

Trian is a fund run by Nelson Peltz whom I have already mentioned in the context of PepsiCo. Although we don't directly have a dog in this particular fight, as we do not have any P&G in our portfolio, it still resides in our Investable Universe and so an investment is still regularly considered by us, and as we sold our stake because of concerns about P&G's strategy we are interested in what Mr. Peltz had to say.

Trian's plan for P&G was detailed on 6th September. It called for 'organizing P&G in a way that promotes accountability, faster decisions and responsiveness to local preferences'; 'ensuring management's $12–13bn productivity plan actually delivers'; 'fixing the innovation machine'; 'improving development of small, mid-size and local brands, both organically and through M&A'; 'winning in digital'; 'addressing P&G's insular culture'; 'improving corporate governance, including aligning management compensation with market share gains'.

The page after these proposals—i.e. very much to the fore of the piece—details what Trian is 'NOT' (they wrote the word in capital letters) recommending. Among the things which they are not recommending—a break-up of the company, a new CEO, replacement of any directors, taking on excessive leverage, pension benefits cuts, slashing of R&D, marketing or capital expenditure budgets, cost cuts which might impact product quality, moving out of Cincinnati. We like this approach. The next page reminded us that all Trian was seeking was that 'Nelson become 1 of 11 (or 12)' directors of P&G and that it is ridiculous to suggest that as one person out of 11 or 12, he would 'derail' P&G.

The Trian presentation is 93 pages long and is all centred around P&G having a poor organizational structure—'suffocating bureaucracy and complexity'—which means that no one is accountable, decisions take forever and so forth. When we sold our P&G stake the fact that the company is the overwhelming market leader with Gillette but was ranked no. 50 in online shave clubs struck as illustrating the sort of point Mr. Peltz was making.

David Taylor, P&G CEO, went on Jim Cramer's CNBC programme at one point calling some of Peltz's proposals 'very dangerous'. They strike me as more dangerous to Mr. Taylor than to P&G's shareholders.

Mr. Peltz succeeded in his bid to win a board seat even though P&G is said to have spent more than $100m of shareholders' money to prevent it. We wish him well with his endeavours. His presence makes P&G more interesting to us.

Unilever / Kraft Heinz

On 17th February, the story broke that Unilever had received a bid approach from Kraft Heinz, the listed food products company controlled by 3G, the Brazilian entrepreneurs who also control AB InBev, the world's largest brewer, and Burger King, together with Warren Buffett's Berkshire Hathaway.

On 22nd February, Unilever put out two releases by way of immediate response. The first was entitled, 'Unilever guidance update' which said that Unilever 'now expects core operating margin improvement for 2017 to be at the upper end of its 40–80bps guidance'. The second release said, 'Unilever is conducting a comprehensive review of options available to accelerate delivery of value for the benefit of our shareholders. The events of the last week have highlighted the need to capture more quickly the value we see in Unilever. We expect the review to be completed by early April, after which we will communicate further.'

On 6th April, Unilever announced the results of this review. The company said it was:

- 'Accelerating its 'Connected 4 Growth' programme and targeting a 20% underlying operating margin, before restructuring, by 2020'
- Combining the foods and refreshment units into one unit, 'unlocking future growth and faster margin progression'
- Establishing a net debt/EBITDA target of 2x
- Launching a €5bn share buyback program
- Raising the dividend by 12%—about double the recent rate of increase

This approach clearly falls foul of our scepticism when management produces rabbits from a hat when an activist or takeover comes into view. We think we should already have seen the rabbits or at least been told about their existence.

To hopefully be clear, we are not fans of Kraft Heinz. We have never owned any shares in Kraft Heinz or its constituent parts. Although 3G has managed to operate the business with efficiency as they have AB InBev, to produce great cost savings leading to operating profit margins of 23% in 2016 and strong gains for owners, well certainly for 3G and Berkshire Hathaway, we have never found a business which can cut its way to growth. Although the Kraft Heinz management are certainly handicapped in this regard by the nature of the company's brands, which are mostly not in growing areas of the market, the sort of people and approaches you need to grow businesses tend not to flourish in cultures in which the emphasis is on cost cutting.

However, the contrast between their approach and that of Unilever does raise some questions for Unilever's management which remain unanswered. To give you a simple illustration of this, in 2016 Unilever had €52.7bn of revenues and an average of 169,000 employees, thus revenue per employee of about €312,000. Kraft Heinz had €23.8bn of sales and an average of 41,500 employees, and so revenue per employee of about €574,000. Kraft Heinz has slightly less than half the sales of Unilever but manages to achieve this with less than a quarter of the number of the employees. You don't have to be a fan of brutal cost cutting to see that Unilever has a case to answer here.

Unfortunately we never got to hear Unilever justify its rather interesting sales/employee ratios because Kraft Heinz withdrew as soon as it became evident that Unilever was hostile to the approach. Warren Buffett is notoriously opposed to hostile takeovers.

I hope that has given you all some insight into how we think about and interact with the companies in our portfolio and those we are interested in, and other shareholders, activists and bidders.

Finally, I wish you a happy New Year and thank you for your continued support for our Fund. My colleagues and I look forward to seeing many of you at our Annual Shareholders' Meeting on 27th February 2018 and to trying to answer any questions you may have. Please see the enclosed invitation for details.

Yours sincerely,

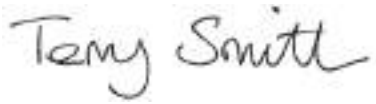

Terry Smith
CEO
Fundsmith LLP

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Sources: All data sourced from Fundsmith research and where appropriate using Bloomberg.

^The PTR (Portfolio Turnover Ratio) has been calculated in accordance with the methodology laid down by the FCA. This compares the total share purchases and sales less total creations and liquidations with the average net asset value of the fund.

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January 2019

Dear Fellow Investor,

This is the ninth annual letter to owners of the Fundsmith Equity Fund ('Fund').

The table below shows performance figures for the last calendar year and the cumulative and annualised performance since inception on 1st November 2010 compared with various benchmarks.

% Total Return	1st Jan to 31st Dec 2018	Inception to 31st Dec 2018 Cumulative	Annualised
Fundsmith Equity Fund[1]	+2.2	+269.6	+17.4
Equities[2]	-3.0	+128.4	+10.6
UK Bonds[3]	+1.2	+35.7	+3.8
Cash[4]	+0.7	+5.1	+0.6

[1] T Class Acc shares, net of fees, priced at noon UK time.
[2] MSCI World Index, £ net, priced at US market close.
[3] Bloomberg/Barclays Bond Indices UK Gov. 5–10 yr.
[4] 3 Month £ LIBOR Interest Rate.
Source: Bloomberg.

The table shows the performance of the T Class Accumulation shares, the most commonly held Class and one in which I am invested, which rose by +2.2% in 2018 and compares with a fall of -3.0% for the MSCI World Index in sterling with dividends reinvested. The Fund therefore beat this benchmark in 2018, and our Fund remains the No.1 performer since its inception in the Investment Association Global sector by a cumulative margin of 13 percentage points over the second best fund and 188 percentage points above the average for the sector which has delivered +81.9% over the same timeframe.

However, I realise that many or indeed most of our investors do not use the MSCI World Index as the natural benchmark for their

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investments. Those of you who are based in the UK may look to the FTSE 100 Index ('FTSE' or 'FTSE 100') as the yardstick for measuring your investments and may hold funds which are benchmarked to this index and often hug it. The FTSE delivered a total return of -8.7% in 2018 so our Fund outperformed this by a margin of 10.9 percentage points.

It would not be surprising if some of you are worried about the returns in 2018 which were our weakest in absolute terms since inception. However, I would suggest that the background needs to be taken into account and not just how the market indices performed but also other active funds.

There are 2,592 mutual funds in the Investment Association ('IA') universe in the UK. In 2018, 2,377 or 92% of these produced a negative return. 13 posted a return of exactly 0%. Just 202 had a positive return. Our Fund was in the 4th percentile — only 3% of funds performed better. Ironically, 2018 was not a great year for our absolute returns but it was actually our second best year relative to all IA mutual funds. 2011 when the market also fell was our best, probably not coincidentally.

2018 was a year in which we saw considerable anxiety from some market participants due to:

- The threat of a trade war between the USA and China
- Brexit
- The rise in US interest rates
- The US mid-term elections
- The Italian budget squabble (Italy is the third largest government bond market in the world)
- The US government shutdown

The response to this was a series of market jitters. The MSCI World Index (£ net) fell by 5.4% in October and after a rally this was followed by a fall of 7.4% in December. Despite the hysterical headlines this, in my opinion, falls well short of turmoil — a word frequently used to describe these events.

October has been a notoriously bad month for stock markets in recent decades and an example of what might reasonably be described as market turmoil was so-called Black Monday 19th October 1987 when the Dow Jones Industrial Average Index ('Dow Jones' or 'Dow') fell 22.6% in a single day. That felt dramatic. I should know as I was in work that day on the trading floor of the investment bank BZW and when I went home I received a slew of sell orders from a large US client who rang me. I had to be careful writing them down as I only had candlelight since the power still had

not been restored from the hurricane, which struck on the previous Friday, adding to the dramatic effect.

I can only imagine with some amusement how some of the commentators, ‘investors’ and market participants who are reeling from the events of this October and December would have performed in October 1987. A December 2018 Financial Times headline referred to ‘Wild market swings’ and whilst the author might like to blame the headline writers for hyperbole — they are trying to sell papers/pixels after all — the article described a recent one day fall in the Dow of 3.1% as ‘eye-popping’. The fall of seven times that scale in 1987 would surely have led to them to exhaust the lexicon of hyperbole. Who knows what might have popped then?

Tumultuous, turmoiled or turbulent Black Monday may have been, but did it really matter? Take a look at the chart below of the Dow Jones and see if you can spot Black Monday. You will need good eyesight or reading glasses to do so.

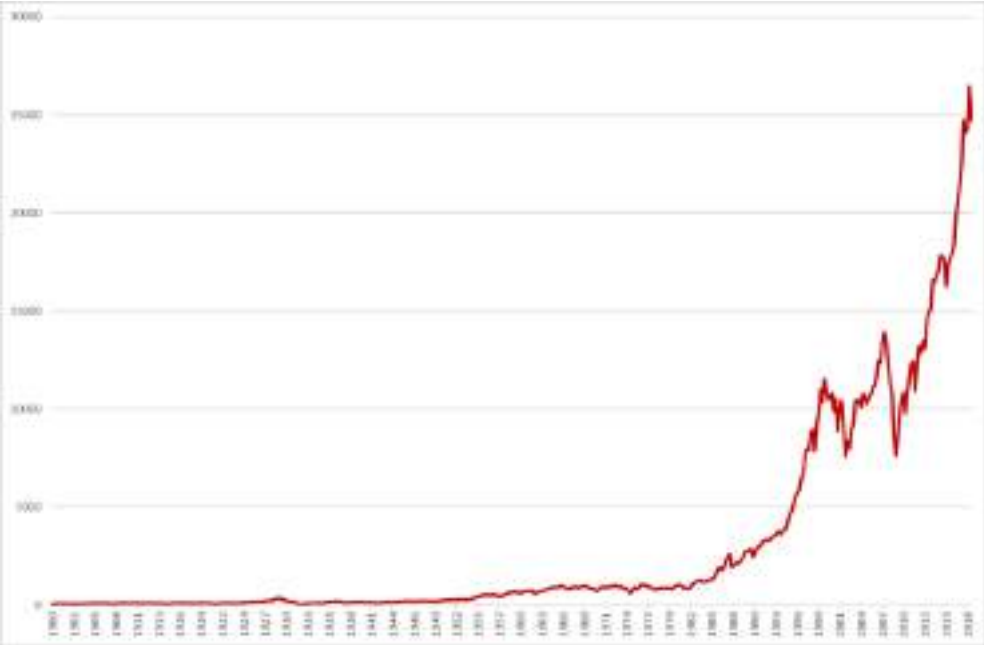

In the long term, it did not matter.

However, this does not stop advisers and commentators predicting crashes and bear markets and suggesting you take preventative action which ranges from reducing your equity holdings, buying or ‘rotating’ into lowly rated so-called ‘value’ stocks, through to selling everything and holding cash to safeguard the value of your assets or buying Bitcoin (down 80% in 2018).

My guiding principles for dealing with such events and predictions are as follows:

1. No one can predict market downturns with any useful level of reliability. Forecasts of what may happen in the market are about as reliable as Michael Fish's infamous denial that there would be a hurricane in the BBC weather forecast on 15th October 1987.

2. However, when one of the repeated warnings proves to be accurate the forecasters will ignore the fact that if you had followed their advice you would have forgone gains which far outweigh your losses in the downturn. I can now trace back six years of market commentary that has warned that shares of the sort we invest in, our strategy and our Fund would underperform. During that time the Fund has risen in value by over 185%. The fact that you would have forgone this gain if you had followed their advice will, of course, be forgotten by them if, or when, their predictions pay off for a period. I suggest you don't forget it.

3. Bull markets do not die of old age so ignore warnings which are based on a phrase such as 'This bull market has gone on for a long time.' They usually die from some event, often but not always rising interest rates.

4. Bull markets climb a wall of worry. The troubling events you can readily see unfolding are rarely the cause of a bear market. Alan Greenspan had already described the market as irrationally exuberant in 1996, so we were in a worryingly well-developed bull market. This was followed by the Asian crisis of 1997, Russian default and Long Term Capital Management collapse in 1998 which all looked scary, but ironically they made the Federal Reserve hesitate to raise rates which gave the bull market a new leg which lasted until 2000. Maybe the possible trade war with China and market jitters will have a similar effect.

5. Bull markets do not broaden as they age — they narrow. The current bull market started in 2009 when shares rose indiscriminately. Then amongst developed markets, the US took the lead. Then the technology sector in the US. Then just the 'FAANGs' (Facebook, Amazon, Apple, Netflix and Google). The idea that in the late stages of a bull market investors can make gains by switching into the stocks which have lagged the market flies in the face of experience.

6. As for buying so-called value stocks, if you wish to pursue this strategy it is best done after the bear market has struck, not before. If you approached any of the famous value investors

and suggested they buy some of the assorted value stocks in the FTSE 100 Index as a value play, I think they would just laugh at you. A ‘value’ stock like Imperial Brands (formerly Imperial Tobacco) was on an historic P/E of 8.1x at the end of 2000 in a bear market. It is now on an historic P/E of 16.5x. An aim for a value investor might be to buy ‘value’ stocks in a downturn when their yield is higher than the P/E.

7. A bear market will occur at some point. We may indeed already be in one. The best stance is to ignore it since you can’t predict it or position yourself effectively to avoid it without impoverishing yourself by forgoing gains. But you have to possess the emotional and financial stability to stick to this stance when it strikes.

Returning to the events of 2018, the MSCI World Index (£ net) fell by -3.0%. So it was a poor performance but it still seems well short of justifying hysteria or a wholesale change of investment strategy. I say this notwithstanding the fact that on the bad days in the stock market there were clear signs of the sort of ‘rotation’ into ‘value’ stocks, which I touch upon in point 6 above.

I often use the term ‘value’ in inverted commas for a number of reasons:

- What some people mean by value is lowly rated. A stock may be lowly rated but not good value if the (lack of) quality of its business and/or its prospects mean that its intrinsic or fundamental value is still below its lowly valuation.

- The distinction which many commentators make between growth or quality investing and value investing is in my view a somewhat superficial one. To quote Warren Buffett:

  ‘Most analysts feel they must choose between two approaches customarily thought to be in opposition: "value" and "growth”. Indeed, many investment professionals see any mixing of the two terms as a form of intellectual cross-dressing.

  We view that as fuzzy thinking (in which, it must be confessed, I myself engaged some years ago). In our opinion, the two approaches are joined at the hip: Growth is always a component in the calculation of value, constituting a variable whose importance can range from negligible to enormous and whose impact can be negative as well as positive.’

  Most investment strategies require some regard for the valuation of the stocks purchased or held — even strategies

like ours which focus on high quality companies. The rate of growth of a company is a critical component of its valuation.

- As pointed out in point 6 above, most stocks are not currently at valuations which would attract classic value investors.

True value investing involves buying stocks when they are trading significantly below your estimate of their intrinsic or fundamental value and then waiting for some event(s) to lift the share price up to or above the intrinsic value — usually a management change, takeover, demerger, a change in the economic or market cycle, or simply when they come back into fashion amongst investors. When this occurs the value investor seeks to realise his or her gains and move on to find another value stock on which to repeat this performance.

Value investing has been out of fashion in recent years as persistently low interest rates have driven the value of almost all stocks beyond the reach of true value investors. Nonetheless value investing has its merits and will surely have its day when stocks of the sort which attract value investors perform well.

However, it is not a strategy which we will be pursuing even if we could foresee it coming back into fashion, which it will at some point. The sort of stocks which trade on low enough valuations to attract value investors are unlikely to be those which we seek – businesses which can somewhat predictably produce a high return on capital employed, in cash, and can invest at least part of that cash back into the business to fund their growth and so compound in value.

Unlike our strategy which is to seek such stocks and hold onto them, letting the returns which the company generates from this reinvestment produce good share price performance, value investing suffers from two handicaps. One is that whilst the value investor waits for the event(s) which will crystallise a rise in the share price to the intrinsic value that has been identified, the company is unlikely to be compounding in value in the same way as the stocks we seek. In fact, it is quite likely to be destroying value. Moreover, it is a much more active strategy. Even when the value investor succeeds in reaping gains from a rise in the share price to reflect the intrinsic value he identified, he or she needs to find a replacement value stock, and as events of the past few years have demonstrated, this is far from easy. Moreover, this activity has a transaction cost. Our strategy has the merit that inactivity is a benefit. If we have correctly identified the good companies whose stock can compound in value, we can hope to hold them indefinitely and still derive good investment performance from them with lower transaction costs.

There are a couple of indices which tell you how value stocks perform. One is the MSCI Europe Value Index (GBP Net). In the 2007-09 financial crisis its maximum fall was 52%, which is 16 percentage points worse than the performance of the MSCI World Index (GBP Net) over that period. So much for the theory that value stocks protect you in a downturn.

As you hopefully know by now, we have a simple three step investment strategy:

- Buy good companies
- Don't overpay
- Do nothing

I will review how we are doing against each of these in turn.

As usual we seek to give some insight into the first of those — whether we own good companies — by giving you the following table which shows what Fundsmith would be like if instead of being a fund it was a company and accounted for the stakes which it owns in the portfolio on a 'look through' basis, and compares this with the market, in this case the FTSE 100 Index and the S&P 500 Index ('S&P 500').

We not only show you how the portfolio compares with the major indices but also how it has evolved over time.

	Fundsmith Equity Fund Portfolio								**S&P 500**	**FTSE 100**
Year ended	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2018**	**2018**
ROCE	28%	29%	31%	29%	26%	27%	28%	29%	16%	17%
Gross margin	58%	58%	63%	60%	61%	62%	63%	65%	45%	39%
Operating margin	22%	23%	24%	25%	25%	26%	26%	28%	15%	16%
Cash conversion	103%	101%	108%	102%	98%	99%	102%	95%	84%	96%
Leverage	15%	44%	40%	28%	29%	38%	37%	47%	46%	39%
Interest cover	27x	18x	16x	15x	16x	17x	17x	17x	7x	9x

Source: Fundsmith LLP/Bloomberg. ROCE, Gross Margin, Operating Profit Margin and Cash Conversion are the weighted mean of the underlying companies invested in by the Fundsmith Equity Fund and mean for the FTSE 100 and S&P 500 Indices. The FTSE 100 and S&P 500 numbers exclude financial stocks. The Leverage and Interest Cover numbers are both median. All ratios are based on last reported fiscal year accounts as at 31st December and as defined by Bloomberg. Cash Conversion compares Free Cash Flow per Share with Net Income per Share.

As you can see, not much has changed. I would suggest ignoring the increase in Leverage — the amount of debt the portfolio companies have as a proportion of their capital. The arithmetic average of our portfolio companies would not be very meaningful as it would average a wide range between nine of our stocks which have net cash and three which have leverage of over 1,000% (as they have reduced their capital through share buybacks). Even the

median which we use is not much better — the median is the average between the 14th and 15th stocks in order of leverage but those either side have widely differing leverage of 27% and 73% respectively. For those of you who glaze over at statistical explanations — the figure tells you virtually nothing about the actual financial characteristics of the businesses. You might therefore wonder why we include it, and latterly so do I, but I don't like taking figures out of tables we have provided in the past as it can cause suspicion about the reasons why (figures are rarely omitted when everything appears to be going well).

The interest cover — which remains stable at about 17x and twice the level of the index companies — is a much better guide to the financial stability of our portfolio companies.

What is more interesting is that the companies in our portfolio continue to have significantly higher returns on capital and better profit margins than the average for the indices. They convert more of their profits into cash and achieve this with at least no more leverage than the average company.

The average year of foundation of our portfolio companies at the year end was 1922.

Consistently high returns on capital are one sign we look for when seeking companies to invest in. Another is a source of growth — high returns are not much use if the business is not able to grow and deploy more capital at these high rates. So how did our companies fare in that respect in 2018? The weighted average free cash flow (the cash the companies generate after paying for everything except the dividend, and our preferred measure) grew by 8% in 2018. We regard this as a very good result given the generally subdued and patchy growth which the world continues to experience and the fact that the previous year the portfolio companies achieved growth of a remarkable 13%, so the starting base for comparison in 2018 was a tough one.

This leads onto the question of valuation. The weighted average free cash flow ('FCF') yield (the free cash flow generated by the companies divided by their market value) of the portfolio at the outset of the year was 3.7% and ended it at 4.0%, so they became cheaper or more lowly rated. Whilst this is not a good thing from the viewpoint of the performance of their shares or the Fund, it is inevitable that sooner or later the cash flows generated by our companies will grow faster than their share prices, rather than vice versa. This is far from an unhealthy development especially if we are investing more in the Fund, as most of us are, through the Accumulation shares.

The year-end median FCF yield on the S&P 500 was 4.7%. The year-end median FCF yield on the FTSE 100 was 5.2%. More of our stocks are in the former index than the latter and I will not repeat the explanation which I gave last year on why I think the FTSE 100 is not an appropriate benchmark or investment proxy for investors to use. Our portfolio consists of companies that are fundamentally a lot better than those in either index and are valued more highly than the average FTSE 100 company and a bit higher than the average S&P 500 company but with a significantly higher quality.

For the year the top five contributors to the Fund's performance were:

Microsoft	+1.3%
IDEXX	+1.0%
Intuit	+1.0%
PayPal	+1.0%
Dr Pepper Snapple	+0.9%

Intuit, the US leader in accounting and tax software, was a relatively new holding having been purchased in 2017. PayPal is putting in an appearance for the second year running and IDEXX is returning to this list after being in our top five contributors in 2016. Microsoft makes its fourth appearance after 2015, 2014 and 2013. So much for taking profits as a strategy. Dr Pepper Snapple was the recipient of a bid from Keurig Green Mountain.

The bottom five were:

Philip Morris Intl.	-1.5%
Sage	-0.8%
Facebook	-0.7%
3M	-0.5%
Novo Nordisk	-0.4%

Philip Morris was caught up in the noise and uncertainty which surrounds the new reduced-risk products — vaping and heat-not-burn technology — where Philip Morris has a market leading product in iQOS. I suspect we can tell that the company is on the right track not just in terms of introducing products which wean smokers off cigarettes and so make their consumption safer and give a new leg to its business but also by the number of regulators and commentators who oppose them.

Sage, the accounting software provider, was the subject of an unplanned change of CEO during the year, of which more later.

Our purchase of a holding in Facebook is certainly one of our more controversial decisions in the light of the furore over its use of

personal data and what role some Facebook users may have made of this in elections.

As pointed out earlier and on many other occasions, we tend to look for suitable investments from the numbers that they report. Facebook's historic numbers are certainly impressive. It has some 1.5 billion Daily Active Users ('DAU') and some 2.3 billion Monthly Active Users ('MAU'). Bearing in mind that Facebook has no presence in China these numbers suggest ubiquity.

In 2017 Facebook had a return on capital of 30%, gross margins of 87% and operating profit margins of 50%. Its revenue growth rate has averaged 49% p.a. for the past five years and over the same period operating profits have grown by 106% p.a. (one hundred and six percent per annum).

Of course, all that is in the past and the future for Facebook is likely to be different. When we started buying its shares we estimated that its revenue growth rate would halve to about 20% p.a. In the third quarter of 2018 they grew at 34% p.a., but the company has indicated that the growth rate would slow further to perhaps the mid 20% range in the fourth quarter, and the operating margin was down to a still impressive 42%. Against the background of the media furore over the use of personal data, this has been enough for some commentators on Facebook to experience very public attacks of the vapours.

But bear in mind the following:

The 42% operating margin in the third quarter which gave 13% profit growth was after a 53% increase in costs. You could look at this as a glass half full or empty, but in its third quarter Facebook increased R&D costs by 29%, marketing and sales costs by 65% and general and administrative costs by 76%. You might see such a rise in costs as problematic, but I suspect that faced with a furore Facebook's management has decided to very publicly spend a lot of money on data security and content control and to improve users' experience. In doing so it has, a) depressed Facebook's results, albeit to a still very acceptable level — showing great results whilst under such scrutiny might be a red rag to a bull, and b) built an even bigger barrier to entry for competitors. Ironically the response to the furore may just have cemented Facebook's competitive position. I also note that at the time of writing, Facebook's new political advertising transparency tools show that the UK government spent £96,684 on Facebook ads promoting Prime Minister May's Brexit deal. Political attacks on Facebook have the look of a circular firing squad.

Similarly, Facebook's capital expenditure doubled in the first nine months of 2018 to $9.6 billion, yet free cash flow in the third quarter was still 16% higher than it was a year ago.

Yet Facebook is on an historic P/E of 19.7x — about the same as the S&P 500. Unless there is going to be a much more severe deterioration in Facebook's operational performance than we have seen to date or reasonably expect, this looks cheap to us.

Also consider the following:

Facebook makes no money from its social network users. It makes most of its revenue from online advertising, a business in which it has a virtual duopoly with Google.

I strongly suspect that most people's judgement of Facebook is based upon their personal experience and prejudices. But 69% of Facebook's DAU and 73% of its MAU are outside the United States and Europe. How much do you think they care about allegations of misuse of data in a US election? Not much I would suggest which seems to be borne out by the fact that in the third quarter the number of DAU grew by 9% and MAU by 10%.

Facebook has yet to 'monetise' WhatsApp. I found it particularly amusing that one person queried our holding in Facebook using a message sent on WhatsApp. Who said the age of irony is dead?

Our Facebook holding has cost us some performance to date and no doubt it will continue to be a difficult stock to hold in terms of media attention, but we have often found that the only time you can hope to buy stock in great businesses at a cheap valuation is when they have a glitch.

Turning to the third leg of our strategy, which we succinctly describe as 'Do nothing', minimising portfolio turnover remains one of our objectives and this was again achieved with a portfolio turnover of 13.4% during the period. This is the highest level of annual turnover which we have undertaken to date, but it is still tiny in comparison with most funds. Moreover, it is somewhat exaggerated by the fact that we ran down the net cash as the market experienced some weakness later in the year. If this element of turnover was excluded the number would be about 11%. It is perhaps more helpful to know that we spent a total of just 0.018% (1.8 basis points or hundredths of a percent) of the Fund's average value over the year on voluntary dealing (which excludes dealing costs associated with fund subscriptions and redemptions as these are involuntary). We have held 11 of our portfolio companies since inception in 2010.

Why is this important? It helps to minimise costs and minimising the costs of investment is a vital contribution to achieving a satisfactory outcome as an investor. Too often investors, commentators and advisers focus on or in some cases obsess about the Annual Management Charge ('AMC') or the Ongoing Charges Figure ('OCF'), which includes some costs over and above the AMC, which are charged to the Fund. The OCF for 2018 for the T Class Accumulation shares was 1.05%. The trouble is that the OCF does not include an important element of costs — the costs of dealing. When a fund manager deals by buying or selling, the fund typically incurs the cost of commission paid to a broker, the bid-offer spread on the stocks dealt in and, in some cases, transaction taxes such as stamp duty in the UK. This can add significantly to the costs of a fund, yet it is not included in the OCF.

We provide our own version of this total cost including dealing costs, which we have termed the Total Cost of Investment ('TCI'). For the T Class Accumulation shares in 2018 this amounted to a TCI of 1.09%, including all costs of dealing for flows into and out of the Fund, not just our voluntary dealing.

We have long said that we look forward to the day when we can compare our TCI with other funds and that day has arrived. The table below shows the TCI of the 15 largest equity and total return funds in the UK and how their TCI differs from their OCF:

15 Largest Active Equity & Total Return Funds in the UK

	OCF %	Transaction Costs %	TCI %	% Additional Costs
Fundsmith Equity Fund	1.05	0.04	1.09	4%
Standard Life Investments GARS	0.89	0.25	1.14	28%
Invesco Global Total Return	0.87	0.40	1.27	46%
Invesco High Income	0.92	0.10	1.02	11%
Stewart Investors Asia Pacific Leaders	0.89	0.13	1.02	15%
Newton Real Return	0.80	0.15	0.95	19%
Baillie Gifford Diversified Growth	0.82	0.63	1.45	77%
M&G Global Dividend	0.91	0.09	1.00	10%
Lindsell Train UK Equity	0.70	0.13	0.83	19%
Artemis Income	0.79	0.13	0.92	16%
Jupiter European	1.03	0.09	1.12	9%
Newton Global Income	0.79	0.10	0.89	13%
Ruffer Absolute Return	1.15	0.20	1.35	17%
Woodford Equity Income	0.75	0.27	1.02	36%
Aviva Multi Strategy Target Return	0.85	0.23	1.08	27%
Average	**0.88**	**0.20**	**1.08**	**23%**

Source: Financial Express Analytics/Fundsmith as at 7.1.19, in descending order of size.

We are pleased that our TCI is not only just 4% above our OCF when transaction costs are taken into account, but that this is the lowest increase in the group. However, we would caution against becoming obsessed with charges to such an extent that you lose

focus on the performance of funds. It is worth pointing out that the performance of our Fund tabled at the beginning of this letter is after charging all fees which should surely be the main focus. This point is rammed home when the same 15 largest active equity and total return funds in the UK are ranked by their three year performance (the picture does not change much if we rank them on their five year performance but two were launched too recently to have five year track records):

% Annualised Performance	**3yr**	**5yr**
Fundsmith Equity	16.9	17.9
M&G Global Dividend	14.0	7.3
Stewart Investors Asia Pacific Leaders	12.7	11.8
Newton Global Income	11.5	10.7
Jupiter European	10.2	11.8
Lindsell Train UK Equity	9.9	9.7
Artemis Income	3.9	4.3
Baillie Gifford Diversified Growth	2.6	2.9
Ruffer Absolute Return	2.2	2.5
Newton Real Return	2.0	2.1
Invesco Global Targeted Returns	0.3	2.1
Invesco High Income	-0.9	3.4
Standard Life Investments GARS	-2.2	0.3
Aviva Multi Strategy Target Return	-2.5	n/a
Woodford Equity Income	-4.6	n/a

Source: Financial Express Analytics as at 31.12.18.

I think the above table speaks for itself.

We did undertake some activity in 2018. In particular we sold our holdings in Dr Pepper Snapple and Nestlé during the year.

Dr Pepper Snapple was a stock we have held since inception. We found the strategic rationale for the acquisition by Keurig Green Mountain difficult to comprehend and so took our leave of the situation. Commentators seem to forget that a similar combination was tried between Coca-Cola and Keurig which was unsuccessful and quietly abandoned.

Last year we wrote about the attention which Nestlé, amongst other portfolio companies, had attracted from activist investors. In Nestlé's case this was followed by the announcement of new margin and share buyback targets and then a deal to purchase Starbucks supermarket coffee products, excluding the 'Ready to Drink' ones, for $7.15bn. In other words, bags of coffee. Presumably we can also look forward to being able to purchase Starbucks Nespresso pods. Virtually no mention was made of the royalty which Nestlé will continue to pay to Starbucks on sales of these products. We rely on the management of our companies to allocate capital in ways which create value for us as investors, and this deal did not seem to meet those criteria, although it certainly seemed to fit the activist

imperative to do something and looked like a good deal for Starbucks.

This year I thought I would use the opportunity afforded by this letter to talk about our engagement with companies. We are often asked by investors whether we meet company management and how we engage with them.

The answer is that we meet them a lot. We visit companies we wish to research and meet them physically or virtually at results meetings and industry conferences. We are often engaged by members of the board remuneration committee and we review and vote on all resolutions and proxy statements at general meetings. We do not employ any outside agency for this.

However, meeting management is not our primary test of whether a business is of sufficient quality for us to invest. We think good businesses are identifiable from the numbers they produce. Nor do we meet management to give them our views on how to run the business. If they don't know how to do so we are in serious trouble.

There were two examples in 2018 of the closer engagement which we undertake when necessary.

One was with Sage, the accounting software company and the UK's largest quoted IT company. Sage like many software providers is in the midst of a switch from provision of perpetual software licenses for its products — historically in the form of a disc — to the provision of Software as a Service (or 'SaaS' as it is known in the jargon) in which the product is provided online as a subscription service. This has many advantages — knowing who the customer is, the ability to provide upgrades and sell adjacent products (like payroll and HR services) and repeat revenues. But it is not an automatic win — legacy customers can be reluctant to switch and the move to SaaS can provide an opportunity for disruptive competitors. Sage has had a couple of disappointing quarters of results in 2018 when the revenue growth which was expected to be 8% p.a. looked like it might come in closer to 6% p.a. Whilst this was not ideal it was not as worrying as the possibility that the product development might not be fit for purpose and/or that in trying to reach for short term targets essential product development might be neglected.

We therefore engaged with the Chairman to ensure that our concerns were understood. In this respect we felt we could draw upon our experience as shareholders in Intuit which competes with Sage and has made a so far successful transition to becoming a SaaS company. We did not however call for any change in

management. The board nonetheless subsequently took the decision to part company with the CEO.

We engaged with the Chairman to try to ensure that a suitable choice was made, drawing on our experience as a shareholder in Microsoft during the transition from Steve Ballmer as CEO to Satya Nadella, which has gone very well, and finally we met with the new CEO when he was appointed permanently to discuss the way forward for the business. We were at pains to stress that we are not interested in short term fixes at the expense of long-term success something which he seems to agree with since he has announced £60m of additional expenditure, two thirds of which is on product development.

The other main corporate engagement outside the run of the mill AGM proxies and remuneration consultations in 2018 concerned Unilever, which announced a plan to unify its Anglo Dutch dual share structure and centre the headquarters and listing in the Netherlands. This was to be subject to a shareholder vote in the UK PLC which never occurred, presumably because the board could see it was about to be defeated.

Unlike some investors, the switch of listing would not have affected our ability to continue as shareholders. Our engagement with the Chairman centred around the motivation for the move which was portrayed as a desirable simplification that would make it easier for Unilever to engage in acquisitions involving share issues, particularly in the United States.

We were rather sceptical about the stated reasons for the change. The previous year Unilever had a near death experience with a takeover approach from Kraft Heinz. Add to this the episode in which the US chemical company PPG Industries had bid for the Dutch paint maker Akzo Nobel and a subsequent freedom of information request had revealed collusive activity between Akzo Nobel's management and Dutch politicians to thwart the bid and you did not need to be the fictional Dutch detective Van der Valk to figure out that there might be some other motivations for the proposed move.

As you will be able to tell if you read our annual letter last year, we are far from enthusiastic about most shareholder activism nor are we shareholders in or fans of the Kraft Heinz business model. But we thought that Unilever's management had a case to answer and we think that the ability to mount a hostile takeover is an important discipline in ensuring that our assets are properly managed. When the Chairman told us that he was never in favour of such actions, though he concurred that some companies were poorly managed, we were at best a bit confused about what mechanism he thought

might be applied if such a change became necessary. Harsh language maybe?

We did not take part in any public commentary about our voting intentions had the Unilever changes come to a vote and please note that we have not revealed that here, we have merely commented on the process. In our view achieving good stewardship of a business is not always a process best conducted through the media.

I would like to end by addressing the question of what will happen next in equity markets, which may surprise you given that I always respond to questions about this by saying I haven't got a clue, and neither has anyone else.

Imagine a fund manager approached you with an offer for you to invest in a portfolio of high quality companies. You may quite like the strategy but you are worried about whether or not this is a good time to invest in the stock market. Take a look at the chart below which shows the world's largest index by market capitalisation, the S&P 500, and which includes more quality companies than any other index.

Source: Bloomberg

The chart looks like a roller coaster that has just passed the peak of the ride. Surely you would be stupid if you invested now no matter how good the strategy is. Better to wait until the market has had a proper fall.

You may notice that there are no dates on this chart of the S&P 500. That's because I wanted you to assume I was referring to the current market and our own fund, Fundsmith. In fact, the chart above shows

the 37 years up to 1965 — the year in which Warren Buffett took control of Berkshire Hathaway. If you had made the decision to time the market and hold back from investing then you would probably have missed out on the 20.9% compound growth in the market value per share of Berkshire since 1965 as a result.

‘Ah but that’s not how market timing works’, I can foresee someone saying. ‘Just because I didn’t buy into it in June 1965 doesn’t mean that I wouldn’t have bought into Berkshire later after the market had fallen.’ Seems fair except that the market didn’t fall in the remainder of 1965. In fact, the S&P 500 went up by a further 13% in the second half of 1965. What would you have done then? Panicked and bought Berkshire or held off? If you had the nerve to do the latter, you might have felt vindicated in 1966 when the S&P 500 fell by 22% at one point.

There are several problems with this though. Berkshire Hathaway is not the S&P 500. Its shares rose 49.5% in 1965 and only fell by 3.4% in 1966. So, your hesitancy would not have paid off. Moreover, by 1967 the market had recovered to a new peak.

Are you really smart enough to not only a) predict a market fall but also; b) figure out how this translates into individual stock movements; c) get your timing sufficiently correct that you do not either forgo gains which far outweigh any losses you protect against or suffer some of the downturn; d) have sufficient mental agility and nerve to start buying when your prediction of a market fall has become reality; and e) get the timing roughly right on that side of the trade so that you don’t end up catching the proverbial falling knife or missing some or all of the recovery? If so, I doubt you will be reading this letter on your private island. But above all, I doubt you exist.

To be fair, there have been plenty of big falls in both the market and Berkshire Hathaway’s stock in the intervening 50 odd years since 1965. Berkshire’s shares fell by over 50% in 1973–75 and 2008–09, and by nearly 50% in 1998–2000, plus a mere 37% in 1987.

The point about this is not simply that getting the timing of markets right is impossible it is also that in even attempting to do so you might have missed out on investing in Warren Buffett’s Berkshire Hathaway, the results of which far outweigh any market timing gains.

So where are we now? Here’s the S&P 500 Index from the end of the previous chart in 1965 over the 53 years to date:

Source: Bloomberg

Looks familiar doesn't it? And it makes people reluctant to invest.

'Ah' but I can hear someone say, 'Things are different — the valuation was much lower in 1965 than it is now.' In mid-1965 the S&P 500 was on a P/E of 18.6x. Now it is on a 2019 forecast P/E of 17.1x. There is no significant difference, although it is actually more lowly rated now.

But surely only an idiot would invest in a portfolio of high quality company stocks when the market chart looks like that...

As Mark Twain said, 'History doesn't repeat itself, but it often rhymes.'

Finally, I wish you a happy New Year and thank you for your continued support for our Fund. My colleagues and I look forward to seeing many of you at our Annual Shareholders' Meeting on 26th February 2019 and to trying to answer any questions you may have. Please see the enclosed invitation for details.

Yours sincerely,

Terry Smith

Terry Smith
CEO
Fundsmith LLP

Disclaimer: A Key Investor Information Document and an English language prospectus for the Fundsmith Equity Fund are available via the Fundsmith website or on request and investors should consult these documents before purchasing shares in the fund. Past performance is not necessarily a guide to future performance. The value of investments and the income from them may fall as well as rise and be affected by changes in exchange rates, and you may not get back the amount of your original investment. Fundsmith LLP does not offer investment advice or make any recommendations regarding the suitability of its product. This document is communicated by Fundsmith LLP which is authorised and regulated by the Financial Conduct Authority.

Sources: Fundsmith LLP & Bloomberg unless otherwise stated.

Portfolio turnover has been calculated in accordance with the methodology laid down by the FCA. This compares the total share purchases and sales less total creations and liquidations with the average net asset value of the fund.

P/E ratios and Free Cash Flow Yields are based on trailing twelve month data and as at 31st December 2018 unless otherwise stated.

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January 2020

Dear Fellow Investor,

This is the tenth annual letter to owners of the Fundsmith Equity Fund ('Fund').

The table below shows performance figures for the last calendar year and the cumulative and annualised performance since inception on 1st November 2010 and various comparators.

% Total Return	1st Jan to 31st Dec 2019	Inception to 31st Dec 2019 Cumulative	Inception to 31st Dec 2019 Annualised	Sharpe ratio[5]	Sortino ratio[5]
Fundsmith Equity Fund[1]	+25.6	+364.4	+18.2	1.22	1.22
Equities[2]	+22.7	+180.3	+11.9	0.63	0.59
UK Bonds[3]	+3.8	+40.9	+3.8	n/a	n/a
Cash[4]	+0.8	+6.0	+0.6	n/a	n/a

[1] T Class Acc shares, net of fees, priced at noon UK time, source: Fundsmith LLP
[2] MSCI World Index, £ net, priced at US market close, source: Bloomberg
[3] Bloomberg/Barclays Bond Indices UK Gov. 5–10 yr., source: Bloomberg
[4] 3 Month £ LIBOR Interest Rate, source: Bloomberg
[5] Sharpe & Sortino ratios are since inception on 1.11.10 to 31.12.19, source: Financial Express Analytics

The table shows the performance of the T Class Accumulation shares, the most commonly held Class and one in which I am invested, which rose by +25.6% in 2019 and compares with a rise of +22.7% for the MSCI World Index in sterling with dividends reinvested. The Fund therefore beat this comparator in 2019, and our Fund remains the No.1 performer since its inception in the Investment Association Global sector by a cumulative margin of 233 percentage points above the average for the sector which has delivered +131.8% over the same timeframe.

However, I realise that many or indeed most of our investors do not use these as the natural comparator for their investments. Those of you who are based in the UK may look to the FTSE 100 Index ('FTSE 100') as the yardstick for measuring your investments and may hold funds which are benchmarked to this index and often hug it. The FTSE 100 delivered a total return of +17.3% in 2019 so our Fund outperformed this by a margin of 8.3 percentage points.

For the year the top five contributors to the Fund's performance were:

Microsoft	+2.7%
Estée Lauder	+2.1%
Facebook	+2.0%
PayPal	+1.8%
Philip Morris Intl.	+1.4%

Microsoft makes its fifth appearance whilst PayPal is putting in an appearance for the third year running. Someone once said that no one ever got poor by taking profits. This may be true but I doubt they got very rich by this approach either. We are not the sort of people who ever declare victory — we invest with a strong sense of paranoia — but it is nonetheless pleasing to note the contribution of Facebook which was certainly our most controversial stock purchase and led to more questions (and demands for its sale) from some of our investors than any other company. We had similar views expressed to us when we purchased Microsoft.

The bottom five were:

3M	-0.2%
Colgate Palmolive	0.0%
Clorox	0.0%
Brown-Forman	0.0%
Reckitt Benckiser	+0.2%

We sold our stakes in 3M and Colgate Palmolive during the year and began buying Brown-Forman, the distiller of Jack Daniel's Tennessee Whiskey, and Clorox, the US household products and personal care products company. With 3M we were acting on growing doubts about the current management's capital allocation decisions, and in the case of Colgate Palmolive we grew tired of waiting for an effective growth strategy to emerge. As is often the case, our buying of Brown-Forman has coincided with a period of share price weakness caused in this case mainly by the impact of EU tariffs on American spirits.

This year we have included the Sharpe and Sortino ratios for our Fund and the Index in the performance table on p.1. I realise that for those of you who are not investment professionals what I say next may well seem to be gobbledegook. However, whilst the returns which our Fund provides are very important so is the amount of risk assumed in producing those returns. These ratios attempt to measure that.

The Sharpe ratio takes the return on the Fund, subtracts a so-called risk-free return (basically the return on government bonds) to get the excess return over the risk-free rate, and divides the resulting number by the variation in that excess return (measured by its standard deviation — I warned you it was gobbledegook). The result tells you

what unit of return you get for a unit of risk and our Fund has a Sharpe ratio of 1.22 since inception against 0.63 for the MSCI World Index — it is producing about twice the amount of return that the Index produces for each unit of risk.

The Sortino ratio is an adaption of the Sharpe ratio, and in my view an improvement. Whereas the Sharpe ratio estimates risk by the variability of returns, the Sortino ratio takes into account only downside variability as it is not clear why we should be concerned about upside volatility (i.e. when our Fund goes up a lot) which mostly seems to be a cause for celebration. The result for our Fund since inception is a Sortino ratio of 1.22 but the MSCI World Index Sortino ratio is lower than its Sharpe ratio at 0.59.

As you hopefully know by now, we have a simple three step investment strategy:

- Buy good companies
- Don't overpay
- Do nothing

I will review how we are doing against each of those in turn.

As usual we seek to give some insight into the first of those — whether we own good companies — by giving you the following table which shows what Fundsmith would be like if instead of being a fund it was a company and accounted for the stakes which it owns in the portfolio on a 'look through' basis, and compares this with the market, in this case the FTSE 100 Index and the S&P 500 Index ('S&P 500'). We not only show you how the portfolio compares with the major indices but also how it has evolved over time.

	Fundsmith Equity Fund Portfolio								**S&P 500**	**FTSE 100**
Year ended	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2019**	**2019**
ROCE	29%	31%	29%	26%	27%	28%	29%	29%	17%	17%
Gross margin	58%	63%	60%	61%	62%	63%	65%	66%	45%	39%
Operating margin	23%	24%	25%	25%	26%	26%	28%	27%	15%	17%
Cash conversion	101%	108%	102%	98%	99%	102%	95%	97%	84%	86%
Leverage	44%	40%	28%	29%	38%	37%	47%	39%	53%	41%
Interest cover	18x	16x	15x	16x	17x	17x	17x	16x	7x	10x

Source: Fundsmith LLP/Bloomberg. ROCE, Gross Margin, Operating Profit Margin and Cash Conversion are the weighted mean of the underlying companies invested in by the Fundsmith Equity Fund and mean for the FTSE 100 and S&P 500 Indices. The FTSE 100 and S&P 500 numbers exclude financial stocks. The Leverage and Interest Cover numbers are both median. All ratios are based on last reported fiscal year accounts as at 31st December and as defined by Bloomberg. Cash Conversion compares Free Cash Flow per Share with Net Income per Share.

As you can see, not much has changed, which is how we like it. Our portfolio companies remain superior to those in the main indices on

any of the financial measures of returns, profitability, cash flow, or balance sheet strength.

As we indicated last year, we are going to remove the leverage calculation from the table in future as it can be close to meaningless. As you can see, we are not planning to remove it just because it looks bad. On the contrary, this year it is at 39% for our Fund's portfolio versus 53% for the S&P 500 and 41% for the FTSE 100. But it gives a sense of how little meaning it has that the values for the companies that comprise the median number are 26% and 53%. Nor is a mean (average) number much better as eight stocks in the portfolio have net cash on their balance sheets.

The average year of foundation of our portfolio companies at the year end was 1925.

Consistently high returns on capital are one sign we look for when seeking companies to invest in. Another is a source of growth — high returns are not much use if the business is not able to grow and deploy more capital at these high rates. So how did our companies fare in that respect in 2019? The weighted average free cash flow (the cash the companies generate after paying for everything except the dividend, and our preferred measure) grew by 9% in 2019.

This leads onto the question of valuation. The weighted average free cash flow ('FCF') yield (the free cash flow generated by the companies divided by their market value) of the portfolio at the outset of the year was 4.0% and ended it at 3.4%, so they became more highly rated. Whilst this is a good thing from the viewpoint of the performance of their shares and the Fund, it makes us nervous as changes in valuation are finite and reversible, although it is hard to see the most likely source of such a reversal — a rise in interest rates — in the near future.

The year-end median FCF yield on the S&P 500 was 4.2%. The year-end median FCF yield on the FTSE 100 was 5.5%. More of our stocks are in the former index than the latter and I will not repeat the explanation which I gave in my 2017 annual letter on why I think the FTSE 100 is not an appropriate benchmark or investment proxy for our investors to use. Our portfolio consists of companies that are fundamentally a lot better than the average of those in either index and are valued more highly than the average FTSE 100 company and a bit higher than the average S&P 500 company but with significantly higher quality. It is wise to bear in mind that despite the rather sloppy shorthand used by many commentators, highly rated does not equate to expensive any more than lowly rated equates to cheap.

Turning to the third leg of our strategy, which we succinctly describe as 'Do nothing', minimising portfolio turnover remains one of our objectives and this was again achieved with a negative portfolio turnover during the period. It is perhaps more helpful to know that we spent a total of just 0.005% (half a basis point or one two hundredth of one percent) of the Fund's average value over the year on voluntary dealing (which excludes dealing costs associated with fund subscriptions and redemptions as these are involuntary). We have held ten of our portfolio companies since inception in 2010.

Why is this important? It helps to minimise costs and minimising the costs of investment is a vital contribution to achieving a satisfactory outcome as an investor. Too often investors, commentators and advisers focus on, or in some cases obsess about, the Annual Management Charge ('AMC') or the Ongoing Charges Figure ('OCF'), which includes some costs over and above the AMC, which are charged to the Fund. The OCF for 2019 for the T Class Accumulation shares was 1.05%. The trouble is that the OCF does not include an important element of costs — the costs of dealing. When a fund manager deals by buying or selling, the fund typically incurs the cost of commission paid to a broker, the bid-offer spread on the stocks dealt in and, in some cases, transaction taxes such as stamp duty in the UK. This can add significantly to the costs of a fund, yet it is not included in the OCF.

We provide our own version of this total cost including dealing costs, which we have termed the Total Cost of Investment ('TCI'). For the T Class Accumulation shares in 2019 this amounted to a TCI of 1.06%, including all costs of dealing for flows into and out of the Fund, not just our voluntary dealing. The table below shows the TCI of the 15 largest equity and total return funds in the UK and how their TCI differs from their OCF:

	OCF %	Transaction Costs %	TCI %	% Additional Costs
Fundsmith Equity Fund	1.05	0.01	1.06	1
Invesco Global Targeted Returns	0.87	0.43	1.30	49
Baillie Gifford Diversified Growth	0.77	0.50	1.27	65
Lindsell Train UK Equity	0.65	0.09	0.74	14
Stewart Investors Asia Pacific Leaders	0.88	0.16	1.04	18
BNY Mellon Real Return	0.80	0.20	1.00	25
Invesco High Income	0.92	0.15	1.07	16
BNY Mellon Global Income	0.80	0.07	0.87	9
Liontrust Special Situations	0.89	0.18	1.07	20
Artemis Income	0.80	0.12	0.92	15
ASI Global Absolute Return Strategies	0.90	0.15	1.05	17
Jupiter European	1.02	0.06	1.08	6
LF Ruffer Absolute Return	1.22	0.35	1.57	29
Baillie Gifford Managed	0.42	0.05	0.47	12
Threadneedle UK Equity Income	0.82	0.05	0.87	6
Average	**0.85**	**0.17**	**1.03**	**20**

Source: Financial Express Analytics/Fundsmith as at 6.1.20, funds in descending order of size.

We are pleased that our TCI is not only just 1% above our OCF when transaction costs are taken into account, but that this is the lowest increase in the group. However, we would again caution against becoming obsessed with charges to such an extent that you lose focus on the performance of funds. It is worth pointing out that the performance of our Fund tabled at the beginning of this letter is after charging all fees which should surely be the main focus. This point is rammed home when the same 15 largest active equity and total return funds in the UK are ranked by their three year performance (the picture does not change much if we rank them on their five year performance).

	3 year Cumulative Performance to Last Year End Overall %	**5 year Cumulative Performance to Last Year End Overall %**
Fundsmith Equity Fund	56.6	132.2
Jupiter European	53.5	98.4
Lindsell Train UK Equity	46.6	81.9
Liontrust Special Situations	39.0	83.3
Baillie Gifford Managed	35.8	70.3
BNY Mellon Global Income	30.5	85.9
Artemis Income	25.0	45.3
Stewart Investors Asia Pacific Leaders	24.1	51.3
Threadneedle UK Equity Income	21.0	43.8
BNY Mellon Real Return	14.8	20.8
Baillie Gifford Diversified Growth	13.9	23.4
ASI Global Absolute Return Strategies	2.8	2.9
LF Ruffer Absolute Return	2.5	16.0
Invesco Global Targeted Returns	0.6	5.7
Invesco High Income	-0.5	13.7

Source: Financial Express Analytics/Fundsmith as at 6.1.20

I think the above table speaks for itself in terms of the relative performance of our Fund so that you can look not just at the fees and costs but what you get in return — performance.

The Fund's performance for the year was adversely affected by a couple of poor months in September and October which cost the Fund about 6%. This was caused by two factors: 1) a rally in the sterling exchange rate from the recent lows which it had plumbed after the Brexit referendum result in 2016 and on subsequent hard Brexit fears; and 2) a 'rotation' from the high quality and relatively highly rated stocks of the sort which our Fund owns into lower quality and more lowly rated 'value' stocks.

If you read the breathless commentary on this in much of the press without knowing the actual performance of our Fund you might be surprised to find that, notwithstanding these events, it ended the year

up by 25.6% which was our second best year since inception and outperformed the MSCI World Index by 2.9%.

Taking each of these factors in turn, currency movements clearly have some effect on our portfolio. Over 60% of our portfolio is invested in companies listed in the United States. The actual exposure to the US dollar and therefore the pound/dollar exchange rate is better gauged by the c.40% of our portfolio companies' revenues which are in the USA. However, currency movements are not something we believe we can predict — they seem to have about the same predictability as a game of Snakes & Ladders — or hedge.

I would suggest looking at the matter this way: imagine we were in a discussion with some of the companies which have produced great returns for us over the last nine years, or which might do so over the next nine, and we asked them to name the top three factors in their success. What do you think the chances are that they would say 'currency exposure and exchange rates'? I would suggest they might name product innovation and R&D, strong brands, control of distribution, market share, customer relationships, installed bases of equipment or software, management, successful capital expenditure and acquisitions as far more important. So, we think it's best to ignore the Snakes & Ladders of currency movements.

Turning to the second point — the so-called rotation into value stocks, I am not much of a gardener but I believe this is becoming what gardeners term a hardy perennial as it crops up every year. To quote from Investment Adviser *'Looking at PE ratios there is evidence in abundance that shows that from a relative perspective quality stocks may today be considered expensive.*' The interesting point about that assertion is that it was published on 13th August 2012. A lot of superior returns have been had from those allegedly expensive stocks in the subsequent seven years.

The argument might be encapsulated thus: stocks of the sort which our Fund owns have had a good run of outperformance as has the Fund but this is all about to end, or even has already ended, and so-called 'value investing' — buying stocks mainly based upon their supposed under valuation by the market — is making a comeback and funds which pursue that strategy are about to outperform us.

Value investing has its flaws as a strategy. Markets are not perfect but they are not totally inefficient either and most of the stocks which have valuations which attract value investors have them for good reason — they are not good businesses. This means that the value investor who buys one of these companies which are indeed lowly rated but which rarely or never make an adequate return on capital is facing a headwind. The intrinsic value of the company does not grow (except

for any new capital that its hapless investors allow it to retain or subscribe for in some form of share issue), or even erodes over time, whilst the value investor is waiting for the lowly valuation to be recognised and the share price to rise to reflect this.

Moreover, even when the value investor gets it right and this happens, they then need to sell the stock which has achieved this and find another undervalued stock and start again. This activity obviously incurs dealing costs but value investing is not something which can be pursued with a 'buy and hold' strategy. In investment you 'become what you eat' insofar as over the long term the returns on any portfolio which has such an approach will tend to gravitate to the returns generated by the companies themselves, which are low for most value stocks. As Charlie Munger, Warren Buffett's business partner, said:
'Over the long term, it's hard for a stock to earn a much better return than the business which underlies it earns. If the business earns six percent on capital over forty years and you hold it for that forty years, you're not going to make much different than a six percent return — <u>even if you originally buy it at a huge discount</u>. Conversely, if a business earns eighteen percent on capital over twenty or thirty years, <u>even if you pay an expensive looking price</u>, you'll end up with one hell of a result.' Our emphasis added.

Mr Munger is not offering a theory or an opinion — what he is saying is a mathematical certainty. The only uncertainty concerns our ability to forecast returns far ahead, which is why we prefer to invest in relatively predictable businesses.

The biggest flaw in value investing is that is does not seek to take advantage of a unique characteristic of equities. Equities are the only asset in which a portion of your return is automatically reinvested for you. The retained earnings (or free cash flow if you prefer that measure, as we do) after payment of the dividend are reinvested in the business. This does not happen with real estate — you receive rent not a further investment in buildings, or with bonds — you get paid interest but no more bonds.

This retention of earnings which are reinvested in the business can be a powerful mechanism for compounding gains. Some 80% of the gains in the S&P 500 over the 20th century came not from changes in valuation but from the companies' earnings and reinvestment of retained capital. If you were a great (and long-lived) value investor who bought the S&P 500 at its low in valuation terms, which was in 1917 when America entered world war one and it was on a P/E of 5.3x, and sold it at its high in valuation terms in 1999 when it was on a P/E of 34x, your annual return during that period would have been 11.6% with dividends reinvested, but only 2.3% p.a. came from the

massive increase in P/E and 9.3% (80% of 11.6%) came from the companies' earnings and reinvesting their retained earnings.

The S&P example is for 500 average large companies. This proportion of your return from the companies' reinvestment activities is even more extreme when you invest in a good company with a high return on retained capital than in an average company.

All of this was much more succinctly encapsulated by Warren Buffett when he said:
'*It's far better to buy a wonderful company at a fair price, than a fair company at a wonderful price*.'

He made the transition from being a traditional value investor based upon studying under Benjamin Graham (author of "The Intelligent Investor" and "Security Analysis") into a quality investor looking for companies which could compound in value based upon the teachings of Philip Fisher (author of *Common Stocks and Uncommon Profits*) and the influence of Charlie Munger.

Here's how Buffett explained this change in his 1989 letter to Berkshire Hathaway shareholders:
'The original 'bargain' price probably will not turn out to be such a steal after all. In a difficult business, no sooner is one problem solved than another surfaces — never is there just one cockroach in the kitchen. [Plus], any initial advantage you secure will be quickly eroded by the low return that the business earns. For example, if you buy a business for $8 million that can be sold or liquidated for $10 million and promptly take either course, you can realize a high return. But the investment will disappoint if the business is sold for $10 million in ten years and in the interim has annually earned and distributed only a few percent on cost. Time is the friend of the wonderful business, the enemy of the mediocre.'

The problems of waiting for value investment to pay off can be seen in the performance of the MSCI World Value Index (USD) which hit 6570 at the end of October 2007 and was lower than this at the end of February 2016. At 31st December 2019 it stood at 9812, just 49% higher than its 2007 peak value.

Compare and contrast the S&P 500 (USD) which peaked on 9th October 2007 but had regained its 2007 high by 2013 and at 31st December 2019 stood 189% higher.

Ah, but I can hear the siren song of the value investors who will take this data as confirmation that the resurgence of value investment which they have long predicted is about to commence. As an old saying goes 'To a man with a hammer, everything looks like a nail'.

The longer the strategy underperforms the market and the more money it costs investors the louder the siren song becomes. And sooner or later they will be right. But a) they have no idea when that will be (note the reference above to Investment Adviser's comment in 2012); b) if you had followed their advice to date it would require a gargantuan reversal of performance to make up the gains forgone; and c) that may continue to be the case for some time to come.

Lastly, there are some commentators who say that one way to address this is to have a portion of your portfolio invested in both strategies — some in quality growth and some in value. I think the assertion that there is no harm in this diversification approach has been disproved rather comprehensively by Warren Buffett, but what does he know? Perhaps we should look at the value investment versus quality and growth strategy debate this way: would you rather side with a) a large section of the UK financial press and rent-a-quote investment advisers; or b) Warren Buffett, Charlie Munger (Berkshire Hathaway), Bill Gates (Microsoft), the Bettencourt family (L'Oréal), the Brown family (Brown-Forman), the Walton family (Walmart) and Bernard Arnault (LVMH)? The latter all seem to have become extraordinarily rich by concentrating their investment in a single high quality business and not trading regardless of valuation. So much for it not doing any harm to diversify across strategies.

It seems impossible to comment upon developments in equity investing in the UK in 2019 without mentioning the word Woodford. The demise of Woodford Investment Management following the 'gating' of its main LF Woodford Equity Income Fund was undoubtedly the main news in the industry last year.

We have no desire to engage in a general commentary on this matter or to engage in an unseemly exercise in schadenfreude. We had long identified the problems which were brewing at Woodford but we kept our own counsel on the matter. The only comments you will find from us mentioning Woodford were in answer to direct questions concerning Woodford from our investors at our Annual Meeting. We regard it as a lack of professional courtesy to comment upon our competitors except when we are asked to do so by our investors. We only wish others in the industry would maintain the same stance.

However, we now feel freer to comment on Woodford since it is hard to see how it can now exacerbate the situation, and I feel that we need to as the Woodford debacle has raised important questions about the industry, some of which have been directed at us and I feel that our investors should know our response.

The most obvious problem at Woodford was the lethal combination of a daily-dealing open-ended fund with significant holdings in unquoted

companies and large percentage stakes in small quoted companies which had very limited liquidity. Whilst this was clearly a very bad idea, Woodford is not the only fund to have encountered this problem. A large swathe of UK property funds was gated after the Brexit Referendum for the same reason, and more recently so was the M&G Property Fund. An open-ended daily-dealing fund is clearly not an appropriate vehicle through which to hold such assets. The daily-dealing and open-ended structure give investors the illusion of liquidity but when a large number of them try to exercise it at once the effect is similar to shouting 'Fire!' in a crowded theatre.

Amongst the causes which commentators seem to have failed to realise is the effect which the rise of investment platforms has had on this, and indeed other areas of the fund management industry. It is now the case that no one can expect to effectively market an open-ended fund on any of the major investment platforms which retail investors and wealth managers use to manage their investments unless it is a daily-dealing fund. As none of these platforms will admit an open-ended fund, unless it allows daily-dealing, that is what fund managers will use even for strategies for which this structure is wholly inappropriate.

Where does the Fundsmith Equity Fund stand on this? We have always regarded liquidity as an important issue. As evidence of this, we have published a liquidity measure on our Fund factsheet since 2012. Equally we only invest in large companies. At 31st December 2019 the average market capitalisation of the companies in our Fund was £114bn and we estimate we could liquidate 57% of the Fund in seven days.

The reality is that the only type of fund which can guarantee 100% liquidity on demand is a cash fund, and I presume that is not what you wish us to invest in. But I suspect you will find it hard to find more liquid equity funds than ours. It tells you much about its liquidity that some of the least liquid stocks we hold are the FTSE 100 companies, InterContinental Hotels, Intertek and Sage.

Another question which arises from the Woodford incident is the question mark over so-called 'star' fund managers, a label the press seems obsessed by. I can't say I like the term, it strikes me as equally inappropriate as the term 'beauty parade' which is used when selecting professional advisers, many of whom do not seem to me to have obvious photogenic qualities.

I think this concern is focused on the wrong issue. I think it makes no more sense to avoid funds run by 'star' fund managers any more than it does to avoid supporting sporting teams because they have star players. The trouble arises not because teams have star players but

if the star tries to play a different game to the one which delivered their stellar performance. Would Juventus do as well if Cristiano Ronaldo played as goalkeeper? How is Usain Bolt's second career as a soccer player going?

Neil Woodford made his name as a fund manager at Invesco Perpetual with his successful Income Fund. In the course of this he took two high profile negative positions on sectors. In the run up to the dotcom bust in 2000 he seems to have seen what was coming and avoided investments in technology, media and telecommunications stocks which was a major success. He also paired this with taking positions in some of the old economy neglected stocks which had become de-rated during the dotcom mania. Similarly, in the run up to the Credit Crisis he decided not to hold bank stocks.

However, when he opened his own fund management business he took positions in a wide range of companies — AA, AstraZeneca, Capita, Imperial Brands, Provident Financial and Stobart are some examples. There is no common theme that I can detect to those companies, other than the fact that they all subsequently fared badly. This was supplemented by a raft of unquoted investments in start-ups and biotech. My suggestion is that what went wrong is that Neil Woodford changed his investment strategy. In the technical jargon of the industry, he engaged in 'style drift'. The problem wasn't that he was regarded as a star but that he changed his game. This style drift actually started when he was still at Invesco Perpetual in that his Income Fund began to accumulate large stakes in small illiquid companies and unquoteds, but this was taken further once he had his own firm.

Is there any chance of style drift or a similar change of strategy at Fundsmith? I think not. We published an Owner's Manual at the outset which describes our investment strategy, write to you in these annual letters analysing how we are faring in implementing our strategy and are the only mutual fund in the UK which holds an annual meeting at which our investors can question us and see their questions answered publicly. So, it would be extraordinary if we were able to effect a change in our investment strategy without you noticing.

Moreover, we have no desire to change our strategy. We are convinced that it can deliver superior returns over the long term. I would pose a different question which links the discussion of the Woodford affair with the earlier discussion of the 'rotation' from quality stocks into value stocks. If you expect such a 'rotation' to occur at some point and for value stocks to enjoy a period in the sun would you rather we tried to anticipate that and switched into a value investment approach of buying stocks based mainly or solely on the basis of their valuation or would you rather we stuck to our existing approach of

buying and holding high quality businesses? I would suggest the latter approach might be better, and it is what we are doing. There will be no style drift at Fundsmith.

Finally, I wish you a happy New Year and thank you for your continued support for our Fund. My colleagues and I look forward to seeing many of you at our Annual Shareholders' Meeting on 25th February 2020 and to trying to answer any questions you may have. Please see the enclosed invitation for details.

Yours sincerely,

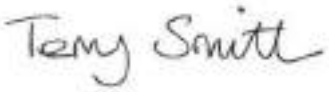

Terry Smith
CEO
Fundsmith LLP

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Sources: Fundsmith LLP & Bloomberg unless otherwise stated.

Portfolio turnover has been calculated in accordance with the methodology laid down by the FCA. This compares the total share purchases and sales less total creations and liquidations with the average net asset value of the fund.

P/E ratios and Free Cash Flow Yields are based on trailing twelve month data and as at 31st December 2019 unless otherwise stated.

Fund liquidity is based on 30% of average trailing 20 day volume.

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31st March 2020

Dear Fellow Investor,

It would be an understatement to say it has been an eventful start to the year so I thought I should take this opportunity to update you on how we are faring in the coronavirus Covid-19 pandemic environment.

First and foremost, the Fundsmith Equity Fund ('Fund') continues to operate. We can price it, people can deal in it and we have been able to provide liquidity where required.

I know that you normally just look at the price and do not worry about such matters, but we need you to know that you can contact us, that any information you need will be provided, and that any dealing instructions you give us will be executed. This is important. If we fail on one or more of those aspects we need not worry about what comes next. As Rick Mears, one of only three drivers to win the Indianapolis 500 Race four times, said 'In order to finish first. You must first finish.'

Secondly, our Fund's performance has been as we would have expected, hoped and predicted. I would even say it is satisfactory if you accept that some fall in valuation is inevitable in a bear market.

% Change	2020 YTD
Fundsmith Equity Fund[1]	-7.9
MSCI World[2]	-15.7
MSCI World Value[2]	-22.0
FTSE 100[3]	-23.8

[1] T Class Acc shares, net of fees, priced at noon UK time, source: Fundsmith LLP
[2] MSCI Indices, £ net, priced at US market close, source: Bloomberg
[3] FTSE 100, £, total return, priced at UK market close, source: Bloomberg

The Fundsmith Equity Fund[1] is down 7.9% for the Year to date having outperformed the comparator MSCI World Index[2] by nearly 8%. It outperformed the FTSE 100[3] by nearly 16% and the MSCI World Value Index[2] by over 14%.

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It also outperformed all these indices significantly in the fall from the peak of the market to its trough before the recent rally. Bear in mind the MSCI World and FTSE 100 indices benefit from the inclusion of our companies. The companies we do not own are collectively performing worse than the index numbers.

As you know, I was immensely sceptical of the view that so-called value stocks could protect you in a downturn. I have never been a believer in the philosophy that so-called "value" investments would perform well or protect your investment in an economic and market downturn. Shares in companies that are lowly rated are so mostly for good reasons. Because their businesses are heavily cyclical, highly leveraged, they have poor returns on capital and/or they face other structural or management issues. It doesn't sound like a combination likely to protect the business and your investment in difficult times, and so it has proven thus far.

Our companies which are most in the firing line – Amadeus and InterContinental Hotels in airline reservations and hotels – are sensibly putting in place cost cutting and cash conservation measures and securing liquidity to enable them to hold their breath for 18 months or so with no revenues. This in our view is far more useful than speculation about what their sector will look like afterwards. They have to survive to find out (reference Mr. Mears thoughts earlier). If our equity in both is vaporised we will lose about 5% of our current portfolio. Whilst I would not be pleased with that, if that's the worst thing that happens I would suggest we can live with it. Whilst we have various stocks exposed to knock-on effects in travel retail for example in cosmetics and drinks, and supply chain issues in other portfolio companies, if we were forced to guess we think about a third of the portfolio will endure this year with increased revenues – Microsoft, the payment processors, Clorox, and Reckitt Benckiser, for example.

It is said that every cloud has a silver lining and we are seeing opportunities and have bought two new holdings which we have been following for some while and which have been hard hit in this market because of China exposure and a classic "glitch".

I suspect the current market reaction to the pandemic is explained by a simple analogy which relates to the virus itself. The COVID-19 virus is not fatal for the vast majority of the population. However, where it seems to be lethal is when it encounters someone with an immune system already weakened by age and/or pre-existing ailments.

Similarly, what has increased the impact of the virus, or rather measures taken to counter it, on the economy and markets is that in this area it has encountered structures with weakened immune systems too. The fact that most of the emergency measures taken in 2008—09 – deficit spending, low or zero interest rates and Quantitative Easing – were still in place 10 years after the crisis

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demonstrated that the patient – in this case the global economy – was not back in rude health when the virus struck. Cue a market panic.

What will emerge from the current apocalyptic state? How many of us will become sick or worse? When will we be allowed out again? Will we travel as much as we have in the past? Will the extreme measures taken by governments to maintain the economy lead to inflation? I haven't a clue. Rather like some of the companies we most admire, I try to spend very little time considering matters which I can neither predict nor control and focus instead on those which I can affect. So at Fundsmith our focus will be on keeping our service to investors fully functioning, and then seeking to grasp any new investment opportunities which are unearthed by the turmoil whilst ensuring that our colleagues, families, friends, and anyone else we can reach receives any help they need and that we can provide.

I hope and expect that our strategy of only investing in good businesses will continue to see our Fund through these trying times intact and continuing to prosper.

Yours as ever,

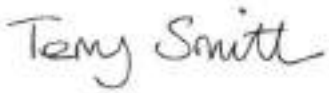

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January 2021

Dear Fellow Investor,

This is the eleventh annual letter to owners of the Fundsmith Equity Fund ('Fund').

The table below shows performance figures for the last calendar year and the cumulative and annualised performance since inception on 1st November 2010 and various comparators.

% Total Return	1st Jan to 31st Dec 2020	Inception to 31st Dec 2020 Cumulative	Inception to 31st Dec 2020 Annualised	Sharpe ratio[5]	Sortino ratio[5]
Fundsmith Equity Fund[1]	+18.3	+449.3	+18.2	1.11	1.06
Equities[2]	+12.3	+214.8	+11.9	0.56	0.52
UK Bonds[3]	+4.6	+47.5	+3.9	n/a	n/a
Cash[4]	+0.3	+6.3	+0.6	n/a	n/a

[1] T Class Acc shares, net of fees, priced at noon UK time, source: Fundsmith LLP
[2] MSCI World Index, £ net, priced at US market close, source: Bloomberg
[3] Bloomberg/Barclays Bond Indices UK Gov. 5–10 yr., source: Bloomberg
[4] 3 Month £ LIBOR Interest Rate, source: Bloomberg
[5] Sharpe & Sortino ratios are since inception on 1.11.10 to 31.12.20, source: Financial Express Analytics

The table shows the performance of the T Class Accumulation shares, the most commonly held share class and one in which I am invested, which rose by +18.3% in 2020 and compares with a rise of +12.3% for the MSCI World Index in sterling with dividends reinvested. The Fund therefore beat this comparator in 2020, and our Fund is the second best performer since its inception in the Investment Association Global sector with a return 283 percentage points above the sector average which has delivered just +166.6% over the same timeframe. The annual return of 18.3% is almost exactly in line with our ten year average.

However, I realise that many or indeed most of our investors do not use these as the natural comparator for their investments. Those of you who are based in the UK may look to the FTSE 100 Index ('FTSE 100') as the yardstick for measuring your investments and may hold funds which are benchmarked to this index and often hug it. The FTSE 100 delivered a total return of -11.5% in 2020 so our Fund outperformed this by a margin of 29.8 percentage points.

For the year the top five contributors to the Fund's performance were:

PayPal	+5.1%
IDEXX	+3.1%
Microsoft	+2.8%
Intuit	+1.5%
Facebook	+1.4%

Microsoft makes its sixth appearance whilst PayPal is putting in an appearance for the fourth year running. IDEXX is making its third appearance. Someone once said that no one ever got poor by taking profits. This may be true but I doubt they got very rich by this approach either. We are not the sort of people who ever declare victory — we invest with a strong sense of paranoia — but it continues to be pleasing to note the contribution of Facebook which was certainly our most controversial stock purchase and led to more questions (and demands for its sale) from some of our investors than any other company. We had similar views expressed to us when we purchased Microsoft. You rarely get to purchase high quality businesses at cheap prices unless there is a 'glitch' which provides an opportunity to do so.

The bottom five were:

Amadeus	-1.1%
Sage	-0.6%
InterContinental Hotels	-0.6%
Becton Dickinson	-0.4%
Philip Morris	-0.2%

We hardly need to discuss the reasons for the poor performance of Amadeus and InterContinental Hotels. Airline and travel reservations and hotel management have not been happy places to be in the past year, although it is worth noting nowhere near as bad as investing in actual airlines or hotels. Amadeus's share price fall of -13.5% in 2020 compares with a drop of -27.9% for the Bloomberg World Airlines Index. InterContinental's share price fall of -9.9% compares with a drop of -35.1% for the Dow Jones US Hotel and Lodging REIT Index. This illustrates the virtues of Amadeus's and InterContinental's business models in contrast to the industries they serve.

However, in both cases whilst they face a difficult situation, we are pleased that management has spent its time and effort managing liquidity and costs in an effort to ensure that they survive these events rather than pointlessly speculating about the likely timescale and course of recovery. In both cases we believe that they should not only survive but also strengthen their competitive position.

Sage's share price remains in the doldrums as we wait to see whether the new management team can make the product fit for purpose in

the age of the cloud and subscription software and compete effectively with those who can.

We are impressed with Philip Morris's development of Reduced Risk Products or RRPs, most notably its heat not burn system iQOS. It seems we are not the only ones to view it this way as it was recently included in the Dow Jones Sustainability North America Index for the first time. For the moment the shares are weighed down by COVID related disruption to some of its markets and simple prejudice which seems to prevent some commentators from weighing the benefits the RRPs bring against the obvious fact that it is a tobacco company.

We sold our stakes in Clorox and Reckitt Benckiser and purchased stakes in Nike and Starbucks during the year. Clorox and Reckitt Benckiser traded strongly due to the rush to purchase increased quantities of household cleaning products, personal cleaning products and OTC medicines. We felt that in both cases the ratings achieved did not reflect the pedestrian nature of these businesses in more normal circumstances or the issues they face which may come back into focus if or when the COVID related boost fades. Moreover, at the same time as these two stocks were enjoying an unusually good performance, two other companies which we admire saw share price falls of over 40% at the height of the panic over COVID — Nike and Starbucks. They are probably familiar to you as the world's leading sneaker and sporting apparel supplier and the leading coffee shop brand. Both are companies with high returns on capital and good growth rates — two characteristics which we seek.

In the case of Nike we felt that few companies were as well adapted to digital distribution of its products which has become de rigeur as a result of the COVID induced restrictions.

Whilst it is easy to see the challenge to the lockdowns for Starbucks's urban outlets which partly rely on seating and coffee collected on the way to the office, this is far from their only format. The sometimes spectacular queues and resulting traffic jams at Starbucks drive-through outlets both illustrate another format and testify to the continued loyalty to the brand as does the rise in loyalty club members in 2020. During this period Starbucks's main competitor in its second largest market — Luckin Coffee in China — was exposed as a fraud in yet another illustration of the rule that it is only when the tide goes out that you find out who has been swimming naked.

After the COVID lockdowns we also purchased a stake in LVMH — the world's leading designer and luxury goods business. Although we had some exposure to luxury goods through our cosmetics and drinks companies, we had no exposure to designer apparel and jewellery which LVMH brings.

We continue to apply a simple three step investment strategy:

- Buy good companies
- Don't overpay
- Do nothing

I will review how we are doing against each of those in turn.

As usual we seek to give some insight into the first and most important of these — whether we own good companies — by giving you the following table which shows what Fundsmith would be like if instead of being a fund it was a company and accounted for the stakes which it owns in the portfolio on a 'look through' basis, and compares this with the market, in this case the FTSE 100 and the S&P 500 Index ('S&P 500'). This shows you how the portfolio compares with the major indices and how it has evolved over time.

	Fundsmith Equity Fund Portfolio								**S&P 500**	**FTSE 100**
Year ended	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2020**	**2020**
ROCE	31%	29%	26%	27%	28%	29%	29%	25%	11%	10%
Gross margin	63%	60%	61%	62%	63%	65%	66%	65%	44%	39%
Operating margin	24%	25%	25%	26%	26%	28%	27%	23%	12%	9%
Cash conversion	108%	102%	98%	99%	102%	95%	97%	101%	94%	95%
Interest cover	16x	15x	16x	17x	17x	17x	16x	16x	6x	6x

Source: Fundsmith LLP/Bloomberg. ROCE, Gross Margin, Operating Profit Margin and Cash Conversion are the weighted mean of the underlying companies invested in by the Fundsmith Equity Fund and mean for the FTSE 100 and S&P 500 Indices. The FTSE 100 and S&P 500 numbers exclude financial stocks. Interest Cover is median. 2013-2019 ratios are based on last reported fiscal year accounts as at 31st December and for 2020 are Trailing Twelve Months and as defined by Bloomberg. Cash Conversion compares Free Cash Flow per Share with Net Income per Share. Percentage change is not calculated if the TTM period contains a net loss

Returns on capital and profit margins were lower in the portfolio companies in 2020. This is hardly surprising in light of events in the economy, but the scale of the falls were hardly disastrous. When people have said to us, 'You invest in non-cyclical businesses' I always reply that I have never found one. It is the degree of cyclicality in our portfolio which we seek to control through our stock selection. As a group our stocks still have excellent returns, profit margins and cash generation even in poor economic conditions. As you can see the same cannot be said for the major indices even though they have the benefit of including our good companies.

The average year of foundation of our portfolio companies at the year-end was 1922. They are just under a century old collectively.

Consistently high returns on capital are one sign we look for when seeking companies to invest in. Another is a source of growth — high returns are not much use if the business is not able to grow and deploy more capital at these high rates. So how did our companies fare in that respect in 2020? The weighted average free cash flow (the cash

the companies generate after paying for everything except the dividend, and our preferred measure) grew by 8% in 2020.

This leads onto the question of valuation. The weighted average free cash flow ('FCF') yield (the free cash flow generated by the companies divided by their market value) of the portfolio at the outset of the year was 3.4% and ended it at 2.8%, so they became more highly rated as growth in the share prices has significantly outperformed growth of the free cash flows. Whilst this is a good thing from the viewpoint of the performance of their shares and the Fund, it makes us nervous as changes in valuation are finite and reversible, although it is hard to see the most likely source of such a reversal — a rise in interest rates — in the near future.

The year-end median FCF yield on the S&P 500 was 3.7%. The year-end median FCF yield on the FTSE 100 was 4.2%. More of our stocks are in the former index than the latter and I will not repeat the explanation which I gave in my 2017 annual letter on why I think the FTSE 100 is not an appropriate benchmark or investment proxy for our investors to use. Moreover, the valuation disparity with the FTSE 100 has been widened by the portfolio's 30% outperformance of the FTSE 100 during the year. It's hard to outperform by such a wide margin without becoming relatively more highly valued unless the portfolio's cash flows have grown at a similar differential rate. What the market seems to be rewarding is consistency of performance which has been emphasised by economic conditions in 2020.

Our portfolio consists of companies that are fundamentally a lot better than the average of those in either index and are valued much more highly than the average FTSE 100 company and higher than the average S&P 500 company. It is wise to bear in mind that despite the rather sloppy shorthand used by many commentators, highly rated does not equate to expensive any more than lowly rated equates to cheap.

Turning to the third leg of our strategy, which we succinctly describe as 'Do nothing', minimising portfolio turnover remains one of our objectives and this was again achieved with a portfolio turnover of 4.1% during the period. It is perhaps more helpful to know that we spent a total of just 0.03% (3 basis points) of the Fund's average value over the year on voluntary dealing (which excludes dealing costs associated with fund subscriptions and redemptions as these are involuntary). We have held nine of our portfolio companies since inception in 2010.

Why is this important? It helps to minimise costs and minimising the costs of investment is a vital contribution to achieving a satisfactory outcome as an investor. Too often investors, commentators and

advisers focus on, or in some cases obsess about, the Annual Management Charge ('AMC') or the Ongoing Charges Figure ('OCF'), which includes some costs over and above the AMC, which are charged to the Fund. The OCF for 2020 for the T Class Accumulation shares was 1.06%. The trouble is that the OCF does not include an important element of costs — the costs of dealing. When a fund manager deals by buying or selling, the fund typically incurs the cost of commission paid to a broker, the bid-offer spread on the stocks dealt in and, in some cases, transaction taxes such as stamp duty in the UK. This can add significantly to the costs of a fund, yet it is not included in the OCF.

We provide our own version of this total cost including dealing costs, which we have termed the Total Cost of Investment ('TCI'). For the T Class Accumulation shares in 2020 this amounted to a TCI of 1.09%, including all costs of dealing for flows into and out of the Fund, not just our voluntary dealing. We are pleased that our TCI is just 0.03% (3 basis points) above our OCF when transaction costs are taken into account. However, we would again caution against becoming obsessed with charges to such an extent that you lose focus on the performance of funds. It is worth pointing out that the performance of our Fund tabled at the beginning of this letter is after charging all fees which should surely be the main focus.

Some commentators have attributed our recent outperformance to the performance of technology stocks accompanied by warnings that a 'bubble' is building in technology stocks rather like the Dotcom Bubble and that it may burst with similar ill effects. The technology heavy NASDAQ Index has provided a total return of +40.9% in 2020 and the MSCI World Information Technology Index delivered +40.2% so maybe they have a point.

I suspect that some of these commentators are the same ones who told you some years ago that our investment strategy was too heavily dependent on consumer staples stocks which they also viewed as over-rated. However, it's always good to start with the facts. Our Fund's sectoral exposure was as follows at the year-end:

Sector	**%**
Technology	28.9
Consumer Staples	27.0
Healthcare	22.6
Consumer Discretionary	10.1
Communication Services	4.5
Industrials	3.4
Cash	3.5

Technology is certainly the largest sectoral exposure but it is closely followed by Consumer Staples and in fact if you take all our consumer

stocks — discretionary and staples — together, they far outweigh our technology exposure.

Moreover, I am not sure that these sector labels are all that helpful in determining what we are really exposed to. For example, our Communication Services holding is in fact Facebook. Isn't that a technology company?

What do the following companies have in common? Amadeus, Automatic Data Processing, Facebook, Intuit, Microsoft, PayPal, Sage and Visa? They are all owned by our Fund and they are all labelled as technology companies. Yet they span airline reservation systems; payroll processing; social media, digital advertising and communications; accounting and tax software; operating systems, distributed computing (the 'cloud'), software development tools, business applications and video gaming; and payment processing. I would suggest that the secular drivers of these businesses have some distinct differences and that their prospects are not governed by a single factor — technology. This one size fits all label does not help much in evaluating them.

There are also issues with the relative valuation of some technology businesses which — like a number of businesses of the sort we seek to invest in — rely on intangibles.

The main assets of the companies we seek to invest in are often intangible. Some examples of intangible assets are brands, copyrights, patents, know-how, installed bases of equipment which require servicing and maintenance and so produce customers who are locked-in to the supplier, software systems which are critical to a business or person and so-called network effects. They are distinct from tangible assets such as real estate, machinery and equipment, and vehicles.

The return on intangible assets is higher as they mostly need to be funded with equity not debt and attract an appropriate return. Lenders seem to crave the often false security of lending against tangible collateral. Intangible assets can also last indefinitely if they are well maintained by advertising, marketing, innovation and product development and the duration of an asset is an important factor in figuring out its real returns.

However, there are obvious problems in comparing businesses which rely on tangible assets with those that rely mostly on intangibles. Tangible assets appear on a company's balance sheet. Cash is expended to purchase them or liabilities are assumed (debt or leases) and the assets are placed on the balance sheet. Only the depreciation charge, if any, enters the profit and loss account and there may be no

impact on cash flow after the purchase. In contrast, intangible assets are mostly built through spending which goes through the profit and loss account and cash flow. Although some software development is capitalised, most is not and neither is brand development nor most research & development. Of course acquisitions skew this picture.

The net result is that for any given level of investment in assets, the profitability of a company building an intangible asset is likely to be depressed versus a company building or buying a tangible asset. This makes a mockery of the comparison of their valuations which are done by some commentators and investors who simply compare their price-to-earnings ratios ('PE').

In addition, the degree to which this needs to be taken into account in making such comparisons has been rising. The chart below shows the rise of intangible investments by US corporations:

The Rise of Intangible Investments in the US, 1977-2017

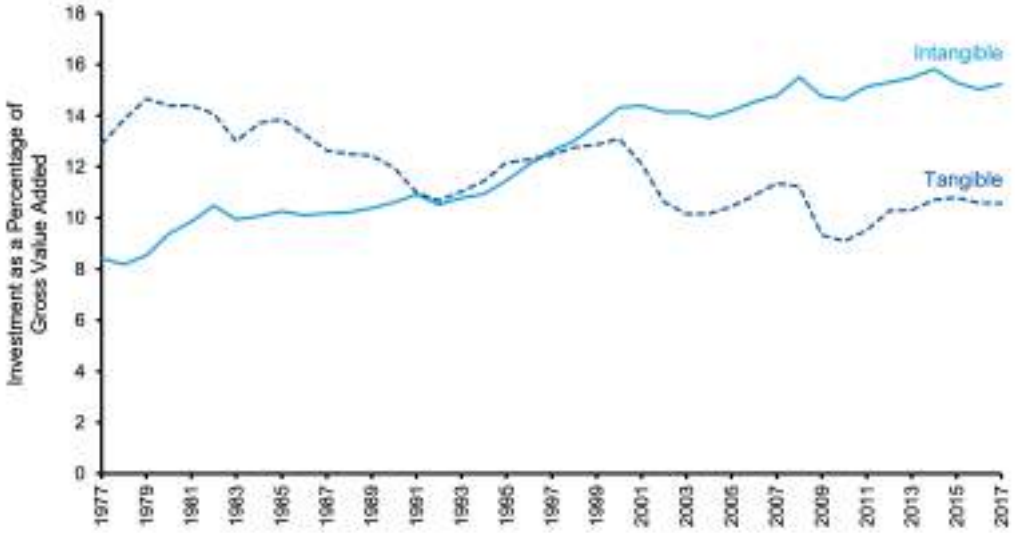

Source: Morgan Stanley (2020), Corrado and Hulten (2010)

As you can see intangible investments have been rising inexorably since the mid-1970s and overtook the proportion of investment in tangible assets in the 1990s — not coincidentally as the internet age hit full pace.

This not only makes comparisons between different types of company difficult, it also makes assertions about market valuations over time — such as the Cyclically Adjusted PE (or CAPE) difficult. A simple illustration of this is that in 1964 the average (median) tenure of a company that was in the S&P 500 was 33 years. By 2016 this had fallen to 24 years:

Average Company Lifespan in S&P 500 Index

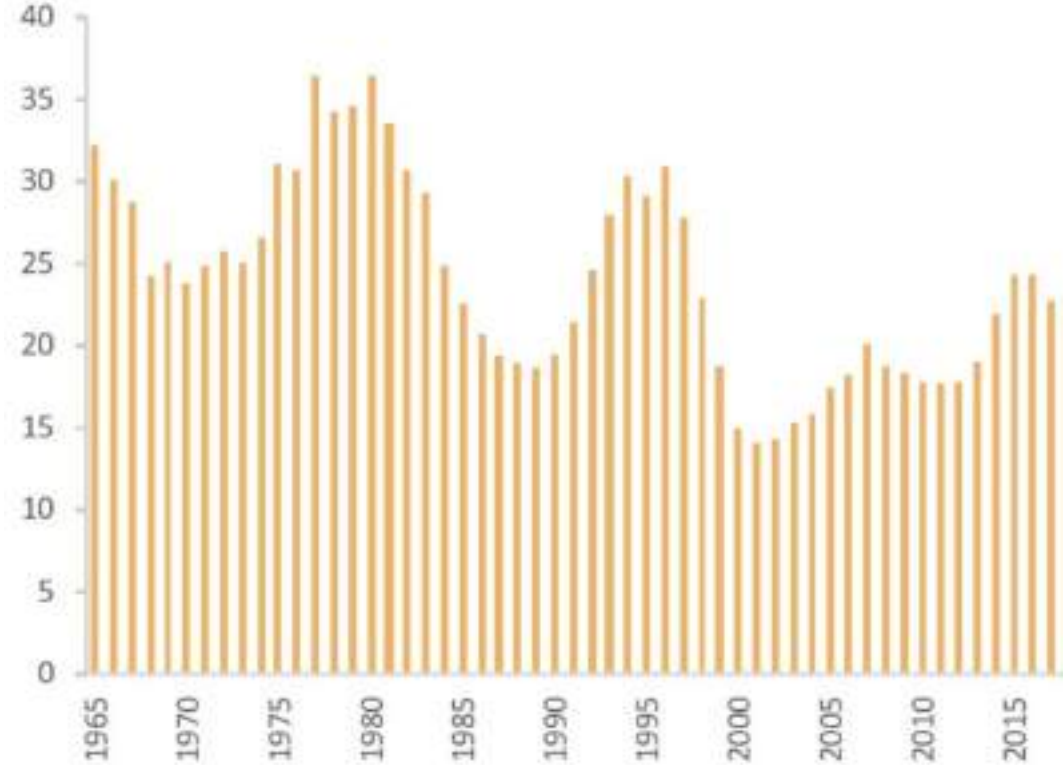

Source: Innosight analysis based on public S&P 500 data sources. www.innosight.com. Years, rolling 7 year average

They are not the same companies and at least in part not even the same sort of companies.

I lived through the rise and fall of the Japanese equity market. When it reached its peak in 1989 with a PE of over 60 we were told that this was because Japanese company accounting was much more conservative than western companies. In fact, their shares were just expensive. So I am wary of explanations for why we should accept high valuations, especially if they are based upon theories about accounting. But whilst Sir John Templeton did say that the four most dangerous words in investment are 'This time it's different' (which is actually five words before anyone points this out) sometimes it really is different and if you miss such inflection points it is to the detriment of your net worth.

It is impossible for me to report on 2020 without mentioning COVID. I hope you agree that our portfolio performed well, both in terms of the share price performance and the fundamental performance of the companies, which is just as important.

It is also important to note that our operations were not impaired by the lockdowns and travel restrictions. Whilst the performance of the fund is important, it is also important that if you wish to contact us you can and are dealt with promptly and efficiently. You should be able to get any information you reasonably require which should be accurate

and up to date. Perhaps most importantly, if you wish to deal — including redeeming your investment — we can execute for you. All of these vital functions continued seamlessly throughout the depths of the lockdowns. We have long been managing the dealing, operations, portfolio management and research across a number of widespread geographies, much to the amazement of some people who felt this could only be accomplished in a few London postcodes. So the need to Work From Home and an inability to travel were not major obstacles for us.

Sadly, one thing which won't be business as usual is our Annual Meeting. Given the ongoing restrictions on public gatherings we have taken the decision that we will not be able to host an in-person meeting this year. However, we are delighted that Ian King from Sky News will chair a recorded question and answer session that we will post on our website on Tuesday 2nd March. Please send your questions to ASM@fundsmith.co.uk and Ian will select the most topical which Julian and I will endeavour to answer.

One of the mantras which has been regularly trotted out by commentators is that the events of 2020 are unprecedented. Whilst that is literally true, as Mark Twain observed, history doesn't repeat itself but it often rhymes. It is certainly true that most of us have never experienced anything like it, yet it may not be strictly true that the events of 2020 are without precedent.

There have been six identifiable pandemics over the past 130 years:

Recent Pandemics	**Estimated Deaths**
Russian Flu (1889–90)	1m
Third Plague (1894–1922)	12m
Spanish Flu (1918–19)	50m
Asian Flu (1957–58)	2–5m
Hong Kong Flu (1968–69)	1–4m
Swine Flu (2009–10)	0.5m

We might be able to draw some parallels from these past pandemics as a guide for what may happen as a result of COVID.

One of the conclusions that you might draw from the economic effects of pandemics is that they do not so much cause new trends but rather they accelerate some existing trends.

The most obvious comparator — and one which people have most frequently alighted upon — is the Spanish Flu pandemic of 1918–19. The death toll of at least 50 million people caused a reduction in the workforce which may have been a factor in the subsequent widespread adoption of assembly line techniques for mass production. The assembly line was not invented as a result of the

Spanish Flu pandemic — the Model T Ford was put on an assembly line in 1913 — but it accelerated its adoption.

The increase in productivity this delivered helped to fuel an economic boom as the cost of production of items such as cars and household electrical appliances were reduced as the volume of production rose so that they became affordable by the middle classes for the first time. This helped to fuel the economic and stock market boom of the Roaring Twenties.

Might something similar happen as a result of COVID? Obviously, I do not know, and fortunately my predictive capability is not the basis of our investment strategy. However, there are some clear signs that existing trends have been accelerated by COVID. For example:

- E-commerce
- Online working from remote locations using the cloud or distributed computing
- Home cooking and food delivery
- Online schooling and medicine
- Social media and communications
- Pets — which have become more important in isolation and when their owners are at home more
- Automation and AI

The result is that many people have become more productive. Salespeople can visit many more clients if video conferencing is acceptable and at virtually no incremental cost. We receive reports of factories which we are told are operating with 50% staffing due to social distancing rules but which have more or less maintained production. I wonder what conclusion that leads to.

Of course not all businesses benefit from these developments. The airline industry, hospitality, bricks & mortar retailing and office property may all have some very difficult problems to face, just as you wouldn't have wanted to have been a saddler when Henry Ford and his competitors hit their stride.

I became increasingly bemused listening to or reading various commentators predict that the economic recovery from the COVID lockdowns would be V shaped, or shaped like a U, an L, a W, a bathtub or like the Nike swoosh (I'm not making this up). But just when I was bored of this entire meaningless alphabet soup of predictions, I came across one that I thought might be correct and help to explain what may happen. It was that the recovery may be shaped like a K. A K shaped recovery occurs when different sectors of the economy

emerge from a downturn with sharply differing trajectories — like the arms of the Roman letter K.

Imagine if you had been told this time last year that there would be a pandemic and that the measures taken to contain it would so affect the world economy that US GDP would fall by 9% in the second quarter of the year and the hospitality and travel sectors would be devastated by the measures as would large segments of traditional retail activity. Considering this would you have predicted that the MSCI World Index would deliver a return of 12.3%, slightly above its ten year average? Hopefully this illustrates the dangers of forecasting and market timing even when you know what major events will occur.

I will leave you with this thought: What are the similarities between a forecaster and a one-eyed javelin thrower? Answer: Neither is likely to be very accurate but they are typically good at keeping the attention of the audience.

Finally, may I wish you a happy New Year, a COVID free 2021 and thank you for your continued support for our Fund.

Yours sincerely,

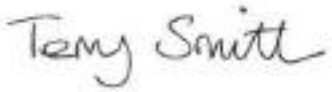

Terry Smith
CEO
Fundsmith LLP

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PE ratios and Free Cash Flow Yields are based on trailing twelve month data and as at 31st December 2020 unless otherwise stated.

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August 2021

Dear Fellow Investor,

The table below shows the performance of the Fundsmith Equity Fund ('Fund') during the first half of 2021 and since inception and other comparators:

% Total Return	1st Jan to 30th June 2021	Inception to 30th June 2021 Cumulative	Annualised
Fundsmith Equity Fund[1]	+13.1	+521.2	+18.7
Equities[2]	+11.9	+252.2	+12.5
UK Bonds[3]	-3.2	+42.7	+3.4
Cash[4]	+0.0	+6.3	+0.6

The Fund is not managed with reference to any benchmark. Above are a number of comparisons of performance.
[1]T class accumulation shares, net of fees priced at midday UK time, source: Bloomberg.
[2]MSCI World Index (£ Net) priced at close of business US time, source: www.msci.com.
[3]Bloomberg/Barclays Bond Indices UK Govt 5-10 yr., source: Bloomberg.
[4] £ Interest Rate, source: Bloomberg.

Our Fund outperformed what is perhaps the most obvious comparator – the MSCI World Index – by a bit over 1% during the first half of 2021. It outperformed the FTSE100 Index which is relevant to many of our UK investors by over 2%.

If you have been reading what investment commentators have been saying during this period you might be rather surprised that our Fund has fared so well. You might even be surprised that we are still here. Since markets started to sense an end to the economic disruption caused by the lockdowns in the final quarter of 2020 there has been a so-called 'rotation' from quality stocks, of the sort we own, into so-called value stocks and those expected to recover as the lockdowns end. In such a situation our Fund is always likely to underperform for a period, after all the companies we invest in mostly have little or nothing to recover from.

However, this inevitable blip was accompanied by lurid headlines and articles which seemed to suggest that we were in imminent danger of extinction:

'Fundsmith Equity sees run of outflows as growth stocks slide'
Citywire 19th May 2021

Followed a week later by:

'Investors 'begin to drop' star stock picker Terry Smith as £360m flows out of UK's largest fund'
City A.M. 26th May 2021

I realise that some commentators do not want the facts to get in the way of a good story but our performance versus the 'value' stocks and Covid recovery plays tells its own story.

	Covid Drawdown[1]	**Covid Recovery[2]**	**Pre-Covid High to 30th June 2021**
Fundsmith Equity Fund	-21%	59%	25%
S&P 500 Value Index	-37%	79%	12%
FTSE 100 index	-35%	41%	-8%
American Airlines	-70%	135%	-30%
BP	-62%	63%	-38%
Carnival Cruises	-84%	175%	-55%
Exxon	-56%	101%	-11%
JP Morgan	-44%	97%	10%
Lloyds Bank	-62%	95%	-27%
Ryanair	-49%	95%	-1%

Note:
[1] Fall from 2020 high to Covid low.
[2] Increase from Covid low until 30th June 2021.
Source: Bloomberg.

You could have made some good gains by buying the value or recovery stocks at or close to the bottom, although of course this depends on getting your timing right, but if you ran the value/recovery stocks across the period of the downturn and recovery, they would still have significantly underperformed our portfolio.

There are several lessons to be learnt from this, not the least of which is that no amount of recovery or low valuation will turn a poor business into a good one and quality is the main determinant of long term performance.

Moreover, neither have we seen the kind of outflows which the headlines might lead you to imagine. Net outflows of £130m for the

half year were somewhat dwarfed by the £3 billion rise in the value of the Fund.

However, I am not expecting these facts to produce a change of heart amongst some commentators. As I believe former German Chancellor Helmut Kohl said, 'Nothing so disappoints deserting rats as a ship which refuses to sink'.

Returning to the more important subject of our performance, the main contributors in the first half of 2021 were:

PayPal	+1.8%
Microsoft	+1.5%
IDEXX	+1.4%
Facebook	+1.2%
Intuit	+1.2%

All of these have featured in our previous tables of Top Five contributors. So much for the idea of taking profits. I suppose a theme which connects at least four of these companies is the growth of everything digital.

The bottom five detractors from our Fund's performance during the period were:

McCormick	-0.4%
Amadeus	-0.2%
Brown Forman	-0.1%
Unilever	-0.1%
Pepsico	0.0%

There isn't much of a theme connecting the detractors. Amadeus continues to suffer unsurprisingly as an airline reservation company and Brown Forman has been affected by the loss of travel retail and on-premise drinking. The comedown from 'pantry loading' in 2020 may also explain the performance of the consumer staples.

Our portfolio turnover was -2.69%. Voluntary dealing (dealing not caused by redemptions or subscriptions) cost £1,267,018 during the half year (0.005% or 0.5bps). The Ongoing Charges Figure was 1.05% and with the cost of dealing added, the Total Cost of Investment was 1.06%.

This time last year I wrote this:

We face an uncertain outlook given recent events, but 'twas ever thus. We have no crystal ball unlike the commentators who tell us that the recovery from the pandemic and resulting closure of economic

activities deemed non-essential will be shaped like a V, a U, a W, a bathtub or the Nike swoosh (I'm not making this up). No one knows- as the economist J K Galbraith said, 'The only function of economic forecasting is to make astrology look respectable'. However, what we know is that we have assembled a portfolio of high quality companies which have to date proven to be resilient. If you are a long term investor that is the most certain determinant of your future returns.

I am not sure I have anything to add.

Yours sincerely,

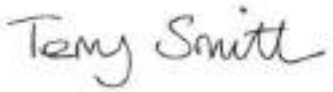

Terry Smith
CEO
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The MSCI World Index is a generic portfolio of global equities across all sectors and, as such, is a fair comparison given the Fund is also global and sector agnostic.

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January 2022

Dear Fellow Investor,

This is the twelfth annual letter to owners of the Fundsmith Equity Fund ('Fund').

The table below shows performance figures for the last calendar year and the cumulative and annualised performance since inception on 1st November 2010 and various comparators.

% Total Return	1st Jan to 31st Dec 2021	Inception to 31st Dec 2021 Cumulative	Inception to 31st Dec 2021 Annualised	Sharpe ratio[5]	Sortino ratio[5]
Fundsmith Equity Fund[1]	+22.1	+570.7	+18.6	1.31	1.25
Equities[2]	+22.9	+287.1	+12.9	0.78	0.74
UK Bonds[3]	-4.5	+40.9	+3.1	n/a	n/a
Cash[4]	+0.1	+6.4	+0.6	n/a	n/a

The Fund is not managed with reference to any benchmark, the above comparators are provided for information purposes only.
[1] T Class Accumulation shares, net of fees, priced at noon UK time, source: Bloomberg
[2] MSCI World Index, £ net, priced at US market close, source: Bloomberg
[3] Bloomberg/Barclays Bond Indices UK Gov. 5–10 year, source: Bloomberg
[4] £ Interest Rate, source: Bloomberg
[5] Sharpe & Sortino ratios are since inception to 31.12.21, 1.5% risk free rate, source: Financial Express Analytics

The table shows the performance of the T Class Accumulation shares, the most commonly held share class and one in which I am invested, which rose by +22.1% in 2021 and compares with a rise of +22.9% for the MSCI World Index in sterling with dividends reinvested. The Fund therefore marginally underperformed this comparator in 2021 but is still the best performer since its inception in November 2010 in the Investment Association Global sector with a return 357 percentage points above the sector average which has delivered just +213.9% over the same timeframe.

However, I realise that many or indeed most of our investors do not use these as natural comparators for their investments. Those of you who are based in the UK may look to the FTSE 100 Index ('FTSE 100') as the yardstick for measuring your investments and may hold funds which are benchmarked to this index and often hug it. The FTSE 100 delivered a total return of +18.4% in 2021 so our Fund outperformed this by a margin of 3.7 percentage points.

Whilst a period of underperformance against the MSCI World Index is never welcome it is nonetheless inevitable. No investment strategy will outperform in every reporting period and every type of market condition. So, as much as we may not like it, we can expect some periods of underperformance.

This is particularly so when we have a period like 2020–21 which was obviously heavily influenced by the pandemic. Our Fund outperformed the market by 6% in 2020 when the economic effects of the pandemic were at their height and most of the businesses we are invested in proved to be highly resilient. However, last year was more of a year of recovery and our companies had relatively little to recover from.

We find it difficult to outperform in particularly bullish periods where the market has a strong rise — 22.9% in 2021 — as a rising tide floats all ships, including some which might otherwise have remained stranded and that we would not wish to own.

In investment, as in life, you cannot have your cake and eat it, so it is difficult if not impossible to find companies which are resilient in a downturn but which also benefit fully from the subsequent recovery. Of course, you could try to trade out of the former and into the latter at an appropriate time but it is not what we seek to do as the vast majority of the returns which our Fund generates come from the ability of the companies we own to invest their retained earnings at a high rate of return because they own businesses with good returns and growth opportunities. In our view it would be a mistake to sell some of these good businesses in order to invest temporarily in companies which are much worse but which have greater recovery potential.

For the year the top five contributors to the Fund's performance were:

Microsoft	+3.9%
Intuit	+3.1%
Novo Nordisk	+2.3%
Estée Lauder	+2.0%
IDEXX	+1.9%

Microsoft makes its seventh appearance on this list, IDEXX its fourth, Intuit its third, Novo Nordisk and Estée Lauder their second. Someone once said that no one ever got poor by taking profits. This may be true but I doubt they got very rich by this approach either, as I've observed before. We continue to pursue a policy of trying to run our winners.

The bottom five were:

PayPal	-0.7%
Amadeus	-0.2%
Kone	-0.2%
Unilever	-0.2%
Brown-Forman	-0.1%

PayPal's performance last year was a clear exception to the benefits of running winners. The shares performed poorly amid concerns that its ambitions to construct a 'super app' to drive users to its payment systems might involve some value destruction, brought home by its apparent interest in acquiring social media operator Pinterest. We may be wrong but we would prefer if PayPal stuck to its knitting.

Amadeus is clearly still suffering from the effects of the pandemic on travel which is hardly surprising given that airline reservations are its largest business segment. However, we remain convinced that Amadeus will both survive this downturn and emerge in a stronger market position.

Kone was affected by the travails of the Chinese construction sector which represents its largest market.

Unilever seems to be labouring under the weight of a management which is obsessed with publicly displaying sustainability credentials at the expense of focusing on the fundamentals of the business. The most obvious manifestation of this is the public spat it has become embroiled in over the refusal to supply Ben & Jerry's ice cream in the West Bank. However, we think there are far more ludicrous examples which illustrate the problem. A company which feels it has to define the purpose of Hellmann's mayonnaise has in our view clearly lost the plot. The Hellmann's brand has existed since 1913 so we would guess that by now consumers have figured out its purpose (spoiler alert — salads and sandwiches). Although Unilever had by far the worst performance of our consumer staples stocks during the pandemic we continue to hold the shares because we think that its strong brands and distribution will triumph in the end.

Brown-Forman struggled under the twin impacts of the on trade shutdowns caused by the pandemic and EU tariffs on American

sprits which gave us the opportunity to increase our stake. We expect both these headwinds to dissipate.

We sold our stakes in Intertek, Sage, Becton Dickinson, InterContinental Hotels and purchased a stake in Amazon and an as yet undisclosed position during the year.

As three of our sales were companies which are listed in the UK I am sure some will see this as some clue that we are selling out of the UK, or that we have some view on the prospects for the FTSE 100 versus the S&P 500 Index (S&P 500) or some other market or macro view. This is not the case. We invest in companies not indices or countries and in our view the country where a company is listed is largely irrelevant, if of course it has a well regulated stock market, and certainly does not provide a good guide to where the company generates its revenues. For example, InterContinental Hotels is listed in the UK but its largest market is the United States, hence why it reports in US dollars.

I don't intend to go into the reasoning on every sale and purchase transaction but the purchase of Amazon has attracted a lot of attention as we had previously declined to purchase its shares. Rather than give a lengthy rationale I would rather summarise it with a quote from the economist (and successful fund manager) John Maynard Keynes who said, 'When the facts change, I change my mind.' Although it could be explained by the simpler aphorism 'Better late than never' or at least it will be if our purchase delivers the performance we expect.

We continue to apply a simple three step investment strategy:

- Buy good companies
- Don't overpay
- Do nothing

I will review how we are doing against each of those in turn.

As usual we seek to give some insight into the first and most important of these — whether we own good companies — by giving you the following table which shows what Fundsmith would be like if instead of being a fund it was a company and accounted for the stakes which it owns in the portfolio on a 'look-through' basis, and compares this with the market, in this case the FTSE 100 and the S&P 500. This shows you how the portfolio compares with the major indices and how it has evolved over time.

	Fundsmith Equity Fund Portfolio								S&P 500	FTSE 100
Year ended	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2021**	**2021**
ROCE	29%	26%	27%	28%	29%	29%	25%	28%	16%	14%
Gross margin	60%	61%	62%	63%	65%	66%	65%	64%	45%	45%
Operating margin	25%	25%	26%	26%	28%	27%	23%	26%	17%	15%
Cash conversion	102%	98%	99%	102%	95%	97%	101%	95%	106%	124%
Interest cover	15x	16x	17x	17x	17x	16x	16x	23x	9x	8x

Source: Fundsmith LLP/Bloomberg. ROCE, Gross Margin, Operating Profit Margin and Cash Conversion are the weighted mean of the underlying companies invested in by the Fundsmith Equity Fund and mean for the FTSE 100 and S&P 500 Indices. The FTSE 100 and S&P 500 numbers exclude financial stocks. Interest Cover is median. 2013-2019 ratios are based on last reported fiscal year accounts as at 31st December and for 2020-21 are Trailing Twelve Months and as defined by Bloomberg. Cash Conversion compares Free Cash Flow per Share with Net Income per Share. Percentage change is not calculated if the TTM period contains a net loss.

Returns on capital and profit margins were higher in the portfolio companies in 2021 recovering from the downturn in 2020.

As a group our stocks still have excellent returns, profit margins and cash generation even in poor economic conditions. As you can see the same cannot be said for the major indices — with the exception of their current cash conversion which I suspect is a temporary phenomenon — if you can't get the stock you need because of supply chain problems, cash tied up in working capital is likely to be low. It's also worth remembering that the index numbers have the benefit of including our good companies.

The average year of foundation of our portfolio companies at the year-end was 1926. They are just under a century old collectively.

Consistently high returns on capital are one sign we look for when seeking companies to invest in. Another is a source of growth — high returns are not much use if the business is not able to grow and deploy more capital at these high rates. So how did our companies fare in that respect in 2021? The weighted average free cash flow (the cash the companies generate after paying for everything except the dividend, and our preferred measure) grew by 20% in 2021.

This leads onto the question of valuation. The weighted average free cash flow ('FCF') yield (the free cash flow generated as a percentage of the market value) of the portfolio at the outset of the year was 2.8% and ended it at 2.7%.

The year-end median FCF yield on the S&P 500 was 3.6%. The year-end median FCF yield on the FTSE 100 was 5.4%.

Our portfolio consists of companies that are fundamentally a lot better than the average of those in either index and are valued higher than the average S&P 500 company and much higher than the average FTSE 100 company. However, it is wise to bear in mind that despite the rather sloppy shorthand used by many commentators,

highly rated does not equate to expensive any more than lowly rated equates to cheap.

The bar chart below may help to illustrate this point. It shows the 'Justified P/Es' of a number of stocks of the kind we invest in. What it shows is the Price/Earnings ratio (P/E) you could have paid for these stocks in 1973 and achieved a 7% compound annual growth rate (CAGR) over the next 46 years (to 2019), versus the 6.2% CAGR the MSCI World Index (USD) returned over the same period. In other words, you could have paid these prices for the stocks and beaten the index — something the perfect markets theorists would maintain you can't do.

Justified P/E's

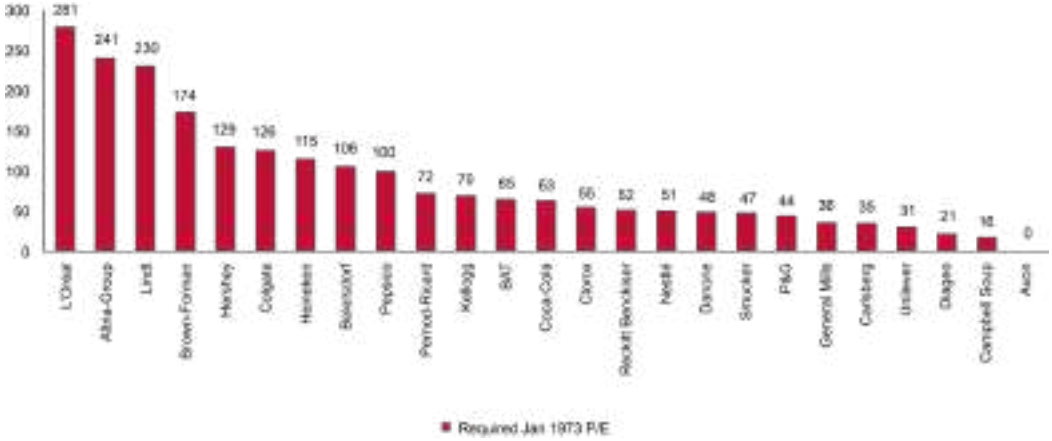

Source: Ash Park Capital and Refinitiv Datastream, excludes dividends, in USD.

You could have paid a P/E of 281x for L'Oréal, 174x for Brown-Forman, 100x for PepsiCo, 44x for Procter & Gamble and a mere 31x for Unilever.

I am not suggesting we will pay those multiples but it puts the sloppy shorthand of high P/Es equating to expensive stocks into perspective.

Turning to the third leg of our strategy, which we succinctly describe as 'Do nothing', minimising portfolio turnover remains one of our objectives and this was again achieved with a portfolio turnover of 5.6% during the period. It is perhaps more helpful to know that we spent a total of just 0.009% (just under one basis point) of the Fund's average value over the year on voluntary dealing (which excludes dealing costs associated with subscriptions and redemptions as these are involuntary). We have held seven of our portfolio companies since inception in 2010.

Why is this important? It helps to minimise costs and minimising the costs of investment is a vital contribution to achieving a satisfactory outcome as an investor. Too often investors, commentators and

advisers focus on, or in some cases obsess about, the Annual Management Charge ('AMC') or the Ongoing Charges Figure ('OCF'), which includes some costs over and above the AMC, which are charged to the Fund. The OCF for 2021 for the T Class Accumulation shares was 1.04%. The trouble is that the OCF does not include an important element of costs — the costs of dealing. When a fund manager deals by buying or selling, the fund typically incurs the cost of commission paid to a broker, the bid-offer spread on the stocks dealt in and, in some cases, transaction taxes such as stamp duty in the UK. This can add significantly to the costs of a fund, yet it is not included in the OCF.

We provide our own version of this total cost including dealing costs, which we have termed the Total Cost of Investment ('TCI'). For the T Class Accumulation shares in 2021 this amounted to a TCI of 1.05%, including all costs of dealing for flows into and out of the Fund, not just our voluntary dealing. We are pleased that our TCI is just 0.01% (1 basis point) above our OCF when transaction costs are taken into account. However, we would again caution against becoming obsessed with charges to such an extent that you lose focus on the performance of funds. Some commentators state that an investor's primary focus should be on fees. To quote Charlie Munger (albeit in another context) this is 'Twaddle'. It is worth pointing out that the performance of our Fund tabled at the beginning of this letter is after charging all fees which should surely be the main focus.

Turning to the themes which dominated 2021, you may have heard a lot talked about the so-called 'rotation' from quality stocks of the sort we seek to own to so-called value stocks, which in many cases is simply taken as equating to lowly rated companies. Somewhat related to this there was periodic excitement over so-called reopening stocks which could be expected to benefit as and when we emerge from the pandemic — airlines and the hospitality industry, for example.

There are multiple problems with an approach which involves pursuing an investment in these stocks. Timing is obviously an issue. Another is that their share prices may already over anticipate the benefits of the so-called reopening. As Jim Chanos, the renowned short seller, observed 'The worst thing that can happen to reopening stocks is that we reopen.' It is often better to travel hopefully than to arrive.

In our view, the biggest problem with any investment in low quality businesses is that on the whole the return characteristics of businesses persist. Good sectors and businesses remain good and poor return businesses also have persistently poor returns as the charts below show:

Persistence in Profitability

Source: GMO. The 1000 largest companies in the U.S. were sorted for each point in the graph into quartiles based on return on equity (ROE). Past Low Profits consists of those companies in the quartile with the lowest ROE. Past High Profits consists of those companies in the quartile with the greatest ROE.

Median and annual ROIC, excluding goodwill %

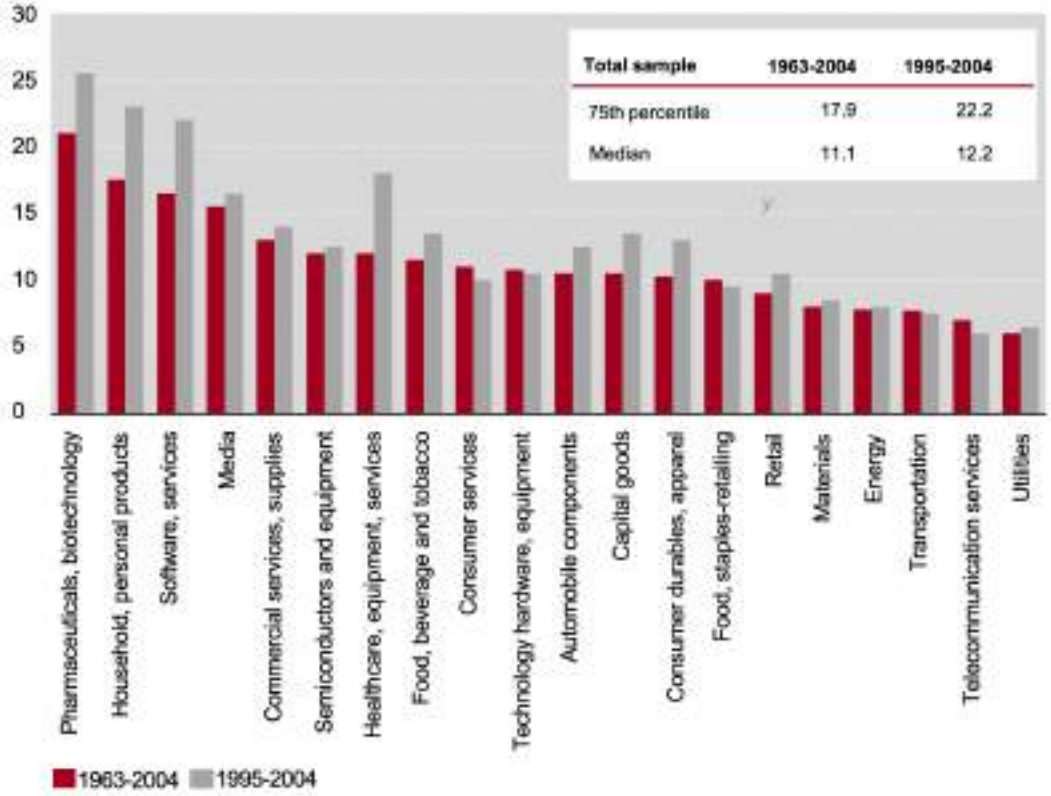

Source: McKinsey

These return characteristics persist because good businesses find ways to fend off the competition — what Warren Buffett calls 'The Moat' — strong brands; control of distribution; high spend on product

development, innovation, marketing and promotion; patents and installed bases of equipment and/or software which are troublesome to change for example.

Poor returns also persist because companies which have many competitors, no control over pricing and/or input costs, and an ability for consumers to prolong the life of the product in a downturn (like cars) cannot suddenly throw off these poor characteristics just because they are lowly rated and/or benefit from an economic recovery.

Contrary to the mantra that every fund has to recite, past returns of companies are a good guide to future returns.

Even if you manage to identify a truly cheap value or reopening stock and time the rotation into that stock correctly so as to make a profit, this will not transform it into a good long term investment. You need to sell it at a good moment — presumably when some of your fellow ~~punters~~ investors will also be doing so because its cheapness will not transform it into a good business and in the long run it is the quality of the business that you invest in which determines your returns.

The chart below shows the excess returns — the amount by which it beats the index — of the MSCI World Quality Index (which I am taking as a surrogate for our strategy). Over the last 25 years there has never been a rolling 120 month (ten year) period when quality has not performed as well as or better than the MSCI World Index.

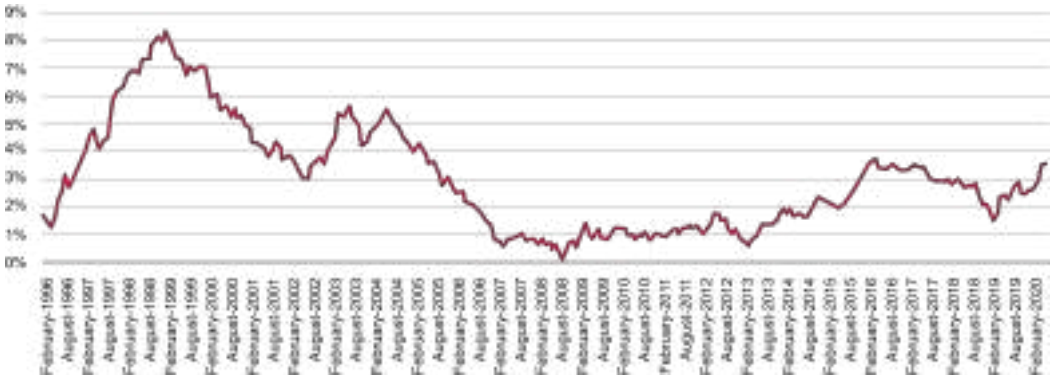

Source: MSCI

I know 10 years is a long time and well beyond the time horizon of most investors, but we are long term investors and aim to capture this inevitable outperformance by good companies. If this investment time horizon is too long for you then you may be invested in the wrong fund. Moreover, if anything this chart flatters the outcome of investing in low quality, cyclical, value or recovery stocks as the index with which the quality stocks are being compared includes those quality

stocks. If they were taken out of the index, the relative outperformance would be even more pronounced.

You may have heard a lot about inflation over the past year and I suspect you will continue to hear more about it in 2022.

In some respects, we needn't discuss whether or not we have inflation — German wholesale prices were up 16.6% year on year in November but were easily trumped by Spain whose producer price index (PPI) rose 33.1% in the same period. However, that eye-catching statistic is far from the whole story.

It is not difficult to see potential causes of inflation. The expansion of central bank balance sheets with Quantitative Easing after the Credit Crisis has been followed by huge monetary and fiscal stimuli put in place to counter the economic effects of the pandemic. One might reason that given the growth in the money supply has vastly outstripped the increases in production of goods and services the price of those goods and services was sure to be bid up and ipso facto inflation must follow.

However, this omits another important element of the equation — the velocity of circulation of money. Are people more inclined to save the additional money or to spend it? The savings ratio leapt after the Credit Crisis and again during the pandemic partly no doubt due to caution but also because there were fewer opportunities to spend, for example on travel and vacations. However, it is now on its way back to pre-crisis levels so maybe we have all the ingredients for inflation to take hold.

You might well be confused at this point (I know I am) particularly considering that the 'authorities' spent most of the decade post the Credit Crisis trying to generate inflation in order to negate the deflationary effects of the Credit Crisis and its causes. The trouble is that with inflation, as with so much else, you need to be careful what you wish for. It is a bit like trying to light a bonfire or a traditional BBQ on a damp day. If you put an accelerant like gasoline on it you can go from no fire to a loud 'Whoosh!' and find that you have also set fire to the garden fence. When inflation takes hold, it too may exceed your expectations.

In terms of how to react, if at all, there are also other factors to consider. Inflation in the cost of commodities does not necessarily equate to retail price inflation or asset inflation. The chart below attempts to correlate the price increases or decreases in a number of commodities with the Consumer Price Index over time.

Correlation of Long Term Commodity Prices With Inflation

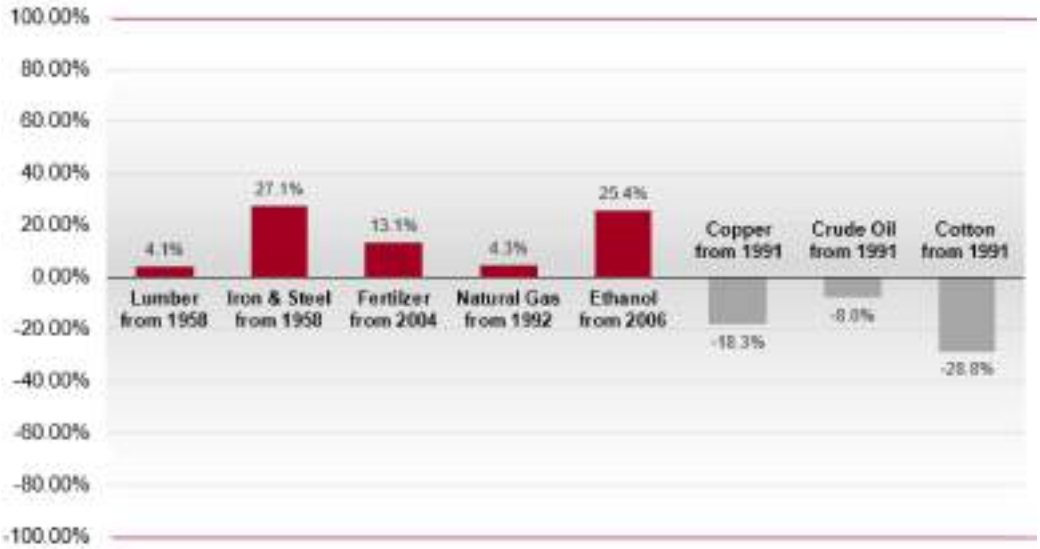

Source: Federal Reserve Economic Research. 100% = perfect positive correlation, 0% = no correlation, -100% = perfect negative correlation.

As you can see, there is no correlation. One of the reasons for this is that consumers do not buy commodities. They are bought by companies which make them into the goods which consumers buy. Interestingly, the eye-popping Spanish PPI rise of 33.1% in the year to November included an 88% increase in energy prices, 48% for basic metals and 16% for paper products but only 8.3% for food. Consumers don't buy basic metals.

So the initial impact of input cost inflation is not on consumer prices but on company profits. All companies are not equal in this regard. The higher a company's gross margin — the difference between its sales revenues and cost of goods sold — the better its profitability is protected from inflation.

The table below shows the impact of input cost inflation on two companies in the consumer sector — L'Oréal which we own and Campbell's Soup, which we do not own. L'Oréal has gross margins of 73% and Campbell's has 35%. A 5% rise in input cost inflation would cut L'Oréal's profits by 7% if it took no other action, whereas Campbell's profits would fall by 22%.

Impact of 5% Inflation

L'Oreal	Before	After
% of revenues		
Revenue	100%	100%
COGs	27%	28%
Gross profit	73%	72%
SG&A	55%	55%
Operating profit	18%	17%
Decline in profit		**-7%**

Campbell's	Before	After
% of revenues		
Revenue	100%	100%
COGs	65%	68%
Gross profit	35%	32%
SG&A	20%	20%
Operating profit	15%	12%
Decline in profit		**-22%**

Source: Fundsmith Research

You will recall from the look-through table earlier that our portfolio companies have gross margins of over 60%, versus about 40% for the average company in the index. So, from a fundamental respect our companies are likely to be better able to weather inflation.

However, inflation also affects valuations. Rises in inflation and interest rates also do not affect the valuation of all companies equally. In the bond market, the longer the maturity of a bond, the more sensitive its valuation is to rate changes. A short-dated bond soon matures and the proceeds can be reinvested at whatever the new rate is. The same is not true of a 10 or 30 year bond.

The equivalent to the duration of a bond in terms of equities is the valuation multiple whether it is expressed in terms of earnings or, as we would prefer, cash flows. The higher rated a company's shares are, the more it will be affected by changes in inflation or interest rates. This is one reason why the shares of the new wave of unprofitable tech companies have performed so poorly latterly. As they are loss-making more than 100% of their expected value is in the future (there are probably other reasons like the growing realisation that you are often being invited to invest in a business plan rather than a business).

So in brief, if inflation is seen to have taken hold rather more than some people, including the Federal Reserve Bank expects, then we are probably in for an uncomfortably bumpy ride in terms of valuations but we can be relatively sanguine in terms of the effect on the fundamental performance of our portfolio businesses which is our primary focus.

The good news is that we do not invest on the basis of our ability to forecast inflation or any other macroeconomic factor. We invest in companies not countries, indices or macroeconomic forecasts.

I would like to leave you with this thought: our Fund has prospered during the pandemic. The companies it invests in have endured much more — the Great Depression, World War II, the Great Inflation of 1965–82, the Dotcom meltdown and the Credit Crisis. They will probably survive whatever comes next and so will we if we stick to our principles and we have every intention of doing so.

Finally, may I wish you a happy New Year and thank you for your continued support for our Fund.

Yours sincerely,

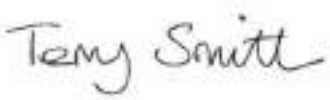

Terry Smith
CEO
Fundsmith LLP

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Sources: Fundsmith LLP & Bloomberg unless otherwise stated.

Portfolio turnover has been calculated in accordance with the methodology laid down by the FCA. This compares the total share purchases and sales less total creations and liquidations with the average net asset value of the Fund.

PE ratios and Free Cash Flow Yields are based on trailing twelve month data and as at 31st December 2021 unless otherwise stated.

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July 2022

Dear Fellow Investor,

The table below shows the performance of the Fundsmith Equity Fund ('Fund') and other comparators during the first half of 2022 and since inception.

% Total Return	1st Jan to 30th June 2022	Inception to 30th June 2022 Cumulative	Annualised
Fundsmith Equity Fund[1]	-17.8	+451.5	+15.8
Equities[2]	-11.3	+243.2	+11.2
UK Bonds[3]	-7.1	+30.9	+2.3
Cash[4]	+0.3	+6.7	+0.6

The Fund is not managed with reference to any benchmark, the above comparators are provided for information purposes only.
[1] T class Accumulation shares, net of fees priced at midday UK time, source: Bloomberg.
[2] MSCI World Index, £ Net, priced at close of business US time, source: www.msci.com.
[3] Bloomberg/Barclays Bond Indices UK Govt 5-10 year, source: Bloomberg.
[4] £ Interest Rate, source: Bloomberg.

Our Fund underperformed what is perhaps the most obvious comparator — the MSCI World Index (£ net), which itself fell by 11.3% — by 6.5 percentage points during the first half of 2022.

The cause of the downturn in global equity markets is obvious — the upsurge in inflation and the consequent need to raise interest rates and risk a recession. A combination of surging inflation and looming recession reminds me of the quote from soccer manager Tommy Docherty, 'When one door closes, another slams in your face.'

If a recession ensues but inflation persists we will not have seen conditions of this sort since the 1970s when the term 'stagflation' was coined. My first full year in work was 1974 when inflation in the UK, as measured by the CPI, was 24.24%. In an example of history not repeating itself but rhyming, as Mark Twain observed, the 1970s inflation was boosted by the Arab oil embargo which followed the Yom

Kippur War. On this occasion we have a similar effect from the Russian invasion of Ukraine.

I have no insight into how severe or persistent the rise in interest rates will need to be to quell inflation, but I am not optimistic. Interest rates as a tool to combat inflation are a blunt instrument at the best of times and I suspect more so in this instance where the inflation has not been caused by demand exceeding supply during an economic boom.

In a recent interview former Bank of England Governor Lord King of Lothbury observed that today's inflation was sparked by a misdiagnosis of the problem at the height of the Covid pandemic back in March 2020. Attempts were made to stimulate demand by further Quantitative Easing when the issue was not weak demand but the lack of supply, with disruption in supply of energy and its derivative products like fertilizers and plastics, metals, glass, agricultural commodities like palm oil and essential components like microchips, and even the supply of labour with the Great Resignation and an inability for migrant labour to travel.

Raising interest rates is now a necessity. This will eventually quell demand. It may take a while to become effective because consumers were quite liquid given the lack of certain types of spending opportunities during the pandemic. However, higher interest rates will do nothing to correct the continuing supply problems in commodities, semiconductors and just about everything else so it may also take some time and high interest rates for demand to become depressed enough for the supply to exceed it and so start to moderate price inflation.

Fortunately, we do not invest on the basis of our prognostications about macroeconomics but it is not a matter of speculation that we now have inflation. Inflation, rising interest rates and an increasingly likely recession have two obvious effects on equity investments; fundamental effects and valuation effects. I will try to address each of these in turn as I review the performance of some of our holdings.

Inflation causes an increase in the cost of the ingredients, components and other inputs which constitute companies' Cost of Goods Sold ('COGS'). The best defence against this inflation is a high gross margin — the difference between sales revenues and COGS. On average last year the companies in our portfolio had a gross margin of 60% compared with about 40% for the average large, listed company. Our companies make things for £4 and sell them for £10 whereas the average company makes things for £6 and sells them for £10. A 10% rise in the COGS clearly has much less effect on the profitability of the companies in our portfolio than the average. Moreover, if they want to compensate for say a 10% rise in COGS,

our portfolio companies can achieve this with a much smaller price rise than the average company. The effect on COGS is not the only effect of inflation but it is clear that the high and sustainable gross profit margins of our companies provide a robust first line of defence.

An illustration of the problems of low gross margins was recently supplied by the US retailer Target — a stock we would never own — in its first quarter results. Gross margin contracted from 30.0% in the same quarter last year to 25.7% — a fall of 4.3 percentage points — driven largely by inventory impairments, lower than expected sales in discretionary categories as well as higher costs related to freight, supply chain disruptions and increased compensation and headcount in distribution centres. The operating margin fell from 9.8% in the prior year quarter to 5.3% — so by a similar 4.5 percentage points. Operating profit declined 43%. The combination of low gross margins and high fixed costs is dangerous and we seek to avoid it.

It may seem little source of comfort at the moment but our companies continued to deliver decent underlying business performance in the first half of 2022. Last reported portfolio weighted average free cash flow per share ended June 2022 4% higher than in December 2021, equivalent to annualised growth of about 8%. Long-term readers of these letters will recognise this as not far off the historic average.

Revenue growth was strong, bordering on very strong at some of our companies. Results reported in the first half of 2022 showed two-year top line growth — which we look at in attempt to avoid confusion caused by the gyrations during the pandemic — of 48% at Adobe, 66% at Alphabet, 51% at Brown-Forman, 79% at Intuit, 40% at Microsoft, 39% at PayPal and 47% at Waters.

If these were our privately owned family businesses we would still for the most part be applauding the growth they had delivered in much the same way as we were six months ago, albeit we might well be concerned about their ability to replicate this performance over the next couple of years.

It is too early in the development of this inflationary economic cycle to be sanguine about this and the next few quarterly earnings seasons are unlikely to be overly exciting. Nonetheless, the structure of our companies' profitability gives us considerable comfort. Nor do we feel that they are likely to be in the forefront of collapsing top line revenue growth in a recession given that we primarily invest in three sectors: consumer staples, albeit with some consumer discretionary, healthcare and technology. It seems likely that they will fare better in a recession than other sectors for which demand is more cyclical, fixed assets and costs are higher and profitability and cash generation are lower.

From a fundamental perspective, which is what we seek to focus on, we are therefore confident that our portfolio companies will perform relatively well over an inflationary and recessionary cycle. But sadly our investments are not our privately owned family businesses where we can focus on the fundamental performance and not worry about the stock market.

It is axiomatic that in a period of rising interest rates, long dated assets will fare worse than short-dated ones. This applies not only to bonds but also to equities. The share prices of more highly rated equities which are in effect discounting profits or cash flows further into the future by being rated on higher PEs tend to be more affected by rising interest rates than lowly rated so-called value stocks.

Our portfolio is not exempt from this effect. Broadly speaking, the stocks that have suffered most from rising interest rates so far were those that started the year the most highly rated and were thus most impacted by the rising discount rate.

The five biggest detractors from our Fund's performance during the period were:

PayPal	-3.0%
Meta Platforms	-2.3%
IDEXX	-2.3%
Intuit	-1.5%
Microsoft	-1.2%

Of these, PayPal and maybe Intuit, exacerbated their situation with self-inflicted wounds that negatively impacted their underlying performance. IDEXX and Microsoft really didn't see any slowdown at all.

Did we miss out by not owning more lowly-rated 'value' stocks during this period? Not much. The much talked about 'rotation' from 'growth' to 'value' stocks during the first half of 2022 was rather underwhelming from the perspective of the latter. In the US, the S&P Value Index did indeed significantly outperform its S&P Growth counterpart and the NASDAQ but this outperformance took the form of a 12% fall for the S&P Value Index versus a 28% decline for the S&P Growth Index and a 30% decline in the NASDAQ. Falling less than others when times are tough has obvious merit but still isn't a sufficient payback for the long preceding wait during which value stocks underperformed massively.

For the most part, not owning the sectors we have frequently said we will never own didn't do us any harm during the first half of 2022. In

the US the S&P Banks Index for example was down 25% during the six-month period and the S&P Airlines Index was down 22% notwithstanding the sharp pick-up in travel demand. Even the S&P Metals & Mining Index fell in absolute terms, albeit by much less than the market. The one sector in the 'we'll never own' category that did cost us by our absence was energy. In the US, the S&P Energy Index increased 29% in the first half while in the UK, BP shares rose 17% and Shell 34%. For those regretting the absence of energy stocks from our portfolio, these increases have only taken the S&P Energy Index back to a level it first reached in 2008 or the two UK stocks reached in the 1990s.

To try to get some objectivity into where we are now on valuation, the free cash flow ('FCF') yield on the portfolio, which had ended 2021 at 2.7%, increased to 3.6% at the end of June 2022. This means that in the space of six months, the valuation of the portfolio has declined all the way back to where it was at the end of 2017. We have cautioned in the past that a rising fund price caused in part by rising valuations is nice but also worrying because it is finite and reversible, but that again is not much of a source of comfort when this is shown to be the case.

Moreover, the rotation from 'growth' to 'value' has also led to a situation where the narrative of the 'highly-rated tech sector' has been turned on its head. The median FCF yield on the 78 technology stocks in the S&P 500 Index is 4.6% and the mean is actually 5.2%. Conversely the equivalent numbers for the 36 stocks in the consumer staples sector are 3.8% and 4.6%. The technology stocks in the S&P 500 are actually now more lowly-rated than consumer staples.

The reason why the aforementioned 'narrative' exists is because of the large number of tech stocks which had or still have two or more of the following characteristics — giant market values, little or no revenue or profits, well publicised 2020 or 2021 IPOs, and charismatic CEOs. Probably the best-known investor for these types of stock has been ARK Investment Management, notably in the form of the ARK Innovation ETF. Bloomberg suggests that the forward price-to-earnings ratios for this ETF's top 10 holdings are in seven cases 'N/A', i.e., there are no earnings, and in the other three cases average 53x.

Conversely the price-to-earnings ratio on most of the stocks in our portfolio that could loosely be described as 'tech' — Microsoft, Adobe, Alphabet, Visa, ADP, Intuit, PayPal and Meta — averages 24x, Amazon is the only outlier. It is worth bearing these contrasting valuations in mind when people lump the whole technology sector together.

What did well for us in the first six months of 2022? It is tempting to observe ‘not a lot’ but here are the five biggest positive contributors to performance:

Philip Morris	+0.8%
Novo Nordisk	+0.4%
Brown-Forman	+0.3%
PepsiCo	+0.3%
Waters	+0.1%

Novo Nordisk discovered that a drug it had developed for diabetics was also the world’s first really effective weight loss drug. The potential market for this product, branded Wegovy, is vast. Philip Morris International meanwhile benefited from its low rating, the perceived defensive nature of tobacco and latterly an attractive-looking agreement to purchase Swedish Match to create the undoubted leader in smokeless tobacco products and nicotine pouches. Despite this outperformance, Philip Morris International still ended the quarter as our second most lowly-rated stock. The title for the lowest-rated belongs to Meta Platforms. Meta’s stock now trades on a FCF yield of 8.7%. At this level it is either cheap or a so-called value trap. We will let you know which when we find out, but we are inclined to believe it is the former.

Our portfolio turnover in the first half was 3.2%. Voluntary dealing (dealing not caused by redemptions or subscriptions) cost £392,705 during the half year (0.002% or a fifth of a basis point). The Ongoing Charges Figure for the T Class Accumulation shares was 1.04% and with the cost of all dealing added, the Total Cost of Investment was 1.05%.

The first half of 2022 marked the end, for the time being, of a long period during which the shares in our companies benefited not only from their underlying business performance but also from falling interest rates and thus rising valuations. Not only did this tailwind disappear but a significant headwind materialised in short order in the form of rising interest rates combined with fears about the impact of inflation and a possible recession.

We claim no insight into how far the headwind to valuations caused by rising interest rates will go, but we are confident that the companies in our portfolio will survive and prosper relatively well in such an environment. This has been and will continue to be our primary focus. If we get that right then our Fund will emerge with the intrinsic value of its investments maintained or enhanced. Sooner or later share prices reflect fundamentals, not the other way around.

In inflationary periods, an acronym which is sometimes used to describe the investment options is TINA — There Is No Alternative. It refers to the concept that equities will be the least poorly performing sector in such conditions because of the ability of at least some companies to continue to grow revenues in real terms and generate real returns on capital above the rate of inflation.

Bonds with fixed interest coupons are certainly not the place to be in these conditions. Real estate may provide some safety but it is a notoriously local market with poor liquidity and high frictional trading costs. Commodities have had a day in the sun at the start of this inflationary cycle and this may continue, or not. But there is no inherent return on commodities — no interest coupon, dividends or profits reinvested. Investing in them is pure Greater Fool Theory — you can only make money by selling them to someone willing to pay more than you did. I have no confidence in my ability to accomplish that. All of which may point to the fact that There Is No Alternative to equities even though they have performed poorly so far this year.

However, even if you accept that, it may be tempting to sell equities and go into cash as this may enable you to avoid further falls in the equity market. Timing is of the essence in doing this and if you haven't done it already I think we can safely say you missed the top. Getting the other side of the trade roughly right will almost certainly mean buying back into equities when economic conditions are at their most bleak. This is a skill which few, if any, possess. Meanwhile, time spent in cash whilst waiting is hardly a good bolt hole from inflation.

Finally, even if you accept the logic of the TINA mantra, maybe equities of the sort in our portfolio are still not the best place to be for a while. This is really a subset of the market timing approach: Sell quality equities, buy lowly-rated 'value' stocks and then reverse this when the time is right. I wish you luck if you intend to pursue this approach not least because I am fairly sure how lowly-rated stocks, most of which are heavily cyclical, have low profit margins and returns on capital, will fare in a recession.

We meanwhile will continue to do what we set out to do. Which is to assemble a portfolio of high-quality companies and hold onto them so that their inherent ability to compound in value will determine how we perform over the long term, not the vagaries of the market. I hope to see you on the other side.

Yours sincerely,

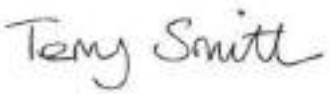

Terry Smith

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Sources: Fundsmith LLP & Bloomberg unless otherwise stated.

Portfolio turnover compares the total share purchases and sales less total creations and liquidations with the average net asset value of the fund.

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The MSCI World Index is a generic portfolio of global equities across all sectors and, as such, is a fair comparison given the Fund is also global and sector agnostic.

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January 2023

Dear Fellow Investor,

This is the thirteenth annual letter to owners of the Fundsmith Equity Fund ('Fund').

Our Fund's performance in 2022 will give credence to those who suffer from triskaidekaphobia.

The table below shows performance figures for the last calendar year and the cumulative and annualised performance since inception on 1st November 2010 and various comparators.

% Total Return	1st Jan to 31st Dec 2022	Inception to 31st Dec 2022		Sortino Ratio
		Cumulative	Annualised	
Fundsmith Equity Fund[1]	-13.8	+478.2	+15.5	0.84
Equities[2]	-7.8	+256.8	+11.0	0.36
UK Bonds[3]	-15.0	+19.8	+1.5	n/a
Cash[4]	+1.4	+7.8	+0.6	n/a

The Fund is not managed with reference to any benchmark, the above comparators are provided for information purposes only.
[1] T Class Accumulation shares, net of fees, priced at noon UK time, source: Bloomberg.
[2] MSCI World Index, £ net, priced at US market close, source: Bloomberg.
[3] Bloomberg/Barclays Bond Indices UK Gov. 5–10 year, source: Bloomberg.
[4] £ Interest Rate, source: Bloomberg.
[5] Sortino ratio is since inception to 31.12.22, 3.5% risk free rate, source: Financial Express Analytics.

The table shows the performance of the T Class Accumulation shares, the most commonly held share class and one in which I am invested, which fell by 13.8% in 2022 and compares with a fall of 7.8% for the MSCI World Index in sterling with dividends reinvested.

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The Fund therefore underperformed this comparator in 2022 but is still the best performer since its inception in November 2010 in the Investment Association Global sector with a return 299 percentage points above the sector average which has delivered just 179.1% over the same timeframe.

Whilst a period of underperformance against the index is never welcome it is nonetheless inevitable. We have consistently warned that no investment strategy will outperform in every reporting period and every type of market condition. So, as much as we may not like it, we can expect some periods of underperformance.

Underperforming the MSCI World Index is one issue, registering a fall in value is another. In 2022 unless you restricted your equity investments to the energy sector you were almost certain to have experienced a drop in value:

Performance of S&P 500 Sectors in 2022	
Energy	+59%
Utilities	-1%
Consumer Staples	-3%
Health Care	-4%
Industrials	-7%
Materials	-14%
Banks	-22%
Software & Services	-27%
Real Estate	-28%
Consumer Discretionary	-38%
Communication Services	-40%

Source: Bloomberg, USD

Why has this happened? We have exited a long period of 'easy money': a period of large fiscal deficits, where government spending significantly exceeds revenues, and low interest rates.

We can probably trace the era of low interest rates back to the so-called Greenspan Put which became evident in the 1990s as low interest rates were utilised as the palliative in periods of market volatility such as the Asian Crisis of 1997 and the Russian default and LTCM collapse in 1998.

As the new millennium arrived so did new crises which seemed to warrant even easier money.

It started with the Dotcom meltdown in 2000 and was followed by the Credit Crunch of 2008–09 which started in the US housing market and quickly became a full-blown international banking crisis. These increasingly severe events seemed to call for even more extreme measures in terms of both fiscal policy and interest rates:

Quantitative Easing ('QE'), so-called 'printing money' in which central banks created money to purchase assets, starting with government debt but eventually ranging into corporate debt and equities. As an aside, quite how it aided the economy of either Japan or Switzerland for their central banks to buy international equities is beyond my grasp. This was combined with low, no (Zero Interest Rate Policy — ZIRP) or even negative interest rates (NIRP). These measures I have collectively christened with the generic term 'easy money'.

Attempts to suppress volatility will only exacerbate it in the long term. If you count the current events, we have now had three economic and financial crises this century and it is still in its first quarter. This would seem to illustrate that attempts to expunge volatility from the financial system are actually producing the opposite of the desired effect. They breach the rule for what you should do if you find yourself in a hole.

This is hardly surprising given that the central banks were aiming at the wrong targets. Central banks were attempting to maintain a benign level of consumer price inflation but ignored asset price inflation caused by their actions. Some also adopted employment targets that were not or should not be part of their remit.

One of the problems of easy money is that it leads to bad capital allocation or investment decisions which are exposed as the tide goes out.

We saw this in Japan in the late 1980s in a bull market when the Emperor's garden was valued more than the state of California and the Tokyo Stock Exchange was on a P/E of about 100. The aftermath has been prolonged and worsened by a penchant for not admitting failure. So-called zombie companies that should have been allowed to fail have been propped up with continued funding and allowed to survive. Sending good money after bad is never a recipe for success. However, before we leap to the conclusion that this is in any way a uniquely Japanese trait let us bear in mind that other than Lehman no other major company was allowed to go bust in 2008, despite it being the largest financial crisis for 75 years.

Japan's bubble was followed by the Dotcom era in which money could be raised for an idea. The resulting meltdown was painful and especially for investors who had bought a business plan rather than a business. It is worth bearing in mind that real businesses survived and prospered. Amazon's stock declined by about 95% during the Dotcom bust. It has since risen about 600 fold to its peak.

Then we had the credit boom and bust when the easy money sucked people into 'investing' in homes, rather than simply living in them, and 'investing' in credit products which had been structured to look like

triple A credits when they were really triple Z. You can't improve the quality or liquidity of an asset by putting it into a structure.

The other problem with the policy of easy money was that it had to end eventually, but not before it had one last hurrah.

There were half-hearted attempts to reverse QE in particular by lowering central banks' bond purchases but when the stock market unsurprisingly reacted badly in the so-called 'taper tantrum' in 2013, these were abandoned.

Then in 2020 came the pandemic and central banks reacted to this by enacting that good old saying 'To a man with a hammer, everything looks like a nail'. They decided that they should double down with their new toy, QE, which seemed to work so well in the Credit Crisis without any nasty side effects, well none that had yet become apparent, and apply an almighty stimulus. This was applied when there was no problem with demand or the banking system. It was just that people were locked up in their homes and unable to spend on bricks & mortar shopping, travel and entertainment and the global supply chain was malfunctioning, leaving consumers with pent-up savings waiting to be spent.

What happened next may be an example of Sod's Corollary to Murphy's Law:

- Murphy's Law: What can go wrong will go wrong.
- Sod's Corollary: Murphy was an optimist.

Sod's Corollary gave us the February 2022 Russian invasion of Ukraine which affected the prices of oil, gas and other minerals, such as nickel, and cereals following the central banks' stimulus.

The net result of the further stimulus and this invasion has been an upsurge in inflation and as a consequence a rapid and painful end to easy money.

This final round of easy money post the pandemic led to all the usual poor investments which people make when they are led to assume that money is endlessly available and costs zero to borrow or raise. We can see the unwinding of these unwise investments, for example, in the collapse of FTX, the cryptocurrency 'exchange' (sic) and the meltdown in the share prices of those tech companies with no profits, cash flows or even revenues.

It is inevitable that when interest rates rise, as they have now to combat inflation, longer-dated bonds fall more than short-dated ones, and so it is with equities with more highly rated shares — which are discounting earnings or cash flow further into the future — suffering

more in the downturn than lowly rated or so-called value stocks. This effect can be seen in the bottom five detractors from the Fund's performance in 2022:

Stock	Attribution
Meta Platforms	-3.3%
PayPal	-2.5%
Microsoft	-1.8%
IDEXX	-1.7%
Amazon	-1.5%

Source: State Street

Four of the five stocks are in what might loosely be termed the Technology sector (although Meta is actually in the MSCI Communication Services sector and MSCI has Amazon as a Consumer Discretionary stock) and at least two — PayPal and IDEXX — started the period with valuations which were particularly vulnerable to the effect of rising rates.

In some cases these share price falls have become more pronounced because of events surrounding the business. Meta has its well-publicised problems with the regulatory and competition authorities and has announced a large spend on developing the so-called metaverse which it changed its name from Facebook to reflect. PayPal seems intent on snatching defeat from the jaws of victory. It has taken a leading position in online payments and parlayed that into a lamentable share price performance. The elements in this would appear to be a disregard for engagement with the customers newly acquired during the pandemic and no obvious attention to or control of costs. This is hardly surprising given the attention devoted to pursuing some clearly over-priced acquisitions. That is what happens when management start to conclude that investments do not need to earn an adequate return.

We are not aware of any major fundamental problems with either IDEXX or Microsoft.

Our highly valued and technology holdings did not fare as poorly as some of the companies which had significant market values but no profits, cash flows or in some cases even revenues. Here is a table which shows those companies in November 2021, roughly the peak of the market:

As at 19th Nov 2021	Zero Revenues	<$100m Revenues	Negative Net Income	Negative Free Cash Flow
Market Cap >$1bn	92	576	1,561	2,606
Market Cap >$5bn	9	42	412	662
Market Cap >$10bn	2	7	204	331

Source: Fundsmith Research/Bloomberg

This may seem cold comfort and to quote an old adage, 'When the police raid the bawdy house even the nice girls get arrested'. But looking back to the example of Amazon over the Dotcom meltdown and its aftermath, it is a lot more comforting to own businesses which are performing well fundamentally when the share price goes down than to be found playing Greater Fool Theory in the shares of a company with no cash flows, profits or even revenues.

For the year the top five contributors to the Fund's performance were:

Stock	Attribution
Novo Nordisk	+2.1%
Philip Morris	+1.1%
PepsiCo	+0.7%
ADP	+0.5%
Mettler-Toledo	+0.4%

Source: State Street

If one word had to be used to describe last year's winners it would be 'defensive'. Two of them are fast-moving consumer goods companies and one is a drug company. However, it is worth pointing out that ADP is actually in the MSCI Technology sector.

Which brings me to another point. You may have read that the Fundsmith Equity Fund is becoming a 'Tech fund' based upon recent purchases: 'Terry Smith tech-buying spree continues with Apple purchase', *Interactive Investor*, November 2022.

Here is the MSCI sector breakdown of the portfolio:

As at 31st December 2022	%
Consumer Staples	33.8
Health Care	26.0
Technology	20.7
Consumer Discretionary	9.4
Communication Services	4.5
Industrials	1.7
Cash	3.9

Source: Fundsmith Research/MSCI GICS® Categories

20.7% of the portfolio is defined as Technology by MSCI. This compares with 23.2% on 31.12.14. I can't see a 'spree'. I am not that keen on relying upon sector classifications to define a business and you may note that 4.5% is in the Communication Services sector. As these are Alphabet (the former Google) and Meta, I regard them as technology stocks and Amazon is classified as a Consumer Discretionary stock, although how this fits Amazon Web Services is difficult to see. But similarly it is worth noting that a number of stocks which are in the MSCI Technology sector and are, or were until

recently, in our portfolio are not in my view primarily technology companies but rather they use technology to deliver differing services, namely:

- ADP — payroll, employee insurance and HR.
- Amadeus — airline and hotel reservations and operations.
- Intuit — tax and accounting services.
- PayPal — payment processing.
- Visa — payment processing.

Moreover, commentators tend to take an all or nothing approach to reporting our holdings — as in the reference to Apple already noted — without any mention of the size of the holding, which is hardly surprising as this is only disclosed semi-annually. But to put this in context, our combined holdings of Alphabet, Amazon, Apple, Adobe and Meta amount to just 9.0% of the portfolio, compared to our holding in Microsoft of 7.6%.

I would therefore suggest that the Fund's exposure to technology is a lot more subtle and nuanced, as well as smaller and more widely spread than the headlines sometimes suggest.

However, as well as the lower valuations caused by higher rates, technology stocks are facing some fundamental headwinds. A slowdown in the growth of tech spending is hardly surprising after the massive growth caused by digitalisation during the pandemic. Moreover, the cyclicality of tech spending and online advertising is probably about to become evident as the economy slows and maybe falls into recession. It may be greater than in the past simply because tech spending has become a much larger proportion of overall corporate and personal spending. However, there may be a silver lining in this cloud (no pun intended) as this pressure on revenue growth may cause some of the tech companies we invest in to stop behaving as though money is free and halt some of the less promising projects outside their core business, such as:

- Alphabet — Its hugely loss-making 'Other Bets'. Lightning does not strike twice. It has a good core online search and advertising business.

- Amazon — It has already withdrawn from food delivery and technical education in India (who knew?). It has a highly successful ecommerce and cloud computing business on which to focus.

- Meta — Stopping or cutting spending on the metaverse? Without that spend we would own a leading communications

and digital advertising business on a single-figure Price/Earnings ratio (P/E).

We continue to apply a simple three step investment strategy:

- Buy good companies
- Don't overpay
- Do nothing

I will review how we are doing against each of those in turn.

As usual we seek to give some insight into the first and most important of these — whether we own good companies — by giving you the following table which shows what Fundsmith Equity Fund would be like if instead of being a fund it was a company and accounted for the stakes which it owns in the portfolio on a 'look-through' basis, and compares this with the market, in this case the FTSE 100 and the S&P 500. This shows you how the portfolio compares with the major indices and how it has evolved over time.

	Fundsmith Equity Fund Portfolio								S&P 500	FTSE 100
Year ended	2015	2016	2017	2018	2019	2020	2021	2022	2022	2022
ROCE	26%	27%	28%	29%	29%	25%	28%	32%	18%	16%
Gross Margin	61%	62%	63%	65%	66%	65%	64%	64%	45%	42%
Operating Margin	25%	26%	26%	28%	27%	23%	26%	28%	18%	18%
Cash Conversion	98%	99%	102%	95%	97%	101%	95%	88%	88%	66%
Interest Cover	16x	17x	17x	17x	16x	16x	23x	20x	10x	11x

Source: Fundsmith LLP/Bloomberg.
ROCE, Gross Margin, Operating Margin and Cash Conversion are the weighted mean of the underlying companies invested in by the Fundsmith Equity Fund and mean for the FTSE 100 and S&P 500 Indices. The FTSE 100 and S&P 500 numbers exclude financial stocks. Interest Cover is median.
2015–2019 ratios are based on last reported fiscal year accounts as of 31st December and for 2020–22 are Trailing Twelve Months and as defined by Bloomberg.
Cash Conversion compares Free Cash Flow per Share with Net Income per Share.

In 2022 returns on capital and profit margins were significantly higher in the portfolio companies than in 2020 and 2021. Gross margins were steady. Importantly all of these metrics remain significantly better than the companies in the main indices (which include our companies). Moreover, if you own shares in companies during a period of inflation it is better to own those with high returns and gross margins.

Consistently high returns on capital are one sign we look for when seeking companies to invest in. Another is a source of growth — high returns are not much use if the business is not able to grow and deploy more capital at these high rates. So how did our companies fare in that respect in 2022? The weighted average free cash flow (the cash the companies generate after paying for everything except the dividend, and our preferred measure) grew by 1% in 2022. This

is the lowest growth rate we have recorded to date in our portfolio and probably says far more about the levelling off in demand in some sectors post the pandemic surge and macro-economic conditions than it does about the long-term growth potential of the businesses. You may recall that the free cash flow for our companies surged 20% in 2021, significantly above the more normal 9% growth in 2019 and 8% in 2020. Moreover, the free cash flow of the S&P 500 fell by 4% last year. Frankly we are pleasantly surprised that there was any growth at all in our portfolio companies, and if 1% growth worries you it may be wise not to read next year's letter.

Cash conversion remains depressed for our portfolio companies but is currently based upon some unusually volatile conditions caused by the pandemic's disruption to supply chains leading to stockouts and subsequent hoarding of stocks by some companies. Cash flow is an acid test of a business but it is also a more volatile measure than profits which are based on accrual accounting and spread some cash flows between periods. We will have to wait a year or two before something approaching normality is restored and we can gauge how well our companies are doing on this measure.

The average year of foundation of our portfolio companies at the year-end was 1922. They are just over a century old collectively.

The second leg of our strategy is about valuation. The weighted average free cash flow ('FCF') yield (the free cash flow generated as a percentage of the market value) of the portfolio at the outset of the year was 2.7% and ended it at 3.2%.

The year-end median FCF yield on the S&P 500 was 3.4%, roughly in line with our portfolio. This is one benefit of the fall in share prices over the period.

Our portfolio consists of companies that are fundamentally a lot better than the average of those in either index and are valued fractionally higher than the average S&P 500 company.

Turning to the third leg of our strategy, which we succinctly describe as 'Do nothing', minimising portfolio turnover remains one of our objectives and this was again achieved with a portfolio turnover of 7.4% during the period, a little higher than usual. It is perhaps more helpful to know that we spent a total of just 0.003% (less than a third of a basis point) of the Fund's average value over the year on voluntary dealing (which excludes dealing costs associated with subscriptions and redemptions as these are involuntary). We sold our stakes in Johnson & Johnson, Starbucks, Kone, Intuit and PayPal and purchased stakes in Mettler-Toledo, Adobe, Otis and Apple. This seems a lot of names for what is not a lot of turnover as in some

cases the size of the holding sold or bought was small. We have held five of our portfolio companies since inception in 2010.

Why is this important? It helps to minimise costs and minimising the costs of investment is a vital contribution to achieving a satisfactory outcome as an investor. Too often investors, commentators and advisers focus on, or in some cases obsess about, the Annual Management Charge ('AMC') or the Ongoing Charges Figure ('OCF'), which includes some costs over and above the AMC, which are charged to the Fund. The OCF for 2022 for the T Class Accumulation shares was 1.04%. The trouble is that the OCF does not include an important element of costs — the costs of dealing. When a fund manager deals by buying or selling, the fund typically incurs the cost of commission paid to a broker, the bid-offer spread on the stocks dealt in and, in some cases, transaction taxes such as stamp duty in the UK. This can add significantly to the costs of a fund, yet it is not included in the OCF.

We provide our own version of this total cost including dealing costs, which we have termed the Total Cost of Investment ('TCI'). For the T Class Accumulation shares in 2022 this amounted to a TCI of 1.05%, including all costs of dealing for flows into and out of the Fund, not just our voluntary dealing. We are pleased that our TCI is just 0.01% (1 basis point) above our OCF when transaction costs are taken into account. However, we would again caution against becoming obsessed with charges to such an extent that you lose focus on the performance of funds. It is worth pointing out that the performance of our Fund tabled at the beginning of this letter is after charging all fees which should surely be the main focus.

In the past we have written about activism and our engagement with companies' management, and this year I want to draw this together with a couple of examples.

Last year I wrote about Unilever and attracted a virtual tsunami of comment for my remarks about Unilever, purpose and Hellmann's mayonnaise. Events soon overtook this commentary insofar as Nelson Peltz's Trian Partners announced that it had bought a stake in Unilever and he was invited to join the board. We are asked to suspend disbelief that this was in no way linked to the subsequent announcement that Alan Jope will be leaving the CEO role. This explanation sounds like it was lifted from the script of *Miracle on 34th Street*.

As I have previously pointed out, our Fund has held Unilever shares since inception and was about the 12th largest shareholder when these events happened. Yet for the first eight years of our existence as a shareholder we did not hear from Unilever. The first contact was when we were asked to vote in favour of moving the headquarters

and listing to the Netherlands. As I remarked at the time, it is not a good way to manage relationships to ignore people until you need their support.

Once contact had been established with Unilever we then tried to make some points about what we saw as problems with the performance of the business and the focus of the management, which were duly ignored. This is a business making a return on capital in the mid to low teens, below the market average, where you could measure annual growth if you could only count to three, and which missed every target it set out when it summarily rejected the Kraft Heinz bid approach. So it's not like there weren't some questions to answer. Then came the near-death experience with the abortive GSK Consumer bid.

I don't know how long Trian held its stake before Mr Peltz was invited to join the board or how big that stake was, but I would guess that they held it for far fewer months than we have held it in terms of years. We have no objection to Mr Peltz's involvement. He at least seems to have the sense to become involved in good businesses which need some improvement, whereas some activists pick on poor businesses and all they can hope to achieve is a better-run bad business. Where we have seen him involved in companies we have owned we have sometimes agreed with and admired his contribution — as in the operational improvements which accompanied his time at Procter & Gamble — and sometimes not — as when he promoted the idea of splitting PepsiCo into separate drinks and snacks businesses.

What I find questionable is that companies mouth platitudes about wanting to attract long-term shareholders yet based on our experience, we tend to get ignored, whereas an activist who has held shares for fewer months than we have held in years gets invited to board meetings.

One example may just represent an outlier. But what about PayPal? We had held PayPal shares since it was spun out from eBay in 2015. We tried to engage with PayPal as we identified, seemingly long before the management, that their lack of engagement with new customers was a problem as was cost control and that their acquisitions were value destroying. In particular, we pointed out that the value destroying acquisitions might be avoided if the management remuneration incentives included some measure of return on capital. A representative of the board kindly told us they would think about that.

Whilst they were allegedly thinking about it Elliott Management bought a stake which led to them being given a board seat and an information sharing agreement.

Please don't misunderstand the criticism I am levelling here. I am not envious. I do not want a seat on the board of Unilever, PayPal or any other listed company. Nor do I want an information sharing agreement. I think our research has been able to identify the problems of PayPal and Unilever better than the management and without any need for access to any unpublished information. In some cases you can determine more from what information is not disclosed. Take Unilever's acquisition record as an example.

Here's a chart covering Unilever's acquisitions in just its Beauty & Wellbeing division over the past eight years.

Unilever Beauty & Wellbeing Acquisitions									
Year	Company	Description	Cost	Comments on Performance in Report & Accounts					
				2016	2017	2018	2019	2020	2021
2015	Dermalogica	Professional grade skin care	N/A	✓	✓	✓	✓	✓	✓
	Murad	Prestige skin care	N/A	✓	X	✓	X	X	X
	Kate Somerville	Prestige skin care	N/A	X	✓	✓	X	X	X
	REN Skincare	Prestige personal care, skin care	N/A	X	X	✓	X	X	✓
	Camay	Soap	N/A	✓	X	X	X	X	X
	Zest	Soap	N/A	✓	X	X	X	X	X
2016	Dollar Shave Club	Subscription shave	N/A	✓	✓	✓	X	X	✓
	Indulekha & Vayodha	Indian hair oil	€45m		X	X	X	X	X
	Blueair	Premium air purifiers	N/A	✓	✓	✓	✓	✓	✓
2017	Living Proof	Prestige US hair care	N/A		✓	✓	✓	X	✓
	Carver Korea	Skincare	€2.27bn		✓	✓	✓	X	X
	Hourglass	Luxury colour cosmetics	N/A			✓	✓	X	✓
	Sundial Brands	Shea Moisture brand	N/A			X	✓	X	✓
	Schmidt's Naturals	US natural deodorant	N/A			✓	✓	X	X
2018	Quala	LatAm beauty, personal care and home care	N/A				X	X	X
	Equilibra	Italian natural skin and hair care	N/A				X	X	X
2019	Garancia	French derma-cosmetics	N/A					X	X
	Tatcha	US Skin care/classical Kyoto rituals	N/A					X	X
	Olly	Vitamins, minerals & supplements (VMS)	N/A					X	✓
	Lenor	Japanese premium skin care	N/A					X	X
2020	Vwash	Indian intimate hygiene	N/A						X
	Liquid I.V	US electrolyte drinks	N/A						✓
	SmartyPants	US VMS	N/A						✓
2021	Welly Health	Playful bandages	N/A						
	Onnit Labs	US holistic wellness and lifestyle	N/A						
	Paula's Choice	US prestige skincare	€1.83bn						
2022	Nutrafol	Baldness	N/A						

Source: Fundsmith Research

A few points are noteworthy:

1. Considering this is Unilever's smallest division outside of ice cream they have been very active. Of course they might say that they are trying to build a wellbeing and beauty business by acquisition, but then all the more reason why we shareholders should know how they are performing.

2. Yet we were only told the cost in just three out of 27 acquisitions. Whilst I am sure Unilever complied with their disclosure obligations, is there some reason why we shareholders can't know how much of our money they spent? (If anyone is thinking of responding 'commercial sensitivity' could you please have the courtesy to check that I don't have

a mouthful of liquid before you say that?). We are aware from press speculation that Dollar Shave Club cost c.$1 billion and it has sunk without trace.

3. The coloured table shows which of these acquisitions were mentioned in subsequent annual reports. It is clearly a minority — only 10 in 2021 and in some years like 2020, just two. We have not heard about the Carver Korea acquisition which cost €2.3bn since 2019 (spoiler alert: purchased from Bain Capital and Goldman Sachs). Now call me cynical if you want but I doubt that mention was omitted because they were all performing embarrassingly well.

4. You can find sources of information other than the company. This chart of Carver Korea's sales revenue from Statista says it all:

Revenue of Carver Korea 2015-2021 (Bln Korean Won)

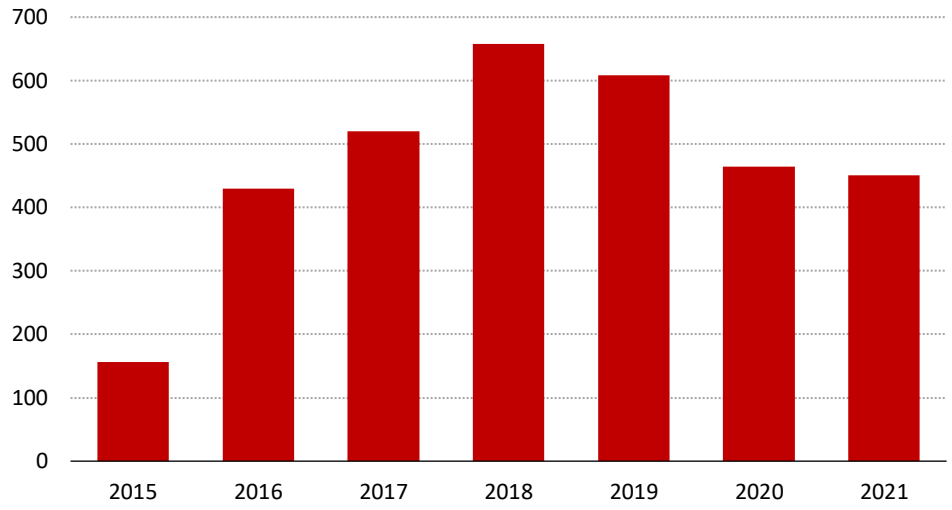

Source: Statista.com

Shouldn't we have some idea how Unilever and its management have performed before they are allowed to do any more acquisitions? Unilever's low return on capital might be a clue.

We do not need an information sharing agreement to reach an obvious conclusion. What I am complaining about is the bipolar response some companies have to long-standing shareholders versus newly arrived 'activists'.

As an investor you might reasonably query why if we had identified the problems at PayPal and Unilever we didn't just sell the shares and avoid any underperformance. One reason is that we try to be long-term shareholders and when we hold shares in what we consider to be a good business, which we think is underperforming its potential, we like to see if we can help to correct that. After all, it's

easier to change the management than to change the business. However, when we are continually ignored there is another even easier option to sell the shares which we turn to when all other remedies fail.

Returning for a moment to Mayonnaisegate, amongst the outpouring of comments last year were a number of apologists for Unilever who were at pains to point out that the Hellmann's brand has been growing revenues well and this was proof that 'purpose' works. Of course there is no control in that experiment; we don't know how well it would have grown without the ~~virtue signalling~~ 'purpose'. It also confuses correlation with cause and effect. There may be a positive correlation between stork sightings and births but that doesn't prove that one causes the other. Maybe Hellmann's would be growing as fast or even faster without its 'purpose'.

To further illustrate the point, this year we are moving on to soap. When I last checked it was for washing. However, apparently that is not the purpose of Lux, the Unilever brand, which apparently is all about 'Inspiring women to rise above everyday sexist judgements and express their beauty and femininity unapologetically'. I am not making this up; you can read it here:

https://www.unilever.com/brands/personal-care/lux/

I will leave you to draw your own conclusions about the utility of this.

One other topic which I want to cover this year is share-based compensation and especially its removal from non-GAAP (Generally Accepted Accounting Principles) profit figures.

Share-based compensation has become an increasingly prominent part of some companies' expenses in recent years, especially among companies in the Technology sector. If we take for example the 75 companies in the S&P Dow Jones Technology Select Sector Index, share-based compensation expense expressed as a percentage of revenue has gone from an average of 2.2% in 2011 to 4.1% in 2021. This may not seem like much of an increase, but keep in mind that during this period revenue for this set of companies had almost quintupled on average.

There is nothing wrong per se with compensating employees with shares. In fact, there is a legitimate reason for doing so: it may help to align the interests of employees with those of shareholders. I want to focus on how share-based compensation is accounted for or, more accurately, how it is not accounted for in companies' non-GAAP earnings figures.

Among the 75 companies in the Technology Select Sector Index mentioned above, 45 of them remove share-based compensation from non-GAAP versions of their earnings per share, operating income, or both — in plain English they remove the amount of the debit for share-based compensation which boosts their profits. That is about $26bn of expenses that have been adjusted out in reporting the 2021 profits in the non-GAAP results of these 45 companies. This amounts to about an average of $600m of share-based compensation for each company which is excluded or added back in reaching their non-GAAP earnings. You will find it as no surprise that all of the companies in the index whose share-based compensation represents greater than 5% of revenue remove share-based compensation from non-GAAP measures.

What are the justifications for removing share-based compensation from measures of income and earnings? A common excuse that companies give for adjusting profits so that the debit for share-based compensation is removed is because it is a non-cash expense. This argument makes no sense. Plenty of income statement items are partially or entirely non-cash. Depreciation is non-cash, but it still reflects the very real cost associated with a company's long-lived assets (although many of the same people who adjust out share-based compensation and many others try to get analysts to focus on EBITDA in order to ignore the inconvenient depreciation and amortisation cost). Deferred income taxes are non-cash but are nevertheless recorded in the P&L account. Parts of revenue can be non-cash as well, but we certainly don't see many companies removing them from their results. As long as accrual accounting is the standard, the 'non-cash' argument simply does not pass muster. If you want to review cash items, then look at the cash flow statement, not an adjusted P&L account.

Other reasons given for excluding share-based compensation include the fact that the calculation of the expense may use valuation methodologies that depend on assumptions and that the values of the securities given to employees as compensation may fluctuate and are outside a company's control.

It is true that the expense associated with stock options provided as compensation is calculated using option pricing models, which rely on assumptions for the risk-free interest rate and share price volatility. But other items on a GAAP income statement make significant use of assumptions and estimates as well. Depreciation expense is calculated based on the estimated useful lives of assets, for example.

It is also true that the share price will fluctuate and is outside of a company's control, but so are many other factors relevant to a

company's operations which can be in the income statement, such as commodity prices which may affect input costs and the value of hedges. The lack of control does not justify their removal from important financial metrics.

Yet another reason proffered for excluding share-based compensation is that it results in double-counting because the shares paid to employees are reflected as both an expense item in the income statement and in the share count that is used as the denominator for per share measures such as EPS.

First of all, it is important to note that this argument applies only to per share metrics such as earnings per share, and hence, it provides no excuse for excluding share-based compensation from measures of gross margin or operating income, which many companies do.

Secondly, by their nature, financial statements have a degree of inter-relation. Many items on the income statement flow back into other parts of the income statement through the balance sheet. If you increase the cash expenses of a company, there will be less cash and/or more debt on the balance sheet. This will in turn affect the income statement by increasing interest expense and/or reducing interest income. Similarly, an increase in share-based compensation expenses will have a secondary impact on the balance sheet in the number of shares outstanding.

We now arrive at a fourth, and perhaps the most nefarious excuse given by companies for removing share-based compensation from their non-GAAP metrics: everybody else does it. This does not make it correct nor is it true. Indeed, it may very well be that the companies that do not adjust their profit numbers from GAAP are put at a disadvantage.

Take the example of Microsoft and Intuit. Microsoft shares are currently being valued at a P/E ratio of 25.0 times the consensus EPS estimate for the fiscal year ending June 2023. Meanwhile, Intuit is being valued at 28.4 times the non-GAAP consensus estimate for the fiscal year ending July 2023. Many investors and analysts may accept that Intuit is trading at a higher multiple given expectations of greater growth potential. However, Intuit removes share-based compensation from their non-GAAP EPS whereas Microsoft does not. Given that Intuit's GAAP EPS guidance for the year ending 31st July 2023 is $6.92–$7.22, its non-GAAP guidance is $13.59–$13.89, and the consensus estimate for 2023 EPS is at $13.69, it seems clear that most sell-side analysts are accepting the company's non-GAAP adjustments, which includes the removal of some $1.8bn of share-based compensation, in their estimates. If we include the impact of share-based compensation in Intuit's 2023 EPS to make a more

apples-to-apples comparison with Microsoft based upon GAAP EPS, Intuit's 2023 EPS would be closer to $9, meaning that the shares would be trading at a multiple of about 43 times. I think investors and analysts may find a premium of 14% for Intuit over Microsoft (28.4 times versus 25.0 times) to be reasonable. I'm not so sure they are fully aware that Intuit shares are actually trading at a premium of 73% if share-based compensation is treated in the same manner between the two companies.

Many investors and analysts, including us, look to cash flow metrics more than accrual profits. Unfortunately, share-based compensation may cause distortions in cash flow metrics as well, even when they follow GAAP. Under GAAP, share-based compensation is added back in the cash flow from operating activities, which in turn is used in the computation of free cash flow.

Some researchers and commentators argue that share-based compensation should be reclassified from the operating activities section to the financing activities section of a cash flow statement for analytical purposes. We agree. After all, the decision to fund compensation to employees with shares rather than cash is a financing decision rather than one pertaining to the operations of a company. As such, a measure of cash flow from operating activities that does not benefit from adding back share-based compensation is likely more reflective of the ongoing cash generation of a company.

If we apply this concept to the case of Intuit, it would imply that the company is not in fact trading at a trailing twelve-month free cash flow yield of 3.5% as it seems. Removing $1.5bn of share-based compensation from the $4.1bn of operating cash flow reported in the cash flow statement would leave Intuit's free cash flow yield much lower, at 2.2%. This example gives a sense of the magnitude of distortion that the accounting for share-based compensation could inflict on free cash flow yields.

However, I suspect the most pernicious effect of adjusting profits to exclude the cost of share-based compensation occurs when the management start to believe their own shtick and mis-allocate capital based upon it. Too often management fail to mention expected returns on capital deployed when they make acquisitions and instead rely on statements about earnings dilution or accretion. We have just been living through an era where interest rates were close to zero. Statements about earnings dilution or accretion from an acquisition versus the alternative of interest income forgone on the cash do not reflect anything useful. In a period of such low rates the only acquisitions which could be dilutive are those where the money was literally shredded. Amazingly there are some of those too.

Once people start relying upon this spurious measure of whether an acquisition represents value based upon earnings dilution or accretion and combine this with using earnings adjusted by adding back the significant cost of share-based compensation, they can make some gross errors. We suspect this may be part of the reason for Intuit's acquisition of the online marketing platform Mailchimp in 2021 for $12 billion, half of it in cash. This represented 12 times Mailchimp's revenues (not its profits, its sales). As a result Intuit's return on capital has fallen from 28% in 2020 to just 11% in 2022 but no doubt it is not dilutive to EPS adjusted by adding back share-based compensation. The Intuit CEO described the Mailchimp acquisition as 'an absolute game changer'. Shareholders must hope he is right and in the way that he meant it.

We have coined a phrase at Fundsmith for this practice of relying upon earnings adjusted to take out the cost of share-based compensation and other real and persistent expenses (such as restructuring costs that keep recurring). Instead of the usual phrase of 'fully diluted earnings per share' being earnings per share diluted by all the shares which a company has agreed to issue through options and so on, we refer to these heavily adjusted EPS measures as 'fully deluded earnings per share'.

Last year in this letter I said I thought we were probably in for an uncomfortably bumpy ride in terms of valuations. We have no idea when the current period of inflation and central bank interest rate rises which caused this prediction to come true will end. It is sometimes said that central bank policy is always either too lax or too tight, it is never exactly right. We need not discuss whether it has been too lax in the past. Presumably at some point it will become too tight and quite probably tip the major economies into recession. This holds few fears for us. Our companies should demonstrate a relatively resilient fundamental performance in such circumstances, and the only type of market which ends in a recession is a bear market.

What we are clear about is that we continue to own a portfolio of good companies. Where the end of the easy money era has exposed any doubts, and there are always doubts, we have acted upon them and/or aired them in this letter.

Our companies are more lowly rated than they were a year ago, now being rated roughly in line with the market. This does not make them cheap and there is no guarantee that they will not become more lowly rated, but our focus is on their fundamental performance, as it should be, because in the long term that will determine the outcome for us as investors.

I will leave you this year with a quote from Winston Churchill: ‘If you are going through hell, keep going’. At Fundsmith we intend to.

Finally, may I wish you a happy New Year and thank you for your continued support for our Fund.

Yours sincerely,

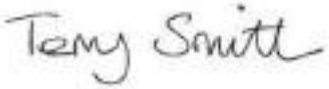

Terry Smith
CEO
Fundsmith LLP

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Sources: Fundsmith LLP & Bloomberg unless otherwise stated.

Data is as at 31st December 2022 unless otherwise stated.

Portfolio turnover is a measure of the fund's trading activity and has been calculated by taking the total share purchases and sales less total creations and liquidations divided by the average net asset value of the fund.

P/E ratios and Free Cash Flow Yields are based on trailing twelve month data and as at 31st December 2022 unless otherwise stated. Percentage change is not calculated if the TTM period contains a net loss.

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CONSTELLATION SOFTWARE INC.

TO OUR SHAREHOLDERS

As you will read in our interim MD&A, and as you can see in the table of appended Performance Metrics, our year over year Revenue growth rate slowed in Q1 2007 to 9%, a level that concerns us. The primary reason for the low growth in Revenue was a 1% contraction in Organic Revenue compared to the same period in 2006. One of the causes of declining Organic Revenue is outside of our control: U.S. housing starts declined approximately 28% in Q1 2007 compared to the same period in 2006, and that seems to have depressed spending amongst our homebuilding, construction and building products related customers. For the most part, we are pleased with how our homebuilding and related businesses have responded to the tougher operating environment. We continue to seek acquisition prospects among software companies that service these currently depressed markets.

In addition to the downturn in the homebuilding and related sectors, I believe that our Initiative program also contributed to the current decline in Organic Revenue Growth. In 2003, we instituted a program to forecast and track many of the larger Initiatives that were embedded in our Core businesses (we define Initiatives as significant Research & Development and Sales and Marketing projects). Our Operating Groups responded by increasing the amount of investment that they categorized as Initiatives (e.g. a 3 fold increase in 2005, and almost another 50% increase during 2006). Initially the associated Organic Revenue growth was strong. Several of the Initiatives became very successful. Others languished, and many of the worst Initiatives were terminated before they consumed significant amounts of capital. Examined on a portfolio basis (and to do that we still have to use forecasts, as payback in our business generally requires a 5-7 year time frame) we believe that our Initiatives have generated reasonable internal rates of return. However the Initiative returns have not been as attractive as those generated by our acquisitions. Accordingly, many of our Operating Groups have shifted more of their efforts to growth by acquisition, and have launched increasingly fewer new Initiatives over the last couple of years.

The response of our Operating Groups is what you'd like to see: Now that they have tools for tracking Initiative IRR's, they are optimizing capital allocation by pursuing better returns in the acquisition market. In principle, there is nothing wrong with this shift. In practice, dramatically fewer Initiatives could eventually lead to a loss of market share. The software business has significant economies of scale, so conceding market share to well run competitors could lead to deteriorating economics. I'm not yet worried about our declining investment in Initiatives because I believe that it will be self-correcting. As we make fewer investments in new Initiatives, I'm confident that our remaining Initiatives will be the pick of the litter, and that they are likely to generate better returns. That will, in turn, encourage the Operating Groups to increase their investment in Initiatives. This cycle will take a while to play out, so I do not expect to see increased new Initiative investment for several quarters or even years.

Organic Growth can also be driven or diminished by acquisitions. When we acquire a rapidly growing company we boost Organic Growth. When we acquire an underperforming company that needs to have some of its unpromising lines of business reduced or removed, Organic Growth suffers. History suggests that we generally grow our acquired businesses, frequently providing additional products for them to sell into their installed base, and bringing our increased scale and best practices to bear upon their business. Occasionally however, the reduction of an acquired business to a profitable Core will leave us with a smaller, but usually more profitable business. Q1 2007 had several instances of declining revenues relating to acquired businesses. These acquisition-related declines in Organic Growth are usually transient, generally reversing after a year or less.

In addition to Organic Growth, we also grow our businesses via acquisition. Since inception Constellation has made 57 acquisitions. Software company acquisitions are becoming increasingly popular amongst both corporate and private equity buyers. As Corum, one of the most active M&A brokers in the software sector put it in their Q1 newsletter:

> "Not since the dot-com peak has a year kicked off with as much merger and acquisition activity and value as in 2007"….. "Last year, 1,726 software companies were acquired, which is the highest number since 2000."

We are currently experiencing intense competition in the large company acquisition market and are increasingly focusing upon those opportunities that are smaller or those that may not have a strong track record of positive cash flow. During 2006, we had a 42% increase in the number of "Non-Disclosure Agreements" that we signed with acquisition prospects, when compared to 2005. These NDA's resulted in a >200% increase in the number of "Letters of Intent" that we submitted. My interpretation of this data is that we were working harder to see and bid on more of the available market. What did this work at the front end of the acquisition process produce? We had the same number of LOI's signed back, and we ended up making only 10 acquisitions in 2006, down from the 12 that we made in the prior year. I think two factors were at play in generating the lower close rate in 2006: first, we went further afield (both geographically and strategically) looking for potential investments and second, we ran into more aggressive competition. The same pattern is apparent when we examine the M&A activity by dollar value instead of number of transactions.

In Q1 2007 we increased our M&A activity still further, almost doubling the number of NDA's that we signed compared with Q1 2006, and achieving a new record high for the value of closed acquisitions in a single quarter. Despite the increased competition for acquisitions, we anticipate that our increased focus and discipline around the M&A process will allow us to generate a record year for acquisitions in '07.

While we do not provide short-term forecasts, our objective is to generate 20% average annual Revenue growth per share between January 1, 2006 and December 31, 2010 (our "Planning Period"). During 2006 we exceeded this objective, generating 23% Revenue growth per share. In Q1, we fell far short of the objective, generating only 4% Revenue growth per share. Much of the shortfall in Q1 2007 was due to the 1% decline in Organic Revenue as compared to Q1 2006. Organic Revenue Growth is an important component of our overall Revenue growth objective, and we believe that it needs to average between 5% and 10% per annum for us to both achieve our objective and to have a healthy company. Management continue to believe that the Company will achieve both the Revenue growth per share objective and the Organic Growth targets for the Planning Period.

As is our practice, we have inserted below a table containing our quarterly Performance Metrics. In addition to the Organic Net Revenue Growth discussed above, the metrics that struck me were:

<u>ROIC (Annualized)</u> – 20%. We believe that this is an acceptable level, but would prefer to see higher levels if the low Organic Net Revenue Growth persisted.

<u>Net Maintenance Growth (Y/Y)</u> – 20%. We believe that (adjusted for cash and debt) maintenance revenues are the best indicator of Intrinsic Value. 20% is an acceptable increase, but any further slippage could be cause for concern.

	Q1 2005	Q2 2005	Q3 2005	Q4 2005	Q1 2006	Q2 2006	Q3 2006	Q4 2006	Q1 2007
	(US$ millions, except percentages)								
Revenue	37.5	40.7	42.6	44.6	51.2	52.2	53.8	53.5	55.9
Net Income / (Loss)	1.1	(3.5)	2.1	0.8	(8.7)	1.3	2.3	3.8	2.6
Net Revenue	34.5	37.0	39.0	39.8	46.0	47.3	48.4	48.6	50.7
Net Maintenance Revenue	19.3	20.7	21.7	23.0	26.0	26.9	28.1	29.6	31.2
Adjusted Net Income	3.8	4.1	5.2	4.1	5.1	5.1	6.8	9.0	7.0
Average Invested Capital	96	100	105	109	114	119	125	135	143
Net Revenue Growth (Y/Y)	62%	51%	47%	35%	33%	28%	24%	22%	10%
Net Maintenance Growth (Y/Y)	72%	57%	48%	52%	35%	30%	30%	29%	20%
Tangible Net Assets / Net Revenue	(76%)	(69%)	(68%)	(86%)	(63%)	(63%)	(75%)	(91%)	(88%)
Organic Net Revenue Growth (Y/Y)	22%	18%	22%	13%	14%	12%	5%	3%	-1%
ROIC (Annualized)	16%	16%	20%	15%	18%	17%	22%	27%	20%
ROIC + Organic Net Revenue Growth	38%	34%	42%	28%	32%	29%	26%	30%	19%

N.B. Due to an error, the historical figures included in our report to shareholders for the year ended December 31, 2006 for the Tangible Net Assets / Net Revenue metric for the periods Q2 2005 through Q4 2006 were incorrectly reported as (71%), (67%), (66%), (57%), (55%), (54%), and (54%), respectively. The correct figures have been included in the table above.

I encourage you to study the Performance Metrics, the attrition data that we presented in the annual report, and the M&A activity data mentioned above. Don't hesitate to pose any questions that you may have either on our quarterly conference call, or during the question period following our Annual General Meeting.

Mark Leonard
President
May 8, 2007

Performance Metrics Glossary

"Net Revenue" means Revenue for GAAP purposes less third party and flow-through expenses. We use Net Revenue since it captures 100% of the license, maintenance and services revenues associated with Constellation's own products, but only includes the margin on our lower value-added revenues such as commodity hardware or third party software.

"Net Maintenance Revenue" is derived from GAAP Maintenance Revenue by subtracting third party maintenance costs. We believe that Net Maintenance Revenue is one of the best indicators of the intrinsic value of a software company and that the operating profitability of a low growth software business should correlate tightly to Net Maintenance Revenues.

"Adjusted Net Income" is derived by adjusting GAAP net income for the non-cash amortization of intangibles and charges related to appreciation in common shares eligible for redemption (a charge that we no longer incur now that Constellation's common shares are publicly traded). We use Adjusted Net Income because it is generally a better measure of cash flow than GAAP net income and it is closely aligned with the calculation of net income we use for bonus purposes.

"Average Invested Capital" is based on the Company's estimate of the amount of money that our shareholders had invested in Constellation. Subsequent to that estimate, each period we have kept a running tally, adding Adjusted Net Income, subtracting any dividends, adding any amounts related to share issuances and making some small adjustments, including adjustments relating to our use of certain incentive programs and the amortization of impaired intangibles.

"Tangible Net Assets / Net Revenue" provides a measure of our Tangible Net Assets as a proportion of Net Revenue. Tangible Net Assets is calculated by taking Total Assets for GAAP purposes, and subtracting (i) Intangible assets, (ii) cash, and (iii) all customer, trade and government liabilities that do not bear a coupon.

"ROIC (Annualized)" represents a ratio of Adjusted Net Income to Average Invested Capital.

"ROIC + Organic Net Revenue Growth" provides a historical measure of the effectiveness of our capital allocation.

Forward Looking Statements

Certain statements herein may be "forward looking" statements that involve known and unknown risks, uncertainties and other factors that may cause the actual results, performance or achievements of Constellation or the industry to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. These statements reflect current assumptions and expectations regarding future events and operating performance and speak only as of the date hereof. Forward looking statements involve significant risks and uncertainties, should not be read as guarantees of future performance or results, and will not necessarily be accurate indications of whether or not such results will be achieved. A number of factors could cause actual results to vary significantly from the results discussed in the forward looking statements. These forward looking statements are made as of the date hereof and Constellation assumes no obligation to update any forward looking statements to reflect new events or circumstances.

Non-GAAP Measures

Net Revenue, Net Maintenance Revenue, Adjusted Net Income and Organic Net Revenue Growth are not recognized measures under GAAP and, accordingly, shareholders are cautioned that Net Revenue, Net Maintenance Revenue, Adjusted Net Income and Organic Net Revenue Growth should not be construed as alternatives to revenue or net income determined in accordance with GAAP as an indicator of the

financial performance of the Company or as a measure of the Company's liquidity and cash flows. The Company's method of calculating Net Revenue, Net Maintenance Revenue, Adjusted Net Income and Organic Net Revenue Growth may differ from other issuers and, accordingly, may not be comparable to similar measures presented by other issuers.

CONSTELLATION SOFTWARE INC.

TO OUR SHAREHOLDERS

Q2 saw an improvement in our revenue growth rate: Organic Net Revenue growth in Q2 compared to the same period last year, recovered to 0.5%, and acquisitions accounted for the remaining 15% of year over year Net Revenue growth. Our homebuilding and building products related businesses experienced Organic Net Revenue declines. A turnaround in their growth prospects is not yet evident. Organic Net Revenue growth in a number of our other businesses more than offset those declines.

Constellation has an inherently resilient business. During Q2 Net Maintenance Revenue was $33.3 million, an increase of 24% from $26.9 million during the same period last year. Net Maintenance grew as a percent of Net Revenues, from 57% to 61%. Constellation has very low attrition rates and good margins associated with this revenue stream. We focus on growing Maintenance revenue because we believe that it is less volatile and more profitable than Professional Service and License revenues.

Constellation's resilience is bolstered further by an employee compensation plan that insulates the company if performance lags, and rewards employees when the business is experiencing both high profits and rapid growth. Accrued bonuses (as a percentage of Net Revenues) in Q2 were 2% lower than in the comparable period last year. This accounted for a large portion of the 5% year over year increase in the EBITDA/Net Revenue margin ("EBITDA Margin") during Q2.

Much of the remaining increase in the Q2 EBITDA Margin was due to the decline in Research & Development and Sales & Marketing ("RDSM") spending as a percentage of Net Revenues (29% in Q2 vs 32% in the prior comparable period). Is this decline in RDSM and the associated increase in EBITDA Margin good for long-term shareholders? Historically, a significant portion of RDSM expense has been invested in new Initiatives. We began tracking the returns from our Initiatives in 2004. Some of the Initiatives were not economic. We sought to improve our returns by culling poor Initiatives, and nurturing those that remained. My fear is that we over-reacted, causing a dearth of new Initiatives. Our challenge is to strike the right balance between Organic Revenue growth and profitability. My current preference would be to see a higher level of investment in attractive Initiatives. If we are successful at rebuilding our portfolio of Initiatives and continue to make acquisitions at the current rate, I anticipate that our EBITDA margins will trend down, but that our Organic growth will improve.

Inserted below is the table of Constellation performance metrics. In addition to the Organic growth, acquired growth, and Net Maintenance Revenue growth discussed above, the metrics that struck me this quarter were:

<u>ROIC (Annualized)</u> – 24%. This was a nice improvement from Q1, and was largely due to the expanding EBITDA Margin.

<u>Tangible Net Assets ("TNA")/ Net Revenues</u> – (66)%. This was not a sterling performance. We pride ourselves in running negative TNA in our businesses. At minus 66% of Net Revenues, this quarter is amoung the highest levels of TNA that we have seen in the last 10 quarters. Some of the slippage stemmed from the way that our VCG investment is carried in our accounts. Some of the problem is poor management on our part. We are raising awareness of the slippage throughout the Company and are working to reduce it.

	Q3 2005	Q4 2005	Q1 2006	Q2 2006	Q3 2006	Q4 2006	Q1 2007	Q2 2007
($ millions, except percentages)								
Revenue	42.6	44.6	51.2	52.2	53.8	53.5	55.9	60.5
Net Income / (Loss)	2.1	0.8	(8.7)	1.3	2.3	3.8	2.6	3.5
Net Revenue	39.0	39.8	46.0	47.3	48.4	48.6	50.7	54.9
Net Maintenance Revenue	21.7	23.0	26.0	26.9	28.1	29.6	31.2	33.3
Adjusted Net Income	5.2	4.1	5.1	5.1	6.8	9.0	7.0	8.8
Average Invested Capital	105	109	114	119	125	135	143	149
Net Revenue Growth (Y/Y)	47%	35%	33%	28%	24%	22%	10%	16%
Net Maintenance Growth (Y/Y)	48%	52%	35%	30%	30%	29%	20%	24%
Tangible Net Assets / Net Revenue	-68%	-86%	-63%	-63%	-75%	-91%	-88%	-66%
Organic Net Revenue Growth (Y/Y)	22%	13%	14%	12%	5%	3%	-1%	0%
ROIC (Annualized)	20%	15%	18%	17%	22%	27%	20%	24%
ROIC + Organic Net Revenue Growth	42%	28%	32%	29%	26%	30%	19%	24%

We made two small acquisitions in the second quarter, as well as a "strategic investment" in VCG Inc., a supplier of staffing and recruiting software solutions. Our preference is to acquire businesses in their entirety, and to own them forever. Occasionally, we have the opportunity to buy a piece of a good business with the prospect of eventually acquiring the rest. While that is by no means guaranteed in the case of VCG, we welcome the opportunity to get to know the business and its managers better, and hope that we will be able to increase our ownership over time.

We have an objective of generating average annual revenue growth per share and average annual EBITDA growth per share of at least 20% for the five year period ending December 31, 2010. I recently ran a screen of public companies with in excess of $50 million in revenues that met these criteria for the last 5 year period. I discovered that less than 1% of companies qualified. Picking through that list and pulling out anomalies, I was left with an even more exclusive list. We have set ourselves a very high bar.

Constellation experienced only 11% revenue growth per share during the first half of 2007. However, due to our strong revenue growth per share performance in 2006 (25%) and our continued optimism regarding acquired growth, we still believe that our five year revenue growth objective is achievable. Our performance to date against our EBITDA growth per share objective has exceeded our expectations. We continue to believe that we will be able to meet or exceed the EBITDA growth objective.

Mark Leonard
President

Performance Metrics Glossary

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"Net Maintenance Revenue" is derived from GAAP Maintenance Revenue by subtracting third party maintenance costs. We believe that Net Maintenance Revenue is one of the best indicators of the intrinsic value of a software company and that the operating profitability of a low growth software business should correlate tightly to Net Maintenance Revenues.

"Adjusted Net Income" is derived by adjusting GAAP net income for the non-cash amortization of intangibles and charges related to appreciation in common shares eligible for redemption (a charge that we no longer incur now that Constellation's common shares are publicly traded). We use Adjusted Net Income because it is generally a better measure of cash flow than GAAP net income and it is closely aligned with the calculation of net income we use for bonus purposes.

"Average Invested Capital" is based on the Company's estimate of the amount of money that our shareholders had invested in Constellation. Subsequent to that estimate, each period we have kept a running tally, adding Adjusted Net Income, subtracting any dividends, adding any amounts related to share issuances and making some small adjustments, including adjustments relating to our use of certain incentive programs and the amortization of impaired intangibles.

"Tangible Net Assets / Net Revenue" provides a measure of our Tangible Net Assets as a proportion of Net Revenue. Tangible Net Assets is calculated by taking Total Assets for GAAP purposes, and subtracting (i) Intangible assets, (ii) cash, and (iii) all customer, trade and government liabilities that do not bear a coupon.

"ROIC (Annualized)" represents a ratio of Adjusted Net Income to Average Invested Capital.

"ROIC + Organic Net Revenue Growth" provides a historical measure of the effectiveness of our capital allocation.

Forward Looking Statements

Certain statements herein may be "forward looking" statements that involve known and unknown risks, uncertainties and other factors that may cause the actual results, performance or achievements of Constellation or the industry to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. These statements reflect current assumptions and expectations regarding future events and operating performance and speak only as of the date hereof. Forward looking statements involve significant risks and uncertainties, should not be read as guarantees of future performance or results, and will not necessarily be accurate indications of whether or not such results will be achieved. A number of factors could cause actual results to vary significantly from the results discussed in the forward looking statements. These forward looking statements are made as of the date hereof and Constellation assumes no obligation to update any forward looking statements to reflect new events or circumstances.

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Company's method of calculating Net Revenue, Net Maintenance Revenue, Adjusted Net Income and Organic Net Revenue Growth may differ from other issuers and, accordingly, may not be comparable to similar measures presented by other issuers.

CONSTELLATION SOFTWARE INC.

TO OUR SHAREHOLDERS

Net Revenue growth for Q3 2007 was 14%. This is short of our 20% growth objective for the 2006 to 2010 period. Despite having started the period well, with 4 quarters of Net Revenue growth in excess of 20%, we have fallen short of our objective for the last 3 quarters. The primary culprit has been Organic Net Revenue growth. During Q3 2007 our Organic Net Revenue growth rate improved: it increased from -1% in Q1, to 0% in Q2, and to 2% in Q3. While Organic growth appears to be recovering, it is not yet in the 5% to10% range that we are targeting. Our homebuilding software businesses continued to experienced Organic Net Revenue declines. A recovery in their organic growth prospects is not imminent. We are impressed, however, with the way that the homebuilding team is managing their way through difficult times, and we will invest more capital with this team and in this vertical if good opportunities can be found. Our Government sector companies also had low Organic Net Revenue growth during the quarter. The reasons were several (and are discussed in some more detail in the MD&A), but appear to me to primarily be execution issues, not sector specific issues. We still believe that the Government sector business will eventually recover into the 5% to 10% organic growth rate range.

We have publicly reiterated our revenue growth objective each quarter, and we have a bonus plan that pays for growth. Those factors create a fierce temptation to stretch a bit and make some acquisitions that aren't quite up to par. Counterbalancing hubris and greed, we have a good board and many long-term oriented managers. I believe that we have the judgment to maintain our investment discipline, and the humility to adjust our growth objectives downwards if we don't think that they are achievable. I'm not yet ready to concede that our Net Revenue growth objective is not achievable, but if we have a couple of more quarters of sub-20% growth, achieving the objective will become very difficult.

We have fared much better with our EBITDA growth objective, far exceeding the minimum 20% year over year growth rate in the seven quarters to date. I believe Adjusted Net Income per share is a more useful measure of profitability growth. Quarterly Adjusted Net Income has grown an average of 49% (year over year comparisons) during the last 7 quarters, and we have issued no new shares. This rate of growth in Adjusted Net Income per share is not sustainable, particularly given our exposure to the increasing Canadian dollar, but the performance has been remarkable.

During Q3 2007, Net Maintenance Revenue was $34.5 million, an increase of 23% from $28.1 million during the same period last year. Those of you who follow our company closely know that we feel (assuming our cash & debt positions are stable), that Net Maintenance growth is a good proxy for the growth in Constellation's intrinsic value.

Another performance benchmark that we look to, is the sum of ROIC and Organic Net Revenue Growth ("ROIC+OGr"). We believe that long term shareholders will generate a return on their Constellation shares that cannot exceed the sum of long term ROIC plus Organic Net Revenue Growth. We align compensation with this belief, basing our corporate bonus plan upon ROIC and Net Revenue Growth. For Q3, ROIC+OGr was 24%, a respectable number, but not up to the 30% that we have averaged over the last 11 quarters. Achieving even 24% ROIC+OGr is non-trivial. We believe that less than 10% of public companies have been able to achieve this level of performance for an extended period.

Inserted below is a table of Constellation's performance metrics. We've added a new metric to the table - Adjusted Net Income Growth. As discussed, we believe that Adjusted Net Income Growth is a better proxy for the growth in profitability that accrues to shareholders, than EBITDA growth, since it also incorporates foreign exchange, tax and debt costs.

	Q3 2005	Q4 2005	Q1 2006	Q2 2006	Q3 2006	Q4 2006	Q1 2007	Q2 2007	Q3 2007
	($ millions, except percentages)								
Revenue	42.6	44.6	51.2	52.2	53.8	53.5	55.9	60.5	60.6
Net Income / (Loss)	2.1	0.8	(8.7)	1.3	2.3	3.8	2.6	3.5	3.3
Net Revenue	39.0	39.8	46.0	47.3	48.4	48.6	50.7	54.9	55.3
Net Maintenance Revenue	21.7	23.0	26.0	26.9	28.1	29.6	31.2	33.3	34.5
Adjusted Net Income	5.2	4.1	5.1	5.1	6.8	9.0	7.0	8.8	8.6
Average Invested Capital	105	109	114	119	125	135	143	149	158
Net Revenue Growth (Y/Y)	47%	35%	33%	28%	24%	22%	10%	16%	14%
Organic Net Revenue Growth (Y/Y)	22%	13%	14%	12%	5%	3%	-1%	0%	2%
Net Maintenance Growth (Y/Y)	48%	52%	35%	30%	30%	29%	20%	24%	23%
Adjusted Net Income Growth (Y/Y)			34%	25%	30%	117%	38%	72%	27%
Tangible Net Assets / Net Revenue	-68%	-86%	-63%	-63%	-75%	-91%	-88%	-66%	-75%
ROIC (Annualized)	20%	15%	18%	17%	22%	27%	20%	24%	22%
ROIC + Organic Net Revenue Growth	42%	28%	32%	29%	26%	30%	19%	24%	24%

During the quarter we engaged in an attempt to help a shareholder sell one million of their Constellation shares. We spent money on lawyers and accountants, and chewed up management time, but didn't manage to complete the offering. Our stock priced dropped by more than 10% after we announced the offering, but has since recovered somewhat. I believe that the intrinsic value of the business continued to increase at an attractive pace, despite the volatility in the stock price.

One of the useful things that we discovered during the marketing of the secondary offering, was that many of our existing shareholders wanted to speak with us. As we have mentioned previously, we would be pleased to meet with any Constellation shareholder at our offices. Please call me or John Billowits, our Chief Financial Officer, if you would like to arrange an appointment.

Mark Leonard
President

Performance Metrics Glossary

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CONSTELLATION SOFTWARE INC.

TO OUR SHAREHOLDERS

Net Revenue growth in Q4 2007 was 24% compared with the same period last year. This was a welcome increase after three consecutive quarters of sub-20% growth. While acquisitions played a huge part in our Net Revenue improvement, Organic growth also improved to 3% for the quarter. As you can see in the Table on the next page, Organic Net Revenue growth bottomed out in Q1 2007, and has been gradually increasing since then. During the quarter, the Organic growth varied dramatically between our private sector (-2%) and public sector (+7%) segments.

The conditions for our housing, building products, and construction related software businesses were the worst that we have experienced since we entered these markets. We see no imminent turnaround in view. While these businesses aren't making as much money as during the prior year, they won customers at the expense of their competitors during 2007, and are bolstering their portfolio of add-on products. We continue to be confident in their long-term prospects.

Our public sector segment had a great quarter, with 28% Net Revenue Growth (of which 7% was Organic), and a handsome return on Invested Capital (25%). The public sector segment now constitutes approximately two thirds of our invested capital and revenues.

Net Maintenance revenue was a record $37.8 million during the quarter, up 28% from the comparable period in 2006. We have the preliminary data in from our annual attrition survey, and we were pleased that over half of the growth in Maintenance revenue was Organic last year. The details of the attrition survey will be in our annual report.

EBITA and EBITDA were down slightly in Q4 vs Q3. Despite that, they both saw significant growth (29% and 26% respectively) vs the same period last year. EBITA margin as a percentage of Net Revenues dropped to 16% in Q4 vs 19% in Q3. Factoring in how our bonus plan works, I believe that a 15% EBITA margin is a more realistic objective if we are generating 20% plus Net Revenue growth.

Our favourite single metric for measuring our corporate performance is the sum of ROIC and Organic Net Revenue Growth ("ROIC+OGr"). For Q4, ROIC+OGr was 25%.

Inserted below is a table of Constellation's performance metrics. We've modified one of the metrics slightly – Tangible Net Assets / Net Revenues. Upon reflection, we decided that non-coupon carrying holdbacks (a form of acquisition financing even though they carry no explicit coupon) and Future Income Tax Assets (an intangible by any other name) were not appropriate to include in the Tangible Net Assets calculation. The table uses the new formula for all of the prior periods. While our performance with Tangible Net Assets continued to be acceptable, we could have done a better job of managing cash (which is excluded from the TNA / Net Revenues ratio) during the quarter. We believe that we had an excess of approximately $10 million of float in our operating entities during Q4. We have modified some incentives and encouraged the operating groups to send more of their cash to head office.

One of the areas where generally accepted accounting principles ("GAAP") do a poor job of reflecting economic reality, is with goodwill and intangibles accounting. As managers we are at least partly to blame in that we tend to ignore these "expenses", focusing on EBITA or EBITDA or "Adjusted" Net Income (which excludes Amortisation). The implicit assumption when you ignore Amortisation, is that the economic life of the asset is perpetual. In many instances (for our business) that assumption is correct. We are constantly "renovating" our software, adding to and replacing portions of it, and we provide the maintained product to our clients under perpetual support programs that we generally term "Software for Life". Some of our products (and markets) won't be as durable, and will gradually start to lose economic viability. I don't think GAAP comes anywhere close to reflecting this spectrum and timing of outcomes. We do, however, have a couple of tools that we use in-house that can highlight the businesses that are

aging vs. those that continue to be revitalised. One crude indicator is a quarterly IRR calculation that we do on all acquisitions that we completed since 2004. IRR by its very nature requires forecasts, and hence is going to have subjectivity. Nevertheless, we try to beat the unwarranted optimism out of the forecasts, and as time passes, we can increasingly cross-reference history with forecasts. Right now, we only have one of those acquisitions (purchase price $1.2 million) that shows a less than 10% after tax IRR on the original investment, and one other (purchase price <$1 million), with an IRR between 10% and 20% after tax. All others exceed a 20% IRR.

The other mechanism that we use to potentially spot the "aging" assets is attrition. As I mentioned before we do a detailed review of attrition each year in the annual report, and in the upcoming one, we'll try to give you some more comfort regarding the robustness of our portfolio of intangible economic assets.

I have no easy fix for GAAP, but we will try to highlight "impairments" as they become apparent, even if they have already been written off for GAAP purposes.

	Q4 2005	Q1 2006	Q2 2006	Q3 2006	Q4 2006	Q1 2007	Q2 2007	Q3 2007	Q4 2007
($ millions, except percentages)									
Revenue	44.6	51.2	52.2	53.8	53.5	55.9	60.5	60.6	66.1
Net Income / (Loss)	0.8	(8.7)	1.3	2.3	3.8	2.6	3.5	3.3	1.6
Net Revenue	39.8	46.0	47.3	48.4	48.6	50.7	54.9	55.3	60.2
Net Maintenance Revenue	23.0	26.0	26.9	28.1	29.6	31.2	33.3	34.5	37.8
Adjusted Net Income	4.1	5.1	5.1	6.8	9.0	7.0	8.8	8.6	9.1
Average Invested Capital	109	114	119	125	135	143	149	158	167
Net Revenue Growth (Y/Y)	35%	33%	28%	24%	22%	10%	16%	14%	24%
Organic Net Revenue Growth (Y/Y)	13%	14%	12%	5%	3%	-1%	0%	2%	3%
Net Maintenance Growth (Y/Y)	52%	35%	30%	30%	29%	20%	24%	23%	28%
Adjusted Net Income Growth (Y/Y)		34%	25%	30%	117%	38%	72%	27%	34%
Tangible Net Assets / Net Revenue (1)	-73%	-52%	-51%	-59%	-73%	-57%	-45%	-53%	-74%
ROIC (Annualized)	15%	18%	17%	22%	27%	20%	24%	22%	22%
ROIC + Organic Net Revenue Growth	28%	32%	29%	26%	30%	19%	24%	24%	25%

(1) Historical figures restated to comply with revised definition.

Recently there was a report of a massive (>30%) short position in our shares. Initially I was more amused than annoyed, thinking that an error had been made in the short report that would soon be corrected. Nevertheless, I touched base with our major shareholders, who told me that they knew nothing of such a short, and I did some math – soon determining that the reported short position exceeded the number of shares that had traded in our entire history as a public company. We probed some more, and found out that the short was reportedly due to a large off-exchange trade that failed to complete. We still are not to the bottom of the issue, but will provide a press release when we have more information.

On a more positive note, we are about to pay an $0.18 per share dividend, a 20% increase from the $0.15 per share paid last year.

The employee stock purchases for the Bonus program will commence in April. The anticipated volume of purchases will be approximately the same ($4.4 million) as last year, and may extend over several months.

When we took Constellation public we communicated management's 5 year performance objectives for the company: i.e. to exceed 20% average annual Net Revenue and EBITDA growth per share for the period January 1, 2006 to December 31, 2010. During 2007, Net Revenues grew 16%, after having grown 27% in the prior year. 2007 saw wonderful but unsustainable EBITDA growth of 33%, after a terrific 31% growth year in 2006. With the first two years of the five year objectives under our belt, we continue to believe that the 5 year objectives are going to be challenging, but achievable.

Mark Leonard
President
March 5, 2008

Performance Metrics Glossary

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"Tangible Net Assets / Quarterly Net Revenue" provides a measure of our Tangible Net Assets as a proportion of Quarterly Net Revenue. Tangible Net Assets is calculated by taking Total Assets for GAAP purposes, and subtracting (i) intangible assets and goodwill, (ii) cash and short term investments, (iii) future income tax assets, (iv) all customer, trade and government liabilities that do not bear a coupon, excluding future income tax liabilities and acquisition holdbacks.

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CONSTELLATION SOFTWARE INC.

TO OUR SHAREHOLDERS

Q1 2008 benefited from a very weak comparable Q1 in 2007. Revenue increased 32%, Organic Net Revenue growth was 6%, Net Maintenance growth was 34%, and Adjusted Net Income growth was 62%. On a sequential basis (Q4 2007 vs Q1 2008) growth was more modest but still encouraging (revenue increased 11% and Adjusted Net Income increased 19%). Please note that we have changed the definition of Adjusted Net Income (see MD&A) in a way that has reduced the Adjusted Net Income for this quarter by $1.3 million vs what it would have been using the former definition. We believe the current definition provides a closer approximation of after tax cash profits.

Organic growth continued to improve despite deteriorating performance in our building related verticals. This was the fourth consecutive quarter of improving Organic Net Revenue growth. A table containing our quarterly Performance Metrics is appended. Our favourite single metric for measuring shareholder returns combines profitability and growth (ROIC + Organic Net Revenue growth). The combined metric was 32% (annualised) in Q1, a very handsome return for a business with such a low Tangible Net Asset ("TNA") requirement. TNA/Net Revenue remained stable at -58% (-57% in Q1 of 2007). We were disappointed that we did not see more improvement in this metric, despite considerable efforts throughout the year. Building related verticals are exhibiting longer receivables, and some long-dated receivables that came along with recent acquisitions (against which we have provisions in the acquisition agreements, should they prove uncollectable) are the primary culprits.

We completed 3 acquisitions in Q1, but only a modest ($2.7 million) amount of capital was invested. Shortly after the end of the quarter, 3 further acquisitions were made for a total net cash investment of $11.4 million. This continues to be one of the best acquisition markets that we have seen in many years. In 2007 we signed 50% more Non Disclosure Agreements than we signed in 2006. These resulted in a 52% increase in the value of Letters of Intent that we issued, and a 65% increase in the value of the Letters of Intent that were signed back to us. 2008 promises to be an equally busy year. As you may have seen in our recent press release, we have increased our revolving line of credit to $105 million, so that we are in a position to take advantage of attractive acquisition opportunities when they are available.

I am often asked why Constellation takes minority interests in other public software companies. The answer is simple (value!), but it can be complicated by our investment horizon and by our requirement that the company have competent ownership.

Constellation's objective is to be a perpetual owner of inherently attractive software businesses. Part of a perpetual owner's job, is to make sure that energetic, intelligent and ethical general managers ("GM") are running their businesses and that the GM's are incented to enhance shareholder value over the very long term. It is trivial for an experienced GM to run a software company to generate high profitability and shrinking revenues. Far more challenging, is generating reasonable short term profits while continuing to grow revenues, in an industry where investment cycles often exceed 10 years. Understanding a GM's performance as they make these long term trade-offs is the most difficult part of a perpetual owner's job.

We have bought more than 70 private software businesses outright. On ten occasions, however, we have also participated in the purchase of significant minority positions in public software businesses. Usually these minority interests were purchased for less than their intrinsic value, and for far less per share than we would have had to pay for the entire business. While these purchases tend to be at the

"value" end of our investment spectrum, they often carry incremental risk because we lack access to information concerning the long term trade-offs that the businesses are making. Even excellent managers of public companies are initially uncomfortable allowing us to join their boards to get access to this information, suspecting us of dire motives or a short-term orientation. We have the same objective when we buy a piece of a business as when we buy 100%, i.e. we want to be a great perpetual owner of an inherently attractive asset. If we are allowed to join a public company's board, we offer to sign an agreement that will limit our ability to make an unsolicited take-over bid. This allows existing long-term shareholders of our public investees to continue to enjoy the benefits of ownership. For shareholders with similar objectives to ours, we believe that we are an exceptional co-investor.

When boards reject our request for representation, we may resort to "shareholder democracy", i.e. we may approach other shareholders to request that they support our quest for a board seat. Only as a last resort will we make an unsolicited bid for a company.

Our financial objective is to generate in excess of 20% average annual revenue and EBITDA growth per share for the period January 1, 2006 through December 31, 2010. We continue to believe that these objectives are attainable.

Mark Leonard
President
Constellation Software Inc.

May 7th, 2008

	Q1 2006	Q2 2006	Q3 2006	Q4 2006	Q1 2007	Q2 2007	Q3 2007	Q4 2007	Q1 2008
($ millions, except percentages)									
Revenue	51.2	52.2	53.8	53.5	55.9	60.5	60.6	66.1	73.6
Net Income / (Loss)	(8.7)	1.3	2.3	3.8	2.6	3.5	3.3	1.6	4.3
Net Revenue	46.0	47.3	48.4	48.6	50.7	54.9	55.3	60.2	66.6
Net Maintenance Revenue	26.0	26.9	28.1	29.6	31.2	33.3	34.5	37.8	41.7
Adjusted Net Income (1)	4.8	4.4	7.5	9.0	6.9	8.4	8.5	9.4	11.1
Average Invested Capital	114	119	125	135	143	149	158	167	176
Net Revenue Growth (Y/Y)	33%	28%	24%	22%	10%	16%	14%	24%	31%
Organic Net Revenue Growth (Y/Y)	14%	12%	5%	3%	-1%	0%	2%	3%	6%
Net Maintenance Growth (Y/Y)	35%	30%	30%	29%	20%	24%	23%	28%	34%
Adjusted Net Income Growth (Y/Y)	21%	5%	49%	115%	43%	91%	13%	5%	62%
Average Invested Capital Growth (Y/Y)	19%	20%	20%	24%	25%	25%	26%	24%	24%
Tangible Net Assets / Net Revenue	-52%	-51%	-59%	-73%	-57%	-45%	-53%	-74%	-58%
ROIC (Annualized)	17%	15%	24%	27%	19%	23%	22%	22%	25%
ROIC + Organic Net Revenue Growth	31%	27%	29%	30%	18%	23%	24%	26%	32%

(1) Historical figures restated to comply with revised definition.

See "Non-GAAP Measures" below and the Company's Q1 2008 Management Discussion and Analysis.

Performance Metrics Glossary

"Net Revenue" means Revenue for GAAP purposes less third party and flow-through expenses. We use Net Revenue since it captures 100% of the license, maintenance and services revenues associated with Constellation's own products, but only includes the margin on our lower value-added revenues such as commodity hardware or third party software.

"Net Maintenance Revenue" is derived from GAAP Maintenance Revenue by subtracting third party maintenance costs. We believe that Net Maintenance Revenue is one of the best indicators of the intrinsic value of a software company and that the operating profitability of a low growth software business should correlate tightly to Net Maintenance Revenues.

Effective this quarter, the term ''Adjusted Net Income'' is derived by adjusting GAAP net income for the non-cash amortization of intangibles, future income taxes, and charges related to appreciation in common shares eligible for redemption (a charge that we no longer incur now that Constellation's common shares are publicly traded). Prior to Q1 2008, Adjusted Net Income was derived by adjusting GAAP net income for the non-cash amortization of intangibles and charges related to appreciation in common shares eligible for redemption. The computation was changed to include future income taxes since the majority of future income taxes relate to the amortization of intangible assets, and thus are being added back to more closely match the non-cash future tax recovery with the amortization of intangibles. All previously reported Adjusted Net Income figures have been restated in the table above to reflect the new method of computations. We use Adjusted Net Income because it is generally a better measure of cash flow than GAAP net income and it is closely aligned with the calculation of net income we use for bonus purposes.

"Average Invested Capital" is based on the Company's estimate of the amount of money that our shareholders had invested in Constellation. Subsequent to that estimate, each period we have kept a running tally, adding Adjusted Net Income, subtracting any dividends, adding any amounts related to share issuances and making some small adjustments, including adjustments relating to our use of certain incentive programs and the amortization of impaired intangibles.

"Tangible Net Assets / Quarterly Net Revenue" provides a measure of our Tangible Net Assets as a proportion of Quarterly Net Revenue. Tangible Net Assets is calculated by taking Total Assets for GAAP purposes, and subtracting (i) intangible assets and goodwill, (ii) cash and short term investments, (iii) future income tax assets, (iv) all customer, trade and government liabilities that do not bear a coupon, excluding future income tax liabilities and acquisition holdbacks.

"ROIC (Annualized)" represents a ratio of Adjusted Net Income to Average Invested Capital.

"ROIC + Organic Net Revenue Growth" provides a historical measure of the effectiveness of our capital allocation.

Forward Looking Statements

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CONSTELLATION SOFTWARE INC.
Q2 2008

TO OUR SHAREHOLDERS

Q2 was a good quarter for Constellation, particularly in light of the difficult economic environment. We achieved record levels of Adjusted EBITDA ($14 million) and Adjusted Net Income ($12 million), and 5% Organic Net Revenue growth.

In Q2 of 2006, Constellation became a public company. Net Revenue during that quarter was $47 million. Net Revenue in Q2 of this year was $71 million – a 23% compound annual growth rate since the IPO. While some of this growth was organic, the majority of it was acquired. We issued no new shares during the IPO nor have we issued any since then, so the intervening acquisitions were financed from our earnings (~$73 million), and borrowings/cash reductions (~$26 million).

Until recently, we had avoided using significant amounts of debt. Circumstances, however, may dictate a change in our capital structure. The economy is slow, credit and equity markets are in rough shape, and buyers for vertical market software businesses are increasingly scarce. Concurrently, and for some of the same reasons, quite a number of vertical market software businesses are for sale at attractive prices. We may not be the successful bidders for these assets, but if we are, we will almost certainly be increasing Constellation's financial leverage. In support of our acquisition pursuits, we negotiated an increase in our revolving bank line to $105 million during Q2 and are currently in discussions with our lenders to further increase the size of this facility. We are also examining other financing alternatives.

Rapid acquired growth is not an imperative, it is a choice. For most of the last decade we struggled to find enough attractive acquisitions to consume our operating cash flows. We believe that the situation has now reversed, and we are sorely tempted to buy as many attractive vertical market software businesses as and while we can.

A table containing our quarterly Performance Metrics is appended. We have discussed the definitions and implications of the various metrics in previous letters to shareholders, and a glossary is also provided. This quarter, I was pleased with our performance across all of the metrics but wanted to draw your attention to one in particular. When economic times are tough, and bonuses are tied to financial performance, there's a strong incentive for the managers of any business to aggressively recognise revenue. I believe that our people are largely inured to such temptations, but there's a quick way to cross-check. Aggressive revenue recognition nearly always gives rise to an associated increase in accounts receivable and work in process. We should be able to see any such movements in our Tangible Net Assets/Net Revenue metric. In Q2 of 2008, this metric was -58%, down from -45% and -51% in Q2 of 2007 and 2006 respectively. This improvement over prior years suggests that, if anything, our businesses are being conservative about the earnings that they are reporting.

Mark Leonard August 7th, 2008
President
Constellation Software Inc.

	Q2 2006	Q3 2006	Q4 2006	Q1 2007	Q2 2007	Q3 2007	Q4 2007	Q1 2008	Q2 2008
($ millions, except percentages)									
Revenue	52.2	53.8	53.5	55.9	60.5	60.6	66.1	73.6	77.7
Net Income / (Loss)	1.3	2.3	3.8	2.6	3.5	3.3	1.6	4.3	3.4
Net Revenue	47.3	48.4	48.6	50.7	54.9	55.3	60.2	66.6	71.0
Net Maintenance Revenue	26.9	28.1	29.6	31.2	33.3	34.5	37.8	41.7	43.8
Adjusted Net Income (1)	4.4	7.5	9.0	6.9	8.4	8.5	9.4	11.1	12.0
Average Invested Capital	119	125	135	143	149	158	167	176	188
Net Revenue Growth (Y/Y)	28%	24%	22%	10%	16%	14%	24%	31%	29%
Organic Net Revenue Growth (Y/Y)	12%	5%	3%	-1%	0%	2%	3%	6%	5%
Net Maintenance Growth (Y/Y)	30%	30%	29%	20%	24%	23%	28%	34%	32%
Adjusted Net Income Growth (Y/Y)	5%	49%	115%	43%	91%	13%	5%	62%	43%
Average Invested Capital Growth (Y/Y)	20%	20%	24%	25%	25%	26%	24%	24%	26%
Tangible Net Assets / Net Revenue	-51%	-59%	-73%	-57%	-45%	-53%	-74%	-58%	-58%
ROIC (Annualized)	15%	24%	27%	19%	23%	22%	22%	25%	26%
ROIC + Organic Net Revenue Growth	27%	29%	30%	18%	23%	24%	26%	32%	31%

(1) Historical figures restated to comply with revised definition.

Performance Metrics Glossary

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"Net Maintenance Revenue" is derived from GAAP Maintenance Revenue by subtracting third party maintenance costs. We believe that Net Maintenance Revenue is one of the best indicators of the intrinsic value of a software company and that the operating profitability of a low growth software business should correlate tightly to Net Maintenance Revenues.

Effective Q1 2008, the term ''Adjusted Net Income'' is derived by adjusting GAAP net income for the non-cash amortization of intangibles, future income taxes, and charges related to appreciation in common shares eligible for redemption (a charge that we no longer incur now that Constellation's common shares are publicly traded). Prior to Q1 2008, Adjusted Net Income was derived by adjusting GAAP net income for the non-cash amortization of intangibles and charges related to appreciation in common shares eligible for redemption. The computation was changed to include future income taxes since the majority of future income taxes relate to the amortization of intangible assets, and thus are being added back to more closely match the non-cash future tax recovery with the amortization of intangibles. All previously reported Adjusted Net Income figures have been restated in the table above to reflect the new method of computations. We use Adjusted Net Income because it is generally a better measure of cash flow than GAAP net income and it is closely aligned with the calculation of net income we use for bonus purposes.

"Average Invested Capital" is based on the Company's estimate of the amount of money that our shareholders had invested in Constellation. Subsequent to that estimate, each period we have kept a running tally, adding Adjusted Net Income, subtracting any dividends, adding any amounts related to share issuances and making some small adjustments, including adjustments relating to our use of certain incentive programs and the amortization of impaired intangibles.

"Tangible Net Assets / Quarterly Net Revenue" provides a measure of our Tangible Net Assets as a proportion of Quarterly Net Revenue. Tangible Net Assets is calculated by taking Total Assets for GAAP purposes, and subtracting (i) intangible assets and goodwill, (ii) cash and short term investments, (iii) future income tax assets, (iv) all customer, trade and government liabilities that do not bear a coupon, excluding future income tax liabilities and acquisition holdbacks.

"ROIC (Annualized)" represents a ratio of Adjusted Net Income to Average Invested Capital.

“ROIC + Organic Net Revenue Growth” provides a historical measure of the effectiveness of our capital allocation.

Forward Looking Statements

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CONSTELLATION SOFTWARE INC.
Q308

TO OUR SHAREHOLDERS

In a diversified company like ours, you can usually point to some businesses that are stars and some that are not. I'm currently in the happy position of being able to commend the performance of all of our Operating Groups to shareholders. In Q3, some of our businesses recorded double digit organic growth and many of them produced record profits. Others continue to be profitable despite rending and perhaps long term change in their sectors. In aggregate, Constellation generated 7% organic Net Revenue growth in Q3, managed a further 28% acquired Net Revenue growth, produced record Adjusted EBITDA ($15.7 million) and Adjusted Net Income ($12.3 million), and invested more in acquisitions ($44 million) than in any previous quarter. You can't judge the quality of this quarter's acquisitions by this quarter's profit, but after 85 acquisitions over a 13 year period, we seem to have developed a knack for acquiring fundamentally sound businesses at fair prices. While it's comforting to revel in the Q3 results, I suspect that our Organic Growth will flag in 2009. Forecasters are calling for GNP contraction in North America. Constellation can't hope to be immune, but we anticipate faring far better than most software companies due to our high and growing (34% growth in Q3) Net Maintenance Revenue.

Another metric worth bringing to your attention in the table below is Tangible Net Assets / Net Revenue. Our Operating Groups did an exceptional job of managing their working capital in an economic environment where many customers are trying to hang on to their cash a little bit longer. This improvement is overshadowed by the large amount of negative Tangible Net Assets that we acquired late in the quarter as a result of the Maximus acquisition. I anticipate that we will not be able to maintain the -84% Tangible Net Assets / Net Revenue ratio in the future, but we should see continued good performance on this metric. A glossary for our quarterly Performance Metrics is appended to this letter. I encourage you to refer back to previous letters for more extensive discussions of each of the metrics.

	Q3 2006	Q4 2006	Q1 2007	Q2 2007	Q3 2007	Q4 2007	Q1 2008	Q2 2008	Q3 2008
($ millions, except percentages)									
Revenue	54	54	56	60	61	66	74	78	81
Net Income / (Loss)	2.3	3.8	2.6	3.5	3.3	1.6	4.3	3.4	3.3
Net Revenue	48	49	51	55	55	60	67	71	75
Net Maintenance Revenue	28	30	31	33	35	38	42	44	46
Adjusted Net Income [1]	7.5	9.0	6.9	8.4	8.5	9.4	11.1	12.0	**12.3**
Average Invested Capital	125	135	143	149	158	167	176	188	201
Net Revenue Growth (Y/Y)	24%	22%	10%	16%	14%	24%	31%	29%	**35%**
Organic Net Revenue Growth (Y/Y)	5%	3%	-1%	0%	2%	3%	6%	5%	**7%**
Net Maintenance Growth (Y/Y)	30%	29%	20%	24%	23%	28%	34%	32%	**34%**
Adjusted Net Income Growth (Y/Y)	49%	115%	43%	91%	13%	5%	62%	43%	47%
Average Invested Capital Growth (Y/Y)	20%	24%	25%	25%	26%	24%	24%	26%	**35%**
Tangible Net Assets / Net Revenue	-59%	-73%	-57%	-45%	-53%	-74%	-58%	-58%	**-84%**
ROIC (Annualized)	24%	27%	19%	23%	22%	22%	25%	26%	25%
ROIC + Organic Net Revenue Growth	29%	30%	18%	23%	24%	26%	32%	31%	32%

[1] Historical figures restated to comply with revised definition.

Because of the uncertainty in credit and equity markets, there are some great VMS investments to be had right now. We scooped up a big one this last quarter in the form of the Maximus assets. It consists of 3 good businesses, two of which came with very large uneconomic contracts. As we indicated when we announced the acquisition, the contingent liabilities associated with these contracts could exceed 50% of the purchase price. Contracts of this size and structure are unusual in our businesses (at least the way we run them). We factored these contracts into the price that

we paid for these assets, and if we got it right, these 3 businesses will eventually generate good ROIC's and contribute to our organic growth.

Having bought the Maximus assets and 16 other businesses this year, combined with our purchases of publicly traded shares of VMS companies and the pending takeover offer for Gladstone plc, we have deployed and committed approximately $94 million of capital. While we have also had record cash flows and profits, these commitments have largely tapped out our existing line of credit. I am leery about using short term financing for acquisitions, so we are exploring financing options: Either we slow down the pace of acquisitions and live within our cash flow from operations, or we raise long term financing, whether that be equity or debt flavoured. The capital markets are volatile right now, so I wouldn't hazard a bet as to whether we will find the right investors. If we do, you can expect our acquisition pace in 2009 to continue… if not, it will slow. Irrespective of our acquisition prospects, I continue to be optimistic that our long term performance will be attractive.

Mark Leonard November 6th, 2008
President
Constellation Software Inc.

Performance Metrics Glossary

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CONSTELLATION SOFTWARE INC.

TO OUR SHAREHOLDERS

This quarter I'm using a reverse shaggy dog format for the Shareholder letter. Shaggy dog stories are wildly tangential tales that end with underwhelming and/or irrelevant punch lines. In my reverse shaggy dog story, we are going to start with the overwhelming punch line and then tell relevant tangential tales. To the extent that you take the time to follow my explanations of the impact this quarter of foreign exchange, employee bonus accruals, acquisition accounting, and organic growth, you'll have an appropriate context in which to judge our remarkable Q4 results and make sensible assumptions about our future results.

In Q4 2008 Constellation had record Net Revenue per share and record Adjusted Net Income per share in the midst of the worst economic decline that most of us have ever seen. Compared to Q4 2007, revenue grew 49%, Net Revenue grew 47%, Adjusted EBITDA grew 111%, Adjusted Net Income grew 103%, and Net Income grew 142%. Meanwhile, the U.S. department of Commerce believes that GDP decreased at an annual rate of 6.2% in the quarter, calling out the "downturn in exports and a much larger decrease in equipment and software" for special attention. Why did Constellation do so well in such a difficult environment?

The facile answer is that we have robust businesses with inherently attractive economics run by good managers whose compensation is tightly aligned with that of shareholders. The more nuanced answer requires a deeper understanding of Constellation and its business model.

As many of you know (please refer to the 2008 annual MD&A for the details), we run Constellation with an unhedged structural currency mismatch. The vast majority of our revenues (81% in Q4 2008) are in US dollars, while a large portion of our expenses (23%) are in Canadian dollars. The Canadian dollar has appreciated in excess of 60% vs. the US dollar since early 2002, peaking above par in late 2007. Despite the adverse foreign exchange rate move during that period we maintained and grew our operating margins. Since the 2007 peak the Canadian dollar has dropped by more than 20%, settling in around an average rate of .8264 per US dollar in Q4 2008. We have benefited enormously from the recent collapse in the Canadian dollar. Some of those benefits are transient (relating to Canadian dollar liabilities on the balance sheet that have depreciated, such as accrued employee bonuses), while others could continue to help us operate with higher margins. In the future, assuming a geographical business mix and foreign exchange rates consistent with those we achieved in Q4 2008, we would expect operating margins to be approximately 3% higher than they would be if we were to operate at the average foreign exchange rates that prevailed throughout the first 9 months of 2008.

Employee bonuses were approximately 9.5% of Net Revenue in 2008. In Q4 2008 they amounted to only 7.9% of Net Revenue, despite the fact that both ROIC and Net Revenue Growth increased. Once again, the impact was primarily due to foreign exchange rates. The bonus accrual that was made for the first 9 months of 2008 was calculated using historical foreign exchange rates and required a multi-million dollar adjustment in Q4 2008 as a significant portion is in Canadian dollars. The Net Revenue Growth of 47% that was achieved in Q4 2008 is not sustainable. Nor is the ROIC of 35%. Hence with some confidence (and no little regret) we can predict that employee bonuses will be less than 9.5% of Net Revenues in 2009. This, however, does point out one of the attractive features of our bonus plan – when one of our businesses suffers a downturn, its costs are automatically trimmed due to lower bonuses. We saw this at the

Homebuilders Operating Group in 2008: operating expenses per employee decreased 14% (mostly due to lower employee bonuses), while Adjusted EBITDA dropped 18%.

We don't often spotlight an individual acquisition. Partly this is because we do a lot of them. In 2007 we made 17 acquisitions and in 2008 a further 21 - tracking them all publicly would be a sinecure for our auditors second only to IFRS. Partly it is because we don't like sharing sensitive information with competitors. We were required by applicable securities laws to file a Business Acquisition Report ("BAR") for our recent acquisition of certain assets and liabilities of Maximus Inc.'s Asset, Justice, and Education solutions businesses ("MAJES"), so the competitive reasons are less valid in this instance.

The BAR did, however, throw into question our sanity. Read literally, it suggests that we bought a business that had $72 million in revenues and lost $32 million pre tax in the year leading up to our acquisition. According to the BAR, the business also had a negative tangible net worth (excluding deferred income taxes) of $2 million. For this we paid $40 million. Clearly we had quite a different perception of these businesses than that depicted in the BAR. I'm pleased to refer you to the "selected financial information" for the MAJES businesses in our 2008 MD&A. The business generated $17 million in revenue during Q4 2008, $3 million of Adjusted EBITDA, $1 million of Net Income, and had a negative $1 million cash flow from operating activities. You need to understand the acquisition accounting to interpret this information.

The Asset Solutions business is performing well, but the Education and Justice businesses have their challenges. First and foremost among these are a number of what I have previously referred to as "uneconomic contracts". Where we cannot reasonably estimate the effort to complete these contracts, we are using the "completed-contract" method to account for them. We have never used this accounting method before. It involves capitalising the contract revenues and expenses on the balance sheet until the contract is completed and then recognizing them in a lump sum. This tends to depress revenues vs. our normal (percent complete) revenue recognition methods, and can have a profound effect upon the bottom line. If at some stage we are able to estimate the cost to complete these contracts, and if we expect the contracts to generate losses, then we are allowed to take provisions against the estimated losses. Prior to that, we cannot recognise losses. Accounting aside, we have been able to make progress with most of the Education and Justice clients that were a source of concern. These situations may take years to resolve. We'll keep you apprised of the financial performance of the MAJES businesses for a couple of years. You will be able to decide first-hand whether or not we effectively deployed a large chunk of capital on behalf of our shareholders.

Organic Net Revenue growth ("OGr") came in at a 0% for Q4 2008, and 5% for 2008 as a whole. Compared to our long term objective of 5-10%, this is low. Compared to U.S. GDP, we are doing fine. There were a couple of mitigating factors. The appreciation of the US dollar vs. the Canadian dollar, the UK pound, and the Danish kroner shaved a couple of points off the OGr rate. I'm sensitive to the fact that our OGr historically benefited from currency shifts, so I don't want to over-emphasize this point. The MAJES acquisition also took a couple of points off of our Q4 2008 OGr rate (we accounted for its run-rate revenues using the numbers in the BAR, which did not use completed-contract accounting). Incorporating these adjustments and a recent analysis we did of license bookings (which are slowing), its apparent to me that achieving organic growth in 2009 is going to be difficult. Some of our public businesses will grow, but the private sector businesses still anticipate significant organic decline.

I continue to be in the fortunate position of being able to commend the performance of all of our Operating Groups. I have confidence that their managers will protect the interests of our customers, shareholders and employees despite the distressing economic environment.

Mark Leonard
President
Constellation Software Inc.

March 4th, 2009

	Q4 2006	Q1 2007	Q2 2007	Q3 2007	Q4 2007	Q1 2008	Q2 2008	Q3 2008	Q4 2008
($ millions, except percentages)									
Revenue	53.5	55.9	60.5	60.6	66.1	73.6	77.7	80.8	98.4
Net Income / (Loss)	3.8	2.6	3.5	3.3	1.6	4.3	3.4	3.3	4.0
Net Revenue	48.6	50.7	54.9	55.3	60.2	66.6	71.0	74.6	88.6
Net Maintenance Revenue	29.6	31.2	33.3	34.5	37.8	41.7	43.8	46.1	52.9
Adjusted Net Income (1)	9.0	6.9	8.4	8.5	9.4	11.1	12.0	12.3	19.0
Average Invested Capital	135	143	149	158	167	176	188	201	216
Net Revenue Growth (Y/Y)	22%	10%	16%	14%	24%	31%	29%	35%	47%
Organic Net Revenue Growth (Y/Y)	3%	-1%	0%	2%	3%	6%	5%	7%	0%
Net Maintenance Growth (Y/Y)	29%	20%	24%	23%	28%	34%	32%	34%	40%
Adjusted Net Income Growth (Y/Y)	115%	43%	91%	13%	5%	62%	43%	45%	103%
Average Invested Capital Growth (Y/Y)	24%	25%	25%	26%	24%	24%	26%	27%	29%
Tangible Net Assets / Net Revenue	-73%	-57%	-45%	-53%	-74%	-58%	-58%	-84%	-102%
ROIC (Annualized)	27%	19%	23%	22%	22%	25%	26%	25%	35%
ROIC + Organic Net Revenue Growth	30%	18%	23%	24%	26%	32%	31%	32%	35%

(1) Historical figures restated to comply with revised definition.

Performance Metrics Glossary

"Net Revenue" means Revenue for GAAP purposes less third party and flow-through expenses. We use Net Revenue since it captures 100% of the license, maintenance and services revenues associated with Constellation's own products, but only includes the margin on our lower value-added revenues such as commodity hardware or third party software.

"Net Maintenance Revenue" is derived from GAAP Maintenance Revenue by subtracting third party maintenance costs. We believe that Net Maintenance Revenue is one of the best indicators of the intrinsic value of a software company and that the operating profitability of a low growth software business should correlate tightly to Net Maintenance Revenues.

Effective Q1 2008, the term ''Adjusted Net Income'' is derived by adjusting GAAP net income for the non-cash amortization of intangibles, future income taxes, and charges related to appreciation in common shares eligible for redemption (a charge that we no longer incur now that Constellation's common shares are publicly traded). Prior to Q1 2008, Adjusted Net Income was derived by adjusting GAAP net income for the non-cash amortization of intangibles and charges related to appreciation in common shares eligible for redemption. The computation was changed to include future income taxes since the majority of future income taxes relate to the amortization of intangible assets, and thus are being added back to more closely match the non-cash future tax recovery with the amortization of intangibles. All previously reported Adjusted Net Income figures have been restated in the table above to reflect the new method of computations. We use Adjusted Net Income because it is generally a better measure of cash flow than GAAP net income and it is closely aligned with the calculation of net income we use for bonus purposes.

“Average Invested Capital” is based on the Company’s estimate of the amount of money that our shareholders had invested in Constellation. Subsequent to that estimate, each period we have kept a running tally, adding Adjusted Net Income, subtracting any dividends, adding any amounts related to share issuances and making some small adjustments, including adjustments relating to our use of certain incentive programs and the amortization of impaired intangibles.

“Tangible Net Assets / Quarterly Net Revenue” provides a measure of our Tangible Net Assets as a proportion of Quarterly Net Revenue. Tangible Net Assets is calculated by taking Total Assets for GAAP purposes, and subtracting (i) intangible assets and goodwill, (ii) cash and short term investments, (iii) future income tax assets, (iv) all customer, trade and government liabilities that do not bear a coupon, excluding future income tax liabilities and acquisition holdbacks.

“ROIC (Annualized)” represents a ratio of Adjusted Net Income to Average Invested Capital.

“ROIC + Organic Net Revenue Growth” provides a historical measure of the effectiveness of our capital allocation.

Forward Looking Statements

Certain statements herein may be “forward looking” statements that involve known and unknown risks, uncertainties and other factors that may cause the actual results, performance or achievements of Constellation or the industry to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. These statements reflect current assumptions and expectations regarding future events and operating performance and speak only as of the date hereof. Forward looking statements involve significant risks and uncertainties, should not be read as guarantees of future performance or results, and will not necessarily be accurate indications of whether or not such results will be achieved. A number of factors could cause actual results to vary significantly from the results discussed in the forward looking statements. These forward looking statements are made as of the date hereof and Constellation assumes no obligation to update any forward looking statements to reflect new events or circumstances except as required by law.

Non-GAAP Measures

Net Revenue, Net Maintenance Revenue, Adjusted Net Income, Adjusted EBITDA and Organic Net Revenue Growth are not recognized measures under GAAP and, accordingly, shareholders are cautioned that Net Revenue, Net Maintenance Revenue, Adjusted Net Income Adjusted EBITDA and Organic Net Revenue Growth should not be construed as alternatives to revenue or net income determined in accordance with GAAP as an indicator of the financial performance of the Company or as a measure of the Company’s liquidity and cash flows. The Company’s method of calculating Net Revenue, Net Maintenance Revenue, Adjusted Net Income, Adjusted EBITDA and Organic Net Revenue Growth may differ from other issuers and, accordingly, may not be comparable to similar measures presented by other issuers. Please refer to Constellation’s most recently filed Management Discussion and Analysis for a reconciliation, where applicable, between the GAAP and non-GAAP measures referred to above.

CONSTELLATION SOFTWARE INC.

TO OUR SHAREHOLDERS

Our Q1 2009 performance compared well with Q1 2008: revenue was up 32%, Adjusted EBITDA up 64%, and Adjusted Net Income up 51%. Sequential comparisons vs Q4 2008 along with a bit of digging reveal a less rosy picture: revenue down 1%, Adjusted EBITDA down 7%, and Adjusted Net Income down 11%. The drivers of this performance that strike me as worthy of highlighting include our Organic Net Revenue Growth rate (-5%), the Maximus Asset, Justice and Education ("MAJES") acquisition which was completed in Q3 2008, our increased tax payments, and lastly, the Canadian dollar.

Organic Net Revenue Growth

Some of our businesses are more subject than others to a downturn in the economy. In Q1 2009, our Private Sector segment Net Revenue contracted 15% organically vs Q1 of 2008, while our Public Sector segment Net Revenue fared better (1% organic growth vs Q1 of 2008) for a combined Organic Net Revenue Growth of -5%. This is the worst Organic Net Revenue Growth that we have produced since we started keeping such records in 2001. Despite the occasional encouraging press release from real estate brokers, bankers and homebuilders to the contrary, we have yet to see any clear signs of a recovery in our private sector businesses. There is also little direct evidence of government stimulus spending trickling down to our public sector clients.

MAJES Acquisition

GAAP and even our own "Adjusted EBITDA" measure do a poor job of reflecting the current economics of the MAJES acquisition. In an investor's shoes, I'd look at the cash purchase price ($35 million disbursed to date) and compare it with the cash produced ($1 million in the 6 months that we've owned the business). Not bad, but certainly not up to our long term expectations, and nowhere near as good as the reported six month Adjusted EBITDA ($8 million) and Net Income ($3 million) for these businesses would lead you to believe. There are several large contracts within MAJES that are cash flow negative, and until they are either completed or terminated by the customers, we don't expect attractive returns from the acquisition. The MAJES acquisition also "helped" our TNA/Net Revenue ratio, contributing to a significant drop in the ratio in Q3 2008 and beyond. MAJES came with significant contract related liabilities but my sense is that the asset intensity of this business will eventually be similar to our other businesses. Excluding the MAJES acquisition, the TNA/Net Revenue ratio was down vs Q1 2008, which suggests that our businesses are continuing to practice conservative revenue recognition.

Taxes

We have had low tax rates during the last couple of years, but increasing profitability is driving them up. In Q1 2009 we provided for current taxes ($3.1 million) that are more than three times the amount provided for in Q1 2008. Taxes are inevitable, and despite our efforts to minimise them, we anticipate that our ratio of cash taxes to Adjusted Net Income will continue to increase during 2009.

Canadian Dollar

In the Q4 2008 letter to shareholders I chronicled how the Canadian dollar had affected our profitability during the last 7 years. The gist of the matter, is that with disproportionate expenses in Canadian dollars and revenues in US dollars, we run a fundamental and unhedged foreign exchange position. This hurt us for many years as the Canadian dollar appreciated vs the US dollar, but in the second half of 2008 as the Canadian dollar plummeted by over 20%, we benefited significantly. In Q1 2009 the average Canadian dollar vs US dollar exchange rate was .8054, down from an average rate of .8264 in Q4 2008. Of late the Canadian dollar has strengthened, and should it continue, we can expect leaner profit margins.

We had comforted ourselves in the last couple of quarters that poor organic growth for Constellation likely meant even worse performance for other vertical market software businesses, and hence we would see a number of good acquisition prospects. This hasn't proved to be the case. Q1 2009 was a slow acquisition activity quarter for Constellation, with just one acquisition and no new signed letters of intent. Many owner-managers of healthy businesses seem to be waiting out the recession before selling, but I had expected some of the leveraged transactions of the last few years to come unraveled. To date, we have seen very few distressed asset sales. I'm still hopeful that lenders will lose patience with some private equity sponsored vertical market software businesses during the second half of the year culminating in some larger transactions. We are currently negotiating an increase in our credit line so that we can pursue large acquisitions.

The toughest challenge in the software business is intelligently trading off profitability and organic growth. Many entrepreneurs have a huge bias towards growth at the expense of profits. Most private equity owned software firms have the opposite bias. At Constellation we try to find an optimum position where incremental investment still generates good incremental long term returns. I think our managers and employees are doing a great job of maintaining profitability in a difficult economic environment, without curtailing our record Research & Development spending ($15 million in Q1).

I look forward to seeing those of you who are able to attend our Annual General Meeting on May 7th, 2009.

Mark Leonard May 6th, 2009
President
Constellation Software Inc.

	Q1 2007	Q2 2007	Q3 2007	Q4 2007	Q1 2008	Q2 2008	Q3 2008	Q4 2008	Q1 2009
($ millions, except percentages)									
Revenue	55.9	60.5	60.6	66.1	73.6	77.7	80.8	98.4	97.3
Net Income / (Loss)	2.6	3.5	3.3	1.6	4.3	3.4	3.3	4.0	3.8
Net Revenue	50.7	54.9	55.3	60.2	66.6	71.0	74.6	88.6	89.3
Net Maintenance Revenue	31.2	33.3	34.5	37.8	41.7	43.8	46.1	52.9	53.7
Adjusted Net Income (1)	6.9	8.4	8.5	9.4	11.1	12.0	12.3	19.0	16.8
Average Invested Capital	143	149	158	167	176	188	201	216	234
Net Revenue Growth (Y/Y)	10%	16%	14%	24%	31%	29%	35%	47%	34%
Organic Net Revenue Growth (Y/Y)	-1%	0%	2%	3%	6%	5%	7%	0%	-5%
Net Maintenance Growth (Y/Y)	20%	24%	23%	28%	34%	32%	34%	40%	29%
Adjusted Net Income Growth (Y/Y)	43%	91%	13%	5%	62%	43%	45%	103%	51%
Average Invested Capital Growth (Y/Y)	25%	25%	26%	24%	24%	26%	27%	29%	33%
Tangible Net Assets / Net Revenue	-57%	-45%	-53%	-74%	-58%	-58%	-84%	-102%	-80%
ROIC (Annualized)	19%	23%	22%	22%	25%	26%	25%	35%	29%
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CONSTELLATION SOFTWARE INC.

TO OUR SHAREHOLDERS

GAAP statements tend to be the best tool that investors have to monitor and judge a company's performance. We have tried to supplement GAAP by providing you with our own calculations of Adjusted Net Income, Average Invested Capital, ROIC, Organic Net Revenue Growth, and Attrition (the "CSI Metrics") amongst others. The CSI Metrics do attract cynicism from some quarters, so I've also included in this letter a couple of GAAP financial metrics that reflect the company's performance over the last decade. I welcome any suggestions that you may have for other metrics to include in these annual letters.

Table 1

	Adjusted Net Income (a.)	Average Invested Capital	ROIC	Organic Net Revenue Growth (YoY)	ROIC + Organic Net Revenue Growth
2000	(2.4)	68	-4%	b.	b.
2001	7.1	69	10%	b.	b.
2002	1.5	71	2%	6%	8%
2003	21.8	83	26%	11%	37%
2004	12.7	84	15%	9%	24%
2005	17.4	101	17%	18%	35%
2006	25.7	123	21%	8%	29%
2007	33.2	154	22%	1%	23%
2008	54.4	195	28%	5%	33%
2009	62.4	256	24%	-3%	21%

a. Historical figures restated to comply with current definition (see Glossary)
b. Not Available

The definitions of Adjusted Net Income, Average Invested Capital, ROIC and Net Revenue appear in the Glossary below.

Internally we think about Adjusted Net Income as the cash profits we generate after paying cash taxes. The most significant variation from GAAP net income, is that we assume our intangible assets are not diminishing in economic value. This is a critical assumption that our board challenges, and that you, as shareholders, need to monitor. The way we support the "ever-expanding intangibles value" contention with our board is by regularly forecasting the cash flows for each of our acquired business units and comparing them to our original acquisition costs to calculate acquisition by acquisition IRR's. We don't provide this level of disclosure to our shareholders because we want to avoid the cost to the company (having done more than 100 acquisitions), the disclosure of competitive information to competitors and overwhelming shareholders with the sheer volume of information that would be required. Instead we disclose the annual changes in our maintenance revenue base, with a particular focus on the organic changes. Our attrition statistics show that we have grown our

maintenance revenues organically, even during the recent recession, so I'd argue that the economic value of our intangibles in aggregate has increased rather than decreased for as long as we've done our annual maintenance attrition surveys.

And when we think about Invested Capital, we think about the shareholder capital that has been invested in the businesses, plus any Adjusted Net Income less any distributions. Obviously, when you divide Adjusted Net Income by Invested Capital, you get a measure of the return on our shareholders' investment (i.e. ROIC). If you add Organic Net Revenue Growth to ROIC, you get what we believe is a proxy for the annual increase in Shareholders' value. In a capital intensive business you couldn't just add Organic Net Revenue Growth to ROIC, because growing revenues would require incremental Invested Capital. In our businesses we can nearly always grow revenues organically without incremental capital.

If you refer to Table 1, you'll see that Average Invested Capital is compounding at a handsome pace, largely because we are generating attractive ROIC's and are paying only a modest dividend. In 2009 we generated a 24% ROIC. I'm particularly pleased with this performance, as it was achieved in a recession, and despite a significant adverse move in currencies. The trend in Organic Net Revenue Growth is less attractive. In the middle of the decade we generated double digit growth rates, but this has slowed, culminating in a 3% contraction in 2009. This is the worst performance that we've experienced since we started tracking Organic Net Revenue Growth. The macro economy had a significant influence on our organic growth, but some of the decelerating growth is also self imposed. In 2004 we started tracking CSI's investments in new Initiatives on an Initiative by Initiative basis. The system was not without flaws, but as the longitudinal data has gradually been amassed, it has convinced me and many of our other managers that the returns that we are generating on these investments are nowhere near as good as we had originally hoped. I believe that our efforts to generate better returns from Initiatives have permanently reduced the amount of Organic Net Revenue growth that we will seek. We are currently targeting an average of 5% organic growth over the long term.

The attrition statistics for 2009 and the previous three years appear in Table 2. We calculate attrition and growth each year based off of the prior year's GAAP maintenance revenue, rather than the run-rate of maintenance revenue at the end of the prior year. This creates a persistent overstatement of both organic growth and attrition if we consistently acquire significant amounts of maintenance revenue late in each year. Foreign exchange changes during the last couple of years have been significant and also complicate the analysis. Despite the challenges of pulling together accurate data across tens of thousands of clients in a multitude of different geographies, we believe that the table is indicative of the trends in our maintenance base.

Table 2

	2006	2007	2008	2009
Maintenance Revenue (US$MM)	**116**	**142**	**193**	**252**
Growth from:				
Acquisitions	17%	11%	24%	27%
Organic Sources				
a) New maintenance	15%	10%	10%	8%
b) Price increases	5%	8%	9%	3%
c) Attrition - Lost Modules	-2%	-2%	-3%	-3%
c) Attrition - Lost Customers	-4%	-4%	-4%	-4%
Total Organic Growth	15%	12%	11%	4%
Total Maintenance Growth	32%	23%	35%	31%

Our customer and module attrition has consistently been less than the sum of new maintenance revenue plus maintenance price increases (i.e. the organic growth in our maintenance revenue has been positive). This suggests that the economic value of Constellation's intangible assets has appreciated even during the recent recession. And while the Total Organic Growth in maintenance has slowed during the recession, 2009 was a record year for the acquisition of maintenance revenues so we still had a very attractive increase (31%) in our maintenance revenues. It seems intuitively appealing that as we go through an economic cycle there will be good times to organically grow maintenance revenues and good times to buy maintenance revenues, and that those events will rarely coincide. I only wish we had acquired more maintenance during the recession before acquisition prices rebounded.

Our attrition rates also illustrate the long-term nature of our client relationships. Attrition due to the loss of customers in 2009 was ~4%, suggesting that our average customer will stay with Constellation for 26 years. Customer relationships that endure for more than two decades are valuable. We have symbiotic relationships with tens of thousands of customers: we handle thousands of their calls each day, and issue scores of new versions of mission critical software each year which incorporate their feedback and suggestions. For an annual cost that rarely exceeds 1% of a customers' revenues, our products help them run their businesses efficiently, adopt their industry's best practices, and adapt to changing times.

In aggregate our intangibles appear to be steadily increasing in value. Nevertheless there is one sector amongst our businesses where the picture is not so rosy. Within our CHS Operating Group, primarily due to the contraction of our homebuilder businesses, Total Organic Growth has averaged -10% in each of the last two years. During the recession we believe that our market share in the homebuilding software industry has grown, even while our revenues and profits have decreased. We still anticipate generating an investment return from this sector that exceeds our hurdle rate.

Even when you use GAAP financial metrics to measure performance, you can be accused of cherry-picking those that look good. There's nothing like studying many years of a company's financial statements and filings to form a clear picture of its business and its

managers' values. Nevertheless, I've tried to boil down that analysis into two simple per share metrics in Table 3. I used per share metrics, because it is no achievement to grow revenues or cash flow 50% per annum while growing share count by 100% per annum. I used Revenue per Share because, all other things being equal, any increase in Revenues per Share should translate into a similar increase in intrinsic value per share (not including dividends). Obviously, all other things are not equal. I'd suggest, however, that on balance the important factors that drive our economic model have improved during the last decade (for instance, margins have improved and we are using less and less working capital). This is borne out by our Cash Flow from Operating Activities per Share, which has improved at a rate in excess of Revenue per Share during the decade. The growth in Cash Flow from Operating Activities per Share has not been achieved at the cost of significantly increased debt per share. Indeed, if we liquidated our portfolio of marketable securities at current market prices, we would entirely eliminate our debt.

Table 3

	Total Revenue per Share		Cash Flow from Operating Activities per Share		Total Share Count
		YoY △		YoY △	
2000	3.00		0.06		19,439
2001	2.95	-2%	0.48	729%	19,284
2002	3.22	9%	0.43	-11%	19,342
2003	4.16	29%	0.74	72%	19,428
2004	5.49	32%	0.59	-20%	19,891
2005	8.11	48%	1.21	106%	20,392
2006	10.01	23%	1.36	12%	21,065
2007	11.47	15%	1.62	19%	21,192
2008	15.60	36%	2.96	83%	21,192
2009	20.67	32%	3.90	32%	21,192
CAGR		24%		30%*	

* 8 year CAGR 2001-2009 is 30%. The 9 year CAGR is 60%.

Experience and math suggest that the compound average growth rates in Revenue per share and Cash Flow from Operating Activities per share of the last decade are not maintainable. Inevitable decline doesn't make the company's performance to date any less impressive. As both the GAAP and CSI Metrics suggest, and over pretty much any period, we have done extremely well vs most comparables. I'm proud of the company that our employees and shareholders have built.

The majority of the Constellation board believe that our stock price does not adequately reflect the company's fundamental performance and its ability to deploy retained capital at high returns. They speculate that the complexity of the company creates a discount because only enterprising investors are willing to do the work to understand our business. The board also worries that if we continue with our current strategy, our growth rates may start to slow and/or our profitability erode. There's something to their observations and concerns.

We have been a serial acquirer of inherently attractive small vertical market software businesses in a large number of different verticals. We try to be competent long-term oriented owners of these businesses. Our maintenance attrition and organic maintenance growth numbers, coupled with our profitability suggest that we have been successful. In the vast majority of cases, the longer we have owned a small software business, the larger and better it has become. If we persist in this strategy (let's call it the "many verticals" strategy), we will continue to add new verticals and to make many more small acquisitions each year. We've handled our geometric growth to date by largely abdicating management to the general managers of each of our vertical businesses. We have a very thin overlay of infrastructure at CSI. We count on the fact that with each new acquisition will come general managers who are steeped in their verticals… veterans who have built industry leading (albeit small) vertical market software businesses with great economics. Having owned more than a hundred vertical market software businesses, we also have some best practices that we can share. We coach the managers of our newly acquired businesses in how to grow their businesses and make them even better. As long as we compensate these managers appropriately, and are not tempted to meddle too much, then I think we can scale up Constellation for many years to come.

This large span of control with low overhead is an experiment. A couple of successful conglomerates appear to have used it, but it isn't common and we are feeling our way forward. The challenge is striking a balance between keeping overheads low and having the management capacity to intervene when a business isn't living up to its potential. Unfortunately, even if we execute this "many verticals" strategy flawlessly, and continue to generate high returns on our invested capital, Constellation will become even more complex and difficult for our shareholders and board to understand.

An alternative strategy that we've discussed with the board, is concentrating our activities in a fewer number of larger verticals. This would likely mean paying higher multiples for larger acquisitions and paying strategic premiums to accelerate the number of tuck-in acquisitions that we do in any one vertical. Despite the higher multiples (and hence lower returns on investment) associated with such acquisitions, we'd end up with fewer and larger businesses and Constellation would be easier to manage and understand.

We've decided to continue with our original "many verticals" strategy, but we are monitoring our ability to keep on scaling up the number of verticals in which we compete. Management are not currently feeling overtaxed, and hate the prospect of paying premiums for larger businesses and tuck-in acquisitions. So for the time being, at least, our shareholders and board will have to contend with increased complexity, and our management will focus on maximising the long term return on capital.

Only one eleventh of our shares changed hands in 2009 (vs one sixteenth in 2008). Our share price has outperformed the S&P TSX index by an average of 16% per annum since our IPO in 2006. We seem to have attracted a group of shareholders who have willingly sacrificed liquidity in return for the opportunity to make a long term investment in what they believe is a good company. We continue to seek long-term oriented shareholders that share our approach to investing.

As in previous years, we will be hosting the annual general meeting in early May. Many of our Directors and Officers and a number of our General Managers will be in attendance. We look forward to talking about our business and answering your questions. I hope to see you there.

Mark Leonard March 25, 2010
President
Constellation Software Inc.

Glossary

Effective Q1 2008, the term ‘‘Adjusted Net Income’’ is derived by adjusting GAAP net income for the non-cash amortization of intangibles, future income taxes, and charges related to appreciation in common shares eligible for redemption (a charge that we no longer incur now that Constellation’s common shares are publicly traded). Prior to Q1 2008, Adjusted Net Income was derived by adjusting GAAP net income for the non-cash amortization of intangibles and charges related to appreciation in common shares eligible for redemption. The computation was changed to include future income taxes since the majority of future income taxes relate to the amortization of intangible assets, and thus are being added back to more closely match the non-cash future tax recovery with the amortization of intangibles. All previously reported Adjusted Net Income figures have been restated in the table above to reflect the new method of computations. We use Adjusted Net Income because it is generally a better measure of cash flow than GAAP net income and it is closely aligned with the calculation of net income that we use for bonus purposes.

“Average Invested Capital” is based on the Company’s estimate of the amount of money that our shareholders had invested in Constellation. Subsequent to that estimate, each period we have kept a running tally, adding Adjusted Net Income, subtracting any dividends, adding any amounts related to share issuances and making some small adjustments, including adjustments relating to our use of certain incentive programs and the amortization of impaired intangibles.

“ROIC” represents a ratio of Adjusted Net Income to Average Invested Capital.

“Net Revenue”. Net Revenue is gross revenue for GAAP purposes less any third party and flow-through expenses. We use Net Revenue since it captures 100% of the license, maintenance and services revenues associated with Constellation’s own products, but only the margin on the lower value-added revenues such as commodity hardware or third party software.

Forward Looking Statements

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Non-GAAP Measures

Adjusted Net Income, Adjusted EBITDA and Organic Revenue Growth are not recognized measures under GAAP and, accordingly, shareholders are cautioned that Adjusted Net Income Adjusted EBITDA and Organic Revenue Growth should not be construed as alternatives to net income determined in accordance with GAAP as an indicator of the financial performance of the Company or as a measure of the Company's liquidity and cash flows. The Company's method of calculating Adjusted Net Income, Adjusted EBITDA and Organic Revenue Growth may differ from other issuers and, accordingly, may not be comparable to similar measures presented by other issuers. Please refer to Constellation's most recently filed Management Discussion and Analysis for a reconciliation, where applicable, between the GAAP and non-GAAP measures referred to above.

CONSTELLATION SOFTWARE INC.

TO OUR SHAREHOLDERS

On April 4th, Constellation's board announced that it was undertaking a review of the strategic alternatives for the company, with the objective of enhancing shareholder value. In your shoes, I'd interpret that as meaning that the company is likely to be sold. In the ~40% appreciation of CSI's stock since January 2011, we have presumably seen the market reflecting some of that takeover premium.

The marketing of the company to prospective buyers has, and will be, a considerable distraction to the managers and employees of the company. We can't be sure that it will result in an acceptable offer. We hope to get through this process as quickly as possible, generate some liquidity for our major shareholders, and then get back to building our business.

This may be my last chance to publicly commend our managers and employees for many years of spectacular performance. In Table 1 below, I've updated the performance metrics that we presented last year. This analysis is no substitute for reading our audited annual financial results and statutory filings, however it does provide a nice synopsis of some metrics that we believe are important. It also highlights the remarkable returns that our employees have generated with our shareholders' funds.

Table 1

	Adjusted Net Income (a.)	Average Invested Capital	ROIC	Organic Net Revenue Growth (YoY)	ROIC + Organic Net Revenue Growth
2000	(2)	68	-4%	b.	b.
2001	7	69	10%	b.	b.
2002	2	71	2%	6%	8%
2003	22	83	26%	11%	37%
2004	13	84	15%	9%	24%
2005	17	101	17%	18%	35%
2006	26	123	21%	8%	29%
2007	33	154	22%	1%	23%
2008	54	195	28%	5%	33%
2009	62	256	24%	-3%	21%
2010	87	325	27%	-2%	25%

a. Historical figures restated to comply with revised definition.
b. Not Available

The definitions of Adjusted Net Income, Average Invested Capital, ROIC and Net Revenue appear in the Glossary below.

As I explained in last year's Letter to Shareholders, we believe that the sum of ROIC and Organic Net Revenue Growth is the best single metric for measuring the performance of a

low asset intensity software business, closely reflecting the increase in Shareholders' value. For 2010 this number was 25%, a nice improvement from 2009. The increase was due in large part to near record levels of ROIC and a slightly smaller contraction in the Net Revenue of our existing businesses. By late 2010, our Organic Net Revenue Growth was once again positive, and 2011 is showing encouraging signs of a continued resurgence in Organic Net Revenue growth, accompanied by even better returns on Invested Capital.

We traditionally report on our Maintenance Revenue as part of this letter. Maintenance is the most profitable part of our business and can provide an insight into whether the long-term intrinsic value of our business is increasing or decreasing. During 2010 we experienced 7% organic growth and 28% acquired growth in Maintenance Revenue. New Maintenance, i.e. maintenance derived from new clients or associated with add-on module sales to existing clients, contributed 8% to the growth in Maintenance Revenue during the year. This performance reflects well on the competitiveness of our products and the value that our solutions can deliver to clients, even during a recessionary period. We lost only 4% of our customers in 2010, a number that has been remarkably consistent over the last 5 years. Some of these customers we lost to bankruptcies or acquisitions… others to competitors. No matter how you look at it, our customers stay with us for a very long time, suggesting both the high switching costs and the real customer loyalty benefits that are inherent in our businesses.

	2006	**2007**	**2008**	**2009**	**2010**
Maintenance Revenue (US$MM)	**116**	**142**	**193**	**252**	**337**
Growth from:					
Acquisitions	17%	11%	24%	27%	28%
Organic Sources					
a) New maintenance	15%	10%	10%	8%	8%
b) Price increases	5%	8%	9%	3%	6%
c) Attrition - Lost Modules	-2%	-2%	-3%	-3%	-3%
c) Attrition - Lost Customers	-4%	-4%	-4%	-4%	-4%
Total Organic Growth	14%	12%	11%	4%	7%
Total Maintenance Growth	31%	23%	35%	31%	35%

In aggregate our Maintenance Revenue increased at a 35% rate in 2010. We believe that Adjusted EBITA correlates well with Maintenance Revenue, hence we'd argue that our enterprise value is appreciating at a similar pace. Another vantage point from which to judge the long term appreciation in shareholder value per share is presented in Table 3 below.

Table 3

	Total Revenue per Share		Cash Flow from Operating Activities per Share		Total Share Count
		YoY △		YoY △	
2000	3.00		0.06		19,439
2001	2.95	-2%	0.48	729%	19,284
2002	3.22	9%	0.43	-11%	19,342
2003	4.16	29%	0.74	72%	19,428
2004	5.49	32%	0.59	-20%	19,891
2005	8.11	48%	1.21	106%	20,392
2006	10.01	23%	1.36	12%	21,065
2007	11.47	15%	1.62	19%	21,192
2008	15.60	36%	2.96	83%	21,192
2009	20.67	32%	3.85	30%	21,192
2010	29.77	44%	4.96	29%	21,192
CAGR		26%		30% *	

* 9 year CAGR 2001 - 2010 is 30%. The 10 year CAGR is 56%.

In 2010 our Revenue per Share and Cash Flow from Operating Activities ("CFOA") per share increased 44% and 29% respectively. For the last decade, Revenue per Share has increased approximately ten fold i.e. a 26% compound average annual growth rate. CFOA per share increased at a compound annual average growth rate of 56% over that same period. This is a bit misleading because cash flows in 2000 were unusually poor, but measuring from the following year (when CFOA/Revenue was a respectable 16%), the compound average annual growth rate has been 30%.

I'm proud of the company that our employees and shareholders have built, and will be more than a little sad if it is sold.

We will be hosting the annual general meeting on Thursday May 5th. Many of our Directors and Officers and a number of our General Managers will be in attendance. We look forward to talking about our business and answering your questions. I hope to see you there.

Mark Leonard May 2, 2011
President
Constellation Software Inc.

Glossary

"Adjusted Net Income" means net income plus non-cash expenses (income) such as amortization of intangible assets, deferred income taxes, and certain other expenses (income).

We use Adjusted Net Income because it is generally a better measure of cash flow than GAAP net income and it is closely aligned with the calculation of net income that we use for bonus purposes.

"Average Invested Capital" is based on the Company's estimate of the amount of money that our shareholders had invested in Constellation. Subsequent to that estimate, each period we have kept a running tally, adding Adjusted Net Income, subtracting any dividends, adding any amounts related to share issuances and making some small adjustments, including adjustments relating to our use of certain incentive programs and the amortization of impaired intangibles.

"ROIC" represents a ratio of Adjusted Net Income to Average Invested Capital.

"Net Revenue" is gross revenue for GAAP purposes less any third party and flow-through expenses. We use Net Revenue since it captures 100% of the license, maintenance and services revenues associated with Constellation's own products, but only the margin on the lower value-added revenues such as commodity hardware or third party software.

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Organic Net Revenue Growth may differ from other issuers and, accordingly, may not be comparable to similar measures presented by other issuers. Please refer to Constellation's 2010 Management Discussion and Analysis for a reconciliation, where applicable, between the GAAP and non-GAAP measures referred to above.

Constellation Software Inc.

TO OUR SHAREHOLDERS

As a rule, I prefer to use these letters to write about our business, not our stock. And while I'll start off focusing on the business, I think it is worth devoting some ink to what I think I've learned about managing our stock.

In Table 1, we've updated the Constellation ("CSI") metrics to include the 2011 results. The definitions of Adjusted Net Income, Average Invested Capital, ROIC and Net Revenue appear in the Glossary at the end of this document.

Table 1

	Adjusted Net Income (a.)	Average Invested Capital	ROIC	Organic Net Revenue Growth (YoY)	ROIC + Organic Net Revenue Growth
2001	7	69	10%	b.	b.
2002	2	71	2%	6%	8%
2003	22	83	26%	11%	37%
2004	13	84	15%	9%	24%
2005	17	101	17%	18%	35%
2006	26	123	21%	8%	29%
2007	33	154	22%	1%	23%
2008	54	195	28%	5%	33%
2009	62	256	24%	-3%	21%
2010	84	325	26%	-2%	24%
2011	140	394	36%	7%	43%

a. Historical figures restated to comply with revised definition.
b. Not Available

Note: 2010 and 2011 information is presented in accordance with IFRS

2011 saw a very significant increase in Adjusted Net Income compared with 2010. The 68% growth in 2011 Adjusted Net Income far exceeded revenue growth, which was 22% for the year. The rapid growth in Adjusted Net Income was partly a function of the recovering economy: Organic Net Revenue Growth was 7% in 2011 versus -2% in 2010. My sense is that our managers were reticent about adding staff and incremental expense (particularly for long term initiatives) while we were involved in the strategic review process ("Process"), and hence the improved Organic Net Revenue Growth drove improved operating margins. Adjusted Net Income growth also outstripped revenue growth because our investment in acquisitions in 2011 was less than half that in 2010. We tend to have lower operating margins in years when we actively acquire because some of the acquisitions are not very profitable when initially purchased. During the Process our managers were instructed to stop making acquisitions in new verticals. In addition some of the time and attention that might otherwise have been used for acquisitions was diverted into preparing for and responding to potential acquirers of CSI. I anticipate that our acquisition pace will recover somewhat in 2012.

Our Average Invested Capital increased by only 21% during 2011, much lower than our ROIC. The difference is accounted for by the $2.00/share annual dividend that we paid in 2011. The company has recently adopted a new dividend policy and paid a quarterly dividend of $1.00 per share immediately

following the end of our first quarter. Because of the new dividend policy, we anticipate that Average Invested Capital will grow at a much lower rate in the coming decade, than it has in the past.

ROIC in 2011 was 36%. I believe that the Process created a focus on short-term profitability that detracted from our investment in long-term initiatives and from acquisitions that would generate attractive (but sub 36%) ROIC's. I expect to see our ROIC decrease in the coming decade as margins moderate and we deploy more capital.

Organic Net Revenue Growth recovered to 7% in 2011. I believe that this was a post-recession bounce. We don't expect organic growth to continue at this pace over an extended period.

We use the sum of ROIC and Organic Net Revenue Growth as the best single metric for measuring the short-term performance of our low asset intensity software businesses. For 2011, CSI's ROIC plus Organic Net Revenue Growth was 43%, a spectacular performance that we would be hard pressed and ill-advised to try to repeat.

When short term results (such as our 68% growth in 2011 Adjusted Net Income) seem unusually good, it is worth examining other measures of intrinsic value that are not as subject to short-term swings. In Table 2, you can see that CSI's Maintenance Revenue grew 24% in 2011, slower than in most prior years. If you believe that intrinsic value is closely correlated with Maintenance Revenue, and factor in our unchanging share count, then arguably CSI's value per share incremented very satisfactorily... though perhaps not at the pace that our Adjusted Net Income growth would suggest.

Table 2

	2006	2007	2008	2009	2010	2011
Maintenance Revenue (US$MM)	116	142	193	252	340	422
Growth from:						
Acquisitions	17%	11%	24%	27%	28%	15%
Organic Sources						
a) New maintenance	15%	10%	10%	8%	8%	8%
b) Price increases	5%	8%	9%	3%	6%	6%
c) Attrition - Lost Modules	-2%	-2%	-3%	-3%	-3%	-2%
d) Attrition - Lost Customers	-4%	-4%	-4%	-4%	-4%	-3%
Total Organic Growth	14%	12%	12%	4%	7%	9%
Total Maintenance Growth	31%	23%	36%	31%	35%	24%

Growth in Maintenance Revenue due to acquisitions slowed to 15% in 2011 and is expected to slow further in 2012 due to the unusually low amount of our acquisition investment in the last half of 2011. Longer term, we will be satisfied if the company generates 10% Maintenance Revenue growth from acquisitions, though it is conceivable we could exceed this number if we succeed in improving the efficiency of our acquisition process.

The organic growth in Maintenance Revenues edged up to 9% in 2011. We were particularly pleased to see customer attrition decrease to 5.5% in 2011 from 6.7% the previous year. One note of caution with regard to the organic and acquired Maintenance Revenue growth numbers… while the analysis in Table 2 foots to our reported Maintenance Revenue for financial reporting purposes, the individual components reflected in this table are generated by examining and categorising thousands of records. This analysis isn't perfect, but I believe it is a fair illustration of the trends in our maintenance base and, ultimately, the trends underlying the intrinsic value of our business.

A couple of years ago we added some GAAP/IFRS metrics to our regular letters to shareholders, which we've updated in Table 3.

In 2011, revenue per share increased 22% and cash flow from operating activities per share increased 28%. The growth in cash flow from operating activities cannot outpace revenues ad infinitum. I expect these two growth rates to track each other more closely in the future.

Having had the chance to review the tables, I hope you'll join me in thanking the CSI employees for a wonderful decade. It is a rare company that consistently increases its per share financial fundamentals by 25% or more for such an extended period.

Table 3

	Total Revenue per Share		Cash Flow from Operating Activities per Share		Total Share Count
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2000	3.00		0.06		19,439
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2007	11.47	15%	1.62	19%	21,192
2008	15.60	36%	2.96	83%	21,192
2009	20.67	32%	3.85	30%	21,192
2010	29.92	45%	5.06	32%	21,192
2011	36.49	22%	6.49	28%	21,192
CAGR *		25%		30%	

* Cash flow CAGR calculated from 2001. It is 53% if calculated from 2000.

Note: 2010 and 2011 information is presented in accordance with IFRS

Moving on to the "manage the stock versus manage the company" issue… I used to maintain that if we concentrated on fundamentals, then our stock price would take care of itself. The events of the last year have forced me to re-think that contention. I'm coming around to the belief that if our stock price strays too far (either high or low) from intrinsic value, then the business may suffer: Too low, and we may end up with the barbarians at the gate; too high, and we may lose previously loyal shareholders and shareholder-employees to more attractive opportunities.

In previous letters (for instance, the 2008 letter to shareholders), I've talked about how important long-term oriented employees, customers and shareholders are to both our strategy and organisational design. A long-term orientation requires a high degree of mutual trust between the company and all of its constituents.

We trust our managers and employees and hence try to encumber them with as little bureaucracy as possible. We encourage our managers to launch initiatives, which in our industry, often require 5 to 10 years to generate payback. We are comfortable providing them with capital to purchase businesses that won't be immediately accretive, but that have the potential to be long-term franchises for CSI. We nearly

always promote from within because mutual trust and loyalty take years to build, and conversely, newly hired smart and/or manipulative mercenaries can take years to identify and root out. We incent managers and employees with shares (escrowed for 3-5 years) so that they are economically aligned with shareholders. In return we need and want loyal employees… if they aren't planning to be around for 5 years, then they aren't going to care much about the outcome of multi-year initiatives, and they certainly aren't going to forego short-term bonuses for long-term profits.

When a company is put on the block, employees worry, and trust erodes. It isn't hard to imagine their concerns: Will the current long-term oriented compensation plans be changed? Will independence be constrained? Will their boss be fired? Will they have to fire some mandated percentage of their long-term employees? Should they embark on attractive initiatives which will lose money in the short-term? Why do major shareholders want to sell and is there something daunting in the future that the major shareholders see?

Customers rely on us to provide them with the tools to keep their businesses operating efficiently and adapt their information systems to evolving best practices within their industry. They also begin to question their relationships with the company when a potential sale is announced: Will pricing change? Do they need stronger agreements to protect themselves? Will they be dealing with different employees? Will the company have significant debt if it is sold? Will the company continue to invest in its solutions?

And long-term shareholders begin to question their commitment to the company: Is the board exploring a sale because they are concerned about the long-term prospects for the company? Has the company been "optimised", and hence should shareholders sell now before the fundamentals plateau?

Our employees, customers and long-term shareholders endured 9 months of these Process related uncertainties last year. There's no doubt in my mind that the Process hurt the company's prospects. However, the ironic and perverse result of the Process, was that our short-term profits improved, acquisition investment slowed, cash piled up and the board was able to institute significant dividends, all of which seems to have contributed to a greater than 70% increase in our stock price over the last 16 months. The stock price increase effectively scuttled the chances of selling the entire company to a financial buyer, while at the same time allowing our two major shareholders to sell some shares at prices which they felt were closer to intrinsic value.

When we announced the Process, I asked a number of our sophisticated long term shareholders (other than the two major shareholders) for their estimate of the intrinsic value of the company. I was surprised by their answers (they seemed high to me), but assumed that they were just trying to put a high sticker price on the company in the event of a sale. During the course of the ensuing year these investors have significantly increased their stake in CSI at ever-increasing prices. This vote of confidence achieved two things: Firstly, it made me accept that the company was likely undervalued when the Process started. It also convinced me that we have the nucleus of a group of competent long-term oriented shareholders who can provide the stable ownership which will allow us to prosper. A respected investor told me, “You end up with the shareholders you deserve”. I’m hoping that’s true.

There is a nuance to “stock price management” that may be unusually important to CSI. For nearly all companies, when their stock price gets too low, there is the potential for a “Process”, and obviously we are no different. However, when CSI’s stock price gets too high, I think we have the potential to lose our most valuable cohort - our senior managers. Most of these employees have been with us for many years. Most of them started out as operators. They’ve refined their operating chops, learning best practices from their peers and from their own experiments. As vertical market software business operators, I’d say they are amongst the most talented available (and I’m uniquely qualified to be a connoisseur of such talent). They also have another skill, one that is incredibly rare: they respect and know how to deploy capital to

generate high rates of return. Glancing at our ROIC+Organic Growth stats, it is evident that our senior managers consistently generate rates of return in excess of 25% on the capital that they deploy. As investors you'll know that this is wildly difficult to achieve. How do we keep these multi-talented managers? Hopefully we provide an environment that is fulfilling, colleagues that are both challenging and entertaining, and work that is meaningful. We also pay them well. They are all millionaires many times over, with much of their net worth invested in unescrowed CSI shares. If they don't think that CSI shares will generate high rates of return, they need only sell their shares and use their unique skills to deploy and manage their capital. And because the average business that we buy costs something less than $3MM, nearly all of these managers could be in business for themselves very quickly.

I've always tried to avoid having CSI's shares trade at too high a price. Many members of the board were conscious of the opposite problem. I think we all now acknowledge the importance of managing our stock into a price range where we neither invite another Process, nor encourage our employee shareholders and long-term investors to liquidate their holdings. I don't think it will be difficult to keep our stock price marching in lock-step with the intrinsic value of our company. The board and I just have to be conscious of doing so.

We will be hosting the annual general meeting on Thursday May 3rd. Many of our Directors and Officers and a number of our senior managers will be in attendance. We look forward to talking about our business and answering your questions. With our increasingly broad institutional and retail ownership, I'm hoping for a record turnout. I hope to see you there.

Mark Leonard May 2nd 2012
President
Constellation Software Inc.

Glossary

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Non-GAAP/IFRS Measures

Adjusted Net Income, Adjusted EBITDA and Organic Revenue Growth are not recognized measures under GAAP or IFRS and, accordingly, shareholders are cautioned that Adjusted Net Income Adjusted EBITDA and Organic Revenue Growth should not be construed as alternatives to net income determined in accordance with GAAP or IFRS as an indicator of the financial performance of the Company or as a measure of the Company’s liquidity and cash flows. The Company’s method of calculating Adjusted Net Income, Adjusted EBITDA and Organic Revenue Growth may differ from other issuers and, accordingly, may not be comparable to similar measures presented by other issuers. Please refer to CSI’s most recently filed Management’s Discussion and Analysis for reconciliation, where applicable, between the IFRS, GAAP and non-GAAP/IFRS measures referred to above.

Constellation Software Inc.

TO OUR SHAREHOLDERS

In Table 1, we've updated the Constellation ("CSI") metrics to include the 2012 results. The definitions of Adjusted net income, Average Invested Capital, ROIC, Net Revenue and Maintenance Revenue appear in the Glossary at the end of this document. Several of the statements included below constitute forward looking statements and should not be read as guarantees of future results. See "Forward Looking Statements".

Table 1

	Adjusted Net Income (a.)	Average Invested Capital	ROIC	Organic Net Revenue Growth (YoY)	ROIC + Organic Net Revenue Growth
2002	2	71	2%	6%	8%
2003	22	83	26%	11%	37%
2004	13	84	15%	9%	24%
2005	17	101	17%	18%	35%
2006	26	123	21%	8%	29%
2007	33	154	22%	1%	23%
2008	54	195	28%	5%	33%
2009	62	256	24%	-3%	21%
2010	84	325	26%	-2%	24%
2011	140	394	36%	7%	43%
2012	172	491	35%	2%	37%

a. Historical figures restated to comply with revised definition.

Note: 2010 and subsequent year information is presented in accordance with IFRS

Our Adjusted net income ("ANI") increased by $32 million when compared with 2011. This 23% increase is far smaller than the 42% average increase achieved in the prior 5 years. The quality of these reported earnings isn't up to our historical standards either, as you'll see by comparing the increase in 2012 ANI with the modest 5% increase in cash flow from operations ("CFOps") for the same period - see Table 3. The major differences were securities gains, which were significant but non-recurring, an $8 million payment that we made to Canadian taxing authorities while we dispute their assessment, and a $5 million decrease in contract liabilities associated with previous acquisitions.

Our Average Invested Capital ("IC") increased by 25% during 2012, which was better than we had expected. With the current $1.00 per quarter dividend, it would not be unreasonable to anticipate that IC will increase at a slower percentage rate in the future.

ROIC in 2012 was 35%. If our conventional license businesses are growing organically, there should be a natural upward bias in ROIC, as those businesses tend to use less and less working capital as they grow their "annual in advance" maintenance streams. Most SaaS businesses tend to have monthly rather than annual payment cycles, and hence are more working capital intensive and are also more fixed asset intensive. As SaaS and other alternative economic models become an ever-larger portion of our maintenance streams, the economics of our businesses will become somewhat less attractive and there will be downward pressure on ROIC. We also tend to see a drop in ROIC when we have had a lot of

recent acquisition activity, since the acquired businesses rarely have strong profits at the time of our initial purchase. It will be a struggle for us to maintain 2012 ROIC levels in the future.

Organic Net Revenue Growth was positive 2% in 2012. We had foreseen a pullback in 2012 from the 2011 post recession pickup, but achieving only 2% was disappointing. We would not be satisfied if our our long term Organic Net Revenue Growth rate were maintained at this level.

We still believe that the sum of ROIC and Organic Net Revenue Growth is the best single metric for measuring the short-term performance of our low asset intensity software businesses. At 37%, our 2012 ROIC + Organic Net Revenue Growth was at the high end of the range achieved by CSI during the last decade.

Maintenance Revenue provides an important way to cross check intrinsic value. In Table 2, you can see that CSI's Maintenance Revenue grew 22% in 2012, slower than in prior years. If you believe that intrinsic value is closely correlated with Maintenance Revenue and factor in our unchanging share count, but adjust for CSI's increasingly leveraged balance sheet, then arguably CSI's value per share incremented somewhere in the high teens percent range last year. That seems an attractive increase in intrinsic value for a relatively high dividend yielding stock. Unfortunately, our stock price has increased at over twice that rate during the last year, a differential that would seem difficult to be sustain in future years.

Table 2

	2006	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
Maintenance Revenue (US$MM)	116	148	193	252	337	417	510
Growth from:							
Acquisitions	17%	11%	21%	27%	26%	15%	15%
Organic Sources							
a) New maintenance	15%	9%	9%	7%	8%	8%	8%
b) Price increases	5%	8%	8%	3%	6%	6%	5%
c) Attrition - Lost Modules	-2%	-2%	-3%	-3%	-3%	-2%	-2%
d) Attrition - Lost Customers	-4%	-4%	-4%	-4%	-4%	-3%	-4%
Total Organic Growth	14%	11%	10%	3%	8%	9%	7%
Total Maintenance Growth	31%	23%	31%	31%	34%	24%	22%

Growth in Maintenance Revenue due to acquisitions was 15% again in 2012. Without changes to our capital and/or dividend structure, and all other things being equal, CSI cannot continue to finance this rate of acquired Maintenance Revenue growth.

The Total Organic Growth in Maintenance Revenue dropped to 7% in 2012. Attrition edged up by 0.5% during the year. We try to trade lower license and professional services revenues in return for higher Maintenance Revenues in our businesses, so the Total Organic Growth in Maintenance Revenue needs to exceed our targeted organic growth rate for total revenue. If Total Organic Growth in Maintenance Revenue were to drop below 7% for any length of time, it would be difficult for us to achieve a mid-single digit organic growth rate in our overall revenue.

A note of caution with regard to the organic and acquired Maintenance Revenue growth numbers… while the analysis in Table 2 is materially the same as our reported Maintenance Revenue for financial reporting

purposes, the individual components reflected in this table are generated by examining and categorising thousands of records. This analysis isn't perfect, but we believe it is a fair illustration of the trends in our maintenance base and, ultimately, the trends underlying the intrinsic value of our business.

A few years ago we added some GAAP/IFRS metrics to our regular letters to shareholders. We've updated them in Table 3.

In 2012, revenue per share increased 15% and cash flow from operating activities per share increased 5%. 2012 revenue growth was constrained by the limited acquisition activity in late 2011 and our 2% organic growth rate. Our capital deployment stepped up considerably during 2012, and has remained strong into the first half of 2013, so we anticipate much stronger revenue growth in 2013. The growth in 2012 CFOps was disappointing. The aforementioned payment to tax authorities chewed up approximately 38 cents/share of CFOps. We also had operating margin compression as the lower profitability of the recently acquired businesses drove down our average profitability. We don't anticipate that the rate of acquisitions will continue at the pace we've managed during the last 3 quarters, so some of the pressure on operating margins may abate later in 2013.

Table 3

Year	Total Revenue per Share		Cash Flow from Operating Activities per Share		Total Share Count
		YoY △		YoY △	
2002	3.22	9%	0.43	-11%	19,342
2003	4.16	29%	0.74	72%	19,428
2004	5.49	32%	0.59	-20%	19,891
2005	8.11	48%	1.21	106%	20,392
2006	10.01	23%	1.36	12%	21,065
2007	11.47	15%	1.62	19%	21,192
2008	15.60	36%	2.96	83%	21,192
2009	20.67	32%	3.85	30%	21,192
2010	29.92	45%	5.06	32%	21,192
2011	36.49	22%	6.49	28%	21,192
2012	42.05	15%	6.83	5%	21,192
CAGR		29%		32%	

Note: 2010 and subsequent year information is presented in accordance with IFRS

Having had the chance to review the tables, we hope you'll join us in thanking the CSI employees for a wonderful decade. It is a rare company that consistently increases its per share financial fundamentals at such high rates over such an extended period.

Our long-term shareholders, our board, and our analysts all seem concerned about CSI's ability to scale. I haven't spent a lot of time worrying about the issue, except in response to their enquiries. We've evolved gradually for 18 years, and don't feel like we are facing an impending paradigm shift. Nevertheless, when a number of smart, engaged constituents consistently harp on the same issue, it is worth investigating both their concerns and the mindset of those asking the questions.

CSI's Adjusted net income ("ANI") increased by $32 million in 2012, from $140 million to $172 million. By my calculation the current stock price values CSI at approximately 16 times 2012 earnings. It is sometimes useful to look at marginal rather than average economics. The $32 million increase in CSI's

ANI in 2012 translates to roughly a buck and a half a share. Concurrent with that increase in ANI, CSI's stock price increased something like $40/share, (depending on the exact beginning and end points that you choose). My back of the envelope math says shareholders accorded us a better than a 25 times multiple on the 2012 incremental earnings. Those sorts of market multiples create a growth imperative… you have to either rapidly grow into your multiple or disappoint your shareholders, analysts and board. So ultimately, it seems to me that it is our stock price that has catalysed the spate of questions about our "ability to scale", rather than our practices and performance. Irrespective of the questions' genesis, some context for what we do to generate growth seems appropriate.

There are two components to CSI's growth, organic and acquired. Organic growth is, to my mind, the toughest management challenge in a software company, but potentially the most rewarding. The feedback cycle is very long, so experience and wisdom accrete at painfully slow rates.

In 2004 we separated our Research & Development and Sales & Marketing spending ("RDSM"), into two buckets: Initiatives and everything else. Initiatives are significant long-term investments required to create new products, enter new markets etc.. In the mid to high ticket vertical market software business, Initiatives usually require 5-10 years to reach cash flow break-even. We felt that they should be both measured and treated differently than our other, sustaining, RDSM expenditures. The ethos of software companies requires the regular launching of visionary new products by steely-eyed tenacious developers (substitute software architects, product managers or founders in this sentence, as the specific instance requires). CSI was not immune to these archetypes, and it became apparent that there were lots of Initiatives and nascent Initiatives buried in our RDSM groups. Initiatives grew to account for over half of our combined RDSM expenditures by 2005, which, not co-incidentally, was the peak of our RDSM spending (measured as a percent of Net Revenues… see Chart A). As you'd expect for venture-style investments, our initial expectations for these Initiatives were very high. We tracked their progress every quarter, and pretty much every quarter the forecast IRR's eroded. Even the best Initiatives took more time and more investment than anticipated.

Chart A

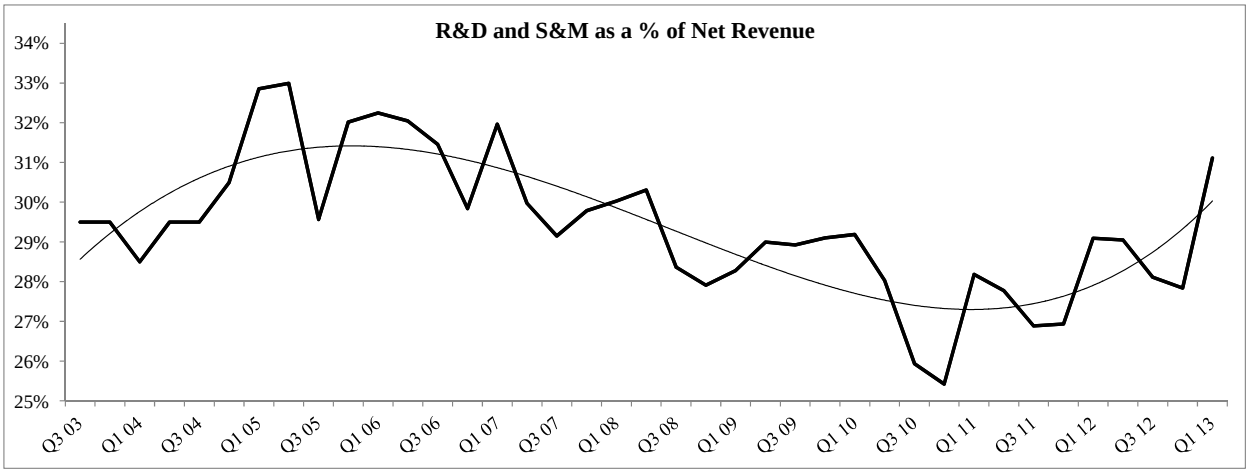

As the data came in, two things happened at the business unit level: we started doing a better job of managing Initiatives, and our RDSM spending decreased. Some of the adaptations made were obvious: we worked hard to keep the early burn-rate of Initiatives down until we had a proof of concept and market acceptance, sometimes even getting clients to pay for the early development; we triaged Initiatives earlier if our key assumptions proved wrong; and we created dedicated Initiative Champion positions so an Initiative was less likely to drag on with a low but perpetual burn rate under a part-time leader who didn't

feel ultimately responsible. But the most surprising adaptation, was that the number of new Initiatives plummeted. By the time we stopped centrally collecting Initiative IRR data in Q4 2010, our RDSM spending as a percent of Net Revenue had hit an all-time low.

We believe that CSI is one of the few software companies that takes a somewhat rational approach to long term RDSM investments. We didn't get to that point with central edicts or grand plans. We just had a hunch that our internal ventures could be better managed, and started measuring them. The people involved in the Initiatives generated the data, and with measurement came adjustment and adaptation. It took 6 years, but we have fundamentally changed the mental models of a generation of our managers and employees (though perhaps not of all the steely eyed visionaries).

In the last three years, we have been investing more heavily in Initiatives. If you compare the recent uptick in RDSM expenditures with the organic growth rates of our Maintenance Revenue in Table 2, it isn't yet obvious that the increased investment has been successful. We still need another couple of years to see the results at a macro level. Based on our experience to date, I'd place the bounds around the potential organic growth outcomes for the next 5 years as follows: If we are wildly successful, we might average high single digit percentage organic growth, while a reasonable assumption would be mid-single digits, and poor performance would be low single digits, but would likely see us pare back on future RDSM investment.

The other way we grow is via acquisitions. We make a lot of acquisitions (see Chart B below). We haven't heard of another company in Canada that has made as many. We have come across a couple of perennial acquirers in the US with more experience than CSI. They offer some interesting insights, but no clear model to emulate. Our acquisition approaches are pretty much home grown, but tend to use variations on only a couple of basic themes.

Our favourite and most frequent acquisitions are the businesses that we buy from founders. When a founder invests the better part of a lifetime building a business, a long term orientation tends to permeate all aspects of the enterprise: employee selection and development, establishing and building symbiotic customer relationships, and evolving sophisticated product suites. Founder businesses tend to be a very good cultural fit with CSI, and most of the ones that we buy, operate as standalone business units managed by their existing managers under the CSI umbrella. We track many thousands of these acquisition prospects and try to regularly let their owners know that we'd love the chance to become the permanent owners of their business when the time is right for them. There is a demographic element to the supply of these acquisitions. Most of these businesses came into being with the advent of mini and micro-computers and many of their founders are baby boomers who are now thinking about retirement.

The most lucrative acquisitions for us have been distressed assets. Sometimes large corporations convince themselves that software businesses on the periphery of their industry would be good acquisitions. Rarely do the anticipated synergies accrue, and frequently the cultural clashes are fierce, so the corporate parent may eventually choose to sell the acquired software business. The lag is often 5 to 10 years as the proponents of the original acquisition usually have to move on before the corporation will spin off the asset. Our most attractive acquisitions from corporate vendors seem to have happened during recessions. Occasionally, we also acquire portfolio companies from a private equity ("PE") fund that is getting long in the tooth. These will have been well shopped but for some reason will not have attracted a corporate buyer. While both corporate and PE divestitures tend to be much larger than the founder businesses that we buy, they are usually more of a cultural challenge for us post-acquisition.

The historical trends in Chart B are telling. We will be disappointed if we don't acquire a few more companies per annum and the average size doesn't continue to edge up. We don't see a doubling or trebling of our annual acquisition investment unless we fundamentally change what we do.

Chart B

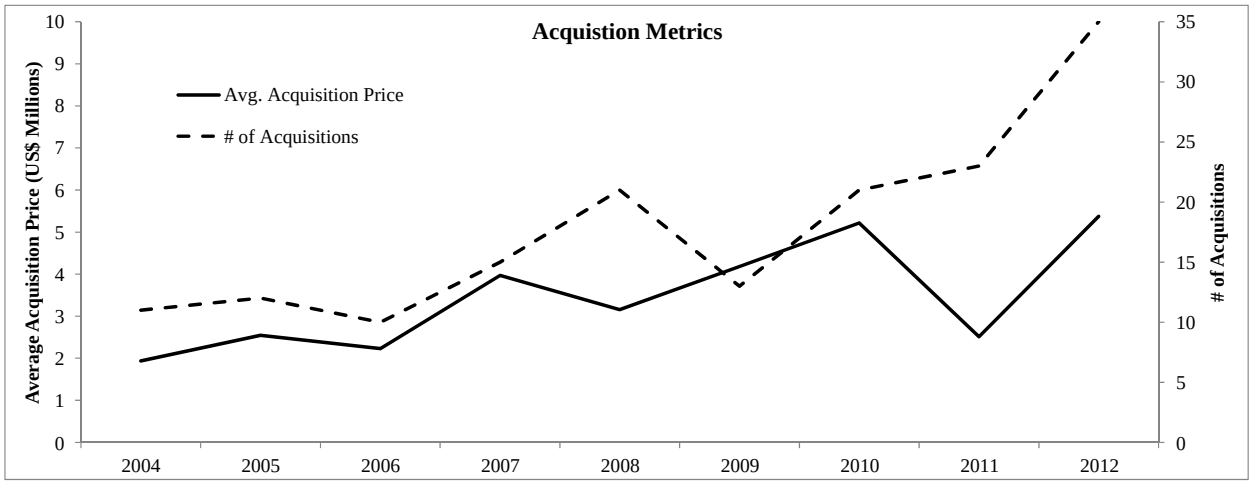

From time to time, we do flirt with fundamental change. I was recently in the UK, where a couple of very large (by our standards) public sector vertical market software conglomerates are for sale. The "whisper" prices are ones we could just about stomach if we were financing the acquisitions on a stand-alone basis like the other PE firms that are competing for these assets. My sense is that we would be better owners of these assets, and would generate better long term performance from them than their PE suitors. If we could not leverage the transactions on a stand-alone basis, they would not meet our hurdle rates, and they would also exhaust our available acquisition lines. Our current bank facilities do not allow us to make acquisitions which incorporate standalone financing, and hence this opportunity to make substantial acquisitions of attractive assets that are close to our core competence is moot, but intriguing.

One of the issues that the CSI Board, in particular, worries about as CSI gets larger, is the complexity created by our continued growth. We totted up the numbers this quarter, and we had approximately 125 business units which were competing in approximately 50 verticals. We tend to add 10-15 business units and 3-5 verticals each year. The Board rightly asks how they (and CSI management) can expect to understand and manage an ever larger number of business units and verticals.

In response to the Board's concern, I've asked each of our Operating Group General Managers to lead the board through an analysis of how their Operating Group has evolved during the last decade: how they are structured now, what has changed over time, where the business unit, divisional and Operating Group managers have come from, how big the business units are and how big they are likely to become, from whom they were acquired, what their subsequent performance has been, etc..

One early observation is that our business units rarely get large. The biggest is 307 employees, and the average business unit currently has 44 employees. Two thirds of our employees are working in business units with less than 100 employees. When we did a linear regression analysis of performance (a metric composed of growth and profitability) against business unit size for Q1 2013, we found less than a .001 R^2. This suggests that the size and performance of our business units are almost totally unrelated. I believe that these business units are small for a reason…that the advantages of being agile and tight far outweigh economies of scale. I'm not a proponent of handling our "complexity problem" by creating a

bunch of 400 employee business units to replace our 40 employee units. I'm looking for ways of "achieving scale" elsewhere.

We currently manage our 125 independent business units through 5 Operating Groups. The Operating Groups have accounting, acquisition, and IT functions, and varying degrees of HR, tax, shared R&D and legal capabilities. They also have a number of relatively senior staff who can be parachuted into large new acquisitions or troubled situations. The Operating Groups serve extremely valuable functions as coaches, capital deployers, occasional recruiters and "single point of management failure" insurance. I'm not sure if there's an optimal structure and size for an Operating Group. In the Operating Group reviews that we've done to date with the Board, it is clear that the Groups have evolved differently: they have markedly different appetites for functional integration, diversification, hierarchy, and average business unit size. This is good news, for by any conventional measure, all of our Operating Groups would be considered successful. At the one extreme, I do worry about the Operating Group managers becoming overwhelmed because of constrained resources at the Group level. At the other extreme, I'm concerned that they may hire too many staff at the Group level and take on too much of the business units' activities. This is one of those debates where there are likely no easy answers, but it helps to have a regular dialog and some crisp data. Given the disparity in size of our Operating Groups, bringing our smaller Groups up to the scale of our largest Groups, and continuing our historical organic growth rates would offer us the opportunity to scale up CSI by a factor of two. Our larger Operating Groups are showing no signs of wanting to pare back their acquisition activities, so we'll likely get continued acquisitive growth from them as well.

We have a 14 employee head office staff composed primarily of finance, accounting, acquisition, tax and legal personnel. Head office provides the Operating Groups with capital allocation assistance and decisions, and tries to disseminate some best practices, a few clear rules, a bit of coaching, and coughs up the occasional partly trained employee for the Operating Groups. Compliance, investor relations, and handling the finance function round out the head office duties. Whenever we feel stretched at head office, we download more of our work to the Operating Groups. This delegation to the point of abdication philosophy (first discussed in the 2010 Letter to Shareholders) seems to have worked so far. It also suggests that I could probably work with more than 5 Operating Groups, so there may be yet another way to scale CSI.

Our board considers all sizeable acquisitions and any acquisitions in new verticals. In practice, this translates into considering a dozen or so new acquisitions per annum. We also present to them a quarterly review of our performance prepared by the CFO but which also contains reports from the CSI President, the Vice President, Mergers & Acquisitions, and each of the Operating Group General Managers. These reports are exception oriented and tend to highlight areas of concern. While the ability of the board to monitor all of our business units and/or verticals is long past, I think they can responsibly discharge their key obligations with these tools and this information. The Board doesn't seem to be a limit to our ability to scale, particularly since we have added two new members with intimate knowledge of vertical market software, our management team, and many of our business units.

Back to the original question: Does CSI have the ability to scale? With some tweaks and normal evolutionary changes, without dramatic reorganisations, recapitalisations or a whole lot of angst, I believe that CSI has the management and financial capacity to double its size and profitability per share during the next 5 to 10 years while continuing to pay a dividend. That would be an impressive achievement for any company. Does CSI have the ability to scale at the rates which it achieved during the last decade? I don't think we are sufficiently humble not to try. I do think we will be pushing our luck.

On a related note, we had mentioned previously that the current rate of acquisitions is unsustainable for financial reasons. We ended Q1 with $109 million drawn on our $300 million revolving line of credit. If we are spending over 40% of our free cash flow on dividends, and doing considerably in excess of $100 million in acquisitions per annum (we closed $78 million of acquisitions in Q1) , then we are likely going to go further into the line. Debt is cheap right now, so it is pretty tempting to use it. Unfortunately, it has a nasty habit of going away when you need it most. I think most revolving debt facilities, while notionally long term, are on the brink of technical default most of the time due to clever and/or cumbersome covenants. Hence I consider them to be de facto demand facilities. Long term high coupon bonds equate to much the same thing, because of so-called incurrence covenants. We would test such covenants monthly, perhaps even weekly, if we were a high yield issuer.

Personally, I'd use significant amounts of debt to finance our growth if it were long term, non-callable and the interest payments could be deferred for short periods. We have demonstrated the ability to generate good returns on incremental capital over the long haul, as demonstrated by the track record in Table 1. Unfortunately, investment bankers tell me that this sort of debt doesn't exist. If you are a long-term lender and would like to do business with a company that has consistently generated strong and increasing cash flows, and are willing to work with us to design a novel lending instrument, please give me a call.

Another obvious fix for our cash constraints would be to axe the dividend. The dividend was a tactic, not a strategic move. It broadened the appeal of our stock and thereby helped us find an exit for our private equity investors. We appreciate the confidence in CSI that many of the new investors expressed in buying the PE shares. We recognise that these investors bought, in part, because of the dividend and the implicit promise of continued yield. Eliminating it would disenfranchise a group of shareholders to whom we owe our independence. That wouldn't sit right with me and many of the senior management team, so I don’t see it happening.

For the time being, we’ll keep an eye on the revolver, and consider increasing our hurdle rate if we start getting too far into the facility.

We will be hosting the annual general meeting on Friday May 3rd. Many of our Directors and Officers and a number of our employees will be in attendance. We look forward to talking about our business and answering your questions. With our increasingly broad institutional and retail ownership, I'm hoping for a record turnout. We hope to see you there.

Mark Leonard
President
Constellation Software Inc.

May 1st, 2013

Glossary

Effective Q1 2008, the term ‘‘Adjusted net income’ is derived by adjusting GAAP or IFRS net income for the non-cash amortization of intangibles, future income taxes, and charges related to appreciation in common shares eligible for redemption (a charge that we no longer incur now that CSI’s common shares are publicly traded). Prior to Q1 2008, Adjusted net income was derived by adjusting GAAP net income for the non-cash amortization of intangibles and charges related to appreciation in common shares eligible for redemption. The computation was changed to include future income taxes since the majority of future income taxes relate to the amortization of intangible assets, and thus are being added back to more closely match the non-cash future tax recovery with the amortization of intangibles. All previously reported Adjusted net income figures have been restated in the table above to reflect the new method of computations. We use Adjusted net income because it is generally a better measure of cash flow than GAAP or IFRS net income and it is closely aligned with the calculation of net income that we use for bonus purposes.

“Average Invested Capital” is based on the Company’s estimate of the amount of money that our shareholders had invested in CSI. Subsequent to that estimate, each period we have kept a running tally, adding Adjusted net income, subtracting any dividends, adding any amounts related to share issuances and making some small adjustments, including adjustments relating to our use of certain incentive programs and the amortization of impaired intangibles.

“ROIC” represents a ratio of Adjusted net income to Average Invested Capital.

“Net Revenue” is gross revenue for GAAP or IFRS purposes less any third party and flow-through expenses. We use Net Revenue since it captures 100% of the license, maintenance and services revenues associated with CSI’s own products, but only the margin on the lower value-added revenues such as commodity hardware or third party software.“Maintenance Revenue” primarily consists of fees charged for customer support on our software products post-delivery and also includes, to a lesser extent, recurring fees derived from software as a service, subscriptions, combined software/support contracts, transaction-related revenues, and hosted products.

Forward Looking Statements

Certain statements herein may be “forward looking” statements that involve known and unknown risks, uncertainties and other factors that may cause the actual results, performance or achievements of CSI or the industry to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. These statements reflect current assumptions and expectations regarding future events and operating performance and speak only as of the date hereof, including:

> Organic Net Revenue Growth will range from low single digit percentages to high single digit percentages.

A number of factors could cause actual results to vary significantly from the results discussed in the forward looking statements, including:

> Revenue can fluctuate significantly based on the demand for our software products, level of product and price competition, the geographical mix of our sales together with fluctuations in foreign currency exchange rates, changes in mix and pricing of software solutions that our

customers demand, our ability to successfully implement projects, order cancellations, renewal of maintenance agreements with customers, and patterns of spending and changes in budgeting cycles of our customers.

Forward looking statements involve significant risks and uncertainties, should not be read as guarantees of future performance or results, and will not necessarily be accurate indications of whether or not such results will be achieved.

Non-GAAP/IFRS Measures

Adjusted net income and Organic Net Revenue Growth are not recognized measures under GAAP or IFRS and, accordingly, shareholders are cautioned that Adjusted net income and Organic Net Revenue Growth should not be construed as alternatives to net income determined in accordance with GAAP or IFRS as an indicator of the financial performance of the Company or as a measure of the Company's liquidity and cash flows. The Company's method of calculating Adjusted net income and Organic Net Revenue Growth may differ from other issuers and, accordingly, may not be comparable to similar measures presented by other issuers. Please refer to CSI's most recently filed Management's Discussion and Analysis for reconciliation, where applicable, between the IFRS, GAAP and non-GAAP/IFRS measures referred to above.

Constellation Software Inc.

TO OUR SHAREHOLDERS

In Table 1, we've updated the Constellation Software Inc. ("CSI") metrics with the 2013 results. We've shortened up the period presented to 10 years. A long term review is worthwhile, but CSI is a much larger business than it was 10 years ago, so it is easy to question the relevance of the older data. The definitions of Adjusted net income ("ANI"), Average Invested Capital, ROIC, Net Revenue and Maintenance Revenue appear in the Glossary at the end of this document. Unless otherwise indicated, all dollar amounts are expressed in U.S. dollars. Several of the statements included below constitute forward looking statements and should not be read as guarantees of future results. See "Forward Looking Statements".

Table 1

	Adjusted Net Income (a.)	Average Invested Capital	ROIC	Organic Net Revenue Growth (YoY)	ROIC + Organic Net Revenue Growth
2004	13	84	15%	9%	24%
2005	17	101	17%	18%	35%
2006	26	123	21%	8%	29%
2007	33	154	22%	1%	23%
2008	54	195	28%	5%	33%
2009	62	256	24%	-3%	21%
2010	84	325	26%	-2%	24%
2011	140	394	36%	7%	43%
2012	172	491	35%	2%	37%
2013	207	585	35%	4%	39%

a. Historical figures restated to comply with revised definition.
Note: 2010 and subsequent year information is presented in accordance with IFRS

ANI increased 20% in 2013. Cash Flow from Operating Activities per Share (see Table 3) grew far faster, so we were less concerned with "quality of earnings" than we were in 2012. The shareholders' Average Invested Capital grew 19%. This was insufficient to finance the acquisitions that we made, so we resorted to using increasing amounts of bank debt - more about this later. The high ROIC achieved over the last decade suggests that we have very good businesses. If ROIC starts to erode significantly, then either we've damaged our existing businesses, or our new acquisitions are less attractive than those that we have made in the past. ROIC isn't one of those metrics that is necessarily subject to "reversion to the mean". Some businesses seem to be able to widen their moats at reasonable cost.

Organic Net Revenue Growth and Organic Maintenance Revenue Growth (see Table 2) are good cross-checks of our business health. You can't easily get this information from audited financial statements. CSI's Organic Net Revenue Growth was 4% in 2013, below our long-term average but better than GNP. We'd like our Organic Net Revenue Growth to be slightly higher. Growing organically while generating a high ROIC is, to my mind, the toughest task in the software business.

We achieved a near-record combined ratio (the sum of ROIC and Organic Net Revenue Growth) of 39% in 2013. If we had to pick a single metric to reflect the performance of our businesses, this is the one that we'd choose.

Maintenance Revenue grew an impressive 42% in 2013. We wouldn't want to do that every year. Growth in Maintenance Revenue due to acquisitions was 34%, and acquiring that maintenance revenue consumed all of our free cash flow for the year, and then some. As of March 31st 2014 we had $485 million outstanding on our debt facilities. We continue to seek longer-term capital to defuse the fundamental mismatch inherent in buying permanent assets with short-term debt. We have not dismissed the idea of cutting the dividend should other attractive sources of capital not be available.

Table 2

	2006	2007	2008	2009	2010	2011	2012	2013
Maintenance Revenue (US$MM)	**116**	**148**	**193**	**252**	**337**	**417**	**510**	**725**
Growth from:								
Acquisitions	17%	11%	21%	27%	26%	15%	15%	34%
Organic Sources								
a) New maintenance	15%	9%	9%	7%	8%	8%	8%	10%
b) Price increases	5%	8%	8%	3%	6%	6%	5%	5%
c) Attrition - Lost Modules	-2%	-2%	-3%	-3%	-3%	-2%	-2%	-2%
d) Attrition - Lost Customers	-4%	-4%	-4%	-4%	-4%	-3%	-4%	-5%
Total Organic Growth	14%	11%	10%	3%	8%	9%	7%	8%
Total Maintenance Growth	31%	23%	31%	31%	34%	24%	22%	42%

The Total Organic Growth in Maintenance Revenue was 8% in 2013, a slight increase from 2012. Our favourite businesses are those that are growing just slightly faster than their markets, gradually adding market share and customer share (i.e. "share of wallet"), while generating a good return on the capital that they have invested to produce organic growth. Small market share gains are much less likely to trigger a scorched earth competitive response that erodes pricing and triggers wildly unproductive R&D and S&M binges. We believe that we have struck that balance at many of our businesses.

Attrition increased in 2013, up more than 1% during the year, but as you can see in Table 2, this was more than offset by organic increases in Maintenance. That is encouraging, but bears monitoring. Over the last few years we have purchased a number of software businesses (usually SaaS) that have a much higher "churn" in their client bases because of factors inherent in their industry. By high churn, we mean that they acquire a greater proportion of new clients each year, and lose a higher percentage of existing accounts, than our average business. Sometimes the higher churn is because the clients' switching costs are low. Sometimes the higher churn is because lots of new potential clients are being created, and old ones are going bankrupt and merging. If it is the latter, these software businesses may be very attractive. If it is the former, then the software businesses are likely to be unpleasant, requiring tremendous effort to stay in much the same place. When we analyse the attrition and customer acquisition economics at the individual business unit level, the jury is still out on whether our high churn businesses are as attractive as our low churn businesses.

A note of caution with regard to the organic and acquired Maintenance Revenue growth numbers… while the analysis in Table 2 is materially the same as our reported Maintenance Revenue for financial reporting purposes, the individual components reflected in this table are generated by examining and categorising thousands of records. This analysis isn't perfect, but we believe it is a fair illustration of the trends in our maintenance base and, ultimately, the trends underlying the intrinsic value of our business.

A few years ago we added some GAAP/IFRS metrics to our regular letters to shareholders. We've updated them in Table 3.

In 2013, revenue per share increased 36% and Cash Flow from Operating Activities per Share ("CFO/Shr") increased 52%. We don't aspire to grow revenue per share at this sort of rate in the future. The growth in 2013 CFO/Shr was wonderful, but really reflects a catch up after a very disappointing 2012.

Table 3

	Total Revenue per Share		Cash Flow from Operating Activities per Share		Total Share Count (000's)
		YoY △		YoY △	
2003	4.16	29%	0.74	72%	19,428
2004	5.49	32%	0.59	-20%	19,891
2005	8.11	48%	1.21	106%	20,392
2006	10.01	23%	1.36	12%	21,065
2007	11.47	15%	1.62	19%	21,192
2008	15.60	36%	2.96	83%	21,192
2009	20.67	32%	3.85	30%	21,192
2010	29.92	45%	5.06	32%	21,192
2011	36.49	22%	6.49	28%	21,192
2012	42.05	15%	6.83	5%	21,192
2013	57.13	36%	10.40	52%	21,192
CAGR		30%		30%	

Note: 2010 and subsequent year information is presented in accordance with IFRS

Having had the chance to review the tables, we hope you'll join us in thanking the CSI employees for a wonderful decade.

Ideally, we'd like CSI's stock price to appreciate in tandem with our fundamental economics. At any point in time, we'd prefer the price to be high enough to discourage a takeover bid and low enough so that our sophisticated long term oriented investors are not tempted to sell. It takes lots of time and effort to attract and educate competent shareholder/partners. The last thing we want them to do, is sell.

If a stock is over-priced and sophisticated investors sell, they are generally replaced by unsophisticated investors who are ultimately disappointed. This may lead to a stock price that over-corrects and in turn precipitate either a takeover bid, or more insidiously, a significant and predatory share buyback. Buybacks are tempting to management and boards: they tend to improve the lot of managers and insiders, while being applauded by the business press. I think they are frequently a tolerated but inappropriate instance of buying based upon insider information. Instead of shareholders being partners, they become prey.

In addition to our long term sophisticated investors, we also have a second constituency of less financially oriented long-term investors, including some of our employee shareholders. Our employee bonus plan requires that all employees who make more than a threshold level of compensation invest in CSI shares and hold those shares for an average of at least 4 years. In practice, their average hold period has been much longer. We feel an enormous obligation to protect our non-professional investor constituency. One way we can do that is by trying to making sure that the stock price stays in a fair range at all times.

CSI's stock price has appreciated something like 68% per annum over the last two years while our revenue per share and CFO/Shr have increased by only 25% and 27% per annum respectively. The divergence between the appreciation in the stock price and the fundamentals prompted us to do an experiment to see if the multiple expansion could be rationalized (revenue per share and ANI per share multiples have roughly doubled during that period).

We contacted 8 analysts from the investment banks and brokerage firms that cover CSI and asked them for their discounted cash flow valuation ("DCF") models. The analysts also use peer comparisons, market multiples and other methods as part of their valuation process, so their DCF results don't entirely explain their valuations for CSI. Nevertheless, the analysts' models do tend to highlight their underlying assumptions about the company. When we examined the average of the analysts' assumptions for organic growth, acquired growth, acquisition pricing, cost of capital, margins, tax rates, and terminal growth rates, we found that we felt reasonably comfortable with most of their assumptions. The assumptions with which we felt least comfortable were the future cash tax rates and terminal growth rates (both of which seemed low to us). We adjusted for these changes to create a DCF model consisting of the average of the analysts assumptions plus a couple of CSI tweaks, which I'll call the "Consensus Model". The Consensus Model generated a stock price that was at a slight premium to the current share price, though without the margin of safety that we would seek when investing CSI's capital. The upshot of the exercise was that one could mathematically justify the current stock price based on assumptions similar to those achieved by the company in the past.

The more interesting part of the experiment was using the Consensus Model to do some sensitivity analysis and to look at alternative strategies. In all of the following examples, we assume that only one variable changes. In reality, our businesses are dynamic and changing one variable has an impact throughout the business.

Varying the organic growth assumption has a tremendous impact on the intrinsic value of a CSI share. Add in another 2.5% organic growth to the base line assumption and you get more than double the intrinsic value. Subtract 2.5% from the base line organic growth assumption and you lose almost half the intrinsic value of the stock. You can see why so many software company CEO's are growth junkies.

For anyone who's studied the industry, it is difficult to imagine a 5% <u>perpetual</u> swing in organic growth that doesn't have an offsetting impact upon operating margins. That said, there's still tremendous valuation and strategic leverage if organic growth can be increased with reasonable levels of investment. If managers have the discipline to monitor the IRR's on their investments in organic revenue growth, then they've taken a critical step towards understanding the most powerful lever in software. Some of our managers are there. I suspect others are using crude heuristics like "make 20% EBITA, and you can invest the rest". I dislike the latter approach, but many managers change their hard-won beliefs at glacial speed.

If we assume that CSI makes no further acquisitions, the Consensus Model calculates an intrinsic value that is roughly half of the current price. The magnitude of this valuation change surprised me, and suggests that our stock price could suffer very significantly if our acquisition activities slow down or the acquired businesses perform poorly. In the early days of CSI, I assumed that shareholders would be somewhat ambivalent between receiving all of CSI's free cash flow as a dividend, and having us invest a portion of it in acquisitions. According to the model, that is resoundingly not the case.

Another scenario that we tried in the Consensus Model was doing large TSS style acquisitions, at prices similar to that which we paid for TSS. The underlying assumptions continued to be that we are able to get these larger acquisitions to generate operating margins and growth equivalent to the small

acquisitions. Not surprisingly, the Consensus Model forecasts that making large acquisitions adds significant intrinsic value, but not as much as doing "many small" acquisitions at lower purchase price multiples. It also confirms our belief that if we can't make more small acquisitions, then doing the occasional large one seems to make sense.

The final scenario that we ran involves the use of non-common share capital (i.e. debt or something similar). The assumption is that we raise enough capital to maintain revenue growth rates in excess of 20%, and that we operate with a balance sheet that is not highly levered. The Consensus Model for that scenario adds hugely to shareholder value, even if we use high cost debt.

Models are only as good as the assumptions that go into them, and there's no substitute for thinking through the above scenarios on your own, with your own underlying assumptions.

The biggest surprise for me in the modeling exercise was that our multiple expansion over the last two years can be justified by our "acquisition engine". I'd rather the market was paying for our acquisition capabilities in retrospect rather than in prospect. Nevertheless, it is clear that acquisitions have added tremendous shareholder value over the years, particularly during times of economic crisis and/or recession.

Which brings us to the topic of funding. We'd like to be in a position to acquire aggressively should attractive opportunities arise. We've asked CSI's Board for permission to raise non-common share capital to replace our revolving line of credit. They've given us that mandate.

Last year I mentioned that I'd feel comfortable using debt to finance our growth if it were long term, non-callable and the interest payments could be deferred for short periods. I followed up in the letter to shareholders with an invitation to potential investors to work with us to design such an instrument. During the course of the ensuing year we've had discussions with a variety of institutions and investment bankers. And while we got past a few hurdles, we inevitably came up against the institutional imperative: no matter how logical and appealing an instrument may be, if it is novel and works, the sponsor gets a pat on the back. If it is novel and doesn't work, the sponsor loses their job.

That led us back into a dialog with our investment bankers. They began to understand what we wanted: a very long term instrument that we could issue in tranches whenever we needed, that was liquid and would trade at close to intrinsic value at all times so that our investors could get liquidity without taking a haircut, that was tax deductible for CSI as we expect to otherwise pay lots of cash tax, and that can be redeemed by CSI with reasonable amounts of notice if we are producing more cash than we can intelligently invest elsewhere. I'll refer to this as a Non-Traditional Instrument or "NTI". The novelty of the NTI was still a concern to the investment banks, but they felt that they could overcome that and sell it to retail investors if the yield were sufficiently high and the transaction fees sufficiently large. Once the first tranche of the NTI was sold, there would be a precedent trading in the market, and the investment bankers felt that the terms of subsequent NTI issues would likely be more attractive to CSI.

As our discussions progressed, the yield and the transaction fees proposed by the investment banks got higher and the terms less attractive. Based on my previous experience during the CSI IPO, I expected further concessions would be required before an offering was completed. I approached our board with an alternative: make the terms of the NTI even more attractive than those proposed by the investment banks, and market it to our existing shareholders. Any overpricing would accrue to our own investors rather than strangers and intermediaries. If our investors have appetite for an NTI issued at a discount to face value with an above average coupon by a company with a strong balance sheet, they could purchase the NTI and subsequently liquidate at close to face value whenever they choose.

My experience selling CSI shares over the years is that you can sell a novel investment to the sophisticated few, and that over time both the size of the audience and the level of trust grow. I think that will also be the case with the NTI.

Finishing on a quite different note: I'm happy if I "find" one good book to recommend to friends, family and employees each year. Currently, I'm shamelessly flogging Daniel Kahneman's Thinking Fast and Slow. His book is about a life (actually two) well spent. He tells the tale of his intellectual journey via a series of behavioural economics experiments. He helped me appreciate the efficiency, speed, and inherent conceit of intuitive judgment, and its infrequent but often abject failures. Understanding the major findings in behavioural economics provides profound insights into investing and managing, and this book is the most pleasant way I've found to acquire that knowledge.

We will be hosting the annual general meeting on Thursday May 1st. Many of our Directors and Officers and a number of our employees will be in attendance. We look forward to talking about our business and answering your questions. We hope to see you there - perhaps with a camera.

Mark Leonard
President
Constellation Software Inc.

April 30th, 2014

Glossary

Effective Q1 2008, the term ‘‘Adjusted net income’ is derived by adjusting GAAP or IFRS net income for the non-cash amortization of intangibles, future income taxes, and charges related to appreciation in common shares eligible for redemption (a charge that we no longer incur now that CSI’s common shares are publicly traded). Prior to Q1 2008, Adjusted net income was derived by adjusting GAAP net income for the non-cash amortization of intangibles and charges related to appreciation in common shares eligible for redemption. The computation was changed to include future income taxes since the majority of future income taxes relate to the amortization of intangible assets, and thus are being added back to more closely match the non-cash future tax recovery with the amortization of intangibles. All previously reported Adjusted net income figures have been restated in the table above to reflect the new method of computations. We use Adjusted net income because it is generally a better measure of cash flow than GAAP or IFRS net income and it is closely aligned with the calculation of net income that we use for bonus purposes.

“Average Invested Capital” is based on the Company’s estimate of the amount of money that our shareholders had invested in CSI. Subsequent to that estimate, each period we have kept a running tally, adding Adjusted net income, subtracting any dividends, adding any amounts related to share issuances and making some small adjustments, including adjustments relating to our use of certain incentive programs and the amortization of impaired intangibles.

“ROIC” represents a ratio of Adjusted net income to Average Invested Capital.

“Net Revenue” is gross revenue for GAAP or IFRS purposes less any third party and flow-through expenses. We use Net Revenue since it captures 100% of the license, maintenance and services revenues associated with CSI’s own products, but only the margin on the lower value-added revenues such as commodity hardware or third party software. “Maintenance Revenue” primarily consists of fees charged for customer support on our software products post-delivery and also includes, to a lesser extent, recurring fees derived from software as a service, subscriptions, combined software/support contracts, transaction-related revenues, and hosted products.

Forward Looking Statements

Certain statements in this letter may contain “forward looking” statements that involve risks, uncertainties and other factors that may cause the actual results, performance or achievements of the Company or industry to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. Words such as “may”, “will”, “expect”, “believe”, “plan”, “intend”, “should”, “anticipate” and other similar terminology are intended to identify forward looking statements. These statements reflect current assumptions and expectations regarding future events and operating performance as of the date of this letter. Forward looking statements involve significant risks and uncertainties, should not be read as guarantees of future performance or results, and will not necessarily be accurate indications of whether or not such results will be achieved. A number of factors could cause actual results to vary significantly from the results discussed in the forward looking statements. Although the forward looking statements contained in this letter are based upon what management of the Company believes are reasonable assumptions, the Company cannot assure investors that actual results will be consistent with these forward looking statements. These forward looking statements are made as of the date of this letter and the Company assumes no obligation, except as required by law, to update any forward looking statements to reflect new events or circumstances. This report should be viewed in conjunction with the Company’s other publicly available filings, copies of which can be obtained electronically on SEDAR at www.sedar.com.

Non-GAAP/IFRS Measures

Adjusted net income and Organic Net Revenue Growth are not recognized measures under GAAP or IFRS and, accordingly, shareholders are cautioned that Adjusted net income and Organic Net Revenue Growth should not be construed as alternatives to net income determined in accordance with GAAP or IFRS as an indicator of the financial performance of the Company or as a measure of the Company's liquidity and cash flows. The Company's method of calculating Adjusted net income and Organic Net Revenue Growth may differ from other issuers and, accordingly, may not be comparable to similar measures presented by other issuers. Please refer to CSI's most recently filed Management's Discussion and Analysis for reconciliation, where applicable, between the IFRS, GAAP and non-GAAP/IFRS measures referred to above.

Constellation Software Inc.

TO OUR SHAREHOLDERS

Table 1 contains non-IFRS metrics for Constellation Software Inc. ("CSI"). The definitions for these metrics appear in the Glossary at the end of this document. Unless otherwise indicated, all dollar amounts are expressed in millions of U.S. dollars. Several of the statements included below constitute forward looking statements and should not be read as guarantees of future results. See "Forward Looking Statements".

Table 1

	Adjusted Net Income (a)	Average Invested Capital	ROIC	Organic Net Revenue Growth (YoY)	ROIC + Organic Net Revenue Growth
2003	22	83	26%	11%	37%
2004	13	84	15%	9%	24%
2005	17	101	17%	18%	35%
2006	26	123	21%	8%	29%
2007	33	154	22%	1%	23%
2008	54	195	28%	5%	33%
2009	62	256	24%	-3%	21%
2010 (b)	84	325	26%	-2%	24%
2011	140	394	36%	7%	43%
2012	172	491	35%	2%	37%
2013	207	585	35%	4%	39%
2014	274	739	37%	3%	40%

(a) Historical figures restated to comply with revised definition.
(b) 2010 and subsequent year information is presented in accordance with IFRS

Adjusted Net Income ("ANI") increased 32% in 2014, and average ANI growth per share over the last five years has been 36%. This is an impressive but unmaintainable performance. The ubiquitous "*Past performance is no guarantee of future results*" disclaimer really does apply in this instance.

Our shareholders' Average Invested Capital grew 26% in 2014. This, in conjunction with a slower acquisition pace, allowed us to reduce our overall debt from $477 million on Dec. 31, 2013 to $295 million on Dec. 31, 2014. I am not comfortable using short term debt or long-term debt with highly restrictive covenants to finance the parent company.

2014 ROIC, at 37%, was the highest we've ever achieved. In a well-managed, organically growing vertical market software business, less tangible assets tend to be required over time, hence you would expect to see increasing ROIC's. In CSI's case, there are a couple of countervailing factors: Our cash tax rates are likely to increase over the next few years, and we are willing to make acquisitions that generate IRR's that are much lower than 37%. Even if new acquisitions track according to plan, they will nearly always depress our overall ROIC to some degree. If we are successful in deploying large amounts of capital, ROIC could drop sharply for a time.

CSI's Organic Net Revenue Growth was 3% in 2014, below our long-term average but better than GNP growth. We'd like our Organic Net Revenue Growth to be higher.

We achieved a very high combined ratio (the sum of ROIC and Organic Net Revenue Growth) of 40% in 2014. If we had to pick a single metric to reflect the growth in the intrinsic value of our businesses, this is the one that we'd choose.

Table 2 parses our Total Maintenance Revenue Growth into organic and acquired, and further divides the organic growth into its components. We made a very large acquisition (TSS) in late 2013, which contributed to another year of rapid (40%) Total Maintenance Growth in 2014. One very important caveat about Maintenance Revenue as presented below: it is a gross number… i.e. it is not net of third party costs. For instance, if we have a business which incorporates third party databases or development tools and/or utilises third party hosting, the Net Maintenance Revenue received by CSI may be far less than the gross.

Maintenance Revenue growth due to acquisitions was 33% in 2014. Based upon the acquisitions that we completed in 2014 and those done year to date in 2015, we anticipate far slower acquired Maintenance Revenue growth in 2015.

Table 2

	2006	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**
Maintenance Revenue (US$MM)	**116**	**148**	**193**	**252**	**337**	**417**	**510**	**725**	**1015**
Growth from:									
Acquisitions	17%	11%	21%	27%	26%	15%	15%	34%	33%
Organic Sources									
a) New Maintenance	15%	9%	9%	7%	8%	8%	8%	10%	10%
b) Price Increases & Other	5%	8%	8%	3%	6%	6%	5%	5%	5%
c) Attrition - Lost Modules	-2%	-2%	-3%	-3%	-3%	-2%	-2%	-2%	-3%
d) Attrition - Lost Customers	-4%	-4%	-4%	-4%	-4%	-3%	-4%	-5%	-5%
Total Organic Growth	14%	11%	10%	3%	8%	9%	7%	8%	7%
Total Maintenance Growth	31%	23%	31%	31%	34%	24%	22%	42%	40%

The Total Organic Growth in Maintenance Revenue was 7% in 2014. Lost module attrition nearly doubled in 2014, primarily due to newer acquisitions.

SaaS revenues are becoming increasingly important to us: Our 17 "SaaS'y" businesses (those where SaaS revenues are over half of total revenues and where our customers do not host their own applications) now constitute 13% of Maintenance Revenues. This is up from less than 1% of Maintenance Revenues five years ago. In addition, most of our traditional (i.e. non-SaaS'y) businesses have some SaaS offerings of add-on or core products, so I'd guess that SaaS revenues overall are now almost one fifth of our total Maintenance Revenues. The SaaS'y businesses also have higher organic growth rates in recurring revenues than do our traditional businesses. Unfortunately, our SaaS'y businesses have higher average attrition, lower profitability and require a far higher percentage of new name client acquisition per annum to maintain their revenues. We continue to buy and invest in SaaS businesses and products. We'll either learn to run them better, or they will prove to be less financially attractive than our traditional businesses - I expect the former, but suspect that the latter will also prove to be true.

A note of caution with regard to the organic and acquired Maintenance Revenue growth numbers… while the totals in Table 2 are materially the same as our Maintenance Revenue for financial reporting purposes, the individual components reflected in this table are generated by examining and categorising tens of thousands of records. The complexity of the analysis is compounded by the movements in foreign exchange and transactional revenues (which are currently categorised in "Price Increases & Other"). We are working

to improve the accuracy of the underlying data so that we can better manage this critically important part of our business. For the time being, we believe that the data presented is a fair illustration of the trends in our maintenance base.

Table 3 contains some metrics that we started to present a few years ago in response to a request for GAAP/IFRS information.

In 2014, revenue per share increased 38% and Cash Flow from Operating Activities per Share ("CFO/Shr") increased 55%. We don't aspire to grow revenue per share at this sort of rate in the future nor do we think that the growth in CFO/Shr will be able to consistently outpace revenue per share.

Table 3

	Total Revenue per Share	YoY △	Cash Flow from Operating Activities per Share	YoY △	Total Share Count (000's)
2005	8.11	48%	1.21	106%	20,392
2006	10.01	23%	1.36	12%	21,065
2007	11.47	15%	1.62	19%	21,192
2008	15.60	36%	2.96	83%	21,192
2009	20.67	32%	3.85	30%	21,192
2010	29.92	45%	5.06	32%	21,192
2011	36.49	22%	6.49	28%	21,192
2012	42.05	15%	6.83	5%	21,192
2013	57.13	36%	10.40	52%	21,192
2014	78.77	38%	16.11	55%	21,192
CAGR		31%		39%	

Note: 2010 and subsequent year information is presented in accordance with IFRS

We hope that shareholders are as proud of our last decade's performance as we are.

A quick observation before we leave the discussion of Maintenance Revenues and cash flows. In assessing CSI's value, it is tempting to look at cash flows after tax, interest and capex as the "real" return on shareholders' capital. However, you should only do that if you can convince yourself that the underlying (mostly intangible) assets of our businesses are not deteriorating. The analysis of Maintenance Revenues in Table 2 is designed to give you some tools to assess the health of those intangible assets. If Maintenance Revenue continues to grow organically, there's reason to believe that our intangible assets are not deteriorating. A nice byproduct of isolating the Organic Growth in Maintenance Revenue, is that you can also see how much Maintenance Revenue has been acquired and compare that to the amount spent on acquisitions.

* * * * * * * * * * * * * * * *

Last year I asked the board to reduce my salary to zero and to lower my bonus factor. CSI had a great year, so despite those modifications, my total compensation actually increased. This year I'll take no salary, no incentive compensation, and I am no longer charging any expenses to the company.

I've been the President of CSI for its first 20 years. I have waived all compensation because I don't want to work as hard in the future as I did during the last 20 years. Cutting my compensation will allow me to lead a more balanced life, with a less oppressive sense of personal obligation. I'm paying my own expenses for

a different reason. I've traditionally travelled on economy tickets and stayed at modest hotels because I wasn't happy freeloading on the CSI shareholders and I wanted to set a good example for the thousands of CSI employees who travel every month. I'm getting older and wealthier and find that I'm willing to trade more of my own cash for comfort, convenience, and speed … so I'm afraid you'll mostly see me in the front of the plane from here on out.

I love what I'm doing, and don't want to stop unless my health deteriorates or the board figures it's time for me to go. We have an impressive board. I trust them to determine when I'm no longer adding value as the senior executive in the company.

I recognise that some of our directors, shareholders and employees have, or are going to have, misgivings about this arrangement. I'm still planning to do the work that I've always done: acquisitions, monitoring, best practice development, investor relations and financing. I'm just not going to do the weekends, all-nighters and a constant grind of 60 hour plus weeks that characterised my earlier career. Keep in mind that CSI has an unconventional organisational structure, and we seem to have prospered to date without a lot of centralised command and control. While I may not be travelling as much as before nor putting in as many hours, CSI has lots of seasoned and accomplished managers at the Operating Group level who have become far better coaches, culture bearers, and hypothesis generators than I ever was.

One of the results of this compensation change is that I get to side-step the agent-principal problem. My compensation for being president is now tied solely to my current ownership of CSI shares. In essence, I'm your partner in CSI, not your employee. I like the feel of the partner relationship a whole lot better.

I'm currently campaigning for a couple of changes in emphasis at CSI, and I'm hoping that my new "partner" status will lend me increased credibility as I make the case for those changes.

First, I'd like CSI to experiment with modifying its employee bonus program. The idea is to make any such changes totally optional from the employee's perspective, so that there is no loss of trust. My experience with long-term compensation programs is that they require many years of consistent application before employees believe in them enough to make the short-term / long-term trade-offs necessary in the software business. The objective of the compensation plan changes will be to allow our newest generation of employees to build wealth more quickly. In a zero sum game, whatever incremental compensation we deliver to these employees will come out of the hides of shareholders, mine included. The trick, of course, is to make sure that we aren't operating in a zero sum environment. There's reticence in the organisation about "fixing" an existing bonus program that isn't obviously broken. I'm trying to convince our managers and directors that pre-emptive change is worthwhile.

Second, I'd like to over-capitalise the company with reliable capital. We've had poor results with this tactic historically. In 1999, we raised a $60 million second round of equity capital. We didn't end up using the capital for several years, and eventually our investors insisted on a special dividend to return some of it. The good news was that we maintained our investment discipline despite holding "excess cash" for many years and we acquired a second institutional investor to help balance out our shareholder group. The bad news was that our employee shareholders suffered more dilution than was necessary. Why is a historically bad idea worth trying a second time? Currently, we're using debentures to build our long term capital. The debentures are less costly than our second round equity financing, and they will only be a net cost to shareholders if CSI is unable to deploy the capital at attractive returns in a reasonable time-frame. Our confidence is growing that we can compete effectively with Private Equity firms for larger vertical market software company acquisitions. This feels like a much bigger opportunity for capital deployment than the market in which we've historically played, and is not a market where we can finance the "equity" portion of transactions from our revolver. Of course, what may appear to be prudent funding when it leads to excess

cash of $100 million, may appear to be foolhardy funding if it has $1 billion floating around in our coffers. And therein lie the seeds of debates that I'm sure our board will be having for years to come.

While we are on the capital raising topic, Jamal has presented our lead bank with a draft agreement for a new revolving line of credit that is more reliable: one with less restrictive covenants, and with room and flexibility enough to allow us to buy significant businesses (or pieces of businesses) during a recession. We are hopeful that our existing banks and perhaps some new ones will find the proposal attractive.

Shareholders sometimes ask why we don't pursue economies of scale by centralising functions such as Research & Development and Sales & Marketing. My personal preference is to instead focus on keeping our business units small, and the majority of the decision making down at the business unit level. Partly this is a function of my experience with small high performance teams when I was a venture capitalist, and partly it is a function of seeing that most vertical markets have several viable competitors who exhibit little correlation between their profitability and relative scale. Some of our Operating Group GM's agree with me, while others are less convinced. There are a number of implications if you share my view: We should a) regularly divide our largest business units into smaller, more focused business units unless there is an overwhelmingly obvious reason to keep them whole, b) operate the majority of the businesses that we acquire as separate units rather than merge them with existing CSI businesses, and c) drive down cost at the head office and Operating Group level.

I find that some of our shareholders confuse CSI's strategy with that of our business units. While there are terrific moats around our individual business units, the barrier to starting a "conglomerate of vertical market software businesses" is pretty much a cheque book and a telephone. Nevertheless, CSI does have a compelling asset that is difficult to both replicate and maintain: We have 199 separately tracked business units and an open, collegial, and analytical culture. This provides us with a large group of businesses on which to test hypotheses, a ready source of ideas to test, and a receptive audience who can benefit from their application. More quickly and cheaply than any company that I know, we can figure out if a new business process works. This sort of ad hoc experimentation doesn't require enormous systems or the peddling of a new dogma to the unreceptive. It requires curious managers at a few dozen business units and a couple of clever analysts to plausibly test if a process works. Once a new best practice starts working within CSI, wide access to benchmarking information tends to rapidly breed emulation. We've found a few other examples of high performance conglomerates built around the idea of continuously refining their business processes and then driving ever more acquired businesses up their business process learning curve as quickly as possible.

When CSI was much smaller, we used to run annual offsite meetings. Working on the curriculum for one of the offsites, I asked our academic advisor about game theory. He said "tit-for-tat, that's pretty much all you need to know". That clever but unsatisfying explanation eventually led me to the book and article that I'm recommending this year - The Evolution of Cooperation by Robert Axelrod, and a related journal article[1] (jointly, "EoC"). EoC is a short and accessible introduction to the prisoner's dilemma game. Google Scholar has 28,000 scientific citations for the original EoC article in the journal Science, so I'm not going out on much of a limb by recommending it. Despite that, it doesn't seem to get much coverage in the business press.

EoC has provided me with models for thinking about a number of business problems. Perhaps the best way to illustrate that the sort of reciprocal trust advocated by Axelrod can be profitably applied in a business, is

[1] "Launching The Evolution of Cooperation": Axelrod, Journal of Theoretical Biology April 2011

to look at some statistics from CSI's history. In Chart 1, you'll see that our head office expense as a percent of Net Revenues has halved from 1.9% in 2005 to 0.9% in 2014 while ROIC has increased from 17% to 37%. Clearly trust trumped central bureaucracy in our case.

Chart 1

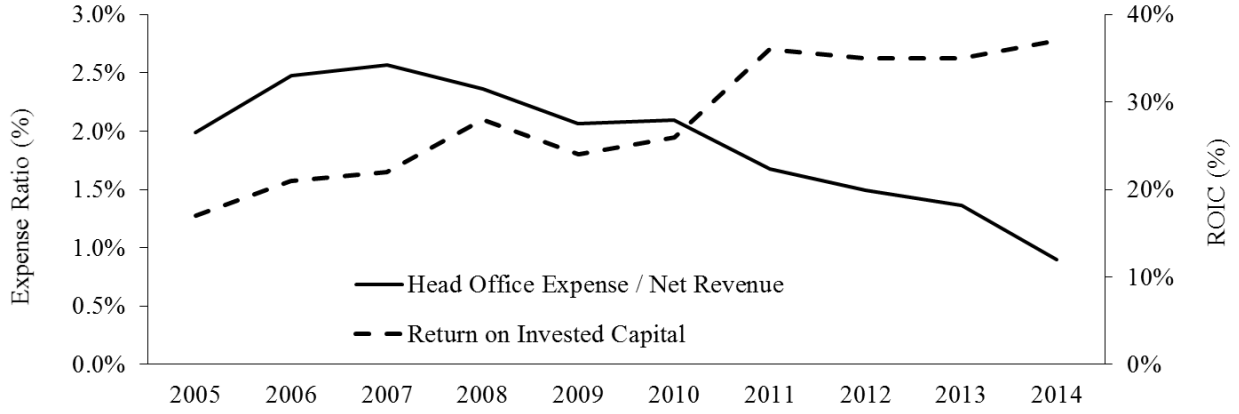

If you ask me about "hierarchical bullies" at our Annual General Meeting, I'll be happy to give you another example of how EoC helped clarify my thinking in a practical application at CSI.

We will be hosting the annual general meeting on Thursday, April 30th. Many of our Directors and Officers and a number of our employee shareholders will be in attendance. We look forward to talking about our business and answering your questions. We hope to see you there.

Mark Leonard
President
Constellation Software Inc.

April 6th, 2015

Glossary

Effective Q1 2008, the term ''Adjusted net income' is derived by adjusting GAAP or IFRS net income for the non-cash amortization of intangibles, future income taxes, and charges related to appreciation in common shares eligible for redemption (a charge that we no longer incur now that CSI's common shares are publicly traded). Prior to Q1 2008, Adjusted net income was derived by adjusting GAAP net income for the non-cash amortization of intangibles and charges related to appreciation in common shares eligible for redemption. The computation was changed to include future income taxes since the majority of future income taxes relate to the amortization of intangible assets, and thus are being added back to more closely match the non-cash future tax recovery with the amortization of intangibles. All previously reported Adjusted net income figures have been restated in the table above to reflect the new method of computations. We use Adjusted net income because it is generally a better measure of cash flow than GAAP or IFRS net income and it is closely aligned with the calculation of net income that we use for bonus purposes.

"Average Invested Capital" is based on the Company's estimate of the amount of money that our shareholders had invested in CSI. Subsequent to that estimate, each period we have kept a running tally, adding Adjusted net income, subtracting any dividends, adding any amounts related to share issuances and making some small adjustments, including adjustments relating to our use of certain incentive programs and the amortization of impaired intangibles.

"ROIC" represents a ratio of Adjusted net income to Average Invested Capital.

"Net Revenue" is gross revenue for GAAP or IFRS purposes less any third party and flow-through expenses. We use Net Revenue since it captures 100% of the license, maintenance and services revenues associated with CSI's own products, but only the margin on the lower value-added revenues such as commodity hardware or third party software. "Maintenance Revenue" primarily consists of fees charged for customer support on our software products post-delivery and also includes, to a lesser extent, recurring fees derived from software as a service, subscriptions, combined software/support contracts, transaction-related revenues, and hosted products.

Forward Looking Statements

Certain statements in this letter may contain "forward looking" statements that involve risks, uncertainties and other factors that may cause the actual results, performance or achievements of the Company or industry to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. Words such as "may", "will", "expect", "believe", "plan", "intend", "should", "anticipate" and other similar terminology are intended to identify forward looking statements. These statements reflect current assumptions and expectations regarding future events and operating performance as of the date of this letter. Forward looking statements involve significant risks and uncertainties, should not be read as guarantees of future performance or results, and will not necessarily be accurate indications of whether or not such results will be achieved. A number of factors could cause actual results to vary significantly from the results discussed in the forward looking statements. Although the forward looking statements contained in this letter are based upon what management of the Company believes are reasonable assumptions, the Company cannot assure investors that actual results will be consistent with these forward looking statements. These forward looking statements are made as of the date of this letter and the Company assumes no obligation, except as required by law, to update any forward looking statements to reflect new events or circumstances. This report should be viewed in conjunction with the Company's other publicly available filings, copies of which can be obtained electronically on SEDAR at www.sedar.com.

Non-GAAP/IFRS Measures

Adjusted net income and Organic Net Revenue Growth are not recognized measures under GAAP or IFRS and, accordingly, shareholders are cautioned that Adjusted net income and Organic Net Revenue Growth should not be construed as alternatives to net income determined in accordance with GAAP or IFRS as an indicator of the financial performance of the Company or as a measure of the Company's liquidity and cash flows. The Company's method of calculating Adjusted net income and Organic Net Revenue Growth may differ from other issuers and, accordingly, may not be comparable to similar measures presented by other issuers. Please refer to CSI's most recently filed Management's Discussion and Analysis for reconciliation, where applicable, between the IFRS, GAAP and non-GAAP/IFRS measures referred to above.

Constellation Software Inc.

TO OUR SHAREHOLDERS

Each quarter we try to study an admirable company and discuss it with our Operating Group managers and board members. We focus on high performance conglomerates that have demonstrated at least a decade of superior shareholder returns. We started by studying those that have generated superior returns for multiple decades. That narrowed the field a lot, so we are beginning to let some single decade performers slip into the candidate pool. I'll refer to the conglomerates that we've studied to date as the "HPCs" in this letter. If you have any suggestions for the candidate pool, please send them along.

Constellation Software Inc. ("CSI") is just entering its third decade. We study the HPCs because they help us understand what CSI does well, where we might improve, and what alternatives we could pursue. Keep in mind that we are comparing CSI to a group of wonderful companies. Over the last decade, if you had held an equally weighted portfolio of the shares of the HPCs, you would have more than doubled the performance of the S&P 500.

We reviewed one of our perennial favourite HPCs this quarter, Jack Henry and Associates, Inc. ("JKHY"). The company's values are those to which we aspire and their multi-decade performance is remarkable. Their shares have outperformed the S&P 500 Index by 11%, 9% and 10% per annum over the last 30, 20 and 10 years, respectively. Best of all, JKHY is in the vertical market software business like CSI, so there are sector-specific lessons in their history from which we can draw.

I encourage you to familiarise yourself with JKHY. Their financial history is easily accessible because they went public very early in their development (i.e. in late 1985). At that time they had less than 50 employees and revenue of $12 million. They now have over 6,000 employees and revenue of $1.3 billion. There's also a lovely company history "You Don't Know Jack… or Jerry", written by a retired IBM executive. The book covers JKHY's founding years through to the end of 2007. It provides many first-hand accounts by employees, customers, competitors and partners about the business practices, strategy, and culture of the company.

During the course of this letter I've incorporated our findings from the HPCs in general and JKHY in particular to the discussion of each metric.

One point of caution with respect to the HPC analysis. The individual HPCs have differences in how they have compiled their publicly available financial information and our calculations of their financial metrics may not be entirely consistent across the group. Despite these "data challenges" we believe the analysis is worthwhile and can provide some insights.

Adjusted Net Income

Table 1 contains the non-IFRS metrics for CSI which we present each year. The definitions for these metrics appear in the Glossary at the end of this document. Any other capitalised financial terms in this letter are also defined in the Glossary. Unless otherwise indicated, all dollar amounts are expressed in millions of U.S. dollars. Several of the statements in this letter constitute forward looking statements and should not be read as guarantees of future results. See "Forward Looking Statements".

CSI's Adjusted Net Income ("ANI", column 2 of Table 1) increased by 35% to $371 million in 2015. Our average annual increase in ANI per share over the last decade has been 37%. We do not expect to come close to achieving this ANI growth rate in the next decade.

During the last decade, the HPCs struggled to increase their ANI per share by more than 15% per annum. JKHY's annualised growth in ANI was only 12% over that period. This drove much higher appreciation

in JKHY's shareholder value because they also made significant dividend payments and share repurchases (jointly averaging 10% of Average Invested Capital per annum). If CSI is not successful in finding attractive acquisitions, we could pursue a similar strategy of returning capital to shareholders.

Table 1

	Adjusted Net Income (a)	Average Invested Capital	ROIC	Organic Net Revenue Growth (YoY)	ROIC + Organic Net Revenue Growth
2006	26	123	21%	8%	29%
2007	33	154	22%	1%	23%
2008	54	195	28%	5%	33%
2009	62	256	24%	-3%	21%
2010	84	325	26%	-2%	24%
2011	140	394	36%	7%	43%
2012	172	491	35%	2%	37%
2013	207	585	35%	4%	39%
2014	274	739	37%	3%	40%
2015	371	965	38%	-3%	35%

(a) Historical figures restated to comply with revised definition.

Only a couple of HPCs that have employed significant financial leverage have had ANI/Share growth consistently in excess of 15%. Inexpensive financial leverage is a tool that diversified conglomerates can easily access. We haven't decided yet where we stand on using leverage, other than that we want to avoid using short term debt to finance long term assets, or using long term debt that is unreliable.

Invested Capital

CSI's Average Invested Capital (column 3, Table 1) increased by 31% in 2015 to $965 million. By December 31st of that year, Invested Capital topped one billion dollars. There's nothing magical about the billion dollar amount, but it is a bit sobering to note that we took over seventeen years to invest the first half billion of CSI's capital. The remaining half billion has been invested during the last three years. We are continuing to add to our "investment capacity". Despite that, we expect the rate of growth in capital deployment to slow.

About eighteen months ago we looked at the impact of investment hold period on transaction costs. We had some rules of thumb in mind, but hadn't actually done the math. If you hold investments forever, you can afford to spend a surprising amount of money to deploy capital at attractive returns. I have been encouraging our Operating Groups to push down more of the acquisition activity to the Business Unit ("BU") level, even if it means higher capital deployment costs. If we can train a couple of hundred BU managers to be competent part-time capital allocators and provide them with acquisition analysis and structuring support when they need it, then I can foresee the day when we are doing 100 acquisitions per annum, instead of 30. It makes the BU manager's job richer and more fun, but also more demanding.

Only one other HPC has followed a strategy of buying hundreds of small businesses and managing them autonomously. They eventually caved in to increased centralisation. My hunch is that it takes an unusually trusting culture and a long investment horizon to support a multitude of small businesses and their entrepreneurial leaders. If trust falters the BU's can be choked by bureaucracy. If short term results are paramount, the siren song of consolidation synergies is powerful. We continue to believe that autonomy and responsibility attract and motivate the best managers and employees.

We are currently adding several hundred million to Invested Capital each year. In addition to our traditional M&A activity, we are re-starting our public company investing efforts. During the period

from 1995 to 2011, we made sixteen public company investments in the software sector. If you viewed our public company investments as a single portfolio, the internal rate of return ("IRR") for that portfolio far exceeded our hurdle rate. Thirteen of the sixteen investments generated individual IRRs in excess of 10%, and only one small investment had a negative rate of return. The average hold period was shorter than we would have liked, and most of the investments ended in the companies being acquired by third parties, rather than CSI. Those may prove to be the fundamental limitations for this sort of investment activity. We hope to find some attractive public software company investments in the coming year or two. At present, the pickings are slim due to generally high valuations.

Return on Invested Capital

ROIC is the next metric in the table, but I thought it was worth a long segue to discuss what we found at the HPCs when we studied a closely related metric, EBITA/Average Total Capital ("EBITA Return"). Both metrics look at return on investment. ROIC is the return on the shareholders' investment and EBITA Return is the return on all capital. In the former, financial leverage plays a role. In the latter only the operating efficiency with which all net assets are used is reflected, irrespective of whether those assets are financed with debt or shareholders' investment.

Surprisingly the HPCs seem to have a fairly consistent pattern of EBITA Returns. Most of them started out in an asset-light business. A few didn't have the "asset-light epiphany" until after they'd struggled with more capital intensive businesses for a few years. During the first year of data that we were able to source for each HPC, they averaged a respectable 21% EBITA Return. Subsequently their returns experienced a period of dramatic improvement as they refined their operating methods and philosophies. These operating methods varied, but generally involved techniques for the detailed measurement of business processes coupled with relentless incremental improvement. At some of the HPCs the methods are applied with a zeal that makes me a bit uncomfortable. It's hard to argue with results. The average peak EBITA Return for the HPCs was 46%, and on average it took them 6 years from the start of our measurement period to achieve those peak returns.

At peak returns, the HPCs' cash flows far exceeded their internal requirements, so all of them embarked upon acquisition programs. They acquired businesses similar to their own - i.e. asset light business with good barriers to entry and a history of positive organic growth. They paid significant premiums to book value for the acquisitions. The initial EBITA Return in each of the acquired businesses would have been modest because of the high purchase prices, but organic growth required little investment in tangible assets so returns would have subsequently climbed. In many instances the acquired businesses were not run optimally prior to acquisition, and the HPCs were able to apply their business practices to further improve returns.

The HPCs have invested almost their entire Free Cash Flow ("FCF") in acquisitions during the last decade. This has allowed them to grow Revenue per share and ANI per share at an average of 9% and 17% per annum, respectively, over the same period. However, their significant acquisition expenditures have tended to depress EBITA Returns. 2015 EBITA Return averaged only 18% for the group.

JKHY's EBITA Return for the last decade was 24%. They performed better than the other HPCs on this metric because they had strong organic growth and did not invest as much of their FCF in acquisitions.

We haven't confirmed it yet by compiling the detailed data, but I have a feeling that acquisition multiples, acquisition size and acquisition profitability have all increased over time for the HPCs. In CSI's case, I've confirmed the first two, but need to check the third.

In summary, the general pattern for the HPCs' EBITA Returns for the study period has been moderate, high and then declining returns, with operating excellence driving the period of growth and significant investments in relatively high priced acquisitions driving the subsequent period of contraction. If CSI's

EBITA Return pattern is similar, there's a good argument that our 37% EBITA Return in 2015 was close to the peak, and that acquisitions will drive it lower from here on out.

CSI's ROIC (column 4 Table 1) was 38% in 2015, its highest to date. Viewed over the long term, our ROIC has increased fairly consistently due to improving EBITA/revenue margins and increasing but still moderate financial leverage. Our acquisition mix in 2015 was also unusual. We acquired some large, high margin but shrinking businesses with attractive tax characteristics and higher than normal profitability resulting in consolidated EBITA/revenue margin reaching record levels.

Most of the HPCs have operated with ROIC's in the mid to high teens during the last decade. JKHY was in the middle of the ROIC range at 18%. CSI was the second highest in the group, with a 30% ROIC average for the decade. I anticipate that we will deploy larger amounts of capital on investments each year. We are using a lower hurdle rate for larger transactions, but have retained our original hurdles for most of our acquisitions. Unless we use increasing amounts of financial leverage, increased acquisition investment and lower hurdle rates on large transaction will likely drive down our future ROIC. Interestingly, half of the HPCs have begun to acquire vertical market software businesses.

Financial leverage is a tool that can have a profound impact on ROIC. Some HPCs have whittled down Invested Capital as a percent of Total Capital by borrowing to pay dividends, repurchase shares, and/or make acquisitions. This has helped them generate higher ROIC's. One of the HPCs has returned their entire Invested Capital to shareholders, and hence generates an infinite ROIC. If covenant-free long-tenured debt is available at a lower after tax cost than equity, then this kind of capital structure is attractive.

Organic Net Revenue Growth

CSI's Organic Net Revenue Growth ("OGr", column 5, Table 1) was negative in 2015 for the first time since the last recession. The Maintenance analysis in Table 3 below, shows that much of the decline vs 2014 was due to shifts in foreign exchange rates. Nevertheless, when we compare CSI's organic revenue growth to that of the other HPCs, we rank amongst the poorest performers and JKHY ranks amongst the best. Are we doing something systematic that leads to low OGr, and if so, is it a mistake? It is worth comparing JKHY and CSI to get some ideas.

JKHY sells software, hardware and services to small and medium sized financial institutions. The number of potential customers in these markets has been shrinking for decades. In the early years, JKHY acquired a number of competitors for reasonable prices, which reduced some of the rivalry in their market, and gave them a larger installed base for which to develop add-on products.

Significant technology change (ATM's, internet banking, mobile banking, and proliferating electronic payment methods) in conjunction with rapidly growing regulation and compliance requirements, drove demand for add-on products and services. During the 2005 to 2015 decade, JKHY's revenue growth has been 2/3^{rds} organic and 1/3rd acquired, with acquisitions primarily being add-on products and services businesses. JKHY deployed approximately one third of their FCF on acquisitions during the decade.

Unlike JKHY, CSI serves a multitude of end markets. We deployed far more (>90%) of our FCF on acquisitions during the last decade. As of December 31, 2015 we had 182 BUs serving more than 75 verticals, run by 158 BU managers that rolled up into CSI via 6 Operating Groups. We usually organise each BU around a single vertical, although there are a few of our BUs that serve more than one vertical, and a many verticals served by more than one of our BUs.

The variations between each of our vertical markets is enormous. Some markets are consolidating, some not. In some we have high market share, in others we are a niche player. Some markets have compliance and technology drivers, while others rarely change their systems. Some have rapidly churning clients while others have long-lived clients. Some clients spend their own money buying systems, and some are

spending an employer's. Some buy enterprise-wide systems with significant customisation, while others buy departmental SaaS products with no customisation. Some markets have rabid venture-backed competitors with a grow-at-any-cost ethos, while others have a few rational competitors intent on making a decent living. All of these factors impact the organic growth potential of our businesses. Taking the particular industry and company factors into account, our BU managers work to develop an appropriate strategy.

A number of our businesses have strategies similar to JKHY i.e. they have built high market share in core systems via acquisition and organic growth, after which they've purchased and built add-on products to serve their clients better and drive up switching costs. JKHY appears to be willing to pay high prices for some third party add-on product businesses that might sell well into their installed base. We have tended to be more sceptical of such cross-selling synergies, perhaps because the investment decision-making has not historically been at the BU manager level. A lesson from JKHY, is that we may have been overly cautious regarding cross selling synergies.

In a variation on the "industry leader rollup with broad suite of add-ons" strategy, we sometimes acquire a group of businesses in the same market and run them independently. This can lead to duplication of costs but also tends to make for better market coverage, differentiated products and ultimately, higher market share. We have developed some add-on products to share between these BUs and sometimes share administration expenses, but the BU managers are autonomous, compete vigorously with each other, and are held accountable only for their own results. Operating with this kind of strategy, we may not be as likely to buy high growth add-on product businesses, nor invest as heavily in developing add-on products, because each BU Manager can't justify the investment based solely on his BU's installed base.

In some verticals, we are not the #1 or #2 player. There are a couple of strategies that we follow in this instance. We obviously try to use our knowledge of the vertical to acquire our way to a leadership position. That sometimes works (e.g. paratransit, mid-tier utilities, equipment rental software, homebuilding software, agricultural software, public housing software). If we are a small market share player and are unable to grow share via acquisition, we target a defensible niche within the overall market where we can differentiate our offering to compete effectively. Sometimes we can grow that niche, sometimes not. In some markets, it may not be economic to compete for new name clients. In that case, your niche has to be the clients that you already have. You target your service, support and add-on products solely at that base, and if the underlying attrition of the industry that you are serving is low, this can be a very good business model.

All of these strategies work, albeit with very different organic growth outcomes. We have tracked the IRR for all of the acquisitions that we've made since 2004 (i.e. >95% of the acquisition capital that we've deployed). When we graph the IRR's vs the post-acquisition OGr of each investment, there is little correlation. If you are really striving to see a relationship, you might argue that our best and our worst IRR's are both associated with low post-acquisition organic growth. Based on the data, there are much more obvious drivers of IRR than OGr. For instance, Revenue multiple paid (lower purchase price multiples are better - no revelation there), and post-acquisition EBITA margin (fatter margin acquisitions tend to generate better IRR's – somewhat intuitive, but needs further work).

How about a thought experiment? Assume attractive return opportunities are scarce and that you are an excellent forecaster. For the same price you can purchase a high profit declining revenue business or a lower profit growing business, both of which you forecast to generate the same attractive after tax IRR. Which would you rather buy?

It's easy to go down the pro and con rabbit hole of the false dichotomy. The answer we've settled on (though the debate still rages), is that you make both kinds of investments. The scarcity of attractive return opportunities trumps all other criteria. We care about IRR, irrespective of whether it is associated with high or low organic growth.

Organic growth can be associated with good IRR's. There are obvious techniques to improve IRR: You keep the early burn rate down while you test the major assumptions and then you add fuel to the fire once the risk associated with the low probability hypothesis testing is largely behind you. You try to test as cheaply as possible, and you move on quickly to new hypotheses. My background is in the venture industry, and that sort of hypothesis testing was what I did for eleven years. Most of our key managers earned their chops running strong organic growth verticals before building out their Operating Groups, so they're used to investing for organic growth. I don't think any of us had done an acquisition before we came to CSI. The vast majority of the CSI senior management team has a natural bias towards organic growth. But despite that bias, we strive to be rational, and only embark on Initiatives (and acquisitions) that we believe will meet our hurdle rate on a probability weighted basis.

Obviously we could do more organic growth Initiatives (and acquisitions) if we dropped our hurdle rates. We observed in early 2015, however, that lowering hurdle rates had historically been far more expensive than we originally thought. We analysed the weighted average expected IRR's for each of our acquisitions by year from 1995 to early 2015 and compared them with the prevailing hurdle rate we were using when the acquisitions were made. During that twenty year period we made three changes to the hurdle rate, one up, two down. The weighted average expected IRR for each vintage (e.g. all of the acquisitions done in 2004) of acquisitions tended to drop or increase to the newly implemented hurdle rate. Said another way, when we dropped our hurdle rate, it dragged down the expected IRR's for all the opportunities that we subsequently pursued, not just those at the margin. We try to capture this idea by saying "hurdle rates are magnetic". It now takes a very brave soul to propose a hurdle rate drop at CSI.

Only our BU managers have the intimate knowledge of their markets and teams needed to intelligently trade-off short term profitability and long term growth when they choose to sponsor an Initiative. Only they can deliver the "synergies" required to justify the acquisition of a high growth potential add-on products/services company. So if we are going to delegate the responsibility for organic growth and some of the acquisitions to the BU managers, how do we go about attracting and keeping great BU managers? I encourage you to bring up the question with our Operating Group managers at the annual general meeting ("AGM").

Our best BU managers have overseen double digit rates of growth for years via a combination of organic growth and acquisitions in their vertical and in adjacencies. That kind of low capital intensity compound growth creates powerful economics that generate remarkable incentive compensation. For BU managers that are new to the job and running a single BU, the compounding effect isn't as obvious, so we've started to roll out an additional bonus program targeted at keeping this contingent around until their wealth building potential becomes apparent. To date there are over 100 CSI employee/shareholder millionaires. Ten years from now, my hope is that there will be five times as many.

Table 2

	Quarter Ended								Fiscal Year Ended	
	Mar. 31 2014	Jun. 30 2014	Sep. 30 2014	Dec. 31 2014	Mar. 31 2015	Jun. 30 2015	Sep. 30 2015	Dec. 31 2015	Dec. 31 2014	Dec. 31 2015
CSI Method	7%	5%	4%	0%	-2%	-4%	-5%	-1%	4%	-3%
Alternate Method	6%	4%	5%	2%	-2%	-4%	-4%	-1%	4%	-3%

As a wrap up to the organic growth discussion, Jamal, at the urging of one of the analysts who covers CSI, asked me to compare how we calculate organic growth in revenue in our quarterly Management's Discussion and Analysis ("MD&A") to a commonly used alternative method. In the MD&A we estimate the run-rate revenue of the acquired businesses at the time of their acquisition as the starting point for

subsequent organic growth measurements. The common alternative method excludes the revenue of the acquired businesses from the calculation of organic revenue growth until the first anniversary of each acquisition. In Table 2 above, we've calculated organic revenue growth for the last eight quarters using both methods. The results are very similar. There are advantages and disadvantages to each method, but we'll continue to use our historical method in the MD&A, since it more quickly reflects organic growth changes caused by acquired businesses.

Combined Ratio

The final column in Table 1 is our "Combined Ratio" i.e. the sum of ROIC and OGr. We have touted the Combined Ratio as the best single measure of CSI's performance. CSI's ROIC+OGr was 35% in 2015, down significantly versus the levels achieved in the years since the last recession.

One of the problems with growing asset-lite businesses is that the historical Invested Capital required to purchase the business becomes increasingly irrelevant over time. We have a number of businesses where their current EBITA now exceeds their original purchase price. If they have achieved all of that growth organically, they have likely also reduced working capital significantly, perhaps driving the net purchase price below zero, and hence ROIC to infinity. These sorts of businesses defy conventional financial statement measurement, which is why we use IRR to track performance. Even IRR has its faults, usually to do with re-investment assumptions and the fact that it indicates neither hold period nor the amount of the investment. These faults are illustrated well by the impressive but largely unimportant IRR track record of our previous public company investments.

Since ROIC is also one of the big drivers of our incentive compensation program, we care about this "increasingly high ROIC" issue. When ROIC is very high, bonuses start to consume a disproportionate and inappropriate amount of pre-bonus net income. We've actually run into this situation a couple of times. You can either change the plan, cap the bonuses, or ask the managers to keep their profits and redeploy them in acquisitions or Initiatives.

We dislike changing bonus plans because it literally takes years for trust to re-build to the point where managers are willing to trade off short term profitability and bonus for higher longer term profitability. We saw this in spades when our major investors put CSI up for sale in 2011. ROIC increased sharply, acquisitions slowed dramatically, and Initiative spending dropped. Faced with the prospect of new owners intent on changing the bonus program and borrowing mountains of debt to acquire the business, our managers reacted as you'd expect, maximising short term profitability and bonuses at the cost of longer term growth and profitability.

The second alternative is capping bonuses. This feels like an extremely strong incentive to shift revenue and profit between good and bad years. It also undermines the utility of the accounting and information systems as management tools. Good people who might stray, become bad people in tiny steps greased by "everyone is doing it" and "it was a grey area". The last thing you want to do is build an incentive system that pushes employees out onto that slippery slope. We aren't fans of capped bonuses.

The third alternative shifts the capital allocation task down to the Operating Groups and Business Units. If they are producing handsome returns, they also need to figure out how to redeploy some of that capital. If they aren't producing good returns, we are happy for them to send excess capital back to head office. Since the Operating Groups and BUs "own" the bulk of our human resources, they also have the talent to develop opportunities and manage them (whether those opportunities are acquisitions or Initiatives). This is the alternative we've opted for when ROIC's get very high.

In the past, we've had both the Volaris and Vela Operating Groups on the "you've got to keep your capital" program, and they've responded well by deploying it at attractive rates of return. One of the nice

side effects of the "keep your capital" restriction, is that while it usually drives down ROIC, it generates higher growth, which is the other factor in the bonus formula. Acquisitions also tend to create an attractive increase in base salaries as the team ends up managing more people, capital, BUs, etc. Currently, a couple of our Operating Groups are generating very high returns without deploying much capital and we are getting to the point that we'll ask them to keep their capital if they don't close acceptable acquisitions or pursue acceptable Initiatives shortly. You might get some interesting dialog with the Operating Group managers at the AGM if you bring up this topic.

When we judge our own track record, we use IRR. We update the IRR forecasts for our acquisitions every quarter. The more "history", and the less "forecast" that we have for each acquisition IRR, the better a measure it becomes of a manager's investment performance. It takes years to figure out who are the great capital allocators. CSI's shareholders do not have the IRR information, would question it if they did have it (by definition, it contains forecasts), and are unlikely to want to wade through the 245 acquisitions we've made since 2004 (to December 31, 2015). Divulging the information would arm our competitors with acquisition pricing information so that they can bid against us more effectively, and acquisition performance data so that they can compete with us in our most attractive markets. So providing IRR information isn't the right way to keep shareholders informed.

Years ago, we settled on the Combined Ratio as a proxy for the growth in intrinsic value. If you assume that we continue to invest our entire FCF in acquisitions, and that the economics of our acquisitions are similar to those that we've demonstrated over the years, then ROIC+OGr is a reasonable (but somewhat overstated) proxy for the increase in intrinsic value. However, if we start paying higher multiples for acquisitions or using significant amounts of debt to either make more acquisitions, buy back shares and/or pay dividends, then the Combined Ratio metric can quickly become misleading. We're starting to look around for a better single metric to reflect the growth in intrinsic value.

Maintenance Growth and Attrition

The Maintenance growth and attrition statistics appear in Table 3. We have removed the estimated impact of foreign exchange from the "Price Increases and Other" category. FX was a big number this year, driving down our Maintenance growth by 6%. Total organic growth in Maintenance revenue was 7% in 2015, down slightly from last year. Lost module attrition is back down to its historical levels after an acquisition related increase last year. Acquisitions provided the bulk of the growth in 2015.

One of the concerns with acquisitive companies is that some of them grow revenues and adjusted earnings but impair the underlying value of their intangible assets. In essence what purports to be a return on capital is really a return of capital. We present these Maintenance statistics each year so that you can see if the Maintenance base is growing or shrinking organically. Our thesis is that as long as the base is growing organically, the value of the business is growing and our shareholders are getting a return on capital, not of capital. The 2015 numbers continue to support the thesis, albeit muddied by the estimated FX numbers.

As we caution you each year with regard to this table, while the totals are materially the same as our Maintenance revenue for financial reporting purposes, the individual components reflected in the table are generated by examining and categorising tens of thousands of records. The estimated FX adjustment was calculated by translating the Maintenance amounts in major foreign currencies into U.S. dollars at the average FX rates for each year. We believe that the data presented is a fair illustration of the trends in our Maintenance base.

Table 3

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Maintenance Revenue (US$MM)	**116**	**142**	**193**	**252**	**337**	**417**	**510**	**725**	**1,015**	**1,170**
Growth from:										
Acquisitions	17%	11%	25%	27%	25%	15%	15%	34%	32%	15%
Organic Sources										
a) New Maintenance	15%	9%	9%	8%	8%	8%	8%	10%	10%	8%
b) Price Increases and other	5%	9%	9%	4%	6%	5%	5%	6%	7%	5%
c) Attrition - Lost Modules	-2%	-2%	-3%	-3%	-3%	-2%	-2%	-2%	-4%	-2%
d) Attrition - Lost Customers	-4%	-4%	-4%	-4%	-4%	-3%	-4%	-5%	-5%	-5%
Total Organic Growth*	14%	12%	10%	4%	7%	7%	8%	8%	8%	7%
Estimated effect of FX	0%	0%	0%	-1%	1%	2%	-1%	-1%	-1%	-6%
Total Maintenance Growth *	31%	23%	35%	31%	34%	24%	22%	42%	40%	15%

* Certain totals may not reconcile due to rounding

Revenue per Share

Table 4 contains a couple of IFRS/GAAP metrics that we think are useful for our investors. Revenue growth is an upper-bound setter, since the growth rate of net income, ANI, cash flow from operating activities and dividends are all ultimately going to be limited by the revenue growth rate.

Table 4

	Total Revenue per Share		Cash Flow from Operating Activities per Share	
		YoY △		YoY △
2006	10.01	23%	1.36	12%
2007	11.47	15%	1.62	19%
2008	15.60	36%	2.96	83%
2009	20.67	32%	3.85	30%
2010	29.92	45%	5.06	32%
2011	36.49	22%	6.49	28%
2012	42.05	15%	6.83	5%
2013	57.13	36%	10.40	52%
2014	78.77	38%	16.11	55%
2015	86.75	10%	18.68	16%
CAGR		27%		31%

In 2015 CSI's revenue per share increased 10%. This was our worst performance since 2002.

The HPCs averaged 9% per annum revenue per share growth over the last decade. JKHY averaged 10%.

Absent enough attractive opportunities to deploy capital, I would not be hugely disappointed with a 10% annual increase in CSI's revenue per share over the next five years, so long as we also started paying significant dividends. We will obviously try to do better, and have refinanced our revolving line of credit and raised incremental debentures to put ourselves into a position where we are not capital constrained if we find acquisitions that meet our hurdle rate.

Cash Flow from Operating Activities per Share

CSI's cash flow from operating activities ("CFOA", column 4, Table 4) per share increased 16% in 2015. Note that CFOA is a defined term under IFRS and is shown in this table, as it is in our financial statements for 2010 and beyond, before the deduction of interest paid. CSI's CFOA per share will eventually be limited by our growth in revenue per share.

Last year I suggested that CFOA less interest paid (for 2010 and subsequent years) and capital expenditures all calculated on a per share basis was a good way to look at CSI's results. That's a non-IFRS metric, so all the associated warnings apply.

Great Companies Are Not Always Great Stocks

There's one last lesson from JKHY that I'd like to share. It relates to you as shareholders. There was a ten year period during which JKHY's shares both underperformed the S&P 500 (2000 until 2010) and didn't make any money for shareholders. The underperformance vs the S&P 500 was minor … approximately 1%. JKHY's revenues per share and ANI per share had compound average annual growth rates of 14% and 21%, respectively during that decade. Why did stock results and operating results diverge so widely for such a long period? It had to do with shareholder expectations and market exuberance. The general mania which gripped the market in 2000, and the more specific enthusiasm for JKHY's stock which then traded at well over 60 times ANI, left shareholders incredibly vulnerable. When the market "corrected" the JKHY stock had no margin of safety.

When really good companies start trading at 5 and 6 times revenues, it's time to start worrying. I hope our shareholders are never in that position.

Partners

In last year's letter I explained that the directors and I had worked out a plan where I was to work less and get paid less. After more than a year under that regime, I'm not complaining, and the directors don't seem uncomfortable.

More important, our shareholders seem comfortable with my new "partner not employee" arrangement. I was pleased to see that this year's AGM proxies still overwhelmingly voted for both our inside and outside directors.

I'd like to thank our shareholders and our employees for their continued support.

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I sometimes recommend books. I don't do this lightly, as I know they can be an obligation (sometimes felt heavily) to spend precious time. I feel better when I remember Will Rogers' advice about learning by readin'.

The books that I recommended in previous letters were summaries of seminal scientific research. This year I'd like to propose that you read "*One Man's Medicine: An Autobiography of Professor Archie Cochrane*", and "*Effectiveness and Efficiency, Random Reflections on Health Services"*, both by A. L. Cochrane. I'm sneaking in two books because they are both thin. Once again the books contain summaries of scientific research, this time in epidemiology.

The first book is a moving, idiosyncratic and dryly amusing autobiography of a brilliant and erudite outsider that makes you wish you'd known the man firsthand.

The second is a stinging critique of a well-meaning but entrenched medical establishment, for their ineffective and dangerous medical practices.

While the epidemiology is interesting and surprisingly relevant even today (people change incredibly slowly!), Archie's observations regarding medical practices and doctors struck me as applying equally to business practices and managers. The asymmetric effectiveness of most medical treatments, rarely influencing positive outcomes while frequently contributing to negative ones, made me think critically about what I and most other managers do.

Archie's legacy is a worldwide volunteer organisation (Cochrane.org) consisting of 37,000 contributors in 130 countries producing systematic reviews of medical research so that researchers, doctors, and patients have access to the most recent evidence from randomised controlled trials "RCTs" to make healthcare decisions.

The progress in business knowledge is painfully slow and is fraught with guru's generalising from plausible anecdotes. A little more experimentation (in the old sense of the word, i.e. testing hypotheses) would go a long way towards improving business practices.

At CSI we spend time on non-randomised observational studies (the red haired step-child of RCTs) trying to spot business practices that actually add value rather than overhead. One of our analysts recently looked at the correlation of increased customer spending with a host of factors and found a single significant correlation. That finding may be an aberration, or it may be a way to unlock untapped organic growth. While I was interested in the analysis, I was incredibly proud of the people involved. Without questing minds and willing participants providing data, you can't even start to solve the important questions.

We will be hosting the AGM on Thursday, April 28th. Many of our Directors and Officers and a number of our employee shareholders will be in attendance. We look forward to talking about our business and answering your questions. We hope to see you there.

Mark Leonard April 26th, 2016
President
Constellation Software Inc.

Glossary

For 2009 and prior periods, the financial information for CSI was derived from the consolidated financial statements which were prepared in accordance with Canadian generally accepted accounting principles ("GAAP"). 2010 and subsequent year financial information for the Company was derived from the consolidated financial statements which were prepared in accordance with International Financial Reporting Standards ("IFRS"). Certain totals, subtotals and percentages may not reconcile due to rounding.

''Adjusted net income'' effective Q1 2008, means adjusting GAAP or IFRS net income for non-cash expenses (income) such as amortization of intangible assets, deferred income taxes, the TSS membership liability revaluation charge, and certain other expenses (income), and excludes the portion of the adjusted net income of Total Specific Solutions (TSS) B.V. ("TSS") attributable to the minority owners of TSS. Prior to Q1 2008, Adjusted net income was derived by adjusting GAAP net income for the non-cash amortization of intangibles and charges related to appreciation in common shares eligible for redemption. The calculation was changed to include future income taxes since the majority of future income taxes relate to the amortization of intangible assets, and thus are added back to more closely match the non-cash future tax recovery with the amortization of intangibles. All previously reported Adjusted net income figures have been restated in the table above to reflect the new calculation method. The Company believes that Adjusted net income is useful supplemental information as it provides an indication of the results generated by the Company's main business activities prior to taking into consideration amortization of intangible assets, deferred income taxes, the TSS membership liability revaluation charge, and certain other non-cash expenses (income) incurred or recognized by the Company from time to time, and adjusts for the portion of TSS' Adjusted net income not attributable to shareholders of CSI.

"Average Invested Capital" represents the average equity capital of the Company, and is based on the Company's estimate of the amount of money that its common shareholders had invested in CSI. Subsequent to that estimate, each period the Company has kept a running tally, adding Adjusted net income, subtracting any dividends, adding any amounts related to share issuances and making some minor adjustments, including adjustments relating to our use of certain incentive programs and the amortization of impaired intangibles. The Company believes that Average Invested Capital is a useful measure as it approximates the retained earnings of the Company prior to taking into consideration amortization of intangible assets, deferred income taxes, and certain other non-cash expenses (income) incurred or recognized by the Company from time to time. ROIC" means Return on Invested Capital and represents a ratio of Adjusted net income to Average Invested Capital. The Company believes this is a useful profitability measure as it excludes non-cash expenses (income) from both the numerator and denominator.

"Net Revenue". Net Revenue is gross revenue for GAAP or IFRS purposes less any third party and flow-through expenses. The Company believes Net Revenue is a useful measure since it captures 100% of the license, Maintenance and services revenues associated with CSI's own products, and only the margin on the lower value-added revenues such as commodity hardware or third party software.

"Total Capital" is the sum of Net debt plus Invested Capital

"Net Debt" is debt less cash.

"Free Cash Flow" in this letter, unlike under IFRS is cash flow from operating activities less interest paid and property and equipment purchased.

"EBITA" is earnings before interest, taxes and the amortisation of intangible assets.

"EBITA Return" is EBITA/Total Capital

"HPCs": Ametek, Danaher, Dover, Illinois Tool Works, Roper, Jack Henry & Associates, Transdigm, and United Technologies.

As part of this letter, we have compared CSI with the HPCs using many commonly used financial metrics. The financial metrics principally used to compare CSI with the HPCs are: adjusted net income (ANI), earnings before interest, taxes and amortization (EBITA), return on invested capital (ROIC), Total Capital, Net Debt, EBITA Return, and Free Cash Flow. We have had to rely on publically available information in order to calculate the financial metrics for the HPCs. It should also be noted that there will be differences between how the financial metrics are calculated for CSI and each of the HPCs.

Forward Looking Statements

Certain statements in this letter may contain "forward looking" statements that involve risks, uncertainties and other factors that may cause the actual results, performance or achievements of the Company or industry to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. Words such as "may", "will", "expect", "believe", "plan", "intend", "should", "anticipate" and other similar terminology are intended to identify forward looking statements. These statements reflect current assumptions and expectations regarding future events and operating performance as of the date of this letter. Forward looking statements involve significant risks and uncertainties, should not be read as guarantees of future performance or results, and will not necessarily be accurate indications of whether or not such results will be achieved. A number of factors could cause actual results to vary significantly from the results discussed in the forward looking statements. Although the forward looking statements contained in this letter are based upon what management of the Company believes are reasonable assumptions, the Company cannot assure investors that actual results will be consistent with these forward looking statements. These forward looking statements are made as of the date of this letter and the Company assumes no obligation, except as required by law, to update any forward looking statements to reflect new events or circumstances. This report should be viewed in conjunction with the Company's other publicly available filings, copies of which can be obtained electronically on SEDAR at www.sedar.com.

Non-GAAP/IFRS Measures

Adjusted net income and Organic Net Revenue Growth are not recognized measures under GAAP or IFRS and, accordingly, shareholders are cautioned that Adjusted net income and Organic Net Revenue Growth should not be construed as alternatives to net income determined in accordance with GAAP or IFRS as an indicator of the financial performance of the Company or as a measure of the Company's liquidity and cash flows. The Company's method of calculating Adjusted net income and Organic Net Revenue Growth may differ from other issuers and, accordingly, may not be comparable to similar measures presented by other issuers. Please refer to CSI's most recently filed Management's Discussion and Analysis for reconciliation, where applicable, between the IFRS, GAAP and non-GAAP/IFRS measures referred to above.

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"optimism is highly valued, socially and in the market; people and firms reward the providers of dangerously misleading information more than they reward truth tellers" Daniel Kahneman

"What accounts for TIT FOR TAT's robust success is its combination of being nice, retaliatory, forgiving, and clear." Robert Axelrod

“I ended up writing the book… between the hours of 10:00 pm and 1:00 am when I had finished everything else. I date the real beginnings of my love of whiskey to this period.” Archie Cochrane

“There are three kinds of men. The ones that learn by readin’. The few who learn by observation. The rest of them have to pee on the electric fence for themselves.” Will Rogers

Constellation Software Inc.

TO OUR SHAREHOLDERS

Last year I used our study of high-performance conglomerates ("HPC's") as a framework for this letter. One of the findings from studying the HPC's was that they followed a multi-decade pattern, with extraordinary returns in asset-light businesses in their early days, followed by a period of attractively priced acquisitions to which they applied their increasingly refined operating practices. Eventually, they drifted towards paying higher multiples for larger acquisitions as the HPC's became very large. The high acquisition prices led to declining pre-tax, pre-interest returns on Total Capital. While the average return on Total Capital for the HPC's still exceeds that of the S&P 500, it is much closer to that benchmark now than it was fifteen years ago.

In the last couple of years, a number of journalists and analysts have hinted that the Constellation Software Inc. ("CSI") historical performance is too good to be true. They frequently conclude, in the best case, that our performance will revert to the mean. Reversion towards the mean is consistent with what we found for all the HPC's, so I don't disagree with their observation. Our goal, however, is to have our return on Total Capital revert to the mean as slowly as possible, while still deploying most of the Free Cash Flow ("FCF") that we generate.

Table 1

	Adjusted Net Income (a)	Average Invested Capital	ROIC	Organic Net Revenue Growth (YoY)	ROIC + Organic Net Revenue Growth
2007	33	154	22%	1%	23%
2008	54	195	28%	5%	33%
2009	62	256	24%	-3%	21%
2010	84	325	26%	-2%	24%
2011	140	394	36%	7%	43%
2012	172	491	35%	2%	37%
2013	207	585	35%	4%	39%
2014	274	739	37%	3%	40%
2015	371	965	38%	-3%	35%
2016	395	1261	31%	1%	32%

(a) Historical figures restated to comply with revised definition.

In our non-GAAP results for 2016 (Table 1), you can see evidence of reversion to the mean. Adjusted Net Income grew only 6% in 2016, as compared to our ten-year compound average growth rate ("CAGR") of 31%. Our Average Invested Capital grew 31% as compared to our ten year CAGR of 26%. On the face of it, the increasingly rapid accumulation of Invested Capital is attractive, but only if we can invest that capital at high rates of return. ROIC was 31% in 2016, in line with our 10-year average, but lower than we've achieved in each of the last five years. ROIC was depressed because we were unable to invest all of our FCF during 2016 and so were carrying excess cash by year-end, and because we made a number of larger acquisitions with lower returns over the last couple of years. Organic Net Revenue Growth for the year was 1%, an improvement vs. 2015, but below our 10-year average.

We have just completed the Maintenance Revenue analysis (Table 2) for 2016. The same cautions apply to this year's analysis as to those in prior years, i.e. while the totals are materially the same as our Maintenance Revenue for financial reporting purposes, the individual components reflected in the table

are generated by examining and categorising tens of thousands of records, and the estimated FX adjustment was calculated by translating the Maintenance amounts in major foreign currencies into U.S. dollars at the average FX rates for each year. We believe that the data presented is a fair illustration of the trends in our Maintenance base.

Total organic growth in Maintenance Revenue declined to 5% for 2016. In my letter last year, I explained that we sometimes buy shrinking businesses, and despite the shrinkage, we still expect to generate good returns on those investments. Growing businesses are more attractive to us, but we can't always acquire enough growing businesses at reasonable prices to invest all of our FCF. Our "next best" use of capital is acquiring shrinking VMS businesses which still meet or exceed our hurdle rate. Mixing growing and contracting businesses in one company creates a number of interesting cultural and management challenges. This might be a lively discussion topic for shareholders to raise with our management team during the Annual General Meeting (AGM). During the last few years we purchased several healthcare software businesses and a real estate software business that were all contracting, but generating strong current results. Those acquisitions improved our short-term profitability but depressed our organic growth rate in Maintenance Revenue by over 1% in 2016.

Table 2

(US$MM)	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Maintenance Revenue	142	193	252	337	417	510	725	1015	1170	1400
Growth from:										
Acquisitions	11%	25%	27%	25%	15%	15%	34%	32%	15%	16%
Organic Sources										
a) New Maintenance	9%	9%	8%	8%	8%	8%	10%	10%	8%	9%
b) Price Increases & Other	9%	9%	4%	6%	5%	5%	6%	7%	5%	5%
c) Attrition- lost modules	-2%	-3%	-3%	-3%	-2%	-2%	-2%	-4%	-2%	-4%
d)Attrition- lost customers	-4%	-4%	-4%	-4%	-3%	-4%	-5%	-5%	-5%	-5%
Total organic growth*	12%	10%	4%	7%	7%	8%	8%	8%	7%	5%
Estimated effect of FX	0%	0%	-1%	1%	2%	-1%	-1%	-1%	-6%	-2%
Total maintenance growth*	23%	35%	31%	34%	24%	22%	42%	40%	15%	20%

* Certain totals may not reconcile due to rounding

Our overall organic growth in revenue has averaged 2% during the last 10 years. The organic growth in Maintenance Revenue has averaged close to 8%. The discrepancy between the two figures has been possible because Maintenance Revenue as a portion of total revenue has increased. While some of the change in revenue mix is due to the elimination of low-margin, non-Maintenance activities, a portion is because we have knowingly traded off one-time licenses for increased recurring revenues. To some extent, particularly where we've adopted a SaaS model, we may have also traded off professional service revenues for increased recurring revenue. These trade-offs create revenue streams that are more stable and make managing our businesses easier. As Maintenance Revenue becomes a larger portion of total revenues, the discrepancy between the organic growth in total revenue and Maintenance Revenue is likely to be smaller.

This will be the last year that we present the Maintenance analysis in this format. Our business units ("BU's") monitor customer health in many ways and tend to do so on a much shorter cycle than annually. When we ask them to produce the information in Table 2, there is a large, unautomated process of classifying data and making it consistent between BU's. The benefit of providing this information for shareholders feels like it is outweighed by the effort of compiling it, if we can do it another way. For reporting purposes, Jamal began (last quarter) an alternative process of measuring organic growth by revenue stream, including maintenance, on a quarterly basis. This is a top-down analysis, and can be done quickly without a lot of ad hoc effort. Jamal will describe the calculation in managements' discussion of the Q1 results, but a significant difference is that instead of using only the prior year's Maintenance Revenue as the denominator for the growth calculations, he adds a run-rate assumption for acquired Maintenance Revenue to the denominator for such calculations. We will be reporting that data quarterly, and will provide quarterly historical comparisons going back to Q1 2016. While the information presented will not be as detailed as in Table 2, the increased frequency of reporting should be valuable for our shareholders.

Because some of our shareholders prefer IFRS-sanctioned data, we regularly present a couple of IFRS metrics that we find informative (Table 3). Total revenue per share increased 16% in 2016, up from 10% the prior year but down from the 26% CAGR that we achieved during the last decade. I consider 16% growth in Revenue per Share to be superb performance. The S&P 500's Revenue per Share grew less than 3% in 2016 and its growth has averaged 2% for the last decade.

Our Cash Flow from Operating Activities per Share grew 24% in 2016, down from the 33% CAGR that we achieved during the last decade. The S&P 500 seems to have grown its Cash Flow from Operating Activities per share in the mid to high single digit percentage range during the last decade, depending upon which source you believe, and whether financial companies are included in the calculation or not. CSI has done an outstanding job of growing cash flow per share, but that surfeit of cash contributes to our reinvestment challenges.

Table 3

	Total Revenue per Share	YoY △	Cash Flow from Operating Activities per Share	YoY △
2007	11.47	15%	1.62	19%
2008	15.60	36%	2.96	83%
2009	20.67	32%	3.85	30%
2010	29.92	45%	5.06	32%
2011	36.49	22%	6.49	28%
2012	42.05	15%	6.83	5%
2013	57.13	36%	10.40	52%
2014	78.77	38%	16.11	55%
2015	86.75	10%	18.68	16%
2016	100.28	16%	23.16	24%
CAGR		26%		33%

CSI is still an exceptional company by most standards, but we are clearly not performing as well as we have in the past. Part of that slippage is due to external factors. Part of it is due to internal execution issues.

Externally, competition to buy vertical market software ("VMS") businesses is intense. Vista Equity Partners and Thoma Bravo are two of the most prominent private equity ("PE") firms that concentrate on

software acquisitions. Roper Industries is a large publicly traded industrial conglomerate that we included in our HPC study and that also actively competes for VMS acquisitions. Vista currently manages approximately $28 billion of capital and Thoma Bravo is managing approximately $16 billion. Both have raised multi-billion dollar funds in the last couple of years. CSI is currently managing only $1.4 billion of capital. In the last 9 years, Roper Industries has invested five times as much capital in the VMS sector as CSI has since its inception, 22 years ago.

In addition to these three daunting competitors, there are a dozen or so PE firms who each manage in excess of a billion dollars and who have well-established software track records. At the lowest end of the market, every quarter we seem to profile for our Operating Group Managers at least one new competitor that proposes to create a CSI look-alike. A number of these new competitors are trolling our employee base for talent. This much capital targeting the VMS sector has driven and will continue to drive up purchase price multiples.

The internal execution issues upon which we currently focus are: Maintaining investment discipline, avoiding overhead creep, and increasing our investment in growth, both organic and acquired. Even if we execute superbly on the first two, it is difficult to foresee consistent multiyear growth in intrinsic value per share (assuming that dividends are reinvested) that exceeds 10% to 12%.

Maintaining Investment Discipline:

I recently worked on a large transaction. With every day that passed, I could feel my commitment to the process growing… not because the news was getting better, just because I was spending more time on the prospect. The investment didn't quite meet our hurdle rate. We were not able to negotiate a structure that got us an extra couple of points of IRR, and the big one got away. The difference between investing and not, was tiny.

Currently, we have 26 Operating Group and Portfolio Managers who spend >50% of their time on M&A, and another 60 full-time M&A professionals spread across CSI. We are trying to ramp up our M&A capacity from the 40 acquisitions that we did last year, to 100 per annum. It was useful for me to once again experience the temptations that these people face every day. It also reaffirmed for me that when we pursue a very large acquisition, the diligence, structuring, negotiating and integration needs to be led by a single person who is one of our highly-experienced acquirers, and who will shoulder responsibility for the process and the outcome.

Bernie tries to be the last line of defense when our Operating Groups and BU's propose borderline investments. Some of our Operating Groups have developed or are developing senior M&A people to help Bernie filter out over-optimistic acquisition proposals, but Bernie is still the primary provider of this acquisition control function for some of the Operating Groups.

If a small investment with a borderline hurdle rate is proposed, we sometimes allow it to proceed. Our rationale is that if the investment goes sideways, then it becomes a "lesson" for the Operating Group or BU personnel that proposed it. If the investment goes well, it becomes a "lesson" for Bernie and me.

An investment only becomes a lesson if we diligently track its post-acquisition performance and take the time to analyse the outcome while the investment is still fresh in everyone's mind. We have a process for this that we call a post-acquisition review, or "PAR". We try to schedule the PAR's about a year after the initial investment. The PAR's originated as a head office led process approximately four years ago. Just over a year ago, we started delegating them down to the Operating Groups.

One of the useful things that head office can do, is pilot new processes and champion new ideas. If the ideas add enough value to the BU's and Operating Groups, and they choose to maintain them, then I'm delighted. Nevertheless, I think all processes should be periodically re-examined for their cost and benefit. An ad-hoc analysis done to understand a problem or opportunity is more likely to translate into action than a quarterly report that gets generated because "we've always done it that way". The former requires curiosity and intelligence, the latter bureaucracy and compliance. If the Operating Groups can learn from their acquisitions by some less burdensome method than PAR's, I'm all for it.

As we teach more people at CSI how to deploy capital, we lean on the accumulated data from our historical acquisitions to help maintain investment discipline. We have base rates for a variety of key operating metrics. Whether it is a neophyte investment champion arguing that a particular acquisition is "special", or a senior executive being tempted by a large acquisition, we have enough data to make the discussion rational, not emotional. We all know whether the key assumptions are being pushed to the 55th or 95th percentiles of our historical distributions.

My only significant concern regarding investment discipline, is that we'll be tempted to drop our hurdle rates as our cash balances climb.

Avoiding Overhead Creep:

Overhead creep is a short-term concern of mine and the BU Managers.

It is human nature to build empires. The slippery slope looks something like this:

I add value to the CSI Operating Groups and BU's, and CSI is doing well, hence the expenditures that I make at head office are justified.

Our Operating Group Managers add value to their BU's, and their Operating Groups are doing well, hence their expenditures are justified (although they find the expenditures at head office questionable).

The Portfolio Managers who work for the Operating Group Managers add value to their BU's hence their expenditures are justified, etc., etc.

There's no real feedback in the process, until the costs of head office, the Operating Groups, the Portfolio Managers and their staff, and the Player/Coaches who work for the Portfolio Managers, all get allocated down to the BU's. We do this allocation, but the BU Managers often don't feel that they can control allocated overheads.

The only way we've been able to consistently stifle overhead growth at head office is to arbitrarily limit headcount additions. That has allowed us to reduce the head office burden from 3.0% of Net Revenue in 2004, to 0.5% last year. We hope it will be lower in 2017.

I have struggled to find a less arbitrary means of appropriately sizing overheads. A couple of years ago, our head office tax folks seemed to have an insatiable appetite for increased headcount. I couldn't argue with their justification, but I asked them to start billing the Operating Groups for the incremental services, separate from our normal overhead allocation. There were two short-term results… our head office tax people hated billing the Operating Groups and justifying their bills, and one of the Operating Groups went off and hired their own tax person. The long-term result also pleased me: the head office tax people have stopped asking about hiring additional staff. Now, if I could just figure out how to stop them spending all that money with outside tax consultants…

Each of the Operating Groups is the equivalent of what CSI was ten years ago (plus or minus three years). If every Operating Group manages to develop six or seven Portfolio Managers to whom they can download the monitoring, coaching and acquisition control functions, and seeks to operate their

remaining overheads with cost parameters similar to those that CSI's head office exhibited at the comparable time/size of portfolio, then overhead creep should be controllable.

Increasing Investment in Growth, both Organic and Acquired

This is a big topic. The Operating Group Managers and I are concerned that our BU's are not investing enough in the pursuit of profitable Organic growth. Equally important, we would like to see the company investing all of its FCF (and perhaps more) in acquisitions.

I believe that optimising organic growth investment is the single toughest management task in software. It requires a long-term orientation and an intimate understanding of customers and capabilities from our BU Managers. Historically, organic growth has not been a struggle for our best BU Managers. When most of our current Operating Group Managers ran single BU's, they had strong organic growth businesses. As those managers gave up their original BU management position to oversee a larger Group of BU's (i.e. became Portfolio Managers), the organic growth of their original BU's decreased and the profitability of those BU's increased. Perhaps those trade-offs were rational and inevitable, and it was just a function of maturing verticals and higher market share. Nevertheless, once you've experienced higher organic growth with all of its ancillary benefits for employees and for the depth and radius of your business moat, the move towards higher profit and lower growth is much less satisfying. Across the board, our Operating Group Managers have organic growth as the primary objective for their BU Managers.

When we study organic growth, there are no easy answers from CSI's data. We are just as likely to have good organic growth in our small BU's as in our large ones. We are just as likely to have good profitability in our small BU's as in our large ones. If you believe that small implies agile and responsive, then the former observation is counter-intuitive. If you believe that economies of scale are the primary drivers of profitability in the software business, then the latter observation is counter-intuitive.

One of my research acquaintances says that most people keep torturing the data until it confesses. In this instance, we can do that… we can make a case for "small is beautiful". Our businesses with fewer than 100 employees are a tiny bit more profitable and have a bit more organic growth. Unfortunately, we can flip that finding by excluding only a couple of outlier data points. Despite the lack of compelling data, I believe that small BU's are more manageable and do a better job of serving clients in the VMS industry. Sometimes belief and gut feel are all you have, and you must act upon them until there's more evidence to influence your thinking.

CSI's BU demographics (as of December 2016) appear below. There are some BU's that are independent but are run by the same BU manager, that get aggregated as single BU's into this tally, i.e. the total number of BU's is slightly higher and the average size is slightly lower than indicated in Table 4.

Table 4

# of BU's	BU Size (Employees)
6	>200
29	100-200
158	<100

CSI's strategy is to be a good owner of hundreds (and perhaps someday thousands) of growing autonomous small businesses that generate high returns on capital. Our strategy is unusual. Most CEO's of public companies would rather run a single big business - perhaps two or three big businesses, but rarely 200 businesses. They expect (or hope) to get above average returns on capital by pursuing

economies of scale and by crushing or acquiring their smaller competition. "We are #1 in this large and growing market" is their normal aspirational paradigm. It's also a formula with which shareholders, analysts and boards are comfortable. We recognise that economies of scale, centralised management and world class talent competing in large and growing markets can be a great business-building formula. But, it isn't what we do.

We seek out vertical market software businesses where motivated small teams composed of good people, can produce superior results in tiny markets. These markets are usually characterised by a gradually consolidating customer base, so partnering with the right clients, and helping them survive and prosper is an important part of our job. What we offer our BU Managers is autonomy, an environment that supports them in mastering vertical market software management skills, and the chance to build an enduring and competent team in a “human-scale” business.

While we have developed some techniques and best practices for fostering organic growth, I think our most powerful tool is using human-scale BU’s. When a VMS business is small, its manager usually has five or six functional managers to work with: Marketing & Sales, Research & Development ("R&D"), Professional Services, Maintenance & Support and General & Administration. Each of those functional managers starts off heading a single working group. If the business leader is smart, energetic and has integrity, these tend to be halcyon days. All the employees know each other, and if a team member isn't trusted and pulling his weight, he tends to get weeded-out. If employees are talented, they can be quirky, as long as they are working for the greater good of the business. Priorities are clear, systems haven't had time to metastasise, rules are few, trust and communication are high, and the focus tends to be on how to increase the size of the pie, not how it gets divided. That's how I remember my favourite venture investments when I was a venture capitalist, and it's how I remember many of the early CSI acquisitions.

That structure usually suffices until there are perhaps 30 to 40 people in the business. At that stage, some of the teams - perhaps R&D if the product is rapidly evolving or has high needs for interfaces or compliance changes - must grow beyond the five to nine optimal team size. If the head of R&D in this example is brilliant and is willing to work hours that are unsustainable for most of us, he may be able to parse out tasks for each of the team members despite the increased team size. He may be able to judge the capabilities and cater to the development needs of each of his direct reports. He may be able to recruit excellent new employees, and he may be able to manage the demands and trade-offs required to co-ordinate with the other functional managers. The more likely outcome, is that the R&D manager isn't a brilliant workaholic and cannot cope as the team size exceeds double digits. Instead, he'll break his team up into multiple teams. A new level of middle managers will be born, with all the potential for overhead creation, politics, and bureaucracy that comes with another tier of middle managers.

The larger a business gets, the more difficult it becomes to manage and the more policies, procedures, systems, rules and regulations are generated to handle the growing complexity. Talented people get frustrated, innovation suffers, and the focus shifts from customers and markets to internal communication, cost control, and rule enforcement. The quirky but talented rarely survive in this environment. A huge body of academic research confirms that complexity and co-ordination effort increase at a much faster rate than headcount in a growing organisation.

If the BU is small enough, and has a competent BU manager who has several years experience in the vertical, and good functional managers, then he/she will be able to cope with complexity for a while, making the right calls to optimise organic growth as the business grows. The challenge of running a BU of this size is human-scaled. As a BU becomes larger (by our standards, that’s greater than 100 employees), I worry that even an extraordinarily brilliant and energetic manager, who has been in the vertical and the BU for a very long time, and is surrounded by a strong team that he/she has selected and

trained and winnowed over many years, is going to struggle to steer the business to above industry-average organic growth.

No one wants to admit that they've hit their limit. Some BU Managers lack the humility, some lack the courage, and most lack the time for reflection, to notice that their task is getting too large, and the sacrifices are getting too great. This is the point at which our Operating Group Managers or Portfolio Managers can provide coaching. If a large BU is not generating the organic growth that we think it should, the BU manager needs to be asked why employees and customers wouldn't be better served by splitting the BU into smaller units. Our favourite outcome in this sort of situation is that the original BU Manager runs a large piece of the original BU and spins off a new BU run by one of his/her proteges. Ideally, he/she has been grooming a promising functional manager who'll be enthusiastic about running and growing a tightly focused, customer-centric BU.

This dividing of larger BU's into smaller units is rare, but not unknown, in other large companies. One of the HPC's that we studied was Illinois Tool Works Inc. ("ITW"). It has hundreds of BU's. We began following the company from afar in 2005. The most relevant period in ITW's history for CSI was the tenure of John Nichols. Nichols began consulting to ITW in 1979, and appears to have been the primary author of its decentralisation strategy. He was CEO as the company went from $369 million in revenues in 1981 to $4.2 billion in 1995 ($6.7 billion in today's dollars). Prior to Nichols's tenure, ITW had acquired only 3 businesses. During his tenure, ITW aggressively acquired and often split the larger acquisitions into smaller BU's. ITW had 365 separate operating units by 1996 when Nichols retired. I'm sorry I didn't reach out to some of the ITW employees and ex-employees until 2015. When I did talk with one of the senior managers, he said (I'm paraphrasing) "Something wonderful happens when you spin off a new business unit." … "With a clean sheet of paper, the leader only takes those he needs. They set up in an open office with good communication and no overheads. They cover for each other. They leave all the bureaucracy and the crap behind". I did record a couple of verbatim quotes from that conversation: "Don't share sales, R&D, HR, etc. because the accountants never get the allocations right and the business units always treat the allocated costs as outside their control", and "When you get big you lose entrepreneurship".

I don't want to give you the impression that the "human-scale" BU idea is a universally accepted doctrine in our ranks. For that, I suspect we'd need more compelling data. However, we have been successfully experimenting with the concept for a long time. Volaris and TSS regularly divide their larger BU's into smaller BU's that focus on sub-segments of their markets. Volaris feels strongly that splitting larger BU's into smaller ones allows more targeted products and services that differentiate their offerings from their more horizontal competitors. Harris has very successfully acquired multiple BU's in the same industry and run them independently rather than combining them into one BU. Both tactics forego obvious and easily obtainable benefits from economies of scale. We think we get something valuable when we constrain BU headcount, but it isn't a panacea for all of our organic growth challenges.

The other way we grow is via acquisitions. The vast majority of our acquisitions fall into the sub-100 employee category and were owner-managed prior to our acquisition. In 2016 we made 40 acquisitions, of which 35 had fewer than 100 employees. 30 of those acquisitions were from owner-managers.

I believe that CSI can be a great home for an owner-managed business. If the business has more than a handful of employees, we nearly always run it as a stand-alone BU. We respect the vertical-specific knowledge of the employees and give them the chance to learn from employees running similar departments and functions in our other BU's. We don't sunset products and we believe that customers and BU Managers, not head office CTO's or product strategists, should choose which products get continued investment. If the owner-manager wants to transition out quickly, the probability is very high that the successor that he/she designates will end up running the business for CSI. If the owner-manager

wishes to stay for several years, perhaps spending less time on day to day management and more on acquisitions, then we are just as happy with that outcome. If you are an owner-manager of a VMS company and fall into either camp, we can arrange for you to meet with former owners like yourself who have sold to CSI.

We have best practices for acquisitions, just as we have best practices for fostering organic growth. When our BU managers encounter natural limits we coach them on how to get the most leverage from their skills and team. We apply a similar model when our Portfolio Managers encounter the limits to their monitoring, coaching, and acquisition related activities. I was CSI's first Portfolio Manager. Somewhere between mid-2005 and mid-2006, I ran out of capacity. CSI had $200 million in revenue, seven Operating Groups and about thirty BU's at that time. I could do the short-term BU monitoring portion of the job, but I couldn't stay abreast of the important longer-term factors for the BU's: details about competitors, market share, major customers, product strategy, initiatives, management competencies, etc. Without those details, my ability to provide context-sensitive coaching for BU Managers and Portfolio Managers rapidly deteriorated. I had been involved in all the large acquisitions that CSI had done up until 2005 and I had chased down a second significant acquisition for several of those verticals. By 2006 I could no longer be the primary driver of our acquisition activities. I began to ask our Operating Group Managers to shoulder the entire responsibility for monitoring and coaching their BU's and to also assume responsibility for deploying the majority of our FCF.

I didn't have complete confidence in a couple of the Operating Group Managers so the delegation process dragged on for a while. We eventually terminated two managers. It cost us some severance pay and time but we were able to find capable and trusted replacements from within CSI. There was a bit of a hiccup in our growth in 2006 and 2007 but the current Operating Group Managers - Barry, Dexter, Jeff, John, Mark, and Robin - have driven most of our capital deployment since 2006. They've developed their teams, put their own unique stamp on their groups and done a magnificent job of growing CSI's revenue and FCF per share by more than tenfold. Each is now running a group of BU's that is similar in size to CSI when I ran out of capacity. All of the Operating Group Managers have started the process of delegating their monitoring, coaching, and acquisition activities down to their Portfolio Managers, so the cycle begins anew.

When I look at the current generation of Portfolio Managers, I see some that have the potential to be exceptional managers and capital deployers. While that bodes well for continued growth, there aren't enough of them to get us the ten-fold growth that we've had in the last eleven years. To generate that sort of growth, we need more Portfolio Managers and they need to be as competent as our current Operating Group Managers. That's a tall order. It will require an intense training and coaching effort with our existing Portfolio Managers, possibly some outside hires into Portfolio Manager roles, and the acceleration of some existing BU Managers into Player/Coach and Portfolio Manager roles. Until these Portfolio Management roles are filled with people that have the complete confidence of their Operating Group Managers, delegating the majority of capital allocation won't happen, and the sustainable 20% plus growth rates of the past are impossible.

In December, we asked our Operating Groups to identify new "Potential Portfolio Managers". The good news was that there were 45 BU Managers on the list and 84% of them had been internal promotions to BU manager, or had arrived as part of an acquisition. The bad news is that newly identified high-potential BU Managers must first demonstrate that they can run a BU well, build a team, and generate optimal organic growth. Then they need to learn some non-trivial M&A skills. They'll have lots of support in this process, but it doesn't happen overnight. If we manage to get even a dozen of these 45 BU managers to the point where they are running 500-1000 employee portfolios in ten years' time, that will be a huge achievement.

I have a bias towards developing our Portfolio Managers internally or having them join us via an acquisition. Our best managers have risen through the ranks and developed a following. When they make it to BU Manager, they act like they "own" their BU and they stick with it. They have career-spanning relationships with their employees and their clients. They feel responsibility heavily. If the industry they serve is suffering, they find a way to grow the business organically, or they roll up their vertical via acquisition. They progress to running one BU and coaching others. If they're ambitious for themselves and their team, they evolve into deeply experienced Portfolio Managers with a tried and trusted cadre of employees that can help them do acquisitions and they continue to build out their Portfolio. It starts small. It's incremental. It's slow, but over the course of a long career their mastery, satisfaction, wealth and the number of their followers, all compound.

This sort of career path obviously worked for our current Operating Group Managers, who all either came up through the ranks or joined us via an acquisition. I believe that attracting, developing, and keeping that sort of talent, is the internal execution issue that poses the greatest threat to our continued success.

I don't know if the analysts and journalists who predict reversion to average performance for CSI will be proved correct in the next few years. Our plan is to maintain investment discipline, keep overheads low and hire and coach a new generation of ambitious, hard-working BU Managers who can be taught how to be competent long-term "owners". Hopefully we'll still be having this reversion debate ten years from now.

Some businesses get their unique advantage from government-granted monopolies, some from natural resources, some from large patent portfolios, and some from enormous fixed assets. CSI doesn't have these advantages. Our employees, and the customer relationships that those employees have built and fostered over many years, provide our competitive advantage. I hope all of our shareholders will join me in thanking our thirteen thousand employees for the company's continued prosperity.

We will be hosting the AGM on Friday, April 28th. Many of our Directors and Officers and a number of our employee shareholders will be in attendance. We look forward to talking about our business and answering your questions. We hope to see you there.

Mark Leonard,

President

Constellation Software Inc.

April 25th, 2017

Glossary

For 2009 and prior periods, the financial information for CSI was derived from the consolidated financial statements which were prepared in accordance with Canadian generally accepted accounting principles ("GAAP"). 2010 and subsequent year financial information for the Company was derived from the consolidated financial statements which were prepared in accordance with International Financial Reporting Standards ("IFRS"). Certain totals, subtotals and percentages may not reconcile due to rounding.

''Adjusted net income'' effective Q1 2008, means adjusting GAAP or IFRS net income for non-cash expenses (income) such as amortization of intangible assets, deferred income taxes, the TSS membership liability revaluation charge, and certain other expenses (income), and excludes the portion of the adjusted net income of Total Specific Solutions (TSS) B.V. ("TSS") attributable to the minority owners of TSS. Prior to Q1 2008, Adjusted net income was derived by adjusting GAAP net income for the non-cash amortization of intangibles and charges related to appreciation in common shares eligible for redemption. The calculation was changed to include future income taxes since the majority of future income taxes relate to the amortization of intangible assets, and thus are added back to more closely match the non-cash future tax recovery with the amortization of intangibles. All previously reported Adjusted net income figures have been restated in the table above to reflect the new calculation method. The Company believes that Adjusted net income is useful supplemental information as it provides an indication of the results generated by the Company's main business activities prior to taking into consideration amortization of intangible assets, deferred income taxes, the TSS membership liability revaluation charge, and certain other non-cash expenses (income) incurred or recognized by the Company from time to time, and adjusts for the portion of TSS' Adjusted net income not attributable to shareholders of CSI.

"Average Invested Capital" represents the average equity capital of the Company, and is based on the Company's estimate of the amount of money that its common shareholders had invested in CSI. Subsequent to that estimate, each period the Company has kept a running tally, adding Adjusted net income, subtracting any dividends, adding any amounts related to share issuances and making some minor adjustments, including adjustments relating to our use of certain incentive programs and the amortization of impaired intangibles. The Company believes that Average Invested Capital is a useful measure as it approximates the retained earnings of the Company prior to taking into consideration amortization of intangible assets, deferred income taxes, and certain other non-cash expenses (income) incurred or recognized by the Company from time to time. ROIC" means Return on Invested Capital and represents a ratio of Adjusted net income to Average Invested Capital. The Company believes this is a useful profitability measure as it excludes non-cash expenses (income) from both the numerator and denominator.

"Net Revenue". Net Revenue is gross revenue for GAAP or IFRS purposes less any third party and flow-through expenses. The Company believes Net Revenue is a useful measure since it captures 100% of the license, Maintenance and services revenues associated with CSI's own products, and only the margin on the lower value-added revenues such as commodity hardware or third party software.

"Total Capital" is the sum of Net debt plus Invested Capital

"Net Debt" is debt less cash.

"Maintenance Revenue" primarily consists of fees charged for customer support on our software products post-delivery and also includes, to a lesser extent, recurring fees derived from software

as a service, subscriptions, combined software/support contracts, transaction-related revenues, and hosted products.

"Free Cash Flow" in this letter, unlike under IFRS is cash flow from operating activities less interest paid and property and equipment purchased. I figure if you have to pay interest and buy new computers, the cash used for those purposes is no longer available, and shouldn't be included in FCF.

"EBITA" is earnings before interest, taxes and the amortisation of intangible assets.

"HPCs": Ametek, Berkshire Hathaway, Danaher, Dover, Illinois Tool Works, Roper, Jack Henry & Associates, Transdigm, and United Technologies.

Forward Looking Statements

Certain statements in this letter may contain "forward looking" statements that involve risks, uncertainties and other factors that may cause the actual results, performance or achievements of the Company or industry to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. Words such as "may", "will", "expect", "believe", "plan", "intend", "should", "anticipate" and other similar terminology are intended to identify forward looking statements. These statements reflect current assumptions and expectations regarding future events and operating performance as of the date of this letter. Forward looking statements involve significant risks and uncertainties, should not be read as guarantees of future performance or results, and will not necessarily be accurate indications of whether or not such results will be achieved. A number of factors could cause actual results to vary significantly from the results discussed in the forward looking statements. Although the forward looking statements contained in this letter are based upon what management of the Company believes are reasonable assumptions, the Company cannot assure investors that actual results will be consistent with these forward looking statements. These forward looking statements are made as of the date of this letter and the Company assumes no obligation, except as required by law, to update any forward looking statements to reflect new events or circumstances. This report should be viewed in conjunction with the Company's other publicly available filings, copies of which can be obtained electronically on SEDAR at www.sedar.com.

Non-GAAP/IFRS Measures

Adjusted net income and Organic Net Revenue Growth are not recognized measures under GAAP or IFRS and, accordingly, shareholders are cautioned that Adjusted net income and Organic Net Revenue Growth should not be construed as alternatives to net income determined in accordance with GAAP or IFRS as an indicator of the financial performance of the Company or as a measure of the Company's liquidity and cash flows. The Company's method of calculating Adjusted net income and Organic Net Revenue Growth may differ from other issuers and, accordingly, may not be comparable to similar measures presented by other issuers. Please refer to CSI's most recently filed Management's Discussion and Analysis for reconciliation, where applicable, between the IFRS, GAAP and non-GAAP/IFRS measures referred to above.

Constellation Software Inc.
TO OUR SHAREHOLDERS

I used to write quarterly letters to shareholders. After a few, I switched to annual letters. There is an archive of them on our website. It contains most of what I can tell you about investing in Constellation. In the future I will only write to shareholders when I think I have something new and important to communicate. We will still provide you with the non-IFRS and IFRS tables that we produce on an annual basis, likely as part of our Q4 MD&A.

For competitive reasons we are limiting the information that we disclose about our acquisition activity. We believe that sharing our tactics and best practices with a host of Constellation emulators is not in our best interest. We have discussed the matter with many of the large Constellation shareholders, all of whom (despite grumbling) eventually agreed.

Since this is the last annual President's letter I thought I would include a grab bag of items that I think long-term shareholders should consider. Some of these opinions may be controversial, so let me stress that they are mine, and are not necessarily shared by others at Constellation.

One of the analysts who covers Constellation recently changed his perennial "sell" recommendation to a "buy". We lost one of our few critics. Analysts who worry about the quality of earnings and reversion to the mean and the impossibility of trees growing to the sky are valuable.

The reversion to the mean argument still has merit. You can see it at work in Constellation's 2017 results: Our Adjusted Net Income ("ANI") increased only 17% last year (Table 1), far below our ten-year average ANI compound annual growth rate of 30%. Our Cash Flow from Operating Activities per share ("CFO/Share") increased only 8% (Table 2), versus our ten-year CFO/Share compound annual growth rate of 31%.

Table 1

	Adjusted Net Income (a)	Average Invested Capital	ROIC	Organic Net Revenue Growth (YoY)	ROIC + Organic Net Revenue Growth
2008	54	195	28%	5%	33%
2009	62	256	24%	-3%	21%
2010	84	325	26%	-2%	24%
2011	140	394	36%	7%	43%
2012	172	491	35%	2%	37%
2013	207	585	35%	4%	39%
2014	274	739	37%	3%	40%
2015	371	965	38%	-3%	35%
2016	395	1261	31%	1%	32%
2017	463	1622	29%	4%	33%

(a) Historical figures restated to comply with revised definition.

Our shareholders' Average Invested Capital grew 29% in 2017, which was above its ten-year compound average growth rate, but a large amount of the retained capital was undeployed at year-end. We have

ramped up our acquisition team, which may help with the capital deployment, but is also likely to put some pressure on our Free Cash Flow ("FCF") margin (i.e. FCF/Net Revenue).

The return on our shareholders' Average Invested Capital ("ROIC") dropped to 29% in 2017. The decrease was a function of a slew of new investments with lower ROIC's and of our increasing cash balance. I expect this metric to continue to drop.

Constellation's Organic Net Revenue growth has averaged only 2% during the last decade. This has been disappointing for me and the Operating Group managers. Some of our businesses serve shrinking verticals or those that are otherwise troubled, so we don't necessarily expect strong organic growth from them. We do expect each business unit ("BU") to provide constantly evolving software and systems that help their clients refine and strengthen their businesses, even in the face of industry headwinds. In 2017 our Organic Net Revenue growth was 4%.

ROIC + Organic Net Revenue growth ("ROIC+OGr") remained relatively flat at 33% in 2017. Over time, ROIC+OGr should move asymptotically towards our hurdle rate if we are deploying all of our FCF on acquisitions and are accurately forecasting the internal rates of return ("IRR's") on those acquisitions.

There has been some confusion regarding the ROIC+OGr metric. When we were investing more than our FCF and generating attractive returns, we were comfortable using the ROIC+OGr metric as the single best measure of Constellation's performance. Competition for acquisitions has increased, as has our FCF, so it is unlikely that we will be able to invest all of our FCF at attractive returns over the next decade. That got me thinking about a new "single best metric" for shareholders. I like incremental return on incremental invested capital (e.g. $((ANI_1-ANI_0)/(IC_1-IC_0)))$, but it is very volatile, and share issuances or repurchases can throw it out of kilter. The increase in Net Maintenance Revenue per share is an interesting metric but is easily abused because it can't be derived from the audited financial statements. I'm now leaning towards the growth in FCF per share (e.g. $((FCF_1/\#Shares_1)/(FCF_0/\#Shares_0)-1))$. This metric takes into account share count, interest expense and capex, but doesn't include an adjustment for the increase in our minority interest liability. If the minority interest is growing at rates similar to FCF, then that's not a problem, but they may not always track together. The growth in FCF per share metric isn't very sensitive to debt and cash, but right now our net cash is not significant. Jamal's preferred measure of our progress is the growth in ANI per share. It is less volatile than FCF per share (because the variance in net working capital largely washes out over the long run), and it does adjust for the portion of ANI that should accrue to minority shareholders.

I gave the growth in FCF per share metric a trial run by looking at the last three years for ROIC+OGr (averaged 33%), our US$ market capitalisation (average increase of 28% per annum), our FCF per share (average increase of 16% per annum) and our ANI per share (average increase of 20% per annum). If I had to stake my reputation on one of those as the best proxy for the annual increase in intrinsic value, I would go with the increase in FCF per share. Jamal may yet argue me around to the growth in ANI per share. Keep in mind that you don't need to use any single metric to judge our performance. Enterprising long-term investors will look at many metrics.

In Table 2 we have presented a couple of IFRS-based metrics that we believe can be important in assessing our business. Total Revenue per Share increased 17% in 2017, in line with the increase in ANI per share. This strikes me as a fairly torrid pace. If we come close to achieving that level over the next five years, I will be pleased. The amount of capital being deployed by competitors in the vertical market software ("VMS") sector was recently reported to be at an all time high, and private equity firms who know the space have never had as much undeployed capital (Hampleton Partners, "Enterprise Software M&A Overview H1 2018").

Table 2

	Total Revenue per Share		Cash Flow from Operating Activities per Share	
		YoY △		YoY △
2008	15.60	36%	2.96	83%
2009	20.67	32%	3.85	30%
2010	29.92	45%	5.06	32%
2011	36.49	22%	6.49	28%
2012	42.05	15%	6.83	5%
2013	57.13	36%	10.40	52%
2014	78.77	38%	16.11	55%
2015	86.75	10%	18.68	16%
2016	100.28	16%	23.16	24%
2017	117.00	17%	24.90	8%
CAGR		26%		31%

It is important to keep an eye on debt when using CFO/Share because this metric does not take interest cost into account. Similarly, the metric isn't adjusted for capital expenditures (although they tend to be small for Constellation). My preference would be to use a FCF/share metric, which subtracts both interest and capital expenditures, but shareholders specifically asked for some IFRS defined metrics that weren't subject to management "adjustment".

In 2017, CFO/Share increased only 8% vs 2016. The primary reason was the payment of cash taxes in 2017 that were associated with earnings in 2016. If we make the cash tax timing adjustment to match cash taxes to ANI before tax, the growth in CFO/Share is similar in both 2016 and 2017. It is also in line with Net Revenue growth and ANI growth. On that basis, the top and bottom line growth are in sync, so neither economies of scale nor creeping overheads are evident.

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Our current policy is to invest all of our retained investor's capital (and then some) when we think we can achieve our targeted hurdle rates. When we can't find enough attractive investments, we plan to maintain our hurdle rates and build cash for as long as our shareholders and board will allow. We believe that long-term shareholders and boards should set those policies, which segues nicely into discussing shareholder democracy and the role of boards.

Almost half of our shares trade each year, which suggests that many of our shareholders are not long-term oriented. These traders are buying our shares because they hope they will be able to sell them at higher prices in three months or six months.

Another class of shareholders are indexers. They buy our stock because we are part of whatever index they are emulating. Their actions are formulaic. Despite the fact that they may be long-term holders, it is difficult to find someone to speak with at these indexing institutions and even if we do, they rarely know much about our company.

There is another class of long-term Constellation shareholders who invest time and effort to get to know our company and may even try to contribute to its growth and prosperity. We are fortunate to have a

couple of dozen institutional investors, several hundred personal investors and several thousand employee shareholders who have taken this view. I'll refer to these as "enterprising investors" (perhaps stretching the original definition). They are the groups that we consult when we need advice and input from engaged shareholders.

One of the ways that our enterprising investors can contribute is by helping find and elect excellent Directors. Shortly after our IPO we started asking our major institutional shareholders to suggest people from their ranks for our board. A couple of enthusiastic investment managers tried to convince their organisations to take that step, but the institutional barriers to them being Directors are apparently insurmountable.

We have also asked our enterprising investors to suggest board candidates from outside of their ranks. This has not been very productive so far, probably because I didn't do a good job of explaining the characteristics of an ideal Director from our perspective. A couple of years ago we started creating a screen for Director searches - I've appended it to this letter so that our enterprising investors will have a better sense of who we are seeking. If you know anyone who would rank well vs the screen, and if you think they would be interested in being a Constellation Director, please let us know.

Qualified and competent Directors are very rare, and not surprisingly, the track record of most boards is awful. According to the 2017 Hendrik Bessembinder study of approximately 26,000 stocks in the CRSP database, only 4% of the stocks generated all of the stock market's return in excess of one-month T-Bills during the last 90 years. The other 96% of the stocks generated, in aggregate, the T-bill rate over that period. This means that 4% of boards oversaw all the long-term wealth creation by markets during that period. Even more disturbing, the boards for over 50% of public companies saw their businesses generate negative returns during their entire existence as public companies.

This governance problem is well understood, and the tools-du-jour for fixing boards are Director independence, diversity, and term limits. These tools are a great starting point when you are dealing with most public companies. However, when you are dealing with a high-performance company, I don't think governance should be the key role of the board. Governance is still necessary, but it is not sufficient. Helping extend the extraordinary track record of building intrinsic value should be the board's primary function. You are unlikely to achieve that by replacing their proven and obviously very rare Directors and Officers with new ones who are statistically unlikely to have ever experienced anything like consistent high performance.

Last year a proxy advisory firm, on behalf of the Fonds de solidarité FTQ ("FTQ"), a tiny Constellation shareholder, proposed that we change our proven Director and Officer recruiting methods to give preference to diverse candidates. During the ensuing year we have appointed a female Director and have undertaken to diligently include diverse candidates in any Director and Officer search processes.

The FTQ have a similar proposal on this year's ballot. We thought we had addressed their primary concerns prior to the motion being submitted, so we asked their proxy advisor to withdraw it. They have refused. Our formal response to the proposal appears in our proxy. Jamal and I are once again lobbying our institutional investors to vote against this proposal. We hope you'll vote against the FTQ's resolution and in accord with management's recommendation at the AGM again this year.

We recently received another challenge to our board practices. This time a significant shareholder (holding hundreds of thousands of Constellation's shares) expressed concern about extended board tenures and a preference for "board refreshment". They proposed that we consider limiting board tenure to 10 years. I appreciated them consulting with us directly, rather than just putting it on the ballot as a

shareholder proposal. I thought I'd respond to them as part of this letter so that all shareholders can see how we think about Director selection and tenure.

We believe that when you limit a competent Director's term, you limit their opportunity to learn and hence to add value.

There was a 1994 peer-reviewed journal article about the role of deliberate practice in becoming an expert (Ericsson & Charness). The concept was popularised and extended by Malcolm Gladwell in his book "Outliers", as the 10,000 hour rule. I understand that you don't need 10,000 hours of deliberate practice to be able to fire a CEO who has his hand in the till or is abusing employees. I'll refer to this as the "governance" role of Directors. However, I also think there's something to be said for Directors intently studying an industry and a company over a period of many years to acquire relevant expertise so that they can contribute more than just governing. I'll refer to this as the "coaching" role of a Director.

In some instances, you are fortunate and can find Directors like Mark Miller and Jeff Bender who have 10,000 hours of relevant experience. They were master practitioners of the VMS craft long before they were appointed to the Constellation board. For most Directors, however, learning about VMS and Constellation's particular approach to VMS, is a long journey. A couple of the outside Directors remarked how humbling it was to have these insiders on our board, because Jeff and Mark had so much context, experience and nuance to bring to most board discussions.

Our outside Directors spend about 30 hours in board meetings each year, and let's assume preparation time doubles that. For an especially engaged Director, committees, special projects and extra-curricular Constellation-related activities might drive their time with us up to 200 hours per year. At 200 hours per year, and if you believe the 10,000 hour rule, then this especially engaged Director needs to put in 50 years on the job to offer deeply contextual expert level coaching.

Some prospective Directors don't have the appetite or incentive to invest 10,000 hours to make the transition from a monitoring/governing role to a coaching/nurturing role. Most prospective Directors are simply too old to make that journey. Unfortunately, that means that the default role for most Directors is as a governor not a mentor. Some investors find that acceptable. I'd argue that governing is table stakes. Coaching and talent nurturing are the places where Directors can make a significant contribution and help a company become part of Bessembinder's 4%.

Simple math suggests that if a Director is not from the industry or the company, then they have no hope of coaching and nurturing unless they start in the Director job when they are young. Ideally we'd like to get them in their 40's or 50's and keep them for 30 or 40 years or until their health deteriorates. We certainly don't want to kick them out after they've served for 10 years.

We've been searching for great Directors for years. We've gone on long campaigns to land individual candidates whom we admire. One observation from those frustrating pursuits is that a lot of high quality people don't want to be Directors. They may be intrigued by the company and the managers and the business philosophy. Despite that, the "policing" responsibility is an unpleasant one, and the prospect of investing a huge amount of time to learn the business and win management's trust and respect is daunting.

There are a number of reasons people serve on boards: the halo effect of being associated with a good company, compensation, curiosity, and a desire to give back. However, I can think of only two really compelling reasons why a high-quality candidate would want to serve on a board and commit hundreds of hours per year to the task: 1) it is a way to invest a significant portion of your net worth and be able to watch it closely, and 2) you can learn and apply those learnings to your own career and investments.

I have difficulty forecasting long-term growth in Constellation's intrinsic value per share that exceeds 12% per annum. For many Directors who are adept capital allocators, that is insufficient to justify investing a significant portion of their net worth. For them, the first compelling reason doesn't apply.

Only a tiny number of CEO's/Owners/Managers and some academics are going to want to study Constellation's decentralised multiple small business unit model for application in their own careers. That suggests the second compelling reason creates even fewer candidates.

The overlap in the Venn diagram between high quality Director candidates and those that have a compelling interest in serving as a Director is tiny. Making Director tenures shorter, or limiting candidates to a particular gender, race, or religion, just exacerbates this situation.

The current movement to limit Director tenure makes great sense if you think your investee company is poorly governed. However, if you think the governance is good, then limiting Director tenure hurts the company. It is analogous to firing a high-performance employee on their tenth anniversary.

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Constellation has some intelligent, curious and irreverent employees who regularly challenge management's fondly held assumptions and beliefs. We don't appreciate those employees enough. One of them posed the following questions to me:

- Why are we doing this? What is the greater vision/mission of Constellation?
- If you keep on buying and you don't sell, where does it end?

I am suspicious of "vision". Long-term studies suggest that the underlying predictions or assumptions for visions are nearly always impractically vague or outright wrong (see Tetlock's "Superforecasting"). I am not much happier with the term "mission". It feels too heavily freighted with overtones of hierarchy and unquestioning compliance. I prefer to talk about Constellation's objective. Our objective is to be a great perpetual owner of VMS businesses. We like VMS businesses because they are asset-light, have robust moats, and attract the sort of managers and employees with whom we enjoy working. Lots of investors seek businesses with those characteristics, but great owners are rare. Far too many owners mistake themselves for great operators. Others, particularly some of those who invest in public companies, abdicate their responsibilities as owners, preferring instead to be traders or passive indexers.

As perpetual owners, we care about the long-term health of our many small businesses. We try to provide an environment in which they can flourish. The primary way we can do that is by making sure that they have high-quality managers who are compensated according to rational long-term oriented incentive programs. We make sure that BU managers have access to capital when they have opportunities. We try to foster a collegial environment so that best practices are shared. Late last year, when we reviewed our BU demographics, we had 243 separately managed BU's, up from 193 the prior year. We currently see no fundamental limit to the number of BU's that we can manage, but we are very worried about limits to the number of good VMS businesses that we will be able to buy at reasonable prices.

To understand the "where does it end?" question, it is useful to look at a much older industry with some similarities to the VMS sector.

If Constellation had started in 1895 instead of 1995, we might have had the objective of being a great perpetual owner of daily newspapers. The newspaper industry underwent a long period of high growth which attracted many new entrants, followed by local consolidation, conglomeration, and eventual decline. I anticipate that the VMS industry will evolve similarly.

Many standalone newspaper businesses and newspaper conglomerates did well for extended periods, generating far above average ROE's. They had deep moats and attracted more than their fair share of intelligent, ethical, driven employees. Some of these businesses returned their FCF to stakeholders, and some deployed it to buy other newspapers. As their industry matured, a few of the newspaper conglomerates acquired somewhat related businesses (book publishing, magazine publishing, radio stations, TV stations, cable franchises, database vendors, etc.). Only a tiny minority of the newspaper conglomerates made the "diversification" transition successfully. A couple have done extraordinarily well. If you had bought shares of the Washington Post (now the Graham Holdings Company) four decades ago, you would have more than trebled the gains generated by the S&P500 over those forty years.

One day Constellation may find that VMS businesses are too expensive to rationally acquire. If that happens, I hope we'll have had the foresight and luck to find some other high ROE non-VMS businesses in which to invest at attractive prices. I am already casting about for such opportunities. If we don't find attractive sectors in which to invest, then we'll return our FCF to our investors. Even if re-investment opportunities become scarcer, Constellation doesn't end… it will continue to be a good (hopefully great) perpetual owner of its existing VMS portfolio, and will still deploy some capital opportunistically.

You may have noticed that I deferred the "why are we doing this?" question. The answer to that is personal to each of us who are involved in Constellation. My motivation is to help create a company where worthy people succeed. Whether they join us with an acquisition or are hired from the outside, I want to support and encourage employees who work hard, treat others well, continuously learn, and share best practices. I try to make sure that sycophants, spin-doctors, and mercenaries don't survive in Constellation's senior ranks. Harder, but not impossible, is helping identify and remove hidebound managers who rely upon habit and folklore to run their businesses rather than rational enquiry and experimentation. Constellation is as close to a meritocracy as I have experienced. I hope it will continue to provide an environment where entrepreneurs and corporate refugees can invest their lives and their capital and thrive.

A career path for an ambitious employee joining Constellation might be something like this: Immerse yourself in learning about the peculiarities of VMS economics. At some point, transition from analyst or knowledge worker into a leader of people. I find there is no magic to managing and leading. If you are smart, work harder than everyone else around you, treat people fairly, do not ask them to do anything you would not or have not done, share the credit, keep learning and keep teaching, then pretty soon you have followers. If you make sure that the team members are intelligent, energetic, and ethical people with whom you would want to work for the rest of your career, it won't be long until you are running one of our BU's. Whatever vertical you end up in, that specialisation, that focus, will require a multi-year effort to build a trusted network of employees, customers, other industry participants, and even competitors.

If I were advising my 35 or 40-year-old self on where to go from there, I would tell him to stay put. Work closely with the best customers in your vertical. Help provide them with the software and systems that they need to prosper. Do an occasional tuck-in acquisition to buy a product or customer base more cheaply than you could otherwise build it. Grow revenues per employee so that you can pay your team significantly more every year. Become a master Craftsman in the art of managing your VMS business. It is the most satisfying job in Constellation and will generate more than enough wealth for you to live very comfortably and provide for your family.

For those whose ambition exceeds their good sense, we have a role that we call a Player/Coach. A Player/Coach continues to run their BU, but ambition drives them to acquire a sizable business, usually in another geography or another vertical. We set up most of these acquisitions as stand-alone BU's because

verticals differ, and it is difficult to create a high-performance team if they are geographically dispersed. The BU manager for the newly acquired business is nearly always from the acquisition itself, and hence has deep expertise in the vertical. Should the Player/Coach find a second or third stand-alone business to acquire, they eventually have to give up the day to day responsibilities for running their original BU and become a full-time Portfolio Manager ("PM"). If the PM is good at finding acquisitions, and helping them learn relevant best practices, and continues to deploy at least the FCF produced by their portfolio, then we refer to them as a Compounder.

The journey from Craftsman to Compounder can be very financially rewarding, but there are some significant sacrifices. At best, a PM is an advisor: they fly in (usually clocking hundreds of thousands of airmiles per annum), gather information, share ideas, provide referrals to others within Constellation who have dealt with similar issues, and then they move on to the next portfolio company. The excitement and satisfaction of doing and deciding has to be traded for the lukewarm cocoa of mentoring and coaching. Fortunately, the Compounders are regularly learning about new verticals, and acting as ambassadors to VMS entrepreneurs who might one day want to sell their businesses to Constellation. The multi-year relationships with VMS founders can be very rewarding.

The difference between a Craftsman and a Compounder is often one of personality. Successful Craftsmen can be autocratic or consultative, brilliant or average intelligence, introverted or extraverted, mercurial or imperturbable. Lots of different personalities and styles work.

Successful Compounders have no choice but to be (or become) more hands-off and trusting. They can be curious and driven, but they can't be directive. They can nurture, goad and suggest, but they can't order. No PM can personally know the customers, products, employees, and competitors sufficiently well across multiple BU's in different geographies and verticals, to make the critical decisions required at the BU level. In the infrequent instances where the manager of a BU isn't making the grade…if they are failing to build the team, extend their moat and generate an adequate return on their capital, then the PM needs to find a replacement for the BU manager.

There will be a couple of dozen PM's attending the AGM and participating in the break-out sessions. Please take the opportunity to ask them about the satisfactions and challenges of their jobs and the trade-offs that they have to make between capital deployment and portfolio nurturing.

Hopefully the analogy between the Compounder's job and that of Constellation's board is obvious.

Both have a governance role. In the rare instance where the manager who reports to them has to go, they need to pull the plug. If this governance role is consuming most of their time, it is a sad reflection on their competence.

Our expectation is that both the Compounder and the Constellation Board spend much of their time in coaching/nurturing roles, bringing along managers and their teams, and making sure that there is a strong bench of talent if they have to change a manager. As aspiring "great owners", our Operating Groups avoid imposing unqualified PM's on high performance BU managers. I'd hope Constellation's owners will show us the same courtesy and allow us to choose our Directors and Operating Group managers based on the criteria that we believe are important rather than on specific targets or quotas.

Lastly, both the Compounder and the Board should be worried about finding good places to deploy capital while maintaining investment discipline. It is one of our most significant challenges.

As you are aware, our AGM is to be held at a larger venue this year. Subsequent to the regular meeting and Q&A session, we have six break-out rooms where each of our Operating Group managers,

accompanied by some of their PM's, will make a presentation followed by a Q&A session. If you haven't already signed up for one of the break-out sessions, please do so as soon as possible, as seating is limited.

For as long as I can recall, I've been using these letters to thank our employees on behalf of all shareholders for another wonderful year. This year is no different. See if you can find an employee at the AGM and thank them personally.

Mark Leonard
April 20, 2018

CSI Board Role Search Criteria

THE ROLE	
Thought Partner	Thought partner for senior leadership.
Long-term Orientation	Unfazed by short term pressure. Focused on CSI's long-term issues.
Timeframe	Able to serve on the board for 20+ years.
Investment in CSI	Willing to make a significant equity investment in CSI, above and beyond board comp.

THE CANDIDATE	
High Quality Business	Understands what constitutes a high quality business.
Autonomy	Appreciates the motivational power of autonomy, decentralisation.
Cultural Fit	Respects and gets along with the current senior CSI management as well as the board.
Ownership	Believes in the motivational power of equity ownership.
High Impact / Low Ego	Will intervene when necessary, contribute meaningfully, but not dominate discourse.
Out of Kitchen	Can resist the urge to get into the kitchen when there's a chef already in there.

EXPERIENCE	
Builder	Helped build or maintain (as a director, manager or major shareholder) a large organisation (>1000 employees) over an extended period, while providing a superior return to owners (ideally including employee owners).
Decentralized	Experience with a decentralised company (nice, not necessary).
Capital Allocation	Experience in a capital allocation role (nice, not necessary).

LIKELY BACKGROUND
Family owned business operator or director.
CEO / #2 for exceptional business.
Entrepreneur

SEARCH PATHS
Multi-generational family owned businesses with high ROIC within reach of our network and ideally local to CSI (increases involvement, eases reference checks, more likely to know CSI, decreases absenteeism).
High quality businesses with strong shareholder alignment.
Great capital allocators in the corporate world.
CEOs with great shareholder letters and high quality businesses.

Glossary

For 2009 and prior periods, the financial information for Constellation was derived from the consolidated financial statements which were prepared in accordance with Canadian generally accepted accounting principles ("GAAP"). 2010 and subsequent year financial information for the Company was derived from the consolidated financial statements which were prepared in accordance with International Financial Reporting Standards ("IFRS"). Certain totals, subtotals and percentages may not reconcile due to rounding.

''Adjusted net income'' effective Q1 2008, means adjusting GAAP or IFRS net income for non-cash expenses (income) such as amortization of intangible assets, deferred income taxes, the TSS membership liability revaluation charge, and certain other expenses (income), and excludes the portion of the adjusted net income of Total Specific Solutions (TSS) B.V. ("TSS") attributable to the minority owners of TSS. Prior to Q1 2008, Adjusted net income was derived by adjusting GAAP net income for the non-cash amortization of intangibles and charges related to appreciation in common shares eligible for redemption. The calculation was changed to include future income taxes since the majority of future income taxes relate to the amortization of intangible assets, and thus are added back to more closely match the non-cash future tax recovery with the amortization of intangibles. All previously reported Adjusted net income figures have been restated in the table above to reflect the new calculation method. The Company believes that Adjusted net income is useful supplemental information as it provides an indication of the results generated by the Company's main business activities prior to taking into consideration amortization of intangible assets, deferred income taxes, the TSS membership liability revaluation charge, and certain other non-cash expenses (income) incurred or recognized by the Company from time to time, and adjusts for the portion of TSS' Adjusted net income not attributable to shareholders of Constellation.

"Average Invested Capital" represents the average equity capital of Constellation, and is based on the company's estimate of the amount of money that its common shareholders had invested in Constellation. Subsequent to that estimate, each period the company has kept a running tally, adding Adjusted net income, subtracting any dividends, adding any amounts related to share issuances and making some minor adjustments, including adjustments relating to our use of certain incentive programs and the amortization of impaired intangibles. The company believes that Average Invested Capital is a useful measure as it approximates the retained earnings of the company prior to taking into consideration amortization of intangible assets, deferred income taxes, and certain other non-cash expenses (income) incurred or recognized by the company from time to time.

"ROIC" means Return on Invested Capital and represents a ratio of Adjusted net income to Average Invested Capital. The Company believes this is a useful profitability measure as it excludes non-cash expenses (income) from both the numerator and denominator.

"Net Revenue". Net Revenue is gross revenue for GAAP or IFRS purposes less any third party and flow-through expenses. Constellation believes Net Revenue is a useful measure since it captures 100% of the license, Maintenance and services revenues associated with Constellation's own products, and only the margin on the lower value-added revenues such as commodity hardware or third-party software.

"Total Capital" is the sum of Net debt plus Invested Capital "Net Debt" is debt less cash.

"Maintenance Revenue" primarily consists of fees charged for customer support on our software products post-delivery and also includes, to a lesser extent, recurring fees derived from software as a service, subscriptions, combined software/support contracts, transaction-related revenues, and hosted products.

“Free Cash Flow” in this letter, unlike under IFRS is cash flow from operating activities less interest paid and property and equipment purchased. I figure if you have to pay interest and buy new computers, the cash used for those purposes is no longer available, and shouldn’t be included in FCF.

“EBITA” is earnings before interest, taxes and the amortisation of intangible assets.

“CRSP”: Centre for Research in Security Prices, University of Chicago Booth School of Business.

Forward Looking Statements

Certain statements in this letter may contain “forward looking” statements that involve risks, uncertainties and other factors that may cause the actual results, performance or achievements of the Company or industry to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. Words such as “may”, “will”, “expect”, “believe”, “plan”, “intend”, “should”, “anticipate” and other similar terminology are intended to identify forward looking statements. These statements reflect current assumptions and expectations regarding future events and operating performance as of the date of this letter. Forward looking statements involve significant risks and uncertainties, should not be read as guarantees of future performance or results, and will not necessarily be accurate indications of whether or not such results will be achieved. A number of factors could cause actual results to vary significantly from the results discussed in the forward looking statements. Although the forward looking statements contained in this letter are based upon what management of the Company believes are reasonable assumptions, the Company cannot assure investors that actual results will be consistent with these forward looking statements. These forward looking statements are made as of the date of this letter and the Company assumes no obligation, except as required by law, to update any forward looking statements to reflect new events or circumstances. This report should be viewed in conjunction with the Company’s other publicly available filings, copies of which can be obtained electronically on SEDAR at www.sedar.com.

Non-GAAP/IFRS Measures

Adjusted net income and Organic Net Revenue Growth and Free Cash Flow are not recognized measures under GAAP or IFRS and, accordingly, shareholders are cautioned that Adjusted net income and Organic Net Revenue Growth and Free Cash Flow should not be construed as alternatives to net income determined in accordance with GAAP or IFRS as an indicator of the financial performance of the Company or as a measure of the Company’s liquidity and cash flows. The Company’s method of calculating Adjusted net income, Organic Net Revenue Growth, and Free Cash Flow may differ from other issuers and, accordingly, may not be comparable to similar measures presented by other issuers. Please refer to Constellation’s most recently filed Management’s Discussion and Analysis for reconciliation, where applicable, between the IFRS, GAAP and non-GAAP/IFRS measures referred to above.

“We should no more trust executives who rely solely on experience than we should trust doctors who ignore clinical trials.” Simon London, Financial Times, Jan. 2006.

“Science is organised scepticism.” Robert K. Merton

“Too much of business is disorganised optimism.” Poster in Constellation’s board room.

“You can’t be normal and expect abnormal results.” Jeffrey Pfeffer

CONSTELLATION SOFTWARE INC.

TO OUR SHAREHOLDERS

One of our directors has been calling me irresponsible for years. His thesis goes like this: CSI can invest capital more effectively than the vast majority of CSI's shareholders, hence we should stop paying dividends and invest all of the cash that we produce, even if it means lowering our hurdle rates.

I used to argue that we needed to maintain our hurdle rates because dropping them for a few marginal capital deployments would cause the returns on our entire portfolio to drop. The evidence supported my contention, so we kept the rates high for small and mid-sized vertical market software ("VMS") acquisitions and made very few exceptions for large VMS acquisitions. The by-product of that discipline has been a perennial inability to invest all of the cash that we generate.

What have we done with that excess free cash flow available to shareholders ("FCFA2S")? Historically, we have paid three special dividends, and for the last decade we have also paid a regular quarterly dividend.

I have stopped arguing. I have converted, and with the fervour of the newly converted, I am busy demonstrating my new-found faith.

The obvious first step is to stop special dividends in all but the most compelling circumstances. That decision was made by our directors at Friday's CSI board meeting. We have maintained the quarterly dividend for now, but if we are successful in finding better uses for our FCFA2S, the quarterly dividend will also be sacrificed.

We will continue to invest most of CSI's FCFA2S in small and mid-sized VMS acquisitions at our traditional hurdle rates. Our Operating Group Managers have done a spectacular job of growing CSI's market share of acquisitions within this portion of the VMS sector, without succumbing to the siren song of increased centralisation, bureaucracy, and control. Most of these businesses are blessed with big moats and long-tenured employees and customers. The Operating Groups provide a low overhead environment where autonomy, collegiality, and shared knowledge are the cultural norm, and good people thrive. I am incredibly proud of what they have accomplished.

At head office our original objective was to be "good perpetual owners of VMS businesses". Our success forced us to delegate that task to the Operating Groups. Head Office now needs to become a "good steward of our investors' capital". To that end, we are working on two initiatives: 1) increasing the number of very large VMS businesses (i.e., those requiring multi-hundred-million-dollar equity cheques) that we pursue, and 2) developing a circle of investing competence outside of the VMS sphere.

For many years, we have tracked large VMS acquisition prospects as a separate segment of the market. We have invested less than 10% of our FCFA2S in this segment, making only three large VMS acquisitions during our entire 26 year history.

Between 40 and 70 large VMS businesses are sold each year. The vast majority of these transactions are marketed to prospective buyers by less than a dozen major merger and acquisition ("M&A") brokers. Over the last five years, we were aware of about 80% of the large

VMS businesses that were sold, but their brokers only invited us to participate in 16% of the sales processes.

We are building a small, dedicated team at head office to pursue large VMS acquisitions and to work with M&A brokers. If we drop our hurdle rates for these acquisitions, I believe that competent and diligent M&A brokers will include us in more auctions.

Most of our competitors maximise financial leverage and flip their acquisitions within 3-7 years. CSI appreciates the nuances of the VMS sector. We allow tremendous autonomy to our business unit managers. We are permanent and supportive stakeholders in the businesses that we control, even if their ultimate objective is to eventually be a publicly listed company. CSI's unique philosophy will not appeal to all sellers and management teams, but we hope it will resonate with some.

If we are successful in acquiring one or two large VMS businesses per annum, then I anticipate that CSI's return on investors' capital will decrease, but we will not have to return any of our free cash flow to shareholders.

In parallel with our established and growing small and mid-sized VMS practise and our nascent large VMS practise, we are trying to develop a new circle of competence. We are seeking attractive returns, a sustainable advantage, and the ability to deploy large amounts of capital outside of VMS. That will require highly contrarian thinking and is likely to be uncomfortable in the early going. Hopefully, we have built enough credibility to warrant your patience as we explore new and under-appreciated sectors.

Mark Leonard
President
Constellation Software, Inc.
February 15, 2021

TO OUR SHAREHOLDERS

After being privately owned for 96 years, Markel Corporation completed its initial public stock offering in December 1986. In this, our first annual report as a public company, we will try to give you an overview of the Corporation, our 1986 results, and our plans and goals for the future.

Prior to our public offering, Milton and Stanley Markel resigned as Chairman and Vice-Chairman of the Board, respectively. They will, however, continue to serve in an advisory capacity. Milton and Stanley joined Markel over 50 years ago and their knowledge and expertise has contributed significantly to our success.

Soon after the public offering, we expanded our Board of Directors by electing V. Prem Watsa and Stewart M. Kasen as Directors. Mr. Watsa is the principal of a prominent Toronto based investment counseling firm and is Chairman of the Board of Markel Financial Holdings Limited, an affiliated Canadian corporation. Mr. Kasen is President and Chief Executive Officer of Thalhimer Brothers, Inc., a leading department store chain based in Richmond, Virginia. We are honored that Messrs. Watsa and Kasen have agreed to serve on our Board and look forward to their advice and counsel in the years to come.

In 1986, our financial results were the best in our history. Total operating revenues increased to $33.3 million, an increase of 45% over 1985. Income before realized investment gains totaled $4.7 million as compared to $800,000 in 1985. Net income was $5.0 million as compared to $1.0 million in 1985. On a per share basis, income before realized investment gains was $1.52 in 1986 as compared to $0.27 in 1985. Net income per common share was $1.61 in 1986 and $0.32 in 1985. The 1986 results include a gain on the sale of real estate of $0.17 per share.

Our 1986 results demonstrate the advantage of our corporate strategy of specialization and diversification. Three of our operating divisions experienced excellent results. The fourth, our claims administration operation, had disappointing results, reporting a net loss in 1986. We are convinced, however, that this segment of our business has a promising future and are very pleased that Edmund Langhorne has joined us as President of our claims division.

The insurance marketplace remained very tight throughout 1986, with price levels increasing and some lines of coverage difficult to obtain. This market contributed to our excellent results as we were able to obtain increased prices with less competition. While the insurance industry is now demonstrating signs of recovery, we do not expect a significantly different marketplace in 1987.

Our strategy for the future is to continue applying the principles that have proven successful for us in the past. We are a marketing oriented insurance organization. We focus on customer needs and solving customer problems. To do this effectively, we specialize in unique market niches where our expertise enables us to be the very best.

The success of this marketing strategy relies on the unique technical skills and performance of individuals. We strive to maintain an atmosphere conducive to personal growth and achievement which proves beneficial to the individual employee and to the Corporation.

We expect to continue the growth and development of each area of our operation, to supplement this growth by developing new specialty products and to look for and take advantage of acquisition opportunities.

Our long range goal is to continue our growth at a rate of at least 20% per year and to earn an annual return on equity in excess of 20%. While this is an ambitious goal, and one that few companies actually achieve, it is one we will diligently work toward.

We wish to thank each of our shareholders for the vote of confidence you have expressed by your purchase of Markel Corporation stock. As shareholders ourselves, we can assure you that we will strive to make your investment profitable.

Sincerely,

Alan I. Kirshner	Anthony F. Markel	Steven A. Markel
PRESIDENT AND CHAIRMAN OF THE BOARD	*EXECUTIVE VICE PRESIDENT*	*EXECUTIVE VICE PRESIDENT*

TO OUR SHAREHOLDERS

We completed our first full year as a public company with very successful results. Once again, our diversification strategy proved valid. Our claims, underwriting, and equity investments exceeded their goals, more than offsetting the results of the brokerage division which fell short.

Net income for 1987 was $6.6 million, a 33% increase over 1986. On a per share basis, this was $1.82 as compared to $1.61, an increase of only 13% due to the larger number of shares outstanding. More importantly, our return on average shareholders' equity was 35%, well in excess of our long-term goal of 20%.

Total operating revenues increased 17.2% in 1987, reaching $39 million. Operating income was $6.9 million, a 31.3% increase over 1986. After tax, but before realized investment gains, income was $6 million, or $1.66 per share as compared to $4.7 million, or $1.52 per share in 1986.

The results of our brokerage operation were somewhat less than we had hoped, as revenues were flat and several products were down due to increased rate competition. We earned significant contingent commissions in 1987, as the result of placing profitable business in prior years. Unfortunately, contingent commissions are difficult to predict and we cannot plan for them in the future.

Our claims operations completed an excellent year with revenues increasing 13%, to $11.3 million. More importantly, most of this increase was reflected in the bottom line as we reversed the loss shown in 1986.

The insurance underwriting operations experienced continued success in 1987, as earned premiums grew 42% to $13.4 million and underwriting results remained quite good. The Essex Insurance Company expanded its base of operations and is now authorized to do business in 44 states and the District of Columbia and is represented by 70 producers. Markel American Insurance Company was licensed in Virginia and is now in business.

Markel owns a 21.6% equity interest in Fairfax Financial Holdings Limited, a Canadian holding company based in Toronto. Fairfax owns Markel Insurance Company of Canada, the oldest and largest specialty insurer for the Canadian trucking industry; Sphere Reinsurance Company, a specialty company in the reinsurance of Canadian property risks; and a 53% interest in Morden & Helwig, the largest independent claims administration firm in Canada. Our equity in the earnings of Fairfax was $1.6 million in 1987, as compared to $1.2 million in 1986.

On December 14, 1987, Markel and Morden & Helwig acquired Lindsey & Newsom Insurance Adjusters, Inc., headquartered in Tyler, Texas. Our objective is to develop a full service international claims adjusting and claims management operation. Bob Irwin, President, built Lindsey & Newsom into the leading claims operation in Texas and will be instrumental in leading the project to merge our various claims operations. Our growth potential in this business is significant and we look forward to an exciting future.

On December 29, 1987, after months of negotiation, Markel and Fairfax each purchased 36% of Shand Morahan and Evanston Services. The Shand/Evanston Group is a leading insurance organization providing professional and product liability insurance. In 1987, earned premiums were $106.4 million and assets were $542.7 million. The group has an exceptionally strong reputation for its professionalism and we are impressed with Joe Prochaska, Chairman and Chief Executive Officer of the companies. The terms of this acquisition were very favorable, and we are excited about the potential returns from this investment.

When you review our balance sheet, you will note some very significant changes from last year. Our investment in the Shand/ Evanston Group ($4.9 million) is shown as an increase in "Investments in unconsolidated subsidiaries." This investment will be accounted for on an equity basis which means we will only report our equity in the earnings of this investment. We, of course, expect this to be quite healthy.

Our investment in Lindsey & Newsom is accounted for by consolidating its results with ours. This is due to the fact that we own or control more than 50% of this operation. Therefore, our December 31, 1987 balance sheet includes the accounts of Lindsey & Newsom. One particular item to note is goodwill in the amount of $5.9 million. This represents the first time we have ever shown goodwill, reflected on our balance sheet as "Excess of cost over fair value of net assets acquired." Because the claims business is a service business, with relatively low capital needs, good cash flow, and low book values, the acquisition of strong companies in the claims business must be made at prices in excess of book value.

One additional comment about the balance sheet is in order. To finance the two acquisitions, we have borrowed $12 million, at what we believe to be very favorable terms. We are generally adverse to carrying a significant amount of debt and our goal is to repay it as soon as possible.

In managing our business, we focus on Marketing, Human Resources and Financial goals. This past year we restated these goals in the form of our Corporate values, "The Markel Style." While our organization enjoys the talents of a diverse group of individuals, we share the same goals and corporate values—our commitment to success. We have included "The Markel Style" in this annual report because we believe these ideals and standards set us apart from the crowd.

During the past year we have met with numerous investors. One of the most frequently asked questions is, "What can go wrong?" In managing our business we always try to minimize the downside risk, but, unfortunately, it is impossible to eliminate all risk.

The three most significant risks on which we are constantly focused are the insurance cycle, estimating loss reserves, and that associated with expansion to help achieve our growth objectives.

The insurance industry has historically been very cyclical, with insurance rates rising and falling to levels unrelated to actual costs. Rates increased dramatically in 1985 and 1986, and coverage was often difficult to obtain. The cycle is now moving in the other direction with insurance rates falling and competition increasing. To deal with these cycles, our continuing strategy is to specialize in diverse areas of the insurance market. By specializing, we seek to become the market leader in unique niches of the business. We believe, by participating in claims, brokerage and underwriting, and by focusing on diverse products, an adverse cycle will not affect all of our business at the same time.

The second major risk is in estimating loss reserves. During the early 1980s, the cost of settling claims escalated to unexpected levels. Many companies learned that they had significantly underestimated actual costs and that their price levels were inadequate. In extreme cases, companies found themselves bankrupt. More often, future earnings were penalized as companies increased loss reserves. To deal with this problem, we try to be as conservative as possible in reserving for our claims. We take advantage of both internal and external actuarial advice. As a result, our historic performance in estimating losses has been good and we believe our reserves are more than adequate.

The third area of risk is that the company is planning to grow, and is always looking at new opportunities. Unfortunately, there is always risk associated with expansion. We believe the greater risk is to stand still. We will work to minimize the risk of growth and expansion and plan to absorb the recent transactions before stepping out again.

Our board of directors was expanded in 1987 with the addition of Edmund G. (Ned) Langhorne, President of National Claims Service, Inc., and Leslie A. (Les) Grandis, a partner in McGuire Woods Battle & Boothe, our corporate counsel. Ned joined the Company in October 1986, and has successfully turned our claims operations around. Les was an important advisor when we went public in late 1986, and led us through a series of legal mazes in completing the two acquisitions in 1987. We welcome both Ned and Les to the Board and thank them for their contributions to the Company.

We are pleased and proud of our 1987 results. Our financial goals will continue to be increasing revenues by 20% and earning a 20% return on equity over an extended period. Our return, and yours, comes from enhancing the value of the Company—because we, like you, are shareholders.

We recognize that our achievements are made possible by the support of our customers, agents, suppliers, shareholders, and most importantly, our people—the nearly 700 men and women of Markel who share our commitment to success and whose dedicated efforts will continue to make a difference in future accomplishments.

Sincerely,

Alan I. Kirshner
President and
Chairman of the Board

Anthony F. Markel
President
Chief Executive Officer

Steven A. Markel
Executive
Vice President

We are pleased to report exceptional results for 1988. Total operating revenues increased by 78%, to $69.5 million. Net income was up 68%, to $11.1 million, and net income per share was up 56%, to $2.80. These results represent a return on average shareholders' equity of 31%, once again exceeding our long-term goal of earning 20% on equity. Markel's strategy of diversifying into different segments of the insurance industry (brokerage, claims and underwriting) and specializing in unique product niches has again proven to be successful.

Our brokerage operations had good results with total revenues increasing by 8%, though growth in this area was limited by the soft insurance market. Transportation and animal mortality revenues were down due to severe price competition. However, revenue from all other product lines increased. Our strategy of diversification and specialization minimized the effects of the prevailing soft market. Additionally, the Law Enforcement Liability book of business acquired from Special Risks, Inc. in October 1988 contributed to fourth quarter results. With this acquisition, along with further market penetration in other product lines, we expect 1989 to be an even stronger year for the brokerage operations.

The claims operations reported revenues of $29.8 million, up from $11.3 million last year, largely as the result of our acquisition of Lindsey & Newsom in late 1987. During 1988, we made a great deal of progress in consolidating the operations of Lindsey & Newsom, National Claims and Gordon Boyd. Effective January 1, 1989, these companies were merged into one organization under the name Lindsey & Newsom Claim Services. Through several acquisitions and internal expansion the claims operation moved into 6 new states with 18 additional offices during 1988. Lindsey and Newsom now operates in 30 states through 130 offices. While we have made significant strides in developing a strong, quality, full-service claims operation, much remains to be done. The profit margins in this area have been impacted by the costs associated with the amalgamation and expansion program. However, we remain very optimistic about the future of Lindsey & Newsom and the claims business.

The insurance underwriting operations have continued to provide both growth and profits for the Corporation. Earned premiums increased 18%, largely due to expansion into additional states and the appointment of new agents. The combined loss and expense ratio was 86%, which was significantly better than our goal and the majority of the insurance industry. We have always tried to be very conservative in establishing our estimates for loss reserves. This strategy proved beneficial in 1988, as reserves set in prior years have proven to be redundant. Without the benefit of this redundancy our combined loss and expense ratio would have been 95%, which is still quite good and well within our objectives. We believe the reserves established at year end 1988, are conservative, though any future benefits are difficult to predict. The insurance market continues to be very competitive and while we expect to see continued growth (albeit more slowly) and profitability, we do anticipate smaller margins as the combined ratio is likely to increase. Our goal of earning underwriting profits remains intact.

Our equity investments contributed $6.0 million to the Corporation in 1988, as compared to $1.6 million the previous year. This increase was the single most significant reason for our increased net income and is primarily due to the acquisition of the Shand/Evanston Group in December 1987. The Shand/Evanston Group maintained its underwriting disciplines and price levels, producing results which exceeded our expectations. Because the markets in which Shand/Evanston competes were impacted by the soft insurance market, earned premiums declined by 42%, to $61.5 million as compared to $105.4 million in 1987. More importantly, the combined loss and expense ratio improved from 109% in 1987, to 105% in 1988. Our objective is to earn underwriting profits and, while this will be difficult to achieve with declining premium volume, we remain committed to this goal.

Fairfax Financial once again enjoyed a successful year. Nineteen eighty-eight results were favorably affected by its investment in the Shand/Evanston Group, which more than offset several somewhat unusual items which affected 1987 results. The Canadian insurance industry, and thus the insurance operations of Fairfax, is experiencing the same competitive environment as in the United States. The claims adjusting business is not impacted by the soft cycle, allowing Fairfax's Morden & Helwig to prosper regardless of the cycle. Additionally, Fairfax has expanded its investment banking activities and completed several transactions during the year. In December 1988, we converted our convertible preferred stock into common stock. As a result, Markel Corporation's equity in Fairfax's earnings will be increased from 17% to 23% in 1989. Prospects for continued growth and profitability from this affiliate are favorable.

In June 1988, we completed the sale of an additional 651,000 shares of stock at $16.25 per share. The net proceeds of this offering were $9.6 million, which were used primarily to increase our investment in the Shand/Evanston Group. A successful offering is not possible without the investment community, and their support is appreciated. While we were reluctant to sell additional shares at a relatively low price/earnings multiple, we had an opportunity to invest the proceeds in our business at rates of return which would not cause dilution to existing shareholders. The additional capital also strengthened our balance sheet.

During the year we renegotiated our revolving credit and term loan agreement, and increased our borrowing under this facility to $15 million. We believe the interest rates and repayment terms of this facility are quite competitive and very manageable, and we are not uncomfortable with this level of debt.

Shareholders' equity, including redeemable common stock, at year end was $19.8 million, or $11.64 per share. This compares to $21.6 million, or $6.00 per share, at December 31, 1987.

In 1988, we achieved industry-good results by almost any measure. As previously stated, revenues were up 78%, net income per share was up 94%, and return on average shareholders' equity was 31%. Not only are these exceptional results, but they were accomplished in a very competitive, soft insurance cycle. We expect the insurance market to remain soft in 1989, and probable beyond. As our 1988 results were favorably affected by acquisitions completed in late 1987, we do not expect our 1989 revenue growth or net income growth to match 1988 levels. We are confident, however, that by adhering to our strategy of diversification into different segments of the insurance industry and specialization in unique product lines, we can achieve our long term goals of increasing revenues by 20% annually and earning a 20% return on equity.

While we have grown very quickly in the past few years, we are still a relatively small company in the insurance industry. We view this as an advantage, and while we expect to continue to grow, we will seek to maintain our strategy of decentralization, allowing the key people in each of the business units to respond quickly and intelligently to opportunities in their respective market segments.

The insurance industry will continue to be cyclical and the current soft market is likely to continue for some time. However, the industry is quite large (over $200 billion in premiums) and regardless of the cycle, there will be opportunities for those who can take advantage of them. We have a group of very talented individuals capable of delivering customized products, superior customer service, and immediate response to the changing needs of our customers.

The insurance cycle has very little impact on the claims administration business, which generally responds to overall economic activity. Any occasional peaks and valleys are the result of unusual weather patterns. We now have the opportunity to develop a large, international claims organization in an industry characterized by small, local operations. The opportunity for profitable growth is very exciting and we will maintain a long-term focus on building a strong, quality claims operation.

Markel Corporation looks toward the future with optimism. In spite of the very competitive, soft market environment, we believe many opportunities for continued growth and development exist. The past few years have been marked by record financial results and we remain committed to our goal of sustaining this performance over the long term.

Our accomplishments are made possible only through the support of our customers, agents, suppliers, shareholders, and, most importantly, our people. It is our people who make the difference and deserve the credit. Their commitment is evidenced by participation, enthusiasm, and the fact that so many have chosen to share in the company's future through stock ownership. The men and women of the Markel Companies have made us successful for the past 60 years and they continue to put forth exceptional effort. Our people *ARE* Markel, and together we are committed to success.

Alan I. Kirshner
President and
Chairman of the Board

Anthony F. Markel
Executive
Vice President

Steven A. Markel
Executive
Vice President

The Markel way is to seek to be a market leader in each of our specialties. We seek to listen to customers' needs and to provide our customers with quality products and service.

TO OUR BUSINESS PARTNERS:

Nineteen eighty-nine was another profitable and eventful year for your Corporation and we are pleased to share the following highlights with you, our business partners. While some of our business units did not meet expectations, overall Corporate goals were exceeded.

For 1989, total operating revenues increased 28% to $89.8 million. Net income increased 24% to $13.8 million and net income per share was up 12% to $2.69. These results represent a return on average shareholders' equity of 24%.

Our long term goals remain unchanged: To achieve a 20% annual growth in revenues and a 20% annual return on shareholders' equity. For the past five years our revenue growth has averaged 39% and return on equity has averaged 30%. Since December 31, 1986, shareholders' equity has increased from $6.7 million to $64.7 million at December 31, 1989, or $1.34 per share to $11.98 per share.

BROKERAGE OPERATIONS

In October 1989, we completed the acquisition of certain assets of the Rhulen Agency which has added several new market niches and will strengthen our position in certain agricultural markets. A major portion of Rhulen's business is seasonal, with most revenues being earned in the second and third quarters. As a result, the Rhulen Division recorded a loss in the fourth quarter and reduced our earnings by approximately $0.14 per share. We do, however, expect this acquisition to contribute to future earnings and cash flow.

Also during 1989, our leadership position in specialty municipal liability coverages continued to expand, augmented by the acquisition of a book of business from Special Risks, Inc. the previous year.

CLAIMS ADMINISTRATION

Lindsey & Newsom continued its expansion program during 1989. At year-end, we were operating from 152 offices serving 36 states, making us one of the largest independent claims organizations in the country. In addition to expansion, our energy is also being focused on staff training and development with the goal of providing our clients with the highest quality service available in the business. This philosophy, and mission, is clearly expressed in Lindsey & Newsom's creed, "First, we'll be the Best, then we'll be First."

Despite business generated from the catastrophies of 1989, our profit margins and return on investment continue to be lower than our long-term objectives. This will continue to be true in 1990, as we are consciously investing to position Lindsey & Newsom for further growth and profitability.

UNDERWRITING

Essex Insurance Company and Markel American Insurance Company are leaders in maintaining disciplined underwriting standards, providing unequalled customer service, and achieving exceptional results. In 1989, the Companies collectively reported a combined ratio, an indicator of underwriting profitability, of 79% on a statutory basis. More importantly, this ratio has averaged 86% for the past five years. As a comparison, the industry's average combined ratio for 1989 was in excess of 110%, and has averaged 109% for the past five years.

The insurance market continues to be in a very competitive cycle. While many experts expect pricing to stabilize in 1990 and 1991, most are suggesting the improvement will be gradual. By focusing on unique product niches and sound underwriting standards, we expect to continue our success regardless of the market cycles.

STRATEGIC PARTNERSHIPS

Our investments in the Shand/Evanston Group and Fairfax Financial contributed significantly to our results for 1989, largely due to exceptional investment performance. The investment portfolios of these Companies, as well as the equity portfolio of Essex Insurance Company, are managed with a disciplined value orientation by Hamblin Watsa Investment Counsel, based in Toronto.

Each of our business units operates autonomously. Though synergy among the Companies is not a priority, we are quite pleased that in 1990, the Shand/Evanston Companies and Essex Insurance Company will be participating in the underwriting of certain business generated by the Rhulen acquisition.

FINANCIAL STRENGTH

While our primary financial goal is to earn a 20% return on shareholders' equity, we are also dedicated to maintaining a strong financial position. During 1989, the total assets of the company increased from $147.3 million to $195.7 million.

Our investment portfolio increased 31% to $66.5 million, with the majority of the funds invested in high quality fixed income investments. However, to achieve a balance in investment opportunities and because we believe better

STOCK PRICES
(by quarter)

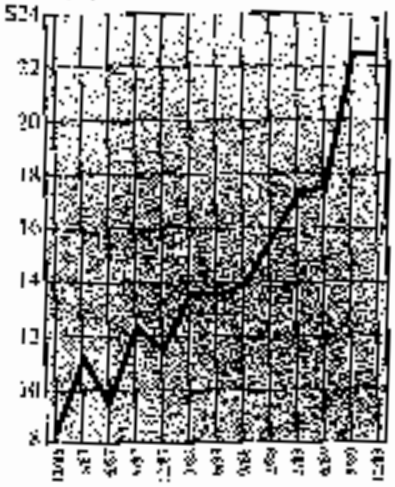

Adjusted for 20% Stock Dividend 07/89.

long-term returns can be realized in the equity markets, $13.8 million is invested in equity securities.

Our investment in unconsolidated subsidiaries has increased to $38.9 million. Of this amount, $16.7 million represents our investment in Fairfax Financial. Fairfax is publicly traded on the Toronto Stock Exchange and the market value of our shares at year end amounted to $27.4 million. This amounts to $1.97 per share more than our carrying value.

As a result of acquiring the Rhulen Agency, we have increased our investment in policy renewal rights from $3.8 million to $79.1 million. Policy renewal rights represent the value attributable to expiration and renewal rights for lines of business acquired. This asset will be amortized over the next seven to ten years. While this expense will penalize our near term earnings, we will achieve tax savings and additional cash flow.

To finance the Rhulen acquisition, we have restructured our long term debt and increased it to $44.5 million as of year-end 1989. The restructuring involved replacing our previous $20 million revolving credit facility with a commercial paper program backed by a $70 million stand by revolving credit facility. The facility will remain available until December 1992. At that time, the participating banks may elect to extend the revolving facility for an additional three years or convert the balance outstanding to a seven-year term loan. While we have significant credit available, we will be cautious in using it.

For any insurance company, one of the most important balance sheet items is the adequacy of the reserve for unpaid losses and loss adjustment expenses. At December 1989, our reserves amounted to $31.5 million. There is always a degree of uncertainty in establishing loss reserves and estimating the future cost of claims, many of which may not have yet been reported. We establish our reserves very conservatively and are proud that in each of the past five years, the reserves we have established have, in fact, proven to be more than adequate. While we cannot eliminate all risk from these estimates, we have a high degree of confidence that the reserve level at year-end will prove to be sufficient.

SHAREHOLDERS' EQUITY

At year-end, shareholders' equity (including redeemable common stock) was $64.7 million or $11.98 per share. This compares to $49.8 million, or $9.54 per share for the previous year and to $21.6 million or $5.60 per share at December 31, 1987.

LOOKING FORWARD WITH ENTHUSIASM

While our results over the past several years have been extremely good, of more importance is the future. We continue to be very optimistic about the company, our markets and our ability to achieve favorable results. Though it is difficult to predict the future, we will share some of our thoughts and expectations.

Our brokerage business should double in size as a result of the Rhulen acquisition. Clearly, our 1990 revenues will increase as a result, although the impact on net income is less clear. As previously mentioned, a large portion of the purchase price has been allocated to policy renewal rights and will be amortized over the next several years. While this represents a non-cash item, it will reduce reported earnings. As with any similar transaction, risk and uncertainty do exist. We expect the acquisition to contribute to our earnings in 1990. However, due to the seasonality of the business, quarterly comparisons with prior years will be distorted.

Growth in our claims operation will continue in 1990, as a result of previous branch expansion and openings planned for 1990. Looking even further into the future, we seek to develop a financially strong, high-quality, full-service claims operation.

We expect the current business environment to exist throughout 1990, and, therefore, forecast only modest growth for our underwriting activities. While growth may be limited, we expect our profitability to remain strong. Longer term, we expect the market to harden, and we expect to be in a position to capitalize upon it.

Our strategy is to diversify into different segments of the insurance industry and to specialize in unique product niches. This strategy provides us with the balance of different businesses throughout the insurance cycle as well as the opportunity to become market leaders. It's proven successful in the past and we look forward to the future with enthusiasm.

Alan I. Kirshner
President and Chairman of the Board

Anthony F. Markel
Executive Vice President

Steven A. Markel
Executive Vice President

Markel Corporation executive officers (clockwise from top): Alan I. Kirshner, Anthony F. Markel, and Steven A. Markel

To Our Business Partners:

In each year since our initial public offering in 1986, significant events have occurred which have shaped Markel's growth and development. When 1990 began we were focused on our corporate strategy of diversification in several segments of the insurance industry and specialization in certain niche markets.

This past year we were presented with a unique opportunity and took advantage of it. The result is that we acquired the remaining shares of the Shand/Evanston Group and sold our ownership in Fairfax and Lindsey & Newsom. The impact of these transactions is that our operation is now completely focused on marketing and underwriting specialty insurance. We have had a close business relationship with these companies and wish them every success in the future. Prem Watsa, Chairman of Fairfax, will remain on Markel's Board of Directors and we look forward to his continued contribution.

Shand/Evanston is one of the premier specialty insurance underwriting organizations in the country. Its largest business includes various niches within the professional liability insurance market. We originally invested in this group in December, 1987 in partnership with Fairfax and certain of Shand/Evanston's management.

Over the past three years Shand/Evanston has contributed significantly to our earnings. Additionally, during the past year, Shand/Evanston has begun underwriting many of the programs which have been developed and marketed by Markel/Rhulen Underwriters.

This "strategic evolution" has the additional benefit of simplifying our operations and organizational structure encouraging synergy between our business units and simplifying our future financial reporting.

1990 RESULTS

In order to better understand our financial results, it is useful to understand the various accounting and reporting issues associated with the Shand/Evanston acquisition and Lindsey & Newsom and Fairfax disposition. For financial statement purposes the transactions have been recorded as occurring on December 31, 1990. As a result, the assets and liabilities of Shand/Evanston have been consolidated with the Company as of December 31, 1990 for balance sheet purposes, while Lindsey & Newsom and Fairfax have been eliminated as of that date. For purposes of income statement presentation, Shand/Evanston's earnings continue to be accounted for as earnings from an unconsolidated subsidiary. However, since both Lindsey & Newsom and Fairfax have been divested, revenues, expenses and earnings associated with these operations have been reclassified as discontinued operations in the Company's consolidated income statements.

In 1990 brokerage operations showed significant growth primarily as a result of the Rhulen Agency, Inc. acquisition in October 1989. The contribution, while not as high as we would like, continues to be good and generates significant cash flow.

Our underwriting units continue to grow and produce very favorable results. The combined ratios for the underwriting companies were 80% in 1990 compared to 79% in 1989.

The overall decline in the stock market during the year affected the Company in three significant ways. The level of realized investment gains from our investment portfolios was much less in 1990 than in 1989. This was equally true for the portfolios at Shand/Evanston. For example, in 1989 income from continuing operations was $1.97 per share, of which $.84 was from investment gains. Of the $1.46 from continuing operations in 1990, only $.12 was attributable to investment gains. Results were further impacted by the valuation of the Fairfax shares surrendered in connection with the acquisition. In establishing the value for the shares we used the quoted market price discounted for size and certain share restrictions. The decline in market price occurring in late 1990 resulted in a $5.4 million loss. While we have recorded this loss for accounting purposes, the economic value of the transaction, which was negotiated in

August 1990, was not affected by the subsequent decline in the value of Fairfax shares. Finally, the stock market decline impacted the Company in the area of unrealized losses associated with marketable equity securities. At December 31, 1990, unrealized losses associated with our consolidated equity portfolios were approximately $10.2 million and are recognized as a direct reduction of shareholders' equity.

While these financial results are short of our long-term goals, we feel 1990 has seen Markel Corporation truly position itself for the future and are proud of what has been accomplished this year.

BALANCE SHEET

The consolidation of Shand/Evanston has resulted in several changes to our balance sheet. The most significant of these are in the areas of our Investment Portfolio, Intangible Assets, Loss Reserves, and Debt.

Investment Portfolio At year end our investments totaled almost $360 million as compared to $66 million one year earlier. This portfolio and the return we expect from it represents a significant opportunity to us. In managing these assets we will seek to provide the security necessary to protect the interests of our policyholders as well as the return to provide growth for our stockholders. At year end, we had $69 million of this portfolio invested in equity securities. While we continue to believe that equities will provide the greatest long term rates of return, we also believe that the Company's financial leverage currently requires that we reduce our investment exposures to equities.

Intangible Assets At year end the following intangible assets were recorded on our books:

Policy renewal rights	$164 million
Noncompete and nonpiracy agreements	19.3 million
Goodwill	35.8 million
	$219.5 million

We recognize this represents a substantial investment in the future business prospects of the Markel/Rhulen products acquired in 1989 and the additional interest in Shand/Evanston acquired in December 1990.

The policy renewal rights are being amortized over the next nine years. However, almost 50% will be written off over the next three years. The noncompete and nonpiracy agreements will be amortized over the next four years. The result is that in 1991 we expect to expense $9 million for the amortization of these amounts. These non cash charges will have an adverse impact on earnings. However, to the extent they are also tax deductible, they will generate significant cash savings from the associated tax benefit.

Loss Reserves The Company's reserve for unpaid losses and loss adjustment expenses amounted to $302 million at year end compared to $31 million at December 31, 1989. These amounts represent our best estimates of the amounts necessary to meet our obligations to our policyholders. As we have discussed in prior years, in establishing these estimates, we attempt to take into consideration all of the relevant information and actuarial methods available to us. While it will always be difficult to accurately determine such future liabilities, we have established a standard for ourselves whereby we seek to set our reserves at a level which we believe is more likely to prove to be redundant than deficient.

Debt The Company's long term debt amounted to $127 million at December 31, 1990 and is much higher than we desire for the long term. The debt increased in 1990 as a result of additional borrowings to complete the acquisition of Shand/Evanston as well as the consolidation of their debt.

We are fortunate to enjoy excellent relationships with our bankers and it is important that we continue to maintain their confidence. Most important however, is that the Company's cash flow is adequate to meet our repayment requirements.

Our goal is to significantly reduce the amount of debt and operate in the future with less leverage.

PRO FORMA RESULTS

The nature and size of the Company will be significantly different in the future. While not necessarily indicative of future results, the pro forma income statements in Note 18 to the consolidated financial statements provides an indication of how the consolidated operations might have appeared had the

acquisition of Shand/Evanston and disposition of Lindsey & Newsom and Fairfax occurred on January 1, 1989.

Total operating revenues would have approximated $220 million in 1990 compared to $161 million in 1989. At $145 million for 1990, earned premiums become the dominant revenue source, highlighting the underwriting focus of the Company. This focus will likely be continued in the future as our underwriting units participate to a larger extent in the business handled by our brokerage operations. With investment portfolios of $360 million, investment income will continue to be a major contributor to operating income.

As previously discussed, the non-cash expense related to the amortization of intangible assets adversely impacts income but, to the extent tax deductible, saves tax dollars. In 1990, amortization expense would have been $9.2 million. We expect these charges to continue to be significant through 1994. Interest expense in the 1990 pro forma is $16.9 million on total debt of $127 million. Interest cost on this debt is expected to be significantly less in the future due to the contractual adjustment of the accrual terms on the contingent notes at Shand/Evanston.

We are optimistic about the future given the financial opportunities presented us by our specialty underwriting focus.

FINANCIAL GOALS

In each of our previous reports, we have discussed our financial goals of achieving a 20% growth in revenues and a 20% return on average shareholders' equity. In our underwriting business we have always placed a higher priority on underwriting profit as it is often difficult and imprudent to grow in a period of significant price competition. While we expect to continue to grow, a much larger part of our revenues will be generated from our underwriting activity. As a result, we will not seek to maintain a 20%

Alan I. Kirshner

Steven A. Markel Anthony F. Markel

growth rate as a financial goal.

As a result of various financial accounting issues, the Company's return on equity calculation is becoming distorted. For example, the amortization of intangibles is an expense. However, it is a non-cash expense which reflects our accounting treatment of acquisitions, not the intrinsic value of our business. Another example is our investment in equities. Accounting rules require that we recognize in our statement of income realized gains and losses while we only recognize unrealized gains and losses in our balance sheet. The result can create higher returns on equity with a decline in the value of our investments. Finally, with the additional financial leverage of our borrowings, we should earn a high return on equity.

We are developing better criteria for measuring "real return on investment" which will take these issues into consideration.

THE FUTURE

We ended 1990 with the completion of a series of complex transactions intended to simplify our Company. Today we no longer have a complicated organization. Our business and financial structure is really quite simple. We are focused on marketing and underwriting specialty insurance. In each market we serve, we seek to provide quality products and excellent service and, as a result, to earn a position of market leadership.

We expect the strength of our marketing and sales organizations to complement our sound underwriting operations. While the insurance marketplace is likely to remain very competitive throughout the year, we believe we can continue to operate on a profitable basis in our areas of specialization with good underwriting results and good investment returns. As we focus on areas that have proven our most profitable in the past, we look forward to 1991 and beyond with enthusiasm and confidence. ■

Alan I. Kirshner
President
Chairman of the Board

Anthony F. Markel
Executive Vice President

Steven A. Markel
Executive Vice President

Dear Fellow Shareholders:

In last year's report we described Markel's "strategic evolution" which resulted in our heightened focus on marketing and underwriting specialty insurance products. This new focus began in late 1990 with the purchase of 100% of Shand Morahan and the Evanston Insurance Company.

We had previously owned a minority interest in these specialty insurance operations. Concurrent with this purchase, we sold our interests in our claims operations and Fairfax, a Canadian insurance holding company. The result was that Markel embarked on 1991 as a new company—far more focused than before and with a very simple organizational structure.

As we began 1991 we had two important short term goals. First was to improve our financial strength. This goal was achieved as we generated very substantial cash flow and reduced debt by $33 million. Our ambition is for long term debt to represent approximately 33% of our total capital. We should be very close to achieving this goal in 1992. The Company's financial strength was also enhanced by the fine performance of our investment portfolio, as market values improved and as we restructured the portfolio to improve our asset quality and reduce investment risk.

Clockwise from top: Alan Kirshner, Anthony Markel, Steven Markel

Our second goal was to capitalize on the opportunities provided by our new structure by leveraging the strengths offered by each of our businesses. Each company offers something different that can be utilized to the advantage of the others. The development of a unified business plan for 1992 will ensure we are working together with a common goal. Symbolic of our achievement of our second goal is the new logo which we proudly display on the cover of this report.

A New Symbol for a Focused, Unified Markel

Prior to our "strategic evolution" we encouraged the independent and autonomous operation of each business. We now believe we should make the fullest use of our experience and expertise by making those resources available throughout the Corporation.

Today, each business unit in the Markel family is focused on marketing and underwriting specialty insurances. Quality products and excellent customer service are common themes throughout. We strive to be a market leader in each of the products, programs, and services we offer.

The demand to achieve underwriting profits is a consistent part of our planning process. We manage our operations with a common mission. Of equal importance to the mission, however, is how we get it accomplished. The Markel Style. All members of the Markel team are expected to share this commitment to success.

Our new logo with its bars ascending like our plans for the future is symbolic of the new Markel Corporation.

1991 Operating Results

We are very pleased with our 1991 financial results. Net income for the year was $14.4 million or $2.68 per share which is a record for our company.

In 1991 our total revenues were $225 million as compared to $73 million in 1990. Operating income was $38 million as compared to $14 million in 1990. We view operating income as a key indicator of our overall performance. It is a composite of underwriting, brokerage and investment results measured before amortization, interest and taxes.

In 1991 our combined ratio was 106%. When this number exceeds 100% we are operating at an underwriting loss which is contrary to our corporate objective. Our

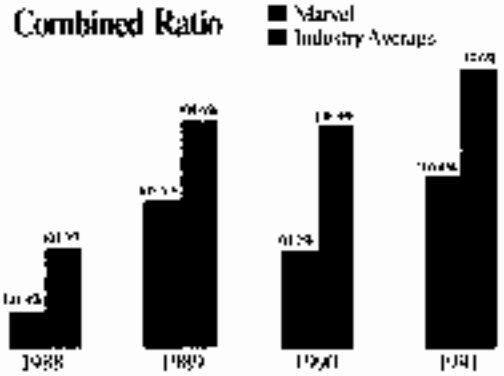

underwriting loss was caused primarily by one program at our American Underwriting Managers (AUM) division. In this division we lost $8.7 million in 1991 which represented 5 percentage points of our combined ratio. This program was discontinued and the division significantly downsized by year end. We believe we have made adequate provision for any resulting losses. Unfortunately, there is no simple excuse. It is now part of our history and we will not make the same mistakes again. The good news is, of course, that the majority of our products are being underwritten profitably and on a consolidated basis, excluding AUM, we are close to achieving our goal of earning underwriting profits. We believe we can--And we will!!!

Our brokerage business provided good returns in 1991 but were slightly behind 1990 results. We view the Market/Rhulen operation as part of our underwriting business since we retain the risk on a large part of this business. As previously reported, the Nurses Malpractice Division was sold in the first quarter of 1991 and the Governmental Programs Division in January, 1992. As a result, pure brokerage business is no longer a significant part of our business strategy.

Investment returns were very good in 1991. We enjoyed the recovery in the stock market and achieved a total return of 38% from our investment in equities. This included both gains which we realized and the recovery of unrealized losses which do not impact earnings, but are recorded as part of stockholders' equity.

Amortization expense for the year was $8.9 million. This represents a reduction to earnings per share of approximately $1.16 related to non-cash items. The majority of this amortization expense relates to items which will be fully amortized in 1994. Interest cost, primarily resulting from the financing of the Shand/Evanston acquisition in late 1990, was $11.5 million. We expect to significantly lower this in 1992 due to reduced debt levels and lower interest rates.

Return on stockholders' equity was 21% for 1991. While we are pleased with these results, we think it's even more significant that over the past five years return on equity has averaged 25%.

Investments

Total cash and investments were $436 million at year end. This amounts to approximately $82 per share. In early 1991 we reviewed and modified our investment policy and established new guidelines. Our investment philosophy balances the needs of policyholders with those of shareholders and recognizes the Company's financial and underwriting leverage. While we seek to earn excellent investment returns, we must first assure the adequacy of our capital so we can underwrite insurance.

During 1991 we improved the quality of our fixed income portfolio and reduced exposure to convertible bonds. Today we believe this portfolio is high quality and very liquid and will meet our future obligations to our policyholders.

The Company continues its policy of investing in common stocks, but we prudently limit our investment in equity securities in relationship to our capital base and our financial and underwriting leverage. While the greatest long-term investment returns can be achieved by investing in this sector of the market, the short term implications of this strategy are more volatility and uncertain

realized gains. Total return from investing in common stocks was 38% in 1991, but over the past four years was 15%.

Contingent Note Adjustment

It is now five years since Fairfax and Markel originally acquired Shand/Evanston and the adjustable notes related to this acquisition are now subject to final determination. At year end our reserves reached the level at which there is, we believe, no principal or interest owing on these notes. The original sellers of the company have disagreed with our reserve estimates and we are in the process of resolving this matter. While some uncertainty exists with regard to the outcome of this process, we do not expect the results to cause any material adverse impact on our financial position or operating results.

The Future

In each of the past several years, we have correctly forecast the continuation of the relatively soft and very competitive insurance cycle. Fortunately, our specialization in unique product niches somewhat protects us from the most competitive forces in the market.

Is this year any different? Not really. We expect the market to continue to be very competitive.

The good news is that we are certain to be one year closer to the next hard market and there are some factors which may indicate a change in the cycle. Industry pricing continues to lag. Increasing claims costs and lower interest rates should slow or even reduce the industry's investment returns.

While we look forward to the day when we will have the wind to our backs, we are extremely proud of our achievements.

Since 1986, the year Markel became a public company, we have seen earnings grow from $5.6 million to $14.4 million, book value has grown from $3.42 per share to $15.59 per share and return on equity has averaged 25%. We would obviously be pleased to achieve similar results in the next five years - and believe we will.

Markel experienced some big wins in 1991. Perhaps the most visible was the adoption of our new logo as the meshing process continued between all the Markel Companies. The resulting financial success is apparent throughout this report.

Whatever an organization is built through acquisition, it takes time to fully integrate the various operations. Integrating the talent, knowledge and expertise of the Markel people and the cultures of the new Markel companies into The Markel Style is an ongoing process that we expect to be a priority for several years to come.

We see this as one of our best opportunities. As we work together as one organization, with common goals and a unified business plan, our future seems as limitless as the new symbol by which we are represented.

Alan I. Kirshner
President and Chairman of the Board

Anthony F. Markel
Executive Vice President

Steven A. Markel
Executive Vice President

Return on Equity and Book Value Per Share

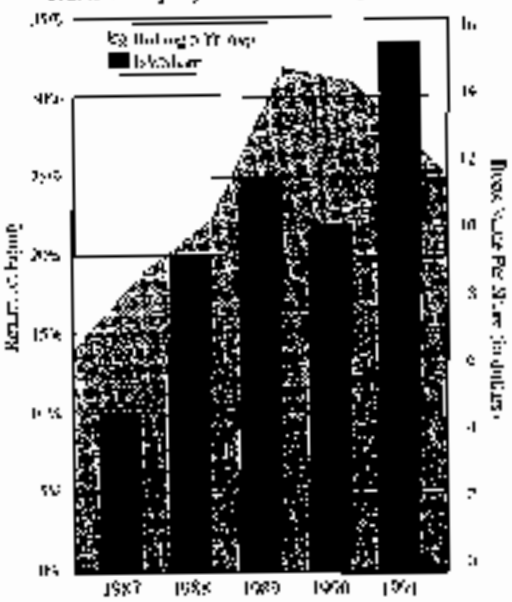

To Our Business Partners:

We have completed another eventful and successful year. While 1992 has proven to be one of turmoil for the insurance industry, your company has avoided many of the industry's problems and is able to report excellent results. Our underwriting units achieved a 97% combined ratio and net income for 1992 announced to $26 million or $4.64 per primary share. This represents a 27% return on average shareholders' equity. Since going public in 1986, return on equity has averaged 29% and book value per share has increased from $3.42 to $20.24.

Our primary objective in 1992 was to continue focusing on specialty underwriting and to continue unifying the various companies we had acquired in previous years. Since our "strategic evolution" in December 1990, we have substantially completed this important transition. In early 1992 we completed the sale of our Governmental Programs Division. This was a successful business for Markel and we made a very significant profit on its sale. However, the operation was primarily a brokerage business and not consistent with our strategic focus on specialty underwriting.

In April we announced our plan to move Markel Rhulen Underwriters from Monticello, New York to Richmond, Virginia. This move was completed in October and involved a tremendous effort from our entire staff. With this relocation, we will sharpen the focus on underwriting profits as well as the development of appropriate insurance company support functions. We believe this can best be accomplished in Richmond.

To better manage our growing and changing organization, the roles of the executive management team were expanded in 1992. Tony Markel, who was previously Executive Vice President for the Corporation and President of Essex Insurance Company, was made President and Chief Operating Officer of Markel

Markel Rhulen Underwriters provides student accident and health plans for over 200 colleges and universities nationwide. This program is used to ensure that every student has insurance coverage, even if they are no longer eligible for their parents' coverage.

Corporation. Tony is now responsible for all our underwriting operations and will be sure every unit remains concentrated on underwriting profits. By centralizing the management of our insurance companies, we expect to realize many efficiencies in operating and administrative activities. Product line management will remain decentralized and will not stray from our continued focus on quality customer service.

Steve Markel was promoted to Vice Chairman and will continue to have responsibility for strategic planning and investment activities. Additionally Steve is responsible for capital allocation and loss reserve adequacy.

Darrell Martin was promoted to Executive Vice President and Chief Financial Officer. Darrell is responsible for corporate accounting, treasury and financial operations as well as most other corporate staff functions.

Alan Kirshner remains as Chairman of the Board and Chief Executive Officer. In addition to supervising corporate marketing and human resources, Alan has responsibility for internal communications. This function is particularly important as we are integrating the talent, knowledge and expertise of people from diverse cultures into the Markel "Style".

Investments

Our investment portfolio at December 31, 1992 was $442 million. This included $290 million in fixed income investments which are purchased to assure our ability to meet our liabilities to policyholders. In 1992 we increased our investment in tax exempt securities to $116 million as yields on these securities became more attractive and our tax position made this alternative worthwhile. The investment portfolio includes $74 million in equity securities which we believe will provide us the greatest total return over the long term.

We have a larger portion of our portfolio allocated to common equities than many property/casualty insurance companies. Because of our confidence in our underwriting results, we feel comfortable with this strategy. While we believe this strategy will provide the best total return, our short term results may be less consistent because they will include capital gains and losses. Although we recognize the short term impact, we are confident our strategy will enhance shareholder value in the long term.

As we are all aware, we are now in an interest rate environment much different than any we have experienced for many years. With interest rates at such a relatively low level, it is more important than ever for us to maintain a sound underwriting discipline in order to earn our desired return on equity.

Loss Reserves

As we have reported for many years, assuring adequate loss reserves is an on-going goal for your company.

Our loss reserves represent our best estimates of the amounts necessary to meet our obligations to our policyholders. In establishing these estimates, we attempt to take into consideration all of the relevant information and actuarial methods available to us. While it is always difficult to accurately determine such future liabilities, we have established a standard for ourselves seeking to set our reserves at a level which we believe is more likely to prove to be redundant than deficient.

At December 31, 1992 total loss reserves were $353 million compared to $346 million last year. During 1992 we realized $10 million in redundancies from prior periods. More importantly we are pleased that in each of the past five years this has been the case.

As we reported last year, we were in dispute with regard to the contingent notes related to the acquisition of Shand/Evanston in 1987. With respect to the largest of these notes, in January of 1993 a final determination was made by an independent actuary and accountant. The good news is that, as to 1986 and prior reserves at Shand, this independent expert found our reserves to be more than adequate. The bad news is that we were required to make an additional payment on the note; however, this had no material impact on our financial results.

Long Term Debt

Since December 1990, when long-term debt was $127 million, it has been our objective to reduce this leverage. With good cash flow and the sale of our Governmental Programs Division, we reduced long-term debt to $67 million at September 30, 1992. At that point in time debt was 40% of total capitalization...very near our goal of 33%.

In the fourth quarter of 1992 we increased borrowing by $34 million leaving debt of $101 million at year end. So what happened? We'll explain.

The Company's primary credit source has been a $70 million revolving credit facility with provisions to convert to a seven year term loan at December 31, 1992. The rate and terms of this facility are most attractive. At September 30, 1992 we had borrowed $34 million with the unused $36 million representing our available credit. In order to assure ourselves of the availability of capital on these favorable rates and terms, we borrowed the full amount available through this facility prior to converting it to a term loan.

The Future

We opened this letter by making reference to the turmoil in the insurance industry and think it appropriate to expand on this subject. We have been in a soft, competitive insurance cycle for the past five years. In each of these years the industry has seen declining returns on equity. In 1991, the industry return declined to approximately 7% and in 1992 the numbers will certainly be worse.

In 1992 there have been an unusual number of headline stories describing problems in the insurance business. These headlines describe major losses and company reorganizations, as well as the recognition that loss reserves have often been inadequate to meet claims costs. Even some very old line, established companies experienced difficulties as a result of Hurricane Andrew's estimated $16.5 billion in losses and Hurricane Iniki hitting Hawaii.

Several companies that diversified into the insurance industry in the 60's and 70's are now exiting this business altogether. Many experienced losses for the first time in decades as a result of inadequate loss reserves, reinsurance bad debts, catastrophic losses and bad investments in real estate and mortgages.

The P&C insurance industry is truly battered and bruised!! 1992 brought big losses and sooner or later those companies most affected must return to good business judgment.

Having focused on specialty niche marketing and having the discipline to make money as an underwriter, we've successfully avoided most of the industry's problems. But pricing has been soft and the marketplace very competitive for the past five years. Even today, with all of the industry problems, we still face a very competitive market.

Within the negative industry headlines there is good news for Markel

First: The significant restructuring currently taking place in the industry is likely to create new opportunities for Markel, whether it's an opportunity to underwrite a new product or to acquire a new business.

Second: Sooner or later the cycle will turn, even though it may not be as dramatic as we've experienced in the past. Shareholders will demand reasonable returns on equity. The result will be increasing prices and sound industry underwriting practices. We'll do well in this environment, too.

While these forecasts are both optimistic, our past success and our future success lies in being able to maintain focus on our mission:

- To provide quality products and excellent customer service in a variety of niche markets;
- To be a market leader; and
- To earn underwriting profits and superior investment returns.

At Markel, there is a feeling that the future we've been planning for is here.

Thank you.

Alan I. Kirshner
Chairman and C.E.O.

Anthony F. Markel
President and C.O.O.

Steven A. Markel
Vice Chairman

A sharp-eyed shareholder noticed that this picture of Alan Kirshner flanked by Steve (*left*) and Tony Markel (*right*) appeared in both our 1990 and 1991 annual reports. He complimented the company for being "tough on costs". The photo is reprinted now to display our never-ending cost control efforts and our never-aging key executives.

We are proud to report another very good year. In 1993 net income was $74 million, or $4.23 per share, which accounted to an 18% return on average stockholders' equity. At year end, stockholders' equity totalled $151 million, or $27.80 per share, representing a 38% increase from $109 million, or $20.24 per share in 1992. Some of this increase was the result of a change in accounting for the unrealized gains on fixed maturity investments, which is discussed later in more detail.

1993 Underwriting Results

Gross premium volume was $313 million in 1993, compared to $304 million in 1992. On the surface, that's a 3% increase. However, 1992 production included approximately $18 million in premiums from sold or discontinued brokerage operations. Our core business, or "same store sales", actually increased by a much larger percentage, around 9%.

We continue to underwrite and retain a growing portion of our gross premium volume. As a result, earned premiums, which represent most of our revenue, increased 26% to $193 million from $153 million in 1992.

While we are pleased to see sustained growth in our business, we are especially pleased to report that we have again earned underwriting profits. For both 1993 and 1992 our combined loss and expense ratio was 97%, representing a 3% profit margin.

1993 Investment Results

Our 1993 investment results were also strong, as evidenced by a total investment return of 11%. Net investment income (dividends and interest less expenses) totalled $24 million and comprised approximately 9% of the total return, while realized gains of $16 million and unrealized gains of $16 million each accounted for approximately 3% of the total investment return.

At December 1993, the investment portfolio was $597 million, or $110 per share.

During the year, we increased our tax exempt investments and by year end held $164 million in state and municipal bonds. We also have continued to increase our investment in equity securities. At December 1993, we had $108 million in equity investments including $72 million in unrealized gains related to these investments. While we realize market gains when we believe it is appropriate to do so, we also recognize the tremendous power of compounding growth when we are fortunate enough to find stocks that can appreciate over many years. We believe we can benefit by sticking with good investments and deferring the tax bill.

In accordance with new accounting guidelines, at December 1993 we recorded our fixed maturity securities at fair value. In prior years, fixed maturity securities were recorded at amortized cost. The change resulted in an increase in carrying value of $12 million, or (after adjustments for taxes) an increase in stockholders' equity of $8 million. While the new accounting treatment will more accurately reflect the value of our assets, it will also introduce additional short-term volatility in stockholders' equity.

Loss Reserves

Loss reserves represent our estimate of the future cost to settle claims. We strive to estimate reserve at levels which are more likely to be redundant than deficient. In the past we have been successful in achieving this goal and believe that our reserving methods are sound.

In recent years, we have made aggressive efforts to settle older claims, particularly those professional and products liability claims which predate our acquisition of Shand/Evanston. The effect of those efforts was a $46 million decrease in our gross loss reserves. In 1993 claim payments totalled $261 million, of which $233 million related to claims from prior years.

In 1993 we offered a number of our reinsurers the opportunity to commute, or pay their liabilities in return for a release from further exposure to changes in reserve estimates. As a result, we collected $65 million in cash from reinsurers who accepted our offer and decreased our net loss reserves by the same amount. We will benefit from additional investment income on the cash generated by the commutations, as well as from reduced collection and administrative costs. A potential disadvantage is that we will have less reinsurance protection if our losses develop adversely. We think we have adequately priced for this risk.

Due to the commutations and our success in closing older claims, amounts recoverable from reinsurers were reduced by $119 million in 1993.

Long-Term Debt

In October 1993 we achieved another milestone. We completed a shelf registration of $100 million in public debt securities and after receiving ratings from the major independent credit rating agencies, we issued $75 million of 10 year bonds in the public markets.

The bond issue allowed us to repay all of our bank debt and help to reduce our total long term debt to $78 million at December 1993. At year end, the ratio of long term debt to total capital was 34%.

Because interest rates remained very attractive, early in 1994 we sold the balance of the debt under the shelf registration. In total, the debt was issued at an effective fixed cost of 7.5%.

Shareholder Relations

Although the history of our company dates back to 1930, we are a relatively young public company. Our initial public offering was in December 1986, only seven years ago. As a public company, we have endeavored to treat our fellow shareholders as equal partners.

We are committed to sound business practices and we try to provide complete disclosure so that our partners can fully understand the value of the company. The objective of our shareholder relations program is to attract and retain investors who share our long-term goals.

If we are successful in meeting our objective, we would expect our stock to trade at its intrinsic value and be less

sensitive to issues unrelated to the value of the company. While we cannot be the most unbiased in determining our own intrinsic value, we believe a significantly undervalued or overvalued stock does not serve our best interests. In 1993, the stock price appreciated 26%, while book value was up 38%.

Dividends and Splits

We are earning very strong returns on our capital and have confidence in our ability to do so in the future. As a result, we have no plans to institute cash dividends.

The intrinsic value of our company will be the same whether we maintain 5.4 million shares outstanding, or split them to increase that number. Splitting the number of outstanding shares will not result in the stock trading at a price more closely related to its intrinsic value. In fact, the opposite may well be true. Of course, we will continue to work to increase the intrinsic value of the company, and we will be happy to see our efforts reflected in the market value of our stock.

Reported Earnings versus "Real Cash Money"

In managing our business, we try to value sound economic judgment over accounting conventions which often do not represent meaningful economic reality. This philosophy will sometimes result in decisions which reduce accounting earnings, yet increase our "real cash money."

We can find two prime examples of this in our business. First, our investment objective is to maximize total returns. In doing so, we invest in common stocks where we sacrifice current income for the opportunity to enjoy capital appreciation. The value of this policy can be seen in our total returns, which have averaged 31% over the past five years.

A second example relates to the amortization of intangible assets. As a result of prior acquisitions, we have significant amounts of intangible assets. A large portion of these assets are tax deductible and are being expensed on an accelerated basis. While accounting convention requires amortization to be included in operating expenses, the charge bears little relationship to our current cost of operations. Further, due to the accelerated amortization of certain assets, amortization expenses will decrease in the near future. After tax amortization charges will decline to $.88 per share in 1994 and $.37 per share in 1995.

The following chart emphasizes earnings per share from underwriting and investing activities, which we believe is a more meaningful representation of our operating performance.

	1993	1992	1991
Core operations	$3.31	$3.03	$2.61
Realized gains	1.83	.89	.94
Underwriting and Investing	5.14	3.92	3.55
Gain on sale		2.52	.28
Relocation expenses	—	(.60)	
Amortization expenses	(.91)	(.16)	(.15)
Net income	$4.23	$4.64	$3.68

Income from underwriting and investing represents the real economic results of our ongoing business operations. Core operations include underwriting and ordinary investment activities. In 1993 and 1992, earnings per share from core operations increased 9% and 16%, respectively.

Realized gains from investments, while inherently volatile and difficult to predict, have also provided significant returns over the past three years. As a percent of our average investment portfolio, returns from realized gains averaged 3% in 1993, improved to 2% in 1992 and 2% in 1991.

Admittedly, we have enjoyed very good financial markets and predicting 1994 and 1995 results would be a dangerous game. Nevertheless, we strongly believe that over the long term, our investment strategy will maximize our returns.

The Future

We fully expect the insurance industry to be just as competitive in 1994 as it was in 1993. Although we would benefit from an improved market, we aren't counting on it. We believe that we can continue to meet the challenges of a competitive market through our focus on specialty products and niche markets and our commitment to superior quality and excellent customer service. Given our past success, we think we've found a formula that works.

Alan I. Kirshner
Chairman and CEO

Anthony F. Markel
President and COO

Steven A. Markel
Vice Chairman

Darrell D. Martin
Executive Vice President and CFO

Clockwise from left: Anthony F. Markel, Darrell D. Martin, Steven A. Markel, Alan I. Kirshner

To our business partners:

It was quite a year. It began with a major earthquake, followed by eleven months of aftershocks from unruly interest rates. Generally, we were very pleased with our results, particularly with our continued underwriting profitability and growing premium base. On the other hand, our investment returns were disappointing, as rising interest rates reduced the current value of our investment portfolio.

The bottom line tells some, but not all, of the story. Net income in 1994 totaled $19 million, or $3.33 per primary share, compared to $24 million, or $4.23 per primary share in 1993. Stockholders' equity at December 31, 1994 was $139 million, or $25.71 per common share, down from $151 million, or $27.83 per common share, at December 31, 1993. Although net income and equity compare unfavorably to the prior year, there is plenty of good news to relate.

Underwriting performance

Our underwriting performance was outstanding. Gross premium volume advanced 12 percent over 1993, to $349 million. Higher gross premiums and increasing net retentions propelled earned premiums to $243 million, representing a 26 percent gain over 1993. This increase exceeded our expecta-

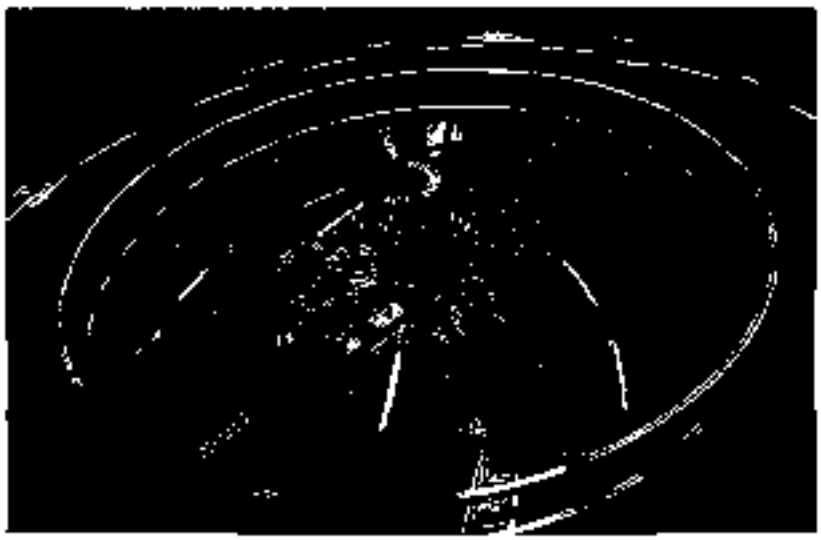

Danger is part of the appeal of amusement rides. For Essex Insurance Company, risk is part of the challenge of providing insurance coverage. We devote special attention to ride design, maintenance schedules, operator experience and legal liability issues in order to make the type of insurance yield high financial returns.

tions, and we are optimistic about continued growth in 1995. Of course, increasing earned premiums doesn't make much sense if the business isn't profitable. So, of all our accomplishments for the year, we are most proud of our continued underwriting profitability. This was the third consecutive year in which we have reported underwriting profits — a record we'll work toward extending.

In 1994 losses and expenses amounted to 97 percent of earned premiums, producing an underwriting profit margin of three percent. In 1992 and 1993 we also reported a 97 percent combined loss and expense ratio. While the Northridge earthquake contributed to an increase in 1994's loss ratio to 64 percent from 62 percent in 1993, we improved the expense ratio by holding the line on underwriting expenses. Underwriting expenses as a percentage of earned premiums declined to 33 percent from 35 percent in 1993.

Over the past several years, our growth strategy has been to focus on increasing our own insurance companies' share of the premiums we control. Our net retention of total premiums has increased from 38 percent in 1991 to 74 percent in 1994. Coupled with higher levels of written premiums, these increases have had a significant impact on our earned premium revenue. However, as we reach our target retentions, future

Underwriting performance

COMBINED RATIO

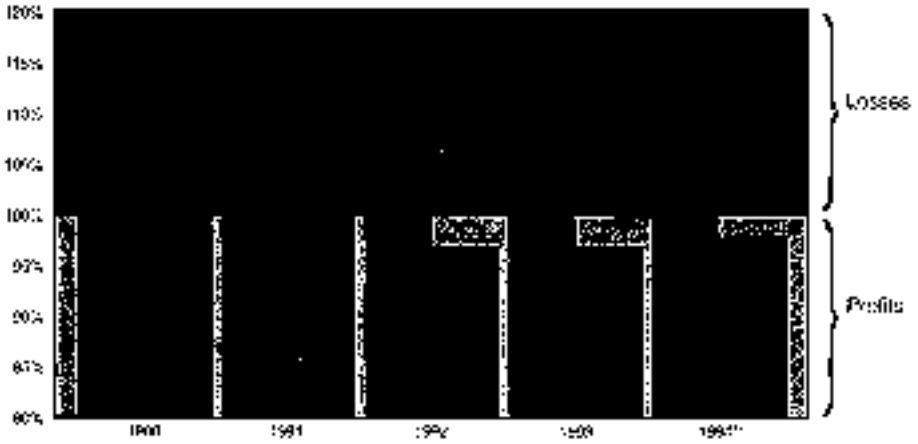

The combined ratio measures the underwriting success of an insurance company by comparing the total of losses and expenses to earned premiums. With this ratio, less is more. A combined ratio higher than 100% indicates a loss from underwriting activities, a combined ratio below 100% indicates underwriting profits.

For the last three years, we have reported combined ratios of 97%, producing an underwriting profit margin of 3%. Our results provide a sharp contrast to the losses sustained by the industry over the last five years.

growth must come from an added emphasis on new products, new customers and acquisitions.

We are constantly searching for niche markets and opportunities where we can provide quality products and excellent service with the expectation of earning underwriting profits. In mid-1993 we introduced a special property program that provided commercial property coverage for large property schedules or risks exposed to natural hazards. In 1994 Special Property premiums grew to $21.6 million from $7.5 million in 1993, making it our fastest growing product line. Despite claims from the Northridge earthquake, the program ended the year with highly profitable results.

We also added or expanded product lines which we hope will contribute to our future underwriting results. We developed a program for businesses that specialize in local and intermediate distance freight, and extended our animal mortality and farmowners' programs into the thoroughbred horse industry. For 1995 we have added a book of business that provides property coverage for mobile homes and low value dwellings. We remain fully committed to our primary goal of underwriting profitability; however, we also expect to find and take advantage of future growth opportunities.

Investment performance

Although we enjoyed strong underwriting results, interest rate shocks took their toll on our investment performance. Rising interest rates were both a blessing and a curse. Rate increases finally began to reverse the long decline in current yields, but at the same time caused erosion in the market values of our investments, which reduced realized and unrealized gains over the course of the year. In addition, due to the implementation of a new accounting standard in 1993, stockholders' equity was adversely affected.

Most of our reported investment income comes from interest and dividends and is influenced by the size of the portfolio as well as the yields of individual investments. Our investment portfolio includes tax-exempt bonds that provide slightly lower than average interest income in return for tax advantages, high quality bonds that generate interest at market rates, and common stocks which contribute modest dividend income.

The yield of our investment portfolio tends to track prevailing interest rates. Our net investment income returns have declined since 1990, as a result of the steady decrease in interest rates over the same period. Yields fell from 7 percent of average invested assets in 1990 to 5 percent of average invested assets in 1994. Net investment income has also decreased, from

Would you want to insure schools that teach people how to fight? Markel Insurance Company has been doing it profitably since the early 1980s. We found that martial arts studios' insurance risks could be controlled with certain safety precautions and practices. Both Markel and the martial arts studios benefit from our efforts.

$32 million in 1990 to $29 million in 1994. The decline in income was not as sharp as the decline in yields because our average invested assets grew significantly over the same period.

Reported income also includes realized investment gains. Over the long-term, investment gains are an important part of our reported income. However, it is difficult to predict precisely when gains are likely to be realized. Since 1990, cumulative realized investment gains have amounted to $38 million, but the timing of those gains has been highly variable. To illustrate, although we earned $16 million in investment gains in 1993, rising interest rates limited our 1994 gains to $4 million.

The total return concept

Reported investment income is important, but our investment strategy focuses on our long-term total investment return. Long-term total return differs from reported results primarily because it includes changes in the market value of our investments, or unrealized gains and losses, and certain adjustments for taxes.

Last year, we commented that realized gains were inherently volatile and difficult to predict. No kidding! – and it's doubly true for unrealized gains and losses. Unrealized gains and losses can change by large amounts from one year to the next and introduce significant variability in short-term total returns.

Investment earnings

(Dollars in millions)	1990*	1991	1992	1993	1994
Net investment income	$ 32	$ 31	$ 27	$ 24	$29
% Avg. inv. assets	7%	7%	6%	5%	5%
Net realized gains	3	8	7	16	4
% Avg. inv. assets	1%	2%	1%	3%	0%
TOTAL	$ 35	$ 39	$ 34	$ 40	$ 33
% Avg. inv. assets	8%	9%	7%	8%	5%
Average invested assets	$ 433	$ 462	$ 463	$ 503	$ 605

*restated

Our investment earnings depend on the size of our portfolio as well as the yields of the investments in the portfolio. Over the past five years, net investment income has declined as lower yields from declining interest rates have offset the benefits of a growing portfolio.

Realized investment gains are unpredictable from one year to the next. Over time, however, these returns are more stable. A portfolio of high quality investments and a long-term outlook can buffer the short-term ups and downs of the financial markets.

Because realized and unrealized returns are volatile, short-term performance measures are not particularly meaningful. An evaluation of total returns over several years is a better test of the effectiveness of an investment strategy. Our tax equivalent total returns over the last five years are strong. The five year weighted average return of our portfolio was 7.9 percent. Bonds earned 7.8 percent, and equities were even higher at 11.31 percent. We're proud of these results, and we will work to do even better in the future.

Investment results & the balance sheet

In December 1993 we adopted a new accounting standard that required our bond portfolio to be carried on our balance sheet at its market value. Previously our bond portfolio was shown at amortized cost. Under this new standard, changes in the market value of the bond portfolio are reflected in stockholders' equity as unrealized gains or losses. When we implemented the standard in December 1993, our bonds and equity investments had unrealized after-tax gains of $22 million, and we adjusted stockholders' equity accordingly. In 1994 increased interest rates caused the market value of our portfolio to decline significantly. As of December 31, 1994 our investment portfolio had unrealized after tax losses of $6 million, a change of approximately $28 million, or $5.31 per common share.

Investment outlook

The good news about investments is that we can expect higher yields in 1995 due to the interest rate increases of 1994. The unrealized losses associated with our bond portfolio will decline as bonds mature at par value and the proceeds are reinvested at higher rates. Also, we will benefit from continued growth in our investment portfolio, which increased to $612 million at December 31, 1994 from $560 million at December 31, 1993.

Although our equity returns in 1994 were less than we hoped, we are optimistic with respect to the future. We remain convinced that our long term, value oriented approach to equity investments will result in enhanced returns to our shareholders.

Runoff Issues

Since the acquisition of our Shand/Evanston subsidiary in 1957, we have been trying to conclude several of the underwriting programs and reinsurance contracts which pre-date our ownership. In 1994 we

One-Call systems help construction crews locate underground pipes and cables. But if a One-Call system provides information that results in damage, that system may be held liable. Some insurance companies don't have the expertise to develop small markets like One-Call systems. The Evanston Insurance Company prides itself on underwriting for unique risks and specialized professions.

made significant progress in resolving many of the issues surrounding the runoff of these programs and contracts.

Perhaps our most important accomplishment was the reduction of our exposure to environmental impairment liability (EIL) and pollution and pollution related bodily injury (toxic tort) claims. These types of claims are among the most unpredictable the property & casualty industry has confronted. Unlike many companies which have adopted a "wait and see" attitude to the complex legal, economic and social issues surrounding these exposures, we have worked hard to set reserves realistically and to close claims as aggressively as reasonably possible. In 1994 we reduced our EIL exposures to 11 active sites from 109 active sites in 1993. More important, the uncertainty with respect to our remaining exposures has also diminished. Our open toxic tort claims, which tend to be less severe than EIL claims, also declined significantly to 307 from 417.

We continued our program of offering certain Signal/Lexington reinsurers the opportunity to commute, or prepay, their liabilities in return for a release from further exposure to changes in reserve estimates. While our net loss reserves increase because of the commutations, we benefit from the cash they generate and lower

Total investment returns

ANNUAL TAXABLE EQUIVALENT TOTAL RETURNS

in percent	1990*	1991	1992	1993	1994	5 yr. weighted avg. ann. return
Equities	(7.0)	26.9	13.1	28.7	(3.3)	11.0
Fixed maturities	10.3	15.1	7.8	9.1	(0.2)	7.8
Total portfolio	5.2	17.0	8.9	11.8	(1.1)	7.9

*pro forma

We emphasize long-term performance measures because realized and unrealized investment returns are volatile. A good test of our investment strategy is an evaluation of total returns over several years. Although returns in 1994 did not meet our expectations, our taxable equivalent total returns over the last five years continue to be strong.

collection and administrative costs. Of course, there is always the risk that we will have less reinsurance protection if reserves develop beyond our estimates, but we believe we have adequately provided for this risk. Balances for unpaid losses due from reinsurers declined to $181 million at December 31, 1994 from $261 million at year-end 1993 and $380 million at year-end 1992.

Finally, we were successful in reaching an agreement with Shand/Evanston's former owners concerning indemnification agreements related to our purchase of Shand/Evanston. These matters have occupied a great deal of our time and energy over the past four years. Now with the uncertainty of these issues significantly reduced, we can focus our full attention where it belongs — on the future.

Passages

Markel's growth and strategic evolution from a small, family-owned brokerage firm to a publicly-held underwriting operation has been a gratifying adventure for all of us who have taken part in it. On a sad note, we report the death of one of our leaders in that adventure, Stanley B. Markel. Stanley retired from "active duty" after more than 50 years of service, including 29 years as our President and Vice Chairman. We can attribute a large measure of our success to the corporate

Overall performance

EARNINGS PER PRIMARY SHARE

	1994	1993	1992	1991	1990
Core operations	$ 1.95	$ 2.61	$ 3.03	$ 3.31	$ 3.77
Realized gains	(0.06)	0.04	0.80	1.83	0.45
Non-recurring	(0.41)	0.28	1.00		-
Amortization expense	(0.43)	(0.25)	(1.18)	(0.91)	(0.89)
NET INCOME	$ 1.05	$ 2.68	$ 4.64	$ 4.23	$ 3.33

We believe the earnings power of our business is best reflected in the results of our core underwriting and investment operations. Core operating results exclude realized gains, which can be volatile, and expenses related to the amortization of intangible assets, which does not stem from our current activities. We also exclude income and expenses related to one-time events, such as the sale of product lines or business units.

Underwriting profitability, increasing premiums and a growing investment portfolio have all contributed to an 18 percent average growth rate in our operating earnings since 1980.

mission and values that Stanley helped establish — the sensibility and values that are today expressed in the *Markel Style*. Stanley's intelligence, wit and disdain for bureaucracy will be remembered by all of us who knew and worked with him, and his commitment to success will always be the cornerstone of Markel Corporation.

In conclusion

We expect the landscape of the property or casualty insurance market to change, either by man or by nature, and we're ready to meet the challenges of that change.

The risks of our business will never be completely avoidable, but they are manageable. We manage the insurance and financial risks of our business with a commitment to consistent underwriting profits and superior investment returns. Our success in accomplishing those objectives is due in large part to the principles that guide us and form the *Markel Style*. We really do believe in the ethics outlined in our *Style* — hard work and a zealous pursuit of excellence, market leadership through quality products and services, and constant improvement. We believe it because time and time again, we've seen it work.

Alan I. Kirshner
Chairman & C.E.O.

Steven A. Markel
Vice Chairman

Anthony F. Markel
President & C.O.O.

Darrell D. Martin
Executive Vice President & C.F.O.

Clockwise from left:
Tony Markel, Darrell Martin,
Steve Markel, and Alan Kirshner

To our business partners

During 1995, we enjoyed success in almost every aspect of our business. Insurance operations continued a record of underwriting profitability, investment returns were exceptional, and net income of $34.5 million or $6.15 per share reached a record level. Shareholders' equity per share grew to $39.37—an increase of 53%.

The real success, however, is not just in our 1995 achievements, but in our long-term performance. Our 1995 accomplishments were produced by the hard work and commitment of our associates over many years. Together, we have built a foundation that has yielded outstanding results this past year, but more importantly, will prompt achievement well into the future.

An Industry with Opportunity

The property/casualty insurance industry seems to be permanently stuck in an intensely competitive cycle. Most companies in the industry sell commodity products, competing by offering the lowest price. Poor industry-wide results stem this strategy and expensive environmental liabilities from the past have resulted in sub standard shareholder returns. This has created a wave of reorganization and consolidation in the industry.

During the past few years several major property/casualty companies have fallen victim to this reorganization. Home Insurance Company's business was taken over by Zurich; Continental sold out to CNA; Aetna announced a deal with Travellers; and Talegen (formerly Cram and Forster) is being acquired by KKR. CIGNA has separated its good business from its bad business. In 1994, the Home, Continental, Aetna, Talegen and CIGNA wrote $14 billion, which represented almost 6% of the industry's total premiums.

With change—especially change of this magnitude—there will be opportunities. We hope to be smart enough to take advantage of them, although we can't necessarily predict how we will respond.

Our Strategy

Markel Corporation is focused on specialty products in unique market niches. "Specialty," "unique" and "niche markets" are words and phrases that have often been mis-used and certainly over used in our industry. For us, however, they

define our commitment to know our customers' needs and to provide them with quality products and services. In doing so, we expect to earn underwriting profits.

Underwriting profits are a key component of our strategy because they prove our knowledge and expertise, our commitment to superior customer service, and our ability to manage insurance risk.

Underwriting Results

In 1995, we again operated with an underwriting profit, recording a combined loss and expense ratio of 99%. For each of the three preceding years, our combined ratio has been 97%. As indicated by these ratios, in 1995 we experienced a slight narrowing of our profit margin. This decline was caused by disappointing results with a few programs and the reduction of high profit margins in some other lines of business. While we recognize the increased combined ratio, we remain pleased with our underwriting results.

Alan I. Kirshner
Chairman and Chief Executive Officer

As the owner of over 300 fine horses, Alan Kirshner leads Markel to the equine insurance marketplace. As Chairman, he guides us to a market leadership position in the equine markets we serve. While not seeing running a successful corporation is like breeding or selecting horses, he can do both. Passion is essential. Alan's passion for people and excellence is the key to Markel's success, and to the inspiration and leadership he brings to our team.

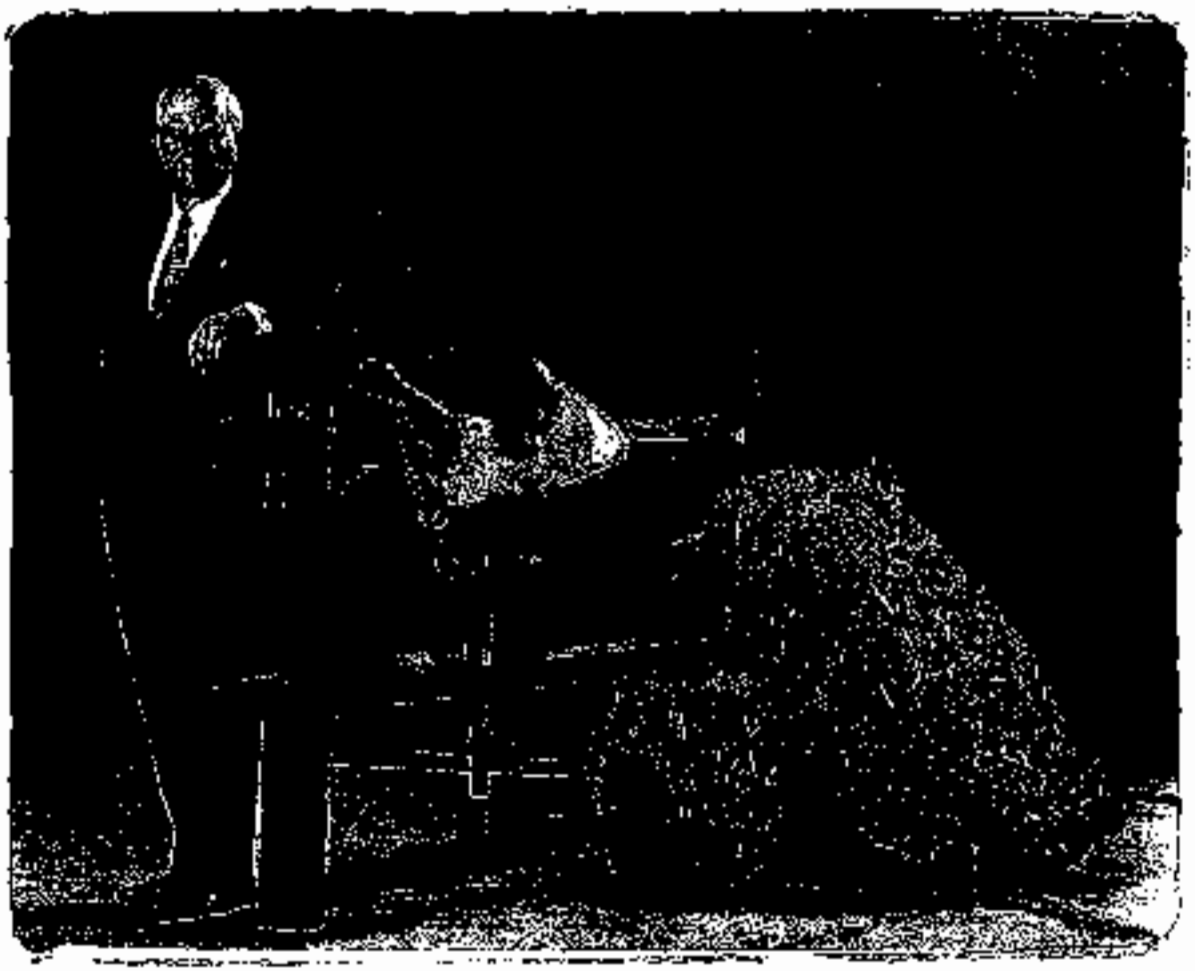

We maintain our long standing policy of establishing loss reserves conservatively, with the hope that ultimately, our reserves will more likely be redundant than deficient. We believe our reserves today are as strong as ever.

Premium Growth

In 1995, gross premium volume increased 15% to $402 million from $349 million in 1994. The $53 million increase in 1995 was fueled primarily by premiums from our newer products: several auto programs started in late 1994 that contributed $13 million to the growth in premiums, $13 million in production from a personal property program focused on low-value dwellings, and $13 million in additional premiums from a special property program initiated in 1994. Business acquired as a result of the acquisition of Lincoln Insurance Company also added $7 million to gross volume.

Earned premiums rose 17% to $285 million from $243 million in the preceding year. Over the past five years, the compound annual growth rate in

Anthony F. Markel
President and
Chief Operating Officer

As a golfer, Tony Markel knows the players, the game and the course. These are very skills to have when you're President and Chief Operating Officer, and are considering what's doable, who should do it and how it should be done. Tony knows underwriting profitability as well as he knows golf, and he loves it just as much. As shrewd as he is hopeful. Tony relishes from playing in a reinsurance if we've made winning the Hole-in-One coverage!

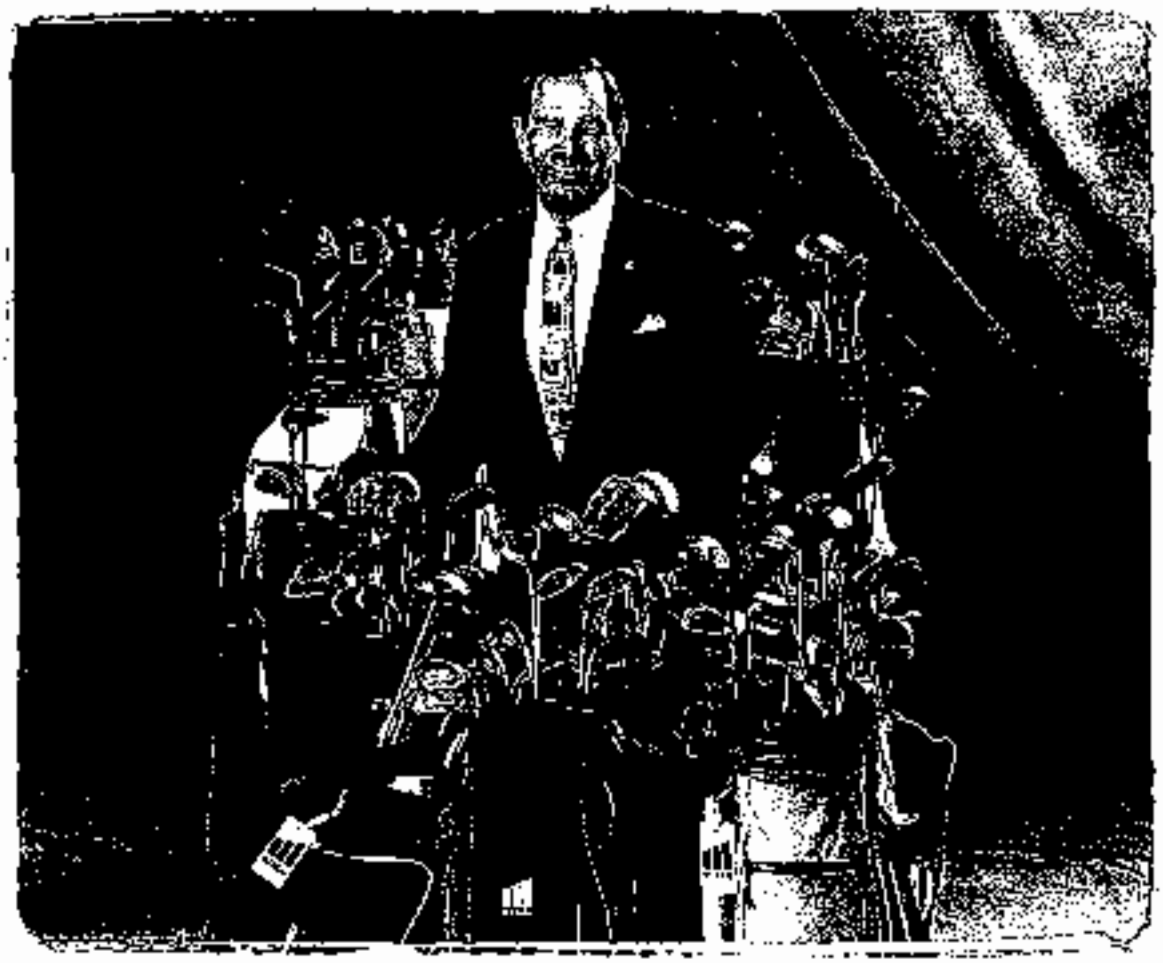

earned premiums averaged 54%. Increased retention of premiums and higher premium volume have pushed earned premiums from $152 million in 1991 to $285 million in 1995. While profitable growth in the current competitive environment may be difficult, it is certainly not impossible. Our best guess is that our overall growth in the future will be slower than in the past. We expect modest growth from most of our existing products, supplemented by stronger growth from our newer lines. We will also look for chances to develop or acquire new products.

INVESTMENTS

Our corporate philosophy clearly recognizes the importance of both underwriting profits and superior investment returns to build shareholder value. A strong loss reserve position and solid underwriting track record give us the financial strength and flexibility to manage our investment activity for higher returns. The growth in income and book value achieved in 1995 is largely due to exceptional investment results.

During 1995, the portfolio grew 49% to $969 million. This growth occurred because of several factors. Most important was the internal growth due to operating cash flow. Our business continues to generate cash at a rate that is faster than is required to meet our claim payments. In addition, strong financial markets in 1995 increased the market value of our investments by $62 million.

There were some one-time transactions that also contributed to the large increase in invested assets in 1995. These include $83 million generated by commutations with reinsurers, $60 million related to the acquisition of Lincoln Insurance Company and $19 million from the sale of our home office buildings, which we will continue to occupy under the terms of a long-term lease.

Income from dividends and interest in 1995 totaled $43 million, compared to $29 million in 1994. The increase in the size of the portfolio was the primary reason for the rise in investment income, although the annual yield also improved in 1995.

In 1995, we realized $12 million in capital gains, up from $4 million in 1994. Approximately 40% of our capital gains were generated from our fixed income portfolio, as we sold investments to

reduce our exposure to municipal bonds. The equity portfolio produced over $7 million of realized capital gains. We are focused on long-term, total returns from our equity investments and cannot predict the timing of equity gains. Our strategy is to invest in companies with the potential for appreciation and hold these investments over the long-term. With this approach, we can enjoy the increases in unrealized gains and the (often significant) benefits of deferring the capital gains tax.

The improved security markets, and hopefully some smart selections on our part, resulted in a net unrealized gain of $34 million at December 31, 1995. This is after allowing for (but not paying) $18 million in deferred capital gains taxes.

Our overall investment results in 1995 were superior. Total returns were 29.7% in equities, 14.4% in fixed maturity securities and 15.7% for the entire portfolio. Over the past five years, total returns were 19.2% in equities, 9.5% in fixed maturity securities and 10.3% overall. These five-year total returns include almost $47 million in capital gains, much of which came from our equity investments.

Reasons for Success

As we have said, we are gratified with this year's performance, but more importantly, with our long-term achievements. We believe the primary reason for these results has been the commitment to success made by our associates. This year, we are pleased to focus our report on that group of people — the chief architects of our success.

Over the years, we have established several programs which try to ensure that our customers' interests, our associates' interests and our shareholders' interests are all aligned, and that each group is focused on the same objectives. These programs involve both cash incentives and stock ownership opportunities.

Bonus Plan

In managing our total compensation program, we want salary and benefits to be competitive with the marketplace, but not exceptional. On the other hand, we do seek to establish exceptional bonus and stock ownership opportunities, so that we can attract and reward those individuals who make extraordinary contributions to our organization.

Steven A. Markel
Vice Chairman

How can you capture the essence of a Renaissance man in a few sentences? Steve Markel is one of those people whose insatiable intellect and creative spirit give him the ability to develop and weigh investment strategies, to consider the form and function of fine art, and to evaluate the risks of insuring pizza delivery drivers — often within the same half hour. He'd make a terrific underwriter for our special risks insurance programs if he weren't so busy being our Leonardo and Vice Chairman.

Our bonus plan has three levels of participation. First, all associates have the opportunity to earn a meaningful cash bonus if they meet the high performance standards and individual goals outlined in their bonus agreements. Second, those associates who have a direct impact on underwriting results can earn bonuses explicitly related to the underwriting profits generated by their product or division. Finally, senior executives are rewarded based on the five-year compound annual growth in book value per share. Our goal is to grow book value by 20% per year; no bonus is paid to senior executives unless we exceed a minimum threshold of 13% compound annual growth over a five-year period.

Stock Ownership Opportunities

While cash compensation incentives are effective in aligning our associates' interests with our shareholders', we believe that direct stock ownership can be even more powerful. One of our main objectives when we became a public company in 1986

was to achieve broad stock ownership among our employees. At the time, our bonus program did not exist, so we generously distributed stock options as incentive compensation as well as an inducement to stock ownership.

Stock options may encourage future stock ownership, but we believe that a "gift" of stock options is not as effective in generating a long-term commitment to the Company as an actual purchase of stock. The act of making a personal investment in our Company is a critical step in encouraging an associate to begin to think and act like an owner of the business. Therefore, we do not expect that additional stock options will be a significant part of our incentive compensation plans in the future.

We offer many opportunities for associates to become shareholders. Every employee who is eligible for participation in our retirement program (a 401(k) plan) receives Markel stock - purchased

Darrell D. Martin
Executive Vice President and Chief Financial Officer

As savvy enthusiasts of fast smart insurance companies know, the right driver can make motorcycling a safe and satisfying pastime. The ideal operator combines experience with a healthy respect for the opportunities of the machine and the risks of the sport. That profile also fits Darrell Martin, Executive Vice President and Chief Financial Officer. For eight years, he's been successfully navigating the Company through the opportunities and risks of an ever-changing business environment. And we sure do appreciate his good driving record.

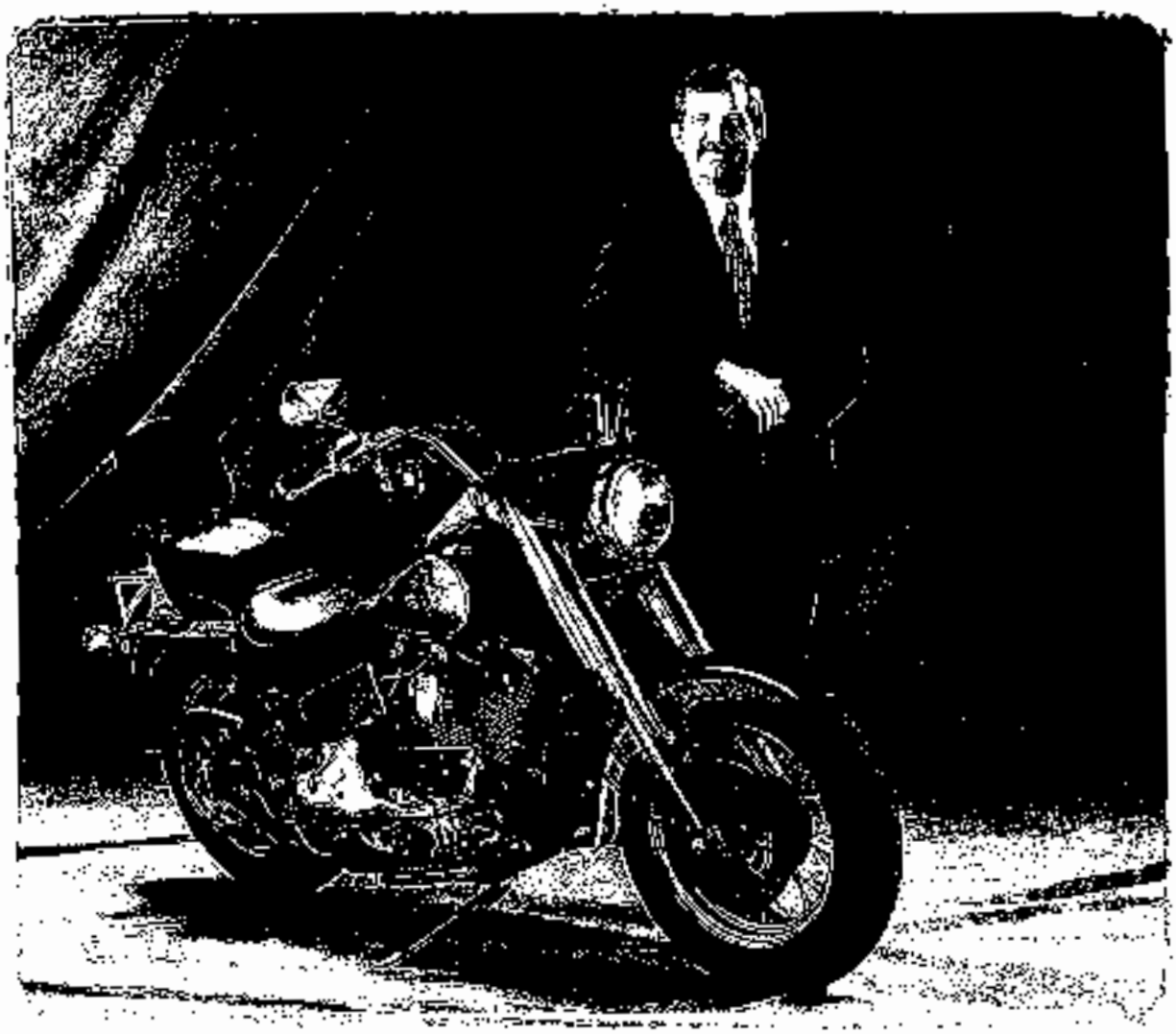

in the open market — as part of the Company's contribution to the plan. In addition, associates can designate all or part of their contribution for investment in the Company's stock. At December 31, 1995, the 401(k) Plan owned over 113,000 shares.

Associates may also acquire our stock through a payroll deduction purchase plan. They can set the amount to be deducted from each paycheck, and accumulate as many stock as their individual financial situations will allow. The Company supports the program by covering the administrative costs and commissions, and also by awarding an additional share for every ten shares purchased through the plan.

Most recently, we offered all associates an opportunity to purchase stock with low interest financing which was partially subsidized by the Company. Over 200 associates participated in this program. At December 31, 1995, over 125,000 shares were owned by these stock purchase plans.

In the aggregate, we estimate associates' ownership at about 32.5% of the Company. This provides a powerful incentive for all of us to focus on our long term success. As shareholders, we all share the results of our performance.

Saying Good-Bye

For the second year in a row, we mark the passing of one of the members of the Markel team who guided the Company from its early days. Milton Markel was one of two sets of twin boys who were the sons of Samuel Markel, our founder. Milton was a businessman whose common sense and integrity served as an inspiration for a generation of Markel leaders. We will miss his optimism and his dedication.

Saying Thank You

As a public company, we have been fortunate to have equity partners who have believed and invested in us. You have given us a vote of confidence that we recognize and appreciate. In return for this trust, we have and will communicate openly and honestly with you, and embrace the challenge of building the value of our Company over the long term. Our past success has been achieved together. We hope that together, we can look forward to a prosperous future.

Alan I. Kirshner
Chairman and Chief Executive Officer

Anthony F. Markel
President and Chief Operating Officer

Steven A. Markel
Vice Chairman

Darrell D. Martin
Executive Vice President and Chief Financial Officer

To Our Business Partners

We finished 1996 pleased with our achievements and long term success, yet challenged and committed to do even better in the future. Despite problems in a few products and storm losses from Hurricane Fran, we were able to achieve our primary objective of earning an underwriting profit. We closed 1996 with a combined ratio of slightly less than 100%, achieving our goal by a small margin. The extraordinary underwriting success of Essex Insurance Company saved the day.

Despite our modest underwriting profit, 1996 proved quite successful financially. For the year, total operating revenues grew 7% to $366.7 million; our underwriting and investing results were $43.9 million, up 17% from the prior year; and net income was $46.7 million, or $8.30 per share, a Company record. Additionally, we enjoyed a significant increase in the value of our investment portfolio. Together, these items resulted in an increase in shareholders' equity per share of 25% to $49.16.

In the ten years that we've been a public company, we've enjoyed consistent success in almost every financial measure. Revenues have increased at a 31% compound annual growth rate; we have earned underwriting profits in nine out of the ten years; our investment portfolio has grown at a 44% compound rate and now totals $1.1 billion

or $207 per share; and most importantly, book value has risen to $49.16 per share, a compound annual increase of 31% over the past 10 years.

We attribute this success to a number of factors. Maybe the most important factor is a strong corporate culture which has enabled us to build a team focused on a common goal, building long-term shareholder value. Very much a part of this culture is the common sense business principle of operating and decision-making using what Ben Graham described as a margin of safety.

Ben Graham is widely recognized as the founding father of modern security analysis. He developed and taught an investment decision-making framework based on sound business principles. His primary investment concept was to operate with a margin of safety.

Graham's margin of safety, simply stated, is the attempt to build a safety net into investment and business decisions. The margin provides a cushion against errors and unfavorable results. This margin is achieved by acting on facts rather than emotions, conservatively forecasting outcomes, diversifying risk and erring on the side of safety when presented with options. Consistently applied, the concept is a powerful business tool. At Markel we attempt to apply Graham's concept to all our decisions.

Regardless of whether we are dealing with accounting philosophy, loss reserving, underwriting, or investing, we seek to operate with a margin of safety.

Accounting Philosophy

At Markel we believe in conservatively stating our financial picture. Financial strength is an important component of our success. Our insurance clients are entitled to the greatest security we can offer, and our shareholders seek to increase the value of their investment. We believe the best way of achieving both of these goals is by building book value per share.

In the insurance business, earnings per share is not the best measure of financial performance. It is more important to establish adequate loss reserves and maintain a strong financial position. We value a strong balance sheet more than current earnings in any single year. Management is rewarded, as are shareholders, by building book value on a per share basis over long periods of time.

Because we believe in the importance of conservative accounting, we often make choices which make economic sense but do not always enhance current earnings. For example, in 1990 we negotiated as part of the purchase price of Shand/Evanston a non-compete agreement that was amortized over four years rather than 40 years as goodwill. While this resulted in an annual charge against earnings of approximately $5.0 million rather than $0.5 million, it was beneficial in at least two ways. We received significant tax benefits, and we built a stronger and more conservative balance sheet due to the accelerated amortization.

Another recent example of this philosophy is the $18.4 million tax benefit recognized in the second quarter of this year. Over the past several years, we conservatively established our financial statement tax reserves. We determined that our estimated tax liabilities were actually less than previously accrued and adjusted the tax liability accordingly.

More recently, in order to reduce future expenses, we made the decision to sell our office building in Evanston, Illinois. This property was acquired as part of our purchase of Shand/Evanston. Over the years, the commercial office market in Evanston has declined. Because the expected proceeds will be significantly less than the carrying value of the building, we immediately recorded the after tax loss of $6.8 million in 1996.

Loss Reserving

Because it is the largest and most difficult to measure, the provision for unpaid losses and loss

adjustment expenses is the most important account on an insurance company's financial statement. This is certainly the case for Markel. This account also best represents our philosophy of conservative accounting and providing a margin of safety. As we have said many times, our goal is to establish loss reserves at a level that is more likely to prove redundant than deficient. This standard of setting loss reserves is somewhat different from other insurers.

A.M. Best Co. recently estimated that the Property and Casualty industry is under-reserved by $82.8 billion, or 24% of total reserves. We believe that much of this shortfall is related to companies' desire to report earnings.

This illustrates why we do not stress current earnings. At Markel we seek to establish loss reserves at a level that anticipates the inevitable surprises that can and do occur and to provide for an appropriate margin of safety.

We constantly review our businesses and try to make sure the reserves we provide are adequate to meet future exposures. Getting the loss reserves right is critical to being able to make an underwriting profit. Current loss estimates not only affect financial results but also influence many pricing and risk selection decisions. Each year we try to make sure our margin of safety is as strong as it was in the prior year.

In the insurance business, we sell the product before we know the actual cost. Claims often take many months or years before they are fully reported and settled. Obviously, as the underwriting years mature, we are better able to estimate the ultimate cost. Consequently, we regularly adjust loss reserves as more information is available.

The best way to understand and analyze this process is to review the loss reserve development schedule shown in Management's Discussion and Analysis on page 55 of this report. From this schedule you can see that we have consistently

benefited from redundant loss reserves. For example, in December of 1991 we had loss reserve provisions of $557.6 million. This estimate was reduced in each of the following years as we became more confident that the actual results were better than originally provided. However, in each year we have attempted to maintain a margin of safety. Five years later we've recognized $56.5 million or 10% of the beginning estimate in redundancy. Looking at 1995 loss reserves you will see the same trend. During 1996 we realized approximately $24.1 million in redundancy from the prior year. This represents 4% of the original reserve amount. We continue to believe that the remaining reserves have a margin of safety and hope to see continuing positive development.

The very nature of the insurance business makes it difficult to establish loss reserves with certainty. In fact it cannot be done. But what we can do is make provisions with a view that to the extent we're wrong, we have erred on the side of safety.

It is unfortunate that in the world of financial reporting and security analysis that current earnings receive more attention than the quality of loss reserves. That does not make it right. We would much prefer to be pessimistic when setting loss reserves than optimistic about current earnings. This philosophy benefits every aspect of our business. It supports our underwriting profit orientation; it supports our investment activity; and it helps build our margin of safety.

Underwriting

Earned premiums in 1996 amounted to approximately $307.5 million, spread over more than 40 different product lines in our five operating divisions. In the past five years, we have enjoyed modest underwriting profits, reporting a combined ratio from 97% to slightly under 100%. Because this ratio has been relatively consistent, one might assume that each of our product lines produces

predictably consistent results. This is not the case. Our aggregate combined ratio is a result of many profitable lines of business balanced against some which are having difficulty. Each product line has unique characteristics and different profit objectives.

New products often experience a higher than desired combined ratio because the costs associated with new product development are higher than after the product is fully established. Occasionally, expectations are not met and products simply develop more losses than we plan. Some products are exposed to weather events, and the results will vary accordingly. Fortunately, most of our businesses do in fact generate underwriting profits so that we enjoy a sufficient margin of safety to cover underwriting losses which inevitably occur.

During the past few years, our specialty personal and commercial lines unit entered the mobile home insurance business. Over time, we expect this product to earn underwriting profits of 10% or more to achieve our return on equity goals. The business does not generate large amounts of investment income since claims are paid quickly. Additionally, the results from this line of business can be volatile because the insured structures are exposed to wind and hail losses. Unfortunately, 1996 was a bad year for this business as we absorbed approximately $1.7 million in losses from Hurricane Fran. While the impact was modest to Markel, this product line suffered an underwriting loss in 1996. In spite of these problems, we still expect to see combined ratios in the low 90's over time.

Within the same unit, we also provide insurance for motorcycles and personal watercraft. These products have enjoyed steady growth and consistent underwriting profits over the past several years, and we expect they will continue to make a nice contribution to our results in the future.

In 1996 we also experienced underwriting losses in our physicians' medical malpractice area. One problem involved a program providing

insurance for a large group of emergency room physicians. This particular program did not provide enough rate for the exposure. Unfortunately, we were unable to correct the problem, so we exited the line of business. In another segment, we found certain classes and territories which needed rate adjustments, and we acted accordingly. We are now comfortable with this business.

The same division also has a variety of programs for other medical professions. These include coverage for exposures such as ambulance services, dialysis clinics, home health care agencies and outpatient centers. Also included is coverage for medical and allied health professionals, such as emergency medical technicians, x-ray technicians, paramedics and social workers. These segments of our medical malpractice business have proven to be consistently profitable over a number of years, and 1996 was no exception.

In late 1993 we began a new property program, Markel Special Property, which provides large commercial coverage with some catastrophe exposure. Fortunately, the Northridge Earthquake in January 1994 occurred before we had written much business. While this event hurt our 1994 results, it actually was positive for us as it expanded our market opportunity as competitors exited the market. The lack of major catastrophes since then has contributed to our success. In 1996 we earned substantial underwriting profits in this line of business on increasing premium volume.

Our most consistently profitable product line has been our small, commercial general liability business written on an excess and surplus lines basis by Essex Insurance Company. This product line includes a very broad list of categories including contractors, bars and taverns, offices and habitational risks, manufacturing and small products coverage. In this area we excel in providing customer service due to our expertise and responsiveness. As with most of our businesses, our success is the result of

the efforts of a group of highly talented, seasoned insurance professionals.

Investing

We believe it is important to manage our investment operation with the same thought, diligence and margin of safety as our underwriting operations. Excellent investment results combine with our underwriting profits to produce superior long-term growth in book value. Our investing philosophy is based on the goal of achieving the best after tax total return and protecting the integrity of our insurance operations. We focus on total return rather than current income. We seek to build value.

We allocate our investment dollars by segregating our portfolio based on the source of the funds. Funds provided by our policyholders are invested in high quality, short duration, fixed income securities to assure the funds will be available to meet claims liabilities. Funds provided by shareholders are generally invested in common stocks of companies we believe will grow and build long-term value. We try to buy these companies at prices at or below our estimate of their intrinsic value. This method of allocation and investment approach helps build a margin of safety.

Our fixed income portfolio is managed to minimize interest rate and credit risk. We therefore have a short duration and high quality portfolio. To maximize after tax total returns we own tax-exempt municipal securities. We also purchase bonds with unique "put" features to provide additional returns if interest rates fall.

In our equity portfolio, we try to avoid undue risk of loss by knowing as much as possible about the companies we purchase. We do extensive research on the companies, and we visit and talk with their managements. Because of our knowledge and comfort with the insurance industry, we often buy other insurance stocks. We are long-term holders

We like the idea of building large unrealized capital gains. To the extent that gains are not realized and taxes are deferred, we can continue to invest money that would have been used to pay taxes. At December 31, 1996, our unrealized gain on equity securities amounted to $603 million. For accounting purposes, taxes of $211 million have been provided on this unrealized gain. Among its other virtues, this also creates a margin of safety. When future markets cause lower stock prices than today, the book value impact will be cushioned by this tax provision.

While we expect to continue to benefit from our investment flexibility, we are extremely aware that our ability to do so is dependent upon continuing to conservatively provide for our loss reserves and earning underwriting profits.

Other Events

In October 1996 we completed the acquisition of Investors Insurance Holding Corp. While this company has had a difficult history, the former owners brought in a new management team and began to develop a sound business plan in 1995. We liked what we saw and had an opportunity to buy the company at an attractive price. This acquisition enables us to expand our product offerings in the excess and surplus lines market.

In January 1997 we saw the opportunity to raise $150 million on terms that we felt were very attractive. Somehow it is always easier to raise capital when you don't need it. Believing that we would find a sound use for the funds in the not too distant future, we took advantage of the opportunity. The security we sold to raise the capital was a trust preferred stock at a cost of 8.71%. The security matures in 49 years, although we can redeem it in ten years. One unique feature of this security is that we can defer interest payments for five years. As a result of the long maturity, the interest deferral and the subordination provisions, this security has many of the benefits of equity, yet its cost is like debt. In the short run, we will lose money as a

result of this financing because the proceeds have been invested in short-term securities earning less than the 8.71% cost. Obviously, in the long run we think this financing will benefit our total capital structure.

A Look to the Future

Every year we spend a lot of energy with each of our businesses reviewing the past and planning for the future. At the corporate level we also analyze our results and try to figure out how to best take advantage of the opportunities we face. We approach 1997 with a good plan and expect to achieve continued success. In spite of our plan, we will face both problems and opportunities that we have not anticipated. The insurance industry continues its evolution and reorganization. Markel is stronger and better prepared than ever before. We face our future with great optimism.

Thank you for your loyal support and encouragement.

Alan I. Kirshner
Chairman of the Board and Chief Executive Officer

Anthony F. Markel
President and Chief Operating Officer

Steven A. Markel
Vice Chairman

Darrell D. Martin
Executive Vice President and Chief Financial Officer

To Our Business Partners

Virtually every measurement system involves the element of time. In this year's letter, we will discuss the relevance of time in measuring results and how we focus on the value of long-term thinking.

In December new business was disappointing, but investment returns were excellent. Financial results in the fourth quarter set company records, and 1997 was an excellent year. This past summer our camp insurance business suffered more large losses than usual. However, we enjoyed good results among most of our other lines of business. Since the Northridge earthquake in January 1994, the earthquake business has been great, yet current prices have declined to levels which suggest many have forgotten what can happen. The insurance industry has experienced a cyclical softening of prices since 1987... much longer than any previous cyclical downturn. Maybe it's not a coincidence that the investment cycle has enjoyed an equally impressive run in the opposite direction. Monthly, quarterly and even annual results do not necessarily mean much if your goal is to build shareholder value over a long period of time. Yes, 1997 was a good year, but we are especially proud to report that in the past five years, we have compounded book value per share at a 26% rate, and since our initial public offering in 1986, we have compounded book value per share at a 31% rate.

1997 Results

In spite of a very difficult property and casualty insurance market, our results in 1997 set records in just about every measure. For the sixth consecutive year and eleven of the last twelve, we reported underwriting profits with a combined ratio of 99%. Earned premiums grew only 5% to $332.9 million; however, investment income increased 34% to $68.7 million. The strong investment environment also allowed us to realize $15.8 million in investment gains. Total revenues increased 14% to $419.0 million. Net income was $50.4 million, or $8.92 per diluted share. In addition, the net unrealized appreciation of our investment portfolio increased $41.5 million, resulting in comprehensive income of $91.9 million. Also during 1997 we further strengthened an already strong balance sheet; total investments increased to $1.4 billion; provisions for loss reserves continued to be, in our opinion, very strong; we raised $150 million in 49 year trust preferred securities and increased shareholders' equity by 33% to $356.8 million, or $65.18 per share.

For many years we have spoken of the importance of measuring growth in book value. This year the accounting profession recognized the same thing by adopting the concept of comprehensive income. This is a measure of total performance because it includes both net income and changes in unrealized gains or losses. Over the past five years, our net income amounted to $173.8 million; cumulative unrealized gains were $73.1 million; and comprehensive income was $246.9 million. The variations year to year are shown below.

COMPREHENSIVE INCOME

(dollars in millions)

	Years Ended December 31,					
	1993	1994	1995	1996	1997	Total
Net income	$ 23.6	$ 16.6	$ 34.5	$ 46.7	$ 50.4	$ 173.8
Change in unrealized gains (losses)	10.3	(28.7)	40.3	9.7	41.5	73.1
Comprehensive income (loss)	$ 33.9	$ (10.1)	$ 74.8	$ 56.4	$ 91.9	$ 246.9

These results point out two significant facts. First, unrealized gains represent an important part of the value created for shareholders. In the past five years, almost 30% of our comprehensive income came from this source. Secondly, and certainly not to be forgotten, changes in unrealized gains from year to year can be quite unpredictable. Having a long term view is especially important when looking at investment results.

New York Stock Exchange

In June 1997 we were listed on the New York Stock Exchange. While we were generally pleased with NASDAQ and certainly enjoyed a great deal of support from NASDAQ market making firms, it was our desire to try to reduce the spread between the bid and asked prices of our stock. We believe this has occurred and we are pleased to be a NYSE listed firm. We continue to see no valid reason to split our shares. (In fact, NYSE fees are based on number of outstanding shares, so we save money by not splitting.) However we would caution our fellow shareholders and

potential new shareholders to be thoughtful when buying or selling our stock. If you see a $2 spread between the bid and asked prices, remember that it represents only a 1.8% spread on a $160 stock price. Most transactions in other securities are likely to be more expensive. Additionally, we enjoy a very loyal base of shareholders and have low share turnover. As a result, the stock price can move on very little volume so it is wise to be patient when buying or selling.

Intrinsic Value

During 1997 our share price increased from $90 to $156, a 73% increase. As previously mentioned, our business results were the best ever, and book value grew by 33% per share. Ideally, the growth in share prices and the growth in intrinsic value should be identical. This rarely happens in the short term but should occur over long periods of time. We are hopeful that the increase in our share price in 1997 represents an alignment of our share price with the long-term growth in our intrinsic value.

We want to share with you important information about your company so you can estimate its intrinsic value. We have no desire for our stock to trade at levels either significantly higher or lower than its intrinsic value. Unfortunately there is no exact science in determining that number. Today the stock is priced higher in relationship to many determinants of value than in previous years; however, we remain committed to building book value at a 20% annual rate, and we think the Company will continue to be an excellent investment for those with a long-term view.

Accounting Cycle

Due to the number of estimates required in the insurance accounting cycle and management's great leeway in setting those estimates, quarterly and annual accounting periods do not reflect the complete picture of an insurance business. Only when viewed over a much longer time period can you begin to determine accurate results.

Insurance for property along coastal areas subject to hurricanes is more at risk during hurricane season, which runs from June to November. Likewise, hurricane activity varies greatly from year to year. While 1997 was a very mild season for hurricanes, that certainly doesn't have much meaning when trying to estimate the risk for the 1998 season. The same applies to insurance for earth-

quakes. The ground has been relatively still since 1994 when Northridge shook violently; yet surely another earthquake will occur. Based on the declining prices for this coverage, you would think the property and casualty insurance industry has no memory.

Other insurance products like professional liability coverages require a long period of time for claims to be reported and paid. Long-tail insurance represents yet another problem for the annual accounting cycle. While premiums are collected today, claims are not paid for many years. At the end of each accounting cycle, estimates are made with regard to outstanding losses. These estimates are just that, estimates. They may be too high or too low but never exact. Unfortunately, many companies report lower losses than are actually occurring in order to inflate current income. This cannot go on forever; companies can underestimate reserves, but claims are settled in cash.

Loss Reserving

We have often described our philosophy in setting conservative loss reserves. Our standard has consistently been to set reserves at a level which we believe are more likely redundant than deficient. The very nature of the insurance business is that surprises in loss occurrences will happen from time to time. Usually surprises represent bad news. Unfortunately, we are not immune

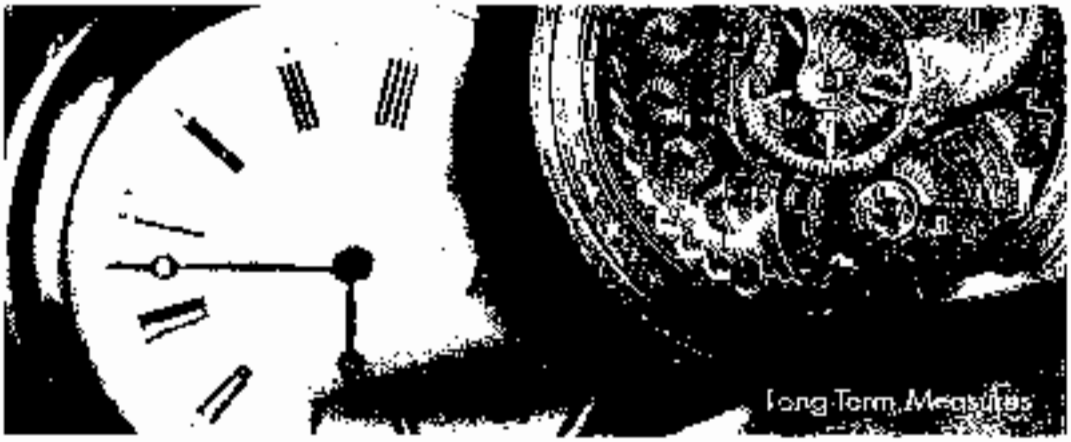

to surprises. But we have been successful in avoiding a negative impact on our loss reserves from these surprises because we establish reserves to cover that unpredictable but inevitable event. We seek to allow for that by establishing a margin of safety in our reserves. This policy again proved sound in 1997 when we determined that it would be prudent to add an additional $28 million to our reserves for environmental and toxic tort claims. While our existing reserves were more than adequate to cover this development, we certainly thought our previous estimates had been sufficient, and we can say the same today. We think the specific reserves for environmental and toxic losses are adequate but if they are not, we have made provisions which give us a margin of safety.

Investments

Our investment activities continue to be very important to our success in building shareholder value. In 1997 the stock market was unusually strong and interest rates trended down which helped us achieve exceptional investment results. The total returns from equities were 31.4% and from fixed maturity securities were 9.2%. As a result our portfolio produced a total return of 22.8%. Over the past ten years our total weighted average annual return was 10.3%.

With the stock market trading at all time highs, we are cautious and concerned about where the market might be headed; however, we have never tried to time the market. We focus on individual securities of companies which we believe will generate good returns, and we invest in these companies at what we believe to be fair values. Fortunately, we own many good companies which are building value and we continue to invest in more which we believe will add value in the future.

The general decline in interest rates has added to the total return in our fixed maturity securities. This is certainly a double edged sword as lower interest rates will make it more difficult to earn high rates of return on this portfolio in the future. With our fixed income portfolio, we will continue to invest in very high quality securities with fairly short durations. We will continue to take advantage of our tax position to invest in tax-exempt securities where they will add value.

Acquisitions

Over the past several years, we have developed our business through the growth of existing businesses as well as through acquisitions. In January 1997 we raised $150 million to help fund future acquisitions, so it seems appropriate to look back at our acquisition history and evaluate our performance. [Also, an interested investor asked us to do so.]

Our most important acquisition was the purchase of Shand Morahan and Evanston Insurance Company. We initially invested in 1987 and acquired the remaining interest in 1990. Our total investment was less than $85 million.

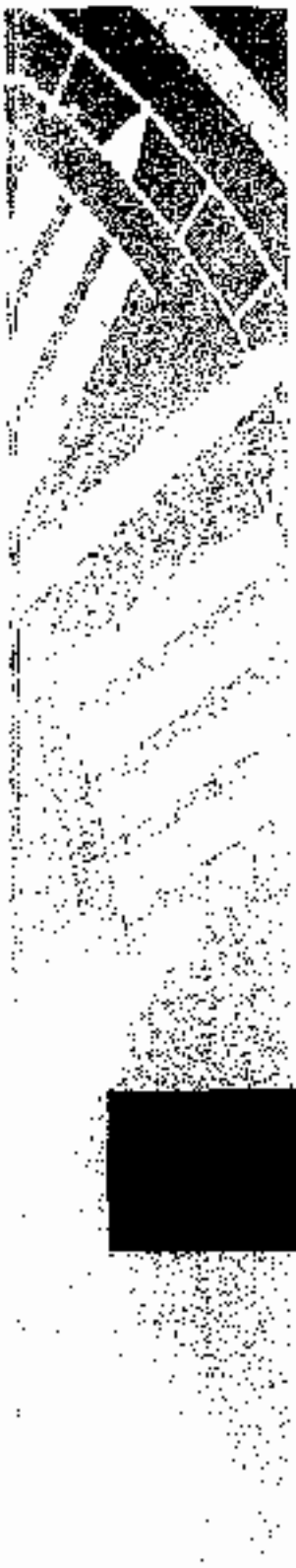

When we acquired the company, it was suffering from several major problems as a result of the very competitive professional liability insurance market of the early 1980s but was well on the way to solving them. Since we purchased the company, we have received more than $83 million in dividends. In 1997 the business generated over $100 million in earned premiums at a small underwriting profit and investment income on a portfolio of almost $650 million. The current equity in this business is approximately $210 million. We wish we could do many more transactions just like this.

In 1989 we acquired a book of business from the Rhulen Agency which placed program business in an unrelated insurance company. In the years following this transaction, we transformed the agency business into a full service insurance company which now trades as Markel Insurance Company. In addition to the original acquisition, we have contributed an insurance company to this business for a total investment of approximately $57 million. No dividends have been received from this investment, although we expect to see them in the future. In 1997 the business reported earned premiums of $68 million and an improving, but still unacceptable, underwriting loss. At this point in time, we believe the difference between our reported underwriting loss and an underwriting profit is equal to the difference between the actuarial point estimates and our more conservative margin of safety. The investment portfolio generated by this business amounts to approximately $178 million. We have not yet achieved our aforementioned investment objectives with

this business; however, our total return in 1997 was approximately 15%. In spite of the less than desired return, we believe this business will be a significant contributor in the future.

The Lincoln Insurance Company was acquired for $24 million in 1995. Our purchase anticipated merging selected business into our excess and surplus lines unit and liquidating the balance of the business. In the short time we owned the company, we received a total of $35 million in dividends and proceeds from the sale of the licenses. We continue to manage the runoff of $22 million in claims liabilities with a like amount of invested assets. In 1997 we enjoyed almost $6 million in premium volume from this acquisition. Our return on this investment was good, but unfortunately it is nonrecurring.

Our most recent transaction was the purchase of Investors Insurance Group in late 1996. This company also had a difficult history and found itself with several problems. About a year before we acquired the company, they began their third reorganization in five years. We knew and respected the new management team and believed it could become an important part of our organization. The purchase price was $38 million. In 1997 this business generated approximately $30 million in earned premiums with a combined ratio of slightly over 100%. Invested assets are approximately $160 million. Total return on our investment in 1997 was about 18%. At year end 1997 the equity in this business amounts to $46 million. While it is probably too early to make a meaningful evaluation of this transaction, we are clearly pleased and excited about the opportunity that Investors brings to us.

We continue to believe that future acquisitions will be an important part of our growth and development. We look at many opportunities but find few that meet our requirements. We expect an acquisition to have the ability to earn underwriting profits and contribute to our goal of building book value at a 20% annual rate. In addition over the years we have developed a strong corporate culture; one we call *The Markel Style*. In any acquisition, we expect the people involved to embrace and be comfortable with our corporate values.

Markel Associates

The Markel Style is our value system. It describes how we conduct our business. Among the values we believe in are "a pursuit of excellence, honesty and fairness in all of our dealings...a respect for authority but a disdain of bureaucracy." Our organization today includes 830 associates. With such a large group, it is not easy to build a strong corporate culture; however, it has been and will con-

tinue to be an important part of our success. One of the primary reasons for this success is that we have a large group with long tenure. Over 25% (227) of our associates have been with the company for ten years or more. Over forty associates have been with the company for twenty years or more.

Another important fact is that all Markel associates own stock in the Company, and many have very significant investments. Several years ago we essentially eliminated the use of our stock option plans and instead have offered our associates stock purchase plans with subsidized interest on loans used for the purpose of purchasing Company stock. This past year over 250 associates participated in the plan and purchased over $6.5 million in stock.

Our goal, of course, is for our associates to be and feel like owners of the Company. We believe this will promote *The Markel Style*, encourage everyone to work hard and enjoy what they are doing and focus on building long term value.

We recently lost a much loved associate, Jim Prinson. Affectionately called "the Governor," Jim began his career at Markel in 1948. Jim was always a big producer, no matter what we asked him to sell. At age 75 he asked if he could cut back his work schedule to 30 hours a week. He continued this schedule until his death at age 82. Jim exemplified *The Markel Style*. Associates like Jim who embrace our core values are the reason that we are successful.

Clockwise from left to right: Anthony F. Markel, Darrell D. Martin, Steven A. Markel, Alan I. Kirshner

Profitable Growth

In managing our company we have consistently tried to focus on generating long-term results. We have sought to build shareholder value not just for the next quarter or year but with a view to the next ten or even twenty years. In contrast, today's fast paced world is one where almost everyone is focused on today's activities and results. Typical measures of success are often oriented to short-term results. The line from a Broadway play, "Instant gratification just isn't quick enough" typifies this short-term focus. But today's instant gratification will be long forgotten five years down the road.

The insurance business continues to be competitive, and profitable growth is extremely difficult to achieve. Anyone can write more business if they are willing to meet unrealistic pricing demands and operate at inadequate returns, or even a loss. Those willing to optimistically estimate loss experience can even fool themselves for a short while. But in the end, these strategies do not work. Losses must be both accounted for and ultimately paid.

While we would prefer to grow quickly, the current environment demands patience. Those who resist the temptation to write business recklessly will be rewarded. Ten years from now, we want to be able to tell you, our shareholders, of additional years of record earnings and exceptional growth in shareholder value. Underwriting profit, not growth, will continue to be our standard.

We thank our Markel associates for their hard work, dedication and commitment to success, and we thank you for your loyal support, encouragement and confidence in our future.

Alan I. Kirshner
Chairman of the Board and Chief Executive Officer

Anthony F. Markel
President and Chief Operating Officer

Steven A. Markel
Vice Chairman

Darrell D. Martin
Executive Vice President and Chief Financial Officer

TO OUR BUSINESS PARTNERS

We are pleased to report another busy and successful year. In 1998 we extended our record of success in earning consistent underwriting profits and superior investment returns. While we will review our company's annual progress in this report, we will also discuss some important long term industry trends which we expect to affect us. Also, without making too many predictions, we will try to look toward the future and give you some idea of what we expect.

Overall our 1998 results were extremely good. While premium growth was small, given the competitive insurance marketplace, bottom line profits were very solid. Underwriting profit exceeded $6 million and our combined ratio was 98%. Investment returns were excellent as we earned a total tax equivalent return on our portfolio of 8.9%. Earnings per share amortized to $10.17, comprehensive income was $12.07 per share, and book value per share grew 18% to $77.09.

Underwriting

The property and casualty insurance market remains extremely competitive but we continue to maintain our underwriting discipline. The net effect is that our premium growth has been very modest over the past few years and 1998 was no exception. In 1998, gross written premiums increased just 3% to $437 million and net earned premium was flat at $393 million. These small changes in total volume do not accurately reflect the vital efforts of our associates in eliminating unprofitable business, fighting "tooth and nail" to keep existing business in the face of fierce competition, and developing and expanding new business opportunities.

We continue our focus on maintaining adequate price levels and disciplined risk selection so that we can earn underwriting profits. In 1998 we reported a combined ratio of 98%, a result slightly better than last year.

Loss Reserves

Our practice is to establish current year reserves on a conservative basis because loss data emerging during the first underwriting year is somewhat limited. Over time, underwriting results for each specific year become more apparent and reserve levels can more easily be set. As in prior years, we have enjoyed the benefit of finding our actual loss experience to be better than originally estimated. We believe that our total loss reserves are as strong today as ever.

In reviewing our loss experience over the past few years, we found that some lines of business were significantly more profitable than

we originally thought. On the other hand, we continue to learn bad news about the ultimate costs associated with asbestos and environmental claims. Because of these events, we have reallocated reserves among different business units. While these shifts occurred, we believe our overall level of loss reserves remains sufficient to cover our exposures.

There can be no doubt that our strong commitment to underwriting profitability, coupled with a conservative approach to setting loss reserves, underpinned the Company's success over a number of years. The underwriting results in 1999 represent the seventh year in a row we have reported an underwriting profit and the twelfth year out of thirteen since our initial public offering in 1986.

Investments

At year end our investment portfolio was $1.5 billion, an increase over the prior year of 5%. During the year, investment markets were quite exciting. The bond market enjoyed the continuation of the broad trend of lower interest rates causing bond prices to be generally higher. The change throughout the year, however, was certainly not smooth. In addition, many events, including problems in Russia and Brazil, the failure of prominent hedge funds, and the Asian meltdown, produced very different results among various segments of the fixed income market. Quality and liquidity proved to be extremely valuable. Despite the turbulence we are quite pleased with our fixed income performance.

The stock market was no less interesting, as in spite of a brief September correction, equity prices continued to rise. It is incredible that the S & P 500 index has increased by more than 20% for the fourth year in a row. We have trouble believing that the underlying intrinsic value of the companies represented increased at the same rate. Consequently, as business people making business judgments, our portfolio is not weighted toward the securities in the index. Our 13.3% return on equities, although solid, was short of the index return. We currently own no high technology or internet stocks (the values of which we also don't understand). We continue our long standing practice of careful selection and extremely low portfolio turnover as it serves our purpose of owning good companies for the long term, and maximizing the total after tax return to our shareholders.

Book Value Growth

Our primary financial goal is to increase book value over the long term on a per share basis. In 1998 book value grew from $1.57 million, to $1.75 million. On a per share basis book value increased 18%, to $77.10 from $65.18. Our goal is to compound book value at a 20% annual rate. In 1998 we just missed the

mark, however, we do expect some volatility in this measure on an annual basis. In the past five years, a more meaningful period and the one we use to calculate incentive compensation, book value grew at a 23% compound annual rate on a per share basis.

Several years ago we discussed our "model for profit." This model helps me understand how we believe we can compound book value at a 20% rate. Simplistically, if we do not lose anything in the underwriting operation, and maintain $4 in investments for every $1 in equity, earning a 5% after tax total return, then we will grow book value at a 20% rate. At year end our investments totaled $1.5 billion and shareholders' equity was $425 million. This represents only $3.50 in investments for every $1 in equity. This is the obvious result of growing book value at a rate faster than the investment portfolio. As discussed later, the acquisition of Gryphon Holdings, Inc. provides additional investment leverage and positions us to work toward compounding book value at 20% in the future.

Gryphon Acquisition

One of the most important events of the year for us was the decision to purchase Gryphon. This transaction consumed a great deal of energy throughout the year, and concluded with an agreement to purchase the company for approximately $150.7 million and the assumption of $55.0 million in debt. Gryphon is an insurance holding company that owns three insurance companies. Associated International Insurance Company based in Woodland Hills, California, Calvert Insurance Company with offices in Hoboken, New Jersey, and The First Reinsurance Company of Hartford which operates out of Chicago. Together these companies control approximately $200 million in annual premium volume.

Gryphon has excellent franchises in property subject to earthquake risk, professional liability insurance for architects and engineers, as well as directors and officers liability insurance and other miscellaneous professional coverages. The company was also active in many other programs with very inconsistent results. In today's environment, it is very difficult for a small company to operate successfully in multiple products across many states. As with other companies in similar circumstances, Gryphon was burdened with too much overhead and too much bureaucracy. While the company tried to grow its way out of its problems, this strategy proved to be difficult in the current competitive environment.

The process of integrating Gryphon into the Markel organization has just begun. We expect that each line of business that we continue to write will be managed by an existing Markel operating company. For example, the property division writing California earthquake coverage

will become a business within the Essex Insurance Company where we currently write similar coverages. The architects and engineers coverage, as well as the Chicago operations specializing in directors and officers coverage, will become part of the Shandy Evanston team where we have a great deal of expertise and believe we can add value and grow these businesses.

Gryphon did not enjoy underwriting success. In fact, the company incurred significant underwriting losses in each of the past four years. These results stemmed from high operating costs, a lack of management focus, inadequate loss reserves, and attempts to develop new business in areas where the company lacked sufficient expertise. We believe that as part of Markel this will quickly change. As the unprofitable businesses are run off and underwriting standards are reviewed, we expect Gryphon's premium volume to decline, probably by as much as 50%; however, more importantly, we expect the remaining businesses to ultimately produce underwriting profits.

As part of our review of Gryphon we determined that the company's loss reserves were set somewhat optimistically. As a result, Gryphon took an additional charge in the fourth quarter to set its reserves on a more realistic basis. At year end we think the company's reserves are adequate (although not yet with the margin of safety we would prefer).

In looking at the investment side of the operation we also see significant opportunity. Gryphon has an investment portfolio of approximately $400 million, invested in high quality fixed income securities with fairly short durations. Markel will also be able to add significant value in the management of the investment portfolio and overall investment leverage will improve. On a pro forma basis at December 31, 1998 we now have investments of $1.8 billion and equity of $425 million which represents slightly more than our targeted level of investment leverage at $4 in portfolio for each $1 in equity.

When we achieve underwriting profitability, we can take full advantage of the additional investment leverage, and the acquisition will help us to compound book value at a 20% rate. The additional premium will better utilize our growing capital base and the additional portfolio provides the balance sheet leverage we seek to maintain.

We believe we start 1999 in an excellent position to continue to build shareholder value. As always, for the actual results, we must wait and be patient.

Industry in Transition

The property and casualty insurance industry remains very competitive. Industry premium growth has been slow, returns on equity from operations are at unacceptably low levels and the industry has too much capital.

There are more than 3,000 insurance companies competing for business. Price levels continue to decline and it's hard to remember when the industry last earned an annual underwriting profit. Many observers also believe that loss reserves are now inadequate. Compensating for weak operations, the industry has been bailed out by rising investment portfolio values from the decline in interest rates and rising stock prices. In addition, many companies are manufacturing earnings per share through creative reinsurance arrangements. This environment will not necessarily change quickly, however, it will change.

Over the past several years there has been a concerted change among the companies which lead the industry. Many of the industry's former leaders have been acquired or substantially reorganized. Merger and acquisition activity has picked up among both large and small companies as the industry consolidates. We expect this trend to continue.

In 1985 when we completed our initial public offering, we compared our small size, our spontaneity and flexibility, our ability to make decisions quickly, and our customer focus. These attributes undoubtedly contributed to our success. Today we are by most measures at least ten times larger than when we went public. Can we maintain these strengths and values as we continue to grow? The acquisition of Gryphon will add $110 million in premium, $400 million in incremental investment portfolio and initially more than 100 new associates. How long will it take this group to embrace the Markel Style? As we grow and meet the new challenges of our changing industry, we recognize the importance of sticking with and communicating to our new associates the important, common sense principles which guided us in the past.

The industry is facing many challenges and we expect as many or more changes in the next decade as we saw in the last. Neither inadequate pricing nor inadequate loss reserves can last forever. These problems must be addressed and resolved and opportunities exist for Markel to be part of the solution. Interest rates are currently as low as they have been in many years. At current levels, many insurance companies will see a significant decline in investment income and returns on equity could drop to even lower levels. In this environment, we expect to see a continuation of industry consolidation.

All of these developments spell opportunity for Markel. While growth is not one of our strategic objectives, we expect to grow in the future. We want to provide excellent customer service, quality products, underwriting profits and superior investment returns. All of this to build shareholder value.

The Markel Style

As an organization, one of our core strengths has been our strong values, values we articulate in The Markel Style. Often organizations have trouble balancing the different demands from clients, associates and shareholders. Some would believe that every decision is a trade-off among these different interests. We disagree. Our goal is to make decisions which support all constituencies. For example, associates become owners through payroll stock purchase programs and loan plans, as opposed to daliative stock options. Additionally, our incentive compensation systems are designed to reward individual achievement. Our performance culture builds financial strength which our clients can count on. Creating an atmosphere in which people can reach their personal potential is much easier when the business is growing and successful. Success breeds success and we have designed Markel to be successful. We also know that just as soon as we become complacent, just as soon as we start to think we're pretty good, that we're headed for trouble. We pledge not to become satisfied with what we've done in the past. We set long-term goals and we work toward them every day. We've come a long way and we are excited about the road ahead.

In closing, we would like to express our deep appreciation to Perry Waesche, who resigned from our Board of Directors in November, for his loyal service and keen advice over the years. Your Company is much stronger today because of Perry's contributions.

Additionally, we welcome Tom Gayner to the Board. Tom joined Markel in 1990 and has contributed both on the management of our equity portfolio and his common sense business advice.

Thank you for your support.

Alan I. Kirshner
Chairman of the Board and Chief Executive Officer

Anthony F. Markel
President and Chief Operating Officer

Steven A. Markel
Vice Chairman

Darrell D. Martin
Executive Vice President and Chief Financial Officer

Clockwise from top right: Anthony F. Markel, Darrell D. Martin, Steven A. Markel, Alan I. Kirshner

TO OUR BUSINESS PARTNERS

We measure our success in building shareholder value by focusing on growth in book value per share over the long term. Book value per share declined 11% to $68.59 due to disappointing investment results. In spite of that, 1999 was a very good year overall. Our core underwriting results remained exceptionally good at virtually every operating division in the Company. This is a real tribute to our underwriters given the very difficult market conditions they faced. Additionally, we should remember that over the past five years we compounded book value per share at a 22% annual rate. While it would be pleasant to report consistently improving results, it would be unrealistic given the nature of our business. Insurance and financial markets are volatile by nature and the volatility itself creates significant business opportunities for Markel.

The year also included the acquisition and amalgamation of Cryphon, as well as the announcement of the plan to acquire Terra Nova (Bermuda) Holdings, Ltd. and the agreement to acquire the renewal rights to Acceptance Insurance Companies' Scottsdale business. Despite the setback to our book value growth during 1999, we believe we continued to build the intrinsic value of the company and positioned ourselves to take advantage of even more opportunities in the future.

1999 Financial Review

After several years of very modest growth, operating revenues increased 25% to $524 million in 1999. While the acquisition of Cryphon was responsible for the largest part of this increase, in the closing months of the year we saw significant increases in written premiums in virtually every line of business. In the fourth quarter, excluding the Cryphon acquisition, written premiums increased 26%. This is a very positive sign and we are certainly hopeful it will continue.

Earned premiums increased 31% to $437 million and we had a small underwriting loss with a combined ratio of 101%. This was the result of excellent performance from almost every operating division enabling us to partially offset the costs associated with acquiring Cryphon. Our core business units achieved a combined ratio of 96% exclusive of the Cryphon business. This is truly excellent performance and compares favorably to our 1998 combined ratio of 98%.

Net investment income increased 25% to $88 million primarily due to the growth in the investment portfolio as a result of the Cryphon acquisition. In the fourth quarter, to create tax savings, we realized $10 million in investment losses. At the same time we replaced the bonds sold with bonds of similar quality and duration. As a result, we reported $1 million in net losses from the sale of investments in 1999 as compared to $21 million in realized gains in 1998.

The brightest spot of the year was the outstanding underwriting performance of our core insurance company subsidiaries.

Net income was $41 million compared to $57 million last year. Earnings per share were $7.20 on a diluted basis compared to $10.17 last year. As a result of the reduction in the market value of our invested assets, we had a comprehensive loss of $10 million compared to comprehensive income last year of $68 million. Shareholders' equity declined 1% to $483 million, or $68.57 per share.

Excellent Results from Core Underwriting Businesses

The brightest spot of the year was the outstanding underwriting performance of our core insurance company subsidiaries, which produced an enviable 96% combined ratio in spite of another year of intense, irrational competition. This is clear testimony to our straightforward and continuous focus on underwriting profits and the unwavering dedication of our associates to this goal.

The Excess and Surplus Lines units, Essex (Excess and Surplus Lines), Evanston (Professional and Products Liability) and Investors (Brokerage Excess and Surplus Lines) generated a 94% combined ratio while showing some solid, well-controlled growth.

Essex volume grew to $196 million from $122 million as a result of the smooth assumption of the Gryphon DIC property book and moderate increases in their other core lines - property, casualty, inland marine and ocean marine. Steve Vaccaro, President of Essex, and his team continue to produce results that are the envy of the industry.

Evanston, led by continued increases in its Management Practices Liability volume, along with the addition of a book of Errors and Omissions business acquired as a part of the Gryphon transaction, grew to $154 million from $124 million. In addition, they successfully experimented with some creative new production sources. At year end, Mike Rosenberg accepted sole responsibility for this subsidiary, as a result of Paul Springman's promotion to President, Markel - North America. Mike has been Paul's partner in the management of Evanston for over eight years, so the transition will be completely seamless.

In October, Jeremy Cooke, President of Investors, accepted the Chief Operating Officer role of Terra Nova, passing the mantle of leadership on to Rod Ayer, previously Senior Vice President. Under the combined leadership of Jeremy and Rod, Investors put impressive numbers together exhibiting both a volume increase ($85 million from $65 million) and a gratifying underwriting profit.

The Specialty Admitted subsidiaries, Markel Insurance Company (Specialty Programs) and Markel American Insurance Company (Specialty Personal and Commercial Lines), made notable strides in both size and profitability during 1999 as the combined ratio improved to 101% from 105% in 1998 and 110% in 1997.

Markel Insurance Company, which has historically produced outstanding loss ratios, aggressively attacked its expense ratio through a combination of significant expense reductions, a new corporate structure with emphasis on sales and marketing, and some creative new product experimentation. We are confident that Britt Gleason and his energized staff will significantly contribute to the underwriting profits this year and for many years to come.

Markel American Insurance Company, now led by Timberlee Grove, who was promoted to President in August 1999, also had an outstanding year of growth and profitability. Their operation, bolstered by the acquisition in April 1999 of a book of yacht business, grew to $50 million in volume. They also completed the transition to a completely autonomous unit with all product underwriting and support services under the same roof in Pewaukee, Wisconsin.

As important as acquisitions have been, and will continue to be, we could not expand our horizons without the knowledge and comfort that our core operations are well managed and will continue to produce the outstanding results that we have come to expect. We are fortunate and extremely grateful to have this talented, motivated group of associates.

Investment Philosophy and Results

Our fixed income portfolio, the largest part of our investment portfolio, has a duration that ranges between 4 and 5 years. At the beginning of 1999 we were earning a tax equivalent yield of approximately 6.1%. By year-end, this yield increased to 7.1%. This rise in yield caused a decline in the value of our portfolio. Unrealized gains

declined $67.3 million and we realized losses of $13.7 million. This market value decline was about 6% and almost completely offset our return from the investment income of 6.9%, resulting in a total return on our fixed income portfolio of only .9%.

Changes in interest rates cause changes in book value, which can be extreme in any particular year. However, over a longer period of time, the fluctuations in value related to interest rate movements tend to have only a modest impact on our results. This is why we prefer to measure our performance over five year periods. Additionally, the duration of our fixed income portfolio is conservatively matched to the duration of our liabilities and is well within a reasonable tolerance for interest rate risk.

We believe that in the long term we can significantly enhance shareholder value by allocating significant investment funds to common equities. We do not think about risk in the context of short-term volatility but rather in the context of a permanent loss of capital. We buy shares of companies where we believe the business will earn good returns on capital and which are being run by honest and talented, shareholder oriented managers who are building the value of the enterprise. We expect to share in the increased value of the business over the long term. We hope you, as a shareholder of Markel, have a similar view with regard to your investment. Our results in equity investing was disappointing in 1999. In most cases we are pleased with the companies we have selected and believe the business fundamentals are sound even though stock market prices have suffered.

We concentrate our equity portfolio in relatively few securities. At year end our top five positions represented over 35% of our portfolio and the top 20 represented 71%. While diversification might reduce short term volatility, we do not believe it maximizes long-term total return. We believe we can earn the best returns by concentrating our bets and our predictions in promising areas where we have the best understanding and knowledge. In 1999 our concentration in other insurance stocks contributed to our disappointing results, and our failure to invest in the red hot portions of the NASDAQ market prevented us from enjoying the well advertised, but narrowly based, returns of the bull market.

In 1999 our total return on equity investing was a loss of 10%. This compares very unfavorably to the major indexes, which include the Dow Jones Industrial Average [up 25%], the S&P 500 [up 20%] and the NASDAQ Index [up 86%]. Over the past five years our performance in equities was up an average of 14%, and for the past ten years 13%. These results are obviously much better than 1999 and are

We invest with a serious regard for the risks we assume

results which we believe will be better than our long-term performance in the future. In managing equity investments, we do not seek to match or beat any specific market index. In addition to seeking individual businesses with good returns on capital as well as honest and talented management, we seek to invest at prices that allow for some margin of safety for our inevitable mistakes in judgement about these attributes. Our goal as investors, rather than traders, is to earn returns similar to those intrinsically earned by the companies themselves in the course of conducting their business. We invest in the equity markets because over time we expect to earn more than we would earn by investing in the fixed income market, always attempting to do so without taking on significant risks of permanent loss of capital.

We have avoided the technology sector due to concerns that many of the businesses represented by the stocks that might be existing trading vehicles were not clearly businesses with sufficiently durable returns on capital, management attributes, and reinvestment opportunities to qualify for what we seek in equity investments. While you as a shareholder may be justifiably unhappy about the opportunities that have passed us by so far, we think you may also someday appreciate the fact that we have not put any of your capital at risk in stocks with valuations that make ownership an extremely high risk proposition. The seesaw of risk versus reward has been all focused on the reward side with too little regard for risk. We invest with a serious regard for the risks we assume.

Acquisition of Gryphon

In January 1999 we completed the acquisition of Gryphon. This purchase was intended to provide profitable premium volume as well as investment opportunities at a reasonable cost. In the first year of this transaction we believe we are very much "on schedule as planned." However it remains too early to proclaim the deal a success.

Our first goal was to acquire profitable premium volume. We completed our re-underwriting and currently expect the acquired business to contribute about $70 million in gross written premium in the year 2000. We also expect this business to generate underwriting profits. This premium forecast is slightly short of our original goal of $80 to $100 million.

A second goal was to re-underwrite and discontinue the unprofitable lines of business as quickly as possible. We completed this very effectively as we eliminated all of the business that we believed caused problems for Gryphon. The underwriting loss on that run-off business was somewhat higher than we originally estimated, however, this cost is now behind us.

Another goal was to increase our investment leverage. With the addition of $300 million to our portfolio, this goal was achieved. Because interest rates increased throughout the year, we did not earn the returns we anticipated on this portfolio, however the investments are productive and will be with us for years to come.

The acquisition price of Gryphon was $146 million. Because a majority of the business is being transferred to other Markel business units, we have sold as licensed shells some of our insurance companies to recapture as much of our capital investment as possible. We sold the Calvert Insurance Company for $22 million in August 1999 and although not directly related to Gryphon, sold Investors Insurance Company as a shell for $51 million in January 2000. These transactions effectively enable us to re-allocate $76 million in capital. In addition, the gain on Calvert reduced goodwill by $6 million and the sale of Investors will represent a gain of $8 million.

Our final objective is to manage the claims process in an effective manner and to maintain appropriate loss reserves for our outstanding exposures. In last year's report we said that we believed the Gryphon reserves were adequate but not with the margin of safety we would prefer. To date we have made a great deal of progress in evaluating, reserving and settling the outstanding claims. As might be expected, there have been some areas where we have had good news and some where we have been disappointed. Unfortunately, we had to deal with several lines of business where Gryphon did an extremely poor job of managing its risk. As a result we have continued to strengthen Gryphon loss reserves but are still slightly short of our desired margin of safety.

The process of merging the Cryphon organization into Markel involved a great deal of work by numerous associates throughout the organization. To the extent that this has prevented us from doing other things, it certainly represents an additional cost. However, we learned a great deal from this experience and developed new skills. We appreciate the extraordinary efforts of so many of our associates to make the Cryphon acquisition successful.

Planned Acquisition of Terra Nova

In August 1999 we announced an agreement to acquire Terra Nova (Bermuda) Holdings, Ltd. Terra Nova is a specialty property and casualty insurance and reinsurance company with headquarters in Bermuda and principal operations in London. The Terra Nova business is split between direct insurance and reinsurance, the London market and Lloyd's, and marine and non-marine. It largely writes short tail business.

Throughout the fall we worked with Terra Nova to begin the integration process and to complete the transaction. Unexpectedly, Terra Nova reported significant losses for the fourth quarter and for the year. As a result, in January we renegotiated this transaction and agreed to revised terms. The transaction is currently expected to close on March 24, 2000.

In purchasing Terra Nova we believe we will acquire a high quality international insurance business at a fair price. While the company suffered from some recent problems and will probably finish the year 2000 with a combined ratio in excess of 100%, we believe that the people will embrace the Markel Style and return their focus to consistently earning underwriting profits.

The total purchase price will be approximately $662 million. Approximately half is being paid in cash and half in securities. We expect to issue approximately 1.8 million common shares to complete this transaction. In addition, we will issue contingent value rights which are intended to increase the likelihood that a Terra Nova shareholder will be able to realize a minimum value of $185 for each share of Markel received. While the potential cost is very real, the contingent value rights will become worthless if our stock consistently trades over $185 in the next 20 months. We are always thoughtful about the cost of issuing stock and believe the contingent value rights were an effective way to complete this transaction and minimize the number of shares we would need to issue.

Terra Nova is slightly larger than Markel. In 1999 its gross written premium was $865 million, and at December 31, 1999 its investment

One of our strengths is that we have an experienced, talented and motivated staff

portfolio was $1.5 billion and its shareholders' equity was $449 million. Terra Nova has 698 associates in its organization. Acquiring Terra Nova gives Markel shareholders significant increases in premium volume and investment portfolio per share as shown on the following table. We believe this additional operating and financial leverage will add value to the company, although it will only do so when we achieve underwriting profitability. Book value per share also increases substantially, however, this is simply because we are issuing additional Markel stock at a price in excess of our book value.

Markel and Terra Nova Combined
Selected Pro Forma Information
December 31, 1999
(in millions except per share data)

	Markel	Pro Forma Combined
Premium Volume	$ 595	$ 1,460
Per Share	$ 105	$ 185
Investment Portfolio	$ 1,623	$ 3,003
Per Share	$ 290	$ 409
Shareholders' Equity	$ 383	$ 677
Per Share	$ 69	$ 92
Investment Leverage	4.2 to 1	4.4 to 1

The transaction will also add a significant amount of goodwill to our balance sheet. This will be amortized over 20 years so we will have an additional non-cash annual amortization charge. Goodwill on any balance sheet should be viewed with caution and only future results can truly validate its real value. We believe the premium volume, investments, business relationships and experienced staff will more than justify the goodwill.

Since the transaction was announced in August, we have been working very closely with the Terra Nova organization to make the transition as seamless as possible. In most respects we share similar values and as a result we believe the transition will be smooth. The Markel Style and our "Commitment to Success" is being shared throughout the Terra Nova organization.

Expanding the Board and Management Team

The acquisition also gives us the opportunity to strengthen our Board of Directors and our management team. We are particularly pleased that Nigel Rogers, Jack Byrne and Mark Byrne will be joining our Board of Directors. Nigel Rogers has been President and Chief Executive Officer of Terra Nova since May 1996 and has been working in the London insurance market for over 20 years. Nigel will continue to run our international operations following the transaction. Jack Byrne is a director and large shareholder of Terra Nova. He is also Chairman and Chief Executive Officer of White Mountains Insurance Group, a Bermuda-based reinsurance holding company. Jack has enjoyed a long and illustrious career in the insurance industry having previously served as a senior executive of both Fireman's Fund and GEICO. Mark Byrne is Jack's son and is also a director and shareholder of Terra Nova. Mark is Chairman and President of West End Capital Management (Bermuda) Limited, a Bermuda-based investment management company. Mark was previously a Managing Director, Global Fixed Income Arbitrage, for Credit Suisse First Boston.

One of our strengths is that we have an experienced, talented and motivated staff. An unexpected benefit of acquiring Terra Nova is that it has created new opportunities for our associates. With our expanding organization we promoted Paul Springman to President of our North American operations. Paul previously served as President and Chief Operating Officer of one of our largest operating units, Markel/Evanston. Paul has over 20 years of experience in the insurance industry and is a past President of the National Association of Professional Surplus Lines Offices (NAPSLO). We are confident that Paul will help us continue to meet our performance objectives in our U.S. operations. Another change made possible by the acquisition is the transfer of Jeremy Cooke to Chief Operating Officer of Terra Nova in London. Jeremy previously served as President and Chief Executive Officer of our Investors

Insurance Group. Jeremy began his career at Lloyd's over 25 years ago, then founded and built his own brokerage business which he sold in 1986. Jeremy is also a past President of NAPSLO. We are extremely pleased that Jeremy will be working with Nigel and his team in London.

We are proud of the depth of the team we have built and our bench strength.

Quality Balance Sheet and Loss Reserves

We have often stated that maintaining a quality balance sheet with a strong loss reserve position is a fundamental principle of our Company. In the past year many insurance companies had to fix balance sheet problems and acknowledge their corresponding underwriting problems. Our approach is to work to maintain a high degree of confidence in the quality of our loss reserve provisions and to do so without being influenced by the desire to achieve short term earnings goals. We continue to believe that our strong balance sheet means more than our quarterly earnings statement.

This philosophy, coupled with our disciplined underwriting standards, puts us in a position to take advantage of volatility and market opportunities. Many others today are suffering from poor underwriting and, in many cases, worse administration. The economic reality created by these events is now manifesting itself. Our discipline, both in underwriting and in managing our balance sheet, is creating real business opportunities and value for our shareholders.

Acceptance Business

In late December we were able to reach an agreement with Acceptance Insurance Companies to purchase the renewal rights to their excess and surplus business produced from their Scottsdale office. As a result we formed Markel Southwest Underwriters and staffed it with former associates of Acceptance. The business we retain will be priced and underwritten to our standards.

In this first year we are assuming most of the existing business. We will administer the runoff on behalf of Acceptance and may offer renewals in one of our companies based on our underwriting and pricing guidelines. Our goal is to manage this process to achieve an underwriting profit. We will be administering the runoff of approximately $100 million and expect to walk away from half or more of this business. As Paul Springman wrote to our new associates, "We fully expect that premium volume at Markel Southwest will fall this year, and will fall significantly. That's not only expected, it's OK! When we look at our numbers at the end of this year, the only meaningful barometer will

We believe we have the people, the capital, and the business culture to respond quickly and efficiently to opportunities in the market.

be the combined ratio, not the top line. No one should be concerned about market share. Our focus needs to be on underwriting results."

Paul's comments are a good example of our culture of focusing on underwriting results. This philosophy extends throughout our organization and is a major reason for our success.

Trends in the Market

Beginning late in 1999 and continuing into this year we are seeing many more opportunities to write business on our terms and conditions. There are many examples of areas where companies are exiting classes of business that have proven to be difficult to write profitably. Additionally, many are looking to exit the industry. While it is far too early to call this a change in the market cycle, it represents the first time in many years that the insurance market environment showed any signs of improvement. There remains too much capacity in the industry, however, it is clear that the industry's return on this capital has been dismal. Maybe the time is coming when the industry will run its affairs to earn reasonable returns.

We believe we have the people, the capital, and the business culture to respond quickly and efficiently to opportunities in the market.

Market Associates

As we enjoy the success of the past and look forward to our bright future, we are especially thankful for the hard work and zealous pursuit of excellence demonstrated by our 563 associates, nearly all of whom are also shareholders. Our greatest pleasure stems from the fact that we are building an outstanding organization. Our results depend on each associate making important contributions and achieving individual goals every day. These individuals working as a team make our success possible. They share a vision and a passion for what our Company represents and we are confident that they will help us continue that success into the future.

On behalf of all our associates, we appreciate our shareholder partners, whose long term confidence and support helps us achieve our goals.

Alan I. Kirshner
Chairman of the Board and Chief Executive Officer

Anthony F. Markel
President and Chief Operating Officer

Steven A. Markel
Vice Chairman

Darrell D. Martin
Executive Vice President and Chief Financial Officer

From left to right: Anthony F. Markel, Darrell D. Martin, Steven A. Markel, Alan I. Kirshner

TO OUR BUSINESS PARTNERS

As our long-term shareholders know, Markel builds shareholder value through superior underwriting and investing results. Our success is measured by our compound annual growth in book value per share over the long term. For the past ten years, we compounded book value per share at a 25% rate; for the past five at 16%; and in 2000 book value per share grew 19%, excluding the effects of the Terra Nova acquisition. But read on to get the full story. 2000 was an eventfilled year. We continued to demonstrate our superior underwriting ability in our North American operations, we completed the acquisition of Terra Nova and made significant progress in reorganizing this business into our Markel International operations, and we delivered truly exceptional investment results in a very difficult market. Both underwriting losses of discontinued lines and the newly acquired Markel International business negatively impacted operating results. In total, we reported a net loss of $28 million. Comprehensive income was a positive $81 million, which included unrealized investment gains. Shareholders' equity advanced from $383 million to $752 million or $68.59 per share to $102.63 per share.

Throughout the year we enjoyed improved market conditions in virtually all of our domestic business units. The property and casualty insurance industry suffered from intense competition for many years, leading to poor results and several company failures. The market has now changed and most competitors are exhibiting underwriting discipline or are out of business. We are getting many more opportunities to sell our products, prices are on the rise, and our results are beginning to reflect these improved conditions.

2000 Financial Review

Revenues for the year more than doubled and now exceed $1 billion. The acquisition of Markel International accounted for most of this growth; however, our North American business also enjoyed solid, profitable growth.

In total, earned premiums increased from $437 million to $979 million and we reported a combined ratio of 114%. This

was the result of excellent performance of 97% from our North American operations, a disappointing 116% from our marine international business, and discontinued lines of 174%. In dollar terms our underwriting loss was $132 million, with North America contributing $16 million in profits, international a loss of $55 million and discontinued a loss of $93 million. We are working diligently to improve these results as quickly as possible to return to our historic standard of underwriting profitability. And we are optimistic that we will be able to do so.

Net investment income increased from $86 million to $154 million primarily due to the growth in the investment portfolio associated with the acquisition of Markel International. Approximately $15 million was earned from realized investment gains during the year, also a very significant $109 million was added in unrealized gains, net of tax.

As a result of the acquisition of Markel International, interest expense increased to $52 million and the amortization of intangible assets increased to $23 million. We reported a net loss of $38 million as compared to net income last year of $41 million. With the increased value of our investment portfolio, comprehensive income was $81 million compared to a comprehensive loss in 1999 of $40 million. Shareholders' equity increased to $752 million or $162.53 per share.

North American Operations

Our core North American underwriting business units enjoyed a very successful year. Gross written premiums increased 27% to $711 million as the domestic insurance market continued to tighten throughout the year. The momentum grew exponentially, as fourth quarter gross written premiums grew 36% from substantial increases in submission activity, more new business and increased prices. Earned premiums increased by 18% with a combined ratio of 97%.

Every division in the North American group participated in the improved market, with our Excess and Surplus Lines companies seeing the greatest upswing. In early 2000 we opened new facilities in Scottsdale, Arizona named Markel Southwest Underwriters. This business came from acquiring the renewal rights of approximately $100 million in premiums from Acceptance Insurance Companies, Inc. We were up and running at the end of March, and we wrote $28 million in premiums for the year and expect to write approximately $50 million in 2001. Our Preferred E&S unit experienced underwriting problems during the year, primarily as the result of providing insurance for New York contractors. This class of business became very difficult to insure profitably and consequently we withdrew from the class. The experience was expensive but is now behind us. This division is now achieving significant price increases and we expect a profitable year in 2001.

The other North American operations performed extraordinarily well. Having a 97% combined ratio, coupled with an increase in gross written premium of 27% after a fifteen year soft insurance market, is a real tribute to our associates. Our underwriting units are filled with skilled and dedicated associates focused on our mission of underwriting profitability, and we are thrilled with these outstanding results.

International Operations

In March 2000 we completed the acquisition of Terra Nova (Bermuda) Holdings Ltd. We acquired this company to gain access to specialty, international insurance markets. We saw an opportunity to acquire a large specialty business, in many cases similar to our North American operations, which has the

potential to earn underwriting profits. Additionally, Terra Nova conveyed significant investment leverage. In acquiring this business, we recognized that a significant amount of work was necessary to reorganize the company, discontinue several unprofitable programs, and to reunderwrite its book of business. We were aware that during this process the business would not be profitable.

While more work needs to be done and our financial results do not yet show the magnitude of our efforts, we have made significant progress. We consolidated Markel International's operations into five business units from 15, and we reduced expenses accordingly. The Markel Style is being implemented with our focus on underwriting profits and incentive plans tied to performance. We centralized all accounting, investment, treasury and actuarial functions. We also consolidated all of our London operations from six uncoordinated offices to one, well located facility few blocks from Lloyd's.

The underwriting results of our International operation were disappointing, as we had a combined ratio of 116% from continuing operations. This is approximately 5% worse than our original expectation. Those poor results were due to business that was on the books prior to our acquisition. Throughout the year we repriced and remunderwrote the ongoing business, and eliminated many underperforming programs. As a result, we expect to report improved results in 2011, and we continue to believe that we will be able to achieve underwriting profitability in the not too distant future.

Over the years, Markel grew from both internal growth and acquisitions. While acquisitions always bring with them some surprises and integration difficulties, we are pleased with our track record. In fact, the longer our acquisitions have been part of the Markel family, the better they perform. We think that this speaks volumes about our culture and the underlying values of underwriting profitability, balance sheet conservatism, and long-term ownership that create a wonderful business.

Discontinued Lines

Earned premiums from discontinued lines acquired with Markel International amounted to $120 million. The combined ratio on this business was 141%. These lines included unprofitable products where we did not believe we had a good opportunity to build a going-forward, profitable, specialty franchise. The business was commonly priced, poorly priced, or underwritten without appropriate control, knowledge and expertise. Additionally, during the third quarter we took a $32 million charge related to discontinued Gryphon programs.

At December 31, 2000, the remaining unearned premium on discontinued lines amounted to $65 million and while not expected to be profitable, should not cause material losses.

We have always prided ourselves on maintaining loss reserves which prove to be more likely redundant than deficient. This is certainly true with our North American businesses, where we have applied consistent underwriting and claims handling processes and have closely monitored loss development. In the context of an acquisition, where the underwriting and claims handling processes may have been inconsistent and several lines have been discontinued, it is almost impossible to establish the same margin of safety with loss reserves. While we believe the reserves of our recently acquired International operations are adequate, future adverse development is possible. As we underwrite and apply strong and consistent standards to our International business, we expect to develop the same confidence with its loss reserves.

Investments

Achieving superior investment returns has long been an integral component of our philosophy, and a strong contributor to our long-term growth in book value. The purchase of Markel International added over $1.4 billion to our investment portfolio and the investment environment in 2000 was one in which we excelled.

During 2000, the white hot and psychologically driven NASDAQ market imploded with a loss of almost 39%. The Dow and S&P indices also declined 6% and 10% respectively. We were never able to understand the valuations of many of the most popular stocks of 1998 and 1999, and as a consequence avoided investment commitments in that area. We were rewarded this past year as our focus on intrinsic business values provided us with an equity return of 26% during a time of difficult results in the broader markets. In our equity investing, we remain focused on reasonably priced profitable companies, with honest and talented management and capital discipline. Over the years this focus served us well and it will remain the hurdle rate for how we consider equity investments in the future.

In the fixed income markets, we remain committed to a high quality portfolio with maturities similar to those of our insurance liabilities. We wish to earn a positive spread on our policyholder funds without taking unwise credit or interest rate risks. This foundation, along with profitable underwriting activities and a conservative balance sheet, allows us to allocate the bulk of our shareholders' equity to the equity markets and earn a higher, though usually more volatile, return over time.

Stock Offering

In February 2001, we completed the sale of additional shares of common stock and raised almost $200 million in new capital. While we were reluctant to issue new shares and dilute the interest of our existing shareholders, we believe that the additional capital will generate excellent returns both for our existing shareholders and for our new business partners.

With the acquisition of Markel International, we increased our financial leverage such that our debt to capital ratio increased to 39%. Our long-term target is one-third debt, two-thirds equity. With the new equity, our debt to capital ratio will be below our long-term leverage target. We believe that putting our balance sheet in a strong, conservative posture will enable us to take full advantage of our tremendous opportunities.

We are particularly pleased that a number of our existing shareholders added to their holdings, and that a number of old friends joined us as new shareholders. One of our strengths is that our long-term shareholders understand our business philosophy and support it. We think the same is true of our new shareholders.

Market Trends

In early 2000, we saw a cyclical change in the property and casualty insurance market, with prices going up and more opportunities for us to write profitable business. As the large, standard, commodity oriented companies sought to improve their results, they became more selective in their underwriting, and increase prices. As a result, more and more business moves into the specialty insurance market. As a leader in the specialty market, Markel is well positioned and prepared to take advantage of this change. As the year progressed the market continued to harden. Our North American premium volume increased progressively throughout the year with a 34% increase in the third quarter, and a 35% increase in the fourth. These increases were the result of both new business opportunities and higher prices. This trend continues in early 2001.

It has been almost fifteen years since we experienced a truly "hard" insurance market. During that period, financial results throughout the industry were poor, many companies failed, and the industry consolidated. At long last underwriting discipline is returning and prices are going up. The question on everyone's mind is "how long will this last?" Unfortunately we don't know. What we do know, however, is that the problems created over many years will not be solved quickly. It is certainly time for the cycle to move in our direction and we will take full advantage of this opportunity.

Directors

Jack Byrne advised us that he would not be standing for re-election at our next shareholders' meeting. His personal commitment to White Mountains Insurance Group and its planned acquisition of the CGU Insurance Group prohibit him from continuing on our Board. We appreciate Jack's contribution to Markel and know his advice will still be available.

At our last Board meeting, Doug Foy joined the Board. Doug is President of Robert E. Torray & Co., an independent investment firm with over $6 billion under management. Doug has been an investment manager for over 15 years and is very active as a volunteer in his community. The Torray organization is also our largest outside shareholder. We know Doug will make a valuable contribution to our Company.

Markel Associates

With the addition of Markel International and our continued growth in North America, we have over 1,500 associates in the Company. Our success has always been our ability to build a team of people with the shared values of The Markel Style. Markel enjoys a strong culture and underlying value system that defines our Commitment to Success. Everyone here knows the importance of, and is committed to, producing an underwriting profit, maintaining a strong, conservatively-rated balance sheet and honest and fair accounting. Each associate has the opportunity to achieve his or her goals, yet work as part of our team. We have a respect for authority, but disdain of bureaucracy. We repeat this message endlessly inside our organization to reinforce the beliefs with our long-term associates as well as to pass the message on to our newer associates. These soft and intangible assets are what ultimately produce the hard and tangible results that we have delivered in the past, and expect in the future.

We welcome our new associates and look forward to our mutual success. We thank all of our associates for their hard work throughout the past year and for their Commitment to Success.

And we thank you, our shareholders, for your support.

Alan I. Kirshner
Chairman of the Board and Chief Executive Officer

Anthony F. Markel
President and Chief Operating Officer

Steven A. Markel
Vice Chairman

Darrell D. Martin
Executive Vice President and Chief Financial Officer

From left to right: Alan I. Kirshner, Anthony F. Markel, Darrell D. Martin, Steven A. Markel

TO OUR BUSINESS PARTNERS

The events of September 11th overshadow everything else that occurred during the year. The terrorist attacks on the World Trade Center and the Pentagon changed the world and impacted all of us. While the losses in human life and economic terms are substantial, we are thankful that so many people were able to escape safely. We also believe our society will work towards building a stronger and safer world. Financially, we will recover from these losses.

Unfortunately, the losses associated with the terrorist attacks were not the only surprises we faced in 2001. In addition to $75 million in losses from the World Trade Center events, we recognized an additional $29 million in adverse loss development from one of our North American programs and took charges of $109 million in our international business. Without question, 2001 was a difficult and disappointing year.

Throughout our 72-year history we built an organization with a sense of conservative accounting and reserving methodologies as well as enviable underwriting profits. Our goals and philosophy have not changed, but we clearly failed to deliver in 2001.

Fortunately amid the disappointments, 2001 did include many positive developments. We are now well prepared to deliver the quality results that you and we have come to expect. It feels like we have been in the London market for an eternity, but in truth it has been less than two years. Throughout the year we continually worked to integrate the operations of the International business we acquired in March of 2000. While we recognized significant losses, we believe we made substantial progress. Additionally, the current market environment is without question, the best we've seen in many years. We are currently enjoying significant, well-priced growth in our business across almost all lines. We are exceptionally proud of our investment operations, which generated fantastic returns. While we will always emphasize the importance of great underwriting, our investment operations are also a critical element in our objective to compound book value per share at high rates of return over time.

We measure our financial success by compound growth in book value per share over the long term. For the past ten years we compounded book value per share at a 22% rate and for the past five at 18%. Excluding the effects of the issuance of new common stock, 2001 book value per share declined 10%. As a result of the additional capital raised during the year, book value per share increased from $102.63 to $110.90 and total shareholders' equity advanced from $752 million to $1.1 billion.

2001 Financial Review

Revenues increased 28% from $1.1 billion to $1.4 billion with a full year of international operations along with accelerating growth in North America. Earned premiums were $1.2 billion and our combined ratio was 134%. North American operations reported a combined ratio of 103%, which includes the $29 million charge for the discontinued New York contractor program. Adjusted for this, the North American combined ratio would have been 97%. Markel International reported a combined ratio of 134%. Excluding the unusual events, and the reserve strengthening of Terra Nova's pre-Markel reserves, it would have been 113%. Finally, discontinued lines reported a whopping combined ratio of 229% bringing total underwriting losses to $294 million.

Clearly these are disappointing and unacceptable results. We are upset not only at the magnitude of the losses we incurred, but also at the need to increase reserves. For years we built a record based on conservative reserving methodologies and we are justifiably proud of our history. Going forward you can rest assured of several things. One, as we have demonstrated, we will not hesitate to take the painful but necessary steps to recognize reserve deficiencies if they arise. Two, we have, worked, and will continue to work diligently to improve the ongoing operations at our international business. And three, we remain committed to conservative accounting and reserving practices. All of these actions should act to rebuild our record of performance over the next several years.

Finally, we think it worth mentioning that Markel has a demonstrated record of improving on our acquisitions as time goes by. All of our purchases have been of companies from the "scratch and dent sale" with less than wonderful financial performance. These were the only sorts of companies that were reasonably priced during our process of building a small insurance broker into an industry leading specialty underwriting organization. While Terra Nova is a bigger challenge than our previous purchases, we are optimistic that our culture and our discipline will ultimately work as well in London as it has in every other circumstance.

Our equity investment portfolio earned a total return of 15.9% during 2001. This was a fabulous result in what was a difficult environment for most investors. Our focus on disciplined, contrarian value investing has served us well for many years now. Reported net investment income increased from $254 million to $171 million despite lower interest rates with the addition of the Markel International portfolio for the full year. Realized gains amounted to $20 million and unrealized gains increased by $76 million for the year. The total return on our investing activities was 8.4%, an excellent result in a tough year.

After interest expense, amortization of goodwill and tax benefits, we reported a net loss of $125.7 million as compared to a net loss last year of $27.6 million. After the increase in the value of our investment portfolio, we reported a comprehensive loss of $77 million or $9.01 per share.

During 2001, total investments and cash increased from $3.7 billion to $3.6 billion and long-term debt and convertible notes payable decreased from $573 million to $381 million. During the year we also issued 2.5 million common shares raising $408 million in new equity to strengthen our financial position.

At year end total shareholders' equity was $1.1 billion or $710.50 per share as compared to $752 million or $102.63 per share the prior year.

North American Operations

Our North American operations enjoyed a strong year as the long-standing skills of our talented underwriters began to be aided by a tailwind of specialty insurance marketplace improvement. Gross written premiums reached the $1 billion milestone, which represented a 41% increase over last year. This improvement accelerated throughout the year and in the fourth quarter, premium volume increased 54%.

Earned premiums for the year were $642 million, an increase of 36%. The combined ratio was 102% as a result of the $29 million adverse loss development from the New York contractors program that

was discontinued in January 2000. We thought we had adequately dealt with this problem last year when we wrote, "the experience was expensive but is now behind us." Despite the fact that we always seek to identify problems quickly and establish conservative loss reserves, we are not always able to succeed. This charge added 5% to Markel North America's 2001 combined ratio.

Our other Excess and Surplus Lines operations enjoyed very good underwriting results with both the Essex E&S unit and the Professional Products Liability unit delivering great performance. The Markel Southwest operation completed its second year of operation very close to its budget and is expected to be contributing underwriting profits in the near future.

Our Specialty Admitted operations finished the year with a combined ratio of 101%. The Specialty Program business at Markel Insurance Company generated underwriting profits while the Specialty Personal business at Markel American Insurance Company reported modest underwriting losses in its property and high performance watercraft products.

Over the years, we have become a leader in the specialty property and casualty business in North America. We have the people, products, relationships and financial strength to take advantage of the current market opportunities. Throughout the past year we enjoyed both price and volume increases which have continued into 2002. The market has turned after many years of cutthroat competition and significant underwriting losses. We expect to apply our knowledge, skill, and underwriting discipline to achieve profitable growth in this marketplace. Our underwriters produced wonderful results for 15 years during progressively softer and softer insurance markets. We think that you can understand why we are optimistic about our future now that the marketplace is turning.

International Operations

Markel International finished the year with gross written premiums of $716 million, earned premiums of $168 million and a combined ratio of 134%. The World Trade Center loss was the single biggest factor. We continue to monitor claims from this event and currently believe that our original loss estimates are sound. In addition, the International operation took a fourth quarter charge in the amount of $20 million to provide for the significantly higher rates to renew marine and energy reinsurance treaties into 2002. Excluding these charges the combined ratio was 113%, which remains unacceptable.

We have accomplished a great deal toward improving our International business. Most importantly, we focused the business on six products where we believe we have, and can further develop, the specialty teams needed to earn consistent underwriting profits. This process unfortunately required the departure of an unexpectedly high number of employees. Some left because they did not like our culture or think they could achieve our admittedly challenging objectives. Others, because we did not think they could adapt. Although this is a difficult and arduous process, we have been through this before with previous acquisitions. We think we made *good* progress in building the Markel Style in London. We believe that we have a team in place to achieve success. We are committed to earning underwriting profits and are taking the necessary actions to achieve this goal.

Our ongoing international underwriting units are Aviation, Marine and Energy, Non-Marine Property, Professional Liability, Retail Professional Liability and Reinsurance and Accident. In addition, we have service companies in the United Kingdom and Australia that sell several of our product offerings. We are seeing significant improvement in the market conditions and as a result we are now enjoying price increases which will help drive future underwriting profit.

Operationally, we have two underwriting entities, Terra Nova Insurance Company's Lloyd's Market insurance company, and Markel Syndicate 3000 (a Lloyd's of London syndicate). We write about 75% of our international business through our wholly-owned Lloyd's syndicates. While we are excited to be part of Lloyd's and believe it has the opportunity to continue and enhance its pre-eminence in the world's insurance marketplace, we also believe that the market must make changes. Some of the changes we recommend include: the end of the annual venture and three-year "reinsurance to close" process; ending inappropriate use of reinsurance leverage and structure; not writing multi-year policies without concurrent reinsurance protection; correctly, properly managed delegated authorities; improving slow policy services and reducing costs; and improved governance, regulation and accounting. Over the past 300 years Lloyd's has built a valuable franchise. Unless it improves its business practices its value could be seriously diminished. We have dealt with these issues within our business and we support Lloyd's reform efforts because a stronger Lloyd's will enhance Markel's opportunities.

Discontinued Lines

Discontinued lines include the run-off business from Gryphon Insurance, from discontinued programs at Markel International, and from the reinsurance business at Cor Insurance, an ongoing operation being held for sale. Gross written premiums from discontinued lines were $54 million with earned premiums of $97 million. Underwriting losses were $125 million or a 329% combined ratio. The major reasons for this loss were the charges for the discontinued motor business ($39 million), increased reserves for asbestos losses ($20 million) and additional reserves for reinsurance collection issues ($25 million). We never expected that the cost of these programs would be as high as they have been. We are continuing to work diligently to manage these exposures as efficiently and effectively as possible and to adequately reserve for all future costs.

Investments

Our approach to investing is an important element of our goal of compounding book value per share over the long term. We believe that sound investing is a critical part of our long-term success and our results in this area clearly distinguish us from most insurance companies. In 2001 we achieved exceptional results in a very difficult investment environment. Our equity returns were 16.9% for the year as compared to a loss of 11.78% for the S&P 500 Index. Our fixed income returns were also favorable as we maintained a high quality portfolio and avoided losses suffered by more adventurous fixed income investors. Total investment returns for the year were 8.4%.

MARKEL

2001

Our investment results over the past 10 years are shown in the following chart.

	One Year	Five Years	Ten Years
Markel Total Return			
Fixed maturities	7.70%	7.50%	7.53%
Equity securities	16.90%	15.40%	15.40%
Market Indices			
Lehman Aggregate Index	8.44%	7.46%	7.23%
S&P 500 Index	-11.89%	10.70%	12.10%
Value Added by Outperformance			
Fixed maturities	(0.74)%	0.07%	0.27%
Equity securities	28.68%	4.70%	4.30%

Our first objective in managing our investment portfolio is to be certain that we can meet our obligations to our policyholders. As a result, policyholder funds are invested in high quality fixed income securities with a similar duration profile as that of our insurance liabilities. Shareholder funds are predominately invested in common stocks where, with sound management, we can earn significantly greater total returns over the long term. We have added value both by outperforming relative benchmarks and by increasing our long term allocation to equity securities. Our total equity returns over the past 10 years averaged 16.50% as compared to the fixed income returns of 7.91%. This additional return on the assets we've allocated to equities has added substantial value to Markel. At year-end we have allocated $544 million to our equity investments and expect this to increase in the future.

We believe we have achieved these results because we have adopted a sound, common sense investment approach. We buy what we believe to be reasonably priced, profitable companies, run by honest and talented management with capital discipline. We want to find companies that we can own for the long term, both to minimize transaction costs and taxes. As a result, our turnover is very low and we've accumulated large unrealized gains in the portfolio.

We are optimistic that equity markets will continue to provide us with opportunities to build shareholder value over time. The volatility that occurs on a regular basis has and should continue to be more of an opportunity than a hindrance in our quest to earn solid investment returns.

Capital Raising

It was a busy year for us in the capital markets. We issued 2.5 million new shares raising $408 million in additional capital. Approximately $245 million of the proceeds were used to reduce our debt. Additionally, we issued a zero coupon convertible note with a 4.25% yield to maturity to repay an additional $100 million. As a result of these transactions, we enjoy a strong financial position. Our ratio of debt to total capital improved to 24% as compared to 39% last year. Despite this balance sheet strength, our ratings with various credit rating agencies are not as strong as our balance sheet alone would support. This is due to our losses, the majority of which were charges reported as the recognition of reserve deficiencies at Markel International from prior to our acquisition. We expect meaningful operating improvements in the future, and as this occurs, our ratings should be stronger.

Tribute

Mark Byrne has advised us that he will not be standing for re-election at our next shareholders' meeting. Mark feels his personal and business commitments prevent him from continuing on our Board. We will miss Mark's advice but thank him for his contributions and support.

Closing Comments

Clearly 2001 was a difficult and disappointing year at Markel. We do not like reporting reserve deficiencies and unusual charges as many other insurance companies did in 2001. While the vast majority of these charges relate to the integration of the Terra Nova acquisition, and should be behind us, we remain embarrassed by these results. In the past we've prided ourselves on our proven track record of being different, and better, than other insurance companies.

We remain optimistic because the things we did differently than the insurance industry at large to build our proud accomplishment remain unchanged. Markel is built upon the consistent values of integrity, long term focus, and conservative accounting. These will never change. Fortunately, the people who make up this organization seem to get better at their jobs the longer they are part of this culture. We are confident that this will be true for our London based colleagues as well and we look forward to earning your continued support.

Alan I. Kirshner
Chairman of the Board and Chief Executive Officer

Anthony F. Markel
President and Chief Operating Officer

Steven A. Markel
Vice Chairman

Darrell D. Martin
Executive Vice President and Chief Financial Officer

From left to right: Alan I. Kirshner, Anthony F. Markel, Darrell D. Martin, Steven A. Markel

2002 TO OUR BUSINESS PARTNERS

Your company is building a premier, specialty, property and casualty insurance organization focused on consistent underwriting profits, superior investment returns and building shareholder value. We're building an organization with a strong corporate culture and sound values, The Markel Style. And it's being built to last.

During the past few years the property and casualty insurance industry experienced the perfect storm. Your company endured these troubled waters and in the same period reorganized and restructured our international acquisition. In this period, we faced challenges larger than expected and our results were less than we would like. In spite of these events, we continued to build the value of your company. And, more importantly, we are positioned to continue to deliver results and achieve our goals.

Net income for the year was $75 million. That's a record. We never thought we'd be disappointed in earning $75 million. But given our capital base our return on equity is below our target and net income per share of $7.65 is below our results in 1996 to 1998. We can and will do better.

Yet in 2000 the good news far outweighs the bad. The North American operations are solid and capitalizing on an ideal insurance environment, our International business is showing solid and continuous progress and our investment activities are performing exceptionally well in a difficult environment. We are positioned to achieve our financial goal of compounding book value per share at a high rate over the long term.

THE PERFECT STORM

The insurance industry sailed through the decade of the nineties on a wave of strong investment returns. Declining interest rates resulted in increasing bond values. At the same

MARKEL

time rising stock prices encouraged equity investing. The result was a soft and very competitive insurance environment typified by lower prices and a loss of underwriting discipline. Insurance companies chased unwise growth but sloppy underwriting and poor pricing were offset with good investment returns. When that was not enough, insurance companies structured transactions that traded future investment income for current benefit to mask the real results, or simply took too optimistic a view when establishing loss reserves.

This environment obviously could not last. During the past three years, the industry experienced a series of events causing substantial losses and shaking its very foundations.

Just as environmental losses associated with toxic waste sites were being resolved, another problem exploded – asbestos. Total costs are estimated to approximate $200 billion and the industry is thought to be $20 billion to $40 billion under-reserved. In the past two years, 32 companies declared bankruptcy and over 600,000 individuals (many people who are not currently sick) are seeking benefits.

Additionally, in many states lawyers and juries turned medical malpractice claims into the newest lottery. Companies specializing in this business left the market, went broke, or sought triple-digit price increases. Doctors in West Virginia, New Jersey and Pennsylvania threatened to strike.

Of course, the claims issues were just part of the problem. Investments also turned sour. Just as equity investing looked like easy money, insurance companies increased their allocations only to catch the bubble at its peak. Since its high in early 2000, insurance companies have lost billions in stock market investments.

And today, investment yields are too low to cover bad underwriting results, much less provide a meaningful return on capital for most companies.

The terrorist attack on September 11th not only shocked the world but also proved that unimaginable events could actually happen. While not comparable to the human loss, the insurance industry suffered economic damages estimated to be $40 billion to $50 billion.

Finally, the industry also participated in losses from the Enron/Tyco/Worldcom corporate governance crisis. Property and casualty companies owned the securities, they wrote the Directors and Officers insurance coverage, and those most creative, joined with banks to provide surety bonds and poorly conceived financial guarantees. Each and every mistake caused billions in losses.

All of this created the perfect storm.

While Markel did not avoid all of these problems, we missed most of them.

Throughout the 90's we avoided the extremes of the competitive insurance market, and instead grew through acquisition. Of course, many of the companies we acquired had problems as a result of their participating in this difficult market. Buying troubled companies and fixing them has been our growth strategy. And it's been effective. Virtually all of the acquisitions we completed continue to get better with age.

On the underwriting side, we've continued our focus on specialty products where we can earn consistent underwriting profits.

On the investing side, we've maintained our equity focus by buying into sound businesses, run by honest and talented managers with capital discipline, all at reasonable prices. Our fixed income investments concentrate on high quality securities, selected conservatively, one by one, from the bottom up. Sticking to this philosophy prevented us from experiencing the investment mistakes made by so many others.

We now look forward to greater success in the aftermath of this perfect storm. Demand for insurance coverage is up, supply is down, and prices are very favorable. We are financially strong and able to take advantage of our current opportunities. More importantly, we have a strong and talented group of professional insurance underwriters who understand how to price and manage risk. Our team of disciplined and experienced people represents our intellectual capital. This intellectual capital, infused with our corporate culture over many years, is our real strength.

2002 FINANCIAL REVIEW

Revenues increased 27% from $1.4 billion to $1.8 billion primarily as the result of the accelerating growth of business in our North American markets where our specialty insurance business enjoyed both price and volume increases. Earned premiums were up 26% to $1.5 billion and our combined ratio was reduced to 103%. While still not at the desired level of underwriting profit, we did achieve this goal in the fourth quarter with a combined ratio of 99%. For the year our North American operations had a combined ratio of 44% and International reported a combined ratio of 107%. International results improved each quarter as earned premiums from business properly priced and underwritten flowed through our financial statements. This trend is encouraging. Discontinued business and developments from our exposure to asbestos claims added $69 million in underwriting losses. This is obviously disappointing and we are doing everything we can to avoid the repetition of these events.

Total investment return for the year was a quite acceptable 8.3%. Equities were down 8.8% and fixed income securities were up 9.8%. While it's tough to be happy with negative stock returns, we outperformed the major indexes by a wide margin and we remain confident in our investing philosophy. Investment income was flat with last year at $170 million as lower yields offset the growth in the size of our portfolio. We realized $61 million in gains from the sale of securities as we repositioned segments of our investment portfolio. Unrealized gains increased by $5 million as the impact of lower interest rates increased the value of our fixed income securities more than declining stock values hurt our equity portfolio. Foreign currency adjustments had an adverse effect of $7 million.

Net income in 2002 was $75 million and comprehensive income was $73 million as compared to large losses last year.

During 2002 total investments and cash increased to $4.3 billion from $3.6 billion a year ago. This is a $723 million increase or 20%. On a per share basis, cash and investments at year end amounted to $639 as compared to $566 last year. In accordance with new SEC rules, this data is no longer included on pages 30 and 31 of our annual report. However we feel that this information is useful in the evaluation of our company.

After a busy year in the capital markets in 2001, we were very quiet in 2002. We borrowed $140 million under our bank facility to repurchase $95 million of our short term convertible notes and to provide adequate capital to our businesses for their 2003 plans.

Shareholders' equity increased to $1.9 billion. Year-end book value was $158 per share, up only 5.7% from last year. In the past 5 years we have compounded book value per share annually by 13% and in the past 10 years by 19% (including the effect of stock issuance).

NORTH AMERICAN OPERATIONS

In 2002 gross written premiums reached the $1 billion mark, an increase of 41%, and a milestone for our North American operations. The specialty market turned after a long

period of cutthroat competition. While we knew the outlook for 2002 was bright, we did not expect to see the 55% growth to $1.6 billion that we achieved. We are convinced that growth will continue at a very good rate for the foreseeable future, but not at the extraordinary rates seen in the recent past.

Earned premiums for the year were $1 billion, up 49% from last year. Most importantly, the combined ratio declined from 102% in 2001 to 95% in 2002, as the increased volume helped reduce the expense ratio and improved prices reduced the loss ratio. In the current environment, we expect our underwriting profit to grow.

Our North American operations were not perfect, however. We experienced some further adverse loss development in our casualty business at our Brokered Excess and Surplus Lines division and some underwriting problems with our property business in Markel Southwest. Our Specialty Admitted business achieved an underwriting breakeven. While this may have been acceptable in a higher interest rate environment that is no longer the case. To achieve our financial objectives in today's interest rate environment, we require a few points of underwriting profit.

The combination of growth and improved pricing led to exceptional results at our Essex Excess and Surplus Lines and Professional/Products Liability divisions. Throughout our North American operations, our talented and experienced underwriters responded to the needs of our clients by providing quality, specialty insurance solutions to their problems as standard insurance markets cancel and non-core business that they find difficult to manage. We expect this environment to continue.

In the fourth quarter we announced that John Latham joined us to develop Markel Re. John possesses wonderful experience in the business, including a prior stint with us. As a past president of the National Association of Professional Surplus Lines Offices (NAPSLO), bringing John back to Markel means that we now have four past presidents of this leading industry association among our associates. Markel Re will focus on the excess casualty market, both on a direct and a facultative reinsurance basis. We expect it to be up and running in the second quarter of 2003.

At year end the Terrorism Risk Insurance Act became law. This law voided previously issued exclusions for terrorism and required companies to offer coverage for this exposure. The federal government became a reinsurer of the industry for 90% of claims in excess of $10 billion. While the act raises many problems and concerns, the insurance industry needs to learn to live with it. In compliance with this act, we have offered our clients terrorism coverage for a price and the option to accept a terrorism exclusion. We do not expect that many of our clients will choose to buy the coverage. However, as long as we can manage this risk and charge an appropriate premium, we are happy to provide the coverage.

INTERNATIONAL OPERATIONS

Markel International concluded the year with $692 million in gross written premiums, $569 million in net earned premiums and a combined ratio of 107%. These results represent significant progress from last year when we reported a combined ratio of 134%. Throughout the year we showed progressively improved results as business put on the books over the past two years has been more soundly underwritten and better priced. Starting in the first quarter the combined ratio was 110% and it improved to 107%, 106% and 104% in each successive quarter. While we are behind our original schedule, underwriting profits are on the horizon.

We originally entered the International market in March 2000 and in the past three years accomplished a great deal. We

focused our business in several specialty product areas and offer our clients security in either Markel Syndicate 3000, our syndicate at Lloyd's of London, or Markel International Insurance Company Limited, which formerly operated as Terra Nova Insurance Company Limited. By putting the Markel brand on our London businesses, we are demonstrating our long-term commitment to this market as well as recognizing that this business has truly become an integral part of the Markel organization.

The market environment for our International business is very similar to the opportunities we face in North America. Underwriting discipline and improved pricing have returned to the market. We reduced our gross premiums as we restructured our business in 2002, but are now looking at opportunities to grow, develop and take advantage of more favorable market conditions in 2003.

DISCONTINUED LINES

While significantly smaller than last year, we still had to absorb $69 million in underwriting losses from discontinued lines. Several items contributed to this loss, however, most significant was an increase in our reserves for losses associated with asbestos claims. For many years we built our claims models by looking at and trying to understand our total exposure by reviewing individual policies and claims from the bottom up. In the fourth quarter of 2001 we completed an in depth study of exposures from our International business and increased reserves as we thought appropriate. At the time we believed our North American reserves were adequate. During the past year, events worsened as more claims have been brought, particularly by non injured claimants. Also, more companies declared bankruptcy, negatively impacting our ability to defend asbestos claims. As a result, we increased reserves (mostly in North America) in the third quarter of 2002. While our asbestos exposure is both material and significant, our companies were not major insurers during the period when most exposure existed and as a result we are a minor player in the asbestos quagmire.

Corifrance is our French reinsurance company and its results are included in discontinued operations. The company has not been discontinued. Corifrance net earned premiums were $26 million in 2002 with very satisfactory results as the reinsurance market enjoyed improved pricing and fewer claims. The company's results are included in this category, as we hold the business as available for sale. We had and have no intention of giving the business away, and have obviously not yet sold it. Corifrance is a solid company and its management team is well disciplined in its focus on underwriting profitability.

INVESTMENTS

We believe that sound investing is a critical part of our long-term success and our performance in this area clearly distinguishes us from most insurance companies. In 2002 we earned a total return of 8.3% on our investment portfolio. This is a very good result in a very difficult market. We lost 8.6% in our equity investments, which, while disappointing, is much better than the 22% loss in the S&P 500 Index. We do not manage against this index nor do we think in relative terms. Likewise, we do not expect equity returns to be smooth and always up. We do expect equities to provide good, long-term total return to our portfolio. Our fixed income securities provided a total return of 9.8%, which was in line with the comparable indexes. We avoided all of the credit problems of the technology, telecommunications and energy trading businesses of the past years as we have consistently focused on high quality credits assessed individually one at a time.

Our investment returns over the past 10 years can be seen in the following chart.

	One Year	Five Years	Ten Years
Market Total Return			
Fixed maturities	9.80%	8.01%	8.00%
Equity securities	(8.80%)	6.80%	11.20%
Market Indices			
Lehman Aggregate Index	10.26%	7.58%	7.51%
S&P 500 Index	(21.96%)	(1.15%)	9.08%

We have added significant value by following a sound investment discipline. We don't think of our investments as paper to trade, but rather as equity ownership of real businesses. Our success in investing is a direct result of the success of the businesses we own.

For the past few years we have had a lower than normal allocation to equities. This was due to several factors. Our portfolio doubled in size with the Market International acquisition in 2000, we needed to focus on building the balance sheet as we absorbed losses related to this acquisition, and we had trouble finding great opportunities in equities as stock prices soared. At year-end our equity portfolio is $591 million and represents 13% of our total portfolio and 48% of total shareholders' equity. This remains lower than we would normally prefer as we think as much as 20% to 25% of the portfolio or 75% to 80% of shareholders' equity can reasonably be allocated to equity investments. While we have no need to rebalance immediately, we are increasing our allocation at a time when we believe we can find quality opportunities at favorable prices. We have no idea whether or not 2003 will prove to be the fourth consecutive year of substandard equity returns. We do believe that for those with a long-term time horizon, it's a great time to invest in American businesses.

We will always need to have a large part of our investment portfolio in fixed income securities in order to meet future claims liabilities as they come due. We are very mindful that with current interest rates being relatively low, we face the risk of declining value in fixed income securities should interest rates increase. This is a difficult risk to completely avoid, however, we will be cautious in the duration of our bonds thereby minimizing this exposure.

BALANCE SHEET / CAPITAL ISSUES

Along with the strong growth in written premiums in 2002, we enjoyed a 20% increase in our total investments and cash to $4.3 billion. This increase totals $723 million and is the result of operating cash flow of $507 million, increased debt of $102 million that was used to provide capital to our insurance companies to support their future growth and foreign currency increases. At year-end investments and cash are 3.7 times as large as shareholders' equity as compared to 3.3 times a year before. This increase in investment leverage is important to our financial model.

Sound loss reserving is critical to our success. Our goal is to set reserves at a level believed to be more likely redundant than deficient. In 2002 there were several areas where we failed to achieve this goal. We increased reserves for asbestos, other discontinued business, as well as for casualty losses in our Brokered E&S division. In setting loss reserves we attempt to add a margin of safety on current year business reserves by discounting the impact of current price increases and looking cautiously at new business. Reserving is more art than science and no matter how diligent we are, is subject to unknowable future events. We believe our year end reserve level is meet our goal.

We do not normally comment on unearned premium reserves, however, given the embedded equity included in these

reserves we think it is appropriate to do so. At year-end gross unearned premiums were $937 million. Net unearned premiums were $718 million. These amounts will be earned over the next year. Given the recent price increases as well as our recent underwriting performance, we expect that barring any major earthquakes, hurricanes or other unusual events, future profits will be earned from this unearned premium.

At year-end shareholders' equity advanced to $1.7 billion or $116 per share. Growth for the year was only 6.7%. We need to do better and we will. As we demonstrate our operating strength with consistent underwriting profitability, we will grow our capital base at a faster pace.

In February 2003, we issued $200 million of ten year notes. Proceeds will be used to repay our bank debt and partially pre-fund debt maturing later in the year. This issuance extended our debt maturities and enhanced our liquidity. We enjoy a strong financial position and we have enough capital to support our current business plans.

CORPORATE GOVERNANCE

Corporate governance issues have become an important topic and one worthy of a few comments. Early in our days as a public company (and even before) we gave a great deal of thought to building, developing and maintaining good relationships with our shareholders. After all, our shareholders were family, friends, and neighbors as well as institutional investors.

For many years, Berkshire Hathaway has published in its annual report a list of "owner-related business principles." The first, and one that we have tried hard to duplicate, states, "Although our form is corporate, our attitude is partnership. [We] think of our shareholders as owner-partners. . . We do not view the company itself as the ultimate owner of our business assets but instead view the company as a conduit through which our shareholders own the assets." In a further discussion of this principle the report says, "[We] hope that you do not think of yourself as merely owning a piece of paper whose price wiggles around daily... We hope you instead visualize yourself as a part owner of a business that you expect to stay with indefinitely... For our part, we do not view Berkshire shareholders as faceless members of an ever-shifting crowd, but rather as co-venturers who have entrusted their funds to us."

This principle, if followed, would eliminate any concern about corporate governance. Treat your shareholders like you would want to be treated if the roles were reversed. Of course, that's a lot easier for us because we are fortunate to have "share-owners" who are with us for the long term as opposed to "share-renters" who are just trying to catch a wave.

As a result of the recent abuses we now will be forced to live with new laws and regulations intended to improve corporate governance. Unfortunately, some will follow the letter of these new rules and do nothing to live up to the spirit behind them. Likewise, many of these requirements will add cost without any benefit and in some cases will undoubtedly make governance worse.

Fortunately, we have always met the spirit of sound corporate governance and we do not need to change our philosophy. We have always believed our shareholders should get their fair share of the business returns and not be exposed to any management "haircut." We decided not to issue dilutive stock options many years ago. Our bonus plans are logical and rational and correctly align our associates' performance with shareholder value. They are fair for both associates and shareholders. Our stock loan plan has enabled associates to acquire reasonable amounts of stock and pay for it over an appropriate term at attractive interest rates. We have not forgiven shareholders. The plan is far more shareholder friendly

than option plans. Unfortunately, your executive officers and directors will no longer be able to participate in these plans. It seems inconsistent that under the new rules option plans are allowed, yet loan plans are not. An option plan is the equivalent of an interest-free loan where the beneficiary can walk away from repaying the principal.

In our efforts to begin complying with both the spirit and the letter of new requirements, we are pleased to have added Jay Weinberg as an independent director to our board. Jay is Chairman of the Hirschler Fleischer law firm in Richmond, Virginia. For those of you from the Richmond area, you may already be aware of Jay's well-deserved reputation for excellence and integrity. We believe he will add real value to our board and we are gratified he has agreed to join us.

We will continue to respect our shareholders and their capital. We recognize that it is our obligation to earn a fair return on that capital.

THE FUTURE

Our company is truly in a unique position to benefit from the changes in the insurance world, as well as to capitalize on our investments over the past several years. Insurance prices are strong and look to stay that way for some time. Standard insurance markets continue to tighten their belts and send more business to specialty carriers. Our reserving and accounting practices reduce (not eliminate) the potential for unfortunate surprises. Our growing investment portfolio and strategy bode well for future prosperity. We've built one of the best teams in the industry and have the intellectual capital necessary to compete successfully. And our shareholders know that they will get fair treatment.

We owe a huge thank you to all of the Markel associates who have helped make our dreams a reality and who work and

ve to continue our commitment to success. As always, we thank you, our shareholders, for your continued support.

Alan I. Kirshner
Chairman of the Board and Chief Executive Officer

Anthony F. Markel
President and Chief Operating Officer

Steven A. Markel
Vice Chairman

Darrell D. Martin
Executive Vice President and Chief Financial Officer

From Left to Right: Alan I. Kirshner, Anthony F. Markel, Darrell D. Martin, Steven A. Markel

TO OUR BUSINESS PARTNERS

We enjoyed a very good year in 2003 and achieved record results. However, in our ongoing effort to thoroughly communicate with you, our partners, we will attempt to fully discuss both the good and the bad of 2003.

First, here is some of the good news. Gross written premiums grew 16% to $2.6 billion, most business units earned exceptional underwriting profits, investments and cash reached a record $9.3 billion and net income totaled $122 million. Our investment returns were superior with equity investments earning a 31% rate of return. Book value increased 15% to $[illegible] per share.

Despite this good news, the year included some disappointments as well. We suffered adverse loss development in three areas resulting in charges amounting to $181 million. Given the magnitude of these charges, we are pleased to have achieved a modest underwriting profit for the company as a whole.

The bad news in 2003 included the recognition of significant loss reserve deficiencies at our Investors Bond and Excess and Surplus Lines units. While we pride ourselves on disciplined underwriting and conservative loss reserving, we clearly missed the mark in this business unit as we increased reserves, primarily for the 1997 to 2000 accident years, by $91 million during the year. We believe the underwriting and pricing issues identified in 2003 were resolved over the past two years as market conditions significantly improved. Our

MARKEL

internal claims review is complete and we believe the current business is well priced and underwritten and reserves on all periods are adequate. This experience reminds us that even in our culture of conservative reserving and underwriting, constant vigilance is a necessity.

Additionally, asbestos claims continued to be an expensive issue for Markel. We are fortunate that we and the companies we acquired were only minor players when asbestos exposures were written by the industry. Our market share in the pre-1986 period was less than 1%. We wish it were even less. As a result of our modest participation, we are not in a position to control what seem to be totally irrational claim settlements. While it is true that on an individual basis a plaintiff and his attorney may hit the lottery with an insurance claim, in the aggregate, the cost of claims is ultimately recycled in the form of future insurance premiums. There are no free lunches. We are fortunate, however, that we are participating in today's market on a much more rational way as industry pricing recovers the losses from these frustrating events. The problems with asbestos as well as other tort reform issues are now on the agenda of Congress and many state legislatures and we hope for improvement in the current system.

Finally, discontinued business and prior year development in Markel International were also a drag on our 2003 results. Although you can never be completely confident about ultimate results early on, we feel extremely good about our risk selection and pricing in the most recent years and look forward to the day when we will be sharing better news about Markel International's success.

We set high standards and goals for ourselves, and are naturally disappointed when we fail to achieve them. 2003 was a very good year, but it could have been a great year. Nevertheless, we remain proud of our long, robust record of compounding book value and are optimistic about our ability to continue to do so.

2003 FINANCIAL REVIEW

Now for some more about the good news.

Revenues increased 19% from $1.8 billion to $2.1 billion as we continued to enjoy growth in both price and volume of our business. Earned premiums increased 20% to $1.9 billion and, more significantly, our combined ratio was 99%. While smaller than we would like, we are pleased to report an underwriting profit, our first since the acquisition of Gryphon and Markel International.

Total investment returns for 2003 were 10.5%. Our equity returns were 4.1% while fixed income securities earned a 4.5% return. Investment income increased 7.3% to $166 million as the average size of the portfolio grew to $4.8 billion. Net realized investment gains were $45 million and the change in gross unrealized gains was $147 million. These results represent an excellent year for our investment operations and

demonstrate the importance and value of superior investing activity for our business.

Net income was a record $123 million, up from $75 million in the prior year, or $12.52 per diluted share as compared to $7.65. Comprehensive income was $222 million as compared to $73 million last year.

During the year investments and cash increased by $1 billion to $5.3 billion at year end. In addition, during the year we steadily increased our allocation to the portfolio to equities and last year and have $969 million invested in great companies.

Shareholders' equity increased to $1.4 billion. Year end book value per share is $141, up 15% for the year. In the past 5 years we have compounded book value per share annually by 13% and in the past 10 years by 15% (including the effect of stock issuance).

EXCESS AND SURPLUS OPERATIONS

Gross written premiums in 2003 for our Excess and Surplus segment were $1.5 billion which represents a 35% increase over the prior year. We continued to have more opportunities to write business and at higher prices, although the rate of increase was at lower levels than we experienced in 2001 and 2002. While we believe price increases will moderate, we expect the market to continue to be very favorable. It is important to emphasize that our current prices should generate good underwriting results.

Excess and Surplus earned premiums increased 24% to $1.3 billion reflecting the strong growth in written premiums in prior years. More importantly, the combined ratio was 91% despite the development at Investors compared to last year's very respectable 93%.

Each business unit in our Excess and Surplus segment is participating in a very favorable insurance environment. Premium volume, pricing and underwriting profits are attractive throughout the segment. Our talented and experienced underwriters are continuing to respond to the needs of our clients by providing quality specialty insurance solutions.

SPECIALTY ADMITTED OPERATIONS

Our Specialty Admitted segment also had an excellent year as gross written premiums increased 15% to $271 million, earned premiums increased 17% to $235 million and the combined ratio declined to 90%. Price levels achieved in the past few years along with our underwriting focus are providing sound underwriting profits. The marketplace for this segment continues to provide a positive platform for both organic growth in our current niches and for new product development and expansion opportunities.

LONDON INSURANCE MARKET OPERATIONS

For 2003, Markel International wrote $736 million in gross written premiums, an increase of 12% over last year.

Earned premiums were $575 million with a 118% combined ratio which was slightly better than the 107% reported last year. Unfortunately, underwriting profitability still eluded us as in the fourth quarter we recognized $15 million in adverse loss development from prior years. Throughout the past three years we have seen progressively better underwriting results from new business that we put on the books. We continue to be dedicated to a conservative loss reserving discipline. We also continue to resolve old issues and we are cautiously optimistic regarding the profitability of the current business.

In 2003, we changed the management team at Markel International. Gerry Albanese moved to London to become President and Chief Operating Officer after serving as extremely well as the chief underwriting officer of the Shared Professional Products Liability operation. Additionally, Richie Whitt joined Gerry as Executive Vice President and Chief Administrative Officer having previously served the company as our Corporate Controller and Treasurer. Gerry and Richie have combined 30+ years at Markel and relocate the Markel Style to London. Their presence in London demonstrates our commitment to Markel International. They are off to a strong start, our London associates are excited, and we are confident that our team in London will be successful.

Business in the London Insurance Market segment is showing continual improvement and we expect underwriting profits and solid returns on our capital. We will never underwrite business just to generate cash flow and have not yet reported underwriting profits. However, it is important to point out that Markel International has a growing investment portfolio which reached $2 billion in 2003. While we do not allocate investments for purposes of segment reporting, we should not forget that the returns on the investment portfolio mitigate the impact of underwriting losses.

OTHER

"Other" includes programs and lines of business related to previous acquisitions which have been terminated or placed into run off. It also includes certain matters involving disputes and litigation. The majority of this business is related to our acquisition of Markel International in March 2000 when we discontinued about 40% of the then existing business. Other also includes our exposure to environmental and asbestos claims which were acquired with our purchase of Evanston Insurance Company in 1996, Associated International Insurance Company in 1999 and Terra Nova Insurance Company in 2000. Finally, included in this segment is the operation of our French reinsurance company, Markel Scor, which while small, is operating with good underwriting results.

During 2003, we made meaningful progress in resolving a number of outstanding issues involving our exposures in discontinued programs; however, in doing so we discovered that it was necessary to increase our reserves by $75 million

Of this amount, $55 million was for asbestos and $20 million for several other discontinued programs. We cannot precisely forecast when these legacy issues will cease, but we trust that we are effectively managing this process.

INVESTMENTS

Our business model emphasizes the importance of superior investing, significantly more so than most insurance companies. Having a disciplined approach to investing and managing investments to achieve sound returns adds significant value for Markel shareholders. In 2003, we earned a 11.5% tax-equivalent total return, including the effects of foreign currency, on our investments where equities returned 31% and fixed income securities returned 4.5%. Given the environment, this was a truly superior investment performance. The following chart shows our performance over the past year, as well as 5- and 10-year periods, and compares our returns to those achieved by standard market indices. We do not manage against an index nor do we think in relative terms, however, the comparison does demonstrate the value added by our approach to investing over long time frames.

	One Year	Five Years	Ten Years
Markel Total Return			
Fixed maturities	4.50%	7.02%	7.20%
Equity securities	31.20%	12.20%	15.10%
Market Indices			
Lehman Aggregate Index	4.10%	6.52%	6.95%
S&P 500	28.37%	(1.56)%	11.56%

Over the past year we continued to shorten the duration of our fixed income portfolio as we fear an bury of increasing interest rates. We believe interest rates are more likely to move up than down and we are unwilling to stretch for yield by either extending the duration or giving up credit quality. The relatively low interest yield on fixed income securities also makes the choice to allocate more funds to equity securities easier. While maintaining our high quality and relatively short duration portfolio, we are pleased with our performance.

It is important to think about our investment returns in dollar terms rather than just percentages. Over the past decade, our investment decisions regarding equity allocations, as well as specific security selections, have added literally hundreds of millions of dollars to shareholders' equity.

During the year we steadily increased our allocation to equities. A year ago equities were $551 million or 13% of the portfolio and 46% of shareholders' equity. Today we have $969 million in equity investments which is 18% of the portfolio and 70% of shareholders' equity. This increase results from higher equity allocation has discussed in last year's report because we found more quality opportunities at favorable prices and the value of what we owned increased. Additionally, our insurance operations are generating significant cash flow with very good margins, which provides capital and regulatory flexibility to increase our equity portfolio.

At year end the total unrealized investment gains before taxes were $417 million. After providing for the deferred tax

liability in the amount of $145 million, the net unrealized gains included in book value were $277 million. It is important to note that the deferred tax will not be paid until and unless the individual securities are sold and the gain realized. The ability to defer this tax payment for a long time (maybe forever) is an important benefit. It is very much like having an interest free loan from the government. It is one of the reasons we prefer unrealized gains to those we realize and why we prefer to invest in good companies which we can own for the long term. And, of course, it is an additional reason why we measure our success by looking at growth in book value per share over the long term. Our equity portfolio turnover is typically less than 10%. This is quite unusual in the institutional investment world where turnover is frequently well in excess of 100%.

BALANCE SHEET/CAPITAL ISSUES

Investments and cash grew 24% to $5.2 billion from $4.3 billion last year. The $1 billion increase is primarily the result of $631 million in operating cash flow, $142 million in increased unrealized gains in the portfolio, and an increase in net borrowings of $115 million. Our investment leverage (the ratio of investments and cash to shareholders' equity) was 3.9 to 1.

As previously discussed, we increased loss reserves for prior years' expenses by $181 million. At the same time we recognized net favorable prior year development of $52 million. This softened the impact of the bad news and the net adverse development for the year was $129 million. We continue to maintain our long standing policy of seeking to establish loss reserves at levels which we think are more likely to be redundant than deficient.

At year end shareholders' equity grew 19% to $1.4 billion or $140 per share. We are well capitalized to achieve our growth/increase plans.

It is absolutely crucial for any insurance company to maintain a strong financial position to honor the promises it makes to its policyholders. At Markel, we firmly believe we offer our clients the security and financial protection they need through the combination of our sound underwriting, diligence in establishing loss reserves, superior investing and our strong capital position.

CORPORATE GOVERNANCE

Corporate governance issues continue to be an important topic. This is nothing new to Markel. To quote Barbara Mandel, "we were country when country wasn't cool." We believe we have always met the true spirit of sound corporate governance in making good decisions, treating all shareholders fairly and fully disclosing all important aspects of the Company's business and operations. To comply with the most recent regulatory requirements which dictate that a majority of the board be independent directors, Tom Clayton, Gary Markel and Darrell Martin will not stand for re-election as directors at the next annual shareholders' meeting. As a result,

our Board will be comprised of 7 directors, 4 of whom are independent. Tom, Gary and Darrell have been valuable directors and have represented our shareholders well. While they will not continue to serve as directors, their voices will continue to be heard by the Board. Additionally, Tom and Paul Springman will join the expanded executive management committee.

While many of the new regulations are well intentioned and seek to achieve admirable goals, these rules cannot guarantee honesty and integrity. Unfortunately, these new requirements will add bureaucracy and cost and the ultimate benefit is not clear. We estimate that in 2004 we will spend as much as $3 million to comply with these new procedures. While we will clearly have additional paper, procedures, flow charts and documentation, it is important that the additional bureaucracy not get in the way of good decisions.

At Markel we believe we have consistently met both the letter and the spirit of the law in providing full and complete disclosure. We have reported all the news, both good and bad, in an honest and forthright manner. More importantly, we have always treated our shareholders as our business partners, as in fact they are.

THE FUTURE

The insurance industry experienced 10 years of soft pricing and poor underwriting before the market began to turn in 2002. After only two full years of a truly "hard" insurance market, many are forecasting the next turn. While price increases are starting to slow, they are still going up with only a few exceptions. As the year unfolds there will undoubtedly be additional examples of a more competitive insurance environment. We will not enjoy the "hard market" forever. But having said that, we believe we are more likely to see a "good" market for some period — maybe several years. Industry wide balance sheet problems continue to exist, the asbestos problem has not gone away and investment yields in the fixed income markets do not justify irrational cash flow underwriting. We expect the favorable market conditions to last a while longer, but even more importantly, we believe we can earn good returns throughout all market cycles.

In 2003, we earned only a modest underwriting profit as several disappointments offset some truly remarkable underwriting results. In 2004 and in future years, we will be looking for solid underwriting margins as well as superior investment returns to drive our growth in book value.

Over the long term we've achieved significant success in spite of our share of things that have gone wrong. Clearly we've done a lot more things which have proven to be successful. While we will strive to make fewer mistakes, do more things right and fix our mistakes as quickly as we can, we will not avoid all risk, take no chances and stand still. We will continue to seek out challenges and capitalize on new opportunities.

We believe that the best way to learn to ride a bike is to get on it and start pedaling. The bruises and scrapes we encounter along the way are an inevitable part of building our successful organization.

OUR ASSOCIATES

One of Markel's greatest strengths is our wonderful and talented team of some 1,700 associates. While making important contributions to their individual business units, they have also been available and willing to pitch in with company-wide projects and needs. Examples include the design and implementation of our global financial system, the work of our multi-unit peer claims review team and various joint projects involving both our U.S. and international associates. Our associates embody the Markel Style each and every day. In an effort to continue to build and enhance our human capital, we recently established more extensive in-house training and career planning programs which will help cultivate and develop our outstanding associates.

In closing we would like to thank all Markel associates who have worked tirelessly to serve our clients as well as our shareholders and have achieved great results. Likewise we thank our shareholders who have entrusted their capital with us.

Alan I. Kirshner
Chairman of the Board and Chief Executive Officer

Anthony F. Markel
President and Chief Operating Officer

Steven A. Markel
Vice Chairman

Darrell D. Martin
Executive Vice President and Chief Financial Officer

From left to right: Alan I. Kirshner, Anthony F. Markel, Darrell D. Martin, Steven A. Markel

2004 TO OUR BUSINESS PARTNERS

Markel will celebrate its 75th anniversary in 2005. Sam Markel founded the company in 1930 with many of the business values we embrace today; values that are timeless and will continue to guide us for the next 75 years. We went public in 1986 and built one of the strongest specialty property and casualty businesses in the United States. In 2000, we expanded our base internationally more than doubling the size of our business. Long-term business success is the result of many factors including good luck. In our case, we attribute much of our success to having great people who focus on the Markel Style, which defines our common values, and our Commitment to Success. While much transpired during our first 56 years, here's what we have accomplished as a public company:

Year	Shareholders' Equity	Book Value Per Share
	($ in 000's)	($)
1986	14,790	3.42
1987	20,129	4.66
1988	45,414	9.22
1989	60,447	11.69
1990	54,659	10.27
1991	83,137	15.59
1992	109,342	20.24
1993	150,678	27.83
1994	138,501	25.71
1995	213,442	39.37
1996	268,335	49.16
1997	356,804	65.18
1998	425,301	77.02
1999	383,419	68.59
2000	752,372	102.63
2001	1,085,108	110.50
2002	1,159,111	117.89
2003	1,382,279	140.38
2004	1,656,503	168.22

This represents a 24% compound annual growth in book value per share since 1986.

Results for 2004 set many records. Earned premiums exceeded $2 billion with a combined ratio of 96%. Net income for the year was $165 million; comprehensive income was $273 million and shareholders' equity grew to $1.7 billion or $168.22 per share. Growth in book value per share over the long term is our overriding financial goal. We enjoyed compound annual growth of 20% over the past one-year and five-year periods and 21% compound annual growth over the past 10 years.

We achieved these results in spite of approximately $80 million of losses from the Florida hurricanes. The 2004 hurricanes were worse than we've seen in many years, but certainly less severe than if they had hit major metropolitan areas. We should also point out that our results were favorably impacted because we had no major earthquakes, hail storms, typhoons or other exceptional losses. The disastrous tsunami in Southeast Asia, which resulted in minimal financial losses to us, reminds us of the magnitude of potential exposures that do exist.

The very nature of our business is that in most years our results will be adversely impacted by one event or another. We learn to expect the unexpected. We hope that not too many bad things will happen at the same time. And we manage our exposure by having a large and diverse book of business across many products and locations. While many would like to see smooth and steadily improving results year after year, the reality is that our business is lumpy. Fortunately, over time, we have managed these risks well and earned solid returns on capital. The result can be seen in our long-term growth in book value per share. We continue to be dedicated to increasing book value per share at a high rate over the long term and remain optimistic that we will be able to do so.

2004 FINANCIAL REVIEW

Revenues increased 8% to $2.3 billion as insurance industry pricing stabilized from the extremely rapid rate increases of 2001 to 2003. Earned premiums increased 10% to $2.1 billion. Gross written premiums declined 2% while net written premiums increased 4% as we continued to decrease our reliance on reinsurance. The higher rate of growth for earned premiums represents the lag effect of earning premiums over the policy term. Most significantly, underwriting profit improved as the combined ratio declined from 99% in 2003 to 96% in 2004.

Taxable equivalent total investment return for the year was 7.9% with equity returns of 15.2% and fixed income returns of 4.8%. Investment income increased by 12% to $204 million as the portfolio increased from $5.3 billion to $6.3 billion. During the year we increased the allocation to equity securities to $1.3 billion or 21% of the total portfolio. The fixed income portfolio remains short in duration and very high in quality due to our concerns about the possibility of higher interest rates in the future.

Our record results are a reflection, in part, of the underwriting discipline possessed by each of our eight business units. While we aggregate our business units into three reporting segments for financial reporting purposes, each business unit contributes to our success.

EXCESS AND SURPLUS OPERATIONS

Our Excess and Surplus Lines segment produced record underwriting profits of approximately $148 million during 2004. A summary of significant highlights for each operating unit in this segment follows.

Essex Excess and Surplus Lines. Our flagship operation, the Essex Excess and Surplus Lines unit, will celebrate its 25th anniversary during 2005. Essex has historically been one of the most profitable excess and surplus lines companies in the industry and 2004 was certainly no different. Our contract property and contract casualty divisions have produced excellent profits and, in spite of the four Florida hurricanes, our conservative underwriting approach to catastrophe exposed business also produced an underwriting profit this past year. Our other specialty products including inland marine, ocean marine, transportation and railroad were all solidly in the black. This was an exceptional year for this team of professionals.

Shand Professional/Products Liability. Our professional liability underwriting arm, the Shand/Evanston group, had equally exceptional results. Over the past decade, Shand has

become a market leader in employment practices liability coverages for the small to mid-size buyer. Our disciplined approach, loss control and safety engineering services and educational seminars set us apart from the vast majority of the competition. Our claims-made products liability business produced significant underwriting profits in every year but one since 1990. Our medical malpractice portfolio consisting of physicians with special needs and new and emerging medical technologies, which we call specified medical covers, have combined to become a major portion of the Shand product mix. With the retrenchment of other medical malpractice insurers over the last few years, Shand has become known as a problem solver and leader in this arena.

Investors Brokered Excess and Surplus Lines. In spite of the adverse development recognized at Investors, we believe our prospects for the future have never been brighter given the new leadership in place at this operating unit. Both our excess and umbrella and our primary casualty books of business have been re-underwritten over the last couple of years and we have confidence in the future profitability of these products. Our property business has been a consistent money maker in every year since our 1996 acquisition. Our newer products including various environmental coverages and our taxi business have established excellent track records during their short tenure and should produce underwriting profits for us well into the future.

Markel Southwest Underwriters. This operating unit became part of Markel in early 2000. The first two years under Markel ownership, we retooled this business unit, completely overhauling the underwriting and claims approaches from the business that we acquired. In each of the three subsequent years, margins have improved. We are extremely proud of the progress that our Scottsdale team has made. They have been able to duplicate the success of our excess and surplus lines businesses by providing superior products and services to the wholesale brokerage community.

Markel Re. Our casualty facultative reinsurance operations, started in the fall of 2002, have established a name and presence for themselves in today's marketplace. Their individual account underwriting approach and focus on bottom line profitability have assisted us in maximizing market opportunities. SMART (Specialized Markel Alternative Risk Transfer) was added to Markel Re in the summer of 2003. Our seasoned team has national recognition and we are confident that their disciplined underwriting approach will benefit Markel over the long term.

SPECIALTY ADMITTED OPERATIONS

Our Specialty Admitted segment also had record results, producing underwriting profits of $38 million in 2004.

Markel Specialty Program Insurance. This underwriting unit has produced profits in 9 of the last 10 years. We are clearly a market leader in many of our core property and casualty products including camps and daycare. Our devotion to safety and loss control engineering services as well as our exceptional attention to customer service requirements has served us well for many years. Our agriculture/equine portfolio also performed well above our profit expectations. This group of commercial lines specialty coverages is, in many ways, unique to the industry. We aim to expand our product mix in 2005 while maintaining our underwriting integrity.

Markel American Specialty Personal and Commercial Lines. Our personal lines specialty unit, located in Pewaukee, Wisconsin is one of Markel's technology success stories. More than two-thirds of the motorcycle accounts written this past year were sold over the Internet. Our bike-line.com site has been operational for 5+ years with many enhancements added along the way. Customers can easily access the site at their convenience receiving quotes, binding coverage and paying for their policies all online.

LONDON INSURANCE MARKET OPERATIONS

While not yet reporting underwriting profits, our London Insurance Market segment produced approximately 28% of our 2004 gross premium volume. We believe our London operations provide an excellent opportunity for international expansion and we are increasingly confident that they will produce the same strong underwriting performance we achieve with our U.S. operations.

Markel International. When we purchased what was then known as the Terra Nova Group in March 2000, we anticipated that we would be dealing with the legacy issues and the run off liabilities associated with any 30+ year old organization for the first few years of our ownership. While that is exactly what transpired, the effort was certainly more expensive than expected. Now, with most of the legacy issues resolved, we are focusing on the future. Later this year, we will be opening a new service office in Madrid, Spain and are exploring expansion into Canada. Our retail UK business has produced extraordinary returns and we will be opening new service offices during 2005 in addition to the four established retail centers that now underwrite and market specialty products. Our core professional indemnity product remains extremely strong and our market leadership position and visibility continues to grow in the London marketplace. While under some pricing pressure, the remainder of our core products, which include specialty property, casualty and marine insurance, are positioned extremely well to achieve our underwriting objectives in the upcoming year.

INVESTMENTS

Our business model emphasizes the importance of superior investing and our investing results have added a great deal to our long-term growth in book value. Having a disciplined approach to investing and managing investments to achieve sound returns adds significant value for Markel shareholders. In 2004 we earned a 7.9% taxable equivalent total investment return where equities returned 15.2% and fixed maturities including our cash and short-term investments returned 4.8%.

The following chart shows our performance over the past year, as well as 5- and 10-year periods and compares our returns to those achieved by standard market indexes. We do not manage against an index nor do we think in relative terms, however, the comparison does demonstrate the value added by our approach to investing over long timeframes.

	One Year	Five Years	Ten Years
Markel Total Return			
Fixed maturities	4.8%	6.9%	6.8%
Equity securities	15.2%	16.1%	15.6%
Market Indices			
Lehman Aggregate Index	4.3%	7.7%	7.7%
S&P 500	10.7%	(2.4)%	11.6%

Over the past year we continued to maintain the short duration of our fixed income portfolio. We believe interest rates are more likely to move up than down and we are unwilling to stretch for yield by either extending the duration or giving up credit quality (as you may note we used the same words last year and we believe they are equally true today). Given our desire to maintain a high quality and relatively short duration portfolio, we are delighted with our results.

During the past three years we have significantly increased our allocation to equities. Three years ago equities were $551 million or 13% of the portfolio and 48% of shareholders' equity. Today we have $1.3 billion in equity investments which is 21% of the portfolio and 81% of shareholders' equity.

Our increasing allocation to equities stems from the combination of our increasing financial strength and improving underwriting results, as well as attractive equity investment opportunities. Equity securities are nothing more than fractional ownership interests in a business. Over time prices of shares reflect the underlying value of those businesses. We expect that those values will increase at a faster rate than the rate of interest offered by high quality fixed income alternatives. Therefore, we look to allocate capital to equities as circumstances and opportunities permit.

In any given year, positive and negative events occur. During 2004 positive events included our investment in Fairfax Financial Holdings which appreciated in excess of $30 million. Negative events included the decline in value of our investment in Marsh & McLennan Companies by

approximately $17 million following the Spitzer allegations and investigation. However, in aggregate, our results for 2004 and over the past 5- and 10-year periods have proved quite satisfactory.

We believe there are two fundamentally distinct approaches to making money in investment markets. "Traders" attempt to benefit from price volatility and successfully trade positions to earn profits. "Investors", by contrast, seek to own profitable businesses at reasonable prices and benefit from the underlying growth in the business they own. In the short run, being a skillful trader is important. As the noted investor John Templeton said, "Share prices fluctuate more than share values." In the long run, however, investing ability becomes more important. The financial skill to identify profitable businesses at reasonable prices and, having the temperament to stick with them through ups and downs, generate favorable long-term returns.

We are investors, not traders. We are pleased with the businesses we've bought over the last several years as we've increased our allocation to equities and we are optimistic about their future prospects. While year-to-year returns will fluctuate with the moods of the stock market and company specific events, we expect our returns as investors over time to be similar to the underlying returns of the businesses themselves. Given the businesses we own, we are happy with that prospect.

BALANCE SHEET AND CAPITAL STRENGTH

Our primary goal regarding our balance sheet is unquestioned financial security. Our second goal is appropriate financial returns for our shareholders. At year end our business is capitalized with $1.7 billion of shareholders' equity, $610 million in senior long-term debt, $150 million in junior subordinated debentures and $95 million in convertible notes payable.

During the year we raised approximately $200 million through the issuance of 7.35% senior notes which mature in 2034. The proceeds of this transaction were used to pay off our revolving credit facility and for general corporate purposes. We remain concerned about the possibility of rising interest rates and wanted to lock in a fixed interest rate for the long term. We also liked the idea of adding 30-year capital to our balance sheet. Of the remaining senior long-term debt, $166 million matures in 2007 and 2008 and $248 million in 2013.

The junior subordinated debentures have equity-like features in that we have the right to defer interest payments for up to five years and the final maturity is not until 2046. Given the subordination features and the long-term maturity, we include this as equity in our debt-to-equity calculations. These securities are also redeemable by us beginning in 2007.

The convertible notes payable also have some unique features. While these are zero coupon notes, each year they increase in value by 4.25%. The notes have a final maturity of 2031; however, the holders have certain rights to redeem the notes or convert them into Markel shares. If the notes are redeemed, we may choose to settle in either cash or Markel shares. While we do not pay current interest on the notes, the accrued interest is a tax deductible expense. If these securities were converted into common shares, we would issue approximately 335,000 new shares. As a result of a new accounting standard, this dilution is now included in our earnings per share calculations. With this dilution net income per share has been reduced by approximately 2%. Coincidently, if these notes were converted into common shares, book value per share would increase by approximately 2%.

Since our initial public offering, we have believed that the appropriate financial structure for our business was roughly one-third debt and two-thirds equity. We continue to think this is a good balance that provides a secure position to our policyholders and high returns for our shareholders.

When we completed the acquisition of Terra Nova in 2000 and assumed the operating issues of that company, the rating agencies reduced the ratings on our bonds. While we believe we have now resolved the vast majority of those operating issues, the agencies have been very slow to restore the ratings to levels we think appropriate. Clearly we're biased in this view. The agencies are independent, don't care much about our opinion and will come to their own conclusions.

Undoubtedly, as we continue to demonstrate superior financial performance, higher ratings will follow.

Our unwavering goal is to manage our business and financial structure to maintain a strong financial position. With profitable underwriting performance, a conservative loss reserving philosophy and an appropriate amount of well-structured, long-term debt, we believe we can achieve and maintain strong debt ratings.

CORPORATE GOVERNANCE

The Sarbanes-Oxley Act of 2002 brought many changes to the way public companies operate. Many, maybe even most, seem like bureaucratic overkill in an environment where a few were simply dishonest. Section 404 of the Act required complex, time-consuming and very expensive processes to test internal control procedures and assure their effectiveness. Many have questioned its value. Over the past year, almost everyone at Markel has been involved in one way or another to document compliance with Section 404. The process was every bit as complex, time-consuming and expensive as we expected and we are pleased we have successfully completed the task. While the task seemed daunting at its inception, we are pleased that much of the process will improve our systems and operations. The expanded understanding across the entire organization that everyone is responsible for the quality of our business and our internal controls is also a good thing.

The insurance industry also came under direct attack as the New York Attorney General investigated illegal bid rigging in the industry. We are confident that we do not have problems with these issues and we will continue to emphasize to all of our associates the importance of our values which require "honesty and fairness in all our dealings." These long-standing values coupled with appropriate policies, procedures and compliance efforts serve us well. We are trying as best we can to follow the example of the Quakers who came to America to "do good, and did well."

Good corporate governance starts at the top. We are fortunate to have a great Board of Directors (particularly the outside, independent directors) to help oversee our operations and to provide a strategic direction for the Company. They embrace the Markel Style and make sure we live up to those high standards. The diverse talent of the Board continues to expand and we are especially pleased that Al Broaddus joined us as a director in August. Al, a native of Virginia, received his undergraduate degree from Washington & Lee University and M.A. and Ph.D. degrees from Indiana University. He served an illustrious career with the Federal Reserve Bank of Richmond starting as an Economist in 1970 and rising to President in 1993. He retired as President from the Fed this past summer. Our meetings will not compare to the Federal Open Market Committee meetings and the press is unlikely to wait eagerly for our pronouncements, but Al's broad knowledge, experience and sound judgment will be very valuable to Markel.

EXECUTIVE MANAGEMENT CHANGES

Darrell Martin, Executive Vice President and Chief Financial Officer, announced in early January 2005 that at the next shareholders' meeting he will pass on his responsibilities as CFO to Richie Whitt and move into a reduced time role. Darrell first became associated with Markel while he was a member of our independent auditors, KPMG, and worked on our account. He became the partner on our account in 1985 the year before our initial public offering. Darrell joined Markel as our Chief Financial Officer in 1988 and has been an instrumental part of the executive management team since that time. Darrell will continue as Executive Vice President and give us approximately 25% of his time while he tests the waters of retirement. Richie joined Markel in 1991 as Manager of Accounting and has made Darrell look good ever since. After continually advancing in the accounting and finance areas, Richie moved to London in 2003 to work as Chief Administrative Officer at Markel International. There he has obtained some very valuable operating unit and international insurance market experience. Our financial affairs will remain in very good hands with Richie and we are very fortunate that Darrell will continue to be available to guide us and offer his wise counsel.

OUR FUTURE IN A COMPETITIVE MARKET

After many years of an increasingly competitive environment, the insurance market showed dramatic improvement in the few years following the tragic events of September 11, 2001. After a too short recovery, pricing in the industry is now showing weakness. While much of our business is holding up with adequate pricing and underwriting conditions, there are an increasing number of examples where companies are chasing business without due regard for underwriting and pricing considerations necessary to earn decent returns on capital. As shareholders and business partners you can be sure Markel will not go down this path. Our premium growth may slow in this environment, but we remain committed to our business principles and corporate values.

In fact, one of Markel's greatest strengths is our consistent focus on a business model…our Model for Profit…where the combination of underwriting profits and investment returns build shareholder value over the long term. Growth in premium volume is not critical to this model. Yes, growth is nice. Yes, growth is important to our long-term success and development. Yes, we are always looking for new opportunities and we will compete for every piece of profitable business we can. But for Markel, underwriting profits come first.

We have a lot of experience in growing our business profitably in a very competitive environment. In fact, that is where we really shine. There are many factors, strategies, and issues that enable us to be competitive without sacrificing our underwriting standards.

Whether the market is "hard" or "soft," one of the first and most important business strategies is to renew our existing business. We do this by providing great service which can only be done with focused and committed associates. Markel is a great place to work. Our incentive plans reward underwriting profitability by sharing underwriting profits with those associates who earn them. True insurance underwriters find the environment at Markel to be one they want to be a part of. We reward success and focus everyone on profit, not volume.

Another option for growth is to increase the proportion of the business we retain by using less reinsurance. This is already taking place. In 2004 we retained 81% of our gross written premium as compared to 77% in 2003. The 4% increase amounted to over $100 million in premium volume. We expect that this process will continue in 2005 as our growing capital and good experience with the business allows us to assume additional exposure. We will, of course, always purchase sufficient quality reinsurance to conservatively protect our financial position.

As the insurance market softens, we continue to look for opportunities to add people and acquire business or companies which can enhance value for our customers and shareholders. New opportunities for expansion are always available and we expect to take advantage of those opportunities when they arise.

As we continue to grow, we remain mindful of the importance of our human capital and internal training programs. To further expand our ability to hire and develop the next generation of Markel associates, we formed Markel University. Since its first class began in the fall of 2002, we have hired 13 recent college graduates who have or will very shortly complete this program and become valued, productive Markel associates.

Our investing philosophy also continues to be a critical element of our business model. We typically allocate roughly 80% of our investment portfolio to fixed income securities with the remaining 20% to equity investments. This allocation matches insurance liabilities with fixed income securities and shareholders capital with equity investments. Our foremost goal is to make sure we have capital available to our underwriters to write profitable insurance business. If, however, there are fewer opportunities to do so or if our capital were to grow faster than insurance opportunities, then we can increase the portfolio allocation to equities. Over time, this will increase the total return we can expect to earn from our investing activities so that we can continue to deliver a high growth rate in book value per share.

A final alternative is to return capital to our shareholders. If we cannot earn high returns on our capital, we clearly recognize our obligation to our shareholders to return that capital. This could take the form of either cash dividends or share repurchases. We currently believe, and our track record would suggest, that we have great opportunities to invest your

money in the business, so we do not expect that either of these alternatives will occur in the near term, however, we will remain cognizant of these alternatives as stewards of your capital.

CLOSING COMMENTS

The great thing about recognizing milestones is they present an opportunity to reflect on the past while focusing on the future. The excitement of celebrating our first 75 years is matched with equal optimism about the next 75. The fact that this business has succeeded by embracing a culture with specific values gives us confidence and direction for the future. Our underlying values and the relationships and integrity they produce remain durable and valuable for 2005 and beyond.

When new people join Markel, they are often recruited by existing associates. They want to join a winning team and one that wins by doing things the right way and in accord with important values. This becomes a flywheel with momentum that helps perpetuate the ability to grow and manage a profitable business in the future. We need good people to grow this business and good people want to join us in order to work in an environment of which they are proud.

Similarly, the shareholders of Markel also are committed to our long-term success. A large percentage of our shares are held by associates who view ownership of Markel as a critical piece of their financial future. Our external shareholders also tend to be long-term owners of the business and have provided us with financial capital, ideas and support that help us achieve our goals.

Over time, the daily execution of these ideas and the daily walk in accord with our values builds credibility for Markel with our associates, our shareholders and our customers. Every day that we do this creates increased evidence and credibility that we will do it again tomorrow. This is a wonderful consequence of being in business for many years. Credibility is a fragile asset to be guarded. We know the value of our heritage as well as the stakes for the future, and we look forward to continuing to earn your trust in the years to come.

We thank our associates for living and executing the Markel Style and making our success possible. We thank you, our shareholders, for your continued support.

Alan I. Kirshner
Chairman of the Board and Chief Executive Officer

Anthony F. Markel
President and Chief Operating Officer

Steven A. Markel
Vice Chairman

Darrell D. Martin
Executive Vice President and Chief Financial Officer

Paul W. Springman
Executive Vice President

Thomas S. Gayner
Executive Vice President and Chief Investment Officer

From left to right: Paul W. Springman, Anthony F. Markel, Darrell D. Martin, Steven A. Markel, Alan I. Kirshner, and Thomas S. Gayner.

Markel Meeting in Omaha – May 1, 2005

The meeting started out with Steven Markel making some introductory comments:

- 2005 – Markel is celebrating its 75th Anniversary, founded by Steven's grandfather Sam Markel

- Went public in 1986

- Business model – to earn consistent underwriting performance, superior returns and to build shareholder value

Finite reinsurance and how big is the problem?

Steven:

I don't know. There's a big grey area of what is and what isn't finite. But it is huge. (Spoke about Frontier) A lot of it is legitimate business processes.

Acquisitions in the last 4-5 years?

Steven:

Growth is secondary to consistent profits and superior margins. We won't sacrifice profits for growth. (Aiming to grow at 20% per year, and growth can come from existing businesses, expand areas of business and acquisitions) In 2000, we doubled our size by acquiring Terra Nova.

Finite effect on pricing cycle?

Steven:

I guess not (in regards to any real effect). We've lived with these cycles in the past and we will again. It will have an impact but we don't know exactly how much.

Compare Berkshire and Markel?

Steven:

We don't write nearly as much catastrophe insurance. The sizes and aggregates we are willing to write are very modest compared to what Warren or Ajit would write.

Pricing in your markets?

Steven:

Some of the property lines are being affected, but in some of our other businesses they are doing better. Our renewals are doing well, but new business is a little slower.

NCB coverage as BRK is willing to accept on some contracts?

Steven:

We don't write policies with that coverage.

What competitive advantages do you have in actuarial services?

Steven:

I don't think we have one. Our target is to get into the 80% percentile of being right. Actuaries provide only one piece of information, but a management team could push them into one direction or another. How do you recognize an extroverted actuary? He's the one looking down at your shoes, instead of his own! We don't shut our actuaries in a room. They work with our managers, analysts and investment team.

Expansion into Europe and Asia?

Steven:

We don't know about Asia, but are expanding into Spain, France and opening a Toronto office.

5-year retrospect on Terra Nova?

Steven:

Started out very bright, went very dim and now looking very bright again (Fairfax shareholders can relate here I guess). The process cycle at Lloyd's of London is much slower than in the U.S. We feel very good about the people we have now. We were aided by the near implosion of Lloyd's in September 2001. In March of 2001, what we had to say sounded stupid, but in October 2001, what we had to say sounded intelligent. We were in front of the curve. If you add up the pluses and minuses, we haven't made up what we've lost.

Changes in contingent commissions?

Steven:

Too early to tell how the brokerage industry will deal with it, but the immediate benefit to us is that our commission cost is lower.

In 2004, how many underwriters earned more than Steven and how many were in the U.K.?

At least one in the U.K., and probably 15 or 16 in the U.S.

Steven:

The underwriters have every objective to make the underwriting consistent and profitable over the long-term, since their compensation is tied to it (in reference to the fact that Markel's underwriters have part of their bonus structure tied to the long-term results of contracts). Underwriters need to be with us for a long enough time to believe in the culture, and that the rug won't be pulled out from underneath them once an objective is set.

How do you manage reinsurance and how much business do you keep on your books?

Steven:

Our underwriting goal is to make sure that the client receives 100% coverage at the right price, and we buy reinsurance when necessary. We try and retain as much of the business as we can.

Equity and fixed income markets?

I can't remember who spoke here, but it was either Tom or Steven. I'll just give the quotes spoken:

These are interesting times as the Chinese curse would say. I think the times we are living in, are one of those periods that happen once a generation. I did not foresee well what this back end of a cycle looks like. The bad guys for the most part are out of the market. But you have the slower, fatter folk who are in business through thick and thin are getting some of the blame. We are in the process of grinding out through the excesses of past years. On the fixed income side, we are worried about interest rates and our duration is short – about 4 years.

Comment on 10-year treasury?

Tom:

The first job we have is to protect capital. There are those that don't know, then there are those that don't know that they don't know! I never want to impinge on the underwriters job, but we would rather be wrong on the shorter side.

Adding higher combined ratio businesses like worker's compensation or medical malpractice?

Steven:

We very openly acknowledge that we may miss some opportunities, but the uncertainty of some of that long-tail business…we wouldn't be extremely comfortable with.

On the Fairfax Financial connection?

Steven:

It's the only transaction that I've been involved in directly. We thought we got it at a very good price. We've known management for a very long time. It's not without its risks, but we thought it was a pretty good opportunity.

Tom:

(Explained their investment in Fairfax with this quote) Smart people don't become stupid and stupid people don't become smart! Prem's got a very good record and we think he'll come back to that.

On BUD and that Markel was in before Berkshire?

Tom:

(Explained how he first became interested in BUD) When I was a kid, my dad had a liquor store. The Anheuser-Busch drivers went on strike, and my father said you can't have a liquor store without Bud, so he got a truck and me and my father drove over to the brewery and bought beer.

How tough to add a new product line?

Steven:

We have about 80-100 lines of business, and we are always trying to find changes where we can find opportunity.

What have you learned and what would do differently in acquisitions?

Steven:

I guess we would do a little more due diligence and spend a little more time on assessments.

Comment on Marsh & McLennan?

Tom:

(Tom first stated that he stands behind his comments on Marsh & McLennan that were in OID) I didn't foresee the subsequent scandals that came. That being said, who is going to be the top brokerage in the world ten years out? Near death experiences often tend to lead to companies that are significantly better.

2005 TO OUR BUSINESS PARTNERS

During 2005, most of our businesses enjoyed excellent performance; however, our financial results were negatively impacted by hurricane losses. Underwriting results excluding the hurricanes were remarkably strong with profits of $234 million. Losses from hurricanes Katrina, Rita and Wilma of $246 million more than offset these results, leaving us with an underwriting loss of $12 million in 2005.

Total reported investment returns were also less than normal as our equity returns were sluggish, despite largely positive earnings in our portfolio of companies. In addition, fixed income markets fought the headwinds of rising interest rates.

We ended the year with net income of $148 million and comprehensive earnings of $64 million. These returns were below our expectations and history of normal returns at Markel.

The hurricanes dominated both the national and insurance industry headlines in 2005. Unfortunately, catastrophes are a normal part of life and the insurance business. We know they will continue to occur, but we do not know when, where, or how severe they will be.

While catastrophes and rising interest rates have made our business tough in the short run, the long-run record is very good and the future is full of opportunity. Our financial model is to earn consistent underwriting profits and superior investment returns. Though we fell short in 2005, and we'll try to fully explain why, we remain confident in our ability to achieve our goals in the future as we have in the past.

Markel will continue to write catastrophe-exposed insurance business and we expect to have losses from time to time. However, in managing this part of our business the following principles apply: first, we must earn enough profits in the good years to more than offset the bad ones; second, we must manage our aggregate exposures so that both individual product lines and the company as a whole are not unreasonably exposed.

In reviewing our catastrophe results, most of our products successfully delivered on these principles. However, there were some notable exceptions and with those products we are aggressively addressing the problems. We are increasing prices and reducing aggregate exposures where necessary. We are also

reducing our reliance on industry catastrophe models and planning for higher frequency and severity of catastrophes in the future based on the experience of the past two years. Should we find the marketplace unwilling to allow us to achieve our profitability targets on this basis, we may find it necessary to withdraw.

Because the impact of these hurricanes was so significant to our financial results, in several cases throughout this report we will be referring to our results "before and after" or "with and without" the hurricane losses. Let us assure you that this is to help you better understand the business and what is happening. It is in no way an attempt to excuse or imply the events didn't really happen. We know all too well that they really did occur and, more importantly, that we can expect similar events in the future. We hold ourselves accountable for everything that happens at Markel and we clearly include these events in our compensation calculations.

In keeping with our efforts to be conservative and prudent, there is good news. While many companies have increased their estimated losses from hurricanes with each announcement, we believe that our initial estimates for Katrina and Rita now look to be too conservative. At the time of our third quarter financial release, we estimated losses from these events at $254 million. With the passage of time, the settlement of many claims, and the ability to better assess the losses, we estimated the costs of these hurricanes at year end to be $140 million for Katrina and $41 million for Rita, a total of $181 million or a reduction of $73 million from our original estimate. Hurricane Wilma, which occurred in the fourth quarter, cost us an estimated $65 million, so unfortunately this redundancy was used pretty quickly. Suffice it to say, we will continue to set loss reserves prudently.

HURRICANES

Given the magnitude of the hurricane losses, we will try to explain what happened, how it impacted us, and most importantly, what we are doing about it. First, it is important to understand that the 2005 hurricane season was far and away the biggest and most costly on record. Hurricane Katrina is estimated to have caused insured losses of over $38 billion. To put this number into some perspective, Hurricane Andrew cost $16 billion in 1992 and total equity capital in the United States property and casualty insurance industry stands at approximately $400 billion today. Hurricane Rita followed in late September and Hurricane Wilma in late October, adding an estimated $13 billion in losses. Together these three storms will cost the industry approximately $51 billion. As a comparison, 2004, which was also a pretty tough year for hurricanes, and the previous record holder, cost the industry almost $29 billion.

We provide insurance coverage for losses related to hurricanes in many of our divisions and business units. Essex Special Property and Markel International's property division provide coverage for highly exposed property risks which often include coverage for wind, flood or earthquake. These risks are typically larger and have low frequency, but high severity. Simply put, the losses don't happen very often, but are very costly when they do. Approximately 48% of our hurricane losses was generated from business in these units.

Markel International's Marine and Energy division sells coverage for all aspects of oil and gas activities which includes drilling platforms in the Gulf of Mexico. Our London operations also sell property reinsurance which includes hurricane exposure. Each of these areas was responsible for about 12% of our hurricane losses.

In our three contract property departments at Essex, Markel Southwest and Markel International, we have exposure to wind losses in the southeastern states which contributed approximately 17% to our hurricane loss. About 15% of the premiums earned in these departments have hurricane exposure.

Markel American Specialty Personal and Commercial Lines had exposure in its watercraft, yacht and property departments. We even had motorcycle losses as a result of the hurricanes.

One of Markel's great strengths is that we have many different specialty products, over 90 at last count. This diversity of products normally adds stability, but in those circumstances where a single event (like a hurricane) impacts multiple products, it creates a challenge to effectively manage

this risk. To help forecast the potential loss from a catastrophic event both within a single product and across the spectrum of our different products, we have used a combination of the three most recognized independent catastrophe models. These models are intended to simulate an event and establish damage estimates for insured exposures. Unfortunately, these models significantly underestimated the magnitude of damage from the recent hurricanes. We also underestimated the unusual frequency of large events in the past two years. The models will be enhanced and made more robust as a result of knowledge from recent events. In addition, we will augment the industry models with our own models and underwriting tools along with an even greater margin for safety.

Many experts suggest that the environment is changing and hurricanes are on the increase. Clearly the recent experience of 2004 and 2005 adds credibility to these ideas. For example, this year's storms, Katrina, Rita and Wilma, all rank in the top ten most costly hurricanes in the United States. They rank first, seventh and third. Last year's storms, Charley, Ivan, Frances and Jeanne, also rank in the top ten. They are fourth, fifth, eighth and ninth. It is surprising that the storms of the past two years represent seven of the ten most costly. Filling out the top ten were Hurricane Andrew in 1992 (second) which set and held the previous record until Katrina, Hurricane Hugo in 1989 (sixth) and Hurricane Georges in 1998 (tenth).

If one were to look at hurricane statistics over the past 10, 20 or 50 years, it would be much more difficult to conclude that hurricane activity is increasing. For example, after Hurricane Andrew in 1992 until the hurricane season of 2004, on average less than 1.5 hurricanes made landfall each year in the United States and only Hurricane Georges now ranks in the top ten. Given these facts, a more logical conclusion might be to expect less frequent and severe hurricane activity in the future. Storm activity is, of course, only part of the issue. Another important issue affecting the costs of hurricanes is that building and economic development in geographic areas exposed to hurricanes continues to increase. The rising values of properties developed in coastal areas have significantly increased economic losses from hurricanes.

The good news is that Markel and the insurance industry can respond to the needs for coverage. While higher property values increase exposure, they also increase the premium base to pay for coverage and inevitable future losses. As new properties are built, they are generally constructed to better withstand hurricane winds. The number and total value of properties exposed to hurricanes is huge, but the probability that any single unit will experience a loss is still remote. Insurance is based on the law of large numbers, and with intelligent underwriting, a spread of risk and sound pricing, the insurance industry and Markel can continue to profitably respond to the need for protection from hurricane losses.

We expect each of our products to earn underwriting profits and contribute to our growth in book value. We fully expect to earn good returns on our capital, and each product must stand on its own. However, we understand volatility and recognize that not all products will earn profits every year. We strive to manage the business so that each product will earn good returns in five-year blocks of time and so that our varied product mix will produce underwriting profits every year. We have learned from the events of 2004 and 2005 and will be a better company as a result of the experience.

We have made several changes to how we write catastrophe-exposed business. We have set higher prices, reduced limits, increased deductibles and taken other steps to better control aggregate catastrophe exposures. As a result, we would expect that if the weather were the same in 2006 as 2005 our results would be much improved, should it get worse, we will remain financially secure and adjust accordingly, and with good weather, our results should be very pleasing.

2005 FINANCIAL REVIEW

Operating revenues decreased 3% to $2.2 billion in 2005 as the insurance market became increasingly competitive. Gross written premiums decreased 5% to $2.4 billion due to our sale of Corifrance, exiting lines of business that were not meeting our underwriting profit targets and an increase in competitive pressures in almost all of our markets. Earned premiums decreased 6% to $1.9 billion as a result of the above items and additional reinsurance costs resulting from the 2005 hurricanes.

Our combined ratio for 2005 was 101% compared to 96% in 2004. As mentioned earlier, the 2005 hurricanes are estimated to cost Markel $246 million, or about 12 points of our 2005 combined ratio. For comparison purposes, the 2004 hurricanes cost an estimated $80 million and represented about 4 points of our 2004 combined ratio.

With continued growth in our investment portfolio and rising interest rates, investment income increased 19% to $242 million. Realized gains were $20 million in 2005. Total investment returns were not as strong due to the effects of higher interest rates on the value of our fixed income portfolio and a sideways equity market. Our taxable equivalent total return for the portfolio, after foreign exchange losses, was approximately 1.5%.

Net income for 2005 was $148 million compared to $165 million in 2004. Shareholders' equity and book value per share grew to $1.7 billion and $174 per share, respectively. Compounded annual growth in book value per share was 3% for the year and 11% for the five-year period. We are never happy to report an underwriting loss; however, we were able to withstand unprecedented catastrophic events and grew book value, even if only modestly.

BUSINESS REVIEW

Sometimes, it is easy to lose sight of the fact that the vast majority of our product lines have little or no catastrophic exposures. In 2005 many of these products produced exceptional results. One of our greatest strengths is a diverse portfolio of over 90 specialty products and, with the exception of our wind-exposed offerings in 2005, virtually every one of our other products met or exceeded our lofty profit expectations.

There is an abundant amount of good news in our operating units and we would like to share a few highlights with you from 2005.

Excess and Surplus Lines

Our Shand/Evanston unit located in the Chicago suburb of Deerfield, Illinois, had an exceptional year, producing over 30 points of underwriting profit in 2005. This stunning achievement is the result of writing profitable business and continued favorable loss development on business written over the past several years. Mike Rozenberg and his talented team of professionals have a winning combination of superior technology and excellent customer service. Our paperless environment has given us a competitive edge and our service to our broker partners is among the best in the industry. Shand is an excellent example of the safety valve that the Excess and Surplus Lines marketplace plays in the overall insurance industry. Over the last several years, we have seen our claims-made products liability and medical malpractice books of business grow rapidly as the standard market walked away from these two specialty classes.

On the other hand, our disciplined underwriters know when and where to walk away from business as market conditions become less attractive to us and more attractive to others. A great example of this disciplined approach can be seen in their management over time of the physicians product, which forms part of their medical malpractice program. At the very bottom of the soft insurance market in 2000, Shand was only able to write $13.9 million of physicians business that met our profitability goals. The market rapidly improved beginning in 2001 and Shand profitably grew the book to $96.8 million by the end of 2003. However, competition is again on the rise in the physicians market and Shand grudgingly reduced its writings to $66.7 million in 2005. During our 16 years of ownership, Shand's professionals have repeatedly demonstrated the fortitude to walk away from underpriced business. Congratulations to Shand on an extraordinary year.

Specialty Admitted

In our Specialty Admitted segment, our hats are off to Britt Glisson and his talented team at Markel Insurance Company. Over the past five years, they have grown the top line while increasing the margin of profitability on the bottom line, producing over 20 points of underwriting profit in 2005. This is no small task to accomplish in any market cycle. Markel Insurance Company's success is built on its ability to keep its customers for many years. Over time we have determined that long-term customer relationships are usually our most profitable. Markel Insurance Company's customer retention rate is approximately 81%, and in several of its

core lines, we retain over 90% of our customers. In a highly-competitive market, this is an outstanding achievement. Value-added services such as loss control and crisis management assistance combined with attention to service are some of the reasons customers keep coming back.

London Insurance Market

While Markel International endured its fair share of hurricane losses in 2005, its professional liability businesses, which include its Retail and Professional Indemnity divisions, continued to perform superbly. The Retail division, using its branch strategy, has proven to be one of the most successful contributors to our results in the U.K., consistently producing underwriting combined ratios in the low 80s. The Retail division's emphasis is on professional indemnity products delivered through independent retail agents. When we began 2005, Markel International had four service offices in the U.K. They were located in the cities of Manchester, Birmingham and Reigate, all reporting into the Retail division's headquarters, located in Leeds, England. We used this anchor in 2005 and expanded with additional offices in Bristol and Cambridge as well as Edinburgh, Scotland. As Steve Carroll, manager of the Retail division says, "all of the pieces of the puzzle are in place!" These three new offices will begin producing profitable results for us in 2006 and we know that we can count on them for many years into the future. The strategy is a straightforward one — being located closer to our ultimate customer gives us the ability to provide superior customer service. This same strategy has been deployed with our new international offices in Madrid, Spain and Toronto, Canada. We are enthusiastic about the future prospects for profitability as Gerry Albanese and his talented team drive our international expansion.

Other Operating Units

Even in our operating units that incurred hurricane losses, there is ample good news to share. Essex Insurance Company's contract casualty department continues to turn in stellar results year after year. The profits that have been produced over the past 25 years are nothing short of miraculous.

At our Investors unit, we witnessed early favorable trends from the most recent years in our primary casualty product, an area that has caused us difficulty in the past. In addition, Investors' environmental products continue to grow and meet or exceed underwriting profit expectations.

At Markel Southwest Underwriters, we are starting to see the fruits of six years of operating under the Markel banner. In spite of storm losses in 2005, this unit exceeded our overall profit goals.

At Markel American, our margins increased on our core motorcycle business while premium volume continues to grow.

Markel Re continues to build profitable books of business in small commercial umbrella, casualty facultative reinsurance and our fastest growing product, Specialized Markel Alternative Risk Transfer (SMART).

Our newest unit, Markel Global Marine & Energy, will open its doors for business in the next few months. This specialty array of products will complement those already offered at Markel International and in our U.S. operations.

As you can see, we have much to be proud of in 2005. While our consolidated underwriting results did not meet our high expectations, we have the people and platform in place to produce true Markel-like numbers in 2006.

INCENTIVE COMPENSATION

Our underwriting culture and success is closely linked to our compensation philosophy and programs. We want our associates to earn reasonable base salaries and benefits, but have the opportunity to earn significant performance incentives based on underwriting profitability, or in the case of the executive team, based on growth in book value per share. To demonstrate what we mean by significant, over the past three years, our incentive compensation payments have averaged over 40% of base salaries. We estimate that incentive compensation payments to Markel associates for 2005 performance will approximate $50 million, including $1.1 million for the executive team.

Top performers receive the biggest checks. Our associates at Shand, Markel Insurance Company and Markel International's retail division, as well as many others,

generated substantial underwriting profits in 2005. Unfortunately, your executive team did not do as good a job growing book value per share. As a result, over 30 associates will earn larger cash bonuses than the six members of the executive team. We are delighted for them and we expect to do a better job in 2006.

INVESTMENTS

Investment activities are an integral component of our business model and are crucial to our long-term growth in shareholders' value. In managing these assets our first task is to protect and preserve the capital we need to conduct our insurance operations. Second, we seek to build and grow capital in the most prudent and productive manner possible.

During 2005, we earned modest investment returns. Fixed income returns were 3.9%. We continue to be committed to very high credit quality fixed income investments and a shorter than normal duration to minimize the impact of higher interest rates. Long-term readers of this report might recognize this phrase. It has been consistent on the credit quality issue forever, and on the interest rate risk issue for the last few years. We are leery of the returns offered on long-dated fixed income investments as we do not think they compensate us for existing and future inflation risks. We are sticking to limited duration fixed income investments. In 2005 rates did rise, especially at the short end of the curve, and bond prices fell modestly. We offset some of these price declines with interest income to produce a positive overall return. We expect to remain short in duration, high in credit quality, and balanced between government, municipal and corporate securities in 2006. If the markets move dramatically in 2006, we will respond accordingly.

In the equity market we had flat performance in 2005 with a total return of (0.3%). This is below our normal expectation of double digit returns from equity investments. Our longer term five- and ten-year records still reflect excellent returns over very challenging investment environments.

We have invested for many years following a four-part thought process to select and manage our equity investments. Namely, we look for profitable businesses with good returns on capital, management teams with equal measures of talent and integrity, reinvestment opportunities and capital discipline, and reasonable prices. Ironically, 2005 was a year in which many of our portfolio companies which meet these tests did not move in price, hence our flat performance. While share prices fluctuate a lot more than underlying share values, the long-term course of share prices is determined by underlying per share earnings. We are confident that our time tested discipline is an excellent process for managing investments as demonstrated by our long-term results. We are optimistic that continued earnings growth in our underlying portfolio of companies will be reflected in higher stock prices and good investment performance over time.

One positive aspect of flat stock prices and better underlying economic performance is that we are getting a better "bang for our buck" as we continue to use the cash flow from our business to purchase more shares at reasonable prices. Additionally, our long-term orientation allows us to achieve tremendous tax and economic efficiency. At year end, the unrealized gains on our equity portfolio stood at $438 million. While we have provided for an ultimate tax liability of $153 million in our financial statements, these taxes will not have to be paid until we sell the investments and realize the gains. Meanwhile 100% of the investment will be growing. This tax deferral, which fits our long-term horizon, adds tremendous and growing value over time to our company. Our long-term horizon is increasingly rare in the investment world and creates a significant advantage for us. Additionally, our costs for managing, trading, and even making mistakes in our portfolio, are minimized by our ability to think about and hold investments for decades rather than for quarterly, or monthly performance.

Market Review

Our goal in managing equity investments is to earn double digit returns over the long run. This is an absolute rather than relative goal. While our focus is on absolute returns, we acknowledge that relative returns exist as a bogey for alternative choices. Over the long term we have met our absolute return goals and exceeded the S&P 500 benchmark over meaningful time periods. Unfortunately, 2005 was a year in which our returns fell below our absolute goals and

underperformed on a relative basis. We tend to own a disproportionate amount of financial service companies which suffered from the previously discussed difficulties in the insurance industry and rising interest rates. We remain long-term believers in the prospective returns of these businesses.

The stars of 2005's financial markets were led by the commodity-oriented businesses of energy and gold as well as certain technology companies as most exemplified by Google. While energy markets clearly moved up dramatically in 2005 and we salute those who profited from those trends, two major factors kept our energy investments at a minimal level in the overall portfolio. First, and most importantly, energy and energy sources, like technology, change over time. For investors, this change is both exciting and dangerous. It is exciting because change creates dramatic positive outcomes for certain companies in the energy markets. It is negative, because the long-term trend in energy and technology pricing is down. This creates a headwind for businesses in those fields and we prefer to avoid investing in companies with decreasing pricing power. Although consumers worldwide benefit from progress and change in these markets, we as investors remain wary about the long-term prospects for these companies and the durability of their profits.

Second, certain aspects of energy pricing are similar to gold prices, where perception and geopolitical events swamp all other factors. We remain investors focused on long-term, durable-compounding businesses with easier to understand franchises or business dynamics. As such we sidestepped the hot energy and gold markets of 2005 and will likely continue to do so in the future. Over long periods of time this approach has proven sound.

Technology stocks, and in particular Google, also rose dramatically in 2005. While these companies continue to delight us as consumers and we enthusiastically applaud the productivity and efficiency gains these companies create for society, the businesses remain volatile and only minimally predictable over time. We focus on consumer-oriented, financial service and distribution businesses because we believe we are better able to make, and are more likely to be successful in, judgments about these kinds of businesses. We are willing to forego the excitement of markets like 2005 in order to be more certain that we're earning good returns over the long term.

Private Equity and Alternative Investment Activity

A major area of interest in the investment markets these days is "Alternative Investments." This includes hedge funds, private equity, and various other asset classes that are thought to provide investors with both attractive and non-correlated returns. As Warren Buffett of Berkshire Hathaway noted in a recent talk, investment markets regularly progress through a sequence where they are led by innovators, then imitators, then swarming incompetents. We don't know exactly where "alternative investment" markets are in that progression but we believe they are in the second, if not the third, stage of development. We also believe that the high transaction and ongoing management fees common in this area diminish the long-term returns available to the ultimate owners of the underlying businesses.

After the "swarm" phase, we believe that returns become disappointing, if not dreadful, and opportunities begin to be created as sellers get out and prices drop to more economically attractive levels. We expect this to occur over the next several years and we look forward to participating in these markets as opportunities present themselves. If and when we do participate, we expect to avoid many of the transaction and management fees which detract from long-term value.

To prepare for the opportunities we see developing in these markets over the next five to ten years, and more importantly to participate in promising opportunities, we pursued two private transactions in 2005. While the dollar amounts invested are relatively small at this time, we are optimistic they will lead to additional opportunities. Both of these opportunities meet our four criteria listed above: profitable businesses with good returns on capital, management teams with equal measures of talent and integrity, reinvestment opportunities and capital discipline, and reasonable prices.

In 2005, we made a majority investment in AMF Bakery Systems, a Richmond-based producer of equipment for the baking industry. We knew the principals of the company from

long-standing community and personal relationships and we believe the business is durable and profitable with attractive returns on capital. Existing management purchased the remaining portion of the business and we will jointly enjoy the long-term economics of the business.

Additionally, in 2005 we committed to purchase a significant minority interest in First Market Bank in Richmond, in partnership with the Ukrop family. As Richmond readers probably know, the Ukrop family runs a successful and unique grocery business. Their values of integrity, absolutely first-rate customer service, an outstanding workplace environment and community involvement match up with our values perfectly. First Market Bank enjoys co-location and cross-marketing relationships with the Ukrop's grocery chain and we are excited to participate in their continued growth and development.

In both of these instances, we were able to find and negotiate these transactions principal to principal. By making these investments directly rather than through hedge fund or fund structures, we achieved significant cost and return advantages. We believe similar additional opportunities will develop over time and we look forward to expanding this part of our investment portfolio.

Future Prospects

We expect our future investment activities to continue in the manner discussed earlier. While the types and forms of investments may change over time our commitment to the principles of preservation and prudent growth of capital and a long-term investment horizon will not change. Our commitment to these principles has produced outstanding long-term results and we believe our adherence to these principles will continue to produce superior long-term investment results in the future.

Finally, we would like to thank our long-term shareholders. We believe that you are some of the premier thinkers in the investment world and are invaluable in your generous source of counsel, ideas and support. We wish to thank you for expanding our horizons with investment thoughts and insights, which help us manage our investment portfolio.

BALANCE SHEET AND CAPITAL STRENGTH

During 2005, our investment portfolio grew 4% to $6.6 billion, primarily as a result of operating cash flows. At December 31, 2005, there was approximately $671 of portfolio working for each share of common stock.

Operating cash flows declined to $551 million in 2005 from $691 million in 2004 due to the decline in our 2005 premium volume, payments of 2004 and 2005 hurricane losses during the year and commutations.

Reinsurance recoverables increased to $1.9 billion in 2005 from $1.8 billion in 2004. The increase is due to approximately $568 million of reinsurance recoverables related to the 2005 hurricanes. Without hurricane recoveries, our reinsurance recoverables would have decreased to $1.3 billion in 2005. The recoverables related to the hurricanes are almost entirely due from financially strong reinsurers, many of whom provide us with security for amounts they owe us. We expect these balances to be collected promptly as we pay hurricane losses during 2006. Our non-hurricane reinsurance recoverables continued to fall as we have consistently increased our retention of gross written premiums, aggressively collected outstanding balances and commuted with reinsurance companies that are no longer core reinsurance partners.

Loss reserves increased to $5.9 billion in 2005 from $5.5 billion in 2004. Approximately $680 million of this increase was due to the 2005 hurricanes. Our long-stated goal and consistent philosophy is to establish loss reserves that are more likely redundant than deficient. Surprises are almost always bad in the insurance industry and as a result we have long attempted to establish a margin of safety in our loss reserves. This translates into our ultimate goal of establishing loss reserves that we do not have to increase in the future. We believe we accomplished this goal in 2005.

On page 98 of the report you can see our past results in establishing loss reserves. We are pleased to report success in 2005, as prior years' loss reserves developed favorably by $51 million. To be fair, our 2005 success represents the first time we have achieved this lofty goal on a consolidated basis since 1999. Our lack of success in the intervening years was

primarily the result of adverse loss reserves development on Markel International legacy business, Investors' general and product liability business and asbestos exposures. Now that we are "back in the black" so to speak, we will work to continue this trend into the future. Of course, the ability to achieve favorable reserve development all starts with our underwriters and their ability to write profitable business.

As a result of our strong capital position, our Board of Directors authorized the repurchase of up to $200 million of our common stock. Our thought at the time was that we would like to minimize dilution from the potential conversion in 2006 of our convertible notes payable. In 2005, prior to the hurricanes, we repurchased 49,400 shares for approximately $16 million. After these events, we did not repurchase any additional shares in 2005; however, in early 2006, we repurchased an additional 129,200 shares for approximately $42 million. The authorization remains in effect and we will exercise sound judgment in considering when, or if, to repurchase shares.

THE INSURANCE MARKET

During 2005, general underwriting conditions and pricing in the insurance marketplace deteriorated. We believe it is suicidal to chase business as price levels drop below those necessary to earn good returns on capital. As a result, we meet competition where we believe we have appropriate margins of safety and walk away from business that we believe is underpriced. Our flat overall revenues in 2005 reflect our disciplined focus on the bottom line, not the top line.

Increased competition is coming from many sources. The standard insurance markets are again beginning to seek more specialty business (often below standard rates) and new specialty markets are entering the fray. Overall, competition and our free markets are wonderful, but they require that we remain disciplined and focused on the bottom line, not the top line. We have lived through this before and we have produced excellent results despite what turned out to be foolish competition. We fully expect to do so again.

The recent hurricanes cost the insurance industry a significant amount of capital and many are promoting the idea that substantial rate increases are on the horizon for 2006. Clearly in those areas most exposed to future hurricane losses substantial rate increases are necessary. But it is less clear whether or not this "rate talk" will convert into action. We are not optimistic that there will be broad based rate increases. We will act with discipline and financial prudence regardless of what our competitors do and seek to obtain rates which cover the risks and provide appropriate returns to our shareholders.

Most people outside the insurance industry assume that everyone knows what prices are necessary to generate profits. Unfortunately, this is simply not the case. Predicting future losses is a tough, challenging and complicated process without much certainty. Today many in the business are enthusiastic about an expectation that they might successfully increase prices by 100% or in some cases even 200%. What that suggests is that the very same people were selling insurance last year at a 50% or 67% discount. It is unlikely that they were doing so with the expectation of losing large sums of money. In many lines of the insurance business, getting the price right is an iterative process. We learn as we go; we try, try and try again. Fortunately, at Markel, our exceptional underwriters get it right most of the time.

Throughout the history of the insurance industry, financial markets and investment bankers were quick to respond to major industry loss events and create new insurance companies to capitalize on perceived opportunities. While some of the innovators proved successful, most imitators ended up delivering marginal results. The promoters of many of these companies seek quick returns and to sell out before the next event. Most investors in these companies seem to have little interest in the companies' long-term success.

In addition to the new companies, we are surprised and befuddled to see many other companies reporting hurricane losses of 30%, 40% or even more than 50% of their capital who are unapologetically raising new capital to pay the losses. Some are even raising extra capital and promising a new market in which they will somehow perform better than before, and the financial markets are providing that capital eagerly. We are stunned that capital markets are not more skeptical of these promises, but we are getting used to it.

This creates concerns. The first is that there is an acceptance that it is okay for managers of a company to expose too much capital to a single event because the capital markets will always be there. Related to this idea, is the thought that capital in the insurance industry has a short-term orientation. Much of the current capital funding new ventures is coming from hedge funds. In 12 or 24 months they will be looking to move on. If these companies are willing to expose a large part of their capital to losses and investors are looking to make a quick trade, it will be a real challenge to build a strong, sustainable business. The long list of subpar and failed companies in the industry indicates that this model does not work in the long run.

Markel offers a clear contrast to this approach. Our business is run for our long-term owners and not short-term traders. Our strength comes from our corporate culture of discipline, accountability, and integrity. Our 75-year history demonstrates success.

CLOSING COMMENTS

We had high hopes for our 75th year and fell short of our expectations. Our success is due to our ability to face issues, recognize our problems and fix them. For the five-year period ending December 31, 2005, compound annual growth in book value per share was 11%, far short of our stated goal. Our ten-year and twenty-year results of 16% and 28%, respectively, continued to show excellent returns. We have a strong business, great associates, a wonderful market franchise and a demonstrated ability to build shareholder value.

We are very optimistic about the prospects for 2006 but are even more confident about the ability of our team to deliver results and success over the long term. We want to thank our associates for living and executing the Markel Style and we thank you, our shareholders, for your continued support. We look forward to reporting our progress to you over the coming years.

Alan I. Kirshner
Chairman of the Board and Chief Executive Officer

Anthony F. Markel
President and Chief Operating Officer

Steven A. Markel
Vice Chairman

Paul W. Springman
Executive Vice President

Thomas S. Gayner
Executive Vice President and Chief Investment Officer

Richard R. Whitt, III
Senior Vice President and Chief Financial Officer

From left to right: Paul W. Springman, Anthony F. Markel, Thomas S. Gayner, Steven A. Markel, Alan I. Kirshner, and Richard R. Whitt, III.

2006 TO OUR BUSINESS PARTNERS

We are pleased to report record underwriting profit, superior investment returns and strong book value growth in 2006, our 20th year as a public company. Celebrating our success is especially rewarding because we have built an incredibly strong company that keeps getting better. A major effort throughout 2006 was to improve the management, pricing and control of our catastrophe exposures. While we believe we've been successful in this effort, we were not tested this year. As a result, our 2006 results include a large dose of good luck as the weather was extremely benign. We are not complaining.

However, good weather does not deserve all the credit for our exceptional 2006 performance. Our associates deserve the real credit as their combined energies produced stunning results. Gross written premiums increased 6% to $2.5 billion. Growth in our investment portfolio and higher interest rates produced net investment income of $271 million, a 12% increase over 2005. Realized investment gains were $64 million. Earned premiums were up 13% to $2.2 billion in 2006; and our underwriting results improved dramatically, producing a combined ratio of 87%. Net income was a record $393 million, more than double our previous record year. As a result of all this good news, book value per share increased 32% to approximately $230 per share.

In this letter, we will discuss our financial results, including our underwriting and investing operations. However, throughout this year's letter, we also want to focus on principles that underlie both our daily underwriting and investment decisions and are integral components of the Markel Style. At Markel, underwriting and investing are working from the same blueprint. The principles that support profitable underwriting are the same ones that lead us to superior investment returns and, in turn, help us build shareholder value. These important principles are: maintaining a long-term time horizon, discipline and continuous learning.

TWENTY-YEAR PERSPECTIVE

While we are delighted to discuss 2006, we recognize that in any one year fortuitous timing (good luck) influences our results just as much as, if not more than, our fundamental business discipline. Over longer time horizons, however, the effect of timing fades away. It is superseded by sound business principles and skilled application which becomes evident only with the passage of time. These facts help, in part, to explain why we focus on long-term measures at Markel. Anyone, including us, can get lucky in the short-term. However, over 10, 20 or more years, only companies with skill and discipline can consistently produce value for their shareholders.

The chart at the bottom of these pages shows some key numbers for Markel's first 20 years as a public company.

(in millions, except per share data)	**2006**	2005	2004	2003	2002	2001	2000	1999	1998
Gross written premiums	**$ 2,536**	2,401	2,518	2,572	2,218	1,774	1,132	595	437
Combined ratio	**87%**	101%	96%	99%	103%	124%	114%	101%	98%
Investment portfolio	**$ 7,535**	6,588	6,317	5,350	4,314	3,591	3,136	1,625	1,483
Portfolio per share	**$753.98**	672.34	641.49	543.31	438.79	365.70	427.79	290.69	268.49
Shareholders' equity	**$ 2,296**	1,705	1,657	1,382	1,159	1,085	752	383	425
Book value per share	**$229.78**	174.04	168.22	140.38	117.89	110.50	102.63	68.59	77.02
5-Year CAGR in book value per share[1]	**16%**	11%	20%	13%	13%	18%	21%	22%	23%

[1] CAGR—compound annual growth rate

For the 20 years, in every important category, we posted compound growth rates of higher than 20%, albeit from very modest beginnings. The measures on this chart reflect our core goals: underwriting profits and growth in book value per share.

Over the 20-year period, we missed our underwriting target six times on an annual basis. These shortfalls occurred due to acquisitions where we purchased companies in need of improvement, the events of September 11, 2001 and the hurricanes of 2005. Despite the periods of annual shortfalls, we are very proud of our underwriting results over time.

The 2006 year was also fantastic for our investment portfolio. We enjoyed a measure of good luck this year as we earned 25.9% on our equity portfolio and 5.2% on our fixed income portfolio for a taxable equivalent total return of 11.2%. Given the inherent investment leverage in our insurance operations, these levels of investment returns more than support our long-term goal of high returns on Markel's shareholders' equity.

More important than the returns of any one year though are the returns created over years and decades. Over long-term periods, when time and our investment discipline begin to outweigh good luck, our results have been wonderful as well. For the last five years we earned 13.9% on our equity investments and for the last ten years we earned 14.3%. By comparison, the S&P 500 over these time frames returned 6.2% and 8.4%, respectively. This is a dramatic out performance over meaningful periods of time.

Over the course of 20 years, you will notice annual volatility in growth in book value per share. As we have a long-term time horizon and focus our energies on economic earnings, sometimes to the detriment of quarterly and annual reported earnings, we have always been willing to accept some short-term volatility in book value growth. However, when examined over longer periods of time, volatility diminishes and the pattern of performance emerges. This can be seen over the past five and 20 years, as book value per share grew at a compound annual growth rate of 16% and 23%, respectively.

LONG-TERM TIME HORIZONS

The long-term view is critical to both our underwriting and investment decisions. It can be seen in our approach to investments, acquisitions, underwriting, organic expansion efforts and private equity opportunities.

Twenty years ago, when Markel went public, the investment portfolio totaled $31 million and shareholders' equity totaled $15 million or $3.42 per share. Over the last 20 years, investments grew to $7.5 billion and shareholders' equity grew to $2.3 billion, or approximately $230 per share. These represent compound annual growth rates of 32% and 23%, respectively.

1997	1996	1995	1994	1993	1992	1991	1990	1989	1988	1987	1986	20-Year CAGR[1]
423	414	402	349	313	304	406	412	44	43	32	35	24%
99%	100%	99%	97%	97%	97%	106%	81%	78%	84%	85%	78%	—
1,410	1,142	927	622	609	457	436	411	79	59	46	31	32%
257.51	209.20	170.95	115.45	112.55	84.64	81.77	77.27	14.54	11.35	10.67	7.07	26%
357	268	213	139	151	109	83	55	60	45	20	15	29%
65.18	49.16	39.37	25.71	27.83	20.24	15.59	10.27	11.69	9.22	4.66	3.42	23%
26%	26%	31%	17%	25%	34%	35%	—	—	—	—	—	—

In 1986, it would have been impossible to forecast the real estate troubles of the early 1990's and the collapse of the savings and loan system in our country. It would have been impossible to foresee the rise of the internet, the weakening and strengthening and weakening again of the dollar. It would have been impossible to foresee the swings in energy prices. It would have been impossible to foresee the nature of the geopolitical struggles we've seen in the Middle East. It would have been impossible to foresee the terrorist attacks of September 11, 2001. All of these things affected the world's economies temporarily, but no one could forecast them, or their effects, with any consistency.

At Markel, we didn't forecast them, and we didn't need to, in order to create excellent long-term returns for our shareholders. We simply took the capital we had and used it to the best of our abilities in the insurance and investment arenas following sound and proven business disciplines. We learned each year and continued to develop our knowledge in insurance, investments and acquisitions. The long-term results speak for themselves. Equally important, this approach suggests that our culture, systems, learning, skills and decision making should remain effective in our effort to earn superior returns on capital in the future.

After our purchase of the Terra Nova Group in the spring of 2000, we embarked on a methodical and deliberate process of dealing with the legacy issues that we inherited, while simultaneously re-underwriting certain segments of the portfolio that were unprofitable. In the short term, this was a painful exercise for Markel's associates and shareholders as our results fell short of our standards. However, we believed that by sticking with our discipline and instilling the Markel Style, Markel International's long-term prospects were bright. The results have steadily improved and in 2006 Markel International began to report underwriting profits. We are now fully focused on the future and are implementing initiatives to leverage our London presence and Lloyd's platform for international expansion. Markel International is now contributing to growth in shareholder value because we focused from the beginning on long-term, rather than short-term, goals.

Woody Allen once opined in a movie that "90% of life is just showing up." That may be true, but showing up on time is even more important. Before the horrible storm season of 2005 brought us Katrina, Rita and Wilma, we had made the decision to geographically diversify our off-shore energy business. When those events occurred, the losses in our marine and energy division, though painful, were significantly less on a relative basis than the rest of the market. As a result, we were able to expand those products in 2006 and are strategically positioned to do the same in 2007. Was there an element of luck involved in our decision? The short answer is yes. However, we constantly monitor and adjust our underwriting and pricing strategies, and luck can sometimes be confused with doing the right things over and over again.

Last year in our letter we discussed opening five new Markel International branch offices. They are located in Bristol and Cambridge, England; Edinburgh, Scotland; Madrid, Spain; and Toronto, Canada. We are pleased to report that all five are up and running and produced business that added to our bottom line this past year. We are extremely pleased with all five branches; but it will be some time before they have a major impact on results. We are patient and take a very long-term view in regards to expansion.

Our recent entry into private equity also represents a good example of our long-term view. While 2006 is only the first full year, we are extremely pleased with our private equity investments to date. AMF Bakery Systems and First Market Bank enjoyed solid years of profitability and should enjoy increased earnings going forward. More importantly, these deals, which we did directly with the principals rather than through intermediaries or fund structures, point the way towards additional investment potential over time.

Private equity and hedge funds are currently the white hot areas of the investment world. We expect that over the next several years many investors will become disenchanted with their returns due to the overwhelming headlong rush into this area by so many pension and endowment funds. We think that the high fee structures associated with this form of institutional investment and the short-term nature with which so many of the investee companies are being run will ultimately produce disappointing results. Following disappointing results, we expect many investors will seek to sell rather than buy private equity. Our measured approach to date has been to invest directly in businesses, support

management teams with a long-term return on capital focus, and build the skills and relationships that should allow us to participate in this area in a more meaningful way as opportunities develop over the next several years.

DISCIPLINE

Whether it is our underwriting or investing operations, we believe that our discipline over long periods of time is what distinguishes us from our competitors. Many of our associates have long periods of service with Markel. At December 31, 2006, a quarter of our 1,897 associates have been with us for over ten years. These associates have experienced the hard and soft insurance markets and bull and bear investment markets. They have learned from their successes and, more importantly, their failures. They have embraced the Markel Style as a way to conduct business. These Markel veterans ensure that our underwriting and investing disciplines are consistently applied and are passed on to our newer associates.

At Markel, underwriting discipline represents both a philosophy and a process. Our philosophy is to work to achieve consistent underwriting profits in all products in all insurance market conditions. The process by which we achieve underwriting profits can be slightly different by underwriting unit but generally includes finding the answers to four questions: Can we assess the risk we are taking? Can we design the appropriate coverage for our client? Can we price the risk to earn an underwriting profit? Can we assess trends that may increase our risk in the future?

One of our first insurance products, the casualty product at Essex Insurance Company, is an excellent example of this discipline. We have been underwriting this product for 26 years with 10 or more points of underwriting margin the norm rather than the exception. Over the years, this product has become one of our largest as well as one of the most profitable. Much of this business is underwritten in the field by managing general agents who work within tightly defined "boxes" of authority that are set by Essex's underwriters. Average premiums per policy are less than $5,000 and typical accounts might be small artisan contractors and habitational risks. Many excess and surplus lines companies offer similar products but few have the underwriting results that Essex has enjoyed for decades. One of our most important daily disciplines is that each of the policies underwritten and issued by our agent partners in the field is re-underwritten and re-priced by an Essex underwriter prior to the policy receiving final approval and processing. This second set of eyes has proven invaluable; this extra step of discipline is directly responsible for a big portion of our underwriting profits.

When we first invested in the Shand/Evanston group in the late 1980's, their specialty offerings included a $50 million book of products liability business. As market conditions softened in the early 1990's and rates remained at depressed levels for almost a decade, sticking to our underwriting discipline required that we walk away from premium volume in this line. Annual premium volume ultimately fell below $10 million. Our underwriters worked side by side with our actuaries to continually define and understand when and where it was necessary to walk away from marginally priced business. Many of these underwriters were redeployed into other product areas that offered better opportunity and some even moved into other areas at the company outside of underwriting. However, when market conditions changed in late 2001 and pricing continued to harden during the following few years, Shand was there with market solutions and the necessary people and expertise to provide the customer service our clients demanded. For the last several years, Shand has written products liability premium volume that is a multiple of those levels from the late 1980's. While premium volume has necessarily changed with market conditions, Shand has generated significant underwriting profit margins over the years through consistent application of their underwriting discipline.

This same discipline is embodied in our investment philosophy. To review the catechism of our four part equity investment philosophy, we seek to invest: 1) in common equity of profitable businesses with good returns on capital, 2) with honest and talented management teams, 3) with reinvestment opportunities and capital discipline, 4) at fair prices. The north star provided by this time-tested discipline creates a guide to constant learning and improvement.

It is important to engrain this discipline in good years because we will need to remember it and stick to it during bad years. At some time in the future, we will have less than wonderful news to report from a single year's worth of investing

activities. All good investors suffer years of underperformance. In those times, it is easy to lose your moorings and drift into different styles and methods of investing since whatever discipline or approach you were using didn't work out so well over the most recent twelve-month period.

If your basic discipline is sound, drifting away from it is a big mistake. This mistake is common among both amateur and professional investors. Most people simply cannot take the psychological pain of underperforming for very long. The inherent uncertainty in investing and thinking about the unknowable future, causes people to embrace the practices of what others are doing currently. Human nature seeks comfort in crowds rather than the relative isolation of remaining independent in thoughts and actions.

Our investment discipline also tends to create excellent tax efficiency over time. The items we focus on, such as basic profitability and good reinvestment attributes, are typically long-term attributes of a company. As such, we tend to buy and hold our equity investments for significantly longer periods of time than most institutional money managers. In fact, our ideal investment is one that we can own forever. The result is that we defer the payment of taxes into the future rather than paying them each and every year as a short-term trader would.

You can see this aspect of our investment philosophy on our balance sheet. As of December 31, 2006, we showed unrealized gains on our investment portfolio of $712 million. Against this gain, we showed a deferred tax bill of $249 million, as we have provided for the payment of our capital gains taxes someday when we sell the appreciated securities. In the meantime, that full unrealized gain is invested and earning a return for Markel shareholders. If we were shorter term oriented and chose to sell our securities due to a forecast of higher interest rates, unfavorable foreign exchange rates, geopolitical circumstances or weather patterns then we would have $249 million less to invest. This difference of having unrealized rather than realized gains has allowed pre-tax compounding to occur in the investment portfolio that would not have been possible without a long-term focused discipline.

CONTINUOUS LEARNING

Every underwriter in our company has a story about insurance risks that didn't work out. Each of them knows the importance of continually learning from these experiences in order to make better decisions the next time. While this is basic to running an insurance business, or any other business, the concept often seems to get lost. Fortunately, we work hard to keep this simple focus intact in both underwriting and investing at Markel. We concentrate on items we can control and we constantly seek to learn from and improve on the experiences of each year.

Continuous learning is critical to an organization such as Markel that underwrites and markets complex specialty products. Sometimes these learning experiences can be expensive as was demonstrated with the 2005 hurricanes (Katrina, Rita and Wilma). As of the end of 2006, we have incurred $301 million of underwriting losses from these storms.

During the fall of 2005 and throughout 2006, we have worked to learn from last year's experience. We have formed a central catastrophe exposure management team and have developed additional tools to monitor our coastal property and earthquake exposures. We have set insured value limits on the amount of business our underwriting units can write in catastrophe prone areas. We have increased our pricing and refined our coverage. We have established plans and procedures that will be put into action when the next major catastrophe occurs and we have geographically spread our catastrophe exposed business so that we can purchase less reinsurance in the future.

We believe that the lessons learned from the 2005 storms have helped us better manage our catastrophe exposure. While we were fortunate to have benign hurricane activity in 2006, we know that it is only a matter of time before we experience the next bad hurricane season. We also recognize that applying learning to underwriting is an iterative process.

While hurricane losses are an example of an expensive lesson, our environmental products at Markel Underwriting Managers are excellent examples of continuous learning. Several of our senior associates in this division have previous training as environmental consultants and as environmental engineers. This added level of expertise helps us better evaluate environmental assessments, environmental inspections and risks in general. This training has also enhanced our credibility with producers and clients and has allowed us to build this product over the last five or six years into a very significant portion of our writings in Red Bank, New Jersey.

Some of the best opportunities for learning come from listening. Listening may be one of the things that we do best. Most of our underwriters are charged with managing broker and client relations. It is not uncommon for our underwriters to spend up to 20% of their time on the road visiting and working with our clients in their offices. One of the sayings that we have at Markel is that while modern communication is great, nothing replaces eyeball to eyeball contact. This is particularly important in a relationship driven business like ours.

Having been in the insurance business for a long time has made us a good listener when it comes to adding extra service above and beyond the contract. At Markel Insurance Company, we have been market leaders in our camp and youth recreational business for almost two decades. One value added service we offer, that is seldom provided by our competitors, is our 24-hour response capability in case of emergency or catastrophe. Given the large amount of camp business that we write, we expect to receive claims during the camp season involving serious injury. These are devastating events for all involved. When these events occur, we provide our insureds with grief counselors, public relations advice and expert defense protection.

In our excess and surplus lines units, a high percentage of our policy forms are manuscripted, or tailored, to fit individual insureds' needs. It doesn't matter if we are helping an amusement park with coverage for a railroad, a chiropractor who needs a special malpractice rider or an asbestos abatement contractor who needs a knowledgeable environmental underwriter. Our people listen first, and then solve problems.

We also believe that our time tested and proven investment philosophy increases the odds of learning and replicating good results into the future. Recently Bill Miller, one of the most successful money managers in the last 20 years, made a comment that speaks to this point. He noted that an individual security oriented, value based discipline differs meaningfully from an investment approach based on the forecasting of events or circumstances. The important difference between the two is that good forecasting doesn't seem to lend itself to future success in accurate forecasting. By contrast a value based approach of working on business fundamentals such as understanding the reasons for returns on capital, management skill and integrity, reinvestment opportunities, and valuation, seems to offer better skills and results with longer practice.

As an example, suppose you base your investment actions on forecasts (fortune telling) regarding interest rates, oil prices, foreign exchange rates, new technology, the frequency of hurricanes, geopolitical factors or any other of the many macroeconomic factors that affect markets in the short term. Suppose you were right and you made some investment decisions which worked out well due to your correct forecast. What did you learn in that process that will make you equally or better skilled at making forecasts for next year?

Peter Lynch, the famed manager of the Fidelity Magellan fund, once joked that if any economist could predict interest rates correctly twice in a row they would not need to seek gainful employment. The fact that thousands of economists still toil away every day in finance, industry, government and academia ought to tell us something about the ability to make forecasts. It simply cannot be done reliably. Miller suggests that this is mainly because forecasting is not an activity in which one can learn from mistakes.

By contrast, our underwriting and investment disciplines allow us to learn from our inevitable mistakes and get better as time goes by.

When an underwriting decision does not work out, we ask ourselves why. Did we misunderstand the risk? Did we not appropriately build our coverage form? Did we under-price the risk? Did we overlook adverse claims trends?

When an investment doesn't work out, we go back to the four parts of our investment philosophy. Did the business or industry become less profitable due to new technology or competitive factors? Did the management team prove itself to be dishonorable or ineffective? Did capital get allocated to lower return projects or bad acquisitions? Was the price we paid for the stock just too high to allow us to earn a return?

In both underwriting and investing, answering all of these questions in an intellectually honest way allows us to make better judgments when faced with the task of evaluating today's and tomorrow's opportunities. Our investment and underwriting disciplines and the logical questions they suggest create a learning environment which increases our skills and odds of success for the future.

In this discussion, we largely focused on learning from our mistakes. Fortunately, we also have many successes from which we learn. When things go right, we work to apply these lessons on success to other aspects of our business. In both underwriting and investing, appreciating these lessons helps us capitalize on our successes and minimize our mistakes. To borrow an old saying, we want to water the flowers and pull the weeds.

2006 FINANCIAL REVIEW

Gross written premiums increased 6% to $2.5 billion as the result of higher premium rates in catastrophe-exposed property lines and growth in new product areas. With the exception of large rate increases on catastrophe-exposed business, rates were generally flat or down slightly compared to 2005. Earned premiums increased 13% to $2.2 billion as a result of higher gross written premiums and higher net retentions of gross written premiums (net retentions of 87% in 2006 compared to 82% in 2005, when our net retentions were impacted by reinsurance reinstatement premiums on the 2005 hurricanes).

Our combined ratio for 2006 was 87% compared to 101% in 2005. The combined ratio for 2006 included $55 million, or 3 points, of losses related to the 2005 hurricanes. The 2005 combined ratio included $246 million, or 12 points, of 2005 hurricane losses. In addition to the favorable impact of the benign hurricane season this year, the improved combined ratio for 2006 was due to an increase in favorable prior years' loss development, primarily in our Shand Professional/Products Liability unit and significant improvement in the results of Markel International (100% combined ratio in 2006 compared to 126% combined ratio in 2005).

Net investment income increased 12% to $271 million. The increase in 2006 was due to higher investment yields and growth in the investment portfolio as a result of $512 million of operating cash flows. Realized gains were $64 million for 2006. Investment returns were outstanding as our taxable equivalent total return for the portfolio was 11.2%.

Net income for 2006 was $393 million compared to $148 million in 2005. Shareholders' equity and book value per share grew to $2.3 billion and $230 per share, respectively. Compound annual growth in book value per share was 32% for the year and 16% for the five-year period.

BALANCE SHEET AND CAPITAL STRENGTH

Operating cash flow in 2006 was a strong $512 million. Premium volume growth and collections of reinsurance balances more than offset increased claims payments related to the 2005 hurricanes.

Our investment portfolio grew by 14% to $7.5 billion in 2006. At year end, the portfolio represented approximately $754 per share of common stock.

During 2006, our already strong balance sheet improved even further. Operating leverage improved as we reduced reinsurance recoveries by approximately $550 million to $1.4 billion by collecting balances due, retaining more of the business we write and successfully completing several commutations of legacy reinsurance balances. We continue to closely monitor the quality of our reinsurers and maintain significant collateral to support these balances. This is an area of increasing strength on our balance sheet.

In August, we issued $150 million of 7.50% senior notes due in 40 years with a five-year par call. We don't have any talent predicting future interest rates, so the call gives us the option to prepay or refinance this debt. Financial leverage declined and our capital structure was simplified as we forced conversion of our convertible notes during 2006 and retired our junior subordinated debentures in January 2007. Even without taking the latter transaction into account, our debt to total capital ratio at year end was 27%.

As a guideline, we believe that funding our business with roughly one-third debt and two-thirds equity represents a good balance. We think in terms of 25% to 35% as "roughly" one-third. We had slightly more debt than "average" over the past few years, so it is okay to have slightly less than "average" today. Having additional borrowing capacity will allow us to respond quickly when future opportunities arise.

We also repurchased approximately 140,000 shares of our stock for approximately $46 million during 2006. We believed that the $328 per share paid represented a good value.

The net effect of all of this is that our balance sheet is strong and getting stronger. We are particularly proud of our financial strength and the integrity of our balance sheet.

GROWTH AND OUR MODEL FOR PROFIT

Consistent underwriting profits, superior investment returns and managing our capital create growth in book value per share for our shareholders. A great and common danger in the insurance business is to seek premium growth at the expense of underwriting profits. In the short run, it is easy to sell the cheapest price and grow at the expense of underwriting discipline. In the long run, this always leads to disaster. By continuously improving and getting better at serving our customers and solving their insurance problems we can both grow and achieve good underwriting results. In fact, our record demonstrates precisely this ability.

Over the last 20 years, we've grown both organically and through acquisitions. Two of our acquisitions, one in 1990 and the second in 2000, virtually doubled the size of our company. In both of these cases and in other smaller transactions, we purchased companies in need of repair. These acquisitions required reorganization to focus on underwriting profits along with the Markel culture. The immediate results often included short-term volume reductions, followed in all cases by profitable growth.

While the insurance industry as a whole is very competitive and cyclical, individual products and markets within the industry often show different characteristics. Profitable growth potential exists when it is based on innovation, creativity, customer service and problem solving. As niche underwriters this is what we do. Opportunities always exist. However, these opportunities do not appear in smooth and exact intervals. There will always be periods of ups and downs as with many other aspects of this business. The key, as with most other things, is patience, discipline and constant focus on long-term results.

While we do not force growth at Markel, growth is important and desirable for several reasons, as long as it is accompanied by underwriting profits. First and foremost, we continue to build our capital and we desire to reinvest it in our business where we believe we can earn high rates of return. We're still a fairly small company in a very large industry, so plenty of growth opportunity exists. Meeting the needs of our clients is also important. As they grow and face new risks, we want to be there to solve their risk and insurance problems. Finally, we want to continue to provide intellectual challenges and development opportunities for our associates. All of these objectives are more easily accomplished when we grow as an organization.

To continue to grow in the future, we will increasingly emphasize continuous learning, new ideas, better ways of meeting customer needs, and other opportunities to build our business. We cannot let our high underwriting standards become an artificial excuse for us not to grow. We cannot let our success lead to complacency. We can, and expect that we will, both grow AND earn solid underwriting results.

LOSS RESERVE PHILOSOPHY

For decades, we've maintained a philosophy of attempting to establish loss reserves at levels which are more likely to be redundant than deficient. We also refer to this philosophy as attempting to establish a margin of safety. It's impossible to set loss reserves perfectly since they represent an estimate about the future outcome of unknown events. Given this uncertainty, we do our best to understand what drives these outcomes, monitor these drivers closely and try to be conservative. We attempt to create a margin of safety so that loss reserves will ultimately prove adequate.

The net unpaid losses and loss adjustment expenses at the end of 2006 totaled $4.3 billion. About 75% of this number is for losses and the remaining 25% for expected loss adjustment expenses. Less than half of this number (about 40%) is related to claims which have already been reported while about 60% is for claims which have not yet been reported even though the losses have occurred. In insurance jargon, this is called IBNR which stands for "incurred but not reported." Unpaid losses from the 2006 accident year are estimated to be $1.0 billion. Of this amount, only 19% are estimates for specific events that we know about today. In many cases, it can take years before an insured knows of, and reports, a loss to us.

Reserves are established for each product and for each accident year. New products and the most recent accident

years contain the highest degree of uncertainty. New business is also more unpredictable than renewal business. As each accident year matures, we become more confident in our estimate of the final outcome.

We review our business each quarter using the best information available to estimate our future losses. For the most recent accident years, we base estimates largely on our historic experience and current business plans, along with a healthy dose of skepticism. We analyze the pricing trends and changes in underwriting approaches, the impact of inflation and changes in the legal environment. All of these items require significant judgment and adverse outcomes are possible. We want the reserves to include a margin of safety so that they will ultimately prove adequate. As the accident year matures, the reserves are increasingly based upon actual claims experience and estimates of the ultimate cost of specific claims. If the business progresses as we would hope, any conservatism or redundancy established in the earlier period will be released as the years go by and the actual results emerge.

While we have consistently tried to maintain a margin of safety in our reserves, our experience shows that we have not always been successful. In most years our reserves have proven to be more than adequate; however, we have had some surprises, and surprises are almost always bad in insurance.

Culturally, we emphasize the importance of dealing with bad news quickly. We tend to be a little slower in recognizing good news. Fortunately, we also find examples where our conservatism results in reserves being released. In the period 2000 to 2003 we increased our business in the specialty physicians' product from $14 million to almost $100 million. While pricing was strong and much of this business was first year claims made business, we were very cautious in estimating the ultimate claims costs. New business and fast growth often create problems. Fortunately, this business proved to be even better than our best expectations. In the past few years we have recognized about $75 million in reserve redundancies from this product and, if the current trends continue, there could be a bit more to come.

Consistent application of our reserving philosophy is more important to us than reported earnings. During periods of high growth, or after acquisitions, reported earnings suffer as we establish an appropriate margin of safety. In more normal periods, redundancies established in earlier periods will be released as those accident years mature. At the same time, the current accident year margin of safety is established at conservative levels. When surprises occur, they are accounted for and reported promptly. While the annual impact on the income statement will vary, we expect the loss reserves on the balance sheet to maintain a consistent margin of safety.

Converting this philosophy into practice is also not always simple. We have about 100 different products, each of which has many unique characteristics. Loss reserving starts with historical reviews, which in some of our products can be limited by lack of data. It involves judgments about current underwriting and pricing standards, expected loss frequency and severity, inflation, the legal environment, currency values and other trends.

The reserving process takes advantage of actuarial science using the principles of probability and statistics. Obviously all of the data points are in the past, yet we are trying to forecast the future. Many estimates and assumptions must be made and small variations in these can have a material impact. So while the systems and computers might be very robust, they cannot replace good judgment.

The most important aspects of our past successes and future prospects are that we approach issues and potential problems conservatively and with intellectual honesty. Our philosophy, principles and goals remain clear and guide us as we try to use good judgment in making daily decisions.

We encourage you to read Critical Accounting Estimates beginning on page 79 where we discuss our loss reserving process and philosophy in more detail.

BOARD APPOINTMENT

We are pleased to have added Lemuel E. Lewis to our board of directors effective February 22, 2007. Lem recently retired from Landmark Communications, Inc., a media holding company headquartered in Norfolk, Virginia, where he served as Executive Vice President and Chief Financial Officer. Lem remains a member of Landmark's board and also serves on the board of the Federal Reserve Bank of Richmond. We are excited that Lem has chosen to join our board. We look forward to having his counsel and the benefit

of his experience. Lem will stand for election along with the other members of our board of directors at our 2007 Annual Shareholders' meeting on May 14, 2007.

CLOSING COMMENTS

Our first 20 years as a public company have been exciting and prosperous; 2006 was a great year and we are optimistic for the future.

This success is, in large part, due to our commitment to the Markel Style and a focus on maintaining a long-term time horizon, discipline and continuous learning. Like any business, we're here to make money. But more than that, we want to build a successful and sustainable organization that can continue to grow, serve its clients well, provide opportunities for its associates and generate financial success for its shareholders for decades and generations to come.

Another integral element to the way we do business is a sound incentive compensation system. Since our earliest days as a public company, management has always worked to put shareholders first. Management compensation at Markel has always been based on the idea that base salaries should be reasonable—but that meaningful incentives should be available when we achieve our lofty goals.

We believe in employee share ownership, but we do not believe that stock options are a good way to create it. Being "given" an option is simply not the same as buying stock. Under our incentive system, when Markel associates deliver exceptional results for our shareholders in the form of underwriting profits or growth in book value, they earn meaningful bonuses. For some of our senior executives, we pay part of their bonuses in restricted stock to tie their interests even more closely to those of our shareholders. For all associates, we have implemented incentives to buy Markel stock so they can choose to participate as owners in a sound and successful business.

These philosophies come together to create a virtuous cycle where success breeds success. Our ultimate goal at Markel is to achieve continued success for all our stakeholders.

We thank our associates, our shareholders and our clients for being part of our success.

Alan I. Kirshner
Chairman of the Board and Chief Executive Officer

Anthony F. Markel
President and Chief Operating Officer

Steven A. Markel
Vice Chairman

Paul W. Springman
Executive Vice President

Thomas S. Gayner
Executive Vice President and Chief Investment Officer

Richard R. Whitt, III
Senior Vice President and Chief Financial Officer

From left to right: Paul W. Springman, Anthony F. Markel, Thomas S. Gayner, Steven A. Markel, Alan I. Kirshner, and Richard R. Whitt, III.

TO OUR BUSINESS PARTNERS

We are pleased to share with you our 2007 report. The year was very successful on a number of fronts, as we continued to produce excellent financial returns and build the enduring strength of our organization. We benefited from another quiet year on the weather front (no pun intended), and our underwriters maintained their discipline in an increasingly competitive and undisciplined insurance market. We avoided most of the land mines in the financial markets and were pleased with our investment results. Together, our underwriting and investment efforts resulted in net income of $406 million, or $40.64 per share, and growth in book value per share of 15%, to $265.26 per share. The five-year compound annual growth rate in book value per share was 18%.

During the past year, the property and casualty insurance market continued to become more competitive. As we have enjoyed a recent lack of severe weather, some property competitors are pricing risks at what we believe are unrealistic levels. Recent profitable underwriting results in casualty lines have also led to increased pricing pressure. Strong financial returns and new capital raised over the past few years have produced excess market capacity. Based on the most recent industry data, the U.S. property and casualty insurance industry should finish 2007 with approximately $540 billion of capital and $450 billion of annual premiums. This is the lowest underwriting leverage ratio since the low point of the last soft market. In addition, these capital numbers do not include offshore capital in markets like Bermuda and London that is also competing in the U.S. marketplace. While this example only addresses the U.S. market, the same dynamics are occurring in the worldwide insurance market. As a result, the industry has too much capital and, therefore, increased competition.

For Markel, this environment calls for caution. During 2007, our gross written premiums totaled $2.4 billion, 7% lower than 2006. Clearly, we would prefer to grow; however, our focus has always been, and will continue to be, producing profitable underwriting margins. We are pleased to report that 2007 underwriting profits totaled $264 million with a combined ratio of 88%. Growth in our investment

in millions, except per share data:	2007	2006	2005	2004	2003	2002	2001	2000	1999
Gross written premiums	$ 2,359	2,536	2,401	2,518	2,572	2,248	1,774	1,132	595
Combined ratio	88%	87%	101%	96%	99%	103%	124%	114%	101%
Investment portfolio	$ 7,788	7,536	6,588	6,317	5,350	4,314	3,591	3,136	1,625
Portfolio per share	$782.18	753.98	672.39	641.49	543.31	438.79	365.70	427.79	290.69
Shareholders' equity	$ 2,641	2,296	1,705	1,657	1,382	1,159	1,035	752	383
Book value per share	$265.26	229.78	174.04	168.22	140.38	117.89	110.50	102.63	68.59
5-Year CAGR in book value per share(1)	18%	16%	11%	20%	13%	13%	18%	21%	22%

(1) CAGR – compound annual growth rate

portfolio and higher interest rates produced net investment income of $306 million, a 13% increase over 2006. Net income was $406 million, another record. Total comprehensive income was $337 million with shareholders' equity increasing to $2.6 billion, or $265.26 per share.

TWENTY-YEAR PERSPECTIVE

We present the 20-year table to remind you, and us, of the importance of maintaining a long-term perspective. While year-to-year volatility does exist, we have enjoyed compound annual growth rates in excess of twenty percent for all categories over the 20-year period. It is interesting to note that gross written premiums over the past five years have barely increased, but, during the same period, we have successfully compounded book value per share at 18%. We are not complacent about our recent lack of premium growth, but the strength of our financial performance in its absence demonstrates the importance of consistent underwriting profits and superior investment returns as the drivers of our success. While premium volume growth over the long term is very important, the year-to-year change bears very little relationship to our bottom line results. We will therefore always seek opportunities for growth, but never at the expense of profitable underwriting.

Due to our focus on underwriting profits over premium growth, we have increased shareholders' equity at a faster rate than our investment portfolio in recent years. At the end of 2007, the investment portfolio was $7.8 billion, about 75% larger than five years ago. During the same time period, shareholders' equity more than doubled to $2.6 billion. As a result, our investment leverage (investment portfolio divided by shareholders' equity) has declined from just under 4 to 1 five years ago to just under 3 to 1 today. As our investment leverage declines, underwriting profits become even more important in driving superior total returns. At the same time, the lower financial leverage allows for a larger allocation to our equity portfolio to

1998	1997	1996	1995	1994	1993	1992	1991	1990	1989	1988	1987	20-Year CAGR[1]
437	423	414	402	349	313	304	406	412	44	43	32	24%
98%	99%	130%	89%	97%	97%	97%	106%	81%	78%	84%	85%	- -
1,483	1,410	1,142	927	622	609	457	436	411	79	59	46	29%
268.49	257.51	209.20	170.55	115.45	112.55	84.64	81.77	77.27	14.54	11.35	10.67	24%
425	357	268	213	139	151	109	83	55	60	45	20	28%
77.02	65.18	49.16	39.37	25.71	27.83	20.24	15.59	10.27	11.69	9.22	4.65	22%
33%	26%	26%	31%	17%	25%	34%	35%	--	—	—	—	...

earn higher long-term returns. For our investment portfolio to grow at a faster rate, we will need to find profitable opportunities to increase premium volume.

REVIEW OF 2007

Rather than review the year in a Management's Discussion and Analysis format, which you can read starting on page 79 of the report, we thought we would share some of the 2007 highlights from our perspective.

Operations

On the operations side, we made significant progress in a number of areas in 2007. Probably the most exciting news is that Markel International reported underwriting profits for the year. MINT ended the year with a 93% combined ratio and earned $46 million in underwriting profits. In addition, the quality of the balance sheet and loss reserves are as strong internationally as they are in the U.S. Our London Insurance Market business has come a long way since the Terra Nova acquisition in 2000. While it has taken longer than we would have hoped, the business is worth much more today than we paid for it, and it is now earning solid returns on our capital. To put icing on the cake, MINT paid its first cash dividend to Markel Corporation in 2007.

In the U.S., our operations produced excellent underwriting results. Markel Shand again led the way, producing $136 million of underwriting profits on its professional liability book of business. It was another great year at Markel Essex as it produced $78 million of underwriting profits. Markel Southwest Underwriters and Markel American also made significant contributions with combined ratios in the low 80's. Markel Insurance Company continued its string of strong performances, producing a combined ratio in the low 90's. Markel Underwriting Managers' results continued to improve in 2007, and we are delighted with the turnaround that has occurred there over the past few years. While still reporting underwriting losses in its start-up phase, Markel Global Marine and Energy added product capabilities during 2007 and is on track to produce underwriting profits in 2008.

However, there were some disappointments in 2007. Virtually all of our businesses gave up ground in terms of premium writings. Premium volume was down 7% as the insurance market continued to soften. In addition, while still strong, underwriting margins slipped. Our businesses produced good margins in 2007, but not at the levels of the past few years, and the market is becoming even more challenging.

At Markel Re, we failed to meet our goals and expectations. While three of the four major product areas are profitable and have bright futures, our business model in the Specialized Markel Alternative Risk Transfer (SMART) product line simply did not work. Several factors contributed to our underwriting losses and they varied by program. However, the most common problem across all the programs written by SMART was our delegation of underwriting authority to managing agents without, in hindsight, sufficient underwriting oversight. We have long known the risks of delegating underwriting authority and have re-learned an expensive lesson.

During the first quarter of 2008, we will be transferring the three profitable Markel Re products to Markel Underwriting Managers and a scaled down, better controlled and refocused alternative risk transfer capability to Markel Insurance Company. These transfers will allow us to better manage the expenses of these programs and provide the necessary resources to seek profitable growth.

Investments

On the investment side of our business, performance was solid in 2007 despite one of the most challenging investment markets in recent memory. The investment environment in 2007 was chaotic, and we steered clear of most of the problems. Our investment portfolio continues to be managed with the same long-term, disciplined focus on earning superior total returns over time.

Our total investment returns in 2007 were 4.8%, with fixed income producing a return of 5.6% and equities producing a small loss of 0.4%. We are particularly pleased with the fixed income results as they show the value of sticking to our plain vanilla approach of investing policyholder funds in high quality securities with minimal credit risks. We avoided the debacle faced by many larger and more sophisticated investors in the fixed income markets by our stubborn insistence on basic and uncomplicated credit quality. As Will Rogers once said, "I'm more concerned about the return of my money than the return on my money." When it comes to fixed income investing, we are disciples of Mr. Rogers.

On the equity side, we remain committed to our four-part philosophy by which we select our investments. We look for profitable companies with good returns on capital, run by honest and talented management, with reinvestment opportunities and capital discipline, at fair prices. While our 2007 loss of 0.4% was disappointing, our five-year and ten-year returns were 11.8% and 10.7%, respectively, and we think these are a better representation of the economic returns achievable from our equity investing activities.

During 2007, our equity performance suffered on a relative basis due to our large holdings in several financial and consumer-related businesses and minimal holdings of energy and commodity firms. As the famous investor John Templeton once said, "The five most expensive words in investing are, this time it is different." In the equity markets, participants are acting as if things are different this time in that they seem to believe that energy and commodity prices will remain high and that the consumer and financial sector will remain depressed indefinitely. We do not believe that this will prove to be the case.

Technological progress throughout time has done nothing but make basic materials and energy less expensive and more efficient. We believe this process will continue, and intellectual and financial capital will continue to outperform physically based substances such as energy and commodities. As a result, our portfolio contains a preponderance of companies with intangible intellectual capital, brand values and financial service and intermediation skills. We think these sorts of companies ultimately provide even greater protection against inflation than physical commodity based companies due to their abilities to re-price their goods and services regularly and to not be forced to spend ever higher amounts to replace depleting physical assets.

Additionally, we retain our long-term confidence in the world's financial system which is predicated on the vast majority of debtors paying their debts. Without that behavior the system collapses. The financial system is the central nervous system of our modern world. Without functioning banks, securities markets and insurance, modern life as we know it would cease. Consequently, we expect that normalcy will return as the current episode of irresponsible lending practices and unwise securities market behaviors gets digested by the overall system. Lenders are already more prudent and securities buyers are more chastened than during the boom times. The sober practices of today will restore profitability and normalcy to the system. We simply have no choice. The banking and savings and loan crisis of the early 1990's and its historical ancestors from 1974, 1929, 1907 and the 1870's give the government, individuals, corporations and the markets, plenty of time-tested approaches to heal the system.

This time it is not different. Fixing these problems is not discretionary now as it was not then. All of us will do whatever it takes. Noted economist Herbert Stein observed that, "If something cannot go on forever, it will stop." A corollary of this law is that, "things that must happen, will." This is one of those things that simply must happen.

This time is also not different in that the naysayers about America are wrong, just as they always have been in the past. For 300 years, the American economy has made forward progress and will continue to do so. With the low exchange value of the dollar, the export sector of our economy is already showing signs of strength. Additionally, anecdotal evidence of foreign buyers purchasing real estate assets shows that real estate prices will stop somewhere short of zero. New York City real estate remains particularly strong. This is probably directly attributable to foreign purchasers and their familiarity and confidence in the long-term future of New York. We have also heard stories of depressed Miami condominiums as well as apartment projects in Richmond, Virginia being purchased by foreign buyers.

Our point is that skepticism about the future of America is misplaced. The notion that you must invest internationally as the only avenue for substantial growth is wrong when considered as an either/or proposition. Enterprising and well run companies will prosper in the U.S. and internationally. Opportunity abounds in emerging markets as well as those that are more well-established. Our portfolio is stuffed with companies that benefit from economic activity wherever it occurs.

Fundamentally, we believe that this time is not different. Our time-tested approach will once again produce solid investment returns. The current environment is one of rich opportunity. The current financial crunch will heal and pass as all others have done before. The world is growing and quality businesses that benefit from this worldwide growth are on sale. Dividend yields from a well-diversified equity portfolio match or exceed current bond yields, a condition that hasn't existed since the 1950's. These are the types of companies that we own. We are optimistic about their future and our ability to share in their success as owners.

ASSOCIATE ENGAGEMENT SURVEY

Another highlight of 2007 was the completion of the first Markel associate engagement survey, where we asked all Markel associates for their opinions on a number of issues. One of our most important tasks is building and maintaining the Markel Style, and we wanted to know how we were doing. What better way than to ask those who live the Style every day?

We were delighted that over 93% of our associates took time to fill out the survey. According to the firm that administered the survey, this was a stunning response rate, confirming that our associates are engaged and care about their Company. The results were very encouraging, and it is clear that at Markel we live, breathe and love the Markel Style. The Company scored very high, at least 90% favorable responses, regarding its social responsibility, customer focus, quality of products and ethical business dealings. It was also gratifying to see that 93% of our associates felt that they had a good understanding of the Markel Style and that 95% responded that they were committed to the success of our organization.

We also learned that Markel associates are very proud of their Company and both agree with and share its goals. Another positive finding was that a similar number of associates believe that the Company has the correct plan and will be successful in the future.

However, the survey was not all good news. We found that we could do a better job providing Markel associates with career development, training and advancement opportunities. Our associates also believe there are opportunities for more and better collaboration between our business units. We are committed to addressing the areas identified for improvement and have established goals and action plans for 2008. We will repeat the survey after the action plans have been completed and will report our progress.

CORPORATE GOVERNANCE AND MANAGEMENT ACCOUNTABILITY

Corporate governance continues to receive increased public interest and attention. In this year's annual report, we want to discuss our thoughts about good governance.

The Markel Style is the best starting point in looking at this issue. The Style is Markel's value statement and defines our core principles. We are committed to success. We believe in honesty and fairness in everything we do. We understand our responsibility to every constituency: customers, suppliers, associates, the community and shareholders. We operate and seek solutions where everyone can win and enjoy success. These principles are communicated to all Markel associates and we make them part of the way we operate on a daily basis. Fundamentally, good corporate governance is about these same principles, it's all about finding the best alignment of the interest among all stakeholders.

In our early days of planning to become a public company, we clearly defined the responsibility of executive management to the Company and its shareholders, as well as the important primary rights of shareholders. We are happy to be accused of copying Berkshire Hathaway from time to time and have admittedly done so in our borrowings from Berkshire's

"Owners-Related Business Principles." It is no accident that we have always headed this letter "To our business partners" because we truly think of our shareholders as our business partners. In addition, you are our family, friends, neighbors and business associates. It just makes sense to treat you honestly and fairly.

As the years have progressed, the rules and regulations concerning corporate governance have continued to grow and become more and more complicated. Committee charters, independence rules, financial expertise requirements, attendance disclosures and many other issues are meticulously defined and regulated. While much of this is valuable and prevents abuse, it also creates bureaucracy. It exposes everyone to the risk of paying too much attention to form and not enough to substance. At Markel, we continue to recognize the importance of complying not only with the rules and regulations, but more importantly with the underlying principles of good governance.

Management Compensation

At the heart of corporate governance is the alignment of interest between executive management and the shareholders, particularly as it relates to compensation and objective performance evaluation.

Markel's compensation policies have been very consistent for many years. We want all Markel associates to receive a competitive base salary and a solid package of benefits to provide for families, health and retirement. More importantly, we want associates to have the opportunity to earn meaningful bonuses as a result of achieving challenging goals and the opportunity to build personal wealth through participation in the Markel stock ownership plans.

Every company has finite resources. To the extent they are spent for the executives, they are not available for the Company or its shareholders. We have always believed that the Company and its shareholders have first call on these resources. Executives should participate through bonuses only after the achievement of superior returns. In addition, they should participate by being shareholders as well.

In recent years, executive compensation in many companies has increased much faster than seems rational. We do not believe this has happened at Markel. While we want and expect to be paid reasonably and fairly, our board has used common sense and good judgment to establish executive management's compensation levels. We do not use compensation consultants and we do not keep track of every competitor's program. We simply want to be absolutely certain that Markel shareholders get a fair deal as regards executive compensation.

For example in 2005, primarily due to the hurricane losses from Wilma, Rita and Katrina, our results were short of our objectives and your executive management team's bonuses suffered (as they should have).

The executive team has a very simple bonus plan based on five-year compound average growth in book value per share. This has been our primary financial benchmark for judging our performance for many years. It also makes a lot of sense as growth in book value per share incorporates both underwriting and investing and a rolling five-year period focuses our attention on the long term. We believe this approach

follows our goal to build financial value over the long term.

Stock ownership is also a very important component of our compensation philosophy. Many companies believe stock options achieve this ownership mentality. We disagree. We do not use options as part of our ownership programs. We believe purchasing, paying for and assuming the downside risk are all integral components of stock ownership. All senior managers at Markel are expected to invest in the Company and own a multiple of their salary in Markel stock. We have established many opportunities for this to occur. All U.S. Markel associates who participate in our retirement plan receive part of Markel's contribution in Markel stock. We have payroll deduction plans as well as low interest loans to help encourage stock purchases. And finally, a substantial portion of many of the senior executives' annual bonuses is paid in restricted stock. An important element of these plans is the education of associates so they understand the economics of the Company and stock ownership. At year end, associates owned more than 10% of our outstanding shares with a market value of just under $500 million. This is over 3 times as large as our annual base compensation expense. Markel associates are economically focused on building the value of the Company.

Objective Evaluation of Performance

It is impossible for any self-evaluation to be totally objective. While corporate financial statements are independently audited, they are management's financial statements. Accounting rules have become diabolically complicated and difficult to understand. In spite of this environment, we have tried to remember the good old fashioned principles of accounting. We work to have consistent and conservative accounting policies and apply full disclosure to all important information necessary for our shareholders to form independent judgments about the Company's performance and future prospects. We communicate both good and bad news. We try to avoid too much sizzle and just give you the facts.

At any given point in time, our financial statements include many estimates, particularly as they relate to our loss reserves. Over the years, we have provided a great deal of information about how the reserving process works at Markel. In this area, we consistently seek to establish reserves that are more likely redundant than deficient, that is we would rather reserve too much than too little. While somewhat complicated, the schedule on page 103 of Management's Discussion & Analysis discloses our actual results as compared to our initial loss reserve estimates. We encourage you to read these disclosures and draw your own conclusions.

We consistently try to fully explain our philosophy and thought process around important business issues as well as our results. It helps that our financial goals can be stated in one simple sentence: "We seek to earn consistent underwriting profits and superior investment returns to build shareholder value."

STOCK PRICE AND STOCK VALUE

We generally do not discuss the market price of our stock. However, we share another Berkshire Hathaway shareholder principle that is closely related

to treating you as business partners. It involves how we think about our stock price, our business and our long-term orientation. Our goal is to build the financial value of the Company over the long term, and we would like the stock price to reflect the Company's underlying value as consistently as possible. We, and we hope you, understand that during short periods of time, the stock price may not move exactly or even in the same direction as the Company's intrinsic value. For the Company and its long-term owners, it is not in our best interest for the price of our stock to be either unrealistically too high or too low. Consequently, we try to communicate as openly and consistently as possible to help the marketplace make reasonable judgments about our intrinsic value. Over long periods of time, we think that this has indeed occurred.

Part of our effort to have the closest correlation between stock price and intrinsic value involves attracting shareholders who have a good understanding of our business and share our long term orientation. Ideally, they will also think of themselves as our business partners and will look at our long-term results and future prospects more than the daily fluctuation of the stock price. We believe that one of our great strengths is that we have just such a shareholder base.

In order to continue to enjoy this wonderful state of affairs, we have consistently communicated and will continue to consistently communicate our current and future prospects to enable you to make rational judgments about the business, evaluate our results and form reasonable expectations.

Over the past 20 years, we have increased virtually all indicators of value by over 20%. The stock price has followed suit. Of all the indicators of value, we think book value per share and our ability to grow it are the best. That's why growth in book value is the measure for our executive bonus plan. During 2007, we increased book value by 15%; however, during the same period, our stock price was basically flat. Over the past five years, book value has compounded at 18% and our stock price appreciated at a fairly similar annual rate of 19%. While we would like for the two to move exactly in parallel, we do not have control over the multitude of factors that influence the financial markets on a daily basis. Instead, we focus on what we can control, growing book value, and understand that over time the stock price will follow.

PLANNING FOR THE FUTURE

Reading this letter, you may have noticed two small name changes that have large implications. For over 75 years, the Markel name has been held in high regard throughout the insurance industry. We realized that we need to do a better job of capitalizing on the integrity and financial strength of Markel Corporation while continuing to give our customers the individual care and attention that they have come to expect and deserve from each of our units. As a result, Shand Morahan and Essex changed their names to Markel Shand and Markel Essex. These were the last units within the Company that did not use Markel in their names. The name changes will allow us to better capitalize on the strength of the Markel brand.

Over our history, Markel has grown and developed our business in a decentralized manner, establishing new business units every few years. As each has grown, we have increasing areas of overlapping businesses as well as duplication of back office functions. One of our most interesting 2008 initiatives is one we have named Atlas. At Markel, it's not a project until you give it a name, preferably developed in a contest. As you know, an atlas is a collection of maps. Our goal with Atlas is to create a map for Markel's future operations. We are closely examining what we're doing and how we're doing it and asking ourselves if there is a better way for the future. Fortunately, nothing operationally is broken. However, technology and the marketplace are constantly changing and we want to make sure we understand those changes and constantly adapt and improve. The bad news is that we'll be spending money and time on this project. The good news is that we believe it will help us develop the best strategy for Markel's future.

CLOSING COMMENTS

Our crystal ball has never been very good. Nevertheless, we expect, with some degree of confidence, the insurance and investment markets to be challenging in 2008. At Markel, we believe we have some of the very best insurance and investment professionals anywhere. In spite of difficult markets, we will find opportunities to profitably underwrite and invest to continue to build the strength and value of your Company.

We thank our associates, shareholders and customers for being part of our success.

Alan I. Kirshner
Chairman of the Board and Chief Executive Officer

Anthony F. Markel
President and Chief Operating Officer

Steven A. Markel
Vice Chairman

Paul W. Springman
Executive Vice President

Thomas S. Gayner
Executive Vice President and Chief Investment Officer

Richard R. White, III
Senior Vice President and Chief Financial Officer

From left to right: Paul W. Springman, Anthony F. Markel, Thomas S. Gayner, Steven A. Markel, Alan I. Kirshner, and Richard R. White, III.

2008

TO OUR BUSINESS PARTNERS

In this year's annual report, we hope to fully communicate our 2008 results and some of our plans for 2009 and beyond. We take seriously the trust that you have placed in us, and we view this report as an integral component of the accountability we owe you. Our job is to protect and build Markel's capital over time. Unfortunately, the collapse of the financial markets in 2008 went beyond what we predicted or expected, and we did not accomplish our goal this year. In 2008, our book value per share declined 16% to $222.20 per share. Over the past five years, book value per share increased at a 10% compound annual rate.

If we had predicted in last year's letter that the following would occur during 2008, would you have believed us?

- Insurance prices would continue to decrease and a major hurricane would hit the Houston metropolitan area. Despite this, Markel would report a 99% combined ratio for the year.
- Worldwide financial markets would implode, experiencing their worst declines since the Great Depression. Markel's equity portfolio return would be a loss of 34% with over $400 million of realized investment losses. Despite this, Markel would outperform the S&P 500 index.
- Even with the insurance and financial market problems, Markel would end the year with low financial leverage and senior debt rating upgrades from two rating agencies. We would hold $1.1 billion of cash and short-term investments on a consolidated basis and $651 million of cash and investments at our holding company.
- Markel would end the year in a much stronger financial position than AIG, Citigroup and Bank of America. We did so despite the fact that these firms received hundreds of billions in federal bailouts.

How can we describe the 2008 year and what occurred in the financial markets and at Markel? More important to you, our shareholders, how do we assess our performance during 2008? Words a shareholder

(in millions, except per share data)	**2008**	2007	2006	2005	2004	2003	2002	2001	2000
Gross written premiums	**$ 2,213**	2,359	2,536	2,401	2,518	2,572	2,218	1,774	1,132
Combined ratio	**99%**	88%	87%	101%	96%	99%	103%	124%	114%
Investment portfolio	**$ 6,908**	7,788	7,535	6,588	6,317	5,350	4,314	3,591	3,136
Portfolio per share	**$703.94**	782.18	753.98	672.34	641.49	543.31	438.79	365.70	427.79
Shareholders' equity	**$ 2,181**	2,641	2,296	1,705	1,657	1,382	1,159	1,085	752
Book value per share	**$222.20**	265.26	229.78	174.04	168.22	140.38	117.89	110.50	102.63
5-Year CAGR in book value per share[1]	**10%**	18%	16%	11%	20%	13%	13%	18%	21%

[1] CAGR—compound annual growth rate

might use include "disappointing" and "poor." If you wanted to be more critical, you could use words like "disastrous" or "worst year ever." While all these words could be used to sum up Markel's 2008 results, we believe another word should also be added in the mix, "opportunity."

To be fair, it was not a good year, and you have every right to be disappointed, but we ended 2008 prepared unlike any other time in our history to take advantage of enormous opportunities in the years ahead of us. We enter 2009 with the capital, both financial and human, to take advantage of the growing opportunities in the specialty insurance marketplace, as well as investment opportunities that will eventually emerge as financial markets heal.

TWENTY-YEAR PERSPECTIVE

Here is an updated 20-year chart from last year's letter. A year ago we remarked, "We present the 20-year table to remind you, and us, of the importance of maintaining a long-term perspective." Last year was a good year. This year was not. Throughout the decades, our underlying philosophy and long-term vision remain the same. We think it is just as important to remember this in a year when things did not go as well as we would have liked.

This year's numbers do not make for the best reading. We achieved total gross written premiums of $2.2 billion in 2008, a decline of 6% and a level similar to the amount of business we did in 2002. The insurance market has endured declining prices for the past several years and 2008 showed no relief. While we believe our underwriters maintained their discipline and let business leave us for cheaper rates, our overall pricing and margins diminished along with the industry. The vast majority of our business continues to earn underwriting profits; however, the margins are now too thin. The time has come to move prices up, and we have started this process.

The flat volume over the last five years contains both good and bad news. The good news is that we worked diligently to maintain our underwriting discipline despite increasingly irrational competition. We also were able to grow book value through this period even with flat top-line revenues. The bad news is that we have not had enough success finding the opportunities for profitable growth that do exist. This is not for lack of effort. Our experience tells us that we must try many new product ideas to find the few that can make a significant contribution. While we enjoyed some modest successes over the past few years with our new initiatives, none have been large enough to offset the volume we continue to lose due to market competition.

Underwriting results for 2008 reflected the competitive insurance market, as well as Hurricanes Gustav and Ike. Despite these obstacles, we finished the year with a combined ratio of 99%. Of course our

1999	1998	1997	1996	1995	1994	1993	1992	1991	1990	1989	1988	20-Year CAGR[1]
595	437	423	414	402	349	313	304	406	412	44	43	22%
101%	98%	99%	100%	99%	97%	97%	97%	106%	81%	78%	84%	—
1,625	1,483	1,410	1,142	927	622	609	457	436	411	79	59	27%
290.69	268.49	257.51	209.20	170.95	115.45	112.55	84.64	81.77	77.27	14.54	11.35	23%
383	425	357	268	213	139	151	109	83	55	60	45	21%
68.59	77.02	65.18	49.16	39.37	25.71	27.83	20.24	15.59	10.27	11.69	9.22	17%
22%	23%	26%	26%	31%	17%	25%	34%	35%	—	—	—	—

goal is to earn consistent underwriting profits. We have done a good job in recent years, producing underwriting profits in five of the past six years. We barely missed in 2005 with a 101% combined ratio as a result of Hurricane Katrina. Over the past 20 years, we have produced underwriting profits in 14 out of 20 years. Our misses were primarily related to the acquisitions of Shand, Investors and Terra Nova and Hurricane Katrina. Given the current low investment returns, we need to earn combined ratios in the low 90's or better to achieve reasonable returns on capital.

Over the past five years, the compound annual growth rate of Markel's book value per share stands at 10%. By comparison, the five-year compound annual growth rate of the S&P 500 was a loss of 1.5%. Despite our relative outperformance in book value growth and the 3.4% compound annual growth in Markel's share price over this period, these results are below our goals and expectations. Consequently, as you would and should expect, your executive management team earned no bonuses this year. We have all witnessed recent examples of executive compensation excesses. At Markel, we have always tried to treat shareholders and our associates fairly.

As evidence of the long-term effectiveness of our approach, we can look to our success in growing book value with a 20-year compound annual growth rate of 17%. Our objective for 2009 is to return to historical form and build book value per share at high rates of return over long periods of time.

Inside the front cover of this year's report are our Profile and The Markel Style. Like our 20-year record, this mission statement and our value system remained consistent throughout the period. We continue to believe that these principles reflect unchanging truths, and they will lead us to success in the years to come just as they have in the past.

REVIEW OF 2008

The best thing we can say about 2008 is that it is over. It is also a year when we learned a great deal about volatility, resilience, flexibility and margin of safety. We look forward to applying those lessons in 2009 and beyond.

Operations

Given the difficult underwriting environment we faced in 2008, producing a 99% combined ratio for the year represents a modest success. Our results included $95 million of losses, or almost five points on our combined ratio, from Hurricanes Ike and Gustav. We are pleased that this represents a $20 million improvement from the loss we initially estimated on the hurricanes in our third quarter results.

Hurricane Ike was a bigger (over 500 miles wide) and more extended storm than any previous hurricane. Based on analysis of our losses from Ike and Gustav, we believe that the underwriting corrective actions that we put in place after Hurricane Katrina are working. There is still work to do, but we are pleased to have met our goal of producing an underwriting profit in a year with significant hurricane losses.

In addition to hurricanes, we continued to combat rate pressure throughout most of 2008. Fortunately, as we approached the end of the year, rates began to stabilize in many classes. However, given how far rates have fallen over the past several years, stable rates are not enough. During the fourth quarter, we instructed all of our underwriters to stop offering rate decreases, and we followed soon after with targeted rate increases for most of our lines of business. In the short run, being among the first to stand up to the need for rate increases may hurt our premium volume. This, however, is a small price to pay. Inadequate pricing will get an insurance company in trouble much faster than losing premium volume (more on this subject later).

In the United States, our operations produced good results, although they were tempered by storm losses and price deterioration. Markel Shand and Markel Essex again led the way with solid, but smaller than 2007, underwriting profits. Markel Southwest, Markel Insurance Company and Markel American also made solid contributions; however, all were impacted by the storms and soft market. Markel Underwriting Managers and Markel International reported underwriting losses for the year. At Markel Underwriting Managers, this was largely due to extreme price competition in their lines of business and the need to establish significant margins of safety as a result. At Markel International, storm losses and problems in a medical malpractice book led to an underwriting loss.

To produce a consolidated underwriting profit, we also had to overcome a few disappointments in 2008. Our team at Markel Global Marine and Energy worked extremely hard to build a franchise for us in Houston; however, we were not able to generate the critical mass necessary to sustain the operation. We made the difficult decision to close this unit at the end of the year. We also made the decision to exit medical malpractice at Markel International. This was an experiment to reproduce our profitable U.S. medical malpractice results in Europe. While we were unable to make these expansion efforts work, we will continue to look for profitable growth opportunities.

One Markel

You may remember from last year's letter that we talked about our Atlas project and how we were building a roadmap for our future through it. During 2008, we continued to refine the vision for the project and renamed it One Markel. The reason for the name change was simple. While we have many goals for One Markel, the primary goal is to get closer to our customer with the full array of Markel's product offerings. We want to be easier to do business with, find out about new business opportunities more quickly and become more efficient in providing insurance solutions to our customers. We want to give each of our customers one access point to Markel through regional teams dedicated to bringing them the right Markel products and services.

By spring 2009, we will transition our four wholesale business units to a regional structure. We have split the country into five regions: Northeast, Southeast, Midwest, Mid South and West. Each regional office will be responsible for serving all the needs of the customers located in their regions. Each regional team will have the full menu of Markel products available to serve their customers.

With our regional teams focused primarily on customer service and marketing, we have created a central product line group that has primary responsibility for underwriting guidelines, pricing and program design. The product line group's focus will be to ensure that the products needed by the regional teams' customers are available and that our regional teams have the expertise to underwrite the risk or can refer more difficult risks to our product line experts.

We have been preparing for this transition throughout 2008. We opened the Mid South regional office in Dallas, Texas in September 2008. Opening this region early gave us the opportunity to refine our plan and train our associates before rolling out One Markel to the other four regions of the country. Initial reactions from our customers in the Mid South region are very encouraging. We want to thank them for their support and patience as we worked through the details.

During 2008, almost every Markel associate was involved in moving the One Markel vision forward. Many of our underwriting and support area associates, over 40 at last count, relocated to staff the regional

offices with the right skill sets. Many associates accepted new responsibilities in the new shared services areas and many have been working to develop the new systems and processes that will support One Markel. During that time, many of them have been doing their old job, as well as their new job. We want to thank these associates for doing what it takes to make this a success for our customers and Markel.

As we worked throughout the year on the One Markel initiative, we realized that the new model would require us to lead and manage the company slightly differently. As a result, we asked several of our senior managers to take on new roles and responsibilities in the organization.

Earlier in 2008, Tony Markel announced that he wished to move out of his daily responsibilities as President, and he became Vice Chairman. He will continue to provide strategic guidance as well as serve as a member of our Board of Directors. At the same time, we promoted Paul Springman to President and Chief Operating Officer. Paul joined Markel in 1984 as an underwriter and his roles and responsibilities grew over the years. During 2009, Paul will focus primarily on the transition of Markel's wholesale units to the One Markel regional model. The five regional presidents will report directly to Paul. While he will continue to be involved in all major decisions affecting the operations, our intent is to allow him to be able to devote the majority of his time and attention to the success of One Markel.

We promoted Gerry Albanese to Chief Underwriting Officer. He will oversee all of Markel's underwriting through the newly formed product line group. Gerry is fresh off a five-year assignment as President of Markel International. Gerry joined Markel 24 years ago and he is one of our most talented underwriters and administrators. We are delighted that Gerry has taken this crucial role, and we believe that he will ensure that our underwriting standards are enhanced in the new model.

With Gerry's return to the United States, we are also pleased to report that William Stovin has been named President of Markel International. William will partner with Jeremy Brazil to further develop our international platform. William and Jeremy have been with us for twelve and eleven years, respectively. They helped us successfully navigate the transition of Terra Nova to Markel International and are ready for this new challenge.

Britt Glisson has been named Chief Administrative Officer and will have responsibility for the new shared services units being created to support our regional underwriting offices. Britt joined Markel in 1990, and since 1996, he has been the President of Markel Insurance Company. During his Markel career, Britt played an integral role in a number of initiatives that helped Markel grow its business and operate more efficiently. He also has leadership experience both on the wholesale and retail side of our company.

We are also pleased to welcome Mike Crowley as President of our Specialty Program Division. In this role, Mike will oversee our specialty business, including Markel Insurance Company and Markel American Insurance Company. Mike has more than 30 years of extensive retail experience, and he is looking forward to joining the company side of the business. With his experience, Mike can bring an innovative perspective to Markel. He worked for HRH since 2004 and held a variety of leadership positions including President and Chief Operating Officer.

As you can see, we benefit from an extremely experienced and talented team ready to pursue the many opportunities we see in 2009 and beyond.

Insurance Industry Pricing

For the industry as a whole, it is clear that both capital and underwriting margins are depressed. With diminished industry underwriting profits (the industry shifted to a loss in 2008), capital and balance sheet pressures from sour investment markets and increasing pressure from regulators and rating agencies seeking greater measures of solvency and financial soundness, insurance prices must increase. While there has been a delay of game as governmental actions propped up major industry competitors, this cannot go on forever. Sooner or later, the unprofitable companies in the insurance industry will run out of money to run out of. We've seen this cycle before and it will play out the same way it always does—pricing will go up.

As 2008 ended, many in the industry started talking about the need to achieve higher prices. Unfortunately, for many it was only talk. At Markel we are aggressively seeking much needed price increases. We believe these increases are needed and justified for the following reasons:

First, and maybe most obviously, prices have been coming down for several years. Prices have now reached a level where there is no room to move any lower—they must go up.

Second, the economy is in a downturn, and we have officially entered into a recession. Insurance claims always increase in difficult economic times, and we must anticipate that this trend will repeat. We must increase insurance rates as we expect claims to increase.

Third, the current economic environment has also resulted in the lowest interest rate levels seen in many, many years. We incorporate interest rates in our return on capital financial models. With lower investment returns on our "insurance float," we must have higher prices to achieve reasonable return objectives.

Finally, and most importantly, we must increase prices to assure that we earn underwriting profits. Underwriting profits are necessary for Markel to provide our customers with the financial security they expect when they buy our insurance policies. Underwriting profits are necessary for our associates to enjoy long-term career opportunities and so that we can be a productive corporate citizen in our communities. Underwriting profits are also critical to meeting our promise to our shareholders that we will build the value of their Company.

Investments

Today's financial markets defy description. The escalating series of bankruptcies, actual and de facto, throughout the year were unimaginable to us a year ago. Despite our lack of imagination, they happened. At the moment, recovery and prosperity seem unimaginable and distant at best. We remain optimistic though, and we suspect that we will be pleasantly surprised by the resiliency and forward progress the worldwide economy will demonstrate as we move through 2009 and beyond. We look forward to a season of pleasant surprises. It will happen, even if the timing is uncertain.

Current events remind us of the cyclicality of economic patterns and the powerlessness of authorities to prevent them. Only a few years ago, Enron and WorldCom served as poster children of cowboy capitalism and flawed regulation. Few would expect that after regulatory responses such as the Sarbanes-Oxley measures, along with fresh scars of chastened investors, that 2008 would see Fannie Mae, Freddie Mac, Bear Stearns, Wachovia, Lehman, AIG, Washington Mutual and Merrill Lynch among others, ALL failing or requiring massive government support to keep the doors open! Additionally, previous blue chip stalwarts such as Citigroup, Goldman Sachs, Morgan

Stanley and Bank of America comprise just a small portion of the list of financial institutions that required major government assistance to survive.

While we were nervous and cautious a year ago, in hindsight, we were not nervous enough. We did not anticipate the magnitude of the 2008 financial crash. We have and continue to maintain a high quality, plain vanilla fixed income portfolio. As such, we missed most of the first wave of problems as the credit markets began to deteriorate in 2007. We didn't own sub-prime mortgages or complicated structured finance instruments. We attempted, as always, to maintain a very high quality bond and equity portfolio. Despite our efforts at diligence, we did own some senior debt securities of companies from the previous list. Many of these firms did engage in what we now know were unsound and too highly-leveraged business activities. Consequently, we experienced permanent losses of capital from our debt holdings in Lehman, Washington Mutual and Fannie and Freddie. These losses made our fixed income returns lower than they should have been. Going forward, we will be more opportunistic regarding corporate bond exposures. In the past, we maintained a normal corporate bond exposure of roughly 33% of our total fixed income holdings. In the future, if corporate bond prices are attractive, we will invest in the sector. If corporate bond prices do not carry sufficient risk premiums, we will reduce our exposure to the sector significantly.

We also suffered permanent losses in our capital from the equity positions we sold in Citigroup, MBIA, LandAmerica and miscellaneous smaller holdings. Market values of just about everything except cash and treasury securities declined. We expect our mark-to-market losses to be temporary and not permanent in nature. In total, during 2008, our fixed income investments had a total return of 0.2% and our equity securities a total return of (34%). Our entire investment portfolio posted a decline of 9.6% including the negative effects of 2.7% from foreign currency translations. In keeping with the "worst ever" records set throughout the financial world in 2008, this is the worst total return performance in the history of Markel. It is the first negative return for the portfolio since 1999, a year in which the portfolio declined 1.3%. While these results are better than many, they are disappointing to us.

The crisis in the financial markets and its impact on the economy will take time to heal. 2008 marks a major turning point in global economics. For decades, consumer consumption and financial leverage increased systemically. This occurred in both the U.S. and many economies around the world. Everybody seemingly benefitted as economic activity increased. Consumers didn't really care if the money for the bigger house and the new car came from debt or equity. The house was still bigger and the car still smelled new no matter where the money came from. The businesses and people who built those houses and cars also enjoyed the good times of growing commercial and consumer activity. In addition to those tangible products such as houses and cars, the entire world of intangible activity grew as well. Financiers, advertisers, entertainers and other derivative jobs and occupations enjoyed the upswing of an apparent virtuous cycle of increasing prosperity.

This seemingly virtuous cycle of the last 20 years was financed by ever increasing amounts of debt at lower and lower interest rates. In hindsight, it created what now looks like the "mother of all bubbles." The steady increase in financial leverage now has come to an end. This will produce a period of restrained economic activity as the overall system adjusts to lower levels of debt and consumer consumption.

Along with excessive leverage, the underlying trust and confidence that modern economies need to function have been broken. Increasingly sloppy and ultimately corrupt behaviors that accompany eras of good times are now showing up in scandals such as those alleged to have been perpetrated by Bernard Madoff and others both personally and corporately. It is worth remembering as we compare our current investment environment to the dismal 1930's that we review the decade that preceded it. The 1920's were an era of excess and gaudiness that produced eerily similar consequences to those of today. Students of financial history can see parallels when studying the accounting sleight of hand behind stock options in the 1920's, financiers such as Samuel Insull and disruptive technological changes such as electrification.

While we do not expect instant healing, we fully expect that our system will recalibrate and return to forward progress. Over the next several years, it is a profoundly good bet that the world's economy will both survive and prosper. We are systemically going about the business of lowering debt levels throughout the economy and soberly resetting the moral compass of accepted business practices. We will also benefit from scientific and technological progress that will change the world for the better in ways that we can't yet even imagine.

Economic tides, like natural ones, do not stand still. While we do not expect a quick return to the boom conditions of the last two decades, neither do we expect current negative trends to persist. The conditions necessary to create the next economic expansion are underway, and we are confident that the overall economic backdrop will improve in coming years.

In 2008, our investment results were painful as we failed to avoid the price declines experienced in almost every asset class. As we mentioned earlier in this letter, while we invested defensively starting in 2007, in hindsight, we were not defensive enough.

Specifically, we spent most of the last two years pursuing the following actions. We began reducing equity exposures from a high of over 75% of shareholders equity in December of 2006 to 49% by December of 2008. The reductions came from reinvesting less than we received as we sold equity securities over the last two years and not investing as much of our cash flow as normal into equities. The dramatic price declines in the equity market also served to reduce our exposure. That is the hard way to bring the percentage down, and we hope not to do so that way again. We are realistic enough to know that the market will do that to us from time to time in the future. We need to maintain a margin of safety that can absorb the inevitable downturns in future financial markets.

On the fixed income side, we also harvested maturities and reinvested less than sales. The objective was to increase cash and liquidity, shorten the overall duration to minimize risks from future inflation, and increase credit quality. As was the case in equities, we were directionally correct in these goals, we were just too slow in turning those goals into decisions and results. As a result of these steps, cash and short-term investments grew from $529 million at the end of 2007 to $1.1 billion by the end of 2008. Unlike most years in the past as well as our expectations for the future, cash was our best performing investment.

Over the years, we've been gradual when we've made investment decisions like the ones we just discussed. In large measure, we believe in gradualism because it salutes the important measure of humility that any investor should bring to the task. The future is unknowable, and all decisions are probabilistic estimates about shades of grey. We are proud of our long-term record, but we remain humble about our

abilities. We use the disciplines of time, measured steps and consistency to improve our odds of good outcomes. In retrospect, pure unadulterated panic would have been the best investment approach to take in 2008. Prospectively, while we are sure that a year will come along where panic looks good again, we don't think it is a reliable setting for the North Star on our investment compass.

INVESTMENT ACCOUNTING COMMENTS OR "WHAT IS OTHER-THAN-TEMPORARY?"

In many respects, financial markets simply stopped functioning during 2008. In this environment, accounting rules and conventions break down and fail to function. As a result, we'd like to digress with some comments about investment accounting as practiced in 2008. Our investment accounting policy is pretty simple, or so we thought. The notes to our annual report state, "Investments are considered available-for-sale and are recorded at estimated fair value. A decline in fair value below cost that is deemed other-than-temporary is charged to earnings."

The meaning of other-than-temporary is not precise. It lies somewhere in the middle between temporary and permanent, but no one really knows, or can tell us, where. When financial markets are in chaos, quoted market prices do not necessarily represent estimated fair value. The exact same diamond can have a different value when you are purchasing it at Tiffany's to present as an engagement proposal compared to what you get for it at the pawn shop when you are trying to pay the divorce lawyer. It's the same diamond, the situation and timing are just different. What is the true value? Quoted market prices are imperfect guides to judging intrinsic value, but they normally work as a reasonable proxy and the "least worst" way to describe values. They also have the benefit of being independent and objective, and they do indicate what something might be worth at a given point in time.

An additional problem with other-than-temporary impairment involves trying to guess how long it might take for markets to return to "normal." Of course, the correct answer is no one knows when or if they ever will return to the old "normal." This makes proving that a security in a loss position is not other-than-temporarily impaired nearly impossible. Such is the current environment.

We constantly review and monitor all of our investments. We mark all of the available-for-sale investments on our balance sheet to estimated fair value using quoted market prices when available and reflect all changes in our comprehensive income. We believe our comprehensive income, the net change in book value, is the best proxy for evaluating our financial success at Markel. The longer the time frame, the truer this statement.

It is important to point out that the meaning of the words "value" and "impairment" from an accounting viewpoint does not change our view of the meaning of the same words from an investment perspective. When we think about "value" from an investment perspective, we think of intrinsic value. While we might believe that intrinsic value represents the real "truth," it is also inevitably a personal and subjective valuation that cannot be objectively documented for financial statements. When we think about an investment being "impaired," we think some of its underlying fundamentals may have changed for the worse. Usually, a market driven decline in price is a good thing that allows us to buy more of the security at a better bargain—not an impairment. While all of our securities are available-for-sale, we usually expect to hold them for the long term, usually many years. While it might be rational to connect the timing element of

other-than-temporary impairment to our expected holding period, in today's environment, it is more important to take a conservative approach.

While we took charges to 2008 earnings for many investments due to our judgment that the estimated fair value might represent an other-than-temporary decline, that does not mean that we believe the companies underlying these investments are in any way "impaired" and it certainly does not mean prices will remain permanently below our cost. In fact, we expect that we will be increasing our investment in many of these companies in the future.

CLOSING COMMENTS

While it might seem hard to believe right now given our disappointing 2008 performance and the drone of negative news headlines that seem to be waiting for us each day, we are optimistic about the prospects for Markel in 2009 and beyond. Clearly, 2009 will have its challenges, and we have worked hard to position your company to face those challenges. However, we believe that insurance market pricing will improve in 2009, and we know that the world economies will recover over time. Our new regional structure will move us closer to our customers and produce more business opportunities. Financial markets will heal, and we have the capital to invest as they recover. We have the right people on our team and will continue to profitably expand our presence in the specialty insurance marketplace. There is much reason for optimism, and we look forward to sharing much better results with you in next year's letter.

We thank our associates, shareholders and customers for their continued support.

Alan I. Kirshner
Chairman of the Board and Chief Executive Officer

Anthony F. Markel
Vice Chairman

Steven A. Markel
Vice Chairman

Paul W. Springman
President and Chief Operating Officer

Thomas S. Gayner
Executive Vice President and Chief Investment Officer

Richard R. Whitt, III
Senior Vice President and Chief Financial Officer

From left to right: Paul W. Springman, Anthony F. Markel, Thomas S. Gayner, Steven A. Markel, Alan I. Kirshner, and Richard R. Whitt, III.

Markel (MKL) 2009 Annual Meeting

Disclaimer: These notes were taken in real time at the Markel Annual Meeting in Omaha, Nebraska on Sunday May 2nd, 2009 without the use of a recorder. The goal was to get the gist of the questions and as much of the answer as possible. Please excuse any mistakes or omissions.

1. Introductory Remarks- EVP/CIO Tom Gayner:
    a. MKL has focused on liquidity over the last few years and has kept a lot of cash on hand
        i. This is what they have been doing with shareholder money recently
    b. Gayner mentioned the question that Buffett brought up at the Berkshire (BRK) annual meeting the day before
        i. What would he and Steve Markel do differently if MKL was a private company?
            1. There should never be an actual answer to this question
                a. The answer should be nothing
            2. Businesses should not be run any other way
    c. MKL likes companies that have survivability
        i. Companies that are ready, willing and able to answer the bell for the next round
        ii. Want companies that in 20 years you will still be talking about
            1. The example he brought up was Marriot (MAR)
2. Introductory Remarks: CEO Steve Markel
    a. 2008 was not an easy year to assess
        i. They need more time to properly assess the full impact and results of 2008
        ii. Looking back at it, 2008 was an historic year
        iii. They are happy with themselves on a relative basis
            1. But, they prefer to have done better
            2. In any case they are extremely optimistic about the long-term future of MKL
                a. Believe that we all need to look at MKL and all companies with a long term time horizon
                b. They understand that the current crisis will lead to many changes in the world but they feel MKL is ready to adapt as needed
        iv. Long term values are very important
            1. Companies have to build a set of lasting principles to operate under
                a. More importantly companies have to stick with these principles regardless of the operating environment
            2. Throughout the organization they have identified core principles and have stuck to them
                a. In areas in which they felt they had issues they have re-examined their processes and made the necessary changes
3. Q&A Section
    a. Questioner: David Winters (The Wintergreen Fund)
        i. Are AIG and its current practices hurting the industry as a whole?
            1. Markel
                a. Yes, a little bit. But not as badly as some people have been suggesting
                b. Clients of AIG are asking a lot of questions and there is extreme disruption in the market
                c. AIG is cutting the heart out of some of their policies, especially upon renewals so that they can keep the business

            i. About 5% of the time (Markel's estimate) AIG is doing very stupid things when it comes to renewals
            ii. The bigger problem is that the competitors are using AIG's problems and lack of pricing discipline not to raise their own prices
                1. This is solely Markel's opinion but he believes that the insurance companies are going to have to reinvigorate and re-discipline their troops
        d. There is a lot of resistance to price increases (partially as a result of AIG)
            i. Q1 2008-Q3 2008: MKL's renewals were 5-7% below previous rates
                1. Q4 2008: Renewals were only 1-2% below previous rates as they started pushing through price increases in Q4
                2. Takes some time to get the price increases through
                    a. Q1 2009 should actually have a positive pricing impact based on some non-renewals and some price increases
b. Questioner: What business lines are the toughest to pass through increases?
    i. Markel
        1. Easy: Oil rigs on the Gulf Coast, hurricane property and casualty, umbrella policies, European policies
        2. Tough: Excess/surplus liability, commercial contractors, California earthquake
c. Questioner: How is the One Markel Program progressing?
    i. MKL used to be segregated by products with certain specialists located in specific offices around the country
    ii. Felt that they were missing opportunities to cross sell and were not serving clients well enough
        1. Clients did not even know about other products MKL was offering
    iii. Now have moved to 5 regional offices where they have experts in each office
        1. This has turned the organization sideways
        2. Started in 2008 in Dallas and now have rolled it out countrywide
    iv. Things are going well despite a little noise and little chaos
d. Questioner: Can you discuss the investment case for Brookfield Asset Mgmt (BAM)?
    i. Gayner
        1. MKL has a long term relationship with BAM
            a. CFO's mother used to work at MKL
        2. BAM has made some tremendous capital allocation decisions
            a. Natural resources: timber, paper mills, hydroelectric dams
            b. Have realized that the forest is a better investment than the mill
            c. Try to buy minimal capital expenditure requiring assets that will go up in value over time
                i. Thus they own better assets over time
        3. Like and trust the people who run BAM
        4. Believe it is priced attractively and expect to own it for the long run
        5. Will protect against inflation due to the hard asset focus
e. Questioner: Can you discuss the Fannie Mae (FNM) and Freddie Mac (FRE) positions?

        i. Gayner
            1. They own senior debt as well as some preferred stock
                a. Believe that they are both permanently impaired
                b. In the future would like to have as little FRE/FNM exposure as possible
f. Questioner: Are there conditions for economic expansion out there right now?
    i. Gayner
        1. Every business is making decisions faster and sorting things out faster
            a. Can't put off hard decisions any longer
            b. Net effect of this rationalization creates the seeds of growth
        2. Feels like the 1970's to them when there were a number of great companies created
            a. Entrepreneurialism was rampant then because it had to be
                i. This is the case now
g. Questioner: What inning are we in when it comes to this rationalization? Are the changes permanent?
    i. Gayner
        1. Quoting Jeremy Grantham he indicated that over cycles we learn nothing
            a. Only short term lessons stick in people's minds
            b. In the long term we make the same mistakes over and over
        2. Business is cyclical and circular so the changes are not likely to be permanent
        3. Felt that we still had a ways to go in this rationalization
h. Questioner: What lessons were learned in 2008?
    i. Gayner
        1. Leverage is a killer
            a. Even if you are fundamentally right you may not be able to play out your hand due to leverage
            b. This includes explicit and implicit leverage
                i. Collateral/contagion damage from the macro level can be just as devastating as on balance sheet leverage
                1. Being levered to the system is dangerous also
        2. Don't learn the wrong lesson
            a. It's easy to make generalizations about this period that will be harmful for the future and may not even be accurate
            b. 2008 was a real rattlesnake
                i. But in the future you have to be able to discern between the real snakes and the fake snakes
                1. You can't operate as if you are constantly afraid of finding snakes
                2. Have to be able to dust yourself off and get back in the ring
        3. Believe their skill levels are higher after going through such a tough period
i. Questioner: In the new One Markel m odel, who has the underwriting pen?
    i. Markel
        1. Underwriting profit is the absolute most important thing for MKL as a company
        2. They are taking experts from specialist areas and are deploying them around the country in the 5 regional offices to make sure there are experienced people writing policies

        3. They are also putting in new technology systems that will help them monitor underwriting

j. Questioner: Can you discuss the future premium growth rate for MKL?
    i. Markel
        1. MKL is a much larger company than previous but the company's growth rate has been much higher than the industry as a whole
            a. In the past 20 years they have been growing faster than GDP
            b. In 2008 they had $2B in premiums written on $2B in equity
                i. In 1986 they had $50M in premiums written on $25M in equity
        2. 20% growth they have seen is not sustainable over time
            a. Now they have about $1.4B in US premiums and $600M outside the US
        3. In 2009 they expect the full P&C market to be about $450B so their $1.4B is still a very small piece of the pie
            a. Think there is a very long runway in front of them
            b. Think there is a huge opportunity to grow through organic growth and acquisitions
                i. Will be launching new products as well
    ii. Gaynor
        1. Have managed to gain scale by finding experts that could grow the MKL web in a silo-ed fashion
            a. They are now better able to leverage expert talent through technology
            b. Markel One also leads to better scale
        2. Believe that they have a lot of room to grow outside of the US as only 33% of their business is overseas
            a. World will continue to develop and grow
                i. People have tasted wealth and are not willing to give it up
            b. This is actually going to be the stronger side of the business in the future
        3. MKL is agnostic between using capital to write premiums or using it for investment purposes
            a. They are now looking to purchase wholly owned subsidiaries like BRK does
                i. They have their flag up looking for companies that would like to be under the MKL umbrella as the leveraged private equity model has not worked out so well

k. Questioner: What was their take on the BRK Annual Meeting?
    i. Gayner
        1. They didn't learn anything new per se
            a. But that is a good thing
            b. It shows that the value investing principles are timeless
        2. Don't need to learn new things when it comes to the discipline required to run businesses
            a. The BRK annual meeting is kind of like going to church
                i. You don't learn new things each week
                ii. You haven't forgotten the principles
                iii. You go to get filled up or re-filled by Buffett and Munger

l. Questioner: Is specialty insurance a sustainable business?
    i. Gayner
        1. Yes, because it solves unique problems
            a. For example data breach security
                i. This is something that 20 years ago no one was talking about
                ii. New problems emerge and new products will be necessary
    ii. Markel
        1. Insurance industry has survivability
            a. The need to transfer/share risk is always there
        2. What makes a singular company survivable?
            a. Most people would not have pegged AIG as a potential casualty
            b. 1975: most insurance companies have gone bankrupt since then
                i. High casualty rate
            c. Culture, business principles, doing the right thing will help you last
                i. MKL still young and small relatively
                1. Want to be around at least 100 years

m. Questioner: Tom Russo (Gardner, Russo & Gardner) – Why would someone not want to buy pieces of AIG at distressed prices?
    i. Markel
        1. There is definitely interest out there
        2. AIG recently sold Hartford Steam Boiler for about $1B after recently being bought for about $2B
        3. AIG was looking for cash purchasers with the ability to write a $1B check
            a. People did not think MKL could write that check even though they were very interested
        4. Apparently the balance sheet for Hartford Steam was not as clean as people had thought and that led to the discounted price

n. Questioner: How is Terra Nova Insurance in London doing in terms of expanding throughout the rest of the world?
    i. Markel
        1. Like Buffett has done with General Re, MKL has done a post mortem on the Terra Nova deal
            a. In March 2000 they bought a damaged company for what they thought was a fair price
                i. In retrospect they paid too much because the problems were greater than they anticipated
            b. In 2000 they had about $1B in premiums and that has been reduced to $400-$500M recently
                i. Did this on purpose to rationalize the book
                ii. Getting it back up towards $600M as growth opportunities continue to present themselves
            c. Did a One Markel –like reorganization with the international division and eliminated rampant cross subsidiary competition
                i. Now have had 3-4 consecutive years of underwriting profit
                ii. Division is now providing a good float
                iii. Focusing on generating returns for shareholders has now become part of the culture internationally

            1. They came in an infused the MKL culture and it has really been beneficial
    ii. Gayner
        a. When people and nervous employees ask them if they have any experience with a transformation like Markel One they say yes
            i. Look at MKL international
o. Questioner: What are the private equity options looking like right now?
    i. Gayner
        1. They started looking like 3-4 years ago
            a. Thought the leveraged private equity model was flawed and would not last
                i. Were a bit early on that call but since then it has cracked
            b. As a result of the previous strength of the leveraged PE model they were only able to buy large, but non-controlling stakes in firms
                i. They learned that they were not good non-controlling shareholder
                1. Believe that they are control freaks
                ii. As a result they have done recent deals in which they bought 80% of the equity
                1. Example: AMF Equipment Machinery
                a. This is a company that supplies baking machines
                b. Will have $100M in revenues in 2009
                c. They are very happy with this deal
                iii. This is a crawl, walk then run process
                1. Going to take it slow
                2. Ideal deal right now a is $5-$25M transaction
                a. Will grow over time
                b. Same deals as Buffett with fewer zeros
p. Questioner: You talked about GE as a good long last year. What happened?
    i. Gayner
        1. This was a hidden leverage problem
            a. Steve Markel was suspicious of GE and Gayner wishes he had listened to Markel
        2. GE has been at the epicenter of the storm
            a. They liked the idea that Welch was out and Immelt was not in the habit of smoothing out earnings
                i. Knew that Welch manipulated earnings by looking at their insurance operations
                1. Thought that Immelt has done a good job de-emphasizing that
        3. It looked like a classic good value play
            a. But the events of 2008 have made Immelt's course much more difficult now
                i. Think that the positives are still there
        4. Right now there is a different between the company and the stock price
            a. Price is guaranteed to be wrong
            b. However, this is a bit of a bi-modal outcome

            i. Either the stock goes to $0 or $60-$75
                1. Would not have chosen this fight if they had known in advance
                    a. They will avoid these types of situations in the future
    ii. Markel
        1. Was suspicious of Jack Welch
            a. Was not his favorite leader
            b. Too much leverage in the insurance business worried him
            c. But the core GE stuff such as power generation is still good
        2. Operating within MKL's core competency has been re-emphasized
            a. If they had known it was going to be this complicated they would never have gotten in

q. Questioner: Marcelo Lima- Why not buy LEAPs on GE due to the bi-modal outcomes?
    i. Gayner
        1. At $8-$12 a share GE is a LEAP
            a. A leap of faith more like
        2. Right now meat and potato companies can be bought at prices we have not seen in years
            a. You can build 70-80% of your portfolio with these solid companies
            b. The rest of the portfolio you use to buy leaps like GE

r. Questioner: Please comment on your policy on loss reserves and give us an idea of your current liquidity situation in the case of a large catastrophe
    i. Markel
        1. (2nd part first): Large part of the investment portfolio ($1.1B) could be liquidated if a large catastrophe loss occurred
            a. Their exposure to any catastrophe loss is well below this figure
        2. Getting reserves right is critical
            a. Can't price for tomorrow if you don't estimate your needed reserves right
                i. You can be either too conservative or too optimistic
                ii. They like to pick a number that it way more likely to be redundant than deficient
                1. Don't want a midpoint number, they want a margin of safety
                2. Leads to a conservative view on pricing as well
                3. Leads to a focus on long term investments
                a. Need solid, secure fixed income investments to protect against loss reserve deficits
        3. Industry as a whole has been bleeding loss reserves down
            a. Current book has a combined ratio above 100%
                i. Many companies are benefitting from previous redundancies that bring the aggregate combined ratio below 100%
                1. Not true at MKL since they are always conservative

s. Questioner: Why is MKL holding so much cash?
    i. Gayner
        1. They are concerned about inflation
            a. Don't know when it will come

b. Carrying more short term securities than before
    i. Expecting an interest rate spike
        1. Does not want to own long term bonds
            a. "Last thing we want to own.."
                i. Want to own businesses with pricing power
c. Not earning much on their cash but they want to preserve the optionality that comes with holding cash

t. Questioner: What is the thesis on Diageo?
    i. Gayner
        1. It fits the 4 criteria they look for:
            a. Profitable business with a high return on capital
                i. Return on total capital is their preferred metric
            b. Run by honest, talented people (weigh those traits 50-50)
            c. Has positive re-investment dynamics
                i. Earns a high ROC and can re-invest at that rate
                1. If they can't re-invest at that rate then they pay dividends and buy back shares
            d. Priced fairly
                i. Look for businesses in which 5-10 year shareholder returns mirror the returns provided by the business
                1. All comes down to what you have to pay

u. Questioner: What is the impact of government actions going to be on the financial industry?
    i. Gayner
        1. Gov't is a bigger part of business than before
        2. He is worried about gov't action
        3. You can connect the dots between the growth of FNM and FRE and the recent turmoil in the mortgage industry
            a. Gov't involvement pushes away private business people
        4. They now ask the constant question:
            a. How could the gov't screw this business/industry up?
                i. They missed medical company opportunities over the last few years as a result of this fear
        5. The whole world is now a bank stock
            a. Nothing works without the banking industry
                i. Problems will eventually get solved but it will take time

2009

TO OUR BUSINESS PARTNERS

We are pleased to present you with this year's annual report. During the course of this letter, and in the body of the attached financial report, we hope to fully describe our 2009 results, our progress on important operational and financial objectives during the year and our outlook and goals for the future.

While the tangible results we speak of in this letter will be discussed in financial terms, another important dimension exists at Markel. Namely, an organization filled with talented and dedicated individuals. Throughout the period of financial crisis, and in dealing with massive internal changes within our organization, you can be proud of the fact that the people of your company acted with integrity, dedication and skill at every turn.

All of us commit ourselves to the long-term success of Markel. Our Company consists of a corps of professionals who are proud of our history and achievements. We all look forward to building our culture and record of success for the next generation.

We enjoy a profound advantage by embracing a long-term horizon at Markel. We run and operate this business with a view of years and decades as opposed to quarterly and annual comparisons. We think that stands as a unique advantage in today's business world, and we intend to make the most of it. We use this freedom to make long-term decisions to build the value of this Company and your holdings over time. We appreciate our shareholder partners and the role you play in helping us maintain a culture of long-term business excellence in the face of a very short-term oriented world.

2009 RESULTS

Markel Corporation continues to enjoy an outstanding record of financial accomplishment. Over the years, we've adapted to whatever conditions we faced and found ways to grow the value of your

(in millions, except per share data)	**2009**	2008	2007	2006	2005	2004	2003	2002	2001
Gross written premiums	**$ 1,906**	2,213	2,359	2,536	2,401	2,518	2,572	2,218	1,774
Combined ratio	**95%**	99%	88%	87%	101%	96%	99%	103%	124%
Investment portfolio	**$ 7,849**	6,893	7,775	7,524	6,588	6,317	5,350	4,314	3,591
Portfolio per share	**$799.34**	702.34	780.84	752.80	672.34	641.49	543.31	438.79	365.70
Shareholders' equity	**$ 2,774**	2,181	2,641	2,296	1,705	1,657	1,382	1,159	1,085
Book value per share	**$282.55**	222.20	265.26	229.78	174.04	168.22	140.38	117.89	110.50
5-Year CAGR in book value per share[1]	**11%**	10%	18%	16%	11%	20%	13%	13%	18%

[1] CAGR—compound annual growth rate

Company. This year continues that longstanding tradition of long-term financial growth. We also continue the tradition of adapting, growing and changing as necessary to continue to produce excellent results over time.

The world does not stand still and neither do we. In 2009 a whirlwind of intense activity took place at Markel, and we look forward to reporting the developments to you as partners in our enterprise.

As to the headline numbers, during 2009 our underwriting operations produced a combined ratio of 95% on earned premiums of $1.8 billion. Our investing operations produced a total return on the portfolio of 13.2% with equity returns of 25.7% and fixed income returns of 9.8%. Combining underwriting and investing, our book value per share grew 27% from $222 per share to almost $283 per share.

While no single measure captures all of the value creation at Markel Corporation for its shareholders, we believe book value per share works as the best proxy. Over longer and more meaningful periods of time, such as 5 and 10 years, book value per share grew 11% and 15%, respectively. We produced these results during periods when investors in general earned low or negative returns.

The year-end 2009 book value per share of approximately $283 represents an all-time high. Our 20 year chart displays the progress of this and other financial measurements. To generate these returns despite the unfavorable fundamentals of a decade-long drought in the investment markets and a multi-year softening in the property and casualty insurance markets makes us happy. We hope the same holds true for you.

Since our public offering in 1986, we've grown the book value per share at a compound annual rate of 21.2%. This compares favorably to the growth of the S&P 500 of 9.3% over this time and stands as one of the better records in today's business world.

While we enjoy reporting these numbers and the balance of the financial figures in the rest of this report, they don't begin to describe the positive changes underway at Markel. To give you some sense of last year, here is a report on our 2009 "to do" list.

2009 "TO DO" LIST & PROGRESS REPORT

One Markel

Our One Markel initiative represents a fundamental restructuring of our Excess and Surplus

2000	1999	1998	1997	1996	1995	1994	1993	1992	1991	1990	1989	20-Year CAGR[1]
1,132	595	437	423	414	402	349	313	304	406	412	44	21%
114%	101%	98%	99%	100%	99%	97%	97%	97%	106%	81%	78%	—
3,136	1,625	1,483	1,410	1,142	927	622	609	457	436	411	79	26%
427.79	290.69	268.49	257.51	209.20	170.95	115.45	112.55	84.64	81.77	77.27	14.54	22%
752	383	425	357	268	213	139	151	109	83	55	60	21%
102.63	68.59	77.02	65.18	49.16	39.37	25.71	27.83	20.24	15.59	10.27	11.69	17%
21%	22%	23%	26%	26%	31%	17%	25%	34%	35%	—	—	—

Lines business. The goal and objective of One Markel is simple. We want to make Markel easier to do business with, and we want to offer more of our products to more of our customers through our wholesale partners.

We seek to accomplish this goal by empowering our five regional offices to offer the entire line of Markel products to their wholesale partners. The regional offices are primarily responsible for underwriting, marketing, sales and customer service in the One Markel model.

At the same time, we strengthened and better organized our product line underwriting organization so that we can support the regions by providing specialized underwriting expertise wherever and whenever a customer needs it. The product line group, led by our Chief Underwriting Officer, retains responsibility in the One Markel model for product development, underwriting guidelines and authority and pricing. It also supports the regions in our marketing and sales efforts and helps underwrite more complex risks.

Prior to One Markel, our business units acted largely as independent silos. Often they operated with unique underwriting, marketing, information technology and administrative approaches. While we always centralized critical functions such as actuarial reviews, investments and balance sheet responsibility, we didn't integrate the underwriting and marketing efforts throughout the organization.

This legacy stems from our history of acquisitions of companies located in different areas. This approach was successful in building the financial results of the company for decades; however, it did not support scaling up and growing beyond a certain level. As Markel's product offerings widened, we realized we needed more effective ways to distribute our products. Problems such as difficulties in cross-selling and inadvertent competition between business units demonstrated a need to fundamentally alter our approach. Those challenges, along with our desire to increase the value of the Company, to more fully utilize our underwriting talent and expertise, to enhance the Markel brand and to create opportunities for our current and future colleagues, demanded a change to a new structure.

With One Markel, each regional underwriter carries sales and underwriting responsibility and authority. They enjoy access to all of Markel's wholesale products regardless of their location. Each product line group now carries the responsibility for the underwriting results of their products throughout the entire organization. Finally, and most importantly, each of our wholesale clients now connects with one Markel team, located in its region, who can deliver the full menu of Markel wholesale products.

It is impossible to overstate the degree of change this represents to our previous way of doing business. While any change such as this involves risk and fear of the new and unknown, the world we face changed, and we needed to adapt and move forward appropriately.

The important good news that we can share with you at this point is that the transition has gone well. We moved to the new model in all five regions in March of 2009 after running a prototype in our Mid South region for six months. This was nine months ahead of our original schedule. As you would expect, we experienced some bumps in the beginning. We wish to thank all of our wholesale business partners who worked with us

and showed great patience as we dealt with transition issues. Due to their continued support, the Excess and Surplus lines segment was able to produce a solid 96% combined ratio in 2009.

While the current soft market conditions obscure the financial benefits of this simple yet powerful business structure, we can see from submission counts and customer feedback that we are on the right track. This is what our customers wanted and we are delivering it. We are confident that this change will produce meaningful opportunities for profitable growth when the property and casualty insurance cycle hardens.

Atlas

Atlas is our name for the systems and business process transformation that will ultimately support the One Markel business model. The goal of Atlas, like that of One Markel, is simple. The Atlas project should deliver the information systems and business processes we need to smoothly and seamlessly serve our customers and manage the insurance operations of Markel. For our customers, we need to offer easy online access to Markel and its products. Operationally we need to account for and manage the flow of business. Even more importantly, we need to use the information we gather to make better risk selection, pricing and marketing decisions every day.

With Atlas we will have unified systems to handle such operational functions as underwriting and policy issuance, claims, billing, agency relationship management and reinsurance. We also will operate with a centralized shared services capacity that should increase our operational speed, effectiveness and efficiency.

In 2009 Atlas began to deliver some of the individual projects to specific areas within Markel. For example we implemented the first phase of the agency management system, which will help us move closer to our customers. We also reorganized all of our administrative functions into shared services groups. This reorganization is already paying dividends in the form of simpler, more efficient and effective workflows throughout the Company. Finally, we made significant progress in establishing and documenting business requirements and have begun to build the systems.

Throughout 2010 the individual deliveries should continue. By the end of 2012, the project should be largely complete and functional throughout our Excess and Surplus Lines operations. 2010 will continue to show higher net costs for the Company as we complete the project. We expect that during 2011 we will be incurring lower costs for Atlas, and we will be operating more efficiently. The full implementation of Atlas will allow our organization to provide and manage greater volumes of business at lower costs.

Atlas is the most mammoth business systems and process project we have ever undertaken at Markel. In last year's report, we estimated that third-party vendor costs for Atlas would be approximately $100 million. Total costs were estimated at $160 million last year. Mostly due to a better understanding of the effort required to successfully deliver the project, we now believe that third-party vendor costs will be approximately $140 million and the total cost will be approximately $190 million. We are completely committed to the success of the Atlas project and will continue to look for ways to deliver the anticipated benefits at lower costs. The good news is that we have

only spent approximately one-third of the total estimated cost to date and have opportunities to reduce costs further. We are pleased to see the early signs of success, and we look forward to continuing to report to you on the progress of this important project.

Markel International

Markel International produced a 91% combined ratio and $52 million of underwriting profits in 2009. Markel International has now produced underwriting profits in two of the past three years, missing only in 2008 as a result of hurricane losses. Immediately after our acquisition of Markel International in 2000, major reorganization and modernization efforts began. These efforts were not unlike those we are implementing in the United States today. Approaching the ten-year anniversary of its addition to the group, Markel International stands as one of the crown jewels of Markel.

Markel International's gross premium volume was $641 million, or 34% of the total gross premium volume at Markel in 2009. In contrast to the U.S. domestic market, the international market currently enjoys slightly more rational pricing and greater growth opportunities. We expect additional increases in the globalization of our business in the future.

During 2009 Markel International completed the acquisition of Elliott Special Risks in Canada. Markel International has done business with Elliott and its principals for over ten years. Elliott is one of the premier specialty insurance underwriters in Canada, controlling approximately $90 million of specialty professional liability and general liability business. This acquisition will allow us to meaningfully increase our Canadian business as we convert Elliott's writings to Markel International. In addition Elliott gives us the opportunity to cross-sell many of our existing product lines in Canada. We wish to welcome our new associates at Elliott to the Markel family.

In addition to Canada, Markel International has a network of offices in Spain, Singapore and Sweden. We also write insurance in over 150 countries around the world through brokerage relationships. We expect additional opportunities in the future to grow in markets such as India, China and Southeast Asia. Through Markel Syndicate 3000, Markel International is part of the Lloyd's market. Being part of the Lloyd's franchise provides regulatory and licensing advantages and efficiencies we will need as Markel International continues its geographic expansion.

Specialty Admitted Insurance

Markel Specialty produced a 99% combined ratio in 2009. In this division, we provide insurance directly to the consumer and to retail customers in various niche markets. Examples include children's summer camps, equine risks, motorcycles and boats, health and fitness clubs, student health, pet health, wedding insurance and other unique insurance coverages. We can design specific insurance products that meet the insurance needs of these unique risks. We often market our products in partnership with industry trade groups or affinity groups and include loss and safety engineering, as well as best practices, to reduce losses (and expenses) for our customers.

We enjoy a higher ratio of renewals in our specialty area compared to other areas at Markel, and have a

reputation of industry leadership in many of our products. The stability and recurring nature of these insurance products provides a solid foundation and platform for growth in coming years.

In 2009 under the leadership of Mike Crowley, we increased our emphasis on providing specialty insurance solutions to the broader insurance markets. Our goal is to grow our retail and direct market share without disrupting or competing with our existing strong wholesale relationships. We also have increased our emphasis on sales and marketing to continue to grow this franchise. We expanded our product offerings with additional lines such as political campaign coverage and excess flood coverage in 2009. We also added a few select acquisitions of books of business and talented insurance professionals.

Markel Ventures

During 2009 we expanded our operations of non-insurance subsidiaries with the acquisition of Panel Specialists, Inc. (PSI) and Ellicott Dredge Enterprises. PSI provides laminated furniture products primarily to the college and university marketplace and to hospital and health care related sites. Ellicott manufactures dredges for transportation, mining and water management applications. Ellicott dredges were used to build the Panama Canal in 1907, and the company does business all around the world.

These two additions join our existing holdings of AMF Bakery Systems (a leading manufacturer of bakery equipment systems), which we acquired in 2005, and ParkLand Ventures (an owner and operator of manufactured housing parks), which we formed in 2008.

Beginning with the 2009 annual report, we will provide additional financial information on these businesses as they have grown to represent a meaningful aspect of Markel Corporation.

Strategically we believe the ongoing development of Markel Ventures will create value for Markel. All of these companies fit our longstanding investment discipline. As is the case in what we seek in our portfolio of publicly traded businesses, these businesses are profitable, with good returns on capital, they are run by management teams with equal measures of talent and integrity, they will use their profits to either grow their existing business or return the cash to Markel and we acquired them at fair prices.

As time goes by, Markel Ventures should assist us with several goals. First the businesses themselves have historically earned, and should continue to earn, excellent profits. They are all market leaders in their industries and enjoy a history of good returns. They provide basic goods and services that people need. As they grow over time, the profits they produce will accrue directly to Markel and benefit shareholders accordingly.

Secondly we can reinvest capital within the individual units or apply it elsewhere within the Markel Corporation structure as we choose. This power as a majority owner is very different than our position as a minority shareholder in a public company, as is the case in the remainder of our equity portfolio.

Finally ownership of these businesses will provide Markel with earnings and cash flow that are distinct and separate from our insurance holdings. This is a nuanced but important point. During times when Markel stock is selling for low valuations, financial markets and the regulatory and rating agency overseers

tend to be very skeptical of companies repurchasing their own shares. All of the insurance regulators and rating agencies want more, not less, capital in insurance company subsidiaries. With non-insurance businesses held by Markel Corporation at the holding company level, we now will have cash flows that are independent of our insurance operations that create more of an option for us to deploy capital aggressively during inevitable stretches of difficult times. Purchasing power from having unrestricted cash to use during environments of low prices should enable us to increase the value of Markel in a unique way over time. Very few companies are in a position to follow or implement this strategy. We will make the most of our opportunity.

Management Development

Our goal is to make sure that Markel is immortal despite the fact that none of us enjoy that status. As such it is critical for the long-term health and development of your Company that the management team is refreshed and renewed continuously. Some of this renewal comes from existing managers taking on new roles and responsibilities. Some comes from the addition of new people into our organization.

During 2009 the changes in our business approach, the acquisitions of non-insurance subsidiaries and the turmoil in financial markets allowed us to aggressively strengthen the management team. Mike Crowley joined Markel to head the specialty insurance operations of the Company. Mike brought a long record of success and accomplishment in the insurance brokerage world to us, and his leadership of several marketing and new product initiatives should provide us with meaningful growth opportunities over time.

Britt Glisson moved into the role of Chief Administrative Officer of the Company. He leads the Atlas project and the shared services operation crucial to the One Markel approach. William Stovin and Jeremy Brazil assumed the leadership of Markel International. Gerry Albanese, after five years leading Markel International, returned to the United States to become Markel's Chief Underwriting Officer and lead our product line group. John Latham recently assumed responsibility for leading the sales and marketing efforts in the newly established regional offices.

Debora Wilson joined our Board of Directors in 2009. Debora oversaw the successful development of The Weather Channel at Landmark Communications. We are thrilled to have her perspective on building new businesses and managing the people and resources needed to accomplish the goal of profitable growth. We are also pleased to welcome Darrell Martin, our former Chief Financial Officer, back to our Board, where his financial expertise and his knowledge of the Company and our industry will be extremely valuable.

Countless other individuals assumed new roles and responsibilities during the year. Space prevents us from listing everyone, but an accurate and full report would include almost everyone in the Company.

Change often invokes fear of the unknown and a nostalgic longing for the way things used to be. That is a backward looking and futile approach that will produce disappointing results over time. The world spins and things change. As the senior leaders of Markel, we could not be more proud of the way our people have responded to the changes within Markel and throughout the entire marketplace.

Almost everyone in the Company has new responsibilities and new tasks. Throughout the year, the willingness and sense of challenge and adventure that our people have brought to the task has been gratifying. This spirit makes us optimistic that the organization will continue to respond, adapt and grow as new challenges and opportunities arise.

Some change, however, is not positive. It is with much sadness that we recognize the 2009 passing of Les Grandis, a member of our Board of Directors for over 20 years. As both a board member and as outside legal counsel, he provided sage wisdom, experience and insight during an important part of the Company's history. We are grateful for his service to the Company and his contributions to our growth.

New Products

With the addition of a Chief Underwriting Officer and the formation of product line groups, we are well positioned to add products and expand and upgrade existing products.

During 2009 we expanded our equine offerings by adding a team of experienced equine professionals at Markel International. We also hired experienced transportation and property insurance professionals to lead these product line groups.

We plan to re-enter the directors and officers liability market. We also added an experienced and successful team of underwriters to enter the trade credit risk market during 2010.

Finally we formed a product development team to help our Chief Underwriting Officer and product line leaders develop new product opportunities.

While the current soft property and casualty insurance market obscures our progress from these initiatives, we are excited about future growth as marketplace conditions stabilize and improve.

Although we completed many items on our "to do" list in 2009, a new list, with new opportunities and challenges, hangs on our refrigerator as we move through 2010.

INSURANCE MARKET COMMENTS

In 2009 our insurance operations produced a combined ratio of 95% on total earned premiums of $1.8 billion. While profitability improved, gross premium volume declined 14% from last year due to lower insurance market prices, depressed demand for insurance from the slower overall economy and governmental actions, which kept insurance industry capacity and supply intact when it would otherwise have failed and been withdrawn from the marketplace.

Our response to the difficult market conditions was as follows. One, we quickened the pace of our reorganization to One Markel as we believe that will produce growth opportunities both from increasing our penetration among our existing customers and allowing us to more easily seize opportunities. Two, we supported the growth of our international operations where more opportunities exist and irrational competition is not quite so prevalent. Three, we increased our emphasis on new product development. And four, we acquired Elliott Special Risks and several other smaller niche product lines.

We expect these actions, as well as the efficiency and responsiveness we are building into our organization, to allow us to make the most of the

current environment and to produce reasonable underwriting results. We also expect these actions will enable us to handle meaningful increases in business volumes, at low incremental operating costs, when the insurance cycle improves.

We do not make any predictions as to when this will occur. We remain convinced, however, that sub-optimal industry profitability (i.e. underwriting losses) and AIG's government-sponsored exemption from free market forces must end. When this happens, we expect pricing for property and casualty insurance risks to improve meaningfully. We will be ready to make the most of that environment when it occurs.

INVESTMENT COMMENTS

Following the cataclysmic events in world financial markets in 2008, we enjoyed a meaningful rebound in 2009. The overall investment portfolio produced a return of 13.2% in 2009 with equities up 25.7% and fixed income returns of 9.8%.

We are very pleased with these results. Our strong balance sheet allowed us to weather the fierce storms of 2008. We endured and kept the losses in 2008 to a minimum despite the most difficult investment markets we've ever encountered. Keeping ourselves largely whole through the storm, coupled with our strong and highly liquid balance sheet, enabled us to continue to invest proactively in 2009.

During 2009 we steadily and consistently added funds to our equity portfolio. At year end, our exposure to publicly traded equities remains lower than our historical averages at 17% of the investment portfolio. While we increased our holdings during the year, we remained conservative and liquid due to continued softness in the insurance marketplace. When insurance market pricing firms and our premium writings grow, we will accelerate the pace of our equity investing.

In our fixed income operations, we enjoyed the rebound in pricing that occurred on our holdings of corporate debt securities. This area of the portfolio suffered the most during the financial crisis. The strength of our balance sheet allowed us to maintain our positions for the rebound. Going forward we will continue to allow the proportion of corporate debt securities to diminish as a percentage of our fixed income holdings. The job of our fixed income portfolio is first and foremost to secure and protect the insurance liabilities of Markel. We will seek additional returns over and above those offered by government-backed securities only with the funds we would willingly and prudently allocate to our equity portfolio.

Our equity portfolio allocation has and will continue to include publicly traded equities, corporate debt with equity like returns and majority-controlled non-insurance subsidiaries.

Protecting the balance sheet is always the most important goal in our investing (as well as in our insurance) operations. Great pricing opportunities in the financial markets, such as we saw earlier this year, mean absolutely nothing if we don't have the balance sheet and appropriate liquidity and cash flows to take advantage of them. Consequently we will always err on the side of conservatism to make sure we have the balance sheet strength to act in the long-term best interests of the Company.

We saw the value of maintaining our balance sheet strength over the last two years. Many previously blue chip financial institutions have been wiped out. Others

exist only due to government influence and largesse. Their shareholders suffered total or near-total wipeouts. At Markel, management's investments in the Company represents the bulk of our personal net worth. We will never operate in such a way as to endanger the firm.

SUMMARY

We look forward to looking back on 2009 in the rear view mirror. It was a historic year of transformation at Markel. We survived the worst financial market storms seen in modern history. We earned a solid underwriting profit in a difficult insurance market. We fundamentally altered the basic operations of the Company with the move to the One Markel business model and the Atlas project. We protected our balance sheet during the crisis (by not being highly leveraged or hyper-aggressive before the crisis). We made substantial positive investment decisions during the year and enjoyed the good returns earned in our publicly traded equity and fixed income portfolios. We expanded our holdings of non-insurance operations to the point where they have now become meaningful to our overall performance.

While we would all prefer to be operating in an environment where insurance prices are going up, financing is easily available and economic growth is a given, we recognize that we are not. The world is not going to change to accommodate us, so we change to accommodate it.

We are faster, leaner and smarter as an organization than we have ever been before. We have talented, hard-working and dedicated associates throughout the Company. We have a healthy mix of proven veterans and younger managers with experience, energy and ideas. We've demonstrated a resilience and flexibility that produced success at Markel, while other firms failed. We gratefully thank our associates, customers and shareholder partners for working through and supporting these changes.

We pledge that we will compete effectively in whatever circumstances the future holds. The world is a big place, and the scope of our organization is wider, more talented and more nimble than at any time in the past. We look forward to continuing to build the culture and adding to the record of accomplishments at Markel.

Alan I. Kirshner
Chairman of the Board and Chief Executive Officer

Anthony F. Markel
Vice Chairman

Steven A. Markel
Vice Chairman

Thomas S. Gayner
Chief Investment Officer

Richard R. Whitt, III
Senior Vice President and Chief Financial Officer

Markel Annual Meeting- Sunday, May 2nd, 2010

Speakers:
Steve Markel (CEO)
Tom Gayner (CIO)

Tom Gayner:
Reminded us that that this is the 20th Year that the Markel (MKL) meeting has been the same weekend as the Berkshire Hathaway (BRK) Annual Meeting

General Comments:
Steve: The current state of affairs if you look at the insurance markets objectively: not a pretty time to be running a P&C business. There is more capital chasing fewer premium dollars and pricing has been very stressed. All in all it is a tough environment. Renewal rates are coming down.

Having said that he thinks Markel is in the best position it has been in years. Why? Markel's great strength is its 25 year, long term view. It makes it easy to be optimistic when you have a long term view and can look past short term issues. The metrics of the business will allow them to generate high rates of return. He believes that they can write insurance with combined ratios that are profitable. This environment will be tough for their competitors as well. So, there should be a lot of opportunities on the private equity and insurance sides. He said that deals are going to happen and they are very enthusiastic about the potential. They think they have the model in place to take advantage of the stressed environment.

The economic scene is starting to see some recovery but it is not what it was 4-6 years ago. Insurance premiums often follow economic conditions and since the people they insure are not as active in business, MKL's premiums are down.

A lower interest rate environment leads to lower returns on the investment portfolio. They are not in the mood to invest in long terms bonds that could get hammered if interest rates go up (a sentiment that was echoed by Buffett at the BRK Meeting). They are afraid of inflation. They don't know when it is going to come about but they think it will.

Question 1: Bill Berkeley [of W.R. Berkley Corporation (WRB)] recently said on a conference call that he expects a turn in P&C pricing by end of 2010? Is he right?

Steve: Said that if he had to bet on the over-under, he would take the over. Steve Berkeley was very optimistic and he hopes he is right. But he is skeptical.

Question 2: What would they have done differently last March (at the bottom of the market) if they could do it all over? How did they make decisions then?

Steve: Anytime there is a panic we all share in the fear that's around us. The smartest of us figure out how not to be too fearful, but you don't want to grab a falling knife. It is always tough to call the bottom. In the insurance business when stocks and bonds are falling, capital levels are falling too. So, to put money to work you need excess capital. Knowing how it all played out, they were much more conservative than they needed to be. However, if the bottom had been lower they would have been much less happy with the benefit of hindsight.

Tom: Steve was encouraging him to be more aggressive. But what Tom pushed back on was the mark to market of the capital accounts [meaning that as stock prices were falling so were their capital levels as mark to market asset values went down] and the soft market for insurance premiums. He would have fired both barrels (he said he was firing one barrel) if it had been a hard insurance market. They were buying and dollar cost averaging their way into a higher equity position and are still doing that today.

Pricing and valuation are important but behavior makes a professional investor rich or poor over time. The ability to continue to buy week in and week out is key. You have to able to pour money into things that are

working and will work well. You also have to be able to sell what is not working. This beats timing the market every time. Insurance companies have regular cash flows so they get money all the time. Accordingly, dollar cost averaging creates a lot of wealth for them.

He mentioned that the #1 mutual fund was run by Ken Heebner (CGM Focus Fund) during the decade last. The fund made 18% per year. However, the most astonishing fact is that the average shareholder in that fund actually lost 11% per year. What that means is that people were trying to time the market and lost money consistently. Thus, it's better to find partners that share MKL's beliefs even though you can't necessarily control your shareholders. You have to put yourself in position to succeed by avoiding losses and failures.

Question 3: Does MKL have automatic shareholder investment plan?

Steve: Not right now but they would look at it if enough people were interested.

Tom: Because they don't pay a dividend and instead invest in the business or the portfolio they actually do have an automatic 100% dividend reinvestment plan.[Laughter]

Question 4: When it comes to the purchasing of private operating companies, with MKL, what do you feel that you can bring to the private business owner that is an advantage over other owners? Where are you looking for these opportunities (Specifically, in reference to the MKL Ventures initiative)?

Tom: A year ago he made the case to Steve that the crisis had presented a huge opportunity for MKL. Agreed with Buffett that there are three categories of buyers to sell private businesses to:
1. Private equity/LBO: This is a disruptive process that adds a lot of leverage. This is the process to choose if you want the highest dollar value. But you have to know that you will be sold again soon.
2. Strategic buyer: Someone already in that business. But this buyer can come in and slash headcount and fold it into their company. If you love your business then this could be very unpleasant.
3. Someone who believes you run a great business: MKL offers permanent capital. Do the same deals as BRK does--just with fewer zeros.

Where do deals come from? First they bought AMF Bakery in 2005. It was located in Richmond (where MKL is located) and the CEO did not want to sell to a PE firm because he had been with a firm that had been bought by a PE firm previously. He threw himself in front of the bulldozer with the intent to sell to MKL. In 2006-07 they still wanted to do these deals but they did $0 in business. Other people were willing to pay too much since financial markets were still going wild. In 2007, a lawyer from the AMF deal called and suggested another client. From that call they linked up with Parkland Ventures, a business that manages mobile home parks. This company had management capabilities but did not have the necessary capital. MKL had capital and together they have been growing. There is a long of runway for this business.

Next, they bought PSI, a company in the dorm room furniture business. This is a specific niche and is as much of a logistics business as a furniture business. This deal came from another Richmond connection. Finally, was the Ellicott Dredge company deal. This company does business all over the world as the leading manufacturer of small dredges. They are the ones who dredge the Panama Canal. The family members needed liquidity, wanted the company to be on permanent footing, and ended up in good hands with MKL.

When people see that you can do these deals, they begin to understand what you are looking for. MKL promotes the ideas of love and permanency. This is a good, self reinforcing mechanism in terms of selection of potential companies. The phone is actually running of the hook now.

Question 5: How did MKL's culture come about?

Steve: Warren and Charlie mentioned that shareholders are a powerful force in terms of company culture. Steve agrees with that when it comes to MKL as well. MKL has created a very successful culture, partially by cultivating long term and loyal shareholders. There is no question that the pressure of going public is

severe. Wall Street analysts are often seen as a firm's actual shareholders by company management teams. The analysts ask these stupid questions and the management teams waste all of this time catering to sell-side analysts. But, the ultimate owner of the stock is a mutual or pension fund shareholder. Analysts are not your shareholders. There is a huge distinction between actual shareholders who make decisions and analysts.

MKL only raised $5M when they went public, A lot of the people who bought in were employees and associates of MKL. When you think about who your shareholders are, in this case their shareholders were their friends and families. Then you have to think about what a manager is entitled to and what a shareholder is entitled to. They decided early on that the shareholders should get the benefit of the doubt. They are shareholders as well so the interests are aligned. Building wealth was more important than building income. Tom always said (quoting the movie The Field of Dreams), if you build it they will come. So, they decided not to make any promises-- just demonstrate success and investors will buy in. Under-promise and over-deliver is their motto.

The value of renewal retentions is incredibly important at places like GEICO. The averaged insured stays around for 8-9 years. For MKL, they want to get customers to stay with them for 3-6 yrs. Retaining existing customers is certainly better than trying to get new policy holders each year. Along the same lines, why would you want to go out and cultivate new shareholder each year? It's a lot smarter to stick with the same shareholders. The average life expectancy of the Fidelity insurance analyst is only 6 months. They think it is crazy to have to tell the story over and over again to someone who is either not listening, not going to be there, or has no interest in owning the stock for a long period of time. The truth is that being in Omaha the first weekend in May is a great place and time to look for shareholders.

How exactly do they retain customers? They get a customer and they treat him/her well in hopes of keeping him/her for a long time. For example, MKL has a children's summer camp business. In fact, they insure 50% of the children's summer camp businesses in the US. It is not a huge revenue generator but people stay with them for 10 years. But, for something like earthquake insurance they get renegotiated each year. They prefer smaller accounts where they know their customers and can keep them loyal.

Question 6: Unlimited government capital has gone to one of their competitors (AIG). How is that going to play out? Also, do they have any volcano exposure?

Steve: Steve said he had no idea how the AIG situation is going to play out. The AIG insurance sub has been re-branded Chartis and appears to be doing $40B worth of premiums each year. This is about a 10% market share. The government was going to spin it off but that has been shelved for now. The truth is that AIG accepts larger accounts and MKL looks for smaller accounts. So, they don't go head to head each day. But sometimes MKL drifts up and AIG drifts down so they do compete a bit. The truth is that AIG is more disruptive when it comes to larger insurance companies.

Steve was not aware of any direct exposures to volcanoes.

Tom: A few years ago they saw competitors doing irrational things and thought that one day these companies "would run out of money to run out of." Well, they eventually did. This will also be true for the various taxpayer funded ventures. MKL will just compete day to day. We can't forget that UPS and Fed Ex have beaten the post office (USPS) because they have better and more efficient operations. So, MKL should be able to compete with government-influenced businesses as well.

Question 7: Do they have a current opinion on large financial companies?

Tom: Steve often tells him that some of his ideas are the dumbest he has ever heard. Then they switch positions and argue the other way. Steve likes arguing and Tom has adapted. They have argued about financials a lot and they have minimal exposure to these companies (excluding BRK of course). They think there are some that are OK and that some will do well. But they like companies with no debt. Crooks often use a lot of debt. If you have a 100% equity company, then you are likely dealing with honorable people because they are using their own money. Financial institutions are highly leveraged. Tom has been burned

by high leverage and going forward he will be leery of high leverage. Systemically, he hopes that we are going to deal with the crisis. Specifically, he thinks we need to figure out ways to counteract the leverage that has to exist for the financial markets to work. As Buffett has said, if CEOs and directors had been personally liable then things would have likely turned out differently. He is expecting that we will figure out a way to align interests and make people more accountable when they run financial companies.

Steve: The MKL model is that they look at problem backwards. If you go through that process you have a better understanding of what's going on.

Question 8: When it comes to Markel Ventures, some investors would like to see more disclosure. How much capital has been deployed? Can you comment on some previous deals?

Tom: You will see more full disclosure since they have now crossed the realm of [accounting] materiality for MKL. Segment reporting disclosure will start in 2010 for MKL Ventures. In aggregate, they have roughly put $100M of capital to the set of companies and they expect $150M+ in revenue this year. They also are anticipating a double digit cash return from these businesses. These companies would be less expensive than public alternatives on price to earnings or any valuation metric.

To be able to have the controlling interest-- 2 things they need to control; CEO compensation and capital allocation decisions. It is a huge advantage when you can eliminate the agency problems that you have with public companies.

Owning these businesses gives them flexibility. For example, if you go through a 2008-like period again, the cash flows are not regulated by the insurance regulators and they can use cash in different ways than they can for cash generated from insurance industries.

Question 9: How is One Markel coming along?

Steve: They reorganized the wholesale side of the businesses and have given the 5 regional offices the entire MKL product suite. It has been a complicated process b/c people had to be moved around. They also had to add sales and underwriting personnel in a lot of markets. It has been an accounting nightmare and has created a lot of disruption When it is done the wholesale business will be operating more efficiently on one integrated system. MKL agents will have the ability to see all of MKL's products. People are becoming more conformable with their new positions and roles. This actually has been a good time to do a disruptive reorganization because the economy is down and the economy is struggling. Agents are starting to embrace it and people are starting to be more aware. It is a big project that a lot of people are focused on but it will be until next year that the entire system is up and running

Question 10: Regarding the run off marine business--would they get into this business again now? Are the competitors really exposed?

Steve: They shut down the marine business 18 months ago. They have no continuing exposures and have no loss from the recent spill. They do have a marine business in London. Losses will likely be the maximum of their policy loss exposure. MKL's share of that risk is probably going to be the max: $12-$13M. Luckily, they had very little exposure relative to other's market shares. Anyone who is near the risk will get sued-- deep pocketed people always get sued. The marine and energy business in London is very strong and they are hopeful that this is one reason that rates will firm.

Question 12: The Richmond bank (First Market) they invested in…what's happened to it?

Steve: Merged with Union Bank. They were a $1B bank and Union was a $2B bank. As a bank they are doing well, but banks in general are not doing well. They have a great opportunity in the Virginia market. They now have a much larger footprint combined. Should be a good match and hopefully will grow and be successful going forward.

Question 12: Is MKL going to create a new team for MKL Ventures?

Tom: Yes, they have already doubled the size. As the size and scale grows it will require a few more people that are not there today. They want to get the people who run the companies in MKL Ventures to meet one another. They hope a cross-pollenization dynamic can emerge. They already have succession plans for these companies in place. In any case they will remain a decentralized operation. Like BRK, they are not going to have a lot of operational personnel.

Question 13: Are the MKL deals usually stock deals? What percentage remains in the hands of management?

Tom: All the deals have been done with cash. They are not opposed to using stock if it suits someone's desire to defer a gain. The share count of MKL goes down each year through buy backs. But they want to keep the share count of MKL in control. They don't offer any stock options so they don't have share leakage. They are getting 80-100% ownership depending on the company in questions.

Question 14: MKL International has become the crown jewel of the organization. What are the opportunities there?

Tom: There are opportunities to grow. There is a big world out there. They are looking for offices all over the world. They have been able to prove that they can turn the corner and become profitable.

Steve: They acquired Terra Nova in 2000.. They spent a lot of time rebranding and reorganizing into MKL International. When they bought Terra Nova, it had 8 different Lloyd's syndicates that were competing against each other. Now they can market and sell all the products in a similar way. It was tough at first to inject the MKL culture in England. But, today, the fact that the London office embraces the MKL style is very obvious. At the end of last year the London team suggested that they buy a general agency in Toronto that they had been working with for years. The MKL International team put the deal together from the beginning to end and they closed the deal last year. A transaction like that does not have to be initiated in Richmond and that shows the strength of the MKL International franchise. They expect more deals to come through that pipeline.

Question 15: Have they made any changes for underwriters in terms of incentives and compensation (in terms of One Markel)

Steve: Most underwriters used to get compensated only based on underwriting profits. Now, it is sort of split between people who get some compensation for selling and others who get compensated only for actual underwriting. Everybody is still compensated based on underwriting profits but in the regional offices in which people are in charge of sales, there are some incentives to stimulate growth. This is an improvement but it does represent some change. Underwriting profits still drive MKL.

Question 16: What was the reason to enter the D&O (Directors and Officers Liability) business?

Steve: They hired a guy who is opening a new office for a D&O business. They got out of that business years ago in the US—only write some non-profit D&O. They brought on a guy they had known for a while and who had a lot of experience. Currently, they are in the midst of putting something together to write new business. He thinks that they could take advantage of a rising pricing in environment in D&O in the coming years. But, they may be early and this may not evolve into a meaningful chunk of business. At most they think it could be $10M in business per year. The expected claims coming from the financial crisis have not played out and at this rate they are not sure if that is ever going to happen.

2010

To Our Business Partners

We are delighted to update you on this year's financial results, business activity and our outlook for the future in this annual report. We appreciate that you, as the owners of Markel Corporation, share our interests in building the long-term value of this Company. We also recognize that the relationship between the management team at Markel and our shareholders is uncommon in today's short-term focused world. We treasure this relationship as it allows us the unique opportunity to build this Company in a durable and profitable manner.

Every year, this report is our best effort to communicate with you about the operations and activities of your Company. We want to tell you everything about what we are doing. We are excited about the changes we've made at Markel in the last few years. We are optimistic about our future, and we want you to know as many details as possible about your Company.

We believe that the more you know about what we are doing, the more you will share our optimism and continue to support us with the capital and patience needed to accomplish our lofty goals.

While no single measure can ever really capture the total financial picture, we have historically reported to you the book value per share as a reasonable proxy for our performance. By this measure, 2010 was a solid year of progress for Markel as book value per share rose to a new record high of $326.36, an increase of 16% from a year ago. Five years ago, book value per share was $174.04, and the compound annual growth rate since that time stands at 13%. Ten years ago, book value was $102.63 per share, and the compound annual growth rate over that period was 12%. You can see our year by year progress in the 20-year table provided below.

We expect to continue to rely on book value per share as the most important metric for measuring the progress of the Company as a whole. In addition, the ongoing growth of our non-insurance operations contained in the Markel Ventures group, and capital management actions such as share repurchases, will mean that we may augment that statistic with other relevant measures. We will fully share with you the key measures that we ourselves look at to make and judge our business decisions.

(in millions, except per share data)	**2010**	2009	2008	2007	2006	2005	2004	2003	2002
Gross written premiums	**$ 1,982**	1,906	2,213	2,359	2,536	2,401	2,518	2,572	2,218
Combined ratio	**97%**	95%	99%	88%	87%	101%	96%	99%	103%
Investment portfolio	**$ 8,224**	7,849	6,893	7,775	7,524	6,588	6,317	5,350	4,314
Portfolio per share	**$846.24**	799.34	702.34	780.84	752.80	672.34	641.49	543.31	438.79
Shareholders' equity	**$ 3,172**	2,774	2,181	2,641	2,296	1,705	1,657	1,382	1,159
Book value per share	**$326.36**	282.55	222.20	265.26	229.78	174.04	168.22	140.38	117.89
5-Year CAGR in book value per share[1]	**13%**	11%	10%	18%	16%	11%	20%	13%	13%

[1] CAGR—compound annual growth rate

The last five and ten years have seen challenging financial environments. The insurance markets in which we operate experienced increasingly competitive conditions and investment markets were treacherous. Despite these conditions, your Company substantially increased in value. We are pleased with these results and we hope you are as well. We look forward to building on this legacy in the years to come.

Ch-Ch-Ch-Changes
(with apologies to David Bowie)

Perhaps when we look back at 2010 in future years, we will smile knowingly at phrases like "unusual uncertainty" or "the new normal" that we all hear so much of these days. The future is always uncertain, and whatever conditions exist as time goes by are, by definition, "normal." For today though, the sense remains that somehow the degree of uncertainty and what normal looks like seem different than in previous eras.

In keeping with this sense of taking everything to warp speed as the overall environment shifted, we've implemented a series of dramatic changes at Markel in recent years. We've changed our basic business model of how we market and distribute insurance. We've changed the senior leadership team to assure continuity into the future. We've changed information technology systems and approaches to how we manage the Company. We've changed by adding to the countries and markets where we operate. We've even changed the scope of the businesses we operate with the addition of Markel Ventures.

As we've worked through these changes, one thing has not changed and will not change, namely, the Markel Style, which describes the values by which we operate this Company. Markel operates with integrity. We value our associates and our customers. We maintain a long-term view while operating our business, and we do not cut corners or take shortcuts to make current results look artificially better.

In addition to those values, which will not change, we expect the future to be guided by two fundamental business realities.

One - technological change will continue to occur at an increasing pace.

Our technological approaches must be fast, flexible and cost effective. Every decision we make must be reviewed in those terms to assure that it fits that model. Whatever solutions exist today will be different in the future, and we need to be able to turn on a dime to adapt to tomorrow's realities.

Later in this report, we will discuss our Atlas initiative and how we are adapting our approach to our information technology management process to reflect this reality.

Two - talented and honest people will do fine.

Despite whatever changes we face and however daunting they may seem at the time, everyone else faces them too. Everyone faces the same economic, regulatory

2001	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991	1990	20-Year CAGR[1]
1,774	1,132	595	437	423	414	402	349	313	304	406	412	8%
124%	114%	101%	98%	99%	100%	99%	97%	97%	97%	106%	81%	—
3,591	3,136	1,625	1,483	1,410	1,142	927	622	609	457	436	411	16%
365.70	427.79	290.69	268.49	257.51	209.20	170.95	115.45	112.55	84.64	81.77	77.27	13%
1,085	752	383	425	357	268	213	139	151	109	83	55	23%
110.50	102.63	68.59	77.02	65.18	49.16	39.37	25.71	27.83	20.24	15.59	10.27	19%
18%	21%	22%	23%	26%	26%	31%	17%	25%	34%	35%	—	—

and technological environments. No one gets to choose a different reality.

We compete all over the world for talented associates to serve our customers. If we attract and retain the best people through a combination of shared values and appropriate financial incentives, we will survive and prosper, and the value of your Company will grow.

Financial Results

Total operating revenues rose to $2.2 billion from $2.1 billion, up 8%. Earned premiums were $1.7 billion compared to $1.8 billion a year ago, and the combined ratio for the year was 97% compared to 95% in 2009. Investment income totaled $273 million compared to $260 million in 2009, and other revenues were $186 million compared to $90 million a year ago.

On our balance sheet, total shareholders' equity rose to $3.2 billion from $2.8 billion, and debt to total capital declined to 24% from 26% in 2009.

We remain balance sheet oriented at Markel. We strive to make our loss reserves more likely redundant than deficient, and we err on the side of conservatism and maintaining the integrity of the balance sheet. This is a core value of Markel that will not change.

In our insurance operations, we operated at a combined ratio of 97% vs. 95% a year ago. This year's results were negatively affected by the Deepwater Horizon disaster in the Gulf of Mexico and the Chilean earthquakes, as well as heavier than normal expenses associated with our information technology initiatives. These two factors added two points to the loss ratio and three points to the expense ratio in 2010. We are pleased with another year of underwriting profitability, especially given the difficult market conditions in the insurance industry.

We also are optimistic that despite challenging overall industry conditions, we will continue to enjoy good results in our insurance operations.

During 2010, we took several steps to make that happen in our wholesale, specialty and international segments.

We promoted several proven executives to new positions of responsibility. For example, we named Gerry Albanese as Executive Vice President of Markel. In this role, Gerry oversees all underwriting functions of the Company.

We also promoted John Latham to President of Wholesale Operations and named new leaders in our Northeast and Southeast regions, as well as a new head of marketing for the wholesale operations.

We promoted Timberlee Grove to Chief Operating Officer of Markel Specialty. We also named new product line leaders in the Transportation, Architects and Engineers, Directors and Officers and Crisis Management disciplines.

We added to our longstanding presence in the equine insurance world with the acquisition of the American Livestock book, and we enjoyed the first full year of operations of the Elliott Special Risks operation in Canada, which we purchased in the fourth quarter of 2009.

All of these promotions and this activity have one goal in mind: Build the Markel brand for future growth and leadership. In the world of insurance, Markel stands for integrity, expertise and entrepreneurship. Our customers recognize our long-term commitment to solve their insurance problems and we look forward to building on that reputation all around the globe.

In our investment operations we enjoyed a fabulous year. Total investment return was 7.9% in 2010 with equities up 20.8% and fixed income up 5.4%. We remain optimistic about future returns from our equity investment operations. We continue to have more ideas than money, and that is a good recipe for future returns.

In our fixed income operations, we remain concerned about the likelihood of interest rates increasing from their current low levels. This began to happen somewhat in the fourth quarter of 2010 and, while we don't know when, we think that higher rates are on the way.

In preparation for higher rates, we've shortened the maturity of our bond portfolio over the last two years. As bonds have come due, we've replaced them with bonds that have shorter maturities. This has constrained our investment income, but we think that protecting the balance sheet from the big price drops that would occur on long-term bonds if interest rates rose is the right decision. We will continue to remain vigilant and only redeploy our capital to longer-dated bonds if we feel we are being paid adequately for assuming the risks of inflation and currency degradation.

Insurance Industry Dynamics

Profitable insurance premium volume remained hard to come by in 2010. It is no mystery why this is the case. There is simply too much capital in the insurance industry compared to the risks that need to be insured.

While reliable statistics are difficult to pinpoint, we can hang some numbers on the capital issue and the supply versus demand situation. According to A.M. Best Company, total capital in the U.S. insurance industry at year end 2010 is approximately $550 billion. Total premiums for the U.S. insurance industry for 2010 are estimated to be approximately $400 billion.

While these are rough estimates and U.S.-based numbers only, they directionally describe the worldwide state of the insurance industry. Just as is the case at Markel, the insurance industry continues to be more global. As such, capital moves from jurisdiction to jurisdiction and can and will respond to insurance opportunities anywhere around the world.

Simply put, there is too much capital (supply) in the insurance industry relative to current demand for the industry to produce attractive overall returns on capital.

Over time, this situation will change. Insurance markets will harden and prices will increase. We do not know when, but we expect a combination of factors such as rising interest rates (which will diminish the values of the industry's investments), loss reserve deficiencies, share repurchases, dividends, merger and acquisition activities and catastrophes to dent and diminish industrywide capital levels.

We also would say that in addition to "too much capital" there is "not enough risk." The economic shock waves from the financial crisis in recent years have not passed through the system completely. Measures of economic activity remain constrained and risk is still kind of a bad word.

This will not remain true indefinitely. Growth outside the United States continues to occur at healthy rates as living standards around the globe rise. Historically, total insurance premiums grew at a rate slightly higher than GDP due to increasing sophistication, complexity and sense of liability. Risk has been suppressed in recent years and the demand for insurance suffered accordingly. As the entire world continues to advance economically, the demand for insurance should resume its upward path and help correct the current supply-demand imbalance.

A more vibrant level of economic activity creates more risk and more demand for insuring that risk. Recovery and an increased pulse of economic activity should improve the supply-demand balance for the global insurance industry.

Finally, one of the many perverse features of the insurance industry is the mislabeling of riskiness and capital adequacy. Right now, prices are falling and premium to surplus ratios are declining. This makes it look like the industry is more overcapitalized and less risky as it charges *lower* prices to assume the *same* risks.

When prices start to rise, premium to surplus ratios will rise and rating agencies, regulators and analysts will state that the industry is becoming riskier and less capital adequate as it charges *higher* prices to assume the *same* risks.

In short, this is idiotic.

Nonetheless, it remains the method by which capital adequacy and solvency is rated and regulated and we can't change it. This produces a leveraged effect where price swings are magnified and needless volatility occurs. Insurance prices accelerate both downward and upward during normal market cycles. While we all bemoan the current tough pricing environment for insurance, we are confident that this recurring cycle will recur yet again, and we will see accelerating upside prices in the future.

Despite the reality of current soft pricing and hypercompetitiveness, we can and are doing several things to propel economic growth at Markel.

First, our focus on specialty insurance products allows us to be among the first to serve new markets and new risks. We don't need extensive history and years of actuarial data to serve a newly emerging industry or a new type of risk. Our talented associates can use the technical tools available and combine those tools with business judgment to design and price insurance products to meet the needs of new customers and new businesses.

Second, while we are willing to significantly reduce writing insurance in specific areas when we believe that rates are inadequate, we can increase writings in these markets later when rates are more appropriate. This flexibility should help us to be out of the market when premium dollars are scarce and present when they are more abundant. As an example, we re-entered the market for directors' and officers' liability coverage in 2010 after having withdrawn from that market in the 1990's.

Third, as our capital base grows and our geographic spread of business widens, we can write more risks and higher dollar amounts of each risk. As an example, writing more energy business around the world enables us to write more energy business in the Gulf of Mexico due to the benefits of additional diversification.

Fourth, while we enjoy a wonderful record of long-term growth, we remain a small player in the global world of insurance. There is room for us to increase our market share for many years to come. We can use the tools of technology to increase our distribution reach and administrative expertise. We can add new people, new products, new companies and new offices for a long time. In 2010, we opened offices in Hong Kong, New York and Barcelona. There are still many places for us to put new pins, representing Markel offices, on a map of the world.

Fifth, we can thoughtfully manage the capital of the Company to create value. We measure our performance and progress on a per share basis at Markel. As opportunities present themselves to deploy capital for organic growth opportunities around the globe, acquire insurance or non-insurance businesses, or repurchase Markel common stock at attractive prices, we will do so.

Since the initial public offering of Markel Corporation in 1986, the insurance market has been what was described as "soft" in more years than not. Most of our associates have only seen one hard market in their entire insurance career! Despite this, we've managed to grow and create value. We expect to continue to be able to do so.

A Digression on Accounting – Enjoy!

Our non-insurance holdings, Markel Ventures, continue to grow. Since launching Markel Ventures in 2005, we've grown from one business with revenues of approximately $50 million to six businesses with estimated revenues of over $250 million for 2011. The associated cash flows have followed as expected. We expect additional growth in these operations in coming years both organically and from acquisitions.

With the growth of Markel Ventures, it is important to add some new measures when reporting our financial results to you. We will begin to do so this year and in the years to follow by reporting EBITDA, or earnings before interest, taxes and depreciation and amortization, that Markel Ventures has produced for us. In 2010, Markel Ventures EBITDA was $20.4 million as compared to $4.6 million in 2009. For a reconciliation of Markel Ventures EBITDA to net income, see the table on page 130.

While we generally do not like EBITDA as a performance measure, it does provide useful information if you keep in mind several caveats. Here is the way we break it down by its components to make it useful to us. We share this with you so that you can see how we think about it ourselves.

First, we start with the "E," Earnings. These are the GAAP after-tax earnings of the businesses involved. They are the starting point for the EBITDA calculation and they are calculated in accordance with GAAP. If we had owned these businesses for a long time, rather than through recent acquisitions, we could just stop there.

It is fair to ask then, why are you adding back Interest, Taxes, Depreciation and Amortization? Aren't they real expenses? The honest answer is both yes and no, and we'll try to explain why in the paragraphs that follow.

Interest is clearly a real expense. As such, we count it in considering the economics of each of these businesses. Other than the real estate intensive business of ParkLand Ventures, we operate the Markel Ventures businesses with little or no debt. Consequently, the "I" factor of EBITDA is an insignificant difference between GAAP earnings and EBITDA. Whether we adjusted for "I" or not, the answer would be roughly the same under these circumstances.

Taxes are also real expenses. Real taxes though are affected by leverage and the associated deductible interest expense. In order to make effective apples to apples comparisons about the performance of underlying businesses which might have different amounts of debt in their capital structure, we add back the tax expense to make the results comparable.

Depreciation and Amortization get more interesting. Depreciation is the accounting method that tries to capture the sense of how much the capital equipment of a company is wearing out and what it will cost to replace it eventually. Fortunately, the Markel Ventures companies are not capital intensive and do not need massive doses of capital spending to remain competitive. This is an important aspect of what we are looking for when we purchase companies. Normally, we do not want to invest in businesses that require massive capital expenditures. As such, depreciation, like interest, tends to be only a minor factor in the adjustment from GAAP earnings to EBITDA.

Amortization represents the accounting effort to capture the cost of maintaining the intangible assets of a company each year. Given that the Markel Ventures companies have brand power in their markets and produce excellent cash flows, our purchase price reflects that reality and was a bigger number than just the hard asset values of existing working capital and real estate assets. The price we pay in excess of those tangible assets gets assigned to intangible assets and those intangible assets are written off over time in the amortization account.

We add back amortization to earnings as we are looking at the management teams and evaluating these businesses for two major reasons. First, as the CEO's of these businesses make decisions, amortization of intangible assets doesn't affect how they interact with their customers, manage their operations, price their products or any other fundamental aspect of running the business. Had we (or someone else) never purchased the business, this amortization would not exist. It is almost a "Lewis Carroll - Through The Looking Glass" type issue. If you look at these businesses from the point of view of Markel's financial statements, which is what we are doing in this report, the earnings of the companies are

penalized by an annual amortization charge that starts on day one of the acquisition and goes away over a number of years.

If you are looking at the operations of these companies from the standpoint of the operating companies themselves, this charge does not exist. Most importantly, it does not affect the cash flow of the business no matter which way you are looking at it. Consequently, we add the amortization back to reported earnings to get a truer sense of the operating cash flow produced by the business.

Second, the other reason we add back amortization is that if the companies are well run, continuing to build the value of their brand and increasing their earnings, the intangible value of these companies should be INCREASING not DECREASING, as the presence of an amortization charge would suggest.

While we would not be so silly as to add an amortization income line to our financial statements, that is what should be occurring if we are doing our jobs well. Over time, as we increase the scale and scope of Markel Ventures and as our insurance operations differentiate themselves in the marketplace as unique and non-commodity solutions to customer problems, the value of Markel common stock should also trade at a growing premium to the stated book value to reflect this economic reality.

This is a new and growing issue for how Markel common stock should be fairly valued in the marketplace. We are no longer solely an insurance company that can be valued by the single dimension of price to book value. There are other factors involved. We have always recognized these additional features, and we are going through this accounting discussion to share our thoughts with you about some of the new components involved in evaluating and analyzing the performance of your Company.

To end this accounting digression, EBITDA, when suitably dissected and analyzed, provides a reasonable and appropriate method to judge the cash flow and value being produced by the Markel Ventures companies. As such, we will share this number with you. Also, you can be confident that we are not confused about the difference between GAAP earnings and EBITDA, and we pay a lower multiple of EBITDA than of GAAP earnings when making an acquisition.

Acquisitions During the Year

During 2010, we completed the acquisition of FirstComp, a workers' compensation specialty operation serving roughly 8,000 retail agents across the United States. The company is skilled at designing and marketing workers' compensation coverage for small businesses and organizations and successfully uses advanced technology to meet clients' needs.

We are especially excited about the addition of FirstComp for several reasons.

First, we will offer additional Markel insurance products to FirstComp's current customer base. FirstComp's agency force already has thousands of customers that need additional types of insurance beyond workers' compensation, and we will offer the expanded array of Markel insurance products to them.

Second, FirstComp brings a marketing and technology focus that will be helpful throughout the Markel organization. Their disciplined and proactive sales process, along with the technological systems to market and administer their operations, will benefit the rest of Markel.

The beautiful thing about FirstComp is that through a focus on *small* accounts in *small* towns with *small* agencies serving *small* businesses, they've produced *big* results. We fully expect them to continue to do so in the future. However, 2011 will be a year of transition for FirstComp. Historically, FirstComp has operated a hybrid model of managing general agent and risk-bearing capabilities. As part of Markel, FirstComp will transition to primarily a risk-bearing operation. Also, as we have

discussed countless times, Markel's reserving philosophy is to establish loss reserves that are more likely redundant than deficient. FirstComp's 2011 results will be impacted by the application of this long-standing philosophy to their business.

While we would love for FirstComp to be earnings positive from day one, we recognize the magnitude of the transition and the current sad state of the workers' compensation market. Given this backdrop, we would expect FirstComp to have an underwriting loss in the range of $30 million for 2011. This is not a surprise to us and does nothing to diminish our excitement. FirstComp has a bright future as part of Markel.

Markel Ventures also made several acquisitions during 2010. While each transaction remains small in isolation, the combined increases in revenues and cash flows are now meaningful to Markel.

Specifically, during 2010, we acquired Solbern and controlling stakes in RetailData Systems and Diamond Healthcare. Additionally, we made strategic, noncontrolling investments in Markel Eagle Partners and GoodHaven Asset Management.

Solbern manufactures equipment for the food processing industry and serves niche markets like pickle packing, hot fill beverages and convenience store fast food products. Solbern has operated in these markets for over 50 years. The installed base of its equipment and longstanding customer relationships are a testament to the solutions it can engineer for its customer base. Solbern will be included as part of our AMF operations.

RetailData provides real-time retail intelligence and data to grocery, general merchandise and drug stores and other retailers. RetailData started 20 years ago and has emerged as the leader in market intelligence services for the retail store industry. As part of Markel, the company now has a permanent capital base and the ability to increase its recent efforts to expand internationally as well as widen its customer base.

Diamond Healthcare provides behavioral health services in over 75 communities across the nation. Working in partnership with local hospitals and health care providers, Diamond brings specialized expertise in behavioral health issues to locations around the country. Diamond started 25 years ago in Richmond and has grown steadily over that time. Partnering with Markel creates a permanent capital structure for the company and will facilitate their ongoing expansion and long-term management stability.

We made strategic, noncontrolling investments in Markel Eagle Partners as well as GoodHaven Asset Management. Markel Eagle was formed to take advantage of opportunities in the Mid-Atlantic real estate markets. The principals of the firm have operated successfully for two generations and were well known to us. GoodHaven is a newly formed investment management company with mutual fund and separate account offerings. We've known the principals of GoodHaven for over a decade, and we are delighted to partner with them as they build a new firm.

In each of these instances, we follow the same four-part checklist that we use in investing in publicly traded securities. As long-time readers of this report will know, we are looking for profitable businesses with good returns on capital, run by honest and talented management teams, with reinvestment opportunities and capital discipline, at fair prices.

We have some critical advantages in our Markel Ventures operations compared to our holdings of publicly traded securities. Specifically, we retain control of the reinvestment and capital decisions as opposed to delegating that responsibility to an independent board of directors, and we can redeploy the cash flows from these companies anywhere within Markel in a highly tax efficient manner.

We operate these companies with little or no debt, and their ability to create unencumbered cash flow for Markel provides us with a strategic advantage. We expect to

continue to add to our holdings of these profitable, well run businesses over time.

We also offer tremendous advantages to potential sellers of these businesses. We offer a long-term home for great businesses. If sellers want to make sure that their business is permanently placed in patient hands that will help current and future managers to build wonderful businesses, we are a unique buyer. We will not use excessive leverage or look to sell to subsequent buyers. That one sentence differentiates us from 90% of the other buyers in the world.

P.S. If you or someone you know owns a business that meets these criteria and would like to find a permanent home let us know.

Information Technology

Last year, we described our Atlas initiative. It was our name to describe the transformation of our information technology systems to both modernize and update our systems as well as to change the fundamental architecture of our IT to reflect the One Markel business model.

2010 was a year of good progress in Atlas and the new systems are starting to be delivered and implemented. This will continue to be the case in 2011 and 2012.

Starting now though, the name Atlas will fade into history. As the One Markel model has taken shape, we have realized that our IT needs are to some extent different than we originally assumed. We have deemphasized and deferred some Atlas initiatives, such as the policy administration system, while increasing our focus in areas such as data warehouse and internet solutions for our agents, brokers and policyholders.

IT is crucial to our business each and every day. It is inappropriate to view Atlas as a one-time project with a start and end date. As we deliver specific projects over the next few years, our focus must and will shift to keeping our technology up to date and appropriate at all times.

As such, we will allocate appropriate capital to our IT efforts on a regular and continuous basis. With this steady source of support, we will prioritize and triage our efforts to continually adapt to what is new and needed and prune and discontinue that which is not new and no longer needed.

Technology efforts will be judged by the following standard:
Our technological approaches must be fast, flexible and cost effective. Every decision we make must be reviewed in those terms to assure that it fits that model. Whatever solutions exist today will be different in the future, and we need to be able to turn on a dime to adapt to new realities.

With appropriate ongoing resources and this standard, we are confident that we will deploy and maintain the right technology to run our business efficiently and effectively.

Management Changes

In 2010, we formalized a management succession plan to perpetuate the long-term success of Markel. We formed an Office of the Chairman with Alan Kirshner as Chairman and Steve Markel and Tony Markel as Vice Chairmen. We also formed the Office of the President with Mike Crowley, Tom Gayner and Richie Whitt.

Alan, Steve and Tony created the vision for the modern Markel Corporation, which launched into the public arena in 1986. Their dreams for the Company took Markel from a small, regional insurance operation to a global insurance and financial firm. Through articulation of the values we all share as outlined in "The Markel Style," a series of bold acquisitions and day-to-day execution of the details, their leadership has presided over a great success story. They plan to continue their strategic and oversight roles indefinitely.

Mike, Tom and Richie assume day-to-day responsibility for the activities of the Company in this transition. Just as has been the case with Alan, Steve and Tony, each executive has ultimate responsibility and authority over certain functions of the Company. Clear boundaries, goodwill and the shared goals of only being interested in what is best for Markel have helped foster the necessary teamwork, as well as providing autonomy for the solo decisions needed from time to time.

This is an unusual structure but then again, Markel is an unusual company. We have had decades of success with this structure, and we are confident that it will continue into the future.

Outlook

As we look towards 2011 and beyond, we are excited about the long-term prospects and future of Markel.

In our insurance operations, we continue to operate in a disciplined fashion and seek to produce underwriting profits.

We will continue to expand geographically into new markets, we will make additional acquisitions as opportunities present themselves, we will train and grow our current talented associates and we will augment them with new, talented people. We expect ongoing growth in our non-insurance operations, and we will manage the capital as owners (which by the way, we are).

Markel Corporation enjoys an excellent record of creating value for its shareholders and associates over decades. We appreciate your support, and we are grateful for the opportunity to build such a great business. It takes time, patience, skill, dedication and some luck to get this done. We look forward to continuing to build on this legacy and reporting our progress to you.

Alan I. Kirshner
Chairman of the Board and Chief Executive Officer

Anthony F. Markel
Vice Chairman

Steven A. Markel
Vice Chairman

F. Michael Crowley
President and Co-Chief Operating Officer

Thomas S. Gayner
President and Chief Investment Officer

Richard R. Whitt, III
President and Co-Chief Operating Officer

2011

To Our Business Partners

Here is our 2011 annual report. Our goal in this report is, "to give you an overview of the corporation, our 2011 results and our plans and goals for the future." We put in the quotation marks because, other than updating the year to 2011, this was the exact phrase we used in the first annual report that Markel issued as a public company in 1986.

In 1986, it took us a grand total of 38 pages to cover the materials in the annual report with the letter taking the whopping total of one page. While our goals for communication remain exactly the same, immense regulatory changes in reporting practices and the wonderful growth of the business means that this year the report comes in at 138 pages. And the letter takes a bit longer too.

We apologize for the heft, but much has changed at Markel over the years, and we have a lot more to tell you in this report. We'll comment on 2011, as well as on longer term trends and developments at your company in the balance of this report. We also will try to give you some sense of why we are so optimistic about our future. We have a lot more ways to produce returns for you in 2012 compared to 1986. We believe we are on the cusp of a new and important era at Markel as a diverse financial holding company with global growth and profitability from our insurance, investment, and Markel Ventures industrial and service operations.

Make no mistake, 2011 was a challenging year. A series of record-setting catastrophes caused us to report an underwriting loss – the first since 2005, the year of Hurricane Katrina. As you know, our goal is to earn underwriting profits, and we have done so in seven of the last ten years. We remain committed to this goal and we are taking a series of actions in pricing initiatives, risk selection and efficiency measures to regain profitability in our insurance operations.

Financial markets also remained unsettled in 2011, still reverberating with aftershocks from the financial crisis of 2008. It was impossible to turn on a computer or see any news coverage that didn't include daily, throbbing reports of European debt and currency issues, unemployment problems, housing and mortgage market weaknesses or various and sundry other financial market problems.

(in millions, except per share data)	**2011**	2010	2009	2008	2007	2006	2005	2004	2003
Total operating revenues	**$ 2,630**	2,225	2,069	1,977	2,551	2,576	2,200	2,262	2,092
Gross written premiums	**$ 2,291**	1,982	1,906	2,213	2,359	2,536	2,401	2,518	2,572
Combined ratio	**102%**	97%	95%	99%	88%	87%	101%	96%	99%
Investment portfolio	**$ 8,728**	8,224	7,849	6,893	7,775	7,524	6,588	6,317	5,350
Portfolio per share	**$907.20**	846.24	799.34	702.34	780.84	752.80	672.34	641.49	543.31
Net income (loss) to shareholders	**$ 142**	267	202	(59)	406	393	148	165	123
Shareholders' equity	**$ 3,388**	3,172	2,774	2,181	2,641	2,296	1,705	1,657	1,382
Book value per share	**$352.10**	326.36	282.55	222.20	265.26	229.78	174.04	168.22	140.38
5-Year CAGR in book value per share[1]	**9%**	13%	11%	10%	18%	16%	11%	20%	13%

[1] CAGR—compound annual growth rate

Finally, we still have, and always will have, improvements we want to make to our business systems and processes. In 2012, the combination of increased revenues and greater efficiency should help reduce our expense ratio, but we know that there is more hard work to be done to get that measure in line with our goals.

Despite all of those factors, your company reported record revenues of $2.6 billion, an increase of 18% from the $2.2 billion in 2010, and a new record high book value per share of $352.10, up 8% compared to $326.36 a year ago. While these represent small advances and lower rates of increase than we would like, we are nonetheless pleased to be able to report these advances to you in a year with as many challenges as 2011.

We dream of the days when insurance market conditions are more favorable than they have been during the last several years. We even see tangible signs of that happening. We also look forward to steadier and sounder general economic and financial market conditions. We are optimistic that the financial markets are in fact healing.

We think that better external conditions are on the horizon, and we pledge our efforts to improve our daily execution of the business so that we can make the most of them.

Our record over time should give you some comfort in our prospects for the future. As always, we include a 20-year table with key financial highlights to demonstrate the long-term financial performance of your company and document the progress of Markel over a meaningful period of time.

One key reason why things have worked out so well for Markel over time is the environment of TRUST that exists at your company. We appreciate that you as shareholders have entrusted us with your capital to build the value of your investment over time. You've given us great latitude to pursue this goal without artificial constraints, and we've validated your faith in us by producing excellent results over time.

We work hard every day to maintain and build a level of trust around Markel because we think that makes our business better. It is almost magical to live in this environment and enjoy the mutual commitment that the people of this company feel towards each other and towards the company.

In this environment, we are all dedicated to building a legacy that goes beyond the simple matter of a job. In an environment of trust, individual skills are magnified and the business becomes something more than just the sum of its parts. That intangible essence is the secret behind the decades of success at Markel and what we are working diligently to increase over time throughout our growing array of insurance and Markel Ventures operations.

In some ways, trust is the key factor in the overall economic environment as well. Prior to the 2008 financial crisis, most people were willing to enter into transactions and engage with one another in an environment of trust. People trusted the veracity of what was on the mortgage application. People trusted that

2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991	20-Year CAGR[1]
1,770	1,397	1,094	524	426	419	367	344	280	235	206	223	13%
2,218	1,774	1,132	595	437	423	414	402	349	313	304	406	9%
103%	124%	114%	101%	98%	99%	100%	99%	97%	97%	97%	106%	—
4,314	3,591	3,136	1,625	1,483	1,410	1,142	927	622	609	457	436	16%
438.79	365.70	427.79	290.69	268.49	257.51	209.20	170.95	115.45	112.55	84.64	81.77	13%
75	(126)	(28)	41	57	50	47	34	19	24	26	14	12%
1,159	1,085	752	383	425	357	268	213	139	151	109	83	20%
117.89	110.50	102.63	68.59	77.02	65.18	49.16	39.37	25.71	27.83	20.24	15.59	17%
13%	18%	21%	22%	23%	26%	26%	31%	17%	25%	34%	35%	—

their houses would go up in value over time. People trusted that insurance companies would be there in the future to pay claims. People trusted that deposits in the bank were money good and so on and so on and so on.

In fact, people trusted too much without checking to see if it was really true. And in many cases the trust was violated.

Now, the opposite environment exists. People don't trust enough. Banks in general are not enthusiastic and trusting when it comes time to lend money. They want additional verification and documentation that might be erring on the side of not trusting enough. Investors and consumers in general seem to look at business propositions with a jaundiced eye. As such, they are entering into fewer transactions than they previously did in a different era and when they do transactions they are taking longer to get done.

All of this causes a slower, more ponderous and less vibrant economic environment.

We spent years in an environment of systemic goodwill and trust. Now we are wandering through a desert period of skepticism and distrust. We do not offer any guesses as to how long it will take to get through this era in the general environment, but we are optimistic that this too shall pass.

What we can do now though, and what we can control, is the environment within the walls of Markel Corporation. Thanks to decades of practice, leadership and continuous reinforcement, this is a company that demands trustworthiness from its people. As such, the amount of time we all spend working cooperatively and positively swamps the time we spend doubting or distrusting our colleagues. Consequently, we get a lot more done around here than would be the case if this were not an environment of trust.

That is an amazing culture and the true underlying reason for the long-term success of Markel Corporation and the key to our future.

We are confident that our culture continues to grow and develop in more corners of the world and in more and different businesses. While we enjoy an enviable track record of long-term growth and financial success, we remain a tiny company on the world stage. We've got a lot of room to grow.

We have immense amounts of runway to expand our insurance and Markel Ventures operations everywhere in the world. We are just getting started, and we're glad you're along for the ride. Buckle up.

Now, we get back to the three-part task of providing you with an overview of the corporation, a review of our 2011 results and our plans and goals for the future.

First — An Overview of the Corporation

Markel continues to strategically adapt and grow at rapid rates.

Two decades ago, we were a small, newly public, U.S. specialty insurance company.

One decade ago, we were a small, newly international insurance company.

Today, we are a diverse financial holding company with global insurance, investment and Markel Ventures operations all around the world.

As we stand today, Markel operates insurance companies in the International, Specialty and Excess and Surplus markets. We also own a diversified set of industrial and service businesses through Markel Ventures.

Throughout the years of building this array, we've earned good returns on the capital you have entrusted to us. We've successfully increased the scope and scale of the company over time, and we are excited about our prospects as we continue to do so.

International

In 2011, our International insurance operations wrote total gross premium volume of $825 million versus $709 million in 2010. The combined ratio was 116% versus 95% a year ago as this unit felt the biggest brunt of the record catastrophe year. The list of 2011's weather and catastrophe events sounds almost biblical with floods in Australia and Thailand, earthquakes in New Zealand, earthquakes and a related tsunami in Japan, and tornados and hurricanes in the United States.

Fortunately, the losses from each of these events were within our risk tolerances. What we didn't anticipate was the large number of significant catastrophic events.

Property and catastrophe insurance rates are moving up in response to these industry-wide losses. We will write catastrophe business when we think we are being adequately paid for the risks incurred, and we will also continue to be selective about what catastrophe-related risks we will write at all.

While our underwriting techniques and strategy are clearly better today than in 2005, the total number of events this year exposed the high stakes involved in insuring catastrophes. We will refine and review our exposures in view of this year's result and seek to improve the profitability of writing catastrophe business. If the market is not willing to pay an appropriate price, we are prepared to walk away from many catastrophe-exposed risks.

We continued to expand our international scope of operations with the opening of a new branch in Rotterdam, Holland. We also increased our presence in Sweden with two small acquisitions, opened our second office in Spain in Barcelona and opened small offices in Hong Kong and Beijing.

We are beginning to see rate increases on more and more of our international book of business, and we continue to enjoy immense expansion opportunities as we build the skill of operating a global business.

Specialty

Specialty gross written premium volume was $572 million in 2011 compared to $375 million in 2010 with a combined ratio of 109% versus 100% last year. Included in the 2011 Specialty numbers is gross premium of $227 million related to FirstComp.

We enjoyed our first full year of ownership of FirstComp and are pleased with its integration into Markel. As we have stated previously, 2011 was a transition year for FirstComp. During the year, we completed the conversion of its managing general agent operation to a risk bearing operation. We also transitioned the pricing and reserving approaches to be consistent with Markel's level of conservatism. The results for FirstComp came in within our expectations and as it regards premium writings, slightly ahead.

Additionally, we have laid the groundwork in 2011 to cross sell products in the future. We expect to offer FirstComp workers' compensation products through the Markel distribution channel and to distribute Markel's specialty products through FirstComp's producers.

Another benefit we have enjoyed from this acquisition is new leadership talent. There is depth and breadth of talent at FirstComp that ensures its success and which can be leveraged across the Specialty division.

All of these elements demonstrate that this is truly a win-win situation and how a good acquisition should work.

We also added several new programs in our Specialty division such as a wine program, Boys and Girls Clubs, garden centers and nurseries programs, renters' insurance and others.

In January 2012, we completed the acquisition of Thomco. Thomco is a program administrator with 30 years of operating history headquartered in Atlanta, Georgia. Thomco is led by Greg Thompson and Bob Heaphey who have joined the Markel team and will lead our Specialty program business.

Thomco has approximately 20 insurance program offerings such as medical transportation, senior living, childcare, fitness clubs, pest control and inflatable rental operators, among others. They have a distribution network of approximately 4,500 independent agents across 50 states.

Thomco represents an important addition to our product offerings and a major expansion of our Specialty book. This transaction closed during the first week of 2012 and should contribute in an increasing fashion throughout the year as programs are transferred to Markel's insurance companies.

Excess and Surplus

For the year, Excess and Surplus gross written premiums totaled $893 million versus $898 million a year ago. The combined ratio was 86% in 2011 versus 96% in 2010.

2011 continued to validate the One Markel business transformation program. We can see the effectiveness of the approach through increases in submission activity from our wholesale insurance distribution partners. Our producers are becoming more familiar and comfortable with the model and are finding it easier to access our menu of products.

Our goal when we started down the path of One Markel was to be "easier to do business with." We are pleased to report that the facts seem to indicate we are making progress in this goal.

The Excess and Surplus market tends to be the tail end of the whip of the insurance marketplace and rises and falls most dramatically in volumes and profitability during the course of a cycle. When the market is extremely competitive, the Excess and Surplus market suffers the most. The opposite is true when competition is decreasing and prices are improving. While 2011 remained a period of generally soft insurance pricing, we are encouraged by the trends we began to experience as the year progressed. Pricing appears to be improving and competition appears to be cooling in some lines. If these trends continue, they could greatly benefit our Excess and Surplus operations.

According to various industry-wide statistics, the insurance industry experienced the highest level of catastrophe losses ever of $105 billion. Given these losses and the ongoing low levels of interest rates, the insurance industry is unable to make an economic profit. This situation cannot persist. Sooner or later, the industry runs out of money to run out of. Sadly, the industry always seems to try to see how close they can get to that outcome before they come to their senses and change their operational and pricing behaviors.

We continue to get closer and closer to the day when insurance prices rise industry-wide and provide a more favorable operating backdrop for Markel. We will enjoy that time but make no mistake, we are not waiting until then to take actions which improve profitability now.

Markel Ventures

During 2011, other revenues, which primarily represent the Markel Ventures companies, rose 89% to $351 million versus $186 million in 2010. Earnings before interest, taxes, depreciation and amortization from the Markel Ventures operations rose 83% to $37.3 million from $20.4 million. For a reconciliation of Markel Ventures EBITDA to net income to shareholders, see the table on page 132.

During the year, we announced the acquisition of PartnerMD and of a controlling interest in Weldship. AMF and Ellicott, existing Markel Ventures subsidiaries, also made acquistions that added to the scope of their businesses.

PartnerMD is a concierge medical practice headquartered in Richmond, Virginia. We believe that PartnerMD has developed one of the answers to the problems facing our troubled medical system. While the business is small today, we expect many years of meaningful growth.

Weldship provides tube trailers and storage equipment for the industrial gas industry. Weldship is a leader in its industry and has operated since 1946. The company provides sales and leasing solutions to a variety of industrial companies. The company enjoys a long record of consistent, profitable growth and good returns on capital. We look forward to that continuing as part of Markel.

Both of these firms should benefit from the larger and permanent capital base of Markel Corporation. Their customers can be confident that these firms will continue to be permanent and reliable providers of the products and services they need. Current and future employees know that they can focus on serving their customers and building a business rather than worrying about the fate of their company.

Our belief, and what we have observed so far in Markel Ventures, is that our permanent capital base and long-term business focus create the best economic outcome over time.

We continue to look for additional acquisitions, and we expect more long-term growth from the Markel Ventures operations. As we have stated before, if you or someone you know owns a profitable business, with talented and honest management, capital discipline, and wishes to find a great long-term home for that business at a fair price, call us. We appreciate the first hand contact from principals looking to join Markel Corporation.

Investments

Our total investment return in 2011 was 6.5%. In our fixed income operations, we earned 7.6% and in our equity portfolio, we earned 3.8%.

Interest rates started the year low and went lower. As such, our total return exceeded the coupon, or natural return, that we would expect from the portfolio of bonds that we own. This is a two-way street and what we gained in excess return in 2011 we are likely to give back in 2012 or beyond. This is a matter of when, not if.

We believe that the natural level of interest rates is something other than zero. As such, we continue to own shorter term bonds than we would normally choose. This costs us current investment income but it protects our balance sheet and total return against a rise in interest rates. We've been concerned about this risk for a few years now and being early can be easily confused with being wrong about our view on the direction of interest rates.

We can't shake our concerns about the risks to bonds and interest rates from current government policies, and we will continue to exercise caution about accepting this risk on your behalf. We just don't think we're getting paid adequately to take this risk and, as such, we will act just like we do in our insurance business and effectively walk away from what we believe is an unwise deal for Markel shareholders.

In our equity portfolio, we continued to follow our historical and unchanging four-point discipline of seeking profitable businesses with good returns on capital, led by honest and talented managers, with reinvestment opportunities and capital discipline, at fair prices.

This four-point phrase should be familiar to long-term readers of this annual report because it has and will remain unchanged. These attributes are attractive at all times and guide our selection of publicly traded and privately held businesses.

We are pleased with the long-term returns we have earned following this approach and while our returns were modest in an absolute sense in 2011, they continued to be outstanding on a relative basis to appropriate bogeys. We continued to modestly and steadily add to our equity holdings throughout the year, and we expect more of the same in 2012.

We believe our equity portfolio is earning double-digit returns on an underlying basis and shows all signs of continuing to do so. Over time, if our analysis is correct, those returns will be reflected in market prices just as they have in the past.

Additionally, our equity investment commitment is increasingly at odds with general marketplace behaviors. In aggregate, individuals and institutions have steadily moved away from equity investments during this decade-plus period of unattractive returns.

Various labels such as alternative investments, hedge funds, private equity, commodities, bonds, FX trading, arbitrage and other categories of investment products continue to receive allocations from the investment community at the expense of ownership interests in businesses, i.e. stocks.

While equity returns may seem low today, we prefer the prospects of double-digit returns that we expect compared to the mathematical certainty of low single-digit returns available from high quality fixed income alternatives.

We also prefer these prospective returns given the low cost structure and tax efficiency we gain by managing our investments ourselves rather than farming that function out to others.

To demonstrate, say we invested $100 with an alternative asset manager who produced a spectacular 20% return, or $20 on our investment. Typically, we would be charged an asset management fee of 2% and a profit participation charge of 20%. The management fee would reduce our $20 to $18 right off the bat. The profit participation fee would further reduce that $18 to $14.40. Typically, these sorts of returns involve high amounts of trading, so assume that the $14.40 is taxed fully at a corporate tax rate of 35%. That reduces our after-tax net return to only $9.36.

By contrast, our internal costs to manage our investments are less than 10 basis points. If we were to produce the same returns internally, our gross return of 20% would become $19.90 after management costs. There are no profit participation expenses. Also, our portfolio turnover averages less than 10% per year. As such, only $2 would be a realized gain and subject to the 35% tax rate. The cash tax bill would be $.70 and that means we would still have $19.20 to add to our investment portfolio at the end of the year, compared with only $9.36 from the same gross return produced by an alternative asset management structure.

We prefer the alternative of keeping this work in house and giving ourselves a better chance of producing net returns for our shareholders. As John Bogle once said, "Returns are uncertain, costs are certain." Our structure aims to reduce the certain costs and get the most we can out of the uncertain returns.

Fortunately, we can point to a record that shows we have earned solid returns over long periods of time in our equity investment activities. We stuck to our discipline despite periods of headwinds. We continue to expect our time-tested, low cost and tax efficient approach to produce good results for you as our shareholders. This should be a point of differentiation for Markel over the next several years.

Second — Our 2011 Results

Our total operating revenues grew 18% to $2.6 billion in 2011 from $2.2 billion in 2010. Earned premiums were $2.0 billion compared to $1.7 billion a year ago, and the combined ratio for the year was 102% compared to 97% in 2010. Investment income totaled $264 million

compared to $273 million in 2010, and other revenues were $351 million compared to $186 million a year ago.

On our balance sheet, total shareholders' equity rose to $3.4 billion up from $3.2 billion, and book value per share rose to $352.10 compared to $326.36 a year ago. Debt to total capital increased to 27% from 24% a year ago due to the $250 million issuance of 5.35% ten-year senior debt.

We remain balance sheet oriented at Markel. We strive to make our loss reserves more likely redundant than deficient, and we err on the side of conservatism in maintaining the integrity of the balance sheet. This is a core value of Markel that will not change.

In our insurance operations, we produced a combined ratio of 102% versus 97% a year ago. This year's results were negatively affected by floods in Australia and Thailand, earthquakes in New Zealand, earthquakes and a related tsunami in Japan, and tornados and hurricanes in the United States. The total impact from all of these events was eight points on the combined ratio in 2011.

Our goal is to earn underwriting profits, and we are disappointed that we failed to meet that goal this year. While the sheer number of events was well beyond what we anticipated, the catastrophe losses we experienced did not exceed our expectations on any single event.

In our investment operations, we enjoyed a productive year. Total investment return was 6.5% in 2011 with equities up 3.8% and fixed income up 7.6%. We remain optimistic about future returns from our equity investment operations. We continue to have more ideas than money and that is a good recipe for future returns.

2011 exposed ongoing flaws in the world of finance. European area issues dominated the headlines, but we are cautious and conservative about credit quality everywhere. Specifically, our Eurozone holdings represent approximately 8% of the total portfolio and are the highest credit quality instruments we can find.

We continue to match the currency exposures from our underwriting operations with a portfolio of high quality fixed income investments and this drives our investment exposures in the Eurozone. As an example of our caution, our exposure to headline countries such as Portugal and Ireland is less than 1% of the total portfolio and we have no direct exposure to Greece.

In addition to our caution about credit quality, we continue to be concerned about the likelihood of higher interest rates. We think this is a matter of when, not if.

In preparation for higher interest rates, we've continued to keep the maturity of our bond portfolio short. As bonds have come due, we've replaced them with bonds that have shorter maturities. This pinches current investment income, but we think that protecting the balance sheet from big price declines that would occur on long term bonds if interest rates rise is the right decision.

Third — Our Plans and Goals for the Future

We are stewards of a big dream at Markel. We think that we can build one of the great companies of the world. It will be marked by unquestioned financial success and stand as an exemplar of how business should be done.

We will serve our customers to the best of our ability. We will earn a fair profit for doing so, as our customers pay us appropriately for providing necessary services. We will operate with integrity and in a first class manner in all respects. We will respect our shareholders and treat them fairly. And we will be a company where talented and honest individuals want to work.

2011 was a year of modest financial progress but tremendous overall progress towards this goal. We continued to make improvements in our historical wholesale insurance business. We expanded the offerings and capabilities of our Specialty insurance operations with the first full year of the FirstComp

operations as part of Markel, a series of new product introductions and the announcement of the Thomco acquisition at year end. Our international division opened new offices in Holland, Sweden, Spain, Hong Kong and Beijing and expanded operations in existing markets. Markel Ventures acquired PartnerMD and Weldship, as well as businesses that expanded the scope of its existing AMF and Ellicott subsidiaries.

We recognize that the financial results were less than what you, or we, expect and we acted accordingly. As such, the signers of this letter received no bonuses or salary increases for 2011 with only one exception. That exception relates to an employent agreement struck in 2009 in conjunction with joining Markel and walking away from earned compensation at a previous employer.

We think this demonstrates appropriate leadership and commitment to the shareholders and the organization, and that it stands in sharp contrast to numerous examples of less than wonderful corporate behavior.

We are working harder than ever, and we hope (as you should) that compensation and bonuses will increase soon to reflect the increased returns we hope to produce for you. Meanwhile, we will demonstrate our commitment to integrity and leadership by setting what we believe is a good example for the business and placing your interests first.

In addition to the daily execution and operation of the business, we think we have four main tools to grow and build the value of Markel. One, we can reinvest in organic opportunities in our insurance operations; two, we can acquire additional insurance businesses; three, we can acquire partial or controlling interests in public or private operations through Markel Ventures; and four, we can repurchase our own stock when we have excess capital and it is favorably priced.

From left to right: Steven A. Markel, Thomas S. Gayner, Richard R. Whitt, III, F. Michael Crowley, Anthony F. Markel and Alan I. Kirshner.

Most companies do not actively utilize this array of options. At Markel, during 2011, we engaged in all four activities. We fully expect to continue to analyze and review these alternatives and to use any and all of them as appropriate to build value.

As we begin 2012, we are incredibly optimistic and grateful to be part of this company.

The people of Markel have created a wonderful long-term record of financial success. The people of this company will be the ones to build that record in the future. We are confident and excited to field our team with a mix of proven veterans and new associates that are dedicated to serving customers and making everything that they touch better.

It is a timeless recipe for success, and we appreciate your long-term support and commitment as shareholders as we continue to build the human and financial value of your company.

Thank you.

Alan I. Kirshner
Chairman of the Board and Chief Executive Officer

Anthony F. Markel
Vice Chairman

Steven A. Markel
Vice Chairman

F. Michael Crowley
President and Co-Chief Operating Officer

Thomas S. Gayner
President and Chief Investment Officer

Richard R. Whitt, III
President and Co-Chief Operating Officer

2012

To Our Business Partners

Each year we write this letter to you to discuss the results of the past year and our plans and aspirations for the future. We think of you as business partners who have trusted us with your firm. Through this letter, we try our best to tell you how we think about your company, what happened over the course of the last year, and what you should expect of us in the year(s) to come. We also write this letter to our colleagues throughout Markel to provide a sense of perspective on how things have gone for the organization as a whole, and to provide a sense of where we are going.

Well, partners, this has been one heck of a year. 2012 was busy. More things went on this year than any in recent memory. There is a long list of things we accomplished. We've also got a full slate of ongoing goals in place, and actions taken to build the future of your company.

Financially, we enjoyed record revenues of $3.0 billion, an increase of 14% from $2.6 billion in 2011. Book value per share increased 15% to $403.85 versus $352.10 a year ago, and comprehensive income totaled $509 million versus $258 million. We also returned to underwriting profitability, with a combined ratio of 97% compared to 102% in 2011.

Given the events of 2012, this letter sets a new record for length. If you have attention deficit disorder and just want to know the highlights, you can read through the bullet points listed below and leave it at that. If you want more details, keep reading. We'll describe each of them in more substance through the rest of the letter.

The 2012 Headlines

1. We produced an underwriting profit despite Hurricane Sandy
2. We earned excellent returns on our investment portfolio
3. We acquired Thompson Insurance Enterprises
4. We announced the formation of our partnership with Hagerty and the associated acquisition of Essentia Insurance Company
5. We continued the successful integration of FirstComp
6. We successfully implemented our data warehouse
7. We enjoyed organic growth in insurance premiums
8. We continued to report favorable loss reserve development
9. We acquired Havco, Reading, Tromp, and Idreco within our Markel Ventures organization
10. We improved our operational performance in our insurance units as well as in our claims and shared services operations

(in millions, except per share data)	**2012**	2011	2010	2009	2008	2007	2006	2005	2004
Total operating revenues	**$ 3,000**	2,630	2,225	2,069	1,977	2,551	2,576	2,200	2,262
Gross written premiums	**$ 2,514**	2,291	1,982	1,906	2,213	2,359	2,536	2,401	2,518
Combined ratio	**97%**	102%	97%	95%	99%	88%	87%	101%	96%
Investment portfolio	**$ 9,333**	8,728	8,224	7,849	6,893	7,775	7,524	6,588	6,317
Portfolio per share	**$969.23**	907.20	846.24	799.34	702.34	780.84	752.80	672.34	641.49
Net income (loss) to shareholders	**$ 253**	142	267	202	(59)	406	393	148	165
Shareholders' equity	**$ 3,889**	3,388	3,172	2,774	2,181	2,641	2,296	1,705	1,657
Book value per share	**$403.85**	352.10	326.36	282.55	222.20	265.26	229.78	174.04	168.22
5-Year CAGR in book value per share[1]	**9%**	9%	13%	11%	10%	18%	16%	11%	20%

[1] CAGR—compound annual growth rate

…and…as the year was winding down…, we announced the acquisition of Alterra. This is a major transaction which adds substantial heft and market presence to Markel Corporation and is accretive to the book value, premium, and investment balances behind each share.

This is a *full* list. The people of this organization ran at a full sprint throughout 2012 to accomplish these items, and they are all hard at work to assure progress on these and other initiatives for 2013. The signers of this letter would like to personally thank all of those involved in the events of 2012. None of them were easy, and all of them will act in concert to make Markel Corporation a stronger, more vibrant, and more profitable company in the years to come. We thank all of you for your efforts.

Now, here are some details behind each of the bullet points.

1. We produced an underwriting profit despite Hurricane Sandy

We've produced outstanding results for our shareholders over time and the core, fundamental, building block in doing so begins with earning an underwriting profit. 2012 was a year in which we started with this building block in place, as we achieved a profitable combined ratio of 97%, which includes five points of underwriting loss from Hurricane Sandy, compared to the unprofitable 102% in 2011.

It is *always* the goal at Markel to produce an underwriting profit. We did so in 2012, and we've done so in eight out of the last 10 years, and 14 of the last 20. Producing an underwriting profit is one of those things that is easy to say and hard to do. It requires an immense effort with many moving parts to accomplish this, and we're proud of this record. The years without underwriting profits occurred during major headline catastrophes such as the World Trade Center attack, Hurricane Katrina and sometimes, as anticipated, in the wake of major acquisitions which required changing the underwriting culture at acquired firms.

The good news is that each of those events, while painful, taught us something, and we learned to be better at managing risks and running your company. Each of these "learnings" caused us to reexamine our processes and assumptions and to improve them going forward. Each challenge caused us as individuals, and as teams, to figure out how to improve and find new ways to succeed.

The fact that we earned an underwriting profit this year despite Hurricane Sandy speaks to how we've learned and improved our underwriting process. The losses from Sandy were within our risk tolerances. We served our policyholders by providing insurance coverage, and we earned a profit while doing so. That is a "win-win" situation for all involved.

The cumulative effect of this learning process continues to produce wonderful results for Markel shareholders. Over the last 10 years, book value per share increased at a rate of 13%, and for the last 20 years that rate has been 16%. By contrast, the S&P 500 rose 7% and 8% respectively over those time periods.

Recently, a head coach made a seemingly counterintuitive statement before a game when he said, "I think that the team that makes the most mistakes will win." That sounded like an unusual statement, but he went on to say that his team needed to be aggressive, and be willing to make mistakes, to produce a victory. An unhealthy fear of mistakes can lead to being too passive or fearful. That leads to stiffness and subpar

2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992	20-Year CAGR[1]
2,092	1,770	1,397	1,094	524	426	419	367	344	280	235	206	14%
2,572	2,218	1,774	1,132	595	437	423	414	402	349	313	304	11%
99%	103%	124%	114%	101%	98%	99%	100%	99%	97%	97%	97%	—
5,350	4,314	3,591	3,136	1,625	1,483	1,410	1,142	927	622	609	457	16%
543.31	438.79	365.70	427.79	290.69	268.49	257.51	209.20	170.95	115.45	112.55	84.64	13%
123	75	(126)	(28)	41	57	50	47	34	19	24	26	12%
1,382	1,159	1,085	752	383	425	357	268	213	139	151	109	20%
140.38	117.89	110.50	102.63	68.59	77.02	65.18	49.16	39.37	25.71	27.83	20.24	16%
13%	13%	18%	21%	22%	23%	26%	26%	31%	17%	25%	34%	—

results. It is important to be willing to act positively, and accept reasonable mistakes, so that the organization can learn, and grow, and deal with a rapidly changing world.

We do that at Markel, and we think that this willingness to take personal responsibility, admit errors, learn, and move forward is a unique competitive advantage for the company.

The first key to our consistency in earning underwriting profits is our discipline and our unwavering commitment to this standard. We are all long-term partners in Markel, and we don't willingly accept any underwriting proposition which we think carries the likelihood of an underwriting loss. While we may not get this right all of the time, we start out with the advantage of a clear sense of purpose. No underwriter in Markel receives incentive compensation unless his or her book of business produces an underwriting profit. Furthermore, that is not just a one year assessment, but a multi-year view. Long-term risks require long-term measurement, and we reward our talented underwriters only when we have reasonable certainty that their books of business are indeed profitable over time. We are confident that our new Alterra colleagues, as well as the existing Markel underwriting team, will enjoy professional and personal achievement by being part of a long-term winning organization. We find that the best underwriters welcome and enjoy this approach since it yields the best professional outcomes possible for them. Underwriters at Markel are not asked to subsidize weaker performers. A great underwriter will do better at Markel than at other organizations that do not have such a firm commitment to underwriting profitability.

We welcome our new colleagues from Alterra, and we are confident that they will find that the long-term focus, and rational nature, of Markel will be the best possible environment for them to realize their professional potential.

2. We earned excellent returns on our investment portfolio

During 2012, we earned a total return of 9% on our investment portfolio. Our equity returns were 20% and our fixed income returns were 5%. We are very happy with these results, and we hope that you are as well.

The 2012 equity returns of 20% added to a long string of excellent results. Over the last 10 years, we've earned a total equity return of 9% versus the S&P 500 index returns of 7% and for the last 20 years we earned 10% versus the index return of 8%.

Over the years, we've never made decisions based on our forecasts of what was ahead for the economy, governmental policies, tax rates, currency values, interest rates, technological changes or other incredibly important but fundamentally unknowable future developments.

Instead, we've simply looked at individual companies, one at a time, and asked ourselves a few questions. By considering four basic types of questions about individual companies and securities we try to develop enough confidence to make a decision.

Our first question is, "Is this a profitable business with good returns on capital without using too much debt?" Second, we ask ourselves, "Is the management team equally and sufficiently talented and honest?" Third, we ask, "What are the reinvestment dynamics of the business and how do they manage capital?" and finally we ask, "What is the valuation and what do we have to pay to acquire ownership in the business?"

While these are four simple questions, the process of thinking deeply about them tends to produce robust results over time as demonstrated by our long-term record. Those questions also tend to encompass consideration of some of the macroeconomic factors that tend to cause so much worry and anxiety for so many investors.

Consider the first question of profitability and returns on capital. The best and most durable businesses in the world are ones that serve their customers well. Profitability is a marker that says a business is serving its customers with products that they need and want and that they are efficient and skilled enough in doing so that there is a measure of profit left over after all is said and done.

If a business is not making an appropriate profit it means that either they are doing something that the customers don't particularly care about, or that they are not good enough at the task to accomplish it in a cost effective manner. Neither one of those outcomes is good. As such, just thinking about the long-term profitability and return on capital record of a business gives us a wonderful insight into whether the company is indeed serving its customers in a fruitful way.

The best marker to describe a successful long-term company is a long-term record of profitability and good returns on capital, and that is the first thing we look for in seeking equity investments in either our public or private equity investments.

Second, we think about the talent and integrity of the managers running the business. If a manager has integrity but is short of talent, that manager may be a very nice person and a pleasant friend or neighbor. However, in the context of business, they can't get the job done and that will not produce a good economic outcome. Similarly, if someone is talented but has an integrity problem, they might do something profitable in the short run but it will fall apart in the fullness of time.

We look for these same attributes in all of our colleagues inside Markel, in the managers of the companies in our public security portfolios, and the managers of the companies we've acquired in our Markel Ventures operations.

Third, we think about the reinvestment dynamics of a business. A wonderful business can take the profits it earns and reinvest them at similar or better returns over time and compound value. Organic growth companies like this are rare and hard to find and none of them last forever. In this world, perfection is not attainable, but we try to snuggle up as close to it as we can whenever we can find it.

The second best business in the world is one that makes very good returns on capital but cannot fully reinvest the profits at similar rates. Those businesses are fine as long as the management team accepts the reality and allocates capital to other uses. In our public equity holdings we own several fine businesses which meet this definition and pay meaningful dividends, repurchase shares, or make good acquisitions. Also, within our Markel Ventures operations, several of our companies match this profile.

When we own a controlling interest in a company like this we can make the capital allocation decisions and do so in a very tax-efficient manner. While we pay full taxes at any entity when they make money, we can subsequently re-allocate the earnings from any area of Markel to any other, all around the world. By contrast, when we earn passive income through the receipt of dividends on our public equity portfolio, the paying companies paid taxes on their earnings and we pay a tax on the dividends received. By building the controlled interests of Markel Ventures operations, we are able to eliminate this tax drag and increase the value of Markel with less friction than would otherwise be the case.

Fourth, we think about the valuation we must pay to buy a company with the three lovely attributes we described earlier. We've learned over the years, as Charlie Munger from Berkshire Hathaway noted, that, "it is better to pay a fair price for a great business than a great price for a fair business." Great businesses compound their value over time while fair businesses wallow in mediocrity. As long as we find great businesses at reasonable prices, we'll allocate your capital to owning them to the fullest extent possible. When great businesses sell for irrationally high prices, and sometimes they do, we'll build cash, continue to look elsewhere, and continue our search for long-term compounding machines that are otherwise known as common stocks of great businesses.

Finally, we are pursuing unusual tactics in our investment strategy in the current environment. We believe that interest rates are fundamentally *too low*. We expect that will change within the next few years and we want to be prepared for the time when it does.

As such, we are letting our fixed income holdings mature and come closer and closer to turning into cash and cash equivalents. The investment yield from this is literally almost nothing so it is painful to be building cash. However, the investment yield of investing longer-term in fixed income is not much more. Just as an insurance underwriter needs to make a good risk/reward decision about whether to accept a risk or not, we must do the same thing in our investment decisions. We've concluded that we are not being paid adequately to assume the risk of owning longer-term fixed income securities so we are letting our cash balances build up.

We look forward to deploying this cash into longer-term and higher yielding investments when the opportunities inevitably present themselves. Meanwhile, we will wait.

At the same time, we continue to own a portfolio of equity interests, both passively through our public equity holdings and actively through our build out of the Markel Ventures operation. We believe that our companies represented by these holdings meet the four question test we discussed earlier and will prove to be durable and profitable businesses into the future. With the Alterra acquisition the size of our portfolio will increase dramatically. The addition of this portfolio and the growing cash balances create a "coiled spring" that we

are looking to deploy and uncoil when opportunities present themselves.

The fantastic news is that the opportunity costs from taking this approach are as low right now as they have ever been given the low level of interest rates. As we see the "whites of their eyes" in investment markets we have more ammo to expend than ever before. This is a tough concept to quantify but it represents one of the most dramatic capital allocation and value opportunities that has ever existed at Markel.

Over time, we've compiled a record that should give you some confidence we will act rationally and produce good results for you as shareholders. Stay tuned for further developments…

3. We acquired Thompson Insurance Enterprises

In January of 2012 we completed the previously announced acquisition of Thomco. Thomco administered approximately 20 insurance programs in fields such as medical transportation, senior living, childcare, fitness clubs, pest control, inflatable rentals, and other specialty insurance lines. We're bouncing up and down with joy with the progress and benefits from this acquisition so far.

Greg Thompson and Bob Heaphey of Thomco have already broadened their roles during 2012. Greg assumed the role of President of Markel Specialty, and Bob became the Managing Executive of Thomco.

Thomco is a classic example of how we've added value to Markel shareholders over the years and created wonderful opportunities for the Thomco associates in the process. Thomco controlled approximately $170 million in insurance premiums and collected commission income in return.

As part of Markel, we've begun to underwrite this insurance through various Markel insurance company entities. We will benefit from Thomco's intellectual capital as we earn the associated underwriting profits from the business. We will also build investment assets from the associated insurance reserves.

Additionally, just as has been the case in our other acquisitions, the people of Thomco now have a permanent home with permanent capital to run their business. They also now enjoy broader cross selling and career opportunities than before.

4. We announced the formation of our partnership with Hagerty and the associated acquisition of Essentia Insurance Company

Hagerty is the premier insurance agency serving the classic collector car and boat market. Essentia Insurance Company underwrites insurance exclusively for the Hagerty customer base. We finalized the terms of our partnership with Hagerty during 2012 and we closed on the acquisition of Essentia in January 2013. We are now accepting the underwriting risks produced by the Hagerty organization.

McKeel Hagerty leads the second generation of the Hagerty firm. This partnership between Hagerty and Markel is yet another example of the value of the long-term nature of Markel and our well known consistent focus on building durable businesses that produce excellent results over long periods of time.

The Hagerty family chose Markel after extensive due diligence on their part to assure themselves that we would be quality partners in their business which they built over decades. The cognoscenti of the collecting world know and trust the Hagerty organization to meet their specialized needs in the world of collectible autos and boats. Hagerty believed that Markel would be the best possible partner to help them ensure that heritage continues into the future.

We are excited about the formation of this partnership and we look forward to reporting on its progress in the years to come.

5. We continued the successful integration of FirstComp

We acquired FirstComp in October of 2010. It is our operating unit which provides workers compensation insurance with a focus on smaller businesses. From the beginning, we were impressed with their customer service orientation, risk selection methodology, marketing skills, and use of technology.

Our initial plan at FirstComp was to provide their sales force with access to other Markel products which they could then sell through their extensive agency network.

Additionally, we hoped to benefit from their technological sophistication and improve our speed and efficiency throughout the rest of Markel. We expected an initial period of underwriting losses at FirstComp as we strengthened their reserves towards the levels we traditionally prefer at Markel and as we bore the expenses of integration.

We're happy to report that process has gone well. FirstComp is a key contributor to increased gross written premiums in 2012 and we believe that the business being written today is being priced to ultimately earn an underwriting profit. The marketing and technology expertise embedded in that organization is now working on behalf of the entire Markel organization and we are just beginning to leverage the cross sell potential of over 14,000 retail producers among FirstComp, Thomco and Markel.

6. We successfully implemented our data warehouse

This is a major development.

The combination of the pace of technological change, the complexity of our business, and our history of acquisitions with multiple legacy systems made the task of building a data warehouse challenging and this accomplishment marks a significant success.

During the second quarter of 2012, we went 'live' with our Wholesale data warehouse. This was the culmination of a multi-year effort to consolidate all of our Wholesale data into one reporting environment.

The warehouse has improved our ability to leverage our data in a number of ways. First, it has improved our reserving and pricing analyses, allowing us to more quickly assess the profitability of our books of business. It has also dramatically improved our reporting capabilities, making it easier to provide decision-makers with the information they need to manage their business. The warehouse also provides a platform for improved analytics, allowing us to drill down into our data and more easily determine the profit/loss drivers.

Finally, the warehouse provides a platform from which we can expand these capabilities into other areas of the business.

7. We enjoyed organic growth in insurance premiums

We enjoyed, and we do mean enjoyed, growth in insurance premiums in 2012. In 2012, gross written premiums totaled $2.5 billion, up 10% from $2.3 billion in 2011. Excluding premiums attributable to acquisitions, gross written premiums increased 6% in 2012.

We believe the growth in our premium volume largely stems from our efforts to improve our internal operations and our ability to serve our clients more efficiently. We've also enhanced and refreshed our products to provide greater value to our customers.

We've substantially increased our marketing efforts to reflect the breadth and depth of what we can offer to the marketplace and we've worked to increase the awareness of the Markel brand worldwide.

Organic growth was also driven by modest price increases during the year. While we still believe that the general level of insurance prices should be higher given the low level of interest rates and recurring investment income, we are pleased to see prices moving up rather than down. The underwriters throughout Markel have done a great job of exercising underwriting discipline and achieving pricing improvements.

8. We continued to report favorable loss reserve development

In 2012 we reported favorable reserve development of $399 million. In every report you'll ever see from Markel, which dates from the initial public offering in 1986, you'll see the statement that our policy is to establish insurance reserves at a level which is "more likely to be redundant than deficient." This is a key underlying value of Markel which goes much deeper than just the surface fact of positive reserve development.

The policy creates a virtuous cycle that is a relatively unique and a significant advantage for Markel compared to the insurance industry in general. First, it fosters a culture of conservatism and discipline which acknowledges reality rather than denying it. When you are making decisions it is always helpful (but often not fun or pleasant) to be dealing with real facts, and accurate data, as compared to what you wish things

were like. In insurance, setting loss reserves involves making predictions about the uncertain future. We know that we will not be precisely right about the exact level of reserves needed. In the face of that reality what we do is to make every effort to err on the side of caution.

Second, conservative reserving practices help our front line underwriters make good decisions when it comes to quoting and pricing current business opportunities. Conservative loss picks help prevent underwriters from making inadvertent mistakes and underpricing new business.

Third, conservative reserving practices help our claims professionals as they seek to fairly and quickly settle losses when unfortunate events occur to our policyholders. No one enjoys having a loss. In the event of a loss, we want to assist our policyholders as quickly and as fairly as possible. By having conservative loss reserves set aside and ready for losses, our claims professionals know that they can do their job for our policyholders to the best of their ability and that senior managers will not wince at the payment of appropriate claims.

Our history indicates that we've accomplished the goal of consistent conservatism in the setting of loss reserves over the years, and 2012 was yet another year of this policy in action.

We've designed our incentive systems and we've spent years getting to know, and test, and trust, the senior leaders of this organization to make sure that your company is in the hands of people with a long-term orientation. If you want to test our resolve and fidelity in keeping this pledge to you, keep checking on our annual reserve development. It is a hallmark of a consistent, conservative, and prudently managed insurance organization.

9. We acquired Havco, Reading, Tromp and Idreco within our Markel Ventures organization

2012 was an exciting year in the ongoing growth and development of our Markel Ventures operations.

Total revenues for the group grew to $489 million versus $318 million in 2011 and EBITDA grew to $60 million versus $37 million a year ago. For a reconciliation of Markel Ventures EBITDA to net income to shareholders, see the table on page 108. While many of the Markel Ventures operations are cyclical and dependent on the overall economy, we are optimistic that we will achieve additional growth in bottom line profitability in 2013 and beyond.

Also, just as is the case in our insurance and other investment operations, we will be opportunistic in responding to and walking away from extreme prices. As we enter 2013, we do not expect to add substantial new acquisitions at Markel Ventures. Transaction prices are now moving up rapidly, and we will wait for better opportunities to show up before committing your capital.

Fortunately, we were able to add several businesses at attractive prices during 2012. We added Havco in April 2012, and they are off to a great start. Havco is the leading supplier of wood flooring for the trailer part of a tractor trailer, and we are delighted with their contribution to Markel. At Ellicott Dredge we added Idreco, a Dutch based dredge manufacturer. At ParkLand Ventures we increased the size of our footprint by over 30%. At Diamond Healthcare we opened a major new treatment facility in Williamsburg, Virginia, and at Partner MD we opened new offices and increased the number of physicians practicing with us by over 40%.

We also added Reading and Tromp to our existing AMF Bakery systems operation. These acquisitions continue AMF's process of becoming the preferred supplier of bakery equipment to food companies around the globe. AMF was the first company acquired by Markel Ventures, and we now begin our eighth year of operations together.

While baking is not a rapidly growing industry, in 2013, AMF should produce revenues and earnings that are up more than four fold since we bought the company in 2005. While this multiple expansion includes acquisitions, it also, and more importantly, reflects the advantages we offer to our Markel Venture companies.

Specifically, when we showed up at AMF, we empowered management to take a long-term view, and we reduced debt levels from those previously employed. Our goal was simple - we wanted management to focus on satisfying their customers with the best possible equipment and service levels, and we didn't want to have artificial pressures of near-term debt repayments and an unhealthy focus on short-term results to get in the way of this clear and simple goal.

Ken Newsome and his team responded magnificently to this charge, and they've been gaining market share and building the company ever since. We think we're just getting started there.

Throughout Markel Ventures, our management teams are working to build the recurring revenue and profitability of their firms and we are delighted with their overall progress.

We also want to express our thanks and our pleasure with the managers who joined us when they sold us their businesses. We have had NO turnover among the senior leaders who've joined Markel Ventures since inception in 2005. We think this speaks volumes about the clarity with which we've communicated our long-term goals and expectations for the businesses we bought, and for the desire of these managers to be able to build great companies unfettered by artificial constraints.

In many cases, these managers don't "need to" work but "want to" work and they do so because they are excited and dedicated to our values, and to the mission of building one of the world's great companies.

This is nothing different than what is true in our insurance operations, The Markel Style, and our multi-generational history of a focus on durable long-term values, pervades the operations at Markel Ventures, and attracts leaders who want to be part of this company to accomplish great things.

We are not for everyone. Being part of Markel requires a commitment to long-term values and a level of teamwork that doesn't suit some personalities. That said, if you want to be in an environment where you can excel, and be recognized and rewarded for doing so, Markel offers a unique opportunity.

With the scale created by the Alterra acquisition, our ability to continue to build Markel Ventures increases. We will be able to pursue larger opportunities, and we will be an attractive buyer to a wider set of potential sellers.

If you, or anyone you know, owns a business where the answers to our four investment questions would be good, and they want to be part of this organization, please give us a call. We are always looking for good partners.

10. We improved our operational performance in our insurance units as well as in our claims and shared services operations

Organic growth of 6% in 2012 gross written premiums is an encouraging sign that demonstrates the value of our operational and marketing improvement efforts that have been underway in recent years.

Markel International, under the leadership of William Stovin and his team produced outstanding underwriting results with a combined ratio of 89% and at the same time increased gross written premiums from $825 million in 2011 to $888 million in 2012. A lower combined ratio on greater volume is as good as it gets, and we thank and applaud the Markel International team for their results in 2012.

Our Wholesale unit, under the leadership of John Latham and his team, produced a combined ratio for the year of 94% compared to 86% in 2011 with gross written premiums of $956 million versus $893 million a year ago. This continues a long-term history of superb performance.

Our Specialty operation, now under the leadership of Greg Thompson and his team, produced a combined ratio for the year of 108% versus 109% in 2011 with gross written premiums of $670 million versus $572 million a year ago.

In all of our operations, we've focused on becoming easier to deal with. We've developed web based applications, broadened our product array, and proactively marketed our growing product breadth and depth to the global insurance marketplace.

Additionally, our increasingly effective analytical efforts are enabling us to refine our risk appetite on new business opportunities. We're increasingly able to understand where, and why, we should be raising prices to accept risks, and we're able to also better understand where, and why, we can lower prices, attract additional business, and still earn appropriate returns.

In general, industry prices remain too low and the returns on capital for the insurance industry are mediocre. We're proud of the fact that we've been able to increase the book value per share at good rates despite this headwind through continuing disciplined efforts in insurance, as well as better than average returns from our investing activities, and our growing Markel Ventures group.

We fully expect to be able to continue to earn good returns on your capital from the comprehensive activities of Markel Corporation. Economic activity and demand is increasing and industry capital is not growing at high rates. The lines of supply and demand are heading towards one another in a way that suggests insurance pricing may improve rather than decline.

We'll manage our operations to earn appropriate returns even if the industry doesn't cooperate, but we'll enjoy a season of higher overall insurance prices should that come to pass.

Alterra

As we noted at the beginning of this report, 2012 was as full and busy a year as any that we can remember. Just before year end, we added to our 2013 and beyond "to do" list by announcing the acquisition of Alterra. Part of what we hope to do in this letter is to welcome the talented professionals of Alterra to the Markel family. We are excited about the new Markel Corporation that comes about as a result of this transaction and we look forward to building on our legacy of excellent financial performance with our existing and new colleagues.

This is a major transaction in the history of Markel and we'd like to discuss our reasons for engaging in this acquisition.

To state something obvious but important, Alterra is a quality insurance operation with a demonstrated track record of excellent underwriting performance. Underwriting profitability and reserve integrity are hallmarks of their organization as demonstrated by their years of consistent underwriting excellence.

Unlike many other insurance entity deals that Markel did in the past, this is not a troubled company with problems to be fixed and a new culture to be installed. Alterra has already demonstrated the ability to produce a consistent record of underwriting profits.

We believe that by joining forces, both the existing Markel organization and that of Alterra will be able to improve performance. We believe that we will both be better off as one company, as opposed to what either one of us could achieve as stand alone entities.

Among the reasons for our optimism about the long-term future of the combined entity is the fact that the new entity is a larger and more important firm in the global insurance world. Immediately, this moves us up the ladder in terms of opportunities that we will see to write business. Agents and producers look for the most efficient way to find coverage for their clients. The size and breadth of the combined entity will make it easier and more efficient for agents and allow us to meet more of our potential clients' needs. We'll see more business, and we'll be able to write more of the business we see.

Further, we'll have a larger balance sheet which will be more attractive to buyers of reinsurance and large global insurance programs. The combined entity will enjoy a higher profile and be a more attractive market for big limit insurance needs. We also will be able to optimize the returns that Markel shareholders should earn by offering our reinsurance and large account underwriters a culture of long-term underwriting profitability. This means that they will be able to write more business when marketplace conditions are favorable and just as importantly, if not more so, reduce writings and walk away from business when the rewards don't justify taking the risks.

We will be a large enough and diverse enough and, more importantly, mentally prepared to walk away from business when it is the right thing to do. This is what we've always done at Markel and this transaction is a force multiplier for the underwriting team at Alterra to improve upon their already solid results.

This mindset of focusing on the long-term discipline of only writing business that carries with it the expectation of an underwriting profit, as well as the reality of a larger and more secure balance sheet, will create a new and expanded set of opportunities for Alterra associates and Markel as a whole. Our new format should make the most of the circumstances.

While we are pleased with the early days of a trend towards improving our expense ratio, this transaction should increase the rate at which we enjoy increased operating efficiency. We will be writing more business with our existing infrastructure, and this should serve to lower our expense ratio in the years to come.

The transaction is immediately accretive to important metrics at Markel such as premiums, investments, and book value per share of Markel. We will recast the Alterra investment portfolio towards that of Markel's historical approach to investments, with our focus on prudent allocations to equities, ownership of controlled businesses, and a hawk like focus on extremely low investment management costs.

The new Markel offers all of our associates from our existing operations, as well as those of Alterra, new opportunities and challenges. While this is difficult to quantify, it is a huge factor in the long-term success of your company. We've taken on challenges before and we've stepped up to tackle bigger and bigger opportunities as time has gone by. In each of these circumstances a wonderful virtuous circle took hold.

Specifically, many of our associates rose to meet new challenges and gained skills and abilities that one can gain only by actually doing the work. Also, many associates from the acquired companies showed their skills and abilities and rose to new and broader roles within Markel over time.

The effect of this process is that the talent level, and bench strength, and skills of the organization continue to improve both from the development and growth of existing colleagues, and the addition of new talented colleagues. This statement applies to our senior leadership team in the same way as every associate of the company and vice versa.

This organic and eco-system like environment at Markel reflects a dynamic firm and not a stale or bureaucratic like system. The world changes at an ever increasing pace and we've got an organization that is designed to adapt and change along the way.

This is a huge reason why we've been successful in the past and will continue to adapt and grow in the future. Things don't stay the same. Fortunately, we know that, and we're willing to keep ourselves a bit agitated and never complacent about recognizing the need for ongoing change and growth.

Markel is an organization well suited for dynamic people who want to be challenged and grow. We are not a good place for people comfortable in a stable bureaucracy.

The Beginning

There is no sense of conclusion at Markel. We are at a point of new and ongoing beginning. We understand that this letter is starting to feel like a book. However, 2012 was a phenomenal year for your company and it takes some time and space to describe the reality of what is going on around here. We were hard at work during the entire year building, rebuilding, tearing down, and rebuilding again, the very foundations of your company.

We acquired a wonderful operation in the case of Thomco, we added organic growth through the internal development of new insurance products and increased marketing efforts. We made breakthroughs in our multi-year challenge of developing an appropriate information technology environment to manage and conduct our business, and we earned wonderful investment returns. We raised the average IQ of our team by increasing the IQ points of the existing players through new challenges, and adding new associates who we hope are even smarter and more talented than we are.

Then after we did all these things, we announced the acquisition of Alterra, which will create a whole new level of opportunity for Markel and its shareholders.

Markel is an exciting place to be and we are proud of our long-term record of creating great value for our partners. Our partners are our associates, almost all of whom are shareholders, as well as the external shareholders who provide us with the capital, and the trust, and the time horizon, we need to continue our task of building one of the world's great companies.

Thank you for your support and confidence. We look forward to meeting the challenges of 2013 and beyond and we look forward to reporting our progress to you next year.

Alan I. Kirshner, *Chairman of the Board and Chief Executive Officer*

Anthony F. Markel, *Vice Chairman*

Steven A. Markel, *Vice Chairman*

F. Michael Crowley, *President and Co-Chief Operating Officer*

Thomas S. Gayner, *President and Chief Investment Officer*

Richard R. Whitt, III, *President and Co-Chief Operating Officer*

Notes from the 2013 Markel Breakfast in Omaha

Tom Gayner (TG):

- This is the 23rd year they have come out to Omaha
- Steve Markel was the architect of a firm that tried to make money from underwriting and make excellent investments as well
    - When Tom was talking to Steve about the idea, Tom realized there was a company that had done pretty well with that exact model—Berkshire Hathaway (BRK)
    - They knew that the people who were most likely to understand what they were trying to do were people who already owned BRK's shares
        - Decided to come to Omaha to try to meet like-minded investors
    - The first time they came here there were 6 people at the meeting
        - The stock price and the number of people at the meeting seem to be correlated
            - When there were 6 people at the meeting, the stock was $7-$8
            - Now that there are 400-500 people here, the stock is over $500

Richard Whitt (RW):

- Richard is the Co-President of Markel on the insurance side
    - He and Mike Crowley are co-presidents of insurance
        - Richard is an accountant by trade
        - He started at KPMG and his first client was Markel
            - He has been at Markel for 22 years
    - His job is to produce underwriting profits and premium volume to hand over to Tom and Steve to put to work in the investment portfolio
        - They want to get 3-5 pts. of underwriting profit so that Tom can do the sexy stuff

Steve Markel (SM):

- Steve Markel is the Vice Chairman of Markel
    - He likes being the Vice Chairman because nobody knows what you are supposed to do so you can do whatever you want
- Markel is at an exciting part of its history
    - Insurance pricing is starting to improve
    - They just completed a very major transaction
    - They are a small company but they have done some great things since they went public in 1986

- We all come back to Omaha so that we can be reminded of something that we had begun to forget
    - One comment that was made by Buffett that was a spark for him had to do with the fact that one of the great strengths of BRK is the shareholder base that understands the mission of BRK
        - Buffett was talking about this in the context of his succession plan
            - His point was that the Board is important but so is the shareholder base that would likely speak out loudly if people saw something happening that was off base
        - Markel has a great shareholder base that does not care about quarterly earnings
            - Allows them to make decisions that will pay off over the long term—not in 60-90 days
            - The Alterra transaction would not have been possible without a shareholder base that understood the reason for the deal and had patience
            - Markel is not for everyone and that is OK—they are not trying to appeal to everyone

Q&A Session

- David Winters: A cornerstone of the success has been the MKL style. How are you going to take that and get buy-in from the new acquisition?
    - TG:
        - The Markel style is a critical feature of the company
        - In the Jewish tradition, there is a concept of "it is written"
            - When the company went public, the founders knew that there would be a time when they would not have their hands on 100% of the business
            - There was an attempt made to make sure there would be something there after the founders were gone
                - The MKL value system has been codified so that it can last
        - As MKL Ventures and the non-insurance operations have grown, nothing about insurance specifically is included in the mission statement
            - The founders understood that things would change over time even if insurance was always the dominant part of the business
        - The 2nd word that was included in the values was "winning"
            - How do they teach that concept to others?
                - He would suggest that it is more fun to be on a winning team than a losing team
            - They have a ton of momentum and people want to be part of that
                - People understand what that entails

- Because all of the MKL people have bought into it, they have a good gut feeling for people who are not wired that way
  - The organization rejects those people
  - Inevitably if someone is not working out, he/she will not last at MKL

- RW:
  - The first thing they talked about when they looked at Alterra was the cultural compatibilities
  - They have looked at a lot of acquisitions and many of them have gone into the "too hard" file because MKL didn't think their cultures would work with the people at MKL
- SM:
  - Why is the strong value system so important?
    - They are not the smartest guys in the world and they try to copy the smart people
      - There have been studies that show that team players who share goals and objectives and are bonded do a lot better than a group of dysfunctional individuals
        - Shared values are a key element of MKL's success
        - If you look at companies that are built to last, those that have a value system that people buy into inevitably do better
  - When they created the original mission statement, the shared value system was very important
    - They were going from a being a family-owned business to being a public company
    - The family business had a different set of values—those that correlated to a typical family business
      - Not all of those were appropriate for a public company
    - You need to separate the rights and benefits of shareholders from the rights and benefits of employees
      - They knew they had to focus more on shareholders
      - At the same time they wanted to create a system where employees would want to stay with the company for years
        - Allowed employees to become owners
    - They have been through a number of transactions where they have brought in a team to try to inoculate the new employees into the MKL style
      - It is always true that 10-15% of people won't want to be a part of the MKL system
        - They are more interested in being a star than being part of a successful team

            - They want to find these people ASAP so they can encourage those people to work somewhere else
        - Then there are 20-30% of people who buy in immediately and they are able to influence the 50% who are on the fence
            - They send MKL people to the offices of the companies to explain the style
            - Markel compensation and incentive systems are implemented as well
- You have had great success investing in public markets. As you build the private market side of the portfolio, how do they source those ideas?
    - TG:
        - There are three buckets of buyers
            - Private Equity
                - These buyers can pay more than what MKL can
                - If you are only interested in the top bid, MKL is not the buyer
                - Private equity buyers will use more leverage and will sell the business in 3-5 years
                - Could lead to a lot of trauma and turmoil
            - Strategic buyers
                - These are people who are in the same business
                - These companies love revenues
                - They don't like expenses though—mostly people
                - You will not have two CFOs so many people will not be around
                - If those people are important to the success of the company, things will change—potentially for the worse
            - Investors with permanent capital
                - This is where MKL sits
                - MKL will not lever the company up
                - They will not sell it
                - They will buy assets that produce cash to buy more assets that produce even more cash
        - MKL's deal history
            - The first deal happened as a result of a local geographic accident
                - The seller was looking for Richmond-based buyer
            - The second deal actually came about because the attorney who represented the first seller called Tom and told him he had another client who was looking to sell
                - Made the deal at lunch and had a handshake by the end

        - As they get bigger and bigger, they are going to have to compete with more strategic and private equity buyers
            - They are willing to pay a full price for a great business
            - MKL sees a lot of deal flow because they know people
                - They also have relationships with middle market investment bankers
        - Of the 12 companies they have bought, their turnover has been 0% when it comes to the CEOs
            - That is unheard of
            - The sellers signed up a capital partner who was going to help the company grow the business
            - They have not had to fire people and sometimes the sellers become more invigorated once they do the deal
            - There aren't that many sources of permanent capital out there so they believe they have an advantage in some circumstances
- Buffett spoke about the importance of creating opportunities for women at the top of companies. What about the gender makeup of the board and the management team?
    - TG:
        - Tom feels good about where they are
        - There is one woman on the Board
        - The treasurer and CFO are both women
        - They are gender blind and gender neutral—they just want the best people
- Re-insurance is a tough business. Can you tell us how they got comfortable with Alterra's book of business?
    - SM:
        - Re-insurance is very challenging area
            - Getting exposure to it was a major part of the rationale for the acquisition of Alterra
            - If this business doesn't make underwriting profits, they will downsize it until it does
            - Reinsurance was a big part of the whole at Alterra
        - One of the areas that has become more channeling is where alternative sources of capital can enter—specifically hedge funds with side cars and/or catastrophe bonds
            - These forms of insurance are entering as investors look for uncorrelated risks
            - In the meantime, more traditional P&C lines remain very competitive
                - Over time these have been reasonably profitable though
        - They are interested in getting in growing this part of Alterra's business
    - RW:

            - He likes the reinsurance business they have now
                - Believe it will be better under MKL than it was under Alterra
                    - Reinsurance made up 60% of Alterra's book but it will only be 20% of the new MKL
                - This is a scalable business and you can take a few people and write a lot on insurance
                    - They are going to wait for their spots and are not keep tons of people around
    - TG:
        - There is an analogy from the investment world that fits here
            - Take 2 names from the portfolio
                - Caterpillar (CAT)
                - Despite being a relatively buy and hold type of company, there are times when they buy this stock and times when they don't
                - This is driven by the price, given that CAT has a somewhat volatile business
                - There are times when people panic and others when people think the business will be growing forever
                - They can take profits when they want
                - They don't have to buy CAT—no one puts a gun to Tom's head
                - CarMax (KMX)
                - This is a growth company
                - Year in and year out you expect them to grow
                - This is a stock you want to own and be in
            - All business is hard and successful businesses fight the good fight
                - The point is that like with CAT, when it comes to reinsurance they will pick their spots and only invest when they believe the pricing/timing is right
- BRK hired 4 key execs out of AIG. Is MKL small enough to stay away from pricing competition with these new players?
    - RW:
        - Those guys were going to be competing with MKL whether they were at BRK or AIG
            - But they are hunting elephants and he thinks that they will not be competing in the wholesale business with MKL
                - They will be competing with Ace, Chubb and Travelers

            - MKL would obviously rather have fewer competitors but no matter what the competitive landscape looks like they will remain disciplined in how they approach the business
    - SM:
        - Steve expects these people to be intelligent competitors now that they are at BRK
            - Maybe they will now be even more conscious when they underwrite
        - There are some questions surrounding AIG though
            - What will AIG choose to do to defend its turf?
            - Will they cut their price to maintain share?
        - His feeling is that MKL does not dominate this space and the fact that they are very small with insulate them
    - TG:
        - If everyone works for Ajit Jain and underwrites like him, MKL is likely to be fine
- Can you talk about how you go about trying to generate an underwriting profit?
    - RW:
        - You need the entire organization to share the goal of generating underwriting profits
            - They set their comp systems up so that people are compensated for underwriting profit, not growth
                - This tends to focus the mind
                - What that has meant is that they did not grow for a number of years as the market got softer and softer
            - The model they have created here does not work unless they make an underwriting profit
                - Have an intense focus on making sure underwriting profits get made on a consistent basis
                - They have some really good underwriters at MKL
                - They are attracted to MKL because they are allowed to do their business
    - SM:
        - Underwriting profitably is always a challenge
        - They want to generate 3-4 pts. of underwriting profits
            - With rates so low, solid underwriting is really important
            - Buffett talked about the importance of risk selection and suggested that the pricing of risks is paramount
                - You should make a profit if you charge the right price
                - This comes from having smart people who become experts in the lines they are writing

            - You need an information system that allow you to see differences between lines of insurance
            - Retention allows you to understand risks better over time
        - In the children's summer camp business, for example, they have renewed certain policies for 8 to 14 straight years
            - When you have written that business for that many years, you are able to price it better
            - If you are giving great service, then camps are willing to pay a fair price
            - This is a small example but in all cases their underwriters only write when they can make money
    - TG:
        - When he came to work for Steve, they talked about how to make an underwriting profit
            - They have done so more often than not for 27 years
        - No insurance executive will ever say he/she doesn't want to underwrite profitably
            - But the market only gives you credit when you do it consistently
            - They have made acquisitions in which they had to change the culture
- What company is Tom Gayner's See's Candy?
    - TG:
        - Of the dozen they have bought there are 3 that apply here
        - AMF is one
            - AMF was a $50M business when they bought it
            - Before that transaction, it had been operating as a levered business
                - It was a good business with a bad balance sheet
            - They reduced the leverage but there was more to it than just that
                - When a piece of equipment broke, you had unhappy customers and they were servicing a lot of debt
                - MKL focused on developing a reputation for making sure things were fixed and worked well
                - The reputation kicked in an it gave them increased pricing power and market share
            - Baking is not a fast growing business but that company is going to do 4-5x what it did when it was bought
                - Some of that was organic and some was through tuck-in acquisitions
                - They are earning good returns on capital in a non-growth business

        - The next business is Parkland Ventures
            - Started out as just an idea and they have gone to 41 parks from just 4
                - Think there is a huge runway for growth as there are 41K parks in the US
        - The last business is PartnerMD, the provider of concierge medical and executive health programs
            - They had 9 physicians when they bought this
                - According to BLS, there were 113K physicians in the US
                - Think there is a long runway here too
- Jeff Stacey: Can you talk about differences between the Terra Nova and Alterra acquisitions? Is there a situation where they would buy another fixer upper?
    - RW:
        - They are very different companies
            - Terra Nova had been built quickly to be sold
                - The pieces had not been integrated
                - MKL knew all this but did not understand the depth of the issues
                    - This was a challenging situation
            - Alterra was built through acquisitions
                - It was clear that they would need a partner in order to grow
                - It was clear that this was a very different type of organization
                    - They had great controls and a good underwriting culture
                - There will always be surprises
                    - But MKL won't be surprised because of poor blocking and tackling in underwriting
                    - There are a lot of good people at Alterra—they have kept all of the top people
                - He feels really good about the people and the business
    - SM:
        - The Alterra transaction is one where they paid a full price for a quality company
            - Terra Nova was a fixer upper they bought much cheaper
        - In the near term they have their hands full so they are not likely to make a big insurance acquisition
            - The idea of buying a fixer upper at the right price is not a bad thing though

- Can you spend some time talking about the big risks on the asset side of the balance sheet that exist in the insurance industry? Are there too many people stretching for yield?
    - TG:
        - He doesn't sleep well at night because he is worried about MKL's assets—he doesn't have time to worry about the whole industry
            - One of the worries that he has is that rates will go a lot higher
            - The regime of low rates does not make sense to him
        - The bond portfolio duration continues to shrink and becomes more like cash
            - This adds a lot of optionality—they are really liquid and can deploy cash
            - Normally they would be giving up yield but the opportunity cost of using that strategy is very small
                - The difference between 1bp and 8bps is irrelevant
            - It is important to have cash when others don't
                - He doesn't know when but we will be in a different environment at some point
                - The Alterra portfolio has a longer duration
                - The MKL portfolio's duration is at 2.5 now versus 4-5 in the past
                - It has never been this low
                - They usually try to match their insurance liabilities and assets but now those are not matched
- As you search for private companies, you say that you are buy and hold-focused. How do you determine that the products or services of these companies will not go obsolete?
    - TG:
        - BRK bough ACME Brick years ago because Buffett knew that 10 years from then a brick was still going to be a brick
        - Tom tells his people that they don't want to own a business that could be gone in one morning
            - Bakery equipment is not going away tomorrow
                - People are going to continue to eat bread
            - Manufactured houses that are low cost are very necessary
        - They bought a dorm room furniture company a number of years ago
            - They had a Board meeting after this deal and the Board members were wondering if Tom had any specific industries he was looking at
                - The answer is no
                - They simply buy large companies in small industries that throw off a lot of cash
                - They also want businesses that don't change much

            - So, the next business they bought was Ellicott Dredge
                - You can't dredge over the internet
        - In general, they are able to immediately recognize whether a company fits or it doesn't
- Can you talk about some of your long tail insurance businesses and the cyclicality inherent in them? How about medical malpractice specifically?
    - RW:
        - Each market has its own cycles
        - Medical malpractice is a business they have been in for a long time
            - Are seeing modest price increase in some lines but medical malpractice is very competitive
            - When St. Paul pulled out a few years ago the market got really hard and the market has performed really well since then
                - Now it is a slugfest and premium volume that was $200M has come down to $80M to maintain margins
        - Markets tend to move in the same general direction
            - In some of the other casualty areas where there have been losses, you are starting to see mid-single digit rate increases
    - SM:
        - They like longer tail businesses because they generate more float
            - But they still want high margins in the long tail businesses
        - A disadvantage of long tail business is the inflation risk
            - They need to think about whether costs of claims will go up or down over time
- CarMax has standard pricing and uses a lot of data. Tom, what stops others from replicating their model?
    - TG:
        - There is no question that there are other major dealer groups that push through a lot of volume
        - But mindset is really important here
            - CarMax reminds him of a story about RH Macy of Macy's
                - Clearly Macy's has a name that still matters
                - RH Macy was a Quaker merchant who worked on whaling ships
                - Quakers were merchants who sold at fixed prices
                - RH Macy went to NY in the 1800s and because he was willing to sell at a fixed price as opposed to through a haggling system, he was able to put ads in the newspaper with firm prices
                - The rest is history as this is commonplace now
                - But it took a long time for competitors to do this

        - The fixed price offer from CarMax is the key
            - No one has done it at the scale that CarMax has
            - It is not a secret what they are doing
                - It is just hard for the competitors to let go of the old model
- One of the advantages is that MKL invests in other insurance companies. What is the outlook for their other insurance companies?
    - TG:
        - They have a good allocation to financial and insurance companies
            - Hold BRK and Fairfax Financial (FFH)
        - There are a lot of other insurance companies that he respects
            - Underwriting discipline has gotten better across the industry
                - You can't make up for bad insurance operations with investment returns in this low rate environment
- Why buy Alterra now? How did it come about? Why did they pay with stock?
    - SM:
        - They had been following Alterra for a long time
            - Knew the shareholder base and the leadership team
            - Knew that it would come to market at some point so they were not surprised
        - The senior team consisted of a good group who had done a nice job
        - Paid $3B to acquire Alterra
            - Would rather have used all cash but they didn't have $3B in cash so they needed to issue stock
                - They think that the value they are getting is bigger than what they paid
            - The overall benefit suggests that the deal should be accretive to book value per share
                - The cost savings from moving the company from Bermuda to the US should help
            - The shares issued represent about 30% of the total outstanding
                - The two largest shareholders were Chubb_Corporation and a hedge fund
                - As it relates to the hedge fund, ultimately the private funds will be dispersed to the underlying investors
    - RW:
        - When they first looked at it they thought there was going to be a lot of overlap between businesses
            - What they saw was that they would pick up 2 businesses that they did not have before

            - The business that they did have in excess and surplus was very complementary
        - It is a $2B portfolio with some overlap but they believe they can renew a lot of that over time
        - The ability to add to the investment portfolio was important too
    - TG:
        - Their share count has been coming down as they have bought back shares
            - They will continue to do that
        - Buffett talked about Henry Singleton at Teledyne and how he used shares in a lot of transactions
            - They know this story well and understand the risks
            - But we have to remember that when he joined MKL, the investment portfolio for $45M
                - Now it is in the billions
                - They would never have had the business they have now if they had not used equity capital
                - They would love to write $3B checks—but they can't now
                - As they get bigger, their bias is to use cash
                - They will always be thoughtful about allocating capital

- Why wouldn't they put more of the investment portfolio into equities than bonds, given the low expected returns for bonds?
    - TG:
        - Regulatory issues are important here
            - They will have the liabilities over-collateralized by fixed income for the next 5 years
                - They want to have bonds coming due so when claims come in, they have cash
            - He has no idea what is coming around the corner
                - But he knows he wants to be around for the next round of the fight
            - He loves Richard and Steve because they have never--in 23 years--asked for money back after they gave it to him
                - MKL construct the operations in a way that they don't put liquidity demands on their equity capital
                - There were "bigger" and "smarter" companies that are no longer with us because they could not meet liquidity requirements
                - Want to be in the game tomorrow so they can take advantage of distress

- If the noninsurance business were running outside of MKL, would they have an ROIC of 20% or more?
    - TG:
        - Yes, but you have to understand the accounting
        - If you are looking at bottom up versus top down accounting, the company can look very different
            - You have to look at what the companies would earn intrinsically before considering the corporate tax rate
            - EBITDA is not the whole answer when it comes to measuring cash flows and returns because you need to think about the level of CAPEX
                - If you own a radio station, EBITDA is an useful measure
                - Not so much in steel companies
- What is your opinion of the recent Brookfield spinoff? What is his opinion of Watsa's hedging at FFH and the deflation trade?
    - TG:
        - In terms of BAM, he thinks it is a fascinating company
            - BAM is their largest holding
            - He has great respect for the management team
            - He does not know about each of the "daughter ships" but he trusts the management team at the BAM level
                - They have a multi-decade track record of creating value for shareholders
    - SM:
        - They have had a long term relationship with FFH
            - Over the last several years that has just entailed MKL being a shareholder
        - Prem Watsa is one of the smartest guys around
            - They are familiar with his equity hedge and his deflation hedge
            - They do not share his concerns to the extent that they would do the same thing at MKL
            - They have a lot of respect in his judgment but will not hedge their equity portfolio or worry too much about inflation
        - These positions are basically insurance policies for FFH
            - They are not big bets that bad things will happen
    - TG:
        - Tom wears the same tie to Omaha each year
            - He bought it a number of years ago and it has a picture of stamps on it—the domination is a nickel
                - Clearly there has been inflation in stamp prices
        - Tom understand why Prem is scared of deflation—look at what has happened in Japan

        - But Tom thinks we live in a period of fiat currency and doesn't think deflation is likely to be a problem
            - The economic forces of deflation have a counterbalance to what central banks are doing for sure
            - He doesn't know who wins but he thinks over time that we will have inflation
- Pat Brennan: How should we think about the CAGR-related compensation metrics in the proxy statement?
    - SM:
        - The most important thing to think about is that over a long period of time, they have gone out of their way to try to make sure the shareholders get a fair shake
            - This will remain a part of their culture when it comes to compensation
            - They will not have extravagant comp for their leaders
            - All of the formulas are moving targets given that interest rates (and this rates of return) will move around
                - They will err to make sure the shareholders get a good return though
    - TG:
        - He would hope that if the roles were reversed, shareholders would be happy with the MKL compensation plan
            - They are not going to grant a lot of options when the stock price goes down
            - But they have re-set the threshold lower in terms of what they have to earn for the execs to get a bonus
                - It is still a pretty high return required and that will increase as rates go up
            - They made some adjustments so that Tom and Richard could receive a bonus
                - They are still compensated based on 5 year rolling averages
        - This is a season in which they are reading proxy statements
            - Exxon (XOM) is a great company to look at
            - Being the Chairman at Exxon is very hard job
                - The Chairman makes $25M
                - Comparing that to what a lot of corporate execs make, he thinks Exxon shareholders are getting a good deal
                - Of that main compensation, the max amount you can get in cash is ½
                - The rest is in stock

            - The vesting period is the longer of 10 years or until retirement
                - If you are 40 years old, the vesting period could be 25 years
                - If you want to be a senior at XOM, you have to be willing to stay decades
        - He thinks MKL's proxy statement gets an A grade
- What is the impact of long term bond rates on what they can now earn on their fixed income book?
    - SM:
        - Bond returns have been a large portion of their returns over the years
        - Low rates are a fact or life
            - If rates on bonds stay low they will have to figure out how to make returns elsewhere
                - If rates go up, there will be some pain but they have short duration bonds
                - As rates go up, they will also have the opportunity to earn high rates again
        - Their goal is to make high ROICs
            - They will have to make more returns from underwriting operations if rates stay low
                - The combined ratio goal will go from 90-95% to 85-90%
            - They will also give more money to equities and to MKL Ventures
            - They expect to figure out ways to earn high ROICs
    - TG:
        - If rates stay low, yields will be so low that they will earn less
        - But they have an 8 cylinder engine—not a 4 cylinder one
            - They have a lot of businesses that can do well at any given time
- Bob Robotti: What are they seeing in the manufactured housing market? Do they also finance these houses as well? Is there room for expansion?
    - TG:
        - They are able to create a homemade corporate bond portfolio
            - They provide debt capital to MKL Venture companies as well as equity capital
                - If they can get a 6% coupons on this debt, it is a lot more than they can get investing in other things
            - They want to find businesses that they have a lot of confidence in
                - They would rather lend to their own businesses at 6% than buy Apple bonds
                - The companies clearly need to maintain robust organizations that can handle the debt

            - But, some of their businesses have capital intensity and it might make sense for MKL to create an in-house fixed income book
- Can you discuss the intrinsic value of MKL and how that compares to book value (BV)?
    - TG:
        - BV is easily calculable
            - On this metric, they have usually sold at a small premium to the industry
                - They have a good track record of returns
                - The premium has diminished over the years
        - As MKL goes forward, you need to think about more than just BV
            - Growth is BV is a good proxy for the growth in intrinsic value
                - But it is not a precise measurement of the intrinsic value of a company
        - He would look at MKL from an SOTP basis
            - Look at the holdings and add those up
            - MKL Ventures throws off cash flow that can add to how much MKL can compound over time
            - You have to pick a discount rate to see how closely intrinsic value resembles BV
            - For the businesses that generate cash, BV is not a very good valuation measure
                - See's Candy does not have a high BV but it throws off a lot of cash
                - Proctor & Gamble (PG) is a great company as well
                    - It trade at a premium to book value and they use some of the capital the business generates to buy back stock
                        - As a result, PG has a negative tangible book value
                            - He would buy PG for a negative value for sure
- On the topic of MKL Ventures, can you elaborate on what you have learned from past acquisitions?
    - TG:
        - The size and scale of the deals has changed over years
            - Good judgment comes from experience, which comes from bad judgment
        - You make better decisions as time goes buy
            - They are getting better as time goes by at making large capital allocation decisions
        - Gayner is a control freak

            - They know they don't want to be a minority shareholder
    - SM:
        - They are still in the crawl phase when it comes to MKL Ventures
            - But they know they like to have a control position versus a minority position
- What about innovation in the insurance industry? What systems does MKL have in place to encourage innovation?
    - RW:
        - Alan Kirshner (the Chairman of MKL) has challenged them to become a more information driven company
            - Many industries have become very information-focused
        - They are trying to get better at using the information they have to make underwriting and marketing decisions
            - They have a ways to go on this—so does the industry as a whole
        - They are a specialty insurance company
            - Will not go toe to toe with the larger, commodity players
            - One of the ways they can innovate is by acquiring
                - When thy acquire, they get talent
                - Growth leads to innovation—bringing people in who can grow into other specialty areas
    - SM:
        - As society grows and evolves, it creates new needs for insurance
            - Cyber security is an example of that
        - The areas of data mining and looking at correlations are a large focus
    - TG:
        - The world changes and they know that they have to change with it
- Closing Remarks by Tom Gayner
    - There are 3 principles of capital
        - Having more is better
        - The best way to get more capital is to earn it—not to raise it
        - You need to have a relationship with the capital markets that leads to quality a shareholder base
            - Having just that allows MKL to run its business without short term pressures
                - These investors only care about MKL doing the right thing over the long term

2013

To Our Business Partners

Here is our annual report for 2013. Each year we write this letter to update you on the financial performance of your company and to qualitatively describe what went on at Markel. This is your company. We as managers are stewards of your capital. You've entrusted us with the authority to run this business, and this annual report functions as our report card to you. As John Cheever said about a kiss, "You can't do it alone." We thank you for your partnership and the opportunity to do this because among other things … it's fun.

Part of what makes it fun stems from the fact that 2013 was a year of fabulous financial performance. Financial results are a scorecard that measures one dimension of how good we are at doing our jobs. We like to think we are good at what we do, and it is pleasant to be able to report outstanding financial results and good marks.

Here are the headlines for 2013. Total revenues increased 44% to $4.3 billion, we earned comprehensive income of $459 million, and book value per share grew 18% to $477.16. We transformed the company by almost doubling the size of our insurance operations with the acquisition of Alterra on May 1st and we are pleased with the pace of our integration efforts.

When we announced the Alterra acquisition, we emphasized the idea of "*scale enhanced, business as usual.*" We said this to give comfort to our insurance customers while we addressed the integration of the two companies, but we also think it is an equally compelling message for our investors.

This is a long letter. It takes a bit of time to update you on how things progress each year. If you just want the Twitter version of less than 140 characters, here it is …

2013 a great year. Doubled insurance business with Alterra acquisition. Rest of Markel grew by double digits. Expect more over time.

More important than any one year, is the long-term record of compounding the value of your company over time. As we have for many years we start this letter with a 20 year compilation of our most important financial measures in the table below. As is always the case, the

(in millions, except per share data)	**2013**	2012	2011	2010	2009	2008	2007	2006	2005
Total operating revenues	**$ 4,323**	3,000	2,630	2,225	2,069	1,977	2,551	2,576	2,200
Gross written premiums	**$ 3,920**	2,514	2,291	1,982	1,906	2,213	2,359	2,536	2,401
Combined ratio	**97%**	97%	102%	97%	95%	99%	88%	87%	101%
Investment portfolio	**$ 17,612**	9,333	8,728	8,224	7,849	6,893	7,775	7,524	6,588
Portfolio per share	**$1,259.26**	969.23	907.20	846.24	799.34	702.34	780.84	752.80	672.34
Net income (loss) to shareholders	**$ 281**	253	142	267	202	(59)	406	393	148
Shareholders' equity	**$ 6,674**	3,889	3,388	3,172	2,774	2,181	2,641	2,296	1,705
Book value per share	**$ 477.16**	403.85	352.10	326.36	282.55	222.20	265.26	229.78	174.04
5-Year CAGR in book value per share [1]	**17%**	9%	9%	13%	11%	10%	18%	16%	11%

[1] CAGR—compound annual growth rate

numbers in this chart stem from the unique financial architecture in place at Markel. We've earned wonderful returns on your capital over decades. One reason for that is that each year, and in fact, each day, we get to choose from a varied menu as to how to allocate capital to continue to build the value of your company. Most companies do not enjoy the 360 degree range of choices we do to build value.

Our first and favorite option is to fund organic growth opportunities within our proven, existing line up of insurance and non-insurance businesses. Our next choice is to buy new businesses. Our third choice is to allocate capital to publicly traded equity and fixed income securities, and our final choice is to repurchase shares of our own stock when it is attractively priced and increases the value of each remaining outstanding share.

In 2013 we did all four of those activities just as we have for several years. The execution of our daily business against that framework is what produces the results we've earned for you over time and display for you here.

We are proud of this record and we hope that you as the long-term owners of this business are as well.

In the balance of this letter, we'll organize things by commenting on each of the elements of this table. We hope to give you some sense of how we produce these excellent financial results over time, as well as providing you with some insights into the non-financial factors that give us confidence we can continue to earn your trust in running this company.

One of the key features that help to produce these results over such long time horizons is the sense of teamwork that exists at Markel. Jim Collins in his book "Good to Great" noted that organizations tend to cluster around two basic models, "teams" or "a genius with a thousand helpers."

Markel functions as a team. We've got a deep and growing roster of skilled players. We know that on a team different players assume different roles and responsibilities. Sometimes it means scoring points, sometimes it means passing the ball to someone else, sometimes it means teaching a new player how to do something, and sometimes it means driving the van to the next game.

Those roles can and do change over time. We believe that teams last longer and produce better, more durable results than the "genius with a thousand helpers" model. We love the team of our colleagues and long-term shareholders, and we hope the following discussion of our key financial measures will provide some insight into that reality and how it works at Markel.

2004	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	20-Year CAGR[1]
$ 2,262	2,092	1,770	1,397	1,094	524	426	419	367	344	280	235	16%
$ 2,518	2,572	2,218	1,774	1,132	595	437	423	414	402	349	313	13%
96%	99%	103%	124%	114%	101%	98%	99%	100%	99%	97%	97%	—
$ 6,317	5,350	4,314	3,591	3,136	1,625	1,483	1,410	1,142	927	622	609	18%
$641.49	543.31	438.79	365.70	427.79	290.69	268.49	257.51	209.20	170.95	115.45	112.55	13%
$ 165	123	75	(126)	(28)	41	57	50	47	34	19	24	13%
$ 1,657	1,382	1,159	1,085	752	383	425	357	268	213	139	151	21%
$168.22	140.38	117.89	110.50	102.63	68.59	77.02	65.18	49.16	39.37	25.71	27.83	15%
20%	13%	13%	18%	21%	22%	23%	26%	26%	31%	17%	25%	—

One - Total Operating Revenues and Comprehensive Income

You might notice that we have two items listed here, revenues and comprehensive income. While we start off the 20 year table just with the label "Total operating revenues," we believe we should discuss comprehensive income at the same time. It would be a mistake to celebrate one without the other. In the insurance business, revenues can be easily obtained. All you need to do is cut prices and charge less than the ultimate underwriting losses. The world will beat a path to your door to pump up your revenues. You will also soon go broke. Any and all revenue must carry with it the expectation of profitability. In our insurance operations profits are measured by underwriting profitability. In our investment operations profits are shown as total investment returns. And at Markel Ventures operations they are demonstrated by EBITDA and net income.

We are focused on the long-term creation of value at Markel. We therefore focus on bottom line profitability over multiple year periods, not just short term increases in total revenues. Our compensation as senior managers, and our wealth as fellow shareholders of the company, depends on *profitable* revenues, not just revenues. That said, when it comes to profitable revenues, more is better.

In 2013, just such a happy thing occurred. Revenues rose 44% to $4.3 billion versus $3.0 billion in 2012. This total comes from earned premiums of $3.2 billion, net investment income of $317 million, net realized investment gains of $63 million and other revenues (primarily from Markel Ventures) of $711 million. This recitation of these amounts sounds so easy to say, and the numbers are so straightforward, that it is easy to forget how much work goes into creating total revenues of $4.3 billion.

In 1930, "Red" Motley said, "Nothing happens until somebody sells something." Each and every associate of Markel is a salesman in some form or fashion. We mean this as high praise and we salute the hard work involved. Each and every one of those $4.3 billion dollars (or pounds, euros, krona, pesos, reais) meant that someone in Markel connected with a customer who needed our products or services. They explained how we could meet their needs. They provided insurance coverage, or mechanical equipment, or products and services that our customers wanted and needed. Additionally, they satisfied our customers, as demonstrated by our having so much repeat and renewal business. The customers came back again and again. We must be doing something right.

Our 2013 revenues of $4.3 billion were a new high water mark for Markel. To give you some sense of perspective, ten and 20 years ago our revenues were $2.1 billion and $235 million respectively. While we focus on bottom line profitability rather than top line revenues, there would be no opportunity to produce bottom line profits without revenues coming in the door.

We'd like to thank all of the associates of the Markel Corporation who serve their customers by producing the incoming top line revenues of the business. It represents immense effort, and we are grateful for their skills and dedication. We cannot begin to do anything that creates value for you as shareholders without revenues coming in the front door.

Our comprehensive income totaled $459 million in 2013 and book value per share grew 18% to $477.16 compared to $403.85 at the end of 2012. The five year compound annual growth in book value was 17%.

We think that the growth rate of our comprehensive income per share over time is one of the most important financial metrics at Markel. While it will vary from year to year due to external market fluctuations and economic cycles, we think that this measurement over multi-year periods is the best way to measure our economic progress.

In the past we've headlined our book value per share, while at the same time noting our five year compound annual growth rate in book value (CAGR). Starting this year, we'd like to shift the emphasis more towards the five year CAGR rather than the static book value amount.

The reason for this subtle shift is that while the insurance businesses of Markel remain tethered to the reasonably accurate GAAP accounting balance sheet definitions of book value, our growing Markel Ventures operations are more accurately valued by considering their generation of cash as shown on the consolidated statements of income and cash flows. Also, capital management activities such as share repurchases, and share issuances in acquisitions, affect the calculation of raw book value.

We believe that the five year change in book value is now just as important a measurement to consider when thinking about the value of your company as the book value itself. We'll describe our reasons for this statement later in the letter as we get to the always treasured accounting discussion. Stay tuned!

Two - Gross Written Premiums

Gross written premiums rose 56% in 2013 to $3.9 billion from $2.5 billion in 2012. Organic premiums from existing Markel operations rose 7%. Gross written premiums also increased due to the Alterra acquisition, with premiums from those operations included for the last eight months of the year.

Each and every insurance unit within Markel produced excellent results in 2013.

Our Excess and Surplus segment, which includes our wholesale division led by John Latham, produced gross written premiums of $1.1 billion in 2013 versus $956 million in 2012, an increase of 12%.

We thank John for his exemplary leadership of the wholesale business and we wish him the best in his upcoming transition to a well-deserved retirement in 2015. We're also delighted that Bryan Sanders, who joined us as part of the Alterra acquisition, will assume leadership of our wholesale division and that the two of them will be working together this year during the transition.

The outstanding growth in our wholesale operations reflects the ongoing efforts of our technology and business leaders to make Markel easier to do business with. While we always operated creatively, and worked diligently to figure out ways to assist our insureds with unusual insurance needs, we had room for improvement in business processes and technology. We've made great strides in this area in recent years, and we are now beginning to see tangible benefits of more business and lower expense ratios as a result of these initiatives.

Our Broker Portal initiative stands as a great example of a successful initiative. With this web-based system we can process more insurance business faster and with lower expense than ever before. With Broker Portal and other ongoing business process improvements, we expect ongoing increases in our ability to write more business at lower expense ratios in 2014 and beyond.

Our London Insurance Market segment, which includes the Markel International operations led by William Stovin, produced gross written premiums of $914 million in 2013 versus $888 million a year earlier, an increase of 3% compared to 2012.

Markel International continues to spread its wings around the world with growing businesses in Continental Europe, Asia and also, as a function of newly acquired capacities from Alterra, Latin America.

Markel International completed the acquisition of Abbey Protection plc in January 2014. Abbey provides legal and tax services to its clients along with related insurance

coverages. We plan to focus on cross selling between Abbey and our existing Markel International UK customer base. We also expect to expand its business geographically over time.

Our Specialty Admitted segment includes the operations of our Markel Specialty division and is led by Greg Thompson. Greg and his team produced gross written premiums of $900 million in 2013 versus $670 million in 2012, an increase of 34%.

During 2013 we focused on streamlining business processes, cross-selling, and building the value of the Markel brand in the marketplace. We also became the premier insurer of classic automobiles through our underwriting relationship with Hagerty.

With the Alterra acquisition we added several complementary products to our existing wholesale and Markel International divisions. We also added two new divisions, Global Insurance and Global Reinsurance.

The Global Insurance division, led by Lou Adanio, John Boylan, Jim Gray and Mike Miller, produced gross written premiums for Markel of $275 million in 2013. The Global Insurance division provides insurance coverage to larger entities than we previously served at Markel on a worldwide basis and stands as a good example of our expanded capabilities as a result of the Alterra acquisition. We are very pleased with how the insurance marketplace has responded to our offerings. The business grew despite the distractions and disruptions involved in any acquisition. As we enter 2014, we believe the distractions of the deal are behind us and the benefits of the larger balance sheet and market presence continue to build.

The Global Reinsurance division, led by Dave Kalainoff and Jed Rhoads, produced gross written premiums of $408 million for Markel in 2013. We are excited about the long-term prospects for this new business.

Today, reinsurance faces some of the most competitive marketplace conditions in our insurance portfolio. Despite that, we expect ongoing profitability in 2014 and beyond. With our new, larger balance sheet and longstanding commitment to underwriting profitability and dependability in the marketplace, reinsurance should be able to grow in well priced insurance markets and produce large profits in some years. In other years, we will reduce writings when we are not being paid appropriately to take risks.

Over time, this culture and discipline at Markel has served us well. Reinsurance in and of itself is neither a good or bad business. What can make it good is that, in certain markets, we can write a lot of profitable premium volume and compound the returns from doing so with our investment activities. In tough markets we will need to be extremely disciplined and willing to walk away from underpriced business.

We've practiced this discipline throughout Markel over the years, and we will continue to do so. The combination of our long-term focus, discipline, and diversification allows us to be patient. We are not dependent on any one product or customer. As such, we can increase or decrease our exposures as market conditions warrant and we are used to doing this. We expect the cumulative results from doing so will demonstrate the wisdom of growing our reinsurance business and creating value over multi year periods.

Three - Combined Ratio

No discussion of gross written premiums makes sense without discussing the combined ratio and profitability of those revenues. We've got good news on that front as the overall combined ratio at Markel was 97% in both 2013 and 2012, despite the fact that we incurred two points of non-recurring expense related to the Alterra acquisition. While we benefited from a relatively mild year with lower than normal weather-related catastrophes, we are pleased with these results.

We also remain committed to our unchanging standard of conservatism in setting our loss reserves and doing our best to make sure that we remain "more likely to be redundant than deficient" in our balance sheet accounts. We are booking the Alterra business with a margin of safety consistent with our long standing practices, and we will continue to do so. This approach protects the balance sheet, and in our opinion, the value of your company in many dimensions. It also tends to produce more volatility in year-to-year results. So be it. We think it's the right way to proceed.

In 2013, we wrote more business than we've ever written before, and we did so at a profit. A number of factors produced these results. One, the underwriters throughout our organization thoughtfully and skillfully selected and priced the risks we take very well. Two, they were able to do so because the information technology that supports their efforts improved during the year and they had more data with which to make decisions. Three, the increased size and scale of Markel gave underwriters more opportunities to see and write business than ever before. Four, the marketing efforts to establish the Markel brand in the insurance world increased our opportunities to see and write business. Five, our financial performance and reputation gave our clients confidence to trust us to be there when and if a claim occurred. And so on and so on and so on ...

We believe that these are persistent advantages and we will continue to build on them over time.

Four - Investment Portfolio

At year-end 2013, the total investment portfolio reached $17.6 billion compared to $9.3 billion a year ago. The acquisition of Alterra added $7.9 billion on May 1st. Interest rates bottomed out for the year almost exactly on the May 1st closing date of the Alterra acquisition. The subsequent rise in rates during the rest of the year reduced the carrying value of the portfolio which offset increases in the portfolio from our investment performance and cash flows.

The highlight of the year in our investment portfolio was the 33.3% return on our equity investments. Over the last five and ten years we've earned 21.6% and 12.4% respectively per year on our equity portfolio. These are outstanding investment results. Most insurance based organizations do not invest in equity securities to the extent we do at Markel. Our equity portfolio has added immense value to our total returns over many years and we think our long standing and consistent commitment to disciplined equity investing is a unique and valuable feature.

As long-term readers of this report will know, we follow a four part discipline when it comes to making our equity investments. First we seek profitable businesses with good returns on total capital that don't use too much leverage. Second, we look for management teams with equal measures of talent and integrity. Third, we look for businesses that can reinvest their earnings and compound their value or that practice sound capital management techniques such as good acquisitions, dividends, and share repurchases. Fourth, we seek these attributes at fair and reasonable prices.

You can find the incantation of this four part thought process starting in the 1999 annual report, and we repeat it every year. We were thinking along these lines before 1999 but we just started saying it in the annual report that year and we continue to invoke it as liturgy year after year.

This four part process guides all of our business decisions when it comes to investing in publicly traded equity securities and privately held businesses, as well as personnel and management evaluations and decisions within our existing operations.

We hope you take comfort in seeing the consistency of this approach year after year. We do.

In our fixed income operations we earned a total return of zero percent. Going into 2013 we worried that interest rates were unnaturally low and that the risks of owning

longer-term bonds outweighed the returns available from doing so. We worried about that in 2012 and earlier as well.

We knew that we couldn't forecast when interest rates would go up with precision. Therefore, we simply let our fixed income securities mature and we built up our balances of cash and shorter term bonds.

Starting in the second quarter of 2013, interest rates finally did begin to rise. Our total return this year was diminished by the market values of our existing bond holdings falling. The very good news is that we are extremely liquid and now able to reinvest our cash balances at rates which make more sense to us.

We see particular opportunities within the distress of the municipal securities market, and we are gradually beginning the process of investing our liquidity in longer term bonds. Our pace in doing so will depend on our internal cash flows as well as the rate of change in interest rates. As 2014 progresses we expect to structure the portfolio with a longer duration that more closely matches the duration of our claims liabilities going forward.

We normally don't try to predict interest rates but we can use common sense to say that we believed they were too low during the last few years, and now they are trending back to a more normal level. Consequently, we too will trend back towards a more normal bond portfolio over time. This should increase our investment income substantially in the years to come.

Our overall investment return was 6.8% in 2013. We continued to add to our equity portfolio throughout the year as we have done consistently since the low point of equity exposure in the first quarter of 2009. While the addition of the Alterra portfolio on May 1st reduced our percentage of the total portfolio in equities back below 50% of shareholders' equity, we methodically worked to increase that allocation during the year. At year end that ratio stood at 49% and we would expect it to gradually increase towards our more normal target of 80% over time.

Five - Portfolio per Share

At year end, our investment portfolio per share stood at $1,259 versus $969 a year ago. The Alterra acquisition added $560 per share at closing on May 1st and our investment performance, coupled with the cash flow from operations, allowed us to continue to build our investment balances during the year.

One wonderful attribute of Markel is that over time our insurance businesses produce both underwriting profits and investable funds at the same time. This means that the total investment balances (after subtracting out our debt) produce investment income that accrues to the benefit of the shareholders. In effect, in addition to our own money (the shareholders' equity) which we invest, we get to invest the funds we are holding on behalf of our insurance claimants until such time as the claims come due.

Most businesses just have one pool of funds to invest, namely, shareholders' equity. At Markel, we have two. Our own capital plus the funds we are holding on behalf of others until they are needed. More is better.

Six - Net Income to Shareholders

Our net income totaled $281 million in 2013 versus $253 million in 2012.

This is the most volatile of the line items in the 20-year table. We understand this volatility and hope that you do as well. At many organizations, volatility causes people to go nuts. Experience has shown they are tempted to tamp it down and pretend that the world is a smooth place. We do not share this delusion.

If we were irrationally afraid of volatility, we could get rid of our equity portfolio, since equities tend to go up and down by greater percentage amounts than bonds. We

think that unnaturally attempting to minimize reported volatility would diminish the long-term profitability of the company and work against the interests of long-term owners of the firm compared to short term traders of the stock.

Specifically, if we re-allocated the equity portfolio, we would increase the amount of net income that would flow through the income statement since all of the fixed income interest income gets reported through this line. For equities, only the dividends and realized gains show up as net income. Unrealized gains we earn by holding onto growing businesses do not.

Over time, we've earned hundreds of basis points of higher returns on our equity portfolio compared to our fixed income investments. Much of that excess return shows up only in balance sheet accounts and in comprehensive income. Unrealized gains never go through the income statement. By the way, this is also incredibly tax efficient as we now enjoy a gain of $1.7 billion on our equity portfolio at year end 2013. We've provided for the ultimate tax liability that would be paid should we sell our holdings, but as long as we hold onto those securities we defer paying that tax until the future.

At a 35% tax rate, this means we have over $500 million in our portfolio today, earning a return for our shareholders, which we would not if we chose to invest only in fixed income securities or to sell and realize gains just so they showed up in our net income statement.

We'll trade a little volatility in reported net income for $500 million anytime we can. A little over ten years ago the amount of our deferred tax liability was approximately $50 million. It's accurate to say we accomplished zero in our investment operations for the last decade. Correct! We added a zero. Please root for us to do so again.

Seven - Shareholders' Equity

Shareholders' equity totaled $6.7 billion at year end 2013 compared to $3.9 billion a year ago. Our shareholders' equity increased $2.3 billion due to our issuance of 4.3 million shares used to partially pay for the Alterra acquisition and our comprehensive income of $459 million offset by $57 million in share repurchases.

Eight - Book Value per Share

Book value per share reached $477.16 in 2013 compared to $403.85 in 2012. Yeah!

Nine - Five year CAGR in Book Value per Share

In 2013, the five year compound annual growth rate in book value per share was 17%. We are delighted with this result and we hope that you are as well.

While in the past we have emphasized the book value per share absolute amount, we think it is important to emphasize the five year CAGR percentage just as much if not more than the absolute amount of book value per share. We'll explain why in the next section.

The Always Treasured Accounting Discussion

Here is the much anticipated accounting discussion. We'll try to make it worth your while to slog through this.

The accounting comments tie to the changing nature of Markel over time. In earlier years we were almost completely, and accurately, described as an insurance company. As such, while the income statement and the cash flow statement were inseparably connected to the balance sheet, the balance sheet stood out as the most important of our three financial statements. From the balance sheet, one can calculate the book value per share, and it would be fair to say that the value of Markel, as well as any other insurance company, shouldn't vary too much from what that book value calculation revealed.

The balance sheet of an insurance company should comprehensively sum up roughly what an insurance company is worth. The assets consist of relatively easy to value items such as cash, publicly traded and market priced fixed income and equity securities, collectible reinsurance amounts, and so on and so on. Similarly, the liabilities should be relatively straightforward and show the future amounts due to policyholders and creditors.

Over time, we've been accorded a premium valuation compared to our raw book value, and compared to most insurance competitors. There were many factors that created our premium valuation in the marketplace, such as a reputation for conservatism in our financial reporting practices, demonstrated customer loyalty as shown by high renewal rates, and excellent long-term financial performance.

We appreciate the vote of confidence the marketplace has provided to Markel, and we will do everything in our power to continue to deserve a premium reputation.

Today, with the ongoing growth of Markel Ventures, the income statement should begin to come more into play as an element of focus for the owners of the company. The value of the Markel Ventures companies stems almost entirely from their ability to produce cash. That ability is not measured predominantly by the balance sheet; it is measured predominantly by current and future income and cash flow statements.

The net income (and associated cash flows) from the Markel Ventures companies comes largely from income statement activities such as selling goods and services for more than the total costs involved in producing them. In some cases, such as at our Weldship and ParkLand operations, the companies are heavy users of capital and need a substantial balance sheet to produce income. By contrast, PartnerMD and RetailData stand at the other end of the spectrum and require only small balance sheets that are dominated by items like working capital for payroll, receivables, and day to day operations.

Fortunately, this spectrum of businesses with various degrees of balance sheet intensity compared to the income statement resolves itself over time with the calculation of the five year CAGR measurement that we emphasize at Markel.

Namely, whatever amount of balance sheet (and associated book value) that the Markel Ventures companies require, it should be relatively consistent over time. The main thing that will change the book value of the various Markel Ventures entities will be the earnings of those companies themselves. The CAGR of the book value of this group should thus serve as a pretty good proxy for understanding how well they are creating economic value for our shareholders.

This calculation is continually refreshed and kept relevant by the passage of time as each year brings a new vintage of returns and a new, yet consistently calculated, base of capital being used to produce those results. The accuracy of this directionally correct surrogate measure should also increase over time as the base of the Markel Ventures business gets larger and more mature.

As our final statement on accounting in this letter think about two different companies where you only knew two pieces of data; the book value per share and the five year CAGR of that book value. At the first company, the book value was $100 per share and the five year CAGR was 8%. At the second company the book value was $100 per share and the five year CAGR was 12%. You would probably accurately conclude that the second company was a better one than the first and worth a higher multiple of book value in the marketplace. We think that calculation cuts through a lot of accounting details and is valuable information to help you evaluate the company.

This concludes the accounting discussion.

Back to business.

2014 and Beyond

2013 was a transformational year for your company. The Alterra acquisition changed the scale and global reach of your company. Every associate in every area of Markel worked to improve your company and translate our new set of opportunities into profitable and durable business.

In addition to the Alterra acquisition, we added Eagle Construction to our Markel Ventures operation. Eagle is a leading homebuilder in central Virginia. We've known the principals at the company for two generations and we had previously partnered with them in a 50/50 joint venture to purchase attractively priced real estate assets in the wake of the 2008/2009 financial crisis.

As evidence of Bryan Kornblau and Bud Ohly's management ability, Eagle remained profitable in 2008 and 2009 despite the myocardial infarction in housing. We are delighted to welcome Eagle into Markel and we think there will be ongoing opportunities to profitably expand this business.

We spent the past year digesting and integrating those acquisitions as well as looking after the basic operations of your company. We invested heavily in our technology platforms and expect to continue to do so in the future.

We served our insurance customers by providing fair and prompt claims services when they experienced losses.

We focused on becoming more valuable suppliers to all of our customers whether they needed insurance, equipment for their businesses, housing, medical services, or other expertise.

We protected the balance sheet of the company through prudent management of credit, interest rate, and equity market risks as we managed the portfolio.

We sought out new companies, new customers and new partners as we sought to build the value of your company.

We changed and improved many processes and expanded geographically.

What didn't and what won't change though is the Markel Style and the values by which your company operates. As the Markel Style states, "We believe in hard work and a zealous pursuit of excellence while keeping a sense of humor. Our creed is honesty and fairness in all our dealings." This value system attracts wonderful associates to this company.

Our decades of doing this consistently show our associates and customers that these are not just words. We mean what we say.

We will continue to do what we say we will.

We are pleased to be able to share this report of long-term financial performance to you as the owners of the company. We are optimistic that we will continue to be able to build one of the world's great businesses and we look forward to reporting our progress in the years to come.

Alan I. Kirshner, *Chairman of the Board and Chief Executive Officer*

Anthony F. Markel, *Vice Chairman*

Steven A. Markel, *Vice Chairman*

F. Michael Crowley, *President and Co-Chief Operating Officer*

Thomas S. Gayner, *President and Chief Investment Officer*

Richard R. Whitt, III, *President and Co-Chief Operating Officer*

2014

To Our Business Partners

Here is our annual report to you for the year 2014. If you are reading this, it's probably because you already own Markel. This is your company. You own it and we work for you. In the course of this report we'll attempt to answer two major questions that we think you would want to know as owners of the business, namely, "How are we doing, and, what's next?"

If for some reason you are reading this and you don't own Markel, we hope that you will want to rectify that void by the time you finish.

Our goal at Markel is to build one of the world's great companies. The markers of success in achieving that goal will be outstanding long-term financial results AND an enduring culture that attracts the best associates, customers, and shareholders. We've pursued this dream through three generations of family ownership and over three decades of public ownership and so far…so good.

Question # 1 – How are we doing?

This was a watershed year for your company. The financial results only hint at the progress made at Markel in multiple dimensions. The people of this company went from a sprint to hyper-speed in adapting to a changing world. We learned important lessons about how to manage and continue to build an enterprise of increasing scale and complexity. First things first, to the associates of Markel, thank you for your amazing efforts.

2014 was a year of great progress, top to bottom. Total revenues grew 19% to $5.1 billion versus $4.3 billion. In our insurance operations, we wrote $4.8 billion of premium volume compared to $3.9 billion a year ago. Most importantly, this was profitable volume with a combined ratio of 95% compared to 97% in 2013. We earned 7.4% on our investment portfolio with equity returns of 18.6% and fixed income returns of 6.5%. In our Markel Ventures operations revenues totaled $838.1 million versus $686.4 million a year ago and we earned Adjusted EBITDA of $95.1 million compared to $83.8 million a year ago.

(in millions, except per share data)	**2014**	2013	2012	2011	2010	2009	2008	2007	2006
Total operating revenues	**$ 5,134**	4,323	3,000	2,630	2,225	2,069	1,977	2,551	2,576
Gross written premiums	**$ 4,806**	3,920	2,514	2,291	1,982	1,906	2,213	2,359	2,536
Combined ratio	**95%**	97%	97%	102%	97%	95%	99%	88%	87%
Investment portfolio	**$ 18,638**	17,612	9,333	8,728	8,224	7,849	6,893	7,775	7,524
Portfolio per share	**$1,334.89**	1,259.26	969.23	907.20	846.24	799.34	702.34	780.84	752.80
Net income (loss) to shareholders	**$ 321**	281	253	142	267	202	(59)	406	393
Comprehensive income (loss) to shareholders	**$ 936**	460	504	252	431	591	(403)	337	551
Shareholders' equity	**$ 7,595**	6,674	3,889	3,388	3,172	2,774	2,181	2,641	2,296
Book value per share	**$ 543.96**	477.16	403.85	352.10	326.36	282.55	222.20	265.26	229.78
5-Year CAGR in book value per share [1]	**14%**	17%	9%	9%	13%	11%	10%	18%	16%

[1] CAGR—compound annual growth rate

In sum, financially, we earned comprehensive income of $935.9 million and the net change in our book value per share was $66.80. There will be many more numbers and tables in the body of this report but suffice it to say that the people of Markel produced outstanding financial results in 2014.

Our associates enjoyed new challenges and opportunities throughout Markel. We expanded in financial size through organic growth and the ongoing successful integration of the Alterra acquisition. We began operating in new territories around the globe, we introduced new insurance offerings, and we added new services and products in our Markel Ventures operations. Associates at Markel should never be bored. There are ongoing opportunities to learn and build at this company. The combination of ongoing personal growth opportunities along with our consistent values as described in the Markel Style, make Markel a wonderful company in which to build a career.

We served our customers. That is why we are in business. During 2014 we provided for our customers with over $1.9 billion of payments for when the earth shook, winds blew, or other unforeseen events, caused covered insured losses. Within Markel Ventures, among other things, we built equipment which our customers used to bake bread, dredge, and haul cars, general cargo, and industrial supplies. We provided affordable housing and medical needs for thousands. We helped retailers with analytics and data they use to run their businesses.

And for our shareholders, the price of each share of Markel rose 18% from $580.35 to $682.84 during the year.

While the short-term annual financial results were great, and the stock price went up, results from any single year do not reliably describe the real accomplishments and progress at your company. It takes longer to make valid judgments.

To begin to correct for this short-term distortion, we as senior managers mechanically use a rolling five-year measurement period to calibrate things like our incentive compensation. The reason we do that is to get a more accurate proxy of measuring our progress in accomplishing the more important long-term goals. We think that time horizon is a bit longer than what most companies use. We also think that orienting ourselves towards long-term thinking offers us a huge advantage. With a long term focus, difficult decisions oftentimes become easier and more obvious.

The answer to the question of, "How we are doing?" also becomes clearer and more accurate when we start to look at five-year measurement terms. In the last five years, revenues grew 148% from $2.1 billion to

2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	**20-Year CAGR[1]**
$ 2,200	2,262	2,092	1,770	1,397	1,094	524	426	419	367	344	280	**16%**
$ 2401	2,518	2,572	2,218	1,774	1,132	595	437	423	414	402	349	**14%**
101%	96%	99%	103%	124%	114%	101%	98%	99%	100%	99%	97%	**—**
$ 6,588	6,317	5,350	4,314	3,591	3,136	1,625	1,483	1,410	1,142	927	622	**19%**
$672.34	641.49	543.31	438.79	365.70	427.79	290.69	268.49	257.51	209.20	170.95	115.45	**13%**
$ 148	165	123	75	(126)	(28)	41	57	50	47	34	19	**15%**
$ 64	273	222	73	(77)	82	(40)	68	92	56	75	(10)	**14%**
$ 1,705	1,657	1,382	1,159	1,085	752	383	425	357	268	213	139	**22%**
$174.04	168.22	140.38	117.89	110.50	102.63	68.59	77.02	65.18	49.16	39.37	25.71	**16%**
11%	20%	13%	13%	18%	21%	22%	23%	26%	26%	31%	17%	**—**

$5.1 billion. The book value per share rose 93% from $282.55 to $543.96 and we earned comprehensive income of $2.6 billion in the last five years as compared to $1.1 billion in the previous five-year period. If the Beatles meant to write a song about us, "It's getting better all the time" might have been the one they had in mind.

The most robust evidence of success in "How we are doing?" can be seen in the embedded 21 year table of financial results that we include in this report. We encourage you to spend just as much time with the numbers and trends in that table as with the words in this letter. The two are intertwined. The culture, the dreams, the vision, and the tasks we describe in the letter, produce the numbers you see in the table.

We would not have been as successful producing those results without our vision as stated in the Markel Style, AND, our words about culture, and values, and dreams, would ring hollow had we not produced the economic results described in the table. They are one.

Question # 2 – What's next?

To think about, "What's next?" consider the words of the famous Virginian Patrick Henry when he said, "I know of no way of judging the future but by the past." Much of what we are reporting to you on our recent results came from four distinct decisions during the last few years. We believe in the dictum that "excellence comes from experimentation rather than design." Here are some examples of the experiments/decisions we've made in recent years and how they are influencing current results.

First, several years ago we decided to pursue the "One Markel" initiative. Historically, Markel grew predominantly by acquisition. While we added our culture and incentive systems to the businesses we acquired, we largely left them to operate as they had in the past. Silos of IT systems, marketing channels, relationships, and product decisions, among other items, were largely left in the hands of the managers of the acquired companies. We modestly carried products, people and ideas from one unit to the other, but not massively so. Fortunately, the company grew and we earned wonderful financial results for a long period of time with that general approach.

As always though, the world changed, and we needed to change with it. With the increasing pace of business today as supported by information technology developments, we needed to increase our speed and scalability. The "One Markel" initiative truly changed the mindset of Markel from that of a confederation of individual units into one global company.

In the early 1990's, one knowledgeable investor remarked that they were impressed with Markel, and our creativity and financial performance, but they were concerned that our approach was not scalable. They were right. After several decades of success, we concluded that we were nearing the limits of scalability with our previous approach. So we changed.

It is impossible to overstate the importance of this decision.

It touches everything we do and it is different from our historical approach. That is wonderful. While our values and principles have and will remain unchanged, the tools and specifics needed to successfully operate a business change all the time. We keep what should remain, and we change what needs to be changed. Count on us to continue this effort forever.

Second, the mindset change from One Markel contributed to our decision to purchase Alterra and roughly double the size of the company in one fell swoop.

The thing about doing things in units of "one fell swoop" as opposed to sips, or incrementally, is that it forces you to accept change immediately. Business as usual just doesn't work and you must find a different way to do things.

Ironically, it can often be the hardest to accept change at a successful organization. The mindset of "if it ain't broke, why fix it?" can easily develop when things are going well. The world in 2015 and beyond has no place for that mentality. However things are, they can be better, and the forced reexamination of our business to figure out overnight how to operate a company that was twice its previous size served us well.

We accepted that challenge and we continue to rise to it. The actions we took, and the new mindset, will serve us well into the future.

Third, we decided to integrate the relevant Alterra operations from day one as opposed to simply bolting it on to our existing operations. This was a different approach than our previous insurance acquisitions and a new day-one mindset going into a deal. So far, this approach has worked extremely well. We've had a smoother integration of Alterra than any other previous insurance acquisition at Markel.

The Reinsurance and Global divisions of Alterra were new to us, but those businesses benefited from the increasing scale and value of the Markel brand immediately.

At the same time, we also kept many of our historical practices while integrating Alterra. For example, we strengthened loss reserves for the post acquisition Alterra business to be consistent with our more likely redundant than deficient reserving philosophy even though this approach penalizes the "reported" short-term earnings. We think this approach reinforces and builds our culture of conservatism and ends up producing better real economics over time. We also introduced our longer term and entrepreneurial incentive compensation arrangements to the Alterra associates which have worked so well in reinforcing our culture and producing great financial results for associates and shareholders over long periods at Markel.

Fourth, we pursued the creation and expansion of Markel Ventures.

From the start in 2005 when we purchased 80% of AMF with its roughly $60 million in revenue, Markel Ventures ended 2014 with revenues of $838.1 million and Adjusted EBITDA of $95.1 million. Markel Ventures now stands as a real, and meaningful contributor to the wealth creation underway at Markel Corporation.

Markel Ventures does two things for Markel. One, it gives us another option for capital allocation decisions. Secondly, it makes a bunch of money. As one frame of reference for that statement, consider Markel Corporation 10 short years ago. In 2004, we earned underwriting premiums of just over $2 billion and underwriting profits of $72 million. While the language used to describe underwriting profits from insurance operations, and cash flows from non-financial businesses, are different, it's not that hard to translate. Underwriting earnings are generally comparable to Earnings Before Interest Expense, Taxes, Depreciation, and Amortization. They equal the acronym EBITDA. In 2014, the Adjusted EBITDA of Markel Ventures, which also excludes a non-cash goodwill impairment charge of $13.7 million, totaled $95.1 million. This stuff is starting to add up.

Most companies are limited in how they think about what they can do with capital. They are constrained by several factors. Many need to reinvest in their business just to keep it viable and competitive. We specifically choose to avoid those industries as much as possible. Many see themselves as narrow providers of specific products or services with limited interest, imagination, or desire, to move beyond those realms. We are fueled by imagination and the desire to grow, *and*, we believe it is necessary in a changing world to do so.

Many are constrained by short-term shareholders with little or no confidence in management to make rational and appropriate economic decisions. We continue to do our best to earn the right as managers to make broader decisions with capital than is the current custom in financial markets. We've earned excellent returns on our historical insurance and investment activities, and we've now developed a mature and robust business in

Markel Ventures as well. We hope you are pleased and encouraged with this development. As managers and shareholders ourselves, we are.

This record, and this trust between shareholders and managers, creates the opportunity for us to continue our triage of how we allocate capital.

First, we look to support organic growth in our existing insurance and Markel Ventures operations. We have a team of proven, successful operators within the walls of Markel. Our first choice is to give them more resources when they have the opportunity to put money to work effectively.

Second, we can pursue acquisitions in the realm of insurance or non-insurance businesses (that should cover it). We have experience and a proven track record of being able to successfully acquire and operate businesses all around the world. In the short-term, we can do math and count money. We can, with reasonable precision, know what things cost and what returns we can earn when we own them. We've done that.

More importantly, in the longer term, we see that our *values* and our *culture* work all around the globe. Talented people want to be part of this company. With talented and honest people we can accomplish anything. As such, in the long run we expect the businesses we buy to grow far beyond our initial estimates of size and profitability and to eventually exceed our wildest expectations. We do more of what works, and we give more resources to the talented associates who make good things happen. We do less of what doesn't work, and we reallocate those resources to others.

This works. It is what matters over time.

We ask for an unusual degree of trust and flexibility from our owners and we try our best to be explicit in communicating how we are proceeding with our plan to build one of the world's great businesses. The good news is that you have decades of evidence demonstrating that we deserve this trust and will carry on in building the value of your company. We intend to keep going.

Thirdly, we acquire publicly traded equity and fixed income securities for the dual purposes of supporting our insurance operations and earning good returns on our capital. The great news to report is that our investments did what they are supposed to do. They supported the insurance operations AND they produced excellent returns on our capital.

As to our equity selection process we continue to use our durable four step process in seeking excellent long-term investments. We look for, one, profitable businesses with good returns on capital and modest leverage; two, management teams with equal measures of talent and integrity; three, businesses with reinvestment opportunities and/or capital discipline, at; four, reasonable valuations. You'll find this language in every Markel annual report since 1999. We believed in this approach since the beginning. We just started explicitly stating it in the annual report that year. Expect this language to continue in future annual reports.

As to our fixed income operations, we look for the highest quality fixed income securities that we can find to match up against our insurance liabilities. In large measure, we match the expected duration and currencies of our insurance liabilities to fixed income securities with similar durations and currencies. We do not attempt to forecast or profit from interest rate or currency movements. While we remain humble about our ability to earn returns from forecasting the future, we do remain responsible for protecting our balance sheet against big changes in those factors. As such, we continue to own a portfolio of fixed income securities which mature faster than what we expect from incoming insurance claims. We will continue to maintain this modest override from our normal design until such time as interest rates are higher than current levels. We just don't think we are being paid appropriately to take the risks of owning long-term bonds so we won't do it. It is the same decision any underwriter at Markel would make when they don't think the rewards justify the risk.

We manage practically all of our investments in house at an extraordinarily low cost. At year end the total investment portfolio stood at $18.6 billion. Our total in house management costs remain a single digit number of basis points of that number and can't even be measured until you get to hundredths of a percent. Additionally, we tend to be incredibly tax efficient in managing our investments given our long-term ability to buy and hold quality equity investments. This is a massive addition to the long-term returns you earn as shareholders.

We continue to use our four lenses to find and select investments and we often ignore investment fashions and conventional wisdom while doing so. Currently, two features of today's marketplace strike us as good examples of ways in which we behave differently than most institutions.

One example is the current move to passive and indexed investments. One goal of indexers is to reduce investment costs. Count us in for that part. As we cited earlier, we operate at very low investment management cost levels. The problem with indexing, and when it cycles in and out of favor, is that it is a relatively brainless activity. Certain behaviors and practices get reinforced by money gushing in or out of indexes, and prices of real companies get distorted in the process. We've been around long enough to have witnessed the dreadful returns experienced by indexers in the late 90's and early 2000's. We'll try to use brains and common sense to avoid the excesses of index strategies while at the same time competing toe to toe with them on costs. Our record of now being in our third decade of outperforming the S&P 500 should give you some confidence in our approach.

A second example of how markets periodically become unhinged from long-term reality can be seen in the current action of the oil market. Arguably, oil is the most liquid, important and globally traded commodity on the face of the earth. Hundreds if not thousands of companies participate in the energy business. Hundreds of thousands if not millions of people work in, and study this field. The fact that oil could sell for over $100 per barrel, and for less than half that price within a few short months, should be about all of the evidence you need to dismiss those who believe in efficient markets, or forecasting just about anything.

Our investment record has not and will not be based on our ability to forecast the future of geopolitical changes, interest rates, currency moves, technological change or any other factor that occupies the minds and hours of countless investment professionals. We simply accept that all of those things will continue to fluctuate and change, and that our four part process does the best job we know of finding the people and financial circumstances who will make the best of whatever happens.

Our fourth and final choice for capital allocation happens when we believe that the repurchase of our own shares creates better returns than any of the first three choices. We've only purchased modest amounts of our stock over the years and we believe that you are better served when we can reinvest capital into businesses which create attractive recurring returns.

The Past – Chapters 1994 to 2014

Financially, our past can be described by the 21 year table that shows our growth in measures such as profitability, net worth, revenues and returns on capital. On all of those measures, we've earned wonderful returns over meaningful periods of time. More importantly, what created those numbers was the leadership, integrity, creativity, flexibility, and adaptability to whatever opportunities came about and in how we responded to changes in economic conditions.

A review of the past, chapter 2014

In our insurance operations we enjoyed a wonderful year in 2014.

By way of a list, here are some of the features from 2014:

1. We made massive progress on the integration of the Alterra operations. Markel operates as a unified company. The process created more scalability and efficiency from our legacy and newer insurance operations.
2. We began a concerted and explicit effort to improve our operational efficiency and discipline to augment our historically strong skills of creativity and relationship building.
3. We systematically created opportunities for our associates to pursue personal development opportunities and transfer knowledge across the organization.
4. We globalized our information technology structure to increase efficiency and increase our opportunity to scale up our business.
5. We developed quick and meaningful actuarial tools that help our underwriters make faster and more accurate decisions.
6. We added analytics capabilities to improve day-to-day decision making regarding catastrophe related exposures, reinsurance market conditions, terrorism issues, and other risk factors.
7. We added new products and exited others that did not meet our profitability requirements.
8. We added internal incentives designed to reward harder to measure front end instances of creativity and ingenuity, in addition to the more traditional incentives associated with back end financial results.
9. We redesigned work flows to increase speed, accuracy and accountability.
10. We amalgamated our claims departments into one global department.
11. We unified our marketing approach to increase the value of the Markel brand.
12. We expanded the very nature of our insurance activities with the ongoing growth of Abbey Protection.
13. And more…

This is just a partial list of activities in our insurance operations. Suffice it to say that we sprinted hard in 2014 as an organization and this is a different and better company than before.

A similar and partial list for Markel Ventures includes the following:

1. We acquired Cottrell. The leading manufacturer of car hauling trailers in the U.S.
2. We added to the size and scale of AMF Bakery systems, now known as the Markel Food Group, with the Tromp acquisitions in the Netherlands.
3. We acquired additional manufactured housing communities at Parkland Ventures.
4. We opened four new offices at PartnerMD.
5. We expanded and deepened strategic customer relationships at RetailData.
6. We demonstrated continuity with successful leadership succession plans.
7. And more…

The always "treasured" accounting discussion

Feel free to skip ahead here. As Winston Churchill said, "The length of this document defends it well against the risk of it being read." That's okay; the gist of this section tries to communicate two thoughts. The first and most important message, which we discussed last year, is that, in order to understand the financial performance of Markel, it is becoming just as important to focus on our statement of cash flows, and our income statement, as it is on the more historically important balance sheet. We believe that the combination of these statements which over time reconcile to the *relative* measure of *rate of change* in book value per share is equally if not more important than the *absolute* measure of where the book value per share stands at any given point in time. To gain confidence and understanding of that point of view requires diving into the world of accounting.

The second and less important message is that we incurred a minor charge for goodwill impairment within our Markel Ventures operations in 2014. This reduces the reported rate of change in the five-year growth rate of book value per share this year and for the next four years by an amount that doesn't even add up to 1%. After that, it will increase the rate of change in this measurement by a roughly similar amount for the next five years. There is no material economic effect from this adjustment.

We are writing about this because sometimes the rules of accounting seem to describe things in a different way than how we as business people might view something. In 2014 Markel Ventures earned over $95 million of Adjusted EBITDA. Despite that aggregate performance we recorded a $13.7 million goodwill charge to write down a portion of acquisition costs. For all of Markel Ventures, total goodwill on our balance sheet now stands at roughly $216.0 million following this charge.

Making money and taking charges at the same time might strike you as a bit contradictory. That's why we're writing about this. We're trying to give you as much clarity as we can about both the economic conditions of our business as well as about accounting rules so that you can gain insight into how your company is doing. We think it is worth adding some commentary to the raw numbers to give you a clearer picture of how things are going.

Some of our Markel Ventures acquisitions have worked out better than we expected so far, and some have not. Given our heritage and culture of balance sheet conservatism *and* (and the word *and* is really important here) the unit level at which we review entity level balance sheets; we recorded a write-off of the goodwill associated with one unit. We remain optimistic about the long-term economic prospects of that business. We also made the sorts of changes and adaptations that you would expect of us at that unit as well as with each and every other business we manage.

From an accounting perspective, we are required to look at the recoverability of goodwill at the "reporting unit" level and each Markel Ventures affiliate group is a reporting unit for this purpose. If, instead, Markel Ventures was aggregated into one reporting unit, with Adjusted EBITDA of over $95 million compared to a goodwill balance of $216.0 million, it is likely that an impairment charge would not be necessary.

Accounting for goodwill involves multiple layers of judgment, in addition to the cold hard facts. We'll attempt to peel the onion of some of the layers of judgment that frame our goodwill accounting in order to try to help you understand the underlying economic reality at your company. We make every decision with the goal of trying to build the long-term value of your company. That never changes.

Specifically, when we make acquisitions we normally make an accounting entry to establish an initial balance for goodwill. We do this allocation in complete accord with GAAP. While a large amount of judgment is involved in this process, we first allocate purchase price to specific assets and liabilities with easily identifiable market prices and intangible assets that can be amortized. Roughly speaking, whatever amount is left over after those allocations is deemed to be goodwill. To the extent this process results in lower amounts of non-amortizable goodwill, it lowers current income by the amount of amortization of the intangible assets and makes the balance sheet more conservative over time.

In general, when compared to our insurance operations, the Markel Ventures companies tend to have smaller amounts of fixed assets and larger amounts of goodwill as a percentage of the total balance sheet. For non-financial based companies, these facts tend to correlate with the circumstances you would find at a good business. They are markers consistent with a company that produces good cash flows and earnings, and at the same time, doesn't need to make massive capital investments. The value of a business like this

tends to come more from cash flows they produce rather than the accumulation of easily marketable asset portfolios.

While accountants appropriately try to make sure that accounting statements provide users with information that helps them understand the underlying economic reality at any given company, it is a tough task to accomplish. Accounting rules change over time. In previous accounting eras, a rough justice approach to goodwill prevailed where the entire amount of goodwill was written off over a number of years. In other eras, different amortization schedules prevailed, and different accounts could be expensed at different rates.

In today's world, accountants mandate that the goodwill amounts on a balance sheet must be constantly evaluated and reviewed. Many billable hours are consumed in this process. This is a one-way process where goodwill might be currently perceived as impaired and therefore charges are taken. If subsequent circumstances improve, the goodwill that was written off in previous periods will never be restored and written back up.

In another instance of making money and taking charges at the same time, consider the "Other-Than-Temporary Impairment" accounting treatment that applies to our portfolio of publicly traded securities. While our overall equity portfolio earned 18.6% in percentage terms and $611.0 million in dollars, we charged $4.5 million against our net income for certain lots within that overall portfolio that were deemed by accounting policies to be "other-than-temporarily impaired." If those securities rise in market price in subsequent periods they will not be written up. The gains will only show up in the income statement when they get sold. This is a small amount relative to the balances involved, but it illustrates how items can travel around between income statements and balance sheets in a way that can be confusing. Fortunately, the net change in book value calculation that you can perform by using the balance sheet rather than the income statement corrects for this effect.

As we wrote last year, historically Markel Corporation was largely and accurately described as an insurance company. As an insurance company, the balance sheet towered over the income statement and the statement of cash flows as the most important of the three financial statements. We always embraced a culture of conservatism and did our best to make sure that balance sheet was as conservatively stated as possible.

Nothing about that has or will change.

The good news remains that in our view the most important single financial metric of *net change in book value per share* will still do an excellent job of accurately describing the economic progress we are making at your company.

To give you some degree of understanding as to why we're so focused on the compound annual growth rate (CAGR) in book value per share, consider the following. For the last five years, the CAGR in book value per share was 14%. For the same five years, the CAGR of the Markel Stock price was 15%. For the 21 years listed in the table, the CAGR in book value per share was 16%. The 21 year CAGR for the stock price was 15%.

It is no accident that those numbers are so similar. If you want to have an idea of what you'll earn in the future from owning Markel, our estimate stops and starts with the *rate* at which the long-term CAGR of book value per share grows. The long-term *rate* of increase in that number is the least worst proxy to determine how we are doing as managers in building the value of your company.

We try to make the growth in book value per share as high as it can be in each and every aspect of our insurance, investing, Markel Ventures, and capital allocation decisions.

Final note- If it is of any comfort to you as readers, five out of the six people signing this letter wished that we didn't write about accounting. But as Bono of U2 sings in One Love, "We get to carry each other." The sixth member of the band looks forward to not writing about accounting as well, but feels that it is of mortal importance to understand the nuances and challenges involved in translating between GAAP accounting procedures and economic reality.

The Future – 2015 and beyond

In all of these activities throughout the entirety of the Markel Corporation we continued our long-term path of building one of the world's great companies.

Our simple forecast for "What's next?" is *more of the same*. We will continue to come to work every day. We will think creatively about how to operate our business more efficiently and effectively, we will think about what businesses we should pursue and what we should cede to others, we will try to attract and retain the most talented people we can find who share our values, and bring increasing skills and talents to the company. We will dedicate ourselves to learning continuously, and we will never stop. While "getting better all the time" is a pleasant tune when you hear the Beatles sing it, the reality is that it describes an eternally challenging, but magnificent, quest.

This is not a new statement in 2014. It's what we've done continuously at Markel since Sam Markel started this company with an idea in 1930.

We are not done. We enjoy the process of getting better and we will continue to work at that task. As such, the next chapter for us is more of the same…*more*.

Thank you again for your confidence and trust in us as managers of your company. We look forward to reporting to you on our ongoing progress and we deeply appreciate the opportunity to build this institution and what it represents.

Alan I. Kirshner, *Chairman of the Board and Chief Executive Officer*

Anthony F. Markel, *Vice Chairman*

Steven A. Markel, *Vice Chairman*

F. Michael Crowley, *President and Co-Chief Operating Officer*

Thomas S. Gayner, *President and Chief Investment Officer*

Richard R. Whitt, III, *President and Co-Chief Operating Officer*

OMAHA, May 3 -- On the weekend of the Berkshire Hathaway 50th anniversary gala that drew visitors from all over the world, Markel Corp. celebrated the 25th anniversary of its morning-after brunch much more quietly. There was no movie. Tom Gayner didn't offer to fight Floyd Mayweather, or even Manny Pacquiao, although he did have some very nice things to say about former Lakers power forward Kurt Rambis.

Also, your humble correspondent got up the nerve to go to the mike and ask the questions he complained were not asked at the 24th brunch a year ago, as you may or may not recall. He also got a chance to follow up with Gayner after the brunch, all of which we will get to in due course. But let's start at the beginning.

The contingent of Markel executives at the head table was double the size of last year's, partly by accident and partly by design. There were supposed to be three last year, but Richie Whitt, the president and co-COO, had a conflict, so there were only two: vice chairman Steve Markel and president and chief investment officer Tom Gayner. Whitt made it this year and they also added Anne Waleski to the mix. She's vice president and chief financial officer. To meet Alan Kirshner, the CEO, you have to go to the annual meeting in Richmond (next week) because he's "the most camera-shy CEO," according to Whitt.

Recalling the origins of the Omaha meeting, Gayner said the thinking was, "The people who are most likely to understand what we're trying to do are people who already own Berkshire." The brunch meeting, Gayner said, is "the only investor presentation we do all year."

Markel followed by thanking the several hundred people who filled the main Hilton ballroom for making a special trip to Omaha to hear them and hoped we all found something to occupy our time on Saturday. He also offered the baseline history: Markel was founded by Sam Markel as a small insurance agency in 1930. Steve joined in 1975. The company went public in 1986, raising about $5 million in an initial public offering. It was still a very small enterprise at that point with a market cap of $30-$35 million. Today the market cap is $10.4 billion, "so we've come a long way."

"We're really just getting started," Markel said. "The opportunities for us in the world of insurance and the world of other businesses is really unlimited."

In a tradition I explained in last year's post, money manager and sometimes-activist-investor David Winters asked the first question. Picking up on introductory remarks by Markel about the "Markel style," which he said "defines how we do business," Winters wanted to know what specific characteristics comprise it.

Gayner said it's a value system and a system of brain wiring. It is a "geometric challenge" to maintain it as the organization grows, he said, but after a while "it's almost like the organism rejects someone" when they aren't in sync with Markel's values.

Markel was more specific. He said people who fit with the Markel style value teamwork over individual achievement; have a disdain for bureaucracy and bureaucratic processes; believe in the primacy of serving shareholders; and prefer a meritocracy to a general sort of egalitarianism.

"If someone is more focused on net income than net worth," he or she is probably not a fit. A person who cashes stock options after two years to buy a boat would be less likely to fit that someone who still held them 10 years later.

The next question was about CarMax, which allowed Gayner to praise its fixed-price model, an

innovation in the used car business. Another questioner later would point out that Warren Buffett and Charlie Munger both opined the day before that people really seem to like negotiating when they buy big-ticket items like houses and cars and they didn't see much chance of that changing. To that later question, Gayner replied:

"It's a big world. There's room for both models . . . Some people like it and some people don't and it's a big enough world for both."

The first CarMax question included a characterization that it was Markel's biggest position. Gayner said it shows up that way on many lists because Markel's Berkshire position is bifurcated into A and B shares, but when you combine them, Berkshire is its biggest position.

This is not what dataroma shows as of year-end 2014, when it reported a 75 percent reduction in Berkshire A shares, leaving a combined allocation to Berkshire of about 7.6 percent, compared to 8.7 for CarMax, but Gayner ought to know. I have not looked at the most recent filings to resolve this, but suffice it to say they are Markel's two largest equity positions, adding up to about 16 percent of the stock portfolio a of the last dataroma report.

The next question came from a woman who said she was glad to see Waleski on the podium, but looking at the corporate officers, they seemed very white and very male and she wondered about encouragement of diversity.

"Well, speaking personally, I'm pretty much stuck as a white male," Gayner said.

Waleski said she was glad Gayner hadn't mentioned gender when he introduced her as an addition to the front table because Markel's "environment is you get rewarded for hard work regardless of ethnicity."

Gayner said statistically women make up a large portion of No. 1 and No. 2 executives within Markel Ventures and he mentioned Kirshner's "partnership for the future" program, which mentors minority high school students in the Richmond area.

There was a question about alternative sources of capital moving into the reinsurance business, taking off from a discussion by Buffett and Munger about reinsurance being used as a "beard for asset management" by hedge funds. Both said it was not as attractive a business as it used to be as a result.

The Markel people seemed much less worried about this, although they acknowledged it's an issue at the moment. The complaint is that hedge funds aren't as concerned with profitable underwriting because they basically value it as a cover for their asset management business. Markel pointed out that if this new capital generates negative or substandard returns, it will stop being so popular. He suggested "a major event," insurance-speak for a disaster, natural or otherwise, will cull the herd. "If we're right, they'll make substandard returns and disappear," he said.

Whitt put this more succinctly:

"One thing I've noticed: It appears God hates cheap reinsurance. He punishes it relentlessly."

Because reinsurance is 20 percent of Markel's business, the company has the flexibility to turn down business when it's priced poorly, as opposed to a 100 percent reinsurance business, which has no choice about participating in the market.

"We've got a 360-degree view of the best thing to do with money," Gayner said. "Reinsurance is not inherently a good business or a bad business. It's a tool. If it's not all you do, you can use it as appropriate."

Someone asked them to name the greatest threat to their business.

Markel started by saying, "I feel awfully good about our business," and it's a challenge to think of one big danger. In fact, he said, this may be the biggest danger. And then he used a word that wouldn't get by the Motley Fool profanity censor the last time I checked, so I'm going to do the dash thing: "We don't want to believe our own b---s--- all the time."

Waleski mentioned liquidity. She said they're in good shape and very conservative, but as CFO she is paid to worry about "a major event" combined with "a market event," which would be insurance-speak for a disaster, natural or man-made, and market crash at the same time.

Gayner mentioned monitoring the sorts of mistakes the company makes. "As Alan Kirshner says, it's OK to make mistakes at Markel, just don't keep making the same dumb-ass mistakes." He also said complacency can make you so happy with what you're doing that it's easy to say no to new risks and new things, which stifles innovation. "The success that breeds complacency is an extremely dangerous thing." He mentioned three people who don't mind telling him when he's wrong, among them Steve Markel and his wife, Susan, a chemical engineer by training who works for Markel as well. Gayner admitted he "can be a little thin-skinned" when Markel tells him he's making a mistake, but Markel has the useful trait of being critical when things are going well and supportive during the tough times.

There was a question about Fairfax India, a $1 billion fund to which Markel contributed $40 million poised to make investments in India. Markel said they like the prospects in India, but it's a relatively small investment.

An 8-year-old asked for advice. "I would say listen to your dad," Gayner said.

A mike was open so I took it and asked Gayner to provide some insight into the way his brain works as an equity investor. I pointed to several specific areas: his investment in Amazon, the poster child for mockery by value investors; his long-held position in Brookfield Asset Management, which has been criticized for its accounting; a larger number of equity positions (over 100) than Berkshire with a much smaller amount of money involved. And I asked him to clarify the percentage of investments devoted to equities.

It's hard to take notes and make eye contact with someone trying to answer your question at the same time, so most of this is paraphrased, but it just happened, so I'm still pretty clear on it, I think. I'm no accountant, so anybody else who was there should feel free to correct me if necessary.

First, he went into the percentage devoted to equities because I'd mentioned at least three percentages that represented different things or conditions. I'd mentioned 80 percent, the number he cited before the Alterra acquisition; 40 percent, the number he mentioned after the Alterra acquisition, and 22 percent, the number mentioned in the annual report.

The 22, he said, is the percentage of total investments, which includes collateralized insurance reserves and other things that would not be considered part of the investible portfolio. The 80 was the pre-Alterra high and remains the long-run target for the investment portfolio. The 40 included not only dilution of the equity portion from acquiring the Alterra fixed-income portfolio, but also losses in equity positions as

a result of the market crash of 2008-09. Currently the correct number is in the "mid- to high-50s," and stay tuned next week for the specific number when they report first quarter results.

He combined his answers to the Amazon and number of positions questions. The top 20 positions in the portfolio represent 70 percent of the value, he pointed out. "It's almost like a baseball organization," he said. Those top 20 names are the major league roster. The rest are the farm system, going from Class AAA to Class AA to Class A to Rookie League as the allocations decline.

He bought Amazon, he said, because "this is an important company" with which a very large percentage of Americans interact in some way. He bought it "to make myself think more deeply about it. I think more about a company if I own it than if I don't own it."

He doesn't exactly think of each company as its own distinct position. For example, he owns four companies that sell alcoholic beverages. "Is that four positions or one?" he asked. "Neither. Is it 1 1/2, 2 1/2?" He encouraged me to look at investments in similar companies, or companies in similar circumstances, collectively, or piled on top of one another.

On Brookfield, I had asked whether, as an accountant, he goes into the weeds on all the related-party transactions and other accounting maneuvers that have drawn criticism, or if he simply trusts Brookfield management since he knows them.

"I do know and trust those people," he said. When Steve Markel needed financing for some Markel project, it was a Brookfield sub that provided it, he said. And then Gayner harkened back to his answer on reinsurance about the virtues of a 360-degree view that doesn't tie you to any particular investment universe if it happens not to be a good deal at that time.

"The No. 1 reason I like Brookfield is they come to work looking at the whole world," he said.

The brunch meeting starts at 10 -- actually 9:55 this year -- and ends at noon so that investors and shareholders in town for the Berkshire meeting can make their flights home. But Gayner and the others stick around and speak with smaller groups for a bit afterward. So I joined the after-meeting scrum around Gayner and got a chance to follow up.

I asked him when he buys and then sells Amazon, as he did a couple of years ago, if that reflects a change in his thinking, a change in the company's performance, or something else. He said in that particular case it may have been that he bought it at 250 and watched it go to 500 and decided to take the cash because he really hasn't figured out the company yet and so doesn't know if he wants to own more of it or less of it.

So I asked him more generally when he invests in an Amazon or a Google, which Markel owns in a small position, how he evaluates such growth names from a value sensibility. He said a lot of what makes Amazon look so unattractive to traditional value investors is just accounting. If all the money it spends to build its brand was instead spent on plant and equipment, it would be depreciated over time, allowing more of its revenue to fall to the bottom line. Amazon expenses it all immediately, making it look worse from a profitability standpoint. He was clearly simplifying for a non-accountant, and said as much, but he suggested that he sometimes translates the accounting into a more traditional form in order to project cash and earnings going forward.

So anyway . . . it was satisfying to get him to address these things and I feel I have a better understanding of the way he thinks about them. He did tell me not to be surprised if Amazon shows up on Markel's

holdings list again, but he admitted again that he just hasn't figured them out yet.

When I resumed taking notes following the public portion of my exchange with Gayner, Steve Markel was being asked about Germany, much as Buffett and Munger were the day before. He noted that Markel has been an international company for only 10 years, so it has a lot to do to earn the sort of global reputation it has earned as a national company.

Gayner picked up on the idea of reputation, quoting a commercial real estate agent in Chicago who told him, "I don't remember everybody who paid me, but I guarantee I remember everybody who didn't."

"The best way to be trusted is to is to trust, to extend that," Gayner said. "Either it's reciprocated or it isn't and you move on."

There was a question about insurance in Florida, which allowed Steve Markel to explain the strange dynamics of hurricane country. If a fair rate is 100, he said, picking a round number out of the air, it will drop every year there is no major event. So, if you have a number of years without a big hurricane, as Florida has recently, the rate will drop as low as 50 or 40, which is not nearly enough to account for the actual risk. Immediately after a big hurricane, on the other hand, the rate will spike to maybe 120. "That's the place to write business," Markel said.

Gayner told the story of a turkey that is given food and water by its owner every day. Based on this treatment, the turkey decides the owner must love him. Gayner told the story from the view of the turkey. "He loves me!" Then, on Thanksgiving Day, the owner comes out and breaks its neck. "He didn't love me!"

As it applies to the insurance pricing dynamic Markel had just described, Gayner said the question for Markel is, "Are we the turkey here?"

There was a question about cyber security insurance in which the questioner rattled off all the parts of his business that Markel insures, then mistakenly called it Fairfax, damaging his attempt to curry favor. In any event, Whitt said fear of cyber attack is high and Markel gets a lot of inquiries about cyber security insurance, but has a hard time closing sales. "The area is still developing," he said. Whitt mentioned that hackers seem a step ahead of security and law enforcement, so it's dangerous. I'm guessing that also makes the insurance pricey, which may be why it's hard to close sales since it would be a new expense for many firms.

There was a question related to the discussion at the Berkshire meeting about 3G Capital, in which a shareholder criticized Berkshire's association with the private equity firm and Buffett and Munger defended it. Gayner basically repeated Buffett's and Munger's argument. "No business can stay in business . . . without earning some appropriate returns on capital. There's nothing untoward or unholy about that."

Markel differed slightly. "I happen to agree that the approach that Berkshire has with 3G is different from the approach they had" before, he said. In any case, Markel does not have the skill set to go into major reorganizations. "We won't be buying businesses that are distressed and need to be fixed," Markel said.

Gayner pushed back a little, pointing out that it's hard to find businesses that have no problems selling for reasonable prices, especially with the market awash in private equity. "As we gain skills and talents, we may indeed consider opportunities where we need to be more operational than we've been," he said.

So somebody else followed up by asking if Markel might partner with a 3G-like firm that had operational expertise. This produced one of Gayner's less transparent analogies. He asked how many people in the room had heard of Rambis, the least glamorous of the '80s Lakers who did the dirty work on the boards and let Magic Johnson and the crew do their Showtime thing. Gayner called him "my favorite NBA player of all time" and "a spectacular rebounder" who knew what his role was and hung around the boards to do it.

Berkshire, Gayner said, got the opportunities it got during the financial crisis, as well as the opportunities presented by 3G, because it was "hanging around the boards." People knew what it could do and found it when they needed it. This led to a downright philosophical observation about how much time it took Buffett to make the Bank of America deal.

"Either he made it in a minute or he made it in a lifetime," he said.

Someone from Venezuela asked about opportunities in Latin America. Nobody took the opportunity to make a joke about his home country, which I'm not sure Munger would have resisted. Whitt said Markel has relatively small Latin American operations at the moment. "It's incredibly competitive in Latin America right now," he said. Everybody wants in, so pricing isn't great. Steve Markel agreed, saying the company would like to do a lot more there, but margins are "skinny" at present.

Another investor allowed his child to ask a question. The boy asked what Markel's goal is.

"We want Markel to be one of the world's great companies," Gayner said. "It's a big dream."

With that, he thanked everybody for coming. Seemed like a good note to end on.

2015

To Our Business Partners

Here is our annual report for 2015, our 30th as a public company. Each and every year we provide you with an update on our recent financial results as well as our plans for the future. We're pleased to report another year of progress in building your company. As we said in the very first report, "we focus on customer needs and solving customer problems." That remains the case today. We just do it for many more people, in many more locations, with many more products and services.

In this report we will update you on our 2015 financial results and then tackle two questions facing us for 2016 and beyond, namely, "What is changing at Markel, and what remains the same?"

At Markel, as well as throughout all businesses, the pace of change continues to accelerate. As such, we continue to refocus our initiatives and actions to adapt and evolve appropriately to the changing business environment. With our longstanding commitment to continuous learning, we embrace the new tools of technology and analytic disciplines, to refine and improve our decisions. We are increasing speed and ease of use for our customers, and we are lowering the expense associated with doing so.

We also continue to enjoy a profound advantage in that we have one feature which remains the same despite the changing business landscape, namely our culture. Prior to Markel's public offering in 1986, we wrote the words of the "Markel Style" in an attempt to define and explain our culture. You will find the Style on the inside cover of this report, and on many plaques, documents, mementos, and items around the many locations where we operate. More importantly, you will find the spirit of the Markel Style embedded within the people of this organization.

Financial Highlights

(in millions, except per share data)	**2015**	2014	2013	2012	2011	2010	2009	2008	2007
Total operating revenues	**$ 5,370**	5,134	4,323	3,000	2,630	2,225	2,069	1,977	2,551
Gross written premiums	**$ 4,633**	4,806	3,920	2,514	2,291	1,982	1,906	2,213	2,359
Combined ratio	**89%**	95%	97%	97%	102%	97%	95%	99%	88%
Investment portfolio	**$ 18,181**	18,638	17,612	9,333	8,728	8,224	7,849	6,893	7,775
Portfolio per share	**$1,302.48**	1,334.89	1,259.26	969.23	907.20	846.24	799.34	702.34	780.84
Net income (loss) to shareholders	**$ 583**	321	281	253	142	267	202	(59)	406
Comprehensive income (loss) to shareholders	**$ 233**	936	459	504	252	431	591	(403)	337
Shareholders' equity	**$ 7,834**	7,595	6,674	3,889	3,388	3,172	2,774	2,181	2,641
Book value per share	**$ 561.23**	543.96	477.16	403.85	352.10	326.36	282.55	222.20	265.26
5-Year CAGR in book value per share [1]	**11%**	14%	17%	9%	9%	13%	11%	10%	18%

[1] CAGR—compound annual growth rate

We believe our culture as described in the Markel Style is timeless. Among other items, the Markel Style speaks of, "a commitment to success, hard work, a zealous pursuit of excellence, honesty, a sense of humor, quality" and other eternally valuable attributes. We believe that the principles described in the Markel Style will continue to reliably guide our decisions in 2016 and beyond just as they have in the past.

As always, all of the financial results and every single initiative that we discuss in this letter come from the skills, dedication, and hard work of the people of Markel. We thank our colleagues for their efforts, and we look forward to increased mutual success in 2016 and beyond. Thank you.

2015 Financial Results

To start, here are the headlines for 2015. We produced total revenues of $5.4 billion and comprehensive income of $232.7 million. The 5 Year Compound Annual Growth in Book Value per share was 11%.

In our insurance operations, gross written premiums declined to $4.6 billion in 2015 from $4.8 billion in 2014. While overall volumes declined, we earned record underwriting profits of $429.7 million in 2015 compared to $177.6 million in 2014 with a combined ratio for 2015 of 89% compared to 95% for 2014.

In our investment operations, we earned net investment income from interest and dividends of $353.2 million during 2015 compared to $363.2 million during 2014. We realized gains of $106.5 million in 2015 compared to $46.0 million in 2014. The change in unrealized gains in 2015 was ($457.6) million compared to $981.0 million in 2014. In total, investments produced a negative total return of (0.7%) compared to 7.4% a year ago.

In our Markel Ventures operations, revenues totaled $1.0 billion for 2015 compared to $838.1 million for 2014 and EBITDA for the year totaled $91.3 million compared to $81.3 million the year before.

We will expand our discussion of each of these factors through the course of the report.

2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995	**20-Year CAGR[1]**
$ 2,576	2,200	2,262	2,092	1,770	1,397	1,094	524	426	419	367	344	**15%**
$ 2,536	2,401	2,518	2,572	2,218	1,774	1,132	595	437	423	414	402	**13%**
87%	101%	96%	99%	103%	124%	114%	101%	98%	99%	100%	99%	**—**
$ 7,524	6,588	6,317	5,350	4,314	3,591	3,136	1,625	1,483	1,410	1,142	927	**16%**
$752.80	672.34	641.49	543.31	438.79	365.70	427.79	290.69	268.49	257.51	209.20	170.95	**11%**
$ 393	148	165	123	75	(126)	(28)	41	57	50	47	34	**15%**
$ 551	64	273	222	73	(77)	82	(40)	68	92	56	75	**6%**
$ 2,296	1,705	1,657	1,382	1,159	1,085	752	383	425	357	268	213	**20%**
$229.78	174.04	168.22	140.38	117.89	110.50	102.63	68.59	77.02	65.18	49.16	39.37	**14%**
16%	11%	20%	13%	13%	18%	21%	22%	23%	26%	26%	31%	**—**

As always, we include a 21 year recap of the financial results for your company in the table that accompanies this letter. Over time, this table illustrates a wonderful record of financial progress. As you examine the chart year by year, you can see that this record of multi-decade progress did not happen in a straight line. Some years were better than others. 2015, like many other years, contained both solid accomplishments and real challenges. We are familiar with that outcome and we remain optimistic about our ability to build on this wonderful long-term record.

2015 Insurance Operations

In 2015 we wrote $4.6 billion compared to $4.8 billion in 2014. As we've reported in previous years, the insurance market remains marked by intense competition. Despite that, we posted a combined ratio of 89%, our best underwriting ratio performance since 2007. Each and every division within our insurance operations produced an underwriting profit.

Our profitability this year benefitted from our longstanding practice of disciplined underwriting. We also enjoyed the good fortune of no major catastrophes.

In our U.S. Insurance segment we produced gross written premiums of $2.5 billion in both 2014 and 2015. However our combined ratio was an 89% this year compared to a 95% last year. This improved profitability is an outgrowth of our ongoing intense effort on the fundamentals of managing the disciplines of underwriting, marketing, claims and administration. Despite competitive overall conditions in the marketplace, all three divisions included in the U.S. Insurance segment contributed to this improved performance.

In our Markel Specialty division, led by Matt Parker, we wrote record premium volume and produced a better combined ratio than in 2014. During the year we unified the leadership across all departments within our specialty operations. The divison's record premium volume and improved profitability reflect our multi-year efforts to increase the consistency of our underwriting, marketing, and operational efforts.

Our Markel Wholesale division, led by Bryan Sanders, also performed admirably in challenging market circumstances. Excess and surplus offerings tend to experience the greatest changes in overall volumes as they respond to different insurance market environments.

As always, we focus on people, products, technology, and relationships. We work diligently through each of these dimensions to serve our key producers and clients. We continue to increase the ease and speed of quoting, binding, and transacting with Markel, and we expect to do so again in 2016 and beyond. We also continued to improve our internal efficiencies as marked by improvements in our expense ratio.

In our International Insurance segment, premium volume decreased slightly year over year due to competitive market conditions, however, as a result of our disciplined underwriting approach, we produced an 86% combined ratio in 2015 compared to a 93% in 2014 with improved results from both the Markel International division and the Global Insurance division.

Other 2015 accomplishments from our Markel International division, led by William Stovin, include successful efforts to meet the new Solvency II

regulatory requirements. This is a major accomplishment. Markel was among the first UK companies to gain this approval and it speaks to our internal control processes and respectful relationships with our regulators.

The Markel International division also continued to methodically develop opportunities in new locations. For example, we opened an office in Dubai during 2015. We also continue to see opportunities everywhere around the globe and we now have offices in Asia, Canada, Europe, North and South America, and Bermuda. Additionally, the Abbey Protection legal and professional services operation of Markel International that we acquired in 2014 continues to meet our expectations.

Our Global Insurance division, led by Britt Glisson, also faces highly competitive market conditions. Despite those headwinds, Britt and his team productively refined and focused their operation during the year. These efforts, along with the combination of lower catastrophe losses, exiting some previously unprofitable lines, and favorable development of prior year reserves, drove a big swing in the profitability.

The Reinsurance segment produced $965.4 million of gross premium volume in 2015 compared to $1.1 billion in 2014 and delivered a 90% combined ratio this year compared to a 96% combined ratio last year.

Our Global Reinsurance division, led by Jed Rhoads, continues to confront one of the most competitive aspects of the insurance marketplace. However, we maintained our unwavering discipline of underwriting profitability regardless of market conditions. We enjoy longstanding relationships with our reinsurance customers and they value our consistency and dependability.

Finally, we undertook a comprehensive review and consolidation of our claims operations in 2015. Under the leadership of Nick Conca, Hannah Purves, Mike Clancy and Alex Sardinia, we began to consolidate our claims processes to improve efficiencies in our claims handling for the benefit of our customers while reducing costs.

This effort marks a continuation of several multi-year initiatives that began in our underwriting divisions. Over the years, Markel acquired several insurance companies with distinct underwriting, marketing, sales, IT, and claims systems. Beginning with the One Markel initiative that was started in 2009 and continuing with the Alterra acquisition, we continue to unify these functions across the entirety of Markel.

In 2015, we increased the focus on the claims aspect of this effort and we are pleased with the outcome so far to streamline and improve upon our claims processes. The goal from this initiative, as is the case with every other effort at Markel, is to serve our customers in better and more efficient ways.

2015 Investment Operations

Overall investment market conditions remained dominated by low levels of interest rates and low overall returns worldwide during 2015. Markel's overall investment portfolio produced a positive return of 0.5% in local currency terms with equities down 2.5% and fixed income up 1.6%. Weakness in

foreign currencies versus the U.S. dollar reduced returns by (1.2%) to produce a net return of (0.7%).

In the face of these conditions we made several key decisions during the year.

First, we maintained our focus on the quality and strength of our balance sheet. Do not expect this to change. In 2015 that meant that we gradually built liquidity during the year with higher cash balances, the highest credit quality fixed income portfolio that we can assemble, and slightly lower holdings of equity securities as a percentage of total capital. We did all this, and at the same time worked to more closely match both the duration and currency profiles of our fixed income holdings to our insurance liabilities. We also worked to maximize the returns from our holdings by minimizing the costs of trading, taxes and management. This has been and continues to be a longstanding and unwavering effort.

Over many years we've discussed our process of selecting equity investments. To review, we follow a four part process of seeking profitable businesses with good returns on capital at modest leverage, with honest and talented managers, with reinvestment opportunities and capital discipline, at fair prices. Long-term readers of this report will recognize that this has been the case for decades.

As we followed this bottom up approach during the year we sold several longstanding holdings. We became concerned that the changing landscape of competitive conditions diminished our expectation for fundamental levels of profitability. As we elected to exit these holdings, we reinvested the proceeds at a slower rate. The combination of these factors increased our liquidity and conservatism of our balance sheet in 2015.

We continue to engage in our search for equity securities which meet our four part test and we fully expect to increase the percentage of equities in our portfolio in the future. We will remain patient as we search for specific opportunities to do so.

Fortunately, we've got good news to report on our fixed income portfolio. For many years, we've consistently taken every opportunity to invest in the highest quality government and municipal securities that we could find. We allowed our historical portfolio of corporate bonds to mature over time, and we also let the credit exposures we inherited through acquisitions diminish through normal maturities. These decisions to increase the credit quality of the portfolio served us well in 2015.

For the last several years we also operated with a shorter overall duration of the fixed income portfolio compared to the duration of our insurance liabilities. We did this to protect our balance sheet against the risk of higher interest rates.

Going forward, we will continue to maintain and build upon our high credit quality profile. During 2015 we also started the process of getting back to a more normal matching of duration between our insurance liabilities and our fixed income portfolio. We expect to maintain a more closely matched position going forward.

2015 Markel Ventures Operations

In 2015, we posted revenues of $1.0 billion compared to $838.1 million in the previous year. EBITDA totaled $91.3 million in 2015 compared to $81.3 million in 2014. As was the case in 2014, the reported EBITDA included several items which we believe would be useful to highlight in order to increase understanding.

Specifically, in 2014 EBITDA from Markel Ventures totaled $81.3 million after a write-off of goodwill of $13.7 million. As we've written in the past, each acquisition within Markel Ventures stands as a separate reporting unit and we evaluate goodwill for each unit rather than in aggregate. Unfortunately, we did not experience the improvement we expected in 2015 in our Diamond Healthcare unit and we wrote off the remaining goodwill from that acquisition of $14.9 million. Make no mistake; this has been a challenging acquisition and we've now fully written off all associated goodwill.

At the same time, we've enjoyed wonderful and better than expected results from our acquisition of Cottrell. As is often the case, that acquisition included an earn-out provision calculated over a multi-year period. Under current accounting treatments, that earn-out in excess of our original expectations was treated as a period expense for the 2015 income statement as opposed to being included in the capital accounts of the balance sheet. The earn-out increase caused by the better than expected results at Cottrell totaled $31.2 million.

Ironically, the bad news at Diamond and the good news at Cottrell both got reported in the same way, as deductions from EBITDA in 2015. Those items which totaled $46.1 million will not repeat themselves in 2016 and beyond. The goodwill balance at Diamond now stands at zero, and the earn-out period at Cottrell is complete.

In aggregate, we are pleased with the overall progress and economics from our Markel Ventures holdings. We've enjoyed several years of profitable results from the majority of the Ventures companies. We've also learned some painful lessons along the way that should help us with future capital allocation and management decisions.

Finally, at year-end, we announced the acquisition of a majority interest in CapTech, a management consulting firm based in Richmond, Virginia that helps to bridge the gap between business and technology. We've known Sandy Williamson and Slaughter Fitz-Hugh, the founders of CapTech, for many years, as well as many of the associates of the firm and the quality of their work.

For the last two years, overall market conditions made it tough for us to continue to expand our operations through acquisitions. Fortunately, in the case of CapTech, the founders knew us well, and valued our culture. They knew we valued in words and deeds the efforts of creative individuals working hard to solve problems for their clients and building a good business while doing so. As such, we mutually agreed upon a majority investment by Markel. These negotiations took place principal to principal.

CapTech assists a roster of successful businesses with selecting and implementing the never ending flow of new technological systems and processes. In addition to providing a permanent platform for CapTech to continue to serve their clients and to keep growing,

we think it will be valuable to other operations at Markel to add this knowledge base to our existing efforts in this area.

In aggregate, we produced very good results at Markel Ventures. We enjoyed record results from our cyclical transportation related businesses. Our less cyclical industrial and housing businesses performed as expected.

Question #1- What is changing at Markel?

As we stated in the opening paragraphs of this letter, the world is changing fast and we are too.

Internally, every change we make is done with the goal of serving our customers better, faster and cheaper. We will do so by continuing to implement and refine our business processes with the latest tools from the disciplines of analytics, technology, communications, and business process systems. At the same time we will retain and build upon the enduring cultural values which bind us together as a team.

Internally, we continue to build upon and improve our successful data warehouse project led by Brad Kiscaden and Mike Scyphers. The data warehouse provides our underwriters, actuaries, and financial professionals, with insights and tools, to improve our day-to-day decisions. During 2015, we also hired Reid Colson to lead our analytics department. We fully embrace the tools of big data and we are using them to increase the speed, granularity, and effectiveness, of daily decision making throughout Markel.

This effort to increase our operational efficiency applies to each and every product, in each and every location, with each and every customer. We are increasing our ability to quickly serve our customers and respond to changing business conditions.

We expect this effort to continue to expand in 2016 and beyond. This is an unending task as the tools and techniques of big data continue to increase in affordability and utility. Simply put, information is king. Every transaction and data point continues to become more robust and informative about what the ultimate risk and outcome will be. We will continue to increase the pace at which we are utilizing these new tools in order to make better, faster, and cheaper decisions.

Another internal development regards the ongoing growth and development of our people. As one example, over the last decade we've periodically conducted an associate engagement process. We use a third party to provide an anonymous feedback mechanism to gain a sense of the issues facing our colleagues and allow them to freely express positive and negative views. Fortunately, we learned that our people profess deep loyalty to Markel and truly value and live our culture on a day-to-day basis. We also learned that they wished for increased training opportunities. We've responded by increasing training options with a greater emphasis on the acquisition of specific skills and techniques as opposed to credentials. This effort will continue.

We continue to grow at Markel. That means our people get to face new and bigger responsibilities. While the names and faces of many of our associates

may remain unchanged, they continue to learn and grow and meet newer and bigger challenges. This remains an exciting feature which helps us to attract and retain talented associates.

Externally, we acquired the assets of CATCo during 2015. CATCo, led by Tony Belisle, was an innovator in the creation of Insurance Linked Securities. These securities mark another development in the shifting nature of how capital can be applied to insurance risks. Traditionally, reinsurance was provided by companies with pools of capital that backed general pools of insurance risks. While that model still remains and likely will continue to do so, it is being augmented by techniques and systems that attempt to closely align specific capital and specific risks.

CATCo does exactly that by arranging and managing reinsurance protection for specifically defined risks as well as sourcing and managing capital that is dedicated to this aspect of the reinsurance market. CATCo has already been successful in accomplishing this task. As part of Markel, Markel CATCo will be able to market their products and services in the U.S. as compared to their previous focus on non-U.S. markets. Additionally, with CATCo as part of Markel, we expect to see more global reinsurance opportunities which we can elect to participate in and deploy available capital.

Question #2- What remains the same?

Thirty years ago in the first annual report we described Markel as a company with a strategy of specialization and diversification that would apply proven successful principles to grow over time at an ambitious rate. We also reported good results in several divisions of Markel at the time, and one area with disappointing performance.

That same language applies in 2015.

As we said at the beginning of this report, in 2015 we enjoyed excellent profitability in our insurance operations as well as meaningful growth and profitability in our Markel Ventures companies. In our investment operations our returns were below our historical levels and reflected the challenging environment of low interest rates, low overall investment returns, and rapid technological change.

This circumstance is nothing new. Insurance and investment markets cycle back and forth between strong and weak overall results, and technology is always changing. Our record has been built over decades of this reality.

One way in which we've successfully maneuvered through these cycles and technological change is that from the very beginning Markel operated with a strategy of specialization and diversification. Specialization creates the opportunity to develop deep expertise about specific areas. This increases the ability to effectively serve our customers year after year and to build and maintain deep and long lasting relationships.

Diversification serves a dual purpose of allowing us to continue to adapt and grow as different markets change over time and to protect our financial position from the vagaries of any one product or area.

2015 demonstrates the unchanging value of that systematic design as we both enjoyed meaningful profitability from our insurance and Markel Ventures operations while investment returns experienced challenges. At the same time, we pursued internal growth and development across our existing operations and we executed the acquisitions of CATCo and CapTech.

The fundamental business architecture of Markel remains the same. It is a proven and tested model with durability and resilience.

Continuous Learning

As it says in the Markel Style we've been "striving for a better way" even before we went public in 1986 and we continue to do so today. Continuous learning is how we do this.

Technology and digitalization changes the tools used in this task, not the task itself.

There is no more important idea than that of continuous learning. The tools and methods to conduct business continue to change. As such, we need to rapidly learn and adapt. We need to use the new tools in the realm of analytics, communication, technology, and learning.

We are dedicated to this task throughout this organization and will act to continuously learn and refresh and renew our techniques and disciplines.

While the rate of change issue seems relentless and instantaneous there is one seemingly contradictory factor at work in the middle of this change, namely, the value of a long-term time horizon.

Making decisions tends to be easier and more effective with a long-term time horizon. We frame our choices in the context of seeking the best decisions for the long-term interest of the Markel Corporation. With this frame of mind, we are not trying to artificially make a decision that might appear better for a short time but carry long-term disadvantages. We try our best to measure decisions over appropriate long-term horizons that promote accountability and responsibility, but at the same time recognize that good decisions often take time to achieve the desired effects.

Our incentive compensation systems, most of which measure results over multiple years, work to reinforce and align the priority of long-term economic rationality.

Another factor which hasn't changed at Markel is our team orientation. As we said in the Markel Style, "we are willing to put aside individual concerns in the spirit of teamwork to achieve success." This remains a cultural hallmark of Markel.

In each and every aspect of Markel's insurance, investment, and ventures operations we faced competitive market conditions in 2015. We expect that will remain the case in 2016 and beyond. From a macroeconomic standpoint the ongoing era of very low interest rates has manifested itself in a business environment of low rates of return on capital throughout almost all industries and sectors.

The good news is that in this environment, superior talent and skilled execution will continue to produce the best results possible. That remains true regardless of the overall level of interest rates and investment returns. We are well served at Markel by our focus on

the skills, dedication, and ongoing learning commitment of everyone in this organization.

Diversification and specialization also remain constant features at Markel. The good news about diversification is that it allows us to expand and contract certain lines of business depending on the level of opportunity. This is true in various lines and areas of insurance as well as in the investment portfolio, and for the Markel Ventures operations. We have an array of businesses in this company that produce capital and we can reinvest that capital opportunistically across a diverse set of opportunities.

Specialization is important in that it tends to provide both the basis of expertise and the ability to add value and serve our customers. We have a set of deep subject matter experts across many aspects of business. Sometimes they are underwriters, claims professionals, or other insurance professionals who bring true value-added knowledge to their clients. Sometimes, our diverse experts reside within the companies we hold in our investment portfolio. Sometimes, our experts reside inside our distinct and different Markel Ventures set of companies. The great news is that within our many specialized business operations we enjoy a roster of some of the world's best experts. As is always the case, the best experts have the most chance of profitably serving our customers and creating returns for us as Markel shareholders.

Finally, we continue to search for new business opportunities, and new people, in our insurance, investment, and ventures operations. We've acquired new companies over the years, opened new offices and expanded into new locations all around the world. Talented people join and stay with Markel due to both our culture and opportunities to keep learning and growing.

We embrace the new world of faster paced analytics and decisions and the task of increasing our skills to adapt to and shape the future. We also take comfort in the knowledge that talented people with all of the necessary skills will flourish within an enduring culture which celebrates and rewards their efforts in a consistent and meaningful way.

We look forward to reporting our progress to you next year and we thank you for your commitment to the longstanding success of Markel.

Alan I. Kirshner, *Executive Chairman*

Anthony F. Markel, *Vice Chairman*

Steven A. Markel, *Vice Chairman*

Thomas S. Gayner, *Co-Chief Executive Officer*

Richard R. Whitt, III, *Co-Chief Executive Officer*

F. Michael Crowley, *President*

Markel 2016

Steve Markel, Tom Gayner, Richie Whitt (Insurance Operations), Anne Waleski (CFO)

David Winters - Can you grow organically, or do you need to do deals to go from $1k to $2k.

TG - Culture of organization has done a terrific job. Markel Ventures initially labeled inorganic growth. But, over time as it belongs to organization it leads to organic growth. Same for people brought in that do new things. If you're not part of the Markel style, you are unlikely to stay as part of the organization and clarity of the message.

RW - Mix of biz is always changing. Have to be reinventing yourself. Lines of biz change over time. There are areas that you can achieve organic growth. You have to grow that way to achieve success.

Q - What are your criteria for purchasing companies and do they change over time?

TG - Criteria apply to purchasing stock, new biz, insurance biz

- Profitable with good returns on capital. For biz to last and endure it has to be profitable, have enough money to pay its bills, employees, etc. or it will go away. Some legitimate ventures of investing do not require this (such as VC), but that is not what MKL does. Wants to invest in biz that do things for rather than to their customers. Also don't like too much debt
- Biz run by people with equal measures of talent and integrity. Need to be honest and fair in their dealings with customers, employees and shareholders.

- Best biz in world is one that makes good returns on capital and can keep investing it and earning good returns. Have good capital discipline.
- Affordable price.

SM - For MKL, those four lenses are part of their DNA. Unlikely to venture too far from those four tenets. There may, however, be changes in knowledge base over time. We may miss some things, but maintaining focus on them helps eliminate problems.

Q - Views on compensation and structure of incentives and how they are aligned with how they do things.

AW - Incentives are really important. It is true that you get what you invent without question. You can underestimate how much you can get through incentive comp. Thinking about tying people to their performance and performance of the organization. Had historically emphasized individual performance. Gave people who aren't underwriters a people of the company to connect to performance of company.

RW - Underwriting grid. Critical to philosophy and model is to generate consistent underwriting profits in order to make model work. Have capital models to set the pricing. Maintain float. Pay out over time. Each person ends up with a bank (relates to profit over time). Helps increase retention. If results deteriorate, company can also recoup overpayment of compensation over time. Added growth incentive (after underwriting profit is generated) in order to help improve growth of underwriting profit.

SM - Importance of making incentives based on long- rather than short-term results. Want to encourage to think long-term and build wealth.

TG - Markel Ventures. Have people think like owners. Share in profitability of acquired businesses. Get people to think that if this was your money what would you do. Recall, however, that money is not the be all and end all. Really want there to be some element that goes beyond money. Recognition, being part of a team and a culture.

Q - Painful lessons that have been learned along the way.

TG - At MKL, it's ok to make mistakes. Just don't keep making the same ones. None of us are smart enough to not make some mistakes along the way. Try things figure out what you should do more of and what you should not do.

Markel Ventures. Don't always get it right as far as the four criteria go. Learned to have more sensitivity around reinvestment opts for the biz. Management assessment is not always spot on. Have learned it is an entirely diff matter to buy a biz that is already operating to scale, has a team, bench, succession process. Much different than a one-man operation. Have to have more confidence to go with the "one" person show. To say that this hasn't worked as well as you hoped does not mean you stop. You put the gear on and go back to it tomorrow. Try to improve.

RW - Terra Nova acquisition. In moment it was tough, considerable effort required to get it going in right direction. Now it is 1/3 of operations and extremely profitable. Let's learn lessons from this deal and do next one better. Created ability to grow outside the US.

Q - Equity port has provided a tailwind. 125 positions, with bulk in top 10. How do you weigh incremental returns from top positions vs the tax consequences of selling if you think the future performance might be bite served by selling and reinvesting in something else.

TG - Having a big gain is a great problem. May the lord bless us with more of this problem. Does the math. Figures out the tax cost and how much you have to invest in next idea. How much do I have to earn on new idea to weigh and balance that tradeoff. Something they look at all the time. As trajectory levels out, it can increasingly make sense to sell, recognize the gain and move on. Paying a big tax bill is far from the worst thing in the world.

SM - Having large gain and deferred tax is a positive. Find investments worthy of a 5, 10 15 or forever holding period is important. Not going to sell over a rough quarter or two. Will ride it through as long as believe in the long-term prognosis.

Q - Reinsurance biz (WB and CM) don't see it as being that attractive. What did Alterra bring and what do you see going forward.

RW - BRK comments not that surprising. MKL Re writes about 20% of MKL biz (about $1B of premiums). Next number of years, all things being equal, will be tough for reinsurance. Like biz for the long term. Want to continue to be in reinsurance biz. One of great things about it is that there is not a lot of overhead to it. Sitting on hands and not writing a lot of biz or not writing biz is low opportunity cost. Option of having the biz for the long term is an option worth having. For example, you won't see BRK getting out of reinsurance. Stay for the long term may just have to ride the market down for next few years.

SM - WB comments about reinsurance are a little bit unique to BRK. Few companies can say no to reinsurance opts the way that BRK can. There is more capacity in market, so reinsurers now can go to broker and get it placed with 10 companies. Size of BRK biz and what it can take on is different than for others such as MKL; I.e., BRK niche has gotten a lot smaller.

TG - A pancake no matter how thin has two sides. If you had all the money in world and were immensely capitalized would you say good or bad things about it... People hate volatility. Make point of wanting efficient market, etc. There is a strong set of buyers looking to damp down volatility. Reinsurance is volatility reinforcement machine. There is cyclicality to the biz. It will, however, be around for a long time. You can live through the fallow period with very low costs. Have to hang in to do more of it when it is appropriate. It is not quite as bad as you think it is.

Q - How are you using reinsurance given lower rates and lowering own retention ratios.

RW - Want people to be thinking about underwriting profits all the time. Try hard not to game reinsurance. Very strong temptation that as pricing goes down to buy a lot more. Want people focused on generating underwriting profit even with lower premium/volume.

SM - One problem with some companies that try to use reinsurance to manage P&L and operating results, is they are trading reinsurance income for future profits. Sometimes cash can be used in a negative way. Goal is to be there tomorrow and get a fair shake out of the deal. Use less, make money and be there tomorrow.

TG - Want everybody you are doing biz with to feel good about doing biz with you. That is what makes the biz. Quicker to pay people that have provided you good reinsurance biz. Don't get into temptation of buying good reinsurance too cheap.

Q - Why should investors pick MKL over the competition.

TG - I'll bet MKL isn't the only stock you own, and you may own some of our peers as well (as does MKL). As long as you have

people that want to be profitable, then you can compete. The problem comes when you have companies that do not look to make a profit.

Q - Is it rational to be a family company?

TG - Yes. Considers himself part of the MKL company. A public company that is privately traded. Like the sense of values implied with we're a family.

RW - Treating associates, customers, and channel partners the way you want to be treated is part of the culture of being a family company and provides competitive advantage.

Q - Insurance side - What is your look at combined ratio, free float, Are you confident combined ratio will stay positive in low interest rate environ

RW - Headwinds to combined ratio from competitive market. Zero interest rate world makes it harder to get to kind of returns they want. Don't see market becoming less competitive until industry starts to report combined ratios over 100.

AW - Recognizing need for lower combined ratio also impacted by incentive comp. Have to make sure there is a match.

SM - Sophisticated analysis of loan loss reserves has led to a lot more discipline in the industry.

TG - Mix between fixed income, equities, etc. Have to have enough fixed income to collateralize the insurance liabilities. Think about the mix beyond that by focusing on where you get the best returns.

Q - Do you worry about DIS succession plan?

TG - Biz that does require great leader. Mistake he made in DIS, DIS is an example of mistake of omission, which are normally bigger than those of commission. It relates to succession issue after Walt left company and Michael Eisner took his place. The systems and culture they have put in place will likely need to next CEO being viewed as having done a good job. If he doesn't, then they will find someone else who can. Believes DIS is as far along the path as anyone he can think of systematizing creativity. DIS is one of largest holdings and expects it to remain that way.

Q - Takeaways of panel from yesterday's BRK meeting.

AW - You go to church to reinforce what you already know and think about something different. Spent time watching WB and CM and thinking about amount of energy they muster up every year to do that as well as the related passion.

RW - Their steel bladders as men of their age. Liked chart of operating earnings and related growth over the last 20 years. Ability to continue to build BRK operating earnings power something that MKL is trying to do.

TG - Sense of humor. Not just about a joke intending to get a giggle. They are teachers. They enjoy the benefits that come from being generous. They are meant to teach you a point. Communication, making a point in a vivid way that you can remember.

SM - Occurs to him that MKL Ventures needs to buy something to put on the dais for them to eat. References to personal values inculcated into running their biz. Personal values and corporate values should mesh and serve as important guideposts in running your biz.

Q - How MKL leadership influences MV acquisitions to make sure that they become better companies after joining MKL.

TG - AMF Bakery acquisition - Looked at F/S, Said this is a good biz with bad balance sheet, constraining the biz. Creates a constraint in terms of running the biz and dealing with customers. MKL reduced the leverage. Allows you to take care of customer and make things right. Provide the equipment that makes things work. Helps make the biz better after joining MKL.

Q - Transition to achieving high returns on larger asset base.

TG - Trying to keep size under control. Will do best they can. Different companies have different returns at different stages. Thinks returns will make sense to shareholders. Can't control results only process.

Q - TG Google Talk (look for this). Change from looking at 52-week low to 52-week high list for investment ideas.

TG - Old set of competitive advantages applied to new set of companies. There is not a way back machine only going forward. There are some winner take all markets that exist. Created some sense of natural monopoly. Oftentimes lead by 30-40 year old founders. Could retain that leadership for a long time. Gives biz much more long-term viability. Giving more consideration to adding to such companies. Should they be wrong, they will adjust and reallocate that capital elsewhere

Q - MV. Why would companies choose Markel Ventures over other suitors?

TG - Private equity has a lot of money behind it. Have done fewer of those deals. Only one in last year. MKL was ultimately chosen

because company ultimately decided it would be better to be part of MKL than stay outside. Relationships and strategic issues that made sense to both. There may be different environs here having additional money may be more or less important. Will do all they can to have money when others have less or none.

Q - RLI Corp holdings - fair value determination.

TG - Company they admire and have held for long time. Won't provide specifics.

Q - Colfax.

TG - Director and can't comment. Has deep respect for people that run that company.

Q - How do you value quant side of the company?

TG - PV of any company is NPV of net cash flows it will produce over time. What are expectations re: cash it will produce over time. What does it cost to buy it, what will it be worth.

Q - View on looking at synergies or non-synergies.

RW - Strategy for first several decades was to buy companies and allow them to be run pretty entrepreneurially for several decades. Very decentralized. Over time it became more difficult to scale. More centralized in terms of shared services, divisions. Try to provide a lot of autonomy to compete in those markets.

TG - Many functions on insurance side have been centralized such as accounting. On venture side, slightly different. Several biz have nothing to do with one another. It is, however, culturally acceptable for those biz to be run independently without connection to other biz. But incentive comp and culture should be in line with MKL

overall philosophy. Their connections to market in different ways will allow for further expansion over time.

Q - DIS - concerns about ESPN. What would it take for GOOG, FB, AMZN to be bigger.

TG - Do not have sports marketplace to itself the way it once did, but it still might be pretty good. Even with those fundamental challenges, If others continue to appreciate, they will grow over time. If they continue to perform, they will increase size.

Q - Biz book recommendation. Valeant thoughts

TG - No comment on Valeant. Book - Millard Fillmore biography. Was much better president than many give him credit for.

Q - Valuing MKL. Returns on capital. ROE five-year average 8%, trading at 1.5x book.

TG - ROE number is probably wrong. Reported ROE over 50 years does not recognize unrealized gains on securities. There is more there and ROE is understated economically. Accounting info only gives you insight.. Some analysts include realized and unrealized gains. Others do not. Agree with CM that as you get the greatest understanding of what the true ROE is, you get the best understanding of what true growth of capital will be. Look at 10 year history (if not longer) and it should provide some guidance as to what may happen going forward.

Q - What do you do with companies that don't have the 10-year history discussed in previous question.

TG - Admit you don't know. You guess. Every day as new info comes in you update your outlook/estimates. Those companies have a lot of cash that came from fundamental operation of the biz itself.

Worry about it every single day and adjust for new information. Challenge of scaling a biz versus operating one at scale. What is a rational thoughtful way to allocate capital starting today. Under that basis, they hold companies such as GOOG, AMZN

Q -

TG - Biz at scale, parts of biz and product line are not at fast growth. The biz have done all they can do and have 100% market share leads to paying different price than you would get for biz with more growth opportunities.

Q - How do you reassess moat of a company you have held for awhile

TG - General example - world changes. You go to work every day with some degree of paranoia over whether or not it will still be good today. Take nothing for granted.

Q - What is your opinion on Fairfax's put positions?

SM - Prem is very smart guy. Fairfax is very smart guy. Need to ask Prem.

Q - Regulatory constraints investing in fixed income versus equities.

TG - BRK follows and applies same regs as everyone else. But, given their size they have a lot more room to apply equity holdings within their portfolio.

Q - Next possible acquisition

AW - Everyone is looking but increasing profitability and efficiency of what they already own as well. Have applied what they have learned to recent acq's allowing for faster integration of Alterra, e.g.

RW - Have been busy doing smaller deals adding to their capabilities. Feels as good about MV and MKL as ever has. What is the best opportunity. Buying something or building internally. May not always be buy.

SM - Have gotten good at doing acq's. Expect more over time.

2016

To Our Business Partners

Greetings, here is our annual report for 2016. Our long term goal at Markel is to build one of the world's great companies. As the comedian Steven Wright once proclaimed, "My goal is to live forever, and, so far so good." We're delighted to report to you that, "so far so good" describes our progress towards our goal in 2016.

Each year in the course of this report, we share with you some details about the year that was, as well as some of our hopes and dreams for the future. While we necessarily break down our results in the normal pattern of yearly increments, we don't think about Markel in annual terms. We think about your company in two distinct yet completely connected time horizons, namely, *forever* and *right now*.

Those two time frames guide our actions. We believe that Markel remains unique among most publicly traded companies in emphasizing the *forever* time horizon as much as we do. That is an immense competitive advantage for us as we continue to navigate into an always uncertain future that continues to change at faster and faster rates.

We won't sugar coat it. Business, (and life) these days, resembles an all-out, full sprint, winner take all race, to adapt to the changes wrought by technology. We must continuously learn, and adapt to new conditions, adopt new technological tools, abandon obsolete business practices and systems, find new markets, develop new products, acquire new businesses, and succeed at every other challenge you can think of to continue to build Markel.

We mean to do so.

Ironically, we are served immensely well in this task by our dual time horizon culture. The emphasis on *right now* means we need to make appropriate changes and adapt to this way of doing business **right now**! There is no time for cherishing old ways and reminiscing about an idyllic past. (In point of fact, the past was never idyllic; it is just falsely remembered that way

Financial Highlights

(in millions, except per share data)	**2016**	2015	2014	2013	2012	2011	2010	2009	2008
Total operating revenues	**$ 5,612**	5,370	5,134	4,323	3,000	2,630	2,225	2,069	1,977
Gross written premiums	**$ 4,797**	4,633	4,806	3,920	2,514	2,291	1,982	1,906	2,213
Combined ratio	**92%**	89%	95%	97%	97%	102%	97%	95%	99%
Investment portfolio	**$ 19,059**	18,181	18,638	17,612	9,333	8,728	8,224	7,849	6,893
Portfolio per share	**$1,365.72**	1,302.48	1,334.89	1,259.26	969.23	907.20	846.24	799.34	702.34
Net income (loss) to shareholders	**$ 456**	583	321	281	253	142	267	202	(59)
Comprehensive income (loss) to shareholders	**$ 667**	233	936	459	504	252	431	591	(403)
Shareholders' equity	**$ 8,461**	7,834	7,595	6,674	3,889	3,388	3,172	2,774	2,181
Book value per share	**$ 606.30**	561.23	543.96	477.16	403.85	352.10	326.36	282.55	222.20
5-Year CAGR in book value per share [1]	**11%**	11%	14%	17%	9%	9%	13%	11%	10%

[1] CAGR — compound annual growth rate

because we survived it.) In prior eras the joke was that between faster, better, and cheaper, you could pick any two. Now, that is no longer the case. We need to be able to provide all three.

In the midst of this urgency, we have a profound competitive advantage. Namely, we think about each of the *right now* decisions in the context of *forever*. We're not making decisions for the expediency of getting through one day. We are thinking about them in the context of what is the best decision we can make *today* in order to build the long term durability and profitability of the Markel Corporation *forever*.

We think that very few organizations enjoy this profoundly clear mission and degrees of operational freedom to pursue this goal.

The only reason we remain free to do so is that you, our shareholders, have placed an immense amount of trust in us. We've acted in your best interests over decades, and our record of financial success helps to demonstrate your wisdom in allowing us to do so.

Thank you.

We will continue to do our best to earn this unique level of trust and support.

Turning to the results of 2016, you can think about three distinct yet interconnected economic engines of activity within Markel as you review these financial statements. Those engines are the three I's, Insurance, Investments, and Industrials (Markel Ventures).

As is always the case, the language of U.S. GAAP accounting strives to communicate the economic results of the underlying activities. In the course of this letter, we'll talk about those results as U.S. GAAP would have us present them. We'll also talk about qualitative factors which we hope provide an even greater understanding of where our conditions may be better than what the raw numbers would show, and some areas where we might not be doing as well as it would seem at first glance.

As managers of this business, this is how we think. Numbers provide just the beginning steps on the path to understanding. We want to go further and more fully comprehend the conditions and circumstances our businesses face. We believe that the more we understand, the better our decisions are likely to be.

2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	**20-Year CAGR[1]**
$ 2,551	2,576	2,200	2,262	2,092	1,770	1,397	1,094	524	426	419	367	**15%**
$ 2,359	2,536	2,401	2,518	2,572	2,218	1,774	1,132	595	437	423	414	**13%**
88%	87%	101%	96%	99%	103%	124%	114%	101%	98%	99%	100%	**—**
$ 7,775	7,524	6,588	6,317	5,350	4,314	3,591	3,136	1,625	1,483	1,410	1,142	**15%**
$780.84	752.80	672.34	641.49	543.31	438.79	365.70	427.79	290.69	268.49	257.51	209.20	**10%**
$ 406	393	148	165	123	75	(126)	(28)	41	57	50	47	**12%**
$ 337	551	64	273	222	73	(77)	82	(40)	68	92	56	**13%**
$ 2,641	2,296	1,705	1,657	1,382	1,159	1,085	752	383	425	357	268	**19%**
$265.26	229.78	174.04	168.22	140.38	117.89	110.50	102.63	68.59	77.02	65.18	49.16	**13%**
18%	16%	11%	20%	13%	13%	18%	21%	22%	23%	26%	26%	**—**

This sort of commentary about the numbers is what we would ask from you if our roles were reversed. We think that you as the shareholders and associates of this organization are entitled to the fullest possible communication we can provide in order to understand your ongoing decision to partner with us at Markel.

2016 in Review

In aggregate total revenues grew to $5.6 billion in 2016 compared to $5.4 billion in 2015. We earned underwriting profits of $316.5 million versus $429.7 million with a combined ratio of 92% versus 89% the prior year. Net investment income for 2016 was $373.2 million versus $353.2 million, realized gains were $65.1 million versus $106.5 million, unrealized gains were $342.1 million compared to $(457.6 million), and the EBITDA of Markel Ventures grew to $165.1 million versus $91.3 million.

These sum up to comprehensive income of $667.0 million versus $232.7 million and growth in book value per share of 8% for 2016 to $606.30 from $561.23. We are pleased but not satisfied with this aggregate result and economic progress amidst the low overall returns available in current financial markets.

More importantly, our raw 5 year growth rate in book value per share stands at 11%. We measure ourselves on this rolling 5 year metric in order to assist us in thinking about longer term measures of performance. The 5 year time frame is our attempt to create a period of accountability that allows us to absorb normal, short term volatility, yet remain accountable to producing appropriate returns on your capital over reasonable periods of time.

For compensation purposes we adjust the 5 year growth number to account for share repurchases and issuances and back them out of the calculation. We do this to assure that we only pay ourselves for changes in the underlying economic value of Markel, and not for capital market activities.

As always, we present in the first part of this letter a table which shows our key financial statistics, year by year, over the last 21 years. We do this every year, and we think it demonstrates our commitment to long term thinking and accomplishment. Year by year you see the revenues, earnings, investment results and overall returns from your company. Over time, you can see the excellent long term pattern of financial results which validate our approach and provide the foundation for the future of our customers and clients, associates, and shareholders.

Engine #1- Insurance

In 2016 we wrote total insurance premiums of $4.8 billion versus $4.6 billion, an increase of 4% over the prior year. We produced an underwriting profit of $316.5 million versus $429.7 million and our combined ratio ended the year at 92% versus 89% in 2015.

Conditions across the insurance market worldwide remained brutally competitive. That is true in every product across the board. Despite the ongoing competitive nature of insurance markets we produced an underwriting profit as demonstrated by the combined ratio of 92%. We've been profitable on an underwriting basis in 15 of the 21 years shown on this chart and we hope that provides you with a tangible sense of how much we mean it when we say that we are dedicated to making an underwriting profit. We will continue to exercise discipline, and walk away from insurance risks that in our opinion carry a likelihood of underwriting losses.

We reinforce this focus with consistent incentive compensation practices which provide extra

compensation if and only if our insurance operations produce an underwriting profit. No one at Markel gets paid to produce business that we expect to be unprofitable.

As you know, the combined ratio gets its name because it combines two distinct items, the loss ratio, and the expense ratio. In order to produce an acceptable total combined ratio we continue to focus on both aspects in order to produce an acceptable total. Much of what is changing at Markel can be thought of as our attempts to address each of these components.

For instance, part of our growing activities in big data, data analytics, predictive modeling, and other rapidly changing dimensions of technology, relate to improving our loss ratio. At its most basic level, getting better at "data analytics" means that we know more about our customers, and the risks associated with insuring them.

The tools of technology increasingly allow us to analyze and better understand more factors that cause losses. With this increased knowledge and understanding, we can serve policyholders by helping them to reduce risks and we can more accurately price and select the risks we assume on their behalf.

As one small example, our data analytics team partnered with the Wholesale division to create an express renewal process that enabled us to offer automatic renewals to existing policyholders. The underwriting decision can be made at a portfolio level rather than policy by policy with this approach. This improves the customer experience by simplifying the process, and lowers expenses for everyone.

All of this "big data" enabled knowledge allows us to lower the overall cost of risks for our customers and for ourselves. This is a win-win scenario that is consistent with the goal of building one of the world's great businesses by lowering the overall cost of risk in a systemic fashion. We believe a great company does things *for* its customers rather than *to* its customers and this stands as a good example of this belief in action.

Similarly, we continue to focus on reducing the expense ratio. Our aggregate expense levels remain stubbornly high, and we need to lower the expense ratio to remain competitive. Just as is the case with using technology to improve our decision making regarding underwriting decisions, marketing activities, and ultimate claims outcomes, we need to continue to accelerate the use of technology to improve our operational efficiency.

We confess that we wrote these sorts of words repeatedly over the last several years. We write them again because we've not gained sufficient traction against this goal and we need to do better. Increased costs of regulatory compliance, information technology, accounting and finance, human resource activities and general administrative activities along with the associated costs of personnel in all of these areas keep raising the costs of doing business.

We as leaders of the overall business, and each of the heads of these areas, are keenly aware of the need to increase efficiency and lower expenses right now. Despite all of the pressures and difficulties in achieving this goal, we hope to report better news to you in 2017 and beyond. Please rest assured that we are not resting assured.

One of the ways to ultimately increase efficiency and lower expenses will be to use the tools of "Fintech." This is a relatively new word that came into being over the last few years. While it is impossible to contain the full meaning of that word in different contexts, it is not impossible to define it as it relates to Markel. For us, it means that we need to use the tools of

technology to improve our underwriting and marketing decisions as well as our operational efficiency.

By the way, this is nothing new. When Sam Markel started this company in the 1930's, there were no computers, fax machines, jet engines, web portals, smart phones, or the internet, among other things. We adapted to those new tools as they came along and we will continue to behave in just the same way as new tools become available.

The goals then, as they are now, were to serve our customers by being better underwriters, and more efficient administrators of the process.

Same stuff, different day.

Throughout 2016, we increased our efforts to improve our knowledge of our business and efficiency in our operations. The language in this letter is that of a layman. Discussions of Information Technology can drift immediately into jargon and unfathomable acronyms, but suffice it to say that we are full at the task of being a digital, and scalable, organization. We are doing so through our ongoing development of in-house resources as well as using external, proven, world class vendors to assist us in this effort.

This crucial task continues to increase in cost and complexity. That said, failure is not an option, and we will continue to iterate to a continuously better outcome. As Michael Jordan remarked, "I've failed over and over again in my life, and that is why I succeed," We continue to strap on our Air Jordans to relentlessly adapt and improve our IT decisions.

Engine #2- Investments

In 2016 we reported a total return of 4.4% from our publicly traded securities portfolio. For the year we reported a total return of 13.5% on our equity investments and 2.4% on our fixed income securities. For the last 5 years we earned a return of 15.9% on our equity portfolio and 3.1% on our fixed income securities.

We specifically use the term "reported" for the one year number and "earned" for the 5 year term. Those words describe two different, yet related things, and we think it is important to conceptually discuss the nuance meant by using those two different words.

First, the "reported" returns from 2016 are exactly that. These are publicly traded securities, with robust markets, that provide easily measurable marks for how to tote up the market values of these portfolios.

The "reported" amounts represent the absolutely straightforward arithmetic of starting with the market values from the beginning of 2016, accounting for the cash flows in and out of the portfolio throughout the year, and dividing the ending balances by the starting market value. That easily soluble equation yields the answer for the "reported" investment return.

Here's where it starts to get complicated. It's also where it is important to keep going from that reported number, to a more important understanding, of what really happened in investments during the year.

In our opinion, while the equity portfolio enjoyed a reported return of 13.5% for the year, we believe that the underlying economic performance of the businesses we own in that portfolio was probably slightly less than that reported return. Some individual companies performed meaningfully better than what the change in stock prices would suggest, and some performed less well than you might think at first glance. Additionally, the dispersion of economic performance between individual companies, and one industry as compared to another, seems to be getting wider in our opinion. In aggregate, the overall equity portfolio return of 13.5% remains directionally correct

in describing the underlying business performance of our investees, but that number is not precise in describing their aggregate economic progress, and we believe it might be just a touch high.

For five years though, the story starts to change, and change for the better. For five years we "reported" a return of 15.9% per year on our equity investment portfolio. We think that number closely describes what we "earned" as well. The point that we are driving home is that this "reported" number is now *more* qualitatively robust, and *more* directionally correct, in gaining an accurate understanding of how we are doing in our equity investment operations.

With the passage of time, the difference between what we "earn" and what we "report" fades away. The year to year volatility in the "reported" amounts dissolve into the reality of what we actually "earn". Five years is not a perfect measurement period to reconcile that difference between the words of "report" and "earn", but it is better than one year. The good news for you is that we as managers think about this over even longer time frames than five years, and act accordingly.

We make the best decisions we can *right now* to create the best *forever* results. (There's that dual time horizon concept at work.)

Please pardon our usual accounting digressions but we believe it is fundamentally important to understand these issues in order to understand how we think, and how we make decisions around Markel. **We care about economic reality more than accounting entries.** We'll go so far as to say that we think that emphasis is somewhat unique, and part of what drives our ongoing competitive advantage.

In our fixed income portfolio the "reported" versus "earned" distinction was particularly wide in 2016. In short, interest rates went up during the fourth quarter of 2016 and the mark to market mechanism caused the price of our fixed income portfolio to fall meaningfully in the fourth quarter. For the full year we reported 2.4%.

We keep a relatively constant duration of between 4 and 5 years in our fixed income portfolio. We also maintain the highest credit quality that we can. We do this in order to collateralize and match our insurance liabilities which have a similar time frame between the time we issue a policy and pay out a final claim.

By doing this, over any given 5 year period, the bond portfolio will roughly mature and get repriced almost completely. Over 5 years, we will "earn" and "report" the interest income from our holdings of high quality bonds and those two numbers will be nearly identical. Our insurance liabilities will have been economically hedged against rising or falling interest rates at each and every point along the way.

The rise in interest rates in 2016 means that our "reported" returns from the fixed income portfolio were lower than our economic returns from owning those securities. U.S. GAAP accounting recognizes that mark to market change of the fixed income portfolio but it doesn't recognize that the net present value of our insurance liabilities decreased economically by a similar amount.

Over five years, these sorts of timing and reporting differences resolve nearly completely, which is why we pay attention to the 5 year number much more than the annual amounts.

By the way… to foreshadow a bit about upcoming U.S. GAAP highlights, over the next several years, accounting rules will change the way in which some of these items are presented. For example, beginning in 2018, market value changes for equity securities, whether realized or unrealized, will flow through

directly to the income statement. This will increase the volatility of our reported income, and require some effort to distinguish between what is happening in the recurring aspects of our business, versus normal market volatility in publicly-traded securities. As a result of these new and somewhat confusing financial reports, we expect we will spend more time, as managers, trying to explain what they mean.

The FASB (Financial Accounting Standards Board), and the SEC (Securities and Exchange Commission), along with the IASB (International Accounting Standards Board) have made or are making numerous changes in accounting standards impacting short duration contract disclosures, investment reporting conventions, revenue recognition, lease accounting and various other matters which have the potential to change financial statement presentation and disclosure for us and for most all publicly traded companies. For some of these changes, when they asked us if we thought it was a good idea, or if it would be helpful in communicating our results to our shareholders, or in understanding and managing our business, we opined in our comment letters that it wouldn't.

However, the powers that be said they will change the accounting rules. Bottom line is, we'll be spending more money on the accounting process in the next several years.

As George Bernard Shaw wrote in 1906, "All professions are conspiracies against the laity."

Same stuff, different day.

Rest assured that we as managers will continue to make the best economic decisions we know *right now* for the best *forever* economic outcomes.

As we've written in previous years and repeat today, we continue to follow our time tested four-point approach to selecting and managing equity investments. One, we look for profitable businesses with good returns on capital and low amounts of leverage, two, run by talented and honest people, three, with reinvestment opportunities and/or capital discipline, four, at fair prices.

This approach has served us well for decades. It guides our actions *today* and remains a resilient model that should endure *forever*.

Same stuff, different day.

Engine #3- Industrials (slang for Markel Ventures...)

Markel Ventures enjoyed a spectacular year.

In 2016, revenues grew to $1.2 billion from $1.0 billion, an increase of 16%, and EBITDA increased to $165.1 million compared to $91.3 million, an increase of 81%.

To provide a similar longer term context for these results consider that 5 short years ago the revenues totaled $317.5 million and EBITDA that year stood at $37.3 million.

Markel Ventures continues to grow as a positive factor within your company. This collection of businesses provides a diversified stream of cash flow for Markel that is not tied completely to the economic fates or regulatory forces affecting our insurance operations.

As such, these cash flows provide resiliency for the company as a whole and allow us more options to consider when we make capital allocation decisions.

Resiliency is a much more important concept than diversification. Diversification is a necessary condition to obtain resiliency, but it is not in and of itself sufficient to achieve that goal.

Resiliency means so much more. Our goal is to continue to build resiliency at Markel. Resiliency means that whatever the markets, and technology, and change, throws at us, we'll be able to rise to those new challenges and circumstances.

Markel Ventures adds to the resiliency of Markel. In 2016, the results from Markel Ventures are both better and worse than what the raw numbers present. They are better in that despite the fact that we earned EBITDA of $165.1 million from the aggregate collection of the Markel Ventures businesses, that number includes a goodwill write off of $18.7 million at one of the companies.

That write-off only occurred because we review each business as separate units that stand on their own for financial reporting purposes rather than in aggregate. As is always the case, accounting treatments and decisions require judgment and different companies often report the same economic realities with different accounting assumptions.

In our opinion, this is a conservative and perhaps unusual degree of self-flagellation in communicating these results to you. Our heritage as an insurance company, and our conservative nature, causes us to emphasize the balance sheet as the most important part of the financial statements. We emphasize redundancy throughout all of our reserving and financial reporting processes in order to make sure we've got a conservative understanding of our balance sheet. This is a good thing, and it serves us well, as we continue to build the resilience of this company.

The Markel Ventures operations tend to be more accurately described by their income statements as opposed to their balance sheets. They also are not particularly capital intensive, and as such, we believe that EBITDA provides a valuable measuring rod to gauge the economic progress of those businesses.

All of that said, after reviewing the current income statements and balance sheets of each individual Markel Ventures company one by one, the decision was made to write down the balance sheet carrying value of goodwill at one subsidiary that is subject to wide economic cyclicality (and we're not at the fun part of that cycle).

As managers, we do not believe that the business is fundamentally impaired. Cycles are merely that, and long cycle businesses can produce volatile results as they progress through the years. This goodwill charge reflects weaker performance for the last few years than before. That performance is highly correlated to energy prices and markets which have been in a fundamental bear market for the last few years.

Neither we nor anyone else knows when or if energy prices will rise or to what degree. That said, the carrying value of this cyclical business has been reduced substantially through this particular goodwill charge. This creates an asymmetric financial reporting outcome. The process creates a one way street where only negative events get highlighted and charged off in lumps. Future good news of better earnings, and the implication of a business that is worth more economically, will never show up in the balance sheet. You'll just see those earnings anonymously comingled with all of the other earnings streams in the income statement. In short, in this one dimension, we think Markel Ventures performed better than the raw EBITDA number would suggest.

"On the other hand," as Harry Truman's economist would say, certain cyclical businesses within the group performed at the high end of what we would expect over the course of a full economic cycle. We do not expect a repeat of that happy event this year, and it would be fair to haircut your sense of the current economic value of Markel Ventures a bit for that factor.

"On the other hand" (and I think we are on hand three at this point), if we owned the economic engines of Markel Ventures through traditional private equity structures of limited partnership form, I am confident that we would be reporting positive "mark to market" valuation changes which would flow through to this year's financial statements. With our structure of direct controlling ownership interests in these businesses, we do not report or rely on any "mark to market" valuation gains in what we think the businesses are worth. In fact the only "mark" we make on the carrying values is when we take a goodwill charge and "mark" things down and never up (see the previous discussion).

By the way, in order to show higher market values on our financial statements, we would have to pay third party management fees to outside managers to do so. Those expenses would be high, and certain. The accompanying reported gains would be uncertain, and the money we would spend to get that accounting treatment would be gone forever.

In our structure, we avoid those high, and certain, external expenses and allow the full economics to flow through to you our shareholders. They show up in the cash flows that you can track on our statement of cash flows.

In this dimension, Markel Ventures is doing better than what it looks like using this year's EBITDA as the measuring rod.

"On the other (and last) hand," the Markel Ventures overall results reflect necessary but "through the looking glass" type purchase accounting entries, internal cost accounting allocations of Markel Corporation overhead, intercompany financing arrangements, and complicated tax allocations. These items all net out to the good for Markel Corporation, but they subtract from the presentation of Markel Ventures' overall economic performance. They further complicate a clear understanding of how these businesses are performing.

The long term good news though is crystal clear and unambiguous. Ten years ago, Markel Ventures reported revenues of $58.9 million and EBITDA of $4.7 million. Five years ago, those numbers were $317.5 million and $37.3 million, respectively. In 2016, they were $1.2 billion and $165.1 million. In the fullness of time, accounting accurately provides an economic report on how businesses are performing. These businesses continue to contribute positively to Markel.

We continue to look for additional opportunities to build the economic value and substance of Markel Ventures. In the current market environment, it remains quite difficult to find attractively priced acquisition opportunities, but we are diligently looking. Stay tuned.

The Future

Markel remains a unique beast in the corporate world. We think our culture as described by the Markel Style remains a powerful tool to drive the value and the fun of being part of this company.

We will continue to use our capital with the same priorities. As we wrote in the 2013 annual report, "Our first and favorite option is to fund organic growth opportunities within our proven, existing line up of insurance and non-insurance businesses. Our next choice is to buy new businesses. Our third choice is to allocate capital to publicly traded equity and fixed income securities, and our final choice is to repurchase shares of our own stock when it is attractively priced and increases the value of each remaining outstanding share."

Same stuff, different day.

As Bruce Springsteen wrote in his recent autobiography, "Rock and roll bands that *last* have to come to one basic human realization. It is: the guy standing next to you is more important than you think he is. And that man or woman must come to the same realization about the man or woman standing next to him or her, about *you*. Or everyone must be broke, living far beyond their means and in need of hard currency. Or: both."

Vince Lombardi, pointed to the same sort of thing when he said, "Individual commitment to a group effort-that is what makes a team work, a company work, a society work, a civilization work."

We mean to continue to build Markel (read Green Bay Packers or E Street band, whatever you prefer) into one of the world's great companies and we mean it to last. We've successfully sustained and grown this business through 3 generations of family leadership and now our first generation of non-family management.

We've done that by following the Springsteen principle of understanding that the people next to us in this organization are more important than we think they are and in Lombardi fashion, we as individuals pour ourselves out completely in order to be worthy of mutual respect from others. This "band" of Markel includes all of our associates as well as our customers, channel partners, communities, and shareholders.

The challenges of the future (and there are always challenges) involve technology, speed, and hyper competition. Those factors will never go away. In fact they will probably accelerate and intensify as time goes by. That said, our secret weapon will continue to be the humane trust and interconnectedness that allows each of us to operate as a group that will accomplish far more than what we could as individuals.

Our long term financial performance reflects the underlying reality of personal relationships and business excellence that motivate us to continue to dedicate ourselves to each other.

Thank you for your longstanding support and partnership of this unique organization. We look forward to the years to come.

Respectfully submitted,

The Band

Alan I. Kirshner, *Executive Chairman*

Anthony F. Markel, *Vice Chairman*

Steven A. Markel, *Vice Chairman*

Thomas S. Gayner, *Co-Chief Executive Officer*

Richard R. Whitt, III, *Co-Chief Executive Officer*

F. Michael Crowley, *Vice Chairman*

2017

To Our Business Partners

At Markel, we aspire to build one of "The World's Great Companies."

Here is our annual report to you for 2017. In it, we review the year that just ended, as well as our plans and dreams for the future. We try to write everything that we would want to know about Markel if our roles were reversed.

We define a great company as one that serves its customers, associates, and shareholders, consistently and dependably over time. As we do so we grow in every dimension.

We're proud of our record over multiple decades, and we are incredibly optimistic about our ability to continue on this path in the future. The design and components of Markel are unique. Our strategy remains the same as what we stated in our initial annual report as a public company in 1986. Namely, as we said then, "our corporate strategy is one of diversification and specialization."

We serve customers anywhere and everywhere around the globe. We do so by providing them with insurance and financial backstops to protect them when unforeseen events create havoc. We help them put Humpty Dumpty back together when things fall apart. We also provide customers with an array of necessary industrial equipment, vital information services, housing, personal products, and healthcare services to help them operate their businesses and live life to its fullest.

We serve our associates by operating a "values" based company. The Markel Style describes our unchanging cultural values that we offer to associates of Markel. We provide a home that rewards and celebrates

Financial Highlights

(in millions, except per share data)	**2017**	2016	2015	2014	2013	2012	2011	2010	2009
Total operating revenues	**$ 6,062**	5,612	5,370	5,134	4,323	3,000	2,630	2,225	2,069
Gross written premiums	**$ 5,507**	4,797	4,633	4,806	3,920	2,514	2,291	1,982	1,906
Combined ratio	**105%**	92%	89%	95%	97%	97%	102%	97%	95%
Investment portfolio	**$ 20,570**	19,059	18,181	18,638	17,612	9,333	8,728	8,224	7,849
Portfolio per share	**$1,479.45**	1,365.72	1,302.48	1,334.89	1,259.26	969.23	907.20	846.24	799.34
Net income (loss) to shareholders	**$ 395**	456	583	321	281	253	142	267	202
Comprehensive income (loss) to shareholders	**$ 1,175**	667	233	936	459	504	252	431	591
Shareholders' equity	**$ 9,504**	8,461	7,834	7,595	6,674	3,889	3,388	3,172	2,774
Book value per share	**$ 683.55**	606.30	561.23	543.96	477.16	403.85	352.10	326.36	282.55
5-Year CAGR in book value per share [1]	**11%**	11%	11%	14%	17%	9%	9%	13%	11%

[1] CAGR—compound annual growth rate

creative, hardworking, talented people motivated by the idea of service to our customers. We are explicit about our commitment to integrity and continuous improvement. Our culture is not for everyone, but it is attractive to those who seek what we offer. We've also found that it applies and works all around the world.

We serve our shareholders by producing financial results which reflect our skills at serving our customers and associates. Excellent financial results create the opportunity to grow, to do more, and offer more, over time. Without financial progress, our ability to serve customers and associates disappears.

The 2017 financial statements accompanying this letter provide you with numbers that reflect this year's economic progress towards the goal of "building one of the world's great companies." As is the case with any single year, those numbers tell only part of our story. Over the course of time though, the numbers become more robust and meaningful. They continuously reveal more chapters of the book. The numbers themselves become inseparable threads in a beautiful tapestry. That tapestry depicts the narrative of "building one of the world's great companies."

We're pleased to report to you that we continued to weave that multi decade tapestry in 2017.

Progress did not take place in a straight line in 2017. It almost never does. This report will appropriately discuss the financial impact of the record setting catastrophes that took place last year. Those financial losses should not obscure or diminish the progress we made in the rest of our insurance operations, our Markel Ventures activities, in our investment portfolio, and in the development and continuity of our management team.

At the bottom of the page in this letter we show a table that depicts 21 years of our key financial highlights. The constant and annually recurring review of decades of financial results helps us to remain focused on the long term.

We've made great progress over decades not just in narrow financial terms. Our story demonstrates personal progress and accomplishment for many

2008	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	**20-Year CAGR[1]**
$ 1,977	2,551	2,576	2,200	2,262	2,092	1,770	1,397	1,094	524	426	419	**14%**
$ 2,213	2,359	2,536	2,401	2,518	2,572	2,218	1,774	1,132	595	437	423	**14%**
99%	88%	87%	101%	96%	99%	103%	124%	114%	101%	98%	99%	**—**
$ 6,893	7,775	7,524	6,588	6,317	5,350	4,314	3,591	3,136	1,625	1,483	1,410	**14%**
$702.34	780.84	752.80	672.34	641.49	543.31	438.79	365.70	427.79	290.69	268.49	257.51	**9%**
$ (59)	406	393	148	165	123	75	(126)	(28)	41	57	50	**11%**
$ (403)	337	551	64	273	222	73	(77)	82	(40)	68	92	**14%**
$ 2,181	2,641	2,296	1,705	1,657	1,382	1,159	1,085	752	383	425	357	**18%**
$222.20	265.26	229.78	174.04	168.22	140.38	117.89	110.50	102.63	68.59	77.02	65.18	**12%**
10%	18%	16%	11%	20%	13%	13%	18%	21%	22%	23%	26%	**—**

people. It is a composite story of resilience, adaptability, creativity, dependability, and conservatism. And it is a story which carries the implication of continuity and replicability into the future. The story of Markel is one of excellent initial design, and thousands of subsequent actions, ideas, and iterations, which keep our story moving forward every single day.

In 1997 at the beginning of this 21 year chart we reported that we had 830 associates.

As we write this letter, there are over 15,000.

Over the last two decades, 14,000 additional people have joined the ranks of your company. We've built an organization in which our people can grow, learn new skills, take on new challenges, and fully utilize their abilities. We've also created opportunities for more and more people to join us in our quest. A virtuous cycle of serving our customers effectively and efficiently and producing sound financial results while doing so creates this dynamic. "Rinse and repeat", as it says on the shampoo bottle.

It is a joy to report this record of growth over time and we appreciate the associates, the customers, and the providers of capital, who made it possible.

2017 Review

In 2017 we produced total revenues of $6.1 billion vs $5.6 billion in 2016, up 8%. Our insurance premiums totaled $4.2 billion vs $3.9 billion, an increase of 10%. Our Markel Ventures operations produced revenues of $1.3 billion vs $1.2 billion, an increase of 10%. We earned 10% on our publicly traded investment portfolio with returns of 26% on our equity holdings and 3% on our fixed income holdings.

We produced an overall underwriting loss of $205 million in 2017 vs underwriting profits of $317 million in 2016 and Markel Ventures EBITDA was $178 million in 2017 vs $165 million last year. In total our comprehensive income was $1.2 billion in 2017 vs $667 million in 2016 and we repurchased $111 million of our own common stock during the course of the year.

When we write this letter, we look back at previous letters to give us a sense of how we've talked in years past. It is easy to see words and phrases such as "transformational", or "watershed events" in previous annual reports. If we knew then, what we know now, we might have saved those words for years like 2017. We hope by the time you finish reading this report that you'll understand why we are using those words again.

Here are the headlines from 2017:

1- 2017 broke the financial record for the highest ever total level of insured catastrophes. Hurricanes Harvey, Irma, Maria and Nate, along with wildfires in California, earthquakes in Mexico, cyclones in Asia, weather and crop damage in Europe, and other events caused record financial losses
2- We acquired SureTec and State National in our insurance operations
3- We acquired Costa Farms in our Markel Venture operations
4- We made these substantial acquisitions on our base of internal equity capital and each share of your Markel stock owns a bigger business than it did a year ago

5- We worked diligently to improve the efficiency and effectiveness of our existing and new operations
6- We earned record returns in our investment operations

In total, your company grew by roughly one quarter in total size and scale during 2017 with major acquisitions in our insurance and Markel Ventures businesses. We responded to, and served our insurance customers effectively as they experienced record natural catastrophes, and we earned record investment returns.

2017 stands as a transformational and watershed year for Markel (yet again).

Taking each one of these items in order, here is a review of the headlines.

1- CATS, CATS, CATS

We wish that we were talking about internet videos with this headline but unfortunately that is not the case. In the insurance business, catastrophic events get described with the shorthand term of CATs. 2017 set a new high water mark for the record books. Financially, the insured loss toll exceeded every other single year in human history.

Total industry losses from hurricanes Harvey, Irma and Maria along with the wildfires in California, earthquakes in Mexico, cyclones in Asia, and European weather events, currently are expected to exceed $135 billion. As such, it is not surprising that our losses from these events also set a new record. We paid out claims of $159 million in response to the catastrophic losses suffered by our customers, with total expected losses of $565 million. Across all our lines of insurance coverages we paid out $2.2 billion in 2017 to help our customers recover from difficult events.

The good news is that these payments demonstrate that our customers can count on us in their time of need. This is why people buy insurance in the first place. It also speaks to why we manage Markel in a conservative and prudent way. We do so in order to have the ability to respond quickly, and appropriately, to help our customers get back on their feet. We keep our promises.

In each and every period of heavy catastrophes, we've learned something about how to improve our operations. We've learned how to better select and accept risks, and how to price those risks more appropriately. It is important to note that despite the large dollar amount of our losses in 2017, those amounts were in line with our estimates of what we expected in the event of major catastrophes.

As we continue to offer insurance to our customers to protect them in the event of catastrophic events, we continue to iterate and adjust our prices and exposures. If events become more common and more costly, we adjust our prices accordingly, to maintain the financial resources needed to pay claims when they occur.

We also provide coverage and protect our clients more efficiently and cost effectively than they could on their own. We do so by maintaining a spread of geographically dispersed exposures. Events in one area tend not to affect other geographic areas. By collecting and managing a pool of insurance risks

and premiums from all around the world, we can effectively offer protection and insurance to individual policyholders at an efficient cost to our policyholders. The geographic spread, in and of itself, creates an efficiency that allows us to offer protection to our clients at a lower cost.

Great companies do things "for their customers" rather than "to their customers" and our ability to efficiently operate a diverse pool of catastrophic risk creates the ability to serve our customers better and more efficiently than they could do themselves.

2- SureTec and State National Acquisitions

During the course of 2017 we acquired SureTec and State National. These two additions represent new and substantial venues to continue our longstanding strategy of specialization and diversification. SureTec brings specialized knowledge of the surety market, a unique and critical insurance function, which we previously had not been able to offer to our clients in a meaningful way. State National also brings new skills and specialized insurance services with their historical knowledge of certain insurance management and program services, as well as collateral protection products.

Both companies are experts and leaders in their respective fields. By joining Markel, both companies will be able to increase the amount of business they write, add specialized knowledge to better serve our clients, and help us continue on our path of diversification. The diversification adds margins of safety to our financial strength and performance, which stands behind our promises to our clients.

Both companies contacted Markel when they considered their own futures. Our longstanding reputation and performance in helping companies flourish and grow, and our culture of integrity and continuous improvement, created the opportunity for us to engage in discussions with both firms.

In the case of SureTec, the founder John Knox, contacted us directly, as he believed that Markel would offer the best option for SureTec and its associates to grow and continue to build the value of the firm.

John and his team did a wonderful job of launching SureTec in 1998 and growing a successful surety operation. SureTec's largest markets are in their home state of Texas, along with California. While they do business in many other states as well, as part of Markel, they will immediately be able to expand the distribution and awareness of their surety products to Markel's existing nationwide client base.

We already do business with many of the agents, contractors, and current and potential customers of SureTec, and our ability to help them grow through access to our distribution channels and customer base creates a win-win situation for SureTec and Markel. John and his SureTec team win by knowing that their firm will be part of the permanent capital structure of Markel. They can grow and provide long term potential for their current and future associates with the larger and long term base of Markel capital.

We at Markel win by adding surety to our array of insurance products and services. Surety requires specialized expertise and we can serve our customers

more fulsomely by adding the surety skills that are now part of Markel.

State National also stands as a strategically valuable and important addition to Markel. The Ledbetter family built State National over two generations. They provided two primary lines of business. In one line, State National served as a "fronting" company for other property and casualty insurance companies. In the other line, they offered collateral protection insurance that works to protect credit unions and their customers.

In the fronting business, State National often works with insurers experiencing some vulnerability, or risks, to their ratings and marketplace acceptance. State National would stand in the shoes of their insurance company clients, and provide services and assurance to regulators and rating agencies, that the client insurance companies could, and would, maintain appropriate levels of service and financial stability.

In developing the skills to provide these important services, State National also developed the skills to assist the growing "Fintech" and venture capital funded entrants in the insurance industry. These new participants often have unique marketing skills, risk pricing abilities, and product packaging and design approaches. At the same time, they often do not have the array of licenses required to offer insurance products or financial strength ratings to provide comfort to potential buyers.

State National can work with those firms to solve their challenges of regulatory and financial rating agency requirements. By partnering, State National and the newer entrants into the insurance business can combine to offer new and unique insurance products that are fully and appropriately regulated, and reviewed by government and rating agency personnel.

As part of the larger Markel organization, State National can continue to expand the size and scale of their offerings and we can learn about the ways in which technology continues to change the fundamental nature of insurance pricing, marketing, and distribution. This acquisition adds additional sets of specialized skills to Markel and further diversifies the set of products we can offer our customers.

3- Costa Farms

Costa Farms is the largest grower of houseplants in the world. You can find their plants on the shelves of the leading home improvement and general merchandise retailers as well as online. The company is in its third generation of Costa family leadership and generation four is in the building.

The Costa family demonstrates everything that can be wonderful about a family business. In their words they talk about the foundation of "customers, culture, and growth." With that focus, starting from scratch, three generations built a wonderful business. They work each day to make themselves indispensable to their customers, and they keep a long term focus. All of these activities stem from, and go hand in hand with, building a business that you expect to continue into future generations. Short cuts, and short term time horizons, have no place when this mentality pervades your business.

Just as is the case at Markel, this mindset goes beyond people with the same last name or blood lines. Family becomes a matter of choice as associates join a firm and choose to live with the same long term values.

To be an associate of Markel is to be a member of the "Markel Family" in a figurative sense. We all share the same basic values and commitment to long term success. We were pleased that the Costa family saw this culture at Markel and sought us out as partners to help them to continue to build their business in the future.

Costa stands as the largest acquisition to date for Markel Ventures. They have the specialized knowledge and skills to grow more than 100 million plants per year in varied locations, and get those living, breathing products onto store shelves, or delivered to your home and office, all around the country. They are the leading firm in their industry, and we expect that they will continue to grow organically (please pardon the pun) and inorganically. We provide capital, and a time horizon, that matches the generational views of the Costa family.

The Costa acquisition represents a new level of size and scope for Markel Ventures. We are excited to continue to add specialized knowledge and skills to Markel and to provide additional margin of safety to our customers, associates, and shareholders.

4- Acquisition Financing

I'm pleased to report to you that we paid for the acquisitions of SureTec, Costa, and State National with cash. We issued no dilutive equity to fund these purchases. These deals increase the size and revenue footprint of Markel by about a quarter. This is a substantial increase in our size and scale, and we were able to pay for these purchases without additional equity financing.

At the same time as we funded these acquisitions, we began making record levels of claims payments to our policyholders from the CAT losses and normal insurance operations. We believe this combination of activities and events stands as strong evidence of our financial strength, investment excellence, and conservative financial practices. We were in a financial position to pay record claim losses and execute *three* substantial acquisitions all in the space of the same year. Additionally, our financial position enables us to fully seek and accept property insurance risks in the post CAT environment of higher pricing and prospectively better financial returns.

We work every day to build and protect our financial strength. Those daily activities over many years paid off in 2017 as demonstrated by our ability to take advantage of these opportunities to grow.

Separately, we raised $300 million of 30 year fixed rate financing at 4.30% in the fourth quarter. We believe that the ability to lock in such a long term, fixed rate debt makes prudent financial sense and is consistent with the conservative way in which we manage our financial affairs.

5- Operational Developments

Amidst the headlines about the new things that happened at Markel this year it can be easy to forget about the thousands of operational details and improvements that took place in all of our global operations.

In each and every aspect of our insurance and industrial businesses we worked diligently to improve the efficiency by which we serve our clients. We have and continue to focus on using all of the tools in the toolbox labeled "technology", to build and maintain our competitive position in the world.

In 2017 our expense ratio stood at 37% compared to 39% in the prior year. This progress shows results from our ongoing efforts to increase our internal efficiency and offer our customers the best possible value for their insurance needs.

Our overall combined ratio of 105% reflects the record amount of CAT losses. CATs in total added 13 points to our combined ratio and the change in UK government mandated discount rate applied to our run-off UK auto business added two points to the total.

We remain fully committed to the discipline of underwriting profits. Our long term record of consistency with this goal stands as evidence that we mean it and we fully expect to produce underwriting profits in 2018.

Throughout the organization we continued to increase the tools created by technological developments. We changed the way we offered renewals to existing policyholders, we streamlined internal accounting and financial processes, we adapted our claims process to reflect more granular understanding of policyholder losses, we increased the efficiency and effectiveness of our marketing efforts, and so on and so on and so on.

There are no activities within the Markel organization that are not being actively worked on to be made better. As it says in the Markel Style we look for "a better way to do things." The most important aspect of that statement is the mindset of continuous improvement that infuses the people of Markel. The tools and technology we use to make that journey change over time but the path is one we've been on for decades. We commit to remaining on that path to improvement in every facet of your company.

There are no businesses on planet earth that do not face the same challenge. Any degree of complacency or satisfaction with current processes or ways of doing business has no place in today's world. There are no elements of any aspect of Markel, in any business, in any country, that are not constantly being refined, reviewed, analyzed, changed and adapted to remain relevant in 2018 and beyond.

6- Investment Results

We earned excellent returns in 2017. We earned 26% on our publicly traded equity portfolio and 3% on our fixed income holdings. The total portfolio earned 10%. In dollar terms, we earned more than $1 billion of unrealized gains, realized gains and dividends from our public equity holdings and this represents a new record.

The double barreled win is that we also achieved this performance at a cost lower than passive index funds. We manage the vast majority of our investments internally. The total cost of our in house management stands at a single number of basis points.

We believe that we manage our investment operations with a triple play advantage of, ultra-low costs, tax efficiency, and rigorous and continuous intellectual engagement and management of our portfolio holdings. Two of those three aspects are currently popular in the investment world. Specifically, indexing and passive investing are relatively low cost and tax efficient. With our internal management, we keep our costs lower than passive indexers, we operate with tax efficiency, AND, we obsess about what we own and why we own it. We do so in order to attempt to adapt and change as the world changes.

Our multi-decade record of outperformance in our investment results speaks to the effectiveness of our approach.

As we've written every year since 1999 we maintain a four step approach to selecting and managing our equity investments.

1- We look for profitable businesses with excellent long term returns on capital and modest leverage

2- We look for management teams with equal measures of talent and integrity

3- We look for companies that can reinvest their earnings at high rates of return and/or demonstrate skill in acquisitions or other capital management activities

4- We look for these investments at reasonable prices which should produce acceptable returns over time

That approach and formula has not changed since our initial public offering in 1986 and despite the swirling pace of change in so many aspects of life, we believe the philosophy remains completely relevant and durable. We continue to find productive ways to invest our capital. In the short run, anything can and will happen and results will be volatile. In the long run, we've earned spectacular returns with this time-tested approach and we're confident in our ability to continue to do so.

In our fixed income operations we maintain the highest possible credit quality holdings we can find. We match the duration and currencies of our holdings to our expectations of our insurance liabilities. This has been our longstanding and consistent practice and it has served us well. We also believe the approach is low cost and durable in the future.

In total, our net unrealized gains from this longstanding approach stood at $3.7 billion at year end. With the change in the tax law that occurred during the fourth quarter of 2017, we reduced the deferred taxes associated with these gains and increased shareholders equity by $402 million due to the reduction in the U.S. corporate tax rate from 35% to 21%.

Next

The spectacular news about Markel is that there is always a chapter that starts with the headline NEXT.

From the very beginning of our firm, with Sam Markel's creative solution to a customer need, the entire history of this company has been figuring out what to do next.

We've done so by following the precepts of the Markel Style. As the Style says, we've worked hard. We've pursued excellence, we've kept our sense of humor, and we've adhered to a creed of honesty and fairness in all our dealings. We've done so on a daily basis for years and we will do it the next day as well.

We tested our design and fundamental strategy of specialization and diversification in 2017. While a record amount of catastrophic losses took place worldwide, our insurance operations were able to absorb those losses. At the same time, our investment and industrial operations produced excellent financial results, and we maintained overall comprehensive profitability for the company. We look forward to the next results from our varied operations as we expect them to reveal the same story of long term progress.

We followed our process of using our financial resources to support organic growth in our existing businesses, acquiring new companies, adding to our investment portfolio of publicly traded securities and repurchasing our own stock. We will follow those same four steps next year and the year after that.

2017 indeed stands as a transformational year in our longstanding goal to build one of "The World's Great Companies." There have been transformational and watershed years in our past and we aspire to more in the years to come.

Next.

Respectfully submitted,

Alan I. Kirshner, *Executive Chairman*

Anthony F. Markel, *Vice Chairman*

Steven A. Markel, *Vice Chairman*

Thomas S. Gayner, *Co-Chief Executive Officer*

Richard R. Whitt, III, *Co-Chief Executive Officer*

2018

To Our Business Partners

Greetings. Here is our annual report to you for the year 2018.

At Markel, we aspire to build one of the world's great companies. Our core values remain integrity, adaptability, continuous learning, and humility, among others. We wrote the Markel Style over 30 years ago to describe our values and culture. We believe this statement of our values ties our varied businesses together. Today, it does so for more people and in more places than ever before. As to tomorrow and beyond, while we've grown tremendously over decades, we feel like we're just getting started.

Each year we write you this letter to update you on the condition and performance of your company. This year's letter will be longer than usual (not necessarily due to popular demand). We'd like to take some extra time and space to describe our strategic initiative in the Insurance Linked Securities (ILS) market, and to answer some specific questions many of you have raised in recent months about that initiative. As usual, we also have a lot to tell you about our existing insurance, ventures, and investment activities.

Short Version

If you'd like the summary version of 2018, here it is. 2018 was a good, but not great, year. We grew the business both organically and by acquisition. We increased the capabilities of the Markel Corporation in every aspect of our business. As a marker of this growth we set a new record in revenues. While we are reporting lower bottom line profitability due to downdrafts in investment markets and ongoing high levels of insured catastrophes, we believe that the economic value of Markel stands at a new record level as well. Finally, we ended the year with fewer shares of Markel than at the beginning, so each share of Markel that you own represents a bigger piece of the company than what it did a year ago.

Extended Play Version

As we noted last year, we define a great company as one with a win/win/win structure. Our customers win as we serve them with products and services that make their lives better. Our associates win because we

Financial Highlights

(in millions, except per share data)	**2018**	2017	2016	2015	2014	2013	2012	2011	2010
Total operating revenues	**$ 6,841**	6,062	5,612	5,370	5,134	4,323	3,000	2,630	2,225
Gross written premiums	**$ 7,864**	5,507	4,797	4,633	4,806	3,920	2,514	2,291	1,982
Combined ratio	**98%**	105%	92%	89%	95%	97%	97%	102%	97%
Investment portfolio	**$ 19,238**	20,570	19,059	18,181	18,638	17,612	9,333	8,728	8,224
Portfolio per share	**$1,385.24**	1,479.45	1,365.72	1,302.48	1,334.89	1,259.26	969.23	907.20	846.24
Net income (loss) to shareholders	**$ (128)**	395	456	583	321	281	253	142	267
Comprehensive income (loss) to shareholders	**$ (376)**	1,175	667	233	936	459	504	252	431
Shareholders' equity	**$ 9,081**	9,504	8,461	7,834	7,595	6,674	3,889	3,388	3,172
Book value per share	**$ 653.85**	683.55	606.30	561.23	543.96	477.16	403.85	352.10	326.36
5-Year CAGR in book value per share [1]	**7%**	11%	11%	11%	14%	17%	9%	9%	13%
Closing stock price	**$1,038.05**	1,139.13	904.50	883.35	682.84	580.35	433.42	414.67	378.13

[1] CAGR—compound annual growth rate

enjoy our jobs, and through them provide the means to serve our families, our colleagues, our customers, our communities, and ourselves. Our shareholders win because by doing these things in positive and sustainable ways, we create financial value which shows up in the increasing value of Markel over time.

In order to build one of the world's great companies we need to have what someone once called, "The Right Owners, the Right Associates, and the Right Strategy." Over the course of this letter we'll try to address each of those issues.

Right Owners

The first idea is that of the "Right Owners." As your management team, we want and need a partnership with our owners. We need that partnership to be long term, and not subject to short term whims of market disruptions, or false objectives derived from too short term an orientation. We need our partners to *want* the same things as we do, namely, the long term creation of one of the world's great companies. That notion embeds ideas about sustainability, diversity, resilience, durability, and adaptability that have served as the hallmarks of Markel since our inception.

Having the right owners with a suitable long term time horizon provides us with an immense competitive advantage. In today's world, short term and artificial time pressures permeate too many decisions. Our dual time horizon of, *Forever and Right Now*, allows us to make necessary, *Right Now*, decisions on a day by day basis. But, we always get to make those decisions with the *Forever* mindset guiding us while we do so. That is an incredibly rare advantage in today's world. It would not happen without you as long term committed owners. For that we are greatly appreciative.
Thank you.

In order to earn the trust and respect of the right owners, we treat you as full partners. We think about what we would want to receive from management if our roles were reversed. If we were distant shareholders, and away from any contact for a year, we would want to know how is the firm doing. We might wonder what is going well and what is not going well. Is the firm going in new directions or maintaining the direction that you told us about last year? Did we add to the businesses we already owned? Did we buy any new businesses? Were there any major management changes, and what else took place that mattered at Markel last year?

These are the sorts of questions we'll attempt to answer in this letter, and the spirit in which we'll describe our current circumstances as well as our ongoing hopes and dreams for the future.

2009	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	**20-Year CAGR[1]**
$ 2,069	1,977	2,551	2,576	2,200	2,262	2,092	1,770	1,397	1,094	524	426	**15%**
$ 1,906	2,213	2,359	2,536	2,401	2,518	2,572	2,218	1,774	1,132	595	437	**16%**
95%	99%	88%	87%	101%	96%	99%	103%	124%	114%	101%	98%	
$ 7,849	6,893	7,775	7,524	6,588	6,317	5,350	4,314	3,591	3,136	1,625	1,483	**14%**
$799.34	702.34	780.84	752.80	672.34	641.49	543.31	438.79	365.70	427.79	290.69	268.49	**9%**
$ 202	(59)	406	393	148	165	123	75	(126)	(28)	41	57	
$ 591	(403)	337	551	64	273	222	73	(77)	82	(40)	68	
$ 2,774	2,181	2,641	2,296	1,705	1,657	1,382	1,159	1,085	752	383	425	**17%**
$282.55	222.20	265.26	229.78	174.04	168.22	140.38	117.89	110.50	102.63	68.59	77.02	**11%**
11%	10%	18%	16%	11%	20%	13%	13%	18%	21%	22%	23%	
$340.00	299.00	491.10	480.10	317.05	364.00	253.51	205.50	179.65	181.00	155.00	181.00	**9%**

Right People

The second idea is that of the "Right People." We believe we have a great formula to help us attract and retain the right people. It is called the Markel Style. The Style explicitly describes attributes such as hard work, pursuing excellence, integrity, having a sense of humor, and adapting to change, among others. It also talks about having fun while doing so.

The Markel Style serves as a written monument to who we are as the people of Markel. It talks about why we work hard, and how our ultimate goal of winning stems from doing things for others. We believe that the ultimate value of a firm derives from the value that the firm delivers to its customers… *others*. The Markel Style applies to every single person of this organization whether they are in the insurance, ventures, or investment operations.

Five years ago 7,200 associates called Markel their professional home. Today, that number stands at over 17,000. Today there are over 17,000 unique stories of people helping others. They are doing so in their work by providing products and solutions that meet the needs of a customer. They are doing so by having the means to take care of their families and their communities. They are doing so by setting examples, teaching, mentoring, coaching, listening, learning, giving, and helping, in countless ways, in countless situations.

We continue to attract the right people who yearn for the values embedded in the Markel Style. We thank them for what they do. We're committed to running Markel in such a way as to continue to create this opportunity for more and more people over time. Thank you for this opportunity.

Right Strategy

The third idea is that of the "Right Strategy." In our initial annual report in 1986 we described our overall strategy as one of *"Diversification and Specialization."* That continues to be the case. Diversification means that we pursue more than one business or idea at a time. This creates a tough, flexible, and resilient organization, capable of withstanding setbacks in any one area. Diversity, and being good at it, allows us to continue to move forward no matter what. And we have observed over the years that "no matter what" seems to happen on a recurring basis.

We also believe diversity applies to more than just the list of businesses we're in. It means diversity in the people of our organization. We need people with different skills, backgrounds, and points of view, to bring robust talent to the tasks at hand.

Diversity also means doing business in more than one place. Over the years we've grown from a small local business in Richmond, Virginia to a global operation. The sun is always shining on some Markel facility somewhere in the world.

Specialization means being good at something specific. Markel bursts at the seams with world class experts in the disciplines of insurance, reinsurance, investments, safety, risks, industrial equipment, securitizations, medical services, horticulture, consumer goods, transportation equipment, affordable housing, and so on and so on. We bring specialized expertise to bear on challenging problems. As we solve those problems for our customers, we serve them, and make them better off than they would be without us.

Each customer problem we solve today gives us the opportunity to solve another one tomorrow. That is the ultimate formula for the sustainability of Markel over time.

The tactics of how we accomplish those worthy goals change over time. It is our job as the associates of Markel to figure that out. It's a fun and challenging task to do so. And that challenge helps to motivate us and drive the excellence you find in this company.

We believe we're pursuing the "Right Strategy" of being "Diversified and Specialized." We view the long term record of excellent financial performance as a validation of that statement, and we expect to continue to refine and adapt our tactics to build on that record going forward.

2018 Financial Results

Usually, when people have a headline like, "2018 Financial Results" they mean just for the year 2018. We mean that and more.

For the year 2018, at the top line, we reported total revenues of $6.8 billion compared to $6.1 billion in 2017. At the bottom line, we reported a comprehensive loss of ($376 million) compared to comprehensive income of $1.2 billion in 2017. We'll break out the steps and items between the top and bottom line over the course of this report but those are the annual, twelve month results. Additionally, Markel shares closed the year at a price of $1,038 compared to $1,139 a year ago.

We measure ourselves over longer and more important time frames as well. Longer term results matter more, and provide better and more robust data as to how we are doing in achieving our ultimate goals. As a tool to help reinforce this message, we use *five* year calculations as the basis for the vast majority of our management incentive compensation programs as opposed to year by year measurements. We think this helps to demonstrate and reinforce the fact that we put our money where our mouth is when it comes to the importance of a long term time horizon.

With a five year view, here are the same numbers. At the top line we reported revenues of $29.0 billion from 2014 to 2018 compared to $14.2 billion from 2009 to 2013. At the bottom line we earned comprehensive income of $2.6 billion in the 5 years from 2014 to 2018 compared to $2.2 billion in the years from 2009 to 2013. Additionally, Markel shares closed 2018 at a price of $1,038 compared to $580 at the end of 2013.

It's unusual for companies to describe their progress in this sort of multi-year fashion. We do so because we think it highlights the long term focus with which we operate. We also think that it washes away some portion of short term market volatility distortions. We think looking at the fundamental economic measures over long time horizons helps us to make better long term decisions. We back up that belief by tying the bulk of our incentive compensation to the accomplishment of long term goals.

We provide even more data which describes and supports our long term focus in the chart at the bottom of this letter. We show 21 years of key financial items and we do so every year in this letter.

We report in this way by design. It helps us keep our focus on doing the right thing every day to accomplish long term and enduring excellence. We wish to minimize short term distractions and costly stop gap behaviors which might puff up short term results at the possible expense of long term performance.

Captain's Log 2018

In 2018, we made excellent progress in continuing to build the long term economic value of Markel but it was a challenging year. We made some mistakes in certain areas. We experienced short term mark to market declines in our investment portfolio, and we look back wishing that we had done some things differently a year ago.

The good news from this report though is that we learned immense lessons during 2018. We continued to relentlessly and continuously learn, and to increase our capabilities to serve our customers, associates, and shareholders as we move forward.

Specifically, the challenges in 2018 included the second successive year of higher than average property catastrophe losses as manifested in record hurricane, typhoon, and wildfire losses. Not surprisingly, those losses affected our insurance, reinsurance, and Insurance Linked Securities

operations. We also experienced headwinds in our publicly traded investment portfolio from rising interest rates and negative overall equity market returns. We also experienced highs and lows in our diverse Markel Ventures business operations.

We are incredibly optimistic that we learned immense lessons from each of those experiences and we will go on to use that knowledge and wisdom to build the future value of Markel. We're also pleased and relieved to report to you that over the years we've built a resilient and durable business. We can and did absorb some painful lessons in 2018, yet we still earned reasonably good financial results while doing so. That statement becomes even truer when viewed over longer time frames such as the five rather than one year time period.

We also have some excellent news from 2018. Namely, we acquired Nephila, the market leader in Insurance Linked Securities, and we added Brahmin Leather to our Markel Ventures operations. We also worked to improve our skills and capabilities within all of the existing insurance, investment, and ventures operations.

In our existing operations we pursued the non-glamorous daily tasks of day to day execution and daily work. As always, we tended to our businesses one day, one customer, one decision, at a time. We helped our long standing associates with training, and experience, to become better at their daily work, and to learn new skills and capabilities. We also added talented individuals with specific skills and capabilities all across the organization to help us all continuously adapt and grow.

Today, newer skills might be called digital, or cyber, or analytics, or other terms. Those words speak to the increasing complexity of today's world. We need to constantly develop new capabilities in whatever skills the marketplace needs. This concept is nothing new, and we've been doing it at Markel for decades. Expect us to continue. Stopping means death and we have no interest in that.

Five year view

One of the benefits of looking at the five year comparison of numbers is that you can start to see things with a clearer perspective than year by year.

When you look at the last five years at Markel you see the transformation of your company in stark terms.

Here are some of the ways we've transformed Markel.

In the U.S. we combined our insurance operations from their separate silos of wholesale and retail. Our simple goal is to seamlessly provide all customers of Markel with any insurance capability found within our organization. We want to be able to provide insurance coverage to our customers in whatever way they want to buy it.

Some coverages will be available on-line and direct to consumer. For example, our coverages for motorcycles, boats, horses, liability for directors of non-profit entities, and many other lines can be researched and purchased on-line directly from Markel.

Other forms of insurance require the expertise of retail insurance agency networks. We have direct access and availability of appropriate insurance to retail insurance agents as they explain coverages, and provide and share servicing responsibility, for those customers.

Finally, complex and large scale insurance products require the specialized knowledge and distribution capabilities of wholesale insurance brokers, and large international insurance agency operations. Through the offerings of our Markel Assurance division, we can meet the needs of those customers and that distribution system as well.

Five years ago, each of those efforts operated in semi-autonomous silos with minimal overlap. Today, we are approaching the ability to match the

capabilities that exist within Markel to any customer, anywhere.

Five years ago, the gross written premium revenues of the preceding divisions that now make up the combined Markel Assurance grouping were $1.6 billion. In 2018, those gross written premiums were $2.1 billion. The growth reflects our increased ability to provide whatever our customer wants and needs in whatever method they wish to purchase it. We're just trying to get out of our own way here in order to give the customer what they want, how and where they want it.

We also operate internationally with our London based Markel International operations. With a combination of licenses owned by Markel International, as well as those markets where we can operate through our licenses with Lloyd's of London, we can serve customers all around the globe.

Our international operations offer local market coverages to local customers in the UK, Canada, Continental Europe, and Asia, with local offices and local presence. We also offer global coverages to global customers through the combined capabilities of Markel Assurance and Markel International along with our Lloyd's, and Markel Global Reinsurance capabilities.

Also, while Brexit looms large as a current issue for the UK, we prepared years in advance to be ready for such a development. Namely, we established a local German presence several years ago. We've worked to continuously develop our capabilities within Europe on a separate and standalone basis from the UK. As such, we believe we're prepared to adapt to whatever Brexit outcome ultimately takes place.

Five years ago the gross written premiums of our International Insurance operations were $826 million, in 2018 they were $1.1 billion.

Through our Global Reinsurance capabilities headquartered in Bermuda and with US, UK, and other locations, we offer global reinsurance coverages. Five years ago the gross written premiums of our reinsurance operations were $566 million, in 2018 they were $1.1 billion.

Reinsurance by its nature tends to be volatile from year to year. While we've suffered the blows of back to back years of record high catastrophe losses, we are confident in the leadership of our reinsurance business and we expect meaningful and positive returns on capital from our ongoing reinsurance activities.

The change in the scope and scale of our Insurance Linked Securities (ILS) operations over the last five years is the most dramatic of all. Five years ago the revenues of our ILS business were $0. In 2018 they were $92 million. We'll pick up the discussion of ILS shortly.

In our Markel Ventures operations, five years ago we reported total revenues of $686 million and EBITDA of $84 million. In 2018 we reported total revenues of $1.9 billion and EBITDA of $170 million. We use the imperfect tool of EBITDA to give you a least-worst proxy of the earning power of the Markel Ventures companies. We think EBITDA gives you a better view of the underlying economic earnings power of the Markel Ventures companies since purchase accounting tends to distort the GAAP measure of net income. The distortion is especially true in the early years following acquisitions. Over time, as the base of Markel Ventures grows and amortization of purchase accounting items diminish, the net income measurement should converge towards the same rate of change as the EBITDA measure.

The seeds of Markel Ventures, planted decades ago, now show up as meaningful crops. Expect this to continue.

Insurance Linked Securities (ILS) Strategy Discussion - "Everything You've always wanted to know about Insurance Linked Securities but were afraid to ask."

Over the last several years, we've been on a multi-year and multi-acquisition process to build our capabilities in the insurance linked securities market. Through the acquisitions of ILS managers CATCo, and Nephila, as well as State National, with its necessary regulatory servicing and licensing capabilities, we've assembled the largest single entity that participates in the Insurance Linked Securities market. We are incredibly optimistic about the future of this business and what it means for Markel as a whole.

That said, we encountered unexpected challenges in our CATCo ILS management operations in 2018. As we announced in December, we received inquiries from U.S. and Bermuda authorities into loss reserves recorded in late 2017 and early 2018 at CATCo and its subsidiaries. We are fully cooperating. We continue to investigate the issue, and we retained first rate outside advisors to conduct a fulsome inquiry into the matter. As of this writing, the investigation remains ongoing. We will report on the outcomes of the investigation when it concludes.

We are confident that our efforts in Insurance Linked Securities will prove to be a valuable and important strategic pillar of our operations at Markel. We will learn, and we will adapt as necessary, to make our ILS operations a key contributor to our results over time.

In response to many of your questions, we thought it would be a good idea to describe the nature of the Insurance Linked Securities business. What is it? What are Insurance Linked Securities? How does this market work? What do buyers want? What do sellers want? What is Markel's role in the business and what are our potential risks and rewards?

As a first step to answer these questions, take the point of view of the buyer of an ILS product. In one incredibly oversimplified example, that buyer could be a major insurance company that sells a broad variety of coverages in a given market. If a company sold homeowners coverages, auto coverages, business interruption coverages, and other lines in markets like Florida or California, they might be concerned that a single event in one location could cause losses across all of the products they sell. As we've seen in recent years, hurricanes in Florida and wildfires in California caused massive losses to whatever stood in harm's way. All and every coverage was hit, and often well beyond what industry participants expected to be the case.

In order to protect themselves, major insurance companies might buy a type of an insurance linked security known as an "Industry Loss Warranty" (ILW) cover. These covers provide buyers with reimbursement if total industry losses from an event exceed a certain amount. This is in essence a reinsurance purchase, but it is not tied to specific coverages or policies. It just is meant to provide some reimbursement to the buyer if the total industry losses go over a certain amount.

An ILS manager finds buyers who are looking for this type of coverage.

As the ILS manager finds buyers who seek this sort of coverage, it needs to find sellers (capital providers), who will provide the capital to fund losses if they occur.

The sellers of the coverage (the investors) put up cash to pay for losses if they occur.

In exchange, if there are no or limited losses, the investors receive their cash back, plus the cash that the buyers paid to put the coverage into place.

The ILS manager puts the transaction together and matches up the buyers and sellers with specific terms, rates and coverages. It facilitates the custody of the cash during the time of coverage, and settles out the cash in, and cash out, for all parties. The manager typically provides only a small, if any, amount of the

underlying capital behind these transactions. The bulk of the capital comes from the investors, and the ILS manager earns management fees, as well as performance fees based on outcomes.

To continue with the math of how this might work in very simple terms consider the following example. Assume a buyer paid a premium of 25% of the total coverage for an ILW policy. That means they are paying $25 million for $100 million in coverage. The sellers/investors put up $75 million of cash. That cash gets added to the $25 million of the premium from the ILW buyer and the $100 million total amount is held in escrow in the form of cash.

If you assume the over-simplified example of no fees or expenses, the 25% rate for that coverage implies that the event being covered would happen once in four years.

Here's what happens for the investors if there are no losses (what the actuaries assumed would happen in three out of four years for this type of coverage). The buyer would be out $25 million but have been protected against a catastrophic outcome.

The investors would receive their $75 million back and the $25 million cash paid by the buyer. That would produce a return of 33% ($25 million divided by $75 million). That's why sellers/investors provide capital for these transactions.

That would be the result in any one year, for one policy, when there weren't any losses. These products are for large losses, and big catastrophes, so that is not an unrealistic outcome in any one year.

Obviously, if those conditions prevailed continuously, the market would stop because that outcome is too favorable to the sellers, and the buyers are paying too much for the risk they're seeking to reduce.

With the same math over four years, the numbers should balance out perfectly. If the losses truly do occur once every four years, then collectively the buyers and the sellers each put in $100 million and they each took out $100 million over time.

The real world is obviously more complicated than that over-simplified example. Many things in life are more complicated to *do* than they are to *say*. That is certainly the case for Insurance Linked Securities. Here are some of the complexities, and how they start to affect real world outcomes.

The first complexity is to acknowledge that the real world will not play out in a precise one in four way. For instance, assume that the big catastrophic event took place once every three years rather than once every four years. What happens then?

In that case, over the three years, buyers would have paid a cumulative premium for the coverage of $75 million (3 years x $25 million), and they would have collected a loss payment of $100 million when the catastrophe occurred. They'd be up a net $25 million on the trade and the sellers/investors would be net $25 million behind ($75 million collected over 3 years minus the $100 million of loss payments).

Following the same math and logic, if the event took place once every five years, the buyers would be behind a net amount of $25 million and the sellers would be up by an equal and opposite amount.

As such, the first part of the equation for an ILS manager is to attempt to underwrite the risk of the product as to the frequency (how often it might happen) and the severity (the cost when it does). Our ILS managers and their actuaries use various tools to attempt to calculate appropriate pricing that will roughly balance out the equation for buyers and sellers over time. That is the first and most challenging complexity when we go from the oversimplified example to the real world.

Also, fees and expenses are not zero. Buyers will pay a price that is ultimately higher than the actuarial technical rate because they get something more than just a reimbursement for when a loss happens. They get to structure their balance sheet in a way that helps to prevent a "risk of ruin." That is a valuable assurance, and they will pay something to provide themselves with assurance that they will be financially solvent after major catastrophes to be able to continue to operate.

ILS products provide real and valuable benefits to their customers to protect them in the event of major catastrophes. Even if the catastrophe doesn't happen, the ability to operate with confidence, and in a financially sound and protected manner, is of the foremost importance. This is a win-win circumstance for the ILS manager and its buyers.

For the investors, the returns from their investments should not be correlated to overall financial markets, general economic conditions, or other circumstances. Investments in Insurance Linked Securities provide diverse and independent cash flows for their portfolios. This ability to earn returns that are separate and distinct from stock markets, interest rate moves, or other factors is of value to investors seeking to manage investment portfolios. As such, an ILS manager provides a product that helps investors meet their objectives. We can earn a fair and appropriate fee as compensation for doing so. Again, this is a win-win relationship between ILS managers and the investors.

Additionally, the fees and expenses associated with these transactions, as well as the returns on capital supporting these deals, tend to be lower than those associated with traditional forms of reinsurance coverage. That is one of the reasons the Insurance Linked Security market developed. The world continues to demand better, faster, and cheaper solutions to all problems, and the ILS market addresses that dynamic for insurance products.

In the short run, compared to hundreds of years of traditional insurance coverages, this is a relatively new market. In 2018 a series of record-setting catastrophes in multiple markets caused the investors in ILS markets to experience losses. This was the second year in a row of such events, and those losses have triggered much discussion about the results and long term viability of the ILS market. We believe in the future of the ILS market and that the results will balance back out towards a more sustainable equilibrium.

In hindsight, CATCo's initial estimates for the catastrophe losses of 2017 and 2018 proved to be too low. The losses to investors on CATCo products have exceeded initial estimates.

Among other matters, the reserve setting process at CATCo involves a unique challenge in that products such as Industry Loss Warranty covers end up with a completely binary outcome. To continue our extreme and oversimplified example, if the industry loss number in a given contract is set at $5 billion, and industry losses turn out to be $4,999,999,999, the loss for the sellers/investors in the ILS security is zero. If the overall industry loss deteriorates by $2, that means the ILS contract would go to a total loss that might be hundreds of millions.

Determining a point estimate for what that loss might be, and doing so for a wildfire that is burning while you are in the room and trying to come up with that number, is a tough task. Frankly, it is impossible to get it exactly right.

Going forward, we are revisiting and reexamining the processes and elements that go into the setting of reserves, pricing decisions, and actuarial matters at CATCo. We remain committed to operating with complete integrity and to the very best of our ability.

We understand the trust you have placed in us and there is nothing more important to us than deserving it.

We are optimistic that we will end up with an improved ILS investment management operation over time. Insurance Linked Securities provide fundamentally sound and valuable services for both buyers and sellers of the product.

We hope that this discussion helps to provide clarity on the nature of the Insurance Linked Security business and why we believe it to be an important element of our long term platform at Markel.

Nephila and State National

In 2018 we purchased Nephila. Nephila literally started the ILS market 20 years ago and they are the number one player in the ILS industry.

Nephila operates in a different portion of the ILS market than CATCo. For Nephila, losses tend to be more frequent but less severe. As such, the risks and rewards for both buyers and sellers tend to be more tightly dispersed than would be the case at CATCo.

Frank Majors and Greg Hagood started Nephila in 1997 and built a wonderful organization over decades. As they reviewed their options for sustaining their company and building its future, they believed that Markel offered the best fit culturally and professionally for the Nephila team. We agree.

We are delighted with the early months of Nephila joining Markel and we believe that the combined platform of Nephila, along with State National, along with CATCo, along with our existing reinsurance operations, gives us the number one market position to meet the needs of buyers and sellers in this arena.

We occupy a unique position in the insurance/risk transfer industry to provide a full and complete solution to buyers and sellers in this realm.

State National's fronting capabilities provide many of the licensing and regulatory processes and mechanisms necessary to operate in the ILS and alternative capital world.

With our current array of capabilities, we offer the broadest based, most comprehensive marketplace, to address risks through Insurance Linked Securities. We believe that over time, the ILS market addresses more risk areas than just property catastrophe coverages. We are already providing risk transfer products that deal with areas such as weather and energy, and we expect to continue to increase the percentage of risk transfers that might be suitably addressed by the ILS mechanism.

As the number one player in this market, we have the advantage of more flow, and more conversations, about how we can meet the needs of buyers and sellers in this marketplace than anyone else. The ultimate size and scale of this idea could be one of the most important strategic moves we've ever made.

Stay tuned. We're learning and figuring it out.

Today, we know more about how to price and describe risk in this marketplace than we did yesterday. We're more sensitive to hidden or previously unthought-of correlations that can cause events to cluster in ways that they did not in the past. We're more sensitive to the implications of climate change, and how that might increase both loss frequency and severity along with more correlation of previously uncorrelated events. Our predictive models, both within Markel, and those available from industry sources, are more robust now that they've been tested and modified based on the experiences of 2017 and 2018.

And, the prices for transferring these risks are higher in 2019 than what they've been in the two previous years. Higher prices help while learning.

The Strategic Platforms of Markel

There are five strategic platforms embedded in Markel at this point. In alphabetical order they are as follows

1 - Insurance & Reinsurance
2 - Insurance Linked Securities
3 - Investments
4 - Markel Ventures
5 - Our Mindset

1 - Insurance & Reinsurance

This is our legacy at Markel and the foundation of our company. It's how we started, and the basis for what we've been able to do in building up the rest of Markel over time.

In our insurance operations we produced Gross Written Premiums of $5.8 billion in 2018 compared to $5.3 billion in 2017. We operated profitably with a combined ratio of 98% despite six points of catastrophe losses during the year and we continued to adapt and refine our insurance operations on a continuous basis.

While insurance marketplace conditions remain tough and hyper competitive, we are pleased to report underwriting profitability for the year. You can observe that we've earned underwriting profits in 14 of the 21 years in the chart included in the letter. We remain committed to earning underwriting profits on a consistent year by year basis. We've learned from each episode of higher industry catastrophes and we would expect to improve this ratio in the years to come.

We're especially pleased that we were able to report an underwriting profit in 2018 with a combined ratio of 98% compared to the underwriting loss in 2017 and the combined ratio of 105%. Catastrophe losses remained elevated in 2018. For us to be able to move from an underwriting loss to an underwriting profit while still facing historically high catastrophe losses is a marker of the improvement in our capabilities and decisions all around the insurance organization.

2 - ILS

We expect 2019 to be a year of improving and expanding our product offerings for the benefit of buyers and investors as we continue to build a robust and important platform for the future (see previous discussion).

3 - Investments

In our investment operations we earned a total return of (1.0%) in 2018 compared to 10.2% in 2017. In our equity operations we reported a loss of (3.5%) compared to a gain of 25.5% in 2017. As always, equities remain volatile in any given year and the year to year comparison demonstrates both types of volatility (up and down).

Over the longer term we've earned excellent returns on our equity investments. In keeping with the five year theme of this letter, we earned 9.7% on our equities over the last five years compared to 3% on our fixed income portfolio. This is an excellent outcome, and provides evidence for why we continue to commit a higher percentage of our investment portfolio to equities than most insurance based organizations.

We continue to follow our longstanding four part equity investment discipline of seeking investments in 1-profitable businesses with good returns on capital and not too much leverage with 2-management teams with equal measures of talent and integrity, 3-with reinvestment opportunities and capital discipline at 4-reasonable prices.

Long term readers of this letter will recognize that catechism of how we describe our equity investing approach. It has not changed in decades and we think the thought process remains durable and effective in making productive investment decisions.

While we produced a return of negative (3.5%) in 2018 on our equities, and we do hate negative returns, we do take some comfort in the fact that this performance exceeded the loss of (4.4%) experienced in the S&P 500. We've outperformed the S&P 500 index by more than 100 basis points for over 30 years. We are proud of this record. We think it remains one of the best in the entire investment industry. We hope you take comfort that our approach remains sound in both theory and in execution.

In our publicly traded fixed income portfolio we earned a total return of 1.3% in 2018 compared to 3.4% in 2017. Just as is the case with equity investments, we have a stated discipline to manage fixed income securities. We allocate enough funds to more than provide for our estimate of the ultimate claim payments of our insurance operations. We match those funds in duration and currencies to our expected liabilities, and we invest them exclusively in the highest credit quality investment options that we can find. We seek to minimize credit risk and we don't try to predict or forecast moves in interest rates.

In a rising interest rate environment, the market value of those securities declines. That is what happened in 2018. We normally hold our positions until they mature. As such, those short term fluctuations do not affect our ability to meet the liabilities of our insurance claims and we continue to protect our balance sheet. Mark to market accounting requires us to report the market volatility of the bonds that we hold for multiple years. Mark to market accounting does not allow us to adjust the net present value of our estimates of future claims payments as interest rates change. In any given year, this causes an accounting presentation mismatch to economic reality. We're following U.S. GAAP accounting and adjusting the market value of the bonds on the asset side of the balance sheet. We are also following U.S. GAAP accounting and not adjusting for the change in the economic net present value of the claims payments on the liability side of the balance sheet.

This process repeats itself every year and the swings of any given year resolve back towards the other direction in subsequent years. Nothing new to report.

More importantly, the recurring dividend and interest income from our portfolio totaled $434 million in 2018 compared to $406 million in 2017. Over the five year time frame we've been talking about total recurring dividend and interest income was $1.9 billion in the 2014-2018 period compared to $1.4 billion in the 2009-2013 period. The recurring income is only a portion of the total investment returns, but we think the increase in that number over time demonstrates the soundness and productiveness of our investment approach.

4 - Markel Ventures

In 2018 we reported revenues of $1.9 billion compared to $1.3 billion in 2017. EBITDA totaled $170 million compared to $188 million. As we've stated for several years, purchase accounting tends to create year by year distortions from our view of economic reality. That effect is the largest in the early years following an acquisition and bigger deals can often produce bigger purchase accounting effects. That was very much the case in 2018 with the swings from our largest deal ever, Costa Farms. In 2017, the effects of Hurricane Irma, associated insurance recoveries from that event, inventory replacements, earn out calculations and other items increased EBITDA in 2017 and decreased it in 2018. As such the year by year comparison doesn't do a good job of directionally describing the business.

When you examine longer periods of time, those distortions fade away and the economic reality of the underlying business comes through. Keeping with our theme of looking at results over five year periods, the results from Markel Ventures shine through. Over the last five year period, revenues totaled $6.4 billion compared to $1.7 billion and EBITDA totaled $709 million compared to $206 million.

The ongoing growth and maturity of Markel Ventures represents a valuable pillar of the long term growth and soundness of the Markel Corporation. The cash flows from our Markel Ventures operations are somewhat independent of insurance cycles, interest rate movements, and public equity volatility. As such, the recurring cash flows from the Markel Ventures operations create optionality for Markel to have cash coming in the door from multiple sources on a relatively consistent and recurring basis.

In order to take advantage of opportunities in times of crisis or financial market disruptions, you need two things, Courage and Cash. Markel Ventures helps on both fronts as the growing record of cash consistently coming in provides us with the tangible and the intangible materials to make good capital allocation decisions.

During the year we also welcomed Brahmin Leather to the Markel organization. We're thrilled to do so. Bill and Joan Martin, along with their son Scott, built a marvelous organization over 30 years at Brahmin. Susan Thacker joined as CEO a few years ago. Susan and Scott will continue to lead the company and we're delighted to welcome them to Markel. Please check out their products on Brahmin.com and enjoy the quality and style of Brahmin products.

In our existing Markel Ventures operations we enjoyed a year of overall growth and solid profitability. We encountered challenges connected to running businesses, and we continued to support our managers with capital and the message of consistent long term focus. We want to operate every segment of Markel Ventures with the mindset of doing the right thing, and doing things *for* our customers rather than *to* them.

The results of this mindset continue to bear fruit and we expect more growth from Markel Ventures over time. As we have said during the last several years, market prices for acquisitions tend to be quite high. Consequently, we've exercised discipline and not chased after deals. Fortunately, our demonstrated performance, and our values based culture, continues to cause our phone to ring with incoming opportunities.

People know about Markel and the values by which we run this company. That doesn't appeal to everyone, but it appeals to some. In the highly competitive arena to purchase wonderful businesses, this is a profound strategic advantage. Some people value our long term, sustainable approach and we continue to answer the phone when they're looking for a new home. We will behave in such a way to keep that going.

5 - Mindset

If you describe something as being in 3D you're talking about the measurable, tangible elements of height, width, and depth. A common practice is to call *time* the fourth dimension. Throughout this letter, we've written extensively and repeatedly about the concept of time and our approach to thinking in long term ways. At the same time, we understand and appreciate the need to make decisions and take actions constantly, and we've written in previous years about our dual time horizon of *forever and right now* in order to provide the right focus to the right time periods for any given decision or process.

We'd like to suggest that the Mindset with which we operate Markel is something like a fifth dimension. There is such a thing, at least conceptually. The fifth dimension is an abstract mathematical concept that suggests that movement, and change, through time and space, alter the easily measured items of the first three dimensions.

At the risk of getting too weird, what we mean by this reference is that our culture, the values we attempt to describe and teach through the written word of the Markel Style, our beliefs, the way we interact with our customers and our colleagues, are all examples of this fifth dimension of a mindset that pervades Markel.

We recruit for people who seem to intuitively understand this concept. We promote and celebrate people within the organization who seem to behave in ways that make this intangible idea real, and we look for acquisitions and new ideas which fit this construct.

We believe that our purposeful embrace of this intangible idea is the "secret sauce" of Markel. Our mindset is a fifth dimension. It guides us as leaders, and provides explicit and implicit forces that help us make better decisions that show up in our quantifiable measures of the first through fourth dimension i.e. annual financial results over many years.

Not Yet

While traveling this year we met a CEO who described his company as a "Not Yet" company. He started a business from scratch and has built a global multi-billion firm from nothing. As he said, he doesn't say no to new ideas or new opportunities because he is only in the fill in the blank _____ business. He says that his company has "Not Yet" considered a new potential idea, but perhaps it could and should. He spoke profoundly about the need to embrace change by reminding us that, "resisting change is like holding your breath. If you get good at it you'll die."

Embracing change, and following the doctrine of "Not Yet", in many ways describes the history of Markel.

When Sam Markel started this business, there was "Not Yet" an insurance product that covered losses and injuries caused by the growing presence of automobiles compared to horses. Markel figured out a way to provide that coverage and improve the safety and outcomes for our customers, the drivers and passengers of that day and place.

When the interstate highway system came into being, there was "Not Yet" an insurance product that covered the new risk of what happens when heavy trucks hit lighter cars. Markel figured out a way to provide those coverages and help make driving safer for all.

When new technology creates new products, new services, and new risks, there is "Not Yet" a way to actuarially understand the risks involved and to create an insurance bridge between the capabilities of entrepreneurs and the demand of customers for new products or services. The people of Markel figure out ways to create that bridge, and allow for progress that new products and technology bring to society.

When people built businesses in diverse fields such as bakery equipment, car hauling trailers, medical services, truck flooring, houseplants, affordable housing, and other products and services, there was "Not Yet" an obvious home at Markel for those firms to continue to serve and prosper as their ownership structure changed and generations passed. The people of Markel figured out a way to sustain the values of service and durability through our Markel Ventures entity.

Our mindset of "Not Yet" powers our drive to continue to build Markel into one of the world's great companies. So far, so good.

We can't wait to get to work every day and learn how to be better. It's an exhilarating way to live and a great formula for building a business.

Thank you for your support and partnership.

Respectfully submitted,

Thomas S. Gayner, *Co-Chief Executive Officer*

Richard R. Whitt, III, *Co-Chief Executive Officer*

Markel Annual Meeting 2019

Tom Gayner:

Thank you, Richie. Good afternoon. Please allow me to add my welcome to our 2019 annual meeting. Thank you for being here to celebrate another year of successful operations for your company. I've gotten just a few things to say today then you all will have the floor to ask questions of us. We'll do our best to answer them and cover whatever you'd like to talk about as part of the official business of this meeting. Then we'll follow Q & A with some drinks and some hor d'oeuvres downstairs. When the drinks are finished and the shrimp is gone, I hope we'll all leave with a renewed sense of confidence and optimism for 2019 and beyond.

When I began to prepare for this day, I looked over my notes and comments from previous meetings. Since I have been to every Markel Annual meeting since the IPO in 1986 and been officially on the payroll since 1990, those years are starting to add up. A review of the decades shows meetings full of happiness and joy during the periods of obvious economic progress and meetings full of explanations during the periods where our progress did not seem so obvious. Needless to say, we've had both kinds but far more of the good than the bad and the long term story of Markel is one of great progress in financial and human terms. I'm confident that will continue to be the case.

Five, four, three, two, one. All right, well, I guess that's about how many seconds I can go without starting to talk about the UVA National Basketball Team. As they might say on Sesame Street, "Today's show will be brought to you by the number 5." So please allow me to take five minutes or so to talk about the UVA Basketball Program and to suggest how their example might indeed relate to our goals at Markel. First, as UVA coach Tony Bennett described several years ago, their program is built on five pillars. One, humility. Two, passion. Three, unity. Four, servanthood and five, thankfulness. Were those five teammates on the floor the best five players in the country? Probably not.

But working as a team, guided by those principals, UVA just won the National Championship. With a program built on those five pillars, they've consistently been one of the best teams in the country in recent years, and I suspect that will continue to be the case. The path to their National Championship did not take place on a straight, uninterrupted line. I suspect the path forward, with several players moving on to the pros this year, will also involve ups and downs. Does this begin to have resonance for our circumstances at Markel? The UVA has an embarrassing blowup last year with the loss at the UMBC. At Markel, we had an embarrassing loss last year at CATCo. Life does not take place in straight, uninterrupted, ever rising lines.

As Tony Bennett said throughout the year and throughout the tournament, the UMBC loss served a greater purpose and acted as a fundamental building block in the path to this year's National Championship. UVA learned from their experiences and mistakes and so do we. Here's another set of fives talking about pertaining to Markel. When this year's end annual report aggregated the discussion of our annual results to a five year aggregate, rather than the standard year by year recap, it did this to provide a tool and a technique to try to help us remain focused on the long term. In the most recent five year period, we reported $29 billion of revenues compared to $14.2 billion in the previous five year period, an increase of over 100%.

We earned comprehensive income of $2.6 billion compares to $2.2 billion, an increase of 18%. And the year-end share price rose to $1038 from $580, an increase of 79%. I would expect the percentage increases to be more similar to one another in the future and I'm very optimistic about what the next five years might hold. I thought the five-year numbers provided a better perspective than the traditional year by year descriptions, show how well things are going around here. I'll also remind that we mean what we say when we talk about five-year time horizons, since our extent of compensation calculations are based on the five-year results. The next set of fives I'll refer to are the five strategic platforms of Markel that we listed in the annual report letter.

They are as follows. One, insurance and reinsurance. Two, insurance-linked securities. Three, investments. Four, Markel ventures; and number five, our mindset. If you remember only one thing that I say today, let it please be this, our mindset is our number one strategic advantage. Our specific businesses will wax and wane over time. The pace of change continues to accelerate. We must always be willing to adapt to change, to embrace what's new and valuable and to let go of that which is fading away, no matter how lovely or comfortable it once was. Our people will change over time as well. The fact stands that all of us are mortal and that Markel should last long past any one of us personally.

What needs to survive in order of us to build one of the world's great companies, to win championships, to be consistently among the best year after year is for our mindset, the Markel style, to endure over time. I want to thank my colleagues for what you do each day in each part of this company to embrace, build, learn and teach our mindset, the Markel style, every day. Thank you. If we continue to do that and stay true to that idea, we will indeed build one of the world's great companies. Now, that is not easy. It's an all-consuming task but it is a life of joy and one worth living. Think about this task with me along the five pillars, laid out by Tony Bennett, the UVA basketball program.

One, humility. What we are trying to do is hard. We have and will make mistakes along the way. Arrogance itself causes mistakes and it makes them worse

when they do happen. Humility in and of itself helps us to recognize when we're on the wrong path. An attitude of humility also helps us to deal with the psychological trauma of admitting a mistake and making a change. Let's remember to always be humble and kind as we do our daily work and with each and every person we meet every day. Two, passion. This stuff's fun. As a kid, I shot a lot of baskets. I practiced a lot of layups and foul shots. Sadly though, my basketball career came to an end at the conclusion of eight-grade church league after a non-distinguished career as a bench warmer.

There was nothing I could have ever done to become a professional basketball player. Trying to find my passion as a basketball player did not work. Today though, at Markel, I'm a professional and so are you. We get to work with our colleagues, our customers, our vendors, our partners, and others and we get paid to do it. That's fun. What we are building is worth it. When I joined Markel we had about 350 people. Today we are 17,000 plus and more on the way. I find passion and fun in being part of something so good that does so much for so many. Three, unity. We talked about diversification and specialization in the very first annual report in 1986. We have diverse businesses run by diverse people with diverse customers in diverse places all around the world.

Those businesses are run by specialists who are experts at what they do. We are united by our values. All of our diverse and specialized skills, personalities, efforts and stories combined to produce the overall results at Markel. We each benefit from being on this team, which combines all of our efforts to produce results that far exceed what we could accomplish as unconnected and disparate individuals. All of us need the best efforts of everyone else in order for this to work. Markel began as a team sport. We all depend on one another. Never forget that. Four, servanthood. The older I get the more I'm able to embrace the idea of servanthood and doing what I do for others, not for myself or solely for my own point of view.

By the way, even if you're trying to do things for others and you completely surrender to yourself to that idea, you'll end up achieving and accomplishing amazing things for yourself, at the same time, you will not be able to help them. Among the reasons for this outcome is some simple math. I'm only one person. I have only 24 hours in a day and 365 days in a year. If I multiply that out and get some quantifiable number of energy units to represent that, one times 24 times 365 equals 8760 of those energy units, 8784 in a leap. When you serve others though, other people start to serve you too. At that point, the 24 times 365 starts to be multiplied by some number greater than one.

There are roughly 7.9 billion people on planet Earth, if you can get any fraction of them to like you, to be rooting for you, to want to see you succeed and to not hate you, you will be amazingly better off. 7.9 billion times 24 times 365

multiplies out to 69,204,000,000,000 of those energy units. You don't need to get to the max number of those 69 trillion units compared to your personal 8000 to beginning to enjoy the fruits of serving others. Serving others compounds over time. It multiplies, it works. Let's embrace that idea. And finally, number five, thankfulness. Take a moment. Close your eyes. Imagine all of the people and circumstances that led you to being right here, right now.

I, for one, an so thankful. I hope you too enjoy a great sense of thankfulness and of joy for the conditions we find ourselves in right now. I hope you will join me in accepting and embracing the challenges the future holds, that you will do your best to make that future better and that you will be thankful and joyful each moment along the way. Thank you.

It is a privilege now to ask any questions that you have. All of us are able to address anything you want to talk about. There are microphones set up. I am completely blinded by the light. None of us can see very well, but if anyone makes their way towards one of the microphones and has any question they wish to ask, we'd be delighted to answer them. We'll pause for a moment. And tell us your name when you ask a question.

Tom:

All right, I see somebody coming up. High-color redshirt.

Jason Wheeler:

Mr. Chairman, my name is Jason Wheeler and I represent a corporate union pension fund that holds chairs in Markel Corporation. Carpenter pension funds collectively add assets of $60 billion and hold 39,000 shares of the company's common stock.

Mr. Chairman, a topic that has received a growing common interest in the business press and at leading business schools is the growth in the size of the ownership interest settled by mutual funds, particularly passive index funds.

BlackRock and Vanguard each own in excess of 5% of the company's outstanding shares. Could you speak to your view of the growing concentration of institutional investor ownership and its impact on corporate governance? Specifically, does the increase in concentration of ownership by passive investors aggravate short-termism in the market? Or, alternatively, enable companies to take a longer-term strategic perspective?

Also, are there potential conflicts of interest issues that average shareholders should be concerned about given that these same investment companies are involved with the administration and investment through both

corporate retirement funds at companies where they hold large ownership positions? Thank you, Mr. Chairman.

Tom:

Thank you. I'll go ahead and try to respond to that. The nature of the questions regarding the growth in indexing, that is something outside of the walls of Markel. So, it's not something that we would have any control over whatsoever.

Your facts are absolutely correct. They are growing shareholders; they own more Markel shares than they used to. We have de minimis communication with them. And that would be at their instigation as opposed to ours. Historically, there was essentially zero communication because we were part of an index, and by definition, that's what they bought.

As such, the degree of engagement we have with them is relatively limited and there's not that many things that they want to talk to us about. We do maintain deep and robust relationships with the active shareholders, who've made a conscious choice to own Markel, many of which are associates, employees, retirees, and long-term friends of Markel who are rooting for this business.

It's something we're aware of. I can assure you that we don't change our long-term views of the business no matter who owns the stock. Whether it's done passively, whether it's done through mutual funds, whether it's done by all of us, collectively, as fellow employees and individuals. Whatever.

Our goal, which is completely independent of what happens outside us, is to build one of the world's great companies. And we welcome them as shareholders as we would welcome anybody of any category.

Thank you for your question.

Josh Goulding:

Hello, my name is Josh Goulding. I work with 4J Wealth Management.

Tom:

Welcome.

Josh Goulding:

Thank you. What do you attribute most to the slow down in book value growth over the past five years relative to the previous five year period? Is it an industry-wide effect or something unique to Markel? If it is unique to Markel, what changes do you plan to reignite that book value growth?

Tom:

Right. As Jeremy mentioned in his results, book value was a spectacular tool to describe the comprehensive economic performance of Markel for all of our history up until the beginning of Markel Ventures.

As Markel Ventures becomes part of the company and as it becomes a more robust part of the company, that set of businesses is not well described by book value. It's really described by the cash-flow that it generates.

So, we have changed our incentive compensation practices to recognize the fact the stock market, while not perfect at explaining the price every day, over the years gets it right-ish. And we think that is a better measure of what our underlying economic performance is. That's one point.

Second point, interest rates, in general, have been trending down for quite some time. And the real rate of economics that we're producing for our shareholders, basically is whatever the core rate of interest rates are and then whatever we do on top of that.

So, when Richie and I started at Markel thirty plus years ago, I think the base rate of return in government 10-year bond was eight, nine, ten percent, something like that. Today, it's two and change. While nominally, the number that represents sort of our annual returns would be lower, I would suggest, as our retiring board member Al brought us, might add, look at things in real terms as opposed to nominal terms. Back out with the base level of interest rates are. We are producing excellent, real returns for our shareholders.

In terms of going forward, or reigniting, we will do the best we can going forward, as we have in the past. But we would also ask you to track the cash-flows of the business as well as the book value. The book value is part of what is happening at Markel, but there's more that's happening these days.

And the last point I will make is that, as Jeremy mentioned also, there are five pretty major transactions that we've done over the last couple of years. And they were paid for with the cash resources of the Markel Corporation without having to get external finances. I am trained as an accountant originally and the cash money, follow the cash. You know, we had the cash to buy those things.

The way purchase accounting works, in the early years when you buy something, you're advertising and expensing a lot of things that were related to the transaction and the purchase that don't relate to the ongoing performance of the business. It takes a couple of years after a deal, before that effect starts to burn off. This is a longstanding feature of Markel in our initial public offering back in 1986. Pretty sure it was thereafter we bought Shand Evanston in 1987. We can show you old analyst reports which talk about how our earnings are depressed by amortization charges. It was a great deal, but the accounting gets obscured in the early years of an acquisition.

For all of those reasons, and I'll invite Richie or Jeremy to chime in if they wish-

Richie:

You know the other thing I'd add, Tom, is our ILS businesses as well as State National's program service businesses, you would look at cash-flows on those businesses as opposed to a book value.

Tom:

That's correct. Same mindset as Markel Venture Business.

Nicolas:

Hi, my question's regarding ILS.

Tom:

And tell me your name?

Nicolas:

My name's Nicolas. I'd like to thank you for putting this up. We've come all the way from Brazil to be here. My question goes towards ILS and cat bonds and the increasing investment that Markel has been doing in this field. And from my understanding, in some way that competes with the traditional reinsurance operations.

If you could point to relative strengths and weaknesses between traditional reinsurance and these new forms of financing reinsurance and how they work well together inside of Markel?

Tom:

Thank you for making the journey and I'll let Richie…

Richie:

Nicolas, you're absolutely right. ILS does compete with the tradition reinsurance and insurance markets more and more. As we saw the growth of ILS over the last several years, we recognize it had a place in the market. I think some people were hoping it would be a fad and go away. But the reality is it just makes way too much sense to transfer certain peak risk further than just the cap of the base of the insurance industry.

As a result of that, you get more efficient pricing because you're going to the lowest cost to cap it at. We saw it and recognized that it was here to stay, it's

something that's going to grow and it's something that we felt we should have a place in.

Strengths of it, of course, are just that. It accesses the broader capital markets. You can access lower cost of capital because you're spreading that peak risk. Some of the, maybe weaknesses, that people have talked about is sometimes there's not rated paper, or a highly rated insurance company in front. But I think for different methods, that's been addressed.

The way I'm thinking about it, and Tom can jump in here as well, ILS is going to become a bigger part of risk insurance, risk transfer as we go forward. That doesn't reduce the importance of our insurance for our reinsurance operations. Each of them have their place in the market as they go forward. But we could see that ILS was going to become more important as we move forward.

Tom:

Yeah. Thank you. I will add that everything we at Markel is meant to be additive. What we do does not take away from what we've already done. It adds to it. And as we wrote in the annual report, I think this is one of the most important strategic initiatives we've ever done.

The position that your company occupies right now of being able to be a comprehensive provider of risk transfer solutions, and I'm using those words exactly as opposed to just saying insurance. Because we're already doing some things in weather and climate-related type of risk transfer that you might not think of as traditional insurance that are facilitated by our abilities and skill sets that exist in ILS.

So, a little rough out of the box. We understand that, but we are long-term people and we are very excited about what the ILS business adds to our insurance business, our reinsurance business, and all of the other businesses that exist at Markel.

Yep, okay.

Martin:

First off, my name is Martin from Chevy Chase, Maryland. Thank you and thank all the Markel associates for having us here to meet the company and ask questions of you all.

Since this is a UVA themed meeting…

Tom:

My partners weren't aware of that before it started.

Martin:

I'm sure.

Tom:

I think they smelled something when they saw the orange Brahmin handbag up there.

Martin:

I wish I'd known about that last thing before Mother's Day, but that's okay.

Tom:

You know, it's for sale. 15% off.

Martin:

And I know Tony Bennett learned a lot last year after the loss to UNBC. Since the inception of Markel Ventures, would you let us know as you've learned about making acquisitions and how you look at them now versus how you did just a few years ago?

Tom:

Thank you. You know, Markel has a history of making acquisitions that long predate when we started on making Markel Ventures. Steve Markel was the primary architect of the deals that built this company. All along the way, the Terra Nova deal, the Alterra deal, and all those small ones that went along the way. I think Steve would be the first to acknowledge, and I use the word acknowledge rather than admit, that all and every one of those had some surprises to them along the way. We did our best to anticipate, do thoughtful due diligence, but at the same time there was always something in each and every situation which we had not anticipated prior to doing the deal itself.

But I will also say, and I think, Martin, you were in Omaha. I quoted my favorite author, Mark Twain, who says, "A man who picks up a cat by the tail, will learn things about a cat that you can learn in no other way."

One of the thing that excites me and is so much fun about being at Markel is the challenges are coming at you. You can either cower and try to avoid them or be in denial. Or you can try to figure it out. The world is coming at you.

The history of this company is that we try to figure things out and catch things and figure out ways to grow and find an attractive business to buy. What we have learned at Markel Ventures, really is a continuation of everything we've learned on the insurance side. It's the same people, the same mindset, the same sort of diligence process, the same sort of weighing of risk-reward. What good could happen. What bad could happen. And try to make rational, thoughtful decisions to

make sure that Markel, in general, Markel overall, Markel in aggregate, becomes a more profitable, more robust, more resilient, more sound company with each and every acquisition that we buy.

We think that that actually helps both sides and all sides of the business because of the heft and the balance sheet size and the profitability that we've accumulated in the insurance business that helps us do ventures deal. As ventures continues to grow and make money, that helps the heft to credibility and market place presence of the insurance side. If we were constructing it in a win-win way, and I promise you we will continue to make mistakes, but please root for us to do that because if don't that means we've stopped trying. That would be a bad outcome.

Richie:

Tom's comments were perfect earlier. One of the big things you learn doing acquisitions over almost thirty years is humility. Some of those didn't start out as well as they ended up. We had to put a lot of sweat equity into a lot of those acquisitions to get them to where they are today. A number of them are, quite honestly, crown jewels at Markel. So, humility is a big thing cause, as Tom said, you will make mistakes. You've got to learn from it and apply it to the next thing you do.

Tom:

Yes, we can't overstate humility. As someone once said, you know, if you use the wrong word you, need to have the humidity to admit that.

Mark Morris:

Hi, Mark Morris is my name. I'm from New Orleans and I'm really happy to be here. I notice, before I ask my question, that the bag kinda looks like a bullhead from down here. So, maybe it adds more value being Brahmin.

My question's for Jeremy. First of all, congrats on your promotion. You said in the earnings call that two of the UK subsidiaries were treated as USA companies and that's why the taxes were over 200%. I was just curious what that's about and why that happened?

Jeremy:

Yes, sure. Many of you will know that we went through tax reform in the US the tail end of 2017. One of the opportune, tax reform's been very positive for us, lowers fetched rate tax rate. Actually allows us to kind of more efficiently move capital amongst the group. Just allowed us to simplify our tax structure.

One of the decisions that we took was just to take two of our UK subsidiaries on the insurance side and treat them as US tax payers. That tax is actually mostly associated with recognizing deferred taxes on gains in our investment portfolio, that we hadn't previously recognized with book purposes.

We only actually pay that tax from cash tax standpoint, as in when we were to exit those equity positions, we try pay that for long-term. As a result of doing that, it allowed us to take some of the capital that sat in our overseas operations, and move it sort of free of a tax charge to the holding company. That's a lot of what we try to do in managing our operations is have that capital disciplined to be able to, flexibility to be able to move capital to the holding company, and then deploy that capital in the best way we see fit.

It was actually kind of noise in our financials from a rate standpoint.

Mark Morris:

So, you're saying there was actual money paid out for it?

Jeremy:

No, no that was not a cash tax. That's a book tax. That's one of these things where we talk about accounting, if you will. It's accounting noise within our books, but it's deferred income taxes. So, again, not a cash tax. We'll only pay that tax, and we held those positions in the equity portfolio, we just were considered to be permanently reinvested in those foreign subs. We had not yet recognized that through book tax purposes. Just an accounting when…

Mark Morris:

Tom, can clarify that's brilliance, but I'm not smart enough.

Tom:

Ya know, both Jeremy and Richie and myself all started out as accountants. There's nothing we love more than talking about accounting. Normally, prefer to have a beer in our hand when doing so. We'll be downstairs with a beer in our hand and we'll try to catch up at that point.

Any other questions?

Michael Patel:

Hi Tom. Michael Patel, longtime shareholder. In your letter, you mention certain business alliance being available direct to consumer. I was wondering if you could address how you view the opportunity longer-term and maybe how that fits into your desire to manage the expense base lower?

Tom:

Right. Let me direct that to Richie cause, while one can buy that Brahmin handbag online, I think your question predominately relates to the insurance business.

Richie:

You know, we have distribution both direct, retail, wholesale, so we work through all the distribution channels today. The reality is probably our smallest amount of distribution today would be direct-to-consumer. As we continue to build out our digital capabilities, particularly in the smaller lines, personal lines, and small commercial lines. I think those are probably more… going direct to consumers, probably more possible there. Better possibility.

Digital is certainly going to help us in terms of distribution and truck some of the bigger risk. But likely, we will always have distribution through wholesalers and retailers. I don't think, it doesn't have to be one or the other. There always are going to be certain lines that lend themselves more to direct, or more to retail, or more to wholesale.

Certainly, as people know to mark their brand better and as we build out our digital capabilities, I think there will be more opportunities for us to go direct-to-consumer.

Tom:

Great. Thank you. I think that finishes up our questions. We thank you for coming. We declare meeting adjourned and now we're headed downstairs. Thank you.

2019

To Our Business Partners

Here is your 2019 Markel Corporation annual report.

At Markel, we aspire to build one of the world's great companies. We believe that the pursuit of excellence in and of itself is a worthy goal. It provides a sense of meaning for the people of your company.

We follow a long term, win-win-win approach. We do our best to work in such a way that our customers, our employees, and our shareholders all win. When everyone wins they want to keep playing. James Carse described the sustainability of this central idea as an "infinite game." We love what we do and want Markel to keep going forever.

In this report we'll update you as our partners on our actions of the past year and our hopes and dreams for the future. We hope you enjoy it and share our enthusiasm as we continue to build Markel.

The Markel Corporation

At Markel we're building and developing a culture that allows us to operate a diverse array of insurance, industrial and service businesses, and investment operations. Our culture unites them all. We describe attributes of the culture through the words of the "Markel Style." We practice the values of the Markel Style every day, in every business, in every place. We believe our approach attracts customers and employees. We believe these values create a dependable North Star. With that North Star in place, we can reliably steer.

We know that our culture may not appeal to everyone. We acknowledge that our explicit focus on these values may set us apart, but it strongly attracts those for whom it resonates. We offer a home for outstanding employees who want to be part of a long

Financial Highlights

(in millions, except per share data)	**2019**	2018	2017	2016	2015	2014	2013	2012	2011
Total operating revenues	**$ 9,526**	6,841	6,062	5,612	5,370	5,134	4,323	3,000	2,630
Gross written premiums	**$ 8,780**	7,864	5,507	4,797	4,633	4,806	3,920	2,514	2,291
Combined ratio	**94%**	98%	105%	92%	89%	95%	97%	97%	102%
Investment portfolio	**$ 22,258**	19,238	20,570	19,059	18,181	18,638	17,612	9,333	8,728
Portfolio per share	**$ 1,613.62**	1,385.24	1,479.45	1,365.72	1,302.48	1,334.89	1,259.26	969.23	907.20
Net income (loss) to shareholders	**$ 1,790**	(128)	395	456	583	321	281	253	142
Comprehensive income (loss) to shareholders	**$ 2,094**	(376)	1,175	667	233	936	459	504	252
Shareholders' equity	**$ 11,071**	9,081	9,504	8,461	7,834	7,595	6,674	3,889	3,388
Book value per share	**$ 802.59**	653.85	683.55	606.30	561.23	543.96	477.16	403.85	352.10
5-Year CAGR in book value per share [1]	**8%**	7%	11%	11%	11%	14%	17%	9%	9%
Closing stock price	**$1,143.17**	1,038.05	1,139.13	904.50	883.35	682.84	580.35	433.42	414.67

[1] CAGR — compound annual growth rate

term institution which stands for something. We offer a home for different businesses who want to focus on serving their customers and taking care of them year after year. We offer a home for shareholders looking to invest their capital in a successful long term institution that will work hard to increase in value.

We enjoyed a very good year in 2019. Our customers won. They demonstrated their satisfaction with our products and services by doing more business with us than ever before. Our employees won. We employed more people than ever before. They enjoyed the opportunity to serve our customers, learn new skills, provide for their families, and serve their communities. Our shareholders won. They owned a business that produced record comprehensive income and operated in such a way that we should be able to repeat these statements in future years.

We deploy three powerful financial engines at Markel, namely, our insurance businesses, our Markel Ventures operations, and our investment activities. All three of those engines provided positive thrust in 2019.

Every year we write this letter to accompany the array of numbers in the attached financial statements.

We think this letter serves as a critical tool to provide a qualitative narrative to help understand our quantitative results.

All of the numbers, as well as those that we will report to you in the future, stem from forces often difficult to quantify, namely the fundamental values by which we manage Markel. This letter serves to discuss these values.

Some of the numbers reflect external forces beyond our control. We do not know what will happen in any one year in the realms of interest rates, man-made or natural catastrophes, economic activity, inflation, currency exchange rates, and other important but unknowable events. We will however always run Markel with the notion that we must be prepared to be resilient and durable through any and every kind of environment we face.

Richie and I take our roles as stewards of this company seriously. We want to thank you, our owners and fellow employees, for the responsibility and the privilege you've granted us in overseeing Markel. This is a unique company.

2010	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999	**20-Year CAGR[1]**
$ 2,225	2,069	1,977	2,551	2,576	2,200	2,262	2,092	1,770	1,397	1,094	524	**16%**
$ 1,982	1,906	2,213	2,359	2,536	2,401	2,518	2,572	2,218	1,774	1,132	595	**14%**
97%	95%	99%	88%	87%	101%	96%	99%	103%	124%	114%	101%	
$ 8,224	7,849	6,893	7,775	7,524	6,588	6,317	5,350	4,314	3,591	3,136	1,625	**14%**
$846.24	799.34	702.34	780.84	752.80	672.34	641.49	543.31	438.79	365.70	427.79	290.69	**9%**
$ 267	202	(59)	406	393	148	165	123	75	(126)	(28)	41	**21%**
$ 431	591	(403)	337	551	64	273	222	73	(77)	82	(40)	
$ 3,172	2,774	2,181	2,641	2,296	1,705	1,657	1,382	1,159	1,085	752	383	**18%**
$326.36	282.55	222.20	265.26	229.78	174.04	168.22	140.38	117.89	110.50	102.63	68.59	**13%**
13%	11%	10%	18%	16%	11%	20%	13%	13%	18%	21%	22%	
$378.13	340.00	299.00	491.10	480.10	317.05	364.00	253.51	205.50	179.65	181.00	155.00	**11%**

As we all work every day, we do so in a way that creates wins for our customers, our employees, and our shareholders. We do so with a forever mindset and an appreciation for the cumulative result that develops over time.

When we take care of customers each and every day, when we solve problems for them, when we provide meaningful jobs and career opportunities for our people, and when we earn financial rewards from doing so, we create the opportunity to wake up and do it again tomorrow.

That is the timeless and endless description of the Markel Corporation. It has worked now for 90 years and we believe it will continue to do so.

2019 Financial Results

During 2019 we reported top line total revenues of $9.5 billion compared to $6.8 billion a year ago, an increase of 39%. At the bottom line we reported comprehensive income of $2.1 billion compared to a comprehensive loss of $376 million last year.

Those are record highs for your company and we're delighted to report that headline to you.

As a first pass in providing context and explanation of this year's results, we'll continue the pattern we set last year by reviewing the cumulative results of the last five years. For the 2015-2019 five year period, we reported total revenues of $33.4 billion versus $17.3 billion in the 2010-2014 period, an increase of 93%. Over the same five year period we reported total comprehensive income of $3.8 billion compared to $2.6 billion, an increase of 47% and Markel shares closed the year at $1,143.17 compared to $682.84, an increase of 67% over the same five years.

We think that looking at the five year numbers provides better and more meaningful data than year-by-year results. In any given year, swings in investment markets cause volatility in the annual results. Insurance also regularly experiences meaningful volatility from catastrophes. Finally, within Markel Ventures we own several cyclical businesses whose results vary widely given general economic activity levels.

With a five year measurement period we think you as shareholders get a better gauge of our underlying economic progress. We also hold ourselves as managers accountable to the exact same standard. We use a five year measurement period to determine incentive compensation. We are with you side by side.

We are generally pleased with the long term results and the economic progress of your company. We know we have some specific challenges and corrections to make. We've learned immense lessons about new and existing businesses and we're incredibly optimistic about our ability to apply those lessons to continue to grow your company over time. We hope you share our optimism as well.

As always, to further reinforce the long term nature of Markel, we include a 21 year table of our results at the bottom of this letter. This tapestry of numbers paints a vivid picture of the success of our long term process over decades.

The longer term mindset guides us as we make decisions. We think about what would be best for our customers and our employees over the long term in each and every decision that we make. We're confident if we do that well, our shareholders will be pleased with the results.

The Three Engines Of Markel

Markel stands as a resilient company able to adapt and grow in the face of ever changing landscapes. Technological progress changes business models. Financial markets experience volatile swings between ecstasy and gloom, governments change, and so on and so on.

The beauty of Markel is that we are open minded as we pursue business opportunities. We are not constrained by a narrow vision. As we wrote in the initial annual report in 1986, we pursue a strategy of "specialization and diversification."

Specialization means that we pursue excellence by being expert at what we do. Whether it is in a particular form of insurance, investments, transportation equipment, concierge medical care, houseplants, baking equipment, consulting, or any of the other myriad activities of the Markel Corporation, we strive to provide the absolute best value to our customer.

Diversification among specialization creates resilience for Markel. The world continues to change at an accelerating pace and we do not know what lies ahead. We do know, however, that some businesses of today will not exist in the future, even if they are the very best at what they do. As such we need to continue to diversify. We need to adapt and change our existing businesses to meet the needs of a changing world. We also need to continue to pursue new business opportunities as we have since our beginning 90 years ago.

We specialize and diversify to pursue the dual goals of providing the best products and services to our customers, and being adaptable to change in economic and technological landscapes that are beyond our control.

Today, one simple way to categorize the diversity of Markel is to think of your company as being comprised of three engines. Those engines are Insurance, Ventures and Investments.

Engine #1 – Insurance (Insurance, Reinsurance, Insurance-Linked Securities, and Program Services)

Insurance Engine – Insurance Cylinder

We enjoyed a very good year in our insurance businesses. We wrote total premiums of $5.3 billion compared to $4.7 billion, an increase of 12% from last year. We wrote more business than last year and we did so more profitably with a one point improvement in our combined ratio to 93% compared to 94% in 2018. Barring extraordinary catastrophes in 2020 we expect to be able to say the same thing this time next year.

As you can see in the 21 year chart at the bottom of this letter our consolidated combined ratio has ranged between 87% at its low point to 124% in our most challenging year. Our goal is to produce consistent underwriting profits. We continue to make progress against that goal.

Within our insurance business we enjoyed spectacular results from our Markel Assurance division which operates largely in the U.S. Markel Assurance comprises the legacy excess and surplus wholesale insurance lines on which Markel was founded along with a growing business to serve admitted retail markets.

Markel Assurance remains a crown jewel within Markel. We polish that jewel every day. Over the last several years, under the leadership of Bryan Sanders, we've continued to focus on making Markel easier to do business with. We continue to communicate to our current and prospective customers that we can do more for them than ever before. Our increased volumes show the message is getting through.

Within our U.S. based insurance operations we also enjoyed a tremendous year at our Markel Specialty operation under the leadership of Matt Parker. Matt and his team focus on program insurance products that cover an eclectic and growing list such as horses, farms, camps, classic boats and cars, electricians, plumbers, dry wall contractors, mom and pop restaurants, and others. We insure small businesses and the people who make things work.

In the past, our talented underwriting experts writing various forms of coverage for our customers tended to operate primarily within the confines of specific industries or niche areas. We've worked hard to communicate to our customers that Markel continues to increase in size and scale. We can do more for them. We can provide more coverages and we can create seamless solutions across multiple classes and types of insurance risks.

Our ongoing growth and profitability at Markel Assurance and Markel Specialty stands as powerful evidence that the process continues to work.

In our international operations headquartered in London, success in 2019 was more muted. The Lloyd's market in London remains an expensive place to do business. The City of London itself suffers from cost pressures and ample (read tough) competition as the concentration of insurance industry professionals remains intense.

Over the years, we've enjoyed solid profitability from our International insurance operations. We have consistently increased our capability to operate in the London marketplace as a stand-alone company and side stepped some of the costs inherent in the Lloyd's system. We've continued to increase our geographical presence throughout the U.K. in markets outside London and we've expanded our operations in Canada, Germany, India, the Netherlands, Spain, and other growing markets.

These expansions create profitable revenues for Markel and platforms to grow sustainably in the future. For example, we've operated in Germany since 2012, well before any talk of Brexit began. We leveraged that platform and now have an established, fully licensed insurance company operating in Continental Europe and we are prepared to operate on both sides of the English Channel in any foreseeable environment. We did not predict Brexit when we came across Frederik Wulff eight years ago. We just found a great leader who embodied the Markel Style and built a business together. In light of Frederik's accomplishments and future vision he now serves as head of our European insurance operations.

The worldwide insurance market continues to grow as billions of people move towards greater affluence. Our opportunity to serve these needs all around the globe is immense and we have the people, regulatory structure, and skills to grow for years to come as the global economy continues to develop.

Insurance Engine – Reinsurance Cylinder

In our reinsurance operations our results improved compared to 2018. We wrote $1.1 billion of premiums in both years, with a combined ratio of 104% in 2019 compared to 113% in 2018.

Reinsurance over the decades has produced positive yet volatile results. We're taking steps to continue to improve our reinsurance operations. While we acknowledge that reinsurance remains a volatile business, we expect better returns in the future from these actions.

We are fortunate in that reinsurance is a part of, but not the totality of, our insurance business. Given the inherent volatility in both rates and losses in reinsurance, it is an excellent component within the larger entity of Markel.

In certain market environments, vivid recent memories of large losses cause many reinsurance providers to diminish their appetite for premiums. At those times, we can and do offer our capital, and we write more business with the expectation of earning appropriate returns.

In other market environments, capital is flush and memories of losses fade. In those markets, reinsurance capacity tends to be ample, and we appropriately diminish our writings as other participants displace us by pricing risk at rates we think are insufficient.

Because we are diversified and not dependent on reinsurance, as a mono line carrier might be, we can be opportunistic and grow and shrink our revenues like accordion bellows.

That sentence is easy to say and hard to do. The human beings who run our reinsurance business don't like to turn away business. But the reality of the market demands that they do. We can and must behave this way as responsible and dependable reinsurers.

Following the record level of property losses in 2017 and again in 2018 from hurricanes, wildfires, typhoons, and of course, lawyers, we began charging more per unit of risk. We did so in 2018 and results were better, but not wonderful, since 2018 also was a high catastrophe event year.

We again charged more per unit of risk in 2019 than in 2018. Once again, results improved, but not yet to satisfactory levels. In 2020, we continue to charge more per unit of risk. We will see how the year develops and whether losses industry-wide will continue to set new records, but we continue to be paid increasing rates to bear those risks.

We are prepared to allocate our capital to reinsurance markets when we believe that it will earn appropriate results but we are willing to allocate our capital elsewhere within Markel when we do not have that expectation.

Insurance Engine – Insurance-Linked Securities and Program Services Cylinder

In last year's letter we discussed the nature of Insurance-Linked Securities (ILS) and their role in the insurance eco-system. To review the bidding, we entered into the ILS business with our purchase of CATCo in 2015, followed by State National in 2017, and Nephila in 2018.

These stand as transformative acquisitions for Markel. While the learning curve has had unexpected and painful bumps along the way, we believe the advantages for Markel will continue to accelerate and grow over time. We are proceeding through the learning curve. We expect increasing returns from our ILS operations over time.

As is the case with every other industry in the world, progress brought about by technological change means that we need to be "Better, Faster, and Cheaper" in providing goods and services to our

customers. In the halcyon days of the past you could pick any two of those, but not all three at the same time. That is no longer the case. For every product and every service, at every time and everywhere, all businesses need to figure out how to be Better, Faster, and Cheaper. If any given business can't figure out how to do so, a competitor will.

It is in the DNA of Markel that we innovate and adapt. ILS and our efforts in this arena, stand as a paramount example of how we are attempting to compete effectively in a changing world.

In traditional insurance offerings, we as a company put up our capital to stand behind the risk we take when we write an insurance policy. We underwrite specific risks to determine appropriate pricing, we write a spread of business to keep systemic risk in check, we manage the claims process, and we handle the legal and regulatory issues connected to the provision of insurance.

In ILS, we do all of the above except for one thing. With ILS, third parties such as endowments, pension funds, and other investors, provide the capital. We manage all of the other processes and are paid management fees and incentive fees for doing so. But the pure return on capital flows to the external capital providers, not to Markel as an insurance company. The same is true of our Program Services operations, which match insurance risk to third-party capital and provide services for a fee when doing so.

To some degree, the provision of traditional insurance can be viewed as railroad tracks that run between the ultimate risk insured and the capital base of an insurance company. In ILS transactions, that rail line starts at the same place i.e. the risk a customer needs to insure. Those tracks run through the same mechanical and regulatory landscape, and then they spur off to a pool of externally provided capital rather than to the balance sheet of the insurance company.

You might ask, "What is better, faster, and cheaper" about this? The answer is that the speed and quality should be roughly the same but it should be cheaper. The returns demanded by the external investors are different than those we expect on our own capital. Often they are lower. The outside investors tend to focus on those returns not being correlated to the returns of other assets as well as the absolute level of returns themselves.

By contrast, we at Markel are well designed through our diversified three engine structure to accept volatility from any one stream of capital returns. We primarily focus on the rate of the return in and of itself. We can accept volatility and correlations on our balance sheet due to our diversification and structure. Through the ILS mechanism we can earn excellent returns as managers of the process rather than through the provision of our own capital.

Well, you might ask, "Why has this not worked out like you hoped so far?"

The answer is that in 2017 and 2018 CATCo funds experienced severe losses due to the record levels of property catastrophes those years. In the wake of those losses, U.S. and Bermuda regulatory authorities initiated inquiries into the loss reserves recorded in late 2017 and early 2018.

As part of the inquiry process we retained outside counsel to conduct an internal review. The internal review found no evidence that CATCo personnel acted in bad faith in exercising business judgment in the setting of reserves and making related disclosures during late 2017 and early 2018. The governmental authorities' inquiries are ongoing and we continue to fully cooperate with them.

The unprecedented catastrophe losses of 2017 and 2018 simply exceeded CATCo's expectations used to

determine pricing for the high severity, low frequency offerings they provided to the retrocessional reinsurance market. Severity turned out to be higher as did frequency.

Not surprisingly, due to the unpredictability of the duration, scope and outcome of the inquiries, substantially all of the capital invested in CATCo by ILS investors was tendered for redemption. Consequently, as announced in July 2019, CATCo has ceased accepting new investments and is not writing any more business, effectively going into runoff.

As we move forward, we've adjusted our pricing, and our appetite to write this business, to reflect this difficult experience. We've also developed additional tools to participate in this necessary market that should provide appropriate returns and risk management for Markel.

In addition to the expenses involved in investigating and dealing with the CATCo matter, we also were a significant investor in CATCo's ILS products. We thought it was valuable to demonstrate that we stood side by side with outside investors in putting up our own capital alongside theirs. We suffered losses on that capital alongside the outside investors.

The plan was that, over time, ILS mechanisms and results would become widely known and a historical track record would provide outside investors with comfort. As that took place, we would shift our own investment capital to other uses within the Markel Corporation and operate our ILS platforms as fee management businesses for other investors. The record level of property catastrophe losses in 2017 and 2018 interrupted the plan. We believe the disruption in ILS is a temporary circumstance. In the long run, we continue to believe in the ILS mechanism and its ability to provide better, faster, and cheaper insurance solutions in many circumstances.

By contrast, our experiences at State National, as led by founder Terry Ledbetter (who just retired on January 1 of this year with full regalia and a very honorable discharge) and his successor Matt Freeman, and at Nephila, led by Frank Majors and Greg Hagood, have gone well. Both of those businesses continue to perform according to our expectations prior to acquisition. We are absolutely thrilled with their progress to date, as well as their future path within Markel.

State National, through their Program Services operations, provides much of the regulatory and process framework that enables managing general agents (MGA's) to operate. They use many of those same skills and abilities to provide similar services to the ILS marketplace. State National provides access to ratings and licenses, and they manage the complicated 50 state, multi-country jurisdiction regulatory matters that accompany the provision of insurance. They are the leading firm in this marketplace and they continue to shine.

Nephila pioneered the ILS market over 20 years ago and they stand as the market leader in the industry. Nephila offers a wide array of insurance products that operate right at the heart of the insurance and reinsurance marketplaces. While their results were diminished by the record levels of catastrophe losses in recent years, their fundamental operations remain well within our expectations at the time of the acquisition.

Nephila's customer relationships continue to deepen and broaden as existing and new investors continue to add Insurance Linked Securities to their investment portfolios. Broadly speaking, "alternative assets" continue to be attractive to pension, endowment, and other pools of investment capital. Nephila started this market and continues to be a leader.

There's an old joke that goes, "What do you call alternative medicine when it works?"

The answer is, "Medicine."

Increasingly, the "alternative assets" of the ILS world continue to provide attractive, understandable, and non-correlated returns for many investors. We may not yet be at the point where they are just called "assets" in the investment world, but we are drawing closer to that day.

We expect ongoing consolidation in the ILS industry. We expect advantages of scale to become more and more important. Large and sophisticated investors need large and sophisticated counterparties to design, process, and execute various strategies for the growing array of ILS "alternative" assets. We are the leading company in this field and we expect to enjoy increasing advantages and profitability from that position over time.

Additionally, our operations in ILS address another strategic imperative at Markel. Namely, we want to be able to seamlessly provide any insurance customer with solutions that meet any specialty insurance need from soup to nuts. As we continue to develop the ILS mechanism to operate in more and more realms of the insurance world, we will continue to offer wider, deeper, and broader, products to our insurance customers in a seamless, better, faster, cheaper way.

We own and operate the leading ILS platform in the industry. We're just getting started in this world and the addressable market is immense. Weather and climate related risks are well suited to be addressed via the ILS market. Markel possesses unique opportunities to act as a dealer in the secondary market for ILS securities already in existence. ILS should also be well suited to expand beyond the original markets of large property catastrophe risks as the sector matures and learns to process longer tailed liability risks. The list goes on and on.

Our ILS platform makes the rest of Markel better by broadening the ways in which we can serve our insurance customers. It makes us a better and more skilled company that can do more for existing and potential customers.

Markel also makes our ILS businesses better by providing a stable and consistent ownership base from which the employees of those businesses can continue to expand and grow. That circular and virtuous circle between our various business units has and will continue to produce financial benefits for our shareholders. Win-win-win.

Engine #2 – Markel Ventures

In 2019 total revenues of Markel Ventures reached $2.1 billion compared to $1.9 billion a year ago. Earnings before Interest, Taxes, Depreciation, and Amortization (EBITDA) totaled $264 million compared to $170 million a year ago. (We use EBITDA as the least-worst proxy to describe our sense of the economic profitability of Markel Ventures. Our reason for doing so is that in the early years following an acquisition, the A, or amortization number shows up as a major expense of the business. That is the cost of Markel purchasing the business, not the ongoing costs of running the business. We think it is important to separate that out to give you a better picture of how our underlying businesses are performing.)

The great news is the Markel Ventures, as led by Mike Heaton and his team, continue to perform wonderfully. We started Ventures in late 2005 and in the first full year, the run rate of Ventures was approximately $60 million of revenues and $5 million of EBITDA. As of 2019, revenues now stand at $2.1 billion with EBITDA of $264 million.

We make our decisions by thinking in "cash money" terms rather than GAAP accounting conventions. Over the last 15 years, up until our November 2019 acquisition of VSC, we've deployed a total of

approximately $1.9 billion of "cash money" into Markel Ventures. During that same time, in addition to self-funding the day-to-day capital needs (including growth), the Markel Ventures companies have returned "cash money" to us and built up internal cash balances of roughly $900 million combined. As we currently stand, we've got a diversified array of operating businesses that produced EBITDA of $264 million in 2019 with approximately $1 billion of net investment in the businesses.

We are delighted with both the returns these businesses produced over the years and the additional resilience they add to the Markel Corporation. Markel Ventures provides a stream of cash flow over and above, and different to, that provided by our insurance operations. It stands as an amazing story and fundamental component as to how we can best assure the long term growth and sustainability of the Markel Corporation.

As is the case with any new endeavor, there is always a learning curve. Over the last 14 years we've learned immense lessons about what defines a wonderful operating company. We've learned how to retain and attract talented managers, we've learned how to deal with unexpected challenges, and we've learned how to build a team that can constantly grow and handle larger and larger opportunities and challenges.

There are several points about Markel Ventures that we'd like to highlight from 2019.

First- Within our diversified array of businesses it should come as no surprise that some are performing spectacularly well, some are on track with normal expectations, and that some are not meeting performance goals. Over the last 15 years of Markel Ventures operations, an increasing number of our businesses are performing well, and largely autonomously. That is the ultimate goal.

We will likely always have some businesses that face temporary, or more permanent, challenges. Over time if we do our job well, the proportion of Markel Ventures companies in that condition should continue to diminish. That has indeed been our experience and it makes us wildly optimistic about our future.

Second- During the last three years, we have not actively sought new acquisitions with traditional business development activities through traditional transaction processes. We observed that market prices for businesses increased markedly and created a "sellers" market. That dynamic kept us from participating in traditional auction based acquisition processes.

That said, our growing reputation as quality owners, with long term vision, autonomous operating practices, and all of the elements of the Markel Style, made us a preferred buyer in many circumstances. During the last five years we directly purchased VSC Fire & Security led by Mike Meehan, Brahmin Leather Works led by Susan Thacker, Costa Farms led by Joche and Maria Smith, and CapTech led by the co-founders Sandy Williamson and Slaughter Fitz-Hugh, with their leadership team of Kevin McQueen, Steve Holdych, Vinnie Schoenfelder, and Joanna Bergeron. We also partnered with Chas Burkhart to form Rosemont Investment Group. All of these acquisitions came about from principal to principal discussions without traditional intermediaries. Some of those conversations took place over multiple years and sometimes they led to very quick action.

We remain cautious about the overall environment to acquire additional Markel Ventures operations in the current pricing environment but we continue to be pleased and honored to receive inbound calls. Increasing arrays of spectacularly successful businesspeople know about Markel and they're calling to see if they can join the family.

This is an immense business advantage. Our years of history and behavior continue to produce cascading opportunities to grow.

In true Markel fashion, the sellers of these businesses won by receiving appropriate and fair consideration for a lifetime of work. The employees of the companies won by joining forces with Markel, and finding a stable and long term oriented home where they could build careers. Our shareholders won by deploying capital in profitable and well run businesses with organic growth opportunities and further expansion possibilities. Win-win-win.

Engine #3 – Investments

2019 stands as a record breaking year. In our equity portfolio we earned a return of 30% and in our fixed income operations we earned a return of 6.5%. The total investment portfolio produced a return of 14.6%. This is the highest total return from the portfolio in 24 years.

While we celebrate the wonderful returns of 2019 it is important to view them in a longer term context. We enjoyed a year where interest rates declined. In that environment, equity prices rose at a faster rate than our estimates of the intrinsic value of the companies themselves.

Long time readers of this report will probably recognize the consistency of this section.

Over the decades, our investment operations continue to produce fantastic returns for Markel. Our five and ten year equity portfolio returns stand at 11.7% and 15.2% respectively. We've consistently followed the same discipline in selecting investments and that discipline has, and in our opinion will continue to, stand the test of time.

Our total invested assets stood at $22.3 billion at year end. We manage the vast majority of our investments in house at an extraordinarily low cost (8 basis points for total management costs) and with tax efficiency (as witnessed by the current unrealized gain of $3.9 billion).

The first thing we do in making investment decisions is to allocate funds to our fixed income holdings to more than match our insurance liabilities (the reserves). We are holding those reserves on our balance sheet for the benefit of our policyholders and we take minimal credit risk as we do so. We merely wish to earn a positive spread between the cost of those funds as shown by our underwriting results and what we can earn on plain vanilla high quality fixed income investments.

In 2019 we reported a combined ratio of 94%. That means that during the year the cost of the reserves on our balance sheet stood at a negative 6%.

We then take that money and invest it in the fixed income markets. The low and sometimes negative interest rates seen in current bond market prices are a growing and troubling development in our opinion. Fortunately, the negative cost of funds generated by our insurance operations is more negative than the low and negative rates of interest on offer from the credit markets. We continue to earn a small but positive spread on our fixed income holdings but that spread is under pressure.

The next step in allocating investment capital within our insurance operations is to look for equity securities with the promise of higher rates of return than what would be available from fixed income alternatives.

As we look for equity securities we follow a consistent, time tested, and four part discipline. First, we look for businesses earning good rates of return that use only

modest leverage to do so. Second, we look for management teams with equal measure of talent and integrity. Third, we look for businesses with opportunities to reinvest their capital and grow organically or by acquisition, and/or with capital discipline to repurchase shares or pay dividends. And fourth, we look to acquire these holdings at fair prices where our long term returns as shareholders should be similar to the underlying growth in intrinsic value of the company itself.

We've followed this four part process for decades and it worked spectacularly well in 2019. More importantly, it has worked for decades and produced higher returns for us than what would have been the case had we invested more similarly to most insurance based entities and limited ourselves to a predominantly fixed income portfolio.

In our fixed income operations we look for high credit quality instruments and we match those holdings in duration and currency to our insurance liabilities. That strategy serves us well as we've never experienced any meaningful credit losses in the portfolio, and we've earned positive spreads compared to the cost of those funds as measured by our underwriting results.

Count on us to continue this approach.

We remain wary of investing in an environment dominated by the forces unleashed by low and negative interest rates. There is simply no way to easily produce our historical results with those gale force headwinds. As we noted earlier in the year, we'd rather sell bonds than buy them at current rates. In May and September we did take advantage of the low interest rate environment to refinance our upcoming debt maturities at Markel, which included raising capital with a 4.15% coupon and a 31 year maturity.

More importantly, we think that the second and third order effects of how management teams, investors, and government leaders behave in the face of the unprecedented interest rate environment are worrisome and give us pause.

Capital markets are like the Wild West right now and anything goes. In an environment where anything goes, something is going to go wrong. We don't have any specific predictions or forecast. We just remain as extraordinarily disciplined and long term oriented as we know how to be in the face of the unprecedented challenge of producing positive investment returns in a low/negative interest rate world.

What we can control in the face of these forces is our own behavior. We will continue to behave according to, and in keeping with, our disciplined investment process no matter what. We also believe that behavior will continue to deliver dependable and delightful results.

Capital

The productive thrust of the three engines of Markel Corporation creates a wonderful circumstance. Those firing engines all worked together to create a situation where we both have capital and keep creating more of it.

A great question you might have is, "What are you going to do with it?"

Over time, the answer to that question will determine how successful we are at building the financial value of your company as we pledge to do in the Markel Style.

As has been the case for many years, we have a four step triage in place for how we allocate the capital flowing into Markel.

Our first choice is to allocate capital within our existing business where we see opportunities to profitably grow and expand. We know and trust the people running the operations. They are proven veterans with a track record of producing excellent results. The people of this organization who historically produced good returns on capital stand first in line when it comes to funding growth and expansion. Fortunately, we see opportunities to deploy capital in this way both in our insurance and ventures operations. We will fund everything we can find that meets this test.

Our second choice is to acquire new businesses that we believe will produce appropriate returns on capital. We enjoy a long history of acquiring insurance and non-insurance businesses. We've bought big businesses that stretched our abilities and capital base at the time. We've learned how to do that and transform and adapt ourselves to big opportunities and changing conditions. We've bought smaller businesses as well. And we've bought businesses in and outside the U.S.

As we noted earlier, each and every one of these transactions involved learning curves of various shapes and slopes, but the net result remains extraordinarily positive for Markel. We will continue to allocate capital to acquisition opportunities as we find them.

Our third choice is to invest in publicly traded securities when we find stocks that meet our four part test. We've done so with excellent results for decades and we continue to see opportunities to allocate capital to equities in our long term and disciplined manner.

Our fourth choice is to repurchase shares of Markel Corporation when we've funded all the previous opportunities and when Markel shares are attractively priced. We've purchased modest amounts of Markel stock over the years but starting last year we increased the pace at which we are doing so. We will be disciplined and rational as we repurchase shares just as we are in every other capital allocation decision.

You might ask, "How do you value Markel stock?"

For many years following the IPO, Markel existed largely as an insurance company with the embedded investment operation that attaches to any insurance company. In that environment, the book value per share provided a reasonable proxy and starting point for how to value Markel shares. The activities of the company were well captured by the accounting process that sum to book value. The rates of growth of that book value per share provided a good indication of the economic progress of Markel over time.

As Markel has grown and entered new businesses through our Markel Ventures operations, as well as the ILS and Program Services businesses, and as we begin repurchasing more shares, the book value per share calculation begins to lose its ability to describe the intrinsic value and progress occurring at Markel. We are earning returns that are not well captured in the book value per share calculation.

In recognition of this fact, we as managers break down our operations into certain components. First, we look at our insurance operations and think about a normalized expectation of underwriting profitability. Second, we look at our investments and think about normalized amounts of return expectations from the portfolio. Third, we look at our Markel Ventures and think about normalized profits from those operations. Fourth, we look at our ILS and Program Services businesses and our normalized expectations of earnings from those operations. We add all of those up. After that, we subtract out the capital expenditures necessary to keep the businesses going.

We also subtract out all interest and taxes. These steps net to our sense of the recurring, comprehensive income of Markel.

We go through this process over rolling, multi-year time frames to adjust for normal volatility and cyclicality. We then apply a reasonable range of multiples to our estimate of our comprehensive income to develop our intrinsic sense of the enterprise value of Markel. We then subtract out the debt we owe and divide by the number of shares outstanding to determine our estimate of the intrinsic value of each share of Markel.

We've followed this process consistently for many years. We would never assign false precision to any single point estimate in any single year, but we think the exercise provides directionally correct data from which we can make rational capital allocation decisions.

The net of all of this discussion is that we're executing all four steps.

Alan Kirshner

As we close this letter we want to take a moment to celebrate and commemorate the career of Alan Kirshner. There would not be the Markel Corporation of today if not for Alan.

As of the annual meeting, Alan will retire from his post as Executive Chair. Alan started in 1960 assisting Milton Markel in the underwriting department and in his 60 years at Markel, he's done every job along the way culminating in his current role.

There are so many aspects to Alan that it is impossible to do justice to him in a few paragraphs. That said, there are a few particular items that it is important to write at this time.

First, many people make contributions and do fantastic work in their careers. Alan's work rises above that standard. His work was not limited to his individual accomplishments and achievements along the way. Alan's work was systemic.

By that I mean that Alan, as the primary author of the Markel Style, created a document and guide for how all 19,000 people of Markel operate the company today. Alan himself couldn't talk individually to 19,000 people, or spend time with each of them on a regular basis. Given that physical reality, Alan crafted the Markel Style in preparation for the initial public offering of Markel back in 1986. By writing that document, each of those roughly 300 employees at the time, and the over 19,000 of today, could hear his voice and understand his vision for Markel.

The idea behind the phrase, "It is written" carries special meaning. That phrase means that a lasting statement is being made. It means that those who follow should pay special attention to the ideas and directions when written down.

The Markel Style represents exactly that idea for us as employees of Markel. Alan knew that the day would come when he and his partners, Tony and Steve Markel, would no longer be the day to day managers of the Markel Corporation. He knew that the day would come when the Markel Corporation would grow in size and scale such that the top executives could not personally know all of the employees, as was the case in the days before the public offering in 1986.

As such, he worked to create a written document that would serve as guideposts for Richie and me as well as

those that will follow us in due time. He worked to create a document that people in every office around the globe, and in every business that Markel might someday enter, could read and understand the high purpose of this company.

In the Markel Style there are two words that Ken Newsome, the CEO of Markel Food Group (our first Markel Ventures acquisition), pointed out as being especially meaningful. Those two words were "winning" and "insurance." As a close reader of the Style might observe, the word "winning" is the final commanding word of the document and the word "insurance" is not mentioned.

Even prior to our IPO in 1986, Alan intuitively understood that a company dedicated to the service of others might someday expand beyond its initial business of insurance. He created a document that allowed for the ongoing creativity, and drive, of current and future Markel employees to "pursue excellence" and he recognized that none of us knew or know where that might lead.

"Winning" is the last word of the Style. Again, Alan intuitively understood the importance of sustainability inherent in win-win-win architecture necessary to build a great company. He knew that unless customers felt that they had won, and were better off because they had done business with Markel, they would not want to do business with us again. He knew that if we did things for our customers rather than to them, that they would be back. They would refer others to us and help to create recurring and growing revenues for Markel over time.

Alan knew that unless our employees felt that they won, they would always think about contributing their skills, creativity, and efforts somewhere else. He knew that our employees had to be able to provide for their families, and always be in an environment where they were learning and growing and building new skills and capabilities to cope with a changing world. The Markel Style explicitly instructs us to provide, "an atmosphere in which people can reach their personal potential." We believe in continuous learning. It describes the mindset of the people of Markel.

Alan also knew that unless our shareholders won and earned appropriate financial returns that we would not be allowed to carry on as managers and build Markel following these goals. For a business to continue to exist and to serve its customers and employees, it must be profitable. Otherwise it goes away. The Markel Style explicitly states that "Our pledge to our shareholders is that we will build the financial value of our company." He was right then, and his instruction remains correct for us today. Unless we produce financial results for our shareholders we will not continue to have the right to build Markel.

Alan's contribution to the Markel Corporation goes beyond the capabilities of one person. His contribution is that of a "system" that serves as the formula by which all of us at Markel operate this company.

Outside of Markel in community service roles, Alan served as the founder of Partnership for the Future and the Faison Center. Both of those institutions serve young people in Richmond and beyond. Partnership for the Future helps high school students from challenged backgrounds prepare and succeed at college and at life. The organization teaches study habits, financial discipline, life skills, employment skills, and countless other necessary elements to those whose exposure to those factors may otherwise be limited.

The Faison Center aids both children and adults with autism. While it started and operates in Richmond, the skills, techniques and learnings that have been

developed at the Faison Center are now applied far and wide. Faison stands as a leader in how to help those with autism and their families. None of the systemic achievements of Faison would have happened without the vision, and non-stop financial and personal, commitment of Alan Kirshner.

Please check out the websites for Partnership for the Future and the Faison Center to learn more about the remarkable work and accomplishments of these institutions and know as you are reading them that they would not exist were it not for Alan Kirshner.

Alan- We, and so many others, love you and thank you. We could not have done it without you. As you instructed us in the Style, we pledge hard work and a zealous pursuit of excellence. We'll follow the letter and the spirit of what you taught us to keep Markel moving forward, and we thank you for your decades of selfless example and teaching.

Onward

Respectfully submitted,

Thomas S. Gayner, *Co-Chief Executive Officer*

Richard R. Whitt, III, *Co-Chief Executive Officer*

2020

To Our Business Partners,

Thank you

Thank you to our employees throughout Markel who stood tall and continued to serve our customers through circumstances we never imagined.

Thank you to our customers who continued to depend on us.

Thank you to our shareholders who provided the necessary capital to operate our business and fulfill our promises.

Thank all of you for maintaining a long term commitment to the enduring and timeless values we articulate in the Markel Style. Our explicit creed that embraces hard work, a zealous pursuit of excellence, keeping a sense of humor, and honesty and fairness, never goes out of style. We appreciate and embrace all who share our dream.

Our values provide the ultimate in sustainability. We believe that no matter what changes the future may hold, the world will always need an organization like Markel that is dedicated to serving the needs of others.

Serving others works forever. The mindset of service drives a durable flywheel that attracts people, capital, and businesses.

We look forward to continuing to earn your trust whether you are an employee, customer, or shareholder of Markel. Many of you are in all three categories and we thank you for each role that you play.

Markel

We continue in our quest to build one of the world's great companies. We define a great company as one with a culture and system of Win-Win-Win for our employees, our customers, and our shareholders. These values define our strategy and frame every tactical decision. They apply to any and every specific line of business.

We strive to make Markel a place where our employees win by pursuing fulfilling careers of service to our customers, continuously learning, and providing for their families and communities, in a dependable and sustainable fashion.

We strive to make Markel a place where our customers win by finding everything from protection against unexpected events and circumstances, to an array of products and services from food making equipment, fire protection, green plants, management consulting, housing, medical services, educational infrastructure, transportation, building

Financial Highlights

(in millions, except per share data)	**2020**	2019	2018	2017	2016	2015	2014	2013	2012
Total operating revenues	**$ 9,735**	9,526	6,841	6,062	5,612	5,370	5,134	4,323	3,000
Gross written premiums	**$ 9,267**	8,780	7,864	5,507	4,797	4,633	4,806	3,920	2,514
Combined ratio	**98 %**	94 %	98 %	105 %	92 %	89 %	95 %	97 %	97 %
Invested assets	**$24,927**	22,258	19,238	20,570	19,059	18,181	18,638	17,612	9,333
Invested assets per common share	**$1,808.50**	1,613.62	1,385.24	1,479.45	1,365.72	1,302.48	1,334.89	1,259.26	969.23
Net income (loss) to common shareholders	**$ 798**	1,790	(128)	395	456	583	321	281	253
Comprehensive income (loss) to shareholders	**$ 1,192**	2,094	(376)	1,175	667	233	936	459	504
Shareholders' equity	**$12,800**	11,071	9,081	9,504	8,461	7,834	7,595	6,674	3,889
Book value per common share	**$885.72**	802.59	653.85	683.55	606.30	561.23	543.96	477.16	403.85
5-Year CAGR in book value per common share[1]	**10 %**	8 %	7 %	11 %	11 %	11 %	14 %	17 %	9 %
Closing stock price per share	**$1,033.30**	1,143.17	1,038.05	1,139.13	904.50	883.35	682.84	580.35	433.42

(1) CAGR - compound annual growth rate

products, and multiple other necessary and desired items. Our underlying values guide us and apply to all of these products and services.

We strive to make Markel a place where our shareholders earn good returns on their capital and continue to want to provide us with it to make everything we do possible.

In 2020, we hit two-and-a-half out of our desired three wins. Our employees, and our customers, both continued to operate in a system that fulfilled the promises and goals we set.

While we earned positive comprehensive income and demonstrably increased the economic value of the company, our shareholders did not see those returns show up in the share price. That can be expected to happen from time to time due to overall investment market volatility. We acknowledge though that that has now been the case over the last five year period. And as you know, we consistently use five year time frames as a reasonable period to measure our performance. We know that delivering "two-and-a-half out of three" wins is not satisfactory. We can and must do better in order to regain traction and make progress like what we've experienced at Markel historically.

Over decades, Markel has accomplished the three part, Win-Win-Win goals. We are optimistic and confident that we also will do so in the future.

In the course of this letter, we hope to give you a full and candid report as to what is working well, and to discuss areas where we must improve. We hope that by the time you finish you will share our optimism about the discipline, hard choices, successes, and dedication we share to fully deliver on our commitment of excellence in each and every facet of Markel.

2020 Review

2020 stands out as a year unlike any other. We're sure you'll read these words in many annual reports and publications. While it may seem like there is an *unprecedented use of the word unprecedented* we believe it is fully justified this year.

This was truly a year unlike any other.

We started out in January brimming with optimism. We had just put the bow on 2019 where we reported a combined ratio of 94%. Those insurance results were a four point improvement over the prior year 98%, which was affected by above average levels of natural catastrophes. Our earned premiums grew from $4.7 billion to over $5 billion and underwriting profitability more than doubled from $114 million to $281 million.

In our investment operations, we had just finished a year when we earned 30% on our equity investment portfolio. That capped off a decade where we earned

2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000	**20-Year CAGR[1]**
2,630	2,225	2,069	1,977	2,551	2,576	2,200	2,262	2,092	1,770	1,397	1,094	**12 %**
2,291	1,982	1,906	2,213	2,359	2,536	2,401	2,518	2,572	2,218	1,774	1,132	**11 %**
102 %	97 %	95 %	99 %	88 %	87 %	101 %	96 %	99 %	103 %	124 %	114 %	
8,728	8,224	7,849	6,893	7,775	7,524	6,588	6,317	5,350	4,314	3,591	3,136	**11 %**
907.20	846.24	799.34	702.34	780.84	752.80	672.34	641.49	543.31	438.79	365.70	427.79	**7 %**
142	267	202	(59)	406	393	148	165	123	75	(126)	(28)	
252	431	591	(403)	337	551	64	273	222	73	(77)	82	**14 %**
3,388	3,172	2,774	2,181	2,641	2,296	1,705	1,657	1,382	1,159	1,085	752	**15 %**
352.10	326.36	282.55	222.20	265.26	229.78	174.04	168.22	140.38	117.89	110.50	102.63	**11 %**
9 %	13 %	11 %	10 %	18 %	16 %	11 %	20 %	13 %	13 %	18 %	21 %	
414.67	378.13	340.00	299.00	491.10	480.10	317.05	364.00	253.51	205.50	179.65	181.00	**9 %**

annual returns of 15.2% on our equity portfolio in a disciplined, tax efficient, conservative, and low cost manner. Recurring investment income of interest and dividends reached a new record of $452 million, up from $434 million, despite unrelenting headwinds of lower and lower interest rates.

In our Ventures operations, we had posted record EBITDA of $264 million, up from $170 million, and revenues of $2.1 billion compared to $1.9 billion the previous year.

In our Insurance-Linked Securities and Program Services businesses, we made progress in continuing to grow and build our strategic Nephila and State National businesses. We continued to resolve the lingering issues associated with the CATCo operations. Profitability from these operations was constrained by costs associated with winding up and settling matters related to CATCo, which obscured the underlying progress evident in the ongoing businesses.

Our balance sheet was strong, and chock full of conservatively stated insurance loss reserves, high-quality fixed income investments to more than back those reserves, no near-term debt maturities, and appropriate levels of public equity investment exposure.

Boy, were we ready to bring it all home in 2020. Then, the pandemic ensued.

We did not see that coming.

The year did not unfold as we expected.

Fortunately, we've designed Markel to be *resilient.* While we in no way predicted the pandemic or the far reaching effects it would have on every aspect of our businesses and the daily lives of everyone on planet earth, we made forward progress this year despite the pandemic.

We will never be able to predict the future.

We can and must though prepare to adapt and adjust to whatever the future brings.

We believe that 2020 stands as a testament to our ability to do just that. We maintained an iron will along with a mindset of adaptability and endurance. We persisted and showed the ability to thrive despite unpredicted and unprecedented events. And we are very optimistic about our future.

We've spoken for years about the value of the Win-Win-Win architecture underlying your company. We've worked tirelessly towards the goal of building one of the world's great companies. We define that goal as being a firm where we do things *for* our customers rather than *to* our customers, where our employees are better off for being with us, and where our shareholders are better off for having invested with us.

That is easy to say and enjoy when you've got tailwinds. 2019 was such a year and we set records across the organization. Comprehensive income in 2019 totaled $2.1 billion, which was more than the previous four years combined, and nearly double any single previous year.

A truer and more meaningful test of the success in building one of the world's great companies takes place when conditions toughen. 2020, the year of the pandemic, stands out as a punishingly brutal exam.

In the face of this test we've got positive results to report. Financially, we earned comprehensive income of $1.2 billion in 2020.

We reported record volumes in both our insurance and Ventures operations. We absorbed significant and unexpected insured losses in the first quarter as the pandemic started to take its toll. Then we endured and adapted.

In our insurance operations, we wrote a record amount of premium for the year and we earned underwriting profits starting in the second quarter and for the full year.

At Markel Ventures, we earned record revenues and EBITDA. Each of our companies faced challenges unlike any ever seen before. We needed to figure out how to keep our people healthy and safe, we needed to adapt to changing levels of what our customers wanted, we needed to figure out how to keep our supply chains functioning and effective, and multiple other existential challenges. Despite swirling and constantly changing conditions, our people endured and adapted and went on to set records. We are amazed and grateful for their dedication and accomplishments.

In our investment operations we earned a total return of 9.4% with equity investment returns of 15.2% and fixed income returns of 5.7%.

In our Insurance-Linked Securities and Program Services operations we reported revenues of $316 million and operating income of $5 million, which was net of $59 million of amortization expense and also reflects $51 million of expenses from CATCo's

run off operations, the majority of which is non-recurring.

As always, we think it is critical to view our financial results over meaningful periods of time. Quarterly and annual results are subject to immense volatility from investment market swings and natural catastrophes. Over longer time frames, a more meaningful and accurate picture emerges. For many years, we've measured ourselves (and based our executive incentive compensation) on five year measurements. We think that creates better Win-Win-Win and sustainable alignment for everyone committed to Markel.

This table shows some key measurements over the last three five-year periods.

(dollars in millions, except per share data)	2016 - 2020	2010 - 2015	2006 - 2010
Total revenues	$ 37,776	$ 20,457	$ 11,398
Earned premiums	$ 23,488	$ 15,023	$ 9,870
Underwriting profits	$ 633	$ 733	$ 709
ILS and Program Services revenues	$ 939	N/A	N/A
ILS and Program Services operating loss	$ (54)	N/A	N/A
Markel Ventures revenues	$ 9,311	$ 3,379	$ 456
Markel Ventures EBITDA	$ 1,167	$ 354	$ 45
Net investment income	$ 2,283	$ 1,580	$ 1,391
Comprehensive income to shareholders	$ 4,752	$ 2,384	$ 1,507
Closing stock price per share, at end of period	$1,033.30	$ 883.35	$ 378.13

These five-year views show that we've experienced dramatic growth in the size and scale of Markel. Unfortunately, our underwriting profitability moved lower during the most recent five-year period. The combination of record levels of natural catastrophes, poor results in our reinsurance operations, and COVID-19 losses weighed on our underwriting profitability.

Investment income grew in both time frames, but at a slowing rate due to the steady, ongoing persistence of lower interest rates. Almost any time a fixed income investment matured or was sold, we had to replace it with something offering a lower yield. Dividends on our equity portfolio grew which counterbalanced some of the declines in interest rates.

Markel Ventures started as a dream in 2005 and grew to become a meaningful contributor to revenues and earnings over the 15 years represented in this table.

We began our strategic initiative in Insurance-Linked Securities and Program Services during 2015 and the most recent five-year time frame shows the beginning era of what we expect will become a more meaningful component of Markel over the next several years. While our initial foray into ILS proved expensive and difficult, we believe that we've learned some important and critical lessons. Ongoing technological and environmental change in insurance markets continues to gallop ahead. ILS and Program Services should serve to keep Markel as a leader, guiding these changes and to protect us against the forces of disruption in the insurance marketplace.

We've designed Markel to be a resilient and adaptable company with "Three Engines" of Insurance, Investments, and Markel Ventures, that can power us forward. In any given year, one engine may be under pressure but the other two can provide positive thrust. In 2020, all three engines contributed. Over multi-year periods, such as the five-year time frame we consistently use to measure and judge ourselves, all three engines dependably propelled us forward.

Engine #1 - Insurance

Our first engine, and the heritage of Markel, is Insurance. In the Insurance engine, our insurance and reinsurance operations faced unprecedented challenges in the initial stages of the pandemic. As a vivid example, event cancellation insurance stands out as one product line where we experienced large and unprecedented losses. Normal underwriting disciplines of diversifying risk guided our approach in writing event cancellation as it does in all of our business lines. We, and our underwriters, fully believed that writing policies for things like a tennis tournament in England, the Olympics in Japan, a music festival in Tennessee, a movie festival in Colorado, a hot air balloon race in New Mexico, a wine festival in California, a beer festival in Germany, weddings, parades, concerts, ball games, and so on and so on, would fit the definition of a portfolio of diverse and uncorrelated risks.

In the case of the pandemic, all of those risks correlated to each other. Spreading things out geographically and throughout the year didn't work. All events were cancelled and significant losses occurred on policies for these events. We did not foresee that possibility.

Fortunately, those losses are finite. We are not writing event cancellation at this point and we are

near the end of when covered events from previously written policies can take place.

Business interruption coverages also loom large as a consequence of COVID-19. We have provided for the losses we expect from business interruption. We did so promptly as the pandemic unfolded and recognized the losses we believed we would face. Those reserves were calculated amidst conditions of uncertainty and necessarily reflect estimates. As 2020 progressed we gained additional data and we added to our estimates. As always, we did so in order to provide reserves which reflected our best estimate of our ultimate exposures.

We established COVID-19 related losses of $325 million in the first quarter of 2020 and additional COVID-19 losses of $33 million subsequently in 2020. As is always the case, we attempted to recognize all of the losses we expect to the best of our ability. Though we do not anticipate further COVID-19 losses, we cannot predict with certainty the extent to which legal decisions and other factors may impact the amount and nature of insured liabilities for pandemic related circumstances.

Despite the surprise and dramatic insured losses at the beginning of 2020, we managed to report a modest underwriting profit for the year with a combined ratio of 98%. While 98% falls short of our goals and does not produce appropriate returns on your capital, we are glad to be able to report underwriting profitability despite and in light of the unprecedented adverse conditions we faced in 2020.

As we stated earlier in this letter, we were very optimistic about reporting better insurance combined ratio results to you when we started the year. Along with the pandemic, we had more hurricanes than hurricane names in 2020, above average wildfires, and a derecho. We hate making excuses but we believe that we've made meaningful progress in improving the fundamental performance of our insurance operations and we're disappointed at how that progress is obscured by COVID-19 and above-average levels of natural catastrophes.

The headlines of COVID-19 and hurricanes fall outside our control. We cannot predict when or if such forces will strike again.

We can however act on things within our control. We have, and we continue to do so. Here is a small sample of actions we've taken, which should improve our financial results going forward.

First, we've significantly reduced writing insurance and reinsurance with exposures to natural catastrophes. We do not know to what extent climate change and other factors have caused insured losses to increase in recent years. Neither can we predict with reasonable assurance what might happen in 2021 and beyond. As such, we've reduced our exposures to natural catastrophe-related losses overall. Should such losses strike in 2021 our losses will be less. We've not earned adequate returns for the risk and capital charges associated with large property related exposures for several years. We will redeploy the capital previously allocated to this business to higher and better uses within Markel.

Second, we've focused on increased efficiency and lower costs throughout our insurance operations. We continue to invest in technology to simplify the process of underwriting, marketing, distributing, and administering every facet of an insurance transaction. We've reduced our expense ratio from 37.7% in 2018 to 36.0% in 2020 and we are working towards, and confident of, further improvement in 2021.

Third, we've considered what it would look like to almost double the size of our insurance operations. We want to grow to $10 billion of annual insurance premiums in five years and earn $1 billion of annual underwriting profit while doing so. We've adopted this "10-5-1" target as an overarching goal to guide and discipline decision making within our insurance operations.

We are excited about this goal and believe it speaks to several important dimensions. The $10 billion speaks to growth. In 2020 we wrote $6 billion of insurance premium. We believe that growing the top line demonstrates that we are serving our customers with insurance coverages they want and need. Insurance rates continue to increase to reflect the severe losses experienced by the industry across multiple lines as well as the pervasive environment of lower interest rates.

We expect to achieve this goal largely through organic growth of our existing operations rather than through acquisitions.

The "5" speaks to a time frame. We want to reach the $10 billion of annual insurance premiums in the next five years. The "5" provides a sense of urgency. Technology continues to drive change at a faster and faster pace. We can and must make decisions faster. By committing to growth *and* attaching a time frame, we're holding ourselves responsible in a measurable way to acting *now* rather than later.

The "1" speaks to $1 billion of annual underwriting profits. Growth without profitability means we're doing something wrong. It also consumes capital since regulators and rating agencies require us to post capital to write insurance business. We've felt the effects of growth without sufficient profitability in the last few years and we're committing to the discipline of focus on the bottom line. We simply cannot provide our customers with quality long term financial promises if we do not earn sufficient profits all along the way to pay claims and provide appropriate returns at the same time.

In addition to the "10-5-1" goals from our insurance operations, we expect meaningful profitability from our reinsurance operations, as well as our Insurance-Linked Securities and Program Services operations beginning in 2021. We look forward to reporting positive results and demonstrating the wisdom of these initiatives.

Engine #2 - Investments

In 2020 we earned total investment returns of 9.4% comprised of 15.2% on our equity portfolio and 5.7% on our fixed income portfolio.

That sentence doesn't begin to address the tumult of the 2020 investment markets. The epic volatility and uncertainty all investors faced, and continue to face, appropriately dominates all investment thought (or at least it should in our opinion, we're not sure if it actually does).

Amidst the unprecedented conditions, we believe in keeping our eyes on the North Star while navigating amidst conditions of uncertainty. The North Star guides investment decisions at Markel both for asset allocation and specific security selection.

For example, we first decide to allocate capital either to fixed income or equity investments. Following the North Star, we first allocate enough capital into fixed income holdings to more than match our expected ultimate liability from insurance reserves.

We do this for two reasons. The first and most important is to make sure that when our customer, a policyholder, experiences a loss, we have the money to pay the claim. This is our foremost promise about the future, and we operate with a sense of stewardship and trust when it comes to honoring this promise. Consequently, we're not gunning for the highest returns with these funds; we are striving to provide as much assurance as possible that we will always have the means at hand to settle claims as they come due.

The second reason to invest in fixed income securities is to earn interest income. Interest rates continue to decline beyond any level ever seen in history. There has been no time on planet earth like today where interest rates in many locations are negative. When they're not in negative territory, they still seem too low to us to compensate us for the irreducible credit, currency, and inflation risks.

Our portfolio consists of sovereign credits with taxing authority at the federal, state, or municipal level, and a variety of high credit quality, first mortgage liens on daily use real estate, and a small component of high quality corporate bonds.

Yields continue to diminish in the face of lower overall interest rates. We are price takers, not price makers, in this arena and as such, we simply have to accept the rates on offer.

We believe that taking *more* credit or interest rate risk for *less* return is unwise. While we've sacrificed some incremental yield from taking this view in the last several years, we simply can't in good faith commit your capital or the funds we hold on behalf of our policyholders to riskier propositions. We think we will be well served by maintaining the capital integrity and storm worthiness of our balance sheet despite the temptation to pick up some yield by venturing further astray.

This stance will strike some as unnecessarily conservative until the day it doesn't. Just as is the case with insurance underwriting decisions, we need to balance potential rewards against potential risks. The risk/reward ratios in credit markets don't look good to us.

At the same time, we are in a period of rapid growth in our insurance operations. While premiums are growing faster than underwriting profits we think it's best to post capital in the form of high quality and shorter term fixed income securities, which keeps regulators and rating agencies happy.

When our expected underwriting profitability develops from this growth, we will have greater degrees of flexibility and latitude to invest more broadly. Underwriting profits create capital that we can then invest in higher return equity securities of all stripes.

In our equity portfolio we earned a total return of 15.2%. Our North Star in making equity investment decisions is to follow our longstanding four part discipline. Those four parts are, one, to invest in businesses with good returns on capital that don't use too much leverage, two, with management

teams with equal measures of talent and integrity, three, at companies with reinvestment opportunities and capital discipline, and four, at fair prices.

We've followed that North Star consistently through the entire history of Markel since our initial public offering in 1986 and it serves us well. We believe in the timelessness of the system. The names and businesses that meet this test continue to change, but the test remains the same.

Following that discipline caused us to reduce our equity exposures in the first part of the year. In light of the outbreak of the pandemic we re-underwrote every security that we owned (equities and fixed income) and made decisions based on our sense that the fundamental economic environment had experienced a seismic shift.

We also faced near term concerns about our underwriting profitability and a strong desire to carry the strongest balance sheet we could into an environment where we thought there would be opportunity to write well priced insurance business.

Tactically, that decision can be criticized as it caused us to reduce our equity exposure by approximately 20% at lower prices than prevailed at the end of 2020. We understand and share the frustration of that decision at that moment, but we would make the same decision again faced with the same facts and uncertainties. We made that decision to first protect the company in the face of such uncertainty and in order to maximize our ability to continue to write insurance premiums at favorable rates. We believe it is the best and highest use for capital in this environment and we look forward to reporting favorable results to you in the next few years that stem in part from these actions.

Engine #3 - Markel Ventures

The people of Markel Ventures produced a spectacular year. Revenues and EBITDA set new records of $2.8 billion and $367 million respectively.

As we stated throughout the year, we stand amazed and grateful at this accomplishment. Over the last 15 years we've brought together an amazing group of companies led by talented and dedicated managers. As a group they embody the values we seek. Their performance in 2020 amidst conditions of unprecedented adversity stands as nothing less than stunning.

2019 had been a record year and we were optimistic but slightly cautious as we entered 2020. Several of our businesses are quite cyclical and highly sensitive to general economic conditions such as auto sales, freight volumes, and capital equipment budgets. We were cautious entering 2020 because we had enjoyed a spectacular run of strong economic growth and favorable conditions for several years. They call them cycles for a reason and we fully anticipated a modest downturn as a strong possibility.

In March, we threw all of our budgets and plans out the window. In many cases, business simply stopped. Orders were cancelled and customers froze. No one knew what the next day would bring.

Fortunately, our managers responded in spectacular fashion. They adjusted and adapted every single component of their organizations. They changed workplace conditions to provide for the health and safety of their employees, they figured out how to operate with damaged supply chains and unsteady vendors, they adjusted their costs, and they made countless other decisions on a continuous basis under conditions of epic uncertainty.

Fortunately, the general economy also found some footing. Everyone in the world adapted to new conditions and governments and authorities responded with unprecedented financial and fiscal injections to keep economies from imploding.

In the middle of the storm in April, Lansing Building Products joined Markel. Our relationship with Lansing dates back many years. Formal discussions about them joining Markel began in 2019. Lansing embodies the values and culture we seek. For Lansing, Markel represents a long term home for a third generation family business. We can help them to grow and provide assurance to the people of that organization that they will be working for a stable and dependable organization. Their charge is to build their business profitably and serve their customers. As part of Markel, they will not be highly leveraged or operate with a sometimes conflicting goal of seeking an "exit" as would often be the case under alternative forms of ownership.

For Markel, Lansing provides another venue and forum for us to build resiliency and dependability. Building products should be on a somewhat different cycle than insurance, green plants, medical services, or management consulting and as such, the diversification should add stability to our overall cash flows and economic performance.

In total, over the last 15 years we've cumulatively invested approximately $2.7 billion to acquire the businesses that comprise the Ventures group. So far, those companies have dividended back, and built up internal cash balances, of approximately $1.2 billion.

In a very over simplified notion, we have a net investment of $1.5 billion in a collection of businesses that earned $367 million in EBITDA in 2020 amidst tough economic conditions.

We think any reasonable analyst would conclude these businesses are worth far more than what we paid and that they contribute to the resiliency and value of the Markel Corporation in tangible and intangible ways.

Capital Management

For many years we've followed a four step triage on how we allocate capital. Our first priority is to support our existing businesses. We prefer to fund people who are already part of Markel and who have already proven their skills and abilities.

Our second priority for capital is to acquire new businesses to expand the scale and resiliency of Markel.

Our third priority for capital is to acquire publicly traded equity securities.

Our fourth priority is to repurchase our own stock when we believe our shares to be trading below a reasonable estimate of intrinsic value.

In the first part of 2020, we were allocating capital to all four buckets. Our insurance businesses were experiencing strong growth. We funded that growth with short term and high quality fixed income securities. This is the type of capital that rating agencies and regulators prefer.

We also purchased Lansing Building Products. Lansing embodies everything we look for in a business. It meets each and every one of our four part tests. The business enjoys a demonstrated record of earning good returns on capital and not using too much leverage to do it. The management of Lansing embodies the values that guide Markel and they will add to the cultural fabric of your company in positive ways. Additionally, we believe that Lansing can continue to grow within the building products industry and the transaction took place at a fair price.

As the pandemic developed and business conditions changed, we halted purchasing additional equity securities. In fact, we liquidated a portion of our portfolio to help fund the opportunities we saw in our existing insurance business as well as to complete the Lansing acquisition. We also stopped repurchasing our shares.

In May we raised $600 million of preferred equity to increase the conservatism and heft of our balance sheet and to help fund our growth opportunities. The preferred stock is callable beginning in 2025.

In 2021, we will follow the same capital allocation triage. We've acted decisively to increase profitability throughout Markel and we're optimistic that we'll be marching through the four part list as we have in the past. In fact, by year end 2020 we resumed modest purchases of equity securities in our publicly traded equity portfolio.

The Future

2020 brought challenges we never imagined. Despite those challenges, we persisted and we adapted. We provided for our customers and took care of our people to the best of our ability. We reported substantial profits and re-thought and re-engineered each and every aspect of what takes place at Markel.

In larger and smaller doses, that describes what we've done for decades. No decade ever ended up at the same place or the same way it started. Accordingly we changed, and grew, and prospered all the way along. We're incredibly optimistic about our resilience, the power of our values based system, our flexibility, and our unending dedication to serving our customers, our employees, and our shareholders. Win-Win-Win works and it represents the ultimate in sustainability.

As we wrote in 1986, at the time of our initial public offering, in the words of the Markel Style, "We believe in hard work and a zealous pursuit of excellence while keeping a sense of humor. Our creed is honesty and fairness in all our dealings."

Those words stand as a timeless formula that will drive our results in the future just as they have in the past.

This company started as a dream.

The dream lives on.

Thank you.

Thomas S. Gayner, *Co-Chief Executive Officer*

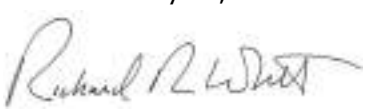

Richard R. Whitt, III, *Co-Chief Executive Officer*

2021

To Our Business Partners,

Greetings

Several years ago, we laid out our aspirational goal to "Build one of the world's great companies." We defined that as a company driven by the idea and architecture of Win-Win-Win. We believe that if a company aspires to be great, the customers need to win, the employees need to win, and the shareholders need to win.

Customers win when we serve them. We provide something they want or need, and we do it in such a way that they end up better off because they did business with us.

Employees win because they can provide for their families and their communities. Our people win because they can continuously learn, be creative, and reach their full personal potential over time.

Shareholders win because when our customers and our employees win, the capital our shareholders provided us with to operate the business earns a fair and durable return.

We believe that this Win-Win-Win structure is the ultimate in sustainable business. We think it goes without saying that this ethos, which underlies and pervades Markel, sets an excellent standard when viewed in the context of the current popular focus on ESG (Environmental, Social, and Governance) principles that should guide any business.

It seems to us that ESG phrasing is a set of new words for old things.

Good environmental, social, and governance *principles* have, and always will, describe Markel well.

We are not perfect, and we never will be. Principles are qualitative. They are the intangible but powerful ideas and beliefs that drive actions and behaviors. They can never be precisely measured or metricized. Things like love, kindness, concern, and empathy for fellow human beings, are the most important things in the world but we don't believe there is a score for them. You either have these principles at the core of your existence or you do not.

We live and act them out every day. Exactly how they are lived and what specific actions take place may change over time as our knowledge and understanding increases. The principles though are unchanging and simply cannot be measured with precision. As always, we will continue to do our best to act in accord with our principles.

Financial Highlights

(in millions, except per share data)	**2021**	2020	2019	2018	2017	2016	2015	2014	2013
Total operating revenues	**$12,846**	9,735	9,526	6,841	6,062	5,612	5,370	5,134	4,323
Gross written premiums	**$11,439**	9,267	8,780	7,864	5,507	4,797	4,633	4,806	3,920
Combined ratio	**90 %**	98 %	94 %	98 %	105 %	92 %	89 %	95 %	97 %
Invested assets	**$28,292**	24,927	22,258	19,238	20,570	19,059	18,181	18,638	17,612
Invested assets per common share	**$2,075.42**	1,808.50	1,613.62	1,385.24	1,479.45	1,365.72	1,302.48	1,334.89	1,259.26
Net income (loss) to common shareholders	**$ 2,389**	798	1,790	(128)	395	456	583	321	281
Comprehensive income (loss) to shareholders	**$ 2,078**	1,192	2,094	(376)	1,175	667	233	936	459
Shareholders' equity	**$14,695**	12,800	11,071	9,081	9,504	8,461	7,834	7,595	6,674
Book value per common share	**$1,034.56**	885.72	802.59	653.85	683.55	606.30	561.23	543.96	477.16
5-Year CAGR in book value per common share [1]	**11 %**	10 %	8 %	7 %	11 %	11 %	11 %	14 %	17 %
Closing stock price per share	**$1,234.00**	1,033.30	1,143.17	1,038.05	1,139.13	904.50	883.35	682.84	580.35
5-Year CAGR in closing stock price per share [1]	**6 %**	3 %	11 %	12 %	21 %	17 %	18 %	15 %	14 %

(1) CAGR - compound annual growth rate

We cannot imagine operating our business in any other way.

We've believed in these timeless and valuable principles since the founding of this company in 1930 and we always will.

2021

In this year's report we will do our best to update you on what took place in 2021. We'll review the annual numbers since this is an annual financial report. But we'll also go beyond one-year time frames by providing you with five-year time buckets to get a longer term (and more meaningful) perspective. Finally, as we do each and every year, we'll provide you with a 21-year chart of data at the bottom of these pages that shows the results of our efforts over decades.

While numbers show quantifiable financial data, we also hope to share a sense of the qualitative side and the humanity of Markel. The story contains the secret as to how those lovely numbers came to be.

We hope to give you insight into how we think and act. More importantly, we hope that by the time you finish reading this report you'll share our optimism about the future. Our narrative describes a durable and sustainable approach. We are incredibly optimistic about our ability to continue on this path of building one of the world's great companies. Thank you for being a part of this great adventure.

"Building one of the world's great companies" captures the essence of our dream. This is not a dream that takes place in the middle of the night only to be forgotten by sunrise. We live it each and every day.

We thank you as fellow customers, employees, and shareholders for being part of it.

A dream like this is fun. It is worthy, it is hard work, and it is joyful. It is not a common way that businesses describe themselves, it only happens over long periods of time, and it only matters if it helps other people.

Markel is more than the sum of the individual businesses that make up the holding company. Markel is an idea. Markel is a dream.

We're glad you're along for the ride. Let's keep going.

2021 Financial Results

We operate with the dual time horizon at Markel of, "Forever…... and Right Now."

2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001	**20-Year CAGR [1]**
3,000	2,630	2,225	2,069	1,977	2,551	2,576	2,200	2,262	2,092	1,770	1,397	**12 %**
2,514	2,291	1,982	1,906	2,213	2,359	2,536	2,401	2,518	2,572	2,218	1,774	**10 %**
97 %	102 %	97 %	95 %	99 %	88 %	87 %	101 %	96 %	99 %	103 %	124 %	
9,333	8,728	8,224	7,849	6,893	7,775	7,524	6,588	6,317	5,350	4,314	3,591	**11 %**
969.23	907.20	846.24	799.34	702.34	780.84	752.80	672.34	641.49	543.31	438.79	365.70	**9 %**
253	142	267	202	(59)	406	393	148	165	123	75	(126)	
504	252	431	591	(403)	337	551	64	273	222	73	(77)	
3,889	3,388	3,172	2,774	2,181	2,641	2,296	1,705	1,657	1,382	1,159	1,085	**14 %**
403.85	352.10	326.36	282.55	222.20	265.26	229.78	174.04	168.22	140.38	117.89	110.50	**12 %**
9 %	9 %	13 %	11 %	10 %	18 %	16 %	11 %	20 %	13 %	13 %	18 %	
433.42	414.67	378.13	340.00	299.00	491.10	480.10	317.05	364.00	253.51	205.50	179.65	**10 %**
(2)%	(3)%	4 %	(1)%	3 %	19 %	22 %	12 %	19 %	7 %	6 %	15 %	

At the time of our initial public offering in 1986 we in essence said, "If you give us some money right now, we will use it to build a business that will be worth more over time." In 1986 we operated almost exclusively in the realm of insurance-related operations. Since that time, we've grown to become a holding company with three engines of Insurance, Markel Ventures, and Investments.

During 2021, we refined and explicitly described the role of the holding company. It's where the buck stops when it comes to matters of Culture, Capital, and Leadership.

We address our culture constantly through things like the message of this annual report, ongoing observance and discussion of the principles laid out in the creedal statement of the Markel Style, and our daily behavior.

We added to our capital this year from successfully operating our businesses.

Our leaders admirably captained their ships through unchartered and turbulent waters. They built their skills by doing so and we continue to attract and develop the leaders who will guide Markel in years to come.

Financially, we had a great year at your company and we're optimistic about where we're headed.

Here are some numbers to start framing the scope and scale of our progress.

In 1986, we reported total revenues of $33 million, comprehensive income-equivalent of $5 million, and each Markel share sold for $9.75.

In 2021, we're reporting total revenues of $12.8 billion, comprehensive income* of $2.1 billion, and at December 31, 2021 each Markel share sold for $1,234 (FYI - if our share price increases at a compound annual growth rate of 13.5638%, each share will sell for $5,678 in 12 years).

We can summarize the big picture as follows:

Time Horizon #1-Forever

It's working.

Time Horizon #2-Right Now

It's working.

*Comprehensive income means something different in GAAP accounting today than it did in 1986. We'll get to that with some comments about accounting later. Sorry.

Right Now-Status Report on the Three Engines of Markel

2021 stands as a milestone year for Markel. Each of our three engines performed beautifully throughout the year with record performance from each and every engine.

In total, they combined to report 2021 total revenues of $12.8 billion compared to $9.7 billion in 2020, and comprehensive income of $2.1 billion compared to $1.2 billion a year ago.

We've designed Markel to be a resilient and durable holding company. In any given year, we ought to be able to make forward progress even if only one of the three engines performs well. It is a thing of beauty to see what happens when all three of our engines run well. 2021 was such a year.

A nearly indescribable amount of human effort went into producing these record numbers. The ongoing pandemic continues to make each and every day harder than what we would otherwise hope. But the people of Markel, in every business, endured and flourished.

In 1986, we said in the very first words of the Markel Style that "We believe in hard work and a zealous pursuit of excellence while keeping a sense of humor." We also stated that, "Our creed is honesty and fairness in all our dealings."

2021 showed those attributes in spades.

To our employees reading this report: Each of you played a role in figuring out how to manage inconsistent health and safety conditions, changing workplace structures, supply chain roulettes, disrupted work, family, travel and other plans and everything else 2021 threw at you.

Thank you.

You did it and you produced record results while doing so. Wow!

We also want to provide a longer-term view of how things are going. We started the practice of looking at a few key statistics cumulatively over five-year horizons in last year's annual report. We provide the data in this format for several reasons. First, we think that longer term measurements tend to be more accurate. The effects of short-term volatility fade away and a better picture of real economic

performance begins to emerge. We also base our incentive compensation calculations on five-year results since we think they are more meaningful than volatile year-by-year measurements. We think this approach puts management and shareholders side-by-side. We're not in this for the short-term and we don't think our shareholders are either. We're both rooting for great long-term returns. Here are some cumulative key measurements over the last three five-year periods.

(dollars in millions, except per share data)	2017 - 2021	2012 - 2016	2007 - 2011
Total revenues	$ 45,010	$ 23,439	$ 11,452
Earned premiums	$ 26,125	$ 16,910	$ 9,665
Underwriting profits	$ 943	$ 1,092	$ 384
ILS and Program Services revenues	$ 1,211	N/A	N/A
ILS and Program Services operating loss	$ (13)	N/A	N/A
Markel Ventures revenues	$ 11,747	$ 4,276	$ 715
Markel Ventures EBITDA	$ 1,392	$ 495	$ 77
Net investment income	$ 2,038	$ 1,689	$ 1,383
Comprehensive income to shareholders	$ 6,163	$ 2,799	$ 1,208
Closing stock price per share, at end of period	$1,234.00	$ 904.50	$ 414.67

Insurance Engine

Our overarching goal in insurance is to build a leading global specialty insurance organization. The 2021 results from our insurance engine were fantastic and demonstrate strong progress towards that goal.

In 2021, in our underwriting operations we produced total gross written premiums of $8.5 billion compared to $7.2 billion a year ago. This stands as a new record.

More importantly, this record volume produced record underwriting profits of $628 million compared to $128 million a year ago. The combined ratio improved to 90% in 2021 compared to 98% in 2020.

We also believe we've fundamentally improved the profitability and lowered the volatility of our underwriting operations compared to previous years. The cost of natural catastrophes continues to exceed historical averages. We've experienced our share of those high losses in recent years and that shows up in the five-year numbers. We've changed the nature and the mix of business we write to lower our exposure to natural catastrophes and 2021 shows encouraging results from our actions. We're optimistic that 2022 will provide further evidence of the fundamentally improved profitability of our underwriting operations.

Last year, we described our 10-5-1 initiative which set out the goal to grow our insurance underwriting operations to the level where it would produce $10 billion of annual premiums within five years at a 90% or better combined ratio which would yield $1 billion of underwriting profits.

We're pleased to report to you that we are on track. We hit all of the marks set out in our plans and we are optimistic that we'll be able to continue on that path in 2022. These goals describe what we thought we could do with our existing businesses. We did not contemplate any acquisitions to meet the targets.

We've never gone five years without acquisitions, and we suspect that could continue to be true. Regardless, we think we've got the people, the products, and the systems in place that can produce these results. Any acquisitions would be cherries on top of the sundae.

Our insurance businesses operate around the globe and involve unusual and complex risks. We need first rate professionals to understand the specific risks involved in the varied business we write. We need excellent claims professionals to make sure our customers are treated fairly when losses take place. We need sales professionals to connect us to opportunities to put business on the books. We need actuaries who work hand and glove with our underwriters to price, manage, and quantify the risks we assume in writing business.

We need IT professionals to empower all of us to understand and transact business in the same way a surgeon needs surgical instruments and all that goes into making an operating room function.

We need accounting professionals to accurately provide us with the status and results of our progress in the way pilots need navigation systems.

The list of what it takes to run our insurance-related operations goes on and on and on.

While the name "10-5-1" describes a goal of writing $10 billion of premium volume in five years with $1 billion of underwriting profits that goal is only an end result. It is an *outcome*. What "10-5-1" really describes is a *process* used to organize and systematize what it would take to achieve that outcome.

The beauty of the "10-5-1" program at Markel is that we used that *process* as a thinking tool to examine every aspect of our underwriting operations. Profitable growth doesn't just happen by itself. The discipline of "10-5-1" caused us to rethink and examine what we needed to do in every aspect of our insurance operations. We continue to reengineer our processes and we are pleased with the progress we're reporting to you in this year's results.

The reviews of our process that took place to develop the "10-5-1" goals help us to orchestrate and manage what it means to operate our underwriting operations at global scale.

We are not done with this sort of discipline. We think it is valuable to constantly review and examine each part of our operations in the same way a great football coach keeps studying film to find new ideas, improve execution, and manage the roster.

Insurance operations at Markel span the globe. We offer Insurance, Reinsurance, Insurance Linked Securities (ILS), and Program Services. The detailed financial reports following this letter will provide you with the greater details on these lines of business. Suffice it to say that across the board, results improved in 2021.

While our overall insurance engine results demonstrate strong performance, we know that investors continue to have questions regarding our ILS operations. We know that the aggregate results from ILS initiatives have not met our (or your) expectations.

To address that reality, here are some questions we'll attempt to answer.

Why participate in ILS?

What has happened so far?

What are the prospects?

Why participate in ILS? We wrote in previous annual reports that all customers in all industries everywhere around the globe want things to be "better, faster, and cheaper." This is the basis of competition in today's hyper competitive world, and we believe that ILS structures can accomplish that for many types of insurance products. We also believe that the ILS structure will address more types of insurance risks over time as technology advances. We believe that being great at ILS will help protect and build the long-term insurance operations of Markel.

ILS lowers the cost of insurance for insurance buyers by connecting insurance risks to capital providers who seek stability and non-correlation in their returns along with acceptable rates of return.

Life is full of trade-offs, and this is one of them. When we commit capital in our insurance operations, we seek a high absolute rate of return for assuming insurance risk. For example, even in today's world of very low interest rates, we still strive to earn double digit rates of return when we commit your capital.

By contrast, the funders of capital in ILS, which are mainly pension funds and endowments, are willing to trade off some portion of absolute return in exchange for a return that should not correlate to the returns from the stock or bond markets. A mix of insurance-linked securities within their portfolios provides stability and helps pension and endowment funds operate within their guidelines.

What has happened so far? What are the prospects?

Starting in 2015 we made two separate acquisitions to enter the ILS world. First, we bought CATCo in 2015 and then Nephila in 2018.

Each company occupied a different place in the ILS ecosystem. CATCo offered products that sought very high, but potentially quite volatile, returns. Nephila offered products designed to produce non-correlated returns with lower volatility than other ILS providers.

In addition, State National, acquired in 2017, provides administrative services such as access to licensing, rated insurance paper, regulatory compliance, and other services needed to operate an insurance-related business. Though not an ILS operation, State National demonstrates how interconnected ILS is with traditional insurance.

We believed that the array of products and services the group offered would create the leading platform in the ILS industry. It has. While things have not gone exactly to plan, we do indeed operate the leading platform in the ILS industry. The ILS ecosystem we operate already makes Markel a better and more attractive partner throughout the insurance industry. We also believe that our comprehensive approach to handling insurance needs through both traditional and ILS mechanisms makes Markel a better, broader and more attractive insurance partner for all of our clients.

In short, the CATCo acquisition did not work out. CATCo did not produce acceptable returns. We ceased CATCo operations in 2019 and continue the process of winding up the affairs of that business.

By contrast, our acquisition of State National has worked out wonderfully. State National, in its Program Services division, provides a suite of administrative services that any ILS provider requires to operate in the regulated industry of insurance. State National itself does not provide ILS. But ILS providers, and many other capital providers across the spectrum of insurance, need the types of services State National provides in order to operate.

State National operated like a well-oiled machine before our acquisition and it continues to do so. We couldn't be happier with their results and prospects. They produced record results and profitability in 2021. State National continues to exceed our expectations from when we acquired the company.

In the case of Nephila, returns have been below our initial expectations, but we remain confident and excited about their prospects. We deeply respect and trust the management at Nephila. We recognize that the results they produced for their investors suffered from the series of larger than expected natural catastrophe losses in recent years.

2021 was the second largest year for natural catastrophes on record. Nephila continues to increase rates for covering these exposures. They've done so for multiple years. As is the case with all insurance products, we make calculations to determine sufficient rates to cover the risks involved, and we iterate and update those calculations constantly.

It's also important to remember the distinction that business written by Nephila is on the balance sheet of their pension fund and endowment customers. The underwriting risks of their business is generally not borne by Markel.

Our profits from the Nephila operation will occur when their investors earn the results they expect from their investments in the ILS securities they purchased. When that occurs, Nephila earns incentive fees which are a share of the returns achieved by their customers.

Since our acquisition of Nephila, the returns they've produced for their customers remain largely below the thresholds where incentive compensation takes place. We expect that the ongoing pricing and underwriting changes taking place will produce better results.

As to timing, prices did rise in 2021 but not yet enough to cover another elevated year of natural catastrophe losses. Nephila continues to iterate, refine their models, tighten underwriting standards, and increase prices. During the course of 2022, we expect to operate Nephila with modest profitability throughout the year. It will only be at the conclusion of 2022 that bonus profitability can be determined.

As is often the case at Markel, we ask you to trust us.

We seek to earn that trust by clearly communicating to you (and ourselves) when we make mistakes, learning from them, and then taking actions to make things better.

We are a learning organization. We will keep making mistakes. They are part of learning and heaven help us if we ever fear making mistakes so much that we stop taking appropriate risks to continue to learn and grow.

We're confident that the people of Nephila are the best at what they do in the ILS industry. They are capable and trustworthy teammates that embody every aspect of the Markel Style. Over time, they've continued to refine their product offerings and respond to customer needs. They've introduced new products that meet marketplace needs and desires for ESG and climate change products alongside traditional insurance coverages.

We, and they, look forward to showing you some wonderful results in the fullness of time and we ask for your trust and patience until that day.

Over the decades we've always validated the trust you put in us. It defines who we are. We do our best, and that usually works out.

Our partners at Hagerty also went public in 2021. We started our relationship with Hagerty in 2013. In 2019, we purchased 25% of the company for $213 million. In December of 2021, Hagerty raised additional capital by going public. We invested an additional $30 million and now own 23% of the company.

At year end, the total market value of Hagerty, as calculated from the closing stock price on the New York Stock exchange of $14.18, stood at $4.7 billion. That number multiplied by 23% is $1.1 billion. The difference between our carrying value of $257 million and $1.1 billion is $849 million. That $849 million of market value does not appear anywhere in our financial statements. Wait…What? (See accounting discussion for more comments.)

Hagerty accurately describes itself as "For people who love cars." They are the leading specialty insurance company dedicated to automotive

enthusiasts and are dedicated to "Serve drivers and the car culture for the future."

McKeel Hagerty leads a third-generation family business and he and his team have exceeded every hope we've had when we formed our partnership, and we look forward to many more years of being connected to the Hagerty organization. Hagerty, like us, is a purpose driven organization.

Markel is a purpose driven company, and our insurance operations provide a great example*. Life is a high wire act. We're the net that catches people when they fall.*

Markel Ventures Engine

In 2021, we reported record revenues of $3.6 billion compared to $2.8 billion in 2020. More importantly, we earned record EBITDA of $403 million compared to $367 million a year ago.

The people of Markel Ventures continue to embody every aspect of our creed as stated in the Markel Style.

We already referred to the first lines of the Markel Style when we talked about "hard work and a zealous pursuit of excellence." The second paragraph of the Markel Style states, "the Markel way is to seek to be a market leader in each of our pursuits. We seek to know our customers' needs and to provide our customers with quality products and services."

Notice how open ended this was in 1986? While we largely operated in the realm of insurance at that time, our creedal statement of the Markel Style recognized that it's a big world. We anticipated that people who embodied our values could take on new challenges in the fullness of time. Explicitly or implicitly, we left ourselves open to the idea of expanding beyond insurance.

Well, we've run with that idea.

Markel Ventures began in 2005 with the purchase of 80% of AMF Bakery equipment. At the time, AMF produced roughly $60 million in total revenues with EBITDA of approximately $5 million.

AMF Bakery equipment was indeed a *market leader in their industry* and *dedicated to knowing their customers and providing them with quality products and services*.

We've followed that recipe consistently for 16 years now and currently we've expanded the realm in which we operate to include house plants, building products, affordable housing, construction, concierge medical services, fire protection, IT consulting, data services, dorm room furniture, dredges, car trailers, industrial gas trailers, truck trailer flooring, and more.

In 2021, we added to our *more* list through our acquisitions of majority interests in Buckner Heavy Lift Cranes and Metromont. Buckner operates the largest domestic fleet of cranes that can lift up to 2000 tons. They are used for things like erecting wind turbines used to generate electricity at scale, large stadium construction, and renovation and other major construction projects.

Lifting hundreds up to thousands of tons cannot be done over the internet. It cannot be done from a distance. If you're going to lift a wind turbine in North Dakota or at sea you need to be there physically. You also really have to know what you're doing. This stuff is not for messing around. Buckner is a fourth-generation family business led by Doug Williams. Doug and his team exemplify everything we're looking for as we continue to grow.

Metromont is the leading producer of precast concrete in the southeast. Precast concrete is used for data centers, parking garages, office buildings, multifamily residential buildings, and other facilities. Precast concrete is an energy efficient and economically attractive way to build those types of structures. It's also heavy. As such, Metromont is unlikely to be subject to disruption by the internet or distant competitors. Metromont is a third-generation family business led by Rick Pennell. Rick and his team fit the mold of everything we're looking for in long-term minded people.

We welcome Buckner and Metromont to the family and we look forward to many years with Doug, Rick, and the teams at both companies.

At this time last year, we would not have expected to be able to find additional companies to add to Markel Ventures in 2021 given the extreme levels of pricing we observed in the private equity marketplace.

Fortunately, we found great leaders at Buckner and Metromont who cared about the long-term future of their businesses, and their people. While finances were important, and we paid and they received fair transaction prices, money wasn't the only factor. The long-term ethos and durable nature of Markel mattered to Doug and Rick and their teams as well.

We seek people like Doug and Rick and fortunately they seek us too. At this point, I don't know if we'll find any mates in 2022 or not but our circle of

relationships keeps expanding and reinforcing itself with each and every day of doing business together and with each and every transaction. It's a flywheel.

What ties all of these businesses together is that they are operated by people who share our values. The diversification and autonomy of these businesses creates a durable and resilient ecosystem that drives Markel forward.

Our secret sauce behind continuing to scale Markel is a commitment to our values.

We can continue to grow by keeping our businesses as autonomous and independent as possible. *Values are scalable, complexity that develops from trying to micro-manage from the top down is not.*

First-rate people want the freedom and trust to feel a sense of ownership and pride in what they do. Our people are craftsmen who take pride in their companies. Our system and approach provide the necessary capital it takes to run a business with a stable long-term focus.

Our leaders can make decisions with a consistent north star of doing what is right over the long-term. We're willing to incur short-term costs and bend over backwards to take care of our customers and our people. We think that this constant, enduring, and consistent focus on empowering our people, and remaining focused on the long-term, produces wonderful and durable economic results over time.

In 2005, Markel Ventures reported $11 million in revenues and $2 million of EBITDA (we only owned 80% of AMF and we only owned it for a portion of the year). In 2021, Markel Ventures produced $3.6 billion in revenues and $403 million in EBITDA. Cumulatively we've invested approximately $3.4 billion to acquire and fund these businesses. Cumulatively these businesses have built up cash balances and returned $1.5 billion to Markel. In economic terms, we've got a net investment of $1.9 billion on the line and in 2021 alone they produced EBITDA of $403 million. The reality is even better than those numbers would suggest since we laid out the cash for Buckner and Metromont near year end and show the full amount of capital committed and only partial-year EBITDA against that outlay.

We think those are very good financial returns on a standalone basis. We also think the resiliency from the diversification makes Markel a more durable, adaptable, and strong company. We also believe that the products and services provided by the Markel Ventures companies magnify the Win-Win-Win architecture by serving our customers, our employees, and our shareholders.

The people of Markel Ventures, many of whom are front-line workers, coped with every wild pitch thrown at them in the topsy-turvy world of 2021. We are grateful and amazed for their skills and dedication and what they continue to do.

The Markel playbook works.

Investment Engine

In 2021, we earned returns of 29.6% on our equity portfolio and (0.7)% on our fixed income holdings for a taxable equivalent total investment return of 8.8%. For the last five-year period we earned annual returns of 18.6% on our equity portfolio and 3.2% on fixed income for a taxable equivalent total investment return of 8.3%. For the last 10 years we've earned annual returns of 17.3% on our equity portfolio and 3.1% on our fixed income portfolio for a taxable equivalent total investment return of 6.8%. We believe longer periods tell you more about the amount and durability of our investment returns.

Given our longstanding and continuous discipline in investments, this section of the report will be the shortest. We'll briefly repeat our investment philosophy but there is nothing new to add.

Of our three engines, investments will tend to be the most volatile from year to year given the normal volatility (read manic depressive nature) of investment markets. Volatility diminishes over longer time frames and that's why we report the ten-year numbers. We also think it helps us remain steadfast and consistent as we manage our investments.

As we have stated for many years, the first investment decision we make is to invest in either equity securities or fixed income holdings. We make that first decision by allocating enough funds to the highest quality fixed income holdings we can find to make sure that we have enough fixed income holdings, with a margin of safety, to more than cover the entire amount of what we expect to pay out to policyholders in the form of insurance claims over time.

After we make that allocation to fixed income, we have discretion over what remains. To the fullest extent possible (keeping the margin of safety concept in mind) we look for equity investments that meet our four-part test. Those four parts are one, to invest in businesses with good returns on capital that don't use too much debt, two, with management teams that possess equal measures of talent and

integrity, three, that can reinvest their earnings at good rates of return or redistribute it, and four, at fair prices.

We hope you'll recognize the consistency of that four-part test through decades. In addition to our public security investments, equity investment decisions also include owning majority interests in privately held business (i.e., Markel Ventures).

As of December 31, 2021, our publicly traded portfolio stood at $9 billion. Our cost for that portfolio stands at $2.9 billion and the resulting unrealized gain totals $6.1 billion.

As to the value of the Markel Ventures portfolio……*

We'll include that in the * discussion on accounting matters.

Capital, Accounting, and Asterisks

In his book, *The Lincoln Highway*, Amor Towles wrote a section where one of the characters named Woolly explains his sense of the difference between a dictionary and a thesaurus. Towles writes, "How he had loved this dictionary-because its purpose was to tell you exactly what a word meant. Pick a word, turn to the appropriate page, and there was the word's meaning." A few paragraphs later Towles writes, "and as much as Woolly had loved the dictionary, he had loathed the thesaurus. Just the thought of it gave him the heebie-jeebies. Because the whole purpose of it seemed to be the opposite of the dictionary's. Instead of telling you exactly what a word meant, it took a word and gave you ten other words that could be used in its place."

I empathize with Woolly.

We would like to think we can be dictionary precise when using words like "capital" and "accounting" but we live in a thesaurus world.

Here are some thoughts about what these words mean in the context of Markel. Capital and accounting are intertwined and each of them create feedback loops upon the other. Some are tangible and some are intangible yet just as powerful and real.

For many words in the dictionary, there are multiple definitions. Capital is one of them. Capital has more than one definition and it means different things in different aspects of Markel.

In its most basic form, you can think of capital as the money we have. For the purposes of this discussion let's call that *blue capital*. It is the net value of our cash and investments. It is what we can allocate/ invest in the normal course of running our business.

To put some numbers on it, at year end 2021 we have shareholders equity capital of $15 billion. That's an accounting entry on the right hand side of our balance sheet and it matches up against cash, fixed income holdings and equity securities on the left hand side of the balance sheet.

As we've stated before, what we do with that *blue capital* is to allocate it in a four-step process that we've consistently followed for years. First, we invest in organic growth opportunities in our existing array of businesses. People in our organization who've proven themselves by running profitable businesses are first in line when they need capital to grow or expand their businesses. Secondly, we allocate capital to new opportunities in the form of acquisitions in insurance or Markel Ventures type businesses. Third, we look for publicly traded securities that meet our four-part test. Fourth, if we've funded all three of those initiatives and still have excess capital, and if we believe Markel shares to be undervalued, we repurchase our own stock.

All four of those things can be going on at the same time. All were during 2021. We funded every internal initiative that passed muster, we acquired Buckner and Metromont in our Markel Ventures operations, we made $88 million of net investments in publicly traded equity securities, and we repurchased $199 million of Markel stock.

While doing all of that with the *blue capital* that any of us would recognize and describe as money or financial assets, we needed to do so while keeping our eye on another form of "capital."

The second definition of "capital" is an amount that regulators and rating agencies calculate to make judgments about the financial strength and soundness of our insurance operations. Those entities review our business and determine the amounts of *blue capital* they think we should have to safely and soundly conduct our business. For the purposes of this discussion let's call that *orange capital.*

Orange capital is a calculated amount. It is a target or threshold figure that we must be above. We need to have more *blue capital* than *orange capital* to satisfy regulators and rating agencies. And the more we exceed the necessary *orange capital* amount with our *blue capital*, the more we have excess capital and higher financial strength ratings.

Also, our *blue capital* contains sub shades of blue. If we carry capital in the form of cash, US Treasury securities, sovereign securities, and other high-quality fixed income securities you can call that *navy blue capital.* We get close to 100% credit dollar for dollar on that kind of *blue capital* to satisfy the *orange capital* requirements.

When we invest some of that *blue capital* into publicly traded equity securities, the shade of blue changes. Let's call that *baby blue capital* since we only get approximately 50% credit on the value of our *baby blue capital* in counting towards our *orange capital* requirements. Part of our calculation when we allocate funds to equity securities is to keep in mind some sense of what our margin of safety is over the regulatory *orange capital* hurdle levels to have the time and flexibility to allow our equity securities to increase enough in value to handle market volatility.

As we stated earlier, our publicly traded equity portfolio stood at $9 billion at year end compared to a cost basis of $2.9 billion. We've made good *baby blue capital* allocation decisions over the years, but we must always do so while keeping a weather eye on the interaction between *orange* and *blue capital*.

More severely, when we invest in a Markel Ventures opportunity, that starts out providing zero *orange capital* credit. In the eyes of certain regulators and rating agencies, we've burned the *blue capital* that we used to purchase Markel Ventures companies. It becomes *invisible capital*. As the Markel Ventures companies make money and distribute those earnings up to the Markel Corporation holding company, that capital titrates from invisible back to blue. Then we get to start the flywheel all over again by seeing where we stand on our *orange capital* settings to see if we have enough flexibility to turn our *blue capital* into higher earning *baby blue* or *invisible capital*.

Orange capital requirements are also influenced by how *fast* our insurance operations are growing and what kind of insurance risks they are writing. Any growth creates higher *orange capital* requirements, and high volatility natural catastrophe property coverages require more *orange capital* than lower volatility lines.

Our financial results in any given period also affect the levels of *orange capital* that regulators and rating agencies require.

Orange capital requirements are also influenced by accounting rules and pronouncements which change over time.

For example, take asterisk #1 from the first page of this letter on comprehensive income and how it is calculated differently over time. In 1986 when we went public, comprehensive income meant the amount of net income we earned according to GAAP accounting principles of the time and the tax-effected unrealized gain on our equity securities portfolio for the year.

By 2021, GAAP accounting changed its definitions and moved the place where gains and losses from our equity investment portfolio are included from other comprehensive income into net income. The sum remains the same, but the presentation is different. More importantly, Markel is a different company than it was in 1986. In 2021, we own and operate a wonderful set of businesses that comprise Markel Ventures. While the net income from Markel Ventures in 2021 of $174 million gets included in our comprehensive income, the change in the overall value of the businesses does not show up anywhere in our financial statements.

In 2020, Markel Ventures reported revenues of $2.8 billion and EBITDA of $367 million. In 2021 Markel Ventures reported revenues of $3.6 billion and EBITDA of $403 million. I would suggest that Markel Ventures is worth more today than a year ago as evidenced by these financial results. That increase in value does not show up in our financial statements nor is it included in the definitions of comprehensive income.

Consequently, it does not strike me as an apples-to-apples comparison. GAAP accounting uses the same term, but it means different things in different parts of our business. Comprehensive income did a good job of describing Markel in 1986 because it captured just about all of the changes that drive the value of your company. In 2021, Markel is a different company. Our economic performance is more than what comprehensive income reports, because comprehensive income fails to incorporate the value we create through our Markel Ventures engine.

Beyond the comparability challenge borne from the value being created at Markel Ventures, developments at Hagerty this year add to the "Through the Looking Glass" qualities of financial reporting.

Before going public, the value of our investment in Hagerty was the invisible type of capital I described earlier. Hagerty has and continues to produce wonderful results and creates *blue capital* from its earnings, but I think any reasonable person would think that the total value of the company far

exceeded the tangible book value created by yearly earnings.

Now that Hagerty is publicly traded, we at least have a daily mark to market indication of what Hagerty is worth in total and at year end, that amount was $1.1 billion.

That number of $1.1 billion compares to our carrying value of $257 million. The difference of $849 million does not appear anywhere on our financial statements. The accounting authorities opine that Markel is in a position to "significantly influence" the outcomes at Hagerty beyond what would normally be the case with our holdings of publicly traded securities and as such we will only include our annual percentage of earnings at Hagerty in our financial statements. As a result, we will not include the value of our Hagerty investment in the same way as we include the value of our publicly traded securities.

As the NYSE mark to market changes on a daily basis we will not include those changes in our comprehensive income calculations in the way that we do for publicly traded securities in our portfolio.

Accounting and economic reality seem detached to me.

Also, required levels of *orange capital* can be changed by fiat and whim of rating agencies and regulators and they can be moody.

All of this interplay creates a "Rubik's cube" where all of these items need to be balanced. We need to manage the real and potential feedback loops to keep all sides of the cube in alignment.

We are doing so and we're in fine shape.

Forever

As we continue to chart the radical idea of Markel being a forever company, we recognize that each and every one of us is mortal and our individual time horizons are not forever. We are constrained. But our ideas are not. The values that describe this company will endure and last beyond any of us. Richie and I are doing our best to build and maintain a culture that will last long after us. We're doing so by trying to set an example. We're doing so by trying to attract people to Markel who embrace our culture. We're doing so by trying to teach and inculcate values that will be practiced all around Markel, in all of our businesses, at all places, Forever…..and right now.

That is our task and I'm delighted to report to you that 2021 stands as a milestone of what things look like when the constant efforts from years and years of diligent work collide with a reasonable external environment. All three of our engines of Insurance, Investments, and Markel Ventures ran well and we are optimistic about the durability of this unique design.

The singer/songwriter (philosopher) Paul Simon in his song "Something so Right" wrote:

When something goes wrong
I'm the first to admit it
I'm the first to admit it
But the last one to know
When something goes right
Well it's likely to lose me
It's apt to confuse me
It's such an unusual sight
I can't get used to something so right
Something so right

Some people never say the words
"I love you"
It's not their style
To be so bold
Some people never say those words
"I love you"
But like a child they're longing to be told

Markel, in its own singular way, is, "Something so Right."

It works.

Every word of Simon's lyrics rings true for us and we will boldly tell you that we love you.

Thank you for your commitment to all that Markel means. We look forward to new challenges and new achievements that 2022 will bring, and to all that lies ahead.

Thank you.

Thomas S. Gayner, *Co-Chief Executive Officer*

Richard R. Whitt, III, *Co-Chief Executive Officer*

2022

To Our Business Partners,

Thank you for being part of Markel. Whether you're reading this as a shareholder, an associate, or as a customer (and we hope you are at least two out of three), we thank you for being a part of our dream to build one of the world's great companies.

We cannot do it without you, and we thank you for your consistent commitment.

In return for your commitment to us, here is our commitment to you – we pledge to expend every effort, every day, to build one of the world's great companies.

If we continue to do so, and you continue to stay with us, we should both be thrilled with the long-term outcome.

Markel started in 1930. After two generations of family ownership, we went public in 1986 at roughly $8 per share.

By year-end 2022, each share fetched $1,317. That is a compound annual return of roughly 15% for 36 years.

That is the *financial* result so far from chasing this dream. Financial metrics are easy to calculate. But financial metrics are just measurements of the work and commitment expended by people.

People come first at Markel.

The financial results flow from the relationships and efforts of our people.

In 1986, approximately 300 people worked at Markel. Today, more than 20,000 find careers and support their customers, families, and communities, as part of your company.

In 1986, we delivered goods and services to our customers (who are people too) for which they paid us total revenues of approximately $33 million. In 2022, we delivered goods and services for which they paid us total revenues of $11.7 billion. (More on what "total revenues" means for Markel later).

I hope you will concur with our sense of our progress towards the goal of building one of the world's great companies as…

So far, so good.

Financial Highlights

(in millions, except per share data)	**2022**	2021	2020	2019	2018	2017	2016	2015	2014
Total operating revenues	**$11,675**	12,846	9,735	9,526	6,841	6,062	5,612	5,370	5,134
Gross written premiums	**$13,202**	11,439	9,267	8,780	7,864	5,507	4,797	4,633	4,806
Combined ratio	**92 %**	90 %	98 %	94 %	98 %	105 %	92 %	89 %	95 %
Invested assets	**$27,420**	28,292	24,927	22,258	19,238	20,570	19,059	18,181	18,638
Invested assets per common share	**$2,042.73**	2,075.42	1,808.50	1,613.62	1,385.24	1,479.45	1,365.72	1,302.48	1,334.89
Net income (loss) to common shareholders	**$ (250)**	2,389	798	1,790	(128)	395	456	583	321
Comprehensive income (loss) to shareholders	**$(1,309)**	2,078	1,192	2,094	(376)	1,175	667	233	936
Shareholders' equity	**$13,066**	14,717	12,822	11,071	9,081	9,504	8,461	7,834	7,595
Book value per common share	**$929.27**	1,036.20	887.34	802.59	653.85	683.55	606.30	561.23	543.96
5-Year CAGR in book value per common share [1]	**6 %**	11 %	10 %	8 %	7 %	11 %	11 %	11 %	14 %
Closing stock price per share	**$1,317.49**	1,234.00	1,033.30	1,143.17	1,038.05	1,139.13	904.50	883.35	682.84
5-Year CAGR in closing stock price per share [1]	**3 %**	6 %	3 %	11 %	12 %	21 %	17 %	18 %	15 %

[1] CAGR - compound annual growth rate

Win-Win-Win

We attribute much of our success to our efforts to sustain a win-win-win culture. From that culture grows the *system* that is Markel. Our culture is based on the idea that our customers, associates, and shareholders all win because of what we do and how we do it.

Our customers win as we provide what they need or want at fair prices. People need insurance to backstop the uncertainty of life. People need food to eat, medical care, help with changing technology, affordable housing, plants to brighten their day, protection against fires, construction for shelter, industrial gases, truck trailers to carry needs for daily life, and so on and so on.

This is only a partial list of how we serve our customers, who win when we solve their problems and provide what they need to live their lives.

Associates win by being a part of Markel. Their jobs help them support their families and their communities. They create and learn. They find joy that comes from serving customers, and colleagues. They solve problems, find better ways to do things, and make the world a better place through their daily work. That's winning.

Our shareholders win when we earn good returns on the capital we need to operate the company. You can see this win on the scoreboard of our share price growing from $8 to over $1,300 since we went public.

What we do matters.

Each win for our customers, our associates, and our shareholders gives us the fuel and credibility to do it again the next day, the day after that, and so on, ad infinitum.

If the Markel Corporation was an athlete, I would hope the image of someone like a Cal Ripken Jr. or Bill Russell would come to mind.

Thank you again for your role as a customer, an associate, and/or shareholder of Markel. Now, on to some details from last year as well as some thoughts on our goals and aspirations for 2023 and beyond.

2022 (and a little about accounting)

First, this is an annual report letter. As such, we talk about the financial results from the year 2022 and compare them to those of 2021.

However, we'll also talk about longer time frames.

2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	**20-Year CAGR [1]**
4,323	3,000	2,630	2,225	2,069	1,977	2,551	2,576	2,200	2,262	2,092	1,770	**10 %**
3,920	2,514	2,291	1,982	1,906	2,213	2,359	2,536	2,401	2,518	2,572	2,218	**9 %**
97 %	97 %	102 %	97 %	95 %	99 %	88 %	87 %	101 %	96 %	99 %	103 %	
17,612	9,333	8,728	8,224	7,849	6,893	7,775	7,524	6,588	6,317	5,350	4,314	**10 %**
1,259.26	969.23	907.20	846.24	799.34	702.34	780.84	752.80	672.34	641.49	543.31	438.79	**8 %**
281	253	142	267	202	(59)	406	393	148	165	123	75	
459	504	252	431	591	(403)	337	551	64	273	222	73	
6,674	3,889	3,388	3,172	2,774	2,181	2,641	2,296	1,705	1,657	1,382	1,159	**13 %**
477.16	403.85	352.10	326.36	282.55	222.20	265.26	229.78	174.04	168.22	140.38	117.89	**11 %**
17 %	9 %	9 %	13 %	11 %	10 %	18 %	16 %	11 %	20 %	13 %	13 %	
580.35	433.42	414.67	378.13	340.00	299.00	491.10	480.10	317.05	364.00	253.51	205.50	**10 %**
14 %	(2)%	(3)%	4 %	(1)%	3 %	19 %	22 %	12 %	19 %	7 %	6 %	

We believe that longer time frames provide a better perspective and data than any one year.

Any given year contains volatility that makes it hard to distinguish skill from luck (both good and bad).

By measuring things five years at a time, as we do for things like our incentive compensation plans for senior executives, the role of luck begins to fade. Five-year periods show more reliable data to make sound judgments.

Then we go one step further. We show you summary data from the last 21 years at the bottom of the first two pages of this letter.

We do this every year to provide you (and ourselves as managers) with a fulsome sense of the progress we are making over decades.

We think providing and emphasizing a multi-decade review is uncommon (and important). We believe that a long-term time horizon matches up with our long-term goal of building one of the world's great companies. A 21-year scorecard gives a far more comprehensive understanding than any one year's results. We never forget, though, that the 21-year scorecard gets constructed one year (and one day) at a time by our daily actions.

As to the single year 2022, we believe as Frank Sinatra sang, "It was a very good year."

When you take a first look at the numbers, it may not jump off the page that way. So here is some more detail as to why we describe ourselves as happy with the results, and with what we accomplished, in 2022.

To start, on the top line we reported "total revenues" of $11.7 billion in 2022 compared to $12.8 billion in 2021. A decline of 9%.

Wait…what?

We're "happy" with this result?

How can that be?

Well, let's talk about what "total revenues" means. As Inigo Montoya said in the movie *The Princess Bride*, "You might want to pick a different word because I don't think that one means what you think it does." GAAP accounting defines the term "total revenues" in such a way that we have to use that word, but "I don't think it means what you think it does."

"Total revenues" include two distinct types of "revenues." One type is the normal recurring revenues from each of our three engines of Insurance, Markel Ventures, and Investments. Our insurance premiums and fee income streams are revenues, sales of the products and services in Markel Ventures are revenues, and interest and dividend income from our investment portfolio are all revenues. That all makes sense to me. We also have some non-recurring revenues in our three engines, like the gains from the sale of our managing general agent businesses this year. For the purposes of this discussion, let's call all of those "orange revenues."

The other component of "revenues", according to GAAP, is the unrealized changes in the value of our equity portfolio. When stock markets decline, as they did in 2022, we report negative revenues from our equity holdings even if we didn't sell anything. Changes in the market price of equities, positive or negative, flow through the line of "total revenues." Let's call those "blue revenues."

I completely agree that we should report on our investment returns, but this strikes me as a curious way to describe them in our financial statements.

To me, it's like talking about chocolate milk and motor oil. Both are fine substances. They both play critical roles in my life. They can both be measured in terms of fluid ounces. That said, I've never combined the two into one composite measurement.

"Total revenues" at a company with financial and non-financial businesses like Markel must combine these two disparate streams into one container labeled "total revenues" as mandated by GAAP accounting.

I would neither drink the contents of that container nor put it in my car's engine. Therefore, I think it's important to break things down into their separate components to help provide greater understanding.

Our "orange revenues" increased 21% to $13.2 billion in 2022 from $10.9 billion in 2021. That is an excellent result. It reflects the superb accomplishments of our associates from all around the world. That number describes how we served our customers with products and services that they needed and wanted. That's why we're happy and proud of what took place in 2022.

Our "blue revenues" swung to a negative $1.6 billion in 2022 compared to positive $1.9 billion in 2021. This is not surprising. Equity markets experienced their worst decline since the 2008 financial crisis,

causing our portfolio of publicly-traded stocks to decline in 2022.

In any given year, investment markets tend to be volatile. And, as is the custom, when we use the word volatile in the context of investment markets, we mean down. Sometimes investment markets go up a lot and nobody (including us) describes up years as "volatile" even though it seems like the same word should apply.

That mathematical fact of lower public market prices at year-end 2022 compared to year-end 2021 causes the sum of "orange revenues" and "blue revenues" to show a decline in our GAAP "total revenues." That doesn't strike me as informative. Progress, in this case, doesn't look like progress when you look at it through the GAAP accounting lens.

I hope that by breaking apart the components, you can share my sense of optimism and pride as to what took place at Markel last year. "Orange revenues" rose 21% and are generally more recurring in nature. The annual volatility around that number should be less than "blue revenues."

"Blue revenues" will likely continue to be volatile, especially on an annual basis. Market prices tend to swing much more violently than the value of the underlying businesses they represent. As such, I think it is important to understand both the accounting presentation and what it means. "Blue revenues" start to make sense, and get the direction of things right, arguably only over multi-year time horizons. It takes multiple years to make reasonable judgments about our investments. Over the last five years, we earned an annual return on our equity portfolio of 9.5% and over the last ten years, we earned an annual return of 13.2%.

Insurance Engine

Our Insurance engine, which generates nothing but orange revenues, reported earned premiums of $7.6 billion in 2022, up 17% from $6.5 billion in 2021. We also reported underwriting profits of $627 million, compared to $628 million in 2021. Cumulatively over both years, we earned $1.3 billion in underwriting profit. That amount stands at approximately 4x the $315 million we generated in the *four years* from 2017-2020.

2022 marked another excellent result and positive momentum in our Insurance engine and we are proud of these results.

The 2022 results of both dramatic topline growth, and excellent profitability, should be celebrated. Fortunately, top line growth and bottom line profitability describe our long-term accomplishments. You can see evidence of this in the five-year and 21-year data included in this report.

Our insurance-linked securities (Nephila) and fronting (State National's Program Services) revenues grew to $485 million in 2022 compared to $328 million in 2021 and our operating income from these operations grew to $193 million from $62 million in 2021.

We've written extensively about our ILS and Program Services operations in previous years and we're glad to be able to report progress this year. State National continues to go from strength to strength and reached new peaks of revenues and operating income in 2022. Our Nephila ILS operation also made meaningful progress in 2022.

Nephila continued to adjust (i.e. raise) prices for property catastrophe reinsurance products. The ongoing level of higher natural catastrophes experienced over the last several years suggest a new normal level of annual catastrophe losses should be expected. Both the capital providers to Nephila, and those seeking to cover the risks, continue to adapt to this new reality.

Changes in climate, along with more affluence over time, have combined to create a situation where more economic activity takes place next to a nice view of the water. As a society, we are all engaged in figuring out how to balance out the various forces involved in such a circumstance.

The team at Nephila continues to do an excellent job of providing the world with real time data through pricing that helps everyone to know the true costs involved in decisions regarding where to live, conduct economic activities, and set governmental policies around these topics.

We are also excited about how the team at Nephila continues to be at the leading edge of creating and providing tools to manage a wider array of risks. In many cases, the work of Nephila helps to address the issues of climate change and the resulting, ongoing, tectonic shifts in energy markets.

For instance, the development of new forms of renewable energy requires providers to commit capital amidst uncertain output and price factors. At the same time, energy users seek certainty in supplies and pricing as they adapt to changes in the sources and uses of energy.

Just as grain processors and farmers have long relied on financial markets to match up uncertainty and volatility to protect and proceed with their operations, the team at Nephila continues to create financial tools to manage uncertainty in ways that can provide protection to people who need it.

We wish we had better and more immediate profits to tell you about from our ILS activities. The learning curve of ILS involved some big and painful bumps along the way. That said, we remain confident that tackling these problems will prove fruitful.

The long-term rewards from these activities could be substantial. These efforts stand as one of the many ways in which we continue to work to "future proof" Markel.

Stay tuned…we'll keep you posted.

In the meantime, we did realize a gain of $226 million from the sale of two managing general agency operations within Nephila in 2022. The proceeds from these sales effectively lower our invested capital in ILS, and provide some validation of our efforts. These two businesses were incubated within Nephila in a modest amount of time and we sold them for attractive gains when we concluded that they were no longer best suited as part of Markel.

We also reduced the carrying value of our investment in Nephila by writing off goodwill of $80 million as part of our normal review of goodwill balances on the balance sheet.

The combination of recapturing some of the capital via the sales and reducing the carrying value via the goodwill write-off should improve our reported returns in 2023 and beyond.

Markel Ventures Engine

Markel Ventures earned record operating revenues of $4.8 billion in 2022, all of which were orange revenues, compared to $3.6 billion in 2021, an increase of 31%. We reported record EBITDA of $506 million in 2022 compared to $403 million in 2021, an increase of 26%.

2022 stands out as a spectacular year for Markel Ventures. First, the record numbers speak for themselves. More importantly, those records took place against a backdrop of continuing and unrelenting labor and material supply chain challenges, and a myriad of ongoing inflation pressures.

It is not easy to raise prices. Our culture compels us to approach our customers with an attitude of service. Our mindset of service makes us reluctant to charge new, higher prices, rather than send a bill with the same price as last time.

That said, even after we work to become more efficient, the costs of doing business continue to increase. Taxes and regulations continue to increase. What we pay our associates continues to increase. The costs of shipping and transportation continue to increase. Everything costs more.

As such, we focus on providing our products and services as efficiently as possible. We also selectively raise prices, where appropriate, to cover our higher costs, and to serve our customers with what they need and want. The managers of the Markel Ventures businesses did a superb job balancing the need to raise prices and strengthening long-term relationships with our customers at the same time. In the aggregate, the management teams of the diversified portfolio of Markel Ventures companies delivered outstanding results.

Despite the record aggregate results in 2022, which included strong overall organic growth, some of our companies experienced a difficult year. Ever since we started the Markel Ventures operations in 2005, we've experienced cyclical ups and downs and specific challenges at different businesses in any given year. This is nothing new.

We continue to respond to every challenge in the same way. We do our best to take realistic looks at each circumstance, and then make rational decisions about what to do next. We also do so while remaining focused on the long-term. We take no short cuts, and we pursue no quick fixes.

We constantly ask ourselves the question, "If this were the only business we or our family was ever going to own, what would we do?"

We try to answer that question to the best of our ability and then we proceed to do just that.

The net result of our Markel Ventures leaders asking this question in some form every day is what you see – record results again in 2022.

We remain optimistic about the long-term contributions from our Markel Ventures operations. These businesses reinforce our culture and provide resiliency, diversification, and cash flow to Markel. We're all better off with each of them as part of the system.

Investment Engine

In our investment operations, we earned record recurring interest and dividend "orange revenues" of $447 million in 2022 compared to $367 million a year ago.

The total return of our equity portfolio was (16.0)% compared to the S&P 500 return of (18.1)%[1] and the NASDAQ Composite return of (32.5)%[2]. Our fixed income portfolio produced a total return of (5.8)% compared to the Bloomberg Aggregate of (13.0)%[3] and the total portfolio produced a total return of (9.5)% for the year.

Negative investment returns are never fun to report.

Despite the negative absolute returns of 2022, I take comfort in several facts about our Investment engine. First, these results took place while following the same time-tested discipline that we've followed for decades. In our fixed income operations, we own a portfolio of the highest credit quality bonds to match against the future claims we expect to pay to our insurance policyholders. We also match the duration and currencies of our fixed income portfolio to our expectation of when we will pay claims.

The job of the fixed income operations is to make sure that when claims come due, we've got the cash and liquidity of maturing bonds to pay them. We continue to execute that strategy without a hitch. Also, as interest rates continue to rise, our recurring interest income continues to grow.

In our equity operations, we continued to follow our four-part, time-tested, discipline. As you will find in this annual letter for decades, those four parts are to invest in profitable businesses with: one, good returns on capital and not too much debt; two, that are run by managers with equal measures of talent and integrity; three, with reinvestment opportunities and/or capital discipline, and; four, at reasonable valuations.

That catechism continues to guide every equity investment decision we make. We have outperformed the S&P 500 results for over three decades, as well as in 2022. Those results speak for themselves.

Another nuanced, but extremely powerful and important, aspect of why we are pleased with the Investment engine results in 2022 is that given the profitability of our Insurance underwriting operations, our Markel Ventures operations, our growing interest and dividend income, and our strong capital position, we were able to continue to invest regularly throughout 2022. As overall equity prices fell during 2022, we put money to work throughout the year at more and more attractive prices (and future expected returns).

A declining market may not be fun while you're in the middle of it, but as the great investor Shelby Cullom Davis once said, "You make most of your money in a bear market, you just don't realize it at the time."

Every time we bought shares in companies that met that four-part test, and every time we paid a lower price for the next batch, we increased the future earning power and value of Markel. It may not be obvious in this year's financial reports, but we believe it should become obvious over time.

Five-year view

When you lengthen time horizons, accounting nuances tend to fade away. The five-year buckets of information give you a more robust, and directionally correct, way of analyzing how things are going for your company:

(dollars in millions, except per share data)	2018 - 2022	2013 - 2017	2008 - 2012
Total revenues	$ 50,623	$ 26,501	$ 11,901
Earned premiums	$ 29,465	$ 19,011	$ 9,695
Underwriting profits	$ 1,777	$ 821	$ 184
ILS and Program Services revenues	$ 1,661	$ 44	N/A
ILS and Program Services operating income (loss)	$ 104	$ (28)	N/A
Markel Ventures revenues	$ 15,168	$ 5,124	$ 1,136
Markel Ventures EBITDA	$ 1,710	$ 623	$ 133
Net investment income	$ 2,067	$ 1,753	$ 1,353
Comprehensive income to shareholders	$ 3,679	$ 3,470	$ 1,375
Closing stock price per share, at end of period	$1,317.49	$1,139.13	$ 433.42

In the single year of 2022, we earned $627 million of underwriting profits. That is 35% of what we earned in underwriting profits in the last five years. As we've discussed in previous years, between the heightened levels of natural catastrophes, the COVID shock losses, and some less than perfect execution

[1] *S&P Dow Jones Indices S&P 500 Equity Factsheet* - S&P Global (*January 31, 2023*)
[2] *US Markets 2022 Review and Outlook* - Nasdaq Market Intelligence Team (*January 3, 2023*)
[3] *Bloomberg U.S. Aggregate bond index total return* - WSJ (*January 2, 2023*)

navigating soft insurance markets, we did not always earn what we would consider appropriate underwriting profits relative to the risk insured and capital deployed.

We worked hard to correct that. Where the causes were internal, and in our control, we addressed them. We changed our mix of business by reducing exposures to natural catastrophe risks. We improved our expense ratio, and we grew our business with discipline.

As an example, the turnaround in profitability of our Reinsurance operations provides vivid and tangible evidence of improvement. In Reinsurance, we improved the segment combined ratio year-over-year to 92% in 2022 from 105% in 2021. We are extremely pleased to be able to report these developments to you.

Insurance accounting inherently contains appropriate and necessary time lags between the time we write a policy and when the earnings show up. Our confidence has grown over time that our Insurance engine results were improving dramatically. Now those improvements are coming through in our results. Yay!

We also remain optimistic that the ongoing trends of growth and profitability you see in this five-year table will continue to move up and to the right over time.

You can fundamentally track our progress over these five-year intervals by simply following the cash.

When we make profits, we allocate that cash across a 360-degree range of options. First, we invest in our current, known and profitable businesses. Second, we invest in publicly-traded equities. Third, we use the cash to buy additional Insurance or Markel Ventures businesses. Fourth, we repurchase our own shares. In some years, like this one, we do all four.

So, how is this all working out?

One part of the assessment is extremely straightforward. If you assume that we will continue to be profitable in our insurance operations, and we do not shrink, the *total* value of the investment portfolio accrues to the shareholders.

The earnings from our investment portfolio are like fruit from a fruit tree.

If you were valuing a fruit tree, the value is the present value of the fruit the tree will produce over time. Same thing with our investment portfolio.

As such, we simply take the total value of our investment portfolio and subtract out all debt, to get an indication of the value of the balance sheet part of Markel.

Another important part of estimating an indication of the value of Markel stems from the *earnings* power of our Insurance and Markel Ventures operations. We take the normal, annualized earnings from those operations and multiply that by a consistent and reasonable multiple year-by-year. That process provides an indication of the total value of Markel's income statement.

Then we add those two parts together to determine our own sense of what each share of Markel is worth.

We track that number every year. Since our initial public offering in 1986, that number correlates to the actual price of Markel stock over time. Sometimes the gap between the two lines is wider, sometimes it is narrower. Over time, both lines head in the same direction.

This is the technique and guidepost we use internally to judge our financial progress.

Others may use different techniques and come to different answers, but this is what we do.

Richie Whitt

As I close this portion of the Annual Report, I want to thank Richie Whitt. Richie retired at the end of 2022 after more than 30 years at Markel.

Richie first came to us as an auditor in the late 1980s. Using the eighties as a starting point through 2022, that means he's been connected to Markel for FIVE DECADES! He's been a critical component of the fantastic growth that we've experienced over that time.

Richie always put the interest of Markel first. He always made decisions while thinking about others. He always tackled every challenge and every circumstance with the thought of, "What would be best for Markel over the long term?" He has dedicated almost his entire adult life to making your Company better, and he has fully embodied the Markel Style each step of the way.

I could ask no more of any human being and I hope you will join me in thanking Richie for his accomplishments and contributions. We couldn't have done it without him.

Additionally, Richie did what all great leaders do. He helped to build and develop a team that will carry on the work of Markel.

Jeremy Noble now runs our Insurance engine as President, Insurance. Jeremy came to Markel more than 20 years ago and he has been an integral part of creating our Insurance engine results for many years.

During 2022 Mike Heaton also moved into the role of Executive Vice President of Markel Corporation. In that role he oversees the day-to-day operations of the Markel Corporation holding company. Mike worked side-by-side with me for the last 15 years building up our Markel Ventures engine and continues to be a trusted and valuable partner to me.

Andrew Crowley now serves as President of Markel Ventures. Andrew, along with Mike, has been part of the Markel Ventures team since our early days. Andrew and his team continue to produce record results. They put people first and continue to build up Markel Ventures.

Thank you, Richie. We will all work to make you proud.

2023 and Beyond

I hope you share our sense of optimism as you review our past performance.

But as is always the case, the past is past. Now it's onto the future.

We don't forecast future economic conditions or geopolitical circumstances. We continue to struggle with the effects of inflation, challenging economic circumstances, currency fluctuations, wars, and generational shifts in workplace dynamics. We do not have any idea what will transpire in those important dimensions.

We never try to forecast these things; and yet, the Markel culture of win-win-win, and our integrated three-engine system, continues to produce good results.

We focus on what we can control and do. We do our best to prepare ourselves to survive and persist no matter what comes our way.

Over decades, we've lived and grown despite bouts of inflation, deflation, dollar strength, dollar weakness, wars, energy shocks, political shocks, labor shortages, natural catastrophes and more. External shocks and challenges like these will never stop coming.

I believe our results over time should give you some comfort that we created a well-designed system that can handle and thrive despite ongoing unpredictable factors.

How we remain resilient, durable, and growing, stems from our integrated architectural design of the three-engine system. Our combination of Insurance, Markel Ventures, and Investments work together to support and reinforce each other continuously.

For example, all three engines benefit from the excess cash that each generates. The cash flows to the holding company where we allocate it across our 360-degree view of options, using our four-part catechism. We can lean into and pursue any rational opportunity we find. Our system and broad range of operations, in and of itself, exposes us to a never-ending array of opportunities. The system should continue to do so.

When business operators think about a forever-home for their cherished business, Markel Ventures should spring to mind. Markel Ventures benefits from the financial strength and marketplace presence of the overall Markel Corporation.

Also, the recurring, reliable nature of our cash flow streams – and their lack of dependence on capital markets' fundraising cycles – allow us to continually deploy capital. This should prove to be a major advantage over the course of a normal economic/ market cycle.

Finally, with our system, we benefit from our daily exposure to business conditions and opportunities everywhere in the world of Markel. We don't need to rely on any one business to keep us moving forward. We can absorb volatility and uncertainty more than most organizations. We've got the opportunity to turn challenging short-term conditions into opportunities. And so on and so on.

This entire system, of the engines working together, creates a virtual feedback loop that continuously refreshes and strengthens the whole in ways that any one of the engines could not do alone.

A rope with three interwoven strands is stronger than a single strand rope of the same size. That's what we've got at Markel.

And with each passing year, the beat goes on.

Conclusion

If Markel was an athlete, I hope you would think of us as something like Cal Ripken Jr. or Bill Russell.

Ripken set the record of 2,632 consecutive games played in major league baseball. That surpassed the record of 2,130 games, a record held by Lou Gehrig for 56 years. Only five other players have streaks of over 1,000 games. Every other streak is in the *hundreds*. This consecutive game streak earned Ripken his nickname of "The Iron Man."

Imagine how many people have played baseball over the last century. The scale and context of this record is stunning and will probably endure.

Ripken also was a two-time gold glove fielder, had 3,184 hits, 1,647 runs, 1,695 RBI's, 431 home runs, 1,129 walks, 8,212 assists, and 1,682 double plays. His name is on the list of every one of those baseball records. He clearly earned his first ballot selection into the Hall of Fame.

All those accomplishments get blended into the consecutive game streak though. That is what Ripken is most known for, and it might appropriately stand atop all of his accomplishments.

By showing up every day, Ripken multiplied the force of each of those other accomplishments. He would never have achieved 3,184 hits and all the other feats without being in the lineup every day.

His unrelenting presence, day after day, year after year, created the ability of his teammates to depend on him. His team knew that they could count on him. The sense of dependability he provided to his team can't be measured. The greatness of his baseball career can be described by his numbers, but the numbers tell only part of the story. I don't know how to quantify the team dynamics he created but they seem evident just the same.

Like Ripken, Bill Russell also owns quantifiable accomplishments that speak loudly to his ability.

The Celtics won the World Championship in 11 of his 13 years with the team. He was the NBA's Most Valuable Player five times. The numbers tell only part of the story. Russell, along with his coach and general manager Red Auerbach, knew that there was an unquantifiable piece involved in Russell's value to the Celtics.

Simply put, Russell was not the most prolific scorer, nor dominant in offensive statistics that are easily measured.

Russell's primary contribution was on the defensive side of the ball where it's harder to capture his value in numbers. What is clear is that when Russell was on the floor, the Celtics won. His contributions of things like energy, drive, and the will to win defy quantification. I hope you would agree that they are nonetheless real.

Russell's fierce determination and will to win powered his team far beyond what numbers could capture.

We see the power of the Markel Style in similar terms.

I hope that as you continue to think of Markel, and our dream of building one of the world's great companies, you might think about the careers and contributions of people like Ripken and Russell.

We are a group of more than 20,000 Ripkens and Russells who work every day to do our best to serve our customers, our colleagues, and our shareholders. The streak keeps going, and the numbers keep adding up. They're quantifiable and fun to report, but they don't tell the whole story. "The map is not the territory."

Can the magic and difference-making ability of the "Iron Man," or the feats of Bill Russell be captured entirely in a stat line? What is clear is this - people come first at Markel. Fantastic things happen when people come together, persist towards a common goal guided by a set of shared, timeless values. I thank you for the honor and privilege of serving as your Chief Executive Officer and leading this amazing team of Ripkens and Russells.

We hope to see you in person at our annual meeting in Richmond this year on May 17, 2023. We'll be at the Robins Center at the University of Richmond. Our annual meeting is a great opportunity to connect with the management team at Markel and one another.

We find that the spontaneous conversations and thoughtful questions you ask help us to be better managers at Markel. We would love to see you there. You can register and find more information about the event at www.markelshareholdersmeeting.com.

We're on an exhilarating and fun journey.

We can't do it without you and…We're all suited up and ready to go.

Your teammate,

Thomas S. Gayner, *Chief Executive Officer*

93/01-Besting the Blundering Herd

By Peter Lynch

Nothing bedevils the average investor more than the false sense of inferiority that comes from playing against the institutions. After all, the institutions are so big, and get so much attention for dominating the markets, that the amateur stockpicker can't help but feel that he's trapped in a fantasy baseball camp, competing against the Atlanta Braves.

I've said this before, but having had nearly three years to reflect on life in the pro ranks on Wall Street, I'm still convinced that it's not the Atlanta Braves, or even the Toledo Mud Hens, that the average investor is competing against. It's more the Thundering Herd.

"Thundering Herd," as you may recall, is how the financial press once described the great mass of stockbrokers hired by Merrill Lynch to service the average investor, back in the days when average investors bought and sold most of the stocks. Today there's another kind of Thundering Herd on Wall Street: institutional investors, including the mutual fund managers, who now do most of the buying and selling.

A sizeable faction of this Thundering Herd could even be called the Blundering Herd. I can say that with confidence, having ridden with the Blundering Herd on more occasions than I care to admit.

The fact that the professionals now dominate the markets, which so often leads people to conclude that the amateur has no chance, has actually improved the amateur's chance. He or she can take an independent tack by zigging when the Herd zags and buying stocks that the Herd has overlooked, and especially the ones that the Herd has recently trampled. What holds them back is the inferiority complex they've gotten from mistaking a cattle drive for the Atlanta Braves.

The inferiority complex causes investors to do one of three self- destructive things: (1) imitate the pros by buying "hot" stocks or trying to "catch the turn" in, say, IBM; (2) become "sophisticated" by investing in futures, options, options on futures, etc.; (3) buy what they've heard a pro has recommended, either in a magazine or on one of the popular financial news programs. Information on what the pros think is so readily available that the celebrity tip has replaced the old- fashioned tip from Uncle Harry as the most compelling reason to invest in a company.

Let's say that in the spirit of doing it yourself, you take money out of your savings account at the local S&L;, America First and Foremost, and decide to buy stock with it. You're somewhat intrigued by the fact that the price of the common stock of America First and Foremost has fallen in half. You know this to be a solid institution with a strong balance sheet and no commercial lending because you checked into these things before you put your money there. (Forgive me for using an S&L; example twice in the three columns I've written for this magazine, but lately I've been very taken with this sector.)

Just as you are about to pick up the phone and order the latest annual report from America F&F; to see if the story is as good on paper as it seems to be in real life, a little voice from the inferiority lobe whispers, "Who do you think you are, buying a stock in a company that has never been touted in Barron's, Forbes, or Business Week?"

So instead of ordering the annual report, you go to the newsstand to pick up their latest copies to see what the experts are saying, and in one of them you discover that Mario Gabelli owns shares in Coca-

Cola Enterprises, a bottling company for the world's favorite soft drink. You buy the stock, on the theory that a famous fund manager like Gabelli knows a lot more than you and your Uncle Harry put together. In fact, Gabelli does know a lot more than you and everybody's Uncle Harry put together, but that doesn't mean you're going to profit by betting on his tip regarding Coca-Cola Enterprises. (I mention this company because three years ago I, too, recommended it in Barron's at a price $3 higher than its current price of $11 a share.)

Since Gabelli doesn't give out his home phone number, you can't call him up to ask if he still likes Coca-Cola Enterprises and whether he views the price drop as an opportunity to buy more, or whether he has soured on the company and gotten out of the stock to cut his losses.

Most likely, the drop in the price will cause you to lose faith in the stock, and without Gabelli to reassure you, you sell your shares to cut your own losses - maybe you've even sold them to Gabelli! Then you take your diminished capital and repeat the process with another celebrity tip, perhaps from an analyst at your brokerage firm. If you cut enough losses, sooner or later there's nothing left to cut.

Picking your own stocks in this popular fashion only confirms what you have always suspected: There is no way an amateur investor can compete with the Atlanta Braves. If you're lucky enough to become totally demoralized before the money runs out, you'll send the remains to a mutual fund. My advice here is that if you want to bet on the pros, the way to do it is to invest in their funds to get the full benefit from their expertise coming and going.

I suspect that amateur stockpickers would have a much higher opinion of their abilities, as well as a greater net worth, if they avoided all expert buy recommendations in favor of their own research. This is the only kind of "independent investing" that makes sense.It's taken me three columns to get around to saying this, but the investor's edge is something you already have, not something you acquire by listening to the latest tips from notable sources. As a depositor at America First and Foremost, you are close enough to the situation to at least have a chance of keeping track of it, and also a chance of buying the stock at a bargain price before the Herd comes back.

Actually, there are two kinds of investor's edges: the on-the-job edge, in which you have a working relationship with an industry and the related companies with whom you do business; and the consumer's edge, with which you can capitalize on your experiences in restaurants, airports, and shopping malls.

In fact, of the 20 top-performing stocks on the New York Stock Exchange in the last decade, no fewer than six (Home Depot, Circuit City, the Gap, Wal-Mart Stores, Liz Claiborne, and Dillard Department Stores) have been stuck under the noses of millions of shoppers who, if they'd paid attention to the popularity of these enterprises, could have profited from their edge. And they had time to do so: It often takes 15 years for a retailer or a restaurant chain to expand across the country, as more and more investors become aware of it, before the Wall Street professionals catch on.

The line about New York, "If I can make it there, I'll make it anywhere," may be true for singers, comedians, and cab drivers, but public companies routinely make it in dozens of places before the news of their success reaches the institutional trading desks in New York or Boston, the two places where most of the Thundering Herd is corralled.

A colleague of mine on the board of Morrison Knudsen, Irene Peden, recently used her coffee lover's edge and bought shares in Starbucks, the popular Seattle coffee company. Peden is a professor of electrical engineering and an expert in subsurface remote sensing, whatever that is, and she always starts her day with a cup of Starbucks coffee. She became a fan of Starbucks back in Seattle, where she normally resides, but now that she's on temporary assignment in Washington, D.C., she gets the Starbucks beans sent to her.

Except for the shares she owns in companies on whose boards she serves, Peden had never bought a single stock until last year, when Starbucks came public. Her own experience with Starbucks convinced her the company had two great advantages: It made a product that people wanted, and it sold it at a profit.

Peden did not have to look far under the subsurface to find out that Starbucks was well-capitalized, with earnings growing at a steady pace, and that it had begun to expand east and south out of the Seattle area. The story is still a good one, and so far the stock has done well.

Cheryl Peterson, who recently retired from a local charity in which I'm involved, used her letter writer's edge and bought shares in Mail Boxes Etc., which sells stamps, mails packages, and rents boxes to people who are tired of waiting in line at the post office. This is basically the same story as Starbucks's: good company, strong balance sheet, and a huge potential market - millions of Americans who are fed up with the post office. The stock was first offered at just under $2 a share (adjusted for splits) and is worth $15 today.

Here's another one: Any subscriber to a computer magazine or owner of an IBM personal computer or IBM clone could have used the consumer's edge and discovered Microsoft. Practically every IBM-based PC you buy comes with the Microsoft disk operating system (MS/DOS), for which Microsoft has the exclusive rights. You can't run the machine without DOS. Microsoft's virtual monopoly on this product puts it in the same enviable position as a < wam-co NYSE:GT>Goodyear with the exclusive right to make all the tires for all the cars on the road. But even if you failed to recognize DOS as a potential profitmaker at the onset, once the company went public in 1986, you had other chances to follow its progress each time the company innovated. Microsoft continued to boast steady earnings growth as it introduced "Word," "Windows," various products for the Macintosh line, and "Excel," its spreadsheet that challenged the popular Lotus version.

Making computers has been a treacherous business, with too many competitors killing each other off, but what was bad for them was good for Microsoft because every time IBM sold a computer with DOS, Microsoft made a profit. While many individual investors were busy trying to think like the pros and figure out how to catch the turn in IBM, they should have been thinking like amateurs, looking for clues in their PCWeek or in their computer boxes (they'd have noticed Microsoft software in every one of them). I wish I'd noticed myself. The stock has been a 35-bagger.

In my recent travels, I have noticed Au Bon Pain, a name I continue to mispronounce, beginning with the "O," which I call "Ow," and ending with the "Pan," which I call "Paw." This croissant-and-coffee franchise has appeared in airports and food courts in malls, where people like me have a chance to use their croissant- lover's edge. The company went public only recently, but it's been in business for more than a decade. It has a good balance sheet, well- conceived plans for expansion, and so far it's only in a few major markets - but don't take my word for it. Do your homework.

Peter Lynch retired in 1990 from managing the Magellan Fund, the best-performing of all mutual funds over a 15-year period. He is currently a trustee of the Fidelity Group of funds, and is working on a book to be published next spring by Simon & Schuster.

93/02-Buy American

By Peter Lynch

The romance with foreign stocks continues. What started in the mutual funds has spread to the pension funds. The California Public Employee Retirement System poured $7.3 billion into foreign stocks in 1991, and, not to be left out, the New York State Teachers' Retirement System invested $750 million in 1992. Our largest 200 pension funds now have $75.6 billion invested abroad--more than seven times as much as they did in 1985.

In effect, U.S. pension managers are betting increasing amounts on the notion that foreign companies will outperform the home-grown variety that got us this far. The subtext is that Wall Street can no longer compete with the Paris Bourse or the Hong Kong Ordinaries. If what's made in America is second-rate, the story goes, then so are the companies that do the making.

Let me be the first to throw myself in front of this bandwagon. It is remarkably short-sighted to invest willy-nilly in foreign stocks when you could be investing in America. In the ten years since foreign stocks have become fashionable, U.S. companies have become more competitive. Even our railroads are beginning to look good.

U.S. railroads are a cherished symbol of great American ineptitude. My generation was raised on the idea that Americans couldn't run one, and that the purpose of the industry was to support large numbers of aimless individuals, a sort of welfare state on wheels. Behind each train was the red caboose, a vestigial organ tacked on by the unions in order to house the pinochle players sitting on the featherbeds.

Slowly but surely, the railroad companies have tossed out the featherbeds and eliminated the cabooses, and last year the industry's return on investment was the best in about 50 years. The average crew size is declining and the volume of traffic is increasing, as railroads are hauling more coal and grain. They are even taking some container business away from the truckers.

The railroad shares still sell at a large discount to the market, so Wall Street does not yet fully believe in this transformation. Nevertheless, companies such as Norfolk Southern, Burlington Northern, Union Pacific, and Conrail prove that America can make the trains run at a profit, and perhaps even on time.

The United States still leads the world in airplanes (Boeing) and in tractors (Caterpillar). Caterpillar is recognized worldwide as producing what once would have been called the Cadillacs of farm equipment--before Cadillac lost its place at the pinnacle of automotive craftsmanship. Detroit, says the tune from the bandwagon, has forgotten how to make cars.

Really? I'll grant you that it's difficult, if not impossible, to determine the nationality of a car, which has begun to resemble the military brat, raised a little here and a little there. That said, the most successful car product of the last decade did not come from the drawing boards in Japan or Germany; it came from Detroit. I'm referring to the Chrysler minivan, which sells twice as many units in the United States per

year as all the Volvos, Lexuses, and Infinitis combined. So if foreign car companies make such an obviously superior product, why did some 450,000 Americans buy Chrysler minivans last year, while only 70,000 bought Volvos?

Perhaps we should say that Caterpillar is the Chrysler minivan of farm equipment. And when it comes to the farm itself, U.S. agriculture has hardly been resting on its cornucopia. U.S. companies are leading the world not only in tractors, in fertilizers, and in food processing (< wam-co NYSE:CAG>ConAgra's stock is up almost fifteen-fold in ten years), but also in genetic hybrids.

You wouldn't think it takes much intelligence to come up with a seed, but the seed-making business now resembles the pharmaceutical business in its astounding complexity. New seeds must face years of clinical trials and run a gauntlet of government approvals before they can be sown.

We've already proven our ability to be among the best in the world of pharmaceuticals (Merck, Upjohn Co., and Bristol-Myers Squibb), and we're repeating the performance in agriculture with DEKALB Genetics and Pioneer Hi-Bred International. DEKALB has been producing hybrid hens since the mid '40s and hybrid swine (bigger litters, fatter porkers) for 20 years, and has recently made progress with its hybrid seed corn. The leading brand of hybrid seed corn in France is marketed by Pioneer Hi-Bred, a triumph in a country that treats home-grown food with the respect that we give our nation's flag. Calgene, Inc., is working on a genetically engineered tomato, Monsanto on a superior, pest-resistant potato that may inspire a rewrite of the famous ditty: You say potato, I say Monsanto.

Likewise, the U.S. steel industry, once left for dead in the Rust Belt, is showing signs of life, especially in companies such as Nucor, a spectacular enterprise that has introduced efficient mini-mills. Even the fallen mastodons, such as Bethlehem Steel, Inland Steel , and USX (the former U.S. Steel), are beginning to stir.

America's loss of the TV market to the Japanese has created the impression that America is unable to compete with the Japanese in electronics. In fact, our position in this industry is still strong at home and overseas. While it's true that the TV-manufacturing business has been captured by the Japanese, they aren't making money in it like they used to, so to this market we can say good riddance. Moreover, this popular theory that the United States can't compete in electronics is disproven by Motorola, a world-class supplier of semiconductors and the world's leading supplier of cellular phones and mobile radios. Their foreign operations account for 42% of sales, and they are the only non-Japanese supplier of car phones and pagers to Nippon Telegraph & Telephone.

As for who will control the computer business, I heartily endorse the opinion expressed by Alan Ryan in a recent issue of The New York Review of Books: "The mass production of computer chips now lies largely in the hands of NEC, Toshiba, and Hitachi, but it is widely believed that the American firm Intel will wipe the floor with them during the next decade."

We can't deny that the Japanese took over the camera business and became their own best customers, but, like TVs, cameras are not profitable per se. Film is where the money is, and although Fuji has made inroads with U.S. customers, its major U.S. competitor, Kodak, still has a higher market share for film in Japan than Fuji and all other Japanese producers have here. Cambridge, Massachusetts-based Polaroid, of course, continues to have a lock on the instant-gratification market worldwide.

Speaking of locks, Gillette maintains its global domination of the razor trade, and political and corporate leaders across every continent (if they happen to be male) begin their day by pulling Gillettes across their cheeks--prima facie evidence that the United States is doing something right.

Meanwhile, we continue to export our fantasies, from Mickey Mouse to Madonna, along with our soft drinks, our fast-food chains, and our retail outlets. It's culturally correct for all U.S. travelers abroad to groan in dismay as we pass a McDonald's in Paris or a Toys "R" Us in Heidelberg, but these are sights we ought to celebrate. The more of this sort of culture we can export, the stronger our economy, and the more likely we'll all be able to afford to travel to Paris to admire the Mona Lisa and wince at McDonald's.

Back at home, we're creating more promising small growth companies of the kind that are listed on NASDAQ. Europe is particularly short on these emerging-growth opportunities, as the European economies are dominated by oversized conglomerates of which only some are making a decent level of earnings. While it's true that Japan has become a haven for small-company growth stocks, these are often so overpriced that the investor has little chance to gain on the upside, and Japan in general is having its troubles these days.

This brings me to the ultimate reason to prefer U.S. stocks: Wall Street provides a level playing field that exists almost nowhere else. Things we take for granted here--the timely settlement of stock trades, the timely receipt of dividends, the accurate reporting of earnings--cannot be taken for granted by shareholders in Latin America, Europe, and the Pacific Rim. Regulatory authorities elsewhere, whether in Malaysia or Mexico City, don't protect investors the same way the SEC does.

Throughout the 1980s, I made a lot of money in foreign stocks for the < wam-co FUND:FMAGX>Magellan Fund. This successful foray had nothing to do with foreign companies being superior to U.S. companies. Foreign stocks were so poorly covered and the reports so sketchy that many of the best companies were selling for a fraction of their actual worth. I found bargains galore, even among the most famous conglomerates (Nestle, Volvo, Unilever, Montedison), with nary an analyst to trumpet their virtue.

The popularity of global investing has caused prices to rise and bargains to disappear, but the primitive reporting system still exists. When you buy foreign stocks, you almost have to do your own research, or else rely on a fund manager's doing his or hers. Managing a portfolio of foreign stocks is a much harder job than managing a domestic portfolio.

There's a patriotic argument I haven't mentioned. Every dollar sent abroad robs an American company of capital it could use to grow. Someday there may be a backlash against owning foreign stocks, just as we've seen against owning foreign cars. Protesters may burn shares of foreign companies on the steps of the New York Stock Exchange, the way they bashed Japanese cars in American parking lots.

You don't have to be a patriot to invest in America--merely self- interested. We have a great system of reporting to protect shareholders. We have great industry leaders (Nike, Walt Disney, Ingersoll-Rand, Sallie Mae, and Federal Express, to add a few more names). When General Motors falters, we have at least three other five-star generals, General Re, General Mills, and General Electric, to pick up the slack with their great records.

There's nothing wrong with investing abroad if you're familiar with the territory. Given a choice between investing blindly in the future of Germany or the Pacific Rim or taking a more educated risk on Supercuts

or Au Bon Pain (two of my recent favorites), I'll choose the latter every time. It's in the backyard that investors find their edge.

Peter Lynch retired in 1990 from managing the Magellan Fund, the best- performing of all mutual funds over a fifteen-year period. He is currently a trustee of the Fidelity Group of funds and has written a new book, Beating the Street, to be published this month by Simon & Schuster.

KEYWORDS: Stock Investing Strategies, Economy, International Investing

93/03-IPOs Explained

By Peter Lynch

Every year, hundreds of new issues take their place on the ticker tapes. These financial newborns are called initial public offerings (IPOs), and how they are handled is one of the most fascinating stories on the Street.

Whereas for humans, life ends at the undertaker's, for common stocks, it begins at the underwriter's. Company X engages one of these Wall Street investment houses to peddle its first publicly traded shares, at a fixed price, to a group of initial buyers. Where to fix the price is a guessing game that puts the underwriter in a ticklish situation.

If the price is set too high, it will surely fall after the stock begins to trade freely, causing the initial buyers to lose money as well as any faith they may have had in the work of the underwriter. Since most of these buyers are big Wall Street institutions who do not take kindly to losing money, this result will not enhance the underwriter's popularity.

On the other hand, if the price is set too low, then the stock will soar in the market, making the initial buyers very happy-- but not so the company. Company X will realize it could have gotten much more for its shares had the underwriter set a higher price at the start. The next time it wants to do a deal, Company X will likely take its business elsewhere.

To satisfy both sides, the underwriter tries to price the new issue high enough so the company won't feel bamboozled, and low enough so the initial subscribers can make a bit of profit. In IPO circles this process is known as "leaving something on the table."

The underwriter, however, reserves the right to sell an additional amount of shares, usually about 10% of the offering shares, at the time of the offering. This is the "green shoe" allotment, named for the now- defunct Green Shoe Corp., for which the strategy of selling additional shares was invented. If all goes well, the stock price of the new issue will "lift" (another bit of IPO jargon) after it begins to trade freely on the open market. The green shoe shares can then be sold to add to the proceeds from the offering.

The deliberate pricing of deals slightly under the presumed market value is one reason IPOs do so well in the first three months of existence. In fact, if you'd bought shares in every IPO that appeared in the last ten years (I'm not counting penny stock IPOs here), held those shares for three months, then sold them and invested in the next batch of IPOs, you would have outperformed the S&P; 500 by a large margin.

Getting your hands on the shares of an attractive IPO is not easy. They are doled out by the underwriter to a who's who of pensions, mutual funds, and the like. Usually the best deals are oversubscribed. At Magellan , a constant frustration was getting excited about a new company and then discovering that I was allowed to buy only a piddling amount of stock.

If Magellan had this problem, you can imagine what chance the average investor has of participating in an attractive IPO. Brokerage houses get an allotment of shares, which they offer to their biggest and best clients. If you're not one of those and your broker offers to let you in on a "hot IPO," you ought to look this gift horse in the mouth. Why are the big investors avoiding this deal?

When Apple Computer went public in 1980, the state of Massachusetts, using the arcane Blue Sky laws, prohibited small investors from buying any shares. The idea was that Apple was such a risky venture that only professionals should participate. This ranks just behind the Boston Red Sox's decision to sell Babe Ruth as the worst ever made in my state. It was fortunate for me because it meant I got a big allotment in the Apple deal.

IPOs seem to come in waves, followed by calmer periods when there's relatively little action. There were waves in mid '81, between mid '83 and early '84, in 1987, and we're in the midst of one that began in late 1991. These waves correspond to peaks in the stock market when investors are euphoric and willing to pay top dollar for stocks. Companies wait for a giddy atmosphere in which to go public, which is why so many of them do it at the same time.

Some people argue that it's a mistake to buy IPOs in a giddy atmosphere, which may be true in general, but this is often when the best of the new issues make their debut. It was in July 1987 that a company called MBIA, Inc., was launched. This profitable insurer of municipal bonds came public at $23.50 and promptly dropped half its value on Black Monday in October. It's a $63 stock today.

Lessons From A Prospectus

If you miss out on an IPO, you can acquire as many shares as you want when the stock starts trading in the "aftermarket." I always search for bargains during the rare periods when the deals aren't lifting, as occurred in the summer of 1992, when 70% of the most recent 100 IPOs were selling at or below their original prices.

In looking through the list of new issues, I came across Taco Cabana, a chain of Tex-Mex restaurants. I got copies of all the relevant reports, one of which included a map of Texas covered with bright red chili peppers that represented each Taco Cabana outlet in the state, accompanied by the company billboard slogan toot if you like our borracho beans.

It's always a good idea to review the prospectuses. There are two of these. The first is called the red herring, named for the numerous warnings sprinkled throughout the text and printed in red. This is the provisional explanation of the deal, showing the range of prices at which the underwriter thinks the shares might be sold after the "road show," where investors are solicited. The final prospectus, with all the details worked out, is printed in black.

By comparing one prospectus with the other, you can see whether the road show was a success and the underwriters got their expected price, or whether a lack of enthusiasm caused them to have to reduce it.

In the Taco Cabana red herring, the underwriter said the deal would be priced somewhere in a range of $11 to $13, but in October 1992 it came public at $13.50. Obviously, investors were moderately excited about borracho beans.

A prospectus also tells you what happens to the money that was raised in the stock sale. The proceeds can go one of two places: into the corporate till (the best result) or into the pockets of the founders and directors who are selling their shares in the offering. Whenever I see insiders using the IPO as an excuse to cash out, I ask myself: If they have no faith in the future of their company, why should I?

In this instance, $20 million was going into the corporate till and $13 million to insiders. I also noted that 94 cents a share was going to the underwriters-- no wonder Wall Street firms love to handle IPOs. In the regular market, institutions make only three to five cents a share in commissions for doing stock trades.

Among the insiders, the chairman, who owned 2.046 million shares, was selling 754,500 of them to pocket a quick $10 million or so. I would have preferred that he keep all his shares, but among the many gossipy details in the red herring, I found his age: 65. A 65-year-old, I figure, has a right to enjoy some of his money, and he'd retained more than half his holdings. Meanwhile, the Prudential Venture Partners II, one of the original bankrollers of Taco Cabana when it was private, owned 2.9 million shares and were not parting with any of them. This was a positive sign.

The next point to consider was how the company will use its share of the proceeds. The red herring informed me that Taco Cabana was planning to reduce its overall debt from $10.4 million to $2.5 million. In fledgling public companies, it's always reassuring to see a strong balance sheet. A company with no debt will have a hard time going bankrupt.

Did management know what it was doing? On page 20 of the report, I learned that Taco Cabana had opened its first "Mexican patio cafe" in 1978, and since then had added 40 more company-owned patio cafes, mostly in Central and South Texas. The chairman had 36 years' experience in the restaurant business in San Antonio. The president had been a vice president at Fuddruckers, the vice president of operations was a vice president at Burger King, and a director was president and COO at Church's Fried Chicken. They knew their beef, their chicken, their beans.

Sales were on the increase and so were the earnings-- another good sign- - and the company was determined to put new chili peppers on the map, with 12 new company-owned patio cafes planned for 1993 and another 18 for 1994.

You discover a lot of interesting trivia in a prospectus, such as the fact that a Taco Cabana restaurant is painted vivid pink and open 24 hours a day, that the average check is $4.63 per person, and that 40% of the business is drive-through. You imagine yourself going to a pink building at 4 am to eat borracho beans, and you marvel at the hearts, minds, and stomachs of Texans.

It says here that it cost $900,000 to build a Taco Cabana and that each one is expected to bring in $1.8 million in average annual sales. A general rule for investing in restaurants is that annual sales should exceed the cost of construction. A two-to-one margin is quite favorable.

Alcohol (beer, I guess) accounted for only 6% of sales. I'm skittish about owning stock in restaurants that make most of their money on liquor. Liquor tastes the same everywhere, and a restaurant that becomes a bar is likely to lose its customers to a trendier bar.

With the stock at $13.50, Taco Cabana was selling for 18 times its estimated 1993 earnings of 75 cents. This was not an extravagant price tag for a fast-growing company in a stock market selling for 23 times earnings overall.

I'm not recommending that either of us buy shares in Taco Cabana. I'm using it to illustrate how much you can learn from reading prospectuses, and how it makes sense to investigate companies that have recently gone public.

New companies are routinely misunderstood and/or ignored by Wall Street, which makes these the perfect targets for individual investors who do independent research. There are several newsletters and advisory services that keep tabs on the latest IPOs. These include "Going Public/ The IPO Reporter," published by Investment Dealers' Digest in New York ($990.00 per year; 212-227-1200); "New Issues Digest," published by National Corporate Sciences, White Plains, NY ($425 per year; 914-421- 1500); and Standard & Poor's "Emerging & Special Situations," in New York ($223.50 per year; 800-221-5277).

In the chart on page 38, you can see the results from a few of the most profitable IPOs of the past 12 years. Most are household names already.

Peter Lynch retired in 1990 from managing the Magellan Fund, the best- performing of all mutual funds over a 15-year period. He is a trustee of the Fidelity Group of funds and his new book, Beating the Street, will be published this month by Simon & Schuster.

KEYWORDS: Stock Invesitng Strategies

93/04

A Fad With Staying Power

By Peter Lynch

You've got your eye on a fine company. All the signs are favorable, but there's this nagging doubt that keeps you away from the stock. So you stand by with cash in you pocket as the company continues to thrive, and you watch the stock price rise accordingly. This leads to Unbuyer's Remorse, which I can't help feeling every time somebody mentions the CML Group. CML sells NordicTrack, and my nagging doubt about the future of living room skiing caused me to ignore the good news that has led to a tenfold gain in the stock price form late 1990 to 1992. I missed the entire move. But, in fact, there were many points along the way that an investor could have bought the stock and made money.

My relationship with CML (the monogram of the founder, Charles M. Leighton) goes back to the early 1980s, before CML had anything to do with menswear, Caroll Reed women's wear, and Boston Whaler. The corporate strategy was to reach the 30 t0 50 age group at work and at play. CML had figured out that this group was growing four times faster than any other age group in the population, and that it had a lot of money to spend.

I didn't own a Boston Whaler at the time (my family has since corrected this error by giving me one), but this was the most frequently sighted boat along the coastline, and I'd ridden in enough Whalers to be fully convinced of the superiority of the product. Meanwhile, on a trip to Baltimore, I was in need of a suit and I bought one at Britches of Georgetowne and wore it on "Wall Street Week" with Louis Rukeyser.

Still, wearing a CML suit and having ridden in CML boats did not cause me to recommend CML stock on Rukeyser's program, although CML was among the hundreds of holdings I'd acquired for the Magellan Fund, so I liked it well enough to have bought a sizeable chunk.

CML was one of those scattershot enterprises in which success in one division was counteracted by failure in another, so on the whole it didn't get very far. There was a stretch when Britches and Boston Whaler both did well, and CML made a big profit from Sybervision, which produced videotapes of athletes so that weekend hackers like me could improve our games by osmosis. Meanwhile, Caroll Reed was a drag on earnings, and Britches was expanding in too many directions at once. CML also had a lot of debt.

My favorite CML subsidiary was The Nature Company--where else can you buy your children a tyrannosaurus tooth? These award-winning stores reported a remarkable $600 per square foot in annual sales, a record that no other retail operation bigger than a hot dog stand could hope to match. Alas, there weren't enough Nature Company outlets to bail out the other CML businesses, especially during 1988-'89, when boat sales began to slump and Britches began to slip and Sybervision was no longer the rage. By the end of the decade, CML's financial condition had not improved. For several years, the stock had sold in a narrow range: $3 to $8. (I say narrow only because of the spurt that was about to occur, which carried the stock price to $33.50 as of this writing.)

This is where it pays to keep in touch. CML sold Boston Whaler and unloaded Sybervision and Caroll Reed in order to reduce debt and devote itself more fully to NordicTrack. The NordicTrack division had been rapidly gathering momentum since CML acquired it in 1986. In the first year, NordicTrack sold 30,000 exercise machines; in the third, 30,000; and, 140,000 by their fifth year. People who never skied cross country or even across the street were skiing in their living rooms.

We had a NordicTrack at home, an my wife, Carolyn, continued to use it regularly. I admired it from a distance, as a piece of sculpture, but I could see that it was well-built, and much less bulky than a rowing machine.

In late 1990 I was in a perfect position to take advantage of the positive developments. I knew that the company had restructured and that NordicTrack now accounted for over 90% of the earnings. I knew that NordicTrack sales were increasing at a phenomenal clip. I knew that NordicTrack was opening numerous retail outlets and kiosks where people could try out the equipment.

Prior to this, the only way you could buy a NordicTrack was by mail order or by calling an 800 number shown on the TV ads. Hundreds of thousands of customers had bought the $600 product sight unseen. There had to be millions more who would never purchase an expensive item from a TV offer but who would respond to a personal demonstration.

I was also getting positive recommendations from two professionals who had given me good advice in the past: Dick Goldstein, a successful private money manager based in Denver, Colorado; and Harry "Skip" Wells III, an analyst at Adams, Harkness & Hill, a regional brokerage firm in Boston. Goldstein told me CML had become his largest position. Wells had been following CML for almost a decade, even though he was getting little attention from Wall Street. In his CML reports, Wells gets so excited about fitness that he makes you want to stop reading and start doing sit-ups. He also gets very excited about the prospects for CML, since in his view we are at the beginning of a "fitness-wellness megatrend" and the potential market for NordicTrack equipment is huge.

So here I had two experts egging me on, NordicTrack sales increasing at 15% to 100% a year, the company reducing its debt, plus the dramatic new developments of the kiosks and the retail stores. Yet I avoided even thinking about buying CML stock, or about recommending it to any of the charities on whose investment committees I serve.

My Nagging Doubt Lobe was telling me that NordicTrack was a fad and not a megatrend, that most people attracted to exercise machines already owned one, and that they weren't likely to purchase a spare. Moreover, I imagined that thousands of former floor skiers had gotten tired of sliding their legs back and forth and had returned to the Jane Fonda workout tapes.

Many companies give investors a lot to worry about, but there are genuine worries and then there's the "bogeyman in the closet" variety. The bogeyman hasn't come out yet, and you're not sure he's in there, but you aren't about to poke around in the dark to prove that he isn't.

I've often alluded to the fact that the collapse of the housing market was the bogeyman in the closet that scared investors away from Fannie Mae, a solid company that on close inspection was a great investment and less risky than most. I'm constantly reminding people that for 15 years, the bogeyman of

too many McDonald's restaurants has been scaring investors away from that wonderful enterprise, even though the stock has gone up tenfold since people began to worry about a fatal glut. Yet here I was, worrying about the glut of NordicTracks and not doing the homework that might have put this fear to rest.

In hindsight, I wish I had dragged myself out to the Chestnut HIll Mall to visit the new NordicTrack retail store. I would have seen firsthand the array of new products--the NordicFitness chair, the NordicFlexGold body building machine, NordicRow TBX, the recumbent bike exerciser, and the various advancements in stationary skiing.

If I had watched the customers try out this equipment, perhaps i would have understood the importance of these retail outlets, which by 1992 accounted for about 25% of NordicTrack sales. Perhaps I would have taken Skip Wells's megatrend projections more seriously. Of the 10 million "fitness enthusiast households" in the United States, fewer than 4% currently own a NordicTrack, and on top of that, there are 45 million "fitness aware households" and 31 million "couch potato households" that might finally decide to start exercising.

One of the benefits of visiting a retail outlet is that it brings the numbers alive. You can study a company's earnings potential all day long, but bullish forecasts always seem more believable after you've seen the evidence in person at the mall. But I never gave myself a chance to view the evidence. I stayed at home and ignored all the positive signs, as CML's stock price rose from a low of $3.50 in late 1990 to $33 by the end of 1992.

Whenever you have a nagging doubt about a company that's doing well, it's human nature to think you're the only person who feels that way, but the truth is that every other would-be investor is as worried as you are. The bogeyman that causes you to ignore the good news is having the same effect on everybody else. The very existence of doubt creates the conditions for a big gain in the stock once the fears are put to rest. The trick is to put your fears to rest by doing the research and checking the facts--before the competition does.

Peter Lynch retired in 1990 from managing the Magellan Fund, the best- performing of all mutual funds over a fifteen-year period. He is currently a trustee of the Fidelity Group of funds and has written a new book, Beating the Street, published by Simon & Schuster.

93/05

Bestowing Gifts

By Peter Lynch

Most of us spend more time building up our net worth than we do in figuring out how to give it away for maximum benefit. Nobody argues with the fact that you can't take it with you, but a lot of people try to delay letting go of it right up to their date of departure. Consequently, charity begins not at home, but at the reading of the will.

The retentive impulse can be very unfortunate for the people and organizations we'd most like to support. When charity begins at the reading of the will, the bulk of the money falls into the hands of the nation's biggest profligate: the federal government.

Uncle Sam's is the unkindest cut of all, the 55% federal tax on inheritance for the deceased in the top bracket. Many states also take their cut, which has caused a great migration of the elderly to places like Florida, which in addition to sunshine offers the warmth and comfort of no estate taxes. But moving to Florida for the postmortem tax break is hardly worth the effort. Most of what the state doesn't get, the feds will.

A 55% tax on inheritance makes death the equivalent of a 2,000-point drop in the current Dow Jones average, and this after all the years the deceased has paid taxes on capital gains and "unearned income." (While the government encourages us to save and invest, it persists in using this insulting term, which makes it sound as if we don't deserve the proceeds from the saving and investing we've managed to do. Here's a suggestion for President Clinton: Order the IRS to drop the phrase "unearned income" from all tax forms immediately.)

I'm straying away from my main point, which is that there are ways to insure that a greater percentage of any good fortune can be handed down to our children or to the worthy causes that we'd most like to support. A giveaway plan ought to be part of any investment strategy, for what's the use of struggling to accumulate net worth, and then allowing it to be carted off to Washington by strangers?

The government offers us various ways to avoid the ultimate tax, beginning with the onetime contribution of up to $600,000 that each person ($1.2 million per married couple) is permitted to make to the recipient of his or her choice, free of the gift tax. We can bestow this $600,000 on anyone we like, or even someone we don't like--wife, husband, uncle, mother-in-law, Mike Milken, or General Motors, to help make up for that company's recent losses.

Meanwhile, every adult couple can give up to $20,000 annually to each of their children, also free of any gift tax. This opportunity is well- known, but many couples fail to take advantage of it, either because: (1) they worry that their children aren't mature enough to use the money wisely, or (2) they imagine they will go on living for a long time, and see no need to rush to sign over any of their assets.

Since it's simple enough to set up a trust fund for the children to delay their receipt of the money, thereby eliminating worry number one, my guess is that number two is the more likely cause of procrastination over making the $20,000 transfers by people who could easily afford them. This failure to act is very rewarding for the government, but unfortunate for the heirs.

This brings us to charitable contributions. Although corporations get most of the publicity for being charitable, individuals do most of the giving. In 1991, 89% of the $125 billion collected by churches, foundations, hospitals, schools, and the like came fro individuals. According to Nathan Weber of the Giving USA digest, we Americans spend more money every year on charity than we spend on gas and oil.

Our collective generosity is a wonderful thing, and continues to set us apart from certain societies of Scrooges in other parts of the world. Nevertheless, our charitable giving often comes in dribs and drabs out of the checkbook, with the major contributions left to the will. But there are more effective methods to consider.

Before you write the next sizable check to your favorite charity, you might want to review your portfolio to see if there are any securities that you could donate instead. Stock certificates can be signed over to any qualified tax-exempt organization, which in turn can sell the shares and pay no taxes on your gains. If you sold the shares yourself, you would owe the 28% capital gains tax, but by giving away the shares, you get their full value as a tax deduction. The advantages are even greater in states that have their own capital gains taxes.

Consider the following two scenarios. If you donate $5,000 to a worthy cause, and you happen to be in the highest tax bracket, you can save $1,550 on this year's income tax, so the donation ends up costing you $3,450. However, if you donate 1,000 shares of stock for which you paid $2,000 five years ago, but which are now worth $5,000, you avoid the $840 tax on the capital gain and you still get the $1,550 write-off against your taxable income. This way, the same $5,000 donation has cost you only $2,610.

I'm not a tax expert, but I'm told there are also advantages to donating artwork, jewelry, houses, used cars, and the like. Several national charities accept used cars in their "vehicle donation" programs. If you're giving away shares of stock, you must have owned them for a least a year and a day to get the full benefit of the tax breaks.

Before you give anything away, you ought to consult with your tax advisor. If you are subject to the alternative minimum tax, you'll have to make an adjustment for the size of the gift.

Until recently, the most effective way for an individual to contribute to charity has been through a foundation. But as I've discovered for myself, you pay a lot of legal fees to establish a foundation, and after that, you continue to pay the accountants for doing a great amount of paperwork. If Fidelity Investments had launched its Charitable Gift Fund a few years earlier, my wife and I could have avoided the bother.

This is my fifth column for Worth, and I haven't yet recommended a Fidelity product, so perhaps I can be allowed one plug for a Fidelity fund that permits small and large investors alike to

funnel money into worthy causes. At present, Fidelity is the only for-profit company that the IRS has approved to run a public charity, but various community foundations have set up similar operations.

You invest in the Charitable Gift Fund much in the same way you'd invest in a regular mutual fund. You make an initial contribution that is fully tax-deductible. A fund manager puts your money to work, and your assets grow tax-free. In the case of Fidelity's gift fund, you have the option of investing in a growth pool, an equity-income pool, or an interest- income pool, depending on your tolerance for the ups and downs of the stock market. You may also split investment of that gift between any of the funds. You can draw on your share of the assets by having the Gift Fund send checks (in amounts of $250 or more) to your favorite charities at any time.

Imagine that someday you'd like to do something special for the American Heart Association. So, you invest $10,000 in an equity mutual fund that grows at 10% a year, for 20 years. Assuming you deduct the amount needed to pay yearly taxes on the dividends, and then pay the capital gains tax on the profits when you get out of the fund, you will have turned your $10,000 into a $43,000 gift.

On the other hand, if you invest the same $10,000 in a Gift Fund account where it grows at 10% a year, but tax-free, your original $10,000 will produce a gift of more than $67,000. You see the advantage of tax-free compounding.

A technique I often use to inspire a charity to which I've contributed is the challenge grant. You offer them a donation of a specific amount, but only if they can match it by raising a similar amount from other sources. I've never met an organization that failed to match a challenge grant.

What begins with a donation may result in a larger involvement: a seat on the board, or a place on an ad hoc committee, or some similar opportunity to serve a worthy cause. In my own experience of working with charities, I've found that there's no job that's more rewarding.

CHARITABLE TRUSTS: SMART WAYS TO GIVE IT AWAY There are a few additional newfangled methods by which people can avoid estate taxes and maximize their charitable contributions.

Charitable remainder trust. You give a major asset (e.g., a portfolio of stocks) to a qualified charity. The stocks are sold, and the proceeds are put into a trust account that you've set up in advance. The trust is managed by the charity or an outside investment manager. You and your spouse continue to receive the income from the trust account for as long as you live. After you both die, the charity gets your trust account. This doesn't do your heirs any good, but if you don't have children, or if your children are richer than you are and don't need to inherit your money, there are tax advantages.

Pooled income fund. This is similar to the charitable remainder trust described above, except that your assets are put into a pooled fund run by the charity or an outside manager. Well-run funds

of this type can deliver the same returns as regular mutual funds. you can deduct about 25% to 50% of your donation, depending on your age and the fund's earnings history.

Charitable lead trust. This is a charitable remainder trust in reverse. You donate assets to a trust, the charity gets the income as long as you're alive, and when you die, the assets are handed over to your heirs. The more years the charity has use of the income, the bigger the tax break for your heirs.

Life estate agreement. You and your spouse sign over your house to charity and get a tax deduction for the present value of the remainder interest of the property. You can stay in the house for as long as you live. Then the charity takes possession.

Charity insurance. You take out a life insurance policy and name the charity of your choice as beneficiary. This enables you to give much more away than you could otherwise.

Charitable trust with insurance. Set up a charitable remainder trust and take out a life insurance policy that is equal to the value of the assets you've given to the trust. When you die, the assets in the trust become the property of the charity, but the life insurance pays off to the insurance trust, which in turn is distributed to your heirs. They pay less in taxes than they would if you simply willed your estate to them.

Gift annuity. These are offered by several financial services companies, colleges, and universities. You make a donation. The charity pays you a fixed return on your money, say 8% a year. You can arrange for payments to start immediately or later. The longer you delay, the greater your tax deduction may be. A 40-year-old who buys a fixed annuity that will start paying him income at age 65 can write off 90% of the value of the gift.

Peter Lynch retired in 1990 from managing the Magellan Fund, the best- performing of all mutual funds over a 15-year period. He is a trustee of the Fidelity Group of Funds and his new book, Beating the Street, was published in March by Simon & Schuster.

KEYWORDS: benefactor, donate, real wealth

93/06-Of Betting on Biotech

By Peter Lynch

The recent collapse of the biotech group got me interested, as collapses almost always do. This isn't like the collapse of the saddle-making group, which never had a chance of coming back after the automobile was invented. Biogenetics has established itself as an industry of the future, as well as the bust of the present.

Knowing next to nothing about what goes on inside a biotech lab, I called a number of analysts and fund managers who specialize in this field. Here's the tantalizing part, as related to me by Stuart Weisbrod, a biotech analyst at Merrill Lynch. If, in early 1986, any of us had been smart enough to buy equal amounts of < wam-co NYSE:GNE>Genentech, Amgen, < wam-co NASD:CHIR>Chiron, Cetus (later acquired by Chiron), < wam-co NASD:BGEN>Biogen and Genex, we would have made 40% annually to the end of 1992, turning a $10,000 investment into $105,414 in spite of the fact that Genex went to zero. This is the sort of result that demands some attention.

Thirteen years ago, when the first of these companies began appearing on the stock exchanges, I remember hearing that all it took to start one was 100 PhDs, 101 microscopes, and $100 million in cash. The 101st microscope, I guess, was a spare. Or maybe there were 25 PhDs with 26 microscopes, but the story was always the same: The brilliant scientists were bound to hit upon a brilliant idea that could be turned into a useful product, from which the shareholders would someday make a tidy profit.

Speaking of tidy profits, the venture capitalists who put up the money to hire the PhDs and install the microscopes could "cash out" by selling all or part of their shares in an initial public offering. On Wall Street, this is called "harvesting the seed capital."

The original flurry of biotech issues I ignored, on the theory that mysterious ventures with no earnings should be avoided. I did buy some of the Genentech IPO, whose stock then rose from $35 to $89 on the first day of trading on October 14, 1980. This was a remarkable event, and a signal of exciting prospects to come. However, the biotech group accounted for less than .5% of Magellan's portfolio throughout the time I ran the fund.

A decade later, I'm hearing that the science of biotech has advanced rapidly. The pace of the research has quickened and the scientists are making more genetic breakthroughs than could have been imagined in 1980. Lately, they've been coming up with potential cures for many serious diseases.

Another thing that has advanced rapidly is the number of biotech companies whose shares are traded publicly. Instead of the handful of companies with the cash, the PhDs, and the microscopes that existed in 1980, there are now about 225, many added in the latest wave of public offerings that ended with the recent biotech slump.

Herein lies the problem, and the reason for the selloff. The odds are slim (I figure, 1,000 to 1 or so) that a great idea from one of the microscopes will ever become a saleable product. With all the companies

now involved in the business of developing new drugs, predicting which company's drug will be approved by the FDA is no easier than picking which turtle egg from a mess of turtle eggs will become a turtle and make it to the sea.

To usher a would-be saleable product through all three of the FDA's mandated trials can take from 5 to 15 years and cost from $100 million to $500 million. So far, the biotech group has been far more adept at inventing things than at surviving the dreaded three Phases, which are given roman numerals, like the Super Bowl.

In Phase I, the new substance is tested on from 20 to 100 patients to determine whether it's safe to use and isn't going to make people sicker than they already are. Then there's Phase II, involving between 50 and 250 patients, to show if the substance really works. After that comes the hard part, Phase III, the multi-center trials with up to several thousand patients, to show that the substance works in different surroundings.

What's been happening lately is that the new drug makes it through Phases I and II, and investors bid up the stock in anticipation of the final FDA approval (it's not uncommon for a biotech stock to double in value between one phase and another), and then the company flunks Phase III.

Earlier this year, Synergen flunked Phase III with its drug Antril, which treats septic shock, and the stock lost 68% of its value in one day--a fate that had previously befallen two other companies, XOMA and < wam-co NASD:CNTO>Centocor, that had developed similar drugs. It was once reported that "knowledgeable people" thought Centocor's Centoxin had a 90% to 95% chance of passing Phase III, which goes to show that a lot of knowledge can be a dangerous thing in the biotech field.

Moreover, when one biotech company fails a big test, the others are sold off in sympathy, as they were after Synergen's drug flopped last February. So many drugs have failed one test or another in recent years that between the end of 1991 and February 1993, the market value of the entire industry declined from about $41 billion to $26 billion, which reminds us how tenuous these valuations can be, based as they are on hopes and dreams, as opposed to earnings.

That's another problem: The earnings in biotech are as scarce as hen's teeth, which scientists have yet to invent. To date, only Genentech and Amgen have what could be called a tradition of meaningful earnings, although even Genentech's earnings have been highly variable, and Amgen didn't start making serious money until 1991. Others haven't fared as well. Genzyme earned a little something in 1991, as did Biogen in 1992, and Chiron, reportedly, is about to break even.

This, more or less, sums up the proceeds from the entire biotech group. Only about a dozen companies out of 225 have had products approved, and more than 90% of the companies in the biotech group are stuck in the "pre-revenue" stage, which is the new euphemism for not earning a living. The firms that can't make ends meet usually are absorbed into larger companies: That has happened to something like 75 companies since July 1990.

Apparently, the experts are as much in the dark about how to pick the next Genentech from among the many potential Genexes as the average person with a degree in English lit. I asked Linda Miller, an analyst at Paine Webber, if the PhDs with the microscopes have an advantage in choosing these stocks. She thinks not.

According to an article I read in Barron's, insiders at the Amgen labs, where ten molecules were being tested, were convinced that the least promising among them was the one that later became Epogen, Amgen's half- billion-dollar drug. Likewise, a product called Neupogen came out of nowhere and is now Amgen's second half-billion-dollar drug. So even the experts have trouble predicting these things.

Moreover, the success of an Epogen or a Neupogen depends on many factors outside the realm of science, such as what happens in the legal department (patent disputes are common in the industry) and what happens at the FDA. Many of the diseases that biotech companies are now trying to cure are difficult to test. It's hard to quantify how much better someone feels after taking a new genetically-produced arthritis medicine in Phase III.

Mr. Weisbrod's investment advice is to ignore the companies with the most exciting products, and buy the ones whose drugs have the best chance of getting approved. He saw the potential in Amgen quite early, because Neupogen did one simple thing that was easy to measure: It raised the white blood-cell count.

In the clinical trials, all Amgen had to prove was that people's white blood-cell count goes up after they take Neupogen. Synergen, on the other hand, had to prove that Antril helps people cope with septic shock, a more subjective exercise.

Every biotech analyst has a favorite method for separating the potential winners from the losers. Some concentrate on the cash, and pick companies with enough of a bankroll to survive several years at their current level of spending, which is called the "burn rate." Others look at the "M Score," which compares the level of R&D; spending with the total market value of the company. Others look for the number of products in the pipeline, or in Phases II and III. At present, these are only attempts to fathom the unfathomable.

The three most important lessons I've learned from my conversations are these: (1) Don't buy a biotech company because it announces an exciting new drug that hasn't yet been tested; (2) Don't assume that because an exciting drug has survived the first two trials, it's a shoo-in for Phase III; And (3) the investor's edge I'm always talking about often doesn't work in biotech. Investors who ignore these rules may end up getting nothing for something, as the shareholders of Genex already have.

Biotech reminds me of computers in the 1960s--the prospects in general are spectacular, but most of the prospectors are likely to fail. What a waste it is to understand the biotech potential, then put your money on the wrong company and lose it. Are there sensible ways to reduce the risks? That's the topic for my next column.

Peter Lynch retired in 1990 from managing the Magellan Fund, the best- performing of all mutual funds over a 15-year period. He is vice chairman of Fidelity Management & Research Co. and has written a new book, Beating the Street, published by Simon & Schuster.

KEYWORDS: Biotechnology Industry, Stock Investing

93/08-A Chicken's Guide to Biotech

By Peter Lynch

In my last column, I discussed the perils of biotech investing, particularly in the small "start-up" companies over which much ado has been made, and often about nothing. For those who are still attracted to biotech, but not to the risks, there may be a chicken's way out.

Now that investors have lost faith and money in the recent biotech sell off, the 225 or so publicly traded companies in this industry can no longer depend on the public generosity to keep them solvent. In the past, when a biotech lab ran out of cash, it could always sell more shares to an eager crowd of buyers but not today. The new-issue market has all but shut down for lack of interest.

As a result, biotech companies that are low on cash are being forced to enter into mergers, joint ventures, or licensing agreements with richer partners, mostly the pharmaceutical giants. Thus, the new chicken's approach to investing in biotech: Buy the pharmaceutical giants.

For the drug companies, the chance to get involved with biotech couldn't have come at a better time. They've got problems that go far beyond Hillary Rodham Clinton. In the halcyon days of the 1980s (when even adjectives like halcyon were turned into drugs), the pharmaceutical giants went along happily increasing their earnings at an annual 12% to 20%. But lately, as many of the patents on their traditional best- selling drugs have expired (Cardizem, Procardia, Ceclor), they've run into fierce competition from the generics.

Now, as these traditional best-selling drugs are losing their money- making potency, new biotech products have emerged from the labs. Not only do these marvels of genetic engineering have the potential to cure many diseases that were incurable in the past, they also have the protection of new patents that won't expire for many years.

Every biotech analyst on Wall Street has a story about a pharmaceutical giant that will benefit from a biotech alliance. Stuart Weisbrod of < wam-co NYSE:MER>Merrill Lynch told me about Schering-Plough. It sounds like what happens when a tractor hits a rock, but Schering-Plough's a prosperous enterprise that's expected to earn $4.20 a share in 1993. It would earn 50 cents more but for the $125 million it spends annually on biotech R&D.;

In addition to this in-house research, Schering-Plough has a licensing agreement with Biogen to market alpha interferon, which has been highly profitable to date. Currently, Schering-Plough's stock is selling at about 15 times 1993 earnings, and the earnings are expected to continue to grow at a 15% rate. And another success from the biotech lab would speed that up.

Then there's Eli Lilly, which manufactures recombinant insulin in a joint venture with Genentech__Genentech getting an estimated 8% of the proceeds, Lilly the rest. Lilly is doing other joint ventures with Centocor. Meanwhile, Roche Holdings, the parent company of Hoffmann-La Roche, another pharmaceutical giant, has spent $2.1 billion to acquire 60% of Genentech. In similar fashion, American Home Products has acquired 67% of Genetics Institute.

American Home was given this opportunity after Genetics Institute lost an important patent suit to Amgen. Since then, the scientists at Genetics Institute have produced a blood- clotting protein by implanting a modified gene in the ovary cells of Chinese hamsters. How they think of these things is beyond me, but the result is a breakthrough in the treatment of hemophilia.

Genetics Institute is also pushing ahead with a family of cloned proteins that can repair bone cartilage and tissue, to take the place of tissue and bone transplants. Its blood cell work may revolutionize the treatment of infectious diseases. These could be very important developments for American Home, which all along has been doing something that even I can understand__raising its dividend for 41 years in a row.

Then there's a reverse chicken's approach to investing in biotech: Buy the biotech companies that are being absorbed by the pharmaceutical giants, or those that are involved in the major joint ventures. When a Roche spends billions to acquire 60% of Genentech's shares, it's a pretty good sign there's some value left in the remaining 40%. In fact, it was the announcement of Roche's plan to purchase a majority interest that convinced me that the biotech industry was for real.

This occurred in September of 1990. It took four months for Genentech stock to start its climb from $21 to $39. Roche still has the option to acquire all of Genentech's remaining shares, at a prearranged price well above the market, that increases each quarter. This gives the stock some built-in support. American Home Products has a similar arrangement with Genetics Institute.

Biotech companies that partially merge with the pharmaceutical giants have solved the liquidity problem that plagues their independent rivals, who are always scrambling around for more cash. To survive and to compete, a biotech company must have the wherewithal to support the scientists in the labs, then to pay for the clinical trials. Finally, if they do get an FDA approval, they may have to defend their ownership of the product when a rival biotech company claims it had developed the same thing first.

As it turns out, Biogen, Amgen, Genentech, and Genetics Institute are among a handful of biotech companies that have produced anything at all that's been approved by the FDA. Amgen, the most prosperous of the four, is beginning to resemble a pharmaceutical giant__an established enterprise with decent earnings from current products, and with potentially valuable new products in the pipeline. Last year, it earned $2.40 a share, or $358 million.

Amgen was recognized circa 1989 by Mike Gordon, Fidelity's biotech analyst at that time. Gordon was urging the in-house fund managers, including yours truly, to load up on the stock when it was selling in the $5 to $7 range. Later in 1989, when Amgen's first saleable compound, Epogen, got its final clearance from the FDA, the stock price had reached $10. At the end of 1991, the price had reached a high of $76. So in about two years, shareholders had made more than ten times their investment.

This lesson applies not only to biotech, but to investing in general: Just because the good news is already out doesn't mean it's too late to invest. While it's true that the biggest profits in biotech have been made from speculating in start-up companies and their untested ideas, Amgen's stock doubled again in 1991-92, after it had won all the patent battles over the Epogen compound.

Then, whacko, the entire biotech sector takes a fall because one other company fails an important clinical test, and Amgen's stock price drops with the rest, in sympathy. What had been a $70 stock is promptly marked down to $35, and Amgen the $10 billion company becomes Amgen the $5 billion company. An investor in biotech shares has to have a strong stomach and it helps to be farsighted as well.

It's times like these, when the entire biotech market has taken a hit, that brave investors can look for bargains, such as companies with share values close to their cash holdings. Of course, biotech companies can go through cash pretty quickly. However, limiting the search to companies that already have drugs on the market, or at least in clinical trials, and some revenues coming in will reduce some of the risk. (ImmuLogic Pharmaceutical Corp., for example, has allergy vaccines Catvax and Ragvax in the pipeline, a joint-venture agreement with Marion Merrell Dow, a joint R&D; project with Merck, $13.2 million in revenues, and has been selling for near its cash value for three months.)

For the average investor with a normal stomach who lacks the training to analyze a pharmaceutical giant and its biotech connections, the ultimate chicken's way out is to purchase a mutual fund. Although I spend much of my time telling people they can be successful stockpickers in almost any industry they follow, biotech is the exception. It's so volatile and so complex that it may make sense to let the pros do the picking. Your neighborhood investor's edge won't help you here.

At present count, there are 14 biotech-related funds on sale in the U.S. Most combine biotech stocks with health-care stocks, so the investor has only a partial exposure to biotech, although with all the complicated deals, it is getting harder to decide what a "pure" biotech investment might be.

The two funds that appear to have the most exposure to biotech are Fidelity's Select Biotechnology, managed by Karen Firestone, and Oppenheimer Global Bio-Tech, managed by Sandra Panem. Panem is far from your average stock jockey. She has a PhD in microbiology and once worked at the Brookings Institution in Washington writing on the economics of biotechnology. This is typical of the experts in this field, both the analysts and the fund managers, many of whom have multiple degrees. Weisbrod of Merrill Lynch also has a PhD in biochemistry and an MBA from Columbia; this is the kind of background a person needs before he can discuss ovary cells of Chinese hamsters as well as price-earnings ratios.

Two other biotech mutual funds are the closed-ended kind, which trade on the New York Stock Exchange. These are H&Q; Healthcare and H&Q; Life Sciences, both managed by Alan Carr at Hambrecht & Quist, hence, the H&Q; prefix. Carr thinks this is a good time to invest in biotech, now that the worry over health- care profits has driven down the prices of all related stocks, including the biotech issues, even though most don't have any profits.

At H&Q; Healthcare, Carr has put 42% of the fund's money into biotech. He is also investing some of that money as a venture capitalist would__to provide capital for biotech companies that have recently gotten started. With fewer venture capitalists investing in biotech these days, the mutual funds are beginning to play this role.

Let me leave you with this footnote:

Usually, my favorite method for investing in high-growth areas where the competition is fierce is the pan-and-shovel technique. This technique gets its name from the 19th century owners of general stores who got rich selling equipment to the prospectors who went bust in the Gold Rush. When I see a mania, such as computers, where dozens of companies are struggling to sell the same thing, I look for a supplier who provides them all with some basic gizmo they all need.

I never found such a company in biotech, but Stuart Weisbrod says there was one: Applied Biosystems. According to him, this was the best- performing stock in the whole group. Applied Biosystems made the DNA and protein synthesizers and other stuff used by all the biotech labs. It was a good stock until it was taken over by Perkin-Elmer, which unfortunately is too big a company to buy just for the Applied Biosystems part. It's uncanny how often the pan-and-shovel technique has worked.

Peter Lynch retired in 1990 from managing the Magellan Fund, the best-performing of all mutual funds over a 15-year period. He is a trustee of the Fidelity Group of funds and his new book, Beating the Street, was published in March by Simon & Schuster.

KEYWORDS: Mutual Funds Investing, Biotechnology Industry, Investing Strategies

93/09-What Goes Around...

One of the keys to Magellan's success was buying cyclical stocks in the early '80s. Is it time to buy cyclicals again?

By Peter Lynch

At Magellan, I loaded up on cyclical stocks during the 1981-1982 economic slump. This strategy was one of the keys to Magellan's success. It occurs to me that we may now be in a similar situation, one in which cyclical stocks will do well.

While the stock market overall has been stuck in the tightest trading range in 40 years, we've already seen some exciting advances in cyclicals. "Seen" may be the wrong verb, because many people seem not to have noticed the upturn, which is occurring, as usual, as we come out of the latest recession.

At the end of the glorious decade, the 1980s, the consumer growth stocks (Merck, Gillette, < wam-co NYSE:KO>Coca-Cola, Wal-Mart, < wam-co NYSE:HD>Home Depot__you know the names) continued to wax while the cyclicals waned, but this couldn't continue indefinitely. On Wall Street, what waxes today may wane tomorrow, as many of these growth stocks have, since 1991. Meanwhile, the cyclicals were due for a rebound.

Sure enough, the 30 companies included in Morgan Stanley's Cyclical Index turned in a 23 percent gain in 1992, when the S&P; 500 rose just 4.5 percent. In the first half of 1993, cyclicals once again have outpaced the average stock. One leader, Standard Products, which makes plastic and rubber gizmos for the transportation industry, has tripled off its 1990 bottom.

For those of you who haven't already heard, a cyclical is a company that will prosper in good times and suffer in bad. That's because it makes or sells expensive products or luxury items that customers can put off buying when they are short on cash. People continue to buy deodorant, dental floss, Big Macs, and headache pills no matter what, which is why drugstores and fast-food restaurants are not cyclicals.

Usually when people think of cyclicals, they think of the industrial giants, such as the steels, the aluminums, and the autos. But industrial giants no longer dominate the financial landscape the way they did in, say, the 1950s. The folks at Dow Jones have had to fill out the Dow Jones Industrials with such unlikely industrials as McDonald's and Disney. If more people realized that McDonald's was a Dow Jones Industrial, the Big Mac might not be so popular.

While the smokestack cyclicals have declined in number, there are other kinds of cyclicals, including some that are not recognized as such. Hotels are cyclical, since more rooms are sold, and at higher prices, in a strong economy. Expensive restaurants are cyclical, since they cater to a prosperous clientele, people who can retreat to the neighborhood bistro as soon as they feel the pinch of recession.

Machinery in general is cyclical, and so are the homebuilders, the appliance companies, and the furniture manufacturers. IBM turned into a cyclical when the mainframe computer became its most important product. Waste-management companies are cyclical__although when these clean-up stocks were widely touted some years ago, investors, unfortunately, did not recognize that fact. Many bought at the wrong time, only to see the cleanup stocks get clobbered in the recession. When business is slow, there's less waste to clean up.

Liner board, which we call cardboard, is cyclical; when nothing is selling, the stores don't need boxes to ship it in. Then there are the airlines. I regard United as the ultimate cyclical. One year it earns $15 a share, and another year it loses $15 a share. So it's a $15-a- share operation, no matter what.

If you're ever in doubt as to whether a certain company is a cyclical, the easiest way to tell is to look at its chart in Value Line, or in one of the chart books published by the Securities Research Company and available in libraries or in a broker's office. One of the lines on a stock chart is the earnings line, and here a picture is worth a thousand numbers. When the earnings line has a steady upward slope, the way Merck's does, you're dealing with a growth stock. When it wobbles up and down, as Alcoa's does, you're probably dealing with a cyclical.

The best time to get involved with cyclicals is when the economy is at its weakest, earnings are at their lowest, and public sentiment is at its bleakest. The staff at Standard & Poor's weekly newsletter, "The Outlook," once reviewed the eight recessions since World War II to find out what happened to the prices of key cyclical stocks after the stock market hit bottom. In every instance, the cyclical groups gained 50 percent or better in five months, more than double the advance of the S& P 500.

It is consumers who lead the way out of a recession, with their car buying and home buying and replacing of old appliances, all of which then creates a revival in the businesses up the line__lumber mills, steel plants, capital goods manufacturers, the advertisers, the newspapers that sell space to the advertisers, and so on.

Yet even though the cyclicals have rebounded in the same fashion eight times since World War II, buying them in the early stages of an economic recovery is never easy. Every recession brings out the skeptics who doubt that we will ever come out of it, and who predict that we will soon fall into a depression, when new cars will sit unsold in the showrooms forever and houses will stand empty, and the country will go bankrupt. If there's any time not to own cyclical stocks, it's in a depression.

"This one is different," is the doomsayer's litany, and, in fact, every recession is different, but that doesn't mean it's going to ruin us. In order not to get sucked into the gloom, I always remind myself that although we once suffered from chronic depressions leading to the Great Depression of 1929 (in fact, that one was no "greater" than several others), we are no longer the same economy.

Today 17 percent of Americans work for federal, state, or local governments, and millions more get Social Security benefits, unemployment compensation, and/or pension payments, so there are enough steady paychecks being cashed every week to keep the economy from slowing to a halt. We have a huge college industry and a huge health- care industry, both of which are immune from recession__colleges do better in recessions. There are many other stabilizing factors__the Fed, deposit insurance, and so forth__that we've all heard about.

This brings us to the ninth recession since World War II, which began in 1990. As usual, the skeptics said that this recession was different from other recessions, and that we might never recover from it. Now that we're two years into the recovery, some people are still doubting that we'll ever recover. Meanwhile, Europe is still in the depths of recession and Japan is sluggish, and the inevitable revival in both places will stimulate our economy.

While some cyclicals have produced impressive gains already, others have yet to turn, and if the experience of 1982 is any guide, the cyclicals have several good years ahead of them. Although Chrysler</wam-co> has quadrupled in price since its 1990 low, and Ford has doubled, both stocks have barely reached the levels at which they sold before the Great Correction of 1987.

As business goes from lousy to mediocre, investors in cyclicals can make money; as it goes from mediocre to good, they can make money; from good to excellent, they may make a little more money, though not as much as before. It's when business goes from excellent back to good that investors begin to lose; from good to mediocre, they lose more; and from mediocre to lousy, they're back where they started.

So, you have to know where we are in the cycle, and right now, most companies are somewhere between lousy and mediocre. But it's not quite as simple as it sounds. Investing in cyclicals has become a game of anticipation, as large institutions try to get a jump on their competitors by buying cyclical companies before they've shown any signs of recovery. This can lead to false starts, when stock prices run up and then fall back with each contradictory statistic (we're recovering, we're not recovering) that is released.

To succeed at investing in cyclicals, you have to have some way of tracking the fundamentals of the industry and the company involved. This is where the Investor's Edge comes in. Of the 110 million Americans who have jobs, at least 50 million are involved in cyclical industries, where they are in a position to see a business turn before the news reaches Wall Street. People who build houses or sell houses, make cars or sell cars or parts of cars, work in a chemical plant or install aluminum siding, work in the airlines or the travel agencies, have a front-row seat from which they can watch the prices, the inventories, and the sales go up or down. Employees in the temporary-help agencies are the first to know which companies have more work than they can handle, a sure sign that business is getting better.

This is the sort of "inside information" that can be put to profitable use, although most people fail to take advantage of it. Even if you decide it's too late to buy your favorite cyclical in the current recovery, in the next five years, ten years, or 15 years there will be another down cycle, and another buying opportunity. Cyclicals are very forgiving. They always give you a second chance.

Peter Lynch writes the Investor's Edge column monthly. From 1977 through 1990 he managed the Magellan Fund, the best-performing of all mutual funds over a 15-year period, and he is now vice-chairman of Fidelity Management and Research Co. His latest book, Beating the Street, is published by Simon & Schuster.

KEYWORDS: Mutual Funds Investing, Stock Investing Strategies, Stock Market Trends

93/10-Investing on the House

By Peter Lynch

There's been a lot of sobering talk lately about housing and how instead of getting a big bounce in housing starts, we're only getting a hop. The "disappointing" housing numbers are used as evidence that the economic recovery has stalled.

I've been hearing a different story from David Berson and Mark Obrinsky, two of the resident experts at the Federal National Mortgage Association (Fannie Mae). While it's true that this year's estimated 1.27 million housing starts will fall far below the record of 2.4 million in 1972, Berson and Obrinsky estimate that 1.1 million single-family homes will be built in 1993. This almost reaches the all-time high of 1.2 million, set in 1986. Moreover, 3.8 million existing homes (the industry never calls them used homes) will change hands this year. This is also close to the all-time record of 4 million, set in 1978.

So we're in a strong phase for single-family construction and a boom in used-home sales, and housing in general is the most affordable it's been since the early '70s. The price of the median house continues to increase each year, as it has for the two and a half decades this data has been collected.

What hasn't bounced is multifamily housing, but that's not because we've been in a recession. The government has pulled its support for low- income housing and eliminated the tax shelters that created the boom in residential high-rises in the 1970s and early '80s. In 1972, there were 906,000 apartment buildings of five or more units built in the U.S., and last year there were only 139,000. It's this decline that makes the overall housing numbers look worse than they are.

Three years ago, I began to look into the housing sector, since housing is one of the first industries to turn around in a recovery. In the early stages, the home builders tend to do well, and home-building stocks made impressive gains from early 1991 to the end of 1992. The price of Toll Brothers, an East Coast builder that I often follow, increased more than fivefold.

Toll Brothers is a typical example of a company that will benefit from hard times. In the 1980s, anyone could build a house. All he needed was a tool kit, a nail apron, and a net to catch the money that bankers were throwing at the project. But in the bust years, banks will lend money only to established, well-capitalized builders. So builders like Toll emerge from the 1990 recession with as many new jobs as they can handle.

Nevertheless, by 1993, many of the home-building stocks had had a good run, and bargains were hard to find. The home builders may not be in the ninth inning of the recovery, but they surely have made it into the sixth or the seventh.

Whenever I research an industry, I like to call an assortment of Wall Street analysts to get their views on how various companies are doing. An analyst can be an invaluable resource, but you have to be careful about whom you listen to. I like the ones with proven records for staying up-to-date on each company they follow.

After talking to a couple of housing analysts, I found I was not alone in thinking it was hard to find bargains among the home builders. Greg Nejmeh at Lehman Brothers likes Lennar, a Florida builder that stands to benefit from Hurricane Andrew, and D.R. Horton, a newcomer that went public in 1992. But these are the exceptions.

From the stock picker's point of view, one of the nice things about a recovery is that it doesn't happen everywhere at once. So with the home builders already in recovery, I turned my attention to other companies in related industries that continue to struggle.

In the forestry group, John Chrysikopoulos at Goldman, Sachs likes Weyerhaeuser. Its timber sales have improved and will improve even more when Japan comes out of its recession, because Japan is a big buyer of U.S. trees. Its paper and packaging divisions are still in the doldrums, but eventually they'll prosper. Meanwhile, Weyerhaeuser has gone through the corporate Slim-Fast, selling an array of unrelated businesses to get back to solid wood.

The best thing that ever happened to timber companies such as Weyerhaeuser was the campaign to save the spotted owl. Who benefits when environmental groups successfully pressure the government to dramatically restrict the cutting of timber on federal lands? Firms with large private forests, including Weyerhaeuser, Georgia-Pacific, Louisiana-Pacific, and Plum Creek.

Plum Creek was spun off from Burlington Resources. It's a limited partnership (traded on the NYSE), and I've always been fond of publicly traded LPs. They require extra paperwork that scares a lot of investors away, and this creates bargains. Plum Creek has a decent balance sheet, strong cash flow, and no expenses to speak of. It's just a bunch of trees that the company harvests and sells, sending the proceeds to the shareholders as dividends.

The dividend fluctuates with profits, but at present the stock is yielding 7.7 percent. Since Plum Creek plants several new trees for every tree it cuts, there is an endless supply. This is a conservative's way to invest in lumber futures.

A few years ago I recommended Pier 1 Imports, on the theory that a housing revival is good news for home furnishers. Nobody wants to live in an empty house, and the new occupants have to have lamps, rugs, couches, and other such items that are sold at Pier 1.

Pier 1 has had its ups and downs, in part because the recovery in home furnishings is lagging the recovery in home sales. Perhaps home buyers have spent all their money and are holding off on decorating and renovations until they can replenish their bank accounts. But all the analysts with whom I spoke expect home furnishings and appliances to do well in 1994. Let's take a tour of the department store to find their favorite companies.

In the paint department--"coatings" on Wall Street--I heard nice things about Sherwin-Williams. This is one of those great companies in boring industries for which I'm always on the lookout. Paint is a pretty boring industry, but Sherwin-Williams has done a spectacular job, and the stock has been very exciting. The company has 2,000 outlets and opens 20 to 30 new stores each year, which is the slow-and-steady approach to growing a business. And when every U.S. town has a store, they can always move into Canada.

In the furniture department, John Baugh of Wheat, First Securities likes Heilig-Meyers, a retailer with 450 stores in 16 states. In the next five years, Heilig-Meyers plans to enter 19 more states. Their formula works, and they are taking it on the road, a la Wal-Mart. I learned from Wal-Mart and from McDonald's that successful companies can continue expanding for decades.

David Dwyer of Kidder likes Ethan Allen Interiors, the furniture maker spun out of INTERCO in 1989 that went public last March. The stock was $18 then and $19.50 now, so it hasn't gone far. Ethan Allen is famous for its Early American line, but half of what it makes today is contemporary. It earned $1.08 per share in the year ending in June, and Dwyer expects $1.45 next year and $1.75 by 1995.

I also got positive reviews on Pulaski Furniture, Winston Furniture (which went public at $16, then dropped to $10.50), Pier 1 (a stock I still like), and Leggett & Platt. L&P; is one of those wonderfully boring companies that makes a product that puts people to sleep: bedsprings. It has 50 percent of the bedspring market and is a major supplier of recliner parts for easy chairs and hide-a-beds. It has a great balance sheet and excellent earnings growth.

In the appliance department, Bob Cornell at Lehman Brothers likes Whirlpool, which makes 50 percent of the washer- dryers and 25 percent of the refrigerators in the U.S. This was a marginal company in the 1970s that has become a global leader in white goods. White goods is the industry term for large appliances; small appliances (TVs, microwaves, VCRs, radios, etc.) are known as brown goods.

In the carpet department, I discovered that while new carpets are superior to old ones (they are stain resistant and last longer), the price has stayed the same for many years. So carpeting is one area where the consumer is getting more for less, as opposed to, say, cars, where the prices are 80 percent higher than they were ten years ago.

Between laying down carpets in new buildings and replacing old carpets in old buildings (70 percent of the business is replacement), there's a steady demand for carpets. This should increase, because big fiber makers such as Dupont, Monsanto, and Allied are beginning to spend tens of millions to advertise the wonders of modern carpeting. Moreover, carpet making has become a highly mechanized industry in which the labor cost is only 10 percent of the price of the final product, so there is no threat of domestic carpet makers being undercut by foreign companies paying their workers 50 cents an hour.

Shaw Industries has been one of the all- time great stocks in history, number eight on the list of winners from the NYSE over the last decade. A $1,000 investment in Shaw in 1971 is worth $80,000 today. Shaw has succeeded by being a low-cost operator and by gobbling up many of its less efficient rivals. Today, Shaw makes 35 percent of all the carpets in the U.S., a remarkable figure. If they keep acquiring more competitors, Shaw will be making so many carpets that it may get a call from the antitrust division of the Justice Department, which probably has a Shaw carpet on its floor.

Shaw could continue to do well, but John Baugh of Wheat, First prefers < wam-co NASD:MOHK>Mohawk. Its stock price has more than doubled since Mohawk came public at $15. Citicorp owns a big chunk from the initial offering and hasn't sold a single share, which means that Citicorp must have a high opinion of Mohawk and its future prospects. Mohawk adopted the Shaw formula, but with only 7 percent of the market it has a lot more room to expand and acquire competitors.

That's the update on the housing sector. Housing is a cyclical industry, and the situation is always fluid. Right now, the best buys seem to be in companies that make the contents for houses, but the next time the stock market has a big correction, maybe the home-building stocks will sell off, and investors will have another chance to find bargains there.

Peter Lynch writes the Investor's Edge column monthly. From 1977 through 1990 he managed the Magellan Fund, the best performing of all mutual funds over a 15-year period, and he is now vice-chairman of Fidelity Management and Research Co. His latest book, Beating the Street, is published by Simon &Schuster.;

KEYWORDS: Stock Investing Strategies

93/11-Detroit's Comeback

While the Japanese downshift, investors can hitch a ride on the recovering U.S. automobile industry

By Peter Lynch

After a couple of years of improved car sales, a lot of people expected the party to be over, but as we've seen in the showrooms, the party continues, in spite of a sluggish economy that has added 2 million workers to the unemployment rolls since 1990. The public may not be buying new suits or dresses at the moment, but it is buying new cars.

In the car business, there are long stretches of poor sales, which create a so-called pent-up demand, followed by equally long stretches of excitement when the pent-up demand gets satisfied. These cycles of automotive boom and bust may be slightly out of sync with the economy at large.

One indication of how much pent-up demand exists at any given moment is the number of clunkers on the road. Right now, the average age of a car in the U.S. is 7.9 years, the highest it's been since 1948, when GIs home from the war had no money for anything but rent, diapers, and groceries.

Until somebody improves the bus service or invents a strap-on personal helicopter, most people will not tolerate living without a car. So as the clunkers conk out, they'll have to be replaced, and this means a steady supply of customers for car dealers and manufacturers.

This is happening at a time when the entire sad story of the U.S. auto industry in the late 1970s and early 1980s (inefficient, inept, insensitive to customers' needs) has been rewritten. Detroit is making good cars that people want to drive and that don't break down any more often than Japanese cars do. It's producing them in efficient factories that pay competitive wages.

The Japanese story (omniscient, omnipotent, omnivorous) has also been rewritten. When their economy was booming and their factories were running at top speed, the Japanese could sell their extra cars abroad at a very low cost per car. Today, with their factories running at half speed, the cost per car is much higher. Now it is Ford and not Toyota or Honda that is producing at full capacity. Now it is Japan and not Detroit that has to worry about losing its share of the U.S. market.

The financial press treats the decline in Japanese auto sales in the U.S. as though it's all to do with the rising yen and the falling dollar, which makes Japanese cars too pricey. This situation will reverse itself as soon as the yen falls and the dollar rises. I think more profound changes are at work here. The remarkable efforts of U.S. carmakers to correct their prior mistakes are likely to pay off for years to come.

In September 1992, I recommended Chrysler on Wall Street Week With Louis Rukeyser. Chrysler is doing okay selling cars and making a fortune on Jeeps and minivans. The minivan has replaced the station wagon as the suburbanite's favorite conveyance: It's roomier and also a better value. In the

government's dictionary, a minivan is defined as a truck, whereas a station wagon is a car. Being a truck exempts the minivan from certain emission-control requirements that add to the sticker price of cars.

Chrysler flirted with insolvency in the early 1980s, but today it is generating so much cash that the rating on its bonds is being raised from junk to investment grade. This would reduce its cost of borrowing and add further to its profits. Chrysler's Jeeps are selling well, and Chrysler has managed to hold on to a 50 percent share of the minivan market against a horde of competitors. The company has produced an exciting new line of cars (the LH series) in the $17,000 to $30,000 range and the first redesign of a full-size truck in 22 years. The Chrysler Neon, a lower-priced car that will appear at dealerships in 1994, has the potential appeal of GM's Saturn.

So it's easy to make a positive case for Chrysler, but with the stock having quadrupled in 24 months, it's not the buy it once was.

Three of the top auto analysts with whom I recently spoke (Wendy Beale- Needham at Smith Barney Shearson, Don DeScenza at DeScenza & Co., and David Bradley at J.P. Morgan Securities) like Chrysler, but they like < wam-co NYSE:GM>General Motors even better.

GM has long been the dunce of the industry--it took years for the company to figure out that customers actually want air bags in their cars--but lately GM has gotten smarter. It is installing air bags in all but three of its 1994 models. After noticing that many of its loyal Cadillac customers were getting too old to pass a driver's test, GM jazzed up the Caddy with a bigger engine to appeal to a younger crowd.

The main reason to prefer GM (and also Ford) over Chrysler is that GM and Ford have big overseas markets and will benefit when Europe shakes out of its recession, whereas Chrysler is essentially a domestic operation.

Elsewhere, I've noted that GM does so well with its non-automotive divisions, including GMAC, Hughes, and Electronic Data Systems (a canny acquisition it made from Ross Perot), that if it manages to break even on its U.S. auto business, it will make a fine profit. David Bradley thinks that before the end of the current upswing in car buying, GM can earn between $5 and $7 a share on U.S. car and truck sales alone. If that happens, the company's overall earnings would be $10 to $15 a share. He sees GM as a potential $100 stock.

GM may also benefit from the curious way Wall Street appraises the earnings of cyclical companies. Chrysler is doing better than GM at present, so let's say Chrysler earns $8, then $10, then $12 a share in the next three years, and in the fourth year it slips back to $10. Meanwhile, GM earns $4, $6, $8, and then the same $10 as Chrysler. At that point, investors are likely to pay more for GM's $10 than Chrysler's $10. That's because Chrysler will appear to have reached its peak, while GM will look like it's still climbing.

Supply-Side Investing: Besides the carmakers themselves, there are an estimated 2,500 additional companies whose principal products are parts of cars. Many of these are publicly traded, and they also stand to benefit from the surge in auto and truck sales. GM, Chrysler, Ford, and even the Japanese carmakers are manufacturing fewer parts in-house, and this "outsourcing" makes the parts industry more important than in any previous cycle.

Somewhere on a car or truck, there's always a part or two that will make investors happier than if they'd invested in the sum of the parts. The catalytic converter, antiskid brakes, and the air bag all have created big winners in the stock market, and so has the aluminum wheel.

The main supplier of aluminum wheels is Superior Industries, whose stock has enjoyed a modest 40-fold gain in a decade. It didn't take a Nostradamus to see this one coming. Carmakers had to reduce the weight of their cars to improve gas mileage to meet EPA standards, and they could drop an easy few pounds with aluminum wheels. The percentage of new cars and trucks with aluminum wheels has increased from zero 20 years ago to 37 at present count. Someday, it may be 100 percent.

There's a certain amount of protection in investing in an established supplier such as Superior. When a car part fails, it's the carmaker that gets the bad publicity and not the part maker, so carmakers are very careful about who gets the contract. A competitor might arrive with the best-looking aluminum wheel ever, but unless that competitor has a track record, carmakers aren't likely to give up on what already works.

Superior may have a prosperous future ahead of it, but the problem is that its price-to-earnings ratio of 34 already reflects that probability. If you want to invest in wheels, Wendy Beale-Needham suggests Hayes Wheels, a company that came public in 1992. Hayes is the largest supplier in Europe, and in North America it's number two, behind Superior. Varity, which sold the Hayes shares in the stock offering, still owns a sizable stake.

Don't Forget Spare Parts: The fact that 37 percent of the vehicles on the road are at least ten years old augurs well for the spare-parts business, also known as the aftermarket. The aftermarket has suffered in recent years because there were too many new cars on the road from the last big spurt in auto sales from 1983 to 1988.

In addition to normal cyclical blahs, two other factors added to the woes of the spare-parts market: Automakers insisted on making high- quality cars and trucks that refused to break down, and longer warranty periods meant that more repairs were being handled by dealers. But sooner or later, the warranties had to expire and the parts had to wear out. Millions of vehicles bought between 1983 and '88 have reached that age when they have to spend time in the shop.

So we can expect the aftermarket to become a very busy place--even busier if and when the other states follow California's lead in adopting stringent pollution-control standards. In addition, it's estimated that one third of all older cars will fail the EPA tests that go into effect in 1995.

Some of the best-known companies in this industry (Echlin, Standard Motor Products) have already seen their stocks rise in anticipation of better days ahead. Others have gone sideways, such as Genuine Parts, which went from $30 in 1987 to a recent $36. This company has increased earnings for 32 straight years, which puts it in the Lynch Hall of Fame. Even in the recent recession, Genuine Parts managed to boost its earnings. Lately, it's been cutting costs and upgrading the 700 NAPA parts stores it owns outright--it also supplies parts to 6,000 independent dealers. Don DeScenza has made Genuine Parts his number one pick in this sector.

Except for retailing and restaurants, there isn't another area of the stock market where more people have more of a chance to follow what's happening than in cars, trucks, and assorted parts. We'll eventually have an electric car, and once the initial confusion is sorted out, some company will emerge as the champion of that business, and we'll all realize who it is. Then there will be several champion suppliers of batteries and so forth, and we'll know who they are, too. And even though the news is out, there will be plenty of time to invest, because if Wall Street is true to form, it will be slow on the uptake.

Peter Lynch writes the Investor's Edge column for each issue of Worth. From 1977 through 1990 he managed the Magellan Fund, the best performing of all mutual funds over a 15-year period, and he is now vice-chairman of Fidelity Management and Research Co. His latest book, Beating the Street, is published by Simon &Schuster.;

KEYWORDS: Stock Investing

94/01-Prospecting in California

The worlds's seventh latgest economy is bottoming out. Get ready for the rebound.

By Peter Lynch

Recently, the decline and fall of California made the front page of the New York Times, in a three-part series, no less. It made me want to buy some California stocks.

The Decline and Fall of California bears an uncanny resemblance to the Decline and Fall of New England, which made the front page of the New York Times on July 23, 1990. In four years, New England had gone from economic miracle to economic disaster, and all the talk on the news was about the lost jobs and the death of the real estate market. You would have thought that Massachusetts, my home state, would have to be liquidated.

Now that New England has bounced back and Massachusetts is still in business, we can view the "disaster" with more dispassion. Housing prices never did collapse, except in the high end of the market, and even the fancy houses are selling again at somewhat fancy prices. People have cheered up and resumed shopping. The amazing part is, the recovery in New England has occurred without the jobs coming back.

The same sort of thing happened in Old England in the 1980s. The British economy looked so hopeless that people were delighted when it managed to muddle through. British stocks did brilliantly after that.

California in 1993 reminds me of New England in 1990 or Old England in the early '80s. Out of 14 million jobs in California, 560,000 have been lost, so that part of the disaster is hardly imaginary. But in the drumbeat of total despair--more layoffs in the defense industry are expected, for example--people are terrified that soon there will be no jobs left in the state.

Housing prices have declined in California, but mostly in the high-end houses, and after more than doubling in the 1980s they were due for a pullback. If what happened on the East Coast is repeated on the West, the California real estate market will stabilize as soon as there's a change in psychology. Then we'll see a modest rebound in consumer spending and a bigger rebound in the stock prices of a variety of California companies as investors anticipate a more prosperous future.

The New England psychology began to improve about the time our state government reduced its deficit and balanced its books. That's where California is right now. After several years of a double whammy--raising taxes and cutting the state payroll--the California government is about to balance its budget. The deficit has fallen from $2.6 billion in 1993 to a projected $560 million in 1994, and a zero deficit is projected for 1995.

I profited from New England's recovery by investing in regional banks and neighborhood savings and loans. Many were selling at tantalizing prices: below book value and with very low price-to-earnings ratios. Those with the wherewithal to survive have been remarkable performers. Problem loans have

declined, earnings have skyrocketed, and stock prices have doubled, tripled, and in a few cases quadrupled. All this in less than three years.

There's no reason to believe California S&Ls; won't follow the same script. As of this writing, half are selling below book value. I'm told by Joe Jolson, the S&L; analyst at Montgomery Securities in San Francisco, that for the first time in five years, California thrifts are able to sell their foreclosed real estate. The worst may be over for loan defaults.

In particular, Jolson likes SFFED, a stock that I recommended earlier this year. He also touts two lenders that specialize in California auto loans: CTL Credit, recently trading at $12.50, and Westcorp, trading at $10.50. These have been steady growers in a weak auto market that will benefit from a pickup in sales.

Other analysts are bullish on California's bigger thrifts, beginning with the nation's largest, H.F. Ahmanson, which writes 74 percent of its loans in California. Like its counterparts in New England, Ahmanson learned an expensive lesson and has been staying away from commercial real estate lately. The company recently unloaded another heap of trouble by selling $1.2 billion in delinquent single-family mortgages to Bear Stearns. This transaction may have broken all records for largest onetime disposal of bad home loans in modern financial history.

The drastic move will take a chunk out of Ahmanson's $19.50-a-share book value, but in the long run it will strengthen the company and prepare it for a huge boost in earnings later. Two other large S&Ls;, Great Western and Golden West Financial, also stand to benefit from a recovery in real estate. Golden West is so well managed it has avoided all trouble.

A slightly more far-fetched play on a California turnaround is Fannie Mae, my perennial favorite stock. While Fannie Mae has been a great investment--up twentyfold in nine years and more than fivefold in five-- the true value of the company is still not reflected in the price. Based on projected 1994 earnings, if Fannie Mae traded at the market multiple, it would be a $125 stock. But a cloud of doom always hangs over Fannie Mae, the way the cloud of dirt hangs over Pigpen.

People remember that Fannie Mae got hurt in the Texas recession, when battalions of homeowners walked away from their houses, defaulting on some Fannie Mae mortgages. Wall Street is worried that the same thing will happen in California, but I say it won't. Fannie Mae has tightened its underwriting standards since stubbing its toe in Texas. The delinquency rate on its mortgages has been going down for six years in a row, continuing to drop throughout the latest recession. Currently, the rate is less than six-tenths of one percent, a ten-year low. Meanwhile, Fannie Mae's mortgage-backed-securities business is booming.

In playing the New England recovery, I invested in a few retailers in addition to the banks and S&Ls;, but it was hard to find companies that were exclusive to the region. California is full of them. It has the seventh largest economy in the world and is home to a variety of businesses that derive most if not all of their revenues in-state. Thirty-one million Californians have a chance to monitor these companies firsthand.

The Good Guys is an electronics retailer with locations primarily in the Los Angeles and San Francisco areas. It offers excellent service and low prices, and the stock itself is selling at half its 1992 high of $22.50. The Good Guys will benefit when consumers resume shopping for nonessentials.

One grocery-store chain, Vons, operates almost exclusively in California, and a second, Albertson's, has a major presence in the state. Nordstrom< /wam-co>, a department-store chain based in Seattle, does 50 percent of its business in California, Dayton Hudson of Minneapolis gets 30 percent of its sales there, and Carter Hawley Hale, which just emerged from bankruptcy, does 90 percent of its sales in the state. Nordstrom is a well-managed company with a great record, and its stock has been trading at a below-market price-to-earnings ratio of 19.

California is also the land of the discount warehouse clubs. A majority of the Price Club outlets are located there, so Price Co. may benefit from a California turnaround, as well as from its recent merger with rival Costco. HomeBase, a West Coast version of Home Depot (owned by Waban< /wam-co>, which also operates the BJ's Wholesale Club in the East), has cloned itself around the state.

A discount retailer of a different kind that I've touted for two years running is Supercuts, a hair salon. One fourth of all Supercuts stores are found in California, and the recession may have helped their business, because people who can't afford the $100 stylist are coming in for the $13 shampoo and trim. Perhaps some of them will never return to the $100 stylist, but in any event, Supercuts is expanding across the country and its same-store sales are on the rise. The stock recently traded around $16.25.

Another way to profit from a turnaround in a depressed region or state is by acquiring shares in companies that own sizable parcels of real estate. During the go-go 1980s, raw land in California was priced so high it could have been sold by the ounce.

Today, there's a lot of land in California that's selling for a lot less than it was five years ago, and two publicly traded companies, Newhall Land and Farming and Tejon Ranch, have large inventories on the outskirts of Los Angeles. Newhall was a spectacular stock for two decades, and now it can be bought for half its 1989 high price.

This brings us to the California home builders. While the Decline and Fall gets most of the publicity, California has quietly become the best place in the country to build houses, with cheap land and a labor force willing to work for modest wages. Many former defense contractors are wielding hammers these days.

In the earlier recessions in Texas and New England, we've seen the marginal home builders go bankrupt, creating more business for the well- capitalized survivors. In California, the largest survivor is Kaufman & Broad (the Broad rhymes with toad, but the company is managed like the prince). Kaufman & Broad dominates the market for entry-level houses, and it plans to build several new communities in the next few years. It keeps costs low and quality high, a combination that's hard for competitors to beat.

While the New England recovery has been anemic, California's may be more robust. Its favorable location north of Mexico and at the gateway to the Far East, an impressive array of high-tech industries, and an experienced work force give California plenty of appeal.

If you miss the California recovery, don't despair. Sooner or later there will be another Decline and Fall, in the Sun Belt, perhaps, or in the Pacific Northwest, which already is slumping, or in Maryland and Virginia if we can ever lay off a few federal bureaucrats. When the calamity makes the front page of the Times, it's a signal to start your research.

Peter Lynch writes the Investor's Edge column for each issue of Worth. From 1977 through 1990 he managed the Magellan Fund, the best performing of all mutual funds over a 15-year period, and he is vice-chairman of Fidelity Management and Research. His latest book, Beating the Street, is published by Simon & Schuster.

KEYWORDS: Stock Investing Strategies, Economy

94/02-Making a Bid for Sotheby's

With the art market finally regaining its strength, it's time to look at auction houses.

By Peter Lynch

Art may be the "window to the inner soul," but like cement or oil, it's also a commodity. It has its cycles of low prices and high prices and the occasional bubble followed by a bust. The latest bubble reached all the way to $82.5 million, the price fetched by Van Gogh's Portrait of Dr. Gachet in 1990. This, apparently, was the priciest bit of canvas ever unloaded at an auction. The art market was giddy. Soon afterward, it went into a three-year hangover.

What does art have to do with my favorite little objects of beauty-- stocks? When cement prices begin to turn up, it usually pays to own shares in cement companies. When aluminum prices begin to turn up, it usually pays to invest in Alcoa. So when Van Gogh prices turn up, I direct my attention to Sotheby's.

My idea of a great business is one that has a shortage of competitors. In America, we grow up thinking that competition is healthy, which in spelling bees, pie contests, and fund management, it is. But in such industries as airlines and computers, competition can lead to lousy earnings and multiple bankruptcies and is hazardous to human wealth. There ought to be a warning label.

Since any Tom, Dick, or Harriet can rent a room, buy a podium, hire a fast talker, and open business as an auction house, you'd figure that the auction business would be more competitive than even airlines or computers. This is not the case. Wealthy aristocrats, in particular, are very persnickety about who handles their effects. They want their auction houses to go back at least as far as their antiques. So they end up at one of two places: Sotheby's Holdings, founded in 1744, or Christie's International, founded in 1766.

These two companies, it turns out, handle 98 percent of the world's major auctions for art, antique furniture, jewelry, and other expensive items. Warren Buffett made his fortune and his reputation investing in companies that dominate their markets, from Katharine Graham's Washington Post to Rose Blumkin's furniture store in Omaha. Sotheby's and Christie's are like two Rose Blumkins, operating in 40 countries and 26 countries, respectively.

This isn't quite a monopoly, but a global duopoly is almost as good. You and I and $500 million could hire some scientists and invent a new computer chip, but we couldn't mount a serious threat against Sotheby's and Christie's. A company called Hapsburg Feldman recently tried and failed.

Sotheby's and Christie's have all the right contacts with galleries, dealers, and major museums. They employ celebrated experts in every category of fine art and collectibles, to whom curators at the major museums often turn for advice. Their representatives graze on the party circuit with the people who own expensive things. These are valuable long-term relationships that can't be manufactured more cheaply in Mexico or Taiwan.

That's not to say these two companies don't compete with each other. In its annual report, Sotheby's can't bring itself to mention Christie's by name. It refers only to "our main competitor." They fight endlessly over prestigious clients, and their rivalry is as spirited as the old Macy's versus Gimbels or Harvard versus Yale.

Last year, a resident of Paris, Hubert de Givenchy, announced he had decided to "simplify his lifestyle" by auctioning off several roomsful of bronzes, silver, rugs, and paintings from Louis XIV through the French Empire. A New York socialite reportedly tried to help Sotheby's win the Givenchy job with a clever seating arrangement. At a dinner party, she placed Givenchy next to Albert Taubman, Sotheby's chairman and principal stockholder, so the latter could schmooze the former. It didn't work. Christie's got the collection.

On the other hand, Sotheby's held the much-publicized auction of stuff from a castle belonging to Princess Gloria von Thurn und Taxis. This is not a German cab company. It's a prominent family whose tree reaches back into the Holy Roman Empire.

What makes this rivalry more amusing than damaging is that there are enough rich people to keep both auction houses very busy. Also, their squabbling over clients does not keep them from uniting on the important issue of raising prices. Late in 1992, Sotheby's upped its buyers' commission from 10 percent to 15 percent on the first $50,000 of any item purchased at its auctions. Christie's quickly followed suit. (Both houses take 10 percent of all amounts over $50,000.) If these were airlines, 15 other competitors would have forced them to lower their prices.

Even though the companies may be equally good investments, Sotheby's is located in New York and trades on the New York Stock Exchange, while London-based Christie's trades on the London Stock Exchange. That makes Sotheby's much easier to track for American investors. And being a Sotheby's shareholder myself, I follow that story more closely.

Sotheby's went public in 1977 with a small number of shares, only to be taken private again by Taubman in 1983. In spring of 1988, there was a new public offering of 11 million shares, a sizable chunk of which was supplied by Taubman. He made a lot of money on the sale, and the public ended up with a major stake in the auction house. The initial price was a split-adjusted $9 per share.

It was just before the Sotheby's IPO that artwork began to get preposterously expensive. First the Australian tycoon Alan Bond bought Van Gogh's Irises for $53 million. Then, shortly after the IPO, Picasso's Yo Picasso fetched $47.9 million. Eventually a Renoir entitled Au Moulin de la Gallette would go for $78.1 million. In the fall of 1989, Sotheby's stock peaked at the rather silly price of $37 a share, so for the initial investors, this was a four-bagger. The stock earned a record $1.96 per share.

It's in the nature of Wall Street to imagine that whenever a company sets a record for earnings, it will go on setting new ones. (This is no different from sports, where last year's winner is usually picked to repeat.) The people who paid $37 for the stock must have been looking for $2.50 in 1990 and $3-plus after that. They were unprepared for the expected: In cyclicals, a period of silly prices is followed by a period of sobriety. Sotheby's earnings dropped to 25 cents a share in 1991, and the $37 stock became a $10 stock. It's been stuck in the teens ever since.

This is unpleasant for former buyers, but it gives the rest of us a chance to own a piece of this great franchise at a reasonable price. Christie's peaked at almost $7 a share during the last bubble and has recently traded below $3.

During the decline, Sotheby's was strengthening itself. It cut its operating budget by 17.5 percent, to about $42 million. It reduced its debt from $54 million at the end of 1991 to $5 million by the end of 1992. As mentioned above, it raised the buyers' premium 50 percent. And it reduced its regular dividend.

Normally, I root for companies to increase the dividend, but not where the amount of the payout exceeds the annual earnings, as it did at Sotheby's for three years. This stock was artificially held up by the regular dividend, which, when cut last August from 15 cents per quarter to 6 cents, took away some of that support.

There are some risky elements to this business. To keep up its credibility in the art world, it must continue to employ the right experts (the recent resignation of president and CEO Michael Ainslie took Wall Street by surprise). Sotheby's may buy important artwork or furniture for its own account, hoping to resell these items at a profit; it could make a costly mistake. To attract prestigious collections to its auctions, Sotheby's sometimes offers the seller a guaranteed return. If the proceeds fall short of the guarantee, Sotheby's must make up the difference. And on the buyer's side, Sotheby's sometimes lends money to the winning bidder. When Alan Bond bought Irises, half the money he used was Sotheby's via a secured loan.

This loan caused a lot of head scratching after Bond went bankrupt and Sotheby's was left holding the Irises, which it later sold to the J. Paul Getty Museum

We can't have it both ways. If we believe sources that they recovered the difference, then of course it was resold for less.presumably for a much lower price. But sources in the company assure me that Sotheby's has recovered the balance of the loan from Bond and that the entire transaction turned out to be quite lucrative. Its finance subsidiary has become a profitable addition to the business.

So overall, this is a more attractive company than it was in 1989, selling for less than half the price while its principal commodity is showing signs of a revival. In December, Sotheby's sold 88 Picassos at an auction in New York, with most of the winning bids at the high end of the pre-auction estimates. Christie's had a successful fall season as well.

An auction buff myself, I recently attended a sale with my wife, Carolyn, at a leading local dealer in Boston. Here again, 90 percent of the paintings brought top dollar. An unsigned work, Still Life With Daffodils, was listed at $800 to $1,200 and went for $16,000. For a Sotheby's investor, this is exciting fundamental research.

There's also a growth element to this story, which adds to its appeal. The auction market itself is growing yearly at an estimated 15 percent worldwide, so Sotheby's stands to gain from that. The company has opened offices and "selling centers" in Europe, Latin America, and the Far East. In the 1980s, the Japanese traveled to auctions in New York to buy French art. Now they can attend auctions in

Japan and buy Japanese art. The Taiwanese can stay in Taiwan and buy Taiwanese art. The auction method seems to work in many cultures.

Sotheby's is also expanding its product line. Along with the furniture, antique jewelry, paintings, etc., Sotheby's is bringing many new items to the auction block: baseball cards, sports memorabilia, original sketches for Disney animated cartoons, comic books. The company now handles 70 different categories of collectibles. Through a subsidiary, it sells real estate, mostly in the seven-figure category. Its newest product? Used corporate jets.

Every decade seems to produce a different group of rich buyers who want to acquire the high-priced treasures of formerly rich sellers who need the cash (the Arabs in the 1970s, the Japanese in the 1980s). As long as there's death, divorce, changes of address, and reversals of fortune, we'll see no end to the procession of goods out of one drawing room and into another. Sotheby's will be there to collect the commissions both ways.

Peter Lynch writes the Investor's Edge column for each issue of Worth. From 1977 through 1990 he managed the Magellan Fund, the best performing of all mutual funds over a 15-year period, and he is vice-chairman of Fidelity Management and Research. His latest book, Beating the Street, is published by Simon & Schuster.

KEYWORDS: Art Industry

94/03-Company After My Own Heart

Unknown, unexciting, unheralded on Wall Street, and successful in Japan: What's not to like about AFLAC?

By Peter Lynch

AFLAC is my kind of company: a $15 billion operation most people know nothing about. Its main source of revenue is selling cancer insurance, which is unlikely to top any list of exciting businesses. Its headquarters is in Columbus, Georgia, which is at least one change of planes from Wall Street. The original name, American Family, was forgettable enough that in 1992 the board of directors voted to drop it in favor of the acronym. The longer and drawn-out version is the American Family Life Assurance Co. "Life assurance" sounds completely old-fashioned. It makes you think of a roomful of clerks sitting at high desks, making notations in giant ledgers with their quill pens.

But AFLAC is exciting where it counts. Its earnings have increased for 12 out of the past 13 years and continue to grow at a 15 percent annual clip. The stock has outperformed the market for 15 of the last 19 years in spite of the fact that it's chronically unfashionable and therefore undervalued. If you put a piece of tape over the name of the company and looked only at the earnings and the growth rate, you'd figure this to be a $37 to $40 stock in today's market. Since it's AFLAC, it's a $27 stock. A situation like this never bothers me. Stocks and singers may start out in the hinterlands, but if they keep making beautiful noises, they're bound to be discovered sooner or later.

In this case, the beautiful noises are in Japanese. AFLAC might just as well be named Japanese Family Life, or JAFLAC, in honor of its remarkable success in the country that has been the bugaboo of U.S. commerce. The Japanese won't buy U.S. products, you say? Twenty-eight million Japanese are insured by AFLAC. That's a quarter of the entire population. The only American-made product that has earned more money in Japan than AFLAC is Coca-Cola, also from Georgia.

To understand how this miracle happened, we have to go back to John Amos, a Colonel Sanders-ish character who got together with his two brothers to form the company on a shoestring budget in the 1950s. Their fledgling enterprise was nearly bankrupt when the Amos brothers revived it by dropping the general line of life insurance, which wasn't selling, in favor of cancer insurance.

Cancer insurance had its critics, who likened it to polio insurance and other "dread disease" coverage sold door-to-door to unsophisticated consumers at very high prices. What was a great deal for the insurers was often a lousy deal for the insured. Nevertheless, American Family earned a reputation for reliability and for paying its claims on time.

Through the 1950s and into the 1960s, American Family expanded its markets and prospered under the leadership of Amos. By the 1970s, when cancer insurance was no longer an easy sell in America, Amos took a pleasure trip to the Far East. I've always admired executives who don't let holidays interrupt their thinking. Some of the best ideas come from a relaxed brain. In this case, Amos was touring Japan with a

friend when he observed that the Japanese were obsessed with germs and preoccupied with cancer, which was both a leading cause of death and a taboo subject, just as it had been in the U.S. Meanwhile, they were madly puffing away on their cigarettes, so the surgeon general's warning hadn't quite caught up to them.

Investigating further, Amos discovered that Japanese salaries had increased to the point that millions of workers were wealthy enough to afford supplemental health insurance, and there were gaps in the national health system that might make such insurance desirable. In short, he realized he had stumbled onto the perfect market for the AFLAC cancer policy.

A family-run company such as this one can have its drawbacks, but one of the advantages is that there are no stodgy committees to pour cold water on a quirky yet fantastic idea. A committee might have pointed out that AFLAC had no contacts in Japan, no experience in doing business abroad, and no employees who spoke Japanese, and that larger U.S. companies with all three had failed to gain entry into that xenophobic country. Amos was not bothered by such trivial impediments. He came home and promptly filled out a formal application to the Japanese Ministry of Finance.

As it turns out, being small and unimportant worked in AFLAC's favor. It was hardly a threat to the Japanese insurance industry, since none of the Japanese insurers had any desire to sell cancer policies. That being the case, allowing AFLAC to operate in Japan was a painless way for the Japanese government to show its openness to U.S. business.

It still took four years of wrangling with the ministry before AFLAC was finally accepted into Japan. This was a lot like being accepted into an Ivy League college--difficult to do, but once you're there, the authorities will go to great lengths to prevent you from failing. Ergo, AFLAC was granted an eight-year monopoly on cancer insurance throughout the entire country. As if this weren't enough, it was allowed to sell its policies inside the major Japanese corporations, which agreed to encourage their workers to buy the insurance and to deduct the premiums automatically from the monthly paychecks. In this remarkable "sponsorship" system, retired executives from each corporation are often enlisted to do the actual selling. Imagine what it would mean to Aetna if General Electric offered to sponsor Aetna's policies in all its offices and factories, or to Travelers if Lee Iacocca returned to Chrysler to sell Travelers insurance to his former employees.

As of this writing, 92 percent of the corporations listed on the Tokyo Stock Exchange are involved in AFLAC sponsorships. Is it any wonder than in its first year in Japan, AFLAC had $25 million in sales, roughly eight times more than its most optimistic projections? Every year thereafter, the sales and revenues have grown, proving again and again that Amos's trip to Japan is the best thing that ever happened to the shareholders.

AFLAC could have followed the lead of many of the giants in the insurance industry by investing its policyholders' premiums in risky real estate loans and junk bonds. This was the thing to do in the 1980s, which resulted in many better-known insurers losing their shirts, along with their pants, shoes, cars, boats, and houses. AFLAC took a less sophisticated approach and put the money into boring old Treasury bonds, so today its $12 billion portfolio is one of the strongest and safest on earth. And since all its policies, Japanese or American, pay a lump-sum benefit, the company is not exposed to unlimited and unforeseen liability.

There are two bits of bad news in this story. AFLAC tried and failed to peddle its products in Australia, the United Kingdom, Italy and elsewhere. Apparently, nobody loves the cancer policy quite as much as the Japanese. And Americans don't love it as much as they used to, because by the mid-1980s, sales in the U.S. had begun to slow.

This was a transition period between the aging John Amos and his energetic nephew, Dan, who is now the CEO. Under Dan Amos, the company left the white-suit era and entered the gray-suit era. Among other things, the younger Amos installed modern management systems, improved and expanded the advertising, and launched a cost-cutting campaign that eliminated two of the four corporate jets.

Along with the internal makeover, the new leadership shut down operations in unprofitable foreign markets. They successfully introduced several new products into the U.S. market: accident, disability, nursing-home care, home health care, hospital indemnity and Medicare supplemental policies. In addition, AFLAC continues to own seven TV stations, which were acquired many years ago at almost no cost to the company, since the revenues covered the interest payments on the debt.

As the new products begin to pay off, cancer insurance is less important to the bottom line. In 1993, noncancer policies accounted for 68 percent of AFLAC's new domestic sales. Taking a lesson from its Japanese operations, AFLAC is selling these new policies through payroll deduction plans, to companies that range in size from 2 or 3 employees to 10,000.

Meanwhile, Japan is in a recession, and the sale of cancer policies has slowed even there. While there's still solid demand for the cancer coverage, AFLAC has begun to broaden the product line over there. It's introduced Super Cancer, an upgrade on the original, and Super Care, which helps defray nursing-home expenses for the elderly.

Nursing-home costs are a major concern in a country whose population is exceedingly long-lived, and Super Care has gotten a favorable reception to date. After one year of existence, it accounts for 25 percent of new sales in Japan.

AFLAC has been helped in recent years by the strength of the yen, since the bulk of its revenues come from people who pay their bills in yen. This could reverse itself at any time. A 10 percent drop in the value of the yen could take 15 cents off AFLAC's earnings per share and put a short-term drag on the growth rate.

But I'm convinced the long-term prospects are excellent. It costs a lot of money to bring new insurance products to market, and the big payoff comes several years down the road. Insurance companies are required to maintain sizable cash reserves for various contingencies. In Japan, AFLAC recently has reached the point where its reserves are fully funded, so it can now "repatriate" the surplus cash back to the parent company in the U.S. In 1993, it repatriated a record $100 million, a number that is almost certain to increase in 1994 and beyond. This extra cash may be used to buy back stock or raise the dividend, either of which would add to shareholder prosperity.

Even on the basis of 1993 earnings, AFLAC at $27 is a cheap U.S. stock with a price-to-earnings ratio of 12.9, as compared to the S&P; 500's price-to-earnings ratio of 22. Viewed as a Japanese stock, AFLAC is the biggest bargain in all of Tokyo. Give it a relatively low Japanese price-to-earnings multiple of 30 to

40, and in the current bear market these $27 shares suddenly become $70 to $90 shares. So if you've been searching in vain for a Japanese investment that isn't wildly overpriced, you haven't been looking in the right places. Try the New York Stock Exchange.

Peter Lynch writes the Investor's Edge column for each issue of Worth. From 1977 through 1990 he managed the Magellan Fund, the best performing of all mutual funds over a 15-year period, and he is a vice-chairman of Fidelity Management and Research. His latest book, Beating the Street, is published by Simon & Schuster.

KEYWORDS: Family Business, Insurance Industry

94/04-Bank On It

The author, perhaps the most famous stock picker ever, tells how to profit from one of the best opportunities he has witnessed during a 30- year career of beating Wall Street

By Peter Lynch

My first column for Worth appeared in the August/September 1992 issue. The subject was the great investment opportunities in the scores of mutual savings banks and thrifts (a.k.a. savings and loans that were going public). Perhaps you know what's happened since then: The share prices of many of these new public companies have doubled, tripled, and even quadrupled in the period following the initial offerings. In my 30 years of looking at stocks, I've rarely seen a group do as well as this one has.

During good times for packaged foods, insurance, or retailers, not every food packager, insurance company, or retailer is going to share in the prosperity. An investor may find the right sector but choose the wrong stock and lose money. But among the mutual savings banks, it's hard to find a wrong stock. Of the 13 that began trading in 1991, the worst performer is up 89 percent.(For more on that year's conversions, see "Class of 1991" on this page.) Out of 46 new issues in 1992, there's only one loser to date. And of the 57 initial offerings in 1993, there are no losers; 30 have gained more than 30 percent.

I'm not telling this old story to exercise my hindsight--who cares about the wonderful investments we all might have made in years past? What causes me to revisit the topic is the 1,231 mutual savings banks that haven't yet converted to public ownership. On top of those, a sizable number of prior converts are trading in the market at bargain prices.

The savings banks have recently made headlines, but not the kind I'd like to see. It seems that a small number of officers and directors have been enriching themselves on their own conversions by issuing themselves free shares or options to buy shares at a discount. There's a move afoot in Congress to put a stop to the insiders' profiteering, and the Office of Thrift Supervision has slapped a moratorium on all future deals while it studies the matter. Meanwhile, the Treasury Department has halted all direct sales of savings banks to larger commercial banks.

I'm no fan of insiders getting more than they deserve. If that's the situation, it ought to be corrected. But to my mind, the prospering of insiders is not the biggest tragedy with conversions. The biggest tragedy is that millions of depositors, average people with CDs or savings accounts, also could have prospered but have not. When given the chance to participate in the scores of recent offerings, only 2 percent of the depositors have taken advantage. The rest have turned down what may be the opportunity of a lifetime.

My guess is that this moratorium on thrift conversions will be lifted sooner or later. Some way has to be found to bring the remaining mutuals into the system of public ownership, or else they'll be unable to compete with the other banks and thrifts that enjoy access to public capital. And unless the rules are drastically revised in the wrong direction, there will be more good deals to come. I only hope that more individuals will enjoy the benefits.

So we know what we're taking about here, mutual savings banks, thrifts, and savings and loans are varieties of the same species. Some are chartered by the states and others by the federal government. Many began in the 19th century as neighborhood associations, similar to electric co-ops or food co-ops. They aren't owned by anyone in particular, except the mass of depositors. This mass ownership is what creates a windfall for the new shareholders, as I'll explain in more detail below.

It's ironic that mutual-savings-bank conversions are branded in the press as unfair to the little guy. Actually, conversions are the rare exception where the little guy gets to buy shares at the initial offering price. In nearly any other kind of IPO, the Wall Street gorillas (institutions, mutual funds) grab all the shares, while the average person is shut out. I often wonder why we bother to call these events public offerings at all; generally, the public has nothing to do with them.

But the offerings of savings banks are truly democratic. Widows, blue- collar workers, and kids with paper routes get a crack at the shares. Although the actual requirements for conversion vesting (that is, eligibility for buying shares at conversion) vary from bank to bank, in most cases a passbook balance of $100 to $500 will give you the right to purchase as much stock as you can afford, up to several hundred thousand dollars' worth.

When a savings bank decides to convert, one of the first things it does is send out letters to all depositors informing them of these rights. Most of these letters, and most of the announcements that follow, end up in the trash along with the junk mail. People are used to getting toaster ovens and calendars from banks--not stock solicitations. They think there's something fishy about a bank's inviting them to put up money in advance to buy its own shares. They've all read the stories about Charles Keating.

This rejection by its own customers usually forces the bank to extend its offer to an ever-widening group of outsiders: residents of the county, residents of neighboring counties, or even all residents of the state. Some of the shares will end up in the hands of professional investors like me who open accounts in a variety of banks and thrifts with the sole purpose of hitting upon a possible conversion. I know about this from personal experience. Seven years ago, my wife, Carolyn, and I bought CDs in several different mutuals in our vicinity.

Becoming a serial depositor is not everybody's idea of an exciting time, and keeping track of the paperwork can be a minor hassle. On the plus side, it only takes one conversion to make all your troubles worthwhile. We have been fortunate enough to have stumbled into four: three in the area around greater Boston, where we live, and one in Maine, where the family goes skiing. Given the remarkable performance of so many other conversions around the country, I only wish we had spent the latter part of the 1980s traveling from coast to coast, sticking money into thrifts.

On second thought, the kids would have mutinied in the back seat. Anyway, the vesting requirements have been tightened to discourage the long-distance carpetbaggers. That's just as well. I'm all for keeping the profits in the neighborhood where savings banks are located, and with 1,231 possible conversions waiting to happen, the odds are excellent that at least one candidate can be found in a city or town where you live or work.

It can't hurt to ask local bankers how many unconverted thrifts exist in your area. Leave a small deposit or purchase a small CD in each one, and even if nothing happens, you'll collect your interest payments. The 100 most likely and most attractive candidates for conversion are identified in "Get Ready," a list that comes courtesy of SNL Securities, a highly regarded advisory service in Charlottesville, Virginia. There are opportunities here in 32 different states. Shown in italics are the 29 thrifts that SNL predicts are most likely to convert within two years. No guarantees, of course.

CASH IN THE TILL

What makes conversions such exceptional investments? It's not simply the bull market that has lifted these stocks. It's the fact that mutual savings banks have no formal owners. A normal company has founders, early investors, and venture capitalists, all of whom claim a share of the proceeds from a stock sale when the company goes public. But a mutual savings bank has only depositors. There are no sellers to compensate. Officers and directors may get free stock, as we've noted, but all the cash that's raised in the offering, minus the underwriting fee, is returned to the company till.

The effect is quite magical. Let's say PennyWise Mutual Savings Bank, which has a net worth of $10 million before conversion, announces a public offering: 1 million shares at $10 per share. The underwriters take their small cut, but for the sake of this exercise, we'll ignore that. So the entire proceeds of $10 million revert to PennyWise. This doubles the value of the company, from $10 million to $20 million. The lucky buyers have just paid $10 million for a $20 million property. Another way of looking at it is they've bought the company for zero.

It's hard to think of another transaction where the value of the merchandise doubles the minute it changes hands. Imagine it this way. You've just paid $10,000 in cash for a new car and driven it home, where you open the glove compartment and discover your $10,000 has been placed there, along with a note from the car dealer: "We don't need this. You keep it."

As long as you leave that money in the glove compartment, your $10,000 car is a lot more valuable than it was before you bought it. Is it any wonder then, that the stock price of a mutual savings bank rises quickly as soon as it starts trading on the open market? Indeed, first-day gains average more than 30 percent. For depositors who are used to getting 3 percent on their CDs, that's ten years' worth of interest, paid overnight. The initial price surge is usually followed by a second, more gradual increase. On average, the 384 thrifts that trade on the major exchanges sell for 104 percent of book value in today's market. Usually, it takes the newer conversions several months or even years to reach this plateau. Investors who miss out on the quick 30 percent profit from the offering can get in on the next 50-70 percent by purchasing shares later.

The example of Green Point Savings is instructive. This is the New York bank (publicly trading as its parent, GP Financial) that was at the center of the fuss about the insiders' unfair advantage. The original plan was to sell Green Point to Republic New York Corp., and when that deal didn't pan out, the directors decided to take their bank public. In typical fashion, the stock was offered at $15 and quickly rose to about $20, where as of this writing it now sits. The book value is $27, and if the earlier pattern holds, the price will creep up to that level eventually.

But let me repeat myself: no guarantees. In spite of the built-in advantage of cash in the drawer, it's a mistake to think that one savings bank is as good as another. Some are highly profitable, others less. Some have "clean" loan portfolios; others are plagued with defaults and foreclosures. While most are solvent, a few of the shaky ones are forced into conversion by the government so they can meet minimal capital requirements with the infusion of new money. These so- called supervisory conversions can be hazardous to investors. I wouldn't invest in any thrift without asking some basic questions.

-- Is there enough equity? Equity is important for two reasons. If a bank lacks sufficient equity, it puts itself in a precarious situation with regulators and becomes a candidate for bailout or liquidation. The S&L; casualties of the 1980s didn't have enough equity to cover the losses from bad loans.

The proceeds from a public offering are counted as equity, which is why converted savings banks excel in this category. The equity-to-assets ratio is the standard measure of financial strength, and an e/a of 5 percent is considered good. J.P. Morgan, one of the nation's strongest commercial banks, has an e/a of 7, while the average e/a of the 384 publicly traded thrifts is 9 percent. Green Point Savings has 20 percent equity to assets after adding the new capital from the conversion.

A couple good things can happen to a bank that's cash rich. The more equity it has, the more loans it can make; the more loans it makes, the more it increases its earnings.

Or if it doesn't want to make loans, it can invest the money in Treasury bills and earn a nice living. Better yet, it can buy back its own stock. Fewer shares outstanding means more earnings per share, more book value per share, and a higher stock price.

-- Is there a high-quality portfolio of loans? Bad loans, a.k.a. nonperforming assets, can break a bank very quickly as it channels more money into its loss reserves and into the management of properties in foreclosure. I look for thrifts that have a low percentage of nonperformers. Less than 0.5 percent is comforting.

-- Is the thrift making money? The common measure of a bank's profitability is return on assets. You get the ROA by dividing the bank's income by its assets over a specified period. A 1 percent ROA is average, and that's a good benchmark to use. Anything above that is a plus. Another useful measure is the price-to-earnings ratio. I look for thrifts with p/e ratios below 10. I'd be wary of investing in any thrift that is losing money (zero or negative earnings) at the time it goes public.

-- What's the book value? You can get this number from a bank officer, the investor-relations department (if there is one), an annual report, an S&P; report, or a variety of other research services. Its importance has already been noted.

If bank officers have begun the conversion process, your investigation is a snap: Everything you need to know can be found in the prospectus. Here, you'll find the offering price of the stock, the earnings history, the makeup of the loan portfolio, the percentage of nonperforming assets, the equity-to-assets ratio, the resumes of officers and directors, the number of shares they are buying, and at what price. This last detail is an important one. Corporate insiders are not known to be self-destructive. They don't buy company stock unless they expect to make money on it. So when you pay the same price they do, you're in with the right crowd.

I also look for a couple of other things. If a bank owns its own branches, it's a plus. Real estate is carried on the books at cost and can be a valuable hidden asset. Another plus is what bankers call cheap deposits. A bank that has few branches and large concentrations of deposits tends to be more cost effective than one with many branches and smaller deposits.

After you've read the prospectus, you can ask all the questions you want and clear up any remaining confusion at a meeting with bank officers and others in the know, to which every would-be investor is invited. The hosts will probably serve donuts and coffee or sandwiches and Coke, and still only six or eight people will show up. This is another rare opportunity for the average person to learn from the horse's mouth--and it's astounding how few take advantage. They're too busy listening to their brokers and watching for the latest hot tip from CNBC.

WINNERS AND LOSERS

What can we learn from 2 savings banks out of the 116 that converted since 1991 whose share prices have lagged behind the rest? The biggest disappointment is First Federal Savings & Loan Association of San Bernardino, which at this point is the only outright loser in the group. It has suffered from being in the wrong place at the wrong time: California in its worst recession in the modern era. The other disappointment, although not a loser at the moment, is < wam-co NASD:PTRS>Potters S&L; of East Liverpool, Ohio. Potters's stock followed the usual pattern--it was offered at $10 a share in 1993, then jumped to $10.88 on the open market. But from there, it drifted downward, reaching a low of about $9. However, it rebounded and today it sells for around $11.

Maybe Potters is jinxed by having virtually the same name as the villainous banker in It's a Wonderful Life. But from what I can gather, the basic problem is earnings. Potters wasn't making much money when it converted, and it's barely profitable today. With 6 percent nonperforming assets, it's not hard to imagine where the profits have gone.

Anyone who asked the key questions about Potters would have avoided the stock. It flunked the test on loan quality. Until you get hard evidence that the delinquency rate is in decline, you're better off putting your money elsewhere. There's plenty of opportunity.

In the column I wrote on this subject in 1992, I included a list of ten savings banks with favorable characteristics. That group is up some 58 percent (see "Scorecard"). A new list of good candidates appears in "Prospects." I'm not suggesting that you run out and buy these, only that they appear to be worth consideration. (I personally own many thrifts including three on this list: Pamrapo , Fidelity New York, and North Side Bank.) Investigate before you invest.

Another word of warning: The perfect conditions banks have enjoyed for several years won't last forever. It's been an extremely happy time for bankers, something they can tell the grandchildren about: declining interest rates, an accommodating Federal Reserve, an improving economy, and a beautifully shaped yield curve. With short rates low and long rates high, a banker can lend money at 6 percent, borrow at 3 percent, and feast on the spread.

Eventually we will have another period of tight money. The first tiny increase in the Fed's lending rate in early February caused bank stocks to stumble. Rising interest rates are profit killers. During 1.5 years out of every 10, on average, we get an inverted yield curve, when short rates are high and long rates are low. This is a calamity for banks.

So it may be that the steady upward rise in bank stock prices will be interrupted sooner or later. But long-term there's another reason to be bullish: consolidation.

In the past five years, nearly 37 percent of the thrifts and savings banks have been acquired through mergers and buyouts. When this happens, the stock prices are pushed to a third tier, far above book value.

Even with the buyouts temporarily put on hold, consolidation is inevitable because we have too many deposit takers in this country. If you count credit unions there are more than 20,000 separate institutions where we can park our money. Each one has its own advertising jingle, board of directors, auditors, software system, and headquarters. The last time I wrote about this, I mentioned the six banks in my town of 19,000 people, as compared to nine in all of Canada. My little town still has six banks.

The record levels of cash that has piled up in the commercial banks is another stimulus to mergers. The industry today looks like it did after World War II--bankers have more cash than they've seen in decades and no place to lend it. By acquiring smaller banks and thrifts, they can expand their deposit bases and eventually increase their earnings.

So we're seeing a double trend: Many mutual savings banks and thrifts are going public, while others are being bought out. Many of the takeover targets are attractive to larger institutions because they, too, are full of cash. On our list of good prospects, Queens County, Pamrapo, and Sunrise Federal can be put in the cash-rich category, along with Green Point, with its incredible 20 percent equity-to-assets ratio.

You may have noticed that seven of the banks on the recommended list are from New York and three from California. On the last list, two were from New England. I've always found the biggest bargains in the thrift group in regions that are recovering from recession. But you have to be careful to buy the ones where loan delinquencies are in decline, and where the situation--the health of both the bank and the community or region--is getting better and not worse.

New York banks are especially ripe for takeover, because the regulations in New York make it easy for out-of-state banks to make acquisitions. Wherever these takeovers have occurred, the target has been bought out at a premium to book value.

SNL Securities (these people keep themselves very busy) did a recent study of the 16 thrifts acquired by larger institutions in 1993. The average acquisition price was 1.5 times book. Not a single one was acquired at a price less than 300 percent of the initial offering price for the shares.

By this measure, our fictional PennyWise, which went public at $10 with a $20 book value, would be worth $30 in a takeover. Of the three phases in the life of a mutual savings bank or thrift, this last one is the most rewarding of all.

Ask the residents of Hattiesburg, Mississippi; Wilmington, North Carolina; Bay City, Missouri; Lakewood, Colorado; New Smyrna Beach, Florida; Covington, Kentucky; or Hometown, La Grange, and Tinley Park, Illinois. They've already tripled their money by investing in the places where they cash their paychecks. That's my kind of insider's edge.

KEYWORDS: Banking Industry, Stock Investing Strategies

94/05-Charlie Silk's 150-Bagger

Meet an amateur investor with an approach -- and a track record -- any professional would be proud of

By Peter Lynch

My candidate for the world's greatest amateur investor is Charles Silk. I met this fellow Bostonian halfway around the world, at a reception at the Bible Lands Museum in Jersualem in 1992. We were part of a trade mission to Israel sponsored by the state of Massachusetts. It turned out we had a few friends and many stocks in common. On a bus ride to historic sites, we had our first extended chat. Not about historic sites, but about Blockbuster Entertainment, Charlie's most successful pick.

Charlie bought Blockbuster many splits ago, in 1984, for $3 a share. It wasn't called Blockbuster yet. It was called Cook Data Services, which fit into Charlie's area of expertise. He had had his own data-processing company, which had fallen on hard times, and he was forced to shut it down. He was sitting home, doing telemarketing for a software outfit and wishing he could find another way to make a living.

Cook Data Services solved his problem. The shares he bought for $3 apiece are worth $450 today, so his $10,000 investment became a living in itself. Thanks to this one exciting stock, he was able to abandon telemarketing and devote himself to his favorite hobby--looking for more exciting stocks. He and two of his three sons are now full-time stock pickers.

I've often said that a couple five-baggers every decade is enough to make do-it-yourself investing a worthwhile pastime. With a 150-bagger like Cook Data, one every half century or so is all anybody needs.

Call Charlie a lucky man for stumbling onto Cook Data Services, but luck didn't make him a millionaire. The hard part was holding on to the stock long enough to get the full benefit. After the price had doubled and then tripled, he didn't say to himself, I'll take my profits and run, like many investors who invent arbitrary rules for when to sell. He wasn't scared out when the price dropped, as it did several times, and he ignored the highly publicized negative comments made by forecasters and "experts" who knew less about Blockbuster than he did. He had the discipline to hold on as long as the fundamentals of the company were favorable. It was not a guess on his part. He was doing his homework all along.

In my investing career, the best gains usually have come in the third or fourth year, not in the third or fourth week or the third or fourth month. It took eight years for Charlie to get his 150-bagger, but in a way, he'd been preparing for the opportunity since college.

At the University of Michigan, where he earned a degree in accounting and finance, Charlie was first exposed to one of life's great mysteries: How do you find a good stock? A professor named Wilford J. Eiteman, famous at the time for his market theories, posed the question. Over the years, Charlie found his own answer. He searches for good stocks among small companies that are relatively debt free and have been beaten down in the market, to the point that they're selling for less than the cash in their bank accounts. "I'm paying nothing for the company itself," Charlie says in his rich Boston accent. "The only thing I'm risking is my patience."

He reminds us that on the New York Stock Exchange, 70 percent of the companies are followed by two or more analysts, but on Nasdaq, 72 percent are not covered by any analysts. This lack of coverage helps produce the great distortions between price and value that he seeks out.

Beginning in the 1960s, Charlie combed the so-called pink sheets in the over-the-counter market. Many small companies went public in the hot initial-public-offerings market late in the decade only to see their prices collapse in the 1973-74 bear market. But it was a heyday for Charlie. Roaming through the wreckage, he found several low-risk opportunities in the area he understood: computers and data processing. A company called Computer Usage had $4.10 a share in cash; he bought the stock for $2.25. Another was Scientific Computers, which had $1.37 a share in cash and at one point was selling for 25 cents. On the rebound, it hit a high of $33.50, but Charlie had bailed out at about $6. "I learned then how tricky it is to know when to sell," he says.

Now we move forward to 1984. Another hot IPO market was followed by a collapse at the end of that year. Small high-tech stocks suffered the most. For Charlie, it was 1974 all over again, except this time he didn't have to bother with pink sheets. Nasdaq had launched its computerized trading system.

He surveyed this latest wreckage. Cook Data Services caught his eye. It sold software programs to oil and gas companies--right up Charlie's alley. It came public in 1983 at $16 a share and quickly rose to $21.50, but the price had fallen to $8 when Charlie began tracking it. He was still tracking when year-end selling dropped the price to $3.

This was the kind of risk Charlie liked to take: a company with no debt and $4 a share in cash, selling for $3. But cash in itself is no guarantee of success. If a company is sick to begin with, it has to spend its cash to stay alive. Cook Data was quite healthy. Its revenues had increased four years in a row. "To produce a record like that," Charlie says, "they had to have something on the ball." His $10,000 investment was as much as he could scrape up. It made him one of the largest shareholders.

A few months after Charlie bought his shares, Cook Data announced it was moving away from data services and into the "consumer area." The company's president, David Cook, had an ex-wife who was a movie buff. Apparently, she still had some influence and convinced him to open a video superstore in Dallas.

Charlie wanted to know more. He got some of his best information by calling the company directly. He made contact with the CEO, Ken Anderson, and also with the investor-relations person, Barbara Phelps. She agreed to send him articles about Cook Data that appeared in the Dallas newspapers.

One of the most interesting things the company sent Charlie was an independent study on the future of the video-rental industry. "When I read that thing," Charlie says, "I found out that 30 percent of American households owned VCRs, and that eventually 60-70 percent would own these machines. [This estimate turned out to be conservative.] All these millions of people with VCRs were going to need an endless supply of tapes."

It got more interesting when he went to the library and looked up company filings in the SEC's Official Summary of Security Transactions and Holdings. He saw that two different groups, the Sanchezes from Texas and Scott and Lawrence Beck from Illinois, had become major shareholders. Scott Beck was

coauthor of the video study and obviously impressed by his own research. Charlie also learned that revenues from the Dallas superstore had more than doubled in the first three months of operation. His sources at the company confirmed these numbers and told him how crowded the store was. It was amazing, they said. People were driving from as far as 30 miles away.

Meanwhile, the stock price had begun to rise on heavy volume. Volume is something Charlie watches very closely. In his experience, stocks on the way down usually don't hit bottom until the volume has subsided. Heavy volume in the upward direction is often a harbinger of more big moves. In six months from late 1984 to early 1985, he'd already made five times his money. Some of his friends were urging him to be sensible and to take his wonderful profit. This is where many investors would have tripped up, but having missed some spectacular gains in the 1970s, Charlie kept his focus where it belonged--not on the stock price but on the company itself.

In spring of 1986 Blockbuster opened an outlet in West Roxbury, a mile from Charlie's house. Suddenly, everything he had been hearing about came to life, and he could see the crowds for himself. It is a tremendous advantage for investors to have stores owned by immature public companies open in their neighborhoods. They get an early whiff of success or failure before Wall Street picks up the trail. Perhaps if there had been a Blockbuster in my own little suburb of Boston, I would have noticed what Charlie noticed. "My sons and I would go over there on Saturday night and count cars," he said. "The parking lot was always packed. I thought to myself, 'This is going to be incredible.'"

By late summer 1986, three new superstores had opened in Texas, and the Becks had bought franchise rights to four new cities. Revenues continued to grow at a rapid pace. A secondary stock offering was planned for September to raise money for more expansion. The company was changing its name from Cook Data to Blockbuster Entertainment.

A week or so before the offering, Charlie was reading Alan Abelson's column in Barron's, when he came to a pan of Blockbuster. Abelson's argument: Who needs another video store?

Abelson's comment produced a spate of selling that caused the stock price to drop 15 percent. Charlie was a fan of Abelson's, but he was confident he knew more about Blockbuster. The sales figures from Blockbuster showed that people were flocking to the new superstores. But enough investors backed away from the offering that instead of the anticipated $20 million, Blockbuster could raise only $3.7 million.

Wayne Huizenga, the Waste Management tycoon, entered the picture in late 1987. A partner with Scott Beck's father, Huizenga jumped on the Blockbuster opportunity, eventually taking complete control. "Now I was really impressed," Charlie says. "I was aware of the terrific job Huizenga had done at Waste Management. I also liked the fact that he wanted to concentrate on company-owned stores, more profitable than a franchise operation."

Toward the middle of 1987, Charlie started worrying about the stock market in general and the fact that he had too much money riding on one issue. So he sold a portion of his shares in the high 30s, just before the big correction in October of that year. Short term, this proved to be a smart move, because Blockbuster stock promptly fell by half, to $16. But longer term, he would have been better off to hold on to every share to get all of Blockbuster's tenfold gain over the next four years.

In 1989, another Wall Street expert spooked the shareholders. Lee Seidler, an analyst for Bear Stearns, made a big fuss over the company's practice of carrying a large quantity of older and less-popular video tapes on the books as assets, when in his opinion they were worthless. This, he argued, made the company appear more profitable than it was.

Seidler's salvo was taken so seriously that the stock price got clobbered (falling 36 percent). The accounting flap was still an issue six months later when Huizenga visited Fidelity in December 1989. I was running Fidelity's Magellan fund at the time and was impressed with his explanation. He said that even if the company changed accounting methods, the result would be a one-time earnings drop of 10 to 15 cents. This was peanuts compared to the tremendous growth of the company.

Having done his own research, Charlie didn't need to meet Huizenga to reach the same conclusion. He and his sons had traveled to New York, Connecticut, and elsewhere to visit other Blockbuster stores. Everywhere the stores were jammed with customers.

Today, Charlie still owns a big chunk of Blockbuster. The recent merger with Viacom, which in turn has swallowed up Paramount, has complicated the story considerably. He's studying the situation.

For all the benefit he's gotten from this one company, following its progress has taken him only a few hours a month. These days, Charlie works at his investing full-time, though his method is basically simple. Every morning, he scans the Nasdaq section of the business pages, looking for stocks that have fallen to new lows. From the Moody's OTC Industrial Manual and other sources, he finds out which of these beaten- down companies are cash rich with no debt and have a potential for a turnaround.

He is excited by the hundreds of new small companies launched at high prices in the hot IPO market of the past three years. Already, some of these 1,400 or so companies have fallen out of favor. Whenever we get the next sharp correction, Charlie will be ready to pick up the valuable pieces. ---------- Peter Lynch writes the Investor's Edge column for each issue of Worth. From 1977 through 1990 he managed the Magellan fund, the best performing of all mutual funds over a 15-year period, and he is a vice-chairman of Fidelity Management and Research. His latest book, Beating the Street, is published by Simon & Schuster.

KEYWORDS: Stock Investing Strategies

94/06-The Second Half Effect

Not only is this the right point in the business cycle to look at quality growth stocks, it's also the right time of year.

By Peter Lynch

In the seasons of the stockpicker, late in the year is when a small stock often loses its value, only to revive in January. Thus, aficionados of small stocks do their bargain hunting in November and December, then await the January Effect, when the small stocks come out of their holes. There's a different season for the quality growth stocks, though fewer people know about it. Spring to early summer is the best time to shop for potential bargains in great companies such as Home Depot, Johnson & Johnson , PepsiCo, Abbott Labs, and Gillette.

These big-name issues and others like them tend to bloom in the second half of the year, when the smaller stocks are starting to wilt. This Second-Half Effect is caused by portfolio managers who bid up the prices for quality growth stocks in the third and fourth quarters. I'll explain why in a minute.

This is a timely subject, because right now we're in the bargain phase before the Second-Half Effect takes hold in the market. What makes it even more interesting is that quality growth stocks have done poorly of late. While other kinds of stocks scored big gains from 1991 to 1993, as a group the quality growth issues went nowhere.

A representative list of these recent underachievers in the market appears at the end of this file. PepsiCo has been flat; Gillette, dull; H&R; Block, a brick; Rubbermaid, a stiff; Home Depot, nothing to write home about. McDonald's, the star performer of the lot, has outgained the S&P; 500, but that's the notable exception. Out of this dreary dozen, seven stocks are selling for near or less than their 1991 prices.

If this was your entire portfolio in 1991, you missed two years of excellent advances, particularly the run-up in cyclicals. As a group, the cyclicals shown gained 37 percent while the growth group gained only 3 percent.

If Home Depot, Johnson & Johnson, etc., had lost their knack for making money, I wouldn't be touting them now. But there is nothing fundamentally wrong with them. Over the long haul, these have been terrific investments. Their earnings go up every year. They have a habit of raising their dividends continually. The only problem is that their stocks have been overpriced.

In early 1991, I noticed this situation and issued a warning: Avoid expensive growth stocks. But don't give me the swami award for this call. I saw it coming on the charts. The technical mumbo jumbo that usually goes along with chart reading is beyond me, but there's a simple exercise that I've found to be invaluable. You can do it yourself. In fact, once you've digested the next two paragraphs, you'll be as capable as I am of sounding the alarm the next time the growth group gets overextended.

If you were to examine a chart showing Johnson & Johnson's annual earnings per share going back more than 15 years, you would see a steady, straight line of earnings growth. This is the typical footprint of a quality growth company: steady increases in earnings with only the occasional bobble.

A line showing Johnson & Johnson's stock price over the same period would looks like it was drawn with a shaky hand. The stock hit a high of $58 in late 1991, and it's been mostly downhill since. On such a chart, the price line and the earnings line, taken together, serve as an important reminder of what we're buying when we buy a stock: a share of the earnings. A glance at these two lines gives us a visual history of the price-to-earnings ratio of the company--what investors have been paying for the earnings along the way.

When the price line strays far above the earnings line, as it did for Johnson & Johnson in 1991, it means the stock is very expensive, and people are paying an unusually high price for owning Johnson & Johnson. I found similar gaps up and down the quality-growth list.

That's what told me three years ago that it wasn't the time to be adding Home Depot and Wal-Mart to a portfolio.

Such charts are found in books published by the Securities Research Co., but there's no need for the casual investor to subscribe. Most brokerage houses carry chart books in their libraries, and brokers will readily lend out their copies. For my purposes, charts don't need to be reviewed very often. It's a good idea to consult them before you buy a stock, then every six months or so thereafter.

While quality growth stocks were lagging the market from 1991 to '93, the cyclicals had a great run. Cyclicals came into vogue as Wall Street's portfolio jockeys anticipated an upswing in the economy. Investors who were savvy to this change in market leadership doubled their money in Bethlehem Steel and Deere & Co., and did better than that in Owens-Corning and Caterpillar .

Now consider what you would see on a chart for Bethlehem Steel, a company on our cyclical list. You would notice that the earnings-per- share line wanders all over the place. As any Wall Street Boy Scout can tell you, this is the footprint of a cyclical. Cyclical companies produce or sell big-ticket items such as tractors or cars, which people will buy in good times and put off buying in bad times. That's why the earnings are so streaky.

Quality-growth companies, on the other hand, sell small-ticket items such as hamburgers or shaving cream or necessities such as pharmaceuticals. People won't stop buying Tylenol and Band-Aids no matter what shape the economy is in. That's why Johnson & Johnson's earnings line is so beautifully straight.

I'll buy almost any company at some price, and whereas two years ago the growth group was overpriced and the cyclicals were cheap, now it's the reverse. Let's go back to the chart of Johnson & Johnson. The stock price has fallen and the earnings have risen to the point that the troublesome gap is almost closed. Other quality growth stocks are beginning to close their gaps as well.

This doesn't mean you can shut your eyes and pick a growth stock. Sometimes, a stock is cheap for good reason - the company has troubles. With every company, there is something to worry about, but the question is, which worries are valid and which are not?

You may have noticed I omitted Quaker Oats, Gerber Products, Kellogg , and other food companies from our list of 12. These are solid growth companies, but at the moment their stocks are not cheap. The cereal and baby-food business has become highly competitive, with everybody fighting for market share by cutting prices. Price wars are not good for earnings, so this is a valid worry.

A less valid worry is the one that says U.S. health care reform with price controls on drugs would ruin Johnson & Johnson. My research tells me that Johnson & Johnson gets only one third of its revenues from pharmaceuticals. And more than half of those come from overseas, where price controls on drugs have existed for years. So whatever happens in the U.S. political arena won't affect J&J; as much as people think.

This brings us back to the Second-Half Effect. One of the natural tendencies of fund managers is to start the year dwelling in the present, but then to begin to anticipate the future as soon as the snow melts. In the winter months of 1994, they were thinking about 1994 earnings. For instance, McDonald's is expected to earn $3.36 this year. But when summer rolls around, analysts begin to think about 1995 earnings, when McDonald's is expected to earn $3.83. On the basis of 1995 earnings, McDonald's stock suddenly looks cheap. So a lot of people buy it, and the price goes up. Nothing has changed, except a page has turned on the calendar.

The Second-Half Effect does not apply to cyclicals. Their earnings are too unstable. Is Alcoa cheap on 1995 earnings? Who can say? What Alcoa will make in 1995 is anybody's guess. What it will make in 1994 is anybody's guess. It all depends on the price of aluminum, and you do need a swami to predict that.

I can't say enough about the fact that earnings are the key to success in investing in stocks. No matter what happens to the market, the earnings will determine the results. In 30 years, Johnson & Johnson's earnings are up 70-fold, and the stock is up 70-fold. Bethlehem Steel earns less today than it did 30 years ago, and guess what? The stock sells for less than it did 30 years ago.

In a bear market, the Johnson & Johnsons will suffer right along with the Bethlehems (although perhaps not as much), and nobody will be happy. But between Bethlehem with its spotty record and Johnson & Johnson doubling its earnings every six or seven years and raising its dividend like clockwork, which would you like to have in your portfolio a decade from now? ---------- Peter Lynch writes the Investor's Edge column for each issue of Worth. From 1977 through 1990 he managed the Magellan fund, the best performing of all mutual funds over a 15-year period, and he is vice-chairman of Fidelity Management and Research. His latest book, Beating the Street, is published by Simon & Schuster.

TABLE: GROWTH STOCKS Abbott Labs (ABT) Genuine Parts (GPC) Gillette (G) H&R; Block (HRB) Home Depot (HD) Johnson & Johnson (JNJ) McDonald's (MCD) PepsiCo (PEP) Rubbermaid (RBD) Toys 'R' Us (TOY) Wal-Mart Stores (WMT) Warner-Lambert (WLA)

TABLE: CYCLICALS Alcoa (AA) AMR (AMR) Armstrong World Industries (ACK) Bethlehem Steel (BS) Caterpillar (CAT) Cincinnati Milacron(CMZ) CSX (CSX) Dana (DCN) Deere (DE) Dow Chemical (DOW) International Paper (IP) Owens-Corning (OCF)

KEYWORDS: Stock Investing Strategies, Stock Market Trends

94/08-The Stock Market Hit Parade

What do the great successes of the past 20 years tell us? It's the company, stupid.

By Peter Lynch

What can we learn from the hit parade of the stock market, the top 100 winners over the past decade -- and the decade before that? The first thing I notice is the lack of household names. Coca- Cola, Gillette, Disney, and Wal-Mart crop up, and also PepsiCo and Blockbuster Entertainment, but celebrity issues are in the minority. Wal-Mart and Blockbuster began their winning decades small and uncelebrated.

If there was ever a doubt that small stocks make big moves whereas big stocks make smaller moves, the hit parade ought to put it to rest. The star performers on Wall Street come straight from nowhere. Most of them never got into the Fortune 500. At the outset of each of the two decades, only a handful of the eventual winners could be found in the Standard & Poor's 500.

A few are unknown to me even today, and I'm the guy who once managed a portfolio with 1,500 different stocks. How did I miss some of these? Nautica Enterprises, almost a 9,000 percent gainer? Genovese Drug Stores? Whitehall Corp.? New Hampshire Ball Bearings? Who would have thunk it?

In the 1973-83 period, small companies were doing so well that it took a 25-fold gain to make the hit parade. Meanwhile, the Dow industrials performed dully, rising from 850 to 1248. No wonder so many mutual fund managers outperformed the market averages in those years: They were picking above-average small stocks that turned in spectacular gains.

In the more recent period, the situation is somewhat reversed. The Dow tripled, going from 1258 to 3751, while small companies slumped a bit -- it took only a tenfold gain to make the second hit parade. So it's hardly surprising that the vast majority of fund managers in the 1980s were outdone by the so-called index funds that ape the averages.

Going down the two lists of winners from the past two decade (see the lists following this article), you get a quick read on the modern U.S. economy and the direction in which we've been headed. Disney and Coke are the only two Dow stocks. There are no aluminums, ores, or chemicals in either of the top 100s and only one paper company (Wausau), a lone steel company (Worthington), a small oil company (Holly), and one tire maker (Cooper). You have to search to find the cyclicals.

So what does this say? For one thing, since we are no longer a gritty industrial nation, we aren't likely to get spectacular returns from gritty industrial investments. And it's the rare cyclical that performs well enough over long stretches to make a hit parade. You can't go to sleep holding cyclical stocks for a decade and expect to be richly rewarded. The rich rewards are in growth stocks and special situations.

As you can see by the evidence, great growth companies come in endless variety. This is a point that can't be repeated often enough. Banks, S&Ls;, supermarkets, biotech, carpets, bubble gum, ballpoint

pens, sugar, and health care are all represented in the top 100. There are a few casino gambling companies, a few stodgy financial companies, and a couple of insurance companies to boot.

Investors who put on blinders and ignore entire categories of companies, such as the stodgy utilities, or the lousy airlines, or the silly candy makers that only sell to a bunch of kids, are missing out on some great deals. Stodgy utilities? Not General Public Utilities, the owner of Three Mile Island, which almost made the hit parade with a 1,000 percent gain on its stock in the latest decade. The lousy airlines? A lot of people will tell you never to put a penny into that mess. Yet here we find three airlines -- Comair, Atlantic Southeast, and Southwest , with the latter two high on the winner's list. Southwest's stockholders made 12,000 percent from 1973 to 1983.

If it's a choice between investing in a good company in a great industry, or a great company in a lousy industry, I'll take the great company in the lousy industry any day. Good management, a strong balance sheet, and a sensible plan of action will overcome many obstacles, but when you've got weak management, a weak balance sheet, and a misguided plan of action, the greatest industry in the world won't bail you out. Here's my investment motto of the month: It's the company, stupid.

Notice the number of bank stocks on the recent winner's list? Eleven, by my count. The period from 1983 to 1993 was the best of times for some banks and the worst for others. There were S&L; fiascoes and bank failures galore, but a long drop in interest rates and an accommodating Federal Reserve helped many banks to record profits. And look who made the most of it. You don't see Citicorp or J.P. Morgan on the hit parade. You see River Forest Bancorp and Trustco Bancorp of New York , and a couple of obscure S&Ls;, Tompkins Country Trust Co. of Ithaca and National Commerce Bancorp of Tennessee. Imagine all the Ithacans who bought Dow stocks to be in the big time with proven winners and missed Tompkins Country Trust in their own backyard.

The retailers make a strong showing on both lists: the Gap, Blockbuster, Home Depot, Bombay Co., Circuit City , and Heilig-Meyers (a furniture seller) on the later, and Wal-Mart, Mac Frugal's Bargains Closeouts, the Limited, Charming Shoppes, Dunkin' Donuts, Hechinger, Pep Boys -- Manny Moe & Jack, Tandy (owner of Radio Shack), and Service Merchandise on the earlier.

I've always been partial to retailers (a poorly kept secret), and to find them on a hit parade is no surprise. Retailing is easy to keep track of, and there's great potential for earnings growth by expansion. All a company has to do is take a successful store and clone it. What sells in Pomona is an odds-on favorite to sell in Phoenix, and in Peoria, etc. Meanwhile, if somebody improves on the idea and opens a similar but better store in Philadelphia, so what? The new rival isn't going to hurt business in Pomona until the competitor puts a store in Pomona, and that may never happen in this lifetime.

With retailers, you can see the competitors coming, and you can see when a company has reached the saturation point with a store in every mall and on every other street corner. That's the time to think about selling the stock, but until that point is reached, a successful chain of stores can multiply its sales and its earnings at an exponential rate. It happens again and again.

It tells you something that only two companies made the top 100 in both decades. Fast-growing companies can't be expected to keep up the pace forever. Eventually, they reach middle age and lose some of their oomph, just like the rest of us. They encounter obstacles.

But it also tells you something that of the two repeat performers, Circuit City is a retailer and Hasbro is a manufacturer that sells to retailers. Successful retailers have a lot of staying power. They can grow for a lot longer than people think. If they run out of room in the U.S., they can go overseas, just like McDonald's has, and Coke, and PepsiCo, and Toys 'R' Us. McDonald's doesn't show up among the winners, but it's been an outstanding growth company and a terrific stock -- a 100-bagger in 25 years.

On both lists, there's no lack of high-tech stuff, companies with names like E-Systems and Pneumo Corp., Matrix and Teledyne, Scimed and Gentex , EDO and Biomet , Amgen and Alpha. In hindsight, it would have been nice to have owned these stocks, but my advice is: If you don't know what it means, don't put money into it. Why take chances with a Biomet when you can do just as well or better with a Wrigley's or a Tootsie Roll?

Did you notice that among all the high-tech issues, biogenetic companies, science labs, etc., there's not a single computer? Computer parts, yes; support services, yes; the software and the chips are all represented, but there's no IBM or Digital or Compaq or Apple. It's one more example of how the suppliers to a hot industry, the residual players, can fare better than the main competitors who are engaged in a desperate struggle to knock each other off.

In the end, what's most gratifying about these two lists is they prove that there's equal opportunity on Wall Street. Small companies can come out of humble circumstances and rise to the top, creating jobs, creating wealth, creating a better world for everyone. What long-distance company is on the hit parade? Not AT&T; but LDDS Communications. The winning airlines are the three regional carriers mentioned above.

It's Horatio Alger all over again -- small companies outdoing the big companies and taking up the slack when the big companies lay off workers. More than 2.1 million small companies were started in the U.S. in the 1980s alone. If each one, on average, employs ten workers, that's 21 million new jobs!

Europe has small companies, but not nearly the number we have, which may explain why the European recession has been more severe than ours was. Small companies may be our greatest national assets. There's no doubt they are our greatest investments.

---------- Peter Lynch writes the Investor's Edge column for each issue of Worth. From 1977 to 1990 he managed the Magellan fund , the best performing of all mutual funds over a 15-year period, and he is a vice-chairman of Fidelity Management and Research. His latest book, Beating the Street, is published by Simon & Schuster.

TABLE: The Stock Market Hit Parade

The following table is a companion to "The Stock Market Hit Parade" by Peter Lynch. It lists the top 100 stocks from 1983 to 1993 and the top 100 from 1973 to 1983, ranked according to total returns over those periods, including reinvested dividends.

(NOTE: To view this table more clearly on your computer, you may wish to use a monospaced font, such as Courier. Using a monospaced font will cause the columns to line up correctly.) ----------

TOP 100 STOCKS

From 1983 To 1993 From 1973 To 1983

1. Franklin Resources Key Pharmaceuticals 2. Nautica Enterprises Pulte Corp. 3. LDDS Communications Plenum Publishing 4. Blockbuster Entertainment Southwest Airlines 5. Unico American SCI Systems 6. Capitol Transamerica Kroy Inc. 7. Amgen Comdisco 8. International Game Tech Mac Frugal's Bargains 9. U.S. Healthcare The Limited 10. Molecular Biosystems Manor Care Inc. 11. Atlantic Southeast Air Charter Medical 12. The Gap National Education Corp. 13. Keane Inc. Resorts International 14. Mark IV Industries Metromedia Inc. 15. Bridgford Foods Corp. A.G. Edwards & Sons 16. Shaw Industries Loral Corp. 17. Superior Industries Mirage Resorts 18. Irwin Financial Corp. Gerber Scientific 19. Gentex Corp. United Artists Ent.-CIA 20. Tyson Foods Inc. Pneumo Corp. 21. Mexico Fund Galen Health Care Inc. 22. Crown Crafts Inc. Matrix Corp. 23. SCIMED Life Systems TSX Corp. 24. Holly Corp. E-Systems Inc. 25. Crompton & Knowles United Industrial Corp. 26. Stewart & Stevenson Svcs. Bruno's Inc. 27. Wm. Wrigley Jr. Co. SCOPE Industries 28. Associated Communications Coachmen Industries 29. River Forest Bancorp Circuit City Stores 30. Jones Spacelink Limited Forest Laboratories 31. Allcity Insurance Co. Optical Radiation Corp. 32. ABS Industries Inc. Zero Corp. 33. McClain Industries Inc. Financial Corp. of America 34. Tootsie Roll Industries Pandick Inc. 35. Danaher Corp. SCOA Industries 36. Wausau Paper Mills Co. Ames Department Stores 37. Ballard Medical Products Community Psychiatric Centers 38. Smithfield Foods Inc. National Convenience Stores 39. CUC International LIN Broadcasting Co. 40. Home Depot Care Corp. 41. Frozen Food Express Ind. Pall Corp. 42. Mylan Laboratories Wal-Mart Stores 43. Total System Services Tele-Communications Inc. 44. National Penn Bancshares Chris-Craft Industries 45. Cracker Barrel Old Country Pacific Scientific 46. Paychex Inc. Teledyne Inc. 47. Walt Disney Co. Worthington Industries 48. Paxar Corp. Espey Mfg & Electronics 49. Natl. Commerce Bancorp/TN MEI Corp 50. Trustco Bancorp/NY Tandy Corp. 51. Leucadia National Corp. Food Lion Inc. 52. Falcon Products Inc. Michigan Sugar 53. Tompkins Country Trust Dean Foods Co. 54. Century Telephone Ent. Fay's Inc. 55. Andrea Electronics Corp. Adams Russell 56. Circus Circus Enterprises Flight Safety International 57. Equitable of Iowa Cos. Analog Devices 58. Cooper Tire & Rubber Service Merchandise 59. Biomet Inc. Postal Instant Press 60. Comcast Corp. Charming Shoppes 61. Total-Tel U.S.A. Comm. Dreyfus Corp. 62. Bic Corp. O'Sullivan Corp. 63. Clayton Homes Inc. Advanced Micro Devices 64. Newell Co. Logicon Inc. 65. Arnold Industries Alpha Industries 66. Bombay Company Inc. Dynamics Corp. of America 67. Johnston Ind.-Del EDO Corp. 68. Modine Mfg. Co. Bairnco Corp. 69. Vornado Realty Trust Applied Data Research Inc. 70. Gillette Co. Anixter Bros Inc. 71. The Progressive Corp. G. Heileman Brewing Co. 72. Coca-Cola Co. Dunkin' Donuts 73. Financial Inds. Corp. Barry Wright Corp 74. Computer Associates Herman Miller Inc. 75. Comair Holdings Guilford Mills Inc. 76. Hasbro Inc. Russell Corp. 77. Harlyn Products Luby's Cafeterias Inc. 78. Circuit City Stores National Medical Enterprises 79. Telephone & Data Systems AEL Industries 80. PepsiCo Inc. Bob Evans Farms 81. Juno Lighting Genovese Drug Stores 82. Berkshire Hathaway Whitehall Corp. 83. Nature's Sunshine Products GCA Corp. 84. St. Jude Medical United Cable Television 85. Heilig-Meyers Co. Hasbro Inc. 86. Bemis Co. Thomas Nelson Inc. 87. Olsten Corp. Pep Boys- Manny Moe & Jack 88. Myers Industries New Hampshire Ball Bearings 89. Uniflex Inc. Sensormatic Electronics 90. Rowe Furniture W.A. Krueger Co. 91. Boston Bancorp Esquire Inc. 92. Washington Mutual Svgs Timeplex Inc. 93. Fannie Mae Veeco Instruments 94. Jacobs Engineering Group John Blair & Co. 95. First Financial Management Computervision Corp. 96. A. Schulman Inc. Lockheed Corp. 97. First Financial/Wisconsin Apogee Enterprises 98. Fifth Third Bancorp Butler Intl Inc. 99. Sealed Air Corp Hechinger Co. 100. First Empire State Corp. Subaru of America

Source: S&P; Compustat Services, Inc.

94/09-Wall Street v. Five-Line Family

America is phone obsessed, yet the markets hate phone companies. It's time to ask: Do the Bells still toll for individual investors?

By Peter Lynch

This year marks the tenth anniversary of the breakup of AT&T;, alias Ma Bell, in the settlement of the biggest antitrust case ever. The Justice Department required AT&T; to split itself into eight parts, with Ma going her way and the seven new Baby Bells going theirs. The Baby Bells got control of the local phone service in each region. Ma Bell kept the long distance.

Like the former Soviet Union, the old AT&T; was a vast enterprise, often accused of being sluggish and outdated. In its heyday, it employed 1 out of every 100 American workers. It controlled virtually all the phones and all the phone lines. To make a call without Ma Bell, you had to use tin cans and a string.

AT&T; was also the nation's most popular and widely held stock, with 3 million shareholders. Institutional investors avoided it, but small investors have always loved it. The breakup didn't dampen their ardor. For every ten shares of Ma Bell, they got one share in each of the Baby Bells. Ten years later, the four most widely held stocks in the U.S. are Bells, and the remaining Bells are in the top 15.

Meanwhile, AT&T; continues to rank near the bottom of institutional ownership -- which for a large growth company is quite unusual -- and the pros have ostracized the other Bells as well. This has been a bad choice on their part, because the Bells as a group have made investors five times their money since the breakup, while the S&P; 500 has merely tripled. Since a large majority of fund managers have underperformed the S&P; during this period, only one conclusion is possible: The unsophisticates who stuck to their Bells have once again outfoxed the experts.

Until 1990, the offspring flourished while Ma Bell lagged, but lately it's been the other way around. Ma Bell has held its own against some stiff competition, and investors have responded by bidding up the shares, whereas the rest of the Bells have barely advanced. Because they are regulated like electric utilities and pay big dividends like electric utilities, they've been lumped together with electric utilities in the recent massive sell-off.

The big question, of course, is where the Bells go from here. In the end, their prosperity, or lack of it, will depend on who controls the phone lines and who is allowed to offer service to whom. So do not ask for whom the Bells toll, ask from whom they'll be collecting tolls, and whether they'll be collecting enough to make for a good investment.

Let's start with the bullish argument. The bulls say it's unfair to throw out the phone companies with the power companies. Electric utilities are bedeviled by rising costs and almost no growth, whereas phones have become a way of life. A five-line family is no longer out of the question, with one line for the teenagers to breathe into and one dedicated to the fax, plus a home phone and a home-office phone and the cellular unit, which has supplanted the cigarette as the most likely object to be carried into a

party. There's shopping by phone, conferencing by phone, and pretty soon they'll have to put nonphone sections in restaurants.

On the cost side, roomfuls of operators have been replaced by machines and digital voices that don't require health insurance. Switching equipment is more compact and easier to manage than it once was. We've seen a 30 percent increase in phone hookups nationwide in the past 10 years, but phone-company payrolls have been cut in half. In 1984, a typical Baby Bell employed around 70 people per 10,000 phone lines. In 1994, they've got it down to about 35 people per 10,000 lines.

This is the heart of the bullish case for the Baby Bells. Demand is up and costs are down. These companies have staying power. At current prices, their stocks are yielding slightly more than 5 percent. It's the highest percentage the Bells have ever paid in dividends, relative to the S&P; 500, which currently pays 2.8 percent. On top of that, the Bells have picked up some valuable assets on the side, most notably the cellular franchises.

Cellular started out as a fad, a curiosity, a CB radio for yuppies. In each region, two franchises were awarded, one to the local Baby Bell and the other to a lottery winner -- Hillary Clinton was in a partnership that won a stake in a franchise in Arkansas. Who could have imagined that by 1994 we'd have over 16 million cellular subscribers nationwide, and no end in sight to the line of recruits? With 6 percent of the population already cellularized, that makes 94 percent who are still potential customers.

Recently, we found out what one of these cellular franchises is really worth. The California Baby Bell, Pacific Telesis, decided to spin off its cellular as a separate business and make it a gift to shareholders. For every share of PacTel, you got a free share of AirTouch Communications. These AirTouch shares now trade on the New York Stock Exchange for about $25 apiece. PacTel without the Airtouch is selling for about $30 a share, so the cellular part turns out to be almost as valuable as the rest of the phone company.

Thanks to the Los Angeles commuters who use their car phones for companionship while they're trapped for hours on freeways and the Hollywood types who make deals while they're jogging, PacTel was number one among the Bells in cellular, with the most customers and most revenue. But the other Bells have built up sizable cellular operations in their regions, and they've bought additional franchises from lottery winners outside their regions. Along the way, they've acquired paging services, cable TV assets, real estate, and bits and pieces of phone companies in Mexico, Russia, and elsewhere.

I got the rundown on Southwestern Bell from Bill Deatherage, a telecommunications analyst for S.G. Warburg. Southwestern has a cellular business that's worth an estimated $13.75 a share, a large stake in the Mexican telephone system ($5 a share), and other assorted properties ($3 a share). That's almost $22 in extras beyond the basic phone service. Deatherage figures the total package, minus the company's debt, is valued at $55, and the stock is selling for $43.

At the moment, Deatherage's favorite Bell is U S West . That stock sells for $42. Every share gives you $5 worth of cellular, $6 worth of Time Warner, $3 in international cable and cellular, $4 in real estate, and $4 in assorted odds and ends. When the company's debts are subtracted, you're left with $58.75 worth of assets.

But before we get too carried away with the bullish case, let me give you the bearish case. The crux of it is that the Baby Bells are losing control of local phone service. Where once they enjoyed a monopoly, now they have to fight off a growing number of competitors, especially for long-distance hookups, known in the trade as "handshakes."

Even though the Baby Bells are not long-distance carriers per se, they get paid for every toll call that begins or ends in their area. On an average call, one costing 17 to 18 cents per minute, the Bells at each end get 3 to 4 cents for transporting the call to and from the local lines to the long-distance lines. Where I live, near Boston, a long- distance call is any call that travels beyond the next town, so a piece of this action is very important to my regional Bell, NYNEX.

Imagine how much cheaper long distance would be if there weren't a Bell at each end. It's already happening in the business districts of major cities, where the so-called competitive access providers, or CAPs, have arrived with their fiber cables. A CAP can connect a local business to a long-distance carrier and cut the local Bell right out of the equation. The Bell is forced to cooperate with its enemies by letting the CAPs install switching equipment on its own premises. Recent court decisions may change this.

The CAPs won't be coming to my house or yours anytime soon, but they have connected enough cables to enough businesses to take a sizable bite out of the Bells' revenues. The Bells are putting up an active resistance. One -- Bell Atlantic -- recently won a court case that frees it from obligation to let the CAPs set up shop in its central office. All seven Bells are seeking permission to compete in the long-distance market, just as other companies have been allowed to compete in their local markets.

Sibling loyalty counts for nothing here. Southwestern Bell recently sought court approval to offer local phone service to a town in Maryland, in the middle of Bell Atlantic's territory. If this holds up, it will be every Bell for itself.

An advocate of the bearish viewpoint regarding the Baby Bells is Jack Grubman, telecommunications analyst for Salomon Brothers. While Grubman acknowledges the value of cellular, etc., he thinks the benefits of cost-cutting are overrated, because whenever a Bell can save a dollar by laying off a worker, it will lose a dollar to the lower rates that result from the fierce competition. He regards the big dividends as something of a hindrance, because they leave the Bells perpetually short of cash. Since it may ultimately cost them billions to rewire their systems to keep up with new technology, they're going to need all the cash they can get.

Grubman rates the Bells as holds. He sees them as 5 percent to 7 percent growers. He prefers long-distance carriers: AT&T;, MCI , and Sprint, in that order -- each of which he thinks can keep up double-digit growth rates. He says the long-distance carriers are growing as fast as many drug companies, but their stocks are much cheaper on earnings.

The future of the Bells and the CAPs, and everybody else in the phone business for that matter, depends to a large degree on the whims of the regulators, the politicians, the courts, and the deal makers on Wall Street. Will the telephone company bring movies into the house, or will the cable company offer telephone service? Will the CAPs be put out of business, or will they capture more revenues from the Bells? Will the Bells be allowed to compete with the long-distance carriers, especially on the calls that begin and end in their regions? Will their various alliances with cable companies and overseas telephone companies prove profitable? Will they be allowed to make massive raids on each other's territory?

There are more questions than answers, and a lot of work for the fortune tellers. But all things considered, I wouldn't bet against the Bells. In fact, I own two of them myself, Southwestern Bell and NYNEX. In the bull market of 1991-93, these stocks went nowhere, and in the decline of 1994 they're falling along with the rest. With their dividends paying almost twice the yield of the S&P; 500, they already reflect a gloomy prognosis.

Wall Street is betting that the Bells will be the losers in the legislation coming out of Congress, but they have a lot of moxie and a lot of clout in Washington. Clout doesn't show up anywhere on a balance sheet, but in a regulated industry, it's the most valuable asset of all. ---------- Peter Lynch writes the Investor's Edge column with John Rothchild for each issue of Worth. From 1977 to 1990 Lynch managed the Magellan Fund, the top-performing mutual fund in the industry. He is vice-chairman of Fidelity Management and Research and the author, with Rothchild, of two books on investing. Beating the Street, the latest, is published by Simon & Schuster.

KEYWORDS: Telecommunications Industry, Stock Investing

94/10-What Goes Around Turns Around

How to catch companies that are on their way back and avoid companies that are on their way out.

By Peter Lynch

Investing in troubled companies that show signs of turning around can be a profitable pastime. But turnarounds are a tricky business in which timing is everything and patience is not necessarily rewarded. Flower children at the first Woodstock have gotten gray hair waiting for Avon Products to come back. Rip Van Winkle would still be waiting for Bethlehem Steel, whose stock hit its all-time high in 1956.

The first challenge in analyzing a company in distress is to figure out if it's going to survive long enough to work out its problems. This is where large, well-known companies have an advantage over smaller ones. Big companies got that way by being successful, and most of them own valuable assets: real estate, subsidiaries, cash in the till. Chances are they've got a good credit rating, and bankers will lend them money in a pinch.

Small companies are more likely to be living in rented office space with rented equipment. They have limited amounts of cash, which will soon run out if they need to use it to cover their losses. Their bankers may not be so eager to rescue them with new lines of credit, and their competitors would love to put them out of their misery. That's why troubled small companies declare bankruptcy in droves and disappear from the stock exchanges, whereas I can think of only a handful of big companies (Pan Am, Eastern Airlines, First Executive, Bank of New England, and a couple large Texas banks) that have gone kaput in recent years.

So when I'm looking at a possible turnaround, I do a solvency check right away. Generally, it's the big outfits that have the resources to muddle through, but you can't assume that. In the early 1980s, when Chrysler's survival was in doubt, its shares were selling for $2 apiece. People who were daring enough to buy Chrysler on its deathbed made 20 times their investment -- but they could have lost everything. I waited until Chrysler got an infusion of cash, thanks in part to a government bailout loan. By then its shares were selling for $4, so eventually I made only 10 times my money, but at less risk.

Chrysler turned around relatively quickly, but most big companies don't. This is where investors get fooled. They see a famous company with a glorious history that's fallen on hard times, and they notice the share price has dropped, and they snap up this supposed bargain in the belief that a turnaround is imminent. A decade, two decades, three decades later, it still may not have happened. International Harvester, now Navistar, ran out of steam in the 1960s. General Motors began to lose its pizzazz around the time the Beatles first landed in New York. Sears reached its pinnacle of $61 in 1973, when Richard Nixon was in the White House erasing the Watergate tapes.

The bottom fishers who bought Sears at $45 a year later, in 1974, and held on to their shares through all the ups and downs have nothing to show for their patience. In 1990, Sears was selling for the same price it fetched 16 years earlier. You would have missed the bull market in the 1980s by investing in Sears.

It's one thing for a company's earnings to decline in a recession or because of a temporary misfortune such as a labor strike or a hurricane or a bad marketing decision. But when there's a steady and prolonged drop in revenues, then you're looking at a serious, fundamental setback that won't be corrected overnight. The key lesson here is, you don't have to rush in to buy shares. You can afford to wait. In some cases, you can't afford not to wait.

Once a troubled company faces up to its predicament (this, too, can take time), it will announce a plan for recovery, which usually involves taking an ax to the budget. Here again, the would-be investor must be careful, because while cutting the budget may boost profits in the short run and create the impression that the company has put its troubles behind it, the real work has scarcely begun.

The hard part is winning back customers and reversing the decline in sales. A company that continues to spend less to make less will eventually have nothing to spend and nothing to make.

I should have reminded myself of this lesson before I invested in 50-Off Stores, a company that couldn't be more aptly named. 50-Off sells discount clothing in a chain of outlets strung across the southwestern U.S. The stock price hit a high of $32 in 1992, and then 50-Off went into a tailspin. Customers lost interest in its inventory of bargain- basement merchandise, and the stock itself fell to a bargain-basement level: $12. Or so I thought.

I visited three 50-Off stores in Texas and was impressed with a snazzy kid's shirt that I bought for a friend. More to the point, the company announced major changes and budget cuts and an exciting new array of bargain dry goods. Yet instead of waiting for results of these reforms to show up on the earnings line, I bought the stock posthaste, along with the shirt. The next thing I knew, the stock had two 50-off sales in a row, dropping to $6 and then to $3. It is currently at $4, slightly above book value.

Another lesson I've learned from experience is not to expect too much from companies on the mend. Occasionally, you'll stumble onto a Chrysler or a Fannie Mae, where you can make 10 to 20 times your money, as Magellan's shareholders did during my tenure at the fund. But comebacks are rarely that lucrative. A double or a triple is normally a great result. You get your ten-baggers from young companies in their fast-growth phases, not mature companies in a midlife crisis.

Turnarounds don't always happen once and for all. Sometimes there are false starts. Sometimes there are lapses and relapses. Chrysler, for instance, has had two turnarounds since the early 1980s. Kmart has had at least two since its heyday in the 1960s. Pier 1 , a perennial favorite of mine, is going through its third. I own the stock, and it's on my list of favorite turnarounds. The company has closed unprofitable stores and revamped the merchandise. Sales are up, and Pier 1 has a good chance of making record earnings this year. The stock is selling for half its price of five years ago.

Here are three more of my current favorites, each with concrete evidence of a turnaround and each of which I own:

GM: I've been touting GM since 1992, when it was selling for $32 a share. The way I see it, GM's diversification gives it an advantage over a one-dimensional enterprise like IBM. While GM's U.S. auto business has been a constant source of headaches and losses, its other operations (Hughes Aircraft, GMAC, Electronic Data Systems, U.S. trucks) have been highly profitable all along. For GM to rise again, all it has to do is break even on cars in this country.

GM has taken all sorts of steps to reduce costs, but what got my attention was how it turned around its European auto business a few years ago, then brought the key players from the team that accomplished this feat back to the U.S. to do the same at home. In the second quarter of 1994, GM wowed Wall Street by reporting the best quarterly earnings in its history: $1.9 billion. I suspect the best is yet to come.

SEARS: Sears closed its famous catalog, which was losing money, and added 200 small stores in rural areas to serve its former catalog customers. It sold 20 percent of its insurance subsidiary, Allstate, to the public in the biggest initial public offering in history and used the proceeds to improve its balance sheet. It has remodeled its stores and brought in new merchandise. It is doing well in Mexico. The outlook for Allstate, which contributes half of Sears's earnings, is favorable.

If everything continues to click, Sears has a chance to break its record and earn $5 per share in 1995. Meanwhile, the stock sells for $46, $15 below the record price.

TANDY: Tandy has overhauled its basic business by selling off its computer-manufacturing operations. It is now a pure retailer, with 6,500 Radio Shack stores and $250 million in excess cash. Radio Shack has become a kind of 7-Eleven for household electronics, and soon all these outlets will offer repair service for items that are normally a hassle to get fixed. Bring your portable phone, VCR, answering machine, etc., to the neighborhood Radio Shack, and Tandy will ship it to one of its centralized repair shops and return it in working order.

Moreover, the company has trotted out a couple of megastore retail ventures: Computer City for computers and Incredible Universe for electronics and appliances. Both are growing fast. It looks like Computer City will rack up $1 billion in sales this year, and Incredible Universe nearly half that.

Because the Radio Shacks are doing well already, Tandy's earnings are on the rise without either of the new ventures contributing much. If both prove profitable, it's easy to imagine Tandy becoming a growth company again, a remarkable achievement for a turnaround. Even if only one new venture succeeds, it will be a big boost to earnings and presumably the stock price. The company has also announced a plan to buy back 10 percent of its shares -- usually a very good sign.

There's no harm in taking a "show me" attitude toward turnarounds. Once in a while you'll miss a few dollars of profit by not getting in at the bottom of the successful cases. But in the unsuccessful cases, you'll save yourself a lot of money and frustration. Missing the bottom on the way up won't cost you anything. It's missing the top on the way down that's always expensive. ---------- Peter Lynch writes the Investor's Edge column with John Rothchild for each issue of Worth. From 1977 to 1990, Lynch managed the Magellan Fund, the top-performing mutual fund in the industry. He is vice-chairman of Fidelity Management and Research and the author, with Rothchild, of two books on investing. "Beating the Street," the latest, is published by Simon & Schuster.

KEYWORDS: Stock Investing

94/11-Finding Bargains Losers List

It's fall, when one investor's tax loss is another's bargain buy. Some of the best values may be in last year's IPOs.

By Peter Lynch

From January 1991 through September of this year, 1,765 new domestic companies were hatched on Wall Street -- a record for such a short period. The newcomers outnumber the entire population of the New York Stock Exchange.

Many of them shot out of the starting gate and attracted attention. But it's a lot harder to generate good news after that first blush. Of the recent arrivals, 831 were selling at press time for less than the prices at which they came public.

This tells us something very important about initial public offerings: There's no rush to buy shares at the outset, because there's an excellent chance they can be picked up more cheaply a few months down the road once they've started trading. People complain that only fat cats and institutions can get their hands on IPOs at the premarket prices, but in many cases brokerage houses are doing small investors a favor by shutting them out.

Why talk about the recent batch of new issues now? Because we've entered the fall selling season. That's when trees drop their leaves, and investors drop the losers from their portfolios. It happens every year, in plenty of time for people to claim the losses on their tax returns. For some reason, taking a loss is a pleasurable exercise -- many stock pickers look forward to it even though the tax break itself is no more than a partial compensation. There's a psychological benefit to tossing the bums out: The names disappear from the monthly brokerage statements; we're no longer reminded of our mistakes.

The stocks most likely to be dropped in the selling season are small- company stocks, a category that includes most of our recent IPOs. Small- company stocks are often purchased as flyers or speculations, and they lack the status of core holdings. As a rule, they aren't followed by Wall Street analysts beyond the initial coverage that accompanies the underwriting. So information about these companies and their prospects is hard to come by.

Even when they do know the details, the stock jockeys on Wall Street -- fund managers and so forth -- have a low tolerance for even a single stumble, or a "negative surprise," as it is called, from any new enterprise. "Everybody wants these nice pretty quarters after a company comes public," says Mary Lisanti, a small-cap fund manager at Bankers Trust who frequently searches for what she calls broken IPOs. "One bad earnings report and the stock gets tossed out."

So as we move into fall, people dispose of their flyers and speculations and disappointments. The dropping prices create more losses, which other investors are tempted to take. The selling leads to more selling. Below $5, a stock no longer can be counted as collateral in a margin account, so the margin buyers join in with the tax-loss crowd, the portfolio managers, and the camp followers who sell because

everybody else is doing it. Perfectly good businesses with excellent prospects are marked down to a fraction of their actual worth.

This creates a perennial opportunity for bargain hunters who rummage through the list of IPO losers. Granted, many of the 831 stocks on this year's list have dropped in price for valid reasons -- the companies they belong to have stumbled and bumbled repeatedly and may be lurching toward bankruptcy. So the first task of the bargain hunter is to narrow the field and separate the solid prospects from the ones that are counting on hopes, prayers, and miracles.

You could start by looking for the companies that have no debt. If a company is debt-free, then at least you don't have to worry that it will default on a loan.

Next, from among the debt-free companies, find companies that are selling for less than cash. Say a company has a million shares outstanding and $3 million in cash in the bank. That's $3 in cash per share. If the stock is selling for $2 per share, then you're in the enviable position of paying $2 to get back $3, with the company itself thrown in for free. Of course, whether this cash does you any good in the end depends on whether the company uses it wisely or fritters it away.

A company that is losing money will go through cash quite rapidly, so the next thing you want to worry about is whether it can make a living. Add a third element to your search: From among companies that have no debt and are selling for less than cash, look for companies that actually have earnings. You can take this a step further and seek out companies whose stocks are priced at less than ten times those earnings.

Some names on the losers list come from biotech or high tech, and their appeal is based entirely on an invention that has yet to be tested or a wonder drug that hasn't emerged from the petri dishes. You have to be an insider, an expert, a gambler, or all three to want to put money into these shares. But along with the risky what-ifs are the companies that have proved themselves with several years of consistent earnings growth.

If you operate a computer and can call up the right kind of database, you can run a screen to pick out the best-performing companies from among the IPO losers. Otherwise, you can do the research on a case-by- case basis. For starters, I've contacted three experts in the field who offer their own favorite downtrodden IPOs, and I've also put together a group of my own candidates for further study (see the list following this story).

Mary Lisanti recommends the following eight companies, all of which have shown they can turn a profit: Wandel & Goltermann Technologies (information networks), Digital Link (digital access products), Summa Four (telephone-switching systems), Filene's Basement (discount apparel), Jos. A. Bank Clothiers (men's apparel), Wind River (semiconductors), Damark International (discount mail order), and Protocol Systems (monitoring for hospital patients).

Robert Natale, editor of Standard & Poor's Special and Emerging Situations newsletter, says that picking from the losers' bin is not his favorite tactic, because the majority of the losers will go from worse to terrible. But he agrees there are some good buys to be found, and he's identified three of them: Capital Guarantee Corp. (insures municipal bonds), IGEN (medical products), and Payless Cashways (a chain of home-repair outlets similar to Home Depot).

Manish Shah runs a small investment company called Otiva and also publishes a newsletter, IPO Maven. A man after my own heart, he believes in doing research first and investing later, and he doesn't rush in to buy shares from the underwriters. "People shouldn't get caught up in the first hour of trading," he says. I couldn't agree more. It's the first two years, three years, five years, that really count.

Shah has been following IPOs for six years. He looks for companies in the 20-20-20 club: 20 percent sales growth for three years or more, 20 percent earnings growth, and a 20 percent ratio of debt to capitalization. To pass his muster, a company must also have a niche -- some sort of specialized product or service -- and the capacity to expand globally.

Again, Shah doesn't necessarily concentrate on IPOs selling below their offering price, but going down the losers list he chose the following: < wam-co NASD:RAWL>Rawlings Sporting Goods (sports jerseys and paraphernalia), O'Sullivan Industries (furniture maker, a Tandy spin-off), Software Etc. (software retailer), < wam-co NYSE:DGP>USX-Delhi Group (natural gas distributor), < wam-co NYSE:BOR>Borg-Warner (security systems), Allstate (insurance), Steck-Vaughn Publishing (children's textbooks, educational software), Paul Revere (insurance), Gateway 2000 (personal computers), Concord Holdings (back-office support for mutual funds run by banks, a Bank of America spin-off), Wandel & Goltermann (also on Lisanti's list), and Radica Games (hand-held casino games).

I can't leave this without repeating the usual Lynch disclaimer: These are not hot tips to take to the broker's office or the bank or the nearest trading desk. They are starting points for calling the company, getting the annual reports, quarterlies, and IPO prospectuses, and doing the research.

It's easy to overlook the fact that Home Depot, Microsoft, Apple Computer, Federal Express, United Healthcare , and other well-known companies that are the modern leaders of their industries, employing thousands of people and giving a great boost to the prosperity of the nation (not to mention the shareholders), began their public life on the IPO list. In some cases it wasn't that long ago. Somewhere from among the 1,765 recent new issues, the future corporate giants will arise.

LIST: STOCKS SELLING BELOW THEIR IPO PRICES

Arkansas Best Corp. (ABFS) The Finish Line Inc. (FINL) Dual Drilling Co. (DUAL) Boston Scientific Corp. (BSX) Petroleum Heat and Power (HEAT) Investment Technology Group (ITGI) The Allstate Corp. (ALL) Argosy Gaming (ARGY) Centex Construction Products (CXP) Borg-Warner Security (BOR) Filene's Basement (BSMT) Walker Interactive Systems (WALK) Kenetech Corp. (KWND) Alexander Haagen Properties (ACH) JDN Realty (JDN) ----------Peter Lynch writes the Investor's Edge column with John Rothchild. Lynch is vice-chairman of Fidelity Management and Research and the author, with Rothchild, of two books on investing. "Beating the Street," the latest, is published by Simon & Schuster.

KEYWORDS: Stock Investing Strategies

95/01

Put Your Broker to Work

By Peter Lynch

What rarely happens at the gas station happens all the time at the broker's office. Millions of customers pay the full-service rate without getting the full services. In a nation of smart shoppers, this may be the last great lapse. With all the attention going to discount brokers and Wall Street firms vying to offer the lowest commissions, nobody is talking about how people whopay for full-service brokerage can get their money's worth. Thanks to the computer, full-service brokers are a far more valuable resource than they were a few years ago. They spend most of their working hours staring at the same information the fund managers on Wall Street are staring at. With the newfangled terminals that have replaced the clunky Quotrons of old, even a broker in the boonies is only a keystroke away from a menu of high-powered sources including Reuters; Dow Jones New/Retrieval; Bloomberg, which reports on the vital signs (cash flow, revenues, etc.)of thousands of companies; Zacks, which gathers earnings estimates from all the analysts who follow a particular company; and charts and graphs that track stock prices and volume of trading goingback weeks or even years.

Along with these data services, the broker can call up the latest

commentary from the in-house analysts at his own brokerage firm.This is the sort of fresh information retail investors normally can't get. To find out what the Dean Witter analyst is saying about IBM, the clients of Dean Witter have had to wait for the written report, which often takes weeks to be printed and sentout to the local branches. By that time, the information is stale and the fund managers and other large investors have already acted on it, because they hear it straight from the analyst's mouth.

I've argued over and over that the retail investor has an edge over the wholesale investor in many aspects of investing, but getting the latest news from official Wall Street sources isn'tone of them. Look what happens, though, if the retail investor's broker is willing to pass along the analyst's comments as they appear on his computer screen. The information gap closes, and the retail investor no longer has to be the last to know.

"The research departments of the major brokerage firms are underutilized, "says Tom Reilly, a Merrill Lynch broker from Boston who enthusiastically plays the new role of conduit between his clients and his database.Merrill Lynch has about 200 analysts in 37 countries, and when everone of them writes a report on a company whose stock is owned by a client of his, Reilly can retrieve it. "When I came into this business 18 years ago," he says, "the printed reports we mailed out could be three months old by the time they reached the customer. Now I can print a copy off the screen and fax it. Or if there's something that the compliance department won 'tallow me to print, I can at least read it to the customer off the screen."

Suddenly, there are better things to ask a broker than "Where's IBM trading today?" - which tells you nothing about IBM's prospects- or "Is the market headed up or down?" - the question brokers have to answer every day, even thought they have no more idea of where the market's going than you or I do.

You can ask forthe latest news on IBM from the Dow Jones wire, or for the latestsummary of earnings estimates from all the brokerage analystson First Call, or for a copy of the most recent bulletin putout by the in-house IBM analyst.

Or, if you want the complete story all at once, the broker canpull the relevant details out of Bloomberg, Zacks, and the rest,and string the pages together to produce what amounts to a homemadereport on any company that piques your interest. Al Bernazani,a broker at Smith Barney with 35 years of experience, preparesthese information packages as a matter of routing. "I can generate20 pages of data on almost anything," he says, "and the computersprint it up at night."

It sounds like a lot of extra bother, but Bernazani, Reilly,and other brokers who are the pioneers of computerized servicessay it's not. They can gather 20 pages on the computer withoutleaving their swivel chairs, and in less time than it would taketo walk to the office library and copy a couple of pages outof the S&P; reports or the "VALUE LINE INVESTMENT SURVEY," whichis the traditional way of doing research for clients. That oldmethod doesn't compare with what's possible today.

Perhaps you're looking for companies with particular characteristics-- a low price-to-earnings ratio, or no long-term debt, or ahigh growth rate, or an unbroken record of raising the dividend,or all of the above. Ten years ago, there would have been noeasy way to search through 10,000 publicly traded companies tofind the suspects that fit the description, but now we've gotonline databases with screens. Some of these databases are soexpensive it wouldn't make sense for the average person to acquirethem, but the brokerage houses might. In that case, your brokercan run the screens for you.

It's not a commonplace request at the moment, but Tom Reillyalready runs screens for his clients, and there's no reason stockscreen can't become one of the standard full services. Meanwhile,useful information on annuities, foreign stocks, and mutual fundsof all stripes is piling up on broker's desks. Many offices alreadysubscribe to the Morningstar and Lipper publications that trackthousands of mutual funds: stock funds, bond funds, open-end,closed-end, foreign, domestic, best total return over ten years,highest yield, you name it. A broker can help clients pick mutualfunds by sending along the ratings and the rankings, yet fewinvestors take advantage of this. People who believe that allfunds seem the same might feel differently if they looked atthese reports from time to time.

It won't be long before a broker's entire client base can beput on an alert system, where any newsworthy development thataffects a specific stock or mutual fund will trigger a note tothe broker, who can then relay the information to clients whoown the shares. There are a least two programs that do this already:Reuters Money Network and Telescan. Both roam the news wiresautomatically, looking for news on the stocks in a subscriber'sportfolio whenever that subscriber logs on to get the latestprice quotes for the shares.

Computers have revolutionized the business to the point thatthe two most important factors to consider in choosing a brokerare: (1) Does he have good software and good databases? and (2)Is he willing to use them on his clients' behalf? This is wherethe larger offices, particularly the flagship offices in majorcities, have an advantage over the smaller, far-flung branches.Larger offices tend to have greater access to research and moreelaborate databases than smaller offices do.

Bernazani is in a great spot. He works at one of Smith Barney'smain offices in Boston, which has its own trading desk wherebig blocks of stock are bought and sold for institutional clients.An office with a trading desk is likely to have the most advancedresearch available, which is how Bernazani gets to use Bridge.Bridge is a premier database that runs 24 hours a day there andwill tell you everything you ever wanted to know about a company'saffairs short of the CEO's bedtime. It also tracks options andcommodities and does the mumbo-jumbo calculations used by theesoteric market timers know as quantitative analysts, or quants.It's a great service, but for an individual to subscribe, thecost can run to a hefty $2,000 a month. Bernanzani makes useof Bridge for his customers free of charge.

I'm amazed that full-service brokerage firms aren't advertisingthe research benefits their clients can get from their computersystems, but so far they've been quiet on the subject. Assetallocation is what they talk about. That's where they hand youa questionnaire that asks you how much risk you are willing totake, and a worksheet so you can figure out how much money you'llneed for retirement, or to pay tuition bills, or whatever. Basedon your answers they design a portfolio with the right mix ofstocks and bonds for your particular situation. Then periodicallyThey review the portfolio to see if it's underweighted or overweightedin one investment or another. It's a valuable service, but notas valuable to the stock picker as the help the broker can providead hoc.

There's potential here for a total overhaul of the relationshipbetween brokers and clients, which often has been less than satisfyingto either party. Instead of the brokers calling their customerswhen they have something to sell, now they can call when theyhave something to say. The client will benefit from having anactive research partner who does for him what the analyst doesfor the big players on Wall Street. The broker will benefit fromfelling more useful. The brokerage house will be able to showthat higher commissions are worth the price.

We're in the experimental stages here, so the client has totake the first step. Call your broker and ask him what he andhis computer can do on behalf of the companies you own stockin. It might be the beginning of a beautiful new relationship.

95/02-The Next Oil Boom

J.R. may be gone, but there are still opportunities to make a killing in oil--in the service companies

By Peter Lynch

It's hard to believe that more than a decade has passed since the heyday of Texas crude, when the Hunt brothers were riding high on the Forbes 400 list of richest Americans, Dallas was the world's most popular nighttime soap, the Arab sheikhs had bought up London, and everybody was scrambling to get into the "awl bidness."

All it took for the bidness to lose its glamour, besides Dallas going off the air, was a pesky decline in oil prices. This brought no joy to Rigville. The lower oil prices caused the Exxons and the Mobils to quit exploring for new sources, which left the drillers and the roust abouts with nothing much to do and a trail of bankruptcies and rusty rigs extended across several continents. The survivors have struggled along ever since, merging, cutting costs, and waiting for a new opportunity, which may soon open up.

We can't go much longer burning more and finding less. Lately, we've been living off oil fields discovered long ago--Prudhoe Bay and the North Sea--but these old supplies won't last forever. In fact, we're much closer to a shortage than the glut that people are worried about. You've read the stories: OPEC can't stick to its quotas, and once Iraq starts pumping, it will flood the market with 3 million extra barrels a day. What these stories don't mention is that with world consumption increasing by an annual 1.5 percent, each year we need another million barrels per day. At that rate, the Iraqi "flood" will be completely absorbed in three years' time.

It's the same story with natural gas: too many straws stuck in the drink. In the U.S., we're burning 20 trillion cubic feet a year, which is double the amount of new gas that's being discovered. The supply in the proven reservoirs has fallen from 290 trillion cubic feet in 1970 to 160 trillion cubic feet today. At the current burn rate, that's eight years' worth, which puts us as close to running on empty as we've been at any time in the second half of this century.

We continue to import from Canadian fields, but you can see where this is heading: More demand and less supply equal higher prices. So if you buy this scenario and you want to profit from it, you have two basic choices. You can invest in the oil producers: Exxon, Mobil, British Petroleum, et al. (Some of these stocks have had a decent run-up already, but there are still opportunities in the group, which I'll discuss in a separate column later in the year.) Or you can invest in the downtrodden oil-service companies that will benefit from the next pickup in drilling and exploration.

At that point, another kind of supply and demand will begin to work in favor of the oil-services outfits: the supply and demand for drills, bits, and rigs. The rig count, which is how oil hands keep track of this industry, has had quite a fall since1981, when there were 4,200 rigs operating in the U.S. and Canada and 1,400 in the rest of the world. Today, there are fewer than1,000 rigs at work in the U.S. and Canada and only 770 everyplace else. Very few industries have suffered a decline as severe as this one. In the

Gulf of Mexico and other watery locations, the offshore rigs have been vanishing at a rapid rate. They've almost become an endangered species.

The oil producers don't own rigs; they generally rent or lease them from the oil-service companies. So when they decide to start exploring again, they are going to be faced with a very tight market for rigs. This will be a fortunate situation for the owners of the rigs, who can raise the rents and name their price. They've already paid for the equipment, and it doesn't cost much to get it into shape, so the increased rent will pass through to the bottom line. That's why a slight pickup in drilling can be explosive for earnings.

But you can't just invest in oil services. You have to pick and choose among the land drillers, ocean drillers, pipeline operators, seismic mappers, downholers, rent-a-rigs, drill-bit manufacturers, tube makers, platform builders, and secondary-recovery companies. Oil services used to be a business in which muscles counted for more than brains, but lately it's gone high-tech. They've got 3-D seismic mapping. They've got new "smart" drills that go horizontal and can snake around the pathways and contours of the rock. They've got drill ships that can sink a probe in mid-ocean. They've got submersible rigs and semisubmersible pontoon vessels that float around like giant oil-sucking lily pads.

With their computer divisions, their science labs, and their Ph.D.s on the payroll, the most advanced of the oil-service companies have given up the he-man role to become technical advisors and consultants to the oil producers. In a sense, this sophistication hurts the old-fashioned drillers, because as the prospectors get smarter, they don't have to drill as many holes. The companies that have the brightest futures are those with the high-tech capability.

There's also been a lot of merger activity in the industry; thus, a handful of companies will dominate what used to be a fiercely competitive situation. The hulk in the lineup is Schlumberger, with annual revenues of $6 billion plus. Of the three analysts I contacted in researching this piece, two have put Schlumberger (NYSE: SLB) on their buy list.

Schlumberger executive vice president Victor Grijalva once admitted that the company had a King Kong complex, but that's been cured. The company let go of Fairchild Semiconductor, a conquest that was outside Schlumberger's regular line of work, and acquired a company in its own field, GeoQuest, a leader in seismic services that once belonged to Raytheon. Recently, Schlumberger has put its cash to better use, bought back stock, and managed to make money (more than $500 million after taxes in 1993) as the market for oil services has shrunk. It's not hard to imagine what will happen when the market begins to expand. The stock has been stuck in the $50–$70 range for several years, and lately it's fallen to the low end--$51 as of this writing. Analysts say it's going to go much higher, but even if it returns only to the top end, that's a 40 percent move.

Among various consolidations in progress, the one that looks the most promising to me is the upcoming merger between McDermott International's marine-construction division and a company called Offshore Pipelines. The result will be an entirely new company, J. Ray McDermott, which overnight will become the largest marine-construction outfit in the world. The parties to the merger were still awaiting final approval from the regulators when I wrote this, but the deal may have gone through by now.

If and when the merger is approved, James Stone at Werthheim Schroder predicts that the new company can cut $50 million in costs right off the bat, on the theory that two can live more cheaply than one. He estimates that cash flow will rise to $5 per share, and if he's right, we're about to witness an exciting development. Cash flow, simply put, is the money a company takes in. The normal ratio between the price of a stock and the cash flow of the company is about ten to one, but with Offshore stock selling at $20, the stock price to cash flow would be four to one.

You can approach this opportunity in one of three ways: buying shares now in McDermott (NYSE: MDR) or Offshore Pipelines (NYSE:OFP), or buying the new company, J. Ray McDermott. Stone thinks Offshore at around $20 is the better choice, assuming the merger hasn't happened yet. For each share of Offshore you own, you'll get a share in J. Ray, plus a 50 cent– per-share cash dividend thrown in as a bonus. James Carroll of Paine Webber favors buying the parent company, McDermott, which will continue to own 60 percent of the shares in J. Ray. He estimates that the J. Ray asset will be worth $12.50 a share to shareholders of McDermott.

Of the smaller, high-tech companies, Gordon Hall of CS First Boston recommends Western Atlas. It was spun off by Litton Industries in March 1994 at $40 per share, which is about where it sits now. Western Atlas (NYSE: WAI) is a leader in 3-D seismic services, which will be in great demand once the search for oil and gas begins in earnest. It's not cheap on earnings ($1.85 per share is estimated for 1995), but a cash flow of $5.45 makes it more attractive.

Finally, there's one I own: Tuboscope Vetco International. As you might have suspected, Tuboscope (Nasdaq: TUBO) is engaged in tubing and pipeline inspection. It's a specialized area, and not many companies are involved in it. At $6.50 a share, the company is cheap and attractive. It may earn 50 cents in 1995, which gives the stock a modest price-to-earnings ratio of 13. The estimated cash flow for 1995 is $1.35.

Last year, Tuboscope was almost bought out by Weatherford at $11 a share, and the company has announced it's still for sale. Somebody else could make a similar offer, but Tuboscope has a good chance of getting to $11 on its own.

But do your own research. Maybe you'll find some drillers you like. There are numerous companies in oil services that have gotten stronger and have sobered up considerably from the free-spending days. The ones that are making money now stand to make huge amounts when the price of gas and oil goes up. And if we get a burst of drilling activity and a rebound in seismic work and secondary recovery, we could see a heyday in oil services and a liftoff in these stocks to rival the liftoff in autos and chemicals that began in 1991.

Peter Lynch writes the Investor's Edge column with John Rothchild. Lynch is vice-chairman of Fidelity Management and Research and the coauthor, with Rothchild, of two books on investing. Beating the Street, the latest, is published by Simon & Schuster.

KEYWORDS: Investment Strategies

95/03-Catch a Ride

Who says investing isn't fun? With this company you get both a great stock and a reason to try out Raptor.

By Peter Lynch

It's worth reminding ourselves from time to time that gyrations in a stock price may tell us absolutely nothing about the prospects of the company involved. A good example of this is Cedar Fair,L.P., a company that owns three amusement parks within driving distance of 65 million potential investors: Cedar Point, in Sandusky, Ohio, on the shores of Lake Erie; Valleyfair, on the outskirts of Minneapolis; and Dorney Park & Wildwater Kingdom, near Allentown, Pennsylvania.

Cedar Point dates back to 1870, and seven U.S. presidents have visited there, but its biggest claim to fame is that Knute Rockne invented the forward pass on the premises. It's listed on the National Register of Historic Places, and it has one of the oldest working wooden roller coasters in the world. So this is a company with a lot of experience. It also belongs right at the top of Lynch's hit parade of companies that are easy to follow.

You don't need a Ph.D. and a microscope to figure this story out, and there aren't 14 different divisions going off in14 different directions. The whole operation hinges on the three parks and how many customers they manage to attract in the four months a year during which they're open. That's the key ingredient in successful investing: finding companies you can keep track of so you've got a point of reference other than the stock price.

Cedar Fair tells you everything you need to know in the annual report, plus the very important third-quarter report sent to shareholders in November, after the summer season has ended. The most recent third- quarter mailing was a humdinger. It reported record crowds at the three parks in 1994, up 9 percent from 1993. (Disney and other park operators suffered a decline in attendance last year.) Revenues were up, earnings were up, and spending per visitor was up. The balance sheet was strong, and the company announced a record $24 million in capital improvements for1995.

The good news is out, and for a few months the parks will be closed and the roller coasters turned off, so nothing is going to happen to affect the company's prospects for a prosperous1995 and beyond. Yet the stock will continue to have its ups and downs, and investors who realize there's no reason for the downs can take advantage and buy more shares.

Since Cedar Fair went public in 1987, there have been at least four chances. The first occurred six months after the stock began trading at $10 a share. The market hit Black Monday, and a $10 share became a $6 share overnight. The company was paying a $1.05 annual cash distribution at the time, so the $6 buyers were getting an astounding 18 percent yield on their investment. You had to ask yourself: Is anything wrong with Cedar Fair that this stock should be this cheap?

The short answer was no, because the parks were already closed for the winter. The big fear at the time was that the U.S. would fall into a deep recession that would doom corporate America. So you then had to ask yourself: How does Cedar Fair do during a recession? The answer is quite reassuring. For the past 20 years, revenues have increased without a single lapse, during good times and bad. That's because, again, 65 million people live less than a tankful of gas from a Cedar Fair park: 22 million within reach of Cedar Point, 8 million within reach of Valleyfair, and 35 million within reach of Dorney. When money is tight, they can take a Cedar Fair vacation and spend far less than they would if they had to fly the family to Disney World. Disney is vulnerable to recessions because so many potential customers have to travel long distances to get there.

You got a second chance to buy Cedar Fair in the fall of 1990, when the U.S. military was preparing for the Gulf War. Thirteen dollars a share became $10.40 a share. Once again, it was off-season at the parks, so nothing had gone wrong at the company to justify this drop. You had to ask yourself: Was Saddam Hussein planning to launch a Scud missile attack on Cedar Point?

The third chance came in 1992, after Cedar Fair bought Dorney Park. Everything about this deal looked favorable, but several months after it was done, the stock price still hadn't budged. It was stuck in the $20 range, giving you plenty of time to study the situation and realize that Dorney was a great acquisition that more than doubled Cedar Fair's customer base.

It's not like Cedar Fair had brought home a wind farm or a biotech lab or something else it didn't understand. Amusement parks it knows how to run. The 20 top people in management have been with the company an average of 20 years apiece. They can take over a park that's down at the heels, renovate, spiff things up, advertise, and cut the overhead by folding the management into the Cedar Fair management. They buy the same trash cans, ticket booths, and roller coasters for all their properties, so they save money by getting a bulk rate.

This brings us to chance four, because while the company is posting record results, with earnings, revenues, and cash distributions on a continuous rise, the stock has fallen a long way from its high of $36.60 in1993. It hit a recent low of $26.75 in the fourth quarter of 1994, and as of this writing, it's selling for less than $29, giving it a very stingy price-to-earnings ratio of 10.

Again, the parks are closed, and again you have to ask yourself:What's the Street worried about this time? My guess is that there is concern about Cedar Fair losing its status as a master limited partnership. An MLP has a big tax advantage over a normal corporation. It makes quarterly cash distributions, similar to a dividend, but it doesn't pay taxes on them. Master limited partnership status makes Cedar Fair's earnings 25 to 30 percent higher than they would be otherwise.

About 90 MLPs trade on the stock exchanges, and roughly a third including Cedar Fair are scheduled to lose their status in1998. There's a small chance, however, that some or all of these will be grandfathered and allowed to keep their tax advantage. Legislation to that effect has been introduced in the House. If Cedar Fair is not granted grandfather status, it will become a regular corporation and will be taxed accordingly.

But when you consider that the average stock on the S&P; 500 has a p/e ratio of 15, Cedar Fair is already selling at a 30 percent discount to the market. Looking at it this way, the stock has already suffered from the drop in earnings that won't occur until 1998, and maybe not even then. It's as if investors have decided that 1998 has already happened, ignoring the fact that Cedar Fair has three years of tax breaks ahead of it. Meanwhile, the cash distribution gets bigger every year. In 1995, the expected payout is $2.40 to $2.45 a share, a yield of more than 8 percent on the current stock price.

Cedar Fair has several advantages that go beyond being an MLP and are again apparent to anybody who reads the reports. The three parks attracted 5.9 million visitors in 1994, so they haven't begun to saturate the market of 65 million people. Cedar Pointis famous for its macho roller coasters, but it's been adding kinder, gentler rides for aging baby boomers and their young children.

Moreover, competitors won't come in to knock them off. You don't see entrepreneurs lining up to build $500 million amusement parks in cold climates. Cedar Point can make a living by staying open four months a year, but that's because the infrastructure is already there. Anybody who starts from scratch will go someplace warm, where tickets can be sold year-round. Not one new park has been constructed in the Midwest in more than 20 years.

Finally, the company can grow its earnings by adding new rides. That's been Cedar Fair's strategy all along. Cedar Point is already in the Guinness Book of Records for most roller coasters (11) in one location, and its Magnum XL-200 was voted Best Ride on Earth by readers of Inside Track magazine, whoever they are. But management isn't resting on these laurels. Last year, Cedar Point unveiled Raptor, the world's highest, steepest, and fastest inverted roller coaster. It flips upside down six times per trip. This year, the park is doubling the size of Soak City, a cluster of water rides.

Cedar Point now has enough flumes, roller coasters, and other amusements that a day in the park isn't enough time to take the mall in. This creates overnight traffic for the hotel, where an extra 200 rooms are being added to the existing 300. Whatever works at Cedar Point is repeated at the other locations. There's a Snake River Falls at Dorney, where it's called White Water Landing, and a Berenstain Bear Country at all three parks.

If Dorney has its expected growth spurt, it will boost Cedar Fair's earnings for the next five to ten years. At that point, Cedar Fair can acquire a fourth park and maintain the growth rate that way. And there's always the chance that somebody bigger will come along and buy out the entire operation. Disney might be a likely candidate, or PepsiCo, the parent company of TacoBell, Pizza Hut, and Kentucky Fried Chicken. Think of all the Pepsis, pizzas, tacos, and chicken wings Pepsi could sell if it had its own amusement parks. It could install a Pepsi coaster fizz flume.

In sum, Cedar Fair has everything you'd hope to find in a long-term investment: a solid franchise in a growing business that lacks competitors and that every person over the age of six can understand. I've owned shares since 1987, and bought more late last year.

Over the past decade, 40 million people have visited a Cedar Fair park, seen the crowds, and watched the new rides going up. How many of these 40 million went home, though, and bought shares in the Uruguay Fund, or the Bangladesh Fund, or the Emerging Markets Infrastructure Opportunity Fund, or the High-Yield Inverse Floater Government Guaranteed Bond Fund, or a biotech stock they knew

nothing about, ignoring a great company with a proven record that pays an annual cash distribution of 8 percent plus and has a story that's easy to follow?

Here's a lesson from Lynch 101 that I never turn down a chance to repeat: No investor can expect to be an expert in hundreds of stocks, but it's possible to become an expert in four or five that are easy to follow and monitor their progress and buy more shares when the opportunity arises. Cedar Fair is a prime candidate.

The best part about being a Cedar Fair shareholder is doing the on-site research. In 1991, my wife, Carolyn, and our oldest daughter, Mary, thoroughly investigated the flume rides at Valleyfair. In 1992, all five of us tested the roller coasters at Cedar Point. In 1993, Carolyn and our middle daughter, Annie, did a complete examination at Dorney. The company's stock symbol isn't FUN for no reason.

Peter Lynch writes the Investor's Edge column with John Rothchild. Lynch is vice-chairman of Fidelity Management and Research and the author, with Rothchild, of two books on investing. Beating the Street, the latest, is published by Simon & Schuster.

KEYWORDS: Stock Investing Strategies

95/04-The Current Thinking

It's been distinctly unrewarding to own electric utilities lately. But that will change__any decade now.

By Peter Lynch

In the past couple of years, I've fielded a lot of anxious questions about electric utilities from investors. They thought they were being conservative when they bought these low-risk stocks, so it was a shock to see them drop faster and further than a lot of the high-risk stocks. Today, the Dow Jones Utility Average hovers around 200, 10 percent below its high of 220 in 1986. Over ten years, this group has gone backward. People want to know if there's something fatally wrong with these companies.

I was mulling this issue when I sat down in January at the annual session of prognostication known as the Barron's Roundtable.

Jim Rogers was sitting directly to my right. This is the man who rode a motorcycle 65,000 miles around the world and lived to write a fascinating book about it, Investment Biker. You'd expect Jim to get excited about Iranian stocks, Ghanaian stocks, and real estate on the Turkish border, but there he was, touting the stodgy domestic utilities. He hasn't been shy about buying these. He owns about half of the hundred that are publicly traded

Rogers's enthusiasm is based on simple supply and demand. As individuals, we're not using as much electricity as we used to, thanks to more efficient refrigerators and air conditioners and people turning off the lights. But overall demand is still rising, at least 1 to 1.5 percent a year in the U.S. On the supply side, nobody has built a major electric plant anywhere in the country in two decades. What company wants to face the protesters, the lawyers, the cost overruns, the haggles with regulators?

So the plants we've already got aren't getting any younger, and many of the nuclear reactors are wheezing their way closer to retirement.

The point Rogers makes is that it won't be long before the older plants are unplugged and we'll have a power shortage in this country. In his experience, whenever there's a shortage of anything, the producers raise prices and make bigger profits, and bigger profits push the stock prices up. "I'm usually early about these things," he says. But he can sit back and collect the hefty dividends on his utility shares while he waits.

I speak to utility analysts and read their reports from time to time, but lately I haven't seen many reports that you could call enthusiastic. The prevailing view is that Jim's power shortage won't occur in this millennium. Many utilities generate more electricity than they need, and they've actually upped their production without building huge new plants. Joan Bok, the chairwoman of the board of New England Electric, tells me her company is planning to refurbish an existing plant, which will add 6 percent to its total output. What the company doesn't make itself, it can buy from Canada with its abundance of hydro generators. And as for nuclear plants being decommissioned, Bok says it won't begin to happen until 2002, and for some facilities not until 2033.

One way or another, there's more than enough voltage to go around, which brings us to the utilities' biggest headache: customer defections. A law the utilities would rather do without, passed in 1992, gives industrial users the right to shop around for the best price. Ford Motor doesn't have to get its juice from Detroit Edison. It's free to negotiate with other utilities that might offer lower rates. And if Ford can make a better deal in Wisconsin, Detroit Edison still has to deliver the power over its own lines.

This is called "wheeling," a form of deregulation that's great for industrial customers but puts the utilities in a bind. They can lower their rates to match the competition, which will cut into profits, or they can keep rates high and lose business to the competition, which will cut into profits.

And if they try to raise rates on the residential customers to make up for what they've lost from the industrial defectors, they'll have a consumer revolt on their hands. The regulators will never approve it.

It's the same predicament the regional phone companies are facing, except the Bells have an advantage. The money they lose in their rate wars, they can make back by cutting costs. Also, people are adding more phones and using them more often, which boosts the revenues of the phone companies. The electric utilities have a harder time finding costs to cut. They can't replace thousands of operators with machines, because they don't have thousands of operators. They've made a giant investment in expensive equipment that needs constant repair. As appliances get more efficient, their customers will use less electricity.

Last year's 20-percent-off sale in the utility sector is not a once-in- a-lifetime event. There's a sale of some kind whenever interest rates go up, because high rates make these dividend-paying shares less attractive. In 197174, the Dow Jones Utility Average dropped 57 percent, but it came back, eventually, in spite of the dire predictions about nuclear meltdowns and imminent bankruptcies. In the meantime, if you bought near the bottom, you were buying good companies on the cheap. A similar situation exists today, and there's no reason to doubt we'll see a comeback sooner or later.

The biggest difference between 1971 and 1995 is that utilities in 1995 are losing their monopolistic advantage, which means you have to be careful about which ones you buy. The important factors are as follows:

Payout Ratio. You can't invest blindly in the power company that pays the highest dividend, because in today's competitive environment, it may have to cut the dividend to survive. In 1994, six major utilities did just that, and more cuts are likely to come. The danger sign is a high payout ratio. That's the percentage of earnings that goes to paying the dividend.

A company that's paying 100 percent of its earnings in dividends could be in a tight spot. If earnings decline, the dividend can't be maintained. On the other hand, a company that pays out 80 percent of its earnings in dividends has a comfortable cushion.

The investor-relations person at any utility, or any brokerage-house utilities analyst, can give you the payout ratio of a utility. Or you can calculate it yourself by dividing the annual dividend by the annual earnings. A company that pays $1 in dividends and earns $2 per share has a ratio of 50 percent. Eighty-five percent or below is considered safe. Above 90 percent and you may be in the danger zone.

Cost of power. Utilities that borrowed billions of dollars in the 1970s and '80s to build expensive nuclear plants, some of which never got their operating license, obviously have more bills to pay than utilities that stuck with gas or coal. Where low-cost producers can generate a kilowatt of electricity for three or four cents, the high-cost producer might be spending as much as 15 cents.

There's no simple calculation you can make to determine whether a company is low cost or high cost, but if your brokerage firm has a utilities analyst, you can find out from him or her. Two low-cost producers on several analysts' buy lists are PacifiCorp(NYSE: PPW) and American Electric Power Company (NYSE: AEP).

The industrial-residential customer ratio. Since it's the industrial customers who are shopping for lower rates, the safest utilities to invest in are those with a high percentage of residential and nonindustrial customers. A good benchmark is 75 percent.

Location. Electricity can't be shipped more than a few hundred miles, because beyond a certain point, too much gets lost in transmission. So gluts and shortages are more regional than national. In the Southeast, where supplies are relatively tight, utilities will have an easier time holding their rates up than in the Southwest, which now generates more power than it needs. Hawaii has a natural protection from competitors: 2,500 miles of ocean makes it wheel-proof.

Cash and miscellaneous assets. Twenty years ago, utilities plowed their excess cash into construction projects. They borrowed heavily and issued more shares to raise the billions they needed to build new plants. They were plant-rich and cash-poor. Since they've stopped building plants, they've been building up cash, and some have more than they know what to do with. They've gone out and bought everything from savings and loans to insurance companies. In January, Minnesota Power & Light bought a company that holds auctions for used cars

A Texas utility, Houston Industries, bought a cable-TV business, which it recently agreed to sell to Time Warner for $2.25 billion. It's planning to use the proceeds to pay off debt and buy back millions of its own shares.

This could be terrific news for shareholders. Soon there will be fewer shares outstanding, which automatically increases the earnings per share and improves the payout ratio, since there will be fewer dividends to pay out.

It's always been a good strategy to invest in companies that buy back shares. Several other utilities are using their excess cash in this fashion. The list includes Pacific Gas & Electric , Dayton Power &Light;, and Florida Power and Light. Southern California Edison recently announced a buyback, too.

The table on page 34 lists ten utilities that have raised dividends ten years in a row and have relatively safe payout ratios. Those shown in italics are considered low-cost producers. Among the top utilities analysts I contacted for this article, Barry Abramson at Prudential recommends Duke Power, LG&E;, TECO, and SCANA. Michael Temple at Duff & Phelps likes TECO, Consolidated Edison of New York, and Central & Southwest. Ernest Liu at Goldman Sachs rates Duke Power and LG&E; as "outperformers," one notch below Goldman's highest rating, "Buy."

Even if Jim Rogers has to wait until the next millennium to see his prediction come true (and that's only five years away), some utilities are likely to do well. In the meantime, it gets my attention that nearly 70 percent of the shares in this industry are owned by individual investors, and 30 percent by the pros and the institutions, whereas with most stocks, the percentage is reversed. The fact that utilities have been underweighted in the pension funds and the mutual funds is promising in itself. The pros wouldn't be shunning this industry if they didn't expect the worst. So if anything good happens and they get more encouraged, there's always the chance they'll start a buying stampede.

Peter Lynch writes the Investor's Edge column with John Rothchild. Lynch is vice-chairman of Fidelity Management and Research and the coauthor, with Rothchild, of two books on investing. Beating the Street, the latest, is published by Simon & Schuster.

95/05-Bet the Houses

Fannie Mae is misunderstood, underappreciated, and undervalued. But don't pity this company. Buy it.

By Peter Lynch

In the stock market, no less than in police work, there are cases of mistaken identity. Once in a while, a reliable company with a steady source of income gets stuck in the line-up with the known gamblers, companies that are in cyclical industries and therefore have unpredictable incomes. Being thrown in with the gamblers can have a depressing effect on the stock price.

One of my favorite victims of mistaken identity is Fannie Mae (NYSE: FNM), formally known as the Federal National Mortgage Association. I've recommended the stock for a decade and owned it all along, and I'm still recommending it even though the price has risen from the single digits into the $70s. That's because it's still cheaper than it would be if Fannie Mae were correctly understood. For ten years, it's been a reliable earner that can't shake the image of being unreliable, so the stock sells at a low multiple to earnings

Through seven years and one recession, Fannie Mae has turned in 28 consecutive quarters of record earnings. If you covered up the name on the chart and asked the nearest Wall Street analyst what company produced these results, he'd probably say Wal-Mart or Home Depot. The difference is that Wal-Mart's stock is priced at 17 times earnings in today's market, whereas Fannie Mae is priced at 9 times earnings. It's a $75 stock that could easily become a $100 stock, overnight, if Fannie Mae started using an alias.

Fannie Mae is a former government agency that was privatized and first sold its stock to the public in 1968. It's the world's foremost owner and handler of mortgages. It buys them by the thousands, then bundles them into packages. Thanks to FannieMae and its close relation, Freddie Mac (the Federal Home Loan Mortgage Corp.), mortgages have become a commodity like barrelsof oil or bushels of wheat. Banks and S&Ls; no longer hold onto mortgages the way they once did. They sell them to FannieMae to be packaged, then use the proceeds to make more loans.The result is that mortgages are easier to get, and you and I pay cheaper rates. When banks or S&Ls; want to own mortgages,they simply buy one of the packages. There's a very active market for these so-called mortgage- backed securities.

Fannie Mae has been a great success as a private enterprise. It pays $1 billion in taxes annually, whereas if it were still part of the government, like the Federal Housing Administration, it would be sopping up taxes. The FHA is also in the mortgage business, but Fannie Mae with its 3,500 employees does twice the volume of the FHA with its 5,400 employees. It makes you root for the FHA to be privatized, along with the post office.Imagine the post office run by Fannie Mae, delivering the mailat peak efficiency and sending $1 billion a year back to the Treasury.

The reason Fannie Mae gets lumped in with the unreliable earnersis that it used to be one. The old Fannie Mae was more like GM or Chrysler: rags to riches and back again. It borrowed moneyat short-term rates and invested in mortgages that paid long-termrates. This worked fine as long as short-term rates were lowand long-term rates were high as long as the yield curve wasnormal, in other words. But when short-term rates went up, FannieMae would bleed red ink. At one point, it was borrowing moneyat rates that varied from 12 to 16 percent while holding mortgages yielding 7 to 11 percent.

In the early 1980s, Fannie Mae changed its strategy. The average mortgage lasts about seven years, so Fannie Mae decided to pay for its mortgages by selling bonds of an equivalent maturity. If it could earn, say, 10 percent on a mortgage and pay 9 percent interest on the bonds, it would lock in a 1 percent profit for the seven years

Now Fannie Mae was borrowing long and lending long. This was more expensive than borrowing short, but it removed the risk of rising rates. Fannie Mae also removed the risk of falling rates by making its bonds callable, which means it can redeemthe bonds at will. So when millions of homeowners refinance their mortgages at lower rates, as they did in 1992, 1993, and 1994. Fannie Mae can refinance its bonds at lower rates and maintain its spread.

It other words, Fannie Mae is no longer interest-rate sensitive. By borrowing long and issuing callable debt, it has lessened its earnings in the short run and given up the chance of making the occasional killing when interest rates go its way. But it has proved it can make a steady profit on rising rates, as in1994; falling rates, as in 1993; and recessions, as in 1990–91.This is the kind of company that Wall Street loves to own: a10 to 15 percent grower that's reliable. Yet a lot of people can't seem to stop worrying about Fannie Mae long enough to appreciateit. Interest rates go up, they sell the stock. Interest rates go down, they sell the stock. Saddam invades Kuwait, they sellthe stock. The dollar falls, they sell the stock.

There's no such thing as a worry-free investment. The trickis to separate the valid worries from the idle worries, and then check the worries against the facts. Since Fannie Mae has reinvented itself, the facts have been easy enough to check.

Remember the headlines six years ago, when people were worried about the collapse in real estate? A big drop in housing prices would seem to be a disaster for Fannie Mae, which owns billions of dollars' worth of mortgages. As it turned out, the prices of fat-cat houses were declining, but the prices of the vast majority of modest houses held up. In fact, the median priceof a house has been on the rise for 27 years, ever since the statistic was first published. It comes out every month. So all you had to know was that Fannie Mae didn't have anything to do with fat-cat houses, and that its average mortgage was $80,000, and you would have ignored the dire predictions and held on to the stock.

Five years ago, people were worried about the recession and how millions of workers would lose their jobs and default on their mortgages. In the oil-patch recession of the mid-1980s, thousands of homeowners walked away from their loans and sent the keys back to the bank. This hurt Fannie Mae, but it learned its lesson and tightened its credit standards. Throughout the1990 recession, when 2 million people did lose their jobs and banks such as Citicorp were reporting delinquency rates of 3 percent or more, Fannie Mae's delinquency rate was negligible less than 1 percent. The company passed the recession test. Today,its delinquency rate has fallen to 0.57 percent, an all-time low. The company publishes this data every quarter, so you and I can keep track of it.

By the end of the recession, people were worrying that the babyboom was over and that soon we'd have fewer people buying houses and taking out mortgages. But halfway into the 1990s, we've hadthe highest population growth since the 1950s and the highest immigration levels since 1910. Even if we did enter a period of zero growth in the housing market, the mortgage market could still grow. That's because of all the older homeowners in this country who paid off their mortgages long ago. When they sell their houses to move into condos or the Great Beyond, the buyers of those houses will be looking for mortgage loans.

Fannie Mae and Freddie Mac (I'm a shareholder in Freddie Mac,too, and I recommend it) already control 40 percent of the U.S.mortgage market, either as owners or as packagers. Mortgage-backed securities didn't exist 25 years ago, when Freddie Mac invented the idea and Fannie Mae followed. Today, this is a trillion-dollar business, most of it divided between Fannie and Freddie. Year by year, the two pioneers are capturing an ever-greater share of all mortgages.

The latest worry is that the government will meddle in FannieMae's affairs by imposing fees and restrictions, or by taking away some of its business the way it has with Sallie Mae (the Student Loan Marketing Association). But that's not likely to happen. In 1992, Congress passed a law that set higher standardsfor Fannie Mae and Freddie Mac and required them to strengthen their capital reserves. They've done so and today are the mainstays of our housing-finance system.

As I write this, Fannie Mae is sitting on $40 billion of surplus cash, half of which could be invested in mortgages. The old FannieMae would have put that money into mortgages right away, to boost profits immediately. The reformed Fannie Mae is holding back,waiting to lock into a better spread. This strategy has put adrag on earnings growth, which is why a lot of big-time investors and the so-called momentum players have been avoiding the stock. Once Fannie Mae puts this chunk of money to work, the growth rate will pick up again. Either way, the company will show its usual steady progress.

In June, investors will descend on Washington to hear FannieMae give what promises to be a favorable progress report. Eighty-five percent of the shares are owned by institutions, many of which will be there to get the good news in person. Average investors who do their homework in advance have a chance to get a jump on the herd.

I never believed in the efficient-market theory, which says that all the information about any company is reflected in the current price and that therefore the price is always rational.Fannie Mae, stuck in the lineup with the cyclicals and sellingfor a price-to-earnings ratio of 9, is all the proof I need that the market makes mistakes.

95/06-Golden Years

You don't need your own ingot, but the time may be coming when we'll all want to own a little gold

By Peter Lynch

No less a personage than Alan Greenspan once said that gold was the only refuge against profligate governments that are forever debasing their currency. He should know, I guess. These days we've been seeing a lot of debased currencies, including the good old U.S. dollar, and there's a whiff of inflation on Wall Street.

I won't try to predict when the whiff will turn into a rank breeze, but I'm sure about one thing: If it does happen, interestrates will rise and stocks and bonds will fall. In the high-inflation scenario, the only investors who get a good night's sleep arethose whose money is parked in a money market or deployed inhard assets such as gold. Some people keep 5 percent of their portfolios in gold at all times, as a kind of insurance policy. For years they haven't needed it, but the case for owning gold is more compelling today than it was a decade ago.

When the price of gold hit $800 an ounce in 1980, it was a signal for every would-be prospector on earth to grab a pick and shovel and head for the nearest Sierra Madre. No glint in a rock orfleck in a stream escaped attention: Creaky, old shafts were reopened; new holes were dug. South African gold production was in decline, but new mines in the U.S., Canada, Brazil, and Australia took up the slack.

Today, South African output continues to decline, and miners there are scraping the bottom of what was once the mother of all mother lodes. But the big news is that the newer mines that have opened up around the world are beginning to run out of gold as well. Many of these latter-day projects involve small deposits of ore, and they have short life expectancies. Moreover, 14 years of catatonic gold prices have dampened the enthusiasm of prospectors,so the search for new sources has been limited. There's beena definite sag in the supply line.

About 3.6 billion ounces of gold have been extracted from the earth since the time of the pharaohs. That may sound like a sizablehaul, but if you took all the gold in circulation today jewelry, bars, ingots, coins, fillings, crowns and melted it into onebig bullion cube, the entire world supply would easily fit onto the basketball court at the Boston Garden. The whole lump is worth about $1 trillion at today's prices, or only one quarter of the U.S. national debt.

If you divided the lump equally among the 5.6 billion inhabitants of the earth, everybody would get less than an ounce. But that's hardly enough to satisfy the growing demand for jewelry justin Asia and India, where billions of fledgling capitalists have money to spend and not much to spend it on. They can't buy a Winnebago, because the roads are too narrow, and where would they park one? In remote areas, they can't buy electric appliances, because there's no electricity. The last thing they want is to be stuck with the local currency, as long as their governments can operate a printing press. So they're buying as much goldas they can.

Jewelry sales have nearly doubled in the past decade, and 75 percent of the world's gold output now ends up as baubles, bangles,and beads. The U.S. is still the world's largest customer, but Chinese jewelry lovers are buying so much gold these days that China is running a close second. This surge in retail

buying would surely have driven up the price if it weren't for the central banks. They've been on a selling spree.

Since the days of the gold standard, when nations settled their debts with metal, the various central banks have kept stacks of gold bars in repositories such as the Federal Reserve Bank of New York, which has the largest supply of gold on earth more than any South African mine. From 1989 to 1993, central banks have been net sellers of gold, giving their governments something to live on while they watered down their own currencies. The governments are like their citizenry in this respect: They've been buying gold because they know the local money can't be trusted.

The Russians have been the most active sellers of gold, drawing down their stockpile to pay their international bills as they flood the country with worthless rubles. As much as the Russian selling has depressed the price of gold, the idea that they will continue to sell has depressed it even more. By one popular guesstimate,the Russians still have 2,000 tons to unload, while the Russians themselves have pegged their supply at a more modest 240 tons. Apparently, there is no way of knowing the exact amount, but in any event, the Russian selling has subsided.

Selling by central banks in general has subsided, from 500-plus tons in 1993 down to an estimated 46 tons in 1994. This, coupled with the growing popular demand and the dwindling supplies inexisting mines, has lifted the spirits of the gold bulls, more commonly known as gold bugs. These people have been waiting for a rally long enough for their children to grow up and leave home.

As to when we'll actually see an extended rally, your timetable is as good as mine, but I've got an idea of how you can get the most out of it when it happens. In the last big run-up in gold, the one that carried the price to $800 an ounce, the most popular way to play the rally was to buy gold coins and gold bars. People lined up at the coin stores to purchase the one-ounce Krugerrand. In those days, there was a widespread fear that the financial system was about to collapse, which is why so many investors opted for owning the metal, as opposed to shares of mining companies that traded on the stock exchanges.

I've never understood the apocalyptic theory of investing. If the world really does collapse, is it really going to do you any good to have a few Krugerrands in your pocket? And if it doesn't, you're much better off buying shares and not the metal. Gold coins and bars are heavy and take up space in the bank vaults, and there's always the chance they'll be stolen. If you buy them through a company that offers storage, they charge you for it. Physical gold never pays a dividend, the way shares routinely do. And the arithmetic of corporate earnings strongly favors investing in the stocks.

The back-of-the-napkin explanation is as follows: You buy anounce of gold at, say, $360 (a little less than gold's selling for as I write this), and the price does a high jump and hits $500. So you've made $140. That's a 39 percent profit from owning the metal. But look what happens when you buy shares in a mining company instead. Let's say for argument's sake that the mining company is making a profit of $20 an ounce on production when gold is at $360 an ounce. When gold hits $500, the company's profits suddenly jump to $160 an ounce. That's an eightfold increase in earnings.

When a company's earnings go up eightfold, even when Wall Street analysts are skeptical that the bonanza can continue, the stock price will double or triple. And if euphoria sets in and people start believing the price of gold can rise to $1,000 an ounce and beyond, the stock price of our would-be

mining company may well increase as much as eightfold, right along with the earnings. Even if it doesn't, you'll get a far better return than the 39 percent you'd get out of the Krugerrand.

Now we arrive at the usual problem: Which gold stocks do you buy? Mining companies are tough to figure out, so this is one of those cases where Lynch's everybody-can-do-it theory of stock selection doesn't apply. How sad it would be if you were right about gold, but then missed the benefit because you picked the wrong company.

It's smarter to go with a gold mutual fund. You'll get a diversified portfolio managed by somebody who knows more about mines than you do. There are 38 or so gold funds or gold-related funds, including 13 with ten-year records (see the table on the nextpage).

Looking over this latter group, I'm struck by two things. A few have done remarkably well, given the fact that the price of gold is stuck at the same place it was at the beginning of the period. If you owned Oppenheimer Gold & Special Minerals, you got a 228.56 percent total return over a decade. The average fund with a ten-year history gave you a 96.90 percent return, which doesn't beat the stock market but certainly beats the zero return from owning a Krugerrand or a gold bar.

The second striking thing about these funds is the wide range of performance. With the minus 22.59 percent return from Lexington Strategic Investments, you were better off owning the gold bar. Obviously, all gold funds are not alike. From what I can gather, the two losers onthe ten-year list (Lexington Strategic and Untied Services Gold Shares) were heavily invested in South Africa. For a variety of reasons, South African shares fare worse than their North American counterparts during periods when the gold price languishes. On the other hand, South African gold funds give you a big pop and outperform the others when gold begins to rise. Lexington Strategic Investments has recently done just that. It's been the top performing gold fund for the past two years.

Of the 38 gold funds, 7 are no-loads. One is an index fund (launched in 1988 by Benham) that tracks the total return of the Benham North American Gold Equities Index. So the usual homework you have to do when picking an individual stock, you need to do when picking a gold fund. I leave it to you to explore the details, but one thing is certain. If gold funds were able to give a mediocre performance in the years when gold went nowhere, they'll be spectacular performers if the metal takes off.

GOLD MUTUAL FUNDS

Fund Name 10-year return

Bull & Bear Gold Investors

91.95%

Fidelity Select Precious Metals

115.20%

Franklin Gold Fund

151.96%

Invesco Strategic Gold

21.74%

John Hancock Gold & Government; B

88.88%

Keystone Precious Metals

128.44%

Lexington Goldfund

136.34

Lexington Strategic Investments

-22.59%

Oppenheimer Gold & Special Minerals

228.56%

United Services Gold Shares

-16.44%

USAA Investment Trust Gold

29.85%

Van Eck International Investors Gold

133.48%

Vanguard Specialized Gold & Precious Metals

172.36%

AVERAGE

96.90%

Lipper Gold Fund Index

99.76%

Peter Lynch writes the Investor's Edge column with John Rothchild. Lynch is vice-chairman of Fidelity Management and Research and the coauthor, with Rothchild, of two books on investing. Beating the Street, the latest, is published by Simon & Schuster.

95/08-Free at Last

Don't mistake a spin-off for a throwaway: Spin-off companiesoften outperform their parents.

By Peter Lynch

Imagine this scenario: you're a shareholder in Quaker Oats,because you think it is a good investment and you like the oatmeal.One day the mail brings free shares of Fisher-Price, a QuakerOats subsidiary that's now being turned loose as a separate company.You call your broker to ask how Fisher-Price is doing. You findout it has been losing money for several quarters, so you thinkto yourself, Why keep this dog? You sell the shares as soon asthey start trading, and you are happy to receive $11 for each.After all, you got them for free.

A couple of years later, you're browsing through the stock pages,and you come across Fisher-Price. Those $11 shares have become$38 shares, and you wish you hadn't noticed it, because now yourealize you missed a chance to more than triple your money onthe giveaway, while Quaker Oats (which you still own) is up amodest 10 percent.

When a subsidiary or a division is booted out of the nest ofa parent company, it's called a spin-off. Lately, we've seena lot of these. After decades of trying to diversifyÐor as Icall it, diworsifyÐmany companies are returning to their coreoperations. The buzzword for this is "rightsizing." If a divisiondoesn't fit in with a company's main line of work, the companysells it or spins it off.

A spin-off happens in two stages. First, the parent companyissues stock in the offspring and sells a small percentage ofit in a public offering. The rest is distributed as a gift (oftentax free) to shareholders of the parent. What makes these dealsso intriguing is that spin-offs tend to do better than stocksin general, particularly in the first 24 to 36 months after theyget their independence. On the next page is a table showing someof the most impressive performers of the 1980s and '90s.

Two Wall Street analysts are making a career out of spin-offs:Barbara Goodstein at Rothschild and Patrick Cusatis at LehmanBrothers. Cusatis says he got the idea from reading my firstbook, One Up on Wall Street, which contains a short section onthe subject. I'm gratified that he paid such close attention.He traced 161 spin-offs going back as far as 1965 and made anintriguing discovery: 14 percent of these spin-offs became takeovertargets and ended up as divisions in other companies, usuallyin the same industry.

Fisher-Price is a typical example. This liberated toy companywas on its own for less than three years before Mattel snappedit up. It made no sense at Quaker Oats, but it was a fine complementto Mattel.

I look at a lot of numbers every week, but the 14 percent takeoverrate made an impression. With companies in general, the oddsof a takeover are only 3 to 4 percent, so the shareholders ina spin-off are three to four times more likely to benefit fromone of these potentially lucrative episodes. In a takeover, thestock price is a cinch to go up.

It's no accident that spin-offs have done well. The managersno longer take orders from above and cut costs in obvious waysthat the old regime overlooked (this is called grabbing the low-hangingfruit). They become more entrepreneurial. The parent companymay have a financial stake in the success of the spin-off. Certainly,it has an emotional stake. The last thing a parent company wantsis for one of its own projects to flop. So it tries to do everythingpossible to help the fledgling enterprise, from cleaning up

thebalance sheet to installing good management. A company that hasto jettison divisions in a fire sale to raise cash may not careabout the consequences, but a powerhouse like Coca-Cola certainlydoes.

Coca-Cola spun off Columbia Pictures in late 1987 (keeping a49 percent interest), and when Columbia proved to be a disappointment,Coke did what it could to turn things around. Then it found abuyer at a fancy price. In 1989, Sony acquired Columbia for $27a share, more than three times higher than where shares firsttraded.

The most complicated separation was the Baby Bells. If you owneda share in AT&T; in 1983, you got fractions of shares in sevenspin-offs at once. A lot of people thought this was a nuisance,but those who held on to their fractions were well-rewarded.The Baby Bells did the easy cost-cutting and had a great sixyears while AT&T; languished.

In many of these spin-off situations, you've got two forcespulling at the stock price from opposite directions. On one sideare the mutual funds that own shares in the parent but can'tget involved with the offspring. For instance, the S&P; Indexfunds must sell whatever shares they get from a spin-off if thenew company isn't in the S&P; 500. While the funds are dumpingtheir holdings, so are individuals who don't want to be botheredwith upstarts they know nothing about.

On the other side are buyers who understand the virtues of spin-offsand scoop up the shares at what they perceive to be bargain prices.This often results in a standoff that may last for several months,until the new company has a chance to prove itself and impressthe Wall Street kibitzers. Take Gardner Denver Machinery, a manufacturerof air compressors and blowers, which emerged from Cooper Industries in April 1994. The stock was stuck in a trading rut for nearlya year until it surprised the Street with better than expectedearnings. Only recently did Gardner Denver jump the rut.

Tandy is one of the champions of spinning things off, sendingso many divisions out into the world that its genealogy beginsto sound like the families of Levites from the Old Testament.In 1975, Tandy begat Tandycrafts and Tandy Brands, and the shareholdersgot free shares in both. Then, in 1976, Tandycrafts begat Stafford-Lowdon.Three years later, it begat Colortile, and in 1986 it begat InterTAN,one of the few losers in this crowd. Tandy Brands, meanwhile,changed its name to Bombay Company, which in 1991 begat TandyBrands Accessories. If you had invested $5,000 in Tandy in 1975and held on to the whole lot, you would have $86,000 by now.

The latest trend from the boardroom is for companies with twoor three giant divisions to divide themselves into equal parts.Usually, they take this action because they think investors havefailed to appreciate the true value of the sum of the parts.In other words, the stock price is too low. Thus, Sears spunoff Allstate, 80 percent of which will go to Sears shareholdersas a tax-free gift sometime this summer.

95/09-Fear of Crashing

Think the market's headed for a fall? No argument here--unless you think you know when, or that there's a better survival strategy than owning great stocks.

By Peter Lynch with John Rothchild

The Dow's passing 4700 has brought new worries about a nastycorrection. The worrying started as soon as we recovered fromthe last nasty correction, in 1990. There's no end to the listof probable causes for a repeat: Too many mutual funds are chasingtoo few stocks, stocks are overpriced, the dividend yield onthe Dow is at an all-time low, and-- this one is my favorite--notenough investors are worried.

Let me go on record with Lynch's prediction: Another big correctionis on the way. I'd bet the ranch on it, if I had a ranch. Itmay come this year, next year, or the year the Red Sox win theWorld Series (don't hold your breath!), but sooner or later,it will happen. You read it here first.

On what do I base this bold assertion? Stocks have declined10 percent or more on 53 occasions since the turn of the century.That's roughly one correction occurring every two years.* And on 15 of these 53 occasions, stocks have declined 25 percentor more. That's one nasty correction (also known as a bear market)every six years.

For all I know, another bear may have arrived on the scene bythe time this article reaches the newsstands. Or the equity godsmay wait until the Dow reaches 6500 before they decide to knockit back to 4700, today's highs becoming tomorrow's lows. Or we could drop from today's levels straight down to 3100.

Make no mistake: Corrections can be scary experiences. People lose confidence in the economy, in their portfolios, and in the companies in which they've invested. It's like a storm that rollsin and blackens the sky. Fear sets in.

If only we didn't have indexes--the Dow, the Standard & Poor's500, and so forth--that enable us to track the ups and downs of "the market," we'd never have this problem with corrections. Do you know what the range is between the high and the low priceof the average stock on the New York Stock Exchange in any given year? Fifty percent. So most stocks fluctuate 50 percent fromtop to bottom every year, without any fanfare.

We remember the 1000-point drop in the Dow from August to October1987, the scariest correction in recent times. But we forgetthe 1000-point rise in the Dow in the 11 months preceding thatdrop--a remarkably fast gain, considering that it had taken theDow four years to tack on the previous 1000 points. If we hadbeen sequestered like a jury during all of 1987, we would havecome out thinking the market was flat for the year, and nobodywould have panicked.

But we do have indexes and we are preoccupied with their upsand downs, so we will have scary corrections. If we tack on another 1000 points from here and the Dow rises to 5700 in short order,the chances of another big decline increase considerably.

Assuming you agree with my forecast, how can we prepare? Mostly by doing nothing.

This is where a market calamity is different from a meteorological calamity. Since we've learned to take action to protect ourselvesfrom snowstorms and hurricanes, it's only natural that we wouldtry to prepare ourselves for corrections, even though this is one case where being prepared like a Boy Scout can be ruinous.Far more money has been lost by investors preparing for correctionsor trying to anticipate corrections than has been lost in correctionsthemselves.

The first mistake is hedging the portfolio. Anticipating a dropin the market, the skittish investor begins to dabble in futuresand options, the kind of investment that will make a profit whenstocks decline. People think of this as correction insurance.It seems cheap at first, but the options expire every coupleof months, and if stocks don't go down on schedule, people haveto buy more options to renew the policy. Suddenly, investing isn't so simple. Investors can't decide whether they're rooting for stocks to falter, so their insurance will pay off, or fora rally, for the sake of the portfolio.

Hedging is a tricky business even the pros haven't mastered-- otherwise,why have so many hedge funds gone out of business in recent years?Hedge-fund managers have been sighted in unemployment lines.

The second and more prevalent mistake is the ritual known aslightening up. This time, our skittish investors, again fearingthe correction is imminent, sell some or all of their stocks and stock mutual funds. Or they put off buying stocks in companiesthey like and sit on their cash, waiting for the crash. "Better safe than sorry," they tell themselves. "I'll wait for the dayof reckoning, when all the suckers who didn't see this comingare wailing and gnashing their teeth, and I'll snap up bargainsleft and right." (But once the market reaches bottom, the cashsitters are likely to continue to sit on their cash. They'rewaiting for further declines that never come, and they miss therebound.)

They may still call themselves long-term investors, but they'renot. They've turned themselves into market timers, and unlesstheir timing is very good, the market will run away from them.

Market timing was quite popular about 2700 Dow points ago, whenclients of mutual funds were encouraged to switch back and forth from stock funds to the money market, thereby avoiding any unpleasant corrections. The signals were sent out by self-appointed heads of "switching services" who charged hefty fees (as high as 3percent a year) for their canny advice. People were paying their switch-fund advisors two to eight times as much as they paidin management fees to the funds themselves.

Whereas in most states barbers have to pass a test before theyare allowed to cut hair, there is no test for switch forecasters. My advice for anyone who is still paying for such a service: Go back and carefully check the results before you give anotherpenny to a switching service. Have you really avoided the corrections,or have you avoided the best months of the greatest bull marketin history? It pains me to think how many people have done thelatter.

A review of the S&P; 500 going back to 1954 shows how expensiveit is to be out of stocks during the short stretches when theymake their biggest jumps. If you kept all your money in stocksthroughout these 40 years, your annual return on investment was11.4 percent. If you were out of stocks for the ten most profitablemonths, your return dropped to 8.3 percent. If you missed the20 most profitable months, your return was 6.1 percent; the 40 most profitable, and you made only 2.7 percent. Imagine that:If you were out of stocks for 40 key months in 40 years, trying to avoid corrections, your stock portfolio underperformed yoursavings account.

The same computer that gave us that revelation also contributedthe following: If you invested $2,000 in the S&P; 500 on January1 of every year since 1965, your annual return has been 11 percent.If you were unlucky and managed to invest that $2,000 at thepeak of the market in each year, your annual return has been 10.6 percent.

Or if you were lucky and invested the $2,000 at the low pointin the market, you ended up with 11.7 percent. In other words,in the long run it doesn't matter much whether your timing isgood or bad. What matters is that you stay invested in stocks.

Recently, Forbes published its hit parade of the richest peoplein the world, and I was reminded that there's never been a market timer on the list. If it were truly possible to predict corrections, you'd think somebody would have made billions by doing it.

The fact that nobody has done so ought to tell us somethingabout our chances of dodging the drops. Warren Buffett weighsin at No. 2 on the Forbes list. He got there by picking stocksand not by switching in and out of them.

Buffett switched only once in his career, in the late 1960s,when Wall Street fell so hopelessly in love with a select groupof growth companies that no price was too high to pay for them.At the point of maximum silliness, McDonald's was selling for 83 times earnings and Disney for 76, whereas in saner times,they might sell for 20 times earnings. These two companies, and 48 others in the so-called Nifty Fifty, were so overvalued thatit took them ten years to catch up to their price tags. So ifyou're looking for more concrete advice than I've offered sofar, take a tip from Warren Buffett and get out of stocks that are selling for 83 times earnings. Otherwise, stay the courseand resist the temptation to outsmart corrections.

In telling you this, I'm assuming you're in stocks for the longhaul: two score years or beyond. Never invest money in stocksif you are going to need it for some other purpose in the foreseeablefuture. Twenty years is a reasonable horizon for investing. Thatought to be long enough for your stocks to overcome the worstof times, such as the stretch between 1966 and 1982, when theDow stumbled from a peak of 1000 to a nadir of 777 And here'sa reassuring point: When you include the dividends, stocks inthe S&P; 500 gave a total return of 75.37 percent during that depressing 16-year period, or 3.5 percent annualized. Thanksto dividends, corrections aren't necessarily as bad as they'remade out to be.

As soon as you realize you can afford to wait out any correction,the calamity also becomes an opportunity to pick up bargains.

The table on page 83 shows a few examples of how the four nastiest corrections in recent history (1973-74, 1981-82, 1987, and 1990) actually paid us a favor by giving us the chance to buy greatcompanies at fire-sale prices. If it's happened before, it will happen again.

THE ANATOMY OF A CORRECTION

How have different types of companies fared in those four corrections?Do all stocks correct equally? To answer those questions, I enlistedthe help of Deborah Pont, my dogged researcher at Worth, whoin turn enlisted the help of Standard & Poor's, the Frank RussellCo., and Safian Investment Research. Together, we came up witha large table (on the next page) involving four broad categories,each represented by an index. Large companies are representedby the S&P; 500; small companies by the Russell 2000; growth companiesby the Safian growth index; and cyclical companies by the Safian cyclical index.

It's obvious from these numbers that growth companies were thestar performers during and after two of these corrections, andthey held their own in the Saddam Hussein correction of 1990.The only time you wished you didn't own them was 1973–74, whengrowth stocks were grossly overpriced, as we've already mentioned.

For those who haven't boned up on the subject, a growth company is a steady performer that can prosper in all economic conditions, as opposed to a cyclical, which lurches from rags to riches and back again. A typical lineup of growth companies includes those that make software and soft drinks, drug makers and fast-food chains, specialty retailers and service-related businesses, and even a cigarette manufacturer, Philip Morris. Sam Stovall, editor of Standard & Poor's Industry Reports and an avid student of corrections, calls these the "eat 'em, drink 'em, smoke 'em,and pay-for-it-by-going-to-the-doctor type stocks."

After the infamous 1987 bear market, when investors in the Dow industrial stocks were traumatized by a 33 percent loss from the August top to the October bottom, including the terrifying 508-point one-day drop, investors in growth stocks were still ahead by 8.5 percent and getting a good night's sleep. In 1990,growth stocks lost a bit more ground than the cyclicals on the downside but far less than the three other categories of stocks, and they've kept pace with the cyclicals on the upside.

I've long been a fan of growth companies, but in the courseof collecting data for this article, I was amazed to discoverthat since 1949, an investment in the 50 growth stocks on Safian's list has returned over 230-fold, while the cyclicals have returned only 19-fold. Whether they are owned individually or as an elementof mutual funds, growth stocks have given their owners fewer heartaches and many happy returns.

THE CASE FOR ZERO PERCENT BONDS--THAT IS, YOU SHOULDN'T OWNANY

This brings me to an investment strategy I described in my second book, Beating the Street. If I convince you of its merits, you will never again buy a bond or a bond fund, and you'll stay fully invested in stocks forever.

There are two main arguments for owning bonds: They give you income so you can pay the bills, and they add ballast to your portfolio. Unless you're talking about bonds of the short-term variety (two to four years), the ballast argument is false. Long-term bonds can be almost as volatile as stocks. They have their own corrections: When interest rates go up, bond prices go down Justas fast as stock prices. If you're not willing to hold a bond to maturity, you're exposing yourself to potential losses, the same as in stocks. And bonds have no upside to reward you for this risk if they're held to maturity. You collect the interest along the way, but in the end, the best you can hope for is to get reimbursed.

In the nine decades in this century, bonds have outperformed stocks only once--in the 1930s. They came close in the 1980s,but in the first half of the 1990s, stocks have once again proved their superiority. People are living longer these days, so many retirees who buy bonds for the income are discovering that they may end up needing more money than they thought they would. They could use some growth in their principal, but they aren't getting it.

The strategy I'm proposing can offer the best of both worlds: money to live on that normally comes from bonds, and growth that comes from stocks. Here's how it works. You sink 100 percent of your investment capital into a portfolio of companies that pay regular dividends. You could do this the easy way and invest in an S&P; 500 index fund, currently yielding about 3 percent. Or you could select a few "dividend achievers," as identified by Moody's. These are the companies that have a habit of raising their dividends year after year no matter what.

According to the latest Moody's list, no fewer than 332 publicly traded companies have accomplished this for at least ten years in a row. The list includes some obscure names but also a lot of familiar ones, the likes of Wal-Mart, Hasbro, Philip Morris, and Merck. (To get a copy of the Handbook of Dividend Achieversf or $19.95, call Moody's at 800-342-5647, extension 0546.)

Since dividends are paid out of earnings, these dividend achiever scouldn't have compiled such a record without having enjoyed consistent success in their core business, whatever it is. So you're looking at a group of profitable enterprises with staying power.

Let's say you've got $100,000 to invest for the long term, and you need an income of $7,000 per annum to make ends meet. Youc an get it by purchasing a 30-year bond paying 7 percent. But instead, you take Lynch's advice, shun the bonds, and build a portfolio of stocks that pays you a 3 percent dividend. In the first year you get $3,000 in dividends. Since you need $7,000to live on, you're $4,000 short on the income side, but that can be solved. You sell $4,000 worth of stock.

It may sound crazy to be selling shares that you bought 12 months earlier, but bear with me. Let's assume the prices have gone up 8 percent, which is the historical norm for stocks. (Overtime, stocks return 8 percent on the price gains and 3 percent on the dividends, for a total return of 11 percent.) Between the dividends and the price gains, your portfolio would be worth$111,000 after the first year if you left it alone. But you don't. You take out the $3,000 in dividends and you sell the $4,000chunk of stock. After putting this $7,000 in your pocket, you begin year two with $104,000 in the account.

You can see from the table on the next page what happens next. The companies in which you've invested raise their dividends as usual, so in the second year, the portfolio gives you an income of $3,120. At the end of year two, you have to sell only $3,880worth of stock to reach your $7,000 goal. Every year thereafter, as dividends are raised and stock prices go up, you're selling less and less stock to cover your expenses. In year 16, you receive$7,000 out of the dividends alone, and from this point forward, you never have to sell a single share to get the customary payout. In fact, your payout goes up.

These numbers are theoretical, but they're based on the average returns from stocks and dividends over this entire century. Assuming these same results hold for the future, after 20 years, your original $100,000 will have grown into $349,140. You'll be more than three times richer than when you started, on top of the$146,820 worth of dividends you've spent along the way. By taking the bond route, you would have received $140,000 in interest and gotten your $100,000 back.

If this dividend strategy is such a great idea, why aren't more people taking advantage of it? I suspect it's the same reason they own more bonds than stocks ($9.4 trillion to $6.5 trillion, at current count) when stocks are clearly more profitable overtime. They think they're jinxed. They're worried about the next nasty correction, and they're convinced it will happen the day after they invest in stocks. Perhaps you count yourself as one of this unlucky crowd.

The best way to cope with the fear of crashing is to assume the worst and examine the results. Let's assume, then, that you are jinxed, and the day after you invest your entire $100,000 in dividend achievers, the market has its worst session in history and your portfolio loses 25 percent of its value overnight.

Fidelity's Bob Beckwitt ran the numbers. In spite of the immediate25 percent loss, if you stuck with the plan, sold shares to augment the return, and collected your $146,820 in dividends along the way, at the end of the 20th year your portfolio would be worth$185,350. That's not as good as $349,140, but it puts you $85,350ahead of the $100,000 bond.

Let's imagine an even more terrible case: a recession that lasts 20 years. The country is in its worst slump since the Great Depression. In this prolonged crisis, companies struggle to increase their profits, and instead of share prices and dividends increasing at the normal rate of 8 percent and 3 percent, respectively, these returns are cut in half. Still, if you stuck with the program and removed $7,000 from the account each year, you'd end up with a $100,000 portfolio--exactly the same as getting your principal back from a bond.

Again, these calculations are theoretical, but the results areso favorable to stocks that there's a lot of room for error.Everybody can be unlucky, the whole country can be unlucky, andstocks will still do better than bonds--assuming you keep yourmoney in stocks for 20 years or longer. This is where male retireeswill say: "I don't have 20 years to wait, because I'm 65 alreadyand my life expectancy is 68.2. I only have 3.2 years to live."In fact, if a man gets to 65, he's likely to make it to 85, andif he and his wife both reach 65, there's a good chance one ofthem will make it to 90. People have more time than they thinkto ride out corrections, which is the main reason we shouldn'tbe worried about the next one, or the one after that.

I'll leave you with the latest gloomy report from Wall Street:Experts say stock prices will collapse because too many peoplehave become long- term investors. The way they see it, the ideaof long-term investing is so popular, it has to be wrong. Doesthat mean the earth really is flat?

* In spring 1994, we had a stealth correction. The Dow dropped10 percent from its January 31 high on three separate occasions,managing to recover its losses before the end of the tradingday in each instance. Few people took notice, but maybe that'swhy 1995 has been such a good market: The semiannual declinehas already sneaked past us.

ASK YOURSELF: WHY DO I OWN THESE COMPANIES?

When a correction hits and people around us are losing theirheads, as Kipling would say, we can find reassurance in the following:What makes stocks valuable in the long run isn't "the market."It's the profitability of the shares in the companies you own.As corporate profits increase, corporations become more valuable,and sooner or later, their shares will sell for a higher price.Historically, corporate profits have advanced by 8 percent ayear. This 8 percent, along with the 3 percent dividend yield,is what

accounts for the 11 percent annual return. There maynever have been a year when they had a total return of exactly11 percent, but that's the average over time. Corrections orno corrections, that's what stocks produce, because that's whatcorporations produce.

Even if corporate profits grew at 6, 5, or 4 percent, stockswould still advance, albeit at this lower rate. Adding in the3 percent for the dividends, you'd get a 9, 8, or 7 percent totalreturn. That's still a better return than you'd get from bondsin most decades. Ultimately, to be an investor in stocks, youhave to believe that American business has a decent future, aswell as business worldwide, and that corporations will continueto increase their profits. If you are as convinced of this asI am, then you'll never panic in a correction. --P.L.

95/10-Still Tough to Beat

Some thought this investment opportunity was too good to last. They were wrong. The local S&L; is still a heck of a place to put your money.

By Peter Lynch

When last we looked into it, investing in the local savings and loan when it went public was the closest thing to printing money that ever came a stock picker's way. Between 1991 and 1994, some 300 new S&Ls; issued shares that gained an average of 30 percent on the first day of trading and 60 percent within three months, on their way to doubles, triples, and even a few quadruples. (It's also remarkable that fewer than a handful of these are trading below their offering prices.) But in early 1994, regulators put a temporary stop to this bonanza.

What created the bonanza in the first place was a quirk in the way these institutions took shape. Founded many decades ago (and in many cases a hundred years ago), America's thrifts were organized along the lines of a co-op. They were run for the benefit of depositors, but they weren't owned by anyone in particular.

So when the thrifts (the term covers S&Ls;, mutual savings banks, and some other creatures) began to go public, there were no previous owners to pay off, as happens in most public offerings. Instead of a big chunk of the proceeds ending up in the pockets of the company's founders, all the money was returned to the company till.

For the lucky buyers of the shares, the result was the same as buying a new car for cash, then discovering that the dealer has left the cash in the glove compartment as a car-warming present. Let's say the local S&L; had a book value of $20 million, the result of decades of earnings built up inside the company. Then it went public and sold $20 million worth of shares in the offering. That $20 million invested by the shareholders became their thrift-warming present to themselves; in effect, they were buying the business for nothing. And because their $20 million was injected into the S&L;, the book value doubled overnight, from $20 million to $40 million. Theoretically, each share was now worth twice as much as the investors had paid for it.

This explains the big "pop" on opening day, when the newly issued shares began to trade on the stock exchanges. The price almost always took a jump to catch up to the fact that the value of the company had doubled in the act of going public. There were no former owners to cry foul, as they surely would have in a traditional offering had their company been sold for half price to public buyers who stood to make a greater profit than the previous owners.

In these hundreds of thrift "conversions," as it's known when a thrift goes public, every person with a savings account in the institution was invited to buy shares at the initial low price! Twice in the past four years (in a column and a Worth cover story), I attempted to describe the merits of investing in S&Ls; as they went public or, for that matter, investing in S&Ls; that had already gone public and were still selling at what seemed to be bargain rates. Reviews of the publicly traded thrifts I suggested researching last year and in 1992 are shown on this page.

Sadly, only a small percentage of depositors nationwide took advantage of the opportunity to buy shares in the public offerings in their own neighborhoods. The vast majority of the shares (98 percent by some accounts) were scooped up by professional investors who roamed the country opening savings accounts so they would get the right to participate in as many conversions as possible. The loyal customers who had maintained savings accounts at the local S&L; for decades turned their backs on these deals while the outsiders took home the spoils.

There were a few notorious cases where the managers and directors of the local thrift gave themselves an ample supply of free stock or stock options going into a conversion. To stop this profiteering, the Office of Thrift Supervision slapped a moratorium on conversions in early 1994. As soon as the moratorium was announced, a chorus of industry watchers proclaimed that the game was over, but four months later the moratorium was lifted.

Once again, the regulators would allow conversions, subject to new restrictions. Insiders could no longer reward themselves with bushelfuls of free shares and options, and the underwriters who took these companies public were pressured to raise the offering prices to take some of the pop out of these stocks

Though the game wasn't over, it had definitely changed. In 1994, 100 thrifts went public. The stock prices of the 68 that traded on Nasdaq gained 17 percent on average on the first day, but by the end of the year, they were up only 16 percent.

There were two reasons for this disappointing performance: a lackluster stock market in late 1994 and the confusion surrounding the new regulations. Since that confusion has now been resolved, the 1994 conversion class is up 48 percent from the initial offering prices. The table on page shows the top-performing thrifts that went public in 1994, as of mid-1995. [Tables and graphs are not included in the Worth OnLine archives.]

For last year's article ("Bank on It," April 1994), the staff at SNL Securities, a Charlottesville, Virginia, research firm that is our favorite authority on the subject, gave us the names of 100 thrifts that were not yet public but were likely candidates for eventual conversion. Eight of those have converted thus far, with an average one-day pop of 18 percent and an average gain of 34 percent as of this writing. Seven more thrifts on that list have conversions pending

In 1995, we've seen 53 thrifts go public, with an average gain of 14.7 percent on the first day of trading and 27 percent after three months. These results don't quite measure up to the bonanza of years past, but a 27 percent gainin just 90 days is a better return than you'd get from a savings account in five years.

One reason for the return of the bigger pops is that shares in the recent offerings have been priced at an average of 64 percent of book value, as opposed to the 73 percent in 1994, when the Feds were leaning on underwriters (who price the shares) to make the thrift conversions less lucrative.

It still makes sense to do what I suggested a year ago in these pages: Scout the area where you live or work for thrifts that haven't yet gone public, and open a savings account in each. In most cases, if you maintain an account for six months, you'll be able to buy shares if a conversion occurs. If the conversion never happens, you haven't lost anything, and you'll collect interest along the way.

The number of unconverted institutions has dropped from 2,524 ten years ago to 1,036 today, and at the rate they've been going public, they may all be public by 2005. Although many of the remaining thrifts are small (many have only one branch), my sources at SNL Securities estimate they represent between $1.5 billion and $2 billion in "embedded gains" that could end up in the pockets of the pioneer investors.

SNL's update on likely conversion candidates is shown at left. We offer our special thanks to Paul Doherty and Bill Kerkam for providing us with this data.

Before you purchase a single share in a thrift going public, you'll receive (as an account holder) a prospectus with all the details about what you may be buying__this is one gift horse whose mouth ought to be looked into. Here are some of the important points: * At minimum, you want the thrift to be profitable. You're getting it for nothing, but unless it's a profitable and healthy enterprise, it may be worth less than zero. * You want it to have a solid balance sheet and not be saddled with problem loans. You want the price-to-earnings ratio to be relatively low (last year I suggested p/e's of 10 or below), the equity-to-assets ratio to be relatively high (5 or above), and the percentage of nonperforming assets to be on the decline. * You want to see insiders buying the shares and paying the same price as you. Insider buying must be fully reported in the prospectus, so you can easily find out whether the managers and directors are risking their own money on the future success of the thrift. If they believe in the deal as much as you do, it's a good sign. * You also want the amount of money raised in the offering to roughly correspond to the book value of the company before the offering. If a local thrift with a book value of $10 a share plans to raise $100 a share in the IPO, the buyers will be paying $100 to get $110 in assets__hardly a bargain. But if that same thrift with a $10 book value plans to raise $10 a share in the IPO, the buyers will be paying $10 to get $20 in assets, the kind of favorable math that produces a nice pop. * If you don't like what you see in the prospectus, you don't have to participate in the offering. Nobody is forcing you to invest. A special note about so-called "mutual holding companies." A small number of thrifts have adopted this form of organization because it allows them to sell a minority interest in the business, with the insiders keeping permanent control and preventing a potential takeover. These deals are less attractive for investors. The real earnings power and real book value of the banks are understated, and the stocks don't have much lift.

In years past, even if you never bought shares in a single conversion, you could make a good living buying shares in recently converted, profitable S&Ls; that were selling at modest p/e ratios and below book value. But the pickings are much slimmer than they were a year ago. As you can see in the table below, [Tables and graphs are not included in the Worth OnLine archives.] the S&Ls; I've put on the current research list are quite expensive compared with those on my earlier research list. Of the thrifts on this list, I own Astoria Financial, Cameron Financial, Carver Federal Savings, GP Financial, and Quaker City.

In 1994, 13 of the 15 publicly traded thrifts on my list had p/e ratios of 10 or below, whereas 7 of the 15 on my new list have p/e ratios above 10. On the 1994 list, 14 of the 15 were trading below book value, but on this latest list, nine are trading above book. It's hard to find real bargains in today's higher-priced market.

Before the moratorium, the typical thrift stock would advance in three phases: the original pop, the gradual rise to book value, and a secondary pop when the thrift was acquired by a larger institution at a premium to its book value. In recent years, these secondary pops have been quite spectacular, taking the stock prices to new heights__150 to 170 percent of book value. The possibility of a takeover gives us another reason for investing in thrifts, although in the near future, we may not see as many takeovers as we've seen in the recent past.

While 1995 has been a banner year for bank mergers__a trend that is expected to continue__the number of thrifts acquired by banks has been declining. Of the active buyers from 1991 to 1994 (including AmSouth, < wam-co NASD:FITB>Fifth Third, Bank of Boston, First Fidelity, First Interstate, Fleet, PNC, and Shawmut), only First Union has continued to buy thrifts. Measured by assets sold, the takeover rate in the first half of 1995 is 60 percent behind the 1994 rate. The experts at SNL Securities tell us this is because thrifts are currently too expensive.

We've gone through a period of bankers' nirvana, several years of steady interest rates and a decent economy, and banks have used these good conditions to eliminate problem loans and strengthen their balance sheets. If these conditions continue, so much the better, but if they don't, sooner or later we may see a sell-off in the thrift-banking stocks, which would create new opportunities all over again. There are two additional factors, one short-term and one long-term, that make thrifts attractive. In the short term, regulators are nearing an agreement that would lower the premiums on deposit insurance. There is already a surplus in the Bank Insurance Fund, which covers savings banks. The Savings Association Insurance Fund, which covers S&Ls;, is undercapitalized, and the government is considering hitting SAIF-insured institutions with a one-time charge of $6 billion to bolster the reserves. Following that infusion of money, the premiums on S&L; deposit insurance would be reduced as well.

For thrifts covered by the BIF, the drop in premiums could increase earnings by 10 percent or more. Those covered by SAIF will have to pay their share of the $6 billion, which might cost them 85 cents on every $100 of deposits. This one-time hit would cause them to suffer an immediate drop in book value, but the lower insurance premiums would boost their earnings for years thereafter.

In the long run, what keeps me interested in the banking and thrift business is the likelihood of future takeovers and mergers. As the government relaxes the prohibitions against interstate banking, we're bound to see more consolidation. There are too many banks and too many chicken restaurants in this country already. I've said this before, but Great Britain has a population of 58 million and only seven different banks, while we've got almost five times the crowd and more than 20,000 banks__if you count the credit unions, thrifts, national banks, regional banks, and so on.

We don't need all these separate buildings, software systems, boardrooms, and highly paid administrators. Every time a thrift is taken over, the acquiring bank can cut costs upstairs and increase productivity downstairs. The acquiring bank can make better use of the thrift's deposits by lending them to a wider range of borrowers over a larger geographical area and by making numerous types of loans where they have a lot of experience and expertise. The entire industry will become more efficient__just like the phone companies, drug companies, and a whole gamut of other companies already have.

Written with John Rothchild. Peter Lynch is vice-chairman of Fidelity Management and Research and the coauthor, with Rothchild, of two books on investing. Beating the Street, the latest, is published by Simon and Schuster.

1992 RESEARCH LIST UPDATED

Bell Bancorp (BELL) $16.94 $30.75 82% Charter FSB Bancorp1 15.18 33.57 121 Liberty Bancorp (LBCI) 15.75 26.25 67 Germantown Savings2 21.50 62.00 188 People's Savings Finan (PBNB) 13.25 19.50 47 Bankers Corp (BKCO) 9.47 17.38 83 NS Bancorp (NSBI) 22.13 33.00 49 UF Bancorp3 16.75 38.70 131 Ameriana Bancorp (ASBI) 12.33 16.25 32 Eagle Financial (EGFC) 13.12 22.00 68

Source: SNL Securities, L.P. Recommended prices as of 7/21/92. Recent prices as of 8/15/95. 1) Charter FSB Bancorp was acquired by Sovereign Bancorp 11/1/94. Recent price reflects the exchange of Charter's stock. 2) Germantown Savings Savings Bank was acquired by CoreStates Financial Corp for $62 cash per share on 12/2/94. 3) UF Bancorp was acquired by Citizens Bancshares Inc. 8/4/95. Recent price reflects the exchange of UF Bancorp's stock.

1994 RESEARCH LIST UPDATED

Astoria Financial (ASFC) $29.13 $37.25 28% Ameribanc Investors Group1 1.44 3.00 108 Bay View Capital (BVFS) 20.50 25.00 22 California Financial (CFHC) 15.75 16.50 5 CENFED Financial Corp (CENF) 17.50 20.13 15 Brooklyn Federal (BRKB)2 34.00 37.25 10 FFY < wam-co NASD:FFYF>Financial Corp (FFYF) 14.62 21.31 46 Fidelity New York, FSB 3 16.63 29.00 74 GP Financial (GNPT) 19.87 24.75 25 < wam-co NASD:LVSB>Lakeview Savings Bank (LVSB) 11.04 17.38 57 < wam-co NASD:MIFC>Mid-Iowa Financial (MIFC) 7.18 10.50 46 North Side Savings Bank (NSBK) 16.78 27.25 62 Pamrapo Bancorp Inc. (PBCI) 14.00 22.88 63 Queens County Bancorp (QCSB) 24.83 33.25 34 Sunrise Federal (SUNY) 21.00 30.13 43

Source: SNL Securities, L.P. Recommended prices as of 3/1/94. Recent prices as of 8/15/95. 1) Ameribanc Investors Group was bought out by First Union of Charlotte, NC for $3 per share in cash on 4/1/95. 2)Crossland Savings changed its name to Brooklyn Federal. 3)Fidelity New York was bought out by Astoria Financial for $29 per share in cash on 1/ 31/95.

SUCCESS STORIES OF 1994

IPO recent percent Thrift DATE Price price gain

(The five most successful initial public offerings of thrifts last year)

Harbor Federal Savings Bank (HARB) 1/6/94 $10 $23.00 130% Security Capital Corp (SECP) 1/3/94 25 52.63 111 First Kent Financial Corp (FKFC) 6/27/94 10 21.00 110 Bay Ridge Bancorp, Inc. (BRBC) 4/6/94 10 20.88 109 Financial Corporation (GTFN) 3/31/94 10 20.38 104

Source: SNL Securities, L.P., Charlottesville, VA. Recent price as of 8/ 1/95.

THRIFTS TO RESEARCH FOR 1995 Publicly traded savings banks and S&Ls; deserving of a closer look

THRIFT STATE Equity Price P/E Assets to Assets to Book ($ billions)

Albank Financial Corp (Nasdaq: ALBK) NY $28.75 11% 114% 12 $3.0 Astoria Financial (Nasdaq: ASFC) NY 37.25 9 96 8 6.4 Cameron Financial (Nasdaq: CMRN) MO 13.00 28 79 12 0.2 Carver Federal Savings (Nasdaq: CARV) NY 7.00 10 47 12 0.4 Charter One Financial (Nasdaq: COFI) OH 26.75 6 155 8 6.3 First Federal Financial Corp (NYSE: FED) CA 15.00 4 86 9 4.2 GP Financial (Nasdaq: GNPT)1 NY 25.25 11 128 9 14.4 Home Financial Corp (Nasdaq: HOFL) FL 15.00 26 115 15 1.2 ISB Financial (Nasdaq: ISBF) LA 15.00 21 90 13 0.6 Leader Financial (Nasdaq: LFCT) TN 32.75 8 154 9 2.7 Portsmouth Bank (Nasdaq: POBS) NH 12.25 25 107 11 0.3 Quaker City (Nasdaq: QCBC) CA 12.75 10 78 12 0.6 Queens County (Nasdaq: QCSB) NY 34.00 18 105 9 1.2 Standard Federal Bank (NYSE: SFB) MI 34.50 7 152 8 13.0 Washington Mutual (Nasdaq: WAMU) WA 23.25 6 141 9 20.3

Source: Prices as of 8/17/95. 1) All data incorporates the pending branch purchase from H.F. Ahmanson & Co.

KEYWORDS: Banking Industry, Stock Investing Strategies

96/01-Peter Lynch By Post

The stock picker's stock picker finally catches up with his mailand answers readers' questions

By Peter Lynch

Letters from readers have been piling up on my desk for morethan three years. I appreciate the fact that so many of you havetaken the time to ask questions and make comments. This keepsthe mail carriers in shape, and I never get lonely. I'm takingthis opportunity to answer a few of your questions in public.

What's your current opinion of Pier 1 Imports?

Carl J. Cooper, Rockwall, Texas

I bought Pier 1 (NYSE: PIR) for the Magellan Fund in the mid-1980s,but it was really my wife, Carolyn, who discovered it. She likedthe eclectic assortment of furniture, rugs, pottery, and glassware--allimported from exotic places like Mexico and the Far East, butwithout the exotic prices these items would have fetched at Bloomingdale's.

In 1991, I recommended Pier 1 again after the stock had fallento $7 a share. The economy was in a recession, money was tight,and buying a new couch wasn't high on most people's shoppinglists. Mom-and-pop furniture stores were going out of business,and big department stores were closing their home-furnishingdepartments. I figured as soon as the recession ended and peoplecould afford to redecorate, Pier 1 would capture a huge chunkof a market that had been abandoned by its former competitors.Also, at the $7 price it looked cheap.

Today, Pier 1 has 651 stores. The key element to the expansionplan is that 100 of its newest 150 outlets have opened in whatthe company calls "single-store markets"--places like Hattiesburg,Mississippi; Rapid City, South Dakota; and Twin Falls, Idaho.The company is expanding into smaller cities where it can attracta bigger percentage of the shoppers. These people no longer haveto drive 150 miles to buy a rattan room divider.

Pier 1 has continued to cut costs and reduce debt, and it'salso expanding abroad, with ten stores in the United Kingdomand outlets installed in several Sears stores in Mexico. TheMexican experiment has been a modest success, in spite of a severerecession there, and when Mexico recovers, results should improve.Although 1995 has been tough for U.S. retailers, Pier 1's domesticsales are up 11 percent. The company is likely to post recordearnings of 85 cents a share for 1995. Analysts expect it toearn $1 a share in 1996.

As I write this, the stock is selling for about $10. Obviously,it's not as cheap as it was in 1991, but it's still undervaluedat 10 times the 1996 estimated earnings, in a market where theaverage stock sells for 15 times earnings. Pier 1 is a maturecompany that is no longer growing at 20 percent a year, but itcan be a decent long-term performer. I still own the stock. Andevery August, my two older daughters, who are away at school,furnish their rooms in Pier 1.

I enjoyed your article "Charlie Silk's 150-Bagger" in the May1994 issue. I'm curious about what sources Charlie uses to findcash-rich companies with no debt and good earnings growth.

C.J. Biddle, La Jolla, California

That was the article in which I nominated Charlie as the world'sgreatest amateur investor. Figuring he ought to answer your question,I coaxed him into providing the following:

My search for undervalued Nasdaq stocks begins with Barron's,which I study every week, noting the stocks making new 12-monthlows that have fallen 50 percent or more from their 12-monthhighs. I take this list of the downtrodden and review their fundamentalsin either the Standard & Poor's monthly guide or Moody's OTCIndustrial Manual. I reject the companies that have a low cashposition or a declining sales trend. I'm also looking for companieswhose current assets are at least two times greater than alltheir debt.

Whenever a company passes these hurdles, I call the investor- relationsperson and request the latest annual report, 10-K, proxy statement,and product literature. I study these materials to get a feelfor the business, the products, and the competition. Weighingthese various factors, I choose an "entry point," a price atwhich I would begin to accumulate the stock.

The most important factor is the cash or cash equivalents onhand. My goal is to find situations where there's little or nodebt and the cash per share is nearly equal to or greater thanthe price of the stock. I've never seen a company with a lotof cash and not much debt go bankrupt.

A basic rule is to have the safest investment value with thesmallest downside risk. The next most important considerationis the probability of a turnaround. Was this price decline atemporary aberration that can be reversed, and is there a possiblere-acceleration of growth?

This approach works best at the year's end, due to tax-lossselling pressures or after a significant market decline. In afrothy market, there are very few opportunities.

Last March you wrote about Cedar Fair. Of all the hundreds ofstocks available, how do you focus on a few to study and research?

Raymond Capobianco, Foster, Rhode Island

There are attractive companies everywhere: cyclicals, fast growers,slow growers, some that pay a dividend, others that don't. Mytheory is to stay flexible. When people limit themselves to acertain kind of company, they also limit their opportunities.

I'm always on the lookout for companies that have no debt, lowprice-to- earnings ratios, good records, and prospects in businessesthat are easy to understand. These don't come along every day.Once I get to know a company, I look for the chance to buy moreshares when the price happens to drop for reasons that have nothingto do with the fundamentals.

I discovered Cedar Fair L.P. (NYSE: FUN)in the pile of prospectuseson my desk. It had just come public in 1987, but it had ownedand operated its amusement-park business for over 100 years.Here was a company that had a good growth rate and paid a dividendof 10 percent, which is rare for a solid growth company

Later, my family and I did the on-site research, riding theroller coasters at Cedar Fair's three amusement parks in Ohio,Minnesota, and Pennsylvania. Many of the 70 million people wholive within driving distance of these parks already knew thiscompany firsthand, so they were a step ahead of me. This is anotherexample of finding great investments close to home. None of thebig Wall Street firms bothered to follow Cedar Fair, but amateurinvestors had the perfect chance.

The story is simple to follow. The parks are only open a fewmonths a year, so you've got those off-season months to studythe quarterly and annual reports. If the stock price drops inthe idle months, you know it's not because the company has reportedbad results. There are no results to report.

This is where it can pay to wait for a buying opportunity. In1987, Cedar Fair had just come public at $10 when the marketwent over the ledge. Suddenly, you could buy FUN for $6, withan 18 percent yield. Because the market had crashed, people wereworried that the country was headed into a recession. But ifyou did your homework, you realized that Cedar Fair's businesswouldn't be affected for at least six months, because the parkshad just closed.

In 1990, when the recession jitters hit the market once again,you had another opportunity to buy Cedar Fair on a dip. If youkeep a list of stocks you'd like to own and watch them like avulture, eventually you will get the chance to swoop.

Cedar Fair had a great run from its $6 low in 1987 to its all-timehigh of $36 in 1993. It's been trading between $26 and $36 eversince. The company also keeps raising the dividend--this year,it's $2.30 a share.

In 1995, Cedar Fair acquired two adjoining parks outside Kansas City, Missouri. Every year, a fantastic new ride is added atone or more of the parks, the latest being the new $12 millionroller coaster in Ohio. Next year, Wild Thing will be installedin the Valleyfair park near Minneapolis. This roller coasterwill be more than 200 feet tall, with a weightless zone at thecrest of the second hill. I can't wait to do the research onit.

The only hitch is that Cedar Fair enjoys a favorable tax status,which is likely to run out in late 1997. But the market has alreadydiscounted that. Even if Cedar Fair paid a normal tax rate in1996, the stock is valued at 15 times 1996 estimated earnings,so it's cheaper than the average company in the S&P; 500. I ownthe stock.

-----In Beating the Street you gave Body Shop a great write-up. Thestock has dropped nearly 49 percent since I bought it. What areits prospects?

William A. Boudreau Nesconset, New York

Here is another example of why investors should focus on whetherthe story is still valid. A stock can fall in half, only to reboundso you end up making several times your money. I'm not sure BodyShop (LON: BOS; ADR: BDSPY) will have such a rebound, but ithas the potential.

The stock price tripled from a low of 125 pence (this is a Britishcompany) in 1990 to a high of 375 pence in 1992, and lately ithas fallen back below 140. The earnings declined in 1993, largelybecause of recessions in three of the Body Shop's most maturemarkets: the U.K., Australia, and Canada. In 1994, the earningsmade a nice recovery, but the company predicts that they willbe lower for the first half of 1995. Earnings would be higherexcept the company is spending a lot of money to introduce newproducts in the U.S. and to revamp its packaging. The Body Shopfaces stiff competition from The Limited's Bath & Body Worksin the U.S. But whether Body Shop succeeds in the U.S. may notbe that important. What's really important is what happens inthe 44 other countries where it has gained a foothold.

The company could concentrate on those 44 markets alone andenjoy excellent growth for the next decade. But it has plansto open Body Shops in China, Korea, and India. This is a fast-growingglobal operation that is opening 150 new stores a year. Coca-Cola is in almost 200 countries worldwide, and there's no reason BodyShop can't reach the same audience.

A company that can manage to grow at 20 percent a year willdouble its earnings every three and a half years. The earningsquadruple every 7 years, and increase eightfold every 14 years.That's how you make big money.

That's the upside. I wouldn't take a chance on Body Shop ifthe company were saddled with debt. Then I'd be facing bankruptcyrisk. But Body Shop is debt free. It is a profitable company,and the stock is very cheap. In my opinion, the risk/reward isfavorable. I own it, and I'm sticking with it.

In October you wrote about buying shares in savings & loans.But how are the stocks of S&Ls; allotted to depositors? Does thenumber of shares you're allowed to buy depend on how much moneyyou have on deposit? It hardly makes sense to keep thousandsof dollars on deposit for a handful of shares.

Murray Dornfeld, New York, New York

You usually have to keep at least $50 on deposit, and sometimesthe minimum can go as high as $500, but beyond that, the sizeof the deposit has no effect on the allotment of shares if theS&L; decides to go public. You generally can buy as many sharesas anyone else.

It doesn't matter how you've deposited the money, whether it'sin a checking account, a savings account, or a CD. What doesmatter is when you opened the account. Again, the rules vary,but people who get first dibs on the shares are usually thosewho've had an account with the S&L; at least a year before it announces the offering.

It's too bad 98 percent of people who have deposits in S&Ls; that go public pass up the chance to research and then considerbuying shares. They throw away the announcements and prospectuses they get in the mail. Don't dismiss these offers. Most of them have turned out to be great investments.

Written with John Rothchild. Peter Lynch is vice-chairman of Fidelity Management and Research and the coauthor, with Rothchild, of two books on investing. Beating the Street, the latest, is published by Simon and Schuster.

96/02-Mind Your P's and E's

A quick lesson in wiggle reading: The use of standard price and earnings charts topot good buys (and bad) in growth stocks.

By Peter Lynch

On my watch at the helm of the Magellan Fund , I often consulted a chart book to check the bearings of companies in the portfolio.Many investors focus on recent price, but I like to refer to certain 10-year and 35-year charts of earnings and price to give me a clue as to a stock's future value. The charts I use arepublished by Securities Research Corporation. A subscriptionis expensive, but many libraries carry the latest copies, sothey're easy enough to find.

Perhaps you follow the progress of companies with the price-to- earningsratio, or p/e. A chart will tell you more: It tells the storyof the ongoing relationship between the P and the E. It's likea tacking duel in a sailing race. As the earnings line (the E)gains or loses ground, the price line (the P) zigs and zags aboveand below it. E is the reality of a company's performance, whileP is led around by Wall Street expectations. Each chart revealssomething important about the way investors perceive a company.

The chart of the Standard & Poor's 500 Index (shown on the nextpage), which tracks earnings and stock prices of 500 large companies lumped together, lifts the fog from the market at large. We seethe E tailing off in the recession of 1990 and 1991, while theP was on the rise. The P was ignoring the drop in the E becauseinvestors anticipated the economic recovery that began in early1992.

To catch up to the rising P, the E basically had to double from1991 to 1994, which it nearly didŠtaking Wall Street by surprise.In 1994 alone, the E was up 40 percent while the P went nowhere.Then in 1995, the E was up another 20 percent, for a combinedgain of 65 percent in two years. This phenomenal rise in earningsis why the P in stocks had such a run in 1995.

This sort of chart reading works best with growth companies,ten of which also appear on the next page. I've also thrown ina cyclical, General Motors, for variety's sake. You can tella growth company because the E keeps on a steady course, withearnings higher each year. Once you've identified a growth company from the E line, you follow the P line to get a read on whether the stock is expensive or cheap, relative to its earnings.

Overpriced growth stocks are doubly risky: If the earnings take a dive, the stock price heads for the bottom, and even if the earnings go up, the stock price may take a dive, or at best treadwater. When you way overpay for growth, the risk/reward ratiois highly unfavorable. The charts can help identify those situations.

Here are the charts of 11 companies (in no particular order) and the stories they tell:

Abbott Labs is a typical growth company, with the E on the riseand the P maneuvering around it. Every few years, as in 1987and 1991, investors get carried away with Abbott's prospectsand bid up the P, which puts a lot of distance between it andthe E. The best time to buy the stock is when the P comes backto the E, or drops below the E, as it did briefly in 1993. When the two lines converge, it means the company's growth rate is equal to its p/e ratioŠa good opportunity to invest in futuregrowth at a bargain price. Today, we see the P drifting awayfrom the E; Abbott is no longer the bargain it was two years ago, despite very good profits.

Walgreen is an excellent drug chain whose P rides above the E most of the time. This shows that investors are so confident of Walgreen's knack for making money, they're willing to pay a high price for future earnings growth.

The P drifted sideways in 1993 and '94. People who look onlyat stock prices might have thought something was wrong with thecompany. But the E kept rising, so people who paid attention to earnings knew the company was doing fine. The price simply got too high, as it does from time to time. It's moving in that direction again.

McDonald's is in the news; Warren Buffett is reportedly buyingshares. No doubt he's aware of the risk: The gap between McDonald'sP and its E hasn't been this wide since 1987, just before theOctober crash. Investors are counting on McDonald's to speedup its earnings by sending more and more Golden Arches abroad.If McDonald's doesn't accelerate the E, there's potential troubleahead for the P.

Johnson & Johnson was one of my recommendations at the Barron'sroundtable in January of 1994. I'd noticed the P had taken arare dip below the E, which, as usual, was on a profitable tack.You can see what's happened sinceŠthe P reversed field and hasshot from under $40 to over $90. Johnson & Johnson is still agreat growth company with strong future prospects (I own it),but a wide gap has opened up between the lines.

Wal-Mart investors have had an unshakable faith in the rapidadvance of the E, so until recently they paid a big premium forthe P. Hence, there's been a gap you could drive a fleet through.By 1992, the P had strayed further from the E than at any timein the company's history. For three years thereafter, the earningsrose by nearly 50 percent and the stock went nowhere. Imaginethe stock's fate if the earnings had dropped.

Recently, Wal-Mart's p/e gap has narrowed, making it less risky than it was in 1992. This hulking giant can't be expected tokeep up the fast growth it enjoyed in years past, but the stockis priced for slower growth. The current p/e ratio on expected1996 earnings is about equal to that of the average stock. IfWal-Mart's new supercenter stores are successful, it has a decentshot at a decade of respectable growth.

General Electric investors have always lacked faith in GE'sability to speed up the growth rate, so the P travels close tothe E and often drifts below it. This chart is telling us: "GE can't keep up with a Wal-Mart or a McDonald's." Nevertheless,GE makes steady progress, and the E has always been on the rise.Saddam Hussein gave us a buying opportunity a few years backwhen the P veered sharply south in the months before Desert Storm.

Emerson Electric, a leading producer of electric motors andother industrial products, has sailed through recessions withouta hitch: 38 consecutive years of rising E. You can see the pointwhere Wall Street finally recognized Emerson as a reliable fastgrowerŠin 1991, the P crossed above the E, and it's stayed there ever since.

As of this writing, Emerson sells for about $80 a share, but if the market had continued to perceive it as an unreliable slow grower, the stock might well be selling for $55 a share, a $25 difference on the same earnings. Instead of being an $18 billion company, Emerson would be a $12 billion company. That's how muchfaith in future growth can affect a shareholder's pocketbook.

Coca-Cola's chart from 1984 to 1989 looked like it belongedto General Electric, and from 1988 forward, it looked like Wal-Mart's.The flagship of the soft-drink business suddenly was put on thefast track, and Wall Street noticed. While the E accelerated,the P raced ahead of it, creating a dangerous gap. At the startof 1992, any chart reader could see the P was out of line andthe E needed time to catch up to it. The P went nowhere for twoand a half years, while the earnings continued apace. Lately,the P has jumped again, and the gap has widened. Investors arebetting once more that Coke will speed up the E.

Who knows how high the stock price will go? Maybe it will hit $100 or $120 a share and go from overpriced to grossly overpriced.Such an advance won't do long-term investors any good. Sooneror later, the P will come back to more sensible levels, becausewith Coke in more than 195 countries already, how can its E growthaccelerate fast enough to support the rising P?

Automatic Data Processing is an even more consistent growerthan CokeŠ34 years of double-digit earnings growth every quarter,and all it basically does is handle other companies' payrolls.You had a great chance to buy it in 1989 and again in 1990, whenthe P and the E converged, but since that time, optimistic investorshave bid up the P and widened the gap.

Philip Morris is another fast grower that Wall Street givesno respect. It's a chronically underpriced growth stock whoseP stays well below the E most of the time. Investors continuouslyworry that Philip Morris will lose billions in lawsuits broughtby smokers. Yet in spite of its underachieving P, the stock is up tenfold in ten years, thanks to the spectacular rise in theE. If Philip Morris maintains its earnings growth, investorswill make money no matter what Wall Street thinks. Without thethreat of lawsuits, the stock would be worth $120 on earningsstrength, as opposed to the $90 it fetches today.

Now, General Motors. Can you see why this chart doesn't fitwith the others? The E wobbles all over. It's the typical courseof a cyclical company, as unpredictable as a hurricane's path.From 1984 to 1989, GM's E was far above its P, yet the P neverrose to meet it because investors didn't believe the prosperitywould continue. They were right: From 1990 to 1992, the E felloff the chart. GM was losing billions. Today, the E has movedback to the top of the chart, but judging by the sluggish P,investors are doubting it will stay put. GM has cut costs and revamped its operations. There's a chance the E will continueto advance and GM will ride out the next recession in the black.If that happens, investors will probably value earnings morehighly in a subsequent recovery. It's a stock I own.

After saying so much about charts, I must issue the following disclaimer: I'm not a technical analyst, or a wiggle reader who makes predictions on the direction of the next wiggle. I usecharts to help me find value among growth companies I follow.

I'd be the last person to suggest using these charts to sell your growth companies every time they looked way overpriced.Instead of investing for the long term, you become a market timer.But if you've got an extra pile of money to invest, and you seethat your favorite growth company's P has far outdistanced itsE, you might want to hold off on buying the stock until it becomesmore reasonable. "Buy on strength," advisers may tell youŠbutthe charts show it's a lousy strategy.

Do-it-yourselfers can plot their own charts with the help of the National Association of Investors Corporation, an umbrella organization for more than 18,000 investment clubs. They evenhave the graph paper with properly aligned price and earningsscales. For details, call 810- 583-NAIC.

Peter Lynch writes Investor's Edge with John Rothchild, and is vice- chairman of Fidelity Management and Research. Their thirdbook, Learn to Earn, was recently published by Simon & Schuster.

96/04-The 5 Percent Solution

Thanks to a diligent reader, a crucial adjustment to the stay-in-stocks strategy

By Peter Lynch

Last September's cover story, "Fear of Crashing," drew more response than any other article I've written. The subject was how to weather a stock-market correction, which many pundits said was imminent as the Dow hit 4700. By mid-February of this year, the Dow had risen to 5600, so a 16 percent correction would have taken it back to the 4700 that people were worrying about when the piece was written.

This supports the main point I was trying to make: Corrections are unpredictable. By selling stocks to avoid pain, you can miss the next gain.

The most thoughtful and challenging response to "Fear of Crashing" came from Scott Burns, a columnist for The Dallas Morning News. Burns found a flaw in my argument that an investor who needs income can use a stock portfolio as a bond substitute, boosting the yield when necessary by selling shares out of the portfolio. His column ran under the headline "Peter Lynch's Stock Theory May Be a Bust."

Here's the plan as I presented it. Let's say you have $100,000 to invest and you want to produce a $7,000 income stream. That's 7 percent a year. The normal course of action would be to buy a 7 percent bond that matures at a much later date: 20 years or longer. But suppose you reject that option and put the $100,000 into a portfolio of dividend-paying stocks or into a growth-and-income mutual fund that owns dividend-paying stocks.

At the end of the first year, you get $3,000 worth ofdividends from your portfolio, leaving you $4,000 short onthe income stream. You make up the difference by dipping into capital and selling $4,000 worth of shares inthe stocks or the mutual fund you bought 12 months earlier.

In financial circles, dipping into capital is a no-no, but in this case, if you accept certain assumptions, it makes sense. You have to believe that stock prices will continue to rise over time and that companies will continue to raise dividends at the same rate. You have to believe that stocks will produce a total return of 10 to 11 percent a year, on average, as they have in the past.

You might be forced to dip into capital for several years to engineer the 7 percent return, but as the companies in your portfolio raise their dividends, eventually you'll get $7,000 without having to sell any shares. Twenty years later, if stocks behave as advertised, the portfolio will be worth $349,140, so you will have more than tripled your money on top of the annual $7,000 you extracted. If you bought a $100,000 bond, the most you could hope for is your to get $100,000 back.

In a bull market, this plan is a cinch to succeed--last year, for instance, when the total return from stocks was 37 percent, you could have withdrawn $7,000 and still come out $30,000 richer. My chief concern was how it would work in a bear market. I asked a number cruncher to crank up the computer, and we tested two nightmare scenarios. In the first, stock prices drop 25 percent the day after you invest the $100,000. In the second, stocks and dividends rise at half the normal rate for the next 20 years. As I reported in "Fear of Crashing," the computer's verdict was thumbs up. In the first hypothetical case, you could take home your annual $7,000, and two decades later you'd be looking at a portfolio worth

$185,350. In the second, you'd end up with $100,000, so you'd get back the same amount as you would have from a bond. This is where Scott Burns had his doubts.

With the help of a couple of brokerage houses, Burns tested the plan on the Standard & Poor's 500 and other stock indexes going back to the 1960s. Using data from real life, Burns found a worse worst-case scenario than my two imaginary ones: the Papa Bear market of the early 1970s. In that disaster, stock prices dropped a quick 40 percent and didn't regain their lost ground until the early 1980s. Any hapless investor who had bought at the top and followed the plan, withdrawing $7,000 a year, would have gone broke. By the time the next bull market rolled around, there would have been no money left in the account.

On the off chance that Burns's computers had caught a virus, I sought a second opinion on his second opinion of my first opinion. John McAllister, at the Boston-based Keystone group of mutual funds, agreed to run a test on Keystone's Growth and Income Fund, also known as S-1, which goes back to 1935 and has had a habit of paying a regular dividend. The results were disappointing. If you put $100,000 into S-1 at the peak of the market in January 1973, and extracted $7,000 every year thereafter, you were penniless by 1991.

Burns deserves kudos for bothering to figure this out. Clearly, it's not safe to withdraw $7,000 from a stock portfolio or a stock mutual fund if you had the bad luck to buy on the eve of a 40 percent correction leading to a 10-year bear market.

Now, I chose this 7 percent figure arbitrarily. If I'd given it more thought last fall, I would have remembered that hospitals, museums, universities, etc., customarily take a 5 percent annual draw, as they call it, from their endowments. The fiduciaries who manage those endowments are a cautious bunch. They must have chosen 5 percent for a reason.

With that in mind, I asked Keystone to test a 5 percent annual draw from the S-1 fund, assuming one had the misfortune of buying at prePapa Bear market prices in 1973. After five years, a $100,000 investment was reduced to $52,671, but eventually, stocks rallied enough to overcome this double whammy of declining prices and regular withdrawals. After 20 years, the portfolio was worth $107,653, so at least there was a $7,653 profit.

Granted, a 5 percent annual return on a $100,000 investment over 20 years, plus a $7,653 capital gain, is nothing to marvel at. But we're talking about the worst-case scenario since the crash of 1929. Stocks in 1973 had a long way to fall, because they were selling for ridiculous prices--for instance, 90 times earnings for Polaroid, 83 times earnings for McDonald's, and 76 times earnings for Disney.

Today, the Dow is selling at 16 times its 1996 earnings as projected by Wall Street analysts, which puts it in the middle of the range of 10 to 20 times earnings, where it has roamed for 50 years. If the Dow went to 15,000 next week and you put $100,000 in the market, I guarantee you'd be unhappy with the results of a 5 percent withdrawal plan--or a 0 percent withdrawal plan, for that matter. Then the market would be selling for 45 times earnings, and a nasty correction would be inevitable. Otherwise, you'd have stock prices going sideways for 12 to 15 years while the earnings caught up to them. As long as people are willing to pay foolish prices for things, no plan is foolproof.

That said, the 5 percent withdrawal plan seems to work well at least back to 1960; in the worst case you made a little money and in the best case you made a lot of money. If your timing was right and you bought S- 1 at the beginning of the bull market in 1982, then by the end of last year you would have had $360,314.

By the way, Burns wrote a sequel to his second opinion, in which he tested a 6 percent withdrawal rate on the Lipper Growth and Income Fund Index, going back to 1965. In the worst-case scenario involving that index, if you invested $100,000 and withdrew $6,000 a year, you ended up with $133,869, and in the best-case scenario, you amassed $914,682, which is a big improvement over the $100,000 return of principal from a bond.

THE BASICS HAVEN'T CHANGED

As long as I'm revisiting an old topic, I can't resist a chance to repeat some key points in brief, in case somebody out there missed the sermon. Here are some things to think about.

*If timing the market is such a great strategy, why haven't we seen the names of any market timers at the top of the Forbes list of richest Americans?

*People who exit the stock market to avoid a decline are odds-on favorites to miss the next rally. If you don't believe corporate profits will continue to rise, and you can't stomach a decline in the market, don't buy stocks or equity mutual funds.

*If you were out of stocks in 40 key months over the past 40 years, your annual return on investment dropped from 11.4 percent to 2.7 percent. You underperformed your savings account.

*In this century, we've had 53 corrections of 10 percent or more, roughly one every two years. We've had 15 corrections of 25 percent or more, roughly one every six years. These setbacks are normal and come with the territory.

*A stock certificate is not a lottery ticket. Behind every stock is a company. Stock prices go up 8 percent a year, on average, because corporate profits go up 8 percent a year. Add in the dividend yield of 2.5 percent (today's levels) and stocks give you a total return of 10.5 percent. Dividends are raised, on average, by 8 percent a year, right along with corporate profits.

*Even if we go into a long economic slump during which corporate profits grow at only half the normal rate, or 4 percent a year, stock prices should follow suit, rising an annual 4 percent a year. Assuming the 2.5 percent dividend, you would still get a 6.5 percent return, which is better than a 6 percent bond.

*Stocks outperformed bonds in eight out of the nine previous decades in this century, and they are well ahead halfway through this one.

*Since 1965, if you bought stocks once a year and were unlucky enough to pick the worst day to invest (when stocks were at their highest prices) 30 years in a row, you ended up with an annual return of 10.6 percent. If you were incredibly lucky and invested on the best day of the year 30 years in a row, you ended up with an annual return of 11.7 percent. So the difference between perfect timing and horrendous timing is 1.1 percent. This timing business is much ado about very little.

*In a correction or a bear market, great companies, good companies, mediocre companies, and terrible companies all see the prices of their stocks decline. A correction is a wonderful opportunity to buy your favorite companies at a bargain price.

Peter Lynch writes "Investor's Edge" with John Rothchild, and is vice- chairman of Fidelity Management and Research. Lynch and Rothchild's third investment book, "Learn to Earn," was recently published by Simon & Schuster. The opinions expressed in this column are strictly those of Peter Lynch, and do not reflect the opinions of Fidelity Investments.

96/06

In Defense of the Invisible Hand

Difficult as layoffs are, they happen for good reasons -- and produce results we wouldn't want to live without

By Peter Lynch

Has the invisible hand ever been so invisible as it is in our country today? I'm referring, of course, to Adam Smith's notion that the market forces of capitalism will produce the best results -- economically and socially -- if they are simply left alone. These days, everyone seems to have forgotten Adam Smith. The press is fixated on layoffs and business avarice.

"Call it 'in-your-face capitalism,'" Newsweek barked. "You lose your job, your ex-employer's stock price rises, the CEO gets a fat raise." The sentiment was echoed by Business Week. And TheNew York Times logged in with a seven-part series that focused on two groups of people: those who had gotten the ax and those who still had jobs but were worried the ax would fall on them next. The employed and the unemployed alike were depicted as victims of corporate greed. CG has become such a hot campaign issue that even the Republicans have been denouncing it.

It goes without saying (although I'll say it anyway) that there's nothing happy about somebody losing a job, especially if that somebody has no immediate prospects for finding another one. Only an ice sculpture would not feel compassion for the thousands of workers getting pink slips from AT&T;, or the three million who were let go by the 499 other Fortune 500 companies in the 1980s, or the next three million who will be idled by the end of the 1990s. That these widespread layoffs have created widespread financial and emotional hardship is beyond doubt. What I doubt is the conclusion that some people appear to be drawing from all this -- namely, that capitalism is evil and exists to spread misery by separating people from their livelihoods.

Job insecurity has been a problem for as long as people have depended on a paycheck. In the last century, half the U.S. population lived and worked on farms, so we've already lost two-thirds of the farming jobs. At one time, there were more than 200 manufacturers in the auto industry; at another point, the steel industry employed one of every 100 workers. Today, we have a handful of auto companies and two-thirds of the steel jobs have disappeared, but somehow the country has managed to survive and prosper.

Many companies can and should do more to help the recipients of pink slips get the training and referrals they need to catch on someplace else. But the pessimism aroused by layoffs per se simply isn't justified. We got a similar dose of pessimism in the late 1940s and into the 1950s, after the war was over and 10 million to 20 million Americans lost their war-related jobs in the defense industries. More than a third of the workforce had to find employment elsewhere. Life looked bleak for millions of workers.

Today, there's also an ominous sense that the recent pace of layoffs in the big-name companies will continue. More likely, we are closer to the end of the dismissals at places like AT&T.; These companies can't run on zero employees. Moreover, most of the reductions are not as heartless as they look, because they are accomplished through normal attrition: People retire, they change careers, they move elsewhere.

Again and again, new opportunities have arisen to take the place of the lost opportunities. This is the way the capitalist ecology works. Industries decline, old companies wither away, and young companies rise up to replace them. This process is hard on many, but ultimately, it is healthy.

The strength of our economy is that it is dynamic and always adapting to changing conditions. That's our advantage in the world. That's the reason we're as creative as we are as a nation. We're number one in music, television, and movies. We're the low-cost producers in forest products, paper, aluminum, and chemicals. We're tops in software, robotics, cellular phones, pharmaceuticals, electronics, telecommunications, and farm equipment. We excel at genetic engineering, microprocessing, and networking.

Helped partly by a falling dollar and also by a revived domestic business climate, our share of the export market is rising. We ship steel to Seoul, transistors to Tokyo, cars to Cologne, spandex to Siena, and bike parts to Bombay. Seven hundred million men and women worldwide shave with Gillette. The skies are filled with Boeing aircraft. Japan may have been the master of memory chips, TVs, and fax machines, but the Japanese can't keep up with the brainstorms coming out of U.S. companies like Intel, Texas Instruments, Cisco Systems, Sun Microsystems, Novell, Bay Networks, and Microsoft. We dominate every phase of computing, from software and hardware to printers and workstations.

The improvements in productivity achieved by business in this country have benefited nearly everyone in some way. Consider what's happened to the telephone industry. In 1983, AT&T; was a monopoly with a million employees. Today, among Ma Bell and the seven Baby Bells, there are 750,000 employees. These 750,000 are handling twice as many calls as their counterparts did in 1984 -- plus all the data, fax, and cellular exchanges that didn't exist in 1983. People are paying less for phone calls and getting more for their money.

It's amazing that the basic cause of the downsizing is so rarely acknowledged: These companies have more workers than they really need -- or can afford to pay. CEOs aren't callous Scrooges shouting "Bah humbug" as they shove loyal workers out the door; they are responding to a competitive situation that demands they become more productive. Would we be leading the world in so many industries if capital and labor were trapped together in outmoded, inefficient businesses with millions of workers holding down unnecessary jobs only for the paycheck? That was the situation that helped cause the collapse of the Soviet Union.

In spite of the continual process of certain industries' shedding their excess workers, America has been expanding the workforce at a record rate. According to the Bureau of Labor Statistics, we've added 54 million jobs in this country since 1965, so nearly half the jobs that exist today didn't exist 30 years ago. The nations of the European Union, with nearly a third more people than the U.S., have added a fifth as many jobs over that same period.

That means we're about 40 million jobs ahead of the Europeans, who for the longest time were held up as a model of efficiency and humanity in labor. Yet they've got 11 percent unemployment to our 5.6 percent, and nearly 20 million Europeans are now out of work. The United Kingdom's job rolls have barely grown (and by some accounts they've actually shrunk) since the Beatles cut their first album. What do these numbers tell us about the comparative strength of our economy versus theirs?

There's no doubt some people have been forced into lower-paying jobs, and one group is clearly worse off than it was in 1965: the people whose education stops at high school or below. That's because steel companies and other heavy industries are no longer hiring high-paid unskilled labor. Much of the assembly-line work has been automated.

But the myth that corporate chieftains squeeze labor to fatten their own paychecks is just that: a myth. When health-care and other benefits are added to the equation, U.S. workers are paid a bigger share of corporate revenues than they were in the 1950s and the 1960s, which are regarded nostalgically as the heyday of American labor. Meanwhile, corporate profits are actually lower now than they were then by a large margin: 10 percent of revenue in the 1950s; 5 percent today.

From time to time, you'll find a corporate type who tries to profit at the expense of the business; we saw that in some of the leveraged buyouts of the 1980s. But as a rule, the self-interest of the CEO and the interest of the company are identical. The executives, the shareholders, and the people on the assembly line are basically in the same boat. Ask yourself this: Where is it more rewarding to work, at a struggling Kmart or a thriving Microsoft?

If we must blame somebody for the layoffs, it ought to be you and me. All of us are looking for the best deals in clothing, computers, and telephone service -- and rewarding the high-quality, low-cost providers with our business. I haven't met one person who would agree to pay AT&T; twice the going rate for phone service if AT&T; would promise to stop laying people off. These companies are responding to the constant pressure from consumers and shareholders.

By the way, the competitive pressures that companies face don't necessarily come from abroad. AT&T; isn't worried about losing customers to Telfonos de Mexico or Philippine Long Distance. It's worried about losing customers to MCI, the cable systems, the Baby Bells, and a slew of small companies (called resellers) that offer discount phone service.

Let's look at the market forces in action. Older companies in established industries are struggling to keep up with the times. Younger, more aggressive companies are challenging the older companies or starting new industries from scratch. The jobs lost when the older companies falter are made up and then some in the younger companies that succeed.

Business today is criticized for being heartless and greedy, but it was lambasted for being soft, lazy, and out of touch with reality not long ago. In the mid-1980s, we learned that the Japanese made better products than we did, and that the Germans worked harder than we did, and that while our corporate leaders were thinking about their golf scores and getting a good table at Lutce their corporate leaders were plotting how to outsell and outproduce us.

Detroit was the target of much of the criticism, and it deserved what it got. The Big Three auto companies made second-rate cars in run-down factories as the unions pressured them to pay higher and higher wages, which were tacked onto the price of the cars. So consumers got less car for more money, until the Japanese and the Germans arrived and offered more car for less money. Millions of once loyal domestic car buyers defected to foreign brands, and the auto industry became a symbol of the decline and fall of U.S. industry in general. From 1979 to 1982, Chrysler was in a more or less constant state of crisis, with bankruptcy a serious threat. Chrysler was saved by strong leadership, layoffs, cost cutting, and an impressive lineup of new products (the minivan, the K-car, the revamped Jeep, etc.). It did get $1.5 billion in federally guaranteed loans in 1980 (which made it possible for the company to actually produce the cars that would save it), but it paid off every dime. The strong leader was Lee Iacocca, and the turnaround he orchestrated was so successful that he deserved every penny of whatever Chrysler paid him.

Without Iacocca, it's quite likely that Chrysler would be as extinct as Studebaker or Nash. But it is alive and solvent enough to support perhaps 500,000 workers, if you count its 126,000 employees plus those of its suppliers. That's a huge number when you consider there are only 18 million manufacturing jobs left in the U.S. Last year, Chrysler employees got an average of $3,200 in profit-sharing bonuses.

Other manufacturing companies followed Chrysler's lead in downsizing, cutting costs, and developing new products. Few were in as desperate a fix as Chrysler, but they had all struggled through the recession of 1982. They decided to make big changes that would free them from the old routine of adding workers in good times and laying them off in bad.

The urge to become more productive with a smaller workforce spread from manufacturing into retailing, pharmaceuticals, banks, financial services, and, most recently, newspapers and entertainment. Even when companies posted record earnings, they put themselves through the Chrysler drill (cut costs, make better products) to prepare for tougher times ahead. They wanted to avoid the fate of some very large companies that had failed to prepare and were lost in Chapter 11.

As a result of this efficiency campaign, the U.S. labor force has become the most productive in the world. According to the most recent numbers from the Bureau of Labor Statistics, the average American worker produces $49,600 worth of goods per year, $5,500 more than the average German and almost $12,000 more than the average Japanese. This extra productivity gives a company a lot of options.

Let's say it builds a new plant, where the same work crew from the old plant can increase the output by 15 percent. It can use that 15 percent to give employees a 5 percent raise, making the workers happy; to lower prices by 5 percent, making customers happy; and to still increase profits, making the shareholders happy. Of course, the productivity windfall could be divided up in different ways, but the point is that there are multiple benefits to becoming more competitive.

If you ask me, we have two key factors to thank for whatever prosperity we have enjoyed as a nation in recent years: Enough large companies have continued to do well, la Chrysler, while small companies have blossomed. Without one or the other, we'd be in a sorry state.

A list of 25 large companies that have managed to stay in top shape appears on page 90. Many names could have been included, but these are some of the standouts. A few have overcome serious trouble. Others are in the process of turning themselves around. Others have kept up their earnings growth against the odds. Others have accelerated their growth rates, which is a rare feat for a giant enterprise such as Coca-Cola.

Hewlett-Packard is one of the companies that hit the accelerator. In 1975, it was a manufacturer of testing and measuring equipment, one-fifteenth the size of IBM, with annual sales of $981 million. In 1995, its sales were $31.5 billion, only 10 percent of which came from the testing and measuring divisions. The vast majority of sales ($25.3 billion) came from printers and computers. Hewlett-Packard is now half the size of IBM, a leader in printers, and ranked sixth in computer sales worldwide, even though as late as 1983 it had never made a printer. It was reinvigorated by employees who were encouraged to dream up new products.

Lumped together, the 25 companies on the list have doubled their sales and profits in the recent decade. They've also cut 363,000 jobs, making them likely targets for negative publicity about the downsizing disease, but I cringe when I try to imagine the troubles we'd have if they hadn't downsized and created better products. A few big bankruptcies in the Fortune 500 are all it would take to stretch the unemployment lines around several blocks. Instead of 3 million jobs lost in the 500 largest companies, we might have lost 10 million or 15 million.

While the innovative large companies have been holding up their end, the small companies have been blossoming remarkably. No one has an exact count on how many jobs they've generated, but we do know that 6.3 million new businesses opened their doors in the U.S. in the 1980s alone.

Among these 6.3 million new businesses is an elite group of high achievers. Twenty-five of the most successful are listed on page 92. All but one (Cabot) went public in the past two decades. Had we packed the list with the all-stars of the computer industry, the performance of the group would have looked even better. But we chose a representative sample from different industries to show that companies of all kinds can grow up very fast in America. We included a toy company, a payroll processor, an airline, even a company that makes the carbon black used to strengthen tires. That's Cabot, which went through a difficult period but turned itself around.

In 1985, these 25 small companies had sales of $31.4 billion combined, less than half the sales of Exxon alone. Their combined earnings were one-quarter of IBM's earnings. They employed 368,000 workers, while the 25 firms in our large-company category employed 2.6 million workers.

By March 1996, the small companies had sales of $260 billion and employed more than 1.4 million workers. So while our 25 large companies were cutting 363,000 jobs, the smaller group was adding more than a million.

Wal-Mart was small enough to make the small-company list in 1985, but today it is bigger than every company on the large list except Exxon. Toys 'R' Us was a medium-sized company in 1985, but now it has more sales than Gillette or Colgate and 22,000 more employees than Goodyear. Amgen didn't exist in 1975, and in 1985 it employed 200 people. Today, it makes a pair of $200 million pharmaceuticals, Neupogen and Epogen, which helped Amgen earn more than $538 million in 1995.

Behind each of these companies is a leader or a couple of leaders who had the vision and the gumption to do something different. Thomas Stemberg took the business plan he wrote after getting fired from his job with a grocery chain and turned it into Staples, which has 25,000 employees. The $3 billion company he has created will be a $10 billion company by the year 2000. Herb Kelleher turned a hub airline into the powerful Southwest Airlines, which employs almost 20,000.

Some people think Federal Express followed the pony express, but in 1973 it was an idea rattling around in the head of Frederick W. Smith. Smith revolutionized the delivery business. When Bill McGowan and Bert Roberts at MCI dared to compete with AT&T; in the long-distance market, people laughed at them. For ten years, MCI lost money, but it has survived and succeeded. Because of MCI's competition, we all pay less for long distance.

Twenty years ago, Nucor was a small steel manufacturer whose embrace of a new technology called thin-slab casting allowed it to thrive when other steel companies were stumbling. Chairman Ken Iverson pays his workers based on the company's performance, and today Nucor is the country's fourth-largest producer of steel. By 2000, it will outproduce USX, which back when it was U.S. Steel was the first billion-dollar company in U.S. history.

Without small companies flourishing underneath the big companies, the U.S. could easily have 15 percent unemployment instead of the recently reported 5.6 percent. Then we'd be in worse shape than the countries of the EU, where large companies have resisted laying people off and where 19.6 million people (10.9 percent of the workforce) are out of work. By being paternalistic and refusing to cut costs and innovate, Europe's big companies have stagnated. Small companies are simply hard to find. The 2,740 small companies that have gone public in the U.S. in the 1990s are probably more than Europe has created in the nine centuries since Charlemagne.

My guess is we're in the seventh or eighth inning of downsizing, while Europe has just entered the second or third inning. They've begun the painful process that we are close to completing, and they're doing it with 20 million people already out of work. They'll need a stronger drug than Prozac to help them cope with the problems that lie ahead.

Of course, we don't lack for problems, either. Our overall economic growth has lagged the growth rates of other periods in our history, and our lowest-paid workers are bringing home a smaller paycheck (adjusted for inflation) than they did 25 years ago. We've got high crime and high unemployment in the inner cities, where half the children never finish high school. Our dropout problem deserves the kind of attention the layoffs have been getting, and business is not doing enough to help with a solution. There are next to no dropouts in Taiwan and Korea, and those countries will have a big advantage over the U.S. in the next century because of it.

But when it comes to job growth, ours is the most dynamic economy in the world. I think much of the pessimism about the 1990s may turn out to be misplaced.

Peter Lynch has written three books with John Rothchild; parts of this article are adapted from the most recent, Learn to Earn, published by Simon & Schuster. The opinions expressed in this article are strictly those of Peter Lynch and do not reflect the opinions of Fidelity Investments.

KEYWORDS: International Economy, Employment, Economy, Stock Investing Strategies

96/10

Self-Service

By Peter Lynch

Gas prices are headed just one way. Get the difference back, and more, with oil company stocks.

In this space back in February 1995, I made a case for the possible revival of the oil-service companies—the drillers and rig operators that Wall Street had left in a scrap heap. It turned out that the survivors shook off the rust and ironed out the balance sheets—which was a pleasant surprise to investors in Schlumberger , Halliburton, Western Atlas , and some others. The analysts I talked to at the time were optimistic about energy services, and it looks like they had the right idea. Schlumberger has gained 62 percent in about 20 months. Western Atlas is up 40 percent. Shares of Global Marine have risen almost fourfold, to $15 from $4.

Now is a good time to deliver what I promised in that earlier column: a follow-up on the rest of the oil-and-gas industry, namely the refiners, the pure producers, and the integrateds, which find, pump, refine, and sell oil and often do more besides. These three groups—which account for 90 percent of the oil business worldwide—include thousands of tiny companies with oily holes in the ground, plus the big names at the gas pump: Exxon, Mobil, Chevron, British Petroleum , Texaco, and Royal Dutch/Shell.

Oil is a timely subject on several counts, beginning with the current 3.8 percent dividend yield on the major oil stocks, which is nearly double the yield on the Standard & Poor's 500 Stock Index. (Dividend yield increases, of course, when a company raises its dividend more rapidly than the market bids up the stock price.) The relatively high yield in the sector is evidence that oil companies did not keep pace with the market in the past decade. This is the widest spread between oil yields and the S&P; yield in 45 years, suggesting either that oil companies are in lousy shape (which they aren't) or that Wall Street is giving them less credit than they deserve.

I'm reminded of the Baby Bells, which also lagged the market in the early 1990s and then had a nice rally. The parallels between the six Bells and the Six Sisters (the big names at the gas pump mentioned above) are intriguing. Both were created in antitrust breakups: AT&T; in 1984 and Standard Oil Trust in 1911. Both are widely held by individual investors and narrowly held by the pros at the institutions. In fact, only two of the Six Sisters appear in the top 20 holdings of equity mutual funds, according to the research firm CDA/Spectrum.

For this to become another example where the public is right, crude prices will have to rise from here. Just as there's no sense owning Kellogg's if you're bearish on cornflakes, there's no sense owning oil companies unless you're convinced that oil has a profitable future. On that subject, I'm not about to make any brash predictions, but I've begun to notice signs that the trend may be up—not for next month or next year, necessarily, but sometime before the Icelandic beach-volleyball team wins the gold medal.

On the demand side, you've got the commuters of the emerging nations driving more cars more often and developing an American appetite for high octane. Meanwhile, U.S. residents are holding up our end as the undefeated champs of gas guzzling. It seems like the 1970s all over again, with off-road vehicles as big as tanks and oxymoronic minivans filling the lanes where tiny Volkswagen Beetles once crawled.

The national speed limit was raised to 65 with hardly a peep from the energy-conservation faction, and this, along with the bigger cars and the widespread boredom with switching off the lights in empty rooms, will surely result in more barrels burned.

The daily world demand for oil now exceeds 70 million barrels, more than double the 31 million barrels a day we turned into heat, speed, and exhaust 30 years ago. More promising than that for oil investors, the annual rate of increase in demand has accelerated from 1.5 percent over the past decade to a projected 2.5 percent for the next two years.

There's no doubt the latest high-tech methods of drilling and exploring will capture oil in areas that were thought to be tapped out—it's already happening in parts of the North Sea and the Gulf of Mexico. But so far, the fancy probes with longer straws haven't produced enough oil to reverse an obvious and long-term decline: U.S. oil production peaked during the Nixon administration at ten million barrels a day. Today it's 6.5 million.

The price of oil went through the roof in the early 1970s, after the Arabs declared an embargo and stopped pumping. Adjusted for inflation, the price has gone nowhere since that expensive trauma. Because oil has been cheap all these years, people have begun to think we'll have cheap oil forever, the same way they thought the price would go up forever when it rose to $40 a barrel during the embargo. As it turned out, their predictions of $100 a barrel were completely off base, because the $40 price stimulated so much production among suppliers and conservation among consumers that it's taken a quarter century for demand to catch up to supply.

Because the cycles are very long, it's easy to forget that oil and natural gas are cyclical commodities that move with the vagaries of supply and demand. Today, we've got tight supplies and low reserves in both oil and natural gas, while demand continues to grow.

Stock pickers have Saddam Hussein to thank for the bargains that can be found in the oil sector on Wall Street. The threat of Iraq's opening the valve on its big pipeline has been weighing on these shares since the Gulf War. For four years, investors have worried that the world will be glutted with oil and the price will collapse as soon as Saddam resumes pumping. But if Saddam had continued to pump at the prewar rate of 3.5 million barrels a day, they wouldn't be worried. Meanwhile, worldwide consumption has grown by two million to three million barrels a day since the war, so the increased demand has already sopped up Iraq's potential supply.

If you expect oil or gas prices to go higher and you want to take advantage of it in the stock market, there are two ways to proceed. You can invest in the giant integrated companies, such as the Six Sisters, or you can sink your assets into the smaller, so-called pure producers, of which nearly 300 are publicly traded. Both strategies have potential merit. Investing in the integrateds is likely to be a safer bet with a more modest potential payoff. The pure producers are riskier, by and large, but they offer a more spectacular payoff if you invest in the right one.

The integrated companies are multinationals that work both ends of the pipeline, from the "upstream" wells and deposits through the refineries and neighborhood filling stations "downstream." And many of them have large petrochemical operations that at times produce substantial profits. Of the top 15 oil companies in the world, Exxon is the largest that's publicly traded.

The Six Sisters have reduced debt in recent years, and their dividend payout is a comfortable percentage of their cash flow. Their aggressive cost cutting enables them to make a profit on a lower price of oil. However, the strength of the Exxons and the Mobils is also their weakness. While their size and their clout protect them in hard times, they also hold these companies back when conditions are favorable. Mobil is a perfect example. Since it refines almost three times as much oil as it produces, Mobil is a buyer of oil as well as a seller, so a higher oil price doesn't automatically translate into higher earnings. What it gains selling oil downstream, it may lose buying oil upstream.

A more serious drag on Mobil's potential gain from higher oil prices is that it is also a chemical company. This helps when the chemical business is good, but lately it's been sluggish. Otherwise, Mobil and the other integrateds might be doing better in the stock market, given the sharp rise in the price of oil.

You won't find either the pluses or the minuses of diversity with the pure producers. These companies work the upstream side of the pipeline, finding oil and then selling it. They run the gamut from low-budget operations with six employees, such as Bellwether Exploration, to midsize companies, such as Apache and Burlington Resources, which have around 2,000 employees each—still quite small when compared with Exxon's 90,000.

Unlike the integrateds, pure producers can't be counted on to pay a steady dividend or even to stay in business if oil prices fall below the point where they can afford to pump it. But if oil prices take a jump, these stocks will tend to follow the same trajectory.

I contacted several top analysts who cover the integrateds and the pure producers. Here are a few of their candidates for investment, starting with the small companies.

Mike Barbis at UBS touts Noble Affiliates (NYSE: NBL), based in Ardmore, Oklahoma. What he finds most attractive about Noble is that it owns more natural gas than oil; Barbis is more optimistic about natural-gas prices than oil prices. Noble earned 35 cents a share in 1995, and Barbis expects it to earn $1.50 this year and $2.05 in 1997. He also likes Louisiana Land and Exploration (NYSE: LLX), which has cut its production costs for oil from $9.27 a barrel to $7.20. Jim Clark at CS First Boston likes a Texas refiner called Valero Energy (NYSE:VLO).

Many pure producers are found in Canada. Martin Molyneaux at FirstEnergy in Alberta likes Canadian Occidental Petroleum (AMEX:CXY), a subsidiary of U.S.–based Occidental Petroleum. Among smaller companies, he likes Alberta Energy (NYSE:AOG) and Renaissance Energy (Toronto:RES).

Of the big companies, Michael Mayer from Schroder Wertheim likes Mobil (NYSE:MOB) and Texaco (NYSE:TX), to which he has assigned target share prices of $127 and $94, respectively—bumps of 14 percent and 9 percent from where the stocks are trading as I write. Jim Clark likes Unocal (NYSE: UCL)at its current price of around $34 a share. He's also recommending Texaco and Chevron (NYSE: CHV). He sees a jump in Texaco's earnings from $3.90 a share in 1995 to $5.55 in 1996 and $6.10 in 1997. Other analysts are projecting similar jumps for many companies in the oil group.

Remember my mention of the underweighting of these stocks among institutions? If good earnings reports convince institutional buyers that they've been wrong about oil, they'll rush in to buy. That will be nice for the individual investors who get there before the big players do.

And there's one more potential attraction to the integrateds: They may add ballast to a portfolio, because oil companies often thrive on bad news, such as wars. The oil embargo of the 1970s was a shock that seemed to come out of nowhere. Who knows where the next disruption could arise: a revolution in Saudi Arabia, a shutdown of the Soviet oil fields, an uprising in Venezuela? An oil crisis could even result when Japan or Germany emerges from its economic woes. It would take a shortage of no more than a million barrels a day to produce another shock in which oil and gas stocks would likely go up while most stocks were going down.

Peter Lynch writes "Investor's Edge" with John Rothchild and is vice- chairman of Fidelity Management and Research. Their third book, Learn to Earn, was recently published by Simon & Schuster.

97/01

Pain and Gain

By Peter Lynch

Letters have been piling up on my desk since December 1995, the last time I devoted a column to readers. Again, I want to thank everyone who took the time to write. The volume of correspondence makes it impossible for me to respond personally to all your questions and comments, but I have chosen a few to answer here.

On your recommendation, I purchased Au Bon Pain for $26.25 a share in January 1994. As of October 1996, the stock has fallen to six dollars. Is it worth holding, or should I sell and take the loss? Robert Schnell, Goshen, Indiana

Au Bon Pain has been a pain in the wallet -- although, if it's any comfort, I've made several recommendations over the years that were worse. The stock in this bakery-style café chain got off to a good start: from $9 a share at the initial public offering in mid-1991 to over $26 a year and a half later. Now it sells below the IPO price. Since I bought some for $22.75, you and I made the same mistake. Both of us should have paid more attention to earnings, which at one point were estimated at 80 cents a share for 1994. This gave the company a price- to-earnings ratio of almost 30, which readers of this column will recognize as on the high side.

If a company manages to increase earnings at 25 to 30 percent a year, then a p/e of 30 isn't too much to pay. But here's the catch: Au Bon Pain's earnings came in at 67 cents in 1994, then disappeared into a loss of 14 cents a share in 1995. Two things went wrong: Starbucks showed up as competition, along with all its clones and a zillion bagel shops, and at the end of 1993, Au Bon Pain acquired St. Louis Bread, a chain of bakery/restaurants where the costs rose faster than the loaves.

Whenever a company does as poorly as this one has, and you own it, the first thing you want to check is its finances. Can it survive the bankers and creditors long enough to turn itself around? On that score, Au Bon Pain gets a B minus -- not great, but okay. It has borrowed $75 million, but the balance sheet shows about $94 million in equity. More equity than debt is comforting. So is the eight-dollar-a-share book value.

Next, you check what the company is doing to solve its problems. Au Bon Pain has been successful in downtown areas but not in suburbs, so management is concentrating on the former. Of the 281 outlets, less than 5 percent have been duds, and these are closing. The others have worked out. Whenever I go into one, it's crowded.

St. Louis Bread has been the real source of trouble because the chain grew too fast and expenses got out of control. But people seem to like these family-style restaurants, which feature fresh-baked breads. The same-store sales are growing at double-digit rates. This year, an experienced restaurant team was brought in. A new bread factory (where raw dough is made) should be up and running by the time this article hits the stands. Getting the factory on line is costly in the short term, but once the bugs are worked out, the factory has the potential to reduce costs substantially and add to earnings.

Finally, you want to ask: What's the upside here if all goes well? Au Bon Pain is adding new outlets abroad, but St. Louis Bread is the key to the company's future. If that franchise can expand from 33 restaurants to 250 or even 500, it's not hard to imagine Au Bon Pain as a very big winner. To buy this stock now, or to hold on to it, you have to believe in St. Louis Bread.

Put me in the believer camp. I still really like the dedication and skill of top management. I bought more shares in August, September, and October.

I must take exception with a few of your comments with respect to market timing. Market timing, as it is practiced by the majority of investment advisers, is a risk-management approach to investing. It enables risk- averse investors to participate in the superior returns of the stock market at a reduced risk level. Jerry C. Wagner, Aurora, Colorado Society of Asset Allocators & Fund Timers

The only problem with market timing is getting the timing right. I haven't met many people who've done it successfully. Maybe once in a row, but not consistently. There's no telling how many timers miss big gains in stocks by making ill-timed exits. Look at the number of hedge- fund managers who've left the business since 1990.

If you had missed the 40 biggest up months on the Standard & Poor's 500 Stock Index in the past 40 years, your return from stocks would have dropped from 11.4 percent to 2.7 percent. That's how important it is to be invested in those key moments: 40 months on the sidelines out of 10,000 days of trading and you'd have been better off keeping your money in a savings account.

I've gone through this before, but let me give you another example based on actual stock-market performance from 1965 through 1995, a period with good years and bad. Imagine three investors, each of whom puts $1,000 into stocks annually over these three decades. Investor 1, who is very unlucky, somehow manages to buy stocks on the most expensive day of each year. Investor 2, who is very lucky, buys stocks on the cheapest day of each year. Investor 3 has a system: She always buys her stocks on January 1, no matter what.

You'd think that Investor 2, having an uncanny knack for timing the market, would end up much richer than Investor 1, the unluckiest person on Wall Street, and would also outperform Investor 3. But over 30 years, the returns are surprisingly similar. Investor 1 makes 10.6 percent annually; Investor 2, 11.7 percent; and Investor 3, 11 percent. Even I am amazed that perfect timing year after year is worth only 1.1 percent more than horrible timing year after year.

The only thing that might convert me into a one-shot market timer is if the Dow suddenly rose from 6,000 to 18,000 and the market was selling for 45 to 50 times earnings, so far beyond the pale of valuation that a huge correction would be inevitable. In such an extreme case, I might wait it out in Treasury bills. But as long as stocks continue to sell in the normal range of 10 to 20 times earnings, I'm staying in.

Ask yourself this: If stock prices dropped 10 to 25 percent, would you add to your positions in stocks and mutual funds, or would you cash out and cut your losses? If the answer is that you'd cash out, then do it now and avoid the misery that is sure to come later. Stocks are a safe bet, but only if you stay invested long enough to ride out the corrections. Remember what makes them a safe bet: corporate earnings. If earnings on the S&P; 500 quadruple over the next two decades, as they have in the past two, stock prices should rise at a corresponding rate.

How do you feel about bonds? Is it okay to stay with them? Worth OnLine Reader

After having written three books and numerous articles, I'm sure my feelings about bonds are hardly a secret. All things considered, I prefer stocks. People worry about the riskiness of stocks, but bonds can be just as risky. Look at what happens to the price of a bond fund the next time interest rates go up 2 percent.

If you could make the right call on interest rates five times in a row, you could buy $10,000 worth of bond futures, roll over the profits, and become a billionaire in short order. But the ranks of interest-rate billionaires are as thin as the ranks of billionaire market timers, which tells you that interest rates are tricky to predict.

If you stick with T-bills or money-market funds, you think your money is secure, but once you pay taxes on the interest, your return might not be enough to keep up with inflation. That's how people lose money on a "safe" investment. If you buy bonds with longer maturities, you get a better interest rate, but it's fixed. This exposes you to the risk of rising rates and falling bond prices. In that situation, you can either sell the bond at a loss or wait until it matures to get back the full amount of your principal. That's why, if I bought bonds, I'd go for the intermediate maturities -- three to five years. Who wants to be stuck with a 20-year bond in a period of rising rates?

Over the past six decades, with inflation running hot and cold, long- term government bonds have earned 1.9 percent over the inflation rate, versus 7.5 percent for stocks, according to Ibbotson Associates. What is this 5.6 percent difference worth? With $10,000 invested over 25 years, the difference becomes $38,000.

Only once in this century have bonds had a clear advantage over stocks: during the depression of the 1930s. If you're expecting another depression, then buy Treasurys.

That said, I'm going to keep an eye on the new inflation-adjusted bonds the Treasury Department will issue in January. The return on these bonds will be pegged to the consumer price index, so if inflation heats up, bondholders will be protected. Of course, if inflation cools off, these bonds may lose their advantage, but they have the potential to be better than money-market funds.

How do you see Wal-Mart? Worth OnLine Reader

This is the colossus of retail, with $93.6 billion in sales in 1995, more than Kmart, J. C. Penney, and Sears put together. In an average week, 60 million customers visit Wal-Mart stores; Wal-Mart takes in an annual $360 for every man, woman, and child in America. But after 35 years of rapid growth, 27 of them as a public company, how can this hulk maintain the pace? Lately, we've seen a letup in the earnings momentum: $1.02 a share in 1994, $1.17 in 1995, $1.19 in 1996.

The stock price has dropped from an all-time high of $34.125 a share to the mid-$20s, reflecting the slowdown in earnings and Wall Street's falling out of love with the company. Mark Husson at J. P. Morgan explains the problem of rekindling the relationship:

"I think that the growth guys look at it now and say, 'This isn't the old growth story we used to know. It's got a high-teen growth rate, below the 20 percent we once got from this company.' So the growth guys are not really interested anymore.

"If you're a value guy, you say, 'Wal-Mart is trading at a premium to its growth rate.' So the value guys aren't interested either.

"The momentum guy says, 'The chart looks awful. I'm not going to touch this.'"

Husson thinks of Wal-Mart as a proxy for retail in general, so if we have a good Christmas season in 1996, the stock might benefit. Beyond that, the company's fate is tied to the new Wal-Mart supercenters, which sell everything from appliances to groceries.

The first supercenters were rolled out in the heartland, where Wal-Mart began, but now they're moving into more densely populated areas, where the competition is tougher. The company opened 100 of these mega-sites in 1996 and plans to open another hundred or so in 1997, for a grand total of 420. It remains to be seen whether consumers will buy TVs, socket wrenches, and chicken soup under the same roof and whether Wal- Mart will get enough return on this investment to boost its profits overall.

Based on analysts' estimates for 1997, Wal-Mart will earn $1.36 a share, giving it a p/e of 20 at the current stock price of about $27. The company isn't the fast grower it was, but neither does it carry a fast grower's lofty price tag. If Wal-Mart can regain some of its earnings momentum, shareholders who buy at these levels can expect to be rewarded.

Do you prefer to look at a stock as a growth investment or as a source of income? Worth OnLine Reader

That depends on the stock. A stock that pays no dividend is obviously not an income investment. But in general, dividends are a more important part of the total return from stocks than people might think. According to Ibbotson Associates, the S&P; 500 returned 10.6 percent annually from January 1926 to September 1996, but only if you reinvested the dividends. Remove the dividends, and these companies returned only 5.8 percent.

Today, dividends are much lower across the board than they were a few years back: 2 percent on the stocks in the S&P; 500, versus 4 to 6 percent in the early 1980s. That's one reason some people are saying stocks are overpriced.

Fast-growing young companies, such as technology firms, don't generally pay dividends, which for them is a plus: They can invest in their own expansion instead of handing the money to shareholders. With slow- growing companies, a dividend becomes part of the attraction. Companies that continually raise their payout have proved to be excellent investments, but they can't prosper in the long run if the earnings aren't there.

Do you still recommend Fannie Mae? Worth OnLine Reader

Fannie Mae, the leader in the home-mortgage business, tops the list of my favorite companies of all time. I've owned it since the first Reagan administration. Lending money to home buyers is by its nature a boom-or- bust proposition, but Fannie Mae has figured out how to protect itself from the vicissitudes of interest rates.

In 1997, Wall Street analysts expect Fannie Mae to earn $2.80 a share, whereas a decade ago, the stock sold for $2.55 a share, adjusted for splits. That's what I call a remarkable investment: when a company's per-share earnings in a single year exceed the price you paid for the stock. No wonder the stock is up tenfold since 1987.

In spite of that incredible rise, Fannie Mae is still relatively cheap. The stock is selling at 13 times the 1997 estimated earnings, and profits are growing at 14 percent a year. On the other hand, the S&P; 500 is selling at 16 to 18 times earnings, while the historic growth rate of the average company is 8 to 9 percent. So you can buy Fannie Mae at its growth rate, whereas you have to pay twice the growth rate to buy shares in the average company in today's market.

Fannie Mae is far from your average company. For ten years in a row, it has posted record earnings -- the only major financial stock in the S&P; 500 ever to have done so. And the gain from the previous year has always been in double digits.

Fannie Mae isn't hurt by changes in interest rates, but a lot of people on Wall Street still worry that it will be. That's why the stock tends to drop whenever there's speculation that interest rates will rise. Another chronic worry is homeowners' defaulting on their mortgages, but Fannie Mae's delinquency rate is a negligible 0.56 percent.

A third worry surfaces from time to time: The government will ruin a good thing. Fannie Mae had its start in the depression, lending money to buyers who otherwise couldn't afford a home. Its original charter gave it a status much like a government agency, and though Fannie Mae is now a private corporation, it still is able to borrow money more cheaply than other companies. A faction in Congress periodically makes noises about altering the terms, imposing a Fannie Mae tax, or ending the relationship altogether; earlier this year, Congress held hearings on the subject.

Personally, I can't see how it would help anybody to reform Fannie Mae. The company pays more than $1 billion a year in taxes, which makes it one of the five biggest taxpayers in the U.S. In March 1994, it announced a program to finance $1 trillion worth of low- and moderate- income housing by the year 2000, and the program is right on track.

Ultimately, homeowners would pay the price for any change in Fannie Mae's status. As it is, the company is continuing to do good by doing well. Along with Freddie Mac, Fannie Mae is a prominent resident of the Lynch-family portfolio.

Peter Lynch writes "Investor's Edge" with John Rothchild and is vice- chairman of Fidelity Management and Research. Lynch and Rothchild's third book, Learn to Earn, was published earlier this year by Simon & Schuster.

KEYWORDS:
column, strategy, advice

97/03

Peter Lynch: Use Your Edge

By Peter Lynch

What's the best way to invest $1 million? Tip one: Don't buy stocks on tips alone. If your only reason for picking a stock is that an expert likes it, then what you really need is paid professional help. Mutual funds are a great idea (I ran one once) for folks who want this sort of assistance at a reasonable price.

Still, I'm not convinced that having 4,000 equity funds in this country is an entirely positive development. True, most of the cash flooding into these funds comes from retirement and pension contributions, where people can't pick their own stocks. But some of it also has to be pouring in from former stock pickers who failed to invest wisely on their own account and have given up trying.

When people find a profitable activity -- collecting stamps or rugs, buying old houses and fixing them up -- they tend to keep doing it. Had more individuals succeeded at individual investing, my guess is they'd still be doing it. We wouldn't see so many converts to managed investment care, especially not in the greatest bull market in U.S. history. Halley's comet may return ten times before we get another market like this.

If I'm right, then large numbers of investors must have lost money outright or badly trailed a market that's up eightfold since 1982. How did so many do so poorly? Maybe they traded a new stock every week. Maybe they bought stocks in companies they knew little about, companies with shaky prospects and bad balance sheets. Maybe they didn't follow these companies closely enough to get out when the news got worse. Maybe they stuck with their losers through thin and thinner, without checking the story. Maybe they bought stock options. Whatever the case, they failed at navigating their own course.

At the risk of repeating myself, I'm convinced that this type of failure is unnecessary -- that amateurs can not only succeed on their own but beat the Street by (a) taking advantage of the fact that they are amateurs and (b) taking advantage of their personal edge. Almost everyone has an edge. It's just a matter of identifying it.

While a fund manager is more or less forced into owning a long list of stocks, an individual has the luxury of owning just a few. That means you can afford to be choosy and invest only in outfits that you understand and that have a superior product or franchise with clear opportunities for expansion. You can wait until the company repeats its successful formula in several places or markets (same-store sales on the rise, earnings on the rise) before you buy the first share.

If you put together a portfolio of five to ten of these high achievers, there's a decent chance one of them will turn out to be a 10-, a 20-, or even a 50-bagger, where you can make 10, 20, or 50 times your investment. With your stake divided among a handful of issues, all it takes is a couple of gains of this magnitude in a lifetime to produce superior returns.

One of the oldest sayings on Wall Street is "Let your winners run, and cut your losers." It's easy to make a mistake and do the opposite, pulling out the flowers and watering the weeds. Warren Buffett quoted me on this point in one of his famous annual reports (as thrilling to me as getting invited to the White House). If you're lucky enough to have one golden egg in your portfolio, it may not matter if you have a couple of rotten ones in there with it. Let's say you have a portfolio of six stocks. Two of them are

average, two of them are below average, and one is a real loser. But you also have one stellar performer. Your Coca-Cola, your Gillette. A stock that reminds you why you invested in the first place. In other words, you don't have to be right all the time to do well in stocks. If you find one great growth company and own it long enough to let the profits run, the gains should more than offset mediocre results from other stocks in your portfolio.

A lot of people mistakenly think they must search far and wide to find a company with this sort of potential. In fact, many such companies are hard to ignore. They show up down the block or inside the house. They stare us in the face.

This is where it helps to have identified your personal investor's edge. What is it that you know a lot about? Maybe your edge comes from your profession or a hobby. Maybe it comes just from being a parent. An entire generation of Americans grew up on Gerber's baby food, and Gerber's stock was a 100-bagger. If you put your money where your baby's mouth was, you turned $10,000 into $1 million. Fifty-baggers like Home Depot, Wal-Mart, and Dunkin' Donuts were obvious success stories to large crowds of do-it-yourselfers, shoppers, and policemen. Mention any of these at a party, though, and you're likely to get the predictable reaction: "Chances like that don't come along anymore."

Ah, but they do. Take Microsoft -- I wish I had.

I avoided buying technology stocks if I didn't understand the technology, but I've begun to rethink that rule. You didn't need a Ph.D. in programming to recognize the way computers were becoming a bigger and bigger part of our lives, or to figure out that Microsoft owned the rights to MS-DOS, the operating system used in a vast majority of the world's PCs.

It's hard to believe the almighty Microsoft has been a public company for only 11 years. If you bought it during the initial public offering, at 78 cents a share (adjusted for splits), you've made 100 times your money. But Apple was the dominant company at the time, so maybe you waited until 1988, when Microsoft had had a chance to prove itself.

By then, you would have realized that IBM and all its clones were using Microsoft's operating system, MS-DOS. IBM and the clones could fight it out for market share, but Microsoft would prosper regardless of who won. This is the old combat theory of investing: When there's a war going on, don't buy the companies that are doing the fighting; buy the companies that sell the bullets. In this case, Microsoft was selling the bullets. The stock has risen 25-fold since 1988.

The next time Microsoft might have got your attention was 1992, when Windows 3.1 made its debut. Three million copies were sold in six weeks. If you bought the stock on the strength of that product, you've quadrupled your money to date. Then, at the end of 1995, Windows 95 was released, with more than 7 million copies sold in three months and 40 million copies as of this writing. If you bought the stock on the Windows 95 debut, you've doubled your money.

Many parents with children in college or high school (I'm one of them) have had to step around the wiring crews as they installed the newfangled campuswide computer networks. Much of this work is being done by Cisco Systems, a company that recently wired two campuses my daughters have attended. Cisco is another opportunity a lot of people had a chance to notice. Its earnings have been growing at a rapid rate, and the stock is a 100-bagger already. No matter who ends up winning the battle of the Internet, Cisco is selling its bullets to various combatants.

Computer buyers who can't tell a microchip from a potato chip still could have spotted the intel inside label on every machine being carried out of the computer stores. Not surprisingly, Intel has been a 25-bagger to date: The company makes the dominant product in the industry.

Early on, it was obvious Intel had a huge lead on its competitors. The Pentium scare of 1994 gave you a chance to pick up a bargain. If you bought at the low in 1994, you've more than quintupled your investment, and if you bought at the high, you've more than quadrupled it.

Physicians, nurses, candy stripers, patients with heart problems -- a huge potential audience could have noticed the brisk business done by medical-device manufacturers Medtronics, a 20-bagger, and Saint Jude Medical, a 30-bagger.

There are two ways investors can fake themselves out of the big returns that come from great growth companies.

The first is waiting to buy the stock when it looks cheap. Throughout its 27-year rise from a split-adjusted 1.6 cents to $23, Wal-Mart never looked cheap compared with the overall market. Its price-to-earnings ratio rarely dropped below 20, but Wal-Mart's earnings were growing at 25 to 30 percent a year. A key point to remember is that a p/e of 20 is not too much to pay for a company that's growing at 25 percent. Any business that can manage to keep up a 20 to 25 percent growth rate for 20 years will reward shareholders with a massive return even if the stock market overall is lower after 20 years.

The second mistake is underestimating how long a great growth company can keep up the pace. In the 1970s I got interested in McDonald's. A chorus of colleagues said golden arches were everywhere and McDonald's had seen its best days. I checked for myself and found that even in California, where McDonald's originated, there were fewer McDonald's outlets than there were branches of the Bank of America. McDonald's has been a 50-bagger since.

These "nowhere to grow" stories come up quite often and should be viewed skeptically. Don't believe them until you check for yourself. Look carefully at where the company does business and at how much growing room is left. I can't predict the future of Cisco Systems, but it doesn't suffer from a lack of potential customers: Only 10 to 20 percent of the schools have been wired into networks, and don't forget about office buildings, hospitals, and government agencies nationwide. Petsmart is hardly at the end of its rope -- its 320 stores are in only 34 states.

Whether or not a company has growing room may have nothing to do with its age. A good example is Consolidated Products, the parent of the Steak & Shake chain that's been flipping burgers since 1934. Steak & Shake has 210 outlets in only 12 states; 78 of the outlets are in St. Louis and Indianapolis. Obviously, the company has a lot of expansion ahead of it. With 160 continuous quarters of increased earnings over 40 years, Consolidated has been a steady grower and a terrific investment, even in a lousy market for fast food in general.

The best companies often thrive even as their competitors struggle to survive. Until recently, the airline sector has been a terrible place to put money, but if you had invested $1,000 in Southwest AirlinesSouthwest Airlines in 1973, you would have had $460,000 after 20 years. Big Steel has disappointed investors for years, but NucorNucor has generated terrific returns. Circuit CityCircuit City

has done well as other electronics retailers have suffered. While the Baby Bells have toddled, a new competitor, WorldCom, has been a 20-bagger in seven years.

Depressed industries, such as broadcasting and cable television, telecommunications, retail, and restaurants, are likely places to start a research list of potential bargains. If business improves from lousy to mediocre, investors are often rewarded, and they're rewarded again when mediocre turns to good and good turns to excellent. Oil drillers are in the middle of such a recovery, with some stocks delivering tenfold returns in the past 18 months. Yet it took a decade of lousy before they even got to mediocre. Readers of my column in Worth learned of the potential in this long-suffering sector in February 1995.

Retail and restaurants are two of the worst-performing industries in recent memory, and both are among my favorite research areas. I've taken a beating in a number of retail stocks (some of which I still like and have continued to buy), but the general decline hasn't stopped StaplesStaples, BordersBorders, Petsmart, Finish Line, and Pier 1 ImportsPier 1 Imports from rewarding shareholders. Two of my daughters and my wife, Carolyn, have continued to shop at Pier 1, reminding me of its popularity. The stock has doubled in the past 18 months.

A glut in casual-dining outlets didn't hurt Outback SteakhouseOutback Steakhouse, and a surplus of pizza parlors didn't bother Papa John's, whose stock was a double last year. CKE Restaurants -- whose operations include the Carl's Jr. restaurants -- has been a profitable turnaround play in California.

So far, we've been talking about growth companies on the move, but even in this so-called extravagant market, there are plenty of bargains among the laggards. Of the nearly 4,000 IPOs in the past five years, several hundred have missed the rally on Wall Street. From the class of 1995, 37 percent, or 202 companies, are selling below their IPO price. From the class of 1996, 33 percent, or 285, now trade below their offering price. So much for the average investor's never having a chance to profit from an offering. In more than half the cases, you can wait a few months and buy these stocks cheaper than the institutions that were cut in on the original deals.

As the Dow has hit new records week after week, many small companies have been ignored. In 1995 and 1996, the Standard & Poor's 500 Stock Index was up 69 percent, but the Russell 2000 index of smaller issues was up only 44 percent. And while the Nasdaq market rose 25 percent in 1996, a lot of this gain can be attributed to just three stocks: Intel, Microsoft, and Oracle. Half the stocks on the Nasdaq were up less than 6.9 percent during 1996.

That's not to say owning these laggards will protect you if the bottom drops out of the market. If that happens, the stocks that didn't go up will go down just as hard and fast as the stocks that did. I learned that lesson in the 1971–73 bear market. Before the selling was over, companies that looked cheap by any measure got much cheaper. McDonald's dropped from $15 a share to $4. I thought Kaiser Industries was a steal at $13, but it also fell to $4. At that point, this asset-rich conglomerate, with holdings in aluminum, steel, real estate, cement, fiberglass, and broadcasting, was trading at a market value equal to the price of four airplanes.

Should we all exit the market to avoid the correction? Some people did that when the Dow hit 3000, 4000, 5000, and 6000. A confirmed stock picker sticks with stocks until he or she can't find a single issue worth buying. The only time I took a big position in bonds was in 1982, when inflation was running at double digits and long-term U.S. Treasurys were yielding 13 to 14 percent. I didn't buy bonds for

defensive purposes. I bought them because 13 to 14 percent was a better return than the 10 to 11 percent stocks have returned historically. I have since followed this rule: When yields on long-term government bonds exceed the dividend yield on the S&P; 500 by 6 percent or more, sell stocks and buy bonds. As I write this, the yield on the S&P; is about 2 percent and long-term government bonds pay 6.8 percent, so we're only 1.2 percent away from the danger zone. Stay tuned.

So, what advice would I give to someone with $1 million to invest? The same I'd give to any investor: Find your edge and put it to work by adhering to the following rules:

With every stock you own, keep track of its story in a logbook. Note any new developments and pay close attention to earnings. Is this a growth play, a cyclical play, or a value play? Stocks do well for a reason and do poorly for a reason. Make sure you know the reasons.

Pay attention to facts, not forecasts.

Ask yourself: What will I make if I'm right, and what could I lose if I'm wrong? Look for a risk-reward ratio of three to one or better.

Before you invest, check the balance sheet to see if the company is financially sound.

Don't buy options, and don't invest on margin. With options, time works against you, and if you're on margin, a drop in the market can wipe you out.

When several insiders are buying the company's stock at the same time, it's a positive.

Average investors should be able to monitor five to ten companies at a time, but nobody is forcing you to own any of them. If you like seven, buy seven. If you like three, buy three. If you like zero, buy zero.

Be patient. The stocks that have been most rewarding to me have made their greatest gains in the third or fourth year I owned them. A few took ten years.

Enter early -- but not too early. I often think of investing in growth companies in terms of baseball. Try to join the game in the third inning, because a company has proved itself by then. If you buy before the lineup is announced, you're taking an unnecessary risk. There's plenty of time (10 to 15 years in some cases) between the third and the seventh innings, which is where the 10- to 50-baggers are made. If you buy in the late innings, you may be too late.

Don't buy "cheap" stocks just because they're cheap. Buy them because the fundamentals are improving.

Buy small companies after they've had a chance to prove they can make a profit.

Long shots usually backfire or become "no shots."

If you buy a stock for the dividend, make sure the company can comfortably afford to pay the dividend out of its earnings, even in an economic slump.

Investigate ten companies and you're likely to find one with bright prospects that aren't reflected in the price. Investigate 50 and you're likely to find 5.

Peter Lynch owns shares in the following companies mentioned above: Outback Steakhouse, Pier 1 Imports, Consolidated Products, Staples, and WorldCom. KEYWORDS: Peter Lynch, million, Fidelity Magellan

97/05

Send in the Money!

By Peter Lynch

The virtue of thrifts, take four. You might not have been paying attention, but your neighbors have.

Since my very first Worth article, in the summer of 1992, I've been talking about the remarkable opportunity presented to investors when thrifts (the term covers savings and loans, savings banks, and some other institutions) go public. Thrift conversions are a rare and lovely reversal of the normal order: a great opportunity that seeks you.

But even I didn't realize quite how exceptional these investments have been until recently, when some questions from readers inspired me to make a call to SNL Securities, the financial-advisory firm that has been my leading source on all things thrift related. I asked SNL to look at the five calendar years starting in 1992. It turns out that, from 1992 through 1996, 445 thrifts went public. Of the 313 for which current pricing is available, the average increase in value is 98 percent. But that's not even the most remarkable part of the story. Of these 313 thrifts, only five are trading below their initial-public-offering price. Two are trading at their IPO price. So 306 of 313 are winners. You'll have to do a lot of looking to find another group in which 97.7 percent of the stocks have risen in value over five years. (As for the 132 thrifts no longer trading, most of them have been bought out by banks and other thrifts. Given the prices they've been bringing, that's good news.)

In what sense is thrift conversion an opportunity that seeks out the investor rather than vice versa? In the sense that if you are a depositor in a thrift that is planning a conversion everything you need to know will come through your mail chute. Anytime a thrift goes public, depositors get first crack--the only crack, usually--at buying shares at the IPO price. For most of these depositors, it's the first and only time they've been guaranteed precedence over the pros who usually make their way to the front of every line. Unfortunately, most depositors don't read the news they get from their thrift, or don't quite believe it, or for some other reason don't say yes to the opportunity. No one has exact numbers, but the guess is that 90 percent or more of thrift depositors don't buy shares when their thrifts go public. It's a real shame. In 1995 and 1996, thrift IPOs experienced an average first-day gain of 14.2 percent, and in the fourth quarter of last year, the average was 25.5 percent. Imagine someone who holds a savings account at one of those thrifts. Say the account pays 3.5 percent annually. The depositor can take that money out of savings for one day to make six years' worth of interest.

That's why I've made it my business to encourage investors to scout the places they live, work, and vacation for thrifts that aren't publicly owned and to consider opening accounts in them. If you've kept a reasonable amount of money (generally a couple thousand dollars) in a thrift for a

reasonable length of time (generally a year), you'll be given a shot at shares should the thrift go public. And if it doesn't, you'll have earned some interest while you waited.

The pace of conversion slowed somewhat last year--74 thrifts went public, compared with 97 in 1995--but the fourth quarter was strong, and SNL notes that the thrifts going public now tend to be among the largest and best capitalized. SNL still counts 925 privately held thrifts. It would be a mistake to assume that all of these are moving inexorably toward public status, but a large number will choose that course eventually, because like so many small businesses they need access to public capital in order to compete and grow. As it has twice before, SNL has come up with a list of candidates for conversion. (See "Top 50 Conversion Candidates" on page 36.) No guarantees, of course, but of the 189 thrifts to appear on SNL's previous lists, published in 1994 and 1995 (11 thrifts were on both lists), 24 have already made the conversion.

One of those, from the 1994 list, is the Roslyn Savings Bank (now Roslyn Bancorp) of Roslyn, New York, which went public in January 1997. Roslyn is a good study on a couple of levels. First, it demonstrates that the rules of the game have changed a little. Second, and more important, it shows how and why a thrift IPO works as an investment.

To set the stage: Roslyn was a big thrift, the second largest yet to go public, with $1.8 billion in total assets. Just as important, it had more than 112,000 depositors and was in what Chris Smith of SNL calls a "conversion-savvy neighborhood." (Greater New York City, in other words.) What's more, a couple of other large, successful conversions had recently taken place in the area, and the media were in high alert. Stories about Roslyn's impending IPO ran in all the papers and on the local news.

There was one more factor at play in Roslyn: the heavy interest of what Chris Smith calls "professional depositors." These are people who, rather than looking locally for thrifts that might someday go public, look all over the country. They leave small deposits wherever they can, and that certainly included Roslyn.

So what happened when Roslyn announced it was ready to go public, with 42.3 million shares available at $10 apiece? Answer: The thrift received buy orders for $1.7 billion worth of shares. As a matter of fact, it was flooded with $1.7 billion in cash, because the only way to order shares for a thrift IPO is to send in the money. Send in the money: Now there's a good barometer of investor passion if ever I saw one.

Oversubscription--more buy orders than shares offered--is a common enough phenomenon these days with thrift conversions, but not on the scale of the Roslyn IPO. To distribute its shares, Roslyn had to establish criteria for deservedness, based on the size of deposits. Basically, for every $170 on deposit, an investor was allowed to buy 100 shares. A deposit of $1,000 entitled you to buy roughly 588 shares; $10,000 was good for about 5,880 shares. To buy 67,500 shares, the maximum number available to an individual, you had to have a little better than $110,000 on deposit with Roslyn.

The formula reflected Roslyn's attitude toward professional depositors-- which was, basically, the heck with them. Pros who had never committed more than a few hundred dollars to the

bank's well-being walked away frustrated, while most people who had maintained real relationships with the bank were satisfied. Chris Smith says professional depositors are the largest reason most thrifts now require higher deposits to secure a full allocation of stock than their peers did a few years back. Still, the barriers aren't terribly high. "In the majority of cases," Smith says, "a $1,000 to $2,000 account balance should be sufficient to receive most or all of the stock you are entitled to, though sometimes you will need more."

Two notes: First, a lot of thrifts have begun rejecting the money of people they think may be professional depositors, usually by requiring that new customers live or work in the bank's home county. Second, and more important, it's a shame Roslyn wasn't oversubscribed by more than it was. Never mind the pros. More ordinary depositors should have been in there requesting all the shares they could afford. Those $10 Roslyn shares were worth $15.70 after the first day of trading--a 57 percent gain.

Why did Roslyn pop that much on its first day out? The first part of the answer has to do with all the attention Roslyn received and its strength in its market. The second part has to do with the nature of thrifts themselves.

A thrift is essentially a cooperative--it's owned by no one, really. So what happens with the money raised in an IPO if there are no founders or owners to pay off? The money goes right into the company till, and the company's net worth jumps by that amount. The new shareholders have just given themselves a great thrift-warming present. Investors in the secondary market see this and bid up the price.

In Roslyn's case, the thrift had a stated net worth of about $222 million at the time of conversion. The IPO raised $423 million. Boom-- Roslyn was now worth $645 million. Let the bidding begin. And though Roslyn's one-day pop might suggest otherwise, this IPO was conservatively priced. The stock was priced at 73.5 percent of book value--slightly higher than the 1996 industry average of 70.5 percent and a lot higher than was typical in the early part of this decade, when depositors were sometimes able to buy a thrift for half of what it was worth.

Take a look at the list of SNL's conversion candidates and see if any are your neighbors. Are any near the place where you work? Or near your regular vacation spot? If so, I can't imagine why they wouldn't welcome you as a new account holder. What thrifts are looking for, very simply, are depositors with legitimate connections to the institution and the community.

Here is how to think about the measures listed on the chart. "Total Assets" is self-explanatory. Beyond that:

*You want to see a high equity-to-assets ratio. This is the most basic measure of a bank's strength--its firepower, if you will. Anything below a 5 is cause for concern. Citicorp, one of the strongest of the big banks, has a ratio of 7.39. Some thrifts, because they've retained a lot of earnings over the years and haven't been aggressive about making loans, have ratios of 10 or even 20 or more.

*You also want to see a high return on assets, the basic measure of profitability. A return on assets of zero translates into zero profits. Healthy thrifts and banks have a return on assets of at least 1 percent.

There is, however, a potentially profitable exception. Say a thrift's return on assets is low, maybe even below zero, but is moving up. Take a quick look at the equity-to-assets ratio. If it's high, you may have found a rewarding combination--the thrift may have enough equity to sustain it through a recovery. When I see a thrift or bank with a lot of equity and a low return on assets, my first question is: If this thing can turn around and make 1 percent on assets, what will it earn?

*You want a low percentage of nonperforming assets--loans that won't be repaid at 100 cents on the dollar. If a thrift has mostly written mortgages, you shouldn't see a problem. Commercial lending, on the other hand, is a hole many thrifts fell into during the 1980s. Nonperforming assets above 0.5 percent should make you wonder just what this thrift has been up to.

Another profitable exception: A very strong equity-to-assets standing gives a thrift a couple of ways to clean up a nonperforming-assets problem. It can write off the bad loans without too much damage to its equity-to-assets ratio. It can even sell the loans at 50 cents on the dollar and put the proceeds to work creating earnings.

That's a starting point. A great deal more information will become available should your thrift file plans to convert. You should confirm, at the very least, that the bank's officers and directors are buying stock in the offering and that they were involved in pricing it. It's worth something to know you're all on the same side of the table.

Let's look at the worst-case scenario in a conversion, because I don't want to give the impression that this is the one investment you don't have to think about and can't lose money on. (I haven't found that investment yet.) Let's imagine that a public offering is the thrift's last chance of getting enough money to stay afloat--it has written off so many commercial loans that it actually has no net worth, and at the same time it isn't making any money. Such a thrift may use an IPO to raise $40 million and be worth $30 million when it's over. You don't want any part of that. Fortunately, that's a rare case these days.

Traditionally, when I look at the issue of thrift conversions, I also look at thrifts that are already publicly traded. That short-term pop from an IPO is nice, but don't let it distract you from the long-term potential of thrifts, whether or not you buy them young. One last statistic from SNL proves this point: The five best-performing converted thrifts of the past five years have returned on average 558.5 percent. So what if you missed the IPO? Imagine if you'd caught even the last half of the ride.

In the past, the research lists have done pretty well, as you'll see in the three tables labeled "Update." On this page is a 1997 research list containing ten new names. Of these, I own Ambanc and Cameron Financial.

For all the stocks on this list, the most alluring quality is a high equity-to-assets ratio--as high as 24.7 in the case of Cameron. As I've noted, overcapitalization covers a lot of sins. And each of

these stocks sells at or below book value in an industry in which the typical thrift trades at 1.23 times book. On the other hand, none of these stocks can truly be called a bargain--they're all fully priced on current earnings. On past research lists, at least a few stocks have traded at single- digit price-to-earnings ratios, but that's not the case this time. Again, this is a research list. Don't invest in any of these companies unless and until you learn more about them--and in particular about whether their strengths are offset by their weaknesses.

I mentioned earlier that a lot of thrifts disappear from the stock tables because they're bought up. Six of the 10 thrifts from my 1992 research list have been acquired or have merged with other institutions, as have 5 of the 15 from the 1994 list and 2 of the 15 from the 1995 list. In most cases, this has produced another quick pop for investors, because thrifts are almost always acquired at prices comfortably in excess of book value. The average takeover price last year, for example, was 149 percent of book, and early this year, Summit Bancorp, a large New Jersey bank, agreed to pay more than 2.3 times book value to acquire Collective Bancorp.

Some people--professional depositors, certainly--are saying that thrift investing isn't what it used to be now that the rules on IPOs are tightening and more people are in on the secret. I don't agree. I see years' worth of opportunity in such offerings, and I see continued consolidation.

Late last year, I even saw a couple pieces of legislative good news. The most important of these, the Deposit Insurance Funds Act of 1996, concerns federal insurance for deposits. It hit thrifts with a big onetime charge to gas up the deposit-insurance fund, but in return it dropped the ongoing premium. Thrifts used to pay 23 to 31 basis points per dollar on deposit; now they pay zero to 27 points, and 95 percent of them pay zero. Imagine a thrift with a return on assets of 1 percent, or 100 basis points. If you lower the thrift's insurance expenses--which come out of earnings--by 23 basis points, those earnings go up by 23 percent.

Thrift investors have been living through a golden period--five solid years of a decent economy and low inflation. It would be foolish not to think about what happens when the economy begins to give out. A recession would be tough on thrifts (and on a lot of other stocks, of course). A sharp jump in inflation would be tough on thrifts, too (and on nearly all stocks). In either case, the 1997 research list probably wouldn't be a star group, though it could very well be when the economic weather turned again.

Thrifts that come public during a downturn will still be good investments. Maybe fewer thrifts will convert in that kind of environment, but maybe, on the other hand, oversubscription will ease up, and you, as a depositor, will be able to buy more shares. Whatever happens, keep checking the mail.

Peter Lynch is vice-chairman of Fidelity Management and Research. His third book, Learn to Earn, was published in 1996 by Simon & Schuster.

Update: the 1992 List

Thrift	Research Price	Recent Price	Percent gain
Ameriana Bancorp (Nasdaq: ASBI)	$8.33	$15.75	89%

Bankers Corp. (Nasdaq: BKCO)	9.19	25.00	172
Bell Bancorp*	17.38	37.50	116
Charter FSB Bancorp**	15.50	45.05	191
Eagle Financial (Nasdaq: EGFC)	13.13	29.13	122
Germantown Savings***	23.50	62.00	164
Liberty Bancorp#	16.25	53.29	222
NS Bancorp##	24.13	53.87	123
People's Savings Fin. (Nasdaq: PBNB)	14.00	31.00	121
UF Bancorp###	16.63	54.13	226

Research prices as of 7/31/92. Recent prices as of 3/13/97. The thrifts whose names appear in green have been bought for cash or stock since 1992. *Bell was acquired by Standard Federal Bancorp for $37.50 cash a share in June 1996. **Charter was acquired by Sovereign Bancorp on 11/1/ 94; recent price reflects the exchange of Charter's stock. ***Germantown was acquired by CoreStates Financial for $62 cash a share on 12/2/94. #Liberty merged with Banc One on 12/30/96; recent price reflects the exchange of Liberty's stock. ##NS Bancorp merged with MAF Bancorp on 5/ 30/96; recent price reflects the exchange of NS's stock. ###UF Bancorp was acquired by CNB Bancshares on 8/4/95; recent price reflects the exchange of UF's stock.

Update: the 1994 List

Thrift	**Research Price**	**Recent Price**	**Percent Gain**
Ameribanc Investors Group*	$1.81	$3.00	66%
Astoria Financial (Nasdaq: ASFC)	14.06	39.56	181
Bay View Capital (Nasdaq: BVFS)	19.75	54.63	177
California Financial (Nasdaq: CFHC)	16.50	29.00	76
CENFED Finan. Corp. (Nasdaq: CENF)	15.91	33.63	111
Crossland Savings**	33.50	41.50	24
FFY Financial Corp. (Nasdaq: FFYF)	14.63	25.25	73
Fidelity New York, SFB***	17.25	29.00	68
GP Financial#	18.50	56.50	205
Lakeview Savings Bk. (Nasdaq: LVSB)	10.70	33.50	213
Mid-Iowa Financial (Nasdaq: MIFC)	3.63	8.25	128
North Side Savings Bank##	17.91	64.38	260
Pamrapo Bancorp (Nasdaq: PBCI)	14.63	23.25	59
Queens Cty. Bancorp (Nasdaq: QCSB)	18.13	57.75	219
Sunrise Federal ###	16.00	32.00	100

Research prices as of 3/31/94. Recent prices as of 3/13/97. The thrifts whose names appear in orange have been bought for cash or stock since 1994.*Ameribanc was acquired by First Union for $3 a share in cash on 4/ 1/95. **Crossland was acquired by Republic New York for $41.50 a share in cash on 1/31/95. ***Fidelity was acquired by Astoria Financial for $29 a share in cash

on 1/31/95. #GP Financial changed its name to GreenPoint Financial. ##North Side was acquired by North Fork Bancorp on 1/2/97; recent price reflects exchange of North Side's stock. ###Sunrise was acquired by Reliance Bancorp for $32 a share on 1/11/96.

Update: the 1995 List

Thrift	Research Price	Recent Price	Percent Gain
Albank Financial Corp. (Nasdaq: ALBK)	$25.00	$34.75	39%
Astoria Financial (Nasdaq: ASFC)	21.31	39.56	86
Cameron Financial (Nasdaq: CMRN)	14.50	16.38	13
Carver Fed Savings (Nasdaq: CARV)	9.88	10.13	3
Charter One Financial (Nasdaq: COFI)	28.09	45.25	61
First Federal Financial (NYSE: FED)	15.63	27.25	74
GP Financial*	27.63	56.50	105
Home Financial Corp.**	15.38	19.68	28
ISB Financial (Nasdaq: ISBF)	15.75	26.13	66
Leader Financial***	34.63	68.63	98
Portsmouth Bank (Nasdaq: POBS)	13.28	15.75	19
Quaker City (Nasdaq: QCBC)	14.00	19.00	36
Queens Cty. Bancorp (Nasdaq: QCSB)	29.91	57.75	93
Standard Federal Bank (NYSE: SFB)	39.00	57.75	48
Washington Mutual (Nasdaq: WAMU)	26.50	51.63	95

Research prices as of 9/29/95. Recent prices as of 3/13/97. Thrifts whose names appear in green have been bought for cash or stock since 1995. *GP Financial changed its name to GreenPoint Financial. **Home Financial was acquired by First Union on 11/26/96; recent price reflects exchange of Home's stock. ***Leader was acquired by Union Planters on 10/1/96; recent price reflects exchange of Leader's stock.

Top 50 conversion candidates

Rank	Institution	Location
1	Hudson City Savings Bank	Paramus, NJ
2	Third FS&LA;	Cleveland
3	Capitol FS&LA;	Topeka, KS
4	Independence Savings Bank*	Brooklyn
5	Investors Savings Bank*	Millburn, NJ
6	Dollar Bank, FSB	Pittsburgh
7	Eastern Bank*	Lynn, MA
8	Provident Savings Bank	Jersey City
9	New Haven Savings Bank	New Haven, CT
10	Ridgewood Savings Bank	Ridgewood, NY

11	Staten Island Savings Bank	Stapleton, NY
12	Columbia Savings Bank*	Fair Lawn, NJ
13	Beneficial Savings Bank	Philadelphia
14	American Savings Bank	New Britain, CT
15	Middlesex Savings Bank	Natick, MA
16	Liberty Bank	Middletown, CT
17	Home Federal Bank of Tennessee, FSB	Knoxville, TN
18	North Shore Bank, FSB	Brookfield, WI
19	Mutual Saving	Milwaukee
20	Financial FT&SB; of Olympia Fields	Olympia Fields, IL
21	Lockport Savings Bank	Lockport, NY
22	Home Savings & Loan Co.	Youngstown, OH
23	Cambridge Savings Bank	Cambridge, MA
24	Compass Bank for Savings*	New Bedford, MA
25	Savings Bank of Manchester	Manchester, CT
26	Richmond County Savings Bank	W. New Brighton, NY
27	Savings Bank of Utica	Utica, NY
28	First Federal Lincoln Bank	Lincoln, NE
29	Salem Five Cents Savings Bank	Salem, MA
30	Maspeth FS&LA;	Maspeth, NY
31	Spencer Savings Bank, SLA	Garfield, NJ
32	Bangor Savings Bank	Bangor, ME
33	First FS&LA;	Lakewood, OH
34	Yakima FS&LA;	Yakima, WA
35	Kearny Federal Savings Bank	Kearny, NJ
36	Piedmont FS&LA;	Winston-Salem, NC
37	Cape Cod Five Cents Savings Bank	Harwich Port, MA
38	Brookline Savings Bank	Brookline, MA
39	Troy Savings Bank	Troy, NY
40	Plymouth Savings Bank	Wareham, MA
41	Hudson City Savings Institution	Hudson, NY
42	Citizens Financial Services, FSB	Hohman, IN
43	Union Savings Bank of Danbury	Danbury, CT
44	Franklin FS&LA;	Glen Allen, VA
45	Provident Bank	Haverstraw, NY
46	Keystone Savings Bank	Bethlehem, PA
47	Fidelity Homestead Assn.	New Orleans
48	Oritani Savings Bank	Hackensack, NJ

49	Gate City Federal Savings Bank	Fargo, ND
50	Liberty Bank for Savings	Chicago

*Indicates a wholly owned subsidiary of a mutual holding company. Source: SNL Securities.

1997 Research List

Institution (Exchange: Ticker)	State	Recent Price	Equity to Assets	Price to Book	P/E Ratio	Assets ($mil)
Ambanc (Nasdaq: AHCI)	NY	14.25	14.2	98.8	29.7	496.5
Bank West Financial (Nasdaq: BWFC)	MI	11.63	15.9	93.2	13.8	143.2
Cameron Financial (Nasdaq: CMRN)	MO	16.38	24.7	98.4	17.1	191.9
Classic Bancshares (Nasdaq: CLAS)	KY	13.50	14.9	93.2	16.1	128.4
MBLA Financial (Nasdaq: MBLF)	MO	20.75	13.6	97.7	14.0	208.9
MFB (Nasdaq: MFBC)	IN	18.88	15.4	97.1	18.2	223.9
Mississippi View Holding (Nasdaq: MIVI)	MN	15.13	18.5	99.2	18.0	70.3
Pennwood Bancorp (Nasdaq: PWBK)	PA	14.00	20.1	91.1	15.2	46.7
StateFed Financial (Nasdaq: SFFC)	IA	17.75	17.8	94.5	13.1	82.8
Tri-County Bancorp (Nasdaq: TRIC)	WY	18.50	15.3	85.7	12.5	85.9/td>

Recent prices as of 3/13/97. Source: SNL Securities.

97/08

The REIT Craze

By Peter Lynch

I wish I had a few dollars for every time I've been asked in the past year, "Hey, should I buy a REIT?" I'd take that money and buy...well, maybe shares in a real-estate investment trust. A REIT.

But not just any REIT. I'd need to do some looking around and some reading, and I'd want to talk with people who know more than I do. In other words, I'd expect to put in a reasonable amount of work before I could find a REIT or two that I'd want to invest in. The question, however--"Should I buy a REIT?"--too often assumes that this work isn't necessary, apparently because each REIT is more miraculous than the next. I have a feeling the REIT is the most recent example of a recurring phenomenon: the investment that people think will make money for them whether or not they really understand it.

I wish that were true. I could go down the hall right now and tell a lot of people to stop working so hard. But investing doesn't have much to do with miracles. Real estate is a cyclical business, and most REITs are enjoying a very profitable part of the cycle. Eventually the wheel will turn, and then we'll see which REITs actually have the best holdings, the best management, and the best honest-to-goodness long-term prospects. The happiest investors then will be those who didn't buy just any old REIT in 1997.

Much of the fogginess that surrounds REITs is owed to the fact that the category is relatively new and surprisingly small. The legislation that produced the REIT industry was signed in 1960, but it was 30 years before REITs could be called respectable, mainstream investment vehicles. Even now, there are only about 195 publicly traded REITs. The market capitalization of these 195 is about $94 billion, which means the entire publicly traded component of the industry is only about two- thirds the size of Microsoft. What do REITs own? Real estate, of course. But real estate in different forms, in different places, with different relations to economic cycles. The most traditional kind of REIT is one that owns office buildings or apartments or hotels. The newest kind--I kid you not--is one that holds prisons.

Here is a much-simplified version of how the most common kind of REIT, called an equity REIT, is set up and operates. The process begins with an initial public offering--let's say the management group of a new REIT sells ten million shares for $10 each. Then it borrows, to pick a conservative number, another $25 million. With that $125 million it builds or (more likely) buys income-producing property. The source of the income is rent--paid by families in apartments, companies in office towers, or stores in malls.

What actually defines a REIT is its lack of choice regarding the money it earns: Tax law requires that a REIT distribute at least 95 percent of its net income to shareholders as dividends. That sharply limits the REIT's options. But tax law giveth, too: REITs pay no federal income tax.

Equity REITs constitute about 89 percent of the REIT industry in terms of market capitalization. About half the remaining market cap is in mortgage REITs, which don't buy property but instead invest in mortgages taken out by builders and property owners--a demanding business that succeeds only if borrowers don't default and interest rates don't go sharply up or sharply down. The remaining REIT money is in so-called hybrids, which own property and also loan money.

By and large, individual investors are best off with equity REITs. If you're a shareholder in an equity REIT, you're a landlord. If you own shares in a mortgage REIT, you're a money lender who lives and dies with interest rates.

Within the equity sector, there are ten or so subsectors. The largest, with 43 REITs and about $21 billion in market capitalization, is retail: REITs that own shopping complexes of various sorts. Next, with 36 REITs, is residential: apartment buildings and complexes. Then industrial/ office: industrial parks and office buildings. There's also a lot of money invested in self-storage and health-care facilities (these REITs tend to own not hospitals and clinics but the ground beneath them).

Any subsector might very well have its own subsectors--in the retail subsector, for example, there are five REITs that own nothing but outlet centers. All this breaks down even further along geographic lines.

The National Association of Real Estate Investment Trusts (800-3-NAREIT or www.nareit.com) is the source for data on the REIT industry. NAREIT's industry-wide index showed a total return of 35.75 percent in 1996--12.79 percentage points better than the Standard and Poor's 500 Stock Index. The big winner, at 51.98 percent, was mortgage-backed securities, which isn't surprising given the relatively strong economy and steady interest rates. The best performer on the equity side was the office group, with a total return of 51.82 percent. Hotels did almost as well: 49.19 percent. Regional malls returned 44.63 percent.

This is the stuff that caught so many investors' eyes. Yet look at the return on those outlet-center REITs: just 3.51 percent. That's how it was possible to do badly in REITs even in a deliriously good year. And as so often happens, the REIT industry is coming down to earth just as attention on it is intensifying--through the first four months of 1997 the NAREIT index was down by a couple percentage points. How does an investor go about evaluating a REIT? The first step is to learn about the properties it holds. Visit them if you can. If the properties are apartment buildings, are they well maintained, do they command good prices, and are the vacancy rates low? If the properties are shopping centers, are the parking lots full and the retail spaces leased? Will the malls still be attractive to shoppers five or ten years down the line? Most important, what's the likelihood that competition will crop up?

That's the first level of examination. Here are additional points of focus:

LEASES. The key here is the relationship between a REIT's leases and local economic conditions. The best combination for a REIT is a market that is turning up and leases that are turning over. In that environment, a new lease is an opportunity to raise prices. You can get some information about a REIT's leases by calling the investor-relations office. But the more important side of the equation is the local markets, and that doesn't require any special knowledge or access. Let's say I'm considering an office-building REIT with a lot of properties here in Boston. I know the local office market is strong--I can read that in the paper. And if I look out my window I can see that there's nothing coming out of the ground. It would take years for a developer to put up new buildings to take advantage of the conditions my imaginary REIT is already enjoying. No one's going to sneak a 50-story office building past me.

The flip side of this happy scenario is one in which the local economy is headed south. If leases are turning over, they're going to be renewed at lower rates. There go your earnings. Even if the terms of the leases are relatively long, investors will see trouble coming and punish the stocks here and now.

GROWTH STRATEGIES. The best REITs don't want to just pay dividends. They want to grow--buy more properties, collect more rent, drive their stock prices up. That's not simple, given the requirement that REITs distribute 95 percent of net income. A REIT can't hold its dividend down for a few quarters while it accumulates cash to buy more property.

So how does a REIT grow? At least four ways: It borrows money; it pays the smallest dividend allowable by the law and acceptable to shareholders (and thereby retains a maximum of earnings); it sells property from its portfolio at a profit; and it issues more stock. An investor should learn which of these strategies a REIT is employing and to what extent.

Leverage is a basic fact of real-estate investing. So is cyclicity. And, given the combination of these two, so is volatility. Right now, aggressive REITs are using leverage to their advantage. That's fine, but they're going to have to be pretty quick on their feet to avoid being hoisted on that leverage when the cycle moves along. Conservative REIT analysts don't like to see debt that totals more than 40 percent of a REIT's estimated asset value.

Selling property can give earnings a kick if, first, the price is right and, second, the money is used to buy another property with a better upside. Stock issues can be good news, too, but only if the sale doesn't dilute the value of existing shares. In other words, any proceeds from the sale of new stock should be invested in property in a way that raises, or at least doesn't reduce, the REIT's overall rate of return. The worst kind of stock issue is one used to support faltering operations or prop up the dividend.

MULTIPLES. The stock tables in the newspaper show a price-to-earnings ratio for every listed REIT. People in the industry tend to ignore it-- for good reason. Different REITs figure earnings differently, so p/e ratio isn't much use for REIT-to-REIT comparison.

NAREIT has pushed its members to adopt a more meaningful measure called funds from operation. It may be a while before all REITs report FFO the same way, but price-to-FFO ratio is a reasonable measure of valuation and means of comparison. The average equity REIT now sells at about 11.3 times FFO.

Much as you might like the income, don't get too hung up on dividend yield. Some REITs distribute money well in excess of 100 percent of their net income (they do this by distributing a portion of the tax break for depreciation on their properties). That may attract investors, but the best REITs look for ways to use their cash for growth. In this environment, if you see a dividend above 8 percent, do some more research. You may be looking at a company that doesn't have a viable strategy. Or you may have found one that has been overlooked and undervalued.

Finally, examine the rate of growth for net income and FFO. The top companies show steady, sustainable growth.

INSIDE OWNERSHIP. I always feel better about a company when the managers have a financial stake in it. NAREIT suggests that management should own a minimum of 10 percent of the shares in any REIT. Sounds good to me.

The REIT craze is far from over. Last year produced six REIT initial public offerings. This year, there will probably be twice as many, including the largest ever, Boston Properties, started by publishing magnate Mortimer Zuckerman and scheduled to go public soon. REIT mutual funds are proliferating, too: There are now 58, and 19 of them are sold without front-end loads. If you believe in the idea of REIT investing

but aren't sure that you have an edge, or the time to take up another kind of investment research, consider letting the professionals do it for you.

Of course, picking a fund will take some research as well. REIT funds are no more alike than REITs are and no less subject to the basic rules of investing: Buy only what you understand, believe in, and intend to stick with--even when others are chasing the next miracle.

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97/11

Keep Digging

By Peter Lynch

So your Krugerrands haven't panned out. It's still possible to uncover good gold-mining companies.

Let's try this again. back in June 1995, I made my pitch for gold in the pages of Worth. It seemed like the right time: Inflation was showing signs of life, and world gold demand was on the rise. Annual fabrication demand alone--for gold destined for actual use, primarily in jewelry and the electronics industry, as opposed to gold to be held in coins and ingots as investments--exceeded the amount being taken out of the ground. Simply on a supply-and-demand basis, it all seemed like a promising recipe for gold prices and hence for gold stocks and funds.

Well, I was right about the demand side of the equation but wrong about supply. Like most gold analysts and gold-fund managers, to say nothing of the long-suffering goldbugs, I didn't see some things coming. And therefore I didn't anticipate the way the price of gold would stagnate for a while, pop nicely higher for a while, and ultimately collapse like a central banker at the end of a long, hard week. In mid-1995, gold traded at a spot price of about $385 an ounce. It climbed in 1996 to $416. It dropped nearly $100 an ounce, to $318, by early this summer, and as I write, it's at $323.

The trend has been ugly, I know, but I think things may begin looking up for gold--and, more important for our purposes, for gold-mining companies. The best news is that if you buy the right companies the commodity price doesn't have to jump for the stocks to show a nice increase.

In the broadest sense, the problem with gold is that it is undergoing a re-evaluation. The central banks of many countries are wondering if gold's traditional role has any meaning in the modern global economy. For centuries, a country's gold reserve has been the representation of its wealth. The very definition of a devalued currency has been one that isn't backed by gold. But in some places the men with their hands on the levers are weakening in their faith. Maybe the best measure of economic strength, they're saying, is something less physical--purchasing power in the world's markets, perhaps. Maybe gold is just a metaphor--a metaphor that doesn't pay dividends or go up in value. The heck with it.

I've talked with people who think this reassessment of gold is savvy and long overdue and with people who think it's foolish, perhaps catastrophic. It's not important to take a position here. What's important is that in the past two years a number of central bankers have decided they didn't particularly care whether their vaults held gold anymore, and they sold (in some cases because they needed to raise cash). I said I had messed up the supply side of the scenario two years ago. That's a large part of what went wrong: Central banks unloaded gold at an accelerated pace.

The amount of gold dumped by the central banks wasn't enormous--they still hold 97.6 percent of the gold they held at the end of 1994. But that's not the point. Gold, much more so than any other commodity, is about sentiment and psychology. There's a sense that central banks aren't playing by the old rules.

Australia, for example, sold two-thirds of its reserves this summer--the government said it would rather buy foreign bonds, which at least pay some interest. Investors have seen this sea change and have asked a pretty fair question: If banks don't want gold, who the heck does? Gold has traditionally been regarded as an inflation hedge, but that is dependent on the same metaphor, the same set of assumptions. (Not to mention that inflation has been quiescent more or less worldwide.) To some people it has begun to appear that, as Jim Rogers said in Worth earlier this year, gold just doesn't work anymore.

I should touch on the infamous Bre-X Minerals scandal. You remember that: The company announced that it had found an enormous reserve in the jungles of Indonesia. And then it announced that there had been...a...mistake. There was no gold. Recriminations followed, to say nothing of lawyers. A company geologist leaped from a helicopter. The company itself has disappeared.

In real terms, this shouldn't have mattered very much. It was even possible to see the bad news as good news: No huge new reserve meant less new supply to dilute demand. But investors saw the scandal in the context of a market that had become odd and unpredictable. They saw it as just another thing not to like about gold. Bre-X didn't cause the collapse of gold prices and gold stocks, but it darkened an already negative atmosphere.

So where do I get the nerve to suggest that you look into gold stocks? I'd like to humbly point out that I was correct two years ago about the demand side of the gold equation. Every year since 1991, in fact, demand has outstripped what is known as the mine and scrap supply. Last year, the gap was about 8.4 million ounces, about 2.3 times the gap in 1994. Much of the demand comes from Asia--in particular India and China. The economies in those countries are increasing rapidly and producing a growing middle class. What are these people going to do with their wealth? They tend to live a long way from a Circuit City. Cars are still out of the question for many of them. If Indians and Chinese can't convert their money to stuff, as Americans so vigorously do, they're going to save it--and they still like to do that, in part, by buying high-karat gold jewelry. A lot of people think this demand, though it has proved price-sensitive, provides a bottom for the market.

The supply issue is probably better under control now, too. Beginning in 1980, when the price of gold shot up to $850, mining companies reacted as you might expect: They explored frantically, sunk new mines, re- opened old mines. They spared no expense, and why should they have? If you can get $850 an ounce, you can make a profit at almost any production cost.

Some of those mines are playing out now; they've had their eight or ten years of production. Others are too expensive to operate in a $330-an- ounce market. According to Gold Fields Mineral Services, a London-based research firm, the industry-wide total cost of getting an ounce of gold out of the ground has risen to an average of $317--a dollar less than the recent low spot price.

Even the great mines of South Africa are finally winding down. They've had amazing runs--100 years and more--but now the gold isn't coming as easily. Or as cheaply: Labor costs have gone in the opposite direction as gold prices. South Africa is not what it used to be as a gold producer. As for central-bank sell-offs, they probably won't be as numerous or have the same kind of impact in the future. Investors now understand that banks can sell. They also know there's a limit to how much they can sell. Australia's sale a few months ago was dramatic symbolically, but in relative terms the country never had much gold to sell. In dumping two-thirds of its reserves, Australia put just 5.9 million ounces of gold into circulation. The U.S., by comparison, has 44 times that much gold in reserve, 262 million ounces, and law requires us

to hold on to it. Germany, Switzerland, and France, the next-largest holders of gold (95 million, 83 million, and 82 million ounces, respectively), aren't likely to destabilize the world economy by emptying their vaults either.

What I'm describing is a fairly delicate balance. Demand is healthy but price-sensitive. Supply is limited (if not in theory, then in practice) but not so limited as to drive prices up.

This is a welcoming environment for investors? Yes, I think it might be. That's because, first, the price of gold doesn't have to rise for the best mining companies to produce respectable profits. And second, if the price of gold is currently at a bottom and does eventually rise, these companies will make huge profits.

I mentioned that the average company is now spending $317 to get an ounce of gold out of the ground. Let's say you're investigating a company that's a little better than average, because of economies of scale or cheaper labor or simply because its mines yield more gold per ton of rock. Perhaps this company produces gold for 10 percent less than the average, or about $285 an ounce. Even with the price of gold limping along at $330, the company can earn good money.

There's ample proof that good companies can do well for investors even when gold itself is a bad investment. I asked Lipper Analytical Services to give me a list of all the gold mutual funds that have been around for 17 years. Seventeen years ago, of course, gold was at a peak. If you filled your dresser drawer with Krugerrands then, at $850 an ounce, you have lost 60 percent of your money. But of the seven gold funds that have been around that long, five show positive returns. The best, Franklin Gold Fund I, has gained 257 percent. The next best, Van Eck International Investors Gold Fund, is up 166 percent. Three more funds managed to stay in the black during these dark days for gold, and even the worst of them has done better than gold itself.

And what if the spot price of gold actually rises? Again it becomes clear that the best way to own gold is not to hoard Krugerrands but to own shares in the best mining companies or in the gold funds that invest in them. Let's say the spot price manages a 25 percent rally: It rises to $412.50, a little below where it was in mid-1996. Your Krugerrands are worth 25 percent more. Not bad. But the company's profits have almost tripled. Where once it cleared $45 an ounce, it now clears $127.50. When a company's profits jump like that, you can imagine what happens to the stock price--and gold stocks consistently pay modest dividends. Gold bars, obviously, don't pay anything.

I'm going to run contrary to the general pessimism and do one more exercise: Let's imagine that gold hits $500 an ounce. When it comes to investing, and especially when it comes to gold, I tend to believe that nothing is impossible, especially if it has happened before. So gold goes to $500 an ounce. If you bought your Krugerrands at $330, you've cleared 52 percent. You're a genius; maybe you should start a newsletter. Our imaginary company, however, is now clearing $215 an ounce. Profits have nearly quintupled. (This bit of leverage, by the way, explains something you'll notice when you look up gold stocks in the newspaper: They trade at extraordinarily high price-to-earnings ratios. A p/e of 50 is not considered out of line for a well-run gold- mining company at today's gold prices.)

Peter Ward, gold-mining and precious-metals analyst at Lehman Brothers, is among those people who think that gold is becoming just another commodity, that more central banks would sell if they could

only find a decent price, and that, with the possible exception of brief spikes downward, the spot price isn't likely to go much of anywhere in the next 12 months.

Nevertheless, he's excited about a couple of mining companies that have the right qualities to thrive in the current environment. His favorite is Barrick Gold (NYSE: ABX; recent price, $21.69), a Canadian firm that is the world's third-largest producer. The central fact is this: Barrick gets gold out of the ground for a cash cost (the actual cost of extraction) of $200 an ounce and a total cost of $265 an ounce. Barrick is also the industry leader in hedging: It has contracts that guarantee it a price of $420 an ounce for much of the gold it produces over the next three years.

Ward also likes Placer Dome (NYSE: PDG, $16.13), because it has some of the same qualities as Barrick. It gets gold out of the ground cheaply (a cash cost of $215 an ounce and a total cost of $280), it has a good hedging program, and it has a clean balance sheet. Victor Flores, senior mining analyst at Marleau, Lemire Securities of Toronto, thinks the long-term average spot price of gold is going to linger in a range of $350 to $385. He, too, sees good things for Barrick Gold.

Flores also likes some medium-size companies. One is Meridian Gold (NYSE: MDG, $4.25), formerly known as FMG Gold. Another is Crown Resources (Nasdaq: CRRS, $6.50), a Denver-based exploration company that is involved in a joint venture in Washington State with Battle Mountain Gold. Finally, Flores mentions a company in which I own shares, Boston-based Pioneer Group (Nasdaq: PIOG, $30.50). Pioneer is actually a money-management firm--you've probably heard of the Pioneer Family of Funds--but it also has mining interests. Among these is a 90 percent stake in Teberebie Goldfields Limited in Ghana. In Flores's opinion, Pioneer is fairly valued even without Teberebie figured in. So when you purchase Pioneer, it's like getting a $500 million gold company for almost nothing.

Let's return for a moment to Barrick Gold. In the spring of 1985, you could have picked up shares in this company for about 50 cents apiece, adjusted back for splits. Gold stood at almost exactly the same price then that it does now. By the spring of 1996, despite a miserable environment for its industry, Barrick traded at $32 a share--it had become a 64-bagger. Even if you didn't buy until 1990, and you're still holding on through a recent drop, you've tripled your money and been paid a small annual dividend for your pains.

Barrick is the kind of company that too few investors are looking for today. It has an old-fashioned business that anyone can understand. It's not the next big anything. All it does is consistently make a couple hundred million dollars a year.

No company, including Barrick, is a sure thing, of course. Say the price of gold begins to rise. The hedging contracts that are now making Barrick so profitable could become, in the short term, an albatross. If the spot price rose above the hedging price, Barrick's profits would hit a ceiling, which would suddenly make it less attractive than some rivals. But don't miss the larger point: There are great companies in just about every industry. You don't have to understand cutting-edge trends to identify these companies. You don't have to have an inside position and buy at the initial public offering. You don't even have to peg the direction of the world's most psychologically freighted commodity. You just need to keep your eyes and ears open and understand what makes a company worth owning.

Peter Lynch is vice-chairman of Fidelity Management and Research. His third investing book, Learn to Earn, was published last year by Simon & Schuster. He writes "Investor's Edge" with Dan Ferrara. Research assistance is provided by John Fried.

98/03

Best of the Best

By Peter Lynch

The question, asked of seven premier money managers: What are your favorite stocks for the near term and the long? The questioner: Well, you know him.

Now, what do you think stock pickers talk about when they get together? Other than the Red Sox, that is? Call me predictable, but when I spend time with people in my business, people whose track records I admire and whose opinions I respect, I like to kibitz about companies.

And why not? No stock picker knows so much that he can't learn a trick or a tip from a peer. Nor does a good stock picker get tired of this stuff. That's almost a matter of definition. A good stock picker is good precisely because he or she loves the process: sifting through thousands of public companies; studying balance sheets; learning the workings, the real details, of industries and businesses; investigating how a company treats its customers and vice versa. This is the only way I know to find great companies, and nothing beats the feeling when it pays off.

The peers I've been talking with recently are seven good ones. Yes, a lot of them have Boston-area connections, but that's not my attempt to plug my hometown. It simply reflects the fact that these are people I know as something more than a sketch in The Wall Street Journal and a voice on the phone. Some of these relationships, in fact, go back further than I care to admit-in one case to the mist-shrouded days of high school.

Some of the seven stock pickers you'll know by name-certainly you'll know Michael Price-and some of the others might be new to you. Among them, these seven veterans have 150 years of investment experience. All of them were on the job during the down markets of 1987 and 1990. A few were around for the long bear market that ended in 1982. The most experienced member of the group has been at it for 30-odd years and the youngest for 11.

Best of all, these people come from what's known as the buy side of the business. A lot of people tout stocks, talking about companies in newsletters and magazines or on television. These seven money managers actually go out and buy stock in the companies they recommend-thousands, even millions, of shares. This isn't an intellectual exercise-they buy shares in a market that doesn't sit still, paying commissions for the privilege and delivering good results despite these penalties.

I talked with these seven people for a couple of hours each, and it wasn't hard for them to come up with names. People at the top of this field keep a close watch on a large stable of stocks-in several cases 400 to 500. The tough part was getting down to two picks each. I asked the stock pickers to give me one recommendation for the next 12 months and another for a three- to five-year commitment. A number of them felt their picks could go either way-that the company they liked for the next year would also look fine five years out. The difference usually came down to this: The 12-month stories typically involve

a special situation, something that will bring a company back from a down period or will add a little buzz to earnings growth in the near term.

The notion of the story is an important one. As I've said so many times before, if you don't know the story, you don't know the company. (And if you don't know the company...) The level of detail here, in these 14 stories, is the minimum any investor should understand before committing money. Do you own stock in five companies? You should be able to write five stories like these. The language is pretty simple. The ideas are from the real world. It's not nearly as difficult as it is necessary.

There's an alphabetized list [on page 74 of the magazine] of the companies the pickers have picked. I suggest you start by thinking about what isn't on it. There are no technology stocks-no Microsoft, no Intel, no Cisco Systems. There are no classic cyclicals-airlines or automakers. There are only four companies in the Standard & Poor's 500 Stock Index.

I was surprised, as I talked to the stock pickers, that they weren't recommending tech stocks-there's certainly been the kind of volatility in the sector that can create buying opportunities. But then I looked more closely and understood. The stocks with good stories are fairly or highly priced in this market. The stocks that are cheap look questionable on the fundamentals. It makes sense to be cautious, because if there's an investing minefield in this decade it's the technology sector, in which so many companies catch a cold one week and are hospitalized with pneumonia the next.

As for the lack of cyclicals, it doesn't mean the stock pickers can't foresee good conditions for certain industries. But what they're most passionate about is steady earnings growth, which is not in the nature of cyclical stocks. These pros share my insistence, I think, on what I call earnings visibility, which is a way of saying we like to see those earnings coming. Which company is most certain to meet our estimates? That's the one we want to buy.

Finally, what does it suggest that only 4 of the 14 companies are in the S&P; 500? To me, it suggests opportunity. We have ten companies from a segment of the market that has struggled the past three years-the S&P;, after all, has run away from every other index since 1995. It follows that these companies may have been overlooked-which is music to a stock picker's ears.

So what does the table show?

First, it shows a breadth of companies, from all parts of the economy, whose stories any intelligent person can understand.

Second, the table shows that people are looking for value. The market, as measured by the S&P; 500, is expected to trade at a price-to-earnings ratio of 19 or 20 in 1998. Earnings are expected to grow at 10 to 11 percent, which is less than half the growth we've seen the past three years but is in line with historic performance. So the market is selling at about twice the expected growth rate. This suggests that investors are pricing stocks on the basis of unrealistic expectations about growth. Of our 14 stocks, however, 11 are selling below their expected growth rates. At the current prices for these stocks, the market is failing to take into account the real future growth of the companies. That's the essence of a good value and a good opportunity.

And now the stories. My introductions of the stock pickers are followed by their introductions, in their own words, of the stocks they believe deserve your attention.

98/06

Peter Lynch: Hope You Guess Our Name

By Peter Lynch

The markets know, or think they know, the meaning of a brand name to a company. The value of the name Coca-Cola, for example, or La-Z-Boy or even Warren Buffett is built into the price of the company's stock. But what about a brand name that hasn't been well tended? One that doesn't mean what it once did, or what it could?

In other words, what about H&R; Block?

You know what this company does: There's only one name that says "taxes" to more people than H&R; Block (nyse: hrb), and that's the name you write on your check in April. In 1997, 13.3 percent of all the individual tax returns submitted to the IRS were prepared by H&R; Block. That came to 14.3 million returns. I've owned Block shares for some time, and a big reason is its phenomenal combination of brand recognition and business reach. Who else, anywhere, has a franchise like this?

And yet, until last year, the stock mostly watched the great market rally from the sidelines. Earnings were generally lousy, and that fed into what might have been an even bigger problem: H&R; Block had begun to look like a company that didn't know where its strengths and weaknesses lay. Perception matters a lot, and most investors, if they were asked what they knew about Block, wouldn't have described the skill Block had shown in managing its core business for 43 years. They wouldn't have said that at the height of tax season Block maintained an office within ten miles of 80 percent of all Americans, or that in 1997 the company transmitted 50 percent of all returns sent to the IRS electronically, or that the value of a share of H&R; Block has increased 1,400-fold since the company went public in 1962. They would have been more likely to offer some impressions of Block's long, costly struggle to maintain its presence and investment in the new territory of online services, a struggle the company finally gave up this year when it sold its remaining stake in CompuServe to WorldCom.

There are plenty of lessons here. Memories are short. A poorly performing business can drag down a whole company. Failure attracts more attention than success. And perhaps the most important one: A brand name should be treated with the utmost care.

If H&R; Block becomes the stock some people think it can, that will be because the company now understands this. Block is in the early stages of an aggressive, far-reaching process of leveraging its brand name-- making that name mean something specific, positive, and, to a certain extent, new. Can the company pull it off? In these brand-oriented times, Block will be putting on a kind of public clinic. We all stand to learn something--and maybe earn something.

The basic fact of H&R; Block's business model is that the company takes in 80 percent of its $1.1 billion in annual revenue and more than 100 percent of its profits during tax season. In other words, Block makes money hand over fist in January, February, March, and April, and sees it dribble away the rest of the year. If it seems that H&R; Block offices pop up in your city like mushrooms and disappear the same

way, that's probably because they do. In the heart of tax season, Block operates about 8,800 offices in the U.S. After April, most of these offices shut down or at least staff down.

The basic fact of Block's brand identity is that tax preparation is the whole shooting match. That's all most people think of when they hear the name H&R; Block.

The way out of each of these boxes is the same. Block needs to develop new products and services that make sense to its loyal customers. In the U.S. alone, better than 15 million people a year sit across a desk from a Block employee (the difference between that number and the number of returns prepared by Block is that some people stop in just for filing; they pay, of course). Between two-thirds and three-quarters of each year's customers return the next year--the more complicated the tax codes and/or the customer's return, the more likely the repeat visit. This deep reach into people's lives is what distinguishes Block from nearly any other company with a well-known name--it's why I say Block isn't just a great name but one of a handful of truly great franchises in American business.

But what the company needs to do now is build wisely on the relationships it has established over the past 43 years. That has always been the sticking point. Block has made some mistakes. In particular, it has occasionally been too attracted to the idea of diversifying its business rather than exploiting its name. You might not have known that Block once owned Hyatt Legal Services, a chain of walk-in law offices. Or that it was an aggressive buyer of personnel companies, which it folded into a company called Interim Services. Those ideas are a long way from tax prep.

Then there's the CompuServe story. Block bought the company in 1980 for $23 million, then picked up a software outfit called Spry for $102 million and merged it into CompuServe. The evolution of CompuServe is not a simple story, but suffice it to say that America Online came along and ate CompuServe's lunch. CompuServe lost $186.5 million in 1997 alone. In hindsight, it seems clear that Block's expertise in tax preparation wasn't of much use when it came to a fight with AOL. Moreover, CompuServe--a big company and a highly visible one--made it difficult for investors to evaluate and value Block. Was H&R; Block a service company? A technology company? It was, in fact, an uncomfortable blend. So Block humbly unloaded its 80 percent stake in CompuServe. (The sale wasn't, by the way, the absolute disaster that some people made it out to be. WorldCom paid Block $1.1 billion in stock, which was quickly converted to cash--and add to that the $552 million Block received in 1996 when it sold 20 percent of CompuServe in an initial public offering.)

The sale of CompuServe, which was completed just a few months ago, marks a turning point for H&R; Block. The decks have been cleared. Block's balance sheet is very clean, though that's to be expected--management has traditionally been conservative. The company is now awash in cash-- about eight dollars' worth a share from the CompuServe sale and another couple dollars a share from the recent tax season. Think about what $10 a share in cash means. The stock is trading at about $47. Based on 1998 consensus earnings estimates provided by First Call, the price-to- earnings ratio is around 25, about the same as the market as a whole. But take the cash off the top and you'll see that shareholders are paying just $37 for Block's earnings. So the effective p/e on this stock is about 20, comfortably below that of the market. Given this, and the company's announcement that it will buy back up to 15 million of its own shares (out of about 105 million shares outstanding), it's no surprise that the market likes Block again. For the 12 months ended April 1, 1998, Block's stock was up 55.1 percent.

Block has a few dozen businesses, but for our purposes it can be thought of as having two sides. The first is the tax side. The second is the financial-services side.

The tax side is the cash cow and always has been. But for the past decade or more, management has been worried that the company's market might be moving toward maturity--in other words, that 13 percent of the taxpaying public is a heck of a lot and that more customers will be tough to find. What will the source of growth be?

The government, at least in part. The best thing to happen to H&R; Block's tax-prep business in years was the Taxpayer Relief Act of 1997. There was a lot of talk about tax simplification in Washington, but in the end the tax code just got more unwieldy, meaning that more Americans will have to file more-complicated returns. On top of that, many of the changes in the Taxpayer Relief Act will be phased in over several years. The door will be open at H&R; Block.

If serious tax simplification ever does come about, then, yes, Block will be vulnerable. The tax return on a postcard--that could be a company killer. So if you know something the rest of us don't about when the talk about flat taxes and national sales taxes might come to something, then you have reason to be skeptical about Block's ability to keep growing in this area. But for now, the IRS is driving ever larger numbers of taxpayers into the arms of H&R; Block.

This could fit nicely with the company's expansion plans for its core business. You think 8,800 offices is a lot? Look for more. Block will also acquire local competitors. And it will selectively acquire franchisees. For many years, the company was an aggressive franchiser (it's a cheap way of opening offices), and close to half of the offices now operate under franchise agreements, but Block thinks it will get more out of some offices if it owns them outright. Finally, Block is working hard to expand internationally. There are already more than a thousand offices in Canada, more than 300 in Australia, and a couple handfuls in the United Kingdom, the beginning of what the company hopes to make a big incursion. Block plans to move into developing countries, too, as the governments of those nations introduce their citizens to the pleasures of the income tax.

All right, but what about the threat from technology, specifically do- it-yourself tax software, which is growing in popularity? This looks like a problem for someone, but that someone probably isn't H&R; Block. Tax-return software costs up to about $50 a year for the federal version, half that much again for the state version. The average tax- preparation fee at H&R; Block is about $72. Typical Block customers, then, don't have much financial incentive to make a switch. And who's to say they don't have other kinds of incentives to stick with Block? Maybe they think that Block will provide them with expertise that will pay for itself. Maybe it's worth money to them just to avoid the time and irritation that inevitably attend doing your own taxes, computer program or not. Maybe they don't have the souped-up home computer most tax software demands. Maybe there's just a tax preparer they really like at the local Block office.

As a matter of fact, tax software is directed at the kind of individual least likely to come to H&R; Block--a person with a fairly substantial income and a fairly complex return. Block serves the middle-income customer. So the people who prefer to use tax programs are unlikely Block clients anyway. It's the independent tax preparer, the accountant doing returns for $200 to $1,000 a pop, who is likely to feel a pinch from tax software.

Besides, Block owns TaxCut, the second-most-popular tax-return program (it has a market share of about 30 percent). Sales of TaxCut increased by 150 percent in 1997. High-income people may not be walking their business into H&R; Block storefront offices, but through TaxCut, more and more of them are contributing to Block's bottom line.

And they're starting to do that in the storefronts, too. The company is expanding a division of its tax-prep business called H&R; Block Premium, which, as the name suggests, is designed to attract customers with more- challenging (and more-expensive) returns. Block now has about 600 Premium offices.

This all adds up to a plan that a lot of people think will work for Block's core business. And as I said, the market likes Block's recent direction. But let's not get too giddy about that 55 percent one-year jump in the share price: For the three years ended April 1, the compound annualized return was just 6.2 percent--pretty miserable given that the Standard & Poor's 500 Stock Index rose an annualized 32.8 percent for the period. Block's five-year annualized return was just 9.1 percent; the S&P; gained 22.4 percent. If Block is going to be a long-term growth story, the financial-services side of the business will have to pull its weight. As will the H&R; Block name.

Alexander Paris Jr., a senior investment analyst at Barrington Research Associates in Chicago, follows Block as carefully as anyone I know. With the sale of CompuServe, he points out, H&R; Block becomes not just a more profitable company but a pure play in financial services. That makes the company easier to understand, easier to value, easier to place in a portfolio. The company earned an estimated $1.50 a share in calendar year 1997. Paris expects to see a 23 percent increase (to $1.85 a share) for 1998 and another 19 percent increase (to $2.20 a share) for 1999.

Paris looks approvingly on the specifics of what he calls Block's "transition from being purely a tax-preparation business to a financial- services business." He likes, for example, the recent acquisition of Option One Mortgage. People buy houses 12 months a year--this could keep the doors of more Block offices open. Paris expects Option One, a mortgage originator with more than 5,000 mortgage brokers in 46 states, to bring in better than $100 million in revenue during Block's first year of ownership.

What will the source of growth be? The government. The IRS is driving ever larger numbers of taxpayers into the arms of H&R; Block.

Block has also begun, in a toe-in-the-water fashion, to sell financial planning out of a few offices--advice on mutual funds, annuities, IRAs, even household budgeting. Paris sees this as a logical step for the company, and he envisions Block taking it further--not just peddling advice but perhaps competing, ultimately, with the discount brokerages. Block is buying small accounting firms. And it has a referral program with Geico, the auto insurer, perhaps as a prelude to offering insurance on its own.

It's all about having enough to offer those millions of people who already take a seat before an H&R; Block employee each year, and it all makes sense. The financial lives of Americans are becoming more complex- -you'd better believe that H&R; tax customers are buying equities and mutual funds, trying to get their financial houses in order and worriedly planning for retirement.

There's one more piece to the puzzle--perhaps as important as any of the others--and that is the recent decision by Block management to really work the brand. The top decision-makers at Block have always been people with financial backgrounds, but to head up marketing, Block has brought in a whiz from Procter & Gamble, a company that knows a thing or two about branding. Don't be surprised if you find yourself one slow afternoon humming a new H&R; Block jingle.

Block has begun to attract more interest on Wall Street; Salomon Smith Barney and some other firms have officially added analyst coverage. If they haven't already, those analysts will probably begin to see what I've been seeing--that a strong H&R; Block is a heck of a takeover candidate. I'm sure you've noticed the consolidation in the financial- services industry--not just such things as the merger of Travelers Group and Citicorp but also Cendant's purchase of Jackson Hewitt, the closest thing Block has ever had to a national competitor. Think what a company gets when it picks up H&R; Block: instant dominance of the tax-prep field, a huge network of offices, all that cash, an hour of face time each spring with millions of financially active adults, and the name. Don't forget the name.

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98/10

Hidden in Plain Sight

By Peter Lynch

If I had a hammer--and I probably do, somewhere--it would have to be a Sears Craftsman. Like many, many people, I have a long history with Sears, Roebuck and Co. S I've been a Sears investor almost as long as I've been a Sears customer. I've spent more time on the phone with Harry Wren, the company's longtime head of investor relations (now retired), than with many people outside my family. I used to talk frequently with Edward Brennan, who was Sears's CEO from 1986 through 1995, and I keep current with Arthur Martinez, who succeeded Ed. I've always liked the company. Sears is a sensational brand name whose best products are sensational brands of their own--not only Craftsman but also WeatherBeater, Kenmore, DieHard, and, until it was spun off in probably the best move a Sears shareholder ever saw, Allstate. The company has always sold real things that real people need.

But to understand Sears now, you have to start over. Forget what you think you know about the company. Sears has a 112-year history and, during that time, has been an example of just about every investing lesson imaginable, but right now the one that matters is this: Sometimes it's necessary to look at familiar companies in new ways.

I have notes from a 1994 meeting with ed brennan. He talked about the corporate restructuring he had begun the previous year, and he mentioned that he had tapped a great executive for the head spot in the merchandise group. That was Arthur Martinez, who joined the company in 1992 after establishing a strong merchandising reputation at Saks Fifth Avenue. This guy is going to be dynamite, Brennan said. He and Martinez had some plans and had already begun putting them in place. Unfortunately for Sears, most analysts and money managers didn't want to listen to the story--or perhaps believe it.

When I sat down with Ed Brennan that day, Sears--at the time a $50 billion company with 360,000 employees--just wasn't running on all eight cylinders. It was still reeling from 1992, a year in which Hurricane Andrew cost Allstate $825 million (the total loss from Andrew would eventually come to about $1.65 billion) and the merchandise group lost an incredible $1.47 billion. Sears's stock gained just 2.4 percent that year, while the Standard & Poor's 500 Stock Index was rising 12.7 percent. Wall Street had decided this company was old and haggard.

Brennan's ideas fell under the heading of recognizing value. The company was so big and so diverse that it had billions of dollars' worth of assets that weren't reflected in the stock price. You might say these assets were hidden in plain sight. Brennan had begun to make some moves intended to realize their value.

Brennan and Martinez set out to redefine Sears--for Wall Street, for Sears customers, and for Sears employees. What was their goal? This will seem odd, because Sears is one of the few great retail success stories of this century, but they wanted to make Sears a retail company. How could Sears be anything other than a retail company? In 1990, 58 percent of its earnings came from Allstate--an insurance company. Dean Witter (a stock brokerage) and Coldwell Banker (a mortgage underwriter and

residential-real-estate company) accounted for another 21 percent. The merchandise group also accounted for 21 percent of earnings, but all of the company's profit came from the Sears credit card.

This wasn't a retail company; it was a crazy quilt of financial-services outfits stitched to a retail operation. Yet who on Wall Street was likely to be following this company? Retail analysts. To these folks, Sears looked unwieldy, complicated, and tired. A retail analyst forced to develop an opinion on Sears back then might very well have concluded, Hey, I'll skip this one and look at that other company--that simple, fast-growing one, Wal-Mart. The march to a new retail identity for sears, step one, 1993: Brennan shuts down the catalog operation. He kills the Big Book. It would be difficult to overstate the significance of this to the company, because Sears's corporate identity is intimately tied to the company's long history. For decades, Sears was absolutely preeminent in American business; for almost 40 years after World War II, its sales consistently represented 1 to 2 percent of the gross national product. As for the catalog, it was simply a piece of the fabric of this country. Americans regarded it as their first (and, in some parts of the U.S., only) source for everything from underwear to bathtubs, screwdrivers to guitars. It was the source for everything that made an American home and even for the homes themselves: Between 1908 and 1940, Sears sold more than 100,000 houses through the Big Book.

But in the modern era, the catalog was an increasingly iffy proposition. Here's a story I remember hearing almost 30 years ago on a vacation with my wife to Alaska: A miner sent five dollars to Sears asking for 100 rolls of toilet paper. Sears wrote back and said he'd have to order through the catalog. The miner replied that if he had the catalog he wouldn't need the toilet paper. The point: Sears spent so much money printing and distributing the catalog that it would always be a struggle to recoup the costs. So say good-bye to that bit of tradition. Say good- bye to the real-estate operation, too--Brennan sold the bulk of Coldwell Banker for roughly half a billion dollars. Then he sold 20 percent of Allstate, bringing $2.4 billion into Sears's coffers. Next to go was Dean Witer. Sears shareholders received 0.39 shares of Dean Witter for each share of Sears they owned.

Brennan's last big move was perhaps the biggest of all: He spun off Sears's remaining 80 percent share in Allstate. (Allstate had been in the Sears family since 1931.) Each share of Sears entitled the holder to 0.93 shares of Allstate; I still have mine.

I recently called Jerry Leshne, the vice president of investor relations at Sears, and asked him to help me figure out how valuable the Dean Witter and Allstate spin-offs have been for shareholders. The numbers are impressive: An investor who held $10,000 in Sears shares in 1992, and who retained the Dean Witter and Allstate shares given to him and who reinvested his dividends in all three stocks, would now have stock worth about $57,000. That's a compound annual return of 33.5 percent, compared with 20.4 percent for the S&P; 500. Or let's say you liked Sears and nothing but Sears. An investor who started with $10,000 in Sears stock in 1992, and who sold his spin-off shares upon receiving them to buy more Sears stock, would now have about $39,000 in Sears shares. That doesn't just beat the S&P.; It also beats the retail index.

The spin-offs enabled Sears to focus on retailing again. It was time for Martinez, who became CEO in mid-1995, to show why Brennan had been so high on him.

as head of the merchandise group, martinez had already begun to close inefficient stores. Now, as CEO, he continued to implement the plan he and Brennan had developed. He placed a great emphasis on remodeling stores to make them more attractive and more profitable--he redid a total of 50 million square feet and, in the process, converted 5.5 million square feet of nonproductive space to usable retail space. He developed incentive plans to re-energize employees. He worked hard on clarifying Sears's pricing policies, having learned from research that the public thought Sears's prices were all over the map. As for that hammer I may or may not own, the company decided I didn't need to have 30 options for buying another. Sears now sells a handful of different hammers rather than dozens.

These moves were all critical because Sears was in a serious fight. There was no single competitor that attempted to do everything Sears did, but add together a Wal-Mart, a Gap, a Home Depot, a Pep Boys, and a Circuit City--a combination found in plenty of communities--and you had a clear and present danger.

Sears's biggest national competitor at the time, particularly in the crucial area of soft goods (apparel, shoes, bedding, so-called home fashions, that sort of thing), was J. C. Penney. Penney, too, owned most of its stores, and it had a much better focus. The two companies were going after the same middle-income customer, and Penney was doing the better job.

Martinez was smart about taking on Penney. He set a goal for Sears of getting the same kinds of margins on soft goods that Penney was getting. He also targeted women--despite the fact that many Americans thought of Sears as primarily a place to buy tools and tires. Sears, Martinez realized, was missing the boat with women: It didn't bother with plus sizes and petite sizes in most women's apparel, for example. It didn't feel like a place that wanted female customers. As he straightened this out, Martinez put a lot of corporate energy into an ad campaign: "The softer side of Sears," which was all about making women feel more welcome. It had a great impact. Soft goods now account for 67 percent of the retail space in a Sears store, up from 58 percent four years ago. Even maternity-wear sales are up sharply.

Finally, it's time to talk about the sears brands, because with Sears functioning as a relatively straightforward retail company, these brands are the very heart of the story. I can keep this simple. WeatherBeater is the number-one exterior house paint in the country for do-it- yourselfers. Diehard is the most popular auto battery. Craftsman is the number-one line of tools. Kenmore is the number-one line of appliances.

What's more, the company has developed several good new brands. The Canyon River Blues line of jeans and other casual apparel, for example, brings in a quarter of a billion a year in revenue. And that's a heck of a lot more profitable than selling the same quantity of Lee's or Levi's. Add to that lines like Circle of Beauty (cosmetics and fragrances), Eagle Golf (golf apparel), and Fieldmaster (rugged apparel).

So Sears has a very good brand lineup. The question is how the company can make the best use of these brands in a changing retail environment.

The answer is not just the big, full-line stores--though there are 833 of those. Sears's push for the past few years has been in what it calls neighborhood stores--small, usually freestanding outlets away from the big malls. Sears now has 225 hardware stores; some are called Sears Hardware and some Orchard Supply Hardware (Sears bought the Orchard chain, which comprises 65 stores in California, in 1996).

Craftsman, not surprisingly, is king at these outlets. To sell Diehard batteries and other automotive products (including 10 percent of all the tires sold in the U.S.), Sears now operates 326 NTB (for National Tire and Battery) stores, plus 576 Parts America stores. Sears doesn't have a big name brand in furniture, but it does have 129 freestanding furniture stores, called HomeLife.

Finally, Sears has about 600 (and is shooting for 900) of what it calls dealer stores. Selling only hard goods, these stores are in small towns. The products, the look, and the prices come from Sears, but the businesses are owned (and tailored to local tastes) by local entrepreneurs. It's important and profitable to do business away from urban centers--Wal-Mart is proof of that.

There you have the retail side of Sears. But we shouldn't slight two other important sources of earnings for the company. First is the Sears credit card, which is another one of those things that remind you of the incredible depth of Sears's reach into America. Nearly half the households in the United States have a Sears card. Last year, 32 million Sears cards were used at least once.

The credit-card business has traditionally been a very good profit producer for Sears, not least because a Sears card carries a very high interest rate--generally 21 percent. But 1997 was a traumatic year for the card division. Sears had been very aggressive about getting the card into new households and, as a result, picked up a lot of bad debt. Then the company went after some of its debtors in a way that a federal court deemed too aggressive and was smacked with a huge fine. That more than ate up the division's profits for the year.

And there's also the home-services division, which may have a relatively low profile but still generates a lot of money. Sears has a network of 15,000 technicians who do everything from install air conditioners to fix dishwashers to spray for bugs to sell warranties for customers' used appliances. The market for these kinds of services is about $170 billion. Sears's piece is about $3 billion, leaving plenty of room for growth.

The new sears, then, still has a financial-services angle, but for the most part it's a great big retail company that is on good terms with just about everyone you or I know. Wall Street saw the change happening and rewarded shareholders appropriately. The stock opened 1995 at around $25 a share and closed the year at about $40. By the summer of 1997, the share price had crossed $60.

But in 1998, Sears has been in the dumps--the stock has skidded from the high $50s to the high $40s. The new freestanding stores aren't all producing, and the softer side of Sears, joked The Wall Street Journal in July, appears to be the company's earnings. The harsh truth is that yesterday's reinvention doesn't mean as much as today's execution and tomorrow's competition. Just as old companies sometimes have to learn new tricks, new companies have to keep changing. Can Sears do that?

The first thing Sears needs to square away is its credit business. Martinez says the 1997 problem was a onetime occurrence whose effects will soon have run through the system. I find that reasonable. Not all analysts believe Sears can return to the kind of credit-card profits it made as recently as 1996, but there's a broad sense that Sears's credit- card division can return to its role as a moneymaker for the company. Sears is also starting to offer its best customers better rates.

Walter Loeb, a longtime Sears analyst and president of Loeb Associates in New York, thinks the neighborhood stores will work. He also likes Martinez's next big venture: The Great Indoors. There's only one Great Indoors store so far, in Denver. With 150,000 square feet (about twice the size of the average full-line Sears), the store brings together everything Sears does relating to the interior of the American home.

Maggie Gilliam, of Gilliam & Co. in New York, is another analyst who sees Sears's greatest strength as its comprehensiveness in the area of home retailing. "Who else has a combination of appliances, furniture, credit, home improvement, and services?" she asks. "There are tons of competitors in the different sectors, but only Sears does the whole thing. Soft side as well as hard side."

But what about the matter of those soft earnings? In 1997, earnings from continuing operations fell to $2.99 a share from $3.12 the previous year. The future, fortunately, looks brighter: The consensus estimate (from First Call) for 1998 is for a 16 percent kick up to $3.46. For 1999, the estimate is for a 13 percent increase to $3.91. You don't have to pay a lot for those earnings, either: Sears trades at a price-to- earnings ratio of about 14.

Some investors dismiss old-line companies like Sears simply because they aren't fresh and exciting. That's a mistake. Let someone else take the companies with cachet; I'll settle for the ones that have valuable assets and management that knows how to use them. For the past five years, that has been a good description of Sears, which is why I'm keeping an eye on this familiar face.

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Features

99/02

Winner's Curse

By Michael Peltz

Richard Thaler lifts his wineglass, swirls its contents-a 1990 Chateau Cos d'Estournel-and takes a slow sip before setting It down next to a glass containing the 1989 vintage. An empiricist by nature, Thaler has arranged this wine tasting for fellow economists Andrei Shleifer, Kent Womack, and Luigi Zengales over dinner at a trendy Chicago restaurant on the eve of the National Bureau of Economic Research's behavioral-finance meeting. Most of the meal Is spent discussing their latest research, but at this moment, the four academics are focused on claret. "The two wines clearly come from the same vines," says Thaler, the 53-year-old Robert P. Gwinn professor of behavioral science and economics at the University of Chicago Graduate School of Business. "The more recent vintage, however, seems to have matured very quickly."

The same could be said of behavioral finance. in less than two decades, the study of how investor psychology affects markets has captured the imaginations of some of the world's finest young economic minds (Including those wine tasters, ages 35 to 42), made its way into business-school curricula, influenced the strategies of professional investors, and given conniptions to the economic old guard. Mostly this is due to Dick Thaler, the leader of the behavioral pack. Says Stanford University finance professor and Nobel Prize winner William Sharpe, "He's the one who was out there in our midst, just pushing, pushing, pushing."

In December, Thaler even began putting his money where his mouth is by offcially joining the ranks of professional money managers. He and longtime friend (and former academic) Russell Fuller hung out a shingle for Fuller & Thaler Asset Management, based in San Mateo, California. Their goal is to take advantage of quirks in investor behavior that they see as systematic-for example, the tendency of people to overreact to unexpected and dramatic news events concerning a particular stock, driving its price down too low when the news is bad and too high when it's good. The strategy of buying beaten-up stocks and avoiding high- priced glamour ones is a lot like the traditional Graham and Dodd value-Investing approach, but Thaler sees a purely behavioral rationale for why it works.

At least that's the theory. Anything can happen when theory hits the street, as Nobel economists Robert Merton and Myron Scholes learned last summer when Long-Term Capital Management, the hedge fund derived from their economic models, nearly imploded. Behaviorist Thaler observes, "It may be that they were guilty of underestimating some risks."

In the 1970s, when Thaler was writing his Ph.D. thesis in economics at the University of Rochester, there was no such thing as behavioral finance or behavioral economics. Yet he saw quirky, unexplainable economic behavior everywhere. in researching his dissertation on the economic value of a human life, he discovered that people would pay only $200 to slightly improve their odds of living yet they'd want thousands of dollars in payment to slightly increase their odds of dying. Traditional economics says that the willingness to pay and the willingness to be paid shouldn't diverge by much.

As an assistant professor at Rochester, Thaler also observed some highly curious economic behavior on the part of the faculty. Most of them chose to receive their salaries over 12 months rather than 9, even though that made far less economic sense. Then, in 1977, he met the israeli psychologists Daniel Kahneman and Amos Tversky. They introduced him to behavioral psychology and their seminal work on "prospect" theory-which in essence states that people's aversion to loss is about twice their desire for gain. in 1978, Thaler moved to Cornell University and began applying his newfound knowledge to economics.

His theories were a controversial departure from the dominant thinking of the time, led by Nobel winner Milton Friedman and other effcient-market theorists who operated out of the University of Chicago. They believed that human behavior was governed solely by the principles of rationality and self-Interest. Markets were effcient because rational investors couldn't help but drive the prices of securities toward their intrinsic value as they tried to maximize their own wealth. in a rational world, future prices were unpredictable and changed only when there was genuine news.

The heretical Thaler tended to view life and markets through a psychological prism, a throwback to economics before World War II. in the 1930s, John Maynard Keynes likened investing to the newspaper contests of his day in which competitors would be asked to pick the 6 prettiest faces from 100 photographs. "It is not a case of choosing those which, to the best of one's judgment, are really the prettiest," wrote Keynes, but "anticipating what average opinion expects the average opinion [of the prettiest to be]." Thaler thinks Keynes's beauty contest says a lot about how people should look at markets: "Good investing must combine good analysis and good psychology."

Despite the critics-University of Chicago Nobel laureate Merton Miller has deemed behavioral finance "a fad that doesn't have anything to offer"; Chicago finance professor Eugene Fama calls it "dredging for anomalies"-Thaler was gaining admirers. in 1992, he published The Winner's Curse, which, among other economic irregularities, describes the tendency to bid too aggressively in an auction as the number of competing bidders increases and why gamblers go for long shots at the end of a bad day.

Three years later, in 1995, the citadel of effcient theory itself offered him an endowed chair, despite opposition from Miller, now finance professor emeritus there. As part of the enticement, the university also offered a professorship in marketing to Thaler's fiancée, France Leclerc, who had been teaching at MIT. (They married a few months later, 35 feet underwater in HawaII.) "It speaks to the school's ecumenical views that it is willing to tolerate a guy who is not in the church," says Sherwin Rosen, Thaler's Ph.D. adviser at Rochester, who has since joined Chicago's economics department. Rosen is himself somewhat skeptical of behavioral finance but is impressed with Thaler's success. "Dick seems to be passing the market test," he says. "His stock looks very hot right now."

Acceptance into Chicago's business school was a turning point for Thaler and behavioral finance. Bright young students who came to Chicago to learn hard-core finance could now also sign up for Thaler's elective course, called Managerial Decision Making and described in the curriculum guide as "only recommended for those students who expect to have to make decisions during their careers." Thaler begins the class with an experiment that's a takeoff on some famous behavioral research: a study that found that 90 percent of Swedish drivers consider themselves better- than-average drivers-a mathematical impossibility. For his lesson, Thaler asks students to anonymously write down where they think they'll rank in the final grading. Of 125 MBA students taking this course last fall, not one thought

he or she would finish in the bottom half. "Obviously, half of them were wrong," quips Thaler. (Students typically say they'll finish in the second decile.)

These experiments speak to overconfidence, which is one of the pillars of behavioral finance. Study after study shows that people tend to overestimate their abilities and their knowledge. "We all think we are pretty good at sizing things up, just the same way we all think we are good judges of character," explains Thaler. "We should know that we really are all hopeless. When some terrible crime is committed and the neighbors are interviewed, they always say what a nice guy the alleged perpetrator was and how he couldn't have done it. The fact is, we can't tell if the guy is a serial killer or not. We also have a hard time telling a good stock from a bad one, though we think we can."

Investor overconfidence may explain what is sometimes referred to in economics as the Groucho Marx theorem. Just as Groucho wouldn't belong to any club that would have him as a member, a rational investor should be reluctant to be part of any trade where someone is willing to take the other side. After all, if the investor on the other side of the trade is also rational, he or she must have a good reason for buying or selling. According to Thaler, the Groucho Marx theorem should result in very little trading, but of course that is not the case.

Thaler's most recent paper, delivered at last October's NBER meeting, looks at asset-allocation strategies used by investors in defined- contribution retirement plans. "We discovered that many investors have incredibly naive ideas about diversification, the most extreme of which is what we call the 1/n heuristic," he says. "Basically, people tend to divide their contributions evenly among all the funds offered in their plan." Sound familiar? Although heuristics, or mental rules of thumb, are often useful in making decisions, sometimes they can be misleading, even harmful.

Eugene Fama, Thaler's friendly rival at Chicago-they play tennis together; Fama usually wins-argues that effcient-market theory actually predicts that there will be some anomalies but that they are generated by chance. "I'm willing to stipulate that investors don't always behave rationally," he says. "The issue in my mind is to what extent does irrational behavior affect pricing, and it's dIffcult to find any evidence that it does. That's what all the fighting is about."

Thaler knows he can't convert Fama, but he also understands that behavioral finance needs a mathematical theory to supplant the effcient- market hypothesis. "We're still at the stage of making fun of the geocentric model and having some theories for some facts, but we don't have a complete theory of the world," he says. "Maybe there can't be one. There certainly won't be anything as neat and tidy as the planets all circling around the sun or that everyone is rational." Thaler himself isn't likely to play a big mathematical role, but his student disciples, now teaching in business schools across America, are on the case. "Dick is more interested in the ideas than in the techniques needed to solve the problem," says Kent Womack, a former student who teaches at Dartmouth's Tuck School. "His one weakness is that he's not particularly strong in statistics or mathematics, so we do the numbers work and he thinks the big thoughts."

It might seem as if Thaler's observations couldn't find practical application within the markets, but they do. indeed, Richard Bernstein, chief quantitative strategist at Merrill Lynch, says behavioral finance is redefining the basic rules that drive the investment game. "We don't advertise it as such, but nearly everything we do in our group-our asset- allocation models, our stock-sector selection models-Is based on behavioral finance," he says. "One of the most important things in any investment strategy is to

understand the frame of reference with which people are approaching the markets, and behavioral finance helps you do that."

Thaler has every intention of taking advantage of people's frames of reference in his new money-management venture, which evolved from RJF Asset Management, a firm that had been solely owned by Fuller. "Everybody is trying to buy cheap stocks," says Thaler, who had been an adviser to RJF but is a full principal in the new firm. "In a sense, we're trying to do that, too, but we're trying to distinguish between ones that are cheap and ones that are dogs by looking explicitly for signs of systematic errors on the part of the analysts." Their firm already manages $370 million in mostly institutional assets and has five years' experience using behavioral finance. it also has a small- to mid-capitalization mutual fund, the Behavioral Growth Fund, which earned a 23 percent re- turn in its first year, and in January the firm planned to launch two new funds under the Undiscovered Managers Fund family. "Russ invests using concepts that are near and dear to my heart," says Thaler. "If I can't help improve that, there's something wrong."

Maybe that's overconfidence. Then again, maybe it's not.

Benefactor

99/06

Lost Time

By Peter Lynch

Employees may be working harder and longer than ever, but businesses are missing out on a way to improve productivity -- and benefit society

Finding money and volunteers for 13 nonprofit organizations, ranging from the Boston Inner City Scholarship Fund to the international relief organization AmeriCares, is a high priority for me these days. The money part of the equation has always been a challenge -- unglamorous and difficult. Recruiting people's time would be an easier row to hoe, or so I thought.

Volunteerism is always said to be as American as apple pie. Without it, much of what we hold dear in this country, from Little League teams to church choirs, would simply cease to exist. And many of our grandest, most important cultural and charitable organizations can attribute their success as much to the donation of brains and brawn as to the collection of gifts and grants.

But volunteerism has gone through some rocky times of late. While initiatives like the 1997 President's Summit for America's Future have helped bring about a fresh uptick in the amount of man-hours committed to charitable activities, this progress has just barely offset the losses recorded earlier this decade. In 1995, America actually had five million fewer people donating their time than it did seven years earlier.

On the positive side, the number of African-American and Hispanic volunteers has been rising. On the negative side, the number of volunteers between the ages of 18 and 24 has fallen more than 5 percent. This shortfall is being felt especially in places like New York City, where the Big Brothers/Big Sisters organization says there are 250,000 children in need, but only 2,200 active BB/BS volunteers.

Changes in our society have limited the growth of volunteerism. People have less private time available because they are spending more time at work. Not only is a greater percentage of the population employed than ever before (with the biggest increase coming in the share of women in the workforce), but many people are also working longer and more stressful hours.

Businesses have benefited from this trend, but I see little evidence that they're doing their part to offset the toll it has taken on volunteerism. A scan of the private sector turns up few examples of well-designed employee volunteer programs. The exceptions -- such as those under way at UPS, Xerox, Lucent Technologies, and Helene Curtis -- prove the rule. Chase Manhattan Bank has a terrific program called Global Days of Service. Last year, it connected more than 10,000 employees to a spectrum of volunteer activities. But are many other companies now racing to emulate this success? Sadly, no.

One has to wonder why -- especially because research about the impact of volunteerism shows it can help raise workforce productivity. One study of employees by the Independent Sector, a philanthropy research and information group, cited the following benefits: "allows me to gain a new perspective on things" (78 percent); "makes me feel needed" (68 percent); "helps me deal with some of my personal problems" (40 percent); "provides me with new contacts that help me with my business or career" (23

percent). I've personally witnessed how these types of personal experiences can translate into reduced absenteeism and office stress, as well as improved job performance. So I feel particularly befuddled when it comes to understanding why corporations don't do more -- a lot more, in fact.

In a preface I wrote for a book called Corporate Social Investing (Berrett-Koehler Publishers), I made the point that businesses could be a force in getting volunteers connected with organizations that go head-to-head with some of our toughest social problems. Experts tell us an estimated 20 billion volunteer hours were logged in 1995. When I looked more closely at these numbers, however, I was dismayed to learn that fewer than 10 percent went to organizations that offered services to the needy. In contrast, 27 percent of the total fell under the category of "informal volunteering" -- in other words, things like baby-sitting for a neighbor and baking cookies for a charitable event.

I'm certainly not suggesting that volunteerism should be restricted to the so-called core problems in our society. Bake sales have their place along with everything else. But we could see more win-win results if businesses became more serious about mobilizing volunteers for soup kitchens, homeless centers, neighborhood revitalization efforts, and so on. The neediest parts of our society would benefit even as businessmen further honed their management skills, developed more team cohesion, and improved both their individual and collective sense of self-worth.

AT&T; Wireless Services must already know this well. Managers there start many of their national meetings with a community-service project. The Gap also has an aggressive volunteer program -- one that helps connect the company with the communities in which it does business. UGI Utilities supports an Excellence in Education program that helps bring volunteers, books, and the corporation's name into schools and the community. Unitrode participates in the Salvation Army's Reach Out program, where employees and their spouses get recognized for the time they spend acting as role models for children. Programs like these don't sap corporate resources; they enhance corporate resources. Posting a list of volunteer openings on the company bulletin board won't dent any outfit's second-quarter profits. Nor will a union howl if a company invites nonprofits to hold an annual volunteer fair in the cafeteria. Want to set up an inexpensive clearinghouse to match workers with nonprofit organizations? Then do what Johnson & Johnson does: Hire some college interns, and put them to work on it.

Regardless of how, when, or where anyone chooses to donate his or her time, volunteerism is important to our country. To the extent that corporations can motivate employees to do so, they themselves will only gain in the process. And if businesses are able to channel some of this volunteer energy toward nonprofit organizations that are wrestling with society's roughest issues, then all of us -- employees, shareholders, citizens -- will benefit.

Peter Lynch is a senior contributing editor.

These class notes and supplemental materials are written by an investor who audited Joel Greenblatt's Special Situation Class at Columbia's Graduate Business Program from 2002 through 2006. Different years may have an overlap of material and concepts covered by the prior year's notes but the repetition and supplemental material may improve retention. Any errors, omissions or faulty premises are the notetaker's fault and not implied or committed by the speakers or persons presented. Please use these notes as a spur to your own efforts and thinking in how to become a more effective investor. I hope this help. Comments welcome at aldridge56@aol.com

Greenblatt Class #1

Sept. 07, 2005

A Story Selling Gum

My goal is to teach you **the course that I never had and that I wish I had**. I started in business school 25 years ago. What I know about investing other than reading financial statements, **I learned on my own reading and making mistakes**. Hopefully, I can give you the benefit of my experience.

A number of years ago I was trying to explain to my son what I did for a living. He is 11 years old. I spoke about selling gum. Jason, a boy in my son's class, sold gum each day at school. He would buy a pack of gum for 25 cents and he would sell sticks of gum for 25 cents each. He sells 4 packs a day, 5 days a week, 36 weeks or about $4,000 a year. What if Jason offered to sell you half the business today? What would you pay?

My son replied, "Well, he may only sell three packs a day so he would make $3000 a year. Would you pay $1,500 now? Why would I do that if I have to wait several years for the $1,500?

Would you pay a $1? Yes, of course! But not $1,500. I would pay $450 now to collect $1,500 over the next few years, which would be fair. Now, you understand what I do for a living, I told my son.

I sit around trying to figure out what businesses are worth, and then I try to pay a lot less for them. I think you get the point.

The Skills I Will Teach You

I really don't think the skills that I am going to teach you are very valuable. It is not that you can't make a lot of money from what I am going to teach you. There are fundamentally better things you can do with your time. My view is that the social value of investing in the stock market as being similar to being good at handicapping horses. There is a benefit to having markets for raising capital; they just really don't need you.

I think what I am going to teach you this semester is really how to make money and so whatever social benefits there are to society, it is not very large. So if you do end up following my advice and it works for you, I would ask that you find some way to give back. I am one iteration removed so what I am doing?

I truly wish that I had the chance to have this course to help out in some way.

Divergence between Prices and Values:

Prices fluctuate more than values—so therein lies opportunity.

Why are prices of each company so variable and volatile compared to the value of companies?

If I take out the newspaper and I pick out any large cap stock like *IBM, Cisco, EBay, KKD, Google*, why are the prices all over the place? Look at the wide divergence between the 52 week high/low. Here is a business that hasn't changed much but the price has gone from $35 to $70. $7 to $30 and right now to $20. Look at *ANF* and *INTL*.

Questions:

These are all pretty good companies and this has been the least volatile period in many years, and there have been 100% moves over one to two year periods—why the huge disparity?

Are markets efficient?

Why do MBAs and other smart people not do well in money management?

People invest with their emotions. They process information differently.

Does it make sense that these prices fluctuate so much while the values of the underlying companies do not move around in a short period of time? *(Price diverges from value).*

***Joel Greenblatt (JG*):** It is very clear—pick any company you want--the price is very volatile over short periods of time. It does not make sense to me that the values are nearly as volatile as the prices and therein lies what should be a great opportunity. All these companies which have fairly established businesses *(Disney, Boeing, Wal-Mart)* the values are not fluctuating nearly as widely as the prices. There should be great opportunity, yet there are not many winners in the market.

The reason why that is…….in the final analysis……why do the price fluctuate so widely when values can't possibly? I will tell you the answer I have come up with: The answer is **I don't know and I don't care.** We could waste a lot of time about psychology but it always happens and it continues to happen.

I don't know and I don't care. **I just want to take advantage of it.** We could sit there and figure it all out, but **I like to keep it simple.** It happens; it continues to happen; the opportunities are there. I don't know why it happens and I don't care—I just want to take advantage of prices away from value.

In this course, **I am going to teach you how to take advantage of that.** I will make a guarantee now: If you do good valuation work and you are right, Mr. Market will pay you back. In the short term, one to two years, the market is inefficient. But in the long-term, the market has to get it right—it will pay you back in two to three years. Keep that in mind when you do your analysis. You don't have to look at the next quarter, the next six months, if you do good valuation work—and we will describe what that means—what the best metrics to use, Mr. Market will pay you. **In the long-term Mr. Market eventually gets it right;** he is very rational. That is very powerful. That is the context in which you should think this semester.

The big picture:

There are lots of smart guys on Wall Street yet most of them go out and basically fail for many reasons—they are unable to contribute value. I have a firm, *Gotham Capital*; we have averaged 40% per year for 20 years. $1,000 would now be $836,683. There are lots of smarter people who can do better spread sheets than I can; there are lots of smarter analysts than me. I think the difference to how we have been able to do it is that **we think simply and a little bit differently.**

The **context in which we put our analysis**—not that our analysis is any better than anybody else's. We are not experts in any particular industry, we are not smarter than anybody else, and we are not doing better analysis. The fact that you are here means you can do the analysis. **It is the context in which you put that analysis that makes the difference to you.**

Simplify, place valuation into context, practice.

That should be encouraging to you that you don't have to be smart, or have to do a million hours of work or tricky analysis, but you have to be good. You have to know what you know—Your Circle of Competence. You don't have to be the best in the world at figuring stuff out. It is the context which I will teach you those

simple things and then we will do a lot of practicing--practice of doing valuation while keeping the simple context in mind. Even I have to remind myself to remember what is important. You must be able to cut through all the noise. The *Wall Street Journal* has more info in it in one day than the entire world had 700 years ago.

How to Beat the Market

Many people don't beat the market, so name some ways that you can do it.

Focus on small caps where the markets are more inefficient. There is less analyst coverage so less information flow. You have the chance to find prices more above or below value. **Small caps have more opportunity to find mis-priced stocks.**

Small Caps: Another secret, when money managers learn their valuation work and focus on small caps, they make a lot of money, and they graduate from small caps. For a guy starting out there is always **an opportunity to do original work**. There is turnover in the ranks.

Activist Investing: *JG* won a proxy fight and eventually made money but it was not worth the pain. His first and last foray into activist investing.

Special situations: A corollary to small cap investing. You go where other people aren't. A more inefficient area of the market. Value investing with a catalyst.

Student: Superior knowledge in an industry. *Linda Greenblatt* focuses in retail.

Concentrate your investments.

How Gotham generated great returns:

Gotham Capital stayed small. We returned outside capital, so we could invest in as many situations as possible (not constrained by size). We are very concentrated. We invest in 5 to 8 securities. **Know your companies very well.** Why that is more safe than diversifying? You pick your spots. So if your holding period is three to five years and you only have 4 to 6 securities, then you only need one or two ideas a year. That is why I have time to teach this class. It is more fun and it works.

Why Value Investing Works

Richard Pzena:

1960-2005	**S&P 500**	**Value Benchmark: Low P/E, Low P/Sales**	**Difference**
Returns	11%	16.3%	5.3
1995 – 2000			
Returns	163%	71%	-91%
Note the LT outperformance of Value Metrics but the 5 year or more periods of underper-formance. Value Investing works because it doesn't work all the time			

Value investing works, but it tends to work in cycles. *Pzena* lost 70% of his investors. Now of the $14 billion he manages he only has 4 (Joel G. is one of them) of his original investors.

***Joel G*:** I was down 5% in 1998-1999 but worried about a bubble breaking in 1999 (a macro worry), but I could find cheap companies—look how cheap Brk.a got in 1999. They kept doing what they were doing. He was up 130% in 2000. The markets came back.

Read: What Works on Wall Street by *James P O'Shaughnessy*. He started a fund in 1996-1997 but he underperformed the market by 25% and after three years in business of underperforming he sold his company at the bottom of the cycle. **The guy who wrote the book quit his system!** It seems like it is easy to do, but it is not easy to do.

This book, What Works on Wall Street, has born out its wisdom. The two funds that are patented that fool his strategy have been phenomenal. HFCGX is the patented fund based on his top idea of Cornerstone Growth; over the last 5 years it has had an average return of 13.44% per year vs. the Vanguard 500's -2.01% per year (6/1/00 through 5/31/05). HFCVX is the patented fund based on his 2nd to best idea of Cornerstone Value; over the last 5 years it has had an average return of 6.47% per year vs. the Vanguard 500's -2.01% per year (6/1/00 through 5/31/05).

The most interesting point is that the author points out those investors often are to emotionally involved to have the discipline to see the strategy through. **Not only did the first reviewer bash the book because he did like the returns strategy one year after the book came out, but Mr. O'Shaughnessy sold the funds to Hennessy Funds at the end of 1999 after it failed to surpass the returns of the bubble that soon after collapsed.** Seven years after it was published an investor would be much wealthier had they followed the books top strategy instead of the investors who dog-piled onto the stocks of the market's bubble.

We are going to try to understand **why it works**. Why it has to work over time. That is the only way you can stick it out.

The math never changes: 2 + 2 = 4. That is the level of your understanding I want you to have by the time we are done. If I get that right, forget all this other stuff and noise, I will get my money. No genius required. **Concepts will make you great.**

There is a lot of experience involved in valuation work, but it doesn't take a genius or high IQ points to know the basic concepts. The basic concepts are what will make you the money in the long run. We are all capable of doing the valuation work.

Overview of the course.

His book, How You Can Be a Stock Market Genius was written for the general public but he learned that it was written more at an MBA level.

Brian Gains was one of our analysts at Gotham. He will be one of the speakers in this class.

The Value Investor's Club:

Six years ago, we found one of our best investments that was trading at ½ cash value and it had a very good business attached. We found it because of the very complicated capital structure. We thought we were the only ones to find it. We found another person on Yahoo.com who had analyzed the situation correctly. Hey, there is intelligent life out there. Get together these smart people and share ideas.

If you get A+ in this class you could get in.

This is the application procedure. You have to know certain metrics that Yahoo members don't know.

I am not vouching for any write-up in particular. Read the reviews above 5.7 with many reviewers. You can search by rating or person. Usually 5.5 and above is pretty good. You can look at example after example and see what happened years later. You see smart investors asking questions. There is a lot to choose from here. It is a great learning tool. A great research archive to build an investment thesis. I can't recommend this highly enough. Do not share your ID for the VIC with anyone. This is a great learning resource for you.

You can search by investor and see what makes for a good write-up. We have found a number of superior investors. A simple and clear thesis.

Review

- Stocks bounce around a lot.
- *Mr. Market* eventually figures it out over three years.
- The market closes the gap.

- We seek a *margin of safety*.

Valuation:

What are the different Valuation Methodologies?

DCF: Discounted Cash Flow (problems) you have to make projections. The terminal value can change drastically due to small changes in assumptions. What earnings does the price imply? What growth rate and what discount rate am I using to get to that valuation three years from now? What would justify that future price? I sort of work backwards and throw in a bunch of numbers like growth rate. What is this price I am expecting it to be worth imply? I use it as a reality check to decide and see if my assumptions can be justified. What it tends to do is force me to use conservative numbers.

How do you know if you are conservative?

What if you can't figure this out—like growth rate or discount rate? Pass on it. If it is hard for me to figure it out, **I go onto the next one.**

Relative value: look at similar businesses and what they are trading at. Problems: the businesses are not really similar. It might be tough to find a good comparable. Everything might be overvalued in a sector, so you are comparing one overvalued asset with another. Comparables might be over or under valued.

Replicating value—I don't usually do that. The communists made square wheels because they cost the same to make as round wheels.

Break-up value: A company has two divisions one is making $3 and the other is losing $1 (EPS = $3 - $1 = $2). The stock trades at $34 so PE = $34/$2 = 17x but if you close down the bad business, it really trades at 11 times or $34/$3.

Where the stock has traded in the past is noise. What is it worth? Where is it today (Price).

Acquisition value: You have a discount brokerage account with 100,000 accounts that acquires *Brown Co's* 50,000 customers, so they can pay more that company due to just adding customers to thei5r infrastructure.

The acquisition value might be much higher than the DCF value.

I don't like to see values per subscriber or x hospital beds. I still want to see the cash flows translated from the hospital beds. I don't like to see relative value.

Summary: Valuing a Company

We have four ways to value a company:

1. DCF or intrinsic value,
2. Relative value,
3. Break-up value, and
4. Acquisition value

Balance Sheets, Income Statements and Cash Flow Statements

A company trades at $6 per share and it has $5 per share in cash.

Current Assets: (CA) First we look at CASH. We have often found companies are trading at close to its cash per share. Technology stocks in 2002. $5 per share in cash and

You can value the $5 in the company's pocket but it is not in your pocket. What will the company do with that cash? How will they redeploy the cash?

Will they dissipate the cash or use it wisely like returning it to shareholders? Look at management and decide if they are capital destroyers. How is their bread buttered, do they own a lot of stock or are they paid mostly in salaries.

Look at where the business is—is it earning money, is it earning $ in other businesses? Is management doing good things with the money? If management is doing good things, I may put full value on that cash. Or I won't take it at face value if the business is losing money. Make sure it is net cash.

They may need more working capital so I may have to haircut the cash figure. I usually give a discount to the cash on the balance sheet. Generally capitalism works. Are these guys' losers. People running a business are generally more entrepreneurial. Are these guys treating it like their own money or somebody else's money? There always nuances. If I am not sure, I will put a very conservative value on the cash to take care of that uncertainty. You may say you know what; this $5 should only be worth $3. Do I still want to buy the company with what is left?

That $5 really is worth $3.00. Something as simple as cash on the balance sheet, there are many iterations of how do I look at cash? A lot of people just look and accept the cash value, but I analyze it. I will value that $5 at $4 or $3. Usually this won't keep me from investing; I will just put a big discount on it (the cash). Probably when the company makes a big acquisition that is the time to sell.

Accounts Receivables:

What are the considerations there? Does the receivable number make sense? If A/R is rising quickly, then they are pumping out sales and extending credit—that may be good, it may be bad.

<u>Inventories:</u>

There are ways to look at that.

Current Assets, prepaid assets.
WC: Accounts Payable, short term portion of long-term debt.
Assets: PP&E, Real Estate (how much have those assets appreciated).
Intangibles: goodwill—the excess paid for assets above the book value of those assets.

A little secret: Operating profit. Usually I use a 40% tax rate. The number I like to use is operating profit—a pre-tax number so comparisons are easier.

D&A are not cash expenses. Now you don't amortize goodwill unless you write it off.

EBITDA—don't show this in your reports. You have to subtract out the maintenance capital expenditures (MCX). Now, if the company is growing and you want to figure out "normalized earnings." Capital spending is the number to use. Capex is a cash expense but depreciation is a book entry not cash.

Let us say you are opening 10 new stores in addition the 10 stores you already have, the capex would include keeping up the ten stores you already have making capex on those stores and the cost of opening the ten (10) new stores but you won't get the benefit of those new stores in that year. For normalized earnings what you really want for normalized earnings is maintenance capex. How is this number reported? Ask the management. Break out growth vs. maint. Capex.
I ask for an explanation for mcx and how do they get there. Usually the company understates mcx. When EBITDA, DA = capex, then EBIT = EBITDA – Capex. A quick and dirty when you use EBIT. I try to get at EBITDA – maint. Capex.

Discussion of maint. capex vs. growth capex.

The Cable Industry is in a continual upgrade cycle.

Look at EV/Sales, EBIT/EV. EV/EBIT is pre-tax earnings yield.

Why you use Enterprise Value (EV)?

COMPANY A
$10 EBIT
40% tax rate
$6 in Net Income
P/E 10
$60 million Market Cap. or EV = $60

COMPANY B
$10 EBIT
-$5 Interest Expense
=$5 million in pre-tax operating
$3 mil. in int. expenses.
$15 mil in market cap + $50 mil in debt = $65 in EV

A is cheaper with a PE of 10 while Company B has a P/E of 5. The price of the EV is lower for A at $60 vs. $65 for B.

I look at EV to sales not P/S. The point of this exercise is that when you show me your comparables and you say the average P/E--every analyst report shows the industry ratios where they say the industry is trading at 13x and this company is trading at 12x so it is cheap--it doesn't take into account market capitalizations, differences in tax rates and things of that nature. And looking at things through an EV/EBIT basis does.

To make apples to apples comparison we will use EBIT/EV.

The Importance of ROIC vs. ROE

Do I care about the ROE? I care about the return on capital (ROIC).

The first thing I look at ROIC = EBIT/ (NWC + Net Equipment). How good a business is this?

Pre-tax return/Net Tangible Capital. What capital the company needs to use to be in business--NWC + Equipt. Net Working Capital (NWC): Use financial A/R and eliminate the excess cash. Subtract Accounts Payable NIB debt.

Why eliminate goodwill? Because it states historical costs. It doesn't matter what I paid. You want to know going forward what type of business you are looking at.

EBIT/EV Earnings yield. What price am I paying relative to earnings?

Avoid value traps (low return businesses).

Hotel Capex:

Spend $1,000 for a hotel. Then spend $25 per year for MCX, but then in year 5, I need to refurbish the hotel for $400 to stay competitive. So I would add ($400/5 or $80 per year to the $25 per year and deduct $105 per year in true maint. capex).

$25 Capex +$80 Capex =$105 Capex	$25 Capex $80 Capex =$105 Capex	$25 Capex $80 Capex =$105 Capex	$25 Capex $80 Capex =$105 Capex	$25 Capex $80 Capex =$105 Capex	$400 in fifth year so apportion $80 mil. per year over regular MCX

Summary of What Joel teaches
in the Little Book That Beats the Market

You will learn:

- How to view the stock market.
- Why success eludes almost all individual and professional investors.
- How to find good companies at bargain prices.
- How you can beat the market all by yourself.

The key is to understand the simple concepts in this book

Most academics and professionals can't help you to beat the market. YOU must *do it yourself.*

You have to believe that the story is true. Most professional investors have learned wrong and very few people believe or else there would be many more successful investors. They aren't.

Compare Our investment alternatives

We want to compare how much we can earn from a safe bet like a U.S. government bond with our other long-term investment choices. We want to make sure we earn a lot more from our other investments than we could earn without taking any risk.

Buying a share in a business

Buying a share in a business means you are purchasing a portion (or percentage interest) of that business. You are then entitled to a portion of that business's future earnings.

- We have to estimate what the business will earn in the future.
- How confident are we in our prediction?
- Nest year is only one year. What about all the years after that? Will earnings keep growing every year?
- The earnings from your share of the profits must give you more money than you would receive by placing that same amount of money in a risk free 10-year U.S. government bond.

Figuring What A Business Is Really Worth?

Why do the prices of all these businesses move around so much each year if the values of their businesses can't possibly change that much?

Why are people willing to buy and sell shares of most companies at wildly different prices over very short periods of time? I just have to know that they do!

Who knows and who cares? Maybe people just go nuts a lot.

Ben Graham figured out that always using the margin of safety principle when deciding to purchase shares of a business from a crazy partner like Mr. Market was the secret to making safe and reliable investment profits.

Valuation

How are you supposed to know what a business is worth? If you can't place a fair value on a company, then you can't divide that number by the number of shares that exist, and you can't figure out what the fair value of a share of stock is.

In the process of figuring out the value of a business, all you do is make a bunch of guesses and estimates. Those estimates involve predicting earnings for a business for many years into the future. Even experts (whatever that means) have a tough time doing that.

Learning the Concepts

You must make a willing suspension of disbelief.

It is hard to predict the future. If we can't predict the future earnings of a business, then it is hard to place a value on that business.

If you just stick to buying good companies—ones that have a high return on capital—and to buying those companies only at bargain prices—at prices that give you a high earnings yield—you end up systematically buying many of the good companies that crazy Mr. Market has decided to literally give away.

Buying good businesses at bargain prices is the secret to making money.

Graham's Formula:

His formula involved purchasing companies whose stock prices were so low that the purchase price was actually lower than the proceeds that would be received from simply shutting down the business and selling off the company's assets in a fire sale. He called these stocks by various names: bargain issues, net-current-asset stocks, or stocks selling below liquidation value).

Graham stated that it seems "ridiculously simple to say that if one could buy a group of 20 or 30 companies that were cheap enoughto meet the strict requirements of his formula, without doing any further analysis, the "results should be quite satisfactory." In fact Graham used this formula with much success for over 30 years.

Graham showed that a simple system for finding obviously cheap stocks could lead to safe and consistently good investment returns. Graham suggested that by buying a group of these bargain stocks, investors could safely earn a high return without worrying about a few bad purchases and without doing complicated analysis of individual stocks.

Magic Formula Results

Over the seventeen years, owning a portfolio of approximately 30 stocks that had the best combination of a high return on capitaland a high earnings yield could have returned 30.8 percent per year. $11,000 would have turned into $1 million before taxes and transaction costs.

To make the Magic Formula Work:

It will be your belief in the overwhelming logic of the magic formula that will make the formula work for you in the long run.

How the Formula Works:

The formula looks for the best combination of those two factors out of a 3,500 company database. Getting excellent rankings in both categories (though not top ranked in either) would be better under this ranking system than being the top-ranked in one category with only a pretty good ranking in the other.

No Size Effect

The Magic Formula Results for the top largest 1,000 companies: 22.9% vs. 12.4% for the S&P 500 over 17 years. The formula works for companies large and small.

The Magic Formula seems to work in order of Deciles. There should always be plenty of highly ranked stocks to choose from

How does the Magic Formula fare vs. the market?

The formula fared poorly 5 out of every 12 months tested. Annually the formula failed to beat the market once every four years.

If the magic formula worked all the time, everyone would use it. If everyone used it, it would probably stop working. The formula doesn't work all the time.

For the magic formula to work for you, you must believe that it will work and maintain a long-term investment horizon.

Timeless Principles

In order for the magic formula to make us money in the long run, the principles behind itr must appear not only sensible and logical, but timeless. Otherwise, there is no way we will be able to "hang on" when our short-term results turn against us.

We are buying on average above-average companies that we can on average buy at below-average prices.

The opportunity to invest profits at high rates of return is very valuable because it can contribute to a very high rate of earnings growth!

To earn a high return on capital even for one year, it's likely that, at least temporarily, there's something special about that company's business. Otherwise, competition would already have driven down returns on capital to lower levels.

In short, companies that achieve a high return on capital are likely to have a special advantage of some kind. That special advantage keeps competitors from destroying the ability to earn above-average profits.

So by eliminating companies that earn ordinary or poor ROC, the magic formula starts with a group of companies that have a high ROC.

Then the mf will buy only those companies that earn a lot compared to what we are paying.

Why the mf works?

A good track record only helps once you understand <u>why</u> the track record is so good.

The mf beat the market averages 95% of the time (160 out of 169 three-year periods tested)! The worst return was a gain of 11% vs. a loss of 46% for the market averages.

There are two things you want to know about an investment strategy:

What is the risk of losing money following that strategy over the long term?

What is the risk that your chosen strategy will perform worse than alternative strategies over the long term?

If an investment strategy truly makes sense, the longer your time horizon you maintain, the better your chances for success. Time horizons of 5, 110 or 20 years are ideal.

Over the long run, Mr. Market gets it right.

I guarantee that if you do a good job valuing a company, Mr. Market will eventually agree with them. Two or three years is usually all the time they'll have to wait for Mr. Market. To reward their bargain purchases with a fair price. Over time, facts and reality take over. Smart investors search for bargains, companies buy back their own shares, and the takeover or possibility of a takeover of an entire company—work together to move share prices toward fair value.

Choosing Companies on Your Own

Choosing individual stocks without any idea of what you're looking for is like running through a dynamite factory with a burning match. You may live, but you are still an idiot.

The mf looks at last year's earnings. But the value of a company comes from how much money it will earn for us in the future, not from what happened in the past.

Ideally, we should be plugging in estimates for earnings in a *normal* year.

"If you took our top fifteen decisions out, we'd have a pretty average record. It wasn't hyperactivity, but a hell of a lot of patience. You stuck to your principles and when opportunities came along, you pounced on them with vigor."

- Charlie Munger, Vice Chairman, Berkshire Hathaway
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Greenblatt Class #2

Sept. 14, 2005

Some definitions of Free Cash Flow = EBIT – Maintenance Capital Expenditures (MCX) – annual changes in working capital. Changes in annual working capital (WC) are due to working capital changes needed for growth.

I can't emphasize enough my recommendation to study the *Value Investor's Club* because **you can obtain more experience and learn from other's mistakes.**

Classes Oct. 5th & 12th rescheduled for Friday Oct. 7th and 14th from 9 am to 12 pm *URIS Room #329* for a make up class. No class Oct. 19th.

I downloaded all the Buffett Letters from Berkshire's Web-site and then used Google Desktop to search through for any topic.

Assignment:

I left you with the magic formula last week. Next Week *Richard Pzena* will talk about (*Lear Corporation*) and read *Haugen* book—focus on the concepts. Prepare *Lear Corp*.

An updated chart from last week's class. Cycles of Value Investing Aug. 2005

Aug. 95 to Feb. 2000: a very tough time for value investors; you remember the *Internet* phase. Even if you had a great company with excellent prospects, the market didn't pay for it. S&P 500 up 163% cumulatively vs. up 91% for Value Investors—72% underperformance. If you are running a fund and you beat the value index, the lowest 20% in BV, you would have underperformed by 70% to 60% over five years. If that happens, people leave. Even *Richard Pzena*, whose firm runs $50 billion dollars, in March 2000, most of his investors had left. His performance since that time has been so phenomenal.

From March of 2000 until today, value has outperformed the S&P 500 by 175% and *Pzena* did much better than that. People left at the wrong time as usual. If you stick to your guns and your clients don't you can understand the pressures on a manager? You are looking at a chart through four years and say you will stick it out through the value cycle, but that is an awfully long time and many don't survive. Some value managers cheated with a value tilt to the S&P, and they got clobbered. They were cheating to hang in there. Even surviving long term with this simple value model is tough.

This may seem like a minor point, but this is the whole story. Really what **I am always doing is valuing the company when I can.**

What happens if it is very difficult to value a company? **Do something else.** That is a very powerful concept if you have the luxury of looking at something else.

The guarantee I made last week is that if your valuation is right, it will usually only take *Mr. Market* two or three years at most—sometimes a lot faster--to get it right. **Do good valuation work.**

They way I define value is not low price to book or P/E but **intrinsic value**. You can see price/book has gotten a little less robust over time from out performing at 6% to 3.1% CAGR.

We are talking about the disparity in performance.

The lesser importance of assets with service businesses as in the past industrial period—perhaps a reason **why book value losing its importance.**

I analyze each company from the bottom up. I am very value driven
I don't predict under or out performance of the value cycle.

MAGIC FORMULAS

1. **WHAT YOU PAY:** "Normalized" EBIT/Enterprise Value (What I pay or pre-tax earnings yield). You would value EBIT higher if tax revenues are lower due to a permanent tax change. Take the after-tax yield and see what the differences are. Is EBIT representative of true cash flow. EBIT is a short hand for EBITDA – Maint. Capex. Different capitalization can skew net income. Differences in tax rates. Using EBIT is a way to compare apples to apples.

2. **WHAT YOU EARN:** EBIT/(NWC + NFA) the denominator shows what I need to invest in the business to get that EBIT. Don't forget to normalize investment capital over the course of a year. What I earn.

I told you about my "magic" formula as my starting point for looking at companies.

JG: You bring up a very important point. These are totally two different things.

This is how much I earn based on what I paid for it (EBIT/EV).

This is what I earn based on what the company paid for the assets that created those earnings (EBIT/IC or (NWC + NFA). Those are two totally separate concepts.

Return on the capital they made on the past. So what? Incremental dollars will make good returns but not as high as they made in the past. I may earn 60% ROIC on the new store versus 70% previously in the old store, but there are no other places to earn as high a return so I will still build that store. But if my pretax returns are between 15% and 20%, it doesn't take too much to tip the balance.

Use normalized EBIT. Look at the normal environment. **This is the art part.** What I think a normal environment might be. There is nothing special going on in regards to the company or the economy. Obviously it is an assessment now we are into the art part of determining "normalized".

Here is normalized EBIT over capital invested in the business. This is my best guestimate of what type of business do I have?

When I ran a defense business I had a lot of contact with investment bankers who were pitching acquisitions. They would say, "Well, you can add 20 cents to earnings and make a non-dilutive acquisition by acquiring a business at 9 x EBIT earning 11% pre-tax and that is about flat in growth while borrowing 9.5% partly fixed and partly variable. The spread is 1.5%. Is this worth it for a crappy business? No.

They slapped on the same multiple we had before even though we would be a lot more levered. The investment bankers had a 400 page report with a nice cover on it, but when you get down to it, this is the bet you are taking. It looks like a bad bet.

Boil the analysis all down to its essence—**is it a good business at a good price?** Is the bet worth it?

Don't throw out logic. Ask one simple question. How much do I have to pay? How much am I earning?

If you have to continually make acquisitions to grow, then it is a different animal.

	Company A	**Company**
Current Assets	3	3
Fixed Assets	2	7
Goodwill	5	0
Current Liabilities	1	1
Book Value	$9	$9
Earnings $2.00 per share in cash		
Return on Tangible Capital	50%	22%

You are earning 50% on tangible capital ($2/$4) unless you have to add acquisitions to get future growth. All you have to replace is fixed assets. Your capital spending will be confined to replacing fixed assets. You don't have to keep replacing Goodwill. Goodwill is a past cost. *(See Warren Buffett's writing in the 1983 Annual Report of Berkshire Hathaway on amortization and intangible assets).*

This took me a long time to learn, but if I had read Buffett's letter in 1983, then I would have learned this sooner.

Forget how the company got there. If the company made bad acquisitions so debt is in the EV. Goodwill is a sunk cost in past acquisitions. If management is a serial acquirer that makes bad acquisitions then the future earnings won't be what they say it will be. Adjust.
I care about what I have to pay <u>today</u> to generate returns today and in the future. EBIT/EV takes into account for what I paid for it.

If they have land where their factory could be moved and the land used for a higher and better use, don't just take the value of the land without considering the cost of moving the factory. Do the difference between the industrial land and the value of the land.

Why are we taking Net Fixed Assets (NFA)? It is not always right. Say we buy a hotel for $10 and it is going to last 10 years and we write it down over 5 years and now it is at $5. But if this goes down to zero, I might half to invest another $10. This would give me ($5) a skewed return (being too high) because of not considering replacement and reinvestment into the fixed assets.

Say you have 100 hotels and they are all on different cycles, then on average, you will be correct in using NFA. 10% of your hotels will be refurbished each year over a 10 year normal cycle. That is my quick and dirty for an ongoing business.

Do I have to adjust any numbers based on the unique circumstances of the business. Beware of overstating returns on capital.

Hooke, author of <u>Security Analysis</u>, said that you don't control the company so you take the capitalization as is so use P/E. It is the hand you drew. *JG:* I strongly disagree with this—reasonable minds differ—because I have been doing this a long time and EV to EBIT works better than P/E because if management doesn't optimally use optimal capitalization then someone will come in and do it for you. Using **EV/EBIT** is the way to go.

Acquisition value is not the same as P/E multiple.

If there are big blips in capex then there will be a hybrid between gross and net.

"Roll-ups mean lose money."

You spent the money on the stores but you don't receive the EBIT yet, so you must normalize the number for EBIT.

Good Price	Good Business
EBIT/EV	EBIT/(NWC + NFA)

If you are earning 50% to 60% vs. 15% to 20% then we are looking at two different animals. Then what are their growth prospects, what is there growth rate, bargain price, good business?

20% pretax = 12% after tax. The average for business is 12%.

I don't make money because I am really smart, I make money because I have a big picture in mind for what I am looking to do. The big picture in mind—is the difference between 50% to 60% vs. 15% to 20%.

Capital Cost: Opportunity cost for my capital

How *JG* compares investments.

For a $1 of earnings per share after tax what P/E for a non-leveraged company?
Now I have alternatives for my money, the risk-free return is the 10-year bond is less than 6%, I use 6%. Never lower than 6% even if the rates are 4.5%. You know Buffett confirmed that when rates are below 6%, I use 6%.

Now if the 10 year bonds are 7%, then I use 7% as my bogie.

$1 at a 16.66 price earnings ratio is equivalent to 6% yield (risk free rate). If my $1 is going to grow to $1.40 EPs in two years, then I prefer growth vs. a static 6%.

How do you justify 20x or 5% yield on $1? If it is growing and I am confident of that growth.

10% pre-tax = 10% x (1- 40% tax rate) = 6% after-tax.

Compare the opportunities here versus my other choices. I compare a growing 5% yield to a 6% risk-free rate.

When I get the money it is after-tax from the company compared to the after tax stream from the bond.

EBIT/EV portion. Then I look at the ROIC portion.

Two businesses:

Jason's Gum Store: $400,000 to build and $200,000 in operating profit so 50% ROIC.

Jimbo's Just Broccoli: $400,000 earnings $10,000 = 2.5% ROIC. But compared to the 6% government bond yield, Jimbo is actually losing (2.5% - 6%) 3.5% a year. This is crazy unless he thinks the profits will grow tremendously. Though it seems he is making a little bit of money (2.5%), he is actually throwing money away (-3.5%).

This is how I evaluate each business—what are they doing. I won't pay for a value destroyer. Stay out of Value Traps of just buying low P/E stocks. WEB calls them "cigar butts."
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I want to look at two things:

Am I getting a **good return based on what I am paying** and what are the **incremental returns** *(MROIC)* on capital? What kind of capital do I have to put in to earn that type of return?

What am I paying and is this a good business? I want to stay out of the *value traps*. I am really looking at normalized EBIT three or four years out vs. last year's EBIT.

How much of the money that I earn can I reinvest at the same rate. The incremental return on capital will affect my growth rate. It will affect how much my dollar will grow over time, then it will what normalized growth rates and earnings will be.

Generally, the way I solve any issues like that are…I look for what things in three years will be worth $50 and I pay $25 for them. If it is $45 or $55, I don't care; I am not smart enough to fine tune it over time. I am picking my spots. There are not that many companies are trading at that discount. It is $38 going to $58 in three years—24% per year. Depending upon how confident I am in that return that may be a great rate of return. Some times I need a higher rate of return depending upon my confidence. I may take a 15% to 20% rate of return despite I like to make more than that. If I am wrong how much can I lose? If I have a lot of room to be wrong and still not lose money. The risk is low.

If the cost of hanging in there is dead money for three years and the $25 goes to $30 or wherever, I get an OK return. Generally, if I am good and I get 4 out of 6 right or how many I get. I look out three years. I take my best shot; I look for a wide disparity. I always looking for a catalyst or the market will realize what I see. What will make people see what I see?

This is a special situations class so I would love to have a catalyst on everything I do. Eventually, in three years or more you don't even need a catalyst. There are a lot of things that can happen. **The efficient market people are right but only long term**. But eventually the facts come out. Whatever people were uncertain about now over the next two or three years, they find the answer to. There are a lot of people out there trying to figure out what something is worth.

So I think the flaw with the efficient market theory is that it often takes a lot more time. There is often a lot of emotion in the short term and there is much more uncertainty involved, and people take the discounts for uncertainty but there is more opportunity if you have a longer term horizon. In the short term I don't think a stock can trade at $20 and $35 and nothing happens and they both can't be right. The economy doesn't change that much. **In the short term, the market may not be efficient, but in the long term the market eventually gets it right.**

Other times a company may buy back stock if they think it is cheap. These little pieces of paper represent the whole company. Eventually all those things work together to get the right price.

We will talk about *Duff & Phelps*. I learned from that.

Break……

(See case study material on Duff & Phelps before reading this section)

EXERCISE: *Duff & Phelps*….Buy, hold or sell? *Students reviewed the annual report of Duff & Phelps without looking at the subsequent price.*

The best section is to look at the front section where they summarized five years of financial and operating history.

This is a great business, it is growing, and it requires low capital intensity. Every dollar they make is spent to buy back shares.

You want to see how the management's bread buttered. How much of their salary vs. share ownership? If they are giving themselves egregious option packages then I will take that into account.

Income grew but total assets did not grow. Their incremental return on capital is infinite. They can grow without reinvesting their capital.
Did anyone attempt to value this?
Duff & Phelps was spun off at $7.

EBITDA is 31.25 and EBIT is $28.8.
EBITDA of $31.25 minus capex of $2.5 = $29.535

EV/(Ebitda – capex).

There are negative working capital businesses like *MacDonald's.*

Anyone see a problem with using a normalized earnings? Look at the fast growth rate of earnings. Do you think that is sustainable?

I took a normal growth rate over five years.

Three different EBIT growth rates: 8%, 13%, 20%. I chose a conservative 8% growth rate.

EBIT of $43.72 x .6 for taxes = $26.23 x 13 P/E = $341. I shrank the number of shares due to the buy backs down to 3.5 million outstanding shares. I assumed that they were buying back shares with the shares increasing in price by 8% a year. Don't forget to make assumptions about what they would do with their excess cash.

$341/3.5 = about $95 to $100 per share.

So at $52 today at 8% the stock price was $99; at 13% the price was $122 and at 20% the price was $164. If I go out five years expecting to earn 20% per year, how could I earn the return sooner? Time compressed? How could I make 50% in a year? The market figures it out sooner. I make 76% if pension funds wake up and discount the earnings at 9%.

Duff & Phelps was a small cap stock with low liquidity.

I am always looking at value and where it is now.

This spin off was a good learning tool for *(Joel's interest and work to analyze and invest in) Moody's.*

Duff & Phelps was taken over by *Fitch* at $100.
Compare the multiple to the bond rate. I will take a 5% earnings yield with a great business and with growth vs. 6% bond yield that is flat.

Quality of Earnings Example: *Commodore*. Work in Process Inventory (WIP) growing faster than Sales.

Sunbeam Article in Barron's. *Chain Saw Al* stuffed the channels with inventory. Another trick is to write down inventory to 0. 490 million to $0. If there are any sales in future periods then sales will be inflated and there will be extra profits.

$92 million in PP&E removes D&A so earnings are overstated.
Drop in allowance for doubtful accounts is less conservative accounting. Sunbeam still lost money after all these adjustments.

Perelman took stock at $40 but the company was worth $7 per share.

Each mistake leads to better insights and subtleties.
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Greenblatt Class #3
Presentation by Mr. Richard Pzena

Sept. 21, 2006

Three objectives:

(1) I want to talk about value investing in general: why does it works, what are the characteristics that might make you believe there is value, and what makes them (the stocks or the companies) cheap.

(2) How do you actually analyze a business? First generically—what makes a good business? I will spend a little bit of time talking about the difference between a good business vs. a bad business.

(3) Then I will use an example, *Lear Corp*, as something that might be a value investment. We will try to understand whether it is or is not a value investment.

Feel free to interrupt with questions any time.

1. **Let me start with value investing.**

I assume you have all read the same things, the academic studies on value investing, They all say basically the same thing that if you do invest and you are sensitive to the price you pay relative to some metric of value like book value, sales, earnings, cash-flow, you tend to naively do well. *Fama & French* studies show price relative to book value metrics outperforming an index as long as they have a pretty long period to work with.

Those studies are repeated over and over again. In fact, I don't believe you can find a single 20-year period of buying the lowest deciles P/E, P/S or P/Book stocks where you wouldn't do better than buying an index. There are none. But over the long term it is a strategy that works. I don't have to use book value, the same thing works with sales, cash flow and earnings--any tangible metric of the size of the business. If you buy a stock at a low price relative to that metric, you outperform the market. *Note the large out-performance of the value metrics, however there are periods of underperformance (shaded areas).*

Value Invest. Metrics Source: What Works on Wall Street, 3rd Edition (2005) by James P. O'Shaughnessy

Price/Earnings	**1952-59**	**1960s**	**1970s**	**1980s**	**1990s**	**2000-2003**
ALL Stocks	19.22%	11.09%	8.53%	15.85%	14.75%	5.91%
50 High P/E Stocks	19.27%	10.96%	2.26%	7.99%	16.99%	-14.73%
50 Low P/E Stocks	21.84%	13.96%	8.89%	7.56%	13.58%	33.55%
Difference	2.57%	3.00%	6.63%	-0.43%	-2.85%	48.28%
Price/Book Value						
50 High P/B Stocks	22.32%	13.13%	0.82%	1.97%	18.03%	-31.17%
50 Low P/B Stocks	18.86%	11.49%	17.06%	13.15%	15.83%	25.68%
Difference	-3.46%	-1.64%	16.24%	11.18%	-2.20%	56.85%
Price/Cash Flow						
50 High P/CF Stocks	19.30%	8.02%	-3.03%	8.77%	12.77%	-27.77%
50 Low P/CF Stocks	18.71%	15.41%	13.57%	12.53%	12.86%	21.23%
Difference	-0.59%	7.39%	16.60%	3.76%	0.09%	49.00%
Price/Sales						
50 High P/S Stocks	14.96%	11.99%	5.82%	-2.02%	-2.46%	-42.37%
50 Low P/S Stocks	20.85%	11.15%	14.80%	20.43%	13.80%	19.94%
Difference	5.89%	-0.84%	8.98%	22.45%	16.26%	62.31%

So why doesn't everyone just do it, if it is so simple? That is the dilemma for me. Even recently where you could study this data for decades. In the late nineties, you had the rare ten-year period that showed that value investing didn't work. We were in a "new world". Now we are in another "mini-new" world thesis where we will be perpetually short of industrial commodities and energy and those prices will stay high forever. Almost certainly that will end the same way (badly with price declines). You never know when, but this is what happens in the world. People love things; people hate things.

Now, if I were today to look at stocks that were the cheapest on the basis of price to book value, you would probably get a list that not one of you in this room would want to invest in. It would be the airlines, the auto manufacturers, and the insurance companies insured against hurricane losses. It would be a list of companies that you would look at and pass on.

That is why psychotics make better investors (Inside Joke. *Joel Greenblatt* placed a NY Times article on the board which had the headline, "Psychopaths make better investors." before introducing *Mr. Richard Pzena*). Because normal people look at this and read the newspaper and say that is crazy. So value investing continues to work.

What really is the mechanism that is going on that creates the opportunity in value? I want to lay out some data for you that demonstrate what goes on and what lies behind the efficacy of this strategy.

On this axis I will measure time and the other axis will be ROE. If I divide the S&P today into five quintiles based on ROE where the highest ones are in the top left hand corner dropping down in each quintile.

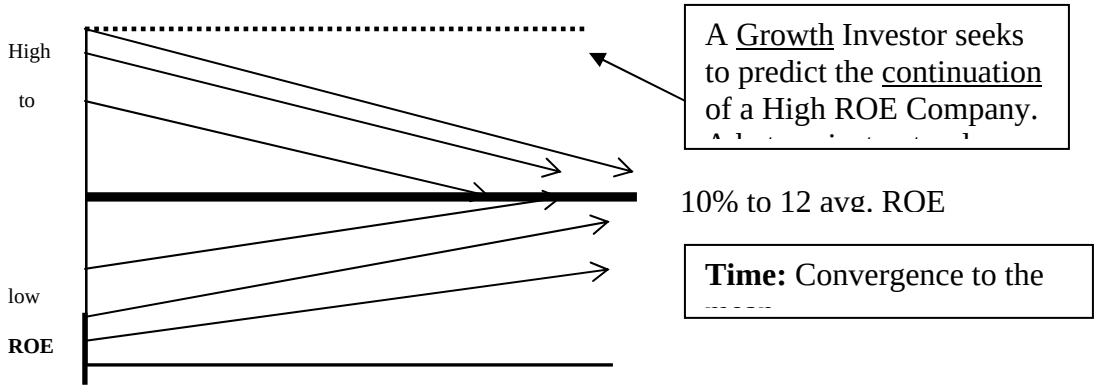

If I could trace out over time what would I see? The companies with the highest profitability decline while the lowest rise--convergence to a mean. You would find that (the mean reversion process) in any market cap, any market in the world, any geographic. Any time period you use, it always looks like this.

I do not think it is very surprising. If you have a company in the left-hand corner up here making lots and lots of money (high ROE), then competitors want to enter that business to make those profits as well. So they try and over time they drive down returns.

Someone has a unique retail concept like *Wal-Mart* 25 years ago, or you execute it better than everybody else, then as you grow you start with the best locations and then you place new stores into less attractive locations. You don't know when to stop building *Wal-Marts* until the ROE begins to decline. There is no formula as to how many to build.

On the opposite side, what do you think these people are doing? They are not jumping off bridges; they are trying to fix things. The low profitability (Low ROE—lower left corner of graph) could be caused by over-capacity in an industry so they take out capacity. The cost structure is too high, they change the cost structure; the sales force orientation is not working, so they change the sales force orientation; the product portfolio may not be working, so they change the product portfolio. Everybody not in the upper left quadrant (high ROE) is trying to get there and everyone down in the lower left quadrant (Low ROE) is trying to move up there. Most of them succeed.

What is interesting is that this data is not adjusted for survivorship bias. This is including the ones that go out of business. On average companies do not go out of business. On average, poor companies do better and on average great companies that are doing wonderfully, don't do as well. **That is why value investing works because the markets extrapolate the same trends of high ROE companies continuing with the same or higher ROE while low ROE companies have lower to same trends extrapolated into the future. People just don't get it (reversion to the mean) despite many years of evidence.**

The people who are buying high growth companies are trying to pick the high growth companies that will not revert to the mean. Some will be great growth or high quality franchise-kind of investors, but you are betting against the odds when you do that. People investing with the low ROE companies with low expectations should be able to outperform the market.

From The New Finance: The Case Against the Efficient Markets, 2nd Edition by Robert A Haugen, "Investors tend to mistakenly project a continuation of abnormal profit levels for long periods into the future. Because of this, successful firms become overvalued. Unsuccessful becomes undervalued. Then as the process of competitive entry and exit drives performance to the mean faster than expected, investors in the formerly expensive stocks become disappointed with reported earnings and investors in the formerly cheap stocks are pleasantly surprised." Page 21.

All you have to do to better than mediocre is to say that you can make some judgment to eliminate the ones, which will go out of business. It is just easier because you don't do anything; just play the odds by buying low P/E or Price to Book. And I will not do any research and over time history shows me that I will win. Then you can try to be more creative by doing better than that, which is what we all spend our time trying to do.

The academic rational is very, very clear for value investing. It is also clear for other types of investing like momentum investing where price trends tend to persist. There is evidence, which suggests businesses doing well, keep doing well. This short-term data contradicts the other long-term data. People who are momentum investors will be sitting on the edge of their chair trying to figure that out when to get out. I think that is hard or harder, but it is valid method backed up by academic data. There is not a whole lot of academic data as you would see going through the *Haugen* book.

We are doing the opposite by buying companies having problems. There is another book, What Works on Wall Street by *Shaughnessy*, which is a composite of trying any possible financial statistics and seeing if it worked. Things like buying high growth companies, but it didn't have price in the variable. I would buy a great company, with great management, good growth rate and dominant market position and all of these characteristics that everyone wants in their portfolio. It is the one thing where there is no academic evidence that it works.

The premise we use is of deep value investing because in the end all of these academic studies are using the cheapest quintile or the cheapest deciles of their universe. They are not using what the index is using. If you are familiar with the indexes that institutions use to evaluate money managers, the *Russell Value Index* and the *Russell Growth Index* which takes the 1000 largest companies and breaks them into: are they either value or are they growth and puts equal market caps in both. And these consultants conclude that over time that they both do the same, so a smart strategy is to have your portfolio diversified into value and growth. This is the premise of the advice given by lots of consulting firms to institutions. One will work while the other doesn't.

Of course, the *Russell Value Index* is not a value index. It is not a value index in the academic sense. It is just a bunch of stocks that have some characteristics of value, but you are not capturing deep value or the academic version of value. I am trying to distinguish here between a value approach that can buy companies that are low ROE companies and accept that they are not probably going to stay there (move to higher or improving ROE) and ignore the high ROE companies.

When I make a presentation to value investors or when I receive a call from my investors, the single most common question from them is: "Don't you read the papers?" Because if you did then how could you be buying…..didn't you see that their earnings were terrible or they just lost a big account or their customers are bankrupt and on and on and on…..

That is why these things are cheap. They are cheap for a reason. The point that I am making is that you never, never find things that are cheap for no reason. I hope to find one some day but it doesn't happen. You have to accept that you don't get the best businesses with great management teams with high margins, with great growth rates and high market share selling at low prices. You don't get those. But good businesses can sell for low prices generally when one or more of those things listed above are missing. When there is some blood on the table.

A basis for contrarian investing: There is some evidence that suggests that markets do overreact to both good and bad news, especially in the long term, and that stocks that have done exceptionally well or badly in a period tend to reverse course in the following period, but only if the period is defined in terms of years rather then weeks or months (Source DeBondt & Thaler).

2. Businesses in General

Let us talk about businesses in general.

Student: What time horizon are you speaking about regarding the ROE change and decline for high ROE Companies?

Richard Pzena (RP): About five years. On average their economics deteriorate while the low ROE companies improve.

If you can combine a company that has a low valuation and should have a sustainable edge, but may, in the present, may not be experiencing it for some--and it may be temporary--reason, then you have this unbelievably powerful combination. **If you can buy a good business at a low price, then you have nirvana.**

Characteristics of good businesses

- High Barriers to Entry
- High Margins
- Good management
- Pricing Power

Low capital intensity--**RP:** but doesn't a company with low cap intensity have low barriers to entry? (*Sees Candy* is a counter example). I think capital is a barrier. Would you pursue competing against *Boeing* with enough capital and find a good person to do that? Is there a barrier to entry? Clearly if no capital is required then there is easier entry.

Why is it that *Boeing* over time produces good profit margins but *Sprint* or *Verizon Wireless* doesn't--they are both equally capital intensive? Answer: High switching costs. Concentration of the marketplace--wouldn't you say an industry with two players vs. eight players has a higher chance for rational behavior? *(Boeing and Airbus make up the two major air plane manufacturers in the world, so the structure of the market is an oligopoly with more rational pricing and high barriers to entry).*

Will *jetBlue* sustain its high profit margins? Would you want to bet that? Does *jetBlue* have a sustainable competitive advantage for the long term? What is that? Better quality of service. How do you account for the fact that the (Airline) industry has been unbelievably unprofitable its entire life? Last cycle *SouthWest Airlines (SWA)* was the *JetBlue*. Now *SWA* is history. How does *JetBlue* all of a sudden appear? And if *JetBlue* can appear all of a sudden, why would you be confident that another *JetBlue* doesn't all of a sudden appear? (The Airline Industry has easy entry with no incumbent competitive advantages).

JetBlue has a no barriers to entry model. There may someday be barriers to entry unless there is a slot restricted type of markets. *JetBlue* could go to an airplane leasing company so capital was not a barrier. An airplane holds its value. If lease financing was not available and airplane values were highly erratic, then you might have a different outcome.

If one guy is standing out better than everyone else, I would be nervous. *jetBlue* probably has a good business model given the industry. C*lear*ly, the history suggests the industry is a bad business.

What are some barriers to entry?

- High switching costs
- High capital costs
- Brands
- Lower operating costs (airline with 1 low cost fleet, by operating in a certain way, locks you in)
- Tobacco with its addicted customers

Value investing works because it doesn't always work. Just naively using value metrics would allow you to outperform the benchmarks.

Barriers to Entry

- Patented technology
- Government regulations No advertising in chewing tobacco, so *SKOL* has an advantage
- Brands
- Customer captivity and Economies of Scale: An Airline with same models allows it to operate cheaper than competitors, which causes customer lock-in.

So we have a general view of what makes a good company….I think the important point comes in many forms. It could be simple like physical location where you have a ten-year concession to sell trinkets at the *Statue of Liberty*. You could have natural resources (low cost copper mine), low transport costs (A Rock Quarry) so physical assets and location could be one form of barrier to entry.

Another could be some form of competitive cost advantage like a mining company—a copper deposit that costs 10 cents to extract while everyone else is at 50 cents a pound, I would say that business is nicely protected. It could be a patent or a technology—you have something that no one else has or will have.

Coca-Cola has a franchise—nobody spoke about franchises-- where it has been built over decades which give *Coke* a competitive advantage of high barriers to entry. *Coke is associated with good things; it has mind share.*

I would define a good business where you can identify specifically a reason why it should be able to earn an excess return on its cost of capital. It has to be a simple reason that you can clearly see.

The Auto Industry is the exact opposite where it is actually easy to see why it wouldn't earn the cost of capital. It is a commodity business, because it is a high fixed cost business where capacity is relatively fixed and the product has a cyclical sales cycle, so people kill each other because they can't produce above their fixed costs. You normally see it with their historical return on capital or ROE over time. Look at the last 10 or 20 years of the company and say, "Is it (ROIC) high? Is the ROE high? If you do this analysis, any company that has been able to earn in excess of 10% to 12% on total capital employed after tax over time, you have to say to yourself, "OK, this looks like a good business.

Now can I identify why it is a good business? I would say *JetBlue* is earning above its cost of capital and therefore is a good business, but do I understand why? Yeah, I get it. I think it is sustainable, then you have a good business.

If I can combine a cheap price with a good business, that is what I am trying to do.

One, I want to talk about: Is it a good business? Then go through the characteristics of the company and ask if it is a good business or not?

Student: High ROIC, High ROE and you see it is sustainable—it looks like a good business. How do you ascribe this to your earlier point of regression to the mean?

RP: Typically, good businesses where you are seeing that on a consistent basis, you rarely see them cheap, they are not good stocks to invest in.

What creates value?

What creates value? We talked about how value gets resolved—the bad stops being bad and things don't stay good forever. How does value get created? Value gets created for almost the same reason, because something went wrong and because there is deterioration. Something went wrong.

The pattern is almost always the same. If you have a company that is chugging along just fine and something falls off trend--that is what creates value. The stock price, especially if the price is looking far out into the future for a continuation of earnings growth, the price will fall dramatically if the earnings fall off their trend.

The dilemma that every value investor faces: the academic studies also show that buying a stock in a business that is deteriorating is a bad idea because there is serial correlation in goodness and in badness—which is counter to the ROE example and argument. Both of those phenomena are happening. **In the short term there is serial correlation and in the long run there is competitive pressure.** They both have an impact. It is deterioration that creates value.

So if you buy a stock that is deteriorating, you are an idiot. The problem is that if you wait for the earnings to turn or the catalysts or the revisions from Wall Street, then you will be too late and not get a cheap price.

Student: Would you have a preference for a good business or a low price?

RP: I would invest in only a cheap stock, but I would give credit for a good business to the extent that that good business justifies better earnings power. For me the issue is price relative to the companies normalized earnings power. So if I had to pay up for *KO* just to feel better because *KO* has a stable earnings base, I wouldn't do it. But if it translates into higher earnings than some other investment and I could quantify that my price is low relative to some future earnings power, then I will (invest). I have never found *KO* to be cheap.

What you find is the business deteriorates and management tries to do something and then the business stabilizes at a lower level. This is where I try to buy—in the trough of stabilization of the business. Most people are unwilling to buy it here because most people don't know if it is going to go back up here.

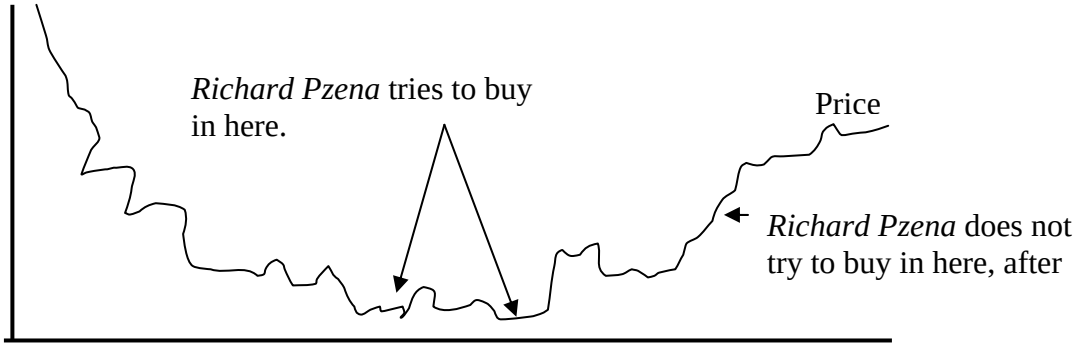

You can speculate because it is a good business because of this, this and this but it isn't going up right now. But I am going to buy it because I know if it does go up, I am going to make a lot of money and if it doesn't, I won't lose a lot of money. *There is a better risk/reward trade-off.*

Value is created by deterioration. The price drop relates to the deterioration while the value captured is associated with price reverting back to trend or the mean. You have to accept further price declines when you buy while the business continues deteriorating, and if you wait, you will pay up while recovering and miss a good opportunity. Once you can see a catalyst, you are late and you are playing partial momentum here.

SUMMARY

You have better odds in the value camp, because **you are playing in a better field**. So if I was mediocre, I would beat the market.

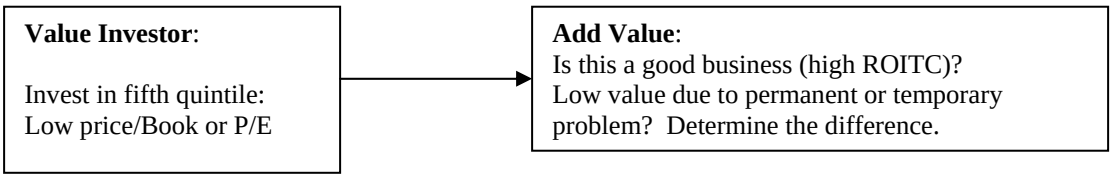

But to be great one must distinguish--what this tells you (lowest quintile) is that those companies are experiencing problems; some are experiencing temporary problems. **The way you can add value is to distinguish between temporary and permanent problems.** Getting a good business at a good price is nirvana. A low price will be associated with problems surrounding the company and its business.

3. *LEAR* CORPORATION

What does *Lear Corporation* (*LEA* – NYSE) do? They are a supplier of parts to the auto manufacturers. They make seats.

Is this a good business? It doesn't look like a good business? Why? They make a commodity—seats and auto parts?

Bad Characteristics of *LEAR*	**Good Characteristics of *LEAR***
(LT) Squeezed by concentrated customers	(LT) Established quality reputation-concentrated customers
(ST) SUV Reliance (two years ago in the + column)	(LT) Ideal Outsourcer--this is why they grow
(ST) Cyclical Peak	Asian Growth
(ST) European Slowness	Rational capacity
(LT) High Debt--it can be a permanent issue.	
(ST) Rising raw materials	

Characteristics of long-term vs. current environment.
Too much capacity is a bad thing, but rationalization of capacity is a good thing.

Let us go back and review which of these characteristics are characteristics of the company and the markets in which they compete in long term and which of these are typical of the current market.

When I am asking about what makes a good business vs. what makes a bad business, I am not talking about current conditions.

Toyota outsource seat supplies so why couldn't *Lear* supply in the future?

Europe is 65% outsourced while the US is 90% outsourced. *Lear* has a flexible, low cost model. Though *Lear* has a union work force, they can lay off workers and close down plants.

The auto manufacturer (*Ford* or *GM*) puts investment into a model, which will either do well or not. The cyclicality will average out over time. *Lear* is in a different fixed cost position than the auto manufacturer. You can say that is bad because of their concentrated customer base.

Questions:

I think we are mixed about whether this is a good or bad business.

ROITC for *Lear*	31%	1995
ROITC after-tax	34%	1996
ROITC	22%	1997
ROITC	30%	1998
ROITC	30%	1999
ROITC	18%	2000
ROITC	32%	2001
ROITC	30%	2002
ROITC	20%	2003

The business has thin margins and a high return on invested capital. There are low working capital requirements and equipment needed. Just in time inventory--the time they get the order before the seat is delivered to the auto plant is three hours. Conflicting signals: thin margins but high ROITC. How? **Low capital requirements**. This is a bunch of guys in a warehouse throwing things together.

There are a lot of assets on the balance sheet--goodwill--so when you see their return on capital it is not as good as shown. We are using tangible capital not including goodwill.

Remember my definition: If the business has a ROC greater than its cost of capital, it is an indication that it is a good business. Now we have to ask, **"Is it luck; is it sustainable? Why is that?"**

It is really rare to find that kind of capital return. If you are generating 30% returns after tax, then you can pay down debt rapidly because of slow growth absent acquisitions. How do they achieve this?
There are high barriers to entry which are high market share. They are sole source suppliers on every one of their supply contracts. Now their customers have the contracts bid out, but there are only one or two competing bids. *Johnson Controls* is their only other major competitor. *Johnson Controls* probably has a similar cost structure to *Lear* and would bid rationally.

There have been two sources of growth in this business over the last twenty years (in the industry): 1.) More complex seats with customer controls, etc. or content per vehicle is going up. Increasing seat content due to two sources: the seats are getting fancier and the cars are getting bigger. 2.) There is more outsourcing.

There has been growth, but still nobody has entered their business. Why? Customers are locked-in. A customer is likely to say, should I risk a new supplier if there is a chance that they can't deliver? The risk for hurting a customers' processes is too great too risk. The structure of the market is that you bid on the contract for the life of the model, so incremental business comes up rarely. Another competitor is unlikely to take market share.

What is the ROITC in 2005? I think they will lose money this year. Certainly they are running on a negative rate of return so far as of end June 2005.

There are two possibilities: 1.) This really is a crappy business and now we should accept it or
2.) We have a temporary problem going on. We don't understand what it is.

What is causing these problems?

High raw material costs with fixed price contracts--a temporary problem. Once the contract is over, there is another negotiation. **How does the pricing mechanism work?** Did anyone read up on that? *GM*'s only choice is to squeeze suppliers (the Bear Argument).

Ask the guy who is running this business what he will do. Now, let's be analysts, and ask. If you were in charge of *Lear*, what would you do?

Lear's reply, "Our Number One Strategy: Grow our business with others who are not in such bad shape."

Let me ask a question….did anybody look at the competitor? *Johnson's Controls* earnings went down by the magnitude of their business to *GM*, which was not nearly the decline in *Lear*'s business. Why?

***Lear* and *Johnson* did not contract on the same basis.** *Lear* contracted on a company by company basis while *Johnson Controls* contracted on a model by model basis. So *Lear* didn't care if they made money on any particular model. So when *GM* said, "You are making all this money on our SUVs, can you give us a break on car seats over here so we don't show huge losses every time we sell a car. *Lear* is happy if the whole contract is profitable, but when *SUV* sales collapse, then there is a problem.

What does the guy at *Lear Corp.* do?
Let us say you are selling a seat for $500, which costs $600 to make, so you are losing $100, and you are selling a *SUV* seat for $1,000 that costs you $800 to make so you are netting $200. This is what *Lear* was doing. So what does *Lear* do?

"Excuse me, but we have to raise prices on this because we are losing money." They bring the numbers to *GM* and ask to raise the price. They have price adjustment clauses in all the contracts. That as always meant in the past, *GM* saying we need 5% lower prices this year. *Lear* would say, OK, here is what a 5% lower-priced seat looks like. *Lear* gives *GM* a different seat--1/2 leather and 1/2 plastic.

Will *Lear* be successful in their renegotiation? You have no idea. Look how much steel and plastic costs are, so we pass on the costs to you. *GM* says, "You are killing me; you make me break my prices. I need a break." How will it be resolved?

Let us switch gears and jump away from what is going to happen now.

I want you to forecast what the earnings will be five years from now. Let's say the average contract is four years, the average model life is four years. I want to forecast the earnings of this company.

1. Auto production of 1% increase of top-line growth in the industry. $16.5 million to $17 million in sales as a starting point. Cars/unit mix skewed.

2. Market share for market

3. Content per vehicle. Big Three/Others market share: 65%/35% 55%/45% 60%/40% 55%/25%

Volume will stay the same at 1% growth. Unit sales will be flat. Content per vehicle is 5% now, so above trend. I would argue we scale back the 5% to 2%. What about profit margins compared to the average of the past two years' margins? We will keep at 5% to 5.5%.

$17 billion in sales times 5.3% net margin = $900 million minus $170 million interest expense = $730 million times (1 - 33% tax rate) = $490 million then divided by 67 million outstanding shares = $7.30 per share. At today's $33 share price with EPS of $7/share = less than 5 times earnings.

Now let's dig down into this. 15% of their business is bad. The interior products business is selling a commodity-like product, competing against Asian manufacturers. What do we do about this division? Shut it down. 8-K came out today where management describes the business:

From 8-K Filed on Sept. 19th, 2005
Section 2 – Financial Information Item 2.06 Material Impairments
In accordance with Statement of Financial Accounting Standards ("SFAS") No. 142, "Goodwill and Other Intangible Assets," Lear Corporation ("Lear" or the "Company") periodically evaluates the carrying value of its goodwill for indicators of impairment. SFAS No. 142 requires the Company to evaluate the carrying value of its goodwill for potential impairment on an annual basis or on an interim basis if there are indicators of potential impairment.

As previously disclosed, in conjunction with Lear's restructuring program, the Company is continuing to evaluate strategic alternatives with respect to its **Interior segment**. This segment continues to experience

unfavorable operating results, primarily as a result of higher raw material costs, lower production volumes on key platforms, industry overcapacity, insufficient customer pricing and changes in certain customers' sourcing strategies. Based on the foregoing, Lear concluded on September 19, 2005, that the **Interior segment's goodwill has been materially impaired.** At this time, Lear is unable to make a good-faith estimate of the amount or range of amounts of the impairment charge. Such impairment charge will not result in future cash expenditures. Lear will file an amended report on Form 8-K pursuant to this Item 2.06 within four business days after it makes an estimate of such amount or range of amounts. Further, an estimate of the goodwill impairment charge will be recorded in accordance with SFAS No. 142 in the Company's third quarter 2005 financial results.

I read that as no value. *The Interior Segment should have no value ascribed to it.*

We knock 15% off of our earnings forecast. $7.30 knocked down to $6.00.

Let's not forget what happens with no growth and 67 million shares. How many shares outstanding you suppose they will have in five years? ***(What do they do with their FCF?).*** So $400 million FCF per year or $2 billion after 5 years, then at $33 per share, there is more than enough to buy back the whole company. However, we assume that *Lear* will have $400 mm in FCF next year. It is better to assume $0 going to $400 mm the next year. *Lear* will either pay down debt and lower interest expense to raise earnings or buy back stock and that will raise earnings. If *Lear* takes two years to reach normalized margins and operating income then let us assume at the end of five years, it has $1 billion to buy back shares (over 30 million shares at $33 per share) or to pay down debt.

Conservative Assumptions

So even with these very conservative assumptions:

No top line growth, average margins, and getting out of the crappy businesses, which by the way probably depressed the margins in the good business so closing that down will raise the average margin going forward. It looks like there will be a lot of earnings. You have a margin of error here and a good risk & reward.

Management thinks that that they will be making $3.5 per share next year if you ask them. And what do they know. They know the status of negotiations with *GM* & *Ford* and you don't. It doesn't mean that they are the most credible and reliable people in the world but that is what they are saying.

Lear could miss earnings this year and next year and you take a bet that steel prices go down. I have no clue about trading strategy, but I won't bet that steel prices keep going up.

Lear has $6 earnings power. $33/6 = 5.5xs about 5th least expensive in our stock rankinguniverse. We rank each company to its earnings power so it is at a 5 P/E vs. 14 P/E for the market. Fair value is $6 in normalized earnings times 14 P/E equals $84. It is a big number. If it took five years to triple your money would you be willing to wait? I don't think it is five years. I wouldn't sell it unless it ran tomorrow from $33 to $75**. I do think it is one of the cheapest stocks out there, for good reasons.**

I never forecast problems. I say if there is trouble now, I might wait. *Lear* is renegotiating its contract, it is going to be better. Always things are going on. Their margins have to be higher barring a major world catastrophe. The fundamentals are not deteriorating. If things get better, the stock will rise a lot, but if conditions don't improve, then you won't lose much.

Even if *GM* & *Ford* go bankrupt, they will still make cars. Interest rates go up causing a consumer recession could hurt. Auto suppliers as proof. *Delphi/Visteon* sell little parts--a lot of competition with no barriers to entry. Big parts like car seats are difficult to import and have barriers to entry. There are big parts and there are small parts--two different businesses.

Our screen for *Lear*:

Our growth rate for Lear was 13% because of past acquisitions and then the computer takes the industry growth rate and averages it (13% + 8%)/2. We have $12 per share in earnings.
There are two reasons for making the margins higher:

1. Closing down the crappy business but sales will go down with it.
2. The European market is not as good as the US market and that will get better structurally in the future.

They are tied to a company, *GM* that is losing share.
$1 billion in debt coming due in three years.

Johnson Controls bought *York*—scary!

What is the top feature of seats for commuters--comfortable seats.
The top feature for SUV customers--power seats.

Once you have a large cap company over $1 billion in market cap, the possibility of growth at high rates is very low.

I think the earnings power for *Lear* will rebound rather quickly.

Johnson Controls overpaid for *York*. It is cheap too on the scale of the market as a whole.

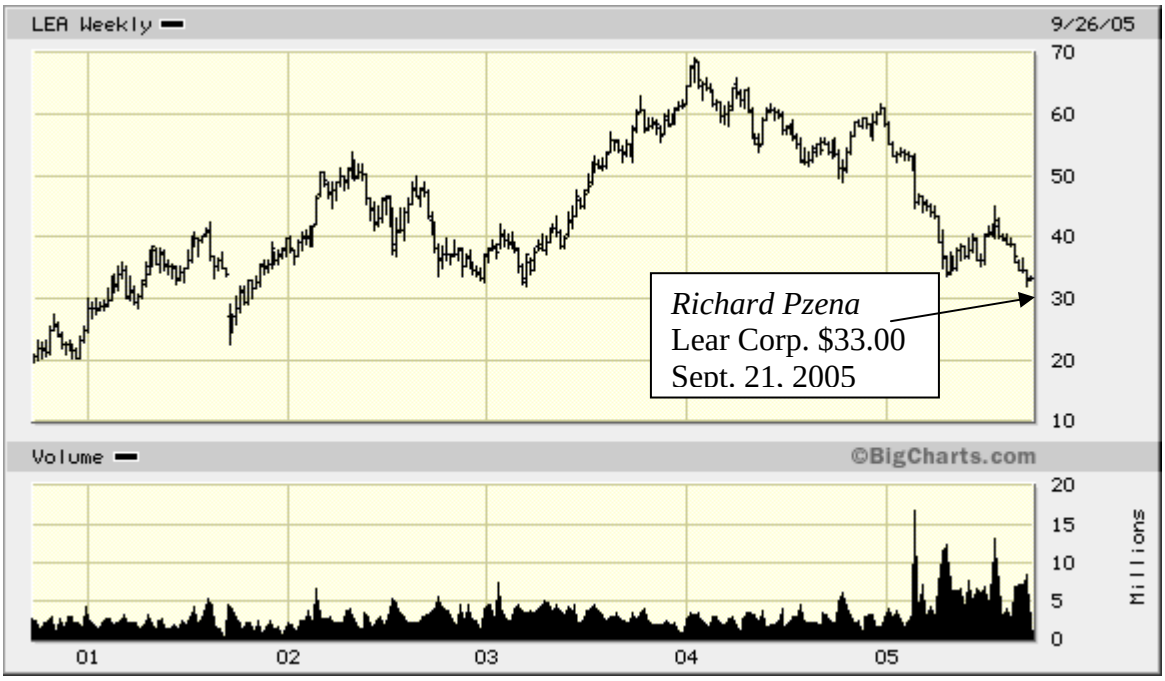

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Greenblatt Class #4
Bruce Newberg, an Independent Individual Investor

Sept. 28, 2005

The next class will be **Oct. 5 on a Friday in Room 329 from 9 AM to 12 Noon**.

We have another guest speaker for part of the class today.

***Joel Greenblatt (JG)*:** Anyone notice a problem with Richard Pzena's methodology?

Student: He uses a multiple that is not tailored to the particular business; instead he uses a general multiple of 14.

JG: In Richard's defense a 12-15 multiple works pretty well there too.

What I saw is that he *(Richard Pzena)* is a lot smarter than you or me. I left that class saying, Gee, if I have to be that smart to make money then there doesn't seem to be much chance for me. We are sort of at the same level while Richard is way up here (hand raised high above his head). That is the only flaw I saw. Having said that, mere mortals can also do this stuff.

We also have an incredible presenter, *Bruce Newberg (BN)*; we all went to school together at *Wharton Business School*. He approaches things a little bit differently. He was actually head of convertible arbitrage at *Drexel/Burnham.* For the last 15 years, he has been investing on his own incredibly successfully. Being an individual investor gives you a lot of flexibility and this being a class on special situations he is a great example. You can actually do a lot more with the less money you have.

Running a smaller amount of money enhances flexibility and returns. *Buffett (WEB)* said he could earn 50% a year with $1 million a year. Now *WEB* runs billions so he says that a large amount of money is the enemy of performance. He says he will have trouble exceeding 15% per year. *Bruce Newberg* looks at the whole world. He has many, many war stories.

He will recount a few today and he will go into how you might find interesting things for yourself.

Bruce L. Newberg as Trustee of the Newberg Family Trust
11601 Wilshire Boulevard, Los Angeles, CA 90025

Bruce Newberg (BN): Well, I am not as smart as *Joel Greenblatt* and I am certainly not as smart as *Richard Pzena.* Basically, I have to find easier ways to make money than figuring out *Lear Corporation (LEA).*

I am going to talk to you about a situation in 2002 that to me was pretty simple. It was a company called *MIPS Technologies* that was a spin off out of Silicon Graphics. See next page.

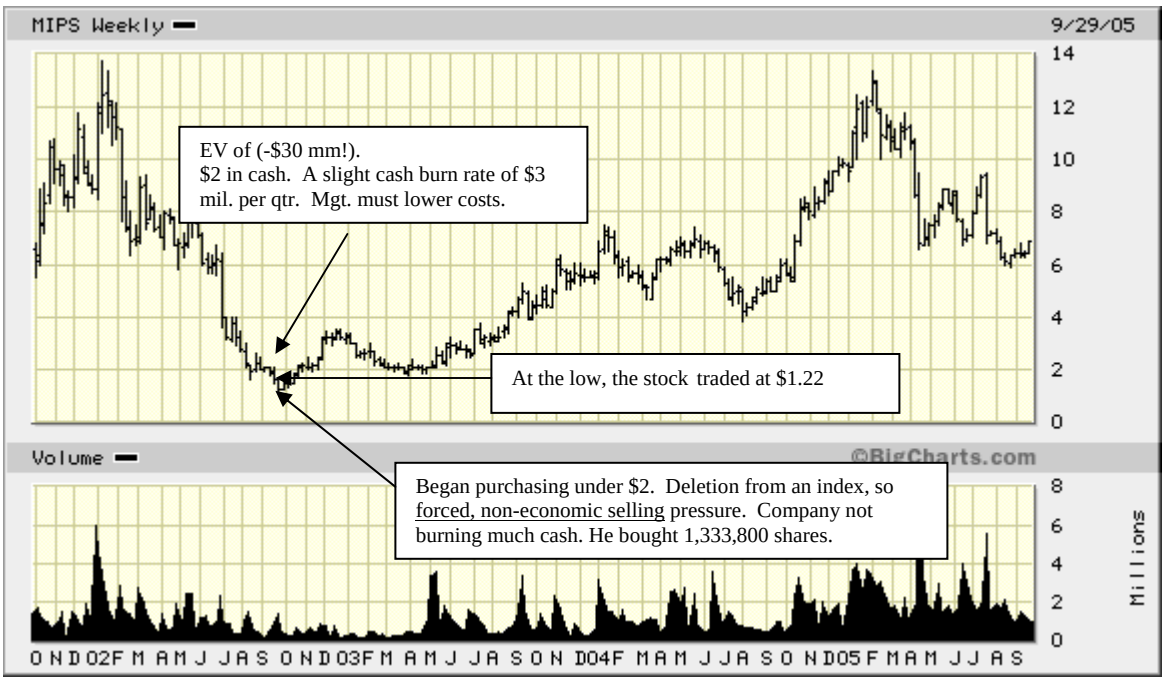

In thousands)

MIPS		September 30, 2003 (unaudited)	June 30, 2003
ASSETS			
Current assets:			
Cash and cash equivalents		$ 73,692	$ 83,839
Short-term investments	**Close to $2/Share in cash**	4,975	—
Accounts receivable, net		4,010	4,762
Prepaid expenses and other current assets		2,603	3,648
Total current assets		85,280	92,249
Equipment and furniture, net		5,607	4,202
Intangible assets, net		3,621	3,769
Other assets		3,590	5,129
		$ 98,098	$ 105,349
LIABILITIES AND STOCKHOLDERS' EQUITY			
Current liabilities:			
Accounts payable		$ 523	$ 504
Accrued liabilities		9,034	10,977
Deferred revenue		2,248	2,592
Total current liabilities		11,805	14,073
Long-term liabilities		2,496	1,900

	14,301	15,973
Stockholders' equity:		
Common stock	40	40
Additional paid-in capital	180,518	180,504
Accumulated other comprehensive income	711	702
Deferred compensation	(1,176)	(1,337)
Accumulated deficit	(96,296)	(90,533)
Total stockholders' equity	83,797	89,376
	$ 98,098	$ 105,349

	Three Months Ended September 30,	
	2003	**2002**
Revenue:		
Royalties	$ 5,088	$ 3,533
Contract revenue	5,325	5,909
Total revenue	10,413	9,442
Costs and expenses:		
Research and development	8,144	8,507
Sales and marketing	2,796	3,243
General and administrative	1,644	1,831
Acquired in-process research and development	—	394
Restructuring	3,233	—
Total costs and expenses	15,817	13,975
Operating loss	(5,404)	(4,533)
Other income, net	208	655
Loss before income taxes	(5,196)	(3,878)
Provision for income taxes	567	—
Net loss	$ (5,763)	$ (3,878)
Net loss per basic and diluted share	$ (0.14)	$ (0.10)
Shares used in computing net loss per basic and diluted share	40,172	39,619

	Three Months Ended September 30,	
	2003	**2002**

Operating activities:		
Net loss	$ (5,763)	$ (3,878)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation	1,002	1,182
Acquired in-process research and development	—	394
Amortization of intangibles	308	651
Other non-cash charges	(3)	(23)
Changes in operating assets and liabilities:		
Accounts receivable	752	3,310
Accounts payable	19	(567)
Other assets and liabilities, net	905	228
Net cash provided by (used in) operating activities	(2,780)	1,297
Investing activities:		
Purchases of short-term investments	(4,975)	(5,000)
Capital expenditures	(2,410)	(334)
Acquisition of Algorithmics Limited and an affiliated company, DFS3 Limited, net	—	(1,265)
Payment related to purchase of intangible assets in a prior period	—	(900)
Net cash used in investing activities	(7,385)	(7,499)
Financing activities:		
Net proceeds from issuance of common stock	15	—
Loan repayment	—	(302)
Net cash provided by (used in) financing activities	15	(302)
Effect of exchange rate on cash and cash equivalents	3	2
Net decrease in cash and cash equivalents	(10,147)	(6,502)
Cash and cash equivalents, beginning of period	83,839	90,712
Cash and cash equivalents, end of period	$ 73,692	$ 84,210

Formation of MIPS Technologies, Inc. (MIPS). *MIPS* Technologies, Inc.'s predecessor, *MIPS* Computer Systems, Inc., was founded in 1984 and was engaged in the design and development of reduced instruction set computing, or RISC, processors for the computer systems and embedded markets. Silicon Graphics, Inc. (Silicon Graphics) adopted the *MIPS* architecture for its computer systems in 1988 and acquired *MIPS* Computer Systems, Inc. in 1992. Following the acquisition,

Silicon Graphics continued the *MIPS* processor business through its *MIPS* Group (a division of Silicon Graphics), which focused primarily on the development of high-performance processors for Silicon Graphics' workstations and servers. In order to increase the focus of the *MIPS* Group on the design and development of processor applications dedicated to the embedded market, in December 1997 Silicon Graphics initiated a plan to separate the business of the *MIPS* Group from its other operations.

In April 1998, our Board of Directors approved a transaction pursuant to which Silicon Graphics transferred to us the assets and liabilities related to the design and development of processor intellectual property for embedded market applications. From the closing of our initial public offering on July 6, 1998, until June 20, 2000, we were a majority owned subsidiary of Silicon Graphics. On June 20, 2000, Silicon Graphics distributed all of its remaining interest in *MIPS* in the form of a stock dividend of Class B common stock to its stockholders.

	Years Ended June 30,				
	2005 (1)	2004	2003	2002	2001
	(In thousands, except per share data)				
Consolidated Statements of Operations Data:					
Revenue:					
Royalties	$ 29,988	$ 23,439	$ 15,693	$ 16,791	$ 41,931
Contract revenue	31,231	24,446	23,397	30,970	42,978
Total revenue	61,219	47,885	39,090	47,761	84,909
Costs and expenses:					
Cost of contract revenue			250	250	250
Research and development	21,911	23,962	32,863	34,045	33,902
Sales and marketing	14,851	11,878	13,759	17,189	15,833
General and administrative	10,283	8,486	8,508	7,435	9,007
Acquired-in process research and development			394	1,737	
Restructuring charge (2)	277	3,233	10,282	437	
Total costs and expenses	47,322	47,559	66,056	61,093	58,992
Operating income (loss)	13,897	326	(26,966)	(13,332)	25,917
Other income, net	2,412	591	303	3,028	6,287
Income (loss) before income taxes and the cumulative effect of change in accounting	16,309	917	(26,663)	(10,304)	32,204

principle					
Provision (benefit) for income taxes	1,400	2,448	2,244	(914)	12,401
Income (loss) before cumulative effect of change in accounting principle	14,909	(1,531)	(28,907)	(9,390)	19,803
Cumulative effect of change in accounting principle, net of tax benefit (3)					(741)
Net income (loss)	$ 14,909	$ (1,531)	$ (28,907)	$ (9,390)	$ 19,062
Per basic share amounts:					
Net income (loss) before cumulative effect of change in accounting principle	$ 0.36	$ (0.04)	$ (0.73)	$ (0.24)	$ 0.51
Cumulative effect of change in accounting principle					$ (0.02)
Net income (loss) per basic share	$ 0.36	$ (0.04)	$ (0.73)	$ (0.24)	$ 0.49
Per diluted share amounts:					
Net income (loss) before cumulative effect of change in accounting principle	$ 0.33	$ (0.04)	$ (0.73)	$ (0.24)	$ 0.49
Cumulative effect of change in accounting principle					$ (0.02)
Net income (loss) per diluted share	$ 0.33	$ (0.04)	$ (0.73)	$ (0.24)	$ 0.47

	June 30,	
	2004	**2003**
ASSETS		
Current assets:		
Cash and cash equivalents	$ 78,335	$ 83,839
Short-term investments	15,041	
Accounts receivable, net of allowance of zero at June 30, 2004 and $183 at June 30, 2003	2,488	4,762
Prepaid expenses and other current assets	3,159	3,648
Total current assets	99,023	92,249
Equipment and furniture, net	3,578	4,202
Intangible assets, net	3,176	3,769
Other assets	2,926	5,129
	$ 108,703	$ 105,349
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 1,255	$ 504

Accrued liabilities	12,344	10,977
Deferred revenue	3,407	2,592
Total current liabilities	17,006	14,073
Long-term liabilities	2,038	1,900
	19,044	15,973
Stockholders' equity:		
Class A common stock, $0.001 par value: 0 and 150,000,000 shares authorized at June 30, 2004 and 2003, respectively; 0 and 15,499,010 shares outstanding at June 30, 2004 and 2003, respectively, net of 0 and 5,317 reacquired shares at June 30, 2004 and 2003, respectively		15
Class B common stock, $0.001 par value: 0 and 100,000,000 shares authorized at June 30, 2004 and 2003, respectively; 0 and 25,057,715 shares outstanding at June 30, 2004 and 2003 respectively, net of 0 and 12,044 reacquired shares at June 30, 2004 and at June 30, 2003, respectively		25
Common stock, $0.001 par value: 250,000,000 and 0 shares authorized at June 30, 2004 and 2003 respectively; and 41,020,061 and 0 shares outstanding at June 30, 2004 and 2003, respectively, net of 17,361 and 0 reacquired shares at June 30, 2004 and at June 30, 2003, respectively	40	
Additional paid-in capital	181,511	180,504
Accumulated other comprehensive income	867	702
Deferred compensation	(695)	(1,337)
Accumulated deficit	(92,064)	(90,533)
Total stockholders' equity	89,659	89,376
	$ 108,703	$ 105,349

BN: *MIPS* was a spin out of *Silicon Graphics*. *MIPS* had two classes of stock, A & B. They had 40 million outstanding shares. The two securities traded at different prices where the B shares traded below the A shares. It was actually an arbitrage where they were both going to be converted into the same class of shares yet the A shares traded at a 10% plus price to B shares. The B shares had more votes than A and automatically converted 5 years after the spin-off and there was a potential that they could be converted before that.

In 2001 technology came off of the *Internet Bubble*, and a lot of technology was having a slow down. *MIPS* had more than that. When *MIPS* went public, *MIPS* was in the business of licensing semiconductor technology to people who were developing chips. Those chips went into a lot of devices. Their first chip went into the *Nintendo 64* video games. Now that was a short-lived experience and it became apparent at the end of 2001 as the Nintendo video games were plunging.

What I want to show you first of all about the stock and then a little bit about the balance sheet. It goes to show you about the efficient market theory as to the value of this company at $2.4 billion dollars in 2000. We focused on *MIPS* in this range ($3 to $2) while it became apparent that *MIPS* sales were falling off the back of the truck and the company was beginning to lose money. Let me show you what I was looking at back then.

Now this company had 40 million outstanding shares so if you look at the Mar. 02 10-Q:

March 31,	**June 30,**	
	2002	**2001**
	(unaudited)	
ASSETS		
Current assets:		
Cash and cash equivalents	**$ 78,423**	$ 116,520
Short-term investments	**19,375**	
Accounts receivable	5,567	6,443
Prepaid expenses and other current assets	8,052	7,720
Total current assets	111,417	130,683
Equipment and furniture, net	6,793	8,089
Intangible assets	4,393	
Other assets	5,369	1,661
	$ 127,972	$ 140,433
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 468	$ 3,184
Accrued liabilities	6,309	10,472
Deferred revenue	3,593	4,069
Total current liabilities	**10,370**	17,725
Stockholders' equity:		
Common stock	39	39
Additional paid-in capital	176,363	175,520
Accumulated other comprehensive loss	(459)	(615)
Accumulated deficit	(58,341)	(52,236)
Total stockholders' equity	117,602	122,708
	$ 127,972	$ 140,433

***MIPS* TECHNOLOGIES INC**
05/10/2002

Income Statement

	Three Months Ended March 31,		Nine Months Ended March 31,	
	2002	**2001 (Restated)**	**2002**	**2001 (Restated)**
Revenue:				
Royalties	$ 4,135	$ 16,106	$ 13,580	$ 34,204
Contract revenue	8,607	12,029	23,635	33,082
Total revenue	12,742	28,135	37,215	67,286
Costs and expenses:				
Cost of contract revenue			250	250
Research and development	8,446	9,543	25,315	24,867
Sales and marketing	4,916	4,272	13,270	11,414
General and administrative	1,948	2,557	5,506	6,801
Acquired in-process research and development			1,737	
Restructuring			437	
Total costs and expenses	15,310	16,372	46,515	43,332
Operating income (loss)	(2,568)	11,763	(9,300)	23,954
Other income, net	510	1,651	2,415	4,883
Income (loss) before income taxes	(2,058)	13,414	(6,885)	28,837
Provision (benefit) for income taxes	(380)	4,875	(780)	11,044
Income (loss) before cumulative effect of change in accounting principle	(1,678)	8,539	(6,105)	17,793
Cumulative effect of change in accounting principle, net of tax benefit				(741)
Net income (loss)	$ (1,678)	$ 8,539	$ (6,105)	$ 17,052
Per basic share amounts:				
Income (loss) before cumulative effect of change in accounting principle	$ (0.04)	$ 0.22	$ (0.16)	$ 0.46
Cumulative effect of change in accounting principle				(0.02)
Net income (loss) per basic share	$ (0.04)	$ 0.22	$ (0.16)	$ 0.44
Per diluted share amounts:				
Income (loss) before cumulative effect of change in accounting principle	$ (0.04)	$ 0.21	$ (0.16)	$ 0.44
Cumulative effect of change in accounting				(0.02)

principle				
Net income (loss) per diluted share	$ (0.04)	$ 0.21	$ (0.16)	$ 0.42
Shares used in computing basic net income (loss) per share	39,014	38,778	38,969	38,659
Shares used in computing diluted net income (loss) per share	39,014	40,262	38,969	40,585

They had $98 mm in cash with 40 mil shares outstanding. And if you take cash minus CL or (($78,423 Cash + $19,375 ST Invs). - $$10,370 CL) = $87,428 or approximately 98 mm - $10 mm = $88 mm or $88/40 = $2.20 per share in net cash. The stock at this time coming into Sept 2002—there were lots of bad things going on—*Joel* and I were talking about this before—we called it the triple witching hour.

Have you discussed tax loss selling? There is a time of the year, usually by October or at least by the end of December investors want to offset gains with losses and not have reportable taxable income. People tend to sell losers to offset their winners. *(You want to find motivated or distressed sellers).* That was going on in a stock that had a significant decline. Secondly, this stock was being deleted when it was trading at $1.22 from one of the S&P indices, the S&P Mid-Cap index, and I think 10% to 15% of the stock was closely held by the kind of funds (like Dimensional Fund Advisors) that would automatically dispose of it with the deletion. When this stock was being deleted, it traded down to $1.22. So that is a market cap of $49 million dollars.

So what can go wrong? If the company burns cash, the value will decline. They could acquire somebody, but shareholders would not want it. The Enterprise Value (EV) at $1.22 was a negative $30 to $40 million! You had some room in terms of a margin of safety.

Let me show you what the historical income statement looked like back then. The revenues fell from $42 million in 2001 to about $17 million in 2002 due to the decline in Nintendo Game Revenues. As *Richard Pzena* always says, "You want to find out if the problem is temporary or permanent.

Basically, I found this stock looking at a spin-off and also doing new lows list screens. Looking for EV to revenues. This will always come up. They were losing about $3 million a quarter. There are ways you can lose money in these situations. The business could continue to lose money. You may have to shut parts of the business down, and you could have the termination costs of employees, leasing costs of manufacturing space and other costs. You may have to pay to exit the leases, so you have to look at all these potential liabilities and expenses.

I met this company before the S&P delete. I filed a 13-G because I was not going to try to influence management or try to control the company. Although I am glad to give them a recommendation, I don't want to take control. I told that to the CFO after I filed a 13-G, and he wrote back thanking me for my support. I wrote back saying we were not buying the stock for support but because we thought that there was real value here and you guys can do something to create value here. The market is saying there is negative value here. To stay in business, one could say the shut down expenses were not high. If they shut down and went to one employee and collected the royalty checks they collected for all that they created, clearly you will create some positive value.

Getting into it was actually pretty easy for me. Their R&D was too high. Basically, here is how I looked at it. They were like the rich guy—they made all this money on *Nintendo*—then they got sloppy with their other projects. They had these royalties coming in and as they were making money and the stock was going up, they would continue to take on projects maybe without the strict economic feasibility to work on all of those projects. I am sure seeing me file a 13-G on the company—and I am not a scary guy—but having me talk to them about losing control, they knew they had to do something or face their shareholders.

Between stopping spending on R&D and the royalties that were coming in, you would have a positive stream of cash in the future? So I think they had a discussion with themselves, and they had to re-evaluate some of their programs and look at really using discipline in how they use the cash. The $3 million in quarterly losses is not that big a deal now but that $3 million can turn into $6 million loss which can turn into a $12 million loss, etc and before you know it the margin of safety is gone. They made an announcement that they would focus on only those economic projects which had the long term returns.

Student: Did you want to have a more activist investor with you to rattle the cage and be sure to have management do the right thing?

BN: You can rattle the cage. I live in CA and getting to San Jose takes about an hour. I have been up there to visit with them. You have to count on capitalism at work. Capitalism and people acting in their own self-interest would spur change. I think management knew the game had changed. This management had been pretty promotional; look at the market cap this company had been at. What was in their best interests? How should they behave? So I agree that you would think that they would want to do the right thing, but sometimes if they articulate that this is what they are going to do and this is how they are going to do it, the market will immediately react to what they have said and a good part of the opportunity will be gone.

I went out there on speculation thinking that they were going to behave rationally and do what was in their best interests and their shareholders best interests which ultimately would be in their interest. The company was where they were employed. If you lost a job during 2002 in Silicon Valley, the situation would be difficult. It was not like trying to get a job in 1999.

Student: Could management have cashed out a lot of their options near the highs in 1999 – 2000 and then not care as much?

BN: They could, but then you would want someone that would care. I have seen situations that were cash rich and where management could lower expenses that did not work out as well as this. Most of those companies did not have a unique product in its class, no royalty stream coming in from other things they control. This was a little bit difference.

The beauty of it was this S&P delete. When indices are rebalanced and stocks are added and subtracted and you will know in 30 to 60 days out that this is a very likely candidate. And we just happen to be there. You dot the i's and cross the t's and wait for them to sell the stock. Sometimes you get it, sometimes you don't. Sometime you have to pay more. Would have I paid $1.40 or $1.50? I don't know. Actually, one of the negatives was that I had to file a 13-G based on 5% of the B shares. My position was 1.4 million shares, but that was not 5% of the whole company, that was 5% of the B shares.

Student: Did you buy shares before meeting management?

BN: I probably bought my first shares before I met with management. Obviously, it is a big advantage to follow something for awhile and then have the price come to you versus waking up tomorrow and seeing a stock have a big hiccup and you are starting this morning and you have to make your decision by this afternoon. I had tangentially looked at this company for a year. I had asked management when their stock was $3.50 if they would buy back stock at $2? Yes, they would. And it got there very quickly—they had a bad quarter, they were losing $0.08 EPS, there was tax loss selling and under $5 a lot of institutions will not be able to own the stock.

And I want to make a big picture comment about any investing. And that is you want to really focus on things when other people have to sell. You want an imbalance of sellers vs. buyers. The biggest money was made when the *Resolution Trust Corporation (RTC)* decided that the Savings & Loans could not own high yield bonds. Can you imagine if you woke up tomorrow and no one with the last name from A – N could own New York real estate what would happen to the value of NY real estate? And if you put it under a small time frame those opportunities are created a few times in your life. So, I hope it is OK to cover this in this class. But the smartest guys that I know focus on situations where everyone is focused on selling, everyone is very negative—**negative sentiment is a great thing when you want to make a purchase.**

One of the things that the company did in its materials and the IR web site--they would put out a line with royalties and they would put out a line without royalties. So they showed that if you took out the *Nintendo 64* revenues, their royalty stream outside of *Nintendo 64* was growing.

Basically royalties grew. I think the company had EBIT of $16 million in 2004 and that cash today is approx $120 million, and the stock went as high after the fact as $12. The hard question today, the company is making $16 million in EBIT and you believe the company is growing and it has $120 mm in cash. Does anyone want to think of a range of valuations that the market might put on this? 10x to 14x $16 million of EBIT plus $120 mm = 160 + 120 to $224 + $120 or $280 to $344. Divide by 40 mm outstanding shares = $7 to $9.

10 x EBIT so that is $7 per share. The stock went to $11. One thing I find in technology stocks, the sentiment swings particularly in small caps. The swings can be significantly greater than in large cap stocks. It is funny because the stock is at $6.60 today. I probably sold on average at about $8.00.

One of the great things about being a private investor and managing my own money is that I don't have to report or write letters to anybody. **If I don't find anything to do that isn't great**, **then I wait.** And I am very focused. There is a lot you can do if you are not a fiduciary. There is a big difference between how often you do things and when you pull the trigger. If you look at great gamblers, they will tell you to wait for the odds to be stacked in your favor. We could look at a lot of situations, but this is one where I thought the odds were really, really stacked in my favor. I sort of felt like tails I make a little and heads I make a lot. Those are great. And there are periods where you can find a lot of those and periods when you can find very few of those.

Being able to sit on your hands, to me, is an important facet of investing.

Student: What do you think about today?

BN: *Joel* and I may disagree about this but I think–it is interesting…the opportunities…a lot of money has gone into hedge funds over the last five years and I think that a lot of hedge funds are focused……..I feel like a little kid in the sand box where everyone is kicking all the sand around him. There is not as much to do. I think there is so much money chasing investments that the dislocations that we used to get are not that great, but what can happen? Basically, if hedge funds under perform large cap growth what will happen to the flow of funds? Money will be going to large cap growth. Historically people won't realize that their strategy isn't working. And I think that there is opportunity. It is great that there is opportunity in the small stuff because you can make multiples of your money, but you find an undervalued great company and you put it away. It is not as easy as this money. But I think this is not a great time for small cap value.

Bloomberg is a great tool for those of us who are addicted to it. The worst quarter *MIPS* had was the FY 2nd Qtr of 2003 they lost $5 mm in negative operating income. <u>I want to look at where cash bottomed out.</u> They have a FY Ending in March. So the third quarter of 2002 cash was $97 million and went down to $94 to $91 million and bottomed at $91 million and went to $102, $110 and…. $116. So they were never bleeding that badly. We didn't spend much time talking about the business, but in reality I wasn't that attracted to the business. I was attracted to the valuation and there is one thing that *Professor Greenblatt* will teach you is that valuation and EV is unbelievably important. The one thing that investors miss which is unbelievably important is valuation.

The other parts of the business, they were in network printers. They made programmable chips. If you are HP and you are putting out a network printer, you don't want to develop a chip for that network printer—it is hugely expensive. There is huge demand out there for chips that are programmable. Their chips went into set-top boxes and HTV. In terms of understanding their business I didn't know every nook of their business, but I did check to see who was signing deals with them. You see where the products are going into to and you use your common sense. Or you consult an expert.

Student: Did you read through all the legal documents? How did you evaluate the legal risks?

BN: It actually is pretty simple. This is a proxy: that is why the B shares are trading at such a discount to the A shares. It doesn't make any sense. Sometimes it doesn't make sense and other times there is a reason for it.

The price discrepancy was not that great, less than 10%. There really wasn't a lot of risk being long and short the same thing plus I got a short rebate. I earn interest on the short. Fed funds minus 25 to 50 bpts. There is a wide range of what you get in rebates depending on the stock—like *General Motors*. People were hedging the debt against the stock, so you had to pay to borrow the *GM* stock.

Another War story…..

Joel you wanted me to cover how I screen for things.

The next company is called, *Artesyn Technologies (ASTN).* I really am not a technologist but I happened to pick busted technology stocks. I can't say why. The sentiment can really swing in a significant way.

MIPS

In FY 2003 the royalties bottomed out at $16 million and came back in 2004 at $30 million in 2005. The bottom was at $23 and got to $31 mil. They stopped doing projects that didn't make economic sense. They reduced their head count where they only took on projects where they could make a decent return on capital. Sometimes you have to make a leap of faith. You have to make a leap of faith that the guy (CEO) is actually going to do that. I didn't think management would want to take my phone calls from people like me.

ARTESYN TECHNOLOGIES

Let me give you the backdrop:

Artisan is in the business of :

ITEM 1. Business

We provide advanced power conversion equipment and real-time subsystems to the computing, storage and communications industries. We are headquartered in Boca Raton, Florida, and are primarily engaged in the design, development, manufacture, and sale of electronic products, power supplies, power conversion products and power subsystems. We operate in two segments, Power

Conversion and Communications Products. With one of the broadest product portfolios available, our Power Conversion business offers customers a wide range of high efficiency AC/DC power supplies, as well as advanced DC/DC and isolated and non-isolated Point of Load, or POL, converters for distributed power architectures. The Communications Products business offers its customers CPU boards, WAN interfaces, and protocol software solutions that are at work on many of today's leading Teledatacom networks. Our customers include worldwide market leaders in each of their chosen market sectors such as Alcatel, Ciena, Cisco Systems, *Dell* Computer, EMC, Ericsson, Hewlett-Packard, IBM, Lucent Technologies, Motorola, Nortel, Nokia, and Sun Microsystems. We also provide products to many other companies in the computing and communications industry and maintain a worldwide network of well-regarded distributors including Arrow Electronics and Avnet.

Founded in March, 1968 as Computer Products, Inc., we have provided components and service solutions to the electronics industry throughout our history. In late 1997, we merged with Zytec Corporation and changed our name to Artesyn Technologies, Inc. Since that time, we have focused on power conversion and single board computing solutions for the computing and telecommunications industries. We have also made several strategic acquisitions to add technologies and new products for our chosen markets and we have disposed of businesses and lines of products that were outside our chosen market focus. More recently, due to the significant downturn in demand in our end markets, we have restructured the company to ensure that our supply capacity matches market demands and that our cost structure is competitive. Despite the difficulties our end markets experienced in the last two years, we believe the industry in which we compete and the markets we have chosen to serve will provide us with significant growth opportunities for many years to come.

BN: They do things inside servers, computers and wireless infrastructure. ATSN was a darling stock that had 40 mm outstanding shares. At one time the company had a $1.6 billion market cap. I want to show you what their sales were looking like before this.

Things were going along rather nicely from 1997 to 2000, and they had done a nice job of growing the business, nice returns……..

The following table sets forth certain selected financial information.

For the Fiscal Years	2002	2001	2000	1999	1998
(Dollars in Thousands					
Except Per Share Data)					
Results of Operations					
Sales	$ 350,829	$ 493,968	$ 690,083	$ 594,155	$ 532,392

Net income (loss) ***Fixed Asset write-downs***	**(108,822)**	(31,763)	43,253	43,362	27,044
Per share – basic	(2.84)	(0.83)	1.15	1.16	0.70
Per share – diluted	(2.84)	(0.83)	1.10	1.11	0.67

Financial Position

Working capital	$ 89,025	$ 152,776	$ 176,113	$ 127,637	$ 120,970
Property, plant & equipment, net	78,631	103,291	105,059	88,468	75,032
Total assets	303,587	426,483	497,815	359,050	325,392
Long-term debt and capital lease obligations	69,521	100,399	73,301	44,154	50,283
Total debt	69,533	100,606	74,813	46,110	52,990
Shareholders' equity	123,446	219,245	256,512	199,912	181,088
Total capitalization	192,979	319,851	331,325	246,022	234,078

Financial Statistics

Selling, general and administrative expenses (includes amortization of goodwill)	$ 36,593	$ 62,138	$ 68,979	$ 52,404	$ 54,548
- as a % of sales	10.4%	12.6%	10.0%	8.8%	10.2%
Research and development expenses	34,341	41,470	44,867	36,413	33,401
- as a % of sales	9.8%	8.4%	6.5%	6.1%	6.3%
Operating income (loss)	(120,569)	(31,945)	67,139	64,861	41,981
- as a % of sales	(34.4%)	(6.5%)	9.7%	**10.9%**	**7.9%**
Total debt as a % of total capitalization	36.0%	31.4%	22.6%	18.7%	22.6%
Debt to equity ratio	56.3%	45.9%	29.2%	23.1%	29.3%
Interest coverage ratio	(14.68)	(3.77)	13.42	21.01	11.06

Other Data

Capital expenditures	$ 5,230	$ 28,763	$ 39,256	$ 33,359	$ 26,795
Depreciation and amortization	$ 77,628	$ 33,590	$ 26,850	$ 19,746	$ 16,653

(includes impairment of goodwill)					
Common shares outstanding (000's)	38,389	38,253	38,282	37,127	37,882
Employees	2,366	2,427	5,227	4,628	4,290
Temporary employees and contractors	2,310	2,818	3,960	3,269	2,326

There were nice returns and then came 2001. So what happened? They didn't foresee the sales—the technology slowdown. People thought growth would continue while not seeing the decline in demand. This is post the Internet bubble. Lots of companies were created who were or could be customers for networking equipment. There was a lot of money raised and a lot of capital expenditure. It really got above trend line for demand for some of this equipment.

If you look at the operating income performance here…the years from 1997 to 2000 the operating margins went from a low of 8% to a high of 11%. So if you think the business will keep earning operating margins of 10%, but we were not thinking that initially when I started buying the stock. We thought the company could get back to their business model once they had reached the bottom of their sales. The question was where was the bottom of their sales? This was a business that has done $700 million so would it be $500 or $350 million? Were they going to be able to right the ship? I bought the stock at $5 while I made that *MIPS* purchase at $1.10, and I was buying with both hands while I was tripling down. This was something that can be very scary.

Student: You never pick the bottom. How do you make the decision as to how much capital you are willing to pour in? How much do you allocate?

BN: In this particular situation I kept going back and double checking, triple checking my facts, checking with management and really trying to understand what the plan was in how they were going to turn it around. Basically you have to look at risk/reward and sometimes the market says at $2 you knew what the EV value was and the risk/reward. And at $1.10 you have to say, "Am I wrong? Will this business not be able to survive?' The way I was looking at it at $1.10—the company going out of business was the only way I was going to lose. The good news was that buying 550,000 at $1.10 was only about ½ million dollars so it was not as big a position as $2.5 million in *MIPS* though you do not want to lose the money.

Student: If you had found another opportunity that was compelling would you have put this much money into it?

BN: I think there is always a way to look at the opportunity sets in front of you. Look at the upside and downside. By the way, there is no better investor who understands the upside and downside as your professor, *Joel Greenblatt*. That is one of his greatest skills. And for some of these small stocks, you allocate capital based on what is available for you to be able to buy. This is not *Microsoft*. If you want to allocate money to *Microsoft*, you can be filled in five seconds for whatever you want allocated. In something like this, it is different.

Student: Can you give us an understanding about how you concentrate your portfolio? Your turnover?

BN: Concentration? I have had 20% + positions. In terms of turnover, today is different than the past. I am having trouble finding ideas with the same opportunity. I can find ideas that are cheap but with not the same upside potential. So I like to have dry powder for these opportunities for real outsized returns.

I have made my money in a lumpy way—some years were big and others were not. The key thing at this point is preservation of capital and not striking out at this point.

Student: Did *ASTN* have cash to offset the debt?

BN: Yes, they did. They went through a lot of different things. They had a bank line and they replaced it with a convertible. When the stock went from $40 to $5 and back to $10 they did a convertible security (convertible at $10/share) with a company in Korea that I thought would buy them. There was no near term problems. They ended up refinancing. They took out the guy from *Deltec* and they did a public convertible. I think they did it during 2003 when the stock was trading at the mid-$6's.

I can walk through what happened. You have to be resourceful. **There is a lot of judgment involved.** Judgment involved with allocation of capital, judgment about the business, about the people and about the risk—there is a lot of judgment involved here. My brother happened to be best friends with the CEO of this company. I got no inside information, but I did think he was an honest man. And as you have seen in the news for the past five years…before Sarbanes-Oxley people played it a little faster and looser than they do today. I think that is an important thing to remember today.

You have to be independent. People will tell you things and just because management tells you X, Y and Z, it doesn't mean X,Y, &Z are true. Your job as an investor is to double and triple check it and go around this way and talk to a customer, talk to a competitor. Get on the phone and check out other points of view.

Student: How did you find this company?

BN: This was a low Enterprise Value to historical EBITDA valuation. It was on my radar screen before.

Student: What serves as the screen?

BN*:* I use *Bloomberg*. The screen is just a starting point. Basically, it identifies companies with certain characteristics to make me drill down further. The great thing about the Internet today is the ability to get information and manipulate it is greater than it has ever been.

Student: What is your preferred way to screen stocks?

BN: I screen with pretty basic criteria. A lot of times, I will look at the new low list. I want to see if there is some company that I know something about. You know I have been doing this for 25 years (since 1980). In 25 years, you probably figure one or two things and so you look at valuation metrics, you look at companies hitting new lows and you sort of have a sense of somebody who has a good business, a cyclical business. There a lots of ways to screen.

Joel Greenblatt (JG): We will have a class on how to screen, but really it is just a starting point. I will give you plenty of places to go that are not that pretty but that are cheap.

Student: How big a universe do you screen for?

BN: Well, you can cut it off by market cap or you can cut it off by country. There a lots of different ways to screen on *Bloomberg*. The way I look at it is: how much capital can I commit to it? And what is a 5% position? Look at it that way to decide if that will be meaningful enough to do the further work and drill down on the potential idea. Sometimes you don't know where the idea will go. You start buying something and you don't know if it is going to get cheaper. You sort of have to have a data base of where values are--that is everything. **Understanding the values of companies is a really, really valuable database to build. It is your intellectual capital.**

Student: What allowed you to think that this company's sales had hit bottom?

BN: Everything was being made overseas and that China was going to kill all these companies. Everything was going to the lowest cost producer. But that is not really it. If you are in a position where you can shut down somebody's production line because they do not have a part, then you are not just a commodity producer. If you are selling to *Dell*—first of all they don't want to deal with thousands and thousands of vendors. So the fear was that China companies were going to take all the business. We spoke to companies

and how they like to deal with their vendors and I was not really concerned about that situation. But what this company had to do was figure where they could manufacture the cheapest and how to get out of some of their capacity.

There just wasn't going to be the type of demand. So they took their hit. They closed down plants and facilities. They got back to their basic business that made sense. I can show you what had happened.

Sales really did fall away. The $108 m in net income loss in 2002 was including significant fixed asset write downs. It was not the equivalent of a cash loss. Actually they were generating cash because their receivables were going down. So what happened was that they right sized the business. And a guy filed a 13-D in the last 13 months. The company is supposedly for sale. The stock is at $9.

Somebody asked a question before about the margin of safety—the M of S might not have been here, but the risk/reward was certainly great. Because if you believed that sales were going to bottom at $350 million or near there and they got back to a 10% operating margin business, then you would generate $70 cents to $80 cents EPS pre-tax. It was not hard to see that you were going to make money. So……

Student: Couldn't *Dell* outsource?
BN: They could but *Dell* wants dependable people (suppliers) as outsourcers to supply them with just in time delivery. *Dell* could design around them, but *Dell* wants to outsource. *Dell* is an assembly and marketer. *Dell* wants suppliers who can provide good parts so they can assemble the computers and sell them. They are a huge marketing ship. *Power-One* was a similar competitor.

When *Dell* saw the stock trade at $1.10, *Joe McDonnell*, the CEO had to go to *Dell* and hold their hand and tell them that he was still going to be around in two years. They did not want to give that business out. They wanted dependable goods from *ATSN* at a fair price and good service while they focused on what they were good at.

Student: Did you have situations where the situations deteriorated.

BN: Sure. I have had a few. The good news is that I have had a lot more winners than losers. One that comes to mine was ***Vlasic*** which was a spin off from *Campbell Soup*. It was highly levered. They make a lot of different food products and basically, the company was over levered and it didn't perform, and I did not evaluate it properly. I thought the assets would be worth more than they were. And it didn't work. I lost money. Leverage is a two-edged sword. It will make you a lot of money when things go right as you would know from studying enterprise value.

If you have $50 mm in equity and $500 mm in debt then a rise in value to $600 mm will double your equity and a drop in value to $450 mm will wipe you out. If it is worth $700 mm you will quadruple your money. So that was one of my mistakes. If I had to do it over again I might have done things a little bit differently.

WILMINGTON, Del. Sep 13, 2005 — A federal court in Delaware Tuesday exonerated *Campbell Soup* Co. of charges of fraud in connection with its spin-off of ***Vlasic Foods International***.

Creditors had accused the Camden, N.J., food company of packaging its money-losing lines of business into the new public company and sending it into the market with little chance of survival.

U.S. District Judge Kent Jordan ruled against them, finding that the Vlasic business was solvent at the time it hit the public market, so *Campbell Soup* isn't liable for the company's later collapse into bankruptcy.

The lawsuit was part of a continuing effort to raise money to pay creditors, mainly bondholders, who bought into a $200 million debt offering more than a year after the Vlasic businesses were launched into a separate company.

In addition to the pickle line, *Campbell Soup* pushed its Swanson's frozen food and other businesses into the new company.

While *Campbell Soup* admitted the businesses were poor performers, those associated with Vlasic thought the company had a chance of succeeding, Jordan ruled.

According to Tuesday's ruling, *Campbell Soup* didn't launch *Vlasic* with an eye toward defrauding the company's creditors.

As part of the spin-off, *Campbell Soup* transferred $500 million in debt to Vlasic, which wound up filing for Chapter 11 protection in January 2001.

Creditors had hoped to recover more than $544 million from *Campbell Soup* in the case.

During the bankruptcy, Vlasic, Swanson and other brands were sold to Pinnacle Foods Corp. for $335 million, while sales of other lines raised about $20 million in additional cash.

Shares of *Campbell Soup* slipped 9 cents to finish Tuesday at $30.90 on the New York Stock Exchange. End of article.

No more questions……..?

JG: As you can see *Bruce* really is an amazing investor. He is the guy I call to go over a situation. He has seen a lot over the years. One of the things that helps—you are all smart enough to be good investors—that there is a lot to be said about practice. I am still learning. I would say *Bruce* would say he is still learning. The good thing is you don't have to be *Richard Pzena* or *Bruce Newberg* but

- You do have to be very thoughtful
- You do have to do your homework
- You do have to have the right framework

I want to thank *Bruce Newberg* for coming. Applause……

END

Bruce Newberg: talking to students between the break…….

BN: I think there is just too much money floating around in hedge funds. I think it is allocation of capital. Too much capital has been provided to people who do not think they can provide value added. Money has moved out of the big cap stocks. If you look at pension fund allocation and you see how much money was allocated to long/short hedge funds six years ago versus today I can guarantee that there is so much more money allocated to these different strategies. And the other thing is that more money has gone to private equity. There is more

money to fund buyouts. There is a multiplier effect for all of these different strategies that have attracted capital. But you know you go through cycles. You don't want to be involved in the markets from 1970 to 1975. There will be different cycles where this will be a great business and where it won't be a great business.

The Convertible Arbitrage market? I think that the market is …well what you had happen in the past year: Interest rates have gone up and volatility has decreased. Typically, convertible arbitrage guys are long volatility and they are long the interest rate. So the bond forward value goes down when interest rates go up. The option portion is worth less as the volatility comes in. But if money floods out of converts, you want to go into it. Go to the area where money is flowing out of it.

Student: Do you think there has been enough of a correction?

BN: It is probably not over. The real question is what happens if we get a big move in some index? Like large cap stocks do really well and hedge fund returns under perform that by 400 to 500 basis points net? Then what will happen? **Because people tend to invest in the rear view mirror.** The right thing to do is think about what is going to happen though you won't always be right all the time.

Second half of Class

JG: You might say that there is a lot of hedge fund money out there and there might not be much opportunity now. I am wasting my time. The party is over. In 1998 and 2000 and 2002/03 there were huge opportunities in small caps. That was not too long ago. Right now I think the opportunities are in the large caps. I would call the opportunities larger cap with smaller upside and better quality businesses.

I don't think the risk rewards have changed all that much, but I think the rewards will be lower but less risky. Now you have better businesses to invest in at attractive prices. You have to adjust for that.

In *Bruce's* example of *ATSN*, the did not have the pile of cash as a margin of safety but he could bet a $1 to make $5 or $6 or $7. It was a good risk/reward bet. You would take that risk/reward bet but adjust your position size based on your ability to take the hit on that. In the first bet, in *MIPS*, was a margin of safety bet. He fell into the situation, he assessed it and chose the risk reward bet.

Obviously, you want to work under somebody you respect. If you can I would look at it as a learning experience. Hopefully by the end of this course you will look at the world through a certain lens. This is not the only way to look at the world but it is one productive way to look at the world. I would certainly try to get myself into a position where I have some portfolio experience.

You have to screw up a bunch and learn from it. If you can value something and buy it for cheaper than it is worth it doesn't have to be a whole lot more complicated than that.

I brought this book published in 1959 and it is called, How to Profit from Special Situations in the Stock Market by Maurece Schiller. Big profits from oversubscriptions and rights offerings. My point is that people have been doing this for a long time.

I was looking in the paper today about the hedge fund manager in *McDonald's*. It is about a HF investor who wants to take over the real estate owned by *McDonald's* and then sale/lease back to free up some cash. Article below:

Hedge-Fund Man at *McDonald's* Pershing Square's $2 Billion Bet Is That the Chain Can Revamp; Time Frame Hasn't Been Fast. September 28, 2005; Page C1

In 1997, a brash, young hedge-fund manager envisioned ***McDonald's*** Corp. selling off all its restaurants to give shareholders a huge value meal. Eight years later, Bill Ackman has amassed a super-size stake in the great American icon and is salivating as he pulls up to the drive-through window.

And, yes -- he wants fries with that.

McDonald's stock has been roiled since it emerged in mid-September that Mr. Ackman's Pershing Square hedge funds had accumulated stock and options that could give his investors a 4.9% stake valued at $2 billion. That is one of the biggest single-stock positions ever taken by a hedge fund.

Mr. Ackman sees Mickey D's as three separate businesses: a franchising operation that accounts for about 75% of its 30,000-plus restaurants world-wide; a restaurateur that owns and operates the rest of the outlets; and a real-estate company that owns the land beneath nearly 40% of all of them.

Back in the 1990s, he had a small stake and suggested that *McDonald's* spin off both its restaurants and the real-estate business. Now, he has a slightly different idea, says a person familiar with it. He still wants *McDonald's* to retain the crown-jewel franchise operation and to sell off a majority stake in the company-owned restaurants as a separate, publicly traded entity that would be one big *McDonald's* franchisee. But he wants *McDonald's* to keep its real estate, borrow against its untapped value and give the money to him and other shareholders.

The two businesses Mr. Ackman wants *McDonald's* to keep are as close to ideal as possible: They have high returns and low cost of capital, allowing it to raise money to run the business cheaply via loans and stock sales. The franchisee business charges outlet owners 4% of whatever they generate in revenue. The real-estate company gets an additional 9% to 10% in rent.

The third business isn't as good: It has low profit margins and demands huge capital spending to run the restaurants. Founder Ray Kroc originally didn't even want to own restaurants, preferring to collect all those pennies on every burger. *McDonald's* ownership of its own joints came later, when it was throwing off so much cash that it didn't know what else to do with it.
The real estate is just sitting on the *McDonald's* balance sheet without producing much cash for shareholders. Mr. Ackman values *McDonald's* real estate at $60 billion, based on the cash it produces, says the person familiar with his analysis. By comparison, the entire company right now has less than $50 billion in stock-market value and net debt.

All this may come off to many investors as audacious, if not farfetched. Spinning off a powerful, gigantic franchisee could backfire if it decides to flex its muscles against its former owner. And adding debt to the parent would be risky, too.

But the company might actually be giving the proposals a sympathetic hearing. Mr. Ackman and *McDonald's* executives met after one of the company's periodic meetings with analysts and investors last week.

"We have a very high regard for *McDonald's* -- the company, the brand, and the management," Mr. Ackman says in an email. "We are particularly encouraged by management's shareholder-value focused agenda. Bottom line, we're lovin' it!"

"*McDonald's* is always looking for ways to further increase shareholder value," says Mary Kay Shaw, the company's vice president of investor relations, in an email.

Mr. Ackman has met with *McDonald's* before. In late 1997 and 1998, he presented his proposals to a *McDonald's* director and some executives, including Matthew Paull, now chief financial officer. *McDonald's* was intrigued enough to hire boutique investment firm Greenhill & Co. to analyze the divisions' value, according to a letter Mr. Ackman wrote to his hedge-fund investors in March 1999. But the stock rose strongly on its own and the urgency to do something faded.

Since then, *McDonald's* has become a dramatically different company, especially in the past two years. It pulled back on its growth plans and became more shareholder-focused, cutting capital expenditures and returning money to shareholders with increased dividends and stock repurchases. It just announced it would partially spin off one of its subsidiaries, the Chipotle Mexican food chain. But these initiatives haven't made the company as efficient as possible. Buying back stock increases its ownership of everything, including the less-profitable restaurant operator.

Mr. Ackman has a track record of fast-food activism. Wendy's, in which he has a 10% stake, initially resisted his calls that the company spin off its Tim Horton's doughnut division. In that case, his position was big enough to require public disclosure, and he pressured management with public letters. Wendy's just recently took his suggestion, and its stock is up.

He hasn't taken those steps with *McDonald's*, a signal that he perceives management as more receptive. That may be because the stock is roughly 25% lower than where it was at its peak in the late 1990s. But the company is worth even more now: Cash flow has improved and the real-estate portfolio has appreciated. Of course that happens to be what leveraged buyout firms or potential acquirers hunt for.

That means *McDonald's* may have to become even more shareholder-friendly or risk becoming takeover bait. Already, Mr. Ackman's play has prompted speculation that **Vornado Realty Trust**, the big real-estate investment company, will make some sort of bid to get a hold of *McDonald's* land. Just the possibility puts pressure on *McDonald's*.

Mr. Ackman's proposals are reminiscent of the split that Coca-Cola underwent in 1986, when it divided its syrup business, which had astonishing profitability, from its bottling operation, which demanded heavy capital spending. That created immense shareholder value, but was, in part, built on an accounting illusion that the bottler was an independent company. Coke initially sold only 49% of the bottling operation and, effectively, still controlled it for years.

If nothing else, Mr. Ackman has pulled off a neat trick: He eked out his stake while only having $1.3 billion under management in his funds. The stake would be too much concentration for one fund, so last month, he invited his investors to put money into a special separate fund to invest solely in a single stock, the name of which he didn't disclose initially. He raised about $250 million in three days. Along with about $150 million from his main fund, he bought 62 million shares and options that, if fully exercised, would bring his stake to the full $2 billion, says a person familiar with the matter.

Critics of hedge funds deride them as vultures that swoop in for short-term feasts. But Mr. Ackman has been at this since 1997. And now we will see whether he ends up with a happy meal.

Write to Jesse Eisinger at longandshort@wsj.com[3].

So there might be an opportunity to take out the cash without effecting operations. However, once you do not own the real estate anymore, you start paying market rates of rent so you have to adjust for that and see what the net gain is. So that was in the paper today.

The next article in the Wall Street Journal right under that is an article on the *American Express* spin-off.

American Express Spin-off Must Prove It Can Create More Value On Its Own
By ERICA COPULSKY Staff Reporter of THE WALL STREET JOURNAL *September 28, 2005; Page C1*

Throughout much of the 1990s, American Express Financial Advisors was the crown jewel of the **American Express** Co. empire.

At one point, the Minneapolis-based financial-planning unit contributed as much as 40% of profit while American Express struggled to revamp its sagging charge-card business and small international bank.

But more recently, the unit has been the weak link at American Express, whose signature card, travel-related services and processing businesses are highly profitable. Compounding its problems, the unit sustained a public-relations black eye when state regulators alleged that it defrauded customers by giving its advisers undisclosed incentives to push its poorly performing, in-house funds; the unit agreed to pay $7.4 million to New Hampshire to resolve the allegations.

Now that Ameriprise Financial Inc., the new name for American Express Financial Advisors, is about to be spun off to American Express shareholders, its challenge is to convince investors that the business can create more value on its own. On Friday, AmEx shareholders are to receive one Ameriprise share for every five American Express shares they hold, and the shares will begin trading Monday on the New York Stock Exchange, using the stock symbol AMP.

Ameriprise is betting it can distinguish itself by building on the financial-planning business it helped pioneer three decades ago under the name Investors Diversified Services, before it was acquired by American Express in 1984. Ameriprise -- which manages roughly $400 billion, has a network of more than 10,500 financial advisers and boasts 2.5 million clients -- faces competition from the likes of Fidelity Investments, **Charles Schwab** Corp. and **Merrill Lynch** & Co. It hopes to differentiate itself by providing one-stop financial planning to affluent baby boomers approaching retirement.

"We look at a client's whole picture," Chairman and Chief Executive James Cracchiolo said. "By offering a combination of investment and insurance products, within the context of a comprehensive financial plan, we help our clients not only grow but protect their assets." Ameriprise is one of the few financial-advisory firms to offer an array of products, ranging from mutual funds to annuities to life-insurance products. It has more certified financial planners than any of its rivals. And it is targeting the mass affluent -- the roughly 29 million U.S. households with $100,000 to $1 million in assets to invest.

So far, not everyone on Wall Street is convinced. "The company hasn't been transparent with analysts and investors on the earnings breakdown between different products. This is adding to the complexity of understanding the company's story and where the return on equity improvement will likely emerge," said Nigel Dally, an insurance analyst at Morgan Stanley. Mr. Dally doesn't yet have a rating on the stock and his firm doesn't have a banking relationship with Ameriprise.

In a presentation to analysts earlier this month, Ameriprise defined its two operating units as asset accumulation, accounting for 61% of 2004 earnings, and protection, accounting for 39%. But many analysts view Ameriprise as an insurance company in disguise. According to John Nadel, an analyst at Fox-Pitt, Kelton, nearly half of the earnings of the asset-accumulation business come from fixed and variable annuities, products that combine investments with insurance. Based on his analysis, insurance and annuity products generate about 70% of the company's earnings.

Wall Street already has gotten a sneak preview of how Ameriprise may be valued. On Sept. 15, Ameriprise began trading at $38.02 in the "when-issued" market, where investors can buy and sell securities before they have been issued in the primary market. Although the stock has since fallen to $37.25, down 50 cents yesterday at 4 p.m. in Big Board composite trading, it still appears to be a rich price relative to some analysts' estimates. Because trading has been relatively thin, some analysts argue that the current price isn't a good indication of how the stock will be valued when it begins officially trading.

"Based on our fundamental valuation work as well as the potential near-term selling pressure from American Express stockholders, we believe the stock should trade between $31 and $34 a share," says Mr. Nadel of Fox-Pitt Kelton, who doesn't yet have a rating on the stock.

One big unknown is whether investors who own big chunks of American Express stock will dump Ameriprise once they receive the shares. Currently, a large portion of American Express shares are held by growth-oriented investors, who may be less inclined to own Ameriprise, which is generally expected to attract more value-oriented investors.

To be fair, AmEx's largest shareholder is one of the best-known value investors, Warren Buffett. Mr. Buffett's **Berkshire Hathaway** owns roughly 12% of American Express shares and whether he intends to stick with Ameriprise after the spin-off is certain to affect Wall Street's thinking. Mr. Buffett declined to comment.

At least one potential overhang on Ameriprise shares was lifted earlier this week when Standard & Poor's Corp. said Ameriprise would be added to its flagship S&P 500 Index at the close of trading Sept. 30. The move eliminates the possible near-term pressure on the stock by index funds that would have been required to sell their shares. However, Ameriprise's inclusion to the S&P 500 Index may have disappointed some investors hoping the selling pressure would enable them to buy the stock on the cheap.

"If the stock falls below $34, then investors should want to own it because the downside in the stock is limited and the upside could be very attractive if management could execute on improving the company's return on equity," Fox-Pitt's Mr. Nadel said.

Ameriprise's return on equity is currently 9% to 10%. Management is targeting a return on equity of 12% to 15%.

To accomplish that goal, management plans to roll out new products, refocus on expanding the institutional asset-management business by investing in sales and capabilities infrastructure, and expand distribution of mutual fund and annuity products through third-party channels such as banks and brokerage firms. However, analysts say the company's future growth depends largely on whether it can continue to improve the performance of its in-house mutual funds.

While there are signs of a turnaround, money is still walking out the door. So far this year, investors have pulled $7 billion out of American Express stock and bond mutual funds, according to AMG Data Services in Arcata, Calif. The stock and bond funds now have roughly $55.5 billion in assets. Overall firm wide mutual-fund performance has improved but isn't striking, says Russel Kinnel, a Morningstar Inc. analyst. On average, the funds did worse than 65% of similar funds over the past three years on an asset-weighted basis, according to Morningstar.

Analysts also are concerned about how the business will fare without the American Express name, one of the most highly recognized in the financial-services industry.

Despite these risks, several investors believe the stock is a good investment because there is value to extract. As Kyle Cerminara, a financial-services analyst at T. Rowe Price Group Inc., sees it: "Ameriprise is viewed as a relatively inexpensive stock that has potential for [return on equity] improvement."

Write to Erica Copulsky at erica.copulsky@wsj.com[1]

Now *AXP* is spinning off the Amer. Fin. Advisors which has been an under managed business. It also unleashes the stand alone charge card business which is a great franchise with high ROE, good market position, good growth prospects and things of that nature. So that will trade on its own. People might say, gee, everyone knows about this. It is not obscure situation.
Now I thought I would hand out more detail on the cases that were in my book. On the front are spin-offs that you can use for your cases. Your first assignment: I am expecting a one page write-up with backup. Give me the investment thesis. If you did the work and you find that the company is not cheap, then show your valuation work. I want to see the original thesis as to why you chose this company. What you find out. You will do your comparable analysis, you will do your absolute analysis of what you think earnings will be. Valuation and things like that on the back. I want to see your work. I don't want to see P/E and Price/Sales.

Part of the exercise is to get my comments back. You only have two more classes after this and then there is a vacation. Next week I will hand out some write-ups that I thought was very good.

What you have in front of you is a list of pending spin-offs. The next page is the *Sear's* example. Just read about *Sear's* and then we will discuss it.

Discussion of *Sear's* Spin off. Spin off of *All State* and *Dean Witter*. This idea was explained by Michael Price in Barron's. This comes out in April or May but I completely missed it despite being a special situation

guy. *Sear's* will spin off 80% of Dean Witter. Then the July 5th issue of Barron's because I read an article on Michael Price.

Sear's at $54 seems valued much too low. That $54 includes 1 share of *All State* so for 1 share of Sear you get $28 worth of *All State* and $15 worth of DW so that leaves $11 for *Sears* then take out $2 or $3 for Coldwell Banker and $3 for *Sears* Mexico and it leaves $5 for *Sears*. A market cap of $1.5 billion with $27 billion in sales. CHEAP!

There is no debt here. So you get 6% on the dollar for sales. What does a comparable look like? So I turn the page on *J.C. Penny* So let me compare it to another crummy retailer—*J.C. Penny*. JC was the closest I could find. I used the tear sheet—we didn't use the Internet in those days—and if I go through the math is trading at 60 cents on the dollar for sales.

Sears is 6 cents on sales versus *J.C. Penny* which is at 60 cents on the dollar of sales while also going through other comparables such as margins, earnings, etc. Everything was pretty close. This was as good a metric to use to show the disparity in prices. So what did I do next? This is all laid out for me by *Michael Price.*

I am looking at a ten times difference in valuation from *Sears* to *J.C. Penny*. What did you think I did next? I bought as much as I could over the next two weeks. I did this after the article after they were giving out the shares. I bought as much as I wanted at the stocks Michael Price was speaking about. I effectively created *Sears* for $5 which could have been worth $50. The gap was huge.

What happened after they spun out *All State*? The *Sears* went up to $30 where we sold most of our stock and two months later it went to $50. How can that be?

I missed it and *Mike Price* lays it all out for me and I am still able to buy it. How can that be? These are well-known companies. There were 10 analysts who were following *Sears*. I am a little baffled. I guess the retail analyst does not cover insurance and brokerage companies. Things fall through the cracks.

The answer is that I don't really know. I am just telling you that it happened. You can say it is so hard. Sometimes it is and sometimes it is not. It was a special situation over ten years ago. You may claim that there are so many hedge funds today that that opportunity would not exist and that may be to some extent be true yet there have been plenty of opportunities in the past five years. *American Express* is doing a spin off. Maybe the spin off gets beat up. Plenty of stuff goes on. Even if the opportunities are not as glaring as this one, but there will be others. The efficient market theory says this shouldn't happen.

Comparable things were trading at *J.C. Penny*'s level not at *Sear's* level.

People said I was an idiot to write the book on spin offs because then the opportunities would disappear. A year after I wrote the book, spin offs did not do particularly well in aggregate, but then the returns came back.

What I say about spin offs: It is a fertile ground to find mis-priced opportunities. Sometimes they are overpriced because too many people are following or sometimes the spin offs are under priced because of too much selling pressure. There is a dislocation and change. Weird stuff is happening. American Express will be able to trade on its own so people will see how good a business they really have.

I am pointing out the amazing dislocations you could have. A few years ago during the Internet bubble you could own *3Com*, which was inclusive of *Palm*, at a negative $36 dollars. For fun, we shorted *Palm* against *3Com.*

Questions? I don't have any answers but to say stuff happens and it is worthwhile to look. We don't own any *Wal-Mart* but we are looking. People ask me when they should buy spin offs. Should you wait two months, should you buy right away? I don't use a formula. I analyze each situation independently. Luckily there is no magic formula.

Perhaps the company being spun off is small so the institutions won't want it. The large caps have not moved in 5 to 7 years but the earnings have moved up.

Our worst years were 1998 to 1999 then we made 100% in 2000. When things look obvious, things happen.

Look at the application on the value investors club for things you should present.

Go to page 12 *Viacom's* purchase of *Paramount Communications*. Basically, the winner of the bid ran out of money so *Viacom* offered lots of paper to its shareholders as payment.

So if you are an institutional investor and you get all this stuff what do you think is going to happen when you get this? You will sell it. Institutional investors won't pay read about *Contingent Value Rights (CVRs).* There will be a fire sale. I hadn't seen a CVR or what the warrants were.

Diagram the combinations of values you can obtain.

We have a three year warrant struck at $6. They had borrowed a ton of money so the equity stake of *Viacom* was like a leveraged buy out. There is a lot of leverage here so these warrants may be worth something.

The exchangeable convertible debentures are basically junk but they were worth 60 cents on the dollar but I can use them as money to buy something of worth. I had to come up with $70 worth of debentures. $70 x 0.60 = $42 for five year warrants. I lowered my cost by 40%. These subordinated debentures have over $1 billion in face value.

Making the debentures available for the warrants made the warrants more valuable. *Viacom* simply ran out of money so they created exchangeable paper.

Any time you see anything remotely complicated try to take the big picture view of it. The market looked at *Viacom* as if it way overpaid for *Paramount.* The way I looked at it was like this:

They only paid half of it in cash and the rest of it with junk. If they didn't lay out cash then I don't care if they overpaid from a credit worthy standpoint. The rest they paid in junk. I was next in line.

I also made a lot of money in *MGM* because *Turner* paid half in cash and half in paper. He bought a film library so he had low programming costs.

Next we will look at *Host-Marriot*.

The big picture here: No one likes the over levered Host Marriot. What I thought was potentially attractive: there is $400 million in equity with $2.6 billion in debt so $3 billion in value. The debt was non-recourse to the parent. Of the $400 million in debt $300 million was only on the San. Francisco Marriot. $2 billion guaranteed by the subsidiary and not the parent.

$700 million - $100 debt = $600 million.

This was a good risk reward. This was a leveraged bet. $4 per share for Host but worth $6 per share of the Parent. There is nothing you can learn at school that says to go look at this stuff. This was a good risk reward where I lay out $4 for 6 value with no debt and some upside.

I don't have to get to that point where I do a lot of work. If I have a thesis and it keeps holding up, you keep going or if not then drop it. I don't care what I don't do but what I actually do do. You wait for your pitch.

The good thing about working for yourself is that you can sit on your hands.

The valuation work is never wasted. The broader your circle of competence from doing different industries the better. The key is doing good valuation work and having the discipline. The key is what context to look at the world. What matters is doing well what you do. I don't care about what I missed.

Next week, read the *Buffett* stuff. Read his letters. The next Friday or the following Friday we will have a guest speaker. END

November 08, 2005

Project for Oct. 16th-choose one of these companies. These companies have not been chosen randomly. All are interesting.

RCII	TBL	COLM
LXK	KCP	DPZ
IPG	CECO	EFD
PFE	KSWS	ABES
MAT	KG	KND
UST	MVL	LIZ
AEOS	NCOG	PETC
FL	OVTI	PGI
FOSL	TPX	WGO
GPS	INSP	COCO

Track 17: Joel Greenblatt: I want to go over your papers. In general for a first attempt they were very good. I guess big, big picture, I would like a more concise pitch.

I read an article about Bill Miller who runs the Legg Mason funds, and he has done tremendously and he has beaten the market for the last 14 or 15 years. He is an interesting value investor but they run billions and billions of dollars.

He wants a pitch very concise and fast. It helps you if you can summarize your pitch very quickly. This company is trading –it is out of favor now; it is earning less money but if you look at normalized earnings it is trading at 5 times normalized earnings and ROIC are 50%, they are closing their money losing division so that is why people don't see it. People see it this way and that is why it will get better. You should be able to say it.

You should be able to spit out the pitch and the valuation portion of why you think it is cheap in a few lines but then I want to see the back up. It is just very good practice for you to understand why you are or are not buying something. Or this is what I thought and this is how it turned out. It is a little harder when you are assigned something because you might not have a strong pitch on it. It looks fairly priced. I went through normalized earnings it comes out within the range of fairness. Or I can't predict what normalized is. I you can pick *BBI (Blockbuster)* and say I don't know where earnings are going to be so I have to stay away. Here are three scenarios and if it hits this one, I am going to lose a lot of money and I don't have a lot of confidence which one is going to hit yet.

In answer to the question which was asked of Brian, by the way, which is: "How do you value a company whose earnings are going to drop off a cliff in three years, five years or whatever? It is really nothing more than a discounted cash flow question. You make your assumptions about future cash flows and if you can buy it at half of all the cash you would collect, then you would buy it. It is not a Warren Buffett pick but it is a way to make money if you think you will collect that money. It is not super complicated—you are trying to figure out the thing you are buying—what is it worth and pay a lot less for it. That is what you are trying to do.

The way I answer most questions is that if I can't figure it out then I say I don't know. Then I have no business investing in that.

Student: How would you think about the terminal value used for BBI?

JG: You know what? Me personally, I would not get that complicated. What are they going to earn in year 1, year 2, …….Year 8 and then figure out what that is worth to me. If I pay $5 now will I get $10 within 8 years. $ of the dollars could be next year and the following year I would receive $1. If I can make an IRR (internal rate of return) on the money I have invested that might look pretty good. A. who cares what I make in year 9 because it will be next to nothing based on my assumptions. I am not looking for exact answers. I am looking for—hey, I think it is going to be worth $10 and it is trading $5 to $6. I think that is a pretty good bet there.

Eric's presentation on Risk Arbitrage. Does anyone have any questions? I think many have misconceptions over what I wrote in the book. Don't try this at home. Not that it isn't a bad place to be but it isn't for amateurs who don't do a lot of work.

What Eric said is that spreads are so thin. Traders are investing in situations with 8% annualized returns or just above the risk free rate. I never looked at the business that way. And I think that is the flaw. I look at it as a risk reward business. I can make a dollar but I can lose $10 and all this happens in three months. A lot of people set it up as an annualized return business. One annualized return can be a lot better where you make ten and lose a dollar.

People look at it the wrong way which was always my complaint. There is too much money chasing returns. I don't think it is particularly relevant right now because plain vanilla arbitrage is not too good. There are always interesting things when something is changing. Brian just went through the takeover battle for Hollywood. There was a $14 bid and it went down to $10.25, that is an interesting one to think about. If you have a strong valuation opinion and you understand how takeovers work, there is a lot of back of forth and game theory involved as the buyer tries to get a cheap price. What are the incentives here? The CEO is not trying too hard for them to cut the price and they still are interested. They didn't walk away because the business is going nowhere. They probably wouldn't show up again.

Track 18: There is a lot of stuff going on there, so it is still fertile ground. And we talked about merger securities to look at sometimes there is overbidding or management is trying to take it private. There is a chance to make money along the way. I am not saying ignore this are completely. I am saying it is its own special area. I originally did not write that book for MBAs. I hadn't taught MBAs yet. I wrote the book for MBA level readers but I had been doing it for 15 years so I didn't realize that. I really meant for lay people.

<u>Comments on Students papers</u>

This is in no particular order, I just went through the papers and made comments. Don't take it personally.

I bunch of people slapped on a bunch of 12 x EBIT numbers. I would not do that lightly; it has to be a pretty good business to trade at 12 x EBIT and people threw out pretty high numbers. Well, it is trading at half that. That might be, but that is a pretty high number. We talked about 10 x EBIT with a 40% take rate is 6% after-tax return that is a pretty good business to trade off for a government guaranteed bond. To take 12 x EBIT you would want to be pretty certain of the business and the growth. I wouldn't throw those numbers around so lightly. There are certain business that are worth that or more than that but it ain't cheap!

Once again if it is tough to know what normalized earnings are, the best thing is move on to something you can analyze. If you can't analyze normalize earnings then you don't have a clue.

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<u>How to Make Presentations to Portfolio Managers by Bill Miller, PM of Legg Mason</u>

BM: I want to emphasize in your presentations that if you go into capital markets, you will realize that portfolio managers have ultra-short attention spans. **And there is basically no successful portfolio manager of my acquaintance who has ever wanted to hear a story longer than ninety (90) seconds.** Peter Lynch, when a senior analyst came into a pitch him a stock, would turn on an egg timer for 90 seconds. The analyst had to complete the presentation within 90 seconds and be out of there.

If you can't get the portfolio manager's attention within that time with a convincing case then they will assume that you either don't have a convincing case or you are not able to articulate it, and you should go back and figure it out.

Stories not Atoms

The world is made of stories, not of atoms. Most people think of the world as analyzing atoms and its constituent parts, and then I am going to figure out how to value it and then describe it. The alternative way to think about it is to construct a convincing story. Take all your material together and construct a convincing story.

If you speak to a portfolio manager, the best thing to say is, "I want to talk to you about *Homestore* (HOM). It is at $2.25. The 52-week range is $4 to $2 and the all time high was $100 in 2000. I think it is a buy for the following five reasons:

1. Bam
2. Bam
3. Bam
4. Bam
5. Bam

The stock is trading a $2 and change. I think it is worth $6 or $8 or whatever. Here is why I think it is worth that. Here are the risks. Then you are done.

In the presentations: no more than five positive points and three negative points. What is it worth and then you are done.

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Greenblatt Class #8

November 08, 2005

Hopefully you will read the Magic Formula book for next Class

***Linda Greenblatt* Presentation on investing in retail stocks.**

Joel Greenblatt ("JG"): Before she speaks, just to give you a context, Linda sticks to one area: **consumer products and retail.** She has been in that area for 10 years and has averaged high 20's percent returns staying in that little niche that she knows well. She finds enough opportunities in that one area. Her returns have been no more volatile than other concentrated investors. She has phenomenal returns focusing on what she knows. There is a great lesson for you. It doesn't have to be retail but an industry that you understand. She picked something she really enjoys--that is a very important lesson.

A number of people have come up to me before class and said they will join a big firm and they are afraid they will be pigeon holed. That may be true but to really learn an area very well and still be very profitable. As you invest over a long period of time you will come to know more areas. Knowing one area well is tremendous.

She will talk about areas she is working on…….

What is a girl from Long Island doing in retail?

Linda Greenblatt ("LG"): So what is a girl from Long Island doing in retail? Pick an area that you can know and that you can understand well and that you enjoy. **I like shopping.** It is definitely an area I have to come to know well. You start to see patterns. Over a ten-year period you learn how a particular industry group trades that gives you a big advantage over people who are first looking at the stock and coming in cold and not having the background.

I like retail because you are constantly getting information. You get it on a monthly basis and sometimes on a weekly basis. Retailers put out same store sales numbers-Comparable sales in stores for a year-over-year period. Monthly basis but most industry groups you normally get quarterly numbers. The more information you have, the more people try to trade on the information before, after and during. You get a tremendous volatility in this sector. A lot of people don't like volatility. As far as I am concerned, I can live with volatility if there is a good opportunity over the long term. And if I am taking a two years time horizon that is actually my greatest opportunity--are these monthly numbers.

Inevitably these companies are going to miss because of their fault or no fault of their own due to the macro environment. There will be a missed number and the market tends to have no mercy. So the market kills these stocks. One day it is trading at 20 times and the next day it is trading 10 times *(earnings)* but nothing has fundamentally has changed. That fundamentally is your opportunity. So you must live with a little bit the anxiety. Believe me when these stocks are down 30% to 40% it is hard to pull the trigger, but that is usually the best time to buy. Volatility is your friend.

I don't know how to pick the next trend. I really don't know fashion. I say this: nobody can predict fashion. It is really is not about hitting the next trend on a continuous basis. **Are these companies running a good business over the long-term?** Are they running a business that can weather the ups and downs?

The best time to get in is when they missed a season of merchandise because if you look at the fundamentals of the company and it is well-run and the stock gets crushed because they miss a season of merchandise, then it is an opportunity to own for the long term. It is really irrelevant if they pick the hot trends or not.

It is very interesting because the Street misses the point on retail. Most analyst reports focus on how this company will do in Oct? How will this company be affected by Katrina or higher heating prices for Christmas? These are all relevant questions, but not relevant if this is a good business. Fundamentally it will be around. If you buy it at the right price it really doesn't matter what is happening to the customer today because they will be around and they will continue to buy.

A quote from Fortune last year from a Hedge Fund manager who often invests in retail, "I have my people visit stores to see how much the items are marked down or if there are long lines at the register and I buy if this company will beat numbers and short it if it misses numbers. It is that simple.

He really misses the point. It is not that simple. If I had to invest that way, I would lose sleep over whether I could consistently do that. Maybe I would get it right only 50% of the time. I would have a lot of anxiety in between. If you can take a longer time horizon for one to two years. **You have to buy these things when people hate it** because that, obviously, is when your opportunities are available. So you have to be a contrarian.

Can you see my slide: This is a price chart of *AEOS, American Outfitters*.

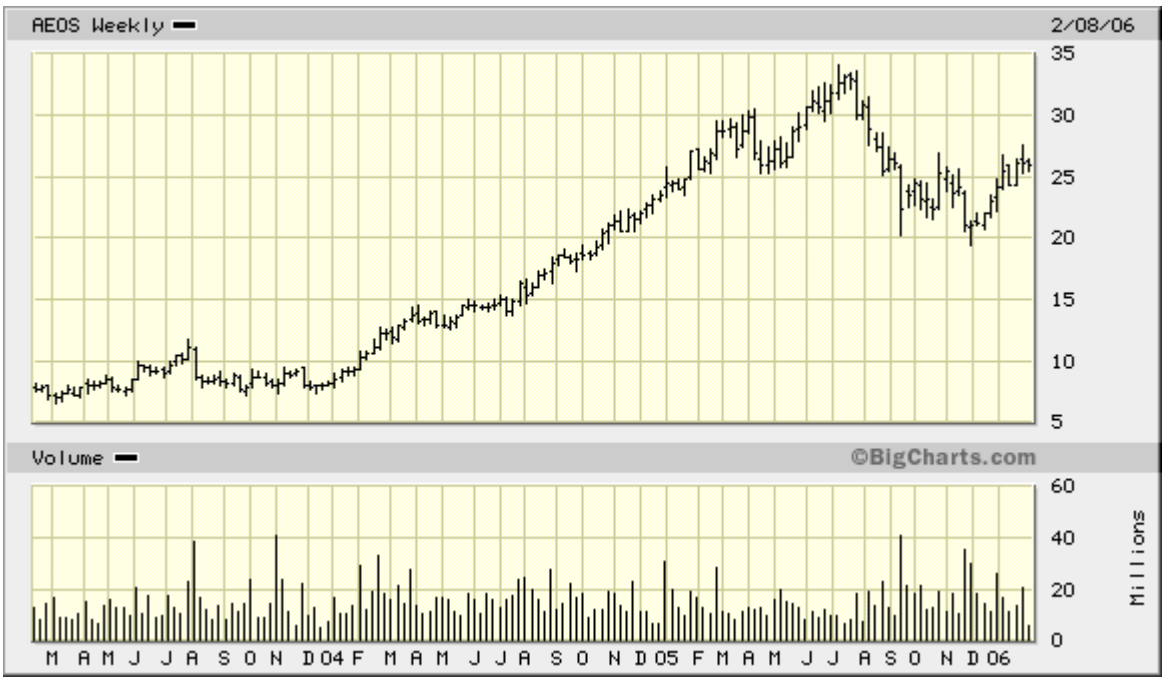

Here is the two year price chart, it was up then down. So the first thing you notice **there is a lot of money to make in this stock.** Two years ago it traded at $7.5. Here at $10, they had $3 to $4 dollars of cash on the balance sheet, you knew they were not going under. Yes, they missed sales—is anybody familiar with this story?
Basically they were off-trend for a while. They were not sure how to position themselves in the marketplace. They tried to compete against (*Abercrombie, ANF* but they didn't have the cache. Back in 2004 they were not addressing their customer—the fickle teenager. Back in 2003/2004 they were missing the boat with their customer; they were not meeting their needs.

Fast forward six months, they got their inventory under control and they turned their merchandise around. Comparable store sales turned around that was key. Back in 2004 it wasn't that their earnings potential was any less than six months later, it was the fact that comps *(comparable same store sales)* were negative. This company doesn't deserve this multiple because they are showing negative comps so it should trade at six times potential earnings net of cash. To me this is a company that will be around. They have a healthy balance sheet. Yes, they have merchandise misses; yes their same stores sales are down. But they are making changes to their management team; they are on top of their inventories. They got hit on inventories in 2004. Certainly there is potential there.

As soon as people as people saw comps stabilizing and they recognize that they could get back to more normalized earnings and margins, the stock basically tripled. This is one example how you can make money in retail if you get in at the right time.

Next Chart: *ANF:*
Does anyone know the story here? Basically the same thing happened. Comps were negative for awhile; there were merchandise misses, they tweaked their management team. Back in their 2003/2004 area, despite the fact that they had a strong balance sheet and strong customer base, the stock was depressed. *ANF* has a loyal following and they were not going away. If they could just stabilize their margins. Again, they had the highest margins in the business; they had the best ROC in the business—a solidly run business. The one caveat was that their comps were negative. That is why people knocked the stock down to those levels. The stock was basically a triple from December of 2003 to July of 2005—the stock went from $25 to $75.

JG: By the way, Linda was here in class touting these stocks at the lower prices.

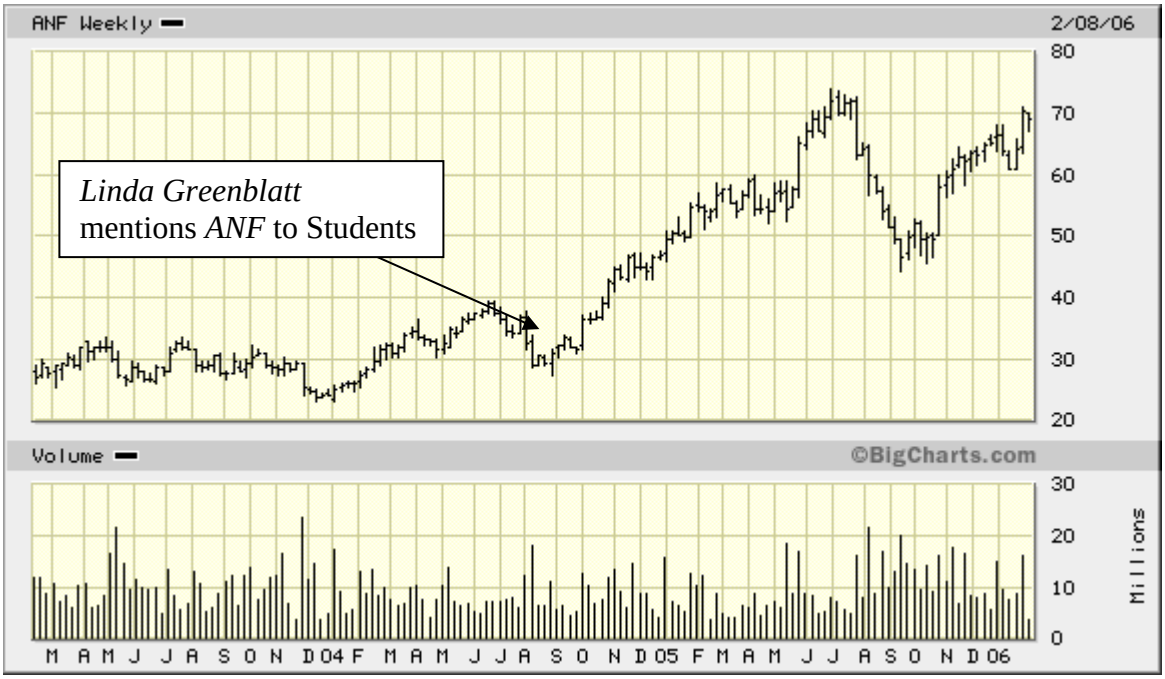

Aeropostale

Anybody know a little bit about this company? Anyone been into an *ARO* store? Have you ever not bought something on sale? If they mark something at $30 it immediately has 20% off. You immediately feel like you are getting a bargain. That is certainly different from what *ANF* is trying to do. Most retailers are only taking their mark downs when they have too. If you see people not buying, I am not going to buy too.

We want our customers to feel like they are getting a bargain. Their price points are about 30% lower than *Eagle* and *Eagle* is about 30% lower than *ANR*. It positions them very well in the marketplace. There is certainly a place for them in the marketplace so they are not going head to head with the other guys. This is a one year stock chart. The stock was as low at $18.5 last week and as high as $35 a few months ago. Perhaps there is an opportunity here. Around $18 was where we were buying it.

We are going to build out their store base and figure out what we think it is worth in a three-to-five year period. We want to figure out a price target of our own.

So obviously, what got me interested was the precipitous fall in the stock price. It certainly made me take a second look. And I knew estimates had been in the two dollar earnings range with $3 in cash so $15 and potential for $2 EPS gives you 7.5 xs. The stock seems pretty interesting; I want to do more work.

What happened for the decline to have occurred: They missed their comp sales, their merchandise was slightly off; inventories were up 33% per sq foot while same store sales were down 2% so they were over inventoried, it will probably take them a few months (not a one quarter problem) to clear out the inventory. So they were having big sales to get rid of stale inventories to bring in fresh inventories so margins get crushed in the interim fire sales. It is a very stable company. They will get their merchandise back on track. They just needed time to weather the storm. A company with heavy debt that misses several merchandising seasons could go bust. The wheels are in motion, management issues--if there are any--are being addressed and inventory issues are addressed. I would rather see you take a hit and get your inventory problems behind you rather than stretch their problems out over a year.

They started to have these issues and everyone piles onto the band wagon (investors sell immediately; all the analysts downgrade the stock). You can't own it here because the problems will carry over into the next quarter. The majority of analysts either have holds on it or sales on it. Nobody wants to get ahead of themselves. They see that this will be a problem for a quarter or two so they don't want to go out on a limb and predict a turnaround no matter how cheap the company becomes. They can't predict over the next few months, but as you know, it is irrelevant what same store sales are going to be. **Because what is relevant is if this company gets past these issues, can the company be back to normalized margins and earnings and when they do, what is this company worth?**

JG: Stop Linda right here and look at that chart and say isn't it great that the world works like that. (Stock chart shows a collapse from $35 to $18). Linda has been making money all these years and that is what the chart looks like every time.

LG: You don't want to listen to the sell-side analysts. Analyst: At $19 we are underweighting *ARO* because they will continue to miss estimates ("sell" it at the lows or buy high and sell low) because they have too much inventory (no kidding). Those trends will likely continue into spring (Jan-Feb). Maybe so, but we are taking a one to two year time horizon. We don't care what happens into spring, we care about what happens when they get through these issues.

"We think it makes sense to underweight stocks with earnings momentum slowing." I think that is exactly the wrong way to think. Downside earnings miss. It is the wrong way to think about things. The time to buy is when everybody knows they are missing comps, have inv issues, etc. You know what, if she knows it, then everyone knows it. This is the time you have to be looking at it and thinking like a contrarian.

JG: She has always has done it that way, she is going to keep doing it that way.

LG: Pulled off the Bloomberg. Earnings were supposed to be $1.65 range and the number for next year was supposed to be in the $2 range. This is now: earnings came down to $1.36 for the year and they took earning down to $1.70 for the following year. **Why did they take the following year's earnings down?** It makes no sense. They can't keep their estimates for next year the same if they lower this year's earnings. They automatically bring next year's estimate down regardless of the business. Could the business do $2 next year? Of course, they could. I think there is a really good chance to make $2. Per share once they get through their inventory issues.

The fact that they numbers come down means that you shouldn't be fooled that something has fundamentally changed with the business that is causing numbers to come down for next year.

Student: What do you do to differentiate among management teams?

LG: Management--I like to see someone who has been around for awhile. I like to see a proven management team. As I do more research, I look at: Who is their customer base? Who are their competitors? Is there a reason for their being? Is there a reason people shop at this store vs. their competitors? Yes, because of price. *ARO* will win on price. There is a reason for their being. They are competing with the discounters and there are not many other specialty store concepts in the malls that are competing directly with them. This is the price point they are looking to.
Student: Why didn't you look at *American Eagle* as an investment? They both are way off of their highs, they both are well run and they have a reason for being.

LG: It is interesting because those are exactly the two companies I was looking at to add to the portfolio. I looked at *Eagle* and you are right on all counts but the one major difference was that *ARO* is a six hundred store chain and they have more potential to grow to 1000 to 1200 store with their concepts like Jimmy's. The growth potential is tremendous. I look at that an American *Eagle* that is fully saturated at 900 stores. Perhaps they can open another 100 stores. I believe growth will be better with *ARO*. It will be a few years before *Eagle* has any growth potential. AEOS can open a new concept but it will take a year for a test phase and a few more years to get momentum. I like *ARO* primarily for that. *ARO* was a little bit less a fashion concept than a fashion follower. I like that position a little better. *ARO* doesn't have to be in the lead on fashions, they can be a step behind.

Student: What about falling same store sales?

LG: Same store sales falling and growth in stores? It really depends upon the issues. They didn't have much top line growth but margin growth, then that might be of interest. I don't necessarily have to see 15% to 20% top line growth depending upon the situation.

You want to understand why the SSS are declining. Ask how the company is addressing the problem or if they are addressing it. If management is blaming it on the weather, oil prices etc. I like companies that take the blame and take responsibility to fix the problem. You know what, there are some macro issues but we have a plan to fix our issues.
Student: How do you know when a retail concept is reaching saturation?

LG: It depends upon whom they are catering to: what malls are they in: ABC Malls. You could see an AEOS in an A or B or C mall. A 1000 to 1200 is max saturation for a retailer to go into all three mall types.

An *ANF* will max out at 400 malls because they are only in A type malls. You won't see them in a C mall. That is why they launched the Hollister concept which was for lower quality malls: B and C.

Student: Whom do you talk to when doing your research?
JG: I will talk to anyone who will talk to me. I will talk to store managers because they often know a lot. I try to talk to senior managers. You will get different information from a senior merchandising manager than a CFO.

We talk to people who come out of the store with or without bags. We speak to store employees. It depends upon what we are trying to find out at the time. When looking into *ARO* we wanted to see a loyal customer base. Are customers coming in and not buying? What do they think of the merchandise? Are the customers still coming in despite the weak merchandise? One of the basic things we try to understand is what is happening to their customer base during this period of time when they have these merchandising missteps. You go in with a thesis on the stock. **Why is the stock cheap?** You go in and try to delve further.

The nice thing about retailers is that you have more access to their customers. Again, the more information the better. I go the malls, my partner and a person in her twenties who spends a lot of time in the malls—we all go to the malls to check out stores.

I send my mother or anyone who I know is a potential customer to the store. Everybody has a valid opinion when it comes to retail. We are based on the East Coast so certainly we have a very warped perspective of the world. It is important to be careful not to extrapolate from the East Coast to the whole country. If you are out doing that qualitative research you focus on the entire area not just one area.

Student: What about macro issues that can hurt retailers?

LG: When it is a cheap retailer like this, this is the customer who will be hit the hardest because of the high oil prices, but on the other side, the customer who used to shop at *Eagle* will now shop at *ARO* because they have less money. **I do not spend too much time on spending trends.**

I try to avoid the macro stuff. Do I think the news of the Macro economy is out there already in the market. Do I think that every article I have read for the past four months is already in the market? Yes.

I ask whether this is a cheap stock today and do I think over the next two years there will there be a normal environment.
Student: Do you short stocks?

LG: Sometimes I short. I prefer to short more of a basket than a particular stock. These stocks can go to even more ridiculous valuations on the upside. I don't have the two-year stomach to wait for a stock to drop like I do for the long side.

If I do see a company posting double digit comps for several months in a row and it is trading at 50 times earnings, do I think it is sustainable? No. I don't know when it is going to turn but I know it is unsustainable. You know the day will come. *Reversion to the mean.*

Student: How do you value growth?
LG: Here is a quick look at the numbers to say this stock looks cheap, so perhaps we want to do more work on it. If you notice it's EV to EBIT is 8 times but this is year coming off of depressed margins because they messed up on merchandise. So that 8.5 EV/EBIT is not that relevant. You really want to look out a year. That EV to EBIT is not really that relevant either. People took down their numbers not because the business is changed but because they got hurt this year.

I like to put together my own numbers for next year. My own numbers show EV to EBIT of 6 times so it looks pretty cheap so I want to do more work.

Slides:

This slide is on store potential: It looks pretty exciting for *ARO*. Just some Easy numbers to calculate for why the stock looks pretty cheap to me. Those P/Es are not net of cash so net of cash they are even cheaper so that is interesting. You asked about growth.

ARO with the potential for another 400 stores and the other, Jimmy concept could be 800 stores. I was more conserve with 600 stores, but there is a lot of store potential there.
Here is a situation where people are looking at this year's numbers and they are really focusing on that operating margin number of 10.8%--under pressure. The analysts write that the margins are really under pressure; we hesitate to recommend it until the get back to better margins *(investing in the rear view mirror)*. It wasn't that long ago that the company did north of 14% in margins. It wasn't that long ago the company did north of 14%. I believe the company can do 13% while the street is at 11.5%. Is it difficult for them to get back to 14% op margins considering nothing in their business has changed in the way they run their business? This says to me, Wow, there is 400 basis point of operating margin improvement in operating margin here.

They have big room for improvement 11.5% to 14%. You need to look at **normalized margins** not depressed margins. If I look at norm in the 13% area because they did 14.5% last year. That This leads me to a valuation of the stock. But the point being is that I see 10.7% operating margin with potential to go to 14%, so there is upside here. I get excited. Most people say, "the stock is 10.7% margins, I am going to knock it down."

There is huge potential upside here from 10.5 margin to 14.5 margin.

LG: You like to see that has experience opening a large number of stores in a year. Typically you don't want to see a company go from 100 to 500 stores in a year, the risk is high. You want to be sure that they have a good model, they can format the store, they know what their customer is looking for, and they are earning attractive ROICs. As they gain confidence then the store opening can accelerate.

JG: A new store may not do as well as a more mature store. If the company has poor merchandising then it doesn't matter if they open many stores or not to help ROC. Ask if there are too many stores opening (saturation) or something else is going on.

I always want to discount their expansion. What is a fair discount for growth?
I try to be very conservative on my terminal value.

Be aware that the quality of merchandising may affect same store sales more than the number of stores opening or the company being close to a saturation point.

New Slide:

JG: This slide is a little confusing, but it helps you come up with a thesis as to when the stock is cheap; where you want to buy. I try to take a look out over a five year period and place a terminal valuation on the stock over that five year period

2.2 billion for arrow with pot for 400 another 1.4 billion Sq ft Jimmy's currently only has 8 stores, Now, this is a sit where they are in a test mode and they will continuye to test for another 6 mos. When I make may assumptions, I want to be very conservative. So I assume they test for another two years, then they slowly open 50 stores a year.

If you look at how Arrow opened their store base, once they has their concept down, they opened 100 stores a year. These are conservative estimates. My assumptions are not aggressive in terms of how I do my valuation.

Over next five years they have 2.2 billion Sq. and 2 bil sq fot potential. Arrow doing $525 a square foot. That is the number I am using for the additional store openings. I am not assuming big things for comps again.

Jimmy's not as prod as Arrow. They are doing $400 per sq ft for their category which is more in line with retailers that compete in their category. Jimmy's is catering to 18 to 25 year old customer. You can take a look at competitors to get the numbers.

What is the potent earnings power over that five year period? Normal margins—peak margins were 14.6%. Mind you that the company believes it has the pot to do north of that. I assume a 13% margin which I believe is a normalized margin, certainly in line with other retailers and well below what the company thinks it can do.

They are earning $1.63 on 13% margin and $1.42 with additional margins. If the Arrow can do a 13% margins and Jimmy's doing a higher margins- Earnings over that five years is $3.05 and place a low 12 multiple (based on conservative assumptions). Jimmy has the potential to open 800 stores but they will only have 150 stores opened by the end of five years.

Then the build up of cash over the five years. $110 then adds back depreciation and subtracts maintenance capex and it gets you to $8 per share in cash and there is $3 in cash today for a total of $11 per share in cash. I am assuming that management does not pay dividend or buy back stock, they just sit on their cash. Here you have $37 plus $11 gets you to $45 stock price at the end of a 5 year period. If you remember Arrow's stock chart, basically you had a month and a half to buy at $20 or under to buy this stock. If you had done these calculations, you have a return of 19% over the next five years. That is one way to look at it.

JG: Right. The way we talk about is that when <u>everyone</u> figures out what *Arrow* will earn and it could be a $48 stock, you could have the stock revalued faster and within two years you could have a $48 stock. Other investors could discount that back at 10% since that is a normal return of what you expect to get from a stock. The stock could be at $36 within two years which is an 80% return. Though Linda presents the return as 19% annualized over five years, when most people start to figure it out, you could get a big chunk of your upside in the next two or three years.

I just want to make another <u>important point</u> that Linda made—she built out her store base. In other words, most people say, "Well, they are growing their stores at X percent and it deserves that P/E or that P/E—people just pick numbers out of the sky based on a growth rate that will be short-term. Whatever the growth rate may be, people just pick—I don't know what they do. But what Linda does is just so logical. She builds out the whole concept; it makes sense. She used conservative margins and store openings. She built up the new concept by only 20% of the potential but she still comes up with huge numbers. So this exercise is figuring out what it is worth and being super <u>conservative</u>. If there is a big gap between what it is worth and what you are paying, then you have something that is pretty good.

LG: Another way I look at it is that if the company can get to that $2 in earnings run rate over the next couple of years, then other investors once they get off same store sales and onto earnings and then they look at square footage growth and say, "Oh, they are growing at 15% to 20% so this company deserves a 15x to 20x multiple, so you have a $30 to $40 stock over the next two years. The bottom line is that I am not including what I could have put in additional assumptions which would imply a more aggressive upside for the new concept of *Jimmy's* which includes a more aggressive roll-out of the stores. They could have 500 stores at the end of the five years not just 150 stores like I mentioned in my assumptions. I am assuming a flattish pick-up of same store sales, but they could do better. They do a stock buy back and the margin performance is doing better than that 13%. The company takes steps to improve the margins beyond 14%.

Student: What are the ROIC's on the stores? What type of return do mall based stores typically have?

JG: You probably should figure out what the inventory will be.

LG: This has 20% after tax ROIC, so it is very good.

Student: How did you figure out $20 million per year for capex?

JG: They break out the capex for stores then I multiply by the new stores they open per year—that is how I reach that number. In terms of MCX, it varies.

What are the assumptions or the things that could happen in a good way which I am not including? I am very conservative.

Student: Mr. Market rewarding you faster, then so you sell?

LG: I would exit if the price was revalued much faster than my five year estimates. I have yet to sell a stock at its peak.

END

Next week you have your 2nd project due.

Assume we are in the 1st qtr of 1996 for Munsingwear.

Class #9 November 16, 2005

Skip Benewitz (SP) from *Kirkwood Capital* is here to ask you questions about your presentations.

Your assignment is to read my book (The "Little Book") for next class.
The exam will be a test of your valuation skills. The one thing about the final is that I generally keep them so when someone asks me about you; I can see the results of your exam.

STUDENT PRESENTATIONS

Student Presentation on Timberland (TBL):

Students: A $2 billion Mkt. Cap Company manufacturing and selling active wear and footwear. 7.7 EV/EBIT and 59% ROIC.

Joel Greenblatt (JG): Did you use EBITA minus MCX for your proxy for EBIT?

Student: We see it cheap for a number of reasons: Negative sentiment. Miscues in product rollouts

We believe there is a 25% upside today and 50% in two years. On a net basis for 24% and if you hold it more than two years you have a 50% return.

Take the current multiple ….

They have no debt and strong cash flow. They have profitable investment opportunities. They are growing. Every dollar they put back into the business, they earn 40% on capital.

The management team is solid. They are fully vested. They have announced a stock buy back. How many shares outstanding? $68 million. Shareholder friendly management. Corporate responsibility is good. Human rights are one of their concerns.

Risks: Not getting the fashion trends right. Risk is mostly in the US business.

Calculating Enterprise Value (EV): Timberland has no debt and $100 million in cash.

Calculating Excess Cash for Enterprise Value (EV)

JG: One of the points that always come out is do you subtract (all) cash? The answer is no; you subtract "excess" cash (cash that is not needed to run their business on a yearly basis). You have to decide whether any of that cash is needed. Negative working capital businesses (like McDonald's Restaurants where customers pay cash or credit card while payables are 30//60/90 days) usually have the total amount of excess cash on the balance sheet excepting, of course, for petty cash in the registers.

Remember that retailers need to keep cash in their registers all the time, so do not subtract the full amount of cash on the balance sheet.

Competitors: *Wolverine.*

They have a loyal following of customers—construction workers.

The multiples and the margins—we took them down from where they have been. There peer group is trading at 11x EV/EBIT. This is trading at 10 x EV/EBIT. 50% return if you hold it for two years and you get 10x EV/EBIT on an exit or sale.

JG: How about on an absolute basis? How do you justify that?

Students: This is a great company over a long period of time.

JG: Did you factor in how much room they have to expand—grow their store base? How much more expansion do they have?

10x pre-tax (EV/EBIT)? Usually I would take off 40% for taxes so you would have a 6% return (10% - 4%). If the tax rate is lower due to overseas operations, sometimes they can't repatriate the money. Ask why that tax rate is lower or if that tax rate is sustainable?

Student: Timberland is growing abroad so we do not see repatriation as an issue. We also discounted back two years in our valuation.

Analyst: How does the business break out between domestic and international operations regarding operation margins? What are international competitors doing? Since you say their international division is growing 20% to 22% overseas.

How much of their business comes from the work boot area versus their entire sales because you said their strong margins are due to their strong customer loyalty in foot wear.

Student: *Timberland* messed up on apparel in the US so earnings for 2006 are depressed (temporarily we believe). EBIT margin of 2005 is 11%.

Analyst: Did you break out their licensing revenue from other revenue? Licensing revenue is very high margin revenue.

Student: No, but it is very small.

Analyst: Companies will tell you if you ask them to break out their licences. Revenue. You can always assume the licenses. Revenue is an 80% margin business.

Footlocker, Inc. (FL).

There are three main reason to buy FL as it sits at $20 with our price target of $26 which is a 35% upside.

Three (3) main reasons to buy FL:

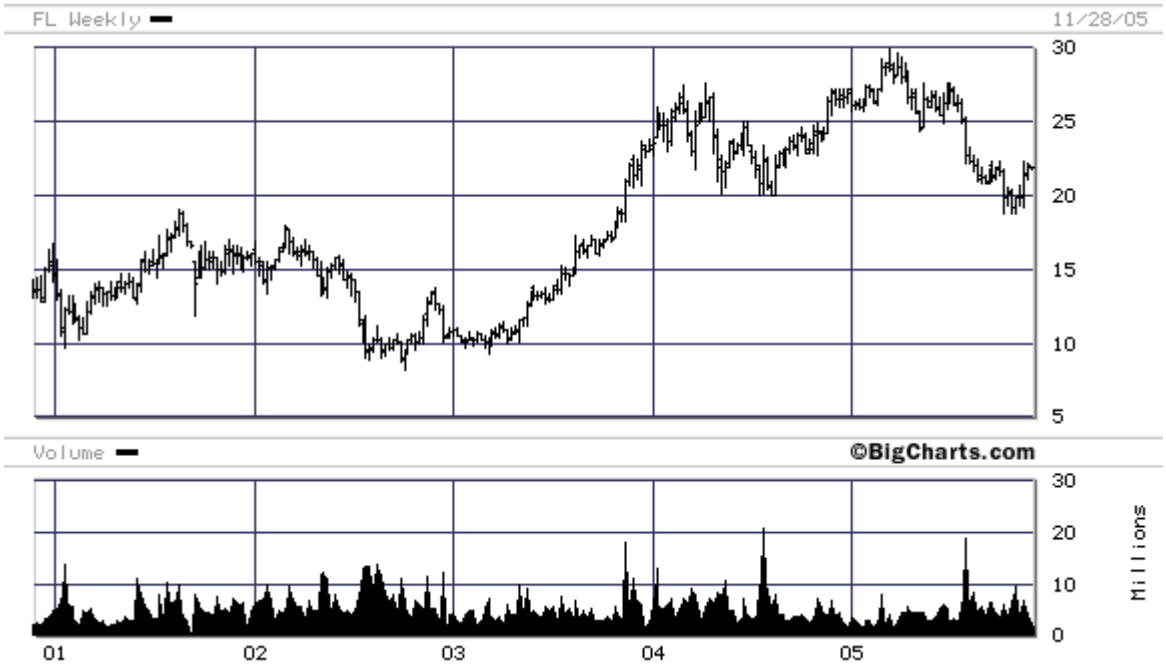

Increase in operating margins. The management is shutting down over-size big store concepts in early 2000 and improving their operating margins. 15% average over the last 4 years and mgt. stated a target of 10% with it currently at 7.4%. Op. margins.

Domestic growth is uncontested in Footwear for teens. Growth in mall space across the US.
They have Strong portfolio of business with different footlocker products and Chance with an 11% EBIT margin.

<u>Valuation:</u>

Average store size 300 square feet. Year-by-year growth in sq. footage. CAGR is 2.5% over the last five years. Sales per Sq. Ft. is $529.

JG: They have been closing some of their stores and that will stop, so using net square footage number may be misleading. So I would look inside that number to see what was the growth of the smaller stores ex-the closing of the big-store concept.

What you said is that they are closing the big store concept while their square footage is growing 2.5% per year. Look at growth with just the small store concept. **Break out the concepts!**

EBIT margin for whole company is 10%. $50 million in EBIT. Using a 7% EBIT margin you get $350 in EBIT to be conservative. The best case is 10% margin. We do think there will be competition from *Finish Line.* We put an 8 multiple on that since the business is not growing. Then you add $400 million for the online business and build up of cash.

Analyst: Pension (debt) in regards to Enterprise Value*? (Did you adjust the Pension liabilities if needed and add to your EV?)*

Student: We did a standard EV/EBIT analysis. We expect per share appreciation of 27% for the base case.

JG: Did you break out the domestic and international divisions? They have different margins and margin opportunities. The market went way down in Europe (margins collapsed from 18% to 10%). Their margins used to be 18% so the question is do they normalize at 10% or higher. But if *Linda (Greenblatt*) were here she would probably say the margins probably normalize around 12% margins that would be her best guess.

I think you have the big picture, and you did a nice job with not much time. I am trying to point out what I would do.

The more you can break it (the Company) apart the better. In some businesses the different parts feed on each other. But in FL there is enough disparity in the growth opportunities, the margins and the competitive landscape in Europe vs. the US where you need to pick apart the different businesses separately. There is extreme margin contraction from 18% to 10%. There is a lot of room there. The question is where it lands.

Management believes that their margins can be double digits. I am trying to bring up issues as how I would approach it. Their competitive position is very strong since their nearest competitor is five times smaller?

Student: Yes, it is.

Analyst: This applies to both presentations--operating margins are the value investors' growth number. The scariest thing to get into earnings is that you feel the urge to go to a reversion to the mean thesis or management estimate thesis like FL. Often those are the best answers you can come to, but the best you can do in all cases is to try to get as bottom up to that number as you can. Do what Joel suggested which is to separate the businesses. You did that with operating leases and how they made progress at FL.

Student: How do you treat operating leases?

Analyst: In most cases it doesn't matter. In some cases where rent is different than market rates, it can matter so you have to adjust for market rates to figure out normalized.

Pensions. The most important time to add pension debt to the EV is when the company is not funding expense through the income statement. Say you have $300 million in pension assets and you are really paying $30 million a year into that pension for employees that are already retired and those that are in service. Sometimes pensions get screwed up because it is done on a lagged smoothed basis. So you must make sure you add back the pension debt on an adjusted present value basis if it is under funded.

JG: If management is using an unrealistic assumption of 9% returns for their pension plan but you think the returns should be 5% or 7%, then I would adjust the pension liability and use your adjusted number.

Claire Stores:

Students: A mall based Store. $2.71 billion market cap. They have 2800 stores. The stock is $27 and we get to a valuation of $27 to $34 depending upon your assumptions going out five years.

We use a 22% margin for the US and international is 17% margin in EBIT so we used

JG: What type of growth do you use for them? Is there inflation growth?

Students: We use 5% annual growth.

JG: Why are they not growing now? So you are assuming mature growth in five to ten years? What did you do with the cash?

Students: We built up cash of $7 per share.

Students: Their (gross?) margins are 55%.

JG: Why are their margins so high—they can source their goods very cheaply?

Students: They have an efficient operating model.

JG: Buy one; steal one—a store that had small, cheap jewelry for teenagers.

Analyst: What are their ROIC in their stores? You gave it a low multiple of 12, but this company has profitable growth—perhaps it deserves a higher multiple—especially where the market is currently trading at.

Students: 27%.

<u>Cross Checking Your Multiple</u>

JG: Did you do a discounted cash flow analysis to determine an appropriate multiple?

Student: No we did not.

JG: A DCF analysis would help you determine a proper multiple as a cross check. A 5% growth in perpetuity will blow out most growth models and gets you a very high multiple. So the question is what happens at 3% or 5% growth in perpetuity? It might be interesting to have a <u>matrix of various growth rates</u> to judge the multiple. What multiple theoretically is 5% growth in perpetuity? Where does your 12 multiple fit into that?

You figured a 15x multiple (6.6% yield) after tax was a reasonable price for *Claire Stores*. I say use a minimum 6% hurdle rate. At best what we will get out of here is that it is a great business, it won't lose much money and at some point it will get a higher multiple. You are probably being too conservative which is OK because you are trying to buy it at a huge discount.

If you start growing 5% a year and you feel very confident about that, then that potentially becomes worth **a lot of money some day and it deserves a high multiple**. Now, if you can find things a lot cheaper than that fine. But instead of picking 12 multiple out of the air, it is nice to go through that matrix to determine the appropriate multiple. *(Don't just assume a multiple even if conservative—cross check it).*

K-Swiss designs and outsource the manufacturing of footwear. A nice stable growth business.

No comments……..

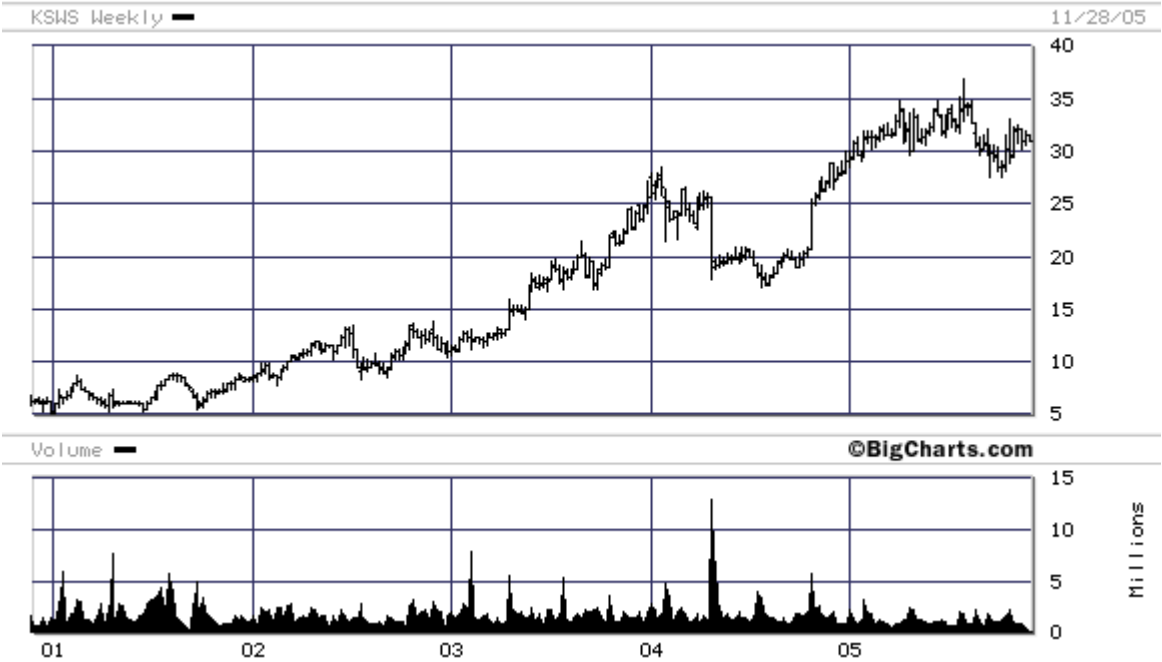

COCO

The company takes six or seven years to integrate an acquisition of a new campus. They have made 80 acquisitions in the past four years. We think the company is worth $22 while it is currently trading at $12. We assume improvement in operating margins.
JG: Do you trust these guys? Explain the big picture thing. Don't they get funding from the government for the tuition and aren't there claims of fraud against the company?

There are no convictions but I'm a great guy? Are they goosing the numbers, are they too aggressive, why is the operating margins dropping—what did they do in the past that is different now?

Analyst: 72% upside? You think it will be worth $22 in 2010? Why do you think it will get there quicker? Explain what you mean by campuses.

Student: ROIC regarding acquisitions? Would goodwill be a good proxy for capital—a decent proxy for capex since they are constantly buying campuses? If they didn't acquire campuses then they would have to build the schools?

JG: They are buying these campuses for their earnings power not the cost of their assets to be able to put the schools together. Wouldn't it cost them to expand? Basically you have to use logic on each one.

Simplify everything—what is it worth now if they just stopped and grow? Then if they take some of their incremental dollars capital and buy stuff what kinds of incremental returns do I think they are going to get on that? So I break things into two pieces generally. They have what they have now. Incrementally if they stop growing what is that worth? If they can generate this much cash, so what will they do with that cash? They can distribute cash (pay a dividend), buy back stock or acquire stuff. I have to make an assumption of what will they do with that cash. If they start acquiring stuff, I have to ask, "Will that be a good use of the cash or not?" And value it that way. It gets to be too amorphous if you start assuming if they are going to buy these many at this time or at this price? If that all changes it mucks up the whole works.

I take what I have and then if they are going to spend some cash do I think is it going to be a good thing or a bad thing (the company which is making acquisitions). And then I ask, "How much do I think they are going to earn on that?" That is the way I take apart your question and try to attack it.

Quantify Growth Mathematically—Growth Matrix of New and Maturing Schools

Another thing that is very important especially with retailers—here was a situation--any time you can quantify something. Here was a question where 1/3 of the schools were two years old, a 1/3 were four years old and a 1/3 were at saturation at 6 years, you can figure out what the growth rates are going to be just from the stuff that you have until maturity. You can pick out the normalized growth rate and margins instead of taking the margins that are there now. If I really did think the two year schools would mature over the next four years and increase margins and the four year old schools will increase over the next two. You can figure out with a matrix as to where it (the margins and growth rate) will be at maturation and then how much growth from there. You can do the math and it is always helpful to it. This is similar to figuring out store bases that take a time to mature. You can see how many stores are open over the last three years or last two years and see what is going to happen in the future and you can almost project part of that. A lot of people don't do it and it is the easy stuff. It is just math and you can get a feel for the (future growth).

Second Part of Class Back From Break……

INVESTING USING JOEL's LITTLE BOOK

The Little Book That Beats the Market (Hardcover)
by Joel Greenblatt

Discussing his new book……"The Little Book"

A few years ago during the *Internet* craze, his (Joel Greenblatt's) students just ignored him and called him an idiot and they said, "Look at *Price-line*! It will double. This is the ad in *Barrons'* at the time to attract

members to his *Value Investors' Club*. Value investing was so bad back then we showed an outline of a dead man. (See appendix for slide presentation).

Back to the story…..so over the years it became apparent to me that *Graham* was one side of the equation which was cheap and *Buffett* was: "I would like to buy a good company that could earn good money and had a good franchise that was going to stay there and be able to earn good money going forward." So the question was: **"Can you combine good and cheap at the same time?"**

We did a little bit of a test. We defined the same things I taught you. Good companies we define as having high returns on capital which is operating income divided by net working capital and net fixed assets. We use high returns on tangible capital. So that is how we defined good. High return on tangible capital gives a very good indication that this may be a good company. Cheap was EV to EBIT (Earnings Yield) which is a little more sophisticated than a P/E analysis taking into account different capital structures and being able to compare companies over a wide array on a fair basis. This equalizes capitalizations.

The Study

We used last year's numbers, we didn't use projections. So what we did was in the study: we ranked companies 1 to 3500 based on their Pre-tax Return on Invested Tangible Capital (ROIC). The best ROC companies we will rank the highest. So we take the 3500 largest stocks in our database and rank them on ROC just straight out. And then we did the same thing for cheap, we ranked 3500 companies on earnings yield: 1 – 3500 on earnings yield. We used last year's numbers. It was the first thing we tried. It (last year's numbers) is good information to have, but certainly it is not disputable information to have.

We wanted to make it easy so we used last year's numbers. We didn't use five-year averages or projections. This is the first thing we tried, we kept it simple. You can imagine all the problems with using last year's numbers, they are not normalized. There are aberrations. It is good information to have but it is certainly not disputable information. It wasn't projections. It is not using an arbitrary number or average over the past five years. When you are back testing, it is dangerous because people adjust all the time or use estimates. The question is that analysts get better over time, they over estimate, they underestimate—everyone evolves. So we didn't use any of that. Analysts' estimates adjust slowly so they change slowly. We use the simplest number—last year's numbers.

We sought companies with high ROIC and a high earnings yield. It doesn't sound that complicated. We ranked from 1 to 3500 on ROC and 1 – 3500 on earnings yield. We combined the rankings. If you had the 50th best ROC and the 100th best earnings yield your combined ranking was 150 (50$^{th\ rank\ in\ ROIC}$ + 100$^{th\ in\ earnings\ yield}$) = 150th ranking. This is very helpful. Obviously we would rather have a normalized number than a trailing number but there was no dispute about this.

This is for the top 3500 companies. This is what we did in 1988 we did 27% using the magic formula vs. 24.4% using a market equally weighted average. In that 30 stock portfolios of highest ranked stocks (the top or 1st deciles) and each stock was held in the portfolio for one year. What we did was Jan. 1988 to Jan 1989, then Feb. 1988 to Feb. 1989 and so on….. We measured 193 periods during the 17 years using rolling one year periods. We used many, many portfolios and it was the average of those portfolios. The bottom line is that we used a lot of time periods and stocks. The magic formula stocks (30 out of the 3500 stocks) did about 30%

We used market caps above $50 million and we had criteria that those small caps had to have a certain amount of volume to be included. We had a minimum trading volume requirement also. People couldn't say that the results were because of the small cap effect where investors wouldn't be able to buy the shares.

Student: What weighting created the highest market return?

Joel Greenblatt (JG): Let's talk about that later. We just used high return on capital and just cheap (high earnings yield) and then combined the two rankings using an equal weighting of high ROIC and high EBIT/EV or earnings yield.
Student: What about other metrics like price/Sales or low P/E to high ROE?

JG: Let's just say this did a lot better.

So you could say, "You know the stocks are too small." So—as you will see in the book--we did the same thing for the largest 1000 stocks with $1 billion market cap and over. 80% of the managers each year can't beat the S&P 500. And that doesn't mean the same manager doesn't beat the market each year. To beat it over time is tough but we basically doubled the return of the S&P 500 (12.4% return vs. 22% for our portfolio). We ranked stocks based on the best return on capital (1 – 3500) and earnings yield (1 3500) and then combined the rankings using an equal weighting. A company might not make the list because it wasn't that cheap. The ranking depends upon the best combined rankings. There were 12 portfolios a year so we averaged the returns. So we got a lot of years out of each test. The returns weren't due to just a lucky Jan. or a lucky July, it was a combination of all of those (months).

A few things looking at this chart.

Holding Periods

There were times it didn't beat the market like in 2002. In 2002 it was down 22.7% vs. the market being down 22%--a difference of negative 0.7%. The magic formula wasn't much more volatile than the market during the bad times for the big stocks. **Bad stuff happens which is tough but you have to stay the course because things work out in the end.** My argument here…..what would be the flaws in the largest 1000 stocks? There were 360 stocks each held for a year. Turnover was for one (1) year. Every stock was held for one year.

Small Cap Effect

Small caps in this period did no better or worse—it really wasn't the small cap effect. When you buy value stocks no matter what databases you are looking at **you are generally buying smaller stocks** because the stocks are out of favor. The market caps are depressed because they are out of favor and they have low prices. Market cap is price x fully diluted outstanding shares so value stocks are skewed toward the smaller market caps. The stocks are out of favor so people are not paying a lot for them. The higher priced ones are popular. The sales are not different but the market cap is smaller because they are out of favor and people are not paying a lot for them.

You could argue that liquidity was a problem here. Just as *Graham's* stocks disappeared-- his (Joel Greenblatt's) thirty favorites even though he did it every year and every month, between the three tests we did, we did over 4500 stock picks over the time--you might argue that the picks might go away like what happened to *Graham's* stocks. The market could get more efficient, etc. I don't think it is particularly valid. But that is one argument I would be sensitive to.

The Opportunities Disappear

So we did another test of the top 2500 stocks and we divided them by rankings into deciles. The best ranking was deciles 1; the second best ranking was in deciles 2… to deciles 10. The performance matched the declining deciles almost perfectly. The top deciles made 18%, then the second did 17.5%, the third did 15%, etc. My argument is that if the first 30 don't work, the next 30 stocks will do well. **It works in order.** If you know a couple of things and you know what a stock is going to do in the future, that is probably valuable information.

What JG Does or How Gotham Partners Invests vs. What the Book Suggests

We *(Gotham Partners)* know a little bit more than what I wrote in the book. But I figured if you could double people's returns in stocks or close to triple the return in small stocks that was worthwhile. **We do look for these two things (high ROIC and high earnings yield) but instead of looking at last year's earnings we use normalized earnings.** Most people can't figure that out. We can't figure it out for most stocks, but for those stocks where we can figure it out, we are looking for companies with high returns on tangible capital on a normalized basis and high earnings yield based on normalized earnings. That is just very logical.

I have been doing this for 25 years so I am pretty good at it. And you are Columbia MBA's who are good at it and who will keep getting better at it as you practice. **So that is what I taught you in this class this year**. But it is just nice to know. I really wrote this book so my kids could understand what I do.

Basically it is much more important than that. **These are the basic fundamentals things that will keep you making money over time and giving you something to focus on.**

So what I would use this for instead of setting up a formula thing is to say, **"Cling to this."** And say, "What I am doing makes sense. If I get my normalized earnings right then what I am doing makes a heck a lot of sense. And even if I screw up or even if the market doesn't agree with me this year or next year, if I keep doing this then hopefully I can beat this rather than using last year's earnings and not thinking and finding these things. **What I am hoping this does for you is to use this as a guide to find companies** (this is written for the masses so the masses have to go do this—stick to the formula approach).

If you know how to figure out normalize earnings, then fine. But 95% of the people shouldn't use normalized earnings because they can't figure it out, and I wouldn't trust their opinion but I would trust yours especially as you practice on. And if you do that and cling to this notion of what you are doing makes sense and I go through later why this makes sense, then you can withstand the difficult times. And we will discuss this in our review session.

Ch 9 in my book describes why **ROC is so important**. And I go through the book why this makes sense. The most important chapter in the book is chapter nine (9). Why ROC is so important and what does that get you. Why high ROC companies are more likely to have moats and earnings growth. That is what you are really shooting for. To know how the numbers stack up is very powerful. I think it is very powerful to say that if I spend my time in this area (1st deciles of Magic Formula Stocks) this is how they average out and maybe I pick the winners. I can pick up 18% (being in the top deciles of Magic Formula Stocks) or maybe I can do better.

Student: Aren't you costing yourself a lot of money (by giving this information out)?

JG: Actually, no. The answer is this….the answer is that it is very hard to do and I will get into that so I am not worried about it at all. I will tell you two stories.

That is a great question by the way; I assumed it was going to be the first question I would get. "Aren't I a blabber mouth? Didn't I ruin everything?" Why I am not worried too much.

The first story is about a book written called, <u>What works on Wall Street (2005)</u> by Shaughnessy about investing formulas. The guy back tested 40 formulas on what worked in the market. He tested dozens of formulas and picked the ones that performed the best and started a mutual fund. The first year the fund didn't do so well, then the second year his fund underperformed by 25% and then the third year he underperformed compared to all his competitors. So after three years, he suffered terrible underperformance. After that he sold his fund to someone else and the he found something else to do.

The guy who wrote the book, who did all the studies and who knew that it worked, he quit and sold his fund management company to someone else. This person who purchased Shaughnessy's business continued to use the formula and has been tremendously successful. Shaughnessy couldn't take it. This is not a straight thing; it doesn't work all the time. **If it worked all the time, it wouldn't work at all.**

Another story is about *Richard Pzena*, who started his business in1996. He was underperforming for four years. He decided to keep doing what he knew worked *(He bought the market's lowest price to earnings stocks on a normalized basis).* That takes fortitude to stick to it when all your customers are walking out the door. If he wasn't working for himself he would have been fired. Rich used a formula and picked stocks from that formula. It had worked for many, many years and it wasn't working.

Today flash forward five years and he is in the top 1% of all money managers, he has over $15 billion of institutional money and many investors. He has 100s of institutional investors, but he has only 4 of his original investors and I am one of them because I am his friend.

It works about 60% of the months (193 1-year rolling periods) it works 2 out of three years. If you go with 2 year rolling periods it works 5 out of 6 years. It even underperforms three years in a row. It really is probably no different than the experience *Rich Pzena* would have picking stocks. There will be a rolling three year period where you underperform the market. It doesn't always work. But underperforming for five years is tough to take.

There is also the example of my son who started in March. My son is doing well. And my daughter who started in Aug is getting killed. You can imagine how many people would quit. My Editor is doing this and he is getting killed. He says to me, "Alright now I get it." I talk about it in the book, imagine buying a book and you start losing real money. You are just following a computer and you are buying stocks like *Lear (LEA)* and you are losing money. "Wait! Why am I buying this? The market is telling me it stinks."

When the market is telling you it stinks, it is very hard to do. It is the same argument, studies have been out for many, many years and it continues to work. I am not particularly worried about ruining your life.

Just telling you guys to do this stuff and you go out and run billions of dollars and I have been doing this for ten years (teaching MBAs), this info is out already there.

Warren Buffett (WEB) wrote up, if you go back, about return on tangible capital in 1983 *(see appendix about Buffett's write up on ROIC).* Hopefully this is a little clearer. I still think there will be many periods where this doesn't work. And most people won't do it, especially institutions. I am hoping individuals do it.

I am only talking about beating the market not making money. Most people are very short term oriented so you should measure (results) over three year periods. From the rolling three year periods it never lost money though it didn't beat the market in some periods.

Student: Are there other factors that allowed the formula to work better like the market going up vs. going down?

JG: We look at results over three year period. In 169 rolling three year periods, the magic formula never lost money. It didn't beat the market in some but it never lost. The worst three year period was down 40%. There is a big difference there.

Student: Are there any periods for the magic formula that were especially good like when there was a good market?

JG: No, most people are short-term oriented so they should look at a three year period. No rolling three year period ever lost money.

Holding Period

We are using trailing one year results. If you hold it for more one year, say two years, it still works. I picked one year for tax purposes—it wasn't actually the best period. One year gives the freshest data because if you hold for another year, you are using two year old data. You would rather have fresher data than way outdated data, so we refresh the portfolio each year on a rolling basis. Once you have faster than one year turnover then you get into transaction costs. You sell your losers in less than a year and your winners in more than one year. So one year is more efficient and more tax efficient.

Student: Would you use this to short stocks?

JG: I wasn't prepared to share that.

My quibble with long/shorts—the guys who do special situations in shorts where it is a scam or the company will run out of money. I like those type of shorts though I am not particularly good at them. If you are doing valuation shorts then I don't like that. That strategy blows up every seven or eight years—the shorts go up and the longs go down and that happens to every quant guy. I am not saying a long/short hedge funds doesn't make sense. But If I don't value short term volatility because I take a three or four year view. Then why give

up 2.5% a year in returns by shorting. I am not adding value. This doesn't add value because I am losing 2.5% a year and I don't care about volatility.

Student: When you pick your top 30 do you start with your top deciles?

JG: When we find stocks, we do various things like look at stock screens. Then we look at competitors of the company we are looking at, we do reading. I would be less structured as this, I care about normalized high returns on capital though I don't care if its 50% pre-tax ROIC or 80% ROIC, but I just say good is good and really good is really good. And then cheap….there are other elements here**. You pick normalized earnings and you also want to pick a normalized growth rate and how confident I am in those projections.**

Buffett wants the certain one where he is pretty certain about normalized earnings and its growth rate. Those are other elements to decide how cheap it is taking into account the long term growth rates and things of that nature. Once again, drive a truck through it (it should be obvious; it is cheap). I am not running to a computer to see how cheap it is. When we did an analysis of Aeropostale we all came to a conclusion that it was cheap, and we weren't risking a lot and we could make money if the new concept takes off. I would go through the same thesis and use my head to figure it out. I would this for to give you confidence.

What I would use this (The Magic Formula and the list of magic formula stocks) for is to give you <u>confidence</u> if you know it in your gut *(that it makes sense and it works over time).* What I said in the book, knowing two plus two equals four (*how to value something is very powerful).* It doesn't matter what other people say or the newspaper says or how unpopular it is if two plus two equals four. If you know two plus two equals four, then you stick with it. In two weeks we will go over why this makes sense especially in the basket approach. You will <u>stick with it</u> when you have those down 20% years.

Believe me, when you look over 17 years and you calculate the averages it looks like any idiot should know that this works. **But in the middle of doing it when you are down 25% you don't really know if it is still working.** Does it make sense? Have things changed? Is it really going to earn that next year? Or newspapers were a great franchise, but they are no longer a great franchise and they are running down.

Blockbuster had high earnings last year and but that is a dying business. Am I really doing the right thing? It gets tough. That *(following the Magic Formula)* is easy to do when you first start doing it, but when you are losing money doing it or everyone else is doing much better it becomes a totally different thing. I am usually accused of making everything sound too easy—I am guessing. (Laughter from students).

I do have this in my head. What I am doing makes sense and what I am calculating makes sense. And I have to keep telling myself that a lot of times but to have things like this to cling to; that what you are doing makes sense. I go step by step in the book why this makes sense. Why high ROIC makes sense and you need to know that what you are doing makes sense.

<u>Originally Opening Up a Hedge Fund</u>

I raised money from *Michael Milken* after working for a few years for a hedge fund doing merger arbitrage.

Lesson from *Milken*: he could stay very focused on this one point. He stayed focused on what he was doing at the time no matter what the distractions. A good lesson for me.

My claim to fame was that I kept *Ron Perelman* waiting for an hour while negotiating my deal at age 27

If I made 30% in the first year was my break even. It was a high cost business. But I took half of what he offered me because I knew there was an unlimited checkbook if I did well.

Student: Are there companies that keep cropping up in your Magic Formula List?

JG: Yes, there are and I don't know if they are the ones you want to be buying but we took what we got. Companies that are always cheap, maybe there is something wrong with them.

The averages were calculated on a large amount of stocks so the results were more robust. We used a database from *Compustat.*

Arguments against the Magic Formula Investing.

The data was not available at the time so you were back testing. So we used the *CompustatDatabase*. Thus survivorship bias was irrelevant. "Well they cleaned up the database by taking out the bankrupt companies," critics could say. Again, it was irrelevant. Small companies can't be purchased without high transaction costs. We used 1000 big cap stocks, and the formula still worked well.

The *Fama & French Study*-everything was determined by low/price to book, Beta and small cap effect. My opinion was that it was a ridiculous study. Small caps were one indication of being out of favor; low price to book happens to be cheap, but it is not why it is cheap. They just happen to be cheap. This is a much more direct way of finding cheap stocks. They happen to be cheap that is not why it is cheap. On the side it works that is really not how the market works. I think that study is completely missing the point.

But they came out and say, "Not only did we beat the market with our low price to book stocks but they were less volatile. It is not that the market is inefficient it is because of risks we can't find. *(Stupid!)*

A comment on ***Beta***. If you think of owning a share of a company, how volatility makes any difference regarding risk is nonsensical. How volatile the stock price is over the past six months makes no sense in analyzing risk.

They found out that the stocks with low price/book values were less volatile and had better returns. The returns have to do with other risks we can't find or can't describe. You take on more risks to make more money. These companies are crummy companies—that is why they beat the market (hidden risks).

Fama & French can't make this argument against the Magic Formula Stocks. On average these stocks are good companies. Many don't have much debt, they are not going bankrupt and they don't need much capital. They are earnings a lot of money.

Even if they were right, which they are not, then the next argument is data-mining. You spit out a lot of data and find out what factors work great then show the results. **The answer to that is that this is the first thing we tried.** This is based on the way we invest not based on any previous study. We invest based on quality and price. We did no previous studies. We were just curious to see how well it worked.

The other answer as to why I wrote this was to come up with an easy metric for people to use. I had no idea it was going to work this well. I still think the same arguments apply which is there have been many market beating studies, **value investing is hard.** You can set up a fund to beat the market with low P/E stocks. There are guys who have set up funds to beat the market investing in low P/E stocks and nothing else. Believe me there are guys who have 71 factor models. This two factor model beats the seventy one factor model. There are models to beat the market, but it is still tough to stay in business and do that.

Student: How do you get the data? Do you do a Bloomberg dump.

JG: I learn from reading. *Wharton* Business School still teaches efficient market theory. I learn by reading *Graham*, *Dreman* and *Buffett*. I always thought about one day writing as a way to give back. That is why I teach also, I enjoy doing it. I was writing this book, and I started looking for databases to for readers to use. I looked at Business Week database because BW is owned by S&P which owns Compustat, but the BW site doesn't use the Compustat data which was the data we used for the study. We wanted to avoid the gibberish of many databases because this book was written for the masses. For you guys it is fine because you can actually use your head and say, "Well, that doesn't make sense because of a special item there, etc. I wouldn't recommend blindly doing this. But if I am writing this book for the masses, I am a little worried because they are programming in EBIT and return on tangible capital. It is kind of tough to do, and you can't really do it in some of these.

By the way, some of you are in that class where low P/E and high ROE is used (Von Mueffling Class). It turns out that **low P/E and high ROE investing is pretty darn good**. This is better, but the concepts are similar. Low P/E and high ROE is great. This (Magic Formula) is obviously better, because it takes into account differences in taxes and capital structure much better in my opinion and the data bears that out.

We leave out finance and utility companies in our study. I would say low P/E and high ROE would work pretty well there too.

Student: Did you take a look at just investing in high ROIC companies regardless of price:

JG: If you don't take into account price, I don't call that investing. I would never invest without considering price especially using a computer. I guess the market could always underestimate high ROIC businesses, but I would never think of using that metric without combining it with price. What type of business is it and can I buy it cheap? OK? I am just sticking to those two things.

The hard part coming up with normalized earnings. The hard part is really living with your choice and sticking to your guns when the market disagrees with you. That is the hard part. That is the whole ball of wax.

Student: Does this type of investing work in Europe?

JG: Every value study that has ever been done has worked across all markets over time. There has never been a contradiction to this.

Next time read the book and we can discuss it further.

END of Class

APPENDICES:

1. **Buffett Writing on ROIC**
2. **Magic Formula Slide Presentation by Joel Greenblatt**
3. **Article on Joel Greenblatt**

Goodwill and its Amortization: The Rules and The Realities (BERKSHIRE'S 1983 Annual Report)
(*Discussion of using tangible return on capital as a judge of businesses)*

Book Value vs. Intrinsic Value

We report our progress in terms of book value because in our case (though not, by any means, in all cases) it is a conservative but reasonably adequate proxy for growth in intrinsic business value - *the measurement that really counts*. Book value's virtue as a score-keeping measure is that it is easy to calculate and doesn't involve the subjective (but important) judgments employed in calculation of intrinsic business value. It is important to understand, however, that the two terms - book value and intrinsic business value - have very different meanings.

Book value is an accounting concept, recording the accumulated financial input from both contributed capital and retained earnings. Intrinsic business value is an economic concept, estimating future cash output discounted to present value. Book value tells you what has been put in; intrinsic business value estimates what can be taken out.

An analogy will suggest the difference. Assume you spend identical amounts putting each of two children through college. The book value (measured by financial input) of each child's education would be the same. But the present value of the future payoff (the intrinsic business value) might vary enormously - from zero to many times the cost of the education. So, also, do businesses having equal financial input end up with wide variations in value?

At Berkshire, at the beginning of fiscal 1965 when the present management took over, the $19.46 per share book value considerably overstated intrinsic business value. All of that book value consisted of textile assets that could not earn, on average, anything close to an appropriate rate of return. In the terms of our analogy, the investment in textile assets resembled investment in a largely-wasted education.

Now, however, our intrinsic business value considerably exceeds book value. There are two major reasons:

(1) Standard accounting principles require that common stocks held by our insurance subsidiaries be stated on our books at market value, but that other stocks we own be carried at the lower of aggregate cost or market. At the end of 1983, the market value of this latter group exceeded carrying value by $70 million pre-tax or about $50 million after tax. This excess belongs in our intrinsic business value, but is not included in the calculation of book value;

(2) More important, we own several businesses that possess economic Goodwill (which is properly includable in intrinsic business value) far larger than the accounting Goodwill that is carried on our balance sheet and reflected in book value.

Goodwill, both economic and accounting, is an arcane subject and requires more explanation than is appropriate here. The appendix that follows this letter - "Goodwill and its Amortization: The Rules and The Realities" - explains why economic and accounting Goodwill can, and usually do, differ enormously.

You can live a full and rewarding life without ever thinking about Goodwill and its amortization. But students of investment and management should understand the nuances of the subject. **My own thinking has changed drastically from 35 years ago when I was taught to favor tangible assets and to shun businesses whose value depended largely upon economic Goodwill.** This bias caused me to make many important business mistakes of omission, although relatively few of commission.

Keynes identified my problem: "The difficulty lies not in the new ideas but in escaping from the old ones." My escape was long delayed, in part because most of what I had been taught by the same teacher had been (and continues to be) so extraordinarily valuable. Ultimately, business experience, direct and vicarious, produced my present strong preference for businesses that possess large amounts of enduring Goodwill and that utilize a minimum of tangible assets.

Goodwill and its Amortization: The Rules and The Realities

This appendix deals only with economic and accounting Goodwill – not the goodwill of everyday usage. For example, a business may be well liked, even loved, by most of its customers but possess no economic goodwill. (AT&T, before the breakup, was generally well thought of, but possessed not a dime of economic Goodwill.) And, regrettably, a business may be disliked by its customers but possess substantial, and growing, economic Goodwill. So, just for the moment, forget emotions and focus only on economics and accounting.

When a business is purchased, accounting principles require that the purchase price first be assigned to the fair value of the identifiable assets that are acquired. Frequently the sum of the fair values put on the assets (after the deduction of liabilities) is less than the total purchase price of the business. In that case, the difference is assigned to an asset account entitled "excess of cost over equity in net assets acquired". To avoid constant repetition of this mouthful, we will substitute "Goodwill".

Accounting Goodwill arising from businesses purchased before November 1970 has a special standing. Except under rare circumstances, it can remain an asset on the balance sheet as long as the business bought is retained. That means no amortization charges to gradually extinguish that asset need be made against earnings.

The case is different, however, with purchases made from November 1970 on. When these create Goodwill, it must be amortized over not more than 40 years through charges – of equal amount in every year – to the earnings account. Since 40 years is the maximum period allowed, 40 years is what managements (including us) usually elect. This annual charge to earnings is not allowed as a tax deduction and, thus, has an effect on after-tax income that is roughly double that of most other expenses.

That's how accounting Goodwill works. To see how it differs from economic reality, let's look at an example close at hand. We'll round some figures, and greatly oversimplify, to make the example easier to follow. We'll also mention some implications for investors and managers.

Blue Chip Stamps bought See's early in 1972 for $25 million, at which time See's had about $8 million of net tangible assets. (Throughout this discussion, accounts receivable will be classified as tangible assets, a definition proper for business analysis.) This level of tangible assets was adequate to conduct the business without use of debt, except for short periods seasonally. See's was earning about $2 million after tax at the time, and such earnings seemed conservatively representative of future earning power in constant 1972 dollars.

Thus our first lesson: businesses logically are worth far more than net tangible assets when they can be expected to produce earnings on such assets considerably in excess of market rates of return. The capitalized value of this excess return is economic Goodwill.

In 1972 (and now) relatively few businesses could be expected to consistently earn the 25% after tax on net tangible assets that was earned by See's – doing it, furthermore, with conservative accounting and no financial leverage. It was not the fair market value of the inventories, receivables or fixed assets that produced the premium rates of return. Rather it was a combination of intangible assets, particularly a pervasive favorable reputation with consumers based upon countless pleasant experiences they have had with both product and personnel.

Such a reputation creates a consumer franchise that allows the value of the product to the purchaser, rather than its production cost, to be the major determinant of selling price. Consumer franchises are a prime source of economic Goodwill. Other sources include governmental franchises not subject to profit regulation, such as television stations, and an enduring position as the low cost producer in an industry.

Let's return to the accounting in the See's example. Blue Chip's purchase of See's at $17 million over net tangible assets required that a Goodwill account of this amount be established as an asset on Blue Chip's books and that $425,000 be charged to income annually for 40 years to amortize that asset. By 1983, after 11 years of such charges, the $17 million had been reduced to about $12.5 million. Berkshire, meanwhile, owned 60% of Blue Chip and, therefore, also 60% of See's. This ownership meant that Berkshire's balance sheet reflected 60% of See's Goodwill, or about $7.5 million.

In 1983 Berkshire acquired the rest of Blue Chip in a merger that required purchase accounting as contrasted to the "pooling" treatment allowed for some mergers. Under purchase accounting, the "fair value" of the shares we gave to (or "paid") Blue Chip holders had to be spread over the net assets acquired from Blue Chip. This "fair value" was measured, as it almost always is when public companies use their shares to make acquisitions, by the market value of the shares given up.

The assets "purchased" consisted of 40% of everything owned by Blue Chip (as noted, Berkshire already owned the other 60%). What Berkshire "paid" was more than the net identifiable assets we received by $51.7 million, and was assigned to two pieces of Goodwill: $28.4 million to See's and $23.3 million to Buffalo Evening News?

After the merger, therefore, Berkshire was left with a Goodwill asset for See's that had two components: the $7.5 million remaining from the 1971 purchase, and $28.4 million newly created by the 40% "purchased" in 1983. Our amortization charge now will be about $1.0 million for the next 28 years, and $.7 million for the following 12 years, 2002 through 2013.

In other words, different purchase dates and prices have given us vastly different asset values and amortization charges for two pieces of the same asset. (We repeat our usual disclaimer: we have no better accounting system to suggest. The problems to be dealt with are mind boggling and require arbitrary rules.)

But what are the economic realities? One reality is that the amortization charges that have been deducted as costs in the earnings statement each year since acquisition of See's were not true economic costs. We know that because See's last year earned $13 million after taxes on about $20 million of net tangible assets – a performance indicating the existence of economic Goodwill far larger than the total original cost of our accounting Goodwill. In other words, while accounting Goodwill regularly decreased from the moment of purchase, economic Goodwill increased in irregular but very substantial fashion.

Another reality is that annual amortization charges in the future will not correspond to economic costs. It is possible, of course, that See's economic Goodwill will disappear. But it won't shrink in

even decrements or anything remotely resembling them. What is more likely is that the Goodwill will *increase* – in current, if not in constant, dollars – because of inflation.

That probability exists because true economic Goodwill tends to rise in nominal value proportionally with inflation. To illustrate how this works, let's contrast a See's kind of business with a more mundane business. When we purchased See's in 1972, it will be recalled, it was earning about $2 million on $8 million of net tangible assets (25% ROIC). Let us assume that our hypothetical mundane business then had $2 million of earnings also, but needed $18 million in net tangible assets for normal operations. Earning only 11% on required tangible assets, that mundane business would possess little or no economic Goodwill.

A business like that, therefore, might well have sold for the value of its net tangible assets, or for $18 million. In contrast, we paid $25 million for See's, even though it had no more in earnings and less than half as much in "honest-to-God" assets. Could less really have been more, as our purchase price implied? The answer is "yes" – *even if both businesses were expected to have flat unit volume* – as long as you anticipated, as we did in 1972, a world of continuous inflation.

To understand why, imagine the effect that a doubling of the price level would subsequently have on the two businesses. Both would need to double their nominal earnings to $4 million to keep themselves even with inflation. This would seem to be no great trick: just sell the same number of units at double earlier prices and, assuming profit margins remain unchanged, profits also must double.

But, crucially, to bring that about, both businesses probably would have to double their nominal investment in net tangible assets, since that is the kind of economic requirement that inflation usually imposes on businesses, both good and bad. A doubling of dollar sales means correspondingly more dollars must be employed immediately in receivables and inventories. Dollars employed in fixed assets will respond more slowly to inflation, but probably just as surely. And all of this inflation-required investment will produce no improvement in rate of return. The motivation for this investment is the survival of the business, not the prosperity of the owner.

Remember, however, that See's had net tangible assets of only $8 million. So it would only have had to commit an additional $8 million to finance the capital needs imposed by inflation. The mundane business, meanwhile, had a burden over twice as large – a need for $18 million of additional capital.

After the dust had settled, the mundane business, now earning $4 million annually, might still be worth the value of its tangible assets, or $36 million. That means its owners would have gained only a dollar of nominal value for every new dollar invested. (This is the same dollar-for-dollar result they would have achieved if they had added money to a savings account.)

See's, however, also earning $4 million, might be worth $50 million if valued (as it logically would be) on the same basis as it was at the time of our purchase. So it would have gained $25 million in nominal value while the owners were putting up only $8 million in additional capital – over $3 of nominal value gained for each $1 invested.

Remember, even so, that the owners of the See's kind of business were forced by inflation to ante up $8 million in additional capital just to stay even in real profits. Any unleveraged business that requires some net tangible assets to operate (and almost all do) is hurt by inflation. Businesses needing little in the way of tangible assets simply are hurt the least.

And that fact, of course, has been hard for many people to grasp. For years the traditional wisdom – long on tradition, short on wisdom – held that inflation protection was best provided by businesses laden with natural resources, plants and machinery, or other tangible assets ("In Goods We Trust"). It doesn't work that way. Asset-heavy businesses generally earn low rates of return – rates that often barely provide enough capital to fund the inflationary needs of the existing business, with nothing left over for real growth, for distribution to owners, or for acquisition of new businesses.

In contrast, a disproportionate number of the great business fortunes built up during the inflationary years arose from ownership of operations that combined intangibles of lasting value with relatively minor requirements for tangible assets. In such cases earnings have bounded upward in nominal dollars, and these dollars have been largely available for the acquisition of additional businesses. This phenomenon has been particularly evident in the communications business. That business has required little in the way of tangible investment – yet its franchises have endured. During inflation, Goodwill is the gift that keeps giving.

But that statement applies, naturally, only to true economic Goodwill. Spurious accounting Goodwill – and there is plenty of it around – is another matter. When an overexcited management purchases a business at a silly price, the same accounting niceties described earlier are observed. Because it can't go anywhere else, the silliness ends up in the Goodwill account. Considering the lack of managerial discipline that created the account, under such circumstances it might better be labeled "No-Will". Whatever the term, the 40-year ritual typically is observed and the adrenalin so capitalized remains on the books as an "asset" just as if the acquisition had been a sensible one.

* * * * *

If you cling to any belief that accounting treatment of Goodwill is the best measure of economic reality, I suggest one final item to ponder.

Assume a company with $20 per share of net worth, all tangible assets. Further assume the company has internally developed some magnificent consumer franchise, or that it was fortunate enough to obtain some important television stations by original FCC grant. Therefore, it earns a great deal on tangible assets, say $5 per share, or 25%.

With such economics, it might sell for $100 per share or more, and it might well also bring that price in a negotiated sale of the entire business.

Assume an investor buys the stock at $100 per share, paying in effect $80 per share for Goodwill (just as would a corporate purchaser buying the whole company). Should the investor impute a $2 per share amortization charge annually ($80 divided by 40 years) to calculate "true" earnings per share? And, if so, should the new "true" earnings of $3 per share cause him to rethink his purchase price?

* * * * *

We believe managers and investors alike should view intangible assets from two perspectives:

1. In analysis of operating results – that is, in evaluating the underlying economics of a business unit – amortization charges should be ignored. What a business can be expected to earn on unleveraged net tangible assets, excluding any charges against earnings for amortization of Goodwill, is the best guide to the economic attractiveness of the operation. It is also the best guide to the current value of the operation's economic Goodwill.

2. In evaluating the wisdom of business acquisitions, amortization charges should be ignored also. They should be deducted neither from earnings nor from the cost of the business. This means forever viewing purchased Goodwill at its full cost, before any amortization. Furthermore, cost should be defined as including the full intrinsic business value – not just the recorded accounting value – of all consideration given, irrespective of market prices of the securities involved at the time of merger and irrespective of whether pooling treatment was allowed. For example, what we truly paid in the Blue Chip merger for 40% of the Goodwill of See's and the News was considerably more than the $51.7 million entered on our books. This disparity exists because the market value of the Berkshire shares given up in the merger was less than their intrinsic business value, which is the value that defines the true cost to us.

Operations that appear to be winners based upon perspective (1) may pale when viewed from perspective (2). **A good business is not always a good purchase – although it's a good place to look for one.**

We will try to acquire businesses that have excellent operating economics measured by (1) and that provide reasonable returns measured by (2). Accounting consequences will be totally ignored.

Joel Greenblatt's Slide Presentation: Graham's Value Formula – Updated

Slide 1: Value investing isn't dead.
Five years ago, at the height of the Internet Bubble, we ran this ad in Barron's:

Value investing isn't dead. It is alive and well at Valueinvestorsclub.com

Slide 2: The Key to Successful Investing: Invest in Good Companies Whose Stocks are Cheap

Good companies have high returns on capital (ROIC)
- **Defined as operating profit (EBIT or EBITDA – MCX (Maintenance Capital Expenditures)) divided by working capital plus net fixed assets**

Cheap stocks have high earnings yields
- **Defined as pre-tax operating earnings divided by enterprise value**

Slide 3: Magic Formula Results

Magic Formula Results			Difference		
Year	**Magic Formula**	**Difference**	**Investing $10,000**	**Market Average**	**S&P 500**
1988	27.10%	2.30%	$10,230.00	24.80%	16.60%
1989	44.60%	26.60%	$12,951.18	18%	31.70%
1990	1.70%	17.80%	$15,256.49	-16.10%	-3.1
1991	70.60%	25.00%	$19,070.61	45.60%	30.50%
1992	32.40%	21.00%	$23,075.44	11.40%	7.60%
1993	17.20%	1.30%	$23,375.42	15.90%	10.10%
1994	22%	26.50%	$29,569.91	-4.50%	1.30%
1995	34%	4.90%	$31,018.83	29.10%	37.60%
1996	17.30%	2.40%	$31,763.29	14.90%	23%
1997	40.40%	23.60%	$39,259.42	16.80%	33.40%
1998	25.50%	27.50%	$50,055.76	-2%	28.60%
1999	53%	16.90%	$58,515.19	36.10%	21%
2000	7.90%	24.70%	$72,968.44	-16.80%	-9.10%
2001	69.60%	58.10%	$115,363.10	11.50%	-11.90%
2002	-4%	20.20%	$138,666.45	-24.20%	-22.10%
2003	79.90%	11.10%	$154,058.42	68.80%	28.70%
2004	19.30%	1.50%	$156,369.30	17.80%	10.90%
Avg.	**30.8%**	**18.5%**		**12.3%**	**12.4%**

* The "market average return is an equally weighted index of our 3,500-stock universe. Each stock in the index contributes equally to the return. The S&P 500 index is a market weighted index of 500 large stocks. Large stocks (those with the highest market capitalizations) are counted more heavily than smaller stocks.

Slide 4:

Largest 1,000 Stocks					
Magic Formula Results			Difference		
Year	**Magic Formula**	**Difference**	**$10,000**	**Market Average**	**S&P 500**
1988	29.40%	9.80%	$10,980.00	19.60%	16.60%
1989	30.00%	2.40%	$11,243.52	28%	31.70%
1990	-6.00%	1.10%	$11,367.20	-7.10%	-3.1

1991	51.50%	17.10%	$13,310.99	34.40%	30.50%
1992	16.40%	6.10%	$14,122.96	10.30%	7.60%
1993	0.50%	-13.90%	$12,159.87	14.40%	10.10%
1994	15%	14.80%	$13,959.53	0.50%	1.30%
1995	56%	24.50%	$17,379.61	31.40%	37.60%
1996	37.40%	-78.80%	$3,684.48	116.20%	23%
1997	41.00%	21.40%	$4,472.96	19.60%	33.40%
1998	32.60%	22.70%	$5,488.32	10%	28.60%
1999	14%	-20.70%	$4,352.24	35.10%	21%
2000	12.80%	27.30%	$5,540.40	-14.50%	-9.10%
2001	38.20%	47.40%	$8,166.54	-9.20%	-11.90%
2002	-25%	-2.60%	$7,954.21	-22.70%	-22.10%
2003	50.50%	9.10%	$8,678.05	41.40%	28.70%
2004	27.60%	10.30%	$9,571.89	17.30%	10.90%
Average	22.90%	11.20%		11.70%	12.40%

* The "market average return is an equally weighted index of our 1,000-stock universe. Each stock in the index contributes equally to the return. The S&P 500 index is a market weighted index of 500 large stocks. Large stocks (those with the highest market capitalizations) are counted more heavily than smaller stocks.

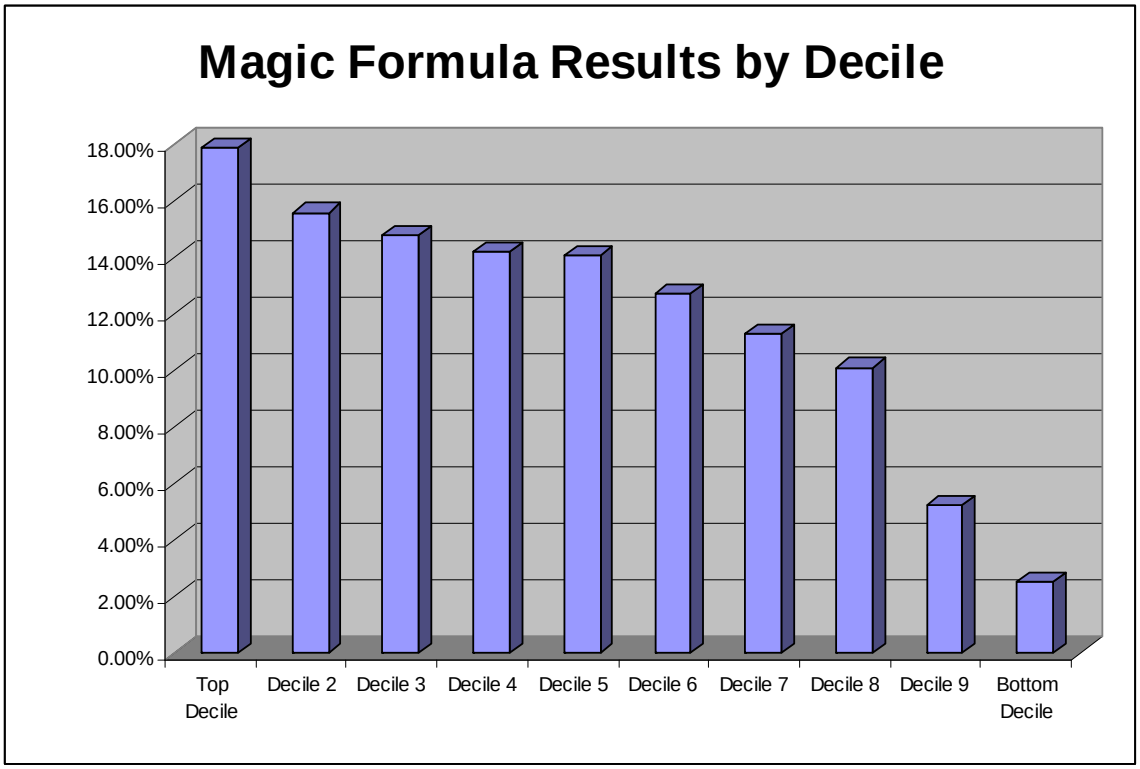

Top 11 Companies with Mkt. Cap > 2 Billion $ as of 11/11/05				
Company	**Ticker**	**Mkt. Cap**	**Pre-Tax Earnings Yield**	**Pre-Tax ROIC**
3M Co	MMM	58.6	8%	50% - 75%
Affiliated Comp Svcs-CL A	ACS	6.97	8%	50% - 75%
American Standard Cos, Inc.	ASD	8.2	9%	25% - 50%
Amer. Eagle Outfitters	AEOS	3.9	13%	> 100%

Amphenol Corp	APH	3.5	8%	50% - 75%
Aramark Corp	RMK	4.6	9%	25% - 50%
AT&T	Ticker	15.9	14%	25% - 50%
Autoliv Inc.	ALV	3.7	12%	25% - 50%
Autozone Inc.	AZO	6.6	12%	25% - 50%
AVON Products	AVP	2.7	9%	75% - 100%
Block H&R	HRB	7.9	13%	>100%

Million-Dollar Magic by James Boric

Joel Greenblatt is not famous...He is merely rich.

Last week, I discovered why he is so rich. My discovery could easily put a few extra dollar bills in your pocket as well...Maybe even millions of dollar bills.

Joel Greenblatt is a Harvard Business School graduate, but let's not hold that against him. He is also the founder and managing partner of Gotham Capital, a private investment firm established in 1985. He started with $7 million of outside capital - mostly from junk bond king Michael Milken. Over the next decade, he earned 50% a year - compounded. Even after paying back all of the original seed capital and factoring out expenses, Greenblatt grew his $7 million stake to over $350 million. A mere $1,000 investment was worth $57,665 in 1995. A $10,000 investment was worth more than a half a million dollars.

So when Greenblatt took the podium at the recent Value Investing Congress in New York City, I listened...intently.

Greenblatt declared that he had a simple two-part investment process that could deliver far greater returns than the rest of the market. He called the process his "magic formula." I thought to myself, "Wow, that's pretty corny...but maybe there's something to it anyway." As it turns out, there is.

Greenblatt's formula relies on a "value-oriented" process that ranks stocks on the basis of two variables — the earnings yield and the business's return on capital.

The first part of his formula requires that a stock trade for a bargain price relative to earnings power (or yield). The idea is simple. If, for example, a company can't earn more than 5% a year - the return you would receive from 10-year U.S. Treasury note - it isn't a business you want to be in. Quite simply, it isn't cheap relative to the risk you must take.

To calculate a company's earnings yield, you divide its annual earnings per share by its share price. For instance...If a company earns $1 per share for an entire year and its stock price is $10, its earnings yield is 10%. Since 10% is double the return of a 10-year Treasury, it may be a company worth looking into. But if you find a company in the same industry that earns $2 per share and trades for $10, that may be an even better investment opportunity. It has an earnings yield of 20%! Obviously, the higher the earnings yield, the better the bargain.

But earnings yield is only one half of the magic formula. Investors must also ask a second question: Is the business a solid one? The last thing you want to do is to buy stock in a company that is cheap for a good reason - because it stinks.

Greenblatt determines whether a company is "good" or not by looking at its return on invested capital. In other words, is it investing its capital wisely - adding to its earnings power? Or is it wasting its cash on frivolous investments that will create no (or even negative) value for shareholders moving forward? For instance...

If a company spends $1 million on a new factory and it is able to crank out an additional $500,000 in profits the next year, the result is a 50% annual return on capital. That's outstanding. It says management knows how to spend YOUR shareholder money to create added value. Clearly, companies with high returns on capital will grow more quickly than companies with low returns.

[Editor's Note: By the way, Greenblatt has authored a terrific book about his magic formula entitled, "The Little Book that Beats the Market." He has also created a Website dedicated to the process, which may be found at www.magicformulainvesting.com. For the record, we have no business association whatsoever with Greenblatt. We are merely providing this information as a courtesy to you].

So Greenblatt wondered how much money you would make if you invested ONLY in good companies (those with a high return in invested capital) that trade for a bargain price (companies with high earnings yields).

To answer that question, he researched the historical returns of the stocks his magic formula would have identified. Specifically, he went back and examined the top 3,500 American stocks (from your large behemoths like Microsoft on down to micro cap companies with market caps of $50 million) from 1988-2004, according to his formula's ranking system. He ranked each stock in terms of earnings yield and return on capital - from 1 to 3,500.

The idea was to invest in the companies with the best combined score – those with the highest earnings yield AND the highest return on capital. So if a company ranked 100th in terms of earnings yield and 50th in terms of return on invested capital, it got a score of 150. And if another company ranked 6th in terms of earnings yield and 10th in terms of return on capital, it got a combined score of 16.

After generating a score for each company, Greenblatt created a portfolio of the top 30 companies. Greenblatt created a new "Top 30" at the beginning of every year within his test, and then calculated the return an investor would have received by investing in each year's top-30 stocks.

From 1988-2004, if you had bought the top 30 companies generated every year using Greenblatt's formula, you would have averaged a 30.8% return for 17 years. During that same time frame, the market averaged a 12.3% return.

So Greenblatt's ideal portfolio (using his two-part formula) beat the market by almost three times over. And it gets even better...

There was NEVER a three-year period between 1988 and 2004 where this portfolio of 30 solid, bargain stocks was not profitable. Indeed, there was never a three-year period in which it failed to beat the return of the S&P 500. In other words, an $11,000 investment in 1988 in Greenblatt's magic formula stocks would have been worth over $1 million by 2004.

As a small-cap specialist, I was particularly intrigued by the fact that the small-cap value stocks within Greenblatt's system dramatically boosted the overall results. For example, when Greenblatt excluded the smallest 2,500 stocks from his sample universe of 3,500, he discovered that his magic-formula portfolios produced an annual return of "only" 22.9%. That result was still far better than the S&P 500's, but the not nearly as good as the 30.8% annual returns that resulted when the mid- and small-cap stocks were included.

In other words, small cap value stocks are some of the market's most valuable stocks of all. So I wondered, what small-cap companies in today's market would meet Greenblatt's stringent value criteria? I ran some numbers of my own, and came up with 10 companies that had at least a 25% return on capital and an earning yield north of 9%. Check 'em out...

November 30, 2005 Review Class

The test next week will be closed book.

The purpose of today's class is:

- We will do some review for the exam
- We will discuss portfolio management which we haven't talked much about it.
- We will then discuss anything from the book—I assume you have read it.

I. **Questions about the book, The Little Book that Beats the Market.**

Student: Does Ebit = Ebitda – Maintenance Capital Expenditures (MCX) used in the book?

JG: Right, I put a little note in there for the *MBA Students* in the book. I assumed MCX = D&A for simplicity purposes. Figuring out MCX for a lot of these companies is pretty hard. On average it (*using EBIT*) is pretty close to being right for simplistic purposes. If I were doing it myself, I would check to see the true MCX and subtract that number from EBITDA. You might use EBIT as a check to see if you are close.

Student: When your sister, *Linda Greenblatt* was here she said that retailers were great to invest in due to their price swings (high price volatility allows for advantageous purchases). Real Estate swings. Were there any other consistent sectors in your database that kept showing up?

JG: There was no particular exposure, but there were a lot of consumer exposure in general because those businesses depending upon whom was doing the categorizing do not require a lot of capital to earn their returns (A low capital return model).

The big picture here is the not trying very hard model, right? You sort of use last year's earnings and you do not make heroic assumptions, and you do not use very many factors. **It shows how powerful the basic concept is.**

I had fun with this because I read a lot of the academic journals *(on finance)* because I am a wild and crazy guy. Four years ago they took some firms in efficient markets. Everything has to be laid out in that context (*of efficient market theory*). They *(academics*) have never really gotten off that. It is pretty amazing how you can argue in the face of so much information that you can beat the market doing something this simple. *(Though ships will sail around the world for centuries, the Flat Earth Society prevails- Warren Buffett).*

I wrote the book for the masses—that was the audience for this book. If you can really insert your estimates of normalized earnings that would be so much better. The fact is that some of you will find some companies that you feel confident in doing that means that if it works this well doing nothing, to work well actually thinking about it as long as you don't get messed up with the emotions when it is not working out for you.

Student: How do you compile the stocks every year? How are stocks added or eliminated? How does that change from year to year?

JG: How is the portfolio purposely constructed? I left that purposely nebulous because it was complicated. The basic idea is that there is always a 30 stock portfolio, and you accumulate that portfolio over time so that each stock was held for a year. We started in Jan. 1988 and although we assumed we started buying stocks in Jan 1987 with some stocks held for 6 months and some held for nine months etc, as I described in the book, I suggested that you bought six stocks every two months until there were 30 stocks accumulated in the portfolio over the year by Jan. 1988.

As I described in the book we used a step-by-step process. We had stocks held for three, six, nine months, etc. In year two you will have 30 stocks, starting in year two you have thirty stocks in the portfolio then you sell six stocks and bought 6 new stocks. What I described in the book for a thirty stock portfolio you would be buying 6 stocks every two months. Then you would sell stocks held for more than a year. Think of starting in year two and that is how we started measuring the 30 stock portfolio.

Student: Was there any reason you picked 1988 for the starting year?

JG: Yes, we used a database called *Compustat* point-in-time database which was the exact data that someone would see back then. I said in the back of the book these were the reasons things get attacked and one of them is survivorship bias where they just take bankrupt companies out of the index so you have a bias to do well because you got rid of the loser. Here this was the exact data the *Compustat* customer had at that point in time and it only goes back until then (1987). So we went to the beginning of the database. You could argue that it might not have worked, but we didn't want to have any argument and this is the easiest database to use because the data is very uniform.

There are many, many problems, and the reason we set up the **www.MagicFormulaInvesting.com**. Website was because I didn't want to write the book and then we didn't want people to use crummy databases and people have to plug in all the formulas. People would be trying to program tangible capital and all those kinds of things. So I had planned to use *Business Week's* data base but it doesn't use *Compustat* data (though it is owned by *S&P*). So I felt kind of obligated to do this because the readers would not have accurate or easily obtained data to use the Magic Formula and then they go buy the wrong stock. We tried to make it as simple as possible.

Student: Did you think of using two year's data?

JG: That is a good question. In other words, I say it is a good long term strategy and I say to turn it *(the portfolio)* over ever year—one, a year was simple and two, to take losses in less than a year for short term losses and two, to take profits after holding the stock for a year for a long term gains especially if you were an individual. It works well using two year old data as well.

We are using last year's data instead of using projections. After a year you have fresher data than a year ago and that always makes more sense than using two year old data. We thought a year was as good as anything else for tax reasons and for turnover costs it was a compromise to a longer term (two years or more) strategy. And we wanted to keep it simple.

Student: The lowest deciles were the most risky? Did you notice a number of companies going bankrupt in the lowest deciles? Are the lowest deciles the most risky? Some stocks in those deciles tripled and some went bankrupt?

JG: No. **We are buying high ROIC stocks earning a lot of money, companies that are earning money. We are not choosing low price to book stocks.** Their argument goes out the window. We didn't see much. *(Academics might say Magic Formula Investing Stocks will do better because of the higher risks inherent in the stocks).* And there isn't much in the low price to book results as well. *(Academics say)* "It (risk) doesn't come out in volatility where they *(Academics in finance)* measure risk everywhere else so it must be some other risk because our theory can't be wrong. It is patently ridiculous. At the end of class I will tell you what I really think. *(Laughter).* One thing I did slip in the appendix is that if we are valuing stocks based on future earnings, discounted back….why would low price to book stocks be important…..*(garbled)*

Low price to book stocks are a subset of stocks that are super cheap and are already out of favor. A subset of stocks that are cheap will trade close to book value but that is not why they are cheap. They just happen to be cheap—it is an indication they may be cheap. **So a more direct way to test whether a company is cheap: Does it earn a lot relative to what I am paying and is it in a good business?** This should work a lot better than low price to book stocks.

Low price to book is just a subset that you would tend to get and actually the *Trosky Study* show less than half of the low price to book stocks beat the market but the ones that do beat it by a lot. So what he tried to do is throw out some of the worse low price books stocks to see if he improved which he did. But his methodology did not work for large cap stocks. I think that is the beauty of this *(Magic Formula)* one. That was why we did the large cap stock study which worked well for us—22% average annual returns for large cap stocks over 1988 to 2003 testing period).

Student: Do you remove cyclical (stocks) from your study? Couldn't you be buying cyclical stocks at the worst time because their earnings would be peak earnings, giving you a high earnings yield?

JG: I wouldn't say that. I wouldn't say that. In most cases…..What we try to do here rather than…. This is the thing that we tested first and it worked. We didn't test many things to pick the one that worked, which is comforting because it shows that logic works. This is the not trying method.

You don't want to put too many factors in there. I actually got an email from *O'Shaughnessy* who wrote, What Works on Wall Street." I beat up on him in my book. The only one left on the list is *Haugen* who has a 72 factor model (*requiring monthly turnover!)* that doesn't work as well as the two factor model. So one down and one left.

Student Did you consider leverage?

JG: No I didn't, but **EV/EBIT includes leverage**. All the studies done in the past—the low P/E studies--are not low EV/EBIT. When I gave you those passages to read and that guy *(Hooke, the author of Security Analysis on Wall Street)* said take what you get regarding capital structure so use P/E as opposed to EV/EBIT. I said that I didn't agree with that. I think it is very clear through statistics that on average, this is much better. So that helps in that analysis.

I try to explain why this works in the book but I have to be frank, I was quite amazed at how well it worked.

JG: Who thinks I was an idiot to write this book in the first place?

Student: Laughter. Will the Magic Formula diminish over time?

Investing is like dieting. It is easier to know what to do than actually do it? There is a pretty strong argument that not many people will be able to follow this. It probably might diminish somewhat.

JG: Low P/E hasn't *(diminished as a value metric*) but low price to book (P/B) has. But low P/B really didn't make much sense to me. I think one reason low price to book has diminished over the years is that the economy has been less asset based earned and more services industry oriented over the last 15 or 20 years. So that the companies that are trading closer to book value with a lot of assets to generate earnings are some of the worse companies to invest in. Negative results from low P/BV. That is one of the things that I am banking on. This method like the low P/E strategy won't diminish and hasn't diminished over the past 40 years. The strategy to buy high earnings yield (Low EV/high Ebit) companies which have high ROIC (high EBIT/Low Invested Capital) should remain robust.

The other thing I am banking on is that if you look at the top of the list (of Magic Formula Stocks) they are hard to own. How I know why these stocks are trading there—bad near term news abounds. There are not too many takers to buy. So I think as long as…..

Even if you look at the *Haugen* study where he had with 71 factors (of criteria to buy superior performing stocks) and he wrote a trilogy of books--all of them worth reading with various benefits with each. (See shaded segment on page 22). One of them had to do with his 71 factor model, and he shows you the top ten factors that he used and six of them were low P/E and high ROE. It is not that quants don't have this stuff (on what quantifiable criteria outperform the market). The average guy doesn't. Then you have to decide, does it work with the analyst working with big companies who set prices or computer robots?

The reasons that Quants go out of business is because they have to keep reinventing themselves—the quantitative model. They find anomalies that work for a day, a week a few weeks whatever and they may converge the way they are supposed to go. And if you look at the results here for the simple model (for the Magic Formula) and in 2002 the model is down 25% and the market is down 22%, but people can't eat that volatility. If things converge quickly, the people have patience. If things converge slowly over a year or two years and things go badly in between, people don't have that patience. It is very hard for people to adopt that model *(of Magic Formula Investing).*

People don't have to patience to wait for convergence. It is very hard. You can imagine if this doesn't work this year people will say this *(method)* doesn't work either.

For example, my daughter—she--started in August and my son started in March but their results differ because of their starting periods and the stock chosen in that period.

Student: Long term expectation? What would you think for this to go away? Or because people are irrational, this will never go away?

JG: That is what I am hoping for. I assume human nature doesn't change.

Student: What would it take for this to go away that is the real question?

JG: I think it would be very hard, because like I said it is very, very lumpy (returns) so that…. There will always be things going out of favor. There are two ways this works. One of the ways which is what I said in the book. **Good companies at cheap prices.** I think that is certainly true for the first and second deciles and why they outperform the last two deciles. I think it is very clear on average that is what you are doing.

When you get into the top tier (deciles) of companies, you are working more as an insurance company *(so you need a pool of bets to have the odds more in your favor*)**.** Individually it is hard to own them because they are out of favor and <u>they may work out or they may not</u>. But as a group on average there are enough winners that work out. So you are really taking an <u>insurance group bet</u> rather than an individual stock bet. There will always be stuff out of favor and stocks will be priced that way until the quants take over the world. And when the quants take over the world, it stops working. Then it will work again because the quants will be out of business.

But generally…..If you think about what a quantitative model is—it is just a bunch of numbers to somebody and it blows up at some point and then you don't know whether it blew up or things had changed or you are doing the wrong thing. <u>You</u> are actually analyzing companies. Frankly that is *(figuring out normalized earnings*) my day job and your day job because you can do it. This is for the guy not doing any work. **My day job is figuring out what normalized earnings are and plugging it into the model--not looking what happened last year.** This is sort of an easy thing for people to do. As far as making money in the future, there is always stuff that is in and out of favor. **Human nature doesn't change.**

Student: This can never go out of favor?

JG: In ten years? I am not expecting it to, no. I think that is a fair assessment.

<u>Evaluating Managements</u>

The main point is not to memorize rules. Because people ask me about this--evaluating management--throughout the semester, but I am just trying to evaluate how certain people will act in <u>their own best interests</u>. How is this guy incentivized? I try to use logic. What is his incentive to do this? If people are not incentivized to do a good job they generally won't do it. There are some great people in the world that will do the right thing regardless of incentives but on average human nature prevails. You must expect people will act in their best interests and know how they are incentivized. I would go in expecting that.

What percentage of the company is best to own? It is either a strong point for the company whether management is incentivized well or not. Do they keep stealing as much as they can and keep blowing it out? If they are buying back stock over the last five years, I assume it is cheap or they wouldn't do that. .

Student: Portfolio managers won't want to hold these types of stocks *(Magic Formula Stocks with "bad" near-term news)* in their portfolio?

JG: *Richard Pzena*, when he is selling to institutions and telling them what he owns, they say to him, "Don't you read the papers?" Because there is something wrong with his companies. For some it is a sale and for others it is a negative.

It is hard to do the stupid thing and lose—that is the hard thing. If it works, everyone is happy.

Student: You think the majority think that way?

There is too much uncertainty or things will turn down. There is too much uncertainty. It is tough. Things are down. You say, "Oh, I knew that stunk and now it is down from $33 to $25. It is not usually the time when guys say let us jump in here.

I do not think about what others are doing or thinking. **Just think about what you should be thinking.** To cut to the chase the idea here is to cut out the extraneous stuff. It becomes a very simple process. Forget about what he thinks or what is happening next. **Figure out what the darn thing is worth and buy it for less.** To figure out what it is worth then figure out what are normalized earnings down the road. Not what happened last year or this year or next year? Most of the time you won't be able to do that. May be the business is too uncertain or too tough or you don't really know. **But if you can do that in the companies you do know, that is the whole analysis.**

It looks cheap enough, and we are getting paid to take our position. Unless the stock bottoms, we have never bottom ticked a stock. Usually it doesn't work out so well.

You know you have something great when you are **rooting the stock down** after you have bought a lot. That doesn't happen that often where you have that confidence.

Student: On small amount of money—those transaction costs will add up.

JG: I was thinking about the IRA investor who can put in $4,000 the first year into an IRA so I am figuring that is pretty much the minimum (amount of investment). There is this site called www. FolioFN.com so you can buy stocks at 19.99 per month. The cost is 6% in the first year or $240 a year for a $4,000 portfolio which is the smallest suggested beginning portfolio size.

Or you can do *Scott Trade* which is $7 a trade and you can buy 20 stocks the first year which is $140 per year. The advantage for you is that you can do small caps.

But you are right, and I was concerned about that. You can do small caps which have done 18% a year better than the market during the study period (1987 to 2003) and that will take care of a lot of the transaction costs as the account grows. *(Note: Small Caps are not necessarily on average more undervalued but they are subject to more mis-pricing of either being more overvalued or more undervalued).*

Right now the first time in 25 years I am finding better bargains in the large cap area. Though it works great for large caps so that is the best argument.

If you think of other questions……..

I thought one of the most interesting things was on the last page where we talked about the Haugen model which was a 71 factor model and it involved turning over the portfolio every month. They did comp to the two factor model. His difference between 1 and 10 was 17% and the difference for the two factor model was 5 percent and change. That was very powerful. His worst 36 month period was minus 40% and the two factor model was plus 14%. So I thought that was good.

Portfolio Management

I also talked a little about Portfolio Management so I also think we should talk about that a little bit now.

When you guys get out of here (Columbia Graduate Business School) it might be difficult to:

A. have the confidence to own 5 to 8 stocks and
B. Have someone who is crazy enough to let you do that.

I imagine you can do that in:

A. your personal account and
B. where you have control over things

There is an argument to have a very concentrated portfolio. You really are buying pieces of the business. The way I look at it. Think about it as your own business where you own percentages of other good businesses that you researched well and bought at a discount. And if you can buy it for 50 or 60 cents on the dollar you wouldn't worry about where people were pricing it all day long.

All the measurements you would get in a traditional MBA in how to do portfolio management would look silly. What happens in the institutional business? When they put out money to money managers, they don't go inside the portfolio (the pension fund managers, for example, don't know the reason why those particular stocks were purchased by the fund manager). They don't have transparency, they don't know why you bought those stocks, and they only know that your returns bounce around. If that is all you have-just the numbers-I understand the process could take longer than three years to work out. If your numbers are no good why should I pick you? Sort of like *Warren E. Buffett (WEB)* "I look for 7 foot basketball players."

It is sort of the same concept. If someone has not done well for three years, you should ditch them to go with people who have done well. If it is not working well now, then why will it work now or in the future?

I am on some institutional (investment) boards and that is the thinking. That is the great thing. The guy, who doesn't do well over three years, so he has to sell all his stuff because his money is pulled—so his stocks get even cheaper. *(Ironically usually just before the turnaround).* You can see the institutional reason why this does happen.

The best example, annual volatility then 10 year volatility, it is about equal to the market. Using trailing 36 months periods, *Pzena's* volatility is about half the markets' volatility. I am not a big proponent of either *(measuring volatility).*

Who cares how much it bounces around in the interim if returns are good? If you look at the statistics what are your draw downs during the course of the year? All of those measures seem a little silly when you own a share of a business at a good price.

Student: What was the one mistake over the past twenty years, you wish you did a little bit differently? What was your most common mistake?

JG: I will tell you something encouraging, I have done so many stupid things, and I hate to talk about them and I am not done—it brings up bad emotions. I have sold too soon and at wrong times. Yet, if you do enough stuff right you can still get great returns, I think that is encouraging. Believe me If I go back over the past 30 years and recount my mistakes—it is too embarrassing--but I did sell a stock at 25 cents that is now $15. **There was no logic to selling it.** I was raising money. How much could I raise? If you knew how many mistakes I have made……not just selling too early though that is one that we often do.

I think I had a contest with *Robert Goldstein*, my partner. We made 60% to 70% on our money with *Moody's* and it unfolded exactly as we predicted, but the position tripled. We went back and forth for 30 minutes. What about all these stocks that tripled after we sold them? That was certainly one mistake we have made and continue to make.

Another mistake we have made: mis-assessment of a business and being in denial. But of denial was that we owned so much that we couldn't get out. It wasn't so much we couldn't get out.

We never worry too much about liquidity if I can buy it well. If I am wrong I should pay for it. Liquidity constraints in companies that we bought a lot of have more than paid for the ones we couldn't get out of. If you have a long enough horizon, over time it works.

Student: You do so much in the small cap area. How small (are the companies, stocks) do you look at?

JG: Right now the typical investment we own is in the multi billions. That is another great thing about investing in small caps which I think I mentioned before. The people who get good at this stuff, get wealthy so then they can't look at the small caps any longer. They go to the large caps. So there is always a new crop of people. **There is always room to start there.** I try to make it clear in the book too. It is not so much that small caps are better. *(Small caps tend to be more mis-priced both on the up and down side).*

That is another stupid thing that academics generally do…. They say.."Well, you left out this or you didn't include that……

I figure I will get attacked eventually because Academics will say, "You did not take out the small cap effect, the low price/book effect." They try to take out all these effects--but for that effect you equaled the mkt. But the point is that the small cap effect if there is one, they are too small to buy. But the small cap effect, if there was one, occurs because the stocks out of favor tend to have smaller caps more than the average stocks because their price is low.

I think a small market cap stock <u>happens</u> because it becomes out of favor. Same with low price book. The stock happens to have a low price to book because it happens to be out of favor. It is not cheap because it has a low price to book value. It is coincidental. It coexists. It is not a good buy because it is low price to book. As opposed to what this is--Rather than what I looked at--which was price relative to what the companies would earn. It makes more sense to me. It seems silly to me to just use low book value to price.

Student: Theoretically, the companies we work for will be firms that have billions of dollars of capital where we wouldn't be allowed to buy companies under $400 - $500 million in market cap.

<u>The Purpose of the Course</u>

JG: The whole point of this course is to give you <u>a context</u> in which to do your valuation work. All you are doing is valuing companies and trying to buy them for less. And then understand the context and how the market works over time. The market may not agree with you in the short term, but you have to stick it out to get right.

All you are doing is valuing companies and buying them for less. And then what is the global context you are looking at? If you are valuing large companies, then figure out the cash flows. It is no different than for small caps. There is no line drawn somewhere. Large caps tend to be better, more established companies, and therefore, they are not one product companies. They have maybe a stronger market position than small companies but you might look at the same attributes. It might be a small niche market that the large company has a great share in that market.

It is all about <u>valuing companies</u> no matter how many studies I blabber about. If you can value companies and buy them cheaper and have the context to know that 2 plus 2 equals 4, then that is all you need—forget the rest. If you can buy good companies that are making money over time at a discount, you will make money. That is really what this course is about.

Putting things into context which I am good at and doing the valuation work which I think I am average at. But I am <u>very picky</u>, and I pick the things I know how to evaluate. And I think all of you can do that because you are all here.

I might flounder at a big firm because my guess on a particular industry might be no better than anyone else because I don't understand the dynamics of that industry. But it is a good process. If you learn three or four industries. *Linda (Greenblatt*) has made a good living knowing one industry, retail. One industry you understand in your bones like manufacturing because that is your background. It is the *Warren Buffett* circle of competence concept.

Bill Miller (*portfolio manager of Legg Mason's Value Trust*) is an extraordinary example is someone who has expanded his circle of competence to companies you generally don't look at. He is trying to figure out what a company is worth and buying it for less. He is trying to understand what people consider very complicated—*Google, Amazon, EBay*.

Student: What do you look for?

JG: I am always looking for a disparity between what it is worth and where it is trading. Then what are my alternatives? Right now because we have some big cap stuff, we are fully invested. I am worried about the indebted consumer. We were scared in 2000 also. We owned a lot of companies earning a lot of money. We knew the Internet bubble would burst also. The S&P 500 dropped in half. There are not many times in your life that will happen, I guarantee it. We were up 100% in 2000 and the market got pummeled. That is sort of what we are doing now. We are fully invested. If we found something else we would sell something else because we don't use leverage.

Leverage

If you are going to be a very concentrated investor, you should not use leverage. WEB said you make a lot of money if you only had a 20 card punch card with 20 choices. I will give you a 20-hole punch card for the next ten years to help you be disciplined.

You can't leverage because you need to live through the downturns and that is incredibly important.

Big picture--the things I look at: What I have in my portfolio. This is just practicing now. You have 6 securities in it, and you are 100% invested. Now if we find something else we like--it has to boot something else out of my portfolio. We run a fund of funds. And we found a money manager from the *VIC*. He ran a fund with 30 names because he wanted to sleep well. But he was smart and he had a big staff so he could source a lot of ideas. He had insights we didn't have.

We came up with a way to work with him. We said, "Listen we only want your five best ideas not 30. If you want to add an idea, you have to sell the other." What are your five favorite things at a time? **I would recommend to you a 6 to 9 stock portfolio. It is a way to get rich actually.** It is a very disciplined strategy to always keeping the best ideas in your portfolio and concentrate. Only keep the best things in your portfolio. WEB says he has more money than ideas, but I don't think you will have that problem for a while. If you do, please look me up.

Student: Is there anything else you look at?

JG: One thing we did not emphasize enough which is inherent in what we are doing because we are buying stocks cheap. Look for **asymmetrical risk reward investments**. It is inherent in what we do. Following the margin of safety principle we are looking for good risk reward-- a dollar down and five up. The stock is worth ten and you can buy it $5 but the stock could go down. You certainly are not going to buy a large cap stock now at a 50 cent dollar. The way I would look at a 50 cent dollar, "Well I am going to hold this for two or three years and in two or three years with the accumulation of cash it will be worth $10 but I can buy it for $5 or $6 now." That is a pretty good return. Sometimes it happens sooner and the market fast forwards those earnings upfront. Perhaps the market will recognize what I am seeing sooner.

It is interesting because we talk to our portfolio managers a lot. One of the things we bring to the table is that we can help the portfolio manager. **We met a guy who ran $100,000 in 15 years into $25 million (44.5% CAGR for 15 years!)** never running outside money. We convinced him to run money for us. One day he went through all the metrics of the company and it is worth $10 where the stock is trading at $4. We said, "Everything you said makes sense, which sounds great. "And one other thing," He said, "they just put the company up for sale." So this sounds really good to me. Right?

Why do you only have 7% of your portfolio in it instead of 20%? If you were not lucky enough to buy at $2 would you buy a hell of a lot more at $4 if you hadn't been so lucky?
He said, "I see your point." The next day a big block of stock comes up in the stock and he tripled his position. Three weeks later the company is taken over for $9.

All the stuff I say…People accuse me of trying to make it seem all too easy. It really is not. When you look at these results (Magic Formula Stocks up 34% and 22%) over seventeen years, it seems obvious. **When you are**

in the trenches and you are living through the year and a half and it sucks, it doesn't seem so obvious. Why am I an idiot? It is different. It is much easier to look at an accumulation over time or an average and say that it is obvious and it works.

The same thing in portfolio management. There is all the psychological things like anchoring, the price you pay. These things naturally go on. **I think the clearer your thought process, the better. Which is: It is worth this it is trading here, I have this much confidence in my opinion. You just keep going back to basics**. The basics are the market will get it right eventually in three or four years and I have to hang out. If I am wrong, I will be wrong some of the time. If I am wrong a lot of the time, I have got to find another line of work. Or I have to find some industry that I do know how to value and that is the learning process.

The Hard Part

Student: What is the hard part?

JG: I think the hard part is limiting yourself to those companies that you can figure out the normalized earnings. **I only limit myself to those companies I can figure out--or are easy to figure out--the normalized earnings.**

Student: Over time what is the difference in this methodology compared to your first book?

JG: It depends where the opportunities lie over time. I didn't get turned on to *WEB's* focus on good businesses until the early 1990's. I got burned in crummy businesses. If there is $10 in value and it is going to $12 then great, but if it is going to $8 then your margin of safety is degraded. Time is against you instead of working for you.

Student: This 20-hole punch card is for the purpose of making great 20 investments?

JG: Put half your portfolio into stocks using your punch card. You put in 10 ideas and you hold them 1 to 3 years. As I have gotten older, slower and working less hard, I have extended my timeframe and increased my concentration.

I don't know if you have done the math. You will use up your twenty picks. It really is more of a reminder that **less is more**. You can only focus on your best ideas. If you don't think it is great, then pass. Your opportunity set is not what is in front of you. The future is unknown. But your opportunity set is not in buying what is the best out there today, but **what might come along if you wait**. I am really losing an opportunity to buy when there is a great opportunity. There are times when there are huge opportunities and it is good to have dry powder.

I am giving you metrics--your hurdle rate should be very high, you should be really confident. Load up on your best opportunities. What I consider loading up is more than most people. We put 20% to 30% of our capital into an idea. We look at it (an equity position) as owning a piece of a great business.

When we found a great idea is was because we did the work and we found it in an unusual spot. "Oh, it is trading cheaply because this division could be closed down then the value will be revealed. It is not like we figured out *Google.*

Two more questions and then we will take a break.

Student: Are you fully invested?

JG: We have seen a lot of good opportunities in the last six months.

Should I have sat on my hands? Sometimes we are fully invested and are looking. The thing you bought goes down and the thing you sold goes up, but I have learned to ignore the pain.

That is the key! You must think **two or three years out** when everyone is thinking about the next quarter.

WEB was spoiled by *Graham* to find only cheap stocks.

JG: To me it took me a long time to get to a long time horizon because there were a lot of neat things to do. You can make money at both. You have more weapons in your arsenal. . It is all the same thing. You get values coming out of weird situations.

BREAK……..107

Final Exam

JG: Why don't we talk about the final? The final is designed to test your analytical skills. Some questions are a matter of opinion. The point is to touch on the right points.
I might ask for strategic advice after you have seen the 10-K. Some general questions about the speakers we had.

You have to figure out an arbitrage spread. You have an option question.

I am the easiest grader in the school. I keep your test in my file so I can answer questions about you if anyone asks me.

I like people in interviews to disagree with me. Pick up the issues and argue well.

We saw speakers: *Matt Mark, Robert Goldstein, Richard Pzena, Linda Greenblatt, Brian Gains* and *Bruce Newberg.*

Comments on student papers:

In general I thought your papers were very good. I will tell you your true grade—the grade you should have gotten—versus what I put on your paper. These are somewhere in between but in general they were good.

110: A couple of comments…….

Comparables and Valuations

A student presented five different types of value:

- EV/EBIT,
- Price/Sales,
- liquidation value,
- Private transaction value
- and one or two others

Then he averaged the five. I say pick one—something that is more relevant. If they are all in the same range, it doesn't matter. Just picking an average doesn't mean much. I think the same thing with relative value—picking comparables. A lot of people just list a bunch of comparables. Even if some did the ROIC and EV/EBIT analysis and compared and that is good. It is much better than doing P/E ratios where there are different tax shields and everything else. But those eight or ten companies were not really great comparables necessarily. I would still pick out the businesses the most likely to be similar and do comparables on two or three companies instead of an average of 8 or 10. I think that might be more useful rather than just getting the job done.

There are other companies that don't have good comparables, but **cash is cash** and what I would do on that…..You know I gave a speech at *Stanford Bernstein* to the young analysts there (50). It is kind of great and sad in a way but I get these kinds of questions. An analyst raised his hand and said, "Well I do tech stocks. Those are valued differently than the others so how would I go about valuing them?" Well, I said, cash is cash, and you are valuing the earnings stream--they are all green. It depends upon your confidence level and

everything else. It is in the way you get into an institutional mindset and they are still doing it that way. *Sanford Bernstein* is a great place. **One of the advantages you have is thinking straight.**

If you can't find a good comparable, then try to find a comparable business with similar metrics like returns on capital and similar growth prospects. *Rob Goldstein* (his partner) compared *Moody's* to *Coke* when Buffett bought it because there were attributes to those businesses that were similar. There were differences and similarities, but it is nice to have a benchmark of some sort. So if you can't find a good comparable within the industry of what you are trying to do, compare it to a comparable with similarities. You have confidence in those cash flows, the ROIC in that business.

So that is what I would look for. That is how we have made a lot of money over the years where people only view this industry a certain way. But, hey, things can change, but it is spinning out cash. Maybe it will get revalued. Look at these two metrics, they match up. This is trading at $25 to $30 and this is trading at $12. So that doesn't continue to last that long if they do continue to spit out the money, you have to wait two or three years, but that is a really, really powerful model **to find a comparable when you don't have one.** Or to analyze an industry a little differently than it has traditionally been analyzed. The industry might be efficiently priced relative to each other, but they all could be cheap. People are not used to paying for……

People just used to pay only 10 times for banks, but then people started to pay more for them because they were earning more as businesses; they went into different businesses.
If it is tough finding comparables find something similar in market share attributes and prospects.

Retailer:

They said, the average P/E over the past five years was this or the highest P/E over the last five years was that, and I think the price will go back to that. That doesn't make sense sometimes because the business could have been much different with different growth prospects back five years ago. Now the company is in 1000 malls and five years ago they were in only 400 malls. Five years ago they were in 4 countries and now they are in 8 countries. The retailer's growth prospects could be different.

Just to say it will go back to its historical P/E, you can see the flaw in that logic. Don't fall into that trap.

Another Example of Conventional Thinking: *DELL*

From: The Detective and The Investor: Uncovering Investment Techniques from the Legendary Sleuths by Robert G. Hagstrom

In those critical early years of 1992 through 1994, most investors and analysts who followed computer companies were still operating on old assumptions. Conventional wisdom at that time held that the time to buy stocks of PC manufacturers was when the price was six times earnings, and the time to sell was when it hit twelve times earnings. That was the historical trading pattern, and few people saw any reason to question it. The simplistic view of most on Wall Street was, This rule of thumb has worked reasonable well in the past, so why change it?

The concept of economic value added hit the mainstream financial press in 1993, with a cover story in Fortune. Anyone reading the article carefully would come away with an important message: If a company's cash earnings represent a high return on capital that should bode well for its future stock price.

At that point, thoughtful investors could have reasoned their way to a profitable conclusion: I should be looking for companies with strong earnings and low cost of capital. And if they were looking at computer companies, they would have hit on Dell.

The lesson: Why would you, as an investor, sell Dell when it reached twelve (12) times earnings if its ROIC was high and going higher. Dell's economic model is built on maintaining low capital costs.

What is excess cash?

Understand the business before deducting cash from Enterprise Value. Some businesses run with just a little cash. Some business use negative working capital. I assume the acquirer doesn't need the cash, so you would get it back then. A retailer has a lot of cash to weather a bad season or two. There are times that when you deduct the cash from Enterprise value, it is the wrong thing to do. Some retailers need to keep a certain percentage of cash in the til to accommodate customers. In summary, before deducting cash from Enterprise Value, determine the cash needed to annually run the business, for example: 1% to 2% of sales.

Cheap on EV analysis. The stock is at $6 with $5 in cash and the stock is going to $7 in two years. But you are laying out $6 and it is only going to $7. The EV doubles (100%) but your return is 8% annually compounded over two years. Also, think about how management will spend the excess cash.

Marvel Entertainment

There was a great report on *Marvel*, but I struggled with that one. It is on the *Magic Formula Investing Site* as one of the recent picks. The approach taken was reasonable. You have a big movie, then they make money over the rights to the characters. They do have a stable of characters, so there is some recurring nature to the business with their characters, but the question is: **what are normalized earnings?** In a couple of years there will be two movies out and it will do this, but last year they had one movie out. Should you normalize at 2 movies or 1 movie a year. How long will it last? The person picked 1.5 movies per year. Unless it is super cheap, I might pass on something like that. It is a particularly good business—licensing brand names—however, I struggle in figuring out normalized earnings. .

An Option Question: Weighting your position in Stocks vs. Options

Let us say you find something interesting, how much do you weight your position in options vs. a stock position?

JG: That is a great question. This is how I would view it. If I had a 30% position in a stock, I don't think I am at risk for that 30% of the portfolio because the investment is in an unleveraged company. I view a disaster as being down 33% (or 10% of the portfolio—33% x 30%) because if I am going to be buying a 30% position I am buying it at ½ of intrinsic value. So I am buying at $5, and I think it is at worth $10. So I assume it goes down to $3.50 or $3. That is how much I have at risk. But with a leap…

What is great about investing in stocks—one way to look at them--is that they are like perpetual options. They never expire unless the company goes bankrupt. So…the comfort you have being a value investor is it may take an extra year but I think it will get to fair value so I may have to hang out for two or three years.

Then you go buy an option that expires in two years you are taking that off the table. We have a few bets like that. We have some combination of stocks and some options that expire in two years and some in 2.5 years. You are adding another risk because stuff happens. The market could crash; the housing market could crash; the consumer drops dead; another 9/11. I know that if I draw a line from now until the next five years I know where the business will be—sort of a *Warren Buffett* thing; I feel very confident from here to there the business will grow and go up. The business will grow 7% to 15%. I feel very confident that the business will grow 15% during that time. If things stink and there is a big drop in the middle, it will still grow 7% from today until five years from now.

With an option, it may get very lumpy, so I take that into account. The way I compare a 20% position to risk 40% of my money so right away I risk 8% in that position. Then I take the time element (of a wasting asset), because I could get it right but have the timing wrong. So I take the position down to 5% from 8%. I assume I could lose all my money in my option. So an option position might not exceed 5% of my portfolio not 15% to 30% of a stock position.

What I mean by not leveraging, is that they can't carry me away with my entire portfolio. When I make money I look at it pre-tax and when I lose money I look at it post-tax. Oh, I lost 50% on that but after-tax it was only 10%. There are little mind tricks you can play.

Student: Do you buy in the money or out of the money options? How do you choose what strike price of an option?

JG: Generally I buy a little bit in the money. A Call option or a Call/Leap is the same as **buying a put and buying a stock; they are identical to each other**. Generally, I don't want to pay a lot of money for the put so usually I would rather take a lower strike price where the Call strike price is struck at a lower price so the put option aspect of the Call is not worth as much. I am not investing as much money in my put the lower the price I go.

So bottom line—another way to look at it is your **risk & reward**. There are two ways to look at that in answer to your question. One is the risk/reward. Let us say I own IBM and it is $60 and I think my valuation thesis is that in two and a half years I think it has a good shot it can be worth $90. Ok? I can buy these $75 calls for a $1 for a 15 to 1 payoff. Or alternatively I could say, "Look, right now I could buy the $55 calls at $9—they are $5 in the money—the stock is at $60 and it is costing me $9 or $10 to buy that but that $10 can go to $30 so I triple my money and even if I am wrong I will get back all my money back if the stock is at $65." So I will factor that in. It would be unlikely to lose all my money if I am close to right, because I am thinking $90. To lose all my money it would have to go to $55. I factor that in, but it is not a science.

The thing that I showed you was—how do I know to buy the $55 calls at $10 instead of the $60 calls at $7.50 when the stock is at $60? Which is better of the two Call strike prices? What I say is, "I always I look at the call spread—a bull spread." What that involves is buying the $55 call and selling the $60 call. If I bought the $55 call for $10 and sold the $60 call for $7.50 for a net cost of $2.50 ($10 - $7.50, not including commissions). The most I can make if the stock is above $60 is $5.00 or a 100% return. If the stock is at $55 then I lose 100%. The spread is worth $5. If the stock is at $57.5, I am at break even ($55 Call Strike Price plus $2.50 paid for the call spread = $57.5).

If the stock is above $60 it will be a double in 2.5 years because I believe the stock will be at $90. Does that sound like a good bet based on my thesis? I think the stock will be at $90. So I will buy the 55 call because I am effectively buying the spread of $55 call/$60 call.

It is an exercise that I do in my head when I want to own an option outright.. I don't really buy the spread. Do I want to own the 55 call or the 60 call? So I compare the two by doing the bull spread in my head. By laying out an extra $2.5 to buy the $55 call at $10 vs. the $60 call at $7.50, I am effectively choosing a bull spread.

The most I can make is $5 but the spread will never close until the end. I would never pay $4.5 for example. The $55 calls are plus $10 or lay out $7.50 for the $60 call? **Buying the $55 vs. the $60 is effectively like owning the spread.** If I buy the $55 call I am effectively paying for the $60 call and the $55/$60 call spread. Laying out the $2.50 brings me $5.00 if I am right for a 100% return. Just go home and think about it in your head.

Student: Why would you ever buy a stock when you can get a higher return with an option?

JG: If the stock goes down 8% over the next two years because the world is a crazy place, I lose 8% in owning the stock, but 100% of my money owning the option spread.
The problem is that I am wrong a lot despite what I tell you in here so that is risky. If it is a good bet--and I would call any option or spread position a bet--I will win over time but not necessary on any one bet. I want to be the betting house where I will win a series of bets over time if my valuations of the companies in the group of bets are correct.

Anyone read Fortune's Formula—it is a new book out (See shaded box below). It talks about the optimal way to structure a portfolio. **It is about horse racing and odds.** What is the optimal way to structure a portfolio if you have good odds? If I could flip a coin and I could get $1 if it is heads and lose $0.50 if it is tails. You want to do that a lot but if you have a pile of money you wouldn't put 100% of your money on that particular bet. Even though it is a great bet, you wouldn't put all your money into it because you could hit a bad run and lose all your money.

From www.bankstocks.com Solve the following problem. You're at the track with $1,000 in your pocket, and see that the posted odds on a certain horse winning an upcoming race are 5 to 1. You (and only you) have a secret line of communication to the horse's trainer, and learn that the horse's chances of winning are meaningfully higher than the posted odds—say, 1 in 3. Which is to say, you have **a material information advantage over other bettors.** How much of your $1,000 do you bet?

That, in a nutshell, is one of the most crucial and least discussed dilemmas in the capital allocation process. While CAPM types preach about the virtues of diversification, the Warren Buffets of the world know better. Diversification only assures mediocre returns, they point out; the *real* money is made **when you put a lot of capital to work in those rare opportunities when you have a true edge.** Like, say the 1-in-3 shot above that's going off at 5-to-1.

William Poundstone gets at this issue in ***Fortune's Formula:*** *The Untold Story of the Scientific Betting System That Beat the Casinos and Wall Street.* The book is a history of a formula called the **"Kelly Criterion"** that allows gamblers (and other capital allocators) to **maximize their profits on a series of bets where they have an information edge**, but without betting so much that they risk going broke. Take the horse-racing example, above. Yes, you'll want to bet more than you normally would, to make the most of your insider knowledge. But you don't want to bet everything: even by your own reckoning, the horse has just a 33% chance of winning. Once you're bankrupt, you can't get back in the game. The optimal bet size is somewhere in between.

The namesake and inventor of the Kelly formula is a man named John Kelly, a mathematician at Bell Labs in the 1950s and 1960s. Kelly developed his formula by building on the work of another Bell Labs mathematician, Claude Shannon. Poundstone says Shannon is considered by many to be the second-most-brilliant individual of the twentieth century, after Einstein. In particular, Shannon is the father of "information theory," which serves as the **broad mathematical foundation for essentially the entire electronics and digital revolutions.** Everything from integrated circuits to fiber-optic cable to DNA sequencers rely at rock-bottom on Shannon's work. His models apply to any kind information conduit, electronic or otherwise. They allow communications engineers to minimize the amount of noise—static, gossip, whatever--in a given conduit, and maximize the amount of information the conduit can carry. Which is to say, Shannon essentially **developed a mathematical way to convert uncertainty into certainty.**

Communications engineers aren't the only ones with an interest in **separating information from noise, of course.** Bettors and investors could use some help there, too. So it's perhaps not coincidental that some of Shannon's math can be put to use at the race track, the blackjack table, and on Wall Street. One of the first to apply Kelly's formula was a young physics grad student, Edward Thorp, who used it in conjunction with a card counting system he developed for blackjack. (Thorp later wrote a book on card counting called *Beat the Dealer* that's now considered a classic among blackjack aficionados. Later on he ran a hugely successful quant fund, Princeton-Newport Partners that eventually got tangled up in Rudolph Giuliani's pursuit of Michael Milken in the 1980s. But that's another story.)

How does the Kelly formula work, you ask? It's pretty simple. The formula says that the optimal wager size is determined according to the following fraction:

Edge/Odds

The denominator, odds, is the public odds posted on the track's tote board. The numerator, edge, is the **amount you stand to profit, on average, if you could make this same bet over and over and over.** Let's go back to the horse racing hypothetical in the first paragraph, and see how it works. The posted odds are 5 to 1. So we'll put a 5 in the denominator. But recall that you believe the true odds are 1 in 3, not 5 to 1. If you bet $1,000, then, you'll have a 33% chance of winning $6,000 ($5,000 plus your original $1,000 wager), or $2,000, on average. On a $1,000 bet, your profit is thus $1,000. That's your *edge*. For the formula's purposes, the $1,000 becomes a 1.

So according to Kelly, the edge is 1 and the odds are 5. Plug in the numbers and you get 1/5. **You should bet 20% of your bankroll.**

A few comments are in order. First off, this **only works in instances when you have a true, material information advantage.** If you don't, your edge is zero, so you shouldn't bet. Second, the only time the formula will tell you to bet all you've got is when you're absolutely, positively sure you'll win. In the real world, that hardly ever happens. Thus Kelly prevents bettors avoid being wiped out completely, so that they'll have capital to put to work when the next opportunity rolls around. This is no small advantage. Other capital allocation strategies gamblers use, most notably "martingale," in which the player doubles down after a losing bet in order to quickly recoup losses, a can be quick trips to bankruptcy. Finally, using Kelly on a series of bets is the most efficient way to compound your winnings. Models show that, say, a more aggressive "Kelly times 2" strategy actually leads to *lower* long-term returns.

Kelly's advantages shows the results of various strategies for betting on a series of hypothetical coin flips where the bettor has a 55% chance of winning.

It scarcely needs to be added, of course, that **the economics profession has roughly zero use for all this.** First off, the formula was developed by a mathematician, not an economist, which naturally makes economists skeptical. Second, the notion that an investor can have a true edge is anathema to the efficient-market dogma that still dominates most economics departments. Paul Samuelson is particularly scornful of Kelly (or "g," as it's referred to in economics circles), calling it a "fallacy."

The Kelly criterion's virtual absence in economics and M.B.A. curricula explains why the formula is not well known on Wall Street. It shouldn't be. It is hard enough to find ideas where an information advantage is even possible. When those do occur, **investors can use all the help they can get** in figuring out how much capital to apply. Kelly may not be as ideally suited to Wall Street as it is to blackjack, but it sure seems like a good place to start.

Student: Do you use the *Kelly Formula*?

JG: It (investing in stocks & options) is <u>not as clear</u> as the *Kelly Formula*. What are the odds of doing that. You are not taking bets where you lose it all; it is not as clear as the *Kelly Formula*. There is not an <u>optimum way</u> to bet on stocks.

A. It is uncertain and
B. You don't lose all the money you put up.

Student: What if you have an inkling of *IBM* moving quickly to $90.

JG: If I put on a bull spread…. The opposite of a bull spread is a put spread. The puts at $60/$55 by definition has to be at $2.50 because they (call and put prices) have to add up. There is still a chance that within a year the spread will still be worth something. Sometimes in the spreads, a shorter expiration is better than a longer expiration. If it is expiring . You have a whole year for the stock to fall. There is an interesting dynamic in spread. A lot of this stuff has been learned the hard way. *(Study the time decay of options).*

<u>*Moody Corporation* Example</u>

Student: Could you go over *Moody's* Example?

JG: This took a long time to learn but hopefully it won't take a long time to teach. Let us say, that when *Buffett* bought *Coke* it was growing at 12% per year and *Moody's* was growing at 12% and they both are earning $1 per share. For *Coke* to continue to grow at 12% it has to take 20 cents for every dollar and plow it back into its business for working capital, etc. *Coke* uses the 20 cents of the dollar they earn to continue to

grow at 12% so the remainder is 80 cents for other uses. *Moody's* meanwhile needs $0 to grow 12%. So what we said was that a $1 from *Coke* is worth 80 cents compared to $1 for *Moody's*. *Moody's* earnings are worth 25% more (80 cents to 100 cents or 20 cents/80 cents for 25%).

The dollar of *Moody's* earnings was worth 20 cents more (20/80 cents = 25%) $1 vs. $0.80 for *Coke*. Or 20 cents/80 cents, so Moody's earnings is worth 25% more. *Coke* will eventually grow 5% a year, so they don't need to invest as much to grow at 5%. So 8 years from now they only have to invest 10 cents per year to grow at 5%. So *Moody's* won't be worth 25% more forever, it might be worth 10% more. So <u>on average</u> a dollar of *Moody's* earnings is worth 15% more than *Coke*'s earnings of $1. *Moody's* earnings would be worth 10% more not 25% over time. I assume both grow at 5% forever but *Coke* puts in 10 cents per dollar while *Moody's* puts in $0.

Student: What about the reinvestment rate? The payout rate?

JG: I would say these 80 cents will be growing at a certain rate. Yes, to grow you need more working capital. In that particular business (MCO) you don't need more working capital, but with *Coke* I assumed that you need more working capital to grow. Now you are talking about returns on working capital of over 100% for *Moody's*. Yes, you have to lay out for working capital. We looked at history to determine reinvestment rates for *Coke* and *Moody's*.

Look let us say interest rates were the same so apples to apples we can pay 15% more for that. *Coke* moved to some price and now it has come down, but let's ignore the crazy prices that it traded at in the late 1990's. But the next two or three years, the stock (*Moody's*) tripled. We are comparing the two because we thought we could get a triple in two or three years. But don't forget, remember the truck driving thought the huge gap. Don't try to fine tune it. If you have to fine tune it, then the investment thesis is a little too close.

Forget about the crazy price *Coke* traded at—65 times earnings in 1998.

Go look at *Duff & Phelps'* change in tangible assets as they grew. There was no change, they spent every nickel on stock buy backs. They didn't need any capital to grow. They were very similar to *Moody's*. This is the best business you will ever going to see.

I gave out that one first (the *Moody's* Example) so you have something to compare it to. Almost all other businesses will be <u>inferior</u>. How good a business is it relative to *Moody's?*

We were looking at *American Express* recently and so we were comparing it to *Coke*. It is a lot closer to *Coke* than *Moody's*. It is a nice way to compare. It is nice to have that type of metric.

<u>Buffett's Advice to Students</u>

JG: I just want to play one thing……. A video of *Warren Buffett* speaking to business students……

***Buffett* Lecture**: *Maugham* at *Salomon Brothers* never once spoke about salary. He worked 18 hours days for months and months. He showed uncanny judgment on what to bring up to me. I often use this illustration in my talks to classes. If one of you could pick one of your classmates in order to share in their earnings for the rest of their life. And you could pick anyone you wanted and you would get 10% of their earnings of that individual for the rest of their life, what would you think about in terms of whom you picked? Would you think about the person with the highest IQ? The highest grades? Probably not. **You are thinking about a whole bunch of qualities of character.**

Every one of those qualities is <u>attainable</u>. You are not thinking about who can throw a football 65 yards. *Ben Graham* wrote down all the qualities that he admired in other people and the qualities that he found objectionable. Those qualities are ones that you can chose. **The chains of habit are too light to be felt until they are too heavy to be broken.** The right habits that you would want to obtain of someone you would want to own 10% of their earnings. The people I see who function well are the ones who don't have the biggest motors but the <u>most efficient motors</u>. It is those qualities of character that are most important. What on the left

hand side of this list (good qualities) I can't achieve myself and what on the right hand side of the list I can't get rid of myself (bad qualities). In the end decide that you will be the one you would buy 10% of.

Think how few people actually keep that in mind—think of those in the business world. I think you can all be very special. You all have the ability and the intelligence. You can decide to be very successful in very many ways by trying always to do the right thing. I enjoyed teaching you.

APPLAUSE.

END

Appendix

Books by *Robert Haugen*:

The three books about the behavior of the stock market that he wrote were:

The Inefficient Stock Market. What Pays Off and Why. This focused on expected-return factor models, which, in part, attempt to exploit error-driven volatility. The positive payoff to cheapness results from the market's overreaction to success and failure. The positive payoff to intermediate-term momentum results from the market's under reaction to positive and negative surprises in individual earnings reports.

The New Finance focused on the market's major systemic mistake. In failing to appreciate the strength of competitive forces in a market economy, it over-estimates the length of competitive forces in a market economy, it over-estimates the length of the short run. In doing so, it overreacts to records of success and failure for individual companies, driving the prices of successful firms too high and their unsuccessful counterparts too low.

The market doesn't under react to a unique event.

Beast on Wall Street focuses on stock volatility. It contends that stock volatility has three comp0onents. Rational and unbiased responses of stock market prices to real, economic events are the source of event-driven volatility.

End

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Magic Formula of Little Book Just May Work November 9, 2005; Page C1

As hard as it is to envision, hedge-fund titans and other masters of the universe soon will be tucking themselves into bed with a thin tome bearing a cutesy title: "The Little Book That Beats the Market."

Here's why: The author is Joel Greenblatt, a former hedge-fund manager. His first investment guide, published in 1997, also sported a hokey title, "You Can Be a Stock Market Genius (Even If You're Not Too Smart)," and sold about 38,000 hardcover and soft cover copies.

Not bad as first books go, but it also became a cult hit in the insular world of hedge funds, passed like samizdat from manager to manager. A book of war stories and case studies written clearly and laced with jokes, it had two profound insights, say hedge-fund managers who have pressed the book on me.

One was that there are secret hiding places in the stock market, like spin-offs and restructurings, where bargains tend to lurk. The other was there wasn't any compelling reason to have a giant portfolio of dozens of stocks when a well-designed, concentrated portfolio could accomplish the same goal of achieving high returns without adding risk.

"His book on investing is by far the most valuable thing I have read," says David Einhorn, who manages a large, successful hedge fund, Greenlight Capital.

But hedge-fund managers "were not quite the underprivileged group I was shooting for when I wrote it," he says. So for his second book, Mr. Greenblatt says he wanted to write an even more basic and fundamental book on investing that would appeal beyond Wall Street. Think Benjamin Graham does Borscht Belt.

Mr. Greenblatt, 47 years old, says his goal was to provide advice that, while sophisticated, could be understood and followed by his five children, ages 6 to 15. They are in luck. His soon-to-be-released "Little Book" is one of the best, clearest guides to value investing out there. I have some minor quibbles, but in a world where individual-investor advice is dominated by jargon-filled short-termism on the one hand and oversimplified throw-up-your-hands indexing on the other, Mr. Greenblatt's approach is valuable.

It is so simple and cute that an investor with a little bit of knowledge might mistakenly dismiss it. Mr. Greenblatt titles his investment approach a "magic formula." His tongue is in his cheek, but not entirely. He writes as if he were J.M. Barrie spinning a Peter Pan-esque fairy tale, but with the fervor of a true believer:

"You have to take the time to understand the story, and most important, you have to actually believe that the story is true. In fact, the story concludes with a magic formula that can make you rich over time. I kid you not."

What is the magic formula? Invest in good companies when they are cheap. As Mr. Greenblatt might say: See? We told you it sounded obvious. Yeah, so what's "good"? And what's "cheap"?

Good companies earn high returns on their investments, he explains, while cheap companies sport share prices that are low (based on past earnings). His proxies for these criteria are return on capital (operating profit as a percentage of net working capital and net fixed assets) and earnings yield (pretax operating earnings compared with enterprise value, which is the market value plus the net debt). To his credit, however, Mr. Greenblatt explains all that parenthetical jargon in terms that shouldn't insult his peers but that will ring a bell for the unschooled masses.

To make things simpler still, his free Web site, www.magicformulainvesting.com, screens companies using his criteria. He advises individual investors to buy a basket of top stocks and turn them over on a strict schedule, depending on how they perform. (For maximum tax advantage, sell losers just before a year's up and winners just after a year.)

It sounds too easy. But in fact, his approach is difficult not because it is hard to understand, but because it requires patience and faith that you are right when the market is saying you're wrong.

This is based on Warren Buffett's investment principles. But they bear repeating. Even a die-hard value investor like Mr. Greenblatt says he didn't realize that trying to find cheap, good companies, rather than just cheap ones, was so important until the 1990s. While Mr. Graham, Mr. Buffett's mentor, was looking for starkly cheap companies, Mr. Buffett wants only the great ones.

"I didn't get Buffettized until the early 1990s," says Mr. Greenblatt. "I wish it happened earlier."

Looked at retroactively, the returns of the "magic formula" beat the market handily. From 1988 through 2004, according to Mr. Greenblatt's book, the high-return/low-price stocks of the largest 1,000 companies had returns of 22.9% annually, compared with 12.4% for the S&P 500.

The most convincing part of Mr. Greenblatt's argument is that when 2,500 companies are ranked for price and returns (based on the formula), the top 10% outperformed the second 10%, which outperformed the third 10% and so on. "The darn thing works in order," he says.

There are some limitations to the approach. It seems prone to tossing up stocks whose high returns and growth may be in the past. Magic-formula stocks with more than $1 billion in stock-market value include lots of fast-growing specialty retailers and niche pharmaceutical companies. Some of these will flame out.

That's why Mr. Greenblatt argues that novice investors buy at least 20 or 30 of them. For himself, he buys a smaller number that he can know deeply. But that requires something not easily taught in a book: good instincts and judgment to distinguish true cheap gems from one-hit wonders.

Though he always was a value investor, his hedge-fund firm, Gotham Capital, wasn't always run on his magic formula, especially in the early years, when he tended toward complex arbitrage. He started Gotham in 1985 and ran it for outside investors for 10 years, achieving compounded annual returns, before fees but after expenses, of 50%. He started with $7 million, mostly raised through junk-bond king Michael Milken. After five years, he returned half the outside capital. He finished with more than $350 million and returned all the remaining outside capital.

These days, he spends his time teaching at Columbia Business School and helping run a Web site for pros, the Value Investors Club. His wealth is mostly tied up in Gotham Capital, which manages $1.6 billion, including some outside money in a fund of hedge funds he started a few years back.

His home cooking isn't just good enough for Mr. Greenblatt. He's got his kids eating it, too. His eldest son is doing well following the book's advice. A daughter, at it for two months, is having a rougher time. "I'm not sure if she didn't have me as her daddy she'd be hanging in there," he says.

Joel Greenblatt Class for Special Situations Investing

Wednesday, March 23, 2005

Brian Gains of Springhouse Capital

Case Study of Investing in a "Dying" Industry

Italics: Transcript by John Chew

Joel Greenblatt Introduction:

Our guest will not sing, but he is really smart and he runs a fund called Springhouse Capital. He started in 2002.

I hope you took a look at BBI, MOVI and Hollywood.

Brian Gains, Founder of Springhouse Capital

My title is: **Making money in a "dying" industry**

I will take you through how I came up with the idea, the work I did and then a couple of different case studies, which I think will be pretty interesting along the way--the facts or the things that were going on--so you can experience what I was thinking or the thought process I was trying to go through.

As you know from your studies of the stock market, there are often hated industries where you want to go if you have more of a value bent. Some of the places I go to find investment ideas.

Idea Generation

- 52 week low lists
- High short interest

- Investors' Business Daily negative momentum
- Spin-offs
- Distressed Debt: Highest yielding areas

Everyone makes fun of Investors' Business Daily but you can go in there and find negative momentum industries where everyone hates the industry(s). You can see what people hate. Start with some industries that may give you some ideas. I am sure Joel has spoken about spin-offs. You can see what is in the distressed area. Obviously, if debt is trading at 50 to 60 cents on the dollar, people don't like it--that would be a good place to start. This leads you to a place to look for ideas.

- Challenge is figuring out if the hate is logical (there are reasons why businesses are hated.)
- Companies fall in one of four categories:

  -- Unsustainable business

  - Avoid

  --Bad balance sheet (Cellular in 2002)

  - Analyze the capital structure
  - Often times akin to an option bet and understanding cap structure determines the maturity of the option.

  --Cyclical (Commodities in down cycle)

  - Normalized earnings

  --Dying businesses (Photography, Photocopying, etc.)

  - How long will it last?
  - Is it really dead?
  - What are the people on the inside doing?
  - Where is the cash going?

The challenge is figuring out if there is a logical reason(s) a business is hated. I like to think that things fall into four different categories:

1. Unsustainable Business:

   - AVOID

   An unsustainable business is like an eToys.com, Pets.com. Something that collapses in 2001-2002 and you are looking at it. You can say it is really cheap; the stock used to be at $50 and it is at $2 now. In reality, it is not a business--no matter how much cash it has or the capital structure, eventually it wasn't going to work. So that is one example.

Student: General Motors (GM)?

BRIAN GAINS: GM's business is probably sustainable. Sure it has problems with its debt structure, but it makes cars that people need.

2. Bad Balance Sheet: (Cellular in 2002)

   - Analyze the capital structure
   - Often times akin to an option bet and understanding cap structure determines the maturity of the option

Then I put Bad Balance Sheet, which I think Cellular companies in 2002 are a prime example. The important thing there is analyzing the capital structure. Everyone knew that cellular phones would be around, but it is a question of they had too much debt on the balance sheet. Sprint and all these different companies, if they could pay the debt, they clearly could make money. They way to look at it is to analyze the capital structure. You literally have an option bet. And you have to figure out, "Are the banks going to take this under?" And if you can survive past that point--if the debt is due in five years, which is long enough for the company to survive--you probably have a great option bet.

3. Cyclical Business (Commodities in a down cycle)

    - Normalized Earnings

Richard Pzena *is the king of normalizing earnings for cyclical businesses. These businesses have a reason to exist, but you have to look for the middle point. You have all been through that.*

4. Dying businesses (Photography, Photocopying, etc.)

    - How long will it last?
    - Is it really dead?
    - What are the people on the inside doing?
    - Where is the cash going?

I will talk about the last category, the allegedly dying business. Maybe it is dying; maybe it is not. And some people would say non-digital photography, photocopying, fax machines. I will talk about video rental. And the key questions are: "Is it really dead?" How long it is going to last? Number three is key: ***follow the insiders to see if they have confidence in their business.*** *That is a great key to see if this thing has some legs left in it. Also key is where is the cash going?* ***Because when you are dealing with these stocks, it is less about a multiple and more about how much cash they are going to generate and what are they doing with the cash.*** *It is really important when you are looking at the return to think about the next two years, they are going to generate $2 dollars a share in cash and if you are buying the stock at $8, well that is pretty good. You still have to figure out how long that will last. But following the cash is key.*

Analyzing the "dying" business

- Process involves going through all the negative arguments and constructing a thesis as to the merit of each. *(Thesis vs. Antithesis)*

    --Most time intensive activity

- Some things to accept before attempting this at home:

    --Your behavior and gut instinct probably won't support your thesis
    --People will say you are nuts
    --Your friends at other funds will tell you they are short the stock and you are nuts.
    --At times you will come to believe they are right and you are nuts.

The way I tend to look at things is that I pick up an industry and I go through all the reasons why people hate it. List all of the things that are really, really bad about it. Then try to find a reason. OK, is it as bad as they think? Is there a reason why it is not as bad as they think?

So right now someone pointed out General Motors (GM). You can see GM down and then you look at all the auto parts guys and list all the negative thoughts on the industry. Then construct a thesis as to why the business is not as bad as people think because of ABC.

Your behavior and gut instinct are probably not going to support what you are doing. If you are looking at video rentals, you are probably saying, "I don't rent videos anymore." The one key to remember is that you are not the target audience. You are not like most of America. For one thing, you are younger and more

urban. A lot of things you do will be more technologically advanced. So if it is faxing or renting videos you will say, I don't do that anymore so forget that industry. Your friends will say you are crazy.

What's Bad about Video Rental?

- Sell-Through
  --Long-term trend?
  --Pricing continuing downward?

- VOD
  --45 day window
  --Additional features/24 hour limit/HD and selection constrained

- Netflix/Home delivery
  --Niche product
  --Instant Gratification

- Digital Distribution
  --Computer watching
  --Time to download relative to length of movie
  --Quality/HD

- Piracy
- TIVO
- Ever expanding entertainment options.

Brian Gains: So what is bad about the rental business? Why wouldn't you like the Video Rental Business?

Students: Netflix, Wal-Mart selling DVDs. VOD.

Brian Gains: Wal-Mart sells cheap DVDs, so people don't need to rent.

One of the things I would add is file sharing, piracy and digital distribution. I would talk to different people and ask what is not good about the business. And then sell through. Is the selling of cheap DVDs--$6 for two DVDs—going to continue. Is this a long- term trend? Can the price continue downward? Wal-Mart is selling DVD's at a loss to drive traffic. The studios love this. What other business has the distributors of their product intentionally selling the product at a loss?

Anyone have any thoughts?

So, I guess the way to look at this is that this is a risk. So we can accept that we don't know what is going to happen in pricing. We know that the studios currently make a lot of money off of DVDs and you can establish that. As to pricing it is very hard to predict. That is going to be one of those variables where you just don't know--is pricing going to steadily creep down? You know these guys (studios) don't want to cut the prices. If the DVD are growing every year, they have no incentive to cut the prices. It costs about $2 to make a DVD and they are selling new releases for $17 to $18. ***They (the studios) have no incentive to cut prices.*** *Research will show you that Wal-Mart is selling new DVDs at a loss. So Wal-Mart is doing the studios a favor. How often do you see a distributor of your product sell at a loss? It is infrequent. We know the studios are pretty happy. They have no desire at this point to cut prices. So logically, the studios don't have an incentive to lower prices.*

VOD: It is important to understand how new releases enter the theatres and they are there for two or three months, then they sit on the sidelines. Then they go to DVD. 45 days. New releases are important for video stores. 80% of their rentals are new releases. The studios don't want it to go to VOD. They make $15 every time they sell a DVD. THIS IS CRITICAL because someone can say VOD will destroy the video rental stores. You can make a case that the studios make so much money off of selling(DVDs) that they will not collapse the window of time for the video stores to sell the DVDs before the releases go to VOD.

You can't say that it (VOD eliminating DVDs and videos) isn't going to happen. ***It is a question of how quickly people change their habits.*** *2% of all music sold is digitally distributed. So 98% of all music sold is through CDs.*
I would say eventually it is going to happen, it is just how long will it take.

The other thing about VOD, you need to have digital cable so you are talking about a smaller portion of the country. You need to not have (or not care about) additional features like extra scenes. Studios are moving toward high definition DVD, so you have another reason not to buy VOD.

Netflix home delivery. Netflix has about 2.6 million customers. Blockbuster has 750,000 customers. It is a different business. It has Premier customers--people who want more category depth. A lot of niche films. These aren't the same customers.

Digital distribution takes too long to download. In reality it takes time too much time for the average consumer.

TIVO came out, but people still want to watch movies. People want to watch new movies. A truism no matter how distributed. People go to movies because of the experience.
Ever expanding entertainment options.

What's Good about Video Rental?

- Good cash flows
- Good returns on new investments
- 45 day window

  --Economics of DVD

- More stable than people think

  --Note that most businesses will last longer than people think

- Mom and Pop's still hold 40% share

- What else can they do with their infrastructure?

  --Retail/Video Games/Used

Brian Gains: What is good about the video rental business?

Student: The cash flows are good.

Brian Gains: The cash flows are great. They have a great retail box. Video stores can sell other stuff.
The returns on new video stores are absolutely amazing. Because it doesn't cost much (to set up a store with inventory). It is $150,000 to open a Blockbuster. The beauty of it, is that if it doesn't work, then you can move it eight miles down the road and try again. You can move the business easily. The returns are high and you can afford to screw up a little bit. The 45-day window is critical for video stores (allowing Video Stores to sell DVDs). This is more stable than people think. ***A lot of businesses last a lot longer than people think.*** *For another 20 or 30 years people will still be buying videos. People are still buying phonographic records and there is a replacement for records.*

There still is a 30% to 40% share of the market in mom & pop stores. It is kind of evil sounding but it is capitalism. If the small business owners still have share, as a chain like Blockbuster, you can go in and you can take them out. So Blockbuster can still gain share.

What else can they do with the infrastructure?

So that is where a lot of the research is done. A lot of time talking to people to figure out how much of this is real.

Macro to micro

Simplest place to look to find all these factors rolled up into one easy measure of video rental performance is the same store sales of the respective stores.

--Mitigating factors that will disrupt this analysis

OK, so how do I make money off of this? Before it was all-theoretical; before you were kind of thinking about the industry.

For Video rental performance, the same store sales (SSS) statistic is key for forming how much of this is coming to life. You form all these theses. And then try to find out where it will show itself--in the video guise of same-store-sales. But the one thing to remember in the video business there are many mitigating factors that will affect SSS as any business (weather, feature presentation schedules, political events, days in the quarter). In this case why SSS may not be indicative of the business. Ans: Blockbuster releases drive customers to stores--hit driven product/sales causes lumpy sales. ***People look at comps and say that comps are down 3% without adjusting for what effects the change.*** *Weather can affect sales. 12 weekends in a quarter--one bad weekend can have an affect.*

I would also say, children's movies--they sell they don't rent. Kids have a propensity to watch the same movies over and over again. It would not be normal behavior for adults.

It is the type of movie that the store rents. Sometimes political events may cause people to watch more TV then rent movies.

The Blockbuster (BBI), Hollywood (HLYW), MOVI are all taking share from the mom & pop (stores), then it will make it look like the business is worse, but they are taking more share. Their business is surviving, because they opened a Blockbuster (store) but the local video store shut down. So everyone who went to that local store will go to the Blockbuster.

Now we will go through what I went through with ***Hollywood Video (HLYW)****. Blockbuster has 6,000 stores while Hollywood has 2,000 stores but in the same kind of areas though more West coast oriented. Consider it identical.*

The (stock) market had a great 2003 and I am sitting around in Dec 2003 and there is nothing too interesting going on. So I am screening different stuff. So I say OK, everyone hates the video rental guys. So I do all that first stuff we talked about. Then I go to an investor presentation. I go to see Hollywood Video. At that point I knew nothing other than I had some arguments as to why this industry could exist. Let's look specifically at Hollywood Video.

What you will see in the Hollywood story is that they are opening up Game Crazies, which are like a game store boutique. They are getting great returns. The CEO is also saying he is going to open 150 new stores a year and getting great returns. So you say, "Hey, maybe the business doesn't last so long, but he (CEO of HLWD) seems to think so. He is still opening stores. He is mildly positive.

The CEO owns 10% of the stock and this will come into play a lot in this case. Because we went through all the arguments and we can say, I believe him and I can get pretty comfortable, but what is someone on the inside saying? In this case, he (CEO) owns 10% of the stock and he is the one making the decisions to build the new video stores. That is important to remember, because the guy who owns 10% is saying he still wants to build these things. Maybe he is dumb, maybe he is not, but you have to give him more credit for knowing more about the business than you do because he is living it (the business) day to day; he is seeing the numbers; he is running all the different tests that say to him--this is still kind of working. And it is his money and he will probably have more money at stake than you probably will.

So really, really important in this case and in a lot of businesses that are dying to see what insiders are doing. If the insiders are bailing out and you think the business is dying--it probably is.

Hollywood Video

Began looking at it late 2003 after attending an investor presentation
--High returns on Game Crazy (HLYW's version of Gamestop or Electronics Boutique) and new Video Stores.
--Mom/Pop still represents 40% of industry
--CEO owns 10% of the stock

HLYW is at $13 to $14 bucks. So this is the news release on Jan 6th.

Jan 6 HLYW News Release

HOLLYWOOD ENTERTAINMENT ANNOUNCES 2003 FOURTH QUARTER
SAME STORE SALES

PORTLAND, OREGON - January 6, 2004 - Hollywood Entertainment Corporation (Nasdaq: HLYW), owner and operator of more than 1,900 Hollywood Video superstores and approximately 600 Game Crazy video game specialty outlets, today announced that same store sales for the fourth quarter increased 12%. Contribution to same store sales from rental product revenue was negative 2% while contribution from merchandise sales was 14%.

As a result, the Company expects net income for the quarter to be approximately $0.36 per diluted share and expects adjusted net income for the full year to be approximately $1.40 per diluted share.

On January 5, 2004, the Company prepaid the $20 million 2006 amortization of its senior bank credit facility. During the fourth quarter, the

Company also used $16 million to repurchase shares of its common stock.

The Company expects to report its fourth quarter and full-year 2003 results of operations on Thursday, January 29, 2004.

So what strikes you? This business could be dead. People are saying this business is gone. Don't touch it. So what strikes you about this news release? They have great merchandise sales (Merch. Sales up 14%). They are buying back their stock, it is kicking off cash and they are prepaying debt. HLYW is buying back $16 million of stock. Buying back expensive stock could be a bad thing.

They are still spending $90 million to open stores. The CEO's interest lies in the stock, not his salary. He stopped in October 2003 his 10B-501 sales--a positive signal.

I go right to the negative 2% comps. Everyone says this business is dead. And we talked about the mitigating factors of weather and all this different stuff that can take your numbers up 5% or down 5%. His comps are only down 2%. Does it look like something that is going to fall off the face of the earth? It is not comping down much in the grand scheme of things. There are businesses that comp down 5%, 7%, 8% and people still think that those are great businesses.

The stock is at $14 and for me I see he (CEO of HLYW) is looking to make $1.40 and it is trading at 10 times next year's earnings. So that is Jan 6th, 2004

So now go to Jan 29th, 2004 when they come out with full year results.

HOLLYWOOD ENTERTAINMENT CORPORATION REPORTS
FOURTH QUARTER AND FULL YEAR 2003 RESULTS

PORTLAND, OREGON - January 29, 2004 -

Hollywood Video:

Fourth quarter revenue and same store sales for Hollywood Video, excluding Game Crazy, were $388 million and negative 1% respectively…… Fourth quarter 2003 operating income was $53 million.

Full year 2003 revenue and same store sales for Hollywood Video were $1.5 billion and 3% respectively. For the full year, there is no material difference between "rental comps" and Hollywood Video comps. Full year 2003 operating income was $205 million. During 2003, Hollywood Video opened 102 new stores, ending the year with 1,920 stores.

Game Crazy:

Full year 2003 revenue and same store sales for Game Crazy were $180 million and 15% respectively. Full year 2003 operating loss was $20 million (after the allocation of approximately $2 million of general and administrative expenses from Hollywood Video to Game Crazy for information services support, treasury and accounting functions, and other general and administrative services). During 2003, Game Crazy opened 319 new stores, ending the year with 595 stores.

….. Commenting on the Company's performance, Mark Wattles, the Company's Founder, Chairman and CEO said, "While I was disappointed by Game Crazy's performance in the first nine months of the year and by Hollywood Video's performance in the second half of the year, the Company still managed to grow total revenue by 13% and adjusted net income by 16%. To put that in perspective, we generated 3% same store sales in a mature industry, while building Game Crazy, which was

essentially a retail start-up, into one of the leading game retailers in the country."

First Quarter 2004 Guidance

Hollywood Video:
Although business has been trending weaker than expected quarter-to-date, Hollywood Video is maintaining the guidance it provided on December 1, 2003 of mid-single-digit negative same store sales for the first quarter of 2004.

Game Crazy:
Same store sales for Game Crazy are expected to range from 12% to 14% for the first quarter of 2004.

Brian Gains: So negative 1% comps for the fourth qtr. but for the full year in 2003, the video business still comped up 3% despite everyone thinking the business is dead. It is still comping up 3%. He opened 102 new stores in 2003.

To put this into context, that when you start looking at multiples of operating income. What is key in Crazy? What strikes me there is that he lost $20 million in Game Crazy, which is a start-up. It is a growing business, comping up a lot; he is allowed to lose money. At some point that--$20 million loss (in Game Crazy) at some point will turn positive. He can stop opening new immature stores. He also has a lot of new stores with inventory in them. Even if it is a disaster, he can liquidate the inventory. So he is losing negative $20 million. When you are looking at the poor results for Hollywood, you must remember he has one division, which he can separate. He can do all sorts of different things with where he is losing $20 million. This division has inventory value. So you have negative $20 million, value of inventory and plus it is probably going positive.

In a lot of these dying businesses, you need to look at another area where they are making money. There is a reason why this could get better.

Second half of the press release.

Full Year 2004 Guidance

Hollywood Video: Assuming a neutral comparison of aggregate home video new releases during the nine months following the first quarter of 2004, and adjusting for the volatility and weakness seen over the last several months, Hollywood Video quarterly same store sales are expected to range from negative 2% to positive 2% for the last three quarters of the year. Hollywood Video is maintaining the guidance it provided on December 1, 2003 of negative 1% to negative 2% same
store sales for the full year 2004.

In addition, Hollywood Video plans to open 150 new stores in 2004, weighted toward the second half of the year.

Game Crazy: Based on the limited information available regarding upcoming software releases and other factors affecting the game industry, same store sales for Game Crazy are expected to average mid-to-high single-digit for the nine months following the first quarter and the full year 2004.

Hollywood Entertainment Corporation:
Based on the above assumptions for Hollywood Video and Game Crazy same store sales, the planned opening of 150 new Hollywood Video stores and 150 new Game Crazy stores, and the recent volatility and weakness experienced

by Hollywood Video, the Company believes 2004 net income per diluted share could be lower than 2003 adjusted net income per diluted share, but does not expect it to be less than $1.33 per diluted share. In addition to operating Hollywood Video and Game Crazy, the Company is evaluating other long-term strategic initiatives. Should the Company choose to pursue one or more of these initiatives during 2004, it is likely that earnings would be negatively impacted by a material amount. Assuming that no significant new strategic initiatives are implemented in 2004, the Company expects total spending for growth, including inventory and store opening expenses associated with new Hollywood Video stores and Game Crazy stores, to be approximately $90 million.

Student: The press release seems fluffy and uncertain

Brian Gains: There are a lot of things that the CEO can't predict.

He is still not making money in Game Crazy but he is comping up 12% to 14% (in that segment), so eventually he will make money. And the reason he is not making money is because he is opening a lot of new stores. When you open a new video store, no one shows up. It takes time to change people's patterns. It takes time for that business to mature. He is still growing Game Crazy. A lot of this relates to his owning more than 10% of the stock. What strikes me is that he is still opening video stores. He still thinks the returns are good. If you told someone who thought the business is dead that the CEO is till opening 150 new stores, they would reply that he is nuts. He owns 10% of the stock. He has more of an incentive than I do.

The CEO talks about developing a strategic initiative to develop a Netflix-like product.

The CEO knows the business better day in and day out than I do. He has the best data. Whether he is using it well is another question.

Student question: How do you assess the CEO?

Brian Gains: Look at his track record. He has been smart about his ability to grow his business. When did he buy stocks and when did he sell his stock. Is he smart with his stock? A CEO, like this one, who has been called "shady" can mean self-interested. You will hear people be effected by their emotions.

He was thinking about spending $150 million to compete against Netflix. He will do what is right.
He is going to do something that will have a return. Maybe he thinks the return is 30% pre-tax. Maybe he thinks it is 70% or maybe 10%. I am just saying he has these parameters set and let's hope that he hits them.

Now it is Feb. March and I am starting to buy the stock. The stock is at $11.50 to $11.50 and it starts to trend down. Here are two years trailing:

HLWD	$mm
Basic OS	$60.3
Price	$10
MC	603
Cash	145.0
Debt	$350.9
NOL	73
EV	735.9
Current A	
Retail Inv/	
Net PPE	
Current L	
Inv Cap	449.8
ROIC	41.7%
EV/Op Inc	3.9x
EV/(E-MCX	**3.6x**

	FYE	**FYE**
	12/30/2002	12/30/2003
Rental	1,324.0	1,386.5
Merchandise	166.0	295.9
Total Rev	1,490.1	1,682.4
Rental COGS	447.3	441.0
Rental GP	39.8	72.3
Rental GM	24.0%	24.4%
Total COGS	573.5	664.6
Total GP	916.5	1,017.8
Total GM	61.5%	60.5%
Operating Ex	647.8	724.2
G&A	89.6	106.2
Opera. Ex as %	43.5%	43.0%
Op Inc	179.2	187.4
Margin	12.0%	11.1%
EBITDA	244.3	252.5

What strikes you here? *Really high ROIC, EBIT, good operating margin and it is really cheap. So I have operating income and I need to set a maintenance capex level. So what does it cost to keep one of these video stores going? If all hell breaks loose, nothing is good, he is not spending any money, he stops Game Crazy; he stops building new stores. What is it going to cost him to keep this business going? And 3.6 multiple is cheap and someone pointed out the Returns on Capital--it is worth noting that when you do ROC--there is a company-wide ROC and taking operating income and dividing by net working capital, his PPE (Property, Plant and Equipment) and in this case his rental inventory. And then there is the incremental returns on capital (ROC) on his new stores. And the incremental ROC on his new stores may be higher because he doesn't have SG&A--it is just incremental. Here on the whole company he is doing a company-wide pre-tax ROC of greater than 42%. It is still fantastic.*

Student: What is the type of the lease? Capital or operating?

Brian Gains: This is an operating lease. They have two or three -year leases so it is not a big factor.

Student: How did you calculate Return on Invested Capital (ROIC)?

Brian Gains: So all I am doing is taking net working capital and net PPE. In this case (rental) inventory as well. I did not capitalize the leases because they are only for three years. I assumed they could break the lease if their business is not working.

Taking that as operating cost. Net of all rental cost.

Student: If the stores are having to constantly replenish inventory--is that capitalized?

Brian Gains: No. I treat it as an expense--an operating expense.

One thing you wouldn't have known--HLYW had an NOL asset. It has a net operating loss (NOL) of $73 million so that is an asset. He will realize it all pretty quickly. That is an asset. It is important to know whether they are paying cash taxes or not. Operating income is running 187 million dollars so he will realize all of his NOL right away. ***With these companies with a lot of cash, it is important to understand their tax situation. Are they paying taxes in cash or not.*** *When you are looking at multiples, you would deduct the NOL from Enterprise Value (EV).*

Another thing to note--despite everyone saying the business is dying-- you went from 244 stores to 252; operating income was up as well. Another thing I noted was that his rental gross profit--the part of the business everyone hates--well, you can say merchandise is growing 12%, that is not a great a business because he has lower gross margins--he took rental gross profit from $876 to $945 and he grew the rental gross margin. To me this doesn't look so awful. I am actually seeing a business that is trending up. And getting it for 3.6x EV/EBITDA-MCX or for a 28% pre-tax return.

So at this point I am excited. I am buying the stock here between $10 and $11.

How bad is it?

Video Revenue	$1,500
Video SSS	1%
Video Rental	-2%
Video Op Inc.	$205
New Video Stores	102
Ending	1,920
Game Crazy Rev	$180
Game Crazy	15.0%
Op Inc	($20)
New Stores	319
EOY	595

- Video Rental?
- Game Crazy?
- Maintenance Capex

How bad is it? He has Game Crazy where he is getting good returns and he has low MCX and everything above is a summary.

HLYW Conclusion

Here is my final work (below). I said how many different ways can this turn out OK for me?

The normal case--what the CEO is telling you he will do in 2004--$230 in EBITDA. His capex is: he has 2,000 stores and $10,000 per store so $20 million plus he has corporate capex. So let's say he just goes MCX then he has interest, so I calculate Free Cash Flow (FCF) tax adjusted is--he has a NOL but we set it aside just to be safe. Let us look at this fully taxed. He is doing $1.90 in cash EPS. I put a 8 multiple on that so you get to $15 per share—the business is not dying as quickly as people think.

Then you say over the next year, you will get $1.90 back in cash, that is what I talked about before--how much cash you will get back right away. You will get back $1.90 right away. So I said, OK if this kind of works out in this fashion, if people look at it as if, OK, it were really dying; it is really bad, I could get 70%.

If the people in the end say it is really a growth business, I may get something much better. Then I said it does $225 and I am wrong on Capex and it is $35, so maybe my return is only 36%. But then you can go through these numbers and see how bad does it have to be to get to $10 where the stock is trading. And you have to take it down quite a bit to say, OK, it is worth what it is (now). And in one case I am saying it could be worth 70% more.

In this last example, I am saying he is losing $20 million on Game Crazy per year. He is actually estimated to lose $16 million for 2004, so let's add that back. Let's say he liquidates Game Crazy so interest expense is not as high because he has 500 stores; he sells the inventory. So he immediately sells that down. In that situation, he ends up with$16 per share and $2 in cash and he gets $18 per share for 82% if I bought the stock at $10 per share. So there are a lot of ways this could work out.

Businesses isn't as bad. Or if it is bad, and if MCX is what really comes into play because he realizes things are falling apart--so he stops doing it. I am still probably going to do OK. At this point I say, OK, I will take the bet.
In the worse case scenario at the end of the year, I have a $10 stock. But I think, I make a lot of money on this. There is chance I make 80%. (0% to 10% downside for a 36% to 82% upside).

This summarizes what I was talking about.

A lot of ways to win…….

In $millions	**Normal Case**	**Base Case**	**Game Crazy Losses**
EBITDA	$230	$225	$246
CX	30	35	30
Int.	25	25	20
FCF	175	165	196
Tax Ad	113.75	107.25	127.4
EPS	1.90	1.70	2.02
Multiple	8x	7x	8x
Value	15.2	11.9	16.2
Cash Gen	1.90	1.70	2.02
Total Value	$17.06	$13.62	$18.20
Return	70.63%	36.19%	82.00%

HLYW Conclusion (cont…)

- Since CEO owns stock, he will do the right thing with high return Game Crazy
- Margin of safety from backing out Game Crazy losses, NOL, value of inventory at GC stores and bare level of
  Maintenance capital expenditures (MCX).

- Logical reasoning of video rental business durability.

Brian Gains: The margin of safety is the Game Crazy stores because they are losing money, but they could be making money--more upside. That is where I came to buy HLYW between $10 and $11.

So March 29th, 2005. Read the whole thing and what strikes you the most?

On March 28, 2004, Hollywood Entertainment Corporation (the "Company")entered into an agreement and plan of merger (the "Merger Agreement") with Carso Holdings Corporation ("Holdings") and its wholly owned subsidiary. Holdings is a wholly owned subsidiary of Leonard Green & Partners, L.P. ("LGP"), a private equity firm that manages more than $3.6 billion of private equity capital….And each share of Company common stock will be converted into the right to receive $14.00.

Mark Wattles, Hollywood's Founder, Chairman and CEO will continue in his current capacities following the merger. Mr. Wattles will exchange a substantial portion of his equity holdings in Hollywood for 50% of the common equity in the surviving company.

Brian Gains: Note that the Founder and CEO is going to take 10% of the equity of the company--now he will take 50% of the company. So maybe he was sure, but now he is doubling down, tripling down. He won't take any cash off the table, I am going to throw all the cards in with these new guys coming in at $14 per share. If you know Leonard Green, they are fairly well regarded. Note that the CEO thinks the business is good, now he thinks it is great. He is willing to take everything in at $14.

So the stock rallies and everyone happy, but you see that the CEO gets to roll in for 50% of the equity. I want in on that. So I sold. The stock was trading at $13.50 and I say there are merger arbs who can do better work than I can do (no more edge), so I sold. I will move onto the next one.

Move on to the next one and use your edge…

If you have done the work on an industry (particularly one with a lot of angles), always look at the competitors.

--Applying HLYW take-out multiple (where CEO of HLYW is buying his own business) to Movie Gallery (MOVI) implied a $20 stock price.

- MOVI arguably a better business so worth doing more work

So you have done all this work in understanding the Video business. Don't give up at that point. And this is where there are other people in the business. Go look for other stuff. People look at insider sales--well, here you have an insider buying half the company. You see insiders buying 10,000 shares. He (HLYW CEO) is willing to buy 30 million shares.

MOVI: This same multiple given to HLYW applied to MOVI Gallery would give you at $20 stock.

MOVI

- Rural version of HLYW and BBI
- Fewer than 1/3 of stores compete with either HLYW or BBI
  --Mainly single operator competition
- High ROIC on new stores
- Stable comps
- Rural nature implies less technology risk
- CEO owns 15% of stock
- Possibility of recap or stock buyback.

MOVI Gallery is in the rural areas of the country, so for all the talk about other entertainment options, MOVI Gallery has none of that. Plus, we will see some other stuff that makes it kind of interesting.

So it is trading right around $20. So you are not getting a steal the day the merger happens. Maybe you are getting something good.

So MOVI has less technology risk if I was worried about that, not much competition and the comps in MOVI Gallery are still comping up and are really, really stable. ***The CEO of MOVI owns 15% of the stock.*** *This capital structure does not have debt on it.*

So HYLW had some debt on it. This has no debt on it, so there is a possibility to lever it up because he has a lot of cash, you get a tax shield from putting the interest expense against the pretax income. All sorts of different things you can do.

MOVI FINANCIALS

Common Shares	33 mil.
Price	$20
Mkt. Cap.	$660
Cash	53
EV	607
EV/Op Inc.	6.53x

	TTM 3/31/2004
Rentals	$663.4
Product	63.7
Total Revenue	727.0
Rental COGS	188.6
Rental GP	474.8
Rental GM	71.6
Product COG	48.4
Product GP	15.3
Product GM	24.0
Store opex	347.5
G&A	49.5
Op Inc.	$93.0

He has cash on the balance sheet. I am not giving you any yr/yr stuff so you can't even take a look at those. What is interesting…. So it costs him $12,000 to open these MOVI Gallery stores and three years out he makes 62%. A mature store three years out makes 62% pre-tax returns on capital and he has been opening stores successfully. He has 2000 stores now and he is adding 200 stores a year. And this, I am sure you know this from retailers, with 62% (returns) you build all day without screwing up. 62% returns on capital, you can't probably find better alternatives.

Even in year 1, it is 35% without it being mature. Particularly, a business trading at 6 x EBIT

THROWING away money?

	Year 1	**Mature**	• **Worthwhile investment?**
Investment	$126	$126	
4 wall operating profit	$45	$79	
Pre-tax ROIC	35.7%	62.7%	

Now we get another piece on August 6th, 2004

August 9, 2004

PORTLAND, OR, August 6, 2004 — Hollywood Entertainment Corporation (Nasdaq: HLYW), owner and operator of more than 1,950 Hollywood Video superstores, today announced that Leonard Green & Partners, L.P., an affiliate of Carso Holdings Corporation ("**Holdings**") and its wholly owned subsidiary (the entities with which Hollywood entered into a merger agreement on March 29, 2004), has informed Hollywood that, due to industry and market conditions, Leonard Green & Partners believes that the financing condition to the consummation of the merger will not be satisfied.

Hollywood and the Special Committee of its Board of Directors are considering Hollywood's alternatives to determine the course of action that would be in the best interests of Hollywood's shareholders. There is no assurance that a merger with Holdings will be completed, or if completed, that it would be completed on terms that do not differ materially from those in the merger agreement.

It is kind of vague, but it --what is the most important sentence here besides you lose if you are in the stock and you are an arb.--Leonard Green is bowing out because of the financing condition. It wasn't because of the conditions or quality of HLYW's business. Leonard Green probably couldn't get something done in the high yield market. They are saying, we are not leaving the deal, but we don't like it at $14. So you can guess what happens now, so the stock trades back to $10. You know the financing didn't get done, the numbers are probably OK and you are back to where you were.

Everybody loves a good spin

- Viacom adds 1B of debt to Blockbuster and says don't let the door hit you on the way out.
- Ramifications of the newly independent BBI?

MOVI has traded down a little bit that day. At the same time as this, BBI is trending lower. Coincidently BBI pays a special dividend to Viacom after being spun-off from Viacom. Everything is bad at HLYW, Summer Redstone over at Viacom says BBI gives me a lower multiple, I am sick of it, get rid of it and at the same time

pay a special dividend-$5. They kick it off. BBI had everything to look for in a spin-off that may be hated—big debt load, bad industry, etc. Now BBI is completely independent. I missed this. I didn't get it.

More Chances to win..

- HLYW and MOVI trade down
  --Significance of MOVI capital structure?

- Is MOVI affected?

- CEO of HLYW's thoughts?

- BBI?

HLYW and MOVI traded down. Since MOVI has cash on the balance sheet, a trade down in MOVI Gallery is huge, because it is cash rich. Any fall off in price is pretty significant on a multiple basis.

Is MOVI affected by what happened? NO.

What is the CEO of HLYW thinking about everything that is going on around him. This is the CEO who wanted to triple down. Does he care where the merger happens--he would prefer a lower price. He is more excited if Leonard Green comes back and offers $3. A take-under.

…and then it becomes a food fight

- Leonard Green comes back on 10/14/04 and offers $10.25
- On November 11/11, BBI confirms interest to acquire at $11.50
- Movi offers to acquire HLYW at $13.25.

Leonard Green shows up again on Oct 14th. We will do it for $10.25, then they hang around. Classic private equity guys who say, the CEO doesn't care about a lower price, so let's offer $4 less. Then a wrench gets thrown in their plans, because a newly independent blockbuster comes back says they will do it for $11.50. Then MOVI gets interested to acquire at $13.25. All these strategic buyers get excited. With a key event, you had a BBI spin-off and you had L. Green get greedy and then a food fight begins. It is funny how this stuff works. L Green woke everybody up to it is not so bad. Everything transpired from there.

The HLYW's CEO offers to acquire half of HLYW's stores.

What I did when the merger announcement came out when Movi was going to acquire HLYW at $13.25, I said BBI runs into anti-trust problems because they have 60% of the market. You do some quick math on MOVI and say wow this is a home run. You can say they can cut costs, they can do the same thing as L. Green.

I am in MOVI but not in HLYW the second time around. Putting a 8 multiple on MOVI's $3.50, you could get a $28 stock. So you could get really excited with MOVI if they get it and if they don't, then a lot of time in these mergers, BBI is forced to sell off stores if BBI were to acquire HLYW, then MOVI could acquire those stores on the cheap.

Another thing about BBI's bid is that it is in cash and stock. And any Board of Directors will favor cash over stock. It is the easier to go with the cash bid. BBI is at a disadvantage because they have too much debt. This is what is happening with Quest and Horizon--MCI's Board is saying we want to go with Verizon since they are offering cash.

The HLYW's Board is tired. They know there is very little upside. They know it will be acquired. The Board personally does not want to be sued. Clean this up and get out of town.

Dynamics of merger

- Ex-Hollywood CEO comes out and wants to buy 1/2 HLYW stores
- MOVI All cash bid
  --Quick math on MOVI acquisition says they could do $3.50 in EPS if they acquire HLYW
- Concessions from BBI if they don't win
- No overlap
- BBI issues
  --Antitrust
  --Cash and stock bid
- Implications for the board

So we will just finish up the story. HYW trades back to $14 and MOVI to $26. BBI pops as well. You could do well in any of these companies.

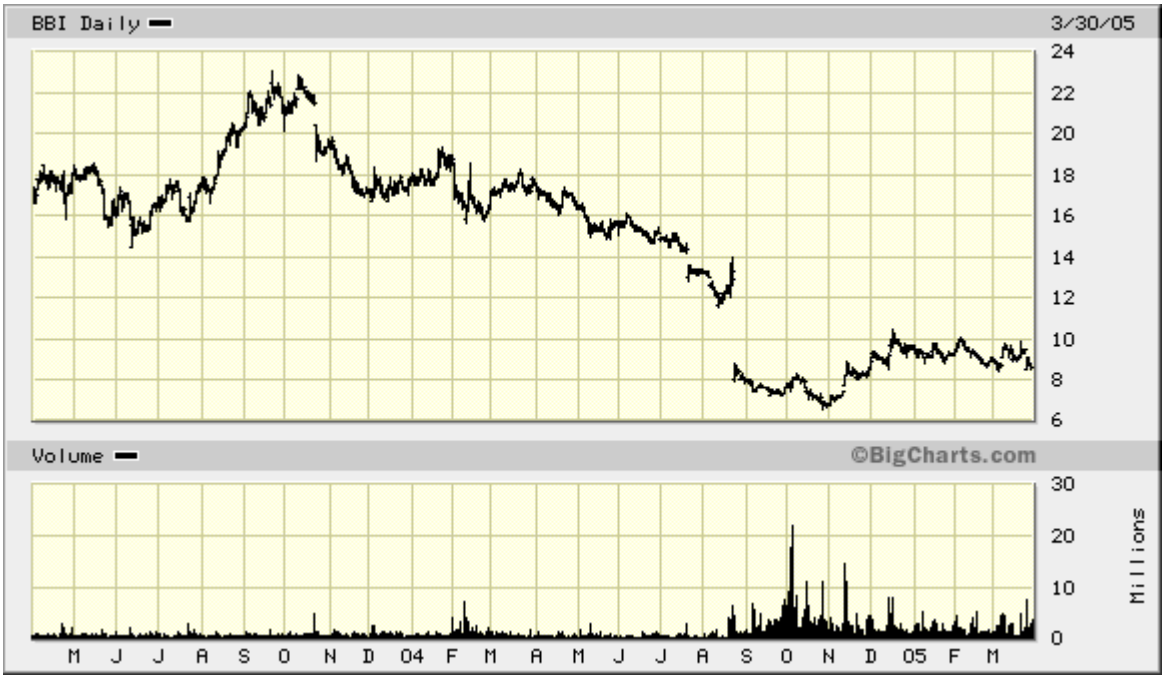

END

Questions and Answers

I put 10% in HLYW, since I did all my work, I knew the downside was $9 to $10 and the upside was good. For me, 20% would be huge, but 10% is usually my position.

What is your best bet--MOVI seemed better.

If you knew MOVI was a sure deal to acquire HLYW, then MOVI would be over $30.

In the end, people rent videos near where they live. With BBI, will it be able to be successful against Net-flix?

END

CASE STUDY

Munsingwear, Inc. Case Study Instructions

Prize:

Pretend you have traded in your hush puppy shoes or sandals in for a pair of wing-tips. You are now an investment banker who is being asked to help Munsingwear, Inc. "enhance shareholder value." How would you advise the CEO in improving their operations and profitability? Your fee, if your advice salvages value for shareholders and/or turns this company around, would be $300,000.

Instructions:

Use only what is in this case study for your analysis. If you feel critical information is lacking, then state what is missing and how it prevents you from advising your client. You will have a chance to speak to the CEO, Mr. Lowell Fisher, in class.

After reading the 10-K what would you advise? Why? Please give no more than a written paragraph answer. Provide a brief pro-forma of your analysis if necessary. What value might you put on the company after your recommendation? Show work and assumptions.

This case test your strategic thinking ability and business sense.

Good luck in your new wing tips!

Munsingwear, Inc. Case Study

FORM 10-K

For the fiscal year ended January 6, 1996

Munsingwear, Inc.

IRS # 41-0429620

8000 W. 78th Street, Suite-400, Minneapolis, Minnesota 55439
Telephone number: 612-943-5000

Delaware: State of Incorporation

The aggregate market value of the voting stock held by nonaffiliates of the Registrant at April 1, 1996 was $9,384,000 based on the closing price of $7.25 per share at that date.

The number of shares of common stock outstanding at April 1, 1996 was 2,037,078

A. GENERAL DEVELOPMENT OF BUSINESS

The Company was incorporated under the laws of Delaware in 1923 as the successor to a business founded in 1886. The Company's principal executive offices are located at 8000 W. 78th Street, Suite-400, Minneapolis, Minnesota 55439, and its telephone number: 612-943-5000. As used in this document, the term "Company" refers to Munsingwear, Inc. and its subsidiaries unless otherwise noted or indicated by the context. At Jan. 6, 1996, the Company had one subsidiary, Munsingwear UK Limited, which was idled in 1994.

After suffering a severely weakened financial condition, primarily due to losses of $89, 243,000 during the years 1989 through 1990, the Company, on July 3, 1991, filed a voluntary petition for bankruptcy under Chapter 11 of the US Bankruptcy Code, together with a proposed Plan of Reorganization. The Company emerged from bankruptcy on Oct. 29, 1991.

Prior to the reductions in operation implemented during 1989 through 1991, the Company designed, manufactured and distributed a broad range of men's and children's apparel through several operating divisions and subsidiaries. Today the Company's operations consist of what was formerly the Men's Apparel Division and sell primarily men's knit sport shirts under the following major brands or labels: Munsingwear ®,

Grand Slam ®, Grand Slam Tour ™, Penguin Sport ™ and Slammer ®. In addition, the Company licenses its trade names and trademarks for use in a variety of products.

In the recent two fiscal years, the Company's sales by channel of distribution have undergone significant change. In 1995, sales to premium/special markets and golf Pro shop customers rose 52% collectively over 1994. This is the result of management's attempt to reduce the Company's reliance on sales to traditional retail apparel channels of distribution where heavy promotional pricing, discounting and advertising activities are required.

In late 1995, the Company retained the services of an investment banking firm to explore a range of opportunities to maximize shareholder value.

B. FINANCIAL INFORMATION ABOUT INDUSTRY SEGMENTS

The Company operates in one industry segment, apparel manufacturing. As of Jan. 6, 1996, the Company's foreign operations were not material.

C. NARRATIVE DESCRIPTION OF BUSINESS

Principal Products:

The Company sells primarily men's knit sport shirts under four major brands or labels: Munsingwear ®, Grand Slam ®, Grand Slam Tour ™, and Penguin Sport ™. Grand Slam ® and Penguin Sport ™ products are sold primarily to department stores, specialty stores and Sears. Munsingwear ® products are sold primarily to premium/special markets customers and to national chain stores, such as Montgomery Ward. Grand Slam Tour ™ is sold primarily through golf pro shops.

Sources and Availability of Raw Materials and Products:

Approximately 60% of the Company's products are manufactured domestically. The other 40% is sourced primarily from manufacturers in the Far East through a relationship with Associated Merchandising Corporation (AMC). The Company also sources some product through the 807 program in the Caribbean Basin. The principal raw materials used in the domestic production process are cotton, synthetic and cotton/synthetic blended goods obtained principally from United States sources. The Company purchases most of its piece goods from approximately ten sources. There are currently no major problems in availability of raw materials and alternative sources are available. The Company's Fairmount, NC manufacturing facility includes a material warehouse, cutting, sewing and embroidery operations, and finished goods distribution center. The company also utilizes contract swing manufacturers in close proximity to its North Carolina facility to meet demand during peak production periods. All products, both domestically and offshore produced, are distributed to customers from the North Carolina facility.

Trademarks and Trade Names:

In 1991, management initiated the strategy to actively pursue licensing as a vital part of the Company's growth plan. During the period 1991 through 1993, the Company entered into eleven license agreements, and in 1994, renegotiated its licenses with Fruit of the Loom which, among other things, extended the original agreement for twenty-five years. In 1995, the Company entered into four additional license agreements. Management intends to continue development of its licensing programs and believes that its advertising, styling and brand name identification established over many years are important to the competitive position of the company. The Company has the following license agreements:

- A license with Fruit of the Loom, Inc. to market underwear and active wear.
- A license with a New York entity to market sleepwear.
- Five licenses with Montgomery Ward to market men's pants, outerwear, accessories, dress wear and shirts.

- A license with a Canadian corporation to market knit shirts.
- A license with a North Carolina entity to market men's and boys' hosiery.
- A license with a Peoples Republic of China entity to market a variety of clothing and accessories.
- A license with a South Carolina entity to market sweaters.
- A license with a Missouri entity to market outerwear.
- A license with a New York entity to market woven shirts.
- A license with a South African entity for apparel.

Management's emphasis on licensing activities in recent years has led to a dramatic increase in the Company's royalty income, from $1,162,000 in 1991 to $4,609,000 in 1995.

Seasonal Aspects of the Business:

Sales of the Company's products can vary significantly by season, with peak shipments normally occurring in the first and second quarters of the fiscal year.

Working Capital Practices:

The Company maintains a secured bank line of credit to meet its working capital needs. Peak borrowings under this agreement normally occur in the first six months of the year during the heavier shipping period and during the fourth quarter when inventories are increased to meet the additional first and second quarter sales volume. Seasonal increases in inventory are normal for the apparel manufacturing industry. The bank line of credit is also used for letters of credit that are required for generally all of the Company's purchases from offshore sources. The Company allows returns of merchandise as a result of shipping errors, damaged merchandise and for other reasons. Returns have been less than 4% of sales in each of the past two years.

Customers:

The Company sells to approximately 4,500 customers. Sales to Sam's Club (a division of Wal-Mart Stores, Inc.) in 1994 and 1993 were 16% and 21%, respectively, of net sales. In 1995, no single customers represented more than 10% of total Company sales.

Backlog of Orders:

The Company's backlog of unfilled orders at January 6, 1996 was approximately $15,600,000 as compared to $18,800,000 a year ago. The decrease was due primarily to management's emphasis on reducing reliance on traditional retail apparel customers. The unfilled order backlog does not necessarily relate directly to future sales.

Competition:

The apparel industry in the United States is highly competitive and characterized by a relatively small number of broad line companies and a large number of specialty manufacturers. In addition, there are unbranded and private label competitors as well as numerous, small specialty manufacturers competing with the Company. The principal methods of competition in the apparel industry are pricing, styling, quality (both in material and production), inventory replenishment programs and customer service. The Company seeks to maintain its competitive position in the markets in which it operates through the use of all these methods.

Research and Development:

The Company is involved in limited experimental research activities related to the development of new fabrics and production methods. Research and development expenses, other than for product design, are not significant.
Environmental Considerations:

The Company's manufacturing operations are subject to various federal, state and local laws restricting the discharge of materials into the environment. The Company is not involved in any pending or threatened proceedings which would require curtailment of its operations because of such regulations. In 1995, the company's capital expenditures for environmental control facilities were not significant, and no significant capital expenditures related to environmental issues are projected in 1996.

Item 1: Employees:

As of January 6, 1996, there were 343 employees, none of whom were represented by a union.

D. FINANCIAL INFORMATION ABOUT FOREIGN AND DOMESTIC OPERATIONS AND EXPORT SALES

Sales to unaffiliated foreign customers located outside the United States and its territories for the past three years were not significant.

Item 2. Properties

At January 6, 1996, the Company occupied the following properties:
Management considers facilities adequate for current operations. At Jan. 6, 1996, no facilities were occupied Under capitalized leases.

Property	Sq/ Footage	Approx. Percentage Utilized	Lease Expires
Minn., MN HQ	29,200	50	1996
Fairmont, NC – Cutting and sewing plant, warehouse and distribution center	139,100	100	Owned
New York, NY – Sales office/showroom	1,000	100	1997
Dallas, TX – Sales office/showroom	500	100	1996

Item 3. Legal Proceedings

None of a significant nature.

Item 4. Submission of Matters to a Vote of Security Holders

None.

Executive Officers of the Registrant

The following information is furnished with respect to the Company's executive officers as of the date hereof, pursuant to Item 401 (b) of Regulation S-K. Each of the officers has been appointed to serve in his respective office until his successor has been elected.

Name and Age	Position	Officer Since
Lowell M. Fisher (63)	Director of the Company; President and CEO, October 1993 to	1993

ABOUT THE COMPANY

The Company was founded in 1886 as a manufacturer of men's underwear. Throughout the early 1900's, the Company was an innovator of new textile and apparel manufacturing processes and, during the 1940's and 1950's, expanded its product lines, acquired a women's intimate apparel company and, in 1955, introduced the Gran Slam (R) collection of golf apparel bearing the well-known Penguin ® emblem. During the 1960's and 1970's, manufacturing facilities were added, textile research and development departments were established and the Company entered into numerous licensing agreements for the use of its trade names and trademarks.

Today the Company derives its revenues primarily from the sale of men's sportswear apparel and the licensing of men's underwear, active wear and other related apparel. The Company's products are sold primarily through premium/special markets, department stores, golf pro shops, national chain stores, specialty stores, sporting goods stores and wholesale clubs. The Company designs, manufactures, imports, markets and licenses branded men's lifestyle apparel under the Grand Slam ®, Grand Slam Tour®, Munsingwear ®, and Penguin Sport ™ labels. The Company is headquartered in Minneapolis, MN and has 343 employees in company-wide operations.

LETTER TO STOCKHOLDERS

Revenues for 1995 were $56.1 million, a 34% increase over last year. Dramatic sales growth in our premium/special markets and golf pro shop businesses more than offset a small decline in business with our traditional customers, such as department and specialty stores, national chain stores and wholesale clubs. Premium/special markets volume increased seven-fold while golf Pro shop volume increased 52%. In 1995 these two businesses represented 40% of our total sales volume and are expected to exceed 50% of total Company sales in 1996. As recent transition the Company has undergone over the past two years, significantly reducing our exposure to the difficult retail apparel marketplace.

Royalty income was up slightly to $4.6 million. As a reminder, 1994 royalty income had increased 25% as a result of additional license agreements and a twenty-five year extension to the Fruit of the Loom license, which will also lead to lower cash receipts from existing licensing agreements starting in 1996. The Munsingwear trade names and trademarks have always signified quality to the licensing market and we will continue to actively pursue additional license agreements.

While we achieved significant revenue growth in 1995, we were not successful in becoming profitable. The loss of $2.3 million, $1.13 per share, was primarily the result of deep markdowns on excess end-of-season merchandise related to the retail department store channel of distribution, losses related to an unsuccessful entry into "Friday-wear", increased advertising expenses in support of the retail department store business and restructuring costs related to completed staff reductions and reduced office space requirements. In addition, costs associated with our PGA Tour endorsement program increased, yet we feel this program is necessary to give Munsingwear brands consumer exposure. We were successful in reducing selling, general and administrative expenses as a percent of sales – from 32% in 1994 to 27% in 1995. Interest expense was up significantly due to inventory build-up required to service the explosive sales growth in the premium/special markets business. Throughout the year we also experienced higher than planned levels of inventory for the retail department store business, which did not meet sales forecasts. Ultimately, we sold this inventory at deep discounts.

Looking ahead to 1996, we plan to continue to grow the premium/special markets business which has achieved exceptional results the past two years. Munsingwear's strong consumer brand recognition, the Penguin logo, quality product and the agility to merchandise across a broad product line give us a competitive advantage. We are confident that increased revenues and a return to profitability will be achieved due to the following:

- Continued strong sales growth in premium/special markets and golf pro shop businesses.
- Cost reduction programs.
- Continued focus on core capability – men's, short sleeve, knit, and moderately priced golf shirts.

(Picture of LOWELL M. FISHER)

- Innovative designs and fabrics throughout all product lines.
- Continued upgrading of management information systems.
- Strengthening of our Board of Directors by the addition of three new members, Thomas D. Gleason, who was named non-executive Chairman of the Board in January of this year, and Kevin S. Moore and William J. Morgan, who represent the Company's two largest single stockholders.

In late 1995 we retained the services of an investment banking firm to help us explore a range of opportunities to maximize shareholder value, and we expect this activity to accelerate in 1996. Please refer to the Management's discussion and analysis section in this annual report for additional financial analysis and a statement regarding forward-looking information.

Although 1995 was a difficult year for retailing, the Company achieved extremely promising revenue growth in our two most profitable businesses—premium/special markets and golf pro shops. These results reaffirmed our decision to continue the Company's transition – expanding markets, enhancing product quality, increasing consumer value and investing in infrastructure. As a result, we are now in a much stronger strategic position and I look forward to working with Tom Gleason and the Board in continuing our efforts to ensure the long-term success and profitability of the Company.

In closing, I would like to thank our customers, suppliers and lender, who have continued to support us throughout the Company's transition. Finally, I would like to take this opportunity to thank all Munsingwear employees for their hard work and effort which led to spectacular 1995 sales growth and reinforces our optimism for 1996.

Sincerely,
/s/ Lowell M. Fisher
Lowell M. Fisher, President and CEO.

CONSOLIDATED STATEMENTS OF OPERATIONS
(AMOUNTS IN THOUSANDS, EXCEPT PERSHARE DATA)

MUNSINGWEAR, INC.	**Year Ended January 6, 1996**	**Year Ended January 7, 1995**	**Year Ended January 1, 1994**
REVENUES			
Net Sales	$ 51,512	$ 37,407	$ 37 635
Royalties	4,609	4,528	3,624
	56,121	**41,935**	**41,259**
EXPENSES:			
Cost of goods sold	42,714	30,029	28,783
SG&A	13,961	12,134	11,869
Restructuring costs (Note 9)	520	---	---
(Gain) loss on closing of facilities (Note 9)	---	(100)	450
	57,195	42,063	41,102
OPER. INCOME (LOSS)	**(1,074)**	**(128)**	**157**
Interest expense	(1,158)	(353)	(286)
Other	2	177	(74)
Loss before inc. taxes and extraordinary item	**(2,230)**	**(304)**	**(203)**
Provision for inc. taxes	105	108	139
Loss before extraordinary item	(2,230)	(304)	(203)
Extraordinary loss from early debt extinguishment	---	161	---
NET LOSS	**$ (2,335)**	**$ (573)**	**$ (342)**
Net Loss per common share:			
Loss before extraordinary item	$ (1.13)	$ (.20)	$ (.16)

Extraordinary item	---	(.08)	---
NET LOSS PER CS	$ (1.13)	$ (.28)	$ (.16)
Weighted avg. OS	2,066	2,066	2,093

The accompanying notes are an integral part of these financial statements

CONSOLIDATED BALANCE SHEETS (AMOUNTS IN THOUSANDS, EXCEPT SHARE DATA)

	January 6, 1996	**January 7, 1995**
ASSETS		
Current Assets:		
Cash and CE	$62	$ 73
Receivables:		
Trade, net of allowance of $511 and $442	8,260	4,852
Other	277	286
Inventories	14,641	14,219
Prepaid expenses	1,004	1,286
TOTAL CURRENT ASSETS	**24,244**	**20,716**
PP&E		
Land	15	15
Buildings and leasehold improvements	568	550
Machinery and equipment	3,928	3,041
	4,511	3,606
Less accumulated D&A	1,584	1,330
	2,927	2,276
TRADEMARKS net of accumulated Amortization of $1,274 and $1,010	4,173	4,437
Deferred taxes, NET OF VALUATION ALLOWANCE OF $11,796 AND $11,151	2,309	2,309
	$ 33,653	$ 29,738
LIABILITIES AND STOCKHOLDERS' EQUITY		
CURRENT LIABILITIES:		
Line of credit borrowings	$ 10,890	$ 5,592
Current maturities of long-term debt	21	19
Accounts payable	5,008	3,760
Accrued payroll and employee benefits	1,009	1,028
Unearned royalty income	2,993	3,159
Other accruals	397	311
TOTAL CURRENT LIABILITIES:	**20,318**	**13,869**
LONG-TERM LIABILITIES:		
Long-term debt, less current liabilities	22	38
Postretirement benefits	319	312
Unearned royalty income	10	200
	351	550
TOTAL LONG-TERM LIABILITIES	351	550
STOCKHOLDERS' EQUITY		
Common Stock, $0.01 par value 2,065,594 shares issued and issuable	21	21
Additional paid-in capital	15,112	15,112
	(2,149)	185

TOTAL STOCKHOLDERS' EQUITY		12,984	15,319
		$ 33,653	$ 29,738

CASH FLOWS	**Year Ended January 6, 1996**	**Year Ended January 7, 1995**	**Year Ended January 1, 1994**
OPERATING ACTIVITIES			
Net loss from continuing operations	$ (2,335)	$ (573)	$ (342)
Reconciling items:			
Deprec. & Amort.	782	712	873
Deferred Taxes	--	(69)	--
Provision for losses on accounts receivable	69	142	204
Loss on restructuring	193	---	--
(gain) loss on closing of facilities	--	(100)	450
Change in unearned royalty income	(356)	2,729	(690)
Changes in operating assets and liabilities:			
Receivables	(3,468)	(380)	(716)
Inventories	(422)	(5,986)	(425)
Prepaid expenses	282	(254)	(192)
Accounts Payable	1,248	944	(164)
Other accrued liabilities	(87)	(292)	(305)
NET CASH USED IN OPERATING ACTIVITIES	**(4,094)**	**(3,127)**	**(1,307)**
INVESTING ACTIVITIES	(1,201)	(865)	(490)
Purchases of PP&E			
NET CASH USED IN INVESTING ACTIVITIES	(1,201)	(865)	(490)
FINANCING ACTIVITIES			
Net Change in previous line of credit borrowings	---	($1,698)	$1,698
Net Change in new line of credit borrowings	5,298	5,592	--
Principal payments on long-term debt and capital lease obligations	(14)	(270)	(303)
Proceeds from exercise of stock options	--	--	133
NET CASH PROVIDED BY FINANCING ACTIVITIES	5,284	3,624	1,528
DECREASES IN CASH AND CASH EQUIVALENTS	(11)	(368)	(269)
Cash and Cash Equivalents at beginning of period	73	441	710
CASH AND CASH EQUIVALENTS AT END OF PERIOD	$ 62	$ 73	$ 441
Supplemental disclosures of cash flow information:			
Cash paid for taxes	$ 178	$ 122	$ 153
Cash paid for interest	$ 1,078	$ 370	$ 273

END

Interview with Value Investor Joel Greenblatt

By Bill Mann (TMF Otter) December 21, 2005

The Little Book that Beats the Market. *Audacious title? Maybe, but Joel Greenblatt has the chops and the record to back it up. His investment returns are amongst the most incredible in investing, with returns exceeding 40% per year over the last 2 decades.*

Bill Mann: One of the things that you talked about in the beginning of this book is that you felt like your first book, *You Can Be a Stock Market Genius*, was a little more advanced than you had intended it to be. So you wrote *The Little Book that Beats the Market* with your kids in mind. Describe for us some process that you went though in creating the book?

Joel Greenblatt: Oh sure. Well, the way it really happened was is that there are a few simple things I have been teaching for ten years over at Columbia. My students are always accusing me of making things sound too simple, so we sort of boiled down to what we have done for the last twenty years at *Gotham Capital* to a couple of important concepts.

What those concepts were were buying good companies at bargain prices. The way we define "good companies" was companies that earn a high return on capital. What that might mean is that if for instance a company opens stores and each store costs $400,000 and you can earn $200,000 on a store, that is a 50% return on capital. If another company opens stores that also cost $400,000 but they only earn $10,000 a year, that is a 2.5% return on capital. Simply, we said, "gee, the company that earns 50% a year on the capital invested is a lot better than the one that earns 2.5%." That is generally the course we have taken to define what a good company is, something that earns a high return on capital. Then we said, "Let's try to buy those good companies cheaply." The way we defined "cheap" was companies that earn a lot relative to the price we are paying. So we call that earnings yield, which is the inverse of P/E. So that just means that if you can buy a lot of earnings for a cheap price, that makes the company cheap.

So if we can buy a good company that is also cheap, in combination that strikes me as being a good thing. That is what we tend to look for when we are looking for investments at *Gotham Capital*. Those concepts are not too hard for kids to understand. If you explain to them that way, that I am just trying to buy good companies at bargain prices, they tend to understand that.

It's very important that you understand what you are doing, not just following what I call the Magic Formula. If you are just following a Magic Formula, that formula doesn't always work. But if you understand what you are doing, you will say, "you know what? It just makes sense to buy good companies at bargain prices and eventually this will work." We did a study showing that large-cap companies can double the market's return just following this formula. With small caps, you could actually almost triple the market's return.

Bill Mann: I wanted to make this point. When you say "we", you are talking about *Gotham Capital.*

Joel Greenblatt: My partners at *Gotham Capital*, yes.

Bill Mann: And just to be clear, this is part of the process that you have used to manage money at *Gotham Capital* for more than 20 years.

Joel Greenblatt: Yes. The Magic Formula from the book is not something that we fished around for by back tested extensively, using 40 different formulas until something looked like it worked. This is the absolute first thing that we tried, and the inputs approximate how we invest professionally. So when we talked about components for a back test we thought "Let's keep it simple. Let's look at what companies do. If we rank them based on earnings yield and return on capital and picked the companies with the best combined ranking of those two factors, how would a portfolio of stocks like that do?" That is what we back tested and that was the first thing we tested and that is what I wrote up in the book because it is so simple and obvious.

There is a slight difference in what we do at *Gotham Capital*. For my kids, I did not think they were capable of projecting earnings out into the future. At *Gotham Capital* what we do is, instead of using least year's earnings, which is what we used for the Magic Formula and what got those great results of double and triple the market's returns, we used what we think normal earnings will be several years out, three or four years from now.

We can't make those projections for most companies, but for the companies that we can make those projections for, or we feel confident about our projections, then we plug those into the Magic Formula rather than last year's earnings. So there are two really different strategies that we use. One, for the Magic Formula when we are looking at last year's earnings, we buy a portfolio stock, either 20 or 30 companies because on average,

they do incredibly well, were the results I just mentioned. For *Gotham Capital*, we do a much more concentrated portfolio, perhaps five or eight companies, generally are 80% of or portfolio, and those are companies that instead of plugging in last year's earnings, we plug in our projections for normal earnings several years out for the company, but we are actually plugging it in to the Magic Formula.

So we are more concentrated and we do a lot more work on each company that we own because of that. For most investors who don't do this for a living, they are better off looking at last year's earnings and buying a portfolio of 20 or 30 companies that on average will do tremendously well.

Bill Mann: It is such an important concept and one of the facts that I thought was great about the book is that you are not talking about what will be. You are not talking about laser beams and dental technology and all of these things that people get excited about that may not have earnings at present. The basis for the Magic Formula rests upon what is, what earnings the company already has generated.

Joel Greenblatt: That is really I think what people can do. There is no argument about it. You know what happened last year and that is all you need to know.
I wouldn't suggest people, without doing any work, pick individual stocks, but if you are willing to own a 20 or 30 stock portfolio based on these simple concepts, on average you are going to do tremendously well.

Bill Mann: What about the argument of if this works very well with the 20 and 30, why wouldn't you pick the top three and concentrate? I mean, if you could determine what they were.

Joel Greenblatt: Even though what I said in the book was the formula actually works in order. In other words, we take the combined ranking of cheap and good companies and we combine those ranks into a Magic Formula ranking.
I said in the book that if you divide all 3,500 companies we modeled into deciles where you take the top 10% as ranked by the Magic Formula then the next 10% then the next 10%, the Magic Formula works in order. The top decile beats the second decile, and so on. That's over a large amount of stocks so there really is not much statistical difference between picking any of the top let's say, 25 stocks versus one, so the top three don't necessarily do better than number 22 to 24.

Bill Mann: And you would in fact increase risk by being concentrated because you are trusting a formula.

Joel Greenblatt: Right, on average it works so to just pick a few names, if you have something on average that works, you might as well shoot for that average. You may do better with the three stocks, but you may do a lot worse. If you have almost a sure thing, why throw it away?

Bill Mann: One of the things that you did in the study was to bifurcate what would you do if you concentrated on the largest companies and then you went down as low as $50 million. What about going smaller than that?

Joel Greenblatt: It should work amazingly well there, but I didn't want to write a book that people couldn't execute and I also wanted to show how robust the Magic Formula was. It worked amazingly well with small caps. Using a small cap model of 30 stock portfolios that we tested over the 17 years, it earned over 30% a year.

It is just that I want to make sure people realize that the formula was very robust and that you could actually execute, you could actually buy enough stock and if you are buying a book that hopefully a lot of people will read, we even showed how it worked for the top thousand companies.
It didn't work quite as well as with the small caps because there are many more small caps to choose from than large caps, but it worked incredibly well. It more than doubled the market's return. Tough to beat that.

Bill Mann: So if a company that trades 50 shares a day and shows up on that list, that makes it functionally irrelevant for most investors because you can't execute a trade.

Joel Greenblatt: Well, we didn't just have a minimum market cap, we also had a minimum trading requirement so that you actually had to be able to trade these stocks to be put into our model. Sure, the small investor has many advantages over the large investor and if you aren't running so much money that you are

prevented from buying smaller cap stocks, then you have a big advantage. You can choose from a lot more companies.

Bill Mann: Because you're dealing with a mechanical strategy, one of the books that people will inevitably make a parallel to is Jim O'Shaughnnessy's *What Works on Wall Street.* How is this different from what O'Shaughnessy did?

Joel Greenblatt: Well number one, he tested dozens of formulas over a long period of time and then picked the ones that worked the best. What we did is we picked a formula based on what we actually do, and we tested it. This was it. This formula ranks stocks in order from best deciles to worse and so it wasn't just picking the top outliers. It was really actually picking what we think goes into making money in the stock market, which is buying good companies when they are cheap, so it was really done somewhat differently.
I actually thought Jim O'Shaughnessy's book was excellent.

Bill Mann: I absolutely agree. The early history of The Motley Fool was built partially around Jim O'Shaughnessy's work, so I certainly am not casting aspersions. As you mentioned, there is a mutual fund company now that runs some of his formulas and does very, very well. *[Editor's Note: That mutual fund company is **Hennessy Advisors** (Nasdaq: HNNA), which we have highlighted as a Tiny Gem.]*

Joel Greenblatt: Well, it is very interesting what happened. I actually wrote up the history of formula-based investing system where a fund did start using one of O'Shaughnessy's formulas and did very badly for the first three years. The fund didn't do well and the fund manager ended up selling the company and then the person who bought it continued with the same formula and ended up doing very well right afterwards. So since inception that fund has done incredibly well yet the original investors and the original fund manager are gone because it didn't do well in the beginning.

I think that is what so great about the Magic Formula. It doesn't always work. If it always worked, everyone would do it. There are one, two or three-year periods of the Magic Formula that we are talking about where it doesn't beat the market, but over long periods of time, it always beats the market and that is very, very powerful.

I used the example, the concept of 2+2=4. Everyone knows that that is the case and no matter what anyone tells you, 2+2 always equals four. It doesn't matter how smart they are, how long they tell you, you are going to stick to your guns. So you will also stick to your guns if you understand what you are doing here, which is if you truly believe what you are doing is buying good companies at bargain prices, you will keep doing it because it makes sense, even though the market doesn't agree with you for long periods of time.

Bill Mann: We saw in the late 1990s where a lot of companies that were just making a lot of money were very, very cheap because it seemed like the investor class as a whole was distracted by things that ended in dot com.

Joel Greenblatt: Well, that is the best example. In the year 2000, we owned a lot of good companies at cheap prices that the market didn't really care about and we weren't doing very well with them. On top of that, we thought the Internet bubble was going to burst any day because stocks were at ridiculous prices and wouldn't that drag down our investments along with the crash in the Internet stocks that we eventually thought might take place, but we decided "hey, listen, we own good companies at bargain prices. We are just going to just keep doing what we know makes sense."
What ended up happening is the market did get crushed. The S&P got crushed. The NASDAQ got crushed in 2000, yet our portfolio was up more than 100%, so if that doesn't tell you to stick with what you think makes sense, I don't know what will. So the market could do badly but as long as you are doing smart things, over time you will do quite well.

Bill Mann: I think that was one of the things about the Magic Formula that immediately attracted me. It wasn't something where you said "Well, if you buy it on the first Thursday of the month, it works out better." These are two very defensible investing components. They are at the core of what good value investing is.

Joel Greenblatt: Well, I would say that I have learned a lot. One of the reasons I wrote this book is because I am really a self-taught investor even though I got a BS and an MBA from Wharton, As far as investing, all they taught me was that you can't beat the market.

Investing I learned from reading and I was reading books by Benjamin *Graham*. I was reading the writings of Warren Buffett. Those are the things that really taught me. The readings of David *Dreman* and so *Graham* and *Dreman* taught buying cheap is a good thing to do and it works over time. Buffett added the component of buying good companies when they are cheap.

I wouldn't presume to say oh, this is a formula that is similar to Warren Buffett, but what I would say is that the concepts are the same. Buffett says "I am going to stick to good companies and buy them when I can buy them at a good price." This is systematically what the Magic Formula does for you except you get to choose from a lot larger universe of stocks than Buffett does now that he is running $80 billion.

Bill Mann: It's interesting that you mention what you didn't learn about investing at Wharton. A lot of individual investors will look immediately to what schools a person has gone to or as they say, "this person obviously has to know about investing. He has a Harvard MBA." But reality is so much different, except, it seems, at one place – Columbia. You teach at Columbia Business School, so you may really be able to speak to this. Columbia is really unique in that it has a long history of actually teaching investing to students.

Joel Greenblatt: Well I always start each class to my students and say, "I aim to teach the class that I wish I had when I went to business school." I want to give young people the benefit of the experience that I have been through. From a practical standpoint in investing this is hugely beneficial. Every investor makes tons of mistakes. It doesn't matter whether they are Warren Buffett or how long they have been doing it or everything else, people make mistakes over time. That is not the problem. The problem is sticking to continually trying to do things that make sense over long periods of time.

I think that is the most important thing to teach people. What does make sense? You are valuing companies and you are trying to buy them at a discount. Of course you will make mistakes valuing companies. This is a guarantee I give to all of my students. I say if you do a good job valuing companies, the market will agree with you. It could take two or three years. It usually takes only at most two or three years, but eventually the market will agree with you, as long as your evaluation work is correct.
I think statistically that is what we are trying to do with the Magic Formula, which is we are buying a group of companies that are in good businesses on average, that are cheap on average and that group of companies will go back to fairly priced within not too long a time, especially if you follow the strategy over a period of years, and you are almost guaranteed to make money over the long term, if you are patient.

Bill Mann: Why do you suppose that most business schools teach that those discounts don't exist?

Joel Greenblatt: You know, I think business schools 40 years ago took a wrong turn into efficient market land and through it a lot of statistics and issues about volatility and things of that nature. When you go back and you look at investing as buying a piece of a company and buying it when you think it is at a cheap price, then how much the stock bounced around over the last six months really ends up being sort of a silly thing to look at rather than thinking about it as owning a piece of company.
When you actually look at what you are doing, which is buying a piece of a company, not a security, not a share of stock, but you are actually buying a piece of a company, all the statistics and all the theory and everything else that business schools teach end up making no sense whatsoever.

Bill Mann: This has become a very nice advertisement for Columbia Business School, right? *(Laughs.)*
One of the stories that I really enjoyed from the book was on your first day of class. The other thing that you did was you had someone just name a company and you had the business section of the paper in your hand and discussed the prices, how they varied within a one-year period.

Joel Greenblatt: Right. What I do is at the beginning of a semester, I call out to my students, "Just name a company." They will pick GM or GE or Foot Locker or something -- Abercrombie and Fitch, for instance. So if you pick something like Abercrombie and Fitch, I will open up the newspaper and I will look at the 52-week high and low. So the 52-week high let's say is 74. The 52-week low is 43. The company is pretty much

unchanged during the course of the year, if the stock has fluctuated between 43 and 74. If you go over the last two years, it is even a wider range. The stock has been between 23 and 74 even though this company hasn't changed very much in the last couple of years. How is that possible? Has the value of this company changed so much during that time? How do you explain that? Does this make any sense? My students spend a lot of time coming up with explanations as to why this makes sense and actually there are whole fields of academic study to explain why this makes sense.

So I ask the question I ask my students, Why do you think the stock can be $23 one day and $74 several months later? Does this make any sense? My conclusion is I don't know why it happens and I tell them I don't care why it happens.

Bill Mann: I thank my lucky stars that it does happen.

Joel Greenblatt: Right, it does happen. All I have to know is that even though the price is bouncing around a lot, it is unlikely that the value of the company is bouncing around nearly as much. So what the Magic Formula is trying to do is pick out those companies that are unreasonably low priced at the times when they are low priced. We are doing that automatically systematically by picking companies that have certain characteristics. They are cheap and they are still good businesses.

Bill Mann: Yeah, and again I think that that is really the core element of sound investing is looking at those two, is looking at those two things. *Graham* said it and Buffett said it and now you are saying it.

Joel Greenblatt: Well, I like to follow in good footsteps.

Bill Mann: The book is called *The Little Book That Beats the Market* and it is available now, is that correct?

Joel Greenblatt: It is.

Bill Mann: OK, well fantastic. We wish you the best of luck and thank you so much for spending time with us here at The Motley Fool.

Joel Greenblatt: Bill, thanks so much for everything.

Bill Mann: Take care, Joel.
Bill Mann owns shares of Hennessy Advisors.

Another Semester

Greenblatt Class # 1

Jan 18, 2005

This weekend outsiders must email *Joel Greenblatt* about auditing class.

<u>Summary:</u> *What Joel does for a living: buying something for less. Opportunity in value investing. Why don't smart people do better? Why value investing works. Problems with valuation techniques.*

What is the social utility of passive investing? <u>None</u> that Joel can see. It is similar to being good at picking horses at the track. **Joel is good at handicapping to make money.**

What does he do for a living? Buy 4 packs of gum for 25 cents and sell one back each for 25 cents. He sells 3 packs a day. 15 weeks x 36 for 6 years or ((4 x $0.25) - $0.25) x 5 x 36 x 6 = $810.00. He pays $1.25 x 216 = $270.

All he does: He finds out what businesses are worth & buy them for less. This is the power of knowing the value of a business.

Look at stocks: *EBay* from $64 to $118. *GM* from $29 to $55. *AAPL* from $20 to $70. *Krispy Kreme* $50 to $5.

Name any company: Why such a (wide) range if the market is efficient? Intrinsic values change slowly, but prices change rapidly and widely. Note the discrepancy.

Observe that prices move around a lot and values move slower. Who knows and who cares? This presents me with an <u>opportunity</u> if I can value businesses correctly. The price at $35 or $55--both can't be right.

Beating the market is <u>not</u> easy.

- Value companies
- Wait for the right price

    1. **People can't control their emotions.**
    2. **People don't do the valuation work.**

Thus prices move around more than value.

- *Mr. Market* is crazy
- Have a margin of safety

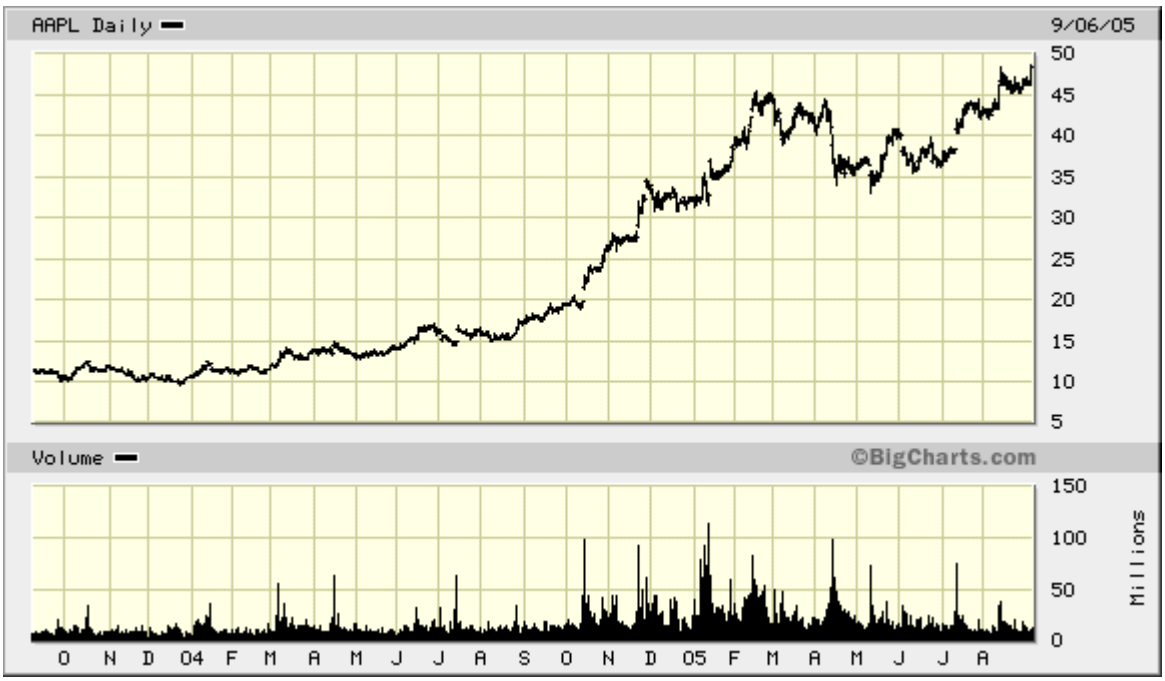

But there is no translation into action for many investors including smart MBAs.

Gotham Capital has compounded capital at 40% per year. **He just does the obvious.**

Why has he outperformed if: 1.) he can't value better? 2.) He is no smarter than others?

Because of the way he looks at the world and his ability to wait for good risk/reward opportunities.

Simplify things. If your valuation is good--that is the key. If he can't value, then he walks away. If he can't figure it out, he walks away. Swing at fat pitches. If it is hard, then pass.

Greenblatt will invest in technology like when those companies had tons of cash and he could buy the business for free.

A good book: Stocks for the Long Run by Jeremy Siegel

Why don't smart people from *Columbia Business School* and *Wharton* do better? They get confused - They put value investing in the context of efficient markets.
In one year you have a 2/3 chance of losing 8% or gaining 28% if you hold for less than 1 year.

In 1996 *Richard Pzena* under performed the market and lost clients, yet he was doing what he always was doing.

3 to 5 years is his minimum time horizon. This is the most inefficient part of the market.

In 1999 value was dead. For 4.5 years, there was underperformance. *Oakmark* fired their manager and brought in a new guy who kept doing the same thing and now is doing great.

Value investing doesn't always work, because if it did, then it wouldn't work. *(This contradiction makes investing very difficult because of the persistence, patience and discipline required).*

Look at special situation investing - uncovered areas, a different way of looking at the world. Keep the context.

How he sees the world. Now he owns three stocks - concentrated. **He is not leveraged.** He believes that the market will eventually get it right. The market can often present extreme values.

Special situations - Time frame involved, not sophisticated. Bigger pick. Buy a company for 4.5 x EBIT, the business will do OK.

Also, the way we conduct our portfolio. How we view risk is different than the norm.

This course is about what I know. Basics of finance and accounting. **This is the course I wish I had while in business school.** Find things worth a dollar and pay 50 cents for it—*Ben Graham's* philosophy.

The press is depressed because something bad happened, people are worried about it. What will it earn two or three years from now? Most focus on the short term problems versus the long term return.

When the smoke clears, what will it be worth?

Ben Graham: Buy for 50 cents a crummy business, but now the $1 is worth 75 cents. The danger with buying "cigar butts" is that time is the enemy of the bad business.

Value your businesses and assume it will pay you. Estimate of growth, but don't know way.

Concentrated portfolio. *Gotham* returned all outside capital and stayed small. Money Managers focus on next quarter.

There are different ways to value business. Triangulate or cross-check your work.

- DCF Analysis.
- Relative Acquisition Value.
- Break-up value (real estate).

Acquire value - discount brokerage has 100,000 clients but worth more to another brokerage firm that has 500,000 clients. Consolidation of clients means that a strategic buyer can pay more.

Flaws with Each Valuation Method

1. Intrinsic valuation – Discounted Cash Flow (DCF) has flaws, small changes in inputs lead to huge swings in valuation. Use when the business is very stable and you should be very conservative (in your assumptions of growth and discount rate).

2. Relative value - P/E similar, but other public companies are overvalued. Most acquisitions fail. Pay only 1/2 of 250 x earnings. Not comparable - industry consolidating.

3. Break-up value. One division is earning $3 per share while the other loses $1 per share. So $2 per share and if the stock is at $33, then it trades at 17 times EPS. 11 x EPS if – ($1.00 close down our loss division) has flaws.

So we use several valuation methods to cross check. Use conservative assumptions.

Use a long-term bond yield. $1/EPS at 16.66 xs vs. 6% long bond. Compare a growing dollar vs. a certain dollar. 6% from govt. bond, but if $1 grows then good. If the current long bond (Feb. 2005) is 4%, use 6% at least as a minimum hurdle rate or discount rate. Have a margin of safety.

$20 ----$1 EPS but the bond yields 6% while the stock yields 5%, but if it can grow, then better.

$10 ----$1 EPS now but normalized earnings show $0.50. Do you rather own a risk- less bond or this? Is it going to grow or not?

A complicated capital structure: buy 1/2 cash value and a good business.

Value Investors' Club (VIC). 1/2 are professionals. The rest are sophisticated professionals in finance. There are good write-ups. Why cheap?

Some turnover because each member must contribute 2 ideas a year, but less than 6.

Review the application for VIC.

S.CN Sherritt
STM.V
JEF
CAH
HIF-U
Groupe Bull
Olympia GA $4.13
MSO
BUL.FP

Next week: Income Statement, Cash flow and Valuation Work.

Use EBIT not P/E ratio in your valuation work.
Read Chapters 12 - 13 & 17 from Hooke's Book. There are some areas in that book where I disagree.

Duff & Phelps case study- $52

END

Greenblatt Class #2

Jan 26, 2005

Joel will not be having a Feb. 9th class. Make up on Friday?

Next Class we will have *Richard Pzena* presenting his idea of *FRE*. Prepare *FRE*ddie Mac (*FRE* - NYSE)

Summary: Balance sheet analysis. Good business and good price. Duff & Phelps Case Study. ROE vs. ROC.

Today we will look at Balance Sheets, Income Statements, CFs as an investor.

Terms	Abbreviations
Net Working Capital	NWC or (CA - CL)
Fixed Assets	FA
Current Liabilities	CL
Current Assets	CA

I. CASH

We said last week that DCF is theoretically the way to look at things, but it is difficult to estimate the cash collected over a long period of time. The problem is figuring that out. Using DCF is like using the *Hubbell Telescope*, one small change and you are looking at another galaxy.
Exception for using DCF.

1. Answer: A crummy retailer with negative cash flow but great real estate. The property is worth more than the DCFs of the retailing operations. Hidden Asset that can be eventually but uncertainly turned into cash flows. Future wealth creation

2. Another example: two discount brokers: 1 has 200,000 customers and (2) another broker that has 1,000,000 customers buys it. After the acquisition Broker 2 has 1.2 mm customers with same cost structure. Broker 1 is worth more to an acquirer who can drive operational improvement--mostly cost reduction. There is more value to a strategic buyer.

In general, DCF is theoretically the normal way to value businesses. If that is the case, then why bother looking at the balance sheet?

1. More cash on the balance sheet than is necessary. The excess cash is $5. How to value and deal with the cash? CF from cash (interest earned) an investor must separate from the operating business. Forget the interest income line.

2. **How will management deploy cash?** The $5 is not in your (the investor's) pocket. What are management's investment opportunities? What is the history of the management in deploying cash?

Cash is easy to see on the balance sheet, but that is not the end of your analysis. The $5 is not in your pocket so what you have to determine, based on the history of management, the history of the company, the opportunities in their space, what is going to happen to that cash? If the stock looks cheap, one of the things management could do with the cash is buy-back stock and accrete value to the remaining shareholders. That would be a good use of cash assuming the stock was undervalued. The company could go on an acquisition binge, and you may or may not like that since 75% of takeovers end in failure, you might think that cash will be dissipated. **You have to determine what will happen to the excess cash.**

Though you see the cash--mathematically it is $5-- on the balance sheet, you need to determine what that cash is worth to me, the investor. If I think they can grow their business with that cash like buy an add-on type of business or if they are buying back stock, I may give the cash full value. Or the company may sit on the cash and only earn 1% or 2% a year, so I discount the cash on the balance sheet. Generally, I look at that $5 on the balance sheet. And how much is it worth to me. I may value it as low as $1 or $2 or at full value.

Don't just take the $5 at face value. If it were all mathematically simple, the opportunities wouldn't be as great.

There is another flaw when you use Enterprise Value. EV = Mkt.Cap. Plus Net Debt. $6 debt + $5 cash = $1 EV. Say a company has 1 share priced at $7 per share or a $7 Mkt. Cap. $5 in cash so EV = $7 mkt. cap - $5 in cash = $2 in EV.

You estimate that EV will be worth $3 or 50% higher (at $2 a conservative 50% discount to $3). So you can lay out $2 in EV and have something at $3 in value. **What is wrong with that analysis?** You can't immediately unlock the value of the excess cash.

Back to example: EV is $2 and you value it at $3, however if you value the cash at par you are putting a big weight on the $5 in cash. You are laying out $5 now for a future return and you may have to wait 2 or 3 years. So $5 + $2 = $7 -------going to $3 + $5 = $8. The $5 could be dead money so there is less upside. Note opportunity costs.

You can wait round for 2 or 3 years for *Mr. Market* to revalue the business. But here don't be fooled--you pay $7 for a return of $8 after two years--your return is not that high--less than 7% compounded. (6.93% to be exact).

USE Enterprise Value (EV) ANALYSIS

Should we use P/E or EV/EBIT analysis? In this class **we will always use EV/EBIT analysis** because in my 20 years in the business--if you don't make the best of your business, someone will come in and do it for you.

So in one sense in the book I assigned you (*Security Analysis* by *Hooke*), the author says that you don't have control over the capital structure of the company, so P/E analysis is fine. The Company has the debt it has and you should just leave it at that.

I disagree and think you should always use Enterprise Value (EV) analysis not market cap and Earnings per Share (EPS) analysis. Use EBIT or (Ebitda – maint. Capex).

In general, I think the Private Market Value (PMV) is the best. Figure out what the whole business is worth to somebody then pay a big discount for it.

II. Accounts Receivable - liquid in a year.
Inventories

Refer to Chapter 8 of *Thorton O'Glove's* Book, *Quality of Earnings*.

Concerns: credit quality and collectivity. Work in Process (WIP) vs. Finished Goods. Look at them as risks. If you sell on credit, you can sell more stuff.

Inventories - salability

Commodore Int'l	**9/30/84**	**% Chg.**	**9/30/83**	**% Chg.**	**9/30/82**
Net Sales (3 months)	$244.2	16.7	$209.3	102.6	$103.3
Accts. Rec., Net	$254.7	34.1	189.9	5.5	180.0
Inventories	437.4	9.7	398.7	22.0	326.8

Good, inventories only up 22% and A/R up only 5.5% in 82-83 while sales are up 103%. Customers are paying quickly or in cash for a hot product.

However, in 84-83, A/R ballooned 34% while sales only up 16.7%--note divergence. Inventories only up 9.7%. A/R up because of slow payers or easier credit terms. Or because of a sales slow down. You look for a dichotomy between these two things--sales and A/R.

Commodore Int'l	**Sep 30, 1984**	**Sep 30, 1984**
Inventories		
Raw Materials and W.I.P.	$243.2	$270.3
Finished Goods	$194.2	$128.4
	Note big jump in finished goods!	Old goods not selling!

Not expecting as many sales since finished goods piling up in the warehouse. Now 1984/1983 receivables are ballooning 2x as much as sales. This Company subsequently blew up.
Ask if receivables and inventories growth is in line with sales growth. **Look for Aberrations and divergences.**

Determine if inventories are good--should I give the A/R and Inventory a haircut?

Could be an industry in distress. Future sales shoved into inventory. Work in Process Inventory (W.I.P.) up 50% while finished goods are up 10% - big boom in sales. Check the divergence out.

Are inventories and receivables in line with sales growth? Know what inventories are made up of.

Keep the big picture in mind.

III. Goodwill

Now some general goodwill is not being amortized. $5 Tangible Assets with $10 EPV so purchase price of $10 in book value has $5 in goodwill. Or $5 in goodwill (premium paid in acquisition) + tangible assets $5 = $10 book Value.

I originally paid $10, but now the value is $7, so $3 written-off ($10 - $7). There is a Goodwill impairment of $3.

Company 1:	Current Assets of	$3
	Fixed Assets of	$2
	Goodwill of	$5
	-Current Liabilities	$1
	Book Value =	$9

Company 2:	Current Assets of	$3
	Fixed Assets of	$7 (more fixed assets means more replacement cost during inflation)
	Goodwill of	$0
	-Current Liabilities	$1
	Book Value =	$9

Both companies earn $2 per share in cash. **With company 1, you don't have to replace tangible assets so you would prefer the business with goodwill**. Less tangible assets means more investment to replace those assets in order to keep the business running as is. I (investor) paid a premium over the tangible assets of $5 because of the high Earnings Power Value of the business. Once I have paid that premium, I own the business and the greater returns will allow me to grow with less investment in fixed assets. **I don't have to keep paying the premium over tangible net assets. (*WEB explained this in his 1989 annual report).***

Current Assets - Current Liabilities = Working Capital (CA-CL = WC).

Capital employed: NWC + FA. So Company 1: WC = $2 + FA = 2 ---$4 in capital. ROIC = $2/$4 = 50%. $2 in cash earnings pre-tax/total investment capital = $2/$4 = 50%.

For every $1 invested, the business earns 50 cents. This business doesn't need a lot of Fixed Assets to grow. You would have to buy less FA to grow than Company 2. (Less capex reinvested).

Company 2: WC = 2 + FA = $7 ----$9 in capital. ROIC = $2/$9 = 22%. For every $1 invested, it earns 22 cents.

There is goodwill on the balance sheet because before, someone paid less than me. Asset heavy.

Accounting records what you or someone else paid in the past.

Always look at pre-tax return. EBIT: Earnings before Interest & Tax or Operating Income. EBIT allows an apples-to-apples comparison between companies because firms have different tax and interest rates. How much the business is earning regardless of the tax rate or interest paid or owed. How much is the business earning?

How much is the business earning to make an acquisition? How much of a dollar of sales drop to operating earnings--the bottom-line.

EBIT/(Net Working Capital) + Net Fixed Assets or EBIT/investment capital.

EBIT is your pre-tax return/what capital that had to be employed to generate that EBIT.

CA ------A/R - CL --------A/P (*FRE*e loan). Assume no excess cash or take out the excess cash and add back after your analysis. You have to finance these receivables minus the money that is lent to you *FRE*ely through A/P.

On the denominator we take the Net Working Capital--what you need to run your business plus you need to finance your fixed assets or your plant and equipment. Forget goodwill and everything else.

What you need to generate EBIT is in your NWC plus Fixed Assets ------ Return on Invested Capital (ROIC or ROC). EBIT / (NWC + FA) or operating income/invested capital.

Which is the Better Business?
GUM STORE

Jason opens a gum store for $400,000 which includes WC + Inventories + FA and building-out the store. Every year he makes EBIT of $200,000. He makes $200,000/$400,000 = 50% Return on capital (ROC).

JUST BROCCOLI

Now he has a friend named *Jimbo* who opens a store, *Just Broccoli*, and he made $10,000 for each store he opens. $10,000/$400,000 = 2.5% ROC.

Who would you give money to expand? Give $$ to *Jason* because of higher ROC.

You want to ask how much it costs to expand and how much will you make on the investment?

Be in a business earning high ROC. Borrow 10% to make 50%---that is a good deal.

Look at pretax rate to simplify. Compare pretax return to pretax return.

Jimbo is really throwing money away earning a 2.5% ROC vs. a 6% risk *FRE*e rate from govt. bonds. He is not earning 2.5% but losing 3.5% (6% Risk *FRE*e Rate - 2.5% return earned from his store). Opportunity Costs. **Your goal as an investor: you want businesses that are earning high returns on capital and returns above your cost of capital.**

Using capital regardless of how fixed assets are financed. How good a business is this (not measuring equity)? If I put in $, how much do I earn on it?

Denominator is **NWC + FA**--why using net and not gross working capital? On average that is the right thing to do. Because in general what happens to your fixed assets, you buy something and you depreciate the assets so the value of your asset goes down, but to maintain your asset, there has to be on-going capex. Depreciation and Capex cancel out (assume Deprec = Maint. Capex). If capex is more than depreciation, then FA will increase accordingly and you will be updated. If you are in expansion mode, you build new stores and the FA balloon before you earn on those assets, so your ROC will decline--so you must normalize or adjust for that. Fixed Assets minus depreciation plus Maint. Capex is why I use a Net number.

So NFA + NWC is what I look at. A quick and dirty analysis. We only buy a few situations. We may have to look at 50 to 100 situations to buy 1 or 2. Drop or evaluate to study further. Do intensive research on a few things. *Gotham Partners* are very selective in our investments.

Explain the big picture. Your predecessors (MBAs) failed over a long period of time. It has nothing to do about their ability to do a spread sheet. It has more to do with the big picture. I focus on the big picture. **Think of the logic, not just the formula.**

Thorton O'Glove was recently interviewed and he wrote the book, Earnings Quality. I looked at the footnotes but they are not the big picture. Don't lose the perspective of the big picture. Listen, I lost the big picture. Savvy guys say the footnotes are important, **but think of whether it is a good business and am I getting it at a good price.**

***DUFF & PHELPS* Example**

The problem with EBIT/ASSETS = $28.4/$44.2 = 64%. What is wrong with that? Take out goodwill of $21.7 million. EBIT/Tangible Assets = 126%. Fantastic returns!

EBIT/(NWC + FA) or (tangible assets - current liabilities). CL or Non Interest Bearing Current Liabilities (NIBCL)

This is a great business because it is asset light but with huge returns to capital. The business needs little capital to grow. **It drowns in cash.**

Student: after-tax EBIT/EV is 6.5% or about the LT Bond Rate. Hold.

EBIT/Assets = 28.4/44.2 = 64%. Take out Goodwill of about 1/2 the assets.

Joel:

Over 100% return on tangible capital. This happens to be a great business with huge ROC.

What to Focus on:

1. First I am looking for good businesses. EBIT/(NWC + FA) or EBIT/Tangible Assets. This is what the business is earning pre-tax or pre interest cost or benefit.

2. Then a bargain price: EBIT/EV or my earnings yield. This is what I am paying for those pre-tax earnings. $100 paid but earning $9, so the yield is 9%.

3. Is the earnings stream growing, declining or staying the same? How confident am I of this? I focus on normalizing earnings two to three years out instead of all the little problems in the near-term. Project my EBIT two years out--will it be at risk, will it be growing or shrinking? Hard stuff. Project my EBIT two or three years out. This is where your circle of competence is important.

4. How much am I paying relative to my normalized earnings? If the 9% yield is growing quickly--it could be a good buy. If it is a business with high ROIC then good. Am I getting a good price? How much am I paying? Am I getting a good return?

5. If I am unable to normalize earnings, then pass on the opportunity or set aside.

The hard part is determining the <u>normalized number</u> and what is happening to that number. *Regression to the mean.*

If I can figure the normalized EBIT three years out, how confident am I of that? Is this a good franchise or not. What is my ROC? How confident can I be of the future? This depends on the Barriers to Entry, competitive advantages and management, etc.

Then how much will I be paying for that?

I look at things in that simple way. Most of the time I can't project normalized earnings. But when I can, then I have confidence in the business. The space is growing, their new stores will be earning a lot. The business has a franchise.

<u>Simplify</u>

Just Learn to first ask:

Good Business?	**Is this a good price?**
EBIT/NWC + FA (or TA - CL) Pre-tax oper. inc./Inv. Cap. Is this a good business with normalized earnings and future normalized earnings?	EBIT/EV Pre-tax oper. inc./Enterprise Value Am I getting a bargain price?

Only invest where and when you have confidence. You don't have that luxury. If you have a choice, then wait for the perfect pitch. If a business or a normalized return produces less than 20% pre-tax, the investment must have more going for it than that.

When interest rates are below 6% (like today 4.5%) I use 6% because when Interest rates are less than 2%, you get crazy multiples. Using 6% or above is an added margin of safety.

Student: Mgt. is getting too much money. Greenblatt: this is a brains business, so you might need mgt. He likes to have management incentivized with shares.

So the company is earning $2 per share, but you feel normalized earnings three years out will be $5 per share. Usually what happens is that when you grow sales, you have to grow NWC and FA during that time. Don't fine tune it. I am trying to choose between the Broccoli Store with 2.5% ROC and the Gum Store with 50% ROC. The choice should be obvious.

Sales growth

Every dollar at *Duff & Phelps* of FCF can go to buying back shares. EBIT growth of 51% in 1998. Jump in sales growth due to structured finance.

The business is a semi-oligopoly. Firms need to have bonds rated by an agency like *Duff & Phelps*, S&P or *Moody's.*

- This is a good business
- Use of cash to buy back stock.
- Because of share buy backs, then Net Income grew at 18% while EPS grew faster at 29%.
- Sales growth of 13% to 25%

In 5 years, what would *Duff & Phelps* look like?

1. 28.4 EBIT grows at 24% per year because it is a good business and has a niche with *Barriers to Entry (B-t-E)* and *Competitive Advantages (CAs).*

Duff & Phelps is using all their earnings to repurchase stock. Assets are not growing despite sales growth of 20% - 25%. It only has tangible assets of 23 mm--only growing by $2 million over five years despite sales doubling. Then looked at EBIT growth. 51% growth in 1998 due to increase in the structured finance area. Their business could grow without increases in assets. There is good increase in sales and FCF without adding investment.

All in all, this business looks good. Every nickel used to buy back stock, so a good use of cash--EPS growing faster than earnings.

What would this business look like in five years?

Greenblatt makes three assumptions for three scenarios:

If we don't have confidence in our estimates, this is a waste of time. EBIT grows faster than sales. EPS grew at 30% per year and sales grew at 20% per year.

1. grow 8%: EBIT of $28.4 ---$41.2 + $2 million = $43.2 x 8 multiple = $341/3.45 mm OS = $99 per share.

2. grow 13% $52.3 + $2 = $54.3 x 13 = $32.58 after-tax = $122 per share.

3. grow 20% = 28% annualized return over five years = $164 per share.

What about cash earned over 5 years? I will assume that I will add the cash to the balance sheet. But in this case, I assume for every $1 there is a buy back of stock. Assume price is up 8% per year. All their earnings used for share repurchase. 347,000 shares per year bought back--so reduce at the end of five years by 1.5 mm shares. 5 mm - 1.5 mm FD outstanding shares = 3.5 mm outstanding shares. *Prof. Greenblatt* noticed the declines in outstanding shares because of continuous share buybacks.

Place a *Margin of Safety* in your assumptions by being conservative. At most, an investor will lose cost of carry if the business doesn't grow.

Simplicity of exercise. In footnotes - put $2 million back. Mgt. owned 25% of company so management is a big stakeholder. A good sign of management alignment with investors.

7.8% after-tax yield for a 13 P/E vs. 6% bond.

Barriers to Entry with huge ROIC. He learned from this to invest in *Moody's*. He invested in *Moody's* at 20 x EPS for a 5% yield which was less than 6% bond yield.

Learn an industry. Because of studying Duff & Phelps, he knew to look at MCO when it was being spun off.

13% growth in five years = $122. It turned out that 24% growth a year was conservative.

Assessing Management:

The trick is that if a CEO is being paid $500,000 a year, then 1/2 million point for every $1 up. Where is their bread buttered? *Prof. Greenblatt* wants mgt. to be large stakeholders relative to their salary. To fight or change management, there is not a lot you can do except by a proxy fight.

Mgt. of *Duff & Phelps* spent $4.5 mm buying back stock in 1996, $13.9 mm in 1997 and $16.7 in 1998.
Net Income of $9 mm in 1996, $10.7 mm in 1997 and $16.7 in 1998.

KEY TO LEARN:

Step 1: Good Business?	**Step 2: Bargain Price?**
EBIT/(NWC + FA) Operating Income/Net Tangible Investment	EBIT/EV or Enterprise Value/Operating Income

Can you normalize EBIT or not? 6% (US Long term bond yield) is the bogie to beat. 16.66 x P/E vs. 6% US bond yield. 10 x EBIT is my initial bogie. Growing or Shrinking?

Gotham Capital invests in a very focused portfolio of 3 to 9 positions.
Have a focused portfolio. Only do things you feel comfortable about or know a lot about.

How to adjust to this framework to new stuff like special situations? How to create opportunities and expand our universe? 6% is equivalent to: $16.66/$1.00

The point of the *Duff & Phelps* example is the simplicity of the exercise and the different things you need to think about. If you looked at the footnotes, you see they would stop paying $2 million a year. What are they doing--buying back stock. Mgt. owned 25% of the company so they were stakeholders. The business had a franchise. There were barriers to entry.

7.8% after-tax yield (8 P/E) or 6% bond? I would rather own *Duff & Phelps* Rarely will you find a business this good in your travels. In fact, the only other business I found was Moody's when it was spun off when it was selling 20 x earnings or yielding 5%. Their earnings were temporarily depressed.

I saw this opportunity because of my prior study of this industry. Ultimately, *Fitch* took over *Duff & Phelps* at $100. In one year we got $100. The gap between price and value closed quickly. **All knowledge in this business is cumulative.**

End of lecture.

Hand-Out www.sherlockinvesting.com

Return on Equity or Return on Capital: Which is the better guide to performance? John Price.

Two brothers, *Abe* and *Zac*, both inherited $10,0000 and each decided to start a photocopy business. After one year, *Apple*, the company started by *Abe*, had an after-tax profit of $4,000. The profit from *Zebra*, *Zac's* company, was only $3,000. Who was the better manager? For simplicity, suppose that at the end of the year, the equity in the companies had not changed. This means that the ROE for *Apple* was 40% while for *Zebra* it was 30%. Clearly *Abe* did better? Or did he?

There is a little more to the story. When they started their companies, *Abe* took out a long-term loan of $10,000 and *Zac* took out a similar loan for $2,000. Since capital is defined as equity plus long-term debt, the capital for the two companies is calculated as $20,000 and $12,000. Calculating the return on capital for *Apple* and *Zebra* gives 20% (=$,4000/$20,000) for the first company and 25% (= $3,000/$12,000) for the second company.

So for this measure of management, ***Zac* did better than *Abe*.** Who would you invest with?

Perhaps neither. But suppose that the same benefactor who left money to *Abe* and *Zac*, also left you $100 with the stipulation that you had to invest in the company belonging to one or other of the brothers. Who would it be?

Most analysts, once they have finished talking about earnings per share, move to return on equity. For public companies, it is usually stated along the lines that equity is what is left on the balance sheet after all the liabilities have been taken care of. As a shareholder, equity represents your money and so it makes good sense to know how well management is doing with it. To know this, the argument goes, look at return on equity.

Let's have a look at your $100. If you loan it to *Abe*, then his capital is now $20,100. He now has $20,100 to use for his business. Assuming that he can continue to get the same return, he will make 20% on your $100. **On the other hand, if you loan it to *Zac*, he will make 25% on your money.** From his perspective, *Zac* **is the better manager since he can generate 25% on each extra dollar whereas** *Abe* **can only generate 20%.** 25% return vs. 20% on total capital employed**.**

The bottom line is that both ratios are important and tell you slightly different things. **One way to think about them is that ROE indicates how well a company is doing with the money it has now, whereas ROC indicates how well it will do with further capital.** (In a later article, I will explain in more detail how to use ROC to estimate the growth of earnings.)

But, just as you had to choose between investing with *Abe* or *Zac*, if I had to choose between knowing ROE or ROC, I would choose the later. As I said, it gives you a better idea of what a company can achieve with its profits and how fast its earnings are likely to grow. Of course, if LT debt is small, then there is little difference between the two ratios.

Warren Buffett is well known for achieving an average annual return of almost 30% over the past 45 years. Books and articles about him all say that he places great reliance on ROE. In fact, I have never seen anyone mention that he uses ROC. Nevertheless, a scrutiny of The Essays of Warren Buffett and Buffett's Letters to Shareholders in the annual reports of his company, Berkshire Hathaway, convinces me that he relies primarily

on ROC. For example, in one annual report he wrote, "To evaluate (economic performance), we must know how much total capital--debt and equity--was needed to produce these earnings." When he mentions ROE, generally it is with the proviso that debt is minimal.

If your data source does not give you return on capital for a company, then it is easy enough to calculate it from ROE. The two basic ways that LT debt is expressed are as LT debt to equity (DTE) and as LT debt to capital DTC. (DTC is also referred to as the *capitalization ratio*.) In the first case, ROC is calculated from ROE by **ROC = ROE/(1 + DTE)**, and in the second case by **ROC = ROE x (1-DTC).**

For example, in the case of *Abe* we saw DTE = $10,000/$10,000 = 1 and ROE = 40% so that, according to the first formula, ROC = 40%/ (1+1) = 20%. Similarly, DTC = $10,000/20,000 = 0.5 so that by the second formula, ROC = 40% x (1- 0.5) = 20%. You might like to check your understanding of this by repeating the calculations with the results for *Zac's* company.

If you compare ROE vis-a-vis ROC for a company like *General Motors* with that of a company like *Gillette*, you will see one of the reasons why Buffett includes the latter company in his portfolio and not the former.

END
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Greenblatt Class #3
Richard Pzena Presentation

February 02, 2005

Next Friday (Feb. 11, 2005) 9:30 AM in classroom 329.

Summary: Richard Pzena's Presentation on Freddie Mac (FRE). Why Value Investing works. Regression to the mean.

***Joel Greenblatt* Introduction:** *Richard Pzena* is the smartest guy on Wall Street that I know and probably the smartest guy I know.

Don't let that discourage you. You don't have to brilliant to be successful. Most of us are intelligent but not brilliant. You can be average and do very well. And without further undue……

Richard Pzena: We will talk about *Freddie Mac (FRE)*. I forgot what the annual report of FRE looked like--and I think this is one of the reasons why value investing works *(Rich Pzena holds up the annual report of FRE which is 400 pages long)*, because you have to read this kind of stuff and you have to try to make sense of it. And it scares most people when they read about the problems of *Freddie Mac*.

Why Value Investing Works

Some of the evidence for why does this style of investing work. I try to use real examples of the kind of things that people are forced to invest in to be true value investors. And maybe it will give you a sense of the human nature and the behavioral psychology that creates value opportunities. And why they will continue forever.

The data is fairly compelling. There have been many academic studies over the course of time trying to find the best things that work in the stock market. What works on Wall Street is a book that tests every available metric. Value metrics, whether they are low price to CF, BV or sales or low EV/EBIT, tend to be a good predictor of future performance. That seems silly as you can get because you would think these opportunities are arbitraged away.

If I were going to look from the 1960's (45 years) to 2004. The *S&P 500* performed 11.5% a year. If you took some simple metric of valuation--lowest price to book value quintile--and bought the cheapest quintile. You would make about 17% or 5.5% out-performance per year for 45 years or 8 times as better.

How can that be? There are a couple of explanations: The tendency of people investing in markets is to act like human beings. Well, what does that mean? Typically, this is how they forecast: they simply extrapolate trends. Good businesses continue to do well; bad businesses continue to do poorly; and stability stays stable. People forecast by looking at the past (driving while looking through the rear-view mirror—*Warren Buffett*). People use that history to extrapolate into the future.

But the actual behavior of companies especially at extremes does not look anything like that. The actual behavior is **regression to the mean.** Note decline of high ROE companies and rise of low ROE Companies.

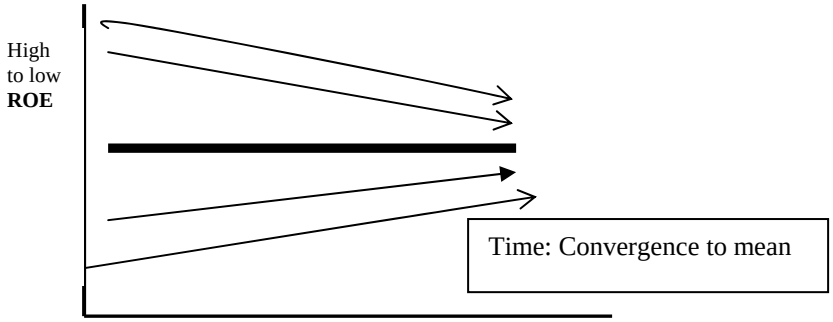

If you use any profitability metric like ROIC, Margins or ROE, you would find that the best companies start in the top quintile (based on profitability), and I will track their profitability over the course of time. What would I find……I would find a slow deterioration to the mean. People assume that the profitability will continue so they price these companies at very high price to book so they might be priced at 5 x book value but earning on average 30% ROE while the lowest quintile might be priced at 1 times book value with a ROE of 2%. Many people would say well these companies with the 30% ROEs are just better. So paying 5x times book for 30%. I get (30%/5) or 6% vs. (2%/1) 2% return so those companies (30% ROE companies are better.

The data we use does not have a survivorship bias so it includes the companies that go bankrupt. What percentage of the lowest quintile companies go bankrupt? Only 1 percent.

A Solid Statistic over time	**1 year**	**5 year**	**10 year**	**20 year**
17% vs. 11.5% out-performance	65% probability	85%	95%	100%

That is looking back over time. Obviously that doesn't guarantee what the future will be, but it doesn't seem to change with time. With every generation there seems to be a *Nifty Fifty*, the *Internet Bubble*. There is something that gives rise to unbelievable valuation spreads, despite the lessons of history for 100s of years. Why?

Have you read books from the *New Era*? One book said that the historical rules of supply demand had been repealed. The greater the supply, the higher the value. The greater the supply, the lower the price but the higher the value. Those were the books that people were reading and believing. You look back on that and say what were they thinking?

Today we have gone almost back to the other extreme. Today people are looking at commodity businesses that are clearly bad businesses with decades of history of lousy returns on investment. The only thing today that counts is physical possession of steel, oil or lumber.

You have better odds in the value camp, because **you are playing in a better field**. So if I was mediocre, I would beat the market.

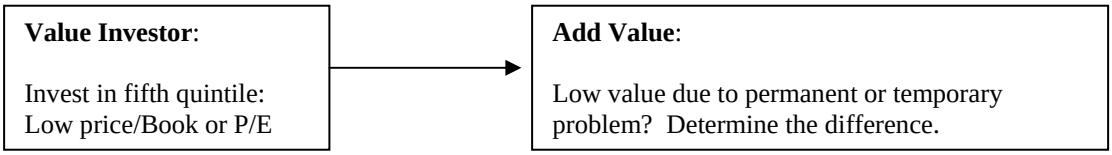

But to be great one must distinguish--what this tells you (lowest quintile) is that those companies are experiencing problems; some are experiencing temporary problems. **The way you can add value is to distinguish between temporary and permanent problems.** You can avoid the bankruptcy issue by avoiding the companies with debt.
But some of the 17% return comes from taking that bankruptcy risk. How many managers can claim for 40 years to have returned 17%? You would have 8 times as much money returning 17% vs. 11.5% after 40 years.

Analyzing Cyclical Stocks

Student: How to value cyclical stocks? Housing Stocks have low price books with high ROE's. Is that the best of both worlds?

Pzena: I would believe that those housing stocks have no chance of maintaining that profitability. That would scare me. If you bought into the home builder story--all the mom and pops are out of businesses and the industry is consolidating--those earnings will be sustainable. One possible explanation.

Any problem with highly cyclical companies with a profit margin swing--you get booms and busts in demand--let's use steel--the price goes from $200 a ton to $600 ton and now you hear it is a "new" world. China had huge demand, there will be shortages of material. It ignores 1000 years of human behavior. You build a lot of steel plants. You can't ignore the supply side issue. What sets the price is the amount of supply (and the number of plants built). When supply comes on, it comes on in huge amounts. There is a sudden shift in supply.

The electricity market had a supply problem: *Calpine* had huge (high) ROEs, power plants will never be built due to environmental issues. So *Calpine* gets valued at 2 times the replacement costs of a power plant. So they have $1 billion in power plants but they are valued at 2 times. So what should *Calpine*'s business strategy be? In one year they added 20% to supply. It is rare to find a sustained commodity peak because the supply side—the increase in supply in response to high prices. *The law of supply & demand is immutable.*

Home builders have a history of poor returns on equity and now all of a sudden they are having spectacular returns on equity.

Last week I visited a home-builder. What I heard was in 2004 they built 37,000 homes and their plan for 2006 is to build 60,000 homes. They acquired all the land and infrastructure. When you ask, what about a downturn? Their response is that you do not have to worry about a downturn because the little guy will suffer. When you ask the regional guy what he will do, he says that you cut the prices quickly and move the inventory. Don't worry we will take it out on the contractors.

The whole purpose of price cycles is to change behavior. The market can't absorb the new supply. It is not just them, but all their competitors who replicate the same strategy. It will happen (the cycle turns) but I don't know when it will happen--next year or the following year, but it will happen.

I am not saying that the peak can't go on for awhile, but you are playing with fire in that kind of investment. This is momentum investing. I am going to ride this bubble and get out before the market turns. I can show you statistical evidence that momentum investing works. There is a serial correlation between what happens today vs. what happens tomorrow. If today's earnings are good, then there is an 80% chance that tomorrow's earnings will be good.

When the market turns, it turns violently. The people playing momentum are spending every day on the phone with the homebuilders asking how many people looked at homes.

While I do believe value and momentum investing are sensible strategies--I have a lot of trouble understanding growth investing.

If I randomly buy the highest growth stocks, I will lose. The higher the growth rate, the lower the returns--why? **Because everyone sees the same thing.** In fact, if I did the same graph as before substituting growth rate for returns, I would get exactly the opposite--the higher the growth rate, the lower the returns. Why?

Everyone sees the same thing, so they pay a high price. But what are the odds of such growth continuing? If you were to study companies with a billion dollars of market cap, about 1200 of them, what percentage of those companies have sustained 15% growth rate for ten years based on historical analysis--less than five (5) percent. **It is really, really hard to have growth rates of 15% for ten (10) years.**

People, when they do growth stock investing, are comparing P/E to growth rates as if those growth rates would continue forever, as if the growth rate will never change. So when you try to understand the valuation of *Cisco*, the reality is that *Cisco* stopped growing as fast as the market hoped. They (investors) had to believe to put a 500 billion valuation on a company that was earning $1billion. They had to believe that $1 billion will grow a lot. Yet, the odds are so heavily stacked against you in that kind of a bet, it doesn't seem reasonable to try to make that bet. That's the fundamental underpinning.

Let us actually take a look at companies trading at low price to book.

Student: In the homebuilder's example, why did you go out there to visit them? Did you go there to think about shorting stock?

Pzena: I went there for educational purposes because I want to be ready buy when the collapse comes. I conclude that the collapse will be very spectacular. Historically, these companies have sold below their book value when they have collapsed. The argument today by the homebuilders is that their book values are understated because the value of the land has gone up.

I have no doubt that that is true, but also, there are at least 10 other publicly traded companies which are well-financed bidding property values sky-high. They are doing it using options, but they are giving a lot of the economics away to the land-owners. They will do fine as long as they are bailed out by rising prices.

They do all their economics assuming no price rise and they only do projects with a 20% rate of return. ***Pzena*** asked the Company, "How would you have done over time using that metric?" If we were not bailed out by rising prices, we would not have made it on a single development. I believe it because 20% is a ridiculous(ly high) return. The reason they don't make their numbers is because developing properties is difficult and they don't happen on the time schedule they expect. So when housing prices are rising, they have windfall profits.

Student: When would you buy the homebuilders?

Pzena: **I would buy the homebuilders when their ROEs are below normal**--not when they are above normal. If you read in the newspapers that *Pulte* has an inventory of unsold homes or where margins have collapsed. The bad news is public. *(Lower prices have already discounted bad news).*

SEARCH CRITERIA

I look for three things:

1. Low valuation
2. The business is good so it *should* earn a decent return on invested capital
3. The current earnings are below normal.

When you are playing around with earnings above normal--and obviously you have to make some judgment about what "normal" earnings are--even the *Pulte's* (homebuilders) of the world say their margins are above normal. This is not a normal environment for housing prices. So I would wait for the opposite, then you win not only from valuation but a positive change in earnings. It is much better to be riding a positive wave in earnings vs. a negative wave in earnings even if the valuation is cheap.

Housing Economics

Student: How would you look at the unit economics of the housing cycle?

Pzena: I would look for some signs that ordering rates are slowing. Look for cancellations and slowing development. What happens if interest rates rise and people cancel? Everyone will cancel, so now the homebuilders have unsold inventory--what do they do? Discount the price rapidly. You can monitor these things on an on-going basis.

Screens: Low price to book.

What do we have on low price to book stocks?

Student: A lot of us had *Von Mueffling's* class and **his criteria are high ROE stocks and low price to book value or low P/E**. What are your comments for that strategy?
Pzena: I would qualify it (*Von Mueffling's* strategy) and say that the current ROE is not the correct or "normalized" ROE. If I can buy low P/E and high normalized ROE, that combination is good. I would want to do that too. **When you do current high ROE as a metric, you will tend to pick everything at a cyclical peak.** The earnings are above trend so the P/E is low and has a high ROE. You will be buying every commodity or manufacturer (like today) at its cyclical peak. Be careful of blind screens.

You would have to believe that those earnings are not sustainable, so you will not use those earnings in the current P/E ratio.

We don't invest in things where we can't figure it out like the fashion industry, for example like *Reebok*. We call up the company and the issue was that they did not have the right fashion in the stores, so next year they will. And they did, but we couldn't figure it out.

I don't invest using price to book. I am just telling you that it works. OK. It is a nice simple thing to use. **I use price to normalized earnings.** I want some downside protection in case I am wrong in my analysis. That may not be assets, it may be the company's franchise or base of business. I am not wedded to P/B methodology. We miss many potential opportunities.

Student: How do you define "normalized" earnings?

Pzena: I define normal as what should the business earn given the industry structure, given the competitive strengths and weaknesses, given the management--it is a judgment but is highly a function of history. History is *usually* a good guide of what the business is capable of earning--especially if you take a long history.

I would look at five years of history of ROEs and if it looks good, or if I looked at the company/business and it is in an incredibly competitive business/industry, and I think they got lucky for five years. This is why I think it was luck and not returns based on the structure of the industry.

I know *UNUM PROVIDENT (UNM)*. The company offers individual and group disability insurance. It is a notoriously bad business. Because their selection of customers tends towards adverse claims. The company is stuck with tons of adverse policies. If you start reading about *UNUM*, you would say I have no idea what the book value really is, so I am going to pass.

Let's go --*Time Warner* has lots of goodwill on the books--they haven't written off *AOL* yet. As soon as they do, then I will look.

We happen to be in a period where there is not a lot of controversy in the world. Normally, you would find every airline stock as a low price/book portfolio. Then you look at that, so you walk away because of all the bad stuff they read about the companies and industry. They are too risky, *Jetblue* is killing them. And yet they should do well (the bad news is already priced in). Buy airline stocks, for example, today.

In fact, I always joke is that the most common question I get from my clients is: "Don't you read the papers? How could you buy *FRE?* The CEO of *FRE* is a crook. Let's stop for ten minutes and return at 2:30.

Freddie Mac (FRE)

You can buy good business at low prices. First we need to define what a **good business** is:

- **High profitability**: high ROIC, ROE, ROA, margins--*FRE* has high ROE. We tend to use current equity because it is a regulatory constraint and a growth constraint. Over history *FRE* has had a high ROE.

- **Barriers to Entry**--*FRE* has a government charter, a quasi-govt. status that allows them to access to credit markets that others don't have.

- **Pricing Power**--*FRE* has a cost advantage due to its access of lower cost credit.

- **Growth Opportunity**--*FRE* is holding and insuring a portfolio of mortgages. Their business is tied to the debt outstanding. The trends are very strong--60% to 70% home ownership with a booming mortgage market. Credit has been available and lower interest costs have driven demand. The demographics are favorable for growth. What is their addressable market: total mortgage debt outstanding. Forecast growth in mortgage debt outstanding.

- **Favorable Industry Structure**--*FRE* is one of two participants

Now we say our objective is--we see all of the above--in general, we seek a low price, low current profitability and a good business. Are those all mutually exclusive? Not really. A good business to me could be having some sort of temporary problems. If you can find that combination, you can make a lot of money. That is what we seek. That is it. It is pretty simple to say.

Now let us talk about *Freddie Mac*. First, why is this a good business?

The trends are strong--looking at the last 10 years the rate of homeownership has gone up to 60%, almost 70% so you have had a booming mortgage market historically, you also have had--you could say that trend has peaked. Because why has that happened? Because interest rates are low, because credit is available. It is cheaper to buy a home than it is to rent an apartment. Let us stay with the concept of demographics.
What is their addressable market? Basically, mortgage debt outstanding--total mortgage debt outstanding.

How would you forecast growth in mortgage debt outstanding for the next ten (10) years?
Household formation is growing: 1-1.5%
Price of housing: the median price of a house has never declined: 4%
Home ownership rates: 1%
Convert credit card debt to 2nd mortgage debt: 1.5%. **Total 7.5%**

If you ask *Fannie Mae* (*FNM)* or *FRE* about this--they would say 7.5%. I think it will be less than that. Is that good? Yes, it is better than the 5% nominal economic growth of the economy.

What do you think the growth rate of the S&P 500 has been over nominal GDP? It is actually a little slower than GDP, because the big companies grow less fast than smaller companies. Over time, the S&P 500 trails nominal GDP by 1%.

I would rather have the money now than in the future. If it is cheap and I can get the money now, then great. If you don't have to pay for the growth--I love that.

What are the negatives for *FRE*? A big risk: *FRE* is under the whim of the govt. to pull their charter. The structural risks in the financial markets. On the other side people will say that the govt. won't mess with this. **The US is the only country in the world with a 30-year fixed rate mortgage market where you can borrow 80% of the value of your house.** Look at the history of this country pre-*FNM* and *FRE*, the mortgage terms were you could put 40% down and borrow for 6 years. A very big difference. The counter to this is that people will say other financial institutions will pick up the slack. The banks will step in with a steep yield curve.

Management

Let us talk about management. No one mentioned management in the criteria for a good business. Based on the metrics, we would say *FRE* and *FNM* are well managed because they make high returns on equity. Wouldn't you conclude that management is doing a good job?

Is this a well-managed business? What do you think? Old management worked had to keep their advantages. Basically, we agree that *FRE* has a great franchise if it can keep its franchise. *FRE* has most of the characteristics of a great business. It is assumed you would want to own this business if it was at a cheap enough price.

Valuation

How would you go about valuing *FRE?* This is not an easy one to do by the way. Especially given the accounting issues in this company. How would one determine the normal, sustainable earnings power value of *FRE*?

What sort of cash is the company generating? Let us start with what they do.

They buy mortgages and sell them of into the market. They are buying a pool of mortgages that were originated by someone else (no origination like *Countrywide Credit*--15% of all mortgages in origination by *Countrywide Credit*--which would require an unbelievable amount of capital if they did not package them and sell them to institutions like *FRE* and *FNM*). *FRE*'s biggest business: buying mortgages.

They engage in credit protection. They buy mortgages and sell bonds to fund those mortgage purchases.

REVENUES: The interest rate on those mortgages and the fees they receive. How do you fund that mortgage? *FRE* buys mortgages and they issue debt to pay for those mortgages--they make a spread. If there was no pre-payment option on the debt and no penalty--how do you fund that and not absorb any risk? They issue callable debt.

The mortgage is 6% and *FRE* issues 5% callable debt for a spread of 1%. If the mortgage holder pays me early, *FRE* calls in its debt, if the mortgage holders does not prepay, then *FRE* continues to hold the debt to maturity. *FRE* has exactly matched its interest rate risk.

Foreign govts. will buy bonds from *FNM* and *FRE*, which allows the *Government Sponsored Entities (GSEs)* a lower cost of capital. You must simulate the callable debt and you must model the behavior of the mortgage market. The competition for *FRE* and *FRM* is coming from the big commercial banks (*Citi, Bank of America*). Those banks take risk by playing the yield curve. The spreads are wide enough (yield curve is steep enough) to take on duration risk.

FNM and *FRE* take duration risk and mismatch on the extreme tails. They hedge 98% of an interest rate move. The cost of a perfect hedge would make this a mediocre business.

Foreign govts. Buy *FRE* and *FNM* paper because they receive a higher interest rate and there is the belief that the US govt. will stand behind this paper in the case of default by *FRE* and FNM.

Limit how much of your portfolio you put into *FRE*--so you diversify.

Find out:

The normal profitability of their mortgage business? The normal profitability of their credit risk business? Take in an insurance premium and pay out a loss.

Normalize earnings: normalize the interest rate spread. Think about the businesses that takes credit risk and their other business, which insures credit risk. The credit risk business is very profitable because it requires little capital.

There is nothing that can't be screwed up so that is why you have to have some diversification. FNM's worst loss was 6 bps. The worse credit losses in their history were 11 bps. Now they are at 1 bps. You can make some assumptions about what are the normal credit losses. Typically, they have low risks.
The incentive for someone to bail on his or her mortgage is very low--so credit risk is low. They require 20% equity down. The dispersion of mortgages is wide. I can come with some normal credit risk and normal credit losses and I can do the same with their credit insurance business.

They make net about 8% bps on their credit business.

Now let's get to earnings? *FRE* can make up any number they want under GAAP.

First of all *GAAP* rules doesn't apply here because they don't make sense. In essence, for *GAAP*, you mark to market the asset side of the balance sheet but <u>not</u> the liability side (mismatch). These companies try to smooth their earnings.

Bad management is doing sleazy things to get their options exercised or their bonuses—to enrich themselves. The most generous way to describe it is that they are trying to meet their capital requirements and they can meet their shareholder's needs for stability by exploiting the accounting rules to get hedge accounting for as much of their balance sheet. <u>Hedge accounting</u> says that if you can link your assets directly to a liability then you can mark both to market since you have a perfect hedge.

My contention is that no matter what they choose, you shouldn't believe it. *GAAP* doesn't work in this kind of business.

The biggest source of opportunity for us these past few years since 2000 or since *Enron* is fear of accounting. The reality is--you shouldn't count on it.

They actually put out their mark to market balance sheet or what they call their fair market balance sheet (they estimate their assets and liabilities marked to market--giving you the net asset value) so you can know what is going on with these companies. See page 76 in 10-K.

Why you should trust these companies fair value estimates because these assets and liabilities are short-term, liquid and they trade freely in the market. You can see exactly what they make. On average they make 20% per year on a fair value basis over time. It is less volatile than reported through GAAP.

OK, so now I know what the fair value of their portfolio is, I know what their returns are. If you were evaluating a leveraged hedge fund, you would judge the fund by its returns. You wouldn't ask to see GAAP financials.

Management had all these tools to manipulate earnings. But it is nothing compared to the value of this franchise. There is a risk that this business franchise (the charter) may be withdrawn. So how do you evaluate that risk? Take the <u>liquidating value</u> to the business today if the charter was withdrawn.

Fair value is $25 billion and on 680 million shares: $37 per share (equity value leveraged 50 to 1) fair value of their mortgage portfolio and it earns 20% a year. So I get $7.40 EPS for their mortgage portfolio.

Then we have their guarantee business, which earns about $1.3 billion a year--$1.97 per share.

So total is $7.40 + $1.97 or **$9.37 per share**. The stock is at $65. Now we can question every part of this. We can say it won't earn 20% per year, the spreads won't really stay where they are because of bank competition.

Worst case analysis: The govt. forces them to liquidate their portfolio. The process of liquidation would be assumed gradually over a 15 year period. It is not in anybody's interest to have a forced liquidation.

Take the present value of that cash flow stream. The value would be greater than $37 per share (theoretically the $37 would be the value if liquidated today) because they have embedded above market discount rate

returns in this investment. So we do this arithmetic and their share goes from 15% of the mortgage market to 0 gradually over 15 years to come up with the value.

Take the current earnings and take the present value over 15 years so it is roughly $44 per share (the PV of liquidating the mortgage portfolio--running it off over time because it is earning above the discount rate). This is roughly $2 per share of earnings (credit risk business) or 10 times earnings.

Total liquidating value: $44 + $20 = $64 per share. Today the stock is $65. **The worse case is the same valuation as today.** In the case that everything bad happens, it would be the same valuation as today. Prior to today, the stock traded down to $46 per share but it had roughly the same value. In a normal value it should earn $9 per share--15x earnings--or $140 per share. If it got over $100 I might sell it**. The excess capital is embedded in the earnings.**

FRE doesn't know what their financials are. FNM is a year and a half behind. You are investing in a company that is not producing any statements.

20% is change in fair value year-to-year. They can leverage their portfolio more than anyone else.

Student: your mortgage analysis?

Pzena: We looked at what the yields were and what the cost of various callable debt was. What should *FRE* have earned on their portfolio.

We are big shareholders of commercial banks. Capital spending is just turning now. Banks make more money in that environment.

In a normal yield curve, the arithmetic doesn't work for the banks. Banks would much rather make industrial loans than invest in mortgages.

When *FRE* went up to the 70's then you saw some downside risk because of the price being up. We bought *FRE* 18 months ago when it was in the 50's.

Student: What stock screens do you use?

Pzena: Our screens are <u>extrapolating</u> reported earnings. Screens are relying on GAAP earnings. The stock price collapsed compared to reported earnings.

I had done work on *FRE* 10 years ago, because I wanted to understand how they make so much money. I concluded that they did not put on a perfect hedge-which was why they made so much money. Plus their competitive advantage. I did a model of their mortgage business. We looked at *FRE* for a couple of months.

FRE isn't going anywhere tomorrow. This *(bad press, accounting scandal and congressional concerns)* will be in the paper for awhile.

The political will to disrupt the mortgage market doesn't exist. *FRE* and FNM have huge support in Congress. Homeownership is part of the American Dream. Tinkering with change will occur.

Student: What type of time horizons do you use?

Pzena: Financial statements being reported is no. 1, a clearing of the regulatory environment is no. 2. Normally we look at a 3 to 5 year time horizon. **Don't forget that these numbers are growing all the time**. It isn't static. You get to participate in the growth in all of this. This year the range is $60 to $140 while next year it will be $70 and $150. They still are making good returns on their portfolio.

We use *Compustat Database* and we have our own model that looks at 10 years of historical data. It screens things for us. Are prices selling at a low price to what history suggests the company should own? Then you

can go in and do the work to see if the problems and fears are temporary. We do five year forward earnings. And we cap the growth at 15% per year.

Student: Which true barriers to entry do you focus on?

Pzena: Can this company earn a return in excess of its cost of capital? Location, competitive cost position, a dominant market position, it could be a brand or a franchise, or an industry structure's. *Boeing (BA)* has only one competitor--a good industry structure. *Computer Associates (CA)* was controversial due to accounting issues, but customers were captive--they couldn't switch. *CA* provides system tools for commercial processes. Customers can't afford to shut down their businesses to switch to other competitors. If *IBM* came in and offered their software for free, would you switch? Customers said. I run a 24/7 data center--this is not strategically important! We view *CA* as *Con Ed*—a utility.

CA under $10. It was yielding $2.75 per share in free cash flow, and it was at $8.00. *Whirlpool* and *Maytag.*

Tenet (THC): Management came into our office to close 1/3 of our hospitals that were losing money. The market rallied on that news which I found unbelievable. We were counting on those hospitals to make money and justify the earnings power value.

END
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Greenblatt Class #4

February 11, 2005

Summary: Spin-off examples: Sears, Paramount, Host-Marriot. How Joel places information into context.

Special situations have been around for awhile. This book was written in 1966 and the first edition was 1958. The book describes turnarounds, mergers, recaps, tenders, spin-offs.

Someone asked me after reading my book, You Can Be a Stock Market Genius, if it is harder to make money now since these techniques are better known? The answer really is no. There are so many hedge funds out there and so much money out there chasing opportunities. I find that pretty amazing. I do think, during the last six months to a year, the stock market has gone higher; many more things are full-priced. This isn't a

particularly plentiful market to find bargains, but then again I don't have to go back very far—to the Spring of 2003 or the Fall of 2002 and there were incredible bargains all over the place. You have to go back to 1999 when insanity reigned and there were huge opportunities on the long and short side in the short term. The market goes crazy sometimes on the downside and on the upside. **Wait for opportunity.**

What opportunities might be out there today? I was looking at the paper this morning and I saw an announcement on *Sara Lee*—they will spin off some assets. I get a couple of these reports that follows spin-offs (The Spin-Off Calendar).

Sara Lee

Here is a hand-out on *Sara Lee*—basically they make food and apparel. It is a huge company with tons of different brands. What caught my eye when I read this: *The branded apparel segment of the business for instance, generated a single digit operating margin and an 11% return on assets in 2004, while the beverage and household products divisions produced margins and returns on assets of about 16% and 20% or more.*

This could be a crappy business but cheap. It could do better on the 11%--not static.

So 20% ROA in the household products division, they are selling some, they are spinning some off. That could be a good business. So we went through that analysis where we are looking for high EBIT/tangible assets.

Student*:* It could be cheap and spun-off.

Joel: **I learned from the school of hard knocks to buy better businesses.** I understand why that 20% ROA is interesting, but why would the 11% be interesting? So maybe the performance could get better–the 11% is not static. The 11% could improve.

The spin-off does better than the parent—usually if the spin-off is the smaller company. I would look at both, they could both be opportunities. Basically, there is a conglomerate discount—you are forced to buy 40% of some business you don't want. When things split up, you have that going for you. One of the things they said in the papers today is that they will sell off some divisions. They will spin off some divisions I don't know what that 11% really means. There could be some high ROA in that branded apparel category. 11% could represent an average. There could be some 3% and 20% businesses in the branded apparel business. Someone smart in new management they begin to get rid of bad performing business. Sell or liquidate.

HP Potential Spin-off

At first brush, it doesn't look that attractive at least compared to the other one. There are opportunities in both companies. To the question does this still go on? This is a big company. We have in yesterday's *Wall Street Journal*: They oust *Carla*. There was a big dispute on the *HP-Compaq* merger. A combination with a low and a high return business. The original Founder fought the merger. He fought *Carla Fiorina*. We have one good business—a printer business which supplies ink to the printers (a high return on capital business)—and you want to combine it with a crummy business—computers. *Carla* doubled down on the crummy business and she would make cuts and improve operations and that kind of failed. Speculation is that they will split up the business. There is potential here for another spin-off here. You have a good business with high market share—the printer business and the computer business. You have a huge market cap company in disarray. There is a lot of uncertainty here, thus there could be opportunity.

Student: When would you start working on this situation?

Joel: Now, I look for more low hanging fruit or when the special situation is further along in the process, but there is a lot of money to be made now. If I were your age, I would start working now and tear apart the company now and develop a first guess as to the combined company would be worth on a conservative basis. Sometimes you can do it and sometimes you can't. They haven't put it into play. This is very early stage.

Sara Lee: This will take a year and a half and cost savings will come over 5 years. That tells me these guys are very slow.

Richard Pzena put out that chart. **Things revert to the mean.** You just don't sit there and take it—things stink. You shut down a factory, you close a division, and you cut costs. The natural thing is to make choices. Sometimes when I own a company and if it is very cheap, I hope it gets worse because I want these guys gone. If things get any worse, these guys won't have a choice—management will have to be fired. Have a margin of safety to suffer through the short term decline. That is one of the benefits of having a long-term time horizon. If you are a money manager, and you are looking to make money in the next 6 to 12 months, that is tough to live through. But if I am getting a big discount and I am looking out three years, I can sit through the near term. They (Board of Directors: BOD) can't live through this. I want some special situation to happen: Where they decide to close down the poor performing division, they replace management.

Carla (Fiorina) was wrong and the three years are up. These (Special Situations) are always percolating. There are always companies in trouble or things not going particularly well. Special Situations like mergers – empire building, strategic acquisitions. Empire building then restructuring and spin offs.

I am trying to give you an idea of how I look at these things. Hey, the 20% ROE business is interesting and hey, the 11% ROE business is interesting—breakout the brands—there could be a huge disparity here. The question is when do I start looking at these? If I looked at *Sara Lee* at $23 and thought it could be worth $36, I would start looking now. How do I figure that out? If I thought *Sara Lee* was worth $27, I wouldn't play now. If there isn't enough of a margin of safety there, I probably wouldn't play there now. All the numbers are guest-imates or estimates. If someone says this is a growth story, I am more skeptical. On the other hand if someone says they are going to cut these costs. I discount cost cutting strategies as well. *Carla* cut costs but the business got worse.

I gave you the spin off calendar for January.

This is an extraordinary event for a company like this. This is the kind of thing they (analysts who follow the company on a regular basis) are just not good at. They will suspend a rating or they will suspend until things are clear.

***AXP-AEFA* Spin-off:** Financial Advisory business for middle income Americans. Not many companies grow 12-15% for long periods of time. *AXP* is a great business. Economies of Scale (EOS) work very well. A tough business to break into. I looked at these 10 years ago when they spun off *Lehman Brothers*. The good business was the financial advisor business which was growing at 20% per year and they messed it up. Now they are the poor relative.

The next line says 12% - 15% growth sounds interesting. It is the high end of its equity return targets which is 28% to 30%--that is a pretty darned good business.

Financial Advisor's *(AEFA)* ROE is 11%--not great for a stand alone company—perhaps it is being mismanaged.

Any opportunities here? They are screwing something up since they should have a very good business here. It is out of favor, but it should have done better. It shouldn't be a low ROE business. When I was looking at the last one. I thought it was a good business. I think that having them sell *AMEX* products and having those types of conflicts hurt them. I met with *Harvey Golub* 10 years ago. We had a discussion. He claimed the markets were efficient. **The price was $40 but we thought it was worth $60. But he was telling me the market was efficient. A disconnect.**

There was a disconnect here. People say we can't beat the market, so what would it lead you to do—it would lead you to not hire the best people because all people are fungible. I will not pay for the best guy. The culture might have been dysfunctional. A terrible attitude to have.

AEFA turned into an allocation business, but selling low quality funds comes back to bite you. There is room for improvement here. Also, there should be different parts of the business, so I would look and see which parts are doing well and which aren't doing well.

Your assignment for Wed is to analyze this spin-off of *Amex*. Tell me where you think the potential value and opportunities are. *(IACI Spin-off)*

That was interesting. Part of the business is lending money or running up the balance sheet. You are lending to people at 8% and borrowing at 2%. Cost of Capital is 2% and lending at 8% but you borrow it. Huge asset size on a small equity. Low ROA but high ROE is the way banks work because of high leverage.

This particular business where you have a high ROE because of sales or critical mass. They make money on the margin. Break-out the businesses: What is in the finance business (ROE) and then what they are getting in the TRS business? One part of the business could be getting 15% and the other 35%. I did a quick and dirty on what the two divisions earn—I read an analyst report. The "good" TRS could earn $2.50—P/E of 20 or $50 and the "bad business" could earn $0.56—16 multiple or $9. He gave a total break-up value of $59 ($50 + $9). Today the stock is at $55. At one sense you could say it is not a great opportunity. The time to look at this is now. I see opportunities in both areas.

When I read the paper what do I see? To give you an idea. I don't know if any of this comes out to play. I am giving you some context for your work Wed. Basically my opportunities are 1) in the "bad" business, they may be able to earn more on depressed earnings. Yet this isn't a huge driver of value, but $9 to $13 could be very good but on a $55 stock—so not the main driver. It might be worth owning if I do enough work and the company (Financial Advisory business) is worth $9 conservatively, so I would be paying $46 for the rest of the business. Buy the good business for $2.50 in EPS and it is then trading at 18 times P/E. But I might be willing to buy this business now. I don't know if this is how it is going to play out.

If I give a conservative value to American Express Financial Advisors (AFA), and I conclude $9 is conservative, so the other business (the parent-*AXP*) is $46. I don't have to wait because I am buying two things I might want to own. The opportunity of the good business may be in the earnings growth. Believe it or not, being a cheap value investor, the opportunity may be in the P/E side because you are now unleashing an improvement in ROE in the poor business. See how high one business ROE is versus the financing business. It could be sold off. Perhaps I own a 40% to 50% ROE business if I strip out the financial part. I don't really know.

A number of years ago, one of my best positions was *Moody's*. Because I learned about their business through researching *Duff & Phelps*, another rating company. The business earned 100% on capital, didn't require any capital spending to grow and it could return capital to shareholders. This was a great business worth 30 x EPS. ROIC – g = excess ROIC.

One of the better businesses was *Coke*. Let's compare what *Buffett* paid for *Coke* vs. what we could pay for *Moody's*. *Moody's* was actually a better business because *Coke* had to reinvest 20% of their earnings back into their business to grow and *Moody's* did not. You could get the same growth for no reinvestment. *Moody's* dollar was worth more per $1 than *Coke*'s dollar (80 cents left over after reinvestment). *Moody's* you got to keep the full dollar. This is an example for why I might pay a high multiple for a business if you can get a high return on capital. If this is truly growing 12% to 15% per year, I could project 2 or 3 years what the company could be earning if I believed that story and put a multiple on it.

Never use less than 6% for an opportunity cost for capital. 20 P/E is a 5% yield vs. 6% minimum (10 year bond yield). This can compete (5%) vs. (6%) if it can grow over many years. *AXP* could be yielding 5.5% to 6% while growing 12% to 15%. I want to see how much capital needs to go into that business to grow. What ROIC is there after I strip out the financial business. *AXP* gave that guidance—12% to 15% earnings growth.

I am just telling you the formulation of a thesis after reading this one article and getting one report to see the break down of the businesses. Now I need to check it out and see if the numbers work and add up and not just taking the numbers they gave me. How I break down the numbers to see how they got there. What's a good business, what is a bad business? That is a lot to figure out in 40 seconds.

It worked that way last time. What we are trying to do in this class is practice and get as much experience as possible. That is why I want you to read the *Value Investors Club (VIC)* site. Read as much as possible, and you will learn faster. Study.

Assignment Wed. is to come back with some of your answer. What makes sense (for AXP Spin-off?)

I think the opportunity might lie with *AGFA* in the earnings. And I think here if they can grow 15% then there could be multiple expansion (20 P/E to 30 P/E). Big investors might think MCU at 30 P/E is a good deal.

I have never found a better business than *Moody's*. I think *AXP* is potentially a great business. 28% to 30% ROIC is good, but I don't know how good—50% ROE business?

Student: How do you think about the multiple? – 6% is a 16.66 multiple or 1/16. I think of pre-tax returns. $100 stock and earning $6 per share or 6% ($6/$100). How long and how much will earnings grow? How good a franchise is it or what is the rate and duration of earnings?

Being a Value Investor

The beautiful thing about being a value investor is:

1. Most businesses I can't figure it out, so I skip it. I pick my spots, wait for the fat pitch.

2. If I can value the business, I will only do it if I have enough room. I think the stock is worth $10 and I can buy it at $5 to $6. It will be worth $10 in two years. So if I am wrong, I kind of break even. Thus, many opportunities are screened out.

I don't measure risk by volatility but by if I can lose money. How confident am I that if ten things go wrong, can I still make money? Like flipping a coin where if I flip heads, I make $5 and if I flip tails, I lose nothing.

Page 1: *The Spin-off Calendar*. These are companies with stakes in other publicly trade equities.

***SEARS* CASE STUDY**

Pages 102-108 of the book, *How You Can Be a Stock Market Genius*:

In Sept. 1992 *Sears* announced its intention to sell a 20-percent stake in two of its subsidiaries to the public. In the case of *Dean Witter*, *Sears* also announced its intention to distribute its remaining 80-percent interest directly to shareholders at a later date, some time in 1993.

Sears was selling or distributing business it already owned. By taking *Sears* stock price and subtracting the market value of its remaining stakes in *Dean Witter* and *Allstate*, a value for the rest of *Sears* assets, primarily the department store, could be calculated.

In the beginning of June, *Sears* sold a 20% stake in *Allstate* for $27 per share. By the beginning of July, just before *Sears* distribution of it s remaining stake in *DW*, this is how things stood: *DW*'s stock was trading at approximately $37 per share; *Allstate*'s stock was trading around $29; *Sears* stock stood at about $54.

Sears announced that it would distribute its remaining 80-percent stake in *DW*. This meant that for every 100 shares of *Sears*, a distribution of 40 shares of *DW* would be made. (*Sears* was distributing 136 million shares outstanding—so the distribution ratio was 136/340 or 0.4.) Therefore, in mid-July, each *Sears* shareholder would receive shares in *DW* worth approximately 0.4 (the announced distribution ratio) multiplied by $37 (the trading price of *DW*'s stock), approximately $15 worth of *DW* stock for each share of *Sears* owned.

Since *Sears* was trading at $54 per share before the distribution, this translated to a net price of $39 for the remainder of *Sears*. What was that remainder? Primarily it was *Sears* remaining 80 percent stake in *Allstate*, its foreign and domestic department store business, and various real estate businesses (including *Coldwell Banker*).

Sears owned approximately 340 million shares of *Allstate*. *Sears*, itself, also happened to have approximately 340 million shares outstanding. This meant that if you owned a share of *Sears* you also indirectly owned a share of *Allstate*. With *Allstate* at about $29, or about $10 per share ($39 net stock price less $29 price of *Allstate*), you were getting the foreign and domestic *Sears* department-store business and its real-estate business. Was this a bargain?

Michael Price in *Barron's* July 5, 1993 laid out the case: "That $54 a share includes one share of *Allstate* at $28, so hat leaves $26 ($54 - $28). Then you get 0.4 share of *DW*, which is $15. That leaves ($26 - $15) $11 or $10. About $2 or $3 of that is *Sears Mexico* and *Sears Canada*. That leaves about $8. *Coldwell Banker* is worth $2 or $3 a share. So that leaves $5 a share, or a market cap of about $1.5 billion of the retailer—with $27 billion in sales. The new mgt. seems very focused. It is an almost debt-free retailer with huge real-estate opportunities.

Sears had $79 per share in sales. If those sales could be purchased for $5 a share (debt free), then that worked out to a purchase price of just over 6 percent of sales (5 divided by 79). On the other hand, a look at *J. C. Penny* (a comparable "crummy" retailer) showed sales of about $78 per share and a market price of about $44 per share—that was over 56% of sales. Of course, there are many other measures of relative value (earnings, for instance), but all indications were that the domestic retail business of *Sears* could be created at an <u>incredibly cheap</u> price.

Look for partial spin-off opportunities.

After the *DW* distribution, the $39 remaining investment in *Sears* was up 50% over the next several months. *Allstate* was only up from $29 to $33 during the period. Obviously, the market finally took notice of the inherent value of *Sears* other assets.

Yes, it was possible to simultaneously buy *Sears* stock and short *Allstate* stock, creating only the portion of *Sears* that was clearly a bargain. In some cases, this is a smart way to play, especially when the value of the cheap portion—a $5 per share department store purchase—is a <u>small</u> part of the purchase price: $39, post *DW* distribution. However, in this case, the disparity between the bargain purchases price of the department store segment and true value was so huge, no such fancy tactics were necessary. (End of book portion).

First announcement of *Sears*. Sept. 1992 announcement. *Sears* had two big subsidiaries—*Allstate* and *Dean Witter* (*DW*). They would sell off 20% to the public and spin off the remaining 80%. Why would they sell 20% to public rather than to spin-off. One answer is to establish a value? You can't sell off more than 20% to have a tax-free spin-off.

Why would you sell 20%? To get the cash! The <u>reason</u> to spin-off stuff is to get money or because it didn't work out or you are not getting the value from the stock market. **Something is not going right**. That is somewhat a painful thing to do—admit your mistake and spin it off.

First sell 20% of company to public then spin off the remainder. They would also sell 20% of *Allstate* to the public and keep 80%. *Sears* will not dispose of the remaining 80% of *Allstate*—but what they <u>really</u> mean is that they will dispose of that interest. Because there is no other logic to that move. What they are saying is that we will try to hold on to this company. No way is that going to happen.

Sears is a department store, *Allstate* is an insurance company and *Dean Witter* is a brokerage, so there is no strategic reason for the combination of these companies.

In those days, *Sears* was a euphemism for loser. Under pressure they do the spin-off. I assume I will eventually get the value. My horizon is three years. This came out Sept 92, so now we move to April 1993.

They did a public offering of *Dean Witter* and now they are getting ready to spin off the remainder.

For every share of *Sears* you own, you get 24 shares of *Dean Witter* (*DW*). If *DW* is at $35, you get 0.4 you get $14 for every share of *Sears* that you own. *Sears* at the time was at $53. You could either short *DW* that

was out there and create the rest of *Sears* for $39 ($53 *Sears* - $14 *DW*). Or you could wait for your distribution and sell it off when you were done. Take the risk that *DW* moves in the interim.

If you own 1 share of *Sears* and *Sears* has 400 million shares outstanding. *Sears* owned 176 million of *DW* after the spin-off. If they say we are going to spin off the shares to investors. For every share of *Sears*, you own 0.4 shares of *DW*. If there are 440 mm shares outstanding and you will get 176 mm shares of *DW*--each 1 share of *Sears* will get 0.4 of *DW*. If *Sears* is trading at $53, then 0.4 x $35 = $14. So what is left of *Sears*, which includes the retailer and *Allstate* trades at $39.

Next page is when they fess up to the fact that (offering in June) they will sell 78 mm shares of *Allstate* (Insurance company) in the range of $24 to $27. *Sears* will own 82% of the outstanding common stock. So now *Allstate*, *Sears* will sell 78 mm shares at $24, that will leave them 303 mm shares. For each share of *Allstate* will equal the shares of *Sears*. For each share of *Sears* you get a share of *Allstate*.

Announcement June 18th. One page 8, *Mike Price* is interviewed in *Barron's*—he points out the opportunity. *Sears* has gone faster than expected in its sales of *Allstate* and *DW*.

So $54 for *Sears* which includes 1 share of *Allstate* so subtract the price of *Allstate* ($28) so the remainder is $26, then subtract *DW* ($15) so the remainder is $11, then subtract *Sears* Canada ($2 to $3) for a remainder of $8 to $9, then subtract the value of *Coldwell Banker* (real-estate firm) of $2 leaving $5 to $6 per share of *Sears* (retail operations). *Sears* has no debt. $1.5 billion market cap for $22 billion in sales or 6% for $1 of sales.

Crappy retailers sell for more. *J.C. Penny* has $19 billion in sales with a $10 billion market cap—55% of sales. *Sears* is now 9 to 10 times cheaper than *J.C. Penny* (Relative Value). *Sears* is a debt-free retailer. The new management seems very focused. In this particular case, *Sears* had no debt.

This is when I finally wake-up. 6% of sales for *Sears* vs. 55% of sales for *J.C. Penny—almost 1/10 as cheap!*

Turn to page 10, I looked at the *S&P* tear sheet for *J.C. Penny*. Look at page 11, *J.C. Penny* –I categorized as a crummy retailer. I did a quick and dirty. Of course, you would have to compare earnings, but *Sears* is 1/10th the price of *J.C. Penny*.

Two weeks later, *Sears* spins off the other two companies. I was left with $5 for *Sears* and worth potentially $50. This went from $5 to $30 in two months or 6xs!

How the heck did that happen? The opportunity was announced for months. *Mike Price* lays out the opportunity in *Barron's* for the entire world. How will you make money with *Amex*, *Sara Lee*, or *HP on* the front page on the *Wall Street Journal*. There is plenty of time for people to find it. How is the opportunity possible?

People said that when I wrote the book, I had ruined it for everybody. The first year after I wrote the book, spin-offs did poorly, but now they have done well. Things don't change. This guy wrote the book about spin offs, mergers and restructuring in 1956. This was a high profile opportunity—*Mike Price* is a high profile guy in a high profile magazine, *Barron's* I am telling you that <u>I am not worried</u> about making money doing this stuff. It's messy. Institutions don't want to own it. **I don't know why these opportunities exist, and I don't care.**

I bought *3Com* and shorted *Palm*. I was able to hold *3Com* for a negative 33 dollars. That was really inexplicable. The bottom line this stuff happens. This is a particularly blatant one. There is a lot of money to be made. I tried to help you in the beginning.

If you as a money manager own 30 to 40, stocks you will <u>not have the time</u> to look at the messy situations. There are plenty of other hedge funds out there, but they are subject to all the same biases. It is that it is complicated or you have to think about it in a slightly different way. I am better at it than I was 20 years ago; I have seen a lot of things and experience is good. It is somewhat hiding in plain sight. **It is that it is complicated. Think in a different way.**

This stuff is out there and in the last three days there is tons of fodder. There is plenty of time to get in.

Sara Lee
AMEX-AGFA If I think $9 for *AGFA* is conservative, I may be able to play right now.
HP (future potential divestiture)

In the *Sears* example, I shorted the *Allstate* because, I wanted to own a lot of just *Sears*.

I am on the extreme scale of concentration. When I see an opportunity this good---buy for $5 and have the potential to make $30 to $50—I load up.

***PARAMOUNT* COMMUNICATIONS/*VIACOM* CASE STUDY**

In Sept. 1993, *Viacom* agreed to purchase *Paramount* Communications for stock and cash. *Viacom*, a media conglomerate controlled by *Sumner Redstone*, was the owner of cable services like *MTV*, *Nickelodeon*, and *Showtime*, cable systems, broadcast stations, and television and production divisions. In what appeared to most analysts to be a good fit with *Viacom*, a combination with *Paramount* would contribute a leading producer and distributor of motion picture and television programming, a book publisher (*Simon* and *Schuster*), more cable channels, more television stations, and two sports teams. Particularly attractive to *Viacom* was *Paramount*'s' extensive library of past movie and television hits as well as access to the future output of *Paramount*'s film and television studios.

Viacom was competing in this merger against *Barry Diller* of *Fox Network* and *QVC Home Shopping* service. *Viacom*, in an effort to strengthen its offer, *Viacom* merged with *Blockbuster Entertainment*. That merger was scheduled to close shortly after the successful acquisition of *Paramount*.

At the time *Viacom* was able to purchase, for cash, 50.1 percent of *Paramount*'s shares outstanding. Although the contest was over the opportunity to profit from the merger had only begun.

What wasn't so formal was the method of payment for the remaining 49.9 percent of *Paramount*. While cash was the sole from of payment for purchasing the first half of *Paramount*'s stock, practically everything except cash, was the form of payment for the second half of the merger—known as the back end of the merger.

The back-end payment for each share of *Paramount* consisted of:

- *Viacom* common stock
- Exchangeable subordinated debentures of *Viacom*
- Securities known as contingent value rights or ("CVR" one for each share of *Viacom* stock received in the merger),
- Three-year warrants to purchase *Viacom* common stock at $60 per share, and
- Five-year warrants to purchase *Viacom* common stock at $70 per share.

The vast majority of *Paramount* shareholders were interested in owning the shares of an entertainment conglomerate or the stock of a takeover candidate. While the *Viacom* common stock might have been of interest to some of these shareholders, the exchangeable debentures, the CVR and the two types of warrants were going to be sold—without looking at the proxy document and without regard to their true value (They sell without economic reason).

The *Viacom* stock issued to the public as part of the merger consideration would nearly triple the supply of *Viacom* stock in public hands.

What is all this stuff? It was answered in "*Paramount* Merger Consideration".

Combining the purchase of one share of *Viacom* common stock with the purchase of one CVR created a unique investment opportunity. The CVR was a security issued by *Viacom* to help guarantee the value of the back-end securities that *Paramount* shareholders were to receive in the merger. It was probably this guarantee of value by *Viacom* that was responsible for its victory in the bidding war over *Paramount*.

The CVRs worked this way: If *Viacom* common stock traded below $48 one year after the completion of the *Paramount* merger, *Viacom* would make up the difference through a payment to holders of the CVRs. (E.g., if *Viacom* stock traded at $44 on the one-year anniversary of the merger's close, *Viacom* would pay $4 for each CVR; if *Viacom* traded at $38 *Viacom* would pay $10 for each CVR.

By purchasing one CVR for each share of *Viacom* he owned, an investor could ensure that the combined value of the two securities would be at least $48 in one year. If *Viacom* traded higher than $48 –let's say to $55—then, although the CVR would be worthless, the combined value of the two securities would be $55, even better than the guaranteed $48 price. Since, shortly after the merger was completed, one CVR and one share of *Viacom* stock could be purchased for a combined price of $37, a guaranteed price of $48 in one year looked pretty good—a 30% annual return with little risk and no upside limitation.

Viacom limited the payout on the CVRs to a maximum of $12; even so, *Viacom* stock could fall to $25 before an investor who bought both the CVR and *Viacom* stock for a combined $37 would lose money. For another, *Viacom* could extend the payment date of the CVR—but only in exchange for a payout larger than $12.

I simply read the page in the proxy that told me how they worked. However, I *did* have an advantage in all this. **It pays to check out merger securities!**

The five year warrants to buy *Viacom* stock at $70 per share, looked particularly interesting. These warrants gave the holder the right to buy *Viacom* stock at $70 per share for a period of five years. Since *Viacom* stock was trading at about $32 per share in July 1994, the right to buy *Viacom* stock at $70 didn't look too enticing. On the other hand, with this type of situation, I like to think about the old story of the peasant who is brought before the king and sentenced to death. **A lot can happen in a year.**

The five year warrants gave the holder the right to buy *Viacom* stock at any time during the next five years for $70. In the case of an ordinary warrant, this could mean that the warrant holder was entitled to receive one share of *Viacom* common stock in exchange for $70 in cash. The $70 could be paid in cash—and there was nothing unusual about that. However, the $70 could also be paid with $70 in face value of one of the other *Paramount* merger securities. Which merger security? The exchangeable subordinated debentures I mentioned earlier—item #2 on our list.

Shortly after the *Paramount* merger was completed, these merger securities were trading at 60% of their face value. This meant I could buy $70 of face value of these securities for only $42 (60% of $70). I would effectively have the right to buy *Viacom* stock not for $70, but only $42 worth of merger securities. I would have this right for five years. *Viacom* was at $32. The right to buy stock at $42 for five years was a lot more valuable than the right to buy stock at $70. <u>If I hadn't read the portion of the proxy covering merger securities</u>, there was no way I could have known this opportunity existed.

Buying <u>both</u> the warrants and debentures was a winning trade.

Remember to read the proxy of merger securities. (end of book section)

***PARAMOUNT* – Page 12.**
This is the back-story to the example in the book, (<u>You Can Be a Stock Market Genius</u>). The *Paramount* situation was a hostile battle for control of *Paramount* back in 1994. What eventually happened was two sides bidding for *Paramount* and they ran out of money, so they threw out pieces of paper. Different rounds. The winner of *Viacom*--they would buy half your stock in a tender offer 51% for cash and then give you all that stuff that they didn't have on the back end. Part of the deal happened in cash, then give you paper on the back end.

It really was one of the most complicated deals ever. They didn't have value to give. The front end was done—*Viacom* bought 51% of *Paramount* for cash—then you had the clean up 3 or 4 months later. This proxy came out in 1994. This was no longer on the front page. Look on page 12—this is what you were getting in the pack end of that deal.

.93065 of a share of a leveraged company (*Viacom* B Stock). *Viacom* bought a company bigger than itself. *Viacom* traded at $28 5/8 before this battle it was at $34 and change. The stock gets pummeled because they are issuing millions of shares of stock and they overpaid, the winners curse.

Then you get $17.50 of 8% subordinated debentures of *Viacom*. They are exchangeable and subordinated.

There is plenty to trade here.

.93 for a contingent value right (CVR)

.53 of a three-year warrant. The difference between a warrant and an option? They work the same way, but with a warrant the money upon exercise goes back to the company. The stock has to double within3 years.

.3 of a five-year warrant.

When issued trade: if the event occurs.

CVR: $48 & mkt. price. At $28. Not >$12. If $26 ---$48 = $12. $51 second date. $55 third date.

If you are a mutual fund—you don't want the junk on the back end. There will be selling—so this presents an opportunity. I will describe what a **CVR** is. It is an interesting security. This is complicated stuff. What is this CVR?

Well if you looked at the table of contents of the proxy—so you go and read what a CVR is. Turn to page 13 or 14. The basic jist is: listen, if our stock is not at $48, but at such a time—two years out—we will pay you the difference of the market price and $48. But they will not pay you more than a maximum of $12. So at $36, the CVR will be paid off at $12 and if *Viacom* is at $40, then ($48-$40) $8 will be paid to the CVR holder. CVR guarantees the $48 price unless below $36.

We can extend the CVR, then it is at $51, then next at $55.00. Such an amount of $12 can be paid at the discretion of *Viacom*. What does that mean? This means you will get 85 cents to 95 cents on the dollar. Wall Street speak means that they will screw you in the end. A euphemism.

So when you do your <u>margin of safety analysis</u> you need to account for the haircut.

Then again, this presents an opportunity of buying *Viacom* and if you are bullish on *Viacom* and this CVR is trading at $3, then for $31 5/8 you will have some security. Let's say you buy 1.5 CVRs for every share you buy of *Viacom*, then at $33 you have the upside above $33 but the downside is covered. This was unique to this deal but every deal has <u>unique</u> aspects.

What I am trying to get you to do is <u>read the fine print</u> of the deal and know <u>where</u> to look.

So for 1 share of *Viacom* stock you get 1 CVR and if you are an enterprising investor, maybe there is some ratio I can do here. But at least know what you are getting.

The warrants when they expire--$70 warrants expire in five years and three year warrants at $60. What do you think attracted me to the warrants? *Viacom* just bought something for debt that was bigger than them? I was thinking more of <u>leverage</u> – you have a company with $2 in equity and $8 in debt for an EV of $10. What would happened if those assets became $12 so for a 20% move in the underlying assets in 3 years, you could get a double in equity value (from $2 to $4) for a move up of 20% in total assets. I viewed *Viacom* stock as a LBO. In three years $28 could turn into $60 because of the leverage. The warrants could be worth something.

Page 16, first paragraph: in the case…….if you exercise all the warrants……..

You have to pay $60 to get your stock so if your stock is at $70, then your warrant is worth $10.

To exercise the five year warrants you have the choice of paying $70 in cash or you can contribute $70 of face amount of the crap they were giving you from the merger—the super subordinated (we don't have to pay you) debenture was trading 60 cents on the dollar. So buying some of these five year warrants and some of this paper, you could use it to purchase *Viacom* stock at face value. So I could contribute $70 face amount of exchange debentures, that gets my exercise price effectively down to $42. These are five year warrants now had a strike price of $42 (not at $70). You could turn $70 warrants into $42. You could make these debentures worth more because combined with the warrants they were worth more than $70. It was a way to get you face value relative to the cost of the funds. Those 60 cents on the money debentures looked good.

No.1 I can tell you want I think. I am just a guy reading this. It is what it is. We created money. It was a way to give money that they (*Viacom*) didn't have in five years. They did a really stupid thing, they went out to buy *Blockbuster (BBI)* for stock so there would be more stock and more debentures.

I love this bet and it seemed like a way to own a piece of a LBO. If they issued a lot of stock for *Blockbuster* they would get a lot of current cash flow but they overpaid.

You find this by looking at obscure opportunities.

When you see a <u>complicated security</u> there is huge benefit. Because when we looked at *Sears* which was on the front page of major newspapers, we still made money. But here when you get into esoteric securities, weird stuff and it seems pretty boring, there is opportunity. You completely <u>understand why people miss this.</u> If you do this for yourself, you will <u>never</u> run out of opportunities. Guys that are very good, get big fast and start looking at other opportunities instead of small opportunities.

Smaller cap situations are good. By knowing this kind of stuff, you can really compound your own capital. I don't think these opportunities (smaller cap stuff) will ever go away. **People don't know where to look or do the work.** The more you see, the more you know what to look for. Instead of shifting through the 400 page proxy, you can hone in on the opportunity.

In addition to looking at *American Express*, we will look at *Warren Buffett* (read the Essay's on *Warren Buffett*). Feel free to bring in ideas. I just found three things in three days which are huge spin-offs. We can analyze them together. I am giving you experience that I have. You won't look at it that way. A lot of it you have to do yourself. **I am pushing you along.**

<u>Why would I look at this, why wouldn't I?</u>

***MARRIOT-HOST MARRIOT*.**

Page 43. In the book I thought I was writing for the lay person, but after a year at Columbia, I realized I was writing at the MBA level. So I left out a lot of details. It is a lot more complicated than I made it sound.

BOOK: *Host Marriot/Marriot International*

During the 1980s, *Marriot Corporation* aggressively expanded its empire by building a large number of hotels, but the cream of their business was not in owning hotels but charging management fees for managing hotels owned by others. *CFO Bollenbach's* idea was to leave all of the unsalable hotel properties and the low-growth concession business-burdened with essentially all of the company's debt in one company, *Host Marriot*, and spin off the highly desirable management-service business, more or less debt free, into a company to be called *Marriot International*.

According to the plan, Bollenbach would become the new chief executive of *Host Marriot*. Further *Marriot Intl* (the "good" *Marriot*) would be required to extend to *Host Marriot* a $600 million line of credit to help with any liquidity needs and the *Marriot Corporation*, would continue to own 25 percent stakes in both *Marriot International* and *Host*. The spin-off transaction would be done by the middle of 1993.

Here was a case where in one fell swoop an apparently excellent hotel-mgt. business was finally going to shed billions in debt and a pile of tough to sell real estate.

I was interested in the "toxic waste"; the "bad" *Marriot (Host Marriot*). Who the hell would want to own this thing?" was the way my thinking went.

I am contrarian because if I've thought through an issue I try to follow my own opinion even when the crowd thinks differently. *Host Marriot* looked like it had unsalable real estate and crushing debt—on the surface…….
What I look for in a spin-off:

Institutions don't want it and their reasons don't involve the investment merits. *Host Marriot* looked so awful that most institutions would be discouraged from doing any further research on the new stock. I vowed to read it—first, to see if *Host* was going to be as bad as it looked and second, because I figured almost nobody else would.

Another reason why institutions wouldn't wish to own it was its size. Not on its investment merits.

Host would account for only 10% to or 15% of the total value being distributed to shareholders, with the rest of the value attributable to the "good" business, *Marriot Int'l*. *Host* was going to own hotels while the business that attracted investors was the mgt. business. Indiscriminate selling might create a buying opportunity.

3. Insiders want *Host Marriot*.

Insider participation is a key area. Are managers of the new spin-off incentives along the same lines as shareholders? When all the required public docs about the spin-off have been filed, I usually look at this area first. *Bollenbach* was going over to lead *Host Marriot* (the "bad" company).

The *Marriot* family was still going to own 25% of *Host* after the spin-off. A good sign.

A previously hidden investment opportunity is created or revealed. In the case of *Host Marriot*, there was tremendous leverage. *Host* would trade at $3 to 5 per share but have $20 to $25 in debt. That would make the approx. value of all the assets in *Host* $30. Thus a 15% move up in the value of *Host*'s assets could practically double the stock (.15 x $30 = $4.50).

The good *Marriot* (*Marriot Int'l*) would be on the hook to lend *Host* up to $600 million. It seemed the leveraged payoff had the makings of an exciting bet.

One of the primary reasons a corporation may choose to spin off a particular business is its desire to receive value for a business it deems undesirable and troublesome to sell. What better way to extract value from a spin-off than to palm off some of the parent company's debt onto the spin-off's balance sheet? Every dollar of debt transferred to the new spin-off company adds a dollar of value to the parent. Thus, there are many inordinately leveraged spin-offs.

The rewards of sound reasoning and good research are vastly multiplied when applied in these leveraged circumstances.

Host could be a good pick because:

Most sane investors were going to sell their *Host Marriot* stock before looking at it, which would, hopefully, create a bargain price.

Key insiders, subject to more research, appeared to have a vested interest in *Host*'s success, and tremendous leverage would magnify our returns if *Host* turned out, for some reason, to be more attractive than its initial appearances indicated.

20% of new company stock, *Host Marriot*, was made available for mgt and employee incentives. The debt was structured better than the newspapers made it appear. *Host Marriot* (the "bad" company) tripled within four months of the spin-off.

End of book portion

Marriot has a big franchise. So they had a big name. They know they have a certain standard. They had a good business. A real estate downturn caught their real estate holdings. Split the management business from the owning hotels. Stuck with many built hotels in a real estate hotel.

Spin-off crummy businesses into *Host Marriot* and keep the mgt. business in *Marriot International*.

I was always jealous of the leverage buy-out (LBO) guys. Leverage can be a good thing if the value is there.

Page 28 you had complicated financials. Page 31 *Host Marriot* Pro-Forma. Hugely leverage. Page 32 had a diagram of the business. Losing money on a pro-forma basis.

Skip to the chase. There was a parent corporation, *Marriot International* was the credit guarantor for *Host Marriot*. This subsidiary owed less money than what people thought. It did not owe $1.8 billion of the $2.2 billion.

Here is a parent that doesn't owe all that debt. It owes $400 million, not $1.8 billion in debt. There is a big discrepancy from what the market thinks.

The San Francisco *Marriot* - $250 million of debt was on that hotel, but the debt was non-recourse. They couldn't attach the hotel. What looked like a huge leveraged thing when it was written up in the papers was not really true. Now I almost have a debt free business in the parent. We were paying about $4 per share. Let's write off the San Francisco *Marriot*—a leveraged play there--the rest of the assets were worth about $6 plus we had a call on anything above $1.8 billion in debt. They were probably worth more. Worth $3 to $6. We had a debtless parent worth $6 plus a call on this plus I was only paying $4.

It all came from saying, "Hey, what was really going on."

In a spin-off, I look at how management is incented and the timing of when management is incented. So in other words, if the price is based on the first week of trading and the incentive is to strike the options at that price, they want to make it look bad. Mgt. doesn't want you to figure it out.

The next one was *Liberty Media*. When you see a great operator like that, look carefully. *Malone*, the CEO, took all his compensation in stock and he made it difficult to understand the plan. He created a big opportunity for himself. He wanted to make it difficult for others to buy the stock.

So although this stuff looks complicated, there is opportunity. Almost the more purposely complicated, the better. Unfortunately, those are the ones you want to look at.

We had a preferred issue in *Marriot* and the preferred was convertible into the common shares of *Marriot*. You had a choice of converting your preferred into common or into the bad business. They had to pick a conversion price. Mgt. made it look so ugly and I wanted to own the ugly business, *Host Marriot*. They wanted us to convert into *Marriot Int'l* instead of *Host Marriot*. The nether world of looking at obscure, complicated securities.

On Wed. we will talk about *Amex* and *Buffett*.

END

Greenblatt Class #5

February 16, 2005

Your assignment is due next class on **Wed. March 16, 2005.** I could make up a session later. A one page report. We will have one guest lecturer on March 2nd (class was cancelled).

My office hours are always 1 hour before class, Room 310.

Summary:

- *We will be talking about examples for your paper.*
- *We will talk about AMEX spin-off. Also, Research Examples—Charlie479*
- *You can ask questions of Warren Buffett.*

March 16th you can meet *Eric Rosenfeld*, a *Canadian Carl Icahn.*

Another speaker is *Brian Gains*, he runs a special situation value fund *(Springhouse Capital)* with a couple of good war stories. A smart guy.

My sister, *Linda Greenblatt* who has made high 20% rates of return investing in the retail business.

Your Assignment is due March 16th. One page investment thesis backed by your work. Do your own calculations not just a cut and paste of a 10-K. **Show a clear thought process.**

Is this cheap absolutely or relatively? How did it pan out when you did the analysis? I am looking for your analytical skills. If you made some projections, I want to see how you arrived at them. A few pages of back-up.

Don't print out comparable P/E ratios from Bloomberg. Use an EV analysis or Price/Sales analysis. I want to see EBIT/EV or EBITDA – Capex/EV. Your return on capital analysis. Use pre-tax cash flow.

EBIT to NWC plus Net Fixed Assets. Do some digging. Adjust accordingly.

What do I mean by Maint. Capex? See *VIC* example.
How would you go figuring that out? Let's say you built a few stores but they haven't opened yet but spent the money. Where does that show up? Call and ask the company. Then you can not believe what they tell you. Basically it is an estimate.

VIC Example: *Six Flag Rides:* Maint. Capex the ride is up, but you have to replace the ride every 10 years. But here, they have to add two rides every year or else they will have declining revenues. **Consider this maintenance cap/ex not growth cap/ex because it is needed to maintain the current level of revenues.** You may disagree with his argument, but it is an argument to have. Another thing about Maint. Capex: You own a hotel business and it looks like maint. Capex goes along every year but it is not expanding. What is wrong with saying it is normalized after three years of average capex. The hotel business can bump along for 3, 5, 7 years without refurbishing charges and then you are hit with a big capex charge. You need to account for that. Normalize the big expenditures into the non-refurbishing years.

Burlington Industries (WEB) making capex by investing in new machines for production. That is a false payback period because everyone else buys the machine so the payback is almost never. Everyone else is doing that as well. A commodity industry with big cap/ex requirements and competitive environment is a poor investment. If you have a department store and you are in a competitive environment so you have to spend more to stay in place. Why he likes good businesses with a moat. All these things go into maint. capex. It is kind of an important question.

What I like about it (kind of hard to figure out sometimes) is that there is your chance to make some money. **If they told you the answer, then there would be no opportunity.**

Maint. Capex –level to maintain the level of sales. Look at PPE/Sales ratio.

Maintenance capex what it would take to keep earnings the same amount in the year you are looking at. What this says, don't fool yourself into thinking you have a better business than you think you have.

Short hand: EBIT/EV. EBIT assumes capex = D&A. Usually you don't have a huge pickup. Usually, you have to spend your depreciation unless you are in a huge deflationary environment. Having said that, that is another thing to consider.

The company he won in a proxy fight. They were in the midst of doing a big acquisition. They bought a new plant which would not need new capex for a long time. Depreciation was a lot bigger than capex. The plant was at low capacity. If you are in business, you don't think of that—most people not looking at that issue. This was a huge pick up and it was what made the deal work. Huge depreciation on a plant that didn't need to be replaced.

PPE ---100 year life/depreciation. What are the real cash flows? Adjunct facts to that flow. Skip it if you can't figure it out. Or make a very conservative estimate and if it still has a huge margin of safety, then you can invest.

Why not include goodwill? Look at the operating business, not the acquisition skill of management. Look forward, not backward at sunk costs. What are returns based on tangible assets. What you paid historically for those assets doesn't matter, it is what those assets really cost. Your goodwill is how much more you paid for those assets than the original guy. But internally I have to pay maint. capex and I have to expand, this is telling me how much those assets are really going to cost me.

What kind of incremental return I will get. Your historical return on those assets may not be your future return, but that is where I would start or that is my single best guess. What type of incremental return I will get? What kind of business do I own? Is this pretax return on the capital I invest in the business--2% or 50%? If I want to be stuck in a business with low returns on capital, I can always say there will be a big boost to earnings. In a big warehouse, whether you have 5 or 20 stores, you don't have to add capex incrementally. Now all incremental growth can use that base, then your returns on capital will rise. **Look at store based (unit based) economics.**

Look at single store base contribution instead of historical average.

How much money to put into the business?

A/R – A/P = NWC (the money you have to lay out)
Free money to others Free money to me.
Then you lay out for inventories. I took out the excess cash—cash greater than 1% to 2% of sales.

Negative WC business-*McDonalds*. As the business grows, you generate capital. It reverses if your business slows down. Do you count that as cash or something else? Eventually you will have to pay that cash. You have an industry loan.

Insurance company: premium income and investment income, then pay out losses in the future. *WEB* gets cheap capital from the insurance business and then he invests this cash or premiums at a higher return in equities.

Net Fixed Assets : gets updated—buy FA then depreciate then replace it. Assume capex = depreciation over time—a constantly updated number. Bought fixed assets then depreciate and eventually repay. Depreciation = capex. Don't throw out your brain. Everything has its own quirks. You adjust to the particular situation. **Avoid formulaic thinking.**

Investment Handouts

Great investor/analyst and thinker: ***Charlie479***. *(An Investor who worked for a distressed investing fund—a very clear thinker and great investor).*

I liked his thought process. *NVR* example.

6/20/2001 9:29:00 AM *NVR* ($143.00) <*NVR*, Inc. > by charlie479 **Rating** 6.7 (19 users)

Description:

NVR is a homebuilder. Their operating model, which is unique (and which is described later), allows them to assume the least risk in the industry and produce returns that are the largest.

Homebuilders are generally dismissed because they're cyclical and interest-rate sensitive (really, though, which industry isn't?) and downturns inevitably leave homebuilders holding large inventories of unsold properties -- the unlevered builders then suffer large inventory write downs while the levered builders go into bankruptcy. However, *NVR*'s model will prevent it from suffering the same fate and, indeed, *NVR* will prosper in a downturn at the expense of the weaker builders.

Two of the most important facets to its operating model are:

(1) *NVR* acquires control of land inventory through options contracts. These contracts give *NVR* the right to buy finished lots from developers. *NVR* secures a supply of land for its homebuilding operations through the use of these options whereas other homebuilders purchase land outright and engage in land development. By avoiding that speculative practice of land purchase/development, and instead using options, *NVR* is able to control large blocks of land (years' worth) in its markets while employing less capital to do so. The lower capital requirements of this method translate into lower inventory risk and greater returns on capital.

(2) *NVR* pre-sells nearly all of its homes. Other homebuilders typically participate in some speculative construction. *NVR* does not. Before *NVR* begins construction, an order must be placed and a deposit made. This practice reduces risk and working capital requirements, which further enhance returns on capital.

In addition to *NVR*'s superior model, consider the following:

-- Low valuation: *NVR* trades at a P/E of 8.6x trailing (7.1x 2001E EPS) and a TEV / EBITDA of 4.7x (trailing). TEV / (EBITDA - Capex) is 4.8x (trailing). TEV / FCF is 7.8x (trailing). I am defining FCF as Net income plus D&A minus Capex.

-- Backlog: *NVR* has a backlog of 5,765 ordered homes. These homes represent $1.49 billion of revenue. To put this into perspective, this is nearly three fiscal quarters of revenue. In addition, the homes in backlog carry higher gross margins than the ones in the historical results. All of this should translate into higher EPS. (Management says 2001 EPS should be just under $20 per share. In the short history that the company has provided guidance (previously they refused to) they have consistently been ridiculously conservative. Their 1Q results and the backlog indicate to me that the $20 EPS estimate continues to be the case).

-- High ROIC: The low capex nature of its business ($301 mil LTM homebuilding EBITDA versus consolidated LTM Capex of $5 mil) and the low working capital requirements of its model allow *NVR* to produce superior returns on invested capital: 45.3% in 2000, and 5-year average ROIC of 25%. Bonus fact: In 2000, *NVR* sold $325 mil more homes than it did in 1999, yet inventory (the bulk of a homebuilder's working capital requirement) increased only $11 million.

-- Intelligent allocation of excess capital: High returns on capital and excess cash flows are only useful if you have a management that is smart about deploying it. In *NVR*'s case, management has chosen thus far to deploy that capital to buy back its own stock. Between 12/31/93 and 12/31/00 the company reacquired 13.5 mil shares. In the first quarter of 2001, *NVR* purchased another 0.85 mil shares For perspective, there are only 8.1 mil primary shares out today (I'm using primary shares to illustrate this but I use diluted shares for enterprise value calculations).

-- Homes a basic necessity: People will always need homes to live in. The process of building a home has not changed materially in decades. Neither of these statements is likely to change in the next year, the next 5 years, or even the next 20 years. There is minimal technological or obsolescence risk.

-- Dominant in its markets: *NVR* competes in 18 geographic markets. It is the #1 player in 10 of them. As for the remaining 8, it is usually #2 or #3 (always at least in the top 5). The rest are markets that *NVR* has just recently entered and will dominate with time.

-- Tax factors: The industry has indirectly enjoyed the benefits of a government subsidy in the form of tax deductible mortgage interest. Additionally, in the last few years, homebuyers no longer have to pay tax on the first $500k of capital gains on a home. This lowers the effective purchase price of a home for a consumer, increases the relative attractiveness of a home as an investment, and adds a little boost to demand for *NVR*'s product.

NVR's profits and market dominance are all the more amazing when you remember that the results have been achieved without land development. *NVR* has margins better than its competitors despite the fact that other homebuilders benefit from the gross margin boost of speculative development in an inflationary environment.

Catalyst:

The small number of shares outstanding occasionally creates large downward gaps. *NVR*'s recent 25% drop is one such opportunity. Also, share repurchases will continue to drive the stock. It's hard to overemphasize the magnitude of the repurchases or the wonderful track record of buybacks:

12/31/95: 15.21 (millions of shares outstanding)
12/31/96: 13.57
12/31/97: 11.09
12/31/98: 10.39
12/31/99: 9.17
12/31/00: 8.86
04/18/01: 8.14

6/24/2001 10:39:00 AM

To: elan19 **From:** charlie479 **Subject:** elan
I understand your example but I think your conclusion is incorrect. I'll show that *NVR*'s model actually produces *inferior* absolute profits versus the competition in a stable or inflationary environment (as a tradeoff for better returns on capital) but produces superior absolute profits versus other builders in a deflationary environment. Given that we have been in an inflationary environment for the last 7 years or so, it is all the more amazing that *NVR* has been able to produce profits consistent with operators which are using a riskier (but, in an inflationary environment, inherently more profitable) model.

Let me use an example with slightly different numbers than you did:

1. *NVR* buys a two year option on a piece of land with a current market value of $100k. The option costs $5k and entitles them to buy the land for $100k. (I believe these figures are closer to reality - it costs about 5% of land value for an at-the-money land option).

2. Homebuilder *"RVN"* buys the same piece of land for $100k.

Let's consider 3 scenarios: an environment of rising prices, stable prices and falling prices.

Rising prices. In one year, if the land price rises to $110k and *NVR* and *RVN* build a house on the land and sell it, *RVN* will have an embedded profit of $10k on the land whereas *NVR* will have an embedded profit of $5k.

RVN and *NVR* will sell the house to the consumer at the same price, but *RVN* will realize a higher profit.

Stable prices. If the land price stays at $100k, the result is similar. *RVN* has no embedded profit, while *NVR* has an embedded loss of $5k. Again, *RVN* will realize a profit that is $5k higher than *NVR*'s.

Falling prices. If the land price falls to $90k, *RVN* will have an embedded loss of $10k but *NVR*'s loss will be limited to the $5k value of the option. *NVR* will simply not exercise its option and instead purchase the land at the current market price of $90k. (NOTE: I think you incorrectly imply in your example that *RVN* is no worse off than *NVR* in this case because it can also purchase the land at the current market price of $90k and incur no loss. This is not correct. *RVN* has already purchased the land - it cannot purchase it twice. Even if *RVN* finds an identical property that it can buy for $90k, it does not eliminate the fact that it has an embedded loss of $10k on the first property).

There are two additional observations that can be drawn:

1. In a deflationary environment, buyers may not at all be interested in the specific property that *NVR* and *RVN* bought! Buyers may instead want a property in the next town, or something near the highway, or something in blue. *NVR* will be able to respond by walking away from their option on the property and then buying the lot in the next town near the highway with the color blue. *RVN* will be stuck. It will have to wait for a buyer to show up for its property, risking further price decreases in the meantime.

2. Theoretically, *RVN* could also try to buy the blue property in the next town to satisfy the buyer. However, *RVN* will likely face capital constraints when it looks in its piggy bank for funds to buy the second property. Remember, *RVN* has already incurred $100k of debt to buy the first piece of land that it holds in inventory. It's unlikely they'll be able to borrow another $90k. (*RVN* may have enough cash to do this the first dozen times, but multiply these figures by the thousands of lots that builders have in inventory to see why the debt amounts would be too large. Note that most builders currently have significant debt. *NVR* has almost zero net debt). *NVR*, meanwhile, has only incurred $5k of debt, so it has the financial flexibility to purchase the land.

6/24/2001 6:34:00 PM

To: elan19 **From:** charlie479 **Subject:** elan
Management has said that options are typically 6% to 7% of land value. This is not quite as cheap as the 5% I used in my example, but I agree with you that it's still fairly cheap. I will try to confirm these prices again.

You raise a good follow-up question: if the options are so reasonably priced, why don't the other builders go in and bid on them? I have two theories on this: (1) The other builders still prefer outright land purchases instead of options because of the greater profit potential in an inflationary or rising environment. Therefore, competition for land is always intense, but not necessarily for options. (2) There are local oligopolies in the homebuilding industry. Builders need a certain threshold level of construction and sales activity in an area to reach economies of scale for purchasing materials, showcasing model homes, having sales agents, etc. If there is a builder that already controls most of the land in a locality (years' worth, even), it is difficult for another builder to get enough inventory to support a critical level of sales (regional economy of sales). Therefore, even if there are options here and there to acquire at cheap/reasonable prices, competition for them is limited to existing builders in the area with enough scale. Note that *NVR* is the largest builder in over half its markets, and is number 2 or 3 in almost all the rest.

Your question deserves a more thorough answer, so I will attempt to get management's opinion about why other builders don't compete vigorously for these options, and what motivates developers to sell options at such prices.

I agree that this could be one reason management does not like to communicate with the street. The other rumored reason is that *NVR* has been an eager acquirer of its stock and management is interested in increasing its stake relative to the public float at the cheapest price possible. I've never quite believed this (sounds too much like a conspiracy theory). I think the most likely answer is they just don't like the Street and prefer to focus on the operating the business than promoting the stock.

10/2001 6:02:00 PM

To: charlie479 **From:** charlie479 **Subject:** follow up for elan
The example we were using was a little too simplified and ignored cost of capital. Therefore, the example produced a result that showed the developer was not being compensated for his cost of capital (or his development efforts) if he went down *NVR*'s option path.

In reality, the developer would be compensated for cost of capital and their development efforts. For example, for a lot worth $100k in 2 years that *NVR* would pay a $5k deposit for today, a developer might be able to sell that same land now but they wouldn't get $100k for it. The sale price would be something lower -- with the difference being the profit that the developer gets in return for holding and developing the property over that time period.

This does not alter the conclusions of our previous example. Other builders will enjoy higher embedded gross profits per unit than *NVR* in a stable to rising environment but they will tie up more capital (and produce lower returns) to do so. Obviously, the other builders assume more risk and it shows up in the falling price environment. *NVR* will not have large amounts of capital tied up in a recession and its losses on inventory will be lower than the other builders. The other builders will likely be left with large amounts of debt while they try to liquidate excess land.

Despite this inherent gross profit disadvantage in the recent inflationary environment, *NVR* has in recent years been able to generate gross margins that compare favorably to other builders. I am repeating what I've already said in previous posts but I believe this is a result of their operational efficiency and dominant position in its markets.

9/19/2001 11:37:00 AM

To: gophar571 **From:** charlie479 **Subject:** gophar

which companies in the space do you feel are most overvalued? - is there a paired trade opportunity that makes sense?

I generally **discourage a paired trade in this industry.** This is not because I disagree with your assessment that most of the companies in the sector are bad businesses, but because many of these companies already trade for extremely low P/Es. The potential downside of shorting something with a low P/E (even in a paired trade) can be massive.

That said, if you insist on shorting something as part of a pair, I'd do a simple screen and pick out the most leveraged lenders. These are the ones run by aggressive management who have been unable to resist accumulating inventory. Centex pops up at the top my screen.

5/27/2002 7:30:00 PM

To: mark227 **From:** charlie479 **Subject:** Options
The options grants for this company are excessive and the board's allowance of it is repulsive. This is the main negative of this stock.

The 10K has the correct issuance number in 2001. The exact number is not important. The bigger point to realize is that this company is reducing its stated earnings by a significant measure by issuing options every few years.

There isn't a lot of reassuring things I can say about the options program. It's essentially one of the costs of owning this otherwise very sound operation. I have drafted a letter to the board but have not gotten around to

sending it. Perhaps several letters from VIC members will get them to change their long-term compensation policy.

2/11/2003 3:38:00 PM

To: charlie479 **From:** charlie479 **Subject:** tim321

The cash flow statement is indeed pretty good. There is almost no capex so all of the operating cash flow is available for share repurchases, which they have been eagerly doing.

Management indeed pays no attention to wall street coverage. It's a great thing.

I noticed your previous msg. I would send you an email but the address seems to be deleted from the post. It's probably better to post the question on VIC anyway.

***Joel**'s comments on NVR*

NVR has good returns on capital because they use options instead of owning huge tracks of land. That is his thesis: they don't lay out a lot of capital. They pre-sell so they don't do much speculating. How big an amount do people put down on their homes. In a recession people walk out on their deposit so *NVR* gets stuck with inventory.

Geographically diversified. This was written up in 2001. A high return on capital business at a low multiple 4.8 x with smart management that is buying back stock. I would look out three or four years and ask what a normal environment might be—is this a good business? Are we way above normal earnings? All we have to do is be well capitalized enough to get to normal. He makes a very good thesis.

11/27/2002 11:15:00 AM NIHD ($3.41) ***NII Holdings*** **by charlie479** **Rating** 6.6 (35 users)

Description:

NII Holdings, which was formerly named *Nextel International*, is the first investment idea in over a year that I have found worth posting.

NII Holdings was incorporated in 1996 as a wholly-owned subsidiary of Nextel Communications (*NXTL*) to hold all of *NXTL's* international wireless assets. Between 1996 and 2002, *NXTL* invested over $500 mil in *NII* and bondholders invested an additional $2 bil. in the company to finance the build-out of *NII*'s wireless network.

Struggling under the weight of its massive debt load, the company decided not to pay a coupon due to bondholders on February 1, 2002 and the company then filed for bankruptcy in Delaware on May 24, 2002. In the ensuing months, the company and its advisors (Houlihan Lokey and Bingham Dana) worked with creditors on a plan of reorganization and on November 12, 2002, *NII Holdings* emerged from Chapter 11 with a substantially de-leveraged capital structure.

The following are the main arguments for investing in the company now:

1. **Under-researched, neglected equity** – Having just emerged from bankruptcy, *NII*'s shares began trading on the OTC Bulletin Board a few days ago. There are no equity analysts following the situation. Much of the financial detail is buried in hundred-plus pages of disclosure statements and plan documents.

2. **Low valuation** – The company's enterprise value is 2.8 x current annualized EBITDA. The valuation isn't easily discerned from the public filings so I will post the details in a follow-up post.

3. **Spectrum rights** – Spectrum rights are a source of "moat" much like cable TV franchise rights or

broadcast radio license rights. *NII* owns the rights to spectrum in the 800 MHz region in Brazil, Mexico, Argentina and Peru.

4. **Differentiated wireless offering** – *NII* offers all of the wireless calling features that traditional wireless operator's offer. However, *NII* offers the Direct Connect feature that its competitors do not (and cannot without expensive network overhauls). Direct Connect is a walkie-talkie-like function on Nextel phones that provides an instant connection to other users in one's designated calling group. For example, field supervisors can simultaneously convey work order changes to multiple field agents using Direct Connect.

This Direct Connect feature has two primary benefits: (1) it is a service which is preferred by many business users (such as the above field agents) which tend to generate higher average revenue per user than traditional wireless users and (2) once users get set up into a calling group, there is a natural reinforcement against switching to other carriers (the field agent that leaves Nextel in the above example would cut himself off from Direct Connect messages from others in his workgroup). Indeed, all of the Nextel companies have shown higher ARPU and lower churn rates than the traditional wireless carriers over a sustained period of time.

5. **Capital structure has been fixed** – *NII*'s plan of reorganization converted $2.4 bil of bonds into equity. In addition, several credit facilities paid down and a $100 mil Argentina facility was settled for $5 mil.
6. **Public comps trade at higher prices**. While I'm not a fan of comparable company analysis, it's worth noting that investors are willing to pay 6.9x 2003 EBITDA for *NXTL*'s equity and over 10x for Nextel Partners' equity (*NXTP*). The average of the traditional wireless carriers is 6.7x. (Note that I am using 2003 EBITDA for the peers but current run rate in calculating the multiple for *NII*). If *NII* were to trade at a 5x EBITDA multiple, the stock price would be $28.10.

7. **Non-core assets not included in valuation** -- In addition to the 1.2 million subscribers it has in its 4 primary markets (Brazil, Mexico, Peru, and Argentina), *NII* owns wireless assets in Chile and the Philippines. The latter two do not contribute to cash flow and *NII* is in the process of selling its Philippine stake.

8. **Strategic importance to Nextel Communications.** *NXTL* customers are able to roam on to *NII*'s international network. As an indicator of how important this is to *NXTL* (particularly in the adjacent Mexico regions), *NXTL* agreed during the bankruptcy to pay $50 mil to *NII* to ensure the build-out of certain regions in *NII*'s territories. *NXTL* has also made an additional investment in the reorganized *NII*. *NXTL* now owns 36% of the common stock of *NII*.

Catalyst:

1. Emergence from bankruptcy.
2. Eventual move off of the bulletin board onto NASDAQ should raise the profile of *NII*. Investors in *NXTL* and *NXTP* will start to notice *NII*. Valuation will normalize to 5.0x EBITDA from 2.8x EBITDA currently. *NII* would trade at $28.10 if it were to achieve a 5.0x EBITDA multiple.

10/3/2003 2:06:00 PM

To: charlie479 **From:** charlie479 **Subject:** legg mason

It's shameful to post this but luckily I am a shameless guy.

I thought VICers might find it funny that the title of the report is "Attractive Early-Stage Opportunity"

RESEARCH ALERT-Legg Mason starts *NII Holdings* with 'buy' CHICAGO, Oct 3 (Reuters) - Legg Mason on Friday started coverage of *NII Holdings* Inc. , which provides wireless service in Latin America, with a "buy" investment rating and a 12- to 18-month price target of $82 per share. "*NII* offers a better competitive dynamic than the U.S. wireless market with only three to four players per market, no wireless local number portability exposure or push-to-talk competition, and the ability to transfer Nextel's proven business model to

Latin America," analyst *Craig Mallitz* said in a research note.

NII, a former unit of Nextel Communications Inc. , sells wireless service in countries such as Mexico, Brazil and Argentina to primarily business customers. Its selling point is a unique walkie-talkie feature that lets users connect to others instantly with the push of a button instead of dialing a number.

Shares of *NII* rose $3.11, or nearly 5 percent, to $65.91 in NASDAQ morning trading. The stock has risen more than ten-fold since last November, when the company emerged from Chapter 11 bankruptcy protection. Reporting by Yukari Iwatani; editing by John Wallace; yukari.iwatani@reuters.com; Reuters Messaging: yukari.iwatani.reuters.com@reuters.net; 312-408-8787))

***Joel**'s comments on NII*

Next example: Catalyst: just came out of bankruptcy. It will go onto NASDAQ. There are reasons that it will become more discovered. Not to say it will be a popular stock. The reason he is using EBITDA is because they already have sunk ½ billion into the network so capex is baked into the number. Low valuation 2.8 EV/EBITDA. Look where the their bread is being buttered. Watch mgt. Nextel owns 36% of this company. This company may have staying power because Nextel needs these guys. In fact, Nextel did pay up for a build out of their network.

He builds a thesis: it is cheap, low relative value analysis. They have a differentiated product; they have a moat, there is growth opportunity. Just at 30% of similar business valuation the stock would go up by 70%.

The stock will triple if we get any type of reasonable valuation.

It can make sense and not work out.

6/9/2003 9:37:00 AM *SGDE* ($9.72) *Sportsman's Guide* by charlie479 **Rating** 6.2 (37 users)

Description:

Sportsman's Guide has an unleveraged return on equity of over 35% and trades at 4.85x free cash flow (defined as operating cash flow minus capital expenditures).

The company is a retailer of sporting gear and other outdoor items. It sells its products primarily through its catalogs and web site. If you are not familiar with this company's wares, please check out www.sportsmansguide.com and spend freely.

1) The company has a strong niche brand. Its customer following has been cultivated since *Sportsman's Guide* was founded in 1970 as a catalog of products targeted at deer hunters. Over the years, founder *Gary Olen* has broadened the original catalog into a business producing $180 mil in revenue per year through a series of monthly catalogs with a distribution of 46 million per year.
Indicative of the loyalty of the customers is the success of the company's recent Buyer's Club initiative. Buyer's Club members purchase a yearly membership for $29.99 to receive catalogs with limited run items available only to members. Members also receive 5%-10% discounts on most items. The number of members was 310,000 at 12/31/02. Membership grew 22% last year and has continued to grow in the 1st quarter.

2) A key competitive advantage for a catalog marketer is its database of customer names. 85% of the company's revenues come from existing names in its database of sporting and outdoor enthusiasts. *Sportsman's Guide* has 5.2 million names with demographic data and purchasing history in its customer files. Of these, 1 million names have purchased a product within the last 12 months. Over time, the company has used response data to subdivide this database into subsets of customers. These subsets receive different specialty catalogs in addition to the main Sportsman's catalog. The specialty catalogs have different product focuses: government surplus, camping, shooting, hunting, etc. Subdivision improves response rates which reduces unnecessary mailing costs and improves economic returns.

Ever since the launch of the online *Sportman's* catalog, the database has also been supplemented with email lists. There are approximately 900k names in the email database and nearly all of them receive a broadcast email every 1 or 2 weeks.

3) The company's "bargain" focus is hard to replicate. The company has developed a customer following partially because of its history of value-priced bargain items in its catalogs. These items are 25%-60% off retail. The company is able to offer these prices to customers because the company's buying agents comb for discontinued /liquidation/overstock items through a network of 1200 supplier contacts. Because the supply of overstock items is irregular, it's critical to have the ability to purchase opportunistically and store cheaply.

All inventory is stocked in Sportsman's warehouses in Minneapolis. Catalogs are customized to include these overstock items shortly before printing so the inventory carrying period is minimized. The company's customer base of bargain hunters allows *SGDE* to move these items faster than other competing retailers. What cannot be sold via its regular catalogs and online store is liquidated through its bargainoutfitters.com site and a small retail location the company has in Minnesota. Everything from the low grade paper in the company's catalogs to the incentive systems for maintaining high shipping accuracy is aimed at selling cheaply and producing a solid return on capital.

4) I believe there is a fundamental shift in *SGDE*'s business that is reducing costs in the company and improving return on capital. It's this fancy new thing called the internet.

Up until 1998, all of the company's business was done through print catalogs. Millions of these catalogs were distributed each year with each one incurring shipping and printing costs. There's also higher production costs and longer product lead time required when doing business by catalog. The company began its web site in 1998 and by February 1999 had its full product offering on the web. Sales generated through its web site have grown each year from 1998 to 2002: $1 mil, $14 mil, $24 mil, $36 mil, $53 mil. The company is encouraging this transition by prominently mentioning the web site in the catalogs it continues to distribute. In the 4Q of 2002, internet sales generated 30% of total company sales.

So what? Well, aside from the reduced capital needs, the company has a chance to take out a major portion of its operating expenses if it can successfully transition its business to the internet. Its current cost of distributing catalogs is approximately $30 mil a year. A large portion of any reduction of this $30 mil in expenses would drop to the bottom line. Considering that free cash flow is currently $8.3 mil, even a small amount of savings would produce a large effect. The company has reduced catalogs mailed from 80 million in 1999 to 46 million in 2002. SG&A (which include the catalog costs) has been falling: 34.8% of sales to 30.8% in 2001 to 29.3% in 2002. These are the initial signs of the internet's impact on Sportsman's business.

Catalyst:

The company has recently initiated a share repurchase program to retire up to 10% of its outstanding stock. The company has a history of returning capital to stakeholders. $7.4 mil of debt was paid down in 2000. $5.2 mil of debt was paid down in 2001. (In 2002, cash simply built up because debt was retired). Now that the company is debt free, it is using a portion of its cash hoard (currently equal to about 20% of market cap) to retire a substantial number of outstanding shares.

6/9/2003 12:48:00 PM

To: charlie479 **From:** charlie479 **Subject:** ben111 Free cash flow

I've been measuring free cash flow over calendar year periods so that may produce our difference in calculations.

For the last 3 years, I have:

Year
OCF - Capex = FCF

2002 9.2 - 0.9 = 8.3

2001 13.0 - 0.5 = 12.5

2000 10.2 - 1.5 = 8.7

I chose to use the 2002 $8.3 mil for free cash flow in my calculation. For enterprise value, I get $40.3 mil ($46.3 mil market cap plus $4.9 mil for options minus $10.9 mil of cash at 3/31/03). This gives me a EV/FCF multiple of 4.85x.

I suppose it doesn't matter much whether multiple is 4.85x or 5.2x. It's pretty cheap either way. There are few companies with free cash flow yields of around 20%.

Thanks for posting this. Wish you had told us about it two years ago before it went from $2 to $10.

I'll post it earlier next time :) But, hey, I wish someone would have told me about Berkshire Hathaway decades ago.

I try not to look at the historical charts too much. They should be irrelevant to investment decisions today. I've found that staring at the charts sometimes leads to irrational (and sometimes harmful) buy/sell decisions.

6/9/2003 1:23:00 PM

To: zzz007 **From:** charlie479 **Subject:** zzz007 Insider sales

I don't typically look at insider sales because it's as critical to me as the quality of the business and other factors. It is an interesting fact that you point out, though. I believe *Paletz* is retired and draws no salary from the company (the other co-founder is still an employee) so he may be selling shares to provide for some retirement expenses.

Shiel had plans to retire this year from the board of directors. I suspect that his selling is related to his retirement as well.

6/9/2003 11:01:00 AM

To: ben111 **From:** grant387 **Subject:** Re: cash flow
Charlie, I think this is a fantastic idea.

Ben, in regard to cash flow figures, if you look back over the past three years, you'll get an average FCF (CFF0 - PPE) = $9.8MM.

If you take an EV of about $37MM now, I get a EV/FCF of 3.78.

If the top line continues to grow a bit and they keep wacking away at the expense side, cash flow will continue to grow at a healthy rate. This is a very good story.

Charlie, I also really liked your QUIPS write-up and your legal analysis was 100% correct...it is a shame that big money sometimes tramples over the little money in this world, leaving the little guy with no leverage

whatsoever.

Next one: ***SGDE*.**
It is amazing what you can say in one page. What differentiates this business—they are good at sourcing goods—cheap sportsman's stuff. Now they can do the same thing on the Internet. But others can do the same?

One of my concerns would be growth hampered by lack of close out merchandise. *Lomans* had to manufacture junk rather than buying the stuff.
SGDE Lomans couldn't scale. Find junk vs. manufacturing. Grow—can they source close outs.

SGDE worked; it went to $24. Cheap. Lesson: **Buy cheap with good ROC.** He makes a case that they have a great network. In effect, they have a brand name. People know this is a place to buy low priced sporting goods.

The Internet brings competition.

Part of this is the very low valuation. There is $2 per share in cash. Paying 5 times cash flow or 20% yield and interest rates are 4%, this would work out. I bought this one because he picked the other two. This was the weakest of the three he picked.

One of the best classes is to go over the mistakes from the papers handed in on the 16th of March. We will review on March 23rd.

Read the first one:

Use the VIC write-ups as a model.

Why pre-tax numbers vs. after-tax numbers.

Last year's tax was weird. Factor in the long-term tax effects. Take away aberrational effects of tax. Factor in different tax rates.

If I am looking at an acquisition for a company, I look at pre-tax returns.

Pay 10% to borrow and pay 8.5 times FCF or 12% yield. Investment bankers will say this will be accretive to earnings. I will not look at the 50 page investment bankers' book. I just say look, my pretax cash flow based on what I am paying (12% and very stable) vs. what I must pay 10% debt (cost of money). I buy these assets for x price (8 ½ times FCF), they will generate a coupon over time of y. That coupon pretax equals 11% and borrowing costs were 9.5%, then I can leverage up and make the spread. But the debt is a floating borrowing rate. I am buying an 11% coupon which could shrink and I am paying 9.5 percent for a tiny spread 1.5%. I am wasting my time for a company with 1000's of employees and a lot of moving parts.

You can see how you can leverage. **You get no margin of safety.** Simple analysis says, "What are you kidding" No matter how good they make it look. This may seem like a simplistic way to look at the world, but I think it is a clear way to look at the world. It is not that hard. But they can make it look really hard.

If you walk out of this class thinking these simple thoughts, you will be ahead of 99.9 percent of the people who know how to use the spread sheets and put together the big books. *Buffett* says, "Look at it as a coupon." I am choosing to look at it pre-tax. Is the coupon growing or shrinking? How confident are you of the business? If you can't answer those questions, you have no business being there. And if you can, then you try to get the best deal you could. It is reasonable to have ball parks. When I say look at EV/EBIT and EBIT/(ROC), what I really want to determine is how good a business is this? What are normalized earnings three or four years out? Is it a 30% or 15% or 50% ROC business?

What am I looking at? And then how cheaply I can buy the business. There is a matrix between what extra ROC is worth. **How much you can reinvest in that business to get the ROC.** How much growth with or

without investment. I bet when *Buffett* makes his decisions in 30 seconds, "Hey, it is worth about $10 and I can buy it for about $5.50 so maybe it worth $9 or $11, but the $10 is going to be growing over the years. It is trading at $7.50 and the $10 is going to be worth $13 two years from now. How to get a 30 to 60 cents dollar. He is doing that in his head. If you have got a good business, you have a particular niche.

The reason it is simple, because you can choose the ones you do have an opinion on and then it does become easier. It isn't easy because you pick and have to analyze 1000 companies. It is a big gap.

***AMEX* Spin off**

Any thoughts? Big picture: they had two businesses: *American Financial Advisors, AFA*, is a financial advisory business that isn't earning high returns on capital. There could be an argument why aren't they earning higher returns on capital. Is the business not being run well? There are values not being realized. In the *TRS* business those will be 28% to 30% once we strip out the *AFA* business (11% ROE).

56 cents next year for *AFA* and he slapped a 16 multiple on it (good or bad, I don't know) and said it is worth $9. Since the stock is trading at $55 now and it will happen in 6 or 7 months. If I think there is an opportunity in *AFA*, then I have to wait for when *AFA* starts trading. Its value is a small part of the whole. I need to be ready when it comes out to assess the value.

On the other hand, I could look at the "good" business, the *TRS* business now. In this particular case, I think I can look now because the moving piece that I have to pay for now is reversed—the $55 stock has $46 in value for the good business. I can today, in effect, buy now. If the stock is $55 now and the *AFA* is only worth $9, then $46 value is with the good business. I can analyze that business now rather than wait for the spin off. Of course, I have to value *AXP* to know what I am paying for the *TRS* business to see if there is an opportunity there. This is why I would look now.

Thoughts?

The terms of the deal. The press release was a bit confusing. There was a conference call off the net. I think this is pretty much what they say: the separation of two businesses—one with high ROC and the other with low ROC that have no synergies.
Hey, will I get a higher multiple businesses on the good business? Now I will own a business which has high ROC. If you just buy *TRS*, you get a purer business with high returns.

AXP has a billion and a half shares and everyone is looking at it. There are many analyst reports. I still look at it. I made money in *Sears*. Even in a simple one—I would rather have a big mess. Here, what you see is what you get.

Student: *AFA* (financial advisors) used to be a good business. In the bubble they earned 22% to 24% ROE. It seemed like it was still a pretty good business. But you are developing a thesis. It is 11% and if ROE gets back to 19%, then earnings will go up 78%. Book value would be a better metric comparing to *Schwab* and *Alliance Capital*?

***Joel*:** What I try to do, I take everything down to earnings power. Why aren't they trading three times book? Is *Schwab's* business better? If other people can do it, they can to. But at the end of the day when you do your valuation. I am very suspect of the number of hospital beds going for $x. I want to be very comfortable what they will earn four or five years out on a normalized basis. What will earnings look like and translate *Schwab's* earnings and then compare. If *AFA* is trading at 1.5 times book while Schwab is at 3 times, then maybe there is room here.

If they are getting rid of it, may be it stinks (one analyst). *Buffett* owns 15% of *AXP*. They wouldn't make a move without his approval. My first guess is that a high ROE should get a big multiple. Mgt. focus and better direct compensation due to the spin off. Capitalism works. *Buffett* will hold both pieces. Perhaps they are not getting a high multiple on their good business and there is no synergy between the businesses. I am looking at the combined. I look for a three to five year horizon.

WEB "A fat wallet is the enemy of returns." Gee, if I had $1 million to work with, I think I could make 50% a year. Somewhere between 15% to 50% lies your opportunity, I think to do things differently. He has to buy good businesses and not trade them in large size, because he can't get out. Time is the enemy of a bad business. If he (WEB) is stuck in a bad business, he will get low returns. He can't trade "cigar butts" returns.

AFA was a good business in the past and it should be a better business in the future. They did enough to screw it up. We will have 9.6 billion in assets (in CC available on the web-site). The good business will have higher returns since we are separating the lower return business (11%).

***Joel*: I will show you what I did regarding *AXP*.**

I did develop a thesis. *AEFA (spin-off from AXP)* is too small for me to focus on now. A page from the 8-K announcement.

If you have a business growing 12% to 15% with 30% ROE you should have a good multiple, you should be buying back stock or paying a dividend. Why wait around to fix the business? This is probably a more strategic way to operate the company.

Looking at page from 8-K. How would you look at newly announced spin-off and what type of thesis could you come up with? How much work do you have to do? This is somewhat of a complicated business.

Most of *AXP*'s business is charge cards. They just won a lawsuit against *MasterCard* and *VISA* who were not distributing *AMEX* cards. It is a particularly good business.

Frankly we bought *Moody's* for 20 x earnings, and I thought it was too low. I am not turned off by this business at 20 x EPS—a high multiple--if I think it is a really good business. It can't possibly be as good as *Moody's* but it could be good given the ROC.

If you buy from a store, *AMEX* gets 1.5% or 2% of the purchase. Their cards will be distributed more widely after winning the lawsuit.

They have a lending business—

Travel commissions and fees is $1.8 billion—I thought it would be a lot bigger number. A recession could have been a problem. 9/11. This was a 1.8 billion five years ago. Drop off of 300 million. After tax 12 to 15 cents loss in a bad downturn. This year *TRS* will earn $2.50. Not going to be a big mover, Frankly, I don't know if we are above trend because of the drop off. You can argue we are not way above normalized.

Another business: give out *AMEX* money card. Pre-paid card. That business is growing. You give them the money and you get a traveler's check. A very high profit business.

Then they have Finance charge revenue which was $2.2 billion plus they securitized their credit card receivables—*AMEX* takes those receivables and packages them into a security and sell that security to another institution. *AMEX* keeps part of the risk to get a better price. They don't have to tie up their capital; they can make their spread right away. My problem with this is that it is not a high multiple business—an 11 to 12 times business—because losses are below normal due to good economy.

Does *AMEX* have a better business not what percentage of its business—you don't know how to allocate how much in expenses to this business. You don't know how much income is coming from this business. If you were to evaluate each of their businesses whether it is the charge card business or *TRS* business, you want to put different multiples on each of those businesses to figure out what the pieces are. You would have to grapple with the issue: what percentage of income do I apply that low multiple to? And what I would struggle with: are they really comparable to those lower multiple businesses? They have a higher credit profile, they have a closed network—it feeds each other because if you use their discount card, it still adds to the discount revenue—you don't know how to untie all those things, they are all mixed together.

So one of my thesis for liking this a lot: I will tell you the quick and dirty on that: Perhaps 80% of the things you look at, you won't get a good answer. **What are the issues to decide?**

ROC is growing, I would normalize the credit spread. In 2007, what will the 2007 *TRS* business earn? 15% rate of growth in this business, net of the corporate overhead will earn $3.20 per share and $55-9 = $46.

We are earning above average spreads. Normalized spread would be 27 cents a share. In three years this will earn $3 and this business should earn 40% ROC three years down the road because they are taking capital out of the business that they don't really need it . They also said in the release, last year between stock buybacks and dividends, we paid out over 87% of our earnings. They are able to grow without much reinvestment. They pledged no less than 65%. I am guessing it is over 70% to 75%. The rest they will have to reinvest back to grow at the rate they say they will. I don't know if I am right about where the $3 goes to.

Take the 10 year bond yield – 6%. Let us try a 20 multiple on the business of 5% earnings after-tax yield which is growing 12% to 15% a year with high ROC (assuming I believe that—you heard Rich Pzena saying there are only a few companies which have sustained such a growth rate over 10 years) vs. my opportunity cost of 6%?

Any growth over 8% in a dividend discount model, you get prices off the charts. Take three years of 12% then 8% then 5%. I would rather have 5% growing than 6%. This has never been a business by itself.

Assume a 22 multiple (for a great business) and assume *AEFA* is $9 and exclude any other earnings, net of what they pay in dividends, so we collect another $3 or $4 dollars. 22 times earnings you can make a case for $80.

22 x $3 EPS = $66 then + $9 for *AFA* = $75 and the earnings from the bank $1 and add earnings net of dividend payments, let's say you collect another $3 so $79 to $80 per share. That is a 20% rate of return from here. You get back your money, $9 in a year.

That is the beginning of a thesis. I don't know if that is fat enough for me. I do know it is hard to find a business that is as good. I don't know if I should count on the stock getting to 22x. *Moody's* went to 30 times. This isn't *Moody's*.

The earnings are a reasonable target, but not a safe bet. Obviously, that is the beginning of a thesis, and I will have an opportunity to look at the spin-off—*AEFA* later.

A complicated business with a lot of moving pieces. Most of the time I do this, I skip it because there are questions I can't answer and I need to make certain metrics. I don't want to skip *AXP* because this is a good business. I will also discuss option situations.

AEFA reported numbers: $300 profit per client that they have. 2.5 million Clients x $300 net income per client—what is this worth to someone else? The list of companies with $50 million to buy *AEFA* is short. Generally, that is a good thing to look at. <u>Look at the takeover value to someone else.</u> You would have to pay a full price.

AEFA is a potentially poorly, under-managed firm. How much do they have under management, is it relatively cheap from that stand point.

Student: What kind of time frame do you give yourself?

Joel: As soon as I finish my work, I move. This situation has a lot of stock out there. I don't think there will be a lot of competition because it is not the cheapest thing I have ever seen. **My general rule is I am not a trader**, so I take a position if the opportunity is there. I am good at valuing businesses but not trading them. I have never met anyone who has made a living trading.

If you can value businesses and are very disciplined, then that is the main strategy.

Joel as Buffett

***Joel* will play *Warren Buffett.* Any questions you have for Warren?**

I want a business earning good returns on capital. I want good managers but if I have mediocre managers in a great business, I may ask for a bigger discount. In two or three years out, the market will eventually get it right—**value the business correctly and the price gap will close.**

I do have people that work with me who go out and visit management. I am more of a numbers guy, but I look at the actions of management over a long time period.

I am always looking for a big enough margin of safety in case I am wrong, I will still make money.

My biggest position now, which I will not name, gets huge ROC and has a big shareholder in it. They plow their earnings back into buying stock. We are confident that they will continue to do that. There is a moat around the business. We will have five or six things that are 80% of the portfolio.

I started as a cigar butt investor with net/nets. *Graham* said that if the business is selling below net liquid assets, then on average you will do well. *Berkshire Hathaway* was a textile manufacturer which was earning low ROC, but he bought it below liquid assts. However, if the business is dissipating capital, then the liquidating value will decline. Unless you liquidate the business, you are stuck with a poor business that is losing value.

That is why you should not buy a business with poor economics. He now would rather pay $8 for a business worth $10 that is growing to $12 instead of paying $6 worth $10 that is going down to $8.

PORTFOLIO MANAGEMENT

Buffett ignores Beta. **Risk is permanent loss of capital**. I don't care if the price goes down for *AXP*, if I can get back to normalized earnings. If we are at peak earnings, then I would be worried about reaching normalized earnings.

I look at risk/reward. If I am wrong and *AXP* is $80 and the stock is $55 now. There is a lot of room between $55 and $80 or $35 to make money.

I am concentrated but not leveraged. Walk into a town and buy the best businesses you can find. Pick five good business at decent prices and put 20% in each. Instead of indexing by putting money in all the businesses in town. If one or two businesses doesn't work out, but the other two or three do very well.
Volatility is a stupid metric. If you have a three to five year horizon at a minimum, you will do OK.

I have missed some huge things--$2 to $12 to $0. I got out at $1.00 so I only lost half my money. Some years I lose 5% and other years I make 100%. **Look for asymmetric rewards.** With *AXP*, I am betting $0 or $5 (whatever is my cost of carry) at $55 and have expected upside of $30 or 50%--$5 down and $25 up or 5 to 1 return. If I feel confident of my valuation, and the business does well so how the business bounces around just ignore it. But if you are in a 3 to 5 year horizon then you are in good shape.

Once again, *Buffett* has huge amounts of capital, so his universe is much smaller. He must hold for a long period of time. He has a more limited universe in which to pick from than you. **There are more opportunities to find the unknown when you are smaller.**

My favorite period is forever, but he did say he wished he had sold *Coke* when it was worth 2.5 times its worth. I may sell 80 cent dollars to buy 50 cent dollars. That doesn't happen to *Buffett* now.

Buffett has advantages operating an insurance company in Omaha, NE because he can invest in equities. If you don't have the balance sheet and the confidence to not worry about volatility.

Coke (KO):

I will see you March 2nd. Look at the spin-offs in the sheet I gave you.

END

Greenblatt Class #6

March 16, 2005

LEAPS:

Joel's Option Trading Days at *Bear Stearns*

Options were not as efficient back then as they are now. If I could create a situation if our borrowing cost was 10% and make 12%--it was a risk-less spread at 2%. I was doing forward conversions.

+

I spent the whole summer trading options.

Another way to look at a *Call* is it is similar to owning 100 shares and 1 put. 100 shares of stock and 1 put (1 put has 100 shares). The put price is expressed on a per share basis. A put price of $3.70 costs $370.

The equivalent of owning a *Call* is like buying a stock and a put. Why is that? Once I own a put at $50 strike price, I can't lose money below $50. I have to lay out $$ for the interest cost of owning the stock at $50. That is the same as owning the *Call* at $9. The economics are exactly the same other than the interest difference.

Dividend Issue: You have to adjust for dividends because if you own the stock you are getting dividends and if you own the *Call* you are not getting dividends.

The *Call* gives you the right to own stock at $50 and the right not to lose money below $50. So here I own the stock and I bought the put.

So what I was doing all summer at *Bear Stearns* was to buy the stock and a put while selling the *Call* --and make money. I was executing *forward conversions*.

If I bought the stock at $50 and the put at $3.70 (identical to owning a *Call*) and I sell the *Call* at $9--this is an *arbitrage*.

I bought the stock at $56.65 and sold a *Call* for 9.00 which will expire Jan. 07.

Arbitrage or Forward Conversions

<u>If the stock is at $60 or above.</u>

So whole position is $56.55 and $60 = $3.45 and I have the cost of laying out the $56.55 for two years. $3.45 in interest for two years. If I put this down $56.55 minus $9 (*Call*) = $47.55 is the cost of the trade. Now, I own a stock and I own a put and I sold a *Call*. The stock is at $60. How much is this $47.55 worth with the stock is at $60?

I laid out $47.55 and I get $50 two years later.

<u>If the stock is at $40 or below.</u>

What happens if the stock is at $40 at expiration? Own the stock at $40 and a put that is worth $10 (put stock at $50 when the stock is trading at $40 for a difference of $10). The *Call* is worth $0.

What if the stock is at $50, the trade is worth $50. Because the put and the *Call* are worthless and I own the stock at $50.

I put trade on at $47.55 I collect $50 no matter what happens to the stock price. The difference is $2.45, so the cost is $2.45/$47.55 = 5.2% and annualized over two years is 2.7%. This rate equates to the risk-free rate for the amount of time of the trade.

Gee, if I (a trader at Bear Stearns) could borrow money at 3% and I can make 5%, it is risk-less.

The key is thinking of buying a call as the same thing as buying a stock with a put attached.

There is no difference. When you are investing, you want to know what you are doing.

When I buy a <u>Leap</u>, I am basically buying a stock with protection. The difference in any price has to do with dividends and any interest that is paid out, but it is fairly priced. <u>It is a cheap way to borrow money.</u> The implied borrowing costs in the *Call* will really be the risk free rate. You will be borrowing close to the risk-free rate.

The volatility will come into what is the put worth? If the stock can vary widely, then the put won't be priced so cheaply.

Don't worry about volatility or any complicated stuff. Remember that when you buy a *Call*--you are buying a stock and a put (protection).

The fundamentals regarding American Express (AXP).

<u>Constructing a thesis</u>.

In Sept. 2005, they will spin off the financial advisory business. An analyst said it would earn 56 cents and he gave it a 16 multiple, so it is worth $8 or $9. Let's say it is at $9, so you are buying the other business (which I am interested in) at $43.85.

Let's construct a thesis for *AXP*. Analyst estimates were roughly $2.50 for this year. The company is telling you that they will grow earnings at 12% to 15% per year. This works out to $3.20 in earnings per share in 2007. Since the options expire in two years, in Jan 2007 what is the multiple of earnings in 2007?

The question now is: are loss ratios in credit cards lower than normal or are their spreads larger than normal? Are they making more than normal profits? Or is this situation now normal earnings? We can quibble if this $3.20 EPS could turn into $3. I will argue that it will be $3.20.

When we went to analyze this thing--and this excludes the American Express Bank which earns about a $0.10 and is not a high multiple business--so I give that a $1 at the end of the day.

So the question is what is that $3.20 worth? Remember when the 20 year govt. bond is below 6%, we will use 6% as a safety net, then we compare our investment in *AXP* to this. What multiple should we place on the $3.20? This is a pretty good business. Actually when they suck out money from spinning off the financial advisors, they won't have to spend money anymore on that division, their returns on equity will approach 40% at that time. Not quite *Moody's* or not quite *Coke*--but a good business. There are no natural barriers to entry. Amex will grow with the economy. *AXP* has unending growth as long as the economy grows. There is no natural end to their business. As long as the financial world grows and *Moody's* can retain share, *Moody's* will grow.

They can do stock repurchases or through dividends--last year they returned 87% of cash through buybacks and dividends. That reminded me of a *Coke/Moody's* type of situation. *Moody's* could return 100% of their capital and still grow while *Coke* could do the same with 80% of their capital. *Coke* needed to reinvest 20% in their business to grow. I am thinking they *(AXP)* are saying 65% and they are paying out 87% while they could do 75% or 80% in the future. This is a decent multiple business. **The question is how much of a multiple and that is more <u>art</u> than science at this point.**

Having seen a lot of things, would I rather have a 5% on AXP earnings that it is growing 12% to 15% or a 6% bond. I would rather have the 5%.

A conservative P/E of 22 x $3.20 in 2007 = $70.40
Then we have $1 from the bank. Then we have $9 from the spin-off.

The spin-off is supposed to happen in Sept. 2005. But we are buying options for Jan 2007. So what happens to my options with the two separate companies post spin-off? You get both of those companies--the right to buy the spin-off and AXP at $50. If you buy the $50 *Call* you get <u>each</u> share.

Which risk/reward do I like better? I value it $9 in two years. To spend to get to this earnings growth of $3.20 in two years you will collect dividends and buybacks. Add another $2.
$82.40 in two years. The Jan 07 *Call*s bought at $9.00 are worth $32.40 ($82.40 - $50.00).

If you own the stock at $52.40 and sell in two years at $82.40. So you make $30 or 55% return over two years or 25% annualized. The options you will make 300%.

At $70 then you would make 14.5% a year, but the options would be worth $20 or a profit of $11 or 100% return.

The market turns down and the market will not pay a multiple. You have to include your interest carry.

<u>Do a decision tree</u>, but I give it a 30% chance of it being worth $30 and I give it a 20% of being worth $70 and give it a 25% of being $60 or 25% for $50. An expected value of $20 for these $9.00 *Call*s.

You would not buy as much of these *Call*s as a stock, but it gives you an opportunity to <u>get more</u> leverage and a greater risk/reward. With the stock you don't know your risk reward exactly--the stock could be at $30.

Here with options you know your loss is no more than $9.00. Buying a stock and buying a put is the only difference.

The way I choose to look at a LEAP - owning a LEAP is buying the stock and owning the put. What is the difference between interest cost in laying out the $52 or paying the interest cost of the $9 *Call?* Here I am paying $6.15 above the intrinsic value of the *Call*. Look I am paying $6.15 in interest over 22 months to borrow $52.85 and $9. Or……..$61.85 or 4.8% per year.

I am paying $6.15, which is 14% cost of money over two years (14%/2 = 7%). So my effective borrowing cost is 7%. So instead of saying I am borrowing money at the risk free rate and buying a put to get my LEAP. What I am saying is forget the put. Let us add the cost of the put to my interest cost.

The difference between my buying this stock and this LEAP is that today--instead of laying out $52.85 today and paying the interest on that--I am paying an additional $6.15 (all interest). And what I get in exchange for the put and my effective borrowing cost is not 3% per year but 7% per year. So I get to borrow at 7%, but I can't lose any more money than this. I am basically borrowing at 7% but I have a non- recourse loan. **In other words, if it doesn't work out, I owe the interest, but I don't have to pay the loan back.**

In effect, I buy the put. I say look, they are lending me money at 7%, but I have to pay the interest no matter what, but if things don't work out, I don't have to pay the loan back. That sounds like a better deal. You pay high interest rates but you don't owe the loan.

Reread the chapter on LEAPS.

You pay your interest costs up front. You are paying the difference between the value of what you are buying (all interest)-- what that put is giving you is a non-recourse loan-- and my interest rate instead of being the risk free rate of 3%, I pay 7%. Say I put 8% of my portfolio into these leaps. I judge by how much I am wiling to lose. 8% over two years or 4% a year. I won't lose it all at once.

Listen, if I have these opportunities and they don't come along very much, I will try to take as much as I can of them. And I think if I did this and my expected value is $20 and I am any good at this at handicapping horses then if I do 6 or 8 or 10 of these and I have a horizon of five years and my expected value is 100% over what I am paying, then I can afford to lose a few--as long as **I am good at handicapping**. I have been doing this awhile.

I would like to know as opposed to buying the stock at $52.85 and when the stock goes to $70 and I make x percent with whatever implicit risk reward is there. Or can I take my bet this way or could I take partial stock and partial leaps. It is a different risk/reward. It is a different alternative that is worth working at.

I don't know if I am right, but I think if I looked at 10 of these, I would get 8 of them right or 7 of them right. There is a case for 25 P/E for AXP.

I am comparing the 6 bond yield to the opportunity. I might use 14 or the economy turns down and the consumer drops dead besides bad credit and loss reserves. You can't lose more than $9. In my leaps I would lose some of my 7% interest a year and won't have a stock loss. That is the way I choose to look at it.

BULL SPREAD

There is another choice in options. You don't want to be as aggressive. You bought these 50's at 9 and sell the 55s for $6.20 for a net $2.80 cost. The stock is worth $55 so the 50 *Call* is worth 55 or $5 and the *Call* at 55 expires worthless. Profit is $5 + $6.20 -$9 or $11.20 - $9 = $2.20. In short, you laid out $2.80 to make $2.20 net profit for a 79% return on your capital. The spread you paid $2.80 for you will make $5 on any stock price above $55. Your break-even is at $52.80. So you can create all sorts of interesting risk reward situations even if the stock doesn't go very far. There a lot of things you can do to with options to create interesting risk/reward situations.

SEARS

There was a lecture on *Sears*. *Dean Witter (DW)* and *Allstate* spun-off. The deal was announced in Sept. and *Michael Price* said in July--Sears is spinning off Sears and *Allstate*. Once they spin off *All State* and *DW*, by buying Sears and shorting those two companies, you could create the rest of *Sears* the department store for $35 per share. The department had $9 per share in sales. It was trading at 6% of sales (5/90). When we looked at *JC Penny*, it was trading at 60 cents per dollar of sales--10 times higher. That $5 you could create Sears for $5 and it was worth $50. By Sept. the $5 had moved to $30, then I sold my stock. Then the stock moved to $50.

Here we have the catalyst; it is not just a LEAP--that is the thesis anyway. There is a spin-off coming in Sept. Once the subsidiary is spun off, people will have a new company too look at. Things will be reassessed. What are the attributes of that company? You say it doesn't work that way, but Sears was pretty darn big. I can guarantee you I have done this many, many times since that time. And so stuff happens. It may not make a ton of sense. This (*AXP*) may not work out.

With Leaps you can create a very exciting risk reward play if you have a strong opinion, and you are right. It is a nice weapon to have in your arsenal.

Discussion of LEAPS in Book, You Can Be a Stock Market Genius by Joel Greenblatt (pgs: 213-220, 236, and 242).

LEAPS (Long-term Equity Anticipation Securities).

This is a way to create your own version of a stub stock. A situation that has many of the risk/reward characteristics of an investment in the leveraged equity of a recapitalized company.

A *Call* is merely the right, but not the obligation--to buy a stock at a specified price for a limited period of time. A June *Call* to buy IBM at $140 per share gives the owner of the *Call* the right to buy IBM at $140 per share until the *Call* expires in June. Let's assume that IBM is trading at $148 in April, two months prior to June expiration. In April, these *Call*s are worth more than the intrinsic value of $8 (148 price - $140 Strike Price). They're more likely to be trading closer to $11.375.

Why? First, the owner of the *Calls* doesn't have to lay out $140 for another two months, yet he is entitled to all of the stock's appreciation until June. To compensate for this, the amount of interest that could have been earned on the $140 for the two months until expiration should be reflected in the price of the *Call*. This is *Call*ed imputed interest rate which is the rate for the amount of money the *Call* buyer didn't have to lay out for the two months is also included in the *Call* price.

That is how we move the from a *Call* price of $8--the intrinsic value of the *Call*--to approximately $9.40--the value of the *Call* including the interest on the $140 the buyer of the *Call* did not have to lay out. But I said the *Call* should trade at approximately at $11.375. What accounts for the nearly $2 difference between the $9.40 already figured and the actual price of $11.375? Clearly there has to be another benefit to owning *Call*s--and there is.

The buyer for the *Call* can only lose the amount of money invested in the *Call*. If IBM falls to $80 per share, the *Call* buyer only loses $11.375 while the owner of IBM at $140 would lose $60. This is probably worth about $2. So, if you pay the $2 in "protection money" as part of the purchase price of the *Calls*, then your cost of $9.40 moves closer to $11.375. The $2 cost for assuming the risk below $140 is actually the same as the cost of the put option.

Buying calls is like borrowing money to buy stock, but with protection.

The price of the *Call* includes your borrowing costs and the cost of your "protection"--so you are not getting anything for free, but you are **leveraging your bet** on the future performance of a particular stock. You are also limiting the amount you can lose on the bet to the price of the *Call*.

Owning a *Call* isn't too much different from owning a stub stock.

STUB EXAMPLE: The company with a $36 stock recapitalized by distributing $30 to its shareholders, the result was a leveraged stub stock at $6 that magnified changes in the value of the underlying company. There,

a relatively modest 20-percent increase in earnings resulted, in one scenario, in an 80-percent gain on the stub stock's price.

On the other hand, if the company declared bankruptcy, an owner of the stub stock was only at risk for the amount invested in the stub, not for the $30 of debt taken on by the company to complete the recap. **Stubs** have unlimited life unlike options which have expiration dates.

LEAPS, which are long-term options, can be purchased up to two and a half years before they expire. Additionally, two and a half years is often enough time for many just plain cheap stocks either to be discovered or regain popularity. Long-term gains are another advantage of holding investments past one year.

Investing in LEAPS will come about as a by-product of your research efforts. Being able to compare the risk/reward of a stock with the opportunities available through an investment in the related LEAPS will provide you with another good investment choice.

END

MONDAY, JUNE 8, 1998

Dangerous Games
Did "Chainsaw Al" Dunlap manufacture Sunbeam's earnings last year?
By JONATHAN R. LAING

Albert Dunlap likes to tell how confidants warned him in 1996 that taking the top job at the small-appliance maker Sunbeam Corp. would likely be his Vietnam. For a time, the 60-year-old West Point graduate seemingly proved the Cassandras wrong. As the poster boy of 'Nineties-style corporate cost-cutting, he delivered exactly the huge body counts and punishing air strikes that Wall Street loved. He dumped half of Sunbeam's 12,000 employees by either laying them off or selling the operations where they worked. In all, he shuttered or sold about 80 of Sunbeam's 114 plants, offices and warehouses.

Sunbeam's sales and earnings responded, and so did its stock price, rising from $12.50 a share the day Dunlap took over in July 1996 to a high of 53 in early March of this year.

But last month Sunbeam suffered a reversal of fortune that was as sudden and traumatic for Dunlap as the Viet Congo's Tat offensive was to U.S. forces in 1968. After several mild warnings of a possible revenue disappointment, Sunbeam shocked Wall Street by reporting a loss of $44.6 million for the first quarter on a sales decline of 3.6%. In a trice, the Sunbeam cost-cutting story was dead, along with "Chainsaw Al" Dunlap's image as the supreme maximize of shareholder value. Now Sunbeam stock has fallen more than 50% from its peak, to a recent 22.

And just as suddenly, what was supposed to be an easy sprint, Dunlap's last hurrah as a corporate turnaround artist, has turned into a grinding marathon. Lying in tatters is his growth scenario for Sunbeam, based on supposedly sexy new offerings such as soft-ice cream makers, fancy grills, home water purifiers and air-filter appliances. Many of the new products have bombed in the marketplace or run into serious quality problems. Moreover, Sunbeam has run into all manner of production, quality and delivery problems. It recently announced the closing of two Mexican manufacturing facilities with some 2,800 workers, citing the facilities' lamentable performance. Dozens of key executives, members of what Dunlap just months ago called his Dream Team, are bailing out. And now he faces another year or more of the wrenching restructuring that's needed to meld Sunbeam with its recently announced acquisitions, including the camping-equipment maker Coleman Co., the smoke-detector producer First Alert and Signature Brands USA, best known for its Mr. Coffee line of appliances. These acquisitions will double the size of a company whose wheels are coming off. This may not be Vietnam, but it sure isn't Kansas, Toto.

Sunbeam declined to discuss the company's problems with *Barron's* . In some ways, Dunlap seems to have morphed into a latter-day Colonel Kurtz of the movie Apocalypse Now, increasingly out of touch with the grim realities of Sunbeam's situation and suspicious of friend and foe alike. For example, Wall Street is still buzzing over a confrontation that Dunlap had with PaineWebber analyst Andrew Shore at a Sunbeam meeting with the financial community in New York three weeks ago. Shore had the temerity to ask several questions that Dunlap deemed impertinent, and Dunlap snarled, "You son

of a bitch. If you want to come after me, I'll come after you twice as hard."

Shore, the first major analyst to downgrade Sunbeam's stock in April when word began to circulate of a possible first-quarter earnings debacle, is still upset over the incident. "As far as I'm concerned, Al is the most over-rated CEO in America," he grouses. "He's nothing but a bully who speaks in sound bites and completely lacks substance."

Despite Sunbeam's latest reversal of fortune, don't expect Al Dunlap to be headed for the poorhouse any time soon. Though the swoon in Sunbeam shares has vaporized the value of the options held by most of the company's executives and managers, Dunlap's huge option and stock grants are still worth about $70 million, down from a peak value of over $300 million when the stock was at its high. Moreover, in February Dunlap negotiated a new contract, doubling his annual base salary to $2 million. Under a rich benefits package, Sunbeam even foots the bill for Dunlap and his wife's first-class air fare from Florida, where Sunbeam is headquartered, to Philadelphia so that Dunlap can visit his personal dentist to keep his latest bridge comfy and pearly white. Limo charges and overnights at the Four Seasons hotel are included as well. All this from the self-styled champion of shareholder value.

We can't say we are surprised by Sunbeam's current woes. In a cover story last year entitled "Careful, Al" (June 16), we cast a skeptical eye at Dunlap's growth objectives in the low-margin, cutthroat small-appliance industry. We also pointed out the yawning gap between Sunbeam's performance claims and reality. We took special note of Sunbeam's accounting gimmickry, which appeared to have transmogrified through accounting wizardry the company's monster 1996 restructuring charge ($337 million before taxes) into 1997's eye-popping sales and earnings rebound. But to no avail. Wall Street remained impressed by Sunbeam's earnings, and the stock continued to rise from a price of 37 at the time of the story.

Sunbeam's financials under Dunlap look like an exercise in high-energy physics, in which time and space seem to fuse and bend. They are a veritable cloud chamber. Income and costs move almost imperceptibly back and forth between the income statement and balance sheet like charged ions, whose vapor trail has long since dissipated by the end of any quarter, when results are reported. There are also some signs of other accounting shenanigans and puffery, including sales and related profits booked in periods before the goods were actually shipped or payment received. Booking sales and earnings in advance can comply with accounting regulations under certain strict circumstances.

"We had an amazing year," Dunlap crowed in Sunbeam's recently released 1997 annual report, taking an impromptu victory lap for the profit of $109.4 million, or $1.41 a share, on sales of $1.2 billion. Sunbeam had every incentive to try to shoot the lights out in 1997. Dunlap and crew were convinced they would be able to attract a buyer for the company just as they had done in the second year of their restructuring of Scott Paper in 1995, when Dunlap managed to fob Scott off on Kimberly-Clark for $9 billion. They openly shopped Sunbeam around in the second half of last year, but the offer never came. The rising stock price made the company too expensive, and would-be buyers were also deterred by the nightmares Kimberly-Clark experienced after buying Scott.

Yet, sad to say, the earnings from Sunbeam's supposed breakthrough year appear to be largely manufactured. That, at least, is our conclusion after close perusal of the company's recently released 10-K, with a little help from some people close to the company.

Start with the fact that in the 1996 restructuring, Sunbeam chose to write down to zero some $90 million of its inventory for product lines being discontinued and other perfectly good items. Even if Sunbeam realized just 50 cents on the dollar by selling these goods in 1997 (in some cases, they reportedly did even better), that would account for about a third of last year's net income of $109.4 million.

One has to go to the 1997 year-end balance sheet to detect more of mother's little helpers. One notes a striking $23.2 million drop, from $40.4 million in 1996 to $17.2 million in 1997, in pre-paid expenses and other current assets. There's no mystery here, according to a former Sunbeam financial type. The huge restructuring charge in 1996 made it a lost year anyway, so Sunbeam pre-paid everything it could, ranging from advertising and packaging costs to insurance premiums and various inventory expenses. The result: Costs expensed for 1997 were reduced markedly, if unnaturally. This artifice alone probably yielded an additional $15 million or so in 1997 after-tax income.

Why did Sunbeam's "Other Current Liabilities" mysteriously drop by $18.1 million and "Other Long-Term Liabilities" fall

by $19 million in 1997? The answer is simple, according to folks close to the company. Various reserves for product warranties and other items that were set aside during Sunbeam's giant 1996 restructuring were drained down in 1997, creating perhaps an additional $25 million or so in additional net income for the year.

On top of all that, as part of the 1996 restructuring charge, Sunbeam reduced the value of its property, plant, equipment and trademarks by $92 million. Though some of these charges applied to assets Sunbeam was selling off, the bulk of the charge related to ongoing operations. This allowed Sunbeam to lower its depreciation and amortization expense on the 1997 income statement by nearly $9 million. That would create about $6 million of additional after-tax income.

Oddly enough, the figure for net property, plant and equipment on Sunbeam's balance sheet still rose during 1997, to $241 million from $220 million the year before. This is likely an indication that such costs as product development, new packaging and some advertising and marketing initiatives were capitalized or put straight on the balance sheet instead of being expensed in the year they were incurred, as was the previous practice. In this manner, expenses could have been shifted from 1997 into future years, when they can be burned off at a slower, more decorous pace afforded by multi-year depreciation schedules. Why else would Sunbeam's advertising and promotion expense drop by some $15 million, from $71.5 million in 1996 to $56.4 million last year? Particularly when Sunbeam trotted out a splashy national television ad campaign in 1997 to boost consumer demand for its new products. This advertising shortfall alone contributed another $10 million to Sunbeam's 1997 profits.

The company also got a nice boost from a 64% drop in its allowance for doubtful accounts and cash discounts, from $23.4 million in 1996 to $8.4 million in 1997. And this decline occurred despite a 19% rise in Sunbeam's sales last year. The milking of this bad debt reserve in 1997 likely puffed net income by an additional $10 million or so.

Then there's the mystery of why Sunbeam's inventories exploded by some 40%, or $93 million, during 1997. Quite possibly, Sunbeam was playing games with its inventories to help the income statement. By running plants flat out and building inventories, a company can shift fixed overhead costs from the income statement to the balance sheet where they remain ensconced as part of the value of the inventory until such time as the inventory is sold. To be conservative, let's assume this inventory buildup might have helped Sunbeam's profits to the tune of, say, $10 million.

Lastly, there are more than superficial indications that Sunbeam jammed as many sales as it could into 1997 to pump both the top and bottom lines. The revenue games began innocently enough early last year. Sales were apparently delayed in late 1996, a lost year anyway, and rammed into 1997. Likewise, *The Wall Street Journal* reported several instances of "inventory stuffing" during 1997, in which Sunbeam either sent more goods than had been ordered by customers or shipped goods even after an order had been canceled. But these are comparatively venial sins that companies engage in all the time to make a quarter's results look better. Besides, Sunbeam gave the plausible excuse at the time that glitches in a computer system consolidation in the first quarter had them flying blind for a time.

But as 1997 dragged on and the pressure to perform for Wall Street intensified, Sunbeam began to take greater and greater liberties with sales terms to puff current results. The latest 10-K, for example, discloses that in the fourth quarter of last year Sunbeam recorded some $50 million in sales of cooking grills under an "early buy" program that allowed retailers to delay payment for the items as long as six months. Moreover, some $35 million of these "early buys" were categorized "bill and hold" sales and never even left Sunbeam's warehouses.

Sunbeam engaged in bill-and-hold transactions in other product lines, too, according to a number of people in the appliance industry. In the second quarter, for example, Sunbeam booked a sale and "shipped" some $10 million of blankets to a warehouse it had rented in Mississippi near its Hattiesburg distribution center. They were held there for some weeks for Wal-Mart . The company also pumped millions of dollars of goods into several national small-appliance distributors on such easy payment terms as to call into question whether a sale ever took place. Some with knowledge of Sunbeam's business practices say the appliance maker in some instances transferred title for the goods to distributors but then agreed to not only delay payment but actually pay the distributors what amounted to a storage charge for taking the goods. These sources also said that in some cases distributors also had the right to return the items to Sunbeam without suffering any loss.

How much did various types of questionable sales add to 1997's net income? No outsider can know for sure. But we can make an educated guess based on the fact that Sunbeam's receivables, or unpaid customer accounts, jumped by 38%, or

$82 million, in 1997. Taking into account Sunbeam's profit margins, it seems that questionable sales could have boosted 1997 net income by as much as $8 million.

We by no means are privy to all Sunbeam's techniques for harvesting current earnings from past restructuring charges and future sales. Deconstructing Al Dunlap is a daunting task. But to save our gentle readers the effort, our total estimate of artificial profit boosters in 1997 came to around $120 million compared with the $109.4 million profit the company actually reported. Thus, one is left to wonder whether Sunbeam made anything at all from its actual operations, despite Dunlap's claim to have realized some $225 million in cost savings as a result of his restructuring prowess.

Our dour view of Sunbeam's current financial health is only confirmed by the company's consolidated statement of cash flow in the latest 10-K. These numbers, of course, are harder to finesse because they track the actual cash that flowed in and out of the company during 1997. And the statement doesn't paint a pretty picture. Despite 1997's eye-catching $109.4 million net profit, Sunbeam still suffered negative cash flow from operations of $8.2 million, after taking into account the explosion in Sunbeam's inventory and accounts receivable during the year. And that operating cash flow deficit would have been an even larger $67.2 million if not for the sale of $59 million in receivables in the last week of 1997. After capital expenditures of $58.3 million is thrown into the equation, Sunbeam's free cash flow deficit amounts to more than $125 million.

Sunbeam's first-quarter earnings debacle is yet another sign of a company that's in anything but the pink of health. Despite management assertions into April that Sunbeam's first-quarter sales would finish comfortably ahead of those for the first quarter of 1997, they ended up declining 4%. Even more shocking to Dunlap's fans was the $44.6 million loss in the March quarter compared with a profit in the year-earlier period of $6.9 million. Sure, $36.8 million of that first-quarter loss was the result of nonrecurring charges, mostly a handsome new pay package Dunlap managed to negotiate in February. But the operating loss Sunbeam suffered of $7.8 million was a clear sign of its true earnings power once the tank from the 1996 restructuring charge had run dry.

Dunlap trotted out a whole raft of excuses for the company's lamentable first-quarter performance. He cited dumb deals his former No. 3 executive had made with major retailers before Chainsaw fired him in April, the effect of bad weather on grill sales caused by El Nino, and so forth.

Whatever the case, the first-quarter disaster wasn't the result of any lack of effort on Sunbeam's part to pump up the results. The company recorded $29 million of additional "buy now, pay later" grill sales. In fact, the company is now holding so many grills in various warehouses around its Neosho, Missouri, grill plant that it has had to lease warehouse space in nearby Oklahoma. Who knows how many of these grills will ever make it to the selling floor?

Sunbeam also extended its quarter by three days, from March 28 to March 31. This allowed the company to book an extra $20 million in sales both from ongoing Sunbeam operations and two days of sales from Coleman (its acquisition closed on March 30). But to no avail. Sunbeam still fell $9 million short of last year's sales of $253.5 million.

Reports are rife that Sunbeam tried to strong-arm suppliers into "rebutting" their invoices for various goods and services so that Sunbeam would officially owe less money. The proviso was that the suppliers would be allowed to add back the amount forgone, plus interest, in invoices submitted after the first quarter had ended. A Sunbeam financial official denies the "rebutting" charge and characterizes the activity by the company's procurement department as the normal give-and-take that goes on between suppliers and companies seeking rebates.

But that's not the understanding held by an official at one China-based supplier. When contacted by Barron's, this official readily acknowledged that he had sent Sunbeam a check for $500,000, or 5% of the business he does annually with the company, in late March. "The only reason I sent them a check rather than a new invoice is that we had no invoices outstanding at the time we received the call," he explained. "We figure our contribution dropped right down to the bottom line if Sunbeam actually booked it. I don't know what happened, though."

For the next few quarters, expect the recent acquisition of Coleman, First Alert and Mr. Coffee to restore a measure of calm to Sunbeam's financial performance. The giant restructuring charges that Sunbeam is taking to integrate the new units, at $390 million before taxes, will give the company plenty of fodder with which to play earnings games. The

company is even forecasting earnings of $1 a share this year and $2 next year -- before extraordinary items, naturally.

But Dunlap's days at Sunbeam may be numbered. The already-ailing company now has to struggle under $2 billion of additional debt and a negative tangible net worth of $800 million. And his enemies, including disenchanted shareholders, angry securities analysts, and bitter former employees, are growing in number and circling ever closer to the company's headquarters in Delray Beach. Of course, Dunlap could always escape by using the building's flat roof to chopper out, should it come to that. One can only hope he'll remember to take the American flag with him.

Greenblatt Class #7

March 30, 2005

Buying *MCO* at 21x Forward Earnings or
How We Learned from *Buffett*'s Purchase of *Coca-Cola*

Notes: *John Chew*

Professor ***Joel Greenblatt*** Introduction:

Presentation by ***Robert Goldstein*,** my partner from *Gotham Partners*. He has been with me for the last 15 or 16 years. He is a brilliant investor.

He will talk about how we are value investors but we also are paying a lot more than we were accustomed for some company. Redefining value based on what it is worth rather than low price/book or low P/E. And it sort of opens up a similar discussion to what we talked about with *Amex* to some degree. It is sort of another tool/arrow in your quiver or in your arsenal. To pay a decent price for a good company. You do not have to go through life doing that. I think it is harder to do, because you have less room for error. **If you are going to pay up, you better understand the business and know why it should be worth more.** It is hard to do because you can screw up. This example certainly shows how important returns on capital are when you are trying to figure out a fair multiple for that earnings stream.

Summary: Return on Invested Capital is key, but what multiple is fair? There is less room for error in buying great businesses since you must really understand the business.

Rob will go through an analysis of a company where we paid up.

The second half of the class we will go through screening techniques

Robert Goldstein (RG): We were looking at *Moody's (MCO)* business after it's spin-off from *Dun & Bradstreet*, but it was priced at 21x forward earnings. Was the greatness priced in?

To help answer that question we chose to compare our potential purchase of *Moody's* with *Buffett's* purchase of *Coke*. *(This is a creative comparison of two companies in separate industries).*

Buffett began buying *Coke* in 1988. *Buffett* figured out that by buying a great business, he could make a fortune. In 1988, *Buffett* invested $650 million in *Coke* stock. He paid 15 times trailing earnings. 12 years later he was up 10 times his initial investment. Obviously, he knew what he was doing. The question then is why *Coke* is a great business? It was growing, it had high returns on capital and it had a very long lasting competitive advantage so five years down the road you are still going to have *Coke* and its advantages—the same as when you initially bought the company.

To give you a little bit of history: originally *Moody's* revenue came from bond investors who paid for *Moody's* ratings. Then the rating industry changed dramatically in the 1970s because the rating companies began to charge issuers as well as investors. And this was a huge deal for *Moody's* because it meant that rating agencies

had gained so much clout, they could charge companies who wished to issue debt or else they would face higher borrowing costs in the market.

Today *Moody's* and *S&P* both have about 40% of the rating industry. Frequently companies get ratings from both rating agencies. Since ratings are very important in the capital market, companies issuing debt will get ratings from both companies since these companies do not want to be dependent upon one rating agency.

***MCO*'s 2000 FY**	**Revenue Growth Rate**	**Operating Profit Growth Rate**
Growth rate for 19 years	15%	17%
In 19 years only 1 year of decline in revenue. Very stable.		

Does past success = future success? Sometimes it does and sometimes it doesn't. *MCO's* growth rate is phenomenal considering its long time period.

Look at the market share stability. The global public debt market grew rapidly over the past 25 years. Basically what was happening was that there was disintermediation in the debt markets. Banks were doing less lending so companies were moving to issue more debt in the public markets, therefore they needed more ratings. You had more securitizations for mortgage loans, car loans—the financial markets were evolving. The market share had not changed much—it was predominantly *Moody's* and *S&P*. It was our conclusion that *MCO*'s growth was likely to continue. Europe and Asia emergence can provide future growth. Less competitive pressure.

It was easy to understand there would be a lot of future growth and not much competitive pressure. Both rating agencies had to be paid. It was very unlikely someone could enter the business because you need credibility. No matter how profitable the business or fast it was growing, a competitor could not obtain the confidence of the customer's CFO nor enter the market easily. It is like paying the Mafia.

In December 1999, *Dun & Bradstreet* announced that they would split into two businesses. *D&B* was selling for $27 a share and you were going to get ½ a share of *MCO* and we assume in a worse case scenario that one share of D&B was worth $15 so the half share was at $7.5 per share. You were effectively paying $24 a share. At the time, I expected *Moody's* to earn $0.95 per share in 2000.

Joel Greenblatt: At the time we had no idea where *D&B* would trade, so the $7.50 we were using was very conservative, so we thought this was a worst case of what we were paying.

KO	***MCO***
6/1988	*3/2000*
Price $5	$20.25
EPS $0.33	$0.85
Forward EPS $0.39	$0.95
Trailing P/E 15	24
Forward P/E 13	21

This meant that at a $0.95 EPS we were paying 21x forward earnings. Much more than *Buffett* paid $4.5 to $5 for *Coke*—he paid 13x–15 xs for *Coke*.

Joel Greenblatt: This was a new animal for us. We had never seen a business (*MCO*) this good with a 19-year growth rate and no need to reinvest money. So we went back to the Master, *Buffett*, and picked something *(KO)* that worked out well for him. So at first blush, if you looked at (the chart), this is what we saw. Were we getting as good a deal as *Buffett* did buying *Coke* in 1988? At first blush it does not look that way.

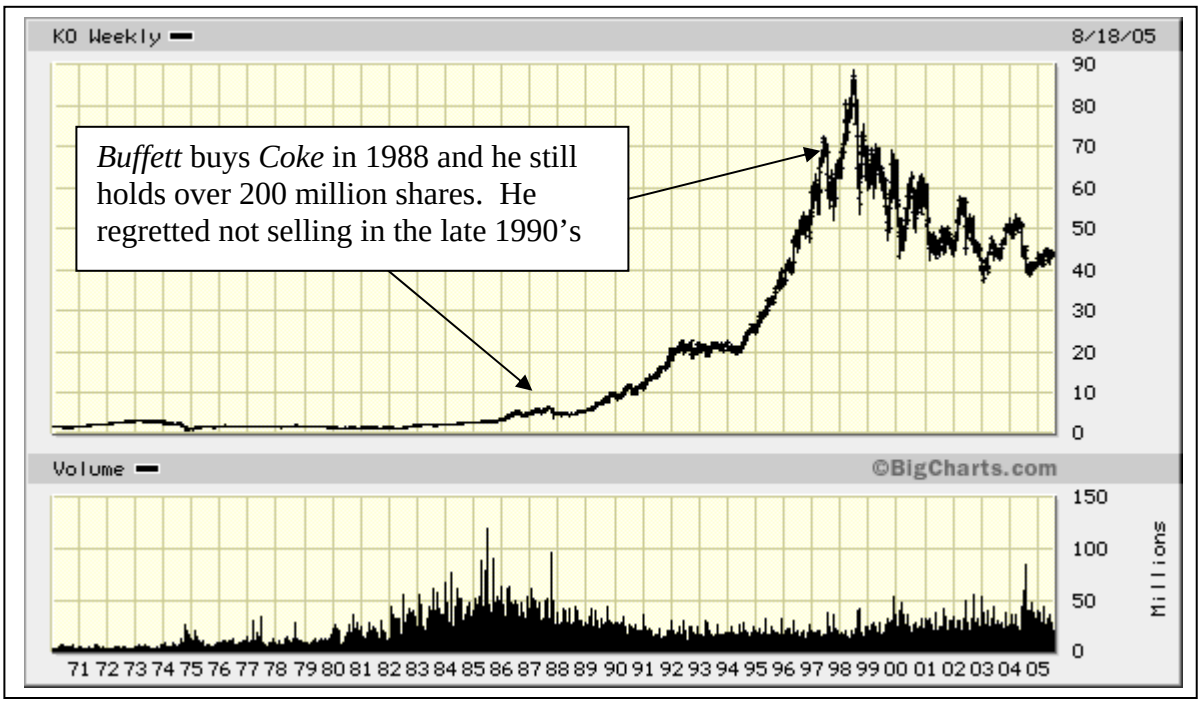

RG: This is how *Berkshire* did on its investment in *Coca-Cola*:

Coke returned 80% of its invested capital return to shareholders and the P/E expanded from 13 to 40. 1/3 of the gain came from P/E expansion.

Warren Buffett paid $5 for *Coke* and in 12 years it went to $58 (not including dividends received). Investment at June 2000: $4.75 in dividends x 6% rate of return = $6 in dividends by June of 2000. $5 to $64 or ($58+ $6) in 12 years. Leave taxes out so you get a 23% CAGR.

His initial outlay of $5 turned into $64 in 12 years. That brings us to the next question—why did *Coke* do so well?

Answer: *Coke*'s ROE was high for a very long time.

***COKE*'s Annual CAGR**	**10 Years**	**15 Years**
Unit Care Volume	7%	8%
Revenues	8.8%	6%
Operating Income	12%	9.9%
EPS	15%	11.3%

Share buybacks help grow the EPS by 15% a year. *Coke*'s management invested 20% of their earnings back into the business to produce that growth and they returned 80% of each dollar invested in the firm of dividends or share repurchases. That had a lot to do with why the return was so good. In addition, the P/E multiple went from 13 xs to 40 xs—the P/E expansion caused 1/3 of the price gain.

The next 10 years looked good as well due to <u>*Coke*'s competitive advantages</u> of strong brand, distribution, good management and corporate governance. This is in part what made investors pay up for the stock.

Let's go back to *MCO* for a moment. Our assumptions for growth? *MCO's* 17% operating income growth which, despite this high growth rate, was very stable.

Student: You might see a lot of trends within those 19 years—perhaps growth in trailing off in the last year?

RG: Actually the growth was very stable.

Student: Assume no growth and then back into a growth assumption?

RG: There really is no science to it. We assumed 12% growth rate because many of the factors that drove their growth were still in place. Even though *MCO* had grown annually at over 17%, management basically had us lower our growth assumptions to 12%.

We try to pick something (growth assumptions) that we feel comfortable with and we think is very conservative and then see if it still makes sense. **Nothing grows for 12% forever.** So we assumed 12% for the next 5 years to 10 years.

We felt *MCO*'s growth factors were still in place. We try to be very conservative. 12% growth for 5 to 10 years. Public financial markets growing vs. bank lending. We assumed Asia's market and Europe's market was a source of additional growth opportunities for *MCO*. This business will grow with global growth.

Capital needs were minimal—no real capital needs. *MCO* was basically some guys in a room with computers.

How does *MCO*'s no need for capital to grow figure into how much more we would be willing to pay for *MCO*?

Coke was growing its operating earnings 12%. *Coke* sent back $0.80 to shareholders for every dollar invested.

MCO could send back $1 or more for every dollar invested. $0.80 for KO vs. $1.00 for *MCO* returned or 25% more.

Now we focus on *MCO*'s ROC. It's ROC was infinite because they use almost no capital (chairs, desks and computers).

How much more could you pay for *MCO* than *Buffett* paid for his *Coke*?

Earnings = Free cash flow with no capex needs. With *Coke* 20 cents had to be retained in the business so they repaid shareholders through share buybacks and dividends the equivalent of 80 cents of every dollar.

Every $1 of *MCO* is worth 25% more than *Coke*'s $1. Your cash flow as a *MCO* shareholder will be 25% higher than *Coke*'s.
For *Coke* to grow 12% a year, it has to invest 25% more than *MCO*. When *Coke* reports a $1 per share in earnings that is really only worth 80 cents to you compared to the dollar you get back from *MCO*. Down the road when growth slows, so say when growth slows to 5%, with *MCO* you will still get back $1 for each $1 invested. With *Coke* you will get back 90 cents on each dollar. Why would you get 90 cents back when growth slows? Because of less growth capex.

Take a growth rate of 5% and a 50% return on capital gets me a 10% reinvestment rate.
Plug into a formula of growth rate/ROC = reinvestment rate: 5%/50% = 10%. So that 25% disparity will shrink to 10% to 11% at some point.

Buffett paid 13 times earnings but we are willing to pay 15% more so 13x multiplied by 1.15 = 15x earnings for *MCO* because *MCO*'s earnings are worth 15% more long term to us.

We can pay 15 times forward earnings to get the same result that *Buffett* got based on that different ROC which is a long way off from 21x earnings.

MCO came public in September and we looked at it in December. *Buffett* was a buyer. We still had to understand what we are doing. *Buffett* won't allow management to be stupid with the shareholder's capital.

Our hurdle for buying companies is much higher than his. We pick and choose other than large caps. 15% return might be great for him, but our hurdle might be 20%. We did know it was a *WEB* business with these numbers *(a franchise-like business with strong economics and barriers to entry).*

***MCO* is a service business with repeatable business and growth—the key question to answer is repeatability and growth prospects.** Good for them not to have to use much capital. The numbers are the numbers. How good are the people and the franchise to keep those numbers growing or stable.

Interest rates were 40% higher when *Buffett* bought *Coke* in 1988. If *Buffett* paid 40% more than $5, then he would have paid $7 per share for *Coke*. Then he would have earned 20% CAGR vs. 23%.

Compare a 30 year T-bond yield (9%) then to now (6%). Remove the drop in interest rate to adjust performance. P/E as an earnings yield. During 1988 – 2000 Interest rates were higher. **This was key because interest rates fell from 9% to 6%, a 40% decline. So, in 2000 the future earnings would be worth 40% more.**

If our adjusted P/E is 15 (vs. 13 for *Coke* because *MCO*'s earnings are worth more) and you multiplied that by 1.4 (because of the lower interest rates now prevailing in 2000) you get 21x. How would *Buffett* have done? $5 to $46 (vs. $64). Knock *KO* down by 30% to get a 70 cents dollar.

A 6% 10-year T-bond. What Pension Funds expect to earn in stock--2% to 8%--pick a number.

Buffett's investment rose because of the interest rate drop. So let's take the drop in interest rates out of the equation. *Buffett*'s return drops from 23% to 20%, now we assume 16% minimum return. We take 30% discount to the end result gets you 70 cents on the dollar to 70% x 64 = 45.

Part of what you lose in this interest rate environment. Expectations on future stock returns are lower. So if we take our minimum 6 percent bond and say people over time in their pension funds expect to earn 8% a year. So here *Rob* said if *WEB* didn't have the benefit of interest rates falling, he would have returned 20% a year instead of 23%.

We are paying a premium for what we are paying for *MCO*, so we are not going to assume interest rates will go our way. We will make 16% a year.

Joel Greenblatt (JG): I look at it this way: let us go three years out or five years out and say the story plays out as expected. The company earns grows 12% a year, they are buying back their stock and people see that it is a good business. **Well, in three years if they price *MCO* to return 8% a year, so the stock may double. You may collect 50% of that in two years' time because everyone sees what you see. We may get paid upfront by a faster rise in the stock due to a big multiple bump.**

People may say what do I have to pay to get 8% a year if it is going to be worth X in a few years? That is how you get your multiple expansion and sometimes fairly quickly.

Mr. Market usually gets it right if you have done your analysis correctly. If in 10 years, I believe it will earn 16% a year, then in three years I may be averaging 40% per year. A big chunk of my return may come in the near term if the market charges a 8% discount rate.

In effect that is what happened to *MCO*'s. It went from a 21x multiple to a 30x multiple then the return drops to 8% a year after that. The stock price will not move in a linear fashion.

I don't know if you remember when we looked a *Duff & Phelps* and we had three scenarios of growth. Yet we still undershot the growth rate. There was in effect an explosion in the different uses for *MCO*'s product, but you knew the trend was going your way; they had only penetrated a small percentage of the market. The trend in earnings grew 30% to 40% for a few years. This happens with a spin-off where they do things efficiently. It is complicated to make these assumptions and sometimes you are wrong.

Frankly, we bought it at $21 and sold it at $35-$36. In our good scenario we had a $70 stock. One of our reasonable scenarios was three years. The stock did go there. We didn't hold it—any reason to do the wrong thing.

There are so many important points in what *RG* brought up today. **It is not only important how much a company earns but how much you get <u>to keep</u> and still get your growth rate.** Growth and ROIC --- examine the capital investment requirements to grow.

Obviously, *Coke* had to put 20% of their cash flows back into their business to maintain their growth rate, but *MCO* even had a better business where they did not have to reinvest anything and those earnings were worth more. **This is a very important way of looking at the world.** You can do all your calculations and say 16% annual returns--that is pretty good--not great. But if you look at the world, this is what I think it is going to earn in three or four years, and if it gets a fair multiple at that time based on ROC and earnings growth, I could get an astronomical rate of return.

MCO was a unique business, a considerably great business. If we could have compared this to *S&P* as a stand alone, I guess we would have done that. But most of our money is <u>not</u> made on comparable analysis; it is a check. Either the comparables are trading much higher and this is a better investment and you want to know <u>why</u> your stock is not trading at those comparable levels.
Or all of the industry is trading too low and either you stumble across or you did the analysis and this is the cheapest of the bunch or you like their business the best. And you are willing to pay up a little bit. So it is a <u>combination</u> of factors. Usually we are finding a situation where we –we don't make thematic investments based on the price of commodities or oil.

This was the first time we paid 21 times normalized earnings for a company. This was sort of a wake-up call. We really don't want to do this. But let us do this exercise to see if we can justify this because it works. If you are doing something that works, it is very hard to do something different. Obviously this can happen to a lot of companies that are doing well. They don't see the competition coming because they want to hold onto their core business. They get blind-sided.

In this particular case there is always money to be made in many different ways. Just because I am teaching you the way we do it, it is <u>not</u> the only way to make money. It is a way that I think works. If you have something better to do, that is fine. We have always had an opportunity to invest in cheap stuff. In what I call a good business at a little higher price. This is something more to compare and <u>another weapon</u> in your arsenal.

It is very seductive to be in great businesses and see a lot of good things flying off of that to then go and buy cigar butts after that. There is plenty of money to be made at that. It is a bit of a little different game. *Buffett* can't play in that anymore.

It is almost taking a <u>leap of faith</u> to assume that the business will continue as it has. What is your plan to get those great results in the future? What will they do with the capital? With something like *MCO* there are not many calls you can make.

Part of the analysis is taking a background of the industry. Read analyst reports. **Most people would have said a good business but fairly valued.** In three years from now, *MCO* could be at 30x – 35xs prospective earnings. There is no business I would give a 30x multiple to on normalized earnings for the same reason I would never use less than a 6% yield on a long term bond. 30x would be 3.3% return—a return too low for the risk.

We were hoping for more growth than 12% but used that for a conservative rate. You hear a lot of smart people, but we are not that smart. We spent ½ hour going over stuff we sold that subsequently doubled. We made a lot of errors. It is good to make a lot of different errors and still make money.

We looked at *MCO* because it was a spin-off number 1. People wait to see it happen. **I don't want to waste too much time on the <u>psychological reasons</u> people wait.** 21x doesn't look that enticing. How good this

actually was. The question would be that *Buffett* filed on it and yet we bought it 5 months later. We look at spin offs anyway. So I would say that if you see something at 21x then look at it if the business is exceptional.

Student: How often do you migrate to higher quality businesses?

Portfolio Management

JG: Everything comes up rarely. **We hold 5 to 8 securities for a year to 2-5 years.** We may only need to find one idea a year. We may do *American Express* for a few weeks. *AXP* is similar to *Coke* and it may be better in some ways.

Right now, the market for small cap stock was up 50% to 100% in 2003 and it was up again in 2004. **Most of the values are in bigger, good companies right now.** When the small cap market gets killed and I can buy retailers at 6x earnings, then I am not picky, I will go do that. Right now some of these better companies are where some of the better deals are.

I am not measuring one against another. It (my interest/investment) depends upon which I found first. What is cheap enough to meet the hurdle. Basically it is a big world out there, there is plenty to choose from. It is more what you know and what you feel competent in. Your circle of competence.

Think how powerful that is—knowing what something is worth is very powerful. That information is almost everything. And you have the ability to look ahead three or four years and not worry about the next year or two. And not worry about how other people are doing. That is the whole ball game.

You are all smart enough now to do valuation work. And know when you know it and that is where practice comes in. You are smart enough now, but you don't have the experience. And you need to go through the school of hard knocks and you will keep getting better. I would say we keep getting better at what we are doing. We still make tons of mistakes, so it is good that we got better, but we make different ones. It gives us more to choose from as we keep learning. **You always keep learning and you always get better.** When you think you have it knocked, you don't. Expect to be right more than you are wrong.

Back from break

Joel Greenblatt: You can't get this analysis of *Moody's* from a text book and it took us a long time to think this way. *Rob* and I wished we had this good stuff. Ask questions if you don't understand this.

This was the end of the lecture.

Additional Notes from other sources

From The Essential *Buffett* by Robert Hagstrom: **Why *Buffett* purchased *Coke* in 1988**

When *Buffett* first purchased *Coke* in 1988, people asked: **"Where is the value in *Coke*?"** The company's price was 15 times earnings and 12 times cash flow – 30% and 50% premiums to the market average. *Buffett* paid five times book value for a company with a 6.6% earnings yield during a time of 9% long-term interest rates. He was willing to do that because of *Coke*'s extraordinary level of economic goodwill. The company was earning 31 percent ROE while employing relatively little capital investment. *Buffett* explained that price tells us nothing about value. **The value of *Coke* is determined by the total owner earnings expected to occur over the life of the business, discounted at an appropriate interest rate.**

In 1988, owner earnings of *Coke* equaled $828 million. The 30 year Treasury bond (the risk-free rate) traded near a 9 percent yield. *Coke*'s 1988 owner earnings, discounted by 9%, would produce an intrinsic value of $9.2 billion. When *Buffett* purchased *Coke*, the market value was $14.8 billion (a 65% premium), suggesting that *Buffett* might have overpaid for the company.

However, when a company is able to grow owner earnings <u>without</u> the need for additional capital, it is appropriate to discount owner earnings by the difference between the risk-free rate of return and the expected growth of owner earnings.

If *Coke* were able to grow its earnings on average 5% for a long, long time then
$828 million/(9% alternative rate of return – 5% long term average growth rate in earnings) = $20.7 billion or round up to $21 billion.

So if *Buffett* purchased *Coke* at a $14.8 billion value its intrinsic value was $21 billion or higher-- or *Buffett* was getting a 40% discount to a conservative appraisal of *Coke*'s intrinsic value.

Return on retained capital

From <u>Buffettology</u>: *Warren* could reason that in 1994, if he paid $21.95 for a share of *Coca-Cola* stock that had per share earnings of $0.98 a share, he would in effect be getting an initial after-corporate-tax return on his investment of 4.5% ($0.98 / $21.95 = 4.5%). And this rate of return would expand because *Coke*'s per share earnings were growing at an annual compounding rate of 17.2% to 18.4% a year.

Warren believes that a company should retain unrestricted earnings only if it is reasonable to project that the management would be able to do a better job investing those unrestricted earnings than would be the shareholders.

How do we as investors measure a company and its management's ability to profitably allocate unrestricted earnings? What is the management skill in allocating capital and management effectiveness?

We take the per share earnings retained by a business for a certain period of time, then compare it to any increase in per share earnings that occurred during this same period.

In 1983 *Coke* made $0.17 a share. This means that all the capital invested in *Coke* up until the end of 1983 produced for its owners $0.17 a share in 1983. Now between the end of 1983 and the end of 1993, *Coke* had total earnings for this ten year period of $4.44 per share. Of that $4.44, *Coke* paid out in dividends during 1983-1993: a total of $1.89 a share. This means that for the ten-year period between 1983 and 1994, *Coke* had retained earnings of $2.55 a share ($4.44 - $1.89 = $2.55).

So between 1983 and the end of 1993, *Coke* earned a total of $4.44 a share, paid out in dividends a total of $1.89 a share, and retained to its capital base a total of $2.55 a share.

During 1983-1993 *Coke*'s per share earnings rose from $0.17 a share to $0.84 a share. We can attribute the 1983 earnings of $0.17 to all the capital invested in *Coke* up to the end of 1983. We can also argue that the increase in earnings from $0.17 a share in 1983 to $0.84 a share in 1993 was caused by *Coke*'s management doing an excellent job of utilizing the $2.55 a share in earnings that *Coke* retained between 1983 – 1993.

If we subtract the 1983 per share earnings of $0.17 from the 1993 per share earnings of $0.84, to get $0.67. Thus, we can say that the $2.55 a share that was retained between 1983 and 1993 produced $0.67 in additional income for 1993. This means that the $2.55 in retained earnings earned $0.67 in 1993 for a total return of 26.2% ($0.67 / $2.55 = 26.2%).

Coke's management earned a 26.2% return in 1993 on the $2.55 a share in equity that *Coke* retained from 1983-93.

END

Greenblatt Class #7

March 30, 2005

The Exam is the last class on 20/April – closed book.

Presentations next week. Papers due.

Your papers are due next week unless you are one of the groups who are going after that.

Stock Screening and Generating Ideas:

I wanted to talk about stock screening later in the class. I found this yesterday in the *Wall Street Journal: Nuveen* Spin-off

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Nuveen Invest down 8%; St. Paul to Sell Controlling Stake

DOW JONES NEWSWIRES ***March 28, 2005 1:56 p.m.*** By Angela Pruitt Of DOW JONES NEWSWIRES

NEW YORK -- *Nuveen Investments Inc.* (JNC) shares fell 8.1% in mid-day trading Monday following news of plans to make the asset manager a fully independent and publicly traded firm.

Nuveen's parent company, *St. Paul Travelers Cos. (STA)* announced Friday that it will implement a three-part plan to sell its controlling stake in *Nuveen* in a secondary offering. The property-and-casualty insurer owned about 78% of *Nuveen*'s outstanding voting securities as of early March.

Nuveen shares recently were down $3.08 at $34.92 on volume of 766,800, compared with average daily volume of 111,000. St. Paul shares were up 15 cents, or 0.4%, at $36.41.

St. Paul's strategy was not unexpected as market analysts anticipated that some sort of secondary offering or sale to a third-party buyer would be the routes taken. However, investors appeared to have stacked more of their chips on the probability that another institution would cough up the money to buy *Nuveen*.

"I think the reason the shares are down is because the market was expecting someone to buy them out," said *John Leonard*, a research analyst at *SNL Financial* in Charlottesville, Va.

"I think there was a reluctance to buy (*Nuveen*) at the top of the market given that quality asset managers are trading at premium prices," he said.

Nuveen said *St. Paul Travelers* will sell 39.6 million of the company's shares, or 42% of total shares outstanding, in a secondary offering. Under the plan, *Nuveen* also will buy back $600 million of its shares from *St. Paul Travelers* at the price of the secondary offering.

St. Paul Travelers announced in late January that it was reviewing options to sell its *Nuveen* stake, valued at about $3 billion. **The move is aimed at raising cash after a $922 million charge related to its asbestos reserves.**

Given the hefty float of *Nuveen*'s shares set to be unleashed on the market, **supply concerns also may be getting the best of *Nuveen*'s stock, analysts said.**

Nuveen is the largest issuer of closed-end funds and has $115 billion in total assets under management. The company in January reported $8.1 billion in gross sales for the fourth quarter of 2004, a 99% increase over the prior year. In addition, *Nuveen*'s fourth-quarter net income jumped 15% over the same period a year earlier.

"*Nuveen* might be better off because they will have...higher float (and) more research coverage from Wall Street," said *Jim Johnson*, an analyst at *Keefe Bruyette & Woods* of the secondary offering. He added that investors probably thought a third-party buyer would swoop in or that a bidding war for *Nuveen* would unfold.

"*Nuveen* is a high-quality company," Johnson said.

Neither *Leonard* nor *Johnson* owns *Nuveen* shares, and their firms don't do investment banking work for the company.

Potential Opportunity: A motivated seller

What would interest a special situations investor in this article? A motivated seller. Right, a motivated seller. *St Paul* wants to sell to raise cash by selling 922 million shares. Right away these guys are blowing out of this because they screwed up in their insurance business.

It may be going down because there will a lot of stock for sale all at the same time, so we may get a good price as a value investor--possible. The company is going to buy back $600 million of the stock that is held by St Paul, so the stock is at $34.25 and change so they are buying back 17.5 million shares. Perhaps this will have debt to leverage a good company. If indeed it is cheap. Anything else?

$42.50 buyout price is the baseline price for a sale. Maybe that is a baseline for what someone would pay. Or gee the thing was for sale and no one would buy it. Traditionally they sell closed-end bond funds that is a valuable income stream. It is tough to lose that income stream—an annuity-like business.

80% of your float has been owned by a big insurance company where it was not considered important as far as size. That might get management focused. The stock dropped $7 or $8 to $34 so it is cheaper than it was. The seller is a motivated seller for non business related reasons for this business. The company is buying back stock, so they are changing the capitalization of the company to create that. Management is perhaps happy to do that. How much will they (mgt.) own?

Management

Wall Street tends to overpay people a lot, so I would worry about that. In management companies where your resources—there is not much capital in these business--go home every night, mgt. ends up taking all the profit for them. So I would like to see how their shares are bread and buttered. That has happened at other companies. This is a $3 billion dollar company so management can be piggy and there is still a lot of value left for us.

Analysis

So what I did was, I took out the prospectus—read this. So anyway, I did a quick and dirty. I may look at 20 or 30 of these. I happen to know these are high return businesses, we used to own a closed end fund (this) for other reasons.

The quick and dirty: EBIT was $254 and EV is $3349 so 13.5x EV/EBIT. ROIC was over 100%. So it looked like a valuable franchise. I was looking at the break down of what the business looks like.

They have $115 billion assets under management, but included in that $50 billion is in Exchange Traded Funds (ETFs). That is a big business but how profitable is that business. Are those dollars as valuable as the closed-end funds? Mutual funds--there is only 12.7 billion, so you have $50 + $12.7 then you have $37 billion in managed accounts or retail. And you have $15.6 billion in managed institutional accounts. So each of those businesses is a little bit different. **Break out each business.** I want to go through each one of these. Each one has a little different stickiness to it; each one has a little different multiple to it. Cash-flow characteristics for each. Do they stink at what they are doing? Managed accounts might be pretty diffuse which is good. I want to see how profitable are the ETF funds--$50 billion. If it is profitable, they may be able to expand that business.

It didn't seem like mgt was going to own much stock relative to their salaries. The CEO earned $6 million a year. So let us say he had an option on million shares. $6 million in salary vs. $36 million in stock. They think they have a great platform and they are well-positioned in rapidly growing segments especially in ETF.

They will expand their marketing and distribution.

Going independent may be a catalytic event. They may be able to make earnings explode more than 12% to 13% a year over the last four years which is pretty good, but the market has been good as well. I would make all those assessments, because 13.5x EBIT may look expensive, but EBIT may grow 30% over the next few years. Then you are down to 10x EBIT in a business that is earning 100% return on capital. I wouldn't write it off right way because of the pretty high price, because of this event.

So that is the beginning of an analysis. If this was at 10x EV/EBIT, I would be buying the stock and asking questions later, but at 13xs I am asking a lot of questions and probably not buying the thing. But I will go through the analysis and look to see whether I should or not. Already there is a thesis built from reading the article.

My analysis is not dissimilar to our analysis of *AXP*. *AXP* has two businesses: one business has a high ROE and the other a low ROE. OK, I want to look at that. Also, the market is kind of weak lately, so this is the kind of thing that could really get crushed. These guys really need the money. *St Paul* just wants to get the deal done. Once you are at this phase, there is a big cheering squad *(investment bankers)* to get this deal done.

We may see the stock down another $6 or $7 from here.

American Express (AXP)

The thinking on *AXP* is this: usually when I buy the stock, it goes down. Number two is this: if I am truly taking a three or four year horizon in my valuation, then what is happening in the short term does not matter. **What matters is what I think normalized earnings will be three years from now.** Which should take into account the fact that account if loss ratios are lower than usual, income credit spreads are bigger than usual. There are a lot of things that go into that. I analyze that. They are 20 cents above normal, but they are also 50 cents above normal in spending in this area. So, they traditionally cut back in this area—it is not a big factor.

You have to decide what is material and what is not. It turns out a lot of stuff is not material, if you are looking out normalized earnings three or four years. Like I said before about *Amex*—whether I bought them or not, it does not matter. This analysis is very important that we did with *Moody's*. It should be worth in 3 to 5 years, X dollars, but if someone wakes up in the next year or two before my leaps expire, I will get most of that money upfront instead of the expected return of 8%.

The risk in the LEAP is that there really is no intelligent way to know where the market will price *AXP* in the next 22 months. There is an intelligent way to know where the market will value *AXP* in three to five years. By owning a stock, you have that comfort level of whenever it happens it happens. If you are in a LEAP with a 22 month expiration and this market can do anything, you are in a window of risk. You are making a risk/reward bet.

If I have the wherewithal and my options expire, I will (could) re-up and buy another set of LEAPs**. It is a cheap way to borrow money.**

That is one way to read the paper. I am trying to show you even obvious stuff. The efficient marketeers would have you believe, it is already in the paper so the twenty dollar bill is not there because someone would have picked it up. This is the way it really works.

Stock Screens

So I will do a stock screen just for fun. This is off of *Multex.* This screening package cost $1500 a year—it is sold by *Reuters*. And maybe it is a little easier to use. A great screening package for a cost of a couple hundred dollars a year is from *AAII.com Powerinvester.com, Smartmoney.com,* there are a lot of web screening packages. They all use the *Reuter's* data.

I use the screening package but it is not worth the money. One thing you want to be careful with the *Reuters's* Data is that it is not that good. Sometimes the data is not accurate. All I am saying is that if you get something super cheap, use that as a first step.

Compustat is a great product. But use stock screens as an idea generator.

Book Value per share last quarter. Instead of doing EV/EBIT we will do simple trailing P/E trailing twelve months. Divide that by tangible book value. Why did I multiply ROE by BV/Tangible BV? I am goosing up the ROE because ROE is based on reported book and I am trying to say I really care about looking at ROE and tangible book value.

Use unique screening criteria!

END

Greenblatt Class #8

April 6, 2005

Special Situation Class

April 20, 2005—The last day of class.

Next week we will have a few presentations. Also, *Matt Mark* runs *Jet Capital* and he will discuss distressed investing.

How to Invest in Retail Companies

Today we have a special guest, *Ms. Linda Greenblatt* who has run a hedge fund for the last 10 years with an extraordinary record. She invests almost exclusively in retail stocks and some consumer stocks. She has had a tremendous record sticking to what she knows. In other words, her circle of competence didn't have to be that large. She has been able to build a nice portfolio with huge returns over those ten years. And it shows that you don't have to know many different things. You will hear from Linda how what level of analysis you can

Last year her pick that she discussed in class was *Abercrombie (ANF)* which went from $25 to $58 for a + 120% return.

Presentations: *Corinthian College, Winnebago* and *H&R Block*

Corinthian College: An attractive price to earnings and cash flow. The company is being sued because some students can't transfer their credits. We believe that the company will be exonerated because there is no evidence of wrong doing. Every student signs a binding arbitration.

Growth has slowed. Historical profit margins of 20% was not sustainable. The Street is spooked, but it is not justified. There is slower growth and margin compression with capex temporarily higher.

$1.4 billion in market cap and $1 billion in sales. EV is less than Mkt. Cap. 20% EPS growth and 15% revenue growth. More capex last year so there will be a jump in FCF.
We define Free Cash Flow: EBITDA – CAPEX and Chg. In NWC and Taxes. Or after tax EBIT. $100 million in FCF.

With a 7% to 8% WACC = $30.
EV/EBIT 8.5 with ROE of 35% ROE
Growth Capital 80% to 90%
Maint. Cap. 20% ROIC.

All management has to do is open satellite campuses. Room for more stores. Capacity to grow and the need to spend more.

Organize Your Pitches.

Peter Lynch used a three minute egg timer to hear analyst's pitches.

Joel Greenblatt: Provide the big picture:

- What are you paying?
- What are the returns on capital?
- What are the normalized earnings?
- What are the growth prospects (of normalized earnings)?

So you organize yourself when making a pitch use those points.

Bill Miller: Says you should give your main points:

Thesis then

Bam
Bam
Bam

Risks

And be done.

END

April 6, 2005

Linda Greenblatt's Lecture on Investing in Retail Companies and a Retail Analysis of Ann Taylor Stores (ANN)

Prof. Joel Greenblatt ("JG"):

Today we have a special guest, *Ms. Linda Greenblatt* who has run a hedge fund, Saddle Rock Partners, for the last 10 years with an extraordinary record. She invests almost exclusively retail stocks and some consumer stocks. She has had a tremendous record sticking to what she knows. In other words, her circle of competence didn't have to be that large. She has been able to build a nice portfolio with huge returns over those ten years. And it shows that you don't have to know many different things. Last year her pick that she discussed in class was *Abercrombie (ANF)* which went from $25 to $58.

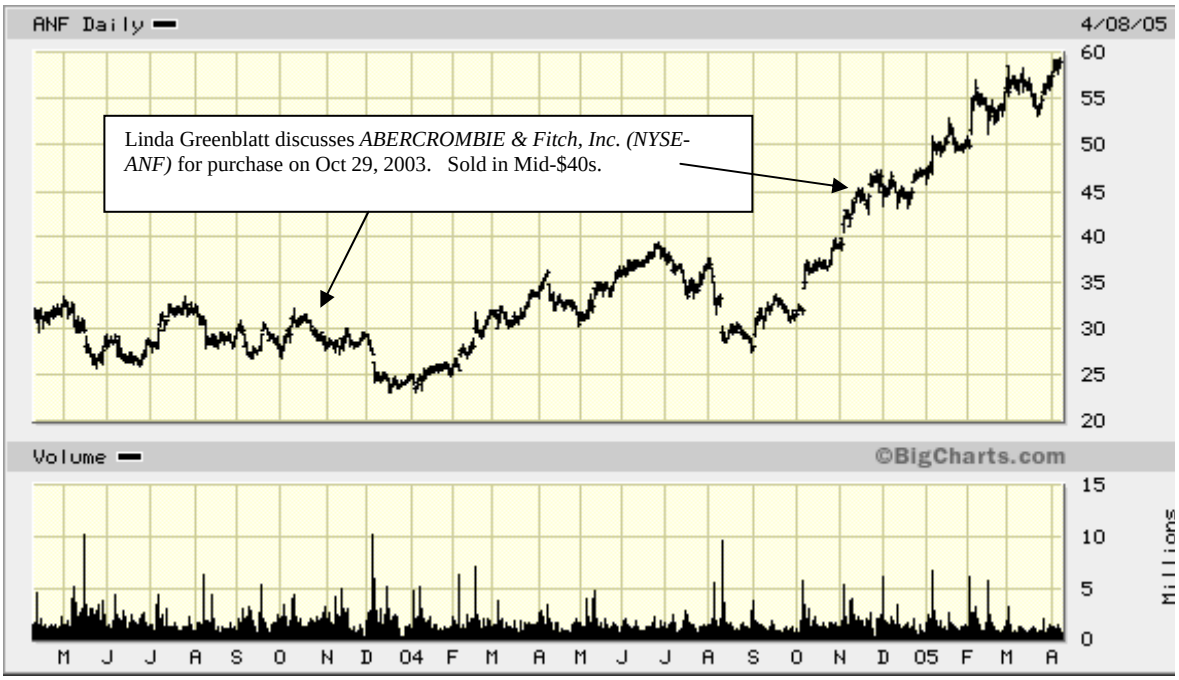

Linda Greenblatt will discuss her current idea, how to evaluate it, and what her thoughts are now.

Linda Greenblatt ("LG"):

I will talk a little bit about how I started and why I went into retail. I really wanted to find a niche for myself. Something I could relate to. I like the consumer sector. **I like to shop.** I focused on those companies easy to understand where you could get out there, touch , feel and understand. I could get the customers' understanding and get their feedback. So it is one of the easier sectors, in my opinion to understand and analyze. Another thing I really like about retail is that you are getting a lot of info and it comes out on a monthly basis, for example, like same store sales (SSS)--Store sales of stores that have been opened for at least twelve months.
Unlike other industries where you are getting numbers on a quarterly basis. You are getting a ton of information coming out of these companies on a monthly basis, which is good and bad. It is bad because it creates tremendous volatility in this sector, but that is the reason it is good. Because you get the opportunity to buy things when they are unfairly cheap. You get to buy things when people are often trading them. If you have a value orientation and a longer term orientation—when I say longer-term I mean one to two years because people are mostly focused on the next months' numbers. If you can take a step back and see the big picture, there often a lot of opportunities out there.

And a lot of people hate this sector for that reason. I can't analyze what the next hot trend is. I don't know whether *ABERCROMBIE (ANF)*'s Spring line looks good. **And that doesn't matter and that is the beauty of it.** You really don't have to understand, "Whether management get the right denim skirt doesn't matter, what you have to get right is if management knows how to run a business, are they generating good returns on capital? And if they miss so what? I get another chance next season. And they certainly are not going under in the meantime.

So *ABERCROMBIE (ANF)* is a case in point if you look at their stock chart and you can go back a year ago you could have doubled your money between then and now. I can't say that a lot has happened in the business fundamentally that has changed from what kind of business they are running or who their customers was. There was a management change but in my opinion it was not significant, but what was happening for a good year and a half prior is that they were generating negative same store sales (SSS) and negative comp store sales. People throughout the industry could not focus on what type of business they were running.

And they were generating EBIT margins close to 20%, amongst the highest in their peer group. And all anybody could focus on was on whether their next comp stores sales was negative. In 2002-2003, you could have taken a step back and said, I recognize that comp store sales are negative, perhaps there are merchandising issues here, but I can see they run a good business and if they could stabilize that comp, if they could just generate at the bottom of those comp numbers—they were running negative 9, negative 5, negative 9, but once they could stabilize their comps, people thought, "Oh wow, look at this business!" This is a great business and all of a sudden people were not just focused on the SSS but on what the actual business was doing.

This article (included below) interviewing a money manager who covers retail stocks and his quote is very similar to how a lot of people think about retail stocks and how most or all of the sell side thinks about retail stocks. Basically he said:

I have my people visit stores and malls to see how much the items are marked down and how long the lines are at the registers. I'll buy a stock if I think the company is going to beat numbers and short it if it is going to miss numbers. It is that simple.

INVESTING: King of the Retail Jungle ***FORTUNE*** Tuesday, March 22, 2005
Hedge fund manager *David Berman* profits by thinking like a patient predator.

"I used to be a victim of people like me," says hedge fund manager and onetime accountant *David Berman*. "Every time I bought a stock, someone smarter than me was selling it. Every time I sold, someone smarter was buying." So when he formed a firm to manage his own money in 1997, *Berman* decided to focus on a single sector and master it. His choice? Retail. This son of a furniture maker spent a year walking malls and eventually developed a custom index—the DeeBee (as in *David Berman*)—to compare sales vs. inventories at U.S. retailers. His specialization strategy has paid off: Berman says he has averaged a return of 17% after fees over the past eight years with only three down months. He now manages more than $100 million through Durban Capital, a hedge fund he named for his hometown in South Africa and launched in 2001. A big part of his formula is that he's willing not to buy if prices aren't right. FORTUNE's Julie Schlosser phoned Berman in Cape Town (where he spends three months every year) to chat about the sector's latest batch of strong sales reports, why they don't necessarily bode well for stocks, and what investors can learn from crocodiles.

Despite lackluster holiday sales, the S&P 500 retailing index is up 11% for the past year. Can retailers keep beating expectations in 2005?

February surprised everybody, retailers included. It surprised me. There are a bunch of theories why. Perhaps tax refunds are better than people thought they'd be. Fashions are pretty good. And I think weather has been a positive factor. It was about four degrees warmer than usual across the country in February. But to a large degree, during this time of year the retail group gets moved for macro reasons.

Which macro factors affect retailers?

Sometimes the best months for retail sales have been the worst months for stocks. If it is the best month for retail, what happens to interest rates? They go up. And that's not good for retailers. You may have that now. The Fed hasn't been able to slow the economy down, but bond yields are going to do the job. Greenspan has been very ineffective with raising rates. But the long range is out of his

control. The rates have gone up to over 42%. Home loans may start going higher, and that will slow things down. I'm not a bond expert, but those yields may well go higher because this economy is really rocking. Or at least people think it's rocking.

How do you figure out if a stock is a good value?

I maintain that I am not smart enough, and I don't think anyone really is, to know what the P/E should be. My job is to understand what the EPS [earnings per share] should be. I look for facts. That's why I measure inventories. I have my people visit stores and malls to see how much the items are marked down and how long the lines are at the registers. **I'll buy a stock if I think the company is going to beat numbers and short it if it is going to miss numbers. It is that simple.**

Your DeeBee index measures sales growth vs. inventory growth. Is that how you predict whether a company will beat Wall Street's earnings estimates?

We summarize every publicly held retailer in America. That's almost 300 companies. We've been doing this quarterly for many years. On an individual level, it gives us a great sense of which companies are going to do well because their inventories are well controlled and which ones have potential for missing numbers. It gives us a sense of the profitability of the group going forward. And it also gives us a sense of the future strength of the economy, because retail leads the way. If inventories are depleted what does that mean? It means retailers are going to be ordering faster, and that means the back end of the economy is going to do well. It is a lot of work, but it is really worth it to us.

What do you mean when you say you use a "Crocodile Approach"?

Just wait and be patient for the right opportunities. The crocodile can go for almost two years without eating food. It has very small legs and can't go very fast. It waits by the riverbed. If its prey doesn't come, it just sleeps all day. You want to be like the crocodile and wait for the prey to come to you. You don't want to rush off to the prey. You want to wait for the big zebra and grab him and eat it up. With that in mind, I've never been afraid to build up a big cash position. You can't lose money if you're in cash. That's why I don't have many down months. I've never used leverage. In fact, some of my investors will be upset with me, but until recently I rarely had much more than 50% of my money invested—both long and short—at one time. That means I am half in cash. I recognize that is too low. It needs to increase. But it's because of the Crocodile Approach.

Last month *Federated Department Stores*, parent of *Macy's* and *Bloomingdale's*, *Ann Taylor Stores (ANN)* announced plans to acquire *May Department Stores*. Is it a sign that the department stores are truly dying?

The merger is a function of *Wal-Mart's* power. *Wal-Mart* by our numbers has 21% of the sales of publicly held retailers, excluding autos. And roughly 8% of total sales. Almost one in every ten sales in America is done in *Wal-Mart*. That has totally changed the retail landscape. As a result the department stores are really being squeezed. They're having to scramble to stay competitive. It is probably just a natural evolution of the retail landscape. There is just a slow deterioration in the department store mode.

What is the DeeBee index's top-rated stock right now?

I can tell you who is good on my inventory list but they might already have a high P/E. At the top is ***American Eagle Outfitters*** (***AEOS***, **$29).** It just reported sales up 37% while inventories are up only 14%. That bodes well for future margins and profits. But a large amount of that is reflected in stock price. I own it, but I've been reducing my position. American *Eagle* has got great management. They've beefed up their staff over the last couple of years. They just hired some good people for a new concept that they will be announcing soon. It will give them another leg of growth. They are firing on all cylinders. **Nordstrom (JWN, $55)** also had good results, with sales up 9% and inventory up only 2%. That's the best in the department store category. The problem is that those results are already factored into the stock price. Remember, the concept of who is going to beat earnings and the stock price are two different things.

So the crocodile isn't running out to snap up zebras?

I am really concerned that the retail group has had a nice run. Many companies are looking worse this year in terms of inventory growing faster than sales. It's hard to find good longs. I'm in sleeping mode, waiting patiently for opportunities.

Linda Greenblatt (LG) continued……

And I say to you that is your opportunity. It is that simple. There are so many people out there doing that whether they miss their numbers or not. It creates so much volatility and so much opportunity for you. And you will read any analyst report, particularly a year ago in *ABERCROMBIE (ANF)*, they (Wall Street Analysts) talked about the *ABERCROMBIE (ANF)* core business and the fact that it couldn't generate double digit SSS as they had in the past. Or analysts will focus on what the stores looked like in March and April. As opposed to what the company was doing and how productive their store base was. But they had tremendous growth—not so much in their core business--but in their *Hollister* business which is their secondary business, which has been a great growth vehicle for them.

Once again tremendous opportunity here if you are looking at the right stuff.

Student: What was the EV/EBIT multiple for *ABERCROMBIE (ANF)*?

Linda Greenblatt (**LG**) – it was at 7x but our target was 10x - 11x EV/EBIT. ROIC was high teens after-tax.

American *Eagle* Outfitters ("*Eagle*" AEOS)

Student: What has happened with this brand? *AEOS* changed their merchandising. Now they are more surf oriented than conservative.

LG: They definitely were having merchandising issues and they were really having trouble finding what their identity was. They were being squeezed at both ends. *ABERCROMBIE (ANF)* was at the higher end–the kids who wanted to shop *ABERCROMBIE (ANF)* and wanted the *ABERCROMBIE (ANF)* brand. While on the lower end, they were being hurt by *Aeropostale (ARO)* where they couldn't compete with those prices and *ARO* was knocking off a lot of what *Eagle* was doing. *Eagle* had defined a niche for itself, but they were also shook up their merchandise team in order to improve their merchandise offering. They also had some little help from their competitors when *ABERCROMBIE (ANF)* simultaneously announced that they wished to go more upscale. *Eagle* has tried to focus on the high school customer. *ABERCROMBIE (ANF)* has gone a little older and a little bit higher end by putting in higher price points. So *Eagle* had a couple of things working in their favor.

About a year ago you would see, when *Eagle*'s price was at $13 to $15, people basically had written them off and had decided that they were never going to regain their footing. What happened during that time, if you looked at EBIT margins, those margins were headed down to the 8% range. At the time if you had looked at it, what might have been attractive to you is that the EBIT margins were trading in the 8% range and two years before the EBIT margin had been in the 12% range. *ABERCROMBIE (ANF)* as you might have remembered from the last slide was in the 18% to 19% range. <u>There could be a lot of opportunity here if they could just get it right</u>. Basically the common stock was trading at 8 times earnings. People had written them off; they had negative comps. Skip forward 6-8-12 months later, you can see the stock has doubled. It has gone from $5 to $30 over the past 2.5 years. And what has happened during that time, they have improve their merchandise and some of their competitors have moved away so they are not competing head on. But the other thing people started to take notice and a stock that was trading at 8xs back in 2003 is now trading closer to 17xs—or over a 100% earnings multiple expansion.

Student: What happened to store count in 2002?

	2000	2001	2002	2003	2004
Stores	790	864	915 bought a Cdn.	846	887

			Chain		

LG: What happed was they bought a Canadian chain and basically blew it the moment they bought it. So they wrote it off. If you notice in the store count which is on the bottom line—they are pretty saturated. If you ask them, they say they can open up to a 1000 stores, but there are only so many malls that exist. So they really needed a new growth vehicle—having said that, the stock is still trading at 18x to 20xs, in spite of no new growth vehicle.

JG: Why is it trading at such a high multiple?

LG: Because they are generating great comps (SSS). The point being that when these stocks are in favor, people focus on the wrong thing.

Student: What you had to get right in this story was to get the merchandising sales trend correctly. So are you not having to guess on future growth in SSS?

LG: It is the fact that they (management) recognized that they had issues; they shook up their merchandising team. Plus they knew they were having a hard time competing. What you have here, though, is a company that definitely has a customer base. Definitely what you were starting to see is they were going to focus on a particular customer. What happened is that they were all over the board. They were focusing on the 20 year old kid, on the 15 year old kid and they really couldn't get their focus down and that was largely in part to their merchants were not being able to target their customer well.

So the answer is—I didn't know for sure they were going to get it right, but they were at an 8% EBIT margin and a couple of years earlier they had 12% margins when they had run things just a little bit better and their closest competitor (ANF) was at 19% margins. This smells like opportunity to me, because actually they did everything wrong and they ran an 8% EBIT margin. So if they laid out a five step program to improve—well if they get two or three of those points right, there is certainly a big upside opportunity there. And, as I said, another thing went in their favor was an external factor in their industry.

JG: Let me add to that. When *Rich Pzena* was here, he said low ROE companies make changes: they fire management, they close factories. They do stuff because it is not working (The Board of Directors or new management make changes to improve or stop losses). That is what happens here in retail. **Here it was trading at a low multiple of depressed earnings.** They were doing everything wrong, but they were still earning some money. They were not going out of business and they had a strong balance sheet. So the question was—the great thing about retail is that if Spring stinks (their merchandise assortment of customer acceptance), then Fall will be better or Winter. So if you buy them cheap enough, they didn't have to get it right in this short of period of time. You see it went from $5 to $30.

If you have a two to three year horizon and you say look I still have a pony on the track and it still is running and the race is still going on. I am still in business; I am not going out of business. This season stinks, but next season won't. Maybe we will hire this guy; maybe they have the platform to really do it.

If you had walked into their stores last Christmas and they couldn't give stuff away. And if they continue to be this bad and they still are generating some money and you could see that the stock is trading at a low multiple, then can it get any worse? Or they could get a few things right? And if they get a few things right, then people will start to sit up and take notice. Then the stock can trade at a greater multiple—10 to 12 xs—off a greater earnings base. Because these were incredibly depressed earnings. Then all of a sudden you get your returns from $5 to $10 which is a pretty good return. *(You are getting a double upside from both an increase from depressed earnings to normalized earnings and a multiple expansion as other investors gain confidence).* If you are playing for a $5 to $10 return, you don't have to be playing for a return of $5 to $30.

JG: When Linda was talking about *ABERCROMBIE (ANF)* which she did own, she bought at $25 on sort of on a similar thesis and now it is at $58. She sold out in the mid-$40s, which is still a pretty good return (80%+). Here you might argue (with AEOS) this is slightly overvalued. Things are going well, there are not a lot of growth prospects and it is trading at 17xs - 18xs so you probably don't last till then.

Student: Do you look at retail like cyclical companies when their earnings are depressed they might have higher multiples?

LG: Again the answer is that people love to beat up these things up. People love to write off retailers. Everybody's thing with retailers is--because what is their reason for being? If another retailer fell by the wayside, who would care? **When people see things on a negative trend, these things (retail stocks) just get battered.** So having followed retail for as long as I have, the low end of multiples is 8xs to 10xs and the high end is 20xs time range—P/E multiples. A lot of retailers these days carry a lot of cash. So that also gives us some security to last through the bad times.

Student: Investors once they see a downtrend, they write-off and sell their stock when they see the bad numbers in comps?

LG: Psychologically when you are seeing month after month of negative numbers it is tough not to panic. I can tell you having lived through when a comp sales posts a negative 15% comp, not to say, maybe they are going out of business, maybe no one will go back into the store. It really is tough to take a step back and say it is a one season thing, or one year thing, but when they get it right, there is so much potential and the operating leverage is huge.

Student: So when of your edge is that you are so patient, you are a contrarian to the other guys.

LG: That is how I like to look at it. I take a long term perspective in an industry which people feel doesn't warrant that.

Student: The industry is pretty leveraged given the capex for the stores. If the sales go down, the profit goes down. You mention the volatility. Have you thought of using the option pricing model to price stocks?

LG: I like to keep it simple. **JG:** The answer is no.

Student: Look at company *Wet Seal*. How do you know if it will survive or not. A turnaround?

Student: Wetseal is another teen retailer to teenage girls, that is just about bankrupt.

LG: You mean Slutty teenagers?

Wet Seal is a company that definitely, they opened way too many stores and stores way too large and ran into a problem when their comps turned negative. What is happening now is that they are closing a good portion of their base of unproductive stores and they are going to try to give it a go with some of their more productive stores. They really ran into a problem. They will try to give it a go with their more productive stores and give it a go with their smaller store base. They got rid of their two other operating chains. One they sold; another they closed. They are really getting back to basics.

They were a 700 store chain, they were running three different concepts, and a lot of their stores were unproductive. But what really came out was that they had a large number of their stores that were unproductive. But the hope now is that they have pulled it down and gotten back to a manageable size and back to a simple business. They want to simplify. At the very least, they have closed many of their money losing stores. If they can keep their head above water while they get their act together, at $4 it could be a good play. A potential turnaround.

Student: Do you know when these companies store concept reach saturation?

LG: It really depends upon two things. The way you look at it is: for the most part there are A, B and C malls. Then there these things called Life Style Centers, then there are street and other non-mall

locations. You have got to look at the competitive landscape and find out who is their customer base. In *Eagle*, which is a lower price point store, can have somewhere in the neighborhood of 900 to 1000 stores, because their model works in every one in these different category malls. So you can look at an *Eagle* and say, Yes, I understand why 1000 stores make sense. But in *ABERCROMBIE (ANF)* it will not work in a C mall with their (high) price points and it won't work in every B mall either. So *ABERCROMBIE (ANF)* will max out for the core division in the 400 to 500 store range. You have to know who your customer is and what the price point is. And look at other competitors if they can open a number of stores. Your job is to figure out if that *(management's expansion plans and store growth)* is realistic or not.

Student: In addition to Comp store sales are their any other metrics you look at?

LG: I will get to that.

I think there are two ways in the examples of *Eagle* and *ABERCROMBIE (ANF)* where you could have made money in both of them. Where *ABERCROMBIE (ANF)* has lots of growth left in their Hollister unit and that is why I really like *ABERCROMBIE (ANF)*. It was not as much a margin play with *ABERCROMBIE (ANF)* because margins were already way up. *Eagle*, on the other hand, doesn't have the growth left, but *Eagle*'s play was just getting the growth of what they had back to the operating productivity of what it could be and should be. You can definitely make money in many different situations. I like to see a good growth opportunity but there are plenty of situations where they don't have much square footage growth left, but they have plenty of opportunity to get their current business right And I think of those opportunities as equal to the growth opportunities. You can make money both ways.

Student: There was fear about cannibalization between brands in *ABERCROMBIE (ANF)*. Customers would go to Hollister to buy a cheaper version of cargo pants rather than shop in Abercrombie. How did you get comfortable that they were not hurting the more expensive brand?

LG: The arguments people make—I am going to talk about *ANN Taylor* in a little bit. *ANN* has their core brand and they have a newer concept called *ANN Taylor Loft*--that when you open a new concept that is 30% cheaper than your core concept, how can you make money at both and why won't a customer go from one concept to the other because it is cheaper? And the answer is you have to be comfortable with the fact that management has differentiated the concepts enough that you are really dealing either with two different customer bases or you have a customer who is willing to buy both. And knowing that you continue to look at margins as they roll-out. For example, in *ABERCROMBIE (ANF)* when they rolled out *Hollister*, margins did not fall apart. So even though comps were down in Abercrombie, it was not the result of *Hollister*. And, you do have to do the work

and develop a level of comfort. Every time a retailer rolls out a new concept that is the argument against it. Some do well and others don't.

Student: Say if *ABERCROMBIE (ANF)* has a margin of 20%+ what is its sustainable competitive advantage (SCA) and what gives you confidence that *ABERCROMBIE (ANF)* can continue to have high margins?

LG: You to have confidence in the management team and that they are thinking the right way. If you think that this is a management team that happened to luck into a great concept in *ABERCROMBIE (ANF)* and they are willing to launch a new concept that is going to be dilutive—I don't think that is the way these people think. Management is thinking how can we develop a concept with the best bank for our buck? We are not just looking to grow the store base or the sq. footage, but we are actually looking to generate good returns on capital that we had in the past.

JG: *ABERCROMBIE (ANF)* had the chance to knock down prices, and they specifically told everyone and made the decision that they were not going to dilute their brand by lowering prices.

LG: Everyone was telling *ABERCROMBIE (ANF)*--when it was a very competitive and promotional environment last Christmas when *Eagle* was promoting everything out of their store--to drop their prices, you will never sell anything. But management responded by saying, "You know what, we have to maintain the integrity of the brand by maintaining prices." If we miss this season, we miss it. We can't start by cutting prices and having our customers expect to shop on sale every time they come into the store.

Just based on their track record—back to your question--it gave me the confidence that they (management) wouldn't launch a concept that would not generate the type of returns their core concept had.

Student: I imagine it has to be more than just management because then a couple of people could go and start as competitors. Or you can hire these people. What is the competitive advantage beyond management (so as to be confident of the company's long-term advantage?)

LG: All I am saying is that they have a concept that works. The concept generates the kinds of returns that are excellent returns. They understand the formula and they will try to duplicate that formula in another form. So there is not any single formula—Oh, a 4,000 sq. ft. store with an average price point of X is the formula. Part of it is building a brand. *ABERCROMBIE (ANF)* has built a premium price point brand where they can maintain their prices and that is why they have such phenomenal margins. And they knew if they launched another concept, then they would have to build another brand. They just couldn't just open stores. They had to develop marketing. They

had to develop something that spoke to their customer base and gave the brand legitimacy. So they could have gone out and opened 400 Hollister's but they went out and opened 20 Hollister's. They tested the concept, they built the brand and then they expanded it.

JG: I would like to move on to *Ann Taylor Stores (ANN)*, and then she can answer more questions. One thing I can say is that when Linda buys stuff, it is cheap; it is beat up. You will see, in the next example, she is not buying the company at 17x earnings with fully built out stores with no new concepts. There are reasons it is cheap at that time. And the whole idea of doing what we have been doing is that if you are right and you say this could trade at 50% to 100% more and than where it is and if you are wrong and you don't lose money, that is a pretty good risk/reward because you really didn't pay up for those opportunities. It is almost making it seem harder than it is in a way because when you miss you don't lose much money because you bought it cheap. You don't have to be right all the time. So you are saying it could be wrong or it could be very tough to figure out whether they can maintain this, but you don't lose much money if you are wrong. And you could make 50% to 100% if you are right and you are right more than you are wrong, then the math works.

So I think—these are difficult questions to answer—Linda is an expert in this field. She still is wrong sometimes, but she limits her losses and she knows opportunities when see sees them. So when she talks about *Ann Taylor Stores (ANN)* you will see what this opportunity is and it may work or it may not. But you can see the risk reward is tremendous each time. So I think the answer is you make a good guess based on everything you have seen: "Is the management good? Does the brand look good? Are their customers loyal? And things of that nature. And if you are wrong you don't lose (much) money. If you are right you can do quite well. <u>It is not quite as hard as getting it right every time.</u>

The discussion above is similar to the difference between buying "cigar butts" vs. "Buffett-type" franchise companies.

LG: When you want to buy something cheap. I put up some of *ANN*'s closest competitors which are Talbot's (*TLB*) and Banana Republic.

	ANN TAYLOR STORES (ANN)	TLB	CHS	JILL
Price	$25	$32.43	$28	$13.27
Market Cap	$1,790	$1,826	$5,044	273
Cash (net)	255	(68)	266	54
EBIT (LTM)	105	1411	224	15

EV	1858			
EV/Sales LTM	1	1.3	5.2	0.5
EV/EBIT 2005	13.3	11.5	16.5	-32.3
EV/EBIT 2006	11.2	10.4	13.5	11.7
Concepts	*ANN* 359 *Loft* 343 Fact 36 738	Misses 519 Pettit's 286 Add Stores 112 Outlets 24 1049	Chico's 511 WH/BM 167 Soma 167 688 Super loyal	J. Jill 150 150

A couple of others that cater to older women are *Chico's* and *J. Jill*.

At first glance you may look at EV/EBIT (13x or less than 7.5% pre-tax return) and think that it is not cheap. And probably if you stopped here you would not buy it. But I think it is one of these things you have to delve a little further to understand why it may be potentially interesting. Again the numbers don't look very cheap. If I said to you which one would you buy? The answer would be based on this would be NONE of them because none of them look cheap. Certainly you might even look at Chico's and say you would want to short it. That has been, unfortunately, one of the best performing stocks over the past ten years. Lots of people have lost their shirt shorting it. J. Jill will lose money. J. Jill will lose money and this year is a turn around year for them. 2006 is really a made up number because nobody knows if they turn it around, where they will land. That could potentially be an interesting story to look at because there is enough opportunity, but I don't think it is cheap enough.

Student: What is the story with *Chico's* – Why has it performed so well?

LG: They are great operators and they have really found their niche. Anybody know anything about *Chico's?*

Student: They cater to _____ and it is a growing demographic and it is an underserved demographic.

LG: They have done a great job at creating a super loyal customer base. They have grown their core concept relatively slowly. They have honed in on their core customers and created a very loyal customer. There is some growth there. WHBM is White House Black Market which is a new chain

that they have launched and there is growth left there. These people are good operators. You don't want to get in their way.

Talking about *ANN* at first glance it doesn't look cheap. Looking at the bottom of the table we are talking about concepts –growth opportunity-in their core concept they are at 359 stores. They probably get to the 400 stores level because they would max out their store base because they have a higher price point. One of the nice things there is that they launched *Loft* about five years ago and it is almost matching the size of *ANN* and they could more than double their *Loft* store base from where they are now because they are at a lower price point. And they have a lot of street locations so they are not just limited to being just in malls. So despite *ANN* and *TLB* looking similar, I could tell you that *ANN* has a lot more square footage growth potential over the next five years than *TLB*.

Why didn't Talbot launch a distinct concept? The truth is at 1150 stores they will max out on their square footage potential a lot sooner than *ANN* is going to max out.

So why do I like *ANN*? Ann is one of those stories where everything they could do wrong in the past year in 2004, they did. In Christmas like *Eagle*, a year ago they were basically giving everything away. And what has happened now is that there have been some mgt changes that have taken place. Management is trying to get the *ANN Taylor* core chain back on track.

What I will tell you is in this same timeframe *LOFT* which is about half of their store base has done extremely well. Now mgt. won't break out margins for you between the two concepts but I will tell you that my guess is that they are at least in the 11% to 12% operating margin range. As you will see from what *ANN* did in 2004 that means the *ANN Taylor* chain must really be doing lousy if they half the chain is doing 12% margins. So you have lots of opportunity *(for improvement)*.

I only went back to 2002 here, but actually *ANN*s peak EBIT margins were north of 12% and that is even low for the industry. Like *ABERCROMBIE (ANF),* which we looked at earlier, you can look at this and say lots of opportunity here based on what they have done historically. They did 12% operating margins when they only had the core *ANN Taylor* concept. Well they went from 12% to 6% margins, but has there been a fundamental shift in the business? What has happened?

JG: Right now this is like a special situation. The good business can double in size (*LOFT* concept) and the bad business has done a lot better in the past so you can earn a lot more from the bad business. You can double the size of the good business. The bad business is masking the good business. You have a lot of plays.

LG: The stock has gotten hammered. It has come back a little bit off its lows. We were buying it in the $21's. It is now up to $25, but I still think there is tremendous upside because if you just take a

look at what Street Estimates are for this year and next. They (Wall Street Analysts) are assuming very little gets fixed on the *ANN Taylor* side. The point being is that when you are looking at those EV/EBIT numbers that didn't look that great--those analysts' numbers are really based on low estimates. Nobody is going out on a limb; nobody is putting back margins to 10% to 12% in 2006. But look at the numbers, if they (mgt.) do reach 10% to 12%. Look at what happens to the stock if they can get their business fixed.

They can go from the assumption of earning $1.50 per share to north of $2 to $3 the following year assuming if they can fix these business. I think 10% operating margin or 12% operating margin one to two years out is realistic. Even knowing nothing about this company it is realistic based on what they have done in the past and what their competitors are doing. Even if you don't know much about their business and who this new management team is that is coming into place and what their new merchandising initiatives are, you can still look at the historical record of their company. What you can analyze is where has this company been and where does it have the potential to go if they do get it right. Is it trading cheap enough so that if they don't get it right will I lose my shirt? The answer is in the mid 20's you have a couple of points down here, but you have a lot of good upside--$3 or $4 downside for $30 upside.

Ann Taylor Stores (ANN)	2006	2007
Revenues	$2,482	$2,854
EPS	$2.17	$3.00
Pre-tax Income	$253.7	$342

SLIDE for Price projection? (missing)

One of the ways to look at it when we looked at *ABERCROMBIE (ANF)* and *Eagle*, is to ask where do these things trade when they get it right? And as we said it trades at 17xs to 20xs when they get it right. You know I don't want to assume a 20 multiple—the absolute top. Let's be conservative and say that it trades at 15xs, and people see in the coming year that the $3 in EPS is a reality, then there is a possibility for a $45 stock price from $25 with $2 or $3 downside. I think that is a pretty good risk/reward.

Another way to look at it is to look out to four or five years and ask what potential type of build-out do they have? And what type of cash can they generate? And what will their earnings be at the end of that five years? So they can still continue to grow square footage in the 13% to 15% range over the next five years that just by opening *Loft* stores and a few *ANN* stores not to mention that they talked

about opening a new concept. They have not made that public yet, but that is sort of a free play so we are not even counting the new concept.

	2006 E	2007 E
Stores	938	1038
ANN	379	389
Loft	493	568

So just from the *Loft* and *ANN* concepts we have got 13% to 15% sq. footage growth per year. So if we build it out to its potential and we assume that the company can get back on track and operate in the 12% EBIT operating margin range, the company at the end of the five years on the current store base--they would be earning $1.70 instead of the $1 they earned last year. So with the current store base the EPS is $1.70, then with the additional build out in the 12% range adds $2.00 so you get to $3.70 EPS. They currently have cash of $3.50 and if you build it out, they would generate another $7 in cash over that 5 year period and that gets you to $10.50 in cash. You get to about a $60 stock price.

JG: Well, the basis of the exercise is you know how analysts just stick a multiple on it. Well it is growing at x percent so therefore it deserves this multiple. In retail if you sort of know the end game—not that they couldn't come up with new concepts—with the concept they have, you say this concept has 340 stores and they can go to 680. If they have 12% margins, what will they earn? How long will it take them to build out to 680 stores? What net cash build will they have in the interim? Then you can put a slower growth multiple at the end. You can take a conservative number and you can put a 12x at the end of four years. You get $45, you have accumulated $10 in cash during that time assuming they did not buy back stock or else you would get a bigger bump up. So you are at $55 on a $25 stock in four years. I think Linda came up with a $60 stock.

LG: It is a compounded 17% annual return over the next 5 years *($25 to $55)*.

JG: And if you remember our discussion last week. This one is very easy to see over the horizon. If they get back to 12% margins—it is not that they probably won't pay more for this—just because that is the way they analyze this. You have to do what you think is reasonable. Well that 17% annualized growth assuming they figure it out in two years, then they don't discount back at 17%, they discount back at 10% or 8% and you will get back a lot of that income upfront. So it is possible to make 50% to 70% on this name in the next year if this plays out. Usually, what this plays out means is that it will be very clear that they will be able to build out the *ANN Taylor Loft* stores. If they can fix the *ANN* stores and get back to 12% margins while the *ANN Taylor Loft* stores are already there. Right? That is not so hard and you can figure out these numbers. And people might even tend to give out

higher multiples though we wouldn't. But you pick a reasonable multiple and discount back rather than try to guess at a multiple.

Analysts will say a company will grow 15% a year—they may even be ending their growth 2 years from now so it is crazy to think of it as a 15% grower. It is really better to say, this is how far they can expand out the concept, this is what they will earn at the end of that, maybe they will come up with a new concept and we get a freebie—may be they won't.

Student: They did everything wrong? How do you gain confidence that they have not permanently damaged the business?

LG: The business fell apart in the second half of the year. They made some huge merchandising mistakes—it can happen to anybody. They have now gotten rid of the guy who was doing the merchandizing. They brought in the woman who now has been running *Loft* for the past five years and who has a great track record at that brand to run the *ANN Taylor* brand. He (former merchandising managers) brought in the wrong merchandise, and he also was going to build inventories to 20% to 25% a sq foot. Not only did the merchandise not sell but it was acerbated because the manager brought in way too much of it (overstocked on poorly selling inventory!). Merchandising and inventory issues going on.

The nice part about that was management took a step back and now they have put in a much more disciplined planning and allocation process. So we will watch inventories go down. That is a big red flag when you see inventories go up particularly in the face in declining sales. So certainly you can certainly take the bet that they will manage their inventories better. The bigger question is whether they can get the merchandise right; that might take longer. But I am willing to make the bet with somebody who has the kind of experience that this woman has who is running *Loft* that they will regain their footing.

We have done research on *ANN Taylor* Stores (*ANN*) by going out to the malls and have spoken to their customers. This company has one of the most loyal customer bases of any concept.

JG: How did you do that? How did you interview customers?

LG: We spoke to those who had *ANN Taylor* bags and who didn't. We spoke also to people who walked into stores and who did not buy anything. We sent people out across the country to go to different malls. What you will find out is that what they are doing in NY may not be what they are doing in the Midwest.

You can also look at the competitive landscape—Although I mentioned Banana Republic and Talbot's--the nice thing about *ANN* is that there is no one else doing exactly what they are doing in the specialty store format. There is nobody else who caters exactly to these kinds of customers. Talbot is a much more conservative customer. Banana is more fashioned forward, younger customer, so *ANN* sort of has a really nice niche. And the beauty of it is that **their customers keep coming back and keep waiting for them to get it right because they have nowhere else to go really other than Department stores and people for the most part are not in love with department stores and department store shopping.** *ANN* has a lot of leeway in terms of having the time and ability to get it right because these customers will keep coming back.

There are twofold ways to win: improvement on their inventory issues and their customer base *(will give them time and ability to improve their situation).*

JG: By the way, We used to own 10% of Chico's about 8 years. I don't know how many times the stock has split since we owned it at $4, so we have owned it at the equivalent of a $1 and now it is at $28. We got out at even as opposed to making 28 times our money. The one thing we were holding this thing for was that when you talked to their customers they were the most loyal people—things at the stores were horrible—they kept coming back hoping it would change. We lived through a few seasons. I was young and stupid, so we took a big bet on a retailer. The loyalty of the customers was what really came though. They finally got it right, they brought in the original people who had started the chain and they turned the thing around. It is the type of thing that can happen here. So if you have loyal customers like *ANN* and they have their own niche like Chico's. If I had hung on to Chico's……..

LG: I walk in and think that this stuff is ugly, but their customers love the store. If they do get it right, then there is huge operating leverage.

Student: How bad did they get it in their merchandising?

LG: They were over assorted. They had one type of sweater in 20 different colors. They were poorly merchandise on the floor. They had a pink pair of pants together with a pink sweater. They have had a revolving door of merchandising managers.

Going back to the cannibalization question about this company. If there is anybody who knows who this company is trying to cater to for each of their concepts it is this woman. She will do as much as she can to differentiate the two chains to make sure they are dealing with separate customer bases.

Student: You think that there is limited downside to $21. How do you get to that $21 number?

LG: I have to believe things will get a little bit better than they did this year (2004). And certainly with their inventory problem I am confident that they will not make the same mistakes there. So I look out a year or two and I say and if they are not doing great things with the business but *Loft* continues to hold its own, then this at least deserves at least a 10 multiple so they have $3.5 per share in cash so if they can continue to grow the store base, even if they don't even do it well, they can still earn $1.60 to 1.70 range. Put a 10 multiple on that for $16 or $17 and add in the $3.50 in cash for approximately $19.50 to $20.50. What is nice about this is that there have been takeover rumors so that has held up the bottom for the stock.

If they continue to do not such a great job, and I put a conservative multiple on it, where is my downside? Where can it trade? It could trade down to $20.

Student: Do you short?

LG: I don't short based on valuation. The sky is the limit when people are excited about retail stocks. It has to be a fundamental issue with the company. Like a fundamental shift in the competitive landscape. This company has been able to generate the kinds of returns that they have because no body else was doing what they were doing., but then all of a sudden new competitors start coming into their niche. Meanwhile the company is trading at 40 times, but it may take a while for things to play out for the short.

Student: How so you talk to customers?

LG: I send people out to talk to customers. But people are happy to talk about their shopping experience. We have people who take surveys—what do people like and don't like. People are happy to talk especially loyal customers.

Student: how did you get to 13% to 15% growth in stores?

LG: That is what the company told me. And I look at where they are today; how big the stores are, how many more they can open, multiply that and I know how many stores they will open. So I can calculate how much growth the new amount of sq. footage will be on top of what they have now. That is an easy number to figure out because they will tell you and you can do the math.

Student: Look out how many stores they can open and assume some time scale for when they open those stores. Then back out the rate. What is the niche?

LG: It is women's wear for predominantly 35 to 55 year old women who are not super fashion forward. A lot of it is wear to work fashion but it is not super conservative. Pant suits. They have

floundered on the casual side. There is an opportunity there. *Talbot's* has a much more conservative customer, and it does not offer a lot of wear to work clothes. Banana offers a couple of suits but its customers are more interested in trendier, more fashion forward merchandise. There is not much serving the middle of the road customers. *(ANN has a unique, underserved niche).*

END

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Greenblatt Class # 8:

Oct. 29, 2003

A guest, sister of *Joel Greenblatt, Linda*, runs a fund focused on retail stocks. Earning a return in the high 20's. There are several hundred retail stocks to choose from.

It shows how well you can do if you focus on your niche by staying within your circle of competence.

- Analysis of competition
- Whole consumer sector
- Retail - monthly flow of store sales. Frequent information flow.
- Same store sales comparison
- Store growth and ROIC of stores.

Companies	*ABERCROMBIE (ANF)*	**AEOS**	**PSUM**	**WTSLA**
Cash	400	209	80	90
EBIT	322	128	89	NA
EV/EBIT	7.7	7.5	11.8	NA
P/E	13.4	15.8	24.8	NA
EV/Sales	1.6	0.6	1.2	0.5
Net Cash/Share	4.0	2.9	0.76	3.04
Total Stores	672	912	855	622

AEOS is going more into lower class malls than *ABER*

What is growth potential?

All these companies have a cash balance. When you look at P/E, you might want to take out cash and focus on their earnings on operations.

Understand concept, customer base, location, know price point differential. For example, a sweatshirt at Abercrombie will sell for $35 - $40 versus $25 at *Eagle* Outfitters.

ABERCROMBIE (ANF) is at $28.80 (as of Oct 29, 2003) and it has $4.00 in cash, so $28.80 minus $4.00 in cash = $24.80 divided by earnings of $2.50—10x multiple.

Where these concepts can go depend on where the stores are located. The core Abercrombie concept has to be at a better mall. 700 A Malls, 800 C Malls.

Is concept maturing? What new concept is coming next?

ABERCROMBIE (ANF) will max. out about in about 400 more stores in A Malls. If *ABERCROMBIE (ANF)* does not have growth potential in its core product, what are they doing now to grow?

Hollinger-is there a new concept for *ABERCROMBIE (ANF)*. Their growth is slowing.

Nautica: an apparel company trying to be a retailer. A failure.

How to evaluate Brand value? A good question. *ABERCROMBIE (ANF)* was once hot--they could sell anything at full price. That is not sustainable. **Never try to value a company four or five years out based on popularity.**

Get an understanding of where these companies stand today. *ABERCROMBIE (ANF)* is in the best position today. Their core concept is old, but they introduced *Hollister* which is very hot. Abercrombie Is more east cost concept and *Hollister* is more of a West Coast Surf concept. *Hollister* has 150 stores so it has good growth potential ahead of it.

Retaliation? Price War? Does *Hollister* take business from *Eagle?* Is there room enough for everyone? *Eagle* has been running negative comps. *Eagle* was knocking off everything from Abercrombie. And selling it for 30% off. Then that strategy stopped working.

Eagle has tried unsuccessfully to buy into a new concept while *ABERCROMBIE (ANF)*'s mgt. has successfully introduced an organically conceived concept. *Eagle* bought an established name in Canada and has destroyed it.

Are they trying to go after their same customer base and cannibalize it? *ANN Taylor* has introduced *Ann Taylor Loft* and people can pay less for the *ANN Taylor* brand--so people are confused.

What happens if a brand is not as hot as it once was? *ABERCROMBIE (ANF)* vs. *Eagle*, mgt has marketed well. *ABERCROMBIE (ANF)* has done a good job at maintaining margins.

ABERCROMBIE (ANF) has been anti-promotional. High standards of pricing and have maintained the integrity of the brand.

(Joel Greenblatt: A lot of the opportunity works better with smaller stocks).

ABERCROMBIE (ANF)'s Mgt. has improved their merchandise margins. They manage it very scientifically. *ABERCROMBIE (ANF)* has maintained numbers very well.
A company won't promote haphazardly.

It is tough to analyze one store unless you go to the same store three times a month and you look at the inventory and break out the inventory.

This is the typical analyst report: what is happening to comparable store sales. Is it relatively important that they get back to their high comp store sales growth--no, not to me, if they are making good money on their stores and there is growth and it is cheap enough. ***Hollister* is doing well but comps are down. It doesn't thrill me, but it is not important in the big picture.**

Do I care what they will do in October, if I am holding for three years or more.

Comps are down 3% but they earn returns on capital in the 60%--a good investment. Sure the ROIC is not as great, but it is good enough depending on the price.

Take advantage of Wall Street's fixation on same store sales. Look like they have a lot of debt, but what they are on the hook for is the current market value of that store and the difference in what they owe. Knowing where you are in the retail cycle. Also, know the concept cycle.

Take out rent expense from income. There is a lot of debt. Note the current market value of real estate vs. what the stores owe. ??? Factor in lease expense and make it part of the debt.

A quick and dirty on valuing *ABERCROMBIE (ANF)*. What is the potential build-out in their concept? *ABERCROMBIE (ANF)* @ $350/sq. ft. sq. ft. growth potential $100/ABER

500 more stores for *Hollister* for a total of 3.2 million sq. ft. total 4.1 million sq. ft. @ 20% margin = $1.80 EPS, $2.50 then $4.3 with a 12 multiple (15 - 20 multiple for comparable stocks in retail) = $52 and with 20x = $86. Then add in expected $10 per share in cash to grow in addition to current $5 per share in cash--thus $15 per share in cash -- $52 + $15 = $67.

I get the fourth concept for free. The stock is now at $29, and then take out 5 per share in cash for $24 current price for $2.50 EPS or 10 xs.

$4.30 EPS in 4 years x 12 P/E multiple + $15 per share in cash = $67 in five years, so $29 to $67 is 17% compounded growth over 5 years.

I hope they can continue what they are doing now. They have 20% margins. $4.30 EPS--4 years out.

Joel Greenblatt: At some point people (the mkt.) wakes up and the stock goes up more than 17% per year. The price does not go up in a steady manner. 19% in one year

ABERCROMBIE (ANF): $1.80 they earn in this year.

Base case for *ABERCROMBIE (ANF)* without growing the business is paying $29 today with a 10 x multiple for $2.40 EPS and ($29 - $5/sh cash). You have room for more than 100 *ABERCROMBIE (ANF)* stores and 500 more *Hollister* stores. On the additional stores, *ABERCROMBIE (ANF)* will earn more $2.50. Netting after capex. and new store capex. you are netting $2.00 per share and after five years you have an additional $10 per share to add to the $5.00 per share in cash. There are things you can do with the cash like buy back stock (adding value to this scenario).

Lumpy returns: year 1 *ABERCROMBIE (ANF)* goes up 19% to $48 then 9% annualized return for 3 years.

Hope for stellar, faster returns.

Assumptions: growth and margin of safety.

For Margin of Safety: Leaving out other good things that can happen to *ABERCROMBIE (ANF)*:

ABERCROMBIE (ANF): We get free--the fourth concept. The margin of safety: we left out all these other possibilities. We have room for error.

Important: comp store sales. Further leverage their operations: better sourcing, etc.

Wall Street focuses on the wrong metrics. Comp Store Sales and P/E Multiples vs. growth of the business overall vs. comp. Store sales. What is in total build out?

Forget slapping on multiples on growth rates.

Judge quality of management

ABERCROMBIE (ANF) focused on margins. They take a strict anti-promotional stance. They haven't slashed prices. Mgt. may panic and slash prices when a concept begins to age. They may sell goods at a discount.

Linda: Look at total build-out of stores. What will they make? Study each of their 3 different businesses. Do a sum of the parts analysis. *KEY!*

An 8.5% after-tax yield--I am comfortable with that.

Simpler to do a total build-out for five years, what are margins with additional stores? Get the methodology instead of slapping a multiple on it.

ABERCROMBIE (ANF) is improving Gross Margins and Maintaining Operating Margins.
Open and closing stores. .

Break-out the new store Capex. and old store capex. *ABERCROMBIE (ANF)* does a good job allocating resources.

ABERCROMBIE (ANF) can improve sourcing, pull costs out and increase merchandizing margins.

Keep a close eye on mgt managing the company as a business? CEO has a big options package.
ABERCROMBIE (ANF) rarely misses a number. They buy goods on sale.

A hot concept is when goods sell at any price.

Analysts say comps are down so stay away, they don't focus on the big picture. Now the stock is a double.

Focus on how much cash is generated over the period.

There could be an opportunity for *Wetseal*. Why are margins down? Opportunities with low margins--turnarounds.

The guy running *Gap* came from *Disney* and he has identified parts run poorly. Function of a poorly run business.
Where are the problems to be fixed and are the problems fixable?

Today, it is tough to find buys. Little value to be found in the market.

Look at absolute valuation.

ABERCROMBIE (ANF) and *Eagle* show the same EV/EBIT but normalized EBIT is better for *ABERCROMBIE (ANF)* vs. AEM. *ABERCROMBIE (ANF)* has better growth potential and management.
Better normalized earnings for *ABERCROMBIE (ANF)* vs. trailing earnings.

Look at normalized EBIT.

END

April 13, 2005

Greenblatt Class #9

6:30 PM Conference Call on Monday for questions to prepare for the exam.

In addition after our special desk: we will have three short presentation and we will talk about portfolio management.

Introduction: A top performing hedge fund manager that my partners who have gotten to know.

Matt Mark of Jett Capital.
Distressed Investing

He started at risk arbitrage at *Bear Stearns*. He is an exceptional investor. He does distress investing.

***MATT MARK*:**

I want to talk about three things.

1. The type of analysis used in distress investing.
2. What distress is—there are different skills involved than value investing in general
3. Third, we will talk about two situations.

I started *Jett Capital* with $20 million three years ago in 2002. We have a little over $300 million now. We do venture investing. Look for value situations with some catalyst or some reason to think that the value will be realized. Why the situation/investment might get better.

I like distress investing, because I don't think we are in an environment of very robust investor returns. Where there is complexity and it is hard to understand there tends to be more value all things being equal. *Warren Buffett* (*WEB)* has this saying that you don't get paid for the degree of difficulty in your investment. I strongly agree with that. But I find that if it isn't difficult, it is hard to find good investments in today's environment. That is why we focus where we do.

Let us talk about distress in general.

A definition: buying a fixed income instrument at a discount at par. What kind of skills do you need to be a good distress investor?

Know the procedural and legal knowledge to understand the bankruptcy process in the distress market.

What else? Other than the bank and legal processes? The ability to value the business and you need to be able to find value and be a good investor.

What is needed to be a distress investor: legal and procedural knowledge of the bankruptcy process, valuing assets and companies and being a good investor.

Focus on different areas than what you have looked at. Distressed investors focus in bonds—as an investor in bonds my concern is: will I get paid back with an attractive return? Is this a credit play? That is where we will be focused. The other kind of distressed investing is receiving newly issued equity. Bonds will become a stock in reorganization.

Some people think that is less interesting than buying stocks. Bonds can become equity in the new company. We will talk of different rights and classes of stocks. In general, the more senior your bond, the greater your chance of being paid back. However in the event of a bankruptcy where the liabilities are greater than the assets, it means you will have a higher likelihood of being paid before the less senior securities.

What are the skills you want as a distressed investor? Temperament is a quality that is an important part of all types of investing. Being willing to act on the financial analysis and why every day is a struggle.

There is a certain amount of negotiation involved. There is a real deal making element to being a distressed investor.

When you have claims in a company that might not pay you back, then your interests may not be aligned with other creditors or investors.

Like a lot of investing distress investing is often cyclical. It is driven by Supply/Demand cycles. Sometimes there is a lot if distress investing. Other times the economy is weak and people are scared, so demand for distress goes down.

These are two different points in the cycle—the first is when distress was in big supply—shortly after World-com, Enron.

Examples of Distress Investing—See Hand-Out

TFF is a Mexican company run by a family. They have a control position in the equity. TFM is the largest Rail Road in Mexico between US and Mexico. They own 51% and they have two minority shareholders—Mexican government and Kansas City Southern.

Let us talk a little about the situation at the start of the case. It is March 2003—this is what the balance sheet looks like.

A: the Rail Road—what is it worth?
Other transportation assets. I am using dollars because this is an ADR.
Then there is cash.

Liabilities: there are two series of notes: $410 million
Other liabilities. Here is where seniority gets to be important
Trade claims and bank loans are senior to you as the note holder. The bonds are publicly traded. There is a little bit of senior debt.

What is the problem here? You are the CFO and these notes: $177 and $200 million notes are due in May 2003 or one month. You don't have sufficient cash. Why would the 2003 bonds trade higher than the notes to be paid later? They get paid back first. The 2006 notes have less chance of being paid.

Let us think about the notes for 2006. That $200 million is now in the market trading at 180 million. As a bondholder you are asking: Are they going to pay you back and can they pay you back?

The CFO is asking what they can sell. $100 million in assets that have a lot of small assets so it is tough to sell it fast.

They decide to sell their interest in the Rail Road for 470 million dollars. $940 million worth in equity based on KCS's offer for part of the equity. There is a billion in debt on top of that so EV is $1.9. Is that a good price for its RR? Is TFM getting a good price? They are getting 7.5 x EBITDA. Is that a good price? Other transactions. If you really wanted to do a valuation, the financials would help.

Is this a good CF business? No, it is a RR. It is a decent RR. It is a monopoly in its territory. Truck goods can be competition. When I think of 7 to 8 x EBITDA, 30 times trailing FCF--that is a good price considering a CFO has looming liabilities.
Who else would buy this? If you own 51% of this can you do whatever you want with it.

The company announces that it will sell the RR to KCS. But it will take time for the process to go through the regulatory process.

Hey you 2003 note holders, we have the assets to pay you, but we need more time to get you the money. Let the deal close. Give us more time. We will do a tender offer for your notes and give you new notes due in 2006 (not 3 months) and more security. We will give you more interest.

Choice number 1: Give us your bonds.

Choice no 2: File for bankruptcy. What does filing mean? The company files for bankruptcy.

What are one of the problems of bankruptcy? The judge is in charge of bankruptcy. I, as a bond-holder, don't know what the judge will do.
There are some technical influences too. You may not be able to own defaulted debt if you are a mutual fund money manager. Bankruptcy is very disruptive. Customers leaving and employees leaving. Real value destruction.

The company can file for bankruptcy. Stigma, the company can be hurt by it.

Choice 3: The threat of bankruptcy—OK fine, I will take my new bonds. The CFO could raise money from other sources and repay the note holders.

Let's say I run a hedge fund and I show up May 18th and you show up and say pay me. As we got to May 15 then 40% to 30% note holders who held out. The people who were holding out was going up and down.

It is in everybody's interest to tender, but in the individual's favor not to tender. Holding out is unethical. Reputational effects for *Jett Capital* are important.

If everybody did it, then we couldn't manage the company. You don't want to be known as someone who pushes companies into bankruptcy.

This is how it works: read the company announcement. The company goes to a local judge to prevent the repayment of debt.

The company recognizes the obligation but says it won't pay you back. On May 13th an injunction preventing debt holders from forcing the company to pay back its debt. The company added debt in a bubble environment.

On May 13th the management is in my office saying to buy back our bonds so we will be fine. At the same time they were in a local court trying not to pay back the debt. So as an investor in public markets that when companies have material information they should tell me. They did not tell their investment banker, Salomon.

When you read that, you ask what else could be wrong? Mgt. specifically lied to you.

This is an important part of the process. The bonds go from 90 cents to 60 cents. Scary. This is when I buy.

But buying the bonds at 60 cents was a no-brainer. It may have been contrarianism. In a sense, I will do anything for a price.

Both bonds default to the 5 cents difference between bonds go away.

I own the business at a value of $245 million dollars and there is asset value of $631 million. At this point who knows what will happen. **He is buying a 40 cent dollar—assuming the assets are good.**

Based on the work that we had done, buying a $630 million value seemed good.

What do you want to know now? You want to know about the asset values. Who would you talk to? Talk to the advisors to the transaction.

I could file (to put the company into bankruptcy) in Mexico or the US.

Talk to the US Secretary of the Treasury. We wanted to know if the financials were good. They had minority shareholders who had an active interest. The mid-level management was not happy. At 60 cents what I was risking was fraud? There was cash on the balance sheet. I had no idea of when I would be paid back.

I pitched this to other fund managers. **One money manager replied, "There has to be something better than buying Mexican bonds."** That thinking is why these opportunities exist. But because people think that way is why the bonds are so cheap despite having 2.5 times the assets values to cover the debt.

To the extent we try to figure this up. Another press release, "We grew our rail road." The new judge on May 23rd that nullified the prior judgment. Irregularities could have taken place. There was concern that they might have bribed the judge. It changed the dynamic.

Now it was clear what our options were. We have bought. We could sell our bonds or push the company into bankruptcy. Who can influence the outcome? Mgt. and the other minority shareholders—the Mexican government and *KCS*. And the senior claims holders and other bond holders. **The bond holders can organize.** If the bond holders had organized, perhaps then this problem might not have happened.

Why would you organize? Leverage for being well represented before the company and/or a judge. Nobody wanted to go before a judge.

Let us think about organizing. *TFM* decides not to do the deal with *KSU*. There was little talking going on during this time.

So what do you want? You are the biggest bondholder and what do you want? How will we get our money back?

There are two ways to be paid back: 1. cash and new paper or 2. Owning the company.

Owning the company.

I am buying at $230 million for the company. At my price then, there is $150 in equity and all the debt is $950 mm for 1.1 billion. $250 mm in EBITDA and I am paying 4 times EBITDA and it trades for 7 to 8 times. So I really have a 50 cents dollar.

This RR is better than some of the comparables. Why wouldn't we want to own the RR? Mexico would not want us as New York Hedge Fund managers to run the rail road, and it is not what we do. So we can't own it.

So how do we get paid back? Can we force them to sell it? Why do you think the company is reluctant to sell? The equity holders' stock is down 90%. The public valuation is $400 million. If the equity holder sells, he won't get a good price. I would get paid back though.

What type of skills are needed here?—the conflict between me and management and KCS is big here.

KCS's CFO—what would he do? He does not want to file bankruptcy in Mexico because they do business in Mexico. Corporate relations.

Bondholders explored every avenue. We got new notes which were a lot better than the prior offer of new notes. We got higher interest rates and higher security and a guarantee to sell off the RR and a warrant interest. We paid management to accomplish the restructuring. The new paper traded at 80 cents on the dollar. 1.2 times 80 cents equals 96 cents. A double in two months.

Despite the paper flying back and forth and the threat of bankruptcy, the asset values never really changed and we bought in at a really, really low price.

Figure out the motivations of the other players:

Money managers who work at Mutual Funds—their compensation goes up if the bonds go up that year. More money on the assets they manage.

On the credit committee: You can't trade. A lawyer can tell me that I am fine, but I am not fine. If the SEC calls, would you mind telling the person from the SEC what you did. Would I feel OK?

Most of the guys who held on where the high yield managers. Mutual Funds are a different business than Hedge Funds.

One point on *Elan Pharma.* Their big product was recalled. Early to mid march the drug blew up. Model 1 with the drug and Model 2 without the drug and burning through cash. It has 1.5 billion dollars in debt and $2 billion in debt.

The bonds were at par and fell to 85 cents. The biggest point I try to make—what is mgt incentivized to do? When you think about the values you are buying at. This deal is not as good as the Mex. RR. Because the market is so rich, they are shooting for a 15% return. Is this worth it? This is not Mexico and immoral behavior, but it is Biotech and the reward is much smaller.

Joel Greenblatt Notes

Bond Yield of 6% Used as a Comparison

When I talk about the 10 year bond yield of 6%, I am talking about after-tax yields. I am not comparing that to EV/EBIT – it is almost like EPS here.

P/E ratio of 16.66 that is what I am comparing to a 6% bond yield.

Cash Flow from Operations: CFO

CF from operations includes changes in working capital. Sometimes they are a one-time change in working capital. What we have been using is **EBITDA minus MCX** or EBIT as a euphemism for EBIDA – MCX. Clearly each business is different, but by just taking CFO you don't know if there is one-time liquidation of inventory or one time need for stuff. Sometimes it is accurate but sometimes not for figuring out normalized earnings.

Look at insider selling if they sold at higher levels.

Presentations: *World Wrestling Federation*

Their sales are way below so their brands or other things are not helping them expand. They are spending money to grow but not making much money. Here your sales re 30% below normal or below your competitor, *Neiman Marcus.*

It is not easily fixable. This is a value trap. No easy fixes while they expand.
Their EBIT last years was $100 and spending 16 million on expansion. You are not getting adequate returns on capital despite it being cheap on a multiple basis. I need to look carefully at their business model.

John Petrie (Joel's' Partner at *Gotham Capital*): This company doesn't have a credible EBIT margin normalization story to it. If you look back at 2000, they are at 6.8% EBIT margin when they were at half the size. Their margins have gone down since then, so there is no rationale for why the margins will jump back up with more competition. There is nothing explainable and reversible.

What is EV/EBIT? It is 7.1x for *World Wrestling Federation*. What is the valuation if the voting stock was not there? Let's normalize EBIT? Norm. EBIT (last was $63.5) as a challenge to value it. Just big picture: I want to find out normalized earnings or EBIT. What is normalized EBIT and EV/EBIT and normalized EBIT/(NWC + FA). I would still do the valuation as if…….

Wrestling is cyclical or not cyclical. Two sides to valuation: what is the business worth? Then I can throw on the extraneous things like the mgt. will steal the EBIT or I won't have the EBIT.

Figure out normalized EBIT and Normalized ROIC. Then go from there.

There will always be moving parts, but that should be your base on every company. You can compare companies that way, you can always adjust because each company is different. This analysis is simple, but big picture it works. A lot of times you can't figure it out either by spending more time on it or passing.

END

Greenblatt Class #9

Portfolio Management

- We have spent the whole semester doing valuations and figuring out what something is worth.
- Then trying to buy it at a discount.
- We are passing on stuff we don't understand.

I also take the *WEB* approach to portfolio management. How much to buy of each thing? How much risk you are taking in each one. There are all sorts of statistics in coming out with the best portfolio.

Here is how I look at it:

You live in a small town and you sold your business for $1 million. How do you invest it? How many ways should I divide the money? There are 40 different businesses in the town.

You would research the companies for the <u>best</u> businesses using the metrics we have learned, and then I have 15 businesses to put the money into. Owning a piece of a business in town. What would I look at?

15 good businesses ranked by cheapness, ROIC, etc.

How many different businesses would you want to buy? How many is prudent? **5 to 8 businesses.**

I could put 20% into each stock. People might say that such concentration is an unbelievable risk. I put a lot of work into valuing those businesses. Think about it in the context of a small town.

$125,000 into 8 businesses. The way I look at—if I look at normalized earnings two to three years out unless it is a special situation with a catalyst—I am doing simple value investing. Mr. Market will get it right within two to three years). I may only need to find 2 or 3 businesses a year to keep a 5 to 8 stock portfolio going over time.

<u>If you own a piece of a business</u>, then you view things differently than traditional portfolio management.

I would rather have 5 to 8 positions in businesses that I understand well that I have valued and that are priced below value (big discounts). I feel good that I have such a margin of safety that I won't lose much.

I look for investments that I think I will make money but if I am wrong I won't lose much because I have such a margin of safety. You can always lose money in the short run, but if you get your valuations right, you are buying 60 cents dollars and you can wait two or three years, then all those things have to be there. The reason other people don't look at it this way—Rich Pzena was here—he buys cheap (a logical strategy for me). He started out and way underperformed the market. Stick to your guns. He now has one of the best records on Wall Street. **Many people can't stick it out.** Most say they can under-perform as long as everyone is underperforming.

He stuck it out and became successful.

It is very hard to do in real life. This is the one that makes sense. Most people can't do this. *Adam* here in class is thinking of having 10 positions because he is a conservative guy.

In a special situation there are opportunities where you can lose 100% of your money, and then you do not put 20% of your portfolio in it.

Buying a 70 cents dollar because it will grow over time. The reason I pay a 70 cents for a dollar in the future is if I have a strong conviction to earn a $1 in two years. I take a certain 20% vs. a maybe 40%. **Evaluate each situation separately.** Obviously, your position size has to be adjusted.

Think of the big picture when you think of portfolio management

If you keep the small town idea of dividing up your portfolio and keeping a long-term horizon, then you will concentrate **on your best ideas**. That is not the only way to make money but it has sure worked well for us.

If you take half your money and use a 20 punch-hole card, you will do the best in the class.

End

Greenblatt Review Class

April 15, 2005

On the Exam: You will get financial statements and some comparables--enough to come to a conclusion. Do a valuation. Do capex correctly. You will view subsequent quarters and see what happens. How are things going for the company.

Bring a calculator. A real world exercise. You might want to review my book, How You Can Be A Stock Market Genius, and *Thorton O'Glove's* book, Quality of Earnings. You will see telltale signs on the balance sheet. That is about half the test.

There will be a question on options and risk arbitrage. *Haugen* reading. Questions from my book.

You will have hardball and softball questions. This exam is a very good test and learning experience.

The point of the class is not to show how little I know but what are the key things I have to know. Reading a lot of the footnotes and all these things are important. What are you trying to do is boil it down to a couple of concepts. Can I answer this question or not?

- Is this a good business (EBIT/(NWC +NFA)? Return on tangible invested capital?
- Can I buy it at a good price assuming normalized earnings (EBIT/EV)? High Earnings Yield?

  What are normal earnings going to be in a few years? That means real cash flow, real earnings. Understanding future growth through competitive advantages.

Think about normal earnings in two to three years or whether those current earnings will continue to grow. How confident are you are in those estimates? Using those estimates to figure ROIC or EV to EBIT. Your earnings yield.

I hate to boil it down so simply, but that is what I use. If I don't have enough information to get there, then I pass. All I am trying to do is ferret out those answers.

You have to do a lot of research to get to normalized numbers. I made a lot of money doing special situations looking for no-brainers. As time goes on I have found ways to make money in different ways. Usually when you find something at 6 or 8 times earnings it is something horrible. Well the next year or two will stink but then normalized earnings will get better.

There are a lot of tests they can do but taking your blood pressure is the best indicator of your health or for your risk of a heart attack. **What can I boil it down to for what I am looking for?**

If it is so tough to figure out next quarter, then why am I confident over the next three years from now? That is what you are looking for.

You are trying to figure normalized earnings two years out.

Well the market may fall or people worry about what happens next qtr? If you can cut through all the crap and focus on normalized earnings and whether the earnings will grow or shrink. Or is this a good business? **It took me a lot of years to get here.** It is not as simple as it sounds. I am sure you have learned a lot of sophisticated stuff in other classes. There is a lot of information out there. The *WSJ* has more information than the average person had in a lifetime in the 14th century.

If you can really pick your spots, it is simple.

Often times the guys running the business do not see the big picture while you are looking at a lot of different companies. You are looking at different companies in the industry. This kind of business will trade at higher multiples. I have seen a lot of businesses and ROE and growth streams deserve to get high multiples but it is not trading there. **You have to be right more than you are wrong.**

Matt Mark, he doubled his money in his position. But it was really about gamesmanship rather than valuation. So you have a good estimate of what this might be worth. If you do detailed work, keep the big picture in mind.

Why do you view EBIT rather than FCF? EV to EBIT. EBITDA – MCX or a pre-tax cash flow?

EV to EBIT is a euphemism. **Changes in working capital need to be taken into account (if you use Cash Flow from Operations.** You have to adjust those metrics to see if they are representative to the company. If there is a difference between earnings and cash I will use cash.

Based on assumptions. If I grew earnings 15% a year, then I grew the stock price at the same rate. (Analyzing stock buy back). In Duff & Phelps, 8% to 12% to 20% CAGR assumption.

A guy who ran a Chemical Co. He wanted to buy back stock in his company. A picture of him pointing to the fence like Babe Ruth. That is a scary guy. At the end of the day, what was his game plan? **He was buying back stock even though his stock was at a huge multiple on peak earnings in a cyclical business.** Sometimes when things don't make sense, they don't make sense.

What we have been good at is avoiding errors of commission. We sold stuff too early, we have missed stuff. **I think the key is to pick with confidence and be selective.** You understand the business well. People question you on too short a time period

2 plus 2 is a powerful idea. You know it is 4 so no matter how many people tell you it is different. If you know the valuation, then these are the three things that are keeping earnings down, but they won't last. **My favorite things are not ones that I am right on, but when I am wrong, I paid so cheaply that I don't lose.** I get a decent amount right.
If you buy something and it only goes up, means you picked the bottom tick.

Use normalized earnings and it is trading at a 50 cent dollar, and then buys it. Don't wait. The school of hard knocks teaches you things.
The Short Side

The short side--unless the thing is going to run out of money it is very hard to hang in there.

I was long and short stuff with bad business models, 5 times overvalued, and running out of money, but it is very hard to hang in there. There are guys who do well shorting stocks.

The market has an up bias and if you break even and the market is up 7% to 8% but you are not adding value long term.

The value stocks were going up while the overvalued stocks collapsed. There are some guys who can add value, but they are very rare.

Unless you value volatility, then shorting may not add much value. Make money in the long term. No matter how you add up all the numbers, it won't add value over the long term (long/short fund). If you look at small periods of time, then it is easy to draw the wrong conclusions. There is time when they both go against you. The notion you are only long 50% when you are 100% long and 50% short.

Another thing I have learned, the <u>less leverage</u>, the better. Because if you have the philosophy to be long term, you need to live to get there. You have to live to play another day if you take a long term horizon.

If you know what the right thing is, but your customers don't then you have a problem.
Sometimes these outside forces can effect you.

Student: How did you move into starting your own firm?

JG: I always knew I wanted to do what I wanted to do. I went to law school for a year because I didn't want to work. Then I went to work for a risk arbitrage firm where I was the flunky. I took that job for $20,000 or a lot less than what MBAs are getting. I went to work for *Michael Milken*. I got interested in investing through reading *Ben Graham*. I read an article in *Forbes*. *Ben Graham* is mathematically oriented, so he finds cheap things.

Wharton Business School doesn't teach value investing. Value investing hit home. Sometimes it clicks or it doesn't. There are people where it doesn't click.

I was doing that and took a job at a risk arbitrage firm. It was like the Wild West. The one offer for $50 for half your stock in the front end and $25 on the back end for the other half. A front end tender offer. It might have made sense to tender the worse deal. The prorate date was ten days after. <u>Some didn't know to tender their stock</u>. I traded options at Bear Stearns. There were some deals—$50 front end and $25 back end or the deal is worth $37 worth on average for the stock. You could buy the $37 puts for a dollar; the options guys didn't understand the deal. So as long as the deal closed before the expiration of the option, then the $35 put then became worth $10. You made 10 times your money.

I thought the *Ben & Graham* stuff could make you 25% per year, but the risk arbitrage business was 100% a year in a bad year.

Then I looked at things that fell off the back of the truck and spin-offs. After doing this for three years I thought I would go on my own if I could raise $200 million dollars.

I met with *Michael Milken*. I wanted what I wanted. I figured I should stick to my guns. So I can't say go replicate that.

A lot of it is being in the trenches for a couple of years. Making mistakes, seeing what can happen, seeing other people make mistakes. Seeing things you missed and you got.

The bottom line is you have to go do it <u>yourself</u>. Feel confident about getting going. Just get going. If I made 30% then I would pay my overhead, but at least I got going. If you run your own account, say $10,000, run it like you are running a fund, but don't run it like you are running $5 billion dollars. Run it like you are running $10 million.

I see guys who raise $10 or $20 million but they run it like they are running a huge fund. **They invest in big cap names.** Take advantage of your size if you can. **Take advantage of your ability to get into and out of things.** I started in 1981 when the market bottom. I started in 1985. When I went to Wall Street the market had been flat from 1966 to 1982 or 16 years. You have a big leg up having gone here. You have a value perspective.

I know it seems simple and obvious to you, but the rest of the world doesn't know what you have learned.

Student: What did those people have that you backed? Or what makes them good investors?

JG: It is different things. What I liked about him was that he disagreed with me. **Independent thinking** is important. He has a very reasoned argument. He was willing to stick to his guns. A strong, well thought out opinion, and you are intellectually honest. Those are the personal qualities that I am looking for. **Someone who thinks a little out of the box and they are not afraid to do their own thinking.**

Just because I taught you certain ways, there are many different ways to make money.

Pick what you are good at. Everyone is different. You have this value underpinning and then you overlay it with your own thoughts. *Linda* Greenblatt understands in her bones, retailing. It is not what I do. She looks for value retailers. She stays in one sector. Most of academia would say what she does is impossible.

Portfolio Management:

I truly look at it the way I described. If I can put my money in 5 to 8 businesses that I understand well and I can withstand the storm then why isn't that a good strategy? Looking at beta and volatility is a waste of time. If my returns are 30% and they bounce around, then so what.

If you look at *Richard Pzena's* portfolio—he is a deep value guy—his standard deviations in one year's time is more volatile but over three years time, then it is lower.
There is no relation between (near-term volatility) and being a good investor.
A pension fund he sits on the board of—if the endowment has a long term horizon…….**END**

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Greenblatt Review Notes

EBIT --- Earnings before interest and taxes (often called *operating earnings*)

This is what the company earns before worrying about capitalization (how much debt it has) and taxes.

Debt levels differ among corporations and therefore EBIT is a good thing to look at to determine the earning power of the company's business. Comparing EBIT/Sales of companies in the same industry might tell you how efficiently different companies turn sales into earnings.

Net income/Sales might not tell you this because net income is arrived at after subtracting interest and taxes. A company with a lot of debt will have a lot of interest expense. So, even if a company is operating very efficiently, net income may be low because of large interest expenses. Taxes may differ because of the tax shielding effects of debt or special circumstances like tax loss carry-forwards, tax credits, etc. which may not reflect operational efficiency.

What is Enterprise Value (EV)?

EV is market capitalization (Price times shares/out) + Net interest bearing debt (Debt includes the current portion).

Why an investor should use Enterprise Value? Consider 2 companies--Co. A & Co. B which are the same company. However, Company B has $50 per share in debt (at a 10% interest). Company A has no debt. Assume the going rate for the earnings stream represented by $10 in EBIT is $80 (8 x EBIT) for company A & B's industry.

	Company A	**Company B**
Sales	$100	$100
EBIT	$10	$10
Interest Expense	0	$5
Taxes	$4	$2
Net Income	$6	$3

Question 1: If Company A trades at $80 per share, let's figure out its P/E, Price/Sales ratio, EV/Sales, EV/EBIT.

Question 2: If Company B trades at $30 per share, let's figure out its P/E, P/S ratio, EV/Sales, EV/EBIT

	Company A @ $80 per share	**Company B @ $30 per share**
P/E	$80/$6 = 13x	$30/$3 = 10x
Price/Sales	$80/$100 = 0.8x	$30/$100 = 0.3x
EV/Sales	$80/$100 = 0.8x	$80/$100 = 0.8x
EV/EBIT	$80/$10 = 8x	$80/$10 = 8x

Company B's P/E appears lower and its price/sales ratio appears incredibly low. Since Company A and Company B have the same pre-tax, pre-interest earnings stream (EBIT of $10/Sh) and since they are the same company, the different companies should really be worth the same thing to a buyer. (i.e. whether you pay $3 for the company and owe $5, or you pay $8 and owe nothing, it is the same thing. (E.g. whether you pay $300,000 for a house and assume a $500,000 mortgage or pay $800,000 up front. It's the same to you. You can pay the $800,000 in cash or take out your own $500,000 mortgage and be in the same shape as buying the house with existing mortgage).

The different capitalization skews P/E and P/S but EV takes into account the different debt levels and lets you compare the true earnings stream that can be leveraged by a buyer or not.

What is EBITDA?

EBITDA is earnings before interest, taxes, depreciation and amortization. This is supposedly the cash that the company generates. Warren Buffett dislikes this number. Investment Bankers use this number to show how much cash a company generates that can be used to pay interest (because depreciation and amortization are non-cash charges). However, before you can use EBITDA to pay interest expense, you must pay those capital expenditures that are required to keep your business running at the current level. This is a cash expense. I call this maintenance cap/ex.

If instead of EBITDA, you use (EBITDA minus CAP/EX) you will get a truer picture of actual cash available to pay interest. This is closer to true cash earnings before taxes. Obviously, some portion of cap/ex may not be for maintenance (some may be for expansion), so you can either subtract just maintenance cap/ex (if you can find it) from EBITDA, or total cap/ex to be conservative.

Instead of P/E, I like to use EV/ (EBITDA - CAP/EX) to compare companies with different amounts of leverage.

What is FREE CASH FLOW?

(Net Income + Depreciation + Amortization) minus CAP/EX

Net income is accounting earnings after subtracting depreciation, amortization, interest and taxes. Since D&A are non-cash expenses, we add them back to net income to figure out how much actual cash the company generated. I subtract maintenance cap/ex (or total cap/ex to be conservative) to arrive at Free Cash Flow. Cap/EX is a cash expense. Maintenance cap/ex must be spent. So, free cash flow should represent the cash available to pay dividends, buy back stock, pay down debt or make acquisitions. These are things that take cash.

If you owned a business, you would want to know how much real cash it was earning. Some companies spend so much on cap/ex to keep up with competitors that they never really earn as much cash as net income indicates. (In other words, cap/expenditures are so large and continuing that, just to stay competitive, companies are spending all their reported income plus more to just keep up with competitors).

Textile companies and high tech companies may fall victim to this. Even a department store may have to do constant overhauls if competitors keep fixing up their stores every few years.

On the other hand, a company may be earning more cash than reported earnings. Often this happens when companies have large amounts of amortization resulting from acquisitions made at substantial premiums to book value.

END
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How Joel Greenblatt uncovers the secret hiding places of stock market profits? December-30-2005 by Brian Zen, *Enlightened Investor Digest*

An enlightened man turns on the "Light" in the dark hidden places. Joel Greenbaltt is such a man.

Discovering The Hidden Places

Nowadays, many investors are reading Warren Buffett's wise teachings about investing *only* in wonderful businesses managed by talented managers. Guess what? They only got the front page of the picture. The flip side of the picture is that Buffett started by flipping thousands of pages of reports on unknown tiny "not-so-wonderful" companies in neglected hiding places, places that Joel Greenblatt has been talking about.

When Buffett bought American Express, it was a credit card business near bankruptcy, with its book value depleted by a fake-warehouse-receipt scandal. Most people thought the company's reputation was forever tarnished while loosing market share to rising stars like Visa, Mastercard and Discover... At that moment, American Express was a stinky stone covered in blood in an ugly place where my daughter would run away screaming: "Oh, smells terrible!"

value depleted by a fake-warehouse-receipt scandal. Most people thought the company's reputation was forever tarnished while loosing market share to rising stars like Visa, Mastercard and Discover... At that moment, American Express was a stinky stone covered in blood in an ugly place where my daughter would run away screaming: "Oh, smells terrible!"

But Joel Greenblatt, hearing the scream of terrible smell or bloody murder, would say: "Oh, really? Let me take a look." And there he would discover his kind of hiding places for stock market treasures. Those places are usually dark, ugly, and neglected. They usually don't smell too good.

Based on our proprietary research, enlightened superinvestors in financial history are *all* tireless at exploring unpopular stinky places and turning over countless ugly stones in the dark corners where nobody wants to go near. Joel Greenblatt is such a tireless explorer.

On Wall Street, many would stumble and fall at street bumps and cracks. Some would later find lost dollar bills and cigar butts beneath the exactly same bumps and cracks. In his book, *You can be a Stock Market Genius (Even if you're not too smart)*, Joel Greenblatt generously provided a list of those hiding places of stock market treasures.

Spin-offs

- Spin-offs are the favorite hiding place for Greenblatt. When a company spins off a subsidiary into a separate company, it may be trying to unlock the hidden value in an unloved baby. Greenblatt quoted a study that found a very large number of such spin-offs outperformed their industry peers by a surprising 10% per year in the first three years after the spin-off. What is more interesting is that the parents of the spin-offs also outperformed their industry peers by 6% during the same three-year period. Why? Because the unloved subsidiary had been a drag on the parent's stock, but there were hidden values in the neglected division.

- Institutional investors are often uninterested in spin-offs, as the companies tend to be small in size. The shares of the spin-off are generally not sold in an IPO, but quietly distributed among the parent company's shareholders. The shareholders often sell them off without regard to price or fundamental value as their primary interest is in the parent company. The initial price after the spin-off, therefore, tends to be depressed, providing a bargain purchase opportunity.
- Greenblatt stresses that in every corporate change it is important to determine where the interests of the insiders and directors of the company lie. If they have a large stake in the spin-off, it means that there is a high level of commitment to making the spin-off a success. The credibility and resources

- The subsidiary to be spun-off is generally some kind of unloved baby in the parent's family of businesses. GE would never spun-off its leading unites commanding a number one market position. The unloved and hated spin-off "bad boy" is often a drag on the parent company's valuation; in other words, the spin-off is generally not an exciting company or a good business.

- The to-be-spun-off company must file form-10 with the SEC. For the trained eyes, there is a lot of good information there to facilitate detailed research.

Merged Securities vs. Merger Arbitrages

- Greenblatt likes merged securities and has mixed feelings about risk arbitrages based on announced mergers, that is, buying stock of a company that is subject to an announced takeover. Warren Buffett also acknowledges that merger arbitrage opportunities are disappearing after the strategy was made famous by Benjamin Graham and Warren Buffett himself.

- Risk arbitrages are subject to too many uncertainties like due diligence, antitrust approvals, multiple government reviews, shareholder disapproval, and changes of market condition, etc. Sometimes, the merger may not even go through. I call this "having your fingers burned while picking the pocket of corporate acquirers". The acquirer is buying for $20 a share. You try to buy at $19.5 a share and deliver your shares to the acquirer for $20. It often works, but many things could go wrong and the engagement relation could turn sour...and you see the stock sink back to $15.

- However, in mergers, the acquirer sometimes pays for the acquisition in terms of securities other than stock. The payment could be in bonds, preferred stock, warrants or rights. Institutions typically shun these illiquid and complex securities, and individuals who receive the unfamiliar securities often dispose them in the market automatically. The prices are thus driven down, making them attractive bargains.

Bankruptcies

- What is the biggest fear on Wall Street? Bankruptcy! And that's where opportunities like American Express, and in recent years MacDonald's and perhaps Merck, are hiding.

- An unconventional and hiding opportunity that Greenblatt suggests is not the stock, but the bonds, bank debt and trade claims of companies that are broke and bankrupt.

- When a company is bankrupt, there are plenty of eager and anxious sellers and the businesses are always unpopular.

- The right time to buy is the tricky thing here. Some suggest buying during the process when the company may be emerging from bankruptcy proceedings.

- Another tricky issue is that you need to be very careful in choosing the 'right' bankrupt companies to invest in. You need to make sure that the "fried chicken" on Wall Street can one day fly again. And how do you do that? (Well, maybe you should consider research workshops like ours at zenway.com.)

Corporate Restructuring

- When a troubled company goes through major corporate restructuring, bargain opportunities are often created.

- People shy away from major changes and uncertainties. Wall Street analysts tend to drop coverage of companies that are undergoing major corporate changes, creating further price dips for the stock.

- You can either invest after restructuring has already been announced or when a company is getting ready for restructuring. Your job is to pick and choose to find the major corporate changes for the better instead of worse.

- Just like Buffet avoiding 7-foot-bars where you must fly over and may break your neck when falling down on your back, Greenblatt too shuns complex restructurings where you can't understand what is really going on, or you have problems measuring the height of the bar.

Recapitalization

- Greenblatt sees recapitalization transactions as an investment opportunity, where a stock buyback is sometimes financed by additional borrowings.

- The reason that makes debt-equity-recapitalization interesting is that buyback of equity increases the leverage in the balance sheet, thus increasing the tax saving which can then be passed on to the shareholders.

- Investors are often scared of new debt, thus pushing down the stock prices to attractive levels.

- Greenblatt believes that, in regard to recapitalization, "there is almost no other area of stock market where research and careful analysis can be rewarded as quickly and generously".

Finally, The Disclaimer In Fineprint

Yes, you can become a stock market genius even if you are not too smart. But, as Joel Greenbaltt would warn you himself that there are tons of painstaking reading, learning and research involved in finding these hidden opportunities.

It's just like the conventional wisdom about free lunch, with which I had some rather personal experience. First, we've all heard that there is no free lunch. But then we would all find out that, if you search hard enough, and if you are "hungry" enough (just as I fled to America with practically nothing and was about to pass out in my advanced accounting classes), you would sometimes pick up a real free lunch here and there. And maybe, pack home some nice gift bags. For example, due to 15 years of hungry research and voracious accumulation of information and contacts, I have discovered quite a few free lunches where Warren Buffett and Joel Greenblatt would have no time to go to in places like Harvard Club... Have we met before?!

An Evening with Mr. Greenblatt January-11-2006

Joel Greenblatt by *Shai Dardashti*

Mr. Greenblatt, author of The Little Book that Beats the Market, treated members of the NYSSA to a special evening program on " Special Situations Investing".

Providing a wonderful glimpse into the evolution of his investment mindset, Mr. Greenblatt opened with an account of his college years - working with Rich Pzena to deconstruct the methods of Benjamin Graham. In the late 1970s, Mr. Greenblatt recalls, he "read a Forbes article about Graham" that discussed Net-Net Strategy, that is - stocks trading below liquidation value.

From my personal explorations into Grahamian techniques, I believe this is the actual article which inspired Mr. Greenblatt's value investing pursuits:

The Return of Benjamin Graham, Forbes October 15, 1979

"Think of a time when stocks of 191 important American corporations are selling for less than net working capital per share. Are we talking about 1932? No, 1979."

Continuing his story of self discovery, Greenblatt recalls that at Graduate school at Wharton, he "wrote a paper published in the Journal of portfolio management."

In his typically humble and modest nature, Mr. Greenblatt chose to leave out the findings of his early explorations - published in a 1981 study. Below are some notes I compiled from research on the actual report:

1981	Greenblatt, Pzena, and Newberg	"How the Small Investor Can Beat the Market	Journal of Portfolio Management

The Greenblatt/Pzena/Newberg study was intrigued by Graham's writings in Security Analysis in which "he outlines in little more than a page the opportunities to be found in stocks selling below their liquidation value. In studies between 1923 and 1957, Graham reported superior results when market levels enabled him to buy a diversified list of these bargain stocks."

The study examined the performance of stocks meeting Graham's *rough liquidation value* (net-net) estimate:

Accounting Definition of Rough Liquidation Estimate:

"Current Assets" (cash, accounts receivable, inventory, etc.)

Less: "Current Liabilities" (short term debt, accounts payable, etc.)

Less: "Long Term Liabilities" (long term debt, capitalized leases, etc.)

Less: "Preferred Stock" (claim on corporate assets before common stock)

Divided by: Total Shares Outstanding

EQUALS "Liquidating Value Per Share"

The study "did not consider the stocks that had shown a loss over the preceding 12 months."

Research covered "15 segments of 4 months each over a six-year period in which the over-the-counter (NASDAQ) averages halved and then doubled... The period under study an from April 1972 to April 1978."

The process looked exclusively at three factors:

- Price in relation to liquidation value
- Price/Earnings ratio
- Dividend Yield
- Stocks were sold after a 100% gain or after 2 years, whichever came first (as per Graham's writings)

The Graham net-net buying process was applied within four distinct portfolio dynamics, each described below with its respective results:

- Portfolio 1:
  - Price/liquidation value <= 1.0;
  - Price/earnings: floating with bond yields;
    - [require a P/E corresponding to twice the prevailing triple A yield in each period]
  - Dividends: no dividend requirements

Results:

"During the 15 4-month periods our constraints dictated a position in the market, we averaged an annual compounded rate of return of 20.0% before dividends, commissions and taxes. The OTC index appreciated at an annual compounded rate of 1.5% during the same period."

"We would expect higher returns to accrue to riskier investments to compensate us for taking on the additional risk. Therefore, we also studied the volatility of the returns of our selected stocks with that of the NASDAQ market average. (During this period, the NASDAQ averages significantly outperformed the S&P indexes of larger companies) A regression of our Portfolio 1 return and the OTC market return over the 15 periods resulted in the following:

Portfolio 1 return = +6.14 +.836 (NASDAQ return), (4 month period)

Portfolio 1 standard deviation = 14.15;

OTC portfolio standard deviation = 12.75."

Portfolio 2

- Price/liquidation value </= 0.85;
- Price/earnings: floating with bond yields;
- Dividends: no dividend requirements

Results:

"After we limited the purchases in Portfolio 1 to stocks selling below 85% of liquidation value, the returns increased to a 27.1% annualized rate before dividends, commissions, and taxes (compared with the market's 1.3% annual performance). After taxes and commissions, this return approximated 16.5% annually.

The regression worked out to:

Portfolio 2 return = +8.54 +.752 (NASDAQ return), (4 month period)

Portfolio 2 standard deviation = 14.58;

OTC portfolio standard deviation = 12.75.

Adjusted beta = 1.14"

Portfolio 3

- Price/liquidation value </= 1.0;
- Price/earnings: </= 5.0
- Dividends: no dividend requirements

Results:

"When we used a low constant P/E ratio coupled with a discount to liquidation value, our returns were significantly improved to a 32.3% annualized rate before dividends, commissions, and taxes. After taxes and commissions, our return falls to 20.1% per year, compared to the OTC market's return of 2.0% during the 14 periods when we had a position in the market.

No stocks were purchased until August 1973 using the parameter of a PE below 5. The portfolio also entered the market closer to the tough and with more conservatively valued stocks. We outperformed the OTC index by 5% or more in 9 four-month periods, while we underperformed the market by 5% in only one period. The regression analysis was:

The regression analysis was:

Portfolio 3 return = +9.9 + .753(NASDAQ return);

Portfolio 3 standard deviation = 14.35;

OTC portfolio standard deviation = 13.16;

Adjusted beta = 1.09.

Portfolio 4

- Price/liquidation value </= 0.85;
- Price/earnings: </= 5.0
- Dividends: no dividend restrictions

Results:

"Our most successful screen. I t resulted in an annualized rate of over 42.2% before dividends, commissions and taxes. The result before dividend returns approximated 29.2% for the 14 periods studied, compared to the 2.0% annual returns of the OTC markets. The regression analysis was:

Portfolio 4 return = +12.83 + .671(NASDAQ return); (4 month period)

Portfolio 4 standard deviation = 14.94

OTC portfolio standard deviation = 13.17

Adjusted beta = 1.13.

Not bad, indeed.

Greenblatt discusses the study

To produce the paper, Greenblatt explained to the NYSSA, he explored the S&P stock guide - by hand - and, together with Rich Pzena, made a unique database of stock information. At the time of the study, the aspiring super investors had to calculate their findings on University of Pennsylvania's DEK 10 Digital Equipment Computer, a far stretch from the modern Compustat database and computing power of the internet age that Greenblatt explains was used to research his Magic Formula,

The downside to the "42.2% annualized rate" of the Graham Formula, Greenblatt shared with his NYSSA audience, was that investors were getting a bargain, but the bargains disappeared in 1980s.

Greenblatt clearly is aware that, as Graham teaches, "cheap works" - and Mr. Greenblatt cited a variety of studies documenting the performance of low price-to-book, low-price-to-earnings, etc. (The sources of which, I presume, are the Tweedy Browne "What has Worked" report and the various experiments documents in Haugen's "The New Finance")

In an attempt to adapt the quantitative construct to reflect his appreciation for Warren Buffett's investment techniques, Greenblatt commenting on Buffett's presumed thought-Process: "Buying cheap works, I know that... But what if I buy good companies that are cheap? And see how it would do..."

Working Towards The Magic Formula

So, Mr. Greenblatt began to study the question of "what is a good company?" The simple answer: A business with a high return on capital.

Business A)

$400,000 cost of store to build.

$200,000 earnings a year.

50% ROIC

Business B)

$400K to build.

10,000 earnings a year.

2.5% ROC

Clearly, in this simplified example, Business A is the superior business.

As per his wonderfully concise summary:

1) Greenblatt ranked the businesses by ROIC.

2) And then ranked the shares by cheapness.

"More earns relative to price... I call that 'cheap.'" - in reference to Earnings Yield.

Developing the Magic Formula

Working with the two variables, high earnings yield and high return on invested capital, Mr. Greenblatt decided simply to combine the two rankings to create a list of businesses that have the best of both components.

Logically, a business that ranks #100 for ROIC and ranks #50 ranking for Earnings Yield would rank #150 in The Magic Formula hierarchy.

To further research the effectiveness of this mechanical process, Mr. Greenblatt took his ranked list of Magic Formula results and divided the hierarchy into deciles, and simply performance of each decile. The results: The top ranked decile outperformed the 2 nd best, in turn was better than the 3 rd, etc. So, the performance of each decile was absolutely in line with the rankings from the Magic Formula.

Mr. Greenblatt, a veteran of Wall Street's inquisitive approach towards ground breaking claims, outlined complicated possible concerns with the process, and simple counter-arguments:

"But, the Magic Formula is subject to error due to... "

Look ahead bias

- The study used the Compustat point in time database. So the data used was reflective of information available precisely at the time period under examination.

Survivorship bias

- Again, the study used the point in time database

Small companies couldn't be purchased, transaction costs would kill you

- The same perfectly aligned decile rankings appeared when only exploring at top 1000 companies by market capitalization.

Fama frech argument: the formula is picking riskier stocks.

- Next question.

This is data mining

- This was the 1 st test attempted, and the weight of "good company" to "cheap stock" was a simple 50/50%

More Advanced Considerations: Piotroski and Haugen

Mr. Greenblatt compared his Magic Formula results to the stock selection techniques of Piotroski. Generally, Piotroski's work performs very well, but only its utility is effectively limited just to companies with a market capitalization up to $700 million. So, for large cap stocks, Piotroski's work isn't all that effective.

Robert Haugen introduced a 71 factor model for superior stock selection. With monthly periodic turnover over the 10 year period, Haugen's technique demonstrated a 30% superior performance of his top ranked decile over the lowest ranked class of stocks.

Greenblatt found a 32% spread when researching the 2 factor Magic Formula. (ROIC and Earnings Yield)

To assess the long term viability of their respective approaches, and to reduce the transaction costs, Greenblatt compared his results with those of Haugen's.

In Search of* The *Magic Formula

Mr. Greenblatt created an experiment in which he held selections derived from Haugen's 71 factor model for a year, with annual turn over, and developed sample portfolios every month for the 10 years. (So, he created portfolios tracking 120 rolling one year periods)

- Haugen's top decile beat the bottom decile by 5.63%
- Greenblatt's 2 factor model recorded an 18.5% spread of out-performance.

Greenblatt repeated this experiment, looking at rolling 3 year periods (there were 169 such periods covered in the duration of his Magic Formula study)

- Haugen's Method: The worst 3-year period return was "-35% or - 45% "
- Greenblatt's Method: The worst 3-year period return was actually a positive return "around 10%"

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Eleventh Annual
Tomorrows Children's Fund
Ira W. Sohn

Investment Research Conference Recap

Sam Zell -- Equity Group Investments

Real Estate Big Picture -

- Believes there is excess capital in the system
- Thinks it will take 5 – 7 years to burn off
- Cost of capital is much lower as assets have been monetized recently
- All driven by aging baby boomers need for income

Lee Ainslie -- Maverick Capital

Lexmark (LXK)

- 51.34 -- 4.6bb enterprise value
- 950mm in cash with 150mm in debt

What's baked in:

- 05 was weak but 06 expected to be better
- Competition increased from many fronts including Epson
- Pricing environment is brutal
- Inventory correction shortened from 5 ½ weeks down to 4 ½ weeks
- Low end biz profits crushed

What's not baked in:

- 2006 changes could lead to 60 cents in eps
- Impact of 10% job cuts across the board
- FCF from 02-04 ranged from 579mm to 685mm and in 05 it bottomed at 300mm
- Buy back of 20% could add 55 cents per share
- 06 1st call at 3.30 but could actually do 4.00 to 4.25 b/c 1st call underestimates these 2 items -- especially the buy back impact

Choicepoint (CPS)

- $44.07/share – 4.06bb enterprise value with 6% free cash flow yield
- Leader in employee data supplied to insurance industry and #2 supplier of data to Homeland Security industry

- EPS growth from $1.33 to $1.90 as restructuring occurs
- After flurry of 50 deals in recent years that resulted in mid single ROIC – mgmt has decided to stop buying small companies.
- Sell off some of these businesses to focus on core business
- Institute major share buyback
- Reinvest proceeds in insurance biz where they hold #1 spot and 90% market share
- 1st call at $2.20 but could do at least $2.35 to $2.45 with buyback

David Matlin – Matlin Patterson Global

Advisers

Polymer Group (POLGA/POLGB) $27

- -Makes non-woven textiles.
- -Customers include - KMB, PG & JNJ
- -Play on emerging markets

- -$528mm market cap
- -6.7 ev/ebitda
- -115 ebitda
- -$400mm in debt
- -14% CAGR ebitda trading at 6.7x ev/ebitda
- -ebitda - 04 -106
  05 -115
  06 -135 - projected
  07 -150 – projected

Huntsman Chemical (HUN) $18.31

- 221 mm shares out.
- 4.5b in debt
- Trades at 7.6x 2006 EPS
- Commodity Chemical business trades at 8.1x
- Differentiated chemical business trades at 16.8x

Split business:

- Sell commodity chemical business 4.5-5.5 ebitda of 322mm=1.5-1.8b
- Specialty 7.8x - 9.5x = 10.7b
- Mid to high 20's values

Steve Tananbaum – GoldenTree Asset Management

Liberty (LBTYA)

- Global provider of triple play video
- 7x EV/EBITDA
- NAV: $34 in 2007
- $42 in 2008
- Ability to tender 1/3 of shares outstanding
- Recent Buyback

Williams Company (WMB)

- Natural Gas, Midstream and ENP Business
- NAV: $29 in 2006
- $32 in 2007
- $34.75 in 2008
- Great businesses with wrong capital structure that needs to be split up.
- 9.5x Ebitda Pipeline Business
- 9.5x Midstream Business
- 8.5x ENP
- Spin off the ENP business from the Pipeline and Midstream Business, able to grow NAV 17%

James Dinan – York Capital Management

Atlas Air

- $65-$85 value

Philips (PHG)

- 25 Euro net cash; 0 debt; 4 of 5 businesses #1 or #2
- $10B non core securities
- $6B in Taiwan Semi
- $4B in LG Philips
- If you value 7B for European Semis or 1.4x revenues, then the rest of the company at:
- 4x 2006
- 3x 2007

The Limited (LTD)

- $28 with 4% Operating Margins can g o to 8%, stock would be worth $35
- Consensus: $1.60 in 06 and $1.80 in 07
- Believes: $1.80 in 06 and $2.00 in 07
- Retail – historically lost money
- Victoria Secret – 70%
- Bath Body – 25%

Alcan (AL)

- $17B market cap; $24B EV
- 5.5x EV/EBITDA; 9x EPS
- Half are downstream assets
- If company is valued at 7.8 – 8x packaging and 7.5x engineered products, then that creates a 4x EV/EBITDA core business
- $9- $10B in value to separate

Advanced Medical Optics (EYE)

- $3B market cap
- Solutions and lens business but the multifocal IOL business is growing from $200mm to $1B 2010
- 30-40% margins
- $3 Cash EPS
- Deserves 20x PE, not 15x
- 20% CAGR

Kansas City Southern (KSU)

- Railroad US to Mexico a large container facility being built in Mexico
- 7.5x – 8.0x EBITDA
- Huge operating leverage
- 10-14x on take out value
- $36 - $57 value

William Browder – Hermitage Capital Management Ltd

Surgutnefte

- 4th Largest Oil Company
- Unfriendly management
- Forensic accounting – illegal share buyback 60% of company never disclosed
- Suing the company
- $60B market cap
- $28.2b stock repurchases
- $13B cash
- $14.4B Net
- $1.60 per barrel of reserves

Gazprom

- Valued at $2.30 per barrel
- High gas contracts in the Ukraine
- Higher gas contracts domestically
- Build a German pipeline

Meridee Moore - Watershed Asset Management

Advocates being long the air cargo sector b/c:

- 6-7% top line CAGR
- Huge overcapacity issues being corrected
- Limited new capacity coming on stream
- Higher fuel costs cut down on possible conversions

Atlas Air World Wide (AAWW)

- $49.00/share -- 975mm market cap
- Freight forward pure play
- Provides services to industry -- e.g. pilots and ground services etc
- Story catalysts include:
- 100mm in cost cuts
- Better utilization mix of military and commercial
- High teens free cash flow yield to equity holders
- New CEO on board

William Ackman - Pershing Square

Capital

Canadian Tire (CTC/A) $65

- 6.8 X ev/ebitda 13.5X p/e
- Canadian tire co with 4 businesses
- 1) Tire business
- 2) Financial Services
- 3) Marks Work Warehouse (revs going from $54 mill to $84 mill 05 to 06)
- 4) Canadian Petroleum (gas stations $1.3 bill in sales and $22 mill Ebitda, could sell real estate)
- 10 % FCF yield
- Own 75% of real estate
- It's a franchise business like Tim Horton's with ½ the multiple; they are expanding the store base, which is hurting comps.
- If they sell the receivables of the credit card portfolio the stock is worth $84
- If the do a Sale Leaseback on real estate the stock is worth $96
- If they sell the extra real estate the stock is worth $100
- If they do an income trust conversion the stock is worth $129
- THE NEW MANAGEMENT TEAM IS RECEPTIVE TO SHAREHOLDER VALUE

Joel Greenblatt - Gotham Partners

American Express (AXP) $52

- High quality franchise it is worth $75 to $80 target
- High ROIC and only needs to reinvest 25% of its earnings
- Very predictable business
- DCF supports $80 stock
- He believes it should trade at 20-22X eps of $3.70 in 2008

David Einhorn - Greenlight Capital

Freescale Semiconductor (FSL) $29.96

- The streets estimates of $1.95 are too low by 25 cents.
- The street is too worried about share loss at MOT while there are huge opportunities for design wins in Korea and Finland

Allied Capital (ALD) $29.82

- Management has a stock option plan where the co buys back in the money options while the company is in a quiet period.
- With investigations ongoing this allows co insiders to do massive sell programs with out affecting the open market trading. Also, regulators wont be able to accuse them of insider trading.

Microsoft (MSFT) $22.79

- 9X Ebit 13.5 X p/e 2007
- MSFT has 7 businesses and 4 of them are unprofitable which all together loose a couple billion per year. 1) Mobile 2) MSN 3) Home entertainment

- Mobile- if they got ½ the market share they get from the PC business it would be a couple billion in revs
- MSN- could get a multiple of competing businesses which are 14-17 Price to Sales
- If they can get rid of 1/3 of the piracy it could equal $2 billion in operating profit
- MSFT produces $1 billion in FCF/ Month
- Great core business and he never thought he could get such a great company at such a cheap price
- $35 billion in Cash. They could lever up the balance sheet with $40 billion in debt and buy back 1/3 of stock

Barry Rosenstein – JANA Partners

Compass group (CPG.LN) $231.25
Catering/food Service Company

- $6b EV
- $12b Sales
- $850m ebitda
- 4.5% Yield
- 7.3x vs. 8.8x peers
- 14x EPS
- 18-20 P/E
- Good Secular Story
- Outsourcing continues – 95% rev recurring business as contracts get renewed
- There is industry consolidation – 2 competitors are being sold
- The co made a series of bad contracts and acquisitions so the margins are now way below the industry

Restructuring:

- Stabilize margins, sell assets, exit below margin contracts, reduce SG&A

Opportunity:

- If there is $250mm in cost cuts then 5.3x ev/ebitda
- 10.5% FCF
- If it trades at 7.5=390p

Six Flags (PKS) $8.65

- $1.3b market cap.
- $2.2b debt
- $3.5b EV
- 6.3x levered
- 1.6b Net operating losses

Over 4yrs ebitda went from $410m to $300m with bad acquisitions and poor capex spending. Lower margins than comps even though 2x the size. New chairman Dan Snyder and CEO Mark Shapiro

- New branded/license/sponsorship $20mm per year
- Increase parking $10-20mm per year
- Gate receipt increases $15-20mm per year
- Eliminate discount to Sr citizen discount $5-8mm per year
- $150mm in rev=$100 in incremental ebitda

Cut capex $30-50$mm. Re-brand, lower cost attractions sell assets including excess land, $400mm in 18months (recently sold Houston property for $77mm). 2007 FCF of $125mm. 9.3x equity value forward #'s = $12 equity value. No taxes paid for years due to net operating losses.

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Footlocker (FL)

Joel Greenblatt, Gotham Capital

He spent entire time plugging ***Foot Locker ($11.50).***

25% pre-tax ROIC, rising to 35% in the next two years.

Market share is twice that of the next two competitors combined

If things don't go right, you should make 75% on the stock in 2 years.

They're in a big fight with their largest vendor, *Nike*. *Nike* wants them to carry their high-end line and not to discount. A front-page story in recent WSJ said FL is losing this battle badly.

Must focus on facts:
- Even analysts who hate the company think it will earn $1.20 this year. Depr and cap ex are the same -- cancel each other out.

They are doing high-return remodels for the next two years that should add $0.12/year

Made disastrous foray into big box retailing; shut this down; getting out of leases over the next five years, improving earnings by $0.30; assume $0.06/year

Have $350M in cash and debt, but paying more on debt than earning on cash, so could use cash to pay off debt, take a one-time charge, and then save $0.08.

Add it all up and you get $1.64 in EPS in 2 years. Assume 12 multiple is $19.68, if nothing good happens.

Possible upside events:

- *Nike* can't replace them; sees settlement in next 6-12 months -- a big plus-Hired guy who turned around Champs to head US operations; has good relationship with *Nike*

- Stores are doing great in Europe; no competition; high single digit comps; no *Nike* problem there

- $0.18 from last three years of getting out of big box leases

- economy could improve ***END***

Greenblatt Class #4 Sept. 23, 2003

What are the <u>problems</u> with *Rich Pzena's* approach?

He forecasts by extrapolating what are the projected normalized earnings over the next 3 to 5 years. He will take the bottom quintile of companies' lowest multiples.

What he said-on average if he is looking at normalized earnings of 13 times for the market as a whole, his universe is 6-7 times earnings. He looks forward by looking backwards at historical normalized earnings.

Mkt. Timing

Jeff Vinik went into a high percentage of cash of his portfolio and then was fired from *Magellan*. Investors did not want him to market time, but to pick stocks.

Greenblatt complaint: So much work and subjectivity that goes into estimating normalized earnings. Why not use a standard metric?

Price to book: How much you earn over time discounted back. How much you earn on book value? *Coke* has a great brand with much cash generating activity. Earnings power may indicate higher price to book. No accounting for high returns to capital. Look at normal returns and price to book.

Airline passenger miles have grown 5% for the past 50 years. Normalized earnings is what the company would earn in an average year.

Extrapolate naively and search in the bottom quintile.

Problem with approach (Prof. Greenblatt) is that **Rich Pzena is smarter than us.** Some of the things are simple to him--big picture--Airbus is not going to grow. How he looks at the world. It is difficult to replicate that broad industry analysis and expertise.

Joel doesn't need to be that smart. Be **more selective and seek more disparity in price value relationships.**

Disagree with:

Main assumption: EBIT (w/o debt) x 6. = Net Income, I assume depreciation is roughly similar to capex. Depreciation and maintenance capex are similar. **Look out for when you have a cash-eating business and depreciation eats up more than capex. Deduct when capex exceeds depreciation.**

No catalyst

Special situation: always has a catalyst. Sometimes they are so cheap that eventually the market will get it right. Because I am not as diversified, I can pick and choose. *Rich Pzena* would rather have 30 or 40 stocks rather than concentrating. Hopefully, I can give you tools to discern better choices from Rich's portfolio.

Boeing is going to earn $5.50 per share normalized in five years so it is trading 5-7 times now.
The 8 times company might be better than 6 times company because it earns higher returns on capital. I would rather own the higher return business all things being equal. How much assets are being used to generate your returns.

$5.00 Normal Earnings		
$50 Capital Basis	vs.	$70
Thus 10% ROIC		7%

Problems with EBITDA. DA --- ignores capex.
EBITDA analysis is often used to justify high price because money is cheap. **Review the negatives of EBITDA.**

How to determine a purchase or value an investment

EBIT/Assets

EBIT/Tangible Assets - (WC plus FA --don't care about historical assets).

How much money earned on the pre-tax money on the net tangible assets (exclude Goodwill)

The money you have to lay-out: net avg. working capital + fixed assets (assume no debt) then exclude net cash (since it is not needed in business). The tangible assets because these are the assets I have to replace--exclude Goodwill (price over the net value of the business).

Be conservative on everything, especially return. On the margin, how much capital is needed to put in to earn a return?

Borrow money at 10% and earn 25% pre-tax yield--I would want to own that spread: $1.00 yields 25 cents. On the margin when I open a new business: I put out working capital, FA.

Read Buffettology--How to look at Return on Capital. By using current return on investment capital. Beware that this doesn't necessarily mean incremental investment will earn the same rate of return. Think through assumptions.

High returns on equity imply a strong franchise. *Warren* found a few businesses that didn't need to spend their retained earnings upgrading plant and equipment or on new-product development, but could spend their earnings either on acquiring new businesses or expanding the operations of their already profitable core enterprises. Is growth financed internally or from additional infusions of capital?

EV/(EBIT - maintenance Cap-ex is the pre-tax owner's return you get in the business.)

Study EBITDA and its weaknesses.

If *Coke* is expanding its business, then will *Coke* get the same rate of returns. *Coke* expands. If I went into the business, the returns would be much lower. Will increased investment get you the same returns? Be conservative in your assumptions.

Use pre-tax borrowing costs and pre-tax returns--be consistent.

Use a margin of safety in case you are wrong. Make assumptions and only bet on the ones where there is a huge disparity between price and value. If you had all the answers, there wouldn't be a game. Behavioral Biases: people get too emotional and dislike uncertainty.

If *Aetna* doesn't do well and earns $3.50 instead of $5.00 in two years, then the stock doesn't go down much.

Be defensive in buying 50 cents and 60 cents dollars.

Rich, a man with a hammer, he looks in the box for a turnaround.

Bill Miller who bought *Amazon* is willing to make more uncertain assumptions. A lot of people think they are buying something cheap due to the future growth.

Understand ROIC.
Quick and dirty: Take a look at net tangible assets. Assets - Goodwill = tangible assets
ROC. Return on $ invested in business.

EBIT/EV: Return on money put into the business. EV = (Debt + Mkt. Cap.) - excess cash
($500 mkt. Cap + $200 debt) - cash =
Use face value of debt. In distress situations you might want to use market value of the debt.

EBIT/EV = 100 million/$500 million = 20% pre-tax return or pre-tax yield. Cheap? Is the $100 million stable and growing. Then it is cheap.
$500 million = $300 million for equity ad $200 million for debt.
Look at real EBIT, which means depreciation - capex (add or subtract from depreciation).

20% pre-tax or 12% after-tax of 8 times earnings. Now 10 year bond is yielding 4%, but use 6%.

Pay 20 times or a yield of 5% (1/20), I better be confident of growth. High quality franchise, in what content.

Above is a simple and important point.
I won a proxy fight and the company had 9,000 employees that were depending upon me. I had to look at acquisition opportunities to make the company viable and profitable.

Investment bankers: borrow at 8% after tax that is 5% and you pay 18 times earnings for this business and it will be non-dilutive and it will add to your EPS.

Pay 9 x EBIT for this business. Investing in an asset that yields 9% and borrowing at 8%, so spread is 1%. Earning $1 while paying $9.00 or 11% and borrowing money at 10% so 1% spread or 27 cents per share in extra earnings. Borrowing at 10% in money that is not locked in while earning 11% that could go to 14% or 8%. No margin for error—no *Margin of Safety*.

They (Inv. Bankers) gave me a 100 page book, but when you boil it all down that is what I saw. K.I.S.S

We eventually bought something that yielded us $80 million for $400 million. EBIT looked like $55 million, but the company had built a whole new plant and it was operating at 20% of capacity. A 50 year life of plant, so no new investment. So If I added back depreciation I picked up another $25 million so $55 + $25 = 80 million. 20% pretax return.

$80/$400 purchase price or 20% yield. Start to look at the world in a simple, direct way.
Have them summarize their bottom line:

- Is the business growing?
- What is your return on capital?

Our holding period is 6 months to 2 years--we will look at many stocks - 30 stocks but only buy 1 of them.

EBIT multiple instead of an EBITDA multiple. EBIT to be Operating earnings before taxes is a good number. Conceptually, get back to the real EBIT. Decide the maintenance CAP-EX.

Value Investors:

Bill Miller will buy Amazon because he is willing to make projections under greater uncertainty.

Understand **ROIC.**
EBIT/EV is the return on $ invested in the business.
EV = Net Debt + Market Capital Minus Excess Cash. EV = ($500 + $200) - $100 = $600

EBIT/EV= $100/$500 or ($200 mil. for debt + $300 mil for equity capitalization) = 20%(is it stable or growing?).

20% pretax then multiple of 0.6 (1 – 40% tax rate) = 12% after-tax--P/E is 8x. Now 10 year bond is 4%, but use 6% for a more realistic hurdle rate.

20 P/E = 5% yield. Rarely would Joel buy such a multiple but if the growth was strong and he was very confident of growth. The company has a high quality franchise in what context.

Magna Auto - a Spin-off

To buy a business--look at the enterprise value first.
Some companies can carry huge leverage such as equity of $1.00 and debt of $9.00 or EV of $10
Then EV = 12 as equity goes to $3.00. Equity tripled.

Boeing's unfunded Pension Fund: $30 billion. With $15 billion unfunded so at a 50% tax rate $0.70 a year off his projections.

Joel sees things from 40,000 feet. He is a generalist

Duff & Phelps: An example of a strong franchise.

Growth but tangible assets not growing! Earnings are used to buy back stock if the stock is cheap enough. Spin-off in 1994 at $13.00 per share. Self-generated growth with high ROIC.

In 2 years: $2 million in expense gone. So Net income plus $2 million to get normalized earnings.

Market Share: S&P with 40%, Moody with 40%, D&F with 10% and others with 10%.
BAD: 2 big competitors
GOOD: High ROIC.
$3.16 in earnings and $50 stock = 16 times.

EBIT
+ Depr.
-Capex
+$2 million with no more expense. (look at notes to financial statements)

$31.6 million x 0.6 = $18.2 in Normalized Net Income/5.1 FD Shares w/o buy-backs.
$3.60 per share or 13.2 xs
20% - 24% EBIT growth.
Margins
Buy Backs of 370,000 shares net per year?

$28.4 EBIT in 1998. Bad, good, great. EBIT is 24%
30% Net Income --Shares being bought back
8% -- 5 years growth so $41.7 million plus $2 million no longer paid out = $43.7 pretax x 0.6 = $26.3 x 13 multiple = $341 million then divide by 3.5 million shares = $99 stock in 5 years. VERY conservative assumptions. $1 earned for $13 paid = 7.8% yield that is likely to grow rapidly vs. 7% yield on 10 year bonds.

With 13% growth then $122 per share in 5 years at same multiple
With 20% growth then $164 per share in 5 years at same multiple

Pick low multiple to give yourself adequate margins of safety.

- **Greenblatt owns 6 to 8 positions held 6 months to 2 years.**
- **Most of my work time screening ideas-reading the paper. The value investor club. We wanted to find good ideas. If we got one or two ideas a year, it would be a big home run for us.**

Screening ideas
Stock screens

A year later, Duff and Phelps was bought out by Fitch.

Notes:

Efficientfrontier.com A good scientist takes nothing for granted. Write about finance - people ask you to manage their money.

Requirements: Math, History of markets, Toughness to do the right thing, and Independence of Thought.

H&R Block.
AIG
SO
Freddie - Mac
YUM

Millea Holding, AVX
Petsmart, Covance
Prioty HC
PXRE Co.
Petrocorp
Rich Electric

Royce RYOTX

END
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Greenblatt Class #5

October 01, 2003

Next week *Special Situations*. Class off Oct. 15th. Presentations on Oct. 22nd.

Commodore International (CBU)

Company X **In Millions**					
	9/30/84	**Incr./Decr.**	**9/30/83**	**Incr./Decr.**	**9/30/82**
Net Sales	244.2	16.67%	209.3	102.61%	103.3
Accounts/Rec.	254.7	34.12%	189.9	5.50%	180
Inventories	437.4	9.71%	398.7	22.00%	326.8
				Big Sales	
Inventories					
Raw Materials & WIP	243.2	-10.03%	270.3		
Finished Goods	194.2	51.25%	128.4		
	Sales up but finished Goods up bigger not selling as well				
Company X	**Commodore Computer**				
In Millions					
	12/31/84	**Incr./Decr.**	**12/31/83**	**Incr./Decr.**	**12/31/82**
Net Sales (6 mos.)	582.9	**-9.02%**	640.7	129.15%	279.6
Accounts/Rec.		*divergence*			
Inventories	449.3	**56.17%**	287.7	130.34%	124.9
Inventories		After $30M	Write-down		
	Goods Bad				
Raw Materials & WIP	204.7	33.62%	153.2	123.65%	68.5
Finished Goods	244.6	**81.86%**	134.5	138.48%	56.4

A very powerful tool to use to detect problems: Study relationships between Sales and A/R & Inventory. Compare growth in Sales, Inventory and A/R with each other. Delve deeper when you note a divergence.

Inventory is up but not finished goods-so company is stocking up on goods. Big disparities are bad.

Note that in example above: Sales down 9% but finished goods up 82%. Goods not selling. By keeping costs in inventory and not writing down immediately--earnings are artificially high.

Thorton O'Glove: Chapter 8, *Two Key Ratios: A/R and Inventories,* in Quality of Earnings.

The best method I have ever discovered to predict future downwards earnings revisions by Wall Street security analysts—is a careful analysis of A/R and inventories.

The analysis of Sales and A/R may provide a clue as to whether a company is merely shifting inventory from the corporate level to its customers because of a "hard sell" sales campaign or costly incentives. In such instances, this type of sales may constitute "borrowing from the future." Within this context, it is important to note that in most instances, a sale is recorded by a company when the goods are shipped to the customer.

Also, there is the added cost to the company in carrying an above-average amount of A/R.

Example in table above, *Commodore International (CBU)*. Note that in 09/82 sales advanced by 102%, while A/R rose by only 5.5%, an indication in a surge in demand. But then in 09/83 and 09/84, CBU's A/R rose 2x as fast as sales. This is a clear sign that CBU's retailers were moving out its products at a slower than usually pace, while the company was shoveling out its old products in what looked like an attempt to dump them on the market in advance of new introductions. In this regard, inventories rose at a slower rate, they were worthy of a more detailed analysis.

What is known as a **"negative inventory divergence,"** meaning that while the raw materials and work-in-progress components of inventories declined, finished goods increased substantially. At *CBU*, raw materials, in this case electronic components, were being assembled into microcomputers and related gear, which despite an intense sales campaign were piling up as inventories of finished goods. Given the relationship between these two sets of figures, it isn't difficult to see that the dollar figures for the finished goods component of inventories on Sept 30, 1984 were too high.

The six months ended Dec. 31 figures had been released by then, showing earnings of $1.00 per share against $2.41 for the same period the previous fiscal year.

What we see in the table above is a huge buildup in inventories, probably older micros the market simply couldn't or wouldn't absorb. For the six months ended Dec. 31, 1984, the company's sales declined by 9 percent, while inventories rose by 56.2 percent. Note that the finished goods inventory increased by 82 percent, while raw materials and work-in-process rose by only 34%, indicating that CBU was still experiencing a backup of finished goods inventory. Expect recurring and large inventory write-downs.

Higher trending inventories in relation to sales can lead to inventory markdowns, write-offs, etc. In addition, it is important to note that **an excess of inventories, time and time again, is a good indicator of future slowdown in production.** Within this context, it is important to analyze the components of inventories. If the finished goods segment of inventories is rising much more rapidly than raw materials and/or work-in-process, it is likely that the company has an abundance of finished goods and will have to slow down production. Akin to A/R, bulging inventories are costly to carry.

Compare with the same reporting period in previous years. Be especially watchful in those industries subject to rapid changes in products and taste.—high fashions, seasonal goods, or high tech.

Fast growing industries are places to watch-out for. "Nothing recedes like success."

A/R and inventory analysis in relation to changes in sales is a great barometer for forecasting negative earnings surprises.

"Positive inventory component divergence," meaning simply the reverse of some of the illustrations described so far, which were negative inventory divergences. The positive version transpires when the raw materials component of inventories is advancing much more rapidly than the work-in-process and finished goods inventory (which declines) while ordering raw materials in larger amounts (so this component of inventories is enlarged). This, of course, is good news, and would trigger bullish impulses.

The Best Short Ideas: 1. When the company is a Fraud
2. When the company will run out of money

Both have catalysts.

Greenblatt was short *Bally Entertainment* at $10 and it was at $2.00, Bonds were $15 cents on the dollar. Clearly worthless in a static situation, but smart money bought up the bonds cheaply and changed the capitalization of the company. He covered at $5.00. Things change.

Sunbeam Corporation

	Dec. 28, 1997	**Dec. 29 1996**
Sales	1,168,182 up 18%	984,236 (3.2%)
CGS	837,683 Down 5%	900,573
Restructuring Costs	---	154,869
A/R	295,550 up 40%	213,438 (1.3%)
Inventories	256,180 up 58%	162,252
Net Earnings	109,415	-228,262 Big Restructuring Chg.
CFO	**-8,249 Big Discrepancy w/ NI**	14,163

Often revenue that is recognized in a premature or fictitious manner is not collected. Accordingly, a balance sheet account, other than cash, will increase as this revenue is recognized. Typically that balance sheet account is accounts receivable. Unusual increases in accounts receivable commonly accompany questionable revenue, whether due to uncertainties about the earnings process or about collectibility. *Sunbeam* used aggressive accounting tactics, to boost revenue in 1997. In a bill-and-hold arrangement, while recognized, revenue collection is delayed. Accordingly, one should see an accompanying increase in A/R.

Note the significant buildup in A/R as the company became more aggressive in its revenue recognition policies. An increase in A/R that is faster than revenue than an increase in revenue is not a problem if it is for only a limited time and does not result in a collection period for A/R that is significantly at odds with the credit terms being offered.

Barrons Article in 1997:

Sunbeam wrote down inventory to $0 from $90 million for product lines being discontinued and other perfectly good items so its future profits would grow. Even if *Sunbeam* realized just 50 cents on the dollar by selling these goods in 1997, that would account for about a third of last year's net income of $109.4 million. They over-reserved to add to income. $25 million added from drawing down reserves.

Pre-paying expenses not a problem (Barron's incorrect). However, note impact of shifting expenses from the future to the present.

They capitalized current expenses to make an asset account on the balance sheet.

Sunbeam stuffed inventory. "Bill and Hold" sales and never even shipped.
Sunbeam reported "$109 million in earnings" but had a -$8.2 million cash drain.
Sunbeam also extended its qtr. From March 28 to March 31 to add 3 more days of sales to its qtr. End.
When the Barron's story came out, *Sunbeam* was trading at $22.00 or 16x "fake" earnings.

The Financial Numbers Game, Charles W. Mulford.

Sunbeam intentionally overestimated the costs of its restructuring, leading to understated results for 1996 and higher results for future years.

By recording unusually high restructuring costs, the company was able to effectively move future-year expenses into its 1996 results. For example, among the costs included in the restructuring charge were reserves or liabilities for future environmental and litigation costs. To the extent that these costs were normal operating expenses of future years, they should not have been included in a charge taken in 1996.
Thus, by recording an overly large restructuring charge in 1996, the company was able to boost results for 1997 and beyond.

Sunbeam boosted 1997 revenue through "bill and hold" practices, where it sold products to customers with an agreement that it would deliver them later. The company recorded as revenue what were effectively consignment sales given the liberal return policies that were instituted. Sales were contingent not final.
Bill-and-Hold Transactions. In some sales, a valid order is received and the goods are complete and ready for shipment. However, for various reasons—for example, a lack of available space or sufficient inventory in distribution channels—the customer may not be ready to take delivery. A bill-and-hold transaction is effected when an invoice is issued, but the goods in question are simply segregated outside of other inventory of the selling company or shipped to a warehouse for storage, awaiting customer instructions.

Sunbeam employed extensive use of bill-and-hold practices as a sales promotion campaign. During 1997 the company sold barbeque grills to retailers at bargain prices before the normal buying season for such products. *Sunbeam* was using the deals to recognize revenue prematurely, borrowing sales from the first and second quarters of 1998.

Criteria for Recognizing Revenue in Advance of Shipment

1. The risks of ownership have passed to the buyer.
2. The customer must have made a fixed commitment to purchase the goods, preferably in written documentation.
3. The buyer, not the seller, must request that the transaction be on a bill-and-hold basis. The buyers must have a substantial business purpose for ordering the goods on a bill and hold basis.
4. There must be a fixed schedule for delivery of the goods. The date for delivery must be reasonable and must be consistent with the buyer's business purpose.
5. The seller must not have retained any specific performance obligations such that the earnings process is not complete.
6. The ordered goods must have been segregated from the seller's inventory and not be subject to being used to fill other orders.
7. The goods must be complete and ready for shipment.

In 1996, including the effects of the restructuring charge, *Sunbeam* reported a pretax operating loss of $285.2 million. In 1997, before restatement, the company reported pre-tax operating income of $1999.4 million.

Once results for the year were restated to remove the effects of the overly large restructuring charge and to adjust for aggressive revenue recognition practices, *Sunbeam*'s pretax operating profit for 1997 was reduced too $104.1 million.

WorldCom just capitalized all expenses.

When Recs. and Inventories growing faster than sales--a red flag. Look further to see what inventories are made of.

Buffett is now (Oct. 2003) borrowing in the bond market to buy Clayton homes.

Duff & Phelps has 100 ROIC.

SEE's Candy: Value a business within your circle of competence.

Get an idea of broad valuation thoughts, how to think about the market, and then how to find opportunities.

Next week, special situations.

Duff & Phelps had 100% ROIC—a great business. A good business throws off cash, while a bad business consumes cash—Textile business.

Buffett could lock in the spread between LT and ST Interest rates.

Buffett uses EBITDA – Maintenance and Growth Cap-ex. 6% yield gives you a $1.00 for each $16.60 paid. How secure is the growth, how secure is the dollar?

Buffett likes high ROE return companies with predictable growth.
Coke had grown consumption for 110 years. Per capita consumption going up. He has confidence about what *Coke* and Gillette will do in 10 years. Keep it simple. Business, People, Price
Franchise value—Hershey Bar: would people pay 5 cents more for it.
See's candy is perceived as the best candy. A castle with a growing moat.
Wrigley's: tastes, service and availability.
If you only had 20 punches, you would think carefully about what you are doing.

Study *Progressive Insurance*

Any good investment idea can be phrased in a paragraph.

GOAL of this course:

1. **Know how to value a business within your circle of competence. Understand particular industries. You don't have to know a lot of things, know a few things.**

2. **How to view the market, Mr. Market.**

I understand retailers. Can they generate enough cash to grow internally? Discount the cash back.

Internet companies trading at $2.00 with $3.00 in cash per share and below cash, earning money.

Page 37: EBITDA is a poor yardstick, it way overstates cash flow. Use EBIT minus maint. Capex..

___ Mental Health really earning $2.3 in free cash due to amortization. Amortization a real non-cash expense but economic goodwill not declining.

The hard part is to sit on my hands waiting for an opportunity—3 to 6 months and the market usually gives you opportunities. Patience

Bad business: must spend Capex to keep up with the Jones. No competitive advantage. Must spend money to stay in place. Time is the friend of a good business, the enemy of the bad.

Beta does not equal risk. Business and knowledge reduce risk.

80% to 20%----10 better investments.

Greenblatt: Don't assume much. Common sense about what I understand.

Margin of safety: $8 to $12 range of value, $10 with conservative assumptions—buy at $5.00 to $6.00.

Greenblatt: I have looked at a lot of stuff. 25 years—seen industries before underlying work. Check the: comparables. Assumptions remain correct adjust valuation. Less margin for error, more work.

I know my circle of competence: what I can assume and can't assume.

When to sell: Thesis is correct. Selling—taxes are LT, world of alternatives. Now 85% but other opportunities are 50% at a discount.

People are very emotional so the market will swing to extremes.
During the Internet bubble, there were many bargains in prosaic businesses. What would happen when the bubble bursts? I am better at valuing companies than market timing or knowing the level of the market.

I don't know a lot—a valid assumption. I do have common sense about what I can and can't predict. I don't know how much the company is going to grow its sales, earnings over the next five years. If I think it is worth $10 in broad brush strokes, and I can buy it at $5 or $6 per share. I won't get jerked out of it at $4.00. Right more than you are wrong. Back of the envelop calculations.

Greenblatt: If there are questions I can't answer, I skip it. If I buy 1 that works, it doesn't really matter if I let the other 9 go. I look at a lot of stuff, but I only care about what I buy working out. I research the company carefully. I have pretty good instincts and a short hand for what I am looking for. I know the metrics underlying the business. Sometimes we do our work fast and then continue.

As long as you buy right, the selling is easier. **I am constantly looking for opportunities.**

Have we analyzed the industry correctly? Keep re-evaluating. The rest of time is spent justifying.

Next week, we will look at special situations. Read my Book, <u>You Can Be a Stock Market Genius</u>. When the spread is so huge, I feel comfortable looking at it.

**KNOW: return on capital, ROE, ROA.
ROC = ROE/1 + DTE or LT debt to capital. ROC = ROE x (1 – DTC).

Owner earnings: NT + Depreciation – Maint. Capex.

www.sherlockinvesting.com/articles/capitalism.htm

Graham would buy Net/Nets: CA – all liabilities. Stock at $4.00 but Liquidation Value is $6.00—price is below liquidation value. A 20% annualized return with quick turnover by buying "cigar butts."

Buffett would say: better to buy a fair price for a great business than a great price for a poor business. Buy business at $5 in a business worth $10, but $10 is eroding to $7.00.

Buy a stock worth $7.00 at $5.00, but value is growing to $10.00 then $12.00.

END

Greenblatt Class #6

Oct. 08, 2003

Next week *Special Situations*. Class off Oct. 15th. Presentations on Oct. 22nd.

The purpose of the assignment is to test your <u>valuation skills</u>. Look at special situations. Type single space with back-up and comparative analysis. $20 million market cap and US based. Greenblatt wants to see your reasoning needed to reach your conclusion—your thought process.

No P/E or Price/Sales recommendations.

- Use **EV/EBIT** Analysis. Why is it cheap? Relative value analysis.
- Discounted cash flow process and normalized earnings analysis.
- Risk free rate, Return on capital employed, Working Capital and Fixed Assets.
- Is it cheap – decent. Justify it on an absolute basis.
- He prefers cheap stuff in good business—cheap and good.
- Is it a value destroyer? A Capital destroyer.
- Define your terms – Free Cash Flow.
- Pre-tax and after-tax returns

(1) Is it cheap and
(2) a good business?

Analyze Cash Flow Statement

- Insider Activity. Are they buying or selling stock?
- Growth rates – why chosen? Why that rate.
- Pick good comparables--
- Pissing cash away—then what are they doing—convince me why they make sense.
- 2 different businesses-then must do sum of the parts analysis.

Understand LBO modeling

Nice cash earnings but they are doing bad things with the cash flow? Buying stock at low prices?
Do some LBO modeling. Explain your assumptions.

Rest of semester – current.

2 weeks – Risk Arbitrage and Activist Firm: Eric Rosen.

The Spin-off community is small. You can make 10 times your money. Liquidity constrained.

Relative and absolute returns with micro-cap stocks. Very lucrative—get rich. Less than $150 & $200 million market cap. Small group cycles with new people. The old people get rich and become liquidity constrained.

Learn the trade. Work, patience and where to look. A CRAFT

Types of Divestitures:

Restructuring Shareholders' Claims. The most common methods for creating new classes of stock include corporate spin-offs, equity carve-outs, and tracking stock.

In a pure **spin-off**, the company distributes to its shareholders new shares of stock representing 100% of ownership of a company subsidiary. After the distribution, the subsidiary trades as an independent public company, while the original parent company shares become claims against the firm's remaining assets. There is a complete physical and legal separation of parent and subsidiary operations. Small cap spin-offs have higher returns than the market and larger cap spin-offs.

Tracking stock, in contrast, represents a "pure" claim against the profits generated by a specific segment of the firm's operations—but the segment continues to be part of the consolidated business entity. New shares are distributed pro rata to the shareholders. These new shares represent a 100 percent claim on the profits of a subsidiary; the parent company shares become a claim on the rest of the business. Alternatively, the new shares can be sold for cash in an initial underwriting or issued as payment in an acquisition. Tracking stock produces the same equity structure as a spin-off, but the firm's corporate and organizational structure remains unchanged. One Board Of Director, one Corp. Charter, etc. The value of a tracking stock depends upon corp. overhead allocations—there must be large synergies between the firms.

In an equity carve-out the firm sells a portion of the stock in a subsidiary for cash, usually in a public offering. The main difference from a spin-off, is that carve-outs bring in new capital to the parent company. Equity carve-outs increase shareholder wealth. Also, it results in new shareholders. Carve-outs are more expensive to implement and subject to more securities law disclosure requirements. Carve-outs also have positive cash-flow effects vs. spin-offs. Many firms look to equity carve-outs as a means of reducing their exposure to a riskier line of business.

Riskier and more highly leveraged firms choose to go the spin-off route.

Voluntary liquidations or bust-ups

If the market value of the firm's assets exceeds the value of the firm's equity, a liquidation may need to be considered. This is more likely when the stocks prices of other firms in the same industry are not also depressed.

***SEARS* CASE STUDY (SPINOFF)**

Page 1- *Sears—Dean Witter*, sell *Allstate*. 20% stake sold to the public. Raise money, then 80% spun off. Parent gets no money.
Sell 20% of *Allstate*-What does it mean for SSI.

Distribute 20% so subtract 80% from *Sears*. Spin-off strengthens the ability to use stock compensation. Does $28 make sense on a stand-alone basis? Parent company wants to retain 80% of spin-off so it can use the Cash flow for consolidated tax treatment.

Tracking Stock- Legal entity – participating in income stream but not actual ownership

Allstate- spin it off to showcase the value of *Sears*.

Understand big picture.
1 share of *Sears* = 0.4 *Dean Witter*.
After sale of 20% *Dean Witter*
$35 = $14
$39 of *Sears* and $14 of *Dean Witter*---*Sears* at $53

Not a public market for *Allstate* right now, but it has a public market value. is at $28 and you own 380 million shares. Then subtract that from *Sears* and get where *Sears* is trading separate from *Allstate*.

PARENT: *Sears, Roebuck & Co.* (S) SPIN-OFF: *Dean Witter, Discover & Co.* DATE: 7/13/93

Sears wanted to turn itself into a pure play in retailing.

June 30, 1995 spun off the last of its big subsidiaries: *Allstate* Corp.

Sears valued at $17 a share in January 1993, now trades at $54, up 300% in 3.5 years.

Sears' shareholders received .40 shares of Dean Witter for each share of *Sears*' common stock they held (Dean Witter had completed an IPO on March 1, 1993 at $27 a share.

Allstate was spun-off in June 1993 with the issuance of 439 million shares at $27 each. *Sears* spun-off the remaining 80% of *Allstate* Insurance in June 1995.

Sears was merely selling or distributing businesses it already owned. By taking *Sear's* stock price and subtracting the market value of its remaining stakes in Dean Witter and *Allstate*, a value for the rest of *Sear's* assets, primarily the department store, could be calculated.

20% stake in *DW* at $27 per share. DW at $37 per share; *Allstate*'s stock was around $29 per share; *Sear's* stock stood at about $54 per share, but $27 plus $37 = $64. So 1 share of *Sears* would get .40 of DW or $15 worth of DW stock. $54 - $15 = $39 for the remainder of *Sears* which owned 80% of *Allstate*. If you owned 1 share of *Sears*, you owned 1 share of *Allstate* —both had 340 million shares.

$39 of total *Sears* minus $29 of *Allstate* nets to $10.00 for *Sears*' Retailing. Take out $2 or $3 for *Sears* Mexico and $2-$3 for Coldwell Banker, which leaves you approximately $5.00 per share or $1.5 billion for the retailer with $27 billion in sales. It is an almost debt-free retailer with huge real-estate opportunities.
$5.00 per share with $79 per share in sales and with no debt. A lay up!

Comparison with *JC Penny* showed sales of $78 per share and a market price of $44 per share or 56% of sales vs. 6% for *Sears*. 8x cheaper. **A HUGE disparity!**

Looking at what insiders are doing is a good way to find attractive spin-off opportunities. Insiders may benefit if a spin-off trades at a low price. Shares of a spin-off are distributed directly to parent-company shareholders and the spin-off's price is left to market forces. It may be in management's interest to have the prices trade lower so as to get a lower price for incentive options.

Internet stock-like *Allstate*-is the price sustainable?

Know differences between tracking stock and spin-offs.

Not a natural buyer for this conglomerate here: *SEARS*. Weakness in *Allstate* is shielding the value in *Sears*? What is the reason for the spin-off?

Using the price of $53.125 for *Sears* After 20% sale of Dean Witter, $35.25 for DW, then *Sears* will drop by $14 to $39 per share. *Sears* owns 340 million shares of *Allstate* and *Sears* has 340 million shares outstanding.

Barrons article mentions *Sears* analysis by Mike Price on July 5, 1993.
$1.7 Billion market cap for *Sears* with 27 billion in sales. NO DEBT. 6 cents for *Sears*' $1.00 in sales.

Sears is a crappy retailer so compare with *JC Penny* which has $10 billion in LT debt. $2.4 billion market cap. 12.4 billion EV for Penny.

Company Comparable	**Sales**	**Market Cap**	
Sears	$1.00	$0.06	
JC Penny	$1.00	$0.62	10x more!

So, if *Sears* was comparable then it would trade at $50.00—a ten bagger!

BIG GAP between $5.00 and $50.00. Why did this occur if the market is efficient?
These things just happen. Stuff happens. Greenblatt sold *Sears* off at $30 to $35.
In the special situation world some things are slam dunks. Be aware that this can happen—a slam dunk laid out for me by Mike Price.

Stub stocks.

NOTES from CLASS

People can be stupid: This is an extreme example. *3-Com----Palm*. You could create the rest of *3-Com* for $17—Worth $10.00 paid $17.00 for a $10 value which had $7.00 in cash.

3Com at $60 and *Palm* was at $180. *3Com* owned *Palm*. For every share of *3Com* you owned, they owned $77 of *Palm*. You could create the rest of *3Com* (no debt) for -$17 per share ($60-$77). I could buy that $10 per share of which $7.00 in cash while being paid $17.00. I am short *Palm*. Stuff could happen—the stock is called in on you.

***3Com*/*Palm* Example from <u>The Intelligent Investor</u> Page 479-480**

On March 2, 2000, the data-networking company *3Com* Corp. sold 5% of *Palm*, Inc. subsidiary to the public/ The remaining 95% of *Palm*'s stock would be spun off to *3Com*'s shareholders in the next few months; for each share of *3Com* they held, investors would receive 1.525 shares of *Palm*.

So there were two ways you could buy 100 shares of *Palm*: By trying to elbow your way into the IPO, or by buying 66 shares of *3Com* and waiting until the parent company distributed the rest of the *Palm* stock. Getting one-and-a-half shares of *Palm* for each *3Com* share, you'd end up with 100 shares of the new company—and you'd still have 66 shares of *3Com*.

But who wanted to wait a few months? While *3Com* was struggling against giant rivals like Cisco, *Palm* was a leader in the hot "space" of handheld digital organizers. So *Palm*'s stock shot up from its offering price of $38 to close at $95.06, a 150% first day return. That valued *Palm* at more than 1,350 times its earnings over the previous 12 months.

That same day, *3Com*'s share price dropped from $104.13 to $81.81. Where should have *3Com* have closed that day, given the price of *Palm*? The arithmetic is easy:

- Each share of *3Com* share was entitled to receive 1.525 shares of *Palm*
- Each share of *Palm* closed at $95.06
- 1.525 x $95.06 = $144.97

That is what each *3Com* share was worth based on its stake in *Palm* alone. Thus, at $81.81, traders were saying that all of *3Com*'s other businesses combined were worth a negative $63.16 per share, or a total of minus $22 billion! Rarely in history has any stock been priced more stupidly.

But there was a catch: Just as *3Com* wasn't really worth minus $22 billion, *Palm* wasn't worth over 1,350 times earnings. By the end of 2002, both stocks were hurting in the high-tech recession, but it was *Palm*'s shareholders who really got smacked—because they abandoned all common sense when they bought in the first place.

Further discussion: **www.nber.org/papers/w8302**

Be aware if the Spinoff creates a taxable event. Be aware of the tax ramifications.

How to do stock screens—in another class. ***Form 10 for Spin-offs***. Spin-off Calendar.

Announcements occur 6-9 months before for spin-offs.

The intelligent investor excels by making decisions that are not dependent on the accuracy of anybody's forecasts, including his or her own.

Yesterday's losers are often tomorrow's winners. Look at the list of new lows for the past 52 weeks.

Spin-offs have done very well and so have the parents. Spin-offs beat the market by 10% a year. I hope you can do better. Spin-offs are a happy hunting ground. After I wrote this, spin-offs did not do well. People say after 6 months, "Oh, this doesn't work well." They quit.

I will mark the spin-off dates on my calendar. Bottom line I do valuation work. **Bottom-line I try to do valuation work. I buy $1.00 for $0.50 to $0.60.**

Risk Arbitrage and Merger Securities

Paramount Communications, Inc./ Viacom Case Study
Sept. 1993, *Viacom* wanted to purchase Paramount Communications. *Viacom* announced a merger with Blockbuster Entertainment. *Viacom* purchased Paramount's 50.1% of stock. The method of payment for the remaining 49.9% of Paramount?

Back-end payment for each share of Paramount consisted of *Viacom* common stock, exchangeable subordinated debentures of *Viacom*, securities known as *contingent value rights* (one for each share of *Viacom* common stock received in the merger, (4) three-year warrants to purchase *Viacom* stock at $60 per share, and five-year warrants to purchase *Viacom* stock at $70 per share.

Most of Paramount shareholders were of interest in owning the shares of an entertainment conglomerate or the stock of the takeover candidate so the other securities would have little interest.

What is all the stuff in the Proxy? 3 page section called "Paramount Merger Consideration." Opportunity: combining the purchase of one share of *Viacom* common stock with the purchase of one contingent right (*CVR*) created a unique investment opportunity.

Contingent-value right was a security issued by *Viacom* to help guarantee the value of the back-end securities that Paramount shareholders were to receive in the merger.

If *Viacom* traded below $48 on year after the completion of the Paramount merger, *Viacom* would make up the difference through a payment to holders of the *CVR*s. If *Viacom* traded at $44 at the one year anniversary of the merger's close, *Viacom* would pay $4 for each *CVR*. So buying on *CVR* with each share of *Viacom*, an investor would ensure that the combined value of the two securities would be at least $48 in one year.

If *Viacom* traded at $55, even better than the guaranteed $48 price. Since, shortly after the merger was completed, one *CVR* and one share of *Viacom* stock could be purchased for a combined price of $37, a guaranteed price of $48 in one year looked pretty good—a 30% annual return with little risk and no upside limitation.

Viacom limited the payout on the *CVR*s to a maximum of $12; *Viacom* could fall to $25 before an investor who bought both the *CVR* and *Viacom* stock for a combined $37 would lose money. *Viacom* could extend the payment date of the *CVR* but only in exchange for a payout larger than $12.

It pays to check out <u>merger securities</u>! Only invest in the ones that are attractive and that you understand.

Five year warrants at a price of $70 for a share of *Viacom* that could be paid with $70 face value of one of the other Paramount merger securities.

Which merger security? The exchangeable subordinated debentures I mentioned earlier.

I could buy $70 of face value of these securities for only $42.00 (60% of $70). I would have this right for five years. *Viacom* was at $32. **The right to buy stock at $42 for five years was a lot more valuable than the right to buy stock at $70.**

Buying both the warrants and debentures was a winning trade.

Notes: This is like a LBO. *Viacom* borrows a lot of money to buy Paramount. Front-end is in stock and the back end with junk securities.

Management incentivized with a lot of options.

Viacom at $36 and Warrants for 3 years at $70—but 3 years is a long time and the situation is very leveraged.

Viacom - $2 billion mkt. cap and $8 billion of debt so EV of $10 billion. The value of assets goes up 20% over 3 years, but the equity has been doubled. Leveraged equity. But risks require a smaller position.

Warrants are a price to buy stock at a certain price for a certain time. When you exercise these warrants you give the company $70.00. Options are among shareholders. Page 16, use junk in 3 to pay for *Viacom*. Take

merger securities—debentures, 60 cents on the dollar, and put them in at face value for the stock. Pay 60 cents for debentures, but I get $1 of *Viacom* stock.

60 cents bonds for five year warrants at $70 so 60% of $70 = $42.00

When you see some weird securities falling off the back of the truck, TAKE A LOOK!

Now, not as many merger securities. Now there are many *Host*ile mergers. There are tons of spin-offs. Value stock at low prices and absurdly high prices for Internet companies—inefficient markets. There are plenty of opportunities all over the place.

In March there were many opportunities. Last Oct. 2002, the prices were very low.
There is so much emotions. You usually only have to wait about 6 months for opportunities. Just sit on your hands and wait. Look for weird securities, who is in charge? Look at the context. Follow the money.

$30 million of the 3-yr. warrants.
$80 million of the 5-year warrants.

A fallacy in risk arbitrage: no analysis of worse case scenario.
S10 take over, trading at $9.5 so 50 cents/$9.5 in 4 months so a 50% return annualized. Look at true risk/reward. Make 50 cents minus cost of carry of 17 cents, so 33 cents profit. Stock goes to $4.50 if deal does <u>not</u> go through.

*Host*ile deals are fun.

Pay $80 per share in cash for Paramount on $45 in cash and the rest in equity shares.
Ted Turner paid ½ cash and ½ in securities. Everyone hated the deal, but Turner saw value in the film library.
$40 in cash and $40 paper trading at $20, so purchase an $80 asset at $60.00.

Greenblatt shoots for a 35% to 40% annual return.

Host Marriot/Marriot International

Ex. From Book:

The cream of the business was charging management fees for managing hotels—*Marriot International.* We will spin off the assets that are loaded with debt—*Host Marriot*.

Spin-off the management fee business. 100 million shares outstanding. Stock trading at $4 or $400 million market cap. Mkt. bad for real estate.

Marriot International will back a $600 million line of credit to *Host Marriot*.

No one would want the new *Host Marriot* because of real estate and loads of debt. The selling pressure would be enormous so values would be interesting.

Non-recourse debt so I would have $6 of value after subtracting all the debt.

WHAT I look for:

Institutuions don't want it (and their reasons don't involve the investment merits). Many thought that *Host Marriot* was loaded with unsaleable real estate and crushing debt. Also the size of the company was small—accounting for only 15% of the total value being distributed to shareholders.

Insiders want it-Key! Are the managers of the new spin-off incentivized along the same lines as the shareholders?

Stephen Bollenback would become *Host*'s chief executive. Marriot family would still own 25% after the spin-off.

Investors were interested in hotel management not owning hotels, therefore the sales of stock solely for this reason would not be based on the specific investment merits and therefore, might create a buying opportunity.

A previously hidden opportunity is created or revealed.

Host had tremendous leverage. *Host* would trade at $3-$5 per share but it would also have $20 to $25 in debt per share. Say assets worth $30 per share, so a 15% rise in value of the assets would double the stock (0.15 X $30 = $4.50). For every dollar of debt transferred to the new spin-off company adds a dollar of value to the parent.

Marriot International, the "good" company was on the hook to lend *Host* up to $600 million.

Say what you will about highly leveraged companies, the rewards of sound investing and good research are vastly multiplied when applied in these leverage situations.

Host could be a good pick because:

- Most institutions were going t sell their *Host Marriot* stock Before looking at it, thus creating a bargain price
- Key insiders appeared to have a vested interest in *Host*'s success, and
- Tremendous leverage would magnify our returns if *Host* turned out, for some reason, to be more attractive than its initial appearance indicated.

Identify where you think the treasure lies.
Host Marriot Page 30, last column on the right. $2.6 billion of debt and convertible preferred stocks ahead of the equity.

100 million outstanding shares outstanding. Say $4.00 price or $400 million, so $3 billion valuation.
Most of debt will be in HMA holding ($2 billion of debt). Still $600 million of debt on the parent of Marriot. This debt is only recourse to HMA Holding.

One hotel is the San Fran Marriot--$250 million of debt was non-recourse. Now get worth of that debt.
$6 of value after subtracting all the debt. Anything in HMA Holding is worth over $2 billion. My $6 is in the debt free in parent. The value is probably worth $12 per share if I was right. The key was that the debt was non-recourse.

Buying $4.00 where it is worth $6.00 in the parent with a call on the other stuff perhaps worth $12. I could buy a lot of it because, it seemed very low risk.

Question: When to sell. Bought FL at $10 and now it is $17. Think it is going to $27 in two years. I usually sell based on valuation. I pick my valuation as to how long I wish to wait.

If what I buy works out is OK even if I let another 13 go buy. It doesn't hurt me not to invest. Remember – don't lose money! Patience. Swing at your pitch.

Do my valuation work and if the stock gets cheap enough, especially for a business I like, I will buy if the price gets cheap enough.

Form 10-12 for spin-offs. **10-K Wizard is excellent**. Look for spin offs. Key words-spinoff, distribution etc.

Rights Offerings: a parent company may give its shareholders the right to buy stock in one of its subs or divisions.

When a rights offering is used to effect a spin-off, it is worthwhile to pay close attention. Often used to raise additional capital.

Rights that are not exercised or sold expire worthless after a set time period.

Rights offerings are obscure and often confusing. Throw in the neglect and disinterest displayed by most instit. Investors towards spinoffs, and you have an explosive combination.

A parent will generally distribute to its shareholders rights to buy shares in a spin-off.

At the time of the offering, it is not known whether the spin-off will trade above or below the purchase price set in the rights offering. No need to seek the highest possible price. In a rights offering, since all shareholders of the parent have an equal opportunity to purchase stock in the spin-off—shareholders have been treated fairly and equally.

BARGAIN PURCHASE: the inclusion of oversubscription privileges in a rights offering. The right to buy additional shares if the rights offering is not fully subscribed.

FOLLOW THE MONEY! No matter how a transaction is structured, if you can figure out what is in it for the insiders, you will have discovered one of the most important keys to selecting the best spin-off opportunities.

Shares of a spin-off are distributed directly to parent-company shareholders and the spin-off price is left to market forces. Often, management's incentive-stock-option plan is based on this initial trading price. It pays to check out when the pricing of management's stock options is to be set.

There are few investment areas where insiders have such one-sided control in creating a new publicly-traded company. **Analyze the motives of insiders in spin-off situations.**

Liberty Media/Tele-Communications

This was a 10 bagger in less than 2 years. A right is somewhat like a short-term warrant.
This situation was artfully designed to create the most upside potential for those who participated, while simultaneously discouraging most investors from taking advantage of the opportunity.

Began Jan. 1990. *Tele-Communications*, the country's largest cable operator, announced its preliminary intention to spin off its programming assets like QVC and the Family Channel—assets est. to be worth nearly $3 billion. There was pressure to limit the ability of cable-system operators to own interests in program providers. The goal of the spin-off was to alleviate some of that govt. pressure by separating the company's programming assets from its controlled cable systems.

In March 1990, Shareholders were to receive rights that would entitle them to exchange some of their *TCI* stock for shares in the new company. If a rights offering is structured properly, shareholders are only taxed based on the value of the rights received.

$600 million value of entity to be spun off. *TCI* had a total capitalization of $15 billion ($6 billion of equity value and $9 billion in debt). The size of the *Liberty* spin-off was going to be an unimportant sideshow as far as most institutional investors were concerned. (Classic opportunity).

2 million shares to be issued in the spin off vs. 415 million FD in *TCI*.

Liberty considered unattractive by the media.

Tele-Communication's shareholders were to receive one transferable right for every 200 shares they owned. Each right, together with sixteen shares of Tele-Communications, could then be exchanged for one share of

Liberty Media. At a price for *TCI* of $16, the price was $256 per share of *Liberty*. For 415 million shares of *TCI*—for every 200 *TCI* shares held translated into the approx. 2.1 million shares of *Liberty* to be issued. Institutions would consider the stock too illiquid. A price over $250 would be considered awkward.

The amount of *Liberty* shares issued would be equal to the amount of rights exercised. If only 1 million rights were exercised to purchase *Liberty* stock, only 1 million shares of *Liberty* would be issued—not the theoretical maximum of 2 million shares.

A sale of 1 million shares in exch. for $256 worth of *TCI* stock would equal a purchase price of $256 million for all of the common equity in *Liberty* Media (instead of a potential $512 million cost if all 2 million shares were purchased). Since *Liberty* would own the same assets, regardless of whether 1 million shares of common stock were issued or 2 million shares, anyone interested in *Liberty*'s upside would much prefer to split that potential among fewer shares.

Any stock not sold in the rights offering would be replaced by preferred stock to be owned by Tele-Communications. Any shortfall was to be made up through the issuance of $250 million of *Liberty* preferred stock to *TCI*—terms very favorable to *TCI*.

The FEWER shareholders that participated in the *Liberty* offering, the more leveraged the upside potential for *Liberty*'s stock. Better, this leveraged upside would be achieved not through the issuance of debt but through the issuance of low-cost preferred stock.

The success of *Liberty* would be of material importance to Malone. He had an option on 5% to 10% of the company.

The loss of $9.77 wasn't as bad as first appearances, since other assets were not consolidated—the stakes in equity of other companies.
Liberty set up as a vehicle for *TCI*'s programming ventures. *TCI*'s programming muscle would benefit little *Liberty*. Help in the upside.

Liberty's problems include an illiquid stock, a terribly complicated asset and capital structure, and a lack of initial cash flow from its investments.

The owner of 200 shares of *TCI* ($3,000 of *TCI* stock at $256 per share) received a right worth less than $1.00.

Malone was able to keep nearly 20 percent of *Liberty*'s upside for himself compared with his participation in less than 2 percent of *TCI*'s upside. Malone would use *TCI*'s clout to help *Liberty*.

Class Notes:

1 share = 1/200 of a right. (go through the hand-out). Very unattractive to do.
Consolidated statements looked horrible. $320 million.

2.1 million common at $250 per share. Why own illiquid stock when you own 320 million shares of the parent stock. Many rights expired worthless so less OS issued for *Liberty*. The $250 stock went to $3,000 in two years.

400 page prospectus. Every shareholder had the same right as Malone. This is a multi-billion dollar opportunity. There are many other smaller opportunities in smaller deals.

Institutional Framework.

Thinking of how to think.

Learning curve of a few years in finding Spin-offs. The world evolves. I am not the most sophisticated analyst, but I do have a very good context to evaluate what I am looking at. **Thinking about how to think.** It

is simpler than you think. It is not going to be based on a 40 page analysis but it is on finding a big opportunity and acting on it. The special situation world has lots of opportunity.

GOOD LUCK on your project.

END

Greenblatt Class #7

Oct. 22, 2003.

Look at *Marshfield Associates*

Companies to research

CI	HCA	SMRT	
ALOY	FL	FMC	
RCI	MHS	FTS	
BKS	POS	S	
AOC	PSS	HHGP	
LAF	PSS		
S	LAB	HOFD (Screen)	
ABS	FCN	CTGI (Screen)	
SLE	TBC	DFS (Screen)	
TMK	ANF	NLS (Screen)	

Eric Rosenfeld is a benevolent *Carl Icahn*. He started in Risk Arbitrage. He now focuses on activist investing in Canada where the laws are friendlier shareholder laws. With 5% share holding, you can requisition a shareholder meeting.

Canada is a good place for activist investor. Laws more favorable for investors. Also there is less competition in Canada from US investors. If you own 5% of a company you can requisition a shareholder meeting and company must have a meeting within 71 days.

By serving as our own catalyst—trying to bring out that value whatever that value—you can help control the process. You want the price mis-priced for some reason—there is some extraneous event that has caused such an event.

Spar Aerospace

Chairman in 1998. Then sold company in 2001 to a large US defense company. The company had $8.50 per share in cash, trading at $9.00 and no debt.—a surplus. Enterprise/EBIT of 3 xs. The maintenance part of company was the most attractive part of company. The price of the stock declined all through the 1990's. The company had a market cap of $130 million vs. $140 million of potential liabilities (AMC lawsuit before a judge) in legal costs in CA. Settled for $13 million. There was an insurance cap but not there if fraud. Usually you should discount this.

We paid cash to shareholders with a return of capital; we put in a stock buyback; we offered a dividend; we closed down underperforming divisions.

Stock trading at $9 with $8.50 in cash. 15 million in OS. $20 million in EBITDA with $3-$4 million in yearly capex. So 1 times greater x EBITDA. Enterprise value was $0.50 x 15 OS = $7.5 million EV over $16 million in EBITDA, but lawsuit greater than market value of the company.

The analysts thought the trail was before a jury in CA, so they just threw up their hands and did not do further work. There was an insurance cap as well. Either an analyst doesn't cover a company or there are other issues that they can't research or understand.

The deal took three years.

Wild Wetman

25 million OS. 24 million non-voting. 2 families own 1 million in voting shares. $18 price. Put a resale to liquidate the company-message to the Board. The company's board had little respect for the minority shareholders. 57% vote for liquidation.

1 year later sold at $45 vs. $18 price then. The assets were there.

CallNet in Oct. 1999. *Sprint* in Canada. Ouster of management. $2 billion on debt.

What is the Opportunity Set for Canada today? Answer: It is still very good. I am on the Board of three companies

Atock (adock) Technologies in Montreal. Work-force planning software--scheduling. Scheduling aircrews.

Stock at $3.00 with $2 per share in cash--mispriced by events. 3 x EBITDA. Now at $4.00

Pivotal Corporation 80 cents with no debt, but losing money. Most of assets in cash. Now at $1.76 per share—sold. The deal should close next month.

Sierra Systems: in Vancouver, Canada 140 million in sales. A system Integrator, no debt, EBITDA margins way below Industry. Run for the benefit for employees instead of shareholders.

Dutch Auction: We try to determine the highest price for buying. We will buy 40% of the company in a set price range. The market dictates the price.

Dutch Auction – offer to shareholder. Set $6.60 to $7.75. Buy up to 25% market dictated system.

Pay attention to debt. Note all the ramifications of debt. He serves as his own catalyst to bring out the value.

CPI aero-structures on AMEX. A liquid business, but has much debt. Bot 17% from company at $4.00. $10.20. $3.25/Share in Ebitda. Electronics masked the great returns in the defense business. Liquidate one business, pay off debt. EV/EBITDA about 3.5X with EBITDA growing at 50%. Good investment.

Hollinger-a disaster. Controlled by Conrad Black. Corporate governance issues.

Are buy backs accretive to cash flow? Not based on book value.

Holding period is from 3 months to 5 years.
You must be prepared to carry the fight to the end.

How do you source investments: Just in Canada and US. Reading papers in Canada, US, Investment bankers coming to us, screens.
I work towards consensus and by showing the other parties that my way is best for all. 30% to 50% return in a short period of time. A longer period would require a higher return—100%.

RISK – ARBITRAGE:

Spreads have been 3x the risk free rate. Not worth it. The risk is in the deals not going through.

Spread from today to where the price would be if deal consummated.

- Merger
- Tender Offer—a buyer offers to buy shares from the shareholders.
- Liquidation
- LBO's in the 1980s put up 10% to 15% of the equity but now the requirement is 35% of the equity.
- Recaps
- Self Tender- Dutch auction
- Spin-offs

There is a lot of capital and few deals.

$105 cash merger, trading at $100 to $5/$100 = 5% with 4 months to close = 15% cash deal.

The brokerage firm has the shares in a depository. Letter requesting a shareholder meeting and the purpose.

Stock for Stock deal

Stock A		**Stock B**
1 share of A	=	½ share of B
$20		$42

Dividends: if long you get dividend and if short you pay dividend.
½ of B = $21.

1 dividend of 25cents with A while losing ½ of 30 cents with B or 25 cents – ½ of 30 cents = 25 cents – 15 cents = 10 cents. $21.10/$20 = 5.5% spread or 22% Rate of Return

If deal BLOWS UP, you lose $10. What could go wrong? FTC, Justice Dept., time delay.
15% for LT holding vs. 35% for short term holding. Stock declines, Sept. 11, other deals break (UAL in 1989).

Now *First Data Corp* buys *Concord EFS*, owns 64% of (10% of EFS market) of Nice Network. EFS has 60% market share so with combo, it would own 64% of check market. To avoid Justice Dept., spin off Nice?

78 cents spread with FTC at $36.03 and EFS at $13.63—5.7% differential. Lose $5.00 but make 25%. Not worth it. A game of chicken.

Stock Screening is a valuable tool—Joel Greenblatt.

ABXA Spin-OFF. DHL offered to buy Airborne Express. but a foreign company (DHL) can't own a US airline. So prior to the Merger, Airborne Express would spinoff its airfleet. One of those weird things that happens as a result of a merger. Where DHL offered to pay 21.25 and a half. In addition, you would get a spin off at a price of $0.50 to $1.00 in a company that was expected to make from $0.30 to a half Dollar! Equity in ABXA would continue to do Airborne's air express business. Stuff likes this happens all the time.

There is room to get other air business at higher margin. Spin-offs are happy hunting grounds. You have a $21 stock and a $1.00 spin-off.

Issue: Is this really an independent airline or was DHL controlling it? If the spin-off doesn't go through, all the trades are cancelled. If the merger structure doesn't go through, the spin-off is cancelled. All trades cancelled and no funds transferred.

***Joel Greenblatt* is not a specialist, but I know where to look and how to think.** Retail—everyone looks at same store sales, but 30% ROIC so that is good enough for me. I look for NORMALIZED EBIT THREE YEARS OUT. If there is something I can't figure out, I don't do it. Low EV/EBIT and high ROIC, then a place to look. Return on tangible capital. EBIT/Working Capital and fixed assets.
What is the balance sheet made up of?

Screens: out of 10 names you will probably have 1 or 2 good names.

Factor Models: 5.5 EBIT but show with a ROA. Review author of inefficient markets. Companies may be a good buy that don't fit all the criteria. The combination of two factors is very high, thus you can find good companies. Screened companies that are trading with net cash minus LT debt. 3x EBIT. SPAR had a lot of cash and 2 xs EBIT; the problem is a big lawsuit—then do your research.
Look for low price/BV companies; look for high cash per share companies. **Screening is an art.**

Small Cap: greater than $50 million and less than $500 million. You can always find names. People over react.

Unfortunately, you have to do some amount of work.

<u>Pound into your head</u>: where to look and how to think. Where I look.

1. **I look at Trailing 12 month EBIT and then try to come out with a normalized EBIT a few years out.**

2. **Is the price cheap enough to take out the uncertainty?**

3. **Low normalized EV/EBIT and**

4. **Good returns on capital!**

Am I buying it at a low enough price relative to normalize EBIT a few years out in a company with good returns to capital so as to have a margin of safety in case I am wrong?

I use a <u>broad</u> brush screens. Power screen. <u>Market Guide</u> from multex. Much cheaper. Compustat is expensive.

Look at the balance sheet and see what the balance sheet is made up. Some businesses don't need much inventory so don't be so concerned with dropping ratios, etc. What is a material part of their business?

You look for certain clues. You pursue one point. Paramount deal—the interesting securities—I pursued.

Note that Return on Assets is tougher than return on tangible assets because you need a return on intangible assets.

Ask if the screen is **too cheap**.

Screens: Assoc. of Individual Investors, Power Investors, Compustat.

Look at *Merck/Medco* Spinoff.

Use *10K Wizard*. Bad news: easy to find things, but people still need to do the work.
Word Search: maximize shareholder value, spin off, rights offerings.

There is a <u>learning curve of a few years</u>. You can make a living pursuing this strategy. I do have a good context of what I am looking at and I am disciplined.

Think about how to think. Think about what context to put things on—then things are simpler than you think. You can 40 pages of analysis. It is more like: Hey, it is worth $10 but it is trading at $3! **It should be obvious.**

END
--

Greenblatt Class # 8

Oct. 29, 2003

A Guest, the sister of *Joel Greenblatt, Linda,* runs a fund focused on retail stocks. Earning in the high 20's return. There are several hundred retail stocks to choose from.

It shows how well you can do if you focus on your niche by staying within your circle of competence.

(Sonkin runs a much smaller class so there is more interaction and student individual presentations in micro-cap stocks).

Analysis of competition
Whole consumer sector
Retail - monthly flow of store sales. Frequent information flow.
Same store sales comparison
Store growth and ROIC of stores.

Companies	***ANF***	**AEOS**	**PSUM**	**WTSLA**
Cash	400	209	80	90
EBIT	322	128	89	NA
EV/EBIT	7.7	7.5	11.8	NA
P?E	13.4	15.8	24.8	NA
EV/Sales	1.6	0.6	1.2	0.5
Net Cash/Share	4.0	2.9	0.76	3.04
Total Stores	672	912	855	622

AEOS is going more into lower class malls than *ABER.* What is growth potential?

All these companies have a cash balance. When you look at P/E, you might want to take out cash and focus on their earnings on operations.

Understand concept, customer base, location, know price point differential. For example, a sweatshirt at Abercrombie will sell for $35 - $40 versus $25 at *Eagle* Outfitters.

ANF is at $28.80 (as of Oct 29, 2003) and it has $4.00 in cash, so $28.80 minus $4.00 in cash = $24.80 divided by earnings of $2.50—10x multiple.

Where these concepts can go depend on where the stores are located. The core Abercrombie concept has to be at a better mall. 700 A Malls, 800 C Malls.

Is concept maturing? What new concept is coming next?

ANF will max. out about in about 400 more stores in A Malls. If *ANF* does not have growth potential in its core product, what are they doing now to grow?

Hollinger-is there a new concept for *ANF*. Their growth is slowing.

Nautica: an apparel company trying to be a retailer. A failure.

How to evaluate Brand value? A good question. *ANF* was once hot--they could sell anything at full price. That is not sustainable. **Never try to value a company four or five years out based on popularity.**

Get an understanding of where these companies stand today. *ANF* is in the best position today. Their core concept is old, but they introduced *Hollister* which is very hot. Aber. Is more east cost concept and *Hollister* is more of a West Coast Surf concept. *Hollister* has 150 stores so it has good growth potential ahead of it.

Retaliation? Price War? Does *Hollister* take business from *Eagle?* Is there room enough for everyone? *Eagle* has been running negative comps. *Eagle* was knocking off everything from Aber. And selling it for 30% off. Then that strategy stopped working.

Eagle has tried unsuccessfully to buy into a new concept while *ANF*'s mgt. has successfully introduced an organically conceived concept. *Eagle* bought an established name in Canada and has destroyed it.

Are they trying to go after their same customer base and cannibalize it? Ann Taylor has introduced *Ann Taylor Loft* and people can pay less for the Ann Taylor brand--so people are confused.

What happens if a brand is not as hot as it once was? *ANF* vs. *Eagle*, mgt has marketed well. *ANF* has done a good job at maintaining margins.

ANF has been anti-promotional. High standards of pricing and have maintained the integrity of the brand.

(Joel Greenblatt: A lot of the opportunity works better with smaller stocks).

ANF's Mgt. has improved their merchandise margins. They manage it very scientifically. *ANF* has maintained numbers very well.

A company won't promote haphazardly.

It is tough to analyze one store unless you go to the same store three times a month and you look at the inventory and break out the inventory.

This is the typical analyst report: what is happening to comparable store sales. Is it relatively important that they get back to their high comp store sales growth--no, not to me, if they are making good money on their stores and there is growth and it is cheap enough. ***Hollister* is doing well but comps are down. It doesn't thrill me, but it is not important in the big picture.**

Do I care what they will do in October, if I am holding for three years or more.

Comps are down 3% but they earn returns on capital in the 60%--a good investment. Sure the ROIC is not as great, but it is good enough depending on the price.

Take advantage of Wall Street's fixation on same store sales. Look like they have a lot of debt, but what they are on the hook for is the current market value of that store and the difference in what they owe. Knowing where you are in the <u>retail cycle</u>. Also, know the <u>concept cycle</u>.

Take out rent expense from income. There is a lot of debt. Note the current market value of real estate vs. what the stores owe. ??? Factor in lease expense and make it part of the debt.

A quick and dirty on valuing *ANF*. What is the potential build-out in their concept?
ANF @ $350/sq. ft. sq. ft. growth potential
$100/ABER

500 more stores for *Hollister* for a total of 3.2 million sq. ft. total 4.1 million sq. ft. @ 20% margin = $1.80 EPS, $2.50 then $4.3 with a 12 multiple (15 - 20 multiple for comparable stocks in retail) = $52 and with 20x

= $86. Then add in expected $10 per share in cash to grow in addition to current $5 per share in cash--thus $15 per share in cash -- $52 + $15 = $67.

I get the fourth concept for free. Stock is now at $29, then take out 5 per share in cash for $24 current price for $2.50 EPS or 10x.

$4.30 EPS in 4 years x 12 P/E multiple + $15 per share in cash = $67 in five years, so $29 to $67 is 17% compounded growth over 5 years.

I hope they can continue what they are doing now. They have 20% margins. $4.30 EPS--4 years out.

Joel Greenblatt: At some point people (the mkt.) wakes up and the stock goes up more than 17% per year. The price does not go up in a steady manner. 19% in one year

ANF: $1.80 they earn in this year.

Base case for *ANF* without growing the business is paying $29 today with a 10 x multiple for $2.40 EPS and ($29 - $5/sh cash). You have room for more than 100 *ANF* stores and 500 more *Hollister* stores. On the additional stores, *ANF* will earn more $2.50. Netting after capex. and new store capex. you are netting $2.00 per share and after five years you have an additional $10 per share to add to the $5.00 per share in cash. There are things you can do with the cash like buy back stock (adding value to this scenario).

Lumpy returns: year 1 *ANF* goes up 19% to $48 then 9% annualized return for 3 years.

Hope for stellar, faster returns.

Assumptions: growth and margin of safety.

For Margin of Safety: Leaving out other good things that can happen to *ANF*:

ANF: We get free--the fourth concept.
The margin of safety: we left out all these other possibilities. We have room for error.

Important: comp store sales. Further leverage their operations: better sourcing, etc.

Wall Street focuses on the <u>wrong metrics</u>. Comp Store Sales and P/E Multiples vs. growth of the business overall vs. comp. Store sales.
What is in total build out?

Forget slapping on multiples on growth rates.

Judge quality of management

ANF focused on margins. They take a strict anti-promotional stance. They haven't slashed prices. Mgt. may panic and slash prices when a concept begins to age. They may sell goods at a discount.

Linda: Look at total build-out of stores. What will they make? Study each of their 3 different businesses. Do a sum of the parts analysis. *KEY!*

An 8.5% after-tax yield--I am comfortable with that.

Simpler to do a total build-out for five years, what are margins with additional stores? Get the methodology instead of slapping a multiple on it.

ANF is improving Gross Margins and Maintaining Operating Margins.
Open and closing stores. .

Break-out the new store Capex. and old store capex. *ANF* does a good job allocating resources.

ANF can improve sourcing, pull costs out and increase merchandizing margins.

Keep a close eye on mgt managing the company as a business? CEO has a big options package.
ANF rarely misses a number. They buy goods on sale.

A hot concept is when goods sell at any price.

Analysts say comps are down so stay away, they don't focus on the big picture. Now the stock is a double.

Focus on how much cash is generated over the period.

There could be an opportunity for *Wetseal*. Why are margins are down? Opportunities with low margins--turnarounds.

The guy running *Gap* came from *Disney* and he has identified parts run poorly. Fxn of a poorly run business. Where are the problems to be fixed and are the problems fixable?

Today, it is tough to find buys. Little value to be found in the market.

Look at absolute valuation.

ANF and *Eagle* show the same EV/EBIT but normalized EBIT is better for *ANF* vs. AEM. *ANF* has better growth potential and management. Better normalized earnings for *ANF* vs. trailing earnings.

Look at normalized EBIT.

END of Linda Greenblatt Presentation

Cable Vision Spin-off. People are down on CableVision because of the money thrown at the Satellite venture. The Satellite venture is losing money. They will put in three of their channels with the Satellite. Charles Nolan will run Satellite. Confusing is good. Opportunity in Junk. He doubts the business will drain capital. $3 billion for Cable Channels. VOOM is considered just throwing money away. Cable channels very cheap but that logic takes over ad he drops VOOM.. Combined and a lot of debt.
By He might cut and run. Or the stock might get cheap enough. The stub is cheap. Keep it simple.

$3 billion of cable channels going over to VOOM. Everyone to a man who covers cablevision says this will be a disaster. My thinking: these two will be combined, so they will be sold for a lot less than $3 billion because they have this money drain. There is a lot of debt on this thing too. They buy the cable channels for 1.5 billion vs. $3 billion and perhaps Nolan wakes up quickly and stops draining the money. He closes the thing down early. I can hold for a year waiting for Nolan to make a better decision. The market takes over at some point.

Nolan bought the Wiz and has made some stupid decisions but they were small. Here he is playing with $3 billion dollars.

People view this negatively.

Don't short comparables.

Hand-out is the Buffett Article in Barron's.
He seeks 14% pretax return. 7 x EBIT--depends on the business and its growth prospects.
Put money in treasuries, T-Bills which earns less than 1% a year after tax. Occasionally, successful investing requires inactivity. We are trying to buy companies at $50 worth $100. In the short term the stock could go to $25.00. The more confident you are, don't be afraid of short term price movement.

Drug companies are better businesses than tech companies. Companies with mystery are worth more than those without-A Ben Graham saying.

Inactivity : wait for your spots.

He prefers a lumpy 15% return vs. a smooth 12% return.

He erred by not selling *Coke* and *Gillette* at Peak 50 x EPS. There is a downside to being on Boards and having huge positions--it is difficult to sell or liquefy your positions. The downside of being on corporate boards and huge positions.

He wants investors for the long term. Don't pay attention to what the market is doing. If you saw a chart of the Nekki in 1988 and saw it drop for 15 years. But in the meantime it rallied up 30% to 40%. If you are trying to interpret the economy by moves in the market. It is a waste of time. Focus on valuation of companies. No logic in that 40%. Look at your stocks as businesses. Value them.

A threat of a terrorist attack on Manhattan.

Pick companies on good valuation.

A student of Wharton asked BUFFETT to visit. A group of 40 students went out to meet Buffett for several hours.

Chart of NEKKII from 1988 going from 40,000 to 10,000 in 2003. Focus on company valuation and not on predicting the market.

***Allete Inc.* - A Spin-off for May 2004.** 8 to 9 months from now. Does the auto auction seem interesting? Buy spin-off or buy combined.
.
KISS: anytime I get complicated, I lose. Don't short comparables. **Buy $1 that is worth $4.00.** Big enough difference for a margin of safety.
Separate out the two businesses. Easy to value and the auction business looks interesting.

Palm Spin-off - software then hardware company

MISTAKES IN STUDENT PAPERS

Ex. 1:

Company: David Busters Analysis:
EV/EBIT - Maint. Capex. = 6.8 vs. Industry multiple of 28.1 so it is cheap. TEV/SALES is 0.56 vs. 1.15 x of industry.
But no mention of the reason why the company was cheap: ROIC is 6% and ROC and ROA is 4%. Metrics are low because the business stinks, that is why it is low. Put $1 in company and then the company loses money. An LBO deal fell through. The company is earning money at such a low rate that is why the company is cheap.

Ex. 2:

The company can cover their debt:
1.4 x EBITDA (student left out capex.). $0 free cash. Who pays for capex.--Buffett: the tooth fairy. 1986 - 1988 Don't leave out Capex: *Seven Eleven* failed: the Texas Chain Store Massacre. Deals got done, but they cratered.

Ex. 3:

Valuation: 8.25 x EBIT. In three years Normalized earnings = $3.00. $3.00 x 8.25 EBIT = $24.00.

Take normalized 8.24 x depressed earnings. Normalized is higher. Competitors have depressed EBIT. If you use that for a justification for using 8.25, your multiple is inflated. They pay lower multiple of normal earnings. At 8.25 of DEPRESSED EARNINGS, they are actually paying a LOWER multiple of NORMALIZED EARNINGS. Normalized earnings at 8.25 may be aggressive.

Ex. 4:

Return on tangible assets. ROA vs. Return on Tangible Assets. **ROA can be loaded with goodwill.** In the future what return on this business without acquisition. Goodwill may mean you overpaid for business. Return on tangible assets. ROA can be depressed due to high goodwill amounts due to overpaying for acquisitions. Good returns on $2 million in tangible assets vs. the $10 million that the company paid for in acquisition (goodwill of $8 million). Look at the underlying returns on that business, so look at tangible assets.

Study the difference between ROA vs. Return on tangible assets. ROA is an annual expense.
Ex. 5:

0.7 x Book Value is cheap? Depends on tangible book. On return on assets. Have an earnings justification. Sales growing but credit is used to grow sales.

Sears has an incentive to use credit to grow sales due to its credit arm.

Ex. 6

The Limited 2: the 7 to 14 year-old group. No competition in that space. No analysis of stores could be opened, how long to take them to open new stores, how much they will make on each store. Pick another retailer. 8 x EBIT vs. others. No comparables. Look at companies below the 7 year old market in retail and companies operating in the market above 14 year old.
See logic. Go to *GAP*.

Ex. 7:

Company cheap, but it is a highly cyclical company. Very difficult to estimate normalized EBIT so either walk away or take a very low number.

Ex. 8:

Depreciation - Capex. So much higher Depreciation vs. Capex: is this permanent or not? Be skeptical.
Take a <u>more conservative basis</u> and do not take Depreciation over CAPEX.

Liquidating Value:

Cash Need to make adjustments by discounting the assets other than cash based on industry comparables.
Inventories (80 cents on the dollar)
A/R
PP&E (10 cents on the dollar)
Minus debt (include liabilities)
Also, what are the liabilities to employees? Costs to exit and liquidate?

Ex. 9:

EBIT/Net WC and Fixed Assets-came out with returns of 35%.

Low valuation is not valid to reject based on low ROA.

Ex. 10:

3 year average for EBIT for normalized. Be careful using a past average. Do not use trailing three years. Many folks using trailing. Use your head when you project out into the three years.

Ex. 11:

Tech company 2 x sales, 10 x EBIT above below market multiples. Even if sales don't grow, then if it trades at these multiples, then I will make 2 x my money. At least use DCF to check or justify relative value.

Relative Value: Uses DCF: pay for this price growth.

Don't use stupid nose bleed valuation as comparables. Come to a justification with DCF analysis. Look at debt.

Ex. 12:

Company has $4 in cash and $11 in receivables and stock is trading at $15, but the student left out $15 in debt per share.

Ex. 13:

Telecom: Other company's trade at $2,800/subscriber, and this company here pays $2,000/subsriber, therefore it is cheaper. People do this with hospital beds. **DCF is a reality check.** This is good to know the metrics.

In a normalized environment will this earn $2.00 per share? Do my assumptions make sense? How secure I am in making my assumptions. What are my other alternatives?

Ex. 14:

Retailer - Dept. 56 is cheap.

Sales down 10%, Inventories up 50% quarter over quarter. (they opened new stores so they had to hold more inventory). Is this something bad? Quest.

Look at some things first.

1. Big inventory business? Inventory turns 60x? not a big deal. Look behind the figures.
2. Open retail stores needed to hold more inventory. Wholesalers had sale channel down 22% and overall sales down 11%

Is there a good reason, a good explanation for the numbers changing.

Ex. 15:

Wholesale channels down 22% and overall sales down 11%. Not a good result.

Ex. 16:

Market Cap./EBIT Ratio: WRONG! Apples to oranges comparison. EBIT has debt (before paying for debt) and Mkt Cap is net of debt.

Ex. 17:

Owens Illinois. KKR holds 25% so it is a risk. It may be a positive. KKR maximize value, thus they could be a catalyst.

Best performing company in the industry on a EBIT/EV basis. EBIT is what you paid for the assets, etc. Not what is in the business. EV is what you paid, not what is in the business.

Ex. 18:

Book Value is $11.50 paid for the company but this doesn't include $3.50 in Asbestos and environmental reserves. If they are reserves, the reserves are included in the $11.50.

Ex. 19:

Dover Downs has race track, slots. In 8 years you will have to spend a huge amount of CAPEX. $10 to $12 for maint. Capex. 6.5 million a year in additional CAPEX. Or 6 x EBIT. You are thrown off by $40 million. Your cash flow will look higher than it really is.

Ex. 20:

EV/EBIT vs. industry average but no break-out.
Net Income/EV. AGAIN, Apples to oranges. EV is after debt service and NI includes debt.

EBIT
+D&A
-TAXES
-Increase in Working Capital
-Capex.
_____

Free Cash Flow.

If you have to constantly increase working capital. Because you are sticking multiples on these numbers, you need a one time increase in WC and it doesn't happen every year, you will have a very skewed number. Look as they grow, how much additional working capital will they need?

IMPORTANT

Look at options for management and the compensation plan for mgt. Compare option plan to salary.

A manager who has $1 million salary vs. 100,000 options at $5.00, then his bread is buttered through his salary.

Look at how management is compensated. Aligned with shareholders?

Greenblatt put in a hostile motion to force management to earn more shares.

When you do projections and it is a cash earnings company. So what will the company do with the cash? Analyze how they will spend the cash:

- Acquisitions
- Dividends
- Stock Buy-Backs

Account for that cash generated into the future. Include cash generation and action in your assumptions. Adjust your share count due to buy backs.

Ex. 21

A student suggested to Short a company because it was trading at a 28 P/E but was earning 11% ROE. But that 11% ROE included intangibles and if you included the cash per share, the returns went up to 25% ROE on tangible equity.

Then he handed back student's papers.

10K Wizard $150 per year. $150 more: lay out many years of data.

Do word searches such as "over-subscription privileges.

Power Investor.com

AAII.com - screening packages

Read extensively to find ideas.
END

Greenblatt Class #9

November 05, 2003

Always do a thorough job on valuation.

In a break-up analysis, be aware of taxes if the break up is not tax free.

STUDENT PRESENTATIONS

***NTLS* Discussion**

Nautilus-Bowflex was once hot. A direct sales company. Bowflex has 30% pretax CF yield. In Q3 sales dried up. Sales were inflated due to the nesting instinct. Competitors are selling at ½ the price at $500.

32 million OS and $2.00 per share in cash. Current price is $16.00. A short with current margins and sales declining. Costs are sticky. Look at Epinions.com. Nautilus will go after the cardio market which is greater than the weight market. 1 million shares in options.

CF: DSO 45 Dils 76.46 DPO 67.56

Nordic Track had fast cumulative sales that saturated the market quickly then there is no where else to go. Sales are like a bell curve. A very quick deceleration of sales.

Cybex has 3% margin while *NTLS* has margins triple that. Expect margin erosion.

HCA – Spin off of *Triad Hospitals*.
Industry has significant regulatory costs.
Discretionary spending from patients.
Change cost plus pricing to fixed costs for Medicare reimbursement.

Facilities and physicians sent patients to suppliers.
Private insurers are the gateway.
Bad economics: bad debt and elective process.

Historical low for industry 6.5. Total capex

Take out the 1 time hit for fines so really at 12 P/E, not 17 to 20. $25 billion EV, Revs at 21 bil. EBIT is 2.8 billion. EBIT to tangible is 15%. 9x EV/EBIT. Bad debts and A/R is up. Good mgt.

Legal (non-recurring expenses) expenses. Adjust EBIT and legal. NI + I + Tax + min. interest.

Adjusted EBIT/Tangible Assets = 12% is a truer reflection

12x EV/EBIT, but 10x now, 15 xs at peak. $50 share EV. FCF – repay debt and shares

4.5% growth: 1½% from demographics and 3% cost/price increases.

$2.8 EBIT – operating income minus Interest. Legal settlement and adjust EBIT legal.

Risks and Catalysts:

- Increase in co-pay
- Regulation
- Limited expenses
- Increase in fraud

Catalyst: fraud is behind us. Healt*HCA*re South

Project 2007 of $4.80 in EBIT, historical 12 x = $58 or 11.6% annual return.
$4/share is a steady grower. 15% for profit. Non-profit. Non-profit is less efficient and 85% of the market. So Medicare has to support.

16 multiple vs. 10% bond yield. $64.00 compounded is 6.67% (1/16 P/E multiple) compounded over 5 years. $3.50 to $4.50 in EPS.

<u>Sportsman VIC</u>

If these simple metrics hit you over the head, then I have done my job. Sm-cap stock.

Buy on what info you can get. Buy an office building.

$200,000 put in equity $800,000 in mortgage $120,000 in CF Mortgage is 8% cost

120,000/(200,000 + 800,000) 12/100 = 12% return on assets

8% of annual mortgage costs x $800,000 mortgage = $64,000. Then $120,000 cash flow minus $64,000 = $56,000 left for equity holders. $56,000/$200,000 in equity = 28% ROE. 12% return on assets. Return on equity is 28%

I need to know both to value.

$56/$200 or 28% = return on stock. Especially if yield locked in.

Return on exp. Capex, Normalize EBIT, EV/EBIT

Big analyst interviewed by *Greenblatt*. The analyst was pushing a stock that was at 14xEPS and 22% growth, so the analyst slaps on a 20 multiple. When does the patent run off?

A thorough more in depth job on your papers.

ANALYSIS: DCF analysis is just a checking analysis. Comparables. Break-up analysis. Normalized EBIT

I will hand out four excellent situations that worked out well for the VIC.

Student Presentation 1

Nautilus: NTLS. EV of $430 million. 30% of float is short. A direct marketing company that includes health and fitness companies. Bowflex.

Bowflex has a 30% FCF yield. A very profitable business. A big sales boom on the back of Bowflex. Their business crashed. Yr. Over Yr. Growth dropped 30%. Sales boosted by 9/11-the nesting instinct.

$500 per unit drop would cause the math to change on profit margins.

Sales for these products typically flame out quickly due to the small market for the product. Once you hit saturation in the market, there is no where else to go.

What projections are needed to justify the market price?
The direct business has a 50% gross margin
Indirect business has a 30% gross margin
Sales and marketing expenses

15% growth of the branded products such as *Stairmaster, bow flex, schwinn*.
Cybex has been down 4%, but *NTLS* says they can grow at 15%.

Stop loss of all sales despite competition at 1/2 the price. Assumptions are too aggressive by mgt. We do not think it likely that *NTLS* will not lose sales and maintain gross margins competing against competition with products priced 1/2 as low.

32 million OS.

On *Cross-bow* they have maintained margins but lost sales.

New product introductions do not seem to be successful. Mgt. is saying they will keep the GM. We know the cardio market is bigger than the fitness market.

Mgt. has been shady. After pre-announcing bad news, the mkt. went from $15 to $8 and then mgt. issued themselves options.

Sales going down 25% per year. Either they lower price or keep margins and lose sales margins.

Our price target is $5.00 per share. Using 12% cost of capital.

They have been acquiring businesses with 1/2 the gross margins. They brought in a new management.
Use an option to short. 11% margin in the indirect business so they might be able to sell.

Cybex operating margins are 3.5%, so if they turn themselves into commercial/retail business it will be much less attractive business.

Risk to $50 if they turned sales around.

Who will win this game of attrition?

Student Presentation 2

HCA Presentation by students

A complicated value chain in the industry. The govt., insurers provide payment to the healt*HCA*re provider who is referring the patient to the facility.

There has been a shift in pricing from cost plus to fixed pricing.
The industry as a whole is attractive. Mgt. has been value creators and not destroyers.
WEB purchased some stock at $37.

Mid - 6s EV/EBITDA for the industry.

Take out the 1 time hit for penalties for *HCA*, so then it is really trading at 12 times. $25 billion market cap. Rolling trailing 12 month data. EBIT has not been quite as steady at 2.9 bil.

9 EV to EBIT multiple. 13 x when you take out all capex? All multiples have declined. What is going on underneath the company to explain this? Debt hasn't changed. Why the missed their earnings because of their bad debt--don't think this is a significant issue for the company. It has not started to sky-rocket.

We do an adjusted EBIT to account for the 1 time legal settlements and payments.
Good free cash flow. 12 times multiple averaged, 15 P/E multiple

$37.5 mkt value per share value and $17.50 in debt - $5.00 in cash for EV of $50 per share.
All FCF to pay down debt and buy back shares. Use all that FCF or $4 per share each year for 4 years is $34 per share in EV by 2007. During this time the base business has grown by 4.5%, which is made up of 1.5% demographic growth and 3% of price growth--below the average that people are expecting for the industry.

500 mil. OS. $2.8 million reported EBIT: NI + Taxes + Int. excluding capex.

Operating income which is $2.8 then you have minority allocations (big neg. number), asset losses and legal settlements. We take all those numbers except for legal settlements and calling that our adjusted number--it is about $2 billion.

We did our FCF to EV for a 8% and increasing to year 4 to 14%. What are the risk to 8% and the risks to get to 14%. Big risk is pricing pressure from govt. and increasing costs from regulations. There could be additional fraud.

Catalysts: the fraud is behind us and the industry will return to normal earnings. The industry fraud should eventually clear.

<u>Valuation Summary</u>

Our Adjusted EBIT is $4.80 in year 4 and using a historical 12 P/E beings us to a $58 per share and it is also an EV since all debt is paid down.

Current share price of $37.50 and EV of $50 so the annual return is 11%. It is an attractive risk adjusted return but it is not a clearly a 50 cent dollar.

In three years they will earn $4 per share. An industry could grow. The hospital business has 85% non-profit business while *HCA* is in the 15% that is for-profit hospitals. Medicare can't cut out for-profit without hurting the non-profit hospitals.

Greenblatt: The way I would look at this in the big picture: if they do earn $4 in three years, you put a 16 multiple--using 6% 10 year bond yield--and I'm say a 6.67 percent return that is growing. Would I rather have this, 6.67% growing vs. 6% (*HCA* has best properties and mgt. business)-so you get $64 per share. You could get this in 3 years. I'm looking long-term. The govt. can't run these guys out of business. LT you have to have the non-profit hospitals in business, therefore, the for profits hospitals which are more efficient, must survive. $3.50 to $4.50 range in earnings. The downside is not big at these prices.

Special Situation Write-ups from the **Value Investors Club (VIC)**

$56 per share value and you have a $10 share price. What is a reasonable multiple with conservative numbers--he came out with $56.00. He looked at a place that was very inefficient. His analysis was very simple--the key is that the numbers are there.

Nov. 12th published and the write-up came out on Nov 27th. You could have bought this coming out of bankruptcy. They don't have to put out much cap-ex. They already have their network built out.
This got one of the highest ratings.

Overhanging stock? I couldn't care less. I focus on valuation work.

This stock ran from $2 to $9.70 (Sportsman Stores) before recommendation--so the writer received criticism.
This is super cheap. Part of it is that this is a small cap company so not many people are looking at it.
If I have to hit you over the head--you have a 20% pretax yield, a scenario where it could do much better--the shift to the Internet. It was very cheap. You have a big margin of safety. Management gave the numbers.

You may know some things or you may not, but you don't have to buy all the stocks. Walk away if unsure.

Evaluation of ROC and ROE

$400,000 in a building.
120,000 cash flow and mortgage is 8% per year.
12% unlevered return.

ROE: take the $200,000 of equity - (8% of $800,000) = $200,000 - $64,000 = $56,000 then $56 left for equity holders/$200 equity base = 28% ROE

Should I look at both--yes. Asset yield and equity yield. Return on stock in the ROE. 12%--if cost of funds goes up. How you can leverage your return if the yield is locked in.

Are you looking at all the right factors? I wish I could pay a lower price, but I am willing to pay a higher price for a great business like the *Duff and Phelps* example.

You have to spend some time understanding the business. There is work involved in figuring out if it is worth $4.00--normalized EBIT. The more confidence I have in the business, the more likely I am to invest.

I pass on those situations where the price is too high or my confidence level is too low.

I like the simplicity of the thought--the research idea on VIC.

HCI coming out of bankruptcy. The hard part is finding out what the numbers are. The hard part is the digging.

Home manufacturer-NVR
Huge returns of capital (25% pre-tax). Question: how close are these numbers to normalized earnings? The business model is relatively low risk. There is not much capex or capital at risk.

They are buying back their stock at very reasonable prices. Where is the option price--I don't mind as long as they (mgt.) aren't stealing. These guys have been good shepherds of investor's capital. This was $143 when it was written up and it is now above $500 per share.

It really is the big ideas, the numbers look great, then try to understand the business--what are normalized earnings, and will this get better or worse.

Even if there are only 8 million shares at $150 per share. Barriers to entry: not having the connections and resources. There is scale to this business.

Greenblatt: my worries about the business and the stock are different at higher prices for the stock. I would be worried but not at this valuation. I will worry at 60% to 70% higher

1. Is this an oil company with limited wells--the life is 30 years. Do they have a plan to replenish the wells. A building plan
2. The valuation and risk that you are taking are very low at these prices. Here they have a great model.

At a conservative case, what are normalized earnings? Forget about recession type earnings. If a normalized environment, they will make very good returns to capital, especially to the price I am paying today. A good business with reasonable barriers.
I am still buying it at 6 x EBIT.

Special Guest. CEO with Pipe (*Greenblatt* pretending to be a CEO being interviewed by the class on how to restructure or fix his company--a declining apparel company with a manufacturing business and a licensing business).

Solution: shut down the manufacturing business and just use the licensing business. Always separate out the two businesses in your analysis.

An investment analyst that I interviewed, so I asked the standard questions such as what returns they get on capex and all the usual types of questions.

This company will ratchet up sales, they have huge margins and everything else. At 14x earnings and it will grow at 22% per year for the next few years. I have been in the business for 10 years, and those things get like a 20 multiple.

So I asked a simple question: **when will the patent run-off?** How can you put a 20 multiple on a stock that will grow at 22 percent for 3 years and then it will fall off a cliff. YOU CAN"T DO THAT. I got a 70 page write-up on this company. SO WHAT! Keep it simple stupid (KISS).

Did you do a DCF analysis for three years for what they will earn before the drug goes off patent, then what type of prospects do they have in the pipeline? Well they don't have anything great in the pipeline. Then put some low value on what they have in the pipeline. Be very conservative since you are saying that they don't have much in the pipeline or many drugs far along in the FDA approval process. This is an analyst who makes $1 million a year and is a partner in his firm. I am trying to get very simple facts.

Know all the questions should you ask. These simple metrics matter. You may not be able to:

- Figure out normalized EBIT
- Normalized returns to capital
- What types of returns to the industry and what types of barrier are there?

Then pass on the idea.
These were stocks that had huge margins of safety and the facts checked out. They were cheap.

You had competitors who had less of a franchise than the example. So put a low multiple on it. You do your DCF and comparable analysis. Apart from DCF analysis--do a reality check with low assumptions such as low growth rate and high capital costs). Test out your thinking that your numbers are in line.

Hey, I am getting a 6.66% earnings stream with *HCA*. How do I feel about that--many of my choices are qualitative assessments. Is it a good business, can it grow with low risk--many qualitative assessment.

The holding period for most of these stocks is two to three years. Buy 1 or 2 stocks every 3 to 5 months

END

Greenblatt Class #10

November 12, 2003

Joel Greenblatt: I will speak about options this afternoon.

If capex is greater than d*epre*ciation and amortization then this is growth capex.

Next week, a review session for the final, and I will tell you what is on the final (ANF).

***Medco* Presentation by Students.**

Break-out maintenance capex from growth capex. Is the Company earning adequate returns on each additional $1 invested? Companies open first in the best locations, then move into secondary locations in the retail industry, for example. ROIC.

Medco:

- EBIT/Tangible Assets
- OPERATING FCF/EV
- EV/EBIT
- EV/EBITDA

With EBIT, the amortization is deducted from EBIT so in this case (a company making many acquisitions), EBITDA is a better metric.

The students estimated a $45 price target for *Medco*---30% above *Medco's* current price. $27 is the downside case.

Risks: HMO's will take this in-house. $150 million capex/yr. 12 P/E multiple. EV $10.5 Bil./$850 mil. EBIT or 12x EV?EBIT. Look at the risks. What are the risks?

EV/EBITDA – CAPEX Cash return on what you are laying out. 7% FCF FCF/EV. Growth assumption is 8.5%

<u>Question</u>: How much to weight your trade or how wide your margin of safety?
65 cents to $1 in a year with catalyst. Level for certainty. Time horizon.

Risks: Competitive. Big customers. Cash pick up of $0.30 per share from Amortization charge. You don't have to amortize Goodwill anymore. Cash earnings greater than reported earnings. Add back amortization. EV/EBITDA a better measure than EV/EBIT (since D&A expensed).

EV/EBITDA – maint. Capex to arrive at pre-tax owner earnings.
Look at how mgt is compensated. Are they aligned with shareholders?

- Mgt. Stock options.
- Mgt. Incentives.

***Albertson* $19.75 – ABS second Student Presentation.** $11-$13 per share valuation.

Albertson's is in a poor market condition. It doesn't dominate its market. A very capital intensive business with economies of scale. No. 4 in market share.

Not growing the business, but remodeling key stores. They own 41% of their real estate--it doesn't seem to be worth that much. They have a restructuring program. No FCF. A change in their capex spending.

Earnings quality is poor. $36 million upwards by 2% and improved returns from restructuring. Earning power of $1.5 billion. Normalized Capex? Are they overspending capex now? -Joel Greenblatt question. Their earnings are overstated--less than the cash earnings number. If you put a multiple on that earnings power, that increases your error if you are wrong. Be sure to adjust for "normalized capex"

Replacement value. Tangible equity and took out operating leases and added back brand value. Tangible book and added the cost of capital. A range of brand value--a portion of the Greenwald book. I (Joel Greenblatt find evaluating brand value is difficult to do). Even if they have a great deal on real estate--undervalued on the books, their rents may be subsidized due to an under-market rent. find it very difficult to do. You can't double count. **Yes, real estate is undervalued on the books, but the earnings are overstated due to under market rents. Don't double count in your valuation.**

Negative FCF. Even if generous margins and 3% growth, you get negative CF. How much left do they have for dividends--add back dividends. $400 billion in sales, limited CF, Wal-Mart about to come in. This is ugly. All numbers are deteriorating.

They are somewhat cheaper to their comps. Break-up valuation.
Joel Greenblatt: If I was an Investment banker for these guys. Is it worth more broken up? Some businesses are worth more in some markets. They are profitable in some markets and less in others. They might be a more profitable enterprise by being smaller and broken up. Perhaps they have a big amount of value in their real estate.

Labor cost is a big issue. Competitive landscape: Not No. 1 in local markets except in a few local areas. Competes against Wal-Mart and Club Warehouses.

Trading with Peers – no catalyst for short. But their business is weak.

6.2% ROIC--6.2% stinks. They own their own real estate.

$30 billion in revenue. 10 basis points means a big change. Labor costs are key. Their labor is union. Local market share is key. But they are only 1 to 2 in only 6 of their 15 markets.

Post tax ROIC 1988 – 2004 is going down. Declining returns on assets, equity and capital.

EVENTUALLY THE MARKET GETS IT RIGHT.

Neg. FCF less than 0. Mgt. has been selling. Stake in Company vs. their salaries for mgt. is important to focus on for compensation.

Operating leases may need to be capitalized for comparison purposes. Liquidating inventory so net income artificially boosted. No pension plan listed-under funded. No expensing of options in the income statement. Net income artificially high. D&A is $948 mil. No opening stores. Overspending on capex? Undercounting D&A?

Their earnings should deduct more for D&A.

Multiple on Earnings Power. Figure out normal capex is key. 1.5x capex greater than D&A.
Balance sheet replacement value. Brand value – tangible book x cost of capital—intangible value. Net asset value is $4.70. Per share value is $12.00.

Understand R/E. Low rent (subsidized stores)--shows more profit—don't double count.

EBITDA: Earnings from Operations before:
- Interest

- Taxes
- Increase in WC
- Dividends
- Capex

Lower comps:

ABS EV/EBIT: 8 P/E comparables.

Lousy market conditions, worth less. Look at company in pieces. Some market profit others have poor profit. Break it out!.

So shift in capex. Remodeling vs. opening new stores. Divest Real Estate.

Look at parts. If there is a huge sales and low margin company it could be worth more at ½ size.
Look at management compensation for spin-offs and all investments.

Second Student Presentation
_____

Springhouse Capital Presentation--Brian

He focuses on small cap spin-offs. *SWBD*, which is in the space of *Yahoo*, super pages, RBOCs.

Cash screen came up with this one. *EPRE*sence.com: *EPRE*. It owns 52% of switchboard 9.8 million shares *EPRE* has cash separate from *SWBD*.

2001/2002. Cash play screen for solid business. Is the Internet for real?
Net cash. $50 mil cash--below cash. This company was at a discount to cash because of fears that the companies would burn through their cash.

1 *EPRE* share owned 0.42 *SWBD* so ½ share. *EPRE* was a back door to *SWBD*. Cash and Engin. Business. EIKI.com

SWBD 18 MM shares--$57 mm mkt cap. Net cash of $2.80 per share. 12/21/01 It had an $86 mm Nols.
EPRE had big GM of 75%. Slash and burn costs. $58 million loss—losing more than revenues.

EBITDA – capex equals -$4.3 MM.

EPRE burning cash. The service business sucks. Switchboard.

He let the company pass for two more quarters. On Aug. 02 the cash situation had stabilized.

Longer than expected transition. AOL sells directly so time is needed.

If revs gone for good, then stock will decline. No change in cash, so deterioration stabilized. He focuses on cash.

Revs 2001 is $2.7 million.
Then SBWD delisted ----SBWDE $2.50 - $2.75 with $3 in cash so you had a free option on the business. 2 million shares at $1.40 from $2.50 due to delisting. Huge trading volumes. Why? Who is in the stock? Harvard, MFS and Harborvest. DFS (Index Fund) – selling to get rid of the stock due to delisting.

EPRE had $47 MM in cash + $15 for *SWBD* = $62 MM Per share value of $2.80
While price of *EPRE* is $1.20. Upside to value is 133.7%

Overloaded Sales staff cut, but sales were up. The stock went from $1.40 to $4.00. The core business is better. Consulting has negative value due to labor liabilities. $70 MM EV over $4.4 MM EBIT. 15% grow and grow GM, no capex competition, alliance with portal acquisition candidate level of revenue for other players.

17% of market who cares? Grow 2x as fast. Contract runs out in a year. A big plus-sell to local papers. Value in traffic, advertising. Other people are selling services.

He bought during the delisting since there were uneconomic sellers (DFS-index funds who needed to exit SBWD). People dump for no economic reason. An opportunity

Impute cash burn. Deduct from cash. He works in the micro-cap world.

Options

A huge advantage if you have a <u>strong</u> opinion on a stock. Create your own risk/reward trade-off or leveraged situation.

1. Buying Intrinsic Value $3.60 and 5 months in the life of the option. $3.60 minus 6 cents dividend = $3.54 paid for the call.

$4.30 minus $3.54 = $0.76 premium above intrinsic value.

Buying time value and right not to lose.

$0.76	-	$0.60 =	$0.16
Not loss of time value		Value of Put	

$16 cents / $15 stock price = 1.1% cost of $.

Make $ on opinion. Joel Greenblatt uses options further out in time--1 or 2 years. $27/$18 = 45%

$6.25 for Jan 06 calls. Stock at $27.00. $15 call so option would be worth $12
$15 + $6.25 = $21.25 - $27 = $5.75 different risk/reward. Put out $6.25 to gain $5.75.

Jan. 06 $12.50 call buy
$17.50 call sell $20 ----------$12.50 = $7.50 - $2.50 = $5.00 greater $17.50.

today $8 $12.50 call for $4.80 $15 for $2.50

Pay $8.00 get $4.80 so pay net $3.20 for spread. If $15.70 or better get money back if stock $12.50.
$5.00 get, so profit of $1.80 so 55% return.

$35 price target. Now $17 for FL so over $100%. Create a situation to earn 50%. Pay spread – do it at $3.20

Risk arb. If you know price and time then you have an edge.

Buy $87. Buy 80 put. After tender $68, pay $1 for 80 put. Then $39.95. $800 million disparity in value.
$4.00 in 3 years and quality
16x = $64 in 3 years.
30 calls @ $58 = $28. Pay $13.10 = 113%. $26.25 less. $3.75 for interest 14% or 6.25% paid.

Lend me @$6.25. Non recourse lending.
Lend me $26 for $6.25% interest by buying this call.

30 Call allows one to borrow money on a non recourse basis. Pay $6 to make $10. 6 x .6 = 60% return.
Options to change risk reward. Focus on great risk/reward situation.

Note: Capitalization vs. Expenses: Capitalized leases vs. owning stores--Retail Industry.

Lease vs. purchase.

Consider two firms in the same line of business. One buys the required assets and the other leases (rents) the same assets. Only the former has made a capital investment and, from the creditor perspective, owns the assets. The other firm only owns the lease rights.

In economic terms, however, the firms are using the same mix of capital and labor. In this sense the firms are identical, and measurement of their return on assets and the efficiency of operations should be made on a comparable basis, regardless of the differing form of ownership. The ownership costs should be similar, with total lease payments over the lease term approx. the acquisition and financing costs. The form of ownership of an asset can greatly affect financial statement presentation even through operationally the firms are essentially identical.

Firms that capitalize costs and depreciate them over time will show "smoother" patterns of reported income. Firms that expense costs as incurred will tend to have greater variance in reported income.
Firms that capitalize always shows higher cash from operations; the difference increases and does not reverse over the life of the asset.
The ratio of cash from operations/capital expenditures measures the degree to which internally generated funds of the firm finance the replacement of productive capacity and expansion. FREE CASH FLOW, the excess cash from operations, would be identical for both firms and would equal the CFO for the expensing firm, assuming that depreciation is also equal to the cost of replacing "used up" capacity that is equal to capital expenditures. (This equality also assumes that, as the firm is not growing, no investment in working capital is required).

Note that non-cancelable leases constitute (off-balance sheet debt).

November 19, 2003

Today: *Robert Goldstein*, my partner, will discuss an investment in *Moody's* and why we were willing to pay the highest multiple ever for a company--21 PE for *Moody's*. Rob gets to the point quickly.

Secondly, *Joel Greenblatt* will discuss **Portfolio Management.** How he thinks about it.

A lot of the good things we find are so good that we don't need to use financial models to figure it out. The value is clear. We find 40 to 50 cent dollars. It is not that we are not thoughtful about our investments, but it is just that when they are good, we don't need fancy models to figure them out.

Moody's was compared to *Coke* since it was priced at 21x forward earnings. Is *Moody's* as good a business as *Coke*. *Buffett* could pay a high price and still make a fortune doing so. *Buffett* bought *Coke* and then 12 years later, he made 10 times his original investment.

He bought in 1986. You should pay $5 and 10 years later the stock was $58. What is that compound rate of return--22%.

Buffett paid 14x for *Coke* in 1986. 12 years later *Buffett* made 10 x his money. He paid $5.22 in 1988-in June 2000 it was $58.

Moody's is a credit rating agency since customers must use their service and their market is growing very rapidly. There is little pricing pressure. 17% operating earnings growth for 19 years. An incredible business with no margin deterioration. *Moody's* and D&B were the two main competitors.

1 share of D&B equals $27.75 which would equal 1/2 share of D&B and 1 share of *Moody's*. This creates:

D&B spinoff equals $7 1/2 and 20 1/4 for *Moody's*. Earning 95 cents per share per year.

6/30/88 Comparison: What *Buffett* paid for *Coke*. What Greenblatt paid for *Moody's*
$4.5 to $5.5
Prior 33 cents 15x 24x
Year 39 cents 13x 21x

The stock for *Buffett* went from $5 to $58 and *Coke* paid out $4.75 in dividends. 6% ----$6 dividend pay-out.
$58 + $6 = $64. 23.7% CGR.

We thought *Moody's* is a great business but the price was high? They compared it to *Coke*.

BIG PICTURE: An Oligopoly.
Moody's had 40% of the business
40% to S&P
10% for Duff and Phelps.

And it doesn't cost customers much as a proportion of the value for them to get a credit rating.

Operating Income up 12%. What focus here?

Buy back stock & payout dividends with cash. ROC for *Coke* was 60%.

12% operating earnings in 12 years for *Moody's*

1. Historical financials-certain conclusion.
2. 2. Growth - Low double digit growth option set to tell you any less.

Competitive analysis.

**Always look at mgt. alignment in a spinoff.

Coke at 12% for 10 years. *Moody's* doesn't need capital to grow. (FINSERV)!
Look at ROC. They could grow operating earnings at 12% annually. Two assumptions, they had been growing at 18%, management told us that growth rate would slow. We took them at their word.

Student: Did you do any growth analysis for *Moody's* in its different markets? To us it didn't matter as long as they grew a lot.

Moody's doesn't have to reinvest, so how to evaluate.

Earn $1, no extra capital. 25%. *Coke* $1 invested equals 25cents. 80 cents to $1. 25% more.

ROC pay 15% more for *Moody's* vs. what *Buffett* paid for *Coke*. 15x forward earnings to pay vs. 21 x forward earnings for what we paid for *Moody's*. How justified?

Buffett paid $7 for *Coke* and 8 x plus dividends = $64.

$5 15x
$7 20x Lower rate of return's

Did I leave anything out of my analysis? Always ask the question.

Joel Greenblatt: Usually shareholders are so happy that mgt. is doing a spinoff to unlock value, that they are often lenient with mgt. on compensation.

Moody does not need to invest capital in its business to grow. Why is that? They just need employees with minimal capital equipment. The strength of the business allows for that--captive customers who pay fees. How to quantify their excess capital: For every dollar they earn, *Moody's* invests nothing ($0) to grow 12%.

You are getting a $1 from *Moody's* and only 80 cents from *Coke*, so you are earning 25% more from *Moody's*. *Coke* will have to reinvest 8% to 10% of their earnings to grow.

Difference in ROC, we are willing to pay 80% more than *Buffett* would pay for *Coke*. 13x 1.25 you get 15 times forward earnings, but how can you justify 21 times forward earnings? We are willing to take a lower return. If you pay 15 times earnings, then you pay $5 or you pay 21 x earnings, you pay 7 dollars, you take a lower rate of return.

Interest rates were higher in 1988 than in 2000. 30 year Bonds were at 9%, you pay 11 x earnings.
In 2000 the bonds were at 6%--50% less in interest rate cost than in 1988. At 6% of 16 and change or almost 50% more.

To get a 20% compounded annual return for 8 years, then how much of a multiple to pay for *Moody's*?
13 x earnings but with a higher ROC, it was worth 25% more then 40% more for the lower interest rates so we could pay 21 x earnings. Earnings grow by 12% a year and the company uses all its earnings to repurchase stock. The company had no debt.

They could actually grow earnings about 17% a year. 2003, they have earnings of $1.49 and a 21 PE multiple, you $37 per share. 3.32% yield for a great business and growing revenue, so we thought the business was worth 30 times earnings for $1.75 at the end of 2004, so a price over $50. It was difficult to lose money at $20 which was our initial price paid for *Moody's*. We might be aggressive using high multiples here, but growth had been higher and the downside was limited. Our best conservative guess. Even if we screwed up some of the numbers, we wouldn't have lost much money. We took a shot.

In addition, we knew *Buffett* owned 15% of *Moody's* at the time and you could still do this analysis. This was so obvious that this was a great business and you were paying the same price as *Buffett*.

A great exercise, we compared to *Coke*, and we thought *Moody's* was better. By looking backwards at *Coke*, *Moody's* was prospectively a much better business. Combined the stock was 21 times combined, but if the bad business was sold, then we were only paying 21 times.

<u>Value investing is not just buying low P/E multiples</u>. In value investing, you are buying something at a discount to what you think it is worth.

You had to make a judgment about D&B due to this special situation. The mgt was questionable. Some investors were afraid that mgt. was going to flush the *Moody's* profits down the toilet.

Joel Greenblatt: we sold it in the mid 30's and our cost was $17 and change. We should have kept it. Usually if you are looking for stuff, you can find better stuff. You don't feel it except for the taxes paid. The easier money was the first year we held it. Compare the investment to your other alternatives are at the time. We were more comfortable in an alternative investment vs. being *Buffett*-like and holding on.

Now that I am older, patience would have been rewarded. I started out in the arbitrage business because that was where the money was made. Now I look three years out. But with *Moody's* the returns came very fast in the first year. How fast do you turn over your money? What are your alternatives. Net of taxes, we would have been better off holding on, but we were more comfortable moving on to other 50 cent dollars.

There might be a flaw in our analysis. Part of *Coke*'s price rise was due to a drop in interest rates. Factoring Interest rates--how does this effect *Moody* share price and our analysis?

T-Bonds : up in Value. 40% premium for 15 x. so pay 21x-22x. Tighten up your expectation. Earnings up 12%. All earnings to repurchase stock.

Stock at 20x, then share buy backs with the excess capital. So earnings growth would go from 12% to 17% with declining share base. In 2003, $1.49 x 21 = $37 per share.

Real value 30 x earnings. Earnings yield 3.33% for a great business. 30 x 1.75 = $50.25

Hard to lose money at $20 by owning a great business. There are not many opportunities like this. *Buffett* owned 15% of *Moody's* at one time. It was <u>obviously</u> a great business.

Moody's business is better than *Coke* because it needs no capital to grow.

Look backwards at *Coke* - *Moody's* would do better going forward. Value investment - not just buying low. P/E and book value.

Buy at discount to what you think its worth is--Intrinsic value. Investors, when they looked at *Moody's* were worried that Mgt. was questionable at *Moody's*?

Bot FL and it is now at $17 but we think it can be worth $35. Compare alternatives.

The older I get, the more patience is rewarded. My time horizon has expanded. That is life, sell winners later. He focuses on a certain niche.

So much analysis is wasted time. The hard part is the knowledge of where to look and the patience to find the right opportunity.

Host/Marriott example: the hotels were just being finished-so earnings will start going up.

Portfolio Mgt.

1. Concentrate - 1-20 positions. 20 things - which ones you like most. Live and learn. *Buffett* paid high multiple for a *Coke*, so Joel learned to find opportunity in *Moody's*. Look for the fat pitch, wait for what you are comfortable with. Out of 20 situations, you usually find 1 or 2 that you are comfortable with. Concentrate on your best positions.

2. Volatility - Washington Post. EV was $100 million and subsequently it went to $50 million in 1973-74 market. Any analyst at the time or private buyer would pay $400 million for the Post. But near term uncertainty was bad.

Pick 1-3 stocks or 1-7 stocks or 1-10 a diversification portfolio of businesses. You would want to own 3 - 10 businesses. You would rather own 3 to 5 good businesses in a town rather than 50 businesses. 3 - 8 business, you would feel well-diversified. I would have an opinion of what those cash flows are worth.

Stop analyzing stocks as data & statistics and start analyzing businesses. In 2 or 3 years the market gets it right--I guarantee it (Joel Greenblatt). The catch is your accurate analysis. You can combine you valuation skills with picking your spots. "I know this is worth between $20 to $30, but I'll pay only $12.

Move your time horizon out 2-3-4 years and think of stocks as businesses.

Look for a catalyst. It can happen over the next year or two. They will have positive earnings growth, or they can fix that division. There are other special opportunities beside just spin-offs. We own 6 to 8 securities held 6-18 months.

Risk = volatility is strange.

100% stock portfolio would have 18% std. Dev. Then 10 years it moves to 4%. The efficient frontier is worthless. If your horizon is 10 years, then why lower return to lower std. devs. It doesn't make sense to lower returns.

If you are good at picking stocks, then as time increases, your returns go up while your volatility goes down. If you view these stocks as businesses, then don't be frightened by fluctuating businesses. Does it make sense focus on statistical analysis vs. evaluating the quality and ongoing condition of the business.

Note: in the Intelligent Investor by Ben Graham: Like it or not: market prices fluctuate, but that does not equate with risk.

You are taking a risk on your valuation work, or future deterioration of that business. If you doubt that it is worth a dollar and now it is worth 50 cents, then you sell.

Last fall was a great time to be buying stocks. Stocks were being given away. Right now there aren't a great amount of opportunities.

What would you say to a money manager now? Be patient. Buy what you think is very cheap and/or sit on your money. We are bottoms up investors. If we can't find things cheap enough, we wait—probably 4 to 6 months. Don't press. You will have plenty to buy but usually in clumps.

1 to 4 years time horizon out.

1. discount to value
2. some catalyst
3. $60 to $70 million spinouts a year. But I might only buy 1 or 2. I own 6 to 8 securities.

Risk does NOT equal volatility.

18% Std. Dev. Per year. 4% Std. Dev in 10 years.

Why lower returns for less volatility?

Std. Dev.	1 year	3-5	10 yrs.
Pzena	20.7	5.6	4.5
Russell	16.9	10.1	6.1

If you are good at valuing stocks, then your volatility will go down over time.
Act as if you own the business.

Risk that valuation is wrong. Or there is a large deterioration in business.
Patience.

Wait for 3 to 6 months for opportunities to arrive. Don't press when you can't find opportunities . The opportunities will come in clumps.

Trying to predict the market: The average opinion of the average opinion in trying to predict the market. Pointless!

In 2000, Joel thought that the 1500 to 2000 S&P market too high. Internet boom to bust. But tons of opportunities - good companies are steady growers at cheap prices. 40 cent to 50 cent dollars.

Down 5% in 1999 then up 100% in 2000.

Why do many portfolio managers fail? Do it a little different.

Mistakes:

- They lack a circle of competence; too many stocks; less focus
- Indexing and momentum
- Sexy businesses vs. unattractive
- **NO WORK!** In Joel's mind the main issue.

Emotions: More painful to lose than win.
The less you know, the worse your emotions. The more stocks you have, the less knowledge for each holding.

Underperformance/lose. Liquidity. Benefits to concentration: it is easier to underperform. A loser's game of 50 to 100 names.

To really out-perform: focus.

Work to pick spots. Investors not always rational.

Diversification

2 stocks reduce risk by	46%
4	72%
8	81%

16 93%

10 stocks in a portfolio then risk reduced 85%.
$1000 then 10% in each position--lose 1/2 so now 5% loss of the portfolio. After tax assuming other profits then 60% x 5% = 3% after-tax loss.

So out of $1000 you have a $30 loss leaving $970 in your portfolio.
Joel Greenblatt has 6 to 9 names in his portfolio. Some leveraged calls.

With a leveraged security, his weighting would go down from 10% to 5%--5 to 1 or 0. He would take a 1/2 position limit.

If he really likes an idea then 10% to 20% of portfolio. The portfolio is built from the bottom up.

Hedge with market index.

He made a big investment in a S&L with a complicated capital structure but a clear 50 cents dollar.

WAIT for opportunities. Take worse case situation. Larger position with higher probability events.

Wells Fargo: $0 or $150-$200. Or $50 investment goes to 0 or $100. Use Calls to make a risk/reward bet of $15 for $110 payoff or 0. Better risk reward.

Usually, he will not have more than 3.5% bet in Leaps.

Prof. Greenblatt then hands out to each student--their 20 hole punch-card. If you could adhere to this, you would become rich.

December 3 is the final--2 weeks from today. This coming Tuesday at 2 PM will be a review class.

A question on risk arbitrage. Read financials, do a comparative analysis.

Key to outperform:

Concentrate and focus on your best ideas within your circle of competence.

Focus on <u>undervalued</u> companies, not the market. Back in 2000, Joel was worried about the Internet bubble and what would happen to the market when it burst, yet he was finding 40 cent and 50 cent dollars. What should he have done? Bought undervalued stock and ignore the market.

Find cheap companies relative to what they are worth.

What mistakes do Institutional Investors make?

Stay within your circle of competence. If you own a lot of stocks, it is very difficult to stay within your circle of competence.

No work—that is a big one. Many lack the time or inclination to do independent, proper valuation.

Personal needs to remove money out of the market can mess up your results.
Pick your spots and stay around those spots.

People hate losing money twice as much as when they make money. It is painful to lose.
I am guaranteeing you that the market will get it right if you hang in there long enough. **The catch is your valuation work.**

If you own too many stocks, you will dissipate your efforts and knowledge. The less your knowledge, the more emotional you will be. The further you get away from what the companies are worth, the more emotional you will be. Risks of concentration, you are more likely to underperform.

Lack of liquidity is a risk.

A loser's game is owning too many stocks—take your out performance way down. FOCUS on the best ideas. The more at bats you have the less chance you have of being better than a 400 hitter.

Modern Portfolio Theory (MPT) will teach you how to do average. Investors do not process information correctly.

Take the opportunities as they come. He will take the worse case scenario such as lose ½ to entire investments. He takes large position with high probability events.

END

Greenblatt Class #12 (Review)

November 24, 2002

Saddlerock Partners - Diane Greenblatt 212-319-4100 Stock: Salton, SCF

Ranaud Ajdler 212-374-1351. Belgium Classmate who audited Greenblatt's class.

Bankruptcy Investing by Ben Branch/Hugh Ray suggested by Linda Chen.

Review Class Nov. 24, 2003

I hope you read my book, You Can Be A Stock Market Genius and the Haugen Book.
Make assumptions and tell me why you make those assumptions.
ROC is important. Balance sheet interests that we spoke about (Inventories growing faster than sales).

EBIT to EBITDA. Use EBITDA for comparative analysis. For absolute analysis you have to deduct for Capex.

Shorthand which is OK to use is EBIT or EBITDA - Maint. Capex. The difference is between EBIT and D&A.EBIT and amortization. When there is a disparity between capex and depreciation, you have to take that into account. Was capex for maint. or growth?

Was the Capex for maint. Or maint. And growth? You use P/E when you compare unleveraged companies. Remember the first example in the class. When you have cash and no leverage then it is all the better to use EV rather than P/Es. Figure out normalized EBIT.

We are using EV/EBIT as a shorthand for what is the return for the capital you have invested. Some times the trailing is a good proxy and other times it isn't.

EV is the amount you pay for the company. EBIT is the pre-tax earnings.
How good a business it is. ROA and ROE and Return on tangible assets. Return on Capital. WC + Fixed Assets for tangible assets.

6% T-Bond Rate. Company has a return of 10% pretax. I either have to borrow the money or have an alternative use for the money. 10% pretax return and growth for 20% a year--that might be good.

Alternative investment: risk and set Ir with a Junk Bond.
Retail: cost of opening stores: EBIT/Net Working Capital and Fixed Assets.

EBIT/Net WC + FA = $20/$100 = 20%. The marginal return on each store will be at least 20%. If it is 10% to build the next store, then there are alternatives like Junk Bonds.
What will be my normalized returns?

Buy a pile of assets, then reinvest in assets. What are they earning on them?

David Buster's: $4 million each store, around for a few years. $180,000 EBIT = 4.5% pre-tax. Lousy return. The investment is $4 million, which is the fixed assets and Working Capital for each store--that is a capital destroyer: 4.5% is less than required return of 10%. There is risk involved.

I would like to see at least 20% pre-tax in a business. But after tax, I am left with 12% return depending upon tax shields, having debt, etc.

Different retail chains have other returns.

EV (mkt. Value + debt - net cash) is the market price you paid. EBIT is what you get on those assets.
EBIT is the return on the business. EV/EBIT at 4.5% is a mix of the two. The 4.5% depends on the return on assets AND the price paid.

A **value trap**: A company looks cheap, but it earns lousy returns on capital.

I don' like the CAPM method because it is based on a number without logic. What I do: I use the T-Bond rate at 6%. Or buy a business at 16 x P/E. I feel very secure about their franchise.

What are my other investment opportunities or 6 months from now relative to my experience.

If I could buy something at 4 times EBIT then it is not clear. They have two businesses: 1 earns $6 and the other loses $4.00. If they shut the loser down, then they can earn $4.
What multiple it is trading at?

Break-up analysis. ***Footlocker*** took a little work. We spoke with management. $1.00 trading at $10 with no leverage and they had a build-out. No growth, so it might be priced OK. Mgt. tried the Super store concept, but it failed. The sneaker mkt got overbuilt. A lot of stores closed down. Too much supply. I felt good about the store base. They had opened a ton of Superconcepts and they were losing money. Each time a lease came up, they closed the stores.

They were losing 60 cents after tax on those stores. Each year, they would earn 20 cents per share more each year—overlooked by many analysts. So if they did nothing and stayed flat, they could earn an additional 60 cents. Less maint. Capex (MCX) and more CF. So from $1.00 to $1.60. No leverage and do nothing, they can earn $1.60 so a $17 to $27 stock at a 10/11 P/E to 16 P/E. Now I have a number over $2.00 so, 16 multiple could be $32. All those things doable by the company without predicting the future of sneaker sales.

I don't have to look for hard ones. ***HCA:*** What is normalized EBIT? In three years would be $4 per share. What type of multiple that deserved. Given the nature of the business, the demographics, and the protection of medicare. They go in cycles. Take a normalized number. I will do better on this $4 growing at 5% - 6%, so a 16 P/E was reasonable so $64.00 and the stock was at $36 or more than double. I know institutions do not have many alternatives for their money, so the multiple may even be low. Or I could be wrong and the multiple should be 14. I could be wrong on the business and the multiplier and still not lose money.

I do think of my cost of borrowing not my cost of equity. 4.5% is a capital destroyer. 6% and growing is OK.

This business will earn 10.5% and the borrowing cost is 9% with half of that not fixed. You have a complex business, and you get a thin spread. Not worth it. His example when he ran that company.

What is this business going to earn? If I have to borrow to buy this business and the spread is only 1.5% then pass. It is that simple.

No one who looks at it that way would take that bet.

OPTIONS:

Stock is at $41 with a 35 call and a 35 put trading at $1.25 and cost of carry is 6% and 4 months to expiration and no dividend. Where does the call trade?

$41stock price -35C = $6.00 intrinsic value plus $1.25 Put value + 2% (6% for 4/12 of year) on $35 = 70 cents for a total of $6 + $1.25 + $0.70 = $7.95

The Intrinsic Value, the Protection Money (or right not to lose money) and the time value of money.

The value of the call is the Right not to put up money and the right not to lose money and intrinsic value.

You can create interesting risk/rewards with this. Don' think of this as volatility, etc.

Sometimes you may have Binary events where the stock could go to $20 or $70. Leverage and time constraints then go to use Leaps (LT Options)--borrow money for long periods of time. Buy Call but you buy the Put as well. The cost of money could be as low as what it costs Goldman Sachs to borrow money by buying that call. Review his Chapter in his book. Even if you include the cost of this put, part of my borrowing cost, i/o paying 2% you are paying 7% - 8%.

Call: Intrinsic value, cost of put and cost of money.

LEAPS are like non-recourse loans.

How to assess management? Look at the numbers. Listen to them, to their game plan. Do they make sense? If you can't assess the situation, then pass on it. How does management put incremental to work. Expertise. Money managers lose on discipline. Note **Kodak** and their plan to spend money is very risky. Instead of taking their cash cow and paying back to shareholders. Milk the business before spending that $35 per share and losing part of it. My assessment is that their plan is riskier. I have less of a sense of how well they will compete in the digital world. You pay your money and you take your chances. Mgt's plan may be right, I just wouldn't bet on it.

I don't know where sneaker trends are going--but that was not important for **Footlocker**. The market is not changing overnight.

If you are going from 50% returns on capital to 40% that is good, but if it is 0, that is bad. Use common sense.

Pick something that you can assess and come up with a valuation based on your expertise, then pay 1/2 that. People buy lots of things and get out of their circle of competence.

The bottom line is that you guys are Columbia MBAs and are all smart. Wall Street is smart. But not many do well. Small, complicated portfolio. You can't measure risk by volatility. **Special Situation Investing is value investing with a catalyst.**

I didn't give you complicated formulas to beat Wall Street.

I am giving you a way to look at the world.

A way you look at the world. Everyone reads the same things. He focuses on Special Situations, which are value investments with a catalyst. Success is not IQ points or a 40 page report. It does or can take a lot of work to get to normalized earnings.

MISTAKE:

P-3 Media. I bought it out of a spin-off from a merger. P-3 media in 2000 for $2.00 and raised an IPO at $6.00. It was running trade shows at Comdex. Mismanged. They rent space for $2/Sq ft. and sell for $62 per sq. ft. Huge $2 to $62 spread. A negative working capital business. Pay ahead of time, expenses low. Little capital for the business. In 2000 the had 1 million sq. ft. But operating leverage works both ways. As business started to decline, they lost money. Other trade shows took parts of the audience. Sq. ft. were lost.

The stock went from $2 to $12. I decided to wait out the storm. I owned too much of an illiquid stock and I was not aggressive enough to get out when I was clearly wrong, when the stock traded at $6.00.

Exam on Wed. Dec 3, 2003 about 2 hours

END

MUPPETS ASK QUESTIONS AND EXPERTS ANSWER

September 21, 2012

What is a muppet?

Henry Blodgett: "The definition of "muppet," say those who live on the other side of the pond (where 'muppet' is apparently a common term on trading floors to describe the guy on the other side of the trade) is "idiot."

Can a muppet become an investor?

David Swensen: "Instead of concentrating on the central issue of creating sensible long-term asset-allocation targets, [muppets] too frequently focus on the unproductive diversions of security selection and market timing."

Is this always the case?

Warren Buffett: "If you are a know-something investor, able to understand business economics and to find five to ten sensibly-priced companies that possess important long-term competitive advantages, conventional diversification makes no sense for you. It is apt simply to hurt your results and increase your risk."

What are the odds that I am not a muppet?

Charlie Munger: "Most people who try [to become know- something investors] don't do well at it. But the trouble is that if even 90% are no good, everyone looks around and says, 'I'm the 10%.'"

What is the key to becoming a know-something investor?

Warren Buffett: "Success in investing doesn't correlate with I.Q. once you're above the level of 125. Once you have ordinary intelligence, what you need is the temperament to control the urges that get other people into trouble in investing."

What dangers should I look out for?

Benjamin Graham: "Most of the time common stocks are subject to irrational and excessive price fluctuations in both directions as the consequence of the ingrained tendency of most people to speculate or gamble… to give way to hope, fear and greed.

Any other things I should look out for?

David Swensen: "Overconfidence contributes to a litany of investor errors, including inadequate diversification, overzealous security selection, and counterproductive market timing."

Do you have any tips on a good investment process?

Warren Buffett: "You ought to be able to explain why you're taking the job you're taking, why you're making the investment you're making, or whatever it may be. And if it can't stand applying pencil to paper, you'd better think it through some more. And if you can't write an intelligent answer to those questions, don't do it."

If I have run or worked for a business will it help me be an investor?

Charlie Munger: "Understanding how to be a good investor makes you a better business manager and vice versa."

Will being a know something investor make me better at business?

Warren Buffett: "I am a better investor because I am a businessman and a better businessman because I am an investor."

What is the best approach for investors not willing to do the work to become know-something investors?

Warren Buffett: "A very low-cost index is going to beat a majority of the amateur-managed money or professionally-managed money."

Is a 401K a retirement plan?

John Bogle: "A 401(k) is a thrift plan trying to be a retirement plan. It was never designed to be a retirement. To be a retirement plan, **you have to keep putting money in** and can't be allowed to take money out, and you can't be allowed to borrow from it."

Why should muppets diversify their investments?

Warren Buffett: "Diversification is a protection against ignorance."

How should muppets diversify?

Charlie Munger: "Our standard prescription for the know-nothing investor with a long-term time horizon is a no-load index fund. I think that works better than relying on your stock broker. "

Why is a no-load low fee fund important?

John Bogle: "In investing, you get what you don't pay for. Costs matter." "The case for indexing isn't based on the efficient market hypothesis. It's based on the simple arithmetic of the cost matters hypothesis. In many areas of the market, there will be a loser for every winner so, on average, investors will get the return of that market less fees."

Why are fees so high?

Charlie Munger: "The people who are telling you to do something else are all being paid by commissions or fees. The result is that while index fund investing is becoming more and

more popular, by and large it's not the individual investors that are doing it. It's the institutions."

How will fees impact my performance?

Bill Gross: "If you choose an investment advisor, a mutual fund or an ETF, make sure that your fees are minimized. After all, if overall returns average 3–4% annually, how can you possibly afford to give 100 basis points [1%] of it back? You cannot."

Are fees as low as Bill Gross notes?

John Bogle: "heavy costs incurred by investors in actively managed equity funds can easily amount to 2% to 3% annually. Typical expense ratios run from 1% to 1.5%; the hidden costs of portfolio turnover often come to 0.5% to 1.0%; a 5% front-end sales load, amortized over a holding period of five to 10 years, adds another 0.5% to 1.0% per year in costs.

What real value can an investment advisor provide?

John Bogle: "The goal of the advisor shouldn't be to beat the market by picking stocks or winning funds. Advisors add value by providing the discipline required for successful investing. They add value in areas like tax efficiency, risk management, estate planning and retirement planning." "I don't think beating the market is where they add value, so I believe charging on a fee-only basis, or a fixed or hourly professional fee, will grow." "The most valuable services advisors can provide are in areas of financial planning like integrating Social Security into one's portfolio. They can help the client set the right asset allocation and then avoid the temptation to change it. Assisting the client in coordinating the will and estate planning aspects of life is a critical area. Planners can save their clients in taxes by building tax-efficient portfolios with little turnover and the assets located in the right tax vehicles – taxable, tax-deferred or tax-free. Making sure clients have the right and most cost-effective insurance is another key area of value. Finally, helping the consumer understand how much they need to save to reach their financial goals, applying all of the areas above, is a critical service planners provide to their clients."

What motivates mutual funds?

David Swensen: "The mutual fund industry is not an investment management industry. It's a marketing industry."

What is a closet indexer?

Charlie Munger: "[With] closet indexing, you're paying a manager a fortune and he has 85% of his assets invested parallel to the indexes. If you have such a system, you're being played for a sucker."

Why not use an ETF since fees can be lower in some cases?

John Bogle: "You're probably 25% more likely to trade with an ETF." [use an ETF only if you are a disciplined investor]

What is asset allocation?

David Swensen: "Asset allocation is the tool that you use to determine the risk and return characteristics of your portfolio. It's overwhelmingly important in terms of the results you achieve. In fact, studies show that asset allocation is responsible for more than 100 percent of the positive returns generated by investors."

Should I re-balance my asset allocation?

David Swensen: "Rebalancing to long-term policy targets plays a central role in the portfolio management process."

Should I speculate in currencies?

David Swensen: "Sensible investors avoid speculating on currencies."

Should I own US Treasuries?

David Swensen: "No other asset type comes close to matching the diversifying power created by long-term, noncallable, default-free, full-faith-and-credit obligations of the U.S. government."

How can I protect against inflation?

David Swensen: "TIPS constitute a compelling addition to the tool-set available to investors."

Should real estate be part of my asset allocation strategy?

David Swensen: "With its inflation-sensitive nature, real estate provides powerful diversification to investor portfolios."

How much should I hold in bonds vs stocks?

John Bogle: "A good place to start is a bond percentage that equals your age. Although I don't slavishly adhere to that rule…" "My personal, non-retirement accounts are about 80 percent bonds and 20 percent stocks, reflecting my old rule of thumb that your bond allocation should roughly equal your age. My retirement accounts are more like a 50-50 split between stocks and bonds, because of a longer time horizon and because yields on bonds are extremely unattractive right now. Bonds in my retirement accounts are about 30 percent Treasuries and 70 percent investment-grade corporates."

What is the importance of having some cash and cash equivalents?

John Bogle: "Virtually all investors should keep some "dry powder" in their portfolios in the form of high-grade short- and intermediate-term bonds. Investors who failed to learn that lesson fell on especially hard times in 2008."

Is there any upside to acknowledging that you are a muppet?

Buffett: "By periodically investing in an index fund…the know-nothing investor can actually out- perform most investment professionals. Paradoxically, when 'dumb' money acknowledges its limitations, it ceases to be dumb."

What is investing?

Benjamin Graham: "An investment operation is one which, upon thorough analysis, promises safety of principal and an adequate return." " The individual investor… should be able to justify every purchase he makes and each price he pays by impersonal, objective reasoning that satisfies him that he is getting more than his money's worth for his purchase."

What is speculation?

Jesse Livermore: "The speculator is not an investor. His object is not to secure a steady return on his money at a good rate of interest, but to profit by either a rise or a fall in the price of whatever he may be speculating in."

Is it easy to spot investing versus speculation?

Warren Buffett: "The line separating investment and speculation, which is never bright and clear, becomes blurred still further when most market participants have recently enjoyed triumphs. Nothing sedates rationality like large doses of effortless money. After a heady experience of that kind, normally sensible people drift into behavior akin to that of Cinderella at the ball. They know that overstaying the festivities — that is, continuing to speculate in companies that have gigantic valuations relative to the cash they are likely to generate in the future — will eventually bring on pumpkins and mice. But they nevertheless hate to miss a single minute of what is one helluva party. Therefore, the giddy participants all plan to leave just seconds before midnight. There's a problem, though: They are dancing in a room in which the clocks have no hands."

The Matthew Effect and VC Performance

October 6, 2012

Andy Rachleff wrote recently:

"Cambridge Associates, an advisor to institutions that invest in venture capital, says that **only about 20 firms – or about 3 percent of the universe of venture capital firms – generate 95 percent of the industry's returns,** and the composition of the top 3 percent doesn't change very much over time."

Anyone who has looked at Cambridge data over time can see that the distribution of VC returns is a *highly* persistent power law, as Andy notes.

Felix Salmon presents the Kauffman data here which shows the same power law.

The existence of a persistent power law is a signature of path dependence. Path dependence is often driven by preferential attachment. Path dependence is everywhere in economics. As Douglass said in his Nobel lecture:

"… path dependence [explains]"one of the remarkable regularities of history. Why do economies once on a path of growth or stagnation tend to persist?"

Specifically regarding venture capital and path dependence, being around very smart people with sound judgment who work hard and like to network is self-reinforcing which produces the power law distribution. The power law distribution represents **Matthew effects** happening in multiple dimensions (skills, networks, judgment, deal flow, etc.). The more skillful, wise and successful you get the more skillful, wise and successful you get [repeat with nonlinear impacts].

The people at Santé Fe Institute believe that this is the best paper that explains why the distribution of VCs returns follows a power law. I have issues with the paper since there are other factors at work, but it is directionally correct on the issue of networks and network effects:

"..better-networked VC firms experience significantly better fund performance, as measured by the proportion of investments that are successfully exited through an IPO or a sale to another company."

Skill plays a huge role (some of which is an outcome of some people winning what Warren Buffet calls "the genetic lottery") but so does luck. On skill vs. luck take a look at the fantastic work of Michael Mauboussin, especially his wonderful new book *The Success Equation*. Also, Felix Salmon on the secret to success in the arts.

Luck and skill are tightly linked. If you get lucky early in life, you get to hang around smarter people, which makes you smarter and that process self-reinforces. If you can get connected to great networks of people those network connections similarly self-reinforces. As just one example, it is a powerful determinant of success in VC to be able to invest only in" referred deals" sent in by smart people with sound judgment. The highest quality startups with the best talent are attracted to past success of a VC and that self-reinforces success. Importantly, exposure to smarter/better startups over time actually makes VCs smarter and have better pattern recognition skills and judgment.

Why do LPs still invest in "marginal VCs" as shown by the Cambridge data given the persistence of the power law in VC returns that Andy notes above? Marginal VC funds are raised from LPs because pension funds and universities have fake ≈ 8% return assumptions that ZIRP makes radically absurd. The marginal LPs need some justification that they will deliver magical returns via the VC asset class even though the Cambridge data says it won't happen unless they get into VCs in the top 5%. The LPs as a result invest in marginal VCs. In other words,i t is a way for the investment committee of the pension or endowment to defer the pain and make the huge underfunding problem the job of someone else in the future.

Persistently successful VCs raise relatively larger funds, but have found through a discovery process that fund size is inversely correlated with performance if the size of a given fund exceeds a certain threshold. Smart VCs know that this threshold on fund size changes over time as economics conditions change. That small funds under perform relative to larger funds is easily explainable by marginal VCs not being able to raise as much money since their historical returns are negative. The supply of LPs who are desperate for support of their ≈ 8% assumed rates of return and will invest in marginal bottom two quartile VCs is limited.

Marginal VCs in the lower two quartiles will disappear more quickly when pension funds are forced to face reality about their return assumptions. VCs in the second quartile will do

better financially when that happens. When LPs stop funding marginal VCs is unclear since psychological denial is a persistently powerful force in the course of human events.

Angel Investing and Power Laws

October 15, 2012

Warren Buffett's view on risk is the right response to the data contained in the post by Robert Wiltbank on Angel investing returns. In an essay in which he discusses risk, Buffett advises:

"... If significant risk exists in a single transaction, overall risk should be reduced by making that purchase one of many mutually-independent commitments. Thus, you may consciously purchase a risky investment – one that indeed has a significant possibility of causing loss or injury – if you believe that your gain, weighted for probabilities, considerably exceeds your loss, comparably weighted, and if you can commit to a number of similar, but unrelated opportunities. Most venture capitalists employ this strategy. Should you choose to pursue this course, you should adopt the outlook of the casino that owns a roulette wheel, which will want to see lots of action because it is favored by probabilities, but will refuse to accept a single, huge bet."

Buffett's recommendation fits perfectly with Wiltbank's suggestion:

"In any ONE investment, an angel investor is more likely than not to lose their money, i.e. to earn less than a 1X return. It is risky. However, once investors had a portfolio of at least six investments, their median return exceeded 1X. Irving Ebert, of the Ottawa Angels, has done some outstanding Monte Carlo simulation with this data, finding that making near 50 investments approximates the overall return at the 95th percentile."

As Wiltbank correctly notes, this is not an argument for "spray and pray" Angel investing. Wiltbank: *"This is critical: Each investment has to be done as though it's your only one; the bar can't be lowered to enable you to more quickly build a bad portfolio."*

Wiltbank should focus more on the question of why the distribution of returns is a power law. The answer, as I explained in the previous post on this blog, is that underlying the data is a product of "path dependence"/ the Matthew Effect.

Power laws appear in many different contexts, but their appearance is not random but rather a signature of path dependence. Not taking that into account in establishing an investment strategy is a huge mistake since fighting the power law is like building a home at the bottom of an avalanche prone mountainside.

As to the nature of Wiltbank's data that produces the power law and his conclusion about overall return, it is implausible that the distribution of return data would not be an even clearer power law distribution if survivor bias were fully taken into account. As one paper by another author notes:

"... In addition to selection bias, research on angel investments is plagued by survivorship bias. The idea is that investors who have failed and left the business are not sampled. This

means that surviving investors are oversampled. Investors who remain in the business are likely to have been more successful than those who have left…."

Having said that about selection and survivor bias, the data is complete enough for the power law to be identified and the optimal strategies adopted.

As for Wiltbank's conclusion: *"The best estimate of overall angel investor returns from this data is 2.5 times their investment,"* it is not plausible that returns are this high given the top down constraint of GDP/Income growth. In other words, Wiltbank's bottoms up analysis needs top down reconciliation with overall investment returns. If Angels were earning 2.5X their investment there would be a LOT more Angels that there actually are in the world. Angel investing as a market is more inefficient than public markets, but is not inefficient enough for returns to be that high overall. It is possible that top tier Angels are generating these returns but that again is section bias, survivor bias and the Matthew effect at work. I am sure this is disappointing to Kauffman, who would love to see a huge ramp up in Angel investing nationwide. That is not to say that Angel investing can't produce high returns, only that the data set is incomplete.

Charlie Munger on Mistakes

November 16, 2012

MUNGER'S METHODS

Chapter 1: The Difference between a Good Business and a Bad Business

Mistakes

Charlie Munger learned about business in the best way possible: by making mistakes and being successful actually being in business. Reading about business is vital Charlie has said many times, but there is no substitute for wading in and actually taking the plunge as a business manager or owner. It is through the process of making mistakes and having success in the real world and getting feedback from the market that you can learn and establish sound business judgment.

Making mistakes is, of course, inevitable. After all, as Einstein once said, anyone who has never made a mistake (if there is such a person) has never tried anything new. Munger advises that people strive to make *new* mistakes and learn as a consequence:

"There's no way that you can live an adequate life without many mistakes. In fact, one trick in life is to get so you can handle mistakes. Failure to handle psychological denial is a common way for people to go broke." http://boundedrationality.wordpress.com/quotes/charlie-munger/

"I don't want you to think we have any way of learning or behaving so you won't make mistakes. http://boundedrationality.wordpress.com/quotes/charlie-munger/

"I don't think it's necessary to be as dumb as we were." http://bitly.com/YsZny5

Where would Apple be if Steve Jobs did not make the mistakes he did at NeXT? What we call "experience" is not only the successes we have, but the mistakes we make.

Charlie Munger admits he still makes mistakes even after many decades as a business person and investor. He has also said that it is important to "rub your nose" in your mistakes.

"I like people admitting they were complete stupid horses' asses. I know I'll perform better if I rub my nose in my mistakes. This is a wonderful trick to learn." http://theinvestmentsblog.blogspot.com/2011_12_01_archive.html

"Forgetting your mistakes is a terrible error if you are trying to improve your cognition. Reality doesn't remind you. Why not celebrate stupidities in both categories?" http://news.morningstar.com/article/article.asp?id=169398

Munger especially recommends paying attention to so-called "mistakes of omission" (mistakes you make by not doing something):

"The most extreme mistakes in Berkshire's history have been mistakes of omission. We saw it, but didn't act on it. They're huge mistakes — we've lost billions. And we keep doing it. We're getting better at it. We never get over it. There are two types of mistakes: 1) doing nothing; what Warren calls "sucking my thumb" and 2) buying with an eyedropper things we should be buying a lot of." http://www.tilsonfunds.com/motley_berkshire_brkmtg01notes.php

"Our biggest mistakes were things we didn't do, companies we didn't buy." http://money.cnn.com/magazines/moneymag/moneymag_archive/1998/07/01/244582/index.htm

The list of big business mistakes is long. But for an ordinary investor the simple act of not saving or contributing to a 401(k) can be a huge mistake of omission.

For Charlie, thinking in terms of "opportunity cost" is essential when it comes to mistakes:

"We are apparently slow learners. These opportunity costs don't show up on financial statements, but have cost us many billions." http://www.tilsonfunds.com/motley_berkshire_brkmtg03notes.php3

"Since mistakes of omission don't appear in the financial statements, most people don't pay attention to them." http://www.buffettfaq.com/

Munger and Buffett not investing in Wal-Mart is just one example of a mistake of omission. Buffett has said that just this one mistake with Wal-Mart cost them $10 billion. In 1973 Tom Murphy offered to sell some television stations to Berkshire for $35 million and Buffett declined. "That was a huge mistake of omission," Buffett has admitted. .

By paying attention to your mistakes, you can learn from your errors and improve your methodology argues Charlie:

"You can learn to make fewer mistakes than other people- and how to fix your mistakes faster when you do make them." http://www.scribd.com/doc/86728974/3-Lesson-in-Elementary-Worldy-Wisdom-Revisited-1996

Charlie has cited "Shell paying double for Belridge Oil" due to "a technical mistake" in a closed bid auction is an example to learn from. Berkshire paying too much for Conoco Phillips was a mistake as was Berkshire buying US Airways. The best way to become a millionaire is to start with a billion dollars and buy an airline is the old joke in business.

As for mistakes others have made, Groupon rejecting Google's $6 billion purchase offer at one point was a wonderful mistake from Google's standpoint but not for Groupon shareholders. AOL buying Time Warner for $182 billion is among the very worst business mistakes ever made. Quaker Oats buying Snapple was also a monster mistake in the annals of business.

Of course, you can also learn from success, particularly if you remember that success can be a lousy teacher since what you may believe is the outcome of skill may be luck. Charlie has said that more than once that he and Buffett have made a mistake only to be bailed out by luck:

"Banking has turned out to be better than we thought. We made a few billion [dollars] from Amex while we misappraisal it. My only prediction is that we will continue to make mistakes like that." http://www.tilsonfunds.com/motley_berkshire_brkmtg03notes.php

"Well, some of our success we predicted and some of it was fortuitous. Like most human beings, we took a bow." http://www.tilsonfunds.com/wscmtg05notes.pdf

"The amazing thing is we did so well while being so stupid. That's why you're all here: you think that there's hope for you. Go where there's dumb competition." http://www.valueplays.net/wp-content/uploads/The-Best-of-Charlie-Munger-1994-2011.pdf

Munger has said repeatedly that he made more mistakes earlier in life than he is making now. One of his early mistakes was to own a company that made electrical transformers. He has also said that he has found himself in real estate ventures which would only be enjoyed by a masochist. In another case, he and Warren Buffett bought department stores. Charlie has said:

"Hochschild, Kohn the department store chain was bought at a discount to book and liquidating value. It didn't work [as an investment.]" http://bitly.com/RzDIys

For Buffett, buying Berkshire Hathaway itself can arguably be put into the mistake category. The New England textile mill when bought in the 1960s was a lousy business that wasn't worth putting an new capital into since it would never generate more return on capital investment than alternative investments available to Buffett. Berkshire was valuable in one way in that it taught Buffett and Charlie what *not* to do. He has said: "It is remarkable how much long-term advantage people like us have gotten by trying to be consistently not stupid, instead of trying to be very intelligent." http://bit.ly/U31gzU

Buying Dexter Shoes was definitely a multi-billion dollar mistake for Berkshire. In doing the Dexter due diligence analysis Buffett and Munger made the mistake of not making sure the

business had what they call a "moat" and being too focused on what they thought was an attractive purchase price. Buffett said once about Dexter: "What I had assessed as durable competitive advantage vanished within a few years." Capitalism inherently means that others will always be trying to replicate any business that is profitable and that means you are always in a battle to keep what you have. Dexter lost that battle in a very swift fashion. If you make a mistake, capitalism's "competitive destruction" forces will expose it swiftly and sometimes brutally.

The Chinese automaker BYD may end up being a mistake for Berkshire perhaps because Munger and Buffett drifted too far from what they call their "circle of competence." Charlie has said that it was fun to make the investment and particularly at his age and level of success he is entitled to do so. But the jury is still out on BYD as an investment and they are having some significant problems. That is arguably to be expected since: "It is fun to watch a business tackle the biggest problems we face in this world. Cheaper solar power and better batteries are holy grails." But the BYD investment was really out of scope for Munger and should be viewed as an aberration like when they invested in US Airways.

Charlie's view is that one great way to avoid mistakes is to own a business that is simple to understand given your education and experience:

"Where you have complexity, by nature you can have fraud and mistakes."
http://www.tilsonfunds.com/brkmtg05notes.pdf

"If you can't understand it, don't do it" is a simple rule of thumb.

If, after you have made a mistake, you can't explain why you failed, the business was too complex for you to have invested in says Buffett. In other words, Munger and Buffett like to be able to understand why they made a mistake, so they can learn from the experience. If you can't understand the business you can't determine what you did wrong. In a sector like technology Munger and Buffett have both said they do not understand the business well enough to be investors. The other problem with investing in technology is that they don't feel like they can forecast what the business will be like even if five years let alone for decades.

Not trying to be too clever with things like taxes is another way to avoid mistakes argues Munger. Complexity can be your friend or your enemy depending on the circumstances. For example,

"…in terms of business mistakes that I've seen over a long lifetime, I would say that trying to minimize taxes too much is one of the great standard causes of really dumb mistakes. I see terrible mistakes from people being overly motivated by tax considerations. Warren and I personally don't drill oil wells. We pay our taxes. And we've done pretty well, so far. Anytime somebody offers you a tax shelter from here on in life, my advice would be don't buy it." http://ycombinator.com/munger.html

Other investors like complexity and spend a lot of time deferring or avoiding taxes in complex ways. While someone like John Malone may like to do deal with complex tax strategies, it is not something Charlie likes to do.

Regarding the desire for simplicity in a business Charlie once talked at a Wesco meeting about a place he knows where poker is played. He then pointed out that" the more complex

the game, the easier it is for the best players to beat the patsies." And, of course, if you do not know who the patsy in the game is, it is you.

Munger likes to find areas where the competition is "dumb":

"Don't go where the big boys have to be. You don't want to look at the drug pipelines of Merck and Pfizer. Go where there are inefficiencies in which you can get an advantage and where there are fewer people looking at the stocks. Go where the competition is low." http://www.gurufocus.com/news/93302/2010-wesco-financial-corp-annual-meeting-notes

Charlie once described a friend who is a chess master and said in business rather than competing with the equivalent of him, you want to find an area where you are the best and competitors are not so talented. He likes investing in businesses which have "no or dumb competition" and the investors who want to invest in them are similar.

Another way to avoid mistakes is to have someone who you can run your decision by so you can improve your odds of success. Buffett and Munger have the ability to do that for each other. Warren Buffett calls Charlie "The Abominable No-Man" since his answer on a given investment is so often "no." Having a diverse "posse" of experienced people that you trust look at a potential investment is wise if you want to avoid making too many mistakes. Philip Fisher, an investor who Munger learned a lot from, liked to have a "scuttlebutt" network of people who he would call for advice or expertise and Charlie is similar in his approach. Munger has said:

"Even Einstein didn't work in isolation. But he never went to large conferences. Any human being needs conversational colleagues." http://www.gurufocus.com/news/93302/2010-wesco-financial-corp-annual-meeting-notes

Buffett once, when discussing his mistakes, gave a huge compliment to Munger's value as a collaborator when he said:

"I try to look out 10 or 20 years when making an acquisition, but sometimes my eyesight has been poor. Charlie's has been better; he voted 'no' more than 'present' on several of my errant purchases." http://articles.businessinsider.com/2012-02-25/wall_street/31098427_1_charlie-munger-warren-buffett-berkshire-hathaway

Another important source of mistakes is overconfidence.

"[GEICO] got to thinking that, because they were making a lot of money, they knew everything. And they suffered huge losses. All they had to do was to cut out all the folly and go back to the perfectly wonderful business that was lying there." http://ycombinator.com/munger.html

Smart people are not exempt from making mistakes. A person with a high IQ can actually make more mistakes that someone who's IQ is 30 points lower due to overconfidence. It is the person with the high IQ who falsely thinks that is 30 points higher than it really is that gets you in serious trouble. People who are genuinely humble about their IQ can sometimes make far fewer mistakes if they do the necessary work, have a sound investment process and think in rational ways. Munger has said on this: "Terribly smart people make totally bonkers mistakes." http://ycombinator.com/munger.html

On numerous occasions Charlie has warned people that "the easiest person to fool is yourself" as Richard Feynman once said. Charlie puts it this way:

"The ethos of not fooling yourself is one of the best you could possibly have. It's powerful because it's so rare." http://www.fool.com/news/foth/2002/foth020515.htm

People have a tendency to make assumptions that enable a desired result even if that assumption is obviously false. This tendency for people to "goal seek" the result they want is a fundamental flaw in human nature in Charlie's opinion. "As a man wants, so shall he believe" says Charlie quoting a Greek philosopher from long ago. For this reason Charlie spends a lot of time examine anything from first principles from the ground up. Assume nothing and" think for yourself" is his mantra. Optimism is the enemy of the rational investor. Rationality comes from a combination of clear thinking and relatively unemotional temperament when it comes to investing.

Charlie over the years has repeatedly said that the most important quality that makes him a good investor is that he is rational. That rationality helps Charlie not follow others over the edge of a cliff. If you think things through from the simplest building blocks in a step-by step process you can avoid making so many mistakes or at least make more new mistakes.

"Rationality is not just something you do so that you can make more money, it is a binding principle. Rationality is a really good idea. You must avoid the nonsense that is conventional in one's own time. It requires developing systems of thought that improve your batting average over time." http://news.morningstar.com/article/article.asp?id=169398

"[An] increase in rationality is not just something you choose or don't choose, it's a moral duty to keep up as much as you reasonable can. It worked so well at Berkshire , not because we were so darned smart to start with…we were massively ignorant…many of the great successes of Berkshire started with stupidity and failure."
http://www.sancaptrustco.com/documents/7.19.11NotestoMunger.pdf

Nothing seduces rational thinking and turns a person's mind in mush like a big pile of money that was easily earned. About Berkshire, Charlie said once: "This is a very rational place."
http://jeffmatthewsisnotmakingthisup.blogspot.com/2007/06/pilgrimage-concluded-this-is-rational.html

Not being patient can also be a huge source of mistakes as well says Munger:

"We don't feel some compulsion to swing. We're perfectly willing to wait for something decent to come along. In certain periods, we have a hell of a time finding places to invest our money." http://www.tilsonfunds.com/motley_berkshire_brkmtg01notes.php

"Most people are too fretful, they worry too much. Success means being very patient, but aggressive when it's
time." http://www.grahamanddoddsville.net/wordpress/Files/Gurus/Warren%20Buffett/Berkshire%20Hathaway%20Annual%20Meeting%20Notes%202004.pdf

Munger and Buffett believe that the passage of time is the friend of the investor or business person and impatience his or her enemy. When asked once about whether he was worried about a big drop in the value of Berkshire Munger said in a very direct way:

"Zero. This is the third time Warren and I have seen our holdings in Berkshire Hathway go down, top tick to bottom tick, by 50%. I think it's in the nature of long term shareholding of the normal vicissitudes, of worldly outcomes, of markets that the long-term holder has his quoted value of his stocks go down by say 50%. In fact you can argue that if you're not willing to react with equanimity to a market price decline of 50% two or three times a century you're not fit to be a common shareholder and you deserve the mediocre result you're going to get compared to the people who do have the temperament, who can be more philosophical about these market fluctuations." http://www.psyfitec.com/2009/10/buffett-and-munger-on-bbc.html

Buffett has said about the importance of patience: "The Stock Market is designed to transfer money from the Active to the Patient." Both Munger and Buffett believe that so-called *chasing performance* ("buying high and selling low") is one of the worst mistakes an investor can make. "Be greedy when others are fearful and fearful when others are greedy" they both advise. People being greedy and fearful at the wrong times are what creates many significant investing opportunities Munger has said.

Another way to avoid making mistakes is to own businesses that even what Charlie calls your "idiot nephew" could run fairly well.

"Network TV [in its heyday,] anyone could run and do well. If Tom Murphy is running it, you'd do very well, but even your idiot nephew could do well." http://www.designs.valueinvestorinsight.com/bonus/bonuscontent/docs/Tilson_2006_BRK_Meeting_Notes.pdf

Having to make one hard financial decision after another in running a company can be damaging to your financial health even if you or your mangers are very talented. Munger is emphatic on this topic:

"We're partial to putting out large amounts of money where we won't have to make another decision." http://www.tilsonfunds.com/motley_berkshire_brkmtg01notes.php

ESPN is an example of a company that could probably be run by your "idiot nephew" since its moat is so strong (moats will be the subject of the next post in this series). Coca-Cola, Snickers and Wrigley's are strong businesses that pass this test.

It is worth emphasizing that Munger is not saying management does not matter (another subject this series of posts will get to later). Instead what Charlie is saying that he would prefer to have a business that passes the "idiot nephew" test *and * for the business to have talented management. Owning a business with lousy underlying economics of the business facing one hard problem after another may not have a good financial outcome even with a top-notch management team according to Charlie. In that sense, having a moat and talented management such as the team that runs the Berkshire portfolio company Iscar gives Warren and Charlie an extra margin of safety when making an investment.

Finally, after achieving some level of financial success mistakes can actually make the investing process more fun. If there was not at least some chance that your investment would end up in the business equivalent of a sand trap in golf once in a while the process that is investing would be boring, even if it was lucrative.

Postscript and what is still to come:

What I wrote above is the first post in a series about "methods" used by Charlie Munger to do things such as invest capital. This series of posts is not about topics like whether he likes to fish, his unusual personality or his political views. The focus will be on the investment methodology of Charlie Munger. Other methods he uses in life are also discussed. Regardless of your political persuasion, personality or hobbies, Munger's methods are uniquely valuable. Even if you disagree with any or all of his methods it is very hard to argue that they are not interesting.

Much of the task here is to organize what Charlie has said or written into something that is easier to understand since he has never explained his investment thesis in a well-organized way. The raw material for this book consists of snippets from interviews and a few articles and papers he has written over the years. Writing these posts is a bit like assembling a jigsaw puzzle. Sometimes the quoted passages may seem a bit too long, but nothing says more about what Munger thinks than what he has actually said.

I will try to make the posts more interesting and current by applying Munger's methods to companies that are in the news today and companies that are outside their circle of competence.

P.s., I decided to begin this series with a discussion of Charlie's view on "mistakes" since it introduces some humility in the process at an early stage. Janet Lowe in her Charlie Munger biography "Damn Right" http://www.amazon.com/Damn-Right-Berkshire-Hathaway-Billionaire/dp/0471446912 , quotes Charlie Munger as admitting that he "was behind the door when humility was handed out." As I said above, my next post will be about the value of economic "moats" in business.

Charlie Munger on Moats (First of the Four Essential Filters)

December 6, 2012

If there is anything fundamental about what Charlie Munger has learned about business it is this:

"The difference between a good business and a bad business it is that good businesses throw up one easy decision after another. The bad businesses throw up painful decisions time after time." http://bit.ly/S5iN7K

Why do some businesses create easy decisions? The answer lies in microeconomics: if there is no significant "barrier to entry" which creates what Harvard Business School Professor Michael Porter calls a "sustainable competitive advantage" (a "moat" in Berkshire parlance), competition will cause return on investment for that business to drop to opportunity cost and there will be no economic profit for the producer. The analogy they use at Berkshire is that the business itself is the equivalent of the "castle" and the value of that castle will be determined by the strength of the "moat."

The need for a business to have a "moat" is so strong that Munger has made it one of the **"four essential filters"** he uses in deciding whether to invest in a given business. The **four essential filters** are:

1. A business with a moat,
2. A business that can be understood by the investor,
3. Management in place with integrity and talent, and
4. A business that can be bought at an attractive price that gives an attractive margin of safety. http://www.psyfitec.com/2009/10/buffett-and-munger-on-bbc.html

Before examining each of these **four essential filters** one-by one, it is important to point out that these **"four skills"** below which relate to moats are very different that the **four essential filters** themselves:

1. **Creating a moat** which is something that people like Ray Kroc, Sam Walton Estee Lauder, Mary Kay Ash and Bill Gates have accomplished. Moat creation requires superior management skill always combined with some degree of luck. It is theoretically possible to acquire a moat with no management talent and just luck but I can't think of an example of this ever happening. Sometimes people who are fantastic managers who have the ability to create a moat have very poor skills when it comes to investing. Stock promoters love these people since they are big targets for scams.
2. **Identifying a moat that others have created** which is something that people like Charlie Munger and Warren Buffett can do. Munger admits that he and Warren Buffett buy moats rather than build them since building them is not something they do particularly well. In addition to a moat Charlie insists that there be a talented management team already in place. For an investor who buys moats instead of creating one, the existence of a moat has special value since they can sometimes survive financially even if management talent does not deliver as expected or if they leave the business.
3. **Identifying a startup that may acquire a moat before it is evident** which is something that some venture capitalists can do at a sufficiently high level of probability that they can generate an attractive return on capital overall. This skill is very rare as evidenced by the fact that the distribution of returns in venture capital is a power law. Moats that emerge from complex adaptive systems like an economy are hard to spot since a moat is something that greater than the sum of the parts emerging from something else that is greater than the sum of its parts. In contrast, a moat being destroyed is easier to spot since it is a process of something transforming into nothing.
4. **Describing a moat in academic terms which** is something that someone like Michael Porter can do. Why this is a rare talent in academia is a puzzle. The reason for this is that simple theories are not the sort of things that will get a person a tenured faculty position. This essay could go on for many pages quoting Munger railing about deficiencies in academia. Here are just two:

"I was recently speaking with Jack McDonald, who teaches a course on investing rooted in our principles at Stanford Business School. He said it's lonely — like he's the Maytag repairman." http://www.fool.com/boringport/2000/boringport00051500.htm "

Warren once said to me, "I'm probably misjudging academia generally [in thinking so poorly of it] because the people who interact with me have bonkers theories." … We're trying to buy businesses with sustainable competitive advantages at a low – or even a fair price. The

reason the professors teach such nonsense is that if they didn't], what would they teach the rest of the semester?"
http://www.tilsonfunds.com/motley_berkshire_wescomeetings.php (2004)

Each of these four skills which relate to moats is very different and it is unusual for a person to have all four skills. Many people just have one. More importantly, well over 90% of the population of the world has none of these skills. Tragically for them, the population that thinks they have this set of skills is far higher than 10%. For society, this overconfidence is valuable since "even a blind squirrel finds a nut once in a while" via luck.

Merely because a person can identify that a given company has a moat does not mean that they have any ability to create a moat as a manager. At the 2012 Berkshire meeting Munger admitted that the brand-based moats which Berkshire has are bought rather than created. The ability to spot a moat that someone else created is very different from the ability to create a moat, believes Munger. You don't need to know how to make hamburgers to spot that McDonald's' has a moat, but don't try to build a business like McDonald's without the abilities that Ray Kroc had.

At the 2012 Berkshire meeting Charlie said:

"We buy barriers. Building them is tough… Our great brands aren't anything we've created. We've bought them. If you're buying something at a huge discount to its replacement value and it is hard to replace, you have a big advantage. One competitor is enough to ruin a business running on small margins." http://gongol.com/research/berkshire/2012/

Sometimes great managers can transition to become great venture capitalists and sometimes not. As another example, Michael Porter has done a great job taking some fundamental ideas from microeconomics and introducing it to business schools, but I would not give him five cents to start a business or invest money on my behalf. Perhaps he is a good manager or investor but I have zero data to indicate that this might be true other than he has described some important principles in an academic way.

Recently someone argued on a blog that because some academics affiliated with Michael Porter's theory on sustainable competitive advantage do not have the management skill required to create a moat themselves, that "sustainable competitive advantage simply doesn't exist" other than created by government regulation.
http://www.forbes.com/sites/stevedenning/2012/11/20/what-killed-michael-porters-monitor-group-the-one-force-that-really-matters/ First and most importantly, as will be explained below, the test of whether a moat exist is quantitative (it is a 100% math-based test). The simple of mathematics reveals that many companies have moats in many sectors of the economy that have existed for many years. Second, as I have explained above, not everyone has all **four skills** that relate to moats. That a team of academics can't create a moat does not mean sustainable competitive advantage does not exist. The act of successfully creating a moat is a rare event. Berkshire's portfolio of companies alone (e.g., See's Candies) proves that moats are sustainable for a very long time. Google and Oracle are just two of many companies that have generated **sustained** profitability that meets the test for a moat.

The blogger's own thesis is that companies should continuously innovate instead. That Porter's work would not support the need to constantly innovate, create new value or disrupt your own business is a baffling conclusion. The two issues are orthogonal. The thesis that

Clayton Christensen's work invalidates the work of his fellow professor at Harvard Business School Michael Porter is simply false. That profit is **hard** to sustain does not mean that it is **impossible** to sustain. Nowhere does Michael Porter say that a moat can be maintained forever.

The blogger's thesis also suffers in that it has no predictive power. It is consistent with the sort of promotion that you see around hyped IPOs. "It's disruptive!" is not a substitute for profit unless your goal is to flip the business to someone else. Disruption alone without anything behind it is the management equivalent of EBITDA.

Clayton Christensen's work around disruptive innovation is super important and wise (you will see links to it below), but don't kid yourself that disruption without a moat will necessarily lead to actual GAAP profit. Disruption is a fantastic place to look for profit whether the business is a startup or an established business, but sometimes profit is just not there. If you don't have a moat somewhere and are unable to flip your company to a greater fool or a company that is already profitable who needs it for defensive reasons, you will soon fall prey to the only unforgivable sin in business: running out of cash. Giving away everything for free while generating zero profit is at best an interim strategy or a description of the Java business model that Sun adopted.

Do some companies create something so disruptive that benefits consumers so much that someone must buy that service or product to stay competitive even though it generates no incremental profit? Absolutely. But in such a case only consumers benefit since only positive outcome is the creation of **consumer** surplus. **Producer** surplus for that disruptive innovation can be zero or less than zero. That is part of the reason why capitalism benefits consumers. To offer a "loss leader" you must in the medium term at least have a base business that generates a profit that is tied to that loss. But I am getting ahead of myself. You can read more on disruption in a futurepost.

Returning to the discussion of the four essential filters, whether a business has a durable moat is without question the most important filter for an investor like Charlie whose chosen profession is buying moats. For example, Charlie describes a moat in three different ways immediately below, each emphasizing the importance of the moat being able to maintain itself over time.

"We have to have a business with some inherent characteristics that give it a **durable competitive advantage**." http://www.youtube.com/watch?v=3XlBrohrIUc

"The number one idea is to view a stock as an ownership of the business and to judge the **staying quality** of the business in terms of its **competitive advantage**." http://www.valuewalk.com/charlie-munger-page/

"We're trying to buy businesses with **sustainable competitive advantages** at a low – or even a fair price."

Charlie may reference another of the four essential filters in a statement but invariably the requirement of a moat is present in his statement. My belief is that of the four filters, nothing is more essential than moat. The second filter is about reducing the number of mistakes made and filters three and four essentially layer on a "margin of safety" when making an investment. In other words, moats are the foundation of Munger's investment process and

methodology. Everything starts with the moat (or lack of a moat) for Charlie because he does not create moats, he buys them.

Components of a Moat:

Munger has not explained his theories on what causes a moat as comprehensively as Warren Buffett, but he has made some comments that point people in the right direction. In addition there are all the companies in the Berkshire portfolio that illustrate what a moat is, like Geico, Burlington Northern, See's Candies.

The primary components of a moat that Charlie has talked about are as follows:

1. Supply-Side Economies of Scale

There are two types of "economies of scale" and the first is supply-side economies of scale. A large firm that is part of an oligopolistic market will generate significant supply-side economies of scale in its production of goods and services as per-unit costs fall with increasing output. Due to factors like the difficulty of managing large firms, economies of scale ar exhausted well before those firms from dominate the entire market." The economists Varian and Shapiro in their book *Information Rules* write about supply-side economies of scale via an example: "Despite its supply-side economies of scale, General Motors never grew to take over the entire automobile market."

Samsung is reaping the benefits of supply-side economies of scale as does Intel. Clayton Christensen argues that the worship false accounting gods like RONA have caused many companies to outsource tasks like the semiconductor fabrication and lose important supply- side economies. He argues that outsourcing has harmed many companies in the long-term even though in the short-term it may have seemed wise.
http://gartner.mediasite.com/mediasite/play/9cfe6bba5c7941e09bee95eb63f769421d

In Charlie's view Wal-Mart has massive supply-side economies of scale through its investments in distribution and other systems. These and other Wal-Mart investments have given the company a moat. Wal-Mart also possesses a high degree of operational effectiveness which adds it its profitability. Like Wal-Mart companies which operate huge steel plants and shipyards can have supply-side economies of scale. Markets like these tend to end up as part of an oligopoly since supply-side advantages only go so far to consolidate an industry.

Munger described two different supply-side economies of scale below:

"On the subject of economies of scale, I find chain stores quite interesting. Just think about it. The concept of a chain store was a fascinating invention. You get this huge purchasing power — which means that you have lower merchandise costs. You get a whole bunch of little laboratories out there in which you can conduct experiments. And you get specialization. If one little guy is trying to buy across 27 different merchandise categories influenced by traveling salesmen, he's going to make a lot of dumb decisions. But if you're buying is done in headquarters for a huge bunch of stores, you can get very bright people who know a lot about refrigerators and so forth to do the buying. The reverse is demonstrated by the little store where one guy is doing all the buying. So there are huge purchasing advantages.

Some [supply-side advantages] come from simple geometry. If you're building a great circular tank, obviously as you build it bigger, the amount of steel you use in the surface goes up with the square and the cubic volume goes up with the cube. So as you increase the dimensions, you can hold a lot more volume per unit area of steel. There are all kinds of things like that where the simple geometry – the simple reality – gives you an advantage of scale." http://ycombinator.com/munger.html

Munger explains below how changes that have taken place in the advertising industry, which perhaps explain why Procter & Gamble has started to struggle more than it has in the past in delivering the same level of profitability:

"You can get advantages of scale from TV advertising. When TV advertising first arrived – when talking color pictures first came into our living rooms – it was an unbelievably powerful thing. And in the early days, we had three networks that had whatever it was – say 90% of the audience. Well, if you were Procter & Gamble, you could afford to use this new method of advertising. You could afford the very expensive cost of network television because you were selling so damn many cans and bottles. Some little guy couldn't. And there was no way of buying it in part. Therefore, he couldn't use it. In effect, if you didn't have a big volume, you couldn't use network TV advertising – which was the most effective technique. So when TV came in, the branded companies that were already big got a huge tail wind." http://ycombinator.com/munger.html

This may also explain in part why Berkshire has dropped its stake in Johnson and Johnson to very low levels. Johnson and Johnson has been a lagging performer for Berkshire and is now out of favor with Munger and Buffett.

Although Berkshire was a bit late to appreciate the attractiveness to an investor of the railroad business, Munger and Buffett clearly value the moat that supply-side economies scale creates in the railroad business. A new competitor in the railroad business is highly unlikely. As the public roads deteriorate as the United States underinvests in infrastructure and energy prices rise, railroads will get even more competitive. Munger has said:

"Do you know what it would cost to replace Burlington Northern today? We are not going to build another transcontinental. And those assets are valuable, have utility. Now they want to raise diesel prices on trucks. … We finally realized that railroads now have a huge competitive advantage, with double stacked rail cars, guided by computers, moving more and more production from China, etc. They have a big advantage over truckers in huge classes of business. http://www.valueplays.net/wp-content/uploads/The-Best-of-Charlie-Munger-1994-2011.pdf

Railroads are interesting in that long ago they were a growth industry that both created great fortunes and great busts in the aftermath of that success. There were times in history when railroads were very lousy investments.

Regarding the impact of supply-side economies of scale Charlie has pointed out:

"In some businesses, the very nature of things cascades toward the overwhelming dominance of one firm. It tends to cascade to a winner take all result. And these advantages of scale are so great, for example, that when Jack Welch came into General Electric, he just said, 'to hell with it. We're either going to be number one or two in every field we're in or we're going to

be out'. That was a very tough-minded thing to do, but I think it was a correct decision if you're thinking about maximizing shareholder wealth."

Berkshire has recently sold nearly all of its shares in GE, which is a reminder that moats come and go as time passes and conditions change. People who follow Munger and Buffett might have laughed not too long ago if someone were to have predicted that GE would lose favor with Berkshire.

2. Demand-side Economies of Scale (Network Effects):

Demand-side economies of scale (also known as "network effects") result when a product or service becomes more valuable as more people use it. Unlike supply-side economies of scale, network effects can be (1) nonlinear and (2) continue to accrue to benefit the company for far longer. Given a choice between supply-side economies of scale and demand-side economies of scale, it is preferable to have the latter. Varian and Shapiro in their book *Information Rules* write: "Unlike the supply-side economies of scale, demand-side economies of scale don't dissipate when the market gets large enough."

eBay, Craigslist, Twitter, Facebook and other multi-sided markets have demand-side economies of scale that operate on their behalf. My view is that ESPN also has demand-side economies of scale, most notable for Sports Center, since the more people who watch the ESPN channels, the more valuable the channels are to each user since those particular images will be the basis of discussion for sports fanatics. Fox and other sports channels just can't replicate that demand side effects since when someone says "did you see X do Y in the Z game?" If you watched Fox version of Sports Center, you may not have seen the particular video clip.

Google has at least two beneficial demand-side economies of scale (one for search and one for advertising targeting) that are mutually reinforcing that give it a strong moat according. Munger has said:

"Google has a huge new moat. In fact I've probably never seen such a wide moat." http://seekingalpha.com/article/140485-would-buffett-consider-google-a-great-investment

"I don't know how you displace Google but a lot of the other companies will have competitive troubles." http://www.investingdaily.com/11313/google-up-13-on-great-earnings-and-google-is-facebook-in-trouble

Some companies have both demand and supply-side economies of scale. Amazon has both supply-side and demand-side economies of scale and they reinforce each other. For example, the more people who provide comments on Amazon the more valuable it becomes to other users due to demand-side economies. Amazon also has huge advantages on warehouses and the supply chain on the supply-side.

There are both weak and strong supply-side demand-side economies of scale and they fall along a continuum in terms of relative strength. Most companies have both supply-side and demand-side economies. The "holy grail" for an entrepreneur is demand-side economies of scale that can cause a market to "tip" and give almost the entire market to one company. The reality is that most demand-side economies do not cause a market to "tip." For example,

GM's cars were better to a degree at one point since the more people who owned the cars, the easier auto parts were to get, but weak demand-side economies like that were not strong enough to make the market "tip."

If a market does "tip" and a competitor is the one to reap those benefits, things can go really wrong, really fast. For example, MySpace started to monetize before the social networking market "tipped" and MySpace paid the price and Facebook reaped the rewards. Facebook held off monetizing until its moat was secure. Zuckerberg was patient about waiting for the market to tip and Rupert Murdoch was not.

One illustrative example can be found in the cement industry. Cemex's cement business gets better the more trucks it has in play in a given geographic area. The service gets cheaper with supply-side scale due to lower COGS (e.g., less gas consumed), it gets better (faster delivery times) due to demand-side economies. And that combination of supply and demand-side economies creates a barrier to entry that helps Cemex.

Which came first, the faster supply of cement to contractors due to more plants (the egg) or greater demand from contractors due to faster delivery times (the chicken)? I believe Cemex intentionally created an egg, knowing there would be greater demand for the service. This solution to the "chicken and egg" problem is typical in multi-sided markets. However, in this case the Cemex demand-side economies were not strong enough to make their market for cement tip.

My thesis about Chinese restaurants is similar: When you have more customers for Chinese food, the food turns over faster and so it is fresher and better, holding the level of cooking constant. More customers for Chinese food not only lowers cost of goods sold (COGS) since they buy in volume, but increases quality. But a market like this is not going to tip

As another example, Costco is a better value the more its "store geographic scope" and density increases since I can, for example, use it when visiting relative in another state. Costco also has supply-side economies of scale. Since a market like Costco is in is not going to tip and so oligopoly is likely.

It could be argued that Cemex, GM and Chinese restaurants with high volumes have some demand-side economies of scale in addition to their supply-side economies of scale. But the demand-side economies are not strong enough to tip to one dominant supplier. Lots of other industries are similar. Credit card markets did not tip enough to prevent multiple providers. Car rentals did not tip and are instead an oligopoly.

Supply-side economies of scale can be really powerful. The jet turbine makers have supply-side advantages that makes them very profitable. Are there advantages to customers of easier access to parts if they buy a Rolls Royce jet turbine that might create some demand-side benefits? Sure. But can China open its checkbook and create a new jet engine competitor? I think so. In the case of jet turbines supply-side benefits are strong, but demand-side benefits are weak.

American Express is another company in the Berkshire portfolio with demand-side economies of scale since the more merchants accept their card the more valuable the service gets and the more people who use the card the more valuable the services is for merchants.

Munger continues to believe American Express has a moat despite the rise of upstarts like Square.

"It would be easier to screw up American Express than Coke or Gillette, but it's an immensely strong business." http://www.fool.com/boringport/2000/boringport000501a.htm

Visa has a similar moat to American Express as does PayPal. But challengers like Square may change the game enough to take significant share. eBay's moat is definitely demand-side driven on its original business as well.

A company having beneficial network effects is only one dimension that impacts profit. Sometimes network effects are there but the market is small since it is a niche. Amazon's market is bigger and that matters greatly in terms of the market capitalization it can generate. Some network effects are very strong like Google's and sometimes they are weaker like for web sites that crowd source reviews which contain a lot of noise that is hard to automate out.

3. Brand

At the 2011 meeting of Wesco held just before it was merged into Berkshire Hathaway, Munger admitted that he and Buffett really did not understand the value of a brand until they bought See's Candies. The two investors found after they bought See's Candies they could regularly raise prices and customers did not seem to care. Buffett and Munger call this ability "pricing power." Munger notes that before See's Candies:

"We didn't know the power of a good brand. Over time we just discovered that we could raise prices 10% a year and no one cared. Learning this changed Berkshire. It was really important." http://theinvestmentsblog.blogspot.com/2011/07/final-wesco-meeting-morning-with.htm

See's Candies is also a great A/B test on brand power. To illustrate, if you grew up in a home that bought See's Candies (mostly on the West Coast, especially in California) and experiences around that candy have very favorable associations, you will pay more for that boxed candy brand.

Someone who grew up in the east cost of the United States is going to shop for boxed candy and not attribute much value to the brand since they do not have those same experiences. For this reason, See's has found it hard to expand regionally and has done so very slowly..

See's Candies can also only sell so much candy at that price given the choices it has made. People don't usually go to a See's Candies store because they are hungry for food. The box/gift candy business is very seasonal. What See's sells is not just food, but rather an experience. See's generates losses two quarters a year and makes all its profit in the other two quarters around three holidays.

Buffett talks about the fact that building some brands took many decades:

"When you were a 16-year-old, you took a box of candy on your first date with a girl and gave it either to her parents or to her. I California the girls slap you when you bring Russell Stover, and kiss you when you bring See's."… "I don't think See's means anything to people

on the East Coast, where people are also exposed to higher-end chocolate products." http://management.fortune.cnn.com/2012/08/22/sees-candies-buffett-berkshire/

While some of the power of a brand can come from taste, modern "flavor" firms can replicate most any taste. Trade dress and presentation of a good or service matters more than ever. A lot of Tiffany's brand power is the blue box the jewelry comes in. Coke made a massive mistake thinking it was flavor in a blind taste test that mattered when it introduced the New Coke. When the taste test is not blind Coke wins and when it is blind Coke does not win. Munger said once about the New Coke episode:

"[Coke spent] 100 years getting people to believe that trademark had all these intangible values too. And people associate it with a flavor…. Pepsi was within weeks of coming out with old Coke in a Pepsi bottle, which would've been the biggest fiasco in modern times. Perfect insanity." http://www.rbcpa.com/Mungerspeech_june_95.pdf

Although it is not currently doing as well financially as it has in the past, Charlie has admired Procter & Gamble since:

"They just make a fortune on some of the body products. Some of these brands, I mean, if you can make something that actually improves the skin, wow. That's the last thing people will give up". http://management.fortune.cnn.com/2012/08/22/buffett-munger-berkshire

As was noted above, it can be argued that TV does not give Procter & Gamble the same benefits supply-side economies in television since post Internet there are so many ways to advertise that do not require supply-side scale. The argument would be that smaller firms and store brands are making big inroads by using new forms of marketing and Procter & Gamble suffers from that new competition as their brand is weakened.

As another example, Charlie said once that customer loyalty to Costco is a big part of their moat:

"If you get hooked on going to Costco with your family, you'll go there for the rest of your life." http://bitly.com/YsZny5

I am skeptical that "getting hooked" is a brand advantage and instead suspect that Costco's moat is more about great business execution by Costco plus supply-side economies of scale. The Costco brand is valuable, but not enough by itself to fully explain its profitability. Most moats are caused by multiple factors. Clayton Christensen makes a very powerful argument that companies like Costco, Zara and Ikea create a moat by integrating around "a job" that a customer need to get done. You can hear Clayton make that argument here in this video: http://gartner.mediasite.com/mediasite/play/9cfe6bba5c7941e09bee95eb63f769421d It sounds similar to arguments that Michael Porter makes about the value of integration of all the aspects of what a company does, but around a task. Perhaps Berkshire believes that this is a source of a moat for Well Fargo.

A moat powered by a brand is something very different from one created via supply-side economies of scale. For example, Warren Buffett has said that for a company like Disney when the brand is mentioned in conversation "you have something in your mind." He adds:

"How would you try to create a brand that competes with Disney? Coke is a brand associated with people being happy around the world. That is what you want to have in a business. That is the moat. You want that moat to widen." http://investdigest.blogspot.com/2005/12/untapped-pricing-power-and-share-of.html

One company that is puzzling is the eyeglass maker Luxottica's (brands like Ray-Ban, Oakley, Persol and other major brands). How that eyeglass company can have that much market share since it has so many brands is unusual. There must be supply-side economies that are driving that business. I just don't see any real significant demand-side economies that might explain Luxottica's level of success. Could is be that they reap a lot of benefits from organization around a job a customer need to get done. Perhaps, but that seems to be a stretch.

Brands of course can fail over time. Put a luxury brand on a table or shelf in Costco as some have done and that luxury brand is damaged. License it too broadly and the brand is also damaged. Buffett and Munger see attracted to brand that they use in their own lives. See's and Dairy Queen are just two examples.

Some brands incur problems with their brand that are completely self-inflected. Buffett went on to say about one his most favorite brands:

"Take See's candy. You cannot destroy the brand of See's candy. Only See's can do that. You have to look at the brand as a promise to the customer that we are going to offer the quality and service that is expected. We link the product with happiness. You don't see See's candy sponsoring the local funeral home. We are at the Thanksgiving Day Parades though." http://www.buffettfaq.com/

Regarding brand power, the two Berkshire leaders have often cited Wrigley's as a brand that creates strong moat. Munger has pointed out:

"The informational advantage of brands is hard to beat. And your advantage of scale can be an informational advantage. If I go to some remote place, I may see Wrigley chewing gum alongside Glotz's chewing gum. Well, I know that Wrigley is a satisfactory product, whereas I don't know anything about Glotz's. So if one is $.40 and the other is $.30, am I going to take something I don't know and put it in my mouth – which is a pretty personal place, after all – for a lousy dime? So, in effect, Wrigley, simply by being so well-known, has advantages of scale – what you might call an informational advantage.

Everyone is influenced by what others do and approve. Another advantage of scale comes from psychology. The psychologists use the term "social proof". We are all influenced – subconsciously and to some extent consciously – by what we see others do and approve. Therefore, if everybody's buying something, we think it's better. We don't like to be the one guy who's out of step. Again, some of this is at a subconscious level and some of it isn't. Sometimes, we consciously and rationally think, "Gee, I don't know much about this. They know more than I do. Therefore, why shouldn't I follow them?" All told, your advantages can add up to one tough moat." http://www.valueplays.net/wp-content/uploads/The-Best-of-Charlie-Munger-1994-2011.pdf

A very important test for Buffett and Munger in determining the strength of a brand- based moat is whether a competitor can replicate or weaken the moat with a massive checkbook. As

just one example, here is what Buffett said about Coke at the 2012 Berkshire meeting: "If you gave me $10, $20, $30 billion to knock off Coca-Cola, I couldn't do it."

Firms like Nike and BMW each have brands that help maintain their moat that were hard to get and super valuable to have. The creation of a great brand is a rare thing and requires considerable skill and arguably a big dose of luck as well. Charlie has pointed out: "China has great companies already. Just not great brand names yet." I would quibble with Munger's conclusion in that the Huawei brand is already strong already in certain business markets. And Chinese firms ZTE and Huawei are making brand inroads in mobile phones. China will in my view surely have many strong global brands over the long-term.

4. Regulation:

There are certain businesses which have created a competence with regard to regulation that is so high that regulation actually serves as a barrier to entry/moat for their competitors. Rather than helping consumers in these cases on a net basis regulations can end up protecting producers and creating a moat. For example, some people believe banks have created such a powerful layer of regulatory expertise that the regulators have become "captured" by the industry they regulate. There are a number of professional; guilds like lawyers who have been able to use regulation to limit supply.

For Berkshire, the regulation-driven moat that Moody's had in the bond rating business was a big attraction. To issue bonds regulators actually require that the issuer get an opinion from a very small number of bond rating firms which means the rating firms Moody's, S&P and Fitch have a moat. Fannie and Freddie also had regulatory created moats, but the result for them in the end was not good.

When regulation disappears, it often becomes quickly evident that it was a major factor in industry profitability. You find out who is otherwise swimming naked when the regulatory-driven moat disappears. For example, said Munger:

"[Airline] Competition was so intense that, once it was unleashed by deregulation, ravaged shareholder wealth in the airline business" http://www.valueplays.net/wp-content/uploads/The-Best-of-Charlie-Munger-1994-2011.pdf

Munger once described airlines as "marginal cost with wings." http://bitly.com/RzDIys
People talk about Virgin Airlines having a great brand and better service, but where are the profits? How long will it be before other airlines begin to imitate the Emirates strategy? Where is the barrier to entry for an airline? You can lease jets and gates. Munger and Buffett have said repeatedly over the years that they hate a commodity business. They learned this lesson the hard way by investing in firms like the New England textile manufacturer that gave Berkshire its name. Buffett ignores insurance lines that are commodities as another example

Returning to the subject of regulatory capture, Berkshire invests so much money in Well Fargo is interesting since arguably the sorts of banking that Wells Fargo does is a commodity business. It can be argued that Wells Fargo benefits from regulation since it is "too big to fail" and therefore has a lower cost of capital than it would otherwise which gives it a moat. We will discuss Wells Fargo again in a future post when the subject of management is covered.

5. Patents and Intellectual Property

Companies which have been granted a patent or other type of intellectual property by a government have in effect been given a legal monopoly. While the justifications for doing so are not the subject of this discussion, this barrier to entry can create a substantial moat for the holder of the intellectual property. Munger has said:

"… In microeconomics, of course, you've got the concept of patents, trademarks, exclusive franchises and so forth. Patents are quite interesting. When I was young, I think more money went into patents than came out. Judges tended to throw them out – based on arguments about what was really invented and what relied on prior art. That isn't altogether clear. But they changed that. They didn't change the laws. They just changed the administration – so that it all goes to one patent court. And that court is now very much more pro-patent. So I think people are now starting to make a lot of money out of owning patents. But trademarks and franchises have always been great. Trademarks, of course, have always made people a lot of money. A trademark system is a wonderful thing for a big operation if it's well-known." http://www.valueplays.net/wp-content/uploads/The-Best-of-Charlie-Munger-1994-2011.pdf

Qualcomm is an example of a company which has created a moat mostly via intellectual property. Qualcomm has so many patents and has managed to get them embedded inside enough important wireless industry standards which have their own demand-side economies of scales, that the company has created a substantial moat.

One example of a company that Berkshire values higher due to intellectual property patents is Lubrizol. Initially Buffett said:

"It struck me as a business I didn't know anything about initially. You know, you're talking about petroleum additives… Are there competitive moats, is there ease of entry, all that sort of thing. I did not have any understanding of that at all initially. And I talked to Charlie a few days later…and Charlie says, 'I don't understand it either.'"
http://advisoranalyst.com/glablog/tag/cnbc-interview/

But eventually Buffett was won over and made the Lubrizol purchase.

"I decided there's probably a good size moat on this. They've got lots and lots of patents, but more than that they have a connection with customers." http://advisoranalyst.com/glablog/tag/cnbc-interview/

At the 2011 Berkshire meeting Buffet reiterated that he decided to go ahead since he thought that the more than 1,600 patents held by Lubrizol would give the company "a durable competitive advantage."

Another example of intellectual property proving its value for Munger occurred in the 1970s when Russell Stover Candies started to open stores in markets served by See's Candies with very similar appearance. The use of the distinctive "trade dress" of See's Candies was enough of a violation of the law that Munger was able through threat of litigation to get agreement from Russell Stover Candies to stop what they were doing and the moat was proven to be durable.

The Nature of Competition and Moats:

In Charlie's view, even if you currently have a good business that does not mean you will have it for very long. This puts the durability of a given moat at risk. The process of what Joseph Schumpeter called "competitive destruction" is as powerful as anything in business. Having a moat is the only way to fight against the tide of competitive destruction.

Michael Mauboussin, in what is arguably the best essay ever on moats, writes:

"Companies generating high economic returns will attract competitors willing to take a lesser, albeit still attractive, return which will drive down aggregate industry returns to the opportunity cost of capital." http://www.capatcolumbia.com/Articles/measuringthemoat.pdf

For example, if you open a successful clothing store that success will attract imitators and competitors. Through a process of "competitive destruction" some clothing stores will adapt and survive and thrive and others will fail. The consumer wins because the products and services offered to them get better and better. But this is a painful process for an investor since the outcome can be highly uncertain. It is also the hardest part for a businessperson since failure is an essential part of capitalism.

Given the inevitability of relentless competition, the question to ask is according to Munger:

"How do you compete against a true fanatic? You can only try to build the best possible moat and continuously attempt to widen it." Poor Charlie's Almanack at 59; http://www.scribd.com/doc/76907884/MOATS-abridged-1-5-70-chapters-a-preview

Jim Sinegal of Costco is just such a fanatic which is why Charlie serves on their board. The founder of Nebraska Furniture Mart "Mrs. B" would be another fanatic. Charlie loves the management team at Iscar. Going down the list of Berkshire CEOs reveals a long list of fanatics.

That moats are hard to create and usually deteriorate over time is one very important reason why capitalism works. What happens over time is so-called "producer surplus" is transferred into "consumer surplus". Charlie describes the competitive process and why it benefits consumers as follows:

"The major success of capitalism is its ability to drench business owners in feedback and allocate talent efficiently. If you have an area with 20 restaurants, and suddenly 18 are out of business, the remaining two are in good, capable hands. Business owners are constantly being reminded of benefits and punishments. That's psychology explaining economics." http://www.fool.com/investing/general/2011/07/02/charlie-mungers-thoughts-on-the-world-part-1.aspx

Munger's views on the nature of business competition are Darwinian: Capitalism does not pull its punches in markets that are genuinely competitive:

"Over the very long-term, history shows that the chances of any business surviving in a manner agreeable to a company's owners are slim at best." http://www.valuewalk.com/charlie-munger-page/

"Capitalism is a pretty brutal place." http://ycombinator.com/munger.html

When it comes to moats, durability matters. Munger wants to avoid a business that has a moat today, but is gone tomorrow. Some moats atrophy gradually over time and some much more quickly. This is not a completely new phenomenon. As Ernest Hemingway once said in his book *The Sun Also Rises*, a business can go bankrupt in two ways: gradually and then suddenly. The speed of moat destruction has accelerated over time due to advances in technology and the way it spreads information. For some people this increase in speed can at times be disorienting. For example, the speed at which a companies like Kodak or Nortel lost their moats has been shocking to many investors who grew up mostly in another era.

The speed at which a moat disappears should not be confused with cases where a company never had a moat at all like Groupon. Hype about a sales "boiler room" selling coupons online is not a moat. Instead, that is an example of crowd folly (social proof + fake scarcity). Did Zygna ever have a moat or did it just evaporate quickly? It is hard to say. Sometimes causes are hard to tease apart. Facebook definitely has a moat, but once it ceased letting Zynga acquire customers cheaply by leveraging the Facebook moat, the tide arguably turned against Zynga. "To borrow someone's moat is not to have a moat" might be the lesson of Zynga, since what is borrowed can be taken away.

How long your moat lasts is called your "Competitive Advantage Period" (CAP) writes Michael Mauboussin. http://www.capatcolumbia.com/Articles/FoFinance/Fof1.pdf The speed of moat dissipation will be different in each case and need not be constant. The rate at which a moat atrophies is similar to what academics call "fade" argues Mauboussin.

Even the very best companies can see competition make their moats shrink or even disappear. Charlie has said:

"Frequently, you'll look at a business having fabulous results. And the question is, 'How long can this continue?' Well, there's only one way I know to answer that. And that's to think about why the results are occurring now – and then to figure out what could cause those results to stop occurring." http://bitly.com/S5iN7K

Sometimes what shrinks a moat is a shift of what Michael Porter has called "the Five Forces". http://hbr.org/2008/01/the-five-competitive-forces-that-shape-strategy/ar/1 One such force is the power of distributors in a value chain:

"Kellogg's and Campbell's moats have also shrunk due to the increased buying power of supermarkets and companies like Wal-Mart. The muscle power of Wal-Mart and Costco has increased dramatically." http://www.tilsonfunds.com/motley_berkshire_brkmtg01notes.php3

When someone, such as a downstream distributor, takes a bigger slice of the amount of profit in the "profit pool," bad things can happen if you are upstream. Whether that happens will depend on who has more bargaining power in that supply chain.

A blogger in an essay discussed above recently argued that the **Five Forces** do not matter since consumers have more power. Consumers are one of the **Five Forces** so the argument is even at that level deeply misguided. Suppliers are also a potential problem. Try arguing that the **Five Forces** do not matter to the many music subscription companies that went bust due to the wholesale transfer pricing power of music suppliers. A restaurant owner who has had a

landlord triple their rent knows very well that supplier bargaining power can be a huge problem. Yes, delighting customers is super important, no that does not help if your sole supplier is raising wholesale prices to take your profit.

Sometimes it is buyers that have the ability to "holdup" the seller and sometimes it is the reverse depending on who has the bargaining power. Every aspect of a given business can be made worse if some firm or person in the value has more bargaining power. As an example, big movie stars have had huge wholesale transfer pricing power over the movie business value chain ever since the Hollywood studio system ended.

Newspapers are a good example of an industry which once had a fantastic moat, which is now in decline. Unfortunately for newspapers, changes in technology have been taking down their moat in rather dramatic fashion. Charlie:

"The perfectly fabulous economics of this [newspaper] business could become grievously impaired." http://www.fool.com/BoringPort/2000/boringport00051501.htm

Munger saw this deterioration before many other people did, mostly likely because Berkshire owned newspaper properties like *The Washington Post* and *The Buffalo News*. Berkshire has not given up on all types of newspapers. Papers that cover local news, particularly in a city with a strong sense of community are still attractive for Berkshire even in 2012. They said at the 2012 Berkshire meeting that they may buy more newspapers. These small city newspaper purchases seems to me like a Ben Graham "cigar butt" style investment and for that reason a reversion to an old investing style. But Berkshire have a *lot* of cash to put to work and only so many quality businesses to buy. Too much cash is, as some people say "A high quality problem." Munger adds: "Excess cash in an advantage, not a disadvantage". As a pool of investment dollars gets bigger it gets harder to find companies to buy or invest in that have a moat. In this sense size works against investment performance. More than one fund manager has suffered from this problem since the tendency is to ignore the need for a strong moat so you can get large amounts of money put to work.

Kodak is a company which once had a strong moat and then began to lose it in dramatic fashion. Munger describes the competitive destruction that hit the photography business:

"What happened to Kodak is a natural outcome of competitive capitalism." http://www.businessinsider.com/munger-on-buffetts-cancer-the-fed-berkshires-investment-strategy-2012-5#ixzz2CB0ay5jG

It is true that what happened to Kodak was rough, but the full story according to Munger should take into account that there was a part of Kodak that did have a moat and will survive:

"People think the whole thing failed, but they forget that Kodak didn't really go broke, because Eastman Chemical did survive as a prosperous company and they spun that off." http://management.fortune.cnn.com/2012/08/22/buffett-munger-berkshire

Why did Eastman Chemical survive? Most probably Eastman survived due to supply-side economies of scale and intellectual property. Kodak probably has some great patents for chemically-based photography too. But in the case of Kodak and photography the entire process changed to digital and the Kodak moat was swiftly gone.

Research in Motion losing its Blackberry moat is another example of competitive destruction. Will they recover? The challenge the Blackberry faces is substantial. Once a feedback loop turns negative, it is hard for any company to regain what it once had. What builds you up can tear you down. And if the ride up was nonlinear, it is very possible that the ride down will be nonlinear as well.

As another example, Munger has said that department stores in downtown areas once had a very strong moat given economies of scale and a central location near mass transit. But then the way people lived started to change as cars became more affordable and people migrated to suburbs with shopping centers. The arrival of Amazon.com has further damaged the moat of the big-box retailers of all kinds whether in the city or the suburbs.

How Can the Quality of the Moat be Quantified?

The test of whether you have a moat with a given company is **quantitative** (i.e., it's a math-based test). If (1) you are earning profits that are greater than your weighted average cost of capital (WACC) and (2) that level of profitability has maintained for some reasonable period measured in years, you have a strong moat. If the size of the positive difference between ROIC and WACC is large and if that "spread" is persistent over time, your moat is relatively strong. Mauboussin is the one to read on this as is usual. The essay: *Measuring the Moat* at http://www.capatcolumbia.com/Articles/measuringthemoat.pdf is a classic. Exactly how long the moat must be persistent to meet this test is an interesting question. If it is not a period of at least two years you are taking a significant risk. Five years of supporting data give you more certainty that you moat is sustainable. For a look at this see:

What determines whether a business a company has a moat is **qualitative** (e.g., supply-side and demand-side economies of scale, brand, regulation and intellectual property) but how you test to determine the strength of your moat is **quantitative** (i.e., it's a mathematical exercise). Mathematical formulas won't tell you how to get a moat but they can help prove that you have one, at least for now.

A company like Salesforce.com has not yet passed this quantitative test since management has been running their business at a loss or a tiny profit. Management at Salesforce.com can argue that they are doing this intentionally which seem to be true. But until Salesforce.com proves that it can pass the moat test with evidence that the mathematics satisfy the test, the assertion that the company has a moat is an unproven thesis. In other words, whether Salesforce.com has significant pricing power right now is just a theory. Until GAAP profit margins rise and stay high for a significant period the jury is still out. Any claims that prop0fiost have been earned non-GAAP basis or that the business generated or EBITDA (jokingly referred to by many people as "earnings before everything bad") should be ignored. On this Munger has said: "I don't even like to hear the word EBTDA." He suggests inserting the word "bullshit" whenever you hear the term EBITDA

Spotting the existence of a moat that has not been fully taken advantage of by its current ownership in terms of raising prices can be profitable for an investor buying that business. Warren Buffett points out:

"There are actually businesses, that you will find a few times in a lifetime, where any manager could raise the return enormously just by raising prices—and yet they haven't done it. So they have huge untapped pricing power that they're not using. That is the ultimate no-

brainer. … Disney found that it could raise those prices a lot and the attendance stayed right up. So a lot of the great record of Eisner and Wells … came from just raising prices at Disneyland and Disneyworld and through video cassette sales of classic animated movies… At Berkshire Hathaway, Warren and I raised the prices of See's candy a little faster than others might have. And, of course, we invested in Coca-Cola—which had some untapped pricing power. And it also had brilliant management. So a Goizueta and Keough could do much more than raise prices. It was perfect." http://ycombinator.com/munger.html

Starting with See's Candies, Munger and Buffett learned that when you have a great moat (in this case driven by a powerful but primarily regional brand), the business can raise prices to improve profitability. On the December 29 of the year that they bought See's prices were raised 20-30 cents a pound. They also learned that some brands translate less well to new markets and there is a limit on how many stores one can profitably build in a given geographic area.

Buffett has said that Kellogg's has at times pushed their pricing too far and damaged their moat. Buffet believes that they didn't have the moat they thought they had versus General Mills and other major breakfast cereal competitors.

At a very practical level the discussion above illustrates that there are some rules of thumb one can use to test the strength of a moat. At the top of the list is whether the business has pricing power. For example, if you must hold a prayer meeting before you try to raise prices, then you don't have much of a moat, if any, argues Buffett.

Finally, it should be emphasized that is nothing sinister about the term "moat." Business is, by its very nature, a competitive process. Even a small restaurant selling barbecue can have a moat. A company that has a return on capital significantly greater than their opportunity cost over time has a moat whether they know it or not. That's enough about moats for now. The next post will be about **Munger's Investment Filters Two and Three: Circle of Competence and Management with Integrity and Talent.**

Charlie Munger on "Circle of Competence" (The Second Essential Filter)

December 22, 2012

"We have to deal in things that we are capable of understanding." Charlie Munger http://www.youtube.com/watch?v=3XlBrohrIUc

"An Investor's got to know His or Her Limitations" (Apologies to Clint Eastwood in *Dirty Harry*)

Charlie believes that investors who get outside of what he calls their "Circle of Competence" can easily find themselves in big trouble. Within a Circle of Competence a given investor has expertise and knowledge that gives him or her significant advantage over the market in evaluating an investment.

The idea behind the Circle of Competence filter is so simple it is embarrassing to say it out loud: when you do not know what you are doing, it is riskier than when you do know what you are doing. What could be simpler? And yet humans often don't do this. For example, the otherwise smart doctor or dentist is easy prey for the promoter selling cattle limited partnerships or securities in a company that makes technology for the petroleum industry.

Really smart people fall prey to this problem. As an example, if you lived through the first Internet bubble like I did you saw literally insane behavior from people who were highly intelligent. Munger has pointed out that even one of the world's greatest investors stepped outside of his Circle Competence during the bubble:

"Soros couldn't bear to see others make money in the technology sector without him, and he got killed." http://everythingwarrenbuffett.blogspot.com/2009/02/motley-fool-notes-from-2000-berkshire.html

In many cases so-called "old money" became so upset at Internet nouveau riche talking about their money and possessions, they jumped in to the market for technology stocks at the worst time possible, with disastrous results.

Professors who leave their university can make similar mistakes. Charlie has talked about the Nobel Prize winner who left academia to help found Long Term Capital Management: "[When] one of the economists who… shared a Nobel Prize … went into money management himself, he sank like a stone." Larry Summers, who is a very intelligent and capable person in Charlie's view, made a huge mistake investing Harvard's cash account alongside the endowment leaving exposing the university to a huge liquidity risk. That decision by Larry Summers was clearly outside of his Circle of Competence and both he and the university paid the price. As a more current example, a talented venture capitalist who is within his or her circle of competence may not do as well running a macro hedge fund.

One way to think about what Munger is trying to achieve with this Circle of Competence filter is this: if you make fewer mistakes, your investment performance will be better. So invest in areas where you are competent. Why would you buy more of X which you know little about when you can buy Y (or more of Y) which is right in your Circle of Competence? The Circle of Competence approach is in part a form of opportunity costs analysis which will be discussed later in this series of posts.

Munger argues:

"[Warren and I only look at industries and companies which we have a core competency in. Every person has to do the same thing. You have a limited amount of time and talent and you have to allocate it smartly." http://www.watheeqa.com/App_Themes/watheeqa/pdf/Conversation%20with%20Charlie%20Munger.pdf

The value of specialization is, of course, at work here too. Munger in an interview put it this way:

"Warren and I have skills that could easily be taught to other people. One skill is knowing the edge of your own competency. It's not a competency if you don't know the edge of it. And Warren and I are better at tuning out the standard stupidities. We've left a lot of more talented

and diligent people in the dust, just by working hard at eliminating standard error." http://mungerisms.blogspot.com/2009/08/stanford-lawyer.html

The investor Li Lu describes how Charlie arrives at this approach:

"When Charlie thinks about things, he starts by inverting. To understand how to be happy in life, Charlie will study how to make life miserable; to examine how a business becomes big and strong, Charlie first studies how businesses decline and die; most people care more about how to succeed in the stock market, Charlie is most concerned about why most have failed in the stock market. His way of thinking comes from the saying in the farmer's philosophy: I want to know is where I'm going to die, so I will never go there." http://blog.enochko.com/2010/06/my-teacher-charlie-munger-english.html

To make wise decisions, stay away from domains where you will make unwise decisions.

By applying this filter, Munger is trying hard to limit his investing to areas in which he has a significant advantage in terms of competence and not just a basic understanding. Munger has talked several times in the past about a man who had "managed to corner the market in shoe buttons- a really small market but he had it all." That's an extreme example of a very narrow Circle of Competence. The areas in which you might have a Circle of Competence will hopefully be significantly larger than just shoe buttons. But if you try to expand that Circle of Competence too far, it can have disastrous results. Li Lu writes about how Charlie has described this "Mungearian" view to him:

"The true insights a person can get in life are still very limited, so correct decision-making must necessarily be confined to your 'Circle of Competence.' A 'competence' that has no defined borders cannot be called a true competence." http://blog.enochko.com/2010/06/my-teacher-charlie-munger-english.html

In the book *Snowball* Alice Schroeder argues that Buffett: "believed in what he called the Circle of Competence, drew a line around himself, and stayed within the three subjects with which he would be recognized as absolutely expert: money, business and his own life. "(P25) I find Schroder's conclusion that Buffett and Munger apply the Circle of Competence rule broadly outside of investing to be unconvincing, especially since Charlie in particular has strong opinions on just about everything. Warren may be more circumspect about offering his opinions on everything that Charlie, but the topics that are off limits for Buffett at a Berkshire shareholder's meeting have not been tightly defined to those three topics in the past. When Charlie does express his opinion on a subject like modern academia he does not have money on the table and the Circle of Competence concept does not provide the same restraining effect as when money is involved.

Staying within a Circle of Competence is obviously not rocket science, but it is hard to do when you meet a slick promoter who is highly skilled at telling stories. This is a case where emotional intelligence, which is very different than IQ, becomes critically important. Humans love stories since it causes them to suspend disbelief. Madoff and Ken Lay were story tellers. I put this problem in the form of a tweet recently:

"Promoters know muppets love narrative & actual facts detract from desired state of suspended disbelief. Circle of Competence…"

Munger's advice on why staying within your Circle of Competence is important is direct as is usual:

"You have to figure out what your own aptitudes are. If you play games where other people have the aptitudes and you don't, you're going to lose. And that's as close to certain as any prediction that you can make. You have to figure out where you've got an edge. And you've got to play within your own Circle of Competence." http://www.ritholtz.com/blog/2012/02/a-lesson-on-elementary-worldly-wisdom-as-it-relates-to-investment-management-business/

Too many investors confuse familiarity with competence. For example, that a given person may fly on airlines a lot does not mean that they understand the airline industry well enough to be competent as an investor in that industry. Using Facebook, that does not make you qualified to invested in a social media start up. If you have not taken a deep dive into the business of a company and its value chain/industry, and you nevertheless decide to invest in that company, you are asking for trouble.

It's important to ask yourself whether you have a personality that fits with the qualities needed to make your own investment decisions that involve individual stocks bonds and other investments. Do you enjoy reading extensively about companies you may invest in and their industries? Are you going to be happy spending hours each month doing so? Or would you rather spend that time playing golf or watching sports on TV? Do you find doing the work to make yourself a wise investor is fun? Do you spend more time researching a refrigerator than the stocks you buy? Is doing due diligence on an investment the sort of thing that makes you genuinely happy. Or is it like a root canal?

There are some people who know very well how to stay within the Circle of Competence and the Berkshire CEO list has way more than its fair share of these people. For example, Buffett cites Rose Blumkin of Furniture Mart as a person who fully understands the dimensions of her capabilities:

"[If] you got about two inches outside the perimeter of her Circle of Competence, she didn't even talk about it. She knew exactly what she was good at, and she had no desire to kid herself about those things." (Snowball at 495).

Knowing the boundaries of your Circle of Competence is critically important. In Munger's opinion, if you have to ask the question whether something is within your Circle of Competence, you have already answered your question. He feels that the answer should be obvious:

"If you have competence, you pretty much know its boundaries already. To ask the question [of whether you are past the boundary] is to answer it." http://www.poorcharliesalmanack.com/pdf/page53.pd f

Buffett talks about that fact that knowing where the perimeter of your Circle of Competence may be is far more important than the size of your circle. If you are only competent in spots and stay in those spots you can do just fine, argues Munger.

Overconfidence, Over-optimism and other Dysfunctional Heuristics

Why do people invest outside their Circle of Competence? The answer can be found in what Charlie calls dysfunctional "mental models" which will be discussed in detail in a later post in this series on Munger's Methods. As a taste of that what Munger is talking about, I can't resist inserting on quotation which describes just one dysfunctional overconfidence heuristic:

"In the 5th century B. C. Demosthenes noted that: "What a man wishes, he will believe." And in self-appraisals of prospects and talents it is the norm, as Demosthenes predicted, for people to be ridiculously over-optimistic. For instance, a careful survey in Sweden showed that 90 percent of automobile drivers considered themselves above average. And people who are successfully selling something, as investment counselors do, make Swedish drivers sound like depressives. Virtually every investment expert's public assessment is that he is above average, no matter what is the evidence to the contrary." http://72.14.203.104/search?q=cache:mgSaxC3O1IoJ:www.philanthropyroundtable.org/magazines/1999/march/munger.html+Berkshire+Hathaway%27s+vice+chairman+shreds+the+conventional+wisdom+on+foundation+investing&hl=en&gl=us&ct=clnk&cd=1

Berkshire itself has sometimes failed to properly apply the Circle of Competence filter as has its portfolio companies. As was explained in the first post in this series, Berkshire makes mistakes like everyone else. Buffet arguably was out of his Circle of Competence in the 1960s when he bought the department stores and then bought Associated Cotton Shops which sold women's dresses. Dexter Shoes is another case where Berkshire wandered outside its Circle of Competence and was badly burned as a result

One example of a Berkshire portfolio straying from its Circle of Competence principle happened in the case of their most profitable insurance company according to Munger.

"[GEICO] got to thinking that, because they were making a lot of money, they knew everything. And they suffered huge losses. All they had to do was to cut out all the folly and go back to the perfectly wonderful business that was lying there." http://ycombinator.com/munger.html

Munger himself may have fallen prey to this with his investment in BYD as was discussed in a previous post in this series. Did Charlie really know enough about BYD for it to fall within his Circle of Competence? How is BYD not a technology Company? All Berkshire companies use technology, but BYD is trying to solve technology problems that are core to its business. It can be argued in investing in BYD Charlie was just having a lot of fun in an exotic country and got carried away.

In using a Circle of Competence filter, Munger is trying to invest only when he has an unfair advantage. Otherwise, he wants to do nothing (which most people find very hard to do).

"The game of investing is one of making better predictions about the future than other people. How are you going to do that? One way is to limit your tries to areas of competence. If you try to predict the future of everything, you attempt too much." http://www.normanrentrop.de/de/gefunden/index_20602.html

In short, Charlie is looking for betting odds which are **substantially** in his favor when making an investment. And when he finds such a situation, he bets big. Otherwise he doesn't bet. It's that simple. A future post in this series on Munger's Methods will deal with just that basic idea.

What is critical in following this approach is patience:

"We have this investment discipline of waiting for a fat pitch. If I was offered the chance to go into business where people would measure me against benchmarks, force me to be fully invested, crawl around looking over my shoulder, etc., I would hate it. I would regard it as putting me into shackles."
http://www.tilsonfunds.com/motley_berkshire_brkmtg03notes.php3

Doing nothing is a very hard thing for most people to do. People for some reason think there is a bonus of some sort for activity in investing when there most certainly is not. In fact, there is a penalty on being overactive due to costs and expenses.

A Clear View of a Low Downside and a Big Upside

Munger does not like situations where there is a "close" investment decision to make.

"There are a lot of things we pass on. We have three baskets: in, out, and too tough… We have to have a special insight, or we'll put it in the 'too tough' basket. All of you have to look for a special area of competency and focus on that." http://www.fool.com/news/foth/2002/foth020515.htm

And certainly, Munger would not invest in anything with a big downside and little upside. One of the best ways I have ever heard the idea behind Charlie's philosophy expressed was by the famed investor Sam Zell.

"Listen, business is easy. If you've got a low downside and a big upside, you go do it. If you've got a big downside and a small upside, you run away. The only time you have any work to do is when you have a big downside and a big upside."
http://www.latimespressmen.com/showthread.php?p=1525

In terms of finance theory, what a smart investor is looking for is "optionality." Nassim Taleb puts what the smart investor is looking for in this way: "Payoffs [which] follow a power law type of statistical distribution, with big, near unlimited upside but because of optionality, limited downside." Venture capitalists who are "antifragile" benefit from optionality. Investment bankers, who are "fragile" still are able to do this by being *too big to fail* and therefore socializing the big downside tail risk (i.e., get the taxpayers to pick up the losses from tail risk).

Charlie and Buffett want the financial upside to be big and clear enough that they can do the math in their heads. Munger said at a Berkshire meeting once:

"Warren talks about these discounted cash flows. I've never seen him do one." ["It's true," replied Buffett. "If (the value of a company) doesn't just scream out at you, it's too close."] 1996 Berkshire Hathaway Annual Meeting http://www.ndir.com/SI/email/q403.shtml

Of course, Buffett and Munger can do more mathematics in their heads that an average person can do on a calculator, but the point remains. Munger and Buffett want the mentally computable math to be overpoweringly clear and positive. Bill Gates has said on this point:

"… being good with numbers doesn't necessarily correlate with being a good investor. Warren doesn't outperform other investors because he computes odds better. That's not it at all. Warren never makes an investment where the difference between doing it and not doing it relies on the second digit of computation. He doesn't invest–take a swing of the bat–unless the opportunity appears unbelievably good." http://money.cnn.com/magazines/fortune/fortune_archive/1996/02/05/207334/index.htm

Technology Investments and the Circle of Competence

The technology sector is one area which Munger and Buffett have avoided since they feel they don't understand the business well enough to predict where it will be many years down the road. Munger received his first taste in the technology business when he bought into an oscilloscope company early in his investing career. His top scientist was hired away by a venture capitalist and then magnetic tape came along and made things even worse. Charlie has said the entire experience nearly made him "go broke."

Munger's reluctance to invest in the technology sector is not a new phenomenon:

"Warren and I don't feel like we have any great advantage in the high-tech sector. In fact, we feel like we're at a big disadvantage in trying to understand the nature of technical developments in software, computer chips or what have you. So we tend to avoid that stuff, based on our personal inadequacies. Again, that is a very, very powerful idea. Every person is going to have a Circle of Competence. And it's going to be very hard to advance that circle. If I had to make my living as a musician – I can't even think of a level low enough to describe where I would be sorted out to if music were the measuring standard of the civilization." http://ycombinator.com/munger.html

Berkshire recently bought a significant stake in IBM, but in that case the company has really transitioned from a technology company to a provider of services. Munger has said that "IBM is easier to understand than Google or Apple. It is a bit ironic that Berkshire invested in IBM given that Charlie said in 1994:

"In terms of blowing it, IBM is some example. Those were brilliant, disciplined people. But there was enough turmoil in technological change that IBM got bounced off the wave after "surfing" successfully for 60 years. And that was some collapse—an object lesson in the difficulties of technology and one of the reasons why Buffett and Munger don't like technology very much. We don't think we're any good at it, and strange things can happen." http://ycombinator.com/munger.html

Munger's personal decision regarding does not mean that the technology sector is not right for other people who do have a Circle of Competence that includes technology. When asked recently about where they would start their career over again if they were just starting out today both Munger and Buffett answered: technology (one of them added energy as an alternative).

Technology presents additional challenges since uncertainty is high and the speed of innovation faster. Buffett has said: "Predicting the long-term economics of companies that operate in fast-changing industries is simply far beyond our perimeter." In my view an investor can cope with that difference by being careful about his or her Circle of Competence

within technology. To know a lot about graphics chips is not necessarily to know much about wireless data for example. To think otherwise is to tempt fate. As Clint Eastwood asked in the movie *Dirty Harry* if you break the Circle of Competence rule: "You've got to ask yourself one question: Do I feel lucky? Well, do ya, punk?"

Learn Continuously: Read, Read, Read

"You don't have to pee on an electric fence to learn not to do it" said Munger on one occasion. At the most recent Berkshire meeting he quipped: "Learning from other people's mistakes is much more pleasant. The best way to do this is simple: When in doubt, read so you can learn vicariously. Charlie loves to talk about the importance of reading:

"In my whole life, I have known no wise people (over a broad subject matter area) who didn't read all the time – none, zero. You'd be amazed at how much Warren reads – at how much I read. My children laugh at me. They think I'm a book with a couple of legs sticking out." http://www.quoteswise.com/charlie-munger-quotes-2.html

We read a lot. I don't know anyone who's wise who doesn't read a lot." http://www.tilsonfunds.com/brkmtg04notes.doc

"Develop into a lifelong self-learner through voracious reading; cultivate curiosity and strive to become a little wiser every day." http://www.valuewalk.com/charlie-munger-page/

The other related point is: success is a lousy teacher. Sometimes what seems like success was mostly luck. On that I suggest you read Mauboussin's book The Success Equation . http://www.amazon.com/Success-Equation-Untangling-Business-Investing/dp/1422184234/ref=la_B001HCX42G_1_1?ie=UTF8&qid=1354820111&sr=1-1

The next post in this series on *25IQ* is about Munger's Methods: **Charlie Munger on Management With Talent and Integrity (The Third Essential Filter)**

Charlie Munger on Management with Talent and Integrity (The Third Essential Filter)

December 24, 2012

Delegate, but not Everything

With only a little over 20 people working at Berkshire, Buffett and Munger must leave it to the managers to run the businesses in the portfolio since they don't have the staff to do otherwise. This is, of course, by choice since what the two men love most is investing. Munger has said:

"We have extreme centralization at headquarters where a single person makes all the capital allocation decisions, and we have decentralization among our operations without a big bureaucracy. That's the Berkshire Hathaway

model." http://mungerisms.blogspot.com/2010/05/charlie-munger-on-how-hed-make-volckler.html

An investor like Munger finds his "comparative advantage" in investing rather than "making sure the trains run on time" like Matt Rose of Burlington Northern. Of course, what Matt Rose does as a "trains run on time" manager is not only invaluable, but essential. Munger says this about See's candy and delegation:

"There are a lot of people who would have bought it and would have screwed it up. They would have thought that headquarters knows best." http://bit.ly/Ug9yV9

When Munger and Buffett do engage in company management, they focus on two tasks:

1. Capital Allocation

Management of the businesses within Berkshire is extremely decentralized, but the management of cash is extremely centralized. The primary management activity at Berkshire is capital allocation. Charlie writes:

"Proper allocation of capital is an investor's number one job" Poor Charlie's Almanack (p. 63)

Buffett's view is no different:

"Charles T. Munger, Berkshire Hathaway's vice-chairman, and I really have only two jobs… One is to attract and keep outstanding managers to run our various operations. The other is capital allocation." http://www.economist.com/node/12677005

Munger has pointed out that capital allocation should not be combined or confused with what is essentially what he calls "gambling at a casino" as is the case with many large investment banks. Charlie has said publicly that he "makes Paul Volcker look like a sissy" when it comes to investment banking reform:

"I would separate derivatives from the basic bridges of civilization. We don't want civilization contaminated by extreme speculation. I'd ban all the derivatives trading except for metals and commodities. The new stuff is a marvelous gambling game. It swamps any commercial transactions that are needed. Gambling does not become wonderful just because it pertains to commerce. It's a casino." http://theinvestmentsblog.blogspot.com/2010/05/if-i-were-lee-kwan-yew.html

2. **Compensation Systems**

This task is not as simple as it might seem since the Berkshire managers in many cases are rich and have little financial need to work. For this reason, Munger and Buffett select managers who love what they do enough that financial motivation is only part of the reason they love the work they do. The best place to see this philosophy set out s in the Berkshire "Owner's Manual" at: http://www.berkshirehathaway.com/owners.html

Munger believes compensation systems are important- too important to delegate:

"It isn't enough to buy the right business. You've also have to have compensation system that's satisfactory to the people running them. At Berkshire Hathaway, we have no [single] system; we have different systems. They're very simple and we don't tend to revisit them very often. It's amazing how well it's worked. We wrote a one-page deal with Chuck Huggins when we bought See's and it's never been touched. We have never hired a compensation consultant." http://www.tilsonfunds.com/wscmtg05notes.pdf

"A man does not deserve huge amounts of pay for creating tiny spreads on huge amounts of money. Any idiot can do it. And, as a matter of fact, many idiots do do it." http://12valuestocks.com/2012/06/best-value-investment-quotes/

"I'd rather throw a viper down my shirt front than hire a compensation consultant." http://www.grahamanddoddsville.net/wordpress/Files/Gurus/Warren%20Buffett/Berkshire%20Hathaway%20Annual%20Meeting%20Notes%202004.pdf

As an example, a manager like Mark Hurd might do very well with Larry Ellison keeping watch, but manage the company to maximize his compensation to the detriment of the company if supervised by a weak board of directors.

Micro-managing what their CEOs do is not in the Berkshire playbook:

"In any big business, you don't worry whether someone is doing something wrong, you worry about whether it's big and whether it's material. You can do a lot to mitigate bad behavior, but you simply can't prevent it altogether." http://gongol.com/research/berkshire/2012/

Of course, fear of micromanagement is not a reason to abdicate responsibility as Scott McNealy did with Jonathan Schwartz at Sun. A board of directors letting a parade of managers run down a business is not justified by a fear of micromanagement either. Should Leo Apotheker have been given the freedom to buy Autonomy? No. Buffett writes: "A managerial "wish list" will not be filled at shareholder expense" at Berkshire. http://www.berkshirehathaway.com/owners.html This raises the Institutional imperative problem that will be discussed later in this series. As Buffett has written:

"[M]any managerial [princes] remain serenely confident about the future potency of their kisses – even after their corporate backyards are knee-deep in unresponsive toads." http://emlab.berkeley.edu/~ulrike/Papers/OCmergers_Final_JFEformat_20feb2008.pdf

"the heads of many companies are not skilled in capital allocation. Their inadequacy is not surprising. Most bosses rise to the top because they have excelled in an area such as marketing, production, engineering, administration or, sometimes, institutional politics. Once they become CEOs, they face new responsibilities. They now must make capital allocation decisions, a critical job that they may have never tackled and that is not easily mastered. …CEOs who recognize their lack of capital-allocation skills (which not all do) will often try to compensate by turning to their staffs, management consultants, or investment bankers. Charlie and I have frequently observed the consequences of such "help." On balance, we feel it is more likely to accentuate the capital-allocation problem than to solve it. In the end, plenty of unintelligent capital allocation takes place in corporate America. (That's why you hear so much about 'restructuring.')" http://www.berkshirehathaway.com/letters/1987.html

Delegation to the extent practiced by Munger and Buffett only works if you follow this rule says Munger:

"Our success has come from the lack of oversight we've provided, and our success will continue to be from a lack of oversight. But if you're going to provide minimal oversight, you have to buy carefully. It's a different model from GE's. GE's works – it's just very different from ours." http://www.tilsonfunds.com/wscmtg05notes.pdf

Buying a "turn-around" business like Sears is not an example of a Berkshire approach despite what was claimed by investor Eddie Lampert. The idea that Lampert would be "the next Warren Buffett" was and is baffling given their different styles as investors.

Better to Have a Great Moat than a Great Manager (But Get Both When You Can)

Munger would rather have a great moat than great managers, but would love to have both so he as a greater margin of safety. "Good jockeys will do well on good horses, but not on broken down nags" quips Buffett. For example, both the New England textile business and the department stores that Berkshire owned had very competent managers, but the underlying businesses the managers had to run were lodged in quicksand. Ron Johnson who formerly was in charge of Apple's retail operations may be a great manager of a retail business, but JC Penny's reputation as a lousy business seems likely to make the critical difference in terms of a financial result. Lots of really great managers will do poorly running startup because the distribution of financial returns in venture capital is a power law distribution.

Munger admits there are rare exceptions to the moat rule:

"So you do get an occasional opportunity to get into a wonderful business that's being run by a wonderful manager. And, of course, that's hog heaven day. If you don't load up when you get those opportunities, it's a big mistake. … Averaged out, betting on the quality of business is better than betting on the quality of management. In other words, if you have to choose one, bet on the business momentum, not the brilliance of the manager. But, very rarely, you find a manager who's so good that you're wise to follow him into what looks like a mediocre business." http://ycombinator.com/munger.html

The Only Duty of Management is to "Widen" the Moat:

In typical fashion Charlie gets right to the point here:

"The only duty of corporate executive is to widen the moat. We must make it wider. Every day is to widen the moat. We gave you a competitive advantage, and you must leave us the moat. There are times when it is too tough. But duty should be to widen the moat. I can see instance after instance where that isn't what people do in business. One must keep their eye on ball of widening the moat, to be a steward of the competitive advantage that came to you. A General in England said, 'Get you the sons your fathers got, and God will save the Queen.' At Hewlett Packard, your responsibility is to train and deliver a subordinate who can succeed you. It is not all that complicated – all that mumbo jumbo. We make bricks in Texas which use the same process as in Mesopotamia." http://mungerisms.blogspot.com/2009/08/2008-annual-meeting-notes.html

Munger wants managers of the business who have "an ownership mentality" toward the business, not just the attitude of manager.

"Carnegie was always proud that he took very little salary. Rockefeller, Vanderbilt were the same. It was a common culture in a different era. All of these people thought of themselves as the founder. I was delighted to get rid of the pressure of getting fees based on performance. If you are highly conscientious and you hate to disappoint, you will feel the pressure to live up to your incentive fee. There was an enormous advantage [to switching away from taking a percentage of the profits to managing Berkshire, in which their interests as shareholders are exactly aligned with other shareholders]."
http://www.tilsonfunds.com/motley_berkshire_brkmtg03notes.php3

Munger and Buffet want managers with what Nassim Taleb calls "skin in the game." They hate situations in which the result is: "heads managers win and tails managers do not lose." They want risk and benefits to be symmetrical. For Munger the presence of the right incentives for manager is critical. Buffett adds that he wants to see managers have: "a major portion of their net worth invested in the company. We eat our own cooking."

Munger also fears bureaucracy and Berkshire works hard to prevent it from lowering returns. Munger:

"For example, if you worked for AT&T in my day, it was a great bureaucracy. Who in the hell was really thinking about the shareholder or anything else? And in a bureaucracy, you think the work is done when it goes out of your in-basket into somebody else's in-basket. But, of course, it isn't. It's not done until AT&T delivers what it's supposed to deliver. So you get big, fat, dumb, unmotivated bureaucracies…. The constant curse of scale is that it leads to big, dumb bureaucracy—which, of course, reaches its highest and worst form in government where the incentives are really awful. That doesn't mean we don't need governments—because we do. But it's a terrible problem to get big bureaucracies to behave."
http://ycombinator.com/munger.html

Management Already In Place with Integrity

Munger has made it clear that integrity is just as significant an investment filter as talent. When Munger buys a company or makes an investment he wants both:

"We would vastly prefer a management in place with a lot of integrity and talent."
http://www.youtube.com/watch?v=3XlBrohrIUc

"Remember that reputation and integrity are your most valuable assets – and can be lost in a heartbeat." http://12valuestocks.com/2012/06/best-value-investment-quotes/

"I think track records are very important. If you start early trying to have a perfect one in some simple thing like honesty, you're well on your way to success in this world."
http://12valuestocks.com/2012/06/best-value-investment-quotes/

"When you mix raisins with turds, they are still
turds." http://12valuestocks.com/2012/06/best-value-investment-quotes/

"All investment evaluations should start by measuring risk, especially reputational." Poor Charlie's Almanack (p. 61)

"Avoid dealing with people of questionable character." Poor Charlie's Almanack (p. 61)

As was noted in the earlier post on mistakes, no one is perfect, including Charlie says Charlie:

"[I know] of a company with a great culture and a great business and he and Warren admire the guy who runs the company. But, the man just made an awful acquisition. … you have to be willing to be disappointed by managers. All managers are going to drift. If [we] could be so wrong as to buy Dexter Shoes then we should not be surprised that others make acquisition mistakes. If you are not frustrated by what you see, you don't understand it." http://www.watheeqa.com/App_Themes/watheeqa/pdf/Conversation%20with%20Charlie%20Munger.pdf

It is harder to spot a lack of integrity than many people imagine. Munger:

"Bernie Ebbers and Ken Lay were caricatures – they were easy to spot. They were almost psychopaths. But it's much harder to spot problems at companies like Royal Dutch [Shell]." http://www.grahamanddoddsville.net/wordpress/Files/Gurus/Warren%20Buffett/Berkshire%20Hathaway%20Annual%20Meeting%20Notes%202004.pdf

The David Sokol case involving Berkshire is interesting to think about. http://www.berkshirehathaway.com/news/MAR3011.pdf Why would someone so rich like Sokol take an action that involved relatively little money as potential gain? That very rich people fall from grace in a huge way over small amounts of money defies easy explanation. Why take a risk that has small upside and massive downside like DennisKozlowski the former head of Tyco did in trying to avoid sales taxes on some art? As an analogy: Why cheat on a spouse with prostitutes when you are in a position of power like Eliot Spitzer? The answer, of course, is that humans are often emotional rather than logical and understand statistics in a dysfunctional way. Munger has said that if you think this sort of thing is easily explainable, you do not understand the problem. Complexity, risk, uncertainty and ignorance are impossible to avoid.

At a small scale reading how to respond when a lack of integrity is uncovered, Munger has said:

"Well in the history of the See's Candy Company they always say, "I never did it before, and I'm never going to do it again." And we cashier them. It would be evil not to, because terrible behavior spreads." http://72.14.203.104/search?q=cache:3sSZnXLbvQEJ:www.loschmanagement.com/Berkshire%2520Hathaway/Charlie%2520munger/The%2520Psychology%2520of%2520Human%2520Misjudgement.htm+%22charlie+Munger%22+%22the+way+Zeckhauser+plays+bridge%22&hl=en&gl=us&ct=clnk&cd=1

Regarding where to draw the line, Munger points out

"We think there should be a huge area between what you're willing to do and what you can do without significant risk of criminal penalty or causing losses. We believe you shouldn't go

anywhere near that line. You ought to have an internal compass. So there should be all kinds of things you won't do even though they are perfectly legal. That's the way we try to operate." http://www.fusioninvesting.com/2011/04/david-sokols-honesty-is-the-question/

Munger makes it clear that he has no desire to buy an otherwise "good" business and they try to find someone to run it:

"We don't train executives, we find them. If a mountain stands up like Everest, you don't have to be a genius to figure out that it's a high mountain." http://www.designs.valueinvestorinsight.com/bonus/bonuscontent/docs/Tilson_2006_BRK_Meeting_Notes.pdf#search=%22Charlie%20munger%20and%20foundation%20and%20croupier%22

The two investors are not interested in investing in a company "turnaround," since they "seldom actually do. Charlie hopes that the moat of the company he is investing in is strong enough to survive bad management. As was discussed in a previous post in this series, Charlie would prefer to have a moat that is so strong that it could survive if the company was run by "an idiot nephew." Neither Buffett nor Munger is going to buy a business and "let" some friend or relative "run it." But if they hypothetically did, they would hope that it would still perform adequately as a business due to the moat.

The Rare Exceptions to the Moat Rule

Occasionally Munger and Buffett find a person who they can bet on who has such superior talent that they really don't need much of a moat (regarding moats see my previous post). This situation is rare, but it does happen.

"Occasionally, you'll find a human being who's so talented that he can do things that ordinary skilled mortals can't. I would argue that Simon Marks – who was second generation in Marks & Spencer of England – was such a man. Patterson was such a man at National Cash Register. And Sam Walton was such a man. These people do come along – and in many cases, they're not all that hard to identity. If they've got a reasonable hand – with the fanaticism and intelligence and so on that these people generally bring to the party – then management can matter much. However, averaged out, betting on the quality of a business is better than betting on the quality of management. In other words, if you have to choose one, bet on the business momentum, not the brilliance of the manager. But, very rarely, you find a manager who's so good that you're wise to follow him into what looks like a mediocre business." http://www.valueplays.net/wp-content/uploads/The-Best-of-Charlie-Munger-1994-2011.pdf

Sometimes, as is the case with Berkshire itself, it is worthwhile to bet on a superior manager. Charlie has said:

"There are people- very few- worth paying up to get in with for a long term advantage'. http://bitly.com/RzDIys

Buffett has pointed out that the talents of Ajit Jain in the reinsurance business are just such a case. Buffett said at the most recent Berkshire meeting: "Ajit Jain has created tens of billions of dollars in value for this company out of nothing but brain and hard work. " That is high praise indeed since there is no mention of any moat in that business. Wells Fargo as has

previously been mentioned is also described by Munger and Buffett as a company that relies mostly on management instead of a moat. I would disagree since I think being "too big to fail" like Wells Fargo is a form of moat since it gives them an artificially low cost of capital. The CEO of Wells thinks his business is all about execution:

"We always say we could leave our strategic plan on an airplane, somebody could pick it up, and it wouldn't matter. It's all about execution." http://management.fortune.cnn.com/2012/11/26/wells-fargo-stumpf/

Certainly the way Wells Fargo "cross-sells" to existing customers in order to lower the cost to acquire new business is about great execution, but the bank in my view starts from a base of "too big to fail" which is a moat.

Charlie feels that the management of a company like Costco is a case in which management adds to the company moat. Charlie is a huge fan of Costco's James Sinegal for example. But Munger clearly feels that companies which have managers like Costco are not easy to find.

"I think it's dangerous to rely on special talents — it's better to own lots of monopolistic businesses with unregulated prices. But that's not the world today. We have made money exercising our talents and will continue to do so. I'm glad we have insurance, though it's not a no-brainer, I'm warning you. We have to be smart to make this work." http://www.valueplays.net/wp-content/uploads/The-Best-of-Charlie-Munger-1994-2011.pdf

Munger also believes that a skilled manager can sometimes find a relatively safe market niche in some cases:

"I find it quite useful to think of a free-market economy – or partly free market economy – as sort of the equivalent of an ecosystem. Just as animals flourish in niches, people who specialize in some narrow niche can do very well." http://www.thepracticalway.com/2010/12/20/quotes-charlie-munger/

This strategy is similar to what Professor Michael Porter calls "differentiation." It can be workable, but is inherently riskier to find a haven from competition in a niche than to have a moat (it is better to have both). An example of a niche market where Munger and Buffett find a gem of a management team is Iscar:

"Judging the management at a company like Iscar is easy—those people are enormously talented and wonderful. But, there aren't many managements like that and few people with the incentive of such intensity." http://www.watheeqa.com/App_Themes/watheeqa/pdf/Conversation%20with%20Charlie%20Munger.pdf

"The reason I got so high on it so fast was that the people are so outstandingly talented. The idea of being in business with them just struck me worth straining for. We didn't know when we were young which things to stretch for, but by the time we reached Iscar, which we never would have bought when we were young, we knew to stretch for the right people. It's a hell of a business. Everything is right there. Isn't it good that we keep learning? Better late than never." http://www.tilsonfunds.com/Whitney%20Tilson's%20notes%20from%20the%202007%20Wesco%20annual%20meeting-5-9-07.pdf

This post is getting beyond my self-imposed limit so I will let Bill Gates summarize the Munger/Buffett management philosophy:

"[Warren's] penchant for long-term investments is reflected in another aphorism: "You should invest in a business that even a fool can run, because someday a fool will." He doesn't believe in businesses that rely for their success on every employee being excellent. Nor does he believe that great people help all that much when the fundamentals of a business are bad. He says that when good management is brought into a fundamentally bad business, it's the reputation of the business that remains intact. Warren installs strong managers in the companies Berkshire owns, and tends to leave them pretty much alone. His basic proposition to managers is that to the degree that a company spins off cash, which good businesses do, the managers can trust Warren to invest it wisely. He doesn't encourage managers to diversify. Managers are expected to concentrate on the businesses they know well so that Warren is free to concentrate on what he does well: invest." http://money.cnn.com/magazines/fortune/fortune_archive/1996/02/05/207334/index.htm

The next post in this series on 25IQ is about Munger's Methods: **Charlie Munger on Margin of Safety (The Fouth Essential filter).**

Charlie Munger on Margin of Safety (the Fourth Essential Filter)

January 2, 2013

"No matter how wonderful [a business] is, it's not worth an infinite price. We have to have a price that makes sense and gives a margin of safety considering the normal vicissitudes of life." Charlie Munger http://www.psyfitec.com/2009/10/buffett-and-munger-on-bbc.html

Are you an Investor or a Speculator?

Anyone who wants to understand Charlie Munger must understand this: If you are buying a share of stock, the investing process is the same as if you were buying a business since a share of stock is just a partial stake in a business. For example, a share of IBM stock is just a small share of IBM's overall business. If you do not follow this approach in Charlie's view you are a "speculator" and not an "investor."

Charlie is a firm believer in what Benjamin Graham once said:

"An investment operation is one which, upon thorough analysis, **promises safety** of principal and an adequate return. Operations not meeting these requirements are speculative." http://en.wikipedia.org/wiki/Benjamin_Graham

Buffett has his own version:

"If you're an investor, you're looking on what the asset is going to do, if you're a speculator, you're commonly focusing on what the price of the object is going to do, and that's not our game." http://en.wikiquote.org/wiki/Warren_Buffett

The objective of a "speculator" is to make predictions about the psychology of large masses of people, which if you are both smart and experienced is a sobering thought. How good are you at predicting what people will do once assembled into a mob? The big danger here is that you just end up following the crowd and doing what Munger talks about here: "Mimicking the herd invites regression to the mean (merely average performance)." http://www.scribd.com/doc/68337347/Charlie-Munger-Investment-Principles If you are not going to do any better than average, what's the point of doing any works to outperform an index fund (more on this on the next post? Seth Klarman writes: "If you can't beat the market, be the market." (Margin of Safety, p. 212).

As an example, people who "day trade" stocks using goofy charts and other voodoo-like practices are speculators. You will hear them talk about how the market "behaves" rather than what the value of a given stock may be. To guess about market "behavior" based on a chart is just that: a guess! Speculators are focused on **price** whether it may be an old baseball card or share of stock. Seth Klarman writes in his book Margin of Safety: "Technical analysis is based on the presumption that that past share prices meanderings, rather than underlying business value, hold the key to future stock prices." Talking heads on cable TV barking out recommendations to buy X and Sell Y as if they were on ESPN Sports Center are speculators/entertainers and are not investors. People who trade on inside information are actually investors, albeit ones that may go jail if caught. Some people who call themselves traders only succeed in doing so because they have better information or are taking the other side of trades with "muppets" being sold down the river via false advice.

Keynes put it this way: "Speculation: The activity of forecasting the psychology of the market." Keynes went on to say the speculator must think about what others are thinking about, what others are thinking about the market, [repeat]. In a Keynesian beauty contest judges are told not to pick the most beautiful woman but instead to pick the contestant they think the other judges will choose as the most beautiful. The winner of such a contest may be very different than the winner of a traditional beauty contest. Keynes wrote about such a contest:

"It is not a case of choosing those [faces] that, to the best of one's judgment, are really the prettiest, nor even those that average opinion genuinely thinks the prettiest. We have reached the third degree where we devote our intelligences to anticipating what average opinion expects the average opinion to be. And there are some, I believe, who practice the fourth, fifth and higher degrees." General Theory of Employment Interest and Money, 1936. http://en.wikipedia.org/wiki/Keynesian_beauty_contest

Much of what went on in the IPOs of Facebook, Zynga and Groupon was a Keynesian Beauty contest: people were trying to guess what other people thought about what other people thought [repeat] about when these stocks would correct with everyone trying to get out just in time. Facebook, Zynga and Groupon investors were trying to "time" when the stock would fall even though the clock had "no hands" and so it was impossible to "time" the exit.

Mispriced Bets

Charlie Munger's best essay and arguably the one that made him most famous is entitled: "*A Lesson on Elementary, Worldly Wisdom as It Relates to Investment Management & Business*"

and it can be found at http://ycombinator.com/munger.html In this wonderful essay (very much worth reading in full) is a long passage which includes this language:

"The model I like—to sort of simplify the notion of what goes on in a market for common stocks—is the pari-mutuel system at the racetrack… Everybody goes there and bets and the odds change based on what's bet. That's what happens in the stock market.

Any damn fool can see that a horse carrying a light weight with a wonderful win rate and a good post position etc., etc. is way more likely to win than a horse with a terrible record and extra weight and so on and so on. But if you look at the odds, the bad horse pays 100 to 1, whereas the good horse pays 3 to 2. Then it's not clear which is statistically the best bet using the mathematics of Fermat and Pascal…." http://ycombinator.com/munger.html

It is worth pointing out that value investing inherently is at odds with the "efficient market hypothesis" (more on that in the next blog post). In the real world, sometimes stocks are underpriced and sometime they are overpriced. To say that Facebook, for example, had an "efficient" price the day it went public and then a far lower price a short time after the stock substantially dropped in price is to defy common sense. During the first few months Facebook had a **value** that did not change very much, but the **price** changed a lot. Price does not always equal value. Anyone who invested through the Internet bubble in 2001 as I did and who still thinks markets are *always* efficient is bonkers.

Business Necessarily Involves Risk, Uncertainty and Ignorance

When you make an investment the laws of probability apply since the decisions involves risk, uncertainty and ignorance (more on this in a later post too, but to jump ahead read: http://www.hks.harvard.edu/fs/rzeckhau/InvestinginUnknownandUnknowable.pdf). If you are making "bets" on stocks and "the house" has the odds in their favor you are gambling/speculating. If you have the odds in your favor you are instead "investing." It should be not a surprise that many successful investor and business people are experts at poker and bridge. Some of them, like Charlie Ergen, were once card counters in Las Vegas. Successful business people don't really gamble since their *big* bets happen when the odds are substantially in their favor.

Many people make the mistake of assuming that buying a quality company ensures safety. Samsung may be a quality company with an attractive business, but that alone is not enough since the price you pay for a share of stock matters. Facebook may be an important company with lots of page views to put advertising on, but it is not worth an infinite price. Howard Marks puts it best:

"Most investors think quality, as opposed to price, is the determinant of whether something's risky. But high quality assets can be risky, and low quality assets can be safe. It's just a matter of the price paid for them…. Elevated popular opinion, then, isn't just the source of low return potential, but also of high risk." http://ivanhoff.com/2012/12/27/high-quality-assets-can-be-risky-and-low-quality-assets-can-be-safe/

Similarly, just because the price of share of stock in a company is beaten down from formerly high levels does not make it "safe" to buy. As an example, HP is way off its value of a few years ago, but that alone does not necessarily make the purchase of the stock "safe" in terms of a Margin of Safety.

The "Margin of Safety" concept is about making it likely that you have the odds significantly in your favor by trying to find a substantial cushion in terms of the odds. Munger does not believe that this happens very often, particular when it is in your Circle of Competence and the other investing filters are in place. Since finding a significantly mispriced bet does not happen very often, when it does happen you should bet *big*. Charlie believes that this means most of the time an investor should be sitting on their "rear end" reading and talking to people. Munger has said: "Investing is where you find a few great companies and then sit on your ass." http://wealthymatters.com/2011/02/12/charlie-mungers-quotes-mungerisms/ Buying and selling stocks for its own sake (e.g., to stay busy) is a very bad idea.

"It's not given to human beings to have such talent that they can just know everything about everything all the time. But it is given to human beings who work hard at it – who look and sift the world for a mispriced bet – that they can occasionally find one. And the wise ones bet heavily when the world offers them that opportunity. They bet big when they have the odds. And the rest of the time they don't. It's just that simple." http://ycombinator.com/munger.html

One truism about investing is this: for you to find a significant mistake, someone else must be making a mistake too. Seth Klarman writes:

"Investors operate within what is for the most part a zero-sum game. While it is true that the value of all companies usually increases over time with economic growth, market outperformance by one investor is necessarily offset by another's underperformance." http://budfox.blogspot.com/2012/11/seth-klarman-goes-nuts-on-fed-in-his_6.html

In other words, when you are investing you are searching for *significant" mistakes made by others. And when you find a *significant* mistake, you bet big.

Everyone Makes Mistakes (No Exceptions).

The first post in this series was about the inevitable mistakes people make. Everyone makes mistakes. If you think you don't make mistakes, you are in dire need of psychological counseling on that issue alone. Donald Trump would be one example of someone who needs psychological help on this point at least.

What you are trying to do when making an investment is to find a mispriced bet. What Margin of Safety is all about is finding a *significantly* mispriced bet. When you look at the current price of a stock like Apple, do you see a significant mistake being made by the market in terms of the price it is offering you at that moment? Charlie puts it this way:

"[Ben Graham developed this] concept of "Mr. Market." Instead of thinking the market was efficient; he treated it as a manic-depressive who comes by every day. And some days he says, "I'll sell you some of my interest for way less than you think it's worth." And other days, "Mr. Market" comes by and says, "I'll buy your interest at a price that's way higher than you think its worth." And you get the option of deciding whether you want to buy more, sell part of what you already have or do nothing at all. To Graham, it was a blessing to be in business with a manic-depressive who gave you this series of options all the time." http://ycombinator.com/munger.html

When the investor faces the challenge of investing he or she faces risk, uncertainty and ignorance. Seth Klarman writes:

"A margin of safety is achieved when securities are purchased at prices sufficiently below underlying value to allow for human error, bad luck, or extreme volatility in a complex, unpredictable and rapidly changing world." http://www.marketfolly.com/2012/04/notes-from-seth-klarmans-margin-of.html#ixzz2FqyYTIon

The bad news for some people in all of this is that investing is hard. But the good news is also that investing is hard and if you have the right temperament and are willing to do the necessary work the process can be fun. As Charlie has said:

"If (investing) weren't a little difficult, everybody would be rich." http://www.wiley.com/WileyCDA/WileyTitle/productCd-0471446912,descCd-tableOfContents.html

To better deal with inevitable mistakes we all make as human beings, Charlie believes that you should have built into the process a "margin" of sufficient size which ensures that even if mistakes happen the outcome will be "adequate" as Ben Graham describes. Graham called this a "Margin of Safety." When you are thinking about buying shares of, for example, Cisco, do you see a value of those shares which is 20-25% less than actual value? If you see a significant discount from value in the current price of an investment, you have a Margin of Safety.

Margin of Safety has evolved since Graham

What Graham did in applying this Margin of Safety concept in his era was quite different than the way Buffett and Munger use it today. In the aftermath of the depression Graham was spending most of his time looking for companies "worth more dead than alive." These "cigar butt" companies were more common at that time, but as years passed and they more or less disappeared. Buffett, encouraged by Munger, began to apply the same principle to companies that were of high quality and the process worked just as well. Munger:

"Ben Graham followers… started defining a bargain in a different way. And they kept changing the definition so that they could keep doing what they'd always done. And it still worked pretty well." http://ycombinator.com/munger.html

Munger believes that process in a financial transaction is similar to processes that exist in engineering:

"In engineering, people have a big margin of safety. But in the financial world, people don't give a damn about safety. They let it balloon and balloon and balloon. It's aided by false accounting. http://www.tilsonfunds.com/motley_berkshire_brkmtg03notes.php3

If you are building a bridge as the designer you want to make sure that it is significantly stronger than necessary to deal with the very worst case. Buffett wrote once: "When you build a bridge, you insist it can carry 30,000 pounds, but you only drive 10,000 trucks across it. And the same principle works in investing." Charlie thinks investing should be similar. The first rule of investing is: don't make big financial mistakes. The second rule is the same as the first rule.

The size of the minimum Margin of Safety should vary with the magnitude of the risk involved. In his fantastic new book Michael Mauboussin writes:

"As Graham noted, the margin of safety 'is available for absorbing the effect of miscalculations or worse than average luck.' The size of the gap between price and value tells you how you're your margin of safety is. As Grahaham says, the margin of safety goes down as the price goes up. In other words, make you margin of safety as large as possible." *The Success Equation* at 169. http://www.amazon.com/The-Success-Equation-Untangling-Investing/dp/1422184234

In terms of the size of the Margin of Safety, Munger and Buffett like the amount to be so big that they need not do any math other than in their heads:

Munger: "Warren often talks about these discounted cash flows, but I've never seen him do
Buffett: "It's sort of automatic. It ought to just kind of scream at you that you've got this huge margin of safety." http://wealthymatters.com/2011/02/12/charlie-mungers-quotes-mungerisms/

Munger talks once about the concept of Margin of Safety in describing Buffett's one time mentor Benjamin Graham in this way:

"Graham had this concept of value to a private owner—what the whole enterprise would sell for if it were available. And that was calculable in many cases. Then, if you could take the stock price and multiply it by the number of shares and get something that was one third or less of sellout value, he would say that you've got a lot of edge going for you. Even with an elderly alcoholic running a stodgy business, this significant excess of real value per share working for you means that all kinds of good things can happen to you. You had a huge margin of safety—as he put it—by having this big excess value going for you." http://ycombinator.com/munger.html

Since nothing is certain in investing, the best approach is to think probabilistically. Michael Mauboussin says it best:

"Margin of safety can be restated as a discount to expected value. Expected value is a function of the weighted probability of potential outcomes." http://people.stern.nyu.edu/adamodar/pdfiles/eqnotes/marginofsafety.pdf

"[One] way to cope with noise is to think probabilistically. The basic idea is to intelligently consider value outcomes and their associated probabilities. These probabilities and outcomes allow you to determine an expected value, and you want to buy at a substantial discount to that value. That discount is what Ben Graham would call "margin of safety." His message about margin of safety is just one of Graham's enduring lessons." http://seekingalpha.com/article/163743-interview-michael-mauboussin-chief-investment-strategist-legg-mason-capital-management

Valuation

In determining the value of a business people make many different mistakes. One reason why so many mistakes are made is that both a business and an economy are unpredictable

complex adaptive systems (more on that later). Another reason is that promoters can tell tall very convincing stores and many investor buy into the false narrative to their detriment.

The starting point in the process is setting a valuation. At his core, Munger believes:

"You must value the business in order to value the stock."
http://www.valuewalk.com/charlie-munger-page/

In setting a value Munger and Buffet don't swallow the stores of promoters that sing songs and tell tall tales about EBITDA and non-GAAP "earnings." They like genuine free cash flow. Munger:

"There are two kinds of businesses: The first earns 12%, and you can take it out at the end of the year. The second earns 12%, but all the excess cash must be reinvested — there's never any cash. It reminds me of the guy who looks at all of his equipment and says, "There's all of my profit." We hate that kind of business."
http://www.tilsonfunds.com/motley_berkshire_brkmtg03notes.php3

Warren Buffett describes the valuation investing process in this simple way:

"Though this … cannot be calculated with engineering precision, it can in some cases be judged with a degree of accuracy that is useful. The primary factors bearing upon this evaluation are:

1) The certainty with which the long-term economic characteristics of the business can be evaluated;

2) The certainty with which management can be evaluated, both as to its ability to realize the full potential of the business and to wisely employ its cash flows;

3) The certainty with which management can be counted on to channel the rewards from the business to the shareholders rather than to itself;

4) The purchase price of the business;

5) The levels of taxation and inflation that will be experienced and that will determine the degree by which an investor's purchasing-power return is reduced from his gross return."
http://www.berkshirehathaway.com/letters/1993.html

Each of these points made by Buffett on valuation deserves its own blog post, so I will leave it at that for now. But the important point is (1) to have the discipline to do the work; (2) realize that mistakes will inevitably be made; and (3) build in a Margin of Safety. In doing this analysis people like Buffett are very conservative:

"We think about worst cases all the time and we add on a big margin of safety. We don't want to go back to 'Go.'" http://articles.chicagotribune.com/2012-05-05/news/sns-rt-berkshiremeeting-highlights2l1e8g52t9-20120505_1_vice-chairman-charlie-munger-berkshire-meeting-berkshire-hathaway

Warren Buffett has views on company valuation which echo Munger's:

"Growth is always a component in the calculation of value, constituting a variable whose importance can range from negligible to enormous and whose impact can be negative as well as positive." http://alephblog.com/2011/10/20/value-versus-growth/

"Growth benefits investors only when the business in point can invest at incremental returns that are enticing – in other words, only when each dollar used to finance the growth creates over a dollar of long term market value. In the case of a low-return business requiring incremental funds, growth hurts the investor." http://www.buffettsecrets.com/company-growth.htm

In terms of valuing a company and its relation of Margin of Safety, I like a definition Michael Mauboussin once set out in an interview:

"Value, to me, is the present value of future cash flows, which would be relevant for any financial asset – present value of future cash flows. Value would be buying something for substantially less than what it's worth, based on that stream of cash flows. It's as simple as that. And the margin of safety, of course, reflects the distance…" http://www.forbes.com/sites/steveforbes/2011/07/11/steve-forbes-interview-michael-mauboussin-professor-and-investor/

To which Mauboussin adds:

"A margin of safety- a concept attributable to Ben Graham- exists when an investor can purchase a stock well below its intrinsic value. Buffett defines intrinsic value in no uncertain terms: 'it is the discounted value of the cash that can be taken out of a business during its remaining life.'" http://people.stern.nyu.edu/adamodar/pdfiles/eqnotes/marginofsafety.pdf

Every so often someone will say that the ideas of people like Munger are old-fashioned. One such case was during the 1999-2001 Internet stock bubble and that did not turn out well for people who doubted these principles. Some promoters did well during that bubble, but that it another subject entirely. Munger believes the Margin of Safety idea is timeless:

"The idea of a margin of safety, a Graham precept, will never be obsolete. The idea of making the market your servant will never be obsolete. The idea of being objective and dispassionate will never be obsolete. So, Graham had a lot of wonderful ideas." (Wesco Annual Meeting 2003) http://wealthymatters.com/2011/02/12/charlie-mungers-quotes-mungerisms/

Summing Up

As I did in the last chapter I will leave it to one person to summarize the ideas set out in this post. James Montier:

"Valuation is the closest thing to the law of gravity that we have in finance. It is the primary determinant of long-term returns. However, the objective of investment (in general) is not to buy at fair value, but to purchase with a margin of safety. This reflects that any estimate of fair value is just that: an estimate, not a precise figure, so the margin of safety provides a much-needed cushion against errors and misfortunes. When investors violate [this principle] by investing with no margin of safety, they risk the prospect of the permanent impairment of capital." http://theguruinvestor.com/2011/05/20/the-seven-immutable-laws-of-investing/

Charlie Munger's summary of all the four investing filters is to the point:

"The number one idea is to view a stock as an ownership of the business and to judge the staying quality of the business in terms of its competitive advantage. Look for more value in terms of discounted future cash-flow than you are paying for. Move only when you have an advantage." http://www.peregrineinvest.com/whatwedo.aspx?spid=109675&Title=Investing%20Words%20of%20Wisdom

It's so simple! Most financial advisors try to make the investing process complex since otherwise they would have nothing to sell. Of course, that the process is simple does not mean the process is not hard work or fun for some people . The next post in this series will discuss whether people should be active or passive investors and whether diversification or concentration of investments makes sense in each case.

Charlie Munger on Investment Concentration versus Diversification

January 16, 2013

Active versus Passive Investing

Charlie's advice to other people on investing is very different depending on the nature of the investor.

"Our standard prescription for the **know-nothing** investor with a long-term time horizon is a no-load index fund." http://www.myinvestmentforum.com/category/sgfunds-forum/interview-with-charlie-munger-t1655.html

What is a **"know nothing"** investor? The answer is simple for Charlie: a no-nothing investor is someone who does not understand the economics of the specific business in question. As was pointed out in the last blog post, to understand the value of an investment, you must understand the value of the underlying business since a share of stock is merely a proportional ownership interest in a business. If you are thinking about price of the stock and not the value of the business you are not an investor believes Munger. Occasionally some academic will claim that Munger and Buffett only know how to buy valuable companies at great prices. This is a moronic academic analysis of Munger and Buffett's market outperformance (alpha) since that *is* investing.

Buffett makes it clear that being a know-nothing investor is nothing to be ashamed about. Know-nothing investors can know a lot about a lot. Sports, politics, science even some aspects of business can be the forte of a know-nothing investor.

"By periodically investing in an index fund, for example, the **know-nothing** investor can actually outperform most investment professionals. Paradoxically, when 'dumb' money acknowledges its limitations, it ceases to be dumb." http://berkshireruminations.blogspot.com/2007/12/thoughts-on-index-investing.html

"Most investors, both institutional and individual, will find that the best way to own common stocks is through an index fund that charges minimal fees. Those following this path are sure to beat the net results (after fees and expenses) delivered by the great majority of investment professionals." http://www.berkshirehathaway.com/letters/1996.html

Think about what this means. You can decide to become a long-term investor in the United States/global economy and not spend much time understanding the economics of specific businesses. You can spend that time engaged in things that interest you like skiing, sleeping or watching TV instead. Josh Brown lays it out cleanly here:

"… Prior to comparing your returns to this or that index and then tearing out your hair over them, **ask yourself whether or not it should matter.** If you are speculating for the sake of speculation, by all means, grade yourself. If you are running a fund, then you won't need to grade yourself because you are already being judged as we speak. Only 39% of active managers beat their benchmarks in 2o12, which means more than half of the fund industry is under this microscope now and the light in their faces is a harsh one. Not a pleasant place to be.

And never mind comparing yourself to an index, it's hard enough to keep up with this orange cat from London named 'Orlando' who took on a gaggle of supposed market-beating fund managers:

By the end of September the professionals had generated £497 of profit compared with £292 managed by Orlando. But an unexpected turnaround in the final quarter has resulted in the cat's portfolio increasing by an average of 4.2% to end the year at £5,542.60, compared with the professionals' £5,176.60.

This cat, a fucking *ginger* no less, threw a chew toy at the stock table pages of the Financial Times and beat guys with decades of experience and unlimited research at their fingertips." http://www.thereformedbroker.com/2013/01/15/chasing-the-cat/

The most important thing people need to know in making this decision is their own limitations. As a previous post explained, Charlie believes that not making big mistakes is a huge determinant of whether you will have financial success in life. By understanding your limitations you will make fewer mistakes.

What Warren Buffett is talking about is the question of whether a person should be an "active" or a" passive" investor – concepts he learned from Benjamin Graham:

"The determining trait of the enterprising [active] investor is his willingness to devote time and care to the selection of securities that are both sound and more attractive than the average. Over many decades, an enterprising investor of this sort could expect a worthwhile reward for his extra skill and effort in the form of a better average return than that realized by the **passive** investor." http://blogs.cfainstitute.org/investor/about-us/ben-graham/

Being an active investor and somehow outperforming the market **after** fees and expenses sounds good, but the catch is that being a successful active investor requires a massive amount of time and work. If you don't enjoy it, why do it?

Even more importantly, if you are provably not good at it, why do it? If you keep track of your active investing results over the years and you are failing to match the indexes, what is that telling you? An active investor who does not keep written track of their results **after** fees and expenses and compares that to "being the market" instead is at big risk of fooling themselves. Charlie says that Richard Feynman was right that the easiest person to fool is yourself, and that especially applies to investing skill/results.

Munger agrees with Buffett that index funds make the most sense for almost all investors. Whether they know it or not most all investors should be passive investors. Some people try to escape from this trap by saying essentially: "I can be smart about picking other people who will outperform market via active investing." Relying on a stock broker to be an active investor on your behalf is no solution says Charlie since "stock brokers, in toto, will do so poorly that the index fund will do better." http://www.grahamanddoddsville.net/wordpress/Files/Gurus/Warren%20Buffett/Berkshire%20Hathaway%20Annual%20Meeting%20Notes%202004.pdf

EMH

If you are not a **passive** investor, you must beat the market **after** fees and expenses. As John Brown notes above, being an **active** investor and accomplishing that is nontrivially hard to do.

It is at this point that the debate about the so-called "efficient market hypothesis" ("EMH") raises its ugly head. Munger's view on EMH are clear:

"I think it is roughly right that the market is efficient, which makes it very hard to beat merely by being an intelligent investor. But I don't think it's totally efficient at all. And the difference between being totally efficient and somewhat efficient leaves an enormous opportunity for people like us to get these unusual records. It's efficient enough, so it's hard to have a great investment record. But it's by no means impossible. Nor is it something that only a very few people can do. The top three or four percent of the investment management world will do fine." http://www.myinvestmentforum.com/category/sgfunds-forum/interview-with-charlie-munger-t1655.html

The paradox facing the ordinary investor is that usually only the biggest investors (e.g., big pension funds, university endowments and the very wealthy) get access to the top three to four percent investment management. This problem for the ordinary investor is reflected in an old Groucho Marx joke: you don't want to hire an investment manager that would take you for a client!

Why is the EMF theory so widely advocated? Academics love EMH because they can claim that they have mathematics-based formulas which can predict the future even though the underlying assumptions (borrowed from physics) are provably false. For a professor, the ability to create beautiful mathematics is important since it means that they are less likely to be teased by physicists in the faculty club. Life is infinitely more interesting for an academic if they can create beautiful mathematics in their papers.

Munger:

"I have a name for people who went to the extreme efficient market theory—which is "bonkers." It was an intellectually consistent theory that enabled them to do pretty mathematics. So I understand its seductiveness to people with large mathematical gifts. It just had a difficulty in that the fundamental assumption did not tie properly to reality." http://ycombinator.com/munger.html

In future posts I will describe Munger's his views on why behavioral economics invalidates key premises of EMH. They are numerous and detailing them will be more fun that the blog posts made to date by this author. Munger:

"The possibility that stock value in aggregate can become irrationally high is contrary to the hard-form "efficient market" theory that many of you once learned as gospel from your mistaken professors of yore. Your mistaken professors were too much influenced by "rational man" models of human behavior from economics and too little by "foolish man" models from psychology and real-world experience." http://www.tilsonfunds.com/Mungerwritings2001.pdf#search=%22%20%22charlie%20Munger%22%20Outstanding%20investor%20digest%22

Munger likes to make fun of a few specific economists who have taken their academic theories into the real world and failed in spectacular fashion:

"Efficient market theory [is] a wonderful economic doctrine that had a long vogue in spite of the experience of Berkshire Hathaway. In fact one of the economists who won — he shared a Nobel Prize — and as he looked at Berkshire Hathaway year after year, which people would throw in his face as saying maybe the market isn't quite as efficient as you think, he said, "Well, it's a two-sigma event." And then he said we were a three-sigma event. And then he said we were a four-sigma event. And he finally got up to six sigmas — better to add a sigma than change a theory, just because the evidence comes in differently. [Laughter] And, of course, when this share of a Nobel Prize went into money management himself, he sank like a stone." http://www.loschmanagement.com/Berkshire%20Hathaway/Charlie%20munger/The%20Psychology%20of%20Human%20Misjudgement.htm

Charlie as similar feelings about other aspects of much of academically generated financial theory:

"Berkshire's whole record has been achieved without paying one ounce of attention to the efficient market theory in its hard form. And not one ounce of attention to the descendants of that idea, which came out of academic economics and went into corporate finance and morphed into such obscenities as the capital asset pricing model, which we also paid no attention to. I think you'd have to believe in the tooth fairy to believe that you could easily outperform the market by seven-percentage points per annum just by investing in high volatility stocks." http://www.tilsonfunds.com/MungerUCSBspeech.pdf

The problems which arise due to people thinking that they can be successful active investors are huge and made worse due to one a dysfunctional heuristic in particular (more on this later) known simply as "overconfidence":

"Most people who try [investing] don't do well at it. But the trouble is that if even 90% are no good, everyone looks around and says, "I'm the

10%." http://www.grahamanddoddsville.net/wordpress/Files/Gurus/Warren%20Buffett/Berkshire%20Hathaway%20Annual%20Meeting%20Notes%202004.pdf

The list of dysfunctional heuristics is a long and winding road.

Closet indexing

One of the saddest cases in investing happens when someone thinks they are active investor but the reality is that they have invested in so many stocks that they have become "closet indexers." Munger points out the ugliness simply:

"[With] closet indexing … you're paying a manager a fortune and he has 85% of his assets invested parallel to the indexes. If you have such a system, you're being played for a sucker." http://www.tilsonfunds.com/wscmtg05notes.pdf

On this point, to understand Munger it is best to look again at his wonderful essay which compares investing to betting at a horse racing track:

"the one thing that all those winning betters in the whole history of people who've beaten the pari-mutuel system have is quite simple. They bet very seldom. It's not given to human beings to have such talent that they can just know everything about everything all the time. But it is given to human beings who work hard at it—who look and sift the world for a mispriced bet — that they can occasionally find one. And the wise ones bet heavily when the world offers them that opportunity. They bet big when they have the odds. And the rest of the time, they don't. It's just that simple.

That is a very simple concept. And to me it's obviously right—based on experience not only from the pari-mutuel system, but everywhere else. And yet, in investment management, practically nobody operates that way. We operate that way—I'm talking about Buffett and Munger. And we're not alone in the world. But a huge majority of people have some other crazy construct in their heads. And instead of waiting for a near cinch and loading up, they apparently ascribe to the theory that if they work a little harder or hire more business school students, they'll come to know everything about everything all the time. To me, that's totally insane. The way to win is to work, work, work, work and hope to have a few insights." http://ycombinator.com/munger.html

If you want to go deeper on the closet indexing issue I suggest you read Mauboussin as usual (when in doubt read Mauboussin is my rule of thumb): https://www.lmcm.com/905988.pdf More discussion can be found here: http://online.barrons.com/article/SB50001424052748703792204578221972943824046.html?mod=bol_share_tweet#articleTabs_article%3D2

Concentration is Key for the Active Investor

Munger is clearly a devotee of concentrating his investments since he is not a know-nothing investor.

"The idea of excessive diversification is madness." http://www.grahamanddoddsville.net/wordpress/Files/Gurus/Warren%20Buffett/Berkshire%20Hathaway%20Annual%20Meeting%20Notes%202004.pdf

"Wide diversification, which necessarily includes investment in mediocre businesses, only guarantees ordinary results." http://investingcaffeine.com/2009/12/02/more-eggs-in-basket-may-crack-portfolio/

Seth Klarman believes: "The number of securities that should be owned to reduce portfolio risk is not great; as few as ten to fifteen holdings usually suffice."

Jason Zweig adds:

"A conventional rule of thumb, supported by the results of Bloomfield, Leftwich, and Long 1977, is that a portfolio of 20 stocks attains a large fraction of the total benefits of diversification. … however, that the increase in idiosyncratic risk has increased the number of stocks needed to reduce excess standard deviation to any given level." http://kuznets.fas.harvard.edu/~campbell/papers/clmx.pdf

"Even the great investment analyst Benjamin Graham urged "adequate though not excessive diversification," which he defined as between 10 and about 30 securities." http://online.wsj.com/article/SB10001424052748704533904574548003614347452.htm

Munger chimes in:

"The Berkshire-style investors tend to be less diversified than other people. The academics have done a terrible disservice to intelligent investors by glorifying the idea of diversification. Because I just think the whole concept is literally almost insane. It emphasizes feeling good about not having your investment results depart very much from average investment results. But why would you get on the bandwagon like that if somebody didn't make you with a whip and a gun? http://www.myinvestmentforum.com/category/sgfunds-forum/interview-with-charlie-munger-t1655.html

Seth Klarman points out that it is better to know **a lot** about 10-15 companies that to know just a little about many stocks. When it comes to diversification vs. concentration Charlie feels like the Maytag repair man:

"I always like it when someone attractive to me agrees with me, so I have fond memories of Phil Fisher. The idea that it was hard to find good investments, so concentrate in a few, seems to me to be an obviously good idea. But 98% of the investment world doesn't think this
way. http://www.grahamanddoddsville.net/wordpress/Files/Gurus/Warren%20Buffett/Berkshire%20Hathaway%20Annual%20Meeting%20Notes%202004.pdf

The number of stocks a person can realistically follow and understand the economics of the specific business better than the market is significantly less than 20. The idea that a dentist working full time in his or her profession is going to pick technology stocks better than the market after fees and expenses is silly. A UPS driver is hoping to the same thing with a health care stock? Remember the task is not just to pick a quality company, but to find a mispriced bet.

The same principles apply to Angel investors who "spray and pray" investments at every start up they can find. Smart VCs and Angels investors make a lot of bets but in a relative sense they are still concentrated. A big VC fund may make 40 bets in a fund and the outcome for

the funs may rest on two or three massive financial home runs, but each of the 40 bets must have optionality. To many companies VCs think they can just invest in 4o0 companies regardless of whether they have optionality.

Summary:

You may recall from an economics class or reading that markets are "efficient." This means markets take all the available information and create a price for the good or service. The market is often right about that price, but is not always right. It is possible, by finding an area in which you are particularly competent, to find an investment that is being offered to you for substantially less than it is worth. Not a little less than what it is worth mind you, but substantially less than it is worth. "How much is substantially less than it is worth?" you may ask. The price should be so good that it is screaming out at you to buy it. "How often is this likely to happen?" It may happen once or twice in a year or twice in a month and then not again for two or three years. As an example, the VC Fred Wilson is said to have made no investments at all in 2012. Sometimes that happens if you stick to your principles.

It is important to note that mispriced investments will happen more often that once or twice a year as a whole, but the only mispriced investment that is important to you is one that falls within an area in which you are very competent. The smaller the area in which you apply your time and effort to being competent, the more likely is that you will genuinely spot the opportunities. If you try to be competent in all areas and you will never be smart enough to find these investment opportunities.

"We don't believe that markets are totally efficient and we don't believe that widespread diversification will yield a good result. We believe almost all good investments will involve relatively low diversification. Maybe 2% of people will come into our corner of the tent and the rest of the 98% will believe what they've been told." http://www.grahamanddoddsville.net/wordpress/Files/Gurus/Warren%20Buffett/Berkshire%20Hathaway%20Annual%20Meeting%20Notes%202004.pdf

My next post will be: "**Charlie Munger on the Importance of Consistently not being Stupid.**"

Charlie Munger on the Importance of Worldly Wisdom and Consistently not being Stupid

January 27, 2013

"I think part of the popularity of Berkshire Hathaway is that we look like people who have found a trick. It's not brilliance. It's just avoiding stupidity."
http://www.scribd.com/fullscreen/110302239?access_key=key-28dmiqkoda00xd7b7mae

A Lattice of Mental Models

Understanding how humans make decisions is critical for any investor. Unless careful attention is devoted to decision making processes the brain can be a **mistake-making machine**.

"It is remarkable how much long-term advantage people like [Warren Buffett and myself] have gotten by trying to be consistently not stupid, instead of trying to be very intelligent." http://www.wiley.com/WileyCDA/WileyTitle/productCd-0471446912,descCd-tableOfContents.html

One way to "be less stupid" is to adopt what Charlie calls a "lattice of mental models" approach to evaluating decisions. He believes that by using a range of different "models" from different disciplines like psychology, history, mathematics, physics, biology and economics, a person can use the combined output to produce something he calls "Worldly Wisdom."

Munger's method is to first assemble all the relevant facts and then apply a rational process to produce an analysis of those facts and an investing thesis. To increase the probability that the process is actually rational Munger applies multiple models from various disciplines like psychology, mathematics, statistics history, physics, biology and economics searching for sources of human misjudgment. It is in effect a form of "double/multiple check" on the investing process. Munger believes that by going over your decision making process carefully using these additional "filters" from many disciplines you can more consistently "not be stupid". You will always make some bone-headed mistakes even if you are careful, but Munger's process is designed to decrease the probability of mistakes.

Munger refers to this approach to problem solving as a:

"2 track analysis: what are the factors that really govern the interests involved here rationally considered (i.e. macro and micro level economic factors) and what are the subconscious influences where the brain at a subconscious level is automatically forming conclusions (i.e. influences from instincts, emotions, cravings, and so on)"

"what are the factors that really govern the interests involved rationally considered (i.e. macro and micro level economic factors) and what are the subconscious influences where the brain at a subconscious level is automatically" http://moneyarchive.wordpress.com/2008/09/07/the-charlie-munger-checklists/

Munger believes that it is critical for a person think broadly since to not do so is to invite mistakes.

"The theory of modern education is that you need a general education before you specialize. And I think to some extent, before you're going to be a great stock picker, you need some general education." http://www.thinkfn.com/en/content/view/52/?id=124

In creating his "lattice of mental models" approach Munger took his cue from Benjamin Franklin a renaissance man/polymath who he admires greatly.

In the language of Philip Tetlock http://en.wikipedia.org/wiki/The_Hedgehog_and_the_Fox, Munger is a "fox" (knows a little about a lot) by nature rather than a "hedgehog" (knows a lot

about very little). In terms of "foxes" that one may encounter in life Charlie is someone truly special. Bill Gates has said about Charlie: "Charlie Munger is truly the broadest thinker I have ever encountered."

What an investor is dealing with when making investing decisions is a nest of "complex adaptive systems" which makes his or her job genuinely hard. This means, says Munger:

"An investment decision in the common stock of a company frequently involves a whole lot of factors interacting … the one thing that causes the most trouble is when you combine a bunch of these together, you get this lollapalooza effect." http://www.loschmanagement.com/Berkshire%20Hathaway/Charlie%20munger/The%20Psychology%20of%20Human%20Misjudgement.htm

If one adopts the model of "complex adaptive systems" one accepts the idea that there are many things that can not be modeled with certainty. In Charlie's view it is better to have common sense and be Worldly Wise than futz around with a lot of models that are precisely wrong rather than approximately right. Munger: "People calculate too much and think too little." http://www.fool.com/news/foth/2002/foth020515.htm

Worldly Wisdom

Charlie's breadth of knowledge is something that is naturally part of his character but also something that he intentionally cultivates. To know nothing about an important subject is to invite problems.

"What is elementary, worldly wisdom? Well, the first rule is that you can't really know anything if you just remember isolated facts and try and bang 'em back. If the facts don't hang together on a latticework of theory, you don't have them in a usable form. You've got to have models in your head. And you've got to array your experience - both vicarious and direct - on this latticework of models. You may have noticed students who just try to remember and pound back what is remembered." http://www.amazon.com/exec/obidos/ASIN/1578643031/consciousinve-20/104-7644521-2497538

Munger illustrates this idea by pointing out that many professionals often think only about their own discipline and think that whatever it is that they do for a living will cure all problems. A nutritionist may feel as if she can cure anything for example. Or a chiropractor may believe he can cure depression. Munger calls this "man with a hammer" syndrome since to such a person "everything looks like nail" even though it may not be a nail.

Charlie has said many times that someone who is really smart but has devoted all their time to being an expert in a narrow area may actually be dangerous to themselves and others. One example of this are most macroeconomists who think they understand the economy but are disasters in investing their own portfolios. As another example, marketing experts may think that most everything can be solved via that discipline. Financiers tend to think similarly about their own profession. Too many people believe what they do at work is hard and what others do is easy.

Charlie believes that the best approach to dealing with this set of problems can be found in adopting a multidisciplinary approach.

"you've got to have multiple models. And the models have to come from multiple disciplines - because all the wisdom of the world is not to be found in one little academic department. That's why poetry professors, by and large, are so unwise in a worldly sense. They don't have enough models in their heads. … You may say, 'My God, this is already getting way too tough.' But, fortunately, it isn't that tough - because 80 or 90 important models will carry about 90% of the freight in making you a worldly - wise person. And, of those, only a mere handful really carry very heavy freight." http://www.amazon.com/exec/obidos/ASIN/1578643031/consciousinve-20/104-7644521-2497538

Munger believes that by learning to recognize certain dysfunctional decision making processes an investor can learn to make fewer mistakes. As was noted in the first post in this series mistakes can't be eliminated. The best one can hope for is to reduce their frequency and hopefully magnitude. Charlie:

"Man's imperfect, limited-capacity brain easily drifts into working with what's easily available to it. And the brain can't use what it can't remember or when it's blocked from recognizing because it is heavily influenced by one or more psychological tendencies bearing strongly on it…" "…the deep structure of the human mind requires that the way to full scope competency of virtually any kind is learn it all to fluency – like it or not." http://www.poorcharliesalmanack.com/pca.php

To sum up is blog post it is useful I think to just quote Charlie on the benefits of his approach:

"I constantly see people rise in life who are not the smartest, sometimes not even the most diligent, but they are learning machines. They go to bed every night a little wiser than they were when they got up and boy does that help, particularly when you have a long run ahead of you.…so if civilization can progress only with an advanced method of invention, you can progress only when you learn the method of learning. Nothing has served me better in my long life than continuous learning. I went through life constantly practicing (because if you don't practice it, you lose it) the multi-disciplinary approach and I can't tell you what that's done for me. It's made life more fun, it's made me more constructive, it's made me more helpful to others, and it's made me enormously rich. You name it, that attitude really helps." http://www.valueinvestingworld.com/2007/05/charlie-munger-usc-law-school.html

In blog posts to follow I will try to apply "Munger's methods" to a series to specific problems. For example, in looking at a decision: are there dysfunctional decision making heuristics from psychology that may have caused an error? As another example, Charlie likes to use a model from Algebra and "invert" to find a solution for problems. Looking for models to explain mistakes so one can accumulate "Worldly Wisdom" is actually lots of fun. It is like a puzzle to be solved.

Charlie likes checklists.

"You need a different checklist and different mental models for different companies. I can never make
it easy by saying, 'Here are three things.' You have to derive it yourself to ingrain it in your head for the rest of your life." http://investdigest.blogspot.com/2006/02/charlie-mungers-investing-mental.html

His most comprehensive checklist can be found in Poor's Charlie Almanack http://www.amazon.com/Poor-Charlies-Almanack-Wisdom-Charles/dp/1578643031 which is reproduced below. Some of the topics have been covered to date and some have not. I hope to get to most if not all of them eventually.

Risk – All investment evaluations should begin by measuring risk, especially reputational

- Incorporate an appropriate margin of safety
- Avoid dealing with people of questionable character
- Insist upon proper compensation for risk assumed
- Always beware of inflation and interest rate exposures
- Avoid big mistakes; shun permanent capital loss –

Independence "Only in fairy tales are emperors told they are naked"

- Objectivity and rationality require independence of thought
- Remember that just because other people agree or disagree with you doesn't make you right or wrong – the only thing that matters is the correctness of your analysis and judgment
- Mimicking the herd invites regression to the mean (merely average performance)

Preparation "The only way to win is to work, work, work, work, and hope to have a few insights"

- Develop into a lifelong self-learner through voracious reading; cultivate curiosity and strive to become a little wiser every day
- More important than the will to win is the will to prepare
- Develop fluency in mental models from the major academic disciplines
- If you want to get smart, the question you have to keep asking is "why, why, why?"

Intellectual humility – Acknowledging what you don't know is the dawning of wisdom

- Stay within a well-defined circle of competence
- Identify and reconcile disconfirming evidence
- Resist the craving for false precision, false certainties, etc.
- Above all, never fool yourself, and remember that you are the easiest person to fool –

Analytic rigor – Use of the scientific method and effective checklists minimizes errors and omissions

- Determine value apart from price; progress apart from activity; wealth apart from size
- It is better to remember the obvious than to grasp the esoteric
- Be a business analyst, not a market, macroeconomic, or security analyst
- Consider totality of risk and effect; look always at potential second order and higher level impacts
- Think forwards and backwards – Invert, always invert –

Allocation – Proper allocation of capital is an investor's number one job

- Remember that highest and best use is always measured by the next best use (opportunity cost)
- Good ideas are rare – when the odds are greatly in your favor, bet (allocate) heavily
- Don't "fall in love" with an investment – be situation-dependent and opportunity-driven –

Patience – Resist the natural human bias to act

- "Compound interest is the eighth wonder of the world" (Einstein); never interrupt it unnecessarily
- Avoid unnecessary transactional taxes and frictional costs; never take action for its own sake
- Be alert for the arrival of luck
- Enjoy the process along with the proceeds, because the process is where you live –

Decisiveness – When proper circumstances present themselves, act with decisiveness and conviction

- Be fearful when others are greedy, and greedy when others are fearful
- Opportunity doesn't come often, so seize it when it comes
- Opportunity meeting the prepared mind; that's the game –

Change – Live with change and accept unremovable complexity

- Recognize and adapt to the true nature of the world around you; don't expect it to adapt to you
- Continually challenge and willingly amend your "best-loved ideas"
- Recognize reality even when you don't like it – especially when you don't like it –

Focus – Keep things simple and remember what you set out to do

- Remember that reputation and integrity are your most valuable assets – and can be lost in a heartbeat
- Guard against the effects of hubris (arrogance) and boredom
- Don't overlook the obvious by drowning in minutiae (the small details)
- Be careful to exclude unneeded information or slop: "A small leak can sink a great ship"
- Face your big troubles; don't sweep them under the rug [checklist from http://www.valueinvestingworld.com/2007/12/investing-principles-checklist-from.html quoting Poor Charlie's Almanack]

Charlie Munger on The Psychology of Human Misjudgment

February 2, 2013

"…the brain should be using the simple probability mathematics of Fermat and Pascal applied to all reasonably obtainable and correctly weighted items of information that are of

value in predicting outcomes…" Charlie Munger http://www.rbcpa.com/Mungerspeech_june_95.pdf

To cope with information and computation overload, humans have developed simple "rules of thumb" called "heuristics" which allow them to make decisions. It would be great if people could do what Charlie describes above, but it is just not possible. Decision making heuristics are sometimes beneficial and sometimes not. Catching a fly ball in a baseball games involves a heuristic which works very well. Really skillful people who know their limitations well can sometimes use heuristics to their advantage including his partner Warren Buffett and Ajit Jain. Munger points out:

"There is a close collaboration between Warren and Ajit Jain. I've known both a long long time and if there are two better people on this earth to do this [super cat underwriting], I don't know who they are. We can't guarantee results, but they've done fine — in fact, more than fine. Sometimes they will do things where it's a straight Pascalian calculation — the odds are x and we get paid at a rate that give us better odds than Las Vegas. The reason other people won't do it is because if they're wrong, it'll be a big money loss, but Berkshire can handle a big number loss. I'm quite comfortable watching those two people do it. I wish I could do it, but I can't. It's reasonable heuristics by two tough, sharp-minded men." http://www.tilsonfunds.com/motley_berkshire_wscmtg03notes.php

Unfortunately, particularly in the context of human activities that are not really part of our evolutionary past (such as investing), euristics can produce boneheaded mistake after mistake. Zeckhauser, who Charlie Munger admires greatly for his decision making processes in bridge, writes that "individuals tend to extrapolate heuristics from situations where they make sense to those where they do not." Charlie notes:

"bias [arises] from the non-mathematical nature of the human brain in its natural state as it deal with probabilities employing crude heuristics, and is often misled" http://www.rbcpa.com/Mungerspeech_june_95.pdf

Why does this happen?

"The simple truth is that we aren't adapted to face the world as it is today. We evolved in a very different environment, and it is that ancestral evolutionary environment that governs the way in which we think and feel. We can learn to push our minds into alternative ways of thinking, but it isn't easy as we have to overcome the limits to learning posed by self-deception. In addition, we need to practice the reframing of data into more evolutionary familiar forms if we are to process it correctly." James Montier http://papers.ssrn.com/sol3/papers.cfm?abstract_id=373321

"Sometimes heuristics are good for making decisions, while at other times heuristics are bad for making decisions. The reason for this mixed or nuanced answer is namely heuristics act faster than rational deliberation, but precisely because of their speed, heuristics can mislead us into systematic errors in making decisions". Huang http://papers.ssrn.com/sol3/papers.cfm?abstract_id=474661

Some of Charlie's most powerful writing consists of a narrative list of the various dysfunctional heuristics that impact human decision making. Munger's writing and speaking in not as academic as others like Dan Ariely, Daniel Kahneman, James Montier and Michael

Mauboussin (see generally http://www.theatlantic.com/business/archive/2013/01/the-irrational-consumer-why-economics-is-dead-wrong-about-how-we-make-choices/267255/), but he is often more amusing and practical. He is certainly more direct in many cases. For a great graphic see: This is your brain on behavioural economics http://www.ritholtz.com/blog/2013/01/this-is-your-brain-on-behavioural-economics/

As was discussed previously in this series of blog posts, investing is less than a zero sum game due to expenses. If you are buying an investment someone else is selling and vice versa. Someone is by definition wrong. If the other person does not understand behavioral economics and you do, that is a potential edge. As a professor at Colombia business school noted recently: "There is a lot of behavioral finance confirming Ben Graham's original judgment." http://www4.gsb.columbia.edu/valueinvesting/news/item/7232425/Greenwald%3A+How+to+Beat+the+Market+with+Discipline#

The essay in **Poor Charlie's Almanack** is his most recent and comprehensive version of what he calls "The Psychology of Human Misjudgment." There is not much point in rewriting what Charlie says in different words, but perhaps I can find more recent examples that are informative and/or amusing.

1. **"Reward and Punishment Super-response Tendency"**

"almost everyone thinks he fully recognizes how important incentives and disincentives are in changing cognition and behavior. But this is not often so. For instance, I think I've been in the top five percent of my age cohort almost all my adult life in understanding the power of incentives, and yet I've always underestimated that power. Never a year passes but I get some surprise that pushes a little further my appreciation of incentive superpower." Munger

Structuring compensation incentives is critical. For example, it is surprising how many people fail to recognize how performance suffers if you pay someone in advance. As was noted in an earlier post in this series, Munger and Buffet delegate most management activity, but they keep compensation decisions from themselves.

It is easy to find examples of how improper incentives are, in Munger's words, "damaging civilization." A current example of this problem is raised by Nassim Taleb

"… instead of relying on thousands of meandering pages of regulation, we should enforce a basic principle of "skin in the game" when it comes to financial oversight: "The captain goes down with the ship; every captain and every ship." In other words, nobody should be in a position to have the upside without sharing the downside, particularly when others may be harmed." http://www.fooledbyrandomness.com/sais.pdf

Investment bankers who spend their days creating and selling toxic derivatives have long since abandoned their moral principles driven by the financial incentives that motivate their actions. The Libor rigging scandal is just one recent example.

On the positive side, stock options can motive people to work to create new value in a start up like nothing else really. The idea that a person can win the lottery like an early Instagram employee is a powerful motivator (which is not fully rational but this is getting to another

heuristic). Unfortunately, that incentive can go too far and people can end up living in their parent's basement due to overinvestment in a technology sector.

2. Liking/Loving Tendency

Munger is pointing out that people tend to ignore or deny the faults of people they love and even distort facts to facilitate that love. There are obviously positive aspects to this tendency for society, but they rarely have place in making investment decisions. You may like or even love your friend, but that does not mean that you should trust him or her with your money. I suspect that Charlie is saying that one needs to be particularly careful with decisions when you like/love someone. Rihanna getting back together with Chris Brown seems fraught with

risk.

3. Disliking/Hating Tendency

This is of course the inverse of the previous tendency. Munger is clear that life is too short to do business with people you don't like. Charlie advises: "Avoid evil, particularly if they're attractive members of the opposite sex."
http://www.grahamanddoddsville.net/wordpress/Files/Gurus/Warren%20Buffett/Berkshire%20Hathaway%20Annual%20Meeting%20Notes%202004.pdf

That someone is "family" does not mean they fall outside of the dislike/hating tendency. Munger quotes Buffett in this section: "a major difference between rich and poor people is that the rich people can spend more of their time suing their relatives." Again, being extra careful in your decision making process when you dislike someone seems to be the suggestion from Charlie. Stay rational.

4. Doubt-Avoidance Tendency

Particularly in the face of stress or puzzlement people tend to remove any doubt that might interfere with a decision. It is in Munger's words: "counterproductive for a prey animal that is threatened by a predictor to take a long time in deciding what to do." Munger feels this tendency can express itself in religion. As another example: What were Madoff's investors thinking when month after month they received financial statements that were positive with little volatility? A blogger puts it this way in reviewing one of Munger's favorite books (*Influence* by Cialdini): "Faced with vast amounts of data and a shortage of time we opt for simplicity, and focus on a few salient signals which generally work."
http://www.psyfitec.com/2011/09/robert-cialdini-and-weapons-of.html

5. Inconsistency-Avoidance Tendency

"The brain of man conserves programing spaces by being reluctant to change." Munger

Munger believes that if you combine Doubt-Avoiding Tendency with a desire to resist any change in that conclusion, ugly things can result. An example might be DEC which refused to recognize that the personal computer was a threat to its business. Steve Wozniak has said that HP turned down making the Apple I five times.

A positive example of how this heuristic might operate may be found in how very young company founders who are not wedded to old ideas can sometimes create disruptive business more easily. Mark Twain's statement comes to mind on this tendency: "All you need in this life is ignorance and confidence; then success is sure." Twain should have added that 19 people adopting that approach will lose everything and one might strike it rich, but that is another set of topics (e.g., optionality; survivor bias).

6. Curiosity Tendency

I have a hard time with Munger's description on this one when it comes to downside risk. He describes curiosity as something good for society. There must be some flip side that I he does not reveal along the lines of "curiosity kills the cat." Perhaps he is referring to the tycoon who is curious to see whether he or she can finally be the person to make a profit in the airline business. Kingfisher in India is a recent example of a company that is in trouble due to excessive curiosity related to airlines. Richard Branson may have a very fine airline in Virgin in terms of quality, but profitability is elusive. Buffett himself jokes that he has a 1-800 number he calls which will talk him out of investing in airlines whenever he gets the urge.

7. Kantian Fairness Tendency

"modern acculturated man displays and expects from others a lot of fairness" Munger

All in all, this tendency seems a very good thing. In terms of generating dysfunction, perhaps Charlie is referring to how humans will act irrationally to punish those who are not fair. A leading blogger on the psychology of investing writes: "Economists for a long time took the view that people would accept any offer made to them as long as they were better off, yet many studies have shown that this isn't true and that people will reject offers they view as unfair." http://www.psyfitec.com/2011/09/robert-cialdini-and-weapons-of.html

8. Envy/Jealousy Tendency

The dangers of envy are a frequent Munger topic. How can I improve on the master?

"The idea of caring that someone is making money faster [than you are] is one of the deadly sins. Envy is a really stupid sin because it's the only one you could never possibly have any fun at. There's a lot of pain and no fun. Why would you want to get on that trolley?" http://www.fool.com/news/commentary/2003/commentary030509wt.htm

"…Missing out on some opportunity never bothers us. What's wrong with someone getting a little richer than you? It's crazy to worry about this…." http://www.tilsonfunds.com/wscmtg05notes.pdf

"Here's one truth that perhaps your typical investment counselor would disagree with: if you're comfortably rich and someone else is getting richer faster than you by, for example, investing in risky stocks, so what?! Someone will always be getting richer faster than you. This is not a tragedy. http://www.fool.com/BoringPort/2000/boringport00051501.htm

"We have a higher percentage of the intelligentsia engaged in buying and selling pieces of paper and promoting trading activity than in any past era. A lot of what I see now reminds me

of Sodom and Gomorrah. You get activity feeding on itself, envy and imitation. It has happened in the past that there came bad consequences." http://money.cnn.com/2005/05/01/news/fortune500/buffett_talks/index.htm

"Well envy/jealousy made, what, two out of the ten commandments? Those of you who have raised siblings you know about envy, or tried to run a law firm or investment bank or even a faculty? I've heard Warren say a half a dozen times, "It's not greed that drives the world, but envy." http://www.loschmanagement.com/Berkshire%20Hathaway/Charlie%20munger/The%20Psychology%20of%20Human%20Misjudgement.htm

9. Reciprocation Tendency

People behave irrationally when they feel the need to reciprocate. That's why the Hare Krishna fundraiser gives away a flower when he or she approaches. A professor writes:

"When we are given a gift, we feel indebted to the giver, often feel uncomfortable with this indebtedness, and feel compelled to cancel the debt…often against our better judgment. The rule of reciprocation is widespread across human cultures, suggesting that it is fundamental to creating interdependencies on which societies, cultures, and civilizations are built. In effect, the rule of reciprocation assures that someone can give something away first, with the relative assurance that this initial gift will eventually be repaid–nothing is lost." http://www.media-studies.ca/articles/influence.htm

As one example, Munger notes:

"…people are really crazy about minor decrements down. And then, if you act on them, then you get into reciprocation tendency, because you don't just reciprocate affection, you reciprocate animosity, and the whole thing can escalate. And so huge insanities can come from just subconsciously over-weighing the importance of what you're losing or almost getting and not getting." http://www.loschmanagement.com/Berkshire%20Hathaway/Charlie%20munger/The%20Psychology%20of%20Human%20Misjudgement.htmv

10. Influence-from-Mere Association Tendency

Humans can easily be misled by mere association. Munger writes in Poor Charlie's Almanack: responsive behavior, creating a new habit, is directly triggered by reward previously bestowed." He goes on to write about a range of phenomena that arise from this tendency like Persian Messenger Syndrome (AKA "shoot the messenger").

"Think how association, pure association, works. Take Coca-Cola company (we're the biggest share-holder). They want to be associated with every wonderful image: heroics in the Olympics, wonderful music, you name it. They don't want to be associated with presidents' funerals and so-forth." http://www.loschmanagement.com/Berkshire%20Hathaway/Charlie%20munger/The%20Psychology%20of%20Human%20Misjudgement.htm

"At most corporations if you make an acquisition and it turns out to be a disaster, all the paperwork and presentations that caused the dumb acquisition to be made are quickly forgotten. You've got denial, you've got everything in the world. You've got Pavlovian

association tendency. Nobody even wants to even be associated with the damned thing or even mention it. At Johnson & Johnson, they make everybody revisit their old acquisitions and wade through the presentations. That is a very smart thing to do. And by the way, I do the same thing
routinely." http://www.loschmanagement.com/Berkshire%20Hathaway/Charlie%20munger/The%20Psychology%20of%20Human%20Misjudgement.htm

The next blog post in this series about Munger's Methods' will discuss Munger's 15 other tendencies.

How thinking like Charlie Munger may have saved my life

February 9, 2013

This is a continuation of my previous blog posts on "the Psychology of Human Misjudgment," which is Charlie Munger's description of dysfunctional decision making heuristics. Munger writes:

"…tendencies are probably much more good than bad. Otherwise, they wouldn't be there, working pretty well for man, given his condition and his limited brain capacity. So the tendencies can't be simply washed out automatically, and shouldn't be. Nevertheless, the psychological thought system described, when properly understood and used, enables the spread of wisdom and good conduct and facilitates the avoidance of disaster. Tendency is not always destiny, and knowing the tendencies and their antidotes can often help prevent trouble that would otherwise occur." *Poor Charlie's Almanack*

Here is a personal example of potentially dysfunctional heuristics at work. For a few months I had been having slight pain in my biceps near my elbows. My doctor said it was probably an injury from lifting weights. One night about four weeks ago I was sleeping soundly when I was jolted awaked by much more significant bilateral pain in both of my biceps. I immediately thought: "I am having a heart attack; I need to get to an emergency room." I woke my wife and asked her to get dressed quickly and to get in the car. As we were driving to the hospital the painful sensations in my biceps started to go away. It was at that point that I believe I started telling myself a story about the pain in my arms not really being from a heart attack. I am sure I was subconsciously thinking: "I have a busy schedule next week. I can't afford to have a heart attack right now. This pain is probably nothing. I probably just hurt myself in the gym. Who gets bicep pain with a heart attack and no chest pain?" I then said to my wife: "Maybe we should go home." My wife insisted we go to the emergency room. I might have argued with her, but at that moment I reminded myself about Munger and Buffett's approach to risk:

"Take the probability of loss times the amount of possible loss from the probability of gain times the amount of possible gain. That is what we're trying to do. It's imperfect, but that's what it's all about." http://beta.fool.com/danielsparks/2012/12/14/berkshire-hathaways-downside-protection/18950/

Going to the emergency room emergency room for tests on my heart function was clearly wise since the amount of possible loss was so massive even if the probability was small (which it was not given the symptoms). After thinking about this formula I no longer argued with my wife about going to the emergency room. In this case rationality (and my wife) overcame psychological denial, over-optimism and other negative decision making heuristics. It turned out that my pain was from a small heart attack and three days later I was in the operating room for a triple bypass.

You might say: "Well that was stupid." Yes it was very stupid. But the reality is that we all do things like this every single day by telling ourselves false stories to avoid the truth. Even if you spend a lot of time with behavioral economics you can only improve your skills on the margin. You will always make mistakes. Nobel Prize winner Daniel Kahneman, who has spent his life researching behavioral economics, has said: "Except for some effects that I attribute mostly to age, my intuitive thinking is just as prone to overconfidence, extreme predictions, and the planning fallacy." http://chronicle.com/article/The-Anatomy-of-Influence/129688/ Just because you can't be perfect does not mean you can't get marginally better at avoiding mistakes and have an edge in the market over people who do not understand Munger's tendencies and other aspects of behavioral economics.

Here are the remaining 15 of Munger's tendencies not covered in the previous blog post:

11. Simple, Pain-Avoiding Psychological Denial

As I drove to the hospital I was in significant danger of falling prey to "psychological denial" that night I had the heart attack. Munger has his own example of psychological denial:

"This first really hit me between the eyes when a friend of our family had a super-athlete, super-student son who flew off a carrier in the north Atlantic and never came back, and his mother, who was a very sane woman, just never believed that he was dead. And, of course, if you turn on the television, you'll find the mothers of the most obvious criminals that man could ever diagnose, and they all think their sons are innocent. That's simple psychological denial. The reality is too painful to bear, so you just distort it until it's bearable. We all do that to some extent, and it's a common psychological misjudgment that causes terrible problems. http://www.rbcpa.com/Mungerspeech_june_95.pdf

Was I avoiding psychological denial whenever I ordered a bacon cheeseburger in the years leading up to my heart problem given I am genetically predisposed to the condition? You decide. We all need friends and colleagues who can help us find the truth. Sometimes we all need a cold rhetorical slap in the face from a friend or significant other. By definition you don't have perspective on yourself.

In an investing context, smart investors should have known that Bernard Madoff generating consistent positive returns was not possible month after month. But the investor liked the result so much that they went into psychological denial mode.

"Failure to handle psychological denial is a common way for people to go broke." http://boundedrationality.wordpress.com/quotes/charlie-munger/

12. Excessive Self-Regard Tendency

Munger likes to talk about the fact that way more than half of Swedish drivers think they are above average drivers. Thinking your IQ is higher than it is potentially a big problem. Thinking that your IQ is a bit lower than it actually is can be a good thing says Munger.

"We don't like complexity and we distrust other systems and think it many times leads to false confidence. The harder you work, the more confidence you get. But you may be working hard on something that is false. We're so afraid of that process so we don't do it." http://www.valueinvestingworld.com/2012/05/charlie-munger-quote-complexity-and.html

Unfortunately, some people think that only others are overconfident:

"… the trouble is that if even 90% are no good, everyone looks around and says, "I'm the 10%." http://www.grahamanddoddsville.net/wordpress/Files/Gurus/Warren%20Buffett/Berkshire%20Hathaway%20Annual%20Meeting%20Notes%202004.pdf

Companies are not immune from this excessive self-regard tendency, including Berkshire portfolio companies:

"[GEICO] got to thinking that, because they were making a lot of money, they knew everything. And they suffered huge losses. All they had to do was to cut out all the folly and go back to the perfectly wonderful business that was lying there. http://ycombinator.com/munger.html

13. Overoptimism Tendency

In driving to the hospital I surely did not want to find I had heart disease. I suspect that I was thinking too optimistically that I had merely injured my biceps. I wanted to not have a medical problem, so I told myself a story that was contrary to the evidence I possessed. Munger describes the phenomenon:

"..in the 5th century B. C. Demosthenes noted that: "What a man wishes, he will believe." And in self-appraisals of prospects and talents it is the norm, as Demosthenes predicted, for people to be ridiculously over-optimistic. For instance, a careful survey in Sweden showed that 90 percent of automobile drivers considered themselves above average. And people who are successfully selling something, as investment counselors do, make Swedish drivers sound like depressives. Virtually every investment expert's public assessment is that he is above average, no matter what is the evidence to the contrary." http://72.14.203.104/search?q=cache:mgSaxC3O1IoJ:www.philanthropyroundtable.org/magazines/1999/march/munger.html+Berkshire+Hathaway%27s+vice+chairman+shreds+the+conventional+wisdom+on+foundation+investing&hl=en&gl=us&ct=clnk&cd=1

As I said above, even experts who spend their lives studying behavioral economics can prey to this problem. Daniel Khaneman writes:

"One of our biases is that we can ignore the lessons of experience. A group of people compiling a report will estimate they can do it in a year, even though every other similar report has taken comparable groups five years. … "When I started the book I told Richard Thaler (the author of Nudge) that I had 18 months to finish it. He laughed hysterically and

said, 'You have written about that, haven't you? It's not going to work the way you expect'." How long did it take you, I ask. "Four years, and it was very painful." http://forums.udacity.com/questions/10006251/no-fooling-nobel-winning-economist-daniel-kahneman

14. Deprival Superreaction Tendency

In the language of behavioral economics, this tendency is called loss aversion. Mauboussin writes:

"One of prospect theory's most important contributions to finance is loss aversion, the idea that for most people, losses loom larger than corresponding gains. 7 The empirical evidence suggests we feel losses about two to two-and-a-half times more than we feel gains. Loss aversion is a clear-cut deviation from expected utility theory." http://www.capatcolumbia.com/MM%20LMCM%20reports/Aver%20and%20Aversion.pdf

A good example of loss aversion at work can be found in the world of golf. A blogger writes:

"Research shows that even professional golfers display loss aversion. They do significantly better when putting to save par than when putting to make a birdie. Indeed, neuroscientists have found that loss aversion is wired into the human brain. And not just the human brain — monkeys are averse to losses, as well." http://www.bloomberg.com/news/2012-12-24/people-hate-losses-and-that-affects-u-s-budget-talks.html

Football coaches punt too often in games for the same reason.

Munger advocates that people try to train their minds so as to overcome the tendency to the extent possible:

"Your brain doesn't naturally know how to think the way Zeckhauser knows how to play bridge. 'For example', people do not react symmetrically to loss and gain. Well maybe a great bridge player like Zeckhauser does, but that's a trained response." http://www.rbcpa.com/Mungerspeech_june_95.pdf

Investors sell their stocks too early and hold on to their losers to long for the same reason. Selling a stock that is way down and taking the loss is really hard for people who have not trained themselves to avoid this tendency. Do venture capitalists to often put more money into companies that they have invested in already even though they would no do so it it was a new investment?

People too often would rather fail conventionally than succeed unconventionally. Munger:

"I mean people are really crazy about minor decrements down. … huge insanities can come from just subconsciously over-weighing the importance of what you're losing or almost getting and not getting." http://www.loschmanagement.com/Berkshire%20Hathaway/Charlie%20munger/The%20Psychology%20of%20Human%20Misjudgement.htm

15. Social-Proof Tendency

Humans have a natural tendency to herd. Bernard Madoff was a master at using social-proof tendency to get investors to give him their money. He worked hard to make sure that only successful people were a part of his Ponzi scheme. Professor Cialdini has an essay on how Madoff used social proof here: http://www.influenceatwork.com/wp-content/uploads/2012/02/Madoff_by_Cialdini.pdf

Social proof is a bedrock cause of bubbles that occur in the investing world as well as the path dependence which creates power laws. Using a classic Munger inversion apprapoch: if you see a power law, there is very likely social proof lurking behind it somewhere.

Munger has his own example from the corporate world:

"Big-shot businessmen get into these waves of social proof. Do you remember some years ago when one oil company bought a fertilizer company, and every other major oil company practically ran out and bought a fertilizer company? And there was no more damned reason for all these oil companies to buy fertilizer companies, but they didn't know exactly what to do, and if Exxon was doing it, it was good enough for Mobil, and vice versa. I think they're all gone now, but it was a total disaster" http://www.rbcpa.com/Mungerspeech_june_95.pdf

16. Contrast-Mis-reaction Tendency

Munger writes:

"Because the nervous system of man does not naturally measure in absolute scientific units, it must instead rely on something simpler. The eyes have a solution that limits their programming needs: the contrast in what is seen is registered. And as in sight, so does it go, largely, in the other senses. Moreover, as perception goes, so goes cognition. The result is man's Contrast-Mis-reaction Tendency. Few psychological tendencies do more damage to correct thinking. Small-scale damages involve instances such as man's buying an overpriced $1,000 leather dashboard merely because the price is so low compared to his concurrent purchase of a $65,000 car. Large-scale damages often ruin lives, as when a wonderful woman having terrible parents marries a man who would be judged satisfactory only in comparison to her parents. Or as when a man takes wife number two who would be appraised as all right only in comparison to wife number one." *Poor Charlie's Almanack*

Here is a blogger's interpretation of this tendency:

"'Contract-Misreaction' causes people to take actions which are potentially detrimental, because they appear insignificant or appear positive when compared to other actions. Munger uses an analogy of the human eyes to illustrate how this tendency works: humans only see items which contrast with their environment. In the same way, humans find it difficult to differentiate perceptions where there is little in the way of contrast. For example, a man may buy a $1,000 leather dashboard, even if overpriced, when considered in combination with the fact that the vehicle cost is a much larger $65,000.

While the above example is a relatively minor one, Munger points to some examples where this tendency can have detrimental and long-lasting effects. In business, Munger has seen marketers use this practice to their advantage. Real-estate brokers may show clients awful properties at inflated prices for the purpose of closing a sale on merely a bad property at a merely partially inflated price. This practice is also seen frequently in mainstream

advertising, with service/product providers asserting a phony price for a product and then promptly offering a 'discount' to a lower price. Munger argues that even though consumers recognize this practice, it still works! Therefore, being aware of psychological ploys does not prove to be a perfect defense!" http://www.barelkarsan.com/2009/07/psychology-of-human-misjudgement_12.html

17. Stress-Influence Tendency

Munger thinks people under stress can make big mistakes as well as have life altering experiences:

"Here, my favorite example is the great Pavlov. He had all these dogs in cages, which had all been conditioned into changed behaviors, and the great Leningrad flood came and it just went right up and the dog is in a cage. And the dog had as much stress as you can imagine a dog ever having. And the water receded in time to save some of the dogs, and Pavlov noted that they'd had a total reversal of their conditioned personality."
http://www.rbcpa.com/Mungerspeech_june_95.pdf

18. Availability-Misweighing Tendency

"The great algorithm to remember in dealing with this tendency is simple: An idea or a fact is not worth more merely because it is easily available to you."
http://markettorrent.com/topic/8171?page=9

A blogger describes the problem here:

"When making decisions, people tend to be influenced by what can be readily remembered. Vivid, much-publicized events are easily recalled. Stock market crashes are vivid, highly publicized events. Long periods of steady market advance are less vivid and less publicized. The result is that people over-emphasize crashes and exaggerate risk. An adviser can provide more balanced information in order to overcome negative perceptions arising from the availability
bias." http://www.fpanet.org/journal/BetweentheIssues/LastMonth/Articles/ABehavioralViewofHowPeopleMakeFinancialDecisions/

19. Use-It-or-Lose-It Tendency

"All skills attenuate with disuse. I was a whiz at calculus until age twenty, after which the skill was soon obliterated by total nonuse." *Poor Charlie's Almanack*

This one is pretty simple. Skill degrades unless it is practiced. For example, flying an airplane is not something you want to do once in a while. If you are not flying often or sting in a simulator often, you should not be flying.

20. Drug-Misinfluence Tendency

This tendency is self-explanatory. Everyone makes mistakes, but Munger has said often that staying away from the really big mistakes like cocaine is vital.

"We've all seen so much [drug abuse], but it's interesting how it'll always cause this moral breakdown if there's any need, and it always involves massive denial." http://www.rbcpa.com/Mungerspeech_june_95.pdf

21. Senescence-Misinfluence Tendency

This is another self-explanatory tendency. Senility happens, but you can slow it with activity. Munger:

"some people remain pretty good in maintaining intensely practiced old skills until late in life, as one can notice in many a bridge tournament…. Continuous thinking and learning, done with joy, can somewhat help delay what is inevitable." Poor Charlie's Almanack

22. Authority-Misinfluence Tendency

People tend to follow people who they believe are authorities. Munger cites the Nazi madness as an example. Then there are the Milgram experiments in which people are told to shock others and they comply since they person giving the command is wearing a lab coat and looks official.

Munger gives this example of the tendency :

"You get a pilot and a co-pilot. The pilot is the authority figure. They don't do this in airplanes, but they've done it in simulators. They have the pilot do something where the co-pilot, who's been trained in simulators a long time — he knows he's not to allow the plane to crash — they have the pilot to do something where an idiot co-pilot would know the plane was going to crash, but the pilot's doing it, and the co-pilot is sitting there, and the pilot is the authority figure. 25% of the time the plane crashes. I mean this is a very powerful psychological tendency." http://www.rbcpa.com/Mungerspeech_june_95.pdf

23. Twaddle Tendency

The definition of "twaddle" is: "speech or writing which is silly or not true; nonsense." What Charlie is saying here is that people tend to spend a lot of time on meaningless activities that accomplish little or nothing. In Munger's view people too often confuse twaddle with importance and value. Here's one example from Munger:

"The whole concept of dividing it up into 'value' and 'growth' strikes me as twaddle. It's convenient for a bunch of pension fund consultants to get fees prattling about and a way for one adviser to distinguish himself from another. But, to me, all intelligent investing is value investing – acquiring more than you are paying for. You must value the business in order to value the stock." http://www.ticonline.com/archives_quotes.html

Most of the talking heads on financial TV are dishing out twaddle. Of course, the hardest thing is to spot when you are telling yourself twaddle since the easiest person to fool is yourself.

24. Reason-Respecting Tendency

What Munger calls "compliance professionals" know that it is possible to get people to act against their interest as long as they are given a reason even if it is silly. Munger:

"Unfortunately, Reason-Respecting Tendency is so strong that even a person's giving of meaningless or incorrect reasons will increase compliance with his orders and requests. This has been demonstrated in psychology experiments wherein "compliance practitioners" successfully jump to the head of the lines in front of copying machines by explaining their reason: "I have to make some copies." This sort of unfortunate byproduct of Reason-Respecting Tendency is a conditioned reflex, based on a widespread appreciation of the importance of reasons. And, naturally, the practice of laying out various claptrap reasons is much used by commercial and cult "compliance practitioners" to help them get what they don't deserve." *Poor Charlie's Almanack*

25. Lollapalooza Tendency – The Tendency to Get Extreme Confluences of Psychological Tendencies Acting in Favor of a Particular Outcome

All of the tendencies described above interact with each other in ways that can make the whole of the effect greater than the sum of the parts. This is a classic signature of complex adaptive systems. What asked what caused "the current economic mess" Munger replied:

"It was a lollapalooza event – a confluence of causes that is how complex systems work." http://www.valueplays.net/wp-content/uploads/The-Best-of-Charlie-Munger-1994-2011.pdf

Sometimes this lollapalooza tendency can be used for good purposes. As Munger points out:

"The system of Alcoholics Anonymous: a 50% no-drinking rate outcome when everything else fails? It's a very clever system that uses four or five psychological systems at once toward, I might say, a very good end." http://www.tilsonfunds.com/mungerpsych

But of course an evil cult can use the same techniques.

Another example Munger cites of a lollapalooza tendency involves open outcry auctions:

"Well the open-outcry auction is just made to the brain into mush: you've got social proof, the other guy is bidding, you get reciprocation tendency, you get deprival super-reaction syndrome, the thing is going away… I mean it just absolutely is designed to manipulate people into idiotic behavior." http://www.valueinvestingworld.com/2010/02/psychology-at-home-auction.html

Buffett's advice for these open outcry auctions is simple: "Don't go".

Charlie believes that this lollapalooza tendency is often encountered in investing:

"An investment decision in the common stock of a company frequently involves a whole lot of factors interacting … the one thing that causes the most trouble is when you combine a bunch of these together, you get this lollapalooza effect." http://www.loschmanagement.com/Berkshire%20Hathaway/Charlie%20munger/The%20Psychology%20of%20Human%20Misjudgement.htm

In the book *Poor Charie's Almanack* Munger describes an airline manufacturer that ran tests that resulted in numerous injuries which were a classic example of lollapalooza tendency. Munger:

"… it's a combination: authorities told you to do it. He told you to make it realistic. You've decided to do it. You'd decided to do it twice. Incentive-caused bias. If you pass you save a lot of money. You've got to jump this hurdle before you can sell your new airliner. Again, three, four, five of these things work together and it turns human brains into mush. And maybe you think this doesn't happen in picking investments? If so, you're living in a different world than I am." http://www.tilsonfunds.com/mungerpsych

Perhaps the best way to sum up Munger's view of these tendencies, is to just quote Charlie responding to people who think that economists can assume that people are rational:

"How could economics not be behavioral? If it isn't behavioral, what the hell is it?" https://twitter.com/mungerisms/status/154735076549201920

P.s., I am not sure where I will take this series of blog posts on Munger from here. I might cover a few specific topics of interest to Charlie. Or not. TBD.

"If you take away the skill that Buffett has Buffett has no skill" is a bullshit thesis.

February 14, 2013

Blogger cites an older (misinformed) Economist article citing an academic study (rubbish) as support for Efficient Market Hypothesis (EMH)
here: http://www.themoneyillusion.com/?p=19209.

If the blogger is trying to get nearly all people to buy index funds, well say so. But don't use that to argue that markets are *always* efficient. Or that EMH supports deeply broken economic theories like dynamic stochastic general equilibrium (DSGE).

The academic thesis in the case of the paper cited by the Economist is essentially as follows: If you take away the skill that Buffett has Buffett has no skill. It's a bullshit thesis.

Like most academics their desire is to reduce investing to mathematics since without math there is no hope of getting tenure. That the thesis is not properly tied to reality is not a concern in the academy when it comes to academic finance. What is critical is that the math is pretty, adopting things like the concept of equilibrium from physics even though a economics is vastly different than a physical system (e.g., electrons do not have feelings).

Buffett's ability to buy stocks low and sell high is, ahem, skill. It is especially so since loss aversion and other dysfunctional heuristics makes human driven to do the opposite.

Buffett's ability to buy businesses that generate float/free cash flow, ahem, is skill. That skill gives you cash to invest that is not leverage on which you are paying points or may suffer a collateral call in a crisis.

The idea that all one must do to outperform is to buy low beta stocks and lever up is, ahem, absolute rubbish. That beta measures risk is also rubbish. To measure volatility is to measure volatility.

"This is why Buffett and Munger considered defining risk as volatility to be "twaddle and bullshit", as Munger would later put it up. They defined risk as not losing money. To them, risk was "inextricably bound up in your time horizon for holding an asset." Someone who could hold an asset for years could afford to ignore its volatility. Someone who was leveraged did not have that luxury-leverage costs; moreover the lender's (not the borrower's) time horizon defines the length of the loan. Thus a risk of leverage is that it takes away choices. The investor may not be able to wait out a volatile market; she is burdened by the "carry" (that is, the cost) and she depends on the lender's goodwill. http://www.go2cio.com/articles/index.php?id=2783

Munger on investing as taught by academia

"We've had very little impact. Warren once said to me, "I'm probably misjudging academia generally [in thinking so poorly of it] because the people that interact with me have bonkers theories." Beta and modern portfolio theory and the like — none of it makes any sense to me. We're trying to buy businesses with sustainable competitive advantages at a low, or even a fair, price." http://boards.fool.com/charlie-munger-in-rare-form-20741250.aspx?sort=username

That most all investors will not outperform does not mean that some small number of investor's can't outperform. Noah Smith puts it simply:

"Of course, even the RMI [his term for EMH] isn't quite true. There are some people – a very few – who correctly guess price movements, and make money year after year after year (I work with a couple). But you're very unlikely to be one of those people. And your behavioral biases – your self-attribution bias, overconfidence, and optimism – are constantly trying to trick you into thinking you're one of the lucky few, even when you're not." http://noahpinionblog.blogspot.co.uk/2013/02/in-defense-of-emh.html

Munger in 2001:

"The future returns of Berkshire and Wesco won't be as good in the future as they have been in the past. The only difference is that we'll tell you. Today, it seems to be regarded as the duty of CEOs to make the stock go up. This leads to all sorts of foolish behavior. We want to tell it like it is. I'm happy having 90% of my net worth in Berkshire stock. We're going to try to compound it at a reasonable rate without taking unreasonable risk or using leverage. If we can't do this, then that's just too damn bad. The businesses that Berkshire has acquired will return 13% pre-tax on what we paid for them, maybe more. With a cost of capital of 3% — generated via other peoples' money in the form of float — that's a hell of a business. That's the reason Berkshire shareholders needn't totally despair. Berkshire is not as good as it was in terms of percentage compounding [going forward], but it's still a hell of a business."

"Berkshire's past record has been almost ridiculous. If Berkshire had used even half the leverage of, say, Rupert Murdoch, it would be five times its current size." http://www.fool.com/news/foth/2001/foth010508.htm

Mauboussin

February 17, 2013

Sometimes I will be reading some dreadful business book or article and think to myself: "I could be re-reading a Mauboussin essay instead!" I suggest you at least read (free and priceless- price is what you pay and value is what you get):

Click to access How-Well-Do-You-Compare.pdf

http://michaelmauboussin.com/writing.html

http://michaelmauboussin.com/books.html

The links at this fine page maintained by Hurricane Capital: https://hurricanecapital.wordpress.com/2015/02/01/links-michael-j-mauboussin/

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Investment vs. Speculation

March 2, 2013

Jason Zweig makes an interesting point about the difference between investment and speculation. http://blogs.wsj.com/totalreturn/2013/02/28/are-you-an-investor-or-a-speculator-part-one/?mod=WSJ_Business_LatestHeadlines He raises the idea that the distinction should perhaps have a time element, which in my view is not helpful.

Seth Klarman has written:

"The line I draw in the sand is that if an asset has cash flow or the likelihood of cash flow in the near term and is not purely dependent on what a future buyer might pay, then it's an investment. If an asset's value is totally dependent on the amount a future buyer might pay, then its purchase is speculation."

The key element in this definition is that investing as opposed to speculation does not involve trying to predict the behavior of others:

"Stock speculation is largely a matter of A trying to decide what B, C and D are likely to think-with B, C and D trying to do the same." Benjamin Graham

If your game is forecasting market psychology you are not an investor. Keynes wrote that speculation is

"the activity of forecasting the psychology of the market . . . attaching hopes to a favorable change in the conventional basis of valuation."

To buy gold is to speculate says Howard Marks:

"There is nothing intelligent to be said about gold. Nobody can tell you the right price for an ounce of gold. People will tell you it should go up or go down. To make any intelligent statements about investments you have to know what the right price is. You can't do that with an asset like gold, which doesn't produce any cash flow. So you can buy it out of superstition or ignore it because you are an atheist but you cannot buy it with an analytical foundation."

While you can make a profit via speculation in gold or a baseball card, it is not investing.

Klarman gives no indication that he believes merger, risk or statistical arbitrage can't be investing just because the duration of the investment may be short.

"Risk-arbitrage **investments** typically have very short lives, usually turning back into cash, liquid securities, or both in a matter of weeks or months. An added attraction of investing in risk-arbitrage situations, bankruptcies, and liquidations is that not only is one's initial investment returned to cash, one's profits are as well." [Emphasis added]

That what Graham calls "an operation" may have a short time duration is a warning sign that it may be speculation, but it is not a barrier to it being an investment. Arbitrage can involve risk but it Is not dependent on a forecast of market psychology but rather on something like whether the transaction will be completed.

Klarman again:

"…assets and securities can often be characterized as either investments or speculations. The distinction is not clear to most people. Both investments and speculations can be bought and sold. Both typically fluctuate in price and can thus appear to generate investment returns. But there is one crucial difference: investments throw off cash flow for the benefit of the owners; speculations do not. The return to the owners of speculations depends exclusively on the vagaries of the resale market.

The greedy tendency to want to own anything that has recently been rising in price lures many people into purchasing speculations. Stocks and bonds go up and down in price, as do Monets and Mickey Mantle rookie cards, but there should be no confusion as to which are the true investments…

Investments, even very long-term investments like newly planted timber properties, will eventually throw off cash flow. A machine makes widgets that are marketed, a building is occupied by tenants who pay rent, and trees on a timber property are eventually harvested and sold. By contract, collectibles [and precious metals I might add] throw off no cash flow; the only cash they can generate is from their eventual sale. The future buyer is likewise dependent on his or her own prospects for resale."

"… Risk arbitrage is a highly specialized area of value investing. Arbitrage is a riskless transaction that generates profits from temporary pricing inefficiencies between markets. Risk arbitrage, however, involves investing in far from riskless takeover transactions. Spin offs, liquidations, and corporate restructures, which are sometimes referred to as long-term arbitrage, also fall into this category. Profit or loss depends much on the successful completion of a business transaction."

"…Opportunity exists in part because the complexity of the required analysis limits the number of capable participants. Further, risk arbitrage investments which offer returns that generally are unrelated to the performance of the overall market, are incompatible with the goals of relative-performance-oriented investors. Since the great majority of investors avoid risk arbitrage investing, there is a significant likelihood that attractive returns will be attainable for the handful who are able and willing to preserve."

Buffett:

"The line separating investment and speculation, which is never bright and clear, becomes blurred still further when most market participants have recently enjoyed triumphs. Nothing sedates rationality like large doses of effortless money. After a heady experience of that kind, normally sensible people drift into behavior akin to that of Cinderella at the ball. They know that overstaying the festivities — that is, continuing to speculate in companies that have gigantic valuations relative to the cash they are likely to generate in the future — will eventually bring on pumpkins and mice. But they nevertheless hate to miss a single minute of what is one helluva party. Therefore, the giddy participants all plan to leave just seconds before midnight. There's a problem, though: They are dancing in a room in which the clocks have no hands."

"So there's two types of assets to buy. One is where the asset itself delivers a return to you, such as, you know, rental properties, stocks, a farm. And then there's assets that you buy where you hope somebody else pays you more later on, but the asset itself doesn't produce anything. And those are two different games. I regard the second game as speculation."

"Basically, it's subjective, but in investment attitude you look at the asset itself to produce the return. So if I buy a farm and I expect it to produce $80 an acre for me in terms of its revenue from corn, soybeans etc. and it cost me $600. I'm looking at the return from the farm itself. I'm not looking at the price of the farm every day or every week or every year. On the other hand if I buy a stock and I hope it goes up next week, to me that's pure speculation."

BUSINESS CONFIDENTIAL – HEART OF DARKNESS

April 9, 2013

I had attended a very important conference the previous month during which we needed the support of a delegation of Africans. To cement that support I promised to attend another conference a few weeks later in the city of Kinshasa in a country that is now called the Democratic Republic of Congo. The story begins in London on December 3, 1995 when I called a friend from the hotel. He knew I was about to leave on a trip to Africa and mentioned that a Cameroon Airlines 737 (Flight 3791) had crashed in a swamp and that all but five passengers had died. I thought to myself: "I'm flying on Cameroon Airlines from Nairobi. I hope lighting does not strike twice this week." Despite having what I would call an ominous set of feelings after hearing that news, I nevertheless proceeded to the Air Kenya gate for

the first leg of my trip. As I sat in my chair waiting for the call to board the plane I was paged by the woman at the counter. She pleasantly told me that the Air Cameroon flight had been cancelled and that I would not be able to get to my destination through Nairobi without several days waiting at least. At this I point, could have said: "Maybe this is a great excuse not to make this trip." I was tired from weeks of traveling and did not see many future benefits from attending the meetings that were planned. But I had promised to make the trip after someone did a favor for me in the past. I have no doubt that what caused me to not cancel my trip was what Professor Cialdini calls "the reciprocity principle." Humans are compulsively driven by nature to return a favor.

"One of the most potent of the weapons of influence around us is the rule for reciprocation. The rule says that we should try to repay, in kind, what another person has provided us." Professor Robert B. Cialdini

Working with the woman at the airline counter resulted in a new plan being hatched to re-route me to the Ivory Coast on a Swiss Air flight leaving from Geneva and then for me to travel on to Kinshasa, Congo via Ethiopian Airways. On my Swiss Air flight, I sat next to a French pilot who lived in the Ivory Coast. He said that he head that the swamp the 737 had crashed into the day before was filled with crocodiles which devoured several of the passengers. I remember thinking to myself: I hate crocs! The flight to Ivory Coast from Geneva almost passes over the wonderfully named cities of Timbuktu and Ouagadougou the capital city of Burkina Faso (formerly Upper Volta). As we were coming into the airport in Ivory Coast, the Frenchman pointed out a hole in the ground where an Air Afrique plane went *nose in* a year before. Needless to say, it's a big hole! He then told me that an old DC-3 Dakota wreck still could be seen at the end of the runway in Kinshasa that they don't even bother to clear away. Upon my arrival in the Ivory Coast, I proceeded to immigration and received my first taste of *la mordida,* African-style. I did not have visa since I had not planned on going to this country until the air crash incident, but my bag was past immigration on the other side of a large chain link fence. My arguments with the officials were going nowhere when a man pulled me aside and said: "Give me dollars and I'll get your bag." I thought for a few seconds and then said in response: "Bags first, **then** dollars."

He proceeded to get bag and I proceeded give him five US dollars. He was indignant at the amount of my tip. "More," he demanded indignantly. Negotiations followed resulting in a $20 payment in total. But my problem had just begun since I needed to buy a ticket from Ivory Coast to Zaire. Again, the problem was that I needed to clear immigration to get a ticket. Several **hours** of discussions ensued, resulting in my clearing immigration but being unable to get a ticket. The Ethiopian Air plane start loading. It' was the last flight out and it was near midnight. The next plane out to my destination was days later on Air Cameroon. People were pushing and yelling. It was hot and

humid befitting a country nearly on the Equator. I was feeling like human piece of toast. Then, in a moment of panic and inspiration I pulled out two $100 bills. Magic instantly happened, and my ticket appeared immediately. I literally raced through customs without stopping and entered the Ethiopian Air 757 with some relief.

The seating arrangements on the 757 were what one would call "festival seating" if it were a concert. So I was a little worried. I spied a seat and it was in a exit row. "What luck!" I thought. The only catch was that there was so much luggage in front of my seat that my knees were are level with my face. I thought the stewardess might frown at this arrangement, but she passed my row during the preflight check without making a peep.

After we were in the air, the meal arrived and it was allegedly chicken, but looked like a huge leg of grasshopper. Lots of hairs could be seen peeking through the hideous looking sauce. I did spy a package of saltines and ate them greedily even though they were as dry as the Sahara Desert I flew over on the way to the Ivory Coast. The crackers had a picture of Emperor Haile Selassie on the wrapper so they were either honoring him or were really old. When we arrived in Kinshasa a miracle happened: I was met by someone calling himself a *majordomo* who whisked me through a "VIP lounge" rather than the usual immigration facility. This man was literally my savior during my stay. The language of the Congo was French and I spoke only enough to order a meal. More importantly, the *majordomo* knew the unwritten rules of a country that was literally in its final stages of disintegration. Conditions would continue to worsen after my visit, culminating in May, 1997 when rebel forces led by Laurent Kabila expelled President Mobutu Sese Seko from the country.

No bribes were solicited in the VIP lounge and a ride to the hotel in a ramshackle Mercedes ensued. I was told later by another person going to the conference that one should **never** go to Zaire, Nigeria or Ivory Coast without someone there to meet you. I remember thinking to myself: "Now you tell me."

As we drove through the still mostly sleeping city at 4:00 AM on December 5, 1995 the scene looked like something out of *Apocalypse Now*. Poverty was everywhere and living conditions astoundingly bad. People were growing corn in the dirt strips between lanes on the road and sometimes could be seen sleeping by their crops. I saw only one stop light in this city of three million on the Congo River. Streets were made of packed dirt or composed of badly broken concrete. I recall seeing just one taxi during my entire visit.

My hotel was operated by the Belgian airline Sabena and was guarded by many soldiers bearing automatic weapons. The presence of the soldiers was both comforting and menacing at the same time, The remainder of my visit to

this country constituted my own *Year of Living Dangerously* (except that I'm no Mel Gibson and there was no Sigourney Weaver). There is something eerie about not getting a dial tone when you pick up a phone. Cellular phones were the only means of communication since and wire or cable is immediately torn down or dug up and made into decorative items to sell to the few tourists that visit. The country had no working bank that people like me could use. So it was not possible to cash a traveler's check. This meant I had only $640 in cash to pay bribes and make tips since $220 had gone to bribes already in the Ivory Coast. I figured I would tip the major domo $40 for each day's assistance. This lack of cash hung on me like an as yet unlit tire necklace for the duration of the trip. The conference was held in the Palace of the People a huge decaying monstrosity constructed by the Chinese next to a bizarre soccer stadium that seated 100,000 people. The heat and humidity in this near equatorial city not only oppresses the body but attacks physical infrastructure with a vengeance. Making matters worse are the periodic *pillages* that occur every three years or so ("le pillage est le sport national Congolais") During these riots everything that isn't nailed down is stolen.

A couple of days of meeting in rooms filled with people all sweating profusely followed. It was to say the least a colorful event about "telecommunication in Africa." It is no small irony that this conference was taking place in a country that had virtually no operational telecommunications systems. All forms of government ministers came and went and speeches droned on and on. One highlight of the conference was the fact that you could buy lunch at mid day from vendors who cooked meat on skewers over small fires lit right on top of the marble installed years before by Chinese workers. I could regale you further with tales of my visit but the important lesson comes as part of my exit from the country as the conference concluded. .

I had a sense of what was coming the next day at the airport when I was approached by a man in the hotel bar demanding I give him **an advance** on the bribes I would be paying at the airport. He produced an army identity card and was large and menacing. A bit of yelling between the *majordomo* and the man resulted in my paying the fellow $20, which seemed a bargain. Unlike when I arrived in the country, the ride back to the airport took place at night . The car took a route that I would never in a million years be able to retrace through a series of teaming slums. Piles of tires burned at irregular intervals, giving the city a hellish appearance.

Arriving at the airport, at 10:00 p.m. rather than 4:00 a.m. when I arrived meant the legions of beggars and con men were there. When the *majordomo* tried to get me through into the VIP lounge that I was able to use upon my arrival, but we were told that the policy had changed and that I would instead need to go through what is called **the lion pit.** It was a round building much like the Roman Coliseum, and like its counterpart it is filled with menacing creatures. The scene was one of pure

chaos, with no one speaking English. There were no real lines, just a series of counters to be navigated and very menacing men walking around either in uniform brandishing weapons or not in uniform jostling you and demanding dollars. To add to the confusion, beggars would now and then poke me trying to sell an item like a plastic soccer ball that they have been hawking for a week or more.

I made it to the Sabena Airlines line with the help of the *majordomo* and amazingly was able to obtain my ticket without paying a bribe! But then came the immigration and then customs lines. I knew I had got to make the $260 last through the entire process. Immigration was a scene out of a nightmare with a lot of yelling taking place between the *majordomo* and the officials in French. Somehow the water parted. "Again no bribe! What a bonus!" I thought. But then I had to navigate customs. Of course, there was no x-ray equipment and I had been told at the hotel that they are known to do strip searches including the equivalent of a prostrate exam on occasion in a small room. The customs officials were ostensibly looking for smuggled diamonds, the country's principal illegal export. Of course, the real purpose of the procedure is to compel people to pay bribes.

The customs officials proceeded open my bag and as soon they saw two shirts and a pair of loafers they liked the items promptly disappeared. This confiscation of my clothing took place in full view of at least 50 people all similarly terrified. No explanation was given for the clothing being taken. They just wanted what I had and took the apparel they wanted with no explanation. This should have been no surprise perhaps given that the President of the country, Mobutu Sese Seko, once said: "If you want to steal, steal a little in a nice way. But if you steal too much to become rich overnight, you'll be caught."

The situation at the airport worsened for me when suddenly the officials demanded that I pay them $300. This was $40 more cash than I actually had remaining in my wallet and I had yet to tip the *majordomo* for the day. Against my better judgment, I made myself appear to be a little indignant. The officials became surly in response to my agitation. To make matters worse, the man I recognized from the bar the previous night arrived and started yelling in French about dollars. I thought to myself: maybe this man is my own version of Kurtz and this is my own *Heart of Darkness.* Again he produced an identity card from the Army and demanded "dollars!" Things were, to say the least, dicey and getting more so. I will never forget thinking that it was literally as hot as hell. Humidity was literally dripping from the walls and from me. As the airplane started boarding passengers my level of fear started climbing. I quickly offered $200 which would leave enough for a small tip for the major domo. I would send him more money by mail later.

Why did I offer only $200? Well, the *majordomo* had done things for me that if I had actually had the cash I would have paid him far more. Even given the danger I was in, I thought to myself: "There is no way in hell I can offer all the *majordomo'*s tip money to these menacing officials no matter how scared I am." Cialdini's *reciprocity principle* was making me face down these brutish and scary thugs. I seriously doubt I was being brave to be brave. As an aside, the President of Zaire's full name Mobutu Sese Seko can be translated as: ""The all-powerful warrior who, because of his endurance and inflexible will to win, will go from conquest to conquest, leaving fire in his wake". Which, at that particular

moment, I decided adopt as my own nickname!

The breakthrough arrived like clap of tropical thunder: "Done," announced the enormous man with the Army ID card. The final word in the negotiation was delivered in English no less by a man who apparently decided that he did not want to be my Kurtz that day.

My bag was quickly closed by the officials and as the *majordomo* and I approached the airplane, I pressed all the cash I had left into his hands as a tip fulfilling my need to reciprocate for all this man had done for me. I remember waking quickly across the tarmac and up the stairs into the airplane. I also still remember first blast of the plane's air conditioning and the Belgian stewardess offering me a chilled glass of champagne. The bubbles never tasted so good.

My visit to this city on the Congo River was as close to hell as I've ever been. As Dorothy said in *The Wizard of Oz*, "There's no place like home."

Asset Allocation for Muppets with a 401(k)

May 13, 2013

A few people have recently asked me to write a post on *asset allocation.* I decided to focus the post on the situation facing so-called "muppets" since they have greatest need for the advice. A term like "muppet" which can be used in a derogatory way can be argued to be a badge of honor for some people. In other words, the sooner you "get to acceptance" if you are indeed a muppet the better. Warren Buffett writes: "By periodically investing in an index fund…the know-nothing investor can actually out-perform most investment professionals. Paradoxically, when 'dumb' money acknowledges its limitations, it ceases to be dumb."

The usual caveats apply: the following post is not intended to be investment advice. Consult you investment adviser, everyone is unique….

I recently saw an article on asset allocation written by Vanguard, a firm I admire for its low fees and non-profit status. You can find Vanguard's 17 page article here which I hope you

read *after* this post:
https://advisors.vanguard.com/iwe/pdf/ICRPC.pdf?cbdForceDomain=false

The paper makes clear that Vanguard has strayed significantly in some areas from John Bogle's principles. While the Vanguard paper is valuable, it is flawed as will be discussed below. Why has Vanguard strayed? My view is that a quest for higher "assets under management" (AUM) has made Vanguard forget the adverse consequences of the dysfunctions of muppets described by behavioral economists that John Bogle knows well. Rather than protect muppets against their human behavioral failures such as the inevitable chasing of performance, Vanguard now advocates practices supported at best by theory and not practice such as active management.

In the paper Vanguard tries to make the case for active investing in theory while ignoring the fact that in practice muppets are muppets and will do things like chase performance and trade too much. Rather than give advice that protects muppets from themselves, Vanguard chases AUM which no doubt increases the salary and bonus of managers. This is "incentive cause" bias at work at Vanguard unfortunately. Vanguard is still my favorite asset manager, it is just that their advice on a topic like active management of funds is misguided. I also sympathize with John Bogle's beef with Vanguard on ETFs since ETFs are cheaper only in theory for muppets since ETFs encourage chasing performance.

Muppets should invest through low-cost index funds. Full stop. Warren Buffet's partner Charlie Munger puts it simply: "Our standard prescription for the know-nothing investor with a long-term time horizon is a no-load index fund. I think that works better than relying on your stock broker." Why is a no-load low fee fund important? John Bogle is similarly direct in answering that question: "In investing, you get what you don't pay for. Costs matter." "The case for indexing isn't based on the efficient market hypothesis. It's based on the simple arithmetic of the cost matters hypothesis. In many areas of the market, there will be a loser for every winner so, on average, investors will get the return of that market less fees."

To be useful to muppets, an asset allocation program must be simple and that 17 page Vanguard paper is anything but simple. So let's try to make it simple: David Swensen writes that investors have three tools to generate investment returns: "asset allocation, market timing and security selection. Asset allocation [is the] decision regarding the proportion of assets that an investor choses to places in particular classes of assets." Of these three tools, Swensen believes asset allocation is by far the most important.

Swensen summarizes what I have said so far here:

"Asset allocation is the tool that you use to determine the risk and return characteristics of your portfolio. It's overwhelmingly important in terms of the results you achieve. In fact, studies show that asset allocation is responsible for more than 100 percent of the positive returns generated by investors."

Vanguard agrees with Swensen arguing the right supporting number is 88% instead of more than 100%.

Part of the asset allocation process is choosing the categories you will invest in. For muppets, stocks, bonds, money market funds and for some people real estate usually in the form of investment trusts (REITs) are the right asset categories. Muppets should avoid commodity

and currency investments. It is useful to point out that when it comes to investing, more than 90% of people are muppets and should be buying low-cost index funds within the stock and bond categories.

Life inevitably presents a human with risk (outcome known, probabilities known), uncertainty (outcomes known, probabilities unknown) and ignorance (outcomes unknown, probabilities therefore not computable). You can't live and avoid these things. Unfortunately, it is human nature to be overoptimistic about the downsides of these three aspects of life. So you need to be careful, particularly if you are a muppet. A careful muppet tends to be a happy muppet.

There are several different types of risk that must be considered in the asset allocation process. In allocating assets one must understand what risk is: risk is the chance that you will suffer harm or a loss of capital. Despite Vanguard and what some others may say, risk is NOT equal to volatility. How the price of a security may vary with time is volatility, which is precisely equal to volatility. That something like volatility is an aspect of risk does not make it equivalent to risk.

It is critical to understand that "return risk" written about in the Vanguard paper is not the only objective in an asset allocation process since other forms of risk must be managed as part of any investment plan. A very important goal for a muppet is saving for retirement. One goal in saving for retirement to avoid eating cold soup from a can in a single-wide unheated trailer. In short, you don't want to be financially destitute. Another goal is to have enough wealth to be comfortable. You should have at least two minimum "numbers" in mind: (1) the minimum level needed to live a hard scrabble life and (2) the level you desire to be comfortable.

Another type of risk is running out of cash at some point in your life. I have seen situations in my life where people have paper wealth but no cash and I have seen no wealth and no cash. In the paper Vanguard recommends that investors keep from three to 33 months in living expenses in cash. That is a very big range in terms of a recommendation but at least three months expenses in cash seems a minimum and six months even wiser.

Achieving a basic level of financial security is essential. What is a basic level of financial security? Here's an extreme analogy. A billionaire once said "If you have a billion dollars, the first thing you should do is buy $100 million in US Treasuries since if you never sell them no matter what happens, you will live well." For a muppet, the figure is not $100 million, but you get the point. There is an amount that you will want to have saved as a minimum like $1 million on top of social security. Warren Buffett has put this point in another format using an analogy from the board game Monopoly: the older you get the more you want to avoid financially "returning to go" and having to start over again. In addition for *Return Risk* there is *Return to Go* risk. Stated positively, having what is called "f-bomb you money" is a valuable thing indeed. If you are willing to live simply, "f-bomb you money" need not even be that much money.

As part of your asset allocation process you must decide what types of assets you will own as investments and you must decide what your proportionate allocation should be in each category. John Bogle, who is in his 80s, has a relatively simple formula for asset allocation:

"A good place to start is a bond percentage that equals your age. Although I don't slavishly adhere to that rule…" "My personal, non-retirement accounts are about 80 percent bonds and 20 percent stocks, reflecting my old rule of thumb that your bond allocation should roughly equal your age. My retirement accounts are more like a 50-50 split between stocks and bonds, because of a longer time horizon and because yields on bonds are extremely unattractive right now. Bonds in my retirement accounts are about 30 percent Treasuries and 70 percent investment-grade corporates."

In doing this math it's important to take social security into account, which Bogle argues is like a bond. Bogle said once:

"… let's say you've been lucky enough to accumulate, let's say $300,000 in your personal investment account, and the capitalized value of your social security at a certain age is also going to be $300,000. It's a great investment, I have to admit, as long as it's great, it's going to be great if that isn't too oxymoronic for you. But so you know, it's basically a bond position with an inflation hedge. So you're at 50/50 if your $300,000 of your own money is entirely in equities."

A huge advantage of this "bonds equal to your age" rule of thumb for a muppet is simplicity. You don't need to read 17 page papers or meet with an advisor. You can in its simplest form invest your age in bonds and have the rest in stocks. Or you can invest your age in bonds minus some percentage to reflect your volatility tolerance or the fact that you are relatively wealthy. Your age in bonds minus 10 or 20% would be one example of a modified rule of thumb. If you look at so-called "*target date"* or" *life cycle"* fund that is really all they are doing. Of course, the fund promoters are all doing this in different ways within that percentage sometimes with allocations to things other more exotic asset classes. People too often talk about *target date funds* like they represent a generic strategy. They aren't. My own view is simple: why pay a target date fund manager a significant amount of money in fees just to have them invest your age minus 10-20% in bonds and the rest in stocks and speculate in other categories like any active manager? As John Bogle has said many time and in many different ways, that costs matter *a lot* with regard to investment performance. It is relatively easy to put together your own *do it yourself* target date fund by copying other target date funds and skill the fees. It takes a little work to *do it yourself,* but with some target date fund charging more than 1%, that is a lot of money saved that can compound for you. The caveats here for a muppet is clear: are you willing to do the work? Will you follow through? A *low fee* target date fund like Vanguard's may be worthwhile for a muppet who would rather be playing golf or watching a movie.

Others have their own suggestions about the proper allocation between stocks and bonds. Some talk about 60% stocks and 40% bonds as if age doesn't really matter. Many assets managers have calculators which they suggest be used in calculating the right assets allocation. When I use the Vanguard asset allocation calculator it suggest that I put 100% of my assets in stocks, which is, well, wrong given my desire to avoid return to go risk. Another form of asset allocation is Nassim Taleb's "barbell" approach which is beyond the scope of this post and arguably a topic not suitable for muppets. As the very least a muppet should take away from Taleb's works that negative Black Swans are significantly more prevalent than you may imagine and your allocation to "safer" assets classes should be significantly greater than you think. The reciprocal of this is the concept of optionality, but this is a post containing advice for muppets and I'm going to resist discussing that topic since muppets are muppets. Taleb also points of that you should observe what people actually do

which is often not what they say. For example, Harry Markowitz once described how he allocated assets as follows: "My intention was to minimize future regret. So I split my contributions 50-50 between bond and equities." That is a far cry from what he argues in his academic papers. Another Nobel prize winner has revealed that he keeps a huge amount of money in money market accounts and acknowledges that it contradicts his own work.

The Bogelheads group illustrates a few so-called lazy portfolios at this link: http://www.bogleheads.org/wiki/Lazy_Portfolios Reading the material at this Bogleheads link is contorting as well as instructive since it reveals that "experts" may disagree and that the process is an art more than it is a science. I suspect that one of these portfolios will appeal to each muppet in a unique way. In general, I like a "no more than 10% allocations to REITS in some of these Lazy Portfolios, but again, muppets need the asset allocation process to be simple.

As I said previously, there is the question of how you invest inside an allocation. Should you devote 30-40% of you equities to foreign stocks as Vanguard recommends in the paper? For most muppets their liabilities are in US dollars so 30-40% seems too high for me. Twenty percent might be better if a muppet wants an allocation to foreign stocks. But again, if muppets need to make this decision about foreign stocks allocation of top of the basic allocation, do they face that complexity and just freeze up and make bad decisions. Is it better just to keep them in domestic equities only so as to keep it simple? That's a hard decision, but if the muppet can deal with the complexity and won't tune out, allocating 20% of the stock category to foreign equities can be a good thing.

And what should the allocations be within the bond category? Most muppets should keep it simple and buy a broad diversified bond fund with low fees like Vanguard's Total Bond Market Index. If you want to do it yourself or want a different mix, how much should you have in treasuries, corporate and municipal bonds? Again, simple is wise. Make it too hard and a muppet will tune out of the asset application process, turn on the TV and make no decision. The Lazy Portfolio attributed to Swensen in the previous link keeps it simple with half of the bonds in Treasury Inflation Protected Securities (TIPS) and half in US Treasuries.

When a financial advisor tells you need to engage in "tactical asset allocation," hold tightly to your wallet and run away like the wind. "Tactical asset allocation" is an oxymoron. That advisor is almost surely trying to get you to buy and sell securities which will probably generate fees for him or her which is about the other two categories: market timing and security selection. Tactical assets allocation is really a justification for market timing and stock selection which generates fees and expenses.

You will also get people who take a number regarding the amounts going into each asset category which is subjectively determined and make argument based on the work of an academic or two that you should often be rebalancing your portfolio based on some precise formula. You will hear about math and things like "the efficient frontier." Assume that this talk is bullshit, because it is. Despite what some people may say there is no precise formula when it comes to this process. People who say you need to hire them to do complex calculations are trying to invent ways to separate you from some of your money by charging fees and expenses.

David Swensen writes:

"Rebalancing to long-term policy targets plays a central role in the portfolio management process."

Rebalancing works for muppets because it counteracts your tendencies to chase performance which lowers your financial returns. In other words, the rebalancing process works because you are human and not rational, not some efficient markets-based explanation. You and I know that markets are not always efficient. Academics assume the contrary since it makes their math pretty, but that assumption is bullshit.

Rebalancing around a number which is not precise in the first place does not need to be precisely done. I personally don't rebalance other than doing so with new money until I am more than 5-10% off my targets. Vanguard gives the same advice in its 17 page paper that funds should be:

"…rebalanced only if the targeted percentage of equities or bonds has deviated by a meaningful amount, for example, by more than 5 percentage points…"

I rebalance as I go along with new money coming in. My purpose in doing so is to avoid taxes, fees and expenses. Vanguard gives the same advice:

"It's preferable to rebalance every time cash enters or leaves the portfolio. These cash flows can include any dividend, interest, or capital gains distributions generated by the assets."

There is a tradeoff between taxes, fees and expenses and benefitting from mean reversion are at work here and I personally err if at all on the side of avoiding taxes, fees and expenses.

Be careful out there.

The "Free Parking" Business Model

June 11, 2013

This blog post is on what I call the "free parking" business model, which in my view is a different way of describing the "attach" business model. @cdixon tweeted a suggestion that I follow up our exchange of tweets with a longer blog post.

The right way to look at almost any business question is to start with the customer. Unfortunately, sorting out who the customer is may not always be simple to determine, especially in "platform" businesses. A platform is a type of market with multiple "sides." In other words, a market maker that owns a platform acts as an intermediary between different "sides" of a market. While many multi-sided markets involve only two sides, others can involve several more.

The most powerful variant of a multi-sided market occurs when "sides" of the market are "interlinked" (i.e., attached) in a way which enables the harvesting of indirect "network effects" on one or more sides (technically known as internalizing positive externalities). Network effects, which are also known as "demand-side economies of scale," result when a product or service becomes more valuable the more users use it. As an example, Google's advertising serving business has network effects that are described by Warren Buffett and

Charlie Munger as the strongest moat they have ever seen. Those networks effects can form the basis of a powerful "moat" which bestows sustainable competitive advantage for the owner of the platform such as Google. While a company may have revenue without a some form of a moat, it is highly unlikely it will be sustainably profitable.

Some network effects are strong and some are weak. For example, Google's moat in the advertising-serving business is very strong. Yahoo's moat in the financial news market (Yahoo Finance) is very weak. Some markets impacted by multi-sided makers with network effects are big and lucrative (e.g., Bloomberg's terminal business; ESPN) and some are not (Yahoo Sports).

While some are quick to talk about network effects of the platform business, there is a great deal of context that determines the strength and sustainability of a most built on a platform + network. Elements of this context include ease of entry for all or part of the network, suitable, if different, replacements for elements of the network, and approaches by competitors that commoditize part of your system. That is why one must consider the full ecosystem and competitive dynamics around one company's collected offering.

The existence of an "interlink" between sides of the multi-sided market is critical. For Sun, Java has network effects for users on one side of the market but there is no interlink to anything profitable. If anyone can take advantage of the network effects on one side of a market there is no moat benefit for the company, in this example Sun. In other words, Sun had no interlink at all to Java and so created a strategy that was fully suicidal. The Java strategy employed by Sun was like owning a yacht and casting off the lines and letting it drift down the river by itself. Red Hat makes a market by working hard on its "free" Linux distros so it can sell services, but anyone can do so which limits the power of the interlink.

One of the greatest challenges in creating a platform business is the so-called "chicken and egg" problem (i.e., one side of the market may not want to be participant in the platform until the other side is participating).

Experience has shown that the best way to accomplish the bootstrap of the "chicken and egg problem" is to give away one side of the market for free. This is particularly true in the software business since the marginal cost of offering up another "free" unit to end users is often close to zero. The free offering, if offered in the right way at the right time, can cause adoption that is both huge and swift creating network effects that can "tip "the free service in a way that creates a moat and barriers to entry (e.g., Facebook's social graph). It is critical that the business not monetize too early like MySpace did before the market tips or all can be literally lost. This is where my "free parking moniker" comes into play. What is "free" is interlinked to what is profitable via an interlink which is like validated "free parking."

It is important to consider that these free services (and this is really software—software eating the world, as Marc Andreessen has said) can be coupled with physical goods or businesses unrelated to pure play software/services. Fitness bands will offer more and more related software, but someone making a profit from supplements might choose to give away the band and the software if the margins on supplements are higher.

Experience has shown that if a potential market maker tries to charge a fee to both sides of a multi-sided market, especially in the beginning, they can't get past the bootstrap of the "chicken and egg problem." Typically it is best to offer the free side to consumers since no

one loves "free" more than a consumer (for a number of reasons described best by behavioral economics). It is also best to give away as free the service that has the lowest marginal cost. In many cases web services have almost no marginal cost after they are developed and can an ideal "free" offering. .

One consequence of the "free parking" business model is that you run a risk that some company deciding to give away what you sell, especially in a technology business where there can be zero marginal costs of giving away a service. Free services are being used in ways never imagined before to make interlinked services more profitable. To use the most recent version of Android, you are locked into Google's advertising serving service and all of the other Google services that feed into that advertising service. Google is interesting in that instead of having multiple services as profits centers, all of the services are in effect a web services tornado sucking in everything it can reach to benefit serving advertising.

Freemium is a variant of the "free parking" business model but there are several sub-variants of freemium itself. In many cases freemium is used since the company has relatively few dollars for marketing and sales. The company in this situation transforms code into the equivalent of marketing spending and "gives away for free" service X to generate qualified leads for interlinked service Y. Freemium works best if service X has network effects. But not all freemium services have strong network effects in a big lucrative market. Giving away salty peanuts in a bar to sell beer as a loss leader is not a case involving network effects. By contrast, giving away a Instagram to end users did create network effects. Instagram is interesting in that it never actually created in interlink to another profitable service before the company was sold.

Many examples of freemium exist as services that have some free level and then a paid-for level that is implemented as a subscription or time-based payment. Physical goods don't make particularly good free products and the strategy of free entry level products with a one-time transaction for a purchased product are painfully difficult product lines to manage (especially in software). Freemium, as attractive as it is, can be a higher risk strategy down the road. Businesses depending on freemium fight a battle on two fronts, month-by-month. They must spend energy on a broad "air attack" to bring new customers in, presumably at the free level. They must also fight a ground war which is to keep existing customers connected at a paying level.

In order to make these battles easier to fight it is highly desirable if not essential that the free offering help create some sort of a moat even if network effects can't be created or if the network effects are weak. Costco is an example of a company which sells goods at close to break-even financially so that it can sell the memberships that bring in 80% of its gross profit. Costco has created "supply-side economies of scale" that are tough to match. While giving away goods and services is easy to do, creating a moat while doing so is a genuinely hard problem. For a blog post in which I have discussed other sources for a moat see: http://25iq.com/2012/12/06/charlie-munger-on-moats-first-of-the-four-essential-filters/

"Wholesale Transfer Pricing" and the "Free Parking" Business Model

June 12, 2013

As part of the discussion of my previous post on the "free parking" business model, a reader asked for a blog post on "wholesale transfer pricing." The rise of free parking as a business model has made wholesale transfer pricing more important than ever.

Wholesale transfer pricing power is a term I heard John Malone use in a conference room circa 1995. You won't find the term in textbooks. Simply put:

Wholesale transfer pricing = the bargaining power of company A that supplies a unique product XYZ to Company B which may enable company A to take the profits of company B by increasing the wholesale price of XYZ.

As an example, John Malone made himself rich by owning the cable systems and saying to new channels, "I will be glad to give you distribution on our cable system as long as you issue us AB% of the equity in your company." The wholesale transfer price of getting distribution on his cable systems was AB% of the equity. On the flip side, John Malone always made sure there were at least two suppliers of set-top boxes for his cable business so he was not on the ugly side of wholesale transfer pricing.

The term "wholesale transfer pricing power" is similar to, but not the same as, a "hold up problem": http://en.wikipedia.org/wiki/Hold-up_problem The best lens to look at the wholesale transfer pricing power/supplier hold up set of issues is Michael Porter's "Five Forces" analysis, specifically "bargaining power of suppliers." https://en.wikipedia.org/wiki/Porter_five_forces_analysis

As an example of avoiding the problems of wholesale transfer pricing power, the iPod/iPhone business model was a work of genius in that the wholesale transfer pricing power of the music labels is 100% neutered because Apple makes all its profit on the device and not the music. If Apple sold the device at a loss and tried to make profit on the music, Apple would be doomed by the wholesale transfer pricing power of the music owners.

As an other example, the owners of Wild Ginger started their wonderful restaurant in a rented space on Western Avenue in Seattle. The restaurant was a huge success. When lease renewal time came up for Wild Ginger the landlord wanted a massive rent increase. The ability of the landlord to demand that increase is wholesale pricing power. It was not absolute, but wholesale transfer pricing power in that case was significant. The owners of Wild Ginger had a lot of brand and other value tied up in that location. The rent increase request was so big that the Wild Ginger owners brought in up investors and bought their new building in a new location and did the huge investment required to refurbish it. The restaurant owners had to completely change their business model by bringing in the outside money from investors. The owners of Wild Ginger are is now in the restaurant business ***and*** the real estate business. The whole thing was kicked off by the wholesale providing power of the original landlord. Another restaurant moved into the old Wild Ginger space on Western Avenue and went bust, probably because the rent was too high compared to the many other restaurants in Seattle. Now that restaurant space on Western Avenue sits empty.

As yet another example, Anthony Bourdain in his former TV show "No Reservations" did a profile of old school restaurants in one episode on "Lost Manhattan" and pointed out that the old school restaurants that are left own their own buildings. They are able to stay "old school" in the restaurant business only because they are their own landlords. If they had

just been tenants, they would have been priced out of business in Manhattan long ago. This raises the important question that each business owner must ask on a regular basis: exactly what business are you in? Has the business you are in changed due to the rise of the free parking business model? If you formerly sold just A, must you now sell an integrated bundle of A, B and C since that is what your competitors are offering? In many cases A and B will both be free parking and only C directly monetized.

A DOZEN THINGS I'VE LEARNED ABOUT BUSINESS

June 23, 2013

1.**"If you play [your competitor's] game, you lose every time."** Allan Benton. http://www.esquire.com/features/what-ive-learned/allan-benton-interview-0909 This quotation to me is all about moats and sustainable differentiation. If you haven't read Warren Buffett, Michael Porter and Michael Mauboussin about "moats/sustainable competitive advantage," well, you are missing out in a huge way.

2.**"Listen, business is easy. If you've got a low downside and a big upside, you go do it. If you've got a big downside and a small upside, you run away. The only time you have any work to do is when you have a big downside and a big upside."** Sam Zell. This makes business sound a lot like gambling which it is. The important point being made here is that you should be looking for situations in which the odds of a business proposition are substantially in your favor. Bet big when that happens. When the odds are not substantially in your favor, don't bet. As Charlie Munger says: "It's just that simple." http://archives.newyorker.com/?iid=15126&startpage=page0000061#folio=C1

3.**"Optionality is the property of asymmetric upside (preferably unlimited) with correspondingly limited downside (preferably tiny). Optionality can be found everywhere if you know how to look. That which benefits from randomness (increased potential for upside in the presence of fluctuations) is convex. That which is harmed by randomness, concave. Convexity propositions should be embraced – concave ones, avoided like the plague."** Nassim Taleb. http://www.amazon.com/Antifragile-Nassim-Nichol-Taleb/product-reviews/1846141575?pageNumber=3 Yeah, yeah, this one in part repeats 2 above but it is worth the repetition even with only twelve spots allowed on this list. I could quote Warren Buffett too here, but I am going to try to get through this post without quoting him saying things like: "One day on land is worth a thousand years of talking about it, and one day running a business has exactly the same kind of value." Whoops.

4.**"A strategy delineates a territory in which a company seeks to be unique."** Michael Porter. http://www.fastcompany.com/42485/michael-porters-big-ideas Strategy is what you do differently than you competitor. Strategy is about what you choose NOT to do. Deciding what things not to do is hard. Steve Jobs was a master at leaving things out and not doing things.

5.**"Our whole business model is to do a few things very well and if it ain't broke, don't fix it."** Jim Spady. http://seattle.eater.com/archives/2013/04/17/the-dicks-drivein-story-then-now.php Anyone who has ever eaten "Chicken Rice" from a hawker stand in Singapore

knows what happens when someone spends 40 years making the same dish. You get awfully good at it. People line up to buy it, your costs drop and you get scale advantages. Costco limits what it does in a way that generates attractive sustainable competitive advantage.

6. **"It's incredibly arrogant for a company to believe that it can deliver the same sort of product that its rivals do and actually do better for very long."** Michael Porter. http://www.fastcompany.com/42485/michael-porters-big-ideas Just trying to rely on being good at what you do it a hard road to walk. Maybe you get some scale benefits by making great Chicken Rice, but that is a weaker form of moat than network effects.

7. **"We like businesses that can't be commoditized. Hardware/software can be, networks can't."** Fred Wilson. Network effects are the most powerful form of moat and when a company like Google has them they are hard and even impossible to compete with. Network businesses offer another advantage in that they offer up the ultimate in scalability. Some businesses are attractive at a small scale but just can't grow profitably. Physical stuff is hard to scale. It can be done, it's just hard. Usually people who do profitable things selling physical stuff inevitably have great back-end systems powered by great software like Amazon, Wal-Mart and McDonalds..

8.**"Supply is the killer of value."** Bill Gates. http://25iq.com/quotations/bill-gates/ When supply increases in a massive way that creates a platform on which you may be able to attach something scarce. The idea that supply itself increases value is what I call "*George Gilder's folly"* and was in no small part the cause of the 1999 Internet bubble. Yes, supply increases are "disruptive", but revenue is not profit. As an example, I heard Bob Metcalfe say once: "No one made a nickel on Ethernet itself; only selling other things on top of the Ethernet standard was profit generated."

9.**"The only unforgivable sin in business is to run out of cash."** Harold Geneen. http://en.wikipedia.org/wiki/Harold_Geneen You can be bankrupt from an accounting standpoint and still survive as a business. But if you run out of actual cash, well, may God help you. If you lived through the Internet crash of 2002, you have experienced the critical importance of cash in a unique way. On the related topic of EDITDA, I am with Charlie Munger that you should insert the word "bullshit" in its place whenever it is encountered. Interest, taxes and depreciation are real expenses and in fact the worst sort of expenses.

10. **"A customer that 'chooses' your firm's services will be much more satisfied than one that is persuaded to buy your product through spend."** Bill Gurley. http://www.forbes.com/sites/bruceupbin/2012/08/30/the-dangerous-seduction-of-the-lifetime-value-ltv-formula/2/ Big firms have these huge marketing budgets and forget that the essence of business is being able to cost-effectively acquire a customer. Fred Wilson talks about that problem at one point in this recent interview: http://pandodaily.com/2013/06/17/pandomonthly-new-york-with-union-square-ventures-fred-wilson-the-full-interview/ Spending on customer acquisition should be tracked on a per customer basis. People who want to spend, for example, "$100 million" on marketing without breaking it down and working it out on a per customer basis are due for a fall.

11. **"Your margin is my opportunity."** Jeff Bezos. http://management.fortune.cnn.com/2012/11/16/jeff-bezos-amazon/ Bill Gurley lays it all out here: http://abovethecrowd.com/2013/04/18/a-rake-too-far-optimal-platformpricing-

strategy/ I can't say it better than he did so read him and not me. Giving more value to customers is self-reinforcing in a way that marketing spending can never be.

12. **"Hire character. Train skill."** Peter Schutz, former CEO of Porsche. http://www.fastcompany.com/3011018/make-every-hire-a-creative-minded-person-even-for-non-creative-jobs This last one is self-explanatory.

A DOZEN THINGS I'VE LEARNED ABOUT INVESTING

June 28, 2013

1. **"[At a horse racing track people make] bets and the odds change based on what's bet. That's what happens in the stock market."** Charlie Munger. http://www.ritholtz.com/blog/2012/02/a-lesson-on-elementary-worldly-wisdom-as-it-relates-to-investment-management-business/ Betting on a horse which is the favorite or a longshot may or not be a good bet. What matters is whether the bet is *mispriced* in your favor. Stocks are exactly the same. The stock market is *often* efficient, but it is not *always* efficient. The will be rare times when an investor who is patient, highly observant and acting within their circle of competence (a "know-something investor") can find a mispriced bet. When such mispricing can be identified, the investor should bet in a significant way.

2. **"Most people who try [to become know- something investors] don't do well at it. But the trouble is that if even 90% are no good, everyone looks around and says, 'I'm the 10%.'"** Charlie Munger. http://www.scribd.com/doc/143910311/The-Best-of-Charlie-Munger-1994-2011 The number of people who are capable of finding the mispricing and who have the emotional intelligence to beat the market is very small. The odds are high that you are not one of those people and should instead buy a low-cost index fund.

3. **"The case for indexing isn't based on the efficient market hypothesis. It's based on the simple arithmetic of the cost matters hypothesis. In many areas of the market, there will be a loser for every winner so, on average, investors will get the return of that market less fees."** John Bogle. http://www.financial-planning.com/fp_issues/42_9/john-bogle-index-fund-interview-2680620-1.html?pg=2 Perhaps the easiest thing one can do in investing is improve performance by lowering fees. What is not to like about doing things that are easy? No one says it better than Bogle: "What happens in the fund business is that the magic of compounding returns is overwhelmed by the tyranny of compounding costs. It's a mathematical fact." Compounding is arguably the most powerful force in the universe, so ignore it at your peril.

4. **"[With] closet indexing, you're paying a manager a fortune and he has 85% of his assets invested parallel to the indexes. If you have such a system, you're being played for a sucker." Charlie Munger.** http://wealthymatters.com/2011/02/12/charlie-mungers-quotes-mungerisms/ Mutual funds have learned people will withdraw money if they underperform what is known as their "benchmark". To preserve their fees mutual funds too often closet index and you end up getting the results of an index fund but are paying high fees. Just say "no" to closet indexing.

5. **"The mutual fund industry is not an investment management industry. It's a marketing industry."** David Swensen. http://david-swensen.com/2009/04/02/swensen-mutual-fund-is-marketing-industry/ Mutual funds spend a lot of money convincing you that they can beat the market even though that data says it rarely happens. And they spend even more convincing HR departments at companies to force their employees to select buy their high fee funds. Few things in investing are more galling than a high-fee manager chosen by your employer to administer a 401(k) telling you that they will charge a fee if you choose a low-fee competitor.

6. **"Advisors add value by providing the discipline required for successful investing. They add value in areas like tax efficiency, risk management, estate planning and retirement planning."** John Bogle http://www.financial-planning.com/fp_issues/42_9/john-bogle-index-fund-interview-2680620-1.html?zkPrintable=1&nopagination=1 John Bogle. Look for conflicts of interest. For example, when you are dealing with a broker remember that you are often a counterparty, not a "client."

7. **"The speculator is not an investor. His object is not to secure a steady return on his money at a good rate of interest, but to profit by either a rise or a fall in the price of whatever he may be speculating in."** Jesse Livermore. http://www.jesse-livermore.com/speculation-definition.html Guessing what you think, other people think, other people think [repeat] a commodity is worth at any given is a game for suckers. Predicting the behavior of a mob humans better than the market is not likely to be a skill you have. Trust me on this.

8. **"A 401(k) is a thrift plan trying to be a retirement plan. It was never designed to be a retirement. To be a retirement plan, you have to keep putting money in…."** John Bogle. http://abcnews.go.com/Business/vanguards-jack-bogle-financial-train-wreck-looms/story?id=17137130&page=2#.UciIw2bn-70 The best way to have a comfortable retirement is to save a lot of your income. Investing helps increase your savings, but it is not enough by itself. SAVE!

9. **"Any time luck contributes to outcomes, you will have reversion to the mean."** http://www.wired.com/wiredscience/2012/11/luck-and-skill-untangled-qa-with-michael-mauboussin/ Michael Mauboussin. As the price of an investment wiggles up and down you will inevitably "chase performance" unless you are a disciplined investor performance and will end up "selling low and buying high". Less than 10% of people who try can do beat the market successfully and the odds are that you are not one of the 10%.

10. **"Instead of concentrating on the central issue of creating sensible long-term asset-allocation targets, investors too frequently focus on the unproductive diversions of security selection and market timing."** http://socialize.morningstar.com/NewSocialize/asp/FullConv.asp?forumId=F100000015&lastConvSeq=43500 David Swensen. Asset allocation is process consisting of choosing the categories you will invest in (e.g., stocks, bonds, money market funds and REITs) and is vastly more important than choosing stocks or when to get in and out of the market. Some type of assets like bonds you should hold in part because they can help you not be as irrational (they lower behavioral risk).

11. **"I am a better investor because I am a businessman and a better businessman because I am an investor."** Warren Buffett.

http://everythingwarrenbuffett.blogspot.com/2009/03/motley-fool-buffetts-words-of-wisdom.html If you don't know much about business, then the odds that you will be a successful investor are vanishingly small. A share of stock is a proportional interest in that business. The more you understand the business the more you will understand the stock.

12. **"By periodically investing in an index fund…the know-nothing investor can actually out-perform most investment professionals. Paradoxically, when 'dumb' money acknowledges its limitations, it ceases to be dumb."** Warren Buffett. http://www.fool.com/investing/mutual-funds/2008/11/04/follow-the-smart-money.aspx This one is self-explanatory.

A Dozen Things I've Learned About the Psychology of Investing

July 1, 2013

1. **"The best example of narrow framing that I can think of is the use of pro forma earnings. Essentially this is a company turning up and saying, hello I'm lying to you, these are the earnings I didn't make, but I'd be jolly grateful if we could all just pretend I did."** (Framing bias) James Montier http://www.investmentpostcards.com/2010/03/11/interview-james-montier-on-value-investing/ Our brains only have so much cognitive capacity so humans suffer from in-attentional blindness. If we are told to focus on the basketball going back and forth we can miss a gorilla that appears in the video being viewed. When people are told to focus on EBITDA (A.K.A. "bullshit earnings"), they often don't see a lack of genuine profit and awful cash flow.
2. **"Denial Ain't just a River in Egypt."** (Denial bias) Mark Twain. Charlie Munger writes "sometimes reality is too painful to bear, so you just distort it until it's bearable." Victims of Nigerian Internet schemes who keep sending more and more money to the fraudster despite existing big losses are an example of this bias. Richard Feynman put it this way: "The first principle is that you must not fool yourself–and you are the easiest person to fool."
3. "**We're really crummy at forecasting the future."** (Hindsight bias) http://www.fool.com/investing/general/2013/06/28/an-interview-with-dr-daniel-kahneman.aspx Daniel Kahneman. Arguably the best thing you can do to overcome this bias is to write down your investing results in a notebook. If you just keep track mentally you will inevitably exclude your mistakes. I know a number of people who used notebook approach and subsequently converted to index funds zealots. If you carefully write them down numbers don't lie. As a profession economists are hindsight bias practitioners extraordinaire. No other profession even comes close to believing that explaining the past enables them to forecast the future. Economists who are very certain about their predictions are the most popular with the public, but are no more accurate.
4. **"People are really crazy about minor decrements down."** (Loss-Aversion bias) Charlie Munger. People hate to sell stocks at a loss so they hold them too long. While what is in the past is what an accountant calls "sunk, it is hard for people to think that way**.** I've watched people let a stock price drop to zero since the more it dropped the harder it became for them to sell. Losses can have long lasting impacts. For example,

investors financially burned in 2001 and 2007 are spooked by the experience in a way that is similar to people who lived through the Great Depression.

5. **"What a man wishes, so shall he believe." (**Confirmation bias) Demosthenes. In doing due diligence and research on a stock people see what they want to see. We all need friends who can tell us when we have objectivity problems. Michael Maubousin's book *Think Twice* http://www.amazon.com/Think-Twice-Harnessing-Power-Counterintuition/dp/1422187381 identifies ways to deal with this bias.
6. **"A careful survey in Sweden showed that 90 percent of automobile drivers considered themselves above average. And people who are successfully selling something, as investment counselors do, make Swedish drivers sound like depressives." (**Overconfidence bias) Charlie Munger. The primary problem with this bias is that people who should be buying index funds think they can be successful active investors. A retiring Morgan Stanley executive recently described overconfidence bias as what drives Wall Street "sell-side" profits (if investors were not overconfident Wall Street profits would plummet).
7. **"Most of us view the world as more benign than it really is, our own attributes as more favorable than they truly are, and the goals we adopt as more achievable than they are likely to be." (**Over-optimism bias) Daniel Kahneman. http://mobile.bloomberg.com/news/2011-10-24/bias-blindness-and-how-we-truly-think-part-1-daniel-kahneman.html Over-optimism leads investors to do things like take on too much debt which can end up crushing their financial returns. To deal with this nothing works better than having a margin of safety. Especially as you grow older, "returning to go" financially is a risk well worth avoiding.
8. **"[People] think in herds; it will be seen that they go mad in herds, while they only recover their senses slowly, and one by one."** (Cascades/herding bias) Charles Mackay. https://en.wikipedia.org/wiki/Extraordinary_Popular_Delusions_and_the_Madness_of_Crowds People are social creatures and in the absence of information or time to make decisions they follow the herd. As Benjamin Graham once said: "You are neither right nor wrong because the crowd disagrees with you."
9. **"In the absence of any solid information, past prices are likely to act as anchors for today's prices."** (Anchoring bias) James Montier. Anchoring is a tendency of people to grab on to inputs just because they are available. For example, financial analysts often fail to revise their estimates since they get anchored to prior numbers. (they revise too late to be useful).
10. **"If people want high numbers, they'll roll the dice really hard, but when they want lower numbers, they roll them very gently."** (Illusion of Control bias) Michael Mauboussin. http://cobrands.morningstar.ca/article/printArticle?articleid=341146&culture=en-CA&cobrandid=50 As an example of this bias, once people pick a stock they immediately become more certain that the pick is wise when logic should tell them otherwise. This can result in a failure to sell a stock when an opportunity cost analysis logically would call for the stock to be sold.
11. **"Let us eat and drink; for tomorrow we shall die."** (Present moment bias) Isaiah Old Testament. Companies like Starbucks know people will pay several dollars for a coffee even though on an annualized basis it eats up a big share of after-tax income. People like benefits that are available NOW—which is why they don't save for retirement and eat too many calories. The investor too often says: "To heck with the 401(k), let's buy a waterski boat with a disco ball."

12. **"Never try to teach a pig to sing; it wastes your time and annoys the pig."** (Cognitive Dissonance bias) Barry Ritholtz.**http://www.ritholtz.com/blog/2011/11/the-cognitive-dissidents/** Barry is the king of cognitive dissonance. Not reading Barry's blog is what a psychologist calls "nuts."

A DOZEN THINGS I HAVE LEARNED ABOUT VENTURE CAPITAL

July 5, 2013

1**. "The problem is that extraordinary performance comes only from correct non-consensus forecasts, but non-consensus forecasts are hard to make, hard to make correctly and hard to act on."** Howard Marks. http://www.go2cio.com/quote/index.php?page=50 Humans are terrible forecasters for many reasons explained by behavioral economics, not the least of which is that we often see false patterns and ascribe false meaning to them. Having great pattern recognition skill is critical in venture capital and one pattern that you see is that really great entrepreneurs often break some rule(s) that you thought were unbreakable. History only rhymes and never repeats precisely.

2. **"The edge from optionality is in the larger payoff when you are right, which makes it unnecessary to be right too often."** Nassim Taleb. http://www.valueinvestingworld.com/2013/04/nassim-taleb-quote_26.html My previous post: "A Dozen Things I've learned about Business" has a nice quote from Nassim Taleb on this point so I won't repeat it. When you combine optionality with the fact that most Black Swans are positive and the portfolio diversification which comes from a venture capital partnership, you have the wind at your back as a VC.

3. **"The frequency of correctness does not matter; it is the magnitude of correctness that matters."** Michael Mauboussin. http://hbr.org/2007/10/losers-and-winners/ar/1 Read the Mauboussin essay on the Babe Ruth Effect and profit. http://www.turtletrader.com/magnitude.html

4. **"The key insight that actual [VC] returns are incredibly skewed. The more a VC understands this skew pattern, the better the VC. Bad VCs tend to think the dashed line is flat, i.e. that all companies are created equal, and some just fail, spin wheels, or grow. In reality you get a power law distribution."** Peter Thiel. http://blakemasters.com/post/21869934240/peter-thiels-cs183-startup-class-7-notes-essay Much of what venture capitalists invest in are companies that sell an offering that is social in nature and anything social will experience" path dependence." And when there is path dependence you will often see its signature which is a power law. I like this passage: "in anything that involves social influence, it is very difficult to predict the outcome. Many people in areas where social influence operates are often paid for good luck. And if you are in a good place in life now, it could mean that you've got a lucky break early in life. So be

humble." http://www.btinvest.com.sg/blogs/2013/01/12/compounding-life-and-investments-20130112/

5. **"We like to say that 'more startups die of indigestion than starvation.' We are all fascinated by the stories of Steve Jobs and Jack Dorsey, who work on two companies at once, but this is not the norm."** Bill Gurley. http://blogs.wsj.com/accelerators/2013/01/10/whatever-you-do-stay-competitive/ One major cause of lost focus is to much money raised by the company too early. Nothing makes people both focused and creative like a lack of money. A little fear focuses the mind. I enjoy explaining to young entrepreneurs how much a fancy chair costs in terms of potential dilution in equity returns.

6. **"Where most entrepreneurs fail is on the things they don't know they don't know."** Vinod Khosla http://venturehacks.com/articles/twitter-3 Anyone who does not read Zeckhauser on this point is missing out in a huge way. I suggest: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=832635 You simply cannot compute the probability of unknown future states of the world. It is not mathematically possible. Zeckhauser calls this the domain of "ignorance".

7. **"All of us in the venture capital area are going through a triage, where we have to decide which portfolio companies are so wounded we will never save them. As horrible as it is to go through that process, it's a cleansing process. To have some branches grow and bear fruit, you have to trim others."** Fred Wilson. http://money.cnn.com/2000/11/09/technology/overview/ I love this quote since it is from the first Internet bubble. Anyone who lived through that period has a different muscle memory than people who have not done so. Marc Andreesseen has said he thinks people who went through the Internet crash are "scarred" which I believe can be both good and bad. Internet bubble survivors are neither better nor worse as founders or investors. Instead, they are just different.

8. **"Don't be a Google Bitch, don't be a Facebook Bitch, and Don't be a Twitter Bitch. Be your own Bitch."** Fred Wilson. http://techcrunch.com/2011/05/23/fred-wilson-be-your-own-bitch/ Having a single supplier of *anything* creates "wholesale transfer pricing power/supplier hold up" problems. My blog post on that is here: http://25iq.com/2013/06/12/wholesale-transfer-pricing-and-the-free-parking-business-model/

9. **"[In venture capital there are] low barriers to entry and high barriers to exit."** http://www.pehub.com/2012/10/18/bill-gurley-lps-you-blowing-it/ Bill Gurley. Too much money arriving in the venture capital industry from limited partners has been shown to depress industry returns. In other words, too much supply in terms of investable cash can be a problem as it is in any capital business.

10. **"Dinner quote from #AndreesonHorowitz key to wisdom is judgment. Key to judgment is enough bad judgments. Experience in startups matters!"** One great way to learn is from other people's mistakes (not to pee on an electric fence for example). And often the best way to do that in a scalable way is to read a lot and to talk to as many people who have actually done things that can result in mistakes as you can.

11. **"In business, I look for economic castles protected by unbreachable 'moats'." Warren Buffett.** My post on moats is here: http://25iq.com/2012/12/06/charlie-munger-on-moats-first-of-the-four-essential-filters/ The idea that in a startup all you need is revenue growth is bullshit and if someone argues to the contrary hold your wallet tightly and walk swiftly away. Bill Miller pointed out "you don't bet, you don't gamble, you don't invest, unless you have some competitive advantage quoting Puggy Pearson, a professional gambler with only a 5th Grade formal education who once said: "There ain't only three things to gambling. "Knowing the 60/40 end of a proposition, money management, and knowing yourself."

12. **"Venture capital is a services business."** Bill Gurley. http://gigaom.com/2012/12/11/bill-gurley/ If you are searching for a venture capitalist and have a choice, talk to actual entrepreneurs (cold call if you must) about which VCs provide the best service.

A Dozen Things I've Learned From Michael Mauboussin About Investing

July 11, 2013

1. **"The only certainty is that there is no certainty… With uncertainty, the underlying distribution of outcomes is undefined, while with risk we know what that distribution looks like. Corporate undulation is uncertain; roulette is risky…"** There is no single number which can be used to predict the future price of an investment because the future is not only risky (like roulette) but uncertain (unknown unknowns). There are known future states for which probability is unknown and future states that are unknown for which probability is not computable.

2. **"Success in a probabilistic field requires weighing probabilities and outcomes—that is, an expected value mindset."** The best that an investor can hope for is to identify a range of possible outcomes/scenarios. "Expected" value is the weighted-average value for a distribution of those possible outcomes (multiply the probability of each possible outcome by its respective present value and sum those numbers). Since only a few outcomes can realistically be identified by an investor, skill is involved in choosing those possible future outcomes. This is where business judgment becomes particularly critical. That skill is important in this process does not means that luck is not a huge factor in outcomes.

3. **"Perhaps the single greatest error in the investment business is a failure to distinguish between the knowledge of a company's fundamentals and the expectations implied by the market price."** It is the gap between expected value and market price which should drive decision making. If you have views which reflect the consensus of the crowd you are unlikely to outperform a market since a market by definition reflects the consensus view. Being different is necessary but not sufficient for investing success since you must also be right. To be contrarian for its own sake is for suckers. What you are looking for is a bet that has been mispriced by the crowd. Mauboussin quotes Seth Klarman: "Successful investing is the marriage of a calculator and a contrarian streak."

4. **"It's unlikely you will gain insight if your inputs are identical to everyone else's."** Since a big source of mispricing is a lack of crowd diversity it makes sense that a

lack of diversity in terms of where you generate your inputs can potentially give you an advantage as an investor.

5. **"Risk for a long-term investor is permanent loss of capital, and probably the most tried and true way to think about that is Ben Graham's concept of margin of safety."** Volatility measures volatility, which is only one type of risk. The longer the period being considered the less volatility matters. Rather than focusing on volatility investors are better off building in a "margin of safety" (a discount to expected value) to deal with "all in" risk. A margin of safety is helpful insurance against being wrong.

6. **"We all operate with certain heuristics- rules of thumb- and predictable biases emanate from those heuristics."** My post on investing psychology, referencing Mauboussin, can be found here.

7. **"We have a natural sort of module in our brain that associates good results with skill. We know it's not always the case for the future, but once it's done, our minds want to think about it that way. "**I learned early in my career that some people are rich because they were lucky. Some of these lucky people were talented and some were not. I have also found that people who are successful numerous times doing different things in business are more likely to have higher business skill levels. It has been my experience that some people have savant-like abilities as entrepreneurs, but that skill may not be transferrable to other domains in life.

8. **"Increasingly, professionals are forced to confront decisions related to complex systems, which are by their very nature nonlinear…Complex adaptive systems effectively obscure cause and effect. You can't make predictions in any but the broadest and vaguest terms."… "complexity doesn't lend itself to tidy mathematics in the way that some traditional, linear financial models do."** The life of an investor would be far simpler if one could assume that people behaved as physics would predict in the case of an electron. Mauboussin writes: "Security returns are not normally distributed, but exhibit high kurtosis and fat tails." Extreme events are inevitable and not thinking in terms of both negative and positive Black Swans is a very bad idea.

9. **"When you see something occur in a complex adaptive system, your mind is going to create a narrative to explain what happened—even though cause and effect are not comprehensible in that kind of system."** People love stories and great story tellers can earn a huge premium in financial markets as promoters. Getting rich as a promoter is very different than getting rich as an investor.

10. **"We tend to listen to experts, although it's been well documented that expert predictions are quite poor. But they're authoritative, so we listen to them."** CNBC is focused on finding guests who fit the adage: "often wrong, but never in doubt." The best way to never be invited back to CNBC as a pundit is to say: "I don't know" or worse "there is no way to know." The way to get "the hook" while on CNBC is to say out loud: "Buy low fee index funds."

11. **"[For] stable businesses the [DCF] process is easily applicable, but the likelihood of finding a mispricing is also the lowest…. "For] emerging businesses look for a comparable based on the business model."** There is a strong argument that the most

essential skill in a venture capitalist or technology investor is pattern recognition. What determines success in a technology business does not repeat, but it does rhyme.

12. **"Sustainable value creation has two dimensions—how much economic profit a company earns and how long it can earn excess returns."** People who have not read Mauboussin's essays and books, including Measuring the Moat, are missing out in a huge way.

A Dozen Things I've Learned From Seth Klarman

July 15, 2013

1. **"Few are willing and able to devote sufficient time and effort to become value investors, and only a fraction of those have the proper mind-set to succeed."** A tiny number of hard working and emotionally disciplined people who understand how to value a business can earn financial returns that are better than the market. It is highly unlikely that you are one of those people, but it is possible. The greatest danger lies in those last three words since far too many people believe "possible" applies in their case.

2. **"Investors are human and do make mistakes… value investing is predicated on the belief that the financial markets are not efficient."** Only fools and the models of some economists assume markets are "always" efficient instead of "often" efficient. As Howard Marks points out: "Markets are made up of people, with their emotions, insecurities, their tendency to go to extremes, and their other foibles. Thus, they often make mistakes and swing to erroneous extremes."

3. **"Resist crowd psychology."** Keynes believed that devoting intelligence "to anticipating what average opinion expects the average opinion to be" in a way that outperforms the market is folly. Such skill arguably the rarest of human qualities, if it exists at all. People who try to predict the behavior of crowds are "speculating" which is not "investing." The existence of George Soros is cited by some people as evidence that successful financial speculation is possible, but what are the odds that you are George Soros? In any event, an argument that Soros ignores value and instead is a purely a speculator is mistaken. Klarman said in an interview: "The economics, the valuation of the business, is not hard. The psychology — How much do you buy? Do you buy it at this price? Do you wait for a lower price? What do you do when it looks like the world might end? Those are the harder things." Since these things are hard to do you want to do them carefully via a deliberative process.

4. **"Look to Mr. Market as a creator of investment opportunities [not] for investment guidance."** The irony is that the mistakes of speculators create the opportunity for value investors. Warren Buffett writes: "The more manic-depressive [Mr. Market] is, the greater the opportunities available to the investor. That's true because a wildly fluctuating market means that irrationally low prices will periodically be attached to solid businesses."

5. **"Attempting to outperform the market in the short term is futile."** Most people are way too focused on the short term. The biggest beneficiaries of a short term focus are brokers

who generate greater fees. Klarman makes medium to long term investments and on that points out: "Buying is easier. Selling is hard."

6. **"To investors stocks represent fractional ownership of underlying businesses and bonds are loans to those businesses."** Too many people treat an investment like they would a rare baseball card or a lottery ticket. The valuation of a business is determined by cash flows in the long term. To understand cash flows you need to understand the underlying business.

7. **"[Value investing is] "the strategy of investing in securities trading at an appreciable discount from underlying value."** Buying something for less than it is worth is wonderful. Genuine value investors like declining prices of a stock or bond because it allows them to buy more. If you do not feel this way about declining prices you are probably not a value investor. It is far better to be approximately right, than precisely wrong.

8. **"A margin of safety is achieved when securities are purchased at prices sufficiently below underlying value to allow for human error, bad luck, or extreme volatility in a complex, unpredictable and rapidly changing world."** People screw up. A lot. Having a cushion against mistakes and studity is valuable, especially since methods for valuing a stock are imprecise.

9. **"An investor is better off knowing a lot about a few investments than knowing only a little about each of a great many holdings…. you diversify most of the diversifiable risk away from a portfolio by owning 20 or 25 positions. "** How many stocks can an individual follow in a sufficiently deep way so that you understand the underlying value of the business? Marty Whitman once suggested that it was limited to ten. With investing partners investing in more securities is possible, but at some point so many stocks are owned that you inevitably become a "closet indexer." Once a portfolio has 40 or so names in it, the closet indexing risk is high. It is important to note that indexing is fine if you are a "know nothing investor, and most all people are know nothing investors. But you should *not* be paying a high fee to own an index.

10. "Once you adopt a value-investment strategy, any other investment behavior starts to seem like gambling." By focusing solely on the value of a business and avoiding attempts to make predictions based on crowd psychology an investor can benefit from a system which allows the investor to profit from inevitable market swings caused by the speculation of opthers. Blocking out the "noise" attributable to speculators is fundamental to value investing.

11. **"The trick of successful investors is to sell when they want to, not when they have to."** There are times in life when liquidity is extremely valuable and planning ahead for those times is wise. Owning the right amount of very liquid assets like US Treasury bonds when you are likely to need cash is a good idea.

12. **"Most investors are primarily oriented toward return, how much they can make and pay little attention to risk, how much they can lose."** One of the biggest, if not the biggest risks in investing, is your own behavior. Overconfidence and over optimism are nearly inevitable elements of the human condition. Be careful out there. As always, think in terms of expected value like Warren Buffett: "Take the probability of loss times the amount of possible loss from the probability of gain times the amount of possible gain."

A Dozen Things I've Learned About Investing from Daniel Kahneman

July 18, 2013

1. **"Many individual investors lose consistently by trading, an achievement that a dart-throwing chimp could not match."** Leonard the Wonder Monkey will beat a muppet in an investing contest. Not only will muppets lose to a dart throwing monkey, they will do worse than chance would dictate, especially after fees because of certain behavioral biases.

2. **"Few stock pickers, if any, have the skill needed to beat the market consistently, year after year."** The danger again is that "the many" will include themselves to be included within the scope of the word "few." Kahneman puts it this way: "Everybody realizes that in principle, it's impossible. But everybody personally thinks they can do it." Kahneman points to Warren Buffett as one of "the few," but even in that case Kahneman believes early luck and path dependence did a lot to make Buffett as successful as he is now. The odds that you are similar to Buffett as an investor closely approach zero. But that will not likely stop you from thinking so unfortunately.

3. **"I actually am a believer in index funds. … if you don't have very specific information, which some say you're not allowed to have, you better not kid yourself that you can pick individual stocks."** An investor who works very hard and is diligent can acquire information that is better than the market. For example, there are professionals who have employees out in the field looking at how a given crop harvest is going. You are not one of those people, especially if you are at a baseball game. That your mobile phone allows you to trade options between innings is not relevant despite the advertising you may see on television.

4. **"For a large majority of fund managers, the selection of stocks is more like rolling dice than like playing poker."** Maubouissin has written the best book on this. Mauboussin explains that there are some activities like hockey which involve more luck than others like basketball. Investing is actually quite similar. Mauboussin places investing closer to roulette than chess.

5. **"The persistence of individual differences is the measure by which we confirm the existence of skill."** and **"Five years is really nothing. I mean, people who go by the record of five years just don't understand statistics."** If you want to determine of an investor or firms has skill look at the persistence of outperformance. There are firms like PitchBook which make a business out of

providing this and other data to investors. Investors who have great data and who consider it objectively outperform people who are guessing. This should not be a surprise to anyone, but because people are inherently lazy (economy of effort) says Kahneman we ignore that fact and guess anyway.

6. **"Individual investors predictably flock to stocks in companies that are in the news."** Anchoring is a major dysfunctional bias. Professionals are better in overcoming a bias like anchoring than individual investors but the difference is relative since both have the problem. Kahneman points out: "People tend to assess the relative importance of issues by the ease with which they are retrieved from memory—and this is largely determined by the extent of coverage in the media."

7. **"Groups tend to be more extreme than individuals."** When diversity of thought disappears within a group of people popular opinion can feed back on itself and bubbles can be created.

8. **"Many people now say they knew a financial crisis was coming, but they didn't really. After a crisis we tell ourselves we understand why it happened and maintain the illusion that the world is understandable. In fact, we should accept the world is incomprehensible much of the time."** Josh Brown recently quoted Josh Friedman of Canyon Partners as saying: "You can protect against certain scenarios better than you can predict them. We don't make macro bets, we try to protect against macro scenarios." It is not possible to predict the future in cases in which probability is unknown or future states are unknown. This is why the concept of "margin of safety" makes so much sense.

9. **"We explain the past with the greatest of ease, and we're really crummy at forecasting the future…."** Barry Ritholtz writes and speaks eloquently about many things but this topic in specific he nails perfectly. Kahneman points out: "hindsight, the ability to explain the past, gives us the illusion that the world is understandable."

10. **"Many people will admit that they made a mistake [putting money in dot-coms or telecoms at their peak] But that doesn't mean that they've changed their mind about anything in particular. It doesn't mean that they are now able to avoid that mistake."** Someone said to be once that he was glad he went through the dotcom bubble since he would know how to get out before it "popped" the next time. He was and still is wrong. What can you do? Kahneman' ""Occasionally, when you think you might be making a mistake, slowing down and asking for advice might be a good idea."

11. **"A person who has not made peace with his losses is likely to accept gambles that would be unacceptable to him otherwise."** Regret is a highly dysfunctional emotion. Some people feel regret more than others and the more you feel regret the less well you will do an in investor. Kahneman has said: my main advice to investors is know yourself, in terms of what you could regret. Because of what you might regret, if you're regret-prone, there are certain things you just shouldn't do."

12. **People have "bounded self-control…. They have procrastination problems."** People don't save enough money given their needs for things like retirement. Researchers have actually located the part of the human brain which cases us to overvalue present moment consumption. "Let us eat and drink; for tomorrow we shall die" is an attitude that causes a lot of financial problems.

A Dozen Things I've Learned About Technology Investing

July 22, 2013

1. **"Payoffs from research are from Extremistan; they follow a power-law type of statistical distribution, with big, near-unlimited upside but, because of optionality, limited downside."** Nassim Taleb. http://www.amazon.com/Antifragile-Things-That-Gain-Disorder/dp/1400067820/ref=sr_1_1?ie=UTF8&qid=1372633921&sr=8-1&keywords=antifragile Valuing a technology company is uniquely hard. The probability of any company encountering a positive or negative Black Swan is impossible to compute since you can't assign a probability to an unknown "future state." It is simply not mathematically possible. And even if you know the potential future state sometimes probabilities are unknown. Overall risk of a tech investment can be reduced via diversification by making that purchase one of a number of similar, but unrelated opportunities in the technology sector. 2. "There's a lot of luck involved." Bill Gurley. http://gigaom.com/2012/12/11/bill-gurley/ Lots of things in life benefit from compounding and one of them is skill. For example, if you get lucky early in life you can via feedback become more skilled (i.e., early luck attracts opportunity and people who help the lucky person get more skilled). For a great analysis of the difference between luck and skill read Michael Mauboussin's book The Success Equation. http://www.amazon.com/The-Success-Equation-Untangling-Investing/dp/1422184234/ref=sr_sp-atf_title_1_1?ie=UTF8&qid=1372715835&sr=8-1&keywords=the+success+equation Since there is a lot of luck involved in technology investing having a margin of safety when making in investment is a wise idea.

3. **"The old industrial economy was driven by economies of scale; the new information economy is driven by economics of networks."** Carl Shapiro and Hal R. Varian. http://www.capatcolumbia.com/MM%20LMCM%20reports/Exploring%20Network%20Economics.pdf The potentially good news for a technology investor is that nothing is more powerful than network effects in terms of their ability to create a sustainable

competitive advantage/moat. If the technology investor gets the analysis right and makes a significant bet, the financial returns are potentially enormous. But the investor must keep in mind that the number of times a company generates a significant new network effect in any given year in a big markets you can count on your fingers. There are fundamental top-down constraints on how much revenue companies can generate.

4. **"It's all about scale economics and market share. When you're shipping a million units of Windows software a month, you can afford to spend $300 million a year improving it and still sell it at a low price."** Bill Gates. Fortune, June 14, 1993 http://25iq.com/quotations/bill-gates/ There are other ways besides network effects to generate a moat, such as supply side economies of scale, intellectual property and brand.

5. **"I've always said 25 percent margins are not a forever thing."** Bill Gates. Forbes, February 28, 1994 http://25iq.com/quotations/bill-gates/ Moats created by existing network effects or others factors are brittle even though they are strong. All moats deteriorate over time the only questions are (1) is how fast the process happens and (2) can the company generate a new moat with the cash flow.

6. **"Change is more rapid and unpredictable in technology relative to the broader economy."** Warren Buffett. http://blog.rcfunds.com/?p=106 Companies can decline as fast as they rise since the phenomena involved are often nonlinear in nature.

7. **"There are all kinds of wonderful new inventions that give you nothing as owners except the opportunity to spend a lot more money in a business that's still going to be lousy. The money still won't come to you. All of the advantages from great improvements are going to flow through to the customers."** Charlie Munger. http://ycombinator.com/munger.html Sometimes, all or almost all of the benefits of innovation end up as "consumer surplus". If the producer of an offering is to generate some producer surplus it must have a moat. That something is disruptive may not result in any direct profit since only consumer benefit. That a given company has revenue does not mean that it will generate a profit.

8. **"That willing suspension of disbelief for the moment, which constitutes poetic faith."** Samuel Taylor Coleridge. http://en.wikipedia.org/wiki/Suspension_of_disbelief There are lots of skillful promoters of technology who are wonderful story tellers. The can weave tall takes with promises of EBITDA and such and suspend the disbelief of investors. One weird aspect of these stores is that stories can be more credible the more facts that are left out by the promoter. If there are too many facts, the story becomes less believable.

9. **"'Free' is kind of an incredibly tempting human hot button. And sometimes it's great and sometimes it gets us into trouble."** Dan Ariely. http://bigthink.com/videos/when-free-is-dangerous One tricky part of today's technology world is that companies often decide to give things away as "loss leaders" as part of a freemium business model. As a result, many companies are a press release away from having what they sell offered "for free" by their competitors.

10. **"Strategy is only 5% of the [technology] business"** Bill Gurley. http://gigaom.com/2012/12/11/bill-gurley/ There are a small number of people who are fantastic at "making trains run on time" in a company. And in terms of engineering, a given company with thousands of engineers may only have a handful that are capable of

putting all the pieces together. Betting on technology companies who have such managers or engineers is wise. Business execution capability matters!

11. "**Many entrepreneurs who build great products simply don't have a good distribution strategy. Even worse is when they insist that they don't need one, or call no distribution strategy a 'viral marketing' strategy."** Andreessen Horowitz is a sucker for people who have sales and marketing figured out." http://techcrunch.com/2012/05/12/marc-andreessen-visits-peter-thiels-stanford-class-to-talk-startups-how-he-invests-the-future/ Selling stuff is really hard and people who do it well deserve to be well compensated. Engineers too often think people will line up with unmarked $100 bills if the product or service is good enough.

12. **"The notion that people who have been lucky enough to make a lot of money know something or are worth listening to is a risky proposition."** Bill Gates. Chicago Tribune, October 24, 1993 http://25iq.com/quotations/bill-gates/ Dave Chappelle arguably puts it best: "Stop worshipping celebrities so much. Just don't pay attention. There's too much googaa over celebrities. People don't know what's fake and what's real anymore." http://comedy-quotes.com/dave-chappelle/celebrity_worship.html

A Dozen Things I've Learned About Investing From Peter Lynch

July 28, 2013

1. **"Nobody can predict interest rates, the future direction of the economy, or the stock market. Dismiss all such forecasts and concentrate on what's actually happening to the companies in which you've invested."** It is far more productive for an investor to focus their time and energy on systems which are potentially understandable in a way which might reveal a mispriced asset. George Soros said once: "Unfortunately, the more complex the system, the greater the room for error." The simplest system on which an investor can focus is an individual company. Trying to understand something as complex as an economy in a way which outperforms the markets is not a wise use of time and is unlikely to happen.

2. **"The way you lose money in the stock market is to start off with an economic picture. I also spend fifteen minutes a year on where the stock market is going." and "If you spend more than 13 minutes analyzing economic and market forecasts, you've wasted 10 minutes."** The media's objective is to convince you that obsessively following the news cycle is necessary for an investor. In short, the media's interest is to to convince you to watch their advertising. While you don't want to be oblivious to the state of the economy, listening to talking head pundits and incessantly following the news cycle is actually counterproductive to profitable investing. Instead, focus on the companies you chose to follow.

3. **“The GNP six months out is just malarkey. How is the sneaker industry doing? That’s real economics.”** The difference between the predictive power of microeconomics and macroeconomics is “night and day” since with the former vastly fewer assumptions are required and the systems involved are far less complex. The best investors make investing as simple as possible, but no simpler. Lynch is saying he may pay attention to the economics of an industry, but only to understand the economics of the companies he chooses to follow.

4. **“To make money, you must find something that nobody else knows, or do something that others won’t do because they have rigid mind-sets.”** It is mathematically certain that you can’t beat the market if you *are* the market. You must find bets that are mispriced, be right about that mispricing and when you do find a mispriced bet, by definition, your view will be contrarian.

5. **“A share of a stock is not a lottery ticket. It’s part ownership of a business.”** Many people love to gamble since it gives their brain a dopamine hit. They gamble even though it is a tax on people with poor math skills. The right thing for an investor to love is the process of investing, not the bet itself. The right process for an investor is to understand the value generated by the underlying business.

6. **“Investing without research is like playing stud poker and never looking at the cards.”** You can’t understand a business and its place in an industry without doing research. And in doing research you must find something that the market does not properly discount into the price of the stock or bond. If you spend more time picking out a refrigerator than researching a stock, you should instead be buying a low fee index fund.

7. **“Owning stocks is like having children—don’t get involved with more than you can handle. The part-time stock picker probably has time to follow 8-12 companies.”** The time in any given day, week etc. is a zero sum game. If you work at a day job and you have a life, only so much time is left to follow stocks and bonds. It is better to be a mile deep in understanding 8-12 companies than an inch deep on many more.

8. **“Everyone has the brainpower to follow the stock market. If you made it through fifth-grade math, you can do it.”** Addition, subtraction, multiplication and division is all the math skill you need. Investors should ignore formulas with Greek letters in them.

9. **“People seem more comfortable investing in something about which they are entirely ignorant.”** Suspending disbelief about an investment is easier for many

people for some reason when you know less rather than more, especially if the story is well crafted and told by the promoter. When confronted with someone touting a stock, imagine them holding a megaphone at the circus and then think about what they are saying.

10. **"If you can't convince yourself 'When I'm down 25 percent, I'm a buyer' and banish forever the fatal thought 'When I'm down 25 percent, I'm a seller,' then you'll never make a decent profit in stocks."** and **"Bargains are the holy grail of the true stock picker. We see the latest correction not as a disaster, but as an opportunity to acquire more shares at low prices. This is how great fortunes are made over time."** Who doesn't like it when something like a hamburger is cheaper to buy? Stocks and bonds are no different. Also, don't put yourself in a position where you may need to sell at the wrong time.

11. **"A market player has 50 percent of his portfolio in cash at the bottom of the market. When the market moves up, he can miss most of the move."** Markets over long period of time inevitably rise. They always have and always will. That is the good news. The bad news is that you can't "time" when the rise in a market will happen. By trying to "time" the market you can miss a big move up and if you do, your returns will show it.

12. **"Only invest what you could afford to lose without that loss having any effect on your daily life in the foreseeable future."** Nothing is worse than not being able to care for people you love. Don't take that risk. And don't put yourself in a position where you are likely to panic more than usual due to the pain of something normal and inevitable (e.g., a 20% correction in the stock market). Peter Lynch said once: "Small investors tend to be pessimistic and optimistic at precisely the wrong times."

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A Dozen Things About Investing I've Learned from George Soros

July 30, 2013

1. **"Money is made by discounting the obvious and betting on the unexpected."** George Soros, like other great investors, is very focused on "expected value." Expected value is equal to the weighted-average value for the distribution of possible outcomes (the payoff for a given outcome is multiplied by the probability that this outcome will occur). A bet which is unexpected by the crowd is only wise when the expected value of the bet is positive. Yes, Soros can make huge macro

bets that others do not. No, his approach to investing is not fundamentally different from other great investors when it comes to process.

2. **"The financial markets *generally* are unpredictable. So that one has to have different scenarios."** [emphasis added] Just because markets are *often* predictable does not means that they are *always* unpredictable. If an investor is patient and waits for the rare instance when he or she successfully spots a mispriced bet, they can beat the market and generate alpha.

3. **"The hardest thing to judge is what level of risk is safe."** Risk is the possibility that you may suffer harm or loss. Three situations must be faced: (1) sometimes you know the nature of the risky event and the probability (as in a coin flip); (2) sometimes you know the nature of the event, but don't know the probability (which is uncertainty as in the price of a given stock in 20 years); and (3) sometimes you don't even know the nature of what future states might hurt you (as in a negative Black Swan). These decisions are made, says Soros, in an environment where: "there are myriads of feedback loops at work, some of which are positive, others negative. They interact with each other, producing the irregular price patterns that prevail most of the time; but on the rare occasions that bubbles develop to their full potential they tend to overshadow all other influences." The best thing you can do to be "safe" given risk, uncertainty and ignorance is to have a "margin of safety."

4. **"It's not whether you're right or wrong that's important, but how much money you make when you're right and how much you lose when you're wrong."** It is "magnitude of correctness" that matters for an investor not "frequency of correctness." This is the "Babe Ruth" effect at work (strike outs in baseball and in investing can be acceptable as long as you hit enough home runs).

5. **"There is no point in being confident and having a small position."** If the odds are substantially in your favor on a given wager, bet big. Few investor bet bigger than Soros when he thinks he is right.

6. **"I only go to work on the days that make sense to go to work. And I really do something on that day."** Staying busy trading mostly generates fees and mistakes. Being inactive can often be the very best thing an investor can do.

7. **"If investing is entertaining, if you're having fun, you're probably not making any money. Good investing is boring."** If you are getting big dopamine hits from investing you are very likely engaged in gambling and not investing. It is best to "be the house" rather than the gambling customer. The best way to "be the house" is to bet only when the odds are substantially in your favor.

8. **“Market prices are always wrong in the sense that they present a biased view of the future.”** Soros is clearly not a believer in the efficient market hypothesis. This is not surprising since if markets were always efficient he would not be rich. Soros: “[My view is] diametrically opposed to the efficient market hypothesis and rational expectations. It is built on the twin pillars of fallibility and reflexivity.”

9. **“Markets can influence the events that they anticipate.”** This sentence is one attempt to put the theory of “reflexivity” into a a few words. Unfortunately, Soros is not a gifted communicator on this very complex topic. In his opinion, markets and the views of people about markets interact dynamically in their effect on each other. Soros: “There is a two-way reflexive connection between perception and reality which can give rise to initially self-reinforcing but eventually self-defeating boom-bust processes, or bubbles. Every bubble consists of a trend and a misconception that interact in a reflexive manner.”

10. **“Equilibrium itself has rarely been observed in real life — market prices have a notorious habit of fluctuating.”** Equilibrium is a bedrock assumption of most macroeconomists and Soros is of the view that equilibrium is a delusional fantasy. Equilibrium as an assumption makes the math beautiful but it does not jibe with reality. Soros has said: “Economic thinking needs to begin addressing real-world policy questions rather than simply creating more mathematical equations.” Soros does not adopt a rational agent thesis in formulating his views. For example, “When a long-term trend loses its momentum, short-term volatility tends to rise. It is easy to see why that should be so: the trend-following crowd is disoriented.” Soros also believes: “Boom-bust processes are asymmetric in shape: a long, gradually accelerating boom is followed by a short and sharp bust.”

11. **“Economic history is a never-ending series of episodes based on falsehoods and lies, not truths.”** The ability to create a narrative explanation of the past does not mean that the explanation is correct or the basis for a thesis which can predict the future. This human dysfunction is “hindsight bias” at work. Soros said recently: “Economic theory has to be rethought from the ground up, because the prevailing paradigm of the efficient-market hypothesis, rational-choice theory, has actually run into bankruptcy very similar to the bankruptcy of the global financial system after Lehman Brothers.”

12. **“I’m only rich because I know when I’m wrong…. I basically have survived by recognizing my mistakes.”** and **“Once we realize that imperfect understanding is the human condition there is no shame in being wrong, only in failing to correct our mistakes.”** This speaks for itself.

A Dozen Things I've Learned About Investing from Howard Marks

July 30, 2013

1. **"The biggest investing errors come not from factors that are informational or analytical, but from those that are psychological."** Psychological mistakes are at the same time the biggest source of danger for an investor and the biggest source of opportunity when other people succumb to those mistakes. If you can keep your head about you when everyone else is losing theirs, you can profit in ways which beat the market. Howard Marks: "The absolute best buying opportunities come when asset holders are forced to sell."

2. **"Rule No. 1: Most things will prove to be cyclical. – Rule No. 2: Some of the greatest opportunities for gain and loss come when other people forget Rule No. 1."** Nothing good or bad goes on forever. And yet people extrapolate sometimes as if a phenomenon will go on indefinitely. "If something cannot go on forever it will eventually stop" famously said Herbert Stein. Situations in which mean reversion does not happen are rare enough as to make a mean reversion assumption a consistent friend to the investor.

3. **"We don't know what lies ahead in terms of the macro future. Few people if any know more than the consensus about what's going to happen to the economy, interest rates and market aggregates. Thus, the investor's time is better spent trying to gain a knowledge advantage regarding 'the knowable': industries, companies and securities. The more micro your focus, the great the likelihood you can learn things others don't."** Focusing on the simplest possible system (an individual company) is the greatest opportunity for an investor since a company is understandable in a way which may reveal a mispriced bet. Howard Marks puts it simply: "We don't make macro bets."

4. **"We can make excellent investment decisions on the basis of present observations, with no need to make guesses about the future."** This video has excellent material from Marks on why trying to make macroeconomic predictions is bound to fail: https://www.youtube.com/watch?v=2It1fzcBoJU If great investors like Marks, Buffett, Munger, Lynch etc. can't make macro forecasts, do you think economists can? If you do believe they can, "Where are the economists' yachts?" Howard Marks notes that anyone can be right "once in a row" especially when the range of possible outcomes is small.

5. **"There are two essential ingredients for profit in a declining market: you have to have a view on intrinsic value, and you have to hold that view strongly enough to be able to hang in and buy even as price declines suggest that you're wrong. Oh yes, there's a third; you have to be right."** Being a contrarian for its own sake is suicidal. Not being a contrarian at all means by definition you can't outperform the market. Being genuinely contrarian means you are going to be uncomfortable sometimes. Howard Marks adds: "To achieve superior investment results, your insight into value has to be superior. Thus you must learn things others don't, see things differently or do a better job of analyzing them – ideally all three."

6. **"It is our job as contrarians to catch falling knives, hopefully with care and skill. That's why the concept of intrinsic value is so important. If we hold a view of value that enables us to buy when everyone else is selling – and if our view turns out to be right – that's the route to the greatest rewards earned with the least risk."** By focusing in the mathematics associated with value investing you are in a better position to shut out psychological dysfunction. Value investing is like meditation and the intrinsic value calculation is the mantra.

7. **"The future does not exist. It's only a range of possibilities. We have to understand that most outcomes will be determined by luck."** *Every* great investor in this "Dozen Things" series of blog posts thinks in terms of expected value. There are no exceptions. Howard Marks: "The expected value from any activity is the product of the gains available from doing it right multiplied by the probability of doing it right, minus the potential cost of failing in the attempt multiplied by the probability of failing."

8. **"Leverage magnifies outcomes, but doesn't add value."** Leverage magnifies results whether good or bad. "Volatility + leverage = dynamite." It is wise to always have a Margin of Safety.

9. **"You can't predict. You can prepare."** Some aspects of life have an unknown probability distribution and some potential future states are unknown. One can deal with this by being anti-fragile and having a margins of safety. Will doubling your money make you twice as happy? Would you really like to take the change that you might need to "return to go" and start over?

10. **"In both economic forecasting and investment management, it's worth noting that there's usually someone who gets it exactly right… but it's rarely the same person twice. The most successful investors get things 'about right' most of the time, and that's much better than the rest."** The poseur in the magazine or on the deck of a big yacht is often lucky rather than good. Don't confuse luck with skill and work as if you need to be skillful rather than lucky. In reviewing Mauboussin's book "The Success Equation Marks wrote: "in fields where luck plays a big part, like investing, outcomes are of limited relevance in assessing performance."

11. **"The great investors are the people who have made a lot of investments over a long period of time and made a lot of money, and their results show that it wasn't a fluke — that they did it consistently."** Persistent success is strong evidence of skill rather than luck generating a given set of results.

12. **"I keep going back to what Charlie Munger said to me, which is none of this is easy, and anybody who thinks it is easy is stupid. It is just not easy. There are many layers to this, and you just have to think well."** If you are not willing to do the work or feel like you have the wrong emotional temperament, buy low fee index funds. Dumb money becomes smart once it accepts its limitations.

Dozen Things I've Learned About Strategy, Business and Investing From Michael Porter

August 26, 2013

1. **"In many companies strategy is built around the value proposition, which is the demand side of the equation. But …it's [also] about the supply side.**" In his classic "Five Minute University" routine on Saturday Night Live the comedian "Father Guido Sarducci" pointed out: "Economics? Supply and Demand. That's it.'" What Michael Porter did after graduating from Harvard Business School was to go across the Charles River and get an Economics PhD. Porter came back to the Harvard Business School to teach as a professor yelling: "Hey people, *supply* matters too when it comes to generating a profit." It's that simple. If you have too much supply, then price drops to a point where there is no long term industry profit above the company's cost of capital. That Michael Porter's most important insight was to teach business school academics that demand *and supply* matters in determining profit is shocking, but there it is. Sometimes you will hear a knucklehead saying moats don't matter since all that matters is delivering customer value in innovative/disruptive ways. This ignores that fact that moats are about dealing with **competitors** – delivering value to **customers** is a different issue. Companies with strong moats are in a position to deliver more to **customers** if they desire. The idea that the supply of alternatives to what you sell does not matter in a business is insanity.

2. **"If there are no barriers to entry… you won't be very profitable."** If there is no impediment to new supply of what you sell competition among suppliers will cause price to drop to a point where there is no long term industry profit greater than the cost of capital. Michael Porter calls a company's barriers to entry a "sustainable competitive advantage." Warren Buffett calls it a "moat." The two terms are essentially identical. The principle is so simple and yet so many people think only about customers and not competitors as well. Yes, innovate and deliver exceptional value for customers. No, that is not necessarily enough for sustainable profitability.

3. **"It's incredibly arrogant for a company to believe that it can deliver the same sort of product that its rivals do and actually do better for very long."** If you deliver the same product or service as your competitor you by definition don't have a moat. Competition will in that case be based on price and price-based competition inevitably degrades to a point where profit disappears. Porter

teaches: "if customers have all the power, and if rivalry is based on price… you won't be very profitable." He adds: "Produc[ing] the highest-quality products at the lowest cost or consolidate[ing] their industry [is] trying to improve on best practices. That's not a strategy."

4. **"Competition for profits goes beyond established industry rivals to include four other competitive forces as well: customers, suppliers, potential entrants, and substitute products."** What you pay for inputs into what you make as a product or service determines whether you will have a profit. If the supplier has *wholesale transfer pricing power* that company can take your profit in a process sometimes referred to as "supplier hold up." Having a single supplier of any essential element of your business offering is a very bad idea. Leave it to an ordinary business person in the food business to describe the problem simply: "There's no rent control on restaurant rent, so even if we did start to be successful, the landlord could jack up our rent. A lot of restaurants get taken advantage of by landlords this way." Similarly if you have only one buyer of what you make, you have also a huge wholesale transfer pricing problem.

5. **"Change is faster now than it was 10 or 15 years ago. Does that mean you shouldn't have a direction? Well, probably not."** Yes, moats are harder to create and maintain than they ever were. Change is accelerating and more and more of the world is part of Nassim Taleb's Extremistan. No, that does not mean that strategy, supplier hold up, etc. do not matter. That it is harder to generate or maintain a moat does not mean that is any less important.

6. **"Strategy is about making choices, trade-offs; it's about deliberately choosing to be different…. "The essence of strategy is choosing what not to do."** One of the hardest things for many people in business is to not do something. One common example is the restaurant with a nearly endless menu. They often serve everything poorly and unprofitably.

7. **"Operational effectiveness is about things that you really shouldn't have to make choices on; it's about what's good for everybody and about what every business should be doing."** That operational effectiveness is not strategy does not mean that operational effectiveness is any less important. It's just a different activity.

8. **"You don't have to have all the answers up front. Most successful companies get two or three or four of the pieces right at the start, and then they elucidate their strategy over time."** Startups may going to need some time to sort out their strategy. That's perfectly fine and in fact to be expected for a firm that is seeking the massive returns that can come from optionality. Larger more

established firms must not only try to profit from optionality but preserve revenue streams that already exist.

9. **"Strategy can be seen as a set of relationship to profitability. Profitability is revenue minus costs."** People who believe they can "exclude items" in calculating profit sometimes fool themselves when their original intent was just to fool others.

10. **"Successful companies do not skate to where the puck will be—they define it."** Speaks for itself and besides I am over my self-imposed limit of 999 words.

11. **"Continuity of strategic direction and continuous improvement in how you do things are absolutely consistent with each other. In fact, they're mutually reinforcing."** Speaks for itself.

12. **"If people in the organization don't understand how a company is supposed to be different, how it creates value compared to its rivals, then how can they possibly make all of the myriad choices they have to make?"** Speaks for itself.

A Dozen Things I've Learned About Investing from John Maynard Keynes

August 27, 2013

1. "As time goes on, I get more and more convinced that the right method in investment is to put fairly large sums into enterprises which one thinks one knows something about and in the management of which one thoroughly believes." Keynes started investing on behalf of King's College in 1924 and because he believed he knew a lot about **macro**economics, he made a lot of macroeconomic-based bets. During this period, which lasted to the early 1930s, Keynes' performance as an investor was dismal. It was only when he was delivered a large dose of reality/humility as an investor that Keynes set himself on a course which focused on the **micro**economics of individual companies. Records of Kings College show that as soon as he focused on systems that were understandable and less complex (individual companies and their markets) Keynes found success as an investor.

2. "It is a mistake to think that one limits one's risk by spreading too much between enterprises about which one knows little and has no reason for special confidence." Keynes understood that generating alpha requires investors to

concentrate their bets or run the risk of being a "closet indexer." **See:** http://25iq.com/2013/01/16/charlie-munger-on-investment-concentration-versus-diversification/

3. One's knowledge and experience are definitely limited and there are seldom more than two or three enterprises at any given time in which I personally feel myself entitled to put full confidence." Keynes is talking about what Warren Buffett calls an investor's "circle of competence. Investing is hard work and there are only so many hours in the day to follow companies in a meaningful way.

4. **"[Investing] is the one sphere of life and activity where victory, security and success is always to the minority and never to the majority. When you find any one agreeing with you, change your mind. When I can persuade the Board of my Insurance Company to buy a share, that, I am learning from experience, is the right moment for selling it."** It is not possible to outperform the market if you **are** the market. You must occasionally have a contrarian view **and** be right about that view to generate a return which exceeds the market (alpha).

5. **"Speculators may do no harm as bubbles on a steady stream of enterprise. But the position is serious when enterprise becomes a bubble on a whirlpool of speculation. When the capital development of a country becomes a by-product of the activities of a casino, the job is likely to be ill done."** Keynes is creating a distinction here between investing and speculation. It was as an investor and not a speculator that Keynes found success.

6. "[Investing is] intolerably boring and over-exacting to anyone who is entirely exempt from the gambling instinct; whilst he who has it must pay to this propensity the appropriate toll." If you treat investing as gambling you will almost certainly lose in the long run since the house is extracting a significant rake of the action. People too easily confuse luck with skill if someone does outperform the market. Portraying luck as skill is a special competence of people who market products for Wall Street.

7. "Professional investment may be likened to those newspaper competitions in which the competitors have to pick out the six prettiest faces from a hundred photographs, the prize being awarded to the competitor whose choice most nearly corresponds to the average preferences of the competitors as a whole, not those faces which he himself finds prettiest, but those which he thinks likeliest to match the fancy of the other competitors, all of whom are looking at the problem from the same point of view. We have reached the third degree where we devote our intelligences to anticipating what average opinion expects the average opinion to be. And there are some, I believe, who practice the

fourth, fifth and higher degrees." This is a "Keynesian Beauty contest" and is best avoided altogether. By guessing what others are guessing what others are guessing [repeat] you will not beat the market.

8. **"We have not proved able to take much advantage of a general systematic movement out of and into ordinary shares as a whole at different phases of the trade cycle Credit cycling means in practice selling market leaders on a falling market and buying them on a rising one and, allowing for expenses and loss of interest, it needs phenomenal skill to make much out of it."** Keynes tried to be a "market timer" based on his macroeconomic knowledge and failed. He learned the hard way that macroeconomists are not able to make predictions in a way that beats the market.

9. "I feel no shame at being found still owning a share when the bottom of the market comes…I would go much further than that. I should say that it is from time to time the duty of a serious investor to accept the depreciation of his holdings with equanimity and without reproaching himself. … An investor…should be aiming primarily at long-period results, and should be solely judged by these." Self-explanatory (brevity is important since I am close to exceeding 999 words on this post).

10. "The danger of Board management [is to] have to suffer the penalty of their faint-heartedness at a later date, just when the virtues of continuity of mind are most required if one is to be successful in the long run." A wise investment manager will outperform a committee.

11. "When the facts change, I change my mind. What do you do sir?" Charlie Munger said once that if he does not succeed in changing his view on something significant during a year, he considers that to be a failure. Keynes seemed to agree.

12. "It is better to be roughly right than precisely wrong." Those people who profess to have formulas which can predict the direction of markets, stocks or bonds often impress the uninformed with fancy mathematics (look Greek letters!) based on fake assumptions (garbage into a formula means garbage out).

A Dozen Things I have Learned from Barry Ritholtz about Investing

September 3, 2013

As part of my "A Dozen Things I've Learned" series of blog posts I thought I would take on a list put together by Barry Ritholtz . My self-assigned task is to add my support to what Barry wrote http://www.ritholtz.com/blog/2012/10/ritholtzs-rules-of-investing/, while staying with my usual 999 word limit for any given blog post. The task I assigned to myself is to **elaborate** on what he has written (rather than just repeating what Barry wrote) since the best support for the investing maxims themselves comes from Barry himself. Given Barry's towering intellect, this is a scary exercise.

1. **"Cut your losers short and let your winners run."** Loss aversion is highly dysfunctional for investors since it causes people to hold on to "losers" for too long to avoid the pain of a loss. The first half of Barry's first maxim pushes against that aspect of loss aversion. Cutting losses short pushed against a tendency to hold tightly to losers hoping that they recover before then need to acknowledge the loss. The second half of Barry's first maxim helps lower transactions costs, fees and taxes, but is also about the value of opportunity cost analysis. Charlie Munger once put it this way: "There is this company in an emerging market that was presented to Warren. His response was, 'I don't feel more comfortable buying that than I do of adding to Wells Fargo.' He was using that as his opportunity cost. No one can tell me why I shouldn't buy more Wells Fargo."

2. **"Avoid predictions and forecast**s." The less complex the system you are trying to understand, the greater the likelihood you can make a bet which is both non-consensus **and** correct. Making a bet which follows the consensus and it correct will only deliver beta. The most complex system of all is the macro economy since it is composed of a nest of complex adaptive systems rife with both uncertainty (probabilities unknown) and ignorance (probabilities not computable). On a relative basis, the most tractable system on which one can make an investment and **try** to generate alpha is an individual company. Very few people can make non- consensus bets which are also correct at a company level, but its is at least possibl;e if you are smart and work hard. 90%+ of people are better off buying a low fee index even when it comes to making bets on individual companies. The greatest for investors often comes from the fact that 70% of people think they fall withion the 10% who can generate alpha. When it comes to self-appraisals humans are too often vastly over generous.

3. **"Understand crowd behavior."** Humans often herd. People like what others like (path dependence) and especially in the presence of uncertainty or a requirement that they actually do some work, will follow other people. Most notably when diversity of opinion breaks down, crowds are often *not* wise. Buying when others are fearful and selling when others are greedy. is wise.

4. **"Think like a contrarian (occasionally)."** As I noted in my post about Howard Marks, http://25iq.com/2013/07/30/a-dozen-things-ive-learned-about-investing-from-howard-marks/ you must both adopt a view that is contrarian *and* be right to outperform the market. Being a contrarian for its own sake is a ticket to losses since the crowd is often right.

5 . **"Asset allocation is crucial."** The amount you allocate to each investing category is a more important decision than the individual assets you pick within that category. My thoughts on asset allocation for muppets are here: http://25iq.com/2013/05/13/asset-allocation-for-muppets-with-a-401k/ Giving advice to "know something investors" is something I have not yet tackled since they are know-something investors already (seems like bringing coals to Newcastle).

6. **"Decide if you are an active or passive investor."** My thoughts on active vs. passive are here: http://25iq.com/2013/01/16/charlie-munger-on-investment-concentration-versus-diversification/ As Dirty Harry said to the cornered criminal in the movie Magnum Force: "A man's got to know his limitations." "I feel lucky" is not the way a genuine investor conducts his or her affairs.

7. **"Understand your own psychological make up."** As Feynman famously said, the easiest person to fool is yourself. Genuine self-knowledge is hard-won knowledge since no one has perspective on yourself by definition. On this topic it is wise to read Charlie Munger http://25iq.com/charlie-munger-book-to-date-chapters-1-5/

8. "**Admit when you are wrong."** Heuristics like "public commitment consistency" bias cause us to hold on to positions long after a reasonable analysis by a neutral observer would have concluded that we were wrong. For example, once you say publicly "X is going up" it gives your brain a shot of *stupid juice* when it comes to concluding that you might be wrong.

9. **"Understand the cycles of the financial world."** Barry seems in agreement with Howard Marks http://25iq.com/2013/07/30/a-dozen-things-ive-learned-about-investing-from-howard-marks/ on this point. Nothing good or bad goes on forever. As Billy Preston sings in the well-known song things "go round in circles." Mr. Market is bipolar and for that reason market swings will always happen. By focusing on the intrinsic value of individual investments And tuning out the talking heads blathering about their macroeconomic forecasts, market swings can become your friend. The irony is: the more you focus on what is micro in nature, the more you will benefit from macro trends.

10. **"Be intellectually curious."** It is in "the micro and the obscure" where one can learn things which others do not know. To make a bet that is contrary to the consensus of the crowd you must possess knowledge that the consensus has not adopted. You will mostly likely find that non-consensus knowledge on the frontiers of your own knowledge. Really great investors read constantly and actively seek out alternative viewpoints. Shutting out views you disagree with is a step toward an echo chamber.

11. **"Reduce investing friction**." John Bogle formed Vanguard on the basis of the "cost matters hypothesis" not the efficient market hypothesis. On that you might want to read http://www.vanguard.com/bogle_site/sp2004AIMRefficientMrkts.html. Paying high fees, costs and commissions is one of the simplest investing errors to correct.

12. **"There is no free lunch."** There is no substitute for hard work and rational decision making.

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A Dozen Lessons for Entrepreneurs

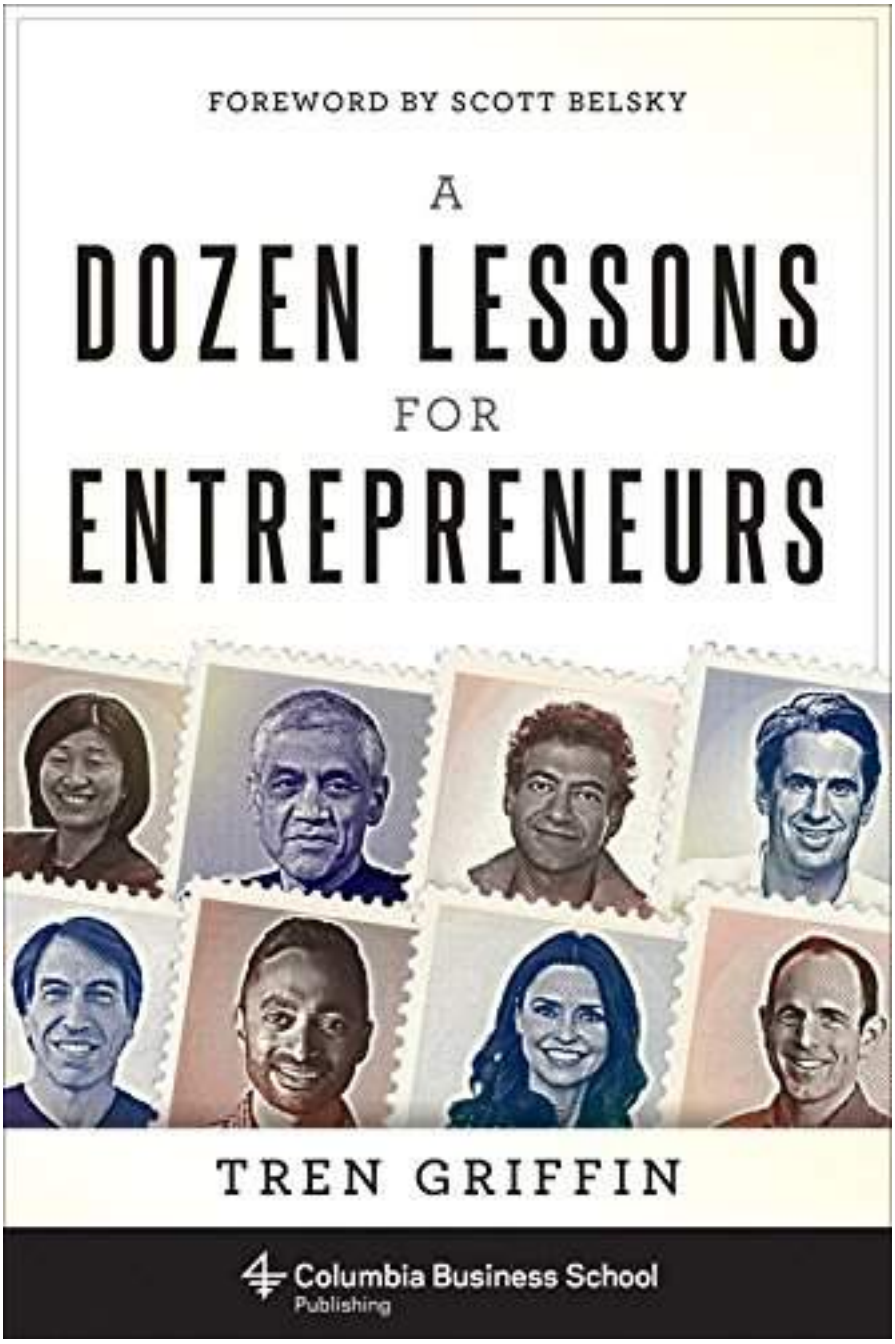

The 25IQ blog posts below have been rewritten and are now part of a new book that will benefit the author's chosen charity: No Kid Hungry. The author will be directing his share of the profits from both hardcover and Kindle sales to this charity.

Hardcover Edition Kindle Edition

1. Steve Blank (*"Customer Development"* methodology)
2. Bill Campbell ("The Coach")
3. Eric Ries (Lean Startup)
4. Sam Altman (Y Combinator)
5. Steve Anderson (Baseline Ventures)

6. Marc Andreessen (Andreessen Horowitz)
7. Rich Barton (Expedia, Zillow, Glassdoor)
8. Roelof Botha (Sequoia Capital)
9. Jim Breyer (Breyer Capital)
10. Chris Dixon (Andreessen Horowitz)
11. John Doerr (Kleiner Perkins Caufield & Byers)
12. Peter Fenton (Benchmark Capital)
13. Jim Goetz (Sequoia Capital)
14. Paul Graham (Y Combinator)
15. Bill Gurley (Benchmark Capital)
16. Reid Hoffman (Greylock Partners)
17. Ben Horowitz (Andreessen Horowitz)
18. Vinod Khosla (Khosla Ventures)
19. Josh Kopelman (First Round)
20. Jenny Lee (GGV Capital)
21. Dan Levitan (Maveron)
22. Doug Leone (Sequoia Capital)
23. Jessica Livingston (Y Combinator)
24. Mary Meeker (Kleiner Perkins Caufield & Byers)
25. Mike Moritz (Sequoia Capital)
26. Chamath Palihapitiya (Social Capital)
27. Keith Rabois (Khosla Ventures)
28. Andy Rachleff (Benchmark Capital)
29. Naval Ravikant (AngelList)
30. Heidi Roizen (Draper Fisher Jurvetson)
31. Mark Suster (Upfront Ventures)
32. Peter Thiel (Founders Fund)
33. Fred Wilson (Union Square Ventures)
34. Ann Winblad (Hummer Winblad Venture Partners)

– More on *A Dozen Lessons for Entrepreneurs* –

A Dozen Lessons for Entrepreneurs shows how the insights of leading venture capitalists can teach readers to create a unique approach to building a successful business. Through profiles and interviews of figures such as Bill Gurley of Benchmark Capital, Marc Andreesen and Ben Horowitz of Andreesen Horowitz, and Jenny Lee of GGV Capital, Tren Griffin draws out the fundamental lessons from their ideas and experiences. Entrepreneurs should learn from past successes but also be prepared to break new ground. While there are best practices, there is no single recipe they should follow. By better understanding the views and experiences of a wide range of successful venture capitalists and entrepreneurs, readers can discern which of many possible paths will lead to success.

With insight and verve, Griffin argues that innovation and best practices are discovered by the experimentation of entrepreneurs as they establish the evolutionary fitness of their business. The products and services created through this experimentation that have greater fitness survive, and less-fit products and services die. Entrepreneurs have always experimented when

creating or altering a business. What is different today is the existence of modern tools and systems that allow experiments to be conducted more cheaply and rapidly than ever before. Griffin shows that listening to what the best venture capitalists have to say is invaluable for entrepreneurs. Their experiences, if studied carefully, teach bedrock methods and guiding principles for approaching business.

A Dozen Things I Learned from John Templeton about Investing

September 11, 2013

1. **"I never ask if the market is going to go up or down, because I don't know, and besides it doesn't matter. I search nation after nation for stocks, asking: Where is the one that is lowest priced in relation to what I believe its worth?"** Like every other great investor in this series of blog posts John did do not make bets based on macroeconomic predictions. What some talking head may say about markets as a whole going up or down was simply not relevant in his investing. John focused on companies and not macro markets. He was a staunch value investor who once said: "The best book ever written [was Security Analysis by Benjamin Graham].

2. **"If you want to have a better performance than the crowd, you must do things differently from the crowd. I've found my results for investment clients were far better here [in the Bahamas] than when I had my office in 30 Rockefeller Plaza. When you're in Manhattan, it's much more difficult to go opposite the crowd."** The mathematics of investing dictate that investing with the crowd means you will earn zero alpha, because the crowd is the market. You must sometimes be willing to take a position that is different from the crowd **and** be right about that position, to earn alpha. John put it this way: "If you buy the same securities everyone else is buying, you will have the same results as everyone else."

3. **"The time of maximum pessimism is the best time to buy, and the time of maximum optimism is the best time to sell. Bull markets are born on pessimism, grown on skepticism, mature on optimism and die on euphoria. People are always asking me: where is the outlook good, but that's the wrong question…. The right question is: Where is the outlook the most miserable? For those properly prepared in advance, a bear market in stocks is not a calamity but an opportunity."** To be able to sell when people are most pessimistic requires courage. Being courageous is easier if you are making bets with "house money." Making bets with the rent money is always unwise. Templeton believed problems create opportunity. For example, it was on

the day that Germany invaded Poland that he saw one of his best buying opportunities since prices were so low and values so high. Simply telling his broker that day to buy every stock selling under $1 yielded a 4X return for John.

4. **"Sell when you find a much better bargain to replace what you are selling. The time to buy a stock is when the short-term owners have finished selling and the time to sell a stock is often when short-term owners have finished their buying."** This to me is about doing an opportunity cost analysis. He once put it this way in three words: "Buy cheap stocks." John was also a big believer in investing globally: "If you search worldwide, you will find more bargains—and possibly better bargains—than in any single nation."

5. **"Focus on value because most investors focus on outlooks and trends. You must be a fundamentalist to be really successful in the market."** When you focus on value, you are dealing with the simplest systems possible and that makes alpha achievable. In his book The Signal & the Noise Nate Silver wrote: "The more complex you make the model the worse the forecast gets." In addition, the more complex the system(s) involved the more worthless the forecast gets.

6. **"Experience teaches us that one of the most common errors in selecting stocks for purchase, or for sale, is the tendency to emphasize only the most obvious factor; namely the temporary outlook for sales and profits of the company."** Markets fluctuate for many reasons that are not rational. They "just do that sometimes "in the short run. By investing for the long term you harness mean reversion, which is powerful force to have on your side.

7. **"The four most dangerous words in investing are: 'this time it's different.'"** As the market approaches a bubble you inevitably hear that something that has been true is not true anymore. The appearance of this phrase in the mouths of promoters is a sign that Mr. Market is euphoric.

8. **"In my 45-year career as an investment counselor, humility did show me the need for worldwide diversification to reduce risk. That career did help me to become more and more humble because statistics showed that when I advised a client to buy one stock to replace another, about one-third of the time the client would have done better to ignore my advice. The only investors who shouldn't diversify are those who are right 100 percent of the time."**

9. **"Successful investing is only common sense. Each system for investing will eventually become obsolete."** There is academic work which shows that any system which may deliver alpha gets eaten by competition as time passes.

10. **"An investor who has all the answers doesn't even understand the questions. …success is a process of continually seeking answers to new questions."** Humility is a theme in accounts of Templeton. "A cocksure approach to investing will lead, probably sooner than later, to disappointment if not outright disaster."

11. **Keep in mind the wise words of Lucien Hooper, a Wall Street legend: "What always impresses me," he wrote, "is how much better the relaxed, long-term owners of stock do with their portfolios than the traders do with their switching of inventory. The relaxed investor is usually better informed and more understanding of essential values; he is more patient and less emotional; he pays smaller capital gains taxes; he does not incur unnecessary brokerage commissions; and he avoids behaving like Cassius by 'thinking too much.'"** Self-explanatory and I'm at my 999 word limit.

12. "**I can sum up my message by reminding you of Will Rogers' famous advice. 'Don't gamble,' he said. 'Buy some good stock. Hold it till it goes up… and then sell it. If it doesn't go up, don't buy it!'"**

A Dozen Sentences Explaining what I've Learned from Warren Buffett about Investing

September 15, 2013

The task I gave myself in this blog post was to distill Warren Buffett's investing wisdom into my "Dozen Things" format but do so in only twelve sentences (instead of the usual 999 word limit). I tried to make each sentence build on the previous sentence(s). One could write a book about how Warren Buffett (there are many), but reducing it to an essential core is also valuable. I wrote this list from memory without looking at source material to make it more authentic (yes, I liberally borrow from his word choices as I do when speaking).

1. Mr. Market is valuable for his pocketbook, not his wisdom.

2. Macroeconomic forecasts are as useful to investors as the comic section of a newspaper.

3. A share of stock is partial ownership in a business.

4. The best way to profit from the inevitable cycle of Mr. Market from fear to greed is to focus on the intrinsic value of a given company (trying to "time" crowd behavior based on macroeconomic data is a sucker's game).

5. People who have actually been involved in a real business (especially as an entrepreneur) are better equipped to determine the intrinsic value of the partial stake in another business that a share of stock represents.

6. Risk is the possibility of risk or injury and is not a computable number (for example, a number purportedly representing risk calculated based in volatility is rubbish).

7. Buying investments at a discount gives you a "margin of safety" helpful when you inevitably make mistakes.

8. You are less likely to make mistakes if you act in areas in which you are competent.

9. Unless a company has barriers to entry (a "moat"), supply created by competitors will rise to a point where lower prices will eliminate economic profit.

10. Wall Street and other promoters will sell investors anything they will buy (quality control is not a factor).

11. Excitement and expenses are the enemy of the investor.

12. Buy low fee index funds, unless you are willing to work hard/read constantly and are rational rather than emotional.

A Dozen Things I've Learned from James Montier about Investing

September 22, 2013

1. "We need to stop pretending that we can divine the future, and instead concentrate on understanding the present, and preparing for the unknown." Montier makes the same point as others have repeatedly made in this series of blog posts: "Frankly the three blind mice have more credibility than any macroforecaster at seeing what is coming." In addition to bets where possible future states are known and probabilities are known, there are bets which involve known states and unknown probabilities as well as bets which can be impacted by unknown future states where probabilities can't be computed. Anyone who does not prepare for the unknown by recognizing it is unknown, is unwise. Montier adds: "To admit ignorance is actually liberating in the extreme. It frees you from all the needless fretting over the things you can't control. Once you have said you don't know, you can think about how you deal with this ignorance."It should not be a surprise then that people like him are focused on making investments which do not require macro forecasting. Why not put capital to work in situations where the system which must be understood to make a profitable investment is orders of magnitude simpler? Why put capital at risk based on forecasts regarding the macro economy? Why not focus on understanding the intrinsic value of individual companies?

2. "Why do we persist in using forecasts in the investment process? The answer probably lies in behavior known as anchoring. That is in the face of uncertainty we will cling to any irrelevant number as support. So it is little wonder that investors cling to forecasts, despite their uselessness." Montier is an expert on behavioral economics and knows that people will seek out and try to make bets based on forecasts despite the dismal track record of forecasters. He recognizes that fighting overconfidence is a constant battle for

even the intelligent investor since being aware of a dysfunctional bias is not enough to keep you from falling prey to it. Nobel Prize winner Daniel Khaneman has written that despite devoting his life to behavioral economics he still suffers fallout from the same behavioral biases as everyone else.

3. "There is a simple, although not easy alternative [to forecasting]… Buy when an asset is cheap, and sell when an asset gets expensive…. Valuation is the primary determinant of long-term returns, and the closest thing we have to a law of gravity in finance." One irony of value investing is that by focusing on the present moment and the intrinsic value of an individual stock, you best prepare yourself for the future which is impacted by macro phenomenon. Montier suggests blocking out the "noise peddlers" ranting about macro factors and instead focusing on intrinsic value.

3. "Process is the one aspect of investing that we can control. Yet all too often we focus on outcomes rather than process. Yet ironically, the best way of getting good outcomes is to follow a sound process." Good outcomes are not necessarily the result of good processes. Similarly, bad outcomes do not necessarily result from a bad process. In probabilistic activities like investing, process will dominate outcomes over the long term, so the best approach is to focus on process not outcome.

5. "Always insist on a margin of safety." The best hedge against mistakes and bad luck is to have a margin of safety. My thoughts on margin of safety are here: http://25iq.com/2013/01/02/charlie-munger-on-margin-of-safety-the-fourth-essential-filter/

6. "This time is never different." If someone says to you that the rules (particularly in a financial context) have changed and that X is no longer important, hold tightly on to your wallet and extricate yourself from the situation. To not study history is to invite misfortune to haunt what you do.

7. "Be patient and wait for the fat pitch." Montier has quoted Winnie the Pooh on this point: "Never underestimate the value of doing nothing." The "fat pitch" is a bet which presents a small downside and a big upside with the odds being substantially in your favor. When you encounter such a bet, bet big. It's that simple. The number of times you will encounter a fat pitch is small so you will need to be patent, spending most of your time doing nothing. Too many investors suffer from "action bias" says Montier.

8. "Be contrarian." To achieve results which are better than the market you must by definition make a bet occasionally that is contrary to the view of the crowd, and you must be right about that bet. This must be true since the crowd is the market. This is not easy since "humans are prone to herd." To be "greedy when others are fearful and fearful when others are greedy" means being occasionally contrarian, which is not a natural state for most people.

9. "Risk is the permanent loss of capital, never a number." You can't quantify the unquantifiable For example, the Value-at-Risk concept says Montier "cuts off the very part of the probability distribution (the extremes) that you most need to worry about." He adds: "Regulators adopting Value-at-Risk is a little bit like asking children to mark their own homework."

10. "Be leery of leverage." As Charlie Munger has said: "I've seen more people fail because of liquor and leverage – leverage being borrowed money." Montier adds: "Leverage can't

ever turn a bad investment good, but it can turn a good investment bad. When you are leveraged you can run into volatility that impairs your ability to stay in an investment which can result in "a permanent loss of capital."

11. "Never invest in something you don't understand." My views on circle of competence are here: **http://25iq.com/2012/12/22/charlie-munger-on-circle-of-competence-the-second-essential-filter/** Montier adds: "If something is too good to be true, it probably is." Both the complexity and non-transparency of any investment are not an investor's friend.

12. "One of the most useful things I've learned over the years is to remember that if you don't know what is going to happen, don't structure your portfolio as though you do!"

A Dozen Things I've Learned from John Bogle About Investing

September 28, 2013

1. "In many areas of the market, there will be a loser for every winner so, on average, investors will get the return of that market less fees." The mathematics of what he describes is inescapable. Costs and expenses are a huge drag on investing performance.

2. "The Prussian General Clausewitz has said, 'The greatest enemy of a good plan is the dream of a perfect plan.' And I believe that an index strategy is a good strategy." For what Warren Buffet calls the "know-nothing investor" the good plan ironically is better than the theoretically perfect plan.

3. "The case for indexing isn't based on the efficient market hypothesis. It's based on the simple arithmetic of the cost matters hypothesis." Too many people use Vanguard's success as support for the EMH, when it isn't. Your inability to beat Mr. Market does not mean that he is efficient. You are just lousy at predicting his irrational short term wiggles. That I can't predict the behavior of a crazy high school friend has nothing to do with efficiency but rather unpredictable behavior. Mr. Market is both a benchmark and your competition. You need to beat him after fees and costs. Few can beat him and so most should be him.

4. "We all think we're above average investors just like we all think we're above average dressers, I suppose, above average intelligence. Probably we all think we're above average lovers for all I know" and "intelligent investors …won't be foolish enough to think that they can consistently outsmart the market." One dysfunctional human bias is overconfidence which is a huge problem for people

when they invest. Most people think they are one of the few people who can beat the market, which is one why active management will never disappear.

5. "The investor is often his own worst enemy. … The marketing colossus known as the mutual fund industry provides the weaponry which enables investors' to indulge their suicidal instincts… The principal role of the mutual fund is to serve its investors." Financial intermediaries want you to trade since trading generates fees. When a broker calls suggesting that you trade he is like a barber suggesting that you get a haircut. You will get a haircut but it will most likely be a financial one which is unpleasant. Making it too easy to trade and providing you with information that might cause you to trade are all too common. Often the best thing you can do is nothing.

6. "…maximum tax efficiency, low turnover, and low turnover cost, and no sales loads." That people willingly pay sales loads of 5% when they buy an investment boggles the mind. That people think they can engage in frenetic trading and outperform the markets is less surprising but no less a problem as is tax inefficiency.

7. "Mutual funds are not mutual in that they're controlled by an investment advisor, or manager, or promoter, or marketer who's in business to earn money on his capital with the exception of Vanguard, everybody else is in business to serve the manager." Vanguard is unique in that there are no shareholders since it is a non-profit. That difference aligns the interests of investors and the fund.

8. "Asset allocation is critically important." The categories of assets bought by investor gets too little attention from the average investor despite the fact that this decision is the biggest driver of returns. Bogle has said that "A good place to start is a bond percentage that equals your age. Although I don't slavishly adhere to that rule…"

9. "If you have trouble imaging a 20% loss in the stock market, you shouldn't be in stocks." and **"The index guarantees your fair share of whatever returns the stock market bestows on us, but it also guarantees your fair share of whatever losses the stock market is mean spirited enough to inflict on us."** Stocks will periodically suffer a substantial drop in value. If you do not have the stomach to endure that drop you will inevitably sell at the bottom and so Bogle is telling anyone with this level of fear to stay out of stocks. "Time is your friend; impulse is your enemy" believes Bogle and if you get fearful in the event of a big drop in the stock market you will sell at the worst possible time. Investing in index funds will not prevent you from falling into this trap.

10. "A 401(k) is a thrift plan trying to be a retirement plan. It was never designed to be a retirement plan. To be a retirement plan, you have to keep putting money in and can't be allowed to take money out, and you can't be allowed to borrow from it." To have a happy retirement you must save. A lot. A savings rate of 10- to 20% of income is not too high and the later in life you get the more you need to save. People are living longer and longer after they retire and sometimes retirement arrive suddenly before people expect.

11. "What can one say about a theory that works most of the time? Not a good idea to rely on it." Bogle's thought is consistent with the ideas of people like James Montier and Nassim Taleb. Picking up pennies in front of a steamroller is unwise. Sadly, intermediaries who do this for others in return for a fee can look surprisingly talented, like the turkey who looks good a few months before Thanksgiving.

12. "The goal of the advisor shouldn't be to beat the market by picking stocks or winning funds. Advisors add value by providing the discipline required for successful investing. They add value in areas like tax efficiency, risk management, estate planning and retirement planning." There are lots of ways a financial advisor can help you that do not involve stock picking, including setting savings goals, reducing taxes, estate planning and buying the right level of insurance. They can also help you avoid getting fearful when others are fearful and greedy when others are greedy.

A Dozen Things I've Learned from Benjamin Graham about Investing

September 29, 2013

1. "The last time I made any market predictions was in the year 1914, when my firm judged me qualified to write their daily market letter based on the fact that I had one month's experience. Since then I have given up making predictions." You will not outperform the market in making macroeconomic forecasts. This series of blog posts makes that same point over and over. The record of the great investors in this series demonstrates that there is a way to outperform the market without doing **any** macro forecasting.

2. **"Abnormally good or abnormally bad conditions do not last forever."** The market will be cyclical even though you can't beat the market with macro forecasts. While it is in those swings that opportunity is created, it is by ignoring the temptation to make macro forecast that these great investors find success. Yes, markets will swing up and down. No, you do not need to forecast those swings to be a successful investor.

3. "The disciplined, rational investor … searches for stocks selling a price below their intrinsic value and waits for the market to recognize and correct its errors. It invariably does and share price climbs. When the price has risen to the actual value of the company, it is time to take profits, which then are reinvested in a new undervalued security." When you focus on intrinsic value you need not time how and when the market inevitably swings. By focusing on the micro (e.g., the value of individual company or bond), the macro takes care of itself. By understanding the simple system you need not understand the complex adaptive systems in which it sits.

4. "The function of the margin of safety is, in essence, that of rendering unnecessary an accurate estimate of the future." Everyone makes errors and mistakes and so having insurance against those mistakes is wise. With a margin of safety you can be somewhat wrong and still make a profit. And when you are right you will make even more profit than you thought. Finding a margin of safety is not a common event so you must be patient. The temptation to "do something" while you wait is to hard for most people to resist. The best investors are those who have a temperament which is calm and rational. Excitement and expenses are the investor's enemy.

5. "Market quotations are there for [your] convenience, either to be take advantage of or to be ignored." This is consistent with Buffett's point that one should value the market for its pocketbook not its wisdom. That the bipolar Mr. Market can offer you liquid is wonderful. That the market is somehow wise at any given point is a bad bet since that happens relatively rarely as it swings back and forth.

6. "The speculator's primary interest lies in anticipating and profiting from market fluctuations. The investor's primary interest lies in acquiring and holding suitable securities at suitable prices." and "An investment is based on incisive, quantitative analysis, while speculation depends on whim and guesswork." If you are trying to predict the behavior of a crowd you are a speculator. Great masses of people have a strong tendency to herd which inevitably produces swings in prices. By focusing on value instead of price the intelligent investors can find profits over the long term. "In the short run, the market is a *voting* machine but in the long run it is a *weighing* machine."

7. **"Investment is most intelligent when it is most businesslike. It is amazing to see how many capable businessmen try to operate on Wall Street with complete disregard of all the sound principles through which they have gained success in their own undertakings.** " A share of stock is partial ownership of a business. Too many investors abandon all that they have learned in business.

8. "It is bad business to accept an acknowledge possibility of a loss of principal in exchange for a mere 1 or 2% of additional yearly income. If you are willing to assume some risk you should be certain that you can realize a really substantial gain in principal value if things go well." It is only acceptable to undertake a risky investment if you are properly compensated for that risk. Too often investors take on "return free risk."

9. "There are two requirements for success in Wall Street. One you have to think correctly; and secondly you have to think independently." This is consistent with Howard Mark's point that to beat the market you must occasionally take a position that is contrary to the market and you must be right about that view. Following the crowd in all cases guarantees that you will not outperform the market, especially after fees and costs.

10. "To achieve satisfactory investment results is easier than most people realize; to achieve superior results is harder than it looks." Buying an index fund is easy and smart for a know-nothing investor (dumb money becomes smart when it buys a low fee index fund). Beating the market as a know-something investor (generating alpha after fees and costs) is hard.

10. "It is undoubtedly better to concentrate on one stock that you know is going to prove highly profitable, rather than dilute your results to a mediocre figure, merely for diversifications sake." This is ideas advanced by Charlie Munger including: (1) if you are a know something investor, you must do an opportunity cost analysis when decided whether to buy a given stock and (2) closet investors are fooling others and maybe themselves too. http://25iq.com/charlie-munger-book-to-date-chapters-1-5/

11. "Exactly the same mathematical advantage which practically assures good results in the investment field may prove entirely ineffective where luck is the overshadowing influence." This is consistent with Michael Mauboussin's point that the investor's focus should be on the right investing process not the investing result in a given case. Luck, both good and bad, happens. http://25iq.com/2013/07/11/a-dozen-things-ive-learned-from-michael-mauboussin-about-investing/

12. "The investor's chief problem – and even his worst enemy – is likely to be himself." My post on the psychology of investing is at: http://25iq.com/2013/07/01/a-dozen-things-ive-learned-about-the-psychology-of-investing/

A Dozen Things I've Learned from Bill Ruane about Investing

October 6, 2013

1. "Nobody knows what the market will do." Investing based on macro market forecasting is folly. Every investor in this series (over 20 now) believes in this bedrock principle. Where are the great investors who believe to the contrary? Where is the list of great investors who outperform the market based on macro forecasting? You may be thinking: "Ray Dalio at least." A 25iq post on Ray Dalio is coming soon.

2. "Forget the level of the market. The only thing that matters is the specific situation having to do with your stocks." It is by focusing on understanding the very simplest systems (an individual company) that an investor can outperform the market. And more importantly, when you buy a stock for significantly less than its intrinsic value you do tend to catch a favorable wave caused by inevitable but unpredictable shifts in the economic cycle. You won't time business cycles perfectly but you will find that they tend to work in your favor. In other words, focusing on what a company is doing today by itself positions you well for tomorrow. And you have a margin of safety against mistakes and errors. If Bill Ruane has been put in a cave for many years and given no information about the general economy he would time business cycles well if all he had was information about the value of individual companies.

3. "Graham said, 'Look at the company as a whole, not as a piece of paper. Then do a highly critical financial analysis'." That Bill Ruane was at Colombia taking a class from Benjamin Graham at the same time as Warren Buffett is evident on this point. Investing is best accomplished when it is most businesslike. If you don't understand the business you don't understand the stock. That you buy product x (for example, a flight to another city) does not mean you understand the business that provides the good or service. Knowledge about a product or service is not the same as understanding a business (for example, an airline). There are plenty of wonderful products and services made by companies that have a lousy business (often because all or nearly all of the value accrues to the consumer and little or nothing to the producer).

4. "Put most of your money in six or seven stocks that you've really studied." "Know-nothing" investors should buy a low fee index fund. A very small number of "know-something" investors can outperform the market by concentrating their investments. For a "know-something investor" concentration puts your money behind your best ideas and allows you to more intensively follow the company. Closet indexing is a fool's errand.

5. "Truth is in the details and this intensive research on stock ideas is of immense importance in avoiding big mistakes and developing the positive convictions required to own and hold concentrated investment positions." When the research behind a given investment is intensive it helps make you brave enough to buy when others are fearful and sell when others are greedy. Doing your own work should provide you with an extra boost of confidence.

6. "Use the results of [your own] own research, as opposed to using outside research." If you are going to outperform the crowd you must have a view occasionally that is different than the crowd. This requires that you acquire information that others do not have which is best found by doing your own research. The importance of making contrarian bets is a corollary point to 5 above. In other words, doing your own research makes you both braver and able to occasionally make contrarian bets and be right about those contrarian bets.

7. "You don't need inside information. Don't need charts and mumbo jumbo. It isn't about momentum. It isn't that guff the talking heads give you on CNBC." There are lots of people who make their living selling noise to speculators and investors. Ignore them. Noise peddlers do entertain some people with stories about momentum and charts that look like chicken entrails. But don't confuse what is speculation with investing.

8. "If you get a great idea every other year, you're really doing well." The number of times you will be able to find an investment that is substantially in your favor that is also within your circle of competence is small. Be patient, wait for the fat pitch, and then bet big on that swing. If you are a "know-something investor" why not put a lot of money behind your very best ideas?

9. "Staying small is simply good business. There aren't that many great companies." It is beyond question that the size of the portfolio is a drag on performance. The bigger the fund the harder it is to outperform. Bill Ruane famously closed his fund to new investors to be "fair" to his clients and to goose his own returns since his own money was in the fund as well.

10. "You don't act rationally when you're investing borrowed money…. Don't borrow money. If you are smart, you don't need to. If you are dumb, you don't want to." When you borrow you put the power of compounding in place as a force against your success. It magnifies failure as well as success. But just as importantly, it can interfere with sound judgment. Anything that makes you less rational as an investor is problematic.

11. "Ben Graham said to be careful of the good idea because it is apt to be terribly overdone. … The psychology of the market can take the market up and down, much further than you think. Psychology feeds on itself." The economy moves in cycles that are impossible to predict with certainty. If you accept this as inevitable the cycles will be your friend since at times they will give you a chance to buy low and sell high. That Mr. Market is bipolar is his gift to you.

12. "I have always thought of myself as a meek little lamb who is afraid of being fleeced." Risk matters. Trust matters. Character matters. Be careful out there.

A Dozen Things I've Learned from Ray Dalio about Investing

October 12, 2013

1. **"The economy is like a machine."** The bottoms-up way Ray Dalio approaches the economy is analogous to value investing. You start with the simplest possible system since that is the easiest system to understand. For a value investor that relatively simple system is an individual company. Dalio starts instead with the simplest part of the economy which is the transaction and then build his models bottoms-up. To do the reverse (adopt a top-down approach) is to start with a nest of complex adaptive systems which makes market outperformance after fees impossible. Ray Dalio is humble about his bottoms-up process and so has adopted an approach where he invests in 15 uncorrelated macro trends at a time so he is diversified. In making 15 bets on macro trends, Dalio has built the case for each bet from micro (bottoms-up) foundations.

2. "Alpha is zero sum. In order to earn more than the market return, you have to take money from somebody else." John Bogle makes the same point and adds that fees must be considered as part of this inevitable math. You are not going to beat people who invest as a profession by spending a few minutes or even a few hours a week looking at Yahoo Finance.

3. "If you're going to come to the poker table, you're going to have to beat me. … We have 1500 people who work at Bridgewater. We spend hundreds of millions of dollars on research and so on, we've been doing this for 37 years." Ray Dalio can build his bottoms-up "machine" model of the economy better than others because, as Paul Volker once noted, Bridgewater "has a bigger staff, and produces more relevant statistics and analyses, than the Federal Reserve." The idea that other investors are going to beat Ray Dalio at this game is folly. Why don't macroeconomists do what Ray Dalio does? Because macroeconomists don't have the bottoms-up data that Ray Dalio has at Bridgewater, so they adopt math driven models that are built on in fake assumptions. Unsurprisingly, the top-down macroeconomic models have less than zero ability to outperform the market.

4. "It all comes down to interest rates. As an investor, all you're doing is putting up a lump-sump payment for a future cash flow…. The big question is: When will the term structure of interest rates change? That's the question to be worried about. .. He who lives by the crystal ball [in trying to forecast interest rates] will eat shattered glass." When you stop thinking you can forecast interest rates (especially in the short term) you are essentially no longer hitting your thumb repeatedly with a large metal hammer. Your financial life gets a lot more attractive.

5. "The nature of investing is that a very small percentage of the people take money, essentially, in that poker game, away from other people who don't know when prices go up whether that means it's a good investment or if it's a more expensive investment. Too many investors are reactive decision-makers. If something has gone up, they say, 'Ah, that's a good investment.' They don't say, 'That's more expensive.'" Price is what you pay and value is what you get. Sometimes a great company has shares that are a poor value in terms of price. If you are patient, the bi-polar Mr. Market usually will send those prices down so the purchase becomes attractive. Until then, wait.

6. "The biggest mistake investors make is to believe that what happened in the recent past is likely to persist. They assume that something that was a good investment in the recent past is still a good investment. Typically, high past returns simply imply that an asset has become more expensive and is a poorer, not better, investment." Nothing good or bad goes on forever. Business cycles are inevitable. Dalio has devoted an entire video explaining his views on business cycles.

7. "The most important thing you can have is a good strategic asset allocation mix. So, what the investor needs to do is have a balanced, structured portfolio – a portfolio that does well in different environments…. we don't know that we're going to win. We have to have diversified bets." The most important words here are" we don't know if we are going to win." The future is a probability distribution.

8. "Bonds will perform best during times of disinflationary recession, stocks will perform best during periods of growth, and cash will be the most attractive when money is tight. Translation: All asset classes have environmental biases. They do well in certain environments and poorly in others. "

9. "Owning the traditional equity-heavy portfolio is akin to taking a huge bet on stocks and, at a more fundamental level, that growth will be above expectations…. Levering up low-risk assets so you can diversify away from risky investments is risk reducing." This is a fundamental part of Ray Dalio's "risk-parity" approach. The leveraging of bonds in the fund has benefitted from the decades long bond bull market which has at least been a major side benefits of the risk-parity approach.

10. "There are two main drivers of asset class returns – inflation and growth… you can't have debt rise faster than income. You can't have income rise faster than productivity and the long term growth will be dependent on productivity."

11. "Risky things are not in themselves risky if you understand them and control them. If you do it randomly and you are sloppy about it, it can be very risky." Ray Dalio is making the same point Warren Buffett makes when he says: risk comes from not knowing what you are doing. Invest in your circle of competence.

12. "You're not going to win by trying to get what the next tip is – what's going to be good and what's going to be bad. You're definitely going to lose." See my post on Howard Marks **http://25iq.com/2013/07/30/a-dozen-things-ive-learned-about-investing-from-howard-marks/**

A Dozen Things I've Learned from Nassim Taleb about Optionality/Investing

October 13, 2013

1. "Optionality is the property of asymmetric upside (preferably unlimited) with correspondingly limited downside (preferably tiny)." Venture capital, when practiced properly by a top tier firm, is a classic example of a business that benefits from optionality. All you can lose financially in venture capital is what you invest and your upside can be more than 1000X of what you invested. Another example of optionality is cash held by a disciplined patient value investor with the temperament to not buy until Mr. Market is fearful. As just one example, Warren Buffett did exactly this during the recent financial panic and earned $10 Billion by putting his cash to work. Seth Klarman, Howard Marks and other value investors use dry powder in the form of cash to harvest optionality since Mr. Market is bi-polar.

2. "'Long volatility' in trader parlance, has positive optionality." As an example, the optionality of cash allows the holder to buy assets from people who were "short volatility" when a crisis hits. The wise value investor sits and waits patiently for Mr. Market to deliver a fearful market and when the intrinsic value of a company's shares presents a "margin of safety" buys in quantity.

3. "If you 'have optionality,' you don't have much need for what is commonly called intelligence, knowledge, insight, skills, and these complicated things that take place in our brain cells. For you don't have to be right that often. All you need is the wisdom to not do unintelligent things to hurt yourself (some acts of omission) and recognize favorable outcomes when they occur. (The key is that your assessment doesn't need to be made beforehand, only after the outcome.)" Being able to make decisions which do not require correctly forecasting the future is a wonderful thing. Not one of the great value investors identified in the series of posts in this blog relies on macro forecasts of the future. Instead, value investors use the optionality of cash to buy after the outcome exists (i.e., a significant drop in intrinsic value). Regarding venture capital, Warren Buffett believes: "If significant risk exists in a single transaction, overall risk should be reduced by making that purchase one of many mutually- independent commitments. Thus, you may consciously purchase a risky investment – one that indeed has a significant possibility of causing loss or injury – if you believe that your gain, weighted for probabilities, considerably exceeds your loss, comparably weighted, and if you can commit to a number of similar, but unrelated opportunities. Most venture capitalists employ this strategy."

4. "Optionality can be found everywhere if you know how to look." Living in a city, going to parties, taking classes, acquiring entrepreneurial skills, having cash in your bank account, avoiding debt are all examples of activities which increase optionality. As another example, a venture capitalist who invests in a team which (1) is strong technically, (2) has

sound business judgment and (3) addresses a huge market opportunity has acquired optionality since the company can often find success with an offering the founders did not conceive from the beginning, but rather found as they went along.

5. "Financial options may be expensive because people know they are options and someone is selling them and charging a price—but most interesting options are free, or at the worst, cheap." Some of the most important options are not obviously financial in nature and for that reason are not labeled as "options." In those cases it is more likely that you will be able to purchase or acquire a mispriced option since other people often don't understand what is involved (e.g., investment bankers have cheap options since losses are socialized when huge).

6. "Make sure the optionality is not priced by the market." It is possible to overpay for optionality. For example, what venture capitalist Bill Gurley called "frothy trades in the bubbly late stage private market" in 2011 is a great example of overpaying for optionality.

7. "[Avoid] companies that have negative optionality." Companies (1) focused on a niche market, (2) have employees with limited technical skills, (3) which raised too much money at an inflated early valuation or(4) are highly leveraged are examples of companies with negative optionality.

8. "A rigid business plan gets one locked into a preset invariant policy, like a highway without exits —hence devoid of optionality." I am at my self-imposed 999 word limit so what follows including this quotation must largely stand on its own without commentary.

9. "Optionality… explains why top-down centralized decisions tend to fail."

10. "Optionality works by negative information, reducing the space of what we do by knowledge of what does not work. For that we need to pay for negative results."

11. "That which benefits from randomness (increased potential for upside in the presence of fluctuations) is convex. That which is harmed by randomness, concave. Convexity propositions should be embraced – concave ones, avoided like the plague…. 'optionality' is what is behind the convexity of research outcomes. An option allows its user to get more upside than downside as he can select among the results what fits him and forget about the rest (he has the option, not the obligation)…. Payoffs from research are from Extremistan; they follow a power-law type of statistical distribution, with big, near-unlimited upside but, because of optionality, limited downside."

12. "Like Britain in the Industrial Revolution, America's asset is, simply, risk taking and the use of optionality, this remarkable ability to engage in rational forms of trial and error, with no comparative shame in failing again, starting again, and repeating failure." Entrepreneurs harvest optionality when they tinker and experiment as they run their businesses and as a positive externality benefit their city/region/nation/the world in the aggregate by generating productivity and genuine growth in the economy even if legions of entrepreneurs may fail. Taleb: "Most of you will fail, disrespected, impoverished, but we are grateful for the risks you are taking and the sacrifices you are making for the sake of the economic growth of the planet and pulling others out of poverty. You are the source of our antifragility. Our nation thanks you."

A Dozen Things I've Learned from Michael Price abut Investing

October 20, 2013

1. "Of course, the macro questions are the hardest ones to figure out. I am not trained to be an economist, and I don't think economists get it anyway. I am left with the bottoms-up, 10Q by 10Q analysis, and hope I have enough sense of where we are in the cycle…" Michael Price is another successful investor who ignores macro forecasts in favor of a bottoms-up analysis.

2. "Never, never pay attention to what the market is doing. … Stay away from the crowd." Mr. Market is not always wise. He sometimes will sell you a stock at a bargain or pay you more than it is worth. The art of knowing the difference **is** value investing. Falling in with the crowd will put you under the sway of Mr. Market because Mr. Market is the crowd.

3. "The key question in investing is, what is it worth, and what am I paying for it? Intrinsic value is what a businessman would pay for total control of the business with full due diligence and a big bank line. The biggest indicator to me is where the fully controlled position trades, not where the market trades it or where the stock trades relative to comparables." By thinking like a business owner Michael Price becomes a better investor. Buying share of stock in a business is owning a partial stake in a business. If a share of stock is not a partial stake in a business, what exactly is it? Anyone who thinks a share of stock is a piece of paper that people trade back and forth is in deep trouble as an investor.

4. "We like to buy a security only if we think it is selling for at least 25% less than its market value." It is refreshing to hear an investor assign a number of a "margin of safety". My assumption is that this 25% figure is a rule of thumb. Many value investors would say that the margin of safety they are looking for is relative based on the risk of the particular business (e.g., the risk of a bakery business is not the same as the risk of a biotechnology company).

5. "If you really [want] to find value, you [must] do original work, digging through stuff no one else [wants] to look at. …The really important thing is to eliminate the Wall Street consensus, the Wall Street research. You need to understand where the company is in the world and what the competition is for the products, whether the products are any good, and whether or not the company has any pricing power or barriers to entry. … Think about the business, think about what you see without any input from Wall Street, do [your own] primary research." To generate alpha in investing you must occasionally be contrarian and be right about that contrarian view. In short, you must find a mispriced bet. To find a mispriced bet you are best positioned if you are looking where fewer people are looking.

6. "You can get lost in the spreadsheets. You can't rely on the projections that you put in the spreadsheets alone… Depending too much on the Excel spreadsheet and forecast of discounted cash flows is a big mistake." Extrapolating the past into the future is a parlor trick favored by consultants and analysts. This process may seem logical to many people but

it is pregnant with danger. Complex adaptive systems produce changes that can't be extrapolated. Things that can't go on forever, don't.

7. "The worst mistake investors make is taking their profits too soon, and their losses too long." This is classic "loss aversion" at work. People hate taking a loss even if it is sunk. Unless you are a trained investor your emotions can get the best of you.

8. "A good time to start in [the investing] business is when markets are terrible…. We wait for bad news… I love to read about losses." A value investor likes prices to fall, especially when they have dry powder and can take advantage of the drop. A classic value investor looks at a price drop of a stock they like as a chance to buy more, whereas the ordinary investor may panic and sell.

9. "I couldn't care less about getting zero on my cash. That's ammunition." Cash has optionality. Yes, that optionality has a cost which includes inflation. Especially when inflation is low and prices of stocks are high, the price of the optionality can be well worth paying.

10. "For rates of return, smaller is better. Returning excess returns at $20-$30 billion is not so easy." The more money an investor must put to work, the harder it is to generate investing alpha. Many opportunities are small in size relative to a big fund. People only get so many investable ideas during the course of a year and some of them are not very big. Another risk is psychological since sometimes an investor will compromise their principles on a big investment just to be able to put money to work.

11. "We know it's easy to get swept away in a growth market. But I've been in this business more than 25 years and I've watched investors figure out a way to justify incredible multiples, only to see valuations collapse back to the underlying worth of the company. The key in the business is weathering the bear markets, not outperforming the bull markets." Value investing shines brightest when stocks are falling in price since they were purchased based on value. Value investing principles can also help you avoid the flip side of bubbles (panics).

12. "A lot of people have the brains. It is the judgment with the brains that matters, and that comes with experience and from thinking about things in the right way." Intelligence without judgment and the right temperament won't make someone a good investor. Intelligence can actually be a problem since the smarter you think you are, the more you may get into trouble trying to predict things that are not predictable.

A Dozen Things I've Learned from Philip Fisher and Walter Schloss About Investing

October 27, 2013

1. "I had made what I believe was one of the more valuable decisions of my business life. This was to confine all efforts solely to making major gains in the long-run…. There are two fundamental approaches to investment. There's the approach Ben Graham pioneered, which is to find something intrinsically so cheap that there is little chance of

it having a big decline. He's got financial safeguards to that. It isn't going to go down much, and sooner or later value will come into it. Then there is my approach, which is to find something so good–if you don't pay too much for it–that it will have very, very large growth. The advantage is that a bigger percentage of my stocks is apt to perform in a smaller period of time–although it has taken several years for some of these to even start, and you're bound to make some mistakes at it. [But] when a stock is really unusual, it makes the bulk of its moves in a relatively short period of time." Phil Fisher understood (1) trying to predict the direction of a market or stock in the short-term is not a game where one can have an advantage versus the house (especially after fees); and (2) his approach was different from Ben Graham.

2. "I don't want a lot of good investments; I want a few outstanding ones…. I believe that the greatest long-range investment profits are never obtained by investing in marginal companies." Warren Buffett once said: "I'm 15% Fisher and 85% Benjamin Graham." Warren Buffett is much more like Fisher in 2013 than the 15% he once specified, but only he knows how much. It was the influence of Charlie Munger which moved Buffet away from a Benjamin Graham approach and their investment in See's Candy was an early example in which Berkshire paid up for a "quality" company. Part of the reason this shift happened is that the sorts of companies that Benjamin Graham liked no longer existed the further way the time period was from the depression.

3. "The wise investor can profit if he can think independently of the crowd and reach the rich answer when the majority of financial opinion is leaning the other way. This matter of training oneself not to go with the crowd but to be able to zig when the crowd zags, in my opinion, is one of the most important fundamentals of investment success." The inevitable math is that you can't beat the crowd if you are the crowd, especially after fees are deducted.

4. "Usually a very long list of securities is not a sign of the brilliant investor, but of one who is unsure of himself. … Investors have been so oversold on diversification that fear of having too many eggs in one basket has caused them to put far too little into companies they thoroughly know and far too much in others which they know nothing about." For the "know-something" active investor like Phil Fisher, wide diversification is a form of closet indexing. A "know-something" active investor must focus on a relatively small number of stocks if he or she expects to outperform a market. By contrast, "know-nothing" investors (i.e., muppets) should buy a low fee index fund.

5. "If the job has been correctly done when a common stock is purchased, the time to sell it is almost never." Phil Fisher preferred a holding period of almost forever (e.g., Fisher bought Motorola in 1955 and held it until 2004). The word "almost" is important since every company is in danger of losing its moat.

6. "Great stocks are extremely hard to find. If they weren't, then everyone would own them. The record is crystal clear that fortune – producing growth stocks can be found. However, they cannot be found without hard work and they cannot be found every day." Fisher believed that the "fat pitch" investment opportunity is delivered rarely and only to those investors who are willing to patiently work to find them.

7. "Focus on buying these companies when they are out of favor, that is when, either because of general market conditions or because the financial community at the

moment has misconceptions of its true worth, the stock is selling at prices well under what it will be when it's true merit is better understood." Like Howard Marks, Fisher believed that (1) business cycles and (2) changes in Mr. Market's attitude are inevitable. By focusing on the value of individual stocks (rather than just price) the investor can best profit from these inevitable swings.

8. "The successful investor is usually an individual who is inherently interested in business problems." A stock is a part ownership of a business. If you do not understand the business you do not understand that stock. If you do not understand the business you are investing in you are a speculator, not an investor.

9. "The stock market is filled with individuals who know the price of everything, but the value of nothing." Price is what you pay and value is what you get. By focusing on value Fisher was able to outperform as an investor even though he did not look for cigar butts.

10. "It is not the profit margins of the past but those of the future that are basically important to the investor." Too often people believe that the best prediction about the future is that it is an extension of the recent past.

11. "There is a complicating factor that makes the handling of investment mistakes more difficult. This is the ego in each of us. None of us likes to admit to himself that he has been wrong. If we have made a mistake in buying a stock but can sell the stock at a small profit, we have somehow lost any sense of having been foolish. On the other hand, if we sell at a small loss we are quite unhappy about the whole matter. This reaction, while completely natural and normal, is probably one of the most dangerous in which we can indulge ourselves in the entire investment process. More money has probably been lost by investors holding a stock they really did not want until they could 'at least come out even' than from any other single reason. If to these actual losses are added the profits that might have been made through the proper reinvestment of these funds if such reinvestment had been made when the mistake was first realized, the cost of self-indulgence becomes truly tremendous." Fisher was very aware of the problems that loss aversion bias can cause.

12. "Conservative investors sleep well." If you are having trouble sleeping due to worrying about your portfolio, reducing risk is wise. Life is too short to not sleep well, but also fear can result in mistakes.

Walter Schloss

1. "I think investing is an art, and we tried to be as logical and unemotional as possible. Because we understood that investors are usually affected by the market, we could take advantage of the market by being rational. As [Benjamin] Graham said, 'The market is there to serve you, not to guide you!'." Walter Schloss was the closest possible match to the investing style of Benjamin Graham. No one else more closely followed the "cigar butt" style of investing of Benjamin Graham. In other words, if being like Benjamin Graham was a game of golf, Walter Schloss was "closest to the pin." He was a man of his times and those times included the depression which had a profound impact on him. While his exact style of investing is not possible today, today's investor's still can learn from Walter Schloss. It is by combining the best of investors like Phil Fisher and Walter Schloss and matching it to their unique skills and personality that investors will find the best results. Warren Buffet

once wrote in a letter: "Walter outperforms managers who work in temples filled with paintings, staff and computers… by rummaging among the cigar butts on the floor of capitalism." When Walter's son told him no such cigar butt companies existed any longer Walter told his son it was time to close the firm. The other focus of Walter Schloos was low fees and costs. When it came to keeping overhead and investing expenses low, Walter Schloss was a zealot.

2. "I try to establish the value of the company. Remember that a share of stock represents a part of a business and is not just a piece of paper. … Price is the most important factor to use in relation to value…. I believe stocks should be evaluated based on intrinsic worth, NOT on whether they are under or over priced in relationship with each other…. The key to the purchase of an undervalued stock is its price COMPARED to its intrinsic worth."

3."I like Ben's analogy that one should buy stocks the way you buy groceries not the way you buy perfume… keep it simple and try not to use higher mathematics in you analysis." Keeping emotion out of the picture was a key part of the Schloss style. Like Ben Graham he as first and foremost rational.

4. "If a stock is cheap, I start buying. I never put a stop loss on my holdings because if I like a stock in the first place, I like it more if it goes down. Somehow I find it difficult to buy a stock that has gone up."

5. "I don't like stress and prefer to avoid it, I never focus too much on market news and economic data. They always worry investors!" Like all great investors in this series, the focus of Schloss was on individual companies not the macro economy. Simpler systems are orders of magnitude easier to understand for an investor.

6. "The key to successful investing is to relate value to price today." Not only did Schloss not try to forecast the macro market, he did not really focus forecasting the future prospects of the company. This was very different than the Phil Fisher approach which was focused on future earnings.

7. "I like the idea of owning a number of stocks. Warren Buffet is happy owning a few stocks, and he is right if he is Warren…." Schloss was a value investor who also practiced diversification. Because of his focus on obscure companies and the period in which he was investing, Walter was able to avoid closet indexing.

8. "We don't own stocks that we'd never sell. I guess we are a kind of store that buys goods for inventory (stocks) and we'd like to sell them at a profit within 4 years if possible." This is very different from a Phil Fisher approach where his favorite holding period is almost forever. Schloss once said in a Colombia Business school talk that he owned "some 60-75 stocks".

9. "Remember the word compounding. For example, if you can make 12% a year and reinvest the money back, you will double your money in 6 years, taxes excluded. Remember the rule of 72. Your rate of return into 72 will tell you the number of years to double your money." Schloss felt that "compounding could offset [any advantage created by] the fellow who was running around visiting managements."

10. "The ability to think clearly in the investment field without the emotions that are attached to it is not an easy undertaking. Fear and greed tend to affect one's judgment." Schloss was very self-aware and matched his investment style to his personality. He said once" We try to do what is comfortable for us."

11. "Don't buy on tips or for a quick move."

12. "In thinking about how one should invest, it is important to look at you strengths and weaknesses. …I'm not very good at judging people. So I found that it was much better to look at the figures rather than people." Schloss knew that Warren Buffett was a better judge of people than he was so Walter's approach was almost completely quantitative. Schloss knew to stay within his "circle of competence". Schloss said once: "Ben Graham didn't visit management because he thought figure told the story."

A Dozen Investors Talk about the Folly of Macroeconomic Forecasting and the Importance on Focusing on Valuation/Margin of Safety Today

November 3, 2013

1. "Charlie and I don't pay attention to macro forecasts." Warren Buffett. A genuine "value investor" determines "intrinsic value" based on "owner's earnings" which will reflect what a private buyer would pay for the same share of the specific business. Treating a share of stock as a share in a business is fundamental to value investing. Yes, macro exists; no, it will not be a source of alpha for you.

2. "I don't read economic forecasts. I don't read the funny papers." Warren Buffett. If you focus on the micro aspects of the particular business, the macro takes care of itself. When Mr. Market is filled with fear, you will see relatively more micro bargains for individual stocks. And when the macro market is filled with greed, you will not see micro opportunities for individual stocks.

3. "Of course, the macro questions are the hardest ones to figure out. I am not trained to be an economist, and I don't think economists get it anyway. I am left with the bottoms-up, 10Q by 10Q analysis." Michael Price Calculated on a bottoms-up basis, if you can buy a share in a business at a price greater than a private buyer's hurdle rate **and** if a margin of safety is built in to that hurdle rate **and** it is the best opportunity available to you, you buy.

4. "We don't know what lies ahead in terms of the macro future. Few people if any know more than the consensus about what's going to happen to the economy, interest rates and market aggregates. Thus, the investor's time is better spent trying to gain a knowledge advantage regarding 'the knowable': industries, companies and securities. The more micro your focus, the great the likelihood you can learn things others don't." Howard Marks. By having a "micro focus" (i.e., not a macro focus) you are

concentrating on trying to understand the simplest possible system (a company). It is in working hard to understand these simpler but still relatively complex systems that skilled value investors once in a while find a significantly mispriced bet. When they find a favorable significantly mispriced bet they "bet big" on that fat pitch. It's that simple. Berkshire results just out reveal that when fear was high after the recent financial crisis Buffett placed big bets on Goldman and a few other companies and "won" $10 billion betting on those fat pitches.

5. "I never ask if the market is going to go up or down, because I don't know, and besides it doesn't matter. I search nation after nation for stocks, asking: Where is the one that is lowest priced in relation to what I believe its worth?" John Templeton. Great value investors are always thinking in terms of opportunity cost. If opportunity cost does not determine your hurdle rate for an investment, then what exactly does? The tooth fairy?

6. "Nobody can predict interest rates, the future direction of the economy, or the stock market. Dismiss all such forecasts and concentrate on what's actually happening to the companies in which you've invested." Peter Lynch. Value investors, when determining valuation, focus on value right now (i.e., in the present) to a private investor. Businesses that have a strong moat and a relatively long operating history which are in the investor's circle of competence are favored since they are more predictable. Risk and losses come from not knowing what you are doing. What can be simpler than this rule: invest only when you know what you are doing. Risk is *not* measured by volatility, but instead the possibility of incurring harm or loss.

7. "Nobody knows what the market will do. Forget the level of the market. The only thing that matters is the specific situation having to do with your stocks." Bill Ruane. Mr. Market's bi-polar nature is his gift to you since occasionally he will present you with great bargains or buy your assets at a premium. Do *not* treat Mr. Market as wise and instead view him as an occasional giver of gifts to rational emotionally stable investors.

8. "Avoid predictions and forecasts." Barry Rithholtz.

9. "Gigantic macroeconomic predictions are something I've never made any money on, and neither has Warren." Charlie Munger. They can't do it and neither can you. So don't try to do so. Life is so much easier when you accept this and you sleep so much better too.

10. "We need to stop pretending that we can divine the future, and instead concentrate on understanding the present, and preparing for the unknown. There is a simple, although not easy alternative [to forecasting]… Buy when an asset is cheap, and sell when an asset gets expensive…. Valuation is the primary determinant of long-term returns, and the closest thing we have to a law of gravity in finance." James Montier. Avoiding psychological denial is a fantastic way to avoid losses. Investors can do better simply by being less stupid.

11. "The last time I made any market predictions was in the year 1914, when my firm judged me qualified to write their daily market letter based on the fact that I had one month's experience. Since then I have given up making predictions." Ben Graham. None of this is new. Learning from the successes and failures of others is so much easier. Very few people can pick stocks as value investors and the likelihood that you are one of those investors is very small (2-5% of the population). Warren Buffett points out

a paradox: by understanding they are the dumb money by purchasing a low fee index fund, "know-nothing investors" become the smart money.

12. "Listening to today's forecasters is just as crazy as when the king hired the guy to look at the sheep guts. It happens over and over and over." Charlie Munger. Stop thinking that the talking heads making macro predictions should guide your investing decisions. Ignore them. Think for yourself!

A Dozen Things I've Learned from Jeremy Grantham About Investing

November 10, 2013

1. "It is simple to see what is necessary, but not easy to be willing or able to do it." Howard Marks' wife has said that his annual letters "are all pretty much the same." Jason Zweig similarly wrote once that his job was to write the same column about investing over and over again in new ways. In this series you have heard the great investors repeatedly say that investing is mostly about controlling your emotions and avoiding mistakes. A range of dysfunctional heuristics makes this task far harder than people imagine. Value investing is a simple system designed to remove decisions from the process which may lead the investor to make mistakes. Decisions for a value investor are sorted into three baskets: "yes", "no" and "too hard." The "yes" basket is tiny compared to the other two baskets.

2. "It is utterly imperative that you know your limitations as well as your strengths and weaknesses. You must know your pain and patience thresholds accurately and not play over your head. If you cannot resist temptation, you absolutely must not manage your own money. On the other hand, if you have patience, a decent pain threshold, an ability to withstand herd mentality, perhaps one credit of college-level math and a reputation for common sense, then go for it. In my opinion, you hold enough cards and will beat most professionals (which is sadly, but realistically, a relatively modest hurdle) and may even do very well indeed." Only 2-5% of investors have the qualities that Grantham describes. "Many are called" to investing but few are genuinely capable of achieving success, especially emotionally.

3. "Financial markets are very inefficient, and capable of extremes of being completely dysfunctional. I learned that in 1974, '82, '87, '2000 and definitely not excluding 2008." Academics who claim that markets are always efficient are not paying attention. Confusing (1) the inability of investors to beat markets due to emotional instability with (2) market efficiency, is a deeply broken thought.

4. "You don't get rewarded for taking risk; you get rewarded for buying cheap assets. And if the assets you bought got pushed up in price simply because they were risky, then you are not going to be rewarded for taking a risk; you are going to be punished for it." Much of the job of the value investor is to tune out the noise. Risk is something an investor should retire rather than "dial-up".

5. "The only things that really matter in investing are the bubbles and the busts. And here or there, in some country or in some asset class, there is usually something interesting going on in the bubble business."

6. "The central truth of the investment business is that investment behavior is driven by career risk. In the professional investment business we are all agents, managing other peoples' money. The prime directive, as Keynes knew so well, is first and last to keep your job. To do this, he explained that you must never, ever be wrong on your own. To prevent this calamity, professional investors pay ruthless attention to what other investors in general are doing. The great majority 'go with the flow,' either completely or partially. This creates herding, or momentum, which drives prices far above or far below fair price. There are many other inefficiencies in market pricing, but this is by far the largest. It explains the discrepancy between a remarkably volatile stock market and a remarkably stable GDP growth, together with an equally stable growth in 'fair value' for the stock market." Incentives are powerful things and the incentives of people who manage money for a living can have some seriously ugly consequences for the poorly informed. For the value investor wild market swings actually are a source of opportunity. Opportunities to generate investment gains arrive in a lumpy fashion. Much of the time of a value investor is spent reading and thinking. The time of greatest activity for a value investor is when people are fearful.

7. "The central idea … in the stock market is patience and value and mean reversion. …We have a shockingly short horizon in the stock market, as witnessed in the Internet bubble." Good things come to the value investor who is willing to wait for the fat pitch which always arrives but not on a fixed schedule. But people have the investing equivalent of attention deficit disorder. They want to get rich now. The idea that one gets rich slowly (but with opportunities arriving in a lumpy fashion) is a hard sell to the general public.

8. "All bubbles break; all investment frenzies pass. The market is gloriously inefficient and wanders far from fair price, but eventually, after breaking your heart and your patience … it will go back to fair value. Your task is to survive until that happens." Something that cannot go on forever will eventually stop. "Reversion to the mean" should be the value investor's mantra.

9. "Wait for the good cards. This will be your margin of safety." Investors in this series have repeatedly made analogies to playing cards since investing is inherently a probabilistic process.

10. "Ridiculous as our market volatility might seem to an intelligent Martian, it is our reality and everyone loves to trot out the 'quote' attributed to Keynes (but never documented): 'The market can stay irrational longer than the investor can stay solvent.' For us agents, he might better have said 'The market can stay irrational longer than the client can stay patient.'"

11. "The more investments you have and the more different they are, the more likely you are to survive those critical periods when your big bets move against you." Especially for the "know-nothing" investor, diversification is the closest thing there is to a free lunch.

12. "Leverage reduces the investor's critical asset: patience. It encourages financial aggressiveness, recklessness and greed. It has proven so seductive that individuals en masse have shown themselves incapable of resisting it, as if it were a drug." The only thing that seduces more investors than leverage is easy leverage.

Two Dozen Things I've Learned from Bill Miller and Mohnish Pabrai about Investing

November 17, 2013

Pairing a post about Bill Miller with a post about Mohnish Pabrai is useful since it contrasts the investment thesis of Miller with someone else who is a self-professed "cloner" of Warren Buffett and Charlie Munger. In other words, how Bill Miller's investing thesis differs from the value investing orthodoxy is useful to consider.

Bill Miller:

1. "In the complex adaptive system that is the stock market … there will be dominant narratives that most everyone agrees with and that seem to provide pat explanations for what has happened and predict what's likely to happen. … we don't make forecasts and conform portfolios to those forecasts." Bill Miller compiled an amazing investing record for 15 consecutive years. And after a few years of underperformance Miller is again outperforming the market. People I know who know Miller have tremendous respect for him. Any analysis of his performance must answer the question: What went wrong starting in 2006? I will try to do that with the first four quotations. I may be wrong about what happened, but it is clear that something was off-kilter.

2. "The crisis was the biggest mistake we made — not understanding the systemic nature of what was happening. … We had it completely wrong." The problem with this statement is that it contradicts the statement in the first quotation ("we don't make forecasts"). Miller's years of working with complex adaptive systems arguably should have led him to conclude that understanding "the systematic nature of the crisis" was not possible. The best investing systems available to a "know something" active investor put this sort of systemic understanding in the "too hard" pile.

3. "Our portfolio contains a mix of businesses, some of which we believe are cyclically mis-priced, and some of which we believe are secularly mis-priced." Other value investors in this blog series do not try to predict secular changes in technology stocks since it is "too hard." as an example of his different approach, Miller's Kodak investment required that he understand how fast Kodak's moat would disappear and whether a team of mostly chemical engineers would create a new moat in a digital age. Applying a moat-based analysis to technology companies is absolutely the right approach, but doing so and generating alpha is a task that most other value investors avoid. In short, Miller did not put Kodak in the "too hard" pile.

4. "It seemed like we needed a 12-step program to cure us of our addiction to buying beaten-up stocks." The massive size of Miller's portfolio going into the financial crisis may have caused confirmation bias to interfere with sound judgment on the margin. Putting

that amount of money to work is a very hard problem if you are not investing like Warren Buffett with a more orthodox style. Like Ruane, Miller perhaps should have limited the size of his fund. Miller may be performing better today **because** his fund is smaller.

5. "If it's in the papers, it's in the price. The market does reflect the available information, as the professors tell us. But just as the funhouse mirrors don't always accurately reflect your weight, the markets don't always accurately reflect that information. Usually they are too pessimistic when it is bad, and too optimistic when it is good."

6. "Most people are not wired to sell what's going up and buy what's going down. It hurts…. Stocks, markets, and money managers' performance are subject to the tendency of things to swing to their opposites. Those swings can have wide arcs, and unsustainable trends can sometimes persist beyond the ability of one to endure. That is why most investors are out of stocks at the bottom–they are tired of losing money–and fully invested at the top–they believe their good performance will persist." Disciplined value investors can arbitrage the bipolar behavior of Mr. Market.

7. "We practice the Taoist wei wu wei, the 'doing not doing' as regards our portfolio, otherwise known as creative non action. We are mostly inert when it comes to shuffling the portfolio around, with turnover that has averaged in the 15 to 20% range, implying holding periods of more than 5 years. Many funds have turnover in excess of 100% per year, as they constantly react to events or try to take advantage of short term price moves. We usually do neither. We believe successful investing involves anticipating change, not reacting to it."

8. "[Value traps happen'] when you get down toward the lower end of these valuations, value people find them attractive. The trap comes in when there's a secular change, where the fundamental economics of the business are changing or the industry is changing, and the market is slowly incorporating that into the stock price. So that would be the case over the last several years with newspapers. They are a good example of where historical valuation metrics aren't working."

9. "When we think about the future of the world we always have in mind where it would be if it continues to move as we see it moving now. We do not realize that it does not move in a straight line and that its direction changes constantly." Quoting Ludwig Wittgenstein.

10. "Your profit is the difference between your average purchase price and your average selling price. Bernard Baruch [a great investor in the 1920s] said nobody buys at the bottom and sells at the top except liars. Your stock will go down after you buy it, and it will go up after you sell it. Being willing to lower your average cost [by buying more when a stock drops] is a great strategy. But it's difficult."

11. "What you are trying to do as an investor is that you are trying to exploit the fact that [fewer] things will happen than can happen. So you are trying to figure out how that probability distribution works and stay in the middle of what will happen."

12. "Anyone can get lucky for a short period of time. But consistent outperformance over long periods is probably evidence of skill."

Mohnish Pabrai:

1. "There is just one way to invest – buy assets for less than they are worth and sell them at full price. It is not 'my approach.' I lifted it from Graham, Munger and Buffett." I talk a lot about the value of index funds only because for nearly all people it is the right approach. But nearly all is not all. Pabrai in this quotation is referring to what Warren Buffet calls a "know-something investor" who can outperform an index fund. Only 2-5% of people can actually do this and the odds that you are one of those people are therefore small (which will not stop most people from trying).

2. "The best thing for an [know-nothing] individual investor to do is to invest in index funds. Charlie Munger [once said] 'If you consistently spend less than you earn and invest it in index funds, dollar-cost average,' because you're putting in money every paycheck…'in, 20, 30, or 40 years, you can't help but be rich. It's just bound to happen.'…any individual investor, if they just put away 5%, 10%, 15% of their income every month, and they just bought into the low-cost index funds, and just two or three of them, to split it amongst them–you're done. Only "know-something" investors (or people who desire to "know something") absolutely need to know what follows.

3. "As long as humans vacillate between fear and greed, there will be mispriced assets. Some will be priced too low and some will be priced too high." Markets that are often efficient are not always efficient. Much of the ability of a small number of know-something investor to earn alpha comes from people who think that they know something but do not.

4. "If you study any number of entrepreneurs… what you'll find is that they have repeatedly made bets which are low-risk bets, which have high-return possibilities. So they're not going high risk, high return. They're going low risk, high return." Pabrai is referring to "optionality" which I discussed in a previous blog post. The "know-something" investor seeks out optionality especially in an environment where uncertainty is high. Pabrai adds: "it's all about participating in coin tosses where: Heads I win; tails, I don't lose too much." Advisors too often tell investors to dial-up risk when the investors should instead dial-up optionality.

5. "I'm a better businessman because I'm an investor. … My experiences as a businessman have very direct, long-term positive impacts on me as an investor, because when I'm looking at an investment, I now look at it like the way I looked at my first business…the first thing I'm looking at is, how can I lose money on this?… The upsides will take care of themselves. It's the downsides that one needs to worry about… the crossover between entrepreneurship in investing, and value investing especially, is protecting your downside."

6. "The ideal scenario is to buy a good business at a cheap price. That's very hard to always do. If we can't find enough of those, we go to buying fair businesses at cheap prices."

7. "If you talk to Michael Porter, he would give you five books on what is meant by, you know, strategy and competitive advantage and durable competitive advantage. If you talk to Warren and Charlie, they would just say it's a moat. And they'd break it down to one word. But basically it's the ability of a business to have some type of an enduring competitive advantage that allows it to earn a better-than-average rate of return over

an extended period of time. And so some businesses have narrow moats. Some have broad moats. Some have moats that are deep but get filled up pretty quickly. So what you want is a business that has a deep moat with lots of piranha in it and that's getting deeper by the day."

8. "Moats are critically important. They are usually critical to the ability to generate future cash flows. Even if one invests with a time horizon of 2-3 years, the moat is quite important. The value of the business after 2-3 years is a function of the future cash it is expected to generate beyond that point. All I'm trying to do is buy a business for 1/2 (or less) than its intrinsic value 2-3 years out. In some cases intrinsic value grows dramatically over time. That's ideal. But even if intrinsic value does not change much over time, if you buy at 50 cents and sell at 90 cents in 2-3 years, the return on invested capital is very acceptable. If you're buying and holding forever, you need very durable moats). In that case you must have increasing intrinsic values over time. Regardless of your initial intrinsic value discount, eventually your return will mirror the annualized increase/decrease in intrinsic value."

9. "The durability of technology moats is many times an oxymoron." Pabrai has been in the technology business himself as a business person and know that predicting the future in technology is a very hard problem. Of course, if you have optionality, uncertainty can be your friend as it is for the wise venture capitalist.

10. "When you are long on a stock, as it goes down in price, the position is going against you and it becomes a smaller portion of your portfolio. In shorting, it is the other way around: if the short goes against you, it is going to become a larger position of your portfolio. When you short a stock, your loss potential is infinite; the maximum you can gain is double your value. So why will you take a bet where the maximum upside is a double and the maximum downside bankruptcy?"

11. "Investing is a peculiar business. The larger one gets, the worse one is likely to do. So this is a field where the individual investor has a huge leg up on the professionals and large investors."

12. "The main thing that makes Warren Buffett Warren Buffett is that he is a learning machine who has worked really hard for [decades] and is continuously learning every day."

A Dozen Things I've Learned from Bruce Berkowitz About Investing

November 24, 2013

1. "We don't predict. We price. Predictions are terrible." Value investors put predictions, especially macroeconomic predictions, in the "too hard" pile. Ben Graham and his disciples have developed a **system** which avoids doing things that are "too hard." Looking at data from today, rather than a prediction about tomorrow, the value investor "prices" the asset and makes the investing decision. The key question is simple: what would a private buyer pay for the asset and does that price reflect a significant discount from

that price. For many investors the value investing **system** has evolved from the "cigar butts era" (which became less useful as time passed after the Great Depression) to an approach which includes some elements of Phil Fisher's philosophy (which I have discussed previously in this series on my blog).

2. "Almost by definition we are running towards that which most people are running away from because how else are you going to get a very reasonable, cheap price on a good company unless the marketplace believes something is terribly wrong." The probability that you will encounter an asset at a significant discount to private market value is significantly higher when Mr. Market is fearful. So a value investor needs both patience (since often Mr. .Market may be instead be greedy) and courage (blood may be running in the streets when bargains appear).

3. "The business of making odds goes back a long way and is the concept of trying to figure out what you give and what you get. That's pretty much the same as the business of investing.…you have to come up with some kind of odds. Also, if you are smart and you know what you are doing, then you build in a huge margin of safety so that the odds are in your favor." Investors who do not understand the basics of probability and statistics are like a snake in a basketball dunking contest.

4. "The markets are made to be taken advantage of, not to be persuaded by." To a value investor the market is not wise, but rather a potentially generous "giver of gifts." When a value investor hears Professor Fama's "efficient market" theories they giggle at least and often may emit a belly laugh.

5. "The only thing you can spend is cash. We want companies that generate significant cash in most times. That is how we start. We don't care much about what they make, but we have to understand it. The balance sheet has to be strong; we want to make sure there are no tricks in the accounting. Then we try and kill the company. We think of all the ways the company can die, whether it's stupid management or overleveraged balance sheets. If we can't figure out a way to kill the company, and its generating good cash even in difficult times, then you have the beginning of a good investment." Berkowitz is similar to Jeff Bezos when it comes to an intense focus on cash flow. A post about Amazon viewed through a "value investing" lens would be interesting.

6. "When times get very tough, everything is correlated. And people need to sell whatever they have. And they sell what's most liquid. So even the baby gets, you know, baby gets thrown out with the bathwater." A financial advisor may tell you that you are well diversified because in his or her view "covariance between your asset classes is low." Unfortunately, as people found out during the last financial crisis, asset price correlation can quickly move toward one.

7. "That is the secret sauce: permanent capital. That is essential. I think that's the reason Buffett gave up his partnership. You need it, because when push comes to shove, people run … That's why we keep a lot of cash around…. Cash is the equivalent of financial Valium. It keeps you cool, calm and collected."

8. "When something goes down in price, I know business schools tell you that if it goes down or up fast, that's volatile. It's riskier. But I don't see how a security, if it goes down 50% in value, is riskier than it was when it was double that price. So it's like

grocery shopping. You know, your favorite food's on sale, your favorite companies. You count the cash they generate. And there's not many times when you can find good companies with a double-digit free cash flow yields, which we found. And of course, when the panic sets in, then you have some tremendous bargains."

9. "I am not genetically engineered for shorting. If you are long and you are wrong, you go to zero. If you are short and you are wrong, you may face death. The mania of markets can last quite a long time, and when you take into account mark to market and the collateral needed, it doesn't appeal to me." Shorting is something lots of people talk about but few people actually do. It is potentially very dangerous. When I do short a stock, which is not very often, I buy options since all you can lose is what you paid for the option.

10. "Concentrated investing implies less risk of permanent loss as long as you maintain superior knowledge about the companies you own." Risk comes from not knowing what you are doing.

11. "Over diversification will just lead to an average return… the price for an above-average return is short-term volatility….I want to give people above-average performance, and you have to pay for that with short-term volatility." Berkowitz will never be confused with a closet indexer.

12. "We have outperformed over a significant period. We had a bad 2011, which confuses a lot, but that's business. Business is a lumpy process. And for those companies and fund managers that have shown business to be a very smooth process, it hasn't worked out real well in the end." The decisions of a wise value investor are a trained response and are above all rational. For example, being brave when loss aversion is pushing you to sell is not easy to do.

A dozen things said by Jesse Livermore that apply to investing even though he was a speculator

November 28, 2013

1. "An investor looks for safety… The speculator looks for a quick profit." Livermore is saying that what differentiated him and other speculators from investors was: (1) a willingness to make bets with short duration and (2) not seeking safety. Anyone reading about Livermore must remember that he was not a person who often/always followed his own advice. He eventually shot himself leaving a suicide note which included the sentence: "I am a failure."

2. "A professional gambler is not looking for long shots, but for sure money…Since suckers always lose money when they gamble in stocks – they never really speculate…" Livermore believed he was not a gambler since he only speculated when the odds were substantially in his favor ("sure money"). Livermore's statement reminds me of a quotation from Peter Lynch: "An investment is simply a [bet] in which you've managed to tilt the odds in your favor." Livermore's statement also reminds me of the poker player Puggy

Pearson who famously talked about need to know "the 60/40 end of a proposition." When the odds are substantially in your favor you are not a gambler; when the odds are not substantially in your favor, you are a sucker.

3. "I trade in accordance to my means and always leave myself an ample margin of safety. …After I paid off my debts in full I put a pretty fair amount into annuities. I made up my mind I wasn't going to be strapped and uncomfortable and minus a stake ever again." Livermore is not referring here to seeking a Benjamin Graham style "margin of safety" on each bet but rather to this: once you establish a big financial stake as a speculator, setting aside enough money so you don't need to "return to go" financially is wise. Livermore wanted a margin of safety in terms of safe assets so that he would always have a grubstake to start over in his chosen profession of speculation. On this point and others, he failed to follow his own advice.

4. "Keep the number of stocks you own to a controllable number. It's hard to herd cats, and it's hard to track a lot of securities." There is only so much information a single person can track in terms of stocks whether you are in investor or a speculator. By focusing on a smaller number of stocks you are more likely to (1) know what you are doing (which lowers risk) and (2) find an informational advantage you can arbitrage.

5. "Only make a big move, a real big plunge, when a majority of factors are in your favor." Only bet when the odds are substantially in your favor. And when that happens, bet in a big way. The rest of the time, don't do anything.

6. " It never was my thinking that made big money for me. It was always my sitting. Got that? My sitting tight! There is the plain fool who does the wrong thing at all times anywhere, but there is the Wall Street fool who thinks he must trade all the time." Neither investors nor speculators get any benefits from activity and instead generate fees and mistakes.

7. "The professional concerns himself with doing the right thing rather than with making money, knowing that the profit takes care of itself if the other things are attended to." Michael Mauboussin: "the best long-term performers in any probabilistic field — such as investing, sports-team management, and pari-mutuel betting — all emphasize process over outcome."

8. "When you know what not to do in order not to lose money, you begin to learn what to do in order to win." The finest art is not to lose money. Making money in the stock market can be done by anybody." This is another way of saying what Warren Buffett has said many times: "The first rule of investing is: don't lose money; the second rule is don't forget Rule No. 1." It is amazing how much benefit once can get from consistently not being stupid.

9. "If I buy stocks on Smith's tip I must sell those same stocks on Smith's tip. I am depending on him. Suppose Smith is away on a holiday when the selling time comes around? No sir, nobody can make big money on what someone else tells him." Livermore claimed that he was never someone to rely on others. He did his own work and made his own decisions as a speculator (with a few well known exceptions that hurt him badly).

10. "The speculator's deadly enemies are: ignorance, greed, fear and hope. All the statute books in the world and all the rule books on all the Exchanges of the earth cannot eliminate these from the human animal…." Jesse Livermore was a student of behavioral economics when the idea had not yet been given a name. Being greedy when other are fearful and vice versa is a simple rule that is hard to execute in practice. For example, buying assets at the lows of 2009 required courage few people had at the time. Livermore was clearly a brave fellow. But being brave when the odds are not substantially in your favor is unwise.

11. "Whenever I have lost money in the stock market I have always considered that I have learned something; that if I have lost money I have gained experience, so that the money really went for a tuition fee." The source of good judgment is often bad judgment. Unfortunately for him, Livermore did not always make new mistakes and repeated some old ones too.

12. "Whatever happens in the stock market today has happened before and will happen again." When people are saying: "this time it is different" grab your wallet and walk carefully toward the door. History never precisely repeats, but it does rhyme. Markets move is cycles because Mr. Market is bi=polar (fluctuating between free and greed). That markets will fluctuate in cycles is inevitable; predicting the timing and extent of the cycles is impossible. Value investing is about putting yourself in position to benefit when the inevitable happens. Price, don't predict!

A Dozen Things I've Learned from Jason Zweig about Investing

December 8, 2013

1. "The future value of every investment is a function of its present price. The higher the price you pay, the lower your return will be." Value investors *price* assets based on their value *now* (based on data from the present) rather than make predictions about markets in the *future.* Value investors put predictions about the future in the "too hard" pile.

2. "A stock is not just a ticker symbol or an electronic blip; it is an ownership interest in an actual business, with an underlying value that does not depend on its share price." The best way to determine the intrinsic value a business is based on the price a *private* investor would pay for the entire business.

3. "You should do business with [Mr. Market]—but only to the extent that it serves your interests. Mr. Market's job is to provide you with prices; your job is to decide whether it is to your advantage to act on them. You do not have to trade with him just because he constantly begs you to. By refusing to let Mr. Market be your master, you transform him into your servant…. "It's harder than ever for long-term investors to ignore the trading madness of Mr. Market. But ignoring it remains the very essence of what it means to be an investor." Markets are bi-polar and will *always* move up and down. These movements are not (1) rationally based, (2) based on market efficiency or (3) predictable with certainty. The best advice is simple: "be greedy when others are fearful and be fearful when others are greedy." This is easy to say, but hard to do since it requires

courage at the hardest possible time. To outperform the market you must occasionally be a contrarian and be right on those occasions.

4. "Regression to the mean is the most powerful law in financial physics: Periods of above-average performance are inevitably followed by below-average returns, and bad times inevitably set the stage for surprisingly good performance." That prices of investment assets will wiggle above and below intrinsic value is Mr. Market's gift to you. Don't try to predict when the wiggles will happen but rather be patiently waiting for when it happens. The "being patient" part of being a value investor is hard. If you expect the market to give you enough profit to buy a car or a speedboat next week, you will fall down. " Value investors price stocks" rather than "time markets."

5. "Investors have never liked uncertainty–and yet it is the most fundamental and enduring condition of the investing world." An investor faces these situations: 1) possible future state known, probability known (risk), (2) Possible future state known, probability unknown (uncertainty) and (3) future state unknown, probability not computable (ignorance). How an investor deals with risk, uncertainty and ignorance will determine their level of success.

6. "The intelligent investor realizes that stocks become more risky, not less, as their prices rise, and less risky, not more, as their prices fall." Risk is *not* equal to volatility as some people claim. There are many money managers who want you to believe/convince you that volatility is equal to risk because volatility is a major risk for them since if stocks drop in price investors will flee the money manager. These managers also love equating risk with volatility since it gives investors the impression that risk can be precisely quantified which justifies their fees. Since some probabilities are unknown and some future states are unknown, "risk" is not computable number. It is "volatility" after all which enables an investor to benefit from Mr. Market's bi-polar behavior (i.e., volatility is actually the source of a value investor's opportunity). For the best essay on the proper definition of risk read Warren Buffett's 1993 Berkshire Shareholder's letter.

7. "Approximately 99% of the time, the single most important thing investors should do is absolutely nothing." As an investor you should bet seldom and only when the odds of success are substantially in your favor. The temptation of investors is too often toward action when inaction is their friend. Keeping fees and expenses very low is important and avoiding hyperactivity helps with that objective.

8. "Investing isn't about beating others at their game. It's about controlling yourself at your own game." Overcoming dysfunctional psychological heuristics is a trained response. That trained response requires work and discipline – if you want to avoid that, buy an index fund.

9. "Keep better records of your decisions." By writing down your decisions and measuring their outcomes you are confronted with the fact that you are often a muppet. Hindsight bias, denial, overconfidence and other psychological biases are powerful. The easiest person to fool is yourself. I have a friend who thought he was a great investor until he wrote down his investing results for three years. Now he is an index fund zealot.

10. "The way I like to think of day trading is that it's probably the most effective weapon ever to commit financial suicide, … It's an absolutely lethal way for the typical

person to invest because it's not even really a form of investing, it's gambling pure and simple." People love to gamble as anyone driving by a casino can see. In far too many cases this gambling finds its way into a person's investing behavior. The difference between making a bet when the odds are substantially in your favor and when "the house" has an advantage is night and day.

11. "Most people will buy more when something goes up and either sell it or freeze when it goes down. The brain is really built as a pattern-recognition machine and a performance-chasing mechanism, and when you combine automatically perceiving patterns where they don't actually exist with pursuing performance right before it disappears, you have a recipe for disaster." Training yourself not to "chase performance" is essential.

12. "Most financial journalism, like most of Wall Street itself, is dedicated to a basic principle of marketing: When the ducks quack, feed 'em…. Every columnist knows that if you ever write something that didn't make anybody angry, you blew it."

A Dozen Things I've Learned from Marty Whitman/Third Avenue about Investing

December 15, 2013

1. "The cheaper you buy, the greater the potential investment reward." This is a simple idea which many investors do not understand since they are driven to buy when "Mr. Market" is euphoric since the human instinct is to follow the crowd. Fighting this herding instinct is a trained response. As James Montier of GMO said his past week: "The golden rule of investing: no asset (or strategy) is so good that you should invest irrespective of the price paid." Re Montier see: http://25iq.com/2013/09/22/a-dozen-things-ive-learned-from-james-montier-about-investing/

2. "The cheaper you buy, the less the inherent risk." Life is easier and more profitable as an investor if you avoid making mistakes. Too many people think that dialing up risk is the best way to increase returns. If you buy at a discount you have a margin of safety which will help protect you from making mistakes and will improve your odds of success. Walter Schloss took this idea to the limit: http://25iq.com/2013/10/27/a-dozen-things-ive-learned-from-philip-fisher-and-walter-schloss-about-investing/

3. "Market prices do not determine business value." Price is what you pay and value is what you get. More generally, Bob Shiller is right (people are often not rational) and Eugene Fama is wrong (because he has confirmation bias). Ben Graham is the creator of the Mr. Market idea and my post on him is here: http://25iq.com/2013/09/29/a-dozen-things-ive-learned-from-benjamin-graham/

4. "[Buy] companies with very strong financial positions whose securities are priced at significant discounts to private market value." Acquiring a margin of safety by buying the asset at a discount to the price an informed private investor would pay is essential to the value investing "system." It is important to understand that value investing is a system and the elements of the system are not optional. The value nvesting system has evolved since the time

of Ben Graham to include elements of Phil Fisher as I explain here: http://25iq.com/2013/10/27/a-dozen-things-ive-learned-from-philip-fisher-and-walter-schloss-about-investing/

5. "Concentrate on 'what is' in terms of understanding a business, in contrast to 'what the market thinks.'" It is best to focus on what is going on **now** in a business and not what you think/predict may happen in the future. "Predicting the present" is infinitely easier than predicting the future. Understanding the present is easier if you know what you are doing and the underlying business is understandable. Read Jeremy Gratham on this: http://25iq.com/2013/11/10/a-dozen-things-ive-learned-from-jeremy-grantham-about-investing/ and Bruce Greenwald too.

6. "Value investing means being price conscious rather than outlook conscious." Prices of assets will be taken up and down by the always bipolar Mr. Market. If you are patient and rational and otherwise follow the value investing "system", Mr. Market will inevitably deliver his financial gifts to you. You can't predict when it will happen, but you can certainly wait patiently for the gift to eventually be presented. If you always bet with the crowd you cannot beat the market, especially after fees. To outperform the market sometimes you must be a contrarian and you must be right on those occasions. Read Seth Klarman on this subject and you will benefit: http://25iq.com/2013/07/15/a-dozen-things-ive-learned-from-seth-klarman/

7. "Value investing just does not work for people deeply involved in trying to predict near-term stock prices or general trends for securities markets or commodities markets." It is fun to make predictions! People love to buy lottery ticket stocks! But don't confuse that fun with something that makes financial sense. A value investor wants to make bets where the odds are substantially in his or her favor. Bet seldom, but when the odds substantially favor, you must bet big. Being ready to bet big when the situation presents itself is critical. Reading Howard Marks is arguably best on this: http://25iq.com/2013/07/30/a-dozen-things-ive-learned-about-investing-from-howard-marks/

8. "We ignore outlooks and forecasts… we're lousy at it and we admit it… everyone else is lousy too, but most people won't admit it." Understanding the limits of your own competence is valuable. Everyone can use colleagues who can give them perspective on decisions. Don't go near the edges of your own competence especially if you don't know precisely where they are. Only bet when you are not the patsy. If you do not know who the patsy is, it is you. Michael Price speaks well on this "avoid making forecasts" topic: http://25iq.com/2013/10/20/a-dozen-things-ive-learned-from-michael-price-abut-investing/

9. "We deal in probabilities, not predictions." Investing is a probabilistic exercise. The frequency of an investor's correctness should not be the focus but rather magnitude of correctness. There is risk, uncertainty and ignorance involved in investing. Process matters in investing and on that and everything about investing read Michael Mauboussin. My post on that is here: http://25iq.com/2013/07/11/a-dozen-things-ive-learned-from-michael-mauboussin-about-investing/

10. "We attracted a lot of market timers and asset allocators. I don't need those … amateurs in my fund." Market returns will always be lumpy. Drops in the prices of stocks are inevitable and it is then when people tend to panic and want to sell. Whitman does not want investors who panic and want to sell when prices are low. My Bruce Berkowitz post

elaborates on this point: http://25iq.com/2013/11/24/a-dozen-things-ive-learned-from-bruce-berkowitz-about-investing/

11. "Based on my own personal experience – both as an investor in recent years and an expert witness in years past – rarely do more than three or four variables really count. Everything else is noise." Occam's Razor is a favorite idea of many value investors. Wikipedia states regarding Occam's Razor: "among competing hypotheses, the hypothesis with the fewest assumptions should be selected." Einstein is famous for saying, "Everything should be made as simple as possible, but no more simple." On this point, read everything Charlie Munger related (which investors should do anyway). Read Jason Zweig on this and everything regarding investing and prosper: http://25iq.com/2013/12/08/a-dozen-things-ive-learned-from-jason-zweig-about-investing-3/

12. "In the financial world, it tends to be misleading to state 'There is no free lunch.' Rather the more meaningful comment is 'Somebody has to pay for lunch.'" See my post on John Bogle regarding the inevitable math of fees and expenses: http://25iq.com/2013/09/28/a-dozen-things-ive-learned-from-john-bogle-about-investing/

A Dozen Predictions from Tren Griffin for 2014

December 29, 2013

1. CNBC will continue to lose viewers by trying to make its programming similar to ESPN's Sports Center, even though that approach is *exactly* what sends ordinary investors to their financial doom and *ensures* that ordinary investors will stop watching CNBC (i.e., the CNBC ratings death spiral will continue).

2. The Zero Hedge blog will continue to push people to buy precious metals even though it is particularly well qualified to tear apart the folly of speculation in precious metals and the promoters who profit from that speculation. In other words, for ideological reasons, precious metals promoters will get a "free pass" from Zero Hedge despite the fact that they are a natural target for the web site. What other promoters get such a free pass from Zero Hedge?

3. Maria Bartiromo will continue to fawn over certain CEOs on Fox Business as long as they "make money" regardless of what their firms have done to "make" that money (e.g., the "Volker" legislation is evil since it gets in the way of "making money").

4. Business reporters in general will continue to ignore the difference between revenue and profit and will talk generically about "making money." What business reporters say a company "earns" will mostly be revenue rather than profit, but that will not be made clear in the article. Reporters will make no attempt to understand what "items" are actually being excluded from financial results or whether these "items" are excluded by the company every single quarter. Business reporters will continue to pretend that depreciation is not associated

with a real cash expense paid up front when they use terms like EBITDA/OIBDA. Survivorship bias will continue to be a completely foreign concept to business reporters.

5. Sell-side Wall Street analysts will continue to put out highly fictional reports about the future performance of companies they cover (mostly motivated by a desire to obtain business for their investment bank in other areas like M&A). Can they repeat this performance? "A MarketWatch analysis reveals that the stocks that analysts hated the most a year ago produced spectacular investment returns in 2013. They beat the overall market indexes, and the stocks that analysts most loved, by a country mile."

6. Analysts for Wall Street will continue their antics. For example, Piper Jaffray analyst Gene Munster will continue to do "channel checks" (the rumor is that he is so focused on channel checks that his friends and family will never let him use the remote control when watching TV with him). Maybe this year Munster will finally be able to do a channel check on an Apple TV. Topeka Capital will continue to put absurd target valuations on stocks since it is the only way they can get some attention. Thankfully, Meredith Whitney is now running her own hedge fund and no longer providing any "analysis"/getting lucky once in a row. Analysts will not forget: "If you're a bull and you're wrong, you're forgiven. If you're a bull and you're right, they love you. If you're a bear and you're right, you're respected. If you're a bear and you're wrong, you're fired."

7. The press will find people in the technology industry who have political views which do not even come close to representing the technology industry, but will claim that they are typical of the technology industry (i.e., stoking the fires of political polarization/generating click bait will continue to be "job #1" for the press). Of course, it is not possible to find a few people with odd political views in other industries like real estate, construction or manufacturing or the educational sector. Not.

8. Economists will continue to make assertions about the economy without actually talking to *anyone* who actually runs a business. They will continue to talk extensively with each other in small warring cabals within the profession being careful to exclude anyone who is not "empirical" (the ultimate insult for a economist) from the conversation. The crew of economists who believe (1) the economy is composed of perfectly informed rational agents and (2) the hard version of the Efficient Market Hypothesis, will continue living in their fantasy world.

9. Online options brokers will continue to advertise heavily to convince new people to trade options, including but not limited to at sports events and at stop lights, since their "clients/marks" will continue to get hurt financially and cease being clients/marks. Online options trading firms face a shrinking supply of new muppets. Given this problem they will likely attend "motivational" seminars for what Charlie Munger calls "compliance professionals" given by people like Jordan Belfort.

10. Bill Gross will continue to "talk his book" (just like everyone else, but his "book" is bigger than nearly everyone else). When Gross says publicly that people/firms should do X, he will be already fully positioned on X and will already be thinking about his next move (just like everyone else who is talking their book).

11. Warren Buffett and Charlie Munger will make zero short term predictions about the economy or interest rates. None whatsoever. Even when they make long term predictions they will make fewer predictions than almost anyone, but bet big when they do.

12. People will continue to make predictions and muppets will believe them (especially if the person making the prediction appears highly confident). As an aside, I am *highly* confident about each of these predictions.

A Dozen Things I've Learned from Mason Hawkins about Investing (Plus Tren on Value Investing)

January 6, 2014

I've done more than 25 of these "Dozen Things" posts now and I feel the commentary by me is getting repetitive. If you want commentary on what Mason Hawkins said below, read what I said on the other posts. I thought that instead of specific commentary on these quotations below from Mason Hawkins I would write a more general paragraph of commentary on value investing trying to "omit needless words."

Value investing has just four core principles: (1) buy at a discount to intrinsic value (margin of safety); (2) a share of stock is a partial interest in a business; (3) make the market your servant and not your master; and (4) be rational. The "core of the core" of value investing is the first principle (margin of safety). The hardest thing about value investing is the fourth principle (be rational). Value investing is simple, but not easy (in no small part since the struggle to be rational is a life long endeavor). There are other aspects of value investing beyond the four core principles which depend on the value investor's individual style which can vary somewhat from investor to investor. Value investing is more of an art than a science since any valuation involves risk, uncertainty and ignorance. The future is never predictable with certainty.

Mason Hawkins:

1. "We want to own companies with the following qualitative characteristics. 1) Unique assets having distinct and sustainable competitive advantages that enable pricing power, long-term earnings growth, and stable or increasing profit margins. 2) High returns on capital and on equity as measured by free cash flow rather than earnings. 3) Capable management teams."

2. "[In] commodity businesses, being a low cost provider is not enough of an advantage for an overweight position since the commodity price is subject to going below the cost of production for an unpredictable period of time.

3. "We only want to buy when we can pay less than 60% of a conservative appraisal of a company's value, based on the present value of future free cash flows, current liquidation value and/or comparable sales…. trying to create a big margin of safety

4. "About 85% of the time, the markets are in some close proximity to central value. It's that other 15% of the time that you need to concern yourself with."

5. "We sell for four primary reasons: when the price reaches our appraised value; when the portfolio's risk/return profile can be significantly improved by selling, for example, a business at 80% of its worth for an equally attractive one selling at only 40% of its value; when the future earnings power is impaired by competitive or other threats to the business; or when we were wrong on management and changing the leadership would be too costly or problematic."

6. "It is very important to pass on opportunities when you can't calculate a conservative assessment of the business's value."

7. "Statistical analysis shows that security-specific risk is adequately diversified after 14 names in different industries, and the incremental benefit of each additional holding is negligible. We own 18-22 companies to allow us to be amply diversified but have the flexibility to overweight a name or own more than one business within an industry."

8. "Limiting the portfolios to our 20 most qualified investments allows us to know the companies we own and their managements extremely well while providing ample security-specific diversification."

9. "From the third quarter of 2008 through the first quarter of 2009, we were given an opportunity to own best-in-class companies at price levels I've never seen in my experience…. If you were forced to sell because you were fearful, and if you liquidated in the fourth quarter of 2008 as opposed to buying, which we were doing, you took a permanent loss, and you used Mr. Market to your detriment. As we have said often, Mr. Market is there to serve you, not to determine your outcome. When he is fearful, you should be greedy, as Mr. Buffett has said. When Mr. Market is greedy, you should be cautious and use those times to sell businesses at full appraisal if they get there."

10. "The great investors throughout history – the Medicis, the Morgans, the Rothschilds, and Buffett recently. Those great investors with terrific long-term records were always in a position to be liquidity providers. Each was willing to hold cash until someone was in distress, under duress, and they could provide that liquidity at very attractive prices."

11. "Capitalism has a way of turning a good idea at a low price into a bad idea at a high price. It makes sense to buy at 6x operating cash flow, but at 14x operating cash flow it is very problematic and harmful to do so using massive leverage."

12. "If you are not willing to look stupid in the short run, you are not likely to be a successful investor in the long-run."

Ben Graham's Value Investing ≠ Fama/French's Factor Investing

March 16, 2014

Ben Graham and his disciples like Warren Buffett, Howard Marks and Seth Klarman have developed a system called "value investing." Eugene Fama and Ken French developed a completely different *factor investing* approach which identifies "value stocks." Although Ben Graham's system and Fama/French's approach share the word "value," they are vastly and fundamentally different.

A very smart friend recently said to me that it is important to: "draw a clear and simple definitional distinction between value as a *statistical factor* (Fama/French) and value as *an analytical style or goal* (Ben Graham). The two methods are solving for different questions: Fama/French is solving for what creates a persistent disparity of return across large numbers of stocks, while Graham-style *value investors* are solving for where can I find low risk of permanent impairment of capital and a high probability of an attractive return?"

As a result of the fundamental differences in investing style, value stocks as identified by Fama/French's *factor investing* model may not be attractive at all to a *value investor* as practiced by the disciples of Ben Graham and that a fund constructed using *factor investing* has **nothing** to do with Ben Graham's *value investing* system.

The backbone of Fama/French's **top-down** factors model is the assumption that markets are efficient and therefore returns that outperform the market can **only** be achieved by taking on greater risk. But when Fama/French looked at the real returns of investors they found anomalies. Since they did not want to abandon the efficient markets hypothesis Fama/French augmented their construct with the idea that there must be undiscovered systematic "risk factors." Fama/French are now up to five such factors, one of which is the ratio of a company's Book Equity (Shareholders' Equity) to Market Equity (Market Capitalization). Thus, "Book to Market" was christened the "value factor."

In contrast to Fama/French's top-down approach, the Ben Graham *value investing* system is based on the premise that to value the stock you must value **the specific business on a bottoms-up basis**. The value investor's goal is to estimate a company's future distributable cash flows and buy it when its share price is trading significantly lower that the intrinsic value implied by these cash flows. For example, the value investor might estimate that a company's long term cash flows will be $100M per year and buy it because the company's enterprise value is $500M. It doesn't take a rocket scientist to see that if you bought something for $500M and it returned $100M per year you would be getting a fantastic return on your investment (20% in this case). The *value investing* system can outperform the market over the long term, but only if the investor can do the significant work required to implement the four value investing principles: (1) value shares like a proportional interest in a business, (2) have a *margin of safety* when purchasing shares; (3) understand *Mr. Market* is bi-polar rather than wise and should be your servant not your master and (4) be rational. The fourth principle is the hardest of all for investors.

Factor-investing does not involve doing any of these things. When someone uses Book to Market as a ratio to measure the inexpensiveness of a stock, he or she is effectively saying there is no difference between a pile of cash in a bank account and an operating company. To such a person, product, customers, production capacity, brand, and operating ability mean absolutely nothing. That's because Book Value in the ratio is being used as a proxy for *intrinsic value* and Book Value tells you nothing about a company's earnings power.

True *value investors* view the world in reverse. They are concerned with what a company's operating characteristics tell you about that company's likely future cash flows. Companies with greater future cash flows are intrinsically worth more than those with less, regardless of what the Book Value of the companies may be.

The bridge between Book Value and earnings/cash flow can be found in a company's Return on Equity. That is:

Earnings Yield = Return on Equity * Book To Market

Although Fama would concede that the value of business is its discounted future cash flows, he assumes that no one can be better than average at discerning how well a company is likely to perform in the future. The implication in Fama's framework is that you might as well assume all companies have the same Return on Equity. If all companies have the same Return on Equity then Book to Market tells you everything you need to know about a company's value. But to the *value investor*, it is absurd to assume that there is no basis for conservatively estimating companies' future Returns on Equity.

Value investors spend a lot of time thinking about Return on Equity and Return on Capital. These are the concepts that allow them to differentiate the earnings power of one company vs. another. To Fama/French, value is determined strictly by a database screen that sorts based on book value and price. To a *value investor*, value is a function of *margin of safety*, which can be established only by measuring market price against a range of *intrinsic values, constructed through a conservative estimation of future cash flows.*

Here is a simple way to think about this difference using an analogy. Suppose you want to put together a basketball team (let's call it Team A). The Fama/French approach would be to recruit 100 of the tallest males in town. This team would do better than average since there is a correlation between height and ability. In the same way there is going to be a statistical correlation between an undervalued company (e.g., a real value investment) and a company with low Book to Market.

Another approach to building the team would be hold tryouts and actually evaluate everyone's basketball skills (as a Ben Graham style investor might evaluate a company). Someone using this style would pick the top 15 players for this Team B. Team B is probably going to do better than Team A by a large margin even though Team A is better than average. In the same way, a properly constructed portfolio of value investments is going to be better (by a large margin) than a portfolio with several hundred stocks with high Book to Market.

When all is said and done the *factor investing* approach is essentially a tweak, perhaps an enhancement, on index investing. In contrast, the goal of a *value investor* is to achieve returns which are significantly higher than a 1 to 2% premium. In other words, f*actor investing* is trying to scrape out a slight statistical edge by tweaking an index fund approach, while the value investor is seeking more significant returns. The proof of each approach's success is "in the doing." Investors would benefit from reflecting on the results shared in Warren Buffett's famous essay *The SuperInvestors of Graham and Doddsville* to appreciate the superior results value investors have historically achieved and can prospectively aspire to and the updating of those results with actual market performance of investors like Seth Klarman and Howard Marks.

Perhaps this is why many funds do their best to encourage confusion about how *value investing* differs from *factor investing.* They want "value" funds that are really *factor investing* funds to benefit from the halo of a value *investing* system as successfully practiced by the "superinvestors" descended from the school of Benjamin Graham.

One *less known descendent* resembles Fama in their use of data, but comes to starkly different conclusions. The firm is named Euclidean Technologies and they use machine learning to do a bottoms-up comparison of the entire operating histories of current companies against thousands of other companies across the past 50 years. They do this to build a foundation for estimating the range of future cash flows a company, with a given set of operating characteristics, might deliver. Then, they invest with an uber-rational systematic process that is protected from the human psychological barriers to buying good companies when Mr. Market offers them at great prices. This approach aligns much more closely with the *value investing* system and is nothing like buying a collection of companies with the highest book-to-market ratio.

It is an unfortunate fact that many investors appear to assume that what Warren Buffett and other value investors are doing is a form of what Fama talks about when he discusses the value factor. If more investors actually read Ben Graham's *The Intelligent Investor* and other books on *value investing* they would realize that the approaches are fundamentally different.

The fundamental difference between Venture Capital and Value Investing

March 29, 2014

"Active management has to be seen as the search for mistakes." Howard Marks

Venture capital and value investing share many different elements but each system is based on a different mispricing. This is a critically important point for an investor to understand. If an asset is not mispriced, market outperformance **is not mathematically possible**. It is also important to understand that investments can be mispriced for different reasons.

In **venture capital** the mispricing occurs because very few investors or asset owners understand **optionality.** This allows a VC to buy what are essentially long-dated, deeply-out-of-the-money call options from companies at prices which are a bargain. By purchasing a portfolio of these options, a VC who understands optionality and who has the right deal flow due to **"cumulative advantage"** can substantially outperform the market. The basic formula is simple for a top 5% VC with the requisite cumulative advantage and deal flow. A VC invests in ~30 companies per fund and the distribution of returns among those companies will reflect a power law. One to three of the companies in the VC's portfolio will overwhelmingly drive financial returns and 50% of the companies will be a total or near total loss.

In **value investing** the mispricing occurs because the market is bipolar (i.e., neither always rational nor always efficient). This allows an investor to sometimes buy assets at a price which reflects a discount to intrinsic value (i.e., a bargain) and to wait for a good result rather than trying to "time" the market. Avoiding mistakes is a focus of the value investor. There is no trick to value investing other than being smart by avoiding stupidity.

Value investing and venture capital investing are not the only ways to invest, but they share many elements like fundamental analysis, circle of competence, rationality, margin of safety and most importantly a search for a mispriced asset. Both value investing and venture capital investing require unique skills and very few people have that skill. Almost everyone (~97% of people) should buy a portfolio of low fee index funds/ETFs.

Many successful value investors do not like to buy an asset which does not generate cash flow since the **"intrinsic value"** calculation requires cash flow. It is important to note that intrinsic value is a very specific type of value. Intrinsic value is not the only type of value. For example, gold has commodity value, but no intrinsic value. There is nothing wrong with commodity value per se, but for some value investors gold is not their "cup of tea" (i.e., it is not their preference to acquire that type of value). For example, if you want to give Warren Buffett gold he will be appreciative of the gift, but don't ask him to buy it as an investment since to do so would be what he calls **speculation.**

Factor investing, a type of tweaked index investing is yet another way to invest, but it is not value investing. A value stock for a factor investor is not necessarily a stock a value investor would buy.

When different types of investors disagree the disagreement is often based on different taxonomies and their chosen investing thesis. Investors have more in common than they may imagine. What Leo Tolstoy should have said was:

"All successful investors are alike; each unhappy speculator is unhappy in their own way."

Notes:

"not mathematically possible" Item #1 here: http://25iq.com/2013/09/28/a-dozen-things-ive-learned-from-john-bogle-about-investing/

"venture capital" http://25iq.com/2013/07/05/a-dozen-things-i-have-learned-about-venture-capital/

"optionality" http://25iq.com/2013/10/13/a-dozen-things-ive-learned-from-nassim-taleb-about-optionalityinvesting/

"cumulative advantage" http://25iq.com/2012/10/06/the-matthew-effect-and-vc-performance/

"value investing" http://25iq.com/2013/09/15/a-dozen-sentences-explaining-what-ive-learned-from-warren-buffett-about-investing/

'intrinsic value" http://www.berkshirehathaway.com/owners.html

"speculation" http://25iq.com/2013/03/02/investment-vs-speculation/

"factor investing": http://25iq.com/2014/03/16/ben-grahams-value-investing-%E2%89%A0-famafrenchs-factor-investing/

The Best Venture Capitalists Harvest Optionality (Dealing with Risk, Uncertainty and Ignorance)

April 5, 2014

Venture capitalists must deal with systems which are, in the words of Nassim Taleb, "more like a cat than a washing machine." A start up and the markets in which they operate are quintessential complex adaptive systems. Michael Mauboussin nails the challenge here:

"Increasingly, professionals are forced to confront decisions related to complex systems, which are by their very nature nonlinear…Complex adaptive systems effectively obscure cause and effect. You can't make predictions in any but the broadest and vaguest terms. … complexity doesn't lend itself to tidy mathematics in the way that some traditional, linear financial models do."

People talking about the challenges of being a venture capitalist in this environment will often use a taxonomy created by Frank Knight:

1. Risk: future states of the world known and probabilities of those future states known. An example of a something involving risk would be roulette.
2. Uncertainty: future states of the world known, but probabilities of those future states are not known.
3. Ignorance: future states of the world unknown, probabilities therefore not computable.

Nassim Taleb pointed out in The Black Swan that Knight's category 1 is massively more rare that humans realize. Nassim Taleb wrote: "these 'computable" risks [in category 1] are largely absent from real life! They are laboratory abstractions!"

What happens in real life is that people make decisions assuming category 1 is involved when the reality is that it is category 2 or 3. How then does the *Wise VC* or entrepreneur operate given this reality?

Nassim Taleb provides a quadrant-based model as a guide to decision making. Michael Maubousin provides a summary of what Nassim Taleb has created:

"a two-by-two matrix, where the rows distinguish between activities that have extreme outcomes and those that have more bunched outcomes, and the columns capture simple and complex payoffs. He allows that statistical methods work in the First Quadrant (simple payoffs and bunched outcomes), the Second Quadrant (complex payoffs and bunched

outcomes), and the Third Quadrant (simple payoffs and extreme outcomes). But statistical methods fail in the Fourth Quadrant (complex payoffs and extreme outcomes).

The nature of the venture capital business is that what drives financial return comes from what Nassim Taleb calls the Fourth Quadrant. The wise person operates in the Fourth Quadrant by seeking to become "antifragile" rather than trying to predict outcomes that are not computable. My blog post on fragility and optionality is here: http://25iq.com/2013/10/13/a-dozen-things-ive-learned-from-nassim-taleb-about-optionalityinvesting/ In short, the *wise venture capitalist* seeks optionality. The poseur venture capitalist tries to predict the future by using extrapolation.

Once a venture capitalist recognizes that optionality/antifragility is the objective they understand that there is no formula for being a wise venture capitalist. Nassim Taleb believes the wise venture capitalist is a flaneur:

"Someone who, unlike a tourist, makes a decision opportunistically at every step to revise his schedule (or his destination) so he can imbibe things based on new information obtained. In research and entrepreneurship, being a flaneur is called "looking for optionality."

Acquiring optionality is best accomplished via tinkering and a process that Taleb calls **via negativa**.

"If you 'have optionality,' you don't have much need for what is commonly called intelligence, knowledge, insight, skills, and these complicated things that take place in our brain cells. For you don't have to be right that often. All you need is the wisdom to not do unintelligent things to hurt yourself (some acts of omission) and recognize favorable outcomes when they occur. (The key is that your assessment doesn't need to be made beforehand, only after the outcome.)"

This approach is straight up consistent with the ideas of Charlie Munger. In short, the best way to achieve success is often "to not be stupid." Wise VCs and entrepreneurs which they invest with engage in tinkering in domains which tend to produce a small down side and potentially massive upside. One of the best ways I have ever heard the idea behind Charlie Mungers's philosophy expressed was by the famed investor Sam Zell:

"Listen, business is easy. If you've got a low downside and a big upside, you go do it. If you've got a big downside and a small upside, you run away. The only time you have any work to do is when you have a big downside and a big upside."

Nassim Taleb describes what the smart investor is looking for in this way: "Payoffs [which] follow a power law type of statistical distribution, with big, near unlimited upside but because of optionality, limited downside." Venture capitalists who are What Nassim Taleb calls "antifragile" benefit from optionality. Investment bankers, who are "fragile" still are able to do this by being *too big to fail* and therefore socializing the big downside tail risk (i.e., get the taxpayers to pick up the losses from tail risk). Optionality also explains why there is a power law inside the portfolio of a venture capital investor in addition to the power law that explains the distribution of financial returns between venture capital firms..

Nassim Taleb sums up much of what I have written above in this passage from Antifragile:

"the idea present in California, and voiced by Steve Jobs at a famous speech: "Stay hungry, stay foolish." He probably meant "Be crazy but retain the rationality of choosing the upper bound when you see it." Any trial and error can be seen as the expression of an option, so long as one is capable of identifying a favorable result and exploiting it…"

A Dozen Things I've Learned about Business from Bill Gates

April 12, 2014

1. **"Business isn't that complicated"** and **"Take sales, take costs, and try to get this big positive number at the bottom."** Many people make a living trying to make "business" sufficiently complex that you feel the need to pay for their services. Their business is to make business complex, when it is actually simple.

2. **"Of my mental cycles, I devote maybe ten percent to business thinking."** and **[John Malone] and I are damn similar. He worked at Bell Labs and understands both business and technology."** It is not enough to understand just business or the just product or service. Successful entrepreneurs/CEOs understand both in a deep way. Great entrepreneurs/CEOs spend way more time on the product/service offering than business strategy, structure and operations. There are many ways to succeed but successful entrepreneurs/CEOs are seldom one dimensional. Having said that, entrepreneurs/CEOs which have success which persist over time do typically have a well-defined idea of the limits to their own competence.

3. **"Being a visionary is trivial. Being a CEO is hard. All you have to do to be a visionary is to give the old 'MIPS to the moon' speech — everything will be everywhere, everything will be converged. Everybody knows that. Which is different from being the CEO of a company and seeing where the profits are."** Poseur CEOs are often eventually exposed but not always. Some CEOs look skillful and are surfing on the work done by people who were in that position before they arrived. CEOs who have created their company from scratch and it lasts over the years have proven their skill. Visionary CEO can often be attached to companies which generate revenue but never significant profits.

4. **"Unless you're running scared all the time, you're gone."** Moats (sustainable competitive advantage) don't last unless you are constantly working to reinforce them since they inevitably atrophy. If you don't yet have a moat, you are even more exposed to competitors. The technology business is unique in that demand side economies of scale can result in nonlinear changes. In a technology business in particular, you can get run over by a mistake you made five years before.

5. **“Intellectual property has the shelf life of a banana.”** Intellectual property can be used to create a moat but it has a limited shelf life. If you are not investing constantly to renew your intellectual property, without a moat from some other source you are dead. Better yet, invest constantly in creating new intellectual property to replace what will inevitably expire.

6. **“Supply is the killer of value. That’s why the computer industry is such a strange industry. We’re dealing with amazing increases in supply.”** and **“If you look at an industry where you have such a rapid increase in supply, usually that’s pretty bad, like when radial tires were invented, people didn’t start driving their cars a lot more, and so it means the need for production capacity went way down, and things got all messed up. The tire industry is still messed up.”** Bill’s view on this is the inverse of the George Gilder thesis during the dot com years. Sometimes disruption caused by an increase in supply only benefits consumers and producers end up with nothing. Whether something is “disruptive” is orthogonal to whether it may be a direct source of profit for the producer. Disruption shifts value creation opportunities creating potential opportunities which may or may not benefit producers of a good or service.

7. **“Word of mouth is the primary thing in our business. And advertising is there to spur word-of-mouth, to get people really talking about ‘the latest thing.’”** Acquiring customers in a cost effective way is the essence of business. Customers you acquire “organically” are more valuable since they do not leave as often and usually generate more revenue.

8. **“Your most unhappy customers are your greatest source of learning.”** There is no end to how much products and services can improve. Dysfunction inside any company is best measured relative to its competitors. There is no perfect company without some dysfunction under the decks and that creates opportunities.

9. **“It is fine to celebrate success, but it is more important to heed the lessons of failure.”** and **“There are many lessons about the dangers of success, and Henry [Ford] is one of them.”** Failure is an opportunity to learn. The more you learn in life the more you learn that there is even more you don’t know and that some things are unknowable. What you may attribute to success may be luck and vice versa. Success in one domain does not equate to success in all domains. Success may cause you to succumb to “man with a hammer syndrome (everything looks like a nail).”

10. **"Perseverance has been characteristic of our great success."** Going up against great competitors requires resilience and a thick skin. Steve Ballmer famously put it this way: "It doesn't matter if we bang our head and fail. We keep right on banging and banging and banging and banging and banging."

11. **"If you look at us from a financial point of view we are wizards, but we have made many products that have faded."** It is magnitude of correctness not frequency of correctness that matters most. Babe Ruth struck out a lot, but that strike out record was vastly outstripped by his successes. Great entrepreneurs and CEOs think in terms of expected value.

12. **"I spend a lot of time reading."** The best way to accelerate learning (which often comes from understanding the mistakes and successes of others) is to read widely and *a lot.* Learning from the mistakes of others scales far better than making those mistakes on your own.

A Dozen Things I learned from Craig McCaw

April 19, 2014

1. **"If you aren't scared you probably aren't doing anything."** Life is filled with risk, uncertainty and ignorance. If you are doing something and aren't a little scared you are not paying attention. Ben Horowitz made the same point in his new book: "… being scared didn't mean I was gutless. What I did mattered and would determine whether I would be a hero or a coward."

2. "We are trying to make as few mistakes as we can." A great way to be smart, is to not be stupid. This is a highly underrated approach advocated by people like Charlie Munger.

3. "Being first is not always best." Craig McCaw said to me more than once: "Pioneers often get arrows in the back." You can learn from the many people who have failed before you. Nassim Taleb calls this *via negativa*. Sometimes all of the forces in the business and engineering worlds are perfectly aligned to create financial success and sometimes that is not the case. Timing can be everything.

4. "Flexibility is heaven." Having the option to make the best choice at a later point in time when you have more information is valuable. Craig McCaw often spends money to preserve his ability to have multiple options.

5. "You make decisions on long-term planning, not on short-term changes in the environment." The world is unpredictable enough that making decisions based on short term changes in markets is unwise.

6. "I hate the orchestration of life. Most executives die frustrated (because) they have been orchestrated into boxes." There is a lot of optionality in serendipity. Having the option to change your schedule and activities has great value. Craig McCaw enjoys nothing more than going for a ride in his seaplane to a beautiful spot for lunch. Getting out of the office makes you think differently. Some of the happiest times in my life were afternoons I spent in that seaplane.

7. "**I approach things differently than other people." "A dyslexic tends to be more conceptual and do things which other people wouldn't see as obvious. So maybe it's a strategic asset . . . I can't go to a piece of paper and organize things as most people would in a way that they could understand and come up with a plan. "I have to explain conceptually what we want to accomplish, and then somebody else has to translate that into a concise organized plan." "I think the way I look at things gives me a different perspective. I'm most valuable when I work with a team of bright people who complement my weaknesses with their strengths." "I think I had trouble fitting as a dyslexic. I don't think like other people, so I don't fit very well in a clique. As a result of that I have trouble quantifying people as directly as others. I look at their ideas, rather than at them so much as individuals… if you pass autonomy as far down in any grouping of people as you can, you will get extraordinary results if you ask for a lot. The greatest burden you can put on someone is trust."** There is huge value in team diversity in the broadest possible sense and in knowing your limitations. Hiring people who complement your skills is wise. Ben Horowitz said in his book: "Looking at the world through such different prisms helped me separate facts from perception." I would expand on that to say a diverse group of people on a team accomplishes much the same result.

8. "We have always tried to have the discipline of being over financed so if you had a problem over a period of time you could survive it." "Borrowing money was a tool for us because of the businesses we were in –cable television, cellular telephone, paging — all were very capital intensive. In a perfect world, you don't have that. It's easier if you don't have it, but it's the leverage to make a lot happen, either pro or con. As long as you believe in the pro, and you've thought out how not to run out of money if things don't go as you expect, then indebtedness, as it were, ups the ante and makes everybody work harder, because you know the consequences of failing to deliver on your promises." Debt destroys optionality, but if it is non-recourse, debt can give you optionality.

9. ''If you are going to set out on a voyage, remember the Titanic. The captain took risks he did not have to take, for ego.'' Hubris can result in big problems. Being humble, especially when outside of your circle of competence, is wise.

10. ''My father was a visionary who did not hire great people. The company was too dependent on one person.'' Craig McCaw hired extremely able managers to run his businesses and it showed. John Stanton, Jim Barksdale, Steve Hooper, Wayne Perry, Dan Akerson, Tom Alberg, John Chapple, Peter Currie, Tim Donahue, Maggie Wilderotter are just a few examples.

11. "When products aren't right, people won't buy it… people won't come until there is something moderately rational. As you begin, you don't expect it to be viable… This isn't an AK-47 [holding up a classic large brick phone], it was the original phone. You couldn't hold it for more than 15 minutes. It had 30 minutes of talk time, but you couldn't hold it up for that long. Things started slowly. The car phone was even worse

because you had to take the car apart, and keep his car for a whole day….” If you give something to people in their interest, they will eventually realize it. If they don’t know it on day one, it really isn’t important. It’s your job to think almost anthropologically about humanity and say, “What would be in their best interest?” “With cellular telephony… we saw an enormous gap between what was and what should be. I mean, [the fixed phone system] makes absolutely no sense. It is machines dominating human beings. The idea that people went to a small cubicle, a six-by-ten office, and sat there all day at the end of a six-foot cord, was anathema to me.” ”Human beings from the time they discovered seeds have been enslaved towards places.” Craig McCaw has a fantastic intuitive sense of what consumers will find valuable. When you watch him pick up a new product or use a new service for the first time you can see his mind racing.

12. “The industry is commoditizing when you look at one cent a minute. Is it even worth keeping track of?” Like Bill Gates, Craig McCaw understands that supply kills value. He also understands that selling something adjacent to that amazing increase in supply can allow a business to create huge profits.

A Dozen Things I have Learned from Jeff Bezos

April 26, 2014

1. “Percentage margins are not one of the things we are seeking to optimize. It’s the absolute dollar free cash flow per share that you want to maximize, and if you can do that by lowering margins, we would do that. So if you could take the free cash flow, that’s something that investors can spend. Investors can’t spend percentage margins.” “What matters always is dollar margins: the actual dollar amount. Companies are valued not on their percentage margins, but on how many dollars they actually make, and a multiple of that.” “When forced to choose between optimizing the appearance of our GAAP accounting and maximizing the present value of future cash flows, we’ll take the cash flows.” Jeff Bezos is very focused on this “absolute dollar free cash flow metric.” You will see many people talk about Amazon’s focus on “growth” vs. margins, but the right focus is instead absolute dollar fee cash flow. Jeff Bezos spelled out his focus on absolute dollar free cash flow in his 2004 letter to shareholders. He is not about to run his company based on a ratio much beloved by someone outside the company, such as a Wall Street analyst. Next weekend I will write about Howard Schultz who similarly ignores metrics beloved by analysts (the ignored metric is “same store sales” in the case of Starbucks). If you want to see Amazon’s approach to absolute dollar free cash flow generation taken even further, go to China and see Xiaomi and Alibaba up close.

2. “Your margin is my opportunity.” Jeff Bezos sees a competitor’s love of margins and other financial “ratios” as an opportunity for Amazon since the competitor will cling to them while he focuses on absolute dollar free cash flow and slices through them like a hot knife through butter.

3. "Market leadership can translate directly to higher revenue, higher profitability, greater capital velocity, and correspondingly stronger returns on invested capital." Jeff Bezos knows when to use economies of scope and scale to his advantage. He also knows that in maximizing absolute dollar free cash flow, velocity of capital and inventory turns matter in a huge way. When Jeff Bezos lacks scale or scope advantages in a given business, Amazon's attack on competitors will be asymmetric in nature. At this point readers might expect that I would give my opinion of the value of a share of AMZN stock. I will give readers a methodology but not a number. If you can't calculate your own number, like 97% of all investors you should be buying a diversified portfolio of index funds/ETFs anyway. If you want simple numerical stock "tips," there are lot of other bloggers and writers who will to give them to you. If you invest based on these third party stock tips, your performance will fall somewhere between lousy and dreadful. Me giving readers of this blog a valuation number for a stock just encourages the wrong investing behavior. I will say that to generate the return on invested capital necessary to support the existing stock price you must believe that AMZN's cash flow will at some point in the future rise significantly faster than AMZN's need for new capital expenditures. Under this thesis as capital expenditures fall, depreciation's slower growth will mean it will have less negative impact on GAAP results. This thesis requires that you believe that AMZN will create a more significant moat for itself via brand, intellectual property, supply side economies scale, economies of scope and demand side economies of scale (network effects). How much any company's moat will increase or decrease in strength over time is a qualitative and not quantitative determination. The definitive essay on moats has been written by Michael Mauboussin and I am on record as saying that you are a damn fool if you do not read it. https://t.co/7Vl7urkCkB If you do not understand this essay you should be buying a diversified portfolio of index funds/ETFs.

4. "On the Internet, companies are scale businesses, characterized by high fixed costs and relatively low variable costs. You can be two sizes: You can be big, or you can be small. It's very hard to be medium. A lot of medium-sized companies had the financing rug pulled out from under them before they could get big." Jeff Bezos is talking about what Michael Porter calls being "stuck in the middle." A company stuck in the middle lacks the scale and scope economies as well as the greater access to capital of a big company, but is too big to effectively pursue a differentiation strategy.

5. "If everything you do needs to work on a three-year time horizon, then you're competing against a lot of people. But if you're willing to invest on a seven-year time horizon, you're now competing against a fraction of those people, because very few companies are willing to do that. Just by lengthening the time horizon, you can engage in endeavors that you could never otherwise pursue. At Amazon we like things to work in five to seven years. We're willing to plant seeds, let them grow—and we're very stubborn." "We've had three big ideas at Amazon that we've stuck with for 18 years, and they're the reason we're successful: Put the customer first. Invent. And be patient." By investing on a seven year time frame Jeff Bezos generates a behavior-based moat since

other companies who invest for the short term flee Amazon's approach to preserve their financial "ratios."

6. "The balance of power is shifting toward consumers and away from companies…the individual is empowered… The right way to respond to this if you are a company is to put the vast majority of your energy, attention and dollars into building a great product or service and put a smaller amount into shouting about it, marketing it. If I build a great product or service, my customers will tell each other….In the old world, you devoted 30% of your time to building a great service and 70% of your time to shouting about it. In the new world, that inverts." "Your brand is formed primarily, not by what your company says about itself, but what the company does." The essence of business is the ability to cost effectively acquire customers. The very best businesses acquire customers "organically" without advertising. Great products and word of mouth drives sales at these companies. By contrast, companies which must sell their wares with huge advertising budgets are losing their edge in the Internet era. Television advertising enabled the creation of mass market advertising driven brands, but the Internet is undoing this in many cases.

7. "We will make bold rather than timid investment decisions where we see a sufficient probability of gaining market leadership advantages. Some of these investments will pay off, others will not, and we will have learned another valuable lesson in either case." Jeff Bezos seeks to harvest optionality (relatively small potential downside, massive potential upside) Harvesting optionality *requires* failure. It can't be avoided since failure provides information that enable success. This is *via negativa*. On this and items 8 and 9 see my posts on optionality at: http://25iq.com/2013/10/13/a-dozen-things-ive-learned-from-nassim-taleb-about-optionalityinvesting/ and http://25iq.com/2014/04/05/the-best-venture-capitalists-harvest-optionality-dealing-with-risk-uncertainty-and-ignorance/

8. "There'll always be serendipity involved in discovery." "If you double the number of experiments you do per year you're going to double your inventiveness." This is why Nassim Taleb recommends tinkering when engaging in the innovation/harvesting optionality. Another related Jeff Bezos quote: **"Even well-meaning gatekeepers slow innovation. When a platform is self service, even the improbable ideas can get tried because there's no expert gatekeeper ready to say 'that will never work!'"**

9. "I believe you have to be willing to be misunderstood if you're going to innovate." You can't outperform the market if you are the market. Similarly, you must adopt a non-consensus view and be right about that view to beat competitors. The way Jeff Bezos runs Amazon when it comes to a willingness to be misunderstood is exactly how Howard Marks invests. See: http://25iq.com/2013/07/30/a-dozen-things-ive-learned-about-investing-from-howard-marks/

10. "I think frugality drives innovation, just like other constraints do. One of the only ways to get out of a tight box is to invent your way out." More money often equals more problems. Companies with too much money are often less rather than more innovative. A quote much used by venture capitalists and entrepreneurs comes to mind here: "We have no money, so we must think!"

11. "If you decide that you're going to do only the things you know are going to work, you're going to leave a lot of opportunity on the table. Companies are rarely criticized for the things that they failed to try. But they are, many times, criticized for things they tried and failed at." This is what Warren Buffett calls "mistakes omission" and they can be the biggest mistakes of all. Warren Buffett puts it this way: "Typically, our most egregious mistakes fall in the omission, rather than the commission, category. That may spare Charlie [Munger] and me some embarrassment, since you don't see these errors; but their invisibility does not reduce their cost."

12. "The great thing about fact-based decisions is that they overrule the hierarchy." It is wise to be rational, objective and dispassionate in making decisions. It's just that simple

P.s., As for the 10% drop in the share price yesterday, Jeff Bezos takes the same "ignore it" approach to daily price gyrations as Warren Buffett. Running a company to please a bi-polar Mr. Market is *a fool's errand* and he won't do it. Jeff Bezos: **"I care very much about our share owners, and so I care very much about our long term share price. I do not follow the stock on a daily basis, and I don't think there's any information in it. Benjamin Graham said, "In the short term, the stock market is a voting machine. In the long term, it's a weighing machine." And we try to build a company that wants to be weighed and not voted upon."**

A Dozen Things I've Learned from Josh Brown

September 7, 2014

1. "The problem is, as a retail broker, you don't make commissions when you sit in cash. You put all your clients in cash, you are going to end up going to the soup kitchen." Josh Brown is talking about one of the many "incentive" problems which exist in investing. In this specific case, the broker has incentives to convince you to trade stocks, since that is the basis on which he or she gets paid (i.e., brokers who are paid on how much you trade are in the moving business not the storage business). The broker's incentive is to create reasons for you to trade since that generates a fee. The problem with this incentive is that nearly all of the time the best thing for the investor to do is nothing. Incentives are powerful and almost always underestimated.

Josh tells a great story about how Babe Ruth's home run production dramatically rose when a bonus was put in his contract for each home run hit. What the investor wants is an incentive structure for the financial advisor that is aligned with the investor's interests. You want your advisor to have "skin in the game," but also not to have an incentive to "skin you" as part of their game. Charlie Munger makes this same point with a story too: "I know a guy who sold fishing tackle. I asked him, 'My God, they're purple and green. Do fish really take these lures?' And he said, 'Mister, I don't sell to fish.' Investment managers are often in the position of the fishing tackle salesman. They're like the guy who was selling salt to the guy who already had too much salt. And as long as the guy will buy salt, why, they'll sell salt! But that isn't what ordinarily works for the buyer of investment advice."

2. "I kind of got taken under the wing of the wrong people (retail brokers) and then got way too good at selling – it was like a ten year layover in a really horrible airport. But then I caught a plane out of there, dropped my Series 7 and converted my best clients to fee-based – which is a great deal for them obviously, compared to paying 2.5% on every buy and sell." People can get really good at selling almost anything, especially if they get the right training. By using the scripts that Josh Brown details in his first book, stock brokers can become what Professor Robert Cialdini calls "compliance professionals" and do things like sell snow in the middle of winter in Alaska. Ideas can be sold just as easily as goods and services. I have a salesman friend who people have said could fire you and you would not realize it until you are home telling your spouse. There is nothing inherently wrong with sales. As I have said in other post in this series, sales is the lifeblood of any business. But as a consumer you want to make sure that the incentives of the salesperson are aligned with yours. It is also helpful to understand some of the basic sales techniques of compliance professional – on that subject, reading Cialdini's book is a good start.

3. "People need to learn the difference between information that's interesting and information that's actionable." The financial media's incentives are very different than an investor's incentives. Financial media wants to assemble viewers to sell to advertisers. Viewers consume media most often if: (1) there is a crisis (real or manufactured) or (2) if they think they can get rich quickly (better yet, both). Research done by Phil Tetlock has found that as the number of interviews an expert does with the press rises, the worse his or her predictions tend to be. John Bogle once said that he watches financial television only for entertainment value.

Josh Brown pulls off a neat trick in that when he is on television he substitutes actual insight and humor for predictions. He also has a nice way of dealing with the people who are better viewed as entertainers than investors. He is naturally funny. If CNBC actually wants to increase its ratings it should put Josh and people like him on the network more often. More Josh, less "analysts" whose credibility is less than zero. That assumes Josh would want to be on CNBC more. Maybe he should be on FX like Louis CK instead of financial television. The last time I was asked to be on financial television I declined since it would more than likely have increased the number of mistakes I make via hubris effects. But if I get asked to be on FX with Josh and Louis CK, I'm in.

4. "It's not different this time, it's different EVERY time." History never repeats itself precisely. Trying to predict the future by extrapolating the past is folly. Despite this fact, humans are pattern seeking creatures and like to ascribe predictive value to patterns they feel they have discovered. People tend to seek meaning from events even if they are random. Humans love to tell stories to themselves and others about past successes being the result of skill rather than luck, which makes the "forecasting folly" problem worse.

5. "The next time you hear someone say we're overdue for a correction, ask them for a copy of the schedule. Unfortunately, markets are biological rather than mechanical in nature and, as such, precision in timing is nowhere to be found." A market is more like a cat than a machine. This is what Josh is referring to when he says markets are "biological." In more technical terms, a market is a "complex adaptive system" and for that reason trying to make short term predictions about the future is folly. If you want to be an "active" investor I suggest a value investing approach: the occurrence of certain types of events over the long term (change in a stock price) within your circle of competence can occasionally be predicted in a way that gives you odds that are substantially better than even – but that happens rarely. When it does happen, bet big. The rest of the time, don't bet. Accept this fact of life sooner rather than later, and you will be wealthier and happier.

6. "I'm waiting for someone to let me know when things are 'certain.'" The reality is that very few things in real life involve risk, defined as "future states of the world known, probabilities of those states known." Risk is actually far less common than people imagine. Almost everything in life involves (1) "unknown probabilities about known potential future states of the world" (uncertainty) or (2) "ignorance of potential future states of the world, probability not calculable." Uncertainty is everywhere and is actually the friend of the investor since it can result in mispriced assets within his or her circle of competence. The best time to invest is when uncertainty is high. If uncertainty is high and you know what you are doing you can have an edge over other investors. Avoid situations in which you do not know what you are doing. What could be more simple?

7. "Panic buying is what happens when you run money for a living and you feel like you're missing a huge upside move. To make up for lost performance, your purchases get more aggressive than usual." Panic buying was never more in evidence in my lifetime than it was during the Internet bubble. Panic buying happens because, as Warren Buffett points out, it is envy and not fear or greed that makes the world go around. The drive for evolutionary fitness makes people want what others have and that drive is very strong. Envy is much more adaptive in an environment of extreme scarcity. In a modern world, envy has become counterproductive. Charlie Munger believes that envy is the most useless emotion, since it produces nothing but unhappiness. The more you suppress envy, the better your investing result will be and the happier you will be.

8. "The way to defeat high frequency traders is to be a low frequency trader, plain and simple." The people who run markets and/or are close to markets as professionals are always going to have the ability to game the game (the only question is how much). The situation is worse when markets are non-transparent (for example, Dark pools? What could possibly go wrong?). For the ordinary investor, the less you trade the less likely you are to be the sucker at the poker table. All of this obviously increases the attractiveness of an investing style like value investing where you need to engage in very few transactions.

9. "Controlling emotions is the thing that advisors can help the most with when they're at their best." "A fantastic portfolio that our clients can't stick to is worthless, we may as well be throwing darts at ETFs." "The real challenge is keeping our clients from acting on their worst instincts. It's keeping the Recency Bias in check, the performance-chasing impulse restrained and the grass-is-greener wolf away from the door. Easy in theory, hard in the real world." The "behavior gap" caused by investors "chasing performance" is a huge problem. The more you chase performance the more you may benefit from an advisor. If an advisor can help you with controlling emotions at a reasonable price relative to your actual performance gap, you are ahead of the game. The best advisors add other value in areas like tax planning, estate/retirement planning and saving for college tuitions.

10. "Sometimes it's a lot more about not screwing up than doing something wonderful." The best way to be smart is to not be stupid. This is straight up consistent with the ideas of Charlie Munger (e.g., when faced with a problem: Invert!). Avoid situations in which you don't know what you are doing. What could be more simple? To improve on that result, if someone is going to pee on an electric fence, it is best if it is not you. That seem obvious, but people don't follow that advice all the time. If someone does pee on that electric fence it is best to pay attention since that is a highly teachable moment, even if we are teaching ourselves.

11. "The model of making 500 phone calls a day and getting 50 people to pick up the phone and getting five of them to be maybes and one to say yes is almost impossible in the age of cell phones and e-mail. People just don't pick up the phone anymore."… [It is] hard to con someone over the phone you can't get in touch with." The boiler rooms of the world have morphed in form and mostly found their way to the Internet as a result of the death of the land line telephone system and the telephone book. Unfortunately, the sorts of people who are attracted to get rich quick scams will always find new outlets.

12. "The type of investor who is easily impressed by short-term performance is also really easily disappointed when a strategy struggles. It's a personality thing. It's what drives the behavior gap that Carl Richards talks about – getting into the next hot thing at a top and then getting out at a bottom for the hot thing after that, 'repeat until

broke.'" Most people will panic when trouble arises, even if they think they have prepared themselves for the sort of events that cause panic. You can be a better investor:

[If you] can keep your head when all about you

Are losing theirs and blaming it on you,

[If you] can trust yourself when all men doubt you,

But make allowance for their doubting too;

[If you can] wait and not be tired by waiting,

Or being lied about, don't deal in lies,

Or being hated, don't give way to hating,

And yet don't look too good, nor talk too wise.

"If-" by Rudyard Kipling

A Dozen Things I've Learned From Yuri Milner

September 8, 2014

1. "If you want to get disproportionate returns, go against flow. Otherwise returns will not be as high. If everybody thinks it's a great idea, returns would be under pressure… It's a positive indicator if you go against the flow–for not only investors but founders as well. You almost have to have it if you want to be disproportionately successful." "…being criticized is a positive indicator that you are going to succeed." That a person with Yuri Milner's math skills would understand that you can't beat the crowd by being the crowd shouldn't surprise anyone. To the extent that Milner falls in with any crowd, it is with other contrarian investors like Howard Marks – those who agree on the need to be occasionally contrarian and to be right on some of those occasions to be a successful investor. To outperform a market you must find mistakes made by other people. It is the search for mispricing that is the primary job of any rational investor. A great business that is overpriced is a poor investment.

2. **"I only invest in companies that are run by founders. The overwhelming majority of successful founders are not motivated by money but by vision and a mission. It's rare that a good founder cashes out in the early life of a company."** Yuri Milner has adopted a "missionary founder CEO" rather than a "mercenary founder CEO" approach to investing in startups. He and many others in the venture capital world believe that companies with

missionaries rather than mercenaries as CEOs are more likely to be mispriced by the market since missionaries will work harder and stay the course longer. Missionary CEOs also know their business better than mercenaries, since they are so passionate about what they do. In short, passion for a cause is more motivating and more likely to result in innovation than passion for cash.

3. "A founder installs his DNA with the first 10 or 15 people he hires. Then his DNA is transferred to more hires from those first few." Hiring great people, particularly early in the life of a business, has benefits which compound in a nonlinear way as time passes. Nothing determines success in a digital business more than how the kernel that is the early core of a startup feeds back on itself. Great people attract other great people [repeat].

4. "All these business models are driven by one simple fact: that everybody is connected. So as time goes by, more and more people get connected, the screen size changes. It gets smaller. It becomes mobile. But fundamentally, it all drives only one parameter – the number of connected individuals and the frequency of usage." Yuri Milner is clearly a believer in Metcalfe's law (the value of a communication network grows in a way that is nonlinear). My view is that the best estimate of Metcalfe's law is that the value of a communication network of size n grows like n log (n). This rate is faster than linear growth but slower than the quadratic growth suggested by some people as the right estimate of Metcalfe's s law (i.e., those people who believe the value grows with the square of n).

Metcalfe's law is just a rule of thumb and not a real law at all, but it is a useful mental construct. It coveys the idea that connecting people together creates great value. What Yuri Milner is saying here is that he uses connectivity as the primary basis for his investing thesis.

5. "It's not about revenues: The fundamental economics in digital business is scale and margins." "Algorithms are constantly adjusting to better cater to our needs based on our feedback. And this virtual cycle continues at an ever increasing pace, making these companies even harder to catch up with." Yuri Milner understands that supply-side and demand-side economies of scale in a digital business can produce positive feedback that can create vast barriers to entry for a business. When the creation of value through a digital process is self-reinforcing in a positive way, you have the makings of powerful barriers to entry (a moat). The nature of feedback means that the better the offering of a business gets, the better the offering gets [repeat]. This positive feedback tends to produce what Nassim Taleb calls "Extremistan" results.

6. "You're hearing there's no business model for social networks, or that Facebook isn't making money. I'm seeing the opposite. That gives us the confidence to make this investment in Facebook." This is perhaps the most fascinating quote of this Dozen Things for me. The way I read this is that Yuri Milner was highly confident that his Facebook

investment was going to pay off, since he had already seen social networks monetized in Russia first. He had better information than other people about social network monetization and saw that Facebook was substantially undervalued by the market. He bet big on Facebook on the basis of this information arbitrage and won.

7. "From a margin standpoint [user generated content] is very magical." A new media business that is able to get its users to create content will obviously have a far lower cost than a traditional media firm's cost of attracting users. These radically reduced costs create high margins and scalability. Why is that magical? Because people underestimate the impact of nonlinear phenomena since they don't encounter it very much in their daily life. Most people think they understand the magnitude of a nonlinear phenomenon, but few people really do.

8. "There's something called Zuckerberg's law. Similar to Moore's law. Every 12-18 months the amount of information being shared between people is doubling." "Technology will shift from collecting data to analyzing data." "This is the era of mathematicians." "There is coming an era for people with a mathematical state of mind." People like Yuri are proof that mathematical skills can produce an investing premium in a digital world. Even just the ability to understand nonlinear phenomenon better than the non-mathematically inclined is *hugely* valuable for an investor. Investors who can harness the power of machine learning to find mis-priced assets are able to reap a significant premium as investors. That machine learning will produce more winners in investing is an inevitable trend.

9. "Social is a better way to interact with the digital world. It is better than search." One of the biggest core challenges in the world today is discoverability. There is more information than ever, but how do you find the information you need? And how do you get help making sense of that information? Yuri Milner is saying he believes in the Facebook model over the Google model. He isn't saying it is the only model, but instead that is the better model.

10. "I must analyze, from what I do now, what will be the impact two or three or five years in the future." Bill Gates said once that the mistakes that can most hurt a business most are ones that are made five years or so earlier. Yuri Milner appears to believe much the same thing. He is saying an investor should invest based on "where the puck is going in three to five years, and not where it is now" – to paraphrase a famous Wayne Gretzky saying.

11. "Intermediation is under pressure and there is a social cost…when improvements now happen this quickly the question is how fast people can adjust." Yuri Milner understands that there are many jobs which will be eliminated as certain activities are "disintermediated" by technology, particularly in ecommerce. New jobs will inevitably be

created as old jobs disappear, but the speed at which changes are happening may mean that the new jobs are not created fast enough to prevent social disruption. My own view is that a robust social safety net is essential when the world is changing this quickly. There is too much danger of negative feedback loops driving peoples' lives into hard-to-escape poverty. A strong social safety net is a wise investment for society, especially in an age of nonlinear change.

12. "Fundamental science and the people who practice it are less and less appreciated in our world…. fundamental science, and fundamental physics in particular, is an important occupation in spite of not triggering any practical results right away." Basic research and development is what is known as a "public good." These sorts of goods are call non-rival (you having it does not mean others can't have it) and non-excludable (you can't prevent others from having it without paying you). This is a problem since basic R&D produces what are called positive externalities (spillovers) for society. Stated differently, from a societal standpoint markets will under-produce basic research and development since you can't profit from it. This means there is an important role for government and philanthropy in supporting basic research and development. Applied research will be adequately funded, but it is basic research which enables applied research to flourish.

A Dozen Things I've Learned from Henry Ellenbogen

September 22, 2014

The investments of Henry Ellenbogen' s New Horizons Fund are particularly interesting since they span both public and late-state private markets. While his late-stage private investments are only about 2-3% of the total assets of the New Horizons Fund, they have disproportionate visibility. Since he joined the fund in 2009 Ellenbogen has invested in five to seven private companies per year.

Ellenbogen's investing results speak for themselves. Barron's writes: "Ellenbogen, is up an average of 23% a year over the past five years, versus 14.7% for the Russell 2000."

1. "I like it when the company has come up with a product, service or strategy that is unique and visionary enough to change its industry." Ellenbogen is looking for a business with an underappreciated ability to create or extend a moat in a big market. The asset must be available at a price which is significantly below its value. As is the case with any asset, Ellenbogen wants to find a business with **"a fundamentally better business model"** (unique) which is **"durable"** (sustainable). All of this is consistent with fundamentally sound investing principles and many funds do this. What makes Ellenbogen unique and attracts most of the interest people have in his fund is the late-stage private

investing. Yes, other mutual funds do late-stage private investing (as do some hedge funds), but few do so as often, as consistently or with the same level of success and influence.

In the case of Ellenbogen's late-stage private investments, there are several potential sources of mispricing that can create an investment opportunity. First, the ability of the business to create or extend the moat can be underappreciated since the investment thesis is contrarian or not recognized since it involves optionality. Second, Ellenbogen's fund can be offered a discounted price since it is willing to hold assets which are not very liquid. Third, the shares may be discounted since the business raising the funds values staying private to avoid scrutiny or delaying the compliance obligations of a public company. Fourth, the business may need to raise cash quickly and is not ready for an IPO process so Ellenbogen is given a favorable price due to his ability to act swiftly. Fifth, Ellenbogen's fund may be given a favorable price since they do not impose onerous governance requirements. Sixth, the fund may be allowed to buy at a favorable price since Ellenbogen is putting a seal of approval on a company prior to an IPO given his track record. The combination of factors involved in valuation and setting deal terms (e.g., any liquidation preference) of a given late-stage private investment will vary based on the unique circumstances of the business and the current state of the markets. But it seems that private businesses often find that Ellenbogen offers a particularly attractive combination as a late-stage investor.

2. "The appeal of the small-cap growth firms I buy is that they reward patient buy-and-hold investors." "The trick is identifying companies and having the patience to hold onto them. Both parts are equally hard. Sometimes one of the best things I do is resist the desire to trade." Ellenbogen invests in firms that are less liquid and less traded than big public companies since they are small-capitalization or private. This means the assets are more likely to be mispriced. The trade-off is that the value of the fund's assets can be more volatile and irrational at times. This approach requires discipline and the ability to stay the course not only from Ellenbogen but the fund's investors. Ellenbogen is saying that sometimes the best thing to do is nothing.

3. "I tend to have a high quality screen. I focus on free cash flow per share. Those companies tend to be able to fund their own growth. That tends to make them less volatile over time." Ellenbogen is focused on the ability of a business to generate free cash flow. Businesses which are not reliant on the constant kindness of the capital markets for new cash are less volatile. People too often forget that sometimes, without warning, the ability of a business to come up with new sources of cash from third parties can completely disappear. This is potentially dangerous since the only unforgivable sin in business is to run out of cash. If a company can generate its own cash Ellenbogen believes the business is of higher quality.

4. "I look for businesses that I am confident can grow their earnings at above-average rates —15–20 percent — for at least the next 10 years. Consistency is the key. I shy away from red-hot companies with soaring growth that get all the headlines. Those stocks often crash and struggle to recover when growth slows or investors find

something more exciting. Sustainable growth gives me the discipline to hang on to a stock year after year." These are the some of the same qualities in an investment which are sought by Warren Buffett and other value investors, the only difference is that Ellenbogen includes technology investing within his circle of competence. While Ellenbogen is sometimes labeled as a growth investor and his fund a "small-cap growth fund," I see a fund that is run with value investing principles in mind. While he is not a cigar butt investor, Ellenboggen appears to me to be a Phil Fisher-style investor who wants to buy good companies at good prices. One of his tests for "goodness" is consistency. A very smart friend of mine points out: "If you are only looking at trailing twelve month numbers on earnings growth and ROIC, then you can't distinguish from a company being truly high quality or just at a peak in its business cycle." Looking at trends lasting for several years is what is important for an investor like Ellenbogen.

5. "The ability to grow revenue at a double-digit pace is really, really hard to do over an extended period of time, and to be able to compound wealth at 20% or more is very rare." "We own 250 stocks, and among our top 20 holdings, it's rare to find a name that was added to the portfolio within the previous three years. There is a very long tail at the bottom with position sizes smaller than 25 basis points [one-quarter of a percentage point]. These tend to be early-stage companies – some of them privately owned – and there is a high failure risk." Managing a portfolio of 250 stocks is not an easy task for Ellenbogen or any fund manager, especially when it consists of small capitalization stocks and late stage private investments. You can't do this successfully without a lot of hard work and a sound process. For example, position sizing is critical (position sizes in his portfolio will not reflect a bell curve). It is worth pointing out that another fund holding 250 large capitalization public stocks would be closet indexing. Ellenbogen is able to avoid this problem only because his is a small capitalization and late stage private investor.

6. "Warren Buffett credits the compounding of interest as one of the keys to his wealth. But it's also the compounding of earnings growth over long periods of time that pays off big. A company whose earnings growth averages 20 percent a year for 10 years will see earnings rise six fold over that time, thanks to compounding, and I expect to see its stock price rise by that much as well." Both feedback and compounding are everywhere if you know where to look. Charlie Munger puts it simply: "Understanding both the power of compound interest and the difficulty of getting it is the heart and soul of understanding a lot of things." Buffett was once asked how someone can get smarter. Buffett then held up a stack of paper and said: "read 500 pages like this every day. That's how knowledge builds up, like compound interest." Lots of other things in life compound, like hiring great people or retaining happy customers. Ellenbogen is saying that earnings also compound and that this compounding will inevitably be reflected in the stock price over time.

7. "If we can find one or two outlier companies, and — it's a big 'and' — we have the discipline to hold on to them over an extended period of time, that is the majority of the battle." It is not frequency of success but overall magnitude of success that determines

return. Ellenbogen understands what Michael Mauboussin calls "the Babe Ruth effect." You can win big even if you strike out lot, if you hit a lot of home runs. Ellenbogen is also saying that being a contrarian is hard and requires significant discipline.

8. "Companies that do require a lot of borrowed capital have a hard time maintaining consistent growth rates. They often can't borrow at favorable interest rates when they need money the most—during downturns in the economy." Markets love to loan money to companies when they don't need it. But when companies do need to borrow in a downturn or cash cunch, the price of leverage is high. Mistakes are magnified in periods like this. Ellenbogen particularly likes companies such as Amazon, which can benefit from "negative working capital." Bill Gurley describes the phenomenon of business with negative working capital: "They collect money from customers before they have to acquire components or spend money. This phenomenon allows these companies to grow without raising capital, even if day-to-day profitability is zero." As another example, businesses which can benefit from cash "float" like Amazon, Berkshire and large "too big to fail" banks have a structural advantage.

9. "One question we ask here is: Does management have the mindset to lead the company to a second act, which is what you need to become a billion-dollar company" "Every once in a while we see a business that can become much larger that's also run by a person who has the ability to make it larger." When someone is investing in the late-stage private market they are typically investing in a company that has substantial momentum. In such a case the question for Ellenbogen is: can it scale in a much bigger way? He is searching for a second layer of optionality that from the optionality which took the business to where it is when he invests. In other words, what he wants to find is a business which most people don't realize has the equivalent of the second stage of a rocket that will send it even faster into space.

10. "We make our share of mistakes." The most important thing to do if you find yourself in a hole as a result of making a mistake is to stop digging. What is past is past. What is sunk is sunk. Thinking you don't make mistakes is a one-way ticket to Hubrisville. Your investment decisions won't always succeed, but as long as you win often enough to come out well ahead, you have a sound investing process. Your frequency of success as an investor will never be perfect. Any individual failures must always be considered in relation to magnitude of overall success.

11. "We have a view of what fair value is. We use ranges as opposed to absolute points." Any estimate of the value of a business is an estimate since future payments are not an annuity from a risk free issuer. Even the concept of intrinsic value Warren Buffett calls "fuzzy." Value is best thought of as a range and it is better to be approximately right than precisely wrong. Your goal should be to buy an asset at a bargain which is so big that your investment will be profitable even if the estimate is fuzzy.

12. "…we pay attention to the macro environment, but it's not what drives our focus. We are looking for companies that compound wealth over extended periods of time, through economic cycles." That the macroeconomic environment is interesting and that people love to speculate about it does not mean that the information is actionable. To If you focus on the micro (the value of the individual business) the macro (the state of the economy) takes care of itself.

A Dozen Things I've Learned from Bill Gross

September 26, 2014

This is a special rushed edition of my usual post given today's news. I planned to post this in two weeks, but it is more interesting today. I had already collected the quotations last weekend, but had not written the usual commentary. Since it is a rushed edition (I read the news less than an hour ago at 6AM), there is less commentary than usual, but most of the quotes are self-explanatory.

1. "I picked up Ed [Thorp's] book in early 1966. I got in an automobile accident and had to go into the hospital and had time to practice the card-counting technique he discovered. And it worked! I had $200, so I headed out to Las Vegas. I turned my $200 into $10,000. I didn't care about the money. I wanted to prove that you could beat the system. Then I thought about what I could do that takes the same skills. I realized it was investing." "My early blackjack career taught me several things. The first is that if you apply yourself with a lot of hard work and mathematical prowess you can beat the system." "Many of the same principles I learned from blackjack apply equally to equities as to bonds. First, spread your risk. Cards run hot and cold, so be prepared. Second, as far as possible know your risks. Quantify them, predict the consequences, and prepare how to react." "It's just like in blackjack. That puts the odds in your favor. If you don't bet too much and if you stay at the table long enough, the odds are high that you are going to go home with some extra money in your pocket." "Dice have no memory and, it's said, the only way to win at roulette is to steal from the table. Blackjack is not chance. It is not an independent trial process; rather the cards played affect the odds on subsequent hands. So, situations emerge that give the player the advantage, situations where the house edge can be overcome. It requires discipline, dedication and skill, but it can be achieved. You learn to predict what the next card might be, whether it is likely to be high or low. You may be frequently wrong, but if on average you come out on top, you win in the long term. And I like winning." Investing is *like* gambling, but it is not gambling. Knowing the difference between gambling and investing is important. Investing is a potentially net-present value positive activity (the likelihood of the net present value of the potential benefits minus the likelihood network present value of the potential loses, is positive) whereas gambling is not. Gambling is a form of present-moment consumption and the net present long-term value of the activity is negative.

2. "Gambling is viewed negatively because the average gambler is emotional, undisciplined and often desperate. A card counter has a method to assess and evaluate the probability of future events. This probability theory is based on mathematics. Cards dealt are cyclical challenges. The blackjack player, like the professional investor, tries to develop the skill to predict the cyclical challenge to ensure success over the long term. Our bets don't always succeed, but we win often enough to come out well ahead." As stated above, at a fundamental level, investing is just one form of making a bet. It's essential, however, that the bet be made in a way that is investing (net present value positive) rather than gambling (net present value negative).

3. "I am not a quant. I don't have a 150 IQ… put an amount of suspicion in the modelling of anything. The model could get broken by animal behavior." "I am more of a subjective, seat-of-the-pants guy, although I appreciate the need for mathematical analysis and modelling. Unlike card games, human nature changes the rules of economics with the potential to punish anyone who relies too much on any one system, no matter how consistent it has been over time. I would say that human nature is a consistently inconsistent input into a model." Gross does not believe that humans are perfectly informed rational agents or in the efficient market hypothesis. He believes in using multiple models.

4. "Big bets are crucial. You need to make them when you believe the odds are in your favor, but big bets can go spectacularly wrong. I always set aside 50 times my maximum bet to avoid significant loss through a bad streak. We apply the same principles at PIMCO with risk management being one of our highest priorities. We can and have lost bets, but we are well hedged and can stay in the game. …Ed's basic thrust concerns the idea of gambler's ruin, where you lose everything by over-betting. In the context of blackjack, you can never bet more than 2% of your stake without the possibility of eventually losing your entire pot. Here at Pimco, it doesn't matter how much you have, whether it's $200 or $1 trillion. You'll see it throughout our portfolio. We don't have more than 2% in any one credit. Professional blackjack is being played in this trading room from the standpoint of risk management, and that's a big part of our success." You will see below that he has made a different statement when it comes to stocks. Part of a Wall Street Journal Interview is explanatory:

5. Mr. Thorp: You have to make sure that you don't over-bet. Suppose you have a 5% edge over your opponent when tossing a coin. The optimal thing to do, if you want to get rich, is to bet 5% of your wealth on each toss — but never more. If you bet much more you can be ruined, even if you have a favorable situation.

WSJ: Your key risk-management strategy is known as the Kelly Criterion. What is it?

Mr. Thorp: It's a formula Bell Labs scientist John Kelly devised in the 1950s for maximizing the long-term growth rate of capital. It tells you how to allocate your money among the

choices available, and how much to invest as your edge increases and the risk decreases. It also avoids the over-betting that can ruin an investor who otherwise has an edge.

Mr. Gross: Ed's basic thrust concerns the idea of gambler's ruin, where you lose everything by over-betting. In the context of blackjack, you can never bet more than 2% of your stake without the possibility of eventually losing your entire pot.

Here at Pimco, it doesn't matter how much you have, whether it's $200 or $1 trillion. You'll see it throughout our portfolio. We don't have more than 2% in any one credit. Professional blackjack is being played in this trading room from the standpoint of risk management, and that's a big part of our success.

6. "Do you really like a particular stock? Put 10% or so of your portfolio on it. Make the idea count … Good [investment] ideas should not be diversified away into meaningless oblivion." This is what Charlie Munger calls "focus investing." What Bill Gross is recommending here for a stock, is very different from how he diversifies in bonds as explained above.

7. I learned in 1966 with blackjack, where although odds were many times in my favor, if you took too much leverage and had too much debt, then the house of cards will come tumbling down." "[Minsky was] a relatively unknown economist whose work helped us save billions. His Financial Instability Hypothesis influenced PIMCO's Paul McCulley resulting in us developing a strategic plan to avoid the subprime meltdown well ahead of time. Minsky argued that Wall Street encourages businesses and individuals to take on too much risk, creating ruinous boom-and-bust cycles. Sounds familiar, wouldn't you say?" As Charlie Munger has said: "Three things ruin people: Drugs, liquor and leverage." Leverage magnifies not just the upside but the downside. If things go wrong having a loan that can be called by a lender dos snot allow you to let your hand play out.

8. "The longer and longer you keep at it in this business the more and more time you have to expose your Achilles heel – wherever and whatever that might be." Black Swans happen. People stop getting lucky. Stuff happens.

9. "It's sort of like a teeter-totter; when interest rates go down, prices go up." "All of us, even the old guys like Buffett, Soros, Fuss, yeah – me too, have cut our teeth during perhaps a most advantageous period of time, the most attractive epoch, that an investor could experience. Perhaps it was the epoch that made the man as opposed to the man that made the epoch." That publications like the Wall Street Journal need to repeat in virtually every article about bonds that interest rates and bond prices move in different directions is a clue that this market is less well understood. Bond investors have been surfing a trend toward lower interest rates for some time. Load up on bonds and even leverage up as well and you can look like a genius until you don't.

10. "An effective zero percent interest rate, as a price for hiding in a foxhole, is prohibitive." "Central banks and policymakers are acting like barbers. They haircut your investments. Negative real interest rates, inflation, currency devaluation, capital controls and outright default are the barber's scissors." "In a rising interest rate environment over time, a portfolio manager might rely less on maturity 'horses' and depend more on the 'machine guns and flamethrowers' associated with credit, volatility, curve and currency." There are many types of risk and uncertainty that someone like Bill Gross manages that are not just interest rate risk. Each is potentially a source of profit or loss.

11."PIMCO's foundation is one that attempts to analyze what we call the secular outlook, which means, for us, the next three to five years." "Secular analysis …examines geopolitical, social and demographic trends to anticipate what may occur. Cyclical trends affect the market over the shorter term, such as new producer price index figures or changes in the federal funds rate. Taken together they tell us where to invest our clients' money – domestically or internationally, more interest rate risk or less, high quality or high yield. This approach improves our ability to consistently add value over the long term. "Successful money management over long periods of time rests on two, somewhat disparate, foundations. The first is "a secular outlook…. forces one to think long term and to avoid the destructive bile arising from the emotional whipsaws of fear and greed. Such emotions can convince any investor or management firm to do exactly the wrong thing during "irrational" periods in the market. The second foundation is what might be called the "structural" composition of portfolio management, and whether the reader agrees or disagrees with the secular thesis, I would argue that those who fail to recognize the structural elements of the investment equation will leave far more chips on the table for other, more astute investors to scoop up than they could ever imagine. A portfolio's structure is akin to its genetic makeup: It is how it is constructed without regard to short-term strategic decisions. Structure incorporates principles that are longer than secular, principles that are nearly paramount and should be able to deliver alpha during years when the manager's magic touch—to use a basketball metaphor—seems to have disappeared or when there's simply a time-out on the court, with secular investment opportunities few and far between. Duration, curve, credit, volatility, and other less obvious tilts to a portfolio's steady state status are what I mean when I speak of a portfolio's inherent structure, although some tilts are more volatile than others and, therefore, produce less risk-adjusted alpha." "Financial structure [is] almost guaranteed to generate a positive return on capital." "Closer to portfolio managers is the structure of Warren Buffett's Berkshire Hathaway, which depends on "float" (about which he frequently writes and talks). This structure, combined with his bottom-up, secular stock picks, has produced one of the world's great fortunes and investment success stories." "In addition to their profit-generating elements, these structures share the common element of longevity, near permanence. They span time periods beyond the secular segments of three to five years, which define typical forecasting periods, and secular stretches of inflation/disinflation that have endured for several decades. An investment's structural magic, then, comes from its 'Methuselahian' ability to persist." This immediately above is the best summary of Bill Gross' investing thesis I can find. Cyclical, secular and structural

are all key concepts for Bill Gross. He has an investing thesis/methodology that is not easy to execute on. Cliff Asness essentially said this week in an interview that he would not want to make his living making macro economic predictions. I agree with Asness.

12. "We are on the edge of uncertainty. It is almost like Columbus is sailing to the New World, all the time wondering whether the earth is flat and whether the Santa Maria would fall over the edge at any minute. That is the biggest amount of uncertainty – which is enormous – and is reflected in the violent changes in financial markets." As Nassim Taleb likes to say, we are increasingly living in Extremistan. Be careful out there.

Notes:

http://online.wsj.com/articles/SB120614130030156085

http://www.aaii.com/investing/article/bonds-investing-faqs?adv=yes

http://www.ici.org/pubs/faqs/ci.faqs_bond_funds.print

http://www.investinginbonds.com/learnmore.asp?catid=3&id=383

http://www.moneymasters.com/default.aspx?page=GrossWilliam

A Dozen Things I have Learned from Howard Schultz

May 4, 2014

1. "Success is best when it's shared." "Culture and values trumps strategy." "Business is a team sport." "Service is a lost art in America. It's not viewed as a professional job to work behind a counter. We don't believe that. We want to provide our people with dignity and self-esteem, so we offer tangible benefits." Bricks and mortar retail means people directly interacting with people. Former Starbucks executive Howard Behar puts it this way: "We're in the people business serving coffee, not the coffee business serving people." Howard Schultz's clearly believes that the focus on people is the primary reason for

the success of Starbucks. Howard Schultz is also very focused on developing and maintaining a strong company culture and improving teamwork. Company culture, teamwork and people are important for every company, but it seems it is even more important in a retail business. Next weekend I will do a post on Costco's Jim Sinegal and you see the same focus on people, culture and team work in what he says and more importantly what he does. As just two examples of a focus on people, Starbucks offers stock options and health insurance to both full and part-time employees. What is arguably most interesting about Starbucks is that they have built a moat in a services business that might be viewed by some people as a natural commodity. Why don't prices at Starbucks drop closer to cost? Why does Starbucks have meaningful pricing power? One can argue that Starbucks benefits from economies of scale but the network effects that create many moats in other businesses today seem absent. Howard Schultz seems to have combined a number of elements to create a moat for Starbucks (i.e., a focus on people, economies of scale, customer experience and brand). In his February 14, 2007 memo to management Howard Schultz recognized that Starbucks was in danger of becoming a commodity. An otherwise rational drive for greater efficiency at Starbucks had degraded important aspects of the experience like the in-store aroma and what Howard Schultz calls the "romance and theatre" of the customer's relationship with the barista. Howard Shultz specifically noted that the efficiency-driven loss of individual elements of the Starbucks experience was greater than the sum of the parts.

2. "Starbucks built its brand in a very unusual way — not through advertising or marketing – but quintessentially through the experience." "Mass advertising can help build brands, but authenticity is what makes them last. If people believe they share values with a company, they will stay loyal to the brand." "Authentic brands don't emerge from marketing cubicles or advertising agencies. They emanate from everything the company does…" I've never been a big believer in market research personally." Acquiring customers in a cost effective manner is how the very best founders build shareholder value. Trying to build a brand with TV advertising is increasingly impossible to do without destroying shareholder value. Howard Schultz understood from the beginning that nothing creates brand value and shareholder value like strong customer word-of-mouth. Yes, Starbucks eventually invested in brand advertising in the mass media but that was late in its history.

3. "We are witnessing a seismic change in consumer behavior. That change is being brought about by technology and the access people have to information." "Any business today that embraces the status quo as an operating principle is going to be on a death march." Customers today have many choices and loads of information about their choices. They don't need to accept an inferior offering. Technology and customer access to information have also made markets far more winner-take-all. If a CEO misses a shift in the market his or her company can quickly find itself dead.

4. "If the stewards of any consumer brand believe that they can create local relevance while sitting in a white tower somewhere in the U.S. — and dictating the ways in which consumers will react all over the world — they are on a collision course with time." "I will be a sponge absorbing any innovative idea, product or category from any part of the world." Thinking globally and acting locally is simple to say, but hard to do. Keeping Starbucks true to itself and its brand while adopting to local tastes is something that requires a deft touch that is more art than science.

5. "When you're in a hole, quit digging!" "If the Barista does not care and produces an inferior espresso that is too weak or too bitter then Starbucks has lost the essence of what we set out to do 40 years ago … Starbucks has always been about so much more than coffee. But without great coffee, we have no reason to exist." When you recognize that you are making a mistake, stop. Try to avoid denial. Treat sunk costs as sunk costs. As an example, when he returned to become Starbucks CEO in 2008 after seeing problems in the business Howard Schultz shut down all stores for three hours and everyone was retrained. A 2008 Starbucks leadership conference of 10,000 employees held in flood-damaged New Orleans which involved a full day of volunteering in the city was similarly transformational for the company at a critical time. As a point of contrast, my daughter and I want inside a temporary tent recently in Seattle and were served a free cup of coffee by a leading maker of coffee machines. The coffee went in the trash about a block later.

6. "Our history is based on extending the brand to categories within the guardrails of Starbucks. [We won't] abuse the trust people have by going off and doing things not consistent with the heritage of coffee." When Howard Schultz returned to the CEO job he found Starbucks selling teddy bears to increase same store sales. He quickly put an end to that offering. Starbucks does try new things, but tries not to stray too far from the core business. The decision to expand the Starbucks business to include offerings like evening alcohol and a light bites menu, which includes bacon-wrapped dates and Malbec wine is walking a fine line. Time will tell if this was a good decision.

7. "Many start-ups make mistakes because they are focusing on things that are farther ahead, and they haven't done the work that has built the foundation to support it." "There is a discipline of being very self-critical, with real quantitative metrics to study the investments that we're making across the board." The advantage Starbucks gets from having better back end and logistics systems is highly underappreciated. Great locations, stores and coffee are not enough to generate a sustainable profit. Howard Schultz is a huge believer in investing in assets like human resources systems and employee benefits and training. The systems that Starbucks has in place to handle the back office and logistics are highly underappreciated. Starbucks is also a world-class coffee and food distribution company. The use of technology by Starbucks in retail applications is superb. For example, Starbucks use of digital payments is second to none.

8. "Don't be threatened by people smarter than you." "You can't build any kind of organization if you're not going to surround yourself with people who have experience and skill base beyond your own." "A" employees not only hire other "A" employees, but seek out people with different skills that complement theirs. Diversity in hiring is not only the right things to do but is the best thing for the business.

9. Underpromise and overdeliver. In the long run, that's the only way to ensure security in any job." It's that simple.

10. "While Wall Street has taught me a lot, its most enduring lesson is an understanding of just how artificial a stock price is. It's all too easy to regard it as the true value of your company, and even the value of yourself." "When a P/E gets to a certain point and a stock price gets to a certain point, you begin to believe that the organization, the enterprise, is worth that. And then you get to a point where you're managing to either uphold it or to increase it." "In 2006 and 2007, I think growth covered up a lot of mistakes. Hubris and a sense of entitlement set in." "Growth should not be—and is

not—a strategy; it's a tactic. The primary lesson I've learned over the years is that growth and success can cover up a lot of mistakes. We're going to make more mistakes. But we've learned a great lesson. And as we return the company to growth, it'll be disciplined, profitable growth for the right reasons—a different kind of growth." I have a very smart friend who read an early draft of this post and he essentially said: "Put the Wall Street material at the bottom of the list and put people on top." Now that this post has dealt with people, product, services and brand first, the discussion can turn to finance. Howard Schultz believes that Starbucks was lulled into some dysfunctional behavior during a period of stock market success. Howard Schultz had moved from company CEO to Chairman during that period but he said the issues came into existence during his watch. He was responsible for the problem as company chairman he admits. The experience reinforced his view that the best approach for a CEO is to ignore short term stock price gyrations. When Howard Schultz returned to become CEO he found that the company had shifted its focus from customers to meeting the expectations of Wall Street, which was a huge mistake. You only find out if you are swimming naked when the tide goes out and when financial growth stops you can quickly see problems you did not know existed.

11. "I really believe that you cannot use the stock market as a proxy for the economy." Stock markets can be up in a down economy or down in an up economy. Growth an economy is not necessarily in phase with growth in stock prices. Focusing on what is happening now in a business is the best way forward. As an aside, and 100% in contrast to Howard Schultz, I met with a CEO of a major company once and all he wanted to talk about was Federal Reserve policy and other macroeconomic topics most probably since he only was in the job because his grandfather founded the company. He was an art history major and knew little about the company itself. This CEO drove the company right into the ground after only a few years in the job. In stark contrast here's Howard Schultz: "The only time that I'm not thinking about Starbucks is when I'm sleeping." Retailers like Howard Schultz and Jim Sinegal visit their stores ***all the time***. As Jim Sinegal says: "retail is detail."

12. **"Citizenship over partisanship"** Unlike most other CEO's Howard Schultz is willing to weigh in carefully on public issues given his focus on culture and values. This has never been so important. Being a civic leader is good for a business and more importantly it's the right thing to do.

A Dozen Reasons why Berkshire's Moat will Survive the Departure of Warren Buffett/Charlie Munger

May 10, 2014

Warren Buffett is famous for using the term "moat," which is very similar to what Michal Porter calls "sustainable competitive advantage." An obvious question is: does Berkshire Hathaway itself have a moat which will survive when Warren Buffett/Charlie Munger depart. The Economist's recent article on Berkshire essentially asserts the moat is all about Warren Buffett. Since the Economist article may be behind a paywall for a reader of this blog, here is a summary by the New York Times:

"The Economist [wrote] that "given his irreplaceability and unrepeatability of his past deal making success," Mr. Buffett should remind shareholders of conglomerates of the past that have unwound themselves, and he should tell them "that a gradual break-up will be his main recommendation to his successor."

The Economist assumes that Warren Buffett departing means the moat is gone. That assumption is incorrect. The New York Times analysis of the same issue was not much better than the analysis of the Economist, attributing Warren Buffett's outperformance to a simple "hack" based on a "longer-term management philosophy with the practical benefits of being a publicly traded company." At least the New York Times reached the correct conclusion and highlights the important of company culture and structure to a moat:

"Berkshire's own economic moat is a history, management culture and corporate structure focused on the long term that can give it an edge over more short-term-focused public companies."

This blog post will make the case that there are many elements beyond a long term focus which contribute to Bershire's moat which are not dependent on either Warren Buffett or Charlie Munger. The New York Times is correct in its conclusion but there are many other factors which support that conclusion.

Moats can be created from a combination of:

1. Supply side economies of scale
2. Demand side economies of scale (network effects)
3. Brand
4. Regulation
5. Intellectual property
6. Culture and systems

Berkshire has many elements which make up the whole of its moat which are further amplified by the way the elements "fit" together. In short, the aggregate value these elements create is greater than the sum of the parts. Charlie Munger calls this a phenomenon a lollapalooza and it applies to Berkshire's moat:

"…when anywhere from two to four forces all are driving the investment in the same direction. And yet, Munger noted in *Outstanding Investor Digest* in 1997 that the effect isn't "simple addition" but rather more akin to a "nuclear explosion."

Set out below are a dozen reasons why the Economist's conclusion about Berkshire is wrong:

1. BRK lacks the *institutional imperative* and will continue to do so since that is core to the company's culture:

The primary work of Warren Buffett and Charlie Munger at Berkshire is: (1) capital allocation; (2) selecting top managers of businesses and (3) selecting the investments which make up the portfolio. The most important task in capital allocation for Warren Buffett and Charlie Munger is to take cash/earnings generated by a company like See's Candies and deploy it to the very best opportunity at Berkshire. Part of that capital allocation task is to avoid the *institutional imperative*:

"… rationality frequently wilts when the institutional imperative comes into play. For example: (1) As if governed by Newton's First Law of Motion, an institution will resist any change in its current direction; (2) Just as work expands to fill available time, corporate projects or acquisitions will materialize to soak up available funds; (3) Any business craving of the leader, however foolish, will be quickly supported by detailed rate-of-return and strategic studies prepared by his troops; and (4) The behavior of peer companies, whether they are expanding, acquiring, setting executive compensation or whatever, will be mindlessly imitated." Berkshire Hathaway Letter, 1989

"We have watched this in past, conglomerates issuing stock at high prices to issue and take over companies. It works, but if you cheat on earnings and where do you stop. That is a game we don't want to play, it is very distasteful. And it comes in waves. We don't want to come close to playing it." -Buffett at 2014 BRK meeting.

The **culture** at Berkshire has been created by Warren Buffett and Charlie Munger so as to reject the *institutional imperative* like a foreign antibody, even if these two Siamese twins are no longer making decisions. Yes, Berkshire is focused on long term investment returns but that is only one part of what the company's people, culture and structure adds to its moat.

2. Ajit Jain and other managers understand the culture

The most likely successor to Warren Buffet is Ajit Jain who clearly has Warren Buffett's full confidence. Warren Buffett never fails to heap praise on Jain and for good reason. In his most recent letter to BRK shareholders, Waren Buffett said they should "bow deeply" if they see Ajit Jain. Also waiting in the wings as possible successors are other Berkshire managers like Greg Abel (who runs Berkshire Hathaway Energy) and Matt Rose (who runs BNSF). Regarding these potential successors, which are all internal, Buffett notes:

"Now, they'll do things their own way. And they should. But we have a distinct culture. And we set our economic principles in the back of the annual report. They haven't changed, virtually, for 30 years. And we're a certain type of business. That's not the only way to run things, but it is the way we run things at Berkshire. And I can't imagine a successor changing that in a material way."

Warren Buffett has also identified successors who will pick stocks when he is no longer doing so, in the form of Todd Combs and Ted Weschler.

Warren Buffett at the 2014 BRK meeting:

"[Todd and Ted] will be handling more money in future than they are now. They are seeing it gets a little more difficult as sums get larger. It is better to move money to them and away from me as time passes. They are both terrific for Berkshire, they each know a whole lot about business and a whole lot about management, and a lot comes across my desk, and I get an idea on it, but they can get involved. It is a cinch that that this will continue. They don't ask for extra compensation. They are 100% attuned to Berkshire. They know how I think. It's been a big big plus for Berkshire. They will be more important as years go by."

The culture at Berkshire is strong but so is a bench populated by talented people.

3. BRK is tax efficient

When a given Berkshire portfolio company (for example, See's Candies) generates cash, that cash is rarely invested in more See's stores, manufacturing plants or acquisitions since the return on capital would be lower than other alternatives within Berkshire. Because of Berkshire's structure, Warren Buffett is able to move that cash from See's to the greatest opportunity on a tax efficient basis (without paying the tax that would be imposed if See's paid a dividend or See's shares were sold and the money the reinvested). Warren Buffett elaborates:

"..because we still have this ability to redistribute money in a tax-efficient way within the company, we can reallocate it to where it will earn a higher return than shareholders may be able to on their own."

Charlie Munger adds:

"Another very simple effect I very seldom see discussed either by investment managers or anybody else is the effect of taxes. If you're going to buy something which compounds for 30 years at 15% per annum and you pay one 35% tax at the very end, the way that works out is that after taxes, you keep 13.3% per annum. In contrast, if you bought the same investment, but had to pay taxes every year of 35% out of the 15% that you earned, then your return would be 15% minus 35% of 15% or only 9.75% per year compounded. So the difference there is over 3.5%. And what 3.5% does to the numbers over long holding periods like 30 years is truly eye-opening. If you sit back for long, long stretches in great companies, you can get a huge edge from nothing but the way that income taxes work."

"WB talks about increasing book value after paying full corporate taxes of 35%. Indices don't have to pay taxes."

4. Low overhead:

Charlie Munger sets the stage on this point simply:

"A lot of people think if you just had more process and more compliance—checks and double- checks and so forth—you could create a better result in the world. Well, Berkshire has had practically no process. We had hardly any internal auditing until they forced it on us. We just try to operate in a seamless web of deserved trust and be careful whom we trust."… "Good character is very efficient. If you can trust people, your system can be way simpler. There's enormous efficiency in good character and dis-efficiency in bad character."

Trust-based systems in which managers must *eat their own cooking* are core to Berkshire's culture, which translates to lower overhead:

"[BRK] has a corporate headquarters with a mere 25 people on a single floor of an office building. From there Mr. Buffett and his staff allocate capital and contemplate acquisitions or sales, hire or fire people to run those portfolio companies, and otherwise stay out of the way." – The New York Times

Morningstar puts it this way:

"All of the firm's operating companies are managed on a decentralised basis, eliminating the need for layers of management control and pushing responsibility down to the subsidiary level, where managers are empowered to make their own decisions." – Morningstar

In order for this "seamless web of deserved trust" system to work you must have great mangers and the right incentives in place. Berkshire's culture again ensures that anyone who succeeds Warren Buffett will know how to do this. If Berkshire has a weakness it is that 'they tend to over trust', said Buffett in the most recent shareholder's meeting but with that comes low overhead. The "seamless web of trust" system is itself part of the Berkshire moat.

5. Private buyer of first resort

If you have spent your life building a business and decide to sell the company, Buffett offers you a unique opportunity. He will let you (and in fact wants you) to continue running the business. Your other option is selling the business to a private equity firm that does not give a damn about your business and will probably load it up with debt – creating a serious risk that the company will fail. Buffett has a track record of keeping the business, instead of playing what Munger calls 'a game of gin rummy' with it and other holdings, which again makes Berkshire attractive to sellers.

People who sell businesses to Berkshire are rich enough that they have more money than they will ever need. Berkshire gives the selling owner the chance to make sure that the business they care about and the people that work there continue to thrive. For this reason, Berkshire gets offered the opportunity to buy businesses at very attractive prices. Warren Buffett said in the most recent shareholder's meeting: "Private equity firms buy businesses, but they're looking to sell those holdings down the road." To reassure selling owners, Warren Buffett holds on to businesses even if returns are less than stellar. Here's buffet on this point:

"You would not get a passing grade in business school if you put down our principles for why we keep some businesses, but we made a promise. If we don't keep our promise, word would get around. We list the economic principles, so managers who sell to us know they can count on it. We can't make some promises, and we don't promise never to sell. But we've only had to get rid of a few businesses, including the original textile business. We also let managers continue to run their business. We are now in class that is hard to compete with. A private equity firm won't be impressed by what we put in the back of our annual report. People who are rich and run a company their grandfather started –they don't want to hand it over to a couple MBAs who want to show their stuff. As long as we behave properly, we will maintain that asset, and many will have trouble competing with it."

6. Value investing is not factor investing

Funds that actually do *Ben Graham style value in*vesting are very rare, while funds that engage in *factor investing* are very common. My post on why "value investing is not factor investing" is here. My post (which I won't repeat here) starts with these two paragraphs:

"Ben Graham and his disciples like Warren Buffett, Howard Marks and Seth Klarman have developed a system called 'value investing.' Eugene Fama and Ken French developed a completely different *factor investing* approach which identifies 'value stocks.' Although Ben Graham's system and Fama/French's approach share the word 'value,' they are vastly and fundamentally different.

A very smart friend recently said to me that it is important to: 'draw a clear and simple definitional distinction between value as a *statistical factor*(Fama/French) and value as *an analytical style or goal* (Ben Graham).' The two methods are solving for different questions: Fama/French is solving for what creates a persistent disparity of return across large numbers of stocks, while Graham-style *value investors* are solving for, 'where can I find low risk of permanent impairment of capital and a high probability of an attractive return?'…"

7. Permanent capital

Berkshire has permanent capital, which allows the company to outperform others. Noted value investor Bruce Berkowitz explains:

"That is the secret sauce: permanent capital. That is essential. I think that's the eason Buffett gave up his partnership. You need it, because when push comes to shove, people run … That's why we keep a lot of cash around…. Cash is the equivalent of financial Valium. It keeps you cool, calm and collected."

8. Berkshire outperforms in down markets

As a value investor Berkshire uses an investing approach designed to outperform in "up market"s and over perform in "down markets". The goal of a value investor is superior absolute performance, not relative performance. In the most recent shareholder's meeting Warren Buffett put it simply: "We will underperform in strong years, we will match in medium years and we will do better in down years. We will outperform over a cycle, but there is not guarantee on that." Other investors like Seth Klarman us the same approach.

The facts support this conclusion. Ben Carlson points out:

"..it's the down years where Buffett has really extended his lead, outperforming the market by almost 25% per year when stocks fall. This is his secret sauce."

Cycles are inevitable, and until we have a down cycle looking at BRK performance is premature. Howard Marks: "Rule No. 1: Most things will prove to be cyclical. – Rule No. 2: Some of the greatest opportunities for gain and loss come when other people forget Rule No. 1." Warren Buffett adds: "Rule No.1 is never lose money. Rule No.2 is never forget rule number one." Berkshire's results must be compared with alternatives on a risk adjusted basis.

9. Intrinsic value:

"Berkshire has assembled a unique collection of businesses with solid management, sustainable competitive advantages and the ability to compound intrinsic value for years to come." Matthew Coffina, editor of Morningstar Stock Investor

"Buffett said Berkshire's intrinsic value "far exceeds" its book value and the gap is widening, partly because book value doesn't reflect the true value of the businesses that Berkshire owns…. Whitney Tilson, owner of Kase Capital Management in New York City, estimates the intrinsic value at $226,253, based on Berkshire's year-end figures. "That doesn't factor in Warren Buffett doing anything smart, any more deals," he said.

"The company has generally strived to raise capital as cheaply as possible to support its ongoing investments, and has traditionally measured their success by focusing on per-share growth in intrinsic value. Book value per share, which is one of the proxies Buffett often uses to measure the growth of Berkshire's intrinsic value, has increased 19.7% per year on average over the last 49 years—handily beating the 9.8% annualized return generated by the S&P 500 Index from the end of 1964 to the end of 2013." – Morningstar

10. Float

Morningstar on float:

"Berkshire's wide economic moat (competitive advantage over peers) is more than just a sum of its parts. That said; the parts that make up the whole are fairly 'moaty' in their own regard. The company's most important business continues to be its insurance operations, comprising GEICO, General Re, Berkshire Hathaway Reinsurance Group, Berkshire Hathaway Primary Group, and Berkshire Hathaway Specialty Insurance. Not only do these businesses account for about a third of Berkshire's pre-tax earnings (and more than 40% of our estimate of the company's fair value), but they also generate low-cost float (the temporary cash holdings that arise from premiums being collected well in advance of future claims)—a major source of funding for investments. While we can point to a multitude of advantages that Berkshire has in its insurance operations, we think the business overall benefits from no more than a narrow economic moat. In general, we do not believe the insurance industry is all that conducive to the development of sustainable moats, as it is for the most part a commodity business where sustainable excess returns are difficult for most firms to achieve. Economic moats have been the result of superior underwriting profitability (achieved through superior underwriting abilities and/or some sort of cost advantage) relative to the industry, rather than through investment gains (even when those gains are the result of the investing prowess of someone like Buffett). We believe insurers that consistently achieve positive underwriting profitability are better bets in the long run, as insurance profitability, in most cases, is far more sustainable than investment income."

Berkshire's insurance float has grown from $39 million in 1970 to just over $77 billion today and that cash can be put to work in part within Berkshire.

11. High quality shareholders, including Buffett and Munger

High quality shareholders don't panic and think long term about investing results. These shareholders are an asset in that they allow the company via their patience to buy when Mr. Market is fearful and sell when Mr. Market is greedy. At the most recent Berkshire shareholder's meeting Charlie Munger said: "When I look out at the audience, I see a bunch of understated frugal people. We collect you people." Warren Buffett puts it this way:

"One of our goals is to have Berkshire Hathaway stock sell at a price rationally related to its intrinsic business value. (But note "rationally related", not "identical": if well-regarded companies are generally selling in the market at large discounts from value, Berkshire might well be priced similarly.) The key to a rational stock price is rational shareholders, both current and prospective. If the holders of a company's stock and/or the prospective buyers attracted to it are prone to make irrational or emotion-based decisions, some pretty silly stock prices are going to appear periodically. Manic-depressive personalities produce manic-depressive valuations. Such aberrations may help us in buying and selling the stocks of other

companies. But we think it is in both your interest and ours to minimize their occurrence in the market for Berkshire."

12. Rational Managers

The culture Warren Buffett and Charlie Munger have created is so rational that if the right thing to do is break up the company- that is what they will do: "If we can turn $1 in dividends into $1.10 or $1.20 on a present-value basis, they're better off if we don't pay out. When the day comes, it should be paid out." As I indicated in my posts post on Starbucks and Amazon, culture and systems matter in a huge way in terms of the strength of a moat. If you add rational mangers to culture and systems which create a moat you have a good thing. And as Mae West once said: "Too much of a good thing can be wonderful."

Finally, Warren Buffett and Charlie Munger themselves at the 2014 Berkshire meeting on why the Economist's conclusion about Berkshire is wrong:

Buffett: "Litton Industries, and Gulf & Western, they were put together on idea of serial acquiring: issuing stock at 20x to buy businesses at 10x. It is an idea of fooling people to ride on a chain letter scheme. I think our business plan makes sense. Group of diversified businesses and conservatively capitalized. Capitalism is about allocation of capital. We have system where we can allocate capital without tax consequences. We can move the capital to where it can be usefully employed. No one else better situated, and it makes good sense, but must be applied with business principles instead of stock promotion principles. And some conglomerates were stock promotion techniques, and were serial acquirers and issuers of stock. If issuing stock continuously, chain letter game goes on, that does come to an end."

Charlie Munger: "There are a couple differences between us and the failures in the conglomerate model. We have an alternative when there are no companies to buy, as we have the insurance portfolio to invest. And we feel no compulsion to buy. Mellon Brothers did very, very well for 50-60 years, they were a lot like us. We are not a standard conglomerate like Gulf & Western."

All quotes from 2014 BRK meeting are sourced from here.

A Dozen Things I've Learned About Marketing, Distribution and Sales

May 17, 2014

1. "Most businesses actually get zero distribution channels to work. Poor distribution—not product—is the number one cause of failure." (Peter Thiel) Legions of businesses fail every day because the people involved in the company do not know how to market, distribute and sell their goods and services. The right training can help a person understand that while potential customers don't like salespeople, they do like to buy products and services. Knowing how to present a situation as an opportunity to buy and not an unpleasant experience with a salesperson requires skill. While a lot of this post is about sales, physical distribution systems should not be forgotten. There are companies like McDonalds which owe their success more to their distribution systems than anything else. Great distribution

systems can be a substantial part of a company's moat, as is the case with Starbucks, Amazon and Costco.

2. "Engineers frequently … do not understand distribution. Since they don't know what works, and haven't thought about it, they try some sales, BD, advertising, and viral marketing—everything but the kitchen sink…. (Peter Thiel) Engineers have a tendency to believe that people will be lined up outside the door with crisp but non-sequentially numbered stacks of $100 bills waiting desperately to buy what they have designed. They love what they create and think other people will too. Selling and marketing is a much harder problem than most engineers realize. Managers can be equally clueless about how hard it is to market, distribute and sell something. Sending employees who are not trained in sales (engineers and managers) on actual sales calls can be hugely beneficial for a company since they quickly learn that selling is not easy (new respect for salespeople is created) and they often discover new ways to improve the product or service. Similar benefits can be obtained by having these same people sit for a day in a call center hearing customer complaints.

3. "In the old world, you devoted 30% of your time to building a great service and 70% of your time to shouting about it. In the new world, that inverts." "If I build a great product or service, my customers will tell each other." (Jeff Bezos) Nothing sells products and services like great word of mouth. Having said that, a so-called "viral" sales and distribution strategy is rarely accidental and is never a complete solution. Clever businesspeople find ways to get customers talking about their product or services that do not require spending huge sums of cash. For an example, see item 4 below. Leveraging a social graph is another way to accomplish the organic avenue of marketing that Jeff Bezos describes.

4. "Rich Barton's law: The number of cheap brand impressions rises with square of amount of controversial/interesting metadata produced." This is my formulation of a law based on statements made by Rich. Sometimes you can give something away to the public (often a byproduct of what you do) and turn that into a customer acquisition tool. As an example, Zillow does this as well as any company. The public loves getting updates on real estate prices and every time the press repeats its market data, Zillow gets free brand impressions. There are other laws like Richard Branson's law (which I just made up) which can also generate cheap brand impressions. Branson's law is: if you wind surf with a naked model holding tight to your back with photographers present, you will have articles written about you and your company thereby creating cheap brand impressions.

5. "Many entrepreneurs who build great products simply don't have a good distribution strategy. Even worse is when they insist that they don't need one, or call no distribution strategy a 'viral marketing strategy' … a16z is a sucker for people who have sales and marketing figured out." (Marc Andreessen). Assuming that a start up with a great technical team or even a promising product or service will be able to creating a winning distribution model is a bad idea. Whether distribution risk can successfully be retired is a core decisions for any investor or entrepreneur. Sales, marketing and distribution systems like the freemium model are easy to talk about but very hard to get right. At an extreme from people who believe that all you need is viral marketing are people (often highly educated marketing professionals) who see **no upper limit** to what they should spend on sales, distribution and marketing. A number of good blog posts recently describe how a lifetime value (LTV) business model can be abused to justify spending far too much on nonorganic marketing such as television advertising. The right level of spending for a business is a Goldilocks-style "just

right" determination. The right level of spending will require not only a keen appreciation of cash levels (and the market's ability to supply new cash should that become necessary) but also understanding the nature of the business opportunity. Certain markets with network effects that create moats will require that a company grow fast, since in the end there will only be one to three winners. Being one of those companies when a market "tips" can be essential. This is not an excuse for every company to spend on sales and marketing like a drunken sailor. If you run out of cash on the way there, you are dead anyway.

6. "Early in a startup you need to acquire your customers for free. Later on, you can spend on customer acquisition." (Fred Wilson) Entrepreneurs who know how to acquire customers in a very cost effective way build the most shareholder value. Early in the life of a startup the offerings of the company should be sufficiently valuable that customer acquisition is very cost effective – even free. Paying third parties like television networks for advertising or buying keywords should not be required. If you look at Microsoft, Amazon, Facebook, Starbucks, Costco etc. they all began acquiring customers by delivering great value, not via spending huge sums of money on inorganic customer acquisition approaches like television advertising.

7. "Organic users typically have a higher NPV, a higher conversion rate, a lower churn, and more satisfied than customers acquired through marketing spending." (Bill Gurley). Customers acquired through sales and distribution channels which do not require spending on television advertising and other inorganic methods are not only less expensive to acquire, they are **more valuable** because they will spend more and churn less.

8. "On the right side of the distribution spectrum you have larger ticket items where you can have an actual person driving the sale… On the extreme left-hand side of the spectrum you have mass marketing, advertising, and the like. There is quite possibly a large zone in the middle in which there's actually no good distribution channel to reach customers. This is true for most small businesses. You can't really advertise. If you can't solve the distribution problem, your product doesn't get sold—even if it's a really great product…. if you can get small businesses to buy your product—you may have a terminal monopoly business." (Peter Thiel) Being a medium sized business is an increasingly untenable position in the Internet age. As I wrote in my post on Jeff Bezos: A company "stuck in the middle" lacks the scale and scope economies as well as the greater access to capital of a big company, but is too big to effectively pursue a differentiation strategy.

9. "Top salespeople get paid extremely well. But average sales people don't really. And there are lots of below average salespeople. … Great salespeople are greater than you think. In a sense probably every president of the United States was first and foremost a salesperson in disguise. " (Peter Thiel) Selling is an incredibly valuable skill and people who do it in a world class way are rare. Top sales people are paid as highly as they are for good reason. Sometimes you may hear people say that one great programmer is worth the same thing as many ordinary programmers. Peter Thiel is saying that the same thing applies to great salespeople.

10. PayPal's big challenge was to get new customers. They tried advertising. It was too expensive. … Business development didn't work. They needed organic, viral growth. They needed to give people money. So that's what they did." (Peter Thiel) Sometimes loss leaders are the only way to jumpstart a market. One such case involves multisided

markets, which have a so-called "chicken and egg" problem to solve. Multisided markets require that the market be seeded with a chicken or an egg before the positive feedback loops kick in. This process is quite tricky to do right and so many companies fail to successfully do so.

11. "In a great company everybody sells – not just the salespeople." (Larry Ellison) This one is obvious, but no less important. Warren Buffett is a classic example of a person who wastes no opportunity to sell Berkshire products and services. Many products and services require technical support to sell and that means engineers often must be involved in the sales process. Sometimes the seller must help the buyer with their business model, since if your customers die, you will die as well.

12. "What can a sales person say to somebody to get them to buy a product that they already use every day if they don't like it? Nothing." (Larry Ellison) Quality matters. Especially in the age of the internet, people don't have to buy inferior goods and services since information is so easy for consumers to obtain. It's that simple.

A Dozen Things I've Learned from James Sinegal

May 24, 2014

In the past few blog posts I have explained what creates a "moat" (i.e., a sustainable barrier to entry against competitors). Costco is an interesting case in that instead of a dominant reason for the moat's existence (for example, self-reinforcing demand side economies of scale/network effects in the case of Google) there are lot of little things which create the Costco moat. As is the case with Starbucks, the moat is made up of a lollapalooza of factors like brand, company culture, systems and supply-side economies of scale. In 2001, the year the Internet bubble popped, Jim Sinegal met Jeff Bezos in a Starbucks in Bellevue, Washington and told the Amazon CEO about the Costco business model. In the book "*The Everything Store*" the author writes about that meeting:

"Sinegal explained the Costco model to Bezos: it was all about customer loyalty. There are some four thousand products in the average Costco warehouse, including limited-quantity seasonal or trendy products called treasure-hunt items that are spread out around the building. Though the selection of products in individual categories is limited, there are copious quantities of everything there—and it is all dirt cheap. Costco buys in bulk and marks up everything at a standard, across-the-board 14 percent, even when it could charge more. It doesn't advertise at all, and earns most of its gross profit from the annual membership fees. 'The membership fee is a onetime pain, but it's reinforced every time customers walk in and see forty-seven-inch televisions that are two hundred dollars less than anyplace else,' Sinegal said. 'It reinforces the value of the concept. Customers know they will find really cheap stuff at Costco.'"

As I said in my post about Jeff Bezos, the existence of "pricing power" and attractive returns on invested capital are the right test of whether a moat exists. Morningstar writes:

"Because much of Costco's membership revenue is booked in advance, cash flow volatility is below average. Membership renewal rates stand at about 90% in the U.S. and Canada, and they did not materially differ from this level during the Great Recession. On a global basis, renewal rates stand at about 86%… With an average of 3,800 active stock-keeping units per club versus more than 60,000 at most mass-merchant superstores, Costco wields almost as much bargaining power as Wal-Mart and Kroger. The firm reduces handling costs by purchasing merchandise directly from manufacturers and storing merchandise on sales floors rather than in central warehouses. Self-service store formats and modest marketing requirements help to minimize operating costs, allowing Costco to deploy much of its assortment as a loss leader. …Costco derives roughly 75% of its operating profits from membership fees. Member renewal and retention rates have not suffered much after membership fee increases, suggesting that Costco also wields meaningful pricing power over its customers. However, Costco offsets thin margins with massive sales volume and rapid inventory turnover, leading to exceptional unit productivity levels. In fiscal 2013, Costco generated about $162 million per club, compared with $80 million per unit at Sam's Club in its most recent fiscal year. On a square footage basis, this translates into more than $1,100 net sales per square foot, a range normally reserved for high-end jewelers and fashion apparel retailers. Exceptional productivity also leads to strong returns on invested capital, which have consistently been in the low to mid-teens over the past five years, comfortably ahead of our 8.6% cost of capital assumption." – Costco's Bulking Up Its Moat

2. "Anybody can sell merchandise for low prices. The trick is to be able to do it well and to make money while you're doing it." As Charlie Munger said at the 2014 Berkshire meeting: "Costco is unbelievable. It is against the human nature of many entrepreneurial people to get price down and service up…" As I also noted in my post on Jeff Bezos, if you lower prices, sales volume goes up and that drives absolute dollar free cash flow and the interest free loan from suppliers – known as float. That higher sales volume gives Costco huge leverage with the one vendor that it decides to carry (Safeway negotiates with many suppliers of peanut butter while Costco has one). Costco also focuses on a specific set of customers, argues Megan McCardle:

"Costco really is a store where affluent, high-socioeconomic status households occasionally buy huge quantities of goods on the cheap: That's Costco's business strategy (which is why its stores are pretty much found in affluent near-in suburbs)." – Bloomberg

3. "We're not kamikaze pilots. We want to do things in a sensible fashion. If we can speed up our growth, without outdistancing our management team, and provide a quality product, then we will do so." The easiest and best way to be smart is to not be stupid. That Charlie Munger is on the Costco board of directors of a company which takes pride in being sensible should not be a surprise. Costco opens new stores at a reasonable pace each year. Lots of the expansion is outside the US. Not getting too far out in front of your skis on store openings is wise. For this reason, Costco opens 25-30 new warehouses each year.

4. "Paying good wages is not in opposition to good productivity." "You'll get good people" If you have stores with fewer SKUs and products that sit on pallets they came in, productivity goes up. Someone is paying for all those people who haunt the grocery store aisles stocking goods and straightening boxes and that gets reflected in grocery store prices. Megan McArdle writes: "Costco has a tiny number of SKUs in a huge store — and consequently, has half as many employees per square foot of store. Their model is less labor

intensive, which is to say, it has higher labor productivity." CBS News reported this week that according to data complied by Glassdoor: "*Costco ranks as the second-best company for pay and benefits*, trailing slightly behind Google. The average annual salary for a Google product manager is $146,215, according to Glassdoor data. The average hourly pay for a front-end cashier at Costco, by comparison, is $16.07 an hour. "

5. "If you're a big-picture guy, you're not in the picture. Retail is detail." A number of very prominent hedge fund investors have been brutally punished by venturing into retail, via companies like JC Penney and Sears. Retail is hard. At the 2014 Berkshire meeting, "Buffett noted that most of his investment misses — at least those related to straying outside his circle of competence — have been in retail. Without explicitly saying, he more or less chalked this up to not knowing the businesses."

6. "This is almost like show business. I mean, every day you're opening up and it is show time." The "treasure hunt" aspect of shopping at Costco is intentional. Some people get a dopamine rush when they find the unexpected treasure as the wander the aisles at Costco. The feeling of walking out of Costco having spent more than you imagined going into the warehouse is common. Charlie Munger puts it this way: "If you get hooked on going to Costco with your family, you'll go for the rest of your life."

7. "I think the biggest single thing that causes difficulty in the business world is the short-term view. We become obsessed with it. But it forces bad decisions." "One of the follies of American business is that we are all so tied into these quarterly results and having to perform that it's damaged a lot of businesses." "You have to worry about where the business is headed long-term." My post on Jeff Bezos explains how this creates competitive advantage over other companies who only think about the short term, and drive the business based on short term changes in ratios.

8. "Wall Street is in the business of making money between now and next Tuesday. We're in the business of building an organization, an institution that we hope will be here 50 years from now." "Driving stock up from one day to the next is not what we are about. We are about building a good company and performing for the long term. I know everyone says that, that sounds trite when I repeat it that way, but that is and has always been our attitude about our business. If we do the right things, the stock price will take care of itself, and our shareholders will be rewarded." It's that simple.

9. "You haven't got enough space in your paper to print all the errors we've made. But what we like to say is that we're not going to make that same mistake five times." Try to make new mistakes, but recognize that making mistakes is a part of finding success. It is wise to fail regularly at new things, trying to learn "*via negativa*", but fail quickly when you do fail.

"Jeff Brotman, Costco's co-founder and chairman, says Bezos "doesn't have to make a profit or break even on" services like Amazon Prime and AmazonFresh. "He's building great loyalty with that, as we have with our executive membership," which costs $110 a year and entitles members to additional benefits. Like other Costco executives, Brotman was skeptical that home grocery delivery could be profitable, but he notes that Amazon doesn't really have to make it work perfectly in the short term: 'He can spend a billion dollars experimenting and putting televisions on a truck and delivering them the same day with apples and oranges.

That's a research and development experiment that competitors and normal online businesses can't do.'" – *Businessweek*

10. "We want to turn our inventory faster than our people." Employee turnover is costly. New employees need to be trained and mistakes can be made in hiring. The only complaint I have heard from a Costco employee is that you advance at Costco one retirement at a time. Charlie Munger has a different view and calls Costco: "a total meritocracy."

11. "We would rather have our employees running our business." As is the case at Nordstrom, Costco employees start at the bottom and for that reason understand the business from the ground up. Letting 'the employee who sweeps the floor, select the broom' means jobs get done better and employees both feel better about themselves and are happier. As I wrote in my post on Howard Schultz, Starbucks similarly thinks store managers making decisions about that store is wise. In his book "The Outsiders" William Thorndike writes: "There is a fundamental humility to decentralization, an admission that headquarters does not have all the answers and that much of the real value is created by local managers in the field."

12. "Competition makes us better. Some of our best stores have a Sam's Club next door." Sam's is a competitor, but Amazon is a bigger threat**.** Jim Sinegal perhaps regrets that he taught Jeff Bezos so much about Costco's business model, but great CEOs are often natural teachers. And that's a good thing.

Finally, Morgan Housel writes:

"Asked about his favorite company outside of Berkshire, Munger literally interrupted the questioner and answered, "That's easy. It's Costco. "It's one of the most admirable capitalistic institutions in the world. And its CEO, Jim Sinegal, is one of the most admirable retailers to ever live on this planet," he gushed. "I just can't say enough about my admiration for Costco. More of you should look at Costco. In fact, every time Donald Trump says something and you get discouraged, you should think about Costco." He wasn't done. "It has a frantic desire to serve customers a little better every year. When other companies find ways to save money, they turn it into profit. Sinegal passes it on to customers. It's almost a religious duty. He's sacrificing short-term profits for long-term success." This wasn't the first time Munger let his admiration run wild. Last year he said, "Generally speaking, I believe Costco does more for civilization than the Rockefeller Foundation."

A Dozen Things I've Learned about Great CEOs from "The Outsiders" (Written by William Thorndike)

May 26, 2014

Many very smart people (e.g., Warren Buffett, Michael Mauboussin) are recommending William Thorndike's book *The Outsiders*. Thorndike's book describes certain attributes/methods of "**top performing"** CEOs. (page IX) What does the author mean by a **"great"** CEO? In short: **"return relative to peers and the market"** measured by **"compound annual return to shareholders during their tenure."** (page IX)

1. **The Outsider CEOs are "positive deviants… deeply iconoclastic"** (page 3)- The way I interpret this **"positive deviancy"** is that they understand this fundamental truth: it is mathematically impossible to beat the market if you *are* the market. The author makes this point by including this quotation from John Templeton: "It is impossible to produce superior performance unless you do something different." Being right doesn't lead to superior performance if the consensus forecast is also right. To beat the market, your views and actions must be non-consensus and you must be right. Thorndike points out that the Outsider CEOs are committed to **"thinking for themselves"** (page 9) and avoid consultants and advisers like the plague. They "**focus on key assumptions and did not believe in overly detailed spreadsheets"** (page 200)

2. The Outsider CEOs are **"masters of "capital allocation- the process of deciding how to deploy the firm's resources" … capital allocation is investment, and as a result all CEOs are both capital allocators and investors."** (page XII) Warren Buffett has established a simple test for use in capital allocation:

"for every dollar retained by the corporation, at least one dollar of market value will be created for owners. This will happen only if the capital retained produces incremental earnings equal to, or above, those generally available to investors." (also page 225)

Determining the right "cost of capital" is a process where Thorndike seems to part ways with Warren Buffett.

For Warren Buffett: "Cost of capital is what could be produced by our second best idea and our best idea has to beat it." "We don't discount the future cash flows at 9% or 10%; we use the U.S. treasury rate. We try to deal with things about which we are quite certain. You can't compensate for risk by using a high discount rate."

In short, Warren Buffett engages in an opportunity cost analysis and ignores what he feels are academic concepts, like "weighted average cost of capital" (WACC).

Warren Buffett starts with a risk free rate that he has decided is the 30 year US Treasury. He only buys companies that he feels have essentially no risk and yet are trading at a 25% or greater discount to "intrinsic value", which gives him a "margin of safety." Warren Buffett does not dial up a 'hurdle rate' to reflect risk and uncertainty. He instead requires a "margin of safety" to protect himself against his own potential mistakes. Margin of safety is like a safe driving distance on the freeway, it eliminates the need to predict what the other driver ahead of you will do. You react instead of trying to predict.

Thorndike uses a 20% hurdle rate on several occasions in the book. He arrives at this hurdle rate in a manner very different from Warren Buffett:

"Hurdle rate should be determined in reference to the set of opportunities available to the company and should generally exceed the blended cost of equity and debt (usually in the mid-teens or higher). (page 218-9)

Thorndike is referring to a weighted average cost of capital (WACC) computation which is the product of a complex formula. What does the WACC formula used by an academic look like?

$$WACC = \frac{E}{V} * Re + \frac{D}{V} * Rd * (1 - Tc)$$

Where:

Re = cost of equity
Rd = cost of debt
E = market value of the firm's equity
D = market value of the firm's debt
V = E + D
E/V = percentage of financing that is equity
D/V = percentage of financing that is debt
Tc = corporate tax rate

To say that Warren Buffett and Charlie Munger dislike this formula and the process it represents is an understatement. At the 2014 Berkshire meeting Charlie Munger said: "I've never heard an intelligent discussion on cost of capital." John Huber, who attended the 2014 meeting, described the interaction in this way:

"Both Buffett and Munger agreed that the term "cost of capital" is an abstract concept that is often used by CEO's and CFO's to justify investments or acquisitions *(i.e. "We think this is "accretive" because the returns exceed our "cost of capital").* Buffett said he has sat in on thousands of these types of discussions where "the CEO has no idea what his cost of capital is" and "I don't have any idea of what his cost of capital is either." Buffett and Munger had a much better way to view cost of capital that I thought was much simpler. Buffett went on to say that the "deal test is whether $1 we retain produces more than $1 in market value… not 'cost of capital'". Classic Munger: "Cost of capital is stupid." He went on to say that Warren's test is the best way to view capital allocation and reinvestment opportunities within a business. "It's simple: We're right and they're wrong". …Buffett said that they are "always thinking in terms of opportunity costs." Thinking in this manner, rather than some model that can be manipulated in a spreadsheet, is a much more productive way to analyze investment opportunities within a business."

Specifically regarding "hurdle rates", the two partners who run Berkshire have said before:

Buffett- "We don't formally have discount rates. Every time we start talking about this, Charlie reminds me that I've never prepared a spreadsheet, but I do in my mind. We just try to buy things that we'll earn more from than a government bond – the question is, how much higher?"

Munger- "Warren often talks about these discounted cash flows, but I've never seen him do one. If it isn't perfectly obvious that it's going to work out well if you do the calculation, then he tends to go on to the next idea."

Buffett and Munger might have significant problems with the way a 20% hurdle rate is presented by Thorndike in the book, despite the fact that Buffett endorses the book with a blurb and recommended it at the Berkshire annual meeting. They might say: Who has an second best investment alternative of 20% right now? If shareholders are distributed cash through share purchases or dividends, can they really earn 20% as a second best alternative? In his defense, Thorndike is perhaps referring to deals with a lot of risk that must include a substantial risk premium, as explained below.

So given all this discussion regarding the right measure of opportunity cost, what is reasonable right now in 2014? My suggestion circa May 2014 is to use 10% in most "ordinary" deals. To explain, investors can earn maybe 6% (real) in public markets right now over very long periods. For an ordinary deal involving an ordinary company which makes a basic consumer good or service that has been around for many years (e.g., one in which Warren Buffett might get involved) I would add in 400 basis points (4%) right now to reflect the fact that other similar private businesses can be bought with that sort of return and call it done.

What about "dialing up" that 10% cost of capital to reflect higher risk, for example in the technology industry? You can decide to increase the premium over the risk free rate or use a bigger margin of safety, but doing both is tricky since they are achieving the same thing. I say this despite the fact that Warren Buffett says: "You can't compensate for risk by using a high discount rate." Risk, uncertainty and ignorance are always present in making an investment, but whether you use a bigger margin of safety or add a bigger premium to the risk free rate seems like a personal choice given that they are two ways to do the same thing. That risk does not go away if you use a higher discount rate is a different issue than what rate is chosen based on opportunity cost. Warren Buffett advocates making no risk bets and having a buffer against mistakes in the form of a margin of safety, but that is not the only way to invest (even though it is a very wise way to invest).

Regarding the right risk premium if one does not take the "no risk plus margin of safety" approach, investing capital in improving a railroad line, is not investing in a new web service, is not providing communications services from a high altitude drone. The risk premium should be different for different investments and that requires judgment, which is one reason why investing is an art and not a science. For railroad improvement investments one might use 10-12% and at the other extreme investments in a communications service provided from high altitude service via high altitude drones might be 20%.

Trying to be very precise about cost of capital using an academic formula for WACC when the right risk premium is a matter of judgment with a large margin for error seems a waste of time and potentially misleading. Common sense is the best policy when it comes to opportunity cost. One of the smartest people I know puts it this way:

"cost of capital is an estimate of opportunity cost. Opportunity cost is the next best thing you can do with your money. In financial markets that are liquid, we generally assume that you can find multiple investments with similar risk and reward profiles. So the idea that is relevant is what I can earn on an alternative investment of similar risk. That is the cost of capital."

It is worth pointing out that an ordinary investor who does not have the option of buying private companies as a second best alternative if given a divided of buyback proceeds from say Berkshire might have a second best alternative of investing the cash in a low cost portfolio of index funds/ETFS and therefore have a lower opportunity cost.

With public companies, Warren Buffett seems happy with paying 10x pretax earnings for a company that meets his criteria since he probably thinks 15% over the long-term is likely.

Warren Buffett pays more for private companies in part since he gets to manage the cash. On the value of float:

"Charlie Munger has said that the secret to Berkshire's long- term success has been its ability to 'generate funds at 3 percent and invest them at 13 percent.'" (page 178)

Questions get more complex when a company is purchased or an investment is made based on optionality. For example, take the case of an evaluation of the merits of buying a company like YouTube when it was bought by Google or Whatsapp when it was bought by Facebook more recently. These decisions can't be made by looking at a 15 year history of earnings and the technology involved is changing value in nonlinear ways. Buffett and Munger put that sort of decision in the "too hard pile" but a tech CEO has no such choice. Thorndike does not deal with valuing optionality and I won't either here (though I have wrote posts regarding optionality here and here).

3. **"They have the investor's mind set."** The Outsider CEOs understand that a share of stock is a proportional share of a business and not just a piece of paper. Investing is done best when it is most businesslike, and vice versa. In other words, the better you are as an investor the better you are in business and vice versa. They are conformable with concentration of assets (avoiding standard diversification dogma). They would rather invest in a few things squarely within their circle of competence than speculate about the behavior of large masses of people.

4. They **"emphasize cash flow over reported earnings"… "in all cases"** the Outsider CEOs **"focus on cash flow"** and **forgo the "holy grail of reported earnings."** (page 9) Jeff Bezos is a great illustration of this point, who has said:

"Percentage margins are not one of the things we are seeking to optimize. It's the absolute dollar free cash flow per share that you want to maximize, and if you can do that by lowering margins, we would do that. So if you could take the free cash flow, that's something that investors can spend. Investors can't spend percentage margins." "What matters always is dollar margins: the actual dollar amount. Companies are valued not on their percentage margins, but on how many dollars they actually make, and a multiple of that." "When forced to choose between optimizing the appearance of our GAAP accounting and maximizing the present value of future cash flows, we'll take the cash flows."

Jeff Bezos is very focused on this "absolute dollar free cash flow metric." You will see many people talk about Amazon's focus on "growth" vs. margins, but the right focus is instead absolute dollar fee cash flow. Jeff Bezos spelled out his focus on absolute dollar free cash flow in his 2004 letter to shareholders. He is not about to run his company based on a ratio much beloved by someone outside the company, such as a Wall Street analyst. If you want to see Amazon's approach to absolute dollar free cash flow generation taken even further, go to China and see Xiaomi and Alibaba up close.

5. They **"optimize long term value per share not organizational growth"** (page 10) **"growth, it turns out, often does not correlate with maximizing shareholder value."** (page 11) Markets inevitably wiggle and simply by waiting out volatility the CEO can generate market outperformance. Morgan Housel writes:

"The reason stocks offer great long-term returns is because they are volatile in the short run. That's the price you have to pay to earn higher returns than non-volatile assets, like bank CDs. Wharton professor Jeremy Siegel once said, "volatility scares enough people out of the market to generate superior returns for those who stay in."

6. They resist the **"institutional imperative."** (page 6) The primary work of Warren Buffett and Charlie Munger at Berkshire is: (1) capital allocation; (2) selecting and compensating top managers of businesses and (3) selecting the investments which make up the portfolio. The most important task in capital allocation for Warren Buffett and Charlie Munger is to take cash/earnings generated by a company like See's Candies and deploy it to the very best opportunity at Berkshire.

Part of that capital allocation task is to avoid the **"institutional imperative"**:

"… rationality frequently wilts when the institutional imperative comes into play. For example: (1) As if governed by Newton's First Law of Motion, an institution will resist any change in its current direction; (2) Just as work expands to fill available time, corporate projects or acquisitions will materialize to soak up available funds; (3) Any business craving of the leader, however foolish, will be quickly supported by detailed rate-of-return and strategic studies prepared by his troops; and (4) The behavior of peer companies, whether they are expanding, acquiring, setting executive compensation or whatever, will be mindlessly imitated." Berkshire Hathaway Letter, 1989

7. **"small number of … high probability bets"** (page 16). The Outsider CEOs realize that opportunities which are substantially in your favor arise rarely so they are patient, prepared to act quickly and yet very aggressive when it is time. When you have the odds substantially in your favor bet big.

8. The Outsider CEOs don't predict the future – they instead *wait* for the right conditions to exist and are prepared to act quickly and aggressively when that happens**. "I like to steer the boat each day rather than plan way ahead into the future."** (page 53) We have lots of data about the present but zero data about the future.

9. In acquisitions **"the benchmark was a double digit after tax return without leverage"** (page 30) **"when the companies multiples were low relative to private market comparables, Murphy bought back stock."** (page 30)

The Outsider CEOs only buy companies or their own shares at a substantial discount to intrinsic value (i.e., private market value determined on a DCF basis using "owners earnings").

The Outsider CEOs buy companies and their own company's shares when markets are fearful and refrain from doing so when markets are greedy. This is straight up Ben Graham-style "Value Investing". Warren Buffett, for example, will only buy Berkshire shares when certain conditions are met:

"Buffett told shareholders in his annual letter that in order to trigger repurchases, the stock would have to trade for 120 percent of book value or less. (A company's book value refers to its assets minus liabilities, and not the size of the contract Michael Lewis could fetch for writing about it.) Berkshire is trading at 138 percent of book, or a price-to-book ratio of 1.38. The multiple hasn't dipped below 1.2 since 2012."

10. The Outsider CEOs **"lead by example."** (page 20) They walk the talk. It is that simple.

11. **"Hire well, manage little"** (page 191). Pay in companies controlled by Outside CEOs is often above market to get the very best people who are trustworthy. This enables the Outsider CEO to implement a seamless web of deserved trust. Charlie Munger sets the stage on this point simply:

"A lot of people think if you just had more process and more compliance—checks and double- checks and so forth—you could create a better result in the world. Well, Berkshire has had practically no process. We had hardly any internal auditing until they forced it on us. We just try to operate in a seamless web of deserved trust and be careful whom we trust."… "Good character is very efficient. If you can trust people, your system can be way simpler. There's enormous efficiency in good character and dis-efficiency in bad character."

12. Outsider CEOs are **"master delegators, running highly decentralized organizations and pushing operating decisions down to the lowest most local levels in their organizations."** (page 202) They push down decision-making on everything but capital allocation and choosing and compensating senior executives. They **"delegate to the point of anarchy."** (page 24)

A Dozen Things I've Learned from Jim Barksdale and "Barksdaleisms"

May 31, 2014

Since the contributions of business executives with great operations skills are too often underappreciated I decided to do a blog post on a notable example. I intend for this post to be a natural follow up to my recent blog post on sales, marketing and distribution. While there are a significant number of executives who excel at business operations, I decided to pick someone who is less boring than may typically be the case. To achieve this objective I decided to write about Jim Barksdale because his use of colorful southern sayings makes his personality not only more interesting than normal but also unforgettable. Operations may not be the most exciting topic in the world, but it sure as heck is important if you want to be successful. What you want to avoid in the end is being described at your funeral as being "all hat, no cattle."

1. **"You cannot manage that which you cannot measure."** People who are highly skilled at ***operating*** a business are a rare and highly valuable asset. Rather obviously perhaps, operating a business is a very different set of skills than founding a business. Some founders are great operators while others are not. When people describe a great operator they will sometimes say that she or he "makes the trains run on time" which is a very good thing since if they don't run on time very bad things can happen to a business. Operating a business when a business gets to significant scale vastly increases the need for highly developed operational skills. As an example, Craig McCaw said once regarding Jim Barksdale's skill as an operator: "He took a great mergers-and-acquisitions company [McCaw Cellular] and made it into a great operating company." Jim Barksdale is famous for doing many things as an operator, including putting in place the measurement systems which drove much of the success of Federal Express. Fred Smith said once that information about the packages can be more valuable than the package itself. Great operators also know how to set priorities and one way to do that is to determine what is measurable. Jim Barksdale believes: **"If you can't measure**

the objective then don't put it on the list. We got too many things to fix that you can measure to waste time with things you can't." Jim Barksdale has also said: "**The management of time is just as important as the management of money."** When you have great measurement tools you can react quicker and capitalize on that information faster and more effectively. Michael Cusumano writes that Jim Barksdale "manages by facts" and demands hard analysis- not just "touchy feely impressions." It can be hard to weigh the facts if you got the scales weighed down with your own opinions, but great operators have a knack for doing that well. As a final point, great operators love what they do. I know one fantastically successful operator whose hands literally shake when he is not running a large organization. This leader lives to lead teams. Not everyone is like this – some people are far happier and better off as an individual contributor.

2**. "Now I'm the President around here. So if I say a chicken can pull a tractor trailer, your job is to hitch 'em up." "If we have data, let's look at data. If all we have are opinions, let's go with mine."** Great leaders are great listeners. What changes their mind on something is facts combined with logic. Opinions are not facts and someone like Jim Barksdale knows the difference.

3. **"The main thing is to keep the main thing, the main thing**." Every business has a profit engine that lies at its core. And that engine is invariably simple if you strip away everything extraneous. Two former Barksdale colleagues write about this "main thing" principle:

> "We loved that expression when we first heard it from Jim Barksdale, then the COO of FedEx. That single sentence captures the greatest challenge that executives and managers face today: keeping their people and their organizations centered on what matters most. Every organization needs a Main Thing—a single, powerful expression of what it hopes to accomplish. Without it, it's not possible to align the four elements that produce organizational efficiency and effectiveness: strategy, people, customers, and processes."

Relentless focus on "the main thing" is a universal attribute of great operators. As an example of implementing this idea in a nonprofit context, Jim Barksdale has said: "… whatever they say to us about what's going on here or there, our question is always, 'But are the children learning to read?' And we want to just stay focused on that."

4. **"Three rules: if you see a snake, shoot it; don't play with dead snakes; everything looks like a snake at first."** A Wharton MBA student who heard Jim Barksdale speak elaborates on what he heard Barksdale say**:** "The first rule: If you see a snake, don't have conference calls about it, don't leave voice mails about it, don't have meetings about it, just kill the snake." If you perceive a mortal threat to the firm, waste no time, and attack it before it destroys you. The second rule: Don't play with a dead snake; keep going even if you've attacked the wrong threat or solved the wrong problem. The third rule: All opportunities start out looking like a snake. If a threatening snake turns out not to be a problem, turn from attacking it to using it.
During a speech at Harvard, Jim Barksdale explained it this way: **"getting rid of a snake is sometimes a greater problem than the snake itself. People within a company…. write memos about the snake. And after the snake is officially dead, …sometimes people in an organization continue to insist that the snake is still around. They're the people who 'lost the argument' and were overruled."**

5. **"The infantry is always ahead of headquarters."** People in the field who are near *the line of fire* know things that people in headquarters don't know. Great systems transport that data quickly from the edge to the center of the system that is a company. Great leaders spend lots of time in the field talking with people like call center operators and store managers who understand the customer pain points. When problems arise, great leaders leave their chair at HQ and get out with the infantry to find a solution. John Stanton is another former McCaw Cellular leader who was famous for getting out of his chair and into an airplane to get to the field when a problem came up.

5. **"In a fight between a bear and an alligator, it is the terrain which determines who wins**." There are some domains in which any business is weaker and some in which they are stronger. Knowing the difference is critically important. As an example, Clayton Christiansen's "disruptive innovation" thesis is all about finding favorable terrain in which to fight an incumbent. Strategists have written about this principle for centuries:

> "Sun Tzu devotes a chapter to terrain and the appropriate, associated tactics and strategies. "We may distinguish six kinds of terrain: accessible ground, entangling ground, temporizing ground, narrow passes, precipitous heights, positions at a great distance from the enemy." Von Clausewitz offers: "There are certain constant factors in any engagement that will affect it to some extent…[one of] these factors [is] the locality or terrain…which can be resolved into a combination of the geographical surroundings and nature of the ground." Notice the use of the expression "constant factors." That is the notion of those things that cannot be controlled in a competitive environment; hence, they must be taken as a given by all competitors. Von Clausewitz also devotes a chapter to terrain, which he argues "bears a close and ever-present relation to warfare."

There are a few related sayings which Jim Barksdale may have used:

"Life is simpler when you plow around the stumps."

"You will encounter horse droppings as you go through life. You can walk around them or jump in the middle of them. The choice is yours."

"If someone tries to hand you fresh horse droppings, whether you grab them is a choice."

6. **"Nothing happens until somebody sells something." "If a company doesn't have profits over the long haul, then it's gonna be a short haul." & "Quit spitting on the handle and get to hoeing."** In the real world of business, hoeing in no small part means selling. I'm not going to repeat the points made in my very recent post on sales and distribution here, but make no mistake, selling successfully is not only important but hard.

7. **"We're going to jump with every chute we build."** Making sure you "eat your own dog food'" is important. Using your own products is essential because it is a source of feedback but also because it creates the right incentives. Charlie Munger on this:

> "Munger cites former Columbia University philosophy professor Charles Frankel who believed that "truly responsible, reliable systems must be designed so that people who make the decisions bear the consequences."…Frankel "said that systems are responsible in proportion to the degree in which the people making the decisions are

> living with the results of those decisions…So a system like the Romans had where, if you build a bridge, you stood under the arch when the scaffolding was removed—or if you're in the parachute corps, you pack your own parachute—those systems tend to work very well." Conversely, "a CEO who's there for five years while the company looks good, after which he's gone on a pension, is not operating in a responsibility system like that of the Roman engineers."

Nassim Taleb calls it "skin in the game":

> "Standard economic theory makes an allowance for the agency problem, but not the compounding of moral hazard in the presence of informational opacity, particularly in what concerns high-impact events in fat tailed domains. But the ancients did; so did many aspects of moral philosophy. We propose a global and morally mandatory heuristic that anyone involved in an action which can possibly generate harm for others, even probabilistically, should be required to be exposed to some damage, regardless of context. While perhaps not sufficient, the heuristic is certainly necessary hence mandatory. It is supposed to counter risk hiding and transfer in the tails. We link the rule to various philosophical approaches to ethics and moral luck."

9. **"Great opportunities are the ones that solve great problems. And a great opportunity for wealth is solving the last link in the chain, that holds the whole system back from working**." If you can find a business that is the last link in the chain, sometimes you can unleash a huge torrent of value that is primed to benefit customers. Lost of the underlying work has been done – the last link solution just unleashes the gusher of value. **"Your job is to run as fast as you can towards the cliff. My job is to move the cliff."** One of the jobs of a leader is to make sure that the team is always challenged and moving toward creating additional value. In other words, says Barksdale: **"Management spends too much time fixing problems instead of pursuing opportunities."**

10. **"They've got a bigger bulldog to feed**." If your competitors have a higher cost of doing business, that can be a huge advantage. Great operators invest only in what adds value. When some young company founder invests in an expensive chair, that money is dilutive of his equity. That may be the most expensive chair ever sold if the company gets a great exit. In the South, people say things about unnecessary spending like: *"He squeezes a quarter so tight the eagle screams." "He's tighter than a bull's ass at fly time.*

11. **"Never mistake a clear view for a short distance."** JimBarksdale has said that this quote is an old "cowboy saying." The saying originally referred to the fact that a ride to somewhere on a clear day may be further than you think. Just because something seems obvious does not mean it will happen quickly. People tend to overestimate change in the short term and underestimate it in the long term.

12. **"Nobody that I know can predict the next two pings of the pinball**." People who think they can predict the future are as common as ears of corn in a farmer's field. Yes, they are right some times because: "Even a blind squirrel finds a nut once and a while." and "Even a broken watch is right – twice a day." But to focus on those inevitable forecasts driven by luck is a big mistake. It is best to remember that we have zero data about the future, but lots of data about the present. Great operators focus on the present and don't fool themselves as often about their ability to fully forecast the future.

A Dozen Things I've Learned from Jim Simons

July 9, 2014

There was so much interest in yesterday's NYT article on Jim Simons, I thought I would do a special "Dozen Things" on Jim Simons with no commentary.

1. **"Models can lower your risk. It reduces the daily aggravation."**

2. **"Certain price patterns are nonrandom and will lead to a predictive effect."**

3. **"Efficient market theory is correct in that there are no gross inefficiencies, but we look at anomalies that may be small in size and brief in time."**

4. **"Great people. Great infrastructure. Open environment. Get everyone compensated roughly based on the overall performance… That made a lot of money."**

5. **"Luck, is largely responsible for my reputation for genius. I don't walk into the office in the morning and say, 'Am I smart today?' I walk in and wonder, 'Am I lucky today?'"**

6. **"We have three criteria. If it's publicly traded, liquid and amenable to modeling, we trade it."**

7. "**We search through historical data looking for anomalous patterns that we would not expect to occur at random. Our scheme is to analyze data and markets to test for statistical significance and consistency over time. Once we find one, we test it for statistical significance and consistency over time. After we determine its validity, we ask, 'Does this correspond to some aspect of behavior that seems reasonable?'"**

8. **"Trend-following is not such a good model. It's simply eroded." Things change and being able to adjust is what made Mr. Simons so successful. "Statistic predictor signals erode over the next several years; it can be five years or 10 years. You have to keep coming up with new things because the market is against us. If you don't keep getting better, you're going to do worse."**

9. "We don't start with models. We start with data. We don't have any preconceived notions. We look for things that can be replicated thousands of times. A trouble with convergence trading is that you don't have a time scale. You say that eventually things will come together. Well, when is eventually?"

10. **"Once in a while the phenomena we exploit are particularly present. We like a reasonable amount of volatility. In our business we want some action." "Tumult is usually good for us. We don't have credit lines of any significance. We don't do a lot of leveraged-type financing."**

11. **"How we do it isn't any more mysterious than how a great fundamental investor does it. In some ways it is less mysterious because what we do can be programmed."**

12. **"Academics has its charms, but it doesn't have enough charms that I regret leaving that field." "Be guided by beauty. Everything I've done has had an aesthetic component to me. Building a company trading bonds, what's aesthetic? … If you're the first one to do it right, it's a terrific feeling and a beautiful thing to do something right, like solving a math problem."**

A Dozen Things I've Learned From Jeffrey Gundlach About Investing

October 4, 2014

Jeffrey Gundlach is always an interesting investor to watch, but recently he has become even more interesting given the news about Bill Gross leaving PIMCO.

It is useful to contrast his style with that of Bill Gross in an attempt to understand how the wheels came off the bus from Gross at PIMCO. Few things result from a single cause, but it Gundlach has been managing far less money than Bill Gross and the bigger a fund gets, the harder it is to outperform a benchmark index.

A bond manager must deal with many types of risk in addition to interest rate risk. For example, there are credit risks and duration risks. Gundlach is focused, as he should be, on mispriced risk. Where that risk may be at any given time will vary. So he or she is an opportunist. And in being an opportunist it is easier to outperform if your fund is not too large. If your funds get too big, the portfolio can suffer. One can argue that Bill Gross suffered much the same fate as Bill Miller did before him in stocks. The fund grew too big and that became a drag on performance. in other words, at some point, being dubbed *the bond king* can become a ball and chain. I also suspect that changes in monetary policy and in markets generally after the 1987 fiscal crisis have made it even harder for bigger bond firms to outperform smaller competitors. Jeffrey Gundlach faces these same challenges as he grows his assets under management.

Gundlach once said: **"When we started the company, our stretch goal was to reach $50 billion of [assets under management] within three years. We do not have a goal of trying to reach $100 billion any time in the foreseeable future. I don't think we can add another $50 billion to [Total Return Bond] and still manage it the way we want to manage it. What you really don't want to do is what the young guys do, and that is take every single dollar that is dangling in front of you." "Closing something is sort of an abstract idea. In the first quarter of 2009, I probably could have invested something close to $1 trillion. [But] those periods like early 2009 don't happen all that often."** It will be interesting to see if he has the discipline required to close the fund to new money. A recent paper argues that "a doubling in 'bond king' assets under management has been associated with a 10-20% decline in achieved alpha. As a result, historically a 'bond king' with a smaller asset base has outperformed a 'bond king' with a larger asset base."

1.“The trick is to take risks and be paid for taking those risks, but to take a diversified basket of risks in a portfolio.” Gundlach seems to be communicating the same view that has been also expressed by Bill Gross when it comes to following the advice that Thorp developed to beat the dealer in blackjack. “Mr. Thorp: You have to make sure that you don’t over-bet. Suppose you have a 5% edge over your opponent when tossing a coin. The optimal thing to do, if you want to get rich, is to bet 5% of your wealth on each toss — but never more. If you bet much more you can be ruined, even if you have a favorable situation.” Taking in risk for its own sake is a sucker’s bet. More risk does not necessarily mean more investment return.

What can generate more return is mispriced risk on the part of someone else. As Howard Marks has pointed out, “if riskier investments necessarily delivered higher returns they wouldn’t be risky.”

Businessweek argues that until his recent spell of underperformance Gundlach competitor Bill “Gross did better by investing in riskier bonds…. Estimates from Morningstar suggest that relative to a bond index fund, Gross’s Total Return Fund is twice as likely to move in tandem with the Standard & Poor’s 500-stock index. Since the financial crisis, that spread has only widened—from 2009 to today, Pimco’s fund returns began to more closely resemble the S&P 500. (The opposite happened to the Total Bond Fund offered by Vanguard: It now moves inversely with the broad stock market.)” Now that the “bond king” spell is broken more investors will find their way into indexed funds instead of another actively managed fund. And some will seek the next bond king, follow Gross to Janus or move to Gundlach. It will be interesting to watch.

2. “Avoid investment positions that have poor asymmetrical risk/return trade-offs.” This is straight up advice about the dangers of negative optionality. Investing in situations where there is a big downside and a small upside is a very bad idea. What an investor should seek is the reverse: a big upside and a small downside. Howard Marks puts it this way: “In order to achieve superior results, an investor must be able – with some regularity – to find asymmetries: instances when the upside potential exceeds the downside risk. That’s what successful investing is all about.”

3. “We always try to ensure that we understand the risks we are taking and to avoid the risks for which the potential return is likely to be inadequate. For example, there are times when ideas become too popular and investors don’t understand the risks of an asset.” These statements by Gundlach are consistent with the views of Warren Buffett. To pick just three similarities to Buffett: (1) “I’d be a bum on the street with a tin cup if the markets were always efficient.”; (2) risk comes from not knowing what you are doing and (3) don’t follow the crowd. Investing has universal attributes. Buffett has said, and I doubt Gundlach would disagree: “The very term ‘value investing’ is redundant. What is ‘investing’ if it is not the act of seeking value, at least sufficient to justify the amount paid? Consciously paying more for a stock than its calculated value — in the hope that it can soon be sold for a still-higher price.”

4. "People love junk bonds because for some weird reason they feel [junk bonds] don't have interest rate risk." This is another example statement of Jeffrey Gundlach's views that markets are not always efficient. People who do not think rationally about a risk create opportunity for the investor. There are many heuristics that as a whole have been helpful to humans in evolution but which can be very dysfunctional in investing. People are "weird" about some things and that can be arbitraged.

5. "We try to be liquidity providers and get paid for that. That's one of the things that tend to support outperformance over time — buying when other people need to sell. That's always been part of our strategy." Having cash when others need it can be a huge source of investment out-performance. People for some reason get easily confused about the difference between cash and wealth. The reality of life is that sometimes people with a lot of wealth are unable to get their hands on cash. Predicting when those times will happen is impossible. When it comes to ash especially, it is better to prepare than predict.

The only unforgivable sin in business is to run out of cash. If you have cash at the right times and can be aggressive at those times in buying assets at a bargain, you can do well as an investor. This will not be easy, especially today, since these are times of great uncertainty (e.g., we are increasingly living in Extremistan).

6. "I want fear. I want to buy things when people are afraid of it, not when they think it's a gift being handed down to them." Be greedy when others are fearful and fearful when others are greedy. One of the best times to invest is when uncertainty is the greatest and fear is the highest. Gundlach is channeling Howard Marks and other contrarians. You can't beat the market if you are the market. Sometimes you must be contrarian if you want to outperform a market and you must be right enough of those times to succeed**.** This is also consistent with the Mr. Market metaphor. Make the market your servant and not your master.

7. "There is one thing about being an asset manager. Timing is everything. The synonym for "early" in the investment business – is 'wrong'." Being a contrarian is not enough if you are wrong. You must be contrarian and right enough to beat a market index. Of course, it is magnitude of correctness that matters and not frequency.

8. "People always want investments to go up like a line.…That's just not reality. You make 80% of your money in 20% of the time in investing and you have to be patient." Success in investing and in life will be lumpy. Accepting that fact is a significant part of not only financial and career success, but happiness in life.

9. "To hold cash you have to have a conviction that prices of something that you'd otherwise own will go down." Cash has optionality. That optionality has a cost that may or

may not be worth paying. Whether this is worth paying depends on the circumstances and the time. I would rather have cash and not need it, than need it and not have it. As always, a margin of safety is wise and that statement applies to cash.

10. "One way you get high yields is taking interest-rate risk, but you don't want a lot of interest-rate risk because interest rates are low and they could rise from time to time during the course of this year or could even break out to the upside ultimately in the future. In the nonguaranteed mortgage market, there is still a market that's plagued with defaults. And the way to think about it is if those defaults get better, that would be the sort of scenario of higher interest rates and a better economy if the defaults slow down.

So actually those securities don't have interest-rate risk, and yet you get paid for taking the default risk. So the secret is to marry together opposite moving investments relative to interest rates while getting paid on both sides of the trade, and that's why we've been so successful with the DoubleLine Total Return earning those yields." This is an interesting statement but it only works if the two bets are mispriced. If this trade or any other trade gets "crowded" it won't work. Are there situations where there are two risk premiums to be earned? Yes. But that depends on price.

11. "The fundamentals are always important but it does get trumped by policy decisions when policy decisions are so radical as has been the case in recent years." "One thing that is absolutely undeniable about quantitative easing is, it is reducing the supply or the float to the non-central-bank world. Reducing the float of high-quality assets." The period since the financial crisis has not been a normal time for most markets, including the bond markets. How is that for an understatement? What may have tripped up Bill Gross: the penalty for having massive assets under management (AUM) may have grown significantly due to changes in factors like liquidity and volatility. Changes caused by (1) new and extraordinary monetary policy (2) changes in the markets as a result of changes in policy, have interfered with his long held theses regarding interest rate, duration, credit and other risks. It is now "the new abnormal".

12. "I don't often know where my ideas come from. Maybe it's the fact that I'm obsessively regimented in my analysis, borderline autistic." It has been my experience that some people who are borderline autistic can have a gift for rationality that can be very helpful in investing. This is not always true but I have seen it happen enough that I think what Gundlach says about himself is not a one-off case.

A Dozen Things I've Learned From Guy Spier About Value Investing

October 12, 2014

1.“The entire pursuit of value investing requires you to see where the crowd is wrong so that you can profit from their misperceptions.” A value investor seeks to find a significant gap between the expectations of the market (price) and what is likely to occur (value). To find that gap the value investor must find instances where the crowd is wrong. Michael Mauboussin writes: “the ability to properly read market expectations and anticipate expectations revisions is the springboard for superior returns – long-term returns above an appropriate benchmark. Stock prices express the collective expectations of investors, and changes in these expectations determine your investment success.”

Value investing is buying assets for substantially less than they are worth and, says Seth Klarman “holding them until more of their value is realized.” Klarman describes the value investing process as “buy at a bargain and wait.” It is critical that the value investor not try to time the market but rather make the market their servant. The market will inevitably give the gift of profit to the value investor, but the specific timing is unknowable in advance. If there is a single reason people do not “get” value investing it is this point. The idea of giving up on trying to time the market is just too hard for some people to conceive. For these people, timing markets is a hammer and everything looks like a nail. That you can determine an asset is mispriced now relative to intrinsic value does not mean you can time when the asset will rise to a price that is at or above its intrinsic value. So value investors wait, rather than try to time markets.

2. “When we apply Ben Graham’s maxim that we should treat every equity security as part ownership in a business and think like business owners, we have the right perspective. Most of the answers flow from having that perspective. …thinking like that is not easy…” When you treat shares of a company as an interest in a business (rather than a piece of paper to be traded based on mob psychology) you naturally think about private market value. Value investors have developed a valuation process for determining private market value that is very rational. The lynchpin of this valuation process is *intrinsic value*. While the process of determining intrinsic value is fuzzy (since methods slightly vary) that is ok, since the margin of safety can cover up small amounts of fuzziness if the margin of safety is sufficiently large (e.g., 25-30%). Investment firm Euclidean Technologies has articulated some of Buffett’s views on this valuation process:

“Buffett talks about book value as a measure of limited worth when estimating the intrinsic value of a business. After all, book value reveals very little about the operations of a company; it makes no distinction between a pile of cash and a company with productive assets, great products, and loyal customers. Instead, when evaluating intrinsic value, Buffett focuses on understanding the amount of cash that a business can generate and distribute to its owners. He calls this concept owner-earnings…”

In calculating a valuation of a business, many people fail to understand that value investing and growth are “joined at the hip.” Value and growth investing are not alternatives, but rather inextricably linked. Here’s Buffett:

“Growth is simply a component–usually a plus, sometimes a minus–in the value equation. Indeed growth can destroy value if it requires cash inputs in the early years of a project or enterprise that exceed the discounted value of the cash that those assets will generate in later years.”

Some of the misunderstanding arises because some (but not all) value investors consider *quality* as a factor in valuation. Many people assume that looking at quality means a focus on growth, when this is definitely not the case. Quality relates to the ability of the business to generate higher return on invested capital. In his new book Tobias Carlisle explains the difference:

"Earnings—central to [John Burr] William's net present value theory—were only useful in context with invested capital. Despite his obvious regard for William's theory, Buffett could show that two businesses with identical earnings could possess wildly different intrinsic values if different sums of invested capital generated those earnings…. All else being equal, the higher the return on invested capital, the more valuable the business."

Here's Buffett on what drives the *quality* of a business:

"Leaving the question of price aside, the best business to own is one that over an extended period can employ large amounts of incremental capital at very high rates of return. The worst business to own is one that must, or will, do the opposite – that is, consistently employ ever-greater amounts of capital at very low rates of return."

Note that the way Buffett measures quality does not refer to reliance on a new growth input and most certainly not any macroeconomic factor. Quality is about relative return on invested capital!

Euclidean Technologies writes on return on capital:

"Buffett cares deeply about the magnitude and resiliency of a company's long-term return on capital. Return on capital is simply the relationship between the earnings a company generates and the amount of capital tied up in its business. For example, a company that can consistently deliver $0.20 for every $1 in capital employed would show a robust 20% return on capital. To Buffett, this would be a higher quality business than another that delivered a lesser yield or showed deteriorating, or inconsistent, returns on capital. Moreover, this yield relationship between earnings and invested capital allows Buffett to view a prospective investment in relation to all other potential uses for capital…"

What determines long-term return on capital? The strength of any barriers to entry (a moat) possessed by the business. Unless you have a moat your profitability will inevitably suffer as competitors copy your success. If there is no impediment to new supply of what you sell, competition among suppliers will cause price to drop to a point where there is no long term industry profit greater than the cost of capital. (Econ 101)

3. "All-too-often, we feel like we are forced to take a decision. Warren Buffett has often said that, unlike baseball, there are no 'called strikes' in investing. That is a truism, but the point is that too many of us act like it is not true. Amateur investors, investing their own money, have a huge advantage in this over the professionals. When you are a professional, there is a whole system of oversight that is constantly saying, "What have you done for me lately!" or in baseball terminology, 'Swing you fool!'"

"Most of the time the answers are not to invest and to do nothing."

To profit as a value investor you must:

1. find an instance where the crowd is wrong,
2. that gap must be within your circle of competence, and
3. the value of the asset purchased must substantially exceed the price paid (e.g., 25%), so you have a margin of safety which can allow you to profit even if you make a mistake or suffer from bad luck.

Since these three things happen at the same time only occasionally, most of the time you should do nothing**.** Since inactivity tends to be contrary to human nature, learning to be patient and yet aggressive when the time is right is a trained response. This is part of the reason why value investing is simple, but not easy.

4. "I'm trying to manage myself, not just my portfolio." Most mistakes made by investors are psychological or emotional. The task of managing yourself is all about avoiding those mistakes. The work required to overcome emotional and psychological mistakes never ends. You will never stop making some mistakes. But hopefully you can at least learn to mostly make new mistakes and to learn from the mistakes of others. Paying attention and being a learning machine are essential. People who don't pay attention are surprisingly common. As Seth Klarman writes in his book, *Margin of Safety*: "The greatest challenge for value investors is maintaining the required discipline." As an example, to be a contrarian you must be willing to sometimes be called wrong by the crowd. That will be uncomfortable for most all people.

5. "Leverage can prevent you from playing out your hand, because exactly the time when markets go into crisis is when your credit gets called." Leverage magnifies your mistakes in addition to your successes. Guy Spier is also saying that it can interfere with your ability to continue investing, since a called loan can take you out of the game. James Montier writes: "Leverage can't ever turn a bad investment good, but it can turn a good investment bad. When you are leveraged, you can run into volatility that impairs your ability to stay in an investment – which can result in a permanent loss of capital."

6. "Going forward, a 5% position will be a full position. An idea will have to be something absolutely extraordinary to become a 10% position and many positions in the portfolio are currently 2-4%." It seems like Guy Spier has moved away from a Phil Fisher/Charlie Munger view on diversification, to something that is closer to what Graham himself believed. At these ownership levels, Spier is not at risk of being a closet indexer and yet he still has a comfortable level of diversification. His new view on diversification seems consistent with views of Ed Thorp as internalized by Bill Gross and Jeffrey Gundlach.

7. "Value investors probably pay far too little attention to the credit cycle. In my case, I think that I was utterly convinced that my stocks were sufficiently cheap, such that I

could invest without regard to financial cycles. But I learned my lesson big time in 2008 when I was down a lot. I now subscribe to Grant's Interest Rate Observer so as to help me track the credit cycle." Howard Marks has said he watches the business cycle but he has never actually said what he does with what he sees in the cycle. Marks seems to use his view on where the business cycle may be as a signal to raise more cash or send it back to his limited partners. Guy Spier seems to be saying he treats the credit cycle as a factor, in some unquantified way. I find myself increasing cash gradually as markets reach prices that are on "the high side of fair," but I doubt this is based on some rational process and I don't see any magic formula. Warren Buffett says he never pays attention to macro factors. But he is Warren Buffett and you and I are not. Not everyone has his discipline.

8. "I do not use short selling. The fund has not shorted a stock since the 2002 to 2003 time frame. At that time I did short three stocks, on which I broke even on two and made money on one of them. The experience taught me that I was not going to be using short selling going forward for a slew of reasons. The first is the straightforward logic of the matter. The trend of the market is up, not down. Shorting stocks puts you against that trend and thus makes it more difficult to make money. … Second, the mathematics of shorting – when you short something and it goes [against you], it becomes a bigger and bigger part of your portfolio, thus creating increasing risk as things go against you, making it an unbalanced and unstable thing to manage. By contrast, when you go long something and it goes against you, it becomes a smaller and smaller proportion of the portfolio, thus reducing its impact on the portfolio. So there is a tendency for long positions to self-stabilize in a certain way – they have a stabilizing effect on the portfolio, whereas short positions have a destabilizing effect on the portfolio." Ordinary investors are significantly at risk when they short stocks. When I say something like this, people tend to extrapolate and say that I must favor banning shorting stocks. No, I don't favor a legal ban. That something is unwise for an ordinary investor does not necessarily mean it should be made illegal. That people like Jim Chanos can (1) profit and (2) perform a socially useful function does not mean an orthodontist or a bricklayer should be shorting stocks. If Guy Spier, Berkowitz, Pabrai, Buffett and Munger don't short stocks (since it is "too difficult") what chance of success does the ordinary investor have?

9. "If I'd not fallen under the sway of Warren Buffett, who knows, maybe I'd still be working at some skeezy place and if not committing financial fraud, then at least not serving society very well." Guy Spier graduated from Harvard Business School and found out too late that he had gone to work for a business with questionable ethics. Guy Spier credits Buffett and Munger with leading him away from the dark side of Wall Street. This is a good thing. Guy Spier's publisher describes his book as revealing "his transformation from a Gordon Gekko wannabe, driven by greed, to a sophisticated investor who enjoys success without selling his soul to the highest bidder."

Spier himself writes: "I think it's important to discuss just how easy it is for any of us to get caught up in things that might seem unthinkable—to get sucked into the wrong environment and make moral compromises that can tarnish us terribly. We like to think that we change our environment, but the truth is that it changes us. So we have to be extraordinarily careful to choose the right environment—to work with, and even socialize with, the right people.

Ideally, we should stick close to people who are better than us so that we can become more like them."

10. "We know in particular that there is a class of investors who get excited about stock splits – even though they do not change the value of the business or achieve anything else substantive. By not catering to that group, Berkshire already makes significant strides in that direction of having a higher quality shareholder base." "Decentralized organisms are more resilient to having their legs cut off and Berkshire Hathaway is the same way… as opposed to a command and control organization." Regarding the first point, having better investors is a competitive advantage for a business. It allows the business to invest for the long term and to be contrarian when it makes sense to be contrarian. Regarding the second point, Nassim Taleb points out: "In decentralized systems, problems can be solved early and when they are small." Decentralized systems are more robust to failure. If you ask Buffett how Berkshire ended up this way, he will say that it is just his nature. And of course it has worked very well. Charlie Munger points out that for this approach to work you must have a seamless web of deserved trust in which the decentralized managers are given the freedom to manage what they do and sufficient skin in the game to be properly motivated/aligned.

11. "The idea that we are managing some finely tuned machine is *just* not the case. I'm *just trying to get it right*. 55% of the *time* or *get* it slightly better *55% of the time*." Guy Spier is pointing out that over time even a modest level of outperformance compounds in a beautiful way, if expenses and costs are kept low. Everyone will make mistakes but if you have a sound investment process you can be way ahead in the game. Mauboussin is the master of this area in my view: "While satisfactory long-term outcomes ultimately define success in probabilistic fields, the best in their class focus on establishing a superior process with the understanding that outcomes take care of themselves."

12. "Mohnish Pabrai taught me to be a cloner. In the academic world, plagiarism is a sin. In business, copying other people's best ideas is a virtue, and it is no different in investing. I would go further. In the same way that if I wanted to improve my chess, I would study the moves of the grandmasters. If I want to improve my investing, I need to study the moves of the great investors. 13F's are a great way to do that." As Charlie Munger likes to say, trying to learn everything yourself on your own from first principles is just too hard and takes too long. Learning from others and then working to extend that is the superior approach. Stand on the shoulders of giants whenever you can, but strive for more. The other key point about cloning relates to business strategy and the business strategies of businesses that one may choose to invest in. Anything you do in business and investing will be copied and cloned. Continued innovation and adaptation are essential to success.

A Dozen Things I've Learned From Chris Sacca About Venture Capital

October 25, 2014

1. "Capital just isn't that important to the early triumph of a company anymore. Much more vital in those inaugural days is collaborating side by side with a founding team that controls its own destiny. Entrepreneurs who are empowered by seasoned advisors, but free to frame achievement for themselves, are much happier." "When you're just getting started, I'm the guy you want in your room to help design your product, build the funnel to convert, help you recruit your first couple of employees, get that shit done." Not all investors are created equal. The winners are persistently the same relatively small groups of investors time after time. Success not only has positive signaling effects in attracting the factors that drive success, but also talent enhancing effects for the venture capitalists themselves.

In short, the best talent, investors and partners are attracted to each other in ways that are self-reinforcing. By getting to work more with other great talent, investors like Chris Sacca actually become more talented and attract more talented people [repeat]. This is an example of what is known as "cumulative advantage." If you genuinely have a great idea for a business that has the necessary tape measure home run potential payoff, talent is a far greater constraining resource than money. Getting access is the best investors is not only valuable but essential. What is the biggest startup success you see out there today that was financially backed by no one you have ever heard of?

2. "The founder needs someone to bring their A-game to. I did the analysis across my portfolio actually, and the companies I have, those that had leaderless seed-rounds underperformed." "I think it's important for anybody to have to sit down, put together a deck, and bring their A game to somebody else, who's gonna listen. A coach, somebody, you feel accountable to." "My job is to obsolete myself by series B." "It's all fun and games until you raise a Series B." People often find a niche where they are most effective and Chris Sacca is telling you where he feels he is most effective and having the most fun. Having a lead investor in a seed round who adds value is really important. If you are raising early stage money and the money is just money, you are settling for less. If you meet a founder and he or she says that all the investors added was money, they may have had a decent financial exit but they almost never hit a tape measure home run.

3. "Good investors are in the service business." "There are angels who have 75 companies and don't call any of them ever." The difference between Chris Sacca and a dentist who writes seed stage checks is measured in light years. Someone like Chris Sacca hustles on behalf of the portfolio company, has judgment and a network of people who know how to get things done. That they are both called Angels by some people seems wrong to me. Great seed stage/early stage venture capital investors are not a common phenomenon.

4. "I was involved in a company, where Bill Gurley is an investor and the company was thinking about hiring CFO, and Bill opens up his folder, and he's got six CFOs, ready to go. People of public company quality. I thought, 'I don't know six public company CFOs in the world.'" "Bill Gurley, will never take credit for that." When a company gets

to a Series A investment round or greater, a business increasingly needs a new set of resources if it is going to scale. Trains need to run on time. Systems must be built. New types of things need to get done. New VCs with new skills often arrive after the seed and A rounds and new management and talent starts to appear. People like Bill Gurley and Chris Sacca have a symbiotic relationship. Sacca is saying that by the time the B round happens he is ready to hand over his active/lead investor role to others. Knowing your highest and best use and what makes you happy is an important life skill.

5. "As investors, VCs are wrong more often, than we are right." "As a VC, I'm wrong most of the time, so whenever any of the VCs tell you about the rules etc. it's really, because we're wrong all the time. You should expect me to be wrong most of the time. When I'm right, I'm really really right. That's what you should expect from a VC." Being a VC is all about hitting tape measure home runs. You can be wrong often. In fact you can be wrong most of the time as long as you are very very right sometimes. It is magnitude of success that matters, not frequency. This is called "the Babe Ruth effect" which I have written about before.

6. "Any VC will tell you where they really make their money is on following on, it's on doubling down into the winners. The things that are growing geometrically in terms of users, revenue that kind of stuff." As the timeline of a business moves along, phenomena start to emerge from the nest of complex adaptive systems that is an economy or a market. Spotting the emergence of a potential unicorn causes the best venture capitalists to double, triple or more down on their best bets. They didn't necessarily see it coming when they did their first investment but later on, they know it when they see it. What was originally optionality over time starts to look more and more like inevitability.

7. "I do try to focus a lot on the entrepreneur as a person, I think that has fallen out of the equation recently…. look for driven people." Getting a company through adversity and challenges takes someone who is driven to succeed. This is why venture capitalists prefer missionary founders to mercenary founders. They also know that strong founders and strong teams are their own form of optionality since they can adapt as the environment changes and opportunities arise.

8. "There are people who are great at being second fiddle." Someone needs to do the work. In fact, everyone needs to do the work. Startups with poseurs don't survive. Public relations and hype only get you so far and if the founders start believing the PR you can put a fork in the business. It is done.

9. "Once you have FOMO (fear of missing out) on your side, you no longer have to ask people like [me] for money. They're lining up to give it to you." When doubt or uncertainty exist, people tend to follow other people. For this reason, if you can get a great lead investor getting each additional investors get vastly easier. The process can become like a snowball running downhill. That can have good results and bad. In the Internet bubble, Pets.com was the poster child for FOMO. Today Clinkle would be an example of FOMO creating big problems for investors.

10. "Create value before you ask for value back." This is a fundamental principle of networking. Chris Sacca shares this view with Heidi Roizen, who I wrote about here.

11. "Simplicity is hard to build, easy to use, and hard to charge for. Complexity is easy to build, hard to use, and easy to charge for." What Chris Sacca talks about here is why there is such a premium on design these days in venture capital. This, in no small part, helps explain the mass migration of companies up into San Francisco from the peninsula (designers are often allergic to suburbs). As the great Startup L. Jackson once said: "Y'all talk about UX like it's just another feature. For a user, it literally is the product. Full stop. Everything else is inside baseball."

12. "It's people with these broader life experiences who have balanced relationships who come up with the cool shit." "College done right, particularly like a liberal arts school, is a lot less about the individual facts. You learn more about how to think, how to communicate, experimenting with personal boundaries, drinking too much, taking the time to go abroad." This is straight up consistent with the Charlie Munger view that you need to have a latticework of different models to make good decisions. People who only know one or even a few models have "person with a hammer syndrome." They have their one model and everything to them looks like nail for that model. A broad liberal arts education helps you become wise. Wisdom is a highly underrated skill.

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October 25, 2014

1. "Capital just isn't that important to the early triumph of a company anymore. Much more vital in those inaugural days is collaborating side by side with a founding team that controls its own destiny. Entrepreneurs who are empowered by seasoned advisors, but free to frame achievement for themselves, are much happier." "When you're just getting started, I'm the guy you want in your room to help design your product, build the funnel to convert, help you recruit your first couple of employees, get that shit done." Not all investors are created equal. The winners are persistently the same relatively small groups of investors time after time. Success not only has positive signaling effects in attracting the factors that drive success, but also talent enhancing effects for the venture capitalists themselves.

In short, the best talent, investors and partners are attracted to each other in ways that are self-reinforcing. By getting to work more with other great talent, investors like Chris Sacca actually become more talented and attract more talented people [repeat]. This is an example of what is known as "cumulative advantage." If you genuinely have a great idea for a business that has the necessary tape measure home run potential payoff, talent is a far greater constraining resource than money. Getting access is the best investors is not only valuable but essential. What is the biggest startup success you see out there today that was financially backed by no one you have ever heard of?

2. "The founder needs someone to bring their A-game to. I did the analysis across my portfolio actually, and the companies I have, those that had leaderless seed-rounds underperformed." "I think it's important for anybody to have to sit down, put together a deck, and bring their A game to somebody else, who's gonna listen. A coach, somebody, you feel accountable to." "My job is to obsolete myself by series B." "It's all

fun and games until you raise a Series B." People often find a niche where they are most effective and Chris Sacca is telling you where he feels he is most effective and having the most fun. Having a lead investor in a seed round who adds value is really important. If you are raising early stage money and the money is just money, you are settling for less. If you meet a founder and he or she says that all the investors added was money, they may have had a decent financial exit but they almost never hit a tape measure home run.

3. "Good investors are in the service business." "There are angels who have 75 companies and don't call any of them ever." The difference between Chris Sacca and a dentist who writes seed stage checks is measured in light years. Someone like Chris Sacca hustles on behalf of the portfolio company, has judgment and a network of people who know how to get things done. That they are both called Angels by some people seems wrong to me. Great seed stage/early stage venture capital investors are not a common phenomenon.

4. "I was involved in a company, where Bill Gurley is an investor and the company was thinking about hiring CFO, and Bill opens up his folder, and he's got six CFOs, ready to go. People of public company quality. I thought, 'I don't know six public company CFOs in the world.'" "Bill Gurley, will never take credit for that." When a company gets to a Series A investment round or greater, a business increasingly needs a new set of resources if it is going to scale. Trains need to run on time. Systems must be built. New types of things need to get done. New VCs with new skills often arrive after the seed and A rounds and new management and talent starts to appear. People like Bill Gurley and Chris Sacca have a symbiotic relationship. Sacca is saying that by the time the B round happens he is ready to hand over his active/lead investor role to others. Knowing your highest and best use and what makes you happy is an important life skill.

5. "As investors, VCs are wrong more often, than we are right." "As a VC, I'm wrong most of the time, so whenever any of the VCs tell you about the rules etc. it's really, because we're wrong all the time. You should expect me to be wrong most of the time. When I'm right, I'm really really right. That's what you should expect from a VC." Being a VC is all about hitting tape measure home runs. You can be wrong often. In fact you can be wrong most of the time as long as you are very very right sometimes. It is magnitude of success that matters, not frequency. This is called "the Babe Ruth effect" which I have written about before.

6. "Any VC will tell you where they really make their money is on following on, it's on doubling down into the winners. The things that are growing geometrically in terms of users, revenue that kind of stuff." As the timeline of a business moves along, phenomena start to emerge from the nest of complex adaptive systems that is an economy or a market. Spotting the emergence of a potential unicorn causes the best venture capitalists to double, triple or more down on their best bets. They didn't necessarily see it coming when they did their first investment but later on, they know it when they see it. What was originally optionality over time starts to look more and more like inevitability.

7. "I do try to focus a lot on the entrepreneur as a person, I think that has fallen out of the equation recently…. look for driven people." Getting a company through adversity and challenges takes someone who is driven to succeed. This is why venture capitalists prefer missionary founders to mercenary founders. They also know that strong founders and strong teams are their own form of optionality since they can adapt as the environment changes and opportunities arise.

8. "There are people who are great at being second fiddle." Someone needs to do the work. In fact, everyone needs to do the work. Startups with poseurs don't survive. Public relations and hype only get you so far and if the founders start believing the PR you can put a fork in the business. It is done.

9. "Once you have FOMO (fear of missing out) on your side, you no longer have to ask people like [me] for money. They're lining up to give it to you." When doubt or uncertainty exist, people tend to follow other people. For this reason, if you can get a great lead investor getting each additional investors get vastly easier. The process can become like a snowball running downhill. That can have good results and bad. In the Internet bubble, Pets.com was the poster child for FOMO. Today Clinkle would be an example of FOMO creating big problems for investors.

10. "Create value before you ask for value back." This is a fundamental principle of networking. Chris Sacca shares this view with Heidi Roizen, who I wrote about here.

11. "Simplicity is hard to build, easy to use, and hard to charge for. Complexity is easy to build, hard to use, and easy to charge for." What Chris Sacca talks about here is why there is such a premium on design these days in venture capital. This, in no small part, helps explain the mass migration of companies up into San Francisco from the peninsula (designers are often allergic to suburbs). As the great Startup L. Jackson once said: "Y'all talk about UX like it's just another feature. For a user, it literally is the product. Full stop. Everything else is inside baseball."

12. "It's people with these broader life experiences who have balanced relationships who come up with the cool shit." "College done right, particularly like a liberal arts school, is a lot less about the individual facts. You learn more about how to think, how to communicate, experimenting with personal boundaries, drinking too much, taking the time to go abroad." This is straight up consistent with the Charlie Munger view that you need to have a latticework of different models to make good decisions. People who only know one or even a few models have "person with a hammer syndrome." They have their one model and everything to them looks like nail for that model. A broad liberal arts education helps you become wise. Wisdom is a highly underrated skill.

A Dozen Things I've Learned From Henry Singleton About Value Investing & Venture Capital

November 8, 2014

William Thorndike (author of The Outsiders) said in an interview that Henry Singleton: "*was a MIT trained mathematician and engineer, he got a Ph.D. In electrical engineering from MIT. While he was there he programed the first computer on the MIT campus, and he proceeded to have a very successful career in science. He developed an inertial guidance system for Litton Industries that's still in use in commercial and military aircraft. He did a whole range of things. And then later in his career– in his mid-40s, he became the CEO of a*

'60s era conglomerate called Teledyne." Henry Singleton was also a limited partner in the pioneering venture capital firm Davis and Rock, and invested $100,000 in Apple in 1978.

Understanding Henry Singleton is worthwhile no matter your investing style, but that is especially true if you are a value investor or a venture investor. As an example of the esteem in which he is held by value investors, Warren Buffett once said: "*Henry Singleton of Teledyne has the best operating and capital deployment record in American business.*" In his book the Money Masters, John Train writes that Buffett once said this about Singleton: "*According to Buffett, if one took the top 100 business school graduates and made a composite of their triumphs, their record would not be as good as that of Singleton, who incidentally was trained as a scientist, not an MBA. The failure of business schools to study men like Singleton is a crime. Instead, they insist on holding up as models executives cut from a McKinsey & Company cookie cutter.*"

On the venture investing side, Arthur Rock once said: "*Henry Singleton was this very brilliant, intellectual type who could foresee all these problems that no one else could see, and he saw opportunities. Henry was as intellectual as anyone I had come across.*"

Coming up with 12 quotations in this case was not easy since Henry Singleton was a very private individual. If you go looking for quotations from Henry Singleton, you will not find much more than is set out below.

1. "I don't believe all this nonsense about market timing." Singleton was not someone who thought he could profit from timing the market in the short term. Because of his aversion to market timing, Singleton believed that making precise predictions about the short-term direction of markets was neither possible nor necessary, if you understand value and have the discipline to invest aggressively when the time is right. Following this approach, Henry Singleton was able to accumulate one of the best capital allocation records of any investor ever. He generated a 20.4% compound annual return for shareholders over 27 years. Charlie Munger has said Singleton's financial returns as an investor were a "mile higher than anyone else …utterly ridiculous."

2."My only plan is to keep coming to work every day. I like to steer the boat each day rather than plan ahead way into the future." "I know a lot of people have very strong and definite plans that they've worked out on all kinds of things, but we're subject to a tremendous number of outside influences and the vast majority of them cannot be predicted. So my idea is to stay flexible." Henry Singleton was also someone who understood the value of optionality. Singleton was able to put himself in a position to opportunistically capture profits when assets were mispriced. They key to optionality is simple: bet big when you have a big upside and a small downside. When you have a big downside and a small upside, don't bet. If you have a big upside and a big downside, why bet if other bets have more valuable optionality?

3. "It's good to buy a large company with fine businesses when the price is beaten down over worry.." Buying shares in a business with a moat at a price that is beaten down is the value investor's mantra. Prices get beaten down when there is a lot of uncertainty caused by worry. Be greedy when others are fearful. John Train points out that Singleton bought over

130 business "when his stock was riding high, then when the market, and his stock fell, he reversed field."

Singleton used big stock price drops to aggressively buy back Teledyne shares. Mike Milken describes one of Singleton's business decisions here: "In the 1970s two businessmen I greatly admired were doing what Drexel and its clients and its imitators were doing ten years later: using debt–junk, if you will–to acquire equity. I'm talking about Dr. Henry Singleton of Teledyne and [the late] Charles Tandy of Tandy Corp. These were both great operational managers and great financial managers. They recognized that their common stock was selling at ridiculously low levels, so they offered to swap high-coupon bonds for common stock. Tandy used $35 million in 10% 20-year bonds to acquire 11% of its own common. In less than ten years that repurchased stock was worth more than $1 billion. Singleton bought in 26% of Teledyne's equity for $100 million in 10% bonds–a very high coupon in those days. By the early 1980s that repurchased stock was worth more than $1.5 billion."

4. "There are tremendous values in the stock market, but in buying stocks, not entire companies. Buying companies tends to raise the purchase price too high." "Tendering at the premiums required today would hurt, not help, our return on equity, so we won't do it." Henry Singleton did not like paying a control premium. If you are paying a control premium, you are counting on the fact that you will be able to change the operations or strategy of that business AND realize that value, in addition to the right return on investment on that premium. With control you do have the ability to change strategy, benefit from supply or demand side economies of scale or scope, lower the cost structure of the business, sell unattractive assets or obtain tax benefits.

5. "After we acquired a number of businesses we reflected on aspects of business. Our conclusion was that the key was cash flow." This approach is not dissimilar to Jeff Bezos, John Malone and others who focus on absolute dollar free cash flow rather than reported earnings. Growth of revenue and size of the company were never key financial goals. Singleton liked businesses which generated cash that could either be taken out of the business or reinvested when it makes sense. Reinvesting only make sense when you can generate substantially more than a dollar in value for every dollar reinvested. Some executives like Henry Singleton, John Malone and Warren Buffet know how to redeploy cash, but some don't.

6. "Our attitude toward cash generation and asset management came out of our own thought process. It is not copied." You don't outperform a market if you are not occasionally contrarian and right about what you believe on enough occasions. Charlie Munger has said about Henry Singleton: "*He was 100% rational, and there are very few CEOs that we can say that about*." Arthur Rock once said about Singleton: "*He really didn't care what other people thought.*" Independence of thought and emotional self-control are the keys to making successful contrarian bets. The other point made here by Singleton is about doing your own thinking and not outsourcing it to consultants and bankers.

7. "To sell something to lift the price of the stock is not thinking correctly." In this quote he was referring to a potential spin off or sale, but he also had strong views on stock buy backs and new stock issuance. Henry Singleton believed that the time to sell a stock is if it is overvalued and the time to buy shares is when they are undervalued. What could be simpler? The purpose of a stock buyback should not be to lift the price of the stock. Thorndike puts it well here: '[CEOs] can tap their existing profitability– their existing profits– they can raise equity, or they can sell debt. And there are only five things they can do with it. They can invest in their existing operations, they can make acquisitions, they can pay a dividend, they can pay down debt, and they can repurchase stock. That's it, those are all the choices. And over long periods of time, those decisions have a significant impact for shareholders."

8. "We build for the long term." Appeasing analysts who cry out for accounting earnings or other concocted metrics in the short term is folly. When his stock went down, Henry Singleton bought more back. That's an example of long-term thinking. Being fearful simply because others are fearful is a big mistake. The greatest investing opportunity arises when people are fearful.

9. "All new projects should return at least 20% on total assets." Free cash flow was not the only driving metric for Henry Singleton. He believed that businesses with sustained returns on assets (lasting for years, not months) produce superior investment returns. This sustained high return is what investors Warren Buffett and Charlie Munger mean by the "quality" of a stock. This rate of return must be maintained over a period of years to be considered a positive investment criteria, since otherwise you can't tell whether there is a genuine moat versus merely high points in a business cycle.

10. "Our quarterly earnings will jiggle." Henry Singleton was not someone who managed earnings. Singleton would much rather have had a long term average financial return of 14% that was lumpy than a 12% return that was smooth. Sergey Brin and Larry Page of Google (executives and co-founders) once wrote: "In Warren Buffett's words, 'We won't 'smooth' quarterly or annual results.' If earnings figures are lumpy when they reach headquarters, they will be lumpy when they reach you."

11. "Teledyne is like a living plant with our companies as the different branches and each one is putting out new branches and growing, so no one is too significant." If Singleton is criticized it is because he operated "a conglomerate." Warren Buffett disagreed with this criticism: "Breaking up Teledyne was a poor result, certainly now and in the future." Singleton was able to ignore the criticism since he has the discipline to think and act independently. It is one thing to talk about being a contrarian and quite another thing to actually do it. Singleton once said in an interview with Forbes: "being a conglomerate is neither a plus nor a minus."

"There was no general theme," Rock has said. "This was a conglomerate of scientific companies, and most of these were allowed to operate with very little direction from corporate."

While Singleton diversified the businesses of his conglomerate, in terms of his outside investments, Singleton was a "focus" investor who did not believe indexing made any sense for an investor like him. Charlie Munger said Singleton "bought only a few things he understood well" – an approach he shared with famous investor Phil Fisher. Singleton said in his Forbes interview: "the idea of indexing isn't something I believe in or follow."

Of course, Singleton was not an ordinary investor. Singleton was one of the few investors who, as Warren Buffett says, fits into the "know something" category. Most people are better off with an index-based approach to investing since they do to have the temperament nor the inclination to work as hard as Singleton did to understand the businesses that he was investing in.

12. "A steel company might think it is competing with other steel companies. But we are competing with all other companies." Henry Singleton knew that any moat is subject to attack and that that attack does not need to come from a competitor that is engaged in the same activities. The most successful attacks on a business tend to be asymmetric. Businesses tend to fail not from a frontal attack, but when they are eclipsed or enveloped.

p.s., This interview with Will Thorndike is an outstanding way to understand Singleton. Thorndike points out in the interview: *"Throughout that decade, his stock traded at an average P/E north of 20, and he was buying businesses at a typical P/E of 12. So it was a highly accretive activity for his shareholders. That was Phase One. Then he abruptly stops acquiring when the P/E on his stock falls at the very end of the decade, 1969, and focuses on optimizing operations.*

He pokes his head up in the early '70s and all of a sudden his stock is trading in the mid single digits on a P/E basis, and he begins a series of significant stock repurchases. Starting in '72, going to '84, across eight significant tender offers, he buys in 90% of his shares. So he's sort of the unparalleled repurchase champion."

Notes:

If you read anything in the notes below, read the Forbes interview with Singleton.

Forbes – The Singular Henry Singleton
Amazon – The Outsiders (William Thorndike)Ideas for Intelligent Investing – 'The Master of Capital

Allocation, Henry Singleton'
Investor's Business Daily – How Singleton Built An Empire
Manual of Ideas – Teledyne's Takeoff
NY Times – Henry Singleton Obituary

Berkshire Hathaway Chairman's Letter – 1981
NY Times – Wall St. Eyes Are On Teledyne
Manual of Ideas – Strategy vs. tactics from a venture capitalist
Harvard Business Review – How Unusual CEOs Drive Value
Forbes – Mike Milken Interview

A Dozen Things I've Learned From Larry Ellison About Business

November 15, 2014

1. "The only way to get ahead is to find errors in conventional wisdom." "Because conventional wisdom was in error, this gave us tremendous advantage: we were the only ones trying to do it." "When you innovate, you've got to be prepared for everyone telling you you're nuts." "When you're the first person whose beliefs are different from what everyone else believes, you're basically saying, 'I'm right, and everyone else is wrong.' That's a very unpleasant position to be in. It's at once exhilarating and at the same time an invitation to be attacked." If you have been reading the profiles of successful investors and entrepreneurs on this blog there is probably no other point made so consistently than this: to outperform the market, you must sometimes be contrarian. Of course, you must also be right when being contrarian in enough of those cases that you outperform the market. It is a mathematically provable fact that you can't beat the crowd if you are the crowd. Breaking at least one aspect of conventional wisdom is the only way to achieve something truly great. Breaking conventional rules or rejecting conventional assumptions for its own sake is unwise (and as an aside, even though being a someone being contrarian and someone being counterintuitive are different concepts, some people recently have improperly treated them as interchangeable).

Reid Hoffman has pointed out that if you are contrarian you ideally want being correct about that to cause a daisy chain of success. You also want the outcome of your contrarian view coming true to have positive optionality (small downside and a big upside). You also don't want to be in a situation where multiple contrarian predictions must happen for your business to become very profitable. Finally, the contrarian bet should be substantially mispriced in your favor (e.g., because you have superior domain expertise or others have lost control of their emotions).

Bill Gurley puts it perfectly here: "a lot of the [bets] that become the breakouts, break any rule set that you have created…" The question is: "Which of these rules am I going to break. What is the new truth going to be?" In other words, make your rule-breaking contrarian prediction count by only making it against an outcome that has huge positive optionality. Don't compound your odds of failure by requiring that you "bowl multiple strikes" in a row on contrarian bets to win.

2. "Software is not a capital-intensive business. You can do it with on a shoestring. And all the great software companies started that way." "The larger you are, the more profitable you are. If we sell twice as much software, it doesn't cost us twice as much to

build that software. So the more customers you have, the more scale you have." Many people today have either (1) lost track of key aspects of how beautiful the traditional software business model that developed in the 1980s and 1990s can be or (2) are too young to know that this golden era of gushing up front free cash flow even exists. In the traditional software business model, you write software and people buy it. They pay in cash up front. After the software developer pays back its development expenses, incremental revenue is almost pure profit. Fees are often based on peak usage not actual usage.

Some people advocating software as a service (SaaS) today like to say: "recurring revenue is the greatest thing since sliced bread." Recurring revenue can indeed be nifty, but there is this thing called customer churn in a "lifetime customer value" based business model which means that what may seem to be recurring revenue, does not always recur. Someone can pretend that customer churn does not exist, just like someone can believe in Santa Claus. Recurring revenue does help avoid a situation where a customer licenses version X of the software and upgrades only after many years and in that way SaaS shares elements with yearly maintenance fees so beloved by Oracle. But the tradeoff with SaaS is that customers can churn more easily and buy only what they need instead of paying for peak capacity.

A dollar of almost pure profit paid up front is better for a provider than a dollar of revenue coming in later that may or may not generate any profit margins. Do customers love a business model where the provider supplies all the capex and supplies the services as SaaS? Yes! That's new consumer surplus (i.e., what the customer gets). That's the future! I'm "all in" on the cloud and SaaS because it is better for many consumers.

Is SaaS also a great way to compete against incumbents in established markets since the means of competition is asymmetric and harder to defend against? Yes! If I started a new business today it would de SaaS? Yes. But in terms of producer surplus (what the software company gets), SaaS is neither good or bad in and of itself. Larry Ellison is a billionaire who owns things like nearly all of the island of Lanai for a reason, and that reason isn't that SaaS revenue is more predictable than Oracle's traditional business model which includes things like cash paid up front by the customer, the customer being responsible for capex, and a yearly 20 percent plus maintenance fee payable to Oracle.

Again, I want to be perfectly clear that SaaS is great for consumers. It is the future. But is not an easy model to execute on (e.g., has less attractive cash low, can have high customer acquisition costs (CAC), has higher customer churn to manage, etc.) as compared to the traditional model. As an analogy, I liked it when I had no joint pain after exercise too, but I can't go back, just like you can't go back from offering pay-as-you-go SaaS to the traditional licensed business model for software.

3. "From the day we started the company, over the 17 years, we have had only one quarter [in which we lost money]. And, boy, even that was one too many." Creating and selling software in the pre-SaaS days was magical if you established the right sort of business driven by network effects. People paid up front in the software business and cash flowed like water at Niagara falls if you got it right. Is a SaaS market potentially vastly bigger today in terms of revenue? Yes! Is revenue the same things as profit? No. Is it fantastic that everyone has a connected super computer in their pocket? Yes! Is the rise of SaaS

inevitable? Yes! Is the shift to the new SaaS business model an unmitigated blessing for software producers? No.

4. "It's like Woody's Allen's great line about relationships. A relationship is like a shark, it either has to move forward or it dies. And that's true about your company." Businesses that can adapt to change can thrive. Businesses that don't adapt, die. The average lifespan of a business on the S&P 500 in 1960s was 60 years. Today, that average age is 10 years. As I said in my comments on the past three quotations, SaaS based business models are part of the future. If you don't accept that change, you are toast.

5. "The computer industry is the only industry that is more fashion-driven than women's fashion." When you have been in the technology business as long as I have you have seen many concepts come and go. Information highway, e-business, clipper chip, Dodgeball, Clippy, Lively, etc. The list is endless. Both software and venture capital firms and investors love to chase a trend. As Bill Gurley said once: "Venture capital is a cyclical business." The great venture capitalists are mostly done with new investments in a sector before the mob moves in and makes it a trend. The great venture capitalists also have money to invest in startups when the cycle is at its bottom (when it is out of fashion).

6. "To model yourself after Steve Jobs is like saying, 'I'd like to paint like Picasso, what should I do? Should I use more red?" You are not going to be Steve Jobs, Larry Ellison or Bill Gates. Get over it, if that's your goal. But you can look at qualities they have and chose some you would like to try to emulate, as you would in looking at a menu on a Chinese restaurant. I knew someone once who thought he needed to treat people like Steve Jobs treated people early in his career to be successful in a startup. That is a full load of rubbish.

7. "When I started Oracle, what I wanted to do was to create an environment where I would enjoy working. That was my primary goal." **"We used to have a rule at Oracle to never hire anybody you wouldn't enjoy having lunch with three times a week. Actually, we are getting back to some of our original ideals these days."** Working with people you enjoy is highly underrated. Working with people you don't enjoy is, well, odious. The great news is that working with people you enjoy is more likely to lead to success. You will end up with less loss from friction since you can benefit from a seamless web of deserved trust. Will you enjoy everyone you work with? No. But with a little work can you find a way to work with most people? Yes.

8. "I think I was interested in math and science because I was good at it. And people tend to like what they're good at and not like very much what they're not good at." "I've never really run operations. I've never had the endurance to run sales. The whole idea of selling to the customer just isn't my personality. I'm an engineer– tell me why

something isn't working or is, and I'm curious." Larry Ellison is probably capable of doing what Mark Hurd does or even Safra Katz does. But he is saying he does not enjoy doing those things. Doing what you enjoy is underrated.

9. "Great achievers are driven, not so much by the pursuit of success, but by the fear of failure." I am not a fan of using failure as a motivational tool. But there is a little of this in everyone and a lot in others. Larry Ellison is obviously competitive. Going up against him in any competitive activity is an adrenaline rush.

10. "I think about the business all the time. Well, I shouldn't say all the time. I don't think about it when I'm wakeboarding. But even when I'm on vacation, or on my boat, I'm on e-mail every day. I'm always prowling around the Internet looking at what our competitors are doing." I have heard this joke for many years: The difference between God and Larry Ellison is that God Doesn't Think He's Larry Ellison. This joke widely misses the mark. If Larry Ellison really thought this way he would not be "**always prowling around the Internet looking at what our competitors are doing."** He would not be driven by a **"fear of failure."**

11. "All you can do is every day, try to solve a problem and make your company better. You can't worry about it, you can't panic when you look at the stock market's decline." If you execute well and focus on great strategy, the stock price will take care of itself. The price of a stock is not the same thing as the value of a proportional share in a business. This point is fundamentally important to investing which is fundamentally about understanding business. A share of stock in a proportional ownership interest in a business and is not a piece of paper to be traded on popularity like a baseball card. Ignore short term noise and shorty term price fluctuations cause by the bi-polar Mr. Market and you will be a better businessperson and investor. Only occasionally will the price and value of a business be the same. Knowing the difference between price and value is a critical part of successful investing.

12. "In some ways, getting away from headquarters and having a little time to reflect allows you to find errors in your strategy. You get to rethink things. Often, that helps me correct a mistake that I made or someone else is about to make. I'd rather be wrong than do something wrong." Waking up before you make a mistake is a very good thing. The experience of actually peeing on the electric fence can sometimes be avoided if you think things through before you pee. Taking a break with something as simple as a walk or as complex as an America's cup race is wise. Admitting you are wrong, especially before you are wrong in actually doing something, is a very good thing.

***p.s.**, There is a great related post from Nick Mehta that includes this sentence: "So have a stiff drink, open your eyes and accept that [the new world of SaaS] is harder. This is the new world, and as long as we live in it, we need to embrace it. And, as Lorde would say, we can keep driving Larry Ellison's yacht in our dreams."

A Dozen Things I've Learned From Bill Murray about Business, Money, Startups, Investing and Life in General

November 22, 2014

The challenge I gave myself with this blog post was to take quotations from Bill Murray (the actor and comedian) and apply his advice to investing. Writing this has been like one of those cooking competition shows where you get some ingredients in a basket (for example, cotton candy, spam, kiwifruit and pimento cheese) and you must make a delicious meal with it using other ingredients that are in the pantry. I decided to throw in Charlie Munger as my other ingredient in this post, since he can make almost anything make more sense. Charlie Munger is the investing equivalent of butter in cooking since his wisdom makes almost anything taste better.

The task is actually easier than it seems. Investing is mostly about making wise decisions, and many people like Bill Murray who aren't professional investors have learned strategies to make better decisions – especially after making some less-than-good decisions over the years. Learning to make better decisions most often comes from having made bad decisions in the past, and actually paying attention to the reasons why they were bad decisions.

Here are the Bill Murray quotations **in bold** text, followed by my thoughts interweaved with the views of Charlie Munger.

1. "I try to be alert and available. I try to be available for life to happen to me." "Eh, it's not that attractive to have a plan." This advice from Bill Murray is straight-up consistent with Charlie Munger, who believes: "[Successful investing requires] this crazy combination of gumption and patience, and then being ready to pounce when the opportunity presents itself, because in this world opportunities just don't last very long." The Murray/Munger approach is simple: Don't try to predict the future. Be patient, alert to opportunity, and ready to act aggressively when the time is right. In looking for optionality, it is essential that the optionality be mispriced by the market. The approach followed by Bill Murray preserves optionality and enables him to take advantage of mispriced bets that don't happen very often.

This quote from Bill Murray's character in Ghostbusters is a great example of the right attitude in a situation with positive optionality: "**If I'm wrong, nothing happens. We go to jail — peacefully, quietly. We'll enjoy it. But if I'm right, and we CAN stop this thing… you will have saved the lives of millions of registered voters!"** Small downside and big upside is the essence of optionality, which is the essence of business and investing. When you see a huge potential upside with a small downside in business or investing, you should grab the opportunity.

Nassim Taleb wrote in Antifragile: "the idea present in California, and voiced by Steve Jobs at a famous speech: "Stay hungry, stay foolish" probably meant "Be crazy but retain the rationality of choosing the upper bound when you see it…. Any trial and error can be seen as the expression of an option, so long as one is capable of identifying a favorable result and exploiting it…"

2. "I think we're all sort of imprisoned by — or at least bound to — the choices we make…. You want to say no at the right time and you want to say 'yes' more sparingly." Most of the time in life when you are asked to do something, the best thing to do is nothing. Saying "yes" too often can destroy positive optionality. For Bill Murray this means things like not accepting every movie offer that come along. Charlie Munger puts it this way: "When Warren lectures at business schools, he says, "I could improve your ultimate financial welfare by giving you a ticket with only 20 slots in it so that you had 20 punches—representing all the investments that you got to make in a lifetime. And once you'd punched through the card, you couldn't make any more investments at all."

I have this friend who likes to say "when someone wants to hand you a turd, don't feel obligated to take it." It's a pretty simple idea that many people forget. The correct response when someone tries to hand you a turd is: "Hey, thanks for thinking of me, but no thanks. You can keep that turd. Have a nice day."

3. "What do they give you to do one of these things?" And they said, 'Oh, they give you $50,000.' So I said, 'Okay, well, I don't even leave the fuckin' driveway for that kind of money'." Bill Murray is describing an opportunity cost analysis here. Two of the more important opportunity costs in life involve time and money. Of course, time is the most precious opportunity cost of all. Charlie Munger's description of the same process is as follows: "…intelligent people make decisions based on opportunity costs — in other words, it's your alternatives that matter. That's how we make all of our decisions."

The funny part of the story related to Murray's quote is that it concerned his decision to do the voice of Garfield in an animated movie. He ended up taking the part because he thought a Coen brother was involved. Murray said: **"I had looked at the screenplay and it said 'Joel Cohen' on it. And I wasn't thinking clearly. It was spelled Cohen, not Coen."**

4. "Don't walk out there with one hand in your pocket unless there's something' in there you're going to bring out." You gotta commit." "Let's just roar a little bit. Let's see how high we can go." When you see an opportunity to make a bet that has odds substantially in your favor, you should bet big. Otherwise, don't bet more than is needed to stay in the game. Charlie Munger: "The chief thing I learned from poker was that when you really have an edge, you have to push hard because you don't get edges that often."
Often that bet is about time as well as an emotional and intellectual commitment, not just money. Going "all in" can be fun as hell.

5. "I made a lot of mistakes and realized I had to let them go. Don't think about your errors or failures, otherwise you'll never do a thing." You will never stop making mistakes, so dwelling on mistakes does you no good. A trick to making wise decisions in life and in business is recognizing the poor decisions you and people you know have made, and

understanding why they were poor decisions. Then, try to learn as much from those experiences as you can, to help you make a higher ratio of new mistakes to old mistakes.

The world does not stop being an unpredictable nest of complex adaptive systems because you are getting older and, on the margin, a bit wiser. This quote reminds me of a story about a young woman who attends a church near my home. After the sermon was over one Sunday, she lingered after the other members had shook hands with the minister on their way out. As the young woman finally shook hands with the minister, she asked, "Reverend, do you believe someone should profit from the mistakes of others?" "Certainly not," replied the minister. "Well, in that case, could I have the $300 back that I gave you for officiating my marriage?"

6. "You have to hope that [good things] happen to you… That's the only thing we really, surely have, is hope." Bill Murray is talking about the value of optimism. In this way Bill Murray is more like Warren Buffett than Charlie Munger, who has said: **"**I don't see how anybody could be more optimistic that Warren. He has this real faith in the long term. I'm not quite so enthusiastic, but he's right that there's a lot good that's happening." Being positive is, well, a positive thing. As an analogy, in terms of characters from The Hundred Acre Wood, it is far better to be a mix of Owl and Tigger, than Eeyore. As for Charlie Munger, his view is: "Is there such thing as a cheerful pessimist? That's what I am."

I think optimism is the better approach, but sometimes we are who we are. There's a old joke about this idea: A family had twin boys, who had very different personalities even though they were identical twins. One boy was an eternal optimist, the other a complete pessimist. Just to see what would happen, on the twins' birthday their father loaded the pessimist's room with a huge pile of toys and games. In the optimist's room, he brought in a huge pile of horse manure. That night the father visited the pessimist's room and found him sitting next to his new gifts crying bitterly. "Why are you crying?" the father asked. "Because my friends will be jealous, I'll have to read all these instructions before I can do anything with this stuff, I'll constantly need batteries, and my toys will eventually get broken," answered the pessimist twin. The father then went to the optimist twin's room and father found him happily digging deep in the pile of manure. "What are you so happy about?" the father asked. The optimist twin replied: "There's got to be a pony in here somewhere!"

There's a joke about this topic that goes like this: Two friends, one an optimist and the other a pessimist, could never quite agree on anything it seemed. The optimist hatched a plan to pull his friend out of his pessimistic thinking. The optimist owned a hunting dog that could walk on water. His plan was to take the pessimist and the dog out duck hunting in a boat. They got out into the middle of the lake, and the optimist brought down a duck. The dog immediately walked out across the water, retrieved the duck, and walked back to the boat. The optimist looked at the pessimistic friend and said: "What do you think about that?" The pessimist replied: "That dog can't swim, can he?"

7. "When you play with great players, you play better, it just elevates your game." Working with smart people makes you smarter, and that feeds back on itself in a recursive way. Success of all kinds feeds back on itself in a process called "cumulative

advantage." Being lucky and talented leads to exposure to other talented people, experiences and training that makes you more talented [repeat]. Of course, some people are born on third base and have convinced themselves they hit a triple. Bill Murray is about as far from that as you get – even though he is an actor. He will, occasionally, comment on the economy. He once said: **"A few decades ago we had Johnny Cash, Bob Hope and Steve Jobs. Now we have no Cash, no Hope and no Jobs. Please don't let Kevin Bacon die."**

8. "The [work] I like most [is] where I connected with great people." This quote is slightly different that the previous one, since this point is about how much you enjoy something rather than what makes you more skilled. Charlie Munger: "Even Einstein didn't work in isolation. Any human being needs conversational colleagues." Working with smart motivated people makes you smarter and more motivated. It is a virtuous cycle when you get it right. If you are just working to make money and are not in that process connecting with great people, it may be work, but its not really living.

9. "It's hard to be anything." Lots of aspects in life and business are simple, but not easy. It is emotions and psychology that make both investing and life hard. Charlie Munger: "If [investing] weren't a little difficult, everybody would be rich." If things aren't going well, keep working. Never give up. Be relentless. That time in life when nothing is hard is when you are dead. There's no need to rush that.

Even though life is hard, try to look on the bright side, like the Bill Murray character Spackler in the movie Caddyshack: "**And I say, 'Hey, Lama, hey, how about a little something, you know, for the effort, you know.' And he says, 'Oh, uh, there won't be any money, but when you die, on your deathbed, you will receive total consciousness.' So I got that goin' for me, which is nice."**

10. "You need all kinds of influences, including negative ones, to challenge what you believe in." Charlie Munger expresses a similar view: "Any year that passes in which you don't destroy one of your best loved ideas is a wasted year." If you are not being challenged, you are not growing. As you go through life if you are not discovering that the amount that you know you don't know is growing even faster than what you do know, you are not paying attention.

If you don't get excited when you are wrong about something and understand why you were wrong, that is actually a bit of a tragedy. You are very unlikely to be a good investor if that is the case. Anthony Bourdain said once, on his preconceptions of Ferran Adria's Michelin 3-star restaurant elBulli the first time he ate there, "I like being wrong about things." I agree with Andy Bourdain. Being wrong occasionally is the way people learn. Some people refuse to admit when they are wrong, and are terrible investors as a result.

11. "The gratification part is: I worked with that son of a bitch. I worked with her. If you get that thing done, you're professional friends for life. There are people who drove me crazy, but they got the job done. And when I see that person again, I nod my head. Respect." There's nothing like a shared experience to bring people together. This shared experience is powerful enough that you can end up with a bond with people you never would have been friends with otherwise. When that creative process results in something valuable, it is not only gratifying but also creates a treasured bond with the people who were involved in that shared experience.

12. "[When I saw Ivan Reitman's early cut of "Ghostbusters] I knew I was going to be rich and famous, and be able to wear red pants and not give a damn." GQ's Dan Fierman wrote about Murray in a 2010 interview: "If [Bill Murray's] three and a half decades in the public sphere have taught us anything about the actor, it's that he simply does not give a good goddamn." The best thing about money is that you have the option to be independent. You have choices when you have money. Conversely, people who are poor or even rich people who have lots of debt tend to have lousy options in life. What you want to avoid are situations where you only have two choices: *take it or leave it.*

Charlie Munger: "Like Warren, I had a considerable passion to get rich**,** not because I wanted Ferraris – I wanted the independence.*"* Having a lot of money and toys is over rated — having a lot of great choices is highly underrated. Cash has optionality that is valuable in and of itself. The ability to be exactly who you are and make the choices you want is a very wonderful thing indeed.

A Dozen Things I've Learned From Bill Ackman about Value and Activist Investing

November 29, 2014

Bill Ackman is the founder of the investment holding company Pershing Square Capital Management. This post will focus on only one aspect of Bill Ackman's investing system: his underlying belief in value investing principles. That Bill Ackman uses value investing principles at all may be a surprise to some people, since he is most known for being an activist investor. Since activist investing is often both controversial and confrontational it generates a lot of press interest. That often leaves the value investing part of his system in the background, but that does not mean it is less important.

At the 2014 Berkshire shareholder meeting, Warren Buffett was asked about activist investing. Buffett put the activist investing style into two different buckets. He approves of activists who are "looking for permanent changes in the business for the better" but disapproves of activists "looking for a specific change in the share price of the business." In my view, this matches closely with Buffett's definition of investing versus speculation. If you're an investor, you're trying to understand the value of the asset. By contrast, a speculator is trying to guess the price of the asset by predicting the behavior of other investors. Charlie Munger, at the same 2014 Berkshire meeting, commented that there is far too much activism that is based on price and not value by saying: "It's not good for America,

what's happening. It's really serious." Unfortunately, there is no bright line that separates investing from speculation.

When asked about what Buffett and Munger said at that 2014 Berkshire meeting, Bill Ackman introduced a time dimension. Bill Ackman told Bloomberg: "I 100 percent agree with them. [Seeking short-term gains without creating better businesses] is bad for markets, and it's bad for shareholders" [Pershing Square typically holds stakes] "four, five, six years or more." Carl Icahn, when commenting in what Buffett and Munger said, also introduced a time element: "I understand and somewhat agree with their criticisms that some activists are going for a short-term pop." Which actions are improper short-termism and which are appropriate actions to increase shareholder value, also lacks a bright line test.

That there is no bright line does not mean that these questions can't be sorted out in a reasonable manner by using a healthy dose of common sense. For example, Buffett's standard on buy backs, whether advocated by an activist or initiated by company management, is as follows: "First, a company [must have] ample funds to take care of the operational and liquidity needs" and "Second, its stock [must be] selling at a material discount to the company's intrinsic business value, conservatively calculated."

As I promised, the focus of what follows in this blog post is on the value investing part of Bill Ackman's investing system.

1. "Short-term market and economic prognostication is largely a fool's errand, we invest according to a strategy that makes the need to rely on short-term market or economic assessments largely irrelevant." Value investing has three bedrock principles that are inviolate and will be identified in italics and discussed throughout this post. The first of these bedrock principles is: *Make Mr. Market your servant, not your master.* Investors who follow this principle understand that if you wait patiently Mr. Market will inevitably deliver his gifts to you as his mood swings unpredictably in a bi-polar fashion from greed to fear. The trick is to buy when Mr. Market is fearful and sell when Mr. Market is greedy. If you must predict the direction of the market in the short term to win, Mr. Market is your master and not your servant. Anyone who has been reading this series of posts on my blog has seen investor after investor talk about the folly of trying to make short-term predictions about markets.

2. "You read [Ben Graham] and it is either an epiphany and it affects the way you live your life, or it's of no interest to you… I found it fascinating." I have encountered the phenomenon which Bill Ackman is referring in this quote many times in my life. Warren Buffett and Seth Klarman both say value investing is like an inoculation, either you get it right away, or you don't. Value investors use fundamental analysis as part of the value investing system to decide whether to make a bet a about *whether* something will happen and don't fool themselves that they can time *when* that will happen. People who are not successfully inoculated into value investing most often fail to see the difference between waiting opportunistically for something to happen and trying to predict when something will happen. Waiting opportunistically for something to happen is not predicting. Arguments that the unchanging assumptions that underlie value investing are predictions are a rhetorical

sideshow. If you don't understand the "patiently waiting, then opportunistically pouncing rather than predicting" element to value investing, you won't ever understand value investing. This explains why a core attributes of successful value investing are patience and a willingness act differently than the crowd. In other words, some people internalize the importance of the idea that Mr. Market should be treated as your servant and some don't.

3. "You should think more about what you're paying versus what the business is worth. As opposed to what you're paying versus what they're going to earn next quarter." "Don't just buy a stock because you like the name of the company. You do your own research. You get a good understanding of the business. You make sure it's a business that you understand. You make sure the price you're paying is reasonable relative to the earnings of the company." The second bedrock principle of value investing is: *treat a share of stock as a proportional interest in a business.* A share of stock is not a piece of paper to be traded based on what you think, others will think, about what others will think [repeat] about the value of a piece of paper. To be successful at value investing, you must understand the actual businesses in which you invest. This means you must do a considerable amount of reading and research and work to understand the fundamentals of the business. If you are not willing to do that work, don't be a value investor. Bill Ackman has said on this point: **"Find a business that you understand, has a record of success, makes an attractive profit, and can grow over time**." What could be more simple?

4. "Our strategy is to seek to identify businesses … which trade in the public markets for which we can predict with a high degree of confidence their future cash flows – not precisely, but within a reasonable band of outcomes." The third bedrock principle of value investing is: *Margin of safety!* A margin of safety is a discount to intrinsic value which should be significant to be effective. Warren Buffett wrote to Berkshire shareholders in 1994: "***Intrinsic value*** can be defined simply: It is the ***discounted value of the cash*** that can be taken out of a business during its remaining life." Buying at a significant discount to intrinsic value (e.g., 25%) creates a margin of safety. If you have a margin of safety you don't need to precisely predict intrinsic value, which is a somewhat fuzzy concept that different people calculate in slightly different ways. This explains Bill Ackman's use of the phrase "**reasonable band of outcomes.**" The important thing about intrinsic value is that you only need to be approximately right, rather than precisely wrong.

5. **"Often, we are not capable of predicting a business' earnings power over an extended period of time. These investments typically end up in the 'Don't Know' pile."** This quotation is about what a value investor calls "circle of competence." This aspect of value investing is handled by different value investors is different ways, so it is not a bedrock principle in my view. Sometimes the intrinsic value of a given business can't be calculated, even by an expert. This is not a tragedy. There are plenty of other businesses which do have an intrinsic value that can be calculated within a reasonable band of outcomes. Risk comes from not knowing what you are doing. When you don't know what you are doing, don't do anything related to that lack of knowledge. One key attribute value investors have is being calm as Buddha when muppets are screaming at them to do something. You don't need to

swing at every pitch. Almost all of the time the best thing to do is nothing. Having a "too hard" pile is tremendously valuable.

"…for an individual investor you want to own at least 10 and probably 15 and as many as 20 different securities. Many people would consider that to be a relatively highly concentrated portfolio. In our view you want to own the best 10 or 15 businesses you can find, and if you invest in low leverage/high quality companies, that's a comfortable degree of diversification." One publication notes that Bill Ackman runs a concentrated portfolio "generally owning fewer than 10 companies, with a high concentration of his portfolio invested in his top two or three picks." Charlie Munger calls this style "focus investing," which is very different from an investor like Joel Greenblatt who was recently quoted in the press saying that he owns 300 names. On this question of diversification, value investors can often differ, so it is not a bedrock principle. In fact, there are many ways that value investors can successfully differ as long as they follow the three bedrock principles.

6. "We like simple, predictable, free-cash-flow generative, resilient and sustainable businesses with strong profit-growth opportunities and/or scarcity value. The type of business Warren Buffett would say has a moat around it." You want to buy a business that is going to exist forever, that has barriers to entry, where it's going to be difficult for people to compete with you… You want a business where it's hard for someone tomorrow to set up a new company to compete with you and put you out of business."

"The best businesses are the ones where they don't require a lot of capital to be reinvested in the company. They generate lots of cash that you can use to pay dividends to your shareholders or you can invest in new high-return, attractive projects." This is a clean description of the key attributes a value investor looks for in a business, and my further commentary won't add much. The core point being made here is simple: if there is no barrier to competition, the competitors of any business will drive profit down to the opportunity cost of capital. Bill Ackman's goal is to discover businesses with a moat that are mispriced by the market. On this I suggest you read Michael Mauboussin on Moats, and my post on Michael Porter.

7. "People seem to be happier buying something at 50 percent off for $50 as opposed to having it marked at $40 and there being no discount, which is sort of an interesting psychological phenomenon. But it's real."

"To be a successful investor you have to be able to avoid some natural human tendencies to follow the herd. When the stock market is going down every day your natural tendency is to want to sell. When the stock market is going up every day your natural tendency is to want to buy, so in bubbles you probably should be a seller. In busts you should probably be a buyer – you have to have that kind of discipline. You have to have a stomach to withstand the volatility of the stock markets." A child of ten knows that markets are not composed of perfectly informed rational agents. There are many dysfunctional heuristics which cause people to make poor decisions. If some people did not make poor decisions, being an investor who performs better than the market would not be possible. Someone else must make a mistake for an investor to outperform a market. Being

an investor is fundamentally about searching for mispriced assets. No one speaks more clearly about this than Howard Marks.

8. "In order to be successful, you have to make sure that being rejected doesn't bother you at all." "Generally it makes sense to be a buyer when everyone else is selling and probably be a seller when everyone else is buying, but just human tendencies, the natural lemming-like tendency when everyone else is [doing something] you want to be doing the same thing, encourages you as an investor to make mistakes." Being contrarian is not easy since people find comfort in being part of a herd. This feeling of comfort is no small part of why being an investor who outperforms the market is not easy. You must be comfortable with being criticized for your sometimes contrarian views and, of course, you must be right enough times about those contrarian views. If you don't understand what Howard Marks says about mispriced assets, do yourself a favor and buy a diversified portfolio of low fee index funds/ETFs since you are not a candidate to be a successful active investor.

9. "The investment business is about being confident enough to know that you're right and everyone else is wrong. Yet you have to be humble enough that you recognize when you've made a mistake. Earlier in my career, I think I had the confidence part pretty solid. But the humbleness part I had to learn.'' Knowing when to be humble and when to admit that you are wrong requires good judgment. Judgment tends to come from having bad judgment, or seeing others make bad judgments. Bill Ackman has said: **"Experience is making mistakes and learning from them."** If press reports are to be believed, there are people who think that Bill Ackman is not humble. But those people don't seem to be very humble themselves. Bill Ackman has said of Icahn: "**He's a bully who thought of me as road kill on the hedge fund highway."** Icahn countered: "I wouldn't invest with you if you were the last man on Earth."

10. "When you go through something like the financial crisis, it makes a psychological imprint on you. It becomes hard to interpret information in a way that is positive."

"A lot of people talk about risk in the stock market as the risk of stock prices moving up and down every day. We don't think that's the risk that you should be focused on. The risk you should be focused on is if you invest in a business, what are the chances that you're going to lose your money, that there is going to be a permanent loss." "[The] key here is not just shooting for the fences, but avoiding losses." People have a tendency to acquire what people in the sports world call "muscle memory" when exposed to something. Memories of things like touching a hot stove or encountering a financial crisis tend to be particularly strong. People who have decades of experience as investors have seen times when the ability to generate new cash dries up in a matter of days, and when people seem to have wealth but can't generate any new cash.

Here's Buffett on the value of cash: "We will always have $20 billion in cash on hand. We will never depend on the kindness of strangers. We don't have bank lines. There could be a

time when we won't be able to depend on anyone. We have built Berkshire for too long to let that happen. We lent money to Harley-Davidson at 15% when interest rates were 0.5%. Cash or available credit is like oxygen: you don't notice it 99.9% of the time, but when its absent, it's the only thing you notice. We will never go to sleep at night without $20 billion in cash. Beyond that, we will look for good opportunities. We never feel a compulsion to use it, just because it is there."

11. "Investing is one of the few things you can learn on your own." "You can learn investing by reading books." "I went to business school to learn how be a good investor. When I got to Harvard Business School and I opened the course catalog for the first time and discovered there wasn't a class on investing. I decided I had to open my first self-study program." It is amazing how much you can learn by reading and paying attention to what happens in your life and in the lives of others. That applies in life generally, but especially in investing. Investing involves a range of ideas that are far more easy to learn than they are to put into practice.

If you are reasonably smart, work hard, read a lot, and can keep control of your emotions it is possible to be a self-taught investor. Many good and a few great books on investing have been written. I would rather re-read a great book that read a mediocre or lousy book for the first time. That many business schools do not teach investing (specifically value investing) is, well, bonkers. How does a CEO or CFO allocate capital without understand investing principles? The answer is too often: not very well and with poor results. Buffett has written: "The heads of many companies are not skilled in capital allocation. Their inadequacy is not surprising. Most bosses rise to the top because they have excelled in an area such as marketing, production, engineering, administration or, sometimes, institutional politics. Once they become CEOs, they face new responsibilities. They now must make capital allocation decisions, a critical job that they may have never tackled and that is not easily mastered." That business schools are not more focused on training executives to intelligently allocate capital is unfortunate, to put it mildly.

12. "Buy high-quality businesses at a price that is not reflective of the intrinsic value of the business as it is, and certainly not reflective of what the intrinsic value would be if it were run better. That allows us to capture a double discount. That's a benefit we can have over private equity. They can buy a company and run it better to extract incremental value, but they're typically paying the highest price in a competitive auction, so they don't get that first discount. We don't get full control, but because we have a track record of making money for other investors, we can often exert enough control to make an impact." "Our greatest competitive advantage, though, comes from using our stake in a company to intervene in the decision-making, strategy, management or structure of the business. We don't like waiting for the market to be a catalyst."

As I said above, Bill Ackman differs from most value investors in that he is also an activist shareholder. Here is Ackman's pitch:

"'I call them happy deals, not hostile deals…Unsolicited, I think, is a little more gentlemanly. I think it's also more accurate.' And while he's at it, he'd rather people didn't call Pershing Square a hedge fund. He would prefer 'investment holding company.' "**When people think hedge fund, they think highly levered, short-term trading-oriented, you know, arbitragers, where we are very different from that,' he said. Pershing Square is 'really much more similar to Berkshire Hathaway.'"** – WSJ

Is Pershing Square really similar to Berkshire? The two investors share value investing as a core activity, but not "unsolicited" activism. Warren Buffett may have early in his investing career tried to turn around some businesses, but as a whole his attempts at activism were not a rousing success. Buffett seems to have abandoned that style of investing. In a 2014 interview, Buffett said: "You might say I took an active role in Berkshire Hathaway in 1965 when I took control, but we're not looking to change people. We may be in a situation with them where [taking an active role] might influence, but we want to join with people we like and trust. We will not come in in a contentious way – it's just not consistent with Berkshire principle."

Charlie Munger simply described some of the reason for this shift at Berkshire regarding active investing earlier this year: "Berkshire started with three failing companies: a textile business in New England that was totally doomed because textiles are congealed electricity and the power rates were way higher in New England than they were down in TVA country in Georgia. A totally doomed, certain-to-fail business. We had one of four department stores in Baltimore [Hochschild Kohn], absolutely certain to go broke, and of course it did in due course, and a trading stamp company [Blue Chip Stamps] absolutely certain to do nothing, which it eventually did. Out of those three failing businesses came Berkshire Hathaway. That's the most successful failing business transaction in the history of the world. We didn't have one failing business – we had three."

Warren Buffett has famously said: "Turnarounds seldom turn." The failure of a business to 'turn around' is a good description of Bill Ackman's unsuccessful JC Penney investment and Buffett's own losses in department stores and retail. The turnaround strategy worked well for Bill Ackman in the case of companies like Canadian Pacific. What Canadian Pacific as a value investing stock did was provide potential upside plus limit downside if the turnaround failed. In short, that a business is a bargain by value investing standards creates a margin of safety, which can be a very good thing for any investor.

A Dozen Things I've Learned from Marissa Mayer about Business, Management, and Innovation

December 14, 2014

1. **“Technology companies live and die by talent. That’s why when people talk about the talent wars…when you see the best people migrating from one company to the next, it means that the next wave has started.” “Really in technology, it’s about the people, getting the best people, retaining them, nurturing a creative environment and helping to find a way to innovate.” “I definitely think what drives technology companies is the people; because in a technology company it’s always about, what are you going to do next?” “It’s really wonderful to work in an environment with a lot of smart people.” “I realized in all the cases where I was happy with the decision I made, there were two common threads: Surround myself with the smartest people who challenge you to think about things in new ways, and do something you are not ready to do so you can learn the most.”** Among the most common themes in my series of posts is exactly what Marisa Mayer identifies in these quotes. It is not possible to be successful in business without great people. Great people attract more great people in ways that are mutually reinforcing creating a positive feedback loop. Whether great people are arriving or departing is something a CEO must make a top priority. Marissa Mayer, through “talent acquisitions” and otherwise, has clearly been very focused on improving the talent base at Yahoo. Marissa Mayer understands that in a technology business, when a fire alarm goes off, the most important assets of the business leave the building. Lee Iacocca once astutely said: “I hire people brighter than me and I get out of their way.” Jack Welch has similarly said: “The essence of competitiveness is liberated when we make people believe that what they think and do is important – and then get out of their way while they do it.”

2. **“Every organization has a drawback. There are some companies that go back and forth between a functional and divisional organization. In the end, it doesn’t matter. It’s important to know what those drawbacks are and work around them. But you shouldn’t spend too much time reorganizing.”** Anyone who has worked at a big company has experienced reorganizations. The classic move in any reorganization is between a divisional organization and a functional organization. Each organizational structure has certain benefits and drawbacks. For example, in a divisional organization, each group within the company is responsible for its own each product(s) as well as its own profit-and-loss results. GE is often cited as a classic example of a divisional organization. Supporters of the divisional organization argue the structure creates clearer accountability for results and less dependencies on other groups. If a functional structure is adopted, each group is organized by function(s). Supporters of a functional organization argue that the system prevents a “warring tribes” culture in which groups fail to cooperate. They also argue that when products must be tightly integrated, functional structure works more effectively. Motorola of 20 years ago is often cited as a company where a “warring tribes” culture was actually encouraged by management. Apple is often cited as an example of a company with a functional organization. Marissa Mayer isn’t saying don’t ever reorganize. What she is saying is that: (1) a CEO and their board should carefully chose a structure and not be jumping back and forth between functional and divisional choices and (2) once the structure is chosen, the CEO’s task

is to exploit the strengths of the structure chosen and "work around" the weaknesses.

3. **"I don't know a lot about genetics, but I understand some of it and I think that what you really want are the genes that are positive to hyper-express themselves in culture. Take the elements of fun, take the elements that are really motivating and inspiring people, and amplify them and ramp them up. And take some of the negative genes that are getting in the way and shut them off, and figure out what's causing those and shut them off… When you're coming into a company, and you know you have to do a transformation, what you really want to do is look at the company and say, 'Okay, here are the parts that the company does well. How do we get those genes to hyper-express? The genes that are getting in the way, how do you turn those off?'"** The importance of culture is another theme in this series of blog posts. Mayer's analogy to genetics is a great one when thinking about culture. Culture is something that when done right is almost automatic, as is the expression of a gene. A culture that has gone off the tracks is a genuinely hard problem to solve. Bill Gates said once that he admired what Lee Iacocca did at Chrysler since turning around a culture is such a very hard thing to do. For the same reason Warren Buffett once said "turnarounds seldom turn" a CEO who wants to create cultural change must put a lot of effort into the process and deserves applause if they do it successfully.

4. **"The interesting thing about being CEO that's really striking is that you have very few decisions that you need to make, and you need to make them absolutely perfectly. …you can delegate a lot of the decisions, but there are a few decisions, and sometimes it's not obvious, that you need to really watch, and that can really influence the outcome. [As a CEO you must watch] for those decisions every day wondering to yourself, 'Is this one of them or is this one where it doesn't really matter what the decision ends up being?'" "Eric Schmitt would always say this very humbling thing that's really true, which is that good executives confuse themselves when they convince themselves that they actually do things. He would say, look, it's your job as leadership to be defense, not offense. The team decides we're running in this direction and it's your job to clear the path, get things out of the way, get the obstacles out of the way, make it fast to make decisions, and let them run as far and fast as you possibly can."** Marissa Mayer is making two important points here. The first relates to the importance of a CEO setting a direction by making a small number of pivotal decisions. The second relates to making sure that people have the freedom and resources necessary to get things done. Someone I really admire who has been a senior executive for decades puts it this way: "I think far too many people think 'management decisions' or 'leadership = decisions'" – I agree. If the CEO is constantly dropping down into the organization and making decisions for people, processes inevitably bog down, the CEO inevitably makes many

poor decisions since he or she is not close enough to the situation and the teams involved become dispirited and less confident since they are being second-guessed.

5. **"Product management really is the fusion between technology, what engineers do – and the business side."** Striking the right balance between "the business side" and "what engineers do" is a core function of the CEO. The focus of my own career has been on what Marissa Mayer calls "the business side." But if everyone limits their scope to just one side, the business is going to have a huge problem. I'm a fan of this Mike Maples, Jr definition of a business model: "The way that a business converts innovation into economic value." To make this happen you need strong talents on both the business and technology sides, but at least a few key people need to understand how to link the two sides. Call these people spanners or whatever, they perform a necessary and even critical function. As an example of Marissa Mayer understanding this need and taking action to create a class of people who can span the two sides, she was the founder of Google's Associate Product Manager Program. Wired magazine wrote once about this innovative program as follows: "Google would hire computer science majors who just graduated or had been in the workplace fewer than 18 months. The ideal applicants must have technical talent, but not be total programming geeks — APMs had to have social finesse and business sense. Essentially they would be in-house entrepreneurs. They would undergo a multi-interview hiring process that made the Harvard admissions regimen look like community college. The chosen ones were thrown into deep water, heading real, important product teams 'We give them way too much responsibility,' Mayer once told me, 'to see if they can handle it.' " This sort of cross disciplinary training is invaluable for both businesses and the individuals involved since the skills learned can help a company avoid "man with a hammer syndrome." The best solutions always involve tools and approaches from multiple disciplines.

6. **"The beauty of experimenting … is that you never get too far from what the market wants. The market pulls you back." "If you launch things and iterate really quickly people forget about those mistakes and they have a lot of respect for how quickly you build the product up and make it better."** "**Innovation, not instant perfection. ..when we launch something people immediately say, "Well, it's so rough it's not very good". …But the key is iteration. When you launch something, can you learn enough about the mistakes that you made and learn enough from your users that you ultimately iterate really quickly? I call this my Max and Madonna theory. We look at, like, Apple, Madonna. They were cool in 1983, they're still cool today, 2006, 23 years later. And that's really amazing to look at, and people think of them as very innovative and very inventive. How do they do it? And the answer is, they don't do it being perfect every single time. You know, there's lots of mess-ups along the way. Apple had the Newton, Madonna had The Sex Book. There's been all kinds of controversies and mistakes made. But the answer is, when they make a**

mistake, you re-invent yourself. And I think that's ultimately the charge that we have, is to launch these innovations and then make them better." Marissa Mayer has a "New Product Development" class on Udemy. The syllabus notes: "Marissa Mayer, Google's Vice President of Search Products & User Experience, by which the company bases its decisions. Google's approach is the take the guesswork out of product design, from functionality to shades of color, and they believe in the science of well-monitored and frequent A/B testing." Marissa Mayer is talking in this set of quotes about the iteration process that that I wrote about in my post on Eric Ries and Lean Startup. In that post I explained that there are tradeoffs involved in a lean process, and the right choice depends on the nature of the business, the opportunity and how much cash is available. Applying the scientific method to business can reap big rewards. As an aside, readers of this blog know that I recently wrote a post on Bill Murray who starred in the greatest movie ever created on A/B testing: Groundhog Day.

7. **"When you can make a product simpler, more people will use it." "When you see that notion in a product where you're just like 'wow this helps me do something I didn't think I could do or helps me do something I didn't think I could this easily; that's the mark of a great consumer product." "I think a great product is something where you see an acute user need and you solve it in a way that is frictionless and beautiful. You really hope there's an element of personality and delight there. But I do think it's identifying the need and then finding an easy way to solve it. Sometimes you can solve it straight and head on….sometimes you solve it in an interesting way….sometimes it's about innovation, sometimes it's about coming at the product very much head on, but it's really about having an eye for design and eye for the user need. How to not get in the users way. How can you just help someone immediately get something done especially if they're doing something every day, multiple times per day, you really want it to be something that is easy and fast and simple with nothing in the way."** There is no doubt that what Marissa Mayer describes is hard. And that some people are better at this process than others. And that a very small number of people are savants in creating great products. And that some people create great products "once in a row." I would also add that there are way more strikeouts than tape measure home runs in this process. And that the results are very often winner take all. It is tricky stuff. Most things fail. The products that do succeed, regardless of whether they were created by skill or luck, or a measure of both, move society forward.

8. **"You can't have everything you want, but you can have the things that really matter to you." "Innovation is born from the interaction between constraint and vision." "People think of creativity as this sort of unbridled thing, but engineers thrive on constraints. They love to think their way out of that little box: 'We know you said it was impossible, but we're going to do this, this, and that to get us there." "Constraints can actually speed development. For instance, we often can**

get a sense of just how good a new concept is if we only prototype for a single day or week. Or we'll keep team size to three people or fewer. By limiting how long we work on something or how many people work on it, we limit our investment. In the case of the Toolbar beta, several key features (custom buttons, shared bookmarks) were tried out in under a week. In fact, during the brainstorming phase, we came up with about five times as many "key features." Most were discarded after a week of prototyping. Since only 1 in every 5 to 10 ideas works out, the strategy of limiting the time we have to prove that an idea works allows us to try out more ideas, increasing our odds of success." Many of my own formative years were spent in the wireless business. One things I learned in that business is that almost everything has tradeoffs, and that there are constraints everywhere. As an example, "Shannon's law, which basically defines how much data can be sent over wireless links, considering the amount of spectrum, number of antennas, amount of interference, etc. To increase capacity could increase the amount of spectrum, or you could also increase the number of antennas, as done with MIMO (multiple input multiple output) or utilize small cells." In my way of thinking, MIMO is a classic example of engineers facing the sort of constraint Marissa Mayer talks about (e.g., laws of physics are laws and not guidelines) and nevertheless innovating. As Sir Ernest Rutherford, the famous New Zealand physicist once said: "We haven't got the money, so we've got to think!"

9. **"We believe that if we focus on the users, the money will come. In a truly virtual business, if you're successful, you'll be working at something that's so necessary people will pay for it in subscription form. Or you'll have so many users that advertisers will pay to sponsor the site." "If you're really successful and you get used a lot, there's usually a very easy and obvious way to figure out how to monetize it."** This approach to business model creation is founded in optionality. I have written about optionality many times in this blog series. You want to find situation where an investment has a small potential upside and a massive potential upside. The optionality-based thesis in this case is: get unique users and data about those users, and the odds are excellent that a way can later be found to a profitable business model (or a sale of the company which needs to play defense). This process can work in a spectacular fashion but can also fail both in a spectacular way and in quiet obscurity. This business model development based on optionality process works best if the business happens to have a moat. Extrapolating the Google experience to startups is not fully applicable or realistic, since Google owns the AdWords platform and startups can't easily use new services as loss-leaders to feeder into something like that which has a moat.

10. **"There's a myriad of different places that ideas come from, and what you really want to do is set up a system where people can feel like they can contribute to those ideas and that the best ideas rise to the top in sort of a Darwinistic way by**

proof of concept, a powerful prototype, by demonstrating that's it's going to fill a really important user need, and so on and so forth." Marissa Mayer has worked hard to stamp out a "not invented here" mentality when it comes to ideas many times on her career. She believes systems to float new ideas and filters that enable truly worthy ideas to be acted upon are essential. This is particularly hard to do once a company reaches significant scale. Her Udemy class includes this description of her views on ideas: "Both the enterprise and the end users are better served by a culture that revolves around rewarding great ideas, rather than the self-promotion of getting others to acknowledge the contributions of an individual. Marissa Mayer… believes that if you fill a room with smart people and give them access to information, brilliant ideas will flourish, and the need for a strict management hierarchy dissolves. A platform for the free-form sharing of ideas promotes an open culture and a flat organization."

11. **"I think threats are always opportunities…and I think the opportunity for us is to focus on the users and innovate."** There are two important ideas at work here. First, most positive most things in life have a negative flip side. I have a friend who likes to say about these situations arising in business: "You can't eat ice cream all the time without getting fat." I will avoid the ever-present and often debunked reference to Chinese characters having double meanings. You may have encountered a version of this saying in an episode of the Simpsons: **Lisa**: "Look on the bright side, Dad. Did you know that the Chinese use the same word for 'crisis' as they do for 'opportunity'? **Homer**: Yes! Cris-atunity." But the essence of the story is true. In engineering and life, there are often inevitable tradeoffs. And one of those tradeoffs is that what is most challenging is usually a huge opportunity. The other important point that Marissa Mayer is making here is that she is focused on innovation which benefits users. There are many types of innovations but not all of them benefit users. If they are not reminded of this engineers can often end up working on innovations that to do not translate into customer value. These innovations that do not benefit users may be quite interesting problems, but they do not drive the business forward.

12. **"We have this great internal list [at Google] where people post new ideas and everyone can go on and see them. It's like a voting pool where you can say how good or bad you think an idea is. Those comments lead to new ideas."** Mayer discusses her approach to this opportunity in some detail in the Udemy Class linked to above. At Yahoo, she has launched an effort known as "PB&J" which is designed to rid Yahoo of dysfunctional "processes and bureaucracy and jams." Yahoo has created online tools to collect employee complaints and voting process which that stack rank PB&J problems so they can be addressed in an order which will produce the greatest impact. One consistent theme of these twelve quotations is that great ideas do not only come from the top of company management. As was specifically noted above, the job of a CEO is in no small part about clearing the way so other people in the business can get things done.

A Dozen Things I've Learned From Comedians About the Business of Life

December 19, 2014

1. "Wealth is not about having a lot of money; it's about having a lot of options." Chris Rock.

"The only thing money gives you, is the freedom of not worrying about money." **Johnny Carson.**

The best thing about having money is having good choices in life. An essential challenge if you are poor is having terrible choices. Having terrible choices feeds back in a self-reinforcing negative way. People who think that the best thing about wealth is that it allows you to have material things are, well, bonkers.

How far this faulty thinking can go is best illustrated by a story. A successful businessman parked his brand-new Porsche in front of his office so his colleagues could see it. As he stepped out of the new car, a truck passed too close and ripped off the door on the driver's side. A bystander dialed 911 and within a few minutes a policeman arrived. Before the officer could ask any questions, the business man began screaming hysterically that his new Porsche was now completely totaled. It was only after a half hour of ranting that the officer was able to talk to the man. "I can't believe how materialistic you are," the police officer said. "You are so focused on your possessions that you don't notice anything else." The businessman was clearly offended: "How can you say such a thing?" The policeman replied: "Don't you know that your left arm is missing from the elbow down? It must have been torn off by that truck." "My God!" screamed the man. "My Rolex!"

2. "If you're an average layperson, your grasp of high finance consists of knowing your ATM code." Dave Barry. The average person is an idiot when it comes to spending and investing money. There is no getting around this fact and sugarcoating the problem does not help anyone. The skills that allowed humans to survive in a more primitive world do not naturally provide the skills necessary for a human to prosper as a consumer or investor in a modern word. In other words, evolution did not equip humans to spend and invest wisely.

The good news is: you can learn to spend and invest better since it can be trained response. The bad news is: the need to train yourself never ends, requires hard work and is contrary to the desire of most humans to enjoy present moment consumption. People who have not trained themselves to be investors need help. The best sort of help is self-help in the form of reading and paying attention. Yes, you may be able to find a trustworthy advisor to help you but you still must work and educate yourself and find an adviser who adds value – and then properly take their advice.

Unfortunately, most people don't even know where to begin. So the result is predictable. As just one example, on the savings side of the house: Adults under age 35 (millennials) currently have a savings rate of negative 2%, according to Moody's Analytics. That compares with a positive savings rate of about 3% for those age 35 to 44, 6% for those 45 to 54, and 13% for those 55 and older." Bankrate reports that "26 percent of Americans have no

emergency savings and 41 percent say their 'top financial priority' is simply staying current with their expenses or getting caught up on their bills."

3. "About 15 years ago, I saw an Oprah show where she said, 'Always be the only person who can sign your checks." At the time, I had no money. I was at Second City in Chicago. I came to New York in 1997 to work on Saturday Night Live. I realized I have no head for business. And it would have been very easy for me to let someone take control of my money – for me to say, 'Here, sign my checks…whatever.' But that line from Oprah has always been a reminder. Today, as much as it makes me super sleepy, I have to pay a lot of attention when my business manager talks to me about money. He talks to me about taxes, and I get really, really sleepy. But I listen." Tina Fey. I'm old enough to have seen misplaced trust go wrong many times. A classic example happens when a child is managing money for a parent and spends it on themselves in ways that the parent is unaware of (e.g., gambling, travel, toys). The person who breaks trust will often try to justify the spending by saying to themselves that they will pay it back with interest. Systems that promote trust are fundamental to commerce. For example, the invention of the cash register was an important development in spreading commerce. Another system for not having your life ruined by someone who breaks your trust is "signing your own checks."

4. "A fool and his money are soon partying." Steven Wright

"Cocaine is God's way of saying that you're making too much money." Robin Williams. I'm unfortunately old enough to have seen people literally kill themselves because they had too much money and took their love of stimulating substances to an early grave. The number of lives and families I have seen ruined by alcoholism is too big to count. I'm not saying don't drink, but I am saying you should be very careful – especially if you have a family history of alcoholism. **Chris Rock** points out that substance abuse can dissipate money fast: **"Wealth is passed down from generation to generation. You can't get rid of wealth. Rich is some shit you can lose with a crazy summer and a drug habit."**

5. "Liz Lemon (as played by Tina Fey): "I have got to make money and save it and I have to do that thing that rich people do where they turn money into more money. Can you teach me how to do that?" Jack: ""With my eyes closed." The Mathew effect (i.e., the rich get richer) is one of the most powerful forces at work in society today. It explains a lot about many things, including income and wealth inequality. Both success and failure have always fed back on themselves, but in a digital economy that process is accelerated and creates what Nassim Taleb calls Extremistan. Edgar Bronfman *said once: "To turn* $100 *into* $110 is work. *To turn* $100 *million into* $110 *million* is *inevitable*."

Comedians know all too well that incomes in their industry reflect a power law. Acting is similar: "'If you're [a big star], you're getting well paid'" says one top agent, 'but the middle level has been cut out.' As an example, Leonardo DiCaprio made $25 million for *The Wolf of Wall Street*, while co-star Jonah Hill was paid $60,000. According to the most recent Screen Actors Guild statistics, the average member earns $52,000 a year, while the vast majority take home less than $1,000 a year from acting jobs."

6. "When people are getting richer and richer but they're not actually producing anything, it can't end well." Louis CK. During the portion of the Internet bubble that lasted from 1999 to 2000, the thing that troubled me the most was that it seemed like everyone I knew was too rich. It was possible to go out to lunch and come back $500,000

richer on paper. This paper wealth wasn't real but yet it drove extreme "fear of missing out" which drove the bubble to ever-higher levels. If loads of people in society are not producing anything but they are getting richer nevertheless, it is what poker players call a "tell." When the tide eventually goes out, it is easy to spot who has been swimming naked. It's like the story about the man who walked by a table in a hotel and noticed three men and a dog playing cards. "That is a very smart dog," said the man. "He's not that smart," replied one of the players. "Every time he gets a good hand, he wags his tail."

7. "Credit and debt is the root of all evil." Chris Rock. If you borrow money to invest, the outcome of your successes will be magnified, but so will the outcome of your mistakes. If you are investing, compounding is a tailwind, but if you are borrowing, compounding is a headwind. Few people have trained themselves to understanding the power of compounding. There is a story that is relevant: "The king was a big chess enthusiast and had the habit of challenging wise visitors to a game of chess. One day a traveling sage was challenged by the king. To motivate his opponent, the king offered any reward that the sage could name. The sage modestly asked just for a few grains of rice in the following manner: the king was to put a single grain of rice on the first chess square and double it on every consequent one.

Having lost the game and being a man of his word, the king ordered a bag of rice to be brought to the chessboard. He started placing rice grains according to the arrangement: 1 grain on the first square, 2 on the second, 4 on the third, 8 on the fourth and so on. Following the exponential growth of the rice payment, the king quickly realized that he was unable to fulfill his promise. On the twentieth square the king would have had to put 1,000,000 grains of rice. On the fortieth square, the king would have had to put 1,000,000,000 grains of rice. And, finally on the sixty fourth square the king would have had to put more than 18,000,000,000,000,000,000 grains of rice which is equal to about 210 billion tons – allegedly sufficient to cover the whole territory of India with a meter thick layer of rice.

The king should have responded in the following way: "Before you receive the rice, just to be sure you are getting what you asked for, I'd like you to count each and every grain." It takes one second to count a grain of rice. To count the number of grains he'd been promised, it would have taken the sage a half-trillion years.

8. "A bank is a place that will lend you money if you can prove that you don't need it." Bob Hope. There is a related joke on the topic of collateral: A man drives into a new city in an expensive Porsche and visits a prominent bank. While there he asks for a loan of $1000 since forgot his wallet. The banker says" "OK, but you have to leave your Porsche and the keys here as collateral". The man agreed and at the end of the week he returned the $1000 plus interest of $4 for a short term loan plus processing fee. Curious, the banker asks why he didn't just get a wire transfer and the man replied "Where else could I park my car for $4 for a week?"

9. "My bank is the worst. They are screwing me. You know what they did to me? They're charging me money for not having enough money. Apparently, when you're broke, that costs money."

"I had five dollars [in the bank] that I couldn't have for three days until they charged me another 15. Leaving me with -10. What does that mean? I don't even have no money any more. I wish I had nothing… I have not ten. Negative ten. I can't afford to buy something that doesn't cost anything. I can only afford to get something that costs, you-

give-me-ten dollars." Louis CK. One way to get to negative money is to have an overdraft protection agreement with a bank. This arrangement allows the consumers spend more money than is in their accounts for a fee that averages $34 per transaction. This is essentially a loan, and the effective interest rates are massive.

Overdraft loans are not the only problem. There are now more than 20,000 payday lenders in the United States. The mean payday loan borrower earns $22,476 a year and is paid $458 in fees. The median amount borrowed from a payday lender was $350, for a 14-day term. Median fees amount to $15 per $100, which is an APR of 322%. Borrowers with payday loans on average are in debt to their lenders for 199 days during a year.

10. "Wealth – any income that is at least one hundred dollars more a year than the income of one's wife's sister's husband." H. L. Mencken. Envy has zero upside. None whatsoever. If you can learn to turn off the envy, your life gets better. To the extent you are successful, you will hopefully be happier and you will make better decisions. But, of course, it is easier to say than do**. Joan Rivers** said once: **"Don't expect praise without** *envy* **until you're dead."** If what she said wasn't a little true, it wouldn't be funny!

Warren Buffett put it this way: "As an investor, you get something out of all the deadly sins—except for envy. Being envious of someone else is pretty stupid. Wishing them badly, or wishing you did as well as they did—all it does is ruin your day. Doesn't hurt them at all, and there's zero upside to it. If you're going to pick a sin, go with something like lust or gluttony. That way at least you'll have something to remember the weekend for."

11. "There are two times in a man's life when he should not speculate: when he can't afford it, and when he can." Mark Twain. There is arguably nothing more fundamental to investing than the difference between a speculator and an investor. John Maynard Keynes defined speculation as "the activity of forecasting the psychology of the market." Speculating is about trying to forecast price. Investing, by contrast, is about trying to buy an asset at a discount to its value. The semantics on this set of issues are tricky and both Robert Hagstrom and Howard Marks have nuanced and well thought through views that are worth reading.

The key to understanding the difference is determining whether a given activity is net present value positive or negative. Which reminds me or a story. A friend of mine once went into a butcher shop and said, "I will bet you $500 that you can't reach that bit of meat," pointing to a cut of beef hanging above him on a hook. The butcher looked up and said, "No way I will take that bet." My friend asked, "Why not?" And the butcher answered, "The steaks are too high!"

12. Navin R. Johnson: [played by Steve Martin] "'I've already given away eight pencils, two hoola dolls, and an ashtray, and I've only taken in fifteen dollars.' Frosty: "Navin, you have taken in fifteen dollars and given away fifty cents worth of crap, which gives us a net profit of fourteen dollars and fifty cents. Navin R. Johnson: "Ah… It's a profit deal. Takes the pressure off." This dialogue from the movie *The Jerk* has always appealed to me, since so many people in life don't understand the difference between revenue and profit. People will often say that X "makes" a lot of money. What the heck does "make" mean? Counterfeiting? The idea that revenue and profit are not the same thing escapes too many people. Whether a business creates value and whether a business captures value are independent outcomes. Too many people have an understanding of business that is similar to

the "Underpants Gnomes" in the South Park episode in which the following business plan is presented:

1. Collect Underpants
2. ?
3. Profit

This problem is made worse by certain financial practices invented by creative CFO's. Jim O'Shaughnessy points out that many investors "argue that earnings can be easily manipulated by a clever chief financial officer, using an old joke as an example: A company wants to hire a new chief financial officer. Each candidate is asked just one question. 'What does two plus two equal?' Each candidate answers four, with the exception of the one they hire. His answer was: 'What number did you have in mind?'"

Here's the scene from the Jerk & the Louis CK bank story.

A Dozen Things I've Learned from Steve Jobs about Business

December 28, 2014

Before writing this blog post I decided to apply one of Steve Jobs' ideas: **"Deciding what not to do is as important as deciding what to do." [1997]** This is not a post about Steve Jobs as a person, so I have tried hard in this post to not discuss his personality. I try to limit the discussion to what I have learned from him about business. Of course, you are perfectly free to write a blog post or article about what he taught you about business. You can write a post about how his personality was a key part of his success in business too. You can also write a post and say: "That isn't what Steve Jobs meant when he said X." You could even be right, but that would not be what Steve Jobs taught me.

Dates of quotes are important in trying to understand Steve Jobs so I have included them in this post. A good friend of mine, who knew Steve Jobs very well, said to me: *"He was a chameleon. And a really good one."* So when Steve Jobs said something really does matter in understanding what he meant.

1. "The difference between the best worker on computer hardware and the average may be 2 to 1, if you're lucky. With automobiles, maybe 2 to 1. But in software, it's at least 25 to 1. The difference between the average programmer and a great one is at least that. The secret of my success is that we have gone to exceptional lengths to hire the best people in the world. And when you're in a field where the dynamic range is 25 to 1, boy, does it pay off." [1995]

"The problem is, in hardware you can't build a computer that's twice as good as anyone else's anymore. Too many people know how to do it. You're lucky if you can do one that's one and a third times better, or one and a half times better… Then it's only six months before everybody else catches up. But you can do it in software. As a matter of fact, I think that the leap that we've made is at least five years ahead of anybody." [1994] This phenomena described by Steve Jobs, when combined with supply-side

economies-of-scale and demand-side economies-of-scale, creates a lollapalooza. The existence of lollapaloozas in an environment where scaling happens digitally over networks means that digital businesses are nonlinear in terms of its outcomes. This point is so fundamental to any digital business today that the Jobs quotes above must come first in my list. Once the offering of a business is digital, even small advantages tend to lead to a "few winners-take-most-all" result.

The power law distributions that exist in business flow from this "few winners-take-most-all" phenomenon. The great wealth of a tiny number of technology business founders is one outcome of this phenomenon. As another example, both (1) the power law distribution inside a venture capital firm's portfolio and (2) the power law distribution of financial returns between venture capitalists, are driven by digital businesses being part of Extremistan. That financial outcomes tend to produce an unequal distribution of income is not a new phenomenon. The rich get richer phenomenon is at least as old recorded history. What is new is that digital systems are an accelerant of the Matthew effect (rich get richer) phenomenon.

This isn't a post about technology but it is worth noting that the second quote above about hardware was made by Steve in 1994. NeXT had just exited the hardware business the previous year, and Steve Jobs's grand vision was reduced to a software objects company. The iPhone was introduced in 2007. Did Steve prove himself wrong with iPhone or is there a way to square the circle? A very smart friend of mine points out:

"The irony about this quote is that the things that really made the iPhone special were all hardware. Large touchscreen with way more sensors for touch than anyone had done before. Screen twice the size of any cell phone. Tons of custom integrated chips. Multitouch and IOS would've made no sense without the innovative hardware to enable this."

Would Steve Jobs say that, nevertheless, it is the software and other factors that maintain Apple's moat for a longer period? To square the circle, one can argue that hardware still provides considerable advantage. I believe Steve Jobs is saying the advantage is not nearly as big as is the case with software, so hardware innovation must be constant. In other words, is Steve Jobs saying that hardware based moats are more precarious and require continual innovation? Hardware that is "a third times better or one and a half times better" is still an advantage. Wouldn't it be fantastic if we could still ask him?

2. "If we don't cannibalize ourselves, someone else will." [Isaacson biography, 2013]

In an Extremistan environment, the same powerful nonlinear phenomenon that built you up, can tear you down just as quickly. If you go into denial, mistakes you make years before can end up causing severe financial pain. Bill Gates said to me many years ago that the potential downside of the power of network effects "is what makes me work so hard and worry so much."

3. "Stay hungry. Stay foolish." [2005]

Nassim Taleb wrote in his book Antifragile: "the idea present in California, and voiced by Steve Jobs at a famous speech: "Stay hungry, stay foolish" probably meant "Be crazy but retain the rationality of choosing the upper bound when you see it." Any trial and error can be seen as the expression of an option, so long as one is capable of identifying a favorable result and exploiting it…" I have written previously that financial returns are created in the venture capital industry by harvesting optionality. To "stay hungry" is to be alert for opportunity, patient but ready to act aggressively when the time is right. To "stay foolish" is to be willing to buck conventional wisdom when there is a massive potential upside, and a relatively small downside (optionality).

4. "I have always wanted to own and control the primary technology in everything we do." [2004]

"Because Woz and I started the company based on doing the whole banana, we weren't so good at partnering with people. I think if Apple could have had a little more of that in its DNA, it would have served it extremely well." [2005]

"We have to let go of this notion that for Apple to win, Microsoft has to lose. We have to embrace the notion that for Apple to win, Apple has to do a really good job. And if others are going to help us, that's great." [1997]

People like Steve Jobs, John Malone and Elon Musk understand the business problems associated with wholesale transfer pricing power as well as anyone in technology. Simply put: Wholesale transfer pricing = the bargaining power of company A that supplies a unique product XYZ to Company B, which may enable company A to take the profits of company B by increasing the wholesale price of XYZ. The way Steve Jobs used the iPod/iTunes business model even before iPhone to avoid the wholesale transfer pricing power of music owners was masterful.

5. "The cure for Apple [when it was down] is not cost-cutting. The cure for Apple is to innovate its way out of its current predicament." [2004]

"A lot of companies have chosen to downsize, and maybe that was the right thing for them. We chose a different path." [2010]

You can't cut your way to success in the technology business. To stop investing in research and development means inevitable, usually nonlinear, decline. There are many current examples of companies paying the price of doing stock buybacks rather than investing aggressively in research and development. Eating your corn seed in a technology business is suicidal and spectacular in its negative consequences at scale.

6. "Even a small thing takes a few years. To do anything of magnitude takes at least five years, more likely seven or eight." [1995]

Too many founders are unaware of the commitment that they are making when they start a business. To create something truly great takes years. Yes, a truly tiny number of people have flipped a SaaS business in a few years, but that is (1) not common and (2) not an Apple, Microsoft of Google class dent in the universe. The converse of this point is that not every business needs to make a dent in the universe. Owning a small but profitable business can be a very good thing. Not every business should raise venture capital.

7. "My model of management is the Beatles. The reason I say that is because each of the key people in the Beatles kept the others from going off in the directions of their bad tendencies…. They sort of kept each other in check. And then when they split up, they never did anything as good. It was the chemistry of a small group of people, and that chemistry was greater than the sum of the parts. And so John kept Paul from being a teenybopper and Paul kept John from drifting out into the cosmos, and it was magic. And George, in the end, I think provided a tremendous amount of soul to the group. I don't know what Ringo did." [2003]

This is a puzzling quote. He did say it so it is worth thinking about. A good friend who knew Steve Jobs said that he sought "control" like Paul and yet idolized John. The situation with the Beatles was not really comparable to Steve's interaction with others. To truly understand what Steve Jobs meant here would require asking for clarification. It seems more likely that Jobs was referring to the fact that every person on Earth has strengths and weaknesses and that different personalities can balance each other and create a stronger team. By having a diverse team with complementary skills and talents the whole of the output of the team can be far greater than the sum of the parts, if you get the mix right. This lollapalooza outcome can be positive or negative. The venture capitalist Bruce Dunlevie once said to me that every once in while a team comes along that is truly special and magic things happen. Bruce said to me that the chemistry is never exactly the same, but there is something familiar about the pattern.

8. "Creativity is just connecting things. When you ask creative people how they did something, they feel a little guilty because they didn't really do it, they just saw something. It seemed obvious to them after a while." [1996]

"Being a beginner again… freed me to enter one of the most creative periods of my life." [2005]

There are many heuristics that can get in the way of creativity. Sometimes it is hard to see what is right in front of your face. As just one example, Steve Jobs said once:

"The last few years at NeXT, I've gotten a little better glimpse of what I really saw at Xerox PARC [in 1979], which was two things. One blinded me to the other because it was so dazzling. The first, of course, was the graphical user interface. The second thing I saw–but didn't see–was the elaborate networking of personal computers into something I would now call 'interpersonal computing.' At PARC, they had 200 computers networked using electronic mail and file servers. It was an electronic community of collaboration that they used every day. I didn't see that because I was so excited about the graphical user interface.

It's taken me, and to some extent the rest of the industry, a whole decade to finally start to address that second breakthrough– using computers for human collaboration rather than just as word processors and individual productivity tools." [1991]

One of the things I have found in my writing is that people love and learn well from metaphors. Not only is connecting things in different ways a driver of creativity, it is a great way to convey knowledge. I am compelled to quote Charlie Munger yet again: "you can progress only when you learn the method of learning. Nothing has served me better in my long life than continuous learning." When Steve Jobs refers to being a "beginner again" I strongly suspect he is referring to Shunryu Suzuki-roshi's ideas including: "In the beginner's mind there are many possibilities, but in the expert's there are few."

9. "I think part of what made the Macintosh great was that the people working on it were musicians and poets and artists and zoologists and historians who also happened to be the best computer scientists in the world." [1996]

This sort of thinking is consistent with Charlie Munger's "lattice of mental model's" philosophy: "What is elementary, worldly wisdom? Well, the first rule is that you can't really know anything if you just remember isolated facts and try and bang 'em back. If the facts don't hang together on a latticework of theory, you don't have them in a usable form….You must know the big ideas in the big disciplines, and use them routinely — all of them, not just a few. Most people are trained in one model—economics, for example—and try to solve all problems in one way." Many professionals often think only about their own discipline and think that whatever it is that they do for a living will cure all problems. A nutritionist may feel as if she can cure anything for example. Or a chiropractor may believe he can cure depression. These are examples of "man with a hammer" syndrome since to such a person "everything looks like nail" even though it may not be a nail. In the language of Philip Tetlock, it is better to be a "fox" (knows a little about a lot) rather than a "hedgehog" (knows a lot about very little).

10. "People think focus means saying yes to things you've got to focus on. But that's not what it means at all. It means saying no to the hundred good ideas that there are. You have to pick carefully." [2004]

"Innovation is saying no to a thousand things. That's true for companies, and it's true for products…. We're always thinking about new markets we could enter, but it's only by saying no that you can concentrate on the things that are really important." [1998]

Focus is tremendously helpful. Focusing on what a business can do that is unique not only creates a sense of mission but is more likely to result in the creation of a moat. This is the same point made by Bill Gurley (tipping his mat to Howard Marks) when he points out: "Being 'right' doesn't lead to superior performance if the consensus forecast is also right."

11. "Apple's market share is bigger than BMW's or Mercedes's or Porsche's in the automotive market. What's wrong with being BMW or Mercedes?" [2004]

This quote pre-dates the iPhone, which changed everything for Apple. But it is interesting nevertheless since this approach is part of the path that took Apple to where it is now. In any event, really big markets create really big opportunities. When I write my post on Don Valentine of Sequoia (who was an original investor in Apple) I will discuss that point in some

detail. Don Valentine said once: "I like opportunities that are addressing markets so big that even the management team can't get in its way." My post on Andy Rachleff address this point as well.

12. "I'm convinced that about half of what separates successful entrepreneurs from the non-successful ones is pure perseverance." [1995]

In several of my blog posts I have talked about the difference between missionary and mercenary founders. Missionaries tend to have more perseverance and are much more likely to create a company with massive impact (i.e., put a dent in the universe). Bill Gates said once; "we were kind of naively optimistic and built big companies. And every fantasy we had about creating products and learning new things — we achieved all of it. And most of it as rivals." If I was able to be a fly on the wall of one meeting between two people who put actually a dent in the technology business it would have been the last meeting between Bill Gates and Steve Jobs. I can't resist adding that Don Valentine once said to Regis McKenna (who had sent Steve Jobs to talk to him): "Why did you send me this renegade from the human race?" My friend Craig McCaw uses the word "renegade" and similar terms in the same positive way to describe someone who can break the mold and create new value for the world.

Notes:

A Dozen Things I've Learned from Tom Murphy About Capital Allocation and Management

January 11, 2015

Some people, particularly those that are in the early stages of their career, may ask: who was Tom Murphy? He is the sort of person that industry hall of fames write about in this way: "He began his broadcasting career as the first employee of a bankrupt television station in Albany, New York. Acquisition by acquisition, he built the company." "Tom, who became President of Cap Cities, gradually built the company into a telecommunications empire. In 1985 he engineered the purchase of ABC with the backing of his long-time friend Warren Buffett, and the company became Cap Cities/ABC. He describes it as 'the minnow that ate the whale'. Ten years later, Tom sold Cap Cities/ABC to Disney for approximately $19 billion."

In 1985, Fortune wrote: "Under Murphy and Burke, Capital Cities has turned in an exceptional performance in its principal businesses: broadcasting, which produced 51% of the company's 1984 operating profits, and publishing (48%). Without much show of effort, Capital Cities' per-share earnings growth since 1974 has averaged 22% annually, compounded. Return on shareholders' equity, a key measure of performance, averaged a splendid 19.2% during the period."

Warren Buffett is one of Tom Murphy's biggest admirers. For Warren Buffett to say this is high praise indeed: "Tom Murphy and Dan Burke were probably the greatest two-person

combination in management that the world has ever seen, or maybe ever will see." Similarly, Warren Buffett once told Lawrence Cunningham, the author of the book *Berkshire Beyond Buffett*: "Most of what I learned about management, I learned from Murph. I kick myself, because I should have applied it much earlier." He has also said it as directly as possible: "I think (Murphy) is the top manager in the U.S."

When you study what Warren Buffet has said and written about managing a business, in many cases you are learning indirectly from Tom Murphy. That is a good thing since Tom Murphy did not say or write very much in comparison to Buffett. Like many great operators and managers Tom Murphy mostly let his business results speak for themselves, and did not spend any significant time seeking to be noticed by the public.

1. "There's no substitute for being a good business, and there are not many of them." "There are not many great businesses that come along in a lifetime." Warren Buffett and Tom Murphy see eye-to-eye on this point, with the Berkshire chairman famously saying: *"When a management team with a reputation for brilliance joins a business with poor fundamental economics, it is the reputation of the business that remains intact."* Without a moat, any business will inevitably see the price of their company's products reduced to a point equal to the opportunity cost of capital – <u>even if</u> the business has managers who have great operational skills. Yes, you definitely want great managers and occasionally you might find one as talented as Tom Murphy or Ajit Jain. But that does not mean you should invest in a business without a moat if you think it has great management.

The forces of competition are relentless, and the ability to copy the operational effectiveness of a competitor is a constant problem for businesses that do not have a moat. Tom Murphy is making the point above that businesses which have a moat are rarer than most people imagine. In other words, a good moat is truly hard to find. And contrary to what Peter Thiel would have you believe, moats come in all sizes with varying strengths and weaknesses.

The width and depth of a given moat shifts constantly. There is no binary phase transition between moat and no moat. I do find it a bit ironic given the Buffett/Berkshire connection that Tom Murphy once said: **"I loved the business I was in, and I loved going to work every morning. If it had been the railroad business, it would not have been as much fun."**

2. "*The goal is not to have the longest train*, but to arrive at the station first using the least fuel." This quote is a great setup to contrast the management style of Tom Murphy with William Paley, who ran the competing CBS television network. Tom Murphy was not a fan of a business getting bigger for its own sake or diversifying into unrelated businesses to achieve "synergy" or diversification. Unlike William Paley, Tom Murphy did not buy businesses like a baseball team or a toy company. When Tom Murphy bought a business it was to generate additional benefits for the core media business.

As we discussed, Tom Murphy thought that a business with a moat is very hard to find and for this reason alone he preferred to put capital to work in the business where he had the greatest advantage. When Tom Murphy allocated capital he preferred a focused approach rather than diversification, since he was investing in a business he knew very well and that had very attractive characteristics.

3. "We just kept opportunistically buying assets, intelligently leveraging the company, improving operations and then we'd … take a bite of something else." One of the great skills that any investor or businessperson can have is a talent for capital allocation. And Tom Murphy, like Warren Buffett, was a master at capital allocation. When Tom Murphy bought a business he used debt or cash generated by the business rather that diluting equity by issuing stock. In this way, he acted a lot like John Malone or Craig McCaw as they rolled up business after business so as to benefit from demand and supply-side economies of scale.

William Thorndike, the author of the popular business book *The Outsiders: Eight Unconventional CEOs and Their Radically Rational Blueprint for Success*, believes that the best CEOs have an "investor's mind set." When they consider a business decision like an acquisition or the purchase of capital equipment, "they viewed it as investment and when it had attractive returns they did a lot of it."

4. "The business of business is a lot of little decisions every day mixed up with a few big decisions." A great business is built brick-by-brick on a daily basis. The job of a CEO is to make a few really important decisions that set strategic direction, and then find ways to enable the rest of the company to achieve their goals. Dan Burke, Murphy's long-time business partner, said in an interview that the process is simpler than people imagine. You gather the facts and then you make decisions based on good judgment. Of course, having good judgment is easier said than done. It is certainly easier if your business itself is sound.

On Warren Buffett's company, Tom Murphy wrote in the forward to Berkshire Beyond Buffett: "From afar, it may look like Berkshire's wide-ranging businesses are very different from one another. In fact … while they span industries, they are united by certain key values, like managerial autonomy, entrepreneurship, frugality and integrity." Dan Burke was fond of a quotation attributed to a Chinese philosopher: "A leader is best when people barely know he exists, not so good when people obey and acclaim him — worse when they despise him. But of a good leader who talks little when his work is done and his aim is fulfilled, they will say: We did it ourselves."

5. "Decentralization is the cornerstone of our management philosophy." "[Warren Buffett and I] are both proponents of a decentralized management philosophy: of hiring key people carefully; of pushing decisions down the organization; and of setting overall principles and resisting temptation to be involved with details. In other words, don't hire a dog and try to do the barking."

"Decentralization, though, is not a magic bullet…. In the wrong environment, chaos and anarchy sit side-by-side with decentralization." Warren Buffett has said his strength is his weakness: delegation to the point of anarchy. What Tom Murphy taught him was that if you (1) hire the very best people and (2) don't delegate the critical job of capital allocation, you can create what Buffett's partner Charlie Munger calls a 'seamless web of deserved trust'. It is tremendously cost efficient to have a culture that is based on trust, since you don't have the cost or the inefficiency associated with layers of management that try to act as a substitute. When Tom Murphy bought the ABC Television network, the Capital Cites headquarters consisted of only 36 people. Of course, this seamless web of deserved trust system does not work if you do not hire great people, allocate capital wisely, and delegate authority. Fortune magazine pointed out: "The great exception to the local-autonomy principle is a rigorous annual budgeting process that Burke personally oversees."

6. "We expect a great deal from our managers." The flip side to Tom Murphy's aggressive delegation of authority was that he held his managers accountable for performance. If you have delegation without accountability it is an absolute recipe for disaster. For example, accountability for sales targets was not something that was casually considered at Capital Cities. As another example, in the television broadcast industry feedback is quick. Someone once quoted Murphy as saying: "Every day you wake up and get a report card on how you're doing."

In the Berkshire context, Jim Weber, the CEO of Brooks Running, has pointed out that Buffett and Munger "fall in love with a business that has great management in place, so that they don't have to run it [but] I've never felt more responsible and accountable." Murphy's #2 Dan Burke put the process at Capital Cities this way: "We sit everybody down in the dark once a year and show them what they said they were going to do for the year and what they actually did. Then we look at what they say they're going to do next year. It's sort of compelling to know that a year from now you're going to be back in that same slot."

7. "Cost control was the baseline of our company culture." "We worked to make cost-consciousness a part of our company's DNA. Budgets, which are set yearly and reviewed quarterly, originate with the operating units that are responsible for them." Tom Murphy was famously frugal. One story often told is about Tom Murphy only painting the two sides of a building Capital Cities owned that faced the road. But when it came to buying assets that produced excellent financial returns, Tom Murphy did not hesitate to spend money. If he was cheap, it was on expenditures that he felt did not produce an adequate financial return.

A producer for ABC said once that if your programs went over budget "you would be invited to seek employment elsewhere." In *The Outsiders* William Thorndike wrote: "Murphy, however, was a **cab man** and from very early on showed up to all ABC meetings in cabs. Before long, this practice rippled through the ABC executive ranks, and the broader Capital Cities ethos slowly began to permeate the ABC culture. When asked whether this was a case of leading by example, Murphy responded, **"Is there any other way?"** Focus on cost control meant "that Murphy's stations had the highest margins in the business, north of 50% compared to an average of 30%."

8. "Gauge performance over the long haul." Tom Murphy was famously patient when it came to acquisitions and he adopted the same view when it came to the performance of his managers. Like Warren Buffett, he was willing to accept results that could be lumpy if that higher volatility improved long-term overall performance. The process was rigorous: "Murphy's method of deal sourcing … involved staying out of the public eye, and spending years developing relationships with potential prospects. He never financed with equity, either generating cash internally, or using debt which was nearly always paid off within three years. All his major deals were through direct contact with sellers; they were never hostile, and never through an auction. He had strict return requirements: a double-digit after-tax return over 10 years, without leverage."

9. "There's no substitute for people with brains who are willing to work hard." "One wrong hiring decision at a senior level can really hurt hiring decisions down the line." "If you hire mediocre people, they will hire mediocre people."

"In terms of culture, we told our employees that we hire the smartest people we can find and that we have no more of them around than necessary." For Murphy, no partner was more important than Dan Burke who "shaped the culture of the company, with an emphasis on accountability, directness, irreverence and community service." [Dan Burke had] a "wicked sense of humor that made every day more fun." Tom Murphy and Dan Burke preferred to hire someone with brains rather than experience. Tom Murphy once said that his company **"doesn't like to have more personnel than it needs. Too many people with too little to do leads to office politicking and other behavior that's destructive for an organization."**

10. "One of the most uncommon things in life is common sense. It's very hard to notice whether people have common sense." Judgment and common sense are among the hardest things to teach**.** I think everyone can get better at making decisions, but some people have more common sense than others it seems. In many respects, making better decisions and having more common sense is a trained response. In my view, the first rule on this point is to read as much about Charlie Munger's views on the psychology of human misjudgment and worldly wisdom as you possibly can. The second rule is to not forget the first rule.

11. "As an entrepreneur you don't want to run out of cash. You don't want to borrow any more money than you absolutely need." This point is so obvious, and yet some people forget it and seal their doom. Running out of cash is an unforgivable sin in business. If you have enough cash, you can even go through bankruptcy and survive as a business. Holding the right amount of cash is an art, especially if you are being financed with debt. I plan to write a post on Michael Milken at some point which will deal with this set of issues.

12. "Don't spend your time on things you can't control. Instead, spend your time thinking about what you can." Carl Richards has a wonderful graphic that makes this same point on a napkin-like sketch.

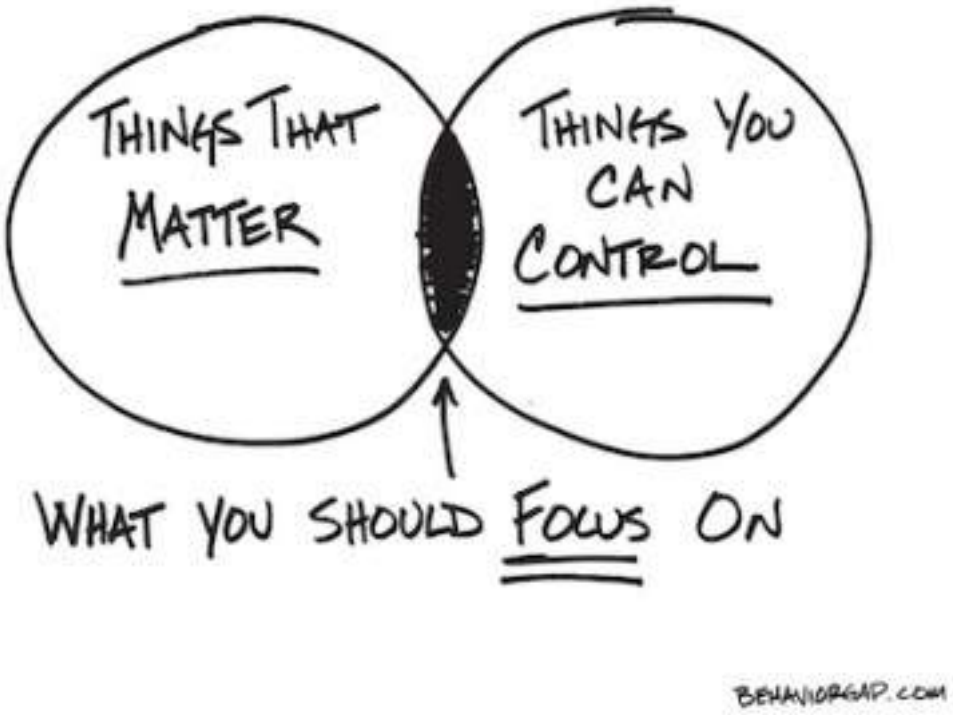

Notes:

Amazon – *Berkshire Beyond Buffett*

Amazon – *The Outsiders*

QZ – The man who taught Warren Buffett how to manage a company

Fortune – "The Best Advice I Ever Got"

Tom Murphy, Harvard Business School notes

Tom Murphy Interview (video)

Smart Company – Warren Buffett: How a rowboat beat an ocean liner

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A Dozen Things I’ve Learned from Joel Greenblatt about Value Investing

January 25, 2015

Joel Greenblatt is a very successful value investor and the founder of Gotham Capital, which offers four diversified long/short equity mutual funds. He has written several books on value investing identified in the notes below.

1. "One of the greatest stock market writers and thinkers, Benjamin Graham, put it this way. Imagine that you are partners in the ownership of a business with a crazy guy named Mr. Market. Mr. Market is subject to wild mood swings. Each day he offers to buy your share of the business or sell you his share of the business at a particular price. Mr. Market always leaves the decision completely to you, and every day you have three choices. You can sell your shares to Mr. Market at his stated price, you can buy Mr. Market's shares at that same price, or you can do nothing.

Sometimes Mr. Market is in such a good mood that he names a price that is much higher than the true worth of the business. On those days, it would probably make sense for you to sell Mr. Market your share of the business. On other days, he is in such a poor mood that he names a very low price for the business. On those days, you might want to take advantage of Mr. Market's crazy offer to sell you shares at such a low price and to buy Mr. Market's share of the business. If the price named by Mr. Market is neither very high nor extraordinarily low relative to the value of the business, you might very logically choose to do nothing."

Joel Greenblatt is a genuine Graham value investor. Benjamin Graham's value investing system has only three essential bedrock principles. The first bedrock principle is: *Mr. Market is your servant and not your master.* The value investor does not try to predict the timing of stock market prices since that would make Mr. Market your master. The value investor buys at a bargain and waits for the bipolar Mr. Market to inevitably deliver a valuable financial gift to them. This difference transforms Mr. Market into the investor's servant.

For a value investor, value is determined using methods that produce a fuzzy but very important benchmark, which is called "intrinsic value." It is perfectly acceptable that the result of an intrinsic valuation is fuzzy and that approaches can vary bit from investor to investor. It is also acceptable that the intrinsic value of some businesses can't be reliably determined since they can be put in a "too hard" pile to free up time for other things. There are many thousands of other businesses to invest in that are not in the too hard pile. Admitting that the intrinsic value of some businesses can't be reliably determined is also very hard for some people to accept.

Joel Greenblatt makes a key point here**: "Prices fluctuate more than values—so therein lies opportunity. Why do the prices fluctuate so widely when values can't possibly? I will tell you the answer I have come up with: The answer is I don't know and I don't care. We could waste a lot of time about psychology but it always happens and it continues to happen. I just want to take advantage of it. We could sit there and figure it all out, but I like to keep it simple. It happens; it continues to happen; the opportunities are there.**

I just want to take advantage of prices away from value.. If you do good valuation work and you are right, Mr. Market will pay you back. In the short term, one to two years, the market is inefficient. But in the long-term, the market has to get it right—it will pay you back in two to three years. Keep that in mind when you do your analysis. You don't have to look at the next quarter, the next six months, if you do good valuation work—.. Mr. Market will pay you."

Here again is this idea that predicting that prices will fluctuate, and that eventually they will rise to intrinsic value or above, is not to predict <u>when</u> that will happen. Gotham's philosophy

is: "We believe that although stock prices often react to emotion over the short term, they generally trade toward fair value over the long term. Therefore, if we are good at identifying mispriced businesses (a share of stock represents a percentage ownership stake in a business), the market will agree with us…eventually."

The Mr. Market metaphor is hard for many people to grasp. For this reason some people are never really comfortable with the value investing system. This is not a tragedy, since value investing is not the only way to invest successfully. There are other successful investing systems. For example, there is factor-based investing, which calls itself value investing, but isn't Graham value investing. There is also activist investing, which can be combined with value investing. There are other investing systems like merger arbitrage. Benjamin Graham style value investing is not for everyone, but anyone who is an investor can benefit from at least understanding the system.

2. "Buying good businesses at bargain prices is the secret to making lots of money."

"Graham figured that always using the margin of safety principle when deciding whether to purchase shares of a business from a crazy partner like Mr. Market was the secret to making safe and reliable investment profits."

"Look down, not up, when making your initial investment decision. If you don't lose money, most of the remaining alternatives are good ones."

"We use EBIT–earnings before interest and taxes–and we compare that to enterprise value, which is the market value of a company's stock plus the long-term debt that a company has. That adjusts for companies that have different ratios of leverage, different tax rates, all those things. But the concept is still the same. We want to get more earnings for the price we're paying. That was sort of the principles that Benjamin Graham taught, meaning that cheap is good. If you buy cheap, you leave yourself a large margin of safety. Warren Buffett had a twist on that and said, 'Gee, it's nice to buy cheap things but I also like to buy good businesses.'

So if I could buy good businesses at a cheap price, it's better than just cheap… We rank all companies based on their return on capital and we also rank all companies based on how cheaply we can buy them relative to their earnings. The more earnings, the better. Then we combine those rankings. And the companies that have the best combination of that ranking go to the top. So we're not looking for the cheapest company. We're not looking for the highest return-on-capital company. We're looking for the companies that have the best combinations of those two attributes."

The second bedrock principle of Benjamin Graham's value investing system is that assets should only be purchased when the price of the asset creates enough of a bargain that it providers the buyers with a *"margin of safety."* What Joel Greenblatt means when he says "look down" is that you should think about Warren Buffett's first and second rules on investing: don't lose money and don't lose money. The right amount of margin of safety will vary based on the investor involved, but it should be large enough to cover any mistakes. One common margin of safety is 25%. The margin of safety for a company for which intrinsic

value can actually be calculated (i.e. not in the "too hard" pile) should be so big that a really smart person can do the valuation in their head.

In the quotes above Joel Greenblatt describes how it is possible for value investing to evolve over time, as long as the three bedrock principles stay the same. Charlie Munger convinced Warren Buffett that quality (a good business) when combined with a bargain price was even better than just a business bought at a bargain price. Value investors like Greenblatt spend a lot of time thinking about *Return on Equity* and *Return on Capital*. These are the concepts that allow them to differentiate the earnings power of one company versus another. Determining value by only a database screen that sorts based on book value and price tells you nothing about the quality of the earnings power of a business.

3. "Choosing individual stocks without any idea of what you're looking for is like running through a dynamite factory with a burning match. You may live, but you're still an idiot."

"Most people don't (and shouldn't) invest by buying stocks and holding them for only one month. Besides the huge amount of time, transaction costs, and tax expenses involved, this is essentially a trading strategy, not really a practical long-term investment strategy."

The third bedrock principle of Ben Graham value investing system is that a *security is an ownership interest in an actual business* rather than a piece of paper to be traded based on person's view about the views of other people, about the views of other people [repeat]. To value a stock, a value investor must understand the underlying business. This process involves understanding the fundamentals of the business and doing some relatively simple math related to the performance of the business.

"A number of years ago I was trying to explain to my son what I did for a living. He is 11 years old. I spoke about selling gum. Jason, a boy in my son's class, sold gum each day at school. He would buy a pack of gum for 25 cents and he would sell sticks of gum for 25 cents each. He sells 4 packs a day, 5 days a week, 36 weeks or about $4,000 a year. What if Jason offered to sell you half the business today? What would you pay?

My son replied, 'Well, he may only sell three packs a day so he would make $3000 a year.' Would you pay $1,500 now? 'Why would I do that if I have to wait several years for the $1,500?' Would you pay a $1? 'Yes, of course! But not $1,500. I would pay $450 now to collect $1,500 over the next few years, which would be fair.'

Now, you understand what I do for a living, I told my son."

Joel Greenblatt is not thinking in all of this: "I think others will pay me more than $X for this business", because that is trying to predict the psychology of potential buyers. Warren Buffett once described the stock market as a "drunken psycho." The financier Bernard Baruch similarly said once that "the main purpose of the stock market was to make fools of as many people as possible." Emotions and psychological errors are the enemy of the value investor. Graham Value investors stay focused on the value of the business and only look at the stock market when they may want to have it be their servant.

4. "Periods of underperformance [make Graham Value Investing] difficult – and, for some professionals, impractical to implement."

"Over the long term, despite significant drops from time to time, stocks (especially an intelligently selected stock portfolio) will be one of your best investment options. The trick is to GET to the long term. Think in terms of 5 years, 10 years and longer. Do your planning and asset allocation ahead of time. Choose a portion of your assets to invest in the stock market – and stick with it! Yes, the bad times will come, but over the truly long term, the good times will win out – and I hope the lessons from 2008 will help get you there to enjoy them."

The Ben Graham value investing system is designed to underperform during a bull market and outperform doing falling and flat markets. This is very hard for many people to handle so they are not candidates to be successful value investors. Seth Klarman, who is one of the very best value investors, writes: "Short–term underperformance doesn't trouble us; indeed, because it is the price that must sometimes be paid for longer-term outperformance." Few investors have the fortitude to endure this period of underperformance referred to by Joel Greenblatt. Investment managers with a Graham value investing style work hard to attract the right sort of shareholders who won't panic and ask to redeem their interest in a fund at the worst possible time. Value investors who manage funds typically spend a lot of time trying to educate their limited partners about how value investing works.

Warren Buffett has created the better solution in that the structure of Berkshire does not allow redemptions by limited partners. Berkshire investors can sell their shares to someone else but they cannot ask for their ownership interest to be redeemed for cash. Bruce Berkowitz said once about Berkshire Hathaway: "That is the secret sauce: permanent capital. That is essential. I think that's the reason Buffett gave up his partnership. You need it, because when push comes to shove, people run … That's why we keep a lot of cash around…. Cash is the equivalent of financial Valium. It keeps you cool, calm and collected."

5. "Companies that achieve a high return on capital are likely to have a special advantage of some kind. That special advantage keeps competitors from destroying the ability to earn above-average profits."

Benjamin Graham style value investors who have evolved their value investing system to include an optional quality dimension understand that a moat is necessary to maintain high returns on capital. To understand moats I suggest that you read this essay (the 2013 updated version especially) and even if you have read it already I suggest you read it again. The concept of a moat is the same concept that individuals like Michael Porter talk about when they refer to a *barrier to entry* or *sustainable competitive advantage*. If you do not have a moat, the supply of what you sell inevitably increases to a point where the price of your product drops to a point where there is no long term industry profit above the cost of capital of the business. Increased supply from competitors is a killer of value for a producer of goods and services. A moat is something that puts limits on that supply and therefore makes a business more valuable. Moats, like people, come in all shapes and sizes. Some moats are

strong and some moats are weak. Some moats protect things that are very profitable and some don't.

6. "You have to know what you know—Your Circle of Competence."

People get into trouble as investors when they do not know what they are doing. This idea is not rocket science and yet people ignore it all the time. This is true whether the situation involves any combination of risk, uncertainty or ignorance. There are a number of behavioral biases that contribution to this problem including overconfidence bias, over optimism bias, hindsight bias and the illusion of control. The right approach for an investor is to find areas in which you are competent. Charlie Munger puts it this way: "Warren and I only look at industries and companies which we have a core competency in. Every person has to do the same thing. You have a limited amount of time and talent, and you have to allocate it smartly."

The idea behind the Circle of Competence filter is so simple it is embarrassing to say it out loud: when you do not know what you are doing, it is riskier than when you do know what you are doing. What could be simpler? And yet humans often don't do this. For example, the otherwise smart doctor or dentist is easy prey for the promoter selling cattle limited partnerships or securities in a company that makes technology for the petroleum industry. Really smart people fall prey to this problem. As another example, if you lived through the first Internet bubble like I did you saw literally insane behavior from people who were highly intelligent.

7. "Remember, it's the quality of your ideas not the quantity that will result in the big money."

Value investors understand that investment outcomes are determined by magnitude of success rather than frequency of success. This is the so-called Babe Ruth effect. This is one of the greatest essays on this investing principle ever written. Fail to read it at your peril. Michael Mauboussin writes: "*being right frequently is not necessarily consistent with an investment portfolio that outperforms its benchmark…The percentage of stocks that go up in a portfolio does not determine its performance, it is the dollar change in the portfolio. A few stocks going up or down dramatically will often have a much greater impact on portfolio performance than the batting average."* Venture capital returns are especially driven by the Babe Ruth effect.

8. There is no sense diluting your best ideas or favorite situations by continuing to work your way down a list of attractive opportunities."

The best investors who "know what they are doing" understand that investing decisions should be made based on an opportunity-cost analysis. And some investors, as a result, decide to concentrate their investments rather than diversify. Charlie Munger has his own take on this same idea: "Everything is based on opportunity costs. Academia has done a

terrible disservice: they teach in one sentence in first-year economics about opportunity costs, but that's it. In life, if opportunity A is better than B, and you have only one opportunity, you do A. There's no one-size-fits-all. If you're really wise and fortunate, you get to be like Berkshire. We have high opportunity costs. We always have something we like and can buy more of, so that's what we compare everything to."

Seth Klarman makes a point here that is similar to the one he made above: "Concentrating your portfolio in the most compelling opportunities and avoiding over diversification for its own sake may sometimes lead to short-term underperformance, but eventually it pays off in outperformance." Having said this, Greenblatt has moved to a more diversified approach. Gotham's web site explains: *"Our stock positions, which generally include over 300 names on both the long and short sides, are not equally weighted. Generally, the cheaper a company appears to us, the larger allocation it receives on the long side. On the short side, the more expensive a company appears relative to our assessment of value, the larger short allocation it receives. We manage our risks by requiring substantial portfolio diversification, setting maximum limits for sector concentration and maintaining overall gross and net exposures within carefully defined ranges."*

Greenblatt explains his views on diversification in a recent interview with Consuelo Mack. My take on his view (starts at about minute 14:30): what comes with a concentrated portfolio, is outside investors in the fund who lose patience and leave the fund when there is a period of underperformance. If you are investing your own money and have the patience, concentration can work better. He now more focused on being "right on average" for outside investors instead of concentrated investing in about eight stocks.

9. "Even finding one good opportunity a month is far more than you should need or want."

Fundamental to value investing is the idea that mispriced securities and other assets which fall within your circle of competence are rarely available to purchase at a price which reflects a margin of safety. For this reason, value investors are patient and yet aggressive, ready to act quickly whenever the opportunity is presented. Most of the time the value investor does nothing but read, think, and research businesses and industries. Actual buying and selling of securities and other assets happens rarely. Warren Buffett has a few thoughts on this point which are set out below:

- "You do things when the opportunities come along. I've had periods in my life when I've had a bundle of ideas come along, and I've had long dry spells. If I get an idea next week, I'll do something. If not, I won't do a damn thing."
- "We don't get paid for activity, just for being right. As to how long we'll wait, we'll wait indefinitely."
- "I call investing the greatest business in the world because you never have to swing. You stand at the plate, the pitcher throws you General Motors at 47! U.S. Steel at 39! and nobody calls a strike on you. There's no penalty except opportunity lost. All day you wait for the pitch you like; then when the fielders are asleep, you step up and hit it."

- "The stock market is a no-called-strike game. You don't have to swing at everything– you can wait for your pitch. The problem when you're a money manager is that your fans keep yelling, 'Swing, you bum!'"
- "One of the ironies of the stock market is the emphasis on activity. Brokers, using terms such as`marketability' and `liquidity," sing the praises of companies with high share turnover… but investors should understand that what is good for the croupier is not good for the customer. A hyperactive stock market is the pick pocket of enterprise."

10. "If you are going to be a very concentrated investor, you should not use leverage. You can't leverage because you need to live through the downturns and that is incredibly important."

Being a successful value investor requires that you have staying power. When you use financial leverage your mistakes are as just as magnified as your successes, and those mistakes can be big enough to make you a non-investor since you may have no longer have funds to invest. Don't just take it from me. Please listen to these three investors. First, Charlie Munger: "I've seen more people fail because of liquor and leverage – leverage being borrowed money." Second, James Montier: "Leverage can't ever turn a bad investment good, but it can turn a good investment bad. When you are leveraged you can run into volatility, that impairs your ability to stay in an investment which can result in a permanent loss of capital." Third, Howard Marks: "Leverage magnifies outcomes, but doesn't add value."

11. "The odds of anyone calling you on the phone with good investment advice are about the same as winning the Lotto without buying a ticket."

To be a successful value investor of any kind requires actual work. And since work is necessarily involved, many people will try to avoid it, since that is human nature. Relying on people who call you on the phone with investment advice to avoid work, doesn't, ahem, work. One way to avoid some of the work is to rely on others, but finding reliable and skilled people to rely on requires work too. Taking the time and devoting the time necessary to get sound financial advice will pay big dividends. This topic reminds me of a man I know who once pleaded with his doctor: "You have to help me stop talking to myself." The doctor asked: "Why is that?" The man responded: "I'm a salesman and I keep selling myself things I don't want."

12. "Almost everyone should have a significant portion of their assets in stocks. But here it comes – few people should put ALL their money in stocks. Whether you choose to place 90% of your assets or 40% of your assets in stocks should be based largely on how much pain you can take on the downside."

Joel Greenblatt is talking about the "asset allocation" set of issues, which present a number of choices that both active and index investors must face. Stock prices can drop by a lot, and

that and that can cause people to panic. Charlie Munger points out: "You can argue that if you're not willing to react with equanimity to a market price decline of fifty percent two or three times a century, you're not fit to be a common shareholder and you deserve the mediocre result that you're going to get."

The best way to acquire good judgment so that you don't panic is to read widely so you are prepared for this sort of result. Unfortunately, many people only learn these lessons by panicking and then missing a subsequent stock market rally while they sit in an emotional foxhole too terrified to participate in stock or bond markets. Unfortunately, many people learn about this so-called behavior gap by actually touching a hot stove. Some people learn the lesson and others never recover fully.

A Dozen Things I've Learned from Sheryl Sandberg about Management, Careers & Business

February 7, 2015

1. "I sat down with Eric Schmidt, who had just become the CEO [of Google], and I showed him the spread sheet and I said, this job meets none of my criteria. He put his hand on my spreadsheet and he looked at me and said, 'Don't be an idiot.' Excellent career advice. And then he said, 'get on a rocket ship. When companies are growing quickly and they are having a lot of impact, careers take care of themselves.' "

This quote above extends on the importance of getting involved in situations that create positive optionality. For example, when companies grow there is a need to do new things – workers become managers, people who do X are trained to do Y and Z, and everyone learns new skills. There tends to be more opportunity and less politics in a growing company since it is more than a zero sum game. Companies that are shrinking tend to be the reverse.

A less than zero sum game at your place of work is problematic when it comes to your career. Startups can be particularly attractive sources of optionality. In the early days of a growing company (when there are just a few people working at the company) there was no shortage of opportunity. Startups tend to make for more battlefield promotions and people are more often allowed to learn new things and grow as employees.

2. "The reason I don't have a plan is because if I have a plan I'm limited to today's options."

Positive optionality is very valuable. If you are not open to opportunity as it arises, you can't harvest optionality. My friend Craig McCaw likes to say "flexibility is heaven." If he can delay a decision somehow, he will do it because he knows a better option might arise in the meantime. Sheryl Sandberg is a protégé of Larry Summers who is close to Robert Rubin. So to understand Sheryl it is useful to understand Rubin. In a New York Times article Summers

describes Rubin's approach: *"Rubin ends half the meetings with – 'So we don't have to make a decision on this today, do we?' Summers says. New information will evolve."*

"What so many people have a tendency to do is to lock into a scenario," Summers says. "What Rubin will say, at times to the frustration of others, is that some questions don't have answers – which is to say that just because a problem is terrible, we don't have to act. It may not be the right time." In a Fortune magazine article Carol Loomis wrote about Rubin: "Part of Rubin's approach to decisions at the Treasury was to put them off as long as possible. Some people might call that procrastination; Rubin called it getting that one last fact or well-judged opinion, from whoever at the table might offer it, that might make a decision the right one. Geithner says the young members of the Treasury staff would on occasion rush into Rubin's office, imploring him for a decision about something consequential. Rubin's first question would often be,"How much time do we have before we have to decide?" Summers calls this Rubin's habit of "preserving his optionality."

3. "There is no straight path from your seat today to where you are going. Don't try to draw that line."

Life is not linear. Opportunity usually arrives in life in strange and unexpected ways. Opportunity also tends to arrive in a lumpy fashion. This nonlinearity and lumpiness means that it is wise to be both patient and ready to be very aggressive when opportunity presents itself. One odd thing that I like to do (there are many) is read obituaries. When you read a good obituary it often reinforces how nonlinear life can be. The line "life is one damn thing after another" is variously attributed to Edna St Vincent Millay and to Elbert Hubbard, but whoever said it was speaking to a fundamental truth. You can see the nonlinear path life takes in many obituaries.

4. "The traditional metaphor for careers is a ladder, but I no longer think that metaphor holds. It doesn't make sense in a less hierarchical world. … Build your skills, not your resume. Evaluate what you can do, not the title they're going to give you. Do real work. Take a sales quota, a line role, an ops job, don't plan too much, and don't expect a direct climb. If I had mapped out my career when I was sitting where you are, I would have missed my career."

Sheryl Sandberg is saying that the traditional career path is history. And that you must sometimes move horizontally into positions where you acquire new skills to advance in life.

Reid Hoffman has a similar view: *"The notion of a career has changed. Whereas we used to have a career ladder, now we have a career jungle gym. Success in a career is no longer a simple ascension on a path of steps. You need to climb sideways and sometimes down; sometimes you need to swing and jump from one set of bars to the next. And, to extend the metaphor, sometimes you need to spring from the jungle gym and establish your own turf somewhere else on the playground. And, if we really want the playground metaphor to accurately describe the modern world, neither the playground nor the jungle gym are fixed. They are constantly changing—new structures emerge, old structures are in constant change and sometimes collapse, and the playground constantly moves the structure around."*

5. "All of us, and especially leaders, need to speak and hear the truth. The workplace is an especially difficult place for anyone to tell the truth, because no matter how flat we want our organizations to be, all organizations have some form of hierarchy. What that means is that one person's performance is assessed by someone else's perception. This is not a setup for honesty."

Genuine listening is hard. People in senior management tend to get surrounded by people who tell them what they want to hear. In his famous speech *The Psychology of Human Misjudgment* Charlie Munger pointed out: "Now you've got Persian messenger syndrome. The Persians really did kill the messenger who brought the bad news. You think that is dead? I mean you should've seen Bill Paley in his last 20 years. [Paley was the former owner, chairman and CEO of CBS]. He didn't hear one damn thing he didn't want to hear. People knew that it was bad for the messenger to bring Bill Paley things he didn't want to hear. Well that means that the leader gets in a cocoon of unreality, and this is a great big enterprise, and boy, did he make some dumb decisions in the last 20 years."

6. "Leadership is about making others better as a result of your presence and making sure that impact lasts in your absence."

Here I think Sandberg shares the view that Marissa Mayer and others have, which is that at a top level in management the job is less about making many decisions but rather making a few very important decisions – then doing what it takes to enable other people to get things done that matter. An effective leader needs to articulate a set of priorities that enables the team to make decisions in the absence of a leader, which is necessary most of the time. Effective leaders find ways to amplify their impact whether they are present or not.

7. "Your life's course will not be determined by doing the things that you are certain you can do. Those are the easy things. It will be determined by whether you try the things that are hard."

"Ask yourself: What would I do if I weren't afraid? And then go do it."

This again is thinking about your life as if you were a venture capitalist. As I pointed out in my post on Chris Dixon, it is in the areas where people are not looking that you can find mispriced opportunities. The "price" you pay in a career when trying to capitalize on an opportunity is not just money, but time and energy. If you aren't failing sometimes you are not learning. Try not to repeat the same mistakes and instead make new mistakes. Good judgment is often acquired by a progress that often involves bad judgment.

8. "The most important thing I can tell you is to open yourselves to honesty. So often the truth is sacrificed to conflict avoidance. You know your closest friends' strengths and weaknesses, and what cliff they might drive off. Ask them for honest feedback."

No one has perspective on themselves. We all need people who can tell us when we are off course. Charlie Munger puts it this way: "This first really hit me between the eyes when a friend of our family had a super-athlete, super-student son who flew off a carrier in the north Atlantic and never came back, and his mother, who was a very sane woman, just never believed that he was dead. And, of course, if you turn on the television, you'll find the mothers of the most obvious criminals that man could ever diagnose, and they all think their sons are innocent. That's simple psychological denial. The reality is too painful to bear, so you just distort it until it's bearable. We all do that to some extent, and it's a common psychological misjudgment that causes terrible problems."

9. "Google is fundamentally about algorithms and machine learning. And that that has been very important and continues to be very important. They're doing a great job. [At Facebook] we start from a totally different place. We start from an individual. Who are you? You know, what do you want to do? What do you want to share?….There's one thing that I think is most important that's to Facebook, which is that we are focused on doing one thing incredibly well. We only really want to do one thing."

Focus matters. For a company to be a master of one thing can be very valuable, whereas an attempt to be a jack of all trades can be problematic. One thing that is tremendously clarifying for a business is a single principle around which a company can optimize decisions (that one thing). This allows people, even in a large business, to know how to optimize daily decisions. At Google, people know that the "one thing" is selling more targeted advertising. Everything is optimized to achieve that objective.

10. "No one can have it all."

"Life and business inevitably involves tradeoffs. Family, work, personal life all potentially create conflicts. Some people have a great ability to balance things in life, but no one can have everything. Operational effectiveness is about things that you really shouldn't have to make choices on; it's about what's good for everybody and about what every business should be doing."

Tradeoffs are inevitable in business and in one's personal life. There is work, personal life and family. Getting the mix right between these three things is neither simple or easy. Often the tradeoffs are caused by limitations created by laws of physics. Business must also make tradeoffs. I have always found this quote from Michael Porter to be useful: "Strategy is about making choices, trade-offs; it's about deliberately choosing to be different."

11. "Done is better than perfect."

The people who succeed in life are people who get things done. Not just getting anything done, but the things that matter. They don't necessarily clear their screens or desks every day, they clear their screens or desks of the things that matter most. Here's an example of done being better than perfect: Every weekend I write 5,000 words or so. The post aren't perfect,

but I get them done. The perfect blog post is the one that has never been written. The perfect life is the life that has never been lived. Mark Zuckerberg wrote in the letter that accompanied Facebook's S-1 filing with the SEC:

"Hackers try to build the best services over the long term by quickly releasing and learning from smaller iterations rather than trying to get everything right all at once. To support this, we have built a testing framework that at any given time can try out thousands of versions of Facebook. We have the words "Done is better than perfect" painted on our walls to remind ourselves to always keep shipping."

Facebook has created a system where everything they ship is an experiment that is rigorously tested and improved through nearly constant iteration. Hundreds or even thousands of experiments are conducted at a software company like Facebook every day. Most things fail, but the experimentation process discovers improvements via what Nassim Taleb Calls *via negativa.*

12. "Work hard, stick with what you like, and don't let go."

Being relentless and working hard often pays big dividends, financially and otherwise. Staying relentless in pursuit of your goals and working hard is far easier and more likely to be successful if you are doing what you like. Sheryl Sandberg's statement is not always true, since life is often unfair, but not working hard, doing what you hate and letting go, almost certainly won't get you anywhere. What Sheryl Sandberg is saying here is quite simple. Someone might even complain that it is too simple or even obvious. Business is often made too complex and at its core is simple. Being a great manager like Jim Barksdale or Tom Murphy requires the daily equivalent of blocking and tackling in football. Building a business brick-by-brick is what great managers do.

Notes:

New Yorker – A Woman's Place

HBS Speech – Sheryl Sandberg: Get On A Rocketship Whenever You Get The Chance

Harvard Magazine – Harvard College Class Day 2014

McKinsey Interview – Facebook's Sandberg: No one can have it all

Amazon – Lean In

A Dozen Things I've Learned From Arthur Rock about Business & Venture Capital

February 13, 2015

"Arthur Rock was one of America's first venture capitalists. He played a key role in launching Fairchild Semiconductor, Teledyne, Intel, Apple, and many other high-tech companies. Following an early career on Wall Street in investment banking, Arthur started his first venture capital partnership with Tommy Davis. Between 1961 and 1968, Davis & Rock invested $3 million and returned $100 million to their investors."

1. "What attracted me first, I got this letter from Gene Kleiner when I was in New York, actually written by his wife, suggesting that seven of the scientists at Shockley were not happy there and could I find them a job together…"

"The problem at Fairchild Semiconductor had to do with incentives. The whole idea of giving people incentives was something foreign to most companies." "…employees like to feel they own part of the company, no matter how little."

Seven scientists who were very unhappy with the management style of William Shockley left Shockley Semiconductor with Bob Noyce to become the famous "traitorous eight." The capital these scientists needed after leaving Shockley was supplied by Arthur Rock's investment firm Hayden Stone. Each of the eight scientists received 10 percent of the equity and Hayden Stone received 20%. The incentive created by that 10% ownership interest was important in motivating these people to create one of history's greatest businesses (Fairchild Semiconductor).

Therese Poletti once wrote about this group: "It is estimated by some that more than 400 companies can trace their roots to those "Fairchild Eight" … the most famous being Robert Noyce and Gordon Moore, who left to co-found Intel in 1968. Other famous "Fairchildren" include Jerry Sanders, a sales star at Fairchild, who left with a group of engineers to co-found Advanced Micro Devices in 1969. 'This was the first company to spin off engineers starting something new,' said Moore. "By luck, we caught up with some financing and got to start our own company." But it wasn't easy, the group approached 35 companies with the help of a young Harvard MBA named Arthur Rock."

Fred Wilson and Andy Rachleff, among others, have both written thoughtfully on the important topic of employee equity.

2. "I get my kicks out of building companies…" "[Early venture capitalists] were all company builders. And people entering the business in the late 1990's were promoters. They're always promoting their companies and promoting their deals."

"You know, a lot of people are just interested in building a company so they can make money and get out. That doesn't interest me at all. Usually it's not a successful way anyway…"

The venture capitalists I admire most like to spend their time and effort building real businesses. They almost always understand finance deeply, but for them, finance is an enabler of what they most love to do. One of the ironies of venture capital is that the best way to be financially successful is to pay less attention to finance and more attention to building a business. The right financial structure doesn't mean anything if all it does is guarantee you a high percentage of nothing.

3. "We spent a lot of time with our companies... [sometimes] if you divide up the number of companies they're invested in by the number of partners, you find that the partners haven't got ten minutes for any one company."

Time is the scarcest resource that any venture capitalist has to offer any business in their portfolio. A founder or business is not going to get much time from the venture capitalist if that venture capitalist is investing in too many businesses. This is part of the reason why the venture capital business does not scale well. You can't automate the work that a great venture capitalist does in helping grow a business.

4. "I was more interested in people, in figuring out whether the people are good people without knowing exactly what it is they are going to do technically."

Many people in this series on my blog have pointed out that the success of a business is fundamentally tied to its people. The company you build is the people you hire. Arthur Rock himself is not a technologist, but he is an excellent judge of people. Finding the right people is fundamental to the success of a startup. Great people create optionality for the business since they are more able to adapt to an uncertain future.

5. "Good ideas and good products are a dime a dozen. Good execution and good management—in a word, good people—are rare." "The lesson from Intel? The necessity of having great management."

Almost everyone has good ideas once in a while. There is a light year of difference between "I thought of that" and "I built that." Arthur Rock's comment on the importance of management also reminds me of the posts I did on "Coach" Bill Campbell, Jim Barksdale, and Sheryl Sandberg. Strong technical skills are not enough to create a successful business, and strong management skills aren't enough either. The rarity of "good management and good people" is another reason why venture capital does not scale well as an industry.

6. "I am especially interested in what kind of financial people they intend to recruit. So many entrepreneurial companies make mistakes in the accounting end of the business. Many start shipping products before confirming that the orders are good, or that the customers will take the product, or that the accounts are collectible. Such endeavors are more concerned about making a short-term sales quota than about maximizing the long-term revenue stream."

Accounting revenue is an opinion and real cash flow is a fact. A startup focused on fake metrics will eventually pay the price. The first and second rules of finance are: pay attention to cash and pay attention to cash. When the business has found product/market fit and the task at hand is more focused on scaling the business, if the focus of the sales team is to create faux success by using misleading metrics that is potentially a *huge* problem. The easiest person to fool is yourself.

7. "I look for people who [are] honest. They have fire in their belly. They're intellectually honest meaning that they see things as they are, not the way they want them to be and, and have priorities and know where they're going and know how they're going to get there."

Confirmation bias and other dysfunctional heuristics drive people to see what they want to see. This gets in the way of the intellectual honesty Arthur Rock seeks. Psychological denial is a powerful and often dysfunctional force in the world of failure. In this interview Arthur Rock is also pointing out that he is trying to sort out whether someone "is a good person." Whether someone is a good person is a highly underrated success indicator. Not only is it the right thing to do and the most pleasant thing to do, it is the most profitable thing to do. People who deal with each other via what Charlie Munger calls a "seamless web of deserved trust" because they are good people, get more things done quickly and efficiently.

8. "When they have their five-year plan and they come down to net profits, that's okay. But then when they tell you how much your earnings per share is going to be and what the dilution is going to be and then how much, at what price earnings ratio the stock is going to sell at and then they tell you, well, you know if you invest it today you would make twenty times or a hundred times or something on your money, at that point I don't want to talk to them anymore. Very nice to have met you. Goodbye. Good luck."

This is such a great statement since the "tell' Arthur Rock describes reveals so much. First, people who think they can predict the future with sufficient accuracy to create a detailed five-year plan have a lousy understanding of how business works and have not been paying attention to life. A spreadsheet is only as good as your assumptions and when you put garbage into a spreadsheet garbage comes out. Second and even more importantly, entrepreneurs like Arthur Rock described are not sufficiently focused on solving real customer problems – a precondition for creating a valuable business.

9. "One thing that probably has not changed is the need to be a good listener."

In deciding which venture capitalist to select, Chris Sacca has suggested the founder ask: "Who's gonna listen?" Mark Suster has similarly said: **"**There are a lot of people with big mouths and small ears. They do a lot of talking; they only stop to listen to figure out the next time they can talk."

This list of people recommending listening is long. Larry King: "I remind myself every morning: Nothing I say this day will teach me anything. So if I'm going to learn, I must do it by listening."

It is not just important that you listen to your venture capitalist or your founder – any successful business must listen to its customers, suppliers and employees. Arthur Rock also pointed out in this same interview that **whether someone is a good listener is best judged over time, since in the first meeting they may be on their best behavior.**

10. "Fred Terman was head of the engineering school at Stanford, and he encouraged his students, especially the doctoral and postdoctoral students, to form companies and continue to teach at Stanford."

"It is entirely possible that there would be no silicon in Silicon Valley if Fairchild Semiconductor had not been established."

The positive feedback loop that Stanford has created is powerful. The formula is simple: allow professors and students to be entrepreneurial and give them access to great facilities and other resources. Teach them to be empathetic, ethical and thoughtful. These professors and students will build valuable businesses and will eventually be philanthropic toward the university, which creates a source of funds that can be re-invested in students, professors and infrastructure and other resources in a way that grows over time [repeat indefinitely]. That William Shockley was born south of San Francisco area was a lucky break for the San Francisco area just as Bill Gates being born in Seattle as a lucky break for the Seattle area. If you look at which areas of the world are economically successful, you inevitably see major research universities. If the research university has archaic rules about conflicts of interest the universities suffer, and so does the surrounding area's economic environment.

11. "Over the past 30 years, I estimate that I've looked at an average of one business plan per day, or about 300 a year, in addition to the large numbers of phone calls and business plans that simply are not appropriate. Of the 300 likely plans, I may invest in only one or two a year; and even among those carefully chosen few, I'd say that a good half fail to perform up to expectations."

This fundamental aspect of venture capital investing – the power law distribution of financial returns – has not changed and will not change. The combination of (1) the optionality discovery process inherent in venture capital and (2) the top down constraint an economy puts on income for any given business/all business collectively, means that the power law is here to stay. To find the one unicorn that drives financial returns in the venture capital industry requires that the venture capitalist look at a lot of prospects before finding an opportunity that may be mispriced. And even after carefully examining hundreds of

opportunities, half of all venture opportunities will fail outright and most of the rest will mostly be "meh" results.

12. "Success breeds success."

This is a simple statement of one of the most powerful forces operating in the world today. The more technical term to describe the phenomenon is "cumulative advantage." Columbia University's Duncan Watts puts it this way:

"The reason is that when people tend to like what other people like, differences in popularity are subject to what is called "cumulative advantage," or the "rich get richer" effect. This means that if one object happens to be slightly more popular than another at just the right point, it will tend to become more popular still. As a result, even tiny, random fluctuations can blow up, generating potentially enormous long-run differences among even indistinguishable competitors — a phenomenon that is similar in some ways to the famous "butterfly effect" from chaos theory."

& this way:

"…hindsight isn't 20/20; it's reductive and unreliable. In a section on the Mona Lisa, for example (see excerpt), he discusses how the painting languished in relative obscurity for centuries, only becoming world famous after it was stolen from the Louvre in the early 1900s—but since the idea of its greatness owing to a fluke is so inherently unsatisfying, people ascribe post-facto "common sense" explanations. (It's the smile! It's the fantastical background! It's the genius of Leonardo da Vinci!) "Common sense is the mythology—the religion—of the social world," Watts says. "It's the simple answer that maps directly onto our experience, the explanation we need to make things make sense. So we hear thunder and say, 'The gods are fighting.' That's something we understand; people get angry and throw things. Common sense is socially adaptive. If we constantly had to grapple with the complexity of the world, we wouldn't be able to get out of bed in the morning."… if an answer and its opposite can seem equally obvious through the right mental gymnastics, there's something wrong with the idea of "obviousness" in the first place. "We make this mistake so often, and it really hurts us," Watts says. "We can't understand the social world just by telling a bunch of cute stories. You need theories, experiments, data. It's tricky and counterintuitive, and everything is more complicated than you think it is. Your intuition is always misleading you into thinking you understand things that you don't."

Descriptions of this so-called "Matthew effect" (the rich get richer) are old enough that the source of its name is the bible. What is new is that digital systems are accelerants of the Matthew effect. The rich are getting even richer since *cumulative advantage* scales even better when the phenomenon is digital. As Nassim Taleb has pointed out, more and more of the world is Extremistan. Taleb gives the example of the recording device as a contributor to Extremistan results:

"Our ability to reproduce and repeat performances allows me to listen to hours of background music of the pianist Vladimir Horowitz (now extremely dead) performing Rachmaninoff's Preludes, instead of to the local Russian émigré musician (still living), who is now reduced to giving piano lessons to generally untalented children for close to minimum

wage. Horowitz, though dead, is putting the poor man out of business. I would rather listen to Horowitz for $10.99 a CD than pay $9.99 for one by some unknown (but very talented) graduate of the Julliard School. If you ask me why I select Horowitz, I will answer that it is because of the order, rhythm or passion, when in fact there are probably a legion of people I have never heard about, and will never hear about – those who did not make it to the stage, but who might play just as well."

Notes:

HBS – Done Deals

Computer History – Arthur Rock

Harvard Business Review – Strategy vs Tactics

HBS – Harvard Entrepreneurs: Arthur Rock

Digital Assets – Oral History

Mike Markula Interviews Arthur Rock (video)

A Dozen Things I've Learned from Don Valentine about Venture Capital and Business

February 21, 2015

"Don Valentine participated in the beginnings of two significant milestones: the birth of the silicon chip and the development of the venture capital industry. From humble beginnings, Valentine became a legendary salesman at Fairchild Semiconductor and National Semiconductor, before founding Sequoia Capital in 1972." He "was one of the original investors in Apple Computer, Atari, LSI Logic, Cisco Systems, Oracle, and Electronic Arts."

1. "[Venture capital] is all about figuring out which questions are the right questions to ask, and since we don't have a clue what the right answer is, we're very interested in the process by which the entrepreneur get to the conclusion that he offers. Our business is a business of highly intuitive decision making and that fact that it's done in a scientific area doesn't make it scientifically practical to make decisions that way…"

"We recognize by Socratic questioning opportunities that are better than others and why."

"The art of storytelling is incredibly important. Learning to tell a story is critically important because that's how the money works. The money flows as a function of the story."

Michael Mauboussin points out in one of his wonderful slide decks: "The best in all probabilistic fields: 1) focus on process versus outcome and 2) always try to have the odds in their favor." If you read the many posts in this series on my blog you will see that all great investors focus on having a sound process. A great venture capitalist like Don Valentine learned early in his career the importance of having a sound investing process.

When you are in a business driven by optionality, like the venture capital business, investing a lot of resources in creating spreadsheets is a waste of time since the assumptions in it are guesses. The best way to quantify the opportunity is actually with a story. Chris Sacca puts it this way: "Good stories always beat good spreadsheets….Before drawing a single slide of your pitch deck, tell the story out loud to anyone who will listen. Again and again. Now you have your deck." My father's twin brother recently passed away and at his funeral one of his sons talked about how his dad liked to tell Ah Mo: Indian Legends from the Northwest stories collected by my great grandfather. My uncle knew well that the best way to get good at telling stories is to actually tell stories. He was also a great teller of jokes.

Telling stories is like public speaking: the more you do it, the better you get. If you must to refer to notes in telling your story, it will be vastly less effective. Speak from the heart in telling your story and you can say a tenth as much but have twice or more as much impact. Sometimes I meet an entrepreneur who reminds me of an Maya Angelou quote in I Know Why the Caged Bird Sings: "There is no greater agony than bearing an untold story inside you." This entrepreneur has an idea, but they can't express it well enough to get funded and attract the necessary team. In a case like that they need a co-founder who can tell the story. Or they need to focus on learning to be a storyteller. Some may consider Dale Carnegie and Toastmasters to be corny, but they work for many people who have not yet learned to tell a story.

2. "I've always been mystified by the critically important disc drive industry, without which the PC is a useless device. You have to be brilliant in electronics, you have to be brilliant in magnetics and you have to be brilliant in mechanics to get all that memory capacity in a very little place and do it for next to nothing. That market has never been rewarded financially for its brilliance."

The reason for this "mystery" described by Don Valentine is best explained by Charlie Munger: "there are all kinds of wonderful new inventions that give you nothing as owners except the opportunity to spend a lot more money in a business that's still going to be lousy. The money still won't come to you. All of the advantages from great improvements are going to flow through to the customers." At its heart, what Charlie Munger is taking about here is the importance of a moat. If a business does not create some barrier to entry, supply will be increased by competitors to a point where profit drops to the opportunity cost of capital.

Don Valentine is pointing out that many things which require sheer brilliance to create technically produce only consumer surplus and no producer surplus (profit). The level of profit of businesses in a given part of the economy can be vastly lower than their importance to society. For example, airlines and many manufacturers generate a lot more value to society than their profitability suggests.

3. "We have always focused on the market — the size of the market, the dynamics of the market, the nature of the competition — because our objective always was to build big companies. If you don't attack a big market, it's highly unlikely you're ever going to build a big company."

"Great markets make great companies." "We're never interested in creating markets – it's too expensive. We're interested in exploiting markets early."

"I like opportunities that are addressing markets so big that even the management team can't get in its way."

Do startups sometimes create new big markets? Sure, but Don Valentine is saying is it too expensive for his taste. The other point he is making is similar to a point made by Warren Buffett: "When an industry with a reputation for difficult economics meets a manager with a reputation for excellence, it is usually the industry that keeps its reputation intact." Don Valentine is saying that even a subpar management team can win in a market that is really big that is exploited early. And, of course, a first rate management team in that same situation will do even better.

4. "The key to making great investments is to assume that the past is wrong, and to do something that's not part of the past, to do something entirely differently. I asked what was the most outrageous thing you've ever done, knowing in my heart of hearts that I'd pick the one who'd done something most outrageous."

"What is important is to have the ability and willingness to be different. Great companies are built with different products by different people."

To make a dent in the universe, it will be necessary to be contrarian on something very important and be right about that contrarian view in a big way. This is true both in investing and in building a business. No one speaks more clearly on this point than Howard Marks. I've blogged about that here. No one has taught me more about this than Craig McCaw, who is about a different a thinker as I have ever met. Don Valentine's partner Michael Mortiz said once: "While there is danger in the venture business in getting too far away from the crowd, it can often pay to be unconventional. Don Valentine, the founder of Sequoia Capital, told me to trust my instincts, which lets you avoid getting dragged into conventional thinking and trying to please others."

5. "The trouble with the first time entrepreneur is that he doesn't know what he doesn't know. After a failure, he does know what he doesn't know and can beat the hell out of people who still have to learn."

A famous Confucius quote is: "True wisdom is knowing what you don't know." But the important corollary to that quote is that there are some things that you can't know, because some future states of the world are not known. A similarly famous Don Rumsfeld quote is: "As we know, there are known knowns; there are things we know we know. We also know there are known unknowns; that is to say we know there are some things we do not know. But there are also unknown unknowns — the ones we don't know we don't know." Risk comes from not knowing what you are doing and big problems can come from not knowing what you don't know.

I have done a few posts on the work of Zeckhauser and Taleb that you can read on this point (e.g., #1 here).

6. "The biggest consistent irritant were co-investors more intent on talking over management, rather than listening to them, in the board room."

"The world of technology thrives best when individuals are left alone to be different, creative, and disobedient."

Board members who thrive on helping others succeed are the right sort of board members to have. Board members who love to listen to themselves talk are a disaster. They are the equivalent of the people in the gym who love to stare at themselves when they work out. You might say that there is an inverse relationship between the need of a person to take selfie's and their suitability to be a board member.

7. "There are two things in business that matter, and you can learn this in two minutes- you don't have to go to business school for two years: high gross margins and cash flow. The other financial metrics you can forget… with high gross margins you can grow the company as fast as the market will allow."

"All companies that go out of business do so for the same reason – they run out of money."

Cash is like oxygen or water. Without it you are dead. A lot of things will be forgiven in business, but running out of cash is not one of them. Particularly in a subscription business you can have a huge mismatch between profit and cash flow. Expense can be stacked up in month one and cash coming in only over a long time. "The only unforgivable sin in business is to run out of cash" said Harold Geneen. The markets seem flush with cash right now. But that availability of new cash can disappear in a heartbeat.

8. "These binders cost money. Spend it on something more useful."

Don Valentine is a believer in cost control and sending messages by walking the talk. Give him something like a report in an expensive binder he is going to say something like "this is not a good way to create value." Famously frugal managers like Tom Murphy are not opposed to spending money as long as it creates value. One thing that people underestimate the importance of is the need to acquire customers in a cost effective way. Acquiring customers cheaply is such a beautiful way to make generating a profit easier. Conversely, paying too much to acquire a customer is not a solvable problem. The cost of acquiring a customer and the cost of serving a customer can be stone cold killers of a business.

9. "We don't spend a lot of time wondering about where people went to school, how smart they are and all the rest of that. We're interested in their idea about the market they're after, the magnitude of the problem they're solving, and what can happen if the combination of Sequoia and the individuals are correct."

One of the most attractive things about the venture capital world is that someone without credential x or y can still become a success. That is not to say that credentials are not relevant or helpful, especially early in a person's career, but history has shown that at least they are not required. One of the very best credentials, of course, is previously scoring a very big financial return, most importantly for the person considering your proposal.

10. "One of my jobs as a board member has been to counsel management to avoid distraction and to execute with constructive paranoia."

It is easy for a startup to lose focus. There are lots of "shiny new pennies" which people like journalists like to talk about that can cause distraction. Paying attention to what is actually going on in a business and avoiding distractions is essential. The importance of being paranoid is famously attributed to Andy Grove of Intel, who said once: "The ability to recognize that the winds have shifted and to take appropriate action before you wreck your boat in crucial to the future of an enterprise." Don Valentine is saying that vigilance is important and that the right sort of paranoia is constructive paranoia.

My father-in-law loved to joke that "just because you are paranoid doesn't mean they are out to get you." Andy Grove once wrote: "Business success contains the seeds of its own destruction. The more successful you are, the more people want a chunk of your business and then another chunk and then another until there is nothing." The bigger and more profitable you get, the bigger the X on your back serving as a target for competitors.

11. "Think about a company like Eastman Kodak – it was the leader in its market, and now it's gone. How can a $100 billion company go out of business? The answer is, easily and quickly."

When optionality driven by network effects pays off, the amount of that payoff in a digital world can be nonlinear. And when network effects disappear, the amount of loss and the speed it disappears is also nonlinear. In other words, network effects are a double-edged

sword – success can disappear just as fast as it was created. Actually, the loss of network benefits is more spectacular since it is something huge transforming into nothing. When network effects create benefits the early success is unseen and more surprising since the phenomenon involves "emergence." Something suddenly appearing in a way that is far greater than the sum of its parts can be surprising indeed.

12. "I just follow Moore's Law and make a few guesses about its consequences."

"The nature of silicon and software and storage go hand in hand. In the case of software, you just have to be more clever about the nature of the application. So all these things kind of tick along, feeding off each other."

Don Valentine's partner at Sequoia Michael Mortiz once said: "A chimpanzee could have been a successful Silicon Valley venture capitalist in 1986." It's been very good to be associated with Moore's law over the years. Underestimating Moore's law's power is easy to do since its impact is nonlinear. Humans are not well equipped to understand nonlinear phenomenon well since most things in life are linear.

Notes:

UC Berkeley Digital Assets – Interviews with Donald Valentine

Computer History Museum – Donald Valentine

Sequoia Profile – Founder Don Valentine

SiliconGenesis – Stanford Interview

GSB Stanford – What Problem Are You Solving?

GigaOm – Lessons From Silicon Valley VC Legend

Forbes Profile – Don Valentine, Venture Capitalist

TechCrunch – VC Titans Perkins and Valentine Articulate What Makes a Good VC

Stanford Talk (video)

A Dozen Things Taught by Warren Buffett in his 50th Anniversary Letter that will Benefit Ordinary Investors

February 28, 2015

1. "We are limited, of course, to businesses whose economic prospects we can evaluate. And that's a serious limitation: Charlie and I have no idea what a great many companies will look like ten years from now."

"My experience in business helps me as an investor and that my investment experience has made me a better businessman. Each pursuit teaches lessons that are applicable to the other. And some truths can only be fully learned through experience."

Treat an investment security as a proportional ownership of a business! A security is not just a piece of paper. Not all businesses can be reasonably valued. That's OK. Put them in the "too hard pile" and move on. See my #3 in my Bill Ackman post.

2. "Periodically, financial markets will become divorced from reality."

"For those investors who plan to sell within a year or two after their purchase, I can offer no assurances, whatever the entry price. Movements of the general stock market during such abbreviated periods will likely be far more important in determining your results than the concomitant change in the intrinsic value of your Berkshire shares. As Ben Graham said many decades ago: 'In the short-term the market is a voting machine; in the long-run it acts as a weighing machine.' Occasionally, the voting decisions of investors – amateurs and professionals alike – border on lunacy."

Make bi-polar Mr. Market your servant rather than your master! See my Howard Marks post or my Jason Zweig post.

3. "A business with terrific economics can be a bad investment if it is bought for too high a price. In other words, a sound investment can morph into a rash speculation if it is bought at an elevated price. Berkshire is not exempt from this."

Buy at a bargain price which provides a margin of safety! See my Seth Klarman, Bill Ackman or Howard Marks posts.

4. "As Tom Watson, Sr. of IBM said, 'I'm no genius, but I'm smart in spots and I stay around those spots.'"

Circle of competence! Risk comes from not knowing what you are doing. See #6 in my Joel Greenblatt post.

5. "Decades ago, Ben Graham pinpointed the blame for investment failure, using a quote from Shakespeare: 'The fault, dear Brutus, is not in our stars, but in ourselves.'"

Most investing mistakes are psychological! Investing is simple, but not easy. Buffett has a great system, but his emotional and psychological temperament is especially suitable for investing. Like Charlie Munger, he is highly rational as human beings go. Everyone, including Buffett, makes mistakes. You can do very well in investing by just avoiding stupid mistakes. See my post on Kahneman or Michael Mauboussin.

6. "It is entirely predictable that people will occasionally panic, but not at all predictable when this will happen. Though practically all days are relatively uneventful, tomorrow is always uncertain. (I felt no special apprehension on December 6, 1941 or September 10, 2001.) And if you can't predict what tomorrow will bring, you must be prepared for whatever it does. Investors, of course, can, by their own behavior, make stock ownership highly risky. And many do. Active trading, attempts to "time" market movements, inadequate diversification, the payment of high and unnecessary fees to managers and advisors, and the use of borrowed money can destroy the decent returns that a life-long owner of equities would otherwise enjoy. Indeed, borrowed money has no place in the investor's tool kit: Anything can happen anytime in markets. And no advisor, economist, or TV commentator – and definitely not Charlie nor I – can tell you when chaos will occur. Market forecasters will fill your ear but will never fill your wallet."

Buy at a bargain and wait! See my post on avoiding forecasting. See also Seth Klarman and Howard Marks posts on this point. You can determine that buying an investment *now* is a bargain that creates a margin of safety based on a valuation process, but you cannot predict *when* the price will rise. So you wait.

7. "Gains won't come in a smooth or uninterrupted manner; they never have."

Investing results will always be lumpy! See #10 in my Henry Singleton post.

8."Stock prices will always be far more volatile than cash-equivalent holdings. Over the long term, however, currency-denominated instruments are riskier investments – far riskier investments – than widely-diversified stock portfolios that are bought over time and that are owned in a manner invoking only token fees and commissions. That lesson has not customarily been taught in business schools, where volatility is almost universally used as a proxy for risk. Though this pedagogic assumption makes for easy teaching, it is dead wrong: Volatility is far from synonymous with risk. Popular formulas that equate the two terms lead students, investors and CEOs astray."

"It is true, of course, that owning equities for a day or a week or a year is far riskier (in both nominal and purchasing-power terms) than leaving funds in cash-equivalents. That is relevant to certain investors – say, investment banks – whose viability can be threatened by declines in asset prices and which might be forced to sell securities during depressed markets. Additionally, any party that might have meaningful near-term needs for funds should keep appropriate sums in Treasuries or insured bank deposits."

Risk is not the same as volatility! See #6 in my Jason Zweig post.

9. For the great majority of investors, however, who can – and should – invest with a multi-decade horizon, quotational declines are unimportant. Their focus should remain fixed on attaining significant gains in purchasing power over their investing lifetime. For them, a diversified equity portfolio, bought over time, will prove far less risky…."

Most investors should buy a diversified portfolio of low fee index funds/ETFs! See my posts on John Bogle and asset allocation.

10. "Huge institutional investors, viewed as a group, have long underperformed the unsophisticated index-fund investor who simply sits tight for decades. A major reason has been fees: Many institutions pay substantial sums to consultants who, in turn, recommend high-fee managers. And that is a fool's game."

Follow the cost matters hypothesis! See #1 and #3 in my John Bogle post.

11. Cash, though, is to a business as oxygen is to an individual: never thought about when it is present, the only thing in mind when it is absent." "When bills come due, only cash is legal tender. Don't leave home without it."

The only unforgivable sin in business is to run out of cash! See #7 in my post on Don Valentine. The need for some cash as dry powder applies to everyone, the only question is how much cash to have on hand.

12. "We will never play financial Russian roulette with the funds you've entrusted to us, even if the metaphorical gun has 100 chambers and only one bullet. In our view, it is madness to risk losing what you need in pursuing what you simply desire."

Black Swans can appear any time! People will try to get you to buy things by hiding this risk. See my post on Nassim Taleb.

A Dozen Things I've Learned from David Tepper about Investing

March 7, 2015

David Tepper is an the founder of the hedge fund Appaloosa. Bloomberg writes that Appaloosa "invests in the equity, fixed income, and hedging markets. For the fixed income investments, the firm invests in high-yield bonds, bank loans to highly-leveraged companies, sovereign debt, debt of distressed companies, and other debt securities. It employs a fundamental analysis to make its investments." The Reformed Broker (Josh Brown) adds: "If you had put a million dollars with David Tepper when he started Appaloosa 20 years ago, it would now be worth $149 million net of fees."

1. "We have this saying: The worst things get, the better they get. When things are bad, they go up."

This is David Tepper's version of Warren Buffett's view that the time to be greedy is when others are fearful. The principal cause of significantly mispriced assets is when Mr. Market is fearful. If you can be brave and aggressive at such times perhaps you have one of the attributes of a successful distressed asset investor. The problem is that vastly more people think they can be brave and aggressive at times like this than actually can do so. While Warren Buffett and David Tepper view the same phenomenon (fear) as an investing opportunity, the way they capitalize on the opportunity is very different. Both Tepper and Buffett know that Mr. Market is bi-polar, but they operate in different ways (e.g., operate in different time scales, with different circles of competence; different systems; different temperaments).

Most everyone should buy a diversified portfolio of low-fee/no load indexed investments. The fact that a very small number of people like David Tepper exist does not change that fact. Some fund managers find it easier to give advice by pretending that people like David Tepper don't exist since it makes their narrative simpler and their job easier. Academics are often hired to deliver a simple message which basically says: "It is impossible to beat the market. It

can't be done." This approach is attractive since it means that no client must be told that they are lacking the skills or temperament to succeed as an active investor. A message delivered to a client that essentially says "it is impossible to beat the market" goes down a lot smoother than: "it is impossible for you and most everyone to beat the market." Many clients benefit from hearing this message since otherwise they would try to beat the market and inevitably underperform. The motivation of the fund saying "you can't beat the market, period" is arguably not improper. It benefits most all people to say this.

The reality is that investors like David Tepper do exist. But the bad news is: 1) the small number of people like him most likely won't take you on as a limited partner and 2) you are very unlikely to be able to do what investors like David Tepper, Seth Klarman or Howard Marks can do on your own.

2. "Markets adapt. People adapt."

People have a tendency to extrapolate from the present in trying to predict the future. Many pundits make their living extrapolating X or Y to the sky or to the ground depending on the most recent trend. David Tepper makes the point with an example: **"In 1898, the first international urban-planning conference convened in New York. It was abandoned after three days because none of the delegates could see any solution to the growing crisis caused by urban horses and their output. In the Times of London, one reporter estimated that in 50 years, every street in London would be buried under nine feet of manure."** The nature of capitalism is that often the remedy for high prices is high prices and low prices is low prices. Incentives are created and people respond in a capitalist economy by adapting based on price signals. David Tepper likes to make bets against people who don't believe markets will adapt. He stuffs perma-bears and perma-bulls in his game bag.

3. "We won't stop if we're down a little bit. We don't freeze. We keep investing with a disciplined, logical approach."

Michael Mauboussin points out: "You must recognize that even an excellent process will yield bad results some of the time. If you are going to be the in the business that David Tepper is in you need to stay focused on your process, rather than any specific short term result. If you make an investment and the odds are substantially in your favor and you generate a loss, that is OK as long as your process was sound.

A sound process exists when the process is net present value positive (i.e, genuine investing). If the process is net present value negative, that is gambling/speculation/a fool's errand. Howard Marks points out the key elements in his process as follows: "a) have an approach b) hold it strongly c) accept that, no matter what, there will be times where your approach doesn't work, and d) work within your own skill set and personality, not someone else's." David Tepper, Howard Marks, John Bogle, George Soros are not you and vice versa. Your investing approach should be consistent with who you are. Everyone is different. In addition to being disciplined and logical, David Tepper believes: **"We're pretty unemotional when we invest"** which is a very good thing since most mistakes in investing are based on emotional or psychological errors.

4. "We invest in a lot of bonds and preferred (stock), which we can convert to equity. It not as risky as people make it out to be."

When you make an investment in distressed debt your ownership interest can (under certain circumstances) convert into equity ownership, which gives you certain control rights that can be helpful in generating the return you desire. People who understand areas like bankruptcy and finance can do things like determine what is likely to be the "fulcrum security" which will convert into sufficient equity to exert some measure of control when the business restructures via a plan of reorganization. This sort of activity combines investing with the profession of distressed investing/bankruptcy. Distressed investing is not an activity where amateurs and people learning on-the-job experience a positive result. That David Tepper can do it does not mean that you can do it.

5. "This company looks cheap, that company looks cheap, but the overall economy could completely screw it up. The key is to wait. Sometimes the hardest thing to do is to do nothing."

People have a tendency to believe there is a prize for hyperactivity. Not only is there not a prize but hyperactivity instead imposes significant penalties. Warren Buffett likes to say there are no "called strikes" in investing. For this reason, sometimes sitting on your hands can be the very best thing you can do as an investor. Patience is key. But so is aggression when the time is right, as was the case, for example, in 2009. The combination of being patient and yet sometimes aggressive seems odd for many people, but it is the right approach. When bargains do appear it is not only a rare event, but a fleeting event. If you snooze when a bargain appears, you lose. Fortune favors the person who is patient, brave, aggressive and swift to act when the time is right. Times like March of 2009 appear rarely in a lifetime for an investor.

6. "For better or worse we're a herd leader. We're at the front of the pack. We are one of the first movers. First movers are interesting; you get to the good grass first, or sometimes the lion eats you."

To outperform the market you must be contrarian, and you must be right about that contrarian view often enough so that the financial math works. But there is big risk and uncertainty in this approach. The good news is that because most people would rather fail conventionally than succeed unconventionally assets can sometime be mispriced. Howard Marks, again, is on the mark: "Non-consensus ideas have to be lonely. By definition, non-consensus ideas that are popular, widely held or intuitively obvious are an oxymoron. Thus such ideas are uncomfortable; non-conformists don't enjoy the warmth that comes with being at the center of the herd. Further, unconventional ideas often appear imprudent. The popular definition of "prudent" – especially in the investment world – is often twisted into 'what everyone does.'"

7. "There is a time to make money and a time to not lose money."

There is a time to reap and a time to sow. There is also a time to be defensive and not lose money. Sometimes almost all potential investments are properly put in the "too hard" pile. At times like this, the best thing you can do is preserve what you already have. Investing is a probabilistic activity. If you don't have an investing thesis that is the output of a sound investing process which is net present value positive, then don't invest. It's that simple. Having a "too hard" pile is such a huge advantage in life.

8. "We don't want to be bigger than we can invest."

"The question is what size gets you – except more fees for the manager. But it doesn't necessarily make the investor more money."

Part of what David Tepper is saying is that he would rather be an investor than an asset gatherer. A smaller fund in which he has a greater personal stake can be a far better outcome for him than trying to make a lot of fee-based income from investing the capital of other investors. He also believes there is no optimal size for every fund. Size matters. David Tepper explains: **"Say you want to buy 5 percent of a $2 billion company, and have it be meaningful. That means it's a 1 percent position in a $10 billion fund. So if you're an equity fund, if you keep getting bigger and get to $20 billion, that means your position is now only a half percent position. The 1 percent position doesn't do much for the fund and so the half percent position does half as much. So there's an aspect to the business, in equity funds especially, that gets funky on size."** The other problem that people have learned the hard way in many cases is that as you grow assets under management, it becomes harder to find opportunities. For example, Charlie Munger points out: "The future will be harder for Berkshire Hathaway – we're so big – it limits our investment options. But, something has always turned up."

9. "Replaying losses in your head is the only way you learn from your mistakes."

As I said in my post about Keith Rabois, you can't simulate investing. The way to learn to invest, is to actually invest real money (preferably your own money) so you have actual skin in the game. And when you invest and fail, you should be "rubbing your nose in your mistakes" as Charlie Munger suggests. When you inevitably make mistakes and get feedback, if you don't learn from that you are not going to build up an edge versus other investors.

10. "Some of our best positions were ones we initially lost money on."

An investor can be too early or too late and still win. David Tepper is not afraid to lose money if he believes he has followed a sound process and performed a sound analysis. Most people can't put their fears aside and so they often sell at the worst possible time. This is sometimes called "performance chasing" or "the behavior gap." A very small number of people have ice in their veins when it comes to investing. David Tepper knows fearlessness is a key part of his investing edge and that without an edge investment out-performance is unlikely. That you will have the same fearlessness as David Tepper, particularly if you will

lose your home or will live in poverty as a retiree if you make a mistake, is highly unlikely. Betting fearlessly with what gamblers call 'house money' is far easier than making bets where one possible outcome is that you lose your house.

11. "After you work on Wall Street it's a choice, would you rather work at McDonalds or on the sell-side? I would choose McDonalds over the sell-side."

The sell-side provides services to clients for a fee. There's an old joke that goes like this: "What's the difference between the buy-side and the sell-side? The buy-sider curses at you and hangs up the phone. The sell-sider hangs up the phone and then curses at you." The sell-side is selling and will tell you what you want to hear. The sell-side's job is to directly or indirectly generate fees. Sell-siders do not have what Nassim Taleb calls "skin-in-the-game."

Ben Carlson has described the life of a sell-sider: "When I worked on the sell-side the head of research pulled up the total number of buy and sell recommendations from every analyst during one meeting, there were only 3 sell calls — in the entire firm. He was basically begging these analysts to make a sell recommendation or two. Yet they weren't really budging because… Relationships Matter. What I came to realize is that all of the number crunching didn't matter nearly as much as the meetings and conference calls with company management. These relationships all carried much more weight than the financial models that the junior analysts toiled away at back at the office. The analysts didn't seem to want to make a critical call against a company in fear of upsetting the management relationship where they got their questions answered."

12. "What's bad is good and what's good is bad, right? You've got a long life. Don't get upset by setbacks. Setbacks are another way to say opportunity."

Opportunity comes in strange, lumpy, and often nonlinear ways. Success rarely takes the form of a steady process similar to climbing a ladder, nor does failure operate in the other direction. As I pointed out in my post on Reid Hoffman, modern careers are more like a jungle gym on a playground than a ladder. There are many examples that illustrate this point. Michael Bloomberg was fired before he started his information services business. David Tepper himself was passed over for a partnership at Goldman, which ended up making him both richer and happier with his life.

If life deals you lemons, make lemonade. Resiliency is a far greater determinant of success in life than most people imagine.

Notes:

The Reformed Broker – The Apotheosis of David Tepper

NY Magazine – Ready to be Rich

Pittsburgh Tribune – Investor David Tepper goes where others don't dare

Bloomberg – How Tepper Makes 22 Billion

The Alpha Masters – Quotes from David Tepper

2007 speech at Carnegie Mellon

A Dozen Things I've Learned from Morgan Housel about Investing and Life

March 14, 2015

1. "'I don't know' are three of the most underused words in investing."

"What's really interesting about finance – and I think this is true for a lot of fields whether you're in physics, math, chemistry, history, or whatever it is – the more you learn, the you more you realize how little you know."

There is nothing more fundamental to investing than understanding that risk comes from not knowing what you are doing. And as Morgan Housel is saying here: the more you know, the more you know that there is even more that you do not know. If you are not getting more humble as you: 1) get older, 2) grow as a person, or 3) learn, then you are not paying attention. The best investors keep their *circle of competence* tightly defined and limited in scope. Skills can atrophy or become outdated. New competencies can be developed with time and effort.

What you are doing when you are investing is buying an ownership interest in an actual business. No matter how hard you may work to know everything about that business, the phenomenon effecting that business, and the markets in which it competes, there always be much that you do not know. Even if you may chose an index-based approach to investing, you are making choices about what types and amounts of assets to buy. The very best investors have been able to develop systems that deal effectively with the fact that investing is probabilistic process. The best systems are designed to enable the investor to buy and sell assets in a way that is "net present value positive" over time after fees and expenses. Systems that do not produce net present value positive results over time after fees and expenses, are speculation and are not investing.

2. "There are no points awarded for difficulty."

The best investors make frequent use of a "too hard" pile when it comes to investing. One of the many things that investors like Morgan Housel have learned from great investors like Charlie Munger is how much investing performance can be improved by just avoiding some of the boneheaded mistakes made by other investors. For example, there is no shame in admitting that a given business can't be valued. There are plenty of other businesses that are understandable which present investment decisions that are not very difficult. Most of the

time what an investor should do is nothing. And there is no better time to do nothing than when something is difficult.

On this point Warren Buffett likes to say "I don't look to jump over 7-foot bars: I look around for 1-foot bars that I can step over." These 1-foot bar jumping opportunities with big financial payoffs don't appear very often, but when they do, it is wise to bet big.

3. "Three of the most important variables to consider are the valuations of stocks when you buy them, the length of time you can stay invested, and the fees you pay to brokers and money managers."

"The single most important variable for how you'll do as an investor is how long you can stay invested. I'm always astounded when I think about compound interest and the power that it has for investing. Time is massively powerful."

Each of the points made here by Morgan Housel has a major champion. On the first point, Howard Marks points out: "It shouldn't take you too long to figure out that success in investing is not a function of what you buy. It's a function of what you pay." On the second point, Charlie Munger puts it simply: "Understanding both the power of compound interest and the difficulty of getting it is the heart and soul of understanding a lot of things." On the third point there is John Bogle: "You get what you don't pay for."

An excerpt of a Motley Fool post called *I Prefer to Keep Things Simple*, by Morgan Housel helps explain compounding:

"What [too often] happens … is that the magic of compounding returns is overwhelmed by the tyranny of compounding costs. It's a mathematical fact.

You've probably heard the story about the guy who invented the game of chess.

It goes like this: An inventor brought his chess board to the emperor of China, who was so impressed he offered to grant the man one wish. The inventor had a simple wish: He requested one grain of rice for the first square on the board, two grains for the second square, four for the third, eight for the fourth, and so on. Sounding like a modest proposal, the emperor agreed. But filling the chess board's last 10 squares would have required 35 quintillion grains of rice – enough to bury the entire planet. Unamused, the emperor had the inventor beheaded.

While I doubt the story is true, its message is important to understanding the power of compound interest: When things grow exponentially, gains look tiny at first, modest in the middle, and then — very suddenly — they shoot utterly off the charts."

4. "[Investing] is just buying and waiting."

It is hard for some people to understand the difference between 1) waiting and 2) predicting. Fundamentally, the difference between waiting and predicting is the difference between focusing on what to buy by finding an asset selling at a discount to value right ***now*** versus trying to guess about ***when*** in the future the value might rise. Price is not the same thing as value. Price is what you pay for an asset and value is what you get in buying an asset. Only rarely doe price equal value. James Montier adds: "We need to stop pretending

that we can divine the future, and instead concentrate on understanding the present, and preparing for the unknown." We have lots of information about the present and exactly zero information about the future. To work hard to understand the present moment in time is not to think you can predict **when** something will happen in the future. You may be working from an assumption that sometime over a ten year period Mr. Market will raise price of as asset so it is equal to or greater than value. But it is a fool's errand to try to predict precisely when it will happen. When it happens, it happens. You will "know it when you see it" if you understand value.

5. "It's much easier to say 'I'll be greedy when others are fearful' than to actually do it. But those who can truly train themselves to be skeptical of outperformance and attracted to underperformance will likely do better than most. They have an advantage."

Buying stocks when Mr. Market is fearful is easier to say than do. You can't simulate investing. The best way to learn to invest is to invest. The feelings involved in investing are primal and often hard to control. For example, humans are simply not hard wired to be contrarian when others are full of fear. You can read all the books, articles and speeches about being fearless when others are fearful and yet fail to be calm when the time comes. This presents a fundamental problem in that this is the best time to be buyer of assets. The best investors are actually nostalgic for times like March of 2009 when the market was rife with fear and uncertainty. Screaming buys based on valuation like those that existed in March of 2009 may appear only two to three times in an investing lifetime. By the time you get good at this key skill you may be too old to take advantage of the opportunity.

6. "The most important thing to know when you look at long term financial history is that volatility in the stock market is perfectly normal."

Anyone who believes in the Mr. Market metaphor understands that volatility is both inevitable and the source of an opportunity for a rational investor. Charlie Munger: "To [Ben] Graham, it was a blessing to be in business with a manic-depressive who gave you this series of options all the time." It is volatility that creates the mispriced assets which present an opportunity for investors. Volatility is one type of risk. For example, if you're retiring or have tuition bills to pay at a certain time. While volatility is one type of risk you must face, it's not the only risk. Why do some investment managers try to equate risk with volatility rather than just considering it as one important type of risk? They want you to believe that volatility is equal to risk because volatility is a major risk for them since, if assets drop in price, investors will flee from their services. They also want you to believe that risk can be expressed a number and controlled by magic formulas with Greek letters in them you do not understand.

7. "Saving can be more important than investing."

"The most powerful way to grow your money is learning to live with less, since you have complete control over it."

It is reasonable to assume that over long periods of time the return on stocks will be about 6% more than the return on cash. You can quibble with that estimate but not too much. The idea that you can invest your way to retirement is simply not possible without savings. This is especially true since most investors chase performance and earn less that an average return of the market, especially after fees and expenses. "Boston College's Center for Retirement Research found that the two most important factors for creating a retirement nest egg are one's savings rate and the age of retirement. "If people could work until they're 70, they would have a much higher chance of having a secure retirement. Social Security is higher if you wait until age 70, and it gives your 401(k) assets a longer chance to grow, and it reduces the number of years you have to support yourself," says Alicia Munnell, the center's director. Less important was the rate of return earned on investments."

8. "Most financial problems are caused by debt."

"Most people's biggest expense is interest, which comes from living beyond your means, and buying things you think will impress others, which comes from insecurity. Avoid these two, and you'll grow richer than most of your peers."

Debt causes many problems, the worst of which is that the magic of compounding is working against you instead of for you. Leverage can also create situations where underperformance takes you completely out of the investing process. Since "staying invested" is a key to financial success anything that takes you out of the process is a very bad thing. As Charlie Munger has said: "I've seen more people fail because of liquor and leverage – leverage being borrowed money." James Montier adds: "Leverage can't ever turn a bad investment good, but it can turn a good investment bad. When you are leveraged you can run into volatility that impairs your ability to stay in an investment which can result in "a permanent loss of capital."

9. "It can be difficult to tell the difference between luck and skill in investing."

Investing involves both skill and luck. Sorting out how much of a given result is skill versus luck is neither easy or always possible. The very best books on this topic have been written by Michael Mauboussin, including *The Success Equation*. Howard Marks also has useful view on the difference between luck and skill and investing: "Success in investing has two aspects. The first is skill, which requires you to be technically proficient. Technical skills include the ability to find mispriced securities (based on capabilities in modeling, financial statement analysis, competitive strategy analysis, and valuation all while sidestepping behavioral biases) and a good framework for portfolio construction. The second aspect is the game inwhich you choose to compete. You want to find games where your skill is better than the other players. Your absolute skill is not what matters; it's your relative skill." Warren Buffet describes the object of the process simply: "Take the probability of loss times the amount of possible loss from the probability of gain times the amount of possible gain. That is what we're trying to do. It's imperfect but that's what it's all about."

10**. "Investing is overwhelmingly a game of psychology."**

"Almost invariably the best investors are the people who have control over their emotions."

Most mistakes in investing are psychological or emotional in nature. Being rational about investing is a task that has no finish line – it is a constant struggle for any human to be rational. It is harder for some people to be rational than others, but everyone is not rational at times. My post on Daniel Kahneman and James Montier examine this in greater depth. Housel elaborates: **"Investing is very complicated. It's an interaction of psychology and math and history and politics, and it's all just mushed together and it's really complicated. It's always more complicated than we think it is. My journey has been one towards growing gradually more humble over the years. I would say each year that goes by, I realize that I know less and less."**

11. "Daniel Kahneman's book *Thinking Fast and Slow* begins, 'The premise of this book is that it is easier to recognize other people's mistakes than your own.' This should be every market commentator's motto."

It is an unfortunately aspect of human nature that we do not have perspective on ourselves. Humans have developed a series of heuristics that make it hard for us, especially in a modern world, to see our own mistakes. If you have an interest in exploring this topic, Daniel Kahneman explains why this is true in this excerpt from his book:

"I'm better at detecting other people's mistakes than my own…. When you are making important decisions and you want to get it right, you should get the help of your friends. And you should get the help of a friend who doesn't take you too seriously, since they're not too impressed by your biases."

Having a posse of people around you who are afraid to tell you that the emperor has no clothes is not helpful in overcoming this bias. Morgan Housel cites Charlie Munger's wisdom on this problem: **"Only in fairy tales are emperors told they're naked."** Pavlovian association and other heuristics Morgan has written about acting together in the form of a lollapalooza make things worse.

12. "When you think you have a great idea, go out of your way to talk with someone who disagrees with it. At worst, you continue to disagree with them. More often, you'll gain valuable perspective. Fight confirmation bias like the plague."

"Starting with an answer and then searching for evidence to back it up. If you start with the idea that hyperinflation is imminent, you'll probably read lots of literature by those who share the same view. If you're convinced an economic recovery is at hand, you'll probably search for other bullish opinions. Neither helps you separate emotion from reality."

"Charles Darwin regularly tried to disprove his own theories, and the scientist was especially skeptical of his ideas that seemed most compelling. The same logic should apply to investment ideas."

I have always loved this Charlie Munger quote on confirmation bias: "Most people early achieve and later intensify a tendency to process new and disconfirming information so that any original conclusion remains intact. …The human mind is a lot like the human egg, and the human egg has a shut-off device. When one sperm gets in, it shuts down so the next one can't get in. … And of course, if you make a public disclosure of your conclusion, you're pounding it into your own head." The trick is to really listen to other people who you trust.

Ray Dalio's investing process is very focused on this approach. Set out immediately below are two paragraphs on Dalio's view:

"There's an art to this process of seeking out thoughtful disagreement. People who are successful at it realize that there is always some probability they might be wrong and that it's worth the effort to consider what others are saying — not simply the others' conclusions, but the reasoning behind them — to be assured that they aren't making a mistake themselves. They approach disagreement with curiosity, not antagonism, and are what I call 'open-minded and assertive at the same time.' This means that they possess the ability to calmly take in what other people are thinking rather than block it out, and to clearly lay out the reasons why they haven't reached the same conclusion. They are able to listen carefully and objectively to the reasoning behind differing opinions.

When most people hear me describe this approach, they typically say, "No problem, I'm open-minded!" But what they really mean is that they're open to being wrong. True open-mindedness is an entirely different mind-set. It is a process of being intensely worried about being wrong and asking questions instead of defending a position. It demands that you get over your ego-driven desire to have whatever answer you happen to have in your head be right. Instead, you need to actively question all of your opinions and seek out the reasoning behind alternative points of view."

Both Morgan Housel and Charlie Munger cite Darwin as a model for people working hard to avoid confirmation bias. Here's Munger: "The great example of Charles Darwin is he avoided confirmation bias. Darwin probably changed my life because I'm a biography nut, and when I found out the way he always paid extra attention to the disconfirming evidence and all these little psychological tricks. I also found out that he wasn't very smart by the ordinary standards of human acuity, yet there he is buried in Westminster Abbey. That's not where I'm going, I'll tell you."

A Dozen Things I've Learned from Startup L. Jackson About Venture Capital Investing and Startups

March 28, 2015

There has been a lot of speculation about the identity of Startup L. Jackson. One theory is that "he" is actually composed of machine learning algorithms and a database of the insight of a few well-known venture capitalists. Evidence will be presented below that Startup L. Jackson's views suspiciously track the consistently expressed views of specific highly successful venture capitalists. This evidence points toward a vast conspiracy, probably orchestrated by Elon Musk. In short, Startup L. Jackson may be an example of the type of super-advanced artificial intelligence that will eventually spell doom for humanity. Or not. The only other alternative to this conspiracy thesis would be that there are fundamental principles and best practices involved in venture capital and that learning from the most successful venture capitalists is wise. In other words, Startup L Jackson is either a cutting edge example of artificial intelligence that will ultimately doom humanity or a world class venture capitalist who speaks the unvarnished truth about the venture capital industry.

While the best venture capitalists are all unique, they inevitably share certain bedrock methods of approaching their business. Startup L. Jackson has chosen to convey his ideas in a humorous and entertaining way. I find his approach refreshing and helpful. He is trying to educate and help others. As Charlie Munger said once: "The best thing a human being can do is to help another human being know more."

1. "Raise enough that your business is "real" by the time you have six months or less of cash. What that means will depend on your business, but you will never again be able to raise on a dream."

"Raise enough that if things go well you can get to the A."

When a startup is raising a seed round they are often able to get away with selling a dream because if they are audacious enough in attacking a massive market what they plan to do can't be captured in a spreadsheet. Chris Dixon makes that point in #8 here when he points out: "If you are arguing market size with a VC using a spreadsheet, you've already lost the debate." That is why at the seed stage the best pitch is a great narrative. The story/dream must be audacious and compelling and take place in a massive market with just the right team. Don Valentine also lays it out in #1 here: "The art of storytelling is incredibly important. Learning to tell a story is critically important because that's how the money works. The money flows as a function of the story."

How much money should you raise? Startup L. Jackson uses an "enough to get to real" standard because he is very focused on the need for delivering metrics at an A round. Josh Kopelman recently argued: "You should target 18 to 24 months of runway post Series Seed. The best time to raise follow-on capital is when you don't need it, and 2 years of runway gives you the best chance to land in that situation." Mark Suster has given advice on this, and Fred Wilson has a view you can see in a video here that argues in part that 'less can be more'. Fred Wilson seems more focused on the amount raised by the startup when he said "I just think if you're forced to figure out how to get from here to here on a million bucks, if you're good, you'll figure out how to do it."

Startup Jackson points out that Founders should keep in mind that venture capital is a cyclical industry, as pointed out many times by Bill Gurley. Doug Leone has also discussed dilution here when he says: "Be incredibly, ruthlessly selfish with your equity."

The hard part about raising money as a founder is raising enough capital so that you can focus on the business, have a margin of safety and enjoy significant optionality but *still* have the discipline to focus on aspects of the business that are genuinely important instead of four different things that are insanely distracting. Bill Gurley makes that clear when he says: "We like to say that 'more startups die of indigestion than starvation." If you raise too much money you can end up solving things with money instead of with innovation and great company culture. Keith Rabois also makes that point: "Many entrepreneurs are raising more money than they need and it can cause derivative consequences down the road that are not healthy."

2. "Power laws rule everything around me."

"Most startup outcomes are binary. Optimizing for the size of your slice is almost never a good idea if the pie is big. Raise enough to bake a big pie."

The data undeniably shows that financial success in venture capital reflects a power law. John Doerr makes it in #1 here: "The key insight is that actual [VC] returns are incredibly skewed. The more a VC understands this skew pattern, the better the VC. Bad VCs tend to think the dashed line is flat, i.e. that all companies are created equal, and some just fail, spin wheels, or grow. In reality you get a power law distribution" Peter Thiel basically says that if you end up with a Unicorn result (a big pie), everyone gets rich. A venture capitalist or a founder getting a very high share of a 0% return is neither helpful or wise.

3. "The worst possible thing you can do to your business is raise just enough money to throw up mediocre metrics right around the next round, especially with a high valuation you can't back off of."

Broken cap tables are a huge problem as Fred Wilson has noted, Jim Breyer discussed (#6), and Sam Altman states simply: "don't forget the prime directive of fundraising strategy: set things up so that you never do a down round. The badness of a down round is difficult to overstate; in fact, the threat of that is the best reason not to take a super high price when you're offered one. If you raise at such a price, everything has to go perfectly in order for your next round to be an up one." Metrics referred to by Startup L Jackson above will be discussed more below, including the Five Horsemen (CAC, WACC, ARPU, COGs and churn) and their friend customer lifetime value.

4. "The existential threat to early-stage startups is almost always lack of demand. There'll be infinite VC to fix tech if you clear that hurdle."

Ann Winblad agrees with Startup L Jackson when she says: "Warren Buffet's quote: 'The market bats last' means 'Have you figured out: are there customers out there?' 'Do the dogs have their head in the dish? Are the customers buying?'"

Getting to product/market fit and proving that "dogs are actually eating the dog food" is essential. If you want to know even more about how product/market fit fits into building a business Paul Graham lays it out here: "You need three things to create a successful startup: to start with good people, to make something customers actually want, and to spend as little money as possible." Too many people forget that you need to solve a real customer problem. Without that, the business is toast (not even the artisanal variety). Reid Hoffman describes the other key element here: "If your technology is a little better or you execute a little better, you're screwed. Marginal improvements are rarely decisive."

5. "Most successful startups are overnight success. That night is usually somewhere between day 1000 and day 3500."

"You can recognize a company that isn't executing by the arrows in its back."

"If you're talented, don't let the tech press do your thinking. You'd be better off relying on Dr. Seuss books."

"If you're competing on price, it better be the case that the incumbent's cost structure doesn't allow them to do the same."

"BigCo may be late to market, but if there's not a winner by the time they show up, it'll probably be them. Go faster."

As Rich Barton points out: "Ideas are cheap. Execution is dear." Jeff Bezos is always thinking: "Your margin is my opportunity." Relentless perseverance is a requirement for any founder. Reid Hoffman asks: "Where's the contrarian thinking that, if they turn out to be right, could be really, really big? Consensus indicates it's probably not a total break-out project. If your thinking isn't truly contrarian, there's a dog pile of competitors thinking the same thing, and that will limit your total success."

Ann Winblad has said (#3): "We invest in markets. If the opportunity is not large, then the business, independent of the people or the technology, will fail. Because of this issue of intense competition and capital efficiency, opportunities always get smaller as soon as you fund the company." If you can't get to $100 million in revenue the math does not work for the venture capitalist since the failure rate is so high, says Bill Gurley. Fred Wilson has also made that point (#1).

6. "Can we start referring to the obligatory five year revenue forecast slide as uniporn?"

"Figure out how long you think it'll take you to get there. It's hard to go fast for extended periods of time. Be realistic about that ski-slope graph you made in YC. It might not last for the next 24 months."

Michael Mortiz could not make this point more simply: "Five-year plans aren't worth the ink cartridge they're printed with." Good venture capitalists mentally giggle when see hockey stick shaped distribution curves based on unrealistic assumptions that don't map to reality. Chris Dixon has talked about this (#8): "If you can't make the case that you're addressing a possible billion dollar market, you'll have difficulty getting VCs to invest." Bill Gurley makes the point as well: "If your idea is not something that can generate $100 million in revenue, you may not want to take venture capital."

7. "Take your budget and pad it by 50%. Shit happens, particularly in startups."

"You can iterate your way out of stupid ideas, but you can't iterate your way out of stupid."

Heidi Roizen has said: "Things outside of your control will happen. You need to lean into this fact." One great way to deal with uncertainty is to have optionality. Warren Buffett treats cash as a call option with no expiration date or strike price. Warren Buffett also says that "cash combined with courage in a crisis is priceless." Vinod Khosla describes the situations faced by most founders: "Bad times come for every startup – I haven't seen a single startup that hasn't gone through a bad time. Entrepreneurship can be very depressing. If you really believe in your product, you stick with it."

8. "Effectiveness is knowing 10 things will kill your startup this year and being able to block out all but the one that will kill it this month."

"Many a startup has failed selling 'better' products."

"Early customers were down and they rolled right with it, We raised our lifetime value by a thousand percentages."

"10x better = hard to build, easy to sell. Marginally better = easy to build, hard to sell."

"Being first to market with the right tech but a shitty UX is the same as being late."

"If you generate a little value for a lot of users in consumer, you're Facebook. Do the same in B2B, you're an acquihire."

These operational points made by Startup L Jackson remind me of a point made by Jim Barksdale: "The main thing is to keep the main thing, the main thing." Bill Gates said once: "Being a visionary is trivial. Being a CEO is hard. All you have to do to be a visionary is to give the old 'MIPS to the moon' speech — everything will be everywhere, everything will be converged. Everybody knows that. Which is different from being the CEO of a company and seeing where the profits are."

9. "Once you've completed this exercise you can go to investors and say 'We see our Series A happening in X months, when we hit Y metrics. We believe we need Z dollars to hire A-C, grow with D strategy.' This turns out to be a great way to figure out if investors are smart. Good ones will help you build a better plan and you'll be better for it. Bad ones will have poor feedback or just ask you where to send the check…"

Chris Sacca points out: "Good investors are in the service business… There are angels who have 75 companies and don't call any of them ever." Dan Levitan would agree (#5), and Keith Rabois reiterates (#2): "Early stage, almost every successful entrepreneur I know doesn't care as much about the economic terms as much as who they are going to work with." There is a huge difference between an amateur and a professional seed stage investor. Startup L. Jackson say on this point: **"Those in the know, go with the pro."**

10. "Sufficiently advanced customer acquisition strategies are indistinguishable from magic."

"Blessed is he who, in the name of profit, shepherds the user through the funnel, for he is truly his user's keeper."

"What do you need for marketing? Do you need firm CACs by the A? If so, have you budgeted to figure them out? What is your marketing strategy? MIT super-nerds are often surprised how much Scotch it takes to get a BD deal done even in Silicon Valley."

"Viral coefficient two point some, I got 99 problems but my pitch ain't one."

"Viral is not a product. Beware those selling it."

Acquiring customers at a low customer acquisition cost (CAC) is great. What is not to like about organic growth where customers are obtained in a cost effective way? Mark Andreessen has made this point (#10): "Many entrepreneurs who build great products simply don't have a good distribution strategy. Even worse is when they insist that they don't need one, or call no distribution strategy a 'viral marketing strategy' … a16z is a sucker for people who have sales and marketing figured out." Reid Hoffman adds: "What a lot of people fail to realize is that without great distribution, the product dies."

11. "The startup that treats their investors like a bank and only calls when they run out of cash is missing opportunities."

"Investors you have built a relationship with who can see past the metrics and are willing to double down because they believe in you are an under-appreciated asset."

As Rich Barton points out (#11): "Get the highest octane fuel in the tank [when choosing a venture capitalist]." Keith Rabois again weighs in (#2): "If you have the option, raise money from one lead investor who has the right skill set, background, and temperament to help you." As far back as when Arthur Rock was more active: "We spent a lot of time with our companies… [sometimes] if you divide up the number of companies they're invested in by the number of partners, you find that the partners haven't got ten minutes for any one company."

The Benchmark Capital partners have talked about how founders can do due diligence on a venture capitalist in this video embedded on Forbes. Founders that don't work at and devote sufficient time to this due diligence process are, well, bonkers given it is a business relationship that can last more than 10 years.

12. "Predicting failure is easy. You can have no clue, a startup can be brilliant, & you're still probably right. Let's see you pick winners."

Most startups fail, as both Marc Andreessen and Fred Wilson have pointed out. Startup L Jackson is saying that getting actively involved as a venture capitalist in the small number of

big winners is hard, which is why the distribution of success among venture capitalists is a power law, not just inside their portfolios. Mike Mortiz says: "[Venture capital] is a business that's always had the investment returns concentrated in very few hands."

#5 here from Chris Sacca is a good one to put this post to bed: "As investors, VCs are wrong more often, than we are right… As a VC, I'm wrong most of the time, so whenever any of the VCs tell you about the rules etc. it's really, because we're wrong all the time. You should expect me to be wrong most of the time. When I'm right, I'm really really right. That's what you should expect from a VC."

A Dozen Things I've Learned from Lou Simpson About Investing and Business

April 4, 2015

"Warren Buffett, in Berkshire's annual letter to shareholders for 2004, devoted a section to [Lou] Simpson titled "Portrait of a Disciplined Investor," saying Lou's picks had produced an annual average return of 20 percent since 1980, compared with 14 percent for the Standard & Poor's 500 Index." – Bloomberg

"I pondered for eight years what makes Lou knock the cover off the ball," Byrne said. "Lou is very bright, with an economics background from Princeton. But the woods are filled with bright guys. It has more to do with his personality. He is very, very sure of his own judgments. He ignores everybody else. He gets one or two really strong ideas a year and then likes to swing very hard." -Jack Byrne

Lou Simpson is a man of few words in the press, so I have added thoughts from other value investors below a bit more than usual.

1. "When you ask whether someone is a value or growth investor – they're really joined at the hip. A value investor can be a growth investor because you're buying something that has above-average growth prospects and you're buying it at a discount to the economic value of the business."

I picked this quotation to start this blog post to illustrate how Lou Simpson and Warren Buffett "think alike." Here's Warren Buffett on the same point: "Growth is always a component in the calculation of value, constituting a variable whose importance can range from negligible to enormous and whose impact can be negative as well as positive…. Growth benefits investors only when the business in point can invest at incremental returns that are enticing – in other words, only when each dollar used to finance the growth creates over a dollar of long term market value. In the case of a low-return business requiring incremental funds, growth hurts the investor."

The idea that an investor might buy a stock regardless of whether it is available at a bargain price simply because the business is growing is foreign to both Buffett and Simpson. Charlie Munger agrees: "The whole concept of dividing it up into 'value' and 'growth' strikes me as

twaddle." What you want to find is a bargain, which takes a lot more work that just finding a business that is growing revenue a lot. There are some very high quality growing business that you would be nuts to buy at a high enough price and equally nuts not to buy at a low price. A high growth asset can be very risky if you overpay for it. Howard Marks points out: "When someone says, 'I wouldn't buy that at any price," it's as illogical as, "I'll take it regardless of price.'"

2. "Investors are going to make out a whole lot better if their whole emphasis is on owning businesses."

"Invest in high return businesses run for the shareholders."

"Return on capital. That really tells you a lot. One of the basic problems is that there is so much noise around earnings that you really have to rip apart the financials to understand what the real numbers are. It's really the basic returns on equity capital [that are] important, but sometimes they're not obvious. Even so, I think you have to look at a lot of things. You have to figure out what the earnings growth rate of the company will be over an extended period of time, and then apply a discount rate to it so you can come up with the best valuation. It's easy in principle but it's extremely difficult in practice."

One of the four bedrock principles of Ben Graham–style value investing is that a security represents partial ownership of an actual business and should not be treated as a piece of paper to be traded based on investor psychology. This means that understanding the business itself is essential to understand the value of a security. To be a value investor you must dig deep and do research on how the business operates, its markets and its competitors. Charlie Munger argues: "All intelligent investing is value investing — acquiring more than you are paying for. You must value the business in order to value the stock." If you find this process boring or can't find the time to do it, it is very unlikely that you will be a successful investor.

Ben Graham once said: "Investment is most intelligent when it is most businesslike." What he means is that to understand a stock or bond you must understand not only the business but business generally. Seth Klarman in a Charlie Rose interview once said: "I think Buffett is a better investor than me because he has a better eye towards what makes a great business. When I find a great business, I am happy to buy it and hold it. [But] most businesses don't look so great to me." Daniel Kahneman has a nice take on this point arguing that people like Lou Simpson or Warren Buffett are not in the business of stock picking; they pick businesses and managers. Lou Simpson again: **"One of the things I have learned over the years is how important management is in building or subtracting from value. We will try to see a senior person and prefer to visit a company at their office, almost like kicking the tires. You can have all the written information in the world, but I think it is important to figure out how senior people in a company think."**

3. "Even the world's greatest business is not a good investment, if the price is too high."

"We try to be disciplined in the price we pay for ownership even in a demonstrably superior business."

"Pay only a reasonable price, even for an excellent business."

The second bedrock principle of Ben Graham-style value investing is that a security must be purchased at a sufficient bargain to intrinsic value that it provides the investor with a margin of safety. Buying securities at a significant discount to intrinsic value (e.g., 25%) creates a margin of safety which can protect against mistakes. In an ideal situation a value investor feels like they are "buying a dollar for 50 cents." This opportunity does not happen often, but when it does, the value investor should load up the truck (buy a lot of the asset; bet big). If you have a margin of safety when buying assets you don't need to precisely predict intrinsic value. Roughly right is enough and far better than precisely wrong. Securities that represent a partial interest in some businesses are selling at a price that is significantly less than their intrinsic value and some are not. Paraphrasing Seth Klarman, at one price a partial interest in a business "is a buy, at another it's a hold, and at another it's a sell." When you buy a partial stake in a business at a price that represents a margin of safety you can make an idiotic decision and sometimes still do OK. And when you are right you can do even better financially.

4. "Over time, the market is ultimately rational, or at least somewhat rational."

"Attempting to short-term swings in individual stocks, the stock market, or the economy, is not likely to produce consistently good results."

The third bedrock principle of Ben Graham-style value investing is that is that you must make Mr. Market your servant rather than your master. To a value investor Mr. Market is not wise, but rather highly unpredictable and irrational. Warren Buffett minces no words here: "This imaginary person out there — Mr. Market — he's kind of a drunken psycho. Some days he gets very enthused, some days he gets very depressed. And when he gets really enthused, you sell to him and if he gets depressed you buy from him. There's no moral taint attached to that."

A cornerstone to this 'make Mr. Market your servant" viewpoint is: the price of an asset is rarely the same as the value of an asset. Price is what you pay and value is what you get. Asset prices will always fluctuate. The objective of a value investor is to profit from volatility by waiting for something to happen that is inevitable rather than trying to predict its timing. Once you reach this rather simple realization, life gets far better for an investor.

5. "A lot of people don't have the patience or temperament to really be investors."

"The stock market is like the weather in that if you don't like the current conditions all you have to do is wait awhile."

The fourth bedrock principle of Ben Graham-style value investing is that the investor must be rational to avoid mistakes which are usually caused by emotional or psychological errors. If you cannot be patient is it impossible to be a successful value investor. While being patient is a key attribute you must also be capable of being aggressive and pouncing on an opportunity when the time is right. Patience and aggressiveness as desirable qualities for an investor may seem a bit at odd to some people, but they are essential.

March of 2009 would be an example of such a time. Seth Klarman said to Charlie Rose: "I think that the analysis is actually the easy part. When I speak to business school students, I tell them investing is the intersection between economics and psychology. Economics, the valuation of a business, is not that hard. The psychology – how much do you buy? Do you buy it at this price? Do you wait for a lower price? What do you do when it looks like the world might end? Those things are harder and knowing whether you stand there and buy more or something legitimately has gone wrong and you need to sell, those are harder things and that you learn with experience and you learn by having the right psychological make-up in the first place."

This concept of waiting vs predicting baffles many people. If you let go of the idea of predicting "when" and focus on "what" intrinsic value is and "how" to buy a partial stake in a real business, that you understand, with a margin of safety, there is some hope for you as a Graham value investor.

6. "Think independently. We try to be skeptical of conventional wisdom and try to avoid the waves of irrational behavior and emotion that periodically engulf Wall Street. We don't ignore unpopular companies. On the contrary, such situations often present the greatest opportunities."

"You live by the sword, you die by the sword. If you are right, you are going to add value. If you are going to add value, you are going to have to look different than the market. That means either being concentrated, or, if you are not concentrated in a number of issues, you are concentrated in types of businesses or industries."

You can't beat the market if you are the market. That a contrarian viewpoint and being correct about that viewpoint is necessary to outperform a market is provable mathematically. Seth Klarman has famously said: "Value investing is at its core the marriage of a contrarian streak and a calculator." It is easy to say you are a contrarian but hard to actually be one. There are many poseurs who think they are contrarian. Getting an unusual haircut or tattoo does not by itself make you a contrarian. The warmth of the herd is comforting. In some circles not it is the tattoo owners that is the herd dweller. People who are wrong while acting conventionally are rarely shunned. To be successfully contrarian requires honesty, self-awareness, aggressiveness and bravery since it is not a natural human state.

Seth Klarman believes: "You need to balance arrogance and humility…when you buy anything, it's an arrogant act. You are saying the markets are gyrating and somebody wants to sell this to me and I know more than everybody else so I am going to stand here and buy it. I am going to pay an 1/8th more than the next guy wants to pay and buy it. That's arrogant. And you need the humility to say 'but I might be wrong.' And you have to do that on everything."

7. "Most investors should own no more than 10 to 20 stocks.

"Good investment ideas… are difficult to find. When we think we have found one, we make a large commitment."

"Do not diversify excessively."

Some Ben Graham Style investors have a diversified portfolio and some do not. Lou Simpson is a focus investor (he doesn't diversify widely). Charlie Munger is also a focus investor. Other value investors, like Joel Greenblatt in his current fund, are diversified. Whether an investor is diversified is not a bedrock part of the Graham value investing system. In the case of Lou Simpson, he feels that the number of stocks that an investor can genuinely understand is limited. He would rather put fewer eggs in a basket and spend a lot of time understanding those eggs.

The idea that a dentist working full time in his or her profession is going to pick technology stocks better than the market after fees and expenses is unlikely. A UPS driver is hoping to beat the market by buying a health care stock or an automaker? I have said many times in this series on my blog: most people should buy a diversified portfolio of low fee index funds/ETFs. You are not Lou Simpson. You are unlikely to be like Lou Simpson. It is possible, but unlikely that you can invest like him. The fact that there is a tiny chance you might be like Lou Simpson is what gets so many people into trouble with their investing. People think: "these other people are muppets, but I am a super genius."

8. "Dealing in a circle of competence, dealing with companies that you have the ability to understand, being able to come up with a good analysis of a company's value and earning power, is fundamental."

"Invest in what others don't know."

"I get excited when we get some insights on a business that's not really well understood."

The goal of a value investor is not just to buy a share in a quality business, but to find assets to purchase that represent a mispriced bet. To find a mispriced bet, someone must have made a mistake. Howard Marks points out that "active management has to be seen as the search for mistakes." To find a mispriced bet you must know what you are doing. To raise the probability that you will know what you are doing, it is wise to stay within your circle of competence. Charlie Munger makes this point succinctly: "For a security to be mispriced, someone else must be a damn fool. It may be bad for the world, but not bad for Berkshire."

There is this interesting idea that as more people (~38% in the US less globally) move to index investing that there will be less alpha for experts. On the margin this conclusion seems logical, but the supply of "damn fool" investors is still massive. in any event, at some point as the number of index investors increases the ability to outperform will increase, since markets will be less efficient.

9. "One lesson I have learned is to make fewer decisions. Sometimes the best thing to do is nothing. The hardest thing to do is sit with cash. It is very boring."

People have a tendency to think that there is a benefit to hyperactivity in investing. Some activity is essential since with no activity of any kind it's a good sign you are dead. But as a rule, making fewer decisions as an investor results in better decisions and lower fees and expenses as well. As is usual, Jason Zweig describes these issues perfectly: "Mr. Munger favors what he calls 'sitting on your a—,' regardless of what the investing crowd is doing, until a good investment finally materializes….Many money managers spend their days in meetings, riffling through emails, staring at stock-quote machines with financial television flickering in the background, while they obsess about beating the market. Mr. Munger and Mr. Buffett, on the other hand, 'sit in a quiet room and read and think and talk to people on the phone,' says Shane Parrish, a money manager who edits Farnam Street, a compelling blog about decision making. 'By organizing their lives to tune out distractions and make fewer decisions,' he adds, Mr. Munger and Mr. Buffett 'have tilted their odds toward making better decisions.'"

10. "We do not have hard and fast rules on selling. We do not sell that well."

Life is far easier for a Graham value investor if you set your holding period at forever. This is, of course, not always possible**.** In an upcoming blog post on Mason Hawkins I included this quote about selling: "We sell for four primary reasons: when the price reaches our appraised value; when the portfolio's risk/return profile can be significantly improved by selling, for example, a business at 80% of its worth for an equally attractive one selling at only 40% of its value; when the future earnings power is impaired by competitive or other threats to the business; or when we were wrong on management and changing the leadership would be too costly or problematic." That selling shares is harder than buying shares is not a technical issue. Instead, it is easier to make emotional and psychological mistakes when selling shares. Resisting the urge to try to "time" the market when putting in sell orders can be excruciating. Mistakes from tendencies like *loss aversion* are so easy to make**.** It's a good idea to follow Charlie Munger's advice when selling shares: "Other people are trying to act smarter. I'm just trying to be non-idiotic."

11. "It is very important to look at your mistakes and determine why you made them."

"When we make mistakes, we always try to do postmortems."

The best way to learn is through feedback. Ray Dalio, the founder of the Bridgewater investment fund, has expressed this idea in a formula: "You learn so much more from the bad experiences in your life than the good ones. Make sure to take the time to reflect on them. If you don't, a precious opportunity will have gone to waste. Remember that pain plus reflection equals progress." And there is no better feedback than the negative results from personal mistakes and folly. Charlie Munger believes in "rubbing his nose" in his mistakes. If you do this post-mortem work, you can increase the percentage of mistakes that are new as

opposed to repeated mistakes. Investment performance can be remarkably improved simply by making fewer mistakes. Sometimes what looks like a special technique or system generating success is simply the people involved being dedicated to being less stupid.

12. "I try to read at least five to eight hours a day."

I don't know any successful investors who don't read a lot. As just one example, in Michael Eisner's book *Working Together: Why Great Partnerships Succeed* Warren Buffett is quoted as saying: "Look, my job is essentially just corralling more and more and more facts and information, and occasionally seeing whether that leads to some action. And Charlie — his children call him a book with legs."

Of course, reading alone is not enough. Charlie Munger puts it this way: "Neither Warren nor I are smart enough to make the decisions with no time to think. We make actual decisions very rapidly, but that's because we've spent so much time preparing ourselves by quietly sitting and reading and thinking."

Read and think. Read and think. Read and think. And don't forget the thinking part.

Notes:

NYTimes – A Maestro of Investments in the Style of Buffett

NYTimes – Lou Simpson's Five Basic Investing Principles

Bloomberg – Buffett Stock Picker Simpson Opens Own Firm After Leaving Geico

Chicago Tribune – Lou Simpson retiring from Geico

A Dozen Things I've learned from Stanley Druckenmiller About Investing

April 11, 2015

"Stan may be the greatest moneymaking machine in history. He has Jim Roger's analytical ability, George Soros's trading ability, and the stomach of a riverboat gambler when it comes to placing his bets. His lack of volatility is unbelievable. I think he's had something like five down quarters in 25 years and never a down year. The Quantum record from 1989 to 2000 is really his. The assets grew from $1 billion to $20 billion over that time and the performance never suffered. Soros's record was made on a smaller amount of money at a time when there were fewer hedge funds to compete against." – *Inside the House of Money*

1. "I think David Tepper is awesome and if he'd take my money, I'd give him some but I think his fund is closed."

I included this quote to make the point that even though a very small number of great investors do beat the market, it is very unlikely that they are going to be willing to invest your money. Even Stanley Druckenmiller does not believe he can get into David Tepper's fund. In other words, you won't be a limited partner in David Tepper's fund anytime soon. It is also unlikely that you will be able to replicate the market outperformance of these great investors on your own. It would be much easier for me to write on this blog and elsewhere that *no one* ever beats the market even though I know it is not true. Some people might find the fib justifiable by the fact that it will encourage people to invest in a diversified portfolio of low fee index funds/ETFs. But that would not be truthful, so I just can't do it.

But this truth has a cost since overconfidence will cause a significant number of people to think that they can do what David Tepper and Stanley Druckenmiller have achieved as investors. And these overconfident investors will go out and inevitably underperform the market. For me, honesty trumps paternalism. Dishonesty, even if only a fib in one area with arguably benevolent intent, is a slippery slope and has other costs. As George Washington said: 'I cannot tell a lie." But I will say that it is ***highly*** unlikely that you can be as successful as David Tepper and Stanley Druckenmiller. The sooner you realize that, the better off you will be. Having said that, everyone can benefit from learning to make better decisions in life including decisions about how to allocate assets.

2. "George Soros has a philosophy that I have also adopted: The way to build long-term returns is through preservation of capital.."

If you look at other posts I have written in this series on my blog you will see a consistent view expressed: not losing money is a critical part of the investing process. The great investors say it in different ways, but the point is always the same. For example, Warren Buffett says: "Rule No. 1: never lose money; rule No. 2: don't forget rule No. 1." Paul Tudor Jones puts it this way: "I think I am the single most conservative investor on earth in the sense that I absolutely hate losing money." Seth Klarman provides the fuller explanation his book *Margin of Safety*:

"Avoiding loss should be the primary goal of every investor. This does not mean that investors should never incur the risk of any loss at all. Rather "don't lose money" means that over several years an investment portfolio should not be exposed to appreciable loss of capital. While no one wishes to incur losses, you couldn't prove it from an examination of the behavior of most investors and speculators. The speculative urge that lies within most of us is strong; the prospect of free lunch can be compelling, especially when others have already seemingly partaken. It can be hard to concentrate on losses when others are greedily reaching for gains and your broker is on the phone offering shares in the latest "hot" initial public offering. Yet the avoidance of loss is the surest way to ensure a profitable outcome."

3. "Soros has taught me that when you have tremendous conviction on a trade, you have to go for the jugular."

"I've learned many things from [George Soros] but perhaps the most significant is that it's not whether you're right or wrong that's important, but how much money you make when you're right and how much you lose when you're wrong."

As I noted in my blog post on Nassim Taleb, investing "home runs" come from finding mispriced optionality. "Optionality is the property of asymmetric upside (preferably unlimited) with correspondingly limited downside (preferably tiny)." Occasionally you can find a situation with a big upside and a small downside if you are patient and work hard to find it. When that happens if you can be brave and aggressive in your bet, you can hit a home run. Charlie Munger argues that hitting a few financial home runs in a lifetime is all you need for financial success. Unfortunately, being patient, brave and aggressive is not a typical combination of character traits for most people.

4. "My job for 30 years was to anticipate changes in the economic trends that were not expected by others, and, therefore not yet reflected in security prices."

Fundamentally, the job of an investor is to find assets which are available for purchase that are mispriced by the markets. If a given trend is expected by others they will be reflected in security prices and there is not opportunity for the investor. In my post about George Soros I note that he once said: "Money is made by discounting the obvious and betting on the unexpected." Like all great investors, Stanley Druckenmiller trained himself to be an intelligent contrarian when making a bet and only to do that when there was a big upside and a small downside. Phil Fisher put it this way: "Doing what everyone else is doing at the moment, and therefore what you have an almost irresistible urge to do, is often the wrong thing to do at all."

Richard Thaler and Cass Sunstein do a fine job of relaying a Warren Buffett story here: "Warren Buffett retells the story of the dead oil prospector who gets stopped at the pearly gates and is told by St Peter that Heaven's allocation of miners is full up. The speculator leans through the gates and yells 'Hey, boys! Oil discovered in Hell.' A stampede of men with picks and shovels duly streams out of Heaven and an impressed St Peter waves the speculator through. 'No thanks,' says the sage. 'I'm going to check out that Hell rumor. Maybe there is some truth in it after all.'"

5. "I have always made big concentrated investments. I don't believe in diversification. I don't believe that's the way to make money."

"You are not going to make money talking about risk adjusted returns and diversification. You've got identify the big opportunities and go for them."

"As far as Soros is concerned, when you're right on something, you can't own enough."

As Warren Buffett has pointed out many times: "diversification is protection against ignorance. It makes little sense if you know what you are doing." Of course is that most people have no idea what they are doing when it comes to investing. Most people don't even understand the difference between speculating and investing. For this reason and others almost everyone should buy a diversified portfolio of low fee index funds/ETFs. Warren Buffett points out that by acknowledging that you are not smart money by putting a strategy in place that harnesses diversification you become the smart money.

Unfortunately any investor must still choose how to diversify, so they still must learn to make sound investing decisions (portfolio asset allocation requires that an investor actively make certain choices even if it is to buy low fee index funds/ETfs).

6. "Soros is the best loss taker I've ever seen. He doesn't care whether he wins or loses on a trade. If a trade doesn't work, he's confident enough about his ability to win on other trades that he can easily walk away from the position. There are a lot of shoes on the shelf; wear only the ones that fit. If you're extremely confident, taking a loss doesn't bother you."

Michael Mauboussin has no peer in explaining why great investors focus on creating sound investing processes rather than outcomes. Because investing is a probabilistic process, results in the short term do not always distinguish between good and lousy processes. David Sklansky wrote in *The Theory of Poker*: 'Any time you make a bet with the best of it, where the odds are in your favor, you have earned something on that bet, whether you actually win or lose the bet. By the same token, when you make a bet with the worst of it, where the odds are not in your favor, you have lost something, whether you actually win or lose the bet." If your process is sound taking a loss in the short term shouldn't bother you, as Druckermiller learned from George Soros.

7. "I particularly remember the time I gave (the research director) my paper on the banking industry. I felt very proud of my work. However, he read through it and said, 'This is useless. What makes the stock go up and down?' That comment acted as a spur. Thereafter, I focused my analysis on seeking to identify the factors that were strongly correlated to a stock's price movement as opposed to looking at all the fundamentals. Frankly, even today, many analysts still don't know what makes their particular stocks go up and down."

"Valuation only tells me how far the market can go once a catalyst enters the picture to change the market direction."

Stanley Druckermiller is referring here to the importance of identifying what Mario Gabelli calls a catalyst. Gabelli writes: "A catalyst may take many forms and can be an industry or company specific event. Catalysts can be a regulatory change, industry consolidation, a repurchase of shares, a sale or spin-off of a division, or a change in management." Valuation is most, ahem, valuable when it can be combined with a catalyst. Buying at an attractive valuation gives you a margin of safety against mistakes and the catalyst can provide you will a turbocharged result on that basic foundation.

8. "I learned you could be right on a market and still end up losing if you use excessive leverage."

"It takes courage to ride a profit with huge leverage."

Leverage magnifies mistakes as much as any successes. But because wrong decisions when leveraged can take the investor or speculator completely out of the investing process, leverage is particularly destructive of financial returns. Howard Marks point out that "Leverage magnifies outcomes, but doesn't add value." Having said this it is clear that George Soros uses leverage and so has Stanley Druckenmiller. So the key word for Stanley Druckenmiller must be "excessive" when it comes to leverage. How much exactly is

"excessive"? The answer it seems, from what I have read, is that it depends on the strength of your confidence in the bet. Druckenmiller did says once in The Wall Street Journal that "leverage at Soros's Quantum rarely exceeds 3-to-1 or 4-to-1." Needless to say I don't think anyone playing along at home should think that investing in this way is applicable or appropriate for them.

9. "I only focus on what is black or white and kind of sift out the gray area in my investing style."

Why invest in anything which you are unsure about when there are other options that you are more sure about? This is simple "opportunity cost" thinking. Michael Mauboussin puts it this way: "We don't have odds on the tote board [like in a horse race], but we have something called the stock price. So we reverse engineer the expectations built into that price. We say, 'What has to happen for that to make sense?' And then we look at how the fundamentals are likely to unfold. It's a probabilistic exercise. That would be the first piece. The second piece, analytically, is bet size, which is once you have an edge, how much do you bet in your portfolio? That's a second key component which is often overlooked."

Charlie Munger finishes the thought: "And then all that is required is a willingness to bet heavily when the odds are extremely favorable, using resources available as a result of prudence and patience in the past. We look for a horse with one chance in two of winning and which pays you three to one. And the one thing that all those winning betters in the whole history of people who've beaten the pari-mutuel system have is quite simple. They bet very seldom. It's not given to human beings to have such talent that they can just know everything about everything all the time. But it is given to human beings who work hard at it—who look and sift the world for a mispriced bet—that they can occasionally find one. And the wise ones bet heavily when the world offers them that opportunity. They bet big when they have the odds. And the rest of the time, they don't. It's just that simple."

10. "Many managers, once they're up 30 or 40 percent, will book their year [i.e., trade very cautiously for the remainder of the year so as not to jeopardize the very good return that has already been realized]. The way to attain truly superior long-term returns is to grind it out until you're up 30 or 40 percent, and then if you have the convictions, go for a 100 percent year. If you can put together a few near-100 percent years and avoid down years, then you can achieve really outstanding long-term returns."

Stanley Druckenmiller is talking about loss aversion here. Most people get conservative when they are winning. The best analogy for this bias happens in golf: "even the best golfers systematically miss the opportunity to score a "birdie" — when a player sinks a ball in one stroke less than the number of expected strokes for a given hole — out of fear of having a "bogey" — or taking one stroke more than what is expected. According to the researchers, for many, the agony of a bogey seems to outweigh the thrill of a birdie."

Loss aversion can be found everywhere if you look. Venture capitalists investing "good money after bad" in the hope of saving a loss is just one example. Similarly, too much energy can be put into saving a business instead of devoting that energy to building one with greater potential. Daniel Kahneman describes loss aversion with a helpful example: "In my classes, I say: 'I'm going to toss a coin, and if it's tails, you lose $10. How much would you have to gain on winning in order for this gamble to be acceptable to you?…People want more than

$20 before it is acceptable. And now I've been doing the same thing with executives or very rich people, asking about tossing a coin and losing $10,000 if it's tails. And they want $20,000 before they'll take the gamble."

11. "I certainly made my share of mistakes over the years, but I was fortunate enough to make outside gains a number of times when we had different views and various central banks. Since most investors like betting with the central bank, these occasions provided our most outside returns and the subsequent price adjustments were quite extreme. I don't know whether we're going to end with a malinvestment bust, due to misallocation of resources. Whether its inflation, or whether the outcome will actually be benign. I really don't. But neither does the Fed."

Many people believe that the Fed has extraordinary ability to predict the economy. Stanley Druckenmiller is saying that the people at the Fed put their underwear on one leg at a time like everyone else. They are reacting to events like everyone else. I think Janet Yellen is a great choice as a Federal Reserve Chairperson. But it makes me nervous when I see people write about how she predicted this or that. I remember when people thought Alan Greenspan was great too. I believe that Janet Yellen is smart enough to know what she can't predict.

As for how Druckenmiller made his bets against central banks, my hat is off to him. I don't know how he did it. He has talked about the importance of understanding how central banks impact liquidity. The story he tells about the decision to short the British Pound is incredible. My hat is particularly off to him when he admitted that in today's environment the tools he developed probably wouldn't work. Humility is essential in a money manager he says, as is a focus on mistakes. In my view, we are in a "new abnormal." Charlie Munger commented about this recently: "I think it's highly likely that the people who confidently think they know the consequences – none of whom predicted this – now they know what's going to happen next? Again, the witch doctors. You ask me what's going to happen? Hell, I don't know what's going to happen. I regard it all as very weird. Anybody who is intelligent who is not confused doesn't understand the situation very well. If you find it puzzling, your brain is working correctly."

12. "This is insane. I've never owned a stock that goes from $40 to $250 in a few months."

The Internet bubble was literally insane. I've never been involved in anything in my life that was more surreal. Fear of missing out (FOMO) caused the bubble to reach unprecedented levels. FOMO is driven by an innate human desire to avoid regret. Daniel Kahneman has counseled financial advisors to "try to prevent people from acting out of regret." Investors and speculators who are prone to regret are more prone to change their mind at precisely the wrong time. Primarily you want to protect them from regret, you want to protect them from the emotions associated with very big losses.

They key takeaway from the Internet bubble, for me, is that when it happens is not predictable. If it is a bubble and it does bust, the day before is like any other day. One key "tell" that can give you a sense that something is up is looking around and seeing lots of companies that are unprofitable paying far too much to acquire customers. What is too much? If the customer over their lifetime is producing a return that is significantly net present value negative the business is paying too much. How much is too much? It depends. If this pattern of acquiring net present value negative customers is persistent and widespread hairs should

be standing up on the back of your neck. The bigger the net present value deficit the bigger the risk. Can you predict when it will end? No. "You can't predict, but you can prepare" says Howard Marks, and I agree. And for the hundredth time: risk is not the same thing as valuation.

Notes:

Inside the House of Money (Amazon)

The New Market Wizards: Conversations with America's Top Traders (Amazon)

*Soros: The Life and Times of a Messianic Billionaire (*Amazon)

Bloomberg Interview on Strategy, Shorting IBM

Finance Trends – Stan Druckenmiller Talks Trading

Speech Transcript at Alpha

The Wall Street Journal – May 22, 2000

CNBC – Delivering Alpha Speech

Bloomberg – Druckenmiller calls it quits after 30 years

ZeroHedge – Druckenmiller on China's Future & Investing's New Normal

CNBC Interview (video) & article

A Dozen Things I've Learned from Ben Carlson about Investing

April 18, 2015

Ben Carlson is one of my favorite finance writers. He is a CFA and has been managing institutional investment portfolios since 2005. He is both a writer and a teacher. His book on investing entitled *A Wealth of Common Sense* is out soon (you should pre-order it).

What I like best about Ben Carlson is that he is young and very savvy about not only investing but the tools of social and other forms of modern media like Twitter and Tumblr. Too many of the people I write about who are able to teach others about investing are, well, either old or very old. People like Ben Carlson, Patrick O'Shaughnessy, Morgan Housel, James Osborne and Josh Brown (the Magnificent Five) represent the next generation in financial writing. They are fearless in confronting financial advice poseurs of all kinds.

That they all are moving swiftly into media formats like video makes me hopeful they can successfully combat more of the hucksters pushing "easy wealth in seven steps" style schemes. I am rooting for them, especially when they go after people like constantly self-promoting old coots flogging their financial flim-flams that hurt ordinary investors. The way they attack promoters of high sales loads and hidden fees with these new tools inspires me. When these Magnificent Five go after the "bad guys" I am always cheering them on.

1. "The all-time great investors –Buffett, Marks, Dalio, Klarman, Munger and even Gundlach – have the ability to translate their ideas into simple terminology. Not only are they brilliant, but they all simplify their message when explaining their process."

Teaching other people helps you think through your own ideas. If you can't reduce your ideas and investing process to something you can describe simply to others, it is less likely that you have a sound investing process or at least your investing process is not as good as it might be. Teaching about investing has another benefit in that limited partners who understand your investing process are much more likely to stay with you when you are under-performing the market. Simply put, having investors who understand your investing process is a competitive advantage. Seth Klarman puts it this way: "At the worst possible moment, when your fund is down because cheap things have gotten cheaper, you need to have capital, to have clients who will actually love the phone call and – most of the time, if not all the time – add, rather than subtract, capital." And finally, teaching others about investing is good for the teacher's brand. A strong personal brand buffed to a shine via teaching makes raising money from limited partners easier.

2. "If you study Buffett, Marks, Soros, Lynch, Dalio, etc. you will find that even though their strategies differ, they all share the ability to control their emotions and make clear, probability-weighted investment decisions based on past experiences."

The psychological aspects of investing are by far the biggest challenge for any investor. Getting control of yourself is a key part of getting control of your finances and investments. Humans will never stop making emotional mistakes. Focusing a significant portion of your time and energy on reducing those mistakes pays big dividends. On Ben Carlson's second point Michael Mauboussin describes how to make wise, probability-weighted decisions: "Expected value is the weighted-average value for a distribution of possible outcomes. You calculate it by multiplying the payoff (i.e., stock price) for a given outcome by the probability that the outcome materializes."

If you can think probabilistically while controlling your emotions, investing gets far easier. Studying great investors helps with that learning process. Famous value investor Irving Kahn said once: "millions of people die every year of something they could cure themselves: lack of wisdom and lack of ability to control their impulses."

3. "Everyone is conflicted in some way. It's impossible to avoid conflicts of interest in the financial services industry. It is a business after all. The trick is to understand how incentives drive people's actions and look for those firms and individuals that are up front and honest about any potential conflicts."

The phrase "everyone is talking their book, all the time" has been seared in my brain ever since I heard it first from my friend Bill Gurley. It's such a simple way to capture an important idea. An old German proverb says: "whose bread I eat, his song I sing." And a lot of the time you are eating your own bread. Daniel Kahneman puts it this way: "Facts that threaten people's livelihood and self-esteem — are simply not absorbed. The mind does not digest them." Warren Buffett advises people to beware of asking your barber if you need a haircut for that reason.

Buffett's partner Charlie Munger said recently: "If the incentives are wrong, the behavior will be wrong. I guarantee it." That adds to what he said many years earlier: "I think I've been in the top five percent of my age cohort almost all my adult life in understanding the power of incentives, and yet I've always underestimated that power. Never a year passes but I get some surprise that pushes a little further my appreciation of incentive superpower."

4. "It's easy to be a long-term investor during a bull market. Everyone's making money and it feels like you can do no wrong. It's when things don't go as planned that this group loses control."

People panic. Not only do they panic, but they follow other people who have panicked, who are following other people who have panicked [repeat]. Being in a "thundering herd" is most often not a good thing. And to outperform the market you must leave the confines of the herd and be right about your reason for leaving. No one is ever contrarian as an investor "just in time" on a consistent basis. Contrarians must inevitably endure periods of underperformance and sometimes even ridicule from the herd. Of course, being too early is often indistinguishable from being wrong.

5. "It's not enough to say you will buy when fear is high and stock prices are low. You also have to have the necessary funds available to make purchases during times of maximum pessimism."

Jason Zweig did a wonderful interview of Charlie Munger in which he wrote: "Successful investing, Mr. Munger told me, requires 'this crazy combination of gumption and patience, and then being ready to pounce when the opportunity presents itself, because in this world opportunities just don't last very long." Sitting on the sidelines in a rising market with cash earning just about nothing is a very hard thing to do. Lots of people may see a bargain during a downturn but may not have any dry powder at that time which allows them to act on that insight. Timing markets is folly, but having a long term attitude and only buying stock at prices that offer a margins of safety can help someone have cash available at a time like 2009.

6. "Understanding yourself and your own tendencies can be much more helpful to the investment process than knowing exactly what's going on in the markets. You have no control over what's going to happen in the markets, but you have complete control over your reactions to them."

Most mistakes are psychological or emotional. Even Daniel Kahneman has said that after a lifetime of study of dysfunctional heuristics he still makes bonehead errors. Staying rational when making investment decisions is a life long struggle. You can never learn enough so that dysfunctional heuristics won't potentially lead you to folly and error.

Everyone makes mistakes. The job of an investor is to make fewer new mistakes and to try to avoid being an idiot. Simply avoiding idiocy is highly underrated. My sister, a psychologist, said to me recently "what I think about in my practice is often not too different from what

you write about on your blog." This is of course true. Knowing yourself pays big dividends if you are an investor.

7. "Increased activity does not necessarily lead to better results."

Investing by nature requires some activity. But not much. In other words, investing can never be completely passive. For example, you must allocate assets and chose an index fund/ETF if you are a passive investor. But there are aspects of investing where doing less through diversification improves performance since it decreases fees and lowers the adverse effects of performance chasing. As another example, an active investor who invests seldom but in a very aggressive way when the odds are substantially in their favor often experiences the best results. The market does not award prizes to investors who are hyperactive. Investors who are too concerned with always "doing something" are like horses wearing extra weight at a racetrack.

8. "All else equal, a talented sales staff will trump a talented investment staff when attracting capital from investors. There are organizations that can have both, but typically the firms with the best sales teams or tactics will end up bringing in the most money from investors. A well-thought-out narrative by an intelligent, experienced marketing department with the right pitch book can do wonders at persuading investors to hand over their hard-earned money. It's difficult to admit we can be so easily persuaded but it's true."

Most investments are sold rather than purchased. Nothing else explains people still paying sales loads when purchasing an investment, when they are often easily avoided. There are people who can sell ice to Eskimos and many of them are selling investments. Howard Marks in a masterful recently published essay on liquidity skewers a few marketing strategies that are being foisted on people as an 'investment free lunch'.

9. "Most investors will be immediately drawn to the marketing firms because people typically gravitate towards certainty, confidence and the latest fads."

People love people who are confident. Daniel Kahneman writes: "Overconfident professionals sincerely believe they have expertise, act as experts and look like experts. You will have to struggle to remind yourself that they may be in the grip of an illusion." You've seen these supremely confident motivational speakers make their pitch to investors saying things like "Just follow these seven steps and you will be rich." It's bullshit, but as long as it is presented confidently large numbers of sheep, err people, will follow.

10. "Financial models are fairly useless if you take them at face value. I dealt with extremely complex Excel spreadsheet models on a daily basis. They were a thing of beauty for spreadsheet geeks. Complex formulas and macros, linked data, pro-forma financial statements — all with the analysis spit out in a neat summary page. Every tiny piece of company and industry data was meticulously estimated or tracked down to the nearest decimal point.

Many of the analysts I worked with told me it was their modelling skills that really set them apart from their peers. But what I found from navigating these models is that there was always one or two levers you could pull that would completely change your

output (price target or earnings estimate). A minor change to a discount rate or future growth rate assumption could drastically change the end result by a wide margin."

When someone delivers you a spreadsheet and makes an argument based on that spreadsheet, I suggest to travel right to the assumptions. This approach saves great amounts of time and wasted energy. Contrary to that old proverb, the devil is actually making trouble in the assumptions rather than in the details. There are also angels lurking in the assumptions too since a lot of innovation has its source changing a commonly believed assumption. Scott Adams could have just as easily been talking about spreadsheets rather than slides when he said: "If you just look at a page and drag things around and play with fonts, you think you're a genius and you're in full control of your world." People who believe their projections that run six years into the future are accurate are as common as leaves in New England.

11."Sometimes negative knowledge by learning what not to do is just as important as figuring out the right way to do something."

Getting ahead by avoiding stupidity, particularly if the activity can potentially result in a big mistake, is such a simple idea. No one personifies this idea more than Charlie Munger. "I think part of the popularity of Berkshire Hathaway is that we look like people who have found a trick. It's not brilliance. It's just avoiding stupidity." In learning what not to do, it is best if you learn through other people's mistakes rather than your own. Avoiding stupidity is best done vicariously. There is no better way to see a lot of stupid behavior over a short time than reading.

You can learn so much just by watching people make mistakes in life, especially if you are genuinely paying attention. Charlie Munger's ideas again come to mind: "Just avoid things like racing trains to the crossing, doing cocaine, etc. Develop good mental habits…. A lot of success in life and business comes from knowing what you want to avoid: early death, a bad marriage, etc." As I've said many times, it is best to avoid situations where you have a big downside and a small upside (negative optionality) and to seek the inverse (big upside small downside).

12. "The reason so many people don't have their financial house in order is because they (a) become overwhelmed or (b) don't care about finance because they find it boring."

If you don't find business interesting you should not be trying to outperform the markets. If actively investing in stocks is not about understanding individual businesses and business in general then exactly what is it about? Most everyone should buy a diversified portfolio of low fee index funds/ETFs. One trick that may help is to understand that business gets more interesting the more you learn about it. Once you get to critical mass in understanding basic principles, it all gets more interesting. Especially if you enjoy understanding how systems fit together and mutually reinforce each other, business can be very interesting. Andy Warhol said once: "Being good in business is the most fascinating kind of art. Making money is art and working is art and good business is the best art."

But even then to be really good at understanding business and investing you must understand many disciplines. You must adopt what Charlie Munger calls a lattice of mental models approach. The best book on this is by Robert Hagstrom entitled: Investing: The Last Liberal Art.

Notes:

http://awealthofcommonsense.com/

A Dozen Things I've Learned from Irving Kahn about Value Investing and Business

May 2, 2015

Irving Kahn was the chairman of the investment firm Kahn Brothers Group. He was born in 1905 and prior to his recent death was one of the oldest active professional investors. The New York Times in its obituary of Irving Kahn wrote: "A disciple and later partner of Benjamin Graham, the contrarian advocate of value investing, Mr. Kahn would go on to work at Abraham & Company and Lehman Brothers, which he left in 1978 to open Kahn Brothers Group with two of his sons, Alan and Thomas." Jason Zweig wrote in his tribute to Kahn: "He [was] Mr. Graham's teaching assistant in the classes on security analysis that the great investor taught at Columbia Business School. Mr. Kahn also assisted Mr. Graham and Columbia professor David Dodd in researching their classic book, 'Security Analysis,' published in 1934."

1. "In the Thirties, Ben Graham and others developed security analysis and the concept of value investing, which has been the focus of my life ever since. Value investing was the blueprint for analytical investing, as opposed to speculation."

"Very few people have Ben Graham's ability to take a subject very complex and boil it down to something simple."

"Value investing is an art, not a science."

"Between the ultra-depression-conservatism of Ben Graham and the brilliance of monopoly investor Warren Buffett, there are ample levels [of value investing] that should fit your own pattern of risk to reward, suitable for your capital needs and lifestyle."

In these few sentences Irving Kahn identified many important points about value investing. First, value investing is a system. Second, the system is simple, but not easy to implement since certain aspects of value investing are an art. Third, by following the value investing system's analytical approach you can invest rather than speculate. Fourth, the value investing system created by Ben Graham in the Thirties has evolved since times have changed. Fifth, there are variants of the value investing system that can be created on top of certain bedrock principles which will be discussed below. You can always find an approach that meets your unique needs. For example, after you retire, certain aspects of your approach to value investing can change.

2. "[Always] know much more about the stock I'm buying than the man who's selling does."

"The gambling nature of Wall Street has little or no interest in the serious, underlying nature of businesses."

A value investor treating an investment security as a partial interest in an actual business is the first bedrock principle of value investing. If a share of stock does not represent an actual interest in a real business, what the hell is it? To understand that business requires research about the business not investor psychology. Irving Kahn is also pointing out in this set of quotations a truism that for every seller there is a buyer and vice versa. Daniel Kahneman writes: "There is always someone on the other side of a transaction; in general, it's a financial institution or professional investor, ready to take advantage of the mistakes that individual traders make." You must work hard to understand the underlying business and its markets better than other investors to generate an investing edge.

3. "Prices are continuously molded by fears, hopes, and unreliable estimates, capital is always at risk unless you buy better than average values."

"There are always good companies that are overpriced. A disciplined investor avoids them. As Warren Buffett has correctly said, a good investor has the opposite temperament to that prevailing in the market. Throughout all the crashes, sticking to value investing helped me to preserve and grow my capital."

That an asset should be purchased at a sufficient discount to intrinsic value (which provides the investor with a *margin of safety*) is the second bedrock principle of value investing. Irving Kahn is saying that *price* is a very different concept than *value* since prices are determined in the short term by the emotional state of investors and speculators. There is always a risk that price will be less than value just like there is always the opportunity that price will exceed value. Irving Kahn is also saying that you can pay too much even for a quality company and that avoiding conventional wisdom is wise. Seth Klarman points out that "value investing is a marriage between a contrarian and a calculator."

4. "Security prices are as volatile as ocean waves – they range from calm to stormy."

"No one knows when the tide will turn. Those who are leveraged, trade short-term and have bought at a high prices will be exposed to permanent loss of capital. I prefer to be slow and steady. I study companies and think about what they might return over, say, four or five years. If a stock goes down, I have time to weather the storm, maybe buy more at the lower price. If my arguments for the investment haven't changed, then I should like the stock even more when it goes down."

That Mr. Market should be treated as a servant rather than a master is the third bedrock principle of value investing. When J. P. Morgan was asked for a market prediction he said: "It will fluctuate." Business cycles are inevitable due to wildly gyrating emotions of the people who make up a market. As large numbers of people follow each other due to their herding instinct they will inevitably sometimes underestimate and sometimes overestimate the actual intrinsic value of a business. Markets cycling back and forth between fear and greed present a rational investor with an opportunity to benefit, if the investor purchases assets based on intrinsic value and doesn't try to time market prices . This is a hard concept for many people to grasp. Buying at a discount to intrinsic value seems like timing to some people, but it isn't because you are not predicting the future price of the asset in the short

term. You *wait* for an attractive price rather than predict its timing. The bet is that you know something will happen in the future, but you do not know when. If you are having trouble with this idea, I suggest you read Seth Klarman's book *Margin of Safety*. They key word for me is "wait." When you are waiting you are not predicting when something will happen, just that it will very likely happen sometime. Irving Kahn is essentially saying that good things come to he or she who patiently waits for a bargain purchase to become more valuable.

5. "You must have the discipline and temperament to resist your impulses. Human beings have precisely the wrong instincts when it comes to the markets."

"The Depression taught me what frugality means and the importance of not losing money."

That an investor must make rational decisions is the fourth bedrock principle of value investing. This fourth principle is by far the hardest part of value investing. The battle humans constantly fight to make rational decisions is never ending. You will never stop making some boneheaded mistakes, but you can, with work and attention, reduce both their frequency and magnitude. learning from mistakes, especially the mistakes of others which is less personally painful, is wise. Many value investors like to read biographies since it is a great source of stories about mistakes and successes of all kinds. The way to acquire good judgment is often through bad judgment.

6. "We basically look for value where others have missed it. Our ideas have to be different from the prevailing views of the market. When investors flee, we look for reasonable purchases that will be fruitful over many years."

"Lemmings always lose."

Irving Kahn thought like a contrarian in order to identify mispriced assets. Howard Marks says investing is a search for the mistakes of other people. Market inefficiency is a fancy academic term for mistakes. That people often acting like lemmings is an opportunity for the rational investor. It is mathematically impossible to follow the crowd and outperform the crowd. Charlie Munger noted at the 2015 Berkshire Annual Meeting that "If people weren't often so wrong, we wouldn't be so rich." You must "think differently" and be right about what you are thinking differently about to outperform a market. In seeking to be contrarian, one must avoid what some people call "the hipster paradox" (attempts to be different often end up with people making the same decisions).

7. "Our goal has always been to seek reasonable returns over a very long period of time. I don't know why anyone would look at a short time horizon. In my life, I invested over decades. Looking for short-term gains doesn't aid this process."

Because most people are impatient, a smart, rational and patient investor is able to arbitrage time and generate outperformance. Value investing is a process in which you get rich not only slowly but in a lumpy fashion. If you can't handle a slow process, irregular returns and occasional periods of underperformance, you are not a candidate to be a successful value investor.

8. "Remember the power of compounding. You don't need to stretch for returns to grow your capital over the course of your life."

Vanguard has an example which illustrates the power and value of compounding. How reinvesting can pay off over time:

"Let's say you begin with two separate $10,000 investments that each earn 6% a year (keep in mind this is a hypothetical example, and actual returns would likely be different and a lot less predictable). In one $10,000 investment, you withdraw your investment earnings in cash each year, and the value of your account stays steady, as you see with the flat line in the chart below. In the other investment, you don't cash out your earnings—they get reinvested. The curved line below shows the power of compounding and time. If you keep reinvesting the earnings (and again, we're assuming a steady hypothetical return of 6% each year) after 20 years your investment will have grown by more than $20,500. And if you've got an even longer time frame—for example, if you're in your 20s and saving for retirement—after 40 years, your investment will have grown by more than $92,000."

9. I don't watch [the stock market every day], because I'm not a trader."

"The public is spellbound by daily price moves. Less noticed are long-term economic changes that ultimately set future prices."

"Investors must remember that their first job is to preserve their capital. After they've dealt with that, they can approach the second job, seeking a return on that capital."

"If the art of investing were actually easy, or quickly achieved, no one would be in the lower or middle classes."

If investing was easy everyone would be rich. For some people one of the hardest things to do as an investor is to not be overly focused on daily price variations. Watching prices wiggle back and forth can be mesmerizing. But watching prices move all the time can make people do nutty things. Unfortunately, many investors seem to think there is some sort of a financial prize for hyperactivity when it is in fact a penalty because of fees, costs and the potential for more mistakes. The best way to prevent mistakes from ruining performance is to have something that is a cushion against mistakes. One analogy I like is the safety driving distance between your car and the car ahead of it on the freeway. Even if the car ahead of you stops unexpectedly, you have build in a margin of safety. If you are building a bridge as the engineer you want to make sure that it is significantly stronger than necessary to deal with more than the very worst case. Preserving capital as an investor is best achieved by buying at a *margin of safety* since even if you make a mistake things can still work out well due to the cushion against error. And if the investment goes well you can earn an even bigger return obviously if you buy the asset at a bargain price.

10. "I stick to the 20 odd stocks that I hold."

Irving Kahn was a *focus* investor who liked to hold only a relatively small number of stocks. Whether one concentrates stock holdings as a value investor like Irving Kahn or diversifies their investments is a personal choice. Both approaches can be successful in their own way. As was mentioned above, an investor's choice regarding diversification is a variable in the value investing system.

For example, the value investor Joel Greenblatt has chosen diversification for his most recent fund. He has done so because he does not believe the people who invested in his fund have

the courage to stay in the fund if they underperform for a significant period of time. Ben Graham was also relatively diversified as an investor but for different reasons. Famous value investor Walter Schloss was also someone who diversified his portfolio. In comparison, Charlie Munger and others believe in concentrating their investments. For example, in the fall of 2014 Bill Ackman's Pershing Square International fund owned only six stocks.

11. "You don't have to be fully invested all the time. Have patience, keep your standards."

"You gain much more by slow investing and concentrating on what you know, than on fast investing, which is nothing more than gambling."

Patience is an essential attribute of a Ben Graham-style value investor. And sometimes being patient means holding significant amounts of cash and not being fully invested. This cash position for a value investor is usually just a natural product of not finding businesses selling at prices that allow for a margin of safety. "Concentrating on what you know" is what is called staying with a *circle of competence* in value investing circles. The way to lower risk is to know what you are doing and the way to know what you are doing is to stay focused on areas where you have genuine knowledge and skills. "Getting rich slow" is too hard for most people to do.

12. "From some of the financial history books I read that discussed the market cycle, I learned that stocks in certain industries were especially volatile, and copper was one. I looked at the stock index list, and decided to short a copper company called Magma Copper. Because I had little money, I had to ask my brother-in-law, who was a lawyer, to open a brokerage account for me. With $50, I shorted the stock in the summer, and my brother-in-law said it wouldn't be long before I lost all my money because the market was going up, and I was telling it to go down. In October 1929, when the stock market crashed, my $50 became nearly $100. That was the first trade of my life."

"I'm a passionate reader. That's why being an investor is the perfect job for me."

"To be a successful investor learning is essential."

"Net-net stocks were easy to find in the early days. All I had to do was to look over annual reports and study balance sheets. I tried to find companies that had dependable assets such as cash, land, and real properties. Then I made sure they didn't have too much debt and had decent prospects. If these stocks traded at below their net working capital, then I would be interested in buying them.

I understand that net-net stocks are not too common anymore, but today's investors should not complain too much because there were only a handful of industries in which to look for stocks in the old days. Now there are so many different types of businesses in so many different countries that investors can easily find something. Besides, the Internet has made more information available. If you complain that you cannot find opportunities, then that means you either haven't looked hard enough or you haven't read broadly enough."

The best investors read a lot. It's that simple. They also take time to *think* about what they have read. It is amazing how many people who don't read. Particularly amazing to me are

people who think buying books without reading them creates any value. They must imagine that the ideas in the unread books travel magically into their brains as they sleep or watch television. What Irving Kahn is also talking about here is the fact that value investing has evolved over the years. As time passed after the Great Depression, it became harder and harder to find publicly traded stocks trading at less than liquidation value. Some value investors started looking outside the major markets, others went looking in private markets and others started considering quality in the analysis of value. Charlie Munger points out that despite this evolution the value investing system continues to work well.

Notes:

Telegraph – 108-year-old investor, *"I'm Still Winning"*
WSJ – Jason Zweig on Irving Kahn

NPR – *The 100 Year Old on Wall Street*

A Dozen Things I've learned from Julian Robertson about Investing

May 9, 2015

1. "Smart idea, grounded on exhaustive research, followed by a big bet."

"Hear a story, analyze and buy aggressively if it feels right."

A colleague of Robertson once said: "When he is convinced that he is right, Julian bets the farm" George Soros and Stanley Druckenmiller are similar. Big mispriced bets don't appear very often and when they do people like Julian Robertson bet big. This is not what he has called a **"gun slinging"** approach, but rather a patient approach which seeks bets with odds that are substantially in his favor. Research and critical analysis are critical for Julian Robertson. Being patient, disciplined and yet aggressive is a rare combination and Robertson has proven he has each of these qualities.

2. "Hedge funds are the antithesis of baseball. In baseball you can hit 40 home runs on a single-A-league team and never get paid a thing. But in a hedge fund you get paid on your batting average. So you go to the worst league you can find, where there's the least competition. You can bat 400 playing for the Durham Bulls, but you will not make any real money. If you play in the big leagues, even if your batting average isn't terribly high, you still make a lot of money."

"It is easier to create the batting average in a lower league rather than the major league because the pitching is not as good down there. That is consistently true; it is easier for a hedge fund to go to areas where there is less competition. For instance, we originally went into Korea well before most people had invested in Korea. We invested a lot in Japan a long time before it was really chic to get in there. One of the best ways to do well in this business is to go to areas that have been unexploited by research capability and work them for all you can."

"I suppose if I were younger, I would be investing in Africa."

What Julian Robertson is saying is that there is profit for an investor in going to where the competition is weak. Competing in markets that are less well researched give an investor who does their research an advantage. Charlie Munger was once asked who he was most thankful for in all his life. He answered that he was as most thankful for his wife Nancy's previous husband. When asked why this was true he said: "Because he was a drunk. You need to make sure the competition is weak."

Warren Buffett makes the point that the way to beat Bobbie Fisher is to play him at something other than chess. Buffett adds: **"**The important thing is to keep playing, to play against weak opponents and to play for big stakes." And "If you've been playing poker for half an hour and you still don't know who the patsy is, you're the patsy." Some investors try to find a market or a part of a market where you aren't the patsy if you want to outperform an index.

3. "I believe that the best way to manage money is to go long and short stocks. My theory is that if the 50 best stocks you can come up with don't outperform the 50 worst stocks you can come up with, you should be in another business."

The investing strategy being referred to here is a so-called "long-short" approach in which long and short positions are taken in various stocks to try to hedge exposure to the broader market which makes gains more associated with solid stocking picking. This approach is actually involves an attempt to hedge exposure to the market, unlike some hedge fund strategies that involve no real hedging at all. When Julian Robertson started using this this long-short approach it was less used and short bets especially were more likely to be mispriced than they are today. Many of Julian Robertson's so-called "Tiger Cubs" continue to do long-short investing. A recent report claims that $687 billion is currently invested in long-short equity hedge funds.

4. "Avoid big losses. That's the way to really make money over the years."

Julian Robertson believes that hedge fund should make it a priority to **"outperform the market in bad times."** That means adopting a strategy where the hedge fund actually hedges. As previously noted, the long-short strategy helps achieve that objective. Another way to avoid "big losses" is to buy an asset at a substantial discount to its private market value. When the right entry point is found in terms of price, an investor can make a mistake and still come out OK financially. This, of course, is a *margin of safety* approach.

5. "For my shorts, I look for a bad management team, and a wildly overvalued company in an industry that is declining or misunderstood."

When an investor shorts a company with a bad management team it is a safer bet since a business with a good management team is far more likely to fix problems. In other words, if a shorted business has a bad management team it is insurance that the real business problem problem underlying the short will continue. Julian Robertson is also saying that the overvaluation must be "wild" rather than mild for him to be interested in a short, and that he likes shorts in an industry in secular decline so the wind is at his back.

6. "There are not a whole lot of people equipped to pull the trigger."

"I'm normally the trigger-puller here."

The system used by Julian Robertson may decentralize the research and analysis function but it concentrates the trigger pulling with him. The newsletter Hedge Fund Letters writes: "Managers oversaw different industries and made recommendations but Robertson had final say. The firm made large bets where they had conviction and each manager commonly covered less than ten long and shorts. Positions were continuously revisited and if things changed there were no holds – positions were either added to or removed." Someone can be a great analyst and yet a lousy trigger puller. Successful trigger pulling requires psychological control since most investing mistakes are emotional rather than analytical.

7. "I've never been particularly comfortable with gold as an investment. Once it's discovered none of it is used up, to the point where they take it out of cadavers' mouths. It's less a supply/demand situation and more a psychological one – better a psychiatrist to invest in gold than me."

"Gold bugs, generally speaking, are some of the craziest people on the face of the globe."

On gold, Julian Robertson agrees with Warren Buffett, who has said:

"The second major category of investments involves assets that will never produce anything, but that are purchased in the buyer's hope that someone else — who also knows that the assets will be forever unproductive — will pay more for them in the future. Tulips, of all things, briefly became a favorite of such buyers in the 17th century. This type of investment requires an expanding pool of buyers, who, in turn, are enticed because they believe the buying pool will expand still further. Owners are not inspired by what the asset itself can produce — it will remain lifeless forever — but rather by the belief that others will desire it even more avidly in the future. The major asset in this category is gold, [favored by investors] who fear almost all other assets, especially paper money (of whose value, as noted, they are right to be fearful). Gold, however, has two significant shortcomings, being neither of much use nor procreative. True, gold has some industrial and decorative utility, but the demand for these purposes is both limited and incapable of soaking up new production. Meanwhile, if you own one ounce of gold for an eternity, you will still own one ounce at its end. What motivates most gold purchasers is their belief that the ranks of the fearful will grow."

To buy gold is to speculate based on your predictions about human psychology. That is not investing, but rather speculation. A gold speculator is engaged in a Keynesian Beauty contest: "It is not a case of choosing those [faces] that, to the best of one's judgment, are really the prettiest, nor even those that average opinion genuinely thinks the prettiest. We have reached the third degree where we devote our intelligences to anticipating what average opinion expects the average opinion to be. And there are some, I believe, who practice the fourth, fifth and higher degrees." (Keynes, General Theory of Employment, Interest and Money, 1936).

8. "When you manage money, it takes over your whole life. It's a 24-hour-a-day thing."

This is a quote from the book *Hedge Fund Masters on the Rewards, the Risk, and the Reckoning* by Katherine Burton. Julian Robertson is not alone in this way since many financial and tech billionaires only turn to things like philanthropy after a career change. This

is also a statement about how competitive and constantly changing the investing world is. Only an academic like Bob Gordon who is not involved in the real world can make a claim that the pace of innovation is slowing. The pace of innovation is increasing and its impact is brutal. With regard to innovation and the level of competition in hedge funds, Roberto Mignone, head of Bridger Management said once: "You've got a better chance surviving as a crack dealer in Chicago than lasting four years in the hedge fund business."

9. "The hedge fund business is about success breeding success."

One of my favorite essays was written by Duncan Watts and is entitled: *Is Justin Timberlake a Product of Cumulative Advantage?* The concept of cumulative advantage is so important in understanding outcomes in life and yet it is so poorly understood. The basic idea is that once a person or business gains a small advantage over others, that advantage will compound over time into an increasingly larger advantage. This is sometimes called "the rich get richer and the poor get poorer" or "the Matthew effect" based on a biblical reference. Merton used this cumulative advantage concept to explain advancement in scientific careers, but it is far broader in it application. Cumulative advantage operates as a general mechanism which increases inequality and explains why wealth and incomes follow the power law described by Pareto. Part of what Robertson is saying is that the more money you raise, the more money you can raise [repeat] the more talent you can attract, the more talent you can attract [repeat].

10. " I remember one time I got on the cover of Business Week as "The World's Greatest Money Manager." Everybody saw it and I was kind of impressed with it, too. Then three years later the same author wrote the most scathing lies. It's a rough racket. But I think it's a good thing in human narcissism to realize you go from highs and lows based on your views from the press – really, it shouldn't matter."

Letting the views of the press on you impact your view of yourself or what you do is folly. Criticism is hard to take for most anyone, but considering the source is helpful in getting past that. The only thing that everyone likes is pizza. My uncle who recently passed away liked to say '*Illegitimi non carborundum'* which is a mock-Latin aphorism meaning: "Don't let the bastards grind you down." This saying was popularized by US General Vinegar Joe Stillwell during World War II, who is said to have borrowed it from the British army.

11. "[In March 2000] This approach isn't working and I don't understand why. I'm 67 years old, who needs this? [In March 2000] There is no point in subjecting our investors to risk in a market which I frankly do not understand. After thorough consideration, I have decided to return all capital to our investors. I didn't want my obituary to be 'he died getting a quote on the yen'."

Sometimes the world changes so much that it is time to either take a break or hang up your cleats – especially if you are already very rich. Some people do this successfully. Others ride old methods to their financial doom. Druckenmiller and others decided to mostly retire when they saw that their methods were no longer working. In 1969, Warren Buffett wrote a letter to his partners saying that he was "unable to find any bargains in the current market," and he began liquidating his portfolio. That situation of course changed and Warren Buffett emerged with a new competitive weapon in the form of the permanent capital of a corporation rather than the panicky capital of a partnership.

12. "[At the age of six.] I still remember the first time I ever heard of stocks. My parents went away on a trip, and a great-aunt stayed with me. She showed me in the paper a company called United Corp., which was traded on the Big Board and selling for about $1.25. And I realized that I could even save up enough money to buy the shares. I watched it. Sort of gradually stimulated my interest."

If you want a child to be interested in investing it is wise to introduce key ideas to them early in life in real form. No matter how small the stake, the impact of real money at work in a market means the experience is meaningful and memorable. Mary Buffett writes in her book that Warren Buffet believes that whether a person will be successful in business is determined more by whether a person had "a lemonade stand as a child than by where they went to college. An early love of being in business equates later in life to being successful in business."

Notes:

Bloomberg Interview: http://www.marketfolly.com/2009/10/julian-robertson-interview-bloomberg.html

CNBC Interview: http://www.cnbc.com/id/101092813

Business Week: http://www.bloomberg.com/bw/stories/1996-03-31/fall-of-the-wizard

Graham and Doddsville Newsletter: http://www8.gsb.columbia.edu/rtfiles/Heilbrunn/Graham%20%26%20Doddsville%20-%20Issue%2015%20-%20Spring%202012.pdf

Forbes Article: http://www.forbes.com/sites/schifrin/2013/06/05/julian-robertson-hedge-funds-are-the-antithesis-of-baseball/

UNC Blog: http://blogs.kenan-flagler.unc.edu/2010/09/27/hedge-fund-pioneer-julian-roberston-on-his-investment-philosophy/

The New Investment Superstars http://www.amazon.com/gp/search?index=books&linkCode=qs&keywords=9780471403135

Hedge Hunters: http://www.nytimes.com/2007/12/19/your-money/19iht-MCOLUMN22.html?_r=0

A Dozen Things I've Learned about Value Investing from Jean Marie Eveillard

May 16, 2015

Jean-Marie Eveillard "started his career in 1962 with Societe Generale until relocating to the United States in 1968. Two years later, Mr. Eveillard began as an analyst with the SoGen International Fund. In 1979, he was appointed as the portfolio manager of the Fund, later named the First Eagle Global Fund. He then went on to manage the First Eagle Overseas and

First Eagle Gold Funds at their inception in 1993 as well as the First Eagle U.S. Value Fund in September 2001. After managing the Funds for over 30 years, Mr. Eveillard now serves as Senior Adviser and Board Trustee to First Eagle Funds and as a Senior Vice President of Arnhold and S. Bleichroeder Advisers, LLC."

1. "Benjamin Graham's book The Intelligent Investor has three lessons. The first is humility, that the future is uncertain. There are people on Wall Street who will predict the Dow will be at a certain level, but that is nonsense. The second thing is that because the future is uncertain, there's a need for caution. The third thing was especially important. Graham values the idea that securities can be more than just paper. You should try to figure out the intrinsic value of a business. In the short term, the market is a voting machine where people vote with their dollars, but in the long term, it's a weighing machine that measures the realities of business."

"You need humility because you know you can be wrong, and when you admit that you stress caution by assigning a margin of safety to your investments so that you don't overpay for them."

"I focused mainly on stocks that were trading at 30 to 40 percent below my intrinsic value calculations."

This passage is a distillation of many key points about value investing. The Great Depression made Ben Graham humble as an investor. As a result of that experience he developed his value investing system. This system is only appropriate for people who can take a long term viewpoint and sometimes underperform a benchmark in the short term. Many people can't do these things for psychological or emotional reasons, or won't do the work required to actually understand the business underlying each security.

Value investing is not the right investing system for everyone, but it is unique in that can potentially be successfully implemented by an ordinary investor with slightly above average intelligence and a sound work ethic. The limitation of the system is that very few people actually have the full set of skills and personal attributes required to be successful in implementing the system. Value investing is simple but not easy.

As for the 30-40% discount to intrinsic value which creates the margin of safety, Matthew McLennan (one of Jean-Marie Eveillard's colleagues at First Eagle) notes:

"We've typically looked to buy 70 cent dollars. I think the mental model of paying 70 cents for a business makes great sense; if the normal equity is priced for 7% returns, and you're going for 70 cents on the dollar, you're starting with a 10% ROI. Closing that valuation gap over five to ten years may generate a low-teens return. If it's a great business, there's an argument to be made, not necessarily for paying 100 cents on the dollar, but for paying 80 to 85 cents on that dollar. As Charlie Munger would say, it's a fair price for a great business. Your time horizon's long enough that you're capturing less spread day one, but if the business has a drift to intrinsic value of 4-5% a year, held for a decade, you may potentially reclaim that and then some. The more patient you are, the more you're potentially rewarded for holding good businesses."

2. "By being a value investor you are a long-term investor. When you are a long-term investor, you accept the fact that your investment performance will lag behind that of

your peers or the benchmark in the short term. And to lag is to accept in advance that you will suffer psychologically and financially. I am not saying that value investors are masochists, but you do accept in advance that your reward, if any, will come in time and that there is no immediate gratification."

"I think one of the reasons I didn't enjoy growth investing was because it assumes the world to be perfect and certain, which it is not! Becoming a value investor allowed me to acknowledge the fact that I am uncertain about the future."

What Jean Marie Eveillard is talking about here is something that you either understand and embrace or you don't. It is also something that you are comfortable with or not. People who are not humble about their ability to predict the future or who need immediate gratification are not good candidates to be successful value investors. These people should put value investing in the "too hard" pile and move on.

3. "We don't buy markets. We buy specific securities."

"An investor who buys a building or an entire corporation gives a great deal of attention to the price to be paid for the asset. So does the buyer of a car or even a bathing suit. They all seek value. What's so different with equities? Are they just pieces of paper to be traded in and out of on the basis of psychology, sentiment, herd instinct?"

"The search for undervalued stocks beings with the idea that stocks are not just pieces of paper that are traded in the market. Every stock represents a business, which has its own intrinsic value. To determine that value, you have to estimate what a knowledgeable buyer would be willing to pay for the business in cash. It is important to understand that intrinsic value is not an exact figure, but a range that is based on your assumptions. Because you have to revise your assumptions from time to time to reflect business and market conditions, intrinsic value fluctuates over time, and it can go up or down."

The best value investors are people who have significant experience in business. This allows the investor to successfully answer a key question: What would a private market buyer pay in cash for the business in question? The point made by Jean Marie Eveillard about intrinsic value not being precise is important. The future is always uncertain and a future business result is not an annuity.

One other important thing about determining intrinsic value is knowing that it is not always possible to determine intrinsic value in a given case. If you can't reliably determine intrinsic value for a specific business, just move on (put it in the "too hard" pile). In other words, the value investor will try to find another security to buy which allows them to easily determine intrinsic value. Jean Marie Eveillard is also pointing out that a fuzzy intrinsic valuation result can be OK for a value investor since the investor is protected to a significant degree by a margin of safety. First Eagle's approach as described by Matthew McLennan is as follows:

"There's a willingness to pay higher multiples for franchise businesses. By going in at 10x – 12x EBIT, you could get a 6%normalized free cash flow yield that can potentially grow 4-5%sustainably over time, and thus you may achieve the prospect of a double digit return. If it's a businesses that is more Graham in nature, with no intrinsic value growth, we may be

inclined to go in at 6x – 7x EBIT, where we get our potential return through a low double digit normalized earnings yield."

4. "We invest, if in the end we think we understand the business, we think we like the business and we think the investors are mispricing the business."

"We try to determine what a knowledgeable buyer expecting a reasonable return would be willing to pay today, in cash, for the entire business. Our approach requires us to understand the business – its strengths and weaknesses – rather than just the numbers. As investors have learned, the numbers can't always be trusted."

"Buffett says that value investors are not hostile to growth. Buffett says that value and growth are joined at the hip – value investors just want profitable growth and they don't want to pay outrageous prices for future growth because, as Graham said, the future is uncertain."

As Howard Marks points out, investing is "the search for mistakes by other investors." Sometimes a security is offered for sale at a bargain price that represents a 30% discount to the intrinsic value of the business. This will happen rarely, but when it does there will often be several opportunities available at the same time. In other words, the arrival of opportunities for value investors will tend to be lumpy.

5. "If one is wrong in judging a company to have a sustainable competitive advantage, the investment results can be disastrous."

A "sustainable competitive advantage" is another name for a "moat." Sometimes even the best value investors fail to see that the business has no moat or that the moat is about to disappear. For example, Warren Buffett found in buying Dexter Shoes that "What I had assessed as durable competitive advantage vanished within a few years." Warren Buffett also thought the UK retailer Tesco had a moat at one point. Other investors thought at an inopportune time that Kodak had a moat, or Blackberry or Nortel. Without a moat a business has no pricing power. 0Matthew McLennan of First Eagle puts it this way:

"Unfortunately, asset-intensive businesses often lack pricing power. What sometimes occurs is a need to reinvest during a time of weak pricing power, and this results in balance sheet deterioration and reduced earnings power. Also, asset-intensive businesses tend to have longer tail assets. With those come management teams that promote their desire to reinvest and grow the business. As a result, there's less return of capital."

6. "Value investing is a big tent that accommodates many different people. At one end of the tent there is Ben Graham, and at the other end of the tent there is Warren Buffett, who worked with Graham and then went out on his own and made adjustments to the teachings of Ben Graham."

"Over the past almost 30 years, we have sort of floated between Ben Graham and Buffett. We began with the Graham approach which is somewhat static and less potentially rewarding than the Buffett approach, but less time consuming. So as we staffed up, we moved more to the Buffett approach, although not without trepidation because the Buffett approach – yes, you can get the numbers right, but there is also a major qualitative side to the Buffett approach."

"Having more people allowed us to spend a lot of time trying to find out the major characteristics of businesses and their sustainable competitive advantage – what Buffett calls a 'business moat.'"

There are many ways to be a value investor as long as the four bedrock principles of value investing are adhered to – 1. a security is partial stake in a business, 2. margin of safety, 3. Mr. Market is your servant and not your master, 4. be rational. Value investing styles can vary when it comes to issues like the level of diversification, whether quality of the business is taken into consideration, and the amount of the margin of safety. Some value investors diversify their investments more than Warren Buffett. Other value investors are numbers-driven cigar-butt investors who do not consider the quality of the business. Other value investors are "focus investors" (they concentrate holdings rather than diversify) and do consider quality of the company in question.

7. "I have a great belief that everything is cyclical in life, particularly in the investment world. Value investors are bottom-up investors. But when we establish intrinsic values and update them, we do not assume eternal prosperity but accept that there is a business cycle."

Other people I have written about in this series like Howard Marks , Fred Wilson, and Bill Gurley also believe that cycles are inevitable in all types of businesses. That cycles are inevitable does not mean that their timing is predictable with certainty.

8. "I think the secret of success of most value investors is that when times became difficult they stuck to their guns and did not capitulate."

It is easy to talk about being "greedy when others are fearful and fearful when others are greedy," but actually doing so is harder than people imagine. It is warm and comforting for many people to sit inside a herd. Being genuinely contrarian is a lonely thing to do at times. Especially when fear of missing out is strong, people can do nutty things.

9. "Both closet indexing and shooting for the stars are exposing financial planners' clients to undue risk. Both are a result of benchmark tyranny."

"The knock on diversified funds is that they're index-huggers, which given the geographic breadth of where we invest, is not at all the case for us. I know the argument that you should only own your best 30 or 40 ideas, but I've never proven over time that I actually know in advance what those are."

"I think a concentrated portfolio is more of a bull market phenomenon. In a bear market, if you are too concentrated, you never know what can happen to your stocks. Some people have asked me whether I just invest in my best ideas, but the truth is that I don't know in advance what my best ideas will be, so I'd rather diversify. Besides, the beauty of our global fund was that we could invest internationally, which helped to minimize country-specific risks. With that in mind, I am not saying that you should diversify the portfolio to the extent of creating a quasi-market index."

"How come we don't have more concentrated portfolio? Number one, because I'm not as smart as Warren Buffett. And number two, because truly, people say, "Well, why

don't you just invest in your best ideas?" But I don't know in advance what will turn out to be my best ideas. So, that's why we're diversified."

Some value investors own only six stocks, some 30 and some hundreds. The degree of diversification an investor uses is a choice that fits within value investing as long as it does not rise to the level of closet indexing ("index huggers"). Charlie Munger points out that "[With] closet indexing, you're paying a manager a fortune and he has 85% of his assets invested parallel to the indexes. If you have such a system, you're being played for a sucker."

10. "By definition there are two characteristics to borrowing. Number one: borrowing works both ways. So you are compromising the idea of margin of safety if you borrow. Number two: borrowing reduces your staying power. As I said, if you are a value investor, you are a long term investor, so you want to have staying power."

You can't stay invested and participate in rising markets caused by a growing economy if you are out of the process since leverage has wiped out your equity stake. Howard Marks says: "Leverage magnifies outcomes, but doesn't add value." Charlie Munger has said: "I've seen more people fail because of liquor and leverage – leverage being borrowed money." Montier adds: "Leverage can't ever turn a bad investment good, but it can turn a good investment bad. When you are leveraged you can run into volatility that impairs your ability to stay in an investment or investing in general which can result in "a permanent loss of capital."

11. "Sometimes in life, it's not just about what we buy, but what we don't buy."

"A value investor doesn't need to be constantly in touch with every security in every market in the world."

This is consistent with Charlie Munger's idea that instead of focusing all your energy on trying to be smart, a person should also focus on not being dumb. It is important to have a "too hard pile" and to limit decisions to areas in which we are competent. By focusing your research on a smaller number of businesses that fall within your circle of competence you can do a better job on your research. Risk goes down when you know what you are doing.

12. "Contrary to many mutual fund managers, we do not believe we have to be fully invested 100% of the time."

"Our cash balance is purely a residual of whether or not we're finding enough to invest in."

Some people think that because value investors tend to have cash to invest when markets are near bottom, value investor are "timing" markets. Value investors tend to have cash near market bottoms since they stop buying securities when markets are near the top of the cycle due to individual company valuations that do not provide a margin of safety. If a value investor focuses on the micro aspect of individual businesses on a bottoms up basis, the macro tends to take care of itself. Matthew McLennan of First Eagle said recently: "We had our greatest cash levels in early 2009, not because we correctly timed the market bottom." Value, not price determines how much cash a genuine value investor has in the portfolio at any given time since that cash is a residual of a disciplined buying process.

Notes:

Staying Power: Jean-Marie Eveillard – Graham And Doddsville http://www.grahamanddoddsville.net/…/an_interview_with_jeanmarie_eveillar…

Eveillard: A value maestro's encore http://archive.fortune.com/2007/06/19/pf/funds/eveillard.fortune/index.htm

Morningstar http://corporate.morningstar.com/us/asp/subject.aspx?xmlfile=174.xml&filter=PR4061

Ivey Lecture: http://www.bengrahaminvesting.ca/Resources/Video_Presentations/Guest_Speakers/2014/Eveillard_2014.htm

Consuelo Mack: https://www.youtube.com/watch?v=Nd9MIJasr8I http://www.gurufocus.com/news/147599/full-transcript-and-video-of-jeanmarie-eveillards-interview-with-consuelo-mack

Interview: https://www.youtube.com/watch?v=i46Gt7ZT6yQ

Columbia Directory: https://www8.gsb.columbia.edu/cbs-directory/detail/je2402

A Dozen Things I've Learned from Seneca The Younger About Venture Capital, Startups, Business and Life

May 28, 2015

Lucius Annaeus Seneca was born 4 BCE in Córdoba, Spain and died in 65 CE in Rome. He was a philosopher, writer and orator, among other things. He was at times in his life a wealthy man who was for many years an advisor to the Emperor Nero.

1. "The time will come when diligent research over long periods will bring to light things which now lie hidden. A single lifetime, even though entirely devoted to the sky, would not be enough for the investigation of so vast a subject… And so this knowledge will be unfolded only through long successive ages. There will come a time when our descendants will be amazed that we did not know things that are so plain to them… Many discoveries are reserved for ages still to come, when memory of us will have been effaced."

What Seneca said then is still true today. Innovation will surely continue to amaze people. Forever. There's no invention stagnation happening now nor will it happen in the future. The idea advanced by some that the pace of innovation is slowing down is deeply misguided. Innovation that is distributed is harder for some people to see, but it is far more substantial when considered in the aggregate. Seneca is saying that there is no fixed supply of

innovation. Seneca also wrote: **"For many men, the acquisition of wealth does not end their troubles, it only changes them."** and **"Wealth is the slave of a wise man. The master of a fool."** He is saying that the best approach is to view wealth as one would any form of optionality. Nassim Taleb's view on Seneca is as follows:

"Seneca was about being long options. He wanted to keep the upside and not be hurt by the downside. That's it. It's just how to set up his method. Seneca was the wealthiest man in the world. He had 500 desks, on which he wrote his letters talking about how good it was to be poor. And people found inconsistency. But they didn't realize what Seneca said. He was not against wealth. And he proved effectively that a philosopher can have wealth and be a philosopher. What he was about is dependence on wealth. He wanted the upside of wealth without its downside. And what he would do is–he had been in a shipwreck before. He would fake like he was a shipwreck and travel like he was a shipwreck once in a while. And then he would go back to his villas and feel rich. He would write off every night before going to bed his entire wealth. As a mental exercise. And then wakes up rich. So, he kept the upside. In fact, what he had, my summary of what Stoics were about is a people who really had, like Buddhists, an attitude. One was to have the last word with fate. And my definition is a Stoic Sage is someone who transforms fear into prudence, pain into transformation, mistakes into initiation, and desire into undertaking. Very different than the Buddhist idea of someone who is completely separated from worldly sentiments and possessions and thrills. Very different. Someone who wanted the upside without the downside. And Seneca proved it. He understood the hedonic treadmill that Daniel Kahneman rediscovered 2,000 years later. He understood it very well. And he understood wealth, debt from others or from fortune. And he wanted to write off debt from fortune and he wanted to remove his dependence on fate, on randomness. He wanted to have the last word–with randomness. And he did." – *EconTalk*

2. "We let go the present, which we have in our power, and look forward to that which depends upon chance, and so relinquish a certainty for an uncertainty."

It is in the domain of uncertainty that the greatest financial returns can be obtained by a venture capitalist or any investor for that matter. I have cited Richard Zeckhauser's work several times on 25IQ on this point: "the wisest investors have earned extraordinary returns by investing in the unknown and the unknowable (UU)" writes Zeckhauser. Embracing uncertainty is essential. Nassim Taleb writes "I want to live happily in a world I don't understand. You get pseudo-order when you seek order; you only get a measure of order and control when you embrace randomness." There are greater financial returns where the crowd does not follow since contrarian bets with odds substantially in your favor can be found in just such a place.

3. "Delay not; swift the flight of fortune's greatest favors."

The successful pursuit of an idea is sometimes time dependent. For example, if Bill Gates had not left Harvard and started Microsoft with Paul Allen and had instead waited to graduate, the opportunity would most probably have been lost. It is not possible to re-run history and prove that point, but the idea of carpe diem seems hard to dispute. Many ideas and businesses are time stamped with an expiration date. Do you need to be first especially in every case? No. Google's success proves that. But you do need to "be." Talking ain't doing. "Real artists ship," famously said Steve Jobs.

4. "Courage leads to heaven; fear leads to death."

"There are more things to alarm us than to harm us, and we suffer more often in apprehension than reality."

Again and again you hear venture capitalists talk about their desire for missionary founders. Missionary founders are far more likely to be courageous and to persevere when things inevitably get hard. Leaders in other spheres of life think the same way. Sheryl Sandberg has said: "Your life's course will not be determined by doing the things that you are certain you can do. Those are the easy things. It will be determined by whether you try the things that are hard." and "Ask yourself: What would I do if I weren't afraid? And then go do it."

In venture capital courage matters. Being carried back from battle on your shield is neither shameful nor the end of the world. No one "bats a thousand." People get too hung up on frequency of success, when it is magnitude of success that they should focus on.

Nassim Taleb writes about Seneca:

"Recall that epic heroes were judged by their actions, not by the results. No matter how sophisticated our choices, how good we are at dominating the odds, randomness will have the last word…..There is nothing wrong and undignified with emotions—we are cut to have them. What is wrong is not following the heroic or, at least, the dignified path. That is what stoicism truly means. It is the attempt by man to get even with probability…..stoicism has rather little to do with the stiff-upper-lip notion that we believe it means…..The stoic is a person who combines the qualities of wisdom, upright dealing, and courage. The stoic will thus be immune from life's gyrations as he will be superior to the wounds from some of life's dirty tricks."

5. "There is no genius without a touch of madness."

"It is pleasant at times to play the madman."

Marc Andreessen has said that he "is looking for the big breakthrough. Ideas that are unpredictable and seem crazy at first. (Black Swans)" and "You are investing in things that look like they are just nuts." Michael Moritz has a similar view: "What they don't say is that at the very beginning there was great uncertainty and a great lack of clarity…. We just love … people who perhaps to others look unbackable." The reason why venture capitalists like a touch of madness is that this is where optionality can be found. If the idea was not somewhat nuts, big companies would be pursuing it. A good dose of nuttiness scares away the people who would rather "fail conventionally than succeed unconventionally."

6. "The less money, the less trouble."

What Seneca is saying here is quite clear, but for many people it is still puzzling. Bill Gurley likes to say: "more startups die of indigestion than starvation." When you don't have "enough" money you are forced to get innovative and to solve problems with a better culture rather than money. Of course, you don't want to run out of money either since as Seneca also said: **"Economy is too late when you are at the bottom of your purse."** When it comes to how much money to have on hand at a startup there is a level like Goldilocks that is "just right." My post on Rolef Botha addresses this issue.

7. "It is quality rather than quantity that matters."

"Love of bustle is not industry."

Focus matters for an entrepreneur. What Bill Gurley calls "death from indigestion" also applies to startups that try to do too much. Fred Wilson has said: "You need more than a lean methodology, you need a lean culture….To me, lean is a state of mind that a founder and his/her team needs to have across all aspects of the business. The specific product and engineering approaches that are at the core of the lean startup movement are paramount for sure. But if you can apply lean to hiring, sales, marketing, customer service, finance, and everything else, you will be rewarded with a fast, nimble company."

8. "Fidelity that is bought with money may be overcome with money."

Keith Rabois has pointed out: "Many entrepreneurs are raising more money than they need and it can cause derivative consequences down the road that are not healthy." Solving hard problems with just money does not scale. (Clinkle. Color. Fab.) If a business is going to overcome mercenary behavior by employees it must offer employees much more than just a paycheck.

9. "Associate with those who will make a better man of you."

Mark Zuckerberg has said: "I will only hire someone to work directly for me if I would work for that person. And it's a pretty good test." Keith Rabois puts it this way: "First principle: The team you build is the company you build." Nothing is quite as much fun than learning from other smart and hard-working people when building something important. This point is the inverse of what George Bernard Shaw once said: "I learned long ago, never to wrestle with a pig. You get dirty, and besides, the pig likes it." In contrast, wrestling with people who will make you a better person is wise.

10. "To err is human, but to persist (in the mistake) is diabolical."

It is important to make mostly new mistakes in life. Charlie Munger has famously said: "Forgetting mistakes is a terrible error if you're trying to improve cognition. Reality doesn't remind you. Why not celebrate stupidities?" One of the best ways to learn from mistakes is to conduct a post mortem on a significant mistake. And, of course, to learn vicariously from the mistakes of other people. I am writing a post now on Charlie Munger's views on mistakes that will appear in September when my book on him is out. Munger says: "Forgetting your mistakes is a terrible error if you are trying to improve your cognition. Reality doesn't remind you. Why not celebrate stupidities in both categories?" and "It's important to review your past stupidities so you are less likely to repeat them, but I'm not gnashing my teeth over it or suffering or enduring it." and "It's a good habit to trumpet your failures and be quiet about your successes."

11. "Our plans miscarry because they have no aim. When a man does not know what harbor he is making for, no wind is the right wind."

A startup executing a pivot may be wise or not. But executing a pivot is not the first choice of an entrepreneur and certainly not if they are mostly clueless about where they want to go. I wrote in my post about Eric Ries: "A decision to pivot shouldn't be taken lightly. Some founders pivot their way right into bankruptcy. Failing is not a good thing. Instead, having the ability to fail and then possibly still recover is a good thing."

12. "Leisure without books is death, and burial of a man alive."

"Welcome those whom you yourself can improve. The process is mutual; for men learn while they teach."

People who teach others get more than they give if they are doing it right. Teaching others and writing helps you think things fully through. If you can't teach it, you don't know it. Yes, Charlie Munger is right that: "The best thing a human being can do is to help another human being know more." But teaching and writing are also selfish activities in many respects. As for the benefits of reading, Charlie Munger points out:

"We read a lot. I don't know anyone who's wise who doesn't read a lot. But that's not enough: You have to have a temperament to grab ideas and do sensible things. Most people don't grab the right ideas or don't know what to do with them." & "In my whole life, I have known no wise people (over a broad subject matter area) who didn't read all the time – none, zero. You'd be amazed at how much Warren reads – at how much I read. My children laugh at me. They think I'm a book with a couple of legs sticking out."

A Dozen Things I've Learned from Mario Gabelli about Investing and Business

June 13, 2015

Mario Gabelli is the founder of the money-management firm GAMCO Investors, Inc. Bloomberg writes: "His investment methodology combines the pioneers of value-oriented investing and the iconic boss of Berkshire Hathaway Inc."

1. "We're not buying a piece of paper when we buy stock, we're buying a business."

"Think like an owner."

A security represents a partial share in an actual business. When you are buying that business you should understand it. This first bedrock principle of value investing is a simple but often ignored idea. What you are buying is not a piece of paper that should be traded as if it were a baseball card. I can't believe I have to say this, but let's be clear since some people have made contrary assertions: The fact that Ben Graham invested in a lot of businesses does not mean he was an index investor. He actually understood each business that he bought through research. How much a given value investor diversifies is a personal choice, but understanding and researching each company as well as applying the other bedrock principles is not optional if you want to be a value investor. An index fund that is tweaked to consider a value "factor" is not Ben Graham-style value investing. Buying a factor-driven indexed fund is one choice, but it isn't value investing but rather index-based investing with a value factor.

2. "What you do is identify a company in the public markets that is selling below a channel called 'intrinsic private market value.'"

"We define Private Market Value (PMV) as the value an informed industrialist would pay to purchase assets with similar characteristics. We measure PMV by scrutinizing on- and off-balance sheet assets and liabilities and free cash flow. As a reference check, we examine valuations and transactions in the public domain. Our investment objective is to achieve an annual return of 10% above inflation for our clients."

"That gives you a margin of safety, and help protect the downside by providing a cushion, because it is selling at a significant discount to "private market value."

"You approach stocks as if they were pieces of a business you want to buy at a discount." "Why am I buying it? Because I have a margin of safety."

"Value investing works because it is founded on the notion of buying something for less than it is worth."

Invest in an asset only if you have a "margin of safety" is the second of four bedrock principles of Ben Graham-style value investing. When you buy assets with a margin of safety you can make a mistake and still do fine as an investor. As Mario Gabelli puts it: "**The value investor has the best of both worlds: upside potential and the comfort of owning a business with a margin of safety."** Mario is a big fan of Warren Buffett who advises investors to: "Have the purchase price be so attractive that even a mediocre sale gives good results." This is another simple idea that many people want to look beyond for some other "trick." There is no trick. If you buy dollars for 70 cents it is harder to lose money. Those opportunities won't happen very often, so most of the time a value investor does nothing. Most people can't stand doing nothing most of the time so they are not candidates to be successful value investors.

3. "Markets fluctuate."

"Mr. Market gives you opportunities to buy above and below intrinsic value."

That Mr. Market should be your servant and not your master is the third of four bedrock principles of Ben Graham-style value investing. Mr. Market is a bipolar maniac rather than a perfectly informed rational agent. Prices in markets will inevitably move rapidly and unpredictably up and down. Markets are far from wise in the short term. This is obvious to a child of ten. Warren Buffett writes: "Ben's Mr. Market allegory may seem out-of-date in today's investment world, in which most professionals and academicians talk of efficient markets, dynamic hedging and betas. Their interest in such matters is understandable, since techniques shrouded in mystery clearly have value to the purveyor of investment advice. After all, what witch doctor has ever achieved fame and fortune by simply advising 'Take two aspirins'"?

4. "Quality is quality, and just because Mr. Market allows you to buy a share of a company well below its intrinsic value, doesn't change the underlying value."

Price is what you pay and value is what you get. Price and value are often different because Mr. Market is not wise and the prices he offers to buyers and sellers gyrates wildly in the short term. Those prices are sometimes higher and sometimes lower than intrinsic value. Value investors believe that you should not try to predict those short term gyrations. As an example, it is unlikely that value of a business that drops 10% in price in a single day has actually dropped in value by 10% . What has changed is the market price, which is set in the short term by a herd of highly emotional and psychologically challenged people. Some people will never understand that price and value can be different and as a result will never understand value investing. That's OK. It happens all the time. You either understand value investing or you don't.

5. "Our investment process centers on the application of principles first articulated in 1934 by the founders of modern securities analysis, Benjamin Graham and David Dodd, in their seminal work Security Analysis (1934). To this, we add what Warren Buffett contributed to the field of investing: the notion of valuing a business's franchise and taking a substantial stake in portfolio companies."

"Value investing, the way I define it, is finding a good business run by smart people, at a reasonably good price relative to its values today and five or more years from now."

Value investing is a get rich slow approach. Gains will be lumpy and during a bull markets there will be underperformance relative to an index. This explains why value investing is less popular than it should be. Mario Gabelli is saying that he has taken the Graham approach and in and terms of his own style evolved in it the way Warren Buffett and Charlie Munger did when it ceased to be possible to buy "cigar butt" businesses trading at less than liquidation value (these cigar butt opportunities disappeared after a significant period had passed after the Great Depression).

6. "What would be the element [the catalyst] that would help narrow the spread between private market value and the stock price? A catalyst may take many forms and can be an industry or company-specific event. Catalysts can be a regulatory change, industry consolidation, a repurchase of shares, a sale or spin-off of a division, or a change in management."

In using the term "catalyst" Mario Gabelli has created a way to describe the idea that one can look for secular and other changes that may increase or decrease value. A catalyst represents extra potential upside in the view of the person doing the analysis. This is another tweak on value investing that has been adopted by some value investors but not others.

7. "When the informed industrialist is evaluating a business for purchase, he or she is not going to put a lot of weight on stated book value. What that informed industrialist

wants to know is: How much cash is this business throwing off today and how much is he going to have to invest in this business to sustain or grow this stream of cash in the future."

From time to time, some people lose track of the importance of cash. These people forget that the only unforgivable sin in business is to run out of cash. Charlie Munger said once: "There are worse situations than drowning in cash and sitting, sitting, sitting. I remember when I wasn't awash in cash —and I don't want to go back." Liberty's Greg Maffei said to me once during a period of market euphoria in the 1990's: "cash will again be king." Markets are cyclical and he was surely right. Of course, you can't time precisely when this will happen.

8. "We believe free cash flow, defined as earnings before interest, taxes and depreciation (EBITD), or a slight variation, EBITDA, both minus the capital expenditures necessary to grow the business, is the best barometer of a company's value. Just as growth-stock investors will pay a higher price-to-earnings ratio for higher earnings growth, private-market-value investors will pay a higher multiple of cash flow for faster cash-flow growth."

The key words in this statement are: **"minus the capital expenditures necessary to grow the business**." Charlie Munger points out: **"**There are two kinds of businesses: The first earns 12%, and you can take it out at the end of the year. The second earns 12%, but all the excess cash must be reinvested — there's never any cash. It reminds me of the guy who looks at all of his equipment and says, 'There's all of my profit.' We hate that kind of business. Mario Gabelli also says: **"We believe that an average management running an above average franchise will do an above average job. An above average management running a lousy franchise will do a lousy job."** For more about what Mario Gabelli looks for in a business see: http://gabelli.com/news/articles/gakraut.html

9. "We don't have to swing at everything."

Some business can't be valued with any reasonable degree of certainty. One great beauty of investing is that you can simply put that decision in the "too hard pile" and move on. There are no "called strikes" in investing. Stated differently, there is no premium for hyperactivity in investing. In fact, there is a penalty. By being patient, but aggressive when the time is right, the investor can "swing big" just when the situation is most advantageous and the odds are substantially in their favor.

10. "If you understand a business, buying the business has less risk."

As Warren Buffett points out, risk comes from not knowing what you are doing. Risk is not a number and certainly risk is not a number that defines volatility. Volatility is certainly "a" risk but it is not the only risk. Charlie Munger points out: "Using [a stock's] volatility as a measure of risk is nuts. Risk to us is 1) the risk of permanent loss of capital, or 2) the risk of inadequate return. Some great businesses have very volatile returns – for example, See's [a

very profitable candy company owned by Berkshire] usually loses money in two quarters of each year – and some terrible businesses can have steady results."

11. "When things look bleak there's a great opportunity for everyone."

The best opportunity to buy a mispriced snow shovel is usually in a month like August not in the middle of winter. Similarly, the best time to buy financial assets is when other investors are fearful. Much of the profit in investing and business is made in downturns. The trick is to have cash to invest at such times. The best investors have cash at such times since it is *a residual* of not being able to find enough securities and others assets to buy during the euphoric part of the business cycle. If you stay focused on buying assets at a margin of safety to intrinsic value, the cash will naturally tend to be available for investing when a period of market euphoria ends and bargains appear.

12. "Always keep your portfolio and your risk at your own individual comfortable sleeping point."

Different people have different emotional temperaments. If you are having trouble sleeping because of your level of investment risk, you have too much risk in your portfolio. The famous investor Jesse Livermore said once: "If you can't sleep at night because of your stock market position, then you have gone too far. If this is the case, then sell your position down to the sleeping level." Mario Gabelli adds: "**if you hold certain cash-generating companies and you buy at a reasonable price, you're going to make more than you will in Treasury bills. The mistake is not staying focused on that." "If I'm an individual investor and I have $100,000 I want to invest in the next five to 10 years, I'd have no problem doing what Warren Buffet recommends — buy an S&P 500 index fund. You're going to earn 5 percent to 7 percent over the next 10 years. The 10-year government bond is yielding only 2.3 percent, so you could earn five percentage points higher."**

Notes:

Gabelli on Value Investing http://www.gabelli.com/news/articles/reg-selby_123099.html

Graham & Doddsville – Columbia Business School https://www8.gsb.columbia.edu/sites/valueinvesting/files/files/Graham%20%20Doddsville%20-%20Issue%2013%20-%20Fall%202011%20-%20v2.pdf

2002 Gabelli talk: http://www.gabelli.com/news/mario_times022502.html

Investment Gurus: A Road Map to Wealth from the World's Best Money Managers by Peter J. Tanous http://www.amazon.com/Investment-Gurus-Wealth-Managers-Selection/dp/0132607204

Forbes: http://www.forbes.com/sites/davidwismer/2012/12/10/billionaire-fund-manager-mario-gabelli-i-like-phds-poor-hungry-and-driven-and-some-investment-themes/

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Value Investing: A Conversation with Mario Gabelli
http://blogs.cfainstitute.org/insideinvesting/2013/02/16/a-conversation-with-mario-gabelli/

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A Dozen Things I've Learned from Leon Cooperman About Investing

June 27, 2015

Leon Cooperman is the founder of the multi-billion dollar hedge fund Omega Advisors. Cooperman founded the firm after a 25 year career at Goldman Sachs where he was a partner and served as chairman and CEO of Goldman Sachs Asset Management. His biography is extensive. The fund's approach to investing is described as: "We are a value-based, catalyst driven investor, focused on a variant perception of company fundamentals. Our disciplined, fundamental approach to company analysis allows us to estimate a company's business value and compare it to market value. Once the investment decision has been made, we determine the appropriate exposure/sizing in the context of prudent risk control and liquidity of the investment."

1. "We are trying to look for the straw hats in the winter. In the winter, people don't buy straw hats, so they're on sale."

"We're looking for things that are mispriced, where opportunity for achieving excess returns exists."

The primary job of any value investor is to find assets that are sufficiently mispriced so they can be bought at enough of a bargain that the purchase price provides a margin of safety. When Mr. Market is greedy about owning more hats, don't buy hats. When Mr. Market is fearful about owning hats, it can be a good time to buy hats. The "best time to buy straw hats is in the winter" principle is simple, but actually following it is hard. John Kenneth Galbraith said once that "The conventional view serves to protect us from the painful job of thinking" and this is often applicable to investing. Seneca adds: "When a mind is impressionable and has none too firm a hold on what is right, it must be rescued from the crowd: it is so easy for it to go over to the majority." It is mathematically the case that you can't outperform a crowd by following it. It is also the case that always avoiding what is popular is folly. The goal is to sometimes be contrarian and to be right when doing so. That requires work and thinking.

Cooperman has also said: "**With an average IQ, a strong work ethic and a heavy dose of good luck, you can go very far." And "The harder I worked, the luckier I got."** If you don't want to work and think, buy a low cost index fund.

2. "[In July 2008.] To some degree, I feel like a kid in a candy store."

2008 was the last time in recent memory when were loads of assets in many asset classes available for purchase at a substantial discount to their intrinsic value. Many great value investors had cash to buy assets that year because that cash was a residual of there being few bargains when the market was euphoric. It may look like people with cash in 2008 successfully timed the market turn around, but in fact they kept their focus on the prices of individual stocks. A value investor fundamentally works from the bottom up when making investment decisions and that means starting from the fundamentals of the specific business.

When a value investor like Warren Buffett says: "I felt like an oversexed guy on a desert island. I didn't find anything to buy," it is a time like 1973. Just a year later Buffett was saying: "This is the time to start investing." A fundamental difference between value investors and many other investors is that value investors say things like "this stock is attractively priced" rather than "I think the market will go up soon."

3. "I am very knowledgeable and cognizant of what the S&P represents; [in 2015] it's an index of 500 companies, on an average they are growing about 5 percent a year, they yield about 2 percent, they trade a little under three times their book value. They have got 35 or 36 percent of debt in their capital structure and for those financial statistics you pay on an average today about 16.5–17 times earnings. So, I look for, as a value investor, I am looking for either more growth at a lower multiple, I am looking for more asset value or more yield. Some combination that says, 'Buy me,' and my team and I spend all day long, 7 days a week, 24/7 trying to look for things that are mispriced to the market."

"As a value investor, I'm looking for more, but for less. I'm looking for more growth at a lower multiple. I'm looking for more yield versus what I can get from the S&P. Or, I'm looking for more asset value."

"About 95% of publicly traded companies have two values. One is the auction market value, which is the price you and I would pay for one hundred shares of a company. The other is the so called private market value, which is the price a strategic or financial investor would pay for the entire business."

Leon Cooperman is explaining that what you pay (price) is not always what you get (value). You need to look very hard and be very patient as well. When you see the opportunity you must also act quickly and aggressively. Few investors have the temperament to do this since they panic when the crowd is fearful. "Inverting" your emotions in an opposite direction from the crowd is not an easy thing to do. Most everyone is better served by sticking to a low cost diversified portfolio of index funds.

4. "We're very confident in the companies we own because they incorporate a margin for error."

He is referring here to the margin of safety principle of value investing. If you buy at a substantial discount to intrinsic or private market value you can make a mistake and still do just fine. And if things work out better than you thought you get an additional bonus. Cooperman points out: "**We have a very narrow assignment, and that's to know the companies we know better than anyone else and own the right companies."** You can't do the former without the latter since to understand the stock you must understand the business. Since risk comes from not knowing what you are doing, know what you are doing when doing. It's that simple.

5. "I look for a stock in the public market that is selling at a significant discount to private market value where I can identify catalysts for a potential change."

This approach is similar to Mario Gabelli, who I have profiled previously. Gabelli places so much importance on catalysts that his firm actually filed for a trademark on the phrase (Private Market Value with a Catalyst™). For example, a catalyst exist if an investor believes that a business selling at a discount also possesses a possible value accelerant that the market does not recognize. This catalyst approach is a tweak on value investing that is optional. Some investors seek an catalyst and some don't. Bruce Greenwald and his co-author's write:

"There are two kinds of catalysts: specific and environmental. Specific catalysts are those changes, either anticipated or recently occurring, that alter the prospects of a particular company. The grimly labeled 'death watch' stocks are attractive to investors who believe that the departure of the CEO or a large shareholder will allow the company, once freed from re-straints, either to improve its performance or to restructure itself, including here selling the whole thing. … Other company-specific catalysts include all types of financial or operational restructurings, such as the spin-off of a division or a significant repurchase of shares, a change in management, and investments in new business developments….In many instances, the environment in question is the government, in its legislative, administrative, and regulatory roles. Even in the most free market of countries, governments cast enormous shadows over the economy and the companies operating within it…. Other environmental catalysts emerge as the consequences of disruptive shifts in technology that facilitate the reorganization of whole industries. The most unavoidable one in our time is the Internet…"

6. "We're a value-oriented, research-driven firm that buys undervalued stocks, shorts overvalued ones, and participates in selected overseas debt and equity markets. May not be an exciting approach, but it works."

Boring "get rich slow" approaches attract fewer competitors which is helpful in the competitive world of investing. Investing where the competition is dumb, misinformed and lazy is an excellent way to boost financial returns. The good news here is that get rich quick type people these are who you are competing against. If other investors and traders were not muppets sometimes, value investing would not work. Turning their dysfunctional behavior into profit is your opportunity.

7. "If you don't have the free cash flow, you don't have anything."

The only unforgivable sin is to run out of cash. Charlie Munger points out that "There are two kinds of businesses: The first earns 12%, and you can take it out at the end of the year. The second earns 12%, but all the excess cash must be reinvested — there's never any cash. It reminds me of the guy who looks at all of his equipment and says, 'There's all of my profit.'

We hate that kind of business." On another occasion Charlie Munger added: "There are worse situations than drowning in cash and sitting, sitting, sitting. I remember when I wasn't awash in cash —and I don't want to go back."

8. "A lot of companies Warren Buffett owns would not be considered value in the classical sense. A company can be growing at an extremely high rate but happens to be trading at a very reasonable multiple."

"[You want] a business that has a moat around it, where it's competitively insulated to some large degree."

What Leon Cooperman is referring to here is that Warren Buffett, with the help of Charlie Munger, was able to evolve his value investing style when Ben Graham style cigar butts companies trading at less than liquidation value disappeared after the Great Depression. In other words, Buffett and investors like Cooperman began to look for quality as an element in the bargain that creates the margin of safety. In the second quote Cooperman is talking about one particularly key elements in the quality of any business which is a moat. Without a sustainable competitive advantage (a moat) competition among suppliers will cause price to drop to a point where there is no long term industry profit greater than the cost of capital. Greater supply kills value. So you want some aspect of the business that puts a limit on supply and the duration of that limit on supply is a key part of what defines the value of the moat.

9. "Analysts tend to be cheerleaders for corporate repurchase programs. In my view, these programs only make sense under one condition – the company is buying back shares that are significantly undervalued. Most management teams have demonstrated the total inability to understand what their businesses are worth. They're buying back shares when the stock is up, and have no courage to buy when the stock is down."

This view is very consistent with both Warren Buffett and Henry Singleton. Businesses buying shares back when prices are high instead of low is driven by short-term investing myopia. Company management has the same opportunity as any investor to do the reverse, which is to buy low instead of high. The best time to be buying back shares are times like 2008 when Mr. Market was fearful.

10. "What the wise man does in the beginning, the fool does in the end."

It is easy to get caught up in the movement of a herd. And it is easiest of all to follow the herd when it is close to the end of a cycle. Even the wisest investors can fall victim to crowd folly. The basic underlying force at work is that people rarely make decisions independently. Fear of missing out (FOMO) and laziness make people follow the lead of other people and that process can snowball. Or not. And it will continue until it doesn't.

11. "There are roughly speaking 10,000 mutual funds that are happy to manage your funds for 1% or less. And roughly 10,000 hedge funds that have the chutzpah to ask for 2 and 20. If clients are going to pay 2 and 20, they have a right to expect more. You're always on the balls of your feet."

"If you are paying somebody two and 20, as opposed to 1%, you basically have the right to expect more from that person."

Since it is possible to invest based on what John Bogle calls the 'low fee hypothesis', if you are paying hedge fund style fees or even 1% just for assets allocation or stock picking you have a right to expect outperformance. One thing you should definitely do if you decide to seek that outperformance is write down actual performance. With an actual pen and paper. Force yourself to consider your real world after fee results. I have several friends who did this and not are index fund investors. Always consider that you may not want to be a member of any fund that will have you as a member. The number of investors profiled in this blog that will not take you on as an investor is huge.

12. "I think it was my discovery of Teleydne and its extraordinary CEO Henry E. Singleton. In my opinion Dr. Singleton was one of the greatest managers in the annals of modern business history. No less an authority than Warren Buffett called Dr. Singleton "the best operating manager and capital deployer in American business." Dr. Singleton started buying up his company's own shares and from 1972 to 1984 he tendered eight times and reduced his share count by some 90%. His ability to buy his stock cheaply and correctly and time the short and long-term troughs is truly extraordinary."

Cooperman can claim lot of credit for discovering the investing and business genius of Henry Singleton, who I've previously profiled here. Charlie Munger has interesting things to say about Singleton that I can't say better:

"We respect Henry Singleton for a very simple reason: He was a genius. Henry Singleton never took an aptitude test where he didn't score an 800 and leave early. He was a major mathematical genius. Even when he was an old man, he could play chess blindfolded, at just below the Grand Master level. He had an awesome intellect, well into the top 1/1,000 of one percent. This was an extreme analytic. Of course, he did create a conglomerate because it was legally allowed at the time. He did it the way everybody else was doing it, he did it better, and he made a lot of money. When they ran out of favor, the stock went way down, he bought it all back for less than it was worth.

Of course, he died a very wealthy man. He was a totally rational human being in things like finance. What I found interesting about Henry Singleton, which has interesting educational implications, is that in watching both Henry and Warren invest and operate at the same time, we had two great windows of opportunity to examine human nature. Henry was very rational. He was quite similar to Berkshire in some ways. Henry never issued a stock option. He had certain commonalities with Warren that were just logical outcomes. What was interesting to me was how much smarter Warren was at investing money than Henry. Henry was born a lot smarter, but Warren had thought about investments a lot longer. Warren just ran rings around Henry as an investor even though Henry was a genius, and Warren was a mere almost-genius."

Notes:
Bloomberg: http://www.bloomberg.com/news/articles/2012-06-28/cooperman-says-earning-13-in-stocks-takes-average-iq-

CNBC: http://www.cnbc.com/id/101823194

Interview: http://www.valueinvestorinsight.com/Nov_06Trial.PDF

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Interview: http://www.bloomberg.com/news/articles/2012-02-22/cooperman-shuns-treasuries-favors-stocks-transcript-

Graham and Doddsville: http://www8.gsb.columbia.edu/rtfiles/Heilbrunn/Graham%20%20Doddsville%20-%20Issue%2014%20-%20Fall%202011.pdf

Graham and Doddsville: http://www.grahamanddoddsville.net/wordpress/Files/Gurus/Leon%20Cooperman/cooperman.pdf

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2015 Daily Journal Meeting http://www.forbes.com/sites/phildemuth/2015/04/27/charlie-mungers-2015-daily-journal-annual-meeting-part-4/

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A Dozen Things I've Learned from Paul Tudor Jones About Investing and Trading

July 25, 2015

Paul Tudor Jones is the founder of the hedge fund Tudor Investment Corporation. The New York Times reported in March of 2014: Mr. Jones can "claim long-term annual returns of close to 19.5 percent in his $10.3 billion flagship fund, Tudor BVI Global."

1. "Certain people have a greater proclivity for [macro trading] because they don't have the need to feel intellectually superior to the crowd. It's a personality thing. But a lot of it is environmental. Many of the successful macro guys today, they're all kind of in my age range. They came from that period of crazy volatility, of the late '70s and early '80s, when the amount of fundamental information available on assets was so limited and the volatility so extreme that one had to be a technician. It's very hard to find a pure fundamentalist who's also a very successful macro trader because it is so hard to have a hit rate north of 50 percent. The exceptions are in trading the very front end of interest rate curves or in specializing in just a few commodities or assets."

There are many ways to make a profit by trading and investing. For example, venture capitalists buy mispriced optionality and traders buy mispriced assets based on factors like momentum. Comparing value investing with what Paul Tudor Jones does for a living is interesting. What could be more anti-Ben Graham and value investing than a statement like: "**We learned just to go with the chart. Why work when Mr. Market can do it for you?"**

"While I spend a significant amount of my time on analytics and collecting fundamental information, at the end of the day, I am a slave to the tape and proud of it."

Set out below are some statements by Paul Tudor Jones that reveal a bit about his trading style:

"**When I think of long/short business, to me there's 5 ways to make money: 2 of those are you either play mean reversion, which is what a lot of long/short strategies do, or you can play momentum/trend, and that's typically what I do. We've seen cheap companies get cheaper many, many times. If something's going down, I want to be short it, and if something's going up, I want to be long it. The sweet spot is when you find something with a compelling valuation that is also just beginning to move up. That's every investor's dream."**

"I love trading macro. If trading is like chess, then macro is like three-dimensional chess. It is just hard to find a great macro trader. When trading macro, you never have a complete information set or information edge the way analysts can have when trading individual securities. It's a hell of a lot easier to get an information edge on one stock than it is on the S&P 500. When it comes to trading macro, you cannot rely solely on fundamentals; you have to be a tape reader, which is something of a lost art form. The inability to read a tape and spot trends is also why so many in the relative-value space who rely solely on fundamentals have been annihilated in the past decade. Markets have consistently experienced "100-year events" every five years. "

"These days, there are many more deep intellectuals in the business, and that, coupled with the explosion of information on the Internet, creates the illusion that there is an explanation for everything and that the primary task is simply to find that explanation. As a result, technical analysis is at the bottom of the study list for many of the younger generation, particularly since the skill often requires them to close their eyes and trust the price action. The pain of gain is just too overwhelming for all of us to bear!"

"I believe the very best money is made at the market turns. Everyone says you get killed trying to pick tops and bottoms and you make all your money by playing the trend in the middle. Well for twelve years I have been missing the meat in the middle but I have made a lot of money at tops and bottoms."

"One principle for sure would be: get out of anything that falls below the 200-day moving average."

"I teach an undergrad class at the University of Virginia, and I tell my students, "I'm going to save you from going to business school. Here, you're getting a $100k class, and I'm going to give it to you in two thoughts, okay? You don't need to go to business school; you've only got to remember two things. The first is, you always want to be with

whatever the predominant trend is. My metric for everything I look at is the 200-day moving average of closing prices. I've seen too many things go to zero, stocks and commodities. The whole trick in investing is: "How do I keep from losing everything?" If you use the 200-day moving average rule, then you get out. You play defense, and you get out."

"It's just the nature of a rip-roaring bull market. Fundamentals might be good for the first third or first 50 or 60 percent of a move, but the last third of a great bull market is typically a blow-off, whereas the mania runs wild and prices go parabolic."

My takeaway: Paul Tudor Jones is timing non-rational human behavior based primarily on his pattern recognition skills. He does things like "spend an entire day watching a projection of his hedge fund's positions blinking as they change." What he does is interesting, but I am not interested in trying to replicate it myself. It does not suit my temperament, interests or skills. In other words, I am temperamentally unsuited to adopt his trading approach. I would rather drop a 100 pound stone on my toe than to watch blinking lights on a screen for a living. I put what Paul Tudor Jones does in what Charlie Munger might call the "not interested" pile. Would I put money in a hedge fund Paul Tudor Jones ran? That is a moot question since he has no need or desire to raise money from people like me just as David Tepper would not invest money for me if I asked him. Would I invest with someone else who said he or she would replicate what they do? I doubt it, and certainly not anyone I know of right now. Whether I would invest in a tweaked index fund that considered a factor like momentum is a different question. I have not done this so far and it would certainly depend on the fees charged by the manager. Outperformance that is less than the manager's fees is not interesting to me.

Understanding a factor like momentum is a big part of what Paul Tudor Jones does. Ben Carlson gives an excellent summary of the momentum approach to trading here which reads in part:

"The momentum factor is based on buy high, sell higher or alternatively, cut your losses and let your winners run. Value investing is based on a long-term reversion to the mean. Momentum investing is based on that gap in time that exists before mean reversion occurs. Value is a long game, while momentum is usually seen in the short- to intermediate-term… And it is a terrible idea to chase performance if you don't know what you're doing or why you're doing it. Momentum is chasing performance, but in a systematic way, with an entry and exit strategy in place. Momentum tries to take advantage of performance chasers who are making emotional decisions. This is why the best momentum investors use a rules-based approach, to avoid those emotions."

It is worth noting that momentum has been on a favorable roll lately. That does not mean the performance of momentum as a strategy will continue, but that momentum can work to outperform the market is a fact.

Despite his unique system, Paul Tudor Jones shares many approaches and methods with other great investors who have adopted different systems. I describe some of these commonalities below.

2. "I am always thinking about losing money as opposed to making money."

"Don't focus on making money; focus on protecting what you have."

"At the end of the day, the most important thing is how good are you at risk control."

"Where you want to be is always in control, never wishing, always trading, and always, first and foremost protecting your butt."

"I look for opportunities with tremendously skewed reward-risk opportunities. Don't ever let them get into your pocket – that means there's no reason to leverage substantially. There's no reason to take substantial amounts of financial risk ever, because you should always be able to find something where you can skew the reward risk relationship so greatly in your favor that you can take a variety of small investments with great reward risk opportunities that should give you minimum draw down pain and maximum upside opportunities."

"[I'm looking for] 5:1 (risk /reward). Five to one means I'm risking one dollar to make five. What five to one does is allow you to have a hit ratio of 20%. I can actually be a complete imbecile. I can be wrong 80% of the time, and I'm still not going to lose."

The focus of great investors on not losing money is universal. Warren Buffett says the same thing, as do Seth Klarman and Howard Marks. This desire not to lose money is another way of saying that great investors and traders want to find bets with a lot more upside than downside. In other words, they are looking for asymmetry of potential outcomes: big upside and small downside. That's optionality. They want to find bets that are very substantially in their favor. Great investors and traders are not gamblers since they seek positive expected value when making a bet.

3. "If you have a losing position that is making you uncomfortable, the solution is very simple: Get out, because you can always get back in. There is nothing better than a fresh start."

Only bet when the odds are substantially in your favor. Don't bet unless you have a margin of safety. If you are not feeling certain and comfortable with your bet, then don't bet. Put differently by Charlie Munger: "the wise ones bet heavily when the world offers them that opportunity. They bet big when they have the odds. And the rest of the time they don't. It is just that simple."

4. "I think one of my strengths is that I view anything that has happened up to the present point in time as history. I really don't care about the mistake I made three seconds ago in the market. What I care about is what I am going to do from the next moment on. I try to avoid any emotional attachment to a market."

Treating past decisions as sunk and looking at each position on that basis is a great skill for an investor to have. Researchers put it this way: "People have trouble cutting their losses: They hold on to losing stocks too long, they stay in bad relationships, and they continue to eat large restaurant meals even when they're full. This behavior, often described as 'throwing good money after bad', is driven by what behavioral scientists call the 'sunk-cost bias'" What has been spent is spent. Once it is gone it is gone.

5. "By watching [my first boss and mentor] Eli [Tullis], I learned that even though markets look their very best when they are setting new highs, that is often the best time to sell. He instilled to me the idea that, to some extent, to be a good trader, you have to be a contrarian."

That you can't perform the market if you are doing just the same things as the market is a mathematical fact. You must sometimes be a contrarian and sometimes be right about that view in a way that makes the magnitude of what you do right outperform the crowd. Paul Tudor Jones said once: **"I also said that my contrarian trading was based on the fact that the markets move sideways about 85 percent of the time. But markets trend 15 percent of the time and you need to follow the trend during those times."** How he does this is a mystery to me. It's pattern recognition, but what's the pattern?

6. "[Eli] was the largest cotton speculator in the world when I went to work for him, and he was a magnificent trader. In my early 20s, I got to watch his financial ups and downs and how he dealt with them. His fortitude and temperament in the face of great adversity were great examples of how to remain cool under fire. I'll never forget the day the New Orleans Junior League board came to visit him during lunch. He was getting absolutely massacred in the cotton market that day, but he charmed those little old ladies like he was a movie star. It put everything in perspective for me."

"I want the guy who is not giving to panic, who is not going to be overly emotionally involved, but who is going to hurt when he loses. When he wins, he's going to have quiet confidence. But when he loses, he's gotta hurt."

Having control over your emotions is a very valuable thing since most mistakes are emotional or psychological. I believe this anecdote is making the point that people who can keep emotions and actions in spate buckets have a big advantage. Self-control and self-awareness are very valuable.

7. "My guiding philosophy is playing great defense. If you make a good trade, don't think it is because you have some uncanny foresight. Always maintain your sense of confidence, but keep it in check."

"Don't be a hero. Don't have an ego. Always question yourself and your ability. Don't ever feel that you are very good. The second you do, you are dead."

This is a series of statements about the dangers of hubris. Oscar Lavant put it this way: "What the world needs is more geniuses with humility; there are so few of us left." The best investors and traders are humble. They know they have made, and will continue to make, some mistakes.

8. "I got out of the brokerage business because I felt there was a gross conflict of interest: If you are charging a client commissions and he loses money, you aren't penalized. I went into the money management business because if I lost money, I wanted to be able to say that I had not gotten compensated for it. In fact, it would probably cost me a bundle because I have an overhead that would knock out the Bronx Zoo. I never apologize to anybody, because I don't get paid unless I win."

This is a quote about having "skin in the game." Advisors with skin in the game perform better and are more accountable. What is good for the advisor or manager is good for you which lowers conflicts of interest. Aligned incentives are a very good thing, not just in investing but in life generally. The more aligned interests are the more you can base a relationship on trust. The more trust that exists the fewer resources need to be devoted to compliance. The optimal outcome is what Charlie Munger calls "a seamless web of deserved trust."

9. "This skill is not something that they teach in business school."

That Paul Tudor Jones can do it does not mean that you can do it: **"I get very nervous about the retail investor, the average investor, because it's really, really hard. If this was easy, if there was one formula, one way to do it, we'd all be zillionaires."** The danger of writing something like this blog post is that many knuckleheads will surely say "Oh, I can be just like Paul Tudor Jones." No, the chances of that being true are vanishingly small. There is only one Paul Tudor Jones. You are not Paul Tudor Jones. But his record exists. It can't be ignored.

10. "I've done really well on the short side. There's nothing more exciting than a bear market. But it's not a wonderful way for long-term health and happiness."

"I spent 20 years doing it, it's not the right way to make a living trading. It's simply not."

Shorting stocks has negative optionality. Mohnish Pabrai says: "When you are long on a stock, as it goes down in price, the position is going against you and it becomes a smaller portion of your portfolio. In shorting, it is the other way around: if the short goes against you, it is going to become a larger position of your portfolio. When you short a stock, your loss potential is infinite; the maximum you can gain is double your value. So why will you take a bet where the maximum upside is a double and the maximum downside bankruptcy?" Warren Buffett points out: "You'll see way more stocks that are dramatically overvalued than dramatically undervalued. It's common for promoters to cause a stock to become valued at 5-10 times its true value, but rare to find a stock trading at 10-20% of its true value. So you might think short selling is easy, but it's not. Often stocks are overvalued because there is a promoter or a crook behind it. They can often bootstrap into value by using the shares of their overvalued stock. For example, it it's worth $10 and is trading at $100, they might be able to build value to $50. Then, Wall Street says, "Hey! Look at all that value creation!" and the game goes on. [As a short seller,] you could run out of money before the promoter runs out of ideas."

11. "The single most important things that you can do is diversify your portfolio. Diversification is key, playing defense is key, and, again, just staying in the game for as long as you can."

It may seem odd that what some people call a gut trader like Paul Tudor Jones is focused on diversification. What he and other investors are saying is that if you don't play defense and you lose, you are out of the game. They know that you can't win unless you remain in the game. Diversification also allows you to "practice patience." Paul Tudor Jones said on one occasion **"if you don't see anything, don't trade."** He adds: **"there's no reason to leverage substantially. There's no reason to take substantial amounts of financial risk ever, because you should always be able to find something where you can skew the reward risk relationship so greatly in your favor that you can take a variety of small investments with great reward risk opportunities that should give you minimum draw down pain and maximum upside opportunities."**

12. "The secret to being successful from a trading perspective is to have an indefatigable and an undying and unquenchable thirst for information and knowledge."

Paul Tudor Jones may be a momentum trader but he is also an investor who looks at fundamentals. You can't find mispriced assets unless you have an investing edge and that edge can come from better information and knowledge.

A Dozen Things Charlie Munger has said about Reading

July 26, 2015

1. **“In my whole life, I have known no wise people (over a broad subject matter area) who didn’t read all the time – none, zero.”**

2. **“You’d be amazed at how much Warren reads – at how much I read. My children laugh at me. They think I’m a book with a couple of legs sticking out.”**

3. **“As long as I have a book in my hand, I don’t feel like I’m wasting time.”**

4. **“I’ve gotten paid a lot over the years for reading through the newspapers.”**

5. **“I don’t think you can get to be a really good investor over a broad range without doing a massive amount of reading. I don’t think any one book will do it for you.”**

6. **“For years I have read the morning paper and harrumphed. There’s a lot to harrumph about now.”**

7. **“We read a lot. I don’t know anyone who’s wise who doesn’t read a lot. But that’s not enough: You have to have a temperament to grab ideas and do sensible things. Most people don’t grab the right ideas or don’t know what to do with them.”**

8. **“By regularly reading business newspaper and magazines I am exposed to an enormous amount of material at the micro level. I find that what I see going on there pretty much informs me about what’s happening at the macro level.”**

9. **“Warren and I do more reading and thinking and less doing than most people in business. We do that because we like that kind of a life. But we’ve turned that quirk into a positive outcome for ourselves. We both insist on a lot of time being available almost every day to just sit and think. That is very uncommon in American business. We read and think.”**

10. **"If you get into the mental habit of relating what you're reading to the basic structure of the underlying ideas being demonstrated, you gradually accumulate some wisdom."**

11. **"Develop into a lifelong self-learner through voracious reading; cultivate curiosity and strive to become a little wiser every day."**

12. **"I met the towering intellectuals in books, not in the classroom, which is natural. I can't remember when I first read Ben Franklin. I had Thomas Jefferson over my bed at seven or eight. My family was into all that stuff, getting ahead through discipline, knowledge, and self-control."**

p.s., "Obviously the more hard lessons you can learn vicariously, instead of from your own terrible experiences, the better off you will be. I don't know anyone who did it with great rapidity. Warren Buffett has become one hell of a lot better investor since the day I met him, and so have I. If we had been frozen at any given stage, with the knowledge we had, the record would have been much worse than it is. So the game is to keep learning."

A Dozen Things I've Learned from Sam Zell about Investing and Business

August 9, 2015

Sam Zell is the founder and chairman of Equity Group Investments, which started in the real estate business but now owns a range of businesses. Sam Zell's nickname is "*the Grave Dancer"* since he is often a distressed asset investor. This is a blog post about Sam Zell the investor. As is the case with all of my blog posts, if you have an issue with the political views of the featured investor, I suggest that you try another blog.

1. **"The first thing you need to understand is how little you know."** The best investors understand that the more you know, the more you know that there is even more you do not know. Creating a taxonomy that categorizes your lack of knowledge is helpful since problems in life most often come from not knowing what you are doing. There are three categories: (1) you may know the potential future states and the probability that those potential future states may come to pass. This is known as "risk" and is rare. (2) you may know the potential future states, but not the

probability that any of those potential future states will happen. This is uncertainty and is most common. (3) you may encounter future states that you had no prior idea were even possible. This is the domain of "ignorance." This third domain (Black Swans) impacts people's lives way more than they imagine since even though events in this domain do not happen that often, when they do, it produces massive disruptive change.

2. **"When everyone is going right, look left." "I've spent my whole life listening to people explain to me that I just don't understand, but it didn't change my view. Many times, however, having a totally independent view of conventional wisdom is a very lonely game."** Sam Zell is expressing the same view as investors like Howard Marks who recognize that it is mathematically provable that without being a contrarian in some instances (and being right about that contrarian view in those instances) it is not possible to outperform a market. You simply can't follow the crowd and beat the crowd. Being contrarian for its own sake is, of course, unwise. Sam Zell is saying that you should "look" left, which does not necessarily mean you should "go" left. But sometimes that look left will give you enough confidence to place contrarian bets since you will see that the odds are substantially in your favor.

3. **"Listen, business is easy. If you've got a low downside and a big upside, you go do it. If you've got a big downside and a small upside, you run away. The only time you have any work to do is when you have a big downside and a big upside."** This statement is all about the value of seeking positive optionality. Every once in a while, if you are looking hard for opportunities, you will find a mispriced bet within your circle of competence with a relatively capped downside and a huge potential upside. It is wise to bet aggressively in these cases since it allows you to harvest positive optionality. Betting when the optionality of the situation is negative is a fool's errand. Situations with a big up side and a big downside are by contrast problematic. This situation is likely to result in the most work and for that reason alone it may be wise to put decisions within it in the "too hard" pile.

4. **"At all times, we are keenly aware of what our exposure is. As a result we are much more of a Benjamin Graham kind of investor. We are very focused on what the liquidation value is. Barnard Baruch, who was a very famous financier said 'Nobody went broke taking a profit.' In the same manner, I have never suffered from any transaction turning out to be too good. The real issue is 'What is the downside'." "My own formula is very simple. It starts and ends with replacement cost because that is the ultimate game. In the late 1980s and early 1990s, I was the only buyer of real estate in America. People asked me, 'How could you buy it?' How could I project yields? Rents? For me, it came down to these issues: Is the building well built? Is it in a good location? How much less than the cost of replacement is its price? I bought stuff for 30 cents on the dollar and 40 cents on**

the dollar." Sam Zell likes to buy assets with a Ben Graham-style margin of safety, even if the asset class is commercial real estate. The value investing formula is simple: buy at a bargain and wait. I suggest that you don't try to make it more complex than that. Most value investors are happy with a 30% margin of safety, but Sam Zell is saying here that he has sometimes been able to buy real estate at what he considered to be as much as a 70% margin of safety. In doing so Sam Zell is also taking a view similar to Howard Marks in that he is controlling risk. Howard Marks believes: "Success in investing is not a function of what you buy. It's a function of what you pay."

5. **"I pound on my people: taking risk is great. You've got to be paid to take the risk. The risk/return ratio is probably the most significant determinant of success as an investor." "Measuring and gauging the risk reward ratio is the biggest [margin of] safety issue every investor has."** Getting paid for any risk you take is a key part of risk control. In my post on Jeffrey Gundlach I wrote: **"**Taking in risk for its own sake is a sucker's bet. More risk does not necessarily mean more investment return." Sam Zell is talking about the same principle here. What you want to find is mispriced risk or uncertainty so you get paid for taking that risk or uncertainty since as Howard Marks has pointed out: "If riskier investments necessarily delivered higher returns they wouldn't be risky."

6. **"You can have all of the assets in the world you want, but if you have no liquidity it doesn't matter." "Liquidity equals value. At no time in my career has it ever been more clearly brought home to me than in the (2008)-09 period. If you had liquidity, you had value. … Everything comes down to liquidity, everything comes down to exit strategies, everything comes down to knowing when you get in how you are going to get out."** A repeating theme of this series on my blog is Harold Geneen's admonition: the only unforgivable sin in business is to run out of cash. Being in a situation where lots of people have lots of assets but no cash is like being in a big earthquake. You can't believe it is happening, but there it is. Sam Zell pointed out http://scholarship.sha.cornell.edu/cgi/viewcontent.cgi?article=1069&context=crer that once in 1990 he read in a magazine that he was worth a billion dollars and yet he did not know if he had enough liquidity to make payroll the next Friday.

7. **"The problem with leverage is that you need to pay it back. The biggest measure of success or failure is how entrepreneurs address and deal with leverage. If you are in the real estate business without leverage, that's like being a boxer in the ring without a glove."** Some people are more comfortable with debt than others. Some people sleep well knowing that they or businesses they control owe other people billions of dollars. Others can't seep while owning anyone much of anything. Learning how to manage debt and you reaction to being in debt is a

valuable skill. Sam Zell is saying that leverage in his business is a not avoidable so he has learned to be really good at managing leverage.

8. **"Anytime you don't sell, you buy. So if we had chosen not to sell Equity Office for $39 billion, we would be buying Equity Office for $39 billion**." Sam Zell is talking about what Charlie Munger calls "opportunity cost" thinking. Munger says: "In life, if opportunity A is better than B, and you have only one opportunity, you do A. There's no one-size-fits-all. If you're really wise and fortunate, you get to be like Berkshire. We have high opportunity costs. We always have something we like and can buy more of, so that's what we compare everything to. We know we've got opportunity X, which is better than the new opportunity. Why do we want to waste two seconds thinking about the new opportunity?"

9. **"I would tell you whatever business I've been in — real estate, barges, rail cars — it's all about supply and demand." "When there is no supply, real estate performs very well. Almost without regard, within reason to the economic conditions. When there is over supply, it doesn't matter what's going on real estate is going to suffer."** Economics is far simpler than most people imagine, especially for a business person. Your task in business is to create a situation where supply is at least somewhat limited by some phenomenon. successfully deal with competitors a business will need what Harvard Business School Professor Michael calls a "sustainable competitive advantage." Warren Buffett calls this same characteristic a "moat." Michael Porter: "That free entry dissipates economic profit is one of the most powerful insights in economics, and it has profound implications for strategy. Firms that base their strategies on products that can be easily imitated or skills and resources that can be easily acquired put themselves at risk. To attain a competitive advantage, a firm must secure a position in the market that protects itself from imitation and entry."

10. **"Arthur Miller did a huge disservice to entrepreneurship by writing Death of a Salesman. Salesmen are not scummy and dirty – people you would not want to ring your doorbell. In fact, all successful entrepreneurs are salesmen."** Selling is a highly underrated skill in life. Everyone can benefit from learning how to sell better since in addition to products and services people must sell ideas, causes and many other things in life. Salespeople tend to be highly compensated since the activity is (1) hard and (2) requires real skill. Sam Zell has gone as far as to say: **"Nothing is bought and everything is sold."**

11. **"Business schools are beginning to change, but particularly in the '80s the business schools focused on if you could just turn the page there's the formula that tells you**

how to do it. And the answer is there are no formulas and – and success and failure are – are a combination of judgment and an external event. But it starts and ends with a simple idea." "Don't get confused by education: Simpler solutions are most often better solution!" Sam Zell is talking about a point made by Ben Horowitz in his book *The Hard Things About Hard Things* which I wrote a post about recently http://25iq.com/2015/07/05/a-dozen-things-ive-learned-from-ben-horowitz-about-management-investing-and-business/. The real world of business cannot be navigated successfully simply by applying simple formulas or following a recipe for success. There is no substitute for things like learning from experience, good judgment and hard work in life.

12. **"Entrepreneurs basically not only see the opportunities, but also the solutions." "A critical element to a successful entrepreneur- he or she thinks in themes, not in single events." "I don't know too many insecure successful entrepreneurs." "Fear and courage are very closely related. Anybody who does not understand fear does not know courage." "Entrepreneurs don't fail – things sometimes just don't work out. But, that's it." "Entrepreneurs don't just deal with risk, they have risk appetite. They look for change that will make the difference." "An entrepreneur is a guy who thinks outside of the box, a person who does not accept the conventional. He constantly asks 'what if?', 'could I?', or 'should I?'" "There is a Confucian saying: 'The definition of a schmuck is someone who reached his goal.' Entrepreneurs always keep going – they never stop. "It is lonely being an entrepreneur. Often, you turn around and ask: where is everybody?"** This set of quotes makes an number of important points about being an entrepreneur including the idea that courage is a highly underappreciated driver of the success of entrepreneurs. If you don't get in the game, you can't win. Perhaps the best way to end this post is with a joke Sam Zell once told: **"I'll tell you a story that I think is probably the most significant advice that I give young entrepreneurs. A pious Jew is facing bankruptcy, and he beseeches God repeatedly each week to let him win the lottery to save his livelihood. The first week, he doesn't win. The second week, he doesn't win. But the third time, a flash of light appears, and from up high, comes a voice — and it's the voice of God — and he says *'You've got to buy a ticket!'"***

Notes:

Rough Rider http://www.newyorker.com/magazine/2007/11/12/rough-rider

Entrepreneurship Talk http://innovateblue.umich.edu/memorable-quotes-from-sam-zells-entrepreneurship-talk-by-thomas-zurbuchen/

Kellog School http://kelloggschool.tumblr.com/post/77181962926/a-packed-auditorium-welcomed-equity-group

Bloomberg Interview http://genius.com/Sam-zell-2-5-2014-bloomberg-interview-annotated

Grave Dancer http://www.valuewalk.com/2015/06/grave-dancers-sam-zell/

Wharton: http://knowledge.wharton.upenn.edu/article/real-estate-developer-and-grave-dancer-sam-zell-its-all-about-supply-and-demand/

Interview: http://knowledge.ckgsb.edu.cn/2012/09/26/finance-and-investment/investment-guru-sam-zell-any-time-you-dont-sell-you-buy/

Forbes: http://www.forbes.com/sites/kerenblankfeld/2011/01/27/billionaire-sam-zells-advice-to-entrepreneurs/

Ackman and Zell: http://www.ibtimes.com/bill-ackman-and-sam-zell-turnarounds-opportunities-and-success-440096

A Dozen Things I've Learned from David Einhorn About Investing

August 15, 2015

David Einhorn is the President of Greenlight Capital which is "a value oriented investment advisor… that emphasizes intrinsic value will achieve consistent absolute investment returns and safeguard capital regardless of market conditions." "He learned the hedge fund business from Gary Siegler and Peter Collery, who managed the SC Fundamental Value Fund. David

Einhorn is one of the most successful long/short equity hedge fund managers of the past decade." He is the author of *Fooling Some of the People All of the Time: A Long Short Story*. http://www.amazon.com/Fooling-People-Complete-Updated-Epilogue/dp/0470481544/ref=sr_1_1?s=books&ie=UTF8&qid=1439654903&sr=1-1&keywords=long+short+story+Einhorn

1. **"We take the traditional value investor's process and just flip it around a little bit. We start by identifying situations in which there is a reason why something might be misunderstood, where it's likely investors will not have correctly figured out what's going on. Then we do the more traditional work to confirm whether, in fact, there's an attractive investment to make. That's as opposed to starting with something that's just cheap and then trying to figure out why. We think our way is more efficient."** David Einhorn is at his core a value investor who has developed a twist on the customary process. Finding reasons for a likely mispricing of assets and then doing the traditional value investing analysis is not fundamentally different than doing the traditional value investing analysis first. He feels his approach consumes less of his firm's resources since they are not doing the work on businesses which are unlikely to see substantial asset appreciation. Reasons for an asset being mispriced include spin-offs, accounting issues and changes in secular or technology trends.

2. **"What I like is solving the puzzles. I think that what you are dealing with is incomplete information. You've got little bits of things. You have facts. You have analysis. You have numbers. You have people's motivations. And you try to put this together into a puzzle — or decode the puzzle in a way that allows you to have a way better than average opportunity to do well if you solve on the puzzle correctly, and that's the best part of the business."** Value investing when done right is a lot of fun if you like to solve puzzles. The process is like being a detective. Sherlock Holmes might have been a good value investor. The task of a investor is to **discover** puzzle solutions in situations that involve different combinations of what Richard Zeckhauser calls risk, uncertainty, and ignorance (see the chart below). The process of discovering puzzle answers is inherently probabilistic in nature.

Table 1. Escalating Challenges to Effective Investing

	Knowledge of States of the World	Investment Environment	Skills Needed
Risk	Probabilities known	Distributions of returns known	Portfolio optimization
Uncertainty U	Probabilities unknown	Distributions of returns conjectured	Portfolio optimization, Decision theory
Ignorance UU	States of the world unknown	Distributions of returns conjectured, often from deductions about other's behavior. Complementary skills often rewarded along side investment	Portfolio optimization. Decision theory. Complementary skills (ideal) Strategic inference.

3. **"Our goal is to make money, or at least to preserve capital, on every investment." "Securities should be sufficiently mispriced, so that if we are right we will do well, but we are mostly wrong, we will roughly break even." "The trick is to avoid losers. Losers are terrible because it takes a success to offset them just to get back to even."** Risk is always relative to the price paid for the asset. If you buy at an attractive price you can have a margin of safety. You can see this margin of safety principle at work in Warren Buffett's two rules of investing: "Rule No. 1: Never lose money. Rule No. 2: Never forget rule No. 1." Howard Marks and Seth Klarman all espouse this same philosophy. How do you "not lose money?" Always protect the downside. If you buy at a substantial discount to intrinsic value you can make a mistakes and still end up with a solid investment.

4. **"There were three basic questions to resolve: First, what are the true economics of the business? Second how do the economics compare to the reported earnings? Third, how are the interests of the decision makers aligned with the investors?"** The best value investors have an investing system that involves asking and answering a series of questions. For example, does the business have a moat? What should the

economics of the business be in a normal situation? Then: Do earnings reports match the strength of the moat? Is there untapped pricing power? Is management underperforming? Are there problems you have not yet seen? Then: Are the incentives of management aligned with the incentives of investors? In the book *Fooled By Randomness* Nassim Taleb writes: "… instead of relying on thousands of meandering pages of regulation, we should enforce a basic principle of 'skin in the game' when it comes to financial oversight: 'The captain goes down with the ship; every captain and every ship.' In other words, nobody should be in a position to have the upside without sharing the downside, particularly when others may be harmed."

5. **"I'm not really good a predicting the market on a very near term kind of basis. So what it does from day-to-day is not within my competency to even hazard a guess at."** This comment is a blend of Ben Graham's Mr. Market metaphor and the "circle of competence" concept. When David Einhorn buys assets he does not have a short term timeline in mind for how long he will own the assets. The objective of a value investor is to buy the assets at a bargain price and then wait. this word wait is an important one. What is meant by the value investor is waiting would any short term timing. Trying to make short-term forecasts instead of waiting is folly and value investors instead rely on the combined long term effects of a buying with a margin of safety knowing that over the long terms prices will return to the mean.

6. **"We don't try to solve the most intractable problems. At Greenlight, when we look at investments, some opportunities are just too hard to assess. We pass on those, even though many may work out perfectly well. We prefer situations that play to our strengths, where we can develop a differentiated analytical edge. This enables us to make investments where we are confident that the reward exceeds the risk."** Having what Charlie Munger calls a "too hard pile" is a tremendously valuable thing. If an investment is too hard, just move on to the many other opportunities that are not hard. Why get involved in investments where you do not know what you are doing especially when there are other bets where you do? Playing against weak competitors is not a sin in investing or business. There are no bonus points in investing for doing things that are really hard.

7. **"Investing and poker require similar skills. I don't play a lot of hands. But I don't just wait for the perfect hand. They don't come up often enough." "With poker, you have a resolution of the hand within a couple of minutes." "Whereas, even if the thought process in investing is very much the same, you're looking at an outcome that could be 2, 3, 4, 5 years from when you make the original decision. And the mindset related to that is very different." "We find things that we think are exceptional only occasionally."** Markets are far from perfectly efficient. But they are efficient enough that finding mispriced assets is hard, especially inside your

circle of competence, which narrows the possible universe of bets. When the markets do serve up a mispriced bet an investor should act quickly and aggressively to place a bet if it is within their circle of competence. A number of very successful investors are excellent card players. Charlie Munger puts it this way: "The right way to think is the way Zeckhauser plays bridge. It's just that simple." Warren Buffett has a similar view: "Bridge is the best game there is. You're drawing inferences from every bid and play of a card, and every card that is or isn't played. It teaches you about partnership and other human skills. In bridge, you draw inferences from everything and that carries over well into investing. In bridge, similar to in life, you'll never get the same hand twice but the past does have a meaning. The past does not make the future definitive but you can draw from those experiences. I think the partnership aspect of bridge is a great lesson for life. If I'm going into battle, I want to partner with the best. I was playing with a world champion and we were playing against my sister and her husband. We lost, so I took the score pad and I ate it."

8. **"We believe in constructing our portfolio so that we put our biggest amount of money in our highest conviction idea, and then we view our other ideas relative to that." "I decided to run a concentrated portfolio."** This statement illustrates that David Einhorn is a "focus" investor like Charlie Munger and that he adopts an opportunity cost approach. At Greenlight 20 percent of capital might be put in a single long bet and up to 60 percent in its five largest long bets. David Einhorn cites Joel Greenblatt as an inspiration for his view. Greenblatt argues that the addition of more stocks in a portfolio that already has six to eight stocks in different industries doesn't significantly decrease volatility. In any event, volatility is only on type of risk. You can see his recent holdings and his most recent letter here: http://www.octafinance.com/david-einhorns-greenlight-capital-had-a-bad-q2-bringing-2015-ytd-loss-to-3-3/101385/ David Einhorn currently has a significant position in gold. Some value investors own gold (e.g., Eveillard) and some don't (e.g., Buffett, Munger). I have never owned gold since it doesn't have earnings that can be used to calculate an intrinsic value. While some value investors may buy gold, buying gold is not value investing since it does not fit with the Ben Graham system. Why buy gold when you can buy a partial ownership interest in a real productive business instead of a lump of inert metal?

9. **"On any given day a good investor or a good poker player can lose money."** A good process can lead to a bad outcome in the real world, just as a bad process can lead to a good outcome. In other words, both good andbad luck can play a part in investing results. But the best investors understand that over time a sound process will outperform. The best way to understand this point being made by David Einhorn is to read Michael Mauboussin, who tells this story: "[A baseball executive] was in Las Vegas sitting next to a guy who has got a 17. So the dealer is asking for hits and everybody knows the standard in blackjack is that you sit on a 17. The guy asked for a hit. The dealer flips over 4, makes the man's hand, right, and the dealer sort of

smiles and says, “Nice hit, sir?” Well, you’re thinking nice hit if you’re the casino, because if that guy does that a hundred times, obviously the casino is going to take it the bulk of the time. But in that one particular instance: bad process, good outcome. If the process is the key thing that you focus on, and if you do it properly, over time the outcomes will ultimately take care of themselves. In the short run, however, randomness just takes over, and even a good process may lead to bad outcomes. And if that’s the case: You pick yourself up. You dust yourself off. You make sure you have capital to trade the next day, and you go back at it.”

10. **“[Our] goal is to achieve high absolute rates of return.” “We do not compare our results to long only indexes. This mean out goal is to try to achieve positive results over time regardless of the environment. Does the reward of this investment outweigh the risk?”** The goal David Einhorn sets for himself is not to outperform a benchmark. This section from Seth Klarman’s book *Margin of Safety* describes a value investor’s desire for “absolute return”: “Most institutional and many individual investors have adopted a relative-performance orientation…They invest with the goal of outperforming either the market, other investors, or both and are apparently indifferent as to whether the results achieved represent an absolute gain or loss. Good relative performance, especially short-term relative performance, is commonly sought either by imitating what others are doing or by attempting to outguess what others will do. Value investors, by contrast, are absolute-performance oriented; they are interested in returns only insofar as they relate to the achievement of their own investment goals, not how they compare with the way the overall market or other investors are faring. Good absolute performance is obtained by purchasing undervalued securities while selling holdings that become more fully valued. For most investors absolute returns are the only ones that really matter; you cannot, after all, spend relative performance. Absolute-performance-oriented investors usually take a longer-term perspective than relative-performance-oriented investors. A relative-performance-oriented investor is generally unwilling or unable to tolerate long periods of underperformance and therefore invests in whatever is currently popular. To do otherwise would jeopardize near-term results. Relative-performance-oriented investors may actually shun situations that clearly offer attractive absolute returns over the long run if making them would risk near-term underperformance. By contrast, absolute-performance-oriented investors are likely to prefer out-of-favor holdings that may take longer to come to fruition but also carry less risk of loss.”

11. **“I’m a big believer in not making decisions before they need to be made. Circumstances change, people change, facts change, and options change. Why commit early when you can have the benefit of deciding later with more information?”** Having the option to make the best choice at a later point in time when you have more information is valuable since markets are always changing. As an example, Craig McCaw has said to me many times over the years that “flexibility

is heaven," which means that he was willing at times to pay a financial price to keep his options open. When change is constant, having the ability to adapt at a later point in time is a very good thing.

12. **"At the top of the bubble, technology stocks seemed destined to consume all the world's capital. It was not enough for all the new money to go into this sector. In order to feed the monster, investors sold everything from old economy stocks to Treasuries to get fully invested in the bubble. Value investing fell into complete disrepute." "Market extremes occur when it becomes too expensive in the short-term to hold for the long-term." "One of the things I have observed is that American financial markets have a very low pain threshold."** David Einhorn is pointing out that people often need to act based on short-term needs. Often that short-term need is to generate liquidity. Sometimes liquidity is needed because some people selling an asset cause a drop in price, which causes more people to sell that asset due to the price drop [repeat]. George Soros calls this phenomenon "reflectivity." When people start acting in some way because other people are acting in the same or similar ways nonlinear results can happen both to the upside and the downside. For example, cash can quickly move from being available quite easily, to being very scarce. As another example, the price of an asset can suddenly jump in a big way. The speed at which this can happen is often forgotten by people and is underappreciated until that time arises. Market extremes do occur since people do not make decisions independently. They are not perfectly informed rational agents. The longer you investment timeframe and the lumpier the returns you are willing to accept the happier you will be and the better your returns will be.

Notes:

Charlie Rose
interview: http://www.businessweek.com/magazine/content/10_51/b4208052554248.htm

CNBC interview http://www.cnbc.com/id/102107346#

http://www.valuewalk.com/wp-content/uploads/2014/06/MarchTrial.pdf

Value Investing Congress
Speech http://www.grahamanddoddsville.net/wordpress/Files/Gurus/David%20Einhorn/einhornspeech200611.pdf

Ira Sohn
comment: http://www.bloomberg.com/apps/news?pid=newsarchive&sid=ayIKbq6xULBA

Fooling Some of the People All of the Time, A Long Short
Story http://www.amazon.com/Fooling-People-Complete-Updated-Epilogue/dp/0470481544/ref=sr_1_1?s=books&ie=UTF8&qid=1439654903&sr=1-1&keywords=long+short+story+Einhorn

Presentation at Grant's (Interest Rate Observer) Spring Investment
Conference http://seekingalpha.com/article/73260-things-go-better-with-coke-in-the-market-too and http://www.naachgaana.com/2008/04/12/grant%E2%80%99s-spring-investment-conference/

Risk Mismanagement http://www.nytimes.com/2009/01/04/magazine/04risk-t.html?pagewanted=all

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A Dozen Things I've Learned from Charlie Munger about Making Rational Decisions

August 22, 2015

I have written a book about Charlie Munger. While the book is written in the context of investing, understanding what Charlie Munger teaches will help you make rational decisions about anything in your life. Everyone must make decisions and by understanding how Charlie Munger thinks you can improve your decision making skills. Even people who have decided to use an index fund-based approach must chose index funds and allocate between asset classes. Making at least some investment decisions is unavoidable. Learning to make better decisions of any kinds requires that you spend some time thinking about thinking. The good news is that this learning process is fun. Charlie Munger puts it this way: **"Learning**

has never been work for me. It's play." Life gets better if you adopt this approach to learning.

1. **"'Charlie,' she said, 'What one word accounts for your remarkable success in life?' I told her I was rational**." If the actor in the television commercials for the famous beer is "the most interesting man in the world," then perhaps Charlie Munger is "the most rational investor in the world." His rationality and honesty in no small part explain why he is so popular. What Charlie Munger says is often so funny because he is perfectly willing to speak the truth in a completely unrestrained and direct manner. In other words, he appeals to so many people because of his honest insight about life, in much the same way as great comics like Louis C.K., Amy Schumer or Chris Rock are so appealing. Individuals who speak the truth openly are often interesting, insightful and funny. To understand Charlie Munger's appeal it is useful to think about the nature of rationality. Michael Mauboussin explains that there are different forms of rationality: "Cognitive scientists and philosophers talk about "instrumental" and "epistemic" rationality. Instrumental rationality is behaving in such a way that you get what you want the most, subject to constraints. Expected utility theory, which is based on a series of axioms, provides a normative framework for how to do this. You'll be instrumentally rational if you follow the axioms. Epistemic rationality describes how well a person's beliefs map onto the world. If you believe in the tooth fairy, for instance, you are showing a lack of epistemic rationality. Here's a catchier way to remember the two terms: instrumental rationality is "what to do" and epistemic rationality is "what is true." Charlie Munger understands and is focused on being both "epistemically" and instrumentally rational.

2. **"The right way to think is the way [Harvard Professor Richard] Zeckhauser plays bridge. It's just that simple."** To be "rational" is to think in terms of expected value, which Michael Mauboussin points out "is the weighted average value for a distribution of possible outcomes." In the 1989 Berkshire Hathaway Annual Meeting Warren Buffett put it this way: "Take the probability of loss times the amount of possible loss from the probability of gain times the amount of possible gain. That is what we're trying to do. It's imperfect, but that's what it's all about." Michael Mauboussin describes the rational approach perfectly: "Success in a probabilistic field requires weighing probabilities and outcomes — that is, an expected value mindset." Robert Hagstrom argues http://blogs.cfainstitute.org/insideinvesting/2013/09/03/what-buffett-believes-but-cannot-prove/: "Jon Elster is a Norwegian social and political theorist who has written extensively on rational-choice theory. He tells us that being able to wait and using indirect strategies are central features of human choice. Indeed, Elster argues that human rationality is characterized by the capacity to relate to the future, in contrast to the myopic gradient-climbing organism found in the natural world. Elster's gradient-climbing organism has eyes fixed to the ground, incapable of seeing what might happen next. Future events for the myopic organism have no effect on decision making. Put differently, for the myopic organism, tomorrow's events are the

same as today's events. In contrast, Elster claims that man can be seen as a rational, global-maximizing machine capable of relating to the future, choosing the best alternative by scanning several possible moves and then selecting the best choice among them. The irrational investor, the myopic gradient-climber, sees only today and postulates that tomorrow will be much the same. In contrast, Buffett sees stock price declines as temporary. Irrational investors see the same price declines and believe them to be permanent. The cornerstone of rationality is the ability to see past the present and analyze possible scenarios, eventually making a deliberate choice." As an aside, if you are not reading Robert Hagstrom's books you are missing out on some very good thinking and writing.

3. **"[What was] … worked out in the course of about one year between Pascal and Fermat… is not that hard to learn." "So you have to learn in a very usable way this very elementary math and use it routinely in life - just the way if you want to become a golfer, you can't use the natural swing that broad evolution gave you. You have to learn to have a certain grip and swing in a different way to realize your full potential as a golfer."** Charlie Munger is saying that the expected value aspects of investing are relatively simple to learn but that it is not a natural way of thinking. He believes that using this process skillfully in real life is a trained response since aspects of the process will require you to overcome certain biases as well as certain often dysfunctional emotional and psychological tendencies. **"Your brain doesn't naturally know how to think the way Zeckhauser knows how to play bridge. 'For example', people do not react symmetrically to loss and gain. Well maybe a great bridge player like Zeckhauser does, but that's a trained response."** The best way to learn to play bridge or invest is to actually play. You can't really simulate it. Over a lifetime you can learn from actual direct and indirect experience to overcome different types of dysfunctional thinking. For example, says Munger **"If people tell you what you really don't want to hear what's unpleasant—there's an almost automatic reaction of antipathy. You have to train yourself out of it."**

4. **"The Fermat/Pascal system is dramatically consonant with the way that the world works. If you don't get this elementary, but mildly unnatural, mathematics of elementary probability into your repertoire, then you go through a long life like a one-legged man in an ass-kicking contest. You're giving a huge advantage to everybody else."** Charlie Munger is famous for his view that simple mathematic techniques like algebraic inversion are essential to making wise decisions. Adopting this approach is neither easy or natural but will inevitably pay big dividends. He believes that if you don't do this work you will inevitably end up being the patsy at the poker table of life. If you are playing in a poker game and don't see a sucker, get up and walk away from the table. You're the sucker. The future is best thought of as

a probability distribution so naturally thinking probabilistically puts you are a competitive advantage in relation to competitors.

5. **"I now use a kind of two-track analysis. First, what are the factors that really govern the interests involved, rationally considered? The first track is rationality-the way you'd work out a bridge problem: by evaluating the real interests, the real probabilities and so forth."** Having a system is important says Warren Buffett: "The approach and strategies [in bridge and investing] are very similar. In the stock market you do not base your decisions on what the market is doing, but on what you think is rational. With bridge, you need to adhere to a disciplined bidding system. While there is no one best system, there is one that works best for you. Once you choose a system, you need to stick with it." The analytical system Charlie Munger uses starts with rationality. But that is only the first step in a two step process that is his systematic approach to investing. He is saying that the rational decision-making track comes first, just like putting on your pants should precede putting on your shoes.

6. **"Second, what are the subconscious influences where the brain at a subconscious level is automatically doing these things-which by and large are useful, but which often malfunctions." Ordinary people, subconsciously affected by their inborn tendencies."** After an expected value process is completed and you believe your decisions is rational, Charlie Munger suggests that the decision be cross-checked for possible errors. The reality is that no one has a fully rational mindset. It would not be possible to get out of bed in the morning if every human decision had to be made based on careful expected value calculations. Heuristics have been developed by humans to get through a day which sometimes cause decisions to become irrational, especially in a modern world which is very unlike most of history. In other words, no human is perfectly rational because everyone is impacted by emotional and psychological tendencies when making decisions. As a result, thinking rationally is a trained response. To be as rational in your daily life as Richard Zeckhauser is in playing bridge a person must overcome errors based on emotional or psychological mistakes. Rationality is in practical terms relative. Charlie Munger believes staying rational is hard work and requires constant practice and lifelong effort. Making mistakes is inevitable and will never stop, but you can learn to make less than your statistical share of mistakes.

7. **"Your brain doesn't naturally know how to think the way Zeckhauser knows how to play bridge. For example, people do not react symmetrically to loss and gain. Well maybe a great bridge player like Zeckhauser does, but that's a trained response.** Thinking in a way that is as rational as possible requires work and training, especially when it comes to avoiding psychological and emotional mistakes. What is the source of these mistakes? The list of factors causing mistakes is very long.

Warren Buffett writes: "It's ego. It's greed. It's envy. It's fear. It's mindless imitation of other people. I mean, there are a variety of factors that cause that horsepower of the mind to get diminished dramatically before the output turns out. And I would say if Charlie and I have any advantage it's not because we're so smart, it is because we're rational and we very seldom let extraneous factors interfere with our thoughts. We don't let other people's opinion interfere with it… we try to get fearful when others are greedy. We try to get greedy when others are fearful. We try to avoid any kind of imitation of other people's behavior. And those are the factors that cause smart people to get bad results." What Buffett describes is an example of what Charlie Munger calls decisional inversion. Instead of just trying to be smart, it is wise to focus on not being stupid.

8. "**What is hard is to get so you use it routinely almost every day of your life."** Training your mind to do what Charlie Munger suggests is the ultimate goal of anyone who wants to emulate his system. Warren Buffett has written: "Chains of habit are too light to be felt until they are too heavy to be broken…At my age, I can't change any of my habits. I'm stuck. But you will have the habits 20 years from now that you decide to put into practice today. So I suggest that you look at the behavior that you admire in others and make those your own habits, and look at what you really find reprehensible in others and decide that those are things you are not going to do. If you do that, you'll find that you convert all of your horsepower into output." One good aspect of habits is that they can be put to good use if they are the right habits. It's a bit like Alcoholics Anonymous, which Charlie Munger believes is a cult, but for the good. What an investor needs is a system that includes habits that reinforce rationality. If you want to say that people who follow Munger are a cult for the good, you won't be far off in too many cases. Munger himself has referred to people who attend Berkshire shareholder meetings as cult followers.

9. **"We have a temperamental advantage that more than compensates for a lack of IQ points." "A lot of people with high IQs are terrible investors because they've got terrible temperaments. And that is why we say that having a certain kind of temperament is more important than brains."** Charlie Munger is making the point that high IQ does not mean you have high rationality quotient (RQ). Temperament is far more important than IQ. Warren Buffett has said about Charlie Munger: "He lives a very rational life. I've never heard him say a word that expressed envy of anyone. He doesn't waste time on senseless emotions." Warren Buffett suggests that some of this aspect of human nature may be innate: "A lot of people don't have that. I don't know why it is. I've been asked a lot of times whether that was something that you're born with or something you learn. I'm not sure I know the answer. Temperament's important." High IQ can be problematic. What you want is to have a high IQ but think it is less than it actually is. That gap between actual and perceived IQ creates valuable humility and protects against mistakes caused by hubris. It is the

person who thinks their IQ is something like 40 points higher than it actually is who creates the most havoc in life.

10. **"Personally, I've gotten so that I have a full kit of tools … go through them in your mind checklist-style."** Charlie Munger is a big believer is the use of checklist and is fan of Atul Gwande's book *The Checklist Manifesto*. Checklists are a foundational part of systems that can help people identify dysfunctional thinking and bias. A checklist is in effect a "nudge" that helps you deal with bias and dysfunction by prodding you in the right direction. As an aside the full kit of tools required when using Charlie Munger's system requires that you have "worldly wisdom" which will be the topic of another blog post in this series.

11. **"Rationality …requires developing systems of thought that improve your batting average over time." "Luckily, I have selected very easy problems all my life, and I have a reasonable batting average." "You don't have to have perfect wisdom to get very rich – just a bit better than average over a long period of time."** No one is going to make the right decision all the time even if they strive to be rational. Howard Marks believes: **"**Most people understand and accept that in their effort to make correct investment decisions, they have to accept the risk of making mistakes. Few people expect to find a lot of sure things or achieve a perfect batting average." The important thing is to have a system, but don't expect it to be perfect. Michael Mauboussin points out: "Constantly thinking in expected value terms requires discipline and is somewhat unnatural. But the leading thinkers and practitioners from somewhat varied fields have converged on the same formula: focus not on the frequency of correctness, but on the magnitude of correctness."

12. **"[Berkshire] is a very rational place." "Warren and I know better than most people what we know and what we don't know. That's even better than having a lot of extra IQ points. Mr. Munger continued: "People chronically mis-appraise the limits of their own knowledge; that's one of the most basic parts of human nature. Knowing the edge of your circle of competence is one of the most difficult things for a human being to do. Knowing what you don't know is much more useful in life and business than being brilliant."** IQ is not the primary cause of investing success. Warren Buffett points out that the key to making wise decisions is rationality: "How I got here is pretty simple in my case. It's not IQ, I'm sure you'll be glad to hear. The big thing is rationality. I always look at IQ and talent as representing the horsepower of the motor, but that the output–the efficiency with which that motor works–depends on rationality. A lot of people start out with 400-horsepower motors but only get a hundred horsepower of output. It's way better to have a 200-horsepower motor and get it all into output." For Buffett and Munger the circle of competence point is critical. Since risk comes from not knowing what you are doing, know what you are doing when you are doing something. If you don't

know what you are doing put it in the too hard pile and move on to something else. The more you know, the more you know, that there is even more than you do not know.

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A Dozen Things I've Learned from Charlie Munger about Mental Models and Worldly Wisdom

August 22, 2015

1. "I think it is undeniably true that the human brain must work in models. The trick is to have your brain work better than the other person's brain because it understands the most fundamental models: ones that will do most work per unit." "If you get into the mental habit of relating what you're reading to the basic structure of the underlying ideas being demonstrated, you gradually accumulate some wisdom."

Every human can assimilate only so much information through their senses and has only so much memory and processing power. Humans must make decisions constantly. Charlie Munger's belief is that by learning and thinking using the big models which have been developed by the very best minds, you can become "worldly wise." The good news is that you don't need to have perfect understanding of all these models. What you will need is greater knowledge and understanding of the models than the other people you compete with in a given activity like investing. You will naturally know some models better than others. Some mental models work better than others in some situations and knowing which models to use and when is a key part of good judgment. For better or worse, having good judgment often comes from making bad judgments. The process of acquiring wisdom is just that – a process. Acquiring wisdom takes time and effort.

2. "You've got to have models in your head. And you've got to array your experience - both vicarious and direct - on this latticework of models. You may have noticed students who just try to remember and pound back what is remembered. Well, they fail in school and in life. You've got to hang experience on a latticework of models in your head."

Richard Feynman liked to tell this story about something his father taught him: "You can know the name of that bird in all the languages of the world, but when you're finished, you'll know absolutely nothing whatever about the bird." Rather than just knowing the names of various mental models, Charlie Munger is very focused on acquiring a deep understanding of these models so they can help him better understand the world. He believes that it is through the application of models in a varied range of settings in life that genuine learning takes place. Mistakes, folly and foibles are an inevitable part of this process. Robert Hagstrom describes the lattice approach as follows: "each discipline entwines with, and in the process

strengthens, every other. From each discipline the thoughtful person draws significant mental models, the key ideas that combine to produce a cohesive understanding."

For Charlie Munger this approach comes naturally: **"For some odd reason, I had an early and extreme multidisciplinary cast of mind. I couldn't stand reaching for a small idea in my own discipline when there was a big idea right over the fence in somebody else's discipline. So I just grabbed in all directions for the big ideas that would really work. Nobody taught me to do that; I was just born with that yen."** Charlie Munger notes that some knowledge and skill acquisition happens based on personal experience and some vicariously through the experiences of other people. Watching other people make big mistakes is a lot less painful than making those mistakes yourself. Reading widely in a range of different domains is the most effective technique to expand the opportunities to learn from the experiences of others. Of course, Charlie Munger reads constantly. A great investor who does not read a lot is rarer than hen's teeth.

3. "Well, the first rule is that you can't really know anything if you just remember isolated facts and try and bang 'em back. If the facts don't hang together on a latticework of theory, you don't have them in a usable form."

This quotation from Charlie Munger reminds me of the scene in the movie The Paper Chase when a character named Brooks is faced with a need to think and reason during Socratic dialogue a classroom but instead tries to use his photographic memory of facts from the cases to find a response. Perfect recall of facts is not enough and Brooks found himself floundering in the classroom when asked to think and reason. Speaking of memory, I remember well when I first read Robert Hagstrom on this latticework concept which Charlie Munger espouses since it made me feel much better about my curiosity about all aspects of the world: "Those who cultivate this broad view are well on their way to achieving worldly wisdom, that solid mental foundation without which success in the market–or anywhere else–is merely a short-lived fluke. To drive his point home, Charlie used a memorable metaphor to describe this interlocking structure of ideas: a latticework of models. 'You've got to have models in your head,' he explained, 'and you've got to array your experience-both vicarious and direct-on this latticework of models.' So immediate is this visual image that latticework has become something of a shorthand term in the investment world, a quick and easily recognized reference to Munger's approach."

4. "What are the models? Well, the first rule is that you've got to have multiple models - because if you just have one or two that you're using, the nature of human psychology is such that you'll torture reality so that it fits your models, or at least you'll think it does."

Charlie Munger is bringing up the tendency of humans to drift into dysfunctional patterns of thought like psychological denial when faced with something unpleasant. There are many sources of psychological and emotional dysfunction which will be discussed throughout Munger Month on this blog and many mental models that can be used to try to prevent mistakes from occurring. Using the right models can help you avoid what Munger calls **"the psychology of human misjudgment."** Munger believes that by applying a lattice of models

from disciplines like behavioral economics an investor can discover decision-making errors. Perfection is not possible to achieve, but following a better decision making process is possible. Focusing on having a sound decision making process rather than outcomes in any given case is wise. In the long term, it is a better process that will generate the better overall result. Reading too much into a good outcome that results from a bad process or a bad outcome that results from a good process, can create big problems.

5. The models have to come from multiple disciplines - because all the wisdom of the world is not to be found in one little academic department. That's why poetry professors, by and large, are so unwise in a worldly sense. They don't have enough models in their heads. So you've got to have models across a fair array of disciplines. You may say, 'My God, this is already getting way too tough.' But, fortunately, it isn't that tough - because 80 or 90 important models will carry about 90% of the freight in making you a worldly - wise person. And, of those, only a mere handful really carry very heavy freight."

You do not need to know every mental model or even know them all deeply to make better decisions, but you do need to understand how most of them work at a basic level at least. It is also important that you read often and broadly especially since these models do change and are updated over time. The goal is to acquire wisdom and common sense rather than to be an academic expert in one or even a few narrow domains. One piece of good news about this process is that each new model is easier to learn since the other models you already know give you a foundation which makes incremental learning easier.

6. "When I urge a multidisciplinary approach- that you've got to have the main models from a broad array of disciplines and you've got to use them all – I'm really asking you to ignore jurisdictional boundaries. If you want to be a good thinker, you must develop a mind that can jump these boundaries. You don't have to know it all. Just take in the best big ideas from all these disciplines. And it's not that hard to do." It is important that you read outside of your domain if you want to avoid failing based on man with a hammer syndrome. If all you know is medieval poetry or auto mechanics you are not going to acquire usable wisdom in life. Without worldly wisdom, you end up like a one-legged man in an ass-kicking contest says Charlie Munger. Read widely and be curious. Think for yourself and be open to new ideas. Use many models from many disciplines when thinking about a problem. For example, when thinking about an economy or a business Munger has suggested it is useful to apply models from biology. Munger has said for example "**Common stock investors can make money by predicting the outcomes of practice evolution. You can't derive this by fundamental analysis — you must think biologically"** and **"I find it quite useful to think of a free market economy—or partly free market economy—as sort of the equivalent of an ecosystem."**

7. "You must know the big ideas in the big disciplines, and use them routinely — all of them, not just a few. Most people are trained in one model — economics, for example — and try to solve all problems in one way. You know the old saying: to the man with a

hammer, the world looks like a nail. This is a dumb way of handling problems." Munger believes that thinking clearly is a trained response. He points out that "if you want to become a golfer, you can't use the natural swing that broad evolution gave you. You have to learn to have a certain grip and swing in a different way to realize your full potential as a golfer."

Some people take to this mental models approach and some people don't. Some people find it interesting and some people don't. One sure way to fail is to look at the world only through the lens of only one model. The surgeon or nutritionist who only thinks about the world through the lens of their particular discipline is a danger to themselves and others.

8."You have to realize the truth of biologist Julian Huxley's idea that 'Life is just one damn relatedness after another'"

"You must have the models, and you must see the relatedness and the effects from the relatedness."

One of the most enjoyable thing about the lattice approach is when you see how "it all fits together." When you use a lattice of mental models approach you quickly learn that everything is related including the models themselves. This relatedness often allows an investor to use analogies to solve problems and find opportunities. The more you know about more things in life, the more you see how it all fits together. The process is like solving a huge puzzle that is never fully completed. The last three words in the previous sentence ("never fully completed") are very important. The more you know, the more you know, that there is more that you do not know.

9. "I've been searching for lollapalooza results all my life, so I'm very interested in models that explain their occurrence."

One particularly important phenomenon related to mental models is what are called "complex adaptive systems." If you adopt the model of complex adaptive systems you accepts the idea that the whole of many things is more than the sum of the arts and that there are many systems that cannot be modeled with certainty. Even after the fact, causation is impossible to prove with certainty when it comes to this phenomenon. Once you accept the idea that some things are simply not predictable, your world view changes. In Munger's view it is better to have common sense and be Worldly Wise than futz around with a lot of models that are precisely wrong rather than approximately right. This is in part why Munger likes to say: **"People calculate too much and think too little."**

10. "You need a different checklist and different mental models for different companies. I can never make it easy by saying, 'Here are three things.' You have to derive it yourself to ingrain it in your head for the rest of your life."

Faced with the tendency of humans to fall down when making decisions based on the use of dysfunctional heuristics, humans can benefit from using tools or nudges to stay rational. Checklist are just such a tool. Despite the fact that a checklist is helpful in developing a better decision making process there is no formula or recipe for success in investing or most other aspects of life. Even with the best investing systems judgment and wisdom are required since risk, uncertainty and ignorance are constants in life. Life is always throwing new situations at you but they sometimes are quite familiar.

11. "Acquire worldly wisdom and adjust your behavior accordingly. If your new behavior gives you a little temporary unpopularity with your peer group … then to hell with them."

To use worldly wisdom properly you must be prepared to be a contrarian. Being a contrarian will inevitably sometimes make you unpopular or lonely. Accepting this solitary state of affairs at times is essential since it is mathematically provable that you cannot outperform the crowd if you are the crowd. In the longer term you will ironically be more popular as long as you are right enough in your contrarian views. Of course, being a contrarian and wrong is not helpful and it is magnitude of correctness and not frequency of correctness that should be tracked on your scorecard.

12. "If you don't keep learning, other people will pass you by. Temperament alone won't do it – you need a lot of curiosity for a long, long time."

"The theory of modern education is that you need a general education before you specialize. And I think to some extent, before you're going to be a great stock picker, you need some general education."

"If you skillfully follow the multidisciplinary path, you will never wish to come back. It would be like cutting off your hands."

"It's kind of fun to sit there and outthink people who are way smarter than you are because you've trained yourself to be more objective and more multidisciplinary. Furthermore, there is a lot of money in it, as I can testify from my own personal experience."

Charlie Munger, Robert Hagstrom, Michael Mauboussin and others I admire are advocates of a broad liberal arts education. I am not just talking about what you take as courses in school but what you learn about throughout your life. The best investors never stop learning. I particularly love the original title of Robert Hagstrom's book *Investing: The Last Liberal Art* since it is such a true statement. Knowing a lot about a lot in many disciplines and being "a learning machine" are attributes of the best investors.

To sum up this blog post it is useful I think to just quote Charlie Munger on the benefits of his approach: **"I constantly see people rise in life who are not the smartest, sometimes not even the most diligent, but they are learning machines. They go to bed every night a little wiser than they were when they got up and boy does that help, particularly when**

you have a long run ahead of you.…so if civilization can progress only with an advanced method of invention, you can progress only when you learn the method of learning. Nothing has served me better in my long life than continuous learning. I went through life constantly practicing (because if you don't practice it, you lose it) the multi-disciplinary approach and I can't tell you what that's done for me. It's made life more fun, it's made me more constructive, it's made me more helpful to others, and it's made me enormously rich. You name it, that attitude really helps."

A Dozen Things I've Learned from Charlie Munger About Benjamin Graham's Value Investing System

August 29, 2015

Charlie Munger has developed a powerful system that is useful in making any type of decision. One notable application of this system by Munger relates to investing and involves another system developed by Benjamin Graham. It is useful to understand what is known as "value investing" not just for its own sake, but to understand how Munger thinks and makes decisions. Even if you find value investing boring or have no intention to follow its principles, you can learn from understanding how it works and has evolved from its original nature based on the ideas of a few people including Munger. For this reason, it is important to understand a little about Graham himself.

"Benjamin Graham was salutatorian of the class of 1914 and, weeks before graduation, was offered teaching positions in three different faculties: Greek and Latin philosophy, English, and mathematics. He was all of 20 years old. Needing to support his siblings and widowed mother, he went to work on Wall Street. In 1934, he wrote *Security Analysis*, the first book ever to put the study of investments on a systematically logical footing. In 1949, he published *The Intelligent Investor*, which Warren Buffett has called "the best book about investing ever written." Warren Buffett….has said that he was struck by the force of Graham's teachings 'like Paul on the road to Damascus.'"

What follows are the usual "dozen things" quotations from Charlie Munger stitched together from his writing and statements made at different times and places (in this case over many over decades).

1. **"Graham didn't want to ever talk to management. And his reason was that, like the best sort of professor aiming his teaching at a mass audience, he was trying to invent a system that anybody could use. And he didn't feel that the man in the street could run around and talk to managements and learn things. He also had a concept that the management would often couch the information very shrewdly to mislead. Therefore, it was very difficult. And that is still true, of course human nature being what it is." "Warren trained under Ben Graham, who said, 'Just look at the facts. You might lose an occasional valuable insight, but you won't get misled.'"** The most important word in these quotations from Charlie Munger is "system," which can be defined as a set of processes or elements that interact in ways that can achieve an objective not obtainable from the processes or elements alone. A second important point made by Charlie Munger is about Ben

Graham's desire to create something an "ordinary person" can potentially use successfully. It is important to note that Charlie Munger believes that only a tiny number of people can actually outperform a market using the value investing system because they lack factors like the necessary work ethic and the right emotional and psychological temperament. It is possible that an ordinary investor can us the value investing systems to outperform that market but it is far from the usual case. If an investor does try to outperform a markets Charlie Munger is also saying that it is easy to be misled by promoters and business managers about the value of a business or other assets. Ben Graham believed that by focusing on a rational appraisal of objective facts fewer investing mistakes will be made than by relying on subjective opinions.

2. "Ben Graham had this concept of value to a private owner – what the whole enterprise would sell for if it were available. And that was calculable in many cases. Then, if you could take the stock price and multiply it by the number of shares and get something that was one third or less of sellout value, he would say that you've got a lot of edge going for you. Even with an elderly alcoholic running a stodgy business, this significant excess of real value per share working for you means that all kinds of good things can happen to you. You had a huge margin of safety – as he put it – by having this big excess value going for you." Ben Graham's system involves four bedrock principles, two of which Charlie Munger introduces here: 1) a share of stock is a proportional ownership of a business and 2) buy at a significant discount to intrinsic value to create a margin of safety. On the first principle, if a security is not a proportional interest in a business then what exactly is it? It certainly isn't a piece of paper to be traded like a baseball card or a painting. In terms of the second principle on "margin of safety," the fundamental idea is to buy an asset at a significant enough bargain price that the result will be good even if a mistakes was made in evaluating the asset. Since risk is always relative to the price paid, buying with a margin of safety is a risk-averse approach. A range of future outcomes can still produce a satisfactory result if you buy an asset at a significant bargain.

3. "Ben Graham [had] his concept of "Mr. Market." Instead of thinking the market was efficient, he treated it as a manic-depressive who comes by every day. And some days he says, "I'll sell you some of my interest for way less than you think its worth." And other days, "Mr. Market" comes by and says, "I'll buy your interest at a price that's way higher than you think its worth." And you get the option of deciding whether you want to buy more, sell part of what you already have or do nothing at all. To Graham, it was a blessing to be in business with a manic-depressive who gave you this series of options all the time. That was a very significant mental construct." Charlie Munger is introducing the Mr. Market metaphor in making these statements. Mr. Market shows up every day willing to quote you a price. Unfortunately, Mr. Market is, in the words of Warren Buffett, a drunk bipolar psycho. For this reason and others, Mr. Market should always be treated as your servant rather than your master. Why would anyone ever treat someone like this as wise? Mr. Market, in the short term, is a voting machine driven by highly volatile and fickle public opinion instead of a weighing machine measuring return on investment. When Mr. Market offers you a price for an asset you have the option to do nothing. In other words, there are no "called strikes" in investing. There is no premium given in investing for activity and in fact there is a penalty since it results in fees and taxes. For a value investor, it is Mr. Market's irrationality that creates the opportunity for value investors. As Charlie Munger points out: **"For a security to be mispriced, someone else must be a damn fool. It may be bad for world, but not bad for Berkshire."** The best returns accrue to investors who are patient and

yet aggressive when they are offered a price for an asset that meets the requirements of value investing.

4. "The idea of a margin of safety, a Graham precept, will never be obsolete. The idea of making the market your servant will never be obsolete. The idea of being objective and dispassionate will never be obsolete. So Graham had a lot of wonderful ideas. Warren worshiped Graham. He got rich, starting essentially from zero, following in the footsteps of Graham." Charlie Munger introduces final bedrock principle of value investing here: be objective and dispassionate. In other words, be as rational as you can when making investing decisions. Despite this objective, an investor will always make some emotional and psychological mistakes, but if you can do things like learn from your mistakes, use techniques like checklists, have the right emotional temperament, exhibit a strong work ethic and are a "learning machine," he believes some investors can outperform the market. Only a very small number of "know something" investors can do this. Charlie Munger believes that most everyone is a "know nothing" investor and should instead invest in a diversified portfolio of index funds and ETFs.

5. "The supply of cigar butts was running out. And the tax code gives you an enormous advantage if you can find some things you can just sit with." "Ben Graham could run his Geiger counter over this detritus from the collapse of the 1930s and find things selling below their working capital per share and so on. But he was, by and large, operating when the world was in shell shock from the 1930s—which was the worst contraction in the English-speaking world in about 600 years. Wheat in Liverpool, I believe, got down to something like a 600-year low, adjusted for inflation. The classic Ben Graham concept is that gradually the world wised up and those real obvious bargains disappeared. You could run your Geiger counter over the rubble and it wouldn't click. Ben Graham followers responded by changing the calibration on their Geiger counters. In effect, they started defining a bargain in a different way. And they kept changing the definition so that they could keep doing what they'd always done. And it still worked pretty well." The beauty of some systems is that they have the ability to evolve so as to adapt to new conditions. And that is precisely what happened in the case of value investing. After the Great Depression many people simply gave up on owning stocks. Loss aversion was so strong among potential buyers that they were simply not rational when it came to the stock market. During this period it was possible for businesses to be bought at less than liquidation value. This was a boon for investors like Ben Graham. Unfortunately for them, that period of time only lasted for so long as memories faded and new investors entered the market. Every so often some pundit will drag out one quote from Ben Graham about how it became to do value investing at one point. These pundits not only take the quote out of context buy ignore the fact that the followers of Graham were even before then time taking Graham's principles and defining a bargain in a new way considering the quality of the business and in some cases considering what are called "catalysts" to the value of a business. Value investing has evolved significantly since the time of Ben Graham and Charlie Munger has played a big part in that evolution.

6. "I don't love Ben Graham and his ideas the way Warren does. You have to understand, to Warren — who discovered him at such a young age and then went to work for him — Ben Graham's insights changed his whole life, and he spent much of his early years worshiping the master at close range. But I have to say, Ben Graham had a lot to learn as an investor. His ideas of how to value companies were all shaped by how the Great Crash and the Depression almost destroyed him, and he was always a

little afraid of what the market can do. It left him with an aftermath of fear for the rest of his life, and all his methods were designed to keep that at bay." "I liked Graham, and he always interested and amused me. But I never had the worship for buying the stocks he did. So I don't have the worship for that Warren does. I picked up the ideas, but discarded the practices that didn't suit me. I don't want to own bad businesses run by people I don't like and say, 'no matter how horrible this is to watch, it will bounce by 25%.' I'm not temperamentally attracted to it." Charlie Munger is always looking for ways to evolve, adopt and even reverse his views. He is a learning machine. Charlie Munger is also excited by great managers running great businesses. And he gets positively ecstatic when every once in a while these managers are running businesses that are available for purchase in whole or in part at bargain prices. This does not happen very often so most of the time he patiently does nothing. But Charlie is prepared to act very aggressively in a big way when the time is right.

7. "I think Ben Graham wasn't nearly as good an investor as Warren is or even as good as I am. Buying those cheap, cigar-butt stocks was a snare and a delusion, and it would never work with the kinds of sums of money we have. You can't do it with billions of dollars or even many millions of dollars. But he was a very good writer and a very good teacher and a brilliant man, one of the only intellectuals – probably the only intellectual — in the investing business at the time." Charlie Munger is in this set of quotations is discussing another reason why the value investing system had to evolve for Berkshire. The amount of money that Berkshire must put to work each year is way too big to hope that enough so-called "cigar butt" businesses with a few remaining puffs left in them can be found to compose a full portfolio. When buying a business anything remotely as big as Heinz or Precision Cast Parts it is very unlikely that they will be buying any cigar butts. Berkshire must find assets that represent a bargain defined in terms of quality. As an example Warren Buffett used $23 billion of Berkshire's $66.6 billion in cash to buy Precision Castparts. Buffet has said that "We will always have $20 billion in cash on hand." So they won't be buying a business as big as Precision Castparts for a while.

8. "Having started out as Grahamites which, by the way, worked fine we gradually got what I would call better insights. And we realized that some company that was selling at 2 or 3 times book value could still be a hell of a bargain because of momentum implicit in its position, sometimes combined with an unusual managerial skill plainly present in some individual or other, or some system or other. And once we'd gotten over the hurdle of recognizing that a thing could be a bargain based on quantitative measures that would have horrified Graham, we started thinking about better businesses. We've really made the money out of high quality businesses. In some cases, we bought the whole business. And in some cases, we just bought a big block of stock. But when you analyze what happened, the big money's been made in the high quality businesses. And most of the other people who've made a lot of money have done so in high quality businesses." Charlie Munger makes two key points here: 1) some bargains are only visible if you understand qualitative factors and 2) there sometimes are catalysts that can boost the value of the stock even further based on factors like scale advantages, favorable regulatory changes, improving secular phenomenon and better systems or business momentum. Charlie Munger likes to **"find a few great companies and then sit on your ass."** When he finds a great business with excellent management like Costco he is like "a pig in slop" and does not want to leave the pig pen.

9. "The great bulk of the money has come from the great businesses. And even some of the early money was made by being temporarily present in great businesses. Buffett Partnership, for example, owned American Express and Disney when they got pounded down. However, if we'd stayed with classic Graham the way Ben Graham did it, we would never have had the record we have." "Iscar is not a Ben Graham stock – in fact, it would be the ultimate non-Ben Graham stock. It's located a few miles from the Lebanese border in Israel. It has a high ROE, doing business all over the earth, using a certain technology to produce carbide cutting tools. The reason I got so high on it so fast was that the people are so outstandingly talented." Charlie Munger has made the point many times that only a few great decisions delivered most of Berkshire's financial returns. Warren Buffett has said that as few as 20 bets in a lifetime can make you very rich. Charlie Munger has also said repeatedly that a high quality business selling a bargain price is not a common event and that if you are not prepared to act aggressively when that happens the opportunity will be lost. In thinking about the value of a business, Munger also strayed far from a view that looking at the quality of management is not something that should be considered because it is too easy to be misled. When Berkshire buys a business they want the moat and the management (the two M's) to be in place already. Berkshire does not build moats itself and it does not want to supply management.

10. "We bought [the Washington Post] at about 20% of the value to a private owner. So we bought it on a Ben Graham-style basis – at one-fifth of obvious value – and, in addition, we faced a situation where you had both the top hand in a game that was clearly going to end up with one winner and a management with a lot of integrity and intelligence. That one was a real dream. They're very high class people – the Katharine Graham family. That's why it was a dream – an absolute, damn dream." These quotations list many of the elements that Charlie Munger looks for in a business. At the time it was first bought the business known as the Washington Post had both a strong management team and a moat. A significant partial ownership stake was also available for purchase at a bargain price. Of course, the moat of the Washington Post has significantly atrophied as the Internet has enabled competitors to avoid the need for big printing process and physical distribution systems. All moats are under attack by competitors and change in strength and value over time. It is perhaps not surprising that the Washington Post was purchased by an expert moat builder like Jeff Bezos. The task of the new owner is to rebuild the moat of the Washington Post which is not easy given that the news is non-rival and non-excludable.

11. "Ben Graham said it's not the bad ideas that do you in. It's the good ideas that get you. You can't ignore it and it's easy to overdo it." Almost everything can be taken to a point where what is wonderful eventually becomes toxic. The great humorist Mark Twain said once that: "Water, taken in moderation, cannot hurt anybody." Even water in sufficient quantity is not good for you. The same phenomenon applies to investing. What a wise person does at first, the fool does at the end. This particular quotations was made in the context of the Internet bubble which was an extreme example of good ideas taken way too far.

12. "Warren Buffett came to investing at the knee of Ben Graham, who ran a Geiger counter over the detritus of the 1930s. Stocks were ridiculously cheap. Graham bought companies that were quite mediocre on average, but made 20% when their stock bounced." "Warren trained under this system and made money, so he was slower to come to the idea I learned that the best way to make money is to buy great businesses that earn high returns on capital over long periods of time. We're applying Graham's basic ideas, but now we're trying to find undervalued GREAT companies. That concept

was foreign to Ben Graham. Warren would have morphed into a great investor without Ben Graham. He is a greater investor than Graham was. Warren would have been great had he never met anyone else. He would have excelled at any field that required a high IQ, quantitative skills and risk taking. He wouldn't have done well at ballet though." The point about Warren Buffett being an unlikely ballet star is important since it raises the idea of "circle of competence." Risk comes from not knowing what you are doing, so it is wise to know what you are doing (i.e., stay within your circle of competence). The skill of every human being has limits. Knowing in which situations you are skilled or not is very valuable in life. An important point in all of this is: you are not Charlie Munger and you are not going to be Charlie Munger. Having said that, you can learn from Charlie Munger and make better decisions than you would otherwise. Those decisions may be limited to things like choosing a mutual fund or allocating assets between categories. They also might include selecting a college or a spouse. Charlie Munger is trying to convey the idea that in making decisions in life it is wise to be rational, try to filter out sources psychological dysfunction and apply a range of mental models and worldly wisdom.

A Dozen Things I've Learned from Charlie Munger about Risk

September 5, 2015

1. **"Risk to us is 1) the risk of permanent loss of capital, or 2) the risk of inadequate return."** Risk has many different dimensions that must be considered including sources, magnitude, outcomes and decision making inputs. In terms of a definition, Seth Klarman writes that risk is: "described by both the probability and the potential amount of loss." Charlie Munger emphasizes an important point in his quotation since it is the ***permanent*** loss which should be the focus of investors since temporary drops can actually represent an opportunity for an investor if they can purchase more of an asset at the lower price and ride out the drop in price. The focus of this definition of risk is on potential "outcomes." In terms of "sources" of risk, Warren Buffett believes that "risk comes from not knowing what you're doing" and that "the best way to minimize risk is to think." This is why Charlie Munger spends so much time thinking about thinking. The magnitude of risk assumed by a given investor on any investment depends on the nature of the asset, but also the price paid for the asset. In addition to not knowing what you are doing, one way to increase risk to pay such a high price for an asset that there is no margin for error. Seth Klarman makes the important point that "risk and return must be assessed independently or every investment…. risk does not create incremental return only price can do that." Howard Marks makes the insightful point that risk itself cannot be counted on to generate higher financial returns, since if this was the case the assets would not actually be riskier. Richard Zeckhauser has his own definition of risk focused on the "inputs" a person has in the decision-making process rather that the "outcome" based definition of Buffett and Klarman. Zeckhauser believes that "risk" is limited to situations where all potential future states and their probabilities are known. Roulette in his view involves risk since you know all future states and probabilities in playing the game. When the

probabilities of potential future states are not known, Zeckhauser calls that situation "uncertainty" and when you don't know all potential future states he refers to that as "ignorance." Most of life is uncertain rather than risky. True risk, as Zeckhauser defines it, is actually not that common in real life. For the rest of this blog post when I refer to "risk" I will be referring to the Klarman/Buffett/Marks definition of risk as an outcome ('the possibility of loss or injury") because that is what I believe Charlie Munger is referring to in each quotation.

2. **"Using [a stock's] volatility as a measure of risk is nuts."** There is a yet another way that some people talk about risk. Howard Marks writes: "Volatility is the academic's choice for defining and measuring risk. I think this is the case largely because volatility is quantifiable and thus usable in calculations and models of modern finance theory….However, while volatility is quantifiable and machinable – and can be an indicator or symptom of riskiness and even a specific form of risk – I think it falls far short as "the" definition of investment risk. In thinking about risk, we want to identify the thing that investors worry about and thus demand compensation for bearing. I don't think most investors fear volatility. In fact, I've never heard anyone say, 'The prospective return isn't high enough to warrant bearing all that volatility.' What they fear is the possibility of permanent loss." Munger rejects the use of volatility to define risk. He describes part of the reason for the desire of some people to qualify risk as follows: "Practically everybody (1) overweighs the stuff that can be numbered, because it yields to the statistical techniques they're taught in academia, and (2) doesn't mix in the hard-to-measure stuff that may be more important. That is a mistake I've tried all my life to avoid, and I have no regrets for having done that." Munger has also said: "Beta and modern portfolio theory and the like — none of it makes any sense to me. We're trying to buy businesses with sustainable competitive advantages at a low, or even a fair, price." Why do some people want so badly to equate risk with volatility? This assumption allows them to create beautiful mathematical models that can be included in their papers. Seth Klarman describes the motivation for this line of thinking in his book: "A positive correlation between risk and return would hold consistently only in an efficient market." To be able to create this beautiful math Munger believes they distort the world to be fully rational to support their mathematical theories even though it defies common sense. This attempt to equate risk and volatility is a classic case of confirmation bias. Munger says: **"I have a name for people who went to the extreme efficient market theory—which is 'bonkers.' It was an intellectually consistent theory that enabled them to do pretty mathematics. So I understand its seductiveness to people with large mathematical gifts. It just had a difficulty in that the fundamental assumption did not tie properly to reality."** Risk is not a number and it certainly can't be calculated simply based on volatility. Volatility can be "a" risk for some people in some situations, but it certainly does not "define" risk. As an analogy, an apple is fruit but apples do not define fruit. There is certainly a time element to risk and life events like retirement or a college bill can turn volatility into an important *type* of risk, especially over shorter time frames. But value investors are usually focused on long-term returns and understand that they

may be able to earn a premium by accepting short-term volatility when buying an asset. As an example, short term US Treasuries may have lower short-term volatility but they have significant long-term risk of underperformance in comparison to equities. Seth Klarman writes: "some insist that risk and return are always positively correlated…yet this is not always true. Others mistakenly equate risk with volatility, ignoring the risk of making overpriced, ill-conceived and poorly managed investments." Volatility is actually the friend of the investor since lower prices are what create opportunities to buy mispriced assets at a significant discount to intrinsic value.

3. **"Volatility is an overworked concept. You shouldn't be imprisoned by volatility." "Some great businesses have very volatile returns – for example, See's usually loses money in two quarters of each year – and some terrible businesses can have steady results."** Charlie Munger and Warren Buffett are very focused on finding investments which possess odds of success that are substantially in their favor. If the process of generating returns along the way is lumpy that is not only perfectly acceptable but it can be a significant financial advantage since others may be unwilling to do so creating mispriced assets that can be purchased at a bargain price. Howard Marks argues: "in order to achieve superior results, an investor must be able – with some regularity – to find asymmetries: instances when the upside potential exceeds the downside risk. That's what successful investing is all about." A regular reader of this blog will recognize what Howard Marks is taking about as an objective as positive optionality (big upside and a small downside).

4. **"We don't give a damn about lumpy results. Everyone else is trying to please Wall Street. This is not a small advantage."** Munger is pointing out that buying what is unpopular or requires a long term viewpoint tends to be underpriced. Since buying underpriced assets creates a margin of safety, it lowers risk and increases financial returns. On volatility, Ben Graham once wrote: "A serious investor is not likely to believe that the day-to-day or month-to-month fluctuations of the stock market make him richer or poorer…. The holder of marketable securities actually has a double status, and with it the privilege of taking advantage of either at his choice. On the one hand his position is analogous to that of a minority shareholder or silent partner in a private business. Here his results are entirely dependent on the profits of the enterprise or a change in the underlying value of its assets. He would usually determine the value of such a private-business interest by calculating his share of the net worth as shown in the most recent balance sheet. On the other hand, the common-stock investor holds a piece of paper, an engraved stock certificate, which can be sold in a matter of minutes at a price which varies from moment to moment – when the market is open, that is — and often is far removed from the balance sheet value." One reason why volatility is such a big focus for managers, as opposed to investors, is that it presents a big risk for them. Investors tend to flee an advisor or fund when there is underperformance or drop in price.

5. **“This great emphasis on volatility in corporate finance we regard as nonsense. Let me put it this way; as long as the odds are in our favor and we’re not risking the whole company on one throw of the dice or anything close to it, we don’t mind volatility in results. What we want are favorable odds.”** Charlie Munger has said that he is a “focus” investor since he is not a “know nothing” investor. In his personal accounts and fund he manages he is not a believer in diversification. He is also careful to note that few people should invest like him and should instead buy a diversified portfolio of low cost index funds. Warren Buffett’s statement about what he and Charlie Munger do at Berkshire is as famous as it is succinct. “Take the probability of loss times the amount of possible loss from the probability of gain times the amount of possible gain. That is what we’re trying to do. It’s imperfect, but that’s what it’s all about.” For Howard Marks, risk is “the possibility of permanent loss… downward fluctuation which by definition is temporary doesn’t present a big problem if the investor is able to hold on and come out the other side.” The same idea applies to a manager in a business investing capital. Some opportunities require that you be willing to have volatile earnings. See’s Candies is just such an example. Since profits happen in the box candy business mostly during the holidays See’s will inevitably have poor financial results half the year but that will be offset by two very profitable quarters.

6. **“All investment evaluations should begin by measuring risk, especially reputational. This is said to involve incorporating an appropriate margin of safety, avoiding permanent loss of capital and insisting on proper compensation for risk assumed.”** If you decide to incur risk and face the possibility of loss or injury, you should insist on being paid for doing so. Munger is saying that the best way to manage investment risk is to buy assets at a price that reflects enough of a margin of safety that the outcome will be favorable even if you make a mistake (i.e., buy with a margin of safety- which is a discount to expected value). This is why Howard Marks says that risk is always relative to the amount paid for the asset. Buffett wrote in his postscript to The Intelligent Investor (2003 edition) about the way value investors should view risk: “Sometimes risk and reward are correlated in a positive fashion… the exact opposite is true in value investing. If you buy a dollar for 60 cents, it is riskier than if you buy a dollar for 40 cents, but the expectation for reward is greater in the latter case.”

7. **“[With] a lot of judgment, a lot of discipline and an absence of hyperactivity… I think most intelligent people can take a lot of risk out of life.”** The three best ways to reduce risk are diversification, hedging and buying with a margin of safety argues Seth Klarman. Making life less risky is also assisted greatly if you make fewer decisions in domains where you do not know what you are doing after doing a significant amount of thinking about the domain involved and the decision. Doing this requires discipline since we all make psychological and emotional mistakes. One

technique for avoiding risk is to place decisions that fall in the domain of "I don't know" into a "too hard" pile if you can. Sometimes a decision is unavoidable and judgment will be required. Munger puts the investor's objective simply: **"What you have to learn is to fold early when the odds are against you, or if you have a big edge, back it heavily because you don't get a big edge often."**

8. **"Each person has to play the game given his own marginal utility considerations and in a way that takes into account his own psychology. If losses are going to make you miserable – and some losses are inevitable – you might be wise to utilize a very conservative patterns of investment and saving all your life. So you have to adapt your strategy to your own nature and your own talents. I don't think there's a one-size-fits-all investment strategy that I can give you." "If we'd used the leverage that some others did, Berkshire would have been much bigger… But we would have been sweating at night. It's crazy to sweat at night."** There is no recipe or formula for investing or dealing with risk. Everyone has a unique tolerance for risk since we are all more or less comfortable with various factors that create it. Some people find it useful to have heuristics (rules of thumb) to guide them in assessing whether a comfortable level of risk tolerance exists. Whether you can sleep soundly at night is a one heuristic. If your investments are preventing you from getting a good night's sleep it may be wise to adjust your portfolio so that it is consistent with a comfortable sleep. Seth Klarman agrees with Charlie Munger on this point: "Investors should always keep in mind that the most important metric is not the returns achieved but the returns weighed against the risks incurred. Ultimately, nothing should be more important to investors than the ability to sleep soundly at night."

9. **"This is an amazingly sound place. We are more disaster-resistant than most other places. We haven't pushed it as hard as other people would have pushed it. I don't want to go back to Go. I've been to Go. A lot of our shareholders have a majority of their net worth in Berkshire, and they don't want to go back to Go either." "I wanted to get rich so I could be independent, and so I could do other things like give talks on the intersection of psychology and economics."** The factors which determine the level of risk that is appropriate for any given person include life goals, age and wealth. For example, Charlie Munger left the practice of law to become an investor since he had a fierce desire to acquire wealth so he could be independent. He did not want to have other people dictate what he did in life. The value of that freedom once acquired can be so high that a person can become unwilling to put at risk the amount of money require to ensure that this independence continues. Playing the game of life with house money (money that you don't really need to be happy) is underrated. At the point where you are playing with house money the game substantially changes since your basic financially driven level of happiness is not at stake. Of course, you can still be rich and miserable, but that comes from other problems, attitudes and mistakes.

10. **“There is a lot to be said that when the world is going crazy, to put yourself in a position where you take risk off the table.” “Here’s one truth that perhaps your typical investment counselor would disagree with: if you’re comfortably rich and someone else is getting richer faster than you by, for example, investing in risky stocks, so what? Someone will always be getting richer faster than you. This is not a tragedy.”** There are times in life when the world will not make much sense, at least to you. As an example, the Intent bubble of 1999-2001 was a time like that. In my book on Charlie Munger I describe a decision I made to sell half of my telecom and Internet portfolio near the height of the bubble. The sale ensured that I would not be a burden to anyone in my retirement and that my children would be able to go to college with my financial assistance. Taking a little risk off the table if you plan to double down on some new risky investments is wise.

11. **“A lot of our major capitalistic institutions that parade as really respectable, they’re just casinos in drag. What do you think a derivative trading desk is? It’s a casino in drag. People feeling they’re contributing to the economy, and they’re managing risk. They make the witch doctors look good.” “I knew a guy who had $5 million and owned his house free and clear. But he wanted to make a bit more money to support his spending, so at the peak of the internet bubble he was selling puts on internet stocks. He lost all of his money and his house and now works in a restaurant. It’s not a smart thing for the country to legalize gambling [in the stock market] and make it very accessible.” “Gambling does not become wonderful just because it pertains to commerce. It’s a casino.”** One definition of gambling is: an activity involving chance that has a negative net present value after fees. Some people find gambling entertaining, since it produces brain chemicals that can be pleasurable. I don’t personally see the point of doing something that could potentially turn into a destructive addiction and potentially wipe you out financially. In my view there are many other non-addictive things that one can do to get a dopamine buzz that are not addictive and are potentially profitable. Munger says: **“intelligent people make decisions based on opportunity costs — in other words, it’s your alternatives that matter. That’s how we make all of our decisions…. Opportunity cost is a huge filter in life. If you’ve got two suitors who are really eager to have you and one is way the hell better than the other, you do not have to spend much time with the other.”** Gambling fails the opportunity cost test for me. The other point Munger is making is that gambling is not a productive activity. You are not building anything valuable when you gamble. The societal contribution of the activity is negative.

12. **“When any person offers you a chance to earn lots of money without risk, don’t listen to the rest of their sentence. Follow this and you’ll save yourself a lot of misery.”** When it comes to investing it is wise to follow the advice of Howard Marks and think of the future as a probability distribution rather than some fixed outcome

that is knowable or predictable in advance. Almost nothing about the future is certain except death and taxes. No one says it better than Howard Marks when it comes to risk: "not being able to know the future doesn't mean we can't deal with it. It's one thing to know what's going to happen and something very different to have a feeling for the range of possible outcomes and the likelihood of each one happening. Saying we can't do the former doesn't mean we can't do the latter."

A Dozen Things I've Learned from Charlie Munger about Inversion (including the Importance of being Consistently Not Stupid)

September 12, 2015

1. "Think forwards and backwards — invert, always invert." "Many hard problems are best solved when they are addressed backward." "The way complex adaptive systems work and the way mental constructs work is that problems frequently get easier, I'd even say usually are easier to solve, if you turn them around in reverse. In other words, if you want to help India, the question you should ask is not "how can I help India," it's "what is doing the worst damage in India? What will automatically do the worst damage and how do I avoid it?" "Figure out what you don't want and avoid it and you'll get what you do want. How can you best get what you want? The answer: Deserve what you want! How can it be any other way?" Charlie Munger has adopted an approach to solving problems that is the reverse of the approach that many people use in life. Inversion and thinking backwards are two descriptions of this method. As an illustrative example, one great way to be happy is to avoid things that make you miserable. Munger once gave a speech where he spoke about a famous Johnny Carson talk in which the comedian described all the ways one can be miserable. Munger said: **"What Carson said was that he couldn't tell the graduating class how to be happy, but he could tell them from personal experience how to guarantee misery. Carson's prescriptions for sure misery included: 1) Ingesting chemicals in an effort to alter mood or perception; 2) Envy; and 3) Resentment. What Carson did was to approach the study of how to create X by turning the question backward, that is, by studying how to create non-X."** As another example of Munger's inversion approach, a very effective way to be smart, is to consistently not be dumb. The good news about this approach is that is it easier to not be dumb than it is to be smart since you can often simply avoid certain types of decisions and activities that are ripe with opportunities to demonstrate that you are not smart. Munger gives some example here: **"Just avoid things like racing trains to the crossing, doing cocaine, etc. Develop good mental habits." "A lot of success in life and business comes from knowing what you want to avoid: early death, a bad marriage, etc."** With regard to financial matters, you should avoid things like buying assets with a 200 page prospectus, or services from highly commissioned salespeople. Don't attend the "free" dinner paid for by a salesperson or the "free" weekend stay in a time share.

2. "[The great Algebra pioneer Jacobi] knew that it is in the nature of things that many hard problems are best solved when they are addressed backward." "In life, unless you're more gifted than Einstein, inversion will help you solve problems." Charlie Munger likes to say that simple high school Algebra can help anyone solve a lot of problems in life. Looking at a problem backward instead of just forward can help you create and reveal new solutions. Munger even jokes that he wants to know where he will die so he can just not go there. A process of elimination, can also be helpful in making decisions. Munger's friend, the investor Li Liu, points out that "when you have a difficult problem in social science, a good way to solve it is to invert it. After you compile all the reasons you should buy a stock, invert the question and state the reasons why you should not buy the stock. By doing this, you ensure that your research process is more complete." Munger himself tells this story: **"I have a physicist son who has been trained more in the type of thinking I like. And he immediately got the right answer, and here's the way he reasoned: It can't be anything requiring a lot of hand-eye coordination. Nobody 85 years of age is going to win a national billiards tournament, much less a national tennis tournament. It just can't be. Then he figured it couldn't be chess, which this physicist plays very well, because it's too hard. The complexity of the system, the stamina required are too great. But that led into checkers. And he thought, "Ah ha! There's a game where vast experience might guide you to be the best even though you're 85 years of age." And sure enough that was the right answer. Anyway, I recommend that sort of mental trickery to all of you, flipping one's thinking both backward and forward."** The memo from Howard Marks that was published this week (citation in the notes) contained a great inversion example: "If what's obvious and what everyone knows is usually wrong, then what's right? The answer comes from inverting the concept of obvious appeal. The truth is, the best buys are usually found in the things most people don't understand or believe in. These might be securities, investment approaches or investing concepts, but the fact that something isn't widely accepted usually serves as a green light to those who're perceptive (and contrary) enough to see it."

3. "I think part of the popularity of Berkshire Hathaway is that we look like people who have found a trick. It's not brilliance. It's just avoiding stupidity." The amazing thing is we did so well while being so stupid." As an example of this idea being put to work, people often try to read too much into the "margin of safety" concept developed by Ben Graham as part of his value investing system. The idea is simple: If you buy at a very attractive bargain price you can make a mistake and still do well financially. For example, if you pay 30% less than the intrinsic value of an asset based on conservative calculations that bargain is a cushion that can help avoid mistakes caused by stupidity. The desire to avoid being dumb is why Seth Klarman describes value investing as a risk-averse approach. It is also why Warren Buffett says that the first and second rules of investing are "don't lose money." Again, it is a good idea to not over-complicate the margin of safety approach. The idea is to buy an assets at a substantial bargain to conservatively calculated intrinsic value and then wait. It's that simple. The hardest parts of the value investing system are emotional and psychological rather than understanding the system itself.

4. "Let me use a little inversion now. What will really fail in life? What do you want to avoid?" "Having a certain kind of temperament is more important than brains. You need to keep raw irrational emotion under control." "When you have a huge convulsion, like a fire in this auditorium right now, you do get a lot of weird behavior. If you can be wise [during such times, you'll profit]." Charlie Munger uses an inversion process not only on thoughts and processes, but emotions. Christopher Davis, the chairman of

fund manager Davis Advisors points out that Charlie Munger: "seems to be able to invert emotions, becoming uninterested when other people are euphoric and then deeply engaged when others are uncertain or fearful." By leaning against the wind emotionally, Charlie Munger harnesses the power of the "return to the mean" phenomenon. The advice is simple: Be greedy when others are fearful, and fearful when others are greedy. This is easy to say but hard to do. This is why successful investing is simple, but not easy.

5. "I'm really better at determining my level of incompetency and then just avoiding that. And I prefer to think that question through in reverse." Humans remember when they mistakenly touch an electric fence or a hot stove. When we fail at something, particularly if it is a painful experience, we tend to remember it. One factor making failure so memorable is loss-aversion. We feel the pain of loss much more than a comparable gain. Charlie Munger points out: **"People are really crazy about minor decrements down."** As an example, Larry Bird likes to say that he hates to lose more than he loves to win. Because we feel the pain of losses more it is easier to avoid incompetency than to determine whether you have the necessary skill. Natural human overconfidence makse this set of problems hard, but with practice you can improve your ability to "not be dumb."

6. "It is remarkable how much long-term advantage [we] have gotten by trying to be consistently not stupid, instead of trying to be very intelligent." Charlie Munger has pointed out that the long term advantage of not being stupid is under-appreciated. In other words, the benefits of not being an idiot as often as most people compound like interest on an investment. The word "consistently" in the quotation is important since consistency implies that you are not avoiding stupidity just via luck. By having a sound investing process you can prosper even if sometimes you have a bad outcome despite a good process. Adopting this attitude requires situational humility. Be humble especially, when you are out of your circle of competence. Munger says: **"If you want to be the best tennis player in the world, you may start out trying and soon find out that it is hopeless—that other people blow right by you. However, if you want to become the best plumbing contractor in Bemidji, that is probably all right by two-thirds of you. It takes will. It takes the intelligence. But after a while, you will gradually know all about the plumbing business and master the art. That is an attainable objective, given enough discipline. And people who could never win a chess tournament or stand in center court in a respectable tennis tournament can rise quite high in life by slowly developing a circle of competence—which results partly from what they were born with and partly from what they slowly develop through work. So some edges can be acquired. And the game of life to some extent for most of us is trying to be something like a good plumbing contractor in Bemidji. Very few of us are chosen to win the world's chess tournament."**

7. "There are a lot of things we pass on. We have three baskets: in, out, and too tough. We have to have a special insight, or we'll put it in the 'too tough' basket. All of you have to look for a special area of competency and focus on that." "The amazing thing is we did so well while being so stupid. That's why you're all here: you think that there's hope for you. Go where there's dumb competition." Investors often have a high IQ (or at least think they do) and for that reason will often assume that there is some sort of prize in investing for making difficult decisions. There is no such prize in investing. One irony of investing is that a high IQ may lead an investor to seek hard problems believing they will reap some benefits from their intelligence ig it is not coupled with humility. Munger believes that the far greater opportunity is to apply high IQ when the problem is easy and the odds of success are very favorable. He favors working with people who believe their IQ is less than is

actually is. The idea of having a "too tough" or "too hard" pile is particularly appealing and has been very useful to me. This approach harnesses the idea of opportunity cost thinking. Investing your time and capital in your best opportunities is also such a powerful but simple idea. "Should you buy stock x" is not the right question. The right question instead is: "Of all the stocks I can buy, is x the very best alternative?"

8. "You have to figure out what your own aptitudes are. If you play games where other people have the aptitudes and you don't, you're going to lose. And that's as close to certain as any prediction that you can make. You have to figure out where you've got an edge. And you've got to play within your own circle of competence." "The amazing thing is we did so well while being so stupid. That's why you're all here: you think that there's hope for you. Go where there's dumb competition." In business, unlike sports, it pays to play against weak competition. In other words, business and investing are very different from professional sports where the players in the most competitive leagues make the most money. Why would an investor want to compete when they have no special advantage? What the wise investor seeks is an unfair advantage and odds of success that are very favorable.

9. "The secret to Berkshire is we are good at ignorance removal. The good news is we have a lot of ignorance left to remove." "Just as a man working with his tools should know its limitations, a man working with his cognitive apparatus must know its limitations." As you go through life you have the opportunity to learn from your inevitable mistakes and the mistakes of others. This process is unlikely to produce positive results unless you are honest with yourself and paying attention. Thinking your IQ is less than it actually is can be a significant benefit in investing. Humility helps reduce the number of mistakes caused by hubris. The work to learn more in life never ends. New information and ideas are constantly arriving and must be considered. If you don't want to do that work you should buy a low cost diversified portfolio of index funds. As a test I suggest you buy my new book on Charlie Munger. If you can't find the time and energy to read the whole book, you should definitely buy a low cost diversified portfolio of index funds. Putting yourself to that test may be the best dollar-for-dollar investment you ever make!

10. "If you have competence, you pretty much know its boundaries already. To ask the question is to answer it." "We know the edge of our competency better than most. That's a very worthwhile thing." The "circle of competence" idea is very simple. Risk comes from not knowing what you are doing. So it is wise to stay within a circle of competence where you know what you are doing. The margin of safety idea applies to circles of competence as well. Why get anywhere near the edge of your competence when you have the option not to do so? It is a very good idea to play it safe if the limits of your competence are unclear. Being less inept and dumb than the competition is such a huge advantage.

11. "Warren and I avoid doing anything that someone else at Berkshire can do better." Life is both easier and better if you let people who do things better than you do those things. As an example, an investor like Charlie Munger finds his "comparative advantage" in investing rather than "making sure the trains run on time" as an operator of a business like Matt Rose of Burlington Northern. As another example, Munger has focused his efforts on buying moats rather than building them. It is easier for him to see an existing Mount Everest than to spot a mountain that may be created in the future. Munger leaves moat creation to entrepreneurs and venture capitalists and feels fine putting that activity in "too hard" pile. Munger has said that if he were young today he might devote his life to technology rather

than investing, but at this point in his life technology is not the source of his greatest comparative advantage. Every business that he is involved in as an investor uses technology, but a pure technology business is not ideal for inclusion in his portfolio.

12. "Every person is going to have a circle of competence. And it's going to be very hard to advance that circle. If I had to make my living as a musician…. I can't even think of a level low enough to describe where I would be sorted out to if music were the measuring standard of the civilization." We all have certain talents and skills. And we should all strive to advance those skills. But understanding the limits of your current skill development is wise. Especially when what is at risk is significant it is wise to be conservative when it comes to self-appraisals. One of the major problems that arises from the psychology of human misjudgment is overconfidence. Munger has famously said: **"In the 5th century B. C. Demosthenes noted that: 'What a man wishes, he will believe.' And in self-appraisals of prospects and talents it is the norm, as Demosthenes predicted, for people to be ridiculously over-optimistic. For instance, a careful survey in Sweden showed that 90 percent of automobile drivers considered themselves above average. And people who are successfully selling something, as investment counselors do, make Swedish drivers sound like depressives. Virtually every investment expert's public assessment is that he is above average, no matter what is the evidence to the contrary."**

A Dozen Things I've Learned from Charlie Munger about Mistakes

September 19, 2015

1. "There's no way that you can live an adequate life without many mistakes." "Of course, there's going to be some failure in making the correct decisions. Nobody 'bats a thousand.'" "I don't want you to think we have any way of learning or behaving so you won't make mistakes." Everyone makes mistakes sang Big Bird on the first episode of Sesame Street. Albert Einstein said once that anyone who has never made a mistake (if there is such a person) has never tried anything new. Warren Buffett agrees: "I make plenty of mistakes and I'll make plenty more mistakes, too. That's part of the game. You've just got to make sure that the right things overcome the wrong." Charlie Munger has learned about business in the best way possible: by making mistakes and being successful actually being in business. Reading about business is vital, but Munger has said that there is no substitute for wading in and actually taking the plunge as a business manager or owner. Yes, you can learn vicariously by watching others and by reading. Learning from the mistakes of others is essential. To maximize how much he learns Munger reads five newspapers a day and has been described as a book with legs sticking out. It is far better to learn vicariously when it comes to many of the more painful mistakes in life. At one shareholder meeting Munger when describing Berkshire's mistakes in the shoe business quoted Will Rogers: "There are three kinds of men. Some learn by reading. Some learn by observation. The rest of them must pee on the electric fence for themselves."

2. "For a security to be mispriced, someone else must be a damn fool. It may be bad for the world, but not bad for Berkshire." The flip side of mistakes for an investor is that they are not just a source of problems, but also the underlying source of opportunity for investors. Howard Marks writes: "In order for one side of a transaction to turn out to be a major

success, the other side has to have made a big mistake. Active management has to be seen as a search for mistakes." This inescapable math explains the old folk wisdom that if you don't see who the sucker is at the poker table, it is you. Munger believes: **"You have to look for a special area of competency and focus on that…. Go where there's dumb competition."** If you don't see who is the dumb competition, it is you. Mr. Market is often not wise so don't treat him as if he is. Mr. Market is your servant, not your master.

3. "Forgetting your mistakes is a terrible error if you are trying to improve your cognition. Reality doesn't remind you." Hindsight bias is the tendency of people to believe that their forecasts and predictions were more accurate than they were in reality. People tend to forget their mistakes and exaggerate their successes. In retrospect, events often appear to be much more predictable than at the time of any given forecast. One way to reduce hindsight bias is to write down your decisions in a journal and to go back and take an objective look at your decision-making record. Shane Parrish points out: "A decision journal will not only allow you to reduce your hindsight bias, but it will force you to make your rationale explicit upfront. We often get the outcome we think will happen, but for the wrong reasons." Neal Roese, a professor of marketing at the Kellogg School of Management at Northwestern University, has said: "You begin to think: 'Hey, I'm good. I'm really good at figuring out what's going to happen.' You begin to see outcomes as inevitable that were not."

4. "Why not celebrate stupidities?" "I like people admitting they were complete stupid horses' asses. I know I'll perform better if I rub my nose in my mistakes. This is a wonderful trick to learn." It is through the process of making mistakes and having success in the real world that you can learn and establish sound business judgment. Buying Berkshire Hathaway itself can arguably be put into the mistake category. The New England textile mill when bought in the 1960s was a lousy business. Buying the textile business was certainly valuable in one way in that it taught Buffett and Munger what not to do. Munger notes: **"Chris Davis [of the Davis funds] has a temple of shame. He celebrates the things they did that lost them a lot of money. What is also needed is a temple of shame squared for things you didn't do that would have made you rich."** Learning from mistakes does not mean wallowing in failure too much. Buffett says: "it is better to learn from other people's mistakes as much as possible. But we don't spend any time looking back at Berkshire. I have a partner, Charlie Munger; we have been pals for forty years—never had an argument. We disagree on things a lot but we don't have arguments about it."

5. "A trick in life is to get so you can handle mistakes. Failure to handle psychological denial is a common way for people to go broke." "Warren and I aren't prodigies. We can't play chess blindfolded or be concert pianists. But the results are prodigious, because we have a temperamental advantage that more than compensates for a lack of IQ points." Munger is getting at the importance of temperament to success as an investor. Most mistakes are psychological and emotional. Munger believes that he and Buffett have an advantage that is based more on temperament than IQ. If you can't handle mistakes, Munger suggests that you buy a diversified portfolio of low fee index funds and leave active investing to others. Unfortunately, even if you do select an index-based approach you still must make some investing decisions such as assets allocation, fund selection and asset rebalancing periods.

6. "Terribly smart people make totally bonkers mistakes." "Smart people aren't exempt from professional disasters from overconfidence. Often, they just run aground in the more difficult voyages." Munger is saying that smart people are not exempt from making

mistakes. Overconfidence can cause a person with a high IQ to make more mistakes than someone who has an IQ that is 30 points lower. It is the person with the high IQ who falsely thinks that is 30 points higher than it really is that gets you into serious trouble says Munger. People who are genuinely humble about their IQ can sometimes make far fewer mistakes if they do the necessary work, have a sound investment process and think in rational ways.

7. "Most of Berkshire's success grew from stupidity and failure that we learned from." Berkshire has made many mistakes. Paying too much for Conoco Phillips was a mistake as was Berkshire buying US Airways. The best way to become a millionaire is to start with a billion dollars and buy an airline is an old joke in business. Munger has said that: **"Hochschild, Kohn the department store chain was bought at a discount to book and liquidating value. It didn't work [as an investment."** He added on another occasion: **"It is remarkable how much long-term advantage people like us have gotten by trying to be consistently not stupid, instead of trying to be very intelligent."** Buying Dexter Shoes was definitely a multi-billion dollar mistake for Berkshire. In doing the Dexter due diligence analysis Buffett and Munger made the mistake of not making sure the business had what they call a "moat" and being too focused on what they thought was an attractive purchase price. Buffett said once about Dexter: "What I had assessed as durable competitive advantage vanished within a few years." Capitalism inherently means that others will always be trying to replicate any business that is profitable and that means you are always in a battle to keep what you have. Dexter lost that battle in a very swift fashion. If you make a mistake, capitalism's competitive destruction forces will expose it swiftly and sometimes brutally.

8. "Where you have complexity, by nature you can have fraud and mistakes." "In terms of business mistakes that I've seen over a long lifetime, I would say that trying to minimize taxes too much is one of the great standard causes of really dumb mistakes. I see terrible mistakes from people being overly motivated by tax considerations. Warren and I personally don't drill oil wells. We pay our taxes. And we've done pretty well, so far. Anytime somebody offers you a tax shelter from here on in life, my advice would be don't buy it." "We try more to profit from always remembering the obvious than from grasping the esoteric." Complexity can be your friend or your enemy depending on the circumstances. I am somewhat surprised by the fact that fees and incomes in finance are so high when there seem to be a lot of competition. There is clearly an asymmetric information problem in finance. But it would seem like technology should have brought fees and incomes down faster in finance as it has in some other sectors. The answer must lie in the fact that humans tend to make so many psychological and emotional mistakes and what Professor Cialdini calls "compliance professionals" are able to milk that tendency to keep fees high.

9 . "The most extreme mistakes in Berkshire's history have been mistakes of omission. We saw it, but didn't act on it. They're huge mistakes — we've lost billions. And we keep doing it. We're getting better at it. We never get over it. There are two types of mistakes [of omission]: 1) doing nothing; what Warren calls "sucking my thumb" and 2) buying with an eyedropper things we should be buying a lot of." "Our biggest mistakes were things we didn't do, companies we didn't buy." "Since mistakes of omission don't appear in the financial statements, most people don't pay attention to them." Munger and Buffett not investing in Wal-Mart is just one example of a mistake of omission. Buffett has said that just this one mistake with Wal-Mart cost them $10 billion. In 1973 Tom Murphy offered to sell some television stations to Berkshire for $35 million and Buffett declined. "That was a huge mistake of omission," Buffett has admitted. Buffett also has said: mistakes of omission…are where we knew enough about the business to do

something and where, for one reason or another, sat they're sucking out thumbs instead of doing something. And so we have passed up things where we could have made billions and billions of dollars from things we understood, forget about things we don't understand."

10. "It's important to review your past stupidities so you are less likely to repeat them, but I'm not gnashing my teeth over it or suffering or enduring it. I regard it as perfectly normal to fail and make bad decisions. I think the tragedy in life is to be so timid that you don't play hard enough so you have some reverses." Of course, you can also learn from success, particularly if you remember that success can be a lousy teacher since what you may believe is the outcome of skill may instead be an outcome based luck. As noted above they try to learn from mistakes but them to move on. Use the feedback from mistakes to improve the process if you can't but spend no time wallowing in failure. If you never make mistakes, you are not being ambitious enough.

11. "Banking has turned out to be better than we thought. We made a few billion [dollars] from Amex while we misappraised it. My only prediction is that we will continue to make mistakes like that." "Well, some of our success we predicted and some of it was fortuitous. Like most human beings, we took a bow." Munger has said that more than once that he and Buffett have made a mistake only to be bailed out by luck. Confusing luck with skill is easy to do. If luck does happen, embrace it. Bad luck may arrive soon enough to balance the score. On the topic of the relationship between luck and skill, read Michael Mauboussin. http://www.michaelmauboussin.com/books.html or watch him. https://www.youtube.com/watch?v=zSgYqwuguPc One of the luckiest things that ever happened to me was becoming his friend. As just one example, I would not have written my book on Charlie Munger if not for his friendship.

12. "You can learn to make fewer mistakes than other people- and how to fix your mistakes faster when you do make them.""Confucius said that real knowledge is knowing the extent of one's ignorance. Aristotle and Socrates said the same thing. …. Knowing what you don't know is more useful than being brilliant." "Around here I would say that if our predictions have been a little better than other people's, it's because we've tried to make fewer of them." Charlie Munger freely admits he still makes mistakes even after many decades as a business person and investor. But Munger does advise people to strive to make new mistakes rather than repeat old mistakes. Munger has said that he made more mistakes earlier in life than he is making now. In other words, even though he continues to make mistakes like everyone else, he has marginally improved his ability to avoid mistakes over the years. Munger likes to be able to understand why he made a mistake, so he can learn from the experience. The mistakes can be a source of clues for improving a decision making process. For example, if you can't explain why you failed, the business was too complex for you to have invested in the first place or outside your circle of competence. Munger is fond of quoting Richard Feynman: "The first principle is that you must not fool yourself – and you are the easiest person to fool."

A Dozen Things I've Learned from Charlie Munger About The Berkshire System

September 26, 2015

1. "There are two main reasons Berkshire has succeeded. One is its decentralization. Decentralization almost to the point of abdication. There are only 28 people at headquarters in Omaha. The other reason is our extreme centralization of capital deployment. Our centralization is just as extreme as our decentralization." Systems are important in Charlie Munger's world. I have already written a blog post in this series about one system called "the value investing system." This post is about another system known as "the Berkshire System." These two systems are related, but distinct. A system can be defined as a set of processes and methods that produce a desired result that is more than the sum of the parts. Charlie Munger is an example of a "systems level thinker." Munger thinks deeply about things like understanding that local optimizations that actually decrease performance of the overall system. Munger also talks a lot about lollapaloozas and the impact of 2nd and 3rd order effects. Howard Marks is doing this too with his second level thinking idea. Nassim Taleb thinks in the same way, including the nonlinear impact of systems level interactions. The best investors and business people think hard and a lot about systems.

The Berkshire system is not the only system for operating a business but it is a very good one. Attempts have been made to replicate the Berkshire system but they are unlikely to be successful without adopting all of the elements that will be described below. In other words, half of the Berkshire system will not be much of an effective system. For example, delegating control without trustworthy people throughout the organization will fail. Decentralization of everything including capital allocation will fall prey to what Buffett calls "the Institutional Imperative: "rationality frequently wilts when the institutional imperative comes into play. For example: (1) As if governed by Newton's First Law of Motion, an institution will resist any change in its current direction; (2) Just as work expands to fill available time, corporate projects or acquisitions will materialize to soak up available funds; (3) Any business craving of the leader, however foolish, will be quickly supported by detailed rate-of-return and strategic studies prepared by his troops; and (4) The behavior of peer companies, whether they are expanding, acquiring, setting executive compensation or whatever, will be mindlessly imitated…Charlie and I have attempted to concentrate our investments in companies that appear alert to the problem." Professor Lawrence Cunningham, who has written an excellent book on Berkshire writes: "The only qualifications on managerial autonomy at Berkshire appear in a short letter Buffett sends its unit chiefs every two years. The missive states the mandates Berkshire places on subsidiary CEOs: (1) guard Berkshire's reputation; (2) report bad news early; (3) confer about post-retirement benefit changes and large capital expenditures (including acquisitions, which are encouraged); (4) adopt a fifty-year time horizon; (5) refer any opportunities for a Berkshire acquisition to Omaha; and (6) submit written successor recommendations."

People sometimes are get confused about what Warren Buffett does at Berkshire. Munger puts it simply: **"We have extreme centralization at headquarters where a single person makes all the capital allocation decisions, and we have decentralization among our operations without a big bureaucracy. That's the Berkshire Hathaway model."** It is worth noting that it is Buffett and not Munger who ultimately who makes the capital allocation decisions. Buffett seeks Munger's guidance and thoughts but Buffett pulls the capital allocation trigger. I have another blog post in the works on the capital allocation process at Berkshire, which will take the total number of planned posts on Munger up to a Spinal Tap-style #11. Buffett has said on the capital allocation system: "Berkshire wants the capital in the most logical place. Berkshire is a tax efficient way to move money from business to business, and we can redeploy capital in places that need them. Most of the managers of companies we own are already independently rich. They want to work, but don't

have to. They don't horde capital they don't need." The management at a subsidiary like See's Candies is given a capital allocation by Buffett, not the reverse. Superior capital allocation skill is one of Warren Buffett's unique gifts. Some people can do things like skateboard very well and some people can allocate capital very well. Buffett has pointed out: "If all of us were stranded on a desert island somewhere and we were never going to get off of it, the most valuable person there would be the one who could raise the most rice over time. I can say, "I can allocate capital!" You wouldn't be very excited about that. So I have been born in the right place."

2. "Good character is very efficient. If you can trust people, your system can be way simpler. There's enormous efficiency in good character and dis-efficiency in bad character." These three sentences capture the essence of what drives the success of the Berkshire System and the necessary preconditions for that system to work effectively. Firms exist to reduce the cost of coordinating economic activity versus the alternative approach. The Berkshire System implemented in a firm will not generate the desired efficiency and results unless the organization has trust in trustworthy people. That efficiency makes the businesses, managers and employees in the Berkshire system better able to adapt to changes in the environment. Professor Lawrence Cunningham relays this interesting snippet from a private conversation: "Munger told me: take Coase seriously/avoid middlemen." People talk about capitalism being the most efficient way to allocate resources, but it is capitalism's ability to drive innovation via discovering new innovation that makes is the best possible economics system. A person saying that socialism is more efficient than capitalism since it is more efficient to have only a few types of phones is an absurdity. Innovation and progress requires failure. Lots of failure. Munger has said, after giving the hat tip to Allen Metzger for the phrasing: **"I regard it as very unfair, but capitalism without failure is like religion without hell."** If course, markets sometimes fail too, which is why programs and policies like a social safety net are needed. Munger described this in his typical blunt fashion: **"Greenspan was a smart man but he overdosed on Ayn Rand at a young age."** Munger also said once at one of his most famous speeches given at USC: **"Another thing I think should be avoided is extremely intense ideology because it cabbages up one's mind. … When you're young it's easy to drift into loyalties and when you announce that you're a loyal member and you start shouting the orthodox ideology out, what you're doing is pounding it in, pounding it in, and you're gradually ruining your mind."**

3. "The highest form a civilization can reach is a seamless web of deserved trust." "The right culture, the highest and best culture, is a seamless web of deserved trust." "Not much procedure, just totally reliable people correctly trusting one another. That's the way an operating room works at the Mayo Clinic." "One solution fits all is not the way to go. All these cultures are different. The right culture for the Mayo Clinic is different from the right culture at a Hollywood movie studio. You can't run all these places with a cookie-cutter solution." The culture of a business is more than the sum of its parts. The totality of the vision, values, norms, systems, symbols, language, assumptions, beliefs, and habits of a business is what creates the culture of a business. Munger and Buffett are huge proponents of creating a strong organizational culture: **"Our final advantage is the hard-to-duplicate culture that permeates Berkshire. And in businesses, culture counts.…Cultures self-propagate."** Winston Churchill once said, "You shape your houses and then they shape you." That wisdom applies to businesses as well. Bureaucratic procedures beget more bureaucracy, and imperial corporate palaces induce imperious behavior."

4. "We want people where every aspect about their personality makes you want to be around them. Trust first, ability second." The greater efficiency that Munger talks about flows from trust. When trust exists you can eliminate lots of inefficient procedures which must exist in a system that must deal with people who are not trustworthy. This means trust is an essential element in hiring people and that exhibiting a lack of trust is something that should result in a dismissal from the business. Buffett's stated philosophy on this point is well known: "Lose money for the firm and I will be understanding; lose a shred of reputation for the firm, and I will be ruthless." Are they perfect in implementing this philosophy? No. They admit mistakes for the reasons my previous blog posts have discussed. Mistakes are feedback and if you don't try to learn from mistakes you are not only missing and opportunity, you are a fool.

5. "Our success has come from the lack of oversight we've provided, and our success will continue to be from a lack of oversight. But if you're going to provide minimal oversight, you have to buy carefully." "The interesting thing is how well it [our acquisition strategy/process] has worked over a great many decades, and how few people copy it." The acquisition process Berkshire uses is very deliberate. Berkshire only buys businesses that meet certain criteria including having an existing moat and existing high quality management. They do not want to create moats or supply management. They greatly admire people who create moats but know that creating moats is not their best game in terms of circle of competence. Munger has said: **"We don't train executives, we find them. If a mountain stands up like Everest, you don't have to be a genius to figure out that it's a high mountain."** The same principle applies to moats: spotting a business with an existing moat is vastly easier than trying to spot a new moat emerging from a complex adaptive system. Seeing something emerging from nothing is a really hard problem compared to seeing something that is already there. Munger does not like really hard problems. He likes easy problems that have very favorable odds of a big payoff if he is right.

6. "We're successful because of simplicity itself: We let people who play the game very well keep doing it. Our successor won't change this. The big worry is that the culture is tampered with and there's oversteering. But our board and owners won't allow this." Munger is talking about the importance of creating and maintaining the Berkshire culture which enables and depends upon trust. It is tremendously cost efficient to have a culture that is based on trust, since you don't have the cost or the inefficiency associated with layers of management and complex systems that try to act as a substitute. David Larcker and Brian Tayan in a paper cited in the notes below write:"A trust-based system [requires] the development and maintenance of a culture that encourages responsible behavior. As Munger says, **"People are going to adopt to whatever the ethos is that suffuses the place."** Which means that this ethos is worth paying close attention to and developing well including being based on a high degree of trust.

7. "A lot of people think if you just had more process and more compliance — checks and double- checks and so forth — you could create a better result in the world. Well, Berkshire has had practically no process. We had hardly any internal auditing until they forced it on us. We just try to operate in a seamless web of deserved trust and be careful whom we trust." "I think your best compliance cultures are the ones which have this attitude of trust and some of the ones with the biggest compliance departments, like Wall Street, have the most scandals." Buffett has said: "Charles T. Munger, Berkshire Hathaway's vice-chairman, and I really have only two jobs… One is to attract and keep outstanding managers to run our various operations. The other is capital allocation."

Lawrence Cunningham writes in his book: "At most companies, CEOs might formulate a general acquisition program with little board involvement and then present specific proposals to the board, which discusses deal terms and approves funding. The board's role in this setting is an example of its service as an intermediary. Berkshire does the opposite, enabling Buffett to seize opportunities that would be lost if prior board involvement occurred…. Berkshire's success at such internal capital reallocation has vindicated its conglomerate business model that has otherwise been denigrated across corporate America. The strategy skillfully avoids intermediaries. Cash transferring subsidiaries distribute cash to Berkshire without triggering any income tax consequences. Cash-receiving subsidiaries obtain corporate funding without frictional costs of borrowing, such as bank interest rates, loan covenants, and other constraints. Some subsidiaries generate tax credits in their businesses that they cannot use but can be used by sister subsidiaries."

8. "Everybody likes being appreciated and treated fairly, and dominant personalities who are capable of running a business like being trusted. A kid trusted with the key to the computer room said, 'It's wonderful to be trusted.'" "We promised our CEOs that they could spend 100% of their time on their business. We place no impediments on them running their businesses. Many have expressed to me how happy they are that they don't have to spend 25% of time on activities they didn't like." People value working for a business that trusts them. In other words, working for a business that trusts you is a non-financial employee benefit. When this trust exists great people like to work for the business and that makes recruiting other people easier. This attracts other great people since this attribute and success feeds back on itself. One of the attractions of Berkshire as a buyer to a person selling a business is that Buffett and Munger will continue to let them run their business and won't break it into pieces like an automobile chop shop like most private equity buyers. The managers of Berkshire subsidies love Buffett and Munger for giving them freedom to run their business.

9. "When you get a seamless web of deserved trust, you get enormous efficiencies. … Every once in a while, it doesn't work, not because someone's evil but because somebody drifts to inappropriate behavior and then rationalizes it." "In any big business, you don't worry whether someone is doing something wrong, you worry about whether it's big and whether it's material. You can do a lot to mitigate bad behavior, but you simply can't prevent it altogether." "By the standards of the rest of the world, we over-trust. So far it has worked very well for us. Some would see it as weakness." There will be instances where someone is not as trustworthy as anticipated. This is a necessary price to pay to harvest the operational efficiencies when trust is deserved. Mistakes will happen and must be corrected. For example, CNBC noted: "Buffett did admit that he "obviously made a big mistake by not saying 'Well, when did you buy it?' when Sokol first told him he owned Lubrizol stock in January. Buffett also apologized for not including more 'outrage' in his March 30 letter announcing Sokol's 'resignation." Munger added, **'I think we can concede that that press release was not the cleverest press release in the history of the world.'"** Everyone makes mistakes and will keep making mistakes. Don't let one or even a few lousy outcomes throw you off the right path. If you have a sound process you will make less mistakes overall and come out ahead.

10. "There's money in being trusted. It's such a simple idea, and yet everybody rushes into every scummy activity that seems to work." Munger is saying that not only is being trustworthy the right thing to do morally, ethically and in terms of being happy in life, but it is the most profitable way to live your life. In short, being trustworthy is more profitable than

being untrustworthy. "A trust-based system can be more efficient than a compliance-based system, but only if self-interested behavior among employees and managers is low" write Larcker and Tayan in the previously cited paper.

11. "We want very good leaders who have a lot of power, and we want to delegate a lot of power to those leaders. It's crazy not to distribute power to people with the most capacity and diligence. Every time I see an opportunity to choose somebody, the second best guy is just awful compared to the guy we hire. Usually the decision is a no-brainer. We have to give power to the people who can wield it efficiently in serious game of survival." "A lot of corporations are run stupidly from headquarters, driving divisions to increase earnings every quarter. We don't do that. The stupidity of management practices in the rest of the corporate world will last long enough to give us an advantage well into the future." Tom Murphy once described the best approach to decentralization of operating decisions this way: "don't hire a dog and try to do the barking." Managers who are on the line in a business actually interacting with customers and systems are in the best position to make the necessary decisions if they are the right people. So work really hard to get the right people with the right skills and let them do their job. By accepting that sometimes businesses have lumpy earnings and letting talented managers run their business without interference Berkshire earns a superior long term return. The idea that this advantage is not possible or sustainable because markets are perfectly efficient is rubbish to anyone actually running a business.

12. "One of the greatest ways to avoid trouble is to keep it simple." "When you make it vastly complicated—and only a few high priests in each department can pretend to understand it—what you're going to find all too often is that those high priests don't really understand it at all…. The system often goes out of control." "We operate Berkshire [via] a seamless web of deserved trust. We get rid of the craziness, of people checking to make sure it's done right." "Our approach has worked for us. Look at the fun we, our managers, and our shareholders are having. More people should copy us. It's not difficult, but it looks difficult because it's unconventional — it isn't the way things are normally done. We have low overhead, don't have quarterly goals and budgets or a standard personnel system, and our investing is much more concentrated than average. It's simple and common sense." A simpler system results in fewer mistakes and makes life much more pleasant. What could be more simple?

Notes:

Lawrence Cunningham: Berkshire Beyond Buffett: The Enduring Value of Values
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A Dozen Things I've Learned from Charlie Munger about Capital Allocation

October 3, 2015

1. "Proper allocation of capital is an investor's number one job." Capital allocation is not just the number one job of an investor but of anyone involved in any business. This is a core part of why Buffett and Munger say that being an investor makes you a better business person and being a better business person makes you a better investor. Making capital allocation decisions is core to any business, including a hot dog stand. Everyone must decide how to deploy their firm's resources. Michael Mauboussin and Dan Callahan describe the core task in allocating capital simply: "The net present value (NPV) test is a simple, appropriate, and classic way to determine whether management is living up to this responsibility. Passing the NPV test means that $1 invested in the business is worth more than $1 in the market. This occurs when the present value of the long-term cash flow from an investment exceeds the initial cost." Of course just passing the NPV test is not enough since the investor or business person's job to seek the most attractive opportunity of all the opportunities that are available. Building long-term value per share is the capital allocator's ultimate objective. Buffett puts it this way: "If we're keeping $1 bills that would be worth more in your hands than in ours, then we've failed to exceed our cost of capital."

2. "It's obvious that if a company generates high returns on capital and reinvests at high returns, it will do well. But this wouldn't sell books, so there's a lot of twaddle and fuzzy concepts that have been introduced that don't add much." Munger is not a fan of academic approaches to capital allocation. He would rather keep the analysis simple. One issue that concerns both Buffett and Munger is that many CEOs arrive in their job without having sound capital allocation skills. The jobs that they have had previously in many cases do not provide them with sufficient capital allocation experience. Buffett has written: "Most bosses rise to the top because they have excelled in an area such as marketing, production, engineering, administration or, sometimes, institutional politics." The best way to learn to wisely allocate capital is to actually allocate capital and get market feedback on those decisions. Allocating capital requires judgment and the best way to have good judgment is often to have experienced some effects of bad judgment. This lack of capital allocation experience can create problems since many people tend to focus on short-term stock prices and quarterly results. Munger believes that if an investor or CEO focuses on wise capital allocation and long term value the stock price will take care of itself.

3. "In the real world, you uncover an opportunity, and then you compare other opportunities with that. And you only invest in the most attractive opportunities. That's your opportunity cost. That's what you learn in freshman economics. The game hasn't changed at all. That's why Modern Portfolio Theory is so asinine." "It's your alternatives that matter. That's how we make all of our decisions. The rest of the world has gone off on some kick — there's even a cost of equity capital. A perfectly amazing mental malfunction." "I've never heard an intelligent discussion on cost of capital." Munger has on several occasions expressed his unhappiness with academic approaches to finance. Buffett describes their approach as follows: "Cost of capital is what could be produced by our 2nd best idea and our best idea has to beat it." All capital has an opportunity costs – what you can do with the next best alternative. If your next best alternative is 1%, it is 1% and if it is 10% it is 10%, no matter what some formula created in academia might say. Allocating capital to a sub-optimal use is a mis-allocation of capital. As an example, if you are a startup founder and you are buying expensive chairs for your conference room the same

process should apply. Is that your best opportunity to deploy capital? Those chairs can potentially be some of the most expensive chairs ever purchased on an opportunity cost basis. I have heard second hand that if you drive an expensive sports car Buffett has in the past on the spot calculated in his head what your opportunity cost is in buying that car versus investing.

4. "We're guessing at our future opportunity cost. Warren is guessing that he'll have the opportunity to put capital out at high rates of return, so he's not willing to put it out at less than 10% now. But if we knew interest rates would stay at 1%, we'd change. Our hurdles reflect our estimate of future opportunity costs." "Finding a single investment that will return 20% per year for 40 years tends to happen only in dreamland." The current interest rate environment is a big departure from the past. Andy Haldane has pointed out that interest rates appear to be lower than at any time in the past 5,000 years. These very low interest rates driven by a "zero interest rate policy" or ZIRP have created new challenges for investors and business people. One issue that seems to exists today is a stickiness of hurdle rate at some businesses. Hurdle rates that were put in place in the past may not be appropriate in today's world. Buffett has said: "The real test is whether the capital that we retain generates more in market value than is retained. If we keep billions, and the present value is more than we're keeping, we'll do it. We bought a company yesterday because we thought it was the best thing that we could do with $3 million on that day." In 2003 Buffett said: "The trouble isn't that we don't have one [a hurdle rate] – we sort of do – but it interferes with logical comparison. If I know I have something that yields 8% for sure, and something else came along at 7%, I'd reject it instantly. Everything is a function of opportunity cost." Warren also recently said that he wasn't just going to buy using today's very low rates just because they were his current best opportunity. These sorts of questions are very hard to sort out given the economic environment we are in now is new. The last point Munger makes is that when someone promises you a long term return of something like 20% for 40 years hold on to your wallet tightly and run like the wind.

5. "There are two kinds of businesses: The first earns 12%, and you can take it out at the end of the year. The second earns 12%, but all the excess cash must be reinvested — there's never any cash. It reminds me of the guy who looks at all of his equipment and says, 'There's all of my profit.' We hate that kind of business." Munger likes a business that generates free cash flow that need not be reinvested and not just an accounting profit. Some business with an accounting profit require that you reinvest all or nearly all of any cash generated into the business and Munger is saying businesses like this are not favored. Coke and See's Candies are attractive businesses based on this test. Airlines by contrast are not favored. Munger calls an airlines "marginal cost with wings." Munger is also not a fan of creative accounting's attempt to hide real costs: **"People who use EBITDA are either trying to con you or they're conning themselves. Interest and taxes are real costs." "I think that, every time you see the word EBITDA, you should substitute the word 'bullshit' earnings."** Buffett says: "Interest and taxes are real expenses. Depreciation is the worst kind of expense: You buy an asset first and then pay a deduction, and you don't get the tax benefit until you start making money."

6. "Of course capital isn't free. It's easy to figure out your cost of borrowing, but theorists went bonkers on the cost of equity capital." "A phrase like cost of capital means different things to different people. We just don't know how to measure it. Warren's way of describing it, opportunity cost, is probably right. The answer is simple: we're right and you're wrong." "A corporation's cost of capital is 1/4 of 1%

below the return on capital of any deal the CEO wants to do. I've listened to many cost of capital discussions and they've never made much sense. It's taught in business school and consultants use it, so Board members nod their heads without any idea of what's going on." Berkshire does not "want managers to think of other people's money as 'free money'" says Buffett, who points out that Berkshire imposes a cost of capital on its managers based on opportunity cost. One thing I love about this set of quotes is Munger admitting that Buffett is only "probably" right and that they don't know how to measure something others talk about. It indicates that Munger is always willing to consider that he is wrong. While he has said that he has a **"a black belt in chutzpah,"** he has also said that if he does not overturn a treasured belief at least once a year, it is a wasted year since it means he is not always looking hard at whether his beliefs are correct. In his new book *Superforecasting,* Professor Philip Teltock might as well have been writing about Charlie Munger when he wrote: "The humility required for good judgment is not self doubt – the sense that you are untalented, unintelligent or unworthy. It is intellectual humility. It is a recognition that reality is profoundly complex, that seeing things clearly is a constant struggle, when it can be done at all, and that human judgment must therefore be riddled with mistakes."

7. "We're partial to putting out large amounts of money where we won't have to make another decision." Attractive opportunities to put capital to work at high rates of return don't come along that often. Munger is saying that if you are a "**know something investor"** when you find one of these opportunities you should load up the truck and invest in a big way. He is also saying that he agrees with Buffett that their preferred holding period "is forever." Buffett looks for a business: "where you have to be smart only once instead of being smart forever." That inevitably means a business that has a solid sustainable moat. Buffett believes that finding great investment opportunities is a relatively rare event: "I could improve your ultimate financial welfare by giving you a ticket with only twenty slots in it so that you had twenty punches – representing all the investments that you got to make in a lifetime. And once you'd punched through the card, you couldn't make any more investments at all. Under those rules, you'd really think carefully about what you did, and you'd be forced to load up on what you'd really thought about. So you'd do so much better." When he finds a really great business the desire of Charlie Munger is to hold on to it. Munger elaborates on the benefits of not selling: **"You're paying less to brokers, you're listening to less nonsense, and if it works, the tax system gives you an extra one, two, or three percentage points per annum."**

8. "We have extreme centralization at headquarters where a single person makes all the capital allocation decisions." Centralization of capital allocation decisions at Berkshire to take advantage of Warren Buffett's extraordinary abilities is an example of opportunity cost analysis at work. Why allow your second best capital allocator or 50th best do this essential work? Here's Buffett on his process: "In allocating Berkshire's capital, we ask three questions: Should we keep the capital or pay it out to shareholders? If pay it out, then you have to decide whether to repurchase shares or issue a dividend." "To decide whether to retain the capital, we have to answer the question: do we create more than $1 of value for every dollar we retain? Historically, the answer has been yes and we hope this will continue to be the case in the future, but it's not certain. If we decide to retain and invest the capital, then we ask, what is the risk?, and seek to do the most intelligent thing we can find. The cost of a deal is relative to the cost of the second best deal." As was noted in the previous blog post in this series, nearly everything else other than capital allocation and executive compensation is decentralized at Berkshire.

9. "We're not going to put huge amounts of new capital into a lousy business. There are all kinds of wonderful new inventions that give you nothing as owners except the opportunity to spend a lot more money in a business that's still going to be lousy. The money still won't come to you. All of the advantages from great improvements are going to flow through to the customers." This is such an important idea and yet it is often poorly understood. Many investments in a business are only going to benefit customers because the business has no moat. In economic terminology, the investment produces all "consumer surplus" and no "producer surplus." Some businesses must continue to plow capital into their business to remain competitive in a business that is still going to deliver lousy financial returns. Journalists often talk about businesses that "earn" some amount without noting that what they refer to is revenue not profit. What makes a business thrive is profit and absolute dollar free cash flow. One thing I am struck by in today's world is how hard nearly every business is in terms of making a significant genuine profit. The business world is consistently hyper competitive. There is no place to hide from competition and potential disruption. If you have a profit margin, it is someone else's opportunity. Now more than ever. People who don't think this contributes the inability of central banks to create more inflation are not living in the real business world. Making a sustained profit in a real business is very hard.

10. "I don't think our successors will be as good as Warren at capital allocation." There will never be another Warren Buffett just as there will never be another Charlie Munger. But that does not mean you can't learn from the way they make decisions, including, but not limited to, capital allocation decisions. Learning from others is strangely underutilized despite its huge rewards. Some of this aversion to learning from others must come from overconfidence. This overconfidence is good for society since it results in a lot of intentional and accidental discovery. But at an individual level it is hard on the people doing the experimentation. Reading widely about how others investors and business people approach capital allocation is wise. As an example, Howard Marks and Seth Klarman are people who have learned from Buffett and Munger and vice versa. Having said that, we are all unique as investors. There is no formula or recipe for successful investing. But there are approaches and processes that are far more sound than others that can generate an investing edge if you are willing to do the necessary work. These better decision making process are applicable in life generally. If you are not willing to do the work that an investor like Munger does in his investing, you should buy a diversified low cost portfolio of index funds/ETFs. A dumb "know nothing investor" can transform themselves into a smart investor by acknowledging that they are dumb. Buffett calls this transformation from *dumb to smart* of they admit they are dumb an investing paradox.

11. "All large aggregations of capital eventually find it hell on earth to grow and thus find a lower rate of return." Munger is saying that the more assets you must manage the harder it is to earn an above market return. Putting large amounts of money to work means it takes more time to get in and out of positions and for that reason it becomes hard to effectively invest in relatively smaller opportunities. Buffett puts it this way: "There is no question that size is an anchor to performance. We intend to prove that up to the point that it really starts biting. We can't earn the same returns on capital with over $300 billion in market cap. Archimedes said he could move the world with a long enough lever. I wish I had his lever."

12. "Size will hurt returns. We can only buy big positions, and the only time we can get big positions is during a horrible period of decline or stasis. That really doesn't happen very often." There are times when Mr. Market turns fearful and huge amounts of

capital can be put to work even by Berkshire as was the case in 2008. To be able to take advantage of this requires that the investor (1) be patient and (2) be aggressive when it is time. Jumping in when things are falling apart takes courage. Not jumping is during a period of investing frenzy takes character. Bill Ruane believes: "Staying small in terms of the size of fund is simply good business. There aren't that many great companies." The bigger the fund the harder it is to outperform. Bill Ruane famously closed his fund to new investors to be "fair" to his clients.

In terms of an example of outperforming during what for others was a horrible time, the following example of Munger in action below speaks for itself. Bloomberg wrote at the time: "By diving into stocks amid the market panic of 2009, Munger reaped millions in paper profits for the Daily Journal. The investment gains, applauded by Buffett at Berkshire Hathaway's annual meeting in May, have helped triple Daily Journal's own share price. While Munger's specific picks remain a mystery, a bet on Wells Fargo (WFC) probably fueled the gains, according to shareholders who have heard Munger, 89, discuss the investments at the company's annual meetings. 'Here's a guy who's in his mid-80s at the time, sitting around with cash at the Daily Journal for a decade, and all of a sudden hits the bottom perfect.'"

Munger having the necessary cash to do this investment in size at the right time in 2009 was not accidental. You don't have the cash at the right time by following the crowd. As Buffett points out holding cash is not costless: "The one thing I will tell you is the worst investment you can have is cash. Everybody is talking about cash being king and all that sort of thing. Cash is going to become worth less over time. But good businesses are going to become worth more over time." That available cash was a residual of a disciplined buying process focused on a bottoms-up analysis by Munger of individual stocks. His ability to do this explains why he is a billionaire and we are not.

Notes:

Michael Mauboussin: http://covestreetcapital.com/wp-content/uploads/2015/07/Mauboussin-June-2015.pdf [The bibliography in this essay is extensive.]

Superforecasting http://www.amazon.com/Superforecasting-The-Art-Science-Prediction/dp/0804136696

A Dozen Things I've Learned about Great CEOs from "The Outsiders" (Written by William Thorndike) http://25iq.com/2014/05/26/a-dozen-things-ive-learned-about-great-ceos-from-the-outsiders-written-by-william-thorndike/

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A Dozen Things I've Learned from Charlie Munger about Moats

October 10, 2015

1. "We have to have a business with some inherent characteristics that give it a durable competitive advantage." Professor Michael Porter calls barriers to market entry that a business may have a "sustainable competitive advantage." Warren Buffett and Charlie Munger call them a "moat." The two terms are essentially identical. Buffett puts it this way: "The key to investing is not assessing how much an industry is going to affect society, or how much it will grow, but rather determining the competitive advantage of any given company and, above all, the durability of that advantage. The products or services that have wide, sustainable moats around them are the ones that deliver rewards to investors." A complete discussion about the nature of moats can't be done well in a ~3,000 word blog post since it is one of the most complex topics in the business world. For this reason, in my book on Charlie Munger I put the material on moats in an appendix since I feared readers would bog down and not focus on the more important points such as making investment and other decisions in life. But the complexity of the topic does not change the fact that to be a "know-something" investor you must understand moats. Even the fate of the smallest business like a bakery or shoe store will be determined by whether they can create some form of moat. The small business person may not now what a moat is called but the great ones know that they must generate barriers to entry to create a profit. The underlying principle involved in moat creation and maintenance is simple: if you have too much supply of a good or service, price will drop to a point where there is no long-term industry profit above the company's cost of capital. Michael Mauboussin, in what is arguably the best essay ever written on moats put it this way, "Companies generating high economic returns will attract competitors willing to take a lesser, albeit still attractive return, which will drive aggregate industry returns to opportunity cost of capital." The best test of whether a moat exists is quantitative, even though the factors that create it are mostly qualitative. If a business has not earned returns on capital that substantially exceed the opportunity cost of capital for a period of years, it does not have a moat. If a business must hold a prayer meeting to raise prices it does not have a moat. A business may have factors that may create a moat in the future, but the best test for a moat is in the end mathematical. The five primary elements which can help create a moat are as follows: 1. Supply-Side Economies of Scale and Scope; 2. Demand-side Economies of Scale (Network Effects); 3. Brand; 4. Regulation; and 5. Patents and Intellectual Property. Each of these five elements is worthy of an entire blog post or even a book. These elements and the phenomenon they create are all interrelated, constantly in flux and when working together in a lollapalooza fashion often create nonlinear positive and negative changes. For me, questions related to the creation, maintenance and destruction of moats are the most fascinating and challenging aspects of the business world. There are no precise formulas or recipes that govern moats but there is enough commonality that you can get better at understanding moats over time.

2. "We're trying to buy businesses with sustainable competitive advantages at a low – or even a fair price." "Everyone has the idea of owning good companies. The problem is that they have high prices in relations to assets and earnings, and that takes all of the fun out of the game. If all you needed to do is to figure out what company is better than others,

everyone would make a lot of money. But that is not the case." Buying a business with a moat is a necessary but not a sufficient condition for achieving financial success in a business. What Charlie Munger is saying in these sentences is that if you pay too much for a moat you will not find success. No one makes this point better than Howard Marks who writes: "Superior investors know – and buy – when the price of something is lower than it should be… most investors think quality, as opposed to price, is the determinant of whether something's risky. But high-quality assets can be risky, and low-quality assets can be safe. It's just a matter of the price paid for them." Some people have this idea that value investing is only about buying cheap assets. The reality is that many assets are cheap for good reason. Genuine value investing is about buying assets at a substantial discount to their value. This is why Charlie Munger says that: **"All intelligent investing is value investing."** What he means is: is there any type of investing whether the objective is to pay more than an asset is worth? There are some assets for which an intrinsic value can't be computed, but that is a different question than whether an asset should be purchased at a discount to its value. Buffett writes: "The very term 'value investing' is redundant. What is 'investing' if it is not the act of seeking value at least sufficient to justify the amount paid? Consciously paying more for a stock than its calculated value — in the hope that it can soon be sold for a still-higher price — should be labeled speculation."

3. "You basically want me to explain to you a difficult subject of identifying moats. It reminds me of a story. One man came to Mozart and asked him how to write a symphony. Mozart replied, "You are too young to write a symphony." The man said, "You were writing symphonies when you were 10 years of age, and I am 21." Mozart said, "Yes, but I didn't run around asking people how to do it." "**We buy barriers. Building them is tough… Our great brands aren't anything we've created. We've bought them. If you're buying something at a huge discount to its replacement value and it is hard to replace, you have a big advantage. One competitor is enough to ruin a business running on small margins."** While there is no formula or recipe for creating a moat there are many common principles that can be used in trying to create or identify one. For example, Munger has said: **"In some businesses, the very nature of things cascades toward the overwhelming dominance of one firm. It tends to cascade to a winner take all result."** On another occasion he said: **"Do you know what it would cost to replace Burlington Northern today? We are not going to build another transcontinental."** It is important to note that there is a world of difference between creating a new moat than buying an existing one. For example, the venture capital business is fundamentally about building moats and the value investing discipline, as practiced by Munger and Buffett, is instead about buying existing moats at a discount to the intrinsic value of the business.

4. "The only duty of corporate executive is to widen the moat. We must make it wider. Every day is to widen the moat. We gave you a competitive advantage, and you must leave us the moat. There are times when it's too tough. But your duty should be to widen the moat. I can see instance after instance where that isn't what people do in business. One must keep their eye on the ball of widening the moat, to be a steward of the

competitive advantage that came to you." What Charlie Munger is saying in these sentences is that operational excellence in running a business is very important, but the factors that maintain the barriers to entry of the business must also receive proper attention by management. For example, if the moat of a business is based on network effects or intellectual property those factors can't be ignored. Sometimes playing defense is needed in whole or in part, as was the case when Facebook bought several potential moat destroyers. The Instagram, Oculus and WhatsApp acquisitions were in no small part designed to widen the existing Facebook moat. Of course, the companies were bought to create new moats too, so in that sense they served two purposes (i.e., the acquisitions served both offensive and defensive purposes for Facebook). Startups potentially have an asymmetrical advantage since often they are bought by incumbents just for defensive reasons (i.e., sometimes in an acquisition only consumers benefit since the new service or good is all, or nearly all, consumer surplus).

5. "How do you compete against a true fanatic? You can only try to build the best possible moat and continuously attempt to widen it." The job of a businessperson is to try to create product or service which are sufficiently unique that constraints are placed on other companies who desire to provide a competing supply of those goods or services. For this reason moat creation and maintenance is a key part of the strategy of any business. What this means is that the essential task of anyone involved in establishing a strategy for a business is defining how a business can be unique. Creating a business strategy is fundamentally about making choices. It is not just what you do, but what you choose not to do, that defines an effective strategy. Professor Michael Porter argues that doing what everyone must do in a business is operational effectiveness and not strategy. The people who most often create unique compelling offerings for customers are true fanatics. Jim Sinegal of Costco is just such a fanatic which is why Charlie Munger serves on their board. Going down the list of Berkshire CEOs reveals a long list of fanatics.

6. "Frequently, you'll look at a business having fabulous results. And the question is, 'How long can this continue?' Well, there's only one way I know to answer that. And that's to think about why the results are occurring now – and then to figure out what could cause those results to stop occurring." This set of sentences is an example of Charlie Munger applying his inversion approach. He believes that when you have a hard problem to solve the best solution often appears when you invert the problem. For example, Munger applies the inversion process to moat analysis. Instead of just looking at why a moat exists or can be made stronger, he is saying you should think about why it may weaken. He is looking for sources of unique insight that might have been missed by others who may be too optimistic. Not being too optimistic is consistent with his personality. Munger has called himself a "cheerful pessimist." Over time the forces of competitive destruction will inevitably weaken any moat. Munger has said: "**It is a rare business that doesn't have a way worse future than a past." "Capitalism is a pretty brutal place." "Over the very long term, history shows that the chances of any business surviving in a manner agreeable to a company's owners are slim at best."** Bill Gates describes what Berkshire is looking for in a business as follows:

"[they] talk about looking for a company's moat — its competitive advantage — and whether the moat is shrinking or growing."

7. "Kellogg's and Campbell's moats have also shrunk due to the increased buying power of supermarkets and companies like Wal-Mart. The muscle power of Wal-Mart and Costco has increased dramatically." Wholesale transfer pricing power, also sometimes called supplier bargaining power (e.g., in the Michael Porter five forces model) is a potential destroyer of moats. Understanding who has pricing power in a value chain is a critical task for any manager. As an example of a moat being attacked in this way, the venture capitalist Chris Dixon wrote once about a chain of events in the gaming industry : "In Porter's framework, Zynga's strategic weakness is extreme supplier concentration – they get almost all their traffic from Facebook. It is in Facebook's economic interest to extract most of Zynga's profits, leaving them just enough to keep investing in games and advertising." As another example, most every restaurant which does not own its building faces this same wholesale transfer pricing problem. If you have an exclusive supplier of a necessary input, that supplier controls your profits. It is wise to have multiple suppliers of any good or service, at least potentially.

8. "What happened to Kodak is a natural outcome of competitive capitalism." "The perfect example of Darwinism is what technology has done to businesses. When someone takes their existing business and tries to transform it into something else—they fail. In technology that is often the case. Look at Kodak: it was the dominant imaging company in the world. They did fabulously during the great depression, but then wiped out the shareholders because of technological change. Look at General Motors Company, which was the most important company in the world when I was young. It wiped out its shareholders. How do you start as a dominant auto company in the world with the other two competitors not even close, and end up wiping out your shareholders? It's very Darwinian—it's tough out there. Technological change is one of the toughest things." I don't know of any business in today's business world that does not face significant disruptive threats. None. It is brutally competitive to be involved any business today. Do some businesses have moats that make their lines of business relatively more profitable? Sure. But I can't think of any business which is not under attack right now. When I say every business is competitive in todya's world I mean every business. Life as the owner of a sandwich shop, a food processor, marketing consultancy, etc. is inevitably tough. Pricing power in the business world today is rarer than a Dodo bird. Technology businesses present a special case when it comes to moats since disruptive change is much more likely to be nonlinear. Businesses in the technology sector that seem relatively solid can disappear in the blink of an eye. The factors like network effects that can create startling success for a technology company can be just as powerful on the way down as they were the way up.

9. "The perfectly fabulous economics of this [newspaper] business could become grievously impaired." The newspaper business once had a strong moat created by economies of scale inherent in huge printing plants and large distribution networks needed for physical newspapers. The Internet has caused the moats of newspapers to quickly atrophy, which is problematic for owners and society as a whole given that the news itself is what is called a "public good" (i.e., non-rival and non-excludable). Charlie Munger has lamented the decline of newspapers: **"It's not good for the country. We're losing something."** Buffett has said it "blows your mind" how quickly the newspaper industry has declined. The way commentators on the financial prospects of newspapers ignore the public good problems is amazing really. Increasing something like quality does not fix a public good problem. Without some scarcity/a moat there will be no ability on the part of newspapers to generate a profit. Solutions to journalism business model problems are likely to include philanthropy as is the case with other public goods.

10."Network TV [in its heyday,] anyone could run and do well. If Tom Murphy is running it, you'd do very well, but even your idiot nephew could do well." Some moats are so strong that even a weak management teams can prosper running the business. The broadcast television moat is not what it once was given the rise of things like over the top viewing. But at one time television had a bullet proof moat. Buffett believes: "When a management with a reputation for brilliance tackles a business with a reputation for bad economics, it is the reputation of the business that remains intact." Munger certainly wants a business in which he invests to be run by capable and trustworthy managers. Operational excellence is always desired. But having a moat is a protection against a poor manager running a business into the ground. Buffett said once: "Buy into a business that's doing so well an idiot could run it, because sooner or later, one will."

11. "I think it's dangerous to rely on special talents — it's better to own lots of monopolistic businesses with unregulated prices. But that's not the world today." In these sentences Charlie Munger uses a term that Peter Thiel likes to use when referring to a moat: "monopoly. While it is certainly profitable to own an unregulated monopoly, the number of businesses today that have moats which can be considered a monopoly is vanishingly small. For this reason I think Peter Thiel takes the monopoly point too far. The word monopoly is loaded and carries too much baggage to be useful. The reality is that the nature of moats is not binary. Moats come in all varieties, from strong to weak. They are always in flux and vary on multiple dimensions. For example, some big moats are more brittle than others. Some moats protect valuable market segments and some do not. In other words, moats can be classified along a spectrum from strong to weak, valuable to non valuable and from big to small.

12. "The informational advantage of brands is hard to beat. And your advantage of scale can be an informational advantage. If I go to some remote place, I may see Wrigley

chewing gum alongside Glotz's chewing gum. Well, I know that Wrigley is a satisfactory product, whereas I don't know anything about Glotz's. So if one is $.40 and the other is $.30, am I going to take something I don't know and put it in my mouth – which is a pretty personal place, after all – for a lousy dime? So, in effect, Wrigley, simply by being so well-known, has advantages of scale – what you might call an informational advantage. Everyone is influenced by what others do and approve. Another advantage of scale comes from psychology. The psychologists use the term 'social proof'. We are all influenced – subconsciously and to some extent consciously – by what we see others do and approve. Therefore, if everybody's buying something, we think it's better. We don't like to be the one guy who's out of step. Again, some of this is at a subconscious level and some of it isn't. Sometimes, we consciously and rationally think, 'Gee, I don't know much about this. They know more than I do. Therefore, why shouldn't I follow them?' All told, your advantages can add up to one tough moat." The most important point made in these sentences by Charlie Munger is that the great moats which exist in the world tend to have an aggregate value that is more than the sum of the parts. Munger calls this a "lollapalooza" outcome. Others may refer to it as synergy. As an example, many moats in the technology business are based on what Munger calls an informational advantage, but there can be many other factors like economies of scale or intellectual property that feed back on each other to create and strengthen the moat.

I am at ~3,400 words in this post and if you are still reading the probability is good that you understand or soon will understand this critical aspect of investing called "moats." The opportunities to learn never end. I think is the best game on Earth and that fact explains why Munger and Buffett love what they do so much that they plan to continue to be investors as long as they are physiologically able to do so. Here's Buffett to finish this post off:

"I will say this about investing: Everything you do earn is cumulative. That doesn't mean that industries stay good forever, or businesses stay good forever, but in learning to think about business models, what I learned at 20 is useful to me now. What I learned at 25 is useful to me now. It's like physics. There are underlying principles, but now they're doing all kinds of things with physics they weren't doing 50 years ago.
But if you've got the principles, if you know what makes a good business, if you know what makes a good manager, if you know what makes a good product, and you learn that in one business, there is some transference to other businesses."

Notes:

Mauboussin and Callahan: http://csinvesting.org/wp-content/uploads/2013/07/Measuring_the_Moat_July2013.pdf

Chris Dixon http://cdixon.org/2010/05/08/facebook-zynga-and-buyer-supplier-hold-up/

Morningstar:

https://corporate.morningstar.com/US/documents/Indexes/What-Makes-A-Moat.pdf

http://news.morningstar.com/classroom2/course.asp?docId=145095&page=9

http://www.vfb.be/vfb/Media/Default/events/beleggerscongres-happening-zaterdag-26-april-2014—kinepolis-antwerpen/PPT%20Morningstar%20Alex%20Morozov%20Z8.pdf

http://news.morningstar.com/articlenet/article.aspx?id=91441

http://www.morningstar.com/cover/videocenter.aspx?id=556881

A Dozen Ways Charlie Munger Thinks like Philip Tetlock Suggests in his New Book Superforecasting

October 17, 2015

Philip Tetlock has written a fantastic new book entitled: *Superforecasting: The Art and Science of Prediction* that I strongly suggest you read. In the book Tetlock identifies a "rough composite portrait" of a what he calls a "superforecaster" and to me it looks like a picture of Charlie Munger. In my post this week I identify statements from Charlie Munger which I believe fit the Philip Tetlock profile.

1. **Munger: "It's kind of fun to sit there and out think people who are way smarter than you are because you've trained yourself to be more objective and more**

multidisciplinary." "I would argue that what Berkshire has done has mostly been using trivial knowledge…if you absorb the important basic knowledge…and you absorb all the big basic points across a broad range of disciplines, one day you'll walk down the street and you'll find that you're one of the very most competent members of your generation, and that many people who were quicker mentally and worked harder are in your dust." "Isn't reality multidisciplinary, so that you have to use the tools of all the disciplines to solve the complex problems?"

Tetlock: "[Foxes (as distinguished from hedgehogs)] pick and choose their ideas from a variety of schools of thought."

2. **Munger: "What I'm against is being very confident and feeling that you know, for sure, that your particular intervention will do more good than harm given that you're dealing with highly complex systems wherein everything is interacting with everything else."**

Tetlock: "Reality is infinitely complex."

3. **Munger: "If you don't get this elementary, but mildly unnatural, mathematics of elementary probability into your repertoire, then you go through a long life like a one-legged man in an ass-kicking contest."**

Tetlock: "[Be] probabilistic. Judge using many grades of maybe."

4. **Munger: "You can progress only when you learn the method of learning." "I think it's dishonorable to stay stupider than you have to be."**

Tetlock: "[Be] intellectually curious"

5. **Munger: "Any year that passes in which you don't destroy one of your best loved ideas is a wasted year."**

Tetlock: “Beliefs are hypotheses to be tested, not treasures to be guarded.”

6. **Munger: “Bias [arises] from the non-mathematical nature of the human brain in its natural state as it deal with probabilities employing crude heuristics, and is often misled.” “what are the factors that really govern the interests involved here rationally considered (i.e. macro and micro level economic factors) and what are the subconscious influences where the brain at a subconscious level is automatically forming conclusions (i.e. influences from instincts, emotions, cravings, and so on)”**

Tetlock: “Check thinking for cognitive and emotional biases.”

7. **Munger: “You can learn to make fewer mistakes than other people- and how to fix your mistakes faster when you do make them.”**

Tetlock: “[Be] reflective- introspective and self-critical.”

8. **Munger: “Not drifting into extreme ideology is a very, very important thing in life.”**

Tetlock: “[Don’t be] wedded to any idea or agenda.”

9. **Munger: “Your brain doesn’t naturally know how to think the way Zeckhauser knows how to play bridge. That’s a trained response.”**

Tetlock: “Believe it’s possible to get better.”

10. **Munger: “You must force yourself to consider arguments on the other side.”**

Tetlock: “Consider other views…. “

11. **Munger: "You must know the big ideas in the big disciplines and use them routinely—all of them, not just a few. Most people are trained in one model . . . and try to solve all problems in one way . . . This is a dumb way of handling problems."**

Tetlock: "Value diverse views."

12. **Munger: "The only way to win is to work, work, work, work, and hope to have a few insights."**

Tetlock: "[Be] determined to keep at it no matter how long it takes."

Notes:

Superforecasting: The Art and Science of Prediction http://www.amazon.com/gp/product/0804136696/ref=as_li_qf_sp_asin_il_tl?ie=UTF8&camp=1789&creative=9325&creativeASIN=0804136696&linkCode=as2&tag=valueinves08c-20&linkId=MNXIFQUUJMSLDKDK

A Dozen Things I've Learned from Charlie Munger about Ethics

October 24, 2015

It is important to consider a post like this in the context of the other posts in this series, like the post on mistakes. No one is perfect. Everyone makes mistakes.

1. **"Ben Franklin said: 'I'm not moral because it's the right thing to do – but because it's the best policy.'" "We knew early how advantageous it would be to get a reputation for doing the right thing and it's worked out well for us. My friend Peter Kaufman, said 'if the rascals really knew how well honor worked they would come to it.' People make contracts with Berkshire all the time because they trust us to behave well where we have the power and they don't. There is an old expression**

on this subject, which is really an expression on moral theory: 'How nice it is to have a tyrant's strength and how wrong it is to use it like a tyrant.' It's such a simple idea, but it's a correct idea." Thinking about this sentence raises the question about difference between ethics and morality. Opinions on the distinction between these two words vary. For purposes of this post I refer to "morality" as relating to shared communal or societal norms about right and wrong. For the companion term this post will use this definition from US Supreme Court Justice Potter Stewart: "Ethics is knowing the difference between what you have a right to do and what is right to do." Returning to the ideas in the quotations, what Ben Franklin and Charlie Munger are saying is that not only is unethical and immoral behavior wrong, it is a bad business practice.

2. **"You'll make more money in the end with good ethics than bad. Even though there are some people who do very well, like Marc Rich–who plainly has never had any decent ethics, or seldom anyway. But in the end, Warren Buffett has done better than Marc Rich–in money–not just in reputation."** Being ethical is just good business. As an example, I have a close friend who owns and leases commercial office building space and when he walks the streets of Seattle everyone seems to know him and they wave and smile. He is vastly better known than the mayor and certainly more popular. He is ethical to the core and people love to do business with him. The quality of his life is excellent and he is a multi-millionaire. He is wealthy both in terms of assets and friends. Buffett has said: "You have certain things you want to achieve, but if you don't have the love and respect of people, you are always a failure. That is the one thing you must earn, it can never be bought. No one that has the love and respect of others is ever a failure."

3. **"We believe there should be a huge area between everything you should do and everything you can do without getting into legal trouble. I don't think you should come anywhere near that line."** This is the application of a margin of safety principle to ethics. Why risk coming anywhere near a legal problem when there are so many other actions to be taken and opportunities to pursue that do not have the same risk? It is truly amazing when someone with massive wealth ends up disgraced over some minor incremental crime, especially when the person involved already has massive wealth. Munger said once: **"Last night, referring to some of our modern business tycoons – specifically, Armand Hammer – I said that when they're talking, they're lying, and when they're quiet, they're stealing. This wasn't my witticism; it was used [long ago] to describe the robber barons."**

4. **"Firms should have the ethical gumption to police themselves: Every company ought to have a long list of things that are beneath it even though they are**

perfectly legal." "We don't claim to have perfect morals, but at least we have a huge area of things that, while legal, are beneath us. We won't do them. Currently, there's a culture in America that says that anything that won't send you to prison is OK." There is a big difference between what is legal and what is ethical. Knowing the difference is critically important. Character and sound ethics means not doing what is unethical even if it may be legal. There is also the gray area of what business do you avoid. Buffett has said: "Charlie's favorite company, Costco. They are the #3 distributor in the US of cigarettes, but you wouldn't avoid buying it because of that. You'll drive yourself crazy trying to keep track of these things. Our philosophy is … we just won't be in certain businesses." Munger puts it this way: **"Warren told the story of the opportunity to buy Conwood, the #2 maker of chewing tobacco. I never saw a better deal, and chewing tobacco doesn't create the same health risks as smoking. All of the managers chewed tobacco – it was admirable of them to eat their own cooking. Warren and I sat down and said we're never going to see a better deal; it's a legal product; and we can buy it at a wonderful price; but we're not going to do it. Another fellow did and made a couple of billion easy dollars. But I don't have an ounce of regret. I think there are a lot of things you shouldn't do because it's beneath you."**

5. **"Once you start doing something bad, then it's easy to take the next step – and in the end, you're a moral sewer."** I have seen this set of issues play out multiple times in my life. As an example, the caretaker or trustee decides that they will "borrow" from funds entrusted for a beneficiary. They may say: "I will just borrow a small amount for a short time and I pay it back with interest." Another example is an investment manager hiding a loss from clients. From this small seed a massive fraud can grow and often does grow. Creeping incrementalism is a huge source of ethical problems. Once unethical behavior starts you have a very slippery slope to deal with.

6. **"If your ethics slip and people are rewarded, it cascades downward." "Terrible behavior spreads." "Sometimes you have to resist sinking to the level of your competitors. But fomenting bad practices often becomes its own punishment. "If you do things that are immoral and stupid, there's likely to be a whirlwind" that sweeps you away."** If people see other people cheating, particularly if they are viewed by the public as leaders, the ethical lapses can start to spread like the flu.

7. **"You're never going to have perfect behavior in a miasma of easy money." "When the financial scene starts reminding you of Sodom and Gomorrah, you should fear practical consequences even if you would like to participate in what is going on." "Investment banking at the height of this last folly was a disgrace to the surrounding civilization." "You do not want your first-grade school teacher to be fornicating on the floor or drinking alcohol in the closet and, similarly, you do not want your stock exchange to be setting the wrong moral example**." **"The SEC is**

pretty good at going after some little scumbag whom everybody regards as a scumbag. But once a person becomes respectable and has a high position in life, there's a great reticence to act. Madoff was such a person." "You should have personal standards that are way better than the criminal law requires. Why should the criminal law determine your behavior? It would be crazy. Who would behave that way in marriage, or in partnership, or anything else? Why should you do it in your general dealing? I think this mess, and, of course, it's a little dispiriting to find that many of the people who are the worst miscreants don't have much sense of shame and are trying to go back as much as they can to the old behavior. The truth of the matter is, once you've shouted into the phone, "I'll take x and y," and three days later, you have an extra 5 million, once that has happened, the people just become hopeless addicts, and they lose their bearings." There will always be some measure of ethical problems. But during times like the Internet bubble or the run up to the credit crisis the presence of easy money can make things worse.

8. **"With so much money riding on reported numbers, human nature is to manipulate them. And with so many doing it, you get Serpico effects, where everyone rationalizes that it's okay because everyone else is doing it. It is always thus."** These sentences describe an ancient problem. For example Augustine of Hippo once said: "Right is right even if no one is doing it; wrong is wrong even if everyone is doing it." The problems that can be created by social proof can go beyond ethics. Warren Buffett has said that: "The five most dangerous words in business are: 'Everybody else is doing it'." Munger puts it this way: "Once some banker has apparently (but not really) solved his cost-pressure problem by unwise lending, a considerable amount of imitative 'crowd folly,' relying on the 'social proof,' is the natural consequence."

9. **"If we mix only a moderate minority share of turds with the raisins each year, probably no one will recognize what will ultimately become a very large collection of turds."** A manager must be careful about the negative impact of a few bad apples on the quality of the other apples in the barrel. Hire slow, and in the case of a turd, fire fast.

10. **"I talked to one accountant, a very nice fellow who I would have been glad to have his family marry into mine. He said, 'What these other accounting firms have done is very unethical. The [tax avoidance scheme] works best if it's not found out [by the IRS], so we only give it to our best clients, not the rest, so it's unlikely to be discovered. So my firm is better than the others.' I'm not kidding. And he was a perfectly nice man. People just follow the crowd. Their mind just drifts off in a ghastly way."** What Charlie Munger is talking about in these sentences is the power of the psychology of human misjudgment. A lollapalooza of biases kicks in to cause

this accountant to fall into unethical behavior. There is self-interest bias and social proof and psychological denial and other heuristics at work in a case like this.

11. **"It's hard to judge the combination of character and intelligence and other things. It's not at all simple, which explains why we have so many divorces. Think about how much people know about the person they marry, yet so many break up." "Avoid dealing with people of questionable character." "One of the reasons the original Ponzi scheme was thrown into the case repertoire of every law school is that the outcome happens again and again. So we shouldn't be surprised that we have constant repetition of Ponzi schemes."** Judging the ethical nature of anyone is not simple. One clue is how they treat people generally. I has an assistant for many years who would let me know how job applicants treated the receptionist and others they met. People who are rude and condescending to anyone reveals much about who they are as people. Munger has said: **"I think track records are very important. If you start early trying to have a perfect one in some simple thing like honesty, you're well on your way to success in this world."**

12. **"The best single way to teach ethics is by example." "Remember that reputation and integrity are your most valuable assets – and can be lost in a heartbeat."** It is far easier to preach about ethical standards than to live up to them. And living up to ethical standards is the best possible teaching method anyway. Children especially know when someone is walking the talk. Both Munger and Buffett have said that it is wise to "take the high road, since it is less crowded."

A Dozen Things I've Learned from Charlie Munger (Distilled to less than 500 Words)

October 30, 2015

This is the last post in a 12 part "Dozen Things" series on Charlie Munger. Collectively the first 11 posts are nearly as large as a book.

The intent with this post is to distill Charlie Munger's approach to making decisions to less than 500 words. If you don't have the patience to read 500 words, I can't help you.

1. STAY IN YOUR CIRCE OF COMPETENCE: Know the edge of your own competency. It is not a competency if you don't know the edge of it.

2. MAINTAIN A MARGIN OF SAFETY: Buy assets at a bargain so your investing results can be financially attractive even if you make a mistake. Price is not always the same as value. Avoid big mistakes. Reputation and integrity are your most valuable assets. Reputation earned over a lifetime can be lost in seconds.

3. THINK INDEPENDENTLY AND WITH OPPORTUNITY COST IN MIND: Markets and crowds are not always wise. Allocate your time and other resources to your most attractive opportunities. The highest and best use of a resource is always measured by the next best use.

4. BE INTELLECTUALLY HUMBLE: Recognize that the world is genuinely complex and that what you know is a fraction of what you still don't know. Wait for what you expect rather try to forecast timing. Think about second order and above impacts of anything.

5. BE SMART BY NOT BEING STUPID: Tune out stupidity. The greatest and most important risk is permanent loss of capital, not just volatility in price. Only accept risk when you are properly compensated for assuming that risk. Activity for its own sake is not intelligent.

6. BE PATIENT, BUT AGGRESSIVE WHEN IT IS TIME: Great opportunities do not appear that often, but when they do appear they won't last long so you must be aggressive when the time is right. When the odds of success are very substantially in your favor, bet big.

7. BE PREPARED: Great investments are hard to find but by consistently working hard you might find a few of them. You only need to find a few great investments in a lifetime.

8. KEEP IT SIMPLE: Apply organized common sense when solving a problem or when doing an analysis of an opportunity. Think more and calculate less. Avoid false precision and unnecessary transaction costs. Try not to interrupt interest that is compounding. Focus on being a business analyst, not a macroeconomic forecaster. Pay attention to the business cycle, but don't try to predict it.

9. ACCEPT CHANGE: Avoid master plans since change is the only constant in life. Adapt. Look for evidence that would dis-confirm your own ideas. Understand arguments from all sides. Face your problems.

10. THINK BROADLY: Use multiple models from many disciplines in doing an analysis. Borrow the great ideas of the best thinkers in every discipline. The antidote to man with a hammer syndrome is a full set of tools.

11. AVOID HUBRIS: Try to avoid fooling yourself, which is hard since it is easy to do. Understand that more of success in life is luck than you imagine.

12. KEEP LEARNING: Be a learning machine. Never stop reading. Be curious. Surround yourself with smart people. Set aside time to read and think.

Warren Buffett: "There's no successor to Charlie Munger. You're not going to find anyone like him. He's got a real fan club, but for good reason. I'm a member, too."
http://www.rbcpa.com/Munger_FT_20090712.html

AMA on Charlie Munger: What did Charlie Munger Learn from Phil Fisher?

November 7, 2015

Phil Fisher had a significant influence on Charlie Munger's decision to invest in stocks based on a bargain relative to the *quality* of the business. On the basis of my research that included a few e-mail exchanges with Phil Fisher's son Ken, I am skeptical that Fisher's view was the source of Munger's emphasis on quality. However, Fisher's ideas probably made Munger more confident that this focus on the quality of the business was the right approach. In any event, it really does not matter at this point in time who between them had this idea or that or any other idea first. It is entirely possible and even likely that these ideas about the quality of a business in value investing evolved independently since the "cigar butt" stocks that Ben Graham talked about were disappearing.

Munger has said that adopting a multidisciplinary approach in making decisions comes naturally to him. Once quality is made part of the valuation of a business, the investing process is very different than when it is mostly about accounting and finance. This change to consider quality places an emphasis on what Munger calls "worldly wisdom" which is based on a latticework of mental models from many disciplines. I have discussed this latticework process in a previous blog post on mental models. If you want to know more about this approach some of the best writing and thinking on this topic has been done by Robert Hagstrom.

In Munger's view: **"All intelligent investing is value investing — acquiring more that you are paying for. You must value the business in order to value the stock."** If you are buying an asset for more than it is worth and instead hope to find a greater fool to buy that asset in the future, that is speculation and not investing. That Munger and Buffett may not buy securities like Facebook or Google is a question of "circle of competence" not whether the shares in these businesses can be a value stock. Munger and Buffett do not have a circle of competence that includes valuing pure technology businesses. That Munger and Buffett have a more limited circle of competence does not mean that a technology stock can't be evaluated using value investing as an analytical style. Analyzing technology stocks on a bottoms-up basis is not easy, but that does not mean that it is not possible. Robert Hagstrom wrote in his book *The Essential Buffett: Timeless Principles for the New Economy* that Buffett's reluctance to invest in technology businesses "is not a statement that technology stocks are unanalyzable."

When people say things like "value stocks have not done well lately" or "value stocks have outperformed lately" they are inevitably referring to the use of value as a statistical *factor* in a manner described by Eugene Fama. That style of *factor* investing has nothing to do with buying a small number of securities based on value investing as an analytical bottoms-up style based on the characteristics of that particular business. I would rather put a viper down my shirt than buy shares in a business just because it is way below its high water mark in a stock market. Just because the price of particular share of stock in a company like IBM or HP is currently beaten down from formerly high levels does not make it a value stock. GE or even Berkshire are not necessarily value stocks at any given time since that depends on the price paid for the security by any given investor.

The private company See's Candies was a value stock for Buffett and Munger when they purchased the business based on quality even though based on traditional Ben Graham math,

they were overpaying. I can assure you that if you bought See's Candy tomorrow from Buffett and Munger the price they would accept would mean it was no longer a value stock.

Apple can be a value stock in just the same way that See's Candies was a value stock. Or not. That depends on the outcome of a current bottoms up analysis of the Apple business and the price quoted. As an example of a technology stock being a value stock based on quality, one of Phil Fisher's long term holdings was Motorola before its big fall from grace. Fisher bought Motorola stock in 1955 and held those shares until his death. Texas Instruments was another Phil Fisher investment. Fisher bought Texas Instruments shares in 1956 before its IPO.

For fun, here's a set of statements in Twitter Tweetstorm format:

1/ Value stocks as defined by a firm like Fidelity: any stock that is not a growth stock https://www.fidelity.com/learning-center/investment-products/mutual-funds/growth-vs-value-investing

2/ Fidelity uses the term "value" to sell indexes using Fama-style statistical factor. That has nothing to do with Munger/Buffett-style value investing based on a bottoms up analysis of a given business.

3/ For example, business X has greater than average rates of growth in earnings and sales and greater than market price-to-earnings/price-to-sales ratios.

4/ Business X can be bought a 30% discount to intrinsic value based on quality. Using Buffett/Munger standards: business X can be a value stock.

5/ For example, business Y has less than average rates of growth in earnings and sales and less than market price-to-earnings/price-to-sales ratios.

6/ Business Y can't be bought a 30% discount to intrinsic value based on quality. Using Buffett/Munger standards: business X is a not value stock.

Munger/Buffett's performance should not be evaluated by the performance stocks using the value investing definition of Fidelity. Vast numbers of stocks that fit in Fidelity's definition of "value" (any stock that is not a growth stock) would never be bought by Buffett/Munger.

Yes, Buffett/Munger tend to buy most successfully in years like 2009. But that does not mean it is not possible to buy a quality company at a discount in 2015.

Apple or Google shares bought at the right time would have been just like See's Candies (a value stock). That Buffett or Munger would not buy a tech stock like Google or Apple is a circle of competence issue. Tech company A is not a value stock simply because they have less than average rates of growth in earnings and sales and less than market price-to-earnings/price-to-sales ratios. Many non-profit education stocks have less than average rates of growth in earnings and sales and less than market price-to-earnings/price-to-sales ratios as defined by Fidelity are not a value stock as defined by Buffett. It is possible to have greater than average rates of growth in earnings and sales and greater than market price-to-earnings/price-to-sales ratios and still be a bargain with a margin of safety. That making this determination in a pure play technology business goes in the Buffett/Munger "too hard" pile is an orthogonal point.

It is likely that Fisher had an influence on other aspects of Munger and Buffett's investing style including: a preferred holding period of "forever" and a less concentrated portfolio than many other investors. Clearly there was much mutual admiration and swapping of ideas and views. They are all strong characters and they probably found comfort in that fact that they shared the same views. Even if you asked them questions at this point in their life about who influenced who and who had what idea first there is always the likelihood of a *Rashomon effect* wherein the same people remember the same events in different ways.

Charlie Munger has made at least three direct public references to Phil Fisher that have been captured in print:

"Phil Fisher believed in concentrating in about 10 good investments and was happy with a limited number. That is very much in our playbook. And he believed in knowing a lot about the things he did invest in. And that's in our playbook, too. And the reason why it's in our playbook is that to some extent, we learned it from him."

"Phil Fisher believed in concentrated investing and knowing a lot about your companies — it's in our playbook, which is partly because we learned from him."

"I always like it when someone attractive to me agrees with me, so I have fond memories of Phil Fisher. The idea that it was hard to find good investments, so concentrate in a few, seems to me to be an obviously good idea. But 98% of the investment world doesn't think this way."

There are other references to Fisher that might be attributable to Munger relayed indirectly through people like Warren Buffett:

"I had been oriented toward cheap securities. Charlie said that was the wrong way to look at it. I had learned it from Ben Graham, a hero of mine. [Charlie] said that the way to make really big money over time is to invest in a good business and stick to it and then maybe add more good businesses to it. That was a big, big, big change for me. I didn't make it immediately and would lapse back. But it had a huge effect on my results. He was dead right."

Munger realized the Graham system had to change since the world had changed:

"The trouble with what I call the classic Ben Graham concept is that gradually the world wised up [after enough time had passed after the Great Depression] and those real obvious bargains disappeared…. Ben Graham followers responded by changing the calibration on their Geiger counters. In effect, they started defining a bargain in a different way. And it still worked pretty well. So the Ben Graham intellectual system was a very good one."

Munger believed his investing style had to evolve:

"Grahamites … realized that some company that was selling at 2 or 3 times book value could still be a hell of a bargain because of momentums implicit in its position, sometimes combined with an unusual managerial skill plainly present in some individual or other, or some system or other. And once we'd gotten over the hurdle of

recognizing that a thing could be a bargain based on quantitative measures that would have horrified Graham, we started thinking about better businesses."

For Munger, not considering the quality of the underlying business when buying an asset is far too limiting.

"The investment game always involves considering both quality and price, and the trick is to get more quality than you pay for in price. It's just that simple."

"We've really made the money out of high quality businesses. In some cases, we bought the whole business. And in some cases, we just bought a big block of stock. But when you analyze what happened, the big money's been made in the high quality businesses. And most of the other people who've made a lot of money have done so in high quality businesses."

"If you can buy the best companies, over time the pricing takes care of itself."

Munger believes the greater the quality of a company, the greater the strength of the wind at your back over the long term. Other Graham-style value investors wish Munger and Buffett the best of luck with looking at quality as a factor in their decision-making and are comfortable with their own "cigar butt" approach.

How do Munger and Buffett assess quality? This passage from the 1992 Berkshire Chairman's letter set out the key test:

"Leaving the question of price aside, the best business to own is one that, over an extended period, can employ large amounts of incremental capital at very high rates of return. The worst business to own is one that must, or will, do the opposite – that is, consistently employ ever-greater amounts of capital at very low rates of return."

Central to business quality is pricing power. If you need to hold a prayer meeting before raising prices you do not have pricing power. Munger:

"The ideal investment in many respects is one where anybody who owned it could make a lot more money with no risk simply by raising prices. You say that there can't be such opportunities lying around anymore than there'd be lots of $100 bills lying around unpicked up on the streets. How could there be? But if you read that book, you'll realize that in the early days of network television, it was a cinch. All they had to do was sit there and keep raising the prices."

Munger and Buffett are very focused on both the magnitude and persistence of the ability of a business to earn a return on capital. Return on invested capital (ROIC) is the ratio of after-tax-operating profit divided by the amount of capital invested in the business

Buffett was introduced to the ideas of Phil Fisher by Bill Ruane writes Alice Schroeder in footnote 29 in the book Snowball:

"Part of Brandt's job for Buffett was finding scuttlebutt, a term used by investment writer Phil Fisher, the apostle of growth, who had said many qualitative factors like the ability to maintain sales growth, good management, and research and development characterized a

good investment. These were the qualities that Munger was searching for when he spoke of the great businesses. Fisher's proof that these factors could be used to assess a stock's long-term potential was beginning to creep into Buffett's thinking, and would eventually influence his way of doing business." …" Bill Ruane introduced Buffett to Fisher's ideas. Philip A. Fisher, Common Stocks and Uncommon Profits (Harper and Row 1958)."

It appears that Buffett read Fisher's book before meeting Munger for the first time in 1959 or at least before the started talking about evolving Graham's ideas to consider quality. Buffett has said this about Fisher:

"The basic principles are still Ben Graham's [but] they were affected in a significant way by Charlie and Phil Fisher in terms of looking at better businesses. And I've learned more about how businesses operate over time."

"I am 85% Graham and 15% Fisher." (1990) [The ratio would different today but Buffett has never quantified it]

"I sought out Phil Fisher after reading his book. When I met him, I was as impressed by the man as his ideas."

"Phil Fisher was a great man. He died a month ago, well into his 90s. His first book was Common Stocks and Uncommon Profits in 1958. He wrote a second book, and they were great books. You could get what you wanted from the books. Like Ben Graham, it was in the books – the writing was so clear, you didn't need to meet them. I thoroughly enjoyed meeting him. I met Phil in 1962. I just went there. I'd go to New York and just drop in on people. They thought that because I was from Omaha, they'd only have to see me once and be rid of me. Phil was nice to me. I met Charlie in '59; he was preaching a similar doctrine, so I got it from both sides."

"I'm glad you brought up Phil Fisher. I recommend his books highly, especially the early ones. We don't break off the relationships we've formed with companies we own when we're offered a higher price. That actually helps us buy companies. A lot of companies have been built with love. The seller wants the company to be in a good home. We're just about the only ones who'll commit to care for it forever. I commit to the seller that the only one who would betray them would be me. There won't be a takeover of Berkshire. With stocks, we're not 100% with Phil Fisher. We love buying stocks that we can stick with forever. We used to think that newspapers, TV, were the most solid things around. But things change. In my first 20 years, I'd sell when I found something better. Now I have lots of money and no ideas. The opposite of the earlier days."

"I've mainly learned by reading myself. So I don't think I have any original ideas. Certainly, I talk about reading [Benjamin] Graham. I've read Phil Fisher. So I've gotten a lot of ideas myself from reading. You can learn a lot from other people. In fact I think if you learn basically from other people, you don't have to get too many new ideas on your own. You can just apply the best of what you see."

"Read Ben Graham and Phil Fisher, read annual reports, but don't do equations with Greek letter in them."

My blog post on Phil Fisher is here: http://25iq.com/2013/10/27/a-dozen-things-ive-learned-from-philip-fisher-and-walter-schloss-about-investing/

Notes:

Common Stocks and Uncommon Profits and Other Writings
http://www.amazon.com/Common-Stocks-Uncommon-Profits-Writings/dp/0471445509

Fisher's 15 Points:
http://news.morningstar.com/classroom2/course.asp?docId=145662&page=3&CN=

What we can learn from Phil Fisher. (interview) Warren E. Buffett; Thomas Jaffe.
http://www.rbcpa.com/What_we_can_learn.html

Obituary http://www.nytimes.com/2004/04/19/business/philip-a-fisher-96-is-dead-wrote-key-investment-book.html

Charlie Munger AMA: How does Charlie Munger recommend dealing with adversity?

November 14, 2015

Charlie Munger has recommended many books, one of which is Viktor E. Frankl's *Man's Search for Meaning*. In that book Frankl writes: "When we are no longer able to change a situation, we are challenged to change ourselves…. Everything can be taken from a man but one thing: the last of the human freedoms—to choose one's attitude in any given set of circumstances, to choose one's own way."

Charlie Munger believes that adversity can cause some people to transform themselves into a victim: "**Whenever you think that some situation or some person is ruining your life, it's actually you who are ruining your life. It's such a simple idea. Feeling like a victim is a perfectly disastrous way to make go through life. If you just take the attitude that however bad it is in anyway, it's always your fault and you just fix it as best you can – the so-called "iron prescription" – I think that really works."** In another context he said: **"Generally speaking, envy, resentment, revenge and self-pity are disastrous modes of thought, self-pity gets pretty close to paranoia, and paranoia is one of the very hardest things to reverse, you do not want to drift into self-pity."**

Joshua Kennon writes about Munger:

"In 1953, Charlie was 29 years old when he and his wife divorced. He had been married since he was 21. Charlie lost everything in the divorce, his wife keeping the family home in South Pasadena. Munger moved into "dreadful" conditions at the University Club and drove a terrible yellow Pontiac… Shortly after the divorce, Charlie learned that his son, Teddy, had

leukemia. In those days, there was no health insurance, you just paid everything out of pocket and the death rate was near 100% since there was nothing doctors could do. Rick Guerin, Charlie's friend, said Munger would go into the hospital, hold his young son, and then walk the streets of Pasadena crying. One year after the diagnosis, in 1955, Teddy Munger died. Charlie was 31 years old, divorced, broke, and burying his 9 year old son. Later in life, he faced a horrific operation that left him blind in one eye …" http://www.joshuakennon.com/if-charlie-munger-didnt-quit-when-he-was-divorced-broke-and-burying-his-9-year-old-son-you-have-no-excuse/

"Recently, someone told me a story about Charlie Munger worth mentioning here. Charlie was developing a condition in his remaining eye that was causing it to fill up with blood. He would eventually go blind in his one remaining eye and lose his eyesight completely. Blindness. When you are an obsessive reader like Charlie, losing your ability to see would seem to be a prison sentence. However, Charlie was undeterred. He told someone close to him, "It's time for me to learn braille." He has been taking braille lessons since. Most recently the worrisome eye condition has receded but the story is a good example of Charlie's philosophy on life. No self-pity. No emotional wallowing. Staying rational. It is hard enough to learn new things, but … Charlie remains an inspiration of a life well lived." http://joekusnan.tumblr.com/post/7113195673/charlie-mungers-last-meeting

This passage is from Brian Keng:

"Charlie Munger's two things NEVER to do: 1) NEVER feel sorry for yourself. 2) NEVER have envy. The first point can be restated as never have a victim mentality. This is important to NEVER do because once you're a victim, you no longer have control and that's scary and depressing. More importantly, incredibly counter-productive. I've read that there was a holocaust prisoner who was about to be sent to the gas chamber but was in high spirits. When asked how he could be so joyful, he replied that his mood was the one thing he had control of. If he isn't a victim, then NO ONE is a victim." http://www.briankeng.com/2010/10/two-things-to-never-do/

More from Munger on adversity:

"Assume life will be really tough, and then ask if you can handle it. If the answer is yes, you've won."

"Life will have terrible blows in it, horrible blows, unfair blows. And some people recover and others don't. And there I think the attitude of Epictetus is the best. He said that every missed chance in life was an opportunity to behave well, every missed chance in life was an opportunity to learn something, and that your duty was not to be submerged in self-pity, but to utilize the terrible blow in constructive fashion. That is a very good idea. You may remember the epitaph which Epictetus left for himself: "Here lies Epictetus, a slave maimed in body, the ultimate in poverty, and the favored of the gods."

"I have a friend who carried a big stack of linen cards about this thick, and when somebody would make a comment that reflected self-pity, he would take out one of the cards, take the top one off the stack and hand it to the person, and the card said, 'your story has touched my heart, never have I heard of anyone with as many misfortunes as you.' Well you can say that's waggery, but I suggest that every time you find you're

drifting into self-pity, I don't care what the cause, your child could be dying of cancer, self-pity is not going to improve the situation, just give yourself one of those cards. It's a ridiculous way to behave, and when you avoid it you get a great advantage over everybody else, almost everybody else, because self-pity is a standard condition and yet you can train yourself out of it."

"Like Nietzsche once said: 'The man had a lame leg and he's proud of it.' If you have a defect you try to increase, you're on your way to the shallows. Envy, huge self-pity, extreme ideology, intense loyalty to a particular identity – you've just taken your brain and started to pound on it with a hammer. You'll find that Warren is very objective."

"I can't imagine any experience in life worse than losing a child inch by inch."

Here is one more quote attributed to Munger for which I can't find the original source. It sounds like him, but I am not sure he said it:

"I think I developed courage when I learned I could deal with hardship. You need to get your feet wet and get some failure under your belt."

Notes:

Man's Search for Meaning: http://www.amazon.com/s/?ie=UTF8&keywords=man%27s+search+for+meaning&tag=mh0b-20&index=aps&hvadid=1695600881&hvqmt=e&hvbmt=be&hvdev=c&ref=pd_sl_5kiyzxr9lm_e

Why and how do Munger and Buffett "discount the future cash flows" at the 30-year U.S. Treasury Rate?

November 21, 2015

Buffett and Munger use several methods which are at odds with traditional financial theory. Here is one of those nontraditional approaches:

Buffett: "We don't discount the future cash flows at 9% or 10%; we use the U.S. treasury rate. We try to deal with things about which we are quite certain. You can't compensate for risk by using a high discount rate."

There is no law of nature requiring that a capital allocation process account for risk, uncertainty and ignorance by adjusting the interest rate. Buffett and Munger instead use the concept of margin of safety. Having a margin of safety and also adjusting the interest rate would be redundant in their view. They:

1. Assemble options to invest that involve businesses which have a future that is "quite certain" and is within their circle of competence

2. Use the 30 year rate to do the DCF in their head on all these opportunities
3. Apply a margin of safety
4. Compare every option available to then anywhere on Earth and chose the best one.

This makes some people nuts since they were trained to adjust the interest rate to account for risk. I'm not taking a personal position here and am instead trying to better explain the Buffett/Munger approach.

The two methods are different ways of accomplishing the same thing, so why do Buffett and Munger use their own approach? I believe they prefer their method since it frames the ultimate question in a way that they prefer. They hate the idea of someone saying "invest in X since the return is above your hurdle rate" since that decisions can be made only by looking at every other alternative in the world. By using the same 30 year US Treasury rate for every DCF he has created a "system to compare things." The things Buffett compares side-by-side must be "quite certain" and available to buy at a significant discount to intrinsic value reflecting a margin of safety.

My friend John Alberg a co-founder of http://www.euclidean.com/ puts it this way:

"Another way of saying it is that all investments share the same discount rate. You can't apply a different discount rate to company A than company B because $1 in the future is worth the same amount of money regardless of whether it comes from company A or B. So instead an investor should focus on the cash that a business can generate within a margin of safety and compare them by that measure. With respect to DCF, the reason that it can be "done in the head" is because it simplifies to a simple ratio when you use margin of safety. That is, if most future cashflows from company A are going to be greater than some number c_A and the discount rates are going to be greater than some other value r then the quantity c_A / r is less than the result you would get from a DCF. Put another way, the quantity c_A / r is a lower bound on the DCF or it is an estimate of intrinsic value with a margin of safety. But notice that if you are comparing the intrinsic value of two companies with cashflows of at least c_A and c_B then the discount rate r is constant between the two and therefore not the important part of the equation."

Buffett and Munger have a flow of deals that cross their desks. We don't see them but Byron Trott recently said that many investors would cry over losing what they turn down. That flow established their opportunity cost. 30-year US treasury rates can be 3%, but if they have a flow of deals that return 10% that is "sort of" their hurdle rate.

Munger: "We're guessing at our future opportunity cost. Warren is guessing that he'll have the opportunity to put capital out at high rates of return, so he's not willing to put it out at less than 10% now. But if we knew interest rates would stay at 1%, we'd change. Our hurdles reflect our estimate of future opportunity costs."

Munger: "There is this company in an emerging market that was presented to Warren. His response was, 'I don't feel more comfortable buying that than I do of adding to Wells Fargo.' He was using that as his opportunity cost. No one can tell me why I shouldn't buy more Wells Fargo. Warren is scanning the world trying to get his opportunity cost as high as he can so that his individual decisions are better."

Under the Buffett/Munger approach the risk free rate used in the discounted cash flow (DCF) and the "next best opportunity" are not connected. Sometimes you will hear people incorrectly say Buffett is hinting at adjusting the discount rate or inconsistent in his approach. If you read him carefully his "sort of" hurdle rate is the next best investment (which can have a number attached to it) based on the deals crossing his desk. In looking at next best he's looking broadly thinking about what may cross his desk in a few years. Right now his next best opportunity is probably at a bit less than the customary 10%. What he is adjusting is not the discount rate but the next best opportunity rate.

Buffett: "The trouble isn't that we don't have one [a hurdle rate] – we sort of do – but it interferes with logical comparison. If I know I have something that yields 8% for sure, and something else came along at 7%, I'd reject it instantly. Everything is a function of opportunity cost."

Buffett: "We use the same discount rate across all securities. We may be more conservative in estimating cash in some situations. Just because interest rates are at 1.5% doesn't mean we like an investment that yields 2-3%. We have minimum thresholds in our mind that are a whole lot higher than government rates. When we're looking at a business, we're looking at holding it forever, so we don't assume rates will always be this low."

Buffett: "In order to calculate intrinsic value, you take those cash flows that you expect to be generated and you discount them back to their present value – in our case, at the long-term Treasury rate. And that discount rate doesn't pay you as high a rate as it needs to. But you can use the resulting present value figure that you get by discounting your cash flows back at the long-term Treasury rate as a common yardstick just to have a standard of measurement across all businesses."

Buffett: "We don't formally have a discount rate. We want a significantly higher return than from a government bond–that's the yardstick, but not if government bond rates are 2-3%. It's a little of wanting enough that we're comfortable. It sounds fuzzy because it is. Charlie and I have never talked in terms of hurdle rates.

Buffett: "We just try to buy things that we'll earn more from than a government bond – the question is, how much higher? If government bonds are at 2%, we're not going to buy a business that will return 4%. I don't call Charlie every day and ask him, "What's our hurdle rate?" We've never used the term.

Munger: "The concept of hurdle rates makes nothing but sense, but it doesn't work. Hurdle rates don't work as well as a system of comparing things. Finance departments ignore it, because it's not easy to teach. Just because you can measure something doesn't mean it's the determining variable in an uncertain world. The concept of opportunity cost is overlooked. In the real world, your opportunity costs are what you want to base your decisions on."

Buffett: "If [corporate] boards would've burned all their charts of IRR [internal rate of return], they would've been better off. [They create] nonsense numbers to give their audience what they want to hear and get CEOs what they want."

Munger: "I have a young friend who sells private partnerships promising 20% returns. When I asked how he arrived at that number, he said, "I chose that number so they'd give me the money."

Buffett: “There’s nobody in the world who can earn 20% with big money. I’m amazed at the gullibility of big investors.”

Munger: “We’re guessing at our future opportunity cost. Warren is guessing that he’ll have the opportunity to put capital out at high rates of return, so he’s not willing to put it out at less than 10% now. But if we knew interest rates would stay at 1%, we’d change. Our hurdles reflect our estimate of future opportunity costs.”

Buffett: 10% is the figure we quit on — we don’t want to buy equities when the real return we expect is less than 10%, whether interest rates are 6% or 1%. It’s arbitrary. 10% is not that great after tax.”

Munger: “We’re guessing at our future opportunity cost. Warren is guessing that he’ll have the opportunity to put capital out at high rates of return, so he’s not willing to put it out at less than 10% now. But if we knew interest rates would stay at 1%, we’d change. Our hurdles reflect our estimate of future opportunity costs.”
We could take the $16 billion we have in cash earning 1.5% and invest it in 20-year bonds earning 5% and increase our current earnings a lot, but we’re betting that we can find a good place to invest this cash and don’t want to take the risk of principal loss of long-term bonds [if interest rates rise, the value of 20-year bonds will decline].”

Buffett: “We don’t formally have discount rates. Every time we start talking about this, Charlie reminds me that I’ve never prepared a spreadsheet, but I do in my mind. We just try to buy things that we’ll earn more from than a government bond – the question is, how much higher?”

Munger: “Warren often talks about these discounted cash flows, but I’ve never seen him do one. If it isn’t perfectly obvious that it’s going to work out well if you do the calculation, then he tends to go on to the next idea.”

p.s.,

Munger: You say there is some vaguely established view in economics as to what is an optimal dividend policy or an optimal investment?
Professor William Bratton of the Rutgers-Newark School of Law: I think we all know what an optimal investment is.
Munger: No, I do not. At least not as these people use the term.
Bratton: I don’t know it when I see it but in theory, if I knew it when I saw it this conference would be about me and not about Warren Buffett.
Munger: What is the break point where a business becomes sub-optimal or when an investment becomes sub-optimal?
Bratton: When the return on the investment is lower than the cost of capital.
Munger: And what is the cost of capital?
Bratton: Well, that’s a nice one and I would…
Munger: Well, it’s only fair, if you’re going to use the cost of capital, to say what it is.
Bratton: I would be interested in knowing, we’re talking theoretically.
Munger: No, I want to know what the cost of capital is in the model.
Bratton: In the model? It will just be stated.
Munger: Where? Out of the forehead of Job or something?
Bratton: That is correct.

Munger: Well, some of us don't find this too satisfactory.
Bratton: I said, you'd be a fool to use it as a template for real world investment decision making. We're only trying to use a particular perspective on human behavior to try to explain things.
Munger: But if you explain things in terms of unexplainable sub-concepts, what kind of an explanation is that?
Bratton: It's a social science explanation. You take for what it's worth.
Munger: Do you consider it understandable for some people to regard this as gibberish?
Bratton: Perfectly understandable, although I do my best to teach it.
Munger: Why? Why do you do this?
Bratton: It's in my job description.
Munger: Because other people are teaching it, is what you're telling me.

Will there ever be another Charlie Munger?

November 27, 2015

The short answer is: no. Every human is unique, but Charlie Munger is particularly unique. As just one example, he is rational in ways few people can emulate. He is also self-effacing and yet has a black belt in chutzpah. He is capable of being patient and yet pounce aggressively at the right time. Knowing what you do not know is a rare quality in a human. Rising to Munger's level of mastery on approaches to life like circle of competence will not happen often, and even if it does happen that person will not have Munger's other attributes. While there is no successful formula for investing, there are successful approaches that can often improve the outcome of your decisions. The points I just made remind me of this exchange between Munger and Buffett:

Munger: A foreign correspondent, after talking to me for a while, once said: "You don't seem smart enough to be so good at what you're doing. Do you have an explanation?" [Laughter]

Buffett: Was he referring to me or you? [Laughter]

Munger: I said, "We know the edge of our competency better than most." That's a very worthwhile thing. It's not a competency if you don't know the edge of it.

We nevertheless can learn from Munger's methods and the way he thinks. When I first started learning about his methods he helped me make a better decision about selling stocks during the Internet bubble that completely altered my life financially. Did I make a perfect decision? No. Would he have made a better decision? Yes. But he helped me make a far better decision that I would have made on my own. Even if people or reading books just help you make better marginally better decisions, you are better off. Years later when I was driving to the hospital and the Munger approach to expected value helped me make a decision to continue to the emergency room even though the pain was gone, I did make a perfect decision but it was (1) a binary decision and (2) I had been studying Munger's ideas for many years. Munger says: **"People chronically mis-appraise the limits of their own**

knowledge. That's one of the most basic parts of human nature. Knowing the edge of your circle of competence is one of the most difficult things for a human being to do. Knowing what you don't know is much more useful in life and business than being brilliant." If you don't know the ways in which you do not have the same qualities as Munger, you have created significant risk for yourself. Munger says: **"You are a disaster if you don't know the edge of your competency."**

When I was writing my book on Munger Wall Street Journal columnist Jason Zweig described one of the essential challenges in investing in this way in an email to me:

"If it was easy to be like him and think like him, then there wouldn't be just one Charlie Munger. Turning oneself into a learning machine with multiple mental models…is very hard work, and the few people who succeed at doing it may still fail to benefit from it if they don't have the right temperament. This is why both Buffett and Munger keep going back to Graham: Being a true contrarian takes supreme courage and implacable calm. Buffett talks constantly about the "emotional framework" Graham provides; Charlie often says that most investors, no matter how smart, won't succeed because they have "the wrong temperament." I like to use a word from ancient Greek philosophy to describe this: ataraxia, or perfect imperturbability. You see it when Socrates goes on trial, when Nathan Hale is hanged, when Buffett invests in Goldman and when Charlie buys Wells Fargo the day before the bottom tick in March 2009."

There is nothing I enjoy more than thinking. And thinking about thinking is probably my favorite type of thinking. And my favorite people to read and listen to are people who think about thinking like Charlie Munger, Warren Buffet, Daniel Kahneman, Richard Thaler, Michael Mauboussin…

The book I wrote about Charlie Munger is about the way he thinks. Janet Lowe wrote the biography of Munger and Poor Charlie's Almanack collected most all the speeches and related material in a scrapbook format.

At a recent event about the BRK 50th Anniversary Seth Klarman said:

"WB is not about giving you a formula. "Business is hard. Everything is overlaid with judgment." WB has been fortuitous to invest at a time when you could get quality inexpensively. He has built on certain advantages. No one else gets the calls that he gets. Some people are overly focused on him as opposed to understanding how he thinks."

One of my favorite memories in life is of getting into my very first job at 6AM in the early 1980s and sitting with Bill Gates Sr. in the coffee lounge reading the Wall Street Journal. He was my first professional mentor and I think the world of him (he just turned 90). That he and Munger would become friends was natural. It was fun to trade sections of that newspaper with him as we finished them. We would talk about important business and political issues of the day as we read. It was a fun time to talk and more importantly just think. This carried over to the many times over the years we met for breakfast or lunch. Writing about this reminds me of a great story about his son, known as Trey to many people:

"As a young boy, Trey probably read more than many other kids and he often surprised us with his ideas about how he thought the world worked. Or imagined it could work. Like other kids his age, he was interested in science fiction. He was curious and thoughtful about things

adults had learned to take for granted or were too busy to think about. His mother, Mary, and I often joked about the fact that Trey sometimes moved slowly and was often late. It seemed like every time we were getting ready to go somewhere everybody else in the family would be out in the car — or at least have our coats on. And then someone would ask, 'Where's Trey?' "Someone else would reply, 'In his room.' "Trey's room was in our daylight basement, a partially above ground area with a door and windows looking out on the yard. So his mother would call down to him, 'Trey, what are you doing down there?' "Once Trey shot back, 'I'm thinking, mother. Don't you ever think?'" Both parents were far too active to have time for much reflection, and so "we answered in unison, 'No!'"

At the BRK 50th Anniversary event Byron Trott said about Buffett:

"He thinks very long term and Berkshire will still be intact a century from now. "Warren, you can't control things from below the ground." "Maybe not, but I can try." The term "investor" is not quite expansive enough to describe Warren. He's also a great acquirer, manager and owner of businesses. Matt Rose of Burlington Northern told me that Warren knows more about the railroad now than I do. And he can interconnect it to everything else. He makes the complex seem simple. When I talk to Warren, I feel like I'm 2 steps behind him."

Who does that sound like? Munger of course. Warren Buffett says Munger has "the best 30 second mind in the world. He goes from A to Z in one move."

The best investors and entrepreneurs are system level thinkers. They have a knack for understanding how everything fits together even though the world is composed of multiple systems feeding back on each other. That people like Gates and Buffett or Munger and Buffett bonded immediately should surprise no one, since they share a love of thinking and learning.

Returning to the original question, the best general answer Munger has given to this question is as follows:

"How do some people get wiser than other people? Partly it is inborn temperament. Some people do not have a good temperament for investing. They're too fretful; they worry too much. But if you've got a good temperament, which basically means being very patient, yet combine that with a vast aggression when you know enough to do something, then you just gradually learn the game, partly by doing, partly by studying. Obviously, the more hard lessons you can learn vicariously, instead of from your own terrible experiences, the better off you will be."

"Neither Warren nor I is smart enough to make the decisions with no time to think. We make actual decisions very rapidly, but that's because we've spent so much time preparing ourselves by quietly sitting and reading and thinking."

One can easily compile another twelve ideas that capture Munger's views on better thinking:

1. "Tune out the standard stupidities. We've left a lot of more talented and diligent people in the dust, just by working hard at eliminating standard error."

2. "Basic mathematics, basic horse sense, basic fear, basic diagnosis of human nature making possible predictions regarding human behavior…. If you just do that with a certain amount of discipline, I think it's likely to work out quite well."

3. "Organized common (or uncommon) sense — very basic knowledge — is an enormously powerful tool."

4. "People calculate too much and think too little."

5. "Be able to tune out folly, as opposed to recognizing wisdom. If you bat away many things, you don't clutter yourself."

6. "I try to get rid of people who always confidently answer questions about which they don't have any real knowledge."

7. "Avoid being a perfect idiot." "The trouble with making all these pronouncements is people gradually begin to think they know something, it's much better to think you are ignorant."

8. "Accountants as a whole have been trained with too much math and not enough horse sense."

9. "In the corporate world, if you have analysts, due diligence, and no horse sense you've just described hell."

10. "I think it's dishonorable to stay stupider than you have to be."

11. "You have a limited amount of time and talent and you have to allocate it smartly."

12. "In business we often find that the winning system goes almost ridiculously far in maximizing and or minimizing one or a few variables — like the discount warehouses of Costco."

Notes:

http://www.marketfolly.com/2015/11/notes-from-berkshire-hathaway-50th.html

http://www.amazon.com/Showing-Up-Life-Thoughts-Lifetime/dp/0385527020

What does Charlie Munger mean when he says that something is a lollapalooza?

December 5, 2015

A textbook definition of lollapalooza is: "A person or thing that is particularly impressive or attractive." When Charlie Munger uses the word "lollapalooza" he often attaches the word "effects" (as in "*lollapalooza effects*") which means that multiple factors are acting together in ways that are feeding back on each other. The *lollapalooza effects* phenomenon is typified

by feedback creating a complex adaptive system, that can be either positive or negative in terms of output or outcome.

Munger is clearly fascinated by the *lollapalooza effects* phenomenon:

"I've been searching for lollapalooza results all my life, so I'm very interested in models that explain their occurrence. Often results are not linear. You get a little bit more mass, and you get a lollapalooza result. Adding success factors so that a bigger combination drives success, often in non-linear fashion, as one is reminded by the concept of breakpoint and the concept of critical mass in physics."

"Really big effects, lollapalooza effects, will often come only from large combinations of factors. For instance, tuberculosis was tamed, at least for a long time, only by routine, combined use in each case of three different drugs. Other lollapalooza effects, like the flight of an airplane, follow a similar pattern."

What intrigues Munger so much is the often unexpected and spectacular output of a complex adaptive system, which Michael Mauboussin describes as follows:

"A complex adaptive system has three characteristics. The first is that the system consists of a number of heterogeneous agents, and each of those agents makes decisions about how to behave. The most important dimension here is that those decisions will evolve over time. The second characteristic is that the agents interact with one another. That interaction leads to the third—something that scientists call emergence: In a very real way, the whole becomes greater than the sum of the parts. The key issue is that you can't really understand the whole system by simply looking at its individual parts. "You can't make predictions in any but the broadest and vaguest terms." Complex adaptive systems effectively obscure cause and effect" "Complexity doesn't lend itself to tidy mathematics in the way that some traditional, linear financial models do." "Increasingly, professionals are forced to confront decisions related to complex systems, which are by their very nature nonlinear… "

To better understand complex adaptive systems, Munger has recommended that people read a book entitled *Deep Simplicity: Bringing Order to Chaos and Complexity* by John Gribbon.

Some people unfortunately confuse what is genuinely "complex" with what is "complicated." Wendell Jones explains the difference:

"Complicated linear and determined systems produce controllable and predictable outcomes. Complex adaptive systems can produce novel, creative, and emergent outcomes. In complicated systems, the elements and their connections are equally important. In a 747 the yolk and the engine and the flaps and the connections between them are all critical for the proper operation of the airplane. Secondly, simple algorithms (rules) produce simple and predictable responses. Every time the pilot pulls the yoke back, the airplane climbs. The response of the component and of the whole system is fully determined. In complex systems, the connections are critical, but individual agents are not. So the connections between the birds are critical, but if one bird gets injured and falls behind, it does not affect the rest of the flock. Simple rules result in complex and adaptive responses — they are not predictable. Each of the agents has a choice of responses within the confines of the rules. So their individual behavior is not determined exactly, as it is in complicated determined systems…. the marching band is a human system that behaves very much like a linear determined

system… with the jazz ensemble there is no hierarchical direction and no mechanical loyalty to a set of prescribed actions. Instead, members agree to subscribe to only general rules and are free to improvise widely. Similar to the flock of birds, the general characteristics of the music can be anticipated, but each rendering will be different."

In no small part because he believes in complex adaptive systems, Munger has concluded that biology presents a better metaphor for business and an economy than a machine or physics: **"I find it quite useful to think of a free market economy – or partly free market economy – as sort of the equivalent of an ecosystem…." "Common stock investors can make money by predicting the outcomes of practice evolution. You can't derive this by fundamental analysis — you must think biologically."** For example, changing interest rates does not alter the economy like pulling on the control yolk of an airplane. The economy is genuinely complex and not just complicated. There are second and higher order effects of everything in an economy. Everything impacts everything. An economy is more a living creature than it is a machine.

The global economy is, of course, getting more interconnected at a exponential rate which increases the impact of feedback, which means we are increasingly living in what Nassim Taleb calls Extremistan. Anything social has particularly strong Extremistan effects. The proliferation of connected sensors powered by machine learning based artificial intelligence will be an increasing accelerator of Extremistan. There will be more Black Swans and seemingly random events. The need for a margin of safety to protect against negative Black Swans is now much greater. The ability to profit from positive Black Swans and the advisability of riding any profitable wave has never been greater.

All businesses, economies, families, ecosystems, immune systems and most importantly the brain are genuinely complex. A change in one part of a complex adaptive system can, through the many connections that exist, influence all other related parts, but not in any uniform or predictable way. Complex adaptive systems are very dependent on initial conditions. Changes in the inputs or rules are not correlated in a linear manner with outcomes.

Munger's views on complexity help explain his strong desire to "be smart by not being stupid" instead of trying to make short term predictions about the future. Anyone who says they understand complex adaptive systems and is not humble about their ability to make short-term predictions about the behavior of large groups of humans does not really understand complexity. Success in investing is found when you avoid situations where the odds are not substantially in your favor and complexity means that not only is the probability of future states often not known but sometimes even the potential future states themselves are not known. Munger says that people should **"bet big when they have the odds. And the rest of the time, they don't. It's just that simple."** If you do not know the odds, by definition you cannot bet the odds. You can bet based on optionality but that is venture investing, which Munger does not consider to be within his circle of competence.

So what should an investor do?

"The game of investing is one of making better predictions about the future than other people. How are you going to do that? One way is to limit your tries to areas of competence. If you try to predict the future of everything, you attempt too much."

"We have the same problem as everyone else: It's very hard to predict the future."

I get this question from some people: "Well Buffett must predict something in order to invest." The answer is composed of two parts plus some differences in taxonomy. First, circle of competence. Munger says:

"You have to figure out where you've got an edge. And you've got to play within your own circle of competence. If you want to be the best tennis player in the world, you may start out trying and soon find out that it's hopeless—that other people blow right by you. However, if you want to become the best plumbing contractor in Bemidji, that is probably doable by two-thirds of you."

Second, what is it that you predict? Munger again:

"Berkshire is in the business of making easy predictions. If a deal looks too hard, the partners simply shelve it." "We're the tortoise that has outrun the hare because it chose the easy predictions."

What's an easy prediction? For example, that over long periods of time the economy will get better and the economy will grow or certain phenomenon will return to the mean is an easy prediction. But is that a prediction or an assumption?

Munger uses the word prediction in ways that Buffett may not agree with. Buffett seems to argue that some of what Munger might call predictions are not predictions at all but rather assumptions. Is a prediction that never changes better described as an assumption? Buffett and Graham certainly make assumptions. Buffett says: "I have no idea what the stock market's going to do tomorrow or next week or next month or next year." Buffett's major influence, of course, is Ben Graham: "The last time I made any market predictions was in the year 1914, when my firm judged me qualified to write their daily market letter based on the fact that I had one month's experience. Since then I have given up making predictions." In *The Intelligent Investor*, Benjamin Graham wrote: "The function of the margin of safety is, in essence, that of rendering unnecessary an accurate estimate of the future."

Predictions that require being accurate about the behavior of humans in the short term are particularly shunned. James Montier explains: "We need to stop pretending that we can divine the future, and instead concentrate on understanding the present, and preparing for the unknown. There is a simple, although not easy alternative [to forecasting]… Buy when an asset is cheap, and sell when an asset gets expensive…. Valuation is the primary determinant of long-term returns, and the closest thing we have to a law of gravity in finance." A law of gravity sounds like an assumption of value investing and not a prediction. As long as the investors agree on what to do, the definitions they use can vary.

In short, whether something is an assumption or a prediction is taxonomy and subject to arguments and differences. Even Buffett and Munger seem to use slightly different definitions. What they do agree on, and what Berkshire avoids like the plague, is what they call forecasts. Munger makes that point here:

"Gigantic macroeconomic predictions are something I've never made any money on, and neither has Warren. "

“People have always had this craving to have someone tell them the future. Long ago, kings would hire people to read sheep guts. There’s always been a market for people who pretend to know the future. Listening to today’s forecasters is just as crazy as when the king hired the guy to look at the sheep guts. It happens over and over and over.”

That the business environment is a nest of complex adaptive systems explains why business will always be an art rather than a science. Adding Greek letters to academic formulas does not transform business into a science. Running a business is a bit like flying an older mostly analog airplane in turbulence. Ben Horowitz writes in his book *The Hard Thing About Hard Things*:

“Management turns out to be really dynamic and situational and personal and emotional. So it’s pretty hard to write a formula or instruction book on it.” “There isn’t one lesson that solves everything.” “Any advice you give is based on your [experience]; it’s not general advice. People try to generalize it — and I try to generalize it, too — but without knowing where it comes from it’s not nearly as useful.”“Nobody is born knowing how to be a CEO. It’s a learned skill and unfortunately you learn it on the job.” “The only thing that prepares you to run a company, is running a company.”

Munger is often suspicious of people who claim that something is a solution to a problem since

“A special version of this ‘man with a hammer syndrome’ is terrible, not only in economics but practically everywhere else, including business. It’s really terrible in business. You’ve got a complex system and it spews out a lot of wonderful numbers that enable you to measure some factors. But there are other factors that are terribly important, [yet] there’s no precise numbering you can put to these factors. You know they’re important, but you don’t have the numbers. Well practically everybody (1) overweighs the stuff that can be numbered, because it yields to the statistical techniques they’re taught in academia, and (2) doesn’t mix in the hard-to-measure stuff that may be more important.”

A classic example of a lollapalooza for Munger would be would be:

“An investment decision in the common stock of a company frequently involves a whole lot of factors interacting … the one thing that causes the most trouble is when you combine a bunch of these together, you get this lollapalooza effect.”

Because many things are feeding back on each other in a complex system precise predictions are nearly impossible to make accurately, especially in the short term. Munger says:

“consequences have consequences, and the consequences of the consequences have consequences, and so on. It gets very complicated. When I was a meteorologist I found this stuff very irritating. And economics makes meteorology look like a tea party.” “If you try and talk like this to an economics professor, and I’ve done this three times, they shrink in horror and offense because they don’t like this kind of talk.It really gums up this nice discipline of theirs, which is so much simpler when you ignore second and third order consequences.”

An example of a lollapalooza effect with a negative outcome would be the 2007 financial crisis, which Munger has said "**was a lollapalooza event – a confluence of causes that is how complex systems work."** What were the factors interacting in that case according to Munger? All of the following were involved says Munger:

"1) Abusive practices in consumer credit. People who couldn't handle credit were deliberately seduced. People who did it justified it by saying competitors would do it if they didn't. That is not proper. Sometimes you should let others proceed and not copy them. It is abusive folly. I talked to a plastic surgeon last night who used to let people write checks against a line of credit on their house. Now his clients are finding those credit lines harder to get. A multiple credit card borrower is dangerous. He can look great right up until he goes bankrupt. Banks have abused their prerogatives and have stuck it in too hard. I have a fundamental theory that in some way the world is just, and if you do something immoral or stupid there will likely be a whirlwind someday where you get clobbered.

2) Mortgage brokers – often these are scum of the earth rejoicing in "rooking" the borrowers with flim-flam tricks, which often can happen with minorities in poor neighborhoods. On first and second mortgages – they built a huge balloon bound to create horrible mess, and the mess finally happened.

3) Wall Street went crazy. Any way of earning money short of armed robbery was ok. The last mortgage broker Merrill Lynch bought were a bunch of sleazy crooks even on the face of it. When people behave like that you get a tremendous mess.

4) Regulatory apparatus that allowed all this was also foolish. The regulators and legislators were in two categories. Legislators wanted poor people to have houses, but this is a bad idea since you want credit practices to be sound just like you want your engineering practices to be sound. People making money just rationalized what they did. Accounting systems spit it out as okay, even though in substance it wasn't right. It was ghastly and there was huge envy in the thing. If Joe made $3m, I'm better than Joe and so I deserve $3.5m.

5) Credit system was the repo system, one of best ways to grant unlimited credit ever invented. Then banks offered access to the repo system to hedge funds. It went to enormous excess. Some of it was due to democratic legislators hoping to help the poor, and some also was due to Republicans who overdosed on Ayn Rand. For Republicans, it was like legalizing armed robbery for anyone under 25. It was like letting the financial class prey on the poor. If it was unreasonable for the buyer, you got 9% for selling it. Ethos was of the "buyer beware". The **vendors in America should care about selling good stuff to the customer.**

6) Then the other issue was in terms of dizzy leverage on stock indices and CDS – where anyone could bet someone would go broke, even if they had no economic interest in the outcome. Then you could help that person along to ruin. We prohibited this in life insurance. I can't buy insurance if I don't have economic interest in the person (spouse, etc). These wise rules were thrown out in CDS markets. Then the people who did the accounting used mark to model. Both sides would allow profits. Anyone with engineering cast of mind will feel like throwing up into the aisle. Well go ahead, it will be a memorable moment if you do [laughter].

7) Accounting was phony because all the customers wanted it phony."

Among the most positive examples of a lollapalooza effect in operation are Buffett and Berkshire:

"A confluence of factors in the same direction caused Warren's success. It's very unlikely that a lollapalooza effect can come from anything else. "If that success in investment isn't the best in the history of the investment world, it's certainly in the top five. It's a lollapalooza."

"Buffett's decision to limit his activities to a few kinds and to maximize his attention to them, and to keep doing so for 50 years, was a lollapalooza. Buffett succeeded for the same reason Roger Federer became good at tennis."

At different times Munger has referred to a Berkshire itself, Tupperware party, open outcry auctions, Alcoholics Anonymous, the Coke brands, and cults as lollapaloozas. Munger is saying that looking for them as you go through life is fun and potentially profitable.

Notes:

Deep Simplicity http://www.amazon.com/Deep-Simplicity-Bringing-Order-Complexity/dp/140006256X

The Hard Thing About Hard Things: Building a Business When There Are No Easy Answers http://www.amazon.com/The-Hard-Thing-About-Things/dp/0062273205

Munger on Academic Economics http://www.tilsonfunds.com/MungerUCSBspeech.pdf

Michael Mauboussin: https://hbr.org/2011/09/embracing-complexity/ar/1

Wendell Jones http://www.beyondintractability.org/essay/complex-adaptive-systems

What are Charlie Munger's views on giving back to society?

December 12, 2015

Charlie Munger's view on philanthropy is clear: "**Those of us who have been very fortunate have a duty to give back."** Among the most interesting questions related to this statement are: What is philanthropy? How does philanthropy differ from charity? Are there actions which are "giving back" that are not quite philanthropy? How does one best give back?

Looking at the origins of these words is arguably helpful. I use the term "arguably" since some of what I am about to say seems in the eye of the beholder, especially on definitions of

key terms (taxonomy). Reasonable minds can have different opinions on some of these issues.

Philanthropy is the desire to promote the welfare of others. The word comes from: Late Latin philanthropia, from Greek philanthrōpia, from philanthrōpos loving people, from phil- + anthrōpos human being.

Charity has a different meaning: the aim of giving money, food or value to a nonprofit organization. Origin: mid-12c., "benevolence for the poor," from Old French charité "(Christian) charity, mercy, compassion; alms.

A reasonable interpretation is: all charity is philanthropy, but not all philanthropy is charity.

In recent discussions about Priscilla Chan and Mark Zuckerberg's plans to use their wealth to "promote change" some people have pointed out that one can be philanthropically motivated even if the effort is not charitable as defined by the United States tax code. As an example, Felix Salmon wrote:

"Mark Zuckerberg isn't going to be satisfied with small, visible interventions which don't scale – feeding the hungry, say, or giving money to the poor. Such activities improve the world, but they don't change the world."

How would Charlie Munger feel about this? Well, he has said you can change the world in a positive way through doing things like teaching people job skills. Munger has specifically lauded businesses like McDonald's and Costco for doing just that. These activities are not charitable, but he seems to be saying that they are good for society in ways that positively spillover from the normal desire of a business to seek profit. It seems a stretch to call this type of spillover benefit philanthropic, but it is nevertheless a good thing for society.

Felix is saying Zuckerberg is doing something bigger. Zuckerberg subsequently said that Felix had accurately captured what he had in mind. as an example, coming up with cheap green forms of energy can change the world. It may be that making an investment can best achieve that change, but the investment may not technically be charitable since it may earn a profit. If the return on the investment is sub-market, then it is something less than charitable and something more than just market driven. What is the best word to describe that activity? If there isn't a word to describe that sort of activity there should be.

Someone who has forgone an opportunity has incurred an opportunity cost. Munger puts it this way:

"I just wanted to do the best I could reasonably do with the talent, time and resources I had available. That's what I was doing then and now. Everything is based on opportunity costs. Academia has done a terrible disservice: they teach in one sentence in first-year economics about opportunity costs, but that's it. In life, if opportunity A is better than B, and you have only one opportunity, you do A. There's no one-size-fits-all. If you're really wise and fortunate, you get to be like Berkshire. We have high opportunity costs. We always have something we like and can buy more of, so that's what we compare everything to. All of you are in the game of taking the lot you have right now and

improving it based on your opportunity costs. Think of how life is simplified if you approach it this way."

There are other actions that while not quite charitable might be called philanthropic. These questions can get complex since motivations in the real world can be mixed. For example: Is a teacher who would earn far more money as an investment banker, but still teaches, being partially philanthropic? If that teacher's non monetary motivation to be a teacher is not philanthropic, what exactly is it? Is there a word that describes forms of giving back that are not quite philanthropic?

If you spend money or devote time picking up trans on the side of a road near where you live, lobbying a government to increase foreign aid for the poor or protect the environment, is that philanthropic? If it isn't philanthropic, what exactly is it?

Returning to the Chan/Zuckerberg example,

"In a letter sent to *Fast Company* "on behalf of the Chan/Zuckerberg Initiative," a [representative] requested a correction to clarify that Zuckerberg and wife Priscilla Chan are not donating their shares to charity but to "broader philanthropic efforts." Further, [the representative] specifically suggested using "philanthropy" rather than charity in a sub-headline and "philanthropic efforts or new initiative" rather than charity in the text of the story."

Where I come out on this set of issues is that society is best off if people are contributing to and promoting the welfare of other people in many ways. Philanthropy should be considered the broader term and charity narrower in scope. Chan/Zuckerberg intentionally avoided using the term charity in favor of philanthropy. People who insist that they can only engage in 1) charity or 2) profit seeking activities and nothing else are bonkers.

As an aside, not all philanthropy should be tax deductible. Some people don't believe any charitable donations should be tax deductible since the deduction is a tax expenditure and the money would in their view be better spent by the government. I am not going to get into that issue here.

Other reactions in the press recently to the Chan/Zuckerberg announcement are essentially different forms of: "They are refusing to take the tax deduction! How dare they try to change the world without accepting the limits we specify." I believe Munger would say that this is "bonkers" thinking. Some things that are not tax deductible or even technically philanthropy are nevertheless a very good thing for society in terms of giving back and should be encouraged. The choices should not be limited to (1) give it to an approved charity under the tax code or (2) do nothing.

Turning to the question of more obvious charitable and philanthropic activities engaged in by Charlie Munger, Janet Lowe wrote in her biography of Charlie Munger (*Damn Right!*) that at the time the book was written it was: "Munger's habit to choose just two or three public causes that seem important, then concentrate on making a difference there." Munger has been the on the board of Good Samaritan Hospital in Los Angeles, for example, since 1979. As an aside, in making his recent comments about the business practices of Valeant, Munger is not

speaking as someone who does not understand the issues involved in drug distribution and pricing. In his role as chairman of Good Samaritan Hospital, Munger said, **"I could see the price gouging."**

Munger has adopted more philanthropic causes since Janet Lowe wrote her book. But even in 2000 she pointed out that: "Munger has given some of his Berkshire stock to Good Samaritan Hospital, Planned Parenthood, Stanford University Law School and the Harvard Westlake School." Since Lowe wrote her book, Munger has given away considerably more money and stock to recipients like the University of Michigan, Stanford University, Polytechnic School in Pasadena and the Los Angeles YMCA.

On the question of the right timing for philanthropy, Munger has said that whether you give your money away all at once when you die or as you go along is a personal choice. In 2013 Munger said he is choosing the latter approach:

"I'm deliberately taking my net worth down. If it's not below a billion, it soon will be. My thinking is, I'm not immortal. And I won't need it where I'm going. There's nothing as insignificant as an extra $2 billion to an old man."

"I'm soon going to be departed from all of my money. Why not give more of it away while I get the fun of giving it?"

Munger believes that people have a duty to give back more than money, especially if they have earned their fortune doing something he feels isn't particularly productive, like picking stocks:

"To the extent that all I've done is pick stocks that have gone up and sat on my ass as my family got richer, I haven't left much contribution to society. I guess it's a lot like Wall Street. The difference is, I feel ashamed of it."

"I'm somewhat ashamed… That I've profited from being shrewd with money is not by itself satisfying to me. To atone, I teach and try to set an example. I would hate it if the example of my life caused people to pursue the passive ownership of pieces of paper. I think lives so spent are disastrous lives. I think it's a better career if you help build something. I wish I'd built more, but I was cursed at being so good at stock picking. 'The man is the prisoner of his talents.' You can laugh, but I'll bet this room is full of people who are prisoners of their talents. It tends to be the human condition."

"I do my outside activities to atone, and Warren uses his investment success to be a great teacher."

Munger knows that he is a teacher in his own way: **"I try to make up for it with philanthropy and meetings like this one today. This meeting is not out of kindness. This is atonement."**

There is some indication from statements made by his family that Munger enjoys intentionally acting like a curmudgeon for comedic effect. One example would be this type of self-effacing comment:

"Early Charlie Munger is a horrible career model for the young because not enough was delivered to civilization in return for what was wrested from capitalism. And other similar career models are even worse."

The other way to "give back" of course is to be a teacher. Munger points out: **"The best thing a human being can do is to help another human being know more."**

In my own small way I am trying to teach too with these blog posts. You have probably figured out by now that I often use Munger as a foil for expressing my own views. He is far more interesting than I am and can generate more page views and reach more people who could use some help with investing. Writing a book or blog to help people with a topic that most people find boring is quixotic, but that's my choice. That I have only modest success in this effort is fine with me.

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https://philanthropy.com/article/No-17-Charles-Munger/153651

The Chronicle of Philanthropy

"Although Mr. Munger left the University of Michigan before graduating, he became one of its most generous donors when he pledged $110-million last year for graduate student housing and fellowships.

The 90-year-old investor is directing $100-million of his gift to build a housing complex where graduate students from varying disciplines can live together and avoid the social isolation that so often accompanies graduate study. The remaining $10-million will go toward a graduate fellowship program designed to encourage study and interaction among graduate students in different fields.

He gave the gifts because he believes housing has a big affect on one's education.

"It's very uncommon that administrations are much interested in creating dormitories because if you're an elite place and you've got 10 applicants for every spot, it's perfectly natural to think, 'Why the hell do we need to do any more for the students? They're begging to get in,'" he says. "I don't think you abuse your best customers merely because you can get by with it."

This isn't his first donation of this sort. In 2011 he gave $20-million to the university's law school to renovate housing for law students.

He decided to donate the money now rather than give it as a bequest so he can see the results of his giving.

Two other organizations benefited from Mr. Munger's gifts in 2013. He donated $38.5-million to the Huntington Library, Art Collections, and Botanical Gardens for a new education and visitor center that is scheduled to open in 2015. His late wife, Nancy, was a Huntington trustee; not including this most recent gift, Mr. Munger has donated about $27-million to the organization over almost three decades.

In addition, he gave nearly $1.9-million to the Marlborough School, a private girls' school in Los Angeles, for an athletics center. His wife was an alumna of the school, as were a daughter, two granddaughters, and a daughter-in-law."

Why does Charlie Munger not invest in high-technology businesses?

December 19, 2015

This is my 150th blog post and probably my last one in the Charlies Munger series. If I get some good questions I might be persuaded to write a few more in the future.

If I had to boil down Charlie Munger's investment approach to a single phrase it would be: the best way to be smart, is to not be stupid. In other words, stay away from investments where you do not have a significant advantage. This has been a hard idea for me to convey sometimes since it seems counter-intuitive. Most people think that the way to get ahead with investing is to be more clever than other investors. The better approach is to realize that real risk comes from not knowing what you are doing. Avoiding standard stupidity in all of its many forms is the key to better investing.

Placing a focus on knowing and learning what **not to do** baffles some people. It almost seems un-American. Academics in particular seem upset by this idea. They ask: "Do you mean to say that you spend much of your time figuring out what not to do? You attend conferences and read books and papers to learn more about what you can't predict?" Yes.

The best investors are humble when it comes to anything not within their circle of competence. But they also pounce aggressively when they see an opportunity inside their circle and the bet has odds that are substantially in their favor.

Buffett and Munger place a big emphasis on knowing what *not* to do. Most people are so focused on the inverse objective that they can't imagine the Berkshire approach. Munger says: **"Berkshire is in the business of making easy predictions. If a deal looks too hard, the partners simply shelve it."**

High-technology for Munger and Buffett is too hard, so they avoid it. When Munger jokes: "**I just want to know where I will die so I can just not go there"** he is humorously making a broader point about avoiding certain areas in investing.

"Warren and I don't feel like we have any great advantage in the high-tech sector. In fact, we feel like we're at a big disadvantage in trying to understand the nature of technical developments in software, computer chips or what have you. So we tend to avoid that stuff, based on our personal inadequacies. Again, that is a very, very powerful idea. Every person is going to have a circle of competence. And it's going to be very hard to advance that circle. If I had to make my living as a musician – I can't even think of a level low enough to describe where I would be sorted out to if music were the measuring standard of the civilization."

Charlie Munger makes several important points in the previous quote, but two in particular that stick out are:

1. Only invest when you have a substantial advantage considering all alternatives available to you; and
2. Stay within your circle of competence, since risk comes from not knowing what you are doing.

All Berkshire businesses use technology. Munger and Buffett are not averse to technology generally. Munger and Buffett just shy away from businesses that are *high* tech and are more pure play technology in nature. Google and Microsoft are *high* tech. Iscar and Burlington Northern are not *high* tech, but they do use lots of tech.

Buffett says: "We have no religious belief that we will not invest in tech, just can't find one where we think we know what the bush will look like in ten years or how many birds will come out of the bush." Both Munger and Buffett have said that if they were young today they would acquire a technology circle of competence. But they are not young today. What they are looking for is an unfair advantage when they invest and in high-technology they have no such advantage. Munger says:

"For a security to be mispriced, someone else must be a damn fool. It may be bad for the world, but not bad for Berkshire."

In short, with a high-tech investment Buffett and Munger worry that they will be the damn fool.

Munger appreciates a good moat held by a high-technology business. For example, he has said: "Google has a huge new moat. In fact I've probably never seen such a wide moat." But he is not going to invest in a high-tech firm. In 2015 he said **"if you put a gun to my head and told me I had to buy a tech stock, I would pick Google."** That it would take putting a gun to his head to get him to buy a high-tech stock is saying a lot.

At the same meeting in 2015 Munger said on venture capital, versus what he does for a living: **"It's a really difficult honest way to make a living. It's not like shooting fish in a barrel, which is how I've made my living."** Venture capital is not within his circle of competence. So he avoids it which is not a tragedy since he has other opportunities.

What he is saying is that other people have a different circle of competence and for them investing in high-tech can be their best opportunity. Buffett puts it this way:

"Charlie and I put money in things we understand and think we'll know what it'll look like in 5, 10 or 20 years. Bill being on the board doesn't change this. I'll listen to any idea of his and, in fact, our investment ideas overlap quite a bit. I still wish I'd bought Microsoft when I'd first met him. You cannot buy high tech companies at prices like, say, you were able to buy pharmaceutical companies for in the beginning of the 1990's. If I had to bet on anyone, it would be Microsoft. But I don't have to bet. If anyone has superior knowledge and confidence, they can make such an investment. And they deserve to profit from it. We're willing to trade away a big payoff for a certain payoff. Bill Gates told me two tech companies in 1991 that he'd buy if he went to a desert island. We would have made a ton of money in them if we'd bought them, maybe more than in Coke. But he also named Coke as a third one,

and we were happy to stick with that. The Dilly Bar has more certainty of being around in ten years than any software company. There are dozens of software companies selling at prices that imply they'll make $200 million or more per year in a few years – and that doesn't happen very often. Only a dozen or so companies move into that category each year in the S&P 500. Look at the biotech companies: how many of them ever grew into the valuations they were given in the early 1990's? Technology is clearly a boost to business productivity and a driver of better consumer products and the like, so as an individual I have a high appreciation for the power of technology. I have avoided technology sectors as an investor because in general I don't have a solid grasp of what differentiates many technology companies. I don't know how to spot durable competitive advantage in technology. To get rich, you find businesses with durable competitive advantage and you don't overpay for them. Technology is based on change; and change is really the enemy of the investor. Change is more rapid and unpredictable in technology relative to the broader economy. To me, all technology sectors look like 7-foot hurdles."

A key point to keep in mind about something like cloud technology or machine learning is that both will create both winners and losers, even in technology itself. Munger puts it this way:

"The great lesson in microeconomics is to discriminate between when technology is going to help you and when it's going to kill you. And most people do not get this straight in their heads.

There are all kinds of wonderful new inventions that give you nothing as owners except the opportunity to spend a lot more money in a business that's still going to be lousy. The money still won't come to you. All of the advantages from great improvements are going to flow through to the customers."

"New technology will be very disruptive to many people. Retailing in particular is facing major threats. It is changing the world. It will hurt a lot of people. Berkshire is by and large in good shape."

The other point to keep in mind is that changes in technology are not linear. Changes in the next ten years will be even faster than changes in the past ten years since the rate of change is exponential. Tech has evolved very fast in recent years but it will evolve even faster going forward. People tend to think: "Well I've been around for the past five years. I have a good idea what the next five will bring." No, actually they very likely do not have a good sense of what the next five years will bring.

The impact of changes in an environment which is composed of a nest of complex adaptive systems is always going to produce surprises. Munger calls these outcomes lollapaloozas. In these cases the whole is greater than the sum of the parts as I explained in a recent blog post.

"The reason we have not in high tech businesses is that we have a special lack of aptitude in that area. And, yes– low tech business can be plenty hard. Just try to open a restaurant and make it succeed… why should it be easy to get rich? In a competitive world, shouldn't an easy way to get rich be impossible?"

Munger's view on technology investing is better understood by looking at a specific case. For example, Why did Berkshire invest in IBM? We can conclude from their comments in the above discussion that Buffett and Munger do not feel IBM is high–tech.

Buffett described his due diligence this way:

"We went around to all of our companies to see how their IT departments functioned and why they made the decisions they made. And I just came away with a different view of the position that IBM holds within IT departments and why they hold it and the stickiness and a whole bunch of things. It's a company that helps IT departments do their job better. But, you know, we work with a given auditor, we work with a given law firm. That doesn't mean we're happy every minute of every day about everything they do but it is a big deal for a big company to change auditors, change law firms. The IT departments, I—you know, we've got dozens and dozens of IT departments at Berkshire. I don't know how they run. I mean, but we went around and asked them and you find out that there's—they very much get working hand in glove with suppliers. And that doesn't—that doesn't mean things won't change but it does mean that there's a lot of continuity to it. And then I think as you go around the world, IBM, in the most recent quarter, reported double-digit gains in 40 countries. Now, I would imagine if you're in some country around the world and you're developing your IT department, you're probably going to feel more comfortable with IBM than with many companies."

I believe Buffett did not get a representative view of what businesses are buying today in this due diligence process. In other words, they received an incomplete view of the transition of information technology to the cloud due to the unique nature of their portfolio at Berkshire. For example, insurance companies, manufacturers of commodity products and railroads will likely be be some of the last firms to move to the cloud. Buffett and Munger may have reached a different conclusion if they had talked to more companies outside of the Berkshire portfolio.

How has the Berkshire IBM bet worked out so far? Buffett has said in the past that his cost basis in IBM is roughly $170. Trading in IBM shares closed yesterday at ~135.

As of November 9 of 2015:

"Berkshire Hathaway announced that it has lost $2 billion on its IBM investment. That's 15% of the more than $13 billion worth of IBM's stock that Berkshire has purchased over the past four-plus years."

Could he be right in the end and me wrong. Absolutely. He's Warren Buffett and I am clearly not.

An important point about something like cloud is that it will create both winners and losers. Munger puts it this way:

"The great lesson in microeconomics is to discriminate between when technology is going to help you and when it's going to kill you. And most people do not get this straight in their heads. …There are all kinds of wonderful new inventions that give you nothing as owners except the opportunity to spend a lot more money in a business that's

still going to be lousy. The money still won't come to you. All of the advantages from great improvements are going to flow through to the customers."

"New technology will be very disruptive to many people. Retailing in particular is facing major threats. It is changing the world. It will hurt a lot of people. Berkshire is by and large in good shape."

I do agree with Munger that Berkshire is in good shape, but disagree on the IBM stock holding.

A Dozen Things I learned from Michael Milken about Finance

December 26, 2015

While Michael Milken is obviously a controversial person, that he was and is influential is impossible to argue. Anyone who wants to learn more about Michael Milken, including the parts of his life that sent him to jail can read *Fall from Grace, The Predators' Ball, Den of Thieves or A License to Steal*. Links to these books can be found below in the Notes as is usual. This is a blog post about finance and not about history or ethics.

A few short sentences provide context for people who do not know who he is: "Starting in 1969, when he joined the firm that would become Drexel Burnham Lambert, Milken helped finance thousands of companies." In his book How the Markets Really Work former Harvard Business Review editor Joel Kurtzman wrote "Milken's real contribution was to get investors to understand that the stock and bond markets were not really separate markets. Milken created a tremendous pool of liquidity."

Michael Milken's financing methods brought new approaches to the financial markets focused "on cash flow rather than reported earnings; and second, to consider human capital part of the balance sheet. He played this out by backing such pioneers as Bill McGowan (telecommunications), Ted Turner (cable television), Craig McCaw (mobile phones), Steve Wynn (resorts), Len Riggio (book retailing) and Bob Toll (homebuilding)." He also financed T. Boone Pickens, Saul Steinberg, Carl Icahn, and Ronald Perelman. The Economist magazine writes:

"While a student at Berkeley in the late 1960s, Mr. Milken came across empirical support for his hunch that a portfolio of these high-yield bonds would outperform an investment-grade portfolio, even taking into account the higher likelihood of default…. The interest-rate spread over supposedly safer bonds was more than enough compensation for the higher expected losses…. Junk-bond issues also offered a new way for many small but growing firms, which had been starved of capital by stodgy commercial banks and sniffy investment banks, to finance themselves…. [Ken Moelis said] Mike Milken started out in the 1970s when capitalism was struggling. In those days, there was very little innovation. Along comes Drexel and suddenly you could get capital….Before 1977, when new junk-bond issues took off, …non-investment-grade bonds were thought of as "bad" investments, at any price.

Nowadays a bad credit can be considered a prudent investment if it is available at the right price…. The Hollywood business model is a search for a blockbuster that will pay for all the turkeys. High-yield bond investment is a different art: the trick is to avoid the losers; then the winners will take care of themselves." http://www.economist.com/node/17306419

I am going to omit the usual line item commentary in this blog post and instead make some general comments up front. One time

His advice was often unconventional and often quite insightful. Once when I was part of a team raising money for a startup, Michael Milken advised us to focus in raising money from people who recently became wealthy. He said that "old money" is far too attached to it and will turn down good investments for that reason. **"Focus on the recently rich when trying to get new investors,"** he said.

While this is a post about Milken, most of what I learned about finance I learned from many different people. I feel lucky to have known each of them. Among the biggest lessons I have learned in finance from these people are: (1) you can have massive wealth in terms of assets and yet sometimes in the short run you can have no cash; (2) cash is the oxygen of business and (3) running out of cash is the only unforgivable sin in business. Assets that are not liquid trade at a discount for a very good reason.

Another lesson I learned is that a business with an ability to raise billions of dollars in debt on one day may not be able to raise five cents a day later. Credit markets can literally change direction overnight. And precisely when that happens is not predictable. For that reason having a margin of safety on cash is very wise. Cash can have tremendous optionality when things go wrong in the markets. But dry power in the form of cash has real costs (negative arbitrage). Getting the mix right, is tricky and depends on the company, industry, business cycle industry and economy. Here's Milken on this point:

"When your business depends on technology – whether it's aerospace, computer and electronics firms in the 1960s or Internet, telecom and networking companies in the 1990s – volatility is a fact of life. Unlike slower-changing industries like supermarkets, which can appropriately assemble a balance sheet with more debt, technology is an inherently risky business and needs a strong balance sheet to survive. In fact, risk in capital structure should vary inversely with business risk." "The decision to increase or decrease leverage depends on market conditions and investors' receptivity to debt. The period from the late-1970s to the mid-1980s generally favored debt financing. Then, in the late '80s, equity market values rose above the replacement costs of such balance-sheet assets as plants and equipment for the first time in 15 years. It was a signal to deleverage."

Ratings from the ratings firms obviously fail for the reasons noted by Milken below. The conflicts of interest in the bond rating business continue to this day. I would rather put a viper down my shirt that buy a bond simply based on a rating. In an article on Milken *Vanity Fair* described the core of the problem: "the rating services are paid by the companies who issue the securities they rate. Moreover, the rating services admit in their fine print that their ratings are based on the data supplied by the companies seeking the ratings."
http://www.vanityfair.com/online/daily/2009/01/was-mike-milken-rightafter-all-1
Michael Milken points out below that "book value" reveals very little about the operations of a business and does not distinguish between cash in an account and a business with assets,

products and loyal customers. Milken discovered this fact and others have since used it to raise massive amounts of money.

A smart CFO I worked with for many years used to say: "If you want to understand better what credit quality actually is, watch how the bank debt is trading. Bank debt is senior and the banks have deeper information based on stronger covenants. They are an early warning system." Speaking of CFOs, a great one is a pleasure to watch work, particularly in a capital intensive business. Milken is correct that financing is an art and a great CFO is an artist.

Also an artist is someone like Howard Marks who earns his financial returns in no small part from his deep understanding distressed bonds. http://25iq.com/2013/07/30/a-dozen-things-ive-learned-about-investing-from-howard-marks/ This is a great summary of what he does from Marks himself: "Our mantra is "good company, bad balance sheet," which is different from a bad company; those can be challenging to turn around. But if you have a good company with the wrong balance sheet, that's easier to fix. How do good companies become financially distressed? The answer is they take on more debt than it turns out they can service in tougher times." Marks and several other successful people like Ken Moelis and Rich Handler at one time worked for Milken.

One interesting thing about debt is how some people are comfortable having loads of it. Even being billions of dollar in debt does not stop them from sleeping like a baby. It was J. Paul Getty who once said: "If you owe the bank $100 that's your problem. If you owe the bank $100 million, that's the bank's problem." Perhaps that is the right explanation for some people's comfort with having loads of debt.

People can argue about the nature of Michael Milken's legacy, but there is no question he had huge influence on finance and business.

Milken quotes:

1. "Financing is an art form. One of the challenges is how to correctly finance a company. In certain periods of time, more covenants need to be put into deals. You have to be sure the company has the right covenant — to allow it the freedom to grow, but also to insure the integrity of the credit. Sometimes a company should issue convertible bonds instead of straight bonds. Sometimes it should issue preferred stock. Each company and each financing is different, and the process can't be imitative."

2. "It grates me to call them "junk bonds" … they are a debt instrument that trades more on the underlying credit risk of the company or the industry than on movements in interest rates. They have legal characteristics of debt, but if things go bad you're generally the first creditor to take on the rights of an equity owner."

3. "Rating is not credit. Long-term ratings have not been a good predictor of credit quality among different sectors of the world economy. So you shouldn't invest based on ratings." "There are only half a dozen U.S. companies with a triple-A credit rating. Yet, in 2007, rating agencies gave almost 1,300 financial instruments triple-A ratings. They never legitimately deserved triple-A ratings, but that rating enabled the leverage that created the problem. People got comfortable with the rating rather than doing their own homework on credit quality."

4. "Book value alone is not usually a good measure of the future."

5. "Debt isn't good. Debt isn't bad. For some companies, close to zero debt is too much leverage. For other companies, nearly 100 percent much higher levels of debt can easily be absorbed."

6. "The right time for a company to finance its growth is not when it needs capital, but rather when the market is most receptive to providing capital."

7. "Credit is what counts, not leverage. If you're leveraged eight or 10 to one in an asset class that declines by five to 10 percent, you don't have staying power in a mark-to-market world."

8. "Most people who've accumulated a great deal of wealth haven't had that as their goal at all. Wealth is only a by-product, not the original motivation."

9. "The past is always triple-A. We can all remember what the past was. But if we try to make the future triple-A, we have no future. The future is always single-B."

10. "The best credit by far, history has shown, has been the private company. Sovereign countries have defaulted 30 times as often as private companies, both domestically and foreign. Individuals default five times as often as private companies."

11. "The year 1974 taught me that leverage can decimate even the best company when its access to capital is cut off. It also taught me that most people have short memories. That's why most financial people have five-year careers – one market cycle." "Bankruptcy isn't an end. It's an opportunity to build a more suitable financial structure.'"

12. "You get full points for telling me things before they happen, not afterward." (said to Myron Scholes at the 2008 Milken Conference). "Interest rates are never predictable. The idea of borrowing short and lending long is simply not a business."

Notes:

Milken Quotes: http://www.mikemilken.com/quotes.taf

Fall from Grace http://www.amazon.com/Fall-Grace-Untold-Michael-Milken/dp/1559721359/ref=sr_1_1?s=books&ie=UTF8&qid=1422773096&sr=1-1&keywords=fall+from+grace+milken

The Predators' Ball http://www.amazon.com/The-Predators-Ball-Burnham-JunkBond/dp/0140120904/ref=pd_sim_b_1?ie=UTF8&refRID=0CBEY9EK37WSM3A1VQTH

Den of Thieves http://www.amazon.com/Den-Thieves-James-B-Stewart/dp/067179227X/ref=pd_bxgy_b_img_y

A License to Steal http://www.amazon.com/License-Steal-Untold-Michael-Conspiracy/dp/0671742728/ref=sr_1_sc_1?s=books&ie=UTF8&qid=1422773194&sr=1-1-spell&keywords=licenbse+to+steal+milken

A Dozen Things I have Learned About Business from Rza (the founder of Wu-Tang Clan)

January 2, 2016

"What these [Wu-Tang clan] guys have done — without taking a single business school course — is to go right to the head of the class in terms of strategy development." James Cash, Harvard Business School (New York Times, 1996)

Rza (Robert Fitzgerald Diggs) grew up in Brooklyn and Staten Island. He learned about business by actually being in business on the street from an early age. As Warren Buffett likes to say: "Can you really explain to a fish what it's like to walk on land? One day on land is worth a thousand years of talking about it, and one day running a business has exactly the same kind of value." Rza hustled and learned early in life how to operate and negotiate as an entrepreneur. Buffett says the earlier in life you are in business the better it is for your business skills since you can learn bad habits otherwise. One thing Rza and many other hip hop musicians have learned that they are both the product and the business. Jay Z's famous words on this point are: "I'm not a businessman, I'm a business, man. Let me handle my business damn." Rza points out: **"Wu-Tang was a financial movement."**

As HBS Professor James Cash notes above, you don't need to go to school to be good at business. As Warren Buffett has said of another self-taught entrepreneur Rose Blumkin, who began working at the age of six, becoming a store manager at 16: "Aspiring business managers should look hard at the plain, but rare, attributes that produced Mrs. B's incredible success. If they absorb Mrs. B's lessons, they need none from me." With just $50 cash and a net worth of $72,264 to start she built Nebraska Furniture Mart into a major retailer.

What hip hop musical entrepreneurs like Rza have built is very impressive, especially given where they started:

"You look at hip hop right now, you know, they're estimating $4 to 10 billion business [circa 2005], so, the start from the guys who had to spend maybe $100-$200 for a turntable and a mixer, now, there's a whole generation, a whole world."

"When I first heard hip-hop, in 1976, there were maybe only 500 people that could do it. Now you got 5 million people."

Rza understands that supply is the killer of value and that being first to scale is very important in determining success in a business. Rza's example shows that you do not need to go to school to be good at business. To illustrate this point here is Rza talking about wholesale transfer pricing which is by far the most important factor determining profitability in the music industry:

”You could sell weed and make a little money, but most of it gets made for the guy you’re selling it for. It’s the same thing in the music business, except it’s legal.”

Here’s me on wholesale transfer pricing:

“Wholesale transfer pricing power is a term I heard John Malone use in a conference room circa 1995. You won’t find the term in textbooks. Simply put:

Wholesale transfer pricing = the bargaining power of company A that supplies a unique product XYZ to Company B which may enable company A to take the profits of company B by increasing the wholesale price of XYZ.

As an example, John Malone made himself rich by owning the cable systems and saying to new channels, “I will be glad to give you distribution on our cable system as long as you issue us AB% of the equity in your company.” The wholesale transfer price of getting distribution on his cable systems was AB% of the equity. On the flip side, John Malone always made sure there were at least two suppliers of set-top boxes for his cable business so he was not on the ugly side of wholesale transfer pricing. The term “wholesale transfer pricing power” is similar to, but not the same as what some people call a “hold up problem.” The best lens to look at the wholesale transfer pricing power/supplier hold up set of issues is Michael Porter’s “Five Forces” analysis, specifically “bargaining power of suppliers.” As an example of avoiding the problems of wholesale transfer pricing power, the iPod/iPhone business model was a work of genius in that the wholesale transfer pricing power of the music labels is 100% neutered because Apple makes all its profit on the device and not the music. If Apple sold the device at a loss and tried to make profit on the music, Apple would be doomed by the wholesale transfer pricing power of the music owners.”

The New York Times recently contained an article about how few traditional delis remain in Manhattan. The ones that survive tend to have one thing in common: they own the building in which they do business, which means they do not have a landlord with transfer pricing power .

The New York Times also explains part of Rza’s business genius: “When record companies ignored Wu-Tang’s early demonstration tapes, RZA collected $100 from each member to put out its debut single, ”Protect Ya Neck.” Selling copies from the trunks of cars, the group traveled from Virginia to Ohio, promoting itself to radio programmers. When ”Protect Ya Neck” turned into a regional hit, the same labels that had rejected the group came calling, but now Wu-Tang had some leverage.” Having leverage is essential. Rza surely learned that lesson very early in life.

Rza was able through force of personality to convince a large number of hip hop artists to band together. They included his cousins GAZ and the late Ol’ Dirty Bastard. Other crew members include Method Man, Raekwon, Ghostface Killah, Inspectah Deck, U-God and Masta Killa. From a marketing standpoint Rza was and is very creative in leveraging comic book and Shaolin themes. In the book The Big Payback: The History of the Business of Hip-Hop the author Dan Charnas writes: “RZA convinced his comrades to sign with his company, Wu-Tang Productions. **“Give me five years,”** he told them, **“and I will take us to the top.”** They cut one deal for a specified amount of music but were free to cut their own individuals deals outside of that, which is not always the case. The label at Rza insistence waived the “leaving member clause” allowing individual members to sign with other labels. Chamas

writes: "Wu-Tang not only kept the right to determine the destinies of its members individually, but —fatefully—they also retained their brand, their name, their merchandising and their publishing rights." And the subsequent individual deals were with many different labels. This is where Rza describes how he nailed the key negotiating points, which apply to any deal between the musician and the label:

"They offered us small amounts of money, like $200,000 for all eight members. 'So I said, 'Forget the money; let's get a deal that gives all of us the power to get more deals.' "

"We reinvented the way hip hop was structured, and what I mean is, you have a group signed to a label, yet the infrastructure of our deal was like anyone else's. We still could negotiate with any label we wanted, like Meth went with Def Jam, Rae stayed with Loud, Ghost went with Sony, GZA went with Geffen Records, feel me? And all these labels still put "Razor Sharp Records" on the credits.

This result is straight up genius. From the freedom and ownership of licensing rights came clothing and other merchandising deals. Rza realized that the best negotiating position exists when you have what Roger Fisher calls a BATNA (best alternative to negotiated agreement). In short, it is your alternatives that matter says Charlie Munger. If you do not have an alternative supplier and you must have what that supplier sells, you are screwed. This is such a simple idea, but so poorly understood. Revenue is not profit. You must be in control of your cost of goods sold to ensure you can earn a profit. Nothing is guaranteed with just control over wholesale transfer pricing, but at least you are in the game.

More on transfer pricing here:

"I started this thing as a dictatorship. The second album? That was the beginning of democracy, right? But, you know, it was like Russia. It ain't working." RZA laughs then, squeaky, self-aware. "So I went back, tried the dictatorship again. But everybody's a father now, everybody's got their own companies, their own ambitions. Career. They run things, they own things. They still might need a dictator. I don't know. For now, I'm erasing the political analogy. I'm just gonna become the spiritual leader. I don't want to be a politician. I want to be more like the pope." Rza: "Raekwon's demand was strong, actually, for money up front. I basically just came out of pocket with that. [You paid him yourself?] Rza: Yeah. I gotta hold that weight. I said, "It can't happen. A budget can't sustain that. There's no budget that can sustain what you want." But then I went to the band and asked, "If one of us had the power to make this happen without it hurting the rest of us, would you do it?" And about 60 percent said "yes." I went with the 60 percent."

My longer post on wholesale transfer pricing is linked to in the notes below.

The usual "Dozen Things I've Learned," in this case from Rza, are:

1. "'Cash rule everything around me,' we told them in the old days. 'Cash rule everything around me.' but it don't rule me, it rules things around me. You got to set yourself aside from those things and guide yourself right. And I think you'll find that balance, man, which is the key." 'C.R.E.A.M.' really says what we went through to get this money. And cash does rule everything around me, but it don't rule me. That's how

come we got it. It's good because we came from the bottom of the bottomless pit." "My money don't own me." How can I say it better? I suspect some people don't understand that just because cash rules what is around you, it is possible for it to not rule you.

2. "You see people falling victim to all sorts of unnecessary things because they just don't know the way and nobody is showing them the way." Find mentors and anti-mentors. If you are a know nothing investor the Chappelle show episode on Wu-tang Financial makes it clear: "Diversify your bonds." GZA reminds investors to "protect your goddamn neck!" This is just like Buffett saying: "Rule No.1: Never lose money. Rule No.2: Never forget rule No.1."

3. "The 85% are walking around [like] cattle." This is straight up disrespect of Eugene Fama's rational expectations theory. He believes that Mr. Market is bi-polar rather than wise. Buffett agrees: "There's this holy writ, the efficient market theory. How do you teach your students everything is priced properly? What do you do for the rest of the hour?"

4. "Those times when you feel most desperate for a solution, sit. Wait." Patience. Do not over trade. There is no prize for hyperactivity.

5. "I'm me and the me that's me is me and is going to continue to be me." Stay in you circle of competence. Stay real. Risk comes from not knowing what you are doing.

6. "Confusion is a gift from God." Be contrarian when it is smart to be so. Rza would agree with what Charlie Munger says: "For a security to be mispriced, someone else must be a damn fool. It may be bad for the world, but not bad for Berkshire." And would agree with Howard Marks that it is the search for other people's mistakes that enables outperformance.

7. "Even when I didn't go to school, I would always study." "I will give you a bit of advice: the best thing to do when trying to find somewhere is to get a map." READ! Find mentors. Never stop learning.

8. "Through great input you get great output." Research matters. Do the hard work.

10. "One thing that definitely did calculate properly for me was the mathematics that makes sense every day, no matter how I look at it, I can't get around it. I try to get around it, I keep trying to find one plus one is not two, somehow. I can't. People can talk about string theory, parallel realities, different dimensions, it's still one plus one is two, baby." Rza would agree with Buffett that an investor should not: "do equations with Greek letters in them." Buffett adds: "If you stand up in front of a business class and say a bird in the hand is worth two in the bush, you won't get tenure. Higher mathematics may be dangerous and lead you down pathways that are better left untrod. If you need to use a computer or a calculator to make the calculation, you shouldn't buy it."

9. "I've never really been a money hungry guy or chasing money. And I already gave a lot of my money away to people who needed it more than me, I guess. But what I mean is that we go through our society, a lot of us is underprivileged, especially in today's recession, there's a lot of hard times out there for people. And if you think that money is the only cure or the solution, you'll never find a cure. Wisdom is the cure." Charlie Munger puts what Rza is saying this way: "Well envy/jealousy made, what, two out of the Ten Commandments? Those of you who have raised siblings you know about envy, or tried

to run a law firm or investment bank or even a faculty? I've heard Warren say a half a dozen times, "It's not greed that drives the world, but envy."

10. "P. Diddy said in one of his old songs, 'More money, more problems.' You know what I mean? Sometimes the simpler life is better for you." Munger again agrees with Rza: There are a lot of things in life way more important than money. All that said, some people do get confused. I play golf with a man who says, " What good is health? You can't buy money with it." Now P. Diddy is cool, but Seneca said "The less money, the less trouble" a long time ago. http://25iq.com/2015/05/28/a-dozen-things-ive-learned-from-seneca-the-younger-about-venture-capital-startups-business-and-life/ a bit earlier. But I would say that of all the figures from ancient times, Rza perhaps reminds me most of Seneca. The Greek historian Cassius Dio wrote that Seneca acquired a fortune of more than 300m sestertii, which easily in the top 0.1%.

11. "A lot of my peers in big places are sending me emails like 'Great idea. Perfect idea. World-changing idea.' And that's the goal. I mean, money, I make money." Buffett's equivalent statement: "Find your passion. I was very, very lucky to find it when I was seven or eight years old… You're lucky in life when you find it. And you can't guarantee you'll find it in your first job out. But I always tell college students that come out [to Omaha], 'Take the job you would take if you were independently wealthy. You're going to do well at it.'"

12. "I live in a capitalist country so I respect, 'Cash rules.'" Rza is not a fan of EBITDA or creative accounting! Similar to what I wrote about Jeff Bezos, what matters most is "Absolute dollar free cash flow." http://25iq.com/2014/04/26/a-dozen-things-i-have-learned-from-jeff-bezos/ As Bezos puts it: "free cash flow, that's something that investors can spend. Investors can't spend percentage margins."

Notes:

Chappelle show video (Wu-Tang Clan Financial)
https://www.youtube.com/watch?v=KmGnl7quDbY

Rolling Stone bio: http://www.rollingstone.com/music/artists/wu-tang-clan/biography

Esquire Interview: http://www.esquire.com/entertainment/music/interviews/a28592/rza-wu-tang-interview-0514/

NY Times http://www.nytimes.com/1996/12/08/arts/brash-hip-hop-entrepreneurs.html

http://en.wikipedia.org/wiki/Hold-up_problem

https://en.wikipedia.org/wiki/Porter_five_forces_analysis

A Dozen Things I've Learned about Investing from Jim Chanos.

January 9, 2016

I have written about the challenges associated with being short a stock before. It has been my expedience that shorting is something lots of people like to talk about, but few people actually do. Here is Jim Chanos describing what his firm does ("fundamental shorting") with some of the best quotes coming from an excellent interview with Barry Ritholtz:

"We select a portfolio of securities – mostly stocks – that are fundamentally overvalued no matter what the market does. Our clients are primarily institutions who use us as a hedge to their core equity portfolio. It allows them to be a little more aggressive in their equity exposures, knowing that they have part of the portfolio in a small group of companies that will go down over time."

"We are benchmarked versus the market inversely. We are an insurance policy [for our clients] that pays slight premiums." "We are in the insurance business."

"A short is a hedge that should produce positive alpha."

"I view macro and short selling as skill-based or alpha businesses, whereas equity long/short hedge funds tend to be more of a "marketing of beta" business. I am always amazed that investors will pay 2 and 20 for a manager that is always net long. I have been saying that for 20 years. It is interesting because I run an alpha-based business and I am more sensitive to it than others. I sit on investment committees and I see it as an investor who advises these funds. When I ask why a lot of hedge fund compensation is simply embedded market risk, I get very uncomfortable, squirming, dodgy answers. Or no answers at all. Look at 2013. It is crazy to see managers who were up 15 percent command huge checks, when the S&P was up 30 percent. Particularly since they were not balanced completely. They were 90 percent long and 30 percent short, or something like that. Not much alpha has been created by hedge funds, and what was created has been taken by fees. This has been the case for a long time. In a way, short sellers might still be one of your great bargains out there, at 1 and 20 percent of the alpha. That is the closest I will get to a marketing pitch."

"The two ways to handle risk on the short side are stop losses and position limits. Stop losses don't work for us both for emotional and trading reasons. Once you exit a position it is hard to re-enter it."

"[The ability to do what I do] is personality based. A lot of it is rooted in behavioral finance. We are the product of positive reinforcement cycles. Most people's rational decision making breaks down in an environment of negative reinforcement."

"**If you are a short seller you are being told constantly that you are wrong. Not everyone has the ability to drown that out."**

"There is a big difference between a long focused value investor and a good short seller." "The psychology is completely different."

"The market won't necessarily immediately see what you see, and in fact often doesn't. Fundamental short sellers are often early. You also have to borrow the shares. The

ability to effect a short position in reasonable size, once everything is clear, may not be given to you."

"Most human beings perform best in an environment of positive reinforcement. We like to be told we are smart, we're on the right track, we're doing the right thing, and that the stocks we bought are cheap and are going up and that their earnings are going up as well… almost everything is positive. 'Wall Street is a giant positive reinforcement machine. That's why it exists. If you're a short seller, you're coming in every day, and out of fifty names in your portfolio, you can count on ten names where there will be some noise. Stocks recommended, re-recommended, earnings estimates raised, CEO on CNBC; whatever it is, you'd be facing that noise. And, a lot of very good value managers completely break down when confronted with the fact they have to invest against the grain in front of all that noise. The best short sellers I know have an innate ability to drown out the noise – to not let it affect them. They use the noise to their advantage; they don't let it get to them. I tell managers, find out who you are first and then you'll find out whether or not you'll like the short side. Some of the very best value managers, with terrific long-term records, are the worst short sellers I have ever seen. Again, it comes back to investment psychology."

The S&P is up over 2,000 percent since his firm was founded in 1985, but Chanos says the Alpha delivered to clients "is in the mid-teens." Think about how hard it is to win as a short seller in a market that is up over 2,000%. The short seller is, in effect, swimming upstream against a significant current. What Chanos does for a living is hard. It is not something to do in your pajamas on Saturday morning. It is a full time job. And when he does short it is done via a portfolio and with a goal of providing insurance to clients who have long positions.

The best personal commentary I can provide on shorting is perhaps to tell a story about an actual short that I put in place that is most similar to what Chanos does for his clients. It is not precisely the same but the intent was similar (to put a hedge in place). The events in the story took place in the 1990s. Peter Thiel described the period well when he wrote in his excellent book *Zero to One*: "The 1990s have a good image… but many of those years were not as cheerful as our nostalgia holds." Thiel points out that the early 1990s were not particularly remarkable. The mobile phone business was doing well then which was a good thing for me. But the overall business climate for new technology ventures didn't really start to get unusually positive until the Mosiac browser was released in November of 1993. After Netscape went public in August of 1995 the business and investing climate in the technology world started to get bit euphoric. By the fall of 1998 things in the technology stock sector were getting nutty. By 1999 valuations were skyrocketing daily and the climate was full on bonkers.

It was in the still bonkers year 2000 that I took the working vacation on a boat that I describe in my book on Charlie Munger. During that trip I read and re-read the writings and speeches of Warren Buffett and Munger. I spent that vacation trying to discover whether what was happening in the technology investing world was real and what was likely to happen to valuations. When I returned from that working vacation in late August of 2000 I decided that some of the Internet businesses I had been following were fundamentally broken. For example I knew that the Internet was not doubling as fast as people like John Sidgemore claimed and more capacity was not good for valuations as George Gilder claimed. Reading Munger in particular helped give me the courage to act. So at a very advantageous time I sold some shares that could be sold and created a proxy hedge for certain shares that could not be

sold by shorting a basket of Internet and telecom stocks. This type of short sale is not the sort of thing I do often, but it was a reasonable thing to do at the time since it balanced non liquid positions that I could not sell except at a significant discount in private markets. I was taking a risk that someone would announce a takeover of one of the firms I had shorted, but since I shorted a basket of stocks I felt that risk was reasonable. The proxy hedge I put in pace provided me with insurance similar to what Chanos provides to his clients. The short positions in the portfolio hedged some long positions I had in other stocks.

Chanos says in the Barry Ritholtz interview that I link to in the Notes below that he does not like to have any one position in his portfolio be above 5%, with an average of 2% per position. **"Our portfolio turns over about once a year,"** says Chanos. **"Doing this as a professional with a portfolio approach makes much more sense." "Don't try this at home kids."** Using the success of Jim Chanos as an example to short one or two stocks is unwise since he invests via a portfolio approach. If someone announces a takeover at a premium of a stock you shorted and you do not have a portfolio of shorts and are instead concentrated, you can be financial toast.

Chanos also said: "**If you are a fundamental short seller you have no problem finding out what the bull case is." "If you are long a stock, knowing what the bear case is takes work."** He is saying the ease of knowing the long case can create a favorable asymmetric benefit for the short seller, who does the hard work to know the short case.

You will see below that Chanos believes the only reason to short a stock is if the business is fundamentally broken. Shorting a stock just based on valuation alone if the stock is not broken in some fundamental way, is dangerous since markets can remain irrational longer than you can remain solvent.

Before getting to the usual quotes from Chanos here are a few quotes from other investors on shorting stocks.

Monish Pabrai:

"When you are long on a stock, as it goes down in price, the position is going against you and it becomes a smaller portion of your portfolio. In shorting, it is the other way around: if the short goes against you, it is going to become a larger position of your portfolio. When you short a stock, your loss potential is infinite; the maximum you can gain is double your value. So why will you take a bet where the maximum upside is a double and the maximum downside bankruptcy?"

Bruce Berkowitz:

"I am not genetically engineered for shorting. If you are long and you are wrong, you go to zero. If you are short and you are wrong, you may face death. The mania of markets can last quite a long time, and when you take into account mark to market and the collateral needed, it doesn't appeal to me."

Charlie Munger:

"It's dangerous to short stocks." "Being short and seeing a promoter take the stock up is very irritating. It's not worth it to have that much irritation in your life." "It would be one of the

most irritating experiences in the world to do a lot of work to uncover a fraud and then at have it go from X to 3X and at h the crooks happily partying with your money while you're meeting margin calls. Why would you want to go within hailing distance of that? We don't like trading agony for money."

Warren Buffett:

"It's ruined a lot of people. You can go broke doing it." "You'll see way more stocks that are dramatically overvalued than dramatically undervalued. It's common for promoters to cause a stock to become valued at 5-10 times its true value, but rare to find a stock trading at 10-20% of its true value. So you might think short selling is easy, but it's not. Often stocks are overvalued because there is a promoter or a crook behind it. They can often bootstrap into value by using the shares of their overvalued stock. For example, it it's worth $10 and is trading at $100, they might be able to build value to $50. Then, Wall Street says, "Hey! Look at all that value creation!" and the game goes on. [As a short seller,] you could run out of money before the promoter runs out of ideas." "Charlie and I have agreed on around 100 stocks over the years that we thought were shorts or promotions. Had we acted on them, we might have lost all of our money, every though we were right just about every time. A bubble plays on human nature. Nobody knows when it's going to pop, or how high it will go before it pops." "I had a harrowing experience shorting a stock in 1954. I wouldn't have been wrong over 10 years, but I was very wrong after 10 weeks, which was the relevant period. My net worth was evaporating."

Here are more quotes from Chanos:

"Short selling is an inherently risky proposition. Profits are limited to a maximum of 100% of the proceeds on the date of sale; losses, however, can be infinite, depending on how high the stock price moves after the sale." Chanos points out that you can take your gains from a falling stock to short more shares. He is saying you can compound your short-based profits. Chanos also says that the prime broker will sell you out before your losses are infinite and that a limited partner can lose only what they put into the limited partnership.

"As Warren Buffett has acknowledged… 'it's a tough way to make a living,' because over time stock markets rise more than they fall, the transaction costs are high, and the risks great."

"Short selling represents only a very small fraction of market activity. It is very costly and full of risk for the short seller to execute and maintain a position, waiting for the rest of the market to realize the stock is overvalued."

"We try not to short on valuation, though at some price even reasonably good businesses will be good shorts due to limitations of growth. We try to focus on businesses where something is going wrong." "Everybody says be careful shorting on valuation and I think that's a good bromide."

"The whole idea of fundamental short-selling is to select a portfolio of stocks that are fundamentally overvalued, no matter what the market does."

"**It is mechanically impossible for short sellers to drive down the price of the stock." "At the end of the day, the language of business is numbers… If you're not very comfortable**

with understanding how companies can play games with their financial statements using GAAP accounting, you're never going to be a good short-seller. That's just the bottom line." "There's nothing better than analyzing the company's numbers themselves to find the anomalies because modern GAAP is as much an art as a science, as any good accountant will tell you."

"In investing, you can be really right but temporarily quite wrong."

"There's nothing better than analyzing the company's numbers themselves to find the anomalies because modern GAAP is as much an art as a science, as any good accountant will tell you."

"You need to be able to weather being told you're wrong all the time. Short sellers are constantly being told they're wrong. A lot of people don't function well in an environment of negative reinforcement and short selling is the ultimate negative reinforcement profession, as you're going against the grain of a lot of well-financed people who want to prove you wrong. It takes a certain temperament to disregard this."

"In a fundamental short position, not only are you analyzing the company or whatever it is that you're analyzing, but in many cases you have a management team interposed that's actively working to prove you wrong through activities that are not necessarily kosher … And so there is an added layer here of three-dimensional chess when you're on the short side … The market won't necessarily see what you see, and, in fact, often doesn't, which is why most fundamental short-sellers will tell you that they're most often early."

"I've seen more stocks go to zero than infinity."

Notes:

Barry Ritholtz Interviews Chanos: Masters in Business https://soundcloud.com/bloombergview/barry-ritholtz-interviews-6

SEC statement https://www.sec.gov/spotlight/hedgefunds/hedge-chanos.htm

The Big Win: Learning from the Legends to Become a More Successful Investor By Stephen L. Weiss http://www.amazon.com/The-Big-Win-Learning-Successful/dp/0470916109

Inside the House of Money: Top Hedge Fund Traders on Profiting in the Global Markets Steve Drobney http://www.amazon.com/Inside-House-Money-Traders-Profiting/dp/1118843282/ref=sr_1_1?s=books&ie=UTF8&qid=1452021295&sr=1-1&keywords=the+new+house+of+money

More than A Dozen Reasons Why Investing in Airlines Belongs in the Too Hard Pile

January 16, 2016

Warren Buffett and Charlie Munger have they call a "too hard pile." Here's Munger on that point:

"If something is too hard we move on to something else. What could be simpler than that?"

"We have three baskets: in, out, and too tough. We have to have a special insight, or we'll put it in the 'too tough' basket."

For example, Munger makes quite clear that he does not have methods to value every company in every industry. If he can't determine a basic fact like the present value of the business with the degree of accuracy he desires, he just moves on to the next opportunity. As another example, Buffett and Munger also simply do not like the economics of some businesses. There is no degree of difficulty premium in investing so they are easily convinced to pass on investing in a given business. This "too hard pile" approach to investing is an example of Munger's inversion philosophy: as a first step in making decisions, eliminate everything that you do not understand or is too hard. Munger says: **"I think part of the popularity of Berkshire Hathaway is that we look like people who have found a trick. It's not brilliance. It's just avoiding stupidity."**

Also important is to understand that Warren Buffett and Munger think in terms of opportunity cost. Again here is Munger describing the approach in the form of an example:

"There is this company in an emerging market that was presented to Warren. His response was, 'I don't feel more comfortable buying that than I do of adding to Wells Fargo.' He was using that as his opportunity cost. No one can tell me why I shouldn't buy more Wells Fargo. Warren is scanning the world trying to get his opportunity cost as high as he can so that his individual decisions are better."

This example can be translated into a broader principle: Berkshire searches the world for its very best opportunities sorting them in terms of attractiveness from top to bottom. As an example of the method at work, if an airline stock is presented to Buffett as a potential purchase, in order for him to say "I want to buy" he must conclude it is a better opportunity than buying anything else in the world. That is a tall standard to meet. Byron Trott has said: "If you knew the deals [Buffett] turned down over the years, it would make you cry!" The only exception would be if he feels that stock adds valuable portfolio diversification. But even the desire for diversification only goes so far.

Munger is also a devotee of concentrating his investments since he is not what Buffet calls "a know-nothing investor" who should diversify. Munger has said:

"The idea of excessive diversification is madness."

"Wide diversification, which necessarily includes investment in mediocre businesses, only guarantees ordinary results."

"The Berkshire-style investors tend to be less diversified than other people. The academics have done a terrible disservice to intelligent investors by glorifying the idea of diversification. Because I just think the whole concept is literally almost insane. It emphasizes feeling good about not having your investment results depart very much

from average investment results. But why would you get on the bandwagon like that if somebody didn't make you with a whip and a gun?"

Seth Klarman similarly believes: "The number of securities that should be owned to reduce portfolio risk is not great; as few as ten to fifteen holdings usually suffice." Jason Zweig adds:

"A conventional rule of thumb, supported by the results of Bloomfield, Leftwich, and Long 1977, is that a portfolio of 20 stocks attains a large fraction of the total benefits of diversification. … however, that the increase in idiosyncratic risk has increased the number of stocks needed to reduce excess standard deviation to any given level."

"Even the great investment analyst Benjamin Graham urged "adequate though not excessive diversification," which he defined as between 10 and about 30 securities."

We can put aside the idea that Munger or Buffett would buy airline stock for diversification purposes. So let's turn to the merits of an investment in the airline business.

Warren Buffett has said on the airline business generally:

"The worst sort of business is one that grows rapidly, requires significant capital to engender the growth, and then earns little or no money. Think airlines. Here a durable competitive advantage has proven elusive ever since the days of the Wright Brothers. Indeed, if a farsighted capitalist had been present at Kitty Hawk, he would have done his successors a huge favor by shooting Orville down. "

"The big problem is not aggregate costs, but costs versus competitors. If your costs are out of line, you're going to get killed eventually."

How do others feel about the airline business? Morningstar writes:

"The airline industry is plagued by minimal barriers to entry and nonexistent customer switching costs that are further burdened with intense industry rivalry. These factors have allowed the startup of hundreds of airlines since deregulation occurred in 1978. Garnering a sustainable cost advantage is effectively the only way to generate an economic moat. Southwest used to have a low-cost advantage, but we believe competition and surging fuel prices have proved that these advantages were temporary. Southwest created this advantage by operating a point-to-point network to less congested secondary airports with a uniform fleet. These attributes maximized flying time and employee productivity, while keeping expenses at a minimum since Southwest requires maintenance and pilot training on only one type of aircraft. Over the years, competitors like Alaska Airlines, Spirit Airlines, and JetBlue have entered the market and mimicked this strategy."

That doesn't sound too good. Why are people attracted to the business? There can be lots of revenue. It provides great social value. I mean, what a marvelous thing to be able to fly to another city in the air for goodness sakes. But sometimes great consumer value is created by a business or industry and yet there is no long term producer profit. Airlines are a classic case where all the value has gone to the consumer and airline suppliers. As Munger likes to say, sometimes a new technology means that the business keeps nothing or less than nothing.

That is why a moat is essential. And airlines, given the lack of profitability over the long term, have lacked a moat.

Adding to the problems identified by Morningstar is the fact that airplanes are mobile and can be moved to routes that might have some profit in them. Worse, some people think owning an airlines is glamorous or strategic so the business tends to attract too much interest. "This industry attracts more capital than it deserves," complains Stelios Haji-Ioannou, founder of EasyJet.

More reasons the airline industry has been unprofitable in the long term, any one of which might cause you to avoid the industry, include:

A "capacity lead" model fostering commoditization. Airlines are managing demand to capacity, not capacity to demand.

Labour has leverage. Wholesale transfer pricing problems abound in the airline industry. Strikes!

Input costs are volatile and require a high level of cash reserve that is difficult to maintain.

The revenue cycle and cost cycle are out of sync. Fuel volatility is very difficult to manage.

Nobody really wants the lack of profitability to be fixed since the value chain, such as customers and governments benefit from cheap service.

Pricenomics wrote in November 2015: The airline industry has never enjoyed a stretch of profitability that lasted longer than 6 years. Overall, the industry has lost $35 billion since deregulation.

Munger piles on about how hard the airline business is:

"Airline pilot unions are really tough. It's interesting to see people paid as well as airline pilots to have such a tough union. No airline can afford a shutdown very long. If you're in a business that cannot take a long strike, then you're playing a game of chicken with labor. Ironically, if you're weak, you're in a stronger negotiating position.

"Here's a model that we've had trouble with. Maybe you'll be able to figure it out better. Many markets get down to two or three big competitors—or five or six. And in some of those markets, nobody makes any money to speak of. But in others, everybody does very well. Over the years, we've tried to figure out why the competition in some markets gets sort of rational from the investor's point of view so that the shareholders do well, and in other markets, there's destructive competition that destroys shareholder wealth. If it's a pure commodity like airline seats, you can understand why no one makes any money. As we sit here, just think of what airlines have given to the world—safe travel, greater experience, time with your loved ones, you name it. Yet, the net amount of money that's been made by the shareholders of airlines since Kitty Hawk, is now a negative figure—a substantial negative figure. Competition was so intense that, once it was unleashed by deregulation, it ravaged shareholder wealth in the airline business. Yet, in other fields—like cereals, for example—almost all the big boys make out. If you're some kind of a medium grade cereal maker, you might make 15% on your

capital. And if you're really good, you might make 40%. But why are cereals so profitable—despite the fact that it looks to me like they're competing like crazy with promotions, coupons and everything else? I don't fully understand it. Obviously, there's a brand identity factor in cereals that doesn't exist in airlines. That must be the main factor that accounts for it.

And maybe the cereal makers by and large have learned to be less crazy about fighting for market share—because if you get even one person who's hell-bent on gaining market share…. For example, if I were Kellogg and I decided that I had to have 60% of the market, I think I could take most of the profit out of cereals. I'd ruin Kellogg in the process. But I think I could do it. In some businesses, the participants behave like a demented Kellogg. In other businesses, they don't. Unfortunately, I do not have a perfect model for predicting how that's going to happen. For example, if you look around at bottler markets, you'll find many markets where bottlers of Pepsi and Coke both make a lot of money and many others where they destroy most of the profitability of the two franchises. That must get down to the peculiarities of individual adjustment to market capitalism. I think you'd have to know the people involved to fully understand what was happening."

Buffett again:

I bought into an airline [US Air] with high seat-mile costs of 12 cents. It was protected, but that was before Southwest showed up with 8-cent costs.

I made a mistake when I bought US Air Preferred some years ago. I had a lot of money around. I make mistakes when I get cash. Charlie tells me to go to a bar instead. Don't hang around the office. But I hang around the office and I have money in my pocket, I do something dumb. It happens every time. So I bought this thing. Nobody made me buy it. I now have an 800 number I call every time I think about buying a stock in an airline. I say, "I am Warren and I am an air-aholic." They try to talk me down, "Keep talking don't do anything rash." Finally I got over it. But I bought it. And it looked like we would lose all our money in it. And we came very close to losing all our money in it. You can say we deserved to lose our money it.

[Question from Bill Miller: The airline industry is plagued with terrible economics. With the pending merger with U.S. Air and American (AMR)… the industry has been consistently profitable with double-digit returns. Do you think the industry's improved economics are likely to improve?]

Warren Buffett: The answer to the second question is no. The question about the industry is interesting because it's true it has consolidated. In some industries there are only two competitors and they still beat each other's brains out. Freddie Mac and Sallie Mae. Two enormous companies in battle to beat the other guy out drove prices down to improper levels and did stupid things. Certain industries once down to certain levels do extremely well and others even when there's two of them still don't do that well. Coke and Pepsi in the U.S. are the only two colas people can name and 50 percent of drinks sold are colas, but if you go into the market on a weekend they're pricing the product at low prices and competing vigorously. It's industry-specific. The airline industry has situation where have very, very, very low incremental cost per seat with enormous fixed costs. The temptation to sell that last seat at a very low price is very high and sometimes it's very hard to distinguish between that seat and

the last seat. It's labor-intensive and capital intensive and largely commody type business. As Bill Miller points out, it's been a death trap for business since Orville took off. If it ever gets down to one airline it will be a wonderful business and the question will be if having gotten down to relatively few through bankruptcy will question be whether it is a good business yet. I don't know the answer but I'm skeptical.

Charlie: The last time we were presented with the opportunity of the railroad we did the same thing Bill Miller would suggest. And what did we do? We missed it. We stumbled in late to the party. We proved to be slow learners. It's conceivable that Miller is right in what he suggests. It goes into my too hard pile.

Warren: Mine too.

The Economist magazine hopefully notes that the airlines have become more sane about buying new airplanes.

These people seem to agree about how hard the airline business is as these quotes demonstrate:

1. "I really don't know one plane from the other. To me they are just marginal costs with wings." Alfred Kahn, 1977.

2. "Deregulation is an abysmal failure and we have no more furniture left to burn." Bruce Lakefield, CEO US Airways, while between bankruptcies and before being taken over by America West, October 2004.

3. "I've said many times that I'd be thrilled to sell the airline to the employees and our guys said no, we'll take all the money, anyway." Robert L. Crandall, 1997. [This statement is all about wholesale transfer pricing.]

4. "I've got no more insight into where the [oil] price is going to go than any other person. If I knew that, I wouldn't be an airline executive, that's for sure." Jeff Smisek, United Airlines, Fortune Magazine.

5. "If the Wright brothers were alive today, Wilbur would have to fire Orville to reduce costs." Herb Kelleher, Southwest Airlines.

6. "You cannot compete in time with airlines on transcontinental runs, but [trains] can outstrip them in comfort, safety, dependability of service, and also show the passenger the countryside. This, we believe, is a permanent market." Edward G. Budd Jr, speech before the American Association of Passenger Traffic Officers, Chicago, 24 April 1957.

7. "This is a nasty, rotten business." Robert L. Crandall, American Airlines.

8. "I don't care what you cover the seats with as long as you cover them with assholes." Eddie Rickenbacker, Eastern Airlines.

9. "You absolutely, positively have to innovate-if only to survive." Fred Smith, FedEx

10. “People who invest in aviation are the biggest suckers in the world.” David G. Neeleman, JetBlue Airways

11. “Business opportunities are like buses; there’s always another one coming.” Richard Branson, Virgin.

12. “If you want to be a millionaire, start with a billion dollars and launch a new airline.” Richard Branson.

13. “These days no one can make money on the goddamn airline business. The economics represent sheer hell.” C. R. Smith, American Airlines.

14. “Bums on seats.” Captain Eddie Rickenbacker of Eastern Airlines.

15. “Once you get hooked on the airline business, it’s worse than dope.” Ed Acker, while Chairman of Air Florida.

16. “A recession is when you have to tighten your belt; depression is when you have no belt to tighten. When you’ve lost your trousers – you’re in the airline business.” Sir Adam Thomson.

17. “Running an airline is like having a baby: fun to conceive, but hell to deliver.” C. E. Woolman, principal founder Delta Air Lines.

18. “They don’t realize that while you’re sitting here talking, someone is f**king you. Changing a fare, changing a flight, moving something. There’s no autopilot, and that’s why I’ve seen a lot of guys come and go.” Gordon Bethune, CEO Continental Airlines, regards his peers at other airlines, Fortune magazine 18 October 2004.

19. “The airline business is crazy. I’ve not been enamored with the industry in general. You can’t depend on anybody and anything. It’s dog-eat-dog and one thing or another from one minute to the next. What I understand about it, I don’t like what I see.” Robert Brooks, Hooters Air owner.

20. “The game we are playing here is closest to the old game of ‘Christians and lions.’” Robert L. Crandall, CEO & President of American Airlines.

Notes:

http://analysisreport.morningstar.com/stock/research?nav=no&region=USA&culture=en_US&ProductCode=mle&part=2&Symbol=LUV&Country=USA

A Dozen Things I have Learned about Investing and Money from Groucho Marx

January 29, 2016

1. "Between my horrible poker play and the '29 stock market crash, it took many years to gain the smarts to keep my investing simple." Groucho learned some hard lessons in 1929. The author of the book *New World Coming: The 1920s and the Making of Modern America* points out that prior to the crash, the investing world seemed quite easy to Groucho. He was very involved in selecting stocks for his portfolio and traded often: "Groucho Marx went to his broker's branch office in Great Neck out on Long Island every morning after breakfast, to follow the ticker and gloat over his good fortune." A National Public Radio exchange between two professors knowledgeable about the famous comedian relates to Groucho's attitude and behavior prior to that crash: Professor Smith: "After Groucho finished filming each scene, he'd call his broker. Groucho had stuffed all of his money into stocks." Professor Klein: "He became just your classic innocent investor. Every day he'd go in and he'd look on the big board and he'd see that he had made several thousand dollars without lifting a finger. And he thought, 'well, this is easy.'" Groucho lost what at the time were very large sums of money when the crash finally came.

Groucho was traumatized emotionally by the crash. The web site for the TV show *Biography* even claims: "His hectic schedule and his enormous financial loss in the 1929 stock market crash had taken a toll on the performer and left him with a lifelong struggle with insomnia." I have certainly seen people irreparably altered by a big loss including losses in the Internet bubble. Some people recover from a big loss better than others. At least Groucho worked in a business where people could earn a living during the Great Depression.

"In the 1950s Groucho was invited to take a tour of the New York Stock Exchange. While in the observation booth, he grabbed the public address system handset and began singing "Lydia the Tattooed Lady". Upon hearing silence coming from the trading floor, he walked into view, was given a loud cheer by the traders, and shouted, 'Gentlemen, in 1929 I lost eight hundred thousand dollars on this floor, and I intend to get my money's worth!' For fifteen minutes, he sang, danced, told jokes, and all this time, the Wall Street stock ticker was running blank."

Groucho is not the only investor to learn a lesson about the futility of speculation the hard way. Both Ben Graham and John Maynard Keynes had similar periods in their lives in which they tried to speculate in the market with disastrous results rather than invest.

2. **Groucho was once walking around the New York Stock Exchange when one of the traders on the floor asked him: "Groucho, how do you invest your money?" Groucho answered: "All in bonds." The trader asked: "But Groucho, they don't pay much return." Groucho said: "They do when you have a lot of em!"** My grandfather went through the crach of '29 and Great Depression and like Groucho. He also liked bonds and government insured savings accounts even though he became quite prosperous from investing in real estate. Groucho died with an estate worth about $2 million which do he was, as they say, "comfortably rich." Which reminds me of a joke often told by Henny Youngman: A car hits a Jewish man. The paramedic rushes over and says, "Are you comfortable?" The guy says: "I make a good living."

3. Groucho: Do you know that property values have increased 1929 to 1,000 percent? Unidentified Woman: You told me about this yesterday. Groucho: I know, but I left out a comma." You can imagine how many brokers tried to sell Groucho investments. Prior to the crash Groucho made the mistake of investing on stock tips including one from an elevator operator to buy United Corporation. Groucho also bought Goldman shares based on a tip

from Eddie Cantor. Which reminds me of a story: Groucho once said to a woman who had 22 children: "Why so many children?" 'Well, I just love my husband,' answered the woman. Groucho replied: "I love my cigar, but I take it out of my mouth once in a while."

4. "What do you think the government does with your [tax] money? Spends it on a woman? Gets drunk? Or plays the ponies? That's what you might do with the money, or if you have to get personal, what I do." Groucho actually wrote a book on income taxes. He was quite proud of that fact. Lee Siegel, the author of Groucho Marx: The Comedy of Existence, once told an interviewer on NPR: "The conventional image of Groucho was that he was on the side of the little guy, and he spoke defiantly and insolently to powerful people and wealthy people. My feeling is that Groucho was out to deflate everybody — that he was a thoroughgoing misanthrope." **"**

5. "I worked myself up from nothing to a state of extreme poverty." How does it feel to be rich and famous Groucho? **"Good. I like money. I support a lot of people I don't have to."** Marx's father never had much success as a tailor. The Marx family struggled financially so Groucho's mother became a stage mom, pushing he kids into show business. This Groucho quote reminds me of a joke by Jackie Mason: "My grandfather always said, 'Don't watch your money; watch your health.' So one day while I was watching my health, someone stole my money. It was my grandfather."

6. "I made a killing on Wall Street a few years ago. I shot my broker. And not a moment too soon. He was about to commit suicide." You probably already knew that joke and probably know this one too: A man calls his broker, who tells him that he's got a hot new stock pick. 'Buy it, buy it,' the man says. The next day he calls the broker for an update – the stock is up 5% 'Buy it, but it, the man says. The next day he calls the broker again, and the stock is up another 5%. 'Buy some more, buy some more,' the man says. He calls the broker again the next day, who tells him the stock is up 10%. 'Sell it, sell it,' the man says. The broker answers: 'To whom?'"

7. "Money will not make you happy, and happy will not make you money." This Groucho quote reminds me of a story: Two guys are walking down the street when a mugger approaches them and demands their money. They both grudgingly pull out their wallets and begin taking out their cash. Just then, one guy turns to the other and hands him a bill. "Here's that $20 I owe you," he said.

8. "Groucho: That's what I always say: love flies out the door when money comes innuendo." Which reminds me of another joke. Saul is working in his store when he hears a booming voice from above: "Saul, sell your business." He ignores it. It goes on for days. "Saul, sell your business for $3 million." After weeks of this, he relents, sells his store. The voice says 'Saul, go to Las Vegas." He asks why. "Saul, take the $3 million to Las Vegas." He obeys, goes to a casino. Voice says, "Saul , go to the blackjack table and put it down all on one hand." He hesitates but knows he must. He's dealt an 18. The dealer has a six showing. "Saul, take a card." What? The dealer has — "Take a card!" He tells the dealer to hit him. Saul gets an ace. Nineteen. He breathes easy. "Saul, take another card." What? "TAKE ANOTHER CARD!" He asks for another card. It's another ace. He has twenty. "Saul, take another card," the voice commands. I have twenty! Saul shouts. "TAKE ANOTHER CARD!!" booms the voice. Hit me, Saul says. He gets another ace. Twenty one. The booming voice goes: "un-frigging-believable!"

9. "Money frees you from doing things you dislike. Since I dislike doing nearly everything, money is handy." Which reminds me of this joke: A Jewish man goes into a confession box. "Father O'Malley," he says, "my name is Emil Cohen. I'm seventy eight years old. Believe it or not, I'm currently involved with a 28 year old girl, and also, on the side, her 19 year old sister. We engage in all manner of pleasure, and in my entire life I've never felt better." "My good man," says the priest, "I think you've come to the wrong place. Why are you telling me?" And the guy goes: "I'm telling everybody

10. "While money can't buy happiness, it certainly lets you choose your own form of misery." Groucho was a friend of the notoriously cheap Jack Beny who liked to tell this joke: "I was walking down the street, when a stick-up man pulls out a gun and says "Your money or your life!" An extremely long silence followed. "Your money or your life!" the thug repeated. Finally I said: "I'm thinking."

11. "I sent the club a wire stating, "PLEASE ACCEPT MY RESIGNATION. I DON'T WANT TO BELONG TO ANY CLUB THAT WILL ACCEPT PEOPLE LIKE ME AS A MEMBER." Groucho's biographer tells the story behind this quote this way: "Groucho wrote that line in a famous resignation letter to a club that he felt superior to. He was inducted into a club in Beverly Hills, and he arrived at this club thinking that he was going to talk with other illustrious figures about all the greats of literature. He wanted to be a writer and a serious literary man. Instead, he gets there and they're all drinking and playing cards, and as he puts it, they're on the phone with each others wives." The marx brothers did not start out in comedy:

One evening in 1912, a performance at the Opera House in Nacogdoches, Texas was interrupted by shouts from outside about a runaway mule. The audience hurried out to see what was happening. Groucho was angered by the interruption and, when the audience returned, he made snide comments at their expense, including "Nacogdoches is full of roaches" and "the jackass is the flower of Tex-ass." Instead of becoming angry, the audience laughed. The family then realized that it had potential as a comic troupe. The act slowly evolved from singing with comedy to comedy with music.

12. **"I find television very educational. Every time someone switches it on I go into another room and read a good book."** Groucho never graduated from grammar school. But he was very proud of being self-educated and being an author.

P.s., Three Groucho stories follow:

I was in a building called the Thalberg Building. It was a building that was built to honor Irving Thalberg, who was our producer at MGM, and a woman backed into the elevator. And this woman was wearing a hat. I had nothing to do and was bored, so I take the back of the hat, and I push it up, and I turn around and it's Greta Garbo. The biggest star in all of show business. I didn't know what to say. And finally I said "I'm terribly sorry, but I thought you were a fella I knew from Kansas City."

Chico was the gambler of the family. He pawned everything. My father was a tailor, and a very bad one, and Chico was always short of money, and he used to hock my father's shears, so whenever my father made a suit, of course it didn't fit, and the shears would be hanging up in the pawnshop on Ninety-first Street. Chico got a job at Klauber Horn and Co. They used to manufacture paper, different kinds of paper. And Chico never brought home a salary, 'cause

he was always in the poolroom, or he was some place, and he never brought a salary. And my father told him, "Next week, if you come home without your salary, I'll kill you." They had a very close relationship. Chico didn't know what to do. His father was laying for him – in a nice way, I mean. And Chico entered, apprehensively, and there was my father waiting for him. Chico said "Dad, I got a great surprise for you. They had a sale today, on paper, and I took the three dollars, that I was supposed to bring home, and I bought this paper." And my father opened it, and it was toilet paper. It was the first time we had ever seen toilet paper in our house. We had always used either the Morning World or the Herald Tribune.

I'm witty, I'm charming…I live in a beautiful home, filled with oil paintings — expensive ones. I have a lot of money. I own a piece of the good pictures. 'Room Service,' 'A Night at the Opera,' 'A Day at the Races,' 'Duck Soup'…they're playing more now than they did then. We're the biggest thing in the movie industry. And I live a good life. My idea of a good evening is to be at home, alone, listening to good political arguments on the television, reading…I put on my pajamas, fill a pipe with very good tobacco, and I soliloquize while the world slides by." Groucho rolled his Havana between his fingers. "I only want to live as long as I have my wits about me," he said. "When that goes, I quit. Chaplin said to me one day, I wish I could talk on the screen the way you do. I told him, 'What are you worrying about? You got fifty million.'"

In his 1967 book, "The Groucho Letters: Letters From and To Groucho Marx," there is a letter from Groucho to his brother Harpo about the best way to invest $100,000:

Dear Adolph,

Remember once, way back in '29, when I suggested a few stocks that would, in time, place you in the same class with Andrew Mellon, and Diamond Jim Brady? It was but a few months after this that you were wiped out.

Yesterday at luncheon, your brother, Dr. Gummo Marx, had just returned from the dentist's where he had a few of his teeth filed off and naturally was in a more apprehensive mood than he normally would be.

Not knowing how much money you are worth, and seeing no reason why I should, it is difficult for me to give you the benefit of my wisdom. I can only tell you that as far as I'm concerned, if I were to invest $100,000 in a project, it would have to be something like AT&T or Standard Oil of New Jersey.

Take this for what it's worth, but remember, someday when you come creeping to my front door asking for alms for the love of Adolph, don't say I didn't warn you.

I'm glad you are in almost perfect physical condition, and not tossing that 100 grand into the crumbing sands somewhere east of Indio will surely help to keep you that way.

Sincerely yours,

Jeffrey T. Spaulding*
(*Groucho's character in the film, "Animal Crackers.")

In “The Groucho Letters,” he wrote this letter from 1964 entitled, “To The President of Chrysler Corporation.” It reads in part:

Dear Mr. Colbert:

Each year, the motor manufacturers hammer home the idea of more horsepower. I realize a reasonable amount of power is necessary, but I think it would be much smarter if emphasis were placed on safety rather than additional speed. Perhaps the ads next year should read, “prettier, faster and safe.”

I also think that if a device could be installed on the carburetor (I understand there are such things) that would eliminate the belching of carbon monoxide through the city streets, the Chrysler Corporation could create an enormous amount of good will, particularly in big cities where the carbon monoxide problem is especially acute. …

Your new cars look good, but the fact of the matter is that all the new cars look good, and I firmly believe that the first automobile company that starts stressing safety instead of speed will win far more than its share of business.

Sincerely yours,

Groucho Marx

Another letter:

April 24, 1961

Dear Mr Goodman:

I received the first annual report of the Franklin Corporation and though I am not an expert at reading balance sheets, my financial advisor (who, I assure you, knows nothing) nodded his head in satisfaction.

You wrote that you hope I am not one of those borscht circuit stockholders who get a few points’ profit and hastily scram for the hills. For your information, I bought Alleghany Preferred eleven years ago and am just now disposing of it.

As a brand new member of your family, strategically you made a ghastly mistake in sending me individual pictures of the Board of Directors. Mr Roth, Chairman of the Board, merely looks sinister. You, the President, look like a hard worker with not too much on the ball. No one named Prosswimmer can possibly be a success. As for Samuel A. Goldblith, PhD., head of Food Technology at MIT, he looks as though he had eaten too much of the wrong kind of fodder.

At this point I would like to stop and ask you a question about Marion Harper Jr. To begin with, I immediately distrust any man who has the same name as his mother. But the thing that most disturbs me about Junior is that I don’t know what the hell he’s laughing at. Is it because he sucked me into this Corporation? This is not the kind of face that inspires confidence in a nervous and jittery stockholder.

George S. Sperti, I dismiss instantly. Any man who is the President of an outfit called Institutum Divi Thomae will certainly bear watching. Is he trying to impress stockholders with his knowledge of Latin? If so, why doesn't he read, "Winnie ille Pu"? James J. Sullivan, I am convinced, is Paul E. Prosswimmer photographed from a different angle.

Offhand, I would say that I have summed up your group fairly accurately. I hope, for my sake, that I am mistaken.

In closing, I warn you, go easy with my money. I am in an extremely precarious profession whose livelihood depends upon a fickle public.

Sincerely yours,

Groucho Marx
(temporarily at liberty)

Notes:

What Groucho Taught Me about Investing http://www.uncommonwisdomdaily.com/what-groucho-marx-taught-me-about-investing-18678

Groucho stories: http://m.imdb.com/name/nm0000050/trivia

Comedy And The Economic Crash Of 1929: NPR http://www.wbur.org/npr/114181633

NPR: http://www.npr.org/2016/01/23/464125023/the-comedy-of-existence-says-groucho-marx-went-after-everyone

Dick Cavett show: https://www.youtube.com/watch?v=VckmK-ZCpAU Sings "Lydia the Tattooed Lady".

Carson Roast YouTube: https://www.youtube.com/watch?v=5pY1XLfjLBI

Ebert interview: http://www.rogerebert.com/interviews/the-only-great-party-is-a-boy-and-a-girl-and-a-whole-cheesecake-an-interview-with-groucho-marx

Jokes: http://www.donsteinberg.com/jokes.htm

Marx Brothers https://en.wikipedia.org/wiki/Marx_Brothers

A Dozen Things I've Learned from Carl Icahn about Investing

February 6, 2016

I have only encountered Carl Icahn once in a business environment and even then it was indirectly. I have never met him. The indirect interaction took place in the aftermath of the crash of the Internet Bubble and control the company XO Communications was up for grabs (if you had cash, which was relatively rare at the time, you could try to gain control of companies in Chapter 11). The private equity firm in which I was a partner had to decide whether to try to gain control of XO or double down on Nextel. We chose Nextel and as a result avoided a battle with Icahn. We were glad not to cross swords with him, but the choice was based on Nextel being the better opportunity for us. Icahn is a very smart investor and has deep pockets.

Icahn is also a controversial public figure so this post on Icahn is an opportunity for me to comment on the nature of these blog posts. This blog series is about "what I've learned." The stated intent is to stay mostly positive. I believe you can learn something from almost anyone. That's why I have done posts on people like Groucho Marx, Rza and Bill Murray. I could probably even do a post on what to learn from Bernard Madoff as an anti-role model.

If you don't like positive blog posts, don't read this blog series. The price to read this blog is zero and there are no refunds. If you want hear some snark from me, then try following me on Twitter, where you will find plenty.

Now for the dozen quotes as usual, in this case from Carl Icahn:

1. "Some people get rich studying artificial intelligence. Me, I make my money studying natural stupidity. I sit on a lot of boards…I don't have to watch Saturday Night Live anymore, I just sit at the board meetings." The idea that people are not perfectly informed rational agents is obvious even to a very young child. The only people who do not understand this reality are a few economists above a certain age. As Richard Thaler points out: "Behavioral economics is really no longer controversial for economists under 40." Stocks composed of perfectly informed rational agents don't drop as much in a single day as LinkedIn or Tableau this week. Anyone who has worked at a real company knows that it is not composed of perfectly information rational managers. And yet somehow Murray Gell-Mann amnesia kicks in and people think other companies are perfectly rational.

2. "If the system wasn't so messed up, guys like me wouldn't make this kind of money." As Howard Marks likes to say, investing is the search for the mistakes of other people that may create a mispriced asset. In other words, one person's mistake about the value of an asset is what can create an opportunity for another investor to outperform the market. You must be contrarian about some bets and be right about some of those bets to outperform a market average (keeping in mind that it is magnitude and not frequency of success that matters).

3. "I look at companies as businesses, while Wall Street analysts look for quarterly earnings performance." This is very much a Ben Graham value investing approach. A share of stock is an actual proportional share of a real business and not just a piece of paper. If you think about the value of the business and not about the psychology of people who may want to buy that piece of paper, you are an investor rather than a speculator. To understand the stock you must understand the business. Understanding a business takes time and requires real work.

4. "I buy assets and potential productivity." Understanding how the pricing power of a business will change over time is critical to successful investing. If you do not understand

moats and wholesale transfer pricing power, you do not understand pricing power. Finding a business in which you can invest which has untapped pricing power is a wonderful thing.

5. "In life and business, there are two cardinal sins, the first is to act precipitously without thought, and the second is to not act at all." This quotation is straight up consistent with the approach of Charlie Munger. It may seem odd, but the ideal posture to have in life is to be patient and yet aggressive when the time is right. Opportunity doe snot come to people who always sit on their hands. Failure often comes to people who think their is a prize for hyperactivity.

6. "The cardinal rule is to have enough capital at the end of the day." "In takeovers, the metaphor is war. The secret is reserves. You must have reserves stretched way out ahead. You have to know that you could buy the company and not be stretched." As Harold Geneen said once: "The only unforgivable sin in business is to run out of cash." In the first Godfather movie the character Sonny at one point says: "Hey, listen, I want somebody good – and I mean very good – to plant that gun. I don't want my brother coming out of that toilet with just his [****] in his hands, alright? Clemenza: The gun will be there." The same principle from that scene applies to cash, including in a takeover fight over assets. Cash is always king, but periodically people tend to forget that fact. Cash is about to become more king than it has been.

7. "I made an awful lot of money not having plans. Ask a running back 'what was your plan when you saw three guys coming at you?' He doesn't say, 'well Jesus I had a plan.' These things have a life of their own." Icahn is talking about optionality. In a previous post on Sheryl Sandberg I wrote: "Positive optionality is very valuable. If you are not open to opportunity as it arises, you can't harvest optionality. My friend Craig McCaw likes to say 'flexibility is heaven.' If he can delay a decision somehow, he will do it because he knows a better option might arise in the meantime. Sheryl Sandberg is a protégé of Larry Summers who is close to Robert Rubin. So to understand Sheryl it is useful to understand Rubin. In a New York Times article Summers describes Rubin's approach: 'Rubin ends half the meetings with – 'So we don't have to make a decision on this today, do we?' Summers says. New information will evolve.'"

8. "The consensus thinking is generally wrong. If you go with a trend, the momentum always falls apart on you. So I buy companies that are not glamorous and usually out of favor. It is even better if the whole industry is out of favor." This quotation again reflects a Ben Graham approach. Be greedy when others are fearful and fearful when others are greedy. Contrarian investing can be a very profitable way to act. Of course, you must still be right when contrarian or otherwise. Being contrarian and wrong is unhelpful.

9. "I will tell you, at the risk of being immodest, that we have one of the best records around over the last decade, over the last year. I will tell you this: I've learned one thing: Don't micromanage. Don't go in and tell somebody else how to run their business. I look at it from the big picture: We go into companies and we tell them how to run their finances, we tell them how to buy pencils instead of buying from their cousin Vinnie, for example. But we don't tell them what to do in this situation." The situation Icahn was talking about in this quote was his stake in Apple. Telling executives at Apple how to run their business is dumb. As I stated above, this blog series is intentionally positive. If you disagree with what Icahn said above or believe he is not walking the talk, take it up with him, not me.

10. "Ideas comes to you… not necessarily working and sitting at a desk." The best ideas come from other people since the smartest people do not always work for you or with you. In addition, creativity needs the sparks you get from everyday life to find their way to your consciousness. Being away from your desk gives you optionality. As Nassim Taleb likes to say: "Living in a city, going to parties, taking classes, acquiring entrepreneurial skills, having cash in your bank account, avoiding debt are all examples of activities which increase optionality."

11. "I enjoy the hunt much more than the 'good life' after the victory." Business is the greatest game of all. Icahn enjoys that game a lot. As Charlie Munger has said: "There's nothing as insignificant as an extra $2 billion to an old man." For someone in Icahn's shoes, its not about the money.

12. "In the takeover business, if you want a friend, you buy a dog."

A Dozen Things you can Learn from the Anti-Models that are Bernard Madoff and his Victims

February 13, 2016

You can learn a lot in life from anti-models since they teach you the sort of person you do not want to be and things you do not want to do. This applies both to Madoff and his victims. As Charlie Munger likes to say, it is often wise to: "Invert!" It would be fantastic if people like Madoff and his victims did not exist but as long as they do, you can learn from them who you don't want to be and what not to do. Charlie Munger says: "Figure out what you don't want and avoid it and you'll get what you do want."

I decided the write this post since I read a few reviews of the recent Madoff mini-series on ABC that is said to portray him as less than the narcissistic psychopath that he is. I refuse to watch it. But let's be clear: everyone isn't "doing what he did." He isn't "just another dirty little fish in a dirty pond." Everyone in finance does not have fraud as a business model. As we walk though his public statements and accounts of his behavior we see a consistent pattern: he is an asshole.

ABC News reports; "Based on the $17.5 billion that investors originally put into Madoff's hands, victims would recover about 63 cents on the dollar for every approved claim of their principle investment." The final account statements of the investigators revealed about $47 billion in fake profit and of course none of that will be recovered. Through December 4 of last year, the trustee for the Madoff Victim Fund had reviewed 51,071 claims.

Now for the usual dozen quotes and some analysis:

1. "It's a proprietary strategy. I can't go into it in great detail." (May 2001) The lesson is to not let psychological bias like authority or scarcity make you not rational. Madoff worked the flaws that people like Professor Robert Cialdini write about like a master manipulator. For example, when asked to reveal what he was doing to generate his returns Madoff would say that he would give people their money back if they wanted, but he would not reveal what he did. People loved the steady financial returns and mostly did not take their money out despite getting zero information about what Madoff was doing with their money. One big question when it comes to some Madoff investors is whether they believed his returns came from front running and whether they were they were turning a blind eye to that. As Jason Zweig points out the steady financial returns were a red flag: "Bernard L. Madoff Investment Securities LLC reported gains of roughly 1% a month like clockwork, with nary a loss, for two decades. Why did that freakishly smooth return not set off alarms among current and prospective investors?" My theory is that Madoff investors wanted the smooth financial returns so badly the psychological denial kicked in. "It was like a religion," Swiss banker Werner Wolfer, said of the promise of steady returns, which would be echoed by other acolytes. "These people firmly believed in the story."

2. "Today, basically, on Wall Street, the big money is made by taking risks." As Howard Marks points out: "If risky investments could be counted on for higher returns, then they wouldn't be risky. And if investments weren't risky, then they probably wouldn't appear to promise higher returns." Buying a bargain is the best way to outperform a market. A great venture capitalist, for example, buys optionality at a bargain. They do not dial up risk. Risk comes from not knowing what you are doing. Investing in a fund without a third party trustee holding the assets is not just risky, it is stupid.

3. "In today's regulatory environment, it's virtually impossible to violate rules … but it's impossible for a violation to go undetected, certainly not for a considerable period of time." (2007) Ironically, the longer Madoff's scam went on, the harder it was to catch him since people assumed that he would have been caught long before if he was cheating. He had lots of industry connections and positions. The more trustworthy he seemed, the more trustworthy he seemed [repeat]. At a point, when a person has built a reputation many people start to assume that other people have done the due diligence. The lesson is: do your own thinking and due diligence.

4. "A guy who comes on like he's Columbo," but who was "an idiot," Madoff said, as recorded in the extraordinary exhibit 104, a twelve-page account of the interview that is part of Kotz's report. Madoff is no ironist. His disdain for the SEC is professional, even if the agency's incompetence saved his skin for years—all Columbo had to do was make one phone call. "[It's] accounting 101," (2010) The SEC's own extensive report http://www.sec.gov/news/studies/2009/oig-509.pdf admits that they should have caught him earlier. There were plenty of red flags. Others were convinced that he was only front running and at worst would get his hand slapped. "They were convinced that the risk was only that the Securities and Exchange Commission would do something about breaches of the Chinese wall in the Madoff organization," the banker Wolfer said. In the worst case, he said, "what could be expected was that at a certain point the SEC could say stop." ABC news reported that: "The SEC said in the last six years it has brought more than 600 enforcement

actions involving Ponzi schemes and other frauds against more than 2,000 individuals and companies." The lesson again is: do your own due diligence.

An investigation by the SEC Inspector General found "that despite three examinations and two investigations being conducted, a thorough and competent investigation or examination was never performed." Madoff's spin was never challenged by the SEC investigators, the Inspector General found. "When Madoff provided evasive or contradictory answers to important questions in testimony, they simply accepted as plausible his explanations," the Inspector General wrote. And most damning, was the failure of the SEC staff to make a single phone call to confirm that the shares of stock Madoff claimed he had bought actually existed.

5. "They call me either Uncle Bernie or Mr. Madoff. I can't walk anywhere without someone shouting their greetings and encouragement, to keep my spirit up. It's really quite sweet, how concerned everyone is about my well-being, including the staff … It's much safer here than walking the streets of New York." In prison Madoff has some fellowship from some other assholes. Someone said about him before going to prison: "Bernie is not what you would call Mr. Nice Guy, not someone you would want to have a beer with. He was imperial, above it all. If he didn't like the conversation, he would just get up and walk away. It was: 'I'm Bernie Madoff and you're not.'"

6. "Well, that's what I did." Said to another prisoner who said that stealing from old ladies was "kind of f–ked up." "Bernie was telling a story about an old lady. She was bugging him for her money, so he said to her, 'Here's your money,' and gave her a check. When she saw the amount she says, 'That's unbelievable,' and she says, 'Take it back.' And urged her friends [to invest]." (June 2010) Saying to a mark at first: I won't take you money was a classic Madoff approach. Jason Zweig descried how authority and scarcity were used to rope clients into the fraud:

"The initial marketing often was in the hands of what one source described as "a macher" (the Yiddish term for a big shot). At the country club or another exclusive rendezvous, the macher would brag, "I've got my money invested with Madoff and he's doing really well." When his listener expressed interest, the macher would reply, "You can't get in unless you're invited…but I can probably get you in."

7. "Everyone was greedy. I just went along." (2011) "People just kept throwing money at me," Madoff related to a prison consultant who advised him on how to endure prison life. "Some guy wanted to invest, and if I said no, the guy said, 'What, I'm not good enough?' " One day, Shannon Hay, a drug dealer who lived in the same unit in Butner as Madoff, asked about his crimes. "He told me his side. He took money off of people who were rich and greedy and wanted more," says Hay, who was released in December. People, in other words, who deserved it."

8. "I certainly wouldn't invest in the stock market. I never believed in it. Most people lose money because of the emotional difficulty involved." Certainly most mistakes in investing are psychological, but to not be in the stock market with some of your assets in the long

term is foolish. But you must think long term and be able to stay "steady as she goes" during inevitable and unpredictable draw downs.

9. "F–k my victims. I carried them for twenty years, and now I'm doing 150 years." Madoff probably believes this still since he is a fully baked narcissist. Some people are born without empathy. Fortunately, most of these people are just assholes and doing thing like being lousy parents instead of being outright criminals.

10. "It was a nightmare for me. I wish they caught me six years ago, eight years ago." This is bullshit like most everything Madoff ever said. His behavior in the weeks before his arrest did no exhibit relief: "He seem[ed] to be in a coma." He was sitting in his office, "staring off into space. He began taking his blood-pressure every 15 minutes, refused to look at his mail, and was constantly meeting with the heads of his feeder funds and Frank DiPascali, 'the go-to guy for the investment-advisory business.'" "Diana Henriques, Madoff was a 'fluent liar. The magic of his personality is how easy it is to believe him — almost how much you want to believe him,' she tells Fresh Air's Terry Gross. 'For example, he assured me in that first interview — and in emails subsequently that we exchanged — that he wasn't going to talk to other writers. … Of course, it wasn't true, he was talking to others. It was all a lie." "Money was flowing out, in part, because he had left himself so vulnerable by accepting very liquid accounts. Other hedge fund managers around the world were being faced with demands from their investors who wanted their money back. Some of their money was locked up in [not] liquid investments or stocks that had suddenly taken a nosedive, but if you had money with Madoff, you thought, 'That's pretty liquid money. That's almost like my money market fund.' So that was the first money [people and hedge funds investing in many places] started to tap to repay their investors, and it became this deadly game of dominos falling, where they would take money out to pay their investors and that would require their feeder fund to take money out of Madoff — and Madoff kept paying those redemptions, but he could see far more money was flowing out than was flowing in. He told me that by about Thanksgiving of 2008, he was pretty sure he just wasn't going to keep this going."

11. "They told me that watch was worth $200,000." Said to other prisoners after seeing the watch sold at auction for $900. Being an expert is domain specific and so is working a scam. Circle of competence! One could argue that this is a form of Murray Gell-Mann amnesia.

12. "It's H2O." When asked where he had hidden his fortune making a gesture of water slipping through his hand. This jerk spent a lot of money – in the end he ran short of cash. He has lived a wasted life. Pathetic is as pathetic does.

Notes:

Jason Zweig: http://www.wsj.com/articles/SB122912266389002855

Madoff's Weapons of Influence http://www.rationalwalk.com/?p=119

The Bernard Madoff Case: Trust Takes Another Blow
http://knowledge.wharton.upenn.edu/article/the-bernard-madoff-case-trust-takes-another-blow/

Madoff Enablers Winked at Suspected Front-Running http://goodharv.com/blog/?p=146

Examining Bernie Madoff, "The Wizard Of Lies"
http://www.npr.org/2011/04/26/135706926/examining-bernie-madoff-the-wizard-of-lies

Bernie Madoff, Free at Last http://nymag.com/news/crimelaw/66468/

ABC: http://abcnews.go.com/US/bernie-madoff-sleuth-harry-markopolos-warns-ponzi-scams/story?id=36578436

A Dozen Famous Lines about Investing from the Movies

February 20, 2016

I am working on a new "mental models" series for the blog. The writing is taking a bit longer than I thought, so in the interim here is something light. I have paired each movie quote with an appropriate Charlie Munger quote.

1. **"Buy low, sell high. Fear? That's the other guy's problem." Louis Winthorpe III. Trading Places.**

Charlie Munger: "Look for more value in terms of discounted future cash flow than you're paying for. Move only when you have an advantage. It's very basic. You have to understand the odds and have the discipline to bet only when the odds are in your favor."

2. **"Don't you see what's happening? Potter isn't selling. Potter's buying! And why? Because we're panicking and he's not. That's why. He's picking up some bargains." George Bailey. It's a Wonderful Life.**

Charlie Munger: "For a security to be mispriced, someone else must be a damn fool. It may be bad for the world, but not bad for Berkshire."

3. **"OK, first rule of Wall Street – Nobody – and I don't care if you're Warren Buffett or Jimmy Buffett – nobody knows if a stock is going up, down or sideways, least of all stockbrokers. But we have to pretend we know." Mark Hanna. The Wolf Of Wall Street.**

Charlie Munger: "People have always had this craving to have someone tell them the future. Long ago, kings would hire people to read sheep guts. There's always been a market for

people who pretend to know the future. Listening to today's forecasters is just as crazy as when the king hired the guy to look at the sheep guts. It happens over and over and over."

4. **"For twenty dollars I can tell you a lot of things. For thirty dollars I can tell you more. And for fifty dollars I can tell you everything." Madame Ruby. Pee-Wee's Big Adventure.**

Charlie Munger: "I know one guy, he's extremely smart and a very capable investor. I asked him, 'What returns do you tell your institutional clients you will earn for them?' He said, '20%.' I couldn't believe it, because he knows that's impossible. But he said, 'Charlie, if I gave them a lower number, they wouldn't give me any money to invest!' The investment-management business is insane."

5. **"There's not a lot of money in revenge." Inigo Montoya. The Princess Bride.**

Charlie Munger: "There's an old saying, 'What good is envy? It's the one sin you can't have any fun at.' It's 100% destructive. Resentment is crazy. Revenge is crazy. Envy is crazy. If you get those things out of your life early, life works a lot better."

6. **"A fool and his money are lucky enough to get together in the first place." Gordon Gekko. Wall Street.**

Charlie Munger: ""Well, some of our success we predicted and some of it was fortuitous. Like most human beings, we took a bow."

7. **"Danny Moses: "How can the banks let this happen?" Jared Vennett: "It's fueled by stupidity. Mark Baum: But that's not stupidity. That's fraud." Jared Vennett: "Tell me the difference between stupid and illegal and I'll have my wife's brother arrested." The Big Short.**

Charlie Munger: "It is remarkable how much long-term advantage people like [Warren Buffett and myself] have gotten by trying to be consistently not stupid, instead of trying to be very intelligent."

8. **"And there is no such thing as a no-sale call. A sale is made on every call you make. Either you sell the client some stock, or he sells you on a reason he can't. Either way, a sale is made. The only question is, Who's gonna close? You or him?" Jim Young. Boiler Room.**

Charlie Munger: "If you take sales presentations and brokers of commercial real estate and businesses — I'm 70 years old, I've never seen one I thought was even within hailing distance of objective truth. 'Incentive-caused bias' causes this terrible abuse. And many of the people who are doing it you would be glad to have married into your family compared to what you're otherwise going to get."

9. **"That's all the market is, one giant casino." Nick Leeson. Rogue Trader.**

Charlie Munger: "The model I like to sort of simplify the notion of what goes on in a market for common stocks is the pari-mutuel system at the racetrack. If you stop to think about it, a pari-mutuel system is a market. Everybody goes there and bets and the odds change based on what's bet. That's what happens in the stock market."

10. **Navin R. Johnson: "'I've already given away eight pencils, two hoola dolls, and an ashtray, and I've only taken in fifteen dollars.' Frosty: "Navin, you have taken in fifteen dollars and given away fifty cents worth of crap, which gives us a net profit of fourteen dollars and fifty cents. Navin R. Johnson: "Ah… It's a profit deal. That takes the pressure off." The Jerk.**

Charlie Munger: "We're trying to buy businesses with sustainable competitive advantages at a low – or even a fair price. The reason the professors teach nonsense is that if they didn't, what would they teach the rest of the semester? Teaching people formulas that don't really work in real life is a disaster for the world."

11. **Doyle Lonnegan: "Your boss is quite a card player, Mr. Kelly; how does he do it?" Johnny Hooker: "He cheats." The Sting.**

Charlie Munger: "People need to ask, 'How do I play the hand that has been dealt me?' The world is not going to give you extra return just because you want it. You have to be very shrewd and hard working to get a little extra. It's so much easier to reduce your wants. There are a lot of smart people and a lot of them cheat, so it's not easy to win."

12. **"Each man's life touches so many other lives. When he isn't around he leaves an awful hole, doesn't he?" Clarence the Angel. It's a Wonderful Life.**

Charlie Munger: "That I've profited from being shrewd with money is not by itself satisfying to me. To atone, I teach and try to set an example. I would hate it if the example of my life caused people to pursue the passive ownership of pieces of paper. I think lives so spent are disastrous lives. I think it's a better career if you help build something. I wish I'd built more, but I was cursed at being so good at stock picking. 'The man is the prisoner of his talents.'

You can laugh, but I'll bet this room is full of people who are prisoners of their talents. It tends to be the human condition."

A Dozen Things I've Learned from Richard Thaler about Investing

February 26, 2016

Richard Thaler is not only a famous economist and author, but is also part of a very successful fund said Bloomberg in an article published just today:

The 70-year-old University of Chicago professor, whose stock-picking theories drive the Undiscovered Managers Behavioral Value Fund, is getting discovered in more ways than one. The small-cap mutual fund, which beat 99 percent of its Bloomberg peers over the past three and five years, has almost doubled in size to $3.7 billion during the past 12 months as investor deposits surged. **"What we try to do is put academic research to use,"** Thaler said in an interview this month in Los Angeles. "**We're interested in the dogs that are going to look better…."We're an active manager, so we think we can beat the market by a little most of the time,"** he said. **"Our methods are kind of a hybrid. We don't fit neatly into a single quant versus judgmental box. We use judgment based on academic-style rigorous testing."**

1. "Behavioral economics [is] a field that only exists because regular economics is based on an idealized economic agent, sometimes called Homo Economicus. In the book we refer to such creatures as Econs. Econs are creatures that can calculate like a super computer, never get tempted by fatty or sweet foods, never get distracted, and probably aren't a whole lot of fun to be around. In contrast, real people, who in the book we call humans, don't make any appearance in standard economics. Behavioral economics is economics about humans. Humans are busy, can't solve every problem instantaneously, and get tempted by luscious desserts. Sometimes they need some help." Some economists believe that introducing ideas from psychology into economics is an admission that ideas from economics might be less valuable. In actual fact introducing a greater degree of realism into the profession causes the credibility of economics to rise rather than fall, especially among people who are not economists. In other words, people like Thaler who work to bring psychology into economics increase the credibility of the profession and as a side effect make jokes about economists "assuming a can opener" less funny. It would certainly make life easier if humans and an economy were as predictable as the systems in a physics experiment. But even a small child knows that assumptions such as one that assumes humans are perfectly informed rational agents do not tie in any reasonable way to reality. The joke that economists have predicted nine of the past five recession is humorous for a reason since the core of humor is truth. The more the economics profession becomes reality-based by adopting the ideas of people like Thaler, the better it will be perceived.

2. "Models of Econs may provide a good approximations of what happens in the real world…. but those situations are the exception rather than the rule." I like this phrasing in a recent blog post by Allison Schrager: "Economics offers a series of parables to help us understand how the economy works. The parables are abstractions that make many simplifying assumptions because the world is too complicated to capture in a simple model." The value of economics that Schrager talks about is a very good thing for society. Charlie Munger has written an essay on the strengths and weakness of economics, that includes this text about strengths:

"Economics was always more multidisciplinary than the rest of soft science. It just reached out and grabbed things as it needed to. And that tendency to just grab whatever you need from the rest of knowledge if you're an economist reached a fairly high point in Mankiw's textbook (Principles of Economics). I checked out that textbook. I must have been one of the few businessmen in America that bought it immediately when it came out because it had gotten such a big advance. And there I found laid out as principles of economics: opportunity cost is a superpower, to be used by all people who have any hope of getting the right answer. Also, incentives are superpowers. And lastly, the tragedy of the commons model, popularized by UCSB's Garrett Hardin."

The ideas from economics like Munger mentions above are essential mental models that must be part of any investor's worldly wisdom. Others include comparative advantage, competitive advantage and creating destruction just to mention three that starts with the letter "c". That economics reaches out and grabs ideas from other disciplines is a good is a very good thing argues Munger, but assuming that an economy can be modeled using the same assumptions and formulas that would be applied to physical systems is, in Munger's view, folly. What Thaler calls "a good approximation" should not only be the goal, but a critical idea to apply so as to avoid mistakes caused by hubris. It is far better to be approximately right than precisely wrong.

3. "The combination of free entry, unfettered competition, and free choice seems hard to quarrel with.… However, if participants are not well-informed or highly motivated, then maximizing choice may not lead to the best possible outcome." "If people starting new businesses on average believe that their chance of succeeding is 75% then that should be a good estimate of the actual number that do succeed. Econs are not overconfident." "Economists assume people are unboundedly unscrupulous—or I'll say self-interested, a more polite term. But there have been lots of experiments where you leave a wallet out and depending on the place—I don't remember the exact data—but a large percentage get returned." "There's no reason to think that markets always drive people to what's good for them." "Most economists recognize that some of the people are not fully rational some of the time, and some of the time that matters." Charlie Munger again says it better than I can:

"How could economics not be behavioral? If it isn't behavioral, what the hell is it? And I think it's fairly clear that all reality has to respect all other reality. If you come to inconsistencies, they have to be resolved, and so if there's anything valid in psychology, economics has to recognize it, and vice versa. So I think the people that are working on this fringe between economics and psychology are absolutely right to be there…"

4. "Most of economic theory is not derived from empirical observation. Instead it is deduced from axioms of rational choice, whether or not those axioms bear any relation

to what we observe in our lives every day. A theory of the behavior of Econs cannot be empirically based, because Econs do not exist." Empirical data can be based on the idea that humans are, well, human. The contributions of people like Kahneman and Thaler on this point are enormous. Economics becoming more empirical is only helpful if it is reality-based. I recommend Thaler's books on this point and other sources which I link to in the notes.

5. "You can [beat the market] but it is difficult." Warren Buffett once said: "I'd be a bum on the street with a tin cup if the markets were always efficient." His partner Charlie Munger adds: "There's no way to make investing easy. Anyone who finds it easy, you're living in an illusion." "I think it is roughly right that the market is efficient, which makes it very hard to beat merely by being an intelligent investor. But I don't think it's totally efficient at all. And the difference between being totally efficient and somewhat efficient leaves an enormous opportunity for people like us to get these unusual records. It's efficient enough, so it's hard to have a great investment record. But it's by no means impossible. Nor is it something that only a very few people can do. The top three or four percent of the investment management world will do fine."

6. "In some ways the, the venerable Ben Graham has been given a Fama-French seal of approval, since they also endorse value and profitability." Fama-French endorses value as a statistical factor which is sort of an endorsement of value as an analytical style (Ben Graham). But the two approaches are very different. A portfolio composed of hundreds of stocks in the form of an index is very different from a portfolio selected on a bottoms up fundamental basis that may only have 10 stocks in it. I have written about this point on my blog before and I link to it in the notes below. Thaler is correct in making the statement the quotation but one must be careful to not conflate value as a statistical factor and value as an analytical style.

7. "Rational models are one hundred percent flexible. If you allow time-varying discount rates, there is no discipline whatsoever. If you look at what happened to tech stocks and then to real estate, and you say maybe there wasn't a bubble—where is the discipline in that?" Those of us who lived through the Internet crash in 2001 know that bubbles exist. One particular example of silliness is often cited, in this case by Burton Malkiel: "in one celebrated case during the Internet bubble, the market price of Palm Pilot stock (which was 95 percent owned by the company 3Com) implied a total capitalization considerably greater than that of its parent, suggesting that the rest of 3Com's business had a negative value. But the arbitrage (sell Palm stock short and buy 3Com stock) could not be achieved because it was impossible to borrow Palm Pilot stock to accomplish the short sale." The Internet bubble was a time when people went bonkers due to fear of missing out. People like Thaler who explain and remind us why people are often not rational are helpful to civilization.

8. Diversification Bias: "When an employee is offered n funds to choose from in her retirement plan, she divides the money evenly among the funds offered. Use of this heuristic, or others only slightly more sophisticated, implies that the asset allocation an investor chooses will depend strongly on the array of funds offered in the retirement plan. Thus, in a plan that offered one stock fund and one bond fund, the average allocation would be 50% stocks, but if another stock fund were added, the allocation to stocks would jump to two thirds." This quotation and its implications raises the question of whether ordinary people should be making their own investment decisions. Can nudges be enough? I tend to think not. Soft paternalism isn't enough in my view since the negative

spillovers for society are simply too big to let people do so poorly investing their retirement money since they end up living in poverty as elderly adults. I understand that some people believe my view is too paternalistic. But a year does not pass that I don't get more convinced that most people are incapable of investing wisely when left to their own devices. I agree with Charlie Munger that efforts some time ago to privatize social security were a deeply flawed idea. I link below in the notes to a recent *New York Times* article entitled "Nudges Aren't Enough for Problems like Retirement Savings." The article notes: "Automatic enrollment in retirement accounts counts as the most successful nudge yet tested on a large scale [But] only 40 percent of American families in the bottom half of the income distribution have any form of retirement savings plan. And even among those who have one, their savings total, on average, is just $40,000." Nudges are great but sometimes are not enough.

9. Loss Aversion: "When they have to give something up, they are hurt more than they are pleased if they acquire the very same thing." You can see loss aversion in human behavior in many settings if you know where and how to look for it. It is almost always combined with other biases so loss aversion (also called Prospect theory) varies in the way it presents itself. New findings and support for the existence and impact of loss aversion bias are still appearing in the literature. For example,

"according to a new study, occur when people are so desperate to avoid them that they blunder into them. It's like a child worried about missing a fly ball or dropping a pass, or a newlywed husband fearful he will drop his new bride as he carries her across the threshold; once it's in the mind — and the person starts to adjust thinking drastically to avoid it — that's when the trouble starts. The new research from Dr. Rui Yao, an associate professor of personal finance at the University of Missouri, identified risk factors for people who are "more likely to make investment mistakes during a down market," and found that aversion to losses was the key character trait."

10. The House Money Effect: "The money that has recently been won is called 'house money' because in gambling parlance the casino is referred to as the house. Betting some of the money that you have just won is referred to as 'gambling with the house's money,' as if it were, somehow, different from some other kind of money. Experimental evidence reveals that people are more willing to gamble with money that they consider house money." Prior gain can increase a person's willingness to accept bets involving greater risk and uncertainty. In other words, the potential for gains or losses is considered by humans relative to a reference point, rather than calculated on the basis of the absolute level of wealth. Thaler and Johnson have called this phenomenon: "prospect theory, with memory."

11. Status Quo Bias: "Hundreds of studies confirm that human forecasts are flawed and biased. Human decision making is not so great either. Again to take just one example, consider what is called the 'status quo bias,' a fancy name for inertia. For a host of reasons, which we shall explore, people have a strong tendency to go along with the status quo or default option." Sales and marketing departments love status quo bias. For example, magazines often offer free trials or issues at a reduced price if the customer agrees that the business can continue to send them issues until they actively end the subscription. When making decisions people tend to follow the adage: "when in doubt, do nothing." For this reason, getting a customer's credit card information is a holy grail for marketers, who hate it when credit cards expire. Customers know this to some degree, which means they are reticent to hand out their credit card data even for a free trial. The incentives must be significant to obtain customer credit card data as a result.

12. Optimism Bias: "The 'above average' effect is pervasive. Ninety percent of all drivers think they are above average behind the wheel." "People are unrealistically optimistic even when the stakes are high." "I think the people who've been the most overconfident in our business in the last decade have been the people that called themselves risk managers. And the reason is they failed to learned the primary lesson we should have learned from when Long Term Capital Management went belly up ten years ago. That is, investments that seem uncorrelated can be correlated simply because we're interested in it. …the world is much more correlated than we give credit to. And so we see more of what Nassim Taleb calls 'black swan events'– rare events happen more often than they should because the world is more correlated. I think one lesson we have to learn is that there's a lot more risk than we're giving credit to, a lot more what economist calls systematic risk. I think we also have learned the lesson that we have to have better incentive structures." I have met Thaler and find him not only to be a delightful and insightful, person but also an to be an optimist. Optimism is good quality to have as long as it does not become a dysfunctional bias. When people talk about optimism bias it always reminds me of a story:

A family had twin boys, whose only resemblance to each other was their looks. If one felt the temperature was too hot, the other thought it was too cold. If one said the television was too loud, the other claimed the volume needed to be turned up. Opposite in every way, one boy was an eternal optimist, the other boy a total pessimist. On the twins' birthday their psychologist father loaded the pessimist's room with every imaginable toy and game. The optimist's room was loaded with a huge pile of horse manure. That night the father passed by the pessimist's room and found him sitting next to his many gifts crying bitterly.

"Why are you crying?" the father asked.

"Because my friends will be envious, I'll have to read all these instructions before I can do anything with these toys and games, I will constantly need new batteries, and they will eventually get broken." answered the pessimist twin.

Passing the optimist twin's room, the father found him dancing for joy in the middle of the pile of manure. "What are you so happy about?" he asked.

The optimist twin boy replied, "There just must be a pony in here somewhere!"

Notes:

My post on Fama-French: https://25iq.com/2014/03/16/ben-grahams-value-investing-%e2%89%a0-famafrenchs-factor-investing/

My post on Kahneman https://25iq.com/2013/07/18/a-dozen-things-ive-learned-about-investing-from-daniel-kahneman/

Nudges Aren't Enough for Problems like Retirement Savings. http://www.nytimes.com/2016/02/24/business/economy/nudges-arent-enough-to-solve-societys-problems.html?_r=0

Thaler article in Bloomberg: http://www.bloomberg.com/news/articles/2016-02-26/-big-short-professor-s-fund-swells-as-theory-works-in-reality

Charlie Munger on economics: https://www.farnamstreetblog.com/2015/03/charlie-munger-academic-economics/

Allison Schrager: http://qz.com/611394/economics-education-is-awesome/

Burton Malkiel https://www.princeton.edu/ceps/workingpapers/200malkiel.pdf

Dr. Rui Yao research: http://www.seattletimes.com/business/for-investors-fear-of-loss-can-be-costly/

Interview with John Cassidy http://www.newyorker.com/news/john-cassidy/interview-with-richard-thaler

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Misbehaving: The Making of Behavioral Economics (2015) http://www.amazon.com/Misbehaving-Behavioral-Economics-Richard-Thaler-ebook/dp/B00NUB4GFQ/ref=sr_1_4?s=books&ie=UTF8&qid=1425185963&sr=1-4&keywords=thaler

Nudge: Improving Decisions About Health, Wealth, and Happiness http://www.amazon.com/Nudge-Improving-Decisions-Health-Happiness/dp/014311526X/ref=sr_1_1?s=books&ie=UTF8&qid=1425185963&sr=1-1&keywords=thaler

The Winner's Curse http://www.amazon.com/Winners-Curse-Paradoxes-Anomalies-Economic/dp/0691019347/ref=sr_1_2?s=books&ie=UTF8&qid=1425185963&sr=1-2&keywords=Thaler

A Dozen Things I've Learned from South Park About Investing

March 5, 2016

1. "Phase 1: Collect underpants. Phase 2: ? Phase 3: Profit." Eric Cartman. Underpants Gnomes. http://southpark.wikia.com/wiki/Gnomes/Script

The business model problem flagged in the Underpants Gnomes episode of South Park is real since creating a significantly profitable business model is hard. Not only is it hard, it is rare. Many important companies have done it exactly once. And companies that have created a successful business model are often not able to hold on to that profit for very long. The competitive pressure that markets put on any source of profit are formidable. Significant amounts of failure are an inevitable part of capitalism. But so is some level of success.

An important part of human nature is a tendency to turn away from hard problems and focus instead on something easy. Charlie Munger once described psychological denial in this way:"If you turn on the television you find the mothers of the most obvious criminals that man could ever diagnose and they all think their sons are innocent. The reality is too painful to bear so you just distort it until it's bearable. We all do it to some extent. It's a common psychological misjudgment that causes terrible problems." Unfortunately, humans will often falsely believe that they have solved "?" for their business model due to psychological denial. The best entrepreneurs don't fall prey to this and instead are laser focused on finding real solutions.

2. "Start up. Cash in. Sell out. Bro down." Eric Cartman. Go Fund Yourself. http://southpark.wikia.com/wiki/Go_Fund_Yourself/Script

Many people want to start a business for the wrong reasons. Venture capitalists who have been profiled in this series talk about wanting missionaries as company founders rather than mercenaries. They feel this way in no small part since a founder who is a missionary can be counted on to stay focused on the tasks that will drive the company forward. The mercenary will be less likely to persevere in the face of inevitable adversity. Mercenaries will sometimes find success, but not nearly as often.

3. Bank Clerk: How can I help you, young man?

Stan Marsh: I got a hundred-dollar check from my grandma and my dad said I need to put it in the bank so it can grow over the years.

Bank Clerk: Well that's fantastic. A really smart decision, young man. We can put that check in a money market mutual fund, then we'll re-invest the earnings into foreign currency accounts with compounding interest aaaand it's gone.

[Blank stares and silence as it goes from the Bank Clerk, to Stan, to the Bank Clerk, to Stan]

Stan Marsh: Uh… what?

Bank Clerk: It's gone, it's all gone.

Stan Marsh: What's all gone?

Bank Clerk: The money in your account. It didn't do too well, it's gone.

Stan Marsh: What do you mean? I-I have a hundred dollars!

Bank Clerk: Not any more, you don't. [Gestures]Bank Clerk: Poof!

MargaritaVille. http://southpark.wikia.com/wiki/Margaritaville/Script

When my children were born they were given some money by their grandparents. Their grandparents are very conservative and wanted that money put into a special children's savings account (Dinosaver!) which paid interest (a quaint concept these days). My kids did not add or withdraw funds from that account since they were infants. Eventually the bank, without warning, transferred everything in the account to the state assuming that the money had been abandoned since the account was legally deemed to be inactive. This process, which is the law in some states, is called escheat. The bank eventually got the money back. But that story reminds me of the South Park script. More commonly the bank or investment firm just gives the customer bad advice and charges big fees that deplete the account. A rule of thumb is that the bigger the sales commission you are paying the worse the deal is for you since it is hard to sell a bad investment so a big sales commission is needed. The best approach to avoid this "aaand its gone" situation is to think for yourself. And do a lot of work. And have the right temperament. If you don't want to do that or can't do that, then buy a low cost diverse

portfolio of index funds. When "dumb money" adopts this approach it is transformed into "smart money."

4. "We thought we could make money on the Internet." Kyle Broflovskin. Canada On Strike http://southpark.wikia.com/wiki/Canada_on_Strike/Script

The Internet is a wonderful means of distribution and it enables new business models. But the fundamental elements of a business remain the same even when the business is on-line. You must acquire a customer cost effectively, you must service that customer at a reasonable cost, the customer must stay a customer long enough and there must be enough revenue to make the whole thing work . All of this must be done in a way that does not result in the business running out of cash at any given point in time. If you are successful, others will try to copy you. More people copying you will result in lower prices. None of this is supposed to be easy. That's capitalism. Otherwise everyone would be rich.

5. "Make the game about waiting. But let the player pay not to wait. It's a surefire way to make lots of money." Minister of Mobile Gaming. Freemium Isn't Free. http://southpark.wikia.com/wiki/Freemium_Isn't_Free/Script

Freemium is a natural business model in many businesses when the offering is digital and has zero or low marginal cost. By spending a relatively limited amount of money on the free items, customer acquisition cost (CAC) can drop dramatically. Because software has a marginal cost of almost zero (it costs almost no additional money to create more copies), there is a natural tendency for the price of software to drop to zero if there aren't any barriers to entry. Of course, some free services have real storage or egress costs but the point remains true. This South Park episode goes into many of the psychological manipulations that are used in freemium games in some detail. The author of the PsiFi blog writes about the techniques used in business models like freemium:

"Operant conditioning is one of the oldest areas of modern psychology and arose out of the observation that people and animals can be conditioned to respond to stimuli in different ways. So if every time your dog chases a cat you give it an electric shock it'll pretty soon figure out that chasing cats is not the pleasurable activity that instinct suggests. Although it may develop some strange theories about the remote electrical properties of cats. Psychologists used to love this stuff. Behaviourism, championed by B.F. Skinner – simultaneously a great man and one of the twentieth century's worst examples of man with a hammer syndrome, insisted that operant conditioning explained all behaviour and refused to accept the possibility of the existence of an inner mental life. If he couldn't measure it, it didn't exist. So much for those flashes of inspiration we dream we have from time to time."

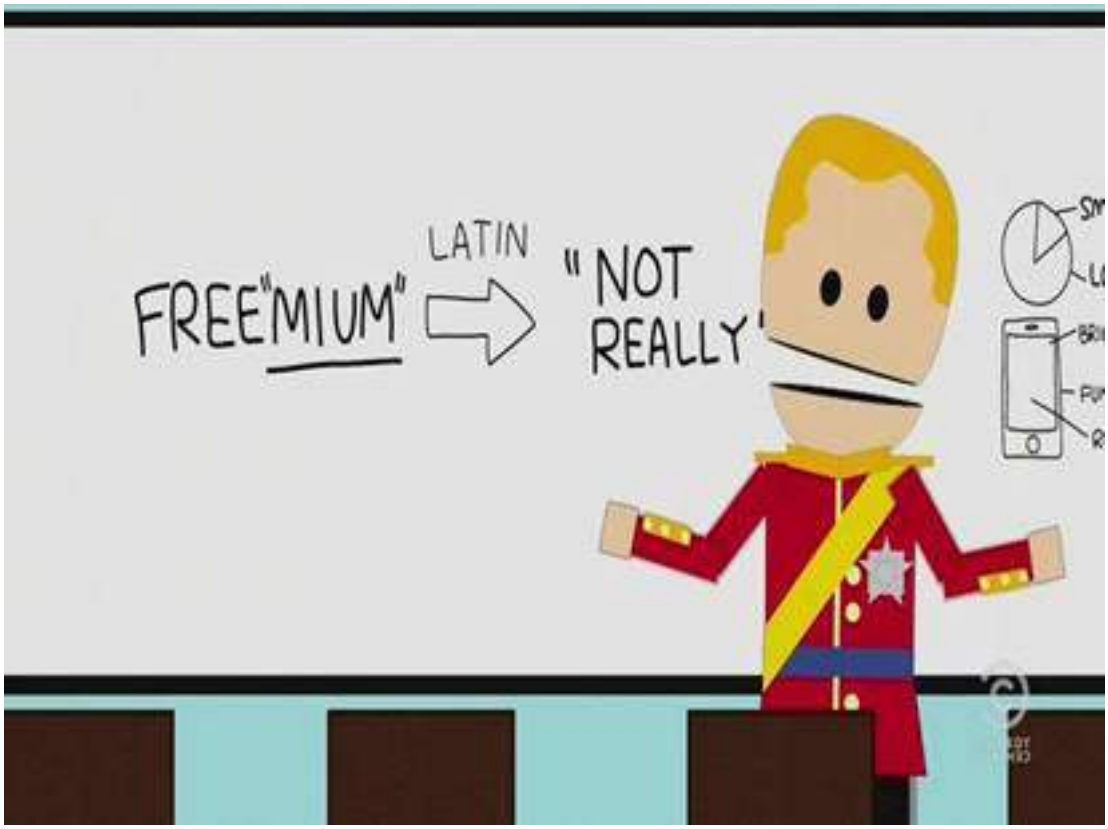

6. "Big corporations are good…because without big corporations we wouldn't have things like cars and computers and canned soup." Kyle. Underpants Gnomes. http://southpark.wikia.com/wiki/Gnomes/Script

Scale economies are an important part of human progress. Jamie Dimon has pointed out that: "Economies of scale are a good thing. If we didn't have them, we'd still be living in tents and eating buffalo." Elon Musk has said: "There are really two things that have to occur in order for a new technology to be affordable to the mass market. One is you need economies of scale. The other is you need to iterate on the design. You need to go through a few versions."

7. "It's simple economics, son. I don't understand it at all, but, God I love it." Randy Marsh. Something Wall Mart This Way Comes.
http://southpark.wikia.com/wiki/Something_Wall-Mart_This_Way_Comes/Script

The cacophony created by competing schools of economics is enough to confuse anyone. For example, heterodox, MMT, Keynesian, Post-Keynesian, Austrian, anarchist, freshwater, monetarist, saltwater, socialist, new classical, Marxist…

8. "Little boy, sometimes, what's right isn't as important as what's profitable." Agent. Prehistoric Ice Man. http://wiki.southpark.cc.com/wiki/Prehistoric_Ice_Man

There are certain profitable business that are odious from a moral standpoint. As an example, for Charlie Munger, operating a casino is one of these businesses. Or selling cigarettes. He is OK that Costco is a distributor of cigarettes. Everyone must draw the line somewhere. Munger points out: "You'll make more money in the end with good ethics than bad. Even though there are some people who do very well, like Marc Rich–who plainly has never had any decent ethics, or seldom anyway. But in the end, Warren Buffett has done better than Marc Rich–in money–not just in reputation."

9. "Well just like the rest of us, you have to make choices with your money. Do you want a bike, or do you not want to be depressed?" Randy. Trapped in the Closet. http://southpark.wikia.com/wiki/Trapped_in_the_Closet/Script

Deferred gratification is hard to accomplish, especially for some people. People use discount rates that vary and for some people any deferral of gratification is nearly impossible. Charlie Munger puts it this way: "It's waiting that helps you as an investor, and a lot of people just can't stand to wait. If you didn't get the deferred-gratification gene, you've got to work very hard to overcome that." In addition, people also do crazy things out of envy. As an example, for every $1,000 increase in a lottery prize, bankruptcy filings by the winner's neighbors rise by 2.4%. If you can shut feelings of envy down, life inevitably gets better. Nothing good comes from envy. It is all downside. There are lot of ways to create motivation that do not involve envy.

10. "We got so caught up in the little things of Christmas, like love and family that we almost forgot it's buying things that makes our economy thrive." Ms. Choksondick. A Very Crappy Christmas http://southpark.wikia.com/wiki/A_Very_Crappy_Christmas/Script

Paul Krugman has said on the Paradox of Thrift:

Suppose a large group of people decides to save more. You might think that this would necessarily mean a rise in national savings. But if falling consumption causes the economy to fall into a recession, incomes will fall, and so will savings, other things equal. This induced fall in savings can largely or completely offset the initial rise. Which way it goes depends on what happens to investment, since savings are always equal to investment. If the central bank can cut interest rates, investment and hence savings may rise. But if the central bank can't cut rates — say, because they're already zero — investment is likely to fall, not rise, because of lower capacity utilization. And this means that GDP and hence incomes have to fall so much that when people try to save more, the nation actually ends up saving less. http://krugman.blogs.nytimes.com/2009/07/07/the-paradox-of-thrift-for-real/?_r=0

11. "Excuse me son, I'm an investment broker; I can help you invest that money."
Broker "Nuh uh, I'm spendin' it." Cartman. Cartmanland.
http://southpark.wikia.com/wiki/Cartmanland/Script

The principal problem in dealing with financial advisers is known as "incentive-caused" bias. Munger puts it this way: "Both in one's own mind and that in one's trusted adviser … [this bias] causes perfectly terrible behavior. Take sales presentations of brokers of commercial real estate businesses. I'm 70 years old and I've never seen one that I thought was even within hailing distance of objective truth." In asking your barber whether you need a haircut, there is natural incentive-caused bias. Seeking independent financial advice in situations where where incentives may not be aligned is wise.

12. "Man, I guess sometimes we let our technology and stuff grow too fast." Kyle. Trapper Keeper http://southpark.wikia.com/wiki/Trapper_Keeper/Script

Technology and innovation help drive the progress in the world's standard of living but that inevitably creates disruption. That disruption can be good or bad depending on who you are. Consumers always benefit. As for a given business, as Charlie Munger says:

"The great lesson in microeconomics is to discriminate between when technology is going to help you and when it's going to kill you. And most people do not get this straight in their heads.

There are all kinds of wonderful new inventions that give you nothing as owners except the opportunity to spend a lot more money in a business that's still going to be lousy. The money still won't come to you. All of the advantages from great improvements are going to flow through to the customers."

What Munger talks about above confuses many people since they assume that technological progress always increases revenue and profit. Anyone involved in a real business knows that sometimes an innovative new technology results in less revenue and profit.

This is as it should be in a capitalist system, but nevertheless there are winners and losers as Nassim Taleb writes:

"Like Britain in the Industrial Revolution, America's asset is, simply, risk taking and the use of optionality, this remarkable ability to engage in rational forms of trial and error, with no comparative shame in failing again, starting again, and repeating failure." "Most of you will fail, disrespected, impoverished, but we are grateful for the risks you are taking and the sacrifices you are making for the sake of the economic growth of the planet and pulling others out of poverty. You are the source of our antifragility. Our nation thanks you."

In his recent shareholder letter Warren Buffett writes about the need for a safety net:

"Nothing rivals the market system in producing what people want – nor, even more so, in delivering what people don't yet know they want. … For 240 years it's been a terrible mistake to bet against America, and now is no time to start. America's golden goose of commerce and innovation will continue to lay more and larger eggs…. Though the pie to be shared by the next generation will be far larger than today's, how it will be divided will remain fiercely contentious. Just as is now the case, there will be struggles for the increased output of goods and services between those people in their productive years and retirees, between the healthy and the infirm, between the inheritors and the Horatio Algers, between investors and workers and, in particular, between those with talents that are valued highly by the marketplace and the equally decent hard-working Americans who lack the skills the market prizes."

Notes:
B.F. Skinner's Stockmarket Slot MachinesWin Big, Win Rarely, Win Never
http://www.psyfitec.com/2009/06/bf-skinners-stockmarket-slot-machines.html

Richard Feynman and Charlie Munger: Expert Generalists

March 12, 2016

Richard Feynman was a scientist, professor, musician and raconteur. Bill Gates adds to that description Feynman: **"**In 1965, Feynman shared a Nobel Prize for work on particle physics. Feynman wasn't famous just for being a great teacher and a world-class scientist; he was also quite a character. He translated Mayan hieroglyphics. He loved to play the bongos. While helping develop the atomic bomb at Los Alamos, he entertained himself by figuring out how to break into the safes that contained top-secret research." The Cambridge History of Science includes this text: "No doubt some of his peers dismissed Feynman's interest in literature, art, and music as just as embarrassingly irrelevant to physics as his frequenting of strip clubs." Rochus Vogt, a Caltech physics professor, former provost, and former division chair in Physics, Mathematics, and Astronomy adds: "He was not only a top-notch physicist, but he was an artist, a Renaissance type of person. He had certain insights and perceptions in physics that I have no word to describe other than 'artistic.'"

Bill Gates and others have said similar things about Charlie Munger, who also has a very broad range of interests and activities. Gates on Munger: "He is truly the broadest thinker I have ever encountered. From business principles to economic principles to the design of

student dormitories to the design of a catamaran he has no equal… Our longest correspondence was a detailed discussion on the mating habits of naked mole rats and what the human species might learn from them."

Both Munger and Feynman are examples of what Bain Chairwoman Orit Gadiesh describes as an "expert-generalist." Gadiesh has said the term describes: "Someone who has the ability and curiosity to master and collect expertise in many different disciplines, industries, skills, capabilities, countries, and topics., etc. He or she can then, without necessarily even realizing it, but often by design: Draw on that palette of diverse knowledge to recognize patterns and connect the dots across multiple areas. Drill deep to focus and perfect the thinking." I would add that expert generalists have other qualities such as being intellectually humble and inquisitive, openness to experience and having a need fin. They also think probabilistically, accept that some areas are inherently uncertain and are open to new ideas. Expert generalists include people like Sir Alex Ferguson, Marie Curie, Pablo Picasso, Bill Gates, Elon Musk, Steve Jobs, Leonardo Da Vinci and Ben Franklin. A similar term for expert generalist is polymath, but they are not quit ethe same thing.

Here's Munger describing himself, in effect advocating for an "expert generalist" approach: **"For some odd reason, I had an early and extreme multidisciplinary cast of mind. I couldn't stand reaching for a small idea in my own discipline when there was a big idea right over the fence in somebody else's discipline. So I just grabbed in all directions for the big ideas that would really work. Nobody taught me to do that; I was just born with that yen."** And: "**the first rule is that you can't really know anything if you just remember isolated facts and try and *bang* '*em back*."**

Michael Mauboussin describes what you should be looking for as follows:

You want to determine who has a high rationality quotient, or the ability to make good decisions. A lot of that boils down to what's called "epistemic rationality," a fancy way of saying that your beliefs map accurately to the world. There are sets of characteristics of the kinds of people who are actively open minded. They incorporate lots of information and various points of view, and they update their view when new information comes in.

As is usual on this blog, the Feynman quotes are in bold text. Munger's ideas are in the commentary in regular text.

1. **"Imagine how much harder physics would be if electrons had feelings!"** Trying to use formulas from physics in investing and economics can lead to some conclusions that are problematic. Charlie Munger describes what the right balance is in this way: 'Economics should emulate physics' basic ethos, but its search for precision in physics-like formulas is almost always wrong in economics." Munger has also said: "Max Planck the great Nobel laureate who found Planck's Constant, tried once to do economics. He gave it up. Now why did Max Planck, one of the smartest people who ever lived, give up economics? The answer is, he said, "It's too hard. The best solution you can get is messy and uncertain." Investing and economics will never be as predictable as physics since the systems involved are complex adaptive systems. If you do not understand economics you do not understand the world. But if it is all that you know and use, you are a danger to yourself and others. Orson Scott Card said once in a slightly different domain: "You know the old saying: To a man with a

hammer, everything looks like a nail. Well, that's only sometimes true. In the case of the academic-literary establishment — the community I lovingly call "li-fi" — the better analogy is: To a man with *only* a hammer, a screw is a defective nail."

2. **"I'm smart enough to know that I'm dumb."** Humility and the mental model of a "circle of competence" are critically important for successful investing since the best way to be smart is to not be dumb. The most effective way to be not dumb is to know what you are doing. Munger believes: "You are a disaster if you don't know the edge of your competency. I like people admitting they were complete stupid horses' asses. I know I'll perform better if I rub my nose in my mistakes. This is a wonderful trick to learn." Isaac Asimov once made the point humorously: "Those people who think they know everything are a great annoyance to those of us who do." The old joke "You can always tell a physicist, but you can't tell him much" just does not apply to someone like Feynman. As an example of his intellectual humility Feynman once said: **"I think I can safely say that *nobody* understands quantum mechanics. … I am going to tell you what nature behaves like. If you will simply admit that maybe she does behave like this, you will find her a delightful, entrancing thing. Do not keep saying to yourself, if you can possibly avoid it, 'But how can it be like that?', because you will get 'down the drain', into a blind alley from which nobody has escaped. Nobody knows how it can be like that."**

3. **"The first principle is that you must not fool yourself and you are the easiest person to fool." "It doesn't matter how beautiful your theory is, it doesn't matter how smart you are. If it doesn't agree with experiment, it's wrong."** This is the Feynman quotation which Charlie Munger likes to cite when he is talking about the many dysfunctional biases that make up what he calls "the psychology of human misjudgment." Understanding behavioral economics is helpful to making better decisions but it is not a panacea. As Daniel Kahneman says, you can study human psychological bias for decades and yet still fall for it. Not fooling yourself is a lifetime struggle – it never ends. Stephen Jay Gould put it this way once: "The most erroneous stories are those we think we know best–and therefore never scrutinize or question."

4. **"I never pay attention to anything by 'experts'. I calculate everything myself."** Working through an analysis from first principles generates big rewards and often an edge versus other investors who follow the crowd or an analyst with conflicted motives. Munger likes to say: "Warren and I do more reading and thinking and less doing than most people in business. We do that because we like that kind of a life. But we've turned that quirk into a positive outcome for ourselves." Marvin Minsky said about Feynman: "When he faces a problem, he's unusually good at going back to being like a child, ignoring what everyone else thinks… He was so unstuck — if something didn't work, he'd look at it another way."

5. **“There are 10^11 stars in the galaxy. That used to be a huge number. But it’s only a hundred billion. It’s less than the national deficit! We used to call them astronomical numbers. Now we should call them economical numbers.”** Big numbers are funny. I was once in a bank and because I was dealing with large numbers at work I wrote a check for 20 million dollars somewhat absent mindedly when the right amount was $20. No matter how many zeros are involved, the underlying investing principles remain the same. Janet Lowe writes in her book *Damn Right*: “Munger has said that accumulating the first $100,000 from a standing start, with no seed money, is the most difficult part of building wealth. Making the first million was the next big hurdle. To do that a person must consistently under spend his income. Getting wealthy, he explains, is like rolling a snowball. It helps to start on top of a long hill—start early and try to roll that snowball for a very long time. It helps to live a long life.”

6. **“For a successful technology, reality must take precedence over public relations, for Nature cannot be fooled.”** Public relations is a funny thing. That means both funny in the sense of strange and funny in the sense of haha. One weird attribute of humans is how much people fall for news reports that are essentially press releases. Briefly stated, Gell-Mann Amnesia effect works as follows says Michael Crichton: “You open the newspaper to an article on some subject you know well. In Murray’s case, physics. In mine, show business. You read the article and see the journalist has absolutely no understanding of either the facts or the issues. Often, the article is so wrong it actually presents the story backward-reversing cause and effect. I call these the “wet streets cause rain” stories. Paper’s full of them.” A Feynman biographer named Lawrence Krauss has said on this point: “the greatest lesson I’d like to leave with – for Feynman, is that it’s nature that tells us how it behaves. And if we want to learn how the universe works, we have to get our answers from nature. And we have to be willing to go fearlessly in that direction and do whatever is possible to find out. And Feynman was nothing if not fearless.”

7. **“You can know the name of that bird in all the languages of the world, but when you’re finished, you’ll know absolutely nothing whatever about the bird. You’ll only know about humans in different places, and what they call the bird. … I learned very early the difference between knowing the name of something and knowing something.”** Munger makes the same point: “You may have noticed students who just try to remember and pound back what is remembered. Well, they fail in school and in life.” And “It’s not given to human beings to have such talent that they can just know everything all the time. The law student in the book *The Paper Chase* with a photographic memory failed. To be an investing success you must think and understand, not just recall.

8. **“Everything is interesting if you go into it deeply enough.”** I have found that even people you may find boring have interesting things to say if you bore into a subject that they are passionate about**.** I once spent a few hours talking on an airplane to someone who knew just about everything about fishing in the Gulf of Alaska. Munger says: “The game is to keep learning, and I don’t think people are going to keep learning who don’t like the learning process.” If you do not have a broad education is is hard to understand anything really. Munger has developed himself into an expert generalist to complement areas where he has a circle of competence. “You have to realize the truth of biologist Julian Huxley’s idea that ‘Life is just one damn relatedness after another’ So you must have the models, and you must see the relatedness and the effects from the relatedness.”

9. **“Physics is like sex: sure, it may give some practical results, but that’s not why we do it.”** Having passion for what you do is important. Passionate people are far more likely to do the required work since they enjoy it. If you are not passionate about investing you should buy a diversified portfolio of low cost index funds**.** Munger believes: “You need to have a passionate interest in why things are happening. That cast of mind, kept over long periods, gradually improves your ability to focus on reality.” Also from Munger: “Like Warren, I had a considerable passion to get rich. “Not because I wanted Ferraris– I wanted the independence. I desperately wanted it. I thought it was undignified to have to send invoices to other people. I don’t know where I got that notion from, but I had it.”

10. **“I think it is much more interesting to live not knowing than to have answers that might be wrong… In order to make progress, one must leave the door to the unknown ajar.”** Munger has said something that is quite similar to the sentiment expressed by Feynman: “When I run into a paradox I think either I’m a total horse’s ass to have gotten to this point, or I’m fruitfully near the edge of my discipline. It adds excitement to life to wonder which it is.” Munger likes to say that if he does not destroy one of his most cherished ideas every year, it is a wasted year. Munger again: “We all are learning, modifying, or destroying ideas all the time. Rapid destruction of your ideas when the time is right is one of the most valuable qualities you can acquire. You must force yourself to consider arguments on the other side.”

11. **“There’s all kinds of myths and pseudoscience all over the place. I may be quite wrong, maybe they do know all these things, but I don’t think I’m wrong. You see, I have the advantage of having found out how hard it is to get to really know something, how careful you have to be about checking the experiments, how easy it is to make mistakes and fool yourself. I know what it means to know something, and therefore I see how they get their information and I can’t believe that they know it. They haven’t done the work necessary, haven’t done the checks necessary, haven’t taken the care necessary. I have a great suspicion that they**

don't know, that this stuff is and that they're intimidating people." Munger says: "Organized common (or uncommon) sense — very basic knowledge — is an enormously powerful tool. There are huge dangers with computers. People calculate too much and think too little." Investors and speculators will often encounter people, usually salespeople, but not always, who try to intimidate them. Just say no to intimidation. Think for yourself. I have a friend who likes to say: 'If someone tries to hand you a turd, say 'no thanks' and walk away." this apprpach applied to ideas as well as other forms of turds.

12. **"Scientific knowledge is a body of statements of varying degrees of certainty — some most unsure, some nearly sure, but none absolutely certain." "We absolutely must leave room for doubt or there is no progress and no learning. People search for certainty. But there is no certainty." "I have approximate answers and possible beliefs in different degrees of certainty about different things, but I'm not absolutely sure of anything."** Predictions are hard to make correctly, especially about the future is an old joke. Many people try to get away with predicting the present and calling themselves futurists. Munger points out: "We have the same problem as everyone else: It's very hard to predict the future… If you don't get this elementary, but mildly unnatural, mathematics of elementary probability into your repertoire, then you go through a long life like a one legged man in an ass kicking contest. You're giving a huge advantage to everybody else." In his book *Margin of Safety* Seth Klarman writes:

"Most investors strive fruitlessly for certainty and precision, avoiding situations in which information is difficult to obtain. Yet high uncertainty is frequently accompanied by low prices. By the time the uncertainty is resolved, prices are likely to have risen. Investors frequently benefit from making investment decisions with less than perfect knowledge and are well rewarded for bearing the risk of uncertainty. The time other investors spend delving into the last unanswered detail may cost them the chance to buy in at prices so low that they offer a margin of safety despite the incomplete information."

Stephen Hawking puts it this way: "The greatest enemy of knowledge is not ignorance, it is the illusion of knowledge." Stay passionate, but stay humble too. Never stop learning. Be an expert generalist if you can.

The right decision making process has two steps: Know your circle of competence. If the bet is not in your circle of competence don't invest.If you decide that it is wise to make a bet based on your circle of competence then use your skill as a expert generalist to check your decision. Do everything make sense base don worldly wisdom too? Munger: "Common stock investors can make money by predicting the outcomes of practice evolution. You can't derive this by fundamental analysis — you must think biologically" and "I find it quite useful to think of a free market economy—or partly free market economy—as sort of the equivalent of an ecosystem." "Acquire worldly wisdom and adjust your behavior accordingly. If your new behavior gives you a little temporary unpopularity with your peer group … then to hell with them.""If you skillfully follow the multidisciplinary path, you will never wish to come back. It would be like cutting off your hands." "It's kind of fun to sit there and out think people who are way smarter than you are because you've trained yourself to be more objective and

more multidisciplinary. Furthermore, there is a lot of money in it, as I can testify from my own personal experience."

Notes:

What was left on Feynman's blackboard after he died.

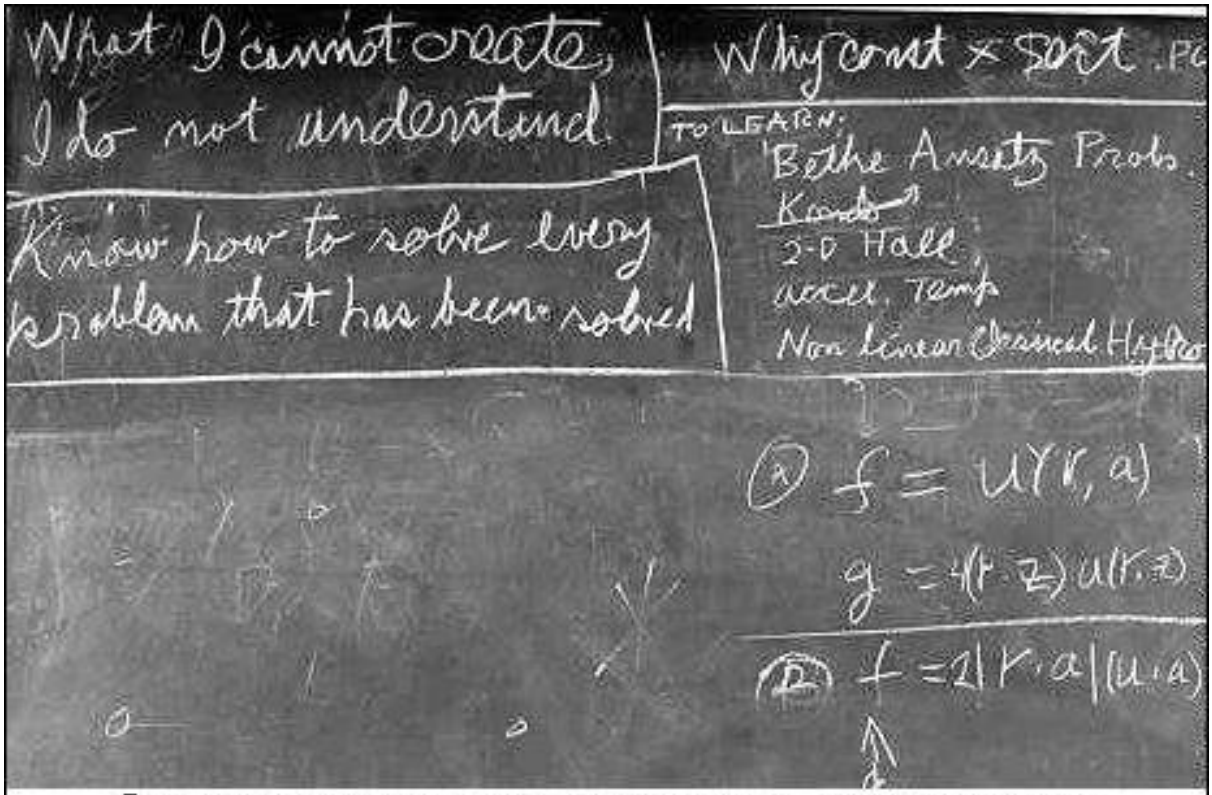

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The Feynman Lectures**:** http://www.feynmanlectures.caltech.edu/

Feynman Talk: Cargo Cult Science https://www.lhup.edu/~DSIMANEK/cargocul.htm

Feynman Talk: There's Plenty of Room at the Bottom**:**
http://www.zyvex.com/nanotech/feynman.html

Feynman Nobel Lecture**:**
http://www.nobelprize.org/nobel_prizes/physics/laureates/1965/feynman-lecture.html

Michael Crichton on Gell-Mann Amnesia: http://www.goodreads.com/quotes/65213-briefly-stated-the-gell-mann-amnesia-effect-is-as-follows-you

Damn Right: http://www.amazon.com/gp/product/0471446912?ie=UTF8&tag=jpin

Feynman Videos: http://www.richard-feynman.net/videos.htm

NPR on Feynman: http://www.npr.org/2011/03/25/134855903/Richard-Feynman-Is-The-Quantum-Man

CalTech: http://m.caltech.edu/news/physics-world-poll-names-richard-feynman-one-10-greatest-physicists-all-time-368

A Dozen Things I've Learned from Benjamin Franklin About Money and Investing

March 19, 2016

Benjamin Franklin was an amazing person measured by any standard. His story is worth learning about in detail and there are some wonderful biographies available. It is hard to do justice to Franklin's accomplishments and his life story in a a blog post, but here is a highly simplified summary of the basics:

"Franklin was born in Boston in 1706. He was legally indentured to work in his brother's print shop when he was 12 years old, and he did so until he turned 17. Then Franklin skipped Boston for Philadelphia, where he became a successful printer and writer. He [founded] Philadelphia's first lending library, first fire department, and first post office. He was always active in colonial politics. Along the way, he became a world-famous scientist. He served as Pennsylvania's colonial regent in England from 1757 to 1762. Franklin helped draft both the Declaration of Independence and the Constitution."

"Franklin started the American Philosophical Society, which was this country's first scientific society and maintained the first science library, first museum, and first patent office; more than 90 members of this society went on to win Nobel Prizes. On his eight trans-Atlantic crossings, Franklin made measurements that helped chart the Gulf Stream. He pioneered the study of water flowing around a hull—hydrodynamics. He investigated meteorology. He

invented bifocal spectacles. He was most famous, of course, for his experiments with electricity, especially lightning. His lightning rod helped banish the terror of thunderstorms."

Franklin is a hero to many people including Charlie Munger:

"There is the sheer amount of Franklin's wisdom… And the talent. Franklin played four instruments. He was the nation's leading scientist and inventor, plus a leading author, statesman, and philanthropist. There has never been anyone like him…. Franklin was quite old when he was ambassador to France. This was after he was world famous and rich, and he was more self-indulgent than when he was young and making his way in the world. But he was a very good ambassador and whatever was wrong with him from John Adams's point of view helped him with the French. I think Franklin was a marvelous steward. I'm willing to take the fellow as he averaged out. And certainly I'm in favor of old people having a little enjoyment."

As is usual, the dozen quotes from Ben Franklin follow in bold text:

1. "In 1732 I first published my Almanack under the name of Richard Saunders; it was continued by me about twenty-five years, and commonly called Poor Richard's Almanack. I endeavoured to make it both entertaining and useful, and it accordingly came to be in such demand, that I reaped considerable profit from it, vending annually near ten thousand." Franklin learned the printing trade working for his brother and including time he later spent in London working for other printers. As the story goes:

"At length the harmony between himself and brother was interrupted, and he left his service and went on board a vessel in the harbor, bound for New York. In that city he could not obtain employment, and he proceeded on foot to Philadelphia, where he arrived on a Sabbath morning. He was then but seventeen years old, friendless and alone, with but a single dollar in his pocket… It is said that his first appearance in Philadelphia attracted considerable attention in the streets. With his spare clothing in his pocket, and a loaf of bread under each arm, he wandered about until he came to a Quaker meeting, where he entered, sat down, went to sleep, and slept soundly until worship was closed."

Franklin, who started his business with very little capital, needed to generate customers in a cost-effective way. He found his solution in the form of what today would be called "content marketing." It has been argued that Benjamin Franklin was the first American and it can similarly be argued that he was the first American content marketer. By printing and distributing his *Poor Richard's Almanack* Franklin was able to spread the word about his business and acquire a reasonable customer acquisition cost (CAC) in relation to the revenue his business could generate from that customer. Franklin's book was published before other content marketing efforts like August Oetker's cookbooks promoting Backin baking powder (1891) or John Deere's magazine, The Furrow. Franklin's advice for others following in his footsteps was simple and to the point: **"Either write something worth reading or do something worth writing."** It is an interesting exercise to keep track of what you read during a day and think about how much of what you read on a daily basis is content marketing. There is so much content marketing that it is crowding out other forms of writing with different business models. Why read a book when you can read a blog for free, especially if that blog maps to the typical attention span of about six minutes? Would *Poor Richard's Almanack* today be a blog offered for free as part of a freemium business model?

2. "An investment in knowledge always pays the best interest." Buffett has made a similar point to the one being made by Franklin in the previous quote. Buffet said: "Generally speaking, investing in yourself is the best thing you can do. Anything that improves your own talents; nobody can tax it or take it away from you. They can run up huge deficits and the dollar can become worth far less. You can have all kinds of things happen. But if you've got talent yourself, and you've maximized your talent, you've got a tremendous asset that can return ten-fold." Through self-directed reading and self-education Franklin turned himself into an "expert generalist" which I wrote about in my previous blog post. Franklin said: **"This library afforded me the means of improvement by constant study, for which I set apart an hour or two each day, and thus repaired in some degree the loss of the learned education my father once intended for me. Reading was the only amusement I allowed myself. I spent no time in taverns, games, or frolics of any kind; and my industry in my business continued as indefatigable as it was necessary."**

3. "Money is of a prolific generating Nature. Money can beget Money, and its Offspring can beget more, and so on. Five Shillings turn'd, is Six: Turn'd again, 'tis Seven and Three Pence; and so on 'til it becomes an Hundred Pound. The more there is of it, the more it produces every Turning, so that the Profits rise quicker and quicker." Franklin understood that not only is compound interest powerful, but "cumulative advantage" is a highly advantageous phenomenon. Success in almost any domain inevitably creates more success as the process feeds back on itself. The classic essay on this is from Duncan Watts entitled: "Is Justin Timberlake a Product of Cumulative Advantage" (find a link to this essay in the notes). In my blog post on Julian Robertson I wrote:

"The basic idea is that once a person or business gains a small advantage over others, that advantage will compound over time into an increasingly larger advantage. This is sometimes called 'the rich get richer and the poor get poorer' or 'the Matthew effect' based on a biblical reference. Merton used this cumulative advantage concept to explain advancement in scientific careers, but it is far broader in it application. Cumulative advantage operates as a general mechanism which increases inequality and explains why wealth and incomes follow a power law."

4. "If a Man lets his Money lie in my Hands after it is due, he gives me the Interest, or so much as I can make of it during that Time. This amounts to a considerable Sum where a Man has good and large Credit, and makes good Use of it." Franklin understood the financial value of what is called "float," which Buffett once described as "free money — and, better yet, getting paid for holding it." Buffett has also said: "Float is money that doesn't belong to us but that we temporarily hold. Float is wonderful – if it doesn't come at a high price." On float Charlie Munger has said:

"Growing float at a sizeable rate at low cost is almost impossible — but we intend to do it anyway."

"I've been amazed by the growth and cost of our float. It's wonderful to generate billions of dollars of float at a cost way below Treasury notes."

"We were always opportunistic and wanted to buy the best thing conveniently available that we could understand. Early on, we looked a lot at float businesses in the public markets, but nowadays we have so much float it isn't as useful, and Europe and Japan rates are negative,

so we can't get great returns on the cash that the float gives us. We made so much money off those float businesses it was obscene."

It is interesting that both Buffett and Munger have said that the ability to profit from float in the insurance business is not what it used to be. Carol Loomis has written: "Float has been rising at Berkshire for eons, but Buffett began a couple of years ago to warn that future gains would be tough to get. But still they've kept coming." One way to look at the importance of float is to use the inversion approach. For example, as Buffett does here: "[Depreciation] is reverse float — you lay out money before you get cash. Any management that doesn't regard depreciation as an expense is living in a dream world."

5. "Our new Constitution is now established, and has an appearance that promises permanency; but in this world nothing can be said to be certain, except death and taxes." The other way to put this is that nothing is certain except risk, uncertainty and ignorance. Michael Mauboussin describes the right taxonomy well by saying: "Risk is when we don't know what the outcome is going to be, but we do know the definable distribution… Uncertainty, by contrast, is when we don't know what the outcome is, but we actually don't know what the underlying distribution looks like." Ignorance exists when you do not even know the potential outcome is possible or can't even conceive of it. As is that case with many of Franklin's axioms, it is unlikely that Franklin was the first person make the point in the quotation, but was unique in his phrasing. For example, the Yale Book of Quotations quotes "Tis impossible to be sure of any thing but Death and Taxes," from Christopher Bullock, The Cobler of Preston (1716) and also quotes "Death and Taxes, they are certain," from Edward Ward, The Dancing Devils (1724). Daniel Defoe The Political History of the Devil 1726 wrote: "Things as certain as Death and Taxes, can be more firmly believ'd."

6. "Success has ruined many a man." This Franklin phrase was probably borrowed from Samuel Richardson:

"In great Prosperity, as well as in great Calamity, we ought to look into ourselves, and fear. Success has blown up, and undone many a man. Who is there that Wealth does not mislead? Prosperity sets up merit as a mark for envy to shoot its shafts at. The greatly Prosperous bear controul and disappointments with difficulty. Great acquirements are great snares."

Mark Twain wrote about Franklin and his borrowing of the writing of others:

"Franklin the immortal axiom-builder, who used to sit up at nights reducing the rankest old threadbare platitudes to crisp and snappy maxims that had a nice, varnished, original look in their regimentals; who said, "Virtue is its own reward;" who said, "Procrastination is the thief of time;" who said, "Time and tide wait for no man" and "Necessity is the mother of invention;" good old Franklin, the Josh Billings of the eighteenth century–though, sooth to say, the latter transcends him in proverbial originality as much as he falls short of him in correctness of orthography. What sort of tactics did Franklin pursue? He pondered over his last words for as much as two weeks, and then when the time came, he said, 'None but the brave deserve the fair," and died happy. He could not have said a sweeter thing if he had lived till he was an idiot.'"

Franklin believed that a person should try to avoid hubris. You should also try to avoid fooling yourself, which is hard since it is easy to do. If you understand that more of success in life is luck than you imagine it is easier to remain humble. Many people attribute what is

really luck to skill and then assign themselves an undeserved moral halo. That someone has become rich does not always correlate well to whether they have anything valuable to say.

7. "Necessity never made a good bargain." The best negotiating position exists when you have what Roger Fisher called a BATNA (best alternative to negotiated agreement) in his best-selling book *Getting to Yes*. In short, it is your alternatives that matter. Without some alternative to what you seek in the negotiation the other negotiator has a very strong lever to get what they want. This is really just simple opportunity cost thinking.

8. "A penny saved is a penny earned." "Rather go to bed without dinner than to rise in debt." "Think what you do when you run in debt; you give to another power over your liberty." "If you would know the value of money, go and try to borrow some; for he that goes a borrowing goes a sorrowing." "The Way to Wealth, if you desire it, is as plain as the Way to Market. It depends chiefly on two Words, INDUSTRY and FRUGALITY; i.e. Waste neither Time nor Money, but make the best Use of both." "Beer is living proof that God loves us and wants us to be happy." Franklin worked hard and read widely to populate the pages of his books and other writings. As was previously stated, did he borrow from people who came before him? Sure. But by any standard Franklin gave us vastly more than he borrowed. We all stand on the shoulders of giants. Mark Twain humorously said that he resented Franklin's example since the principles he talked and wrote about were used in Twain's upbringing:

"If it had not been for him, with his incendiary 'Early to bed and early to rise,' and all that sort of foolishness, I wouldn't have been so harried and worried and raked out of bed at such unseemly hours when I was young. With a malevolence which is without parallel in history, he would work all day, and then sit up nights, and let on to be studying algebra by the light of a smoldering fire, so that all other boys might have to do that also, or else have Benjamin Franklin thrown up to them. Not satisfied with these proceedings, he had a fashion of living wholly on bread and water, and studying astronomy at meal time–a thing which has brought affliction to millions of boys since, whose fathers had read Franklin's pernicious biography."

9. "Time is money. He that can earn Ten Shillings a Day by his Labour, and goes abroad, or sits idle one half of that Day, tho' he spends but Sixpence during his Diversion or Idleness, ought not to reckon That the only Expence; he has really spent or rather thrown away Five Shillings besides." The phrase "time is money" was used by Franklin in a 1746 essay entitled *Advice to a Young Tradesman, Written by an Old One* (an essay reproduced in full in the notes). The key point being made again by Franklin here is that it is wise to think in terms of opportunity cost. How early was Franklin in making points related to opportunity cost? Frédéric Bastiat did not write his essay *What is Seen and What is not Seen* until 1848. David Ricardo's writing on the importance of comparative advantage and opportunity cost did not appear until the early 1800s. Combine this quotation with Franklin advancing ideas like (1) "no nation was ever ruined by trade" and his essays on "paper money" when he was only 23 years old and an argunet can be made that Franklin was a pioneering economic thinker too. Was Franklin the first American economist? Why not? Historical accounts say that Adam Smith sent chapters of his book *The Wealth of Nations* to Franklin for comments while they both were in London and the two men certainly met and discussed the ideas in the book. One writer notes that: "During [Franklin's] sojourn of five years in England he had made many valuable friends outside of court and political circles, among whom David Hume and Adam Smith were conspicuous."

10. "If everyone is thinking alike, then no one is thinking." Franklin knew that if you adopt a contrarian view and are right about that view, you can both profit and create innovation. Being a contrarian doesn't produce anything valuable if you are wrong. Thinking is required. Bill Gurley has put it this way: "Being 'right' doesn't lead to superior performance if the consensus forecast is also right." Michael Mauboussin describes the goal:

"the simple act of being a contrarian will make no one rich. In fact, conforming generally makes the most strategic sense. If you're in a theatre that catches on fire, you're best served running out in contrast to the contrarian tack of running into the theatre. If being different is not the sole goal, what should the aspiring contrarian focus on? Here I turn to a common sense distinction that I would argue is the single most common error in the investment business: failure to distinguish between the fundamentals of the situation (of a company in the case of stocks) and the expectations reflected in the asset price. Horse racing provides a good metaphor. There are two issues: how well the horse will likely run – you look at the horse's record, the stable it came from, the jockey, the track conditions, etc – and the expectations, which show up as the odds posted on the board. A contrarian investor focuses not only on the general sentiment, but more importantly on how that sentiment can lead to disconnects between the fundamentals and market expectations.

11. "Money has never made man happy, nor will it, there is nothing in its nature to produce happiness. The more of it one has the more one wants." "He that is of the opinion money will do everything may well be suspected of doing everything for money." What is as interesting as anything about Franklin is that he worked hard to become wealthy and then retired at age 42 and use his wealth to do what he wanted. Charlie Munger is said to have used both Franklin and Robinson Crusoe as a model for the value of being independent. What Munger strove for with his investing was accumulating enough wealth to enable his independence, so he could spend as much time reading and learning as he wanted. In the case of Franklin:

"His printing business made him a wealthy man. But by the age of 42, he had as much money as he needed. He found an able managing partner in whose hands he put the business, and he retired to study philosophy. And philosophy in those days, of course, encompassed science and the general study of the natural world. He thought that was a better use of his time at that point."

On the topic of wealth, the National Humanities Center notes:

"Franklin is well-known for his aphorisms—usually printed in his almanacs and public essays—promoting frugality, hard work, and plain living as the road to success. This does not mean that Franklin was opposed to wealth in itself, nor that his later acquisition of luxury goods was hypocritical. What mattered to Franklin was how one achieved wealth (honestly) and how one displayed it (unostentatiously)."

12. **"When I was a child of seven years old, my friends, on a holiday, filled my pocket with coppers. I went directly to a shop where they sold toys for children; and being charmed with the sound of a whistle, that I met by the way in the hands of another boy, I voluntarily offered and gave all my money for one. I then came home, and went whistling all over the house, much pleased with my whistle, but disturbing all the family. My brothers, and sisters, and cousins, understanding the bargain I had made, told me I had given four times as much for it as it was worth; put me in mind what good**

things I might have bought with the rest of the money; and laughed at me so much for my folly, that I cried with vexation; and the reflection gave me more chagrin than the whistle gave me pleasure. This, however, was afterwards of use to me, the impression continuing on my mind; so that often, when I was tempted to buy some unnecessary thing, I said to myself, Don't give too much for the whistle; and I saved my money. As I grew up, came into the world, and observed the actions of men, I thought I met with many, very many, who gave too much for the whistle. When I saw one too ambitious of court favor, sacrificing his time in attendance on levees, his repose, his liberty, his virtue, and perhaps his friends, to attain it, I have said to myself, this man gives too much for his whistle. When I saw another fond of popularity, constantly employing himself in political bustles, neglecting his own affairs, and ruining them by that neglect, "He pays, indeed," said I, "too much for his whistle." If I knew a miser, who gave up every kind of comfortable living, all the pleasure of doing good to others, all the esteem of his fellow-citizens, and the joys of benevolent friendship, for the sake of accumulating wealth, "Poor man," said I, "you pay too much for your whistle." When I met with a man of pleasure, sacrificing every laudable improvement of the mind, or of his fortune, to mere corporeal sensations, and ruining his health in their pursuit, "Mistaken man," said I, "you are providing pain for yourself, instead of pleasure; you give too much for your whistle." If I see one fond of appearance, or fine clothes, fine houses, fine furniture, fine equipages, all above his fortune, for which he contracts debts, and ends his career in a prison, "Alas!" say I, "he has paid dear, very dear, for his whistle." When I see a beautiful sweet-tempered girl married to an ill-natured brute of a husband, "What a pity," say I, "that she should pay so much for a whistle!" In short, I conceive that great part of the miseries of mankind are brought upon them by the false estimates they have made of the value of things, and by their giving too much for their whistles." Franklin is saying in this parable that too much focus on acquiring things (materialism) can result in a lower quality of life. Materialism, jealously and other dysfunctional emotions can cause you to pay too much for anything. Franklin again is talking about opportunity cost. Of course, the hard question is: how much is too much? Franklin did work hard to become wealthy but he used that wealth to create financial freedom for himself to do what he wanted in life. The wealth from his business enabled him to contribute to society and become one of the greatest Americans who ever lived, if not one of the greatest humans who ever lived.

Notes:

Franklin bio (by Gordy): http://www.legendsofamerica.com/ah-benjaminfranklin.html

Mike Volpi on Franklin: http://fortune.com/2011/03/31/ben-franklin-and-the-art-of-business-development/

Franklin as a Marketer http://www.pbs.org/benfranklin/l3_wit_master.html

Van Doren's Franklin bio: http://www.amazon.com/Benjamin-Franklin-Volume-Carl-Doren/dp/193154185X

Isaacson's Franklin bio
http://www.amazon.com/gp/product/074325807X/ref=pd_lpo_sbs_dp_ss_1?pf_rd_p=1944687722&pf_rd_s=lpo-top-stripe-

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Bio of Franklin by Brands: http://www.amazon.com/gp/product/0385495404/ref=pd_lpo_sbs_dp_ss_2?pf_rd_p=1944687722&pf_rd_s=lpo-top-stripe-1&pf_rd_t=201&pf_rd_i=193154185X&pf_rd_m=ATVPDKIKX0DER&pf_rd_r=0GSFY00H4GNR33JN67X1

NNDB Franklin bio: http://www.nndb.com/people/578/000026500/

Good Reads – Franklin Quotes: https://www.goodreads.com/author/quotes/289513.Benjamin_Franklin

Essays: http://nationalhumanitiescenter.org/pds/becomingamer/economies/text4/franklinwealth.pdf

Duncan Watts: http://www.nytimes.com/2007/04/15/magazine/15wwlnidealab.t.html?pagewanted=all&_r=0

Loomis: http://fortune.com/2016/02/27/berkshire-hathaway-buffett-2015-earnings/

National Humanities Center: http://nationalhumanitiescenter.org/pds/becomingamer/economies/text4/text4read.htm

Two Powerful Mental Models: Network Effects and Critical Mass

March 24, 2016

This post is all about network effects and critical mass. But it's also about applying those concepts as important mental models in business, so I will share a short story about a business decision I once made that required me to consider network effects.

The Internet bubble had popped by 2002, and a lot of people were looking for the next big thing. One day that summer, my friend told me about the idea behind Friendster, which sounded promising: "system, method, and apparatus for connecting users in an online computer system" (according to patent number 7,069,308).

Friendster was pioneering what would become known as a social network.

By the time I was evaluating this potential investment in 2002, I had become a disciple of Charlie Munger's "lattice of mental models" approach to making decisions. One of the best descriptions of **mental models** I've seen is Nobel-prize winning social scientist Herbert Simon's original framing of the concept, where he states that better decision makers have at their disposal repertoires of possible actions; checklists of things to think about before acting; *and* "mechanisms in mind to evoke these, and bring these to conscious attention when the situations for decision arise."

So a mental model isn't a passive framework, it's something to actively use in making decisions. In each case you must decide not only which mental models to apply, but which ones are most important. Each model is like a different filter or tool. The mental models are applied in parallel and not in a serial, step-by-step way. The process is necessarily analog in nature since in most cases assumptions are rough, the systems involved are complex adaptive systems, and different models can be self-reinforcing. The process is also based on experience: The decision maker is usually applying judgment most often acquired from when he or she made mistakes in the past.

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One of the most important mental models in business is the concept of **network effects**. This is especially true today, when other factors that can create a moat against competitors —

brand, regulation, supply-side economies of scale, and intellectual property (like patents) — are under threat. As software continues to "eat the world," network effects become even more important as a factor in creating a moat since that's the primary way software companies build a barrier to entry against competitors. That's why venture capital firms investing in software-based startups include network effects in the business attributes they are looking for

Nothing scales as well as a software business, and nothing creates a moat for that business more effectively than network effects.

Network effects don't always lead to direct financial or long-term value, however. For example, a standard like Ethernet generates network effects and benefits that last longer than one would expect for supply-side economies of scale. But Ethernet also illustrates that sometimes no one directly financially benefits from the standard itself (since it is owned by no one). And even if network effects are strong initially, as with DEC, Palm, and BlackBerry — they can be brittle and disappear relatively quickly, as those businesses discovered.

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Network effects as a mental model

Network effects exist when the "value" of a format or system depends on the number of users. These effects can be positive (for example, a telephone network) or negative (for example, congestion). They can also be direct (increases in usage lead to direct increases in value to users, as with the telephone) or indirect (usage increases the production of complementary goods, as with cases for mobile phones). Network effects can protect valuable markets, or not much of a market at all in terms of financial value.

Network effects can exist in settings that are not obvious. Take ESPN for example. It has demand-side economies of scale (aka network effects) — most notably for SportsCenter — since the more people who watch the ESPN channels, the more valuable the channels are to each user because those particular images will be the basis of discussion for sports fanatics. Partly due to those network effects, ESPN has a competitive advantage compared to Fox and other sports channels that have a hard time replicating the demand-side effects. When someone says "did you see X do Y in the Z game?" if you watched the Fox version of SportsCenter, you may not have seen the particular video clip.

In tech, significant market adoption of a proprietary format or system can create a network effect and a competitive advantage for a business that is similar to supply-side economies of scale. But network effects are potentially more powerful. Unlike supply-side economies of scale, the benefits of demand-side economies of scale can increase in a *nonlinear* manner, especially in software businesses. This means that the benefits realized by a Google are far larger than those realized by a large steel or cement producer based on supply-side economies of scale. Google has at least two beneficial demand-side economies of scale — one for search and one for advertising targeting — that are mutually reinforcing and accordingly give it a strong moat. As Munger has observed: "I've probably never seen such a wide moat" and "I don't know how you displace Google." Om Malik writes about this winner-take-all dynamic as well.

For the owner of the platform, such as Google in this case, the networks effects form the basis of a powerful moat that bestows sustainable competitive advantage. A company may have revenue without some form of a moat, but it is highly unlikely it will be *sustainably* profitable over time without one.

Some network effects are strong and some are weak. For example, Google's moat in the advertising-serving business is strong. Yahoo's moat in the financial news market (Yahoo Finance) is very weak. Some markets impacted by multi-sided makers with network effects are big and lucrative (e.g., ESPN or Bloomberg's terminal business) and some are not (Yahoo Sports).

Some companies have both demand *and* supply-side economies of scale. Amazon has both, and they reinforce each other. For example, the more people who provide comments on Amazon the more valuable it becomes to other users due to demand-side economies (everybody knows to find reviews on Amazon). Amazon also has huge advantages on warehouses and the supply chain on the supply-side, which it passes along to its customers in the form of lower costs.

In fact, most companies have both supply-side and demand-side economies of scale. However, these fall along a continuum of weak to strong. The Holy Grail for an entrepreneur is demand-side economies of scale that can cause a market to "tip", giving almost the entire market to one company (winner-takes-all). Markets are more likely to tip if scale economies are high and the consumers have a low demand for variety. At one point, demand for online auctions tipped strongly to eBay. Over time that tipping phenomenon has weakened.

But the reality is that most demand-side economies do *not* cause a market to "tip" and yield a single winner. For example, the rental car industry has a number of providers since weak demand-side economies in that business were not strong enough to make the market tip.

When applying network effects goes too far

When I was applying the mental model of network effects to the Friendster decision back in 2002, I saw potential for a big financial upside. My experience in the wireless industry led me to conclude that the more people who used Friendster, the more valuable it would become.

But I had just come through the Internet bubble and seen how people had taken the concept of network effects too far — and without sufficient depth — led by "Piped Pipers" of financial doom like George Gilder, who first formulated Metcalfe's Law. An article by Briscoe, Odlyzko, and Tilly describes the folly:

"By seeming to assure that the value of a network would increase quadratically — proportionately to the square of the number of its participants — while costs would, at most, grow linearly, Metcalfe's Law gave an air of credibility to the mad rush for growth and the neglect of profitability. It may seem a mundane observation today, but it was hot stuff during the Internet bubble."

The article goes on to propose that more realistically:

"the value of a network of size n grows in proportion to $n \log(n)$. Note that these laws are growth laws, which means they cannot predict the value of a network from its size alone. But

if we already know its valuation at one particular size, we can estimate its value at any future size, all other factors being equal…. The fundamental flaw underlying… Metcalfe's law is in the assignment of equal value to all connections or all groups."

The point is that the strength of network effects is not just determined by the number of participants in a network. Affinity *between* participants, and the value of trade between those participants, matters. As the authors of the article referenced above observe, the increasing value "lies somewhere between linear and exponential growth" — and where exactly it fits will vary from case to case, as amusingly shown by this illustration from Serge Block [via Thoughts Illustrated]:

(As an aside, I had found Andrew Odlyzko's ideas to be particularly useful in the past, most notably when he wrote important papers debunking claims about the rate of Internet growth. For example, it was while reading Odlyzko's paper in November of 2000 that I realized: "Holy crap, Cisco's Internet growth numbers are rubbish.")

the strength of network effects is not just determined by the number of participants in a network

Ultimately, I decided not to invest in Friendster due to potential conflicts in some other work I was doing at the time. But my instincts about it benefitting from network effects turned out

to be correct: By June 2003 the service had 835,000 registered members; four months later, there were more than two million.

Yet growth would eventually stall. And Friendster would be overtaken first by MySpace and then conclusively by Facebook. Why?

Critical mass as a related mental model

There are a number of autopsies written about what went wrong with Friendster. The only thing they really share in common is that they are all guesses about the outcome of complex adaptive systems. So opinions on "what happened to Friendster" are like belly buttons — everyone has one, and they are all different. *Wired* magazine summarizes the conclusion of one opinion, citing David Garcia, a professor with the Swiss Federal Institute of Technology:

"What they found was that by 2009, Friendster still had tens of millions of users, but the bonds linking the network weren't particularly strong. Many of the users weren't connected to a lot of other members, and the people they had befriended came with just a handful of their own connections. So they ended up being so loosely affiliated with the network, that the burden of dealing with a new user interface just wasn't worth it. 'First the users in the outer cores start to leave, lowering the benefits of inner cores, cascading through the network towards the core users, and thus unraveling,' Garcia told us."

Garcia raises an important issue related to network effects here, though: that of **critical mass**, which is yet another mental model.

The term "critical mass" came into use around 1941 though it originally had a very limited definition: the minimum amount of a given fissionable material necessary to sustain a nuclear chain reaction at a constant rate. While not the first to use the term in a physics setting, the physicist Leo Szilard is said to be the first person to propose that a chain reaction could be created starting from a critical mass of uranium. And that's the critical point behind the concept as we apply it today.

Soon, other disciplines began to use the term "critical mass" as a mental model. One of the first people to apply it to the social sciences was the same person who created the mental models construct — Herbert Simon. His influential essay on critical mass, "Bandwagon and underdog effects and the possibility of election predictions", was published in 1954. (Simon later went on to win the Nobel Prize "for his pioneering research into the decision-making process within economic organizations".)

Other definitions of critical mass exist for other disciplines. In business, critical mass refers to "the size a company needs to reach in order to efficiently and competitively participate in the market. This is also the size a company must attain in order to sustain growth and efficiency." In a *technology* business, critical mass refers to the level of users that are required to help create a set of network effects that are so strong, that they build a moat for that particular business. Sometimes there is no second place in a market when network effects are that strong.

Critical mass is present in a platform business if a sufficient number of users adopt an innovation in a system so that adoption of those innovations becomes self-reinforcing. The classic example people cite to illustrate this point was the competition between the Beta and

VHS videocassette formats in the 1970s. Beta was considered to be the superior format in terms of quality but VHS reached critical mass first. A research paper by Sangin Park notes:

"The tipping and de facto standardization of the VHS format in 1981-1988 is believed to have been caused by network externalities [aka network effects]. In the time period, watching prerecorded videotapes such as movie titles became the most important reason to use VCRs. Hence an increase in the users of VHS VCRs could raise a variety of available movie titles and thus the demands for VHS VCRs. That is, indirect network externalities became signification in the home VCR market."

Getting to critical mass when creating a multi-sided market is sometimes called overcoming the "chicken and egg problem", which can be stated simply as: How do you get one side to be interested in a platform until that other side exists (and vice versa)? How did someone sell the first ever fax machine when there was no one on the other end to receive the fax yet? (Obviously that salesperson had to sell at least two machines.)

But in the case of complements that are different — such as game developers making games for Sony consoles before there were even a lot of consoles out there — how do you get one side (developers or console buyers) on board in the first place? In Sony's case, it sold game consoles at a loss to build up a base of users that would attract developers. As with all network effects, this eventually resulted in a flywheel effect where enough developers made enough games to attract enough users (players) which in turn attracted more developers and thus resulted in more games for more those players and a stronger user base for developers and so on.

How do you get one side to be interested in a platform until that other side exists?

What happens if a market does "tip"… but it's the *competitor* that reaps those benefits? Well, that's what happened to MySpace with Facebook. MySpace started to monetize before the social networking market "tipped". Facebook held off monetizing until its moat was secure. Zuckerberg was patient about waiting for the market to tip whereas Rupert Murdoch was not. So MySpace paid the price and Facebook reaped the rewards.

Some mental models should be weighted more than others

The mental models approach is simpler than it seems. There are about 100 important mental models (which come from multiple disciplines) that a person should use. "Fortunately," as Munger says, "it isn't that tough because 80 or 90 important models will carry about 90% of the freight in making you a worldly wise person. And, of those, only a mere handful really carry very heavy freight."

I'd argue that network effects and critical mass are two of these mental models that carry a lot of weight.

You do not need to know every mental model or even know them all deeply to make better decisions, but you do need to understand how most of them work at a basic level at least. Speaking about that importance of balancing depth vs. breadth, Charlie Munger recently said "The trouble is you make terrible mistakes everywhere else without [extreme specialization], so synthesis should be a second attack on the world after specialization. It is defensive, and it helps one to not be blindsided by the rest of world."

In business, specialization helps acquire comparative advantage. But not being wise can bite you in the rear end.

The application of a mental model from physics to other disciplines – as well as business or life questions — is intended to be a method of improving general thought. But it's pure folly to assume that formulas from physics can be applied in human affairs and produce the same predictive outcomes. As Richard Feynman says, electrons do not have feelings like people. The real world — which is a nest of complex systems — can't be modeled like a physical system. The trick is to apply the basic ethos of physics in your metal model without assuming that the real world can be modeled with formulas containing Greek letters.

Ultimately, the goal is to use mental models — like network effects and critical mass — to increase the probability of correct decisions. It is far better to be roughly right rather than to be precisely wrong in doing so.

12 x 2 quotes on network effects and critical mass

Network effects

1. "When the value of a product to one user depends on how many other users there are, economists say that this product exhibits network externalities, or network effects." Carl Shapiro and Hal Varian

2. "A network effect exists when the value of a good increases because the number of people using the good increases. All things being equal, it's better to be connected to a bigger network than to a smaller one. Adding new customers typically makes the network more valuable for all participants because it increases the probability that everyone will find something that meets their needs. So getting big fast matters, not only because it creates more value, but also because it assures that competing networks never take hold." Michael Mauboussin

3. "Network effects are tricky and hard to describe but fundamentally turn on the following question: Can the marketplace provide a better experience to customer "n+1000" than it did to customer "n" directly as a function of adding 1000 more participants to the market? You can pose this question to either side of the network – demand or supply. If you have something like this in place it is magic, as you will get stronger over time not weaker." Bill Gurley

4. "Businesses [can] create barriers to entry through "network effects", in which the value of a service to a user increases as others use it. This can potentially arise in a number of ways: for example a proprietary data asset; the marketplace dynamics of having a robust set of sellers and buyers; or through the development of a community that openly shares and exchanges information. In an era where the initial cost to develop the prototype of a product has been dramatically reduced, where there are mature and scalable open source tools and services to utilize for that development, and where cloud infrastructure is available on demand and at a variable cost, defensibility may no longer be found in the technology underpinnings — the code or IP — of a service. Defensibility may however arise through the

growth of service that gets more valuable, and more interesting, with each new participant." Union Square Ventures

5. "A popular strategy for bootstrapping networks is what I like to call 'come for the tool, stay for the network.' The idea is to initially attract users with a single-player tool and then, over time, get them to participate in a network. The tool helps get to initial critical mass. The network creates the long term value for users, and defensibility for the company." Chris Dixon

6. "Network effects can be powerful, but you'll never reap them unless your product is valuable to its very first users when the network is necessarily small….Paradoxically, then, network effects businesses must start with especially small markets. Facebook started with just Harvard students–Mark Zuckerberg's first product was designed to get all his classmates signed up, not to attract all people of Earth. This is why successful network businesses rarely get started by MBA-types: the initial markets are so small that they often don't even appear to be business opportunities at all." Peter Thiel

7. "…there are what I call groove-in effects tied to customers and consumers. Basically, this means that the more I use a product, the more I'm familiar with that product, the more convenient it gets for me. I use Microsoft Word. There might be a better program out there, but I know all the tricks with Word that I mastered over several years and I am very reluctant to give that up to start over with another product." Brian Arthur

8. "The answer [to creating a flywheel] lies in two essential variables: the size of the market and the strength of the value proposition. Any growth goes through an exponential curve, then flatters with saturation. If the ceiling of the market opportunity is $200 million, even if you get a flywheel, it will take you from twenty to sixty or seventy, then peter out because you saturated the available space. The bigger the market the more runway you have — so if you hit that knee of the curve, you can grow exponentially and keep going for a long time. Doubling a business of material size for three to four years leads to a really large, important company. That's a key element in the flywheel idea." Roelof Botha

9. "In marketplace businesses, sell-through rate can also go by "close rate", "conversion rate", and "success rate". Regardless of what it's called, sell-through rate is one of the single most important metrics in a marketplace business. As investors, we like to see a relatively high rate so that suppliers are seeing good returns on the effort they put into posting listings on the marketplace. We also like to see this ratio improving over time, particularly in the early stages of marketplace development (as it often indicates developing network effects)." Andreessen Horowitz, 16 Metrics

10. "Because the long-run success of a song depends so sensitively on the decisions of a few early-arriving individuals, whose choices are subsequently amplified and eventually locked in by the cumulative-advantage process, and because the particular individuals who play this important role are chosen randomly and may make different decisions from one moment to the next, the resulting unpredictably is inherent to the nature of the market. It cannot be eliminated either by accumulating more information — about people or songs — or by developing fancier prediction algorithms, any more than you can repeatedly roll sixes no matter how carefully you try to throw the die." Duncan Watts

11. “Ultimately, we’re all social beings, and without one another to rely on, life would be not only intolerable but meaningless. Yet our mutual dependence has unexpected consequences, one of which is that if people do not make decisions independently — if even in part they like things because other people like them — then predicting hits is not only difficult but actually impossible, no matter how much you know about individual tastes. The reason is that when people tend to like what other people like, differences in popularity are subject to what is called “cumulative advantage,” or the “rich get richer” effect. This means that if one object happens to be slightly more popular than another at just the right point, it will tend to become more popular still. As a result, even tiny, random fluctuations can blow up, generating potentially enormous long-run differences among even indistinguishable competitors — a phenomenon that is similar in some ways to the famous “butterfly effect” from chaos theory.” Duncan Watts

12. “Network effects can be classified along a spectrum, with stronger and weaker forms.” Michael Mauboussin

Critical mass

1. “The notion of a critical mass — that comes out of physics — is a very powerful model.” “Adding success factors so that a bigger combination drives success, often in non-linear fashion, as one is reminded by the concept of breakpoint and the concept of critical mass in physics. Often results are not linear. You get a little bit more mass, and you get a lollapalooza result. And of course I’ve been searching for lollapalooza results all my life, so I’m very interested in models that explain their occurrence. An extreme of good performance over many factors.” Charlie Munger

2. “We don’t have automatic competitive advantages. We’re seeing some more insurance volume, mainly from General Re, and Cort and Precision Steel have momentum, but we have to find future advantages through our own intellect. We don’t have enough critical mass and momentum in place at Wesco, so investors are betting on management.” Charlie Munger. He is saying that he does not like a situation where he does not have critical mass in the business or businesses he controls and that sometimes we must rely on having better management. He would prefer to have business that even an idiot can run successfully but sometimes that is not the case.

3. “There will be certain points of time when everything collides together and reaches critical mass around a new concept or a new thing that ends up being hugely relevant to a high percentage of people or businesses. But it’s really really hard to predict those. I don’t believe anyone can.” Marc Andreessen

4. “One clear lesson in the history of technology and business is that once an open standard gains critical mass, it is extremely hard to derail. The x86 computing architecture and the Ethernet networking standard are two salient examples of this truism. Once a single inter-operable standard gains the acceptance of multiple vendors in a marketplace, a consumer bias toward compatibility and scale economics create an increasing returns phenomenon that is nearly unassailable.” Bill Gurley

5. “Economies of scope and agglomeration are obtained by the presence of a critical mass of consumers…. Using a chemistry analogy, we hypothesize that (see Stuart Kaufman and Brian Arthur), a critical mass of consumers and producers, a ‘soup’ with sufficient diversity of

consumers, producers, ideas, skills, at a sufficient scale and critical mass will become autocatalytic. Economic activity, newly catalyzed business activity, and other surprise will emerge. Emergent behavior, surprising and unplanned, is a well-known behavior of complex systems and a manifestation of the invisible hand of Adam Smith." Vinod Khosla

6. A tipping point is "the moment of critical mass, the threshold, the boiling point." Malcolm Gladwell

7. "Phase transitions are unusual points in the 'phase space' of possible states, while most of this space is occupied by stable states." "There seem to be 'laws' [of] social systems that have at least something of the character of natural physical laws, in that they do not yield easily to planned and arbitrary interventions. Over the past several decades, social, economic and political scientists have begun a dialogue with physical and biological scientists to try to discover whether there is truly a 'physics of society', and if so, what its laws and principles are. In particular, they have begun to regard complex modes of human activity as collections of many interacting 'agents' — somewhat analogous to a fluid of interacting atoms or molecules, but within which there is scope for decision-making, learning and adaptation." Philip Ball

8. "At a certain scale, a system reaches a critical mass or a limit where the behavior of the system may change dramatically. It may work better, worse, cease to work or change properties. Small interactions over time slowly accumulate into a critical state — where the degree of instability increases. A small event may then trigger a dramatic change like an earthquake. A small change may have no effect on a system until a critical threshold is reached. For example, a drug may be ineffective up until a certain threshold and then become effective, or it may become more and more effective, but then become harmful. Another example is from chemistry. When a system of chemicals reaches a certain level of interaction, the system undergoes a dramatic change. A small change in a factor may have an unnoticeable effect but a further change may cause a system to reach a critical threshold making the system work better or worse. A system may also reach a threshold when its properties suddenly change from one type of order to another. For example, when a ferromagnet is heated to a critical temperature it loses its magnetization. As it is cooled back below that temperature, magnetism returns." Peter Bevelin

9. "Silicon Valley has evolved a critical mass of engineers and venture capitalists and all the support structure — the law firms, the real estate, all that — that are all actually geared toward being accepting of startups." Elon Musk

10. "Startups with a customer base need to maintain an ongoing dialog with their customers — not make a set of announcements when the founder thinks it's time for something new. This is why entrepreneurship is an art. When you have a critical mass of customers, there's a fine line between sticking with the status quo too long and changing too abruptly." Steve Blank

11. "If you tell Facebook about your startup before you reach critical mass, you are an idiot." Jason Calacanis

12. "Critical Mass." Dr. Evil

This post was syndicated by permission of the author. About the author: Tren Griffin's professional background has primarily involved areas where business meets technologies like software and mobile communications. He currently works at Microsoft. Previously, he was a partner at private equity firm Eagle River (established by Craig McCaw) and before that, a consultant in Asia. Griffin's latest book, Charlie Munger: The Complete Investor is about the

legendary Berkshire Hathaway vice chairman, and how he invokes a set of interdisciplinary "mental models" involving economics, business, psychology, ethics, and management to keep emotions out of his investments and avoid the common pitfalls of bad judgment.

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A Dozen Things I've Learned from Dr. Michael Burry about Investing

March 25, 2016

Dr. Michael Burry is the founder of Scion Capital. He was recently made famous with the general public as a character in the movie adaptation of Michael Lewis' book *The Big Short*, but even before then he was famous in investing circles for his astute investing during times like the financial crisis of 2007. Michael Burry is portrayed in the movie by Christian Bale. The real Michael Burry started out as a part time investor and blogger and built his reputation and AUM with great results and original thinking. He is a physician by training and has diagnosed himself as having Asperger's Syndrome. Burry is particularly interesting for investors in that he has adapted value investing principles to his personality, skills and nature. Like Charlie Munger did many years before, Burry found new ways for value investing to evolve beyond using the system to find "cigar butt" stocks. Burry's approach indicates that value investing can work for technology and other stocks that people like Warren Buffet may invest in if circle of competence exists and the holding period is not as long that used by someone like Warren Buffett. Technology changes too much to adopt the same holding period as Munger and Buffett. What is Burry doing today? "Michael Burry is still managing a hedge fund named Scion and is still critical of the way the financial system is being run, but now he's more interested in water than real estate" wrote the author of a New York magazine

article who interviewed him in late 2015. Burry's story demonstrates several important things. Most importantly, the power of being rational and the power of fundamental bottoms up research. It also demonstrates the huge value that permanent capital provides to a rational money manager since as Keynes once said: Markets can remain irrational longer than you can remain solvent. Even as rational as Burry is, it took courage to make and to hold on to the investments that made him famous. Being right, but too early, is indistinguishable from being wrong.

1. **"My weapon of choice as a stock picker is research; it's critical for me to understand a company's value before laying down a dime. I really had no choice in this matter, for when I first happened upon the writings of Benjamin Graham, I felt as if I was born to play the role of value investor." "Investors in the habit of overturning the most stones will find the most success." "The late 90s almost forced me to identify myself as a value investor, because I thought what everybody else was doing was insane."** Burry has not completely adopted the ideas of Warren Buffett or Ben Graham and has instead developed his own approach that remains true to the fundamental bedrock of value investing. Burry's example illustrates how it is possible to follow the value investing system and yet have your own unique style. Again, he is at his core a value investor. Burry makes clear in this set of quotes that he treats shares of stock as a partial ownership of a real business and that understanding any business requires research. You must genuinely understand of the underlying business. A share of stock is not a piece of paper to be traded like a baseball card. The movie version of *The Big Short* conveys that the style of Burry has a lot more stress associated with it than a Buffett approach, but for Burry it has worked out well financially.

2. **"All my stock picking is 100% based on the concept of a margin of safety, as introduced to the world in the book "Security Analysis," which Graham co-authored with David Dodd. By now I have my own version of their techniques, but the net is that I want to protect my downside to prevent permanent loss of capital. Specific, known catalysts are not necessary. Sheer, outrageous value is enough." "My firm opinion is that the best hedge is buying an appropriately safe and cheap stock." "It is a tenet of my investment style that, on the subject of common stock investment, maximizing the upside means first and foremost minimizing the downside."** Burry reveals in these statements that he keeps the core value investing faith by always using a "margin of safety" approach. When Burry says: **"Lost dollars are simply harder to replace than gained dollars are to lose"** it is another way of saying what Warren Buffett has said many times: "The first rule of investing is: don't lose money; the second rule is don't forget Rule No. 1." Joel Greenblatt agrees: "Look down, not up, when making your initial investment decision. If you don't lose money, most of the remaining alternatives are good ones." Seth Klarman writes in his book of the same name: "A margin of safety is achieved when securities are purchased at prices sufficiently below underlying value to allow for human error, bad luck, or extreme volatility in a complex, unpredictable and rapidly changing world." An investor who purchases shares in a business at a price that reflects a margin of safety can make a mistake and still do well financially. When Burry refers to "catalysts" he is talking about the events that I wrote about in my post on Mario Gabelli, who has said**:** "A catalyst may take many forms and can be an

industry or company-specific event. Catalysts can be a regulatory change, industry consolidation, a repurchase of shares, a sale or spin-off of a division, or a change in management." Burry, Buffett, Greenblatt, Klarman, Gabelli all think about *margin of safety* first. It is not an optional part of value investing.

3. **"I try to buy shares of unpopular companies when they look like road kill, and sell them when they've been polished up a bit." "Fully aware that wonderful businesses make wonderful investments only at wonderful prices, I will continue to seek out the bargains amid the refuse."** The third bedrock value investing principle is: Mr. Market is your servant and not your master. Howard Marks makes the same point Burry is making about the necessity of sometime being contrarian: "It is our job as contrarians to catch falling knives, hopefully with care and skill. That's why the concept of intrinsic value is so important. If we hold a view of value that enables us to buy when everyone else is selling – and if our view turns out to be right – that's the route to the greatest rewards earned with the least risk…. To achieve superior investment results, your insight into value has to be superior. Thus you must learn things others don't, see things differently or do a better job of analyzing them – ideally all three." Adopting the popular viewpoint will not result in market out-performance if the popular forecast is also right. Some roadkill is really roadkill, and some refuse is really refuse. Finding an out-of-favor business selling at a substantial bargain and then waiting is the name of the value investing game. It is easier to say than do.

4. **"If you are going to be a great investor, you have to fit the style to who you are. At one point I recognized that Warren Buffett, though he had every advantage in learning from Ben Graham, did not copy Ben Graham, but rather set out on his own path, and ran money his way, by his own rules.… I also immediately internalized the idea that no school could teach someone how to be a great investor. If it were true, it'd be the most popular school in the world, with an impossibly high tuition. So it must not be true." "Ick investing means taking a special analytical interest in stocks that inspire a first reaction of 'ick.' I tend to become interested in stocks that by their very names or circumstances inspire unwillingness – and an 'ick' accompanied by a wrinkle of the nose on the part of most investors to delve any further."** In his book *The Big Short* Michael Lewis describes Burry's view: "The lesson of Buffett is, to succeed in a spectacular fashion you have to be spectacularly unusual." The movie version of *The Big Short* certainly portrays Burry as a very usual character due to his Asperger's syndrome. Burry believes he has an advantage in the investing process since Asperger's allows him to be more rational/less emotional. There will be times when Mr. Market will offer up shares in a business at a price that reflects a substantial margin of safety, and to find that bargain wise investors try to find something that is out-of-fashion. Burry

believes there is no better place to look for something that is out-of-fashion than the "ick" category.

5. **"I prefer to look at specific investments within the inefficient parts of the market." "The bulk of opportunities remain in undervalued, smaller, more illiquid situations that often represent average or slightly above-average businesses." "In essence, the stock market represents three separate categories of business. They are, adjusted for inflation, those with shrinking intrinsic value, those with approximately stable intrinsic value, and those with steadily growing intrinsic value. The preference, always, would be to buy a long-term franchise at a substantial discount from growing intrinsic value."** Markets are often efficient but that does not mean that they are always efficient. If you work hard at the research side of investing and are diligent Burry believes that bargains can be found. The bargains may not always be found within your circle of competence and may not be available for very, long but if you are aggressive and willing to act quickly Burry believes there are big opportunities for an investor.

6. **"It is Buffett, not Graham that espouses low turnover. Graham actually set targets: 50% gain or 2 years. That actually ensures rather high turnover."** The actual Ben Graham quote from an interview is: "If a stock hasn't met your objective by the end of the second calendar year from the time of purchase, sell it regardless of price." This statement by Graham is not consistent with Warren Buffett's view of the world, but it is perfectly acceptable for a value investor to do as long as the holding period is not so short that it falls within the definition of speculation. Burry feels comfortable buying stocks and other assets that Buffett would avoid. Both approaches are still value investing.

7. **"Credit-default swaps remedied the problem of open-ended risk for me. If I bought a credit-default swap, my downside was defined and certain, and the upside was many multiples of it."** Burry is describing a classic example of positive optionality that I discussed in my post on Nassim Taleb: "Optionality is the property of asymmetric upside (preferably unlimited) with correspondingly limited downside (preferably tiny)." If you can buy positive optionality at a bargain price that investment can be very valuable. It is of course possible to overpay for optionality.

8. **"A Scion portfolio will be a concentrated portfolio." "The Fund maintains a high degree of concentration – typically 15-25 stocks, or even less. Some or all of these stocks may be relatively illiquid." "I like to hold 12 to 18 stocks diversified among various depressed industries, and tend to be fully invested."** Burry is what Charlie Munger calls a "focus investor" since he concentrates his bets. For Burry, owning a

small number of stocks in "various depressed industries" is enough diversification. This means he does not buy a dozen health care stocks. In other words, Burry diversifies based on categories.

9. **"One hedges when one is unsure. I do not seek out investments of which I am unsure."** It is always wise to have what Charlie Munger calls a "too hard" pile and avoid investment about which you are unsure. But this approach is especially important if an investor has as few as 12 stocks in their investment portfolio like Burry. One way to make peace with this approach and avoid *hyperactive investor syndrome* is to realize that you can be a successful investor by making only one of two sound decisions a year. Joel Greenblatt says: "Even finding one good opportunity a month is far more than you should need or want."

10. **"How do I determine the discount? I usually focus on free cash flow and enterprise value (market capitalization less cash plus debt). I will screen through large numbers of companies by looking at the enterprise value/EBITDA ratio, though the ratio I am willing to accept tends to vary with the industry and its position in the economic cycle. If a stock passes this loose screen, I'll then look harder to determine a more specific price and value for the company. I also invest in rare birds — asset plays and, to a lesser extent, arbitrage opportunities and companies selling at less than two-thirds of net value (net working capital less liabilities). I'll happily mix in the types of companies favored by Warren Buffett — those with a sustainable competitive advantage, as demonstrated by longstanding and stable high returns on invested capital — if they become available at good prices."** Burry is not like Buffett in every way and not like Graham either. Burry shows how it is possible to follow the value investing system and yet have your own unique style. But he is still a value investor since he buys at a price that reflects a margin of safety, does not make Mr. Market his master and treats shares of stock as a partial ownership of a real business. Burry's style is opportunistic and fits with who is he is. You are not Michael Burry and neither am I. Most everyone is far better off investing in a low cost portfolio of diversified index funds.

11. **"Volatility does not determine risk." "I certainly view volatility as my friend. Volatility is on sale because 99% of the institutions out there are doing their best to avoid it." "I will always choose the dollar bill carrying a wildly fluctuating discount rather than the dollar bill selling for a quite stable premium."** Michael Mauboussin has a wonderful description of volatility that I like a lot.

"A lot of value investors shun concepts such as volatility, or standard deviation, as a measure of risk — and I'm sympathetic to that point of view. That said, the notion of risk is very time-dependent. For very short periods of time, volatility is a pretty good way to think about risk. I have kids in college and I have to write a check for their tuition, so volatility is a very important concept for me. I want to minimize my volatility so I can make sure I can write that check. Or if you go out to an options desk and say, "Options traders, we're taking away your measure of implied volatility," they would actually be very much hamstrung. But if you take a long-term point of view, which most value investors do, then that idea of volatility melts

away and, in fact, volatility becomes your friend. Risk then becomes the loss of permanent capital. You can bring these under the same tent by thinking about the temporal dimension."

12. **"Innovation, especially in America, is continuing at a breakneck pace, even in areas facing substantial political or regulatory headwinds."** Anyone involved in a real business or an occupation like medicine can see the pace of innovation in increasing not decreasing. That people are not buying as much capital equipment like machine tools is not evidence that innovation has slowed. That software is replacing capital goods is obvious to anyone paying attention to the real economy. Innovation is racing ahead, but not all innovation is profitable. A simple way to think about disruption is to say that it happens when one business is able to harm or eliminate the competitive advantage of another business. It's that simple. Disruption happens when a business creates innovation which reduces the competitive advantage of rival businesses. Innovation both creates and destroys competitive advantage and therefore profit. Consumers always benefit from innovation. Producers only sometimes benefit from innovation depending on whether the innovation creates or harms a moat.

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A Dozen Times Mark Twain and Warren Buffett have said Similar Things

April 30, 2016

My objective in this blog post is to contrast the investing outcomes of an amateur investor like Samuel Clemens (Mark Twain) with the outcomes experienced by a professional investor. One type of investment where most anyone can see this difference is in venture capital, where Twain was quite active over the years even though the word had not yet been created. His performance as a venture capital investor was terrible. Why? Well, as Warren Buffett says, "risk comes from not knowing what you are doing" and Twain was often involved in businesses and investments he knew next to nothing about.

That so many people seem to think business and investing are easy is a bit of a paradox. What is simple is not necessarily easy. To illustrate, seven professional venture capital investors would never say: "Let's perform a colonoscopy on Fred." Well, they might if they hated Fred, but that is a special case. And yet seven doctors may say: "Let's make this venture capital investment" without a professional lead investor also being involved in the business so they can sit in a sidecar. As I wrote in my post last weekend about the professional seed round investor Steve Anderson, it takes years to become a successful venture capital investor. Attending medical, law or pharmacy school and having a high IQ is not enough to make you a successful venture investor. There are many posts on this blog which discuss why success in venture capital requires much more than writing a check so I will not repeat that here.

Are amateur Angel investors much more likely to successfully sit in a "sidecar" when a professional venture investor is involved? Sure. As an example, in the Amazon seed round there were a few wealthy Angels involved, but there were also professionals investors participating in the round like Nick Hanauer and Tom Alberg. It is rare for an amateur Angel investor to get access to high quality seed investment opportunities like Amazon but it is surely a better alternative than investing in a startup along with with two dentists, a hardware store owner, a sociologist and a probate lawyer. How often are seed sound investments successful? I discussed that last weekend. I think the answer depends on how much you swing for the fences. Jason Calacanis said 8 of 10 of his investments are complete zeros in terms of return on capital but I suspect he is swinging harder for the 100X return than many Angels. But many people will say that 4-6 of ten seed round bets will be a total loss.

Andy Rachleff is probably the most negative person I have read on amateur Angel investing. For example, he's written an article entitled: "Why Angel's Don't Make Money… And Advice for People who are Going to Do it Anyway" that I link to in the notes. How many venture investors are out there investing today who are modern day Mark Twain equivalents? It is impossible to know for sure. There is no central database of Angels. Investors at seed stage are not required to register with anyone or report results to any government agencies. Some people, including a few academics, claim to have surveyed Angels on their investing returns to obtain useful data, but this process is like asking fishing enthusiasts about the quality and size of their catch. There are lots of psychological reasons people forget about

unfortunate investing results and overly enhance any successes. If someone cites an academic study on the financial returns of Angel investors, look closely at where they obtained their data and how. Self-reported data from Angels obtained as part of a survey is simply not credible. With professional venture investors who have limited partners who must file reports with government agencies, at least there is a statute or regulations requiring that the filings are accurate. The existence of this data for professional venture capitalists allows information providers like PitchBook to produce statistics on venture capital returns that are accurate and therefore useful. In contrast, there is little accurate data on amateur Angel investing returns. What is the average aggregate return of an average amateur Angel investor? The answer is: no one really knows. There are limited partners of professional Micro VCs who know what their financial returns are, but as far as I know no one has revealed those results.

That Mark Twain made loads of different mistakes in his business investments is well documented. Why does someone like Buffett learn from his mistakes and Twain never seemed to do so? Will Rogers pointed to part of the answer when he said: "There are three kinds of men. Some learn by reading. Some learn by observation. The rest of them must pee on the electric fence for themselves." But the main driver is what Charlie Munger describes here: "Warren and I aren't prodigies. We can't play chess blindfolded or be concert pianists. But the results are prodigious, because we have a temperamental advantage that more than compensates for a lack of IQ points." As the just concluded Berkshire meeting Munger said that some of success is nature and some is nurture, and the precise ratio varies in each case. He believes that having the right judgment and temperament for investing is mostly innate.

How lousy were Twain's investing results? The biographer Richard Zacks wrote this summary of Twain's business follies:

"Mark Twain was a great author—but a stupendously incompetent businessman. He lost money on an engraving process, on a magnetic telegraph, on a steam pulley, on the Fredonia Watch Company, on railroad stocks. He once turned down a chance to buy into Bell Telephone even though he had one of the nation's first residential phones. The author eventually lost so much money that in 1891 he moved the family out of their Hartford home; Twain would sell it after twenty years for about one-sixth the amount he put into it…. [Twain] poured thousands of dollars into backing a protein powder called Plasmon, which he claimed delivered 16 times the nutritional value of steak at a cost of a penny a day; it could 'end the famine in India.' Plasmon was the subject of a fraud trial in 1907, in which Twain tried to recoup his $30,000 investment (about $750,000 today). At the trial, Twain said that company president Henry A. Butters should have been paid "$3 a century" and was a 'stallion in intention, a eunuch in action.' Twain was asked if this was the first time that he had been swindled. 'No, I have been swindled out of more money than there is on the planet,' he told the judge."

The Fredonia Watch Company sounds like it was part of a Marx brothers movie. The promoters of the watchmaking scam that Twain fell for were professional sellers of patent medicine. Why was Twain such an easy mark? Some people have the idea in their head that the way to get ahead is to get rich quick with one big score. twain may have picked up this attitude from his father who was a land speculator. This approach usually leads to very painful outcomes. Twain admitted more than once that he was a born speculator. His most famous folly was:

“a new invention called the Paige Compositor.The machine was the brainchild of James Paige, a mechanic and inventor whose goal was essentially to transform the printing press (a machine that required a skilled professional to slowly prepare words to be set onto paper) to something more automatic, closer to a typewriter. Something that could print and align words quickly and cheaply.

… By the time the compositor was finally completed in 1889, Twain had sunk the equivalent of $3 million in today’s currency. It wasn’t the first time he’d made a bad investment. Twain once threw money towards a project to create a hand grenade that could extinguish fires.”

According to the biographer Peter Krass, Twain was an incurable speculator and at one point stopped working on Huckleberry Finn to devote time to inventing a children’s trivia game. His other inventions included a clamp to prevent infants from kicking the sheets off their beds and a self-adhesive scrapbook.

If good judgement can be derived from bad judgement, Twain should have had plenty of material to learn from. Unfortunately, the lessons did not seen to stick in the case of Twain who repeatedly repeated mistakes. A person like Buffett learns while another person like Twain does not. How is it that someone like Twain can say and write things that are sound and seem full of wisdom and yet ignore that advice in their own decision making? How can his ability to observe human nature be so good and yet his decision making in business be so bad? The failure of someone to heed their own advice is not a new problem since proverbs like: "The cobbler's children are always the worst-shod" or "Physician heal thyself" are very old.

One theory is that Twain's painful business experiences made him a better writer. Twain's business losses were perhaps literature's gain. Stanford English professor Shelley Fisher Fishkin believes:

"It would be fair to say that he probably would not have necessarily decided to earn his living as a writer unless he had failed as a silver miner. He learned things from all of his experiences and adventures that came in handy when he wrote."

A secondary objective of this blog post is to remind people of a few of Buffett's more important ideas. Each Twain quote is paired with a Buffett quote for that reason. Twain often managed to get the advice right in terms of what he said or wrote, but had a hard time following his own instructions.

Before getting to the customary dozen quotes, here's a Tom Sawyer style story from Alice Schroeder's Warren Buffett biography *Snowball* that illustrates how he is similar to Mark Twain's most famous character in some ways:

"Doing what he called his Tom Sawyer routine, Warren said to Kerlin: 'This is your chance. We're going to deal you in.' We told him that we would go out at four in the morning to some golf course in Virginia, and that he would wear the gas mask in the lake and retrieve the balls, and we'd split the money three ways. "Kerlin said, 'How do I stay down on the bottom?' I said, 'Oh, I've got that all worked out. What we will do is, you'll strip, and you'll be nude, but you'll wear my Washington Post newspaper bag, and we'll put barbell plates in the newspaper bag so that you'll stay on the bottom.' "So we got out there at the crack of dawn. Kerlin was stripped, and we were dressed warmly. He was totally nude with a Washington Post newspaper bag on and all these barbell plates, and he started wading into the lake. Of course, he didn't know if he was stepping on snakes or golf balls or whatever. And then he got down and when he tugged on the rope, we pulled him back up. He said, 'I can't see anything.' We said, 'Don't worry about seeing anything, just grope around.' And he started to go back down. "But before his head went under, this truck came over the rise, carrying the guy that's going to fill up sand traps in the morning. He saw us and drove up, saying, 'What are you kids doing?' Danly and I were thinking fast. 'We're conducting an experiment for our high school physics class, sir.' Kerlin was nodding the whole time. So we had to get him out of the pond. The whole thing blew up on us."

1. **Twain: "There are two times in a man's life when he should not speculate: when he can't afford it and when he can." "OCTOBER: This is one of the peculiarly dangerous months to speculate in stocks in. The other are July, January, September, April, November, May, March, June, December, August, and February."** *Following the Equator, Pudd'nhead Wilson's New Calendar.*

Buffett: "The line separating investment and speculation, which is never bright and clear, becomes blurred still further when most market participants have recently enjoyed triumphs. Nothing sedates rationality like large doses of effortless money. After a heady experience of that kind, normally sensible people drift into behavior akin to that of Cinderella at the ball. They know that overstaying the festivities — that is, continuing to speculate in companies that have gigantic valuations relative to the cash they are likely to generate in the future — will eventually bring on pumpkins and mice. But they nevertheless hate to miss a single minute of what is one helluva party. Therefore, the giddy participants all plan to leave just seconds before midnight. There's a problem, though: They are dancing in a room in which the clocks have no hands." "So there's two types of assets to buy. One is where the asset itself delivers a return to you, such as, you know, rental properties, stocks, a farm. And then there's assets that you buy where you hope somebody else pays you more later on, but the asset itself doesn't produce anything. And those are two different games. I regard the second game as speculation."

2. **Twain: "Behold the fool saith, 'Put not all thine eggs in the one basket' — which is but a manner of saying, 'Scatter your money and your attention;' but the wise man saith, 'Put all your eggs in the one basket and –WATCH THAT BASKET.'"** *Pudd'nHead Wilson's Calender*

Buffett: "We believe that a policy of portfolio *concentration* may well decrease risk if it raises, as it should, both the intensity with which an investor thinks about a business and the comfort-level he must feel with its economic characteristics before buying into it. In stating this opinion, we define risk, using dictionary terms, as 'the possibility of loss or injury.'" "[A] situation requiring wide diversification occurs when an investor who does not understand the economics of specific businesses nevertheless believes it in his interest to be a long-term owner of American industry. By periodically investing in an index fund, for example, the know-nothing investor can actually out-perform most investment professionals. Paradoxically, when "dumb" money acknowledges its limitations, it ceases to be dumb."

3. **Twain: "Whenever you find yourself on the side of the majority, it is time to reform (or pause and reflect)."** *Notebook, 1904*

Buffett: "You want to be greedy when others are fearful. You want to be fearful when others are greedy. It's that simple."

4. **Twain: "All my life I have stumbled upon lucky chances of large size, and whenever they were wasted it was because of my own stupidity and carelessness."** *Letter to Mr. Rogers*

Buffett: "During 2008 I did some dumb things in investments… I made some errors of omission, sucking my thumb when new facts came in that should have caused me to re-examine my thinking and promptly take action."

5. **Twain: "A man who goes around with a prophecy-gun ought never to get discouraged: if he will keep up his heart and fire at everything he sees, he is bound to hit something by and by."** *Autobiography of Mark Twain*

Buffett: "I continue to believe that short-term market forecasts are poison and should be kept locked up in a safe place, away from children and also from grown-ups who behave in the market like children." '*Forecasts* may tell you a great deal about the forecaster; they tell you nothing about the future." "I don't read economic forecasts. I don't read the funny papers."

6. **Twain: "Beautiful credit! The foundation of modern society. Who shall say that this is not the golden age of mutual trust, of unlimited reliance upon human promises? That is a peculiar condition of society which enables a whole nation to instantly recognize point and meaning in the familiar newspaper anecdote, which puts into the mouth of a distinguished speculator in lands and mines this remark: 'I wasn't worth a cent two years ago, and now I owe two millions of dollars.'"** *The Gilded Age*

Buffett: "When leverage works, it magnifies your gains. Your spouse thinks you're clever, and your neighbors get envious. But leverage is addictive. Once having profited from its wonders, very few people retreat to more conservative practices. And as we all learned in third grade — and some relearned in 2008 — any series of positive numbers, however impressive the numbers may be, evaporates when multiplied by a single zero. History tells us that leverage all too often produces zeroes, even when it is employed by very smart people."

7. **Twain: "Money and chips are flung upon the table, and the game seems to consist in the croupier's reaching for these things with a flexible oar, and raking them home. It appeared to be a rational enough game for him, and if I could have borrowed his oar I would have stayed, but I didn't see where the entertainment of the others came in. This was because I saw without perceiving, and observed without understanding."** *Aix, Paradise of Rheumatics*

Buffett: "On my honeymoon I traveled out west. When I visited the casino and saw all these smart well-dressed people participating in a game with the odds against them, it was then that I realized I won't have a problem getting rich!"

8. **Twain:** "The lottery is a government institution & the poor its best patrons." *Notebook #17, October 1878 – February 1879*

Buffett: "I get dozens of letters, almost daily from people who have financial difficulties for one reason or another. And they overwhelmingly come from three sources: One is health problems, people run into unexpected medical bills and it gets them into a tough situation. Second, they get into trouble on credit cards, frequently and a credit card is a temptation to many people. But the third thing I hear about is people who have an addiction to gambling. And they've used thousands and thousands or tens of thousands of dollars that the family needs and they just can't get off the hook and they find themselves in enormous financial trouble, sometimes that interacts with the credit card situation." "I think that for a state to essentially prey upon its citizens, create more of these addictions, create more of these letters coming in every day, I just think it's wrong. I think it's cynical on the part of the state to raise money from people who basically can't afford it by promising them a dream that is not going to come true." "There's nothing getting developed. It's a transfer of money. I mean, basically, if you take the losses of everybody who participates in gambling, (it's not gaming, it's gambling), if you take the losses, it goes three places: it will end up going to the state as taxes, to some degree, that's not development. It will end up paying part of the operating expenses, but any place you spend money with will pay expenses of that establishment. And it will go to the owners." "Addictions produce crime. If you have a large group of people that are addicted to drugs, you are going to have more crime. If you have a large group of people that are addicted to gambling, you are going to have more crime. People get into impossible situations when they get into positions like that." "For every lucky person, there's hundreds of thousands, you just keep feeding the kitty and in the end, it's just a big loser for everyone." "It is certainly clear that a given percentage of people will become addicted and use money they've got no business using and that percentage is not a small percentage." "You're teaching your citizens something all the time by the actions you take as legislators and as administrators of a state like this [Nebraska]. And essentially they teach you that the state is on the other side of the transaction from you, they're trying to get you to do something dumb. I think the state ought to be trying to do something for its citizens, not do something to its citizens."

9. **Twain: "The mind exercises a powerful influence over the body. From the beginning of time, the sorcerer, the interpreter of dreams, the fortune-teller, the charlatan, the quack, the wild medicine-man, the educated physician, the mesmerist, and the hypnotist have made use of the client's imagination to help them in their work. They have all recognized the potency and availability of that force."** *Christian Science*

Buffett: **"Decades ago, Ben Graham pinpointed the blame for investment failure, using a quote from Shakespeare: 'The fault, dear Brutus, is not in our stars, but in ourselves.'"**

10. **Twain: "Being rich ain't what it's cracked up to be. It's just worry and worry, and sweat and sweat, and a-wishing you was dead all the time**." *The Adventures of Tom Sawyer*

Buffett: "Success is getting what you want. Happiness is wanting what you get."

11. **Twain: "It isn't the sum you get, it's how much you can buy with it, that's the important thing; and it's that that tells whether your wages are high in fact or only high in name."** *A Connecticut Yankee in King Arthur's Court*

Buffett: "The arithmetic makes it plain that inflation is a far more devastating tax than anything that has been enacted by our legislature. The inflation tax has a fantastic ability to simply consume capital. It makes no difference to a widow with her savings in a five per cent passbook account whether she pays 100 per cent income tax on her interest income during a period of zero inflation or pays no income taxes during years of five per cent inflation. Either way, she is 'taxed' in a manner that leaves her no real income whatsoever. Any money she spends comes right out of capital. She would find outrageous a 120 per cent income tax but doesn't seem to notice that five per cent inflation is the economic equivalent."

12. **Twain: "He had discovered a great law of human action, without knowing it– namely, in order to make a man or a boy covet a thing, it is only necessary to make the thing difficult to attain."** *The Adventures of Tom Sawyer*

Buffett: "Charlie said of the seven deadly sins, envy is the worst. You feel miserable-but the other guy has no idea how you're feeling. Envy-where the hell is the upside?"

Notes:

Twain Quotes: http://www.twainquotes.com/Luck.html

Alice Schroeder, Snowball http://www.amazon.com/The-Snowball-Warren-Buffett-Business/dp/0553384619

The only film footage of Twain http://www.openculture.com/2014/09/the-only-footage-of-mark-twain-the-original-digitally-restored-films.html

Richard Zacks essay on Twain as an investor: http://time.com/4297572/mark-twain-bad-business/

Peter Krass book: "Ignorance, Confidence and Filthy Rich Friends: The Business Adventures of Mark Twain, Chronic Speculator and Entrepreneur." http://www.reuters.com/article/us-books-twain-idUSN0923316520070316

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A Dozen Things I've Learned from Bernard Baruch about Investing

May 7, 2016

One of the more legendary characters in the history of investing is Bernard Baruch. In his biography Jim Grant writes that Baruch was not as wealthy as most people imagine, but wealth enough to live the lifestyle "of a millionaire" (whatever that means). At various times in his life Baruch was an investor, philanthropist, statesman, and political consultant. *The Dictionary of American Biography* provides background:

In 1891 Baruch joined the brokerage firm of A. A. Housman and Company as a bond salesman and customers' man. After some initial setbacks his personal speculations resulted in a series of successful plunges in sugar, tobacco, and railroad stocks. Baruch played a lone hand, followed his hunches, and achieved his greatest triumphs during bear markets, selling short as stock prices tumbled. His flamboyance did not gain him respectability among the Morgans, Warburgs, and other pillars of New York's financial establishment, but he was a millionaire at thirty. In 1903 Baruch left Housman to establish his own firm. In frequent alliance with the Guggenheim brothers he speculated in copper, sulfur, gold, rubber, tungsten, zinc, and iron investments in the United States and abroad.

Baruch was influenced by several other investors, one of which was Scottish journalist Charles Mackay, the author of *Extraordinary Popular Delusions and the Madness of Crowds.*

Ben Graham was so successful early in his career as an investor that he was invited to be a partner of an older and more established Bernard Baruch. A passage of the book *A Decade of Delusions* provides backgrou8nd on this time in history:

At the quarter-century mark of 1925, the great bull market was under way, and Graham, then 31, developed what he later described as a "bad case of hubris." During an early-1929 conversation with business associate Bernard Baruch (about whom he disparagingly observed, "He had the vanity that attenuates the greatness of some men"), both agreed that the market had advanced to "inordinate heights, that the speculators had gone crazy, that respected investment bankers were indulging in inexcusable high jinks, and that the whole thing would have to end up one day in a major crash." Several years later he lamented, "What seems really strange now is that I could make a prediction of that kind in all seriousness, yet not have the sense to realize the dangers to which I continued to subject the Account's4 capital." In mid1929, the equity in the "Account" was a proud $2,500,000; by the end of 1932, it had shrunk to a mere $375,000.

Graham declined the invitation to join Baruch as a partner. But if you look at what Baruch said over the years it is impossible to conclude that he did not have a significant influence on Graham and the creation of the value investing system. The dozen quotes I have chosen below were chosen to help make this point.

1. **"Before you buy a security, find out everything you can about the company, it's management and competitors, it's earnings and possibilities for growth."** Treat a share of stock as a proportional ownership of the business. A share of stock is not the equivalent of a baseball card or a collectable car. It is a real business that you must understand deeply to be a successful investor. For someone like Buffett this process of learning about the business is the most fun part of investing. If you do not find understanding businesses interesting, I suggest that you find a low cost diversified portfolio of index funds/ETFs and be content with your profession and hobbies.

2. **"Don't try to buy at the bottom and sell at the top. This can't be done – except by liars." "Bears can make money only if the bulls push up stocks to where they are overpriced and unsound." "Whatever men attempt, they seem driven to overdo. When hopes are soaring, I always repeat to myself that two and two still make four." "The main purpose of the stock market was to make fools of as many people as possible."** Make bi-polar *Market* your servant rather than your master. Trying to time markets in the short term is a fool's errand. People, of course, fib about their success as stock speculators all the time — mostly to themselves. Mr. Market is a drunken psycho. Markets are not wise in the short tern nor always efficient. He is the source of opportunity since his bi-polar swings up and down produce the mis-pricing that allows some people to beat the market.

3. **"When beggars and shoeshine boys, barbers and beauticians can tell you how to get rich it is time to remind yourself that there is no more dangerous illusion than the belief that one can get something for nothing**." There is a big difference between investing and speculating. Investors are focused on *value* whereas speculators are focused on how the changing psychology of large numbers of people impacts *price*. In order to buy a stock at a discount to value you must do the work. Of course, if it is not work but fun to understand businesses then you have what Warren Buffett likes so much- something that is both profitable and fun.

4. **"In the search for facts I learned that one had to be as unimpassioned as a surgeon. And if one had the facts right, one could stand with confidence against the will or whims of those who were supposed to know best."** Being rational is the fourth bedrock principle of value investing. Charlie Munger calls rationality "a moral duty." Unfortunately, it is hard to be rational all the time and in all situations given the many human biases that have been identified by behavioral economists. Even though it is not easy to be rational, it is worth the effort, especially in investing.

5. **"Don't try to be a jack of all investments. Stick to the field you know best**." This statement by Baruch is another way of saying: stay within your circle of competence.

Risk comes from not knowing what you are doing. Charlie Munger says: "There are a lot of things we pass on. We have three baskets: in, out, and too tough…We have to have a special insight, or we'll put it in the 'too tough' basket. All of you have to look for a special area of competency and focus on that."

6. **"Don't buy too many different securities. Better to have only a few investments which can be watched."** Baruch is saying that he is a "focus investor" like Charlie Munger: "Our investment style has been given a name — focus investing — which implies 10 holdings, not 100 or 400." Especially if you have a day job there are only so many business you can genuinely follow and understand.

7. **"Beware of barbers, beauticians, waiters – of anyone – bringing gifts of 'inside' information or 'tips'. The longer I operated in Wall Street the more distrustful I became of tips and 'inside' information of every kind. Given time, I believe that inside information can break the Bank of England or the United States Treasury. A man with no special pipeline of information will study the economic facts of a situation and will act coldly on that basis. Give the same man inside information and he feels himself so much smarter than other people that he will disregard the most evident facts."** Perhaps there should be something called a "stock tip" heuristic/bias. People who get a stock tip will often suspend disbelief and stop being rational. It is best to "just say no" to stock tips.

8. **"Mankind has always sought to substitute energy for reason, as if running faster will give one a better sense of direction."** Baruch is pointing out that there is no prize for hyperactive trading in markets. There is in fact a penalty in the form of fees, costs and taxes. If stock prices drop some people think they can fix that with more activity when often leads to mistakes,

9. **"Always keep a good part of your capital in a cash reserve. Never invest all of your funds."** Cash is like financial Valium. Cash can keep an investor calm and more importantly given them the ability to buy a bargain when it becomes available.

10. **"The wisest course is to sell to the point where one stops worrying." "Learn how to take your losses quickly and cleanly. Don't expect to be right all the time. If you have made a mistake, cut your losses as quickly as possible."** Buffett makes the point that if your stock holdings make it hard for you to sleep you should be holding a greater percentage of less volatile assets in your portfolio like cash and bonds. Having said that he also says: "Over the long term, however, currency-denominated instruments are riskier investments — far riskier investments — than widely-diversified stock portfolios that are bought over time and that are owned in a manner invoking only token fees and commissions. That lesson has not customarily been taught in business schools, where volatility is almost universally used as a proxy for risk. Though this pedagogic assumption makes for easy teaching, it is dead wrong: Volatility is far from synonymous with risk. Popular formulas that equate the two terms lead students, investors and CEOs astray."

11. **"In the stock market one quickly learns how important it is to act swiftly."** Markets are not perfectly efficient, but they are mostly efficient. Bargains that you can spot within your circle of competence don't come along that often and when they do you must be ready to pounce sinnce the bargains won't be available for long. You must be patient and yet brave enough to act quickly and aggressively when an opportunity presents itself.

12. **"Nobody ever lost money taking a profit." "It is one thing to make money and another thing to keep it. In fact, making money is often easier than keeping it."** There is an old saying that you can make a profit as a bull or bear but never a pig. Baruch is also saying once you take a profit it can be hard not to spend it. The more you spend the more you feel pressure to push the edge of the envelope which can lead to mistakes. I've never found that more expensive stuff makes you any happier.

Notes:

A Decade of Delusions: http://www.amazon.com/Decade-Delusions-Speculative-Contagion-Recession/dp/1118004566/ref=sr_1_1?s=books&ie=UTF8&qid=1456343773&sr=1-1&keywords=a+decade+of+delusions

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A Dozen Things I've Learned from Steven Crist About Investing and Handicapping Horses

May 21, 2016

You may be wondering: what does horse racing have to do with investing? Charlie Munger answered this question in his famous *Worldly Wisdom* speech:

“The model I like — to sort of simplify the notion of what goes on in a market for common stocks — is the pari-mutuel system at the racetrack. If you stop to think about it, a pari-mutuel system is a market. Everybody goes there and bets and the odds change based on what’s bet. That’s what happens in the stock market.”

I never bet on racehorses. Ever. The rake taken by the track is just too high for it to make any sense financially and for me the entertainment value is low. But you can learn important lessons about investing by listening to people who understand horse handicapping. I believe you can learn from just about anyone, which is why I have written blog posts on people like Bill Murray and Rza from Wu-Tang Clan. This blog has two indexes where you can see “old” posts organized by featured individual or topic. These old posts are just as up to date as the new posts. They are written to be as timeless as possible.

In the pari-mutuel system used by racetracks, the money bet is pooled for each type of bet, the racetrack takes its percentage (the rake), and the remainder is disbursed to the winners in proportion to the amount wagered. Michael Mauboussin further explains in his book *More Than You Know*:

“One way to think about it is to contrast a roulette wheel with a pari-mutuel betting system. If you play a fair game of roulette, whatever prediction you make will not affect the outcome. The prediction’s outcome is independent of the prediction itself. Contrast that with a prediction at the racetrack. If you believe a particular horse is likely to do better that the odds suggest you will bet on the horse. But your bet will help shape the odds. For instance, if all bettors predict a particular horse will win, the odds will reflect that prediction, and the return on investment will be poor.

The analogy carries to the stock market. If you believe a stock is undervalued and start to buy it, you will help raise the price, this driving down prospective returns. This point underscores the importance of expected value, a central concept in any probabilistic exercise. Expected value formalizes the idea that your return on an investment is the product of the probabilities and the various outcomes and the payoff from each outcome.”

The famous Preakness horse race is being run today and on that Steven Christ has said:

“Exaggerator may provide **better betting value** as the 3-1 second choice than Nyquist at 3-5.”

This post will explain why professionals focus on finding the **better betting value** instead of predicting which horse is most likely to win the race. Nyquist can be the horse most likely to win the race and not be the best bet in terms of value. It is magnitude of success that matters in a probabilistic activity, not frequency of correctness.

Steven Crist is the editor and publisher emeritus of the Daily Racing Form, a newspaper that reports on the past performance of race horses. Crist has had a number of jobs in the horse racing industry over the years, including writing about horse racing and the gambling generally as a reporter and columnist for *The New York Times* from 1981 to 1990. He is the author of several books on horse racing and a 1978 graduate of Harvard. Crist fell in love with horse racing while in college: **“The stats and numbers stuff is there. Plus the animals, the gambling—and the weird subculture: the racetrack is…well, like people who ran away and joined the circus.”**

The idea for this blog post came from Michael Mauboussin, who I quote in this post and elsewhere extensively. His writing is an amazing resource for investors.

Here are the usual dozen quotes from this week's featured personality Steven Crist:

1. "A good litmus test for someone being a liar and an idiot is if someone ever tells you, 'I am really good at roulette,' or 'I win at craps," or 'I have a system for beating the slot machines.' There is no such thing. These are games with fixed percentages. The casino might as well attach a leach to your forehead when you walk in the door because the longer you stay, the more you will lose, except for short-term, meaningless fluctuations." There are zero professional roulette players. For similar reasons, I would rather pit a viper down my shirt than play a slot machine. Some people may feel cool when playing craps thinking that they are a modern day member of the rat pack, but craps in a casino is a game for suckers who are bad a math. If you really want to gamble or play cards there are games with better odds.

2. "The exceptions to [the previous] rule are blackjack and poker. If you count cards diligently in blackjack, you can get a 1.5 percent edge over the house. Casinos, of course, don't get built by players having edges, so the casinos will eject you if they figure out that you're counting cards." There are a number of investors who counted cards at one time in their life. Card counting was invented by a group of U.S. Army Engineers known as the Four Horsemen. They published their ideas on card counting in a paper in 1957 entitled *Playing Blackjack to Win*. A mathematician named Ed Thorp improved on that system in his famous book *Beat The Dealer.* Card counting is now a well-known phenomenon. As just one example of a card counter, the actor Ben Affleck has been banned from several casinos for counting cards. He said about one incident: "That being good at the game is against the rules at a casino should tell you something about a casino." As just one example, Affleck has been told to never again play blackjack at the Hard Rock Hotel and Casino.

3. "Poker, which is always situated right next to the horse racing area. The reason that you can win at poker and horse racing is the same – you are not betting against the house; you are betting against the other players. This is such a crucial and fundamental difference, and it is lost on the general public. The house is not setting the odds. In roulette, there are 38 spaces on the wheel, and if you pick the correct one, the house will pay you off at 35-to-one, and they will keep the difference. The longer you play, the more you lose and the more the house wins. When the other players are setting the prices, it is an entirely different story because somewhere between frequently, occasionally and rarely, the public makes the wrong price." Many successful investors also play poker. Michael Mauboussin tells this story which makes an important point about poker:

"Jim Rutt, who used to be the CEO of Network Solutions [talks] about playing poker when he was a young man. By day, he would learn about the different probabilities, and look for poker tells and pot odds, and all this stuff, and by night he would play. He played in progressively tougher games, and won some, lost a little. Eventually, his uncle pulled him aside and said, "Jim, it's time to be less worried about getting better, and more worried about finding easy games."

Warren Buffett put it this way in 2002: "The important thing is to keep playing, to play against weak opponents and to play for big stakes."

Buffett's partner Charlie Munger is another example of someone who learned a lot from poker, including:

"Playing poker in the Army and as a young lawyer honed my business skills. What you have to learn is to fold early when the odds are against you, or if you have a big edge, back it heavily because you don't get a big edge often. Opportunity comes, but it doesn't come often, so seize it when it does come."

4. "The truth is that only a small number of people are 20% better than the takeout, and that just gets you even. It's a tough, tough game to win." I've have zero intention of ever betting on a horse race. Charlie Munger says he knows people who beat the odds even with this 20% "rake" by the track. That may be true, but I'll pass thank you very much. As I said previously, I just don't enjoy gambling as entertainment. Some people may enjoy betting on horses or be addicted to it. If they are the former, they need to worry about the latter. Even if there is a tiny probability that I might become addicted to gambling I never want to take that chance given the magnitude of the potential harm. The odds of you seeing me playing roulette or pulling the arm of a slot machine in a casino are zero.

5. "The central premise of pari-mutuel wagering, is to get a better price from the other bettors than something deserves to be." "Recognize the difference between picking horses and making wagers in which you have an edge. The only path to consistent profit is to exploit the discrepancy between the true likelihood of an outcome and the odds being offered." "If you demand sufficient value to cover the margin of error, you should outperform the competition-your fellow horseplayers." When Crist talks about "value necessary to cover mistakes" who does that sound like? Ben Graham and his margin of safety**.** Michael Mauboussin writes: "A positive expected value opportunity has an anticipated benefit that exceeds the cost, including the opportunity cost of capital. Not all such financial opportunities deliver positive returns, but, over time, a portfolio of them will…. An investment is attractive if it trades below its expected value. Expected value, in turn, is a function of potential value outcomes and the probability of each outcome coming to pass. Investing is fundamentally a probabilistic exercise. Investing is the constant search for asymmetric payoffs, where the upside opportunity exceeds the downside risk. Ben Graham

described margin of safety as buying an investment for less than what it is worth. The larger the discount, the greater the margin of safety." Bloomberg writer David Papadopoulos writes that one should seek finding "value" in a horse. He says: "You're not necessarily looking for the most likely winner, so much as a horse whose odds are longer than they ought to be."

Venture capital is the extreme case in that the better betting value is determined by how cheaply one can buy optionality. Optionality is sometimes mis-priced and can be bought at a bargain.Those situations tend to be in places where others are not looking and the failure rate is high. I have written two blog posts on optionality which discuss this topic in greater detail. Jeff Bezos describes the value of mis-priced optionality here:

"Outsized returns often come from betting against conventional wisdom, and conventional wisdom is usually right. Given a 10% chance of a 100 times payoff, you should take that bet every time. But you're still going to be wrong nine times out of ten. We all know that if you swing for the fences, you're going to strike out a lot, but you're also going to hit some home runs."

"In business, every once in a while, when you step up to the plate, you can score 1,000 runs. This long-tailed distribution of returns is why it's important to be bold. Big winners pay for so many experiments."

6. "What you really want to do is determine which most-likely winners are good prices and which most-likely winners are bad prices. It is a very simple equation:

Price X Probability = Value.

The entire world of investing is that simple too. Here is what I mean. If a horse has a 33 percent chance of winning a race, and if you can get odds of 2-to-1 on him (which means tripling your money), there is no value – the horse is priced correctly. If a horse is 6-to-5 (which means you will only get back 120 percent of your bet) and he is only 33 percent to win, then he is a terrible bet. If you're going to get 4-to-1 (quintupling your money) on a 33 percent chance winner, then it's a great bet. People talk about value as if it is a 'factor' or an 'angle' when in fact it is the definition of success at pari-mutuel wagering." The math here is simple, but the many sources of emotional bias make the process fraught with potential problems. And of course determining probability is often not a simple thing and sometimes not even possible. Mauboussin writes:

"We can specify two types of probabilities: objective (or frequency) and subjective. Objective, or frequency, probabilities arise when there are specified outcomes. Coin tosses are a good example. In these cases, the probability is based on the law of averages as it assumes that the event is repeated countless times. While we still can't make definitive statements about any specific outcome, the frequency of outcomes will reflect the probability of each outcome over time. The circumstances are totally different for events that only happen once, a valid assumption for stock investing. Here, we must rely on subjective

probabilities. Subjective probabilities describe an investor's "degree of belief" about an outcome. These probabilities are rarely static, and generally change as evidence comes along. Bayes's Theorem is a means to continually update conditional probabilities based on new information. Bayesian analysis is a valuable means to weigh multiple possible outcomes when only one outcome will occur."

Of course there is also what Richard Zeckhauser calls "ignorance" when you do not know the potential future states of the world and probability therefore cannot be computed.

7. "The point of this exercise is to illustrate that even a horse with a very high likelihood of winning can be either a very good or a very bad bet, and the difference between the two is determined by only one thing: the odds. A horseplayer cannot remind himself of this simple truth too often." Michael Mauboussin writes: "Some high-probability propositions are unattractive, and some low-probability propositions are very attractive on an expected-value basis." Charlie Munger talks about the need to understand probability and statistics here:

"So you have to learn in a very usable way this very elementary math and use it routinely in life – just the way if you want to become a golfer, you can't use the natural swing that broad evolution gave you. You have to learn to have a certain grip and swing in a different way to realize your full potential as a golfer. If you don't get this elementary, but mildly unnatural, mathematics of elementary probability into your repertoire, then you go through a long life like a one-legged man in an ass-kicking contest."

8. "Do you really think this way when you're handicapping? Or do you find horses you 'like' and hope for the best on price? Most honest players will admit they follow the latter path. This is the way we all have been conditioned to think: Find the winner, then bet. Know your horses and the money will take care of itself. Stare at the past performances long enough and the winner will jump off the page. The problem is that we're asking the wrong question. The issue is not which horse in the race is the most likely winner, but which horse or horses are offering odds that exceed their actual chances of victory. This may sound elementary, and many players may think they are following this principle, but few actually do. Under this mindset, everything but the odds fades from view. There is no such thing as 'liking' a horse to win a race, only an attractive discrepancy between his chances and his price. It is not enough to lose enthusiasm when the horse you liked is odds-on or to get excited if his price drifts up. You must have a clear sense of what price every horse should be, and be prepared to discard your plans and seize new opportunities depending solely on the tote board." What the investor wants to find is a substantially mis-priced bet. The objective is not to maximize the frequency of betting on winner but to maximize the magnitude of total winning bets. Munger:

"Playing poker in the Army and as a young lawyer honed my business skills. What you have to learn is to fold early when the odds are against you, or if you have a big edge, back it

heavily because you don't get a big edge often. Opportunity comes, but it doesn't come often, so seize it when it does come."

"The wise ones bet heavily when the world offers them that opportunity. They bet big when they have the odds. And the rest of the time, they don't. It's just that simple."

"It's not given to human beings to have such talent that they can just know everything about everything all the time. But it is given to human beings who work hard at it – who look and sift the world for a mispriced bet – that they can occasionally find one."

9. "I'm usually looking to beat favorites because that's how you make scores, and making scores quicker than you give them back is how you come out ahead." Investing is the search for mistakes says the famous investor Howard Marks and one big mistakes people make is following the crowd. Sometimes a mis-priced bet can be found by being contrarian. Not always but sometimes.Often the mis-priced bet is caused by a bias that impact humans. For example, Professor Thaler has a paper on long shot bias that is worth reading (link in the Notes below). There is little "value" in just betting on favorites to win due to the rake by the track.

"The *favorite-long shot bias* is an observed phenomenon where on average, bettors tend to overvalue "long shots" and undervalue favorites. That is, in a horse race where one horse is given odds of 2-to-1, and another 100-to-1, the true odds might for example be 1.5-to-1 and 300-to-1"

10. "A lousy handicapper, who bets on hopeless horses or takes the worst of prices, has no shot. A decent handicapper who makes idiotic bets won't do much better. A ton of players consider themselves excellent handicappers and poor bettors or money managers, but I think they may be kidding themselves by rationalizing their losses this way." "How often have you or a fellow trackgoer opined that you're a pretty good handicapper but you really need to work on your betting strategies or your so-called money management? This is sometimes an exercise in denial for people who are in fact bad handicappers, but it is probably true for many who can select winners as well as anyone. The problem with this line of thinking is that it suggests betting is some small component of the game, which is like pretending that putting is a minor part of championship golf. In fact, if you handicap well and bet poorly, you've failed. It's as useless as crushing your tee shots while three-putting every green." Michael Mauboussin in these three quotations elaborates on by Crist says better than I ever could:

"Money management is all about determining the right amount of capital to allocate to an investment opportunity, given the edge and the frequency of such opportunities.

"Position size is extremely important in determining equity portfolio returns."

"The first rule of money management is to "live to see another day." Say you see a 50-1 event priced as if it's 100-1. That is an attractive opportunity, but you surely wouldn't bet your net worth on it. Two types of investments are worth looking out for. The first is a

positive expected value investment with a high probability of loss. A portfolio of these investments is attractive, but betting too much on any single idea is poor money management. The second is the one with a high probability of gain but significant downside risk. These investments are luring even though they have a negative expected value. Eventually, time assures that investors seeking these opportunities do poorly (witness Long Term Capital Management). A related concept in money management is that it is not the frequency of correctness that matters, but the magnitude. Behavioral finance emphasizes that humans like to be right. Many positive expected value investments have a high frequency of a small downside and a low frequency of large upside. Such investment opportunities may be systematically mis-priced, reflecting inherent human bias. Another rule of money management is the larger the margin of safety, the more you should invest. More attractive investments should receive a greater percentage of the funds. While most portfolio managers have legitimate constraints on how much they can invest in any single idea, too frequently their asset allocation does not distinguish sufficiently for the relative attractiveness of various stock."

In managing money many investor look to the Kelly criterion, a formula used to determine the optimal size of a series of bets. Munger has recommended a book, *Fortune's Formula* by William Poundstone on the subject. The Kelly criterion or formula can be expressed as follows:

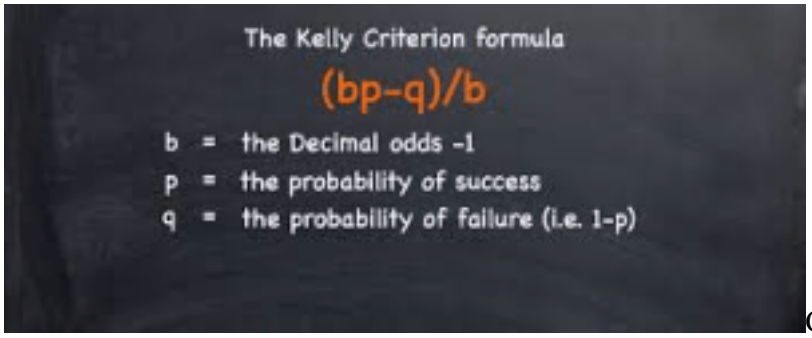

Credit http://www.pinnaclesports.com/en/betting-articles/betting-strategy/how-to-use-kelly-criterion-for-betting

The formula reveals the expected value of any bet including an investment. Robert Hagstrom points out that many investors use what is called "a fractional Kelly." One popular approach is a "half Kelly" in which the wager is half of the Kelly bet.

Munger at the 2006 Wesco meeting said when asked about whether he uses the Kelly criterion:

"The first time I read about that sizing system, my take was that it seemed plausible to me, but I haven't run that formula through my head – and I won't. You couldn't apply it to the investment operations I've run [I think because of Berkshire 's size], but the gist of it in terms of sizing your bet makes sense. Whoever developed that formula has an approach to life similar to mine."

11. "The horseplayer who wants to show a profit must adopt a cold-blooded and unsentimental approach to the game that is at variance with both the 'sporting' impulse to be loyal to your favorite horses and the egotistical impulse to stick with your initial selection at any price. This approach requires the confidence and Zen-like temperament to endure watching victories at unacceptably low prices by such horses." Most mistakes are psychological or emotional. For all of the reasons Munger talks about in his famous *Psychology of Human Misjudgment* speech people make mistakes. Munger puts it this way:

"Now if the human mind, on a subconscious level, can be manipulated that way and you don't know it, I always use the phrase, "You're like a one-legged man in an ass-kicking contest." I mean you are really giving a lot of quarter to the external world that you can't afford to give."

12. "So many of the bad gamblers—the people who should be pulling handles on slot machines — have left racing for casinos that one of the great regrets of current horseplayers is: 'Where did all the suckers go?' You want to be betting against people who are betting based on colors and jockeys and hunches." Alpha or the amount that an investor may earn above the market return is a zero-sum game. Only in Lake Woebegone can more than half of the people be above average. This is why Howard Marks says that "In order for one side of a transaction to turn out to be a major success, the other side has to have made a big mistake." After costs alpha is a negative-sum game. As John Bogle says: "investors as a group must fall short of the market return by the amount of the costs they incur." Beta, or the market return is not a zero-sum game. As the economy grows everyone can rise with the tide, some of course more than others and some talking a loss anyway. As more investors move to index funds, there are less mistakes and less total opportunity for outperformance. On the topic of why people make mistakes I can't resist one final quote from Crist about people looking for clues in factors that do not matter:

"It will be interesting to see what kind of narrative NBC Sports will try to weave around the sport during its Preakness telecast after its Derby Day premise was so wrong. Two weeks ago, we were told that American Pharoah's Triple Crown had ushered in a renaissance in the sport, prompting increases in handle, television ratings, and the size of the foal crop. (Never mind that the 2016 crop was bred before the 2015 Triple Crown.) Then the rest of the theory fell apart when ratings and handle on this year's Derby declined rather than increased.

Here's my premise: There's going to be a good horse race, many people will watch and wager, and the precise size of the crowd, handle, and Nielsen ratings will signify absolutely nothing."

Here's the rest of Charlie Munger's explanation of why investing shares attributes with horse racing from his *Worldly Wisdom* Speech.

“Any damn fool can see that a horse carrying a light weight with a wonderful win rate and a good post position etc., etc. is way more likely to win than a horse with a terrible record and extra weight and so on and so on. But if you look at the odds, the bad horse pays 100 to 1, whereas the good horse pays 3 to 2. Then it’s not clear which is statistically the best bet using the mathematics of Fermat and Pascal. The prices have changed in such a way that it’s very hard to beat the system.

And then the track is taking 17% off the top. So not only do you have to outwit all the other betters, but you’ve got to outwit them by such a big margin that on average, you can afford to take 17% of your gross bets off the top and give it to the house before the rest of your money can be put to work. Given those mathematics, is it possible to beat the horses only using one’s intelligence? Intelligence should give some edge, because lots of people who don’t know anything go out and bet lucky numbers and so forth. Therefore, somebody who really thinks about nothing but horse performance and is shrewd and mathematical could have a very considerable edge, in the absence of the frictional cost caused by the house take. Unfortunately, what a shrewd horseplayer’s edge does in most cases is to reduce his average loss over a season of betting from the 17% that he would lose if he got the average result to maybe 10%. However, there are actually a few people who can beat the game after paying the full 17%.

I used to play poker when I was young with a guy who made a substantial living doing nothing but bet harness races…. Now, harness racing is a relatively inefficient market. You don’t have the depth of intelligence betting on harness races that you do on regular races. What my poker pal would do was to think about harness races as his main profession. And he would bet only occasionally when he saw some mispriced bet available. And by doing that, after paying the full handle to the house—which I presume was around 17%—he made a substantial living. You have to say that’s rare. However, the market was not perfectly efficient. And if it weren’t for that big 17% handle, lots of people would regularly be beating lots of other people at the horse races. It’s efficient, yes. But it’s not perfectly efficient. And with enough shrewdness and fanaticism, some people will get better results than others.

The stock market is the same way—except that the house handle is so much lower. If you take transaction costs—the spread between the bid and the ask plus the commissions—and if you don’t trade too actively, you’re talking about fairly low transaction costs. So that with enough fanaticism and enough discipline, some of the shrewd people are going to get way better results than average in the nature of things.

It is not a bit easy. And, of course, 50% will end up in the bottom half and 70% will end up in the bottom 70%. But some people will have an advantage. And in a fairly low transaction cost operation, they will get better than average results in stock picking.

How do you get to be one of those who is a winner—in a relative sense—instead of a loser? Here again, look at the pari-mutuel system. I had dinner last night by absolute accident with the president of Santa Anita. He says that there are two or three betters who have a credit arrangement with them, now that they have off-track betting, who are actually beating the house. They’re sending money out net after the full handle—a lot of it to Las Vegas, by the way—to people who are actually winning slightly, net, after paying the full handle. They’re that shrewd about something with as much unpredictability as horse racing. And the one thing that all those winning betters in the whole history of people who’ve beaten the pari-mutuel system have is quite simple. They bet very seldom. It’s not given to human beings to

have such talent that they can just know everything about everything all the time. But it is given to human beings who work hard at it—who look and sift the world for a mispriced be—that they can occasionally find one. And the wise ones bet heavily when the world offers them that opportunity. They bet big when they have the odds. And the rest of the time, they don't. It's just that simple. That is a very simple concept. And to me it's obviously right—based on experience not only from the pari-mutuel system, but everywhere else."

Notes:

Crist on the Preakness: http://www.drf.com/news/crist-new-factors-likely-change-little-preakness

Harvard Magazine Profile: http://harvardmagazine.com/2010/03/horseplayer-extraordinaire

Crist on Value http://www.funnyeconomist.com/CRIST%20ON%20VALUE.doc

Handicapping Lessons https://medium.com/@onehorsestable/handicapping-lessons-from-the-world-of-poker-70c71a3a0934#.3vk01ezct

Crist Column http://www.valueinvestingworld.com/2008/01/steven-crist-publisher-and-columnist.html?m=1

Mauboussin- Size Matters http://www.pmjar.com/wp-content/uploads/2013/05/Size-Matters-Mauboussin.pdf

Mauboussin- More than You Know http://www.amazon.com/More-Than-You-Know-Unconventional/dp/0231138709

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The Racetrack and Equity Markets http://tabbforum.com/opinions/two-pari-mutuel-environments-the-racetrack-and-equity-markets-how-different

Thaler Paper:
http://faculty.chicagobooth.edu/Richard.Thaler/research/pdf/parimutual%20betting%20markets.pdf

Munger Worldly Wisdom http://old.ycombinator.com/munger.html

Munger Psychology of Human Misjudgment
http://www.rbcpa.com/Mungerspeech_june_95.pdf

A Dozen Things I've Learned from Louis C.K. about Money, Investing and Business

May 28, 2016

The comedian Louis C.K. was born Louis Szekely in 1967. He began his career writing for other comedians including David Letterman, Dana Carvey, Conan O'Brien and Chris Rock and has created several video series including the FX comedy show Louie, which he wrote, directed and edited. Louis has been a notable innovator in the business of comedy including releasing his debut standup routine *Live in Houston* directly through his website in 2001. He has also been an innovator in the use of direct-to-fan sales of tickets to his stand-up shows as well as using free video downloads to promote his other work. Most recently, he created and financed the video series *Horace and Pete.*

1. **"I have a no problem with something going down in flames. I'm not afraid of that. It's very important to me that it works, but that doesn't come from fear of failure — failure is okay."** The entertainment business has a distribution of financial success that reflects a power law. A tiny number of entertainers find huge financial success in the entertainment business, while most everyone else makes a modest living, very little or even virtually nothing. Like venture capital, entertainment is a tape measure home run business. An entertainer like Louis is not going to break through and be financially successful unless he or she swings for the fences and takes risks. Power laws exist because of the tendency of what is popular to get more popular and for anything which loses advantage to lose further advantage. So-called "cumulative advantage" is an example of positive feedback. Positive feedback can also be seen in the technology world. There is also cumulative disadvantage. When things change so rapidly for the better or worse for a company like Blackberry, people can be shocked. Humans are simply not good at understanding exponential change. Nassim Taleb calls this phenomenon "Extremistan." Some people may say, "Well, Extremistan and cumulative advantage have always been the case." The difference today is that more systems are digital, which magnifies cumulative advantage or disadvantage. We do not yet know the full societal impact of this Extremistan phenomenon.

2. **"You can't make a show without losing money first…Then there were these stories that say, 'Horace and Pete lost money.' And I thought, well, I didn't lose money. I invested money. I'm so not broke. I'm so not broke. It's kind of crazy to see how wrong it gets, and to see how far that wrongness spreads. It's an interesting pipeline to have tested. Because the interest thing about this show, this experience for me, is that I made a thing that's usually made by a corporate entity but I don't have any of the apparatus. We didn't send out big press releases. We actually avoided the press when we were making the show, so they don't have any guidance or relationship with us. If Fox or ABC makes a show, they have a staff of people that are all about PR and about handling the press." "It was just a weird distortion of what I said because I said on Howard Stern that I took on debt. I mean, Howard's a comedy guy, so I wanted to make it sound funny, and I knew he would laugh if I said I'm in debt… I told him, 'Yeah, I'm millions of dollars in debt,' which I was, technically — I took a line of credit to finish the show. But there's no other way to make a TV show — every TV show that you ever see is running a deficit… I took debt so I could get through production, but I knew that I would make the money back — I knew it." "The tax rebate we're getting from New York**

State and the amount of sales we have so far have put the show in the black." Louis has talked several times in public about how fast his joke on Howard Stern's show about losing millions making *Howard and Pete* series went viral. He believes that the story was particularly "clickable" since it has story elements people love. For example, people want to read stories that indicate great success is followed by failure and vice versa. The less interesting reality behind the fake viral story is a near inevitability: investing requires that money be invested up front. Unless all you are putting in to an investment are talent or sweat equity, cash must go out, before cash comes in. Even if you are not personally putting cash in first before cash comes out, someone else inevitably is funding the business. Charlie Munger once told a humorous story about absolute dollar free cash flow: "There are two kinds of businesses: The first earns 12%, and you can take it out at the end of the year. The second earns 12%, but all the excess cash must be reinvested — there's never any cash. It reminds me of the guy who looks at all of his equipment and says, 'There's all of my profit.' We hate that kind of business."

3. **"[Horace and Pete] is paid for — with no advertising. There isn't a TV show with this kind of cast that has that kind of success. So why the dirty fuckballs did I charge you five dollars for Horace and Pete, where most TV shows you buy online are 3 dollars or less? Well, the dirty unmovable fact is that this show is fucking expensive. The standup specials are much more containable. It's one guy on a stage in a theater and in most cases, the cost of the tickets that the live audience paid, was enough to finance the filming. But Horace and Pete is a full on TV production with four broadcast cameras, two beautiful sets and a state of the art control room and a very talented and skilled crew and a hall-of-fame cast. Every second the cameras are rolling, money is shooting out of my asshole like your mother's worst diarrhea. (Yes there are less upsetting metaphors I could be using but I just think that one is the sharpest and most concise). Basically this is a hand-made, one guy paid for it version of a thing that is usually made by a giant corporation. Now, I'm not complaining about this at all. I'm just telling you the facts. I charged five dollars because I need to recoup some of the cost in order for us to stay in production."** It has become quite hard to charge a fee for many types of consumer services since people have become accustomed to getting many services "for free." When business people say things like: "We are going to start charging a subscription fee" for a product or service they often do so without having the slightest idea about how hard it is to actually do so. Getting people to pay for anything is never easy, but getting them to commit to pay real money is even harder especially if the commitment extends into the future. Five key factors will drive the financial success of any business. They are:

Average revenue per user (ARPU) – How much do customer's pay?

Customer Lifetime – How long do customers stay?

Cost of capital – What is the rate of return on your next best alternative for investing money?

Gross Margin – What's left of revenue when you take away the cost of goods sold, divided by the total sales revenue, expressed as a percentage?

Customer Acquisition cost (CAC) – How much was spent to acquire the customer?

Every business can be analyzed in this way. Louis has been an innovator with respect to many of these factors. For example, he makes his shows in innovative less costly ways, acquires customers more cheaply with less advertising and prices services for value.

4. **"The thing that was left out is that I own a television show. I own a complete series. I own it. I'm at the head of the stream. I'm in the mountains. I'm the snow that's melting to feed the water. It's an enormous asset and it's mine forever. That doesn't exist. You might own a small piece if you get points on your show, which is a hard position to get to even. But I own this thing. I own a show that has Steve Buscemi, Edie Falco, Alan Alda, Jessica Lange, Aidy Bryant." Hopefully we'll get Emmy nominations, which I'm going to push for. And then we'll sell it to Netflix or somebody else or Hulu." "We'll sell the show to other services. We've got a few offers and we're kind of not paying attention to them right now… I'd like to spend the rest of the year seeing how it does in the wild, and then when it's time sell it, I can split these checks with my cast, who all own big pieces of the show."** By financing, making, promoting and distributing a series or other entertainment himself Louis has fewer suppliers who can extract value from his work via "wholesale transfer pricing." The wholesale transfer pricing concept is important to understand especially if you are in business or an investor. I wrote in a previous blog post:

"Wholesale transfer pricing power is a term I heard John Malone use in a conference room circa 1995. You won't find the term in textbooks. Simply put: Wholesale transfer pricing = the bargaining power of company A that supplies a unique product XYZ to Company B which may enable company A to take the profits of company B by increasing the wholesale price of XYZ. The term "wholesale transfer pricing power" is similar to, but not the same as, a "hold up problem." The best lens to look at the wholesale transfer pricing power/supplier hold up set of issues is Michael Porter's "Five Forces" analysis, specifically "bargaining power of suppliers."

Every business has a value chain and each element in the value chain is trying to extract value from the value chain. How much anyone gets in that value chain is determined by negotiating leverage. And negotiating leverage is determined by what Roger Fisher calls a *BATNA (*best alternative to a negotiated agreement*),* which is essentially an opportunity cost process. If you have only one supplier of an essential component at any point in your value chain (like the music streaming business does), then may God have mercy on your business. Hopefully God will have mercy because suppliers (for example, music owners) will not.

5. **"The advertising budgets on these shows often eclipse the production budgets. They'll spend millions of dollars on advertising." "While we're sitting here, [my show] is selling and selling and selling. So far to date, my advertising budget is zero."** Louis knows what Jeff Bezos knows, which is that these days it is far better to invest in your product than to spend money amplifying your shouting about it. Jeff Bezos:

"The balance of power is shifting toward consumers and away from companies…the individual is empowered… The right way to respond to this if you are a company is to put the vast majority of your energy, attention and dollars into building a great product or service and put a smaller amount into shouting about it, marketing it. If I build a great product or service, my customers will tell each other. In the old world, you devoted 30% of your time to building a great service and 70% of your time to shouting about it. In the new world, that inverts." "Your brand is formed primarily, not by what your company says about itself, but what the company does."

What Louis has done is a smart personal rebellion against the type of ad spending shown in this chart below.

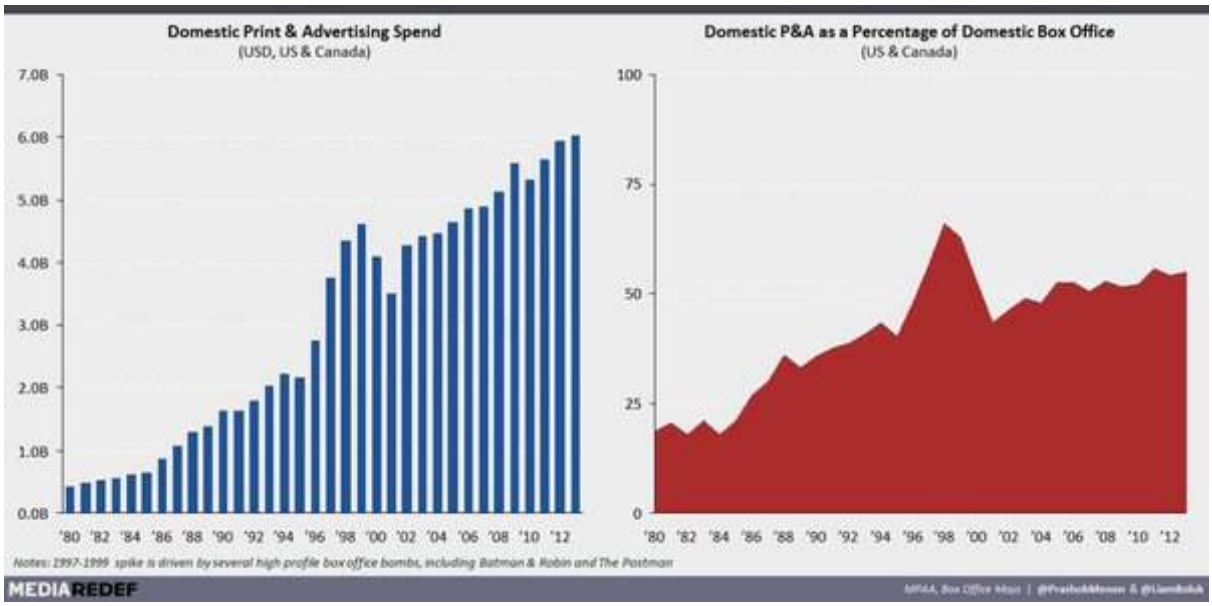

6. "I just make the show, I don't really get paid a thousand bucks a show. I have a fee but it's the lowest legal fee that I could possibly take. The skills minimum across the board for SAG, Director's Guild and all that stuff. But I might get an enormous amount of money on the road because of the show. So that's the tradeoff." Even if Louis takes very little salary for a video series he is still able to use that exposure as advertising or promotion to sell complementary products and services like concert tickets. A term used for this phenomenon is *content marketing.* As an example, almost all of the blogs you read are content marketing for something else that is being sold. It could be wealth management that is being sold or venture capital. What people get from content marketing is not always financial. Charlie Munger says that he gives his speeches and talks as a form of penance.

7. "There is fatigue [in creating the shows]. It's fucking hard. What I know from experience is that if I was getting a million dollars a show it wouldn't make it easier. It wouldn't make it more fun." Work is work. That's why they call it work. If your work is 100% fun, then you should call it fun, not work. Some work is more fun than other work. Some work pays more than other work. Some work pays a lot and is mostly not fun. Some work is mostly fun and pays a lot. The mix for everyone is different.

	Pays Well	Pay is Lousy
Fun	Top tier comedian	River rafting guide, most comedians
Not fun	Proctologist	Migrant fruit picker

8. "Everything is amazing right now and nobody's happy. In my lifetime the changes in the world have been incredible. When I was a kid we had a rotary phone. We had a phone you had to stand next to and you had to dial it. And then when, if you wanted money you had to go in the bank for when it was open, for like three hours." Standup comedy delivered on a grassy field in New York's Central Park is not an effective way to capture revenue since anyone can listen without paying. Louis can't *exclude* people who do not pay in that park setting without walls or barriers being constructed. Anyone on the grass can record his performance and transmit it to billions of people. The free experience that consumers get in that situation generates "consumer surplus." Consumer surplus is the difference between the total amount consumers are willing and able to pay for a product and the total amount that they actually do pay. By contrast, if Louis does standup comedy in a theater, the ticket revenues received from people who desire to be in the building can bring in big loads of cash. In a theater, an entertainer like Louis's performance is "excludable" in that only people who pay the required fee can attend. That value captured by Louis in a theater is "producer surplus" and can be very significant. For example, in a music setting just five concerts at the Staples Center in Los Angeles generated $8.9 million in box office revenue for Taylor Swift in 2015. The services provided by a business like Netflix are similar to a Louis CK performance in a theater in that they are both designed to create something hard to consume for free. Software running in server in a data center providing a web service is similarly able to capture revenue and profit since users can't make their own copy of the streamed service just like they can't see Louis doing stand up in a concert hall without buying a ticket. This matrix below illustrates how "excludable, non-rival" has become a sweet spot for digital business models. In contrast, "non-excludable, non-rival" is a danger zone for profitability.

	Excludable	**Non-excludable**
Rival	Louis CK t-shirt	Unregulated fishing in the ocean
Non-rival	Louis CK in concert in a theater	Digital Louis CK comedy routine obtained via BitTorrent

You may be saying, "Well, I'm not Louis and that solution won't help me." This is true, but like him, you will need to adapt your business in order to prosper in this ever-changing world. You will need to think about how you create value and what your own business model will be. What is a business model? I like the definition created by Mike Maples, Jr.: "The way that a business converts innovation into economic value." Steve Blank has his own view: "A business model describes how your company creates, delivers, and captures value." One effective way to find a business model is to apply a trial and error process in which the optimal result is discovered via experimentation rather than a grand plan generated from whole cloth. The task of people who create business models is often to take software-based products or services that might otherwise be in the bottom right quadrant of the previous matrix (sometimes called *public goods*) and moving them into the bottom left quadrant to make them *excludable*. Software is a non-rival public good, since more people can possess it

at no additional cost. The object of the business is to somehow make that public good excludable or attach its use to something *complementary* that is excludable.

9. **"I never viewed money as being 'my money' I always saw it as 'the money.' It's a resource. If it pools up around me then it needs to be flushed back out into the system."** Andrew Carnegie famously said that a person who "dies rich, dies disgraced." In effect, he believed that money is like manure, it does the most good when you spread it around. Of course, you shouldn't spread it around so much that you are not able to take care of yourself and the people you love. But someone like CK who is spending money to create things people enjoy is a very good thing.

10. **"The worst thing you can lose is some money, and money grows back, time doesn't, that's what my mom used to say."** The older you get the more you realize that money can't buy you time. Nothing is more valuable than time. If you are young, trust me on this one.

11. **"When people are getting richer and richer but they're not actually producing anything, it can't end well."** Why is Louis's joke funny? I think it is because there is a core of truth involved, like all good humor. If it is not funny to you then you probably do not see any truth. Great comedians are great observers of truth in life. The truth here is similar to Charlie Munger's point is that simply trading pieces of paper is not a very noble way to make a living.

12. **"My bank is the worst. They are screwing me. You know what they did to me? They're charging me money for not having enough money. Apparently, when you're broke, that costs money." "I had five dollars [in the bank] that I couldn't have for three days until they charged me another $15. Leaving me with -$10. What does that mean? I don't even have no money any more. I wish I had nothing. But I don't have it. I don't have that much. I have "not ten." Negative ten dollars. I can't afford to buy something that doesn't cost anything. I can only afford to get something that costs 'you give me ten dollars.'"** Being poor is very expensive. Just one element of that problem is what the poor pay for financial services, which is what Louis is joking about just above. Facts are:

"About 28.3 percent, or one in four American households, are what the FDIC calls "under" or "unbanked." Underbanked households use a bank account, but also use alternative financial services, such as payday loans or check-cashing outlets. The unbanked don't use any accounts at all."… they have to rely on expensive alternatives like non-bank money orders,

check-cashing services, prepaid debit cards and payday loans. For the poor, even being lucky enough to have a bank account means high fees. You don't have enough to meet the minimum balance requirements so you pay a monthly fee that eats away at any money you have.

A Dozen Things I've Learned from Georges Doriot (the Founder of the Modern VC industry)

June 4, 2016

Why should people want to read about an ex-U.S. General born in France who taught at Harvard Business School and formed the first venture capital fund? The answer is that this fellow unleashed an industry that is harvesting optionality in ways that are dramatically changing the world. Once people saw that was possible to generate 5,000X returns on a single investment as was the case with Digital Equipment Corporation (DEC) the world would never be the same. As venture capital proliferated new value started to be unlocked at rates that the world had never been seen before. The change unleashed by the new torrent of innovation is so dramatic that some misinformed and disoriented observers actually claim that innovations levels have gone down.

Who was this pioneer Georges Doriot?

"Born in France in 1899, he came to the U.S. to get an M.B.A. and extended his stay, working for an investment bank and teaching at Harvard Business School. In 1946, he founded American Research and Development Corporation (ARD), the first publicly owned venture capital firm."

"ARD was formed as a closed-end fund. That is, it raised permanent capital by selling a limited number of public shares."

"For the first few years, ARD struggled. But then Doriot backed Ken Olsen, who worked at Lincoln Labs at MIT and wanted to build something called a 'mini-computer.' Doriot put $70,000 into Digital Equipment ARD made 5,000 times its money on that one deal, and venture capital was off to the races…. Doriot, along with New England industrialist, banker and politician Ralph Flanders and MIT president Karl Compton, passed the hat to the stodgy old companies and old money with a unique proposition: Let's set up a fund that will invest in promising young companies, often companies with little or no sales and with little management experience but with potentially breakthrough technologies. Investors in Doriot's funds included the academic institutions (Harvard, MIT, Penn) as well as stuffy old companies (Hancock, Home Insurance, State Mutual, Mass Investors Trust)."

1. **"Someone, somewhere, is making a product that will make your product obsolete."** This is perhaps Doriot's most famous quote. What Joseph Schumpeter called "creative destruction" is a constant process in the business world.

Schumpeter said: “the process of industrial mutation—if I may use that biological term— incessantly revolutionizes the economic structure from within, incessantly destroying the old one, incessantly creating a new one.” The paradox is that in order for productivity and standards of living to grow some aspects of the economy must be destroyed. Capitalism requires failure so new productivity and wealth can be created. Every business is in its own way constantly fighting this phenomenon: Warren Buffet once wrote: “Capitalism is all about somebody coming and trying to take the castle. Now what you need is a castle that has some durable competitive advantage — some castle that has a moat around it.” The moat of any business is always under attack by competitors even if you can’t see it. because moats are constantly under attack Charlie Munger points out that it is a rare company whose future is not a worse than its present. Schumpeter used the term “venture capital” as early as a paper written in 1943. Of course, ARD was itself a startup. The venture capital business itself once upon a time needed to find “product market fit.” As part of its business model discovery process, ARD eventually discovered that the venture capital business is driven by tape measure home runs. The idea that only one investment by ARD out of a much larger portfolio of scores on investments would overwhelmingly determine its financial success in venture capital was surely not anticipated by Doriot. The business world noticed that ARD’s success came from a single high tech investment, whereas ARD investments in businesses like tuna fishing failed. Merrill Griswold, a Director of ARD, once said to a Fortune reporter: “Some of our friends began to say: ‘Oh, Lord, not another longhair project. Why doesn’t ARD back something commercial and make some money?” We learned our lesson. Now we realize that our best things are longhair.” He is making the point I have made repeatedly in this series on my blog: in order to hit a tape measure financial home runs in venture capital you need to find a entrepreneur who is trying to create something that is half-crazy since that is where the necessary under-priced positive optionality can be found and purchased at a bargain. What Doriot did was highly unconventional at the time (H/T Ben Evans):

Olsen and Anderson encountered difficulty getting the company off the ground. The U.S. economic recession that took place in the late 1950s as well as the failure of a number of other small computer companies presented significant obstacles; as a result, few investors were willing to take a risk on the unproven duo. In April 1957, Olsen sent a proposal to ARD. He was subsequently invited to present the idea to the ARD board, but not before receiving a few pieces of advice from an ARD employee who had read his proposal:

> One was, don’t use the word “computer” because *Fortune* magazine said no one was making money in computers and no one was about to. So we took that out of our proposal. We were going to make modules first, anyway. And they said “don’t promise five percent profit.” You see we looked in the library. All good companies seemed to make about five percent on sales. The staff said that if you’re asking someone to give you money, you’ve got to promise better results than that. So we promised ten percent. The third thing they said was, “most of the board is over 80, so promise fast results.” So we promised to make a profit in a year.[46]

Doriot was impressed by the business idea, as well as by Olsen and Anderson. ARD invested $70,000 in return for a 70% stake in the company. By early 1958, DEC was shipping its first products:

2. **“The hardest part is to help a company through its growth pains. That is particularly hard because we have to work with others.” “Too many bankers and counselors have forgotten the history of the early years of our industrial giants of**

today. The first fifteen years of companies and of human beings are very much alike: hope, measles, failures, mumps, reorganizations, scarlet fever, executive troubles, whooping cough, etc. are parts of one's daily life. Hopes, disillusions, hard work, are all necessary, particularly during the first ten or fifteen years before a stable and healthy body or corporation can begin to exist." This set of quotations reminds me of some of the points made by Ben Horowitz in his book *The Hard Things About Hard Things.* Horowitz describes this process as "the struggle" and notes that there are no formulas for dealing with it. Mike Maples Sr. has said: There's something about the struggle, adversity, the trial and error and worrying at night about things that makes the entrepreneur better and stronger." ARD itself was a startup trying to create a new industry which would help people create important new businesses in important new industries. In trying to prove that venture capital was financially viable, Doriot faced battles and struggles related to raising money, politics and company governance. The book *Creative Capital: Georges Doriot and the Birth of Venture Capital* by Spencer Ante describes this period of time at ARD. By today's standards the amounts raised an invested by ARD were small: "By the end of December 1946, ARD offices and its partner banks were only able to sell 139,930 of the 20,000 shares, rustling up a total of $3.5 million Of the sum, just over $1.8 million was purchased by nine financial institutions, two insurance companies and four university endowments: MIT, Rice Institute, The University of Pennsylvania and the University of Rochester. Individual stockholders, required to invest the considerable sum of $5,000, contributed the rest of the capital." It is clear that the leader of this movement to create a new form of finance for young companies was Doriot. Josh Lerner a professor at Harvard Business School points out: "Doriot is the founder of the modern VC industry. He is the first person who basically ran an institutional venture capital fund. And he played a lead role in getting the VC community to see itself as a real industry." Doriot struggled to create a modern venture capital firm. He complained: "**Yardstick measurements to be used in judging the work of a venture capital organization are very different from those of a normal industrial company. Methods of remuneration used by large manufacturing companies may be quite ineffective in attracting, keeping and rewarding personnel."** The task of ARD was described as follows by Doriot: **"research and development, new technical ideas, and young small businesses are not in themselves the certain keys to great success. They must be supplemented by sound management, adequate financing, competent production methods, and aggressive merchandising."**

3. **"Never go into venture capital if you want a peaceful life. Keep on financing concrete that doesn't move, that doesn't call you at 2am in the morning."** Pioneering venture capitalist Pitch Johnson once said that part of what you must give to be a successful venture capitalist is "commitment." To be committed you can't help but get somewhat emotionally involved and that means being available. Pitch Johnson said: "We invest stomach lining in those companies because any venture capitalist with his or her salt gets emotionally involved. You can't be that detached because the entrepreneurs are very emotional people who want to succeed." Doriot

liked to refer to the businesses he invested in as his children since he was so emotional entangled in their success or failure. Doriot said once: **"When you have a child, you don't ask what return you can expect. Of course, you have hopes – you hope the child will become President of the United States. But that is not very probable. I want them to do outstandingly well in their field. And if they do, the rewards will come. But if a man is good and loyal and does not achieve a so-called good rate of return, I will stay with him. Some people don't become geniuses until after they are 24, you know."**

4. **"The riskiest part of the spectrum has to date proved the most rewarding, and the greatest capital gains have been earned in companies which were started from scratch."** The venture capitalist Fred Wilson writes about the same topic raised by this quote from Doriot: "It's not just the lower valuations you get at the formation stage, but it's also that you are working from a blank slate with respect to everything and you can work with the founding team to form the culture, the strategy, the team, etc." Venture capitalists like Doug Leone also prefer to be the "first outside dollar" in a new business saying the "DNA is set in the first 60 to 90 days."

5. **"Be careful of attempting to get publicity too soon or too much on a new investment. Remember the French proverb: 'to live happily, live hidden'. Otherwise one only alerts competition to what you intend to do; it may bring in other venture firms' money into competing technologies; if it goes wrong, you have a problem."** Flying under the radar can be an advantage for some companies as they struggle to get started. Doug Leone is also a fan of very young startups using in stealth to gain an advantage. Other people argue that this is the wrong approach and suggest that the entrepreneur should want everyone to know what the business is doing since it will need as much help as it can get from as many people who will contribute. On this one: vive la difference.

6. **"ARD in making an investment is in no way 'gambling.' Gambling is win or lose; ARD is the opposite, invest and build."** People who gamble are engaged in an activity which is net present value negative. Investing, for that reason, is not gambling although an investment is often called "a bet" since there is a chance that you can lose. The best investors only bet when the odds are substantially in their favor and in the case of venture investing to find mispriced optionality (big upside and relatively small downside). Doriot wrote despondently at one point in the early 1953 "**Venture capital is not fashionable any more. [People] search for security instead of hard work and daring opportunities. It is interesting to see how the great interest that existed seven or eight years ago in venture capital has disappeared and hoe the daring and courage which were prevalent at the time have now waned."** In December of 1953, ARD's stock price hit an all-time low of $16 a share. That share price would recover, but it was not an easy time for Doriot at

that low in the market. As is often the case in venture capital, it was one investment that turned the business of ARD around. ARD invested $70,000 "for a 70 percent equity stake and promised additional loans."

7. **"I don't consider a speculator — in my definition of the word — constructive. I am building men and companies."** This quote hits the Ben Graham/Warren Buffett point about the difference between investing and speculation. In their 1934 book *Security Analysis*, Benjamin Graham and David Dodd set out their definition of speculation: "An investment operation is one which, upon thorough analysis, promises safety of principal and a satisfactory return. Operations not meeting these requirements are speculative." Ben Graham in *The Intelligent Investor* added that "Outright speculation is neither illegal, immoral, nor (for most people) fattening to the pocketbook." Speculators focus on price and investors focus on on value.

8. **"The study of a company is not the study of a dead body… it is the study of things and relationships. They are very much alive and constantly changing… it is the study of people and people's work, of their hopes and aspirations… a study of determination of successive goals and of victorious competitive drive towards them**." I have always been attracted to biological metaphors since both a business and an economy are complex adaptive systems and not something that is similar to a machine. This means that an evolutionary outlook is helpful and a reason why a strong and diverse team is so valuable in any startup since they can adapt as conditions change. Doriot was part of a movement that changed many things in business. Its sort of odd to think about a ex-general born in France who taught at Harvard Business School leading cultural change but there it is. The cultural change created by companies funded by ARD, including Digital Equipment Corporation (DEC) marked the beginning of what we see today in technology. In *Creative Capital: Georges Doriot and the Birth of Venture Capital* Spencer Ante writes:

Just as important, ARD's support of Digital and dozens of other unproven little companies ushered in a new era of corporate culture. At Digital, the engineer was king. Hierarchy was out. Controlled chaos was in. Like Jack Kerouac and the Beat Generation, Digital was a petri dish in which the counterculture was spawned in the late 1950s. "He was definitely part of a social revolution that loosened things up," says Parker G. Montgomery, founder and chief executive of Cooper Laboratories, a successful health care products company that ARD financed during the 1960s. "There was such support, his presence, his philosophy, his belief in new enterprise was an inspiration."

9. **“At the time it is made, a vital error can seem like a minor decision.”** An error which you made five years before can kill your business. At the time you make a fatal error it can seem to be really small. There are many types of fatal error, one of which is not knowing what business you are in. As an example, Doriot said once: **“U.S. Steel does not know what business they are in. They are in the materials not the steel business. They are completely ignorant of aluminum and plastics.”** One can make this same argument about many companies include Kodak. Spencer Ante Wrote: By 1951 the company had invested in 26 companies employing over 3,000 people. Twenty-one of these companies were profitable. ARD had also begun charging consulting fees to portfolio companies in an attempt to raise revenues and further reinforce its business model.”

10. **“A committee is an invitation to do nothing. Very few committees can perform better than the weakest man.” Modern business vocabulary is full of expressions which are often used so loosely that they fail to convey anything to a perceptive listener.” “Sometimes I use [the stopwatch on my desk] to see how long it takes someone in a meeting to tell me the same thing three times.”** Georges Doriot was an early critic of bureaucracy and anyone who places too much emphasis on process. He was stuffy and conservative in other ways but for him time he was a bit of a rebel too. For example, he hated committees as do many other people. Of course, jokes about committees are common. A common definition is: “A committee is a group of the unwilling, appointed by the unfit, to do the unnecessary” The relevant Milton Berle joke was: A committee is a group that keeps minutes and loses hours.” Elbert Hubbard said: “A committee is a thing which takes a week to do what one good man can do in an hour.”

11. **“You will get nowhere if you do not inspire people.” On a road somewhere, three men were breaking stones. They were asked what they were doing: One said, “I earn a living.” One said, “I break stones.” One said, “I help build cathedrals.” Let us build cathedrals together.”** That Georges Doriot was a believer in the importance of leadership is not surprising. He was sometimes quirky in terms of the advice he doled out as a leader. For example, “**When traveling, always adopt the psychology of a suitcase,” “If any information is to be exchanged over whiskey, let us get it rather than give it,”** and “**Always look relaxed when you are very tense inside. Never look mad unless you need to.” “A real courageous man is a man who does something when no one is watching him.”** There is not a lot to say about this last quote other than it is true and that the older you get the more you appreciate it when you see it.**“Without actions, the world would still be an idea.”** I have met many people in my life who would have loved to start a business but they were never willing to do the necessary work and take on the associated risk. Talking about something is not doing something. Doriot believed: **“An average idea in the hands of**

an able man is worth much more than an outstanding idea in the possession of a person with only average ability."

12. **"A creative man merely has ideas; a resourceful man makes them practical."** One of the more admirable things Bill Gates and Paul Allen did when the formed Microsoft was drop what they were doing, ignored conventional wisdom and moved to Albuquerque to chase what they saw as a huge opportunity that would not wait for them to finish other things. They acted. They and others in the technology industry grabbed fate by the ears and wrestled it to the ground. The most influential thing Georges Doriot did was fund Ken Olsen who created DEC. ARD invested $70,000 for 70 percent of what would eventually become one of the world's largest computer companies. ARD eventually sold its holdings in DEC in 1972 for $450 million. It has been a recurring theme of these blog post that success in venture capital is driven by a tiny number of tape measure home runs. In the case of ARD, financial success was driven by one investment in DEC. Tom Nicholas of Harvard Business School wrote in his 2015 paper on the history of high tech venture investing in the US: "ARD was revitalized by a single investment, which also helped to spur the development of American VC more generally."

Notes:

Creative Capital: Georges Doriot and the Birth of Venture Capital. Spencer Ante. http://www.amazon.com/Creative-Capital-Georges-Doriot-Venture/dp/1422101223/ref=sr_1_1?ie=UTF8&qid=1464498641&sr=8-1&keywords=Creative+Capital%3A+Georges+Doriot+and+the+Birth+of+Venture+Capital

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A Dozen Things I've Learned from Pitch Johnson about Venture Capital and Business

June 11, 2016

I decided last week that the next post in this series should be about Franklin "Pitch" Johnson, Jr. who has been a venture capitalist since 1962. It is a good follow up to my previous post on Georges Doriot and posts I have written on Arthur Rock and Don Valentine. These people and a few other innovators created the venture capital industry. Johnson is a founding partner of the venture capital firm Asset Management, which has made more than 250 investments during its more than 40 years of operation. The firm's investments include Amgen, Applied Bio Systems, Applied Micro Circuits, Sierra Semiconductor, Tandem Computer, Teradyne and Verity. Johnson developed and taught a well-known course in entrepreneurship and venture capital at Stanford from 1979-1990.

1. **"This is a big argument between me and my good friend Don Valentine, a founding partner of Sequoia Capital. The first thing you look for in an entrepreneur is a sense of integrity, honesty, openness, and decency. Once you think you have found a decent person, the second thing is: Do they have a clear vision of the marketplace they want to serve? Don believes that you need decent people, but the marketplace comes first, because you can't change that, but you can change the people."** One way to look at venture capital investing is as a three stool with three legs: people, markets and innovation. All three legs are required for success, but different venture capitalists put different emphasis on different legs of the stool at different times. This is especially true in the very early stages of a business. Johnson believes that the "people" leg of the stool is more critical than Valentine, who was famously involved in replacing the founders at Cisco. I prefer Johnson's approach since replacing people in any business, including a startup, is not only unpleasant but often not successful. Johnson seeks teams composed of people who not only have desirable qualities like integrity, honesty, openness and decency but also a clear vision about an attractive market. Johnson's preference to invest in firms that do not need a management change is more like the approach of Warren Buffett and Charlie Munger who won't buy a business if it does not come with management with the necessary skills and integrity.

2. **[Don Valentine and I] both ask: Do they have a differentiated ability? Is their product workable? Do they have enough of a different idea that they will be free of**

certain kinds of competition? Will the business operate with good margins?" Both Johnson and Valentine agree that if a business performs the same activities as its competitors it won't have significant barriers to entry. I am not aware of any successful venture capitalist who does not believe a moat is required to generate a sustainable profit. The key strategy questions that every business should ask related to moats include: (1) what will the businesses will do differently than its competitors? (2) what sustainable advantage can the business create versus competitors and (3) is that differentiation sustainable in the face of competition? These strategy questions are quite different than matters relating to what Professor Michael Porter "operational effectiveness." Without a moat, competition among suppliers will inevitably cause increases in supply, which will cause price to drop to a point where there is no long term industry profit greater than the cost of capital. When Buffett says "microeconomics **is** business," this is what he means. Too much supply is bad for profits. It is that simple.

3. **"You're trying to find people with good ideas and the ability to make those ideas into companies. Lots of people think we're investing in technologies. That is not really a correct statement. We're backing people who can take technologies and serve markets, thereby serving people and building great companies." "You concentrate on building a good company, which means getting the right people, having great products, marketing them well, having a good organization, and getting adequate financing in the thing to make it happen. And those are the immediate objectives, because if you don't achieve those things, the rest of it doesn't count."** As stated above, **t**he three legs of the stool in venture capital are: people, markets and innovation. The process of taking innovation and turning it into value is the essence of a business model. Johnson has identified the key steps in that process and the objective, which is to build a scalable business that delivers unique sustainable customer value. Venture capitalist Mike Maples, Jr. describes a business model as "the way that a business converts innovation into economic value." The innovations that underlie the business are absolutely necessary, but not sufficient. Johnson is saying that his early focus in evaluating a startup is more focused on making sure the right people and team are in place.

4. **"We look for zeal. We look for guys who give a damn—and women—that want to make things happen. You can be as bright technically, you can understand marketing, you can do all the intellectual part of it right. But if you don't yourself feel it and stimulate in your employees this same winning team feeling, you're much less likely to succeed." "If you don't feel excitement, you'd better find another business." "Entrepreneurs, the men and women that start companies, are quite competitive. They're athletic in that sense of the word. Some have been athletes, some haven't, but they have that drive to succeed, this unwillingness to fail, that's characteristic. The venture capitalists—the good ones—the best ones, share this enthusiasm, this zeal that they have. So they sense that you're as**

zealous as they are to succeed." The best entrepreneurs don't quit when inevitable problems arise during the process of turning an idea into a successful business. These people are often referred to as missionaries. In other words, the ideal founders have a burning desire to create the business that is not just driven by money. The importance of perseverance is part of what Ben Horowitz writes about in *The Hard Thing About Hard Things.* Johnson is saying that entrepreneurs should look for the same missionary qualities in their investors and advisors.

5. **"Running out of cash gets your attention [as an entrepreneur]. The sight of the gallows clears your mind. [The mistake I often see entrepreneurs making is] running out of money. Often they plan to grow faster than reality will permit. They are too optimistic." One of the risk levels that you have to think about is will you be able to get enough money together to make this thing succeed? Companies can get a great idea with great leadership. If they don't have enough money they can't develop their products."** You can be forgiven for a lot of things in business, except running out of cash. Many accounting problems can eventually be overcome as long as the business has access to cash, which is the oxygen of business. Even bankruptcy can sometimes be survived if the business has enough cash. How much cash to raise and how much cash to burn are questions that involve judgment in the face of risk, uncertainty and ignorance. There is no magic formula that can be used to answer cash management questions, but having enough cash for nine months of operations is a common standard. If you don't have that much cash on hand it is a good rule of thumb to be working toward raising more funds. At only six months of cash remaining it should be a major priority. At three months of cash remaining, the CEO and the CFO should be thinking about raising more cash first and foremost.

6. **"[Entrepreneurs] treasure and love independence. They love their feeling of being self-reliant, or a group bring self-reliant. They know that if they work hard and are right, in the end they'll make some good money, which is certainly a primary aim. But they also can live with uncertainty, they can live with risk—they can sleep. I know people that can't be in little companies—it just makes them too nervous. And they're not good or bad people, they're just people. So you have to be able to sleep when you have no idea what's going to happen to you. Venture capitalists all learn how to sleep when things are going to hell." "We knew that if you're going to attract good people, whether they're scientists or down the line, you want to have a plan so that everybody feels like an owner, and that if you had an option and the company succeeded greatly, then people were incentivized by that."** Johnson is describing a few of the qualities that a venture capitalist looks for in a founder.Getting the balance right so the startup has the best opportunity is not simple. Making everyone involved feel like an owner of the business is central to success. It takes a special person to be an entrepreneur and is not something everyone is suited for. For example, as Daniel Kahneman has written, "For most people, the fear of losing $100 is more intense than the hope of gaining $150.

[Tversky and I] concluded from many such observations that 'losses loom larger than gains' and that people are loss averse." Kahneman also points out:

"It is costly to be risk averse for gains and risk seeking for losses." "Many unfortunate human situations unfold [. . .] where people who face bad options take desperate gambles, accepting a high probability of making things worse in exchange for a small hope of avoiding a large loss. The thought of accepting the large sure loss is too painful, and the hope of complete relief is too enticing, to make the sensible decision that it is time to cut one's losses." "When action is needed, optimism, even of the mildly delusional variety, may be a good thing." "The optimistic risk taking of entrepreneurs surely contributes to the economic dynamism of a capitalistic society, even if most risk takers end up disappointed."

7. **"There are three ways in which venture capitalists [are involved with a business**.] **"I always think of it as capital, consulting, and commitment."** "**The first one, they provide money to give the company some capital to operate with. [The second], they provide advice and help, and on a frequent basis, weekly in young companies very often, certainly not less than monthly. The balance is between advising the management and trying to run the company yourself. "If you get the management too dependent on you, or you're too assertive and they get too resistant, you've got to get this balance of discussion of keeping things open so that people will ask you stuff sometimes. But the worst thing you want to hear is have a guy come to a board meeting and he says, 'I have three courses of action. Which one does the board want to take.' That's really bad news when a guy does that. What you want a guy or woman to come in and say is 'Here's where I want to go." If you don't like it then you can argue about that, but you don't want them dependent on you for operating decisions."** Johnson believes that capital is only one element that an venture capitalist should provide. Venture capital is fundamentally a service business. Success in the venture business requires hustle, wisdom, judgment and hard work. If all a founder needs is capital then they are quite lucky indeed. Johnson is also saying that board's primary role should be as advisors to management, not running the business. Someone like Johnson has seen many different boards and knows how important a good board is in terms of increasing the probability of success.

8. **"This is true of any venture: you don't think about losing money, you think about what an investment can do, especially startup venture capital in some strange area. So you use your hunches, you use what you read, you use your sense of the practicality of the science, where the science is workable. You bring all that together on kind of a judgment call. I was trying to tell my class when I taught it— you can't calculate all this. You should run the numbers— you have to run the numbers, but in the end you've got to have a sense of balance of the likelihood of success and what you need to do yourself to make things succeed. And the venture capitalist can play a substantial role in success by selecting the right people, encouraging them, getting them incentivized, and then helping the companies devise strategy. That's an important venture capital function."** Venture capital is all about judgment. The way to get better judgment is to pay attention to your mistakes

and the mistakes of others (and conversely the successes). Good judgment comes from experience, which often comes from bad judgment. A venture capitalist never has all the data and an investing decision simply can't be made based on a formula. A really smart venture capitalist said to me once that success in the "picking" part of venture capital mostly about pattern recognition. The more businesses you see in your career, the better you can get at spotting the patterns that can lead to success.

9. **"[Georges Doriot, my Harvard Business School professor] said: 'Remember there's a great tape recorder going all the time,' which is fairly true. So what he was saying is, 'Behave yourself, because if you're going to cut corners, you can't.'" "When we were first starting our firm, a lawyer, Ed Huddleson, said to Bill [Draper]and me: 'We can write all the investment agreements you want but if you have to bring them out of the drawer, something has gone wrong. Invest in people you can believe in, and you will never need to take the papers out of the drawer.'"** One simple approach that can help guide personal and company behavior is to imagine that everything you do in life will appear on the cover of *The New York Times*. Would you be proud of what you have done? In interviews Johnson talks about how the venture capital industry he wants to work in is a place where handshakes matter and where people are good for their word. Of course, it can take years to build a reputation and just minutes to destroy it. Someone who takes any pride in how much time they spend in court litigating with other people and businesses is an idiot.

10. **"The whole portfolio isn't so risky, but any one deal is risky." "George Quist said it best—a friend of mine who was a founder of Hambrecht and Quist. He said that venture capitalists sleep like babies—they sleep for an hour and they cry for an hour! But I sleep fine. I've had nights when I've been happier than other nights, when I was worried about something, but I really have been able to get off to sleep and get a night's sleep almost always." "We all have had a series of things we could have done differently, but it's a batting average, you know? And my batting average is good. I'm not the greatest slugger in the business, but I've got a good solid batting average for a long time. But involvement would be the cornerstone of what I believe venture capital is. Involvement and help to the companies."** When Johnson says "the whole portfolio isn't so risky" this is what he means: In an essay in which he discusses the nature of risk, Warren Buffett advises: "If significant risk exists in a single transaction, overall risk should be reduced by making that purchase one of many mutually-independent commitments. Thus, you may consciously purchase a risky investment – one that indeed has a significant possibility of causing loss or injury – if you believe that your gain, weighted for probabilities, considerably exceeds your loss, comparably weighted, and if you can commit to a number of similar, but unrelated opportunities. Most venture capitalists employ this strategy. Should you choose to pursue this course, you should adopt the outlook of the casino that owns a roulette wheel, which will want to see lots of action because it is favored by probabilities, but will refuse to accept a single, huge bet." Founders

by contrast have made a single huge bet. Chris Dixon has been both a founder and a venture capitalist so he has empathy for both venture capitalists and founders on this set of issues. He says: "VCs have a portfolio, and they want to have big wins. They'd rather have a few more lottery tickets.. while for the entrepreneurs, it's their whole life, and let's say you raised five million bucks, and you have a fifty million dollar offer, and the entrepreneurs are like, 'Look, I make whatever millions of dollars. I'll be able to start another company.' And the VCs are like, 'Wait! We invested billions of dollars.' That is usually where tension comes**."**

11. **"People forget San Francisco and Silicon Valley have their roots in pioneering. Failure is not unthinkable here. You can try again. In some places in Europe, however, it is a disgrace to fail and you have to retreat from business life." "I think the most important single reason is the presence of two, now three, great research universities in the area—Stanford, Cal, and UCSF. But also, the presence of other important educational institutions that provide a great flow of engineers and people that aren't scientists, although two produce engineers."** You simply can't have a business like venture capital which is based on buying mispriced optionality and not have lots of failure. The failures are the price you pay to discover payoffs from optionality. Mistakes are inevitable. If there is a culture in a company, city or region that penalizes failure, there will not be successful venture capital industry or startups. Johnson is also saying that in order to create a successful innovative climate any region also needs a critical mass of supporting services and resources. That means, most importantly, at least one major research university. I discussed that in more detail in my post this week on economic development.

12. **"My class [at Harvard Business School] was '52. I don't remember people talking about venture capital at all when I was in school. The term didn't come up. I learned later that the term had been invented by Elton Mayo [a professor of Industrial Management at Harvard], in the early forties, middle forties." "There were very few venture firms when Bill [Draper] and I got started in '62. We had an informal group that met monthly for dinner. There were twelve of us and it was called the Western Association of Small Business Investment Companies, which itself was the forerunner of the Western Association of Venture Capitalists." "The idea of angels—I'd never even heard of angels 'til about twenty years ago [the late 1980s]. And that's recent times." "The word [angels] wasn't used. Because we were all small, we were doing brand new startups a lot of the time, but not always. We did startups and we did deals that were already underway. The idea of angels only took place much later, when individuals were backing companies to get them going. Probably not fair, but I always think of angels as putting money in and seeing what happens**." Pitch Johnson was in a good position to know who invented the term "venture capital." It could be that Mayo was the originator. Some history buffs trace the term to Schumpeter who wrote an article in 1943 in which he uses the term "venture capital." Another account http://www.startup-

book.com/2012/03/31/prophet-of-innovation-joseph-schumpeter-and-creative-destruction/ makes a case that Schumpeter did not invent the term and that its origins are obscure. In any event, I agree with Johnson that the word "Angel" should be reserved for use in describing amateur early stage investors. Professional seed stage venture capital investors belong in another category.

Notes:

Stanford Business: http://www.gsb.stanford.edu/insights/venture-capital-pioneer-illuminates-silicon-valley-ecosystem

Bio publications and papers http://www.gsb.stanford.edu/faculty-research/faculty/franklin-pitch-johnson

National Venture Capital Association Venture Capital Oral History Project http://digitalassets.lib.berkeley.edu/roho/ucb/text/dennis_johnson_donated.pdf

http://digitalassets.lib.berkeley.edu/roho/ucb/text/johnson_franklin.pdf

Bio: https://www.alumni.hbs.edu/stories/Pages/story-bulletin.aspx?num=11

IESE Interview https://www.youtube.com/watch?v=o6oLLj1Zz2k

TiEcon interview https://www.youtube.com/watch?v=9VmeF9LeqSU

https://www.youtube.com/watch?v=a-HMupXe6yE

https://www.youtube.com/watch?v=ff7OPt_afq4

A Dozen Things I've Learned from Elon Musk About Business and Investing

June 18, 2016

Elon Musk is a classic missionary founder who is more interested in changing the world and creating enduring businesses than just the financial rewards that may flow to him from the product or service. Mercenaries may sometimes succeed financially, but they do not bring as much lasting value to their communities. What a city and nation wants in terms of economic development are businesses that produce jobs, innovative products and services, a better quality of life and which add to the tax base over the long term. I would rather have an Expedia, Zillow or Tableau in my community than a startup sold early in its potential life by the founder for tens of millions of dollars or even $1 billion, which then slowly (or quickly) disappears.

To cover the situation where a reader of this blog has been living in a cave, set out below is some background information on Musk before getting to his quotes and my own thoughts:

Elon Musk is a South African-born entrepreneur, engineer, and investor. "Musk became a multimillionaire in his late 20s when he sold his start-up Zip2 to Compaq. He taught himself to program and at 12 he sold a game called Blastar. At age 17, in 1989, he moved to Canada and attended Queen's University. "In 1992 he move to the US to study business and physics at the University of Pennsylvania. He graduated with an undergraduate degrees in economics and physics." "In March 1999, Musk co-founded X.com, an online financial services and e-mail payment company, that eventually merged with Confinity, which operated a service called PayPal." He is the founder, CEO and CTO of SpaceX and the Chief Executive Officer, Product Architect and Chairman of Tesla Motors.

1. "People should be less risk averse when there's not much at risk.'' "When something is important enough you do it even if the odds are not in your favor." Musk's many successes in business and life are an excellent way to explain: (1) why financial returns from venture capital and research and development follow a power law and (2) why the creation of startups that are *tape measure home runs* in terms of success is enabled by other startups which fail.

The potential distribution of financial returns from the creation of a new businesses that is "0 to n" is *convex*. I am not going to go very deep into the nature of convexity because most of my readers will stop reading. If you do get bored anyway skip to number 2 below. In the Notes below, two people write on the nature of convexity:

"In finance, convexity is a broadly understood and non-specific term for nonlinear behavior of the price of an instrument as a function of evolving markets. Oftentimes, financial convexities are associated with some sort of optionality embedded in the instrument."

"The trouble is that convexity involves a whole bunch of seriously geeky math and computer models and normal people probably don't want to go there. (I don't even want to go there.)"

Investments which are instead "1 to n" are not convex. Nassim Taleb writes: "Payoffs from [convex investments like venture capital and] research are from Extremistan; they follow a power-law type of statistical distribution, with big, near-unlimited upside but, because of optionality, limited downside." In other words, convexity is about bets that reflect an asymmetric possible distribution of outcomes. Taleb writes: "Convexity propositions should be embraced – concave ones, avoided like the plague." The billionaire investor Sam Zell puts it in more understandable terms for an ordinary investor or business person in this way: "Listen, business is easy. If you've got a low downside and a big upside, you go do it. If you've got a big downside and a small upside, you run away."

This matrix below represents my attempt to better explain investments which are convex:

	Big Upside	Small Upside
Big Downside	"The left tail dominates, hence there is no optionality," writes Taleb. I believe bets in this quadrant belong in a "too hard" pile.	Don't do it (negative optionality) unless you know your edge extremely very well
Small Downside	Attractive if priced right (positive optionality). People like Musk and venture capitalists invest here.	Trivial case, encountered often in daily life

Illustrative examples are:

	Big Upside	Small Upside
Big Downside	Late stage equity in a startup at a high valuation often in the newspapers	Base jumping; driving while drunk
Small Downside	Early stage equity in promising startup in a new category	Savings account

Determining whether rights to a potentially convex investment are available at an attractive price requires expected value thinking. If you overpay for an investment which has convexity you are not making a bet with positive expected value. This is why the best venture capitalists and entrepreneurs like Musk and Jeff Bezos are involved in areas and technologies before they become popular. Once the crowds arrive in a given area of investment an investor must invariably overpay for any investments, competition becomes very significant and potential investments cease to be opportunities and instead become efficient ways to destroy wealth.

When you encounter a convex financial or other opportunity with little downside and very big upside, it is with your circle of competence and it is under-priced, you should bet BIG. If the big convex bet is financial you only need to be right once in a lifetime to be wealthy since it is magnitude of success and not frequency of success that determines the desirability of the result. This is the so-called "Babe Ruth Principle." When you are looking for convex bets, often the best place to look is in areas where you encounter significant complex adaptive systems. Investing is a probabilistic activity. Areas where financial outcomes can potentially be impacted by positive Black Swans can be significant opportunities.

Convex propositions can be found most anywhere if you know how to look for them and Musk is certainly someone who knows how to find them. Discovering convexity is made easier if you want to do things that are uncommon and bold. The convexity is in a sidecar if you will with people who think big and differently. As an example, going to Mars is very important to Musk. When he and Jeff Bezos started their quest to substantially lower the cost of launch using unconventional methods, the bets were convex. A similar bet would not be nearly as convex now that they have has proven their approaches are viable. This is why venture investors and founders inevitably have both spectacular results and many failures. Taleb writes that the process works: "by negative information, reducing the space of what we do by knowledge of what does not work. For that we need to pay for negative results." If someone tries to take failure out of the process, innovation will cease. This is why Jeff Bezos recently wrote is a shareholder letter:

"One area where I think we are especially distinctive is failure. I believe we are the best place in the world to fail (we have plenty of practice!), and failure and invention are inseparable

twins. To invent you have to experiment, and if you know in advance that it's going to work, it's not an experiment."

As for assessing the "risk" of failure, Musk talks about in his quotes, how risky is something if you can't conceive of failing? This passage from Jim Cantrell who was on the SpaceX founding team is enlightening:

"He is by far the single smartest person that I have ever worked with … period. I can't estimate his IQ but he is very very intelligent. And not the typical egg head kind of smart. He has a real applied mind. He literally sucks the knowledge and experience out of people that he is around. … I am going to suggest that he is successful not because his visions are grand, not because he is extraordinarily smart and not because he works incredibly hard. All of those things are true. The one major important distinction that sets him apart is his inability to consider failure. It simply is not even in his thought process. He cannot conceive of failure and that is truly remarkable. It doesn't matter if it's going up against the banking system (Paypal), going up against the entire aerospace industry (SpaceX) or going up against the US auto industry (Tesla). He can't imagine NOT succeeding and that is a very critical trait that leads him ultimately to success. He and I had very similar upbringings, very similar interests and very similar early histories. He was a bit of a loner and so was I. I recently wrote an op-ed piece for Space News where I also suggest that his ruthlessly efficient way to deploy capital is another great reason for his success. He can almost smell the right way through a problem and he drives his staff and his organization hard to achieve it. The results speak for themselves. …In the end I think that we are seeing a very fundamental shift in the way our world takes on the big challenges facing humanity and Elon's Way as I call it will be considered the tip of the spear."

Someone who knows Musk well once told me that to understand Musk you really have to understand how badly he wants to go to Mars. They said they have seen him turn down chances to earn more profit since he believed he could get to Mars faster by doing so. This person said to me: "If you want to predict what Musk will do, ask yourself: Will this help him get to Mars faster?" Existing providers of launch did not think they would encounter anyone who thinks this way. To illustrate this "0 to n" approach to investing and life, it is useful to look at something that Musk recently said:

"Essentially what we're saying is we're establishing a cargo route to Mars. It's a regular cargo route. You can count on it. It's going happen every 26 months. Like a train leaving the station. And if scientists around the world know that they can count on that, and it's going to be inexpensive, relatively speaking compared to anything in the past, then they will plan accordingly and come up with a lot of great experiments."

If someone thinks like Musk or Bezos and they are right about their investments, your competing business that did not make the same bets can be in big trouble. This is what happened to Blackberry. An anecdote about Musk that was recently in a Bloomberg article further illustrates the point:

"For France's Le Gall, Europe's contemptuous inability to take Musk seriously dates back years. He remembers a conference in Vietnam about a decade ago where the billionaire "showed up in torn jeans and with a plastic bag. He told us — the chiefs of the three biggest rocket launchers worldwide – 'I am here and you are dead.' One of us replied: 'you talk, we launch.' Had we known…"

2."Focus on something that has high value to someone else, be really rigorous in making that assessment, because natural human tendency is wishful thinking." "Great companies are built on great products." "There are really two things that have to occur in order for a new technology to be affordable to the mass market. One is you need economies of scale. The other is you need to iterate on the design. You need to go through a few versions." 'You've got to make sure that whatever you're doing is a great product or service. It has to be really great. To go back to what I was saying earlier, where if you're a new company – unless it's like some new industry or new market that hasn't – if it's an untapped market, then you have more ability to – the standard is lower for your product or service, but if you're entering anything where there's an existing marketplace, against large entrenched competitors, then your product or service needs to be much better than theirs. It can't be a little bit better, because then you put yourself in the shoes of the consumer and they say why would you buy it as a consumer. You're always going to buy the trusted brand unless there's a big difference. A lot of times an entrepreneur will come up with something that is only slightly better, and it can't just be slightly better. It's got to be a lot better." "If you're trying to create a company. It's like baking a cake. You have to have all the ingredients in the right proportion." There is a lot to unpack in this set of statements by Musk, but fundamental to a successful business is making really great products that people want to buy. Great products in this context means that they are not just a little better than what competitors sell or that people already have, but a lot better. This simple fact seems so obvious, but some people get so caught up in trying to "start a company," that they don't pay enough attention to creating the products that define the business. How much better than the offerings of competitors must the product be? There is no formula to determine the correct result, but the answer is "a lot." The SpaceX example is a quite interesting case to examine this question. Launching payloads into space on rockets has traditionally been thought of as a business that does not result in significantly more demand if there is a price drop. This assumption about price elasticity resulted in the traditional space launch providers deciding to milk their sunk non-recurring engineering and not invest significant amounts in new price reducing innovation. In short, these traditional launch providers believed that a lower prices would not result in more profit so they kept prices flat to increasing. This price elasticity assumption by the incumbents created an opportunity for Musk to innovate by relaxing another assumption which was that reuse of rocket stages was not possible. Musk reasoned that if Columbus and other explorers of his era had been forced to throw away their ships after every voyage not much would have been accomplished. Musk has proven that part of rockets can be reused and that other price reducing innovations are possible. Musk now must demonstrate that more rocket launches will be purchased due to the lower price so as to increase the total addressable market (TAM) for launch. For example, a price drop from $375M to $100 Million for a heavy rocket launcher would be a significant price cut. How many more heavy launches will be generated at the new lower price? No one really knows yet. We can expect Musk to be innovative in looking for ways to increase launch demand. For example, the huge communications satellite constellation Musk has proposed is arguably an example of him looking for ways to create new payloads for SpaceX.

3."It's OK to have your eggs in one basket, as long as you control what happens to that basket." The key word in this quotation is "control." If you take dependencies on others and you have no alternative supplier (i.e, what Roger Fisher calls no BATNA) the suppliers can block your success. For example, if you build a rocket and you must source your booster from a single supplier, then that supplier controls your fate. This is why Musk prefers to make everything he needs or have multiple suppliers. He does not want to buy components

from traditional suppliers of launch who want the price of launch to remain high. This is a set of problems related to what I have called "wholesale transfer pricing" in other posts on this blog. Michael Porter calls it "supplier bargaining power." Having all your eggs in one basket is a concentrated bet. Warren Buffett has a view on concentrated bets that is similar to Musk. Buffett says:

"Diversification is a protection against ignorance. It makes very little sense for those who know what they're doing." "I can't be involved in 50 or 75 things. That's a Noah's Ark way of investing – you end up with a zoo that way. I like to put meaningful amounts of money in a few things." "We believe that a policy of portfolio concentration may well decrease risk if it raises, as it should, both the intensity with which an investor thinks about a business and the comfort-level he must feel with its economic characteristics before buying into it. In stating this opinion, we define risk, using dictionary terms, as 'the possibility of loss or injury.'"

4. "[Physics is] a good framework for thinking. Boil things down to their fundamental truths and reason up from there." The famous physicist Richard Feynman is a hero to many people, especially to anyone who likes to think about thinking. Feynman was a great believer is being able to understand each step of the reasoning involved in an idea from first principles. David Goodstein once said to Feynman:

"Dick, explain to me, so that I can understand it, why spin one-half particles obey Fermi-Dirac statistics." Sizing up his audience perfectly, Feynman said, "I'll prepare a freshman lecture on it." But he came back a few days later to say, "I couldn't do it. I couldn't reduce it to the freshman level. That means we don't really understand it."

Warren Buffet believes the same things about business principles. If you cannot write it down, you have not thought it through. In a previous blog post I compared Feynman to Charlie Munger who also has bottom's up thinking process. What are the factors that really govern the interests involved, rationally considered? What are the influences where the brain at a subconscious level is automatically forming conclusions that may be dysfunctional or incorrect? Munger's style is to first assemble all the relevant facts and then apply a rational process to produce an analysis of those facts and an investing thesis. Even if you can't rely on the same principles as physics in business you can adopt its basic ethos.

5. "**Starting a business is not for everyone. Generally, starting a business, I'd say, number one is have a high pain threshold. There's a friend of mine who's got a good saying which is that starting a company is like eating glass and staring into the abyss. That's generally what happens because when you first start a company – there's lots of optimism and things are great. Happiness at first is high, then you encounter all sorts of issues and happiness will steadily decline, and then you will go through a whole world of hurt, and then eventually, if you succeed – and in most cases you will not succeed. Tesla came very close to failure. If you do succeed, after a long time, you will finally get back to happiness. " "[Starting a company is like] staring into the face of death. If that sounds appealing, go ahead." "Persistence is very important. You should not give up unless you are forced to give up." "You will encounter issues you didn't expect, step on landmines. It's bad. Years 2 to 4 or 5 are usually quite difficult. A friend has a saying, it's 'eating glass and staring into the abyss' … "If you're cofounder or CEO, you have to do all kinds of tasks you might not want to do … If you don't do your chores, the company won't succeed … No task is too menial."** Starting a business is as brutally hard as Musk describes. If you like doing things that are brutally hard, and some people do, then you

may want to start a business. And if you don't like doing that, then don't. It's that simple. Of course, just liking challenges and hard work is not enough to create success since the founders must have the other required inputs like the necessary skills, significant innovation, a big addressable market and the ability to assemble a great team.

6. "**Constantly seek criticism. A well thought-out critique of whatever you're doing is as valuable as gold, and you should seek that from everyone you can, but particularly your friends. Usually, your friends know what's wrong, but they don't want to tell you because they don't want to hurt you. Yeah, they say I want to encourage my friend so I'm not going to tell him what I think is wrong with his product. It doesn't mean your friends are right, but very often they are right, and you at least want to listen very carefully to what they say.. and to everyone. You're looking for, basically, you should take the approach that you're wrong. That you, the entrepreneur are wrong. Your goal is to be less wrong." "Pay attention to negative feedback and solicit it, particularly from friends. Hardly anyone does that, and it's incredibly helpful." " It's very important to have a feedback loop, where you're constantly thinking about what you've done and how you could be doing it better." "Some people don't like change but you need to embrace change if the alternative is disaster."** To learn from success or failure you need effective feedback loops. Some people take feedback better than other particularly if it is criticism. Musk and people like him are very thick skinned and have a scientific orientation. The best approach is to have "strong ideas weakly held." Someone with strong ideas should know the topics well and have researched all side of the issues. By keeping this strong views weakly held the person can adapt as new information and idea arrive. What people struggle with most is learning from mistakes. Charlie Munger has views that are quite similar to Musk on this topic. Munger says: "Why not celebrate stupidities?" "I like people admitting they were complete stupid horses' asses. I know I'll perform better if I rub my nose in my mistakes. This is a wonderful trick to learn." It is through the process of making mistakes and having success in the real world that you can learn and establish sound business judgment.

7. **"Work like hell. I mean you just have to put in 80- to 100-hour weeks every week. [This] improves the odds of success. If other people are putting in 40 hour work weeks and you're putting in 100 hour work weeks, then even if you're doing the same thing, you know that you will achieve in four months what it takes them a year to achieve."** The work ethic of Elon Musk is legendary. He has been described at working 15 hours days and sleeping six hours a night. Musk's ex-wife talks about his work habits this way: "I had friends who complained that their husbands came home at seven or eight. Elon would come home at eleven and work some more. People didn't always get the sacrifice he made in order to be where he was. He does what he wants, and he is relentless about it. It's Elon's world, and the rest of us live in it." This set of quotes about the value of hard work and working harder than your competitors from Musk makes me think of Michael Mauboussin's point that if you can work to change the outcome of something what you do to impact that outcome isn't luck. The cause of that success is instead hard work or skill.

8. "I don't think it's a good idea to plan to sell a company." "My motivation for all my companies has been to be involved in something that I thought would have a significant impact on the world." As I said above, Musk is the poster child for the value of the missionary as opposed to the mercenary founder. Missionaries are more likely to get through the hard tasks, stress and hardships involved in building a business because they have the drive to succeed. Sometimes a great success is only inches from failure before is eventually breaks through to become a great success. It isn't easy to have people say you are wrong or

even crazy. People say that in the early days of Space X his goal was to "the Southwest Airlines of Space," which is not the goal of a mercenary, but rather a missionary. Investors who back missionaries instead of a mercenaries are not only doing the right thing for society they will be more successful financially. Missionaries possess the key quality that Taleb describes as follows: **"**the remarkable ability to engage in rational forms of trial and error, with no comparative shame in failing again, starting again, and repeating failure."

9. "Any product that needs a manual to work is broken." I love this quote since I do not like to read manuals. I am glad manuals exist, but they are not my passion. Some people love to read manuals. I am not one of those people. The way great designers and engineers can reduce of eliminate the need for a manual is a beautiful thing to see. Some people seem naturally suited for this work just as they are for understanding what consumers will like and buy. As an example, one of my favorite things in life is to watch my friend Craig McCaw handling a new device. Craig is dyslexic and is someone who does not enjoy reading a manual. That is part of what gives him special insight into the mind of a consumer. He has the best instincts for what consumers will buy that I have ever seen.

10. "If things are not failing, you are not innovating enough." It takes you very little time reading this blog you know I am fond of the ideas of Charlie Munger. He said once: **"**There's no way that you can live an adequate life without many mistakes." Munger's partner Warren Buffett agrees: "I make plenty of mistakes and I'll make plenty more mistakes, too. That's part of the game. You've just got to make sure that the right things overcome the wrong." As I explain above failure is an essential part of harvesting optionality. It is how we acquire the information necessary to innovate. A system without failure is a system that will not progress. The economist Allan Meltzer created the following aphorism to capture this idea: "Capitalism without failure is like religion without sin. It doesn't work. Alternatives to capitalism concentrate power in few hands, opening the way to tyranny and brutality, not justice."

11. **"The market is like a manic depressive."** This is so close to the "Mr. Market" metaphor that it is hard to imagine that Musk has not read the work of Ben Graham. He has at least read about the ideas of Warren Buffett who calls Mr. Market "a drunken psycho." Anyone who thinks the market is always wise is not paying attention. Entrepreneurs and investors like Musk are able to figure out where conventional wisdom is wrong so as to create or purchase under-priced optionality. These entrepreneurs are searching for positive optionality in an environment filled with the mistakes of other people. When the market is depressed is often the best time to invest and start a business. Talent is more available in a downturn if you can find the necessary cash or raise it during good times. This is why venture capitalist Eugene Kleiner once said: "When they are passing the hors d'oeuvres take two." In achieving his many objectives in recent years Musk has had the good luck to be operating in favorable capital markets. If luck shines on you you for any reason, you should not only take a bow, but take full advantage of it while the sun shines.

12. "I think it matters whether someone has a good heart." "I don't believe in process. In fact, when I interview a potential employee and he or she says that 'it's all about the process,' I see that as a bad sign. "The problem is that at a lot of big companies, process becomes a substitute for thinking. You're encouraged to behave like a little gear in a complex machine. Frankly, it allows you to keep people who aren't that smart, who aren't that creative." Once upon a time, I interviewed with Craig McCaw for a job. I don't remember much about our conversation specifically other than it was very pleasant and we talked about any things. My favorite memory of that day was speaking to someone after the

interview and being told that Craig thought I had: “a good heart.” Just thinking about that feedback makes me smile. More than anyone in my life, Craig McCaw taught me about the value of avoiding conventional thought, action and processes. People who worked at McCaw companies thought of ourselves as pirates and Craig encouraged that approach. Like Musk, McCaw hates process and bureaucracy. The former Bell companies were our competitors and we took pride in operating with unorthodox strategies and tactics when facing them and others as competitors. We were encouraged by Craig’s example to think for ourselves and be creative. In terms of his approach to business, Craig is more like Elon Musk than anyone I know. Their personalities are quite different it seems, but their “I would rather be a pirate than join the Navy” attitude toward business is very similar.

A Dozen Things Someone Might Learn about Investing and Business from the Simpsons

June 24, 2016

You can learn as much from anti-role models as role models. Knowing what not to do is valuable. While Homer and other characters in the Simpsons are often among the more classic anti-role models, they are sometimes role models on issues like family loyalty.

1. ***HOMR-***

Broker: "Okay, now before I execute this order, are you sure you understand the risks of stock ownership?"

Homer: "Absolutely!" [picture of *Homer's brain appears that includes a line of dancers line singing 'We're in the money'.]* "You heard the monkey, make the trade."

The stock market will not deliver wealth to you, especially if you expect it to appear on some sort of schedule. That you can determine an asset is mis-priced now relative to intrinsic value does not mean you can time when the asset will rise to a price that is at or above its intrinsic value. The best investors wait for profitable result, rather than try to time markets.

2. Homer vs. Patty and Selma-

Homer: "This year I invested in pumpkins. They've been going up the whole month of October and I got a feeling they're going to peak right around January. Then bang! That's when I'll cash in."

This dialogue from the Simpsons reminds me of Nassim Taleb's story about the turkey: "Consider a turkey that is fed every day. Every single feeding will firm up the bird's belief that it is the general rule of life to be fed every day by friendly members of the human race 'looking out for its best interests,' as a politician would say. "On the afternoon of the Wednesday before Thanksgiving, something *unexpected* will happen to the turkey. It will incur a revision of belief." Here's a chart depiction of Taleb's story:

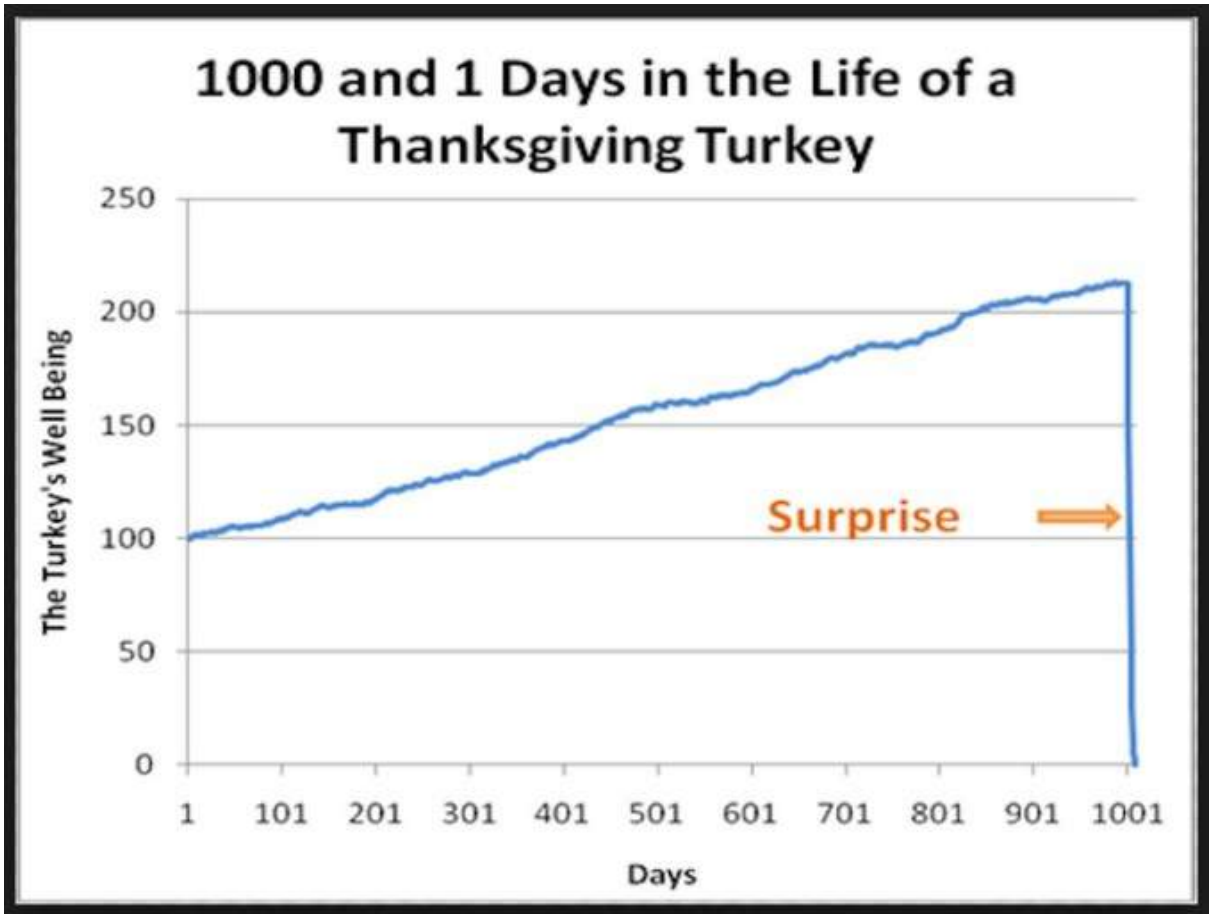

3. Lard of the Dance-

Homer Simpson: Okay, boy. This is where all the hard work, sacrifice, and painful scaldings pay off.

Employee: Four pounds of grease… that comes to… sixty-three cents.

Homer Simpson: Woo-hoo!

Bart Simpson: Dad, all that bacon cost twenty-seven dollars.

Homer Simpson: Yeah, but your mom paid for that!

Bart Simpson: But doesn't she get her money from you?

Homer Simpson: And I get my money from grease! What's the problem?

Marge: Homer! That side of bacon was for my bridge game tonight!

Homer: Marge, if you don't mind, I'm a little busy right now achieving financial independence.

Marge: With cans of grease?

Homer: [sarcastically] No! Through savings and wise investment. Of course with grease.

Homer doesn't understand what Bill Gates said once in his famous Playboy interview: "Take sales, take costs, and try to get this big positive number at the bottom." July 1994

4. Homer the Vigilante-

Homer Simpson: "Aw, you can come up with statistics to prove anything, Kent. Forty percent of all people know that."

Charlie Munger makes the same point in his own unique style: **"**Without numerical fluency, in the part of life most of us inhabit, you are like a one-legged man in an ass-kicking contest."

5. Bart Gets an Elephant-

Homer: "Look at this Marge, $58 and all of it profit. I'm the smartest businessman in the world." Marge: "[The elephant's] food bill today was $300" Homer: "Marge, please, don't humiliate me in front of the money"

Homer is operating this business at a negative gross margin.

6. No Loan Again Naturally-

Homer: "It's a secret thing called a home equity loan. I get all this cash…and the house gets stuck with the bill!"

Homer: "When you gave me that money, you said I wouldn't have to repay it 'til the future. This isn't the future. It's the lousy, stinking now!"

Leverage can be a very dangerous thing. Next to liquor and drugs is it one of the most common sources of ruin.

7. The Flight Before Christmas-

Krusty: "Kid, this company's bust. For years I've been giving away free toys and getting cookies in return. It's not a sustainable business model."

Krusty clearly has a problem with his business model and what he generates as income is insufficient to even recover his cost of goods sold.

7. The Old Man and the Lisa-

Mr. Burns: "I'll keep it short and sweet. Family, religion, friendship. These are the three demons you must slay if you wish to succeed in business."

Mr. Burns: "Smithers, why didn't you tell me about this market crash!" Smithers: "Um, well… sir, it happened 25 years before I was born." Mr. Burns: "Oh, that's your excuse for everything!"

Lisa [to Mr. Burns]: "If I did agree to help you, you could only earn money by doing good, socially responsible things. Nothing evil." Mr. Burns: "Nothing evil. That's exactly the kind of radical thinking I need!"

Charlie Munger: "I think you'll make more money in the end with good ethics than bad. Even though there are some people who do very well, like Marc Rich–who plainly has never had any decent ethics, or seldom anyway. But in the end, Warren Buffett has done better than Marc Rich–in money–not just in reputation."

8. Kamp Krusty-

Homer: "Son, if you really want something in this life, you have to work for it. Now quiet! They're about to announce the lottery numbers."

This is a Charlie Munger riff on another point made above: "If you don't get this elementary, but mildly unnatural, mathematics of elementary probability into your repertoire, then you go through a long life like a one-legged man in an ass-kicking contest. You're giving a huge advantage to everybody else."

9. The Twisted World of Marge Simpson

Marge: "I'm not wild about these high-risk ventures. They sound a little risky."

Other woman: Tsk. Oh, Marge. You are such a wet blanket. If we'd listened to you, we wouldn't have sponsored that Mexican wrestler.

Andy Rachleff on Angel Investing**: "**Everywhere I go in Silicon Valley I hear people discussing their angel investments. The conversations remind me of fish stories. People love recounting the one time they caught a big fish, not the many futile hours they spent waiting for a bite."

10. Lisa's Date with Density-

Homer: "Greetings, friends. Do you wish to look as happy as me? Well, you've got the power inside you right now. So, use it, and send one dollar to Happy Dude, 742 Evergreen Terrace, Springfield. Don't delay, eternal happiness is just a dollar away."

Homer: "**Now we just sit by the mailbox and watch the money roll in."**

Marge: "But you're going to annoy thousands of people just to make a few measly dollars. It's nothing but panhandling."

Homer: "Hello, this is Homer Simpson, AKA Happy Dude. The court has ordered me to call every person in town to apologize for my telemarketing scam. I'm sorry. If you can find it in your heart to forgive me, send one dollar to Sorry Dude, 742 Evergreen Terrace, Springfield. You have the power."

This dialogue reminds me of this:

Jerry Sienfeld: This isn't a good time.

Telemarketer: When would be a good time to call back, sir?

Jerry: I have an idea, why don't you give me your home number and I'll call you back later?

Telemarketer: Umm, we're not allowed to do that.

Jerry: Oh, I guess because you don't want strangers calling you at home.

Telemarketer: Umm, no.

Jerry: Well, now you know how I feel.

11. Pulpit Friction-

Homer is offered a job as the new church deacon and says: "Well, I'm not one for taking new jobs on a whim. But as we say in the snow plow business, I'm your astronaut."

Avoid "ready fire aim" decisions in life and you will have a better life. Charlie Munger: "Just avoid things like racing trains to the crossing, doing cocaine, etc. Develop good mental habits." "A lot of success in life and business comes from knowing what you want to avoid: early death, a bad marriage, etc."

12. $pringfield-

Mr. Burns: "I've discovered the perfect business. People swarm in, empty their pockets, and scuttle off. Nothing can stop me now."

Burns: "By building a casino, I could tighten my stranglehold on this dismal town!"

Smithers: "Sir, bad news from accounting: the economy's hit us pretty hard." Burns: "Heh, tough times, huh? I've lived through twelve recessions, eight panics, and five years of McKinleynomics. I'll survive this."

Gambling is net present value negative. Because it can become an addiction, it can produce real harm. Charlie Munger: "I knew a guy who had $5 million and owned his house free and clear. But he wanted to make a bit more money to support his spending, so at the peak of the internet bubble he was selling puts on internet stocks. He lost all of his money and his house and now works in a restaurant. It's not a smart thing for the country to legalize gambling [in the stock market] and make it very accessible."

Addendum:

Mr. Burns: "What good is money if you can't use it to strike fear into the hearts of men."

Mr. Burns: "I'll bide my time. Revenge is a dish best served cold."

Mr Burns: "Eternal happiness for one dollar eh? Hmmm, I'd be happier with the dollar."

Homer: “Hello, this is Homer Simpson, AKA Happy Dude. The court has ordered me to call every person in town to apologize for my telemarketing scam. I’m sorry. If you can find it in your heart to forgive me, send one dollar to Sorry Dude, 742 Evergreen Terrace, Springfield. You have the power.”

Krusty the Clown: “Kids, we need to talk for a moment about Krusty Brand Chew Goo Gum Like Substance. We all knew it contained spider eggs, but the hantavirus? That came out of left field. So if you’re experiencing numbness and/or comas, send five dollars to antidote, PO box…”

Milhouse: “I can’t go to juvie. They use guys like me as currency.”

Krusty: “Here’s the deal. Every time you watch my show, I will send you… forty dollars! Voice: Checks will not be honored.”

Herbert Powell: [watching `Itchy and Scratchy’] “To think I wasted my life in boardrooms, and stockholders meetings, when I could’ve been watching cartoons!

Homer: “The three little sentences that will get you through life. Number 1: Cover for me. Number 2: Oh, good idea, boss. Number 3: It was like that when I got here.”

Homer: “How is education supposed to make me feel smarter? Besides, every time I learn something new, it pushes some of the old stuff out of my brain. Remember when I took that home wine making course, and I forgot how to drive?”

Marge: “The plant said if you don’t come in tomorrow, don’t bother coming in Monday.” Homer: “Woo-hoo! Four day weekend!”

“Marge, don’t discourage the boy! Weaseling out of things is important to learn. It’s what separates us from the animals! Except the weasel.”

“Lisa, if you don’t like your job, you don’t go on strike. You just go in every day and do it really half-assed. That’s the American way.”

“Don’t struggle! You’ll only sink faster.”

“I think Smithers picked me because of my motivational skills. Everyone says they have to work a lot harder when I’m around.”

“Bart, you’re saying butt-kisser like it’s a bad thing!”

“I can’t believe it! Reading and writing actually paid off!”

“Mr. Scorpio says productivity is up 2%, and it’s all because of my motivational techniques, like donuts and the possibility of more donuts to come.”

“Now go on, boy, and pay attention. Because if you do, someday, you may achieve something that we Simpsons have dreamed about for generations: You may outsmart someone!”

"Trying is the first step towards failure."

"Hello, Jerry? Homer Simpson. Remember last month when I paid back that loan? Well now I need YOU to do a favor for ME."

Notes:

HOMR- https://en.wikipedia.org/wiki/HOMR

Homer vs. Patty and Selma– http://www.drodd.com/simpsons-quotes/6-17.htm http://www.simpsonsarchive.com/episodes/2F14.html http://www.springfieldspringfield.co.uk/view_episode_scripts.php?episode=s06e17https://en.wikipedia.org/wiki/Homer_vs._Patty_and_Selma

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http://www.imdb.com/title/tt0701149/quotes

Bart Gets an Elephant- http://www.springfieldspringfield.co.uk/view_episode_scripts.php?episode=s05e17 http://www.simpsoncrazy.com/episodes/bart-gets-an-elephant

No Loan Again Naturally- http://www.springfieldspringfield.co.uk/view_episode_scripts.php?episode=s20e12http://simpsons.wikia.com/wiki/Bart's_Inner_Child/Quotes

The Flight Before Christmas- http://simpsons.wikia.com/wiki/The_Fight_Before_Christmas

The Old Man and the Lisa- http://simpsons.wikia.com/wiki/The_Old_Man_and_the_Lisa/Quotes

Kamp Krusty- http://simpsons.wikia.com/wiki/Kamp_Krusty/Quotes

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Springfield- http://www.simpsonsarchive.com/episodes/1F08.html http://www.imdb.com/title/tt0701040/quotes

Lisa's Date with Destiny- http://simpsons.wikia.com/wiki/Lisa's_Date_with_Density/Quotes

The Fabulous Faker Boys- http://simpsons.wikia.com/wiki/The_Old_Man_and_the_Lisa/Quotes

A Dozen Things I've Learned From Mike Maples Sr. About Business and Investing

July 1, 2016

It would be difficult to overemphasize how important Mike Maples was to the success of Microsoft. Even more difficult would be trying to explain his personality which someone who knew him very well said to me "is several standard deviations away from what you would expect from a tech executive who started his career at IBM." His personal impact on the lives, beliefs and skills of many people I know is nothing short of massive. He graduated from Oklahoma University with a bachelor's degree in electrical engineering and earned his master of business administration at Oklahoma City University. Maples joined Microsoft on May 1, 1988. Maples was responsible for all product development and product marketing activities. By the time Maples eventually retired from Microsoft he was the executive vice president of the Worldwide Products Group and member of the Office of the President, reporting directly to Bill Gates. Maples is now an investor and rancher.

Bill Bliss: "Mike arrived from IBM and really shook things up. He created the first Apps Division Business Units (BU's) — if memory serves: Analysis Business Unit (Excel, Pete Higgins), Word Business Unit (led by Jeff Raikes), Graphics Business Unit (PowerPoint, led by Bob Gaskins, the founder of the company that created PowerPoint), Entry Business Unit (Microsoft Works, led by Susan Boeschen), and the Data Access Business Unit (Access, codenamed Omega at the time, led for a short time by the late and great Jeff Harbers). Under each of these was Development, Product Management, Test, Program Management, and User Education. There was also a small shared Tools team reporting to Mike; at the time all the Microsoft applications used a proprietary compiler and other tools." "This organization allowed each of the products to exist as little startups within the larger organization and it was the BU organizational framework and the strong empowered leaders Mike put in charge that enabled Excel to beat Lotus, Word to beat WordPerfect, and (later) Access to beat Ashton-Tate. Strategy and execution were pushed all the way down into the organization; without that, the products never could have scaled the way they did."

Bill Gates: "Mike Maples has been a key architect in [Microsoft's] growth and success– few business leaders could claim a better record during a similar time." Seattle Times, May 15, 1995.

The quotes from Mike Maples are in bold text as is usual:

1. **"You try not to have top down decisions. The team who is building Word knows more about that trade-off than I will ever know."** A number of people have told me that this was the most important idea that Maples brought to Microsoft. This principle arrived at just the right time and allowed the company to grow and scale. Decentralization can work extremely well if you have the right people and culture. I have written a post on how this principle is followed at Berkshire Hathaway. The fundamental idea is relatively simple: work really hard to get the right people with

the right skills in position to do the work and let them do their job. As with most simple things, it is easy to say, but hard to do in practice.

2. **"I don't care what process you use as long as you: A) know what it is and write it down; B) establish that you're following it. Anything that you can plan is fine with me."** All processes must include a post audit of what worked and did not work. This would include all functions, be written down and published for all to read. At the end and beginning of every project, the last post audit would be studied to insure constant improvement.Maples is again stressing the importance of delegation and pushing down responsibility to the people closest to the work. Even though the nature of the process that is used to build a business or create a product like software can vary with the team and the objectives, that does not mean that something like a written schedule can be omitted from that process or that the process can deviate from a zero defects standard of quality. The "writing it down part" is non-trivially important. As Warren Buffet says, if you can't write it down, you have not thought it through.

3. **"What we tried to do was say that development has three trade-offs. You had quality, function and schedule, and that quality wasn't an arguable- it was a must. So now you had to choose what function you were going to include on what schedule, but management could only choose one of them. So management would say- this product needs to be shipped in August, and the team would say how much function can I put in before August."** Development is a three-legged stool said Maples recently at a lecture at Stanford. All three legs are critical but managers should only be allowed to create a mandate related to either function or schedule. The team makes the other decision and quality is not negotiable since it must be as good as you can make it without constraints.

4. **"A group of people that was so bright, and so hard-working, and so focused as Microsoft, you couldn't tell them how IBM did it, or you couldn't tell them how to change; but that they were always on a quest for discovery. So if you could frame a problem, they would work through trying to come to an answer, and they'd often come to you for advice as they were trying to craft their answer. And so I think that a lot of times the way things changed was not by autocratically saying, 'We're going to do this, or we're going to have this.' It was more of getting the people together and say, 'OK. I've observed that we failed here. How do you think we should correct it?' And then let them discover, and maybe throw in a few ideas, or a few suggestions along the way you know, kind of the 'I'm a poor boy from the South, don't know much, but let's see if we can work this out.' And it seemed to work pretty well. And the folks were so receptive."** One great way to get things done is to let other people think it was their idea. Another helpful other idea is to remember that people will often take advice better if they seek that advice out rather than a having it pushed on them without asking for help. Maples reminds me in his comments about being a poor boy from the South of another manager who is from Mississippi. I have written about this fellow named Jim Barksdale who is famous for his Barksdaleisms, like: "The infantry is always ahead of headquarters." Another legendary manager Tom Murphy once described the best approach to

decentralization of operating decisions this way: “Don’t hire a dog and try to do the barking.”

5. **“The management system I described is on the edge of control. By design, we didn’t centrally control many things. We let each product team pretty much run alone. And the way that worked was that they would have phases and would report where they stood against that, but we didn’t have management sign off or fixed reviews. The deal was that Bill or I could review any product at any time. We could change it or do whatever we wanted with it, but if we didn’t chose to review it, they didn’t stop and wait. So there would be products for whatever reason we didn’t have time to deal with, that would go from conception to shipping without ever having a management review.”** As a manager you can’t review everything. In my experience the best managers know when they smell something rotten and drill down when they sense it. And when they sense something great they drill down so they can optimally fertilize it. Trusting the teams you build is an attribute of a great leader. So is the process of holding great review when you do so.

6. **“Good ideas without passion and execution never work. A lot of companies that fail didn’t believe with all their hearts that this was the most important thing to be doing and they didn’t focus. Any time you have pivots 4-or-5 times a year you haven’t got enough focus. If you don’t give ever give x a chance to work out, it never will.” People [at Microsoft] worked incredibly long hours. And I can remember who was it? Was it, maybe, Jabe Blumenthal. Somebody was working on a projection a database project, and they didn’t leave their office for six weeks. You know, they slept, and ate, and lived in their office. I remember going by and finding people with their hands just on the keyboard just asleep. You know, they’re just they’d been there until they’d just stopped thinking.” “These individuals were working to complete the commitment they made to their team, not what the company or manager expected of them.”** A lack of focus can be a killer problem for a business. It is vital that a business to pick its objectives well and not get too distracted by chasing every new thing that may appear. Staying focused on the needs of the customers and basics like planning for growth and cash management can help reduce distractions. When you see a great business it is surprising how much success is attributable to doing a small number of things extremely well. Former Microsoft executive and venture capitalist Mike Slade told me: “Jeff Harbers also lived in his office while laboring to ship Microsoft File 1.0 for Mac, which shipped around Christmas 1984. Harbers bunked down in his office at 10700 Northup Way.” In my post last weekend on Elon Musk he talks about how a business can win by simply working harder than competitors. Maples set an example for others. I recall walking by his office at Microsoft late one evening and there he was, the only person in the office wearing a white long sleeve short.

7. **“Keep commitments and schedules.” “Do what you say you will do.” “Believe in yourself.” “It’s only over when you decide to quit.” “Work with kick-ass people who are committed to doing GREAT work.” “There’s something about the struggle, adversity, the trial and error and worrying at night about things that makes the entrepreneur better and stronger.” “I’m kinda driven by the concept that life dealt**

me an overly lucky hand. It had little to do with how smart I was. I was at the right place at the right time. Maybe you owe part of that back." "If you look at the major tech companies, Bill Gates, Larry Ellison, Steve Jobs, they didn't waste time going to college getting advanced degrees. They went out and built a company. The fact that you went to college means you may be a little conservative on the risk side…that's not to say a PhD isn't useful to running a company." The importance of values and culture to success in business is often underestimated since people do not tie it to the ability of a business to adapt to change and efficiently make decisions.

8. **"Have system that values the people and the product of their work, one that's pretty non-political." "Do what's right. Sometimes you will be confronted with a situation where it's harder to explain the right course politically but you will know it's right brake the risk to stand for what's right. Don't hide facts to look good."** The venture Capitalist Mike Maples Jr. says about his father: "He used to hate it when someone would spring a 'new' fact on someone in a meeting for the purpose of having the upper hand. All discussions and meetings should start with all cards on the table and no hidden cards for political benefit."

9. **"If you have 100 people and you want to add 80 more, you better have all 100 of them recruiting." "Recruiting is best not done by HR but by people with skill like what you are trying to recruit (developers hiring developers). "I'd say the number one thing is we've managed to hire the best and the brightest. We hire people who are serious minded, and care, willing to work very hard, and are very smart. And I would put that very high on the list. The second thing is I think we have a really good value system, a value system that includes being financially conservative. You know, we don't waste a lot of money.""When you hire people, you will make mistakes about 10% of the time. Not everyone will be a great fit. Managers must correct mistakes as early as possible. 6 month is easier than a year or two later. It is only fair to the individual to get them on a path to some other company where they can be maximize their success**." People underestimate how much time the senior management team of a growing business spends recruiting. And no one spends more time recruiting than the CEO at a well-functioning startup especially.

10. **"Acquisitions are hard to make work. We never thought about buying customers or revenue streams. We always thought about people and skill."** People disagree about what percentage of acquisition fail. The number is big. Of course the Babe Ruth principle applies to acquisitions. It is magnitude of success and not frequency of success that matters most. The goal in investing as Warren Buffett has said is simple**:**"Take the probability of loss times the amount of possible loss from the probability of gain times the amount of possible gain. That is what we're trying to do. It's imperfect but that's what it's all about." Diversification can help says Buffett: "If significant risk exists in a single transaction, overall risk should be reduced by making that purchase one of many mutually- independent commitments. Thus, you may consciously purchase a risky investment – one that indeed has a significant possibility of causing loss or injury – if you believe that your gain, weighted for probabilities, considerably exceeds your loss, comparably weighted, and if you can

commit to a number of similar, but unrelated opportunities. Most venture capitalists employ this strategy." In the end the goal is to make decisions based on expected value which is the weighted-average value for a distribution of those possible outcomes (multiply the probability of each possible outcome by its respective present value and sum those numbers).

11. **"You're trying to build barriers to entry that keep your products installed and others out." "You make sure that people understand the economic theories."** If there are no barriers to new supply of what you sell competitors will cause price to drop to a point where there is no long term industry profit greater than the cost of capital. Michael Porter use the term "sustainable competitive advantage" to describe the objective of creating these barriers. Warren Buffett calls it a "moat." The two terms are essentially identical. The principle is so simple and yet so many people think only about customers and not competitors as well. Yes, innovate and deliver exceptional value for customers. No, that is not enough for sustainable profitability. Revenue is not profit.

12. **"First place is the only place. Any strategy should be a strategy to lead." "Some of the real rewarding times you know, when I came, I think we had 8% market share in spreadsheets, and it just seemed like forever that it just never changed very much. And then all of a sudden one day, you know, it seemed like in two months it went from 12 to 40, or something. It happened. And I was sitting with Pete [Higgins], and I said, 'You know, some day we're going to be in the lead, and we're going to have the highest market share. We're going to be the leaders, and what are we going to do then?' And so it was kind of ah you know, that time that all of a sudden you had arrived." "Stick-to-it-tiveness" is a success factor. But, by and large, working hard, working smart, smart people; and then really capitalizing on the mistakes of your competitors. You know, the reason Lotus lost out was not only the fact that we were there and pushed them hard, but the fact they just screwed up. The reason Word Perfect, the reason Novell you know, you can trace every one of them to senior management screw-ups. And we wouldn't be where we are today if they hadn't of no matter how hard we did. There's so much momentum against change that unless the users really get frustrated with their installed vendors, they won't change."** Maples is a strong believer in adopting a long term approach in any business. In a recent joint presentation with Steven Sinofsky at Stanford these attributes were called out by Maples: passion for products and technology, customer feedback, team work, individual excellence. In terms of culture: strong work ethic, self-motivation, driven / empowered, technical/business vision, a will to succeed, pride, individual identification with whole company, belief we can change the world, and high standards.

Notes:

Gaskins Interview: http://www.robertgaskins.com/powerpoint-history/documents/ensmenger-cbi-interview-mike-maples-oh387mm-2004-may-07.pdf

Interview: http://www.siliconhillsnews.com/2013/07/30/mike-maples-talks-investments-startup-smarts-and-bill-gates/ https://www.youtube.com/watch?v=AuKWMq0xq9Y

Quora: https://www.quora.com/What-was-Mike-Maples-Sr-s-role-at-Microsoft/answer/Mike-Maple s

Article: https://books.google.com/books?id=RC_5OCQQJ7YC&pg=PA287&dq=%22mike+maples%22&hl=en&sa=X&ved=0ahUKEwjT7YvUw9rMAhUH1GMKHVIXAQMQ6AEIIDAB#v=onepage&q=%22mike%20maples%22&f=false

Article: https://books.google.com/books?id=bZrPRKsUd2QC&pg=PA180&dq=%22mike+maples%22&hl=en&sa=X&ved=0ahUKEwjviJCbxNrMAhUQ0GMKHTZVB5Q4ChDoAQhDMAg#v=onepage&q=%22mike%20maples%22&f=false

Bill Bliss: https://www.quora.com/What-was-Mike-Maples-Sr-s-role-at-Microsoft

A Dozen Entries from the Venture Capital Devil's Dictionary

July 3, 2016

The Devil's Dictionary is a satirical dictionary written by the American journalist and author *Ambrose Bierce*. This humorous book was originally published in 1906 as The *Cynic's Word Book.* One of my favorite writers, Jason Zweig of the Wall Street Journal, is the author of the newly published and wonderful book: *The Devil's Financial Dictionary*.

What follows are a dozen terms used in the venture capital industry, defined in Devil's Dictionary fashion.

1. **"Burn Rate" –** the speed at which available cash is being consumed. Expenses such as inter-floor office slides, nerf guns, office space with water views, corporate retreats to other continents, dog chefs, and free Kind bars are sometimes put in a numerator of a fraction and expenses like salaries and electricity in the denominator, with the resulting number expressed as what is known as "an idiocy ratio."

2. **"Chicken and egg problem" –** describes a "which one came first?" problem, such as jump starting a multi-sided market. Explains why the first sale of fax machines was probably not just one machine. Which reminds me of a story: A chicken and an egg are lying in bed. The chicken is smoking a cigarette with a satisfied smile on its face and the egg is frowning and looking a bit pissed off. The egg mutters, to no-one in particular, "Well, I guess we answered THAT question!"

3. **"Dog and pony show"-** a presentation that is long on showmanship and light on substance originally used in the United States in the late-19th and early-20th centuries to refer to small traveling circuses that toured through small towns and rural areas and startup pitches at Angel investor clubs composed of proctologists, dentists and beauticians.

4. **"Ducks are quacking, so feed them"** – describes what some startups do when it is easy to raise cash (e.g., feed amateur Angel investors shares in return for cash). If a business does not hear ducks quacking and has no cash reserves raised during a period of time that was "quack rich," the business may soon auger into the ground at high speed. Cash is financial Valium.

5. **"Exit strategy"** – a plan to generate cash from the sale of a business or part of a business. The more a founder talks about his or her "exit strategy" the less attractive the investment. See also: Mercenary. Gary Larson has a *Far Side* cartoon strip in which one chicken is shown talking to another while they sitting on beach chairs holding umbrella drinks saying: "Man, they made me a free-range chicken and I never looked back." A founder who is driven to be sitting in a beach chair holding an umbrella drink is not likely to be successful.

6. "**Growth hacking"-** a glorified term for sales and marketing using analytics. Using the word "hacking" as part of the term makes a non-technical person sound more like an engineer who seems to have a cooler job since they use words like grok, DevOps and Rails.

7. **"Hockey stick"-** what a line on a chart representing something like revenue growth looks like when that distribution is calculated as a goal seek in a spreadsheet (up and to the right, to infinity and beyond).

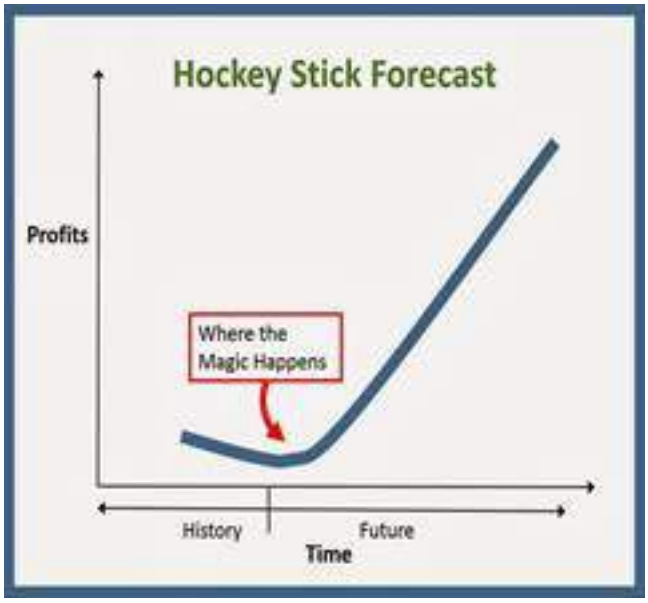

8. **"Pivot"-** a new direction or path for the business if the original idea turns out to be crap. Scott Adams of Dilbert fame writes: "For example, a company starts out selling PEZ dispensers online and later pivots to become eBay. You didn't hear about all of the companies that failed so the pivot stories probably sounded more prevalent than they were. It's similar to how a story of one shark attack makes you think there's a Great White under every surfboard. The human brain assumes that whatever it hears most frequently must be the best reflection of reality."

9. "**Ramen profitable" –** Just enough profit to afford to eat ramen with the "profits" of the business. Profit is unfortunately an opinion whereas absolute dollar free cash flow is a fact. While there may sometimes technically be "profit" based on someone's definition/opinion there may not actually be cash to buy ramen. The instant noodles are usually purchased by the case or even a pallet from a "cash and carry" store or Costco.

10. **"Runway"-** the number of months the available cash will last if the current burn rate continues. Not to be confused with "run away" which is what you should do when founders use words like "paradigm" or "e-business" in their pitch deck.

11. **"Telling someone their baby is ugly"-** giving someone the news that their idea or creation is doomed to fail. Best done by someone else. See: delegate. As H.L. Menken once said: "When A annoys or injures B on the pretense of saving or improving X, A is a scoundrel."

12. **"Zero-billion dollar market"-** A small unattractive market for a venture capitalist, often fought over by a group of businesses that reminds you of several bald men fighting over a hair brush. H/T Eugene Kleiner.

Notes:

Jason Zweig- *The Devil's Financial Dictionary.* https://www.amazon.com/Devils-Financial-Dictionary-Jason-Zweig/dp/1610396995

Scott Adams: http://blog.dilbert.com/post/103051127931/the-pivot

VC Jargon: http://www.sherpapartners.com/Sherpa_Jargon.htm

Glossary: https://www.cbinsights.com/research-venture-capital-terms?ads_cmpid=270202443&ads_adid=24533358603&ads_matchtype=p&ads_network=g&ads_creative=86955087243&utm_term=vc%20terms&ads_targetid=kwd-142600249443&utm_campaign=&utm_source=adwords&utm_medium=ppc&ttv=2&gclid=CNzDjYubs80CFVKDfgodAhYGiA

A Dozen Things I've Learned from Eugene Kleiner about Investing and Business

July 8, 2016

Eugene Kleiner was an Austrian-born American engineer and venture capitalist. He worked for William Shockley at Shockley Semiconductor Laboratory starting in 1956. The next year he and seven colleagues (the so-called the "traitorous eight") famously left Shockley to found Fairchild Semiconductor. They left because did not like Shockley's management practices or his plans to use germanium to make semiconductors. "Using just $3,500 of their own money to get started, these eight entrepreneurs eventually developed a way to manufacture multiple transistors on a single silicon wafer." Kleiner was one of the original founders of Kleiner Perkins, which was an early investor in more than 300 information technology and biotech firms, including Amazon, AOL, Brio, Electronic Arts, Flextronics, Genentech, Google, Intuit, Lotus, LSI Logic, Macromedia, Netscape, Quantum, Segway, Sun and Tandem. Kleiner's obituary in the Economist includes this sentence: "To the end of his life, he called himself an engineer." Despite his technical background Kleiner made major contributions to the world as a financier. That obituary notes it was Kleiner's letter "to his father's stockbroker in New York that was passed to Arthur Rock that set off a chain of events that resulted in Rock moving to California and persuading Sherman Fairchild, the inventor of the aerial camera, to make Mr. Kleiner's little group a subsidiary of his company."

1. **"Invest in people, not just products."** The KPCB web site elaborates on Kleiner's first point: "Eugene always respected founding entrepreneurs. He wanted to build companies with them not just with their ideas." The three legs of the stool that drive venture capital returns are: (1) great people, (2) attractive markets and (3) significant innovation. If you neglect even one of the three you have a big problem. But there are disagreements among venture capitalists about emphasis and phasing. For example, people like Don Valentine argue that you can always replace the people, so it is better to place more emphasis on attractive market. Venture capitalists like

Kleiner believe that replacing people is not only hard and unpleasant, but significantly lowers the convexity of the investment. Great people and teams are able to adapt in ways that solve problems. Without great people already in place, preferably missionaries, the probability of survival is significantly reduced in Kleiner's view. Elad Gil had an interesting post this week on the importance of great founders which included these two paragraphs:

"There are a handful of venture firms that are always thesis-driven, for example Union Square investing in network driven businesses. However, most venture firms are admittedly reactive – they do not have a specific theme they are driving themselves, but rather respond to where the best entrepreneurs are creating the most high growth, high margin, companies fastest.

When lots of VC firms shift into a thesis driven mode, it is usually a sign that organic entrepreneurial activity is no longer sufficient to drive that firms investments. As a result, lots of capital gets invested in areas that do not merit the investment, there is a flurry of activity that looks important (Cleantech), but ultimately this activity does not yield great returns. Typically these areas are ones where the investors lack real expertise."

2. **"It's easier to get a piece of an existing market than to create a new one." "Two companies fighting over a niche market are like two bald men fighting over a comb."** Kleiner is agreeing with Valentine that attractive markets make the venture capital business model work since there is a need for tape measure financial home runs. The difference is that Kleiner, like Pitch Johnson and many other venture capitalists, consider people to be relatively more important. Kleiner is also saying that it is hard to create a new attractive market where none existed before. He is not saying that creating a new market is not valuable (that payoff can be enormous actually), but instead that it is hard to do. In contrast, fighting with other businesses over a niche market is not likely to be a pleasant or profitable activity.

3. **"Risk up front, out early."** A famous venture capitalist said to me about this comment that Kleiner: "Always had a strong bias of eliminating the biggest risks quickly, which was much more relevant in the days of backing companies with high technical risk and low market risk." Another famous VC who knew Kleiner well wrote to me that what he meant by this sentence was: "Reduce the biggest risks first for the fewest dollars. This may mean out of order execution to minimize loss in case of failure." Steve Blank points out that there are different types of risk that must be retired for a business to be a success: "Markets with Invention Risk are those where it's questionable whether the technology can ever be made to work – but if it does customers will beat a path to the company's door. Markets with Customer/Market Risk are those where the unknown is whether customers will adopt the product."

4. **“The problem with most companies is they don’t know what business they’re in.”** Venture capitalists who talk about this problem usually see the flip side which is that it can create opportunity for a challenger. This idea being important in venture capital can be traced at least all the way back to Georges Doriot, who said that US Steel did not know what business it was in. Other venture capitalists believe businesses like Kodak and DEC late in their life had the same problem as US Steel. In the case of Kodak the company invented the technology that would eventually prove to be its undoing. This point made by Kleiner is applicable to service businesses too. For example, Mark Cuban said once: “You always have to know what business you are in. Everybody thought we were in the basketball business. It’s an NBA-team; we are not in the basketball business. We are in the business of creating experiences and memories.”

5. **“Make sure the dog wants to eat the dog food. No matter how ground-breaking a new technology, how large a potential market, make certain customers actually want it.” “There are two types of early adopters. Those who buy and those who want the product given to them.”** This quote is a nod by Kleiner to the importance of determining whether there is “product market fit” before scaling a business. Premature scaling is a common cause of startup death. The other point Kleiner is making is that someone must pay for something for a business model to work. Freemium only make sense as a business model if there is a complementary good that customers are willing to pay for. Rihanna may have a hard time selling music these days since digital music is non rival, but if she uses the fame generated by her music to sell tickets to concerts and t-shirts with her name on them she can still do very well. Her Diamonds World Tour in 2013 grossed US$137,982,530 from 87 shows.

6. **“The more difficult the decision, the less it matters what you choose.”** Sometimes you are better off making a decision and living with it than agonizing over the decision for a long period and as a result experiencing a significant delay. Kleiner is saying the harder the decision is to make, the more this is true. One famous decisions concerned what material to use in making semiconductors. William Shockley wanted to use germanium. Kleiner ans his colleagues wanted to use silicon instead. People sometimes joke that without Kleiner the term used today would be “Germanium Valley” not Silicon Valley.

7. **“Build one business at a time. Most business plans are overly ambitious. Concentrate on being successful in one endeavor first.” “What tips me off that a business will be successful is that they have a narrow focus of what they want to do, and they plan a sufficient amount of effort and money to do it. Focus is**

essential." The number of people who can run multiple businesses at one time is truly tiny. What Steve Jobs did at Pixar and Apple is not normal. In addition, the propensity of a founder to pivot is negatively correlated with success. Focus matters. When Bill Gates and Warren Buffett met for the first time at dinner that night "Bill Gates Sr posed the question to the table: What factor did people feel was the most important in getting to where they'd gotten in life? And [Warren Buffett] said, 'Focus.' And Bill said the same thing."

8. **"You have to create deals to be really successful."** Success in venture capital is in no small part about hustle. The best venture investors beat the bush for prospects and ideas and have the best referral networks. They are curious and open to new ideas. Reading and talking to people they believe are smart and knowledgeable is a constant activity. Finding the university researchers does not happen by accident. Networks of friends and people you have helped can feed back valuable information in very positive ways.

9. **"The time to take the tarts is when they're being passed. When the money is available, take it." "When the hors d'oeuvres are passing, take two**." Venture capital is a cyclical business. Sometimes it is easy to raise money, sometimes it I merely hard and sometimes it is impossible. It is better to have more money than you need and not need it, than need it and not have it. The absence of cash is fatal. So it is wise to have a margin of safety when it comes to cash. Yes, dilution is an issue but if a venture backed business is a hit, there will be more than enough financial return for everyone.

10. **"Even turkeys can fly in a high wind. In times of strong economies, even bad companies can look good**." This is a variation of Warren Buffett's point that: "you only find out who is swimming naked when the tide goes out." The problem, of course, is that you do not always know when a tailwind is about to rapidly slow or even cease. In fact, sometimes you don't know if what you are experiencing is a tailwind at all. The best founders are prepared for any outcome.

11. **"It's difficult to see the picture when you're inside the frame."** Having perspective on something when you are an insider is hard. Self interest and other biases are powerful enough that dysfunction can result from insider status. The venture capitalist having a network of people who the founders can count on for perspective and feedback is important. Charlie Munger has a great story about this set of issues:

"You also have to allow for the self-serving bias of everybody else, because most people are not going to remove it all that successfully, the human condition being what it is. If you don't

allow for self-serving bias in your conduct, again you're a fool. I watched the brilliant Harvard Law School trained general counsel of Salomon lose his career, and what he did was when the CEO became aware that some underling had done something wrong, the general counsel said, "Gee, we don't have any legal duty to report this but I think it's what we should do it's our moral duty." Of course, the general counsel was totally correct but of course it didn't work; it was a very unpleasant thing for the CEO to do and he put it off and put it off and of course everything eroded into a major scandal and down went the CEO and the general counsel with him. The correct answer in situations like that was given by Ben Franklin, he said, "If you want to persuade, appeal to interest not to reason." The self-serving bias is so extreme. If the general counsel had said, "Look this is going to erupt, it's something that will destroy you, take away your money, take away your status…it's a perfect disaster," it would have worked!"

12. **"Venture capitalists will stop at nothing to copy success."** The venture capital industry has no shortage of camp followers and poseurs like other industries. It is a fact of life that in capitalism that any success will be quickly copied and that moats are needed to sustain any profit. The best venture capitalists are already leaving a market, when the poseurs show up. What is the moat in venture capital itself? My view is that it is cumulative advantage that causes a few firms to have persistently higher returns. The best essay on this topic was written by Duncan Watts and is entitled: Is Justin Timberlake a Product of Cumulative Advantage? http://www.nytimes.com/2007/04/15/magazine/15wwlnidealab.t.html?_r=0

Notes:

Giants: http://web1.poly.edu/alumni/_docs/Giants-Kleiner.pdf

Economist Obituary: http://www.economist.com/node/2265786

NYT Obituary: http://www.nytimes.com/2003/11/26/business/eugene-kleiner-early-promoter-of-silicon-valley-is-dead-at-80.html

KPCB: http://www.kpcb.com/design/on-investing-by-eugene-kleiner

Elad Gil: http://blog.eladgil.com/2016/07/end-of-cycle.html?utm_campaign=digest&utm_medium=email&utm_source=app&m=1

A Dozen Things I've Learned from Mark Cuban About Business and Investing

July 16, 2016

1. **“I’m always selling. Always.” “Learn to sell. In business you’re always selling – to your prospects, investors, and employees. To be the best salesperson, put yourself in the shoes of the person to whom you’re selling. Don’t sell your product. Solve their problems.” “No sales, no company.” “Make your product easier to buy than your competition, or you will find your customers buying from them, not you.” “Treat your customers like they own you. Because they do.” “Your customers can tell you the things that are broken and how they want to be made happy. Listen to them. Make them happy. But don’t rely on them to create the future road map for your product or service. That’s your job.”** Being an effective salesperson is significantly underrated as an important life skill, especially by engineers who too often hope that a great product will sell itself. In thinking about the value of the ability to sell it is wise to remember that people sell much more than just products. For example, you were selling when you received your first romantic kiss. People must sell themselves to a potential spouse or “significant other” person. A business owner not only sells product but the company to employees and distributors. I have a good friend who likes to say that “everyone is talking their book all the time.” This is true and it is clear that some people are much better at talking their book than other people. It has been my experience that the best salespeople don’t even appear to be selling. I had a late friend who people said was such a good salesman that he was capable firing someone and that person would not know they were fired until they were at home that night telling their spouse about their day. “Hey, wait a minute…” On the last point Cuban makes above on future products, he seems to agree with Steve Jobs, who once said in an interview:

Business Week: Did you do consumer research on the iMac when you were developing it?
Steve Jobs: No. We have a lot of customers, and we have a lot of research into our installed base. We also watch industry trends pretty carefully. But in the end, for something this complicated, it’s really hard to design products by focus groups. A lot of times, people don’t know what they want until you show it to them. That’s why a lot of people at Apple get paid a lot of money, because they’re supposed to be on top of these things.

2. **“Sweat equity is the most valuable equity there is.” “Everyone has ideas, but most people don’t do the work required to get the job done.” “It’s not about money or connections — it’s the willingness to outwork and out learn everyone.” “You accomplish much more with direct relationships than by using an intermediary.”** Sweat equity is not only the cheapest form of equity to acquire, it is the most rewarding as well. But more than just acquiring cheaper equity is going on when you do something yourself since it means you are in the best position to know whether you are getting value and the real cost of the work. A person always has some path loss when they use an intermediary and path loss in not a good idea when a person can benefit so much from having accurate information. Young children are often taught about this idea when they are introduced to “the telephone game” in which a message is passed on in a whisper from person to person. The final version of the message is usually radically changed from the original after the person to person

whispering is done, which teaches the lesson. If you always use a vendor to accomplish a task you may never fully know what is actually happening in your business. As an aside, when I say "path loss" in this context I am not referring to the reduction in power density of an electronic wave as it propagates through space. I refer to messages getting garbled when they travel from person to person.

Your Memory is like the Telephone Game: "A memory is not simply an image produced by time traveling back to the original event — it can be an image that is somewhat distorted because of the prior times you remembered it," said Donna Bridge, a postdoctoral fellow at Northwestern University Feinberg School of Medicine and lead author of the paper on the study recently published in the Journal of Neuroscience. "Your memory of an event can grow less precise even to the point of being totally false with each retrieval."

3. **"Whatever business you have, there is always someone trying to put you out of business." "Business is a 24/7 job where someone is always out there to kick your ass."** Cuban's point captures the essence of what Joseph Schumpeter called "creative destruction." Other businesses are always out there trying to take your customers with a better product offering or a better a sales approach. This process that Schumpeter described is the engine of capitalism and results in the continual transformation of producer surplus to consumer surplus. This transformation process is happening faster than ever, which weirdly has caused some economists to believe innovation has slowed since producers surplus growth has slowed. Anyone who is actually engaged in business knows that the idea that innovation has slowed is completely detached from reality. Current business conditions are more competitive than ever. If you do not have a moat to prevent someone from capturing your customers, your profit will quickly disappear. Competition takes many forms and comes from many places. Harvard Business School Professor Michael Porter teaches his students competition can come from many sources such as customers, suppliers, potential entrants, and substitute products. Be careful out there…

4. **"Most people think it's all about the idea. It's not. Everyone has ideas. The hard part is doing the homework to know if the idea could work in an industry, then doing the preparation to be able to execute on the idea."** I doubt there many people above the age of 12 who have not said at least once when they see a successful business: "Hey, I thought of that idea first." There is a vast gap between thinking about a business and actually doing what is needed to create the business and make it a success. If you are not willing to do the work and take risk nothing will ever be more than an idea. The ability to execute on an idea much rarer than people imagine. Cuban is saying that people who do the preparatory work first and avoid "fire, ready, aim" are much more likely to be successful in life. This point made by Cuban reminds me of Benjamin Franklin who famously once said: "By failing to prepare, you are preparing to fail."

5. **"Focus on finding big problems."** A business that serves a big attractive market is much more likely to be a success. Many businesses fighting over a niche market is not a pretty sight. The venture capitalist Eugene Kleiner said once that a few businesses fighting over a niche market is similar to a few bald men fighting over a comb. Cuban's point reminds of of one of my favorite Gary Larson *Far Side* cartoons which involves two spiders sitting next to a playground slide with a spider web stretched across the bottom. One spider is saying to the other spider in the caption: "If we pull this off we'll eat like kings!" Thinking big pays big dividends when operating a business.

6. **"Don't start a company unless it's an obsession and something you love. If you have an exit strategy, it's not an obsession."** If you are missionary and not a mercenary the probability that you will create a successful business goes way up. You will work harder and survive the tough times far better if you love what you are doing and are obsessed with the business. Missionaries are not thinking much about exit strategies since their focus is on getting the job done and achieving their objectives. Which reminds me of joke. Two missionaries were captured by a tribe of hostile cannibals who put them in a large pot of water after building a huge fire under it. A few minutes later, one of the missionaries started to laugh uncontrollably. The other missionary could not believe what he was hearing and said: "What's wrong with you? We're being boiled alive! They're going to eat us! What could possibly be funny at a time like this?" The other missionary responded, "I just peed in the soup." This joke has nothing to do with starting a business, but it is funny and involves missionaries.

7. **"[Diversification] is for idiots." "You can't diversify enough to know what you're doing."** Warren Buffett is agreeing with Cuban when he says: "Risk come from not knowing what you are doing." Buffett believes: "concentration may well decrease risk if it raises, as it should, both the intensity with which an investor thinks about a business and the comfort-level he must feel with its economic characteristics before buying into it. In stating this opinion, we define risk, using dictionary terms, as "the possibility of loss or injury. …You only have to do a very few things right in your life so long as you don't do too many things wrong." Of course, if you don't want to do the work to "know what you are doing," then diversity. Dumb or lazy money becomes smart money when people realize that they are dumb or lazy. A person's got to know his or her limitations, as Dirty Harry famously said. Some people are hard working and thoughtful in the rest of their life but lazy and not thoughtful when it comes to investing. They spend more time picking out a shirt in a store than on selecting their investments and their investing results reflect that emphasis.

8. **“In every job, I would justify in my mind, whether I loved it or hated it, that I was getting paid to learn and every experience would be of value when I figured out what I wanted to do when I grew up. It is time to get paid to learn.”** Until you get out of college you are usually paying to learn. Or at least someone like your parents is paying for you to learn. But after you graduate from college your goal should be to be paid by other people to learn. The more you learn in a given job, the more valuable that experience will be for you and the more other people will want to pay you to learn more. This is an example of a positive feedback loop and my own life is an example. I have been paid to learn my entire career since I left graduate school. The more I learned in life, the more people have wanted to pay me to learn more so I can help them solve problems and find new opportunities.

9. **“When you’ve got 10,000 people trying to do the same thing, why would you want to be number 10,001?” “What I do know, at least what I think I have learned from my experiences in business, is that when there is a rush for everyone to do the same thing, it becomes more difficult to do. Not easier. Harder.”** Competition drives down prices to levels where financial return is equal to the opportunity cost of capital. That is the essential truth of capitalism and its engine. The goal in any business is to create some non-replicable advantage that is a moat against competition. Barriers to entry should be the goal of any business. The deeper and stronger the moat the happier the business owner will be with their financial results. Finding a source of differentiation is a beautiful thing. Harvard Professor Michael Porter puts it this way: “It’s incredibly arrogant for a company to believe that it can deliver the same sort of product that its rivals do and actually do better for very long.” If you deliver the same product or service as your competitor you by definition don’t have a moat. Competition will in that case be based on price and price-based competition inevitably degrades to a point where profit disappears. Porter teaches: “If customers have all the power, and if rivalry is based on price… you won’t be very profitable.” He adds: “Producing the highest-quality products at the lowest cost or consolidating their industry is trying to improve on best practices. That’s not a strategy.” Cuban is making an additional point here about how a crowded market for X, makes achieving X harder and not easier. Resources become more scarce when there is a so-called crowded trade going on.

10. **“It doesn’t matter how many times you have failed, you only have to be right once.”** Michael Mauboussin elaborates on the point Cuban is making: “In any probabilistic exercise: the frequency of correctness does not matter; it is the magnitude of correctness that matters.” This is the so-called Babe Ruth effect. Mauboussin writes: What is striking is that the leading thinkers across varied fields — including horse betting, casino gambling, and investing — all emphasize the same point.” Chris Dixon has a great post on this that I link to in the notes. Dixon points out: “The Babe Ruth effect is hard to internalize because people are generally predisposed to avoid losses.” If you can overcome this loss aversion and learn to

benefit from convexity (big potential upside, small potential downside), you can beat the market averages. Doing this successfully is relatively simple concept to understand, but is not easy to do since most mistakes are emotional or psychological. I have said before I think ~10% of people are capable of beat the market but only ~3% are willing to do the work to actually do so. The problems are in no small part created by the fact that more than half of investors think they are in that 3%.

11. **"Never put your money in something where you don't have an information advantage." "Most people won't put in the time to get a knowledge advantage."** Charlie Munger agrees with Cuban and advises investors to "Look for more value in terms of discounted future cash-flow than you are paying for. Move only when you have an advantage." In trying to buy something for less than it is worth, you should be working to create an information advantage over the seller. How do you do that? Howard Marks points the way: "Mistakes are all that superior investing is about. In short, in order for one side of a transaction to turn out to be a major success, the other side has to have been a big mistake. There's an old saying in poker that there's a "fish" (a sucker, or an unskilled player who's likely to lose) in every game, and if you've played for an hour without having figured out who the fish is, then it's you. Likewise, in every investment transaction you're part of, it's likely that someone's making a mistake. The key to success is to not have it be you." If you do not have an information advantage or are not willing to do the work to get an information advantage, put your money in a low cost diversified portfolio of index funds.

12. **"I placed too much importance on comparing how much I had to others early on. Then I started realizing time was a far more valuable asset." "The cheaper you can live, the greater your options."** Jealously is a useless emotion. Nothing good comes from jealousy. Ever. It is a far better idea to focus any energy that would be wasted on jealousy on creating more time to do what you love. The best thing that money can give you and people you love is better choices. People who do not have any money have terrible choices. Over the years I have seen a lot of people with expensive luxury possessions who do not have the cash required to always have the ability to make have good choices in their life. Liquidity matters. Howard Marks recently said: "When you go into risk assets and they go through a tough period, there will be heartburn and price declines. If you are going to need the money in the short term, you shouldn't put it into potentially illiquid assets." Having enough cash in the bank so you always have good choices is the ultimate luxury. No car, boat or house could ever be better than that feeling. CNBC's Joe Kernan said to Marc Cuban in 2000: **"Don't you feel dumb that you cashed out your Yahoo stock at $200 & now it's trading at over $230?""** Cuban answered: **"Well, it's hard to feel dumb when you're flying around in your GV."** More importantly Cuban added: **"I asked**

myself – what's the worst that could happen? I walk away with $2B in the bank? How much money do I really need?"

A Dozen Things I Learned Being Involved in one of the Most Ambitious Startups Ever Conceived (Teledesic)

July 23, 2016

I've decided to write this blog post about one of the more interesting business stories that has never really been told accurately. The story started for me when I was hired in 1994 to join a company that would become known as Teledesic as the fourth employee. This startup's mission was to provide communications to the world regardless of location. Early in the process of designing the system it become evident that the nature of the available spectrum when combined with the greatest market need meant that it should be focused on providing broadband communication and not just telephony services. I had been involved in the mobile industry since the 1980s and knew the power of communications to make people's lives better. So the mission of the startup was very appealing to me.

Craig McCaw and Bill Gates were the founding shareholders of the company, but were not involved in the day-to-day business of the company. My friend Russ Daggatt was the second employee to join the company and Elaine Ferguson was our co-conspirator. We started Teledesic in a couple of furniture cubes in the offices of what was then McCaw Cellular (it was sold to AT&T two years later). We had nothing really at the start but a modest amount of cash, our chutzpah and the reputations of our founding shareholders. Teledesic's plan was audacious: build and operate more active satellites than any other previous satellite constellation – originally the plan was for 840 active satellites (reduced to 288 satellites in 1997). The original estimate of the system cost before any service could be provided was $9 billion. The idea for Teledesic was a spinoff of a military system called "brilliant pebbles." Ed Tuck originated the idea for Teledesic, but it had been shepherded by the first employee, an engineer named Dave Patterson. There were many other very talented people involved in Teledesic that I could name but this is a short blog post not a book (which I may write some day). Some people involved Teledesic may disagree with aspects of this post since experiences like this are a bit like the famous Japanese movie Rashomon by Akira Kurosawa. If you have seen that movie you know it is about different people recalling contradictory versions of the same intense collective experience.

I turned down an offer of a very attractive job Microsoft the day I joined Teledesic in 1994. That day I told Bill Gates that I felt a need to do an ambitious startup sometime in my life and that I was passionate about making Teledesic happen. He said he understood why I turned down the Microsoft job, but he probably thought I was nuts. Not too nuts though, since he was an founding investor in what I was about to do. I have written before on this blog that the ideal venture investment is "half nuts" so it has the requisite convexity to create the potential

for a 50-1,000x financial return. I also have written many times on this blog that missionaries act differently and are willing to do more things to make a startup successful than mercenaries. From 1994 until 1999 I threw my life into making Teledesic's business a reality. You probably have heard the story about the chicken being *involved* in breakfast because she laid an egg but that the pig was *committed* to breakfast since he supplied the bacon. Investors are like the chicken, but startup up employees are like the pig. I flew over 500,000 air miles a year for five straight years to help retire Teledesic's financial, regulatory and technical risk. I worked constantly. Other Teledesic employees where working just as hard accomplishing impressive things on the technical, business and regulatory aspects of the business. An amazing multi-disciplinary team was assembled in Kirkland, which is a suburb of Seattle. If I name one more of these people I would feel compelled to name them all.

Based on the incredibly positive reputation of our founding shareholders we were able to meet with just about anyone on earth in developing Teledesic. People I met with around the world inevitably would look at me dumbfounded as I told them about a constellation of hundreds of satellite circling the Earth providing broadband service. The New York Times once called the number of satellites involved in the Teledesic system design "mind boggling." But since Craig McCaw and Bill Gates were involved most of these people not only listened but decided to get involved. The arc of the startup's existence coincided with the Internet bubble so we had a tailwind that enabled us to plan to make fantastic things happen. The business climate for new ventures like Teledesic started to get even more positive when the Mosiac browser was released on November of 1993. After Netscape went public in August of 1995 the business and investing climate in the technology world started to get euphoric. Raising the $9 billion needed to build the system seemed more possible every day.

Like any startup that is worthy of venture capital Teledesic had all the elements of "the struggle" for the team trying to make it happen. Sleepless nights. Worries. Things going right and wrong. When I talk to a founder, my experiences at Teledesic color my world view and advice. Ben Horowitz describes the struggle involved in a startup beautifully:

"Your product has issues that will be very hard to fix. The market isn't quite where it was supposed to be. Your employees are losing confidence and some of them have quit. Some of the ones that quit were quite smart and have the remaining ones wondering if staying makes sense. You are running low on cash and your venture capitalist tells you that it will be difficult to raise money given the impending European catastrophe. You lose a competitive battle. You lose a loyal customer. You lose a great employee. The walls start closing in. Where did you go wrong? Why didn't your company perform as envisioned? Are you good enough to do this? As your dreams turn into nightmares, you find yourself in *The Struggle*."

There were many things to worry about at Teledesic. We faced technology risk, financial risk and market risk. The experience was exhilarating and frightening at the same time. Teledesic did not have the support of everyone in the orbit of the founders in the early days. At one point when the startup had only had seven employees an executive named Wayne Perry who had worked with Craig McCaw for many years in the mobile and cable businesses said: "The problem with Teledesic is Russ and Tren – they just won't let it fail." Wayne was not a fan Teledesic in its early days, but many other people were fans. People in general love space-based businesses. Who doesn't marvel as they look up at the sky on a clear dark night?

Through sheer force of will, the reputation of the founding shareholders and a lot of work, the small but growing team at Teledesic took the business forward clearing regulatory and

other hurdles that others thought would certainly kill us. The peak of achieving the impossible was in 1995 when we achieved a regulatory win thought unwinnable at a World Radio Conference in Geneva. What we did in about six weeks in Geneva was simply unheard of in regulatory circles. Wired magazine wrote at the time: "It was a giant party, complete with favors,' said an executive at wireless phone company Qualcomm, who, like seven other attendees of the 1995 conference interviewed by Wired News, talked about the conference on the condition of anonymity. These seven echoed the accounting of events at the WRC '95. Other delegates remembered it differently – as a lobbying effort never before seen at a World Radio Conference. 'What was unprecedented, I believe, was the scale and systematic aspect of this lobbying effort,' noted a French delegate." We were pirates with an entertainment budget and modern communications tools like the Internet and mobile phones. I loved being a pirate. It is about as much fun as you can have with your clothes still on.

By the fall of 1998 other opportunities were proliferating in the business world and I was asked by Craig McCaw to become more involved in other aspects of his communications and software businesses. By 1999 I was only involved in Teledesic as an advisor. By then the Internet bubble was in near full swing with lots of interesting and challenging things to do in private equity and venture capital. A talented team was in place at Teledesic to take it forward so I felt relatively good about moving on. I did have one major nagging concern. Giant companies like Boeing and Motorola were getting involved as Teledesic contractors and that meant space and other systems for Teledesic which kept growing both in terms of size and cost. The involvement of the huge contractors also made being involved in Teledesic less fun. The days of being a pirate in a startup known as Teledesic seemed to be ending, and were being replaced by traditional processes and thinking typical in giant defense and space companies. One brilliant thing that founders like Elon Musk and Jeff Bezos are doing today with their involvement in space-based businesses is not creating dependencies on these traditional high cost contractors. To do so would create wholesale transfer pricing problems that would kill their efforts to reduce cost, as I will explain below.

At the time I ceased being a Teledesic employee in 1999 people still believed in the dream especially since by then valuations were skyrocketing daily as people suspended disbelief about many aspects of financing a business. Anything seemed possible during those years, even the idea of raising the needed $9 billion for building the proposed Teledesic satellite system. But about two years later the business climate changed for the worse rather abruptly. People who did not live through the internet bubble simply don't understand how quickly things changed. One day you could raise billions of dollars to build something like a massive fiber based national or global telecommunications network and the next you could literally not raise 3 cents. Just reading about this shift in the ability of a business to raise new funds is not sufficient to convey how swift the change from internet bubble to internet bust really was. If you went through the internet bubble and its collapse you were forever changed. Your muscle memory is just different than other people who did not have the same experience.

In the end the financial, technical and business risks associated with Teledesic could not be retired. A non-geostationary system must serve everywhere to serve anywhere so the constellation was an all or nothing effort. The ground antennas given technology at the time would have been too expensive and complex given the frequency band (Ka) and the satellite system costs were just not low enough since a cubesat approach was not being adopted. Non mechanical inexpensive antennas at that frequency are still a year away from being available even today. When Teledesic was trying to purchase launch services in 2001 entrepreneurs like Elon Musk and Jeff Bezos were not driving down launch costs and cubesat-style satellite

systems were not being built yet since Moore's law was not quite far enough along. The traditional manufacturers like Boeing and Motorola did not want to enable cubesat-style systems, so cost estimates skyrocketed and satellite size ballooned. The traditional manufacturers wanted to re-use the massive satellites they had already developed so the number of satellites in the proposed system needed to be reduced. These traditional manufacturers did not want cheap satellites since their military and government customers would want them too. They liked the idea of PhDs assembling massive satellites in clean rooms out of custom parts since it created a barrier to entry. I wrote about this price elasticity problem of a legacy manufacturer in my blog post on Elon Musk. Sometimes people will say that the Teledesic system shrunk in size since Boeing or Motorola had a better design. That is bullshit. The proposed Teledesic system shrunk because the legacy satellite manufacturers had huge satellites they already manufactured and they did not want to make small satellites since that would require new engineering and a new business model. Most importantly, the legacy satellite manufacturers did not believe they would sell many more satellites if they were cheaper.

Elon Musk and others like Greg Wyler's OneWeb satellite system have revived the original Teledesic idea of constellations of hundreds and even thousands of satellites. I am optimistic these systems will get built and become operational. What is different now and what might make it happen? First, Moore's law has had a couple of turns since then and more is possible at substantially less expensive price points. But more importantly a new group of people have been making very small "cubesats" in ways that some more traditional people involved in space would consider "a toy" These cubesats are tiny and simple by traditional standards and manufactured from off the shelf parts in many cases in a relatively normal manufacturing facility at far lower cost. These cubesats are getting better and better and can be up-sized to bigger dimensions (for example 250 kilograms) to make them powerful enough to do communications and not just imaging. The biggest question I have actually is not whether these system can be built and financed but rather: what is the total addressable market (TAM) for these communications systems given the cost of the services and the the necessary antennas? Is there enough demand and the prices that will be charged to make the business case work financially? The radio frequency bands (Ka and Ku) and distances involved most likely mean the communications systems will be used for communications backhaul. Low frequency LTE on the satellite does make not make much sense (channel bandwidth and structure are completely different). Greg Wyler's OneWeb is planned for Ku/Ka frequencies and therefore is likely to be a system that will be used as backhaul for mobile cell towers and by big customers like the military. I am skeptical that the pictures of small villages using the system to create direct links to the satellites depict a realistic market scenario, but they do help with regulatory approvals. More communications backhaul in hard to reach areas is good for the world, but these systems are not likely to be an affordable scalable broadband communications end-user solution for ordinary users. Having said that, providing emergency broadband communications capability in areas with problems like epidemics and natural disasters is important. Will backhaul be nearly all fiber and terrestrial microwave or will some satellite satisfy some of the demand? What role can drones play in all of this? Is there enough other demand from other markets like ships, airplanes, NGOs and the military to make the systems financially successful? I have opinions on that market demand and approaches like drones, but writing about that topic is not right for a short blog post like this. There is already a risk that you may be getting a little bored with parts of this story. In any event, we will find out about the size of market demand for space-based communications systems soon enough.

During its life, the Teledesic team raised over a billion dollars at a valuation that was as high as a $3 billion. Teledesic was a triple Unicorn in its time. But when it was determined by the Teledesic board of directors that the business could not retire enough of the financial, technical and business risks to proceed, a decision was made to liquidate and hundreds of millions of dollars were distributed back to shareholders. This distribution of cash back to shareholders was and still is relatively unprecedented since most companies in a similar situation just pivot again and again to new businesses ideas until the cash is all gone. The math of corporate finance meant that early Teledesic investors received a significant multiple as a financial return on their investments even though it was a liquidation. One early investor to this day marvels that he received many times his original investment in a company that never provided service. Shareholders who invested at a higher valuation like $3 billion were not so fortunate.

Winding up any startup is never a happy time, but Teledesic was a valiant effort undertaken by a very talented team that paved the way for other similar systems to be built someday. It was also great fun and a wonderful life experience to be involved in the startup, especially in the early days. As Jeff Bezos wrote recently, "failure and invention are inseparable twins." Negative results provide knowledge to everyone about what will not be a success. That makes it easier to determine what can be successful. Failures enable us to not only make new mistakes but to create genuine and lasting innovation. If you are not occasionally failing in what you do, you are unlikely to achieve great things.

A Dozen Things I Learned at Teledesic:

1. **It is more fun to be a pirate than join the navy. Pirates know how to break the eggs needed to make the necessary omelet. We broke a lot of eggs.**
2. **Most people are not cut out for the startup life. It is not for everyone.**
3. **Certain periods in your life are right for being involved in an audacious startup, and other periods are not.**
4. **Flying 500,000 air miles a year for five years takes a big physical toll on your body. I still pay a physical price for that time in my life.**
5. **Almost everything in life that is technically interesting and important involves trade-offs. This is especially true in space.**
6. **The more great people you hire, the easier it is to hire great people. Positive feedback can be powerful.**
7. **The better the quality of your existing shareholders, the easier it is to attract new high quality shareholders.**
8. **Having smart, talented and accomplished lead investors is invaluable in raising funds.**
9. **Space is very big. The distance to a non-geostationary orbit around the Earth is not so big, but launching any mass into that orbit is still relatively expensive.**
10. **There are no electrical outlets or power cords in space. This creates hard problems for systems that need power.**
11. **Since power density of an electromagnetic wave is proportional to the inverse of the square of the distance from a point source, space-based communications isn't easy.**

12. **Billionaires love space and rockets. A rocket launch is like a big very controlled explosion. Explosions that are very controlled and hurt no one can be great fun. Billionaires like to have fun.**

Notes:

Wired on Teledesic: http://archive.wired.com/science/discoveries/news/1997/10/7655

New York Times on Teledesic: http://www.nytimes.com/2000/06/04/business/can-craig-mccaw-keep-his-vision-of-teledesic-from-crashing.html?pagewanted=all

The Teledesic System: http://3csysco.com/Pubs/Teledesic%20Satellite%20System%20Overview.pdf

The Struggle by Ben Horowitz http://www.bhorowitz.com/the_struggle

A Dozen Things I've Learned from Andy Grove about Business and Strategy

July 29, 2016

"Andrew S. Grove was born in Budapest, Hungary in 1936. He graduated from the City College of New York in 1960 with a Bachelor of Chemical Engineering degree and received his Ph.D. from the University of California, Berkeley in 1963. Upon graduation, he joined the Research and Development Laboratory of Fairchild Semiconductor and became Assistant Director of Research and Development in 1967. In July 1968, Grove participated in the founding of Intel Corporation. In 1979 he was named President, and in 1987 Chief Executive Officer."

1. **"Success breeds complacency. Complacency breeds failure. Only the paranoid survive." "I believe in the value of paranoia. Business success contains the seeds of its own destruction. The more successful you are, the more people want a chunk of your business and then another chunk and then another until there is nothing left."** Grove believed that some degree of fear is healthy for any business, especially if the businesses has been successful. Two business school professors who have studied Grove point out: "A touch of paranoia—a suspicion that the world is changing against you — is what Grove prescribes." *The Economist* magazine describes Grove's application of what one might call a "paranoia principle" as follows: "[Grove] argues that every company will face a confluence of internal and external forces, often unanticipated, that will conspire to make an existing business strategy unviable. In Intel's case, such a 'strategic inflection point' arose because its

memory-chip business came under heavy assault from new Japanese rivals willing to undercut any price Intel offered." Strategic inflections points are created when a business faces an order-of-magnitude change in their environment. The two professors argue: "Grove offers a 'six forces' framework for identifying strategic inflection points. He starts with Michael E. Porter's five-forces model: customers, suppliers, competitors, potential competitors, and providers of substitutes. He then adds complementarity to the strategy map." Grove wanted to be sure that if there was the potential for convex outcomes Intel would be well positioned to benefit and if there was the potential for a concave outcomes Intel would be well positioned to avoid harm. Grove identified a range of factors he worried about in in his book *Only the Paranoid Survive:* **"I worry about products getting screwed up, and I worry about products getting introduced prematurely. I worry about factories not performing well, and I worry about having too many factories. I worry about hiring the right people, and I worry about morale slacking off. And, of course, I worry about competitors."** Grove recognized that competitors will inevitably be attracted to any source of profit and that increasing competition will drive returns down toward the opportunity cost of capital. What was once profit (producer surplus) is inevitably eventually transformed by competition into consumer surplus. This shift of value from producer to consumer is now new. What is new since the arrival of Moore's law and the proliferation of digital networks is how fast this transformation of profit into consumer surplus happens. It is increasingly hard for any business to maintain pricing power in the face of (1) technological progress and (2) intense and rising levels of global competition. Companies are finding it hard to meet their investment hurdle rates give this phenomenon and so cash often piles up or is distributed rather than being reinvested. People involved in a real business know that innovation often reduces rather than increases profit. Consumers always benefit from innovation but GDP may actually shrink as a result of the innovation. Charlie Munger put it this way once: "There are all kinds of wonderful new inventions that give you nothing as owners except the opportunity to spend a lot more money in a business that's still going to be lousy. The money still won't come to you. All of the advantages from great improvements are going to flow through to the customers." The point here is simple: some innovations create a moat due to the presence of factors like network effects and some innovations destroy moats. More consumer benefit is wonderful for society, but so is some healthy level of producer surplus since this is what powers a healthy growing economy.

2. **"Technological change is going to reach out and sooner or later change something fundamental in your business world."** Once upon a time there was a distinction between technology businesses and other businesses. Today every business is a technology business. As a result if this shift, a technological change can quickly create a strategic inflection point for any business. For example, John Deere is no longer a supplier of farm equipment but rather a provider of integrated productivity solutions for agriculture. Ford is no longer just a supplier of automobiles. Companies like John Deere and Ford increasingly find themselves in competition with other businesses that they never thought of before as competitors and also as partners

with firms that they never though they would partner with. The wrong response to a strategic inflection point proved to be the undoing of companies like Kodak, Nortel and Motorola. The right response can create powerful new sources of profit for a business.

3. **"If existing management want to keep their jobs when the basics of the business are undergoing profound change, they must adopt an outsider's intellectual objectivity. They must do what they need to do to get through the strategic inflection point unfettered by any emotional attachment to the past." "I do have a lot of strong feelings. When it gets to one of those, I guess I state them pretty forcefully. I don't thrash out and yell (but) maybe some people think it sounds like yelling."** Grove believed in "constructive confrontation." To put it bluntly, an encounter with Grove was often intense. He wanted issues brought out into the open, fully discussed and decisions made in a very timely way. In an interview in Chicago Tribune in 1996 he said: **"We encourage our people to deal with problems without flinching. At its best, the method means that people deal with each other very bluntly."** I am quite familiar with business discussions reflecting this level of intensity. I have been in numerous meetings in which the people involved argued their positions so vociferously that spittle was flying back and forth across a conference table. I see less of this behavior than I did in the 1980s and 1990s but it still happens sometimes. What most people do not understand about meetings like this is that after the issues have been "fully and candidly discussed" the people involved are capable of making a decisions at the conclusion of the meeting and the doing something like getting hamburgers together as if the intense confrontation never happened. It also surprises some people to learn that when someone important in the technology industry says nothing when you are making a presentation it can mean that they think you are an idiot. In technology, it is often the case that the more someone confronts what you are saying the more they may believe what you are saying is important or interesting. If you are not familiar with this bluntly confrontational environment, it can be disconcerting. As just one example, Larry Ellison and Steve Jobs were at a dinner once in which Grove said he would not have hired either of them since they were "flakes." Ellison recalls: "Both Steve and I admired and respected Andy. We enjoyed all of our precious time with him, including the memorable and characteristic abuse." I am not saying that all technology managers are confrontational. I worked for many years for Craig McCaw and he was the polar opposite of Grove when it came to blunt confrontations. Craig McCaw is the politest and most private person I have ever known. He just has a different style than someone like Grove. What McCaw and Grove do share is mastery at confronting their own ideas. This self-confrontational approach can be an effective way to deal with: (1) confirmation bias and (2) avoiding situations where the CEO does not hear the truth since his or her staff is unwilling to deliver bad news or push back on the CEO's opinions. I agree with Charlie Munger that an effective manager or investor knows the other side of the argument better than the people who he or she disagrees with. Since most mistakes are psychological or emotional,

attachment of these factors to the past is banished by the most effective managers since that baggage is what an accountant would refer to as "sunk."

4. **"Intel [is] a data driven company and the phrase is, 'Don't argue with the emotions, argue with the data.'" "Measurement against a standard makes you think through WHY the results were what they were.** Former Intel executive Pat Gelsinger said once: "If you went into a meeting [with Grove], you'd better have your data; you'd better have your opinion; and if you can't defend your opinion, you have no right to be there." Grove joked at his last shareholder meeting about his drive to obtain the very best data: **"I didn't enjoy myself 100 percent of the time. According to my statistical analysis, it was about 80 percent."** The amount of data that is available today is unprecedented and modern machine leaning tools that can analyze that data are evolving at a breakneck pace. Grove was an admirer of other businesses that have learned to use data well, For example, he said once: **"Amazon is the preeminent pioneer in building a new way of doing commerce: personalized, database-driven commerce, where the big value is not in the purchase fulfillment, but in knowing as much about a customer base of ten or twenty million people as a corner store used to know about a customer base of a few hundred. In today's mass-merchandising world, that's largely gone; Amazon is trying to use computer technology to re-establish it."** Moats are increasingly resulting from the ability of a business to apply analytics to the data that their business generates. There is a feedback loop at work: the more successful a business is the more data they generate, the more successful that the business is [repeat].

5. **"Most companies don't die because they are wrong; they die because they don't commit themselves. They fritter away their momentum and their valuable resources while attempting to make a decision. The greatest danger is standing still."** That decisions get made in a timely way as part of Grove's "constructive confrontation" is critical. Eugene Kleiner once said**: "The more difficult the decision, the less it matters what you choose."** What Grove and Kleiner mean is that sometimes you are better off making a decision and living with it than agonizing over the decision for a long period and as a result experiencing a significant delay. What can kill a shark is when it stops moving in the water and a business today can be killed in much the same way. Business momentum matters since feedback effects are so powerful. If competitors harness new network effects or other phenomena while a business is unable or unwilling to make a decision, the result can be very harmful or even deadly.

6. **"I think it is very important for you to do two things: act on your temporary conviction as if it was a real conviction; and when you realize that you are wrong, correct course very quickly." "Investment decisions and personal decisions don't wait for the picture to be clarified." "It's not that you shouldn't plan but you**

should not regard your plans to be anything more than a baseline model of what might happen." This point made by Grove is consistent with the "strong opinions, loosely held" idea that I have written about before. We all face a world filled with risk, uncertainty and ignorance. The best approach is to have strong opinions that reflect the best research and data possible, but that can be changed as new and better data becomes available. The world is more connected every day by digital networks and this creates phenomena that feed back on themselves which creates unpredictable turbulence. Outcomes are much more likely to be determined by genuinely complex processes than in the past. In other words, the world will evolve in ways that many businesses will not anticipate since the business environment is increasingly nonlinear. If a business is not preparing for this level of change to increase in both scope and magnitude, it may get caught in a turbulent riptide of change and find its business battered or even destroyed.

7. **"You need to try to do the impossible, to anticipate the unexpected. And when the unexpected happens, you should double the efforts to make order from the disorder it creates in your life. The motto I'm advocating is — Let chaos reign, then rein chaos. Does that mean that you shouldn't plan? Not at all. You need to plan the way a fire department plans. It cannot anticipate fires, so it has to shape a flexible organization that is capable of responding to unpredictable events." "There are two options: adapt or die."** Dwight Eisenhower is famous for saying: "In preparing for battle I have always found that plans are useless, but planning is indispensable." Survival in the long term is determined by adaptability, rather than size or strength. Using the preparation process to get ready to change that will produce surprising and sometimes shocking outcomes is wise. Expecting to be able to successfully respond to change by pulling out a prepared plan is a triumph of hope over experience. Denial is not just the name of a river in Egypt, it is the leading cause of the death of businesses.

8. **"The new environment dictates two rules: first, everything happens faster; second, anything that can be done will be done, if not by you, then by someone else, somewhere."** A digital connected world is an accelerated world. Everything moves faster now due the advance of technology and networks. Everyone has better information and that information is dispersed faster than ever and so any advantage a business has that is merely better operational effectiveness can be copied far quicker. The speed at which a new competing business can be created has never been faster. The ability of businesses to compete from half way around the world has never been easier. Accelerating these phenomena even more is that fact that capital for genuinely good idea is not scarce. As Professor Michael Porter points out, operational effectiveness is very important, but it is not a strategy. Strategy is about what a business does differently than its competitors to create a sustainable competitive advantage. What does your business do differently that will create what

Warren Buffett calls a moat against competitors? If you have a moat it is more valuable than ever since they are scarce, but also more at risk that ever before too.

9. **"Long distances used to be a moat that both insulated and isolated people from workers on the other side of the world. But every day, technology narrows that moat inch by inch. Every person in the world is on the verge of becoming both a coworker and a competitor to every one of us." "You have no choice but to operate in a world shaped by globalization and the information revolution."** Moats have never been under more threat. Globalization and innovation have never been stronger as driver of change. The impact of globalization is taking a front seat in the world of policy and business today. Some people are now arguing that globalization has gone too far. The reality may be, however, that it may not be possible to put that genie fully back in the bottle. Since globalization is to some degree here to stay no matter how the political environment changes, many aspects of society will need to be rethought as a result. The idea that the world can change as quickly as it is now, but that societal institutions can stay the same is unrealistic. This is equally true for a business.

10. **"You have to understand what it is that you are better at than anybody else and mercilessly focus your efforts on it."** Comparative advantage is the ability of an individual or group to engage in a particular economic activity (such as manufacturing a product or writing software) more efficiently than another activity. Professor Michael Porter argues "the essence of strategy is choosing a unique and valuable position rooted in systems of activities that are much more difficult to match." Grove is saying that a business should find this comparative advantage and FOCUS resources on it with passion. Business that try to do everything end up doing close to nothing. Grove said once on this point: **"A question that often comes up at times of strategic transformation is, should you pursue a highly focused approach, betting everything on one strategic goal, or should you hedge? Mark Twain hit it on the head when he said, Put all of your eggs in one basket and WATCH THAT BASKET."** As Mark Cuban has said you can't diversify your way into knowing what you are doing.

11. **"The Internet doesn't change everything. It doesn't change supply and demand."** Charlie Munger made a similar point when he said the Internet **"**increases efficiency, but lots of things increase efficiency without increasing profits. It is way more likely to make American businesses less profitable than more profitable. This is perfectly obvious, but very little understood." Without a moat against competition that places some limits on the supply of what you sell, profit will not arrive. Warren Buffett said at the last Berkshire shareholder meeting that microeconomics defines what a business is and the Internet does not change the fundamentals of microeconomics. Grove has said on this point of microeconomics: **"There is a time-**

dimension involved in the adjustment of one system to another. And by the time a supply-and-demand imbalance develops in one area of the economy, you can be very much out of phase with what is happening elsewhere. In physics, the equivalent would be unstable oscillations; in medicine, it would be heart palpitations. Economists don't bother with that. They take one picture in a steady state, and another picture in a steady state, and somehow they think nature will smooth everything out. Often it does, but just as often it does not."

12. **"Technology will always win. You can delay technology by legal interference, but technology will flow around legal barriers." "Technology happens, it's not good, it's not bad. Is steel good or bad?"** Technology will always find a way to route around obstacles. It is a question of when barriers to the adoption of technology will be circumvented not whether it will happen. Technology itself is morally agnostic. Society must learn to use it in ways that are beneficial. William Gibson agrees with Grove on this point: "I think that technologies are morally neutral until we apply them. It's only when we use them for good or for evil that they become good or evil."

Notes:

Only the Paranoid Survive https://www.amazon.co.uk/Only-Paranoid-Survive-Andrew-Grove/dp/1861975139

High Output Management https://www.amazon.com/High-Output-Management-Andrew-Grove/dp/0679762884

Grove Essay: http://www.intel.com/pressroom/archive/speeches/ag080998.htm

Interview with his biographer: http://hbswk.hbs.edu/item/the-history-and-influence-of-andy-grove

Inside Intel: https://hbr.org/1996/11/inside-intel

Quartz: http://qz.com/645327/silicon-valleys-confrontational-management-style-started-with-andy-grove/

Economist: http://www.economist.com/node/14299624

A Dozen Things I've Learned from Bill Draper about Investing and Business

August 6, 2016

"William H. Draper, III started his career in venture capital with Draper Gaither & Anderson, the first venture capital firm west of the Mississippi, working there with his father from its creation in 1958 until he left to cofound Draper & Johnson Investment Co. in 1962. Three years later, Draper & Johnson merged with Sutter Hill Ventures to great success. From 1981-1986, Draper served as President and Chairman of the Export-Import Bank of the US, continuing on to become the Administrator and CEO of the United Nations Development Program, serving until 1995. He is also a co-founder of Draper Richards Kaplan Foundation, a venture philanthropy group focused on early-stage, high impact organizations. He is the author of *The Startup Game: Inside the Partnership Between Venture Capitalists and Entrepreneurs*."

1. **"Venture was far more profitable 40 years ago than it is today." "When I was there, the returns at Sutter Hill were 42 percent." "[There was] much less competition." "In the early days of VC, the returns were so attractive that they got Wall Street's attention. But then perhaps it was too much attention." "It's not as cozy and not as nice and not as profitable as it used to be." "It's much better for the entrepreneur now. The entrepreneur has a chance to go to lots and lots of places. If he doesn't like Draper, he has a chance to go to Valentine or some other firm." "This has been good for the overall economy, because it has meant more entrepreneurs could get started. If there were many fewer venture capitalists, perhaps a company like Facebook or Skype wouldn't have been created in the first place, or been able to get funding."** Competition between venture capitalists has made the world a better place for founders and consumers. The nature of capitalism means that value in any business is constantly moving from producer surplus to consumer surplus driven by increasing competition. Venture capital is not an exception to this phenomenon. The bigger the venture capital business gets and the more money is under management, the harder it us to generate significant out-performance over a benchmark financial return. Timing matters and being early in the venture business was great luck for some people like Draper. Michael Moritz of Sequoia once said at a Fortune magazine conference: "a chimpanzee could have been a successful Silicon Valley venture capitalist in 1986." Both today and in the past, financial success in the venture capital business overall is top down constrained by the number of successful exits as Fred Wilson pointed on is a classic post on the business. Fred wrote: "$100bn in [venture capital exits in a given year] produces roughly $50bn in proceeds for venture firms per year. After fees and carry, that $50bn is around $40bn. Which is only 1.6x on the investor's capital if $25bn per year is going into venture funds. If you assume the investors capital is tied up for an average of 5 years (venture funds call capital over a five year period and distribute it back over a five year period, on average), then the annual return is around 10%." If venture capital industry exits are at the level in the chart below the overall financial returns will necessarily be constrained by the level of financial exits in industry. As I have written before, venture capital industry returns are far from spread evenly like peanut butter between all of the venture capital firms. The better venture capital firms capture the lion's share of the financial returns in the industry. The venture capital business is certainly not like Lake Wobegon where all firms are above

average. If the top down industry constraint is ~$100B a year on average, only so many startups (unicorns or otherwise) can achieve an exit in a given year.

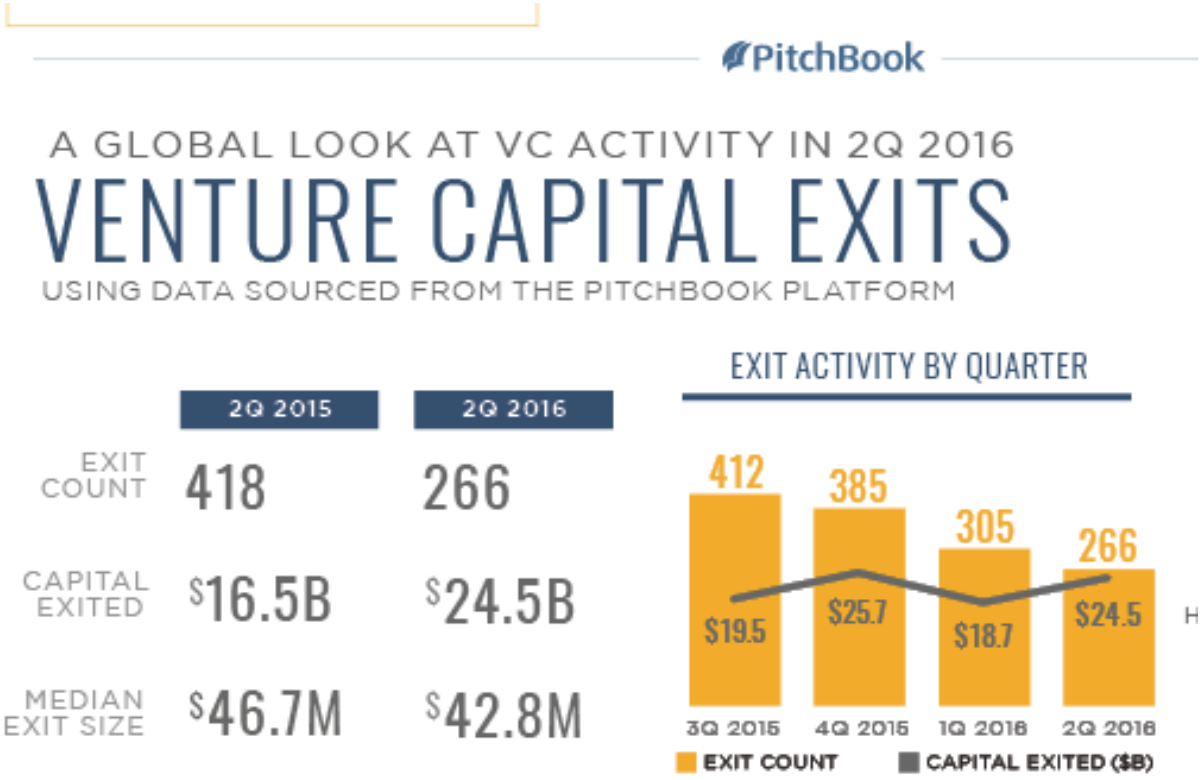

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2. **"We had many fewer failures in [the early years of venture capital] In our day we had really very few losses. At Sutter Hill, we had a lot of doubles and triples and not many strikeouts." "We didn't have the billion dollar hit, although there were one or two of those."** I believe that the change in the success rate that Draper describes is a natural outcome of increasing competition in the venture capital business. Since risk capital was relatively scarce in the early years the financial returns in venture capital could be excellent even without finding what Draper calls "the billion dollar hit." As venture capitalist skill levels and capital under management rose over the years, venture capitalists found themselves needing to find new undiscovered sources of value as the obvious bargains disappeared. This process is similar to what happened to value investing when after a period of years after the end of the Great Depression the obvious "cigar butt" bargains disappeared. Venture capital like value investing was forced to evolve. As an analogy, in value investing the change took the form of people like Phil Fisher and Charlie Munger starting to consider quality in assessing whether a bargain was present. In the venture capital industry, Doriot's massively successful investment in DEC provided a huge clue about where to find undiscovered and undervalued opportunity. What venture capital industry learned from the financial outcome of DEC was that convex payoffs (nonlinear payoff properties that create massive potential upside and small potential downside) which benefit from uncertainty and disorder could generate very attractive financial returns. A portfolio approach was required in venture capital

since only a very small number of outsize winners determine the financial outcome of a given fund. Warren Buffett describes the strategy adopted:

"If significant risk exists in a single transaction, overall risk should be reduced by making that purchase one of many mutually-independent commitments. Thus, you may consciously purchase a risky investment – one that indeed has a significant possibility of causing loss or injury – if you believe that your gain, weighted for probabilities, considerably exceeds your loss, comparably weighted, and if you can commit to a number of similar, but unrelated opportunities. Most venture capitalists employ this strategy. Should you choose to pursue this course, you should adopt the outlook of the casino that owns a roulette wheel, which will want to see lots of action because it is favored by probabilities, but will refuse to accept a single, huge bet."

By investing in businesses that can generate convex payoffs venture capitalists have been able to generate the returns we see in venture capital today. Because payoffs from convex propositions are determined by complex systems financial returns in modern venture capital reflect a power law distribution. Draper is saying that this was not the case in in the early years. My thesis is that investments like ARD made in DEC fundamentally changed the venture capital business. Draper has his own theory on why there were less failures in the early years, but I just don't see it as being sufficient to drive the magnitude of the change. He said: **"I think the reason [for fewer failures] is we'd share deals with other venture firms, so that you check your judgment, you get your broader contacts, you get more information, and you have a more cooperative spirit. It was a lot less competitive than it is today. Today, there's these huge companies, and they want to get it all because they're very hungry. 'Feed me, feed me, feed me!; So that's something that has changed. But "The size and the lack of cooperation among venture capitalists [has changed]. It's hard for them to get a 10 million dollar deal and divide it up and say to Sutter Hill or Sequoia, why don't you take half of it? We used to do that all the time."** Of course, Draper was actually there and I was not. So you might want to believe his thesis is right instead of mine.

There is one more important point to make that is relevant to what Draper said above abut a lower failure rate in the early years. In the United States there are only about 3,600 startups a year (~800 per quarter) that obtain first time venture capital from a professional investor. That leaves about 280,000 other startups every quarter that need to either raise some form of capital or bootstrap themselves financially. There is room for many other business financing models including what some call "Indie VC" and other approaches that involve cash flow financing like merchant based finance from a factor. Cash flow based financing is available and has a cost that varies with the approach. But it is not "disruptive" to venture capital.

3. **"For every hundred entrepreneurs, we say yes to four or five. Saying no is the worst part of the job."** Finding a venture capital investment that has the requisite amount of convexity (huge potential upside and small potential downside) is a bit like looking for a needle in a haystack. A venture capital firm may look at thousands of different investments before deciding to invest in as few as two to five businesses a year. Marc Andreessen points out: "the basic math component is that there are about 4,000 startups a year that are founded in the technology industry which would

like to raise venture capital and we can invest in about 20. We see about 3,000 inbound referred opportunities per year we narrow that down to a couple hundred that are taken particularly seriously. There are about 200 of these startups a year that are fundable by top VCs." No one likes to deliver bad news to a founder, but that is part of the job. The venture capitalist does not do the founder any favors if they string them along when they know the answer is no. A founder should realize that hearing the word "no" from venture capitalists is almost always part of the process.

4. **"Venture capital was not a word known out here. It was known to me and my father and a lot of people in New York because of J.H. Whitney and the Rockefellers were known to do some venture capital. They backed Minute Maid, and Eastern Airlines, but those were both family operations. I knew it more because of General Doriot who, while he was teaching, was also starting up and running American Research and Development. AR&D was a venture capital company that made the big mistake of having a public issue, and being a public company, having to answer to stock holders. [It was a mistake] because in this business it's just not earnings that you can predict. It's very blocky, and you don't really know what the value is of your assets either. So that combination made it very awkward to be a public company."** I have already written a blog post on Georges Doriot and his struggles in creating AR&D. Limited partners who understand that venture investments are not liquid and take a long period of time to pay off are a great luxury for a venture capitalist. The very best limited partners have been involved in venture capital for decades and aren't doing things like rushing to find a secondary market to unload their holding in the events the market turns negative. Venture capital has always been a cyclical business. Limited partners who can ride out the down cycle end up with superior financial returns as a reward for their patience. A venture capitalist who has experienced and thoughtful limited partners will be better at his or her job since they will not be distracted as much by the antics of nervous limited partners.

5. **"I consider all characteristics of success, but it's the CEO, the entrepreneur, that's the most important among all the factors."** Great people, attractive markets and significant innovation are all required for a business to become a success. Different founders and venture capitalists put different emphasis on these three elements of success at different stages of the evolution of a business. Robin Richards, who co-founded Draper Richards Kaplan with Draper once said: "You'll find that other investors tend to ask whether the market makes sense and that people are interchangeable. Bill will take on business risk. He doesn't want to take on people risk. He wants to make sure he can really work with that person or people. That's what makes Draper unique. He's always been about the people." In this way Draper is more like Pitch Johnson and Eugene Kleiner when it comes to people. He would rather take on market risk or technical risk that people risk. Of course, risk and

problems related to people can appear to be low at first and then appear as the business evolves. One interesting thing about the rise of software-based business models is that it is not nearly as common today for technical risk to be the primary concern of investors and founders. As a result, most of the risk that a founder must retire is now market risk, if you get the people issues right.

6. **"The entrepreneurial mind is an inquisitive mind."** I rarely meet a founder who is not a curious person and successful founders who are not curious are even rarer. I have also found that inquisitive people inevitably like to read. Not only do they like to read, but they read broadly. The best founders typically ask great questions and love to learn. Successful founders also tend to have strong opinions that are weakly held (they believe in what they believe because they have done the research to feel that way but can quickly adapt if new evidence becomes available). Eric Ries talks about why an inquisitive mind is so valuable in a founder: "As an entrepreneur everything you do – every action you take in product development, in marketing, every conversation you have, everything you do – is an experiment. If you can conceptualize your work not as building features, not as launching campaigns, but as running experiments, you can get radically more done with less effort."

7. **"Venture capital is not all about money, it's really mostly about building a company with the entrepreneurs who do the heavy lifting."** Implicit in this statement by Draper is that the best venture capitalists help with "light lifting." Different venture capitalists and firms have different models for how much support they provide to portfolio companies. Venture capitalist support can range from: (1) extensive support from so-called platform approaches which offer end-to-end support (public relations, marketing, finance, recruiting, sales, distribution etc.) to (2) lighter touch support where the VCs get involved in only a few issues like recruiting or scaling growth in addition of their board duties. For example, Chamath Palihapitiya has a system where: "our growth team can help them implement the right data infrastructure, implement the machine learning, implement the right sort of customer acquisition metrics and reporting." Other venture capital firms have full time recruiters on staff. A first time technical founder will have different needs than an experienced founder, so that there is a range of available venture capital options for founders to choose from is a good thing. Marc Suster writes that a founder should: "Beware of VC Seagulls, who shit on you and then fly away (or worse yet leave you with Red Herrings). The best VCs act as a sounding board for management."

8. **"When an entrepreneur has a first board meeting, we called that the 'Oh shit meeting.' That's when the VC finds out the bad news he didn't know when he made the investment. How the VC reacts to that defines the relationship – it either becomes more brittle or closer."** Honesty is important in any relationship. Not only

is honesty the right policy morally but it is vastly more efficient. Charlie Munger puts it this way: "You'll make more money in the end with good ethics than bad. Even though there are some people who do very well, like Marc Rich – who plainly has never had any decent ethics, or seldom anyway. But in the end, Warren Buffett has done better than Marc Rich – in money – not just in reputation." Being ethical and honest is good business and in addition a necessary part of being a good person. Of course, sometimes problems are discovered that have nothing to do with a lack of honesty. A venture capitalist in a board meeting or otherwise may discover things that the founder(s) do not realize are a significant problem. Helping to resolve those problems is part of being a valuable board member. Since relationships like this tend to be both long in duration and intense, strong relationships can be formed just as they do during other life changing events like college or the military. The venture capitalist-founder relationship is sometimes said to be like a marriage, except it is harder to get a divorce.

9. **"Very often [Founders] overestimate the size of the market that their product or service will reach and underestimate what it takes in the way of a timeline (and) a team. Sometimes they make the mistake of thinking they can do everything themselves." "We often tell (entrepreneurs) they have underestimated the timeline – toward becoming profitable or becoming an exit candidate, for example. They'd say, 'No, we've doubled the time we think it will take.' Then we double that timeline, and very often that's not enough."** If founders were not optimistic and confident they would not be founders. For example, founders would not be able to withstand the many critics who will inevitably say that are crazy. As a result of this optimism and confidence Draper is saying that founders may get ahead of themselves a bit and the board's job in part is to make their estimates more realistic without choking off their ambition. This is often tricky. I have written about board members like the late Coach Bill Campbell who understand how to strike the right balance. The best venture capitals are patient. As a result of skills developed via pattern recognition the best venture capitalists can provide excellent guidance of timing and staging.

10. **"A great firm name isn't worth much if the actual partner on your board isn't very good."**A great venture capital firm is valuable to a founder since several partners are sometimes available to lend a hand if needed. What Draper is saying is that the quality of a board partner within that firm has great importance for a given founder. This is particularly true for the lead venture capital firm or firm involved in a startup since it is often that partner or partners who are critical in helping the firm raise the next funding round. Not having a lead investor just to minimize dilution can be penny wise and pound foolish. A lead investor who will signal to others that the business is a sound investment is invaluable.

11. **11. "[Some founders have] the misconception that things will take care of themselves and that the competition will stay the way it is. Nothing stays the same. So the inflexibility becomes a problem**." The old saying that the only constant is change is true. If a business ever earns a profit or even seems likely to earn a profit competition will inevitably arrive. The ability to successfully adapt to change is part of what makes a great founder and, in and of itself adds, to the convexity of the investment. In other words a great team of people give a business valuable added optionality that is often essential to success given the need to adapt. Draper is saying that he has at times had to encourage founders to be more flexible to respond to competition. Striking the right balance on this set of issues is key, since the founder's motivation and persistent nature are important to maintain. Sometimes what looks like dogged founder persistence sends a business right off a high cliff and at other times it is the key to success. Knowing the difference between suicidal moves talented differentiation is part of what separates a great venture capitalist from a bad venture capitalist.

12. **"Venture Capital started because of Stanford University." "Without Stanford there would be no Silicon Valley. There's just lots of structural support in Silicon Valley."** Generating strong economic growth in ant region of the world requires a major research university as an anchor. There is no substitute in a modern economy for this engine of growth. If you look at which areas of the world are economically successful, you inevitably see at least one major research university. If a given city or region does not have a major research university it should try to affiliate with a city that does. Silicon Valley not only has Stanford but Berkley and UC San Francisco. Of course, there are range of other support services that a region must have to generate successful technology businesses. When all of the necessary factors come together any given city may find itself having significant success but it is not likely that it will be another Silicon Valley, but rather it will find its own version of success. I have written about this topic previously: http://www.geekwire.com/2016/12-things-seattle-can-teach-others-jobs-economic-development-building-better-city/

A Dozen Ways Michael Bloomberg Thinks Like Charlie Munger

August 13, 2016

After graduating from Johns Hopkins University and Harvard Business School, Michael Bloomberg worked at Salomon Brothers. After he left Salomon Brothers, he started the financial news and information service known as Bloomberg. He was the 108th Mayor of New York City. After leaving City Hall, Michael Bloomberg returned to the company he founded.

As is usual for this blog, Bloomberg's statements are in bold text.

1. "I think if you look at people, whether in business or government, who haven't had any moral compass, who've just changed to say whatever they thought the popular thing was, in the end they're losers." Charlie Munger: The culture now is that anything that can be sold for a profit will be. 'Can you sell it?' is the moral test, and that's not an adequate test." Munger is unrestrained on this point: "I think we have lost our way when people like the [board of] governors and the CEO of the NYSE fail to realize they have a duty to the rest of us to act as exemplars. You do not want your first-grade school teacher to be fornicating on the floor or drinking alcohol in the closet and, similarly, you do not want your stock exchange to be setting the wrong moral example."

2. "In 1981, at the age of 39, I was fired from the only full-time job I'd ever had—a job I loved. But I never let myself look back, and the very next day I took a big risk and began my own company based on an unproven idea that nearly everyone thought would fail; making financial information available to people, right on their desktops." Many people are thrust into a situation with significant optionality by losing a job. When you are already in a position where you have little to lose taking a risk with a potentially big upside can be easier to do. Munger has said that he "developed courage when I learned I could deal with hardship. You need to get your feet wet and get some failure under your belt."

3. "Persistence really does pay off." Charlie Munger agrees: "Be persistent: Slug it out one day at a time." On the subject of persistence, venture capitalist Mark Suster has said: "Tenacity is probably the most important attribute in an entrepreneur. It's the person who never gives up—who never accepts 'no' for an answer….what I look for in an entrepreneur when I want to invest? I look for a lot of things, actually: Persistence (above all else), resiliency, leadership, humility, attention-to-detail, street smarts, transparency and both obsession with their companies and a burning desire to win."

4. "The most powerful word in the English language is 'Why.' There is nothing so powerful as an open, inquiring mind. Whatever field you choose for starting a business—be a lifelong student. The world is full of people who have stopped learning and who think they've got it all figured out. Their favorite word is 'No.' They will give you a million reasons why something can't be done or shouldn't be done. Don't listen to them, don't be deterred by them, and don't become one of them. Not if you want to fulfill your potential—and not if you want to change the world for the better." People who get ahead most in life are invariably lifelong learners. They read, study and are inquisitive. Charlie Munger puts it this way: "In my whole life, I have known no wise people (over a broad subject matter area) who didn't read all the time — none, zero."

5. "I'm a very lucky guy." "You can't control how lucky you are, you can't control how smart you are, but you can control how hard you work, so that's the first thing." Charlie Munger has similarly said: "Well, some of our success we predicted and some of it was fortuitous. Like most human beings, we took a bow." Michael Mauboussin points out: "Skill is 'the ability to use one's knowledge effectively and readily in execution or performance.' You can think of skill as a process, or a series of actions to achieve a specific goal. Luck is the events or circumstances that operate for or against an individual." "Luck, in this sense, is above and beyond skill. Consider luck as a distribution that has an average of zero. By this definition, luck tends to be transitory. Note that many common phrases, like 'you make your own luck,' 'luck is what happens when preparation meets opportunity,' and 'the harder I work, the luckier I get,' do not fit with our definition. In each of these cases, luck is conflated with skill. Think of luck as something in addition to skill."

6. "Being a plumber is a great job because you have pricing power." [The plumber father of one of my employees has] got six plumbers working for him, he's a scratch golfer, he goes around playing golf courses I only dream about. He's built a business, he's had a chance to do that. He never went to college." A business that can raise prices and demand for the product does not drop significantly has pricing power. Some firms have so much pricing power that they can raise prices and demand goes up. If a business must hold a prayer meeting to raise prices it does not have a moat. A business may have factors that may create a moat in the future, but the best test for a moat is in the end mathematical. Munger believes:

"There are actually businesses, that you will find a few times in a lifetime, where any manager could raise the return enormously just by raising prices—and yet they haven't done it. So they have huge untapped pricing power that they're not using. That is the ultimate no-brainer. … Disney found that it could raise those prices a lot and the attendance stayed right up. So a lot of the great record of Eisner and Wells … came from just raising prices at Disneyland and Disneyworld and through video cassette sales of classic animated movies… At Berkshire Hathaway, Warren and I raised the prices of See's Candy a little faster than others might have. And, of course, we invested in Coca-Cola—which had some untapped pricing power. And it also had brilliant management. So a Goizueta and Keough could do much more than raise prices. It was perfect."

7. "I always give the most difficult and complicated assignment I have to the most overworked person in the company. There's a reason they don't have time — work is a marketplace, and it's telling you this person is good." What a market does is drench people who want something or make or sell something with feedback says Charlie Munger. Without feedback it is not only hard to respond and adapt to changing conditions, but to figure out who has talent and who is willing to work hard.

8. "None of you are going to be Mark Zuckerbergs. It's just not going to happen." As Charlie Munger says about investing: "It's not supposed to be easy." If it was easy anyone could do it." The magnitude of financial success of someone like Zuckerberg or Gates happens extremely rarely. This must be so simply due to the top down math involved. There is only so much profit and revenue to be captured in any given economy given the normal workings of competitive capitalism. Financial success follows a power law distribution.

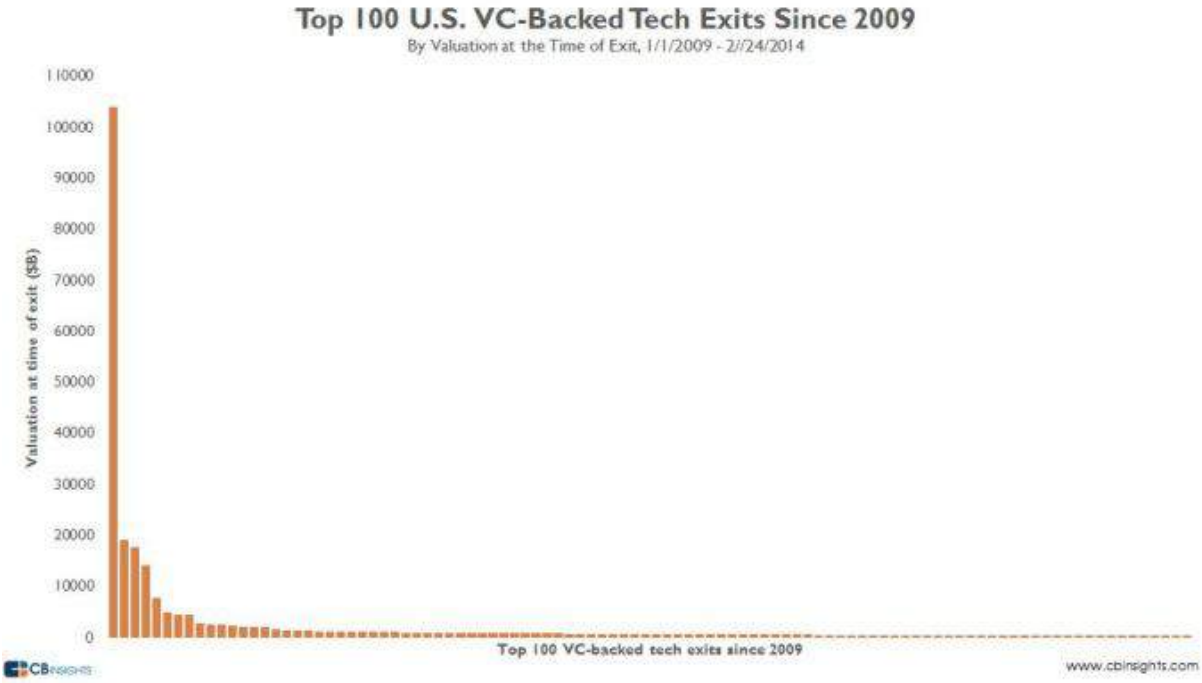

9. "If you say, 'Look, my father never existed, my mum had cancer, I'm working five shifts at McDonald's,' that's the person I'm going to hire." Charlie Munger: "Life will have terrible blows in it, horrible blows, unfair blows. And some people recover and others don't. And there I think the attitude of Epictetus is the best. He said that every missed chance in life was an opportunity to behave well, every missed chance in life was an opportunity to learn something, and that your duty was not to be submerged in self-pity, but to utilize the terrible blow in constructive fashion. That is a very good idea. You may remember the epitaph which Epictetus left for himself: "Here lies Epictetus, a slave maimed in body, the ultimate in poverty, and the favored of the gods."

10. "Capitalism works." Munger has similarly said, after giving the hat tip to Allen Metzger: "I regard it as very unfair, but capitalism without failure is like religion without hell." Innovation and progress requires failure. Lots of failure. As Warren Buffett said in his 2015 shareholder letter: "Nothing rivals the market system in producing what people want – nor, even more so, in delivering what people don't yet know they want." Capitalism isn't a perfect system, but it is the best one available by far. Markets sometimes fail, but that can be dealt with wise regulation.

11. "I don't believe that government is good at picking technology, particularly technology that is changing. By the time you get it done and go through democracy, it's so outdated." What a politically driven process lacks is the ability to get real feedback in a timely way about the nature of a given decision. Many political systems are created with a set of "checks and balance" which work against efficiency. Munger: "The constant curse of scale is that it leads to big, dumb bureaucracy—which, of course, reaches its highest and worst form in government where the incentives are really awful. That doesn't mean we don't need governments—because we do. But it's a terrible problem to get big bureaucracies to behave."

12. "Life is too short to spend your time avoiding failure." Munger puts it this way: "The wise ones bet heavily when the world offers them that opportunity. They bet big when they have the odds. And the rest of the time they don't. It is just that simple."

Notes:

Mike Bloomberg: https://www.mikebloomberg.com/about/

The Venture Capital Power Law – Analyzing the Largest 100 U.S. VC-Backed Tech Exits
https://www.cbinsights.com/blog/venture-capital-power-law-exits/

WSJ on Bloomberg: http://topics.wsj.com/person/B/Michael-Bloomberg/4365

A Dozen Things I've Learned from Michael Dell about Business (Pre-2002 edition)

August 27, 2016

If you have been reading this blog for a while you have probably figured out by now that my posts are a scheme on my part to write about topics that interest me in a way that is more interesting for readers. This blog post about Dell founder Michael Dell is no different. I try to work within a 4,000 word count on each blog post. For this post both for brevity and due to the nature of what I do for a living, I'm going to limit the discussion mostly to pre-2002 events.

As is usual, the Michael Dell quotes are in bold text:

1. "I believe that you have to understand the economics of a business before you have a strategy, and you have to understand your strategy before you have a structure. If you get these in the wrong order, you will probably fail." Dell's statement about economics is a reference to microeconomics and not macroeconomics. The distinction between these two types of economics was explained at the 2016 Berkshire shareholder meeting by Charlie Munger who said: "Microeconomics is what we do, macro is what we have to put up with." Understanding microeconomics is essential if you want to be successful in business since as Munger went on to say business is essentially microeconomics. In his "Five Minute University" bit on Saturday Night Live, Father Guido Sarducci explained business simply: "You buy something and you sell it for more." It is really quite simple. The math that determines whether you can "sell it for more" is called "unit economics." How much can you profit from the sale of each unit of what your business produces?

Dell said in the quote above that once you have an understanding of the economics you need a strategy. What is a strategy? My most complete post on strategy is about Michael Porter, who has said: "Strategy is about making choices, trade-offs; it's about deliberately choosing to be different. The essence of strategy is choosing what not to do. Operational effectiveness is about things that you really shouldn't have to make choices on; it's about what's good for everybody and about what every business should be doing." After you have a strategy then you can create a structure says Dell. The original structure at Dell was three people assembling PCs working at a six foot table and two more people answering the phone with Dell performing the rest of the necessary functions at the company. The structure of Dell's business has evolved many times, but always in relation to the underlying economics and the strategy of the business.

2. "When I was 19, I saw what I thought was a huge opportunity to change the way personal computers were made and sold. In high school I purchased and took apart one of the very first IBM PCs. I made two interesting discoveries: 1) none of the parts were made by IBM 2) the system that retailed for $3,000 actually cost IBM about $600. I immediately saw this as an opportunity. I started upgrading my own systems, using the same components as IBM, and selling them. The idea grew from there." What a 19 year old Michael Dell saw in the PC business was "unit economics" that were quite favorable. Dell saw the opportunity to take $600 in components and transform that into a product that people would pay $3,000 for. Even better, none of the parts were made by IBM so there was no real barrier to entry and as a result IBM did not have wholesale transfer pricing power over his business. Dell was able to find favorable unit economics because Bill Gates also had a favorable strategy with respect to IBM. The most important business decision that took place in the earliest days of Microsoft was Gates' decision to license Microsoft Basic to MITs (the manufacturer of very first PC known as the Altair) on a non-exclusive basis. This decision by Gates was enabled by the fact that multiple people and businesses can possess the same software at the same time at essentially no incremental cost (software is non-rival). Gates understood the difference between a license and an outright sale which was an essential enabler for both Microsoft and companies like Dell. Gates explained the history of one of the most important deals in business in this way: "The contract with IBM called for us to do all this work on the design of the machine and all this software. We didn't get paid that much–the total was something like $186,000–but we knew there were going to be clones of the IBM PC. We structured that original contract to allow them. It was a key point in our negotiations." Paul Allen elaborated: "We already had seen the clone phenomenon in the MITS Altair days. Other companies made machines that succeeded because they were similar to the Altair. For us it had been easy to modify our software so it worked on those machines too." Not only was Dell able to surf on the phenomenon created by Gates and Allen, he was also able to create his own moat by making some key decisions as will be explained below.

3. "We started the company by building to the customer's order. And interestingly enough, we didn't do it because we saw some massive paradigm in the future. Basically, we just didn't have any capital to mass-produce." "While that was a great way to start the business, it turned out there was a lot more we could do with it, in terms of building relationships with suppliers, reducing inventories and receiving direct input from customers."' Most important, the direct model has allowed us to leverage our relationships with both suppliers and customers to such an extent that I believe it's fair to think of our companies as being virtually integrated. That allows us to focus on where we add value and to build a much larger firm much more quickly. I don't think we could have created a $12 billion business in 13 years if we had tried to be vertically integrated." Dell started his business at a very auspicious time. Powerful forces were transforming the economy and that created massive opportunity for many business. In his 1999 essay Michael Mauboussin pointed out "source of value creation is shifting from physical capital to intellectual capital— from atoms to bits." Better information technology systems (i.e., bits) allowed Dell to create a vertically integrated solutions with only a fraction of the capital that would have been needed in the traditional business world. Professor Gerald Davis describes this phenomenon:

"In 1950 it might have made economic sense to assemble cars in giant vertically integrated factories in Detroit and ship them from there to the rest of the world. Today, the parts of a business are like interlocking plastic bricks that can be snapped together temporarily and snapped apart when they are no longer needed. Information and communication technologies

(ICTs) make starting an enterprise trivially easy, from creating a legal structure to hiring temporary employees to contracting out for production and distribution. Coordinating activities used to be the corporation's strong suit. Now the corporation is increasingly out-maneuvered by alternative forms of enterprise that are more flexible and less costly. The barriers to entry are falling across a wide swathe of industries. In his famous 1937 article "The Nature of the Firm," Nobel Prizewinning economist Ronald Coase explained, "The main reason why it is profitable to establish a firm would seem to be that there is a cost of using the price system. The most obvious cost of 'organising' production through the price mechanism is that of discovering what the relevant prices are." But what if discovering the relevant prices becomes trivial? What if the inputs of a firm, including labor, can be priced and ordered as they are needed? What if, in place of long-term employees, firms were able to contract for workers if and when they were needed for specific tasks—the way that customers can use the Uber app to order a ride?"

4. "Inventory velocity is one of a handful of key performance measures we watch very closely. It focuses us on working with our suppliers to keep reducing inventory and increasing speed." "We tell our suppliers exactly what our daily production requirements are. So it's not, "Well, every two weeks deliver 5,000 to this warehouse, and we'll put them on the shelf, and then we'll take them off the shelf." It's, 'Tomorrow morning we need 8,562, and deliver them to door number seven by 7 a.m.'" "Because we build to our customers' order, typically, with just five or six days of lead time, suppliers don't have to worry about sell-through. We only maintain a few days—in some cases a few hours—of raw materials on hand. We communicate inventory levels and replenishment needs regularly—with some vendors, hourly." Dell did not have much capital when he started so he turned a weakness into a strength. Bill Gurley and Jane Hodges described the Dell strategy in a classic article from 1998:

"From a corporate perspective, the best measure of fitness is return on invested capital (ROIC). This measure matters most because over the long haul, capital flows toward investment opportunities with a high ROIC. Inefficient companies, on the other hand, are eventually starved of the cash they need to survive. To understand just how indispensable technology has become, you have to follow the basic math of return on invested capital. To get ROIC, you divide EBIT, or earnings before interest and taxes, by invested capital. Now let's divide the numerator and the denominator by annual sales. This restates ROIC as operating margin multiplied by asset turnover. In other words, the two components that define a company's fitness are the ability to charge a high spread between price and actual cost, and the ability to generate sales from a small base of invested capital…. companies that lack competitive information technology will be in serious trouble. They will resemble a 40-year-old trying to win Wimbledon with a small wooden racquet. Their business models may no longer be economically sustainable. Companies like Dell have reached an interesting new stage in the evolution of business–negative working capital. They collect money from customers before they have to acquire components or spend money. This phenomenon allows these companies to grow without raising capital, even if day-to-day profitability is zero."

Gurley elaborated on Dell's advantage in another article: "Dell's incredible five days of inventory allows it to pass on component price declines faster than anyone else in the industry. But perhaps the unique aspect of Dell's business advantage is its negative cash conversion cycle. Because it keeps only five days of inventories, manages receivables to 30 days, and pushes payables out to 59 days, the Dell model will generate cash–even if the

company were to report no profit whatsoever." Michael Mauboussin describes the results in his essay Atoms, Bits and Cash in November of 1999.

Dell Computer Corp.

"The balance between profitable growth and liquidity management is all about velocity."

Thomas Meredith, Chief Financial Officer, Dell Computer Corp.[28]

On January 3, 1995, Dell's stock fetched $0.623 per (split-adjusted) share. By June 30, 1999, Dell stock traded at $37.00 per share, almost sixty times the earlier value.

Over the period, Dell management made a deliberate effort to break out all internal activities into their operational components, isolating the essential drivers of return on invested capital. This process highlighted the importance of working capital requirements on invested capital totals.

Through the implementation of the direct model (build to order) and fast receivables collection, the company actually turned working capital into a source of cash. Dell's return on invested capital went from 37% in 1995 to 195% in 1998. Because so much of Dell's invested capital was tied up in working capital, we estimate that without the improvements in the cash conversion cycle, Dell's return on investment would be roughly two-thirds its current level.

The effective management of these assets over the period led to a dramatic rise in market value.

Figure 14
Dell's Shortening CCC Translates into Market Value
in millions; ratios in units

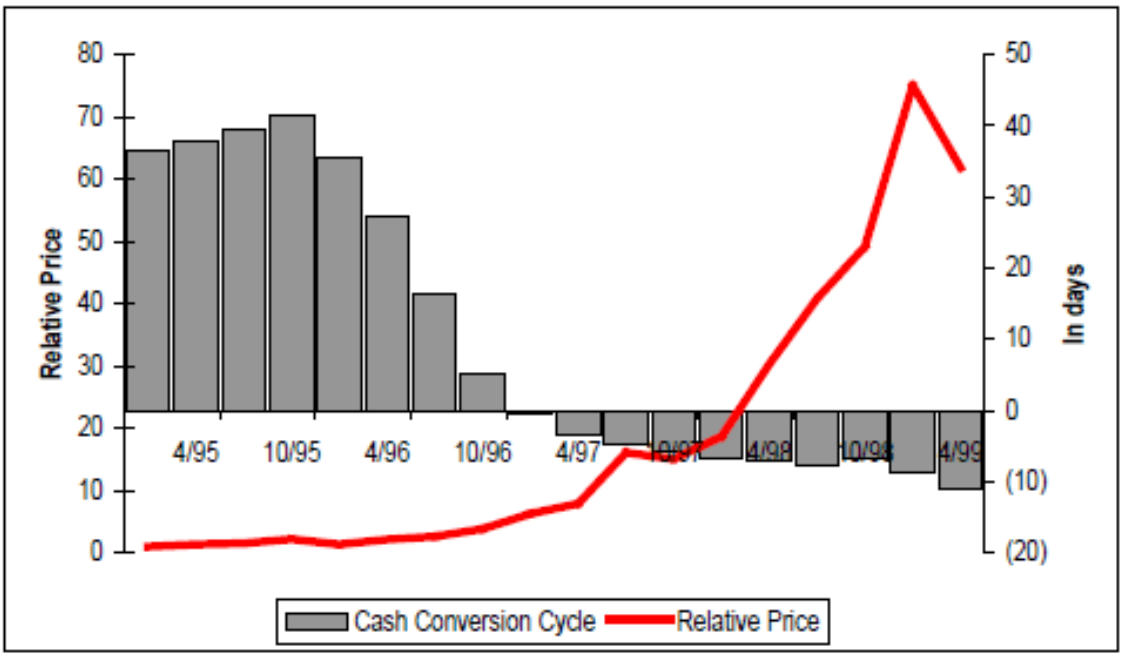

Source: Company financials, disclosure, and FactSet.

5. "We're free cash flow people." Dell shares this attribute with many great operators like Costco's Jim Sinegal. One of my post popular blog posts was on Jeff Bezos. One focus of that post is on his views on the right financial drivers of his business. Bezos is quite clear about what he seeks:

"Percentage margins are not one of the things we are seeking to optimize. It's the absolute dollar free cash flow per share that you want to maximize, and if you can do that by lowering margins, we would do that. So if you could take the free cash flow, that's something that investors can spend. Investors can't spend percentage margins." "What matters always is dollar margins: the actual dollar amount. Companies are valued not on their percentage margins, but on how many dollars they actually make, and a multiple of that." "When forced to choose between optimizing the appearance of our GAAP accounting and maximizing the present value of future cash flows, we'll take the cash flows."

Justin Fox explains:

With free cash flow what counts is when the money actually changes hands. So if you have a business where your customers pay you quickly, you manage your inventory well, and you're able to take your time in paying your suppliers, your free cash flow can be consistently positive even when your net income is not. Which is exactly the kind of business that Jeff Bezos and his colleagues have constructed at Amazon over the past decade. According to my instructor in such matters, Harvard Business School finance professor Mihir Desai, the key metric of a company's cash-generating prowess is the cash conversion cycle, which is days of inventory plus days sales outstanding (how long it takes your customers to pay you, basically), minus how many days it takes you to pay your suppliers. Super-efficient retailers such as Walmart and Costco have been able to bring their CCC down to the single digits. That's impressive. But at Amazon last year, the CCC was negative 30.6 days.

6. "The computer industry when [we] entered it had gross margins of 40 percent plus. On top of that, you had dealers with margins of 20 to 30 percent. So the end user was paying a pretty incredible premium over the cost of goods for the product." "The basic idea was to eliminate the middleman." "Every breakthrough business idea begins with solving a common problem. The bigger the problem, the bigger the opportunity." Jeff Bezos famously said that the profit margins of his competitors are Amazon's opportunity and Dell was an early believer in that approach to business. The longer I am involved the business the more I appreciate the value of being in a business with high gross margins. Life is just better when gross margins are high since you have headroom for sales and marketing as well as profit. By contrast, businesses with low gross margins tend to be soul crushing slogs where every penny spent is another way to go out business. Of course, high gross margins alone are not enough to make a business attractive. You also need a large market. And a moat. At one point I changed the focus of my career from the communications business to the software business and I must admit that a major motivation for the shift was the high gross margins available in software. There were other reason that attracted me like better scalability, but high gross margins are a wonderful thing to have in a business. As Warren Buffett has said: "When a management with a reputation for brilliance tackles a business with a reputation for bad economics, it is the reputation of the business that remains intact."

7. "If we can buy something that's very similar to something we can create ourselves, we believe it might not be valuable for us to create it. On the other hand, if we're thinking about creating something that nobody else has, that's worth doing." "Dell Computer

came along and said, "Now wait a second. If I understand this correctly, the companies that do nothing but put chips on motherboards don't actually earn tremendous profit doing it. If we want to earn higher returns, shouldn't we be more selective and put our capital into activities where we can add value for our customers, not just into activities that need to get done?" I'm not saying those activities are unimportant. They need to get done very, very well. But they're not sources of value that Dell is going to create. When the company started, I don't think we knew how far the direct model could take us. It has provided a consistent underlying strategy for Dell despite a lot of change in our industry. Along the way, we have learned a lot, and the model has evolved." Dell is talking about a point made by Andy Grove, who said once: "You have to understand what it is that you are better at than anybody else and mercilessly focus your efforts on it." Professor Michael Porter argues "the essence of strategy is choosing a unique and valuable position rooted in systems of activities that are much more difficult to match." Grove is saying that a business should find this comparative advantage and focus resources on it with passion. Businesses that try to do everything, often end up doing close to nothing.

8. "The consumer has better information, you have transparency of pricing. You can't trick the consumer anymore. The businesses that had an advantage because they sold things in a geographic area where people had limited information, and they couldn't travel to go buy something else. Those folks are in real trouble. The Net kind of destroys that business model." "At the root of any economic system is the cost of transactions. You have something you want to sell, I want to buy it, and what that transaction ultimately costs is tied to the cost of communicating information. The Internet is the latest evolution of communication technology-tremendously powerful because it enhances the flow of information. So basically it's like a big vacuum that sucks friction out of the economy." Simply increasing product advertising is often not a solution to increasing sales due to higher levels of transparency enabled by Internet. When customers are as well informed as they are today the best way to acquire customers cost effectively is almost always with an organic customer acquisition strategy, meaning they are attracted to the service because it is a great service. Businesses that must sell their products with huge advertising budgets are losing their edge in the Internet era. Jeff Bezos of Amazon puts it this way: "In the old world, you devoted 30% of your time to building a great service and 70% of your time to shouting about it. In the new world, that inverts. Your brand is formed primarily, not by what your company says about itself, but what the company does."

9. "Ideas are commodity. Execution of them is not." "Coming up with the ideas is not the hard part for us. We got more ideas than we know what to do with. The hard part for us is prioritizing the best ones, picking them, and fielding teams to go after them all. We've gotta be careful. Because if we go after too many of them, well then we'll fail to execute, because we won't have the people, the resources. It's sort of one foot in front of the other." "People look at Dell and they see the customer-facing aspects of the direct-business model, the one-to-one relation-ships. What is not really understood is that behind these relationships lies the entire value chain: invention, development, design, manufacturing, logistics, service, delivery, sales. The value created for our customers is a function of integrating all those things." "If you want to sustain excellence over a long time, you'd better come up with a system that works well. Anyone can sprint for a little while, but you can't sprint for forty years." In my blog post on John Doerr I quoted John Doerr as saying "We believe that ideas are easy, execution is everything." A good idea or invention is necessary, but it is far from sufficient to achieve success in business. It takes an entrepreneur to take an idea or innovation and turn into genuinely scalable business. That

means a “roll up your sleeves” and a “make the trains run on time” effort from a team of people. Bill Gates said once: “Being a visionary is trivial. Being a CEO is hard. All you have to do to be a visionary is to give the old ‘MIPS to the moon’ speech — everything will be everywhere, everything will be converged. Everybody knows that. Which is different from being the CEO of a company and seeing where the profits are.” The great CEOs I have seen over the years like John Stanton and Jim Barksdale are masters of execution.

10. “The inspiration initially was my own curiosity about technology and what it could do for people. But I had a sense of urgency about it in 1984. Like all windows of opportunity, they eventually close.” “You have to focus on the point of impact where you can really make a difference in something in a meaningful way. That’s going to evolve. Where you might have had an impact on something three years ago. If you did that same thing now, you wouldn’t have enough of an impact to matter.” Sometimes an opportunity comes along and it has a time stamp. You either grab that opportunity right then and bet big or it is gone. As an example, Bill Gates famously dropped out of Harvard to move to Albuquerque, joining Paul Allen in writing software for the Micro Instrumentation and Telemetry Systems Altair computer they first saw in a Popular Electronics magazine at a newsstand in Harvard Square. The price of the MITS computer in 1975 was $397. It was primitive and lacked easy-to-use software, but even then they could see the potential for this device since they experienced how valuable having access to a computer could be. Despite being their youth, especially in the context of how business was conducted at that time, Gates and Allen realized that if their business was not formed immediately they would miss the opportunity. Gates recalls: “When we saw [the Altair], panic set in. ‘Oh no! It’s happening without us! People are going to write real software for this chip!’” Dell saw his own opportunity and grabbed it. Charlie Munger’s advice is that a person needs a combination of patience and yet aggressiveness when the opportunity is right.

11. “Assets collect risks around them in one form or another. Inventory is one risk, and accounts receivable is another risk. In our case—with 70% of our sales going to large corporate customers—accounts receivable isn’t hard to manage because companies like Goldman Sachs and Microsoft and Oracle tend to be able to pay their bills. But in the computer industry, inventory can actually be a pretty massive risk because if the cost of materials goes down 50% a year and you have two or three months of inventory versus 11 days, you’ve got a big cost disadvantage. And you’re vulnerable to product transitions, when you can get stuck with obsolete inventory.” “Consider what to do with the investment that could be freed up by shedding inventory and other assets now on the balance sheet.” “One of the big changes that is brought about by information technology is that the cost of those connections and those linkages has gone down dramatically. So if you’ve got an operation that builds a component, the cost to communicate worth that operation in an information sense, if it is done electronically goes to zero. That means you can build a linkage between that components supplier and a manufacturer and make it very, very efficient. That enables you to scale more quickly, gives you more flexibility, you can manage supplier networks in a more dynamic fashion, and get things off your balance sheet that aren’t your specialty, and companies can really hone in on something that they’re really great at.” The many ways in which Dell grew by having great financial strategies and tactics is underappreciated. Dell had a succession of great CFOs over the years and it shows. Combine a great CFO and a great information technology infrastructure and that is rocket fuel for success. CFOs take a lot of criticism from engineers since they often put limits on spending. Which reminds me of a story. A CEO I knew took the company’s leadership team on a retreat to a resort that had a

large swimming pool filled with hungry alligators. One night the CEO said to the executives: "A person should be measured by courage. Courage is what made me CEO. This is my challenge to each of you: if anyone has enough courage to dive into the pool, swim through those alligators, and make it to the other side, you will be my successor." While everyone was laughing at the CEO's crazy offer, they suddenly heard a loud splash. When they turned to look at the source of the splash they saw the CFO of the company in the pool, swimming for his life. Amazingly he swam so fast that he avoided the alligators and was able to make an exit using a ladder at the other side the pool with only a fraction of a second to spare. The shocked CEO approached the CFO and said, "You are amazing. I've never seen such courage in my life. You are clearly the right person to be my successor. Tell me what I can do for you." The CFO, panting for breath, looked up and said, "Well, first of all, you can tell me who the hell pushed me into the pool!"

12. "Try never to be the smartest person in the room. And if you are, I suggest you invite smarter people… or find a different room." Dell has always had a range of talented people working with him. One example is Thomas J. Meredith, who was at one time Dell's chief financial officer. There are many other people who have contributed to the success of Dell over the years, many of which are mentioned in this article: entitled: Inside Dell Computer Corporation: Managing Working Capital http://www.strategy-business.com/article/9571?gko=d8c29 As Charlie Munger has said: "Acknowledging what you don't know is the dawning of wisdom. I believe in the discipline of mastering the best that other people have figured out. I don't believe in just sitting down and trying to dream it all up yourself. Nobody's that smart."

Notes:

Dell on Going Private: http://www.cnbc.com/2014/09/23/after-going-private-dell-isnt-looking-back.html

HBR Interview: https://hbr.org/1998/03/the-power-of-virtual-integration-an-interview-with-dell-computers-michael-dell

Justin Fox: https://hbr.org/2014/10/at-amazon-its-all-about-cash-flow/

Gurley and Hodges Fortune Article: http://archive.fortune.com/magazines/fortune/fortune_archive/1998/10/12/249302/index.htm

WSJ on the Dell Model: http://www.wsj.com/articles/SB944003985432882680

Technology Review Article on Dell: https://www.technologyreview.com/s/401105/direct-from-dell/

Mauboussin on CAP: http://people.stern.nyu.edu/adamodar/pdfiles/eqnotes/cap.pdf

Mauboussin on Measuring the Moat: http://csinvesting.org/wp-content/uploads/2013/07/Measuring_the_Moat_July2013.pdf

Mauboussin on Atoms, Bits and Cash: http://giddy.org/dbs/neweconomy.pdf

Professor Davis: http://vanishingcorporation.com/wp-content/uploads/sites/62/2016/02/Davis-Booksite-Excerpt.pdf

Mauboussin: Atoms, Bits and Cash: http://giddy.org/dbs/neweconomy.pdf

A Dozen Things I've Learned About the Music Business (and Businesses Like It)

September 3, 2016

1. **"I wish there had been a music business 101 course I could have taken." Kurt Cobain.** There are many musicians like Cobain who are thrust into situations without financial help they can trust. Every musician should take a lesson from the comedian and actress Tina Fey: "I came to New York in 1997 to work on Saturday Night Live. I realized I have no head for business. And it would have been very easy for me to let someone take control of my money – for me to say, 'Here, sign my checks…whatever.' But… as much as it makes me super sleepy, I have to pay a lot of attention when my business manager talks to me about money. He talks to me about taxes, and I get really, really sleepy. But I listen." Most people get bored quickly learning about business topics. I've thought a lot about how to fix this problem, but I really don't have a great solution. Warren Buffett tries to make business entertaining in his own way and that helps. But the unfortunate fact is: few people are willing to do the necessary work to learn business concepts. I fear the situation will get worse with time and not better. Once upon a time people learned about business when they joined a big company and went through what was effectively an apprenticeship. Today companies are smaller and fewer people receive that training. I wrote about many of the basic business principles that apply to the entertainment business in my blog post on Louis CK. I supplement what I said in that post in my usual format below.

2. **"At the end of the day, there's only a few major stars in the music business, and then there's all these people that are aspiring to be that." John Legend.** One of my favorite articles on the music business was written by Duncan Watts and is entitled: "Is Justin Timberlake a Product of Cumulative Advantage?" This article by Watts (the link is in the notes) makes important points that must be understood if you want to understand modern economics generally. The key insight is simple: People don't make decisions independently. Something called "preferential attachment" happens in some situations and this phenomenon produces the "power law distributions that rule everything around the music industry." This power law phenomenon is not new but as Nassim Taleb points out, it has received an accelerating boost from digitization and the internet. A writer of a story about Nassim Taleb put it this way: "We live in Extremistan, where black swans proliferate, winners tend to take all and the rest get nothing –there's Domingo and a thousand opera singers working in Starbucks." In an article entitled *The Music Industry's New Math* New York

Magazine points out: “Since 2008, there have been 66 No. 1 songs, and six artists are behind almost half of them. (In 1986, there were 31 No. 1 songs by 29 different people).”

The distribution of financial success in the music looks like this:

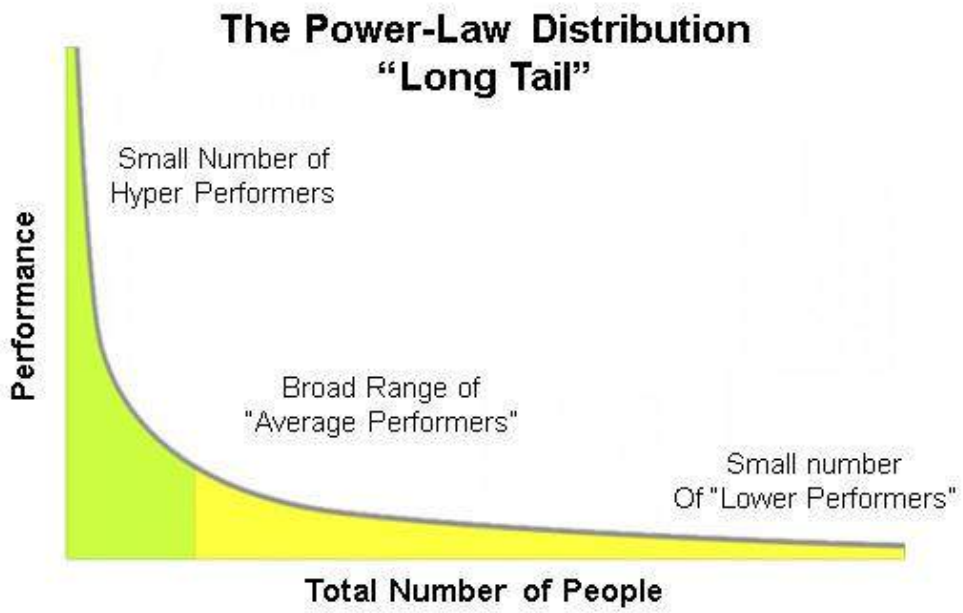

As an example of a power law distribution in the music business: The share of concert revenue taken home by the top 1% of performers has more than doubled, rising from 26 percent in 1982 to 56 percent in 2003.

The Top Artists are Getting a Larger Share of Total Ticket Revenue…

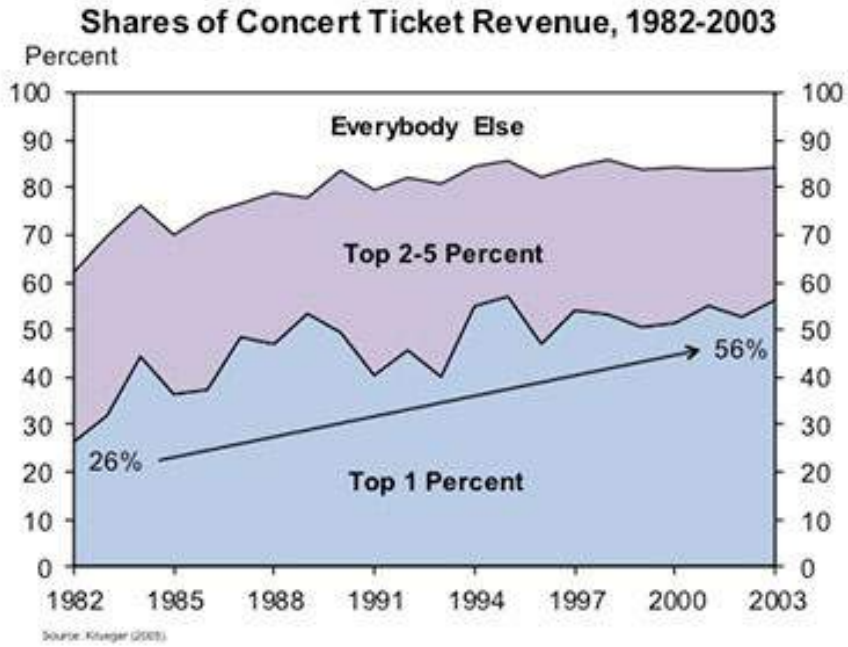

As another example, the top 5 percent of musicians take home almost 90 percent of all concert revenues.

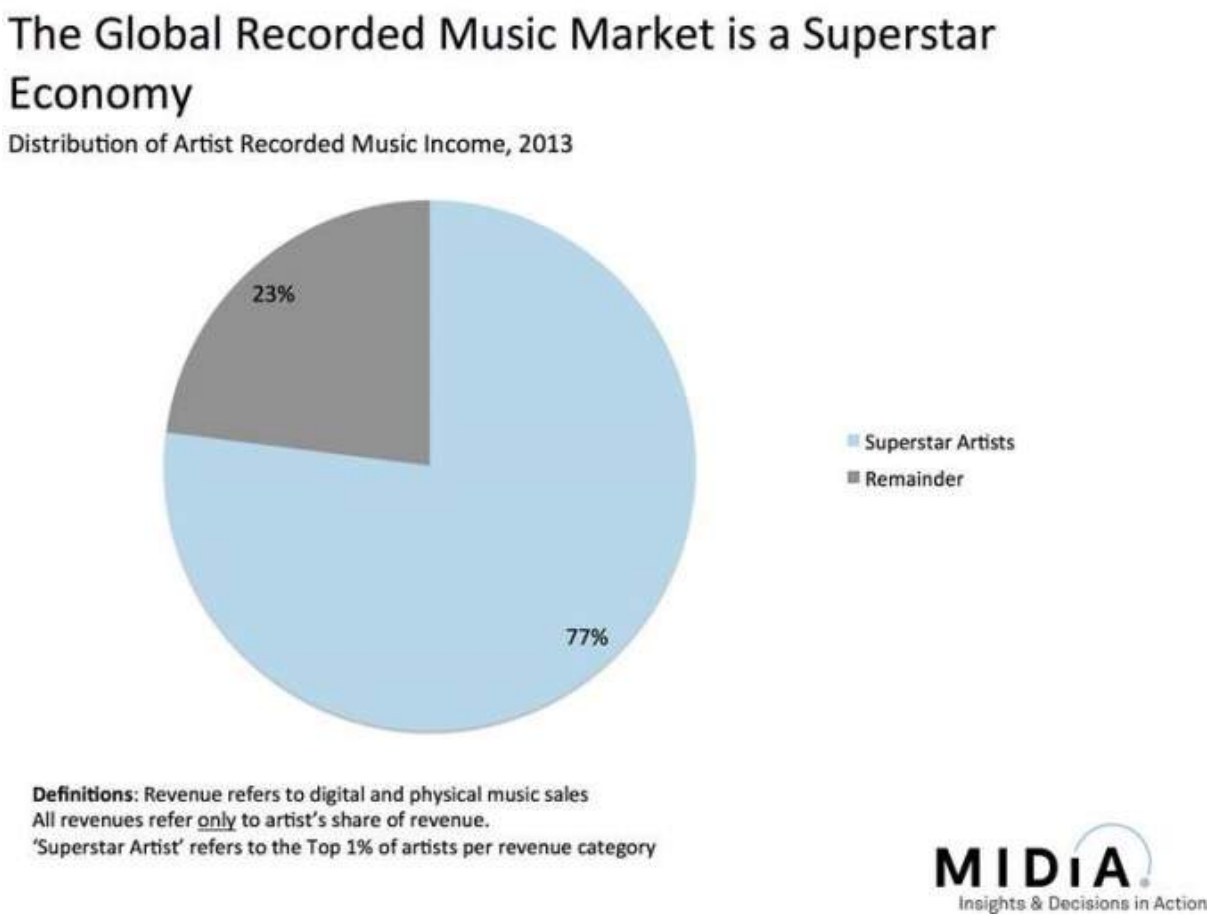

3. **"The TV business is uglier than most things. It is normally perceived as some sort of cruel and shallow money trench through the heart of the journalism industry, a long plastic hallway where thieves and pimps run free and good men die like dogs, for no good reason." Hunter Thompson.** You will see versions of this quotation by Hunter Thompson that substitute the word "music" for "TV." the reality is that Thompson wasn't writing about the music business although he could have been since they share attributes. You may also sometimes see the following tag line attached to this quote: "There's also a negative side." While it is a clever addition, it is fake. Sorry. But that does not mean that the quote is not directionally correct. And it does make for a good quote (I love a good quote as you probably know). Anyway, "payola" in all its forms has always been a part of the music business. The word is combination of "pay" and "Victrola" (i.e. record player). At first, payola was mostly about cash, which lead to a major scandal in the 50s that lead to a law prohibiting payments for airplay in certain situations where there wasn't full disclosure. Payola is messy, cruel and shallow money trench, which is a shame since it can block the rise of talented people.

4. **"[Any money I make] goes straight into my bank account, where it turns all moldy and smelly." "I didn't go and buy a Lamborghini because I had a million dollars." "I drive a family car—not a monster SUV but a family car that fits five people. I've got a house that is just big enough, too." Dave Grohl.** This musician's statement reminds me of something Warren Buffett once said: "There's nothing material I want very much." Wanting too much can make you really miserable. This point was made

well in a line of dialogue of a fictional character in Charles Dickens's 1850 novel, David Copperfield: "Annual income twenty pounds, annual expenditure nineteen pounds nineteen and six, result happiness. Annual income twenty pounds, annual expenditure twenty pounds nought and six, result misery." While there is no formula to get rich, staying rich is a bit easier if you can get control of your emotions.

5. **"I just don't agree with perpetuating the perception that music has no value and should be free." Taylor Swift.** Music is a public good, which can be a danger zone for profitability. What is a public good? Well, public goods are both non-rival and non-excludable. If I make a digital copy of your digital music, you still have your music (the music is non-rival). If I steal your phone you will no longer have a phone (a phone is rival). Music becomes "excludable" if you move the musician's performance into a theater, since you can exclude people from hearing the performance who do not pay. Lots of important industries like journalism have this public good problem. It is not a new problem and applies to things like lighthouses and national defense.

	Excludable	Non-excludable
Rivalrous	**Private goods** food, clothing, cars, parking spaces	**Common-pool resources** fish stocks, timber, coal
Non-rivalrous	**Club goods** cinemas, private parks, satellite television	**Public goods** free-to-air television, air, national defense

The music business has responded to this public problem by shifting to complementary products that are excludable like concerts and merchandise sales. This works for musicians but is not enough to save the newspaper business since people will attend only so many conferences.

This public goods problem combined with other points that I have described above above place real and uncomfortable pressure on some people who trying to earn a living from music and similar professions. Neil Howe writes:

http://i.forbesimg.com/forbes/scripts/fb471d66.ie_scripts.js

http://i.forbesimg.com/forbes/scripts/21ef3912.ie_vendor.js

"Data from the Bureau of Labor Statistics on specific professions point to a similar conclusion. While the incomes of the creative class have generally kept pace with inflation, their ranks have shrunk—in some cases, drastically. From 1999 to 2015, the number of musicians and singers slipped 20%; photographers, 24%; news analysts, reporters and correspondents, 29%; dancers and choreographers, 42%. (Though these numbers don't include the self-employed, freelancers tend to earn less than their counterparts with conventional jobs.)"

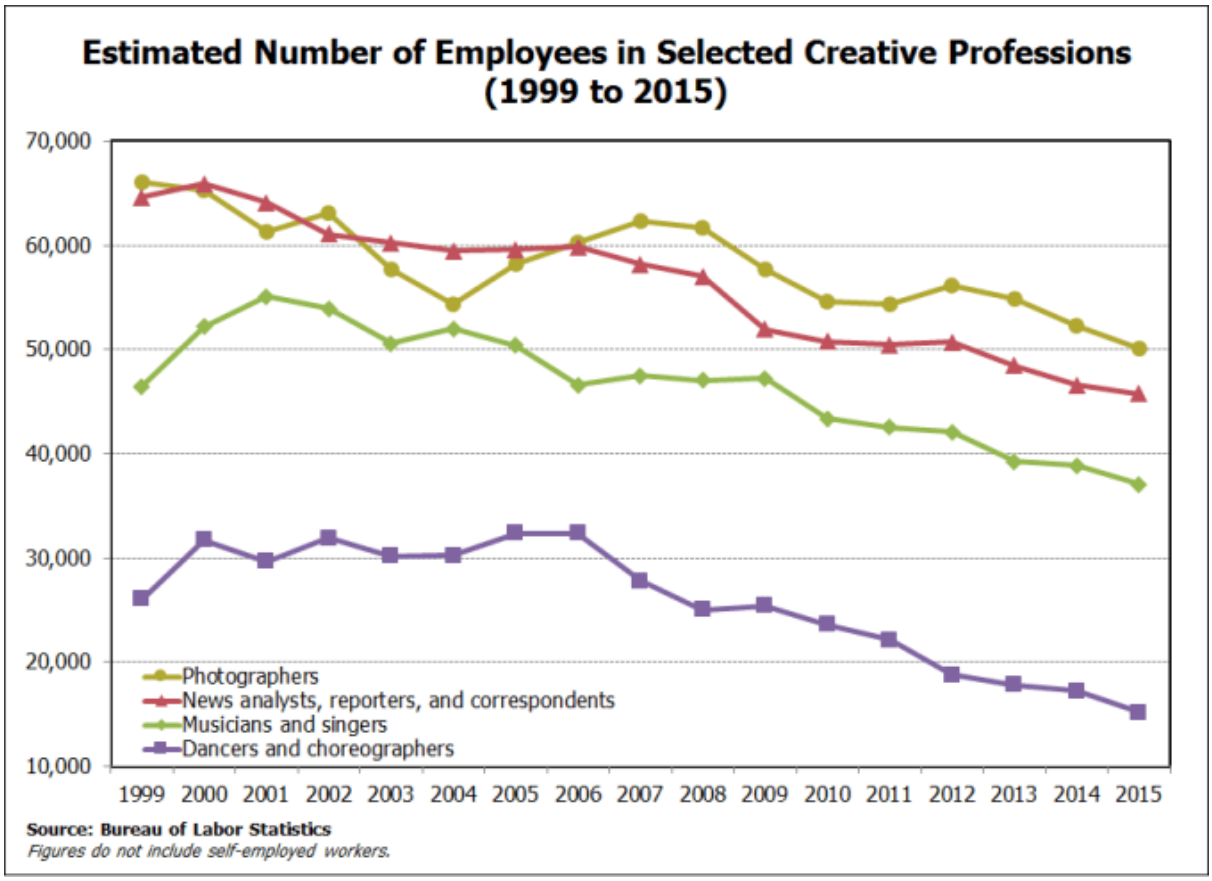

6. **"When the Rolling Stones started out they didn't make any money out of records because record companies didn't pay you. Nobody got paid. I always wonder if Frank Sinatra got paid. Your royalty was so low. If you sold a million records you got a million pennies. It was all very nice, but not what you imagined you were going to get." "There was a small period from 1970 to 1997, where people did get paid, and they got paid very handsomely and everyone made money. But now that period has gone. So if you look at the history of recorded music from 1900 to now, there was a 25 year period where artists did very well, but the rest of the time they didn't." Mick Jagger.** That the economics of the music business are worse than they have been at some times in the past in not controversial. This unfortunate reality means that people need to be more creative in finding solutions. My blog post on Rza of Wu-Tang clan is about a musician who figured out how to change the rules so his share of the business is better. Just selling digital music is no longer enough.

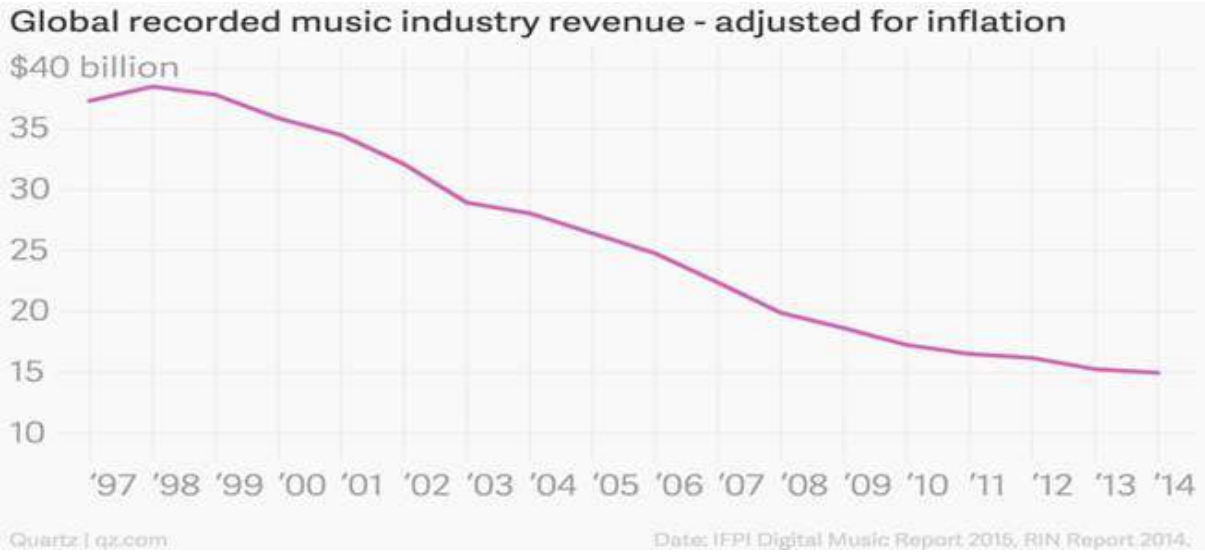

7. **"People who cost too much: manager, lawyer, publicist, label, music publisher." Roger McNamee.** Every business has a "value chain." Some portions of that value chain is not necessary and yet they may take a big a slice of the profits. What is going on in the value chain today is a battle over "wholesale transfer pricing" between the layers. Set out below is one depiction of some of the different types of people who are trying to get a slice of the profit from the music industry.

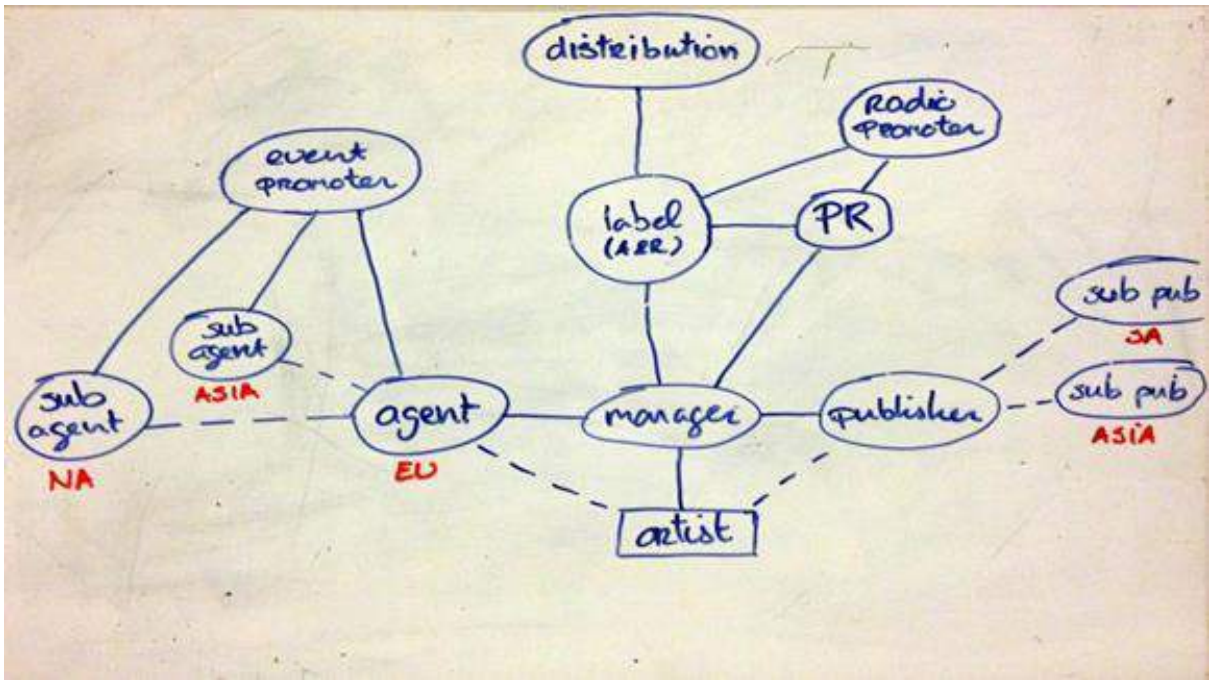

8. **"I'm not a businessman, I'm a business, man**." **Jay-Z.** In the modern world of the music business much of the profit must come from complementary goods. That means concerts and merchandise and other services. The entertainer is a business. If

they are not thinking about different kinds of revenues related to the business they may not make enough money to stay in the business. One interesting thing Hip-Hop did was make it OK for a musician to sponsor goods again without being a sellout. That helps musicians work around the "public good" problem. This writer raises the idea of complementary goods as a partial solution:

"One interesting thing about this market is there are two major sets of players: Those who make their money solely from these music services and those who make the vast majority of their money elsewhere. Spotify and Pandora can't afford to keep losing money in this business because it's the only business they have. Amazon, Apple, Google and others, however, can afford to subsidize these offerings or run them at low margins because they feed the other parts of their businesses and generate additional revenue indirectly. Apple may be in the strongest position of all here, because it has a user base willing to pay for content and it can afford to run the music business at a relatively low margin, while Amazon's customer base is highly driven by saving money, and Google's true customer base is its advertisers, not its users. Much has been made of Spotify's lead over Apple in on-demand streaming, but Apple offers the flavor of streaming the labels like and has already signed up half as many paid subs as Spotify."

9. **"Grateful Dead Fans are like people who like licorice. Not everyone likes licorice, but the people who like licorice REALLY like licorice." Jerry Garcia.** I was never a Dead Head. But I know people who are. And I know people who love to hate Dead Heads. Frankly people who spend their lives talking about what "real music is" bores me. But I like a lot of things other people find boring so I should not complain. In any event, music is not an exception to the rule that there can be significant be benefits when a business differentiates. Being unique can create a moat. Professor Michael Porter writes: "It's incredibly arrogant for a company to believe that it can deliver the same sort of product that its rivals do and actually do better for very long." If you deliver the same product or service as your competitor you by definition don't have a moat. Competition will be based on price and price-based competition inevitably degrades to a point where profit disappears. Porter teaches: "if customers have all the power, and if rivalry is based on price… you won't be very profitable." He adds: "Producing]the highest-quality products at the lowest cost or consolidating their industry is trying to improve on best practices. That's not a strategy."

10. **"I don't waste my time thinking about how I could make more when I already got enough. I'm not a banker, I'm a musician." "[Money] buys me freedom. It allows me to do what I want to do and not have to worry about anything at all." Dave Grohl**. This famous musician seems to have a very firm grasp on the "circle of competence" idea. Grohl seems to recognize that risk comes from not knowing what you are doing. If you do not understand much about investing and finance, it is very wise to keep your approaches simple. Know your limitations. Be smart, by not being stupid.

11. **"To me, music was an escape from working in a furniture warehouse." "I was a manual-labor worker, doing masonry and working at a furniture warehouse. I worked at a nursery breaking fucking rocks. There were not a lot of career**

opportunities for me. At one point, I thought, 'I know how to play drums. I'll learn to read music, become a session drummer and from that money, I'll put myself back through school." "I wanted to have a kickass job downtown, in Washington, D.C. But that wasn't going to happen. In Washington, D.C., you're either in the Army or the government. I was too skinny to be in the Army and too stupid to be in the government – or too smart." Dave Grohl. Many musicians are one hit wonders who therefore have short careers. They may need to live for a lifetime mostly based on the income from that one hit. Sports stars are similar. Yes, they can get another job after the music career ends but it may not pay nearly what they generated from a brief period of time creating music. Since income can be very lumpy it pays to save. Grohl is far from a one hit wonder, but he is financially careful nevertheless.

12. **"The reward of playing music should be playing music." Dave Grohl.** Enjoy what you do and you will not only be happier, but will be much more likely to be successful since you can adopt the attitude of a missionary not a mercenary. Missionaries survive through the tough times, which is usually what success in the music business requires. Many people work for many years in order to become an overnight sensation. It is important to note that what you love will likely change substantially over your lifetime. This is natural. Tastes and desires evolve over the years, which is a good thing, since otherwise life can get boring.

Notes:

Duncan Watts: http://www.nytimes.com/2007/04/15/magazine/15wwlnidealab.t.html

Generation of Swine: https://books.google.com/books?id=hysRM1imbJ0C&lpg=PA43&pg=PA43#v=onepage&q&f=false

BBC: http://www.bbc.com/news/10581280

The Music Business: https://www.budivoogt.com/understanding-music-industry-record-labels-ars-distribution-pluggers-pr/

Quartz: http://qz.com/383109/the-music-industry-has-hit-its-rock-bottom/

Nesta: http://www.nesta.org.uk/blog/artistic-inequality-industry-or-human-nature

Recode: http://www.recode.net/2016/8/26/12645066/music-streaming-services-pandora-spotify-amazon-pandora

Rza: https://25iq.com/2016/01/02/a-dozen-things-i-have-learned-about-business-from-rza-the-founder-of-wu-tang-clan/

John Bersin: http://www.forbes.com/sites/joshbersin/2014/02/19/the-myth-of-the-bell-curve-look-for-the-hyper-performers/#7ae8019d13fc

Neil Howe: http://www.forbes.com/sites/neilhowe/2016/08/31/the-new-rules-of-the-creative-economy/#695d7cc259f0

Pollstar: http://www.pollstarpro.com/files/charts2015/2015YearEndBusinessAnalysis.pdf

New Math: http://nymag.com/arts/popmusic/features/grizzly-bear-2012-10/

A Dozen Ways to Apply the Lessons Taught in the Book "The Most Important Thing" by Howard Marks

September 17, 2016

When I am asked by someone what book they should read first to learn about investing I often suggest Howard Marks' *The Most Important Thing* **https://www.25iqbooks.com/books/207-the-most-important-thing-illuminated-uncommon-sense-for-the-thoughtful-investor-columbia-business-school-publishing**

The book does not take too long to read and the points Marks makes are simple and understandable. *The Most Important Thing* is currently a top five rated book on my book discovery web site **https://www.25iqbooks.com/**. Warren Buffett has said about this book: "This is that rarity, a useful book. When I see memos from Howard Marks they're the first things I read. I always learn something and that goes double for this book." The only reason I might hesitate in making *The Most Important Thing* my first recommendation is that some people may need to read a survey book on investing first to learn some terminology and basic concepts. For that primal level and survey type introduction to investing I usually chose one of the books by the Bogleheads or John Bogle himself.

This post is not a book review. What I will do in this post is explain how to identify situations where you can apply the ideas in the book.. The key skill you need to acquire to do this well is pattern recognition. The more you work at applying these ideas, the better you will get at applying these principles, the more fun you will have with the process, the more you investing skill you will acquire [repeat]. What I just described is an example of a positive feedback loop. As Mae West once said: "Too much of a good thing can be wonderful." Improving your investing results is a very good thing indeed.

Howard Marks is a value investor. Someone might say: "What does value investing have to do with other investing systems?" The answer to that question is: "All intelligent investing is value investing." Who said that? Charlie Munger. Why did he say that? Because the foundational principles of value investing are universal. The need for a margin of safety, a business valuation process and phenomena like moats are universally applicable to any style of investing. These principles do not apply to speculation, but that is a subject for another post.

To convey my points in this post I decided to take an investing style that many would consider to be very different from value investing and show that they are in fact based on the same principles applied in different ways to different types of assets. That other investing system I will discuss here is venture capital. Venture capitalist and entrepreneur Andy Rachleff has said: "My investment idol is a guy named Howard Marks, who runs a hedge fund in LA., you might know called Oaktree. He's as well known for his writings as he is his

returns, which are very, very good. He once wrote an article about investing which I think relates well to entrepreneurship as well."

As always on this blog, the words written or spoken by the subject of the post (in this case what Howard Marks wrote in his book *The Most Important Thing*) are in bold.

1. "The expected result is calculated by weighing each outcome by its probability of occurring." Once upon a time in 1999, Sergei and Larry were looking to raise some capital for a business they were calling Google. One of the venture capital firms the Google founders pitched in seeking an investment was Kleiner Perkins, which saw hundreds of other pitches that year, just like they do every year. Out of all of the firms Kleiner considered that year they made 85 investments. One of those 85 was an investment of $12.5 million in Google (another venture capital firm named Sequoia made the same bet). This Kleiner IX fund also invested in AutoTrader and Martha Stewart Living Omnimedia Inc. in 1999 but it is not much of an exaggeration to say that the Google investment was all that mattered in that venture capital fund and in Silicon Valley in general that year.

In making a decisions like Kleiner did in 1999, the venture capital firm performs an "expected value" analysis which is: the weighted-average value for a distribution of possible outcomes. In other words, expected value is calculated by multiplying the payoff (i.e., stock price) for a given outcome by the probability that the outcome materializes. As Buffett likes to say: "take the probability of loss times the amount of possible loss from the probability of gain times the amount of possible gain." Venture capital firms have a hard problem in that it is not easy to make the expected value calculation since there is a great deal of risk, uncertainty and ignorance related to the decision. You will sometimes hear venture capitalists say that they make decisions based on their gut instinct, but this really is an investor making an expected value calculation using rough inputs determined in many cases in their head based on pattern recognition skills. Precise inputs are not required to make an expected value calculation and the math can be done in your head if you know it well and you are seeing a substantial bargain that more than covers any mistakes on your part. Michael Mauboussin lays out a key part of the task for any investor in his usual clarifying manner in his essay "Ruminations on Risk":

"Subjective probabilities describe an investor's "degree of belief" about an outcome. These probabilities are rarely static, and generally change as evidence comes along. Bayes's Theorem is a means to continually update conditional probabilities based on new information. Bayesian analysis is a valuable means to weigh multiple possible outcomes when only one outcome will occur. As Robert Hagstrom notes, the textbooks on Bayesian analysis suggest that if you believe that your assumptions are reasonable, it is perfectly acceptable to make your subjective probability of a particular event equal to a frequency probability. Thinking about the investing world probabilistically is critical to the margin of safety concept."

2. "Many futures are possible, to paraphrase Dimson, but only one future occurs. The future you get may be beneficial to your portfolio or harmful, and that may be attributable to your foresight, prudence or luck. The performance of your portfolio under the one scenario that unfolds says nothing about how it would have fared under the many 'alternative histories' that were possible." They key point is this is that Kleiner and Sequoia did not know that Google would be a tape measure financial home run. It was enough that they thought it had a significant chance to do so and that the potential payoff was

massive. So how does a venture capitalist deal with this uncertainty about the future? Warren Buffett describes the approach:

"If significant risk exists in a single transaction, overall risk should be reduced by making that purchase one of many mutually-independent commitments. Thus, you may consciously purchase a risky investment – one that indeed has a significant possibility of causing loss or injury – if you believe that your gain, weighted for probabilities, considerably exceeds your loss, comparably weighted, and if you can commit to a number of similar, but unrelated opportunities. Most venture capitalists employ this strategy. Should you choose to pursue this course, you should adopt the outlook of the casino that owns a roulette wheel, which will want to see lots of action because it is favored by probabilities, but will refuse to accept a single, huge bet."

This approach employed by venture capitalists outlined by Buffett is essential given the nature of convex bets. As I have written in previous blog posts, the value that is uncovered by venture capital is achieved through a process that is based on trial and error by the entrepreneurs. There is no absolute certainty in investing. Ever. There is no future. What exists now and in the past is what we have and when we look forward all we should think about is a probability distribution. What this means is that when it comes to the future, there is no "there there" yet. For this reason investing of all kinds is inherently a probabilistic activity. In any form of investing you can be wrong even though you made the right decisions based on probability. And vice versa. Venture capital investing is unique in that the bargains being discovered are convex and outcomes that result in financial success being determined by very few winners. Startups are not the sort of undervalued asset that a traditional value investor seeks. But both types of assets should be considered using the same basic principles.

3. "Since other investors may be smart, well-informed and highly computerized, you must find an edge they don't have. You must think of something they haven't thought of, see things they miss or bring insight they don't possess. You have to react differently and behave differently. In short, being right may be a necessary condition for investment success, but it won't be sufficient. You must be more right than others… which by definition means your thinking has to be different." "To achieve superior investment results, you have to hold non-consensus views regarding value, and they have to be accurate. That's not easy." It is provable mathematically that you cannot beat the market if you are the market. To outperform the market you must take positions that are at odds with consensus and be right about that decision. As an example, in the spring on 1995 Tom Alberg was asked to be an investor in a startup created by Jeff Bezos by the name of Amazon. Alberg wasn't sure whether to make that investment:

"Bezos hadn't launched the site yet. He had a good business plan that was solely focused on books. It was going to break even in year two. Sounded attractive. The other thing, I loved bookstores…. I met with him, and I thought he was a very smart guy and intrigued. I said: Well, I am potentially interested but let me think about it. The next week I went to Barnes & Noble bookstore. I was trying to buy a book for my son, who was starting a business. And I had that sort of bookstore frustration where the salespeople didn't know. I finally figured out the book I wanted and they didn't have it. So, I said maybe there is room for online. Then, every month for the next couple months, they launched it in June, I think, Jeff would send me an email and say: 'Gee, we've now sold books in eleven states.' And then I get an email and it said: 'Revenues are up to $70,000 a week.' And: 'We just sold our first book to a European customer.' I met with him a couple more times, and invested."

Lots of people turned Jeff Bezos down that year. I know one such person and it impacts his investing to this day since it causes him in my view to write too many checks. For better or worse I was not asked to invest. But I know seven people who said yes.How did it workout for the people who invested?

Jeff Bezos: "The riskiest moment for Amazon, was at the very, very beginning. I needed to raise $1 million at a certain point, and I ended up giving away 20 percent of the company for a million dollars."

Charlie Rose: "A helluva a deal for somebody."

Jeff Bezos: "A lot of people did very well on that deal (laughs). But they also took a risk, so they deserve to do very well on that deal. But I had to take 60 meetings to raise $1 million, and I raised it from 22 people at approximately $50,000 a person. And it was nip and tuck whether I was going to be able to raise that money. So, the whole thing could have ended before the whole thing started. That was 1995, and the first question every investor asked me was: 'What's the Internet?'"

4. "To boil it all down to just one sentence, I'd say the necessary condition for the existence of bargains is that perception has to be considerably worse than reality. That means the best opportunities are usually found among things most others won't do. After all, if everyone feels good about something and is glad to join in, it won't be bargain-priced." "A hugely profitable investment that doesn't begin with discomfort is usually an oxymoron." "The most profitable investment actions are by definition contrarian: you're buying when everyone else is selling (and the price is thus low) or you're selling when everyone else is buying (and the price is high). These actions are lonely and… uncomfortable." "The thing I find most interesting about investing is how paradoxical it is: how often the things that seem most obvious – on which everyone agrees – turn out not to be true." To find something that is undervalued you need to be looking where others are not looking. It has been said that the best venture capitalists are looking for something that is half crazy. Why? Well, people are generally fearful of investments that are even part crazy and that fear on the part of others can create some bargains due to mis-pricing. Something that others do not believe is valuable, or better yet, is not yet on anyone's radar, can be offered to a venture capital investor at a bargain price. A venture capitalist is just looking for a different type of asset available at a bargain than a typical value investor. Venture capitalists are looking for a chance to purchase an asset that is highly "convex," which means there is a huge upside and a relatively small downside. For example, a venture capitalist is not buying something like a well-known consumer product brand at less than intrinsic value. They are instead is looking for convex bets that can be bought at less than their true value. As is the case with any other financial asset a venture capitalist can pay too much for an asset that has convexity. But there were some people in the venture capital business who though the valuation of Google in 1999 was too high and passed. The 1999 investment in Google by Kleiner and Sequoia had tremendous convexity (massive upside and relatively small downside). The most these two venture firms who invested in Google in that round could lose is what they invested. Similarly, early seed round investors in Amazon could only loose what they invested. If they still owned those Amazon shares, the total gain would greater than ~38,000%.

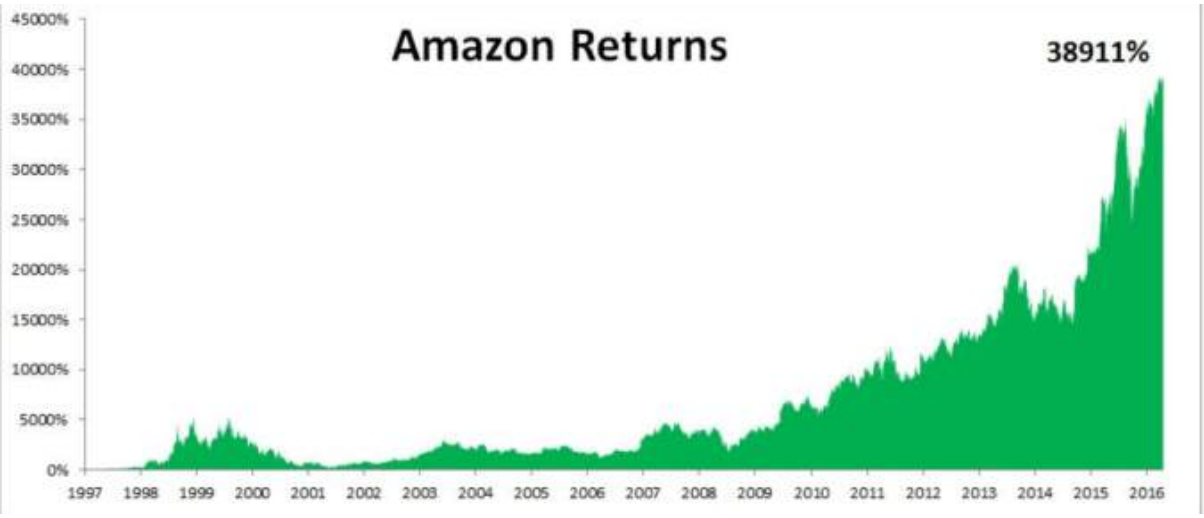

5. "I've said for years that risky assets can make for good investments if they're cheap enough. The essential element is knowing when that's the case. That's it: the intelligent bearing of risk for profit, the best test for which is a record of repeated success over a long period of time." To discuss risk you must first start with a definition. My favorite definition is from the work of Richard Zeckhauser who teaches at Harvard:

Table 1. Escalating Challenges to Effective Investing

	Knowledge of States of the World	Investment Environment	Skills Needed
Risk	Probabilities known	Distributions of returns known	Portfolio optimization
Uncertainty U	Probabilities unknown	Distributions of returns conjectured	Portfolio optimization, Decision theory
Ignorance UU	States of the world unknown	Distributions of returns conjectured, often from deductions about other's behavior. Complementary skills often rewarded along side investment	Portfolio optimization. Decision theory. Complementary skills (ideal) Strategic inference.

Zeckhauser explains an important take away from those chart:

"The returns to UUU investments can be extreme. We are all familiar with the Bell Curve (or Normal Distribution), which nicely describes the number of flips of a fair coin that will come up heads in a large number of trials. But such a mechanical and controlled problem is extremely rare. The standard model often does not apply to observations in the tails. So too with most disturbances to investments. More generally, movements in financial markets and of investments in general appear to have much thicker tails than would be predicted by Brownian motion, the instantaneous source of Bell Curve outcomes. That may be because the fundamental underlying factors produce thicker tails, or because there are rarely occurring anomalous or weird causes that produce extreme results, or both. Nassim Taleb and Benoit Mandelbrot posit that many financial phenomena are distributed according to a power law, implying that the relative likelihood of movements of different sizes depends only on their ratio. Power distributions have fat tails. In their empirical studies, economists frequently assume that deviations from predicted values have normal distributions. That makes computations tractable, but evidence suggests that tails are often much thicker than with the normal."

The key point is that venture capital is all about exceptions and phenomenon that express themselves in power laws. It is not an investing discipline that is ruled by a Bell curve, but it is still a probabilistic activity.

6. "In thinking about risk, we want to identify the thing that investors worry about and thus demand compensation for bearing. I don't think most investors fear volatility. In fact, I've never heard anyone say, "The prospective return isn't high enough to warrant bearing all that volatility." What they fear is the possibility of permanent loss." "Riskier investments are ones where the investor is less secure regarding the eventual outcome and faces the possibility of faring worse than those who stick to safer investments, and even of losing money. These investments are undertaken because the expected return is higher. But things may happen other than that which is hoped for. Some of the possibilities are superior to the expected return, but others are decidedly unattractive." Risk comes from not knowing what you are doing. The best way to lower risk is to know what you are doing. It's that simple. If riskier investments could be counted on to generate higher returns than they would not be riskier is the applicable famous Howard Marks quip on this point.

7. "First-level thinking says, 'It is a good company; let's buy the stock.' Second-level thinking says, 'It's a good company, but everyone thinks it's a great company, and it's not. So the stock's overrated and overpriced; let's sell.' First-level thinking says, 'The outlook calls for low growth and rising inflation. Let's dump our stocks.' Second-level thinking says, 'The outlook stinks, but everyone else is selling in panic. Buy!' First-level thinking says, 'I think the company's earnings will fall; sell.' Second-level thinking says, 'I think the company's earnings will fall less than people expect, and the pleasant surprise will lift the stock; buy.'" Second level thinking is about finding value that others don't appreciate. You can't beat the crowd if you are the crowd. Here's Howard Marks writing in one of his wonderful essays:

"Remember your goal in investing isn't to earn average returns; you want to do better than average. Thus your thinking has to be better than that of others – both more powerful and at a higher level. Since others may be smart, well-informed and highly computerized, you must find an edge they don't have. You must think of something they haven't thought of, see things they miss, or bring insight they don't possess. You have to react differently and behave

differently. In short, being right may be a necessary condition for investment success, but it won't be sufficient. You must be more right than others . . . which by definition means your thinking has to be different."

The matrix that describes the outcomes is:

	Consensus	Non-consensus
Success	Index Fund/ETF	Above Market Return for Top VCS and Value Investors
Failures	Poseur VCs	Necessary Part of Success for Top VCS

8. "Cycles will rise and fall, things will come and go, and our environment will change in ways beyond our control. Thus we must recognize, accept, cope and respond. Isn't that the essence of investing?" "Processes in fields like history and economics involve people, and when people are involved, the results are variable and cyclical. The main reason for this, I think, is that people are emotional and inconsistent, not steady and clinical. Objective factors do play a large part in cycles, of course – factors such as quantitative relationships, world events, environmental changes, technological developments and corporate decisions. But it's the application of psychology to these things that causes investors to overreact or underreact, and thus determines the amplitude of the cyclical fluctuations." "Investor psychology can cause a security to be priced just about anywhere in the short run, regardless of its fundamentals." "In January 2000, Yahoo sold at $237. In April 2001 it was $11. Anyone who argues that the market was right both times has his or her head in the clouds; it has to have been wrong on at least one of those occasions. But that doesn't mean many investors were able to detect and act on the market's error." "A high-quality asset can constitute a good or bad buy, and a low-quality asset can constitute a good or bad buy. The tendency to mistake objective merit for investment opportunity, and the failure to distinguish between good assets and good buys, gets most investors into trouble." "It has been demonstrated time and time again that no asset is so good that it can't become a bad investment if bought at too high a price. And there are few assets so bad that they can't be a good investment when bought cheaply enough." Howard Marks believes that almost everything is cyclical. And venture capital is no exception to this rule. Other people agree the venture industry is cyclical. Bill Gurley once put it this way: "Venture Capital has long been a trailing indicator to the NASDAQ. Venture capital is a cyclical business." "Moreover, deep down most LPs know that performance in the VC sector is counter cyclical to the amount of money raised by VCs." Andy Rachleff has similarly said: "[Venture capital is] a very cyclical business. So there was a cycle from 1980-1983 that looked a lot like 1996-1999. Only an order of magnitude smaller on every dimension." "I don't think a bubble is an environment where things are valued highly, I think it's an environment where crappy companies are valued highly." Sometimes growth is valued more than profitability by markets and sometimes it isn't. Sometimes cash is relatively easy to raise if you have a good business and sometimes

you can't raise five cents even if you have a good or even great business. Howard Marks likes to say you can't predict but you can prepare. Having enough cash on hand to survive an inability to raise new cash for a significant period of time helps prepare a company for adverse turns in a cycle which can't be fully predicted.

9. "Overestimating what you're capable of knowing or doing can be extremely dangerous – in brain surgery, transocean racing or investing. Acknowledging the boundaries of what you can know – and working within those limits rather than venturing beyond – can give you a great advantage." "The actions of the 'I know' school are based on a view of a single future that is knowable and conquerable. My 'I don't know' school thinks of future events in terms of a probability distribution. That's a big difference. In the latter case, we may have an idea which one outcome is most likely to occur, but we also know there are many other possibilities, and those other outcomes may have a collective likelihood much higher than the one we consider most likely." This is the "circle of competence" idea in all of its glory. Risk comes from not knowing what you are doing. The best way to avoid risk is to stick to situations where you know what you are doing and to work hard to expand the areas where you do know what you are doing by learning. One thing I have seen again and again in great investors is that they spend most of their time trying to determine what they don't know. They would much rather read a book or attend a lecture on what we don't know than listen to crackpot theories that try to predict what can't be predicted. This "tell me what I don't or can't know" approach is very different from academia since there are few people who get academic tenure for proving what we don't know or that we can't know something. The key point is illustrated by Charlie Munger's desire to know where he is going to die so he can just not go there. Munger's quip is humorous because it is so true for an investor. If you just know where you are going to lose money, you can just not go there. If only that was always true.

10. "The more we concentrate on smaller-picture things, the more it's possible to gain a knowledge advantage. With hard work and skill, we can consistently know more than the next person about individual companies and securities, but that's much less likely with regard to markets and economies. Thus, I suggest people try to 'know the knowable.'" This is the Howard Marks version of the Charlie Munger principle that "the best way to be smart is to not be stupid." The best venture capitalists are aware of the cycle because of its impact on valuation of individual businesses but stay focused on microeconomics. They value the convexity of each business in the portfolio and give only occasional thought to Federal Reserve interest rate policy when making investments. Like Marks, a smart venture capitalist understands that they know a lot about today but nothing certain about tomorrow and the days after that. The future is not only risky and uncertain but contains the potential to reveal ignorance. By adopting a margin of safety approach one can be wrong, make a mistake and still have an acceptable result.

11. "No rule always works. The environment isn't controllable, and circumstances rarely repeat exactly." Venture capital is interesting in many ways, but perhaps most interesting is that it involves people who break rules. At least one key rule is broken by each entrepreneur who hits a financial home run. If you don't do make a decision to be different in some way and are right about that decision you are unlikely to generate convex financial returns. Operational excellence is a great thing, but to generate a 10-100X financial return you can't be doing what everyone else is doing, only better. Every time an entrepreneur breaks a rule the risk of failure rises so they don't want to break too many rules at once. As

was the case in the story in Goldilocks and the Three Bears, the founders of a startup want the "rule breaking" to be at a "just right" level.

12. "Where does an investment philosophy come from? The one thing I'm sure of is that no one arrives on the doorstep of an investment career with his or her philosophy fully formed. A philosophy has to be the sum of many ideas accumulated over a long period of time from a variety of sources. One cannot develop an effective philosophy without having been exposed to life's lessons." There is no way to get through life and learn without making mistakes. You can certainly learn a lot and avoid a lot of pain by watching and reading about the mistakes of other people. Learning vicariously not only scales better but can be far less painful. That is why I love books so much and created my book discovery site **https://www.25iqbooks.com/**. But there is a big difference between knowledge and skill. Acquiring skill requires at least some real world practice. In the end, to acquire skill you need to sometimes make mistakes yourself to really learn the most powerful lessons. You can only learn so much just by watching others.

Notes:

Howard Marks: https://www.25iqbooks.com/books/207-the-most-important-thing-illuminated-uncommon-sense-for-the-thoughtful-investor-columbia-business-school-publishing

My previous blog post on Howard Marks: https://25iq.com/2013/07/30/a-dozen-things-ive-learned-about-investing-from-howard-marks/

Alberg invests in Amazon: http://www.geekwire.com/2015/qa-madronas-tom-alberg-on-the-changing-winds-of-venture-capital-tech-bubbles-and-bankrolling-a-young-jeff-bezos/

Kleiner's IX fund: http://www.wsj.com/articles/SB108328387230498204

Zeckhauser:
https://www.hks.harvard.edu/fs/rzeckhau/InvestinginUnknownandUnknowable.pdf

Mauboussin's Ruminations on Risk:
http://people.stern.nyu.edu/adamodar/pdfiles/eqnotes/marginofsafety.pdf

Buffett's 1993 Chairman's letter: http://www.berkshirehathaway.com/letters/1993.html

Geekwire Charlie Rose: http://www.geekwire.com/2013/jeff-bezos-60-meetings-raise-1m-amazoncom-giving-20-early-investors/

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A Dozen Ways You Can Use Seth Klarman's "Margin of Safety" Approach When Voting

September 24, 2016

When you cast a vote you are making an investment. You should vote using a sound process, just as you should use a sound process when investing. Having a sound decision making process means reading a lot and talking to people you trust who have good judgment before making a decision. When it comes to a decision about a particular candidate in an election I would frankly rather read a transcript of a speech than listen to it. But if you like listening to speeches, do that. In general, I prefer an interview to a scripted speech anyway since you get a better sense of whether the candidate has any sense when they are not scripted. Yes, I would rather read a transcript of the interview. Reading any policy papers that are available is also helpful but few people will actually do that. Of course, more than just getting the facts is required. As Charlie Munger has said: "I don't know anyone who's wise who doesn't read a lot. But that's not enough: You have to have a temperament to grab ideas and do sensible things. Most people don't grab the right ideas or don't know what to do with them." As an aside, if you don't like reading about Munger's ideas, this may not be a good blog for you to read.

In writing blog posts about what people like Bill Murray, Rza and Louis CK can teach about investing, I am trying to make a point about sound decision-making principles being universally applicable. Investing is about making good decisions. For example, someone like Charlie Munger does not use a different decision making methodology when voting than he does when he is investing or making a charitable donation. A key point about making decisions of any kind is stated simply by Munger: "It is remarkable how much long-term advantage people like us have gotten by trying to be consistently not stupid, instead of trying to be very intelligent." This applies both to the way you vote and how you analyze a candidate. The best way to be smart, is to not be stupid.

I have previously written a blog post on Seth Klarman that included some quotes from his excellent book *Margin of Safety.* Few people reading this post will be willing to pay the $1,000 that a used copy of that book sells for on Amazon. I suggest that you instead borrow a copy of *Margin of Safety* from a friend or somehow find another way to read it. As an aside, I'm hoping that Klarman allows someone to republish this book soon since the world needs books like this now more than ever. Any sane publisher would do so in a heartbeat. "Hey Seth. The investing world needs you! Please republish the book!"

The quotes from *Margin of Safety* in the text below are in bold as is usual, but in this post I have substituted the words "voter" for "investor" and "candidate" for "investment" to make my points.

1. "Rather than targeting a desired rate of return, even an eminently reasonable one, [voters] should target risk." Klarman is using the term "risk" in the broadest sense. He knows that very few things in life involve just "risk" if you use Richard Zeckhauser's definitions. Almost everything in life involves decisions that have outcomes which will be determined by "uncertainty and ignorance" rather than "risk" since it is rare that the probability distribution of future outcomes is known. In other words, life is almost never like roulette, where you know the odds and the probability distribution. The way Howard Marks puts it is that there is no definitive future at any given point in time and instead what we all face when looking forward in time can only be represented by probability distributions.

Table 1. Escalating Challenges to Effective Investing

	Knowledge of States of the World	Investment Environment	Skills Needed
Risk	Probabilities known	Distributions of returns known	Portfolio optimization
Uncertainty U	Probabilities unknown	Distributions of returns conjectured	Portfolio optimization, Decision theory
Ignorance UU	States of the world unknown	Distributions of returns conjectured, often from deductions about other's behavior. Complementary skills often rewarded along side investment	Portfolio optimization. Decision theory. Complementary skills (ideal) Strategic inference.

Given the inevitable risk, uncertainty and ignorance that you face in life, one thing you want to avoid is a candidate who will often create "concave" situations (small upside and big downside). Stated differently, what you want to avoid is a candidate who is what Taleb calls a *fragilista*. Taleb's *fragilistas* develop and promote concave propositions that promise low or modest upside gains, but ignore the possibility of catastrophic risks. Does the candidate understand this concept? Do they have a sound decision-making process? Or are they oblivious to actions which exhibit negative outcome asymmetry? Nassim Taleb elaborates: "When you inject uncertainty and errors into airplane ride (the fragile or concave case) the result is worsened, as errors invariably lead to plane delays and increased costs — not counting a potential plane crash." Taleb continues by saying that The *fragilista* "defaults to thinking that what he doesn't see is not there, or what he does not understand does not exist. At the core, he tends to mistake the unknown for the nonexistent."

2. "Smart [voters] stick to [candidates who stay] within their circle of competence, within which … they have the capability to understand." This is the only quote of Klarman's in bold in this post that wasn't in *Margin of Safety*, but it is something Klarman believes in as evidenced by this bolded quote from another source. The book *Margin of Safety* has a great index but I can't find the "circle of competence" in the index or text. This is a bit odd, but it is what it is. I would say that in general that *Margin of Safety* is not a book that digs into investor psychology like *Thinking Fast, and Slow or Influence.* In any event, the circle of competence idea when applied to an election decision is simple: Does the candidate know what they do not know? Do they understand what a circle of competence is? Do they

stay within that circle? Do they seek experts when they are outside their circle of competence? Do they avoid getting advice from poseur faux experts who don't know what they don't know and stray from their circle of completence?

3. "One of the recurrent themes of this book is that the future is unpredictable." "[A nation] must be prepared for any eventuality." If a country has done its preparation correctly it has this thing called a constitution that prevents an idiot who somehow gets elected to office from ruining a nation and its way of life. Every nation needs a constitution that is structured so well that an idiot could be elected to the highest office in the land and the nations will get through that difficult time, "because sooner or later, one will" to paraphrase Warren Buffett. There is a separation of powers and checks and balances in the US Constitution for very good reasons. The people who wrote the US Constitution were aware that someone might someday end up being president who was unwise or had a lousy temperament. So they wrote it carefully to limit the power of a single person by making sure political power was distributed. Not only is there a constitution that provides protection in the case of the United States but there is also the extraordinary people of the nation itself as a buffer against idiocy.

4. "An irresolvable contradiction exists: to [vote intelligently], you must predict the future, yet the future is not reliably predictable." If the candidate for elected office believes they have an IQ that is greater than t actually is that is a red flag on their suitability to perform the duties of an elected official. Munger again:

"A [elected official] with an IQ of 160 and thinks it's 180 will kill you," he said. "Going with a [candidate for office] with an IQ of 130 who thinks its 125 could serve you well." "Smart people aren't exempt from professional disasters from overconfidence. Often, they just run aground in the more difficult voyages they choose, relying on their self-appraisals that they have superior talents and methods." "You need to have a passionate interest in why things are happening. That cast of mind, kept over long periods, gradually improves your ability to focus on reality. If you don't have the cast of mind, you're destined for failure even if you have a high IQ."

5. "A margin of safety is [is intended to] allow for human error, bad luck, or extreme volatility in a complex, unpredictable and rapidly changing world." As Charlie Munger has said: "Proper [voting] is like engineering. You need a margin of safety. Thank God we don't design bridges and airplanes the way we [vote for political candidates]." When choosing who to vote for it is wise to ask yourself questions like: Do the candidate's previous actions reflect margin of safety principles? Do they leave a margin for error, bad luck or extreme volatility? Are they thoughtful in making decisions using a sound process or are they quick to make judgments before they think through an issue? Do they make decisions like an engineer designs a bridge? Does the candidate have a temperament that will allow them to make the right decisions in a crisis? Will they conduct themselves in a way that does not precipitate crisis after crisis?

6. "The river may overflow its banks only once or twice in a century, but you still buy flood insurance." Black swans are highly unlikely but very impactful events that have causes which are explainable, but only after the fact. We know Black Swans happen. Does the political candidate in the election understand that you must invest to capture the benefits of positive Black Swans and also invest to prepare for unpredictable negative Black Swans? Do

they know that you can't predict when negative Black Swans will arrive but that you can prepare?

7. "Think for yourself." If you consider yourself a member of a political party and it nominates candidate X, why would you vote for that candidate if you have actually done your own research and drawn you own conclusions? Why would you not do your own research and draw your own conclusions? Think! The power of thinking for yourself has been a consistent message on this blog.

8."[Smart voters] pay attention to financial reality in making their decisions." Does the candidate make promises that are grounded in financial reality? Do they make proposals that are achievable? In making a decision a voter should use an opportunity cost approach as described by Munger: "If you take the best text in economics by Mankinaw, he says intelligent people make decisions based on opportunity costs — in other words, it's your alternatives that matter. That's how we make all of our decisions. The rest of the world has gone off on some kick — there's even a cost of equity capital. A perfectly amazing mental malfunction. In the real world, you uncover an opportunity, and then you compare other opportunities with that. And you only invest in the most attractive opportunities. That's your opportunity cost. That's what you learn in freshman economics."

9."Successful [voters] tend to be unemotional, have confidence in their own analysis and judgment." Here's Charlie Munger again on the importance of avoiding mistakes that can be made due to emotional or psychological factors. **"**Increasing rationality and improving as much as you can no matter your age or experience is a moral duty. Too many people graduate from [college] today and think they know how to do everything. It's a considerable mistake." Be rational. Decide carefully, but do decide.

10. "A [candidate for office] should be inspected and re-inspected for possible flaws." Who should I quote now? Yep, Munger: "The best single way to teach ethics is by example: take in people who demonstrate in all their daily conduct a good ethical framework. But if your ethics slip and people are rewarded it cascades downward. Ethics are terribly important, but best taught indirectly by example. If you just learn a few rules [by having ethics taught in school] so they can pass the test, it doesn't do much. But if you see people you respect behaving in a certain way, especially under stress, [that has a real impact]." "I think we have lost our way when people …fail to realize they have a duty to the rest of us to act as exemplars. You do not want your do not want your [public officials] to be setting the wrong moral example."

11. "What appears to be new and improved today may prove to be flawed or even fallacious tomorrow." Sometimes an electorate is hoping for "a change" from the status quo. This is understandable. But it is wise to make sure that the change is for the better. Sometimes people jump out of what they think is a frying pan and into a fire. Munger again: "Opportunity cost is a huge filter in life. If you've got two suitors who are really eager to have you and one is way the hell better than the other, you do not have to spend much time with the other. And that's the way we filter opportunities."

12. "[Voting] is serious business, not entertainment." When you vote you are making decisions that can have a major impact on something that is precious. Your voting decision should not be decided on the basis of a talk show performance or other events with entertainment value. Do the research. Think. Select wisely. And do actually make a

selection. Not voting is voting. Protest votes have no place in elections, especially in 2016. Make your vote count.

I will have attempted to be relatively apolitical in this post. I have also tried to make the explanation of a sound decision making process applicable to any election, not just the US Presidential election that will take place soon. Reuters reports that Klarman himself: "is registered as an independent voter and has given money to candidates from both parties in the past." In the United States presidential election Klarman has said: "I will continue to find ways to support Hillary Clinton and defeat Donald Trump. He is completely unqualified for the highest office in the land." The views of Klarman are similar to Munger's statement on the election: "The last person, almost, I'd want to be president of the United States is Donald Trump."

My intent in writing these blog posts is to teach people how to make better decisions and making this post partisan interferes too much with that mission in this case. I would rather teach someone to fish than hand them one. I've set out my decision making process many times. It should not be hard to figure out who I will vote for in a given case. What I hope that you do is think for yourself after doing the research, just as you should do in investing. Be rational rather than emotional. Decide based on facts. Be smart by not being stupid, stay in your circle of competence and find candidates who think the same way.

One of my favorite recent stories took place at the recent Rio Olympics: "The U.S. boat was in third place halfway through the race when coxswain Katelin Snyder shouted the magic words: 'This is the U.S. women's eight!' In the bow seat, Emily Regan could feel her end of the boat rise, as if the whole shell were taking flight. 'It was like I wasn't even touching the water,' she said." For an American citizen it is helpful right now to remind yourself that: "This is the United States of America!" We will get through this year, the next four years, or anything else that is thrown at us. Despite the existence of that buffer, every American who is eligible needs to vote. Get the hell out and vote. Your country needs you.

Notes:

25iq on Seth Klarman https://25iq.com/2013/07/15/a-dozen-things-ive-learned-from-seth-klarman/

Margin of Safety: https://www.25iqbooks.com/books/109-margin-of-safety-risk-averse-value-investing-strategies-for-the-thoughtful-investor

Klarman on the US presidential election: http://www.politico.com/story/2016/08/seth-klarman-supports-clinton-226663

Munger on the US presidential election: https://www.youtube.com/watch?v=1Bb3cvrxdVs

Antifragile: https://www.25iqbooks.com/books/12-antifragile-things-that-gain-from-disorder-incerto

Poor Charlie's Almanack: https://www.25iqbooks.com/books/215-poor-charlie-s-almanack-the-wit-and-wisdom-of-charles-t-munger-expanded-third-edition

Charlie Munger: https://www.25iqbooks.com/books/54-charlie-munger-the-complete-investor-columbia-business-school-publishing

Michael Mauboussin: http://www.michaelmauboussin.com/excerpts/MTYKexcerpt.pdf

A Dozen Things You can Learn by Reading "The Success Equation" by Michael Mauboussin

October 1, 2016

Asking me to select my favorite book written by Michael Mauboussin is like asking me to pick my favorite child. I love them all the same. But if I had to choose one book it would probably be *The Success Equation*. There are lot of reviews of this book, all of them glowingly positive. The world doesn't need another review of this great book so I will try to write mostly about how the ideas in the book might be applied in the real world.

Anyone who has been reading this blog should know a lot about Michael Mauboussin. He is one of the clearest business thinkers ever in my view. When he writes and speaks it is in complete thoughts to an extent that astounds me. Read his books and essays. Then read them again. He is a wonderful teacher and very generous with his ideas and time.

It is rare that a post on this blog does not have a notes section identifying further resources to read, but this one is particularly long since Mauboussin's written work is voluminous. He is a reading and writing machine.

One of the many things I like about Mauboussin is that he thinks about thinking. That is not only valuable, but fun. I am lucky to count him as a friend. His ideas have shaped mine about as much as anyone. Let's get started.

1. "There's a quick and easy way to test whether an activity involves skill: ask whether you can lose on purpose. In games of skill, it's clear that you can lose intentionally, but when playing roulette or the lottery you can't lose on purpose." Luck is easier to describe than skill. Luck is best thought of in terms of an activity like roulette. With roulette you know the all potential future states and the probability distribution. Because the house takes a rake in roulette, there are no professional roulette players. Very few things in life involve just luck. The probability distribution of outcomes in the real world is rarely known. Mauboussin writes that luck has three core elements: 1) it operates on an individual or an organizational basis; 2) it can be positive or negative; and 3) it is reasonable to expect that a different outcome could have occurred.

Skill is harder to define, but Mauboussin believes a dictionary definition works well. Skill is: "The ability to apply one's knowledge readily in execution or performance." Mauboussin writes that activities like chess rely almost wholly on a player's skill. Mauboussin explains that each sport has a different mix of skill versus luck and if you want to understand this point better read the book! You will note that in this picture below investing finds its home closer to luck than skill (see the placement of chart icon).

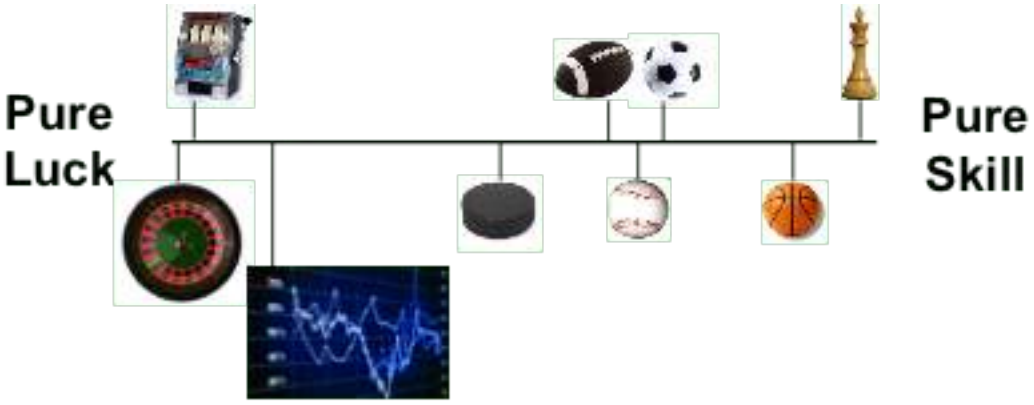

2. "Much of what we experience in life results from a combination of skill and luck." The mix between skill and luck in a given business or investing activity is always different and is constantly changing. Exactly where investing falls on that continuum depends on the style of investing involved and the business environment at the time. Investing in the stock market is an interesting case to consider when thinking about the mix between luck and skill since it is hard to do better than an index and it is also hard to do worse, especially if you are diversified. Venture capital investing is a more a skill driven activity since it involves things like coaching founders and significantly more uncertainty. Starting a business also involves more skill than investing in pubic equities. When Mauboussin was writing *The Success Equation* we had an email conversation about the role of luck in the success of Microsoft. I recall that we did not agree completely about the mix in that case. I recall that saw less luck that Mauboussin did. But I am too close to the story perhaps to be objective. Mauboussin includes writes in the book: "When asked how much of his success he would attribute to luck, Gates allowed that it played 'an immense role.' In particular, Microsoft was launched at an ideal time: 'Our timing in setting up the first software company aimed at personal computers was essential to our success,' he noted. 'The timing wasn't entirely luck, but without great luck it wouldn't have happened.'

3. "Great success combines skill with a lot of luck. You can't get there by relying on either skill or luck alone. You need both." Sometimes you will hear people say things like: "the harder I work, the luckier I become." Mauboussin easily demonstrates these statements to be a *non sequitur* with a few well-chosen words: "there is no way to improve your luck, because anything you do to improve a result can reasonably be considered skill." This Mauboussin turn of phrase reminds me a lot of the classic Howard Marks line: if risky investments could be counted on to deliver high returns, then they wouldn't be risky.

4. "So here's the distinction between activities in which luck plays a small role and activities in which luck plays a large role: when luck has little influence, a good process will always have a good outcome. When a measure of luck is involved, a good process will have a good outcome but only over time." Mauboussin believes a wise investing process has three elements: 1) you must find something the market does not believe and you must be right about that belief; 2) you must have control over your behavioral biases; and 3) you must not have organization issues that get in the way of a sound decisions. One way to find things that are true that the market does not believe is to find areas of the market that are less well known and popular. In other words, what you want to do is find a game where the competition is weak. This is exactly what investors Warren Buffett and Howard Marks recommend. What you want to do is find a bet where the other bettors are making decisions based on things that are the equivalent of the patterns made by sheep guts at a slaughterhouse

or a Keynesian Beauty Contest. Munger says: "For a security to be mispriced, someone else must be a damn fool. It may be bad for the world, but not bad for Berkshire." Warren Buffett makes the point that the way to beat a chess master is to play them at something other than chess. Buffett adds: **"**The important thing is to keep playing, to play against weak opponents and to play for big stakes." If you've been playing poker for half an hour and you still don't know who the patsy is, you're the patsy."

There is no substitute for a sound process in an activity like investing. Mauboussin writes:

"If you compete in a field where luck plays a role, you should focus more on the process of how you make decisions and rely less on the short-term outcomes. The reason is that luck breaks the direct link between skill and results—you can be skillful and have a poor outcome and unskillful and have a good outcome. Think of playing blackjack at a casino. Basic strategy says that you should stand— not ask for a hit—if you are dealt a 17. That's the proper process, and ensures that you'll do the best over the long haul. But if you ask for a hit and the dealer flips a 4, you'll have won the hand despite a poor process. The point is that the outcome didn't reveal the skill of the player, only the process did. So focus on process."

5. "When everyone in business, sports, and investing copies the best practices of others, luck plays a greater role in how well they do." "It's not that investors lack skill. As investors have become more sophisticated and the dissemination of information has gotten cheaper and quicker over time, the variation in skill has narrowed, and luck has become more important." Mauboussin calls this idea the paradox of skill. For example, as the skill levels of portfolio managers rise the greater the role of luck becomes in the outcome. The classic example of this idea that Mauboussin cites is the .400 batting average of Ted Williams. One of the many joys of this book is how easily he conveys ideas that involve statistics. Mauboussin points out: "The average of all batting averages in Major League Baseball is generally in the range of .260 to .270. In 1941, when Williams achieved his feat, the standard deviation was .032. Today it is about .028. Saying this differently, Ted Williams had an average that was 4 standard deviations away from the average, getting him to .406. If a player were to be 4 standard deviations away from average in 2011, he would have hit .380. Awesome, but nowhere near .400." Charlie Munger once said, "If you don't get this elementary, but mildly unnatural, mathematics of elementary probability into your repertoire, then you go through a long life like a one-legged man in an ass-kicking contest. You're giving a huge advantage to everybody else."

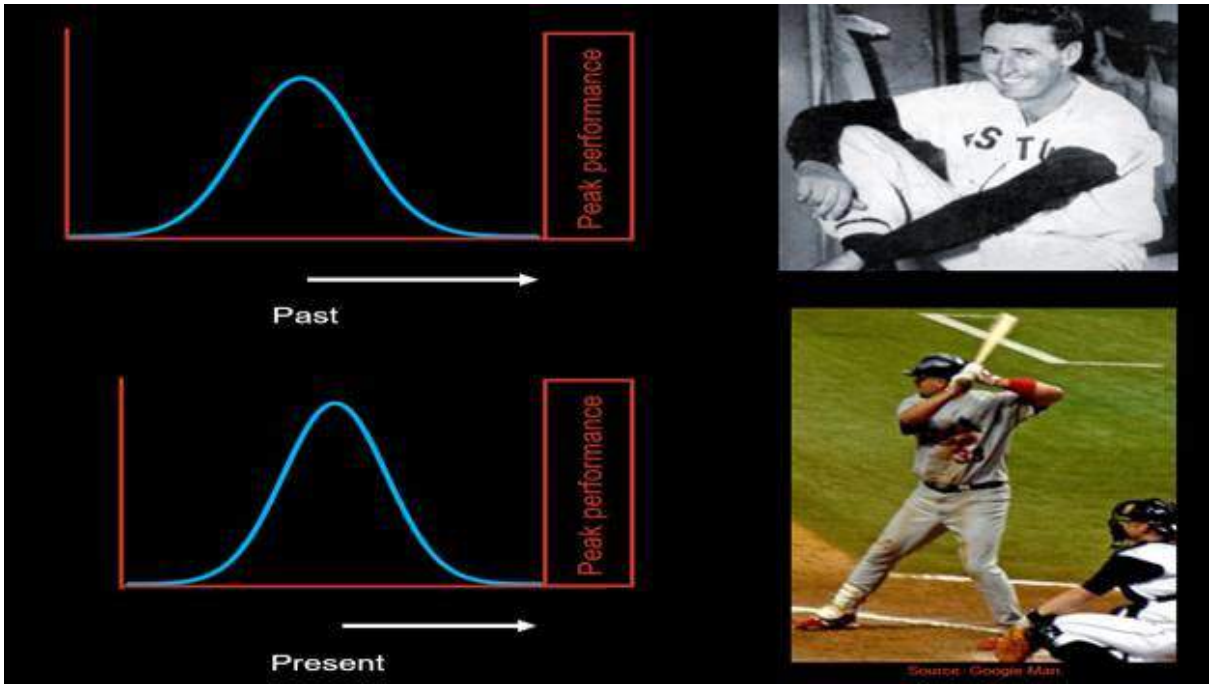

As investors increasingly move toward buying index funds, unskilled investors are removed from the game which makes the task of a manager trying to earn alpha harder. In their book *The Incredible Shrinking Alpha*, Larry Swedroe and Andrew Berkin argue that active managers are increasingly competing for a shrinking pool of alpha. So as investment skill levels rise, luck gets more important.

6. "If you take concrete steps toward attempting to measure [the contributions of skill and luck to any success or failure], you will make better decisions than people who think improperly about those issues or who don't think about them at all. That will give you an enormous advantage over them." The more data you have on your processes and outcomes the more you will be able to improve those processes and outcomes. What data is valuable? I would rather have data and not need it, than need it and not have it. This quote makes me think of a quality that Mauboussin and I share. We both want to know why something is true. It is not enough to know that x is true. Why is X true? One way to know more about why something is true is to measure it. Of course people tend to ignore or hide data they do not like, which reminds me of an old joke told by Kieran Healy:

A soldier is captured during a long-running war and thrown into the most stereotypical prison cell imaginable. Inside the cell is another solider. He has an enormous, disgusting-smelling beard and has clearly been there a long time. The young solider immediately sets about trying to escape. He is resourceful and possessed of great willpower. He bribes a guard with his emergency supply of cash. The guard gets him into a supply truck and he makes it to the prison garage, but is found during a routine vehicle search while exiting the compound. He is returned to his cell. His mangy companion says nothing about his departure or return. Undeterred, the young soldier works on the bars of the cell for weeks, filing them down with a shim made from a toothbrush. The whole time the old soldier looks on, silently. The young soldier finally breaks the bars, slips out the window and makes it to the outer wall, where he is spotted and recaptured. He is thrown back in the cell. He glowers at his grizzled companion, who still remains silent. Calming himself and mastering his despair, he tries yet again, this time digging a tunnel with the narrow end of a broken plastic coffee spoon. After about two years of work he succeeds in escaping under the wall and making it to the nearest

town, only to be captured again at the train station. He is delivered, once again, back to his cell and its taciturn occupant. At the end of his wits, the young soldier finally confronts the old soldier, shouting, "Couldn't you at least offer to help me with this?! I mean, I've come up with all these great plans—you could have joined me in executing them! What's wrong with you?" The old soldier looks at him and says, "Oh I tried all these methods years ago—bribery, the bars, a tunnel, and a few others besides—none of them work." The young soldier looks at him, incredulous, and screams "Well if you knew they didn't work, WHY THE FUCK DIDN'T YOU TELL ME BEFORE I TRIED THEM, YOU BASTARD?!" The old soldier scratches his filthy beard and says, "Hey, who publishes negative results?"

7."Not everything that matters can be measured, and not everything that can be measured matters." People want to be able to predict the future. To satisfy that desire, humans have a tendency to grab what data can be measured and assume that what can't be measured does not exist or does not matter. People who are mathematically gifted are particularly prone to this tendency. For example, if you just assume that the human world works like the world of physics you can use this assumption make beautiful mathematical formulas. But there may or may not be any tie of that mathematics to reality, which can create a host of major problems. As an example, one of my biggest problems with a lot of economic discussions today related to the fact that it is very hard to measure consumer surplus. Just ignoring consumer surplus because you can't measure it well is a bad idea that can lead to unhelpful policy conclusions. Just as unhelpful are people who say that it can be accurately measured, based on a bunch of assumptions that are essentially guesses. Sometimes we need to accept that we do not or cannot fully know something. The policy choices must deal with that uncertainty.

8. "Even if we acknowledge ahead of time that an event will combine skill and luck in some measure, once we know how things turned out, we have a tendency to forget about luck." Survivor bias is a huge problem in human cognition. The tendency is for people to conclude: what I achieve is skill and what I fail at is luck. Too often recollections of events we see in life is best categorized as fiction. People love to tell stories, particularly about their successes. Sometimes we get lucky and sometimes we are skillful. Usually the result is some mix of both. Charlie Munger has said on this topic: "Well, some of our success we predicted and some of it was fortuitous. Like most human beings, we took a bow." What is particularly bothersome to me is when people ascribe luck to themselves in a way that they bestow themselves some moral measure superiority. As Warren Buffett points out, he won the ovarian lottery: "I was born in the United States. I had all kinds of luck."

9. "One of the main reasons we are poor at untangling skill and luck is that we have a natural tendency to assume that success and failure are caused by skill on the one hand and a lack of skill on the other. But in activities where luck plays a role, such thinking is deeply misguided and leads to faulty conclusions." One of the aspects of life that bothers me the most is when I encounter someone who attributes all their success to skill, and as a result of that they assign a higher moral standing to themselves than people who have been less successful. Mauboussin illustrates this point with a story:

"For almost two centuries, Spain has hosted an enormously popular Christmas lottery. Based on payout, it is the biggest lottery in the world and nearly all Spaniards play. In the mid-1970s, a man sought a ticket with the last two digits ending in 48. He found a ticket, bought it, and then won the lottery. When asked why he was so intent on finding that number, he replied "I dreamed of the number seven for seven straight nights. And 7 times 7 is 48."

10. "The trouble is that the performance of a company always depends on both skill and luck, which means that a given strategy will succeed only part of the time. So attributing success to any strategy may be wrong simply because you're sampling only the winners. The more important question is: How many of the companies that tried that strategy actually succeeded?" Once up a time long ago I read a book called *In Search of Excellence*. The authors analyzed leading companies are sorted out the secrets of success in a way that suggested that it was a replicable formula. The best companies do X, Y and Z was the claim. What was missing of course were all the companies that did X, Y and Z and failed. Mauboussin writes:

"There are numerous books that purport to guide management toward success. Most of the research in these books follows a common method: find successful businesses, identify the common practices of those businesses, and recommend that the manager imitate them. Perhaps the best known book of this genre is *Good to Great* by Jim Collins. He analyzed thousands of companies and selected 11 that experienced an improvement from good to great results. He then identified the common attributes that he believed caused those companies to improve and recommended that other companies embrace those attributes. Among the traits were leadership, people, focus, and discipline. While Collins certainly has good intentions, the trouble is that causality is not clear in these examples. Because performance always depends on both skill and luck, a given strategy will succeed only part of the time.

Jerker Denrell, a professor of behavioral science, discusses two crucial ideas for anyone who is serious about assessing strategy. The first is the undersampling of failure. By sampling only past winners, studies of business success fail to answer a critical question: How many of the companies that adopted a particular strategy actually succeeded?"

As an example, I knew someone once who though that since X successful founder yelled at people that he must yell at people to succeed. People do things like see fictional accounts of Facebook in a movie and think that all they need to do is replicate that formula. Hoodies or black turtlenecks are not highly correlated with startup success. If enough people wear hoodies sure one of them will succeed to, but there is no causation involved. Free Kind bars and colorful plastic slides between floors of an office do not cause startups to succeed financially.

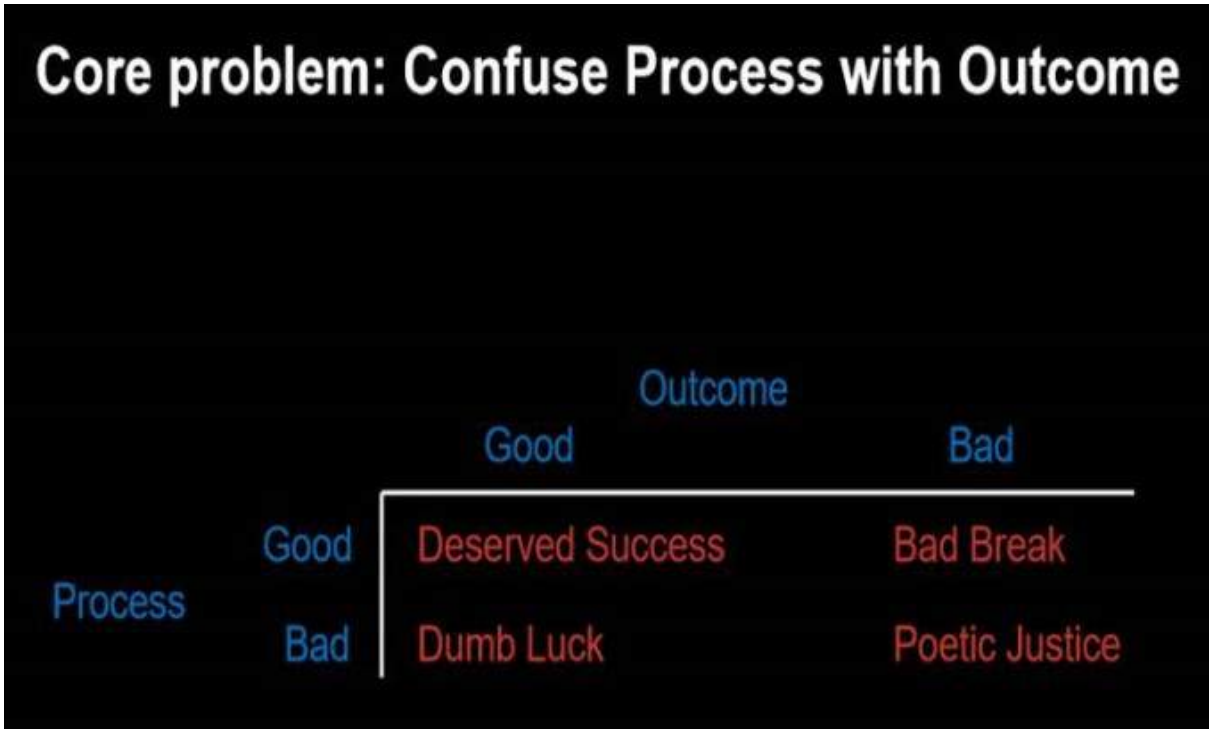

11. "The process of social influence and cumulative advantage frequently generates a distribution that is best described by a power law. … One of the key features of distributions that follow a power law is that there are very few large values and lots of small values. As a result, the idea of an "average" has no meaning." I call this the paradox of luck as a riff on Mauboussin's "paradox of skill." My thesis is that the luckier you get, the more skill you can get if the conditions are right. This happens because of what is known as "cumulative advantage." As an example, the more financial success someone like a venture capitalist gets, the more skilled people they get to work with since they are attracted to that success, which makes the venture capitalist more skilled, which makes them more financially successful [repeat]. My thesis is: financial success caused by luck begets not only greater financial success, but greater skill. A good example on this point is a statement made by Michael Moritz years ago. He said: **"**I know there are millions of people around the world have worked as hard and diligently as I have and weirdly enough, like [former US President] Jimmy Carter said years and years ago, 'life's unfair'. I just happen to have been very fortunate." "A chimpanzee could have been a successful Silicon Valley venture capitalist in 1986." The key point about what Moritz describes is that luck did not just make him richer, it made him more skilled since he was exposed to opportunities and teachers that he would not otherwise have encountered. Being lucky made him more skilled and that process fed back on itself. Luck and skill are different but one can lead to the other in a way that create a virtuous circle.

12. "Knowing what you can know and knowing what you can't know are both essential ingredients of deciding well." The best investors are certain of just about nothing and spend a lot of time trying to learn more about what they do not know and cannot know. Mauboussin is chairman of the board of trustees of the Santa Fe Institute, a leading center for multi-disciplinary research in complex systems theory. Perhaps the greatest things I have learned about complex adaptive systems is to more aware of what I do not know.

There is a difference between knowing what you do not know and not knowing very the basics necessary to do a job. As an example, I'm of the view that a US President should know what Aleppo is or be able to name a few foreign leaders. And you want you investment managers to understand things like, well, compound interest and capital gains. Call me a stickler on this point if you want. A positive example would be an investor who candidly says, "I don't understand biotech investments."

If you ever attend a meeting at Sante Fe Institute meeting you will see famous investors in the audience who are hungry for information on what they do not know or can't know. Great investors are humble but yet aggressive when they see a significant opportunity within their circle of competence. Munger is a good person to give the closing statement:

"Even bright people are going to have limited, really valuable insights in a very competitive world when they're fighting against other very bright, hardworking people. And it makes sense to load up on the very few good insights you have instead of pretending to know everything about everything at all times."

Notes:

The Success Equation (the book): https://www.25iqbooks.com/books/3-the-success-equation-untangling-skill-and-luck-in-business-sports-and-investing

My previous post on Mauboussin on 25IQ: https://25iq.com/2013/07/11/a-dozen-things-ive-learned-from-michael-mauboussin-about-investing/

My list of Mauboussin Essays: https://25iq.com/2013/02/17/mauboussin/

More than You Know: https://www.25iqbooks.com/books/5-more-more-than-you-know-finding-financial-wisdom-in-unconventional-places-updated-and-expanded-columbia-business-school-publishing

Think Twice: https://www.25iqbooks.com/books/4-think-twice-harnessing-the-power-of-counterintuition

Expectations Investing: https://www.25iqbooks.com/books/24-expectations-investing-reading-stock-prices-for-better-returns

Mauboussin's bio/CV: http://www.santafe.edu/about/people/profile/Michael%20Mauboussin

Mauboussin's Web site http://www.michaelmauboussin.com/

Fast Company Interview: https://www.fastcompany.com/3002729/facts-luck

CNBC post: http://www.cnbc.com/id/49791755

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Bloomberg: https://www.bloomberg.com/view/articles/2016-08-16/michael-mauboussin-on-skill-and-luck

Talk at Google: https://www.youtube.com/watch?v=1JLfqBsX5Lc

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Essay on Measuring the Moat: http://csinvesting.org/wp-content/uploads/2013/07/Measuring_the_Moat_July2013.pdf

Essay on the Skill Paradox: http://changethis.com/manifesto/100.03.SuccessEquation/pdf/100.03.SuccessEquation.pdf

Essay: https://doc.research-and-analytics.csfb.com/docView?language=ENG&format=PDF&source_id=csplusresearchcp&document_id=1051045621&serialid=CFuLyFE%2BEXHlo12BGWMqq8fSzI8Xcj0miB1nOa39p9U%3D

Wired Interview: https://www.wired.com/2012/11/luck-and-skill-untangled-qa-with-michael-mauboussin/

Forbes interview: http://www.forbes.com/sites/investor/2013/11/05/the-role-of-luck-and-skill-in-investing/#7368a94e3e4c

Slide Deck http://www.sloansportsconference.com/wp-content/uploads/2013/Slides/EOS/Why%20You%20Don't%20Understand%20Luck.pdf

Prisoner Joke: http://crookedtimber.org/2011/04/23/i-predict-the-gifted-will-foresee-the-punchline/

A Half Dozen Things I've Learned from Robert Cialdini's book "Influence"

October 8, 2016

Professor Robert Cialdini first published his best-selling book *Influence* in 1984. Charlie Munger liked the book so much he sent Cialdini a thank you note and a share of Berkshire A stock then worth $75,000. Munger said in his famous *The Psychology of Human Misjudgment* speech at Harvard: "Cialdini does a magnificent job and you're all going to be given a copy of Cialdini's book. And if you have half as much sense as I think you do, you

will immediately order copies for all of your children and several of your friends. You will never make a better investment." It should not be a surprise that *Influence* is in the top ten on my book discovery web site 25IQ books.

Cialdini has a new book out that is at the top of my reading list called *Pre-Suasion*, which I will write a post about at some point. Cialdini's describes the subject of his new book as follows: "Pre-suasion is the practice of getting people sympathetic to your message before they experience it."

In his book *Influence* Cialdini identifies six important principles often used by what he calls "compliance professionals." Do you know any "compliance professionals" who have been in the news lately? How do they use principles like authority to try to manipulate you? Influence also discusses a range of additional biases and type of dysfunctional thinking that can cause people to make mistakes. Ironically, we often act as compliance professionals with respect to ourselves to our own detriment. Unfortunately, just being aware of these tendencies is not sufficient to keep them from adversely impacting our judgment and decisions. But a tendency is not destiny, so we can learn to be less adversely impacted by these techniques. None of us will ever be perfectly rational, but we can become incrementally better at making rational decisions.

1. "The [reciprocity] rule says that we should try to repay, in kind, what another person has provided us." "The obligation to receive reduces our ability to choose whom we wish to be indebted to and puts that power in the hands of others." The need for reciprocity is a powerful human emotion. Compliance professionals know how to exploit this tendency. For example, when the stock broker gives away the "free" salmon dinner he or she is expecting you to reciprocate by allowing them to manage your wealth. The salesman who wants you to buy his goods in return for the football tickets is no different in his or her motivation. One weird thing about the reciprocity tendency is that you are so influenced by this tendency that what is asked for by the compliance professional can be of far greater value that what is given to you. For example, the Hare Krishna member in the airport who gives away the flower can ask for something much more valuable and yet the people being solicited will still feel the compulsion created by reciprocity. The key defensive move against reciprocity is to not accept the gift in the first place. I would rather stab myself in the thigh with a sharp fork than accept a free weekend condominium stay offered by a time share salesperson. One technique that is useful when engaging in a negotiation is to politely refuse to accept or at least immediately reciprocate when hospitality is offered. Lavish hospitality given to the employees of a business is often intended to create obligation at a personal level, which they hope will cause the employee to offer reciprocal benefits to the generous compliance professional. One problem, however, is that some studies have shown that there is also a bias toward receiving a gift: "Although the obligation to repay constitutes the essence of the reciprocity rule, it is the obligation to receive that makes the rule so easy to exploit." I'm not so sure about this conclusion as I have an easy time saying no to gifts**.** Cialdini points to an additional factor that compliance professionals may use to generate the behavior they desire: "A well-known principle of human behavior says that when we ask someone to do us a favor we will be more successful if we provide a reason. People simply like to have reasons for what they do." Charlie Munger has said: "the practice of laying out various claptrap reasons is much used by commercial and cult 'compliance practitioners' to help them get what they don't deserve." The sales person may say something like: "Well yes, we are charging you a 3% sales load on this index fund, but we need to do that because our costs are high."

The "reason" cited by the compliance professional creates a tendency by the customer accept the fee, even though it is unreasonably high. Similarly an internet scammer may claim that they need to know your social security number because it is required by a state government regulation. How can this reciprocity principle be used in a positive way? One example would be someone who wants to find a career mentor. The best way to do that is often to do favors for the person you want to be a mentor first. Cialdini talks about an important idea he calls prework:

"People will help if they owe you for something you did in the past to advance *their* goals. That's the rule of reciprocity. Get in the habit of helping people out, and—this part's really important—don't wave it away when people thank you. Don't say, "Oh, no big deal." We're given serious persuasive power immediately after someone thanks us. So say something like "Of course; it's what partners do *for each other"*—label what happened an act of partnership. With that prework done, a manager who subsequently needs support, who needs staffing, who maybe even needs a budget, will have significantly elevated the probability of success."

Cialdini believes the exchanges can:

"increase both the social value of the giver *and* that person's productivity. It wasn't the number of favors done. It was the number of favors *exchanged*. If the initial giver creates a sense of reciprocity—a sense that there's a network of partners who are not just willing but eager to help—he will get a lot in return. He can increase the likelihood of a big ROI by characterizing his assistance as a two-way partnership."

2. "We all fool ourselves from time to time in order to keep our thoughts and beliefs consistent with what we have already done or decided." Charlie Munger believes:

"The brain of man conserves programing spaces by being reluctant to change." He describes the relationship between the human brain and an ideas as being like a human egg with a sperm. Once an idea gets in to the brain, other ideas are prevented from entering by a shut off valve, just like what an egg does to additional sperm once one gets in."

Commitment and consistency are a very powerful forces that kick in with particularly strong force when people do things like making a public statement about something like a stock price or a political issue. Once that public statement is made (e.g., climate change is X), the tendency is for the person who made the statement to ignore or deny dis-confirming evidence. The best antidote to this bias is arguably an outlook often described as : "Strong opinions, weakly held." To effectively adopt this antidote a person should do enough research so their opinions are strongly believed, but be open to new dis-confirming evidence (weakly held). As an example, when you publicly state that you believe X stock is going up you are setting in place a potential bias that may cause faulty thinking. By keeping your view on that stock weakly held you can remain open to new evidence if it appears. Value investor Guy Spier writes: "I try to avoid walking into the trap of making statements about any stocks that we currently own, since the situation might later change or I might discover that I was wrong. This is why I prefer not to discuss our current investments in public settings such as annual meetings, shareholder letters, and media interviews." Sunk cost bias is part of this bias. Munger notes:

"Failure to handle psychological denial is a common way for people to go broke. You've made an enormous commitment to something. You've poured effort and money in. And the

more you put in, the more that the whole consistency principle makes you think," Now it has to work. If I put in just a little more, then it 'all work…. People go broke that way —because they can 't stop, rethink, and say," I can afford to write this one off and live to fight again. I don't have to pursue this thing as an obsession —in a way that will break me."

How can this principle be used in a positive way? Cialdini once used this story in an interview to make the point:

"There was a study done on college students, as freshman, were having trouble in their first year with their study habits. They weren't doing very well in their classes. And they went into a particular program that was scheduled to help their study habits. One group of them made a commitment to study regularly and specific times, in a systematic way every night. And they kept that commitment in their heads. Another group wrote it down and kept it private. Another group wrote it down, and showed it to everybody else in the room. "Here's what I promise that I'm going to do." The first 2 groups didn't improve at all on their next test. But that group that showed their public commitment to everybody else in the room, 86 percent of them got one full grade better and moved from a C to a B or a D to a C on the next exam."

3. "First, we seem to assume that if a lot of people are doing the same thing, they must know something we don't. Especially when we are uncertain, we are willing to place an enormous amount of trust in the collective knowledge of the crowd. Second, quite frequently the crowd is mistaken because they are not acting on the basis of any superior information." "**We will use the actions of others to decide on proper behavior for ourselves, especially when we view those others as similar to ourselves."** Social proof is powerful and someone who knew that well was Bernie Madoff. The list of his famous victims is long. Sandy Koufax, Kevin Bacon, Henry Kauffman, Steven Spielberg, Kyra Sedgwick, John Malkovich… The list of famous victims goes on and on**.** Cialdini writes: "One means we use to determine what is correct is to find out what other people think is correct. We view a behavior as more correct in a given situation to the degree that we see others performing it." Restaurants often seat the first patrons near the front window since it is harder to get people to enter if no customers are already inside. As Ben Graham once said: "You are neither right nor wrong because the crowd disagrees with you. You are right because your data and reasoning are right." Munger talked about how business executives makes errors based on social proof in his famous Harvard speech on human misjudgement: "Big-shot businessmen get into these waves of social proof. Do you remember some years ago when one oil company bought a fertilizer company, and every other major oil company practically ran out and bought a fertilizer company? And there was no more damned reason for all these oil companies to buy fertilizer companies, but they didn't know exactly what to do, and if Exxon was doing it, it was good enough for Mobil, and vice versa. I think they're all gone now, but it was a total disaster." In order for investors to beat the performance of an index fund they must have a view that is different than the crowd and they must be right about that different view. Cialdini points out: "Daniel Kahneman won a Nobel Prize for showing that if you're trying to mobilize people under conditions of uncertainty, notions of loss are psychologically more powerful than notions of gain. Managers can take the wind in their faces and make it wind in their sails by speaking not just of what will be gained by moving but also of what will be lost or forgone if people fail to move. A second thing that happens when people are uncertain is that they don't look inside themselves for answers—all they see is ambiguity and their own lack of confidence. Instead, they look outside for sources of information that can reduce their uncertainty. The first thing they look to is authority." An

example Cialdini cites is changing the action line in an infomercial from "Operators are waiting, please call now," to "If operators are busy, please call again." Cialidni describes why the call in rates went way up when this change was put in place: "home viewers followed their perceptions of others' actions, even though those others were completely anonymous. After all, if the phone lines are busy, then other people like me who are also watching this infomercial are calling, too."

Social proof, like the other tendencies discussed in this post, can be uses for good as well as bad purposes. For example, an advocate of greener practices writes:

"Cialdini, a professor at Arizona State University, conducted a study in several Phoenix hotels comparing the effects of those ubiquitous hotel-bathroom placards that ask guests to reuse towels, testing four slightly different messages. The first sign had the traditional message, asking guests to "do it for the environment." The second asked guests to "cooperate with the hotel" and "be our partner in this cause" (12 percent less effective than the first). The third stated that the majority of guests in the hotel reused towels at least once during their stay (18 percent more effective). The last message was even more specific: it said that the majority of guests "in this room" had reused their towels. It produced a 33 percent increase in response behavior over the traditional message."

Cialdini gives this other example from an area of the United States close to where he lives:

"We've done some research in the petrified forest in Arizona where I live, there's a big sign: 'So many people have stolen pieces of wood from the forest that it's undermining the integrity of the forest'. That sign tripled theft! But if we said 'If even one person steals, it undermines the integrity of the forest', that cut theft in half compared to no sign. Well, it turns out that the managers of the park made a mistake, because only 2% of people steal. So actually they made two mistakes: First of all, they didn't use the real Social Proof: the 98% of the people who don't steal. Secondly, they made stealing seem like the norm when it wasn't! So it's all about the norm. Norm is essentially Social Proof."

4. "People prefer to say yes to individuals they know and like." Finding examples of dysfunction based on liking is like shooting fish in a barrel with a spear gun. For example, an actor who knows nothing about finance is put in a commercial and talks in the advertisement about how you can "make money" doing X. People know that the person is just an actor and yet statistics show they are motivated into the reverse mortgage or buy the expensive insurance or trade commodities. The sales person who wants to close the sale may want to learn the favorite sports team or hobby of the customer for the same reason. People are also more likely comply with requests of people who are physically attractive or who have similar backgrounds and interests." Again, the liking tendency can be used for good as well as bad purposes. For example, a study concluded: "newcomers feel motivated to come back to Alcoholics Anonymous because they felt cared for, felt similar to other alcoholics, and found hope in others' recounted experiences with the program. Findings also argue for an extension of Cialdini's theory by augmenting the 'liking' peripheral cue to include social support and similarity." Munger says Alcoholics Anonymous uses many of the same techniques as a cult like the Moonies, but for what he believes is a positive outcome. It is interesting to note that just because someone is "family" does not mean they fall outside of the liking/hating tendency. Munger quotes Buffett as saying: "a major difference between rich and poor people is that the rich people can spend more of their time suing their relatives." On a more positive note, Cialdini advise salespeople as follows:

"People don't buy from because they like you, as much as they buy from you because they perceive that you like them. If I know that you like me, I know you're going to give me a good deal. You're not going to exploit my interests. You're not going to take me. If you genuinely like me, I can exhale. I can listen to what you have to tell me with confidence. So here's the implication. Instead of trying to find a way to get your clients to like you, you find a way to come to like your clients, and show them that you like them. That's your secret."

5. "We are trained from birth to believe that obedience to proper authority is right and disobedience is wrong." "Abraham's willingness to plunge a dagger through the heart of his young son because God, without any explanation, ordered it. We learn in this story that the correctness of an action was not judged by such considerations as apparent senselessness, harmfulness, injustice, or usual moral standards, but by the mere command of a higher authority." Authority is often used by "compliance professionals since it is so easy to put into play. Often all is needed is an expert, who can be just about anyone with a fancy title, particularly if they are from out of town. The good news is that if someone's expertise is shown to be fake the spell can be broken. Charlie Munger describes the problem with authority bias: "[Researchers] don't do this in airplanes, but they've done it in simulators. They have the pilot to do something where an idiot co-pilot would know the plane was going to crash, but the pilot's doing it, and the co-pilot is sitting there, and the pilot is the authority figure. Twenty-five percent of *the* time, the plane crashes. I mean this is a very powerful psychological tendency." Cialdini explains: "Someone who is ***in*** authority has a title, ranking, or the trappings of authority. But, someone who is ***an*** authority is more persuasive because they have superior knowledge, experience or expertise in a specific area." A crook trying to steal your Internet password may claim that they are from the security department of your network services provider, bank or credit card company. The Nigerian scammer may say they are a prince, senior government official or tribal leader for the same reason. Scammers who claim to be from the IRS are also trying to exploit authority bias. Ciadini has said in an interview:

"Authority is more important, impactful and more influential on topics of fact. If you are an expert on the matters of fact then you should emphasize your authority when you are presenting that information." How has the Internet charged this authority principle. Cialdini points out: "Social media have allowed us to access other sources of information than in the past, but I don't think they've changed our responses to influence appeals. One thing we're seeing, though, is that people are beginning to be influenced by their peers more than by experts."

6. "Our typical reaction to scarcity hinders our ability to think." Scarcity is often used by salespeople and other compliance professionals to motivate buyers. Bernard Madoff when approaching new marks liked to make a big show out of telling people in public that they would not be allowed to invest in his fund. The more he told them he was not willing to manage their money, the more they wanted to do so since he created a false sense of scarcity. Palm Beach accountant Richard Rampell said of Madoff: "It was almost like you were getting let into the club of investors, and everybody wanted to be in. 'Oh, wow! You've got a Madoff account.'" The phrase "limited time offer" or available for the first ten customers is all about invoking scarcity bias. A limited edition Ferrari is all about creating an image of scarcity. Cialdini points out: "The scarcity principal trades on our weakness for shortcuts." If the Yeezy sneaker is relatively scarce, is must be valuable is the message intended by the compliance professional. If there is a line outside a store to buy the latest phone it must be scarce and therefore valuable in the thinking the vendor wants to generate. If the salesperson

says you need to act now, but you are not ready to act since you have not done the due diligence, just say no. As Warren Buffett says: "Investing is a no-called-strike game. You don't have to swing at everything–you can wait for your pitch." Addendum: It is important to note that more than one principle may be involved and that there are many more biases, tendencies and heuristics than the six discussed in this post on *Influence*. They can all interact to create what Charlie Munger calls a lollapalooza. Munger:

"A [decision] frequently involves a whole lot of factors interacting … the one thing that causes the most trouble is when you combine a bunch of these together, you get this lollapalooza effect. Often results are not linear." Munger relays this story: A guy named Zimbardo had people at Stanford divide into two pieces: one were the guards and the other were the prisoners, and they started acting out roles as people expected. He had to stop the experiment after about five days. He was getting into human misery and breakdown and pathological behavior. However, Zimbardo is greatly misinterpreted. It's not just reciprocation tendency and role theory that caused that, it's consistency and commitment tendency. Each person, as he acted as a guard or a prisoner, the action itself was pounding in the idea." Wherever you turn, this consistency and commitment tendency is affecting you. In other words, what you think may change what you do, but perhaps even more important, what you do will change what you think. And you can say, "Everybody knows that." I want to tell you I didn't know it well enough early enough."

Notes:

Cialdini's book *Influence*: https://www.25iqbooks.com/books/8-influence-science-and-practice-5th-edition

Munger's *The Psychology of Human Misjudgment* speech: http://www.rbcpa.com/mungerspeech_june_95.pdf

Influence at Work http://www.influenceatwork.com/wp-content/uploads/2012/02/E_Brand_principles.pdf

Atlantic article: http://www.theatlantic.com/magazine/archive/2009/07/greening-with-envy/307498/

HBS Interview: https://hbr.org/2013/07/the-uses-and-abuses-of-influence

NPR Interview: http://www.pbs.org/newshour/bb/psychological-trick-behind-getting-people-say-yes/

Interview: http://www.mischacoster.com/2010-10/psychology/interview-dr-robert-cialdini-on-social-media-influence-with-audio/

Interview: http://www.geniusnetwork.com/robertcialdini/Genius-Network-Robert-Cialdini-Interviewed-by-Joe-Polish.pdf

A Half Dozen More Things I've Learned from Bill Gurley about Investing

October 14, 2016

I started my friendship with Bill Gurley in the mid-1990s soon after Bill Gates forwarded me a copy of *Above the Crowd.* I immediately signed up to receive it (by fax!). I then found a way to for us to start talking by phone and the Internet. Gurley was a sell-side analyst living in New York at that time. We kept talking when he moved to Silicon Valley, including the time he spent at Hummer Winblad Venture Partners and then on to Benchmark Capital. As fate would have it, I was sent by Craig McCaw to spend time with Benchmark Capital not soon after Gurley arrived as a partner. It was the late 1990s, the Internet bubble was in full swing and mobile was thought to be "the next big thing" in Silicon Valley. The time I spent co-investing with Benchmark for Eagle River was as much fun as I have ever had in my career. I learned as much from the Benchmark partners during that time as I have from anyone ever. Learning from Gurley, Bruce Dunlevie, Andy Rachleff, Kevin Harvey, Bob Kagle, Steve Spurlock and David Beirne was a dream come true. Unfortunately, the Internet bubble would eventually pop and that would put everyone into firefighting mode for a few years. But I have maintained my friendship with Benchmark over the years and have continued to learn from them. For example, Gurley was the person who pushed me to start using Twitter and from that came my 25IQ blog (my effort to pass along a little of what I have learned before I am dead).

When I wrote my first blog post on Gurley for 25IQ I was limiting myself to 1,000 words per post. I am now up to as much as 4,000 words on some posts since people seem to be actually reading them. So I feel like I owe Gurley and some other people who I wrote about early in this 25IQ series an addendum. As part of my effort to make amends, set out below are a few quotes from a fantastic recent ReCode interview of Gurley by Kara Swisher and my usual commentary. In the notes that are always at the bottom of each post I have assembled a collection of other videos of Gurley, including a particularly insightful interview by Om Malik:

1. **"I think everybody, to a certain extent, has to play the game on the field. I like to use the example of Hortonworks and Cloudera. So we're in this company HortonWorks, it's a Hadoop company. Cloudera raises $950 million from Intel. What do you do? You could sit around and say, 'We're going to get to profitability,' but you're not going to matter. You might as well lock the door and leave the building. So you're forced into a game of capital warfare that you may have not been ready to play. And so I don't know that any one person is responsible. Silicon Valley and venture capital have always been cyclical. And so there's something about human nature that causes us to be increasingly risk-seeking until someone comes along and really punishes everybody." "I've got an unwritten blog post about unit economics. One of the things that Silicon Valley does when it gets risk-seeking, which it did in '99 and now, is they invest in businesses with lower and lower gross margins. And that's riskier. And a lot of times those involve consumer products. And then what they do is they start selling them heavily discounted. And there's this old saying about selling dollars for 85 cents. But there's a truism to it. You can create infinite revenue if you sell dollars for 85 cents. And if you give consumers more value than you charge them for, they will love you. And I remind entrepreneurs all the time that Webvan had the highest NPS scores of any**

company I've ever known. It wasn't that the consumer proposition didn't work, it was that the economics didn't work. They weren't charging enough for the service level." "When bubbles come along, almost anyone can raise money. And so it creates excessive competition, you get companies that are misbehaving." Are there any exceptions to the rule that every business needs a moat to generate a sustainable profit? No. However, this is a trick question since it is the existence of a return on investment that is significantly above a firm's opportunity cost of capital over a number of years that is the test of a moat's existence in the first place. In other words, the test of whether a moat exists is fundamentally mathematical (i.e., quantitative). But what causes a moat to exist is mostly qualitative since a nest of complex adaptive systems is involved in any business and the economy in which it operates. The successful creation of a new moat is emergent – you know it when you see it. Moats are created through the interaction of a number of phenomena that I have written about many times on 25IQ series and in my book on Charlie Munger. Because moats are emergent it seems rather obvious how they were created after the fact, but the reality is they are hard to predict before the fact (which explains why venture capital firms invest in a portfolio of businesses hoping for one to three grand slam financial home runs per fund).

In order to moderate the risks associated with this phenomenon of startups and other businesses selling dollars for 85 cents Gurley has been playing the role of an industry leader when he says things like he did above. He has been *pushing against the wind* to try to benefit not only his own portfolio of businesses, but the industry as a whole. People get easily confused about what Gurley is saying because they tend to be almost totally focused on valuation. Valuation is easy to understand. The general public and many mercenary entrepreneurs like to read and dream about wealth. Wealth sells. But the valuation of a business is a very different issue than the issues that can arise due to risk, uncertainty and ignorance in an industry, value chain or business. In short, there is far too much talking and writing about valuation (especially about whether some company is a unicorn) and far too little focus on the set of issues created by risk, uncertainty and ignorance. In other words, the press likes to say Gurley believes valuations are too high, when he is actually saying that risk, uncertainty and ignorance are too high. Valuation ≠ Risk. Valuation can be a source of risk, but it is not the same thing as risk.

Since Gurley is an athlete and a sports fan he uses sports analogies like "play the game on the field." Another of these analogies is "muscle memory." He said in the Kara Swisher's Recode interview:

[Gurley] "People discount risk slowly. Like they forget about pain and they forget about layoffs and they forget about that this is supposed to be hard, you need to profitable. And the younger generation, they're taught in very short time windows. So most of the entrepreneurs today weren't around in '99.

[Kara] So they've forgotten.

[Gurley]They have no muscle memory of it whatsoever."

It is hard to exaggerate what a shock it was when the Internet bubble popped. The business environment moved from a fund raising climate where you could easily raise billions of

dollars for a telecom firm or hundreds of millions for a startup in days to one where you could not raise five cents over any period. Any rational founder should have given thought about what they would do if there was no more cash coming in from investors. Prior to the end of the Internet bubble some founders did and some founder didn't, and that was a life or death decision for their business. Some founders just got lucky since they had recently done a big financing round (what looked like skill was actually luck). People like Mitch Kapor and Josh Kopelman are in 2016 talking about a Watney rule: "We need to act we're like Mark Watney in the Martian. We can't assume we will get a shipment of new potatoes to save us." The Watney Rule is intended as insurance, not as an operating plan while money is available as current costs. Fred Wilson thoughtfully argues that times when liquidity is tight can be cathartic:

"As these expansion stage companies struggle to raise capital, they are forced into a cathartic (and at times painful) process of self-reflection. What is their sales process? Is it efficient? What is their unique value proposition? Is it really unique? What kind of company are they building? Will it be large enough to justify all of this investment? And as a result, these companies are coming out of these hard raises with better businesses, better operating models (lower burn rates!!), and bigger visions to go execute against."

2. **"When I was on Wall Street I was just devouring any book I could on investing philosophy — I think I bring a structured approach. And the way I think about it, which will sound trite, but I'm always looking for some kind of competitive advantage, like some type of unfair ability to compete in the marketplace. I don't get drawn to the kind of enterprise deals that are just, "Who has the better sales force, knock them down," kind of thing." "I remember the OpenTable scenario. We're meeting with Chuck [Templeton], and he's in, like, three restaurants, and we're like, "How could this ever work?" And you're like, "Well, it can work if we tip it into a network effect and then everyone has to buy it." And that's what played out. It's that kind of thing. We were betting on the existence of a network effect. And people talk about network effects all the time, but you come up with ways to try and analyze whether it's possible or not. Will more diners lead to more restaurants, and will more restaurants lead to more diners? Are there ways to measure and study that? Or to implement the go-to-market strategy such that it exploits it as much as possible?"** One particularly challenging element of a technology-based business is the moats of these businesses have network effects at their core. In a value chain dominated by network effects-based moats it is rare that a business can be fully rational about spending on customer acquisition when their competitor is spending on sales and marketing as if they have a printing press set up in a huge warehouse minting non-sequentially numbered $100 bills at zero cost. Since there is no way to predict when the spigots supplying new cash will be less available or even dry up and since network effects are so critical, a technology startup or business must, as Bill Gurley says: "play the game on the field." The entrepreneur must trade off: (1) the risk of running out of cash against (2) the risk of not acquiring essential network effects before more free spending competitors do so. There is no scientific method for optimally making this tradeoff. However, cash in the bank is something that can give the business a margin of safety. A famous investor once called cash "financial Valium."

All of this is obviously impacted by the availability and cost of capital. More cash means less people are paying attention to having sound unit economics. Gurley notes: **"I was fortunate enough this summer to meet Warren Buffett — Chamath [Palihapitiya] was the one that made that happen. But we only had one question each, and I said, "You know, in our industry we're seeing that low interest rates are leading to overt competition that's irrational." And he says, 'You bet it is.' And he's seeing it in his business as well, and I think it's played out in natural gas and all these other pockets. Real estate in Silicon Valley, right? All these asset prices, because with interest rates so low you just have people looking for yield, so money sloshes around."** There is clearly a lot of capital looking to find higher returns and that impacts the amount of capital invested in the venture capital industry which ends up in the hands of the businesses. This is having a significant impact on behavior to say the least. As Warren Buffett wrote in his February 28, 2001 Chairman's letter:

"Nothing sedates rationality like large doses of effortless money. After a heady experience of that kind, normally sensible people drift into behavior akin to that of Cinderella at the ball. They know that overstaying the festivities—that is, continuing to speculate in companies that have gigantic valuations relative to the cash they are likely to generate in the future—will eventually bring on pumpkins and mice. But they nevertheless hate to miss a single minute of what is one helluva party. Therefore, the giddy participants all plan to leave just seconds before midnight. There's a problem, though: They are dancing in a room in which the clocks have no hands."

3. **"When I first arrived at Benchmark, it was like, 'Nothing can go wrong.' There was an IPO every week. And then, *wham!* Man, the door came down hard."**

Joe Wiesenthal asked this question on Twitter recently: What caused the end of the Internet bubble. Here is my answer from a previous post:

"The Internet bubble was literally insane. I've never been involved in anything in my life that was more surreal. Fear of missing out (FOMO) caused the bubble to reach unprecedented levels. FOMO is driven by an innate human desire to avoid regret. Daniel Kahneman has counseled financial advisors to "try to prevent people from acting out of regret." Investors and speculators who are prone to regret are more prone to change their mind at precisely the wrong time. Primarily you want to protect them from regret, you want to protect them from the emotions associated with very big losses.They key takeaway from the Internet bubble, for me, is that when it happens is not predictable. If it is a bubble and it does bust, the day before is like any other day. One key "tell" that can give you a sense that something is up is looking around and seeing lots of companies that are unprofitable paying far too much to acquire customers. What is too much? If the customer over their lifetime is producing a return that is significantly net present value negative the business is paying too much. How much is too much? It depends. If this pattern of acquiring net present value negative customers is persistent and widespread hairs should be standing up on the back of your neck. The bigger the net present value deficit the bigger the risk. Can you predict when a bubble will end? No. "You can't predict, but you can prepare" says Howard Marks, and I agree. And for the hundredth time: risk is not the same thing as valuation."

The Internet bubble and its end were nonlinear. There was no single cause of its creation or its demise. They were what Charlie Munger calls "lollapaloozas." Michael Mauboussin describes the phenomenon: "Increasingly, professionals are forced to confront decisions

related to complex systems, which are by their very nature nonlinear…Complex adaptive systems effectively obscure cause and effect. You can't make predictions in any but the broadest and vaguest terms. … Complexity doesn't lend itself to tidy mathematics in the way that some traditional, linear financial models do."

4. **"It's called asymmetric returns. If you invest in something that doesn't work, you lose one times your money. If you miss Google, you lose 10,000 times your money. You have to orient yourself toward — Bruce [Dunlevie] uses the phrase, 'What could go right?" And you have to kind of think that way all the time." "The learning is that if you have remarkably asymmetric returns, you have to ask yourself, "How high could up be?" And then that "what could go right?" Because it's not a 50/50 thing on the judgment call. Like, if you thought it was a 20 percent chance at doing it, you should still do it, because the upside is so high." "You have to be very fortunate to fall on what people sometimes refer to as positive black swans, these break-out plays. And I think you could spend your whole career and do extremely well and never get behind one of the ones: A Facebook, a Google, that kind of thing. And it's almost impossible to predict ahead of time what's going to turn into something like that." "The moment that John Doerr and Mike Moritz closed the Google investment, which was probably all of a week and half, it was the biggest event in both those firms for over a decade. And something had happened in a week and a half. And for a lot of those companies, and I'll include the ones we're in, if you worked there it probably would have come out that way anyway. So the seminal event was that closing event that was very quick."**

Convexity (huge upside and small downside) and power laws drive financial returns in venture capital. Venture capitalists must deal with systems which are, in the words of Nassim Taleb, "more like a cat than a washing machine." Nassim Taleb provides a quadrant-based model as a guide to decision making. Michael Maubousin provides a summary of what Nassim Taleb has created:

"A two-by-two matrix, where the rows distinguish between activities that have extreme outcomes and those that have more bunched outcomes, and the columns capture simple and complex payoffs. He allows that statistical methods work in the First Quadrant (simple payoffs and bunched outcomes), the Second Quadrant (complex payoffs and bunched outcomes), and the Third Quadrant (simple payoffs and extreme outcomes). But statistical methods fail in the Fourth Quadrant (complex payoffs and extreme outcomes)."

Richard Zeckhauser explains why

"The real world of investing often ratchets the level of non-knowledge into still another dimension, where even the identity and nature of possible future states are not known. This is the world of ignorance. In it, **there is no way that one can sensibly assign probabilities to the unknown states of the world.** Just as traditional finance theory hits the wall when it encounters uncertainty, modern decision theory hits the wall when addressing the world of ignorance."

The nature of the venture capital business is that financial returns come from the Fourth Quadrant/the world of ignorance. Standard statistical methods do not work. If you are looking for a career that is more protected from artificial intelligence, the Fourth Quadrant is a place

to be. The great venture capitalists person accept this uncertainty and ignorance by seeking to become "antifragile" rather than trying to precisely predict outcomes that are not computable. This is part of the reason why there are venture capital firms. Warren Buffett advises:

"If significant risk exists in a single transaction, overall risk should be reduced by making that purchase one of many mutually-independent commitments. Thus, you may consciously purchase a risky investment – one that indeed has a significant possibility of causing loss or injury – if you believe that your gain, weighted for probabilities, considerably exceeds your loss, comparably weighted, and if you can commit to a number of similar, but unrelated opportunities. Most venture capitalists employ this strategy. Should you choose to pursue this course, you should adopt the outlook of the casino that owns a roulette wheel, which will want to see lots of action because it is favored by probabilities, but will refuse to accept a single, huge bet."

5. **"There aren't that many [rules]. One of the games you play in venture is to know which rules to break at the right time. And so we constantly challenge ourselves. Like, "Should we maybe be dropping this rule at this moment in time because things are changing?" "In the venture rule book there's: "Don't back academics who insist on being CEO." So [when Google pitched to us] there was a number of things that said, "Don't do it." But two of the smartest investors ever [Sequoia and Kleiner] stepped up and did it. They also wanted a price that was seemingly ridiculous, obviously a very good investment. We failed to pursue it. It's always important to state it that way. Because to say 'pass' made it sound like we had a chance. I don't know if we had a chance. They presented to us and we failed to pursue it. And if we had, we would have had to compete with two of the best."** When venture capitalists make a decision on an investment they must think about a range of issues. One of these issues is valuation. If the investor pays too much for an investment it can become very hard to hit the targeted potential return. Another issue is the ownership level. You need to own at significant stake in a business to justify diverting the time and energy of the venture capitalist and not investing in a business that may be viewed to create a conflict. The venture capital business is about tape measure financial home runs and those returns come from exceptions to what people thought was a rule before or things no one knew. It is worth repeating what Zeckhauser said above: **there is no way that one can sensibly assign probabilities to the unknown states of the world.** So for the venture capitalist the question is always: what rule it it wise to break in the case of this investment?

6. "Venture's really hard. And there's a lot of luck involved. And mistakes that you make — especially missing ideas." "Most big startup breakouts are where people aren't paying attention. As opposed to where everybody's got their guns lined up." "Between the time we looked at the [Uber] seed and when we did the A, Travis had moved into the CEO position. At the beginning we were just studying him as an angel investor in the thing, and probably by the time the A came around he was the CEO. It was hard. Like I said, we had a theory that it could be like OpenTable. So you know, OpenTable was sold for like $3 billion or something. So I'd be inaccurate if I suggested we had a vision that it could one day cause people to question car ownership. I never had considered that." The best venture capitalists are open and aware of the role that luck played in their lives and in their portfolio.When you listen to a Gurley interview he always takes time to thank the people who helped him along the way and to point out the good fortune he has experienced in his career. In a Quora AMA, Gurley gave a great answer to this question: What are the top

pieces of advice you would give to your younger self? I can't think of a better way to end this post than Gurley's answer:

1) Read even more than you did.
2) Thank the people (more) that helped you along the way.
3) When Larry and Sergey ask for $110 pre-money, say "yes, we would be very excited about that."

Notes:

Previous 25IQ on Bill Gurley: https://25iq.com/2013/09/09/a-dozen-things-ive-learned-from-bill-gurley-about-investing-and-business/

Above the Crowd: http://abovethecrowd.com/

ReCode: http://www.recode.net/2016/9/28/13095682/bill-gurley-benchmark-bubble-uber-recode-decode-podcast-transcript

Quora AMA: https://www.quora.com/session/Bill-Gurley/1#!n=30

McCombs Interview: http://www.today.mccombs.utexas.edu/2016/05/high-stakes

Om Malik: https://www.youtube.com/watch?v=dBaYsK_62EY

Pando: https://www.youtube.com/watch?v=nUfkK2xcwnY

TechCrunch: https://www.youtube.com/watch?v=FTGQb32DCDE

GeekWire: https://www.youtube.com/watch?v=VVbK5LCpuWk

Gurley on Coach Campbell: https://www.youtube.com/watch?v=Lfrbn4tH-NY

Bloomberg: https://www.youtube.com/watch?v=PwuAYyhfuMs

WSJ: http://www.wsj.com/video/bill-gurley-weve-become-comfortable-with-high-burn-rates/1A3324C6-40BF-4B64-BAD2-D2864F891AB3.html

CNBC: http://www.cnbc.com/2016/06/01/bill-gurleys-warning-for-start-up-investors.html

TechCrunch: https://techcrunch.com/2015/10/20/bill-gurley-surprises-with-a-positive-note-on-seed-stage-startups/

Techcrunch: https://techcrunch.com/2015/09/15/bill-gurley-on-some-high-flying-startups-and-their-economics-its-the-same-shit-as-in-99/

Fred Wilson: http://avc.com/2016/10/the-hard-raise/

A Dozen Things I've Learned about Multi-sided Markets (Platforms)

October 22, 2016

1. **Multi-sided markets bring together two or more interdependent groups who need each other in some way.** Uber, eBay, and Airbnb are all multi-sided markets. A multi-sided market is sometimes called a "platform." Hundreds of big and small firms fail trying to create multi-sided markets in different categories every year. Since the payoff from creating a significant multi-sided markets is so massive and the financial downside relatively small, founders and venture capital investors are willing to keep experimenting since it is magnitude of correctness and not frequency of correctness that determines financial success. Just one success in creating a multi-sided market can pay for many dozens of failed attempts. Apple, Microsoft, Google, Amazon and Facebook are all platforms. Why don't firms create more multi-sided markets if they are so profitable? Because getting all of the elements just right at just the right time is very hard to do successfully. Creating a successful multi-sided market requires a lot of skill and luck as will be explained below.

2. **A critical difference between single and multi-sided market is that the sides interact directly.** A single-sided "market maker" buys x, puts x in inventory, and eventually sells x. As an example, a person employee who buys breakfast cereal from a grocery does not deal directly with the manufacturer of the product so that value chain represents a single-sided market. The authors of the book *Platform Revolution* refer to single sided markets as having a linear value chain. They describe a single-sided market as "a step-by step arrangement for creating and transferring value with producers at one end and consumers at the other." In contrast, when a recruiter contacts a potential employee directly using the LinkedIn platform that interaction is part of a multi-sided market. Multi-sided markets look like this:

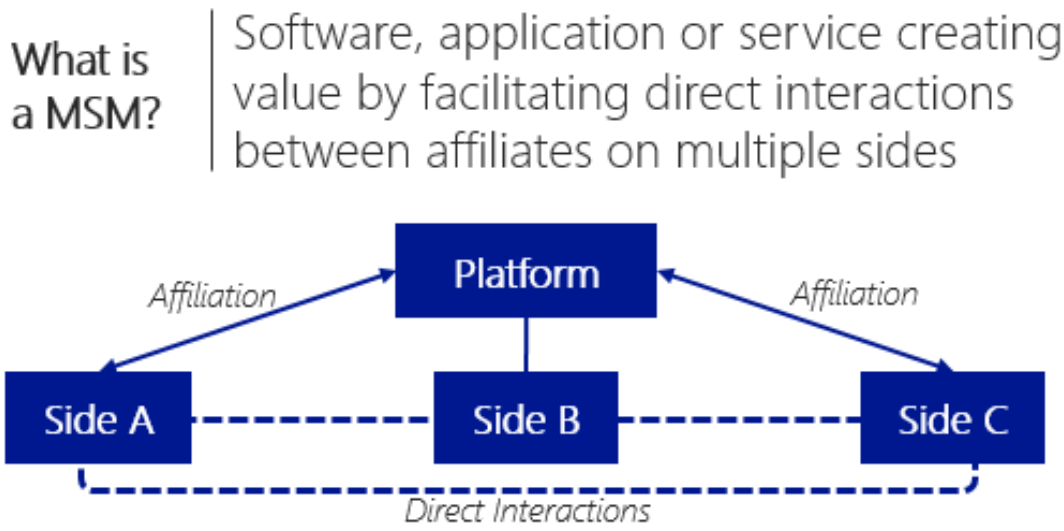

3. Multi-sided markets are not linear. A market that has two or more sides is vastly more financially attractive to create since it has the potential to scale and generate value in a non-linear manner. In other words, the whole of the value created by a multi-sided market can be more than the sum of the parts, if the multi-sided market is correctly structured. What can happen if the right conditions and structure is present is described well by Esko Kilpi as follows: "Network effect-based value can increase exponentially at the same time as costs grow linearly, if at all. If you follow the valuations of firms today, there is an ever-widening gap between the network-economy platforms and incumbents driven by traditional asset leverage models. Investors and markets have voted." The nature of platforms has changed the value chain in many industries. Tom Goodwin of Havas Media famously said: "Uber owns no vehicles. Facebook creates no content. Alibaba has no inventory. And Airbnb owns no real estate." When you do not need to own these assets less capital is required and the business scales vastly better both financially and operationally.

4. **A multi-sided market is not valuable if the sides can find each other easily.** Solving a hard coordination problem is the key to sustainability for any market, including multi-sided markets. How do many firms and individuals involved in a complex division of labor successfully coordinate their actions so as to optimize the creation of value and profitability, when each possesses different and changing knowledge and expectations about a risky and uncertain future? Coordination is achieved through price discovery and a multi-sided market can provide just that for market participants if the conditions are right. For example, someone may need to find a freelance artist or software programmer and since there are so many potential suppliers with different skills and availability a platform like ProFinder or UpWork will therefore often be useful to them. But sometimes a significant coordination problem does not exist and a multi-sided market is unlikely to succeed. For example, if Boeing needs a supplier of rivets, once it finds that supplier it no longer needs a multi-sided marketplace. Airbnb and Uber are example of businesses that do solve hard coordination problems.

5. **"Demand side economies of scale" (also known as network effects) result when the value of a product or service changes in a positive way as more people use it. Network effects can be positive (for example the benefits of an increasing number of members of a social network) or negative (for example, network congestion; viruses, spam).** What a business seeks in any multi-sided market are network effects since they are increasingly the most important method that can be used by a technology business to create barriers to entry against competitors (a moat). Due to the falling costs of creating a new business, especially technology businesses, network effects are the most significant way to a company to create moat and generate a profit. The famous napkin sketch that illustrates Uber's network effects is as follows:

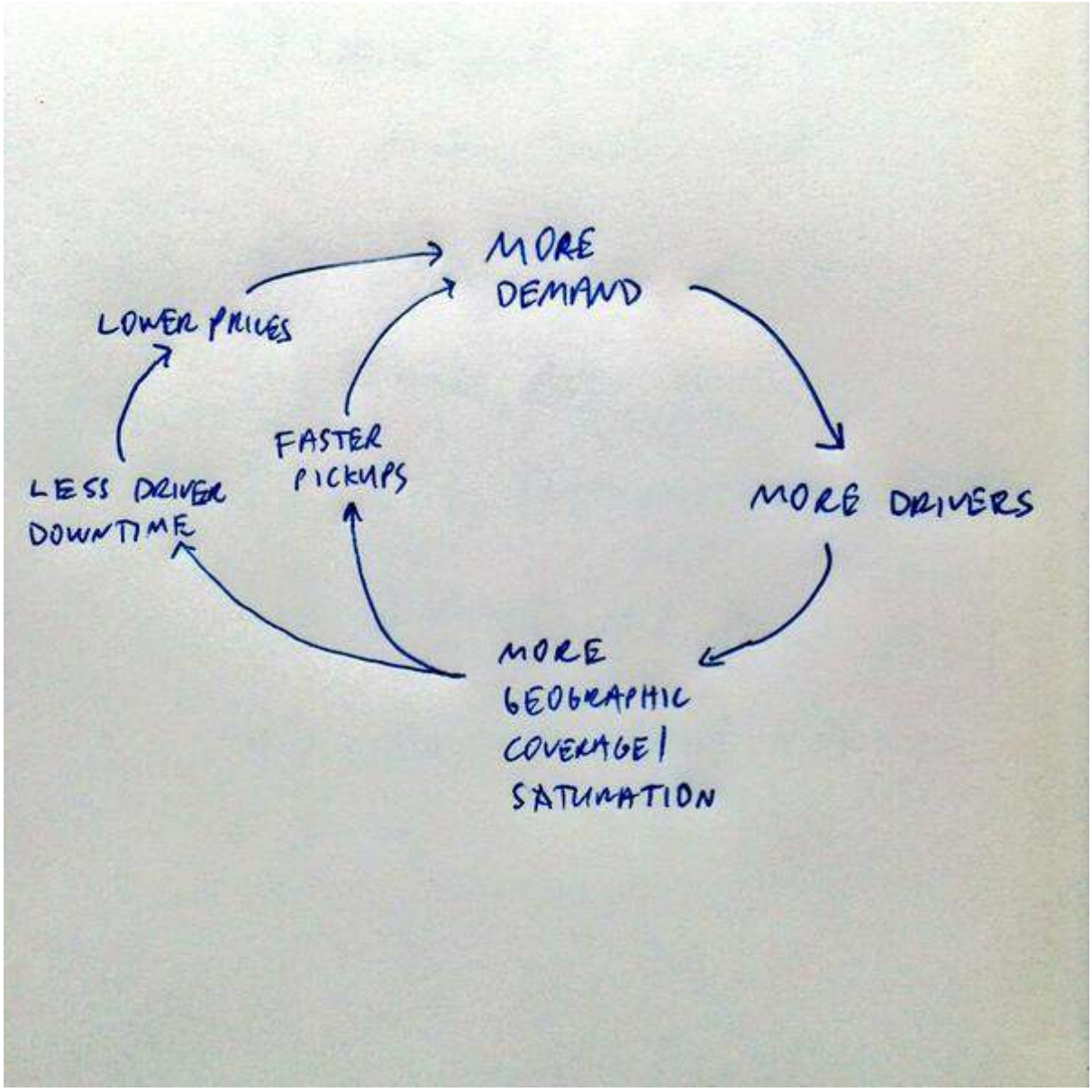

Having a moat is essential for any business since otherwise competitors will introduce additional supply to a point where financial returns are equal to the opportunity cost of capital. Anyone who says a moat is not needed is essentially suspending the laws of supply and demand. If a business earns a financial return that exceeds its opportunity cost of capital for a significant period of time it has a moat. The only question open at that point is what the elements are that created that moat (network effects, brand, supply side scale economies, regulation, intellectual property, etc.).

6. **"Supply side economies of scale" exist when there are reductions in the average cost per unit associated with increasing the scale of production.** Sometimes you hear people say that supply-side scale economies of scale no longer matter in an age where network effects are so powerful. This is not true since supply-side scale economies can in some cases still enhance the moat of a business that also enjoys network effect benefits. A moat can never be too strong since it is always under attack by competitors. As an example, the leading providers of cloud

infrastructure have supply side economies of scale in building web scale services that smaller companies will not be able to match.

7. **Creating a successful multi-sided market requires that the business overcome the "chicken and egg problem."** The problem can be stated simply: How do you get one side to be interested in a platform until that other side exists, and vice versa. Part of the challenge is to get enough customers on both sides so there is critical mass. Critical mass is tricky to obtain particularly if the two sides need to show up simultaneously.

8. **The chicken and egg problem is best overcome if one side is clearly made the loss leader.** Experience has shown that it does not matter which side gets the free or subsidized offering- what is important is that one or more sides be chosen as the loss leader and one or more sides as the profit pool. The subsidy side tends to: (1) have more elastic demand; (2) be an offering that is harder to get; and (3) is needed more by the other side. The profit generating side tends to be the reverse, obviously. The price of the subsidy side is often below marginal cost and in some cases less than $ zero. For Uber, the subsidy side is drivers since they are relatively scarce. In the real estate business in the United States, buyers are the subsidy side.

9. **The sides of the market should complement each other – if the sides are complements, it not only reduces the customer acquisition cost (CAC) but assembles sides that want to to enter into exchanges.** A "complement" is any product or service that increases the value of another product or service. Multi-Sided Markets work best when the offering on one side of a market complements an offering on the other side of the market. Some complements are "demand-side complements" like cars and oil, hotdogs and mustard or chips and salsa. Some complements are supply side complements, like beef and leather. Search and advertising are complements as are social networks and advertising.

10. **Subsidizing the side of the multi-sided market with lower marginal cost/COGS is optimal.** Giving away goods that have a high marginal costs is often deadly. The objective is to have zero or very low marginal cost. As an example, it is particularly financially attractive to give away software as your incentive since it has zero marginal cost after fixed costs are recovered. Giving away subsidized hardware or storage is far less attractive, since there are always additional marginal costs no matter the scale of the business.

11. **Businesses that are slow to get to critical mass can run out of cash and momentum**. This problem is hard to solve for the same reason the opportunity exists. Getting the balance right and achieving critical mass is an art and not a science. People creating multi-sided markets is relatively is rare at scale. In technology business today there are few areas that do not have existing competition. If you go too slow you may fail just as you can fail if you go too fast. And as I wrote in my recent post on Bill Gurley, you may need to deal with competitors who are not acting rationally or at least are acting extremely aggressively. You need to play the game that is on the field.

12. **Clear profit pools should exist.** Products and services at a given business cannot all be loss leaders. The adoption of a multi-sided market strategy must be considered holistically. If something is a loss leader then there must be a leader that is profitable. Providing one side of a multi-sided maker at a loss cost is a tactic intended to optimize the customer acquisition process and lifetime value for a service that is profitable overall, rather than a standalone strategy.

Notes:

Invisible Engines: How Software Platforms Drive Innovation and Transform Industries. By David S. Evans, Andrei Hagiu, Richard Schmalensee. https://www.25iqbooks.com/books/314-invisible-engines-how-software-platforms-drive-innovation-and-transform-industries-mit-press

Platform Revolution: How Networked Markets Are Transforming the Economy–And How to Make Them Work for You. By Sangeet Paul Choudary and Marshall W. Van Alstyne. https://www.25iqbooks.com/books/315-platform-revolution-how-networked-markets-are-transforming-the-economy-and-how-to-make-them-work-for-you

Matchmakers: The New Economics of Multi-sided Platforms Hardcover – May 24, 2016 by David S. Evans (Author), Richard Schmalensee https://www.25iqbooks.com/books/133-matchmakers-the-new-economics-of-multisided-platforms

Sangeet Paul Choudary http://platformed.info/twitter-whatsapp-uber-airbnb-network-effects/

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Van Alstyne: http://ebusiness.mit.edu/research/papers/232_VanAlstyne_NW_as_Platform.pdf

Haigu paper: http://www.hbs.edu/faculty/Publication%20Files/15-037_cb5afe51-6150-4be9-ace2-39c6a8ace6d4.pdf

Hagui interview: http://hbswk.hbs.edu/item/new-research-explores-multi-sided-markets

Booz: http://www.strategy-business.com/article/03301?gko=16442

Esko Kilpi: https://workfutures.io/one-theory-to-rule-them-all-c942486e4b30#.gj4wcbxtz

Sam Ghosh: https://www.linkedin.com/pulse/understanding-multi-sided-platforms-social-networks-more-sam-ghosh

Why Investors Must Be Contrarians to Outperform The Market

October 28, 2016

1. **Bill Gurley: "Being 'right' doesn't lead to superior performance if the consensus forecast is also right."**

Andy Rachleff elaborates on the point made by Gurley: "What most people don't realize is if you're right and consensus you don't make money." It is a bit strange that most people don't realize this truth and yet it is common sense: you simply can't *be* part of the crowd and at the same time *beat* the crowd, especially after fees and costs are imposed. Nobel Laureate William Sharpe famously provided the mathematical proof in a paper entitled "The Arithmetic of Active Management." As restated by John Bogle the conclusion is: "In many areas of the market, there will be a loser for every winner so, on average, investors will get the return of that market less fees." Of course, the part about the investors collectively getting the return of the market is key. Being a long term investor in the progress of the economy is a very good thing. As life runs its course, some investors get more of that financial return of the market than others.

A key point in all of this is that you can decide not to try to outperform a market and instead to match it as closely as you can a very low cost. Warren Buffett describes the motivation for this approach well: "By periodically investing in an index fund, for example, the know-nothing investor can actually outperform most investment professionals. Paradoxically, when 'dumb' money acknowledges its limitations, it ceases to be dumb."

2. **Jeff Bezos: "You just have to remember that contrarians are usually wrong."**

This point made by Bezos is the reason why most people follow the crowd. Michael Mauboussin explains this tendency with a simple example:

"Being a contrarian for the sake of being a contrarian is not a good idea. In other words, when the movie theater's on fire, run out the door, right? Don't run in the door…. Successful contrarian investing isn't about going against the grain per se, it's about exploiting expectations gaps. If this assertion is true, it leads to an obvious question: how do these expectations gaps arise? Or, more basically, how and why are markets inefficient?"

Mauboussin explains why some investments get mispriced so badly:

"Because if the crowd takes something to an extreme, either on the bullish side or the bearish side, that should show up in your disconnect between fundamentals and expectations. And that is what allows you to make a good investment… Again, the goal is not to be a contrarian just to be a contrarian, but rather to feel comfortable betting against the crowd when the gap between fundamentals and expectations warrants it. This independence is difficult because the widest gap often coincides with the strongest urge to be part of the group. Independence also incorporates the notion of objectivity—an ability to assess the odds without being swayed by outside factors. After all, prices not only inform investors, they also influence investors."

This blog has repeatedly profiled great investors who have acquired skill in knowing when to be contrarian. Buffett's famous admonition is: "be greedy when others are fearful and fearful when others are greedy." One of the best times to invest is when uncertainty is the greatest and fear is the highest. This contrarian admonition is fully consistent with the Mr. Market metaphor. Make the market your servant and not your master. For example, Jeffrey Gundlach puts it this way: "I want fear. I want to buy things when people are afraid of it, not when they

think it's a gift being handed down to them." There aren't many people like Charlie Munger: "We have a history when things are really horrible of wading in when no one else will."

Bucking the crowd's viewpoint in practice in the real world is not easy since the investor is fighting social proof. Robert Cialdini: "social proof is most powerful for those who feel unfamiliar or unsure in a specific situation and who, consequently, must look outside of themselves for evidence of how best to behave there." I discussed social proof in a recent blog post on Cialdini's book *Influence*. In many cases, following the crowd (social proof) makes sense. Sticking with the warmth of the crowd is a natural instinct for most people. Many people would rather fail conventionally than succeed unconventionally. But doing the reverse is easier said that done for most people.

3. **Andy Rachleff: "Investment can be explained with a 2×2 matrix. On one axis you can be right or wrong. And on the other axis you can be consensus or non-consensus. Now obviously if you're wrong you don't make money. The only way as an investor and as an entrepreneur to make outsized returns is by being right and non-consensus."**

It is the existence of a gap between expected value and market price that Mauboussin talked about above which should drive investment decision making. If you have views which reflect the consensus of the crowd you are unlikely to outperform a market since a market by definition reflects the consensus view. Buffett puts it this way: "Most people get interested in stocks when everyone else is. The time to get interested is when no one else is. You can't buy what is popular and do well." Charlie Munger is more direct and colorful is his explanation: "For a security to be mispriced, someone else must be a damn fool. It may be bad for world, but not bad for Berkshire." Sometimes waves of social proof and other dysfunctional heuristics create a significant gap between price and value. This does not happen often in areas within a person's circle of competence, but it does happen. For some investors, spotting a gap like this happens only once or twice a year and that is just fine with them. In those instances these investors bet big and the rest of the time they do nothing. Some people, like day traders, think they can spot gaps between expected value and market price several times a day and make a profit after fees (this is almost always a triumph of hope over experience).

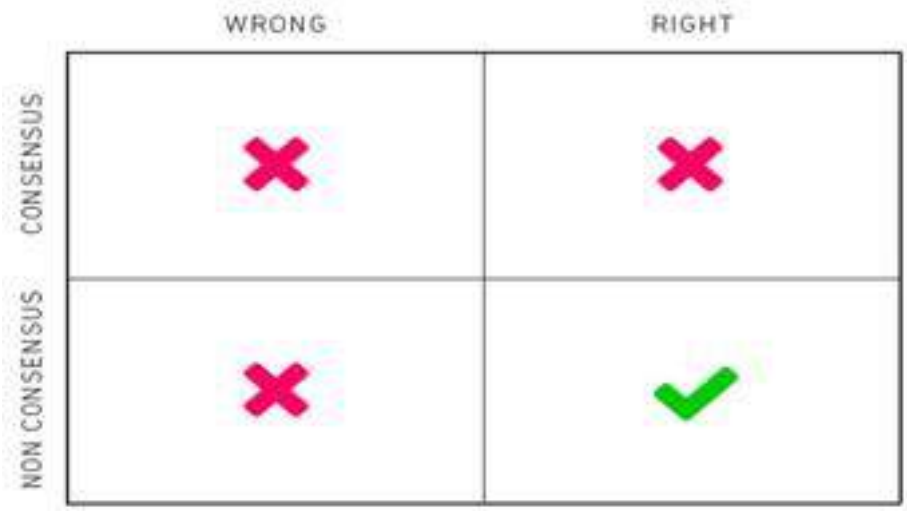

4. **Howard Marks: "To achieve superior investment results, your insight into value has to be superior. Thus you must learn things others don't, see things differently or do a better job of analyzing them – ideally all three."**

Being genuinely contrarian means the investor is going to be uncomfortable sometimes. Some people are good at being uncomfortable, and some are not. Peter Lynch said once: "To make money, you must find something that nobody else knows, or do something that others won't do because they have rigid mind-sets." Successful investing is the search for the mistakes of other people say Howard Marks that may create a mispriced asset. In other words, one person's mistake about the value of an asset is what can create an opportunity for another investor to outperform the market. This search is best done by people who are curious and hard working. Great investors hustle, have a huge scuttlebutt network and read constantly. They are constantly trying to learn more about more and know that the more that they know, they more they will know that there is even more that they don't know. If you are not getting more humble over time, you have a flawed system.

It is Mr. Market's irrationality that creates the opportunity for investors. Markets are often wise, but they are not always wise. The best returns accrue to investors who are patient and yet aggressive when they are offered an attractive price for an asset. Seth Klarman says: "Successful investing is the marriage of a calculator and a contrarian streak." The most effective way to get free of social proof when the time is right is to have done the homework in advance and stay within your circle of competence.

5. Jeff Bezos: "Outsized returns often come from betting against conventional wisdom, and conventional wisdom is usually right. Given a 10% chance of a 100 times payoff, you should take that bet every time. But you're still going to be wrong nine times out of ten. We all know that if you swing for the fences, you're going to strike out a lot, but you're also going to hit some home runs." "In business, every once in a while, when you step up to the plate, you can score 1,000 runs. This long-tailed distribution of returns is why it's important to be bold. Big winners pay for so many experiments."

It is magnitude of success and not frequency of success that matters for an investor. Bezos is talking about convexity in investments. All a founder or venture capitalist can lose is 100% of what they invest in a startup and yet what they can potentially gain is potentially many multiples of that investment. Nassim Taleb provides a quadrant-based model as a guide to decision making. Michael Mauboussin provides a summary of what Nassim Taleb has created:

"A two-by-two matrix, where the rows distinguish between activities that have extreme outcomes and those that have more bunched outcomes, and the columns capture simple and complex payoffs. He allows that statistical methods work in the First Quadrant (simple payoffs and bunched outcomes), the Second Quadrant (complex payoffs and bunched outcomes), and the Third Quadrant (simple payoffs and extreme outcomes). But statistical methods fail in the Fourth Quadrant (complex payoffs and extreme outcomes)."

Richard Zeckhauser explains why

"The real world of investing often ratchets the level of non-knowledge into still another dimension, where even the identity and nature of possible future states are not known. This is the world of ignorance. In it, there is no way that one can sensibly assign probabilities to the

unknown states of the world. Just as traditional finance theory hits the wall when it encounters uncertainty, modern decision theory hits the wall when addressing the world of ignorance."

The nature of the venture capital business is that financial returns come from the Fourth Quadrant/the world of ignorance. It is only in this quadrant that optionality will be substantially mis-priced and the type of bargains found that make a venture capital portfolio work financially.

6. Marc Andreessen: "If something is already consensus then money will have already flooded in and the profit opportunity is gone. And so by definition in venture capital, if you are doing it right, you are continuously investing in things that are non-consensus at the time of investment. And let me translate 'non-consensus': in sort of practical terms, it translates to crazy. You are investing in things that look like they are just nuts." "The entire art of venture capital in our view is the big breakthrough for ideas. The nature of the big idea is that they are not that predictable." "Most of the big breakthrough technologies/companies seem crazy at first: PCs, the internet, Bitcoin, Airbnb, Uber, 140 characters. It has to be a radical product. It has to be something where, when people look at it, at first they say, 'I don't get it, I don't understand it. I think it's too weird, I think it's too unusual.'"

Andy Rachleff elaborates: **"**Being willing to intelligently take this leap of faith is one of the main differences between the venture firms who consistently generate high returns — and everyone else. Unfortunately human nature is not comfortable taking risk; so most venture capital firms want high returns without risk, which doesn't exist. As a result they often sit on the sideline while other people make the big money from things that most people initially think are crazy. The vast majority of my colleagues in the venture capital business thought we were crazy at Benchmark to have backed eBay. 'Beenie babies…really? How can that be a business?'" Marc Andreessen adds: "Breakthrough ideas look crazy, nuts. It's hard to think this way — I see it in other people's body language, and I can feel it in my own, where I sometimes feel like I don't even care if it's going to work, I can't take more change. O.K., Google, O.K., Twitter—but Airbnb? People staying in each other's houses without there being a lot of axe murders?" Most things that sounds crazy are crazy. It is the ability to use pattern recognition developed over time to see the businesses that have massive convexity "if something goes right" that makes for a great venture capitalist. The ideal startup business for a venture capitalist is a combination of half-crazy and great convexity (big upside and small downside).

Notes:

The Arithmetic of Active Management
https://web.stanford.edu/~wfsharpe/art/active/active.htm

Mauboussin: http://wp.nbr.com/your-mind-and-your-money/making-better-investment-decisions-20100215

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A Half Dozen Reasons Why Venture Capitalists Prefer Missionaries to Mercenaries

November 5, 2016

1.Mark Cuban: "Don't start a company unless it's an obsession and something you love. If you have an exit strategy, it's not an obsession."

No one should start a business if they are not obsessively committed to the mission of that business. Genuine obsession and passion are highly valuable since making the business a success will require overcoming significant obstacles. My most interesting experience with being obsessively committed to the mission of a business started in 1994. It was the most intense five years of my professional life. The business was a global broadband non geostationary satellite system known as Teledesic. My obsession with making that startup a success consumed me. My family and health all paid a serious price for this obsession. As much as I loved that business, by 1999 I knew that it was time to move on and do other things. It wasn't easy to cut the cord, but it was necessary. Teledesic was valued at $3 billion in its last round of funding and we raised close to $1 billion in capital. The story of Teledesic has never properly been told and perhaps it is my responsibility to do so one day. Until I write that book, you can read the blog post I have written about my experience at Teledesic that is part of this "Dozen Things" series if you are interested.

Missionary joke #1: Two cannibals met each other on a path in the jungle one day. The first cannibal said: "I just can't seem to prepare a tender Missionary. I've baked 'em, I've roasted 'em, I've stewed 'em, I've barbequed 'em, I've even tried every sort of marinade. I just cannot seem to get them tender." The second cannibal asked, "What kind of Missionary do you use?" The first cannibal replied, "You know, the ones that hang out at that place at the bend of the river. They wear brown cloaks with a rope around their waist " "Ah ha!" the second cannibal replied. "No wonder. Those Missionaries are friars!"

2. John Doerr: "Mercenaries are driven by paranoia; missionaries are driven by passion. Mercenaries think opportunistically; missionaries think strategically. Mercenaries go for the sprint; missionaries go for the marathon. Mercenaries focus on their competitors and financial statements; missionaries focus on their customers and value statements. Mercenaries are bosses of wolf packs; missionaries are mentors or coaches of teams. Mercenaries worry about entitlements; missionaries are obsessed with making a contribution. Mercenaries are motivated by the lust for making money; missionaries, while recognizing the importance of money, are fundamentally driven by the desire to make meaning."

A venture capitalist I know recalls Doerr using the "missionary versus mercenary" metaphor as early as 1998 at a Stewart Alsop Agenda conference. Doerr has repeated this idea often over the years and it has essentially become a meme in the venture capital industry. In short, mercenaries are motivated primarily by money. Missionaries are driven by a cause. Elon Musk is a classic missionary as was Steve Jobs. My advice is: don't start a business because you want to have it on your resume or because you think it is glamorous. And don't do so to fill a bucket list unless you feel the obsessive passion Cuban and Doerr are talking about. Here's the slide Doerr uses when talking about this concept:

Mercenaries	vs. Missionaries
drive, **paranoia**	**passion**
opportunistic	**strategic**
"the pitch, the **deal**"	"the **big idea**, partnership"
sprint, short run	**marathon**, long run
obsess on **competition**	obsess on **customers**
aristocracy of founder(s)	**meritocracy**, best idea wins
financial statements	mission, **values** statement
loners, you're on your own	**mentors**, coaches of **teams**
entitlement	**contribution**
the "**deferred life**" plan	a **whole** life (that works)
lust for making **money**	lust to **make meaning** and money
success	success AND **significance**

Doerr's list is largely self explanatory. There are a couple of YouTube videos of him making his case about missionaries cited in the notes below. In one video Doerr refers people to a book by Randy Komisar entitled: "The Monk and the Riddle: The Art of Creating a Life While Making a Living" for further inspiration on this topic.

Missionary joke #2: A missionary was walking in Africa when he heard the unmistakable sound of a pride of lions behind him. He immediately started praying: "Oh Lord, please make these lions into good Christians." The Missionary thought his prayer was being answered when heard the lions also start to pray. But then he heard the lions say in unison: "Bless us oh Lord, for this thy food, which we are about to consume…"

3. Andy Rachleff: "Mercenaries, whose primary goal is money, fall somewhere on the middle of the entrepreneur bell curve. They seldom have the desire to change the world that is required for a really big outcome, or the patience to see their idea through. I don't begrudge them their early payouts. They're just not the best entrepreneurs."

Missionaries are far more likely to work to keep their business independent – which is more likely to produce "tape measure financial home runs." They think bigger in terms of what the business can accomplish. Missionaries with huge ambition for their business are rarer than most people imagine. Mark Zuckerberg is a classic example of a missionary:

"At the time, Facebook was just two years old. It was a college site with roughly eight or nine million people on it. And, though it was making $30 million in revenue, it was not profitable. "And we received an acquisition offer from Yahoo for $1 billion," Thiel said. The three-person Facebook board at the time–Zuckerberg, Thiel, and venture capitalist Jim Breyer–met on a Monday morning. "Both Breyer and myself on balance thought we probably should take the money," recalled Thiel. "But Zuckerberg started the meeting like, 'This is kind of a formality, just a quick board meeting, it shouldn't take more than 10 minutes. We're obviously not going to sell here'." At the time, Zuckerberg was 22 years old. Thiel said he remembered saying, "We should probably talk about this. A billion dollars is a lot of money." They hashed out the conversation. Thiel said he and Breyer pointed out: "You own 25 percent. There's so much you could do with the money." Thiel recalled Zuckerberg said, in a nutshell: "I don't know what I could do with the money. I'd just start another social networking site. I kind of like the one I already have."

Founders who "flip the business" early or even in midstream usually don't last long enough to do this. Rachleff is pointing out that mercenaries don't always fail, but also that success is less frequent and payoffs are smaller on a relative basis for mercenaries.

Some cities have more missionaries than others. Seattle is a great example of a city with a mostly missionary culture. People in Seattle create businesses and they grow them passionately. The best examples are Bill Gates, Jeff Bezos and Howard Schultz. This creates lasting businesses and healthy job growth. Other cities have a mostly a mercenary culture- the founders grab any early money that becomes available and move on.

Missionary joke #3: One day the African chief's wife gave birth to a white child and the chief was stunned. He suspected some hanky panky and went to visit a white Missionary who lived nearly. "You have been having sex with my wife," the chief said to the Missionary. The Missionary tried to escape from the difficult situation by explaining Mendel's laws of genetics to the angry chief. "You see that herd of sheep," he said pointing to the chief's herd, "Most of them are white; but you will also notice two black lambs among them." "OK! OK!" said the chief. "You keep your mouth shut, and so will I."

4. Jim Goetz: "I am looking for unknowns, who are passionate and mission-based." "We try hard to make that unknown underdog comfortable in our ecosystem."

As an example of what Goetz is talking about here, he said once about WhatsApp: "It was mission-based and very different than what everyone else was doing at the time." Goetz calls the WhatsApp founders "talented underdogs whose unshakeable beliefs and maverick natures epitomize the spirit of Silicon Valley." Passion is something you can't fake. Making a better auto insurance product is a passion for some people, but it may not be for you. What's your passion? Sometimes I will meet a founder who has created a startup to do X and it is clear that he or she does not particularly like X, let alone has passion for it. When I ask why he or she started that business the story is usually that they wanted to create a startup. While that may be true in some cases it sometimes seems clear that the founder is instead overwhelmingly motivated by a desire to be wealthy. The irony is that the more you are

focused on a mission rather that money the higher the odds that you will become financially successful. The other point made by Goetz above relates to how underdogs have a particularity strong form of motivation that can be very helpful in creating a successful startup. People with something to prove often have a stronger motivation to succeed.

Missionary joke #4: A man became separated from his group of explorers and found himself lost in the desert. Fortunately he eventually encountered the home of a Missionary. Tired and weak, he crawled up to the house and collapsed on the doorstep. The Missionary found him and nursed him back to health. Feeling better, the man asked the Missionary for directions to the nearest town and if he could borrow his horse. The Missionary said, "Sure but there is a special thing about this horse. You have to say 'Thank God' to make it go and 'Amen' to make it stop." Not paying much attention, the man said, "Sure, ok." So he mounted the horse and said, "Thank God" and the horse started walking. Then he said, "Thank God, thank God," and the horse started trotting. Feeling really brave, the man said, "Thank God, thank God, thank God, thank God, thank God" and the horse just took off. Pretty soon the man saw that the path lead to a cliff and he started doing everything he could to make the horse stop, yelling: "Whoa, stop, hold on!" Finally the man remembered, "Amen!" The horse stopped just four inches from the edge of the cliff. The man then leaned back in the saddle and said, "Thank God."

5. Dan Levitan: "We can find a great sector or business, but we're investing so early that unless there's this tenacious grit, determination, resourcefulness, ability to evolve, it won't work."

Levitan is pointing out a key aspect of early stage investing: it is called an early stage business because it is an early stage business. Many unknowns will be encountered along the path of any business and a team with the qualities Levitan describes is far more likely to find success than a team who is just in it for the money. People with grit determination, resourcefulness, ability to evolve don't give up easily. Ev Williams story is a classic example of how things can evolve in very different ways and how grit is critical to success. This is from a Harvard Business School case from 2008:

"The Blogger experiences had included a major blow-up with his co-founder that had resulted in legal proceedings, a brush with near-bankruptcy, and the laying off of his entire team, Williams has become even more disillusioned with his current venture, Odeo. Odeo, a podcasting pioneer, had debuted almost two years before and had gotten off to a very strong start, with a high-profile debut at a prominent industry conference, coverage on the front page of the New York Times' Business section, and the raising of a large round of financing from a top-tier venture capital firm. His attempts to find an acquirer have failed, layoffs have begun, and he is now facing a meeting with an increasingly hostile board of directors. At that meeting, he is very tempted to resign so he can move on to his next project and regain the thrill of being an entrepreneur."

Odeo would evolve to become Twitter.

"One day in September 2006, Odeo's CEO Evan Williams wrote a letter to Odeo's investors. In it, Williams told them that the company was going nowhere, that he felt bad about that, and that he would like to buy back their shares so they wouldn't take a loss. In his letter to Odeo's investors, Williams wrote this about Twitter:

By the way, Twitter, which you may have read about, is one of the pieces of value that I see in Odeo, but it's much too early to tell what's there. Almost two months after launch, Twitter has less than 5,000 registered users. I will continue to invest in Twitter, but it's hard to say it justifies the venture investment Odeo certainly holds — especially since that investment was for a different market altogether.

Evan proposed buying back Odeo investors' stock, and, eventually, the investors agreed to the buyback. So Evan bought the company — and Twitter. The amount he paid has never been reported. Multiple investors, who had combined to put $5 million into Odeo, say Evan made them whole."

Missionary joke #5: "A Missionary travelled to what he thought was an totally uninhabited island. He discovered that there were indeed people there, but the inhabitants of the island knew nothing of Western culture. The missionary decided that it would be in the locals best interest if he could teach them about civilization. He created small schools in huts and taught the natives how to read and write and do mathematics. Part of his teaching was to take the locals one by one around the island, and teach them the correct English words for objects that they would see. One day, the Missionary was walking around the island with one of the locals. When they walked past a tree, the Missionary pointed and said: "Tree". The local would repeat, "Tree". They continued further and saw a bush. The Missionary pointed to it and said, "Bush". The native repeated the word, "Bush". They walked around the bush – and lying on the ground behind it, were two locals making whoopi. The Missionary hoped that the local would not ask about it, but he did: "What is that? What are they doing?" Missionary replied, "Riding a bicycle. Those two people are riding a bicycle!" The man pulled out his poison dart gun and killed the couple. The Missionary was incredulous. Angered, he yelled: "Why did you kill those two people? I told you that they were riding a bicycle! "The local answered, "He was riding MY bicycle!"

6. Jessica Livingston: "Resilience keeps you from being pushed backwards. Drive moves you forwards."

Livingston is pointing to one of the qualities discussed on sectin 5 as being particularly important. Dr. Angela Duckworth defines "grit" as "perseverance and passion for long-term goals." As an example, some people I know describe Uber's Travis Kalanick as being off the charts on grit. Steve Jobs said once: "I'm convinced that about half of what separates the successful entrepreneurs from the non-successful ones is pure perseverance…. Unless you have a lot of passion about this, you're not going to survive. You're going to give it up. So you've got to have an idea, or a problem or a wrong that you want to right that you're passionate about; otherwise, you're not going to have the perseverance to stick it through."

Missionary joke #6: A cannibal was walking through the jungle and discovered a new restaurant operated by a fellow cannibal. Feeling somewhat hungry, he sat down and looked over the menu. Broiled Missionary: $25.00 Fried Explorer: $35.00 Baked Politician: $100.00. The cannibal called the waiter over and asked: "Why such a big price difference for the politician?" The waiter replied "Have you ever tried to clean one of them?"

Notes:

John Doerr Video https://www.youtube.com/watch?v=ui8yLqCxChM

John Doerr Video https://www.youtube.com/watch?v=oSCgYT8p2NQ

John Doerr Video https://www.youtube.com/watch?v=n6iwEYmbCwk

The Monk and the Riddle https://www.25iqbooks.com/books/359-the-monk-and-the-riddle-the-art-of-creating-a-life-while-making-a-living

Dan Levitan 25IQ https://25iq.com/2015/03/22/a-dozen-things-ive-learned-from-dan-levitan-about-venture-capital-business-and-people/

Jim Goetz 25IQ https://25iq.com/2015/06/06/a-dozen-things-ive-learned-from-jim-goetz-about-business-startups-and-venture-capital/

Andy Rachleff 25IQ https://25iq.com/2014/07/19/a-dozen-things-ive-learned-from-andy-rachleff/

Elon Musk 25IQ https://25iq.com/2016/06/18/a-dozen-things-ive-learned-from-elon-musk-about-business-and-investing/

John Doerr 25IQ https://25iq.com/2014/08/24/a-dozen-things-ive-learned-from-john-doerr/

Fred Smith: http://www.businessinsider.com/fedex-saved-from-bankruptcy-with-blackjack-winnings-2014-7

HBR case study: https://hbr.org/product/evan-williams-from-blogger-to-odeo-a/an/809088-PDF-ENG

A Dozen Things You can Learn from Biggie Smalls (The Notorious B.I.G.) About Business

November 11, 2016

During a recent lunch meeting with a few friends I used the phrase "mo money, mo problems." One of my friends responded by challenging me to do a Dozen Things post on Biggie Smalls similar to the one I wrote on Rza. My response to the throw down is the blog post for this week. I have made the point repeatedly on this blog that you can learn something from just about anyone. I have written posts on Bill Murray, Louis CK and comedians generally to make this same point. The other point relevant to this post is to not take yourself too seriously. Having fun is under-rated.

1."If y'all love the music, y'all gonna buy the music." In my post on Jessica Livingston I quoted her as saying: "Our motto is to make something that people want. If you create something and no one uses it, you're dead. Nothing else you do is going to matter if people don't like your product." Biggie is making the same point as Livingston. The importance of making products people want to buy seems obvious. Unfortunately, too often people get wrapped up in other aspects of startups and can lose track of that basic truth. A founder who

is focused on making products people want to buy will succeed far more often than founders who are mostly concerned with things like getting prime speaking slots at major industry conferences or having a hip office with exposed brick walls and water views.

2.“Only make moves when your heart’s in it.” http://genius.com/The-notorious-big-skys-the-limit-lyrics My blog post last week was about how important it is for the founder of a business to be a missionary rather than a mercenary. Biggie believed that a great business founder or performer needs heart, which includes attributes like passion, determination and grit. Missionaries are far more likely to succeed in business than mercenaries since they have the qualities it takes to overcome hard problems. People with a mission in life “passionately persevere” in the face of adversity when a mercenary would bail out to do something else.

3.“Stay far from timid … and live the phrase the sky’s the limit.” http://genius.com/The-notorious-big-skys-the-limit-lyrics My interpretation of Biggie’s statement is that he was stressing the importance of making convex bets in life and in business. What you ideally want when making a wager are bets with a big upside and a small downside (convexity). When you find a mispriced convex bet, Biggie’s advice is to “be far from timid.” My post on Nassim Taleb discussed Biggie’s point on mispriced convex wagers more extensively.

4.“Never let them know your next move.” Biggie in this quote is making a point similar to Doug Leone: “Little companies have really two advantages: stealth and speed. The best thing for little companies do is to stay away from the cocktail circuit.” This piece of advice is a bit tricky and controversial since there is another view that it is wise to get feed back early and often. My view is that one can seek early product feedback and yet still follow Biggie’s admonition that there is no need to reveal your next move.

5.“I learn from the other people’s mistakes. I know when to say no.” Biggie’s view here is aligned with the view of Charlie Munger that the best way to learn not to do something that is the equivalent of peeing on an electric fence is to watch other people do it and learn vicariously. In short, it is wise to learn from other people’s mistakes! Like Charlie Munger, Biggie put a lot of effort into when to say “no.” Putting significant resources into a few mispriced bets is a far better approach to business and investing than saying “yes” to too many things. Be patient, but aggressive when it is time.

6.“I’m living every day like a hustle.”
https://www.youtube.com/watch?v=0MF6w134W6Y Biggie knew that there is no substitute for hard work and hustle. Other successful people invariably think the same way not matter what career they have chosen. Writers, for example. need to hustle too. Anais Nin put it this way: “Good things happen to those who hustle.” Stephen King has similarly expressed his view that: “Talent is cheaper than table salt. What separates the talented individual from the successful one is a lot of hard work.” Biggie himself once said:**“I can’t never stop nobody, can’t knock nobody hustle. They feel like they can come into it dissing Big and dissing Puff and doing they little thing. If that’s what they choose to do, that’s what they choose to do. Only thing I gotta do is feed [my daughter] Tianna and take care of Ms. Wallace. That’s my only job.”**

7.“Your style is played out, Like Arnold and that, what you talkin’ bout Willis.” Biggie is referring to the need for genuine 0 to 1 innovation, which I discussed in my post on Peter Thiel who believes: “Maybe we focus so much on going from 1 to n because that’s easier to do. There’s little doubt that going from 0 to 1 is qualitatively different, and almost always

harder, than copying something n times." In other words, a person or business should avoid just repeating what others have done if they want to produce a substantial and valuable innovation. The cultural reference in the Biggie quote is to a Garry Coleman (AKA Arnold) tagline from the TV show *Different Strokes* that repeated itself perhaps a bit too often.

8."Watchin' the stash grow, clockin the cash flow." http://genius.com/2pac-2pac-and-biggie-freestyle-at-table-lyrics Biggie knew that the only unforgivable sin in business is to run out of cash. Biggie once quoted the sage Rza on this point: "Cash Rules Everything Around Me." Cash can provide its holder with significant optionality. It is likely that Biggie had similar beliefs to Warren Buffett on cash:

"Ms. Schroeder argues that to Mr. Buffett, cash is not just an asset class that is returning next to nothing. It is a call option that can be priced. When he thinks that option is cheap, relative to the ability of cash to buy assets, he is willing to put up with super-low interest rates, said Ms. Schroeder, who followed Mr. Buffett for years before she became his biographer. "He thinks of cash differently than conventional investors," Ms. Schroeder says. "This is one of the most important things I learned from him: the optionality of cash. He thinks of cash as a call option with no expiration date, an option on every asset class, with no strike price."

9."That goddamn credit? Dead it." http://genius.com/The-notorious-big-ten-crack-commandments-lyrics Biggie, like many other great investors and business people, was not a fan of debt. Charlie Munger has a view that is similar to Biggie's: "I've seen more people fail because of liquor and leverage – leverage being borrowed money."

10. "Never let no one know how much dough you hold." https://www.youtube.com/watch?v=kyWTJWrH1aI Biggie was pointing out that certain metrics do not need to be made publicly available if you are a private business. This is one of the advantages of not going public.

11. "Never get high on your own supply." https://www.youtube.com/watch?v=kyWTJWrH1aI I prefer to think of this statement as an admonition from Biggie that people should be more humble so they avoid mistakes. Of course, what this advice actually represents is Biggie warning people about the dangers of consuming the inventory of your own business. Either way, the advice is sound.

12. "Consignment is not for freshmen." "If you ain't got the clientele say 'hell no' — 'cause they gon want they money rain, sleet, hail, snow." http://genius.com/The-notorious-big-ten-crack-commandments-lyrics Biggie is saying that there are dangers associated with taking on a lot of inventory risk, especially from suppliers who have not yet been paid. If a business ends up with products on a shelf that it can't sell, the suppliers will want to be paid. Biggie knew that business is business. You must get the basics right to be successful. Managing inventory risk is a core skill in many businesses. You never want to get into a situation where someone says, "Leave the gun. Take the cannoli." https://www.youtube.com/watch?v=yHzh0PvMWTI

Why Moats are Essential for Profitability (Restaurant Edition)

November 18, 2016

Investing is about owning a partial stake in a real business. You must understand whether the actual businesses in which you own stock earns a return on capital to be a successful investor. The more different types of businesses you understand in this way, the more skill you will acquire in understanding another new business. The point I am making explains why Warren Buffett says: "I am a better investor because I am a businessman, and a better businessman because I am an investor." The reason why Charlie Munger has what Buffett calls "the best 30 second mind in business" is in no small part because of the many different types of businesses he has examined as potential investments. In contrast, most people spend more time selecting a refrigerator than they do selecting a business to invest in. When you buy a stock without digging in and understanding that business deeply, the odds that you have made a mistake go up significantly. Investing is so competitive that you simply can't afford to give way that competitive edge and succeed as an active investor.

Buffett explains why some businesses are profitable and not others:

"The single most important decision in evaluating a business is pricing power. If you've got the power to raise prices without losing business to a competitor, you've got a very good business. And if you have to have a prayer session before raising the price by 10 percent, then you've got a terrible business."

Why do only some businesses have pricing power? Charlie Munger describes the answer succinctly: "We have to have a business with some inherent characteristics that give it a durable competitive advantage." Buffett puts it this way: "The key to investing is not assessing how much an industry is going to affect society, or how much it will grow, but rather determining the competitive advantage of any given company and, above all, the durability of that advantage. The products or services that have wide, sustainable moats around them are the ones that deliver rewards to investors."

I've been thinking about what might be the best example to use to try to explain the nature of the work an investor must do to determine whether a business might have a moat protecting an attractive business. The example must be narrow since people will read only so much in a blog post. Since just about everyone reading this post has at least thought about opening a restaurant at some time in their life I have created this hypothetical scenario: Two of your friends have asked you to invest in their restaurant. How should you analyze this request? What factors might create a moat for an individual restaurant? To find the answer to this question Warren Buffett recently said that when you are thinking about buying stock in a company or making an investment you should: "assign yourself a story." Your task in doing the research is to assemble the relevant facts, talk to experts and create a model of the microeconomics of the business. Please note that this is not a post about investing in a chain of restaurants like McDonalds to keep the discussion simple.

People can and do start with as little as a food cart and from that small beginning build a successful restaurant with hard work and some luck. This aspect of the restaurant business is both good and bad. It is good since it presents a way for people with little capital to get a financial start in life. It is unfortunately also bad since there are few barriers to entering the restaurant business, which limits profitability.

Here are some illustrative facts about competition levels in the restaurant business:

In spring 2016, there were 624,301 restaurants in the US.

Between 2006 and the industry's peak in 2014, the number of restaurants in the U.S. grew 7.3% to more than 638,000—outpacing the population 6.9% growth rate.

"New York, New Jersey, and Connecticut — have more restaurants than anywhere else in the United States; 16.9 restaurants per 10k people. In 2013 there were 232,611 establishments in the U.S. fast food industry.

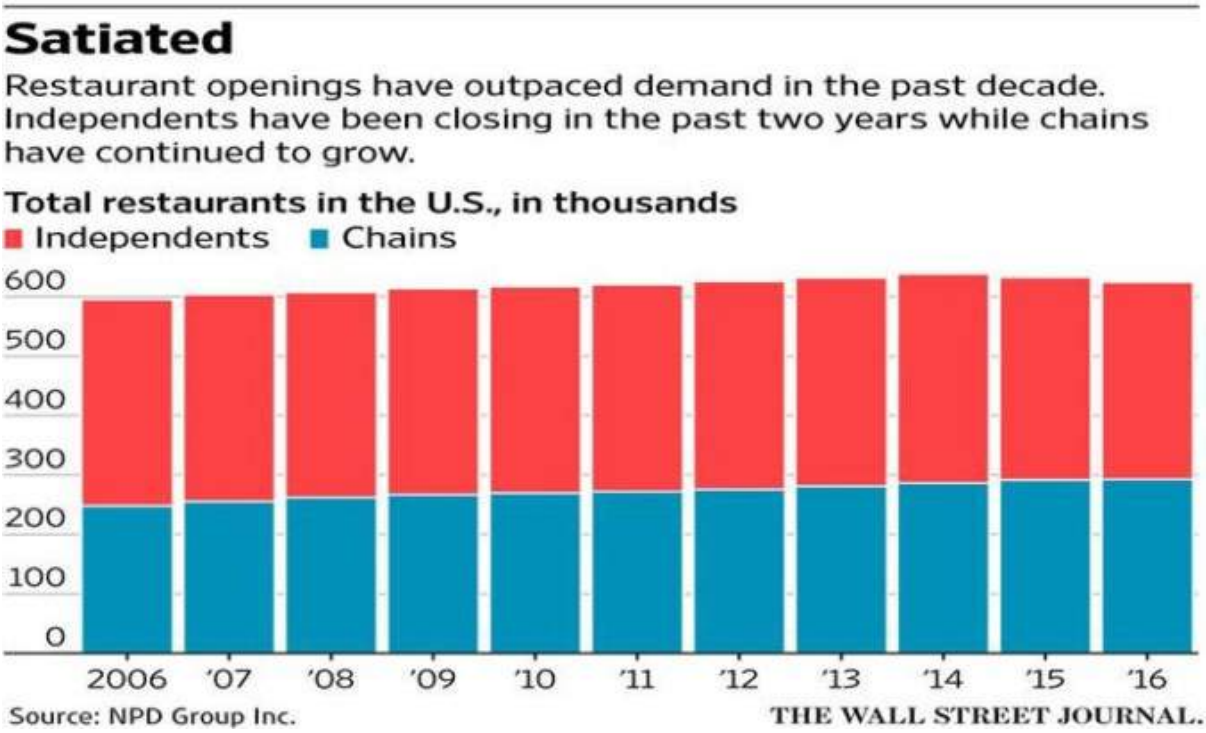

The primary reason why restaurants fail so often and have low profitability is that there are too many of them. This is true in any business. Supply is the killer of value. Adding to that oversupply problem are people who stray out of their circle of competence, since risk comes from not knowing what you are doing. Even worse, some people are in the restaurant business for non-economic reasons and that makes the economics worse for people who desire to make an actual profit. A famous Ohio State study revealed that 26.16% of independent restaurants failed during the first year of operation. That is consistent with other studies that show: "Over three years, that number [of failures] rises to three in five. While a 60% failure rate may still sound high, that's on par with the cross-industry average for new businesses, according to statistics from the Small Business Administration and the Bureau of Labor Statistics."

What is overall demand for restaurants? This brings up the top-down constraint on revenue that is caused by disposable income limits: people have only so much money to spend.

William Wheaton, a professor at MIT has identified: "an incredible regularity in what they spend on eating out: $1,200 to $1,400 per person" on average annually. Americans tend to visit restaurants of any type, from fast food to fine dining, about 190 times a year according to NPD's food service division. In the past 10 years, older millennials have made 50 fewer restaurant visits per capita, according to NPD.

The other factor that can adversely impact a restaurant's profits are alternative sources of supply (like buying groceries and eating at home). The total number of supermarkets in the United States amounted to 37,716 in 2014. What about profit of that restaurant substitute? "Grocery is among the thinnest margins out there in retail. The average grocer probably gets a 2-3% operating margin. That's a very slim margin, and that's before interest and taxes."

You will sometimes hear people say that that restaurant profits are down because food costs are up. Food costs rising are not a good thing for a restaurant. When food cost go up it does suppress overall demand due to limits on what people can spend. And customers who see higher restaurant prices will tend to seek out alternative sources of supply like buying groceries and cooking at home. But the most fundamental problem with restaurant profitability is a lack of pricing power because there are too many restaurants.

What about the flip side, when something happens like food costs dropping? Food costs going down are only an opportunity for a restaurant if competitors don't lower their prices. Competition tends to cause the restaurants to either cut prices or use more expensive ingredients, which takes costs higher again. Competition between restaurants will tend to cause retail prices to drop to a point where there is no long term industry profit greater than the cost of capital, despite the drop in wholesale food costs. This is not just true in the restaurant business and applies to any business.

What are the economics of a full service restaurant? Well, they typically they look like this:

San Francisco restaurants

Cost of food – 24%

Cost of alcohol sold – 5%

Wages and salaries – 32%

Employee benefit – 7%

Restaurant occupancy costs – 10%

Other – 15%

Pretax profit – 2.5%

U.S. restaurants

Cost of food – 27%

Cost of alcohol sold – 7%

Wages and salaries – 31%

Employee benefits – 4%

Restaurant occupancy costs – 6%

Other – 19%

Pretax profit – 6%

Does 2% or even 6% pretax profit sound like a significant moat to you?

Of course, there are many types of restaurants. A food truck is not fine dining and the actual microeconomics of each business type will vary, but here is another example of the full service category from California:

"The 220-seat restaurant serves about 1,300 to 1,400 diners a week, with an average per-person check of about $40. After adding in revenues from private parties and people who just have drinks in the bar, it had 2003 sales of $3.2 million and is on track to do $4 million this year, said Chief Executive Officer Bruce McDonald. Foreign Cinema is cash-flow positive, but it won't realize a genuine profit for at least five years, because it carries $2 million in debt. Its earnings before interest, depreciation and amortization were $86,000 last year. With higher sales and a tight grip on operating expenses this year, they may hit $400,000, McDonald said. "[The chefs] start out most days seeking out what's fresh and inspirational at Monterey Market, a produce dealer blocks from their Berkeley home. They spend more than $1,000 a week there. Their food and beverage costs average about $21,000 a week, or 30 percent of their weekly revenue of $70,000. That lines up closely with other full-service restaurants, which follow a remarkably similar economic formula. Of every dollar a full-service restaurant brings in, it spends roughly a third on food and alcohol; another third on salaries, wages and benefits; up to 10 cents on rent; and up to 20 cents on other costs such as marketing, according to studies by restaurant associations. That leaves about 4 cents of pretax profit." As with all restaurants, alcohol is far more profitable than food. "We pay $25 for a bottle of booze and sell it for $100," McDonald said. (Beer and wine have slightly lower markups.) "Many people who start out in the restaurant business end up owning bars or in real estate."

Here's the situation in New York:

As the chef David Chang howled earlier this year, "Food's too cheap, tipping makes no sense, cooks are broke, and it's damn near impossible to earn a living in this effed-up business.") Second, that three dollars or so in operating income isn't even really profits. Operating income is needed to pay back the costs to build out the restaurant. Paying those costs was supposed to take about three years in the case of our restaurant. (It never happened.) Only after that come profits. The harsh bottom line: three per cent operating income isn't that short of the definition of *success* in New York City restaurants of five to ten per cent operating income, depending on whom you ask. And even that piddling percentage, achieved by few restaurants, is under assault from all sides. There are rising New York rents: if our restaurant's rent, which was twenty thousand dollars per month for about twelve hundred square feet, had consumed only ten per cent of revenue—a restaurant's target, per the conventional wisdom—its operating income would have tripled.

There are restaurateurs who claim they are more profitable, but restaurant people I know roll their eyes when they hear a claim of 20% profit like this:

"The key to success in the business, Mr. Bastianich says, is a basic understanding of restaurant math—and "restaurant math is easy." Appetizers cost only a small part of what customers are charged; desserts are almost pure profit. Linen is enemy No. 1 because buying and cleaning tablecloths and napkins is expensive and customers don't pay for it, just as they don't foot any of the bill for bread and butter. "Übermeats" such as dry-aged steaks ("the *King Lear* of menu items") and veal chops are the bane of every restaurant because the initial food cost is high. As for wine, when sold by the glass the price is usually four times the actual cost, although at Babbo, the author says, the price of a small carafe called a quartino is sometimes only double." "For Babbo, a "nice little $2.5- or $3-million-a-year operation," the annual net is at least a half-million dollars. Not bad for a casual Italian restaurant in Greenwich Village."

Babbo has the Mario Batali brand, but this claim of 20% profit is not normal. It helps (and can even be essential) to own the building as I explained in my post on "wholesale transfer pricing."

The owners of Wild Ginger started their wonderful restaurant in a rented space on Western Avenue in Seattle. The restaurant was a huge success. When lease renewal time came up for Wild Ginger the landlord wanted a massive rent increase. The ability of the landlord to demand that increase is wholesale pricing power. It was not absolute, but wholesale transfer pricing power in that case was significant. The owners of Wild Ginger had a lot of brand and other value tied up in that location. The rent increase request was so big that the Wild Ginger owners brought in up investors and bought their new building in a new location and did the huge investment required to refurbish it. The restaurant owners had to completely change their business model by bringing in the outside money from investors. The owners of Wild Ginger are is now in the restaurant business **and** the real estate business. The whole thing was kicked off by the wholesale providing power of the original landlord. Another restaurant moved into the old Wild Ginger space on Western Avenue and went bust, probably because the rent was too high compared to the many other restaurants in Seattle. Now that restaurant space on Western Avenue sits empty. As yet another example, Anthony Bourdain in his former TV show "No Reservations" did a profile of old school restaurants in one episode on "Lost Manhattan" and pointed out that the old school restaurants that are left own their own buildings. They are able to stay "old school" in the restaurant business only because they are their own landlords. If they had just been tenants, they would have been priced out of business in Manhattan long ago.

In a recent Bloomberg podcast a restaurant owner said: "the lease is everything in our business." His approach to the wholesale transfer pricing problem by having the landlord be his partner. The restaurateur said "the golden number is rent at 8% of revenue but he said achieving that is usually impossible in a place like Manhattan. One side note is important to consider here: sometimes building owners will give a restaurant with a strong brand below market rent to entice other tenants to lease space in their building. If your competitors have this lower rent and you do not, that is a problem for your business. You are not Mario Batali.

Avoid rents by having a food truck you say? Here is an accounts of food truck economics:

"These numbers do not paint a pretty picture—nor do they support the notion that there's a ton of savings to be passed on to the consumer because they operate out of a truck. Essentially, after you sink 50-100 grand into your truck/kitchen/home, you now work 10-plus hour days and hope to hell that you can turn 150 covers in 3 hours or less of service. You read that right—150 covers in 180 minutes, or 1.2 covers per minute every day for 250 days a year. If you're lucky enough to average that level of business every day of the year (including those dreary days in winter), then you may just walk home with enough profit to pay yourself minimum wage. All three food-truck owners agreed that most of the successful trucks are also doing catering. Edison pointed out that some owners have evolved their businesses into brick-and-mortar spaces due to the profit constraints presented by the truck model. "There's not a single truck from the 'old guard' that hasn't expanded to brick-and-mortar. Why? If we could sit back and retire on a single truck, we'd roll with that. But it's just not possible. It's a pretty honest way to make a dollar—but nobody's getting rich off a single truck."

Here's Anthony Bourdain talking with Thrillist about the current state of the fine-dining business:

"It's more and more difficult to even run a fine-dining restaurant. The profit margins are not getting bigger; they will probably get smaller. That space, that part of the market, will probably continue to shrink. As it is now, most restaurant people cannot afford to eat in their own restaurants."

This short essay on restaurant economics is intended to be illustrative of the sort of research that must be done when investing in any stock. It is only a start of the actual research that should be done in any given case. As you can probably tell, I think investing in a restaurant opened by two friends belongs in the "too hard" pile at the very least. In short, there are far more attractive opportunities. Charlie Munger says it best: "Opportunity cost is a huge filter in life. If you've got two suitors who are really eager to have you and one is way the hell better than the other, you do not have to spend much time with the other. And that's the way we filter out buying opportunities"

I'm going to stop writing now since this post is up to ~3,500 words and research tells me that most people have stopped reading already. What you see above in terms of research is only the beginning of the sort of work that a person should do before buying a share of a business or investing in a business. Risk comes from "not knowing what you are doing" says Buffett. Researching the business before you buy a stock lowers risk. If you don't want to or can't do the research on the businesses in which you buy stock you should instead buy a low cost diversified portfolio of index funds. The choice is that simple. There is no shame in saying: "researching a business bores me." But it is a shame if people buy individual stocks anyway.

P.s., Understanding the previous discussion of the restaurant microeconomics depends on the reader understanding these points which I raised in my post on Michael Porter (his quotes are in bold and mine are in plain text as is usual):

"If there are no barriers to entry… you won't be very profitable." If there is no impediment to new supply of what you sell competition among suppliers will cause price to drop to a point where there is no long term industry profit greater than the cost of capital. Michael Porter calls a company's barriers to entry a **"sustainable competitive advantage."** Warren Buffett calls it a "moat." The two terms are essentially identical. The principle is so simple and yet so many people think only about customers and not competitors

as well. Yes, innovate and deliver exceptional value for customers. No, that is not necessarily enough for sustainable profitability. **"It's incredibly arrogant for a company to believe that it can deliver the same sort of product that its rivals do and actually do better for very long."** If you deliver the same product or service as your competitor you by definition don't have a moat. Competition will in that case be based on price and price-based competition inevitably degrades to a point where profit disappears. Porter teaches: **"if customers have all the power, and if rivalry is based on price… you won't be very profitable."** He adds: "**Produc[ing] the highest-quality products at the lowest cost or consolidate[ing] their industry [is] trying to improve on best practices. That's not a strategy."**

The five primary factors which can help create a moat, either alone or in combination with other factors, are as follows:

1. Supply-Side Economies of Scale and Scope;
2. Demand-side Economies of Scale (Network Effects);
3. Brand;
4. Regulation; and
5. Patents and Intellectual Property.

When might a restaurant be deemed to have moat? The test is always quantitative: does the restaurant generate a return on investment that is significantly above the opportunity cost of capital and does that last for a significant number of years? If a restaurant meets that mathematical test, it has a moat even if precisely what created the moat is not clear. The task at that point is to determine what factor or factors created the moat so they can be reinforced by the owner of the business. Sometime a bit of research will reveal clues. For example, chain restaurants can create distribution networks and systems that take advantage of supply side economies of scale. Their moat is similar to a business like Costco in that way. Other factors can create moats and sometime it is the combination of factors that produces the barrier to entry. Sometimes a famous chef's brand acquired from television appearances can help create a moat. Sometimes a location can be helpful as can longevity (the comfort food effect) and historical significance.

P.s., This is a fun chart below explaining aspects of a how different restaurant items bring in different profits. As I said above I know people who think his view on profit levels is not realistic. "Shrinkage" is a problem for many restaurants. I find this story told by Joe Bastianich humorous: "At 11 he was washing dishes. One of his jobs was to salt the wine. 'If I didn't put two tablespoons of salt into every gallon of cooking wine, everyone in the kitchen would be completely s—faced.'"

RESTAURANT MATH

BUSINESS IS SERVED

Anyone who has ever thought about running a restaurant could take a lesson from Joe Bastianiach. In his book, *The Restaurant Man*, he dedicates the first chapter to something he calls "restaurant math," the secret sauce to a successful business.

"It's a nickel and dime business. You make dollars by accumulating nickels. If you make dollars by grabbing dollars, you'll never survive."

THE GROSS DIVIDE

Margins Should Be 3X COSTS ON EVERYTHING

Most restaurants in NYC earn 10% - 20% profit

"Show is free - baby carrots cost 3x as much as big carrots, but if you carve big carrots down to look like baby carrots, it's the same thing."

Some things you make more, some things you make less.

Basically, you need to even out at 30%

"Anything you give away is bad. Linen is expensive, the 'number-one evil'. A spoon that goes into the garbage comes out of your pocket."

HOW TO BREAK IT DOWN

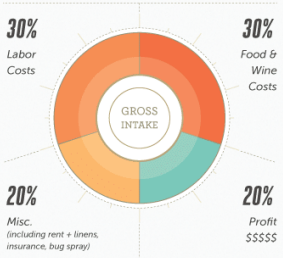

EXAMPLE: If you need to gross 10k a day, then you need 200 people spending $50 each. Within that $10k...

COSTS			PROFIT
Food & Wine	Labor	Misc.	
$3,000	$3,000	$2,000	$2,000

COST VS. MARGIN

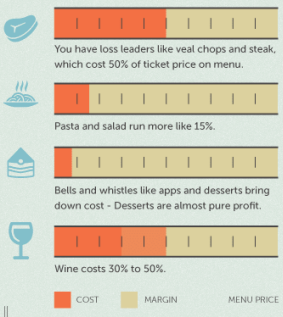

"Our mantra is 'we buy it, we fix it, and we sell it for a profit.'"

EXAMPLE RESTAURANT

Babbo - NYC

Monthly Rent	Size	Price Per Head
$12K	110 Seats	$40-$45

GROSS INTAKE			20% PROFIT
Per Night	Per Week	Per Year	
$7k	$50k	$2.5 - $3m	$600k

Published on OPENForum.com
Design by Katie Daly
Source Joe Bastianich, Restaurant Man (Viking 2012)

OPEN Forum

Notes:

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A Dozen Things Warren Buffett and Charlie Munger Learned From See's Candies

November 25, 2016

This is my 200th blog post. I thought it would be most fitting given the milestone to write about a topic related to Munger and Buffett.

One of the most important decisions in the history of Berkshire was the acquisition of See's Candies in 1972. Buffett has called See's Candies "the prototype of a dream business." Berkshire's purchase of a boxed candy business founded by the See family in California fundamentally changed the investing world because it changed the way Buffett and Munger thought about investing. While you may never have the chance to own a business like See's Candies, by better understanding the nature of a dream business you can more easily find a business to invest in that shares some of its positive attributes.

For anyone not familiar with the company, Bloomberg provides a helpful summary: "See's Candies produces and retails boxed chocolates. The company was founded in 1921 and has store locations in the United States and internationally. See's Candies operates as a subsidiary of Berkshire Hathaway."

1. Buffett: "It's one thing to own stock in a Coca-Cola or something, but when you're actually in the business of making determinations about opening stores and pricing decisions, you learn from it. We have made a lot more money out of See's than shows from the earnings of See's, just by the fact that it's educated me." "If we hadn't bought See's, we wouldn't have bought Coke. So thank See's for the $12 billion. We had the luck to buy the whole business and that taught us a whole lot." Munger: "We've learned that the ways you think and operate must involve time-tested values. Those lessons have made us buy more wisely elsewhere and make many decisions a lot better. So we've gained enormously from our relationship with See's."

What Buffett is saying is that the more you know about business the better investor you will be (and vice versa). The best way to learn about business is to actually run one or at least work in one. As Will Rogers once said: "Good judgment comes from experience, and a lot of that comes from bad judgment." It is the feedback loop between success and failure and various decisions and actions that are part of operating a business that gives the business executive or investor the best education. Reading about X, Y or Z aspects of business is helpful but there is nothing quite like the education that comes from being in the driver's seat and having personal responsibility for actual business outcomes.

2. Munger: "If we'd stayed with the classic Graham, the way Ben Graham did it, we would never have had the record we have. And that's because Graham wasn't trying to do what we did." "See's was the first high-quality business we ever bought." "After nearly making a terrible mistake not buying See's, we've made this mistake many times. We are apparently slow learners." "If See's had asked $100,000 more, Warren and I would have walked — that's how dumb we were. [Munger's friend] Ira Marshall said you guys are crazy — there are some things you should pay up for, like quality businesses and people. You are underestimating quality. We listened to the criticism and changed our mind. This is a good lesson for anyone: the ability to take criticism constructively and learn from it. If you take the indirect lessons we learned from See's, you could say Berkshire was built on constructive criticism." "The main contribution of [buying See's Candies] was ignorance removal. If we weren't good at removing ignorance, we'd be nothing today. We were pretty damn stupid when we bought See's – just a little less stupid enough to buy it. The best things about Berkshire is that we have removed a lot of ignorance. The nice thing is we still have a lot more ignorance left. Another trick is scrambling out of your mistakes, which is enormously useful. We have a sure to fail department store. A trading stamp business sure to fold and a textile mill. Out of that comes Berkshire. Think about how we would have done if we had a better

start." "See's Candies was acquired at a premium over book (value) and it worked. Hochschild, Kohn, the department store chain (in Baltimore), was bought at a discount from book and liquidating value. It didn't work. Those two things together helped shift our thinking to the idea of paying higher prices for better businesses."

What Munger is talking about above (in addition to the importance of humility) is the idea that a business with superior quality bought at the right price can still be a bargain consistent with the principles of value investing. This evolution of the value investing system to consider quality in valuing a business is arguably Munger's greatest contribution to Berkshire. Munger knew that value investing had to evolve since the "cigar butt" types of businesses that Graham liked to buy started to disappear as years passed since the Great Depression. Munger recognized that "Grahamites … realized that some company that was selling at 2 or 3 times book value could still be a hell of a bargain because of momentum implicit in its position, sometimes combined with an unusual managerial skill plainly present in some individual or other, or some system or other. And once we'd gotten over the hurdle of recognizing that a thing could be a bargain based on quantitative measures that would have horrified Graham, we started thinking about better businesses." For Munger, not considering the quality of the underlying business when buying an asset is far too limiting: "The investment game always involves considering both quality and price, and the trick is to get more quality than you pay for in price. It's just that simple." "We've really made the money out of high quality businesses. In some cases, we bought the whole business. And in some cases, we just bought a big block of stock. But when you analyze what happened, the big money's been made in the high quality businesses. And most of the other people who've made a lot of money have done so in high quality businesses." "If you can buy the best companies, over time the pricing takes care of itself."

3. Buffett: "Blue Chip Stamps bought See's early in 1972 for $25 million, at which time See's had about $8 million of net tangible assets. (Throughout this discussion, accounts receivable will be classified as tangible assets, a definition proper for business analysis.) This level of tangible assets was adequate to conduct the business without use of debt, except for short periods seasonally. See's was earning about $2 million after tax at the time, and such earnings seemed conservatively representative of future earning power in constant 1972 dollars. Thus our first lesson: businesses logically are worth far more than net tangible assets when they can be expected to produce earnings on such assets considerably in excess of market rates of return."

How do Munger and Buffett assess quality? This passage from the 1992 Berkshire Chairman's letter set out the key test: "Leaving the question of price aside, the best business to own is one that, over an extended period, can employ large amounts of incremental capital at very high rates of return. The worst business to own is one that must, or will, do the opposite – that is, consistently employ ever-greater amounts of capital at very low rates of return." A recent presentation from Broyhill Asset Management points out:

"See's sold 16 million pounds of candy in 1972. In 2007, it sold 31 million pounds. That's a growth rate of about 2% annually. Yet the business created tremendous value. How? Because it generated high returns on invested capital and required little incremental investment. Growth creates value only when a business can invest at incremental returns higher than its cost of capital. The higher return a business can earn on its capital, the more cash it can produce, the more Value is created. Over time, it is hard for investors to earn returns that are much higher than the underlying business' return on invested capital."

4. Munger: "There are actually businesses, that you will find a few times in a lifetime, where any manager could raise the return enormously just by raising prices—and yet they haven't done it. So they have huge untapped pricing power that they're not using. That is the ultimate no-brainer. Disney found that it could raise those prices a lot and the attendance stayed right up. So a lot of the great record of Eisner and Wells came from just raising prices at Disneyland and Disneyworld and through video cassette sales of classic animated movies. At Berkshire Hathaway, Warren and I raised the prices of See's Candy a little faster than others might have." Buffett: "We bought See's Candy in 1972, See's Candy was then selling 16 million pounds of candy at a $1.95 a pound and it was making 2 bits a pound or $4 million pre-tax. We paid $25 million for it—6.25 x pretax or about 10x after tax. It took no capital to speak of. When we looked at that business—basically, my partner, Charlie, and I—we needed to decide if there was some untapped pricing power there. Where that $1.95 box of candy could sell for $2 to $2.25. If it could sell for $2.25 or another $0.30 per pound that was $4.8 on 16 million pounds. Which on a $25 million purchase price was fine."

Buffett believes: "The single most important decision in evaluating a business is pricing power. If you've got the power to raise prices without losing business to a competitor, you've got a very good business. And if you have to have a prayer session before raising the price by 10 percent, then you've got a terrible business." Buffett and Munger found an asset in the form of See's that has retained tremendous pricing power over the years. That means See's has a moat. It is not an unlimited moat geographically as will be discussed below, but where the moat exists it is very strong.

5. Buffett: "Buy commodities, sell brands has long been a formula for business success. It has produced enormous and sustained profits for Coca-Cola since 1886 and Wrigley since 1891. On a smaller scale, we have enjoyed good fortune with this approach at See's Candy since we purchased it 40 years ago." "When we bought See's Candies, we didn't know the power of a good brand. Over time we just discovered that we could raise prices 10% a year and no one cared. Learning that changed Berkshire. It was really important." "Guilt, guilt, guilt—guys are veering off the highway right and left. They won't dare go home without a box of chocolates by the time we get through with them on our radio ads. So that Valentine's Day is the biggest day. Can you imagine going home on Valentine's Day—our See's Candy is now $11 a pound thanks to my brilliance. And let's say there is candy available at $6 a pound. Do you really want to walk in on Valentine's Day and hand—she has all these positive images of See's Candy over the years—and say, 'Honey, this year I took the low bid.' And hand her a box of candy. It just isn't going to work. So in a sense, there is untapped pricing power—it is not price dependent." "What we did know was that they had share of mind in California. There was something special. Every person in California has something in mind about See's Candy and overwhelmingly it was favorable. They had taken a box on Valentine's Day to some girl and she had kissed him. If she slapped him, we would have no business. As long as she kisses him, that is what we want in their minds. See's Candy means getting kissed. If we can get that in the minds of people, we can raise prices. I bought it in 1972, and every year I have raised prices on Dec. 26th, the day after Christmas, because we sell a lot on Christmas. In fact, we will make $60 million this year. We will make $2 per pound on 30 million pounds. Same business, same formulas, same everything–$60 million bucks and it still doesn't take any capital. And we make more money 10 years from now. But of that $60 million, we make $55 million in the three weeks before Christmas.

The See's acquisition taught Munger and Buffet about the power of a brand to create a moat. Munger has pointed out:

"The informational advantage of brands is hard to beat. And your advantage of scale can be an informational advantage. If I go to some remote place, I may see Wrigley chewing gum alongside Glotz's chewing gum. Well, I know that Wrigley is a satisfactory product, whereas I don't know anything about Glotz's. So if one is $.40 and the other is $.30, am I going to take something I don't know and put it in my mouth – which is a pretty personal place, after all – for a lousy dime? So, in effect, Wrigley, simply by being so well-known, has advantages of scale – what you might call an informational advantage. Everyone is influenced by what others do and approve. Another advantage of scale comes from psychology. The psychologists use the term 'social proof'. We are all influenced – subconsciously and to some extent consciously – by what we see others do and approve. Therefore, if everybody's buying something, we think it's better. We don't like to be the one guy who's out of step. Again, some of this is at a subconscious level and some of it isn't. Sometimes, we consciously and rationally think, 'Gee, I don't know much about this. They know more than I do. Therefore, why shouldn't I follow them?' All told, your advantages can add up to one tough moat."

One question relevant right now is whether the power of national brands versus local brands is decreasing due to transparency created by the Internet. In any event, over the years the power of a brand when combined with commodity inputs has created a powerful combination. "In 1972, See's sold 16 million pounds of candy, and 35 years later, it stood at 32 million, meaning it gained just 2% a year, but it's profit rose by 9% a year":

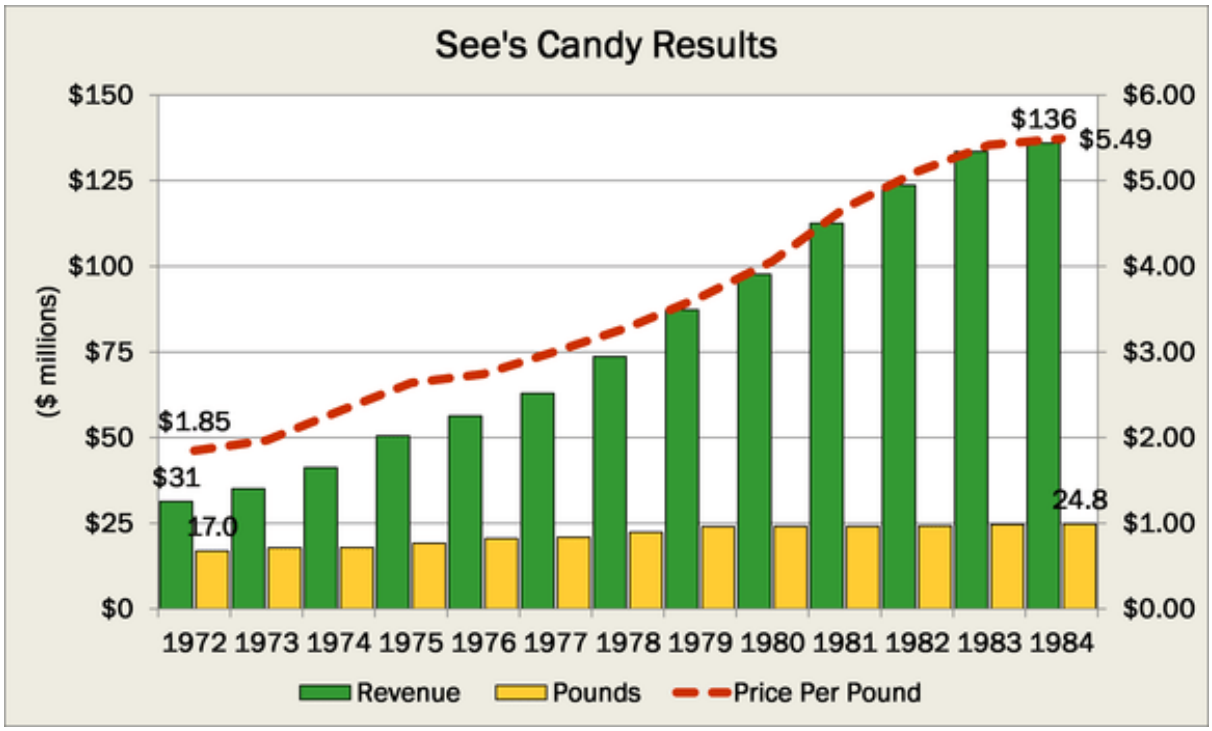

Source: Motley Fool Berkshire Hathaway Annual Letters.

6. Buffett: "The boxed-chocolates industry in which it operates is unexciting: Per-capita consumption in the U.S. is extremely low and doesn't grow. Many once-important brands have disappeared, and only three companies have earned more than token profits over the last forty years. Indeed, I believe that See's, though it obtains the bulk of its revenues from only a few states, accounts for nearly half of the entire industry's earnings." "You cannot destroy the brand of See's Candies. Only See's can do that. You have to look at the brand as a promise to the customer that we are going to offer the quality and service that is expected. We link the product with happiness. You don't see See's candy sponsoring the local funeral home. We are at the Thanksgiving Day Parades though." "In our primary marketing area, the West, our candy is preferred by an enormous margin to that of any competitor. In fact, we believe most lovers of chocolate prefer it to candy costing two or three times as much. (In candy, as in stocks, price and value can differ; price is what you give, value is what you get.)"

If you grew up in a home that bought See's Candies (mostly on the West Coast, especially in California) and your experiences around that candy have very favorable associations, you will pay more for a box bearing the See's Candies brand. By contrast, someone who grew up in the east cost of the United States will not attribute as much value to that brand since they do not have those same experiences. For this reason, See's Candies has found it hard to expand regionally and has done so very slowly. What See's Candies sells is not just food, but rather an experience that is usually offered in the form of a gift." A perceptive writer in an Israeli newspaper points out:

"Warren suggests getting your brand into the "gift market" because people don't give second-class gifts. If you price your new whiskey brand at 5 percent less than the leading brand, you'll have a hard time gaining customers. "The higher-priced one is both better known and more expensive," reasons the customer. "Why get something inferior just to save a few dollars?" This is especially true when the product will be a gift; no one wants to be seen as second class. The new whiskey would actually market itself more successfully in Grey Goose style: as a premium brand with a matching package that helps the potential buyer overcome much of his hesitancy. "Even though I've never had it before, it looks elegant and costs just a bit more than the brand I was planning to buy. It makes an impressive-looking gift that my host would enjoy. I'll give it a try," the thinking goes."

That See's Candies sells boxed candy mostly bought as gifts is a fundamental way that is business differs from other businesses that sell something that people eat. Buffet points out:

"Most people do not buy boxed chocolate to consume themselves, they buy them as gifts—somebody's birthday or more likely it is a holiday. Valentine's Day is the single biggest day of the year. Christmas is the biggest season by far. Women buy for Christmas and they plan ahead and buy over a two or three week period. Men buy on Valentine's Day. They are driving home; we run ads on the Radio. Guilt, guilt, guilt—guys are veering off the highway right and left. They won't dare go home without a box of Chocolates by the time we get through with them on our radio ads. So that Valentine's Day is the biggest day. Can you imagine going home on Valentine's Day—our See's Candies is now $11 a pound thanks to my brilliance. And let's say there is candy available at $6 a pound. Do you really want to walk in on Valentine's Day and hand—she has all these positive images of See's Candies over the years—and say, "Honey, this year I took the low bid." And hand her a box of candy. It just isn't going to work. So in a sense, there is untapped pricing power—it is not price dependent.

If you are See's Candies, you want to do everything in the world to make sure that the experience basically of giving that gift leads to a favorable reaction. It means what is in the box, it means the person who sells it to you, because all of our business is done when we are terribly busy. People come in during those weeks before Christmas, Valentine's Day and there are long lines. So at five o'clock in the afternoon some woman is selling someone the last box candy and that person has been waiting in line for maybe 20 or 30 customers. And if the salesperson smiles at that last customer, our moat has widened and if she snarls at 'em, our moat has narrowed. We can't see it, but it is going on every day. But it is the key to it. It is the total part of the product delivery. It is having everything associated with it say, See's Candies and something pleasant happening. That is what business is all about."

7. Buffett: "The ideal business is one that takes no capital, and yet grows. And there are a few businesses like that, and we own some." Buffett [in 2007]: "Two factors helped to minimize the funds required for operations. First, the product was sold for cash, and that eliminated accounts receivable. Second, the production and distribution cycle was short, which minimized inventories. Last year See's sales were $383 million, and pre-tax profits were $82 million. The capital now required to run the business is $40 million. This means we have had to reinvest only $32 million since 1972 to handle the modest physical growth – and somewhat immodest financial growth – of the business. In the meantime pre-tax earnings have totaled $1.35 billion. All of that, except for the $32 million, has been sent to Berkshire (or, in the early years, to Blue Chip)." "We've tried 50 different ways to put money into See's. If we knew a way to put additional money into See's and produce returns a quarter of what we're getting out of the existing business, we would do it in a second. We love it. We play around with different ideas, but we don't know how to do it." Munger: "By the way, we really shouldn't complain about this because we've carefully selected a bunch of businesses that just drown in money every year."

Some businesses just can't profitably put more cash or capital to work even though their underlying business at its existing scale is sound. This is why Buffet insists that all cash is allocated by him to the highest and best use within Berkshire. This avoids what Buffett calls the "institutional imperative" about which Buffett writes:

"Rationality frequently wilts when the institutional imperative comes into play. For example: (1) As if governed by Newton's First Law of Motion, an institution will resist any change in its current direction; (2) Just as work expands to fill available time, corporate projects or acquisitions will materialize to soak up available funds; (3) Any business craving of the leader, however foolish, will be quickly supported by detailed rate-of-return and strategic studies prepared by his troops; and (4) The behavior of peer companies, whether they are expanding, acquiring, setting executive compensation or whatever, will be mindlessly imitated."

8. Buffett: "After paying corporate taxes on the profits, we have used the rest to buy other attractive businesses. Just as Adam and Eve kick-started an activity that led to six billion humans, See's has given birth to multiple new streams of cash for us. (The biblical command to 'be fruitful and multiply' is one we take seriously at Berkshire.)"

When a given Berkshire portfolio company (for example, See's Candies) generates cash, that cash is rarely invested in more See's Candies stores, manufacturing plants or acquisitions since the return on capital would be lower than other alternatives within Berkshire. Because

of Berkshire's corporate structure, Buffett is able to move that cash from See's Candies to the greatest opportunity on a tax efficient basis (without paying the tax that would be imposed if See's Candies paid a dividend or See's shares were sold and the money the reinvested). Buffett elaborates: "because we still have this ability to redistribute money in a tax-efficient way within the company, we can reallocate it to where it will earn a higher return than shareholders may on their own." Sometimes the best way to appreciate a business like see's is to contrast it with the opposite example, as Munger does here: "There are two kinds of businesses: The first earns 12%, and you can take it out at the end of the year. The second earns 12%, but all the excess cash must be reinvested — there's never any cash. It reminds me of the guy who looks at all of his equipment and says, 'There's all of my profit.' We hate that kind of business."

9. Munger: "It takes almost no capital to open a new See's candy store. We're drowning in capital of our own that has almost no cost. It would be crazy to franchise stores like some capital-starved pancake house. We like owning our own stores as a matter of quality control."

Wesley Gray and Tobias Carlisle write in their book *Quantitative Value:* **"**Finding a genuine franchise is as worthwhile as it is difficult. As the See's Candies example demonstrates, franchises are valuable because they can pay out capital to owners without affecting their ability to grow, or they can compound the capita; of the business by reinvesting it year after year. Sustainable, high return business like See's Candies are forgiving investments. They throw off a great deal of capital every year." Munger believes: "There are worse situations than drowning in cash and sitting, sitting, sitting. I remember when I wasn't awash in cash — and I don't want to go back."

10. Buffett: "We never hired a consultant in our lives; our idea of consulting was to go out and buy a box of candy and eat it."

Charlie Munger is also not a fan of consultants. He is famous for saying: "I have never seen a management consultant's report in my long life that didn't end with the following paragraph: 'What this situation really needs is more management consulting.' Never once. I always turn to the last page. Of course Berkshire doesn't hire them, so I only do this on sort of a voyeuristic basis. Sometimes I'm at a non-profit where some idiot hires one." Munger has offended just about everyone at some point so consultants are part of a large club. Having said that, cold calling Buffett or Munger in an attempt to sell them consulting services is unwise.

11. Munger: "Some great businesses have very volatile returns – for example, See's usually loses money in two quarters of each year – and some terrible businesses can have steady results." Buffett: 'Our company song is: —What a friend we have in Jesus."

If you are willing to buy a business that has volatile profits from quarter you may find the purchase price to be a bargain since others may be frightened by what they deem as "risk." Munger has said this is a considerable willingness to accept volatile results from quarter to quarter is a considerable advantage in investing.

12. Munger: "We wrote a one-page deal with Chuck Huggins when we bought See's and it's never been touched. We have never hired a compensation consultant." "I'd rather throw a viper down my shirt front than hire a compensation consultant."

The most important task in capital allocation for Buffett and Munger is to take cash generated by a company like See's Candies and deploy it to the very best opportunity at Berkshire. Buffett's view on the importance of capital allocation easily stated:

"Charles T. Munger, Berkshire Hathaway's vice-chairman, and I really have only two jobs… One is to attract and keep outstanding managers to run our various operations. The other is capital allocation."

Occasionally Munger and Buffett find a person on who has such superior talent that they really don't need much of a moat. This situation is rare, but it does happen.

"Occasionally, you'll find a human being who's so talented that he can do things that ordinary skilled mortals can't. I would argue that Simon Marks – who was second generation in Marks & Spencer of England – was such a man. Patterson was such a man at National Cash Register. And Sam Walton was such a man. These people do come along – and in many cases, they're not all that hard to identity. If they've got a reasonable hand – with the fanaticism and intelligence and so on that these people generally bring to the party – then management can matter much. However, averaged out, betting on the quality of a business is better than betting on the quality of management. In other words, if you have to choose one, bet on the business momentum, not the brilliance of the manager. But, very rarely, you find a manager who's so good that you're wise to follow him into what looks like a mediocre business."

Sometimes you have both a moat and a great manager, and as Mae West once said: "Too much of a good thing can be wonderful."

Finally, here is Janet Lowe quoting Munger talking about See's in her book *Damn Right* (the best step-by-step account of the See's acquisition is in Lowe's book). She quotes Munger talking at a See's company event as follows:

There are a million business traps. You can get sloppy, you can get alcoholic, you can get megalomania, you can not understand your own limitations. There are a million ways to gum it up. To survive and prosper as long as this company has—started by a woman who was 71 [years old], that I really like. And it's an amazing example. See's has stayed out of a lot of traps."

"The ordinary candy company puts in too many stores," Charlie continued. "You have this huge overhead you're carrying through July and August, and you just can't get well at Christmas. But See's has always had the discipline of knowing their own business. That's harder on the employees, by the way. They have this huge crunch in the stores at Christmas, but it's part of the secret of See's.

"And of course the fanaticism about the quality of the product and service is the heart and soul of the business. I love the fact that this room is full of long time customers and long time suppliers. You get suppliers who are good and who are trusted because they deserve trust, and you behave the same way toward your own customer, then you are a little part of a civilization that is a seamless web of deserved trust. This is the way the world ought to work. It is a better example for everyone else. It is the right way to build up a state or a civilization. It was just marvelous for us to become associated relatively early in our business careers with a culture that was so fundamentally sound. It is Ben Franklin (or his business philosophy) all over again, alive and well at See's after all these years."[1]

Notes:

The Investments blog: http://theinvestmentsblog.blogspot.com/2013/06/buffett-and-munger-on-sees-candy.html?m=1

Don't Confuse Cheap with Value: http://www.broyhillasset.com/wp-content/uploads/2016/11/2016.10-BAM-Dont-Confuse-Cheap-with-Value-Final.pdf

The Secrets of See's Candies: http://fortune.com/2012/08/22/the-secrets-of-sees-candies/

Warren Buffett Bought This Company for $25M: http://www.fool.com/investing/general/2014/07/13/warren-buffett-bought-this-company-for-25-million.aspx

Warren Buffett basks in sweet success of See's Candies, Bank of America deals: http://www.bizjournals.com/sanfrancisco/blog/2015/03/warren-buffett-bank-of-america-berkshire-sees-brk.html

Here's why Buffett and Munger love companies like See's Candies: http://finance.yahoo.com/news/why-buffett-and-munger-berkshire-hathaway-love-companies-like-sees-candies-low-capital-145432726.html

Tren's Advice for Twitter

January 6, 2017

Jack Dorsey very recently asked for feedback on Twitter. The focus of nearly all of the comments he received was on ways to make Twitter's service qualitatively better for consumers. If Twitter does not have a great product for consumers, nothing else matters. But having a great product for just one side of a three-sided market is not enough to make Twitter into a successful business.

In a deeper analysis below I will argue that Twitter needs to become more of a platform and not less. Twitter's drive to become a media company reminds me of this joke:

Late one night a police officer found a drunk man crawling around on his hands and knees under a streetlight. The drunk told the police officer that he was looking for his keys. When the police officer asked if he was sure this is where he dropped his keys, the drunk man replied that he believed he dropped his keys across the street. The police officer asked: "Then why are you looking over here?" The drunk explained: "Because the light's better here."

Twitter devoting resources to offerings like Moments in an attempt to become a media business is like the drunk looking for his keys under the streetlight, when his keys are across the street where the building blocks of a much better platform business can be found. In short, it is easier for Twitter to try to be like Yahoo than it is to be a better platform. It is also easier to open a bakery or bar than it is to maintain and expand a platform. But because it is easy to do does not mean it is the right thing for Twitter to do.

I will argue below that to be a better platform Twitter must let go of its worship of the monthly average user (MAU) metric and go full speed ahead on ending abuse, bots and spam. MAU will drop for a while, but will emerge will be a more genuine MAU and better advertising targeting and user data.

In terms of suggestions to make the Twitter consumer offering better, why not focus on doing more things for existing Twitter creators? The best creators on Twitter get paid zip to make Twitter more valuable. They don't get ***any*** love from Twitter whatsoever. **The best thing about Twitter are the people who create Tweets.** Twitter should do a far better job of making these people more discoverable and happy. For example, why don't they reach out and offer a blue check mark to the most valuable creators on Twitter. If you ask to get the check mark and you are not Beyonce, Twitter more or less treats you like a possible criminal. The blue check mark rejection letter, which makes you feel like you have been rejected by Harvard Divinity school for questionable character, is a missed opportunity. YouTube has taken advantage of the opportunity to create a far more positive relationship with its creators. Instead of giving some attention and love to the people on Twitter who create the value for Twitter, Twitter is hiring more people to write first party content about the Kardashians on Moments? That. Is. Just. NUTS.

Blue check marks are just one idea for making the service more valuable for Twitter's most important creators. Medium has this same problem, but it is even more important for them. In a Tweet his week about Medium I said: "Content can only be consistently good if its creators can make a living from it." Twitter creators don't need to make a living on the service, but they will do more work and contribute more if there are greater incentives to do so.

Twitter is a poster child for a critical point that many people do not understand about innovation. Many businesses like Twitter deliver huge amounts of value to consumers via innovation but do not generate a corresponding amount of profit for shareholders from that innovation. That Twitter is a very important innovation for society does not necessarily mean it will deliver a significant profit. That Twitter may have a moat from network effects is a different point than the size and value of the market that the moat protects. Moats are far from generic. Some moats protect very valuable markets and some don't. Twitter's objective should be to expand the value of what its moat protects. If it does not expand the value of what its moat protects, it will not grow into its cost structure.

More detailed analysis:

Twitter is a multi-sided platform linking advertisers on the first "side" of the market with people like me on the second side who use Twitter to communicate. Another third side of the platform is composed of businesses which pay for access to a Twitter API that gives them access to data that Twitter collects about interactions on the platform.

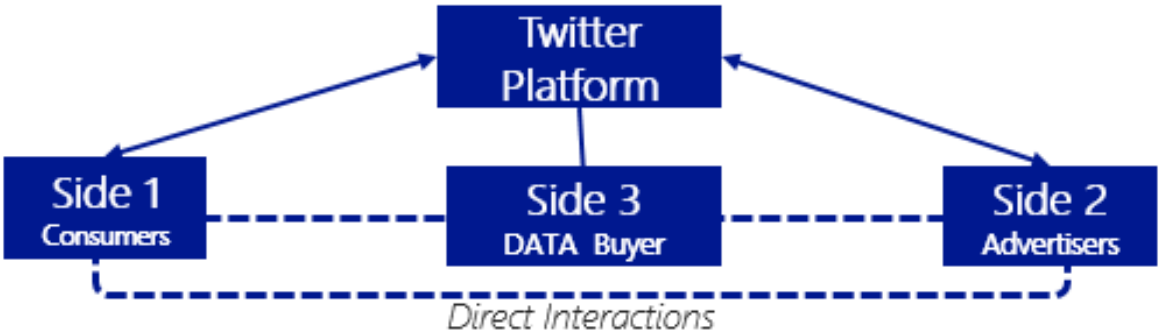

The key to delivering value to Twitter's advertiser customers (Side 1) is having highly relevant data about potential buyers on Side 2 so the advertisers can generate a high and measurable return on investment (ROI) on their Twitter advertising. Advertisers on Side 1 will compare their Twitter ROI to the ROI they can achieve on other social media platforms. This of course is capitalism at work. Every advertiser and buyer of access to the Twitter API must do an opportunity cost analysis.

Twitter must capture a much bigger share of this:

U.S. Ad Revenues	Q3 2015	Q3 2016	Growth	Share of Growth
Google[1]	$7.9 Billion	$9.5 Billion	$1.6 Billion	54%
Facebook[2]	$2.1 Billion	$3.4 Billion	$1.3 Billion	45%
Everyone Else	*$4.6 Billion*	*$4.7 Billion*	*$40 Million*	*1%*
PWC / IAB[3]	$14.7 Billion	17.6 Billion	$2.9 Billion	

One important objective for Twitter is to make targeted advertising so valuable that when consumers want to buy something that the advertisements are considered by consumers to be valuable information rather than spam. Delivering advertising to consumers as close as possible to the time they are ready to buy is the optimal result for Twitter. How is Twitter doing in targeting is advertising? When you see an advertisement in your Twitter feed is it highly relevant to you? Have you ever clicked on a Twitter Advertisement? Or does a Twitter ad usually make you say: "this is annoying. Why are they sending this to me" The magic of search advertising is that when you are using a search engine you are often in the mood to buy. When you are on Twitter reading a post on a sporting event are you really in the mood to buy just anything? Is an advertisement for anti-itching cream valuable then?

To make the targeted advertisement valuable Twitter must "know you" in a deep way. What are the impediments to that? That should be the focus of work at Twitter.

Understanding the urgency of what Twitter must do is bought into focus by looking at the unit economics of Twitter. We may not have enough data to do the type of LTV calculation that I have written about recently on this blog, but Twitter does. We do know enough to make some educated guesses about Twitter's Unit Economics. As always, especially for an investor, it is better to be roughly right than precisely wrong. Of course, Twitter can be far more than roughly right. They have the nonpublic data. They can do the math and use the math to create key performance indicators.

Most people who look at Twitter's numbers focus on the need for more user growth. The cry from analysts is usually some form of: "Twitter must increase MAU and DAU!" This results in thinking and products like the awful Twitter Moments, which is essentially trying to recreate Yahoo's declining business model and diverts resources that can be better deployed elsewhere. Is it a good thing is MAU and DAU grow? Sure. But the more important question is: what is the highest ROI for Twitter on new investments?

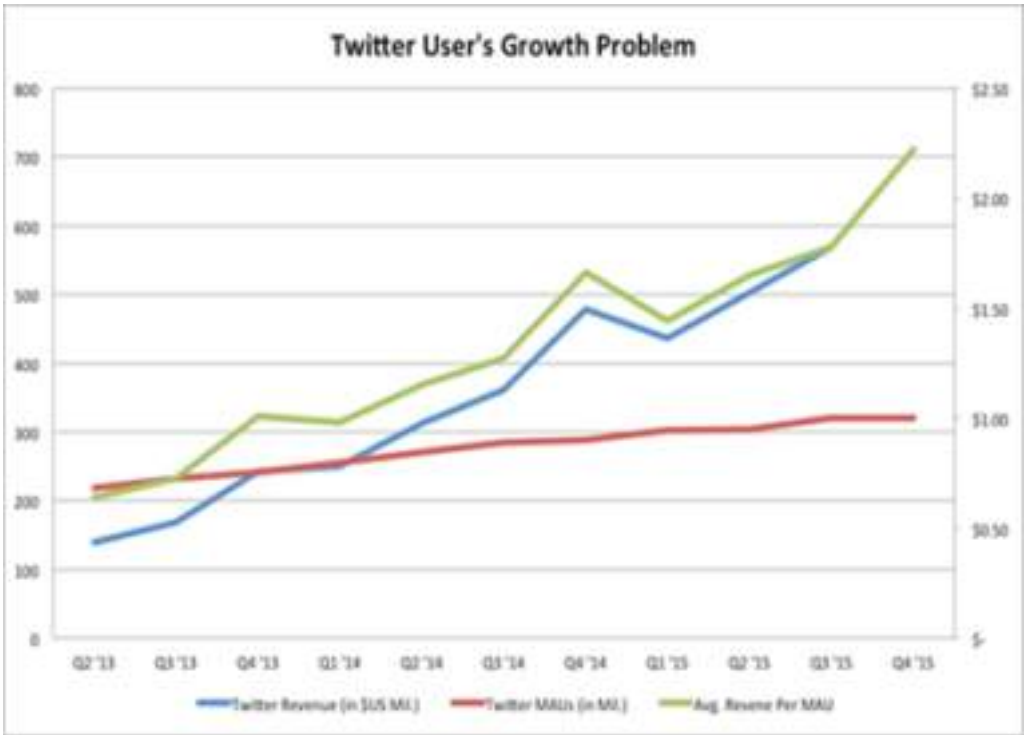

Over-fixation on growing MAU and DAU also makes Twitter fearful of fixing important but broken aspects of the service like abuse, spam and bots since that would result in user count drops and less "activity." Unfortunately, that confuses genuine real consumers with counts inflated by fake users. Twitter needs to fix the abuse problem regardless of what it does to negatively impact fake MAU. Spammers and bots must go. No one is going to be fooled about MAU claims when the company can't generate a profit. The clock is ticking.

Some people argue that this focus on growth MAU makes the Twitter usage data less useful too both in targeting advertising and for buying of access to the Twitter API. Trip Chowdry of Global Equities Research argues:

“If data quality is bad, Ad targeting is bad, and if Ad targeting is bad, Advertisers are not happy, and hence monetization will remain challenging for TWTR. If data quality is bad, then performing prediction on these data sets will also be wrong, hence 10% of revenues that TWTR gets from selling its data will also suffer.”

In my post on Chamath Palihapitiya he makes clear that the for key Facebook in the early days wasn’t MAU and DAU.

“After all the testing, all the iterating, all of this stuff, you know what the single biggest thing we realized [at Facebook]? Get any individual to seven friends in 10 days. That was it. You want a keystone? That was our keystone. There’s not much more complexity than that. It’s not just top-line growth. It’s acquisition, engagement, ongoing product value. It’s understanding the core value and convincing people that may not want to use it.”

What’s the core value of Twitter? What key performance indicator (KPI) drives that value best? It isn’t activity generated by abuse, bots and spam. I suspect the right KPI is something that captures real users sharing and creating content. Something like more than X Tweets shared or created over period of time Y.

Anil Dash in a thoughtful post on Medium argues that Twitter has made a mistake by focusing on the wrong metrics:

“Your relationship with Wall Street investors (and, to some degree, with advertisers) is fundamentally broken because you’ve gotten trapped into using the wrong metrics to measure the success or progress of Twitter. New signups are flat, and they’re going to stay flat, and every desperate flailing attempt to change that just reminds engaged users that they’re not seeing any progress and they don’t believe you can ship features they care about. Meanwhile, do you know how many new video creators joined YouTube this quarter? Me neither! You know why? Because *all the good videos are on YouTube!* What percentage of people who visit YouTube each month are logged in? What percentage ever uploaded a video? Answer: Nobody gives a shit. Because YouTube inarguably drives culture, and people (and advertisers!) want to be part of that.”

The more important tasks for Twitter and other platforms are less fun than writing Kanye entries in Moments. The focus of Twitter should be on increasing average revenue per user (ARPU) which is driven by the ability to better target users.

As I said, it is useful to look at unit economics

1. ARPU:

Twitter’s total most recent quarterly revenue: $616 million a quarter or $205 million a month

Monthly active users:

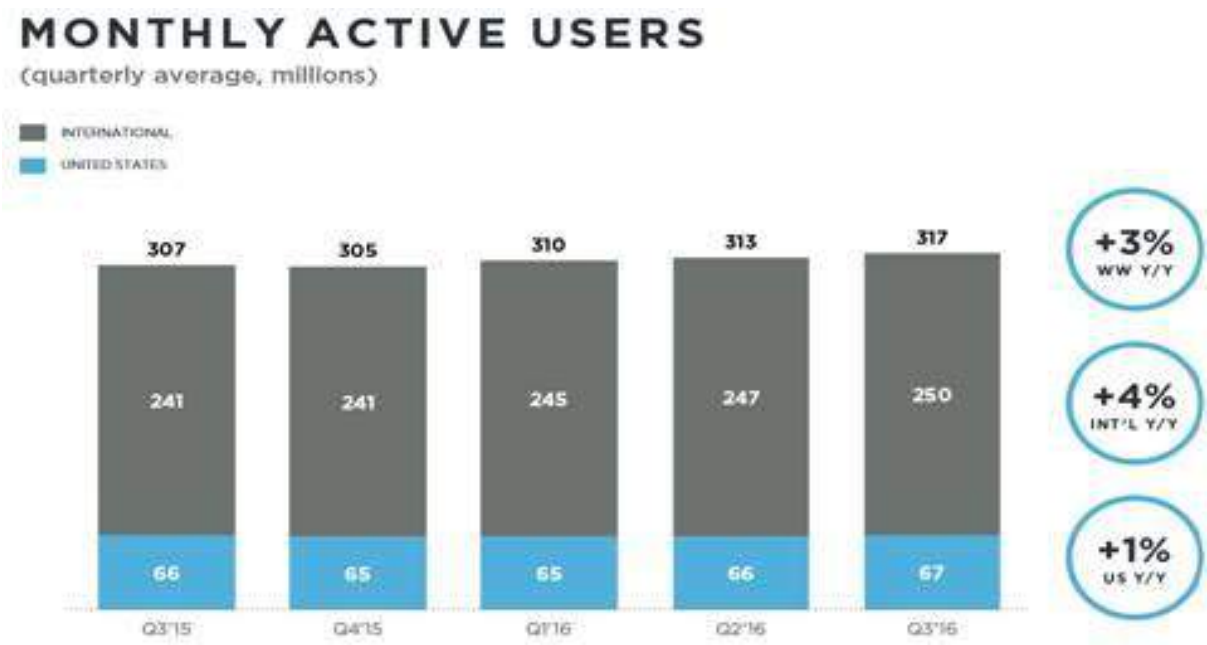

There are also ~500 million monthly average users (MAUs) who are not logged in, but let's ignore them since it would make Twitter's ARPU per user even worse.

Monthly ARPU: 317 million logged in users are generating $205 million a month or 64 cents per user per month.

2. Gross Margin (revenue less cost of goods sold or COGS):

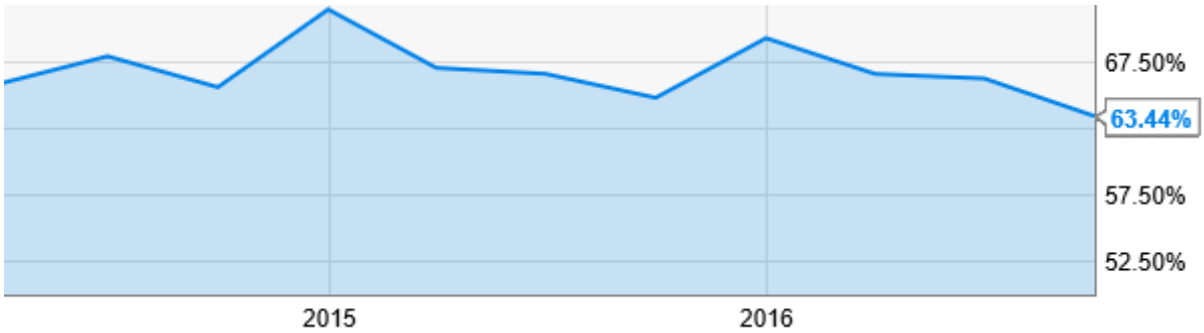

The problem with the new "we are a media company" approach being adopted by Twitter is that even if they do grow users it is not a high gross margin path. Being a "media company" has significantly worse margins that a platform business and it scales far less well.

3. Churn (customers lost):

This variable and the next are the hardest to know if you are not Twitter. What is Twitter's customer retention rate? Twitter knows but we must make an educated guess. We know net growth is 1-4% (including bots, etc.). Within that envelope there can be a lot of churn that is killing growth or not.

Survey Monkey has some rough data that should be viewed with caution.

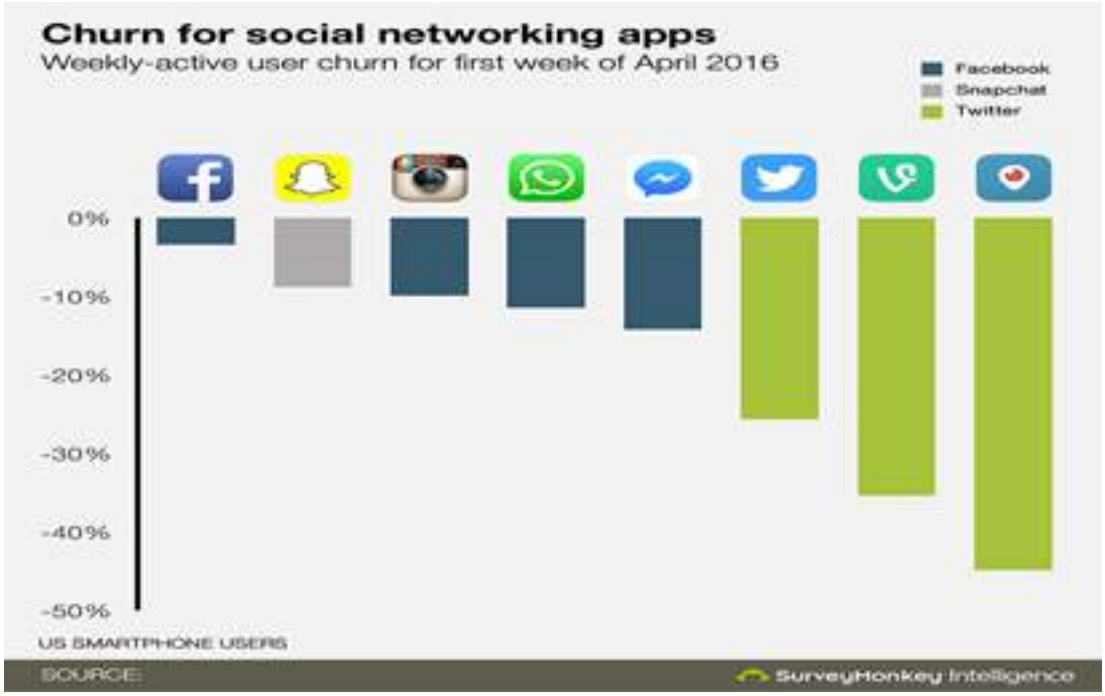

This chart looks at weekly churn, which refers to people who used the app one week, but didn't use it again in the following week. Some of those churned users will probably return to the app in the future, but generally speaking, Twitter retention rates do not look very good at all, especially when compared to Facebook's apps.

I'm going to make an educated guess Twitter's real churn is 4% a month since that is typical in a consumer business with no annual contract. How did I make that guess? Well I know what their loss is as a company, I know gross margin and ARPU and I see their income statement which generally reflects sales and marketing costs. And I know many churn "comparables" from other companies over a period of decades. With that data, you use pattern recognition and make your educated guess.

4. CAC (customer acquisition cost):

CAC is also a hard one. In the case of a company like Twitter, a lot of the COGs is really CAC. I use the same reverse engineering process I used with churn to come up with my educated guess. Twitter, as I said, does not need to guess.

Looking at Twitter's SG&A and the losses (see below) I, going to guess based on losses and SG&A that Twitter's direct and indirect CAC is about $8.

So how does this net out? Well, Twitter's unit economics might look roughly like this:

INPUTS	
CAC	$8.00
ARPU (per month)	$0.64
Churn (per month)	4.0%
Gross Margin	60%
Annual Discount Rate	10.00%
COGS (per month)	$0.26
Monthly Discount Rate	0.83%
Terminal value multiplier (months	20.86
NPV	-$0.06
IRR	8.52%

Excludes last period with terminal value

	Time 0	Year 1 Jan 1	Feb 2	Mar 3	Apr 4	May 5	Jun 6
CPGA	-$8.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
ARPU		0.64	0.64	0.64	0.64	0.64	0.64
COGS		-0.26	-0.26	-0.26	-0.26	-0.26	-0.26
Monthly Cash Flow	($8.00)	$0.38	$0.38	$0.38	$0.38	$0.38	$0.38
Remaining fraction of subscribers		100%	96%	92%	88%	85%	82%
Net cash flow	($8.00)	$0.38	$0.37	$0.35	$0.34	$0.33	$0.31
Simplified NPV calculation (check)	($0.06)						
Simplified IRR calculation (solving in NP	9.60%						

Unlike me Twitter does not need to guess what the inputs variables into the unit economics calculation are. But we do know that if Twitter can get ARPU up to $3 a month the operating leverage gets lots better. Adding a lot of new COGS to the math makes things worse.

There is some urgency if you look at the financials:

Management Effectiveness	
Return on Assets (ttm)	-2.79%
Return on Equity (ttm)	-8.54%

Income Statement	
Revenue (ttm)	2.52B
Revenue Per Share (ttm)	3.63
Quarterly Revenue Growth (yoy)	8.20%
Gross Profit (ttm)	N/A
EBITDA	41.67M
Net Income Avi to Common (ttm)	-380.06M

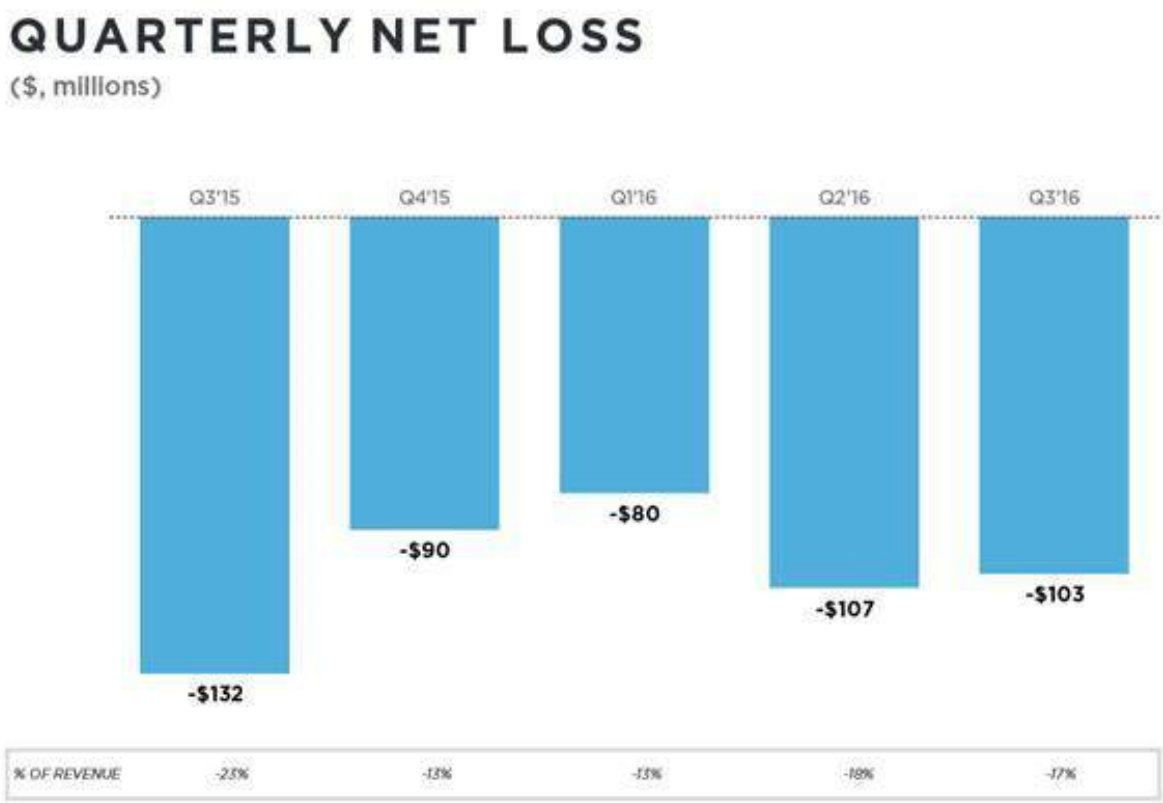

Notes:

Twitter Investor relations slide deck: http://files.shareholder.com/downloads/AMDA-2F526X/3556176911x0x913986/54A7EF6C-F9C3-44C7-BF3C-D4A921452DFA/Q3_16_Earnings_Slides.pdf

Survey Monkey https://www.surveymonkey.com/business/intelligence/twitter-retention-rate/

Anil Dash: https://medium.com/startup-grind/a-billion-dollar-gift-for-twitter-8b3d541b9e1e#.v2r2gtd23

Fortune: http://fortune.com/2016/12/31/what-twitter-needs-to-do-in-2017/

Why is it so Hard to Forecast the Future?

January 13, 2017

For most of human history the life experiences of people have been overwhelmingly linear. Human are accustomed to encountering situations that reflect a simple proportional relationship between cause and effect. People expect that when they do X that Y will happen if Y was what happened in the past. This type of linear relationship is comforting to people since it is familiar. Ray Kurzweil believes: “our intuition about the future is linear because that is the way the world worked for most of history. Prey animals did not get exponentially

faster for example." Except for a virus or bacterial infection multiplying inside your body, few things in ordinary life are nonlinear.

The rise of modern science combined with modern distribution and other processes developed by businesses has resulted in people increasingly encountering nonlinear change. The economist Paul Romer explains one common reaction: "People are reasonably good at estimating how things add up, but for compounding, which involves repeated multiplication, we fail to appreciate how quickly things grow. As a result, we often lose sight of how important even small changes in the average rate of growth can be." When something is sufficiently nonlinear, a phenomenon can seem almost magical. Especially when the outcome of a nonlinear change is negative, tendencies like loss aversion can kick in and people can have a strong tendency to react in highly emotional ways. Even people who are otherwise rational may not think clearly in this situation. Nobel Prize winner Daniel Kahneman describes one important reaction: "People talk of the new economy and of reinventing themselves in the workplace, and in that sense most of us are less secure." People who feel less secure can feel confused and even angry. In one of his famous memos sent to readers just this week Howard Marks frames the current challenge:

"I realized recently that in my early decades in the investment business, change came so slowly that people tended to think of the environment as a fixed context in which cycles played out regularly and dependably. But starting about twenty years ago – keyed primarily by the acceleration in technological innovation – things began to change so rapidly that the fixed-backdrop view may no longer be applicable. Now forces like technological developments, disruption, demographic change, and political instability and media trends give rise to an ever-changing environment, as well as to cycles that no longer necessarily resemble those of the past. That makes the job of those who dare to predict the macro more challenging than ever."

We all must make decisions including about events that will happen in a future that is risky, uncertain and may involve unknown unknowns. What's the right response to this reality? Howard Marks describes an approach that works for him: "We can't predict, but we can prepare…. the key to dealing with the future lies in knowing where you are, even if you can't know precisely where you're going. Knowing where you are in a cycle and what that implies for the future is very different from predicting the timing, extent and shape of the next cyclical move." When change is both inevitable and gaining speed a person's ability to adapt to the environment based on what he sees **in the present** is far more useful than trying predict the future. Steering as you react to signals being generated in the present is very different from trying to predict events that may happen in the future. The changes we are seeing in society and business effectively mean that evolution, as broadly defined, has accelerated. Evolution favors individuals who can adapt the fastest and most effectively to that accelerated change.

One way to be smarter about the ways in which we adapt is to change the way we think. One of many important ideas that have resulted from the work of Kahneman and Amos Tversky is the "distinction between two profoundly different approaches to forecasting, (1) the inside view and (2) the outside view. In his book *Thinking, Fast and Slow* Kahneman describes a view he and Tversky followed when they tried to predict when they would finish a project:

"The *inside view* is the one that all of us, including Seymour, spontaneously adopted to assess the future of our project. We focused on our specific circumstances and searched for evidence

in our own experiences. We had a sketchy plan: we knew how many chapters we were going to write, and we had an idea of how long it had taken us to write the two that we had already done. The more cautious among us probably added a few months as a margin of error. But extrapolating allow for what Donald Rumsfeld famously called "unknown unknowns." At the time, there was no way for us to foresee the succession of events that would cause the project to drag on for so long: divorces, illnesses, crises of coordination with bureaucracies. These unanticipated events not only slow the writing process, but produce long periods during which little or no progress is made at all. Of course, the same must have been true for the other teams that Seymour knew about. Like us, the members of those teams did not know the odds they were facing. There are many ways for any plan to fail, and although most of them are too improbable to be anticipated, the likelihood that something will go wrong in a big project is high."

In his book *Think Twice*, Michael Mauboussin describes alternative to the inside view: "The outside view asks if there are similar situations that can provide a statistical basis for making a decision. Rather than seeing a problem as unique, the outside view wants to know if others have faced comparable problems and, if so, what happened. The outside view is an unnatural way to think, precisely because it forces people to set aside all the cherished information they have gathered."

In addition to adopting a better viewpoint so to increase the probability of making a successful forecast, a person can also try to avoid making predictions that by their nature are particularly hard to make successfully. Howard Marks describes the objective best: "The more we concentrate on smaller-picture things, the more it's possible to gain a knowledge advantage. With hard work and skill, we can consistently know more than the next person about individual companies and securities, but that's much less likely with regard to markets and economies. Thus, I suggest people try to 'know the knowable.'" Charlie Munger has a similar view: "Micro-economics is what we do and macro-economics is what we put up with." Warren Buffett describes the objective of people like Marks and Munger in this way: "I don't look to jump over 7-foot bars: I look around for 1-foot bars that I can step over." Munger makes a similar point by joking that he wants to know where he will die, so he can just not go there.

What categories of phenomenon are less knowable? Grace Hopper famously said: "Life was simple before World War II. After that, we had systems." When systems are involved it can get especially hard to make forecasts. What is a system? Nobel Prize winner Murray Gell-Mann has said that a scientist would rather use someone else's toothbrush than another scientist's definitions. Nevertheless, one dictionary definition a "system" is: a regularly interacting or interdependent group of items forming a unified whole. There are many types of systems, but the system that creates the greatest challenges for people in today's world is a specific type known as a complex system. A complex system is a system composed of many interacting independent agents or elements that can lead to outcomes that are either difficult or impossible to predict by looking at the components. Capital markets, ecosystems, ant colonies and the human immune system are all example of complex systems. Michael Mauboussin describes a new reality: "Increasingly, professionals are forced to confront decisions related to complex systems, which are by their very nature nonlinear. Complex adaptive systems effectively obscure cause and effect. You can't make predictions in any but the broadest and vaguest terms. Complexity doesn't lend itself to tidy mathematics in the way that some traditional, linear financial models do." Nassim Taleb identifies key ideas about complex adaptive systems in this way:

"The interactions matter more than the nature of the units. Studying individual ants will never (one can safely say never for most such situations), never give us an idea on how the ant colony operates. For that, one needs to understand an ant colony as an ant colony, no less, no more, not a collection of ants. This is called an "emergent" property of the whole, by which parts and whole differ because what matters is the interactions between such parts. And interactions can obey very simple rules."

A small system like a business is not easy to make predictions about, but on a relative basis these predictions bout small systems are easier than making other more macro predictions. In other words, understanding enough about a single business like a hot dog stand, a grocery or Ford in order to make predictions with some reasonable degree of accuracy is far more possible to do than making predictions about the future state of an economy on a given date. Even with a focus individual businesses it is still hard to value a business. If it was easy to do so or if there was a simple formula to follow, everyone would be rich. Munger says anyone who thinks investing is easy is stupid. Howard Marks writes: "investing can't be reduced to an algorithm and turned over to a computer. Even the best investors don't get it right every time. No rule always works. The environment isn't controllable, and circumstances rarely repeat exactly." Since the future is uncertain you must think probabilistically.

Until the Internet made facts as transparent and retrievable as they are today many people took comfort that experts from branded institutions understood what was going on and could reliably predict the future. The situation today is that people are able to easily "showroom" the predictive performance of experts against what actually happened and they do not like what they see. Sometimes you will hear someone say: "people have lost faith in our institutions." That may be true, but no small part of what they may actually be saying is that they have lost faith in experts who claim to be able to predict the future. As people recognize that "experts" can't predict the future any better than chance so they are doing things like flocking to index funds. Only when experts stop predicting the unpredictable will their credibility return. The expert may forget about their prediction failure due to hindsight bias, but the public can now easily fact check the record of the pundit. This reality will not change. Ever.

The number of and magnitude of systems that impact our lives is increasing as digitization of the economy proliferates and systems are to a far greater degree interconnected by networks. Mauboussin writes in *Think Twice*: "Unintended system-level consequences arise from even the best-intentioned individual-level actions has long been recognized. But the decision-making challenge remains for a couple of reasons. First, our modern world has more interconnected systems than before. So we encounter these systems with greater frequency and, most likely, with greater consequence. Second, we still attempt to cure problems in complex systems with a naïve understanding of cause and effect." A networked and always connected world is an environment where people encounter complex adaptive systems in many more situations than in the past. Andrew Haldane, Chief Economist, Bank of England believes: "These systems are even more unpredictable because they nest within each other creating even more turbulence. Modern economic and financial systems are not classic complex, adaptive networks. Rather, they are perhaps better characterised as a complex, adaptive 'system of systems.' In other words, global economic and financial systems comprise a nested set of sub-systems, each one themselves a complex web."

Whether we like it or not, the economy is currently changing in ways that are increasingly nonlinear. Feedback of all kinds is being amplified in new ways and that increases the

magnitude of nonlinearity. That crazy event you watch on a video is like the screeching of a microphone at a concert feeding back on itself. When nonlinear change happens the aggregate behavior of systems is vastly more complicated than would have been predicted by summing the inputs into the system. With a nonlinear system when we do X sometimes instead of Y happening Z can happen which we did not expect at all or had never even conceived of as a possible outcome. For example, in a nonlinear world you can train for profession X that has been around for many years and it can disappear over a very short period of time.

Volatility in the prosperity of businesses and professions produced by exponential change can be seen virtually everywhere. For example, many giant corporations are losing the competitive advantages that come with greater economies of scale and are under assault by smaller more nimble competitors. Smaller nimble businesses spend as much time competing with each other as attacking more established businesses, creating unprecedented levels of competition. Jobs disappear in one profession and are yet are being created in new industries, if you have the right skills. People are comparing prices of virtually everything using their mobile phones, which means profits that once were made possible by taking advantage of information asymmetry between producers and consumers are disappearing. The CEO of Costco told the CEO of American Express that the credit cards they provide are no different than ketchup. Shopping malls are being decommissioned as e-commerce rises. New markets are proliferating, value chains are breaking up, and profit pools are shifting. Industry boundaries are blurring and barriers to entry are disappearing. Sources of competitive advantage are fundamentally changing at unprecedented speed.

Cars and trucks driving themselves is a nonlinear change, especially if your job is to drive for a living. Stores that do not need checkers is a nonlinear change, especially if you do that or a living. People being able to get news for free instead of buying a newspapers is a nonlinear change, especially if you are a reporter. If you make your living selling any of the devices that a modern smartphone replaces that is nonlinear change. As was noted above, since we are not accustomed to nonlinear change, when it happens it can be confusing. When humans get confused they start telling stories to make the world make sense again. These stories may or may not have any tie to reality, but they make us feel better. Daniel Kahneman has said: "What we have is a storytelling system and the coherence of the story determines how much faith we have in it."

I have written a book on Native American legends entitled *Ah Mo* that captures how people in the Northwest part of what is now the United States used stories to make sense of the world before Columbus arrived in the Americas. These stories explained **simple** things like where fire came from and why salmon appear in the streams in the fall to spawn. A different sort of storytelling about **complex** systems is happening today, most notably as politicians or promoters try to use stories to explain things like why someone's job has disappeared. As these stories proliferate being able to tell the difference between the truth, what we don't know and what we can't know, will be increasingly important.

On the subject of forecasting, in addition to reading what Howard Marks has written on the subject, I suggest that you read Philip Tetlock and Mauboussin, who writes in this cautionary note:

"The predictions of the average expert were 'little better than guessing,' which is a polite way to say that 'they were roughly as accurate as a dart-throwing chimpanzee.' When

confronted with the evidence of their futility, the experts did what the rest of us do: they put up their psychological defense shields. They noted that they almost called it right, or that their prediction carried so much weight that it affected the outcome, or that they were correct about the prediction but simply off on timing." https://doc.research-and-analytics.csfb.com/docView?language=ENG&format=PDF&source_id=em&document_id=1053681521&serialid=gRAGx5o9KjpeAGBLPq7bpyJRa6r6fj06KjHB6PGBbGU%3d

Think for yourself.

Notes:

Howard Marks: https://www.oaktreecapital.com/docs/default-source/memos/expert-opinion.pdf

Thinking, Fast and Slow http://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/daniel-kahneman-beware-the-inside-view

Think Twice: https://www.amazon.com/Think-Twice-Harnessing-Power-Counterintuition/dp/1422187381

Haldane: http://www.bankofengland.co.uk/publications/Documents/speeches/2015/speech812.pdf

Tetlock: https://www.amazon.com/Superforecasting-Science-Prediction-Philip-Tetlock/dp/0804136718

Ah Mo: https://www.amazon.com/Ah-Mo-Indian-Legends-Northwest/dp/0888392443

Everyone Poops and has Customer Churn (and a Dozen Notes)

January 27, 2017

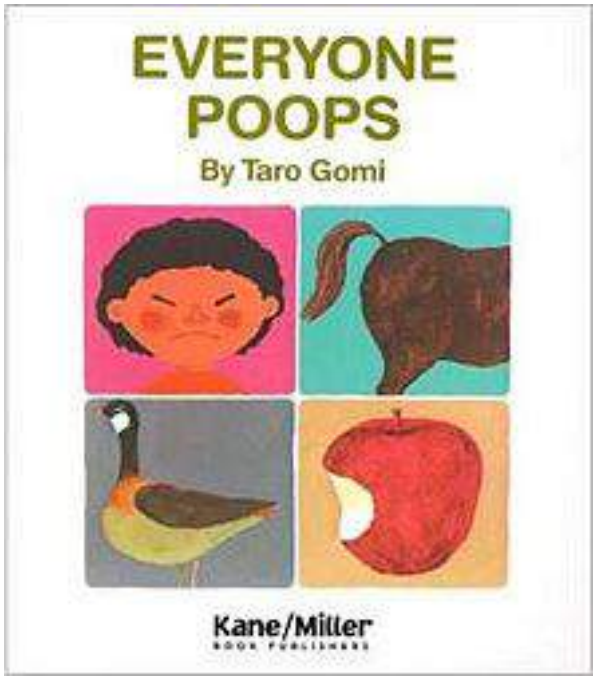

Everyone Poops is the title of the American edition of a Japanese children's book written and illustrated by Tarō Gomi. This post will explain why every business from Tesla to a hot dog stand has churn, just like everyone poops. I decided to use this analogy because both churn and poop are both inevitable and important parts of an essential process. For example, both individual and business customers all die at some point. This is called *death churn* and is inevitable, just like taxes. I'm not going to take this poop analogy any further since my family was not amused that I have done so at all when I told them of my intentions. They were more pleased with my "everyone has customer acquisition cost and a belly button" idea. I will try to keep this post short, snappy and relatively math free so you don't get bored.

A churn rate measures of how much of something is lost over a given period. Retention is the inverse of churn. One important type of churn calculation determines how many customers are retained by a business. The simplest explanation of customer churn is visual:

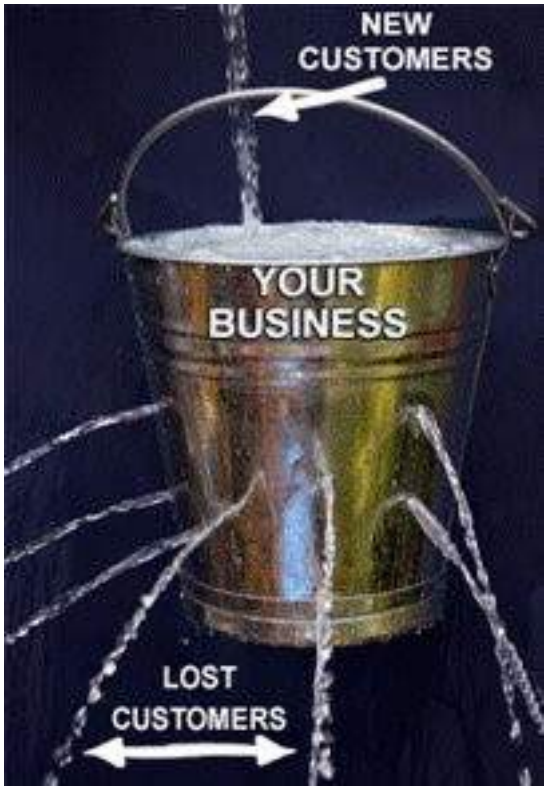

The financial impact of "lost customers" as depicted in the illustration (churn) is too often underestimated by a business.

I'm not going to dig too deeply into the math of churn in this post or the many versions of that math since most of you will stop reading. Let's just say the math associated with churn can be very complex (or not) and some data scientists (i.e., statisticians who work in a city like San Francisco or Seattle) can spend their entire careers measuring it. Product development, marketing and other people can spend their entire careers trying to improve churn.

Despite my desire to avoid math, I am going to repeat a short explanation of the math of churn from a post by Lighter Capital:

"Customer Churn Rate = Number of preexisting customers who left during a given period / Total customers at the start of that period. For example, assume your company has 50 customers at the beginning of the month. During that month, 12 customers left. That would mean you had a monthly customer churn rate of 24% (12/50 = 0.24). Mathematically, this means churn is the inverse of customer retention."

The impact of churn, once calculated, is best conveyed graphically:

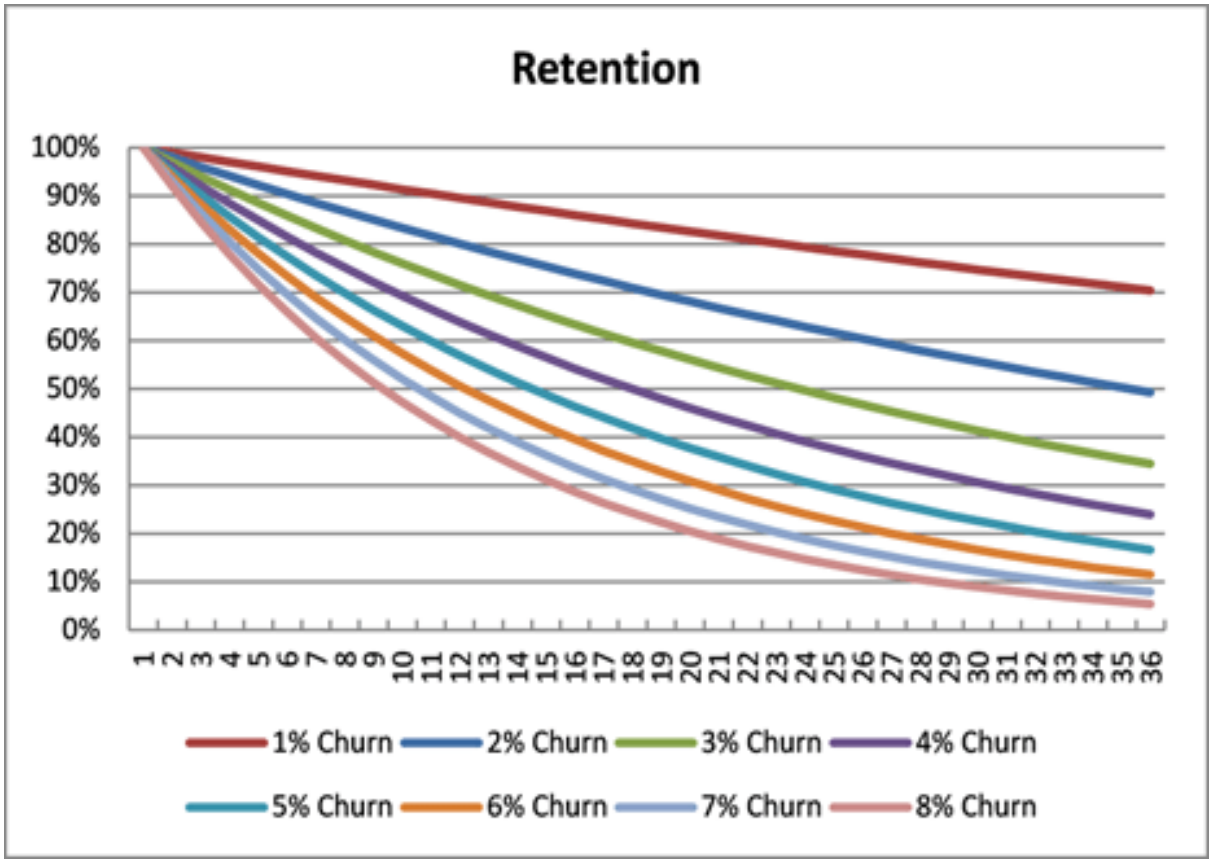

When it comes to the financial impact of churn, even a fraction of a percentage point change can make a huge difference in an outcome. This is why churn is often tracked in terms of basis points (a hundredth of a percent). A business that ignores even small changes in churn often ends up dead. As with any metric, it is better to be roughly right in calculating churn than to be precisely wrong. It is also important to understand that there are sneaky ways to hide the adverse effects of churn and so you need to be careful with any claims made by promoters based on churn calculations. It is always wise to examine the assumptions that promoters use in a churn calculation since it is possible to tell a very tall tale by misrepresenting the impact of churn. Ben Horowitz writes about hearing this sort of talk from people who want to raise money from his venture capital firm:

"'We have a very high churn rate, but as soon as we turn on email marketing to our user base, people will come back' – Yes, of course. The reason that people leave our service and don't come back is that we have not been sending them enough spam. That makes total sense to me, too."

Going back to the bucket analogy for the impact of churn, if you don't know how much water is flowing out of the bucket via leaks you have a very incomplete picture of the financial health of a business. Sometimes a business does not reveal its customer churn. For example, I suspect some of the food preparation and delivery startup businesses have very high churn but are not revealing their customer losses. Groupon had punishing churn levels in its early glamorous but highly unprofitable days. The churn rate for some mobile gaming firms and mobile apps is perhaps best measured in hours rather than days.

The higher the customer acquisition cost (CAC) of a given customer the more important lower churn becomes in the unit economics calculation. For example, if you pay $700 in

CAC to acquire a satellite TV customer you can't afford much churn and have positive return on investment. If you pay only $30 to acquire a prepaid cellular customer, churn can be relatively high and yet the business still can make financial sense depending on the other variables that determine unit economics. Here is a short description of why churn matters from a post by Joel York:

"In plain English, you spend an awful lot of money, time and energy acquiring customers. You recover this investment over time, so you want your customers to stick around as long as possible. The longer they stay, the stronger your business. This is why the value of one divided by the churn rate is often quoted as the average customer lifetime; lower churn equals longer customer lifetimes equals larger customer lifetime value."

Often the math of the unit economics produces a result that makes clear that the benefits of retaining a customers are nonlinear. In short, investments in churn reduction (retention) can yield a far better return on investment than generating new users on a relative basis. There are some research studies that claim that increasing customer retention rates by 5% can increase profits by 25% to 95%.

What is an acceptable churn rate varies by business model and industry. In some cases in some industries it can be wise to require that a customer commit to a contract with a term that is relatively long so as to reduce the risk of churn. The trade off that exists is that services which are not terminable on a monthly basis have higher customer acquisition cost. For example, there is a reason why a service provider does not ask you to commit to a service for five years (answer: it is too expensive in terms of CAC to get you to do so). You must also keep in mind that if the customer is not creditworthy a contract is not worth much anyway. Customer quality matters a lot in thinking about churn. So-called "freemium" services are particularly prone to churn. For example, mobile apps can experience churn that is just short of stunning as depicted in this graph:

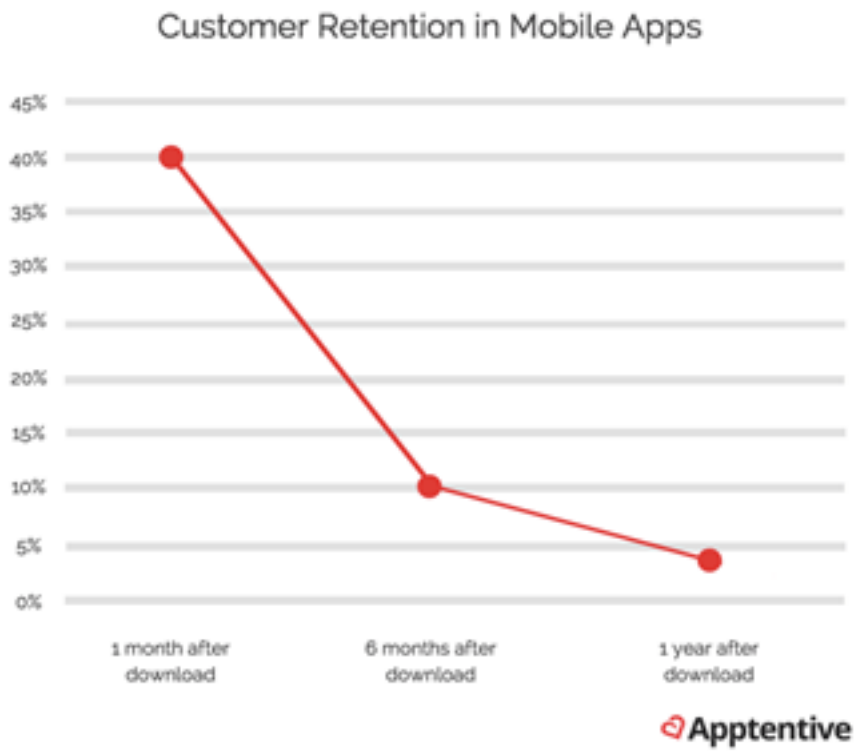

No one has ever captured my view of the reflexive nature of unit economics model better than Bill Gurley did in one of his *Above the Crowd* blog posts:

"Tren Griffin, a close friend that has worked for both Craig McCaw and Bill Gates refers to the five variables of the LTV formula as the five horsemen. What he envisions is that a rope connects them all, and they are all facing different directions. When one horse pulls one way, it makes it more difficult for the other horse to go his direction. Tren's view is that the variables of the LTV formula are interdependent not independent, and are an overly simplified abstraction of reality. If you try to raise ARPU (price) you will naturally increase churn. If you try to grow faster by spending more on marketing, your SAC will rise (assuming a finite amount of opportunities to buy customers, which is true). Churn may rise also, as a more aggressive program will likely capture customers of a lower quality. As another example, if you beef up customer service to improve churn, you directly impact future costs, and therefore deteriorate the potential cash flow contribution. Ironically, many company presentations show all metrics improving as you head into the future. This is unlikely to play out in reality."

By watching how a specific "unit economics" model changes as the inputs change you can actually get an analog "feel" for the best ways to create an optimal finance return. Make no mistake: getting the balance right is hard and is an art as much as is it a science, since human emotions and complex adaptive systems are involved. Once you understand the sensitivities of the business/unit economics model to changes in inputs you are better able to answer questions like these if you have a feel for the process:

1. Should you deliver more value to customer even if COGS rise?
2. Should you increase resources given to the customer retention team?
3. Should you focus on acquiring higher quality customers?

In a blog post linked below Sixteen Ventures set out a nice example. If a business wants to have an annual churn rate of 7%, they must keep monthly churn to ~.5 percent, which means only 1 in 200 customers can leave every month. That is not a small challenge in many businesses given the level of competition. Many consumer businesses have 5% customer churn each month. A 5% monthly churn results in a 46% annual churn rate, which means that the business must work hard and spend significant amount of money to replace those customers. Customer replacement requires new CAC, which is expensive. There is nothing bad about acquiring new customers if the unit economics are positive, but too often businesses forget to invest enough in customer retention given the higher return on invested capital from those investments.

If you don't know the churn of a public business you are considering investing in and they won't reveal it, the best an investor can do in understanding the unit economics of that business is to look at comparable situations and build in a margin of safety to an estimate. As an example, Netflix no longer reveals churn, but when it did so it looked like this:

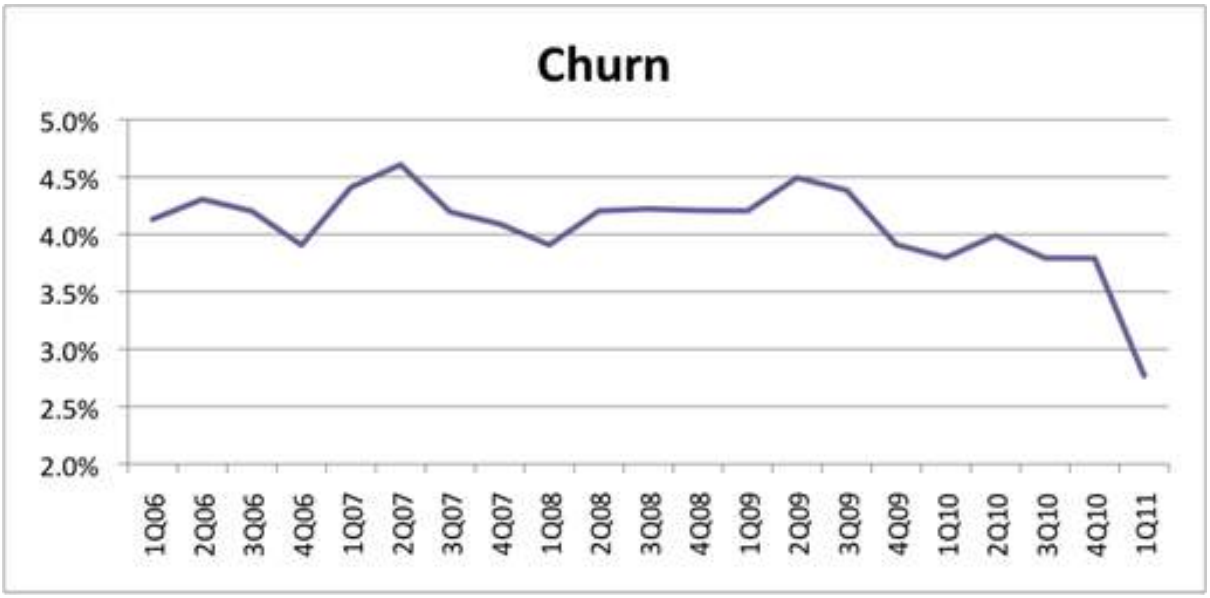

You can then take a look at net growth of revenue and customers and roughly calculate a churn rate.

Understanding churn has always been important for a business, but it is even more so today because the challenges associated with attracting and retaining customers have greatly increased. Jeff Bezos understands this new environment well:

"The balance of power is shifting toward consumers and away from companies…the individual is empowered. The right way to respond to this if you are a company is to put the vast majority of your energy, attention and dollars into building a great product or service and put a smaller amount into shouting about it, marketing it. If I build a great product or service, my customers will tell each other. In the old world, you devoted 30% of your time to building a great service and 70% of your time to shouting about it. In the new world, that inverts."

Almost every customer is "showrooming" (comparing provider prices and quality) using the tools that the Internet and a range of modern hardware devices have made ubiquitously available. The days where a business could take advantage of a wide information asymmetry to earn a higher profit on the sale of a good or service are either rapidly disappearing or are gone. The showrooming phenomenon has resulted in lower gross profit margins and increasing focus on customer retention that often takes the form of a subscription business model and a membership mentality. The theory behind this new approach is simple: by delighting customers on a more regular basis, treating the customers as if they are members of a club and tracking their engagement via a range of metrics, the risk of churn can be reduced. Netflix is an example of a business that has a membership mentality as if Amazon Prime. Another less obvious example is Costco which makes the bulk of its profit on membership fees. The minimally marked up merchandise in Costco stores (~14%), the cheap hot dogs and the free samples are all about delighting customers enough that they renew their membership.

Keeping a customer in today's hyper-competitive business world is often more profitable than paying to acquire a new customer. This increased focus on customer retention in no small part explains why so many business are shifting to a "lifetime value" approach to valuing customers. Having to re-acquire customers again and again for every transaction is

not an ideal way to run a business when customer acquisition costs (CAC) are as high as they are today and customer switching costs are so low. Businesses are as a result focused on delivering nearly constant value to their customers and keeping them engaged and happy. Eric Ries describes the opportunity here:

"…every action you take in service development, in marketing, every conversation you have, everything you do – is an experiment. If you can conceptualize your work not as building features, not as launching campaigns, but as running experiments, you can get radically more done with less effort. Process diagrams [in major corporations] are linear, boxed diagrams that go one way. But entrepreneurship is fundamentally iterative"

Descriptions of a service development process must increasingly look like flywheels. Failure is an essential part of the process which is a feedback loop. The model is: "build, measure, learn" [repeat]. This is the scientific method at work, but systematized with telemetry allowing timely and accurate measurements like never before and cloud computing radically lowering the cost of the experiments.

Customer churn can be separated into sub-types such as: (1) voluntary churn where customers switch to another provider or terminate their use of the product and (2) involuntary churn where a product is no longer provided to the customers due to missed payments, bad debts, etc. There are also plenty of other permutations like gross churn, net churn and cohort churn if you want to go down those roads. There is also revenue churn in addition to user churn for example. Time periods used in the calculation can also vary. Churn can be calculated on a monthly quarterly or annual basis. One post is even entitled: "43 ways to calculate SaaS churn" since there are so many methods for doing the math. There are way more tan 43 but you get the idea. When it comes to the math of churn the Richard Feynman line comes to mind: "The first principle is that you must not fool yourself, and you are the easiest person to fool."

As an aside, one thing you may encounter is the term: "negative churn." What drove the creation of this term was the need for a metric that describes increasing revenue from the customers that remain and the term "negative churn" was invented to meet that need. A business has achieved net negative churn: "When, for a given time period, expansion revenue more than offsets any revenue you lose from customer churn, downgrades, lower usage, etc." I am not fond of the term, but it is out there. It sounds more like up-selling and cross-selling to me. But that is a topic for another post.

In the end, churn is about useful life: how long will the customer relationship last? Here's a chart of the useful life of mobile customers in about 2009

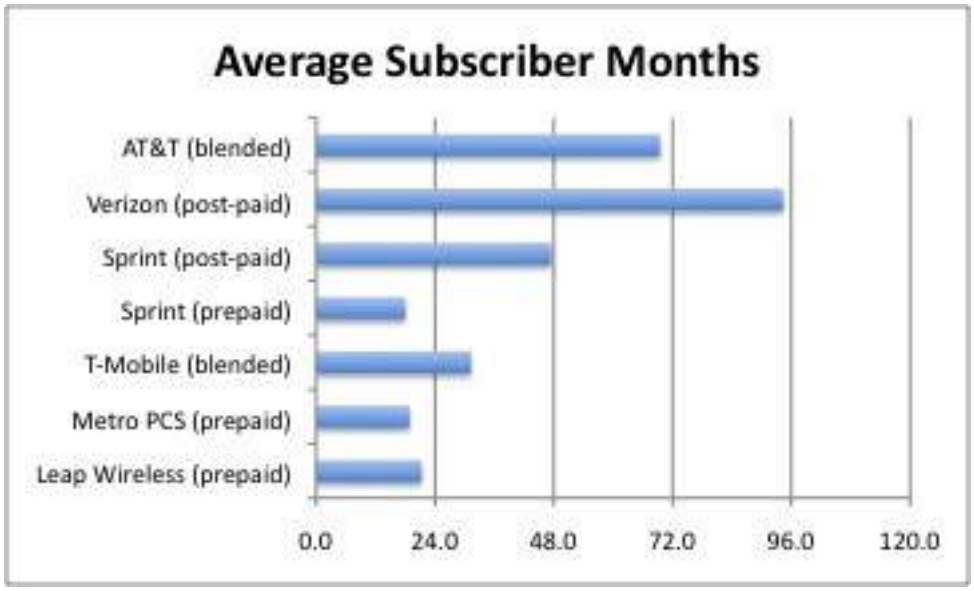

If churn is defined and tracked properly it can be a powerful motivating and unifying force for a business. A simple metric can result in everyone in effect "rowing together toward a common goal." Unfortunately, too often "key performance indicators" (KPIs) roughly related to churn are created that vaguely measure engagement. The result is often a hand wavy distraction for the business that is mostly useful for the employee at performance review time. A customer not paying any longer, is a customer not paying any longer. That is what matters.

Other issues must be considered in dealing with churn such as: "for virtually all businesses, new customers will have a higher churn rate than mature customers. But what this means is that some form of segmentation is necessary to have a useful churn rate. For example you may want to only report the churn rate for customers who have been around for at least 90 days. Or you may want separate churn rates for all sorts of demographics and tenure." This is where the data scientists can really earn their keep. A well-run business with great information about its customers and systems can do things like refer higher value customers to a different level of customer service. A business that knows the customer well can tailor the customer service response to net present value of the stream of income from the specific customer. Having granular data about customers and their lifetime value has never been more important. For example, in the early days of the mobile business we used to know that X dropped calls over a period of Y days, meant risk of churn rose by Z and we would often intervene with a bill credit to stop churn proactively. There are many similar techniques businesses can use to manage and reduce churn. The churn act itself is often the result of a long process that the consultancy Bain argues looks like this:

Figure 1: Churn results from the cumulative experience of many episodes

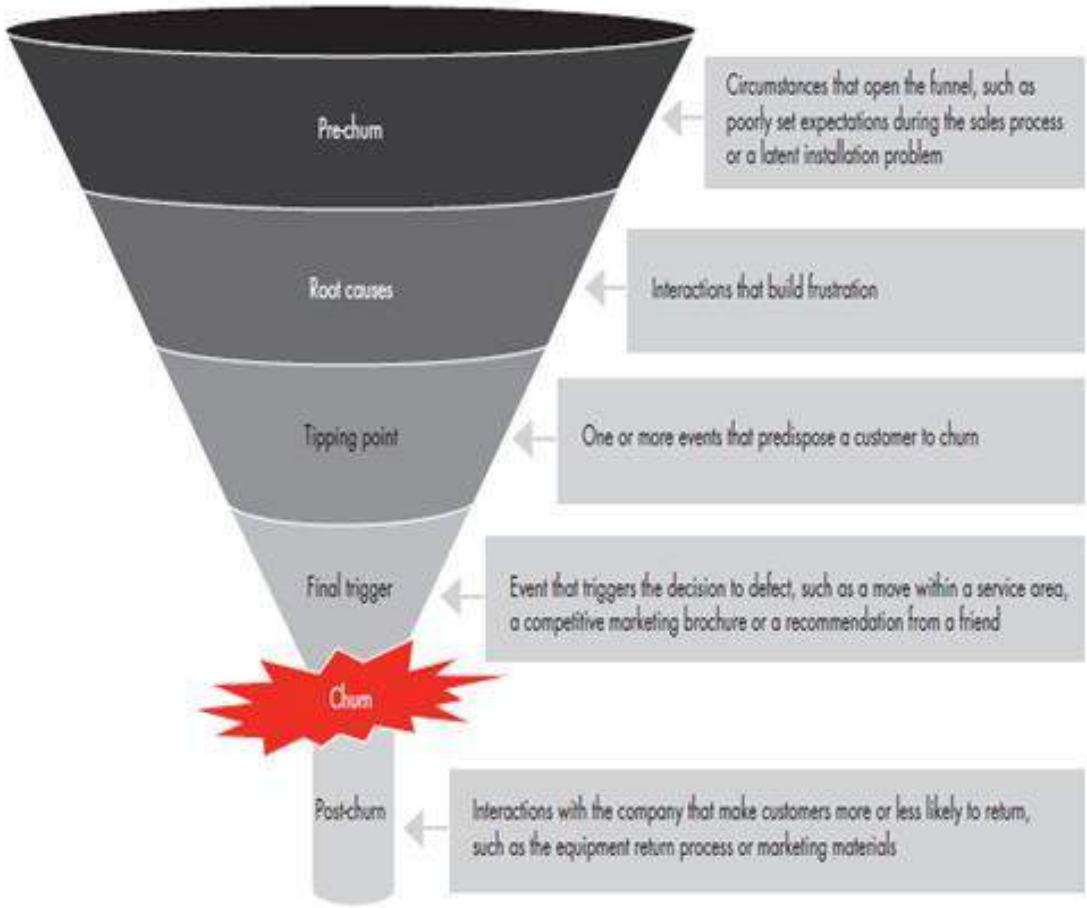

Source: Bain & Company

It is true that frustration can build up over time resulting in an eventual churn event of some kind. A situation that results in churn is often a process that is long enough in duration to allow pro-active intervention by a business before the churn event happens. Great analytical systems can go a long way to reducing churn by identifying triggers and ways to reduce customer frustration. A Harvard Business School case linked in the Notes to this post argues:

"By the time you see an increase in your churn rate it is six or eight months after the point in time when you actually failed the customer. If churn is your only measure of customer happiness, then you're always six months too late to influence your future." HubSpot and many other firms have developed analytics and accompanying metrics to predict who is going to leave. "The most innovative firms are using churn rate analysis as an opportunity to get ahead of losing customers rather than just accept it."

To close this post (since this post is running long at ~3,000 words), I will point you to work done by Pacific Crest, which has a well-known survey in which they track churn in the software as a service (SaaS) business, and one of their charts look like this:

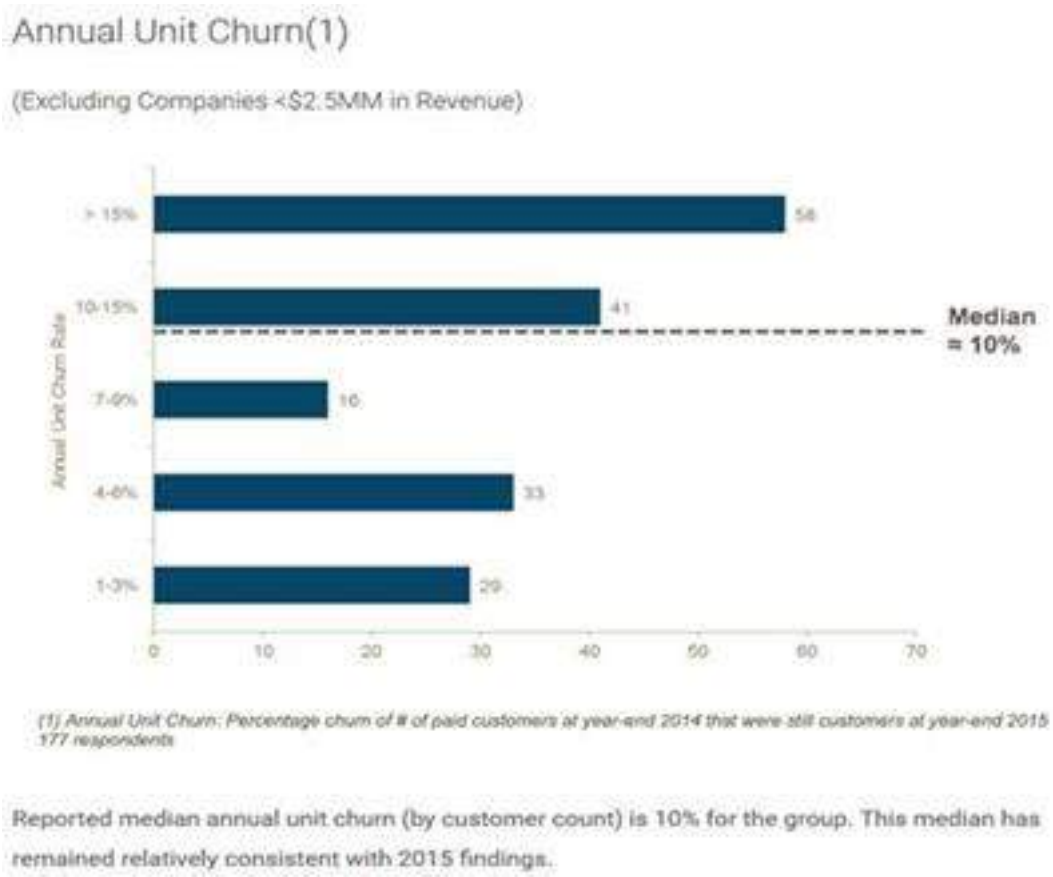

There are many more useful charts in the links in the Notes. If you want to dig into churn mathematics and methodology there many other resources available.

A Dozen Notes:

1. 2026 Pacific Crest Survey: http://www.forentrepreneurs.com/2016-saas-survey-part-2/

2. Joel York- What is Churn: http://chaotic-flow.com/saas-metrics-faqs-what-is-churn/

3. Lighter Capital: https://www.lightercapital.com/blog/key-saas-metrics-customer-churn-rate/

4. TechCrunch: https://techcrunch.com/2015/10/05/easily-measure-the-profitability-of-your-consumer-subscription-business/

5. Bain http://www.bain.com/publications/articles/breaking-the-back-of-customer-churn.aspx

6. Shopify: https://engineering.shopify.com/17488468-defining-churn-rate-no-really-this-actually-requires-an-entire-blog-post

7. Sixteen Ventures: http://sixteenventures.com/saas-churn-rate

8. Bill Gurley: http://abovethecrowd.com/2012/09/04/the-dangerous-seduction-of-the-lifetime-value-ltv-formula/

9. Consultants! Booz: http://www.boozallen.com/content/dam/boozallen/media/file/customer_churn_insights.pdf PWC: http://www.strategyand.pwc.com/media/file/Strategyand_Customer-Value-Management.pdf

10. HBS! http://www.forbes.com/sites/hbsworkingknowledge/2013/11/11/a-smarter-way-to-reduce-customer-churn/#96bd49a9ac71 HBS: http://www.hbs.edu/faculty/Publication%20Files/14-020_3553a2f4-8c7b-44e6-9711-f75dd56f624e.pdf HBS https://hbr.org/2014/10/the-value-of-keeping-the-right-customers

11. Medium: https://medium.com/point-nine-news/saas-metrics-benchmarking-your-churn-rates-e9ae2c7129b5#.8lr7wbhwb

12. Horowitz: http://www.bhorowitz.com/lies_that_losers_tell

Gross Margin for Fun and Profit – Involves Beer and Music Streaming!

February 4, 2017

The primary challenge with this blog post on gross margins is to make it interesting enough for people to read. So let's start out with beer. Who doesn't like beer! One way to understand more about the cost of making beer is to look at the financials of Ballast Point Brewing on a percentage basis at the time it filed for an initial public offering. By the last quarter before its IPO the "gross profit" (in yellow) of Ballast Point was 53% (the cost of net revenue was 47%). I don't like small print, but I do like these charts that set out the financials of a business on a percentage basis when trying to convey ideas since it is simple for people who may be allergic to accounting to understand.

	Fiscal 2013				Fiscal 2014				Fiscal 2015	
	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	First Quarter	Second Quarter
Net revenue	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Cost of net revenue	59	56	52	55	53	52	57	58	52	47
Gross profit	41	44	48	45	47	48	43	42	48	53
Selling, general and administrative expense	27	29	30	29	29	29	30	26	24	23
Operating income	14	15	18	16	18	19	13	16	24	30
Other expense, net	1	1	3	1	1	1	—	2	1	—
Income before income taxes	13	14	15	15	17	18	13	14	23	30
Provision for income taxes	5	6	6	6	7	8	5	6	7	11
Net income	8%	8%	9%	9%	10%	10%	8%	8%	16%	19%

The gross margin of a business is the percentage of each dollar of net revenue that is available after accounting for cost of net revenue. If a business has a cost of making products or services of $50M and total net revenue is $100M the gross margin is 50%. The dollar amount is commonly referred to as gross profit.

Businesses come in all varieties and the gross margins generated by various businesses are no exception. Software businesses and pharmaceutical firms have high gross margins. Costco and Exxon have low gross margins. Some firms make up for relatively low gross margins by selling a lot of products and some don't. Some companies have high operating cost below the gross margin "line" on the income statement and some don't. If a business does have low gross margins it does not have a lot of elbow room for operating expenses. Bill Gurley describes a key point out beautifully here:

"There is a huge difference between companies with high gross margins and those with lower gross margins. Using the DCF framework, you cannot generate much cash from a revenue stream that is saddled with large, variable costs. As a result, lower gross margin companies will trade a highly discounted price/revenue multiples. All things being equal, gross margin percentage should have a direct impact on price/revenue multiple, as there will obviously be more gross margin dollars to contribute to free cash flow. Journalists who quickly apply 10x multiples to all private companies should at the very least consider gross margin levels in their analysis."

Like many things in life, high profit margins can be a double edged sword since it is much easier for a disruptive new business to attack an incumbent that has high margins. Jeff Bezos famously said: "Your margin is my opportunity." In other words, Bezos sees a competitor's love of margins and other financial "ratios" as an opportunity for Amazon since the competitor will cling to them while he focuses on absolute dollar free cash flow and slices through them like a hot knife through butter. If you do not have a moat, your margins are at risk.

Let's return to beer to keep this blog post from getting boring! The craft brewer in the example below is not as profitable as Ballast Point probably due to lower scale and higher levels of competition. But the cost break down is interesting:

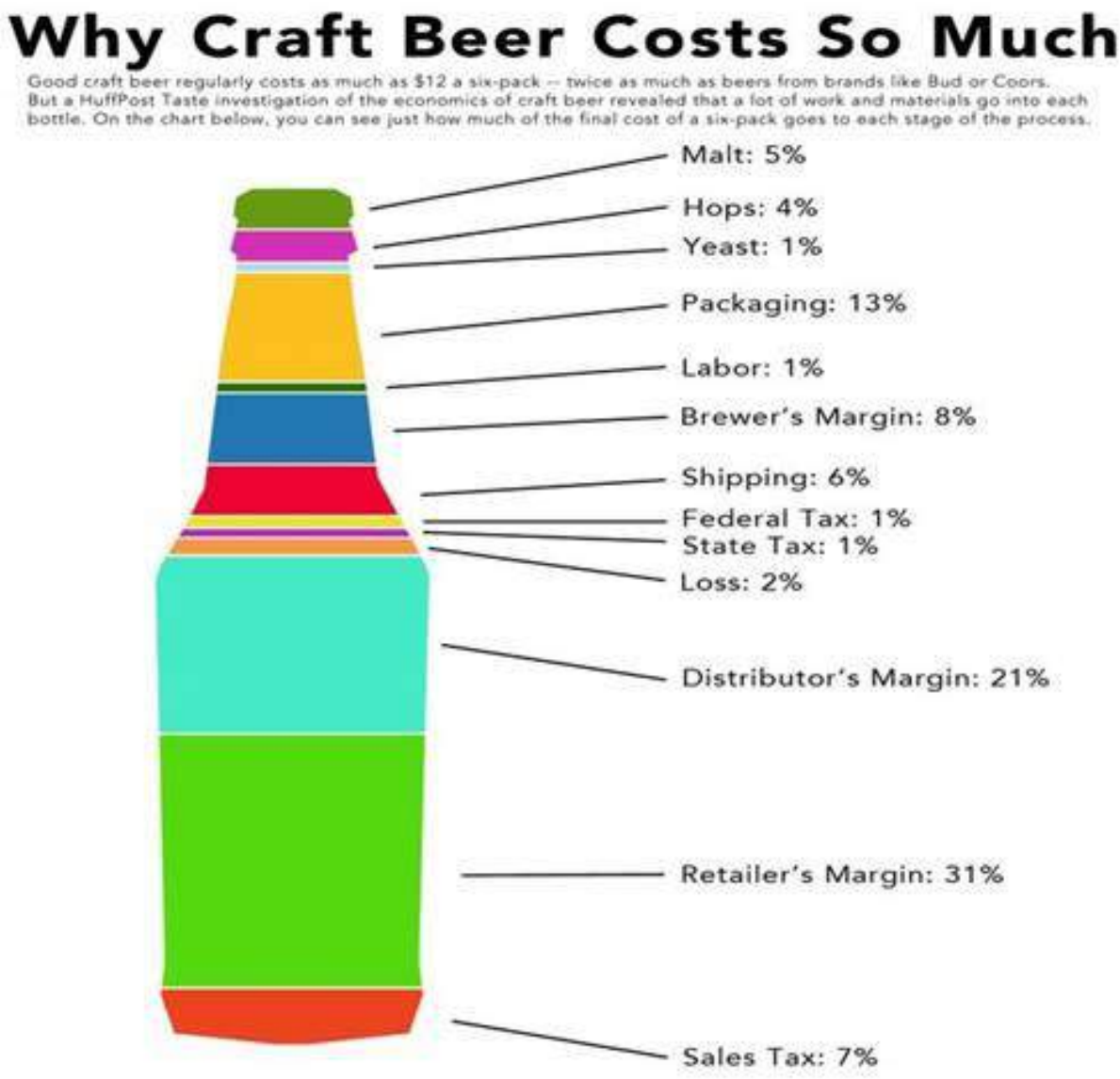

Many business face a large and innovative set of competitors and brewing beer is no exception. There are more than 5,000 breweries in the US alone right now.

The quality of life for a business can be much better for a business if gross margins are approach 80-90% as they can be in some software as a service (SaaS) businesses. An attractive SaaS business might have unit economics that look like this:

INPUTS	
Customer Acquisition Cost	$400.00
ARPU (per month)	$20.00
Churn (per month)	2.0%
Gross Margin	80%
Annual Discount Rate	10.00%
COGS (per month)	$4.00
Monthly Discount Rate	0.83%
Terminal value multiplier (months	35.59
NPV	$164.71
IRR	22.02%

	Time 0	*Year 1*			
		Jan	Feb	Mar	Apr
		1	2	3	4
CPGA	-$400.00	$0.00	$0.00	$0.00	$0.00
ARPU		20.00	20.00	20.00	20.00
COGS		-4.00	-4.00	-4.00	-4.00
Monthly Cash Flow	($400.00)	$16.00	$16.00	$16.00	$16.00
Remaining fraction of subscribers		100%	98%	96%	94%
Net cash flow	($400.00)	$16.00	$15.68	$15.37	$15.06

Three venture capitalists talk about what you want to have in a startup business below:

Mark Suster:

"In the startup world, low gross margin almost always equals death which is why many Internet retailers have failed or are failing (many operated at 35% gross margins). Many software companies have greater than 80% gross margins, which is why they are more valuable than say traditional retailers or consumer product companies. But software companies often take longer to scale top-line revenue than retailers so it takes a while to cover your nut. It's why some journalists enthusiastically declare, 'Company X is doing $20 million in revenue' (when said company might be just selling somebody else's physical product) and think that is necessarily good while in fact that might be much worse than a company doing $5 million in sales (but who might be selling software and have sales that are extremely profitable)."

Fred Wilson:

"There are providers in the market who are not passing through the true cost, in effect subsidizing the cost of the service, to gain market share. This results in fast growth but negative gross margins. Again, the companies that are doing this are hoping that once they get to scale and users are "locked in", they can raise prices. The thing that is wrong with this strategy is that taking prices up, or using your volume to drive costs down, in order to get to positive gross margins is a lot harder than most people think. If there are other startups competing with you and offering a similar service, you aren't going to be able to take prices up without losing customers to a similar competitor, unless your service truly has "lock in." And most don't. Using volume to drive costs down can work, but if there are similar services out there, the provider who is being asked to take a cut by you might just move their supply over to another competitor offering a higher price."

Chamath Palihapitiya:

"Most companies in e-commerce right now are negative-gross-margin businesses. These companies are in the delivery businesses (Postmates, DoorDash, Instacart) and in the food business (SpoonRocket, Munchery). Basically, a lot of these new-generation, remote-control-type businesses—where the phone acts like a remote control to replace an offline experience—are generally, to date, highly, highly, highly unprofitable. There's a lot of what I call "venture philanthropy" to prop these businesses up. Time will tell whether any of those can become a real business. We have to get back to this world of having pretty reasonable discipline on business models and understanding that many of these gross-margin businesses will never, never break even or become profitable."

Here is an example from the recent news where a company is buying assets that generate high gross margin that is quite attractive: "We believe the AppDynamics [just acquired by Cisco] is likely to be accretive to gross margins (77% vs Cisco at 65%) and consistent with the company's strategy to capture more high margin recurring software revenue."

Here is another example illustrating the importance of gross margins. In the streaming portion of the music industry the numbers look approximately like this:

1. Labels get 60% of total revenue
2. Publishers get 10.5%
3. 10.5% goes for billing, bandwidth and back end service and support.

Just considering these three items of expense, 80.5% of industry revenue is not available for streaming distributor profit. Some reports put the percentage of revenue going to these categories even higher. Where does the rest of the revenue go given that the streaming distributors are unprofitable?

1. Personnel costs and general and administrative costs (G&A)
2. R&D
3. Customer acquisition costs (CAC)

To illustrate, Mattermark has assembled these unofficial figures regarding Spotify from available reports:

2015 results:

Aggregate Revenue: $2.2 billion.

Revenue via Advertising: $219 million.

Revenue via Subscriptions: $1.95 million.

Royalty Payout Costs: $1.8 billion.

Revenue sans Royalty Costs: $400 million.

Net Loss: $194 million.

As I have discussed many times, Spotify must obtain less costly deal on "wholesale transfer pricing" from the rights holders so as to have a more attractive gross margins. A TechCrunch article linked below describes the current situation well:

"the crux of the matter is that Spotify has been locked into licensing deals that do not give it a strong enough margin. As of September 2016 — the last time Spotify publicly updated its figures — the company has cumulatively paid out $5 billion to music rights holders….But one source tells us that depending on the region and other factors — deals are negotiated case-by-case, covering an artist's or group's music but also the number of times a stream is played, and whether it's a free user listening with ads, or a paying subscriber with no ads — that overall payout can go up as high as 84 percent."The message to license holders from Spotify is: we can't really make this work, guys," our source said. "But, on the other hand, we've taken Spotify now to such a size that we *need* to make it work."

The best defense of a firm like Spotify to the wholesale transfer pricing power of its suppliers would be to have enough distribution power so that it gets a favorable deal. The battle between Spotify and the rights holders is bound to be intense, so the best thing to do as an observer is buy some popcorn, find a comfortable chair and watch. I have a post coming soon on profit pools that will discuss Spotify's wholesale transfer pricing situation more fully.

As a way to close this blog post, this list below illustrates how gross margins can differ by business and industry (I find this fascinating, but I am not normal). All the figures below are from Morningstar and vary with time:

A Dozen Lessons on Growth

February 10, 2017

1. **A growth team has the "responsibility to measure, understand and improve the flow of users in and out of the product and business. That's the role of growth." "A finance team by definition measures, understands and improves the flow of capital in and out of a business. That's important because it contributes to all sorts of incredibly important business decisions. Finance uses its knowledge to help the business operate. What's interesting is every company — and certainly the finance team — eventually realizes that the single biggest lever that it has for maximizing revenue potential is the number of users." Andy Johns – Vice President of Product at Wealthfront (formerly Facebook, Twitter, Quora).**

Every business must accomplish a range of objectives to be successful:

1. Measuring financial metrics,
2. Marketing products,
3. Optimizing products to enable the business to grow.

This post is about the third objective, which obviously can make a huge positive difference for a business. To illustrate the point about the value of a growth team, as of the end of last quarter, Facebook had 1.23 billion daily active users (DAU) and 1.86 billion monthly active users (MAU). These numbers represent stunning growth. It is easy to forget that not too long

ago the total number of Facebook users seemed to have plateaued. Facebook Vice President of Growth Alex Schultz recalls:

"[Facebook grew to] 50 million, and then we hit a brick wall. When we hit that brick wall that was when a lot of existential questions were being asked inside Facebook whether any social network could ever get to more than 100 million users. It sounds stupid now, but at that time, no one had ever achieved it. Everyone had tapped out between 50 and 100 million users, and we were worried that it wasn't possible. That was the point at which the growth team got set up; Chamath Palihapitiya [Founder of the venture capital firm Social Capital] brought a bunch of us together."

A small wealth manager needs to grow. Twitter needs to grow. Last weekend I wrote about how everyone poops, well, everyone needs to grow. Especially since everyone has churn and a belly button. Growth can create problems, but they are high quality problems.

Every aspect of a product has the potential to help make the business grow. Or not. The opportunities to create growth by making product choices are nearly endless since it is simply not possible for a product to be technically neutral. For example, you cannot design a neutral automobile, a neutral building or neutral software. Choices must be made in creating and offering a product and those choices can impact growth in either a positive or negative manner.

2. **"The number one problem I've seen for startups, is they don't actually have *product market fit*, when they think they do." Alex Schultz**

Y Combinator's Jessica Livingston made a critical point about what drives growth in any business when she said: "Our motto is to make something that people want. If you create something and no one uses it, you're dead. Nothing else you do is going to matter if people don't like your product." Psychological denial can be very powerful. People who want something very badly often just pretend that that have created something that people want to buy when there is no evidence that this is the case since reality is too terrible to contemplate. For example, a team under pressure from investors that is running out of seed funds can convince itself that it has created a product desired by consumers, even though a child of ten knows the product is crap.

Marc Andreessen has written: "*Product/market fit* [which] means being in a good market with a product that can satisfy that market." Until *product market fit* is discovered by a business, that process should represent the near total focus of everyone at the business. Andy Rachleff elaborates:

"A *value hypothesis* is an attempt to articulate the key assumption that underlies why a customer is likely to use your product. Identifying a compelling *value hypothesis* is what I call finding *product/market fit*. A *value hypothesis* addresses both the features and business model required to entice a customer to buy your product."

"A *growth hypothesis* represents your best thinking about how you can scale the number of customers attracted to your product or service. [What is] the best way to cost-effectively acquire customers? Unfortunately many people mistakenly pursue their growth hypothesis before their value hypothesis."

Chamath Palihapitiya believes that a *value hypothesis* is driven by *core product value* which is: "what the market desires about a product." Chamath believes "*core product value* is elusive and most products don't have any."

3. **"[Once] you understand *core product va*lue you can create loops that expose that over and over again. You have to work backwards from 'what is the thing that people are here to do?' 'What is the *A-ha moment* that they want?' and giving that to them as fast as possible." Chamath Palihapitiya.**

Chamath is saying that in addition to: (1) finding *product market fit* and (2) identifying *core product value,* a business must (3) identify *A-ha moments (*sometimes called *magic moments)*, which are based on positive experiences with the product. The *A-ha moments* represent an opportunity to build a growth hypothesis. It is useful to think about what Chamath is saying about *A-ha moment* experiences in the context of a current example. The Snap IPO documents set out what they believe is the *core product value*: "Snapchat, is a camera application that was created to help people communicate through short videos and images." As with Facebook, the experience of seeing that your friends are on Snap's service and being able to chat with them and tell them stories is an *A-ha moment*. The sooner potential customers get to that *A-ha moment* the better for the business because every moment that passes before then increases the probability that person will not become a customer. A business which delivers a series of *A-ha moments* as part of feedback loops will "early and often" expose its customers to *core product value*, which drives growth.

4. **"Zuck would say 'You really think that if no one gets a friend, that they'll be active on Facebook? Are you crazy?'" Alex Schultz.**

Facebook famously directed employees to place have near total focus on getting users to have a specific number of friends on the service in a specific number of days as possible given the importance of *A-Ha moments*. Other Ah-ha moments include getting a like or retweet on Twitter or finding a product you want to buy. People who experience an AH-Ha moments are more likely to become and stay engaged. Richard Price summarizes some industry engagement metrics here:

"Josh Elman, a VC at Greylock, and a former growth lead at Twitter, said that the leading indicator of engagement at Twitter was related to Facebook's metric: the user following a certain number of people, and a certain percentage of those people following the user back.

Ellior Schmuker has said that the leading indicator of engagement at LinkedIn is also similar to Facebook's: the user getting to X connections in Y days. He didn't say what the X and the Y were.

Characteristics of leading indicator metrics

The various leading indicators fit into three categories:

- Network density: friend or following connections made in a time frame
- Content added: files added to a Dropbox folder
- Visit frequency: Day one retention"

Chamath spoke about how his growth team discovered the "7 friends in 10 days" leading indicator. He said that they looked at cohorts of users that became engaged, and cohorts of users that did not become engaged, and the pattern that emerged was that the engaged cohorts had hit at least 7 friends within 10 days of signing up.

5. **"Knowing true *core product value* allows you to design the experiments necessary so that you can really isolate cause and effect. As an example, at Facebook, one thing we were able to determine early on was a key link between the number of friends you had in a given time and likelihood to churn. Knowing this allowed us to do a lot to get new users to their *A-ha moment* quickly. Obviously, however, this required us to know what the *A-ha moment* was with a fair amount of certainty in the first place." Chamath Palihapitiya.**

Innovation and best practices are discovered by the experimentation of entrepreneurs who try to establish the evolutionary fitness of their business. Products and services created as part of this experimentation which have greater fitness survive and other less fit products and services die. Entrepreneurs are essentially running experiments in this evolutionary system when they create or alter a business. What is different today is that the tools and systems which exist which allow experiments to be conducted more cheaply and rapidly than ever before. It has never been so possible to know so much about so much. The trick is being able to use these tools to separate signal from noise.

6. **"If you can run more experiments than the next guy, if you can be hungry for growth, if you can fight and die for every extra user and you stay up late at night to get those extra users, to run those experiments, to get the data, and do it over and over and over again, you will grow faster." "Startups only have so many opportunities to run an experiment in the product, and they're also time bound by the cash they have in the bank. With that said you need to run experiments that matter." "Experiments that count when you are using smaller samples have to be incredibly thoughtful." Alex Schultz.**

Entrepreneurs are engaged in "deductive tinkering" as they search for better products and services. Eric Ries describes the process in this way: "Learning how to build a sustainable business is the outcome of experiments [which follow] a three step process. Build, measure, learn." To illustrate with an example, the Snap S1 describes how it conducted an experiment via a "build, measure learn" process to enhance its *core product value*:

"We saw so many people having fun with the Creative Tools we made, like drawing and captions, and we thought people might want to purchase additional ways to express themselves. To test this hypothesis, we built a Lens Store where our users could buy new Lenses, in addition to the free ones we already provided. The results were disappointing. Only a small number of people wanted to buy Lenses, and the number of people using Lenses decreased. After a few weeks, we got rid of the Lens store and made all of the Lenses available for free. Almost immediately, our community began to use Lenses more and create more Snaps to send to their friends and add to their Story."

7. **"Basic growth equation: Top of the funnel (A) x Magic Moment (B) = Sustainable Growth (C)." Andy Johns channeling Chamath.**

Chris McCann of Greylock Partners describes a common mistake made by people seeking growth: "Most growth professionals come into a new company and start working on A) the top of the funnel right away. The problem with this is if you don't really understand B) and C) then you are fundamentally adding people into a leaky bucket. He believes that the top of the funnel is about "the various mechanisms where you can drive traffic and conversions to your product (SEO, Paid Acquisition, SEM, Social, etc.)." The magic or *A-Ha Moment* is a "compelling experience that creates an initial emotional response that your customers first experience."

Chamath and people who worked for him at one time or another typically talk about a customer acquisition process that has these elements:

Acquisition

- What do people want to accomplish (what is *core product value*)?
- What is the best way to get people experiencing the service quickly?

Activation

- What is the *A-ha moment*?
- How do you get people to this point as fast as possible?

Engagement

- How can the business deliver as much *core product value* as possible to customers?

Only after these three objective are achieved should methods be used to make the service more genuinely viral.

Andy Johns elaborates: "Growth is broken down into a few fundamental questions: (1) How do I increase the rate of acquisition i.e. get more signups? (2) What can I do to activate as many users as quickly as possible in their first 'N' days? (3) What are the levers for engagement and retention and how can I pull them? (4) How do I bring churned users back into the system to "resurrect" them from the dead?"

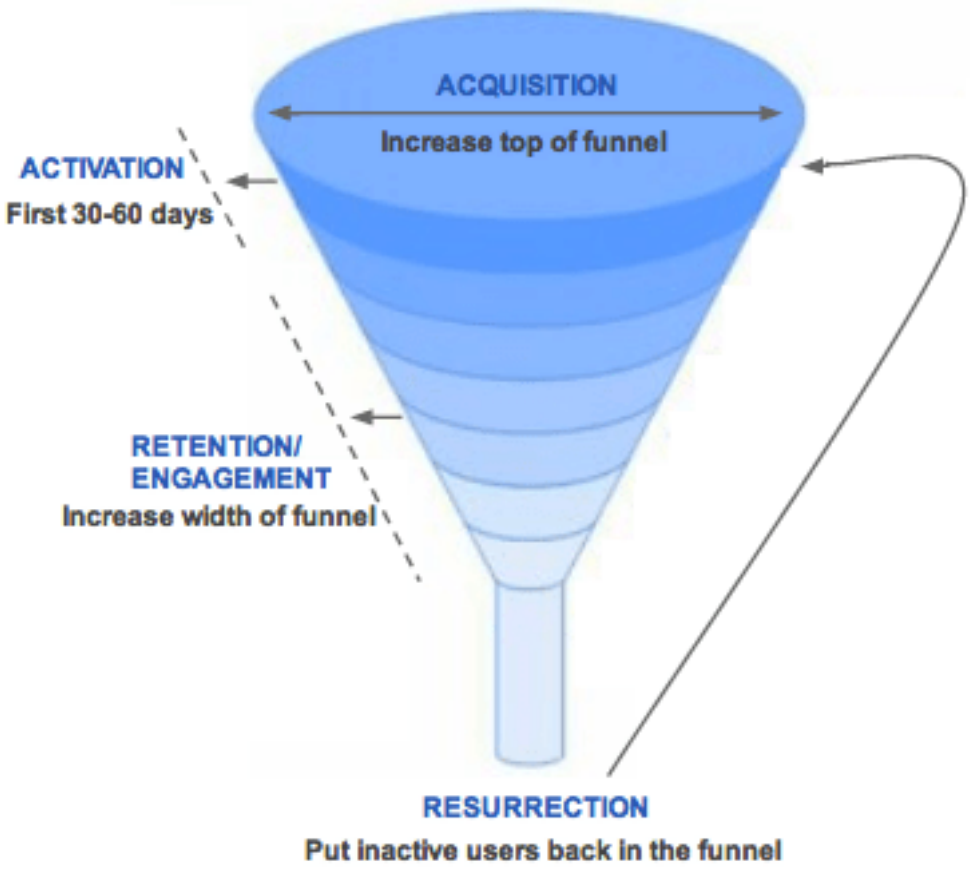

8. **"Anything you can do to move friction out of the flow, do it." "There's a really fine line between removing friction and duping users. Tricking users hurts users. Adding friction hurts users." Alex Schultz**

If unnecessary friction impedes people from getting to that *A-ha moment* the growth team is not doing their job. An important goal of the growth team is to eliminate any unnecessary friction in the customer acquisition process. When in doubt remove steps that a customer must take to get to an A-ha moment. How can the potential customers be given an A-ha experience in just seconds in ways that are almost frictionless? LuLu Cheng has written this below about

"How do you evaluate different sign-up flows and decide where to allocate time and resources?

The first step is understanding all of the various channels that are bringing new users to your product. Determine the conversion rate of each and prioritize based on the following 4 points:

It's easier to build on a strength than to improve a weakness.

Likewise, it's easier to get an active user to do more than to get an inactive user to do anything. LinkedIn, for instance, sends "Who's been viewing your profile" emails to active users of the site (20% CTR) rather than inactive members (5% CTR).

Desire – Friction = Conversion. It's a lot easier to reduce friction than to create desire.

Apply the 10% rule: Assuming you can increase the conversion rate of each channel by 10%, how many incremental users do you get from each flow?

After you find a flow that works, run A/B tests to optimize it. Having an A/B testing framework helps you make informed decisions, and it fosters a culture where data trumps opinions and where rapid iteration is encouraged. Keep in mind, however, that A/B testing will only get you to a local maximum, not a breakthrough change."

9. **"Think about what the magic moment is for your product, and get people connected to it as fast as possible, because then you can move up where that blue line has asymptotic, and you can go from 60% retention to 70% retention easily if you can connect people with what makes them stick on your site." Alex Schultz.**

Not losing customers is a highly under-rated way to generate growth in a business. Venture capitalist Tom Tunguz describes the importance of retention with an example:

"Churn is a limiting factor on the business. Like fiction, at some scale, churn will prevent the business from growing. To maintain the subscription revenue from the existing customer base requires ever greater mountains of cash. A $20 million ARR business losing 50% of its customers every year will have to replace $10 million worth of customers each year to achieve 0% growth. Assuming 18 month payback, that's $15M in sales and marketing spend. That means the business will be fundraising constantly."

10. **"Focusing on short term optimization never works." Chamath Palihapitiya**

If you have not discovered *core product value* no amount of growth is going to save you. Customers attracted via "hacks" before *product market fit* exists are going to leave anyway. It should go without saying that it is unwise to try to make a product "viral" without *product market fit* since what will be communicated virally is that you product sucks, which is like self-administering poison. Alex Schultz believes: "Those users will cease to trust you." As an example, Twitter tolerating abuse to keep MAU and DAU high was classic short term optimization. It does not work long term anyway due to the negative impact it has on retention. Twitter is finally moving to adopts a longer term attitude about this set of issues.

11. **"Most people when they think about growth they think it's this convoluted thing where you're trying to generate these extra normal behaviors in people. That's not what it's about. What it's about is a very simple elegant understanding of product value and consumer behavior." Chamath Palihapitiya**

It is far better to create a process based on a deep understanding of consumer behavior than to relay on some trick or hack since the former is sustainable while that latter is not only transitory but can destroy good will with customers. Good resources to better understand consumer behavior include books on behavioral economics like *Influence, Thinking Fast and Slow* and *Misbehaving.* If you are not familiar with concepts like reciprocity and social proof you don't understand some of the most important drivers of growth.

12. **"Retention is the single most important thing for growth." "Retention is the number one thing we focus on [at Facebook]. You can't trick users into doing that." "Retention comes from having a great idea, and a great product to back up that idea, and a great *product/market fit*." "The way we look at, whether a product has great retention or not, is whether or not the users who install it, actually stay on it long-term, when you normalize on a cohort basis, and I think that's a really good methodology for looking at your product and say 'okay the first 100, the first 1,000, the first 10,000 people I get on this, will they be retained in the long-run?" "The one thing that's true, over and over again is, if you look at this curve, 'percent monthly active' versus 'number of days from acquisition', if you end up with a retention curve that is asymptotic to a line parallel to the X-axis, you have a viable business and you have *product market fit* for some subset of market. But most of the companies that you see fly up, we've talked about packing and virality and all of this stuff, their retention curve slopes down toward the axis, and in the end, intercepts the X-axis." Alex Schultz.**

It is always a challenge to write about a topic like this in less than my target of ~3500 words. I try to include many more resources in the Notes for people who want to dig deeper. Since I have already written a post about the importance of reducing churn and this post is already running a bit long at ~3,300 words I will end with a link to that post, so you don't churn: https://25iq.com/2017/01/27/everyone-poops-and-has-customer-churn-and-a-dozen-notes/

Notes:

Snap S-1
https://www.sec.gov/Archives/edgar/data/1564408/000119312517029199/d270216ds1.htm

Tom Tunguz: http://tomtunguz.com/churn-or-growth/

Andy Johns: http://firstround.com/review/indispensable-growth-frameworks-from-my-years-at-facebook-twitter-and-wealthfront/

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Adam Berke http://venturebeat.com/2016/11/19/what-the-heck-is-a-growth-team/

My blog post on Chamath Palihapitiya https://25iq.com/2016/04/02/a-dozen-things-ive-learned-from-chamath-palihapitiya-about-investing-and-business/

Slide deck: http://www.slideshare.net/growthhackersconference/how-we-put-facebook-on-the-path-to-1-billion-users

Genius transcript of Chamath Palihapitiya: http://genius.com/Chamath-palihapitiya-how-we-put-facebook-on-the-path-to-1-billion-users-annotated

Interview of Chamath: https://www.youtube.com/watch?v=ZlYln36BRpo

TechCrunch Interview: https://www.youtube.com/watch?v=59uTUpO8Dzw

StartupGrind Interview: https://www.youtube.com/watch?v=ncjum-bkW98

Chamath Palihapitiya on Quora: https://www.quora.com/What-are-some-decisions-taken-by-the-Growth-team-at-Facebook-that-helped-Facebook-reach-500-million-users

Wired article: http://www.wired.co.uk/magazine/archive/2014/09/features/growth-hacking

Vanity Fair interview: http://www.vanityfair.com/news/2016/03/chamath-palihapitiya-interview-says-start-ups-are-mostly-crap?mbid=social_twitter

Semil Shah Interview of Chamath Palihapitiya: http://blog.semilshah.com/2015/09/17/transcript-chamath-at-strictlyvcs-insider-series/

Every Company Needs a Growth Manager: https://hbr.org/2016/02/every-company-needs-a-growth-manager

Richard Price: http://www.richardprice.io/post/34652740246/growth-hacking-leading-indicators-of-engaged

Dave McClure http://500hats.typepad.com/500blogs/2007/06/internet-market.html

Chris McCann http://www.greylock.com/building-growth-model-company/

LuLu Cheng https://www.quora.com/What-were-the-most-interesting-takeaways-from-the-Growth-Hackers-Conference-held-on-October-26th-2012

Andy Rachleff https://www.fastcompany.com/3014841/why-you-should-find-product-market-fit-before-sniffing-around-for-venture-money

A Dozen Lessons About Product/Market Fit

February 17, 2017

The product/market fit (PMF) concept was developed and named by Andy Rachleff (who is currently the CEO and co-founder of Wealthfront, and is a co-founder of Benchmark

Capital). The core of Rachleff's idea for PMF was based on his analysis of the investing style of the pioneering venture capitalist and Sequoia founder Don Valentine."

Why market matters more than anything

1. **"Give me a giant market — always." "Arthur Rock is the representative of: you find a great entrepreneur and you back him. My position has always been: you find a great market and you build multiple companies in that market." "Our view has always, preferably, been: give us a technical problem, give us a big market when that technical problem is solved so we can sell lots and lots and lots of stuff. Do I like to do that with terrific people? Sure. Are we unwilling to invest in companies that don't have them? Sure. We invested in Apple when Steve Jobs was about eighteen or nineteen years old — not only didn't he go to Harvard Business School, he didn't go to any school." Don Valentine**

One way to look at venture capital investing and creating a valuable business is as an effort to build a stool with three legs: people, markets, and innovative products. All three legs are required for success, but different venture capitalists and entrepreneurs emphasize and weight each of the three core elements differently at different times. While Valentine believed that yes, of course you need decent people, "the marketplace comes first, because you can't change that, but you can change the people" (according to Pitch Johnson, who was a venture capital industry pioneer at the same time Valentine was developing his investing style).

A famous example of changing people was when the Cisco board of directors replaced the then-husband-and-wife team who founded the company. In other cases, new team members are brought in to supply new skills instead of replacing people; Eric Schmidt being recruited to Google is a famous example of that approach.

What *is* product-market fit, really?

2. **"A value hypothesis is an attempt to articulate the key assumption that underlies why a customer is likely to use your product. Identifying a compelling value hypothesis is what I call finding product/market fit. A value hypothesis identifies the features you need to build, the audience that's likely to care, and the business model required to entice a customer to buy your product. Companies often go through many iterations before they find product/market fit, if they ever do." "When a great team meets a lousy market, market wins. When a lousy team meets a great market, market wins. When a great team meets a great market, something special happens." "If you address a market that really wants your product – if the dogs are eating the dog food — then you can screw up almost everything in the company and you will succeed. Conversely, if you're really good at execution but the dogs don't want to eat the dog food, you have no chance of winning." Andy Rachleff**

One way to rephrase a key point Rachleff is making is to say that that nothing is as irreplaceable as a great market. In saying this, no one is saying this means that a great team isn't an accelerant to what a great market can enable! (The modified Gary Larson cartoon below captures this idea):

Nor is anyone rejecting the idea that PMF is needed. There are other venture capitalists, like Pitch Johnson and Arthur Rock, who put the quality of entrepreneurs first. But it's a matter of emphasis and timing. Rachleff observes that if you look at the most successful startups, they actually didn't have "the world's best management teams in the very early days. They happened to have conceived, or more likely pivoted into, an idea that addresses an amazing point of pain around which consumers where desperate for a solution".

The process behind product-market fit

3. **"You often stumble into your product/market fit. Serendipity plays a role in finding product/market fit but the process to get to serendipity is incredibly consistent. What we do is teach that incredibly consistent process." Andy Rachleff**

Even though serendipity plays a role here, there is a process — which is why Rachleff later created and teaches a course at Stanford, *Aligning Startups with their Markets*. Steve Blank also developed a customer development process based on the idea that startups should apply the scientific method just like scientists do: start with a hypothesis, test it, prove it, move on or further iterate on the hypothesis. Similarly, Rachleff observes that "First you need to define and test your value hypothesis. And then only once proven do you move on to your growth hypothesis. The value hypothesis defines the what, the who, and the how. What are you going to build, who is desperate for it, and what is the business model you are going to use to deliver it?" Startups should therefore start with the product and try to find the market, as opposed to starting with the market to find the product. It's important to emphasize here that the iteration is more about the market and the business model than the product itself.

Finally, as Reid Hoffman notes, "Product/market fit requires you to figure out the earliest tells." Using an analogy to poker is appropriate since the process finding PMF fit is an art rather than a science. PMF emerges from experiments conducted by the entrepreneurs. Through a series of build-measure-learn iterations, PMF is discovered and developed during a process rather than a single Eureka moment. A-ha moments of inspiration do happen, but PMF is not created that way.

How can you tell whether you do (or don't) have product-market fit?

4. **"You can always feel when product/market fit isn't happening. The customers aren't quite getting value out of the product, word of mouth isn't spreading, usage isn't growing that fast, press reviews are kind of 'blah', the sales cycle takes too long, and lots of deals never close. And you can always feel product/market fit when it's happening. The customers are buying the product just as fast as you can make it — or usage is growing just as fast as you can add more servers. Money from customers is piling up in your company checking account. You're hiring sales and customer support staff as fast as you can. Reporters are calling because they've heard about your hot new thing and they want to talk to you about it. You start getting entrepreneur of the year awards from Harvard Business School. Investment bankers are staking out your house. You could eat free for a year at Buck's." Marc Andreessen**

According to Andreessen, "product/market fit means being in a good market with a product that can satisfy that market." But too often the focus is on latter part of the sentence (a product that can satisfy the market) and not the former (in a good market). Andreessen emphasizes that *market matters most*: "You can obviously screw up a great market — and that has been done, and not infrequently — but assuming the team is baseline competent and the product is fundamentally acceptable, a great market will tend to equal success and a poor market will tend to equal failure." That's why time spent building a business around the product alone is pointless: "Best case, it's going to be a zombie. … in a terrible market, you can have the best product in the world and an absolutely killer team, and it doesn't matter—you're going to fail. You'll break your pick for years trying to find customers who don't exist for your marvelous product, and your wonderful team will eventually get demoralized and quit, and your startup will die." The converse is also true. You can have an OK team and a buggy and incomplete product but if the market is great and you are the best product available success can happen both suddenly and quickly. That success won't last unless those products are fixed, but at least the business has the beginnings of something wonderful.

5. **"The term product/market fit describes 'the moment when a startup finally finds a widespread set of customers that resonate with its product'." Eric Ries (Lean Startup, p. 219)**

The "satisfy the market" part of the Andreessen definition is where the PMF concept necessarily starts to get qualitative. Various math tests have been devised in an attempt to quantify PMF, but they are proxies for something that is fundamentally like Justice Stewart's famous definition of pornography: "I know it when I see it." Even if there is a best practices test for whether PMF exists that does not mean that creating PMF can be reduced to a formula.

So what are considered some of the best tests for PMF? Rachleff writes that "You know you have fit if your product grows exponentially with no marketing. That is only possible if you have huge word of mouth. Word of mouth is only possible if you have delighted your customer." Tying together the concepts, Rachleff also shares that entrepreneurs too often confuse product/market fit with growth in what Ries calls vanity metrics ("numbers or stats that look good on paper, but don't really mean anything important"). So what does? Rachleff suggests Net Promoter Score (NPS) as a great tool to predict the magnitude of customer love for one's product/service — ideally a score of 40 or higher "to know you're on the right track." However, while NPS is a pretty good proxy for likely fit, it is "not nearly as accurate as having market feedback in the form of purchases." People vote with their dollars, after all.

6. **"The number one problem I've seen for startups, is they don't actually have product/market fit, when they think they do." Alex Schultz**

Many founders seem to believe that what they have developed is the modern equivalent of magic beans and that people will accept them as payment for a cow. My post last weekend on growth talks about the need for an offering to have core product value. Chamath Palihapitiya believes that a value hypothesis is driven by core product value — "what the market desires about a product" … but that it "is elusive and most products don't have any." And in fact, Rachleff has observed that this is where technology inflection points can play a role: "Truly great technology companies are the result of an inflection point in technology that allows the founder to conceive a new kind of product. The question then is: who wants to buy my product?" Marc Andreessen writes: "In a great market — a market with lots of real potential customers — the market pulls product out of the startup." Ideally in the easiest stages of a product development process pull is happening organically (i.e., without any advertising spending).

Common misconceptions about product-market fit

7. **"First to market seldom matters. Rather, first to product/market fit is almost always the long-term winner." "Time after time, the winner is the first company to deliver the food the dogs want to eat." "Once a company has achieved product market fit, it is extremely difficult to dislodge it, even with a better or less expensive product." Andy Rachleff**

Rachleff has cited examples like Intuit, Apple, and Google as examples of how being the first mover isn't necessarily the advantage here. Facebook was not the first social network either. Finding product market fit is a process that is not unlike "creating a 'dance' between the product and the market" as Mike Maples Jr has described it. It also involves taking the most powerful and compelling aspects of the product and delivering them in the form of 'WTF' level features that are not merely compelling—they rise to the level of changing people's points of view about what's even possible and create intense delight in customers." To reach that level, the target isn't just product-market fit, but "product-market scale," observes Casey Winters. As I explained in my previous post on growth, Facebook has a superior approach to generating growth and in a business with network effects that not only captures customers and changed points of view, but keeps out competitors.

8. **"Product/Market Fit Myths: Myth #1: Product market fit is always a discrete, big bang event; Myth #2: It's patently obvious when you have product/market fit;**

Myth #3: Once you achieve product/market fit, you can't lose it; and Myth #4: Once you have product/market fit, you don't have to sweat the competition." Ben Horowitz

Even though tight product-market fit and product-market scale help beat out the completion, that doesn't mean that the struggle stops there. Markets and the actions of competitors in that market (which are not always visible to outsiders) are always changing. Constant adaptation is therefore required to retain PMF. Steve Blank observes, "What matters is having forward momentum and a tight fact-based data/metrics feedback loop to help you quickly recognize and reverse any incorrect decisions."

One mistake many people make is to believe that the process described in feedback loop diagrams does not apply to them. The reason the process is depicted as a circle is that it is both iterative and continuous. It is highly unlikely that even a hundred internal whiteboard product planning sessions will result in a product that has perfect PMF from the start.

9. **"Getting product right means finding product/market fit. It does not mean launching the product. It means getting to the point where the market accepts your product and wants more of it." Fred Wilson**

One of the most common ways that startups die is "premature scaling," a term first used by Steve Blank. A business is "scaling prematurely" if it is spending significant amounts of money on growth before it has discovered and developed PMF. Steve Blank describes one important reason why premature scaling can happen: "Ironically, one of the greatest risks … is high pressure expectations to make these first pass forecasts that subvert an honest Customer Development process. The temptation is to transform the vision of a large market into a solid corporate revenue forecast — before Customer Development even begins." A study conducted by Startup Genome concluded:

"Startups need 2-3 times longer to validate their market than most founders expect. This underestimation creates the pressure to scale prematurely… In our dataset we found that 70% of startups scaled prematurely along some dimension. While this number seemed high, this may go a long way towards explaining the 90% failure rate of startups."

An entrepreneur quoted by the authors of the study said:

"Premature scaling is putting the cart before the proverbial horse…As an entrepreneur there's always the temptation to grow the sales team at the first sign of revenue traction, but there is always the danger that this early traction is coming from the subset of the market that are early adopters and not the actual market itself. Additionally, too often I've seen startups ramp up sales before they've figured out the most efficient way to achieve profitability. A vicious cycle ensues wherein the more a company grows, the more it farther away from profitability it becomes."

Viddy is often cited as an example of a company that died of premature scaling. For a period of time Viddy was able to use Facebook OpenGraph to grow its user base to millions of users before it ever had PMF. That mistake eventually meant the company was sold for very little and it faded away like the Cheshire Cat. Other business that suffered from premature scaling included Friendster, Orkut, and Digg. Groupon suffered from premature scaling but was able to pivot and save itself so far.

By the way: Not everyone uses this premature scaling terminology. For example, if you look at this list of reasons why startups fail from CB Insights, premature scaling is not even listed but is perhaps buried in other categories:

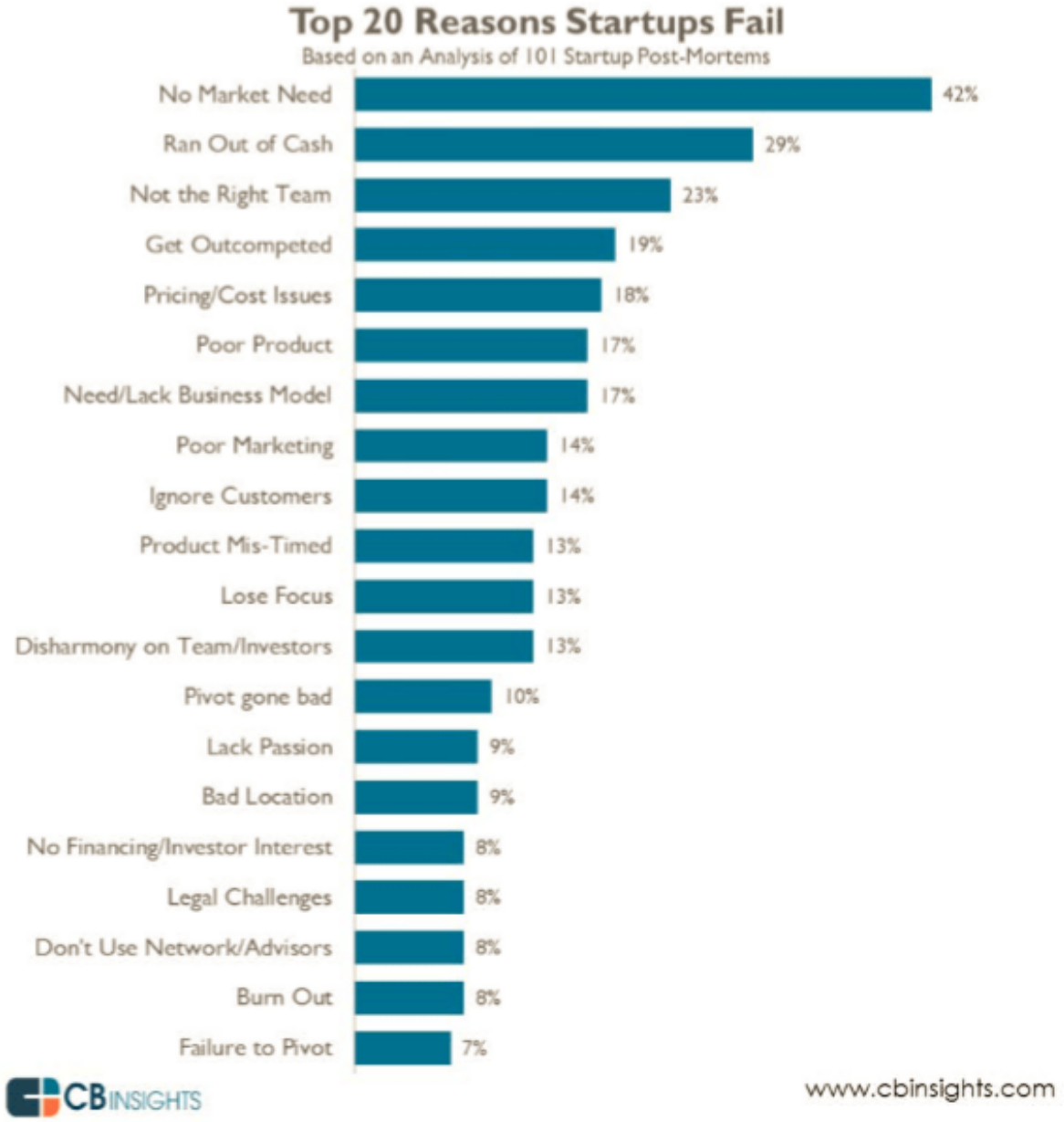

[As an aside, "Pivot Gone Bad" is a popular Country Western song written by a founder who wrote: "My Co-founder Left with my Husband and I'm sure going to Miss Her."]

How to get there

10. **"In the early days of a product, don't focus on making it robust. Find product market fit first, then harden" Jeff Lawson**

Again, the process is discovery-based and experimentation is required. There is no value in hardening something that customers don't want to buy. Andreessen argues that "The product doesn't need to be great; it just has to basically work. And, the market doesn't care how good the team is, as long as the team can produce that viable product." If nearly everyone at the business is focused on trying to fulfill product demand instead of "siting around" trying to dream up new feature to create demand, there is almost certainly PMF — *but the reverse is not the case*.

PMF is not a magic elixir. It signifies an important milestone that is necessary but not sufficient for success. Once a company has PMF it still must find a sustainable growth model and create a moat against competitors and so on. What PMF does do is help prevent businesses from spending money trying to grow a business (often inorganically) in a way that is doomed to fail.

11. **"In general, hiring before you get product/market fit slows you down, and hiring after you get product market fit speeds you up. Until you get product/market fit, you want to a) live as long as possible and b) iterate as quickly as possible." Sam Altman**

What Altman is saying is reflected in what co-founder Jessica Livingston calls the Y Combinator motto: "make something that people want. If you create something and no one uses it, you're dead. Nothing else you do is going to matter if people don't like your product."

Andreessen argues that the life of any startup can be divided into two parts: *before product/market fit* (what he calls BPMF) and *after product/market fit* (APMF):

"**When you are BPMF, focus obsessively on getting to product/market fit. Do whatever is required to get to product/market fit.** Including changing out people, rewriting your product, moving into a different market, telling customers no when you don't want to, telling customers yes when you don't want to, raising that fourth round of highly dilutive venture capital — whatever is required. When you get right down to it, you can ignore almost everything else. I'm not suggesting that you *do* ignore everything else — just that judging from what I've seen in successful startups, you *can*.

12. **"Founders have to choose a market long before they have any idea whether they will reach product/market fit." Chris Dixon**

Some venture capitalists want to see product-market fit before they invest and leave it to angels to do the investing pre-product market fit. They would rather buy a business with product-market fit than try to predict whether a founder will find it. Key as always is for the venture capitalist to let the founders do the heavy lifting ("You do not want a venture capitalist who hire a dog and then tries to do the barking."). The key point Dixon makes is that founders have control over this by thinking carefully about what they're trying to do and why. There is also founder-market fit.

Why has the level of business competition levels been turned up to 11? Or: Why is the

lean customer development process important?

February 24, 2017

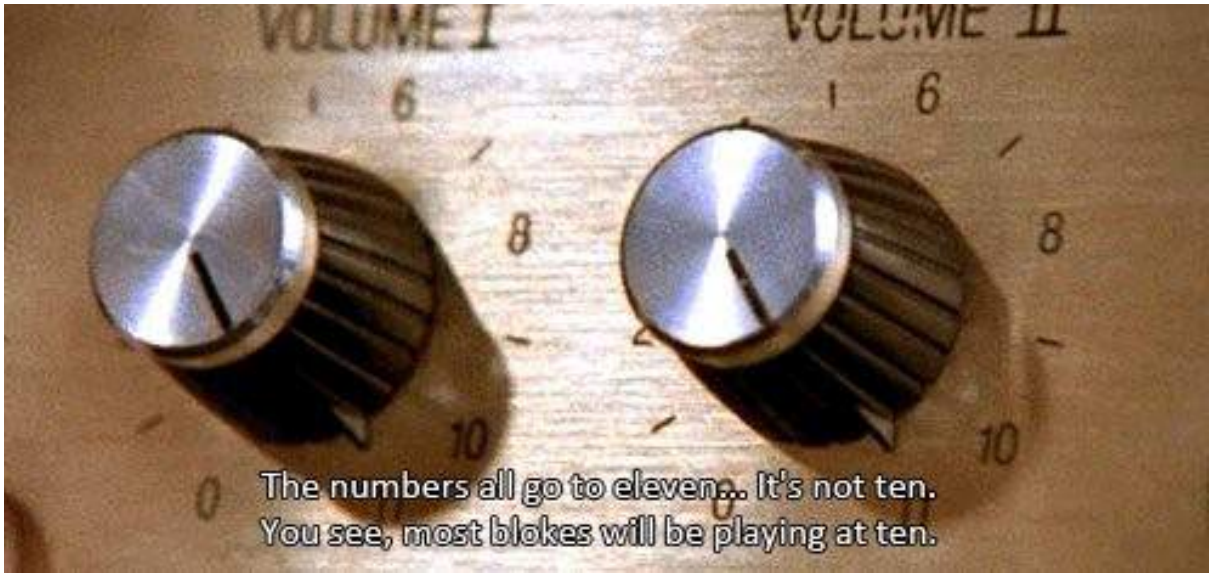

The world has been fundamentally changed by digital networks and software. Businesses and customers which are connected by networked digital systems create amplified network effects which means the velocity of business and the level of competition and innovation are higher than they ever been ever been. To survive in this new environment every business, from the largest enterprises to the smallest sole proprietor, must accelerate and fundamentally change their customer development processes. Increasing the ability of a business to adapt to a changing world has never been more important. Virtually every niche in the business world is being constantly explored by challengers using a lean customer development process which I wrote about in my previous post. This constant experimentation by entrepreneurs makes profit harder than ever to sustain, especially if its source was traditionally information asymmetry (i.e., the buyer knew more about something than the customer). Unless a business has a moat based on something like network effects, there is nowhere to hide from the constant onslaught of competition.

Even if a business is fortunate enough to have a moat based on network effects, the life of a business can still be nasty, brutish and short. In other words, since network effects are brittle and work in both directions, a moat can be torn down just as fast or faster than the time it took to create it in the first place. Steven Sinofsky wrote a great Tweet on this point the day before yesterday: “It isn’t enough to build a better mousetrap. Your mousetrap must connect to all the other mousetraps and improve as mice evolve.” Steven is saying that it is not enough to write great software any more or create a great device. Network and network effects matter more than ever.

Once producers and customers are connected via digital networks and telemetry like usage data is being shared it is possible to use the lean start up process to find product/market fit in ways that are more effective, faster and cheaper than ever before. Experiments can be conducted at speeds that were never before possible. Intensifying the process further is that

fact that competition can come from anywhere on the globe. I wrote in my post on Naval Ravikant:

"The cost of starting a company has collapsed." "As the cost of running a startup experiment is coming down, more experiments are being run.""Three years ago, companies could for the first time get all the way through a prototype of a service before they even raised seed money. Two years ago, they could make it through launch before raising money. Now, they can start to get traction with a user base by the time they come looking for seed money." A capitalist economy is an evolutionary system. Innovation and best practices are discovered by the experimentation of entrepreneurs who try to establish the evolutionary fitness of their business. Products and services created as part of this experimentation which have greater fitness survive and other less fit products and services die. Entrepreneurs are essentially running experiments in this evolutionary system when they create or alter a business.

"Success rates are definitely coming down but that is because the cost of running a startup experiment is coming down…so more experiments are being run. In the old days, we would have one company spend $10 million to figure out if it has a market. Today, maybe that same company could do it under $1-2 million. The capital, as a whole, may make the same or better returns, but yeah, if the failures don't cost a half of what they used to, you are actually saving money, it is a more efficient market." More experiments inevitably means more failures on an absolute basis. In addition, as the rate of business experimentation rises there will inevitably be an increase in the number of poseurs trying to create new businesses and that will increase failure rates. A lower overall success rate caused by an increase in the number of experiments is a positive trade off overall since society benefits from the increased level of innovation. This net benefit for society is created even though most experiments fail. What the collapse of the cost of running business experiments has done is radically increased the pace of the discovery process that creates innovation.

Any business that does not have connected customers who are sharing telemetry and a modern agile customer development process is bringing a pickle to a gunfight where the competitors have machine guns. Do products get created that do not use the lean process? Sure. That has always been the case. That vast majority fail and a few are a spectacular success creating a distribution that looks like a power law, but that is a topic for another post.

When I worked for Craig McCaw we would meet with various CEOs on a regular basis. It was interesting to see how different styles and approaches impacted business outcomes. One particularly memorable set of meetings we had involved a CEO who represented the third generation of his family to run a major public company which his grandfather started. When we met with him he was nearly always focused on macroeconomic issues like Federal Reserve interest rate policy and forecasts about the economy. Talking about these macro issues seemed to make him feel better. He never seemed to know much about his actual business. Over the years that business has declined to a point where all that is left today is the brand. It is a tragic story that negatively impacted not only him and his family, but tens of thousands of people. Of course, startup founders can fail for essentially the same reason at this CEO when they spend too much time on macro, attending industry conferences and shows and posing for photo shoots.

The CEO I am referring to attended one of the most well-known business schools in the world where he was taught that the systems his company had to deal with could be explained by concepts borrowed from physics like "equilibrium." This was both unfortunate and fatal since the reality is that a capitalist economy is an evolutionary system and the best metaphor for how it works is biology rather than physics. Charlie Munger agrees: "I find it quite useful to think of a free-market economy – or partly free market economy – as sort of the equivalent of an ecosystem." Unfortunately for people like this CEO there is no formula that will tell someone like him what to do. People who claim to have such a formulas are never right more than once in a row. The good news is that there are processes which can be followed that will greatly increase the probability of success. One process that killed the huge business was customer development. The pace at which new products were developed at his company was so ponderous and expensive that they were unable to react with sufficient speed when customer demand changed.

Fifty years ago this CEO would not have found himself in so much trouble so quickly. There has always been change in the business world and competition is not a new phenomenon in business. This was true during Georges Doriot's heyday of the 1950s and 1960s, when he famously said "Someone, somewhere is making a product that will make your product obsolete" competition was significant. The competition Doriot describes is central to what Joseph Schumpeter called "creative destruction." Schumpeter believed: "The process of industrial mutation—if I may use that biological term— incessantly revolutionizes the economic structure from within, incessantly destroying the old one, incessantly creating a new one." What is new about business today is that the many systems that make up businesses, markets and an economies are part of globally connected digital networks. When systems get connected via digital networks, feedback effects become stronger. When feedback effects get stronger, outcomes become more uncertain and nonlinear. This name Nassim Taleb gives to this phenomenon is *Extremistan.* Taleb advises that in such an environment:

"Be prepared for the fact that the next large surprise, technological or historical, will not resemble what you have in mind (big surprises are what some people call 'unknown unknowns'). In other words, learn to be abstract, and think in second order effects rather than being anecdotal – which I show to be against human nature. And crucially, rare events in Extremistan are more consequential by their very nature: the once-every-hundred-year flood is more damaging than the 10 year one, and less frequent."

Capitalism has always been an unforgiving system. Capitalism without failure is like religion without hell, it doesn't work. There is something important and new happening with respect to the level of failure: digital systems that are connected via networks have turned the level of competition and innovation in the business world "up to 11."

People are not unaware of this *competition levels have been turned up to 11* phenomenon, which means they are starting fewer new business. I am not talking about venture capital backed businesses which are a tiny percentage of new business starts each year. In 2016 there we only 800 new businesses that received a series A financing round from a venture capital firms in the United States. What I am talking about is small businesses that are bootstrapped or rely on bank financing:

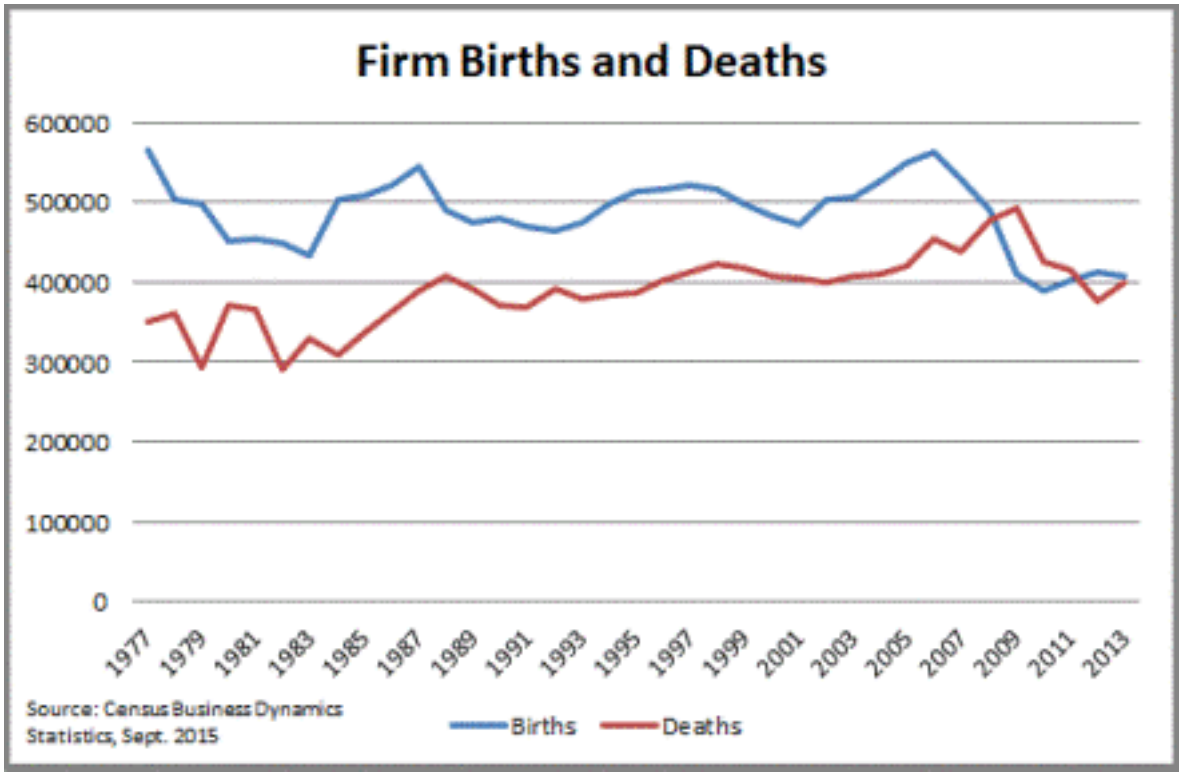

This *competition levels turned up to 11* phenomenon is perhaps most easily explained by another example. Mike Lazaridis was working out at home on his treadmill in 2007 when he first saw an iPhone on a television. Lazaridis is a co-founder of a business which at that time was selling millions of BlackBerry phones and secure network services to many of the world's most famous people, including the President of the United States. The phone his business sold was nicknamed the CrackBerry since it was so addictive. The future of the business seemed as secure as its network. It was not simply possible for Lazaridis to have fully realized the extent to which Apple's iPhone was about to radically diminish the fortunes of the fabulously successful business he had created. *The Globe and Mail* newspaper describes what happened:

"That summer, he pried [an iPhone] open to look inside and was shocked. It was like Apple had stuffed a Mac computer into a cellphone. The iPhone broke all the rules. The operating system alone took up 700 megabytes of memory, and the device used two processors. The entire BlackBerry ran on one processor and used 32 MB. Unlike the BlackBerry, the iPhone had a fully Internet-capable browser. That meant it would strain the networks of wireless companies like AT&T, something those carriers hadn't previously allowed. RIM by contrast used a rudimentary browser that limited data usage. Mr. Lazaridis recalled 'It's going to collapse the network.' And in fact, sometime later it did. "If that thing catches on, we're competing with a Mac, not a Nokia," he recalled telling his staff."

The iPhone, of course, would go on to be an industry and global phenomenon, pummeling the fortunes of BlackBerry and other businesses, reshaping several industries and changing the global economy. BlackBerry was not just competing with "a Mac in a phone" but an entirely new hardware, software and services ecosystem unlike anything the world had ever seen before.

This is a chart of the Blackberry stock price beginning about the time I started using their pager for the first time in 1999.

Another chart tells the story of how quickly the business changed:

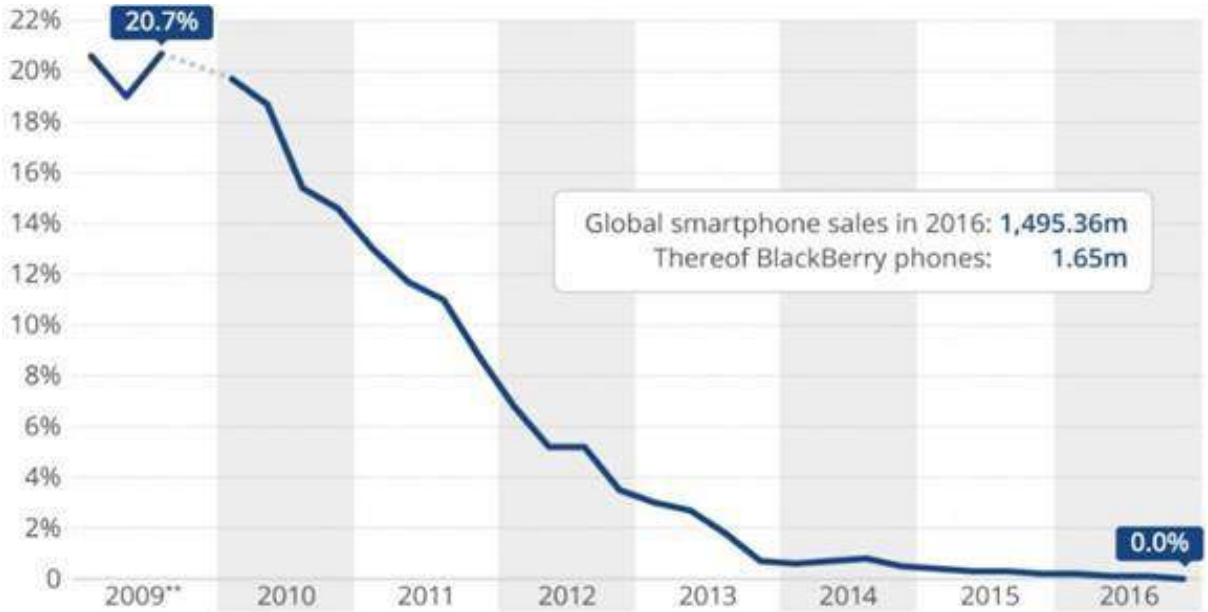

What happened to BlackBerry can now happen to any business at any time. NYU Professor Aswath Damodaran points out: "We can no longer assume that competitive advantage will last a century as it used to for the old and mature companies. Instead competitive advantage for tech companies comes with a life span that continues to shorten. What this means is that you'll climb faster as a business but fall faster too – Blackberry being a classic example."

You are not employed by or invested in a tech business you say? Every business is now a tech business. There is no escape from Extremistan. Let's be clear about the point I am making here: I am saying that my generation rode a bike downhill to school both ways over a very short distance in balmy weather conditions and that young entrepreneurs today walk uphill both ways to school in the snow. Business is more competitive today than it ever has been. Thirty years ago my grandfather was a property developer who went to a club for lunch on most days where he played cards and had a cocktail. My friend's dad was a stock broker who was playing tennis every day by 3:30 (on the West coast). There's none of that any more that I can see. I would not want to go back to that time for any reason, but the competitive slack that existed in the system is gone. As another example of increased competition, I saw a

woman in the grocery store last night "show rooming" containers of pre-washed lettuce on her phone (she was as an individual shopper comparing supermarket lettuce prices on a hand held supercomputer connected to the internet). That show rooming represents new competitive pressure which impacts the profitability of every product and service, from wealth management to services to retail of all kinds. Show rooming on mobile phones is great for consumers and is not going away! But for producers it adds to the competitive pressure they encounter every day.

Michael Mauboussin describes why the creative destruction process is inevitable: "Companies generating high economic returns will attract competitors willing to take a lesser, albeit still attractive, return which will drive down aggregate industry returns to the opportunity cost of capital." Charlie Munger has said the same thing as Buffett many times, including this statement: "Over the very long-term, history shows that the chances of any business surviving in a manner agreeable to a company's owners are slim at best. Capitalism is a pretty brutal place." Warren Buffett recently said during an interview at Columbia University: "The first question I ask myself when I look at a business, is it important and easy. And a lot of [businesses] don't make it. I'm looking for the one-foot bars to step over versus the eight-foot bars to jump over."

When it comes to moats, durability matters. Some moats atrophy gradually over time and some much more quickly. This is not a completely new phenomenon. As Ernest Hemingway once said in his book *The Sun Also Rises*, a business can go bankrupt in two ways: gradually and then suddenly. The speed of moat destruction has greatly accelerated over time due to advances in technology and the way it spreads information. For some people this increase in speed can at times be disorienting. For example, the speed at which a company like Blackberry lost its moat was shocking to many investors and employees. This disorientation is having many second and third order effects like heightened political discord. People in many cases are terrified about losing their jobs. Angry, scared and confused people can do unexpected things.

How long a moat lasts in a business is called a "Competitive Advantage Period" (CAP) writes Michael Mauboussin. The speed of moat dissipation will be different in each case and need not be constant. The rate at which a moat atrophies is similar to what academics call "fade" argues Mauboussin. Even the very best companies can see competition make their moats shrink or even disappear. Munger has said: "Frequently, you'll look at a business having fabulous results. And the question is, 'How long can this continue?' Well, there's only one way I know to answer that. And that's to think about why the results are occurring now – and then to figure out what could cause those results to stop occurring."

That moats are hard to create and inevitably deteriorate over time is one very important reason why capitalism works. What happens over time is so-called "producer surplus" is transferred into "consumer surplus." What I am saying in this post is that I suspect that the average "competitive advantage period" (CAP) of a business is shrinking. There is some supporting data such as a study which concludes: "over time competitive advantage has become significantly harder to sustain …seen across a broad range of industries."

To illustrate the points I have made in this post with an example, if a business person opens a successful restaurant that success will inevitably attract imitators and competitors. Some of these restaurants will adapt and survive and thrive and others will fail. Charlie Munger describes the process: "The major success of capitalism is its ability to drench business

owners in feedback and allocate talent efficiently. If you have an area with 20 restaurants, and suddenly 18 are out of business, the remaining two are in good, capable hands. Business owners are constantly being reminded of benefits and punishments. That's psychology explaining economics." The consumer wins because the products and services offered to them get better and better over time. What happens over time is what economists call "producer surplus" is transformed into "consumer surplus." Producer surplus is lower since competition has been turned up to 11 and this makes GDP growth look anemic, but competition and innovation are anything but anemic. In Extremistan, producer surplus becomes consumer surplus faster. For a business this is problematic since producer surplus is what delivers the profits that makes the process called capitalism work.

Notes:

25iq post on Naval Ravikant https://25iq.com/2016/08/20/a-dozen-things-ive-learned-from-naval-ravikant-about-investing-business-and-startups/

A Dozen Lessons about Minimum Viable Products

March 3, 2017

1. **"It's only cheap to build 2-3 person companies with sweat equity. The minute you start paying engineers you will realize it is quite expensive." Bill Gurley.** Assume a startup has raised a seed round of ~$2 million. Also assume that what the startup has is a hypothesis that a big market composed of dogs will want to eat the dog food described by the hypothesis. The founders of the startup have no proof that their hypothesis is true, but some investors have voted with their money that there is significant hope that the startup's hypothesis is correct. Every penny of the $2 million raised by the startup is precious. If the startup runs out of cash it is dead, since that is the only unforgivable sin in business. Now let's look at the overall context in which this is happening. The odds that the startup will be financially successful are, simply put, not good. How many startups raise a seed round? There is no way to know for sure since many startups at seed stage live and die and don't leave a trace that can be tracked. Reported seed stage startups typically number about 1,200 in a given a quarter (plus or minus a couple of hundred) depending upon the business climate. Assuming ~5,000 seed stage startups a year both reported and unreported, only 800 of them raised a Series A round in 2016 says Mattermark. That's about an 84% fatality rate just at seed stage. Mattermark also calculates the odds of survival here at far less than 10%. This calculation is based simply on a startup not getting to the next phase.

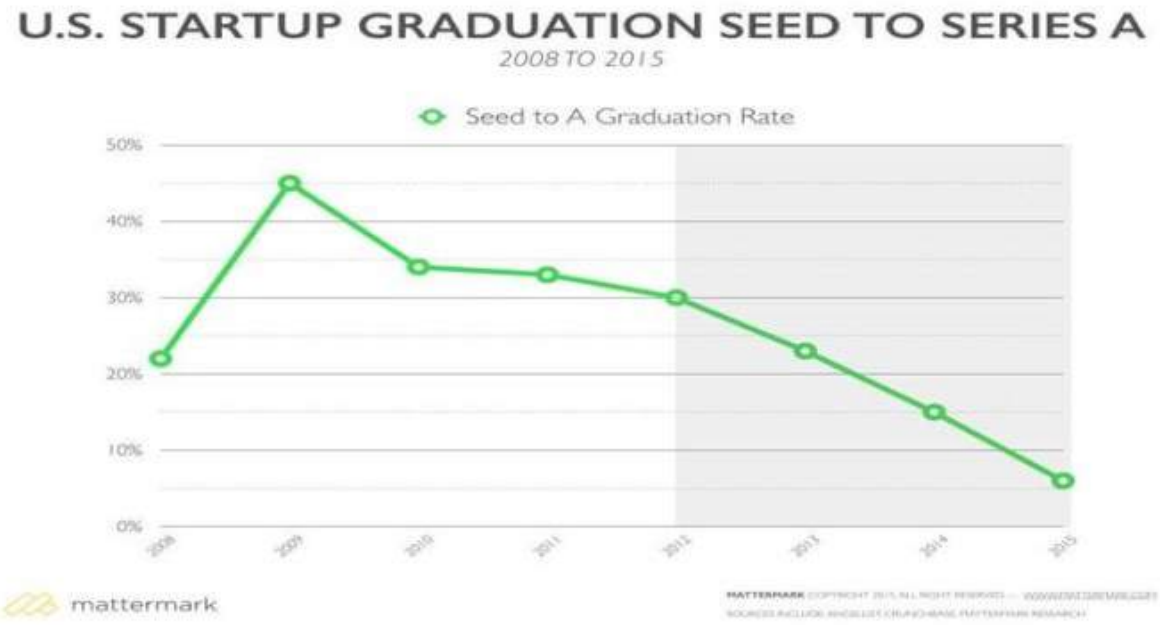

Other research, which uses different definitions, concludes:

About 75% of U.S. venture-backed start-ups fail, according to Harvard Business School senior lecturer Shikhar Ghosh. Ghosh's research estimates 30% to 40% of high potential start-ups end up liquidating all assets–a failure by any definition. But if a start-up failure is defined as not delivering the projected return on investment, then 95% of VC companies are failures, Ghosh said.

Being a founder or early employee of a startup is not a rational act given the odds of success. Of course, as George Bernard Shaw wrote in *Man and Superman*: "all progress depends on the unreasonable [human being]." The reason why books like *The Hard Thing about Hard Things* by Ben Horowitz and *Shoe Dog* by Phil Knight resonate so strongly with people who have been involved in startups is that they accurately describe the terror, inevitable setbacks and daily struggle of life in a startup business, not just the seemingly glamorous parts. .

2. **"If you create something and no one uses it, you're dead. Nothing else you do is going to matter if people don't like your product." Jessica Livingston**. The first rule of startups is that without making something that people want to buy, you're dead. The second rule is that you should not forget the first rule. Particularly when the odds of survival are low in an activity, it pays to be very aware of methods that can increase the probability of survival. Michael Mauboussin's advice should be front and center in every founder's mind: "If you compete in a field where luck plays a role, you should focus more on the process of how you make decisions." What should that process be for a startup? In thinking about the right process it is wise not to forget that the startup's goal is to establish product/market fit before they run out of money. Unfortunately, at the very early stages of the startup's existence it faces many challenges related to at least one untested hypothesis. "Hypothesis", of course, is just a fancy word for "guess." Steve Anderson the founder of the seed stage venture capital firm Baseline Ventures points out: "Generally speaking, most of my investments are pre-product launch – they're just an idea. My goal as an

investor is to make sure there's enough financing to give companies time to do that, a year to 18 months. The worst scenario is to try to raise more money when you haven't achieved that goal. If you don't have it, eventually you'll run out of cash, say the experiment is wrong, and fold up your tent. That's why when I invest I want to leave enough room for pivoting or reexamining your goals." Making matters even more challenging for the early stage startup is the point Ev Williams makes here: "You know that old saw about a plane flying from California to Hawaii being off course 99% of the time—but constantly correcting? The same is true of successful startups—except they may start out heading toward Alaska."

3. **"A full executive team with a salesforce and all that stuff before you have a killer product is a complete waste of time." Marc Andreessen.** A startup should defer spending time and energy proving and developing its growth hypothesis until it has established the value hypothesis. I have recently written a blog post on precisely this "first value THEN growth" point here. The key point in that post is made by Andy Rachleff: "A value hypothesis identifies the features you need to build, the audience that's likely to care, and the business model required to entice a customer to buy your product. Companies often go through many iterations before they find product/market fit, if they ever do." When the startup is still searching for the elements of its value hypothesis, money and time spent on growing the business is a bonfire of cash generating zero value. The early days of the life of a startup are focused on "search" rather than "execution" advises Steve Blank, a serial entrepreneur, professor and author who is justifiably famous in the startup world.

4. **"The minimum viable product (MVP) is that product which has just those features (and no more) that allows you to ship a product that resonates with early adopters; some of whom will pay you money or give you feedback." "The lesson of the MVP is that any additional work beyond what was required to start learning is waste, no matter how important it might have seemed at the time." Eric Ries.** The goal of the MVP process is to validate the hypothesis in a speedy and cost efficient manner. The key word in this quote from Ries above is feedback since that is how anyone learns. The most effective processes are based on feedback loops which are in turn based on the scientific method: build, measure, learn. What the startup offers as its MVP should be compete in what it does to deliver and capture value, not a fully complete implementation of the vision. The MVP is an experiment that is intended to generate validated learning about what customers value enough to pay for. An MVP approach is not the only way to go forward with a startup. Eric Ries describes two extreme alternatives:

"One, which I call maximizing chance of success, says 'Look, we only got one chance at this so let's get it right.' We're going to ship it when it's right and that actually is perfectly rational. If you only have one shot, you want to take the best shot you can and build the most perfect product you can. The issue is, of course, you know, you can spend, I don't know, say five years of stealth R&D building a product you think customers want and then discover to your chagrin that they don't. The other possible extreme approach is to say, 'Well, let's just do 'release early, release often.' This approach is: 'Look, we'll just throw whatever crap we have out there and then we'll hear what customers say and we'll do whatever they say." But the issue there is if you show a product to three customers, you get 30 opinions, and now

what do you do? So minimum viable product is kind of a synthesis of those two possible extremes."

5. **"As you consider building your own minimum viable product, let this simple rule suffice: remove any feature, process, or effort that does not contribute directly to the learning you seek." "If you want to do minimum viable product, you have to be prepared to iterate. And so you have to have the courage to say, 'Yeah, we'll ship something, get negative feedback and respond.'" Eric Ries.** A minimum feature set is not a goal but a tactic to create cost-effective and speedy validated learning about the hypothesis. The goal is to learn and steer based on feedback rather than try to predict and emerge with a killer fully formed product. Some people like Peter Thiel who is quoted just below, have a different view:

"Even in engineering-driven Silicon Valley, the buzzwords of the moment call for building a 'lean startup' that can 'adapt' and 'evolve' to an ever-changing environment. Would-be entrepreneurs are told that nothing can be known in advance: we're supposed to listen to what customers say they want, make nothing more than a 'minimum viable product,' and iterate our way to success. But leanness is a methodology, not a goal. Making small changes to things that already exist might lead you to a local maximum, but it won't help you find the global maximum. You could build the best version of an app that lets people order toilet paper from their iPhone. But iteration without a bold plan won't take you from 0 to 1. A company is the strangest place of all for an indefinite optimist: why should you expect your own business to succeed without a plan to make it happen? Darwinism may be a fine theory in other contexts, but in startups, intelligent design works best."

Thiel or an entrepreneur like Elon Musk are not as capital constrained as the typical seed stage startup. They can afford to adopt what Ries called a "maximizing the chance of success" approach. Thiel in particular makes many bets and is nicely hedged since he owns a portfolio of wagers. In contrast the founders and early employees of a startup typically have all their eggs on one basket. The founders and early employees are far from hedged. What is right for Thiel may not be right for founders or early employees for that reason.

6. **"An MVP is a process that you repeat over and over again: Identify your riskiest assumption, find the smallest possible experiment to test that assumption, and use the results of the experiment to course correct." Yevgeniy Brikman.** The MVP process is depicted as a flywheel or loop for a reason. Most of the time actual testing of a hypothesis will reveal that customers do not value the product or even the vision the product represents. If the hypothesis is not validated by the experiment the business must iterate by replacing the hypothesis or shut down. I like this description of the process from an interview of Steve Blank by Chris Dixon:

"An MVP is really just a tool for discovering a scalable business model through customer development. An MVP should have the smallest possible feature set that creates gains for customers and reduces pain—but it can't be so small that customers have nothing to evaluate. In other words, an MVP gives startup entrepreneurs something to demonstrate when they get out of the building and talk to current and potential customers about what they really need."

7. **"The worst fate of any shipping of any product is that nobody cares. You don't get any feedback at all. That's what most features or most products do. They're just**

dead weight." Eric Ries. What Ries says here is an unfortunate fact. Chamath Palihapitiya describes reality bluntly: "Core product value is really illusive and most products don't have any." Faced with the reality of shutting down many companies just push the button and start working on the growth hypothesis without having solved the value hypothesis, starting a process in which they will usually fly the business at high speed into the side of a mountain.

8. **"The common phrase that most people use today is,"You should build a minimum <u>viable</u> product." And I underlined viable because I think a lot of people skip that part and they go out with a feature and the whole user experience in the very beginning is flat. Minimal viable product pretty much means what is the smallest feature set that you should build to solve the problem that you are trying to solve. I think if you go through the whole story-boarding experience you can kind of figure that out very quickly. But again, you have to be talking to users, you have to be seeing what exists out there already, and what you should be building should solve their immediate needs." Sam Altman.** The graphics which best describe what Altman is talking about depict the MVP as being complete in terms of what it does but not as complete as it will eventually be in implementing the vision once the feedback is obtained from early adopter customers.

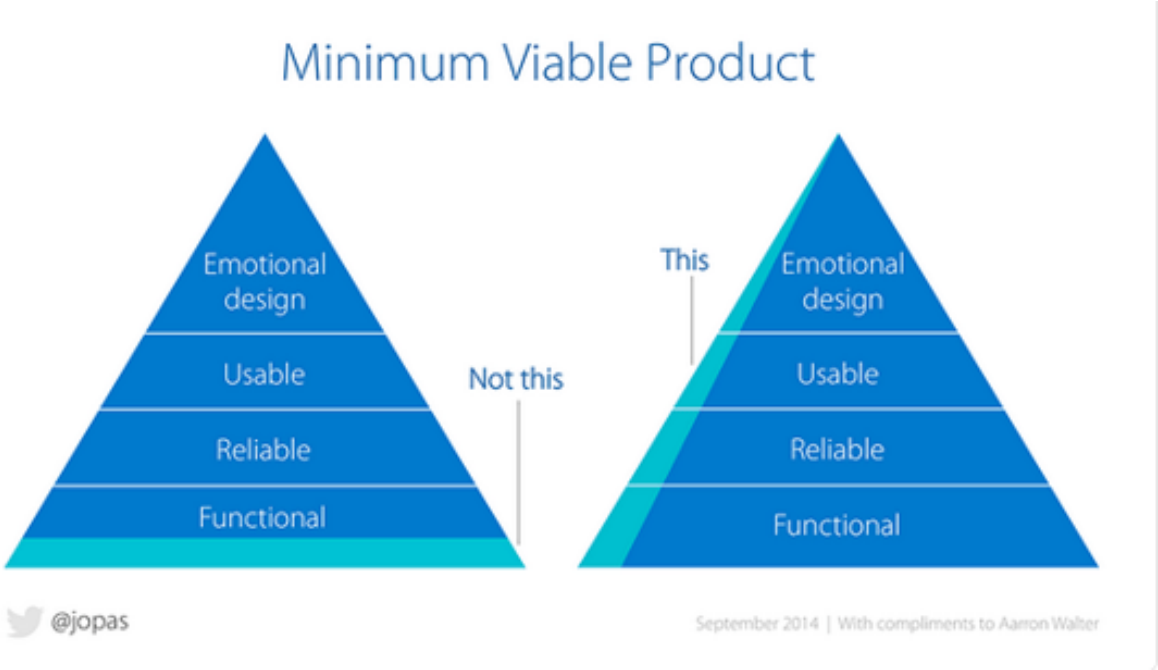

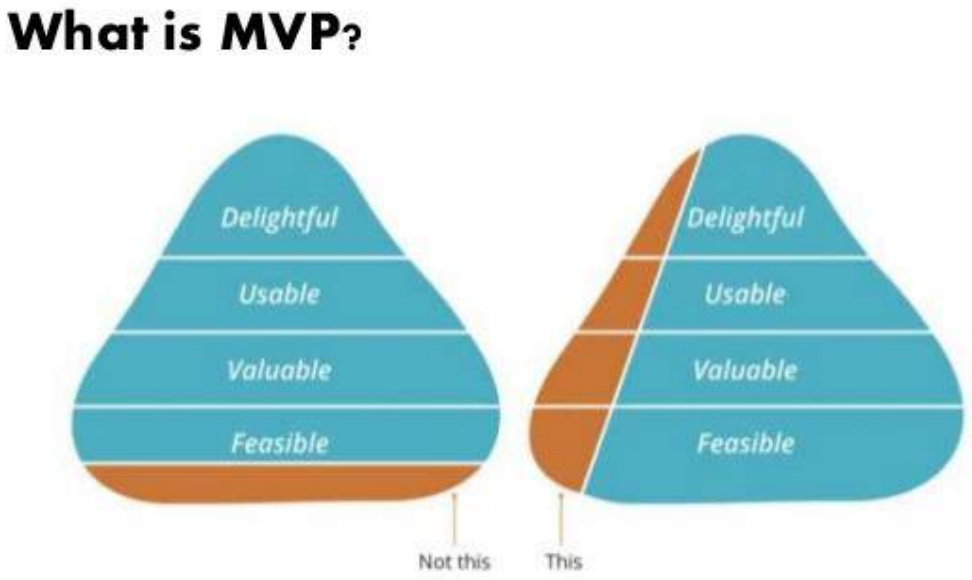

9. **"A minimum viable product is not always a smaller/cheaper version of your final product." "Launching a new enterprise—whether it's a tech start-up, a small business, or an initiative within a large corporation—has always been a hit-or-miss proposition. According to the decades-old formula, you write a business plan, pitch it to investors, assemble a team, introduce a product, and start selling as hard as you can. All MBA tools are irrelevant on a startup's day one. This wrong belief is based on that we can start absolutely any company just by spending a lot of time on writing complicated operating plan and financial model and then hire people to execute this plans. But now we know that no plan survives first contact with customers! First days of startup are completely unpredictable. Business plans and financial forecasts are just silly as it was in the Soviet Union." Steve Blank.** A classic example of a MVP is what was done by Zappos Founder Nick Swinmurn: "My Dad told me, you know I think the one you should focus on is the shoe thing. That's a real business that makes sense. So I said okay, focused on the shoe thing, went to a couple of stores, took some pictures of the shoes, made a website, put them up and told the shoe store, if I sell anything, I'll come here and pay full price. They said okay, knock yourself out. So I did that, made a couple of sales." If you can validate your thesis without paying to create lots of code that approach is like found gold. As another example, the MVP for AngelList mostly took the form of making introductions by email. The Virgin Airlines MVP was just a single plane flying back and forth between two cities. The less money spent on proving the hypothesis, the more money that is left to pivot or execute on the idea.

10. "**A MVP is not just a product with half of the features chopped out, or a way to get the product out the door a little earlier. And it's not something you build only once, and then consider the job done." Yevgeniy Brikman.** The MVP should deliver value to the customer even though it is not as complete at is could be. Some people argue that an MVP can be as simple as a landing page, but I am skeptical. Eric Ries writes: "The idea of minimum viable product is useful because you can basically say:

our vision is to build a product that solves this core problem for customers and we think that for the people who are early adopters for this kind of solution, they will be the most forgiving. And they will fill in their minds the features that aren't quite there if we give them the core, tent-pole features that point the direction of where we're trying to go."

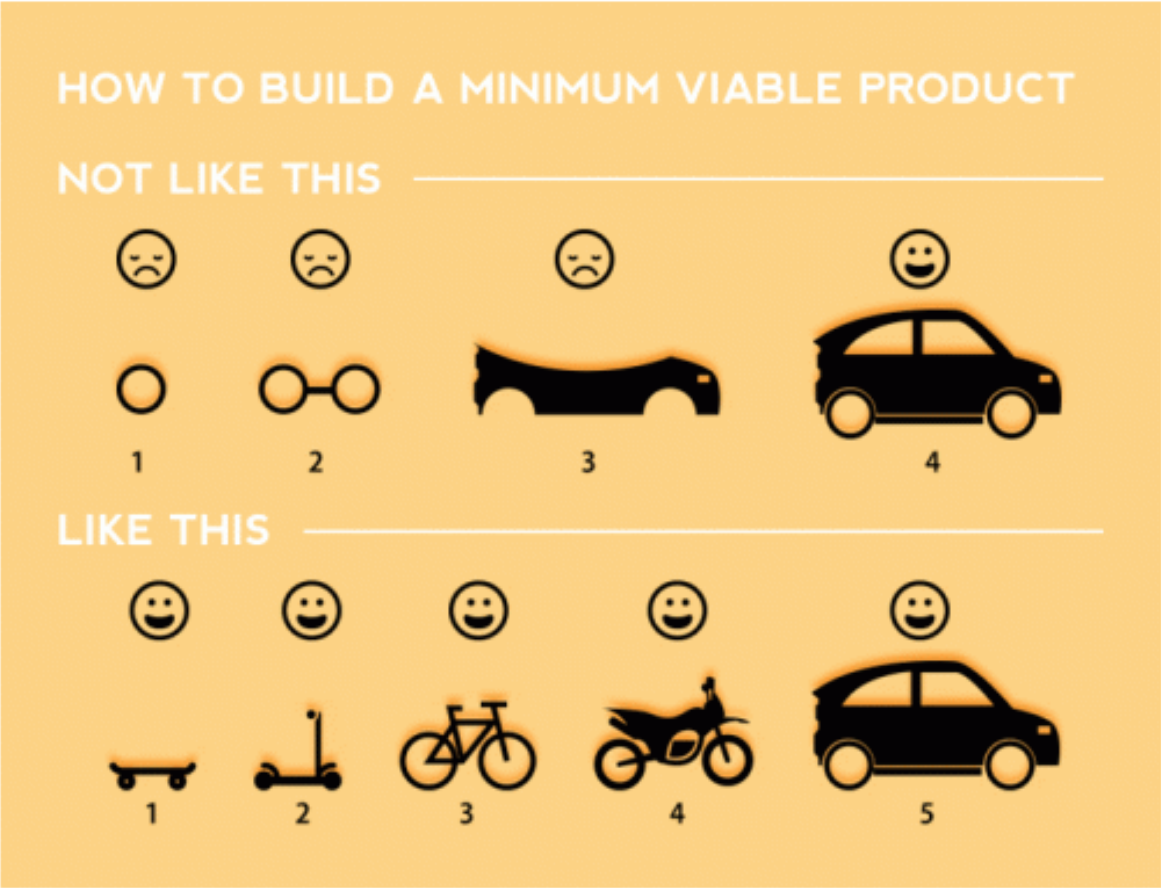

11. **"MVP is quite annoying, because it imposes extra overhead. We have to manage to learn something from our first product iteration. In a lot of cases, this requires a lot of energy invested in talking to customers or metrics and analytics. Second, the definition's use of the words maximum and minimum means it is decidedly not formulaic. It requires judgment to figure out, for any given context, what MVP makes sense." Eric Ries.** It does not make much sense to build a MVP unless you do the work to collect data about the experiments and conduct an analysis using modern tools. This data collection and analysis is a lot of work and is not as glamorous to some people as product design, creating marketing plans and attending fancy conferences and parties.

12. **"In the real world not every customer is going to get overly excited about your minimum feature set. Only a special subset of customers will and what gets them breathing heavy is the long-term vision for your product. The reality is that the minimum feature set is 1) a tactic to reduce wasted engineering hours (code left on the floor) and 2) to get the product in the hands of early visionary customers as soon as possible. You're selling the vision and delivering the minimum feature set**

to visionaries not everyone." Steve Blank. Every potential customer does not need to value the MVP for it to be a success. Eric Ries elaborates: "Early adopters can be very forgiving of missing features. They see the vision and you can be in dialogue with them going through that learning feedback loop." Operating in this process is faith that the customers will help evolve the MVP into something fantastic that will support a very profitable business with a scalable and repeatable business model.

Notes:

Eric Ries: Minimum Viable Product: a guide http://www.startuplessonslearned.com/2009/08/minimum-viable-product-guide.html

Eric Ries: What is minimum viable product? http://www.startuplessonslearned.com/2009/03/minimum-viable-product.html

Steve Blank: Perfection by Subtraction. https://steveblank.com/2010/03/04/perfection-by-subtraction-the-minimum-feature-set/

75% of Venture-backed Start-ups Fail http://www.inc.com/john-mcdermott/report-3-out-of-4-venture-backed-start-ups-fail.html

Eric Ries: https://m.youtube.com/watch?v=1FoCbbbcYT8

Steve Blank https://m.youtube.com/watch?v=Fj0qsAyKPN8

Neil Patel: Developing an MVP: Your Key to Success https://medium.com/@NeilP666/developing-an-mvp-your-key-to-success-43333610ab12#.yq9f3lecb

LinkedIn Founder Reid Hoffman's Advice for Entrepreneurs https://blog.kissmetrics.com/hoffmans-advice-for-entrepreneurs/

Wikipedia https://en.wikipedia.org/wiki/Minimum_viable_product

Minimum Viable Products in Biotech http://blogs.nature.com/tradesecrets/2011/12/20/minimum_viable_products_in_biotech

Chris Dixon interviews Eric Ries: https://techcrunch.com/2011/09/27/founder-stories-eric-ries-lean-google-plus/

Sam Altman: http://startupclass.samaltman.com/courses/lec04/

Zappos: http://www.businessinsider.com/nick-swinmurn-zappos-rnkd-2011-11?page=1

A Minimum Viable Product Is Not a Product, It's a Process http://blog.ycombinator.com/minimum-viable-product-process/

Eric Ries on 4 Common Misconceptions About Lean Startup
https://www.entrepreneur.com/article/286701

You have Discovered Product/Market Fit. What about a Moat?

March 10, 2017

I have previously written blog posts about (1) growth, (2) product/market fit and (3) minimum viable product. The most logical topic for the next post is: Why does a business need a moat? The answer is simple: even if a business discovers solutions to the value hypothesis and the growth hypotheses without a moat the probability of the business being financially successful over time is remote. Revenue alone is not enough to sustain a business given the inevitable competitive response. A sustained return on invested capital is a prerequisite for the long-term survival of a business. In other words, "for what shall it profit a business, if it shall discover solutions to the value a growth hypotheses, but fail anyway because it does not have a moat?" At worst, the business without a moat is never profitable (like Fab.com). At best, the business without a moat is profitable for a while, but over time is gradually overtaken (as may be happening right now to GoPro).

Questions about the creation, maintenance and destruction of moats are the most fascinating and challenging aspects of business and investing. This is true because what Joseph Schumpeter called "creative destruction" is more powerful than any phenomenon in business. Michael Mauboussin says it best: "Companies generating high economic returns will attract competitors willing to take a lesser, albeit still attractive return, which will drive aggregate industry returns to opportunity cost of capital."

The moat creation and destruction process is similar to what happens during evolution in nature. What's an example of a specific moat analogy from nature? The sword-billed hummingbird is a species from South America. The bird's very long sword-like bill acts as a moat against competitors by allowing it to reach a unique source of nectar from long-tubed passion flowers.

Why did I select this hummingbird to illustrate my point? First I wanted to leverage the fact that you may have recently watched one notable episode the BBC's Planet Earth series. Second, while the humming bird has a moat due to its long beak, the bird's market is limited to a small number of flowers in a relatively small territory. Some moats are operative in small markets and some are big. Twitter's moat may only protect something that generates $600 million a quarter in revenue, which some people might consider to be relatively small like the hummingbird's territory. Or Twitter's revenue may grow much larger. Therein lies much of the fun and challenge in investing. As an aside, since I know you want to know, hummingbirds do tweet.

Mistakes are easy to make when trying to make predictions about moat strength, value and duration. For example, even if a business currently has a moat, that does not mean it will continue to do so for very long. Some businesses were at one point very highly valued since investors mistakenly thought they had a strong moat in a large and valuable market. GoPro would seem to be an example:

GoPro Valuation:

March 2017: $1.2 Billion

October 2014: $11.8 Billion

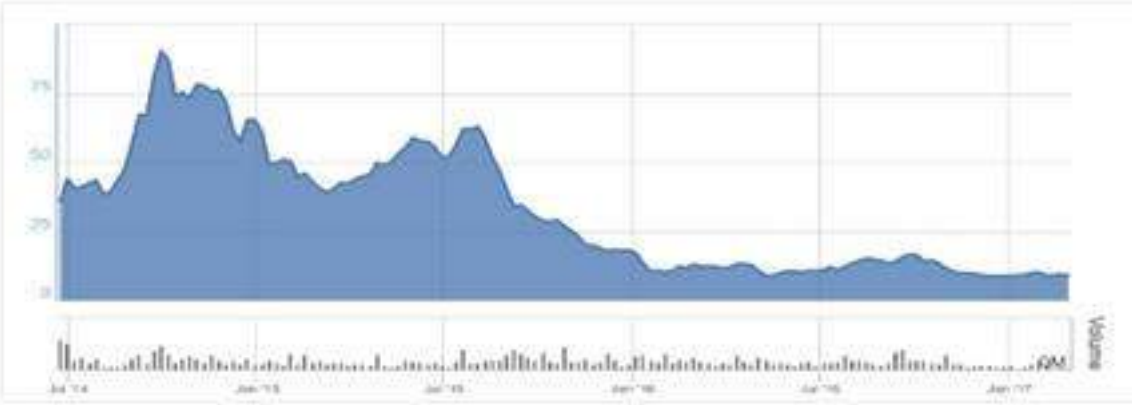

Predicting the future of a moat is so hard because the markets in which they operate are complex and adaptive. I wrote about why it is hard to predict the future in this post. Factors that can create a moat are constantly in flux and because they often interrelate to create nonlinear positive and negative changes. An example of negative outcomes for a business from a shift in the strength of a moat is what happened to the newspaper industry when publishers lost their physical distribution-based moat.

Without a moat this can happen:

"There are all kinds of wonderful new inventions that give you nothing as owners except the opportunity to spend a lot more money in a business that's still going to be lousy. The money still won't come to you. All of the advantages from great improvements are going to flow through to the customers." Charlie Munger

The point Munger just made so clearly is counter-intuitive for many people, but essential to understand. Moat creation is incredibly hard and rare and maintaining one is hard as well. It is a big mistake to confuse a moat shortage with an innovation shortage. Some innovation does not produce any profit and in fact can destroy profit. For every firm creating disruption, some other firms are being disrupted.

The test of whether a moat exists is quantitative, even though the factors that create moats are qualitative. If a business has not earned returns on capital that substantially exceed the opportunity cost of capital for three to five years, it does not have a moat. That is quantitative. As for the qualitative side of this topic, there are no formulas or recipes that govern the creation and sustainability of moats, but there is enough commonality that you can get better at understanding how they are created and whether they can be maintained over time. Charlie Munger told Howard Marks once: "It's not supposed to be easy. Anyone who finds it easy is stupid. There are many layers to this and you just have to think well." The existence and need to understand the many layers Munger is talking about explains why there are so many different posts on this blog. And why Warren Buffett believes that business is

the most interesting game ever invented. The need to "learn more about more" never ends. Ever. What are these "layers" that Munger is talking about? Marc Andreessen puts it this way:

"I have always been a fan of something that Andy Rachleff taught me years ago, which he calls the onion theory of risk. Which basically is, you can think about a startup like on day one, as having every conceivable kind of risk and you can basically make a list of the risks. So you've got founding team risks, are the founders going to be able to work together; then you have product risk, can you build the product; you will have technical risk, maybe you need a machine learning breakthrough or something. Are you going to have something to make it work, or are you going to be able to do that? You will have launch risk, will the launch go well; you will have market acceptance risk, you will have revenue risk. A big risk you get into with a lot of businesses that have a sales force, is that can you actually sell the product for enough money to actually pay for the cost of sales? So you have cost of sales risk. If you are a consumer product, you have viral growth risk. So a startup at the very beginning is just this long list of risks, right, and the way I always think about running a startup is also how I think about raising money. Which is a process of peeling away layers of risk as you go."

Among the risks Andreessen talks about are technology, product, market, competition, timing, financing, distribution, marketing, hiring and founder. Each must be retired at some point by the business. The existence of a moat is critical to reducing competition risk. In my blog post on Eugene Kleiner I quote him as saying**:** "Risk up front, out early." A famous venture capitalist said to me that Kleiner: "Always had a strong bias for eliminating the biggest risks quickly, which was much more relevant in the days of backing companies with high technical risk and low market risk." Another famous VC who knew Kleiner well wrote to me that what he meant by this sentence was: "Reduce the biggest risks first for the fewest dollars. This may mean out of order execution to minimize loss in case of failure."

I view the great moat creators of the world as artists. When someone like Rich Barton creates or is involved in the creation of successful business after successful business (*Expedia, Zillow, Glassdoor, Avvo, Realself, Nextdoor*) when the failure rate for startups is as high as it is, I can't help but be impressed. Bill Gates created several moats for different product as did Steve Jobs. When someone does something repeatedly you can be assured that the skill to luck ratio weighted strongly toward skill. One point is clear from the numbers (AKA, empirical evidence): moat creation in a really large and valuable market is rare event. This must be the case since the number of financial exits is top-down constrained by the size of the economy and its ability to absorb profitable new businesses. Venture-backed businesses overwhelmingly fail financially as I wrote in my post last week on minimum viable products.

The major factors that can create a moat are:

1. **Demand-side Economies of Scale**

Demand-side economies of scale (also known as "network effects") result when a product or service becomes more valuable as more people use it. Microsoft, Amazon, Google, Facebook and other multi-sided markets have demand-side economies of scale that operate on their behalf. Network effects represent the most valuable factors creating a moat since the benefits of demand-side economies of scale can increase in business value a *nonlinear* manner, especially in software businesses. Moats created by network effects are vastly more scalable

than other types of moats. This means that the benefits realized by the major software-based platforms are far larger than those realized by a large steel or cement producer based on supply-side economies of scale. Network effects are extremely hard to create and, as Blackberry found, can be very brittle. Of all the factors that can create a moat, nothing is more important than network effects in my view. A great example of the value of network effects are Bloomberg terminals. The more people who use these terminals the more valuable they become to other users. The FT writes:

"Bloomberg's pioneering instant messaging and chat rooms, not data or news, are arguably one of the biggest drivers of its dominance. The bond market — where trading mostly happens discreetly between fund managers, brokers and banks, rather than on bourses — is particularly dependent on the Instant Bloomberg messaging function. But "I'll IB you" has become lingua franca across the financial world. The dominance of Bloomberg chat is a significant "economic moat" for the company."

2. **Supply-side Economies of Scale**

A business generates supply-side economies if per-unit costs fall with increasing output. Economies of scale, with a few rare exceptions, are exhausted well before businesses dominate the entire market." For example, despite having significant supply-side economies of scale, General Motors never was able to obtain 100% market share. Costco has supply side scale economies of scale that help create its moat, but it is not even the only warehouse club in terms of market share. Costco is nevertheless a hugely valuable business that is Charlie Munger's favorite business after Berkshire Hathaway. Both Amazon AWS and Microsoft Azure have supply-side economies of scale that benefit their business.

3. **Brand, Patents and Intellectual Property**

Charlie Munger and Warren Buffett discovered soon after they bought See's Candies that they could regularly raise prices and customers did not seem to care. Buffett and Munger call this ability "pricing power." Charlie Munger has pointed out that before See's Candies: "We didn't know the power of a good brand. Over time we just discovered that we could raise prices 10% a year and no one cared. Learning this changed Berkshire. It was really important." People do conduct surveys and try to rank brands which is in my view is the equivalent of guessing.

What's in a name?

Top 10 valuable technology brands in 2017

	Brand	Domicile	Brand value (US$b)	Y-o-y change (%)
1 (2)	Google	US	109.5	▲ 24
2 (1)	Apple	US	107.1	▼ 27
3 (3)	Amazon.com	US	106.4	▲ 53
4 (4)	Microsoft	US	76.3	▲ 13
5 (6)	Facebook	US	62	▲ 82
6 (5)	Samsung	South Korea	51.4	▲ 12
7 (7)	IBM	US	36.1	▲ 14
8 (12)	Alibaba	China	34.9	▲ 94
9 (9)	Oracle	US	25.9	▲ 17
10 (10)	Huawei	China	25.2	▲ 28

Source: Brand Finance *() denotes rankings in 2016* SCMP

A patent or other form of intellectual property like trademarks or copyrights can create a moat. Qualcomm is an example of a company that has created a moat mostly via intellectual property. Open source makes moats on some areas of the software business problematic. Proprietary software kept secret in a server does not need to have the same intellectual property protection as client side software.

4. **Regulation:**

There are certain businesses which have created a competence with regard to regulation that is so high that regulation serves as a moat. As an example, lawyers and other professional are able to reduce supply and create a moat through regulation. As an example, having the regulatory expertise to qualify to do business as a web services provider on a global basis on behalf of customers is a form of moat.

Can great management or better business execution create a moat? Warren Buffett's famous quip on that point is: "When a management with a reputation for brilliance tackles a business with a reputation for bad economics, it is the reputation of the business that remains intact." Professor Michael Porter agrees: "It's incredibly arrogant for a company to believe that it can deliver the same sort of product that its rivals do and actually do better for very long." Competition will in that case eventually be based on price and price-based competition inevitably degrades to a point where profit disappears. This is not to say that great management is not highly valuable. It is. But people like Buffett and Porter believe it isn't enough to reliably sustain profitability over long periods of time. Some companies which execute operationally have a great run of success but eventually fall victim to competition catching up with best practices. Buffett puts it this way: "The key to investing is not assessing how much an industry is going to affect society, or how much it will grow, but rather determining the competitive advantage of any given company and, above all, the durability of that advantage. The products or services that have wide, sustainable moats around them are the ones that deliver rewards to investors."

Notes:

Mauboussin- Measuring the Moat https://doc.research-and-analytics.csfb.com/docView?language=ENG&format=PDF&sourceid=em&document_id=1066439791&serialid=RojFyPPuyB52GjdsfOiNhlbEB2L63HISLZqSTpL1p48%3d

A Dozen Things I've Learned from Charlie Munger about Moats https://25iq.com/2015/10/10/a-dozen-things-ive-learned-from-charlie-munger-about-moats/

Lecture 9 How to Raise Money https://genius.com/Marc-andreessen-lecture-9-how-to-raise-money-annotated

FT on the Bloomberg Terminal: https://www.ft.com/content/5d6c2d9c-1f61-11e5-ab0f-6bb9974f25d0

Eugene Kleiner https://25iq.com/2016/07/08/a-dozen-things-ive-learned-from-eugene-kleiner-about-investing-and-business/

A Dozen Ways "Virality" Can be Misused and Misunderstood

March 17, 2017

1. "The most important thing that we did [at Facebook's] was I teased out virality and said you cannot do it. Don't talk about it. Don't touch it. I don't want you to give me any product plans that revolve around this idea of virality. I don't want to hear it." Chamath Palihapitiya.

I have the same concerns Chamath is talking about in writing more about virality than I did in my previous post on product/market fit. If Lord Voldemort is *He Who Must Not Be Named* then virality is perhaps the *Business Concept That Must Not Be Named*. But since you will hear the term virality so often I have concluded that it is worthwhile to discuss the concept further. The term virality and ideas that underlie it are borrowed from epidemiology. There is math involved, but if I dig too far into that math now you may stop reading. The best summary description I have found for the non-math inclined was written by Watts, Peretti and Frumin:

In the simplest case, each word-of-mouth transmission occurs with some constant probability β. If each person spreads the word to z others, on average, then the expected number of new converts generated by each existing one is $R = \beta z$, which is called the "reproduction rate" in simple epidemiological models. The reproduction rate is important, because if $R > 1$, then each person who gets the message, on average, will spread it to more than one additional person, who then does the same thing, and so on, leading to exponential growth in the number of people who have received it. On the other hand, if $R < 1$ then any small, initial seed will invariably burn itself out before many additional people get the message. Finally, $R = 1$ is a special "critical" case where the outbreak changes character from exponential collapse to exponential growth. Epidemiologists therefore call $R = 1$ the "epidemic threshold", and in public health, the goal is to reduce R below 1 in order to stop epidemics. In viral marketing, however, where $R = 1$ is usually called a "tipping point" or sometimes a "phase transition," the opposite pertains: in order for something to "go viral," or "tip," it needs to have $R > 1$.

2. "A viral product is one whose rate of adoption increases with adoption. Within a certain limit, the product grows faster as more users adopt it." Sangeet Paul Choudary.

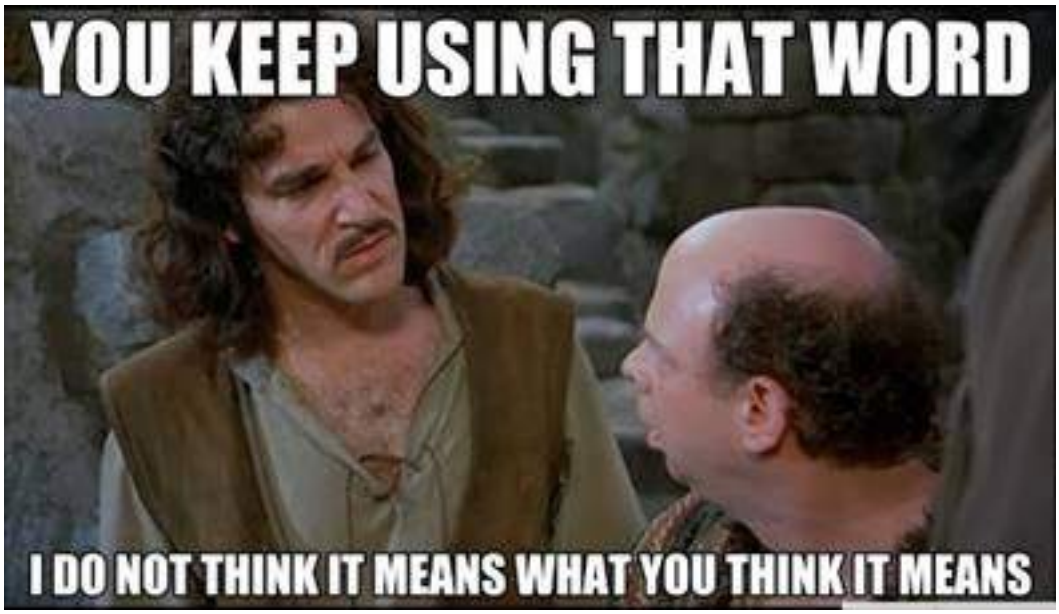

If a business's product is able to grow organically by means of direct customer-to-customer interaction it is viral. For example, Twitter and Instagram both have viral attributes. Twitter has encountered greater limits on its customer growth as it reached very large numbers of users and that has been disappointing to shareholders. Every business has an upper limit on growth and it is just a question of where and where they appear. The point where growth plateaus for any business is determined in no small part by the size of the addressable market. Andrew Chen has written a post in which he describes a business that has saturated its market

as having" jumped the shark" which I think is apt. If a company like Twitter reaches a point where customer growth plateaus it has several logical choices. It can: (1) try to increase revenue per customer; and/or (2) try to create and grow profitable complementary services that serve new addressable markets.

3. **"If you don't delight a customer you don't create a viral effect because delight is the greatest form of virality." Andy Rachleff.**

If you love a product you are going to tell your friends. If someone tells you about a product and it is not lovable you will stop using it. This simple idea reminds me of a well-known Warren Buffett quotation: The only way to get love is to be lovable. It's very irritating if you have a lot of money. You'd like to think you could write a check: 'I'll buy a million dollars' worth of love.' But it doesn't work that way." Rachleff believes that a focus on growth before the value hypothesis has been solved is dangerous to the financial health of a business.

Rachleff points to Netflix as an example of a company that is totally focused on delighting its customers instead of being paranoid about competitors. Here Netflix is parting ways with the Andy Grove dictum about being paranoid about competitors and instead being focused on delighting customers. He quotes Reed Hasting's as saying: "being paranoid about competition is the last thing you want to do because it distracts you from the primary job at hand: Delighting the customer." Especially in a technology business where one company can dominate a market due to network effects, losing focus on delighting customers can be a fatal mistake. Steve Blank puts it this way: "Why are so many founders so reluctant to invest even 500 or 1,000 hours upfront to be sure that, when they're done, the business they're building will face genuine, substantial demand or enthusiasm? Without passionate customers, even the most passionate entrepreneur will flounder at best."

Charlie Munger tells the story of young people approaching him and asking how they can become as rich as he is, but much faster. This desire to get rich quick or create a successful company quick can cause people to make serious mistakes. This most often happens because people seek shortcuts like trying to work the growth and value hypothesis at the same time. If it were easy and fast to do solve the value hypothesis by creating core product value protected by a moat everyone would be rich. The reality is that is no substitute for solving the value hypothesis first. People tell their friend about businesses like Netflix and Costco because the product is delightful. Bill Gurley writes: "'Wow' moments lead to word-of-mouth viral growth and high net promoter scores." That is the best type of virality a business can have.

4. "Products that exhibit viral growth depend on person-to-person transmission as a necessary consequence of normal product use. Growth happens automatically as a side effect of customers using the product." Eric Ries.

Growth should ideally be driven by a natural byproduct of customers generating core product value from their use of the product. The less optional the sharing activity the more naturally viral the product is. Customer should derive value from sharing the product with others without the process feeling forced. Three slides from a presentation by *Anu Hariharan of* A16z helps clarify different types of viral growth and what the objective of viral growth should be:

Distinguishing between various flavors of viral growth

'PRODUCT VIRALITY'

Network effects

A **product that has inherent virality**—i.e., spreads from one user to another as an organic consequence of use—will have a network effect (referred to as a 'direct network effect' in academic literature)

Example: Facebook without friend connections is not useful

TRADITIONAL VIRALITY

Word-of-mouth

This is where customers recommend the product to other customers or distribute it via other platforms (like Facebook and Twitter) due to a positive experience with it

Example: games like Angry Birds; BuzzFeed 'The Dress'

Referrals with no incentives

This is something that spreads without financial or other sharing incentive due to being exclusive, invite-only, or other

Example: Gmail created buzz (the hot thing with 1GB storage that was available only to a few) and encouraged existing customers to send invites slowly

Casual contact

This is where a product spreads virally via customer to customer contact (not via users *intentionally* inviting other users)

Example: Hotmail acquired users by including footers for free accounts at bottom of every email; DocSend acquires customers when users email links to view/download files

So why do those distinctions matter?

Because **product virality** (a product that is inherently viral) leads to network effects

But **traditional virality** does not always lead to network effects

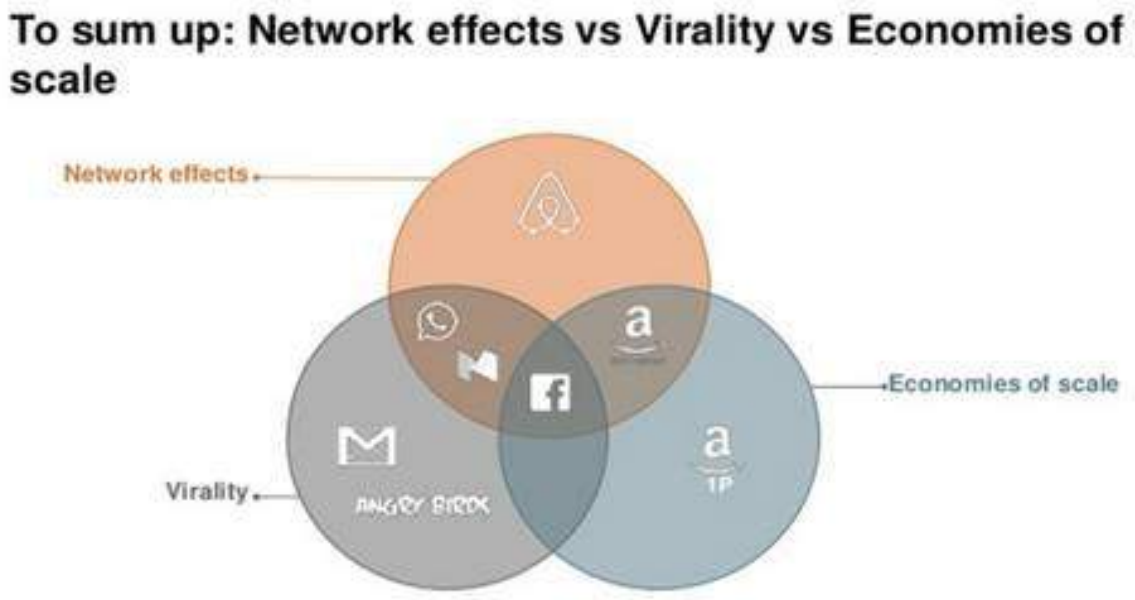

The need to generate positive word of mouth is greatest when the business is offering a consumer product which has low average revenue per account (ARPA) relative to what it would be for an enterprise product. This chart from a lecture by Christoph Janz nicely describes a continuum. The lower the revenue per account (mice and insects)the less the customer acquisition cost (CAC) can be and still create lifetime customer value.

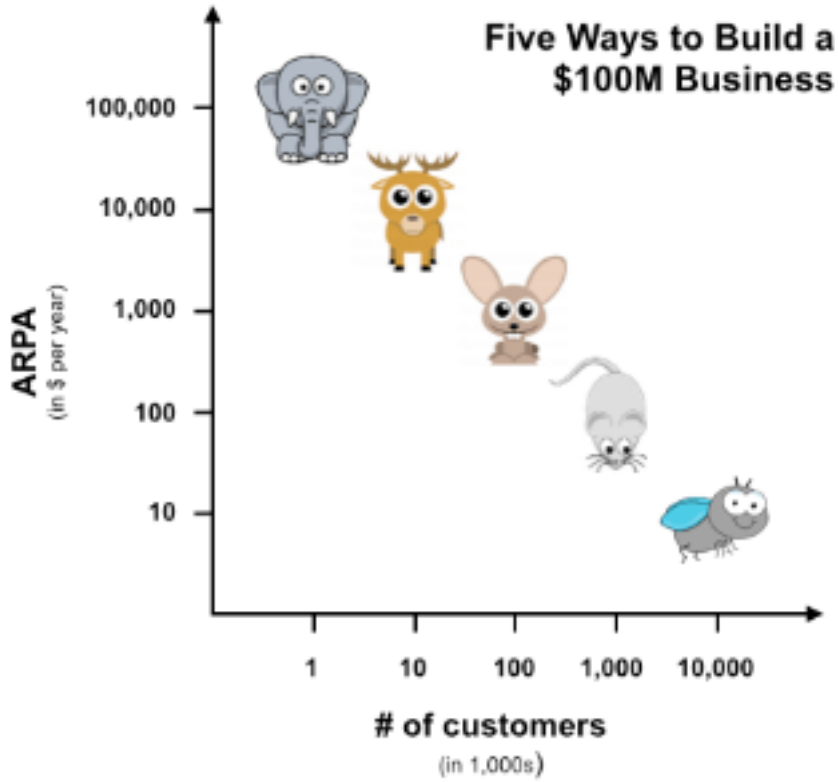

Unfortunately the pressure to keep CAC low can create tremendous pressure to use clever tricks and hacks that may get in the way of delighting a customer. Spam is spam, even if it comes from someone who calls them self a growth hacker.

5. "Virality is something that has to be engineered from the beginning…and it's harder to create virality than it is to create a good product. That's why we often see good products with poor virality, and poor products with good virality. Josh Kopelman.

Building enough delight in to a product from the start is an essential element of virality. The goal is to make the customer say "WOW" when time they use the product. Roelof Botha agrees with Kopelman: "Forget about adding 'viral' to your marketing to-do list after your product is already on the market. You need to bake it into your business model from the very beginning. Viral isn't something you can just make happen. It has to be inherent in your product." Andy Rachleff writes:

"Facebook cut its teeth in the Ivy League without spending a nickel on marketing (or growth as they call it) before making its product more broadly available. Once the company had incredible traction, it broadened its reach. The same can be said for just about every franchise technology company we know (for example: Adobe, Apple, Google, LinkedIn, Oracle, Salesforce, and Twitter). The classic counter-example is Groupon. It ramped up the hiring of salespeople well in advance of determining if it offered customers (merchants) a compelling value proposition… post IPO, the market realized Groupon didn't have a value hypothesis. In other words, Groupon was able to succeed for a while without a proven value hypothesis, but sooner or later the truth catches up with everyone."

6. "Most viral acquisition is built around incentives. Users are incentivized either explicitly (with a clear dangling carrot) or implicitly (through product mechanics) to invite other users." **Sangeet Paul Choudary.**

One approach is to offer existing customers an additional amount of a free service for every successful customer referral. Choudary has created a taxonomy of incentives that includes categories like Network Value, Single-Player Value, Interaction Value, Immediate Value and Mutual Value. For example, in the Network Value category he cites "Draw Something where users may invite friends because they get interesting opponents in the longer run." He adds: "Of course, platforms may use a combination of the above strategies. Dropbox uses a combination of Network Value, Single-Player Value and Mutual Value to incentivize users. Groupon uses a combination of Immediate Value, Interaction Value and, to some extent, Mutual Value." Choudary has a great post on his blog about how natural incentives can be created: "Today's social startups don't start off as networks. They start off as standalone apps. These products enable users to create a corpus of content first. They then connect the users with each other as a consequence of sharing that content."

7. "The goal of all viral efforts is to insert (or "incept") an idea of what a product can do into someone else's head, and to get them so excited about it they want to try it and use it. Remember, at the end of the day, there's only one metric that really matters. How many people are actually using your product." Josh Elman.

In terms of the right approach and additional metrics, Adam Nash suggested this approach in a slide deck:

- Clearly articulate the flows where content from a user can touch a non-user. Wireframes are fine.
- Build a simple mathematical model for conversion rates and multipliers and cycle time. Instrument your flows for these metrics.
- Develop, release, measure, iterate. Be prepared to execute 6-8 release cycles to get your factor high enough to contribute meaningfully.

8. **"Without first creating approximate viral memes that are (a) logically consistent a site's primary value proposition and (b) resonate with something fundamental in the audience's psyche, its virtually impossible to jumpstart a viral growth cycle." Ravi Mhatre.**

Delighting customers with magic moments are critical to creating sustainable viral growth. These magic moments are sometimes referred to as "A-Ha moments." Whatever they are called the objective of the business is to create an emotional affinity with the product for its customers. Delight and love are strong words but they are the right words. Chamath Palihapitiya describes the objective simply: **"**How to get them to an "A-ha" moment as quickly as possible? And then how do you deliver core product value as often as possible?" Instagram, Snapchat and WhatsApp are businesses were successful in creating magic moments and therefore viral growth. Hotmail is often used as an example to illustrate viral growth. Sabeer Bhatia and Jack Smith developed a system that displayed an email displayed on a web page. People tend to forget how much delight that product created with customers. An email on a web page that could be accessed from anywhere for free was magical at that time. In terms of a built in mechanic that enabled virality on top of the underlying customer delight each Hotmail message had the words: *"Get your free email at Hotmail"* at the bottom. Clicking on those words took the person to the Hotmail signup page that explained that the service was free and accessible from any computer. Hotmail was able to acquire more than 12 million subscribers in 18 months despite spending less than $500,000 on marketing. Just the clickable mechanic without the customer delight would not have worked for HotMail.

9. "No single feature determines the virality of the product – instead, it's part of a viral loop that connects a disparate set of functions into a cohesive motivation for the user to tell their friends." Andrew Chen.

If the business can reinforce the magic moments in a feedback loop that continuously reinforce core product value that generate not only growth but a moat against competition. If data is collected during that process the moat gets even stronger. Adora Cheung pointed out in a Stanford Class called *How to Start a Startu*p: "there are three types of growth. Sticky,

viral, and paid growth. Sticky growth is trying to get your existing users to come back and pay you more or use you more. Viral growth is when people talk about you. So you use a product, you really like it and you tell ten other friends, and they like it. That's viral growth. And the third is paid growth." It's hard to overemphasize the value of retaining customers (stickiness) in generating lifetime customer value. As I pointed out in my post on growth, the best way to grow is not to shrink. This may seem like a paradox but it is clear when you do the customer lifetime value math.

10. "My biggest fear was we spam our users and we trick them and it will alienate these people. You won't see it today but you'll see in three years from now or four years from now, and it accelerates when you compound that with a competitor who actually builds a better product that doesn't alienate people." Chamath Palihapitiya.

Using tricks to generate invitations when there is no *core product value* is suicidal. Virality without *product market fit* means what will be communicated virally is that the product sucks. Alex Schultz describes a healthy process where the business actually builds a better product as follows:

"with virality, you get someone to contact import that site. Then the question is, how many of those people do you get to send imports? Then, to how many people? Then, how many click? How many sign up? And then how many of those import. So essentially you want people to sign up to your site to import their contacts. You want to then get them to send an invite to all of those contacts – ideally all of those contacts, not just some of them. Then you want a percentage of those to click and sign up. If you multiply all the percentages/numbers in every point in between the steps, this is essentially how you get to the point of 'What is the K factor?' For example, let's says 100 people get an invite per person who imports, then of those, 10% click, and 50% sign up, and of those only 10 to 20% import, you're going to be at 0.5 – 1.0 K factor, and you're not going to be viral. A lot of things like Viddy were very good at pumping up stories. They got the factor over 1, which is perfectly doable. But if you've got something that doesn't have high retention on the backend, it doesn't really matter. You should look at your invite flow and say 'okay, what is my equivalent to import, how many people per import are invites sent to, how many of those receive clicks, how many of those convert to my site, how many of those then import,' in order to get an idea of you K factor. The real important thing is still to think about retention, not so much virality, and only do this after you have a large number of people retained on your product per person who signs up."

11. "The most disappointing answer is when [entrepreneurs] say 'Oh, we'll just make it viral.' As if virality is something you can choose to add in after the product is baked – like a spell checker. The reason that over $150 Billion is spent on US advertising each year is because virality is so hard. If virality was easy, there would be no advertising industry." Josh Kopelman.

The cost of acquiring a customer is never zero especially after you consider cost of goods sold (COGS) that is often hidden CAC (e.g., freemium). There is nothing in a viral marketing approach that is inconsistent with mass media advertising, including spending on marketing to create a seed of customers that has viral attributes. Marc Andreessen agrees with Kopelman: "Many entrepreneurs who build great products simply don't have a good distribution strategy. Even worse is when they insist that they don't need one, or call no distribution strategy a 'viral marketing strategy. Andreessen Horowitz is a sucker for people

who have sales and marketing figured out."' As an example, Blake Masters writes about a lecture Peter Thiel gave that discusses virality and seeding a market as follows:

"The PayPal team reached an important conclusion: Business development didn't work. They needed organic, viral growth. They needed to give people money. So that's what they did. New customers got $10 for signing up, and existing ones got $10 for referrals. Growth went exponential, and PayPal wound up paying $20 for each new customer. It felt like things were working and not working at the same time; 7 to 10% daily growth and 100 million users was good. No revenues and an exponentially growing cost structure were not. Things felt a little unstable. PayPal needed buzz so it could raise more capital and continue on. (Ultimately, this worked out. That does not mean it's the best way to run a company. Indeed, it probably isn't.)."

12. "There are many products that exhibit virality without exhibiting network effects. A case in point being email and cross-platform communication products. There are many others that exhibit network effects without exhibiting virality. Products with indirect network effects such as marketplaces may not grow virally." Sangeet Paul Choudary.

I have already written a post about network effects but this is the first time I have written specifically about *virality.* The two terms are often confused since they can occur at the same time. Network effects exist when a product gets more valuable the more people use it. Network effects are about increasing **value** and drive business success by increasing the size of a business's moat. Virality is about increasing **speed of adoption** and lowering customer acquisition cost (CAC). As an example, the game Angry Birds was viral, but it did not have network effects. Many multi-sided marketplaces have network effects, but are not really very viral. Facebook is viral and has network effects. Andy Rachleff provides the best closing quote for this post by reinforcing a key idea this post has tried to drive home: "Network effects often drive virality. But another thing that drives virality is delight." When I took driver education classes years ago the teacher would say that if you found yourself headed for a telephone pole look where you want the car to go not at the pole or else you wold steer into the pole. Similarly a startup should look at delighting its customers with magic moments and avoid the pole which is an early focus on the growth hypothesis.

Notes:

Rachleff Twenty Minute VC podcast: http://www.thetwentyminutevc.com/andyrachleff2/

Rachleff Essay in Fast Company: https://www.fastcompany.com/3014841/why-you-should-find-product-market-fit-before-sniffing-around-for-venture-money

Rachleff on First Round Review: http://firstround.com/review/When-it-Comes-to-Market-Leadership-Be-the-Gorilla/

Watts, Peretti and Frum: https://www.microsoft.com/en-us/research/publication/viral-marketing-for-the-real-world-duncan-j-watts-jonah-peretti-and-michael-frumin/

Anu Hariharan A16Z Slide Deck https://www.slideshare.net/a16z/network-effects-59206938/71-By_the_numbers_Product_virality

Bill Gurley: http://abovethecrowd.com/2012/11/13/all-markets-are-not-created-equal-10-factors-to-consider-when-evaluating-digital-marketplaces/

Sangeet Paul Choudary: http://platformed.info/incentives-virality-platform-growth-hacking-hacks/

and http://platformed.info/the-network-effect-playbook-social-products-win-with-utility-not-invites/

David Skok: http://www.forentrepreneurs.com/lessons-learnt-viral-marketing/

Fong: http://www.blissdrive.com/blog/the-k-factor-the-secret-factor-behind-your-companys-growth/

Andrew Chen: http://andrewchen.co/facebook-viral-marketing-when-and-why-do-apps-jump-the-shark/

Virality vs Network Effects http://platformed.info/virality-viral-growth-network-effects/

How to Start a Startup: http://darwine.nl/weblog/files/Stanford-How_to_Start_a_Startup.pdf

Chamath Palihapitiya https://genius.com/Chamath-palihapitiya-how-we-put-facebook-on-the-path-to-1-billion-users-annotated

Incentives: How to Engineer User Growth and Virality http://platformed.info/incentives-virality-platform-growth-hacking-hacks/

The Five Types of Virality https://news.greylock.com/the-five-types-of-virality-8ba42051928d#.le3z1cano

Steve Blank: https://steveblank.com/2012/09/21/why-too-many-startups-er-suck/

Seven Ways to go Viral: https://lsvp.wordpress.com/2007/03/02/seven-ways-to-go-viral/

How to measure the product virality https://medium.com/@devtodev/how-to-measure-the-product-virality-47f4a81d507#.rtkeudnp9

Why Trello Failed to Build a $1 Billion+ Business: https://producthabits.com/why-trello-failed-to-build-a-1-billion-business/

From 0 to $1B – Slack's Founder Shares Their Epic Launch Strategy http://firstround.com/review/From-0-to-1B-Slacks-Founder-Shares-Their-Epic-Launch-Strategy/

Studies:

https://www.sciencedaily.com/releases/2017/02/170227151959.htm

https://www.sciencedaily.com/releases/2017/02/170213124318.htm

Core Product Value and Entrepreneurial Success

March 24, 2017

I have previously written about Minimum Viable Product (MVP) and Product/Market Fit (PMF). These are important processes based on the scientific method that can be used to test a value hypothesis. That hypothesis does not just appear via spontaneous generation. Andy Rachleff describes what should be included in a value hypothesis as: "the features you need to build, the audience that's likely to care, and the business model required to entice a customer to buy your product."

At the center of any value hypothesis is "core product value" and the idea or vision behind that CPV is created by the entrepreneur.

As an example of how this process works and fits into a bigger picture, Chamath Palihapitiya's approach has been depicted below by one of his colleagues:

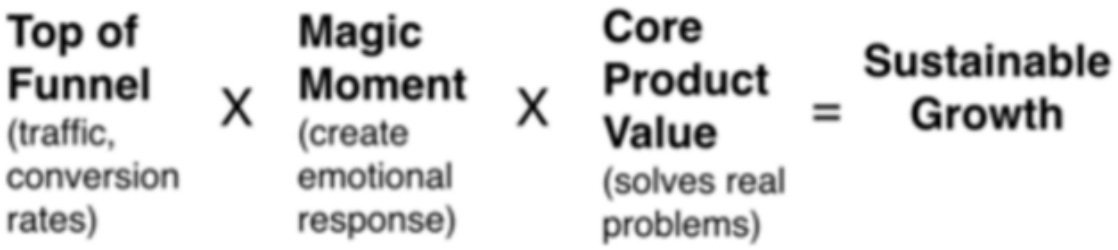

Core product value represents a solution a real problem that is valuable enough to cause people to want to pay for a product. Core product value is first recognized when the customer connects with the product in an A-Ha moment.

Core product value is an essential element of product/market fit which is a broader concept that requires additional elements. Andy Johns says: "For products that get the 'magic moment' and 'core product value' right, the top of the funnel naturally and rapidly fills." in other words, without core product value and a magic moment it is not likely that people will convert from guests to customers. In a talk at Index Ventures Andy Johns talked about an example of what he feels is core product value:

"One current company with a clear core product value, Johns says, is Snapchat. Their core value isn't just sexting as some like to believe; rather, it's the removal of a designated target and mental friction from messaging. Users receiving snaps don't have to worry about who else may be seeing a message or what their response is, and by removing that moment of hesitation, a social burden is lifted."

You can disagree with his conclusion but I think even then you will understand his point. As another example, Johns believes that for Wealthfront, where he works now, core product

value is giving any customer access to low-cost, tax-efficient, diversified investment portfolios via a direct to consumer model.

Finding a new source of core product value is: (1) very hard to do and (2) a rare event. As context, there are roughly 5,000 seed stage startups a year and only 800 of them raised a Series A round in 2016 reported Mattermark. Why do so many startups fail to successfully raise an A round? There are many reasons for this but most often it is because there is insufficient confidence among investors that the business has found or will find core product value or product/market fit. Andy Johns points out that among the right questions to ask when thinking about whether something has core product value are: Is the problem your product is solving (1) painful, (2) important for your customers, and (3) is there a sizable market behind this problem? He adds that: "some firms create new, meaningful experiences, rather than solving an existing, painful problem. One could count Facebook, Twitter, Snapchat, Instagram, and others in this group."

Fred Wilson describes the steps on a startup's journey:

"The first step you need to climb is building a product, getting it into the market, and finding product market fit. I think that's what seed financing should be used for.

The second step you need to climb is to hire a small team that can help you operate and grow the business you have now birthed by virtue of finding product market fit. That is what Series A money is for.

The third step you need to climb is to scale that team and ramp revenues and take the market. That is what Series B money is for.

The fourth step you need to climb is to get to profitability so that your cash flow after all expenses can sustain and grow the business. That is what Series C is for.

The fifth step is generating liquidity for you, your team, and your investors. That is what the IPO or the Secondary is for."

Fred seems to be saying that he wants his portfolio companies to have product/market fit before the Series A which means they will also have discovered core product value as part of that process. It is worth pointing out that what constitutes product/market fit is always to a degree in the eye of the beholder, is not a discrete event and can disappear (e.g., a competing product emerges) and reappear like a Cheshire cat. I did a quick survey of a few VCs to get a current sense of what the standards are on product/market fit at a Series A financing. One venture capitalist I talked to said that only 5% of Series A rounds involve a company that does not have product/market fit. Another said that the percentage ranged from 10 to 40% depending on the firm and that it varies by partner. He also said that Series A rounds that do not have product/market fit "tend to skew smaller ($3-5M) and the firm tends to lead taking the whole round." Another VC mentioned that there has been some easy grading on whether product/market fit exists and so that impacted her estimate of 20%. Another VC said: "15-20% are non-PMF A rounds, but they seem to be exceptional either by virtue of all-star founding team or a particularly hot area." Another VC joked that that 30% of A rounds funded by VCs did not have product/market fit intentionally and another 29% failed to achieve this unintentionally. Raising funds after the seed round without proven core product value and product/market fit or can happen for many reasons including because the venture

backers: (1) confuse progress on the growth hypothesis with a solution to the value hypothesis (product/market fit); (2) hope that product/market fit can still be discovered with more cash or (3) various errors in judgment caused by a really great story told by a really great story teller. The startup landscape is littered with the invisible dead bodies of failed startups.

The VCs I talked to generally said that a Series A without product/market fit was more likely if there is a huge potential market, a great story is being told and the specific venture capitalist involved is a "people person" on a relative basis.Having said that, Josh Kopelman's advice on this issue is excellent: "Keeping your burn rate low until you have product/market fit will give you the best chance at building a big company. There's nothing that increases your odds of a successful A round like a successful launch followed by customers that really love what you've built. These inflection points change year to year — so be sure you know what's currently fundable." Someone like Elon Musk may be able to raise an A round without core product value and product/market fit, but you are not Elon Musk, and neither am I.

As an aside, as Mark Suster and others have said:

"what actually IS the definition of a seed vs. A-round.

'Cautionary note: No competent VC is actually fooled when you show up after raising $6M in seed financing and say you're now raising an A!'

— Marc Andreessen (@pmarca) October 7, 2014

This is something I think entrepreneurs don't totally understand and it's worthwhile they do. My view: "Spending any time or energy trying to game the 'definition' of your round of fund raising is a total waste. Nobody cares. No VC will be so naive as not to see straight through it. And actually many will probably find the gamesmanship as a bad sign of lack of property priorities or perspective."… If it looks like an A-round, smells like an A-round & tastes like an A-round … it's an A-round…. if you raised $3–5 million from well-known seed funds or from a VC and you're asking for $8–10 million in your next round … that next round is a B-round no matter what we collectively decide to call it when we VCs fund you."

It is possible for a startup which has not proven that they have core product value and product/market fit raise a Series B? Sure. But is it likely? No. is is significantly less likely that in an A round. Significantly fewer firms raise a Series B than a Series A. Sreies B is often called the hardest round to raise. Fred Destin writes: "Series B is hard for a simple reason: suspension of disbelief fades and is replaced by an increasingly cold, hard look at milestones and progress. Series B is the round where the rubber meets the road, where the promise has to be met with numbers and projections."

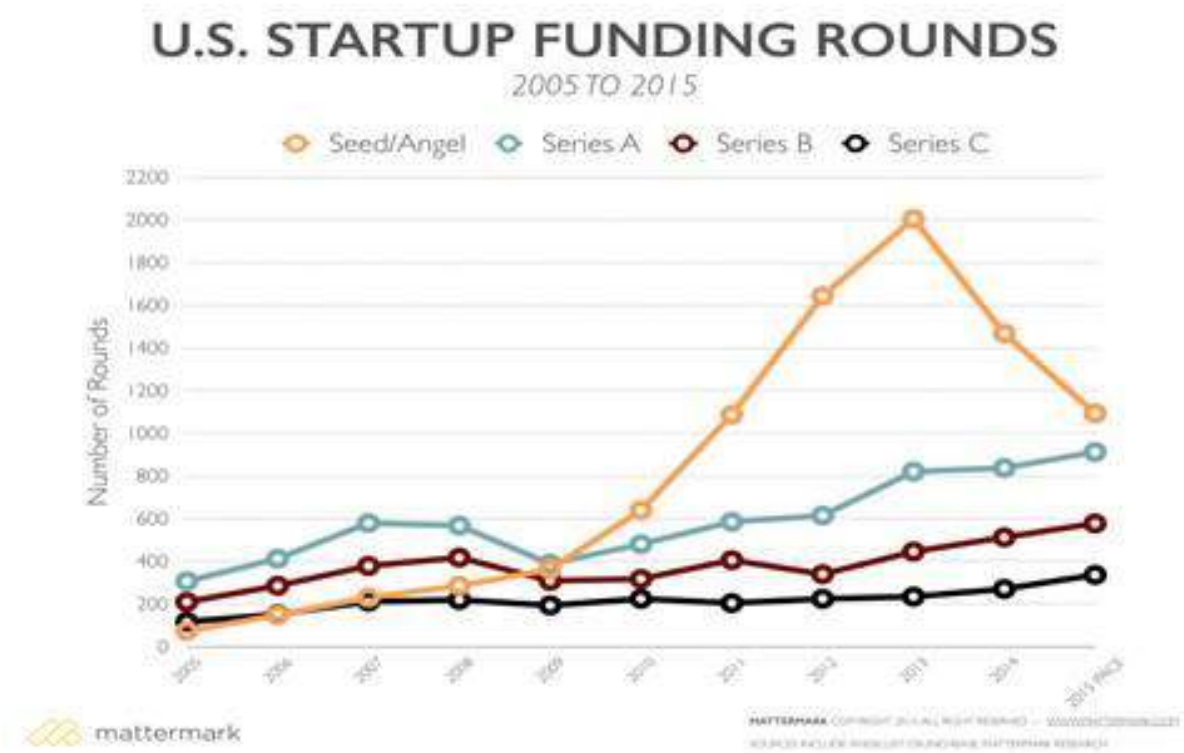

Andy Chen has written about **TTPMF** – the "Time to Product/Market Fit." Remembering that you must have core product value to get to product/market fit his view is:

"TTPMF has to be less than 1-2 years or else your startup will implode. Ask anyone who's been working on a product for more than 2 years and doesn't have traction to show: It really, really sucks. The first 6 months can be fun because it feels like you're painting on a blank canvas, but soon enough, there's just fatigue and the window of opportunity shifts. Platforms change, investors get disengaged, your employees start getting excited about other companies. So if you miss your window, then you'll run out of money or energy or both."

Chamath Palihapitiya has a gift for getting to the point. You can't make the most important point about core product value in a simpler way than this slide:

Steve Blank believes: "The best entrepreneurs are the ones who are passionate about solving a problem because they've had it or seen others have it, love those customers, love solving that problem or have been domain experts. Those are authentic entrepreneurs." He believes "entrepreneurs, at their heart, are artists. … What comes out from the great artists is something completely unexpected. World class entrepreneurs understand something that is driven by passion." He believes world class entrepreneurs are connected to their subject and with their customers.' Blank believes entrepreneurship is a calling rather than a job. I believe that this is why many venture capitalists describe what they do as "artisanal." Blank believes:

"Founders fit the definition of a composer: they see something no one else does. And to help them create it from nothing, they surround themselves with world-class performers. This concept of creating something that few others see – and the reality distortion field necessary to recruit the team to build it – is at the heart of what startup founders do. It is a very different skill than science, engineering, or management. Entrepreneurial employees are the talented performers who hear the siren song of a founder's vision. Joining a startup while it is still searching for a business model, they too see the promise of what can be and join the founder to bring the vision to life."

The great entrepreneurs tend to be persistent, obsessive and relentless, but the really great entrepreneurs also seem to have a gift for looking at the world from a customer's viewpoint. These entrepreneurs seem to know instinctively what the customer wants. Most artistic entrepreneur I have ever seen is Craig McCaw. He has an amazing way of putting himself in the shoes of the customer. Rich Barton is very similar in his ability to know whether (1) the customer's problem is real and significant enough that they will pay for the solution, the market is big, and that there is a business model with a potential moat. Steve Jobs had an artist's skills in understanding what customers wanted. Bill Gates, Jim Sinegal and Howard Schultz all fall in the artist category. The people are also missionaries rather than

mercenaries. Missionaries are far less inclined to sell the business and more inclined to build a franchise that is truly lasting. Do all founders who are missionaries, visionary, persistent, obsessive and relentless succeed? No. But they succeed more often. I talk about this is my blog post on the wonderful Michael Mauboussin book *The Success Equation*. Mauboussin wrote: "The trouble is that the performance of a company always depends on both skill and luck, which means that a given strategy will succeed only part of the time. So attributing success to any strategy may be wrong simply because you're sampling only the winners. The more important question is: How many of the companies that tried that strategy actually succeeded?" Once up a time long ago I read a book called *In Search of Excellence*. The authors analyzed leading companies are sorted out the secrets of success in a way that suggested that it was a formula that could be replicated easily. The best companies do X, Y and Z was the claim. What was missing of course were all the companies that did X, Y and Z and failed. Mauboussin writes:

"There are numerous books that purport to guide management toward success. Most of the research in these books follows a common method: find successful businesses, identify the common practices of those businesses, and recommend that the manager imitate them. Perhaps the best known book of this genre is *Good to Great* by Jim Collins. He analyzed thousands of companies and selected 11 that experienced an improvement from good to great results. He then identified the common attributes that he believed caused those companies to improve and recommended that other companies embrace those attributes. Among the traits were leadership, people, focus, and discipline. While Collins certainly has good intentions, the trouble is that causality is not clear in these examples. Because performance always depends on both skill and luck, a given strategy will succeed only part of the time.Jerker Denrell, a professor of behavioral science, discusses two crucial ideas for anyone who is serious about assessing strategy. The first is the undersampling of failure. By sampling only past winners, studies of business success fail to answer a critical question: How many of the companies that adopted a particular strategy actually succeeded?"

The best venture capitalists want to be involved in enabling entrepreneurs to be successful in this artistic process. You will sometimes hear people say "providing venture capital is just finance. You go to school and listen to a bunch of case studies and learn the formula." That's bullshit. I don't know anyone with any significant degree of success in venture capital who thinks that way. The more the venture capitalist understands that finding core product value is an art and what they do is provide a service that goes beyond finance, the better their financial result. The best venture capitalists spend a lot of time listening, let the founders do the heavy lifting and do not try to supply the vision ("You do not want a venture capitalist who hires a dog and then tries to do the barking"). Marc Andreessen says: "You want to have as much 'prepared mind' as you possibly can. And learn as much as you can about as many things, as much as you can. You want to enter as close as you can to a zen-like blank slate of perfect humility at the beginning of the meeting saying 'teach me'…. We try really hard to be educated by the best entrepreneurs."

Some of the best venture capitalists are people who ask great questions that help the entrepreneur find core product value and get to product market fit. Bruce Dunlevie is a great example of someone who has a service mentality in his work as a venture capitalist. Many entrepreneurs trust him implicitly since they know he asks great questions and has sound judgement. Here's a story told by Jeff Hawkins about that skill:

“Hawkins: Yes, Palm was struggling. We had 27 employees, we had a couple of million dollars left in the bank. All of our partners had abandoned us on doing Zoomer 2. No one was interested in doing PDAs at all, and there was no real business selling PalmConnect and Graffiti. We were kind of bummed out, everyone was sort of miserable about it. But I still believed in the mobile computing space. So Donna Dubinsky and I went and visited one of our VCs one time, Bruce Dunlevie. We were sitting in his office and we were complaining about how our partners had abandoned us and how everything was hard, and Bruce said– my recollection was in an annoying tone, “Well, I don’t want to hear you complain about this. Do you know what you should be doing?” Something along those lines. And I said, “Yes, I know what we should be doing,” although I had no idea what we should be doing. But I said, “I can think of it”– immediately I said I can think of what we should do. If you ask me, I’ll tell you what we should do, something different. It occurred to me right away. I said, “Well we should do a new computer and we’re going to take everything we’ve learned and fix all the problems and do it again. That’s what we should do.” I didn’t know what that would look like yet because we had never really considered doing the whole computer again ourselves. We were still trying to work with Casio and GeoWorks and other people. And Bruce said, “Well if you know what to do, why don’t you go do it?” And our answer was, “We don’t really have the money to do that, we don’t really have the right type of people to do that– we only have software people. But if you think we can, if you don’t mind us trying, we’ll go do it.” And that was the beginning, the genesis of the Pilot. That night I went home and– I’m not sure, I think it was that night, maybe it was the next night, I don’t remember, I think it was that night.”

Here is an example of what WeWork’s *Adam Neumann* says about Dunlevie’s contribution:

“One example of this is Benchmark Capital, one of our investors. It’s a very successful VC firm, that works with companies like Uber, Snapchat, and Instagram. The partner that brought me in, Bruce Dunlevie, one of the original founders, is one of the smartest people I’ve ever met. Immediately after I met him, he became one of my five to seven close “advisors” that I asked a lot of both business and personal questions.”

There are many other successful entrepreneurs who tell the same story about Bruce. Someone I know said once: “Most stories about Bruce revolve around him being the world’ greatest person who is the best advisor anyone could ever hope for.” Those are qualities that an entrepreneur should seek in a venture capitalist. Dunlevie said to me once: “pattern recognition is an essential skill in venture capital.” While the elements of success in the venture business do not repeat themselves precisely, they often rhyme. In evaluating companies, the successful venture capitalist will often see something that reminds them of patterns they have seen before. It might be the style, chemistry or composition of the team or the nature of the business plan. Some things will be fundamentally different but other things may be familiar. While the pattern will be similar, something in what the team is doing will seem to break a rule. Part of the pattern that is being recognized is a rule breaking innovation of some kind which drives new value.

Creating “core product value” by finding a value hypothesis that is capable of being the foundation of a valuable business is a process similar to alchemy says Benchmark Capital’s Peter Fenton:

“Doing this job for almost 20 years now has taught me far more about people than about business. So let me first answer what I’ve learned about business, and in this case I mean the

business of investing in startups. I started out as someone who had all the conceptual overhead needed to sound intelligent in our world, Porter's 5 Forces, the Innovators Dilemma, and Crossing the Chasm. I would, in my former firm's parlance, develop a "prepared mind" in a sector so I could see where the logical opportunities should exist. I became an expert on Storage, on Application Software, on Supply Chain. All of that, I came to realize, was useless without the alchemy of an entrepreneur who was playing around with explosive market forces**.** Yes we can look, and it helps to look with a lens, but the best ideas and companies aren't filling logical white spaces. They are touching nuclear reactor of some force that will yield, and yield quickly, to an entrepreneurial leader."

"I also came to realize that at the beginning, no analysis can capture 'what can go right' without sounding like you are clinically insane. Having seen the Series A pitch for Facebook, Uber, Snap, Twitter, Vmware…$1B in revenue for any of those companies would have been nearly impossible to imagine. Yet in each of those cases, I vividly remember the meetings, the day, the setting…and this feeling that an exceptional entrepreneur had touched on something nobody else had understood at their level of depth and insight. Each in its own way felt limitless. I'll never forget meeting Evan Spiegel in 2012 at Sightglass in SF and leaving thinking, I know with all of my being that this person, this product, will give humanity back the playful joy of self-expression, which had been stolen away by then current social networks. Sometimes it's obvious."

What else helps someone find core product value? Domain expertise, beginner's mind, and a personal desire to solve a problem that has caused the entrepreneur genuine personal pain. Jim Goetz of Sequoia believes:

"Many of the entrepreneurs that we back are attacking a personal pain." "The common thread [between Sandy Lerner and Len Bosack (the founders of Cisco), Reid Hoffman (LinkedIn) and Omar Hamoui (AdMob)] is that these were all sketchy misfits, unknowns, who all focused on [solving] personal pain points and were all willing to put something out early and iterate."

The best case happens for the venture capitalist when someone has the savant qualities I described when it comes to products and is attacking a personal pain that the care about is a missionary fashion. Michael Moritz of Sequoia not surprisingly has the same views as Goetz: "When we help organize one of these companies at the beginning, it never looks like the world's greatest idea. I think it's the marketing and PR department that rewrites history and tells you that it was always the world's greatest idea. What they don't say is that at the very beginning there was great uncertainty and a great lack of clarity." "We just love people who perhaps to others look unbackable. That has always been our leitmotif of doing business." "If you have been around the start of success it is far easier to recognize it again."

Steve Blank said this during a GigaOm video interview: "I did this at SXSW. I said 'There are 500 people in this room. The good news is, in ten years, there's two of you who are going to make $100 million. The rest of you, you might as well have been working at Wal-Mart for how much you're going to make.' And everybody laughs. And I said, 'No, no, that's not the joke. The joke is all of you are looking at the other guys feeling sorry for those poor son-of-a-bitches.'" Financial success in creating and funding startups follows a power law. This means that a very small number of startup founders, employees and investors will reap most all of the financial rewards. The overconfidence heuristic will make most everyone

overconfident that the winners will include them. The inevitable failures are hard for individuals, but the right thing for society as a whole.

One thing is clear: if an entrepreneur wants to discover core product value they should find a venture capitalist who knows that journey well, has a service mentality, asks great questions and has sound judgment.

Notes:

Chamath Slide Deck: https://www.slideshare.net/growthhackersconference/how-we-put-facebook-on-the-path-to-1-billion-users

Fenton in Quora: https://www.quora.com/What-has-being-a-venture-capitalist-taught-you-about-people-and-business

Andy Johns:
http://linkis.com/firstround.com/revie/VuHlS http://www.greylock.com/building-growth-model-company/

Index Ventures: https://www.indexventures.com/news-room/index-insight/growth-101-wealthfront%E2%80%99s-andy-johns-on-how-to-build-and-test-a-sustainable

Alex Schultz: https://www.youtube.com/watch?v=n_yHZ_vKjno

Bruce Dunlevie story re
Palm: http://archive.computerhistory.org/resources/text/Oral_History/Hawkins_Jeff/Hawkins_Jeff_1.oral_history.2007.102658113.pdf

Bruce Dunlevie interview:
https://books.google.com/books?id=FCMbUYFSZVQC&pg=PT297&lpg=PT297&dq=%22what+we+do+has+nothing+going+for+it+at+the+time+we+look+at+it%22+Bruce&source=bl&ots=FrkZgK8a-h&sig=_QzYXUyWiAeN3wDRNT1sgX9HUGE&hl=en&sa=X&ved=0ahUKEwiI7YPF_-nSAhXhr1QKHVCdBTUQ6AEIGjAA#v=onepage&q=%22what%20we%20do%20has%20nothing%20going%20for%20it%20at%20the%20time%20we%20look%20at%20it%22%20Bruce&f=false

Fred Wilson: http://avc.com/2014/06/what-seed-financing-is-for/

Steve Blank: https://steveblank.com/2011/05/27/entrepreneurs-as-artists/ https://www.youtube.com/watch?v=BhD9CXAsVAI and https://steveblank.com/2011/03/31/entrepreneurship-is-an-art-not-a-job/

Andy Chen: http://andrewchen.co/ttpmf-time-to-product-market-fit/

Adam Neumann: https://www.fastcompany.com/3041812/why-im-glad-i-never-had-a-mentor

Mark Suster: https://bothsidesofthetable.com/what-is-the-definition-of-a-seed-round-or-an-a-round-2cf20264297c#.1lsy4fxl4

Josh Kopelman: http://firstround.com/review/what-the-seed-funding-boom-means-for-raising-a-series-a/

A Dozen Beliefs About Business, Money and Life that Kanye West Shares With Other Great Entrepreneurs and Investors

March 31, 2017

1."For me, first of all, dopeness is what I like the most. Dopeness. People who want to make things as dope as possible, and, by default, make money from it."

As everyone who is dope knows, "dopeness" is an adjective used to describe the awesomeness of a person, place or a thing. In these sentences Kanye is in effect repeating the Y Combinator motto as stated by Jessica Livingston: "Make something that people want. If you create something and no one uses it, you're dead. Nothing else you do is going to matter if people don't like your product." https://25iq.com/2016/04/09/a-dozen-things-ive-learned-from-jessica-livingston-about-business-and-investing-2/ Kanye understands that the establishing the "value hypothesis" (finding product/market fit) must precede the "growth hypothesis."

2. "Please avoid trying to talk me out of being me in the future."

Kayne wouldn't be interesting if he wasn't Kanye. In making this statement about "me being me" he is channeling a point made by people like Bill Gurley about the importance of sometimes being a contrarian if you want to outperform a market. Gurley has said in this point: "Being 'right' doesn't lead to superior performance if the consensus forecast is also right." Andy Rachleff agrees: "What most people don't realize is if you're right and consensus you don't make money. The returns get arbitraged away. The only way as an investor and as an entrepreneur to make outsized returns is by being right and non-consensus."

3. "One of my biggest Achilles heels has been my ego. And if I, Kanye West, can remove my ego, I think there's hope for everyone."

Kayne recognizes in these sentences a point made Howard Marks: "The biggest investing errors come not from factors that are informational or analytical, but from those that are psychological." Paul Tudor Jones feels the same way: "Don't be a hero. Don't have an ego. Always question yourself and your ability. Don't ever feel that you are very good. The second you do, you are dead." Phil Fisher had a similar view: "There is a complicating factor that makes the handling of investment mistakes more difficult. This is the ego in each of us."

4. "If you read books – which I don't, none at all – about how to become a billionaire, they always say, 'You learn more from your mistakes.' So if you learn from your mistakes, then I'm a f*cking genius."

This statement about the importance of learning from mistakes is straight up Charlie Munger: who has made these same points about mistakes which are quite similar to Kayne's thesis: (1) "There's no way that you can live an adequate life without many mistakes." (2) "Of course, there's going to be some failure in making the correct decisions. Nobody 'bats a thousand.'" (3) "I don't want you to think we have any way of learning or behaving so you won't make mistakes." Munger is a self-described "book with legs sticking out" and reads constantly. But he would never read a book about how to become a billionaire.

5. "Having money isn't everything, not having it is."

In my blog post abut what you can learn from comedians I pointed out that Johnny Carson once said: "The only thing money gives you, is the freedom of not worrying about money." Kayne seems to understand why Seth Klarman said: "The trick of successful investors is to sell when they want to, not when they have to." People who don't have cash can be forced to sell other assets when they do not want to. Cash is always valuable, but there are times in the business cycle when cash is particularly valuable and planning ahead for those times is wise.

6. "I just have to look at say, 'What do I have to lose? We only have everything to gain.'"

Kayne is thinking like Nassim Taleb on the value of convexity: "Optionality is the property of asymmetric upside (preferably unlimited) with correspondingly limited downside (preferably tiny)." Sam Zell said something very similar in a New Yorker profile: "Listen, business is easy. If you've got a low downside and a big upside, you go do it. If you've got a big downside and a small upside, you run away. The only time you have any work to do is when you have a big downside and a big upside." This statement from Kanye is all about the value of seeking positive optionality. Every once in a while, if you are looking hard for opportunities, you will find a mis-priced bet within your circle of competence with a relatively capped downside and a huge potential upside.

7. "Visiting my mind is like visiting the Hermès factory. Sh*t is real."

Kanye appears to be comparing himself to certain hedge fund founders in terms of his self-appraisal of his own IQ. Many hedge fund greats are unabashed fans of their own mental competence like Kanye. John Bogle pointed out the dangers of overestimating one's own IQ when he said: "We all think we're above average investors just like we all think we're above average dressers, I suppose, above average intelligence. Probably we all think we're above average lovers for all I know."

8. "I am so credible and so influential and so relevant that I will change things."

Kanye is channeling George Soros on reflexivity. Soros believes: "Markets can influence the events that they anticipate. Markets and the views of people about markets interact dynamically in their effect on each other. There is a two-way reflexive connection between perception and reality which can give rise to initially self-reinforcing but eventually self-defeating boom-bust processes, or bubbles. Every bubble consists of a trend and a misconception that interact in a reflexive manner." Kanye understands that people almost never make decisions independently. Duncan Watts writes:

"when people tend to like what other people like, differences in popularity are subject to what is called "cumulative advantage," or the "rich get richer" effect. This means that if one object {like Kanye] happens to be slightly more popular than another at just the right point, it will tend to become more popular still. As a result, even tiny, random fluctuations can blow up, generating potentially enormous long-run differences among even indistinguishable competitors — a phenomenon that is similar in some ways to the famous "butterfly effect" from chaos theory….n such a world, in fact, the question "Why did X succeed?" may not have any better answer than the one given by the publisher of Lynne Truss's surprise best seller, "Eats, Shoots & Leaves," who, when asked to explain its success, replied that "it sold well because lots of people bought it.""

9. "I've gotta get my money up to another level cause it ain't on Jay Z level, it ain't on Diddy level yet. I'm talking about economic empowerment because the economics give you choices, the choices can help give you joy and freedom. And I'm trying to find that joy."

Kayne seems to be talking about issues that Bruce Berkowitz identifies in this quote: "Cash is the equivalent of financial Valium. It keeps you cool, calm and collected." In my blog post on what you can learn from comedians I note that Chris Rock once said: "Wealth is not about having a lot of money; it's about having a lot of options."

10. "I think business has to be stupider. I want to do really straightforward, stupid business — just talk to me like a 4-year-old."

Kanye is advocating the same game plan Warren Buffett does here: **"**We try to stick with businesses we believe we understand. That means they must be relatively simple and stable in character. If a business is complex or subject to constant change we're not smart enough to predict future cash flows." Risk comes from not knowing what you are doing and keeping it

simple lowers risk for that reason.Business is hard. Vanity Fair notes about Kanye's business efforts so far:

"In 2009, he put all of his musical endeavors aside to work on his label, Pastelle—which then shuttered after seven months. Add to that however much it cost to create his line of G.O.O.D. merchandise, marketed to fans of his record label. He was chewed up and spit out for his attempt at a high-end women's-wear line called Kanye West in 2011. The line never made it to stores."

Good judgement comes from experience and a lot of that come from bad judgement said Will Rodgers and hopefully Kayne is learning from his troubles as well all should.

11. "One of my courses was piano. I actually went to college to learn how to play piano. Talk about wastin' some money."

Kanye is expressing concern about the value of some aspects of college that he shares with Peter Thiel who has said: "I've never claimed that nobody should go to college or that we should shut down all the universities in this country or anything like that. What I have argued is that there is no one-size-fits-all, and that we need to have a more diverse array of things that people, including our most talented people, can be doing." Learning should not start or stop with college.

12. "My definition of success is dropping a Charlie Sheen-level tweet and being like, 'I am in debt and f— you.'" "Also for anyone that has money they know the first rule is to use other people's money."

Kayne has probably not thought a lot about the ideas of Mike Milken. But Milken did once say something that Kanye should know: "Debt isn't good. Debt isn't bad. For some companies, close to zero debt is too much leverage. For other companies, nearly 100 percent much higher levels of debt can easily be absorbed." The same idea applies to people. As Charlie Munger has said: "I've seen more people fail because of liquor and leverage – leverage being borrowed money." Montier adds: "Leverage can't ever turn a bad investment good, but it can turn a good investment bad. When you are leveraged you can run into volatility that impairs your ability to stay in an investment which can result in "a permanent loss of capital."

P.s., Kanye is Kanye, and I am not. Why is Tren writing about people like Kanye? First, I think you can learn something from everyone. Second, it is hard to get people to read anything about finance. Adding someone like Kayne to the mix increase the number of people who will read the post. I can see it in the data. Why do I care about page views if I have no advertising or other business model? As you may know I am fond of quoting Charlie Munger who once said: "The best thing a human being can do is to help another human being know more." If people don't read they can't learn.

You may ask: "Why can't Tren just write in a 'seven simple rules for success' format? Unfortunately the world does not work that way. A step-by-step formula for achieving wealth and happiness does not exist. Over the course of over 215 blog posts I have been advocating that readers adopt the "worldly wisdom" approach of Charlie Munger which is based on the concept of a "lattice of mental models." Your task, if you decide to adopt this approach, is to combine a range of mental models into a lattice and acquire

"worldly wisdom." A premise of the worldly wisdom approach is that there is no precise recipe for success. Munger instead suggests that individuals combine attributes like patience, rationality, cultivating optionality and aggressive opportunism. While the combination of attributes like patience and pouncing on opportunities may seem a bit strange at first, it is an approach that can lead to a highly favorable outcome. Munger says: "You've got to array your experience - both vicarious and direct - on this latticework of models. You may have noticed students who just try to remember and pound back what is remembered. Well, they fail in school and in life." By reading about the approaches of others and their successes and failures, you can begin to spot patterns that can help you make decisions in life. For example, you can do things like learn not to pee on an electric fence without doing it yourself. Be careful out there.

Notes:

Duncan Watts: http://www.nytimes.com/2007/04/15/magazine/15wwlnidealab.t.html?_r=1&ref=magazine&pagewanted=all&oref=slogin

A Dozen Lessons about Business, Investing and Money from Lil Wayne (Weezy)

April 7, 2017

1. "They can't put no more Weezy baby out. That's that cash money vasectomy." *From the song: Grateful.*

That there was a feud between Lil Wayne and Birdman and another feud with the record label which has distributed Weezy's music is well known. The core of the issue is "wholesale transfer pricing" (WTP). Simply put: WTP is the bargaining power of A that exclusively supplies a unique product X to B which may enable A to take the profits of B by increasing the wholesale price of X. In this case, the artist (Weezy) is unhappy about by the nature of the revenue split between himself, Cash Money Records and the distributor. The good news is that industry revenue are rising:

"The outbreak of streaming has officially helped the music industry rebound after nearly a decade of decline, with the Recording Industry Association of America reporting $7.7 billion in revenue in 2016. That's the music industry's highest gross since 2009 and, at an 11 percent improvement over 2015, its best gains percentage-wise since 1998."

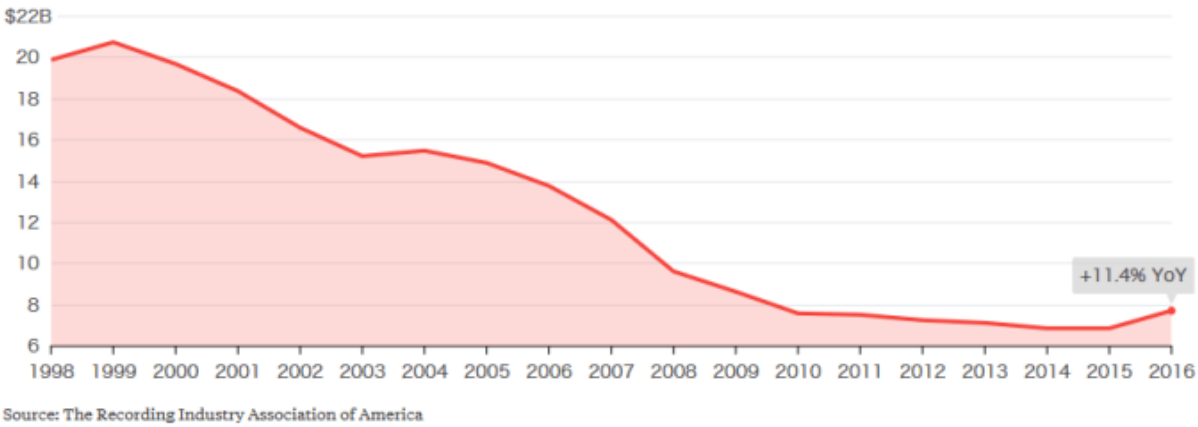

2."The garden's full of snakes so I had to escape." *From the song: CoCo.*

What relative WTP determines is the structure of what is called an industry profit pool, which is the total amount of profit earned in an industry at all points along the industry's value chain. The amount of sustainable profit generated by any business is driven by whether it has a moat and the definitive essay on moats was written by Michael Mauboussin. In that essay he writes:

"A profit pool shows how an industry's value creation is distributed at a particular point in time. The horizontal axis is the percentage of the industry, typically measured as invested capital or sales, and the vertical axis is a measure of economic profitability… Profit pools are particularly effective because they allow you to trace the increases or decreases in the components of the value-added pie. One effective approach is to construct a profit pool for today, five years ago, and ten years ago and then compare the results over time."

Mauboussin created this profit pool example which illustrates how some firms can be profitable and others not in the same value chain:

Exhibit 7: Airline Industry Profit Pool by Activity

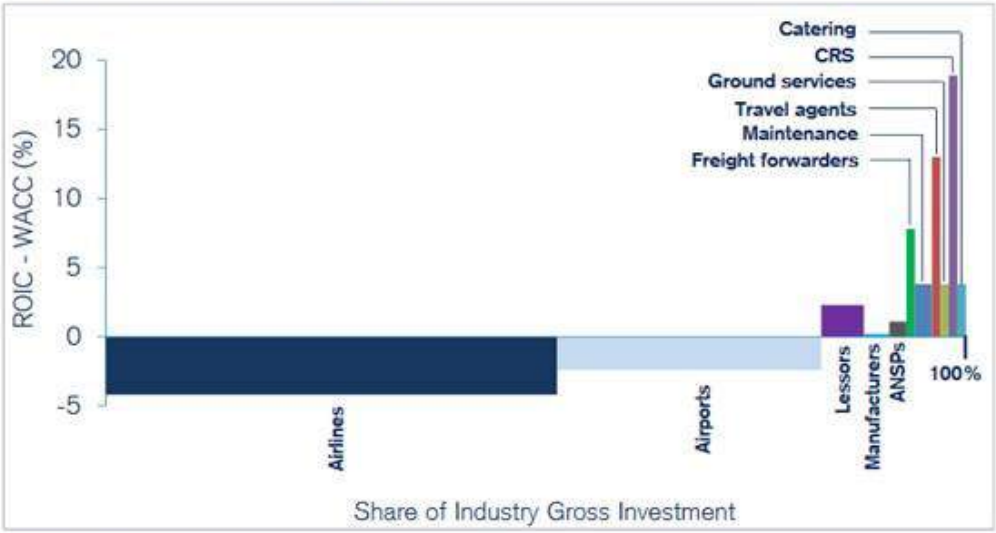

Source: Based on International Air Transport Association, "Vision 2050," February 12, 2011; Credit Suisse.

“the industry as a whole destroyed an average of $19 billion of shareholder capital per year through the 2002-09 business cycle”

The nature of a given profit pool can change over time or not. For example, someone can argue that new developments, like the recent reduction the number of airlines has changed the situation now and profit for airlines may be more sustainable. That is true but that is not relevant to the 2002-09 time period in the chart. One really interesting fact about how the airline industry has changed and how its profitability prospects may have improved is the rising importance of selling airline miles.

Bloomberg reports:

“the sale of miles—mostly to the big banks, but also to companies that range from car rental firms to hotels to magazine peddlers. The latter has expanded so much that it accounts for more than half of all profits for some airlines. [one estimate] is that the margin on this business is 60 percent or 70 percent.”

Profit in a business does not always arrive directly. Weezy knows that. The fact that certain complementary goods exist that can lower factors like CAC and churn can create a really important dynamic when a company adopts something like a freemium/land and expand strategy. For example,

“Credit Karma, a popular credit-monitoring site, wants to do your taxes online for free. [Kenneth Lin’s company is] striking out at TurboTax and H&R Block, which are now charging the typical homeowner or investor more than $90. Credit Karma can offer free tax preparation because it makes money in other ways. The company, with 600 employees, gets paid to recommend financial products, such as credit cards and auto loans, to customers. It says it had revenue of $350 million in 2015 and has been profitable for a couple of years. By breaking into tax prep, Credit Karma hopes to get better data on its members and improve its recommendations. The idea is to create a “trusted digital assistant” for its customers’ financial lives, Lin said.”

As another example, look at the Comcast mobile offering. One of Comcast’s major goals with the wireless service is to reduce churn for the overall bundle of services.“The more products you add, the lower the churn,” said Greg Butz, president of Comcast Mobile. That lower churn alone can justify the effort. Or not. That depends on the unit economics which we do not know. Comcast will only sell the mobile service to customers who are already buying its broadband offering (that lowers CAC and COGS; as always everything in lifetime customer value is connected and has reflexivity).

The impact of this freemium/land and expand phenomenon is highly underestimated since it is happening many categories. The consumer surplus created as these strategies are implemented is massive but so is the producer surplus it eliminates. The end result is great for consumers but a challenge for businesses that have counted on the revenue to generate profits, not just product promotion. In this way the cost of goods sold (COGS) in many categories is being transformed unto CAC by companies implementing a form of the freemium/land and expand strategy adopted by Credit Karma. In a profile of Bill Gurley I quoted him (in bold) and then wrote:

"If a disruptive competitor can offer a product or service similar to yours for "free," and if they can make enough money to keep the lights on, then you likely have a problem." Digital offerings have very strange economics in that multi-sided markets are often involved and offerings in such a market can have close to zero marginal cost once it has been created. Solving the "chicken and egg" problem inherent in any platform business usually involves either a free egg or free chicken on one "side" of the market. It's easy to wake up in a digital world and have whatever you were selling now being offered "for free."

The profit pool in the music industry is not something Weezy is happy about since he believes his share should be bigger. He once said in an interview: **"I want off this label and nothing to do with these people, but unfortunately it ain't that easy."**

The most important aspect of a profit pool analysis is that it is not just a statement about the top line revenue of a business. Revenue is not profit! It is odd that this even needs to be said, but I am doing so anyway. Too many people think: "Well this business in generating a lot of money!" The assumption is that it must be profitable or is generating the most profit in the value chain, when that is not the case. Music streamers may have a lot of revenue and yet zero profit. That's why a profit pool analysis is so interesting.

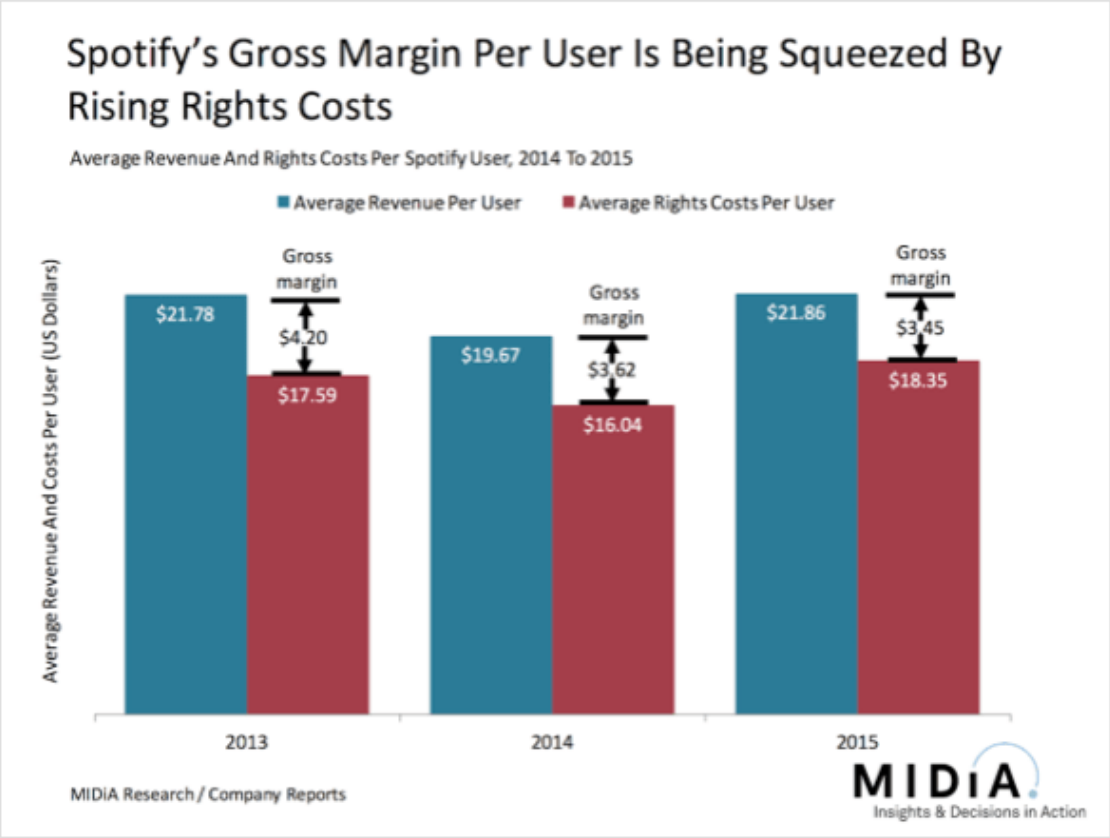

Rights costs are Spotify's Achilles Heel. Rights and associated costs accounted for 83% of Spotify's 2015 revenue, up from 81% in 2014 and this resulted in a dramatic fall in Spotify's gross margin per user: down from $4.20 in 2013 to $3.45 in 2015. This is

Here's another example created by Mauboussin:

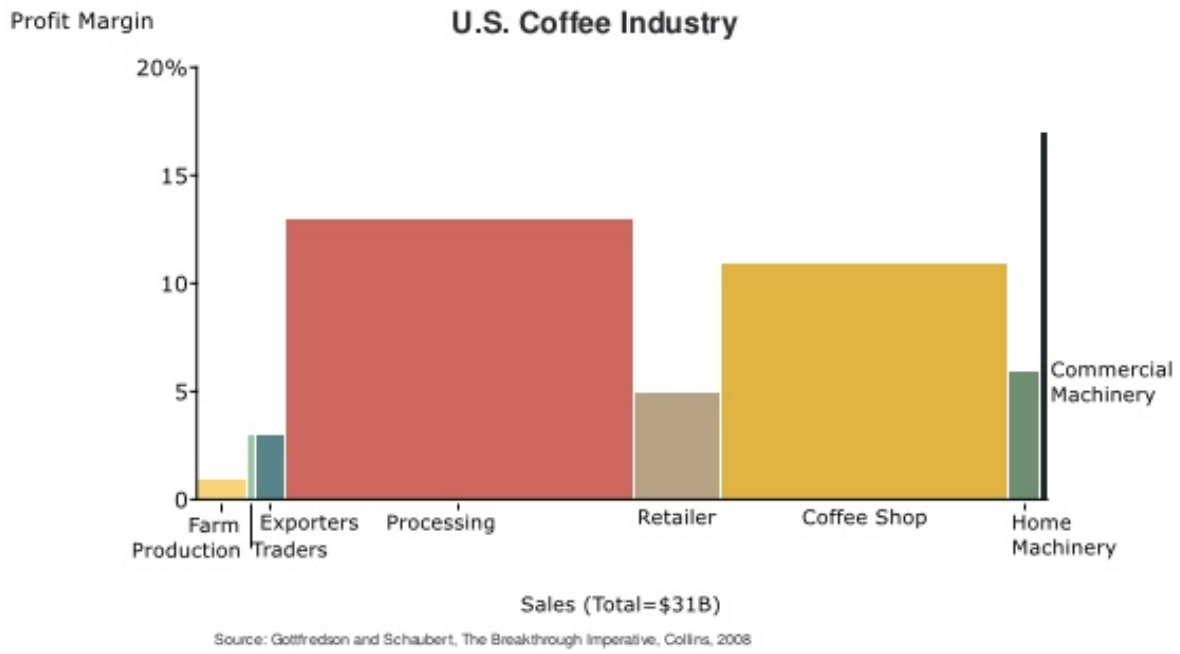

Mauboussin's profit pool graphics illustrate that some sectors of some industries generate huge amounts of value for society and yet no overall profit. This is also true about innovation. Sometimes all of the benefits of an innovation go to consumers. As an example, Bill Gates said once:

"If you look at an industry where you have such a rapid increase in supply, usually that's pretty bad, like when radial tires were invented, people didn't start driving their cars a lot more, and so it means the need for production capacity went way down, and things got all messed up. The tire industry is still messed up. Supply is the killer of value. That's why the computer industry is such a strange industry. We're dealing with amazing increases in supply."

Sometimes disruption only benefits consumers and producers end up with nothing. Whether something is "disruptive" does not determine whether it may be a direct source of profit for the producer. This increase in the rate at which producer surplus is transformed into consumer surplus also distorts all sorts of economic statistics like GDP.

3. "If Cash Money Records coming for me, I'm goin' out like Tony." *From the Sorry 4 the Wait 2 mixtape.*

Lil Wayne has considerable leverage in these WTP disputes since, among other things, he is needed to promote the product. He has been able to maintain some leverage for that reason and that so far has produced a stalemate. Lil Wayne's suggestion that he would rather go out like Tony Montana did the 1983 film Scarface is an often seen negotiation tactic. In an interview Weezy noted: **"Carter V is super-done. Cake baked, icing on top, name on top, candles lit. I would have released it yesterday if I could. But it's a dead subject right now. It's a jewel in the safe. It's that stash-house money."**

4. "Right now, anybody could put out a new song on the Internet and it could become the hottest thing ever. When I was starting, you couldn't do that type of shit. But that's wonderful – the game is wide open, and my job is just to stay vital."

The internet has been a destroyer of many moats that were based on distribution scarcity (for example newspapers and music). People like Weezy have had to increasingly make their profits on concerts and merchandise. I discussed this in my post on Louis CK, Biggie and Rza. Even at Universal mech is a significant revenue line as is streaming:

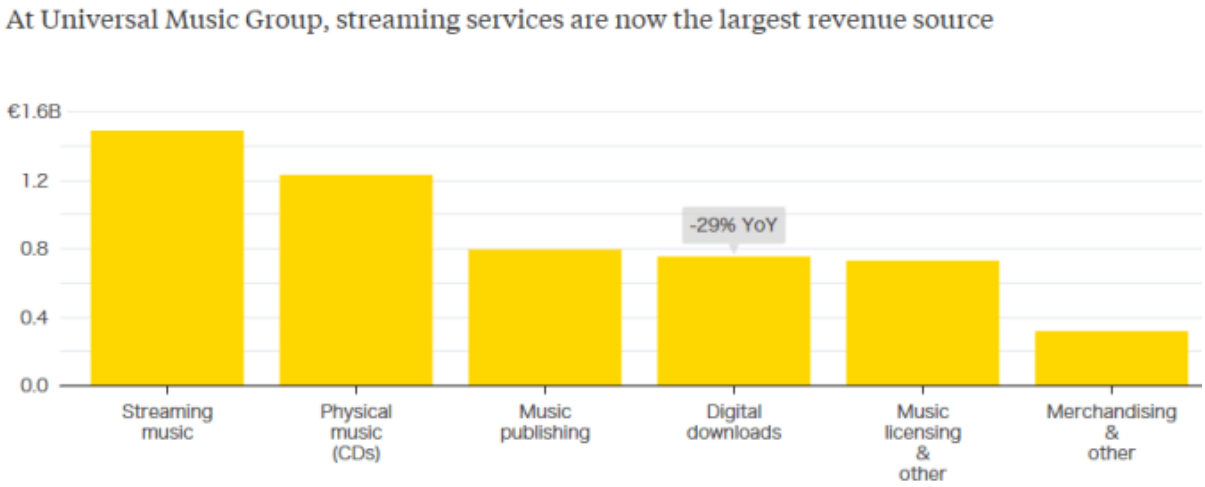

5. "I got the key to success, get money invest." *From the song: Over Here Hustlin.*

Lil Wayne understands that it is income from services and other work ("get money") that enables investments. Investments are certainly important, but so is a source of income which is fundamental, especially for younger people.

6. "I'm just chillin, but my money still running 'round." *From the song: Over Here Hustlin.*

Lil Wayne is channeling Warren Buffett with this lyric, who once said: "If you don't find a way to make money while you sleep, you will work." The best way to earn money while you sleep is to invest wisely.

7. "My money so old I tell my new money 'respect your elders.'"*From the song: Living Right.*

It is not completely clear what Lil Wayne is talking about in this lyric, but it is possible he is referring to the fact that older assets tend to have a lower tax basis and deserve respect. To lower the tax hit, new assets should be sold first to raise cash for expenses like VIP sessions at clubs or private jets.

8. "I need a Winn-Dixie Grocery bag full of money." *From the song: Got Money.* **"I gotta posse full of hittas and a pocket full of In God We Trust; It's been so long since I said "it cost too much." I'm so addicted to the fast money lifestyle and withdrawal sucks; And dead presidents act immortal, but I know you see money's not a problem"** *From the song: "I Feel Good"*

People tend to acquire significant hobbies and other habits that require involve significant cash burn rates. Lil Wayne is saying that this can create problems unless you have a lot of cash. For example, as well all know the only unforgivable sin in the VIP section of the club is to run out of cash. Lil Wayne seems know the Warren Buffett admonition well: "Nothing

sedates rationality like large doses of effortless money." So having a grocery bag full of cash is helpful.

9. "I invest, I stock trade, From Eagle Street, to Wall Street." *From the song: Hot Boy (Freestyle)*

It appears that Lil Wayne is an active stock market investor. He may hold some passive investments in Vanguard and other funds and ETFs but it is not clear from the context of this song lyric. Some people can invest in an active way successfully, but not too many. Charlie Munger believes that ~3% of investors can do so.

10. "Getting mugged from everybody you see." *From the song: Got Money.*

Lil Wayne in this lyric is agreeing with the Charlie Munger idea that jealousy is a worthless emotion. Munger points out: "A member of a species designed through evolutionary process to want often-scarce food is going to be driven strongly toward getting food when it first sees food. And this is going to occur often and tend to create some conflict when the food is seen in the possession of another member of the same species. This is probably the evolutionary origin of the envy/jealousy tendency that lies so deep in human nature. Envy is a really stupid sin because it's the only one you could never possibly have any fun at. There's a lot of pain and no fun. Why would you want to get on that trolley?"

11. "Real Gangsta's die of old age." *From the Song: Cream.*

As Hyman Roth said in the movie The Godfather: "Good health is the most important thing**.** More than success, more than money, more than power." In keeping with Mr. Roth's admonition Lil Wayne appears to want to take better care of his health. I need to do that too.

12. "Soon as I learned how to talk I talked business." *From the song: Cream.*

In another blog post entitled "A Dozen Things I've Learned About the Music Business (and Businesses Like It)" I quote Kurt Cobain as saying: "I wish there had been a music business 101 course I could have taken." Lil Wayne is saying he learned about business very early in life. That was a good idea. As Warren Buffett likes to say: "I am a better investor because I am a businessman, and a better businessman because I am an investor."

Notes:

Streaming http://www.rollingstone.com/music/news/music-industry-rebounds-in-2016-thanks-to-streaming-w474394

Airlines https://www.bloomberg.com/news/articles/2017-03-31/airlines-make-more-money-selling-miles-than-seats

Spotify https://www.bloomberg.com/gadfly/articles/2017-04-04/spotify-and-universal-music-strike-right-chord-for-digital-future

MIDiA https://musicindustryblog.wordpress.com/2016/05/25/the-2-spotify-charts-you-need-to-see/

Should Tax Preparation Be Free? Credit Karma Challenges TurboTax – Bloomberg https://www.bloomberg.com/news/articles/2017-04-07/should-tax-preparation-be-free-credit-karma-challenges-turbotax

25IQ Gurley https://25iq.com/2013/09/09/a-dozen-things-ive-learned-from-bill-gurley-about-investing-and-business/

25IQ Music https://25iq.com/2016/09/03/a-dozen-things-ive-learned-about-the-music-business-and-businesses-like-it/

Comcast Wireless https://www.bloomberg.com/news/articles/2017-04-06/comcast-enters-wireless-business-with-45-a-month-service

http://www.mtv.com/news/2055325/lil-wayne-sorry-4-the-wait-2-birdman-lines/

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A Dozen Lessons about Business Valuation from the Iridium Debacle

April 14, 2017

One of the best illustrations of the many ways a business valuation can go wrong is the pre-bankruptcy story of mobile satellite service Iridium. I knew Iridium well since I did potential acquisition due diligence on Iridium several times and because people who worked for Craig McCaw had a long history with Motorola. We (Eagle River) always passed on buying Iridium no matter how low the price dropped. The potential upside of buying Iridium even for $1 was tiny, but the potential downside (especially the opportunity cost) was massive. We already had enough wholesale transfer pricing and other problems with Motorola related to Nextel.

There is a recent book about Iridium, but that account does not identify why such colossal mistakes were made in assessing the potential value of the business. The common narrative is:

"John Bloom, an investigative journalist and author of the book *Eccentric Orbits: The Iridium Story*. "It did what it was supposed to do. It was an engineering miracle. It's just that not enough people needed a phone at all longitudes and latitudes."

That's true only in that not enough people valued the product at the price point. But there are deeper explanations of why this happened. The common explanation is that "cellular spread faster than people imagined." That wasn't the root cause.

The root cause of Iridium's valuation failure was what I call *goal seek bias* which is a special case of *confirmation bias* and *incentive caused bias*. The *goal seek* function in a spreadsheet allows a modeler to use the desired result of a formula to find the possible input value necessary to achieve that result. To understand how the biases played out in the case of Iridium you must know a few background facts.

Motorola was a satellite subcontractor. It wanted to be a prime contractor, but it did not have a customer. The best way around that problem was to create the customer for Motorola satellites from scratch. Iridium was born for that reason. In order to raise the billions of dollars needed to pay for the system a credible business model was required. Naturally spreadsheets were created and it was necessary to *goal seek* a total addressable market (TAM) to financially justify building and operating the system to investors. The outcome of that financial modeling was a case of what Warren Buffett calls the *institutional imperative* at work: "Any business craving, however foolish, will be quickly supported by detailed rate-of-return and strategic studies."

The result of the *goal seek* bias in the case of Iridium was preposterous on its face, if the assumptions were carefully examined.

The phone did not work indoors

The phones did not work in a car

The phones did not work without line of sight to the satellite (buildings and even trees are a problem)

The phones were very big, heavy and expensive

The service was expensive

What did the market researchers ask potential consumers about the Iridium service? A classic leading question of course: "Would you value a mobile phone that you could use anywhere?" Who wouldn't say yes to that question? But it wasn't even close to the right question to ask.

The reality was "anywhere" meant: to use the Iridium service a person would need to find an open field and lug out a heavy and expensive phone and pay expensive rates. That isn't anywhere. Anywhere means inside buildings and cars or in the shadow of a buildings. On a mountainside is a place but is not enough to mean anywhere and instead is a niche market. My friend and wireless expert Tim Farrar sent this Tweet on the topic:

This was the original satphone joke: Who would use a satphone?
A person outstanding in his field

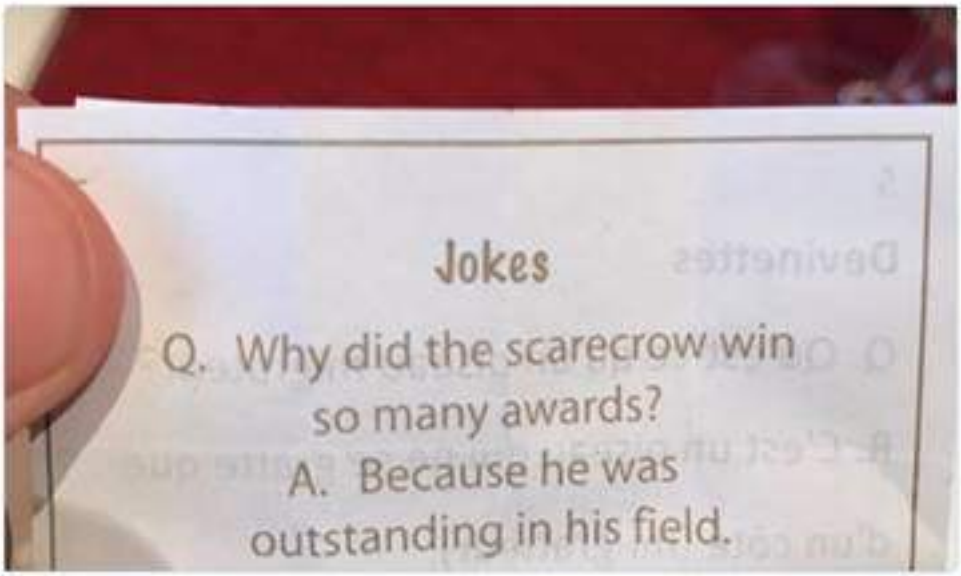

Goal seek bias ignored this reality and that resulted in a number of silly estimates from forecasters about the size of the mobile satellite market. For example:

With respect to the global wireless market, recent but conservative projections have indicated 6-8 millions MSS subscribers by the year 2000 and 10-15 millions by 2005, with a 7-10% penetration factor in the estimated total wireless market. Europe should acquire a portion equivalent to one third of this market (the remaining equally shared by the American and Asian continents) of which Iridium® is currently targeting a 1-2% segment. These figures per se seem to justify the large financial and technological development efforts to date

The way *confirmation bias* works inside a company like Motorola meant that the problems with the addressable market I just discussed were rendered invisible and the momentum enabled by social proof ("Hey lots of big companies are behind this-") enabled the system to be built.

"In order to secure bank loans in early 1999, the following subscriber targets ("covenants") were set for Iridium: 52,000 by March 31, 1999; 213,000 by June 30, 1999 and 454,000 by September 30, 1999. Even though never publicly disclosed, the break-even point for Iridium was expected to be between 500,000 and 600,000. In order to reach this level, Iridium would have had to add roughly 50,000 subscribers per month in 1999. In reality, in March 1999, **Iridium only had 10,000 subscribers.** The number of three to six million subscribers expected by 2001 was never reached. A comparison between the predicted subscriptions and reality is shown in Figure 12"

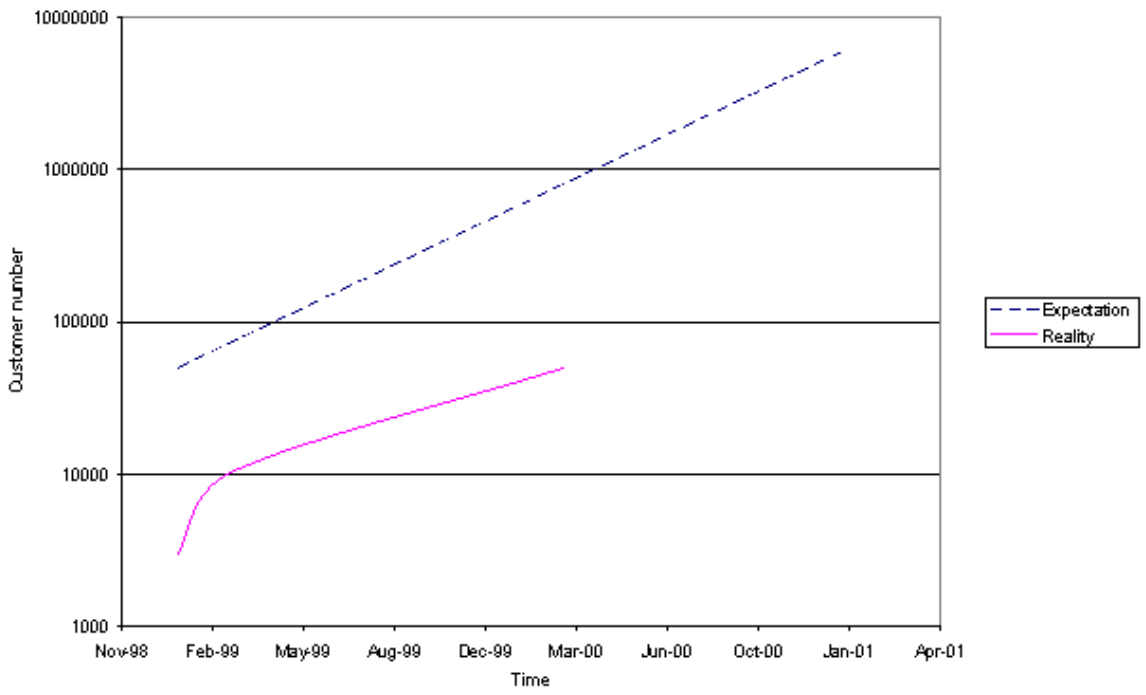

Figure 12. Iridium expected number of customers (predicted in 1991) versus reality in 1998-2000.

The end result was both tragic and relatively swift:

On November 1, 1998, after launching a $180MM advertising campaign and an opening ceremony where VP Al Gore made the first phone call using Iridium, the company launched its satellite phone service, charging $3000 for a hand-set and $3 – $8 per minute for calls. The results were devastating. By April 1999, the company had only ten thousand subscribers. Facing negligible revenues and a debt interest of $40MM per month, the company came under tremendous pressure. In April, two days before Iridium was to announce quarterly results, CEO Staiano quit, citing a disagreement with the board over strategy. John Richardson, an experienced insider, immediately replaced Staiano as interim CEO, but the die was cast. In June 1999, Iridium fired 15% of its staff, including several managers who had been involved in designing the company's marketing strategy. By August, Iridium's subscriber base had grown to only 20,000 customers, significantly less than the 52,000 necessary to meet loan covenants. Two days after defaulting on $1.5 Billion in loans – on Friday, August 13, 1999 – Iridium filed Chapter 11 bankruptcy protection.

Iridium was purchased by an investment group for very little cash and today is both an operating business and a listed company. The business is very different than originally envisioned (r.g., they are chasing non voice markets) and the link to Motorola that would have created huge wholesale transfer pricing problems is gone (Iridium has multiple suppliers). The prospects of that new business is not a subject covered in this post since this is about what happened pre-bankruptcy.

What are "the dozen lessons" in the case of Iridium?

1. **"An unresolved contradiction exists: to perform present value analysis, you must predict the future, yet the future is not reliably predictable." "A perfect business in terms of the simplicity of valuation would be an annuity; an annuity generates an**

annual stream of cash that either remains constant or grows at a steady rate every year. Real businesses, even the best ones, are unfortunately not annuities." Seth Klarman

When valuing an asset it is wise to focus of the simplest system possible, preferably one that has a stable and well known operating history (e.g., an individual business like See's Candies). Iridium was about as far from an annuity as was possible. When valuing a business like Iridium a massive margin of safety must be built into the model to account for risk (risk meaning the potential for a permanent loss of capital). How are risky investment intelligently made? Well, very carefully. A portfolio approach is used in venture capital since only a very small number of outsize winners determine the financial outcome of a given fund. Warren Buffett describes the strategy adopted:

"If significant risk exists in a single transaction, overall risk should be reduced by making that purchase one of many mutually-independent commitments. Thus, you may consciously purchase a risky investment – one that indeed has a significant possibility of causing loss or injury – if you believe that your gain, weighted for probabilities, considerably exceeds your loss, comparably weighted, and if you can commit to a number of similar, but unrelated opportunities. Most venture capitalists employ this strategy. Should you choose to pursue this course, you should adopt the outlook of the casino that owns a roulette wheel, which will want to see lots of action because it is favored by probabilities, but will refuse to accept a single, huge bet."

2. **"When future cash flows are reasonably predictable and an appropriate discount rate can be chosen, NPV analysis is one of the most accurate and precise methods of valuation. Unfortunately, future cash flows are usually uncertain, often highly so. Moreover, the choice of a discount rate can be somewhat arbitrary. These factors together typically make present-value analysis an imprecise and difficult task. Although some businesses are more stable than others and therefore more predictable, estimating future cash flow for a business is usually a guessing game. A recurring theme in this book [Margin of Safety] is that the future is not predictable, except within fairly wide boundaries." Seth Klarman.**

Klarman is pointing out a fact that will be made repeatedly in this post. A NPV calculation of the value of a business is not precise. This means that having a margin of safety is wise. Everyone makes errors and mistakes and so having insurance against those mistakes is wise. With a margin of safety you can be somewhat wrong and still make a profit. And when you are right you will make even more profit than you thought. I have written posts before about the discount rate issue.

3. **"Using precise numbers is, in fact, foolish: working with a range of possibilities is the better approach." "Charlie and I admit that we feel confident in estimating intrinsic value for only a portion of traded equities and then only when we employ a range of values, rather than some pseudo-precise figure." Warren Buffett "Warren talks about these discounted cash flows. I've never seen him do one." Charlie Munger.**

Warren Buffett's response when Charlie said this was to say: "It's true. "If the value of a company doesn't just scream out at you, it's too close." "You just want to estimate a

company's cash flows over time, discount them back and buy for less than that." Warren Buffett "In the Theory of Investment Value, written over 50 years ago, John Burr Williams set forth the equation for value, which we condense here: The value of any stock, bond or business today is determined by the cash inflows and outflows – discounted at an appropriate interest rate – that can be expected to occur during the remaining life of the asset." Warren Buffett in the Berkshire 2000 annual report.

4. **"In 44 years of Wall Street experience and study I have never seen dependable calculations made about common stock values, or related investment policies, that went beyond simple arithmetic or the most elementary algebra. Whenever calculus is brought in, or higher algebra, you could take it as a warning signal that the operator was trying to substitute theory for experience." Ben Graham**

Some people are seduced by Greek letters in valuation formulas. Seth Klarman has said: "It is easy to confuse the capability to make precise forecasts with the ability to make accurate ones."

5. **"DCF is an unruly valuation tool for young companies. This is not because it is a bad theoretical framework; it is because we don't have accurate inputs. Garbage in, garbage out." Bill Gurley**

Whenever you receive a spreadsheet valuing a business, it is wise to focus on the assumptions. And as Gurley points out that is particularly true of a young company. But people make emotional mistakes:

"Ed Staiano, formerly a senior executive at Motorola and the CEO of Iridium at the time of commercial activation, knew in intimate detail how the Iridium system actually functioned and was well aware of its various technical limitations, including the fact that the Iridium telephone would not work dependably indoors or in the urban canyons of central business districts, but he made the decision, nonetheless, to invest $500,000 of his own money in Iridium securities in March 1999"

"Multiple witnesses indicated that they were familiar with the "line-of-sight" nature of the system, and, despite that, they appear to have assumed that the service still would be acceptable to users."

Iridium is a particularly extreme example of garbage in and garbage out. Sometimes people suspend disbelief:

NEW YORK-Iridium World Communications Ltd., which plans to launch a satellite-based global telephone and paging service, went public June 10, raising $240 million in an offering of 12 million shares of Class A common stock at $20 per share. The initial public offering, lead managed by Merrill Lynch & Co., New York, was oversubscribed. Consequently, the issuer, which had planned a 10 million share IPO, increased its initial offering by 2 million shares.

6. **"Buffett's reluctance to invest in technology businesses "is not a statement that technology stocks are unanalyzable." Robert Hagstrom in his book The Essential Buffett: Timeless Principles for the New Economy.**

Buffett says: "We have no religious belief that we will not invest in tech, just can't find one where we think we know what the bush will look like in ten years or how many birds will come out of the bush." Both Munger and Buffett have said that if they were young today they would acquire a technology circle of competence. But they are not young today. What they are looking for is an unfair advantage when they invest and in high-technology they have no such advantage.

7. **"Some of the worst business decisions I've seen came with detailed analysis. The higher math was false precision. They do that in business schools, because they've got to do something." Charlie Munger.**

That a spreadsheet generates precise numbers can create an illusion of precision. It is one of several biases that can impact a valuation. Aswath Damodaran:

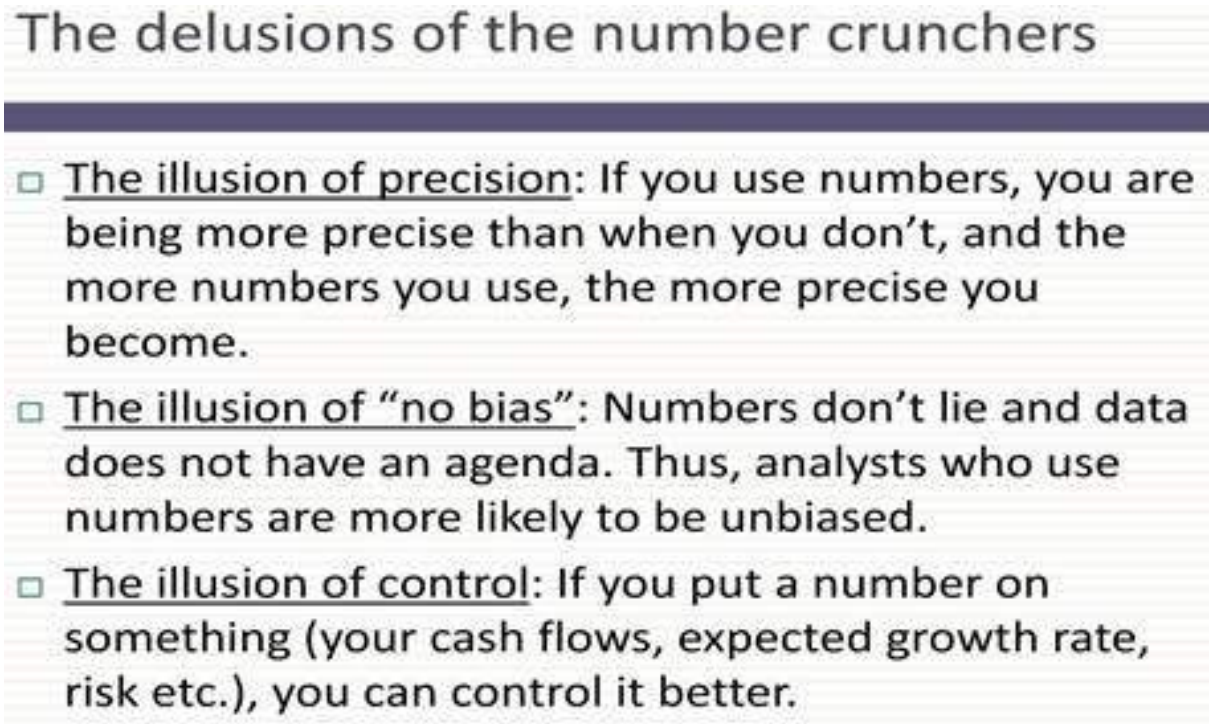

Multiple bias and illusions were involved in this result:

"The Global Arrangers for a $1 billion credit facility that closed in December 1997 engaged Coopers & Lybrand (now known as PriceWaterhouseCoopers) and Arthur D. Little to conduct extensive independent diligence with respect to the Iridium business plan as a condition to extending credit to Iridium. These consultants to the lenders "stress tested" the Iridium projections, prepared a more conservative set of projections that assumed a downside case for future company performance after commercial activation and gave a green light to the loan which was oversubscribed."

8. **"I have seen so many cases where there is a complex model that is exactly wrong. This focus on a model may cause you to move away from thinking about the competitive advantages of the business. Then you are making decisions based on all these numbers rather than thinking about whether this is one of the ten businesses that you would like to own." Glenn Greenberg.**

Numbers can seduce even the most rational investor. It is qualitative factors that generate quantitative results in a business. Does the business have a sustainable competitive advantage? This can be tested for existence using numbers but it cannot be analyzed by just using numbers. Competitive advantage is determined qualitatively. Mohnish Pabrai make the point in this way: "It's not about the numbers. For most investments the factors that will drive long term success don't have much to do with spreadsheets. They have to do with something other, either understanding human nature or understanding nuances about how certain aspects of how things work rather than running spreadsheets."

9. **"So, if one can't use DCF how should one think about valuation? Well, one solution that I have long favoured is the use of reverse engineered DCFs. Instead of trying to estimate the growth ten years into the future, this method takes the current share price and backs out what is currently implied. The resulting implied growth estimate can then be assessed either by an analyst or by comparing the estimate with an empirical distribution of the growth rates that have been achieved over time, such as the one shown below. This allows one to assess how likely or otherwise the implied growth rate actually is." James Montier.**

Take company X and its market cap. What sort of growth would be required to support that valuation? For Iridium:

May 1998:	Full satellite constellation in orbit, stock peaks at $68 7/8 with Iridium's total market capitalization **near $10 billion**

Paraphrasing Buffett: "Think about a company with a market cap of $10 billion. To justify paying this price, you would have to earn $1 billion every year until perpetuity, assuming a 10% discount rate. Think about how many businesses today earn $1 billion, or $.75 billion, or $.5 billion. It would require a rather extraordinary change in profitability to justify that price."

10. **"Some investors swear off the DCF model because of its myriad assumptions. Yet they readily embrace an approach that packs all of those same assumptions, without any transparency, into a single number: the multiple. Multiples are not valuation; they represent shorthand for the valuation process. Like most forms of shorthand, multiples come with blind spots and biases that few investors take the time and care to understand." Michael Mauboussin.**

Aswath Damodaran:

"Relative valuation is much more likely to reflect market perceptions and moods than discounted cash flow valuation. This can be an advantage when it is important that the price reflect these perceptions as is the case when

the objective is to sell a security at that price today (as in the case of an IPO)

investing on "momentum" based strategies

With relative valuation, there will always be a significant proportion of securities that are under valued and over valued. Since portfolio managers are judged based upon how they

perform on a relative basis (to the market and other money managers), relative valuation is more tailored to their needs. Relative valuation generally requires less information than discounted cash flow valuation (especially when multiples are used as screens)"

From January 1998 to January 1999 a great Number of analysts believed that Iridium had an equity value that ranged between $4 and $14 billion. Garbage in and garbage out.

July 1997: DLJ gave Iridium a $6.2 billion private market equity valuation.

October 1997: BancAmerica Robertson Stephens gave Iridium a $9.3 billion private market equity value.

February 1998: Goldman Sachs found $10.6 billion private market equity value.

11. **"Though many DCF models do incorporate sensitivity analysis (typically a grid of values driven by alternative cost of capital, growth, or terminal valuation assumptions), these grids provide little relevant information for anyone trying to understand the prospects of the business. Investors should look to the value drivers—sales, margins, and investment needs—as sources of variant perception. Even sensitivity analysis based on the value drivers is generally flawed because it fails to consider the interactivity between value drivers. Proper scenario analysis considers how changes in sales, costs, and investments lead to varying value driver outcome." Michael Mauboussin**

Sensitivity analysis is useful in getting a "feel" for a business model. What inputs are most important? Even with a sensitivity analysis since the systems involved are complex and adaptive, scenario analysis is important. Maboussin writes: "Scenario analysis also addresses concerns about an uncertain future. By considering "if, then" scenarios and insisting on a proper discount to expected value—or margin of safety—an investor can safely and thoughtfully weigh various outcomes.

12. **"Generally, when companies or investors run a cash flow model they go out five or ten years. Why is that? Because that's how many fingers you have. Literally, we live in a decimal world because that is how many fingers we have! What you really want to do is link the competitive position of your business and/or industry to an economically sound competitive advantage period." Michael Mauboussin**

It is always best to read Mauboussin in the original.

http://www.kellogg.northwestern.edu/faculty/korajczy/htm/mauboussin.valuation.pdf

http://csinvesting.org/wp-content/uploads/2012/06/dangers-of-dcf.pdf

Notes:

Iridium: http://fortune.com/2016/10/22/iridium-satellites-airplanes/

Iridium: https://books.google.com/books?id=4CqvpWwMLVEC&pg=PA1016&lpg=PA1016&dq=iridium+%22business+model%22+cellular+spread&source=bl&ots=LOsJtvtt1o&sig=_0QnbQRf2vXeAbdhemsGSXNonCI&hl=en&sa=X&ved=0ahUKEwjHx-3c0ZXTAhVH32MKHWv8BIIQ6AEIGjAA#v=onepage&q=iridium%20%22business%20model%22%20cellular%20spread&f=false

Iridium: http://www.altfeldinc.com/pdfs/LearnFromTheirMistakes.pdf

Iridium: http://www.tech-go.com/manuals/Iridium.pdf

Aswath Damodaran http://people.stern.nyu.edu/adamodar/pdfiles/execval/relval.pdf and http://people.stern.nyu.edu/adamodar/pdfiles/country/narrative&numbersshort2017.pdf

Bonus round:

"I agree with Warren to keep it simple and not use higher mathematics in your analysis." Walter Schloss

"In my life there are not many questions I can't properly deal with using my $40 adding machine and dog-eared compound interest table." Charlie Munger

"A person infatuated with measurements, who has his head stuck in the sand of the balance sheet, is not likely to succeed." Peter Lynch

"Any attempt to value businesses with precision will yield values that are precisely inaccurate."

"We never sit down, run the numbers out and discount them back to net present value … The decision should be obvious." Charlie Munger

"It is better to be approximately right, than precisely wrong." Warren Buffett

"There's no such thing as precise intrinsic value." Mohnish Pabrai

"There are so many factors involved that it is never wise to attempt to judge intrinsic value to the last eighth or even point." Phil Fisher

"Given that the future is inherently uncertain, we do not believe the value of any business can be known with certainty at a given point in time, so our aim is to be generally right as opposed to precisely wrong." Wally Weitz

"It is important to understand that intrinsic value is not an exact figure, but a range that is based on your assumptions" Jean-Marie Eveillard

"Businesses, unlike debt instruments, do not have contractual cash flows. As a result, they cannot be precisely valued as bonds" James Montier

"The essential point is that security analysis does not seek to determine exactly what is the intrinsic value of a given security. It need only establish that the value is adequate." Ben Graham

"If modest changes in assumptions cause a substantial change in NPV, investors would be prudent to exercise caution in employing this method of valuation." Seth Klarman

The Rise of the Freemium Business Model

April 22, 2017

Freemium describes a business model in which a business gives one product away for free or at a subsidized price and then either: (1) sells another profitable product to this user base; or (2) sells access to that user base to third parties (e.g., advertisers). Three versions of the Freemium approach are:

1. Available Forever- No premium versions are made available. Google and Facebook are examples that monetize with advertising.
2. Premium Freemium: Users pay only for premium versions (e.g., more powerful features or greater use rights). Only the free baseline version is "available forever." LinkedIn and TurboTax are an examples.
3. Limited Freemium: The free version is made available but is limited by factors like time and/or capacity. One example would be a 30 day trial with no "available forever" baseline version.

The freemium business model is ancient. A bar giving away salty snacks to sell more alcohol is nearly as old as the still that created the liquor. The practice of offering tapas in Spain is just one relatively modern example. Newspapers being used to sell political views is another example:

"Gerald J. Baldasty's book, *The Commercialization of News in the Nineteenth Century*, makes a case clear as spring water that hard news has almost never been a mass commercial enterprise. The American newspapers of the 1820s and early 1830s were creatures of political parties, edited by zealots. Essentially propaganda sheets, these newspapers were "devoted to winning elections …Many subscribers simply did not pay for their newspapers," Baldasty wrote. "In 1832, one North Carolina editor estimated that only 10 percent of his 600 subscribers had paid for the paper."

Many businesses have offered free services (free month of HBO) or free trials (magazines). The Venture capitalist Tomasz Tunguz of RedPoint has written about why the freemium business model works so well:

"At its core, freemium is a novel marketing tactic that entices new users and ultimately potential customers to try a product and educate themselves about its benefits on their own. By shifting the education workload from a sales team to the customer, the cost of sales can decrease dramatically… freemium startups leverage usage data to improve their product. The large amount of users using the product enables A/B testing with statistical significance, a non-trivial strategic advantage. Marketing teams can sift through the data to understand market segmentation and funnel efficiency, and product management can parse the data to

improve the on-boarding experience. Third, freemium startups gather information about their customer base to prioritize their sales efforts."

The cost of educating the potential customer about the benefits of the product can be dramatically lower once a potential customer has used the product in the free setting. The need for advertising to create awareness is lower and any expenses associated with a paid salesperson or sales support engineer patiently explaining the product to a potential customer has been replaced by self-education. Freemium also leverages other human tendencies like reciprocity and inertia, which further lower the cost of sale. John Vrionis of Lightspeed Venture Partners describes the less costly and more effective freemium sales process:

"Evangelizing a new religion is hard work, and more importantly it is expensive. But that's essentially what selling proprietary software is like. Conversely, selling bibles to a group of believers is a lot easier… Sales people engage an account when they know that the prospect is well down the path of adoption and belief."

In some settings the salesperson can be eliminated completely as the customers "upsell" themselves with self-service capabilities of the company web site.

As Tungus and Vrionis note, the essence of the Freemium model is to reduce the price of acquiring a customer. My post "Why is Customer Acquisition Cost (CAC) like a Belly Button?" is an introduction to the topic of CAC. Everyone with a business has CAC.

To illustrate, even comedians must incur costs to acquire customers. As an example, here a famous few sentences from a monologue form the comedian Louis C.K:

"Everything is amazing right now and nobody's happy. In my lifetime the changes in the world have been incredible. When I was a kid we had a rotary phone. We had a phone you had to stand next to and you had to dial it. And then when, if you wanted money you had to go in the bank for when it was open, for like three hours."

Those four sentences solidified Louis C.K.'s reputation as an A-List comic. The comedian's monetization was indirect as is often the case today:

"Comedians today are more likely to gain fame via a YouTube skit or a bit that plays well on a talk show. (Louis C.K.'s most famous monologue, "Everything's amazing and nobody's happy," happened in a sit-down interview with Conan O'Brien)."

Since Louis C.K. is a member of the Screen Actors Guild he would have received at least the union minimum wage to be on O'Brien's show, but that is a tiny fraction of the value that monologue created for his career. Louis C.K. essentially gave away that monologue for free. In this case one activity (the Conan O'Brien appearance) is being used as a substitute for customer acquisition cost (CAC) for other products like his concerts. This cross promotional approach is not new. Especially for comedians. Not too long ago they generated most of their profit from albums (promoted on talk shows) and concerts (Johnny Carson used to tell people their dates).

Are other comedians using freemium like Louis C.K.? Yep. But the loss leader is not always a zero revenue gig, just lower revenue.

"Comics [have] realized how a constant presence on Netflix, as opposed to sporadic broadcasts on linear television, could help build a larger loyal audience. For most comedians, specials are a means to boosting their key revenue source: regular ticket sales on the road. TV specials have always translated into additional fans showing up on tour stops, but the lift from a Netflix special exceeded what a lot of comics were seeing from regular TV. "The amount of time it took to see the bump was drastically reduced from years to … six or seven months after an artist's special is on Netflix," says Volk-Weiss. "Their touring business goes up by hundreds of [percent]."

"**Wait!" You are probably saying, "People have done free promotions forever."** That's true, but with the digitalization and networking of the world this freemium phenomenon has been put on steroids. Ben Thompson succinctly describes one root cause of why the Freemium phenomenon is on the rise as a customer acquisition technique as the world become more digital and networked:

"The defining characteristic of anything digital is its zero marginal cost. Take apps for example: What makes the software market so fascinating from an economic perspective is that the marginal cost of software is $0. After all, software is simply bits on a drive, replicated at the blink of an eye. Again, it doesn't matter how much effort was needed to create said software; that's a sunk cost. All that matters is how much it costs to make one more copy – $0. The implication for apps is clear: any undifferentiated software product, such as your garden variety app, will inevitably be free. This is why the market for paid apps has largely evaporated. Over time substitutes have entered the market at ever lower prices, ultimately landing at their marginal cost of production – $0."

In addition to being reproducible and distributable at virtually zero marginal cost, digital goods typically do **not** have the two qualities described here by Brad DeLong:

"Excludability: the ability of sellers to force consumers to become buyers, and thus to pay for whatever goods and services they use.

Rivalry: a structure of costs in which two cannot partake as cheaply as one, in which producing enough for two million people to use will cost at least twice as many of society's resources as producing enough for one million people to use."

If I make a digital copy of your digital music, you still have your music (the music is non-rival). If I steal your phone you will no longer have a phone (a phone is rival). So-called "public goods" are non-rival and non-excludable. A lighthouse is a public good and in many settings so is software. If a business can't charge customers a fee directly for a good or service since it is a public good giving it away is "sleeves off its vest." In other words, the real opportunity cost of the sales incentive is zero if the business can't charge a fee for it anyway.

One confusing element of a freemium business model is the accounting involved. If giving away goods or services for free or with a subsidy is not a marketing expense, what exactly is it? Marketing costs are typically shown below the gross margin line on an income statement. But the cost of freemium offerings can be considered part of costs of goods sold or COGs. Different companies treat freemium costs in different ways. Some companies even split the difference: the cost of non-converted non-paying customers is a marketing expense and the

cost of serving paying customers is COGS. In any event, giving away free services is an expense however you look at it.

Small startups with little cash on hand or that desire not to dilute their ownership too much by raising more cash have found freemium to be particularly attractive. If they know how to write software they can use the free service to avoid spending cash on customer acquisition. As an added benefit, customers acquired though freemium tend to value the product more. They churn less from the service and tend to have better credit. Of course freemium can be taken too far, especially if there isn't a profitable complementary good that can be paired with the service. With internet scale services, while the incremental cost of a new customer/user is not zero (as per Ben Thompson's description of digital goods) it is effectively zero as there is so little incremental cost. An exception would be highly resource intensive services such as live streaming, email/file storage, or translation all of which use significant bandwidth, storage, or compute per incremental use.

Bill Gurley describes an increasingly important phenomenon facing every business today: "If a disruptive competitor can offer a product or service similar to yours for 'free' and if they can make enough money to keep the lights on, then you likely have a problem." Every businesses today must be prepared for competitors to give away what they sell as an incentive for customers to buy something else. That fact thatmany of the free services are digital and have close to zero marginal costs has caused the freemium strategy to spread like wildfire. The implications of the freemium business model are massive since businesses now face competition from companies that they never previously thought of a competitors. Fred Wilson believes: "when network effects matter, when your users are creating the content and the value, free is the business model of choice." If the network effects benefits of size are large getting big fast is hard given customers acquisition cost. And the best way to lower customer's acquisition costs is often free. Making the approach even more attractive is the fact that even free users add to network effects since they are using the systems and its formats.

Using a freemium approach can be tricky in an enterprise setting. Version One ventures points out that freemium can create problems and is not a panacea:

"Offering an app/service for free can send the wrong message. Here, free can be equated with low quality. Free isn't necessarily sustainable with B2B. Acquiring business users may prove too costly, forcing start-ups to raise incredible amounts of money to finance aggressive sales and marketing efforts for a free app. In the enterprise, freemium models generally work in two situations: (1) You target a large enough user base and (2) The product becomes more valuable over time."

Freemium works best when there are millions of potential customers since the conversion rate will not be high. Best practices include:

1. Avoid selecting "free" items that have significant variable COGs. Select software-based free services that have almost zero marginal cost works better.
2. The best free services have network effects.
3. Make sure that the item you select as free side of the marketplace has complementary services that might be sold at a profit. Free checking at a bank is good example of free service that makes upselling natural (many types of loans).

4. The best forms of Freemium make it natural for the users to register revealing their personal data and set up a credit card on file.
5. The best complementary products are services that people are accustomed to paying real money for (convincing people to spend money in a new category is not easy),
6. The best free services have low churn since they are sticky)

What sort of conversion rates are typical in a freemium model? One estimate from Totango is:

"For a B2B SaaS company with free trial, I assume the following ball park figures:

3%-5% – average and means good business operations
8% and above – excellent conversion rates
below 3% – below average."

Nothing creates a base from which to try to up-sell users like a free service. There is no question that a price of zero is magical for humans. Work by Dan Ariely proves this point:

"In one study we offered students a Lindt Truffle for 26 cents and a Hershey's Kiss for 1 cent and observed the buying behavior: 40 percent went with the truffle and 40 percent with the Kiss. When we dropped the price of both chocolates by just 1 cent, we observed that suddenly 90 percent of participants opted for the free Kiss, even though the relative price between the two was the same. We concluded that FREE! is indeed a very powerful force."

Ariely concludes: "'Free' is kind of an incredibly tempting human hot button. And sometimes it's great and sometimes it gets us into trouble."

The freemium approach is now scalable globally as never before. The implications of this shift are huge and still being sorted out.

P.s., How much is being given away by producers in consumer settings as a result of the freemium phenomenon? Since free products have no price they are not easy to measure, One indication that the number is large is the fact that 98% of App Store revenue is coming from freemium apps. Services like mobile games and Craigslist have free elements.

- A Deloitte Report summarizes some of the research in consumer settings:

"Researchers at the University of Michigan found that they saved 15 minutes by using the internet compared to the university library to answer a list of specific questions. Assigning a monetary value to these time savings Google's Chief Economist, Hal Varian, estimated that the search feature of the internet generates a consumer surplus in the US of $65-130 billion a year. This is likely to significantly underestimate the true level of saving because in this experiment the internet was compared with a university library – an asset that few consumers can access. Another approach is to estimate the time people spend on the internet. The reasoning runs that if I choose to spend an evening searching the web it demonstrates that I prefer this activity to all others available to me. Using this approach Erik Brynjolfsson and Joo Hee Oh at MIT estimated America's consumer surplus from the internet at $564bn in 2011. Inclusion of this surplus in America's GDP numbers would have boosted annual

growth by a sizeable 0.4 percentage points – equivalent to a 15% uplift in trend growth. The nature of the internet and the way we interact with it makes estimating the consumer surplus from it incredibly difficult. Crowdsourced websites such as Twitter, Wikipedia, TripAdvisor or the review section of Amazon are particularly challenging. How does one measure the addition to the consumer surplus from our receiving advice, ideas and information?"

These estimates do not include the value of open source and other public goods for businesses such as free cloud compute and storage for commercial customers. For example, every cloud company now has a free tier. Azure also has free credit for new customers and a free service trier. Amazon has both an always free trier and a first-12-months-free offer. Google also has a free to use tier for its cloud services. In 2015 GetApp, a company that tracks over 3,000 business apps, reported that 22% of the total have adopted a freemium model. Business like DropBox, Slack, MailChimp, SoundCloud, EverNote, ZoHo, SurveyMonkey, Skype, HootSuite, Moz, Weebly, Salesforce, Optimizely, and Box all use a freemium approach. Open source examples include Linux, Git, MySQL, Node.js, Docker, Hadoop, Elasticsearch, Spark, MongoDB, Selenium, NPM, Redis, Tomcat, Jenkins, Vagrant, Postgres, Gradle, Nginx, Ansible, Kafka, GitLab, and Chef.

Open source software has enabled the creation of many freemium business models. By combining software that is given away as part of an open source community with related proprietary services that are not given away, a new business model is created. The related profitable and proprietary services must "complement" the free service like mustard complements a hot dog for the model to work well. Many entrepreneurs and investors have realized that the best path in creating a new business is to invent an open source project that is widely contributed to and then build a service around it after hiring all the people who worked on it. Businesses that have been built around open source, like Databricks, Mesosphere, and Docker, exemplify this trend.

Notes:

Louis C.K. https://www.youtube.com/watch?v=q8LaT5Iiwo4

Ben Thompson https://stratechery.com/2014/cost-bitcoin/

Deloitte: http://blogs.deloitte.co.uk/mondaybriefing/2015/09/weve-never-had-it-so-good.html

DeLong http://delong.typepad.com/hoisted_from_the_archives/2007/11/j-bradford-delo.html

John Vrionis: http://venturebeat.com/2015/12/06/its-actually-open-source-software-thats-eating-the-world/

Jack Shafer: News never made money, and is unlikely to. http://blogs.reuters.com/jackshafer/2013/08/15/news-never-made-money-and-is-unlikely-to/

Tomasz Tunguz http://tomtunguz.com/when-to-go-freemium/

Version One: http://versionone.vc/freefreemium-work-enterprise/#ixzz4eNwf7zE0

Fred Wilson: http://avc.com/2012/07/in-defense-of-free/

How to Make Decisions like Ray Dalio

April 28, 2017

What is most interesting to me about Ray Dalio is his decision-making process. This blog post is limited to a discussion of that process and not Bridgewater's philosophy generally. If you are interested in understanding Bridgewater and Dalio more broadly, Dalio has a book coming out this fall which expands on his widely circulated "Principles" document. I have written a more general blog post about Dalio on this blog, which you can find a link to in the Notes to this post.

Anyone who has read and understood the books and essays of Michael Mauboussin knows that people who have a sound decision-making process have better outcomes in life (not just in investing). Dalio's view tracks Mauboussin's view: **"I think that every single day there are many decisions that people make and they all have consequences. And your life essentially depends on the cumulative quality of the decisions you make."** Having said that about the importance of making wise decisions in all aspects of life, thinking about how Dalio makes investment decisions is a particularly effective way of understanding his process. These quotations from Dalio set the table for a discussion of his decision-making process:

"You have to be an independent thinker in markets to be successful because the consensus is built into the price. You have to have a view that's different from the consensus."

"To win at stocks or entrepreneurship, you must bet against the consensus and be right."

Andy Rachleff makes the same point as Dalio is saying in this way: "Investment can be explained with a 2×2 matrix. On one axis you can be right or wrong. And on the other axis you can be consensus or non-consensus. Now obviously if you're wrong you don't make money. The only way as an investor and as an entrepreneur to make outsized returns is by being right and non-consensus."

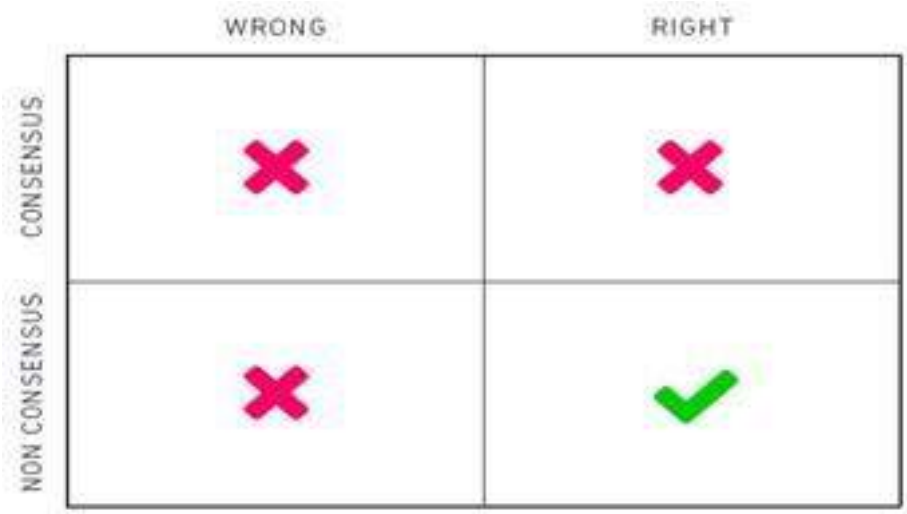

Another adherent to this idea is Howard Marks who has said: "To achieve superior investment results, your insight into value has to be superior. Thus you must learn things others don't, see things differently or do a better job of analyzing them – ideally all three." Being genuinely contrarian means the investor is going to be uncomfortable sometimes. Some people are good at being uncomfortable, and some are not.

Dalio believes:

"Most other professions you can build on existing knowledge. You don't have to have a point of view. If you're a doctor and somebody breaks a leg or whatever, you can repair that leg. It's not zero-sum, in the sense that you have to be smarter than the next person or different from the consensus. Now in order to be different from the consensus, there's a high risk you're going to be wrong."

"Find people of alternative points of view and have quality conversations back and forth. Not to let them think for me, not for me to follow their point of view, but for me to understand the different perspectives. Because it increases my probability of being right, and it reduces my probability of being wrong."

"When you have a view that's different from the consensus, you're gonna be wrong a certain number of times. It teaches you humility. The most important thing is to have humility and to think about 'how do I get the best decision?' It doesn't have to come from me, I just want to be right."

"Decision-making should be two steps. The first step is taking in information, particularly if there is disagreement, to understand that disagreement and then to make a decision. You have your right to make a decision. But it is so stupid not to take the time to take in and explore disagreement that might help prevent yourself from being wrong."

The desire to explore disagreement is the foundation of Dalio's drive to create "radical transparency"? Dalio describes this concept as follows:

"I want an idea meritocracy. I want independent thinkers who are going to disagree. The most important thing I want is meaningful work and meaningful relationships and the way to get that is through radical transparency."

"Meaningful work is being on a mission that you're excited about and that you can get your head into. And in meaningful relationships you can be totally transparent with each other, letting each other know what your weaknesses are."

As context, what Dalio is setting out to do as an investor is extraordinarily hard. To say that a tiny number of people outperform the markets by making macro bets is a radical understatement. A handful of people have been able to do this successfully over many years at scale. Dalio has discovered a source of alpha (outperforming a benchmark) through a process that results in better decisions.

Here is my short "boil the ocean" description of his decision making process: Dalio starts with a rational analysis of the information he has and from that he forms a hypothesis. He then exposes that hypothesis to thoughtful people with alternative points of view and methods

of analysis who may disagree with him and then he wants a radically transparent "back and forth" discussion. As part of that process he wants to deeply understand the reasoning of any thoughtful opposing views. Only after he has understood these alternative points of view does Dalio believe he is in a position to reject or accept the alternative ideas and make a decision. Dalio's approach is quite similar to Charlie Munger's approach: "I never allow myself to have an opinion on anything that I don't know the other side's argument better than they do. Rapid destruction of your ideas when the time is right is one of the most valuable qualities you can acquire. You must force yourself to consider arguments on the other side."

Why would Dalio join Twitter this week? Well, if you do use Twittter properly you can get exposed to real time views of smart people who think differently and who may have opposing views. He seems to understand a key point about Twitter's value when he tweeted this past week: **"Look forward to learning from my mistakes in a whole new way."** Bob Lefsetz explains why Twitter is so unique:

When breaking news occurs a hive emerges with tons of data. Is it sometimes wrong? Of course! But so is mainstream news! And if you can't ferret between the true and false, if you can't adjust on the fly, you don't deserve to be on Twitter, you need remedial reading classes.

And this is where the President makes his pronouncements.

It's all happening on Twitter.

But we've got to listen to the people who ruined this country, the financial sector, hate on the company.

Can it be improved? Sure! Does it need to be a standalone entity? Absolutely not. But one thing's for sure, we need a source for real time news, and so far no one else is coming close to Twitter.

The fact that more people would rather revisit high school, post cat videos and doctor images that make them look amazing is irrelevant. It's like looking to the Kardashian sisters to push the cultural envelope as opposed to Gustavo Dudamel.

We want people to make us think. We want to know where it's all going and what it all means.

And there's no better place to do this than on Twitter.

Many people treat Twitter as a broadcast medium which is a shame since the value of interactive discussion is so much higher. Many people also turn their Twitter feed into a echo chamber, which is a lost opportunity. Jason Zweig has a great column this week where is describes why "Investors have a hard time looking the truth square in the face" and the creation of echo chambers of all kinds makes the problem worse.

Dalio and Munger share other approaches to decision-making. For example, Munger, who describes his process as follows: "I use a kind of two-track analysis. First, what are the factors that really govern the interests involved, rationally considered? The first track is rationality-the way you'd work out a bridge problem: by evaluating the real interests, the real probabilities and so forth. Second, [I work to eliminate] influences where the brain at a subconscious level is automatically doing these things-which by and large are useful, but which often malfunctions." Munger and Buffett also have a third step in their decision-making process that is similar to Dalio: expose their ideas to the best minds they can find. In Buffett's case that mind is almost always Charlie Munger. Buffett calls Munger the "Abominable No Man." Buffett exposing an investing hypothesis to Munger is like tempering steel if an investing hypothesis doesn't break after being exposed to Munger it is more likelky to be sound.

Having a diverse "posse" of experienced people that you trust look at a potential investment is wise if you want to avoid making too many mistakes. Philip Fisher, an investor who Munger and many other investors learned a lot from, maintained a "scuttlebutt" network of people who he would call for advice or expertise, Munger has said: "Even Einstein didn't work in isolation. But he never went to large conferences. Any human being needs conversational colleagues." Buffett once gave a huge compliment to Munger's value as a person who can stress test his ideas when he said: "I try to look out 10 or 20 years when making an acquisition, but sometimes my eyesight has been poor. Charlie's has been better; he voted 'no' more than 'present' on several of my errant purchases."

To review what I have said in this post so far, the decision making process that Dalio, Buffett and Munger use is:

(1) make the most rational decisions you can;

(2) look for psychological bias that may have interfered with making a rational decision; and

(3) expose your hypothesis to very smart people who have a thoughtful contrary view and deeply understand their position.

On this last point Daniel Kahneman believes: "To better avoid errors, you should talk to people who disagree with you and you should talk to people who are not in the same emotional situation you are."

Dalio believes that the more a person repeats this process over the years, the more they learn. What does this sound like to you? It is essentially what Munger calls "Worldly Wisdom." Dalio sounds very much like Munger here:

"What I've discovered in that process is that I was learning so much. So just imagine what a fantastic path to think." "Let me go after the person who has got the opposite point of view, who is really smart, and let me have quality conversations, quality disagreement." "I get clear feedback. The goal is: don't be too wrong. Be more right than wrong. So in that process I can take personal accountability. If I don't learn personal accountability, if I don't learn, then I'm going to pay a terrible price. So that process itself lent itself to this kind of very open-minded decision. Also the making mistakes, and the loving the mistakes."

"There's an art to this process of seeking out thoughtful disagreement. People who are successful at it realize that there is always some probability they might be wrong and that it's worth the effort to consider what others are saying — not simply the others' conclusions, but the reasoning behind them — to be assured that they aren't making a mistake themselves. They approach disagreement with curiosity, not antagonism, and are what I call 'open-minded and assertive at the same time.' This means that they possess the ability to calmly take in what other people are thinking rather than block it out, and to clearly lay out the reasons why they haven't reached the same conclusion. They are able to listen carefully and objectively to the reasoning behind differing opinions. When most people hear me describe this approach, they typically say, 'No problem, I'm open-minded!' But what they really mean is that they're open to being wrong. True open-mindedness is an entirely different mind-set. It is a process of being intensely worried about being wrong and asking questions instead of defending a position. It demands that you get over your ego-driven desire to have whatever answer you happen to have in your head be right. Instead, you need to actively question all of your opinions and seek out the reasoning behind alternative points of view."

Dalio's famous principles document provide a guide to decision making at Bridgewater. Many of these principles you have seen other investors say on this blog. For example:

"190) Recognize the Power of Knowing How to Deal with Not Knowing

191) Recognize that your goal is to come up with the best answer, that the probability of your having it is small, and that even if you have it, you can't be confident that you do have it unless you have other believable people test you.

192) Understand that the ability to deal with not knowing is far more powerful than knowing a) Embrace the power of asking: 'What don't I know, and what should I do about it?' b) Finding the path to success is at least as dependent on coming up with the right questions as coming up with answers.

193) Remember that your goal is to find the best answer, not to give the best one you have.

194) While everyone has the right to have questions and theories, only believable people have the right to have opinions

195) Constantly worry about what you are missing. a) Successful people ask for the criticism of others and consider its merit. b) Triangulate your view.

196) Make All Decisions Logically, as Expected Value Calculations

197) Considering both the probabilities and the payoffs of the consequences, make sure that the probability of the unacceptable (i.e., the risk of ruin) is nil. (a) The cost of a bad decision is equal to or greater than the reward of a good decision, so knowing what you don't know is at least as valuable as knowing. (b) Recognize opportunities where there isn't much to lose and a lot to gain, even if the probability of the gain happening is low. (c) Understand how valuable it is to raise the probability that your decision will be right by accurately assessing the probability of your being right. (d) Don't bet too much on anything. Make 15 or more good, uncorrelated bets."

What typically gets in the way of the process like Dalio wants to create? Ego and organizational politics.

A. The ego of the decision maker is so often the source of a problem or mistake. Dalio says that it is emotionally hard to be radically transparent. Warren Buffett writes: "It's ego. It's greed. It's envy. It's fear. It's mindless imitation of other people. I mean, there are a variety of factors that cause that horsepower of the mind to get diminished dramatically before the output turns out. And I would say if Charlie and I have any advantage it's not because we're so smart, it is because we're rational and we very seldom let extraneous factors interfere with our thoughts. We don't let other people's opinion interfere with it… we try to get fearful when others are greedy. We try to get greedy when others are fearful. We try to avoid any kind of imitation of other people's behavior. And those are the factors that cause smart people to get bad results." What Buffett describes is an example of what Charlie Munger calls inversion. Instead of just trying to be smart, it is wise to focus on not being stupid. Dalio believes:

"People are so attached to being right, and yet the tragedy is it could be so easy to find out how you're wrong. If you just said to yourself, "I'm not sure that I'm right, and let me go find people who have alternative point of views and let me have quality conversations." Not to pay attention to their conclusions, but to the thought process. So thoughtful discussion, worrying about being wrong but not to the sense of being paralyzed. Or moving forward, but in the sense of trying to create discovery, to have an exchange. To go after the person who has the most different point of view, who is the most thoughtful, and then have a conversation to see their point of view. Whether a person could be both open-minded and assertive at the same time, that creates a

discovery process. It creates a fabulous learning. That process itself reduces the probability of being wrong and produces a great deal of learning. People are so hung up on being right. Starting their discussion and deriving some sort of satisfaction if, at the end of the discussion, they were where they began the discussion. That doesn't make any sense, because there's not going to be any learning. So ego plays an important role in that. The people that feel like, 'I'm good. I've got it,' won't learn. If you've got it, you won't learn. So you have to get rid of this ego barrier, 'I've got it' thing."

"You start to learn how people see things differently. And rather than just seeing how you see it, you go above that. You're seeing that everybody is seeing things differently. It changes how you see things because it starts to make you think, how do I know I'm not the wrong one? You start to think, how do I collectively see? And it's like being in a different color range. All of the sudden you see the full spectrum. When you start to realize that people are actually seeing in those [different] ways — that it's a valid way of seeing, and that I need you and you need me — it gives you the evidence base that it's okay to be different. The most important thing is to have humility, and to think about, how do I get the best decision? It doesn't have to come from me. I just want it to be right, right? If comes from other people, that's good. The greatest tragedy of mankind is people holding on to wrong opinions that could so easily be rectified and that are doing them harm because they're making wrong decisions."

B. Organizational politics. One advantage that Buffett and Munger have is that in many cases the "radically transparent" discussion is just between the two of them. Both Buffett and Munger have said that they sometimes disagree but have never had "an argument" that was hostile. They have also decided to focus on investing decisions that involve forecasts about microeconomics. In contrast, Dalio is engaged in macro investing and his supporting organization is far larger. Reuters describes what must be managed at Bridgewater as follows:

"Bridgewater manages about $160 billion, according to its website, and is known for a unique culture of 'radical truth and radical transparency' whereby intellectual conflict is encouraged to promote a meritocracy of ideas, avoiding traditional office politics. The culture is not for everyone. The firm is known for relatively high turnover among its roughly 1,700-person staff. An estimated 25 percent depart during the first 18 months of employment."

The challenges associated with maintaining a culture like Bridgewater which is willing to incur the overhead of continuously providing feedback and utilizing it in decision-making in an idea meritocracy are significant. The number of connections between employees increases with the square of the number of involved employees, which has caused Dalio to come up with some unusual approaches to maintaining radical transparency like videotaping and making available to anyone almost all meetings and the use of Bridgewater designed baseball cards. It is precisely because what Dalio is doing at Bridgewater is so hard that Bridgewater's alpha has been persistent. If doing what Bridgewater does was easy, the alpha would disappear. Being different is a source of competitive advantage. If you want different results you must act in a different way.

To see how Dalio tries to combat dysfunctional corporate politics at Bridgewater it is useful to examine how he describes his principles:

"Never say anything about a person you wouldn't say to him directly. If you do, you're a slimy weasel. Badmouthing people behind their backs shows a serious lack of

integrity. It doesn't yield any beneficial change and it subverts both the people you are bad mouthing and the environment as a whole. Next to being dishonest, it is the worst thing you can do at Bridgewater. Criticism is both welcomed and encouraged at Bridgewater, so there is no good reason to talk behind people's backs. You need to follow this policy to an extreme degree to be in harmony with our culture. For example, managers should not talk about people who work for them without those people in the room." "So every meeting is taped and made available for everybody in the company to look at. And all we have are conversations of, 'What makes sense?" Everybody has the right to make sense of things. Now in that environment I get to see how differently people think. I realize how radically different people think." "This approach comes to life at Bridgewater in our weekly research meetings, in which our experts on various areas openly disagree with one another and explore the pros and cons of alternative views. This is the fastest way to get a good education and enhance decision-making. When everyone agrees and their reasoning makes sense to me, I'm usually in good shape to make a decision. When people continue to disagree and I can't make sense of their reasoning, I know I need to ask more probing questions or get more triangulation from other experts before deciding. I want to emphasize that following this process doesn't mean blindly accepting the conclusions of others or adopting rule by referendum. Our CIOs are ultimately responsible for our investment decision-making. But we all make better decisions by maintaining an independent view and the conflicting possibilities in our minds simultaneously, and then trying to resolve the differences. We're always in the place of holding an opinion and simultaneously stress-testing the hell out of it. Operating this way just seems like common sense to me. After all, when two people disagree, logic demands that one of them must be wrong. Why wouldn't you want to make sure that that person isn't you?"

This sort of total honesty and transparency is not a comfortable environment for many people, but it is for enough talented people that Bridgewater has been able to assemble its team and compile its remarkable investing record. If you want to dig into radical transparency and issues like how ego and emotions can get in the way of Dalio's approach to making decisions, I suggest you watch "The Culture Principle" video linked second in the Notes below.

Notes:

Dalio Essay http://www.institutionalinvestor.com/blogarticle/3433519/bridgewaters-ray-dalio-explains-the-power-of-not-knowing.html#.WPcD9YWcFNs

The Culture Principle https://www.youtube.com/watch?v=h2KHec3KNyQ

Dalio Interview: http://prodloadbalancer-1055872027.us-east-1.elb.amazonaws.com/autodoc/page/dal1int-1

Bridgewater Principles: https://docs.google.com/viewer?a=v&pid=sites&srcid=ZGVmYXVsdGRvbWFpbnxlYm9va3Nkb3dubG9hZG5vdzIwMTZ8Z3g6MjY3NGU2Njk5N2QxNjViMg and https://www.bridgewater.com/#principles-culture

New Yorker Profile: http://www.newyorker.com/magazine/2011/07/25/mastering-the-machine

A Dozen Things Essay by me about Dalio: https://25iq.com/2013/10/12/a-dozen-things-ive-learned-from-ray-dalio-about-investing/

Radical Transparency Essay: https://www.forbes.com/sites/eriklarson/2017/04/04/decision-making-guru-ray-dalio-radical-transparency-buddha/2/#6eef6f63112c

A Dozen Lessons on Finance and Business from Ambrose Bierce

May 6, 2017

Ambrose Bierce started his career as a printer's devil (apprentice) at an Indiana, paper after he completed about a year in high school. In 1861 he enlisted in the 9th Indiana Volunteers and fought in a number of American Civil War battles, including Shiloh and Chickamauga. He was seriously wounded in the Battle of Kennessaw Mountain in 1864 and served until January 1865. After the war he worked as an editor, journalist, and short story writer mostly in San Francisco. What would become the book "The Devil's Dictionary was begun in a weekly paper in 1881, and was continued in a desultory way at long intervals until 1906. In that year a large part of it was published in covers with the title The Cynic's Word Book, a name which the author had not the power to reject or happiness to approve."

Janson Zweig has written a wonderful book entitled *The Devil's Financial Dictionary* in the style of Bierce that is both entertaining and educational. My approach in this blog post, as is customary, is to supply something in support of the original text, which in this case a joke rather than the usual commentary.

1. **"OWE, v. To have (and to hold) a debt. The word formerly signified not indebtedness, but possession it meant 'own,' and in the minds of debtors there is still a good deal of confusion between assets and liabilities."**

A frog goes into the bank and asks the teller for a business loan. The teller tells the frog to see Mr. Paddywack, the business loan officer. Mr. Paddywack looks at the frog and says, "What do you have for collateral? The frog pulls out of his pocket a solid silver elephant. Mr. Paddywack looks at the elephant and says, "I don't know. I'm going to have to ask Mr. Larson, the bank manager to approve this business loan." He goes into Mr. Larson's office and comes back. Two minutes later, Mr. Larson comes out with the elephant and says, "It's a knick-knack Paddywack, give the frog a loan!"

2. **"COMMERCE, n. A kind of transaction in which A plunders from B the goods of C, and for compensation B picks the pocket of D of money belonging to E."**

A man had just been hired as the new CEO of a large corporation. The CEO who was stepping down met with him privately and presented him with three numbered envelopes. "Open these if you run up against a problem you don't think you can solve," he said. Well, things went along pretty smoothly at first, but six months later, sales took a downward turn and he was really catching a lot of heat. About at his wits end, he remembered the envelopes. He went to his drawer and took out the first envelope. The message read, "Blame your predecessor." The new CEO called a press conference and tactfully laid the blame at the feet

of the previous CEO. Satisfied with his comments, the press — and Wall Street — responded positively, sales began to pick up and the problem was soon behind him. About a year later, the company was again experiencing a dip in sales, combined with serious product problems. Having learnt from his previous experience, the CEO opened the second envelope. The message read, "Reorganize." This he did, and the company rebounded. After several consecutive profitable quarters, the company once again fell on difficult times. The CEO went to his office, closed the door and opened the third envelope. The message said, "Prepare three envelopes."

3. **"FINANCE, n. The art or science of managing revenues and resources for the best advantage of the manager. The pronunciation of this word with the i long and the accent on the first syllable is one of America's most precious discoveries and possessions."**

How many stockbrokers does it take to screw in a lightbulb? Two. One to hire a lightbulb installer and another to charge you a fee of 1% of your assets each year and a 5% sales load.

4. **"MAMMON, n.: The god of the world's leading religion." (can be defined as money, material wealth, or any entity that promises wealth."**

Two friends met in the street. One looked sad and almost on the verge of tears. The other man said, "Hey my friend, how come you look like the whole world has caved in?" The sad fellow said, "Let me tell you. Three weeks ago, an uncle died and left me $50,000." "That's not bad at all…!" "Hold on, I'm just getting started. Two weeks ago, a cousin I never knew died and left me $95,000." "Well, that's great! I'd like that." "Last week, my grandfather passed away. I inherited almost $1 million." "So why are so glum?" "This week – nothing!"

5. **"PROPERTY, n. Any material thing, having no particular value, that may be held by A against the cupidity of B. Whatever gratifies the passion for possession in one and disappoints it in all others."**

A man opened the door of his BMW, when suddenly a car came along and hit the door, ripping it off completely. When the police arrived at the scene, the lawyer was complaining bitterly about the damage to his precious BMW. "Officer, look what they've done to my Beeeemer!!!", he whined. "You are so materialistic. You make me sick!!!" said the officer, "You're so worried about your stupid BMW, that you didn't even notice that your left arm was ripped off!" "Oh my gaaad….", replied the man, finally noticing the bloody left shoulder where his arm once was, "Where's my Rolex? "

6. **"MONEY, n. A blessing that is of no advantage to us excepting when we part with it. An evidence of culture and a passport to polite society. Supportable property."**

A thief stuck a pistol in a man's ribs and said, "Give me your money." The man replied, "You cannot do this — I'm a United States congressman!" The thief said, "In that case, give me my money!"

7. **"CLAIRVOYANT, n.: A person who has the power of seeing that which is invisible to her patron – namely, that he is a blockhead."**

While studying the occult, a teacher asked one of the boys in her class, “Can people predict the future with cards?” His response was, “My mother can.” The teacher replied, “Really?” The young boy was quick to explain, “Yes, she takes one look at my report card and tells me what will happen when my father gets home.”

8. **“BRAIN, n. An apparatus with which we think that we think.”**

An alien walked into a shop and told the owner that he came from Mars and wanted to buy a brain for research. ”How much is this one?” he asked. ”That one is a monkey brain, and it’s $20,” the owner explained. ”How much is that one?” the alien asked. “That one is an engineer’s brain, and it’s $100,” the owner replied. ”And how much is that one?” the alien asked. ”That one is a politician’s and it is $500” the owner explained. ”Why is the politician’s brain so expensive?” the alien asked. The owner answered, ”Well, it’s hardly been used!”

9. **“PLAN, v.t. To bother about the best method of accomplishing an accidental result.”**

A girl has brought her fiancé home for dinner. After dinner, the fiancé and the girl’s father go into the study for a man to man talk. “So, what are you doing right now?” asks the father. “I am a theology scholar,” replies the fiancé. “Do you have any plans of employment?” “I will study and God will provide.” “What about the children?” asks the man. “God will provide.” “And your house and car?” “Again, God will provide,” says the fiancé. After the talk, the girl’s mother asks the father, “So what did you two talk about?” The man replies, “He has no plans of employment, but on the other hand, he thinks I’m God.”

10. **“RESPONSIBILITY, n. A detachable burden easily shifted to the shoulders of God, Fate, Fortune, Luck or one’s neighbor. In the days of astrology it was customary to unload it upon a star.”**

Joe was having a tough time finding a job what with the current economic problems. He couldn’t even get an interview. Finally, he secured an interview and needless to say, he was trying his best to impress. The interviewer said, “In this job Joe, we need someone who is responsible.” “I’m the one you want,” Joe replied. “At my last job every time anything went wrong, they said I was responsible.”

11.“CONSULT, v.i. To seek another’s disapproval of a course already decided on.”

A shepherd was herding his flock in a remote pasture when suddenly a brand-new BMW advanced out of the dust cloud towards him. The driver, a young man in a Brioni suit, Gucci shoes, Ray Ban sunglasses and a silk tie, leaned out the window and asked the shepherd… “If I tell you exactly how many sheep you have in your flock, will you give me one?” The shepherd looked at the man, obviously a yuppie, then looked at his peacefully grazing flock and calmly answered “sure”. The man parked his car, whipped out his laptop and connected it to a mobile phone, then he surfed to a NASA page on the internet where he called up a GPS satellite navigation system, scanned the area, and then opened up a database and an Excel spreadsheet with complex formulas. He sent an email and, after a few minutes, received a response. Finally, he prints out a 130-page report, then turns to the shepherd and says, “You have exactly 1586 sheep. “That is correct; take one of the sheep.” said the shepherd. He watches the young man select one of the animals and bundle it into his car. Then the shepherd says: “If I can tell you exactly what your business is, will you give me back my animal?”,

"OK, why not." answered the man." Clearly, you are a consultant." said the shepherd. "That's correct." Says the man, "but how did you guess that?" "No guessing required." Answers the shepherd. "You turned up here although nobody called you. You want to get paid for an answer I already knew, to a question I never asked, and you don't know crap about my business. Now give me back my dog."

12. **"BORE, n. A person who talks when you wish him to listen."**

"I'm bored' is a useless thing to say. I mean, you live in a great, big, vast world that you've seen none percent of. Even the inside of your own mind is endless; it goes on forever, inwardly, do you understand? The fact that you're alive is amazing, so you don't get to say 'I'm bored." Louis C.K.

Notes:

The Devil's Dictionary http://xroads.virginia.edu/~Hyper/Bierce/bierce.html#L

The Devil's Financial Dictionary By Jason Zweig https://www.amazon.com/Devils-Financial-Dictionary-Jason-Zweig/dp/1610396995

Tech version: http://www.theverge.com/a/new-devils-dictionary

The Dot-Com Boom and Bust

May 12, 2017

"Most of the entrepreneurs today weren't around in '99. They have no muscle memory of it whatsoever." Bill Gurley (September 2016)

Unlike the entrepreneurs Bill Gurley is talking about, I have a lot of muscle memory that resulted from the Internet bubble. There is no way you can fully convey in words the experience being in the lead car as an investor in that roller coaster. Looking at the cycle after the fact is nothing like looking ahead and not knowing what will happen next. The experience still impacts the way I think and act. It was a heck of a lot of fun in some ways. If you can't learn from an experience like we had in the markets during roller-coaster ride that was the Dot-Com phenomenon, you were not paying attention. Good judgment comes from experience and often that experience comes from bad judgment. Most of the bad judgment associated with the Dot-Com era was observed but some of it was mistakes I made all by myself or as part of a herd. It is hard to describe how strong the feeling of FOMO was at the time. People were terrified of missing out on the upside and loss aversion and paper gains made them reluctant to act to cushion the downside.

Every story must have a starting point. The best time to begin this tale is probably 1993 when the business environment first started to change in way that would develop into a bubble. Changes that we would look back at later and say "that was crazy" did not happen in a huge way at first. The initial buildup was gradual and steady at the outset. But by 1994 the parties started getting better, the tchotchkes more lavish and paper wealth created at an impressive

pace. Everyone was a frog in a pot of boiling water but they mostly did not feel it. By 1995 having in the Rolling Stones or The Eagles play at a private party hosted by a bigwig was becoming normalized in some circles in certain geographies.

One aspect of the abnormality of the period was the rapid jump in the number of IPOs. This chart shows the "IPO pig coming through the snake" in the mid to late 1990s. It also puts the current IPO market into perspective.

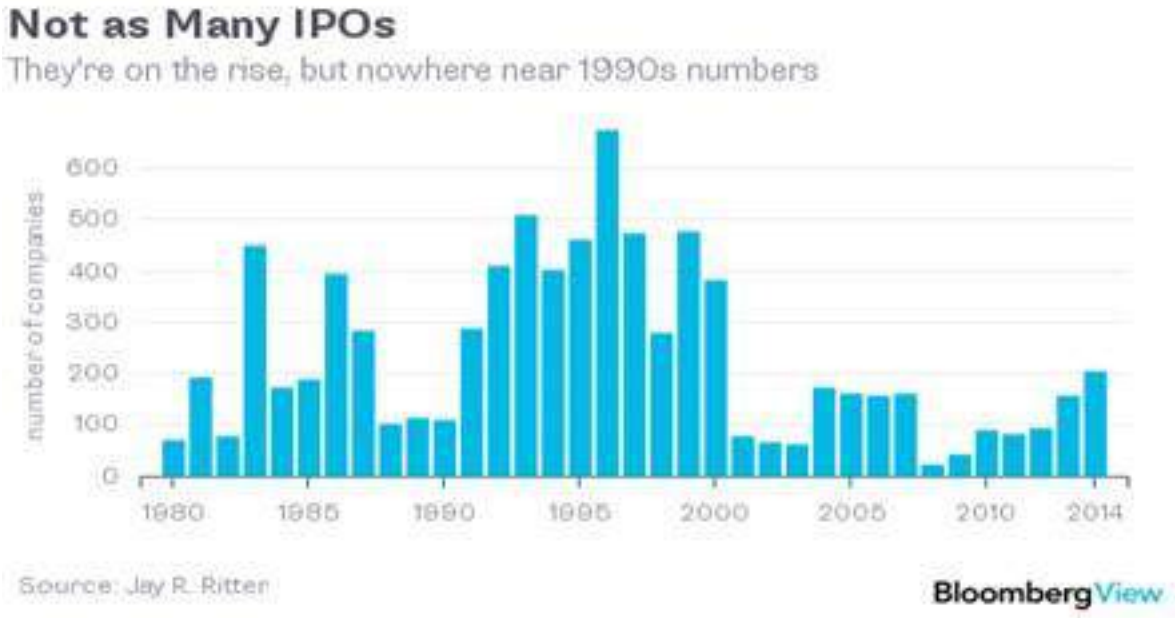

Venture backed IPOs looked like this chart below. One VC quoted on Bloomberg recently predicted 30-35 IPOs in 2017. As a benchmark for comparison, there were 21 tech IPOs in 2016, 23 in 15 and 55 in 2014 and 84 in 2013.

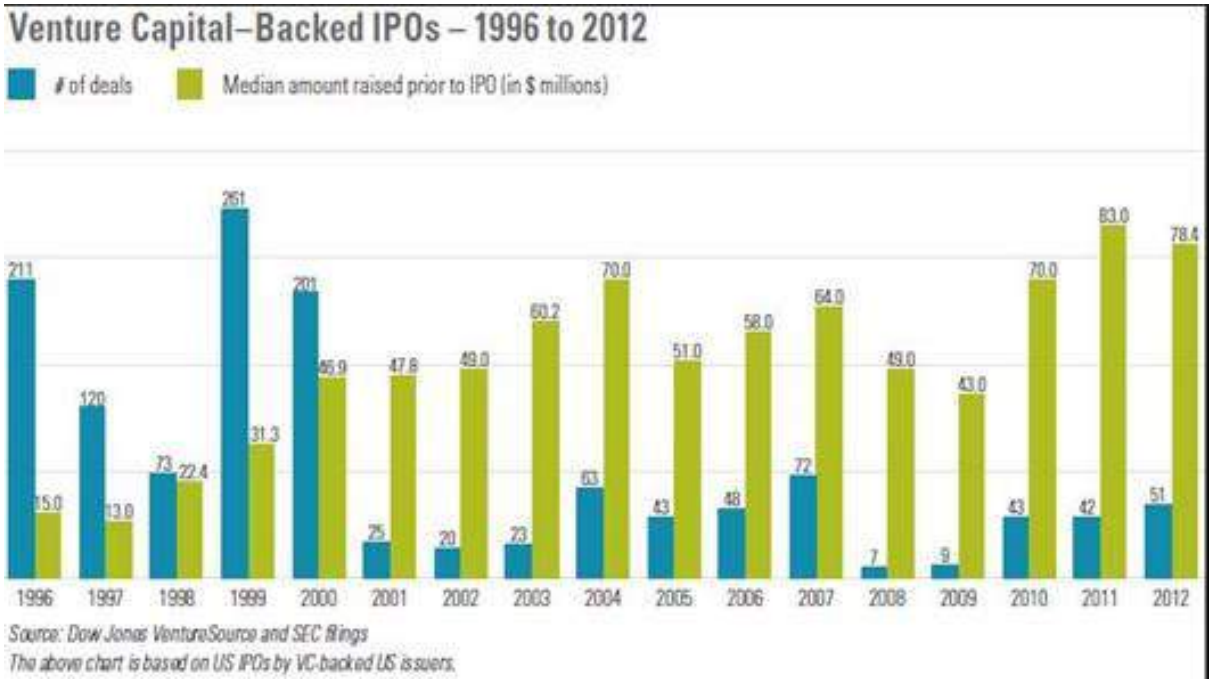

The amount of paper wealth that was being created did not start to accelerate to bonkers levels until ~1996. While 1996 had the most IPOs 1999 was the pivotal year in terms of the valuations and amounts of money raised:

Biggest years for IPOs in the 1990s		
Year	No. of IPOs issued	Money raised
1999	546	$69.2B
1996	872	$49.9B
1997	630	$43.3B
1993	708	$41.3B
1998	373	$36.5B

Source: Thomson Financial Securities Data

One aspect of the IPO craziness of the Dot-Com era was the *first day pop*. Getting an allocation of "friends and family" shares for an IPO seemed to some people like a guaranteed way to make a profit in 1999. Like most bubble phenomenon that *first day pop* approach worked until it suddenly didn't.

While the madness was going on there were people who predicted that a bubble was forming and that it would end badly; some of these people took their fund to $0 by shorting stocks too early. That experience illustrated how being early in making a prediction is indistinguishable from being wrong. By late 1999 I remember thinking "everyone can't really be this rich. Or can they?" Some people became fabulously rich on paper in just months and the impact of that was that envy and jealousy which caused other people to lose their tie to reality. The environment was literally nuts. FOMO made people do things that in retrospect seem insane, but at the time seemed reasonable. Here's a recap:

"Initial public offerings raised more than $69 billion in 1999, 39 percent more than 1996, the second-biggest year, according to Thomson Financial Securities Data. More eye-popping, however, may be the year's record first-day gains. VA Linux jumped a record 733 percent in its first day of trading in early December. One hundred and seventeen, or 23 percent, of the year's IPOs soared more than 100 percent in the first day of trading, according to WorldFinanceNet.com. The average first-day gains of 68 percent this year trounced last year's average rise of 23 percent. The year registered nine of the top 10 first-day IPO gains of all-time, according to IPO.com."

Top 10 first-day IPO performances			
	Company	Offer date	Gain
1.	VA Linux	12/9/99	733%
2.	theglobe.com	11/12/98	606%
3.	Foundry Networks	9/27/99	525%
4.	Cobalt Networks	11/5/99	482%
5.	MarketWatch.com	1/15/99	474%
6.	Akamai Technologies	10/29/99	458%
7.	CacheFlow	11/19/99	427%
8.	Sycamore Networks	10/21/99	386%
9.	Ask Jeeves	7/1/99	364%
10.	Finisar	11/11/99	357%

Source: IPO.com

What happened to VA Linux?

> VA Linux Ssytems changed its name in 2001 to VA Software, after jettisoning the hardware business entirely, and it focused on selling licenses for SourceForge Enterprise. And when that didn't work out, it became SourceForge, a collection of Web sites deriving revenue entirely from ad sales. And it has since **changed its name again, to Geeknet**.

Geeknet now sells classic items like:

Star Wars Geeki Tikis - Series 1

A Salon article in April of 2000 article painted a picture of the party scene in the technology world that was produced by too much cash chasing too little value. What is most notable perhaps about the article is that it appeared after the bubble had popped. The party scene was operating on momentum still, but about to come to a calamitous halt.

"Jessica Crolick downs her free drink, grabs a black fleece jacket from the table and darts out of the dot-com party at the San Francisco Museum of Modern Art. She hops into a van with four strangers, who are on their way to another dot-com bash across town. The conversation moves from work to apartments, but conspicuously absent from the chatter is Digital Island the digital content delivery company that spent over $50,000 for food, drink and fleece to fete its new logo and announce a partnership with Apple. In fact, by the time Crolick and her posse reach the second party — a tropical-themed and more raucous affair hosted by Beenz an online currency company — few remember the first company's name, and no one knows or cares what either company does. Dot-com valuations may have withered, but the enthusiasm for extravagant dot-com parties hasn't, and party budgets show no signs of being trimmed. In any given week, technology companies throw 15 to 20 parties in the San Francisco Bay Area. On average, each costs $30,000 to $50,000, according to party planners and venue owners, although the $250,000 blowout is hardly rare. In March, for example, Salesforce an online sales automation service, and iCast which offers streaming media tools and content, each ran up tabs greater than $200,000, entertaining more than 1,000 guests each…. Marx, the president of Acteva — which brought 2,000 people to Treasure Island in

December for a $200,000 party to announce its new name — agrees. More money, more people and more extravagant ideas are definitely the way to go. It's no longer enough to just "get a few hundred people together and give them a drink," he says, glancing around at the paltry WiredPlanet party."

Clearly an abnormal number of IPOs and unprofitable companies doing an IPO was happening in 1999.

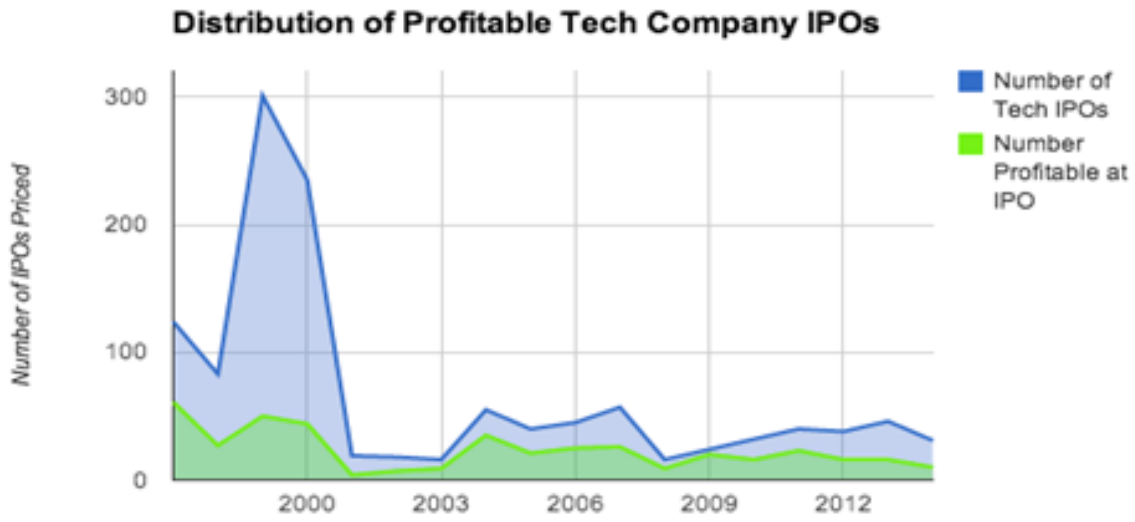

The level of s*chadenfreude* and morbid curiosity was also unprecedented. The roll call of craziness is long:

FogDog

Pixelon

Startups.com

eToys

Pointcast,

PlanetRX

Blue Mountain

Digiscents

InfoSpace

CyberRebate

iFusion

GovWorks

Beenz

Webvan

Kozmo

GeoCities

Flooz

A more complete list of companies that went public during the DotCom era can be seen in this document entitled: "A Prelude to the Dot-Com Bust" http://online.wsj.com/public/resources/documents/CovOriginal.pdf What is interesting is that a few companies like Amazon are on this list so some went on to bigger things. It would be interesting if the math revealed yet another power law.

One thing that is hard to describe is how quick things got really ugly. Some people froze like a deer in headlights. Other people acted and salvaged some value. Every day in the market even during less volatile times you are in the lead car of the a roller-coaster and can't see anything ahead, but because the up and down motion were so very steep in the Dot-Com era the experience was particularly unnerving.

"On March 10, 2000 the combined values of stocks on the NASDAQ was at $6.71 trillion; the crash began March 11. By March 30, the NASDAQ was valued at $6.02 trillion. On April 6, 2000, it was $5.78 trillion."

By the start of 2000 the investing and business environments weren't quite as nutty as was the case in 1999 but times were still relatively good. But things went downhill fast that year:

"Unlike 1999, the new issues class of 2000 featured a lot of big losers," says Richard Peterson, chief market strategist for Thomson Financial Securities Data. Peterson's firm reports that of the 452 stocks that went public last year, 284, or 63%, trade below their offering prices and 68% are down from the first trading day's close.

What caused the bubble to pop? In March of 2000 Barron's carried a story that contained some sobering numbers that some people believe was pivotal in triggering the correction. I am of the views that what triggered the correction was a lack of cash. Was the Barron's article the last straw on the camel's back? It is impossible to prove but some people think so. I remember reading the Barron's story but since I was seeing many Internet companies with little cash on hand the article's conclusion was not really news. There were telecom companies on that list referred to in the Barron's article but the telecom world did not see a collapse until early 2001. There were also companies on that list http://online.wsj.com/public/resources/documents/CovOriginal.pdf like Amazon, Ticketmaster, McAfee and Priceline that survived. In any event, regardless of whether you think the article as the cause of the change, the Barron's story was very timely and correct:

"An exclusive study conducted for *Barron's* by the Internet stock evaluation firm Pegasus Research International indicates that at least 51 'Net firms will burn through their cash within

the next 12 months. This amounts to a quarter ofthe 207 companies included in our study. Among the outfits likely to run out of funds soon are CDNow, Secure Computing, drkoop, Medscape, Infonautics, Intraware and Peapod. To assess the Internet sector's financial position, Pegasus assumed that the firms in the study would continue booking revenues and expenses at the same rate they did in last year's fourth quarter. While this method cannot predict the future precisely, it helps answer a question that has been nagging many stock-market analysts: When will the crowded Internet industry begin to be winnowed? The ramifications are far-reaching. To begin with, America's 371 publicly traded Internet companies have grown to the point that they are collectively valued at $1.3 trillion, which amounts to about 8% of the entire U.S. stock market."

These charts of the NASDAQ tell a graphical story about what happened and when. It is important to note that it went down as fast as it went up. One company as I recall ended up stuck with $1B in FPGA chips sitting in warehouses. Everything changed. Quickly. The telecom bubble took at bit longer to correct, but that is another story.

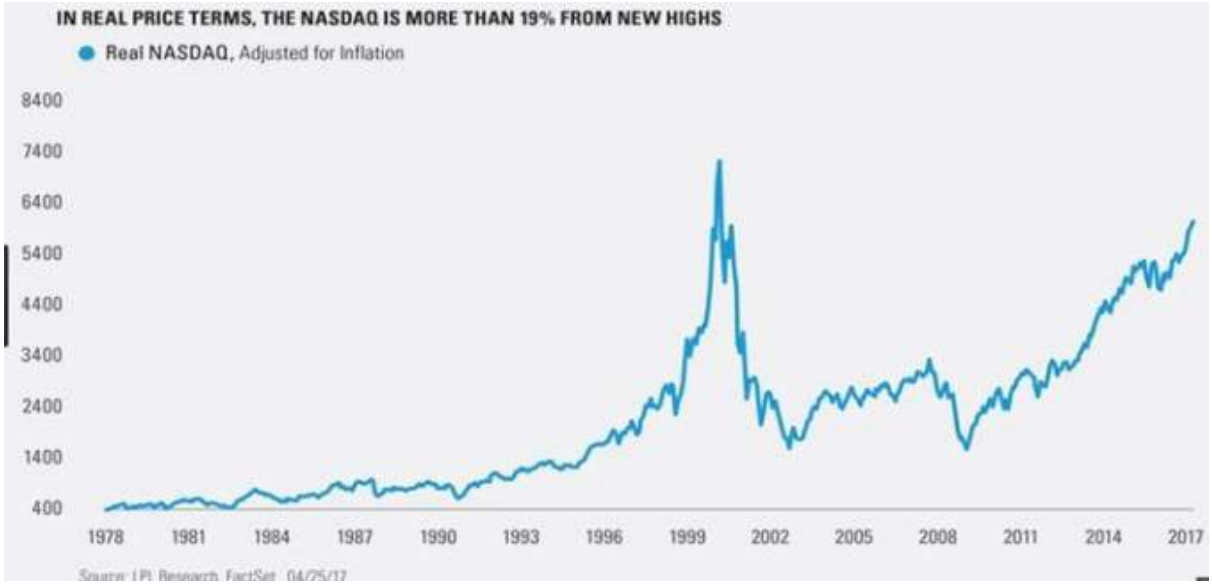

By December 2000:

"What a difference a year makes. The Nasdaq sank. Stock tips have been replaced with talk of recession. Many pioneering dot-coms are out of business or barely surviving. The Dow Jones Internet Index, made up of dot-com blue chips, is down more than 72 percent since March. Online retailers Priceline and eToys, former Wall Street darlings, have seen their stock prices fall more than 99 percent from their highs."

Philip J. "Pud" Kaplan's operated a web site that published stories, internal memos and leaked documents of failed startups that still can be found at http://web.archive.org/web/20011201061308/http://fuckedcompany.com/ You can change the date to simulate what it was like to look at the dead pool every day. Posts looked like this:

RECENT NEWS

General discussion | 9/11/2001

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good word

Apparently IT Factory management doesn't think that employees are "tenacious" enough to get paid, according to this string of emails to employees...

When: 11/30/2001

Company: ITFactory

Severity: 90

Points: 190

82 comments in the *Happy Fun Slander Corner!*

Shutdowns.com

Meeting today at 1:00pm at Startups.com, major layoffs (not Startup.com the movie, which, btw, if you saw, you should see this).

When: 11/30/2001

Company: Startups.com

Severity: 90

Points: 190

40 comments in the *Happy Fun Slander Corner!*

In terms of my own decisions related to the end of the bubble, the summer of 1999 was when I hedged the market by selling some shares and buying some puts as a proxy hedge after reading a lot of material on the views of Buffett and Munger. I decided that year I would put away enough money in safe bets so I could live comfortably regardless of what happened. There are times in life when the world will not make much sense, at least to you. As an example, the Internet bubble of 1999-2001 was a time like that. The share sales and proxy hedging ensured that I would not be a burden to anyone in my retirement and that my children would be able to go to college with my financial assistance. I did leave a lot of money on the table by not selling everything, but my "barbell portfolio" did what it was designed to do. My decisions were not perfect but they were sound.

Little Risk (cash and safe bonds) Lots of Risk (startups and tech stocks)

So you may ask, are we in a bubble now? Well we can say that things are very different. The situation today is not the same it was in March 2000. The Economist writes;

"the base of today's success is broader. In 2000 some 400m people around the world had access to the internet; by the end of 2015 3.2 billion people will. And the internet reaches into these people's lives in many more ways than it could 15 years ago. 'Technology is no longer a vertical industry, as it's been understood by everyone for four decades,' says John Battelle, a journalist and entrepreneur who launched the *Industry Standard*, a magazine which reported on the dotcom boom before itself going bankrupt in 2001. 'Technology is now a horizontal, enabling force throughout the whole economy.'"

I fall in the camp of people who say that we do not have a valuation bubble today but rather a risk bubble. The big lesson to take away from the 2000 bust is that the cash spigot can close really fast. One day you can raise hundreds of millions of dollars and the next day you can't raise five cents. From the end of the Internet bubble into 2003 cash was indeed king. I remember Greg Maffei telling me that when he was still Microsoft's CFO as early as 1998. Risk and valuation are not the same. There are many thing that are different now a few of which are noted in this article http://www.valuewalk.com/2017/05/nasdaq-6000-now-infographic/ by Burt White, Chief Investment Officer for LPL Financial

- **Price to Earnings Ratio (PE).** The PE ratio for the Nasdaq in March 2000 on current year estimates was 107, versus 23 today. Even using the consensus forward (next 12 months) earnings estimates, the PE stood at 75 back in March 2000 compared with 22 today. The cash flow multiples also tell the same story: near 100 then compared with mid-20s now.
- **Price-to-book ratio.** Valuation measures based on the value of company assets minus liabilities, or book value, also reveal a much more expensive Nasdaq in 2000 versus now. The lack of assets supporting valuations was a big problem during the dotcom bubble (page views, eyeballs, and clicks were not enough). The price-to-book ratio at the peak in March 2000 was over 7, compared with 3.9 now (as of April 28, 2017). And those assets today produce far more profits.
- **Market trajectory.** Another way to compare today's Nasdaq to the 2000 version is looking at the steepness of the two rallies, which reveals a dramatic difference. The Nasdaq has gained 22% over the past two years, compared to its 189% surge during the two years leading up to the March 10, 2000 peak. Clearly today's technology rally lacks the parabolic nature of the dotcom bubble.

Good things can come from bad experience. Many ideas that failed then are succeeding now. Capitalism requires failure and it is an understatement to say that a lot of things failed as a result of the Internet bubble. One good example is described here by CB Insights: "In 1996, Louis Borders, founder of Borders bookstores (a famous casualty of the modern e-commerce era), had the crazy idea to let people order their groceries online and have them delivered to their homes. To achieve this, Louis Borders raised $396 million through an IPO in late 1999. After several years of sustained losses, though, the company finally crashed in 2001. But Borders' dream of people never having to leave their homes for groceries has since been adopted by Amazon." I know several people who loved WebVan as customers and they mourned its demise. But they could not cover their costs (venture philanthropy does not scale) and ran out of cash.

Notes:

1999: http://money.cnn.com/1999/12/27/investing/century_ipos/

2000: https://www.forbes.com/2001/01/03/0103sf.html

Mattermark: https://mattermark.com/technology-company-ipos-then-now/

10 years Gone: https://www.cnet.com/news/10-years-gone-the-va-linux-systems-ipo/

A Dozen Lessons about Money and Investing from Kendrick Lamar (K-Dot)

May 19, 2017

1. **"What I've learned is the best thing I can do with the position I'm in, and the places I've gone, is sharing this same information and giving you a step by step guide on the do's and don'ts of what I've gained from talking to Jay Z and these different moguls in the business — whether talking about business, or just life. I can't keep all of the information to myself, I have to share it. Within doing that, it's giving me just as much as it's giving them, and that's worth more than any dollar amount."** ***Forbes Interview.***

K-Dot is making the same point Charlie Munger was trying to convey when he said: "The best thing one human being can do for another human being is to help them know more." Trying to figure out everything in life by yourself from first principles not only does not scale

well, but it involves lots of unnecessary pain. Life gets easier when you learn vicariously from the mistakes of other people. You can do this by watching other people's behavior or by reading about it. Munger advises: "I believe in the discipline of mastering the best that other people have figured out. I don't believe in just sitting down and trying to dream it all up yourself. Nobody's that smart." K-Dot is also saying that an approach to life that includes teaching other people inevitably means you get back more than you give (e.g., the process of teaching anything makes you learn the topic even better). The other factor involved is what Munger has referred to as "penance." Mohammad Ali made a similar point once when he said: "Service to others is the rent you pay for your room here on earth." Giving back to other people is not just beneficial because you learn more, it is by itself a moral imperative.

2. **"If you get your first big check and you cop a chain before you buy a house. You're a vanity slave."** ***Vanity Slave.***

K-Dot is cautioning people to stay grounded about priorities, especially when fortune suddenly arrives. Vanity, greed and ego can cause people to make bad choices. He makes his point with an example: copping a chain before you take care of other basic needs is vanity. Concern about the adverse impact of vanity is not a new idea. For example, Jane Austen wrote: "Vanity and pride are different things, though the words are often used synonymously. A person may be proud without being vain. Pride relates more to our opinion of ourselves, vanity to what we would have others think of us." I would rather put a viper down my shirt than let someone else determine whether I am happy. Getting control of your desire for ever more stuff is mentally healthy. Seneca once said: "It is not the man who has little, but he who desires more, that is poor." In contrast, being ever covetous despite gains in wealth only increases the probability that you will be miserable. Can you be wealthy and enjoy that but not tie your happiness to maintaining that wealth? Seneca believed: "For many men, the acquisition of wealth does not end their troubles, it only changes them" and that "Wealth is the slave of a wise man. The master of a fool." The best thing you can acquire with money is independence. Munger puts it this way: "Like Warren, I has a considerable passion to get rich, not because I wanted Ferarris. I wanted the independence. I desperately wanted it."

3. **"A dependable savings and you'll retire with money in your account."** ***The Lonely Island.***

People involved in the entertainment and sports industries often have incomes that are front loaded in the early years of their career. Yes, they can work at another job later in life, but that work may not pay nearly as much as they earned in their prime years. K-Dot is saying that adopting an approach which paces consumption over a person's entire life is wise. The best way to increase your wealth is to save more of your income. Morgan Housel puts it this way:

"Building wealth has little to do with your income or investment returns, and lots to do with your savings rate. Fortunes can be blown as fast as they're earned – and often are – while others with modest incomes can build up a fortune over time. Wealth is just the accumulated leftovers after you spend what you take in. And since you can build wealth without a high income but have no chance without a high savings rate, it's clear which one matters more."

K-Dot is saying that people should think more about their retirement savings in particular. As just one example of what can happen if you do not save, among senior beneficiaries in the US, the median Social Security benefit is $14,400. Trying to live on just that income given

health care and other expenses is a terrible idea if you can avoid it. Here is some data on that point:

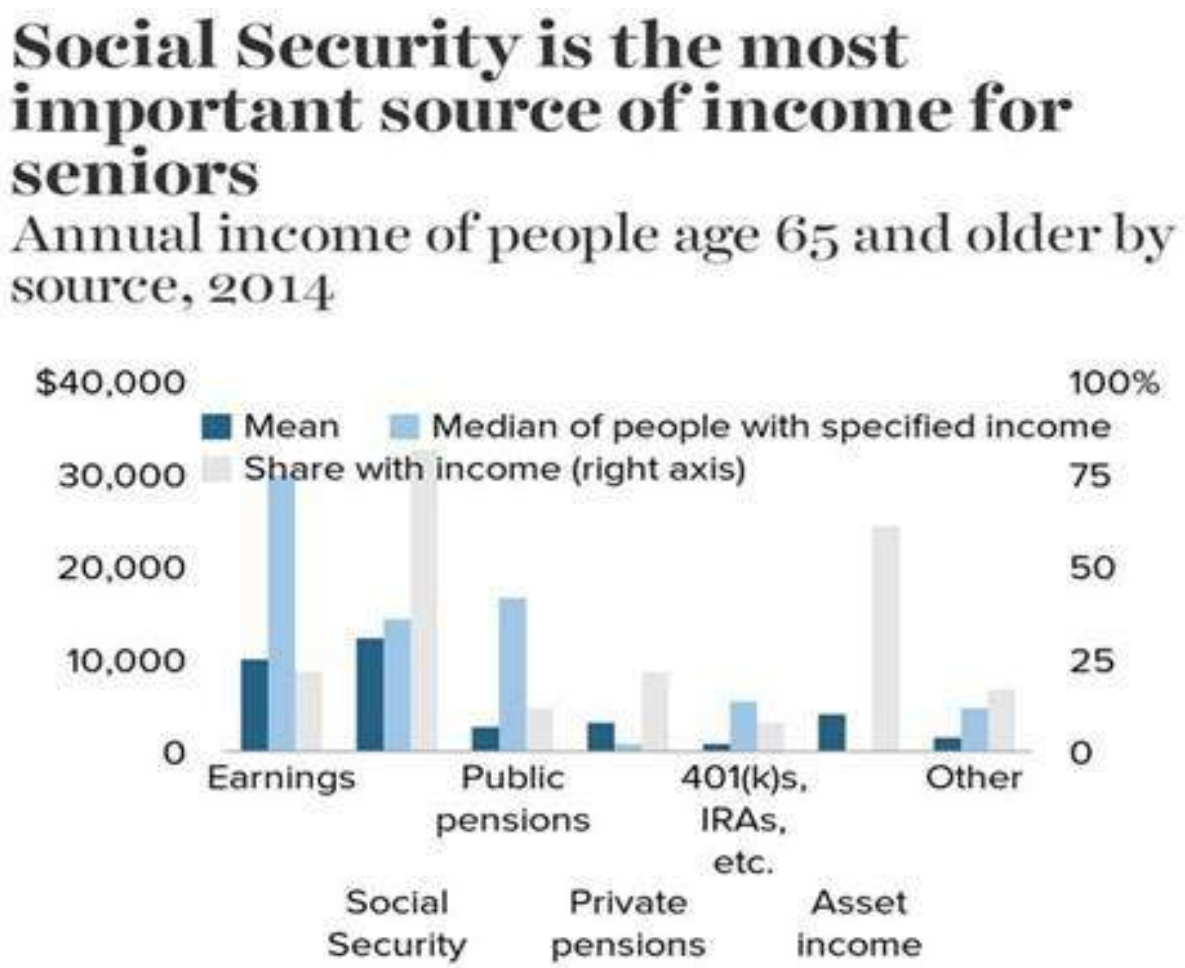

4. **"Take no chances, stop freelancin'; Invest in your future, don't dilute your finances."** ***The Lonely Island.***

While saving money is the most important step one can take to increase wealth and security, K-Dot is saying that investing is important too. The statistics on where many people stand on people's financial preparation for retirement are dire. For example, "~1/2 of families have no retirement account savings at all. Median values are low for all age groups." http://www.epi.org/publication/retirement-in-america/#5 …

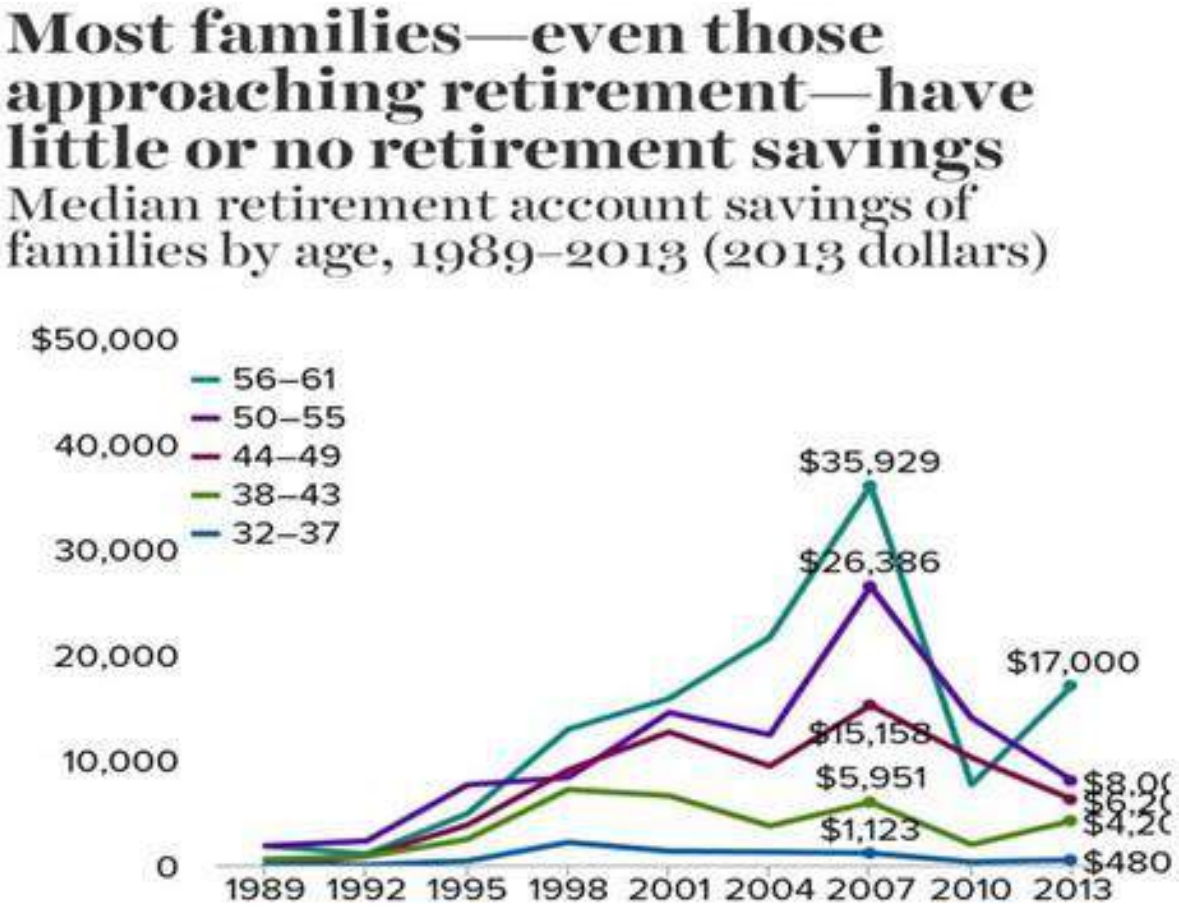

5. **"401K, make sure it's low risk."** ***The Lonely Island.*** **"At 27, my biggest fear was losin' it all."** ***Fear.***

K-Dot is talking about the need for investors to control risk, especially when it comes to retirement funds in something like a 401K. Before a person can control risk it is necessary to define it. I particularly like the definition of risk adopted by Howard Marks: "In thinking about risk, we want to identify the thing that investors worry about and thus demand compensation for bearing. I don't think most investors fear volatility. In fact, I've never heard anyone say, 'The prospective return isn't high enough to warrant bearing all that volatility.' What they fear is the possibility of permanent loss." Warren Buffett recently told a story about someone worrying about having enough money in their retirement that is both relevant and amusing:

"I had an Aunt Katie here in Omaha… She worked really hard all her life, lived in a house she paid $8,000 for… Because she was in Berkshire she ended up — she lived to 97 — she ended up with a few hundred million and she would write me a letter every four, five months and she said, 'Dear Warren, I hate to bother you, but am I going to run out of money?' And I would write her back and I'd say, 'Dear Katie, It's a good question because if you live 986 years, you're going to run out of money. And then about four or five months later, she would write me the same letter again. There's no way in the world if you've got plenty of money that it should become a minus in your life."

6. **"Got real estate over there and hustle over here."** ***Enjoy.***

K-Dot is saying that he will not lose focus on the hustle aspects of his life just because he has made real estate or other investments. Nothing generates wealth more reliably that a strong work ethic, a regular income combined with talent and a willingness to save and invest. My view on actively investing real estate is heavily influenced by the advice my grandfather (a real estate developer) gave to my father the doctor. He said that my dad should leave active real estate investing to professionals. If my father desired exposure to real estate my grandfather suggested that he do so via a fund. He said that it was possible for my dad to become an expert active real estate investor but only if he treated it as a second career, found an area to specialize in and was passionate about it. Here's Munger on real estate:

"The trouble with real estate is that everybody else understands it. And the people who you are dealing with and competing with, they've specialized in a little twelve blocks or a little industry. They know more about the industry than you do. So you've got a lot of bull-shitters and liars and brokers. So it's not a bit easy. It's not a bit easy. You don't even see the good offerings in real estate. It's not an easy game to play from a beginner's point of view. Real estate. Whereas with stocks, you're equal with everybody. If you're smart. In real estate, you don't even see the opportunities when you're a young person starting out. They go to others. The stock market's always open. It's (like) venture capital. Sequoia sees the good stuff. You can open an office, "Joe Schmoe Venture Capitalists: Start-ups come to me!" You'd starve to death. You got to figure out what your competitive position is in what you're choosing. Real estate has a lot of difficulties.}

7. **"When you're in this situation with all the lights on you, you're going to get a lot of offers thrown at you, but if it's not something that you see has longevity in it, you have to pass it up."**

K-Dot knows that there are no called strikes in investing. Patience is essential as is waiting for the right offer. Opportunity cost is a huge filter in life. Charlie Munger looks at his investing decisions in this way: "We're guessing at our future opportunity cost. Warren is guessing that he'll have the opportunity to put capital out at high rates of return, so he's not willing to put it out at less than 10% now. But if we knew interest rates would stay at 1%, we'd change. Our hurdles reflect our estimate of future opportunity costs. Warren is scanning the world trying to get his opportunity cost as high as he can so that his individual decisions are better."

8. **"On the business end, it just shows me: always be critical and smart about the moves you make."**

K-Dot is pointing out that it is important to think critically about your decisions since we all have a range of dysfunctional biases that can tend to result in unwise decisions. Everyone makes mistakes. Thinking hard about how you might have made a mistake due to an emotional or dysfunctional factor can pay big dividends. People who can put aside their ego-based defenses and embrace a great idea that someone else discovered tend to get better results in life. "Not invented here" too often means "no benefits here." Charlie Munger said exactly that the 2017 Berkshire shareholders meeting: "You have to have a habit of reexamining your old ideas from time to time since without that, you can't see it when they become wrong. A year in which you do not change your mind about something important is a wasted year in his view.

9. **"So just to get a dollar, will I sell my soul? I look the Devil in the eye and tell him, hell no."** ***Compton State of Mind.***

In the end you can make more money from behavior that meets a high ethical standard. Not only it is the right thing to do morally, it is the right thing to do from a profit standpoint. Charlie Munger has said: **"**We don't claim to have perfect morals, but at least we have a huge area of things that, while legal, are beneath us. We won't do them. Currently, there's a culture in America that says that anything that won't send you to prison is OK." What can be more satisfying than doing well financially while at the same time making a positive contribution to society in a way that is highly ethical? Munger tells a story about how he made a fantastic investment by wading into an area where the other people involved are ethically challenged:

"I soon realized that under the peculiar rules of an idiot civilization, the only people who were going to bid for these oil royalties were oil royalty brokers who were a scroungy, dishonorable, cheap bunch of bastards. I realized that none of them would ever bid a fair price."

10. **"All money ain't good money."**

K-Dot is channeling a point Dorothy Parker famously made when she said: "If you want to know what God thinks of money, just look at the people he gave it to." It is that simple. Munger puts it this way:

"Ben Franklin said: 'I'm not moral because it's the right thing to do – but because it's the best policy.'" "We knew early how advantageous it would be to get a reputation for doing the right thing and it's worked out well for us. My friend Peter Kaufman, said 'if the rascals really knew how well honor worked they would come to it.' People make contracts with Berkshire all the time because they trust us to behave well where we have the power and they don't. There is an old expression on this subject, which is really an expression on moral theory: 'How nice it is to have a tyrant's strength and how wrong it is to use it like a tyrant.' It's such a simple idea, but it's a correct idea." "You'll make more money in the end with good ethics than bad. Even though there are some people who do very well, like Marc Rich– who plainly has never had any decent ethics, or seldom anyway. But in the end, Warren Buffett has done better than Marc Rich–in money–not just in reputation."

11. **"The best thing I've learned is that it's not about getting a certain amount of dollars and spreading it all out. That process is meant to crumble. That process is meant to bring envy and hate, because once you stop spreading it, or once you stop getting it, you realize there's just a lot of evil behind it."**

No matter how rich someone like K-Dot may become there are limits to what can be given away. Problems are inevitably created when too much money is given away to a friend or a posse of friends. K-Dot is saying that people who were on the receiving end of gifts have a tendency to get angry if you stop since they feel they have lost something. These angry feelings are heightened due to loss aversion. Being generous works better when you make sure that the beneficiary is not acquiring an expectation that the gifts will be ongoing. Being generous of charitably minded is not always simple. This is K-Dot in "How Much a Dollar Cost" from the album "To Pimp a Butterfly":

"…Walked out the gas station
A homeless man with a silly tan complexion
Asked me for ten grand
Stressin' about dry land
Deep water, powder blue skies that crack open
A piece of crack that he wanted, I knew he was smokin'
He begged and pleaded
Asked me to feed him twice, I didn't believe it
Told him, "Beat it"
Contributin' money just for his pipe, I couldn't see it
He said, "My son, temptation is one thing that I've defeated
Listen to me, I want a single bill from you
Nothin' less, nothin' more
I told him I ain't have it and closed my door
Tell me how much a dollar cost

It's more to feed your mind
Water, sun and love, the one you love
All you need, the air you breathe

He's starin' at me in disbelief
My temper is buildin', he's starin' at me, I grab my key
He's starin' at me, I started the car and tried to leave
And somethin' told me to keep it in park until I could see
A reason why he was mad at a stranger like I was supposed to save him…"

12. **"It's one thing we'll keep coming back to — remove the ego. I promise you, that's the most valuable thing I've learned."**

Morgan Housel puts it this way: **"**one of the most powerful ways to increase your savings isn't to raise your income, but your humility." Morgan knows that ego can easily get in the way of making sound decisions. As I noted in my recent blog post on Ray Dalio, he believes: **"**People are so attached to being right, and yet the tragedy is it could be so easy to find out how you're wrong." If you can learn to take ego out of your decision making you will make fewer mistakes. Buying things and making investments that stroke your ego is short sighted. People who learn to save and invest have better choices in life. Few things are worse in life than having no choices. Munger with a closing thought:

"Then there's the chasing of the investment return rabbit. What if you had an investment that you were confident would return 12% per annum. A lot of you wouldn't like that — especially if you've done better– but many would say, 'I don't care if someone else makes money faster.' The idea of caring that someone is making money faster is one of the deadly sins. Envy is a really stupid sin because it's the only one you could never possibly have any fun at. There's a lot of pain and no fun. Why would you want to get on that trolley?"

Notes:

https://www.forbes.com/sites/julianmitchell/2016/12/13/kendrick-lamar-opens-up-about-growth-success-and-staying-true-to-your-mission/#136027f52525

http://ohhla.com/anonymous/kenlamar/lamar_ep/vanity.ken.txt

https://www.linkedin.com/pulse/kendrick-lamar-talks-growth-success-staying-true-mission-mitchell

https://genius.com/The-lonely-island-yolo-lyrics

https://genius.com/9th-wonder-enjoy-lyrics

https://www.linkedin.com/pulse/kendrick-lamar-talks-growth-success-staying-true-mission-mitchell

https://genius.com/Big-sean-control-lyrics

https://genius.com/Kendrick-lamar-fear-lyrics

https://www.directlyrics.com/kendrick-lamar-control-lyrics.html

Morgan Housel: **http://www.collaborativefund.com/blog/let-me-convince-you-to-save-money/**

Nassim Taleb: **http://www.econtalk.org/archives/2012/01/taleb_on_antifr.html**

A Dozen Lessons on Building a Business from Sarah Tavel

May 27, 2017

1. **"Ultimately when evaluating an early stage company, I say it's a combination of art and science. The art is understanding how products work, the science is knowing how to measure it. The earlier the company, the more it is about art, which in this case is assessing what I think of the product and the use case."**

Tavel is a great fit for Benchmark since the firm has always believed what they do is a craft. I wrote about this in my blog posts on Andy Rachleff, Peter Fenton and Bill Gurley. Fenton has said:

"because we love the day-to-day work with the entrepreneurs, [it] prevents us from scaling. We don't have an ability to offload any part of our relationship in the way we practice it, to anyone other than ourselves. So, there's no associates, no principals, there is really nothing beyond the group of people here and our assistants who keep our lives sane. That's a strategy."

What Benchmark partners like to do is invest early and work shoulder-to-shoulder with entrepreneurs. The Benchmark partners would use that approach even if it was not the best way to optimize their financial return since it is what they enjoy most about the process. The

"art" of venture capital Tavel is referring to is often found in pattern recognition and that is highly related to good judgment which often comes from first party bad judgment or what Will Rogers once called watching other people pee on an electric fence (third party band judgement). It is important to note that a critically important part of the pattern recognition in venture capital is finding the exception to previous patterns that is different. Part of the pattern is: some rule that other people preciously believed was important is being broken by the best startups, but some rules that other people thought were important are being followed. It is a bit like the spot the difference game, except it must be a very important difference that delivers significant new core value to a really big market.

I have written about the science part of the entrepreneurial process quite a bit lately. Generating growth in a startup is accelerated by great data science because it allows you to measure results and apply the scientific method to growth experiments. When founders get access to great data science they have a greater ability to scale their output and most importantly make their creative contribution enduring. Data science does not eliminate the need for creative sparks, but when used effectively it facilitates creativity by enabling rigorous experimentation and increases the impact and growth of the business.

2. **"For seed investments, it's always first team, and second, believing in what they're doing (as early as it is). I've passed on opportunities that had amazing teams, but I just couldn't get behind what they were doing, for whatever reason. It doesn't feel authentic to me to just make an investment on #1, if I'll spend our conversations together trying to convince them that they should change #2. So really both need to line up for me."**

One of the reasons I write about so many different venture capitalists is to make the point by example that there is no cookie cutter way to be successful investing in startups. There are many similarities and common elements, but many differences too. My view is that there are different pools of alpha and different people search for that alpha in different ways. Of course, some investors are more successful than others. Typically the investors that are most successful chose an approach that is most consistent with their nature and unique skills. Benchmark co-founder Bruce Dunlevie puts the strength of the team at the top of the early stage investing hierarchy. Another Benchmark co-founder Andy Rachleff puts more emphasis on the existence of a very large addressable market. Of course, this is a matter of emphasis as both the right team and the right market are important. That Benchmark has adopted a craft rather than a platform approach to their business does not mean that other approaches by other venture capitalists do not work. It is just the right approach for them as individuals and gives then a unique service to offer founders. Some founders will be more comfortable with a full service venture capital platforms. Some will not. Vive la différence. Strategy is what you do differently than your competitors. You must be different and you must be right about that difference if the strategy is going to be successful.

3. **"Spend money very very carefully until you have product market fit. You want as lean a team as possible before you get there. There is no point of hiring more than the bare minimum team (usually just the co-founders) before you figure out what users want. Then you scale. Companies that hire before that waste runway, and that's a shame. Once you have product market fit, you still need to be careful with hiring.**

The critical point Tavel is making is that it make no sense to pursue a growth hypothesis before the company has solved the value hypothesis. Why would you try to get more people to use a product that does not have core product value? It is not only hard to create core product value but the discovery process (if it happens) inevitably requires time and experimentation. The shorter the financial runway of the business the less opportunity exists for the startup to discover product market fit and solidify its value hypothesis. Tavel also notes that hiring is something to be approached with care even after the value hypothesis is proven. Early hires are particularly important as they create the business' DNA place much more than later hires. Company culture is far more a determinant of success than people imagine.

4. **"Another thing I see is scaling too quickly, particularly for local businesses. I see a lot a company launch something in one city, and before they've figured out the playbook, launch a bunch of other cities which burns through their cash, without really figuring out how to make it work in any one city."**

Benchmark's Bill Gurley has said: "We like to say that 'more startups die of indigestion than starvation.'" One cause of death by indigestion is premature scaling of a growth hypothesis that has not been proven. Putting fuel in a rocket which does not have an attractive target and a working guidance system is a bad idea. Even if there is product market fit, there is a right time to spending big on generating growth and that time if after a sound growth hypothesis has been proven.

5. **"I'd say that companies that have the greatest chances of becoming sustainable unicorns have incredibly strong network effects or economies of scale. More often than not, you find this with platforms/marketplaces, but not always. e.g., companies like Amazon or big banks, have very strong economies of scale, that make it very difficult to compete. But they take an enormous amount of capital to build."**

Tavel is pointing out that the primary means of defending a business against competitors today is network effects. My blog post on network effects is here. Other approaches that can create a barrier to entry like economies of scale, regulatory expertise, intellectual property and brand still matter, but they are relatively less important than they once were, especially in the case of software startups. Economies of scale are desirable and complement network effects in many cases, but Tavel is pointing out that they are not "capital light." One of the big changes in the business world that Charlie Munger and Warren Buffett talked about at the recent Berkshire meeting was the appearance of technology businesses that do not require much capital.

6. **"Growing users without growing users completing the core action is the empty calories of growth. It feels good, but it's not good for you. What is a core action? The action that is the very foundation and essence of your product. Pinterest would not exist without pinning. Twitter would not exist without tweeting."**

There are a number of terms used to describe the factors that can create sustainable growth. One term that I like is the concept core product value, which represents a solution a real and significant problem that is valuable enough to cause people to want to pay for a product. Core product value is first recognized when the customer connects with the product in what is

known as a "magic moment." A magic moment is a realization or reaffirmation by a customer that a product has *core product value*. Tavel is saying that that a "core action" is what the customer does to realize core value.

There are different types of magic moments. My taxonomy is as follows:

1. *Hook magic moment* – a realization of core product value that occurs within the first 15 seconds of customer on boarding that creates retention. There should be as little friction as possible in getting the visitor to the Hook magic moment as fast as possible. Delivering the core experience quickly without overwhelming the visitor with features and sign up requirements is critical. For example, Alex Schultz of Facebook explains:

"[if you want] people to buy an item on eBay, should I land them on the registration page or the search results page?" You'd probably land them on the search results page, and that would get them to that magic moment faster. What is the moment when you used AirBnB? What is the moment when you used DoorDash, when you used Slack, when you used Facebook, LinkedIn, WhatsApp? Whatever the product, what is that moment when you went, 'Yes. I've got it.' On Facebook it's friends. Getting that first person reserve your house, staying at that first property, those are our magic moments. eBay, buying your first item from a stranger online."

Scott Belsky describes the objective:

"Just one example: At Behance, in the sign-up process for our service, we used to ask new Behance members to select their top three creative fields. New users took an average of 120 seconds to browse the list and select their top fields. We lost around 10% of new members at this particular step in the sign-up process. And so, we removed it from the sign-up process and resolved ourselves to capture this information later on during active use of the website. As a result, sign-ups went up. This is true for every online service or store. In the first 15 seconds, your visitors are lazy in the sense that they have no extra time to invest in something they don't know. They are vain in that they want to look good quickly using your product. And they're selfish in that, despite the big picture potential and purpose of what your service."

2. *Critical mass magic moment*– a realization of core product value that is strong enough to ensure that customers are retained over the long term. To determine whether retention has reached a critical mass. A Bain study concluded:

"Depending on which study you believe, and what industry you're in, acquiring a new customer is anywhere from five to 25 times more expensive than retaining an existing one. It makes sense: you don't have to spend time and resources going out and finding a new client — you just have to keep the one you have happy. If you're not convinced that retaining customers is so valuable, consider research done by Frederick Reichheld of Bain & Company (the inventor of the net promoter score) that shows increasing customer retention rates by 5% increases profits by 25% to 95%."

3. *Reinforcing magic moments*– customers experiencing "core product value" reinforcement while experiencing the product. An example of this approach happens

when Facebook sends you a message that someone has tagged you in a photo. The intent is to harness your curiosity to drive you back to core product value. For Facebook, reinforcing magic moments include adding a friend, liking or sharing a post, or updating your status within 24 hours of downloading the mobile app. Chamath Palihapitiya believes you can create loops that expose that core product value over and over again. he says: "You have to work backwards from 'what is the thing that people are here to do?' 'What is the *A-ha moment* that they want?" Schultz cautions: **"**There's a really fine line between removing friction and duping users. Tricking users hurts users. Adding friction hurts users."

4. R*eactivation magic moments*– experiences that cause a customer to returns to a service after being inactive. "We missed you" emails are intended to trigger this type of Magic Moment.

How do you discover magic moments for your service? The objective is to look for correlations between usage, demographics and other behavior and retention. Examples of magic moments discovered by some businesses include adding seven friends in ten days or sending several thousand messages.

7. **"Virtuous loops are the flywheels that covert your users' engagement into fuel to power your company forward. The strongest virtual loop is a network effect. Virtuous loops are really hard to create. Most products don't have them."**

Virtuous circles and vicious circles are processes which can reinforce themselves through a feedback loop. Virtuous circles produce feedback that results in an increasingly positive outcome and vicious circles the inverse of that. One famous picture of a flywheel at work that you see a lot is this one below which describes one aspect of Amazon's business:

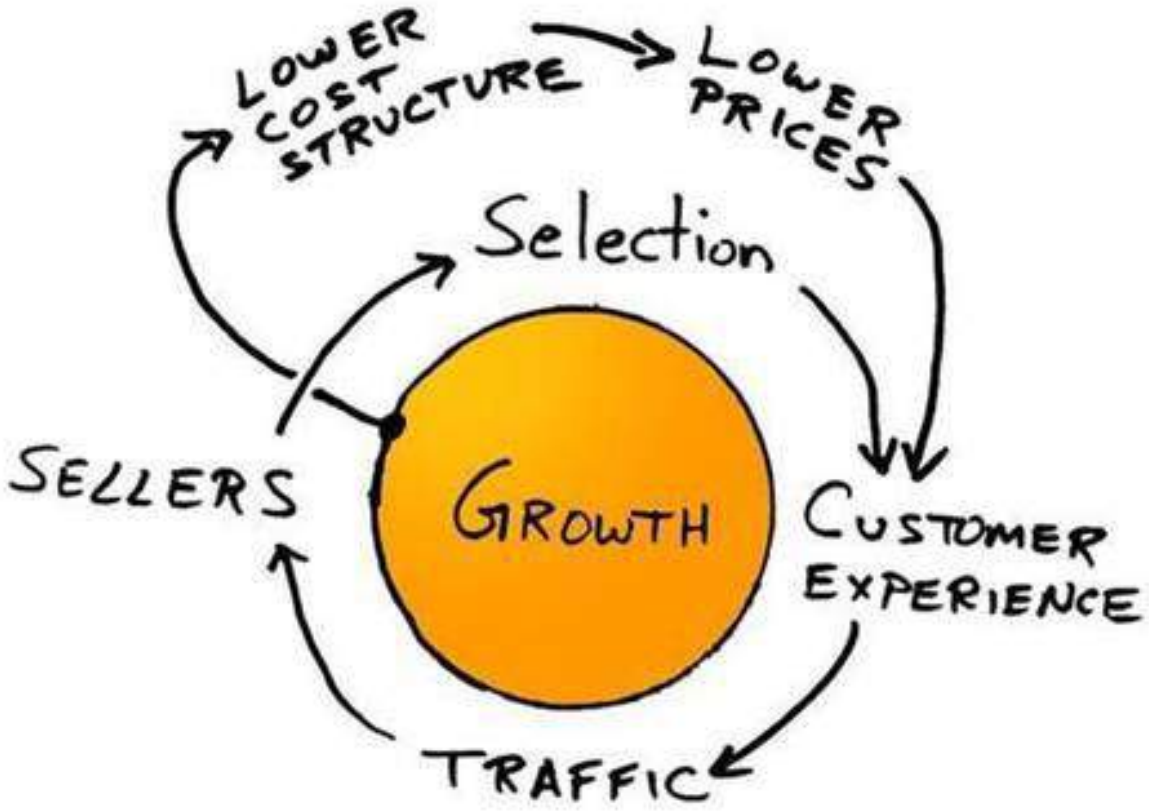

8. **"To get the flywheel spinning for a marketplace, you can't sit in front of your computer and code. You need to pound the pavement more often than not and do things 'that don't scale' to get the liquidity to help you start scaling."**

Y Combinator co-founder Paul Graham describes what a business must do to start a business from a standing start better that just about anyone I have seen:

"The most common unscalable thing founders have to do at the start is to recruit users manually. Nearly all startups have to. You can't wait for users to come to you. You have to go out and get them. A good metaphor would be the cranks that car engines had before they got electric starters. Once the engine was going, it would keep going, but there was a separate and laborious process to get it going."

There is a big difference between doing things that don't scale and being in a business that won't eventually scale. Scalability is an important goal for any business but almost always in the beginning efforts will be require that don't scale well. CEOs will go on sales calls, products will be created by hand, and many manual processes will be used at first. This info-graphic captures some non-scalable approaches that startups have used to bootstrap their flywheels past the cold stat problem.

http://fundersandfounders.com/do-things-that-dont-scale-in-startups/

9. **"In non-transactional products, real value will be created when you create accruing benefits. A product has accruing benefits if a user would say 'the more I use the product, the better it gets.'"**

Tavel uses examples from her experience at Pinterest to make this point:

Pinterest

- Initially, used following to create accruing benefits, but later built features that converted core action into accruing benefits - e.g, "Picked for you" feature: The more you pin, the more personalized your home feed gets.

10. "Mounting loss happens as a product becomes something you depend on, part of your identity, or a product in which you've accrued value of some sort (e.g., a following). 'I'd have a lot to lose if I left this product' is the claim to test."

Pinterest

- The more you pin, the more you have to lose - your bookmarks, expression and extension of your identity (mounting loss).

11. "The clearest way to understand a company's engagement is to look at cohorts: number of weekly users completing the core action and percentage of weekly active users completing the action."

There are an endless number of ways you can think about cohorts. One simple approach to illustrate what can be done is to look at a cohort's behavior graphically: the number of days from acquisition is on the x axis, on the y axis is the percent of people who are still monthly active. With each day that passes some members of the cohort will stop using the service but the critical mass objective is to get the curve to "flat line" in a way that asymptotes with the x axis. What causes the line to stop dropping is often the network effects of more people being on the network creating a critical mass of value for the customer.

A retention curve that does not flatten and instead drops to zero may be caused by a product market fit problem or it may be the nature of the product (e.g. some video games). The single most important factor that drives growth is retention.

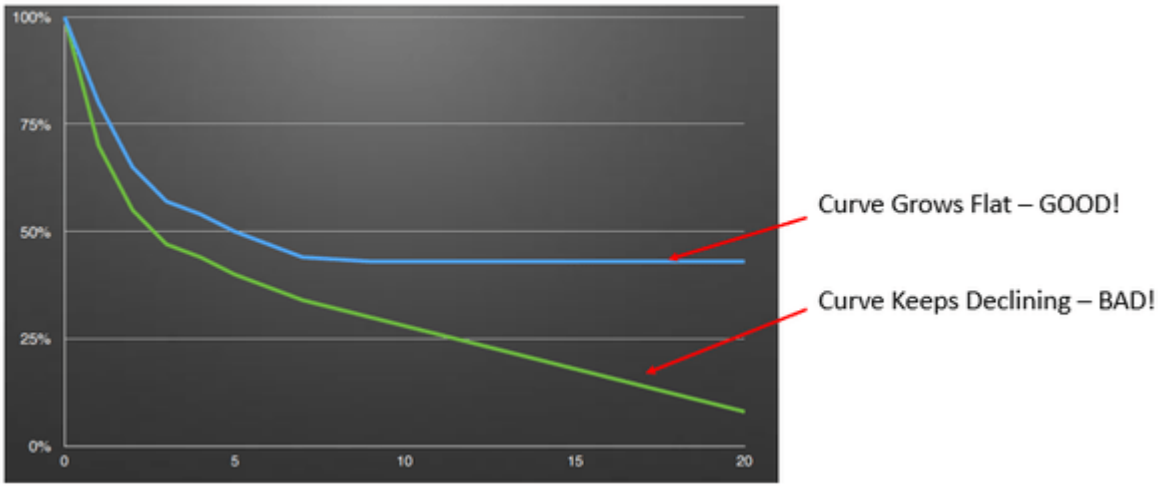

12. "Blogging is venture capital's freemium model."

There are at least three reasons that venture capitalist's write for public consumption.

1. It helps the writer think things through and find new solutions and ways to communicate ideas.
2. It is way to give back- teaching is a way of giving back.
3. It is way to use content marketing to source new deal flow.

It's always nice when you get three things for the same amount of effort. It is even better if you can do well financially by doing something good for other people. Regardless of whether someone is first starting out or even if they are a big success writing is a way to turn thinking, words and effort into a substitute for capital. Content marketing is both more capital efficient and produces better results than traditional marketing.

Writing is my way of giving back. Revenue is negative. It makes me feel good though, which is highly underrated.

Notes:

The Hierarchy of Engagement, expanded https://medium.com/@sarahtavel/the-hierarchy-of-engagement-expanded-648329d60804

How To Create A Sticky Product Like Facebook and Evernote https://www.linkedin.com/pulse/accruing-benefits-mounting-loss-sarah-tavel

How to build an enduring, multi-billion dollar business https://medium.com/@sarahtavel/how-to-build-an-enduring-multi-billion-dollar-business-hint-create-a-10x-product-recast-3527df2b8fcb

Engagement Hierarchy: Core Actions https://medium.com/@sarahtavel/engagement-hierarchy-core-actions-dd4f72042100

Venture Capital's Freemium Model http://www.adventurista.com/2009_11_01_archive.html

Growth Hackers AMA https://growthhackers.com/amas/live-jun-14-ama-with-sarah-tavel-vc-at-greylock-partners

Lesson from Scaling Pinterest https://medium.com/@sarahtavel/five-more-lessons-from-scaling-pinterest-9c10fe97d325

The Mitochondria of Startups https://www.linkedin.com/pulse/mitochondria-startups-sarah-tavel

20 Minute VC https://www.producthunt.com/posts/the-twenty-minute-vc-sarah-tavel-partner-greylock-partners

Graham- Do Things that Don't Scale http://paulgraham.com/ds.html

Bain: https://hbr.org/2014/10/the-value-of-keeping-the-right-customers

Belsky: https://medium.com/positiveslope/the-first-15-seconds-9590d7dabc

Alex Schultz: https://venturebeat.com/2014/08/06/facebook-growth-chief-you-lose-users-if-you-try-to-trick-them/

Quora: https://www.quora.com/Growth-Hacking/Growth-Hacking-How-do-you-find-insights-like-Facebooks-7-friends-in-10-days-to-grow-your-product-faster-1?utm_content=buffer2afcc&utm_medium=social&utm_source=twitter.com&utm_campaign=buffer#!n=12

A Dozen Thoughts from Charlie Munger from the 2017 Berkshire Annual Meeting

June 2, 2017

1. **"To make teaching endurable, it has to have enough wiseassery in it. And we do." "We've done a lot of preaching [about investing] to not much effect." "To the extent you're working on it, you're on the side of angels, but lots of luck."**

Munger has tapped into something that makes his ideas both memorable and understandable. He is suggesting in these sentences above that part of his success as a teacher is that he injects a certain amount of "wiseassery" into his delivery. The dictionary definition of wise ass is: "a person who is irritating because they behave as if they know everything, often in a way that is quite humorous but potentially insulting." While a wiseass may be an effective teacher, Munger once suggested that he does not make for a good role model since what he says is often too controversial which can create significant problems. But the world would be a dreary and less interesting place if there wasn't someone in it who said things like:

"I don't think I'm a good example to the young. I don't want to encourage people to follow my particular path. I do not want a proctologist who knows Schopenhauer, or astrophysics. I want a man whose specialized. That's the way the market is. And you

should never forget that. On the other hand, I don't think you'd have much of a life if all you did was proctology."

Or:

"You do not want your first-grade school teacher to be fornicating on the floor or drinking alcohol in the closet and, similarly, you do not want your stock exchange executives to be setting the wrong moral example."

To be a wise ass in public in the cause of educating the public requires a rather thick skin, which Munger clearly has. His willingness to say the truth out loud is a needed antidote to somethings that are wrong in the world today. Munger has also said that what brought he and Warren together as friends and business partners *Munger* was that they are both "natural wiseasses. I'm not the only wise ass in the world. Warren can find another one."

Teaching people anything, particularly about investing, is hard. Charlie has said that he has trouble getting his own family to follow value investing principles so he has little hope of his ideas being widely adapted. I think Munger understates his influence, but it may be true that he has helped more people improve the way they think than the way they invest. One final Munger thought on teaching is: **"I think the only way you've got a chance is sort of by example. If you want to improve your grandchildren the best way is to fix yourself."**

One last point here I can't resist. I know a blogger who Tweeted recently that he was responding to "hate mail." He is a nice fellow who is trying to teach people a few things. That people are sending him hate mail is bullshit. Debating ideas is one thing but hate is quite another. People who are haters are often making up for something. like being teased in middle school for having small hands. The unfortumate reality is that you need to either have think skin like Munger or quit blogging/ tweeting/writing. "Haters gonna hate" is the sad truth. It is an advantage to not give a damn what people say. I like this from Felicia Horowitz:

2. **“A life properly lived is just learn, learn, learn all the time.” “If we had stopped learning, you [Berkshire shareholders] wouldn’t be here – you’d be alive, probably, but you wouldn’t be here.” “There’s nothing like a personal, painful experience if we want to learn, and we certainly have had our share of it.” “There’s nothing like the pain of getting into a lousy business to find a good one.” “We were young and ignorant then; Now we’re old and ignorant.” “Experience is like eating cockleburs – it really gets your attention.” “It is a good idea to not play where the other people are better.”**

You may or may not know that a *cocklebur* is one of these little spiked seed pods that may attach itself to your shoes, socks or clothing, especially if you enjoy walking in riverbeds or pastures. I don’t think I have ever mistakenly eaten one, but I expect that it would not be pleasant. When you read the Munger quote if you found yourself wanting to know (or make sure you knew) what a cocklebur was, you are more likely to be a learning machine. Munger is pointing out that one very effective way to be a learning machine to pay close attention to your own mistakes. If you are not making some mistakes you not learning. The same thing goes for making too many mistakes that are not new mistakes. He also believes that if you are not changing your mind on some important questions each year you are not learning either. Munger believes: **“Learning has never been work for me. It’s play.”** Life gets better if you adopt this approach to learning.

3. **“The investment world has gotten tougher. Maybe now we have small statistical advantages, when before it was like shooting fish in a barrel.” “We can’t bring back the low hanging fruit; we will have to reach for higher branches.”**

Anyone who doesn’t realize that more competition has arrived in the investing world isn’t paying attention. The more widely held the asset class the more intense the competition has become. This is not new but the trend seem to have accelerated. It is hard to imagine that it was possible in the days of Ben Graham to buy companies at less than liquidation value. As just one example of how investing has become more competitive, Michael Mauboussin writes:

“Exhibit 1 shows that the standard deviation of excess returns has trended lower for U.S. large capitalization mutual funds over the past five decades. The exhibit shows the five-year, rolling standard deviation of excess returns for all funds that existed at that time. This also fits with the story of declining variance in skill along with steady variance in luck. These analyses introduce the possibility that the aggregate amount of available alpha—a measure of risk-adjusted excess returns—has been shrinking over time as investors have become more skillful. Investing is a zero- sum game in the sense that one investor’s outperformance of a benchmark must match another investor’s underperformance. Add in the fact that in aggregate investors earn a rate of return less than that of the market as a consequence of fees, and the challenge for active managers becomes clear.”

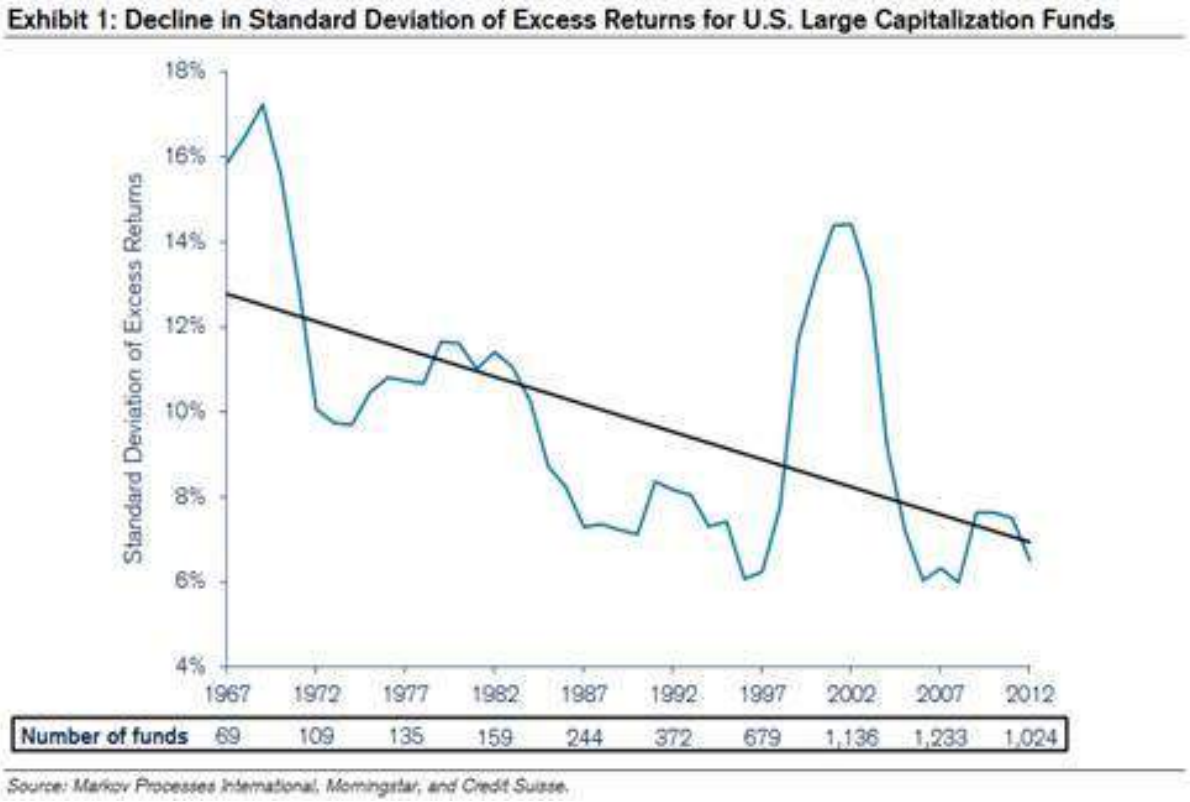

4. **"An expert who is really good at money management suffers terrible performance problems when he gets more money in." "In the future, with our present size, in terms of rates of return will be less glorious than the past we keep saying it now we are proving it. But it is still a collection of businesses on average that has a better investment return than the S&P 500."**

Munger: "It's a lot harder now (with $90B in cash to deploy)."

Munger: "$150B is probably too big for us."

Buffett: "We both would do a very big deal."

Munger: "We don't have to agree perfectly."

Buffett: "If we found a deal that makes compelling sense, we would do it."

Munger: "Now you're talking."

Investing large sums of money a market like we are in now is particularly hard. That is why some fund managers return cash or keep funds smaller that they could raise relative to demand. Warren Buffett's friend the famous investor Bill Ruane said once: "Staying small is simply good business. There aren't that many great companies." It is beyond question that the size of the portfolio is a drag on performance. The bigger the fund the harder it is to outperform. Buffett puts it this way: "Anyone who says that size does not hurt investment performance is selling. The highest rates of return I've ever achieved were in the 1950s. I killed the Dow. You ought to see the numbers. But I was investing peanuts then. It's a huge structural advantage not to have a lot of money."

3. **“The first rule of fishing is to fish where the fish are, and the second is don’t forget the first.” “We’ve gotten good at fishing where the fish are. There’s too many boats in the damn water, but the fish are still in it.” A good fisherman can find more fish in China; it’s a happier hunting ground.”**

Munger loves fishing and fishing sayings. There are of course other fising sayings like “fish or cut bait” and of course his story about visiting the tackle shop. William Safire in his Political Dictionary wrote:

> To *fish for votes* is a common construction, leading to this frequent admonition to candidates too willing to spend time on citizens too young to vote or too deeply committed to either side: “Fish where the fish are.”

The tackle shop story? Chris Davis tells it here in this one minute video:
http://davisfunds.com/document/video/charlie_munger_fishing_lure

As an aside, in Wisconsin, populations of silver pike have been reported in **Munger** lake in Oconto County.

Kevin Wolff caught a 31-pound silver pike in Canada. Credit: Contributed photo

6. **“I do think the Chinese stock market is cheaper than the American market. China has a bright future.” “Too many people believe in luck and gamble, and that’s a national defect.There will be growing pains of course.”**

Munger said that China was not an easy market to invest in due to opaque financial reporting but it is a better place to find bargains still. Munger said: **"One of the things we got into [in China] was the Shanghai airport, the main airport in China, with no debt net. How can you lose owning the main airport in China? It takes extra work. But why should it be easy to get rich?"**

7. **"If all [a business owner] cares about is getting highest price, we are not a good call. We can offer happiness to a person who sells us the business. He will have lots of money and be doing what he loves doing while leaving family and employees in the best possible position. This is not the equation of many people who buy businesses borrowing everything they can and resell after dressing up the accounting." "Don't call leveraged buyouts private equity – that's like a janitor calling himself chief of engineering." "We do well, because people don't want to sell to those guys." "There is an army of people in finance and shadow banking who are leveraging these deals with liberal leverage and of course they pay very high prices and they get part of the upside and they don't take any of the downside and they get fees off the top. So it is fee driven buying and it is very extreme. Of course, it makes it hard for us to buy companies.**

People who sell businesses to Berkshire are rich enough that they have more money than they will ever need. Berkshire gives the selling owner the chance to make sure that the business they care about and the people that work there continue to thrive. For this reason, Berkshire gets offered the opportunity to buy businesses at very attractive prices. Warren Buffett said in the most recent shareholder's meeting: "Private equity firms buy businesses, but they're looking to sell those holdings down the road." To reassure selling owners, Warren Buffett holds on to businesses even if returns are less than stellar. Here's Buffett on this point:

"You would not get a passing grade in business school if you put down our principles for why we keep some businesses, but we made a promise. If we don't keep our promise, word would get around. We list the economic principles, so managers who sell to us know they can count on it. We can't make some promises, and we don't promise never to sell. But we've only had to get rid of a few businesses, including the original textile business. We also let managers continue to run their business. We are now in class that is hard to compete with. A private equity firm won't be impressed by what we put in the back of our annual report. People who are rich and run a company their grandfather started –they don't want to hand it over to a couple MBAs who want to show their stuff. As long as we behave properly, we will maintain that asset, and many will have trouble competing with it."

8. "If things go to hell in a hand basket and then get better later, we will do better than others. We are good at navigating through that kind of stuff." "When the rest of world is fearful, we know America will come out fine. We won't put the company at risk. We'll grab all the opportunities we can without losing sleep." "Fear spreads like you can't believe, unless you've seen it." "Everywhere you look in Berkshire Hathaway someone is being sensible. Combine that with being very opportunistic so when some panic or something comes along it's like playing a one-hand sport with two hands."

Buffett and Munger don't time markets but they do buy more companies when they are undervalued and buy less when market are high.

Munger Triples Publisher's Value With Panic-Era Stock Bet

Noah Buhayar
July 24, 2013 1:21 PM PDT

9. "What was done [at Amazon] was very difficult; it was not at all obvious that it was going to work as well as it did. Other things were easier, and we screwed those up. I don't regret missing it – I do with Google. We'll miss out on more, but that's our secret – we don't miss out on them all." "You can read Bezos' annual report in 1997, and he lays it all out. And he has done it and done it in spades. It just always looked expensive." "We are sort of like the Mellons – old fashioned folks who've done right, and Jeff Bezos is a different species."

When asked in a press interview why he did not buy Amazon shares Buffett said on CNBC:

"STUPIDITY. I WAS IMPRESSED WITH JEFF EARLY. I NEVER THOUGHT HE COULD PULL OFF WHAT HE DID. AND WHAT IS REALLY – I MEAN, I THOUGHT HE COULD PULL OFF SOMETHING, BUT ON THE SCALE THAT IT HAS HAPPENED. IT'S CHANGED YOUR BEHAVIOR, YOU KNOW, IT HAS CHANGED EVERYBODY IN THE OFFICE'S BEHAVIOR. THE REMARKABLE THING ABOUT JEFF, AND EVERYTHING ELSE, IS HE'S DONE IT IN TWO INDUSTRIES ALMOST SIMULTANEOUSLY THAT REALLY DON'T HAVE THAT MUCH CONNECTION. I'VE NEVER SEEN ANY PERSON DEVELOP TWO REALLY IMPORTANT INDUSTRIES AT THE SAME TIME."

10. "It's a very good thing that Warren bought Apple. Either he's gone crazy or is learning. I prefer to think he's learning." "The world has changed a lot, and people who've gotten into these [capital light] businesses have done very well." "Now Warren did run around and take his grandchildren's tablets away for market research." "We failed you [on Google]. We were smart enough to do it and we didn't."

At Munger and Buffett he used their error of omission on Google to illustrate how you can learn from experience. Buffett said:

"I SHOULD HAVE HAD SOME INSIGHT INTO GOOGLE. GEICO WAS A HEAVY USER VERY EARLY ON. HERE WE SAW VALUE. AT THAT TIME, I HAVE NO IDEA WHAT WE WERE PAYING FOR PER CLICK NOW. WE WERE PAYING $10 OR $12 PER CLICK FOR SOMETHING THAT HAVE NO COST OF GOODS SOLD, AND WE WERE GOING TO KEEP DOING THAT WE COULD SEE THAT. I SHOULD HAVE HAD MORE INSIGHT INTO THAT. IF I WAS FORCED TO BUY IT OR SHORT IT I'D BUY IT, SAME WAY WITH AMAZON. IT IS A LITTLE HARD WHEN YOU LOOK AT SOMETHING AT X AND IT SELLS AT 10X TO BUY IT. THIS IT SHOULDN'T BE TRUE BUT I CAN JUST TELL YOU PSYCHOLOGICALLY, IT'S HARDER WHEN YOU LOOKED AT IT IN THE FIRST PLACE AND PASSED AT X AND BUY AT 10X. AND THEN BUY IT. IT HAS COST A LOT OF PEOPLE MONEY AT BERKSHIRE.

THEY SAW IT AT A LOWER PRICE THEN AND JUST SAID 'IF IT EVER GETS BACK THERE, I'LL BUY IT.' THAT'S A TERRIBLE WAY TO THINK."

Buffett said, "The five largest market cap companies in America are worth $2.5 trillion and require no equity capital. That is an extraordinary change from the past,

"IF YOU TAKE SAY THE FIVE LARGEST BUSINESSES IN THE COUNTRY BY MARKET VALUE, YOU'RE PROBABLY – AND ASSUMING BERKSHIRE ISN'T IN THERE, IT FLIPS IN AND OUT, LETS ASSUME WE'RE OUT – THOSE FIVE BUSINESSES HAVE A MARKET VALUE OF $2.5 TRILLION OR MORE, YOU KNOW, STARTING WITH APPLE. YOU COULD RUN THOSE FIVE BUSINESSES WITH NO EQUITY CAPITAL. SO YOU HAVE CLOSE TO 10% OF THE MARKET VALUE PERHAPS OF THE UNITED STATES IN FIVE EXTREMELY GOOD BUSINESSES THAT ESSENTIALLY TAKE NO CAPITAL. NOW, THAT WAS NOT THE CASE IN THE PAST."

11. **"A lot of other people are trying to be brilliant and we are just trying to be rational. Trying to be brilliant is very dangerous, particularly when gambling."**

My post on this is: A Dozen Things I've Learned from Charlie Munger about Making Rational Decisions

12. "We don't want to go back to subsistence farming. I had a week of it and hated it growing up. I also don't miss the elevator operator sitting there with a crank." "No one ever complained about the advent of air conditioning. I am worried more about the change not being fast enough."

Productivity getting better is what makes the quality of a person's like get better. Munger believes that what we need to realize is that people get hurt by this shift and we need to help them make the transition. One of the more impressive arguments I have seen on issues related to productivity and innovation set of issues was made recently by Marc Andreessen. Marc said:

"There are two very different parts of the economy. There's the part where there's rapid technological change and very rapid productivity improvement. You've got this other, second part of the economy that's the exact opposite — where quality is not improving and prices are rising." "The economy has bifurcated. In high productivity sectors, prices are crashing. The sectors where prices crashing are shrinking as a percentage of the economy. TVs are going to cost ten dollars and health care is going to cost a million dollars." "The rising cost of a modern college education is just staggering. In the industries where there's rapid productivity growth, everybody is freaked out, because what are people going to do after everything gets automated? In the other part of the economy, that second part, health care and education, people are freaked out about, 'Oh my God, it's going to eat the entire budget! It's going to eat my personal budget. Health care and education is going to be every dollar I make as income, and it's going to eat the national budget and drive the United States bankrupt!' And everybody in the economy is going to become either a nurse or teacher. Both sides of the economy get polar opposite emotional reactions."

Today's technology advances often produce efficiency improvements which in turn produce lower costs, which translates into lower spending and measured GDP. More is being done

with less and yet traditional measurements say that productivity is decreasing since less money is being spent in more productive sectors. In addition, many people assume that innovation always creates more producer surplus and profit. Charlie Munger describes the reality: "The great lesson in microeconomics is to discriminate between when technology is going to help you and when it's going to kill you. And most people do not get this straight in their heads. There are all kinds of wonderful new inventions that give you nothing as owners except the opportunity to spend a lot more money in a business that's still going to be lousy. The money still won't come to you. All of the advantages from great improvements are going to flow through to the customers." These are confusing times, but that is no reason to adopt a pessimistic outlook on the potential of innovation to create enormously beneficial impacts. There is no question that today's economy and the technological changes that power the economy have created a significant number of new problems like worker retraining that we must solve. We must discover new solutions to these new problems and this will require innovations of many kinds. Andreessen argues that we don't have *enough* technological innovation: "With higher productivity growth, we'd have higher economic growth and more opportunity. But without enough opportunity, we're all at risk on all sides of the ideological spectrum."

Notes:

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A Dozen Things I've Learned About Negotiation

December 2, 2016

Once upon a time I wrote a book on negotiation with my friend Russell Daggatt. The book is mostly a collection of real stories about our experiences working and living abroad. I lived in Seoul for four years and for a year in Sydney. Russell lived in Tokyo. The book was published by Harper Collins, but few years after the paperback was on the market we bought back the copyright. It is available to read for free on my web site https://25iq.com/ If you want a paper copy of The Global Negotiator, try Amazon.

1. Establish Trust

An acquaintance of ours had the occasion to travel to Addis Ababa, the capital of Ethiopia, in the mid-1980s. After an arduous air journey from Europe, he presented himself at the hotel to which he had been directed by his vigilant travel agent. The hotel had no record of the reservation that the travel agent had allegedly secured. His further research on the subject uncovered the existence of just one vacant room in the hotel. After trudging up the stairs behind the bellman (the elevator, it seems, had found a position in life from which it had no aspirations to rise), he found himself at the door to his room. When the protagonist of our story opened the door, he found nothing but darkness. The bellman shook his head and in halting English asked our traveler to wait. A short time later the bellman returned with a light bulb. Before our traveler could think of a good quip about the number of Ethiopians required to screw in a light bulb, the deed was accomplished. The light revealed four walls, a ceiling, floor, a bare mattress, and nothing

When our traveler had absorbed this information, he noticed the bellman smiling broadly, obviously waiting for his tip. "Preposterous," exclaimed our unaccommodating traveler to no one in particular since the bellman's simple grasp of the English language included no word with twelve letters. "No can stay," said our traveler in his best Pidgin English. The bellman and our traveler walked together to the front desk to discuss the condition of the rented room with the desk clerk. "I must have sheets and a blanket," demanded our somewhat agitated traveler. "You will steal," responded the desk clerk, frowning. Our traveler deduced that a basis of trust needed to be established. Out of his pack came four tins of sardines. In short order a deal was arranged. The sardines went into the hotel safe to be kept until the traveler left the hotel with all items on the room inventory accounted for. In due course, our somnolent traveler received sheets and a blanket.

Our traveler's solution to his problem was little different from the American buyer who arrives in the Ivory Coast and delivers a letter of credit to a trader selling cocoa. An item of value has been offered as security if the buyer proves untrustworthy. An exchange has been created that facilitates the trust-building process. There are an infinite number of exchanges that can create trust. (Consider the body parts exchanged by court eunuchs in return for steady employment in comfortable surroundings.) Eventually, if our traveler were to visit the hotel in Addis Ababa many times without stealing, and the cocoa buyer were to make repeated purchases, the security arrangements would become unnecessary. [redacted]

2. Do Research about the other Negotiator

Using an interpreter can put you at a significant disadvantage if the foreign negotiator is only pretending not to understand English. This negotiating tactic can achieve a number of objectives. During a negotiation in the Soviet Union, an American company encountered a government official who falsely claimed to speak only Russian. An interpreter was provided by the American company and the negotiations began. When the American spoke, the Soviet official had more than twice the usual time to prepare a response or to formulate a question. The Soviet official was also able to move the negotiations to his benefit by claiming "not to understand" arguments favorable to the American company or by "clarifying" his own translated comments when they did not elicit the desired response from the American. Needless to say, the negotiations went poorly for the Americans and well for the Soviets. After an agreement was signed, a dinner was arranged in a Moscow hotel. The interpreters were performing their usual role when a waiter's tray began to lose a dish loaded with food. The president of the American company was directly below the tray and in a moment would be covered with food. The supposedly monolingual Soviet official exclaimed in perfect English, "Look out!" The Soviet official's reflexive action revealed his deception. The American thanked his Soviet counterpart for the warning and knew better the next time.

3. Be Creative:

One of the authors was drawn into a major negotiation between Japanese and Soviet concerns. Their only common language was English and the author was called upon to set forth the agreement of the parties in an English language contract. As a model for the contract, he was given copies of previous agreements between the same parties. Key provisions of those agreements consisted of meaningless sentence fragments and other gibberish. When he attempted to redraft those provisions in a coherent and comprehensible form, both the Soviets and Japanese reacted with alarm. "Please don't touch those sections," they pleaded. "The language is agreed upon and has formed the basis of all our agreements." (The problem was dealt with by leaving the model provisions intact, but clarifying the points elsewhere in the contract.)

4. Be Humble About Your Skill Level

What you believe to be passable Arabic may be babble to an Arab. Mark Twain told the following story illustrating this point in his classic travel book, *A Tramp Abroad*:

> When we got down town I found that we could go by rail to within five miles of Heilbronn. The train was just starting, so we jumped aboard and went tearing away in splendid spirits. . . . There were some nice German people in our compartment. I got to talking about some pretty private matters presently, and Harris became nervous; so he nudged me and said:
>
> "Speak in German—these Germans may understand English."
>
> I did so, and it was well I did; for it turned out there was not a German in the party who did not understand English perfectly. It is curious how widespread our language is in Germany. After a while some of those folks got out and a German gentleman and his two young daughters got in. I spoke German to one of the latter several times, but without result. Finally she said:
>
> "Ich verstehe nur Deutsch und Englisch"—or words to that effect. That is, "I don't understand any language but German and English."

5. Some Days are better Than Others

Some bargaining sessions go better than others. A passage from *Aunts Aren't Gentlemen,* by the British humorist P. G. Wodehouse, is illustrative of this point. The dialogue begins when the protagonist in the story spots an item he wishes to purchase from a merchant. He begins the negotiation by asking the price. The merchant responds:

"How much do I want, sir?"

"Yes. Give it a name. We won't haggle."

He pursed his lips. "I'm afraid," he said, having unpursed them, "I couldn't do it as cheap as I'd like, sir . . . I'd have to make it twenty pounds."

I was relieved. I had been expecting something higher. He, too, seemed to feel he had erred on the side of moderation, for he immediately added:

"Or rather thirty."

"Thirty?"

"Thirty, sir."

"Let's haggle," I said.

But when I suggested twenty-five, a nicer looking sort of number than thirty, he shook his grey head regretfully, so we went on haggling, and he haggled better than me, so that eventually we settled on thirty-five.

It wasn't one of my best haggling days.

6. Get the Other side to Make the First Offer

Most experienced negotiators prefer to have the other party make the first offer in a negotiation. The party who moves first gives away information without the benefit of another offer as a reference point. Few people knew the value of making the second responsive effort in a negotiation better than the legendary studio founder Samuel Goldwyn. Goldwyn always liked to gain the upper hand in a negotiation. On one occasion, Goldwyn wanted to borrow an actor from Darryl Zanuck. Goldwyn had been trying to speak with Zanuck for several hours but was told the studio head was in an important conference. Zanuck's secretary finally put Goldwyn through after she became convinced of the urgency of the call. When Zanuck answered the telephone, Goldwyn began the conversation by saying: "Darryl! What can I do for you today?"

A friend of ours recounts an experience in Indonesia. He desired a gold claim owned by an ethnic Chinese merchant, and this became known in the social stratosphere of Jakarta. By chance, our friend and the Chinese merchant were invited to the same dinner party. After dinner, our friend approached the owner of the coveted claim.

"Good to see you," said our friend.

"Likewise," responded the Chinese merchant.

"I suppose you've heard I would like to buy your gold claim," our friend said, somewhat hesitantly.

The Chinese merchant said nothing and his face was expressionless. The silence became awkward for our friend, so he continued,

"So, how much are you asking?"

The Chinese merchant chuckled and said, "It is not I who wishes to sell. It is you who wishes to buy."

Our friend was forced to make the first offer on the gold claim.

7. Build relationships. Don't do Deals.

When pressed to distill our international negotiating experience down to a single glib maxim, our response is immediate: When doing business internationally, think of the process as building a relationship, not doing a deal. Of course, not all negotiations entail building a relationship. When you are negotiating with a terrorist, your primary objective may be to avoid any future relationship. Nonetheless, our experience has taught us that overestimating the value of building long-term relationships is much less of a danger than overestimating the primacy of short-term considerations.

One of the major premises of this book is that people are essentially the same, but cultures are not. International negotiation is unique because cultural differences create barriers to agreement and opportunities for conflict that would not exist in a negotiation between compatriots. A bridge must be built to span these differences. This bridge is the **relationship**

8. Keep the Relationship Mutually Beneficial by Sharing value

Sharing value is critical to maintaining a relationship. Smart negotiators learn to share value even when nothing compels them to do so. On a trip to Asia, Georges Clemenceau, the prime minister of France, discovered an antique he desired badly. The dealer said he could have it for only seventy-five rupees, "Because of who you are." Clemenceau offered forty-five rupees. The bargaining went on, with Clemenceau firmly sticking to his forty-five-rupee offer. Eventually, the dealer raised his hands indignantly. "Impossible! I'd rather give it to you!" he exclaimed. "Bon!" agreed Clemenceau, pocketing the antique. "You are exceptionally kind and I thank you, but such a gift could only come from a friend. I hope you will not be insulted if I offer you a gift in return." The dealer politely refused. "Here," said Clemenceau, "are forty-five rupees for you to use in charitable works." The dealer accepted the money, and the men parted on excellent terms.

9. Counter Gamesmanship

A skillful negotiator can often create a false impression regarding his acceptable settlement range by making patterned concessions. The best way to explain this form of gamesmanship is through an example. In one case, an African government offered to pay $10 million as compensation for a nationalized factory of a U.S. company. The next offer of settlement from the African government was $15 million and the following offer $17.5 million. By patterning its concessions, the African government had subtly begun to convey a message that it would be willing to settle the matter for between $18 million and $20 million. In fact, the Africans were willing to go as high as $30 million to avoid scaring off other foreign investors. By creating the artificial pattern, the U.S. company was given the false impression that a settlement of more than $20 million was not possible.

The French novelist Honoré de Balzac used a variation of the patterned-concession strategy to purchase a vase with an asking price that was beyond his means. Repeated attempts by Balzac to bargain down the price of the vase were unsuccessful. Balzac did not give up and enlisted three of his friends in a carefully scripted plan. The first friend entered the shop and made an offer, lower than the marked price. The next day, the second friend made a bid which was lower than the first. On the next day, the third bidder made a strong effort to get it at his ridiculously low figure. Balzac returned and offered more than the last three bids. The plan worked and Balzac got the vase at his price.

10. Focus on Interests, Not Positions

Interests shouldn't be confused with positions. Interests are one's needs and aspirations that provide the underlying motivation for the negotiation. Positions are adopted by negotiators to advance their interests. There may be any number of positions by which one's interests may be advanced. Focusing on the position rather than the interest is confusing the means with the end.

Another example of a negotiation in which a solution was found by focusing on interests rather than positions occurred in Moscow. An American company was negotiating with the Soviet State Committee on Science and Technology concerning the importation of computers. The Soviets had introduced a standard form contract that contained terms that were totally unacceptable to the Americans. The Soviets were intransigent in their insistence that this contract be used. Looking at the positions of the parties, there appeared to be an irreconcilable problem. Fortunately, the American negotiators were able to ascertain the underlying interest of the Soviets. If the language of the form contract was altered in any way, it would be necessary to process it through numerous levels in the state bureaucracy. Neither side wanted to endure that ordeal. The solution was simple and elegant—draft an addendum containing new provisions that superseded the objectionable clauses.

In another negotiation, between a U.S. hotel chain and an Asian government, an impasse was reached when the government refused to allow the payment of a management services fee to the U.S. company of 10 percent of net revenue in U.S. dollars. The Asian country believed it could not spare more than 3 percent to preserve its extremely spare supply of foreign currency. The U.S. hotel chain could not justify becoming involved if it could not remit profits home. By ignoring positions and examining interests, the negotiators were able to reach an agreement in which a 10 percent fee payable in U.S. currency was allowed to be paid provided that the hotel operation generated at least 30 percent of its gross profit in U.S. dollars or other "hard currency." The U.S. company received its royalty and the Asian government ensured a net gain of hard currency.

11. Create and Claim value

Negotiation actually consists of two distinct processes: creating value and claiming value. Creating value is a cooperative process whereby the parties to the negotiation seek to realize the full potential benefit of the relationship. Without some potential for creating value, there would be no incentive for negotiating. One would voluntarily choose to engage in the interaction only if one believed oneself capable of prevailing on the basis of power or deception. Claiming value, on the other hand, is essentially a competitive process. While it is possible, in a given instance, that the division of benefits from a relationship would flow naturally from the contributions of the parties, usually some element of bargaining is involved whereby one party's gain is the other's loss. The relative importance of the cooperative and competitive elements in any given negotiation will vary. However, the basis of the negotiation must be cooperation. If the competitive element predominates, the basis of the negotiation can be undermined.

12. Know Yourself and the Other Negotiator

In order to build a global bridge, you must first recognize the differences between yourself and the other negotiator that need to be spanned. Especially in the international context, these differences are often largely differences in perception. Dealing with these differences in perception requires determining the point from which each negotiator views an issue. Obviously, you need to understand the other negotiator if you are to develop the sense of "connectedness" that is the first step in all constructive communication. Just as important, however, you need to understand your *own* interests, motives, and perceptions.

One useful technique for dealing with differences in perception is to examine the issue being negotiated from the other person's point of view. Imagine yourself in the other negotiator's shoes and think about where the shoes hurt or could fit better. (This may be excruciating if you are negotiating in Asia and have size 11 feet.) Try also to imagine how your counterpart views relationship factors like relative status, power, resources, patience, and character. This new perspective will allow you to more accurately identify the needs, interests, and expectations of the other negotiator.

Just as communication expands the range of options, so shared experience enhances communication. In his book *Gestalt Therapy Verbatim*, Frederick S. Perls writes:

> You speak a certain language, you have certain attitudes, certain behavior and the two worlds somewhere overlap. And in this overlapping area communication is possible.

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Why is Customer Acquisition Cost (CAC) like a Belly Button?

December 9, 2016

Every business owner has customer acquisition cost (CAC). And a belly button. If that business owner does not know their CAC they are essentially the equivalent of a blindfolded poker player. Every shareholder is a partial owner of the business in which they own shares. If they want to make intelligent decisions about the value of that partial ownership interest in the business, they must understand CAC.

CAC is a key element in the unit economics of a business, which can tell the owner whether the business is healthy. Unit economics are determined by understanding the direct revenues and costs associated with a business model expressed on a per unit basis.

Looking at a few CAC examples is helpful in understanding the concept. As an aside, in a subscription business CAC is often called SAC (subscriber acquisition cost), but the terms are essentially interchangeable. Another term you may see is CPGA (cost per gross addition). None of these terms is defined under generally accepted accounting principles (GAAP)and definitions may vary from company to company and over time. That GAAP is way behind the times on issues like defining CAC and customer churn is an understatement.

Satellite TV is a good example of a business that has high CAC. Here are some numbers for DISH:

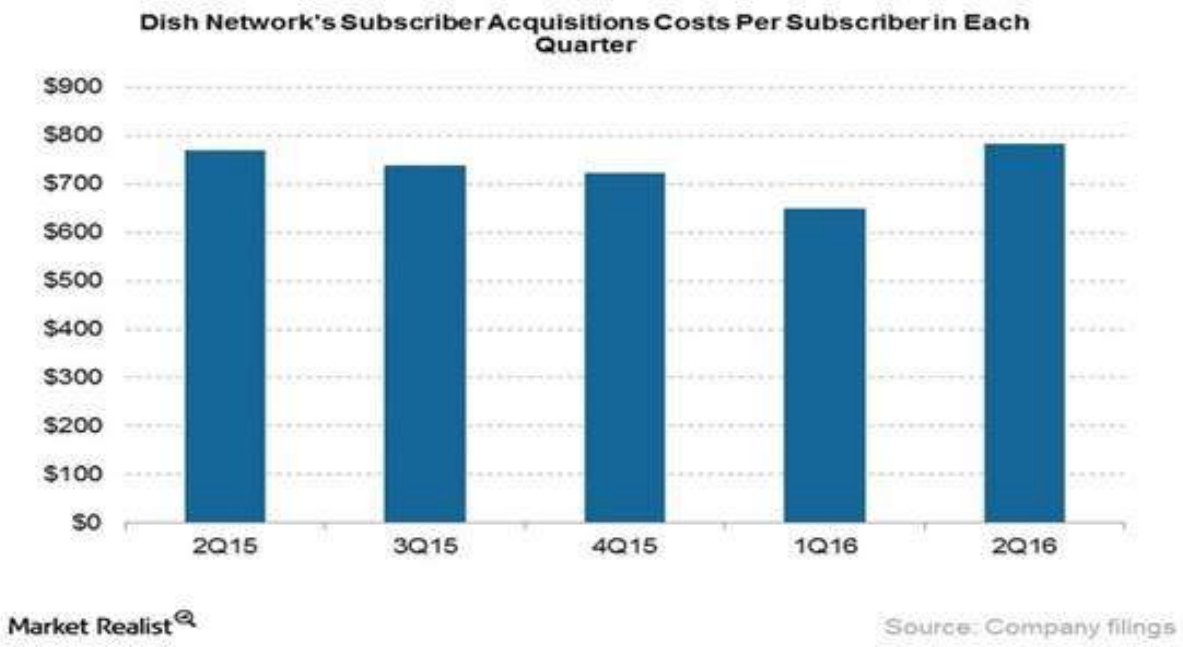

The high CAC of DISH is only financially supportable with a multi-year contract since the potential for losing customers (churn) before that CAC is recovered exists. CAC and churn are reflexive. For example, if you require a a customer to sign a contract for months or years, CAC rises since customers must forgo opportunity to cancel if circumstances change (long term contracts requires customers to incur opportunity cost). If you do not require customers to sign and contract and they can cancel at any time CAC is lower but you risk not recovering CAC due to churn.

There are many other examples of real world CAC. For example, magazines, restaurants, credit cards, health clubs all have well-known CAC. People have created many entire new products to deal with the impact of CAC and churn over the years. As another example, prepaid cellular was created to lower CAC and to deal with the fact that many people can't pass a credit check.

Buying keywords is another way to incur CAC. A sample calculation is:

"Assume a cost "per click of 50 cents, and the resulting website visitors converting to a trial at the rate of 5%. Those trials are then shown converting to paid customers at the rate of 10%. What the sheet shows is that each customer is costing you $100 in just lead generation expense. For many consumer facing web sites, it can be hard to get the consumer to pay more than $100 for the service. And this cost does not factor in the marketing staff, web site costs, etc."

If 10% of leads turn into a sale, CAC is at least $1,000 since there will be other expenses.

Someone may say about the concepts discussed in this post: "This is too complex. I don't like math." If that is the case, it is wise to buy a diversified portfolio of low cost index funds. Investing requires some math. The good news is that it is not complex math. Operating a business also requires math, but in both cases no more than high school algebra is required.

Is there any way to reduce CAC? Yes. Some people spend their entire working lives trying to make this happen. One way to lower CAC is to have people spread the word via viral invitations sent by existing customers. This can happen, but it takes an existing customers to get a new customer by word of mouth. Something must kick start the process. The other way to reduce CAC is via cross selling or selling new services or products to existing customers. It is easier and less expensive to sell to customers who are already using your products than to sell something to a completely new customer. Wells Fargo recently took this approach cross selling way too far and created some serious problems as a result. Another way to reduce CAC is to use the "freemium" business model, which is about getting people to use products or services and then trying to create a upsell opportunity.

Companies do not generally like reporting CAC or SAC for reasons that will be explained below. As an example, Netflix no longer reports SAC, but when it did:

Another example of SAC is the mobile phone business. The pink line shows the SAC for a mobile business expressed in Euros in this case (contract not prepaidcustomer):

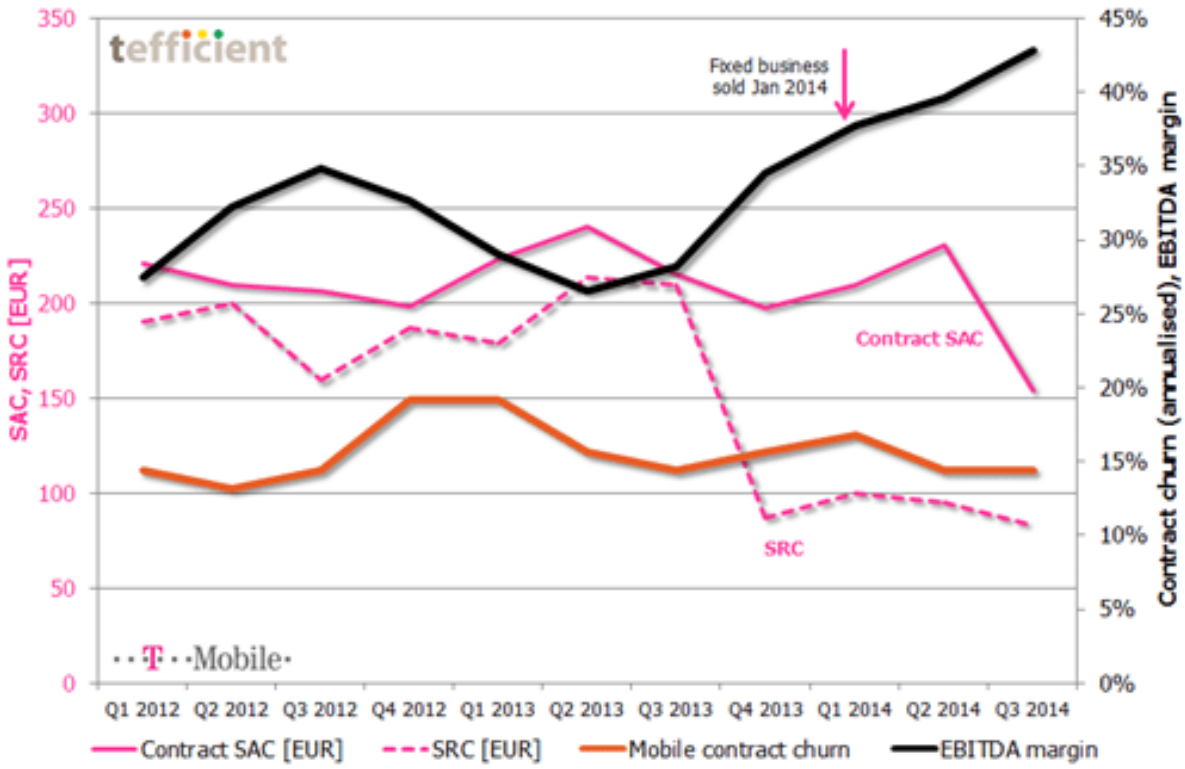

Bill Gurley has an excellent explanation of how CAC can be used in a lifetime value model, with emphasis on how it can be misused. When looking at LTV is is wise to remember that all models are wrong, but some models are useful. The LTV model must be used carefully and is only as good as the assumptions in the model. Gutley writes:

“Lifetime value is the net present value of the profit stream of a customer. This concept, which appears on the surface to be quite benign, is typically used to compare the costs of acquiring a customer (often referred to as SAC, which stands for Subscriber Acquisition Costs) with the discounted positive cash flows that will come from that customer over time. As long as the sum of the discounted future cash flows are significantly higher than the SAC, then people will argue it is warranted to “push the accelerator,” which typically means burning capital by aggressively spending on marketing.

This is a simplified version of the formula:

$$LTV = \sum_{X=1}^{n} \frac{ARPU_x - Costs_x}{(1+WACC)^x} - SAC$$

The key statistics are as follows:

- ARPU (average revenue per user)
- Avg. Cust. Lifetime, n (This is the inverse of the churn, n=1/[annual churn])
- WACC (weighted average cost of capital)
- Costs (annual costs to support the user in a given period)
- SAC (subscriber acquisition costs, sometimes referred to as CAC)

The LTV formula, when used correctly, can be a good tactical tool for monitoring and comparing like-minded variable market programs, especially across channels. But like any model, its proper use is entirely dependent on the assumptions used in that model.

Something unprecedented is impacting all business models right now and it is causing people a great deal of confusion and angst. Central bank policies have taken the cost of capital (WACC) down to levels we have never seen before at a time that is technologically unlike any we have ever seen before. When WACC falls precipitously and platform businesses see the opportunity to generate network effects and critical mass they can get very aggressive on customer acquisition spending since the tape measure grand slam home run potential of doing so has never been higher. Bill Gurley noted this past week that this phenomenon has resulted in: “a massive increase in speculative behavior. If you can make low prob/high outcome bets with OPP [other people’s property], why not?” Understanding why this is happening is made clearer when you consider Warren Buffett’s suggested formula: “Take the probability of loss times the amount of possible loss from the probability of gain times the amount of possible gain.” Wagers in platform businesses are being made at a time when outcomes are highly convex (massive upside potential and limited downside potential). Magnitude not frequency of success matters. Some people are swinging for the fences right now given the low cost of capital and the magnitude of a potential win. If your competitor does this you need to decide whether you play the game that is on the field. Or not.

CAC is a particularly important part of a lifetime value computation for a business since it is paid up front and that means cash going out the door in month one of the customer relationship. David Skok explains the cash flow issue here:

"To illustrate the problem, we built a simple Excel model which can be found here. In that model, we are spending $6,000 to acquire the customer, and billing them at the rate of $500 per month. Take a look at these two graphs from that model:

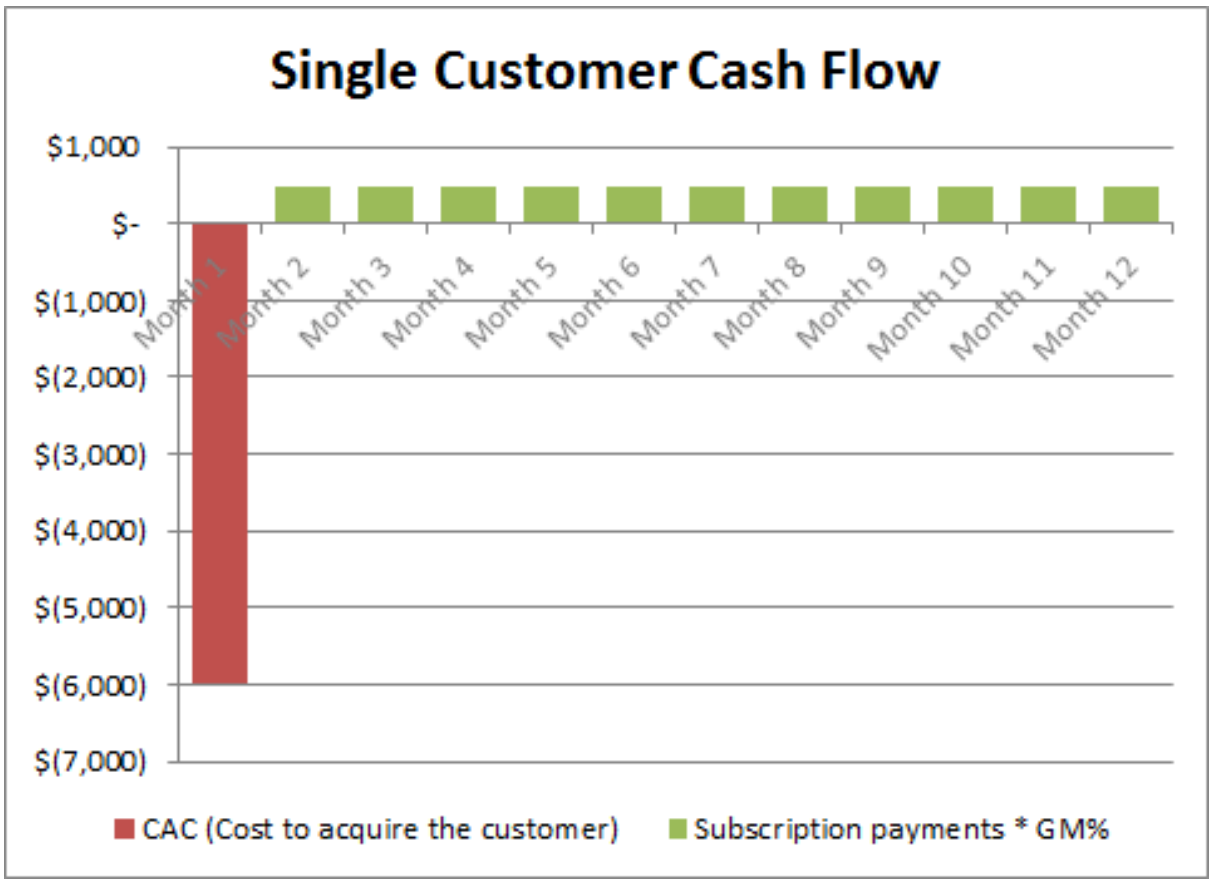

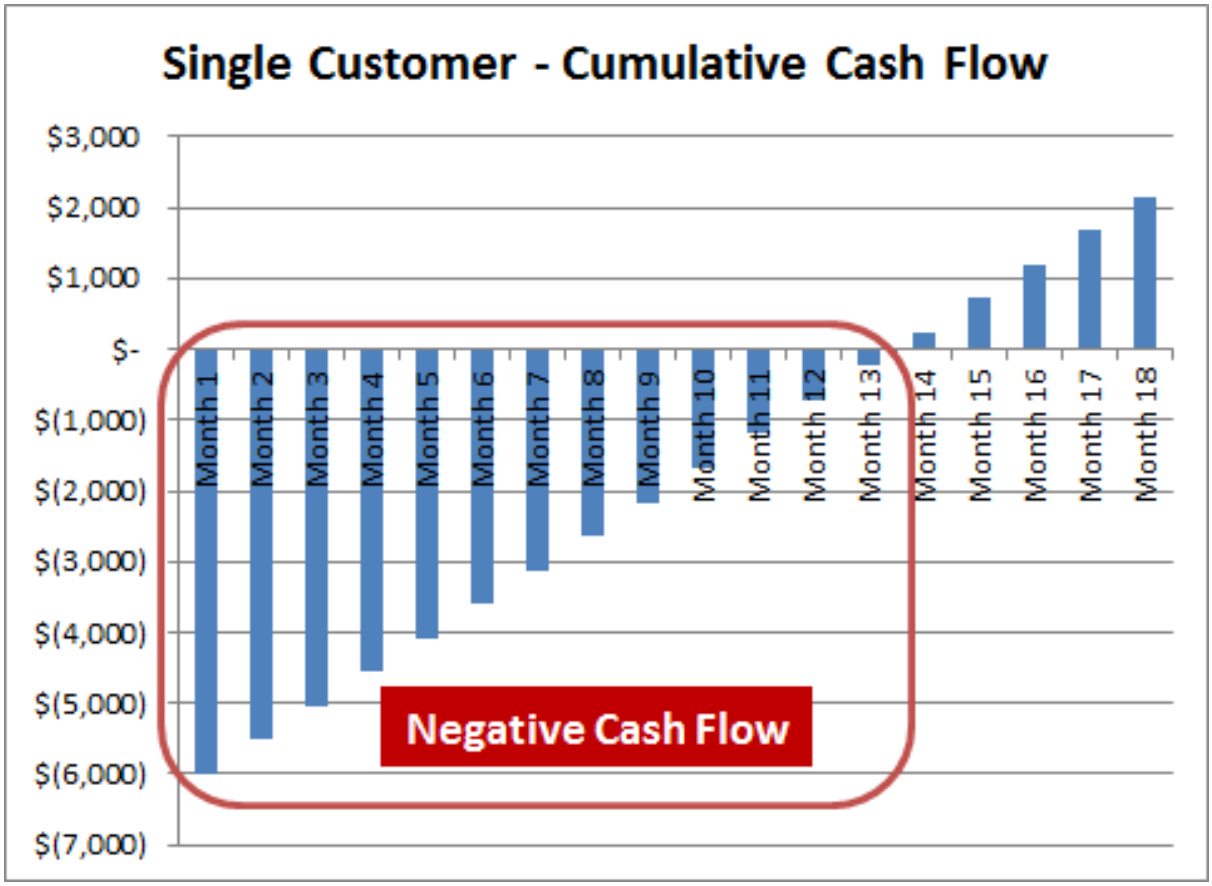

To compute its CAC a business takes its entire cost of sales and marketing over a given period, including salaries and other headcount related expenses and divides it by the number of customers acquired during that period. If a business spent a total of $1,000 on sales and marketing in a month and acquired 100 customers in the same month CAC is $10.00. This calculation of CAC is done on a "gross" customer acquisition basis since customers lost during the period (churn) is considered separately in the LTV formula.

In calculating CAC, everything that is a cost of customer acquisition must be considered or CAC is not fully loaded. Some costs that go into CAC are more obvious like any wages and commissions paid related to marketing and sales, the cost of all marketing and sales software and additional related professional services. Other elements in CAC are more subtle and sometimes hidden.

"The following list includes time and/or other items that you may be ignoring as part of your acquisition costs:

- The time you spend on getting people onto your sales pipeline – typically may become the job of a sales person down the road
- The time you spend on Social Media outreach
- The time you spend Networking at Events
- The time you spend converting a customer from warm to paying – typically may become the job of a sales person down the road
- The time you spend on support or install calls to help a customer roll out the product within their network – might become the job of a sales engineer down the road

- Integration work to include your product into their system or data flow – might become the job of a consultant, or sales engineer down the road
- Supplier calls or deals (with minimums to help provide you with the necessary inventory to sell onto your new customers.
- Sales Channel calls or deals – do you need to spend time setting these up or actually even splitting revenues? "

Other additions to CAC may look like cost of goods sold or COGS but are actually a part of CAC. The amount a company pays for a retail store lease near a popular street location is in part CAC. The cost of "loss leader" goods and services offered to potential and actual customers is also part of CAC. "Free" X for customers as a loss leader may look like COGS but it is CAC. In some situations the loss leader business model is called freemium. Sometimes the product or service is actually free and sometimes it is offered at a subsidized price. In other words, sometimes COGS is disguised CAC.

This analysis of Amazon Prime by Cowen is a good example of an all in LTV calculation that includes SAC of $312 and a lifetime value of $2,960:

Figure 12 AMZN: US Prime Member Valuation Analysis

	Prime	Non Prime	Memo
Membership fee	$8.39	$0.00	Assumes 95% of Prime subs are on annual $99 plan
Order Frequency / Month	3.5	2.3	Cowen Survey data - Aug '16
x Avg. Basket Size	$55	$60	Assume $147MM US GMV, 69MM purchasers ordering 3x/month per Aug '16 survey
= Monthly Spend	**$193**	**$138**	**Calc**
x Gross Margin	28%	30%	We estimate ~29% AMZN Gross Margin (x-AWS).
= Gross Profit / HH / month	**$54.67**	**$41.40**	**Calc**
+ Subscription / month	$8.39	$0.00	Cowen Estimates
- Fulfillment cost / month	$9.94	$11.05	Cowen Estimates - 60% of US fulfillment exp. allocated to Prime
- G&A cost / month	$1.13	$1.26	Cowen Estimates - 60% of G&A exp. allocated to Prime
= Pre-tax profit / HH / month	**$51.99**	**$29.09**	**Calc**
- Tax ($)	$15.60	$8.73	
= Post-tax Profit / HH / month	**$36.39**	**$20.37**	**Calc**
x Customer Life (months)	167		Cowen Estimate based on CIRP churn data
= PV Pre-Acq. Lifetime Value / HH	**$3,272**		**Calc**
- SAC	$312		Cowen Estimate
= Lifetime Value / HH	**$2,960**		**Calc; 10% Discount Rate**
x US Prime Members	48.6		Survey data
= Enterprise Value ($, BN)	**$143,833**		**Calc**
memo: Churn / Month	0.60%		Note: 91% Prime subs renews after Yr 1, 96% renew after Yr. 2, CIRP
memo: Avg. Annual HH Spend	$2,310	$1,656	Calc
memo: Discount rate	10%		Cowen Estimate
memo: AMZN Gross Margin (x-AWS)	29%		Cowen Estimate
memo: Tax rate	30%		Cowen Estimate
memo: Prime Penetration of HH	44%		Cowen Survey data - Aug '16
memo: Total Addressable HH's	109.7		Cowen Estimate
memo: Prime Penetration of AMZN Purchasers	58%		Cowen Survey data - Aug '16
memo: Total AMZN US Purchasers	68.6		Cowen Survey data - Aug '16

Source: Cowen and Company; Cowen proprietary Consumer Tracking Survey, n=~2500, August 2016

Sometimes you will hear someone say: "I don't spend anything on marketing. It's all word of mouth." The reality is that word of mouth does not happen by accident and inevitably a lot of time and energy was expended to create viral customer acquisition. Creating product virality requires work and most always some money.

Sometimes you will also hear people talk about what Sam Altman talks about below:

"There are now more businesses than I ever remember before that struggle to explain how their unit economics are ever going to make sense. It usually requires an explanation on the order of infinite retention ("yes, our sales and marketing costs are really high and our annual

profit margins per user are thin, but we're going to keep the customer forever"), a massive reduction in costs ("we're going to replace all our human labor with robots"), a claim that eventually the company can stop buying users ("we acquire users for more than they're worth for now just to get the flywheel spinning"), or something even less plausible. Most great companies historically have had good unit economics soon after they began monetizing, even if the company as a whole lost money for a long period of time. Silicon Valley has always been willing to invest in money-losing companies that may eventually make lots of money. That's great. I have never seen Silicon Valley so willing to invest in companies that have well-understood financials showing they will probably always lose money. Low-margin businesses have never been more fashionable here than they are right now. Burn rates by themselves are not scary. Burn rates are scary when you scale the business up and the model doesn't look any better. Burn rates are also scary when runway is short (i.e., burning $2M a month with $100M in the bank is fine; burning $1M a month with $3M in the bank is really bad) even if the unit economics look great."

Recently we have seen a number of writers talk about businesses "losing money" based on information that sources have given them from an income statement. This is not surprising since many growing business may be incurring a loss on their income statement because CAC happens in month one. That loss may be acceptable if the acquisition of the revenue from the customer creates value. Or not. Without more data than just the income statement you just don't know.Would you accept a $40 cash outflow in month one if a credit worthy customer agreed to pay you $10 a month for a year? If you had enough cash that return is attractive over the long term.

One key to wise growth is making sure what Warren Buffett wrote in his 1992 letter is true:

"Growth is always a component in the calculation of value, constituting a variable whose importance can range from negligible to enormous… Growth benefits investors only when the business in point can invest at incremental returns that are enticing – in other words, only when each dollar used to finance the growth creates over a dollar of long-term market value. In the case of a low-return business requiring incremental funds, growth hurts the investor. In The Theory of Investment Value, written over 50 years ago, John Burr Williams set forth the equation for value, which we condense here: The value of any stock, bond or business today is determined by the cash inflows and outflows – discounted at an appropriate interest rate – that can be expected to occur during the remaining life of the asset. Note that the formula is the same for stocks as for bonds. Even so, there is an important, and difficult to deal with, difference between the two: A bond has a coupon and maturity date that define future cash flows; but in the case of equities, the investment analyst must himself estimate the future "coupons." Furthermore, the quality of management affects the bond coupon only rarely – chiefly when management is so inept or dishonest that payment of interest is suspended. In contrast, the ability of management can dramatically affect the equity "coupons."

Rules of thumb have emerged regarding the "right" level of CAC in relation to LTV. David Skok lays out the current conventional wisdom:

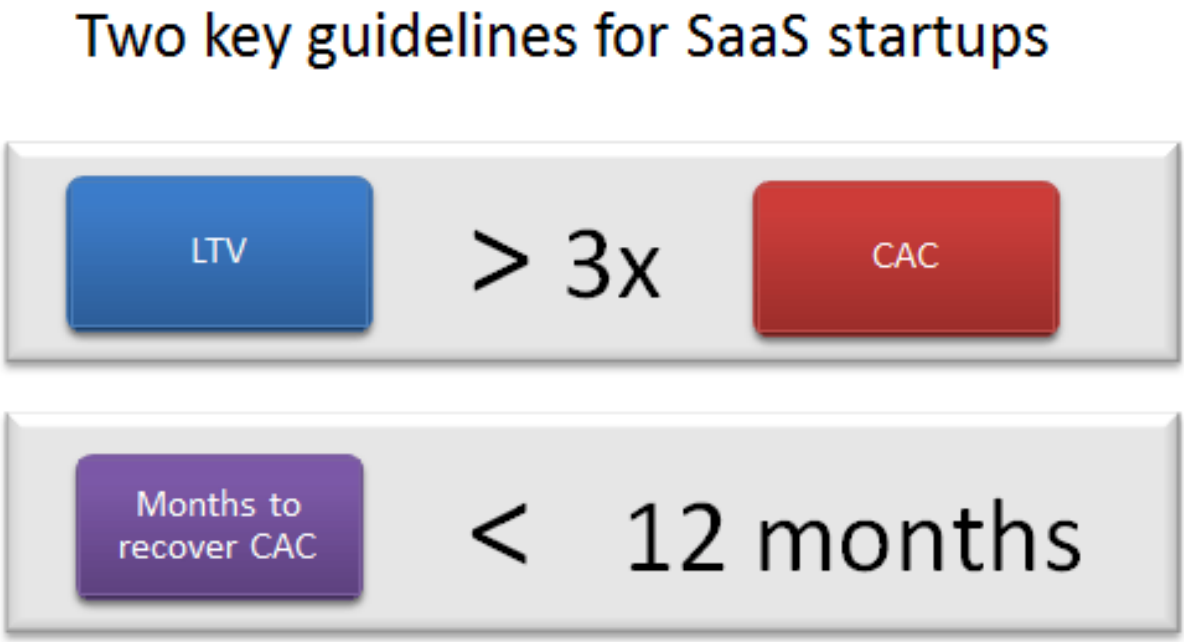

"Over the last two years, I have had the chance to validate these guidelines with many SaaS businesses, and it turns out that these early guesses have held up well. The best SaaS businesses have a LTV to CAC ratio that is higher than 3, sometimes as high as 7 or 8. And many of the best SaaS businesses are able to recover their CAC in 5-7 months. However many healthy SaaS businesses don't meet the guidelines in the early days, but can see how they can improve the business over time to get there. The second guideline (Months to Recover CAC) is all about time to profitability and cash flow. Larger businesses, such as wireless carriers and credit card companies, can afford to have a longer time to recover CAC, as they have access to tons of cheap capital. Startups, on the other hand, typically find that capital is expensive in the early days. However even if capital is cheap, it turns out that Months to recover CAC is a very good predictor of how well a SaaS business will perform. Take a look at the graph below, which comes from the same model used earlier. It shows how the profitability is anemic if the time to recover CAC extends beyond 12 months. I should stress that these are only guidelines, there are always situations where it makes sense to break them."

People often under-rate the importance of great distribution and specifically organic customer acquisition. It is often the case that CAC early in the life of a business is very high and that it can trend down over time if the right approaches are taken. Sirius Satellite radio is an example of a business that has seen its CAC drop significantly over time from very painful levels. Founders of startups often make wild claims about their ability to reduce CAC. Marc Andreessen said once: "Many entrepreneurs who build great products simply don't have a good distribution strategy. Even worse is when they insist that they don't need one, or call no distribution strategy a 'viral marketing strategy' … a16z is a sucker for people who have sales and marketing figured out." Just hoping that an offering will go viral is not going to lead a company to success since something going viral is rarely an accident. Acquiring customers cost effectively is the essence of business. Almost always the best way to acquire customers cost effectively is with an organic customer acquisition strategy. In contrast, formulating a strategy based on buying advertising is unlikely to be successful.

The final point related to the inherently **connected** nature of CAC. Bill Gurley helped me improve my metaphor when he wrote this:

"Tren Griffin, a close friend that has worked for both Craig McCaw and Bill Gates refers to the five variables of the LTV formula as the five horsemen. What he envisions is that a rope connects them all, and they are all facing different directions. When one horse pulls one way, it makes it more difficult for the other horse to go his direction. Tren's view is that the variables of the LTV formula are interdependent not independent, and are an overly simplified abstraction of reality. If you try to raise ARPU (price) you will naturally increase churn. If you try to grow faster by spending more on marketing, your SAC will rise (assuming a finite amount of opportunities to buy customers, which is true). Churn may rise also, as a more aggressive program will likely capture customers of a lower quality. As another example, if you beef up customer service to improve churn, you directly impact future costs, and therefore deteriorate the potential cash flow contribution. Ironically, many company presentations show all metrics improving as you head into the future. This is unlikely to play out in reality."

It is always wise to be be careful out there in running or owning a stake in a business since CAC can be a stone cold killer.

Notes:

Bill Gurley on LTV: http://abovethecrowd.com/2012/09/04/the-dangerous-seduction-of-the-lifetime-value-ltv-formula/

David Skok: http://www.forentrepreneurs.com/saas-metrics-2/

Sam Altman on Unit Economics: http://blog.samaltman.com/unit-economics

Buffett 1992 letter: http://www.berkshirehathaway.com/letters/1992.html

Recode quoting Cowen on Amazon Prime: http://www.recode.net/2016/10/5/13175272/amazon-prime-valuation-worth-143-billion-cowen-report

Seed Camp: http://seedcamp.com/resources/whats-your-real-customer-acquisition-cost/

We Have Not "Reached an Innovation Plateau"

December 16, 2016

The economist Robert Gordon is the author of a book entitled "*The Rise and Fall of American Growth.*" I have yet to read a review that does not like most of Gordon's book. For example, Bill Gates writes in his review of the book https://www.gatesnotes.com/Books/The-Rise-and-Fall-of-American-Growth: "Gordon does a phenomenal job illustrating just how different life was in 1870 than it was in 1970, through both an economic analysis and engaging narrative descriptions. Most reviews have focused on the "fall" indicated in the

title: the last hundred pages or so, in which Gordon predicts that the future won't live up to the past in terms of economic growth. I strongly disagree with him on that point." I agree with Gates' review of the book so I won't write my own review and will instead focus the argument made by Gordon that Gates refers to toward the end of the book. I have had a hard time writing a blog post since I want to be respectful of Gordon and his work but disagree with him on this point. I don't recall rewriting a post as many times as I have this one. While it has not been easy to write I feel compelled to do so since I believe that failure to understand why this alleged innovation plateau may result in serious policy and other mistakes.

The strangest thing about Gordon's assertion about an innovation plateau starting in 1971 is identified by Diane Coyle. In her review of Gordon's book she writes: "Throughout the first two parts of the book, Gordon repeatedly explains why it is not possible to evaluate the impact of inventions through the GDP and price statistics, and therefore through the total factor productivity figures based on them." What Coyle is pointing out is that the early pages of Gordon's book include statements like: "This book … focuses on the aspects of improvements of human life that are missing from GDP altogether." Despite the problems with GDP and price statistics identified on the book, Gordon uses these metrics to conclude that "there are just so many dimensions of human life where we seem to have reached a plateau in innovation." Gordon's pessimism about the impact of innovation is typified by the dreary title of his paper: "US Economic Growth is Over." When it comes to the impact of innovation on productivity and human welfare going forward, Gordon's views on the impact of innovation make Eeyore seem positively cheerful.

Gordon relies heavily on the assertions and concepts described below in making his argument that the impact of innovation has plateaued:

"Our best measure of the pace of innovation and technical progress is total factor productivity (hereafter TFP), a measure of how quickly output is growing relative to the growth of labor and capital inputs."

"Growth in total factor productivity (the metric that captures innovation) was much faster between 1920 and 1970 than either before 1920 or since 1970. From 1970–1994, it was only 0.57 percent a year, less than a third the 1.89 percent rate of 1920-1970. Total factor productivity growth, or TFP, was notably faster from 1994–2004 than in other post-1970 intervals, but that brief revival was an aberration: It was much shorter lived and smaller in magnitude."

> Innovation is proceeding apace, and almost weekly the stock market rewards newly created firms with initial public offering (IPO) valuations of a billion dollars or more. There is no debate about the frenetic pace of innovative activity, particularly in the spheres of digital technology, including robots and artificial intelligence. Instead, this chapter distinguishes between the *pace* of innovation and the *impact* of innovation on the growth rates of labor productivity and TFP.

Gordon's reliance on the TFP to reach his conclusion about the impact of innovation concept is unfortunate. Bill Gates explains the TFP concept and its problems in a way that is easy for anyone to understand:

"As Gordon acknowledges many times, we don't have a good tool for measuring the impact of innovation on people's lives. Like other economists, Gordon uses something called Total Factor Productivity (TFP), which is meant to capture efficiency due to innovation. TFP is based on GDP but takes into account the hours we work and the equipment we use. The truth is, while economic measurements like TFP can be useful for understanding the impact of a tractor or a refrigerator, they are much less useful for understanding the impact of Wikipedia or Airbnb. GDP may not grow as fast as it did in the past, but that alone doesn't tell you whether people's lives are going to get better. How do you calculate the value of millions of pages of free information at your fingertips? How do you calculate the impact of the entire hospitality industry flipped on its head?" https://www.gatesnotes.com/Books/The-Rise-and-Fall-of-American-Growth

University of California at Berkeley economist Bradford DeLong expands on the same point made by Gates:

"Northwestern University economist Robert J. Gordon maintains that all of the true "game-changing" innovations that have fueled past economic growth – electric power, flight, modern sanitation, and so forth – have already been exhausted, and that we should not expect growth to continue indefinitely. But Gordon is almost surely wrong: game-changing inventions fundamentally transform or redefine lived experience, which means that they often fall outside the scope of conventional measurements of economic growth. If anything, we should expect to see only more game changers, given the current pace of innovation. Measures of productivity growth or technology's added value include only market-based production and consumption. But one's material wealth is not synonymous with one's true wealth, which is to say, one's freedom and ability to lead a fulfilling life. Much of our true wealth is constituted within the household, where we can combine non-market temporal, informational, and social inputs with market goods and services to accomplish various ends of our own choosing. While standard measures show productivity growth falling, all other indicators suggest that true productivity growth is leaping ahead, owing to synergies between market goods and services and emerging information and communication technologies." https://www.project-syndicate.org/commentary/economic-trends-productivity-growth-inequality-by-j–bradford-delong-2016-11

Another reason why TFP is not a good measure of the impact of innovation is that it is based on GDP which is also flawed. *The Economist* magazine has written a helpful survey of the problems with the GDP concept, including (1) a bias for activities that involve manufacturing (which is declining as a share of the economy) and (2) measuring only what is bought and sold. The Economist's survey also points out that the nature of output has rapidly changed in ways that make the GDP concept less useful:

"It is not just that many new services are now given away free; so are some that used to be paid for, such as long-distance phone calls. Some physical products have become digital services, the value of which is harder to track. It seems likely, for instance, that more recorded music is being listened to than ever before, but music-industry revenue has shrunk by a third from its peak. Consumers once bought newspapers and maps. They paid middlemen to book them holidays. Now they do much more themselves, an effort which doesn't show up in GDP. As commerce goes online, less is spent on bricks-and-mortar shops, which again means less GDP. Just as rebuilding after an earthquake (which boosts GDP) does not make people wealthier than they were before, building fewer shops does not make them poorer."

Making these metrics even less useful is the fact that TFP is based on other flawed assumptions, such as assuming that there are no returns to scale in an economy and that the economy reflects a state of perfect competition. The economics of software in particular are driven by returns to scale, and as the impact of software grows over time that makes TFP even more inaccurate.

You may be thinking: Gordon has written a really long book, surely it must contain data that supports his claim that the impact of innovation has plateaued. The answer to this question is: no. It is true that TFP is not climbing like it once did but as has been previously explained TFP is very flawed as a measure of innovation's impact (as is the GDP metric it is based on). Are there easy to understand metrics that can easily replace TFP and GDP? Not really. But that does not mean making policy decisions based on TFP makes any sense. Relying on TFP to gauge the impact of innovation is like using a pickle to change a car tire. It may be fun for people with mathematical gifts to calculate TFP, but eating a pickle is also fun.

What about data to support the "innovation has not reached a plateau" story? Well, we can look at a range of trends that show that actual human welfare based on things we can actually measure did not stop having significant impact starting in 1971. Measuring real impact is superior to a broken formulas based on fake assumptions. For example, in the real world there is the example of the falling price of solar power:

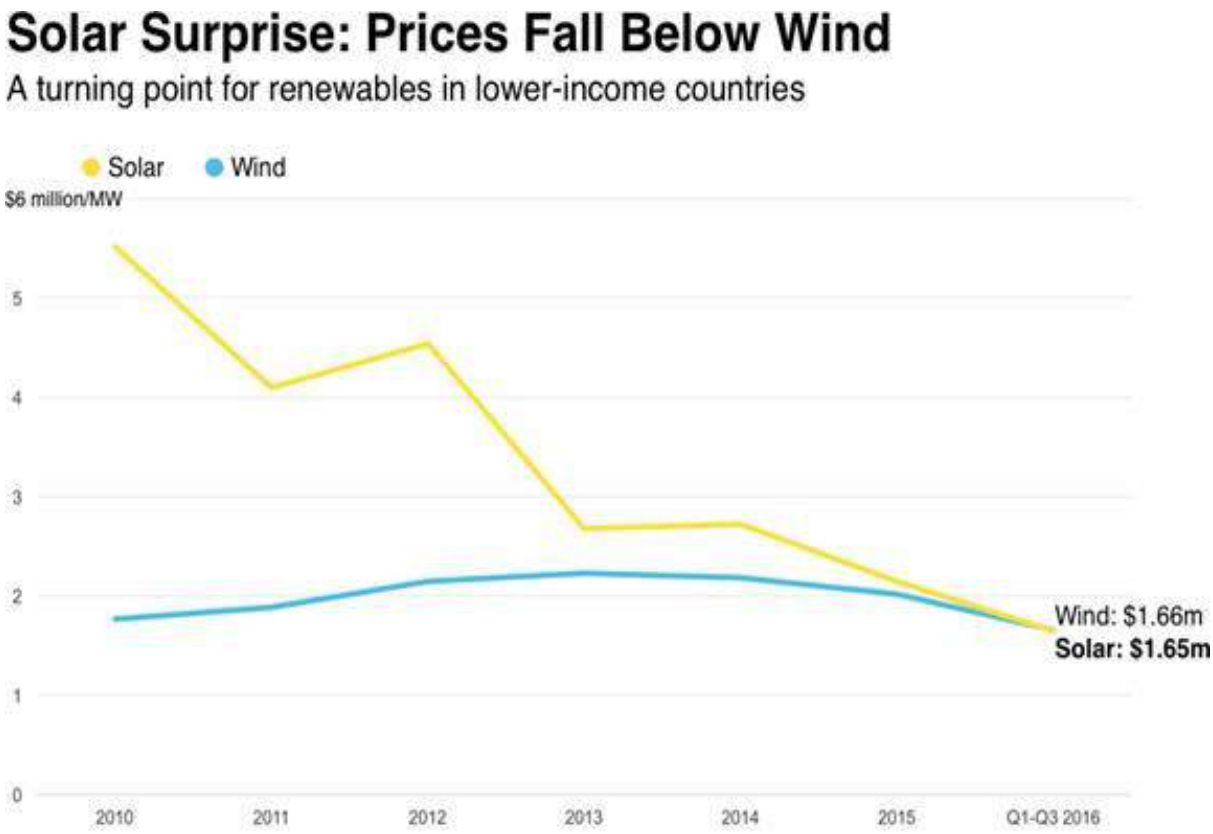

There are many other metrics as well that refute the idea that there was innovation impact plateau starting in 1971. You can see more data supporting my view at the end of this post. The TFP formula utterly fails the "does the result map to reality" test.

Understanding why Gordon feels the way he does about the impact of innovation is put into context by looking a few of his public statements on technology and innovation:

"Everywhere I go, I see technology doing almost exactly what it was doing 10 years ago. Receptionists sitting in front of flat screens, making appointments, just identical to what was happening 10 years ago."

"When you check out in the supermarket, you have bar-code scanning, and you have instant credit card authorization. When you get money, you get it out of the cash machine, which is a form of robot that makes it unnecessary to walk inside a bank."

"The entire decade of the rollout of the smartphone and all the applications have not caused productivity growth to budge." http://www.cnsnews.com/news/article/no-smartphones-arent-innovative-why-pay-lagging

"This book was written the old-fashioned way. It was written with stacks of books taken out of the library. The only modern invention that was involved in writing this book, besides the word processor, was Post-Its stuffed in the books to flag important passages. There was very little reliance on the Internet in the writing of the book." http://www.northwestgeorgianews.com/associated_press/business/state_national/no-smartphones-aren-t-that-innovative-why-pay-is-lagging/article_18bd0f90-dbf4-11e5-bf48-274655b20bc8.html

To say that I disagree with everything Gordon said above is a huge understatement. Few receptionists today just "make appointments" and many receptionist jobs have been eliminated by automation. Supermarkets use very different technology today and are far more productive that their predecessors, especially the new one created by Amazon that will have no checkers or self-serve check out process. In this Amazon store:

"you scan in with an app on your phone as you walk into the store, grab whatever you want — and leave. "Computer vision," "deep learning algorithms" and "sensor fusion" figure out what you've taken and charge you for it. http://www.wvgazettemail.com/gazette-op-ed-commentaries/20161210/justin-fox-when-the-store-checkout-lines-go-away#sthash.NXFlPlbn.dpuf

Anyone who has visited a developing country knows how smartphones have boosted productivity in a huge way, let alone what they have done in the US. I use the Internet extensively for example in writing and researching and often on my smartphone. Having GPS functionality built into a supercomputer in your pocket did not exist 78 years ago when Gordon was born nor did it exist in 1971 that year Gordon says technology plateaued. I will say that there is less smartphone use and technology use in general in people above the age of 75, but that is a small slice of total users with usage that does not reflect usage of other age groups:

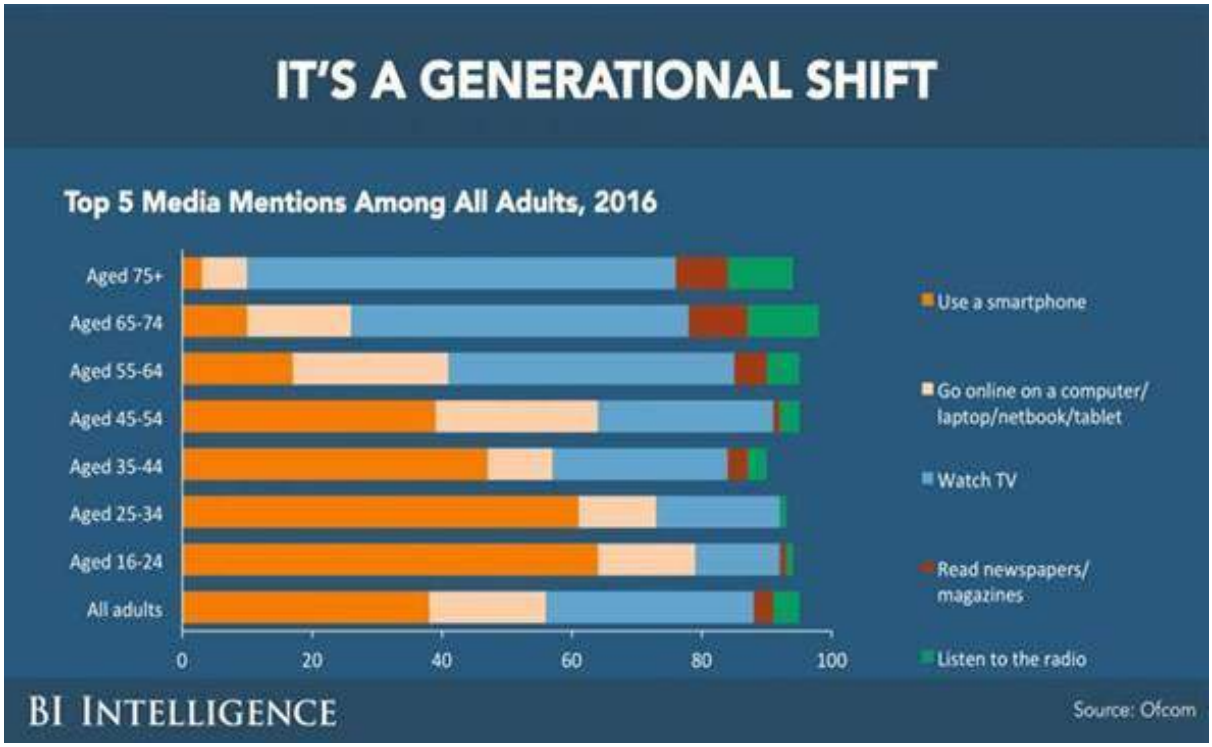

The absence of accurate metrics about the impact of innovation means that people are going to tell stories about that topic. Someone like Gordon who makes "good old days" statements about innovation's impact from the past being better that inventions since 1970 is going to tell a different sort of story about the impact of technology than someone like me. The good old days crowd might make an argument like Gordon does here:

Gordon "flashes a photo of a smartphone and a toilet on a screen and asks his audience what they would do if they had only two options: Keep everything invented up until 2002, or keep everything invented up until today—but give up running water and toilets. The answer to him is obvious: Indoor plumbing changed how people live, he says, smartphones are just a handier form of what already exists." http://blogs.wsj.com/economics/2014/06/15/if-you-had-to-choose-iphone-or-toilet/

Gordon is telling a story based on anecdotes which reflects his view that the "Great Inventions" from the past can't be replicated. Part of this story includes a claim that nothing happening today compares to ending diseases like polio during the pre-1971 period. My view is that this story is the result of the same "availability bias" that makes people fear shark attacks or believe that plane crashes kill more people than auto accidents. Innovation today is far more distributed and effects many more people. Thomas Edison working as a lone inventor in his lab is not how innovation happens in today's economy. The more credible alternative story to Gordon's is that the collective value of innovation today from technologies like falling solar prices, personal computers, mobile phones, mobile apps or modern medical advances like CRISPR are bigger not smaller than in the pre-1971 period. Cars from three different companies are driving around San Francisco without drivers right now. You can say well that is destroying jobs. We can argue about that. But you can't say that innovation's impact plateaued in 1971 and at the same time say automation is increasingly eliminating jobs. Select any one argument but not both.

When Gordon claims that what is being created as innovation today are just incremental improvements on what came before 1971, Gordon is essentially making an argument that is similar to someone arguing that electric lighting is just an improvement on a campfire or that a modern automobile is just an improvement on a horse. That human needs are often persistent does not mean that the impact of innovation plateaued starting in 1971.

A far more plausible story than Gordon's about what happened to TFP and GDP after 1971 is: (1) the economy has shifted rapidly from manufacturing to services; and (2) more of the benefits of innovation are consumer surplus (i.e., not something producers can monetize). These two developments and others mean innovations is increasingly poorly measured in both GDP and TFP. The fundamental nature of the output of the economy, consumption and welfare has changed and will continue to change. You may call my explanation a story too, but it is a far more plausible story than Gordon's to anyone paying attention to the advance of technology today and the ways in which the economy is changing. Is academia struggling to increase productivity? Sure. Baumol's cost disease is a significant problem for academia. But just about anyone involved in business on a daily basis knows that innovation's impact is increasing rapidly. Innovation in business today is relentless. Ask Motorola or Nortel or HTC or Blackberry.

In telling my story I'm not going to explain in detail what consumer surplus is (since most of you will stop reading) other than to say that is calculated by analyzing the difference between what consumers are willing to pay for a good or service relative to its market price. Roughly: "Total economic welfare = consumer surplus + producer surplus." The measurement problem with consumer surplus comes from that fact that it is not possible to estimate the shape of demand for products when there is no measurable price. For example, what is the consumer surplus from WhatsApp or Wikipedia which has a price of zero? If you ask this question about WhatsApp to someone arguing that the impact of innovation has plateaued, they inevitably change the subject.

Brad DeLong describes why a software-driven economy is fundamentally different:

The key difference is between "Smithian" commodities–where it is a safe rule of thumb that the consumer surplus generated is about equal to the producer cost, so that GDP accounts that value goods and services at real producer cost will capture a more-or-less stable fraction equal to half of true standards of living–and… I might as well call them "Andreesenian" commodities, where consumer surplus is a much larger proportion of monetized value because what is monetized is merely an ancillary good or service to what actually promotes societal welfare. What is the proportion? 5-1? 10-1? Somewhere in that range, I think–at least. http://delong.typepad.com/sdj/2015/01/afternoon-must-read-tim-worstall-facebook-explains-why-marc-andreessen-and-larry-summers-disagree.html

DeLong wrote that pointing to an article by Tim Worstall. In that article Worstall wrote: "the gap between 'real living standards' and "recorded living standards" is growing simply because so much more of the value of the new technologies is not in fact monetized." Worstall explains:

"'consumer surplus' is the value that we consumers derive from whatever it is over and above the price we've got to pay to get it. A general assumption is that we derive a consumer surplus from absolutely everything that we do buy: if we didn't gain more value than it cost us then we wouldn't buy it, would we? Brad Delong once pointed out (or perhaps pointed to

someone who pointed out) that one way of looking at rising living standards in the 20th century was a factor of about 8. Rich world people in 2000 were 8 times better off than rich world people in 1900. Roughly true by those standard measures of GDP and so on. But if we than added what people could do, the improvements in quality, all something analagous to that consumer surplus. it might be more true to say that people were 100 times better off. That's how I would explain (some of) that productivity puzzle. A larger than normal portion of the output of the new technologies is not monetised so we're just not counting it as output at all."

That the level of consumer surplus is hard to quantify does not mean that economists don't try to do so. The economist William Nordhaus writes:

"We conclude that only a minuscule fraction of the social returns from technological advances over the 1948-2001 period was captured by producers, indicating that most of the benefits of technological change are passed on to consumers rather than captured by producers." http://www.nber.org/papers/w10433

Nordhaus estimates that an innovator's ability to capture the benefits of their innovation is in the low single digits and that the benefits that consumer's get can be 25-50 times higher than the innovator. Why? *The Economist magazine* explains:

"Nordhaus, an economist at Yale University, looked at two ways of measuring the price of light over the past two centuries. You could do it the way someone calculating GDP would do: by adding up the change over time in the prices of the things people bought to make light. On this basis, he reckoned, the price of light rose by a factor of between three and five between 1800 and 1992. But each innovation in lighting, from candles to tungsten light bulbs, was far more efficient than the last. If you measured the price of light in the way a cost-conscious physicist might, in cents per lumen-hour, it plummeted more than a hundredfold."

Do I believe the calculations of Nordhaus on consumer surplus are precisely accurate, especially when he calculates a figure to the right of the decimal point? Certainly not. But I do believe Nordhaus is at least directionally correct.

Today's technology advances are often producing efficiency improvements which in turn produce lower costs, which translates into lower spending and measured GDP even though actual GDP is higher. For example, the percentage of firms reporting what is effectively zero inventory levels has increased to more than 20% from less than 5%. This reduction in inventory levels is unprecedented. More is being done with less and yet traditional measurements say that productivity is decreasing since less money is being spent. The key to understanding this change and how it confounds traditional approaches to measuring progress is made clear by example: If an economy doubles output, but competition halves the price, GDP is unchanged but real productivity has doubled.

Another major reason why many people underestimate the impact of innovation is that most innovation has no moat! Many people assume that innovation always creates more producer surplus and profit. The equate the wealth of a few exceptional innovators with what is happening as a whole (availability bias). Charlie Munger describes the reality for any business person best:

“The great lesson in microeconomics is to discriminate between when technology is going to help you and when it’s going to kill you. And most people do not get this straight in their heads. There are all kinds of wonderful new inventions that give you nothing as owners except the opportunity to spend a lot more money in a business that’s still going to be lousy. The money still won’t come to you. All of the advantages from great improvements are going to flow through to the customers.”

The point Munger just made so clearly is counter-intuitive for many people, but essential to understand. Moat creation is incredibly hard and rare. It is a massive mistake to confuse a moat shortage with an “impactful” innovation shortage. Some innovation does not produce any profit and in fact can destroy profit. For every firm creating disruption some other firms are being disrupted. Munger is saying that sometimes both the disrupting businesses and the disrupted businesses generate only losses from an innovation and consumers are the only beneficiaries. Moat creation is so hard that Munger and Buffett don’t even try to create moats and instead focus on buying them. Other people do try to create new moats and that is essential for the economy. Most venture capital investments fail but a few succeed spectacularly enough to make the investment system very profitable for some venture capitalists and highly beneficial for society. Lots of failure is essential for capitalism to work properly since it is experimentation based on trial and error that drives innovation.

If you are feeling confused at the state of the world as you read this in 2016 it is because your brain is operating normally. Charlie Munger makes that point below in the context of monetary policy, but he just as easily could have been referring to how technology is changing the world:

“I think something so strange and so important [as current central bank policies] is likely to have consequences. I think it’s highly likely that the people who confidently think they know the consequences – none of whom predicted this – now they know what’s going to happen next? Again, the witch doctors. You ask me what’s going to happen? Hell, I don’t know what’s going to happen. I regard it all as very weird. If interest rates go to zero and all the governments in the world print money like crazy and prices go down – of course I’m confused. Anybody who is intelligent who is not confused doesn’t understand the situation very well. If you find it puzzling, your brain is working correctly.”
http://www.forbes.com/sites/phildemuth/2015/04/20/charlie-mungers-2015-daily-journal-annual-meeting-part-3/#434e750f6f0e

Why is the period since 1970 such a confusing time? If Gordon gets to tell a story, people like me should get to tell our story too, especially since ours is a lot more credible. My story begins when Intel began selling the 4004 semiconductor in 1971, the exact same year that Gordon claims innovation plateaued.

This semiconductor and others that followed famously caused Bill Gates to dropped out of Harvard and start Microsoft with Paul Allen. They moved to Albuquerque to write software for the Altair computer they first saw in a Popular Electronics magazine at a newsstand in Harvard Square. The price of the computer in 1975 was $397. It was primitive and lacked easy-to-use software, but even then they could see the potential for this device since they experienced how valuable having access to a computer could be. Despite their youth, especially in the context of how business was conducted at that time, Gates and Allen realized that if their business was not formed immediately they would miss the opportunity. They also realized that what the hardware enabled and where the bulk of the value would accrue was software. Gates recalls: "When we saw [the Altair], panic set in. 'Oh no! It's happening without us! People are going to write real software for this chip!'" Gates captured the key factor in driving the rise of software as a driver of business value many years later in a famous 1994 interview with Playboy magazine: "When you have the microprocessor doubling in power every two years, in a sense you can think of computer power as almost free. So you ask: Why be in the business of making something that's almost free? What is the scarce resource? What is it that limits being able to get value out of that infinite computing power? Software." He has also pointed out that "software is so inexpensive to duplicate that substituting it for costly hardware reduces system costs. At Microsoft, our only 'hammer' is software…. It's all about scale economics and market share. You can afford to spend $300 million a year improving it and still sell it at a low price." That productivity statistics started changing in 1971 the year the 4004 chips appeared is not a coincidence.

This point made by Gates is critical to understanding the unique economics of software. Also important is that the dollars spent creating the software are what an accountant calls "sunk." Ben Thompson writes: "What makes the software market so fascinating from an economic perspective is that the marginal cost of software is $0. After all, software is simply bits on a drive, replicated at the blink of an eye. Again, it doesn't matter how much effort was needed to create said software; that's a sunk cost. All that matters is how much it costs to make one more copy: $0. The implication for apps is clear: any undifferentiated software product, such as your garden variety app, will inevitably be free. This is why the market for paid apps has largely evaporated. Over time substitutes have entered the market at ever lower prices, ultimately landing at their marginal cost of production: $0." Software has unique economics since it is a public good and that creates new challenges for the economy.

All businesses and occupations are being impacted by the software revolution. The phrase "software business" is now as redundant as the term "technology business." Every business is being impacted by technology, most importantly software. This transformation is not a completely new phenomenon, but the pace of change is. John Naughton has pointed out: "In

1999, Andy Grove, then the CEO of Intel, was widely ridiculed for declaring that 'in five years' time there won't be any internet companies. All companies will be internet companies or they will be dead.' What he meant was that anybody who aspired to be in business in 2004 would have to deal with the internet in one way or another, just as they relied on electricity. And he was right." What is different a decade later is that the pace of change driven by this software revolution has accelerated because the change is happening on multiple dimensions that feed back on each other. As just one example, the speed at which the operations of business are moving to the cloud and the implications of that one change alone are staggering.

The 4004 chip was the first of many products sold by chipmakers that unleashed exponential change. Since few aspects of life are exponential when humans do have such an experience it almost seems like magic, especially at first. People are simply not good at understanding exponential change. Bill Gates once put it this way: "When things are improving so rapidly, how do you create a model in your head? Computers are doubling in power, relative to the price, about every 18 months. Most humans don't have a situation where something doubles in power that fast." Except for a virus or bacteria increasing in number inside your body, few things in a human's life are nonlinear.

These are confusing times, but that is no reason to adopt a pessimistic outlook on the potential of innovation to create enormously beneficial impacts. There is no question that today's economy and the technological changes that power the economy have created a significant number of new problems that we must solve. We must discover new solutions to these new problems and this will require innovations of many kinds. Economic growth is far from "over." The impact of innovation has not plateaued.

P.s., More support for my view is set out below. There are too many other example to mention here, but this is a start:

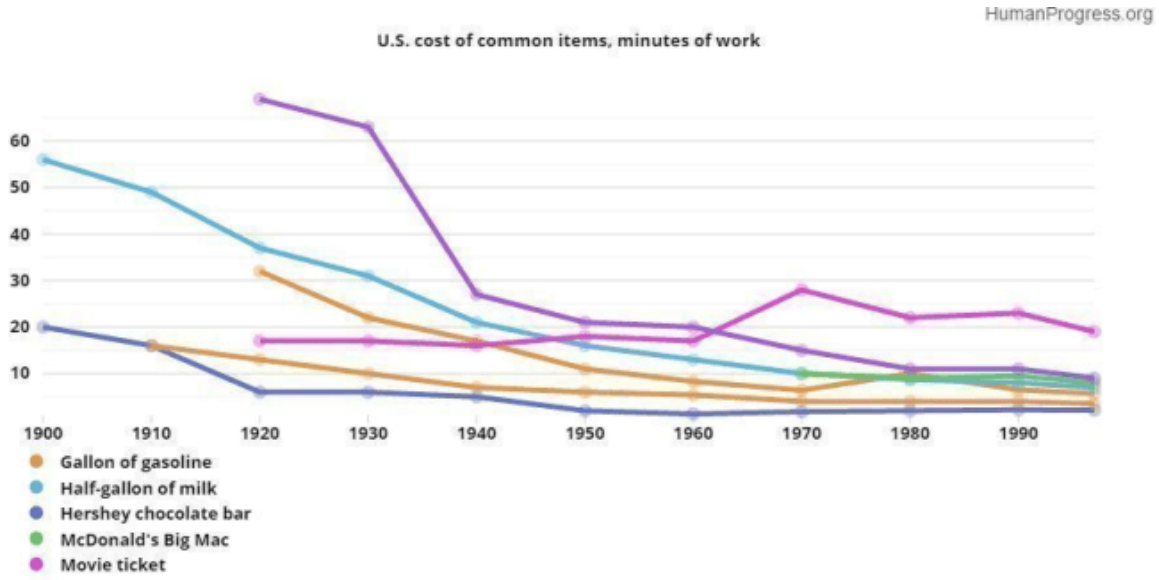

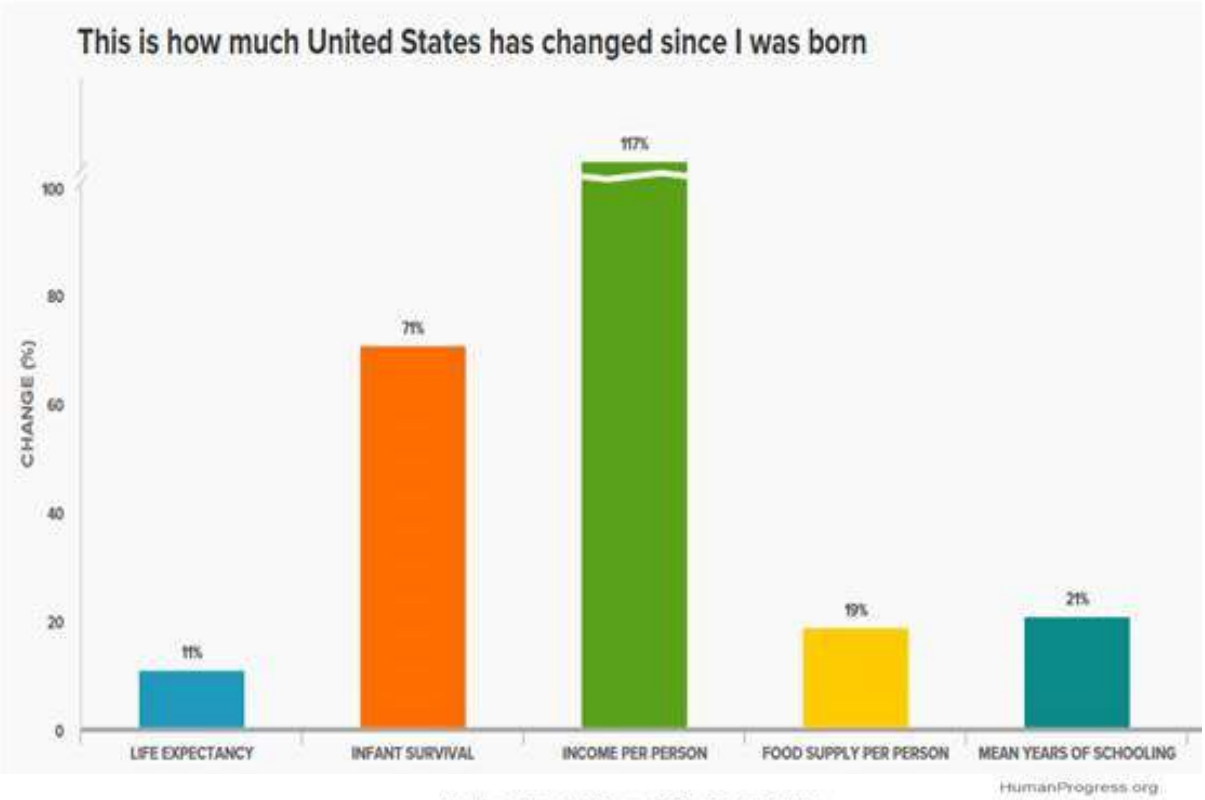
This is how much United States has changed since I was born
CHANGE (%)
100
80
60
40
20
0
11%
71%
117%
19%
21%
LIFE EXPECTANCY
INFANT SURVIVAL
INCOME PER PERSON
FOOD SUPPLY PER PERSON
MEAN YEARS OF SCHOOLING
HumanProgress.org

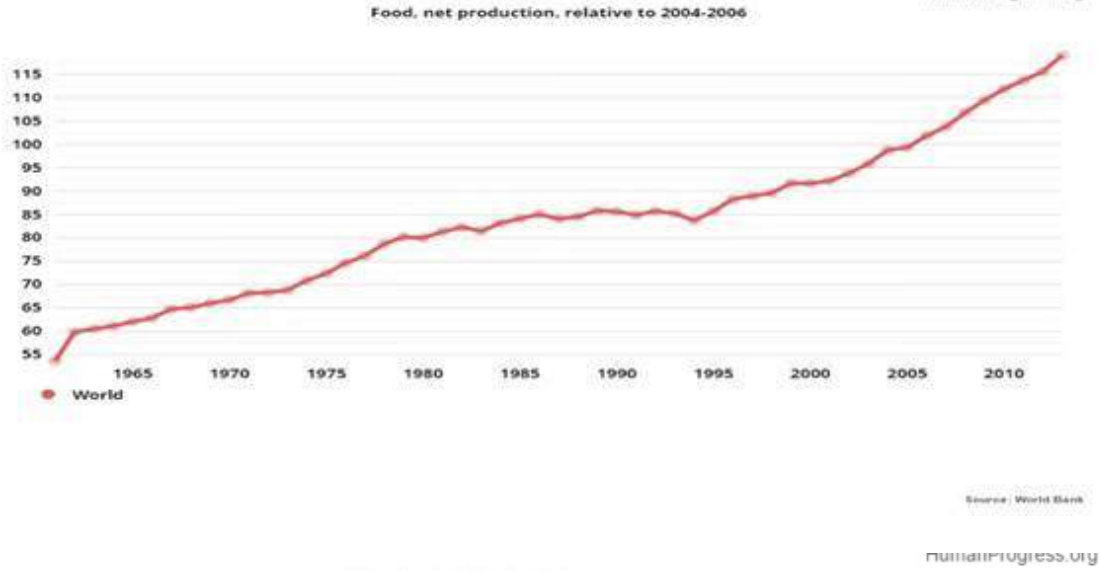
Food, net production, relative to 2004-2006
115
110
105
100
95
90
85
80
75
70
65
60
55
1965
1970
1975
1980
1985
1990
1995
2000
2005
2010
World
Source: World Bank
HumanProgress.org

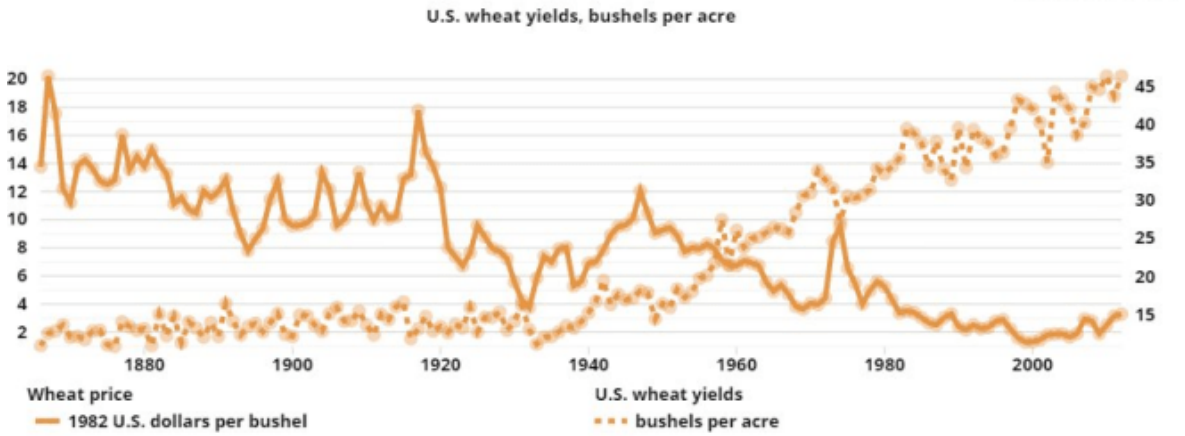
U.S. wheat yields, bushels per acre
20
18
16
14
12
10
8
6
4
2
45
40
35
30
25
20
15
1880
1900
1920
1940
1960
1980
2000
Wheat price
1982 U.S. dollars per bushel
U.S. wheat yields
bushels per acre

What You Can Learn about Business from a Dozen Lines in the Godfather

December 24, 2016

1. Michael Corleone: "I have always believed helping your fellow man is profitable in every sense, personally and bottom-line." Michael seems to be claiming that he agrees with Charlie Munger who once said: "You'll make more money in the end with good ethics than bad. Even though there are some people who do very well, like Marc Rich–who plainly has never had any decent ethics, or seldom anyway. But in the end, Warren Buffett has done better than Marc Rich–in money–not just in reputation." You may, of course question, whether Michael was being sincere in making this statement to some assembled reporters. But perhaps he agrees with the sentiment of Munger here:

"Ben Franklin said: 'I'm not moral because it's the right thing to do – but because it's the best policy.' We knew early how advantageous it would be to get a reputation for doing the right thing and it's worked out well for us. My friend Peter Kaufman, said 'if the rascals really knew how well honor worked they would come to it.' People make contracts with Berkshire all the time because they trust us to behave well where we have the power and they don't. There is an old expression on this subject, which is really an expression on moral theory: 'How nice it is to have a tyrant's strength and how wrong it is to use it like a tyrant.' It's such a simple idea, but it's a correct idea."

2. Michael Corleone: "One thing I learned from my father is to try to think as the people around you think. On that basis, anything is possible." Michael appears to be advocating speculation in the manner of a Keynesian beauty contest which may explain his poor performance investing in public markets. Keynes explains the problem this way:

"Professional investment may be likened to those newspaper competitions in which the competitors have to pick out the six prettiest faces from a hundred photographs, the prize being awarded to the competitor whose choice most nearly corresponds to the average preferences of the competitors as a whole, not those faces which he himself finds prettiest, but those which he thinks likeliest to match the fancy of the other competitors, all of whom are looking at the problem from the same point of view. We have reached the third degree where we devote our intelligences to anticipating what average opinion expects the average opinion to be. And there are some, I believe, who practice the fourth, fifth and higher degrees."

By guessing what others are guessing what others are guessing [repeat] you will not beat the market. This is speculation rather than investing.

3. **Don Vito Corleone: "Someday, and that day may never come, I'll call upon you to do a service for me."** Reciprocity is a powerful human emotion. Professor Cialdini has made this point in his ground breaking book *Influence.* Compliance professionals

know how to exploit this tendency. For example, when the stock broker gives away the "free" salmon dinner he or she is expecting you to reciprocate by allowing them to manage your wealth. The salesman who wants you to buy his goods in return for the football tickets is no different in his or her motivation. One weird thing about the reciprocity tendency is that you are so influenced by it that what is asked for by the compliance professional can be of far greater value that what is given to you. For example, the Hare Krishna member in the airport who gives away the flower can ask for something much more valuable and yet the people being solicited will still tend to feel the compulsion created by reciprocity. The key defensive move against reciprocity is to not accept the gift in the first place. I would rather stab myself in the thigh with a sharp fork than accept a free weekend condominium stay offered by a time share salesperson. One technique that is useful when engaging in a negotiation is to politely refuse to accept or at least immediately reciprocate when hospitality is offered. Lavish hospitality given to the employees of a business is often intended to create obligation at a personal level, which they hope will cause the employee to offer reciprocal benefits to the generous compliance professional. One problem, however, is that some studies have shown that there is also a bias toward receiving a gift: "Although the obligation to repay constitutes the essence of the reciprocity rule, it is the obligation to receive that makes the rule so easy to exploit."

4. **Clemenza: "Leave the gun. Take the cannolis."** Professor Michael Porter believes that "The essence of strategy is choosing what not to do." One of the hardest things for many people in business is to not do something. One common example is the restaurant with a nearly endless menu. They often serve everything poorly and unprofitably. Allocating resources to a sub-optimal use is a misallocation of capital. As an example, if you are a startup founder and you are buying expensive chairs for your conference room the same process should apply. Is that your best opportunity to deploy capital? Those chairs can potentially be some of the most expensive chairs ever purchased on an opportunity cost basis. If you drive an expensive sports car Buffett can calculated in his head what your opportunity cost is in buying that car versus investing.

5. **Michael Corleone: "Never hate your enemies. It affects your judgment."** It is hard to overemphasize the importance of temperament to success. Most mistakes are psychological or emotional. Munger believes that he and Buffett have an advantage that is based more on temperament than IQ. If you can't handle mistakes, Munger suggests that you buy a diversified portfolio of low cost index funds. Unfortunately, even if you do select an index-based approach you still must make some investing decisions such as asset allocation, fund selection and asset re-balancing periods. Humans tend to make so many psychological and emotional mistakes and that "compliance professionals" are able to milk that tendency to manipulate your actions. Be careful.

6. **Sonny Corleone: "Whatcha go to college? To get stupid? You're really stupid!"** Charlie Munger makes the point that high IQ does not mean you have high rationality quotient (RQ). Temperament is far more important than IQ. Warren Buffett has said about Charlie Munger: "He lives a very rational life. I've never heard

him say a word that expressed envy of anyone. He doesn't waste time on senseless emotions." Warren Buffett suggests that some of this aspect of human nature may be innate: "A lot of people don't have that. I don't know why it is. I've been asked a lot of times whether that was something that you're born with or something you learn. I'm not sure I know the answer. Temperament's important." High IQ can be problematic. What you want is to have a high IQ but think it is less than it actually is. That gap between actual and perceived IQ creates valuable humility and protects against mistakes caused by hubris. It is the person who thinks their IQ is something like 40 points higher than it actually is who creates the most havoc in life.

7. **Michael Corleone: "Well, when Johnny was first starting out, he was signed to a personal services contract with this big-band leader. And as his career got better and better, he wanted to get out of it. But the band leader wouldn't let him."** Johnny Fontaine was locked up in this services contract to lower his transfer pricing power. Wholesale transfer pricing = the bargaining power of A that supplies a unique product or service XYZ to which may enable A to take the profits of company B by increasing the wholesale price of that product or service. The term "wholesale transfer pricing power" is similar to, but not the same as, a "hold up problem." The best lens to look at the wholesale transfer pricing power/supplier hold up set of issues is Michael Porter's "Five Forces" analysis, specifically "bargaining power of suppliers." To solve this problem Don Vito Corleone famously said: **"I'm going to make him an offer he can't refuse."**

8. **Hyman Roth: "The best deal you're ever going to make is the one you can walk away from."** This is a statement about the importance of having what Roger Fisher Calls a BATNA (best alternative to a negotiated agreement) in his book *Getting to Yes*. Negotiating leverage is determined by what is essentially an opportunity cost process. If you have only one supplier of an essential component at any point in your value chain (like the music streaming business does), then may God have mercy on your business. Hopefully God will have mercy because suppliers (for example, music owners) will not. At one in the Godfather the bodyguard Mosca made another point related to BATNA when he said: "Tell me what to do. Then I will tell you my price." Never agree to buy and then negotiate price. Do the reverse.

9. **Michael Corleone: "All my people are businessmen; their loyalty is based on that."** The best CEOs are "master delegators, running highly decentralized organizations and pushing operating decisions down to the lowest most local levels in their organizations." They push down decision-making on everything but capital allocation and choosing and compensating senior executives. They "delegate to the point of anarchy" using incentive to get the behavior they desire. There are many examples of this in the Godfather. Tessio at one point said to Tom: "**Tell Mike it was only business. I always liked him."** Michael Corleone famously said: **"It's not personal, Sonny. It's strictly business."** Sonny forgot the lesson and was ambushed as a result. This is the famous exchange the preceded the ambush:

Tom Hagen: "Your father would want to hear this. This is business, not personal."

Sonny: "They shot my father? It's business, your ass."

Tom Hagen: "Even the shooting of your father was business, not personal, Sonny!"

Sonny: "Well then, business will have to suffer, all right?"

10. **Sollozzo: "I don't like violence, Tom. I'm a businessman. Blood is a big expense."** Keeping costs low is a fundamentally important business skill and is consistent with lean startup principles. As Chamath Palihapitiya has said:

"It's fine to fail. But if you fail because you didn't have the courage to move to Oakland and instead you burned 30 percent of your cash on Kind bars and exposed brick walls in the office, you're a fucking moron….The company builders are just cheap, they're just grimy, and just, shitty office space, and they've got to keep it under 8 or 9% of their total burn, and they find people who really really believe in the thing they're making, and they decide to just live in Oakland and pay for Lyft, and it's still cheaper. They do all kinds of creative things that deserve capital so they can build. So it forces us to ask those questions, 'How are you really company building?' And that's how we get the truth on who's going to stand the test of time." "We're trying to coach our C.E.O.s that the window dressing is both expensive from a cash perspective and tremendously expensive from a culture perspective. It distracts the team from building what they need to build. Don't waste money on things that get away from your mission, which confuse employees about why they're actually there. Meaning, the quality of the office and the quality of the food are all part and parcel of a lack of discipline, which speaks to the fact that the mission isn't compelling enough."

Every penny not spent on achieving the objectives of the business goal is not only wasted but a potentially a contributor to a cash gap that can kill the business. The only unforgivable sin in business is to run out of cash. People who are driven to build a business (missionaries) won't trade off things like free Kind bars if it increases the risk that they will not achieve their goals. Of course, wasting money is still stupid if a founder is more of a mercenary. As noted above, if a business spends $2,000 on an expensive office chair at seed stage, that chair becomes very expensive indeed if the business eventually has a financial exit at 100X that seed stage valuation.

11. Frankie Pentangeli: "Your father did business with Hyman Roth, he respected Hyman Roth. But he never trusted Hyman Roth!" Charlie Munger has said:

"The highest form a civilization can reach is a seamless web of deserved trust." "The right culture, the highest and best culture, is a seamless web of deserved trust." "Not much procedure, just totally reliable people correctly trusting one another. That's the way an operating room works at the Mayo Clinic." "One solution fits all is not the way to go. All these cultures are different. The right culture for the Mayo Clinic is different from the right culture at a Hollywood movie studio. You can't run all these places with a cookie-cutter solution."

The culture of a business is more than the sum of its parts. The totality of the vision, values, norms, systems, symbols, language, assumptions, beliefs, and habits of a business is what creates the culture of a business. Munger and Buffett are huge proponents of creating a strong organizational culture: "Our final advantage is the hard-to-duplicate culture that permeates Berkshire. And in businesses, culture counts. Cultures self-propagate." Winston Churchill

once said, “You shape your houses and then they shape you.” That wisdom applies to businesses as well. Bureaucratic procedures beget more bureaucracy, and imperial corporate palaces induce imperious behavior.”

12. Hyman Roth: “Good health is the most important thing. More than success, more than money, more than power.” “I’d give four million just to be able to take a piss without it hurting.” Buffett has talked about the challenges of growing older by using this joke as a set up at annual meetings: “I’m Warren, he’s Charlie. He can hear and I can see. We work well together.” Buffett also tells this story:

“I get a little worried about Charlie. I probably shouldn’t say this, but I’m worried about Charlie’s hearing. Buffett then tells about talking to a doctor about his concern. To test the extent of any potential hearing loss Buffett yells from across the room, “Charlie, what do you think about buying General Motors at $35?” Nothing. Mr. Buffett moved closer. “Charlie, what do you think about buying General Motors at $35?” Nothing. Buffett stood right next to Munger and said directly into his ear, “Charlie, what do you think about buying General Motors at $35?” Munger turned to him and said, “For the third time, I said yes.”

Extras:

Don Vito Corleone: “Never get angry. Never make a threat. Reason with people.”

Don Vito Corleone: “Friendship is everything. Friendship is more than talent. It is more than the government. It is almost the equal of family.”

Don Altobello: “The richest man is the one with the most powerful friends.”

Licio Lucchesi: “Our ships must all sail in the same direction. Otherwise, who can say how long your stay with us will last. It’s not personal, it’s only business. You should know, Godfather”

Hyman Roth: Michael: “We’re bigger than U.S. Steel.”

Hyman Roth: “The $2 million you have in a bag in your room. I’m going in to take a nap. When I wake, if the money’s on the table, I’ll know I have a partner. If it isn’t, I’ll know I don’t”.

Don Vito Corleone: “Whatsa matter with you? I think your brain’s goin’ soft. Never tell anybody outside the family what you’re thinking again.”

Hyman Roth: “This is the business we’ve chosen; I didn’t ask who gave the order, because it had nothing to do with business!”

Archbishop Gilday: “It seems in today’s world, the power to absolve debt is greater than the power of forgiveness.”

Michael Corleone: “I knew it was you, Fredo. You broke my heart.”

Michael Corleone: “Keep your friends close, but your enemies closer.”

Hyman Roth: “I loved baseball ever since Arnold Rothstien fixed the World Series in 1919.”

Michael Corleone : “Politics and crime – they’re the same thing.”

Hyman Roth: “This is the business we’ve chosen!”

Michael Corleone: “Friendship and money. Oil and water.”

Michael Corleone “I hoped we could come here and reason together. And, as a reasonable man, I’m willing to do whatever’s necessary to find a peaceful solution to these problems.”

A Half-Dozen Ways to Look at the Unit Economics of a Business

December 31, 2016

McCaw Cellular Communications sold to AT&T for $12.6 billion in September 1994. And yet the business did not show an accounting profit on its income statement until the second quarter of that year (after the deal was announced on August 17, 1993). The McCaw Cellular example shows that you can create a tremendous amount of value for shareholders without showing any profit on an income statement. Or not. Here below is a picture of a real letter from Craig McCaw sent in July of 1994 which documents what I said above.

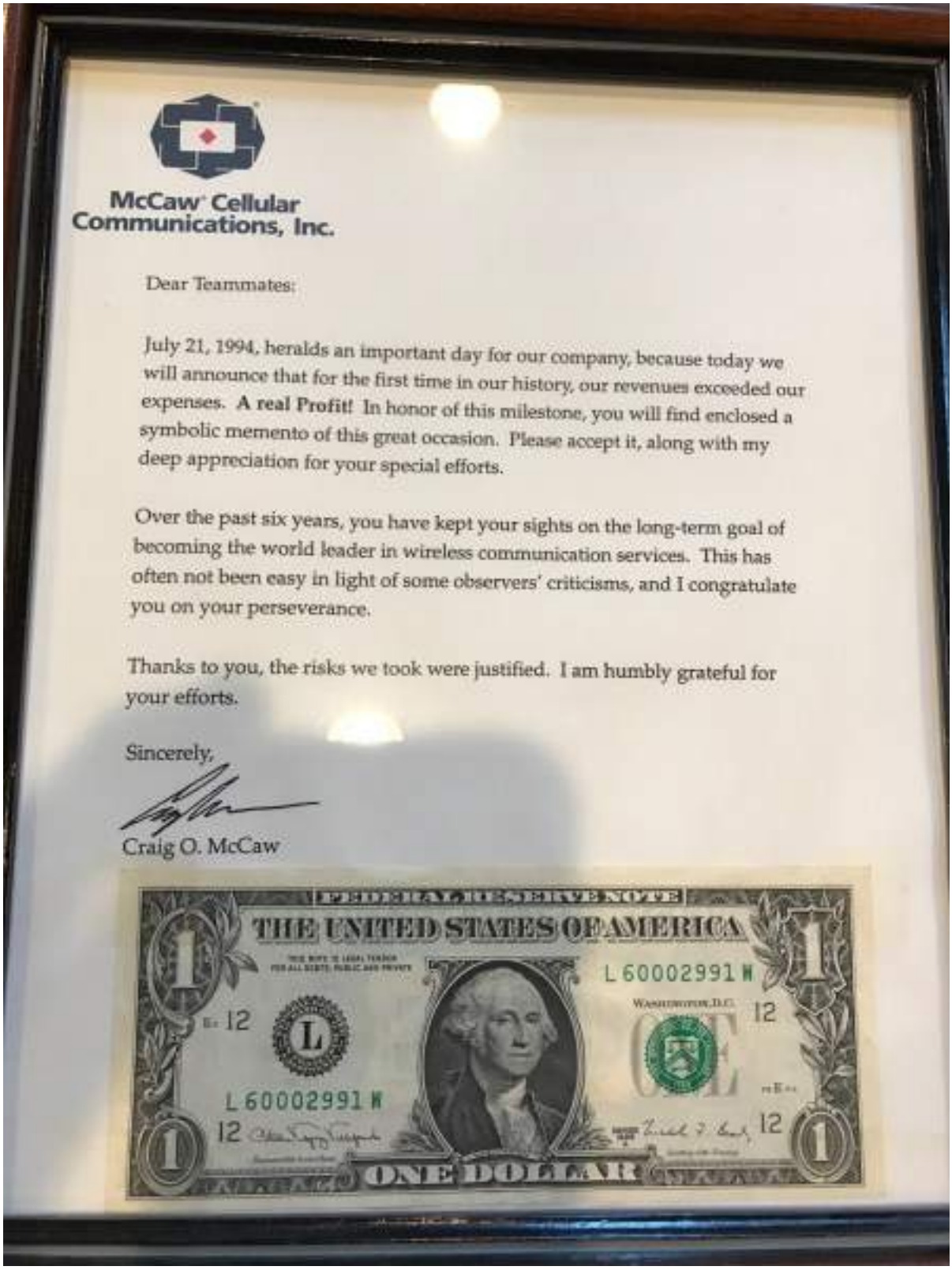

McCaw Cellular Communications, Inc.

Dear Teammates:

July 21, 1994, heralds an important day for our company, because today we will announce that for the first time in our history, our revenues exceeded our expenses. **A real Profit!** In honor of this milestone, you will find enclosed a symbolic memento of this great occasion. Please accept it, along with my deep appreciation for your special efforts.

Over the past six years, you have kept your sights on the long-term goal of becoming the world leader in wireless communication services. This has often not been easy in light of some observers' criticisms, and I congratulate you on your perseverance.

Thanks to you, the risks we took were justified. I am humbly grateful for your efforts.

Sincerely,

Craig O. McCaw

Amazon and Netflix are examples of the same value creation phenomenon as are many businesses that John Malone has created over the years. This post will try to help people understand why this is true.

The drumbeat of people (especially reporters) saying a that a business is "losing money" and is therefore doomed is constant. People with a political axe to grind on a platform company

like Uber to make this sort of statement. What these people are usually claiming is that they learned from sources that the current income statement of a business reflects a loss. The reality is that a loss on the income statement can reflect bad news or good news, depending on other variables, as I noted in my post on CAC. Weirdly, these people will also say that a business is great because they are "making money" when all they know is that revenue is rising.

Working through some examples usually helps people understand these issues. Every business on Earth, from a huge company to a hot dog stand, can be analyzed in this same way. No matter what your business may be, this unit economics method of analysis is relevant to you!

Assume you have a business that sells a streamed film collection. Looking at comparable movie streaming (OTT) services like Netflix (there are over 110 businesses doing this), the key inputs into the unit economics of the business might look like this:

Monthly Churn	4%
Monthly ARPU	$10
Gross Margin	30%
Cost Per Gross Addition (CPGA sometimes called SAC or CAC)	$30

A screen shot of the unit economics calculation might look like this:

INPUTS		
CPGA (one time expense)	$30.00	
ARPU (per month)	$10.00	
Churn (per month)	4.0%	
Gross Margin	30%	
Annual Discount Rate	10.00%	
COGS (per month)	$7.00	
Monthly Discount Rate	0.83%	
Terminal value multiplier (months	20.86	
NPV	$32.07	
IRR	71.97%	Excludes last period with terminal value

	Time 0	Year 1 Jan 1	Feb 2	Mar 3	Apr 4	May 5	Jun 6	Jul 7	Aug 8	Sep 9	Oct 10
CPGA	-$30.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
ARPU		10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
COGS		-7.00	-7.00	-7.00	-7.00	-7.00	-7.00	-7.00	-7.00	-7.00	-7.00
Monthly Cash Flow	($30.00)	$3.00	$3.00	$3.00	$3.00	$3.00	$3.00	$3.00	$3.00	$3.00	$3.00
Remaining fraction of subscribers		100%	96%	92%	88%	85%	82%	78%	75%	72%	69%
Net cash flow	($30.00)	$3.00	$2.88	$2.76	$2.65	$2.55	$2.45	$2.35	$2.25	$2.16	$2.08
Simplified NPV calculation (check)	$32.07										
Simplified IRR calculation (solving in NP	72.00%										

Note what happens up front: $30 immediately is spent to acquire the customer (see the red number). But in month one the net cash flow coming in is only $3. That means $27 in cash has been consumed in the first month ($30 out and $3 in). If the customer stays a customer for a long enough time and keeps generate $3 in net cash flow, shareholder value can be created. Without knowing churn you don't know if the business is sound. You do know that the business is "losing money" in the aggregate, but that is not enough.

In this screen shot above I cut off the picture at 10 months to make it fit the page. The reality of the screen shot below is that at 4% churn the implied user life is 25 months (i.e., cash will be coming in for that long on average).

Implied Life of User (months)								
18	25	32	39	46	53	60	67	74
Churn								
7								
5.6%	4.0%	3.1%	2.6%	2.2%	1.9%	1.7%	1.5%	1.4%

Value is being created in my first example but it is deferred value. Why does anyone defer consumption to create or invest in a business? They do so if they believe delaying gratification will allow them to consume more in the future. In deciding whether to defer consumption people know that a dollar delivered tomorrow is worth less than a dollar today and therefore the dollar delivered tomorrow must be discounted to a lower value in order to determine its value today (10% annually is chosen at the discount rate in the example).

The cost per gross addition (CPGA) is assumed to be relatively low in my first example because customer value is high versus alternatives and customers are able to terminate service with 30 days' notice (which lowers sales resistance). But the absence of an annual or longer contract means higher churn is possible.

Gross margins are assisted in this case because the business only pays the credit card merchant fees one time per month versus many credit card charges for à la carte movie buying services.

The important point to understand about the unit economics in this example above is that the variables are assumptions, they feed back on each other and inevitably change with an evolving business climate. If the business asks customers to commit for a year of service in a contract instead of paying month to month, CPGA would rise. Let's assume CPGA would rise to $70 with that change to a yearly contract. If CPGA is now $70, the unit economics of this business look like this (red is not good):

INPUTS	
CPGA (one time expense)	$70.00
ARPU (per month)	$10.00
Churn (per month)	4.0%
Gross Margin	30%
Annual Discount Rate	10.00%
COGS (per month)	$7.00
Monthly Discount Rate	0.83%
Terminal value multiplier (months	20.86
NPV	-$7.93
IRR	1.91%

Excludes last period with terminal value

	Time 0	Year 1 Jan 1	Feb 2	Mar 3	Apr 4	May 5	Jun 6	Jul 7	Aug 8	Sep 9	Oct 10
CPGA	-$70.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
ARPU		10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
COGS		-7.00	-7.00	-7.00	-7.00	-7.00	-7.00	-7.00	-7.00	-7.00	-7.00
Monthly Cash Flow	($70.00)	$3.00	$3.00	$3.00	$3.00	$3.00	$3.00	$3.00	$3.00	$3.00	$3.00
Remaining fraction of subscribers		100%	96%	92%	88%	85%	82%	78%	75%	72%	69%
Net cash flow	($70.00)	$3.00	$2.88	$2.76	$2.65	$2.55	$2.45	$2.35	$2.25	$2.16	$2.08
Simplified NPV calculation (check)	($7.93)										
Simplified IRR calculation (solving in NP	3.43%										

In this business a $70 CPGA kills shareholder value. But in an alternative scenario that shareholder value killing input could have instead been higher churn or lower gross margin.

As another example, if the business encountered 10% churn the unit economics also get uglier than the first example:

INPUTS	
CPGA (one time expense)	$30.00
ARPU (per month)	$10.00
Churn (per month)	10.0%
Gross Margin	30%
Annual Discount Rate	10.00%
COGS (per month)	$7.00
Monthly Discount Rate	0.83%
Terminal value multiplier (months	9.31
NPV	-$2.31
IRR	-0.02%

Excludes last period with terminal value

	Time 0	Year 1 Jan 1	Feb 2	Mar 3	Apr 4	May 5	Jun 6	Jul 7	Aug 8	Sep 9	Oct 10
CPGA	-$30.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
ARPU		10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
COGS		-7.00	-7.00	-7.00	-7.00	-7.00	-7.00	-7.00	-7.00	-7.00	-7.00
Monthly Cash Flow	($30.00)	$3.00	$3.00	$3.00	$3.00	$3.00	$3.00	$3.00	$3.00	$3.00	$3.00
Remaining fraction of subscribers		100%	90%	81%	73%	66%	59%	53%	48%	43%	39%
Net cash flow	($30.00)	$3.00	$2.70	$2.43	$2.19	$1.97	$1.77	$1.59	$1.43	$1.29	$1.16

Making all of this work financially for the business is tricky and some people spend their entire careers working on just one aspect of lifetime value problems like this. There is a lot of art rather than science in this work since these people are dealing with human behavior, which fluctuates and is unpredictable.

Investors often need to make guesses about these numbers since business do not real the data. For example, many businesses do not like reporting CPGA or whatever the customer acquisition cost metric is called in their industry (e.g., CAC or SAC). As an example, Netflix no longer reports SAC, but when it did:

Reports in 2016 indicate the Netflix has substantially reduced CPGA/SAC and churn since 2008 through changes like original first party content (which can increase COGs, but at an acceptable cost say many people), but that is a topic for another post. Your business can also die because it runs out of cash and that is another post too.

The most important "take away" from this blog post is that looking at an income statement alone is not enough to determine whether a business is creating value. You must also understand the unit economics of the business.

When someone says a business is "making money" or "losing money" be skeptical about either claim until you get enough data to apply math like I explain above.

Think for yourself. Be a learning machine.

A Dozen Lessons about Business and Investing I've Learned from Mike Maples Jr.

June 10, 2017

Mike Maples, Jr. is a Partner at Floodgate. Before becoming a full-time investor, Mike was involved as a founder and operating executive at back-to-back startup IPOs, including Tivoli Systems (IPO TIVS, acquired by IBM) and Motive (IPO MOTV, acquired by Alcatel-Lucent.) Some of Maples' investments include Twitter, Twitch.tv, ngmoco, Weebly, Chegg, Bazaarvoice, Spiceworks, Okta, and Demandforce. This is the first time I have written about the son of someone else I previously profiled on this blog. Maples has an M.B.A. from Harvard Business School and a Bachelor's degree in Industrial Engineering and BS degree from Stanford University. Next weekend I will profile the co-founder of Floodgate, Ann Miura-Ko. Floodgate is an early stage venture capital firm that wants to invest and assist "the iconic companies with the biggest impact. Floodgate backs these *Prime Movers* before the rest of the world believes."

1. **"Floodgate uses a framework called the "value stack" [which is] a hierarchy of powers. Each is powerful on its own, but as these advantages are layered on top of each other they reinforce and amplify each other even further." "We are proud to have been one of the tiny number of firms to have invented the micro-VC space over a decade ago. Back when we got started in 2005, it was very hard for a founder to raise $1M. They had to raise a whole lot less or be de-risked enough to raise $5M from a traditional VC."**

If you have read the work of Michael Mauboussin you have seen him make this point repeatedly: "elite performers in all probabilistic fields all think in terms of process versus outcome. So while our society may be conditioned to focus on outcomes, an emphasis on process makes the most sense for the long haul." Maples has thought deeply about Floodgate's investing process and can articulate a clear investing thesis. Floodgate believes that the right "stack" (the co-founders were trained as engineers after all) assembled in the right order will potentially generate value which is far more than the sum of the inputs. The

first layer in the Value Stack is Proprietary Power which is when the conditions are right tightly coupled with Product Power (the second layer). The business model layer is next the stack and so on. When all the layers are skillfully put into place in the right order, Floodgate's thesis is that the value created by the process increases non-linearly. This is an example of what Charlie Munger calls "a lollapalooza."

Maples is naturally focused on the lower layers in the Value Stack since he is an early stage investor, but even then, the potential for the higher layers must be there and some groundwork done on the higher layers.

Maples depicts the Floodgate stack as follows:

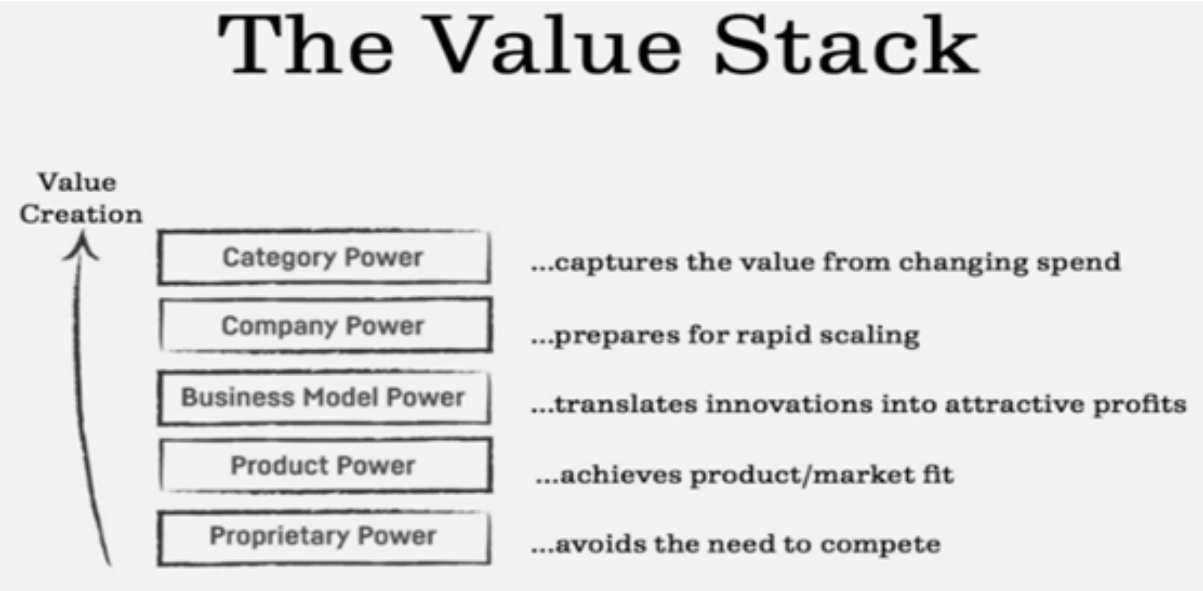

PROPRIETARY POWER: "is about having a structural competitive advantage is critical for avoiding mindless competition."

2. **"Whenever I look at a company that says they have a technology advantage, I'm interested in a couple things. One is, just what is the advantage, and why would it be hard to copy? But then the other part of the question is, why now? Why did something in the world change to open the world for this opportunity? [For example] if you're doing topological data analysis, why couldn't that have been done five years ago? Why couldn't that have been done 10 years ago? Well it turned out that computational capacity in the cloud was improving, improving, improving at the rate of Moore's Law, and eventually converged at a critical point where it became practical." "The problem with mimetic desire is that it's the wrong 'personal operating system' for coming up with a *breakthrough* idea — it is by definition an incrementalist view of the world that emphasizes following the rules and outcompeting others, rather than re-inventing the rules and transcending competition."**

Strategy is important at every stage of the life cycle of any business. If investors can't see a source of sustainable competitive advantage it will be hard to raise a financing round. A startup can easily die an early death without some credible of path to achieving a sustainable

competitive advantage. Someone may say: "Wait what does this competitive advantage concept really mean?" What it means is that unless there is some constraint on supply it will increase until profit is equal to the opportunity cost of capital. Here's an example: Imagine you have a stand selling bananas on a city street. And 26 other people start going the same thing sourcing the bananas from your wholesale supplier. That is an extreme example of zero proprietary power. Maples adds: **"The best way to compete is to choose not to."** Strategy is what you do differently than your competitors. It is about choosing what not to do.

If you want to understand more about strategy people like Bill Gurley suggest reading Porter's book *Competitive Strategy*.

In his search for proprietary power Maples is looking for a breakthrough idea that re-invents rules and transcends competition. What is it that the business will do that is unique? What rule can it break that others thought it was sacrosanct? This is where thinking different can pay in a huge way once in a while. Thinking and acting different will not always succeed, but when it does: boom!

Maples has said on other occasions that lower costs at seed stage are both good news and bad news. Here is his slide:

- The downside of low barriers to entry is…*low barriers to entry*
- Too many startups
- Customers, potential employees, investors, and others struggle to make sense of the noise
- Racing to product/market fit still matters, but it is no longer enough.

Let's be clear that this is a discussion about startups that are suitable for an investment by a leading venture capitalist like Maples. This post is not about opening a new bicycle repair shop. As will be explained below, a business must have a number of essential qualities to be suitable for a venture investment. To put the challenge in context, only 800 new firms raised a Series A round in venture capital in the US in 2016. While this represents a tiny percentage of overall business starts in that year or any year, a few of these business will have an out-sized impact on society. Can the number of series A investments in a given year go up? Organizations like Y Combinator, 500 Startups and Angel List are pushing hard to change this. I hope they are successful, but we do not know the outcome yet.

3. **"The most valuable businesses in the world are going to be networks. I believe the big companies of the world today, if they don't position themselves to be network-centric, they will fail. I believe that Tesla is a network centric car company. I believe Apple is a network centric phone company. I believe that the twin powers of Moore's Law and Metcalfe's Law are what is going to bring abundance to the world in the next 10 or 15 years." "If you're going to build a network effects business, it's important to ask yourself, what is my network? What are the nodes of the network? How do they connect with each other? Where are the connections strong? Where are they not strong? Is it a global network? Is it a hub and spoke network? What does it mean for me to be the network operator? Interestingly, network effect businesses have existed for a long time. They existed with the railroads, they existed with canals, they existed with RCA, with records, and TV. They existed with Craig McCaw and McCaw Cellular."**

The factor that creates the most competitive advantage in the business world today is network effects. The increased importance of network effects is explained by what Marc Andreessen calls "software eating the world" (the increased important of software in business value chains). Another multiplier of the importance of network effects is that so many systems and networks are now interconnected. Other factors that can potentially create product power like patents, economies of scale and regulatory advantages are still important, especially when combined with network effects, but they are relatively less important than they were in the past. I do appreciate the shout out by Maples to McCaw Cellular and Craig McCaw since that is part of my heritage. People in many cases have forgotten how capital intensive the early cellular business was particularity for new entrants and how much money had to be raised in places like the high yield markets to make the business model work. They were not

the "capital light" platform businesses that Warren Buffet marveled about at the last Berkshire shareholder meeting.

***PRODUCT POWER:* "is about achieving product/market fit."**

4. **"Have you ever seen a startup where you're like, 'how in the hell could they have been successful?' It's because they met a great market. And sometimes, your product, your market, it just has the magic. You can't beat customers off with a stick. They just want it. I've had this happen to me before, where in spite of the fact that the product just seemed horrible on the surface, it just didn't matter. People wanted it really bad. Product market fit is more of like a dance between the product and the market. You know it's like if you ever see two people doing the tango, I look at it like the product is leading the dance, but the market is tangoing with the product. I'll try to be G-rated in my language, but sort of an intimate sort of back and forth between them. And what I find is that if you want to get the tango right, the first thing is to really identify the market. Large, strong customer desire and the right time. You want to find markets where people gravitate to your idea and want it right now, as soon as possible, even if it's half done. And then that market pulls the product. When a market pulls a product, this is what it feels like inside the building. Nobody's debating what the features of the next version ought to be, because they're like, oh my god. This stuff is flying off the shelves, and our customer needs us to fix x, y, and z. And you're like, OK well let's fix it. And so that's what it feels like when the market's pulling the product. Whereas where the market's not pulling the product, the conversations in the building are arguments over, why aren't those customers smart enough to figure out how awesome our stuff is?"**

When a business has discovered genuine product/market fit the business will know it. The primary focus of the business will be on satisfying demand. If the team is spending all their time adding features, the business has not yet found product/market fit. The best businesses generate organic growth and do not need Herculean spending on marketing and sales.

5. **"Most investors are overly focused on traction right now. The problem with that is it can be gamed in the short term. And even worse, it often instills a mindset of iterating metrics to nowhere. It's more important to us that the startup has a structural competitive advantage and is on the path to creating a product that blows people away in large potential numbers. I have never seen an awesome product with a fundamental advantage and lots of potentially delighted customers not be able to make money."**

Maples is pointing out that without a proven *value hypothesis* a decision by a business to proceed with proving they have a solid growth hypothesis is counterproductive since resources are being wasted. Traction with a product that lacks core product value won't last. That some investors and business put too much focus on traction at seed stage does not mean that traction does not matter.

Yes, eventfully the growth hypothesis must be proven. Maples once included these benchmarks in a slide deck:

How much traction do you have?

- Ideally 30% a month in an important area (sales, revenue, users)

BUSINESS MODEL POWER: "involves translating a startup's innovation into attractive profits that can improve rapidly.'

6. **"A business model is the way that a business converts innovation into economic value." "You just have to discover it, but is there always. And then increasing margins and pricing power are proof that the first two layers are strong. It's axiomatic that if your pricing power is going down, the first two layers aren't that strong. Either that, or you're dumb at pricing. But it's more likely that you've overestimated how compelling your product is or how strong your competitive advantage is. The Business Model Canvas by Alex Osterwalder is good to look at for this. But a lot of what I find about business modeling is it is just intuition. When you get to know the customer really well and what they value, it just seems to work.'**

Business models fascinate me since they are all unique and are always changing in an environment that is always changing. They all also must cope with nests of complex adaptive systems. The number of potential business model permutations are endless. How can any game on Earth be more interesting than that?

Maples and a group of people like his partner Ann Miura-Ko as well as Steve Black and Eris Reis clearly talk a lot and share many of the same ideas. The output of this process is interesting since it reflects an engineering approach to creating new businesses. Actually going through the Business Model Canvas by Alex Osterwalder (see below) with real examples is quite an instructional process.

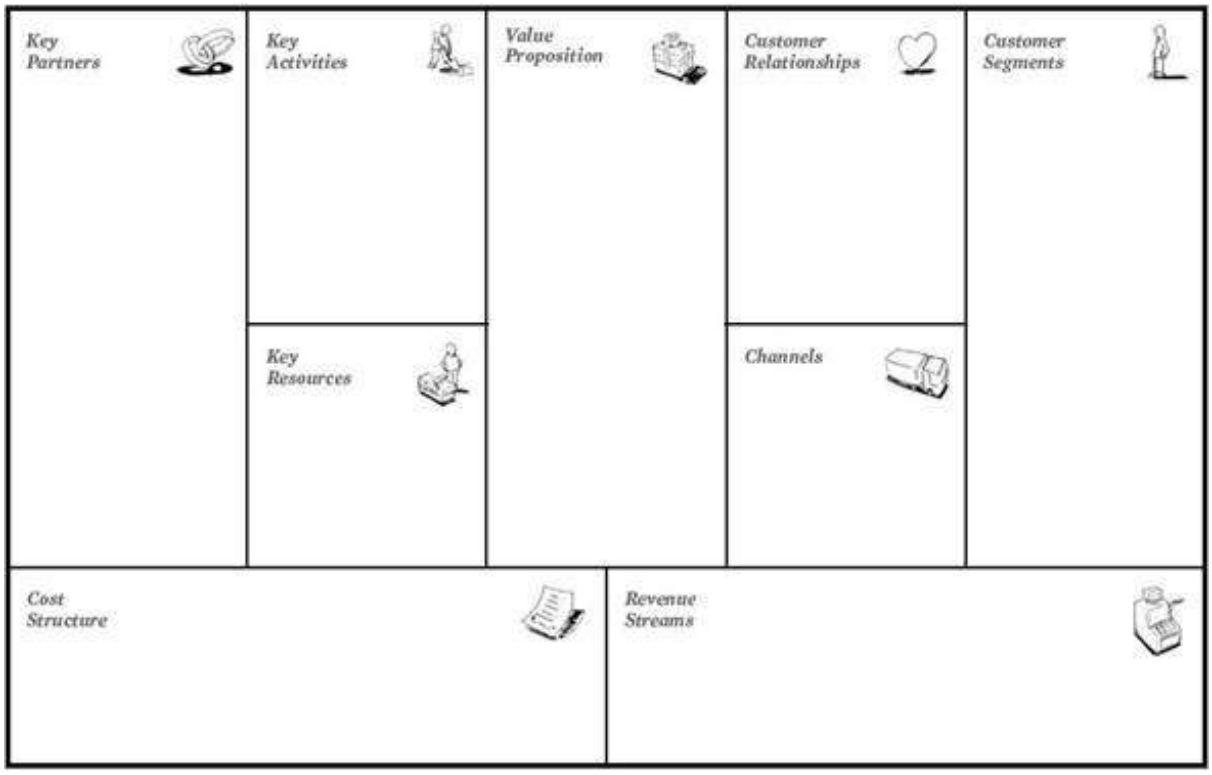

COMPANY POWER "is about avoiding management and technical debt."

7. **"The common element of Twitter, Lyft, Twitch.tv, Okta, Demandforce, Weebly, Chegg, Xamarin, Refinery29, Spiceworks, Playdom, and ngmoco] as startups is that their teams were amazing. They were amazing in their domain knowledge for the products they were building and they were amazing at their ability to 'McGyver' great outcomes in harrowing and uncertain circumstances. It's surprisingly rare for a startup team to be able to execute at the level of speed, urgency, and precision required to build a real company."**

Three essential elements in a startup are team, market and product. Or market, team and product. This is essentially another mental model or stack that is useful in understanding a business. The degree of emphasis varies on the first two elements depending on the venture capitalist. Certain people and teams in certain situations are capable of amazing feats of creativity. More money is not necessary and in some cases is a hindrance.

Before proceeding to the next quote, a side bar on technical and management debt is perhaps useful. Let's start with a Wikipedia definition:

"Technical debt (also known as design debt or code debt) is 'a concept in programming that reflects the extra development work that arises when code that is easy to implement in the short run is used instead of applying the best overall solution'. If technical debt is not repaid, it can accumulate 'interest', making it harder to implement changes later on."

Management debt is incurred when a founder or manager makes expedient, short-term management decisions which have costly long-term consequences. If management debt is not repaid, it can accumulate 'interest', making it harder to implement changes later on.

8. **"A lot of the good companies that I've seen actually proactively define their culture. And they emphasize what that is their first 20 employees, and then it kind of takes a life of its own. Why do you want that? It's sort of like when ducks fly south for the winter, you don't have to tell the ducks in the back of the v, get in the v. They just know. And when a company gets into blitz scaling mode, you don't have time to tell the hundreds of new employees that you hire, here's how decisions get made here, here's what we value, here's how we make tradeoffs at the margin. They have to be programmed in the DNA of how they participate in the company. Basic management systems. This has to do with just one-on-one meetings, board meetings, team meetings, forecasting frameworks. You know, what gets covered in those meetings, what shouldn't get covered in those meetings. Just having a sort of a philosophy of that going in can save a lot of time and avoid a lot of management debt."**

The right company culture not only allows a business to scale, but minimize and resolve problems as they arise. It allows decision-making to be distributed, optimized and expedited. Warren Buffett has written: "In businesses, culture counts….Cultures self-propagate. Winston Churchill once said, 'You shape your houses and then they shape you.' That wisdom applies to businesses as well." A partner from the venture capital firm Greylock had a blog posted recently in which they said: "Culture Is How You Act When No One Is Looking." The title alone makes a strong point. When you are working with people you know and trust, tremendous efficiencies are created. Charlie Munger has said on the importance of culture:

"The highest form a civilization can reach is a seamless web of deserved trust." "The right culture, the highest and best culture, is a seamless web of deserved trust." "Not much procedure, just totally reliable people correctly trusting one another. That's the way an operating room works at the Mayo Clinic." "One solution fits all is not the way to go. All these cultures are different. The right culture for the Mayo Clinic is different from the right culture at a Hollywood movie studio. You can't run all these places with a cookie-cutter solution."

9. **CATEGORY POWER: "is [about] designing and owning a category [so as to make] the business the "Category King" [which] usually capture 70–80% of the profit pool in their markets."**

This is the least important layer for a seed stage business, but as I noted above the potential for this layer is attractive to an early stage investor. In this layer along with the Company Power layer ground work is still being done at seed stage says Maples. Ann Miura Ko describes the Category Power layer this way:

"One thing we have noticed is the best companies will spend the time to create a whole new category in the market for themselves, because they don't want to compete on other people's terms. They want to be the only Thunder Lizard on the block. For example, Netflix didn't start out trying to be a better Blockbuster. They created their own separate category and then completely destroyed Blockbuster. Another example is Starbucks—who would have ever thought people would buy $5 coffees when other coffees at that time was selling for 50 cents. They created their own new category. Category power is the ability for the founders to think about the language of the market they are going into, and how they define this for their

company. If they are allowing the existing market to define who they are—we get worried about this."

VENTURE CAPITAL AND STARTUP OUTCOMES:

10. **"I'm interested in not just companies that are doing a startup, but companies that are doing something hyper-exceptional. And I was seeking a metaphor to describe these companies. And I wanted it to combine the ideas of being big, adaptable, fearsome, radioactive. And it just didn't seem right to use a term like 'disruptive innovation' or something to academic-y sounding, even though we are in an esteemed academic institution right now. So I came up with this term 'thunder lizard' about 20 years ago. And thunder lizards, for those of you who are not familiar with Godzilla, were hatched from radioactive atomic eggs. And this is actually the stage of the market that we, at Floodgate, like to invest in. And so we like to say that our job is to spot radioactive atomic eggs. When we invested in Twitter, they weren't sure whether they were going to call it TWTR, or TWTTR, or Voicemail 2.0. And when we invested in Lyft before it launched, we had to get comfortable with the legal ambiguity of that service. And so at the time that we see this stuff, it's hard to even know what it's going to mutate into. But the goal is to find companies that have radioactivity at their roots. And then they swim across the ocean, and emerge with an attitude. And then they begin to devour their startup competitors right as they hit the beach. And then not long after that, they begin to disrupt even more, swiping holes into the sides of buildings, and then eventually, they attack the incumbents. The incumbents in the market are represented by those trains that he's eating like sausage links. So now you know what thunder lizards are." "My job is to spot radioactive eggs and to determine if they have that energy to morph into something, to mutate." "Of tens of thousands of companies started a year, 97 percent of the exit profits will likely come from less than ten….the point one percent. Our job is to find the point-one percent. But we have an extra twist. We want to avoid competing in a fiercely crowded landscape of established Series A funds. So we have to find these companies at the crazy, risky, and early time before Sand Hill Road is excited. When we are right, we will be rewarded because we will have been able to invest smaller amounts of money at lower valuations. That's what makes our math work. So, as a general rule we like to see any startup idea that has the chance to be meaningful enough to be in the top point-one percent. But we try not to be too dogmatic about the areas we are focused on. We believe that knowing the rare exceptional startup when you see it is the more important skill."**

What I like about the term Thunder Lizard and I don't like about Unicorn is that the "U" word does not refer to a business that has actually generated a financial exit for investors. The term Unicorn encourages bad behavior. I actually use the term Grand Slam myself and definite that term like Maples does with Thunder Lizard to include an actual financial exit.

Maples says he is looking for "radioactive eggs" that can turn into "Thunder Lizards." I like his taxonomy since not all startups are eggs that can eventually produce a lizard that is as powerful as Godzilla. There are more "radioactive eggs" today that are possible investments

by top tier venture firms. Business formation in this Thunder Lizard category is up. But in the non Thunder Lizard category the numbers are down, This statistic makes the point: "the economy hatched 154,000 fewer new companies in 2014." A bicycle repair shop or food tuck are not a radioactive egg. To grow the economy and create new jobs we need lots more new business that are not radioactive eggs.

11. **"The first thing that I like to emphasize to people when they start a company is, start a company that's worthy of your talents that you think represents the absolute utmost gift you have to offer to this world in your life. Because to be one of those, that's what it takes. People shouldn't just be doing a startup. Well, I should back up. If you decide to just be doing a startup, that's fine. But that's kind of like the decision to join a nonprofit. Or it's kind of like a decision to– it's kind of a labor of love, it may make the world better. But don't do it because you think you're going to make money approaching it that way. Because that's not what the objective function of the industry is."**

Starting a business that has the potential to be a Thunder Lizard is far more of a calling rather than a rational act. Missionaries are far more likely to succeed than mercenaries when the act is not rational. It is impossible to fake the feeling that makes someone a missionary rather than a mercenary. The founder may fool some of the people some of the time, but in the end the truth will come out. They will eventually hit one of the lows that are an inevitable part of what Ben Horowitz calls "the Struggle" and you will bail out. Hoping that the economics of the venture capital world will bend just for them is a triumph of hope over experience.

People say flying a commercial airplanes is composed of long periods of boredom interspersed with a few minutes of terror. A startup is the reverse: long periods of struggle and terror interspersed with a few minutes terror. Am I exaggerating a bit? Sure, comedy requires exaggeration. Did I often have a weird kind of fun and feel accomplishment when I was helping to build Teledesic? Absolutely. Would a team of mercenaries have been able to do what the team of Teledesic missionaries accomplished? No way. My startup experience give me lots to be humble about. I learned a lot. It was also financially rewarding for me since as I explained in my blog post on Teledesic, early investors and employees received a significant multiple on their investment or stock options. Later investor were not so lucky.

12. **"Bill Gates didn't need to be in Silicon Valley to start Microsoft. Jeff Bezos didn't need to be in Silicon Valley to start Amazon. Great companies happen because of great founders, not because of where they are or who the VCs are or any of that nonsense." "I just don't believe that VCs animate much. I believe that entrepreneurs animate things."**

There will never be another Silicon Valley. But other cities and regions can create a successful technology-driven economy in their own way. In order to achieve this goal, a city or region must and find its own comparative/competitive advantage. The best way to do that is to create a pool of great founders since venture capital will always follow great founders. As an example, when venture capital started in northern California the venture capitalists had their offices in San Francisco. When the founders moved south toward the Stanford campus the venture capitalists moved to Sand Hill Road. When the founders started moving back to San Francisco so did the venture capitalists. Another example of capital chasing great

founders is Benchmark investing in Zillow in Seattle and Snap in Los Angeles. Money will always follow opportunity and the opportunity is created by great founders.

The best single way for a city to create a supply of great founders is to have at least one world class research university. Any city or region that wants to well in a modern economy that does not have a major research university is operating at a serious handicap. There are other things a city can do like having a culture that does not treat failure at trying something hard as anything but a great learning experience. Great K-12 schools, a diverse population and a healthy environment help too. Success feeds back on itself in that great founders inspire and attract more great founders.

One final note relates to the power laws that are pervasive in venture capital. With power laws most values are below average and a few outliers are far above. This means that average figures are close to meaningless. Power laws apply not just the distribution of success of venture-backed companies in a country or globally, but to the success of startups within a city or the success of venture firms operating in a city. For example if you take the "multiple on invested capital" of the top 10% of venture firms in Silicon Valley that MOIC will be far above the average MOIC since the distribution is not a bell curve. If you take the MOIC of the top 1% of venture firms in Silicon Valley, the MOIC will be even higher. In venture capital it is the outliers that matter most. This power law distribution exists in an industry but also within a city.

Notes:

Dare to do Legendary Things http://ecorner.stanford.edu/videos/3740/Dare-to-Do-Legendary-Things-Entire-Talk

Slide deck: https://www.dropbox.com/s/z8io37mqoctale9/Capital%20Factory%20VC%20Primer%205-4-16%20PDF.pdf?dl=0

Slide deck: https://medium.com/@m2jr/beyond-lean-startups-pre-money-keynote-speech-from-6-22-16-11aa0257901b

Secrets https://austinstartups.com/finding-billion-dollar-secrets-95fb2b6489fb

Dare to Make your Startup Legendary https://medium.com/floodgate-fund/dare-to-make-your-startup-legendary-dc8eb68ba1fc

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Interview http://www.siliconhillsnews.com/2016/05/06/mike-maples-jr-talks-about-tncs-thunder-lizards-and-network-capitalism-at-longhorn-startup-demo-day/

Thunder Lizards https://techcrunch.com/2010/02/21/mike-maples-talks-venture-capital-and-thunder-lizards/

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Category Kings https://techcrunch.com/2016/10/10/floodgates-mike-maples-on-what-makes-category-kings/

Greylock post https://news.greylock.com/culture-is-how-you-act-when-no-one-is-looking-f29d5dd16ecb

How would Ann Miura-Ko have reacted if Bill Gates had walked into her office in 1975?

June 18, 2017

Ann Miura-Ko is a Partner at the venture capital firm Floodgate. She is a lecturer in entrepreneurship at Stanford. Prior to co-founding Floodgate, she worked at Charles River Ventures and McKinsey and Company. Some of Miura-Ko's investments include Lyft, Ayasdi, Xamarin, Refinery29, Chloe and Isabel, Maker Media, Wanelo, TaskRabbit, and Modcloth. She has a BS from Yale University (EE); and a PhD from Stanford University (Math Modeling of Computer Security.)

Since my post from last weekend was about Floodgate's co-founder Mike Maples Jr., I decided to write about Miura-Ko's ideas in the context of a specific early stage business I know something about (Microsoft in the 1970s and early 1980s). Miura-Ko's ideas are, as usual, in bold text and my commentary follows. This post is different in that I am commenting on a specific hypothetical and how Miura Ko's ideas and approaches might have been applied. This is an experiment and I may or may not do this again.

The thought experiment is as follows: Imagine you are Miura-Ko, had been sent back in a time machine and a 20-year old entrepreneur named Bill Gates walks into your office in 1975. Instead instead of bootstrapping Microsoft's business like he did in real life, he is in this hypothetical seeking seed stage venture capital.

1. **"The priority as an early stage startup is at the bottom of the stack — What is the unique advantage or insight you are building your product on top of? The product/market fit will come later after your key insight of what your unique advantage is."**

The stack Miura-Ko is talking about in the bold text is a key part of the Floodgate investing process which starts at the bottom of this stack below and works up.

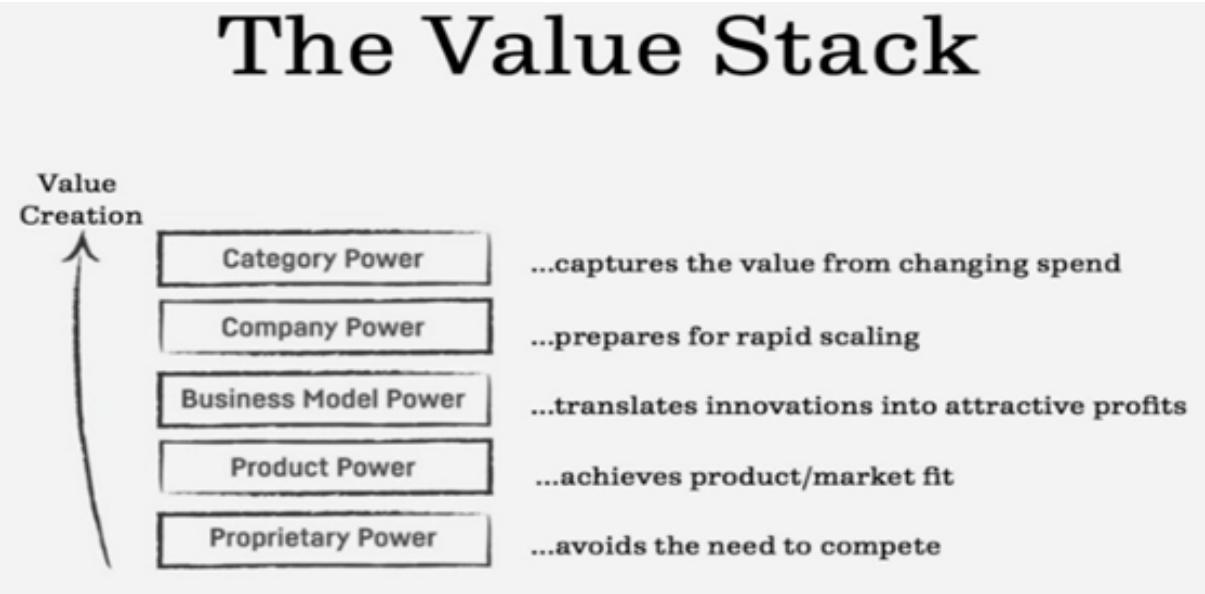

Miura-Ko is saying that at Floodgate the process starts with a careful look at strategy (i.e., whether business might be able to achieve a sustainable competitive advantage). Miura-Ko's interest in "the unique advantage" of the entrepreneur is directly tied to the "proprietary power" of the business, which in essence is about creating sustainable competitive advantage. If everything that a business offers can be easily replicated by other businesses, then the entrepreneur's business won't be very profitable.

Let's apply Miura-Ko's process to the hypothetical. What were Bill Gates and Paul Allen thinking about when they formed Microsoft?

They had reached two important conclusions:

1. Computers would be owned by individuals; and
2. Software rather than hardware was the key to sustainable profit.

To make the investment Miura-Ko would have believed that software rather than hardware was going to be Microsoft's "unique advantage."

This focus on software seems obvious now but it was not obvious in the 1970s. I am not saying making hardware is never a good idea, useful to sell software or otherwise valuable but the fateful decision to focus on just software early in the life of the Microsoft business meant that the business was "capital light." Microsoft never really needed to raise venture capital as a result and did so only once to convince Dave Marquardt of August Capital to join the board of directors. When Microsoft eventually went public years later Bill Gates alone owned nearly 50% of the outstanding shares because the business did not require a lot of externally provided capital to grow. Microsoft went public when it did only because it had too many shareholders and SEC rules required that it do so.

Strategy is about deliberately deciding to be different and finding unique advantage. Here is Bill Gates describing his thought process in creating a strategy for Microsoft in 1975:

“The original insight for Microsoft was this: What if computing was free? The answer: Individuals would use computers as a tool, and software standards would become the critical element in making this happen.” Fortune, January 16, 1995

As early as 1971, Paul and I had talked about the microprocessor. And it was really his insight that because of semi-conductor improvements, things would just keep getting better. I said to him, "Oh, exponential phenomena is pretty rare, pretty dramatic. Are you serious about this? Because this means, in effect, we can think of computing as free." It is a gross exaggeration, but it is probably the easiest way to understand what it means to cut cost like that. And Paul was quite convinced of that. So I would sort of say to Paul, "Well, you know what that means?" And he'd say, "Yeah, that is what it means." It is kind of fun to know this, and think, gosh, how are companies going to react, how are they going to respond to something that phenomenal? The early days were very slow moving, though. By the time I went to Harvard, all there was the 8008 chip. And the 8080 was just coming out, which was the first good general purpose microprocessor chip that Intel was coming out with.

“When you have the microprocessor doubling in power every two years, in a sense you can think of computer power as almost free. So you ask, Why be in the business of making something that’s almost free? What is the scarce resource? What is it that limits being able to get value out of that infinite computing power? Software.” Playboy, July 1994

This is from ~ 40 years later (June 2017):

The analysis by Gates that resulted in a focus on software was microeconomics linked to an observation about technology. That is was done by someone his age at that time is history was amazing.

2. **“If you are asking if you have product/market fit, you do not.”**

A business that spends most of its time desperately trying to keep up with customer demand and has a scalable business model has found product/market fit. This is the part of the stack that Floodgate refers to as Layer 2 (Product Power).

The history of Microsoft again is an interesting example of product/market fit. It was in 1975 that the MITS Altair 8800 appeared on the cover of Popular Electronics and inspired Gates and Allen to develop a BASIC language for that device. In 1975 Microsoft revenues were only $16,005. Would that have been enough to get Miura-Ko to invest in Microsoft at seed stage? I think so. The bet she made on Lyft supports my conclusion. Here below is Miura-Ko on Lyft:

"I invested in Lyft when it was still a business called Zimride. I invested because they came in and told me a story about how transportation innovation was critical to significant inflection points in the economy and that they believed such an inflection point was on the horizon. (No other transportation startups existed back in 2010 when I invested aside from Zipcar.) They had a hard time raising their Series A as well. It wasn't until they pivoted into Lyft in 2012 that they started getting proactive interest from investors." "Zimride was originally a platform for carpooling and they sold this platform to individual Universities and companies. They were making sales but it wasn't working as a scalable business model. They had customers but it never felt like product market fit. Lyft was just another experiment that the team tried. They were also looking at doing bus routes from SF to Tahoe, renting vans from SF to LA, etc. The thesis for Lyft was—mobile is big and doing ride sharing peer-to-peer (P2P) would be interesting. The big questions for Lyft before they launched was how big of an idea was this and how confident were they in trying this. Normally the founders had been very nice but when they pitched the idea of Lyft they were very intense about it and the board said to go for it and try it. During the first week of Lyft launching (Zimride was still going on) Tommy Leep who worked with us at Floodgate said—"You have no idea how big this is going to be." He experienced this magical moment while using Lyft and became one of their early power users. "

The decision about whether to invest in Microsoft would have been easier for Miura-Ko to make in 1978 when Microsoft's year-end sales exceed $1.3 million. But a seed stage investor in 1995 wouldn't have known that.

3. **"It's the business model that matters. If you send me a 50 page business plan, I probably won't read it. But send me a picture of your business model all the hypothesis that you have around your business model and I'll take a really good look."** "**Alexander Osterwalder has a book on business model generation and so there are different frameworks now that exists out there where you can use them to figure out what your business model looks like."**

The third layer in the Value Stack is mostly about development of a solid business model, which is the way that a business turns innovation into value. Did Microsoft have a sound business model? In 1975 this business model question was tricky, because at the time piracy was rampant which caused Gates to write his famous "Letter to Computer Hobbyists" about software piracy. Gates solved this business model problem by licensing the software to hardware manufacturers who could mostly be counted upon not to violate intellectual property laws. Gates describes his business model as follows (remember in this thought experiment he is 20 years old and this is 1975):

BG: Well, we knew that MITS was only one company, and we wanted our software to be used on all the machines. And even the original deal we did with MITS talked about our ability to get paid for licenses to other companies. We saw that as Intel was promoting their chip to intelligent terminal makers and other computer makers, that instead of that company writing their own BASIC, we could sell our own BASIC to them for a lot less money. In fact, just do it on a royalty basis. And so we went around convincing companies like NCR and a lot of the terminal companies that they should make microprocessor-based machines.

"It's all about scale economics and market share. When you're shipping a million units of Windows software a month, you can afford to spend $300 million a year improving it and still sell it at a low price." Fortune, June 14, 1993

"We keep our prices low and innovate as fast as we possibly can because we are keenly aware of the large number of companies that are single-mindedly working to displace us in every software category." Upside, April, 1995

4. **"We have our startups do is they'll go through each component of a business model. In my mind those would be your users, your customers, your pricing which also includes your customer lifetime, how you do customer demand creation, your sales channel, and then on the backend if your producing something or if you have inventory your whole supply chain that could all your components, design, manufacturing, and inventory warehousing." "How do the customers view you, what's your value proposition to them? What's your value proposition to the manufacturers? What's your value proposition to the sales channel? How do you do demand creation? What's the cost of customer acquisition? These are all questions that you should be constantly thinking about. And if the dollars in are not greater than the dollars out, then you need to rethink your business model right then and there."**

Gates might have said to Miura-Ko in her office that day what he would say later in an interview: "Our basic business strategy [is] to charge a price so low that microcomputer makers couldn't do the software internally for that cheap. One of the bigger early contracts was Texas Instruments, where we bid $99,000 to provide programming languages for a home computer they were planning." I believe Miura-Ko would have seen the potential of early Microsoft given her track record and investing style.

5. **"In the early stage, a good think to look at is — how good are they at early hiring? And what are they willing to give up to get the best people? One of the companies we invested in has successfully hired great talent at some of the top companies around Silicon Valley, even during this highly competitive market. The way they do this is the founders have spent a lot of time thinking about who they want to hire, how they do interviews, compensation structure, etc. They think about these issues just as much as they think about the product." "If a company is advertising and posting job postings everywhere — this is a sign the company isn't doing so well. There isn't anyone who will advocate for your company like the people who are working there already."**

If you have been reading posts on this blog you have seen me write about the fact that missionaries more successful than mercenaries. There is even one post dedicated to just that issue. This matrix below illustrates why being a missionary can be 100% consistent with seeking high profitability. The issues are separate.

	Seeks high profitability	**No profit objective**
Passionate re the product	Missionary (Bill Gates at MSFT)	Missionary (Bill Gates at the BMG Foundation)
Not passionate re the product	Mercenary	Volunteer (paying penance for some reason)

Founders who are not passionate about their mission fail way more often. Lots more. Employees and founders who follow their passion do better in their career. The passion and energy of gates and Allen caused many people to join Microsoft. Gates has several times lauded Steve Ballmer for his ability to hire great employees which allowed the company to scale. The team they built was essential to the company that was created. The more great people they hired, the more people wanted to work there.

6. **"We will only invest if there are thunder lizard ambitions but that has nothing to do with how much they raised upfront."**

There is no question though that the ambitions of Bill Gates were huge. This story from the book *Hard Drive* about Gates takes place right before he would have visited the office of Miura-Ko in my hypothetical.

"Gates had tried to prepare his parents for the fact that he might eventually drop out of Harvard to form a computer business with Allen. As Mary Gates saw it, her 19-year-old son was about to commit what amounted to academic suicide. …Mary Gates turned to a new friend, Samuel Stroum, an influential and respected business leader she had met during a United Way campaign, for help with her son. She arranged for Bill to talk with Stroum, in the hope that Stroum would convince her son to drop the idea of starting a company, at least for the time being, and continue his education at Harvard. A self-made multimillionaire, philanthropist, and civic leader, Samuel Stroum's advice was often sought, even by the region's most powerful movers and shakers… "I was clearly on a mission," recalled Stroum of the couple hours he spent picking Gates' brain. "He explained to me what he was doing, what he hoped to do. I had been involved in that industry since I was a young boy. He just talked about the things he was doing… Hell, anybody who was near electronics had to know it was exciting and a new era was emerging." Gates talked about the vision he and Paul Allen shared. The personal computer revolution was just beginning, he told Stroum. Eventually, everyone would own a computer. Imagine the moneymaking possibilities…. a zillion machines all running on his software. Not only did Stroum not try to talk Gates out of his plans to start a business, but after listening to the enthusiastic teenager he encouraged Gates to do so. "Mary and I have kidded about it for years," said Stroum, now 70. "I told her I made one terrible mistake—I didn't give him a blank check to fill out the numbers. I've been known as an astute venture capitalist, but I sure didn't read that one right."

7. **"While you are an early stage startup it's ok to incur technical debt. During this time period you really aren't sure what is going to work and what isn't going to**

work — the key should be emphasizing on moving fast and making quick decisions vs. making everything perfect."

Miura-Ko is expressing a thought similar to Mark Zuckerberg's idea that a business should "move fast and break things." But in doing this Miura-Ko knows that some technical debt may be incurred and believes that this is acceptable. Ben Horowitz explained technical debt in his recent book *The Hard Thing About Hard Things* in this way:

"Thanks to Ward Cunningham, the metaphor 'technical debt" is now a well-understood concept. While you may be able to borrow time by writing quick and dirty code, you will eventually have to pay it back — with interest. Often this trade-off makes sense, but you will run into serious trouble if you fail to keep the trade-off in the front of your mind."

Almost every software company that is ambitious gets into a situation where there is some technical debt. When I asked a close friend for a good example of technical debt involving Microsoft he said:

"With MS-DOS Word huge effort was undertaken to port the code to serve the Mac (and then the Windows code base). The debt though was that the data structures were designed for very small amounts of real mode memory and floppy disk space which were not the right assumptions to make for Windows with paged memory and hard disks."

8. **"A lot of people get confused because we as a firm also talk a lot about Customer Development, the Lean Startup methodology. And they say, 'Well how is that consistent with Lean Startups?' The problem is people confuse lean with small. Lean has nothing to do with small. In fact the amount of capital that you've taken has nothing to do with whether or not your ambitions are big or small. … Lean is not small. Lean is a tactic by which we help our entrepreneurs and the entrepreneurs help themselves in a data driven way figure out how they're going to iterate their product."**

Bill Gates had to watch cash carefully since in the very early days there was a lot of uncertainty about revenue. When he meet with Miura-Ko in my hypothetical Microsoft would have had $16,005 in revenue and three employees. Gated would eventually go through a cash crisis when MITs stopped being a source of revenue. In an interview many years later the two Microsoft founders described the problem:

Gates: "It could get scary. In our very first contract with MITS, we set them up to sell our BASIC to their customers, rather than us selling to computer buyers directly. We thought it

was a good deal because they agreed to make "best efforts" to sell it. But later they decided not to sell to anybody at all because there were so many illegal, free copies of our BASIC floating around, so why try to charge people for it? That really made us mad because we thought it encouraged piracy. We eventually went into arbitration to determine if they were in compliance with the contract. In the meantime we were totally out of money…

Allen: …because MITS was withholding payments from us while the arbitration was going on.

Gates: They were trying to starve us to death. We couldn't even pay our lawyer. They tried to get us to settle, and we almost did, it was that bad. The arbitrator took nine months to issue his damn opinion. But when it was all over, the arbitrator ripped them apart for what they had done.

Allen: That case really, really scared us. If we had lost, we would have had to start over. Bill would call up his dad for advice. We were on pins and needles the whole time.

Gates: But, you know, through it all, we never borrowed money. I always felt like if we had to, we could have. But we never did."

Gates would later write in his book *The Road Ahead* about the impact of that experience:

"After that episode, Microsoft has been perpetually cash flow positive. In fact, I developed a rule: We always have enough cash on hand to be able to run the company for at least a year if no one pays us. The MITS experience, suddenly having no income, made me very conservative, a trait that persists to this day."

9. **"Nowadays people talk about pivoting as changing the homepage on your website and calling that a pivot. That's not a pivot. A pivot is when you feel sick and you are going to throw up because what you are working on is such a dramatic shift and you don't know if it will work or not." "[As an example] the founders had this dilemma where Lyft was taking off but they still had Zimride going on at the same time. We went for a walk and they asked — what should we do with this other asset we have — should we move people over to Lyft? At the time this was a really difficult decision to make but we decided to move everyone onto Lyft. In hindsight this is a no-brainer decision but you need to understand the founders spent 3 years of their life selling the idea for Zimride, building Zimride, raising money for Zimride, having users for Zimride, and sacrificing weekends / friends / family to try to make this happen. Then you are faced with the realization that what you have been building this whole time isn't working, but this thing you spent a month on is working. It takes a lot of courage to shut the thing down you have spent all of this time and energy on. I appreciate the courage it took for the founders to move aggressively into Lyft."**

Microsoft never did a pivot. So this is a hard one to put in this thought experiment. While it was not a pivot, for Bill Gates and Paul Allen a prior business impacted what they would do later at Microsoft:

"While Traf-O-Data was technically a *business* failure, the understanding of microprocessors we absorbed was crucial to our *future* success. And the emulator I wrote to program it gave us a huge head start over anyone else writing code at the time. If it hadn't been for our Traf-O-Data venture, and if it hadn't been for all that time spent on UW computers, you could argue that Microsoft might not have happened."

However this example did not involve the gut wrenching shift that Miura-Ko describes.

10. **"As an early-stage investor I'm not in the crazy fray of investing in companies once everyone recognizes the company is on a hockey stick trajectory. It's my job to recognize the early signs of something interesting."**

I have already said that I believe Miura-Ko would have seen the potential of Microsoft in 1975 and would have made an investment if asked. But that was another time and place. Making early stage bets means a lot of investments will fail. It is easy to look back at a great success and say: "I would have invested in that." To illustrate, someone who did not see the potential was an engineering student at the University of Washington who worked with Gates and Allen on their Traf-O-Data business had many conversations with Gates and Allen about PCs. He recalls: "The whole concept of having a big clunky PC in your house that just used up room, I thought that was totally dumb. I did not have any foresight into what was really going on. I just kinda fought it in my mind, and said, 'Nah, this is not going to work.'"

11. **"We have invested in solo founders but the healthier dynamic is to have 2–3 co-founders. Being a solo founder is lonely and you are a prisoner to your own startup — that kind of dynamic can be really bad. Having 2–3 team members you feel much more social pressure to stay in the game and can focus the whole team on a problem, in general, teamwork is a more healthy dynamic. The other problem is there is no superhuman founder, everyone has their own weaknesses. It's better to round out the edges of your weak spots."**

The early team at Microsoft was amazing. They all just fit together and created this positive feedback loop (lollapalooza) of success. The right people kept arriving at the company at just the right time year after year. When Miura Ko met Gates in this thought experiment there might have been just three Microsoft employees.

In addition to Gates and Allen these people worked at Microsoft in the very early days:

Steve Wood was a programmer who developed a version of FORTRAN for the 8080.

Bob Wallace was a programmer who developed a version of BASIC for Texas Instruments (TI).

Jim Lane was a programmer who was hired to write a DEC simulator for Intel's new 16-bit chip, the 8086.

Bob O'Rear was a programmer who worked on a translator to turn the 8080 BASIC code into 8086 code.

Bob Greenberg was a programmer who worked on developing TI BASIC.

Marc McDonald was a programmer who worked on converting 8080 BASIC for the NCR machine.

Gordon Letwin was a programmer who developed a BASIC compiler.

Andrea Lewis was a technical writer. Marla Wood was a receptionist/secretary/bookkeeper

Many thousands of key people like Ballmer, Shirley, Gaudette and Maples Sr, would later join Microsoft just to name four. The problem I have about going further with names is that the list is long and if I leave someone out I will make that someone very unhappy. So I will stop at four. The important point is that these people balanced each other well and the whole was more than the sum of the parts.

12. **"Gutenberg was probably one of the first people who ever got venture capital so he had a business partner by the name of Faust and he went out and had this idea around the printing press and he got the equivalent of 5 years' worth of peasants pay to get started on his business. His series B financing came about when he realized he needed a little bit more financing, so this time he asked for little bit more capital from the same guy and the guy gave him the equivalent of 10 peasants stone built houses. So he went along, made a few more mile stones and then had to go back for a series C financing. And then sure enough he was able to get that and it was the same amount; the amount that would basically pay for 10 stone houses for a peasant. And it turns out that the story ends very sadly. He wasn't really able to satisfy his investors. His investors as you may have heard from other stories from entrepreneurs an investor gets very anxious, wants to see more milestones, he isn't sure why this isn't proceeding and eventually sues and he wins and he's able to buyout Gutenberg's portion of the printing store. Gutenberg actually died a relatively penniless man and most people don't really realize his contributions to the printing press until much, much later. And the history books are then changed to reflect his contributions. Now my story today about investors and entrepreneurs is totally different. I believe actually that this whole relationship between innovators and investors is actually very much switched. The power has shifted to the entrepreneur."**

This is excellent story-telling by Miura-Ko which makes an important point: great founders are what creates Thunder Lizard businesses. Gutenberg was a great founder who did not have a great financial result. But he did change the world in a very significant way. Capitalism requires failure since that is what drives a better life for society as a whole. The cities that produce that most successful startups and the most innovation do not treat failure as a stigma. Firms like Floodgate and investor like Miura Ko help make that happen. But it is the founders that matter most.

Notes:

Miura-Ko: http://ecorner.stanford.edu/videos/2540/Funding-Thunder-Lizard-Entrepreneurs-Entire-Talk

Miura-Ko: https://medium.com/cs183c-blitzscaling-class-collection/class-4-notes-essay-reid-hoffman-john-lilly-chris-yeh-and-allen-blue-s-cs183c-technology-428defb04850

Miura-Ko: https://medium.com/cs183c-blitzscaling-class-collection/cs183c-session-4-ann-miura-ko-98617f03b580

Miura-Ko: https://techcrunch.com/2016/07/06/floodgates-ann-miura-ko-on-the-four-powers-all-venture-backed-startups-share/

Miura-Ko: https://www.geekwire.com/2017/true-seattle-tech-engineers-loyal-san-francisco-indeed-data-confirms/

Allen and Gates: https://www.geekwire.com/2017/bill-gates-paul-allen-business-microsoft-engineer-partner/

Fortune interview: http://archive.fortune.com/magazines/fortune/fortune_archive/1995/10/02/206528/index.htm

Gates Smithsonian Oral History: http://americanhistory.si.edu/comphist/gates.htm

Ben Horowitz (The Hard Things About Hard Things): https://www.amazon.com/Hard-Thing-About-Things-Building/dp/0062273205

The Road Ahead: https://www.amazon.com/Road-Ahead-Bill-Gates/dp/0453009212/ref=sr_1_2?s=books&ie=UTF8&qid=1497272499&sr=1-2&keywords=the+road+ahead

A Dozen Lessons I Learned from Bill Gates Sr.

June 24, 2017

Bill Gates Sr. is one of three mentors I have had that were actually appointed by a group to help me develop as a person. I have had other mentors that I recruited or the relationship just developed. What Bill taught me was not only important but inevitably delivered at just the time I needed the guidance most. Other than my parents, who attended college with Bill and his first wife Mary, no one has had more influence on who I am. I probably never go through a day where I do not think subconsciously at least once: "What Would Bill Gates Sr., do in this situation?" Having Bill Gates Sr. be your mentor is the equivalent of being able to start a career and life at third base. Bloody hell was I lucky. Set out below are a dozen of the many things he taught me.

1. **"I am an optimist."** He is always optimistic and forward thinking. The only time I ever saw him less that fully optimistic was at a lunch right after his wife Mary died. That day at the restaurant he said emphatically as tears poured down his cheeks: "I will never marry again," which goes to show that he is not always right since he married Mimi Gardner Neill about a year later.

2. **"There's power in sharing stories."** The holiday card Bill sends each year and the corny poems he traditionally recites at events are all about storytelling. Bill also uses stories when talking to clients to who looked to him for wisdom as much as they did legal advice. This reminds me of the great story about his son who said after being chided about being slow getting into the car for a family event: "I'm thinking, mother. Don't you ever think?" Bill once recalled that day in this way: "**Imagine yourself in our place. I was in the most demanding years of my law practice. I was a dad, a husband, doing all the things parents in families do. My wife, Mary, was raising three kids, volunteering for the United Way, and doing a million other things. And your child asks you if you ever take time to think."**

3. **"A start-up business is just virtually 100 percent devotion both in time and energy."** Together with a few other people Bill built both a fine law firm and a solid business**.** Like most businesses the law firm was not a Microsoft class grand slam financial outcome, but it was a fantastic result nevertheless. The vast majority of businesses are more like the law firm Bill created than Microsoft, Facebook or Google.

4. **"As conflicts arise between parents and children from common causes, the whole business of exerting independence, fighting against discipline, that's an experience we had, and it was one that was particularly the case with my son and his mother for a period of a couple of years. It obviously worked itself out at a very early date. An interesting piece of that was the consultant that we went to and talked to about this. Mary and I would go in, and our son would go in and talk to this fellow. This went on for a better part of a year and a half. Toward the end, Mary and I were there for a meeting with him, and he said, 'You have this war going on with your son — you really should understand that he's gonna win.'"** Pick your battles and especially your wars**.**

5. **"Woody Allen said, 'Eighty percent of success is showing up.' And, I believe that. If you're on a board, a committee of some kind, and you go to a meeting and nobody else showed up… You support causes by showing up and, obviously, participating."** It is stunning how many boards, committees and groups Bill has participated in over his career. His influence is everywhere you look in Seattle and, if you look at the influence of the Bill and Melinda Gates Foundation, the world. As just one illustrative example, in the early 1980s he involved me in an effort to move technology from the University of Washington to the private sector. The Washington Research Foundation was organized in 1981 and the Washington Technology Center

two years later to foster the transfer of technology from university researchers to commercial businesses. He knew then that it is the positive spillovers a great research university that drives the economic and cultural vibrancy of a city. Having the opportunity to watch him operate in that setting was life changing in terms of developing my skills.

6. **"I believe in the combined power of men and women who 'show up' for the people they love and the causes they believe in**." The whole of people's participation in a cause is worth more than the sum of the parts when it comes to "showing up." Bill believes that everyone who has been fortunate in life needs to do something to counteract what he calls the **"disadvantages that random chance has imposed on others."**

7. **"Society works better when people think less about 'me and mine' and more about 'us and ours'." "We're all in this together."** Making this point is best done by looking at two examples. The first example concerns the United Way campaign which is always an important activity in the life of Bill Gates. He understands the power of people helping others in a community. His enthusiasm causes other people to become involved and that snowballs. The second example involves an after work basketball team that I played on with Bill. He played center and I was a guard on that team since I am a full foot shorter than he is (which is why I always wanted to be like him when I "grew" up). He was an unselfish player more concerned with making a great pass than scoring himself. On this team and in other settings he was always thinking about "us and ours" and not "me and mine."

8. **"I've seen the power of public will to take on and surmount great challenges." "I don't care if you carry a banner or if you stand near the back. You can yell into a microphone if you like or you can listen carefully if that's your style. You don't need a soapbox to be a good citizen, you just need to be part of the public will to make life on this planet a little better."** How can you say it better than that? When Bill turned 90 years young in 2015 his birthday party held at the University of Washington was attended by many luminaries. Over the course of his career he helped many people and numerous stories were told at that event about his positive impact on their lives. A book of memories was produced for that event in his honor. In one memorable chapter in that book Howard Schultz wrote that without Bill's help in dealing with an unscrupulous character he would not have been able to buy Starbucks. If Seattle has a George Bailey equivalent (a lead character in the movie "It's a Wonderful Life") it would be Bill Gates Sr.

9. **"I've experienced the fear of being poor, the exhilaration of working hard to build a career." "Dad was very hard-working – he had a partnership in a furniture store, worked very hard, worked long hours. And I learned from seeing that." "My parents never talked about showing up. They just did it."** "**There wasn't a lot of structure to my growing up. I had an awful lot of discretion about where I went, what I did, who I did it with."** The way children are organized today by parents is quite different than what Bill experienced. One thing this upbringing did was force him to learn from mistakes since he had lots of chances to make them. I can't help

think that this experience is a significant part of why Bill has such sound judgment. Bill was on the board of directors of Costco with Charlie Munger who is an advocate of learning from mistakes. Charlie said once: "We look like people who have found a trick. It's not brilliance. It's just avoiding stupidity." Bill contributed to my personal development in many ways not the least of which was the idea of sound judgment. "Ready, aim fire" not "Ready, fire, aim."

10. **"Hard work, getting along, honoring a confidence and speaking out."** These are the attributes I saw in him as a business leader and community volunteer. He polished each attribute that he learned as a boy scout under scoutmaster Dorm Brahman. He did not forget those lessons. I remember once seeing him tie a fancy knot on a speedboat at his home on Hood Canal (you can take a boy out of scouting, but not take scouting out of the boy).

11. **"You should never demean your child. When you think about the centrality of that, in terms of the relationship with an offspring, you're off to a really good start."** The centrality of his family in everything Bill does is an inspiration. The way the family operates as a team is also marvelous to watch.

12. **"For all the rewards of private life, my life would have been much the poorer if I had not experienced those moments when I felt like I belonged to something larger."** There is arguably no organization where he has had more impact that the University of Washington. And the reverse is also true. There is a biographical article about Bill entitled: "Mighty are those that wear the purple and the gold." He is mighty indeed. Go Huskies!

Biography: Bill Gates Sr. earned his bachelor's and law degrees from the University of Washington, following three years of military service. A founding partner at Shilder, McBroom, Gates and Baldwin, Gates has served as president of both the Seattle/King County Bar Association and the Washington State Bar Association. He has served as trustee, officer, and volunteer for more than two dozen Northwest organizations, including the Greater Seattle Chamber of Commerce and King County United Way. In 1995, he founded the Technology Alliance, a cooperative regional effort to expand technology-based employment in Washington. Gates also has been a strong advocate for education for many years, chairing the Seattle Public School Levy Campaign in 1971 and serving as a member of the University of Washington's Board of Regents from 1997-2012.

Notes:

Mighty are those that Wear the Purple and the Gold
http://www.washington.edu/alumni/columns-magazine/june-2013/features/gates/

Showing Up for Life **https://www.amazon.com/Showing-Up-Life-Thoughts-Lifetime/dp/0385527020/ref=sr_1_1?ie=UTF8&qid=1495307985&sr=8-1&keywords=Bill+gates+sr**

Whitman Commencement Speech http://www.networkworld.com/article/2279854/data-center/lessons-from-bill-gates–dad–whitman-college-commencement-speech.html

Showing Up http://www.law.washington.edu/Multimedia/2009/ShowingUp/Transcript.aspx

A Dozen Things I've Learned About Startups from Hunter Walk

July 1, 2017

Hunter Walk is a partner at the seed stage venture capital firm Homebrew Management, which he co-founded in 2013. He previously was head of consumer product management at YouTube. Walk joined Google in 2003 managing product and sales for their contextual advertising business. He was a founding member of the product and marketing team at Linden Lab, the creators of online virtual world Second Life. Earlier in his career he was a management consultant and also spent a year at Late Night with Conan O' Brien. He has a BA in History from Vassar and an MBA from Stanford University.

1. "The best businesses are being constructed by founders who have empathy for, or a connection to the problem they're solving. It's not about disdain for an industry. We like to see founders who have a real connection to the problem that goes beyond excitement about a market opportunity. Founders need a 'why' that is very personal." "When founders have an empathetic understanding of a market and they are connected to the problems they are solving, it's a more 'mature' approach to a starting a startup."

While it would seem natural for people to understand the importance of "product/founder fit," startups are often created by people who do not have a passion or connection to the problem they are trying to solve. Why would anyone start a business they are not passionate about? Well, they may have read that the block chain was a big opportunity or thought that virtual reality was an attractive market and concluded that they should start a business take advantage of those opportunities. What a venture capitalist like Walk wants is an emotional connection to the customer problem. Mark Zuckerberg is an example of a founder with deep understanding of the company's product and a strong vision on where he wants the company to go. Bill Gates and Steve Jobs both had this same set of qualities. Great chief executives inevitably have help that allows them to focus on being a great CEO. Zuckerberg has Sheryl Sandberg to focus on operating the business which makes him a better CEO. My friend Craig McCaw had John Stanton and Jim Barksdale as managers to do many of the things that Sandberg does.

There are lots of great examples demonstrating why not considering product/founder fit can be a huge mistake. Steve Blank talks about his own experience with this set of issues here:

"I was now a CEO of Rocket Science, and having a great time building the company. Unfortunately, while I had gone through phases of video game addiction in my life, in no way could I be described as even a "moderate hard-core gamer," which ruled me out as a domain expert. I realized that for the first time in my career I had no emotional connection to my customers or channel partners. I was about 90 days into the company when I began to realize

there was something very different about this business. In previous companies I could talk about technology details and how the product features could solve a customer problem. But people didn't buy video games on features and they weren't looking to solve a problem. I was in a very, very different business. I was in the entertainment business. There couldn't have been a worse choice for CEO in Silicon Valley. Alarm bell one should have started ringing – for me and my board."

A deep understanding of and empathy for the problems faced by the customer and the market increases the probability that the business will find a way to successfully deliver core product value (solve a real customer problems that they are willing to pay for). A founder of a startup needs every advantage they can get given the struggle that are going to go through. There is a reason why so many people call building a business from startup a "grind." Perseverance is an essential attribute in a founder.

2. "Don't start a tech company just because you 'want to do a startup.' Startups are hard! You have to be mission-driven. Be able to understand the 'why?' Why do you want to spend, minimally, several years of your life working on a particular problem? If you've personally experienced the problem you're solving, or are connected to it in some meaningful way, you're more likely to persevere and adapt through the challenges of starting a company."

Startups are hard. As Ben Horowitz wrote in his book *The Hard Thing about Hard Things,* the effort to create a successful business is inevitably a series of struggles. The passion that the founders and early employees have for the customer problem will energize and sustain them through the struggles that a startup must conquer to be successful. People who love what they do create, make and sell better products. This idea applies in life generally and not just in startups. Warren Buffett puts it this way: "You really should take a job that if you were independently wealthy that would be the job you would take. You will learn something, you will be excited about, and you will jump out of bed. You can't miss."

Why are startups so hard? As Charlie Munger says, if business and investing were easy everyone would be rich. The unfortunate reality is that in an economy there is always a top-down constraint on the amount of profit that can be earned in the aggregate by all businesses. Yes, the size of the pie can get bigger for everyone if an economy is healthy and innovation is taking place, but statistically we have data that shows that there is a top-down constraint to how quickly that can happen. There are many venture capital firms trying hard to increase the size of the pie and that is quite exciting, but we have a ways to go before we see the results of these efforts. One of the best posts on this issue was written by Fred Wilson and is entitled: "The Venture Capital Math Problem." It would be great if someone solved this math problem Wilson talks about via innovation and growth but it is not something that we can say has already been proven to have happened.

What do I mean by top-down constraint? Understanding this concept is best conveyed by example. Warren Buffett said something once about a single company that I am going to change to be about a cohort of collections of startups:

Think about a cohort of startups with a combined market cap of $500 billion. To justify this price, they would have to collectively earn $50 billion every year until perpetuity, assuming a 10% discount rate. And if the businesses do not begin this payout for a year, the figure rises to $55 billion annually, and if you wait three years, $66.5 billion. Think about how many

businesses today earn $50 billion, or $40 billion, or $30 billion. It would require a rather extraordinary change in profitability to justify that price.

To put the magnitude of a cohort generating $50 billion in new earnings in context:

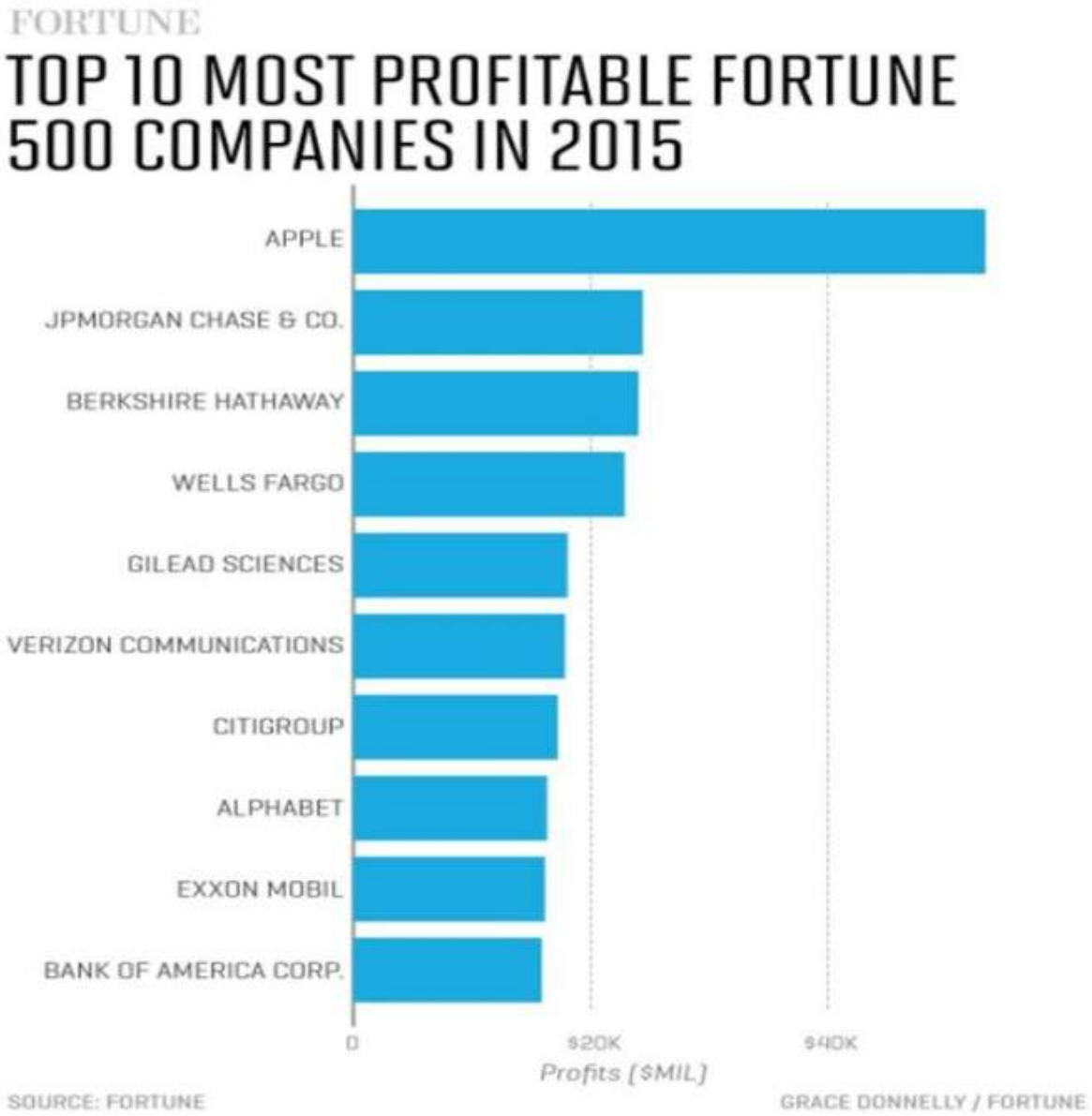

New businesses with profits that approximate those generated by a business like Apple, Microsoft, Google and Facebook do not arrive that often. People and organizations have only so much money to spend and competition effectively creates a top down limit on profit. In addition, much of human progress in consumer surplus and generates no profit or even less profit. The economy does not have an unlimited ability to generate new profits to support the income needed by a very large business like Facebook or Google that often. That ability to support new profit streams can be changed in positive ways via innovation and investment, but the historical record is that that power of an economy to absorb new businesses that deliver huge profits to shareholders does not just radically leap ahead. I would be as happy as anyone if this did happen, but some realism about how much the aggregate profit in an economy can scale over a limited period of time is wise. Fred Wilson points out that venture capital is only a small part of the private equity asset class because it has scaling challenges.

Venture capital does punch far above its weight in terms of societal benefit, but there are limits to venture capital ecosystem growth that no one has found a solution for yet. My heart is hopeful, but my brain is more cautious.

3. "Write your principles in pen but your strategy in pencil."

"What is Strategy?" is the title of a famous Michael Porter essay. Porter describes the essence of strategy in a few sentences:

"In many companies strategy is built around the value proposition, which is the demand side of the equation. But …it's [also] about the supply side." "If there are no barriers to entry…you won't be very profitable." "It's incredibly arrogant for a company to believe that it can deliver the same sort of product that its rivals do and actually do better for very long." "Strategy is about making choices, trade-offs; it's about deliberately choosing to be different." "The essence of strategy is choosing what not to do." "Operational effectiveness is about things that you really shouldn't have to make choices on; it's about what's good for everybody and about what every business should be doing."

Almost anything a business creates and sells can be quickly copied by other businesses and as a result profit will be driven down by competition to the opportunity cost of capital. This is straight up college freshman economics. Increased supply is the killer of value. In other words, without some constraint on supply, price will drop to a point where there is no real profit left. That is why there is so much talk about "sustainable competitive advantage" by people who are actually running a business. People who believe all you need to do to be successful in business is to "make the trains run on time" make me giggle. Creating a sustainable competitive advantage is both rare and hard. Even if you have it you can lose it in a heartbeat. When sustainable competitive advantage is lost by a business it often can be traced to a mistake made five years before.

Regarding the "principles" of a business that Walk should be written in pen Charlie Munger believes: "Firms should have the ethical gumption to police themselves: Every company ought to have a long list of things that are beneath it even though they are perfectly legal. We believe there should be a huge area between everything you should do and everything you can do without getting into legal trouble. I don't think you should come anywhere near that line." The bonus says Munger: "You'll make more money in the end with good ethics than bad. Even though there are some people who do very well, like Marc Rich–who plainly has never had any decent ethics, or seldom anyway. But in the end, Warren Buffett has done better than Marc Rich–in money–not just in reputation."

4. 'There's a big difference in-between 'smart iteration' and 'lack of discipline.'" "Companies which raise too much too early might think they're de-risking their funding but also may intro a host of other issues."

"All work and no play makes Jack a dull boy" is a well-known proverb. "All iteration and no discipline will kill Jack's startup" could also be a proverb. Long-time observers of the startup world often make this same point by saying: "More businesses die from indigestion than starvation." A pivot is a stomach wrenching shift that should never be undertaken lightly. Similarly, wild goose chases into new areas of business can divert attention for the critical path. Too much cash can be bad for children, adults and startups. It causes people to do silly

things. Buffett puts it this way: “Nothing sedates rationality like large doses of effortless money.”

5. “People tend to forget that your company is your first product, and you have to be intentional about building your company before it’s ready to really grow and scale.”

Walk make a a great point here about the importance of people and hiring. The best way to see if someone understands this point is to watch what they do and not what they say. Benchmark Capital’s Bruce Dunlevie is more focused on the strength of the team in a startup than any venture capitalist I have ever met. His sterling record as an investor is proof that his approach can have a huge payoff financially. His close friend Andy Rachleff believes: “When a great team meets a lousy market, market wins. When a lousy team meets a great market, market wins. When a great team meets a great market, something special happens.” The team you build is the business you build. Being especially intentional about how you build your team is wise.

6. “The only decisions that are reliably bad are those made out of fear.”

If you don’t feel some fear it is a clue that you may be dead. This is a more common condition that some people imagine. It is one thing to be conscious of fear, but quite another to make decisions based on fear. Dale Carnegie said once: “Inaction breeds doubt and fear. Action breeds confidence and courage. If you want to conquer fear, do not sit home and think about it. Go out and get busy.” Not only does refusing to let fear drive your decisions cause you to make better decisions, it makes you happier.

7. “Work with smart people you trust. Over-index to the quality and ethics of your coworkers and you’ll never go wrong. Not only does it increase the likelihood of success on current projects, but those are the type of people who will continue to work at amazing companies over the course of their careers.”

A “seamless web of deserved trust” is one of the biggest advantages a business can have. Trust is vastly more efficient than layers of management and control. Unfortunately, a system based on trust only works if you hire people very carefully. In other words, with great trust comes great responsibility to hire well. That someone is smart, hardworking and successful does not mean that they are trustworthy. Charlie Munger sets out the challenge on this set of issues:

“It’s hard to judge the combination of character and intelligence and other things. It’s not at all simple, which explains why we have so many divorces. Think about how much people know about the person they marry, yet so many break up. It’s not easy, but it is in some cases. If people are splashing around with money like Dennis Kozlowski, with vodka at parties coming out of some body part, and if it looks like Sodom and Gomorrah, then maybe this isn’t what you’re looking for. But beyond that, it’s hard. If you have some unfortunate experiences while getting that knowledge, well, welcome to the human race.”

If you have found you have made a mistake about someone’s character, then change course.

8. “Your organizational culture—especially as it relates to diversity—is established the moment you start a company. Once your team grows, once you have your first twenty employees, it’s very difficult to change a culture. Early hires are your culture.”

What is the culture of a business? I view it as a system of beliefs, mental models, values and principles that drive the behavior and actions of the people who are involved in a business. The best cultures are authentic in every sense. When people know what to do and actually do that when no one is looking at them, a healthy functional culture in place. Culture, like trust, allows the business to be more efficient. It also create a a shared sense of mission that breeds the missionaries that create successful businesses.

9. "The importance of adding an outside investor to your board as early as seed stage is more common now than it was when we started the fund early in 2013, there's still occasional question about whether this slows down a company's operations or gives investors too much control. My answer is, if it does, you've selected the wrong investors, which is a bigger problem. Our emphasis isn't on slide decks and governance, but instead on helping founders build leadership, steady cadence and periodic strategic discussion into their thinking, which we believes contributes to startups being more prepared for a successful A Round."

We all need people who can help us grow as a person and make better decisions. No one has perspective on themselves. Some people are obviously more self-aware than others of course, and some people have zero self-awareness. As an example of a healthy balance, Munger says about Buffett: "Warren's a lot more able than I am, and very disciplined." Buffett says Munger is "both smarter and wiser." Well-chosen colleagues can help make you a better investor, business person and human being. The best venture capitalists roll up their sleeves and stand shoulder to shoulder with founders.

10. "At the seed stage there are just some things you can't outsource and fundraising is one of them. Having a banker or adviser behind the scenes helping you understand the venture process? Maybe (although there's so much more info out there these days than 10 years ago). But having this person approach me with an 'I'm representing Company XYZ which is looking for funding' email? Not the way to start off our relationship."

The relationship between founders and their venture capitalists is like marriage in that it must last for many years. Personal chemistry is very important. The importance of doing due diligence on the character of venture capitalists and not just their investing acumen will pay big dividends for any founder and the same is true for venture capitalists doing due diligence on the character of founders. How do they treat people? Not just people they feel are "important" or that can help them, but everyone. How do the treat their friends and family? How do they treat a total stranger? Are they still around for friends and family when the chips are down or something has gone wrong? Are they kind? Do they have empathy? Do they stand up for what is right? Do they keep promises? Are they compassionate? Do they pitch in? Do they walk their talk?

11. "Work on projects that matter. If you find yourself treating your job like, well, a job, you should either figure out how to be more passionate about it, or find a new gig."

Life is short. The older you get, the more you should realize that every minute of every day is precious. I wrote in #2 above about how passion will make you more successful, but there is also the fact that doing what you are passionate about will make you happier. Happiness is highly under-rated. Working with people who are happy is also under-rated.

12. "The Bottom Up Economy is about the global transition from an industrial economy to a technology-based one. It means there's not really a single 'technology industry'—every industry is being shaped by tech. Out of both opportunity and necessity, new marketplaces, revenue streams and efficiencies are being created."

Every company of significant size is now a technology company. They are also all software companies. Not everyone must be a programmer, but everyone must understand the importance of and uses of software. While there are still management teams that do not understand the importance of software, they will not be able to survive as managers much longer. Software is eating the world. And the world is eating software.

Notes:

https://blog.mixpanel.com/2016/07/06/hunter-walk-early-stage-venture-capital/

https://redef.com/source/529657a5bc4626126841af6d

http://technmarketing.com/tech/an-interview-with-hunter-walk-partner-at-homebrew-and-previous-consumer-product-management-lead-at-youtube/

How VCs Spend Their Time. Err, How This VC Spends His Time.

http://money.cnn.com/interactive/technology/15-questions-with-hunter-walk/

http://www.fluffylinks.com/hunter-walk-interview

You're Either Venture-Backed or a Lifestyle Business: The Big Lie

Two VCs Interview Me While They Drive: A Transcript

https://www.laserfiche.com/simplicity/3-questions-hunter-walk-creative-economy

Steve Blank: https://steveblank.com/tag/early-stage-startup/page/2/

Fred Wilson: http://avc.com/2009/04/the-venture-capital-math-problem/

How to Create a Successful Business Model in a Dozen Easy Steps [Fake advice! Not possible.]

July 7, 2017

You can't create a successful business model in a dozen easy steps. The title of this blog post is fake news or, more accurately, fake advice. This blog post will give you real advice instead.

Successful business models can be created with a lot of hard work, creativity, innovation and especially experimentation, but there are no formulas. Fortunately there are best practices. I have written about business models many times before (for example, my Steve Blank and Eric Ries posts), but in this post I will be making my points more with examples than the usual more narrative explanation.

The best place to start is asking what a business model is and how it is best discovered. The best place to start is with a definition. I like the Mike Maples Jr. definition: "The way that a business converts innovation into economic value." Steve Blank has his own definition that is also useful: "A business model describes how your company creates, delivers and captures value." In other words a business must create value within the value chain and it must capture some of that value. Sometimes value is created and delivered by an entrepreneur and yet little or no value is captured by the creator. As an example, Spotify is creating lot of value in its value chain but how much value is it capturing? The important point is that a business model that does not capture value is not a successful business model. The concept of "capturing value" particularly important since it requires some sort of competitive advantage. The most common cause of failure is the failure of a business model to have a competitive advantage. In a recent interview Bill Gurley described one critical objective of a business in this way: "What is it that will allow you to protect that business over the long term? That could be a network effect. It could be some kind of scale advantage. But it needs to have something like that." In the Floodgate Value Stack model I have written about before this is the third layer which they call Business Model Power:

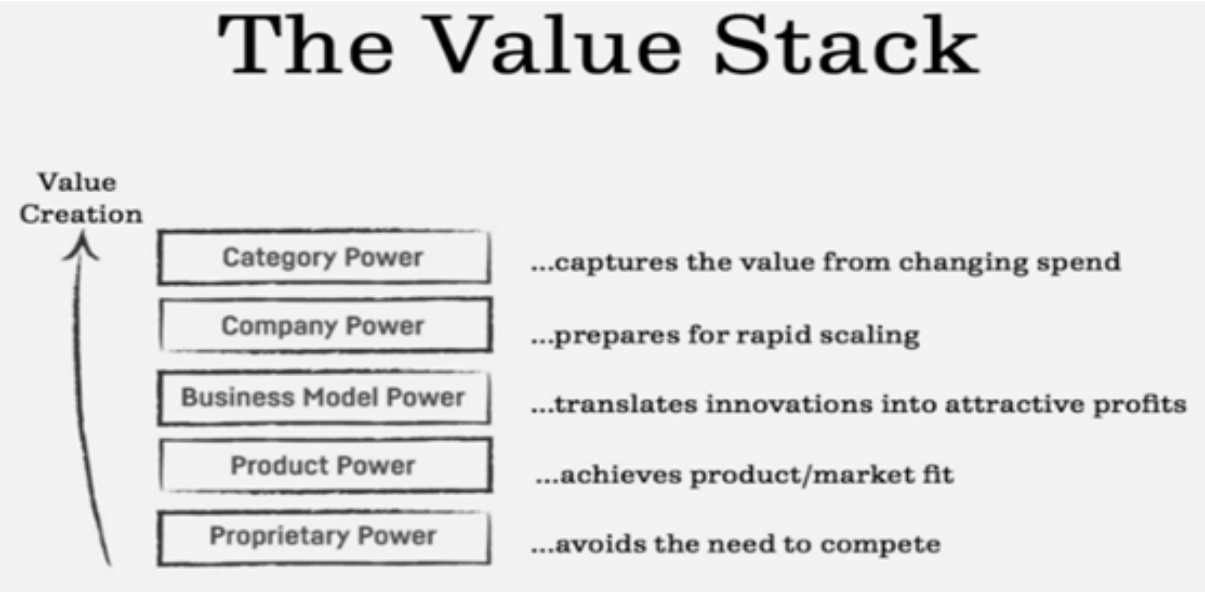

A business model is discovered rather than precisely planned in advance and then manufactured. A flywheel is often used as a metaphor for this because the business model discovery and maintenance process is based on iteration and feedback. The "build measure learn" process is a feedback loop that never ends as long as the business is in operation. Businesses that stop the business model improvement and maintenance process inevitably die. A paper by Rita McGrath notes:

"In highly uncertain, complex and fast-moving environments, strategies are as much about insight, rapid experimentation and evolutionary learning as they are about the traditional skills of planning and rock-ribbed execution. Modeling, therefore, is a useful approach to

figuring out a strategy, as it suggests experimentation, prototyping and a job that is never quite finished."

Sometimes the discovery process is quick and sometimes it is slow. Sometimes the business model discovery process creates a successful outcome, but very often it does not. Applying the scientific method to the business model discovery process is a proven way to improve and expedite business model discovery. As I said I want this post to be more about illustrative examples than usual, so let's dive into that process. I decided to pick an example from the early 1990s. Many people have forgotten or do not know that at this time people had no clue about many of the business models that would eventually be created. The big buzz was around the Information Superhighway and services built around television. People might say: "I would have known what was about to happen to business models in the years after 1993." The answer to that is: "No you wouldn't." Businesses whose success seems obvious now did not seem so than. Some of the smartest and best informed people in the world missed these successes completely. Some people got a few things right obviously but even then their views and plans evolved over the years based on feedback. The future in the 1990s and all other periods was discovered rather than predicted. People made a lot of bets in the 1990s and some of them worked out. Some people were better at making bets than others. Some of that was luck and some of that was hard work, perseverance and skill.

One of the best illustrative example of my points is Starwave, a business founded in 1993 which pioneered a number of important internet technologies and business models. The founder of Starwave was my friend Mike Slade, who once said: "The whole concept of Starwave was to take various bets on the future of a wired world." At that time the "wired world" was the investing thesis of Paul Allen who was Starwave's primary shareholder. Allen once described his thesis as follows: "We can already see a future where high-bandwidth access to information is cheap, where there is plenty of computing power to manipulate that information, and where most of us are connected. I think the most exciting things happening have to do with content. We have only begun to invent what will be possible." *Wired* magazine described this using the hyperbole that typified its writing at the time: "Starwave's mission is to envision products and services as if bandwidth were infinite and free – in other words, as if there were no technological and financial limits to how titles and services could be produced and delivered." Slade has described the "wired world" thesis in very practical terms: "Paul's idea was that the world is going to be connected and we should do something about it."

The magazine *Fast Company* described how Starwave's business was evolved by Slade over the years:

"To their first brainstorming session with Allen, Slade brought eight ideas. The first stemmed from a job he had while in college. Back then, he wanted to be a sportswriter. Working at the local newspaper in the fall of his senior year, Slade would spend hours combing the Associated Press wire for stories and scores. After graduating in 1979, however, Slade changed his mind about sports writing. He pursued an MBA at Stanford and landed a job at Microsoft. But he never forgot those nights reading the sports wire, unencumbered by the limits of a sports section's page count. 'I always wanted to do that again,' Slade said. 'Everybody should like what I like, right? Of all the things that I could be a proxy for consumer taste on, being a sports fan is one. That was our first idea. We had a bunch of others. But of course the first idea was the best idea. Never fails. Off we went to do things with it.'

Trouble was, they still hadn't come to terms with a platform. They created a few titles on CD-ROM. That's the path down which most of the sports world was headed. All the leagues were licensing discs that included stats, video and audio that could be updated online, through dial-up modems. They built a few prototypes for an online site that would be delivered via interactive TV. None of it seemed to lead anywhere. For about nine months, Slade and a staff of almost 100 tweaked and tuned this thing that would deliver a sports wire feed, supplemented and complemented by original content, to home computers. They started negotiating with ESPN about branding it. But they couldn't figure out how to get 'it' to sports fans. 'We were all dressed up,' Slade said, 'with no place to go.'

Frustrated by the holdup, one engineer finally suggested that they put the product on the Internet. More specifically, on the World Wide Web. Slade knew the Web, knew it cold. He had been vice president of marketing for NeXT computers, the company Steve Jobs started after leaving Apple in 1985. The Web was created on a NeXT machine. Slade did not think the Web was the answer. It was 'nerdy,' Slade thought, and would never catch on beyond the scientists who used it to share their work. It wasn't going to be a business. And it certainly wasn't going to be a business until more people had high-speed connections. The engineer insisted they should do it anyway. Lacking a better plan of his own, Slade took the idea to Allen. "I went to Paul and said, 'We're going to build this thing on the World Wide Web, because we don't know what else to do,' Slade said, recounting the dialogue. 'He goes, 'What's the business model?' I go, 'I have no idea.' He goes, 'OK.'"

This is classic example of an entrepreneur who knew that he needed to find "core product value" and "product/market fit" before finalizing the business model. Certainly all possibilities were considered such as advertising, subscriptions, licensing, and merchandise, but nothing was set at the beginning of the process. Slade would later say: "There is no single plan or model for doing business on the Web because there is no business — yet." He added on another occasion: "Our strategy was to get out ahead. And run like hell."

Eventually at least several business models would emerge. Most importantly Starwave cut a deal with ESPN that included:

"Placement of the ESPNet Sportszone name on the crawl that it would run at the 28- and 58-minute marks of every hour. Glover presented a rate card that showed Starwave was getting most of its money back in advertising on ESPN. In the deal analysis, Allen valued that as zero. 'I have no idea what this is worth,' he told Slade. Few did. 'Turns out it was worth everything,' Slade said. 'The first people to run a crawl of a Web site that you were supposed to go to was us and ESPN.' They made their debut on April 1 with an event at the Final Four in Seattle. Digger Phelps chatted up Allen at the launch party. Starwave gave out 15,000 browser discs at an ESPN booth at the convention center. Starwave never turned a profit on ESPN during the five years of the deal, but it became the bridge toward a larger relationship with Disney, which eventually bought Starwave. Along the way, the two companies charted a course for dot-com success.

It didn't always proceed smoothly. The first time ESPN tried to sell advertising space on the site, the pitch tanked. Glover went to companies offering six charter sponsorship positions for $1 million each. For that, they'd get … well, to be honest, Glover hadn't a clue. 'We were laughed out of the room,' Glover said. 'Here, most people haven't even heard of the Internet. And we wanted $1 million. Needless to say, we didn't even get close to a sale.' They did

finally sell what some say was the first sponsorship deal on the Internet, to Gatorade, for $25,000. 'And that was huge,' Glover said. With the sports ubersite launched, Starwave and ESPN had a template in place. They would pay to develop and operate sports sites, in exchange for a cut of the revenue they brought in. They offered the same deal to each of the four major leagues and to NASCAR."

To close this blog post it is worth thinking about is happening when a new business model is created. Nick Hanauer and Eric Beinhocker make important points here:

"A capitalist economy is best understood as an evolutionary system, constantly creating and trying out new solutions to problems in a similar way to how evolution works in nature. Some solutions are 'fitter' than others. The fittest survive and propagate. The unfit die. The great economist Joseph Schumpeter called this evolutionary process "creative destruction." And he highlighted the importance of risk-taking entrepreneurs to make it work. Thus, the entrepreneur's principal contribution to the prosperity of a society is an idea that solves a problem. These ideas are then turned into the products and services that we consume, and the sum of those solutions ultimately represents the prosperity of that society. Capitalism's great power in creating prosperity comes from the evolutionary way in which it encourages individuals to explore the almost infinite space of potential solutions to human problems, and then scale up and propagate ideas that work, and scale down or discard those that don't. Understanding prosperity as solutions, and capitalism as an evolutionary problem-solving system, clarifies why it is the most effective social technology ever devised for creating rising standards of living…. If the true measure of the prosperity of a society is the availability of solutions to human problems, then growth cannot simply be measured by changes in GDP. Rather, growth must be a measure of the rate at which new solutions to human problems become available."

P.s., There are many other examples of business model discovery. The paper by Rita McGrath cited once before above (link in the notes) uses Google to make her points:

"Consider a business model category that we take for granted today – advertising-supported Internet searches. Text-based searching has been with us for decades, used primarily by organizations (such as libraries and police departments) equipped with electronic databases. When the Internet began to expand the amount of information available on line, new entrants promised a more organized way for users to find what they were looking for. The business model most early entrants tried was to be paid for the search itself, assuming that was what customers valued. In an early example (circa 1995), Infoseek tried to get customers to subscribe $9.95 per month for access to its search engines. Only later did players such as Yahoo! come up with the innovative idea of giving searches away for free in exchange for giving advertisers access to their visitors – and only later still did Google invent what is still regarded as the best algorithm for ranking web pages among the major search engines, creating a critical mass of searchers that would be attractive enough to advertisers to delivers the huge profits it enjoys today.

Without disparaging Google's accomplishments in any way, its current success stems from and builds upon the many previous experimental efforts made by preceding companies. Figure 2 illustrates how the experimental process of discovering a viable business model for Internet searching unfolded over a considerable time. Note that the model shifted conceptually as technological possibilities expanded e from transaction to subscription based models, to ones supported by advertising. And note also how the advertising-supported model

gives a first-mover advantage to a firm that is able to achieve critical mass, since it becomes more attractive to both searchers and thus advertisers.

A few points bear reinforcing:

- What often isn't recognized is that business model experimentation takes place *across* as well as *within* firms;
- Further, that business model evolution is highly path-dependent — early experiments often shape the trajectory for models yet to come;
- Finally, it is nearly impossible to tell in advance which design will win.

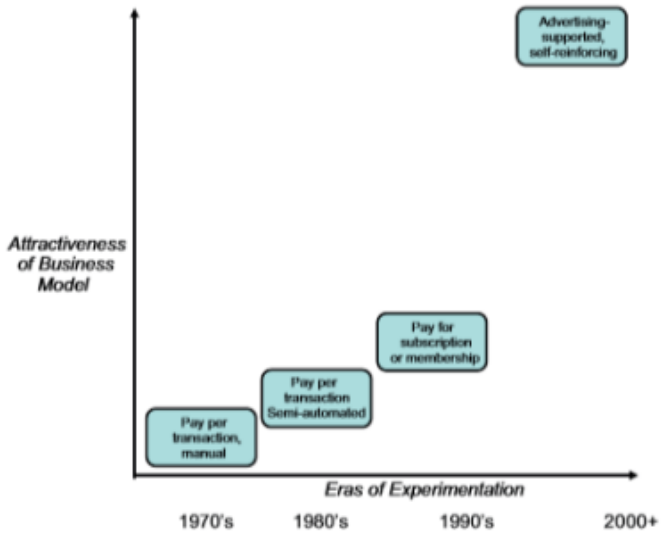

Figure 2. The Centrality of business model experimentation in searches

Notes:

My post on Steve Blank: https://25iq.com/2014/10/18/a-dozen-things-ive-learned-from-steve-blank-about-startups/

My Post on Eric Ries: https://25iq.com/2014/09/28/a-dozen-things-ive-learned-from-eric-ries-about-lean-startups-lattice-of-mental-models-in-vc/

The Mouse that Roared https://na01.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.sportsbusinessdaily.com%2FJournal%2FIssues%2F2008%2F03%2F20080310%2FSBJ-In-Depth%2FThe-Mouse-That-Roared.aspx%3Fhl%3DEdge%2520Marketing%26sc%3D0&data=02%7C01%7Ctgriffin%40microsoft.com%7C914a8a5af4174750993908d4be6dce47%7C72f988bf86f141af91ab2d7cd011db47%7C1%7C0%7C636342826203706034&sdata=sMa%2FXVWuvKYyH9hNZmRKAJDSGm%2F0LQZ%2FgMgayUeNGdU%3D&reserved=0

Starwave Takes the Web https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.fastcompany.com%2F27448%2Fstarwave-takes-web-

seriously&data=02%7C01%7Ctgriffin%40microsoft.com%7C914a8a5af4174750993908d4be6dce47%7C72f988bf86f141af91ab2d7cd011db47%7C1%7C0%7C636342826203706034&sdata=wDbFQg22UXC3w6vV5LtJDceT66qWW%2B6OhSetnZ0p%2Fr4%3D&reserved=0

Rita McGrath paper:
https://pdfs.semanticscholar.org/3f08/b47c049a84fb440caaf6ee3a44c0af4e3fef.pdf

Amazon Prime and other Subscription Businesses: How do you Value a Subscriber?

July 15, 2017

Businesses increasingly don't just sell products and services in a single transaction. Subscription and other businesses that focus on recurring sales have existed for a very long time. What is new is that many more businesses have adopted a subscription approach, which makes them look a lot more like a company in the the cable television business than an auto parts manufacturer.

Successfully implementing a subscription business model can be particularly hard since the customer acquisition cost (CAC) happens up front and the revenue appears over time. These subscription businesses have a revenue profile that is more like an annuity. This revenue profile is not like the manufacturer's business that many people learned about from a college introduction to accounting class. Unlike an annuity, the revenue stream of a subscription business is subject to risk, uncertainty and ignorance. The good news is that it is precisely because there is risk, uncertainty and ignorance that an opportunity for profit exists. The bad news is that it can be hard to capture. The reality is that if you do not capture this profit your competitors may do so.

Someone may ask: Why should I worry about this? Will it be on the test? The answer is: Yes and yes. Charlie Munger says it best: "The number one idea is to view a stock as an ownership of the business and to judge the staying quality of the business in terms of its competitive advantage. **Look for more value in terms of discounted future cash-flow than you are paying for.** Move only when you have an advantage." The text in bold in the Munger statement is critical with a subscription service like Amazon Prime- you can't understand the value of the business by looking at just one month or even a few months since it is lifetime value that matters.

Why are these new subscription businesses being created more often? The economics of a subscription business can be very favorable if you get it right. A lot of financial leverage can be generated if the customer does not need to be acquired repeatedly. Customer acquisition cost is lower for a well-run subscription business even though it is more front loaded. Yes, subscription business models can have more predictable revenues, but that is not caused by the tooth fairy. More predictable revenues are a byproduct of lower overall CAC and some operational approaches and investments in customer retention. The trade-off is that a

subscription business model can also be deadly if you get it wrong. Each of the key variables in a subscription business can be either: (1) many angels working together to build something wonderful, or (2) a pack of hungry wolves that can tear the business to shreds. Propelling more businesses to adopt a subscription business model is a simple truth: if your competitors or competitors get this model right your business may be doomed.

The benefits of this new way of doing business was chronicled well in the book *The Outsiders* by Thorndike. One of the major innovators of this way of doing business model was John Malone in the cable television industry. Here is John Malone talking about the model he used to build many of his businesses:

"We decided… to go on a cash flow metric very much like real estate. Levered cash flow growth became the mantra out here. A number of our eastern competitors early on were still large industrial companies — Westinghouse, GE, — and they were on an earnings metric. It became obvious to us that if you were going to be measured on earnings, it would be real tough to stay in the cable industry and grow." "I used to say in the cable industry that if your interest rate was lower than your growth rate, your present value is infinite. That's why the cable industry created so many rich guys. It was the combination of tax-sheltered cash-flow growth that was, in effect, growing faster than the interest rate under which you could borrow money. If you do any arithmetic at all, the present value calculation tends toward infinity under that thesis." "It's not about earnings, it's about wealth creation and levered cash-flow growth. Tell them you don't care about earnings.." "The first thing you do is make sure you have enough juice to survive and you don't have any credit issues that are going to bite you in the near term, and that you've thought about how you manage your way through those issues." "I used to go to shareholder meetings and someone would ask about earnings, and I'd say, 'I think you're in the wrong meeting.' That's the wrong metric. In fact, in the cable industry, if you start generating earnings that means you've stopped growing and the government is now participating in what otherwise should be your growth metric."

The more you understand about what John Malone has accomplished in his business the more you will understand what companies like Amazon are doing in their business.

To help entrepreneurs, shareholders and lenders understand whether a given business is generating what Charlie Munger called "more value in terms of discounted future cash-flow than it is paying for" it is more than useful to calculate what is known as "unit economics." I have written a post before about unit economics, but in this blog post I focus more on examples.

Bill Gurley sets the stage:

"[Understanding] the actual unit economics in the underlying business…requires analyzing the 'true' contribution margin of the business; not simply looking at gross or net revenue and the proper contra-revenue treatment, and not even looking just at gross margin as defined by the company. Many companies embed costs that are truly variable (for instance customer support, marketing, credit card processing) below the gross margin line. If you want to know if the business model truly hunts, you must pay careful attention. Otherwise, you may have simply found a company that is simply selling dollars for $0.85."

These five factors determine the "unit economics" of a business:

1. a customer acquisition cost (CAC);
2. an average revenue per user (ARPU);
3. a gross margin;
4. a customer lifetime (which is a function of customer retention/churn); and
5. a discount rate.

Let's work though a key sensitivity using a fictional example. Imagine there is a business with the name "Green Oven" that delivers the food components for cooking meals along with recipes (i.e., food Legos for adults). Assume Green Oven's unit economics look like this:

Average revenue per user (ARPU) per month – $110

Gross margin – 33%

Monthly customer churn – 18%

Customer acquisition cost (CAC) – $450

Discount rate – 10%

The lifetime value of a Green Oven Customer would look like this:

INPUTS	
CAC	$450.00
ARPU (per month)	$110.00
Churn (per month)	18.0%
Gross Margin	33%
Annual Discount Rate	10.00%
COGS (per month)	$73.70
Monthly Discount Rate	0.83%
Terminal value multiplier (months)	5.35
NPV	-$257.26
IRR	-119.24%

That set of numbers above obviously produces an ugly lifetime value. What would happen to Green Oven's unit economics if the rate of customer churn could be reduced to 7% a month?

INPUTS	
CAC	$450.00
ARPU (per month)	$110.00
Churn (per month)	7.0%
Gross Margin	33%
Annual Discount Rate	10.00%
COGS (per month)	$73.70
Monthly Discount Rate	0.83%
Terminal value multiplier (months)	12.87
NPV	$13.40
IRR	12.70%

Making this comparison (often called a sensitivity analysis) reveals that retention is an important factor for Green Oven. Another important sensitivity to model is the impact of a lower customer acquisition cost (CAC). Let's take it down to $300 and assume churn is 10% in another sensitivity calculation. The numbers look like this:

INPUTS	
CAC	$300.00
ARPU (per month)	$110.00
Churn (per month)	10.0%
Gross Margin	33%
Annual Discount Rate	10.00%
COGS (per month)	$73.70
Monthly Discount Rate	0.83%
Terminal value multiplier (months)	9.31
NPV	$35.08
IRR	25.20%

It is useful to play around with a lifetime value spreadsheet and do numerous sensitivity runs to get a "feel" for how the variables interact in a given business. In this case of the Green Oven the high CAC makes high churn a potential business killer. Green Oven needs to be laser focused on reducing CAC, so it can better handle churn.

When a business reports an input into lifetime value like CAC or churn it is often an average. That may hide the fact that there are big differences in the analysis by "cohort." A *cohort* is a collection of customers who share an attribute or set of attributes. For example, one type of a *cohort* is those customers who subscribed to a service in a given month.

Managing customer lifetime value for a business isn't simple as David Skok writes:

"If you're an early stage SaaS startup, still trying to get product/market fit, or experimenting with different ways to make your marketing and sales predictably repeatable and scalable, it is useful to play around with CAC and LTV to get a feel for where you are. But it's important to note that these formulae will only yield meaningful results when your sales and marketing process and costs are predictable and scalable. Instead of spending too much time obsessing over CAC and LTV, rather focus your energies on solving the problems of improving product market fit, and making your customer acquisition, repeatable, scalable and profitable.

My apologies that there are some complex looking formulae in this article. We have provided a summary below of the key concepts, and a link to jump straight to the spreadsheet to model your own LTV. For those interested in understanding the theory behind this model, we provide our usual detailed explanation below."

Making management of lifetime value is hard for an entrepreneur in no small part because the lifetime value variables change based on other factors like the sales channel used or geographic factors. A business can start out with very high CAC and then have it it drop over time (XM Sirius or Netflix) or have relatively low CAC and watch it rises over time (Blue Apron it appears). You can see the impact of these changes yourself by using Skok's spreadsheet in the link to perform your own sensitivity analysis.

Why might CAC drop? There are many possible reasons including improved core product value over time, less competition, a booming economy and rising incomes, or a better sales funnel. Spending money on a growth hypothesis before a value hypothesis is a classic way to suffer horrific churn. Nothing reduces churn more than a more delighted customer. Nothing makes it worse the an unhappy customer telling other people about their unhappiness.

1. "If the dogs don't want to eat the dog food, then what good is attracting a lot of dogs?" Andy Rachleff
2. "If you make customers unhappy in the physical world, they might each tell 6 friends. If you make customers unhappy on the Internet, they can each tell 6,000 friends." Jeff Bezos
3. "The key is to set realistic customer expectations, and then not to just meet them, but to exceed them – preferably in unexpected and helpful ways." Richard Branson

Why might CAC rise? There are many reasons this could happen including but not limited to greater competition, a recession, or the need to move into new market segments as the early mark segments become fully penetrated. Amy Gallo writes in a Harvard Business Review article:

"Often a high churn rate is the result of poor customer acquisition efforts. "Many firms are attracting the wrong kinds of customers. We see this in industries that promote price heavily up front. They attract deal seekers who then leave quickly when they find a better deal with another company…Before you assume you have a retention problem, consider whether you have an acquisition problem instead." "Think about the customers you want to serve up front and focus on acquiring the right customers. The goal is to bring in and keep customers who you can provide value to and who are valuable to you."

A cohort analysis might look like this when graphically presented (another David Skok example):

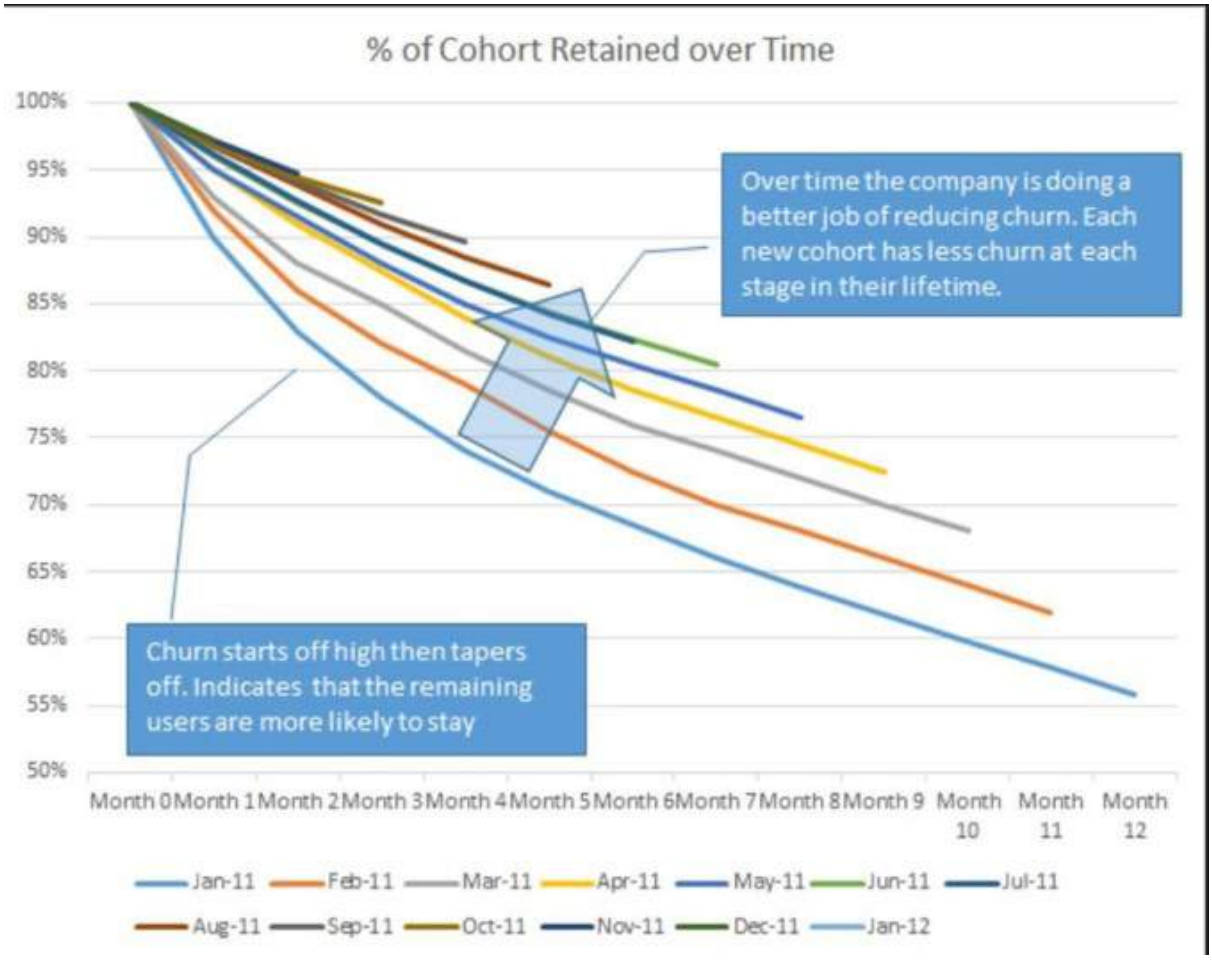

In the title of this blog post I said that I would explain how to value an Amazon Prime Subscriber. If you think about Amazon Prime as an annuity (i.e., in terms of lifetime value) it might look like this below:

Figure 12 AMZN: US Prime Member Valuation Analysis

	Prime	Non Prime	Memo
Membership fee	$8.39	$0.00	Assumes 95% of Prime subs are on annual $99 plan
Order Frequency / Month	3.5	2.3	Cowen Survey data - Aug '16
x Avg. Basket Size	$55	$60	Assume $147MM US GMV, 69MM purchasers ordering 3x/month per Aug '16 survey
= Monthly Spend	**$193**	**$138**	**Calc**
x Gross Margin	28%	30%	We estimate ~29% AMZN Gross Margin (x-AWS).
= Gross Profit / HH / month	**$54.67**	**$41.40**	**Calc**
+ Subscription / month	$8.39	$0.00	Cowen Estimates
- Fulfillment cost / month	$9.94	$11.05	Cowen Estimates - 60% of US fulfillment exp. allocated to Prime
- G&A cost / month	$1.13	$1.26	Cowen Estimates - 60% of G&A exp. allocated to Prime
= Pre-tax profit / HH / month	**$51.99**	**$29.09**	**Calc**
- Tax ($)	$15.60	$8.73	
= Post-tax Profit / HH / month	**$36.39**	**$20.37**	**Calc**
x Customer Life (months)	167		Cowen Estimate based on CIRP churn data
= PV Pre-Acq. Lifetime Value / HH	**$3,272**		**Calc**
- SAC	$312		Cowen Estimate
= Lifetime Value / HH	**$2,960**		**Calc; 10% Discount Rate**
x US Prime Members	48.6		Survey data
= Enterprise Value ($, BN)	**$143,833**		**Calc**
memo: Churn / Month	0.60%		Note: 91% Prime subs renews after Yr 1, 96% renew after Yr. 2, CIRP
memo: Avg. Annual HH Spend	$2,310	$1,656	Calc
memo: Discount rate	10%		Cowen Estimate
memo: AMZN Gross Margin (x-AWS)	29%		Cowen Estimate
memo: Tax rate	30%		Cowen Estimate
memo: Prime Penetration of HH	44%		Cowen Survey data - Aug '16
memo: Total Addressable HH's	109.7		Cowen Estimate
memo: Prime Penetration of AMZN Purchasers	58%		Cowen Survey data - Aug '16
memo: Total AMZN US Purchasers	68.6		Cowen Survey data - Aug '16

Source: Cowen and Company; Cowen proprietary Consumer Tracking Survey, n=~2500, August 2016

This LTV calculation for Amazon Prime is based on one set of assumptions by one analyst based on incomplete information. The assumptions for Prime used by this analyst are:

ARPU: $193 a month

SAC: $312

Gross margin 29%

Churn 0.6% (customer life 167 months or ~14 years)

Discount rate 9%

You can use your own variables and David Shok's spreadsheet (or your own) in conducting a lifetime value analysis rather than relying on Cowen. Not looking at lifetime value at all is a huge mistake. A company like Amazon is not understandable if you believe its business model is similar to the steel manufacturer you learned about in your introduction to accounting class. Trying to value Amazon's Prime business with a P/E ratio is like trying to open a can of corn with a pickle.

An investor can pretend they do not need to do this lifetime value math, but the result will not be pleasant. Peter Lynch famously said that an investor who does not do research is like a poker player who does not look at the cards. To understand the value of the stock of a company that is using a subscription business model you need to understand the business and you can't understand a business like Amazon without doing this lifetime value math. I will be writing more on subscription business models in subsequent blog posts.

Notes:

Bill Gurley http://abovethecrowd.com/2015/02/25/investors-beware/

David Skok: http://www.forentrepreneurs.com/ltv/

Amy Gallo: https://hbr.org/2014/10/the-value-of-keeping-the-right-customers

My blog post on the book *The Outsiders*: https://25iq.com/2014/05/26/a-dozen-things-ive-learned-about-great-ceos-from-the-outsiders-written-by-william-thorndike/

My previous post on Unit Economics: https://25iq.com/2016/12/31/a-half-dozen-ways-to-look-at-the-unit-economics-of-a-business/.

My previous post on CAC: https://25iq.com/2016/12/09/why-is-customer-acquisition-cost-cac-like-a-belly-button/

My previous post on churn: https://25iq.com/2017/01/27/everyone-poops-and-has-customer-churn-and-a-dozen-notes/

A few links

On churn:

https://www.ngdata.com/what-is-customer-retention/

https://hbr.org/2014/10/the-value-of-keeping-the-right-customers

On "Green Oven" comps:

https://www.linkedin.com/pulse/detailed-look-blue-aprons-challenging-unit-economics-daniel-mccarthy

https://medium.com/@nbt/how-blue-apron-compares-to-other-subscriptions-in-one-graph-6404a74ccf2d

https://medium.com/startup-traction/blue-apron-s-1-meals-on-your-doorstep-923499bcaf45

http://www.slate.com/blogs/business_insider/2017/06/30/blue_apron_customer_retention_low.html

A Dozen Lessons on Investing from Ed Thorp

July 22, 2017

"Edward O Thorp is the author of Beat the Dealer, which was the first book to prove mathematically that blackjack could be beaten by card counting, and Beat the Market, which showed how warrant option markets could be priced and beaten. He also was the co-inventor of the first wearable computer along with Claude Shannon. Thorp also pioneered the use of

quantitative investment techniques in the financial markets (Option Arbitrage, Warrant Modeling, Convertible Arbitrage, Index Arbitrage and Statistical Arbitrage)."

Thorp speaks clearly and from the heart. He reminds me of that other ultra rational decision maker Charlie Munger. Despite his prodigious intellectual gifts Thorp remains grounded and approachable. A few sentences reveals his gift for communication which reminds me of Michael Mauboussin:

"My life has been an adventurous journey I thought readers would enjoy my stories of the people I met and the challenges I faced." "Chance can be thought of as the cards you are dealt in life. Choice is how you play them." "A lot of big choices that you make at some point or other, and then there are things that you can't control like who your parents were, and what kind of economic circumstances you were brought up in, where you started. Did you start 20 yards behind the start line or 20 yards ahead of it, or right on it? People start in different places. Those are cards that are dealt."

Set out below are usual twelve lessons I have learned from Thorp:

1. **"Try to figure out what your skill set is and apply that to the markets. If you are really good at accounting, you might be good as a value investor. If you are strong in computers and math, you might do best with a quantitative approach." "If you aren't going to be a professional investor, just index."**

Thorp likes to stay within his circle of competence. This is a hallmark of people who are rational. In that sense, Thorp reminds me of Warren Buffett. But unlike Buffett, Thorp did not make his fortune in the market by analyzing businesses and instead found his special competency in statistical arbitrage, which he more or less invented. Thorp was able to successfully take his considerable mathematical and intellectual gifts and apply them in an area where he has a significant advantage.

2. **"The way I sized up the Ben Graham approach was that it would be a total lifetime of effort. It was all I would be doing. Warren demonstrated that. He's the champion of champions. But if I could go back and trade places with Warren, would I do it? No. I didn't find visiting companies something I wanted to do. I never even thought about finance until I was 32."**

Thorp also decided early in life to get in the side car of other people who have a different competitive advantage. He invested in Berkshire when the stock was trading at $982 and still hold those shares today. When Buffett was winding up his partnership he was asked to do some due diligence on Thorp as an investor by a mutual friend. That chain of events resulted in Thorp and his wife playing bridge with Buffett in 1968. Thorp described the meeting: "The Gerards invited my wife Vivian and I to dinner with Warren and his charming blonde wife Susie. Impressed by Warren's mind and his methods, as well as how far he'd already come, I told Vivian that he would eventually become the richest man in America. A mutual friend talked recently with Warren, who spoke warmly of our meetings, of *Beat the Dealer* and *Beat the Market*, and of non-transitive dice."

Speaking of impressive mental calculation, Barry Ritholz recently interviewed Thorp and watched him calculate his return on his Berkshire shares in his head. Thorp is the sort of

person who taught himself FORTRAN so he would create his card counting techniques for Blackjack on an IBM 704 mainframe. The number of things Thorp taught himself is astounding.

It is a good thing to remember that you are not Ed Thorp, Warren Buffett or Charlie Munger and neither and I. If you have similar mathematical gifts as Ed Thorp or Buffett, good for you. I do not have them. Even if you have those mathematical gifts, are you are rational as Thorp? Do you have control of your ego sufficiently to stay within your circle of competence?

3. **"The first group of investors are those who do not want to do a lot of work who should invest in indexes. Index investors do better than maybe 90% of all other investors who are busy paying fees to advisers." "The second group are those who would like to learn more about securities. They are entertained by following and analyzing securities. I think they can learn about special, unusual things although there is a price for that education. [They are] interested in the market, and it's kind of fun for them. Those people if they want to learn more should go out and have their go at trying to make some money, but they shouldn't use the bulk of their resources to do this. If they find something that really works then they can start putting more money into it. They'll find that most of the time they haven't really found anything that really works." "The third group, which are the professional people some of whom actually get an edge. Most of whom don't, but some of whom do. Those people get a start somehow in the market just like I got a start with an option's formula, so I have an edge. I get in. I build an organization, which is small, and it gradually grows. It gets more and more skills. It gets into more and more kinds of investing. You, basically, get over the hurdle and get yourself established. If you can do that as a professional then you're kind of on your way to collecting what people call Alpha, excess return. Then there's the fourth group, which I don't have much interest in, and those are the ones who are simply asset gatherers. They're in there to collect fees and get rich, but there's nothing really very interesting in what they do."**

In which category do you fit? Do you enjoy learning a lot about businesses? Are you willing to devote many hours a day to researching businesses? Have you tried picking stocks with a small portion of your assets and carefully tracked results to see if you are any good at it?

4. **"[Slot machines are] the most moronic devices ever, one of the stupidest activities of humankind. People play negative-expectation games. That's something I'm not willing to do. I've never even bought a lottery ticket." "The first thing people who have control do is tilt the playing field. Maybe the majority of wealth is accumulated because of tilted playing fields. Not because of merit." "In standard gambling games in casinos you can generally calculate what the casino's edge is, or if you figure out how to count cards you can calculate what your edge over the casino is. It's a fact, a mathematical fact, that if you play a game like this and the casino has the edge it will eventually collect all your money if you play long enough. On the other hand, if you have an edge your bankroll will grow and grow and grow. Basically, what happens is your bankroll either grows or shrinks depending on what your edge is or what your disadvantage is. There's luck that**

pushes it up and down around that growth curve. That's the way things look in the gambling world."

If you look carefully at what Thorp has accomplished with his funds he was not gambling if you define it as a "negative net present value" activity (which you should). Thorp only invested when he had a statically generated advantage or as he calls it "an edge." I have never bought a lottery ticket either. I would rather drop a large rock on my toe than gamble.

5. **"The overlap of interest between gambling and the stock market is very high. There are so many similarities and so much one can teach you about the other. Actually, gambling can teach you more about the stock market than the other way around. Gambling provides an analytically simpler world, and you can see principles and test theories." "I chose to investigate blackjack." "I was lucky in that I came at investments through blackjack tables. And the blackjack tables are an amazingly good training ground for learning how to invest, how to think about investments, how to manage them. And the reason is that they teach you, on the one hand, to use probability and statistics to evaluate things. And on the other, they teach you discipline. When you find something, you stick to it. "Most of the games, whatever happens on one trial or one play of the game doesn't have any influence on what's going to happen next. I realized that in a minute or two that if cards were used up during the play of the game, the odds would shift back and forth – sometimes for the casino, sometimes for me." "Say a blackjack player is dealt a ten and a six, while the dealer's showing a ten. You can calculate that situation, and anyone who's played any cards knows you're 'supposed' to hit. But what if your 16 is comprised of two fours and four twos? In a deck that's ten rich, it's a definite stand." "Beating the blackjack tables by keeping track of the cards was, though I didn't realize it until later, a preparation without equal for successful investing. When I had the edge, I bet big, but not so big as to risk going broke. When the cards favored the casino, I played defense, to limit my losses. The same approach worked on Wall Street: the bigger my edge, the more I bet and the greater the risk the more cautious I was. Gambling and investing are alike – in both you risk money, which you then may win or lose."**

Again, the comparison to the methods of Charlie Munger is easy. Munger has said: "Life in part is like a poker game, wherein you have to learn to quit sometimes when holding a much loved hand….Playing poker in the Army and as a young lawyer honed my business skills … What you have to learn is to fold early when the odds are against you, or if you have a big edge, back it heavily because you don't get a big edge often."

6. **"One of the early things that I learned, fortunately, which was how much to bet on good situations. If you bet too much you're likely to be wiped out. If you bet too little it takes forever to make any money, so there's a happy medium." "You have to make sure that you don't over-bet. Suppose you have a 5% edge over your opponent when tossing a coin. The optimal thing to do, if you want to get rich, is to bet 5% of your wealth on each toss — but never more. If you bet much more you can be ruined, even if you have a favorable situation. It's a formula Bell Labs scientist John Kelly devised in the 1950s for maximizing the long-term growth rate of capital. It tells you how to allocate your money among the choices available, and**

how much to invest as your edge increases and the risk decreases. It also avoids the over-betting that can ruin an investor who otherwise has an edge." "There are, however, safer paths that have smaller draw downs and a lower probability of ruin. If you bet half the Kelly amount, you get about three-quarters of the return with half the volatility. I believe that betting half Kelly is psychologically much better…. sometimes the dealer will cheat me. So the probabilities are a little different from what I calculated because there may be something else going on in the game that is outside my calculations. Now go to Wall Street. We are not able to calculate exact probabilities in the first place. In addition, there are things that are going on that are not part of one's knowledge at the time that affect the probabilities. So you need to scale back to a certain extent because over betting is really punishing—you get both a lower growth rate and much higher variability. Therefore, something like half Kelly is probably a prudent starting point. Then you might increase from there if you are more certain about the probabilities and decrease if you are less sure about the probabilities." "In the last 15 years or so, there has been a large flow of capital into the hedge-fund world, from $100 billion in the early 1990s to $2 trillion now. But the amount of available investing opportunities hasn't increased that much. That has led to the over-betting phenomenon [which can result in] gambler's ruin."

I remember when I first started reading about the Kelly criterion in books and essays written by Robert Hagstrom and Michael Mauboussin. It was a revelation. Imagine how cool it would have been to be a fly on the wall when Thorp and Claude Shannon were having conversations at MIT. Or learning and debating with Richard Feynman. Thorp has had such an interesting life, but the idea of he and Shannon developing the world's first wearable computer to beat casinos at roulette is Ocean's Eleven type stuff. In a paper detailing the shenanigans Thorp writes:

"The final operating version was tested in Shannon's basement home lab in June of 1961. The cigarette pack sized analog device yielded an expected gain of +44% when betting on the most favored "octant." The Shannons and Thorps tested the computer in Las Vegas in the summer of 1961. The predictions there were consistent with the laboratory expected gain of 44% but a minor hardware problem deferred sustained serious betting. We kept the method and the existence of the computer secret until 1966."

Thorp was smart and rational enough to have avoided the gambler's ruin that caught Long Term Capital Management. Elliot Turner describes a talk Thorp gave at Sante Fe Institute:

"Thorp described their strategy as the anti-Kelly. The problem with LTCM, per Thorp, was that the LTCM crew 'thought Kelly made no sense.' The LTCM strategy was based on mean reversion, not capital growth, and most importantly, while Kelly was able to generate returns using no leverage, LTCM was 'levering up substantially in order to pick up nickels in front of a bulldozer.'"

Turner also notes: "It's been mentioned that both Warren Buffett and Charlie Munger discussed Kelly with Thorp and used it in their own investment process."

7. **"I think inefficiencies are there for the finding, but they are fairly hard to find." "Markets are mostly good at predicting outcomes, but very bad at**

anticipating black-swan events." "When people talk about efficient markets they think it's a property of the market, but I think that's not the way to look at it. The market is a process that goes on, and we have depending on who we are different degrees of knowledge about different parts of that process."

Thorp's track record as an investor makes a mockery of anyone who believes in the hard version of the efficient market hypothesis. Elliot Turner gives summary of Torp's approach and results as a hedge fund manager:

"In 1974, Thorp started a hedge fund called Princeton/Newport Partners [which] used warrants and derivatives in situations where they had deviated from the underlying security's value. Each wager was an independent wager, and all other exposures, like betas, currencies and interest rates were hedged to market neutrality. Princeton/Newport earned 15.8% annualized over its lifetime, with a 4.3% standard deviation, while the market earned 10.1% annualized with a 17.3% standard deviation (both numbers adjusted for dividends). The returns were great on an absolute basis, but phenomenal on a risk-adjusted basis. Over its 230 months of operation, money was made in 227 months, and lost in only 3."

9. **"When the interests of the salesmen and promoters differ from those of the client, the client had better look out for himself."**

Thorp knows that you should never ask a barber if you need a haircut. There are few things as powerful in human affairs as incentives. Both at a personal level and in society as a whole, incentives are the dominant cause of outcomes. The more you understand the impact of incentives, the more you understand life.

10. **"When there's money and not full accountability, whether it's in casinos or on Wall Street, there's going to be stealing and cheating." "My book tells how you have to be aware of cheating in both of these worlds. At blackjack, it can be marked cards, second-dealing, or a stacked deck. On Wall Street, it can be Ponzi schemes and other frauds, such as insider trading, fake news, or stock price manipulation. Mathematically, the biggest difference is that the odds can be figured exactly or approximately for most gambling games, whereas the numbers are usually far less certain in the securities markets."**

Munger not surprisingly agrees with Thorp: "Where you have complexity, by nature you can have fraud and mistakes. The cash register did more for human morality than the Congregational Church. It was a really powerful phenomenon to make an economic system work better, just as, in reverse, a system that can be easily defrauded ruins a civilization." One of the reasons Thorp uses a fractional Kelly approach is that it provides some protection against fraud.

11. **"Most stock-picking stories, advice and recommendations are completely worthless." "Sell down to the sleeping point. As far as asset classes go, it is hard to know when you are in a bubble, and if you are in one, when it will pop." "I read a good book recently, Superforecasting by Dan Gardner and Philip Tetlock. They wanted to see whether people can forecast better than chance. What they found is that experts often do not have much to tell us things of value. Experts receive a lot of media attention because they make strong, definite claims. But definitive claims**

are usually not accurate predictions; we can only see the future fuzzily. People that tend to weigh different possibilities can make somewhat better predictions than chance."

The most effective way to learn this lesson is the same way you learn not to touch a hot stove as a child. But the better way is to watch someone else do it. "Just say no" to stock tips. Bernard Baruch described why stock tops are so appealing to some people in this way:

"Beware of barbers, beauticians, waiters – of anyone – bringing gifts of 'inside' information or 'tips'. The longer I operated in Wall Street the more distrustful I became of tips and 'inside' information of every kind. Given time, I believe that inside information can break the Bank of England or the United States Treasury. A man with no special pipeline of information will study the economic facts of a situation and will act coldly on that basis. Give the same man inside information and he feels himself so much smarter than other people that he will disregard the most evident facts."

12. **"People say, 'Gee, what if your Berkshire goes down?' I say, 'Oh, that's good because now I can buy more'" They say, 'But what if it goes up?' I say, 'Well, that's good too because I feel good because I feel suddenly richer.' So let it go up or let it go down. I don't care."**

This statement by Thorp is a variant of a point Warren Buffett likes to make:

"This is the one thing I can never understand. To refer to a personal taste of mine, I'm going to buy hamburgers the rest of my life. When hamburgers go down in price, we sing the "Hallelujah Chorus" in the Buffett household. When hamburgers go up, we weep. For most people, it's the same way with everything in life they will be buying–except stocks. When stocks go down and you can get more for your money, people don't like them anymore."

P.s.,

1. At the 2017 Daily Journal of Commerce annual meeting Charlie Munger recommended *Thorp's* autobiography *A Man For All Markets.* Thorp tells this story about attending a Berkshire meeting in Omaha:

"Saturday night we were back at Gorat's! The price of the T-bone dinner we had Friday was, as a "special for shareholders," now $3 more! Charlie Munger reluctantly 'worked' the room we were in and I mentioned to him a tale I'd heard about his youth. Charlie had gone to Harvard Law School and, when a friend of mine got his degree there a few years later, he found that Charlie was a legend – with many saying he was the smartest person ever to have attended. As a first year student Charlie was said to have regularly intimidated professors in the classroom. While autographing my menu, Charlie said (perhaps sadly) 'That was a long time ago … a long time ago.'"

2. "Warren Buffett once challenged Bill Gates to a game of dice. 'Buffett suggested that each of them choose one of the dice, then discard the other two. They would bet on who would roll the higher number most often. Buffett offered to let Gates pick his die first. This suggestion instantly aroused Gates' curiosity. He asked to examine the dice, after which he demanded

that Buffett choose first." Buffett was using a set of non-transitive dice! An explanation of these dice is here: https://www.microsoft.com/en-us/research/project/non-transitive-dice/

"From "Fortune's Formula", by William Poundstone 2005:

"The dean of UC Irvine's graduate school, Ralph Gerard, happened to be a relative of legendary value investor Benjamin Graham. Gerard was then looking for a place to put his money because his current manager was closing down his partnership. Before commiting any money to Thorp, Gerard wanted his money manager to meet Thorp and size him up. "The manager was Warren Buffett. Thorp and wife [Vivian] met Buffett and wife for a night of bridge at the Buffetts' home in Emerald Bay, a community a little down the coast from Irvine. Thorp was impressed with Buffett's breadth of interests. They hit it off when Buffett mentioned nontransitive dice, an interest of Thorp's. These are a mathematical curiosity, a type of "trick" dice that confound most people's ideas about probability."

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A Dozen Lessons about Business and Investing from Poker

July 29, 2017

You can't write about the relationship between games and investing without quoting Michael Mauboussin. I will do so often in this post. He is the master. Read his books. All of them. Then read them again.

Set out below are the usual dozen lessons you can learn from poker:

1. **"Poker is a game where you don't have to have the best hand to win. Poker is really reading other people and reading human emotion, which certainly comes into play in business." Charlie Ergen**

One of the stories people tell about Charlie Ergen is how he was a blackjack card counter before he created the DISH satellite television business. One part of the lore about his poker playing is this anecdote:

"In 1980, a few months before Charlie Ergen co-founded the company that would become Dish Network, he and a gambling buddy strode into a Lake Tahoe casino with the intention of winning a fortune by counting cards. Ergen, then 27, had bought a book called *Playing Blackjack as a Business* and studied the cheat sheets. Unfortunately for him, a security guard caught his pal lip-syncing numbers as the cards were dealt. The two were kicked out and subsequently banned from the casino."

Ergen knows the smartest business people and investors don't really "gamble" (a net present value negative activity) since their intent is to bet only when the odds are substantially in their favor (i.e., a net present value activity). Ergen understands this distinction since he has the same outlook as Steve Crist of the Daily Racing form:

"A good litmus test for someone being a liar and an idiot is if someone ever tells you, 'I am really good at roulette,' or 'I win at craps," or 'I have a system for beating the slot machines.' There is no such thing. These are games with fixed percentages. The casino might as well attach a leach to your forehead when you walk in the door because the longer you stay, the more you will lose, except for short-term, meaningless fluctuations. The exceptions to [the previous] rule are blackjack and poker. If you count cards diligently in blackjack, you can get

a 1.5 percent edge over the house. Casinos, of course, don't get built by players having edges, so the casinos will eject you if they figure out that you're counting cards."

The best example of what essentially was poker playing I have even seen in business is how Bill Gates managed Microsoft's relationship with IBM and took them to the cleaners. Gates said in 1993:

"We would have been glad at sometime to sell IBM part of the company. We even proposed to IBM that they buy part of Microsoft– I think it was 30%– and they turned us down. At every stage of our relationship, they had project groups doing work to wipe us out. We stayed ahead, but it wasn't simple." Computerworld, May 24

This story has never been properly told. If someone does write an accurate account someday, it will convey poker playing skills at the highest level. The relationship wasn't just a dumb lumbering IBM not understanding software (although there were elements of that). IBM was actively engaged in a campaign to "wipe out" Microsoft. Gates played hand after hand against IBM in this business poker game and won every time. The OS/2 era alone is worthy of an entire master class in business strategy.

2. "If there weren't luck involved, I would win every time." Phil Hellmuth

There is no substitute for a sound process in an activity like investing. When playing poker you can make a wise decision and still lose or make a terrible decision and still win. As Michael Mauboussin writes: "If you compete in a field where luck plays a role, you should focus more on the process of how you make decisions and rely less on the short-term outcomes. The reason is that luck breaks the direct link between skill and results—you can be skillful and have a poor outcome and unskillful and have a good outcome. A good process can lead to a bad outcome in the real world, just as a bad process can lead to a good outcome. In other words, both good and bad luck can play a part in investing results. But the best investors and business people understand that over time a sound process will outperform." Over a shorter period of time, luck can fool you into believing that someone has skill or good judgement. On this point I have always liked this 1993 quote from Bill Gates on luck: "The notion that people who have been lucky enough to make a lot of money know something or are worth listening to is a risky proposition." Chicago Tribune, October 24.

Luck of course is at the root of what poker players calls a bad beat. There are many stories one of them is:

Amateur Hal Fowler made the final table of the 1979 Main Event. Despite being short-stacked and surrounded by some of the best professionals in the game including Johnny Moss and Bobby Baldwin, Fowler had survived hand after hand to get heads-up with seasoned rounder Bobby Hoff. After playing for over five hours, Fowler had ground out a slight chip lead over Hoff when this legendary hand came up, Hoff raising from the button with A♣ A♥ and Fowler calling with 7♠ 6♦ from the big blind. The flop came down J♠ 5♥ 3♣ and Hoff led out for a 40,000 bet into the 76,000 pot. Despite having flopped only a gutshot straight draw, Fowler decided to call. Then, like manna from heaven, the 4♠ hit the turn, making Fowler a seven-high straight. Hoff moved all in for his remaining 43,000 and Fowler quickly called. The cards weren't immediately turned over back then, and both players waited until the dealer put the 10♦ on the river to show their hands. Hoff slapped his aces on the table only to see that the bracelet had just slipped through his hands with the turn of a single card.

3. "On any given day a good investor or a good poker player can lose money." David Einhorn

Mauboussin tells this story about poker: **"**Jim Rutt, who used to be the CEO of Network Solutions. He talked about playing poker when he was a young man.By day, he would learn about the different probabilities, and look for poker tells and pot odds, and all this stuff, and by night he would play. He played in progressively tougher games, and won some, lost a little. Eventually, his uncle pulled him aside and said, "Jim, it's time to be less worried about getting better, and more worried about finding easy games."

Mauboussin tells another story to illustrates this point:

"[A baseball executive] was in Las Vegas sitting next to a guy who has got a 17. So the dealer is asking for hits and everybody knows the standard in blackjack is that you sit on a 17. The guy asked for a hit. The dealer flips over 4, makes the man's hand, right, and the dealer sort of smiles and says, "Nice hit, sir?" Well, you're thinking nice hit if you're the casino, because if that guy does that a hundred times, obviously the casino is going to take it the bulk of the time. But in that one particular instance: bad process, good outcome. If the process is the key thing that you focus on, and if you do it properly, over time the outcomes will ultimately take care of themselves. In the short run, however, randomness just takes over, and even a good process may lead to bad outcomes. And if that's the case: You pick yourself up. You dust yourself off. You make sure you have capital to trade the next day, and you go back at it."

4. **"Ain't only three things to gambling: knowing the 60-40 end of the proposition, money management, and knowing yourself. Any donkey knows that." Puggy Pearson**

This statement from Puggy Pearson is one of the favorite quotes of Michael Mauboussin who wrote one of his many essays specifically on Pearson." In that essay Mauboussin explain's what Pearsin means:

"Pearson's message may be colloquial, but that in no way undermines its power. We can express the ideas more formally, and readily draw out critical investment concepts. Taken together, Pearson's points indeed provide a strong foundation for investment success. The core of Pearson's point is that investors should seek financial opportunities that have a

positive expected value. A positive expected value opportunity has an anticipated benefit that exceeds the cost, including the opportunity cost of capital. Not all such financial opportunities deliver positive returns, but, over time, a portfolio of them will. So how should investors seek such opportunities? First off, investors must understand their source of competitive advantage. Markets reflect the collective expectations of investors, and embody more information than any individual can hope to have. An investor with a competitive advantage knows something that the market doesn't—based either on superior information or on superior analysis of known information. An investment is attractive if it trades below its expected value. Expected value, in turn, is a function of potential value outcomes and the probability of each outcome coming to pass. Investing is fundamentally a probabilistic exercise, and leading investors always think in probability terms. In Pearson's words: 'I believe in logics. Cut and dried. Two and two ain't nothing in this world but four. But them suckers always think it's somethin' different. I play percentages in everything.' Investing is the constant search for asymmetric payoffs, where the upside opportunity exceeds the downside risk. Ben Graham described margin of safety as buying an investment for less than what it is worth. The larger the discount, the greater the margin of safety. That's knowing the 60-40 end of a proposition."

My blog post last weekend on Ed Thorp has loads of great material on the Kelly criterion. I win't repeat that here other than to repeat two sentences from Thorp which make the key points: "If you bet too much you're likely to be wiped out. If you bet too little it takes forever to make any money, so there's a happy medium."

5. **"Coming out ahead at poker requires that I win a lot on my winning hands and lose less on my losers. But insisting that I'll never play anything but 'the nuts' – the hand that can't possibly be beat – will keep me from playing lots of hands that have a good chance to win but aren't sure things. For a real-life example, Oaktree has always emphasized default avoidance as the route to outperformance in high yield bonds. Thus our default rate has consistently averaged just 1/3 of the universe default rate, and our risk-adjusted return has beaten the indices. But if we had insisted on – and designed compensation to demand – zero defaults, I'm sure we would have been too risk averse and our performance wouldn't have been as good. As my partner Sheldon Stone puts it, 'If you don't have any defaults, you're taking too little risk.'" Howard Marks**

My blog posts on Howard Marks are here and here. In his book *Margin of Safety,* Seth Klarman writes:

"Most investors strive fruitlessly for certainty and precision, avoiding situations in which information is difficult to obtain. Yet high uncertainty is frequently accompanied by low prices. By the time the uncertainty is resolved, prices are likely to have risen. Investors frequently benefit from making investment decisions with less than perfect knowledge and are well rewarded for bearing the risk of uncertainty. The time other investors spend delving into the last unanswered detail may cost them the chance to buy in at prices so low that they offer a margin of safety despite the incomplete information."

Sometimes the right result is found through trial an error. At other times intelligence and observation are the key factors. There is also luck involved of course and a keen

understanding of human nature. In their famous book *In Search of Excellence* Tom Peters and Bob Waterman write:

"There is a quality in experimentation as a corporate mind set that resembles nothing so much as a game of stud poker. With each card, the stakes get higher and with each card, you know more, but you never really know enough until the last card has been played. The most important ability in the game is knowing when to fold."

As an example of business people making big bets, here are Bill Gates and Steve Jobs talking about a big bet made by Apple and a simultaneous big bet by Microsoft:

"Bill: One of the most fun things we did was the Macintosh and that was so risky. People may not remember that Apple really bet the company. Lisa hadn't done that well, and some people were saying that general approach wasn't good, but the team that Steve built even within the company to pursue that, even some days it felt a little ahead of its time–I don't know if you remember that Twiggy disk drive and…

Steve: 128K.

Bill: The team that was assembled there to do the Macintosh was a very committed team. And there was an equivalent team on our side that just got totally focused on this activity. Jeff Harbers, a lot of incredible people. And we had really bet our future on the Macintosh being successful, and then, hopefully, graphics interfaces in general being successful, but first and foremost, the thing that would popularize that being the Macintosh….We made this bet that the paradigm shift would be graphics interface and, in particular, that the Macintosh would make that happen with 128K of memory, 22K of which was for the screen buffer, 14K was for the operating system.

Steve: What's interesting, what's hard to remember now is that Microsoft wasn't in the applications business then. They took a big bet on the Mac because this is how they got into the apps business. Lotus dominated the apps business on the PC back then."

6. **"It's very important for most people to know when not to make a bet, because if you're going to come to the poker table, you're going to have to beat me, and you're going to have to beat those who take money. So, the nature of investing is that a very small percentage of the people take money, essentially, in that poker game, away from other people who don't know when prices go up whether that means it's a good investment or if it's a more expensive investment." Ray Dalio**

Many people agree with these points made by Dalio, including these three famously successful people:

Warren Buffett: "The important thing is to keep playing, to play against weak opponents and to play for big stakes." "If you've been playing poker for half an hour and you still don't know who the patsy is, you're the patsy."

Charlie Munger: "For a security to be mispriced, someone else must be a *damn fool*. It may be bad for the world, but *not bad for Berkshire*." Charlie Munger was once asked who he was most thankful for in all his life. He answered that he was as most thankful for his wife

Nancy's previous husband. When asked why this was true he said: "Because he was a drunk. You need to make sure the competition is weak."

Tony Hseih of Zappos: "An experienced player can make ten times as much money sitting at a table with nine mediocre players who are tired and have a lot of chips compared with sitting at a table with nine really good players who are focused and don't have that many chips in front of them. In business, one of the most important decisions for an entrepreneur or a CEO to make is what business to be in. It doesn't matter how flawlessly a business is executed if it's the wrong business or if it's in too small a market."

7. **"One of the best antidotes to this folly is a good poker skill learned young. The teaching value of poker demonstrates that not all effective teaching occurs on a standard academic path." "Part of what you must learn is how to handle mistakes and new facts that change the odds. Life, in part, is like a poker game, wherein you have to learn to quit sometimes when holding a much loved hand." "Playing poker in the Army and as a young lawyer honed my business skills. What you have to learn is to fold early when the odds are against you, or if you have a big edge, back it heavily because you don't get a big edge often. Opportunity comes, but it doesn't come often, so seize it when it does come." "And the wise ones bet heavily when the world offers them that opportunity. They bet big when they have the odds. And the rest of the time they don't. It's just that simple." Charlie Munger**

A simple point Munger makes again and again is that understanding probability and statistics is essential in both card playing and investing. Munger bets big when he sees a situation that is "net present value positive" over time after fees and expenses. Bets that are net present value negative are avoided. Amarillo Slim has a view that is similar to Munger: "I like to bet on anything—as long as the odds are in my favor….there are people who love action and others who love money. The first group is called suckers, and the second is called professional gamblers, and it was a cinch which one I wanted to be." Here's a story about Slim putting that principle to work:

"Bobby Riggs, the 1939 Wimbledon Tennis Champion tried to hustle Amarillo Slim in Ping Pong. Riggs was looking to bust Slim's skinny ass. Slim tells the story, "I told Riggs I would play him in Ping Pong straight up with *one* stipulation: that I got to choose the paddles. "We both use the same paddle?" Bobby asked. "Yessir." "So when you show up with two of the *same* paddles, can I get my choice of which one of them?" "Yessir, so long as I can bring the paddles." Bobby thought I was pulling a schoolboy's scam—that it was a weight thing or that one of the paddles was hollow or something. But once I told him that he could choose whichever of the two paddles he wanted to use, he couldn't post his money fast enough. We bet $10,000 and agreed to play at two o'clock the next day. Before I left, just to avoid any misunderstanding, I confirmed the bet: We were to play a game of Ping Pong to twenty-one, each using the paddles of *my* choosing. I showed up the next day at the Bel Air Country Club ready to wage battle. When Bobby asked to see the paddles, I reached into my satchel and handed him two skillets, the exact same weight and size, and told him he could use either one. Now, Bobby was about as coordinated an athlete that ever lived, but he was swinging that skillet like a fry cook on speed. It wasn't until I had him buried that he started to get the hand of that skillet, but it wasn't soon enough. I won the game 21-8, and it could have been much worse. Once again I proved that you can make a living beating a champion just by using your head instead of your ass. The easiest person in the world to hustle is a hustler, and

Bobby had taken the bait like a country hog after town slop. You see, I had been practicing with that skillet since I saw him in Houston."

8. **"Poker is a lot like sex, everyone thinks they are the best, but most people don't have a clue what they are doing." Dutch Boyd**

Overconfidence is one of many behavioral biases that can trip up a poker player or investor. Charlie Munger likes to use this example to explain this bias: "A careful survey in Sweden showed that 90 percent of automobile drivers considered themselves above average. And people who are successfully selling something, as investment counselors do, make Swedish drivers sound like depressives." Munger is talking about investing here but he may as well have been writing about poker: "The primary problem with this bias is that people who should be buying index funds think they can be successful active investors. Munger has said: "Most people who try don't do well at it. But the trouble is that if even 90 percent are no good, everyone looks around and says, 'I'm the 10 percent.'"

9. **"In poker, a player collects different pieces of information—who's betting boldly, what cards are showing, what this guy's pattern of betting and bluffing is—and then crunches all that data together to devise a plan for his own hand." Bill Gates**

When Bill Gates was a student at Harvard people he went to school with quickly found out how hard he works to learn and how persistent he can be:

"He took up poker with a vengeance. The games would last all night in one of the common rooms of Currier House, which became known as the Poker Room. His game of choice was Seven Card Stud, high low. A thousand dollars or more could be won or lost per night. Gates was better at assessing the cards than in reading the thoughts of his fellow players. "Bill had a monomaniacal quality," Braiterman said. "He would focus on something and really stick with it." At one point he gave Paul Allen his checkbook to try to stop himself from squandering more money, but he soon demanded it back. "He was getting some costly lessons in bluffing," said Allen. "He'd win $300 one night and lose $600 the next. As Bill dropped thousands that fall, he kept telling me, 'I'm getting better.' " He was known to be an aggressive player," says C. Greg Nelson '75. "But in the crowd at Currier House where we played, he was about the median—definitely not in the top quartile." According to Nelson, the group usually played with six people and allowed participants to buy into the game for $100. As the year went on, the pot would grow until some hands were being played for over $1,000."

Gates is also very practical. When the Altair computer came out Gates "decided that I better buy one. I thought it was a better use of my money than losing at poker." The process did have some significant befits according to Steve Ballmer who has said that Microsoft's success in business was "basically an extension of the all-night poker games Bill and I used to play back at Harvard. Sometimes whole divisions would get moved just because someone bet two pairs against an inside straight. People were always wondering why [co-president] Jim Allchin ended up with so much power. What can I say? He bet big and won big."

The pattern recognition and bluffing part of poker is fascinating. Tom Schneider, a four-time World Series of Poker bracelet winner once said:

"I pick up clues immediately. If you come in, and all your bills are 20s, it means you don't have casino chips and you don't have 100s. It means you went to the bank, and money is probably more important to you. You'll be a little tighter with it than somebody who comes in with $20,000 in $5,000 casino chips, which means they're probably a gambler in the pit and money won't mean as much to them."

But poker requires skills that transcend simply knowing the odds of completing any particular hand. It requires a split-screen ability to read the other people at the table while maintaining an awareness of how they are reading you. It requires what is called "leveling": the ability to move fluidly and accurately in one's imagination from the hands that all the other players are representing, to the hands that they probably have, to the hand that they think you have, to the hand that they think that *you* think that they think you have. The acute awareness and processing ability required to quickly go through a complex checklist and get it right—while controlling your thoughts and behavior so that others can't read you with any equivalent degree of accuracy—is what separates poker pros from casino operators and other crude types who profit from the fact that large numbers of people are dumb or drunk and can't do math."

The number of possible "tells" that can potentially be exploited in poker is gigantic:

"Because poker is a game of human interaction, we sometimes receive clues from other players, based on changes in their betting patterns or their physical demeanor, which indicates the strength or weakness of their hand. These are called "poker tells." A player gains an advantage if he observes and understands the meaning of another player's tell, particularly if the poker tell is unconscious and reliable. Sometimes a player may even fake a tell, hoping to induce his opponents to make poor judgments in response to the false poker tell. After all, poker is a game of deception. Poker tells come in two forms: (1) Betting patterns and (2) Physical tells."

10. **"Nobody is always a winner, and anybody who says he is, is either a liar or doesn't play poker." "The over-under, is just another example of how the bookmakers are always looking for more options to give the guesser an opportunity." Amarillo Slim**

Charlie Munger's best essay and arguably the one that made him most famous is entitled: "A Lesson on Elementary, Worldly Wisdom as It Relates to Investment Management and Business" and it can be found here. In this wonderful essay is a long passage which includes this language:

"The model I like—to sort of simplify the notion of what goes on in a market for common stocks—is the pari-mutuel system at the racetrack… Everybody goes there and bets and the odds change based on what's bet. That's what happens in the stock market. Any damn fool can see that a horse carrying a light weight with a wonderful win rate and a good post position etc., etc. is way more likely to win than a horse with a terrible record and extra weight and so on and so on. But if you look at the odds, the bad horse pays 100 to 1, whereas the good horse pays 3 to 2. Then it's not clear which is statistically the best bet using the mathematics of Fermat and Pascal…."

My essay on Steve Crist discusses the meaning of this point so I won't repeat that here.

11. **"If you don't study any companies, you have the same success buying stocks as you do in a poker game if you bet without looking at your cards." Peter Lynch**

If you are going to win at poker you need to have an edge of some kind. That means doing things like acquiring skill and finding better information. Howard Marks writes: "The investor's time is better spent trying to gain a knowledge advantage regarding 'the knowable': industries, companies and securities. The more micro your focus, the great the likelihood you can learn things others don't." In addition to having an informational edge, outlook is important. Poker professional Doyle Brunson once said: "Poker is not a game where the meek shall inherit the earth." If you don't do the work, understand probability, manage your bankroll well, manage your emotions and understand the emotions of others, you are going to get your clock cleaned in poker and in business.

Somtimes the best way to learn the importance of something is to go without it as an experiment. This link tells a story about a famous player winning without looking at their cards:

12. **"This fricking donkey stuffs $15,000 in with king-jack. I mean, the guy can't even spell poker." Phil Hellmuth**

Humans love stories and part of the fun of playing poker is the ability of a player to tell a story like Hellmuth just did. Business for me is the same way. Part of the fun of this blog is telling stories. A great story told well is one of the best ways ever invented to teach people about a topic. Before the invention of written language stories were the only way that culture and history were conveyed from generation to generation. As an example, I edited two books of stories collected by my Great Grandfather Judge Arthur Griffin that he used to help establish native American treaty rights since there was no other written record that they could use to make their case. The best business people and founders are great story tellers. Some of the best story tellers like Mark Twain were also poker fans as was the great sportswriter Grantland Rice. Twain once said: "There are few things that are so unpardonably neglected in our country as poker. Rice said it better: "It's not whether you won or lost, but how many bad-beat stories you were able to tell.

Maybe the best way to end this post is with a Puggy Pearson story. It is sort of long (about six minutes) and you will probably enjoy it most if you are a poker player:

Notes:

Bill Gates at Harvard: http://news.harvard.edu/gazette/story/2013/09/dawn-of-a-revolution/

Charlie Ergen: http://www.hollywoodreporter.com/news/dish-networks-charlie-ergen-is-432288

Mauboussin on Puggy Pearson: https://www.scribd.com/document/112879396/Puggy-Pearson-s-Prescription

My Steven Crist post https://25iq.com/2016/05/21/a-dozen-things-ive-learned-from-steven-crist-about-investing-and-handicapping-horses/

Einhorn http://www.thinkingpoker.net/

Mauboussin: https://research-doc.credit-suisse.com/docView?language=ENG&format=PDF&sourceid=em&document_id=x745112&serialid=knrGGNw%2Bo620toTTx96qBQ%3D%3D

Poker tells:

https://www.washingtonpost.com/blogs/local/wp/2014/04/23/what-professional-players-see-at-the-poker-table-hint-more-than-you/?utm_term=.d39b899b9538

http://www.pokerology.com/lessons/poker-tells/

https://www.pokernews.com/news/2009/03/pokernews-top-ten-big-event-bad-beats-1285.htm

http://tournamentpoker.weebly.com/1/category/famous%20poker%20stories/1.html

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A Dozen Lessons about Angel Investing from Jason Calacanis (Poker Edition)

August 4, 2017

This is the last post in my trilogy on how games of chance can teach lessons about investing and business. This first two were:

Ed Thorp: https://25iq.com/2017/07/22/a-dozen-lessons-on-investing-from-ed-thorp/

Poker and Investing: https://25iq.com/2017/07/29/a-dozen-lessons-about-business-and-investing-from-poker/

Blog posts about people are always more interesting and Jason Calacanis is nothing if not interesting. He is an entrepreneur and active angel investor (2-3 startups per month). He also created the six-year old podcast *This Week in Startups* and the *Launch Festival.* Calacanis is the founder and CEO of Inside.com, a real-time mobile news app. Calacanis co-founded and was the CEO of Weblogs, Inc., a network of weblogs that was sold to AOL in 2005. He is the author of a new book: *Angel: How to Invest in Technology Startups-Timeless Advice from an Angel Investor Who Turned $100,000 into $100,000,000.* If there is one word that jumps to mind when I hear his name it is "hustle." Calacanis is relentless and he works hard.

Venture capital *investing* is not gambling since it is a net present value positive activity. Venture capital *speculation* is gambling, since it is a net present value negative activity. With venture capital investing you can impact the outcome (i.e., change the odds) by having skill. You are also playing against other people not just the house. Professionals like Calacanis are investors since they actively impact the outcomes in a positive way by having a high degree of skill in sourcing, picking and helping founders make the business successful. Amateur Angel investors are in contrast to investors like Calacanis often gambling. One way for amateur Angel investors to improve their prospects is to get in the sidecar of a professional

Angel investor, which can be accomplished through syndicates with a professional venture capital investor in the lead role.

Richard Zeckhauser in one of his classic papers entitled "Investing in the Unknown and Unknowable" describes the sidecar strategy:

"Most big investment payouts come when money is combined with complementary skills, such as knowing how to develop real estate or new technologies. Those who lack these skills can look for "sidecar" investments that allow them to put their money alongside that of people they know to be both capable and honest.

…Maxim A: Individuals with complementary skills enjoy great positive excess returns from Unknown and Unknowable investments. Make a sidecar investment alongside them when given the opportunity."

The usual dozen lessons are below:

1. **"Poker is a real good analogy for angel investing because of implied odds." "You have to bet, bet, bet with ice in your veins: knowing that after dozens of failures, you'll hit a winning bet of epic proportions." "We want 7 of 10 to fail because that means they are trying high-variance projects that have massive implied odds."**

David Sklansky writes in his book *The Theory of Poker*: "Implied odds are based on the possibility of winning money in later rounds over and above what is in the pot already. More precisely, your implied adds are the ratio of your total expected win when your card hits to the present cost of calling a bet." Chamath Palihapitiya pointed out that the in a tweet: "Founders + VCs thrive on the implied odds from financings but don't realize it also comes with reverse implied odds!" He links to this from a web site called *The Poker Bank*: "Reverse implied odds are the opposite of implied odds. With implied odds you estimate how much you expect to win after making a draw, but with reverse implied odds you estimate how much you expect to lose if you complete your draw but your opponent still holds a better hand."

Regarding Poker and venture capital generally, Fred Wilson wrote the classic post:

"Early stage venture capital is a lot like poker. The first round is the ante. I think keeping the ante as low as possible is a good thing. I like to think of it as an option to play in the next round and to see the cards. Clearly, we don't ante up to just any deal, but it is very useful to think of the first round as the ante. For the first year or 18 months, however long the first round lasts, you get to 'see your cards'. You learn a lot about your management team. You learn a lot about the market you've chosen to go after. You learn about the competition and a whole lot more. Then you have to decide whether to you want to see 'the flop', that is the next year to 18 months. The price to see that is usually higher. If you don't like your cards (ie your management team, your market, the competitive dynamic, etc) then you fold. Cut your losses. Preserve your capital. Wait for the next deal."

In an interview in *San Jose Mercury-News* venture capitalist Joe Lacob said about poker:

"No matter how much analysis you do, there's always going to be things you don't know. "And what makes somebody good at this business, vs. somebody not good, is the ability to take risk. Calculated risk. And to be OK with that. To be a gambler, to some extent. I like

poker. I like the idea… of calculated risk. Doing my homework, and then you have to take a shot. You learn a lot in poker about people. Phil Hellmuth is a good friend of mine and you learn a lot about people when you play that game."

2. **"I put $25k or $250k into a company and own one to five percent and most of them fail. So that one to five percent times is usually, 8 of 10 times, worth zero. Then one hand you kind of chop it. Then, hopefully, one hand out of 50 becomes Thumbtack or a Wealthfront. Then sometimes you hit the royal flush like Uber. I was the third or fourth person to invest in Uber and it only takes one of those to kind of make your career. Those are the equivalent of a 5,000 to 10,000 times return."**

What Angel investors accept in a business that has not proven either a value hypothesis or a growth hypothesis is far greater outcome variance due to convexity. Venture capitalists hedge variance/convexity with a portfolio of bets and that is especially true at seed stage. All you can lose financially in venture capital is what you invest and your upside can be more than 1000X of what you invested. Why is an early stage opportunity to invest in a company like Lyft even available? Because most people like the safety of the herd and shy away from risk and uncertainty. Calacanis says: "I have a theory about angel investing, which is basically you're investing in the person and that the more outlandish the idea is, and the less people understand it, the greater the chances you should invest in it are."

3. **"You have to get very comfortable with the concept of losing seven, eight, nine out of 10 bets." "It's very hard to sit down at a poker table or a blackjack table where you lose eight or nine out of 10 hands." "You have to deal with bad news constantly. The companies that are failing take 10 to 50 times more of your energy and emotion and time than the winners. If you are emotionally not resilient, it is not the job for you. Every day, there's three or four phone calls from founders that come in, or emails us, that they're running out of money, they're fighting with their co-founder, they're being sued, somebody copied their idea, nothing's working, the company's sideways, they got hacked. It is a shit show most days. You have to have a certain desire to deal with insurmountable odds. You've got to have a little Han Solo in you, not C-3PO."**

Emotionally handling that the chaos that is an inevitable part of an Angel investor's life is not an easy thing. When startups and businesses in a portfolio fail they are people you know. It can be both a grind and a struggle to do this work but it seems to be something that Calacanis is well suited for. Fred Wilson writes:

"In poker folding is simple. In the VC business, it's not that simple. Sometimes you can fold by selling the company or the assets. Other times, you need to shut the business down. It's not easy and many inexperienced VCs make the mistake of playing the hand out because they don't want to face the pain of folding. That's a bad move."

4. **"[Angel investing] is sort of like playing really bad cards with a very deep stack and seeing a lot cheap flops." "As an angel you have to be able to focus on the 5% chance that things will go really, really well. As a VC you have to look at the downside a lot more because you make 1/20th the number of bets. I can put $25k into 30 companies a year and if I hit one big winner every 10 years I'm golden. VC**

doesn't exactly work like that… you might do 20 investments over 10 years — if you were going fast!" "There are probably 10,000 projects angel funded in technology per year (say 5x the number of venture deals per year, which I understand is around 2,000 here in the USA). If there are 10 angels in each deal (another guesstimate), that means 100,000 angel investments get put into this bucket per year. Over 10 years we have 1,000,000 swings at bat by angels. If we have 40 unicorns every 10 years here in the USA there are 400 angel lottery tickets (40 unicorns with 10 angels each) in the 1,000,000 lottery tickets issued. By this absurdly incorrect math, you would have .04% chance of getting a lottery ticket: 1 in 2,500.''

Marc Andreessen describes the approach of a venture capitalist as "buying a portfolio of long–dated, deeply–out-of-the-money call options." Entrepreneurs are in the business of creating those call options and selling some of them to investors to create a pool of capital to fund the businesses. In evaluating each call option a venture capitalist is seeking a mispriced asset. Half crazy ideas are typically more mispriced and have the convexity that venture investors need to generate grand slam financial outcomes.

There are only so many actual exits for investors. Creating a unicorn is not the same thing as getting a financial exit.

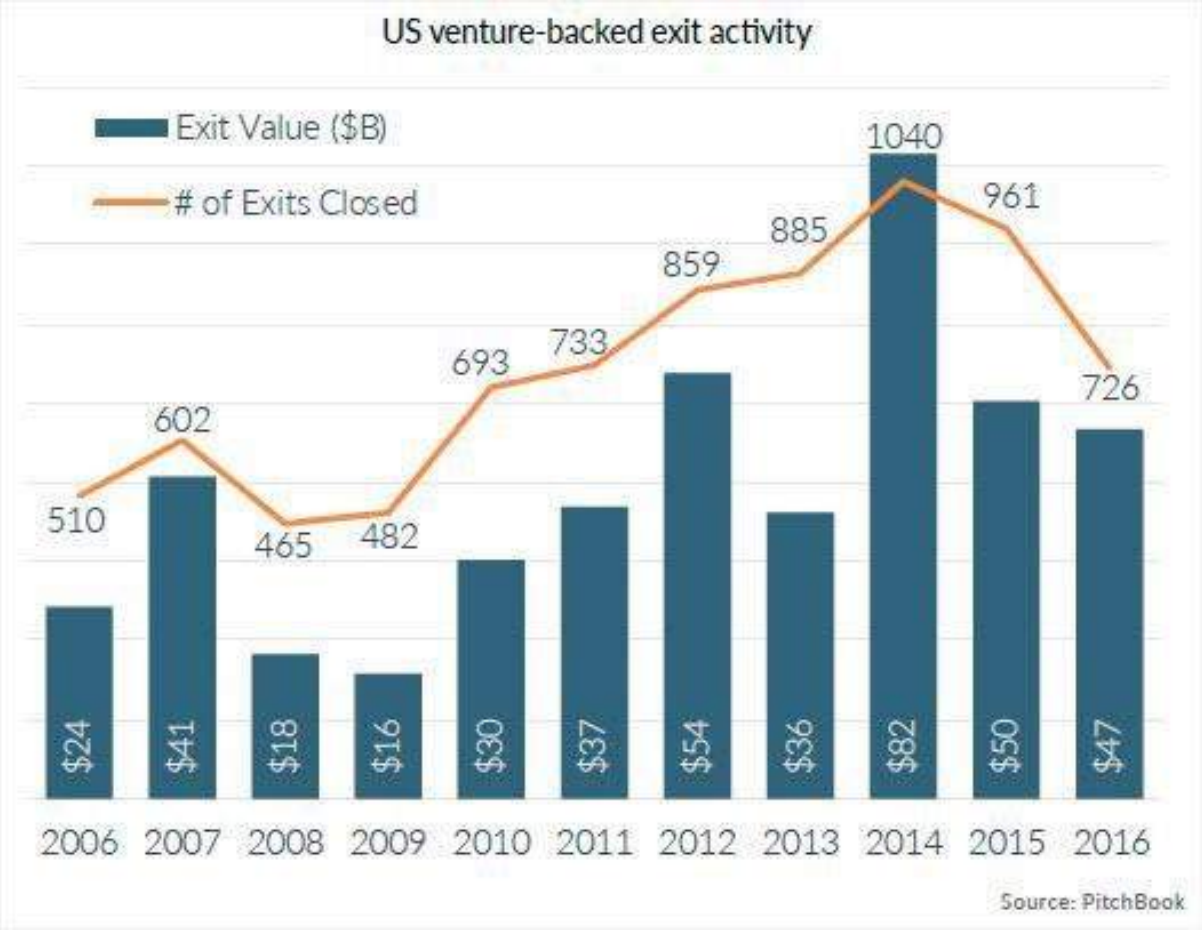

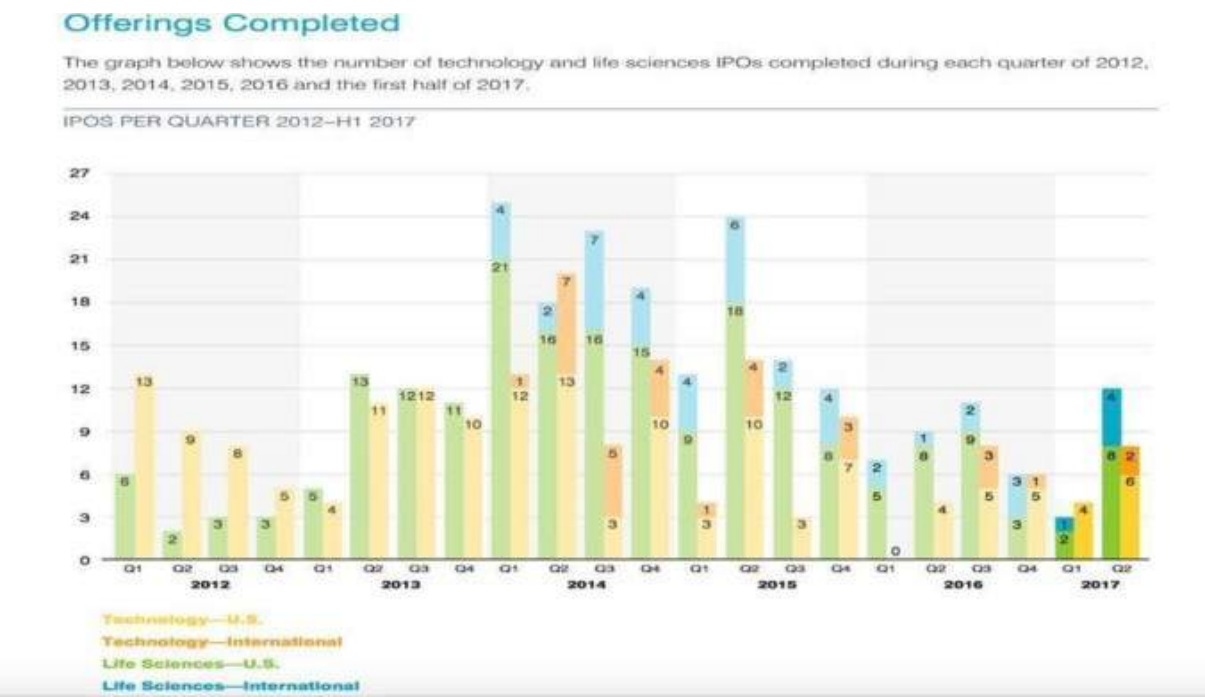

5. **"Angel investing is very similar to poker, where you're playing against other people, you can increase your chances." "The big rub in all this is that you have to get access to the unicorns as they are born." "You can't be ever embarrassed about hustling."**

Steven Christ writes: "The reason that you can win at poker [is that] you are not betting against the house; you are betting against the other players. This is such a crucial and fundamental difference, and it is lost on the general public. The house is not setting the odds. In roulette, there are 38 spaces on the wheel, and if you pick the correct one, the house will pay you off at 35-to-one, and they will keep the difference. The longer you play, the more you lose and the more the house wins. When the other players are setting the prices, it is an entirely different story…"

6. **"Why is there such an overlap between angel investor and poker player? It's a couple of things. One, you're dealing with partial information and trying to make decisions. You have to make a lot of decisions under pressure with money, exactly like investing. You're under pressure, there's time constraint, and you don't have complete information. If you can have a slight edge in some way, you can outperform everybody else. It's the same as investing. Also, deception, intimidation, reading people."**

One of the most creative thinkers ever to tackle the theory of poker was John von Neumann, a Hungarian born mathematician, physicist, inventor, computer scientist, and polymath. One biography notes that "…the inspiration for game theory was poker, a game he played occasionally and not terribly well. Von Neumann realized that poker was not guided by probability theory alone, as an unfortunate player who would use only probability theory would find out. Von Neumann wanted to formalize the idea of 'bluffing,' a strategy that is meant to deceive the other players and hide information from them." *The Financial Times* elaborates:

"John von Neumann believed that if you wanted a theory that could explain life, you should start with a theory that could explain poker – game theory. "Real life consists of bluffing, of little tactics of deception, of asking yourself what is the other man going to think I mean to do, and that is what games are about in my theory." High quality global journalism requires investment. It was the bluff that interested von Neumann. Novices wrongly believe that bluffing is merely a way to win pots with bad cards. In the 1972 final of the World Series, the famous hustler Amarillo Slim won because he had bluffed so often that when he finally put all his chips in the pot with a full house (a very strong hand), his opponent assumed Slim was bluffing again; called (matching the bet), and lost. A player who never bluffs will never win a big pot, because on the rare occasions that he raises the betting, everyone else will fold before committing much money. Then there's the reverse bluff: acting weak when you are strong. In the 1988 World Series, the Chinese-born Johnny Chan (dubbed the "Orient Express" because he won money so quickly) passed up every opportunity to raise the stakes and meekly called his opponent's bets. By the last round of betting, his opponent became convinced that Chan didn't have a hand and bet everything he had. Chan called and turned over a straight – a strong hand – scooping up $700,000 and the title of world champion."

7. **"I know I'm not smarter than Google. Me vs. a Google person playing chess I'd lose. Me vs. anybody at Google in poker, I'm rich; I will win. You have to know what game you're playing. I would not play chess vs. anybody at Google or write an algorithm."**

One of the best ways to improve your poker results is to play against weak competition and to avoiding being the weak competition. This is essentially the *circle of competence* principle put to work in poker. The Poker Dictionary defines a few key terms relevant to circle of competence: "In the 1990s the bad players were referred to as fish. Nowadays they are called donkeys. A tournament that is full of donkeys or bad players is called a donkament." Having some fish or donkeys in a card game wakes winning easier. Amarillo Slim said once: "No river, no fish." A similar saying is: "You lead a horse to water, but a donkey will follow you all the way to the river." Some people believe that a donkey is a bit different than a fish because fish are just prey and a donkey can have dumb luck and take your money.

8. **"Angel investing is gambling in the same way poker is: it involves a lot of skill and discipline on top of the luck."**

In all questions that involve the relationship between investing and games the "go to" expert is Michael Mauboussin:

"Luck plays a huge role in determining results in investing, especially in the short term. Luck is also prominent in business strategy and card games —including blackjack and poker. One way to think about the difference between the results for pianists and poker players is to visualize a continuum with all luck at one end and all skill at the other. Then place activities along that continuum. Roulette wheels and lotteries are on the luck side, and swim and crew races are on the skill side. Most of the action in life sits between those extremes…. there's no way to know for sure how Phil Ivey will fare in the next World Series of Poker because even if he plays his cards just right, he may suffer from awful luck."

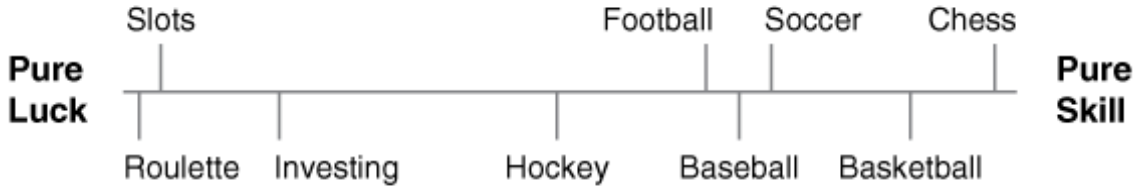

Source: Michael Mauboussin, *The Success Equation*

9. **"If you're at the poker table and you can't tell who you're better than and who the fish is, you're the fish. That's, inevitably, how everybody starts. What you have to do is try to slowly move yourself up."**

An academic paper that looks at poker makes a point about poker that is a lot fancier but less informative.

"The results show that competitive edges attenuate as one moves up levels, and tight-aggressive strategies—which tend to be the most remunerative—become more prevalent. Further, payoffs for different combinations of cards, varies between levels, showing how strategic payoffs are derived from competitive interactions. Smaller-stakes players also have more difficulty appropriately weighting incentive structures with frequent small gains and occasional large losses. Consequently, the relationship between winning a large proportion of hands and profitability is negative, and is strongest in small-stakes games."

10. **"It's a portfolio strategy. If 7 out of 10 fail, 8 out of 10 fail, what you're trying to do is figure out what those 2 out of 3. Let's say 2 or 3 out of 10 don't fail. You want to quickly figure out who those 2 out of 3 are, and then take your 25k investment and make a 100k investment in those 3. Then you figure out, let's say you've done 100, and you have 4 of them that are really breaking out, you want to figure out which those 4 are, so you can put 250k into those. On a name basis, 7 out of 10 of your investments fail. Say you put 10k into each, that's 70k gone. Then the last 3, let's say you put 100k in each. Now, you have 300 active, and you put 100 into the first 10. 7 failed, so you have 330k of your 400k is still in play. You see what I did there? You do 10k in 10, 70 goes away, 30,000 is still active. You put 100k in each, now you've got 330k still active. Then, 2 of those sell off and you get your money back, fine, you've got 110 back. Great, you have 220 back of your 400 committed. Then, you put half a million into that one this really breaking out, and that half a million goes 20, 30, 50x. Holy shit, now you've got a $10 million or $25 million return on your hand, and you've played the game properly. You're doubling down, and then you're going all-in. It is just like poker. When you get pocket aces, or ace, king, or 10, jack suit, or whatever it is, you make an exploratory bet. When the flop comes and your 10, jack is met with ace, king, queen, you're like, 'Oh my God, these donkeys probably have ace, queen and ace, king. They're going to be batting like maniacs, and I have the stone cold nuts right now.'"**

Fred Wilson writes about one important idea that Calacanis is talking about in this way:

"If you structure your deals appropriately, you can often get three or four rounds. As your hand strengthens, the cards get better, you increase the betting, putting more money at risk in each subsequent round. That's how smart poker players win and it's also how smart VCs win. The poker analogy only works so far. Bluffing doesn't work in the VC business. If you've got a band hand, you really can't bluff your way out of it. But on the other hand, you can impact the cards you've got. You can work with management, beef it up, switch markets, buy some businesses, etc. You can significantly improve your hand if you work at it, something that's not really possible in poker."

In a book entitled *Venture Investing in Science* Douglas Jamison and Stephen Waite argue:

> High-quality venture investors can, in effect, "count cards" and thus change the statistical distribution of success with each new round of investment they make. For instance, if I am playing blackjack and I am counting cards in the deck, at each subsequent deal, I can recognize the statistical odds changing, potentially in my favor for getting the cards I need to reach twenty-one. By placing larger bets when the odds have increased in my favor, I increase my chances of winning. I change my statistical distribution for success.

"What the heck are 'the nuts'?" you might ask if you are not a poker player. The origin story for that term goes like this:

"This poker term dates way back to the Wild West where cowboys would gather round a table, preferably in a saloon but alternatively around a campfire, and play cards. Back then poker players would not always bet with cash or chips. It was a more rustic time, and men would often bet their horse and wagon on a poker hand. Legend has it that when a cowboy bet his wagon he would unscrew the nuts from his wagon wheels and place them in the pot. The reason behind this gesture was that in the event that he lost the pot he could not leap up, hop into his wagon and ride away with his wager. The fact that he was willing to put those nuts in the pot as surety for the strength of his hand resonated through the prairie, and came to be synonymous with the best hand. A cowboy would only bet "the nuts" when he was convinced that his hand was the best out there."

Bankroll management is an important part of Angel investing and poker. I wrote about this set of issues in my post on Ed Thorp. He is how one poker player manages his bankroll:

11. **"Poker, like entrepreneurship, is very painful when you start, but then you get better at it."**

Investing, poker and business are skills that you can get better at. Skill matters in poker and venture capital. *Freakonomics* author Steven Levitt with Thomas Miles did a study and concluded:

"…we analyze that question by examining the performance in the 2010 World Series of Poker of a group of poker players identified as being highly skilled prior to the start of the events. Those players identified a priori as being highly skilled achieved an average return on investment of over 30 percent, compared to a -15 percent for all other players. This large gap in returns is strong evidence in support of the idea that poker is a game of skill."

Douglas Jamison and Stephen Waite argue:

> Playing poker, like venture investing, is an exercise in using Bayesian statistics. The goal, as Charles Duhigg explains masterfully in *Smarter, Faster, Better*, in a chapter titled "Decision Making: Forecasting the Future (and Winning at Poker) with Bayesian Psychology," is to make predictions, imagine alternative futures, and then calculate which alternative futures are most likely to come true.[13] Duhigg notes that to be among the elite in poker, bets need to be ways of asking other players questions and using the answers to predict the future a little more accurately than the other players in the game. Chips are used to gather information faster than others in the game.

12. **"Poker has a lot of things that entrepreneurship is about. Trying to figure out a situation with limited information." "[Investing and poker] are very analogous and I think reading people is a skill of angel investors. Reading people understanding people. Understanding motivation and then also trying to solve problems with limited information. When you look at poker you're trying to uncover this riddle and you don't have complete information." "Jason's Law of Angel Investing" states: "You don't need to know if the idea will succeed — just the person." "Jason's Second Law of Angel Investing" states: "Your success is correlated to the amount of time you give to founders." "I have a theory about angel investing, which is basically you're investing in the person and that the more outlandish the idea is, and the less people understand it, the greater the chances you should invest in it are." "People who are crafts persons and who have craftsmanship in their work, they will always happen, whether in the early stage or late stage. When I see a particularly well-designed product, or somebody understands their metrics, I know that person cares. People are in this wacky belief system that their idea matters, when it does not. All that matters is what you build."**

This last item is obviously grab bag of quotes from Calacanis. In this collection of quotes you see his investing thesis come more into the light. These are a good way to end this post since it is getting a bit long. Calacanis proves that great investors *hustle*, have an extensive scuttlebutt network and read constantly.

Notes:

Angel: How to Invest in Technology Startups-Timeless Advice from an Angel Investor Who Turned $100,000 into $100,000,000 https://www.amazon.com/Angel-Invest-Technology-Startups-Timeless-Investor/dp/0062560700

Click to access InvestinginUnknownandUnknowable.pdf

https://25iq.com/2016/10/01/a-dozen-things-you-can-learn-by-reading-the-success-equation-by-michael-mauboussin/

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http://angellist.tumblr.com/post/141199140045/interview-with-jason-calacanis-investor-in-uber

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https://www.linkedin.com/pulse/20130928204536-24171-the-end-of-venture-capital-sort-of

https://www.forbes.com/sites/jakehayman/2016/04/07/pokermeetsphilanthropy/#5d4f5226a63a

https://cs.stanford.edu/people/eroberts/courses/soco/projects/1998-99/game-theory/neumann.html

A Dozen Lessons about Product and Services Pricing (Including being “Too Hungry to Eat”)

August 11, 2017

This is a blog post about some of the most basic elements of pricing a product or service. Since the longest a post like this should be is about 3,500 words, the scope of what is covered here must be significantly narrowed. This discussion therefore focuses mostly on the sale of a single product or service and on the right price point. Decisions get more complex when there are multiple offerings with different price points for different features and you are thinking about upsell, cross sell, negative churn etc.

As context, I have written many other blog posts already about topics related this post including:

1. Product/market fit: https://25iq.com/2017/02/17/a-dozen-lessons-about-productmarket-fit/
2. Steve Blank on business models https://25iq.com/2014/10/18/a-dozen-things-ive-learned-from-steve-blank-about-startups/
3. Eric Ries on Lean Startups https://25iq.com/2014/09/28/a-dozen-things-ive-learned-from-eric-ries-about-lean-startups-lattice-of-mental-models-in-vc/
4. Growth: https://25iq.com/2017/02/10/a-dozen-lessons-on-growth/
5. Customer Acquisition Cost (CAC) https://25iq.com/2016/12/09/why-is-customer-acquisition-cost-cac-like-a-belly-button/
6. Churn https://25iq.com/2017/01/27/everyone-poops-and-has-customer-churn-and-a-dozen-notes/
7. Freemium: https://25iq.com/2017/04/22/the-rise-of-the-freemium-business-model/
8. Multi-sided markets: https://25iq.com/2016/10/22/a-dozen-things-ive-learned-about-multi-sided-markets-platforms/
9. Network effects: https://25iq.com/2016/03/24/two-powerful-mental-models-network-effects-and-critical-mass/
10. Subscriptions: https://25iq.com/2017/07/15/amazon-prime-and-other-subscription-businesses-how-do-you-value-a-subscriber/

This post will be number 11 in this series and a post next weekend on scalability will be number 12. That will result in the series of 25IQ blog post fitting the usual dozen lessons template.

The first focus of any startup founder should be to prove the validity of a *value hypothesis*. If a business does not make a product or service that customers are willing to pay money for, nothing else matters. Anu Hariharan, who is a Partner with the YC Continuity Fund writes:

"A great way to waste money, resources, and jeopardize the future of your company is to invest in a growth program before you've proven you can retain customers. In other words, it's best not to hire a full-fledged growth team to put major ad dollars into growth until you've ensured you don't have a 'leaky bucket' problem.'"

The amount of unique value delivered by a new business should be significantly more than the established competition if a startup wants to be successful. If the value delivered by the business is "me too" relative to existing competitors the competitive environment will be is more than hard for a startup.

Only after the value hypothesis has been proven should the startup focus on a *growth hypothesis*. A key part of the growth hypothesis is the business model and a key part of that is

pricing. The question of pricing raise many issues, one of which Marc Andreessen addressed recently:

"At the growth stage, when a startup is fully in market and building out sales and marketing efforts to expand, the decision [to invest] becomes far more about the financial characteristics of the business—particularly unit economics: can the startup profitably sell its product to each customer?… we see far more SAAS startups underpricing their product than overpricing.

The problem with overpricing seems obvious—we in our daily lives as consumers are more likely to buy products if they are cheaper, and so pricing higher is presumed to reduce sales.

But that's not how business markets tend to work—in business markets, where customers make what's called a considered purchase, the result of a reasonably objective and rigorous analysis of options, startups that underprice tend to have the problem I call "too hungry to eat"—by pricing too low, they can't generate enough revenue per deal to justify the sales and marketing investment required to get the deal at all. In contrast, by pricing higher, the startup can afford to invest in a serious sales and marketing effort that will tend to win a lot more details than a competitor selling a cut-rate product on a shoestring go-to-market budget."

There are many types of businesses and each has unique attributes that are in a constant state of change. There are an endless number of permutations of the relevant variables and the systems involved in the business. Nothing remains the same and everything is always in flux. That is no small part of what makes business so interesting to me.

This post can't possibly discuss pricing optimization for every type of business since there is so much variation. For example, gross margins can vary greatly depending on the sector involved (DM means developed markets). But general principles and best practices can be discussed. Gross margins are a very important part of creating an optimal pricing strategy:

Median Gross Margins

Median Gross Margin: 10.0 – 72.2

Sector	DM Americas	DM Asia	DM EMEA
Financials	69.6	64.3	51.4
Health Care	56.6	58.5	61.8
Real Estate	39.2	72.2	68.9
Information Technology	57.6	40.2	43.7
Consumer Staples	34.9	37.0	23.6
Telecom	32.9	35.0	35.2
Consumer Discretionary	32.3	32.1	34.3
Industrials	31.9	21.7	23.3
Utilities	28.6	16.7	19.0
Materials	23.7	22.8	22.8
Energy	10.0	12.9	12.7

I don't want to insult anyone reading this but I don't want to leave anyone behind either (this tension between expert readers and novices is always a challenge in writing these posts). What's a gross margin? Lighter Capital provides an example:

"ABC Company buys Widgets for $1 and can sell each Widget for $10. On each sale, they make $9. The gross margin for this company is 90%. On the other hand, XYZ Company buys Thingies for $5, and sells each Thingy for $10.

	ABC Company	**XYZ Company**
Sale (One Unit)	**$10**	**$10**
Cost of Goods Sold	**$1**	**$5**
Gross Profit	**$9**	**$5**
Gross Margin	***90%***	***50%***

Assuming all else is equal, ABC Company has a higher margin on their sale (90% vs 50%).."

To further make the discussion in this blog post more manageable by limiting its scope I will mostly focus the text that follows on a "software as a service" business (SaaS). Gross Margins in public SaaS companies look like this according to data compiled by venture capitalist Tomas Tunguz:

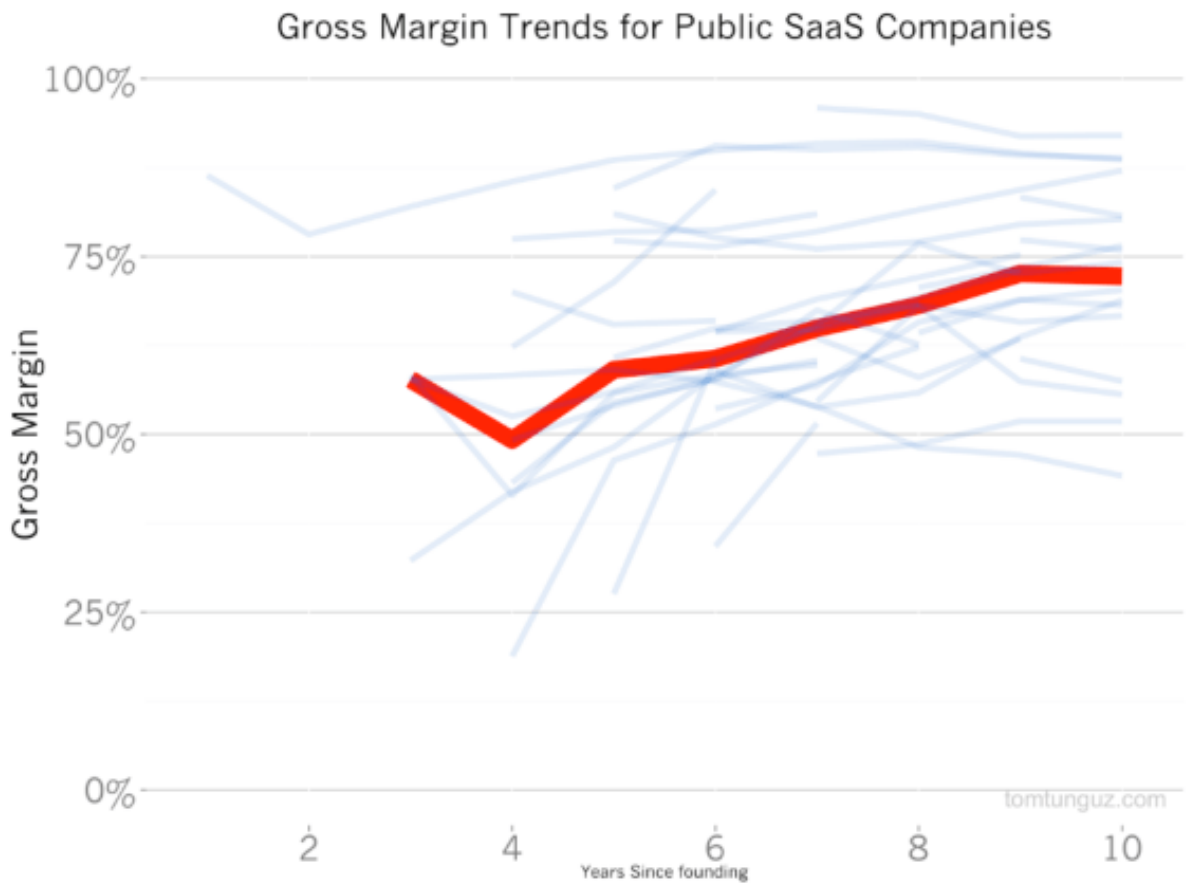

"…investors prize SaaS companies because providing SaaS service costs very little, and consequently these startups record very high gross margins. The median gross margin for publicly traded SaaS companies expands from 50% in year four to just under 75% in year five, as the chart above shows."

Why are gross margins so high in SaaS? The answer is explained well by Andreessen Horowitz in a blog post:

"Paraphrasing Jim Barksdale (the celebrated COO of Fedex, CEO of McCaw Cellular, and CEO of Netscape), 'Here's the magical thing about software: software is something I have, I can sell it to you, and after that, *I still have it.'* Because of this magical property, software companies should have very high gross margins, in the 80%-90% range. Smaller software companies might start with lower gross margins as they provision more capacity than they need, but these days with pay-as-you-go public cloud services, the need for small companies to buy and operate expensive gear has vanished, so even early stage companies can start out of the gate with relatively high gross margins"

Bill Gurley lays out the value of high gross margins for a business here:

"There is a huge difference between companies with high gross margins and those with lower gross margins. Using the DCF framework, you cannot generate much cash from a revenue stream that is saddled with large, variable costs. …Selling more copies of the same piece of software (with zero incremental costs) is a business that scales nicely. Companies that are increasing their profit percentage while they grow are capable of carrying very high valuation

multiples, as future periods will have much higher earnings and free cash flow due to the cumulative effect of growth and increased profitability."

Bill Gates in 1993 described what Bill Gurley is talking about in this way:

"It's all about scale economics and market share. When you're shipping a million units of Windows software a month, you can afford to spend $300 million a year improving it and still sell it at a low price."

One useful way to better understand the context and implications of what Andreessen, Gurley and Gates are saying is to follow the Charlie Munger approach and "invert" the analysis. If a SaaS business has 60-90% gross margins it has headroom "below the gross margin line" to spend on these three expensive and unavoidable aspects of their business:

1. Research and Development (R&D)
2. General and Administrative (G&A)
3. Sales and Marketing. (S&M).

What I typically do when considering the economics of a business is perform a "reverse math" analysis of business financials using well-known benchmarks. Like almost every other business, the SaaS company will have familiar categories of expense. To illustrate, I will use an example of a specific software as a service (SaaS) business serving enterprise markets which recently went public so we have access to an IPO that is not too dated. MuleSoft's financials in that document include this chart:

	Year Ended December 31,		
	2014	2015	2016
Consolidated Statements of Operations, as a percentage of revenue:			
Revenue:			
Subscription and support	84%	80%	81%
Professional services and other	16	20	19
Total revenue	100	100	100
Cost of revenue:			
Subscription and support	9	7	7
Professional services and other	20	22	19
Total cost of revenue	29	29	26
Gross profit	71	71	74
Operating expenses:			
Research and development	30	22	18
Sales and marketing	102	84	65
General and administrative	21	22	17
Total operating expenses	152	129	100
Loss from operations	(81)	(58)	(26)
Interest income	—	—	—
Other expense, net	—	(1)	—
Net loss before provision for income taxes	(82)	(59)	(26)
Provision for income taxes	1	1	1
Net loss	(83)%	(59)%	(26)%

You can see that MuleSoft's gross margin was 74% in 2027. Tomas Tunguz notes that MuleSoft's gross margin:

"is better than the public software average of 71%. Professional services margins used to be -25%, but the company has brought that figure up to breakeven in the last year. This may also be a contributing factor to the increase in average contract value.

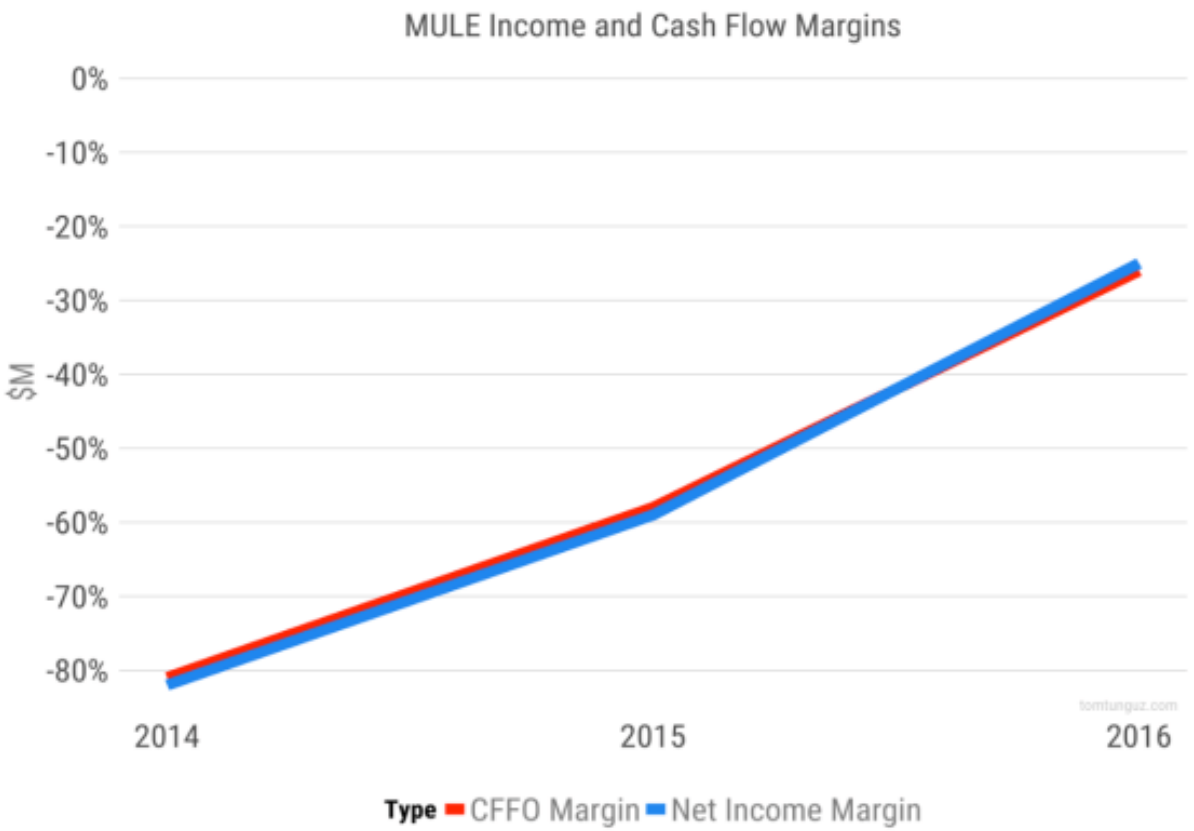

Mulesoft is rapidly approaching cash flow from operations breakeven and net income profitability. Cash flow from operations breakeven means the business generates as much cash as it consumes setting aside financing and investing activities. Mulesoft operated with an estimated sales efficiency of 0.57 in 2015 and a estimated sales efficiency of 0.63, which implies a payback period of 19 months, right on the average."

MuleSoft's R&D and G&A alone are 35% of revenue, which leaves less room for spending on sales and marketing needed to grow the company. Every business has general and administrative costs. To illustrate:

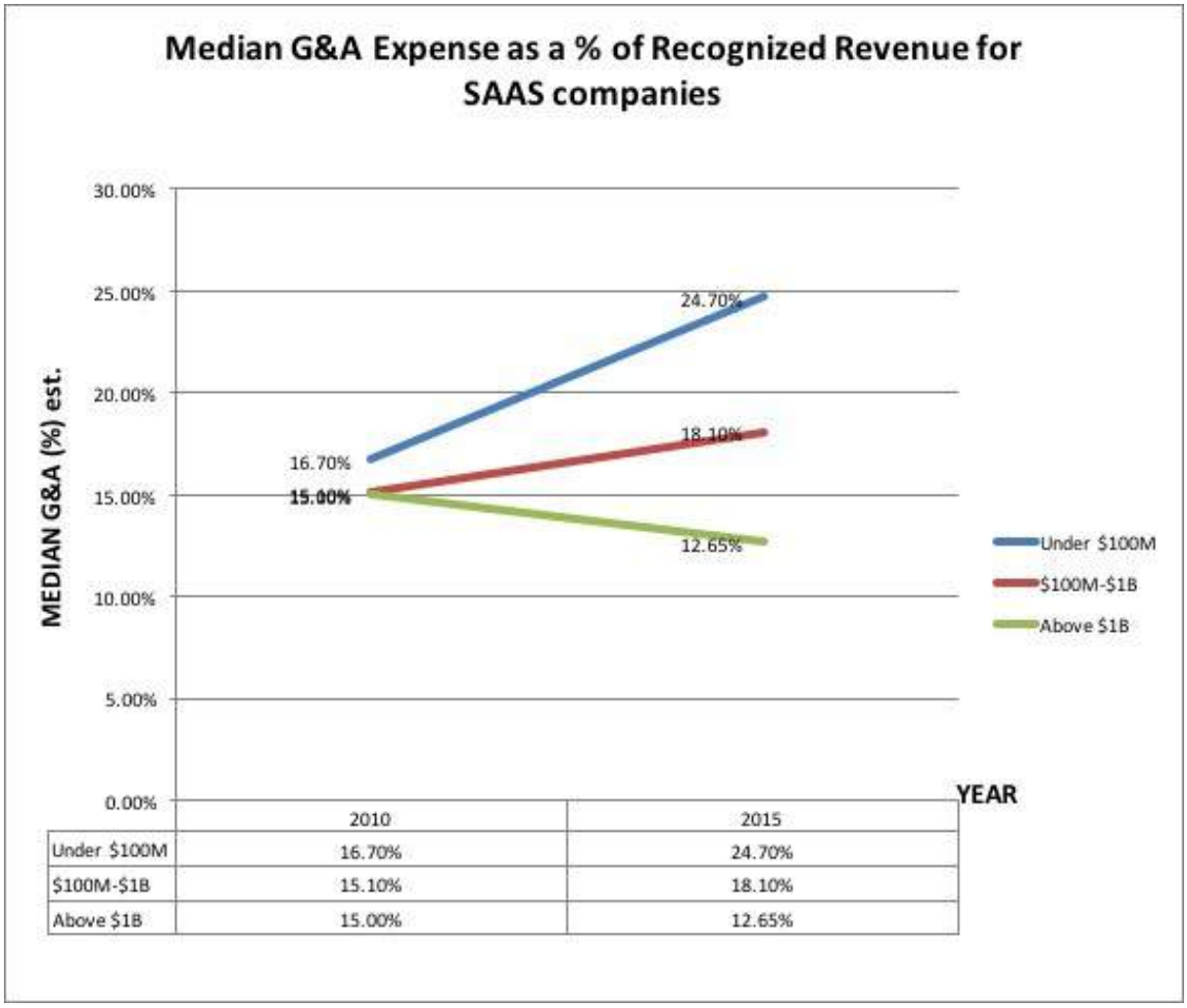

Every SaaS business also has R&D costs (this cost can range between 10 and 30%nd should drops as the company matures and is operated more effectively).

"In general, R&D expenses (as measured as a percent of revenue) for public SaaS co's are lower than traditional licensed software companies. Unlike licensed software vendors, SaaS companies are not required to support multiple technology stacks (i.e., operating systems, Web servers, databases, etc.) or a variety of hardware platforms. Additionally, SaaS solutions are typically version-less (all customers are on the same version) thereby enabling critical R&D dollars of the organization to focus on the next version and innovation."

The next item on the list of below the gross margin line expenses is sales and marketing. This is an expense that can easily kill a business or make it a winner. The very best companies have products that sell organically. Bill Gurley writes:

"All things being equal, a heavy reliance on marketing spend will hurt your valuation multiple. …You will be hard pressed to find a company with a heavy marketing spend with a high price/revenue multiple. This should not be read as a blanket condemnation of all marketing programs, but rather a simple point that if there are two businesses that are otherwise identical, if one requires substantial marketing and one does not, Wall Street will pay a higher valuation of the one with organic customers." Organic users typically have a

higher NPV, a higher conversion rate, a lower churn, and more satisfied than customers acquired through marketing spend."

As an example of how complex pricing issues can be, another important pricing issue is how a price will impact customer acquisition costs (CAC) and churn. I've been involved in setting services prices since there were zero portable mobile phones in service. That is a long time ago. One thing I have learned over the decades is that the higher the price and the longer the contractual commitment, the higher customer acquisition cost (CAC) and churn will be. If this were not the case all customers would be signing up for >10-year binding contractual commitments. People do not like to give up optionality by signing long terms contractual commitments, so sales incentives (e.g., price discounts) and higher sales and marketing costs are often required in order to get a longer customer commitment.

As another example of the complexity of pricing issues, when founders talk about SaaS they often assume the revenue is recurring. Many founders who think that they have recurring revenue really have 12-month deals. While this normal early on, especially for a pilot, it isn't annual recurring revenue (ARR) if it is just payment spread over a year. This is especially true if there is no per-time period and per-user price. Until there have been renewals what is "recurring" in ARR is unknown.

Yet another issue is the topic of freemium or selling religious icons to the already converted. This can be a useful strategy to reduce CAC. But you need to be careful since freemium results in higher COGs, which is hidden CAC. If you give away storage to get sales leads that isn't really COGs now is it. It is just a different sort of sales and marketing spending.

What are most SaaS companies spending of sales and marketing? Tomas Tunguz writes:

"…In the first 3 years, these public SaaS companies spend between 80 to 120% of their revenue in sales and marketing (using venture dollars or other forms of capital to finance the business). By year 5, that ratio has fallen to about 50%…."

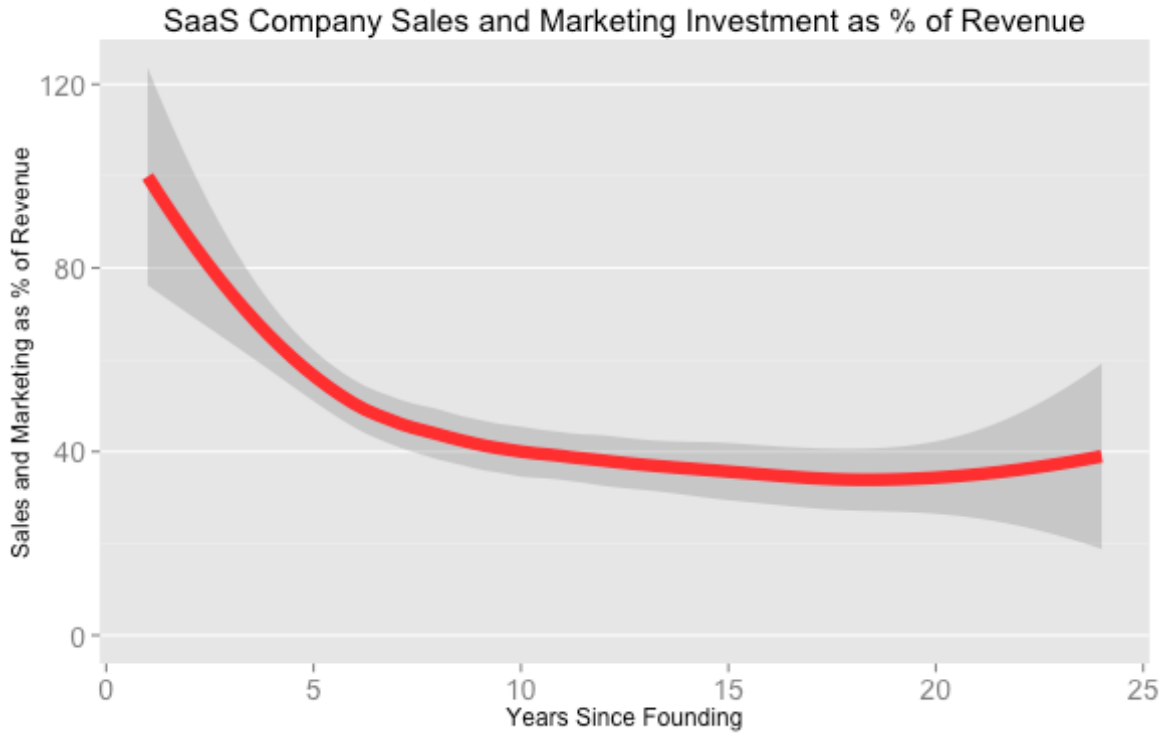

How should a SaaS company find the right price points for its services? They are best discovered through actual interaction with customers and a series of pricing experiments. The right price is discovered through a carefully constructed but inevitably slightly trial and error process. For example, a startup might start with its first paying customer and set a price. As the startup reels in new paying customers the business can gradually raise prices as it grows its customer base but only until it meets significant resistance on price.

This gets us to the related issue of setting price for a new category of SaaS. What I tell founders is that the best way to price of a new service that customers have not seen before is to set price so it produces sufficient gross margins so that the business has a margin of safety. I like to see a business set a target of at least 70% gross margins on SaaS. It can be lower at the start of the effort but there must be a plan to get it higher. An 80% gross margin would be better obviously. If a business can't eventually get to a point where the business generates a 70% gross margin in a SaaS business it really needs to think hard about whether it has achieved sufficient product/market fit. A gross margin of 60% is living more dangerously obviously. Of course, most business have far lower gross margins than a SaaS business as was noted in the Median Gross Margins by industry chart above. But the more general point remains true for any business: if a startup is not able to generate better than industry standard gross margins it very likely does not have sufficient product/market fit.

Reid Hoffman believes:

"People underestimate how much of an edge you need. It really should be a compounding competitive edge. If your technology is a little better or you execute a little better, you're screwed. Marginal improvements are rarely decisive." "The question comes down to…not to think of it just as a question of 'Oh, I have a better product, and with a better product, my thing will work, as opposed to other things.' Because unless your product is like 100x better,

usually your average consumer…they use what they encounter. If other[s] are much more successful at distribution and they have much better viral spread, they have better index and SEO…it doesn't matter if your product is 10x better, the folks don't encounter it."

If you deliver this sort of value, you can set your price on a value basis. Lincoln Murphy of Sixteen Ventures writes:

"The definition of Value Pricing is: Applying a price to a service that is congruent with the value derived from the service rather than the underlying cost to create and deliver the SaaS, market prices, specific margins, etc. Which makes Value Pricing the most effective method of pricing for SaaS and Web Apps… something like cost+margin just doesn't make sense. The key to Value Pricing is knowing the, well, *value* of your service as perceived by your target market AND/OR market segments (not all are alike) … If I sell something for $100, I want to provide at least $1,000 in value to them… at least."

As an example from another industry, let's look at the New York Times which has gross margins that are typically about 62%. The New York Times has a yearly average revenue per user (ARPU) of ~$140 which is ~ $11.66 a month.

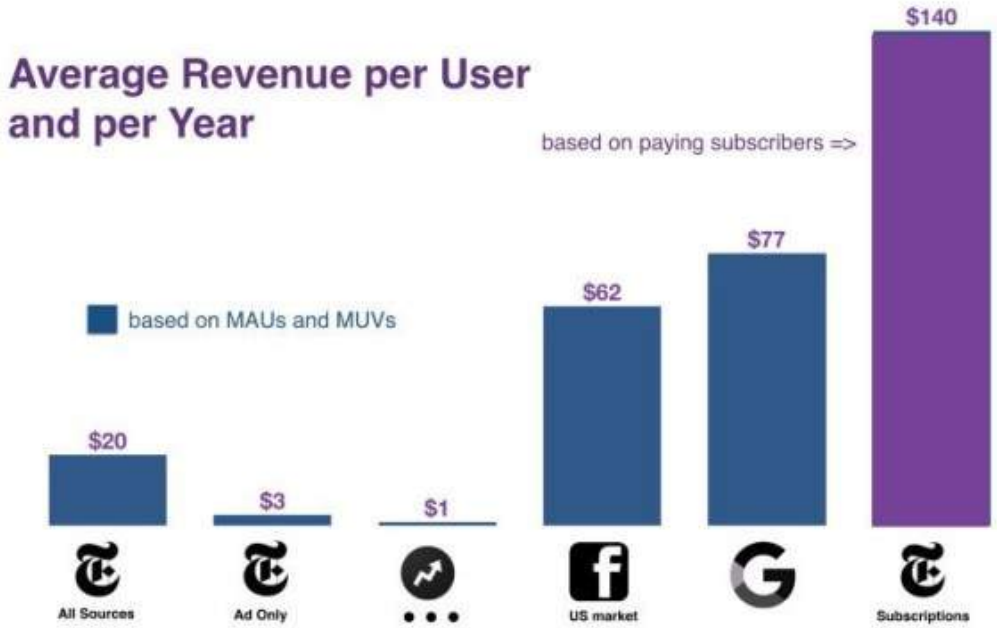

Churn and CAC are known only to the management of the New York Times which means investors must guess at what they are to calculate unit economics. My post on unit economics is here.

The New York Times, like other businesses, periodically conducts pricing experiments to see what it pricing power is. What is tested in these experiments is what Warren Buffett calls is "pricing power" of the business. Buffett's famous quote on this topic is:

"The single most important decision in evaluating a business is pricing power. If you've got the power to raise prices without losing business to a competitor, you've got a very good business. And if you have to have a prayer session before raising the price by 10 percent, then you've got a terrible business."

What determines pricing power? Whether the business has a sustainable competitive advantage, a topic that I wrote about in my blog post on Michael Porter. https://25iq.com/2013/08/26/a-dozen-things-ive-learned-about-strategy-business-and-investing-from-michael-porter-2/ and this post I wrote about Charlie Munger. https://25iq.com/2015/10/10/a-dozen-things-ive-learned-from-charlie-munger-about-moats/

Setting and managing prices is both an art and a science. Having a top rate data science team and some people who have real world experience are both invaluable. Many interacting variables are involved even before you start calculating and managing the business against metrics like lifetime value (LTV). The best way to learn the art and prefect the science is to actually create pricing plans for a business it in a real business setting. In setting and managing prices there are best practices, but there are no precise formulas. The more you do it, the more skill you will acquire.

Notes:

http://blog.ycombinator.com/growth-guide2017/#checkretention

https://stripe.com/blog/marc-andreessen-ama

https://a16z.com/2015/09/23/16-more-metrics/

http://abovethecrowd.com/2011/05/24/all-revenue-is-not-created-equal-the-keys-to-the-10x-revenue-club/

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What Would a Healthy Music Streaming Business (e.g., Spotify, SoundCloud, Pandora) Look Like?

August 19, 2017

SoundCloud was just recapitalized by investors in a dramatic down round after announcing that the company had only enough cash to last into the fourth quarter. Pandora just agreed to terms on a new investment that was also a down round and which resulted in a new controlling investor. Both companies have a new CEO. More broadly, there are bitter fights in the value chain between music streamers and music owners about royalty rates. All is not well in some parts of the music distribution business. Change is needed. As Jimmy Iovine

puts it: “Not every industry was meant to last forever. The record industry needs to do something that artists can’t do for themselves. Or else there’s no reason for it to exist.”

This blog post will follow the Charlie Munger “inversion” approach. Instead of focusing on what is wrong with the finances of companies like SoundCloud, Spotify and Pandora (“SSP”), this post will focus on what they would have to do right to create a profitable business. The question that I want to answer in this blog post is: What would a healthy music streaming business look like for SSP? As my friend Bruce Dunlevie likes to say: “What can go right?”

In thinking about these issues it is important to remember that streaming is not a business, but rather a technology. Streaming is just one method of distributing music. Another point to keep in mind is that no business can be healthy if it does not have sound unit economics. There are zero exceptions to this rule.

The healthiest business that has somewhat similar characteristics to SSP is Sirius XM. It is a rough analogy, as we will see, but it is worth thinking about. How can music streaming by SSP be more like Sirius XM?

Let’s take a look at the unit economics of Sirius XM using a recent reports:

Subscriber Acquisition Cost (SAC)	$31
Gross margin	62%
ARPU:	$13.22
Churn:	1.7% a month

Assuming a 10% discount rate in this LTV calculation, the Sirius XM unit economics look like this:

INPUTS		
SAC	$31.00	
ARPU (per month)	$13.22	
Churn (per month)	1.7%	
Gross Margin	62%	
Annual Discount Rate	10.00%	
COGS (per month)	$5.02	
Monthly Discount Rate	0.83%	
Terminal value multiplier (months)	39.80	
NPV	$292.54	
IRR	296.88%	Excludes last period with terminal value

	Time 0	Year 1				
		Jan	Feb	Mar	Apr	May
		1	2	3	4	5
CPGA	-$31.00	$0.00	$0.00	$0.00	$0.00	$0.00
ARPU		13.22	13.22	13.22	13.22	13.22
COGS		-5.02	-5.02	-5.02	-5.02	-5.02
Monthly Cash Flow	($31.00)	$8.20	$8.20	$8.20	$8.20	$8.20
Remaining fraction of subscribers		100%	98%	97%	95%	93%
Net cash flow	($31.00)	$8.20	$8.06	$7.92	$7.79	$7.65
Simplified NPV calculation (check)	$292.54					
Simplified IRR calculation (solving in NPV)	296.88%					

Sirius XM has a very attractive business which is creating real value.

It is worth remembering that the deal Liberty struck to acquire the stake in Sirius XM was well timed. It was 2009 and due to the turbulence created by the financial crisis, cash was king and Sirius XM desperately needed it. Liberty loaned $530 million to Sirius XM in return for a ~40% equity interest just in time:

"Sirius XM, the embattled satellite radio company, said early Tuesday that it reached an 11th-hour deal with Liberty Media that will allow it to repay maturing debt and avoid a bankruptcy filing, at least for the moment." https://dealbook.nytimes.com/2009/02/17/sirius-xm-reaches-loan-deal-with-liberty/

Liberty was buying into a company that had already done much of the really painful parts of creating a business that necessarily has huge upfront capital costs. For example, the $6 billion in accumulated net operating losses had been funded by other investors. In a recent earnings call Sirius said that these net operating losses mean no taxes will be paid until at least 2018. The free cash flow generated by the business has allowed them to do share buyback and pay dividends at a rate of about $2 billion a year.

As an aside, I ran into Liberty President and CEO Greg Maffei in Sun Valley at the bottom of a chair lift in the spring of 2009 shortly after they first bought a stake in Sirius XM. I remember telling Maffei that his purchase was an amazing bargain. I knew the satellite business well since I was an early Teledesic employee, was part of the negotiations with Rupert Murdoch over his Death Star satellite plans, did due diligence on Iridium, Globalstar and most importantly know about satellite radio since McCaw Cellular Communications had been a shareholder in American Mobile Satellite since its creation. I wish I had loaded up on more Sirius XM stock at that time. More recently, other investors have reached this same conclusion. For example, Berkshire Hathaway has invested in Sirius XM's business both directly and through their equity investment in Liberty.

The beauty of the Sirius business model is obscured for some people by the fact that subscriber acquisition cost (SAC) is an upfront expense (see the number in red above in the spreadsheet screen shot). Current quarter GAAP "earnings" do not fully reflect the annuity-like value that is being created by a company like Sirius or Amazon. In other words, in a growing business that has up front SAC current quarter earnings are lower. The good news about that timing of the customer acquisition expense in a growing business that is creating annuity value is it defers taxes with further compounds the wealth that is being created.

The attributes of John Malone's preferred business model have been consistent over the years and exist in the case of Sirius XM.

"We decided to go on a cash flow metric very much like real estate. Levered cash flow growth became the mantra out here. A number of our eastern competitors early on were still large industrial companies — Westinghouse, GE, — and they were on an earnings metric. It's not about earnings, it's about wealth creation and levered cash-flow growth. Tell them you don't care about earnings. The first thing you do is make sure you have enough juice to survive and you don't have any credit issues that are going to bite you in the near term, and that you've thought about how you manage your way through those issues. I used to go to shareholder meetings and someone would ask about earnings, and I'd say, 'I think you're in the wrong meeting.' That's the wrong metric. In fact, in the cable industry, if you start generating earnings that means you've stopped growing and the government is now participating in what otherwise should be your growth metric."

John Malone

Many other companies like Amazon have adopted the financial model pioneered by cable television pioneers like John Malone and my friend Craig McCaw.

How can the SSP music streamers become more like Sirius XM? First and foremost, they must start working to improve each of the unit economics variables and become more like Sirius. These variables discussed below are all important, but nothing is more important for the SSP music streamers than improving gross margin (#2). Without a gross margin fix, nothing else matters.

1. **Subscriber Acquisition Cost:**

At the time of the launch of the satellite radio business subscriber acquisition cost (SAC) was high. There were two separate satellite radio systems, Sirius and XM Satellite Radio and each was bidding against the other for distribution. They also signed expensive content deals that were not sustainable. For example, Sirius' SAC during the first quarter of 2003 was $299. Ouch! The manufacturing volumes on the receivers were low and so unit cost were high. The adoption by car buyers of the service was also relatively low and brand awareness was still being created who was too often addressed via expensive advertising. Cars with radios were not yet in the used car channel where SAC can be lower. Both satellite radio providers did what they could to improve their sales funnels, improve retention and lower SAC but they had a long way to go. By 2007 Sirius' SAC had dropped to $105, but it was still very financially painful. The merger of Sirius and XM in March of 2008 was a helpful event that caused SAC to drop further. With the help of Liberty SAC has continued to drop over the years until now it is $31 (which is an average figure that includes both higher SAC new car customers and lower SAC used car owners).

Sirius has acquired its more than 32 million subscribers in a number of ways. The biggest driver of SAC is the installation of new radios in cars on speculation that conversion rates will be high enough. When a new car leaves the dealer it typically comes with a free trial, which lasts three months. That free radio and trail is COGS that is really CAC but it works to get people hooked. Sirius XM is not a big advertiser and spends money instead on getting better content.

Sirius XM is in about 75% of cars and conversion is ~40% of that figure.

"conversion of new car buyers remains our largest single acquisition channel, in the second quarter these represented only 46% of all self-pay gross additions, compared to 48% a year ago and 49% the year before that. This means that 54% of our gross adds are coming from the existing fleet, either our used car efforts, win-back, self-pay activation or aftermarket additions. We only expect this share to climb higher in the future as our penetration rate in used car sales increases from about 34% in the second quarter to eventually match the approximately 75% penetration in the new car market."

The bottom line is that Sirius XM's SAC can be what it is because ARPU and gross margins are high and churn is low. Music streamers like SSP do not have that luxury. The ad supported ARPU for a SSP music streamers is tiny. Some reports indicates that SoundCloud ARPU is just 11 cents per user. XM has zero ads on its music channels. Total advertising revenue at Sirius XM is about 2%. It is not really a material part of the business of Sirius XM.

At a Morgan Stanley conference in 2015 Sirius XM's CEO Jim Meyer said:

- "Economics on used cars are compelling, don't pay a subsidy on second or third owner, only new car
- There's not any technology that will go on the vehicle that SIRI won't also be able to use
- We won't have commercials on our music channels, never will
- Future of SIRI is based on subscriptions, not advertisement
- We don't want to get into video delivery, or compete with Netflix (NFLX), we want an acquisition that will make subscriber base stronger, lower the churn, grow ARPU, etc. We don't see the streaming business models right now as good businesses, not good economics."

Sirius XM has been very opportunistic in working its sales funnels and churn management procedures and practices. It has partnerships with used car dealers, auto lube stores, insurance companies, banks and other businesses to generate leads.

There are other opportunities and challenges ahead. How do they sell more service to younger consumers? How do they sell service to people who do not own a car? How can they use music streaming to lower SAC for the paid service? Sirius' CEO and President Greg Maffei made this comment about Liberty's investment in Pandora recently:

"The $480 million we invested [in Pandora] will not move the needle at Sirius. It's really there about figuring out is there a strategy in which we have a free offering that Pandora can be a part of that story that we can together figure out how to better monetize these 75 million to 80 million monthly users that they have in a more integrated fashion with the Sirius higher price offering."

Maffei is talking about the value of an up-sell approach.

SSP music streamers have no choice but to be upselling first party premium content as will be explained next. The problem the music streamers face on SAC is that the amount of SAC that can be justified given their current gross margins and ARPU is miniscule. If SSP raise SAC then they will end up with a lot of customers who don't really like the service that much. Not

only are customers acquired organically cheaper to acquire but they are of higher quality and churn less. No one understands this better than Jeff Bezos:

"The balance of power is shifting toward consumers and away from companies…the individual is empowered… The right way to respond to this if you are a company is to put the vast majority of your energy, attention and dollars into building a great product or service and put a smaller amount into shouting about it, marketing it. If I build a great product or service, my customers will tell each other….In the old world, you devoted 30% of your time to building a great service and 70% of your time to shouting about it. In the new world, that inverts." "Your brand is formed primarily, not by what your company says about itself, but what the company does."

2. Gross Margin:

The royalty paid by Sirius XM for music is favorable for historical reasons. The traditional business model for recorded music was based on the assumption that radio stations playing songs sold records that music labels created and the labels paid the musicians. Only song writers received a royalty from broadcasters since they could not sell records. But when music went digital, the music industry business model flipped on its head and there was no longer much of a business selling physical records. Musicians shifted to making their profit on concerts.

Sirius XM pays 11% of its gross revenue as a royalty to musicians as determined by a copyright board operated by the Library of Congress. What this royalty rate means is that even though it pays for its own content like Howard Stern Sirius XM is able to generate gross margins of ~62%. Barron's explains:

Most of Sirius' content, including Major League Baseball games and Fox News, is signed through the end of the decade. Howard Stern and the National Football League—admittedly costly programming—are up for renewal at the end of 2015. Music channels, which make up about half of Sirius XM's content, generate an estimated 60% of the costs.

What does this say about what the SSP must do? Here is how one analyst looks at the comparison of Sirius XM to the SSP music streamers:

Analytical Consideration SiriusXM, the satellite radio broadcaster, seems to have much less exposure to demands for higher royalty payments by performing artists than do the pure music streaming companies mentioned above. Half of Sirius's content is talk and much of that content is in the form of sports broadcasts. Using rough numbers, Sirius's royalty expenses and revenue sharing obligations have amounted to about 20% of its subscription revenues while Pandora's royalty costs have approximated 60% of its total revenues. However, this is not a true comparison because Sirius spends additional money on acquiring and producing its content, the costs of which do not come under its royalty or revenue sharing model. Making a related adjustment would have yielded Sirius a royalty-to-revenue ratio of roughly 30%, still much lower than Pandora's royalty-to-revenue ratio.

Pandora reported in the Earnings Conference Call on July 31, 2017:

Subscription ARPU was $4.82 up from $4.76 in 194 the prior quarter, reflecting a shift from Pandora Plus to Premium. For the quarter, licensing cost per subscriber (or LPU), was $3.11, an increase of 5% from Q1. Non-GAAP gross margin was 36%, compared to 38% in the year-ago quarter. The decline in margin year-over-year was primarily driven by higher statutory rates under direct-deals versus statutory rates.

$3.11/$4.82 means the royalty expense alone eats 64.5% of revenue. Ouch!

For Spotify the royalty payments also crush its gross margins. One estimate is:

"84% of Spotify's total [revenue] last year went back out the door to the music industry, or to facilitate its payment to the music industry."

"Cost of royalties and revenues paid: Spotify will pay at least $2 billion in payments to record labels, in addition to per-stream rates the company pays when users listen to songs. Dividing cost of revenue — which are primarily royalties paid — by total revenue, nearly 85% of Spotify's revenues go toward royalty rates."

Comparing the SSP music streaming gross margins to Sirius XM makes a clear point: the SSP music streamers must get their content costs under control. I like to say that all the LTV variables are interrelated. But the current gross margins are the clear business model killer in the case of the SSP music streamers. Bill Gurley describes my view below:

"a rope connects them all, and they are all facing different directions. When one horse pulls one way, it makes it more difficult for the other horse to go his direction. Tren's view is that the variables of the LTV formula are interdependent not independent, and are an overly simplified abstraction of reality. If you try to raise ARPU (price) you will naturally increase

churn. If you try to grow faster by spending more on marketing, your SAC will rise (assuming a finite amount of opportunities to buy customers, which is true). Churn may rise also, as a more aggressive program will likely capture customers of a lower quality. As another example, if you beef up customer service to improve churn, you directly impact future costs, and therefore deteriorate the potential cash flow contribution. Ironically, many company presentations show all metrics improving as you head into the future. This is unlikely to play out in reality."

The SSP music streamers must find **first party content** that does not expose them to wholesale transfer pricing power of content owners to remedy the gross margin problem. Otherwise wholesale transfer pricing power of the record companies means that the SSP streamers will forever be unprofitable. Netflix and Amazon know this and that is why they create first party content.

The work of musicians is not substitutable. For example, Arctic Monkeys are not a substitute for Bob Dylan. The SSP's music streamers will never have acceptable gross margins until they have their own content. Amazon know this and has a business model focused on generating cash flow only indirectly on music.

Morningstar:

	2007-12	2008-12	2009-12	2010-12	2011-12	2012-12	2013-12	2014-12	2015-12	2016-12	TTM
Revenue USD Mil	922	1,664	2,473	2,817	3,015	3,402	3,799	4,181	4,570	5,017	5,222
Gross Margin %	40.4	48.1	57.0	61.0	62.8	63.9	63.3	61.5	59.7	60.3	60.7
Operating Income USD Mil	-513	-5,037	228	465	676	872	1,045	1,120	1,179	1,432	1,532
Operating Margin %	-55.6	-302.7	9.2	16.5	22.4	25.6	27.5	26.8	25.8	28.5	29.3
Net Income USD Mil	-565	-5,313	-352	43	427	3,473	377	493	510	746	808
Earnings Per Share USD	-0.39	-2.45	-0.15	0.01	0.07	0.51	0.06	0.08	0.09	0.15	0.17

3. ARPU:

Sirius XM ARPU has risen slowly and gradually. This is the variable over which Sirius XM has the most control. In contrast, an advertising supported music streaming business the ARPU challenge is not a truly hard variable to control but not very significant in size. The price of an advertisement is so low due to exploding supply that the advertising-supported ARPU of a music streamer is inevitably tiny.

Contrast an advertising supported model to Sirius XM which makes clear that it is cash-money paying subscribers that drive the profit and cash flow train:

"We offer trials to car buyers and we even discount onboard or retained subscribers, but at the end of the day if you don't want to pay for our service, we don't have a place for you."

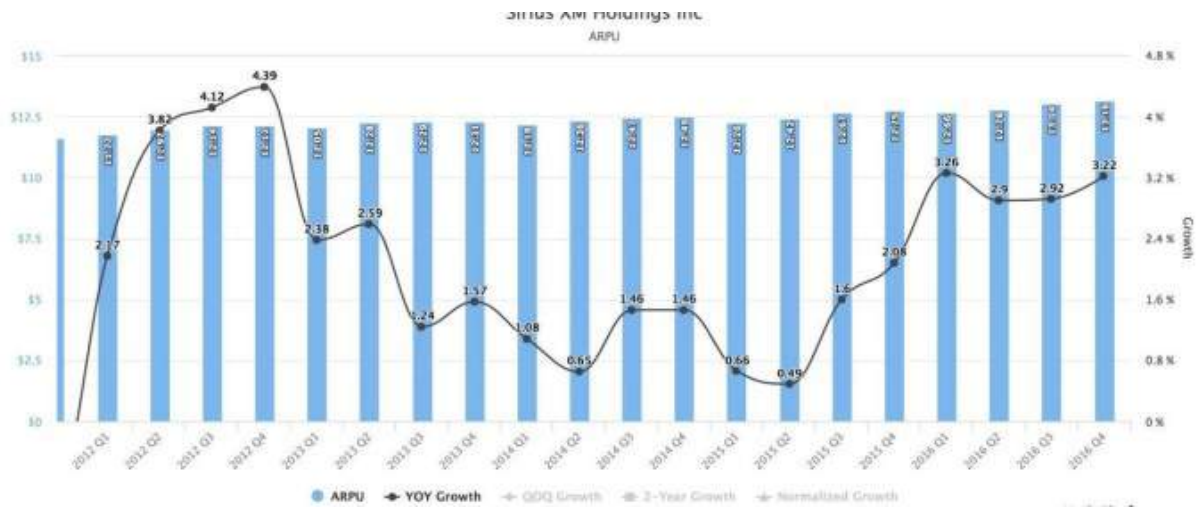

Sirius XM put the comparison this way at a Merrill Lynch TMT Conference in June of 2005:

Pandora is monetizing at about $11 a user, Clear Channel at about $13, Spotify at about $30 and pays 2/3 of economics in royalties, and we monetize at $150 per subscriber.

The Sirious XM example show that the question for a music streaming company like SoundCloud is: what first party services would people be willing to pay a subscription fee for? What original content is valuable enough to get people to pay a fee? I don't see any other choice than to do what Netflix did which is increase first party content. This means that SSP must shift from being only content distributors to being, at least in part, content creators/owners.

4. Churn:

The news on churn has been increasingly good for Sirius XM in recent quarters. In the most recent earnings call the company reported:

"Churn was 1.7% in the quarter, down from 1.8% in the prior-year quarter. And reductions in voluntary churn rates more than offset pressure from an increasing rate of vehicle related churn. Healthy gross additions and this extremely good churn performance produced 466,000 net new self-pay subscriber additions in the second quarter which brought the self-pay subscriber base to nearly 26.7 million and total subscribers to just over 32 million."

Churn is super important in any subscription business. Sirius XM said in an earnings call in 2015: "When you have subscriber base as big as SIRI, a 0.10% change in monthly self-pay churn is equal to the difference between 70,000 subs in a quarter or 280,000 net subs in a year." Every single basis point of churn is important for anyone in the services business. The best way to grow is not to shrink.

Less than 3% churn for a consumer service can be a healthy phenomenon depending on the other variables. Lower than 2% churn is great and lower than 1% churn is outstanding. The level of churn is a product of a number of factors like high product/market fit and sound business execution on retention processes like automatic renewal.

What about churn at the SSP music streamers? One report is as follows:

"Apple Music have a subscriber churn rate of 6.4%, which is nearly three times higher than Spotify, whose churn rate is 2.2%."

The best way to retain customers is always to have a fantastic product. Of course there are a range of operational excellence approaches like automatic renewal that can help, but in the end a great service is the most effective way to retain a subscriber. The best way to increase satisfaction is not, as Pandora has done, to increase ad loads. A far better approach would be to have content that is compelling enough that people do not leave. XM Sirius has this hook in the Howard Stern Show and other first party content. The SPP music streamers must find something similar that is first party. There is no other option.

I am going to stop this discussion here since the post is getting a bit long. Most people do not have the patience for an analysis like this which I could have made much longer. Getting the data needed to value a stock is like being a detective. You must find data from many places, figure out what is signal and what is noise and then put together an analysis despite inherent uncertainty. If you do not find this process fun or are unwilling to do the work, you should be buying shares in the form of a low cost index.

Notes:

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A Dozen Attributes of a Scalable Business

August 25, 2017

"A startup is a company designed to grow fast. Being newly founded does not in itself make a company a startup. Nor is it necessary for a startup to work on technology, or take venture funding, or have some sort of 'exit.' The only essential thing is growth. Everything else we associate with startups follows from growth. To grow rapidly, you need to make something you can sell to a big market. That's the difference between Google and a barbershop. A barbershop doesn't scale." Paul Graham

"A startup is a temporary organization designed to search for a repeatable and scalable business model." Steve Blank

There are many definitions of scalability and ways in which the term can be used. For example, in a technical setting, one definition of scalability is: "a measure of the ability of a system to maintain its performance under an increasing load." In a business setting, the definitions of scalability can vary based on context. Business people who focus on management issues tend to look at scalability differently than people who are financially-oriented. A sales team looks at scalability in yet another way. A CFO might argue that scalability as the ability of the business to grow revenue and profit at an exponential rate while only adding resources at an incremental rate. Some venture capitalists argue that scalability is not present unless the business has the ability to grow revenue to $100 million or more which can justify a venture capital investment.

Given the diversity of views about the definition of scalability, perhaps it is best thought of as a phenomena where "you know it when you see it." If that is true, what would an optimally scalable business look like? Or instead, what qualities increase the scalability of a business? The remainder of this blog post is a discussion of a dozen attributes which can potentially make a business more scalable. As you read this blog post you may conclude, like I have, that

these attributes of scalability are in many cases essentially our old friends from the unit economics equation (CAC, ARPU, Churn, Gross Margin and cost of money) plus free cash flow and some outside frictional forces like government regulation and the laws of physics. You may also conclude, as I have, that no two businesses are exactly alike when it comes to scalability. Each of the attributes of scalability are always in flux, with changes in any one attribute potentially impacting the others. There is no precise formula or recipe that will enable a business to scale, but there are best practices. Every business faces different scaling challenges and opportunities.

Scalable businesses tend to have these twelve attributes:

1. **Customer acquisition cost (CAC) is low in a scalable business since positive word of mouth is strong (i.e., the business benefits from organic customer acquisition)**

Andy Rachleff believes: "If you don't have exponential word of mouth growth, you don't have product/market fit." In terms of staging a successful startup, product/market fit (which is central to the *value hypothesis*) should precede scaling (which is central to the *growth hypothesis*). Spending capital on growth before you have a product that people want to buy is essentially a giant bonfire of cash. Steve Blank talks about why scalability is so important in business: "Success isn't about size – of team or funding. It turns out premature scaling is the leading cause of hemorrhaging cash in a startup – and death. In fact: (1) The team size of startups that scale prematurely is 3 times bigger than the consistent startups at the same stage; (2) 74% of high growth Internet startups fail due to premature scaling; (3) Startups that scale properly grow about 20 times faster than startups that scale prematurely; and (4) 93% of startups that scale prematurely never break the $100k revenue per month threshold." Ryan Smith the founder of Qualtrics describes this objective simply: "Nail It, Then Scale It." Too often people try to scale a start-up before they nail it.

The positive customer word of mouth that Rachleff describes is important for a business since it enables a lower customer acquisition cost (CAC). In other words, scalable businesses generating organic growth do not need massive spending on marketing and sales. Every business will have some customer acquisition costs but in the best and most scalable business that cost is relatively low. Bill Gurley agrees with Rachleff: "With great companies the consumers buy because the product is so good. They aren't spending [tens of millions] on marketing." Gurley also believes that customers quality if higher is they are organically acquired: "Organic users typically have a higher NPV, a higher conversion rate, a lower churn, and more satisfied than customers acquired through marketing spend."

It is important to understand that growth is not always organic from the start of a business. Sometimes critical mass must be achieved in non-scalable ways before a business becomes scalable via organic customer acquisition. Paul Graham points out that sometimes doing what does not scale is essential to enabling critical mass which does allow a business to scale: "One of the most common types of advice we give at Y Combinator is to do things that don't scale. In Airbnb's case, these consisted of going door to door in New York, recruiting new users and helping existing ones improve their listings."

2. Scalable businesses have fewer incremental marginal costs after a modest upfront investment has been made to create the product or service

Software is the ultimate representation of this second attribute of scalability because it has unique qualities. If you give me your car, you no longer have a car. But if you give me a copy of your software, you still have your software. We don't necessarily need to be "rivals" about owning the same software, so the term used to describe something like software is "non-rival." That billions of people can possess the same software at close to zero additional cost on a non-rival basis, combined with the fact that cost of making another copy of software is essentially zero and the cost of distributing that software to customers is also close to zero means that a software business when properly run and possessing the right attributes can deliver almost magical business results. Bill Gates said about the software business in 1993: "It's all about scale economics and market share. When you're shipping a million units of Windows software a month, you can afford to spend $300 million a year improving it and still sell it at a low price." Once a software business recovers its cost associated with research and development a lion's share of the additional revenue can drop to the bottom line as profit. The profit potential of software is unprecedented in the history of business. The business outcomes that Google and Facebook represent are examples of this phenomenon. Contrast the scalability of a software business with a home security company that must roll a truck with a trained technician who installs expensive equipment in the home and where a human operator must respond to service calls.

3. A business is more scalable if the total addressable market is enormous

It is by definition impossible to grow a business significantly if the market is too small. Sequoia's co-founder Don Valentine said once: **"**We have always focused on the market — the size of the market, the dynamics of the market, the nature of the competition — because our objective always was to build big companies. If you don't attack a big market, it's highly unlikely you're ever going to build a big company." One slide that venture capitalists almost always see in a pitch deck for a startup is the addressable market slide. Often it is a pie chart depicting a massive total addressable market (TAM) and conveying the point that the business only needs a small slice of that market to be a huge success. For example, here below is a company called Artsy making a case for a large addressable market for its business:

"Despite an estimated $3 trillion of art assets in the world, only $44 billion trades in a given year—and less than 2 percent of qualified buyers participate in this market due to high transaction costs, long lead times, and limited transparency on pricing and value,' Artsy will bring this last major consumer category online and thereby substantially expand the size of the global art market. We look forward to working with Artsy to make a larger, more connected art market a reality. The global art market is currently valued at around $44 billion annually, and about $3.75 billion of that was spent online in 2016, according to The European Fine Art Foundation, a rise of about 15 percent over 2015."

4. In a scalable business the average cost of creating the products and/or services fall as the volume of its output increases (economies of scale)

Supply-side economies of scale exist when there are reductions in the average cost per unit associated with increasing the scale of production for a product or service. JP Morgan's Jamie Dimon has said that if we didn't have economies of scale, "We'd still be living in tents and eating buffalo." Scale economies have always been important but n recent decades scale economies and their impact have been put on the equivalent of steroids. Erik Brynjolfsson explains this phenomenon: "Technology has made it easier for different firms to coordinate

their activities with one another, and they don't have to be part of one company. They can get the benefits of scale without the inertia of scale."

Scalabilty can be further understood by sorting the attributes of scalability into categories. Venture capitalist Alex Taussig describes the *financial* aspects of scalability in this way: "Businesses that scale are businesses with operating leverage. Put simply, if you add operating costs (sales, marketing, administrators, R&D, etc.) at the same rate you grow revenue, then your business does not scale. Alternatively, if additional revenue requires relatively smaller and smaller additions to operating costs, then congratulations… your business scales!"

5. A scalable business requires fewer people to operate

Mike Maples Jr. describes some of the *operational* aspects of scalability here:

"Company power has to do with technical debt or management debt. So technical debt is sort of like when you make short-term, expedient decisions in the technology that sort cost you later. Maybe in order to ship something on time, you had to cut some corners, and the architecture wasn't as elegant as it could've been, or just the attention to detail or bug fixing maybe wasn't as good as it could've been. And so technical debt is sort of like when you put off some things that you have to solve later, but they cost you more money and time after the fact. And management debt is the same thing, but it's for lack of having management systems in place. And if you have too much management debt, if the company starts to take off and do really well, you don't have the internal capacity and wherewithal to scale to the speed that the opportunity might scale."

Maples uses this approach to looking at a business opportunity which I have written about before:

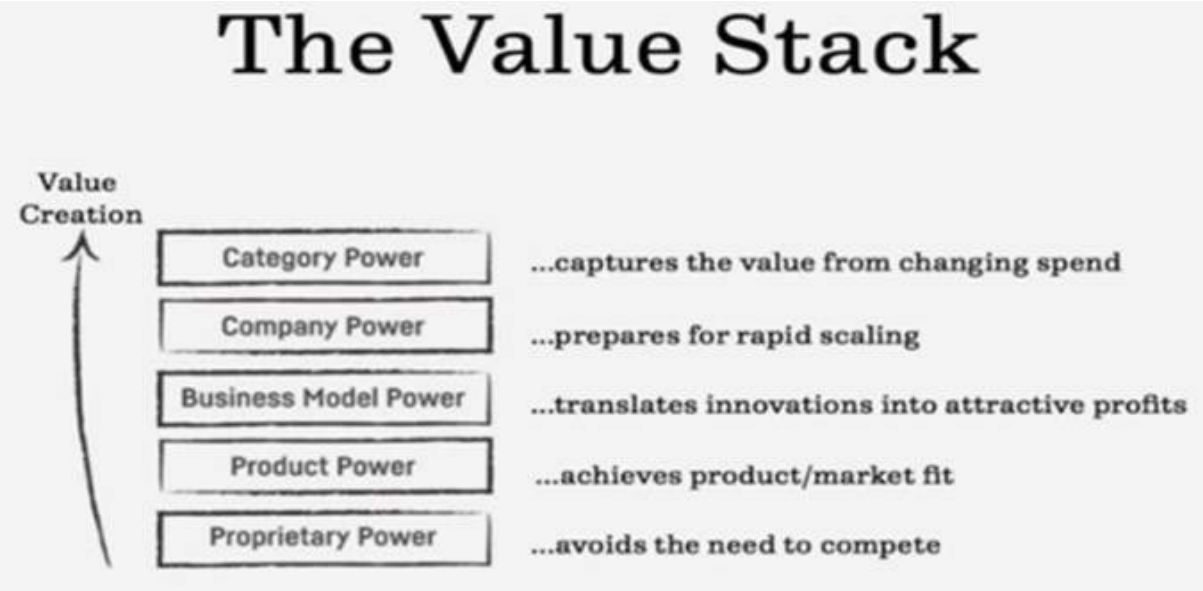

Fred Wilson describes some of the work required to enable operational scalability in this way: "Investing in management means building communication systems, business processes, feedback, and routines that let you scale the business and team as efficiently as possible."

The classic example of a non-scalable business is a consulting company since in order for the business to grow it must hire more people the same skills and abilities. Alex Taussig writes: "McKinsey & Co. is one of the greatest consulting firms and brands in corporate America. But, it doesn't scale. Ignoring its publishing business, McKinsey needs to add consultants, almost on a one-to-one basis, to grow its revenue." It is time consuming and expensive to create new consultants and they often leave to form their own consulting firms or join a company.

Other business scale very well. It is hard to find a more representative story of the ability of a software-driven business to swiftly rise to fabulous success while employing very few people than the messaging provider WhatsApp, a business famously sold to Facebook for $21.8 billion. The company was founded in 2009 and sold just a few years later in 2014. *Wired* magazine points out: "One of the (many) intriguing parts of the WhatsApp story is that it has achieved such enormous scale with such a tiny team. When the company was acquired by Facebook, it had 35 engineers and reached more than [one billion] users." New approaches to programming adopted by WhatsApp enabled scale to be created by the business at speeds that were previously not possible. WhatsApp, Skype, Line and WeChat now dominate messaging, saving consumers billions of dollars in charges.

6. A business that generates positive float, which creates a low cost source of capital, is more scalable

Bill Gurley and Jane Hodges describe the Dell strategy in a classic article from 1998:

"From a corporate perspective, the best measure of fitness is return on invested capital (ROIC). This measure matters most because over the long haul, capital flows toward investment opportunities with a high ROIC. Inefficient companies, on the other hand, are eventually starved of the cash they need to survive. To understand just how indispensable technology has become, you have to follow the basic math of return on invested capital. To get ROIC, you divide EBIT, or earnings before interest and taxes, by invested capital. Now let's divide the numerator and the denominator by annual sales. This restates ROIC as operating margin multiplied by asset turnover. In other words, the two components that define a company's fitness are the ability to charge a high spread between price and actual cost, and the ability to generate sales from a small base of invested capital…. companies that lack competitive information technology will be in serious trouble. They will resemble a 40-year-old trying to win Wimbledon with a small wooden racquet. Their business models may no longer be economically sustainable. Companies like Dell have reached an interesting new stage in the evolution of business–negative working capital. They collect money from customers before they have to acquire components or spend money. This phenomenon allows these companies to grow without raising capital, even if day-to-day profitability is zero."

Gurley elaborated on Dell's advantage in another article: "Dell's incredible five days of inventory allows it to pass on component price declines faster than anyone else in the industry. But perhaps the unique aspect of Dell's business advantage is its negative cash conversion cycle. Because it keeps only five days of inventories, manages receivables to 30 days, and pushes payables out to 59 days, the Dell model will generate cash–even if the company were to report no profit whatsoever."

Justin Fox explained the financial benefits further:

"If you have a business where your customers pay you quickly, you manage your inventory well, and you're able to take your time in paying your suppliers, your free cash flow can be consistently positive even when your net income is not. Which is exactly the kind of business that Jeff Bezos and his colleagues have constructed at Amazon over the past decade. According to my instructor in such matters, Harvard Business School finance professor Mihir Desai, the key metric of a company's cash-generating prowess is the cash conversion cycle, which is days of inventory plus days sales outstanding (how long it takes your customers to pay you, basically), minus how many days it takes you to pay your suppliers. Super-efficient retailers such as Walmart and Costco have been able to bring their CCC down to the single digits. That's impressive. But at Amazon last year, the CCC was negative 30.6 days."

7. In a scalable business pricing power is high, enabling high gross margins and profit

Warren Buffett believes: "The single most important decision in evaluating a business is pricing power. If you've got the power to raise prices without losing business to a competitor, you've got a very good business. And if you have to have a prayer session before raising the price by 10 percent, then you've got a terrible business." Charlie Munger has a similar view:

"There are actually businesses, that you will find a few times in a lifetime, where any manager could raise the return enormously just by raising prices—and yet they haven't done it. So they have huge untapped pricing power that they're not using. That is the ultimate no-brainer. … Disney found that it could raise those prices a lot and the attendance stayed right up. So a lot of the great record of Eisner and Wells … came from just raising prices at Disneyland and Disneyworld and through video cassette sales of classic animated movies… At Berkshire Hathaway, Warren and I raised the prices of See's Candy a little faster than others might have. And, of course, we invested in Coca-Cola—which had some untapped pricing power. And it also had brilliant management. So a Goizueta and Keough could do much more than raise prices. It was perfect."

What companies have pricing power today? Facebook would be one example. In the most recent quarter the average growth in the price of Facebook advertising grew by 24 percent to a record high. What drives pricing power? The sustainable competitive advantage that I wrote about in my blog post on Michael Porter.

8. A business is more scalable if it has few regulatory and legal barriers

Some businesses require approval after approval to grow revenue and profit and are not very scalable. Highly regulated businesses are harder to scale. One highly regulated business that I have experience with is communications satellites. Not only do you need permission to launch satellites but you need agreement of regulators that you can occupy a spot in orbit. use radio frequencies in creating communications links and to operate as a communications provider.

Many other industries have a high regulatory component to their business. The bad new is that businesses with a lot of regulation impacting what they do are hard and expensive businesses to enter. The good news is the same thing, since that difficulty can create barriers to entry.

The McLaughlin-Sherouse List: The 10 Most-Regulated Industries in 2014

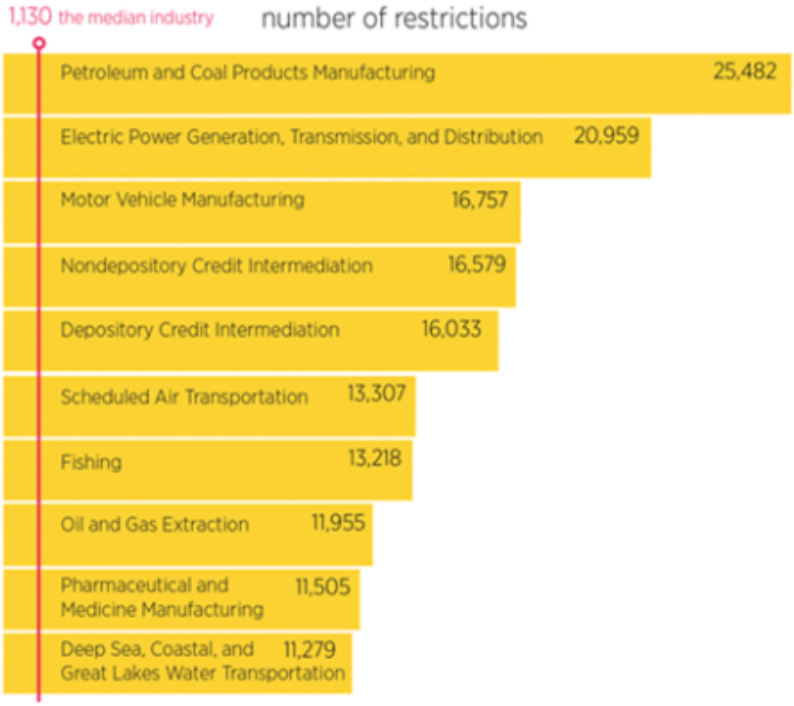

9. If product and/or service distribution simple and inexpensive (preferably just bits delivered on-line) the product is more scalable

The speed of adoption of a service like WhatsApp has no precedent in the history of business. The cost of delivering bits for that application is tiny. People receive the product on devices that they already paid for. When a business has attributes like WhatsApp the result can be remarkable:

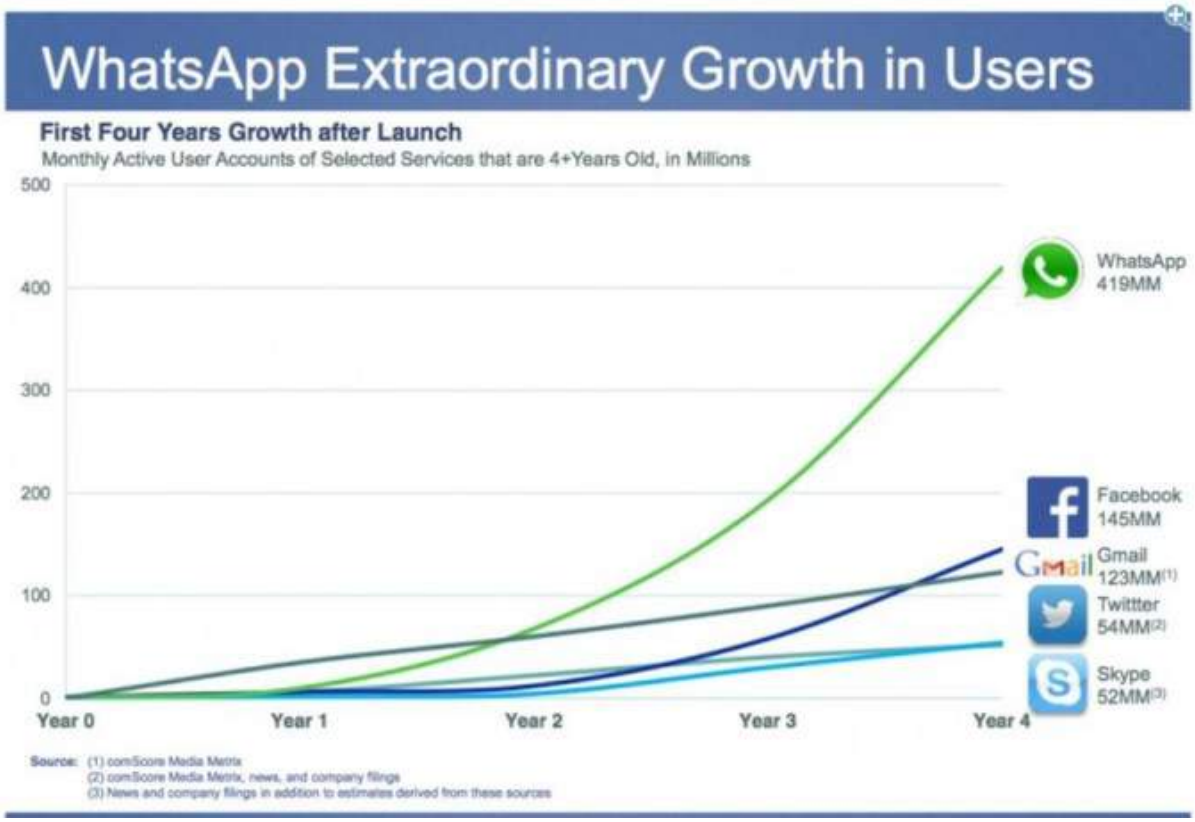

Chris Dixon has said that it is only a matter of time before a single programmer achieves greater success than WhatsApp in terms of how fast his or her application is adopted. Now, more than ever, one person can literally change the world in a major way since they now have the ability to create software on inexpensive machines, using techniques they can learn on line, by accessing a third party data center in the cloud and delivering the service over the global network of networks. The good news is that barriers to entry in business are disappearing. The bad news is also that barriers to entry are disappearing in business.

10. Maintenance and support costs are low in a scalable business

Many modern software applications can be supported in an automated way, which can make the cost of goods sold (COGS) remarkably low and gross margins incredibly attractive. I wrote about that phenomenon in my blog post on pricing and gross margins. Cloud computing has radically reduced the cost of creating a startup. The good news is that it is cheaper than ever to conduct new business experiments, the bad news is that there are more people and companies than ever conducting these experiments.

11. In a scalable business customer retention is very high (low churn)

My blog post on customer churn is here https://25iq.com/2017/01/27/everyone-poops-and-has-customer-churn-and-a-dozen-notes/ and since this post is already getting a bit long I will not say much more here. What makes a business scalable is a service that is sticky and as a result does not suffer too much from painful churn. Every business has some customer churn, but some have less than others. The best businesses understand the value of customer retention and as a result have effective ways to keep the impact of churn manageable.

12. In a scalable business network effects are strong, which increases the value of the product or service as the number of customers grows

My post on network effects is here https://25iq.com/2016/03/24/two-powerful-mental-models-network-effects-and-critical-mass/ and again I won't write too much more now since this post is running long.

I will add one final note before concluding this post. Investors should consider both supply-side and demand side scalability in evaluating the financial prospects of a business. Supply-side scalability concerns the ability of a business to use capital, labor and resources more efficiently as the business grows. Managers concerned with supply-side scale are working to optimize processes so profit can be maximized. Sangeet Paul Choudary writes:

"Optimization involves creating repeatable processes which can be cost-effectively repeated over and over again to grow the business. The two key aspects of scaling are:

A) Repeatability

B) Cost-effectiveness

A lot of business education is focused on strategies for optimization of these processes. An IT outsourcing shop, for example, optimizes processes surrounding the labor variable to create scale. A manufacturing business has to optimize processes involving procurement, production, distribution."

Scalability on the demand side, which is where network effects happen, can be created by structuring how customers interact with the product and with other users of the product.

Network effects exist when the "value" of a format or system depends on the number of users. These effects can be positive (for example, a telephone network) or negative (for example, congestion). They can also be direct (increases in usage lead to direct increases in value to users, as with the telephone) or indirect (usage increases the production of complementary goods, as with cases for mobile phones).

Investors seek a business with network effects since it has attributes which can help it build a barriers to entry against competitors.

Notes:

https://steveblank.com/2010/01/25/whats-a-startup-first-principles/

A Dozen Lessons about Investing and Money from Dan Ariely

September 1, 2017

Dan is a Professor of Psychology and Behavioral Economics at Duke University and the founder of the Center for Advanced Hindsight. His research and work is about how people

actually act in the marketplace, as opposed to how they should or would perform if they were completely rational. His books include *Predictably Irrational, The Upside of Irrationality, The Honest Truth about Dishonesty, and Payoff.* His next book is entitled: *Dollars and Sense: How We Misthink Money and How to Spend Smarter* and will arrive in stores in November.

1. **"We're such good storytellers that we come up with stories that portray us in good ways, so we don't always even see our own mistakes. And then on top of that, it's about our social standing, and admitting failure also admits that we might be wrong in the future." "We all want explanations for why we behave as we do and for the ways the world around us functions. Even when our feeble explanations have little to do with reality. We're storytelling creatures by nature, and we tell ourselves story after story until we come up with an explanation that we like and that sounds reasonable enough to believe. And when the story portrays us in a more glowing and positive light, so much the better."**

A New York Times reviewer of Airely's book *Predictably Irrational* describes one of his foundational conclusions as follows: "We aren't cool calculators of self-interest who sometimes go crazy; we're crazies who are, under special circumstances, sometimes rational." The situations in which human are not rational are sufficiently predictable that systems can be created to achieve Airely's goal of: "gaining a better understanding of our ability to make decisions, and identifying the places where we fall short, in order to better design products, interventions and policies." In short, by understanding biases that can impact human behavior we can become better choice "architects." For example, by creating the right structure we can make decisions more or less likely to happen depending on the results we want to achieve. Here is a grim but powerful example of how making something harder changes behavior:

Prior to the 1950s, domestic gas in the United Kingdom was derived from coal and contained about 10-20% carbon monoxide (CO). Poisoning by gas inhalation was the leading means of suicide in the UK. In 1958, natural gas, virtually free of carbon monoxide, was introduced into the UK. By 1971, 69% of gas used was natural gas. Over time, as the carbon monoxide in gas decreased, suicides also decreased. Suicides by carbon monoxide decreased dramatically, while suicides by other methods increased a small amount, resulting in a net decrease in overall suicides, particularly among females.

If this change can reduce the level of suicide imagine how much it can increase the willingness of people to sign up for a savings programs or a 401(k). Decision-making frictions can have positive or negative impact depending on the desired outcome. people can be nudged just like frames.

2. **We look at the most recent evidence, take it too seriously, and expect that things will continue in that way." "If you think about the creation of asset bubbles, that's always what happens. Things go up and up and up, and we start thinking it has to always go up." "It's very hard for us to deal with lots and lots of information. Of course, today we're getting lots and lots of information, so what do we do when we get too much information? We simplify. We use heuristics. We rely on only part**

of the information. On the most salient information. And that, of course, means that the most salient information is probably the information everybody else knows, as well; so we become less independent in our opinions from other investors. If everybody is in information overload, and we all do simplifications, then what happens is that we follow the simplest source of information, which is probably common to everybody." *Recency bias and herding.*

A human brain has many taxing decisions to make all day long. It naturally look for shortcuts and was to reduce cognitive load. It has a preference for readily accessible information like recent memory, over the hard work of thinking and analysis. If you have seen something recently is is easier to remember and take into account. People who have seen a stock or a market index go up recently are more likely o think it will go up more. People who have seen a picture of some who has won the lottery and more likely to believe that they will win the lottery. Nothing sells more lottery tickets than pictures in the news showing ordinary person holding a cardboard check from the lottery board. The tendency of people to follow the crowd is illustrated by a story that Warren Buffett likes to tell about a deceased oil prospector who is told by St Peter that Heaven's allocation for his profession is full. The speculator yells "Oil discovered in Hell." A stampede of people streams out of Heaven toward Hell. St Peter informs the prospector that he is welcome pass through and enter heaven. "No thanks," said the prospector. "I'm going to check out that oil discovered in Hell rumor. Maybe there is some truth in it after all."

3. **"Money is really about opportunity cost. Every time you buy coffee, the money comes from something else. What is this something else? We don't envision it. With money, the trade offs are really unclear." "Every time we buy something, it's about what we are not going to be able to do in the future." "The problem with opportunity cost is that opportunity cost is divided among many, many things."** *Opportunity cost.*

Charlie Munger is a strong believer in making decisions based on opportunity cost.

"In the real world, you uncover an opportunity, and then you compare other opportunities with that. And you only invest in the most attractive opportunities. That's your opportunity cost." "We're guessing at our future opportunity cost. Warren is guessing that he'll have the opportunity to put capital out at high rates of return, so he's not willing to put it out at less than 10% now. But if we knew interest rates would stay at 1%, we'd change. Our hurdles reflect our estimate of future opportunity costs." "Warren is scanning the world trying to get his opportunity cost as high as he can so that his individual decisions are better."

When some asked you to buy something your decisions should not be limited to that question. The better question to ask is: Of all of the things I can buy or otherwise do with this money, is this what I want to do? The question should not be: should I buy stock X. Instead, out of all the stocks or other investments in the world other should I buy X?

4. **"When things like complex financial instruments are difficult to evaluate, it's easier for us to rationalize unethical behavior and the effects of conflicts of interest become larger. Finally, when other people around us behave similarly, conflicts of interest rule even more." "The overall market for annuities is bad because it is very obscure. It is hard to price. And annuity companies can use lots of hidden fees and**

costs. If you think about it, it's a market where most people who sell annuities get their commissions upfront which tells you that it's probably (a) a hard thing to sell, but (b) that the companies need to incentivize sales people to sell them, which I think suggests (c) that there has to be something quirky about the whole system." *Incentive caused bias.*

Charlie Munger says: "Where you have complexity, by nature you can have fraud and mistakes. You'll have more of that than in a company that shovels sand from a river and sells it." As an example, Munger says the U.S. healthcare system is "ridiculous" in its complexity. "The whole system is cockamamie," he has said. There is he value in keeping an investment plan and investment decisions simple. You will make fewer mistakes and be a happier person. Research Affiliates makes three key points about this bias:

- A preference for complexity is almost hardwired into investors, their agents, and asset managers because the intuition is that a complicated investment landscape requires a complex solution; a complex strategy also supports a higher fee from both agents and managers.
- Research shows that simple, low-turnover and complex, high-turnover strategies perform similarly on a before-fee basis, suggesting the former may have the advantage after tax.
- Simplicity leads to better investor outcomes not because simplicity in and of itself produces better investment returns, but because a simple strategy encourages investors to own their decisions and to less frequently overreact to short-term noise.

Munger makes the point with a fishing story: "I think the reason why we got into such idiocy in investment management is best illustrated by a story that I tell about the guy who sold fishing tackle. I asked him, 'My God, they're purple and green. Do fish really take these lures?' And he said, "Mister, I don't sell to fish.'"

5. **"A man's satisfaction with his salary depends on (are you ready for this?) whether he makes more than his wife's sister's husband. Why the wife's sister's husband? Because (and I have a feeling that Mencken's wife kept him fully informed of her sister's husband's salary) this is a comparison that is salient and readily available."** *Availability bias*

An idea or a fact should not be taken more into consideration I making a decision merely because it is easily available to you. Shark attack or a plane crash is not more likely because it is vivid. You are not more likely to win the lotto because you saw a winner on TV. A story bout X that you have read recently will tend to impact your decisions more than one you read years ago. Overcoming a dysfunctional heuristic like availability bias is a trained response.

6. **"Why does cash feel so different? The agony of parting with our money has to do with the saliency of, do we see this money going away? And it has to do with the timing of whether the money is going away at the same time we're consuming." "For example, we find that if you have a coin flip that you have a 50% chance of making $1,100 and a 50% chance of losing $1,000. The expected value is positive, but we don't think of it as positive. We think, "Oh, my goodness. If I lost $1,000, I would be very miserable. If I won $1,100 I would be happy, but it wouldn't offset**

it, so let me not take that bet." Now, we think that the reason is evolutionary. If you think about nature, if you get something good (like you get to eat more food and so on) that's a good thing, but if you do something bad, you can die. So nature has kind of tuned us to look at the negative side because if you get a bit more food, a bit more money or whatever, there's a positive expected value but it's limited. Whereas on the negative side, you can lose a lot. So because of that we just attune more to losses." *Loss aversion.*

Michael Mauboussin writes: "One of prospect theory's most important contributions to finance is loss aversion, the idea that for most people, losses loom larger than corresponding gains. The empirical evidence suggests we feel losses about two to two-and-a-half times more than we feel gains. Loss aversion is a clear-cut deviation from expected utility theory." Charlie Munger puts it this way: "People are really crazy about minor decrements down. Huge insanities can come from just subconsciously over-weighing the importance of what you're losing or almost getting and not getting."

7."There are wealthy gentlemen in England who drive four-horse passenger coaches 20 or 30 miles in the summer because the privilege costs them considerable money, but if they were offered wages for the service, that would turn it into work, and then they would resign." [Quoting Mark Twain] *Anchoring*

Anchoring is a tendency of people to grab on to inputs just because they are available. James Montier describes the bias as follows: "In the absence of any solid information, past prices are likely to act as anchors for today's prices. For example, financial analysts often fail to revise their estimates since they get anchored to prior numbers. (they revise too late to be useful). Experiments have shown that if you ask a professional to work in behalf of the poor for free you get a much better response than if you ask them to work at a reduced rate. Free work on behalf of the less fortunate activates their desire to contribute to a community. Partial payments tend to activate anchoring which make them unhappy since they feel they have incurred a loss.

8. "People are always willing to take money from their future self, but then that puts the future in danger. So we have to work on getting people to think about how much they are really spending and also how they can invest in the future. That will take more of an effort as technology makes spending money easier to do." "If you think about an environment in which we have to think long-term and abstractly, that's just not something we're good at. Saving is about now versus later, it's about concrete versus abstract, and we don't do those well." Present biased preference.

A time preference can be quantified as the amount of money required to compensate the consumer for foregoing current *consumption***.** For example,

9. "Retirement is especially difficult because we not only don't know exactly what we're giving up, it's also far away in the future. That makes it very, very difficult to think about. It's called hyperbolic discounting — we just care less dramatically about the future so not only is it hard for us to understand what we are giving up, it's also really, really delayed." "If you think about the opportunity cost of money — if I spend a thousand dollars now on a new bicycle I know what I'm getting. If I put it into my retirement account I don't really know what I'll get in the future." *Hyperbolic discounting.*

Companies like Starbucks know that people will pay several dollars for a coffee house experience even though on an annualized basis it eats up a big share of their after-tax income. People like benefits that are available NOW—which is why they tend to not save for retirement and eat too many calories. The investor too often says: "To heck with the 401(k), let's buy a waterski boat with a disco ball."

10. "If it's more difficult to get credit, it might make people feel more pain of paying and therefore spend less." "I think one of the bigger problems today is how easy it is to spend money. I see a lot of younger people who get way out of whack with the reality of money because tech enables it. You order food from your phone because it is easy and someone else is doing the work of making it, but that also adds up over time. That may not be great for your finances long term because you stop thinking about how much money you're spending each day. That feeds into all sorts of investment decisions over time." *Loss Aversion.*

In my blog post on Richard Thaler I wrote:

"Hundreds of studies confirm that human forecasts are flawed and biased. Human decision making is not so great either. Again to take just one example, consider what is called the 'status quo bias,' a fancy name for inertia. For a host of reasons, which we shall explore, people have a strong tendency to go along with the status quo or default option." Sales and marketing departments love status quo bias. For example, magazines often offer free trials or issues at a reduced price if the customer agrees that the business can continue to send them issues until they actively end the subscription. When making decisions people tend to follow the adage: "when in doubt, do nothing." For this reason, getting a customer's credit card information is a holy grail for marketers, who hate it when credit cards expire. Customers know this to some degree, which means they are reticent to hand out their credit card data even for a free trial. The incentives must be significant to obtain customer credit card data as a result.

11. **"Buffett gave unsigned checks for $10,000 to his children, promising to sign them if he was over target weight by a certain date. Many people use commitment devices to try to keep their weight down, but Buffett's idea had a big flaw: his children, spotting a rare opportunity to get money from the notoriously frugal billionaire, resorted to sabotage. Doughnuts, pizza, and fried food mysteriously appeared whenever Buffett was home. In the end the incentives worked: even with his children's sabotage, the Oracle kept his weight down, and his checks went unsigned. But had he been purely rational, no commitment device would have been needed."** Nudging.

It is possible to use a bias that is dysfunctional for positive purposes as Buffett has done here. Most certainly. Charlie Munger has said: "The system of Alcoholics Anonymous: a 50% no-drinking rate outcome when everything else fails? It's a very clever system that uses four or five psychological systems at once toward, I might say, a very good end." Richard Thaler tells this story to talk about why people need help:

I was having a dinner party for fellow economics grad students. Before dinner I served some cashew nuts along with cocktails, and everyone kept eating them. Soon their appetites were in danger, not to mention their waistlines. I grabbed the bowl and hid it in the kitchen. People

were (a) happy, and (b) they realized their reaction conflicted with traditional economic theory. Econs are better off with more choices. We humans actually need help controlling our impulses—nudges.

12. **"Our irrational behaviors are neither random nor senseless- they are systematic and predictable. We all make the same types of mistakes over and over." "One of the most underused interfaces in human decision-making is the calendar. If you think about it, the calendar does many, many things wrong. But one of the interesting things about the calendar is that when you have something there that is set there's a good chance that you will actually go ahead and do it." "I want to know if we can start building ways of preventing risks. Can reminders really help people? We all know that you get a lower price on auto insurance if insurers think you are less likely to speed. What if we started sending reminders to people about speed or remind them of some of the long-term consequences that could result from speeding?"**

Another example of a dysfunctional bias involves what a New York Tines reviewer of Predictably Irrational pointed out that: "People aren't just loss-averse; they are also effort-averse." They also have status quo bias. Some countries have an opt-in system for organ donation. The direction they give is: "Please check this box if you would like to participate in the organ donation program." Other countries have an opt-out system. This result of this choice architecture is striking.

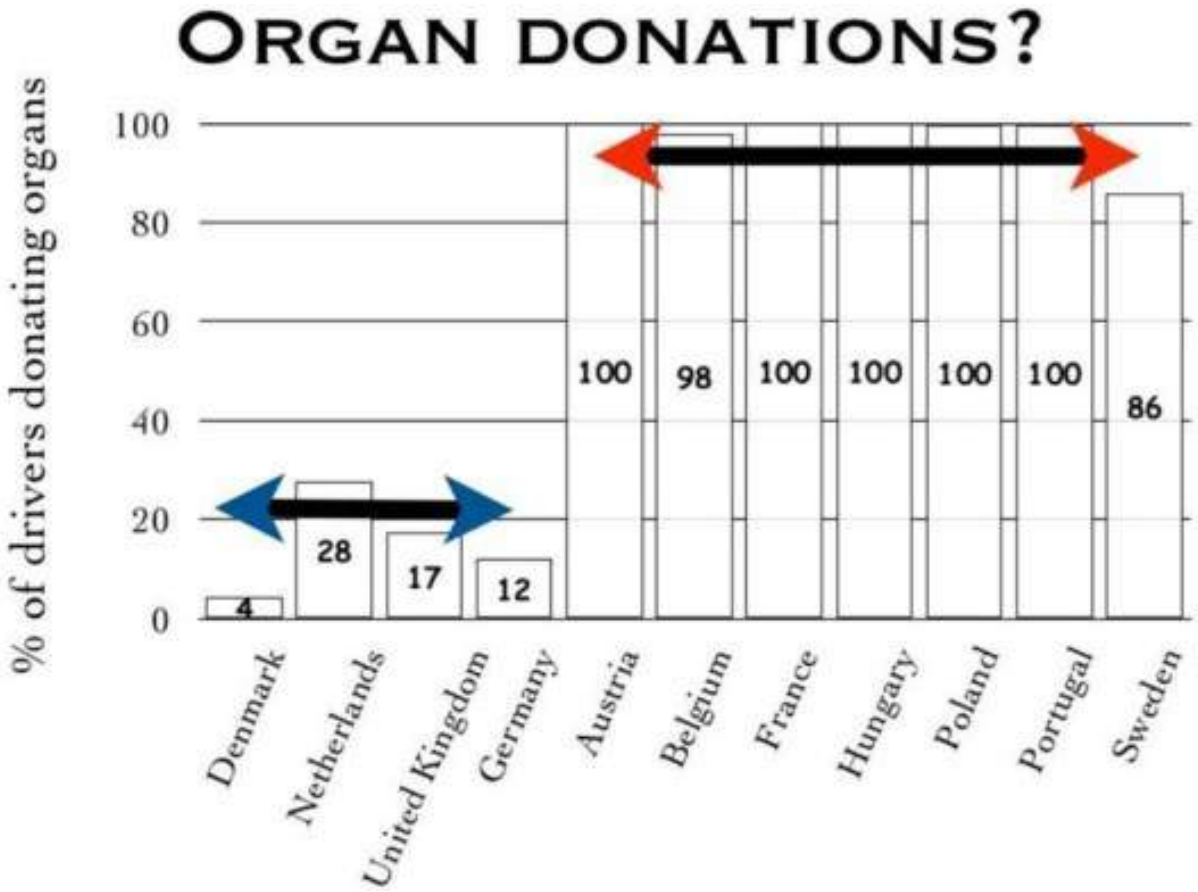

That brings this post bask to the first point above. Airley says that if you ask people why they made their organ donation choice the inevitably come up with a story that somehow justifies their decision regardless of whether it is yes or no.

Notes:

Not released yet:– Dollars and Sense: How We Misthink Money and How to Spend Smarter November 7, 2017 https://www.amazon.com/Dollars-Sense-Misthink-Money-Smarter/dp/006265120X/ref=sr_1_7?ie=UTF8&qid=1503168432&sr=8-7&keywords=dan+ariely

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Click to access SpillerValueOfMoney.pdf

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A Dozen Lessons about Business and Life from Jimmy Iovine

September 9, 2017

Jimmy Iovine started his career as a sound engineer. He used that experience to become a record producer and later translated that set of skills to becoming a co-founder of Interscope Records. In 2006, Iovine and Dr. Dre founded Beats Electronics, which they later sold to Apple for $3 billion. As an aside, I would have liked to have written about Dr. Dre too in his post, but he is a man of few words.

1. **"I don't have a rear view mirror." "I never celebrated a success. There are no victory laps. I'm always moving forward." "The most important thing I ever learned: No matter how ugly it gets, keep moving." "Going backwards is not an option."**

Allen Hughes, who directed the documentary *The Defiant Ones* has said that the mentality reflected in the six bolded sentences above is:

The thing that they both have in common is that they literally don't look back at anything they've accomplished. They don't talk about it. They're not nostalgic at all about any accomplishments or things they've been through. They just keep moving. They don't have a rear view mirror.

As an example of putting this idea into practice, Iovine has said that he hid his first gold record in his basement because it was about past achievements, not future goals. The two partners are all about the work they are doing right now. They refuse to get sentimental or boastful and instead devote themselves to the present and how that will impact the future. Hughes has also said about Iovine and Dre:

What they both taught me the most and what they most have in common is when they get focused on something—creatively or passionate about anything in their life—that's all they talk about and that's all they live, breathe and eat. They don't let any other noise come into their vision they just have blinders on. They don't have extra conversations about sports or politics, they're just so focused on what they're doing. I took many, many life lessons from this but while I'm very passionate, they really taught me how to focus or tune out noise that doesn't have anything to do with what you're doing. As we get older that becomes more precious—to tune out the bullshit.

2. **"My proudest thing in my career is that I was able to change it three times. And I'm happy about that, I couldn't have done the same thing my whole life, I would've gone nuts. I couldn't do it because I do things based on impulsive excitement and I'm just not that guy that can do something for 50 years and be excited about the same thing. I can't do it."**

Iovine's experience in making these three career changes illustrates that this process can be positive, especially if you are willing to work hard and can hustle. Not only is a career change possible but it is likely to be essential given how fast the economy and world are changing. People will, for better or worse, increasingly need to repot themselves as they would a houseplant. That will necessarily take some bravery. But since we all get root bound at some point in our careers and the change can potentially be a positive experience. One attribute that can help people navigate a change like this is to remain opportunistic. Occasionally an opportunity will come along that has a big upside and a small downside and you will need to be ready to take advantage of that. To illustrate that point, author and filmmaker Nelson George has said that Iovine "is one of the few — and it's a very small group — who were part of the height of rock in the '70s and '80s with some of the greatest musicians of the era, who was able to see the value in hip-hop and make the move into hip-hop pretty seamlessly."

On a personal note, one career change I made happened in 2002 after the Internet and telecom bubbles popped (there were two separate but related bubbles). The wireless and telecom industries were getting boring. Even on the financial side, the big opportunities were gone. The suits were taking over. Pirates were being asked to join the navy. Consolidation had already happened and would continue to happen. My investing thesis at the time was all about software anyway and so I decided that this would be the basis of my new career. I did not "go back to school" in 2002 but rather redoubled my efforts to become more knowledgeable about software. I read even more voraciously than usual about software and actively sought out the best teachers and experts. Mark Cuban said once that after you graduate from college one very valuable trick is to find jobs that pay you to learn. Cuban's point is a very important idea regardless of whether your education stops at high school or extends to graduate school.

3. **"Just because you did something once doesn't mean anything. You have to be willing in your heart to begin again every day. The minute I'm not willing to do that, I will retire. When we did Beats, we had to begin again. Nobody at Best Buy knew who we were. Did they care we had produced a record? They didn't give a shit." "Don't believe your own bullshit. If I were going to teach a course, it would be called 'Don't Breathe Your Own Exhaust.'"**

The business world is filled with people who have created a single successful business. That can be very impressive on one end of the spectrum or at the other end of the spectrum more luck than anything else. What exactly is luck and what is skill is an interesting topic and, as always, the writing of Michael Mauboussin is the "go to" source trying to figure out what is skill and what is luck. Luck comes in a lot of different forms in the business world. For example, some people are suited from birth to do what they do while others never get the chance to do what they would be best suited for. Other people would have been a success no matter what they decided to do as a result of winning the genetic lottery. Business people who particularly impress me are those that have created something valuable multiple times. Iovine has obviously been successful in multiple business settings. As another example of

this from my personal life, I worked with Craig McCaw for many years. McCaw created a huge cable television business from virtually nothing and after that McCaw Cellular Communications. After selling both businesses McCaw resurrected Nextel. As another example, Steve Jobs was fabulously successful at creating different business. Bill Gates has done the same thing and is now changing the world with his philanthropy.

4. **"I'm interested in listening to the people who walk in the door. If your ego and your accomplishments stop you from listening, then they've taught you nothing. There are geniuses, savants; I'm not one of them. I work hard." "A diploma is really just your learner's permit for the rest of the drive through life. Remember, you don't have to be smarter than the next person, all you have to do is be willing to work harder than the next person."**

I have been lucky enough to be able to watch and assist some of the great entrepreneurs and investors work at very close range during my working like. This is has been a boon for my career since being able to observe very smart, creative and motivated people work is like going to school (if you are paying attention). In particular, building or fixing a business, whether inside a big company or in a startup, is a wonderful environment since there is so much learning going on. I do have one very unusual friend who almost never reads which astounds me since I read so much. He is nevertheless fabulously successful since he is nearly always around many smart people in cutting edge situations. He learns by taking to smart people. I don't know anyone else like him, but he is an interesting case.

5. **"I learned my work ethic from Springsteen. I was a guy who would say, 'Five o'clock, I'm out of here.' Springsteen worked all the time. We were in a room with no window—no one ever knew what time it was."**

There is rarely a substitute for hard work. All of the great entrepreneurs I have known work very hard. One great example of the value of hard work is Bill Gates who said once on a Reddit: "20 years ago I would stay in the office for days at a time and not think twice about it. I had energy and naiveté on my side." He made a similar point in a BBC interview "I knew everyone's license plates so I could look out in the parking lot and see, when did people come in, when were they leaving. Eventually I had to loosen up, as the company got to a reasonable size."

One slight variation on what I just said about hard work are a small number of founders and managers who sometimes seek out talented but "relatively lazy people" as employees since, as one of my friends likes to say, "they tend to find simpler and less costly ways to do things." His belief is that these "relatively lazy people" will find short cuts that create a competitive advantage for a business. I should emphasize that this exception does not apply to people who are too lazy to work but rather to people who seek simpler methods that do not compromise quality. That preference for a small number of talented relatively lazy people who still seek high quality outcomes is a very narrow exception, but it is an interesting twist.

6. **"You have talent, you give them the keys and let them drive." "What happened was, those first four years [working with Springsteen, Smith and John Lennon], I realized where the magic comes from, and it's not from me." "I always knew which side of the glass was more important." "I'm not a humble guy. I just don't believe my own bullshit."**

Iovine is saying that you should let "the talent" do their job. Iovine's point is reflected in an old saying that you are not going to detect burglars better than your dog. This is an old idea that may of first been written down by Brian Melbancke in his novel from 1583 entitled Philotimus. In that novel Melbancke wrote: "It is smal reason you should kepe a dog, and barke your selfe." Iovine is not saying that you should relinquish control of everything. Jim Barksdale likes to say: **"**Now I'm the President around here. So if I say a chicken can pull a tractor trailer, your job is to hitch 'em up." "If we have data, let's look at data. If all we have are opinions, let's go with mine." But if the question involves the software that is used in an Internet browser a smart manager like Barksdale is going to defer to someone like Marc Andreessen.

7. **"Get in the room with the best people you can and open your heart, ears, and mind. Open up and learn. Be of service. Because if you're of service, they will teach you. With Lennon and Springsteen and Smith, I knew that I had to be of service." "John Lennon, Bruce Springsteen, and Patti Smith — were my college education."**

Yogi Berra famously said: "You can observe a lot by just watching." When you get an opportunity like I have had in my business life to work closely with great managers and founders, what you learn is invaluable. One key thing you learn is that there are many ways to be successful. As an example, Craig McCaw and Bill Gates are very different people with very different styles. Bill Gates is more digital in his approach and Craig McCaw is more analog. They both surround themselves with diverse teams who make them better. One related point is that you should work actively put yourself in situations where you can learn from smart people.

8. **"Some of the best advice I've ever gotten [was] to look at the bigger picture." "The thing about seeing the big picture and being self-aware is knowing that it's not about you. It's about the big picture. It's not about you. It's not. This is not about you."**

Good things happen when you help other people. Some people might say "that is karma," but I am more practical and instead believe it is Professor Cialdini's principle of reciprocity at work. Caldini writes: "A Hare Krishna devotee presses a flower or a copy of the Bhagavad-gītā into your hand (that happened to me), or a store gives you free samples, and you feel awkward about taking it for free. You end up giving money or buying something you don't want." This reciprocity idea as described by Iovine reminds me of an experiment conducted by a a sociologist at Brigham Young University who decided to see what would happen if he sent Christmas cards to total strangers.

He went out and collected directories for some nearby towns and picked out around 600 names. "I started out at a random number and then skipped so many and got to the next one," he says. To these 600 strangers, Kunz sent his Christmas greetings: handwritten notes or a card with a photo of him and his family. And then Kunz waited to see what would happen. But about five days later, responses started filtering back — slowly at first and then more, until eventually they were coming 12, 15 at a time. Eventually Kunz got more than 200 replies. "I was really surprised by how many responses there were," he says. "And I was surprised by the number of letters that were written, some of them three, four pages long."

When you give to others in an intelligent way by being of service to them you inevitably get good things in return.

9. **"The real thing is that we are all frightened. If you are not frightened you are not original. Everyone's frightened. It's how you deal with that fear. It's very very powerful. And what you've got to do is get it as a tailwind instead of a headwind. And that's a little bit of a judo trick in your mind. And once you learn that, fear starts to excite you. Because you know that you are going to enter into something and try it and risk. And once you can get going, it's a very powerful thing."**

Writing something like this blog post or a book should create a little bit of fear or it is not likely it will be original or valuable. For better or worse, the tools created based on today's internet will inevitably expose your work product to attacks. Fear is an odd motivator. To little is bad and to much can be debilitating. The good news is that as you get older you cease giving a damn what people think. If you get immobilized by fear you are wasting a great opportunity. Take a risk. Every time I push publish on my blog, send in a book manuscript or send a Tweet I am taking a risk. If I am not creating some friction in doing so, I will very likely not achieve anything positive.

10. **"I live on the edge of this table, and if I get too comfortable on its surface, I lose what it is I'm trying to do. It's all about balancing risk with overindulging on comfort."**

There was an article in the New York Times recently that talked about the power of getting outside of your comfort zone. The author wrote:

The times in my life during which I've felt happiest and most alive are also the times that I've been the most unbalanced. Falling in love. Writing a book. Trekking in the Himalayas. Training to set a personal record in a triathlon. During these bouts of full-on living I was completely consumed by my activity. Trying to be balanced — devoting equal proportions of time and energy to other areas of my life — would have detracted from the formative experiences. It's not just me. Nearly all of the great performers I've gotten to know — from athletes to artists to computer programmers to entrepreneurs — report a direct line between being happy, fulfilled and at their best and going all-in on something.

If you find something you are passionate about not only does life get better but you do better work. Consider yourself blessed if you get to tap dance to work like Warren Buffett. Even if you only sort of tap dance to work that is better than a poke in the eye with a sharp stick.

11. **"The first project I produced: Foghat. I did it for the money. At the time, you get paid three points to be a producer, and their last album sold 4 million. So I immediately said, '20 cents a record… that's $800,000!' I'm getting $10 an hour as an engineer. I'm like, 'I'm in.'" "I brought my girlfriend to the sessions. I let her run the tape machine."**

Iovine was famously fired by Foghat for the reasons Iovine identifies in the above quotes. That was not a good thing for Iovine at the time, but it was a good thing that he learned from the experience. A wise goal at any time in life is to make some new mistakes since otherwise you are not learning and growing as a person. Fortunately Patti Smith and other musicians

believed in Iovine despite his mistakes with Foghat and he had another opportunity to prove that he was a talented and productive team member. Take some risks. Learn some things. Make things happen. Don't be afraid to fail sometimes. Be a bit of a rebel. Your life will be better and you will be happier if you do. Not giving a damn about what other people think when you are trying to be creative can be a superpower if you do this judiciously when the time is right if he potential upside is enormous and the downside is limited. Beat was a $3 billion exit and what they had to loose was what they invested.

12. **"Musicians believe right now that there's very little money in the recorded music business. So a lot of them are aiming their goal to be nothing but promotion." "Not every industry was meant to last forever. The record industry needs to do something that artists can't do for themselves. Or else there's no reason for it to exist."**

I have written several blog posts on the problems and opportunities that exist in the entertainment industry. I will link to them immediately below instead of repeating the points I made in those posts. One argument I have heard that is not in those posts: a major purpose of the record labels is to act as a bank since the musicians will invariably blow through all the money they have and will need an advance of funds to finance their next creative period. I have a friend who knows the music business very well who said to me several times his business is a place where you can take money in but you rarely get to take it out. What he was saying is people who make a fortune in some other business sometimes decide to take a significant amount of their cash and try to put it to work in the music business. These newbies have a lot of fun hanging out with famous musicians at parties, but the financial result is rarely pretty since they are outside of their circle of competence.

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A Dozen Lessons from Murray Gell-Mann that Apply to Business, Investing and Life

September 16, 2017

Murray Gell-Mann is a theoretical physicist and was the winner of the Nobel Prize for Physics in 1969 for his work on the classification of subatomic particles. Gell-Mann is a Professor of Theoretical Physics, Emeritus at Caltech and a Distinguished Fellow at the Santa Fe Institute, which he co-founded in 1993. Caltech writes: "Gell-Man earned his PhD in physics at MIT and went on to study at Princeton under Oppenheimer, has devoted his scientific career to finding the ultimate elementary building block of matter, a search that has been compared to looking for the bottom of a well extending into infinity. The quest for the bottom of the well has led Gell-Mann through an Alice-in-Wonderland world of 'strangeness' and the 'eightfold way' to the wondrous 'quark.'" A New York Times profile describes the range of his skills and interests: "He is a director of the John D. and Catherine T. MacArthur Foundation, member of the Council on Foreign Relations, adviser to the Pentagon on arms control, collector of prehistoric Southwest American pottery, amateur ornithologist, to name a few." He is the author of *the book The Quark and the Jaguar: Adventures in the Simple and the Complex*.

1. **"Any entity in the world around us, such as an individual human being, owes its existence not only to the simple fundamental law of physics and the boundary condition on the early universe but also to the outcomes of an inconceivably long sequence of probabilistic events, each of which could have turned out differently." "The fundamental law does not tell you exactly the history of the universe, but only gives probabilities for a gigantic number of alternative histories of the universe."**

Perhaps the most important lesson I have learned from Gell-Mann is phrased perfectly by Howard Marks: "Many futures are possible, but only one future occurs." In making that statement Marks gave a hat tip to Elroy Dimson who said: "Risk means more things can happen than will happen.," but I imagine both he and Dimson have read Gell-Mann. Marks embellished on this idea further by saying "the future should be viewed not as a fixed outcome that's destined to happen and capable of being predicted, but as a range of possibilities and, hopefully on the basis of insight into their respective likelihoods, as a probability distribution." This idea that the future is should be viewed as a probability distribution was made even more valuable for me when I combined it with Charlie Munger's ideas about the value of knowing what you do not know. These ideas were made even more valuable by the ideas of Richard Zeckhauser, which were best brought to life for me by a wonderful paper entitled: "Investing in the Unknown and Unknowable." I could go on identifying other related ideas from other people, but I think you see my point. When you encounter a really big idea and it is reinforced by ideas from other great minds, it becomes even more powerful and useful.

2. **"We live in a universe with an enormous amount of uncertainty. Quantum mechanical law can only give probabilities for alternative-different alternative histories of the universe. And all the things that are not predicted are nevertheless very important for determining the outcome. So that the particular events of the history of the universe are co-determined by the fundamental law and a whole series of intrinsically unpredictable accidents." "Quantum mechanics gives us fundamental, unavoidable indeterminacy, so that alternative histories of the universe can be assigned probability." "Sometimes the probabilities are very close to certainties, but they're never really certainties."**

Gell-Mann's point about inevitable uncertainty makes me think harder about the right way to make decisions in the presence of uncertainty. I like Zeckhauser's definition of uncertainty, which makes clear that when potential states of the world are unknown, probability is not computable (ignorance) and that probability cannot be calculated if you do not know probably distribution (uncertainty). Almost all of life is uncertain since the probability distribution impacting the future is rarely known with certainty.

Table 1. Escalating Challenges to Effective Investing

	Knowledge of States of the World	Investment Environment	Skills Needed
Risk	Probabilities known	Distributions of returns known	Portfolio optimization
Uncertainty U	Probabilities unknown	Distributions of returns conjectured	Portfolio optimization, Decision theory
Ignorance UU	States of the world unknown	Distributions of returns conjectured, often from deductions about other's behavior. Complementary skills often rewarded along side investment	Portfolio optimization. Decision theory. Complementary skills (ideal) Strategic inference.

Howard Marks talks about these ideas in the context of investing is his latest letter:

there are two things I would never say when referring to the market: "get out" and "it's time." I'm not that smart, and I'm never that sure. The media like to hear people say "get in" or "get out," but most of the time the correct action is somewhere in between. Investing is not black or white, in or out, risky or safe. The key word is "calibrate." The amount you have

invested, your allocation of capital among the various possibilities, and the riskiness of the things you own all should be calibrated along a continuum that runs from aggressive to defensive.

In one of two posts I have written on Marks I quoted him as saying: "The future you get may be beneficial to your portfolio or harmful, and that may be attributable to your foresight, prudence or luck. The performance of your portfolio under the one scenario that unfolds says nothing about how it would have fared under the many 'alternative histories' that were possible." This point is fundamentally important since, as Michael Mauboussin points out, "Investing is a probabilistic exercise. In any probabilistic field, you have to recognize that even great decisions won't work out all of the time, and sometimes poor decisions will work out well." Nobody can be right all the time, but a person can learn to be wrong less often and in that process gain an investing edge. In other words, we can learn to have a better investing process even though we can't be right all of the time. The more humble you are about making predictions in environments involving uncertainty and the more you include a margin of safety in making these decisions, the better off you will be. I don't think that the first word that comes to mind when anyone describes me would be humble, but I try to be very humble about what I can predict. Another point made by Zeckhauser that is important is his emphasis on portfolio optimization as a skill needed by investors. The case of venture capital is an extreme example in the investing world, since "among the very top performing VCs, 4.5% of invested capital generates 60% of their funds' returns."

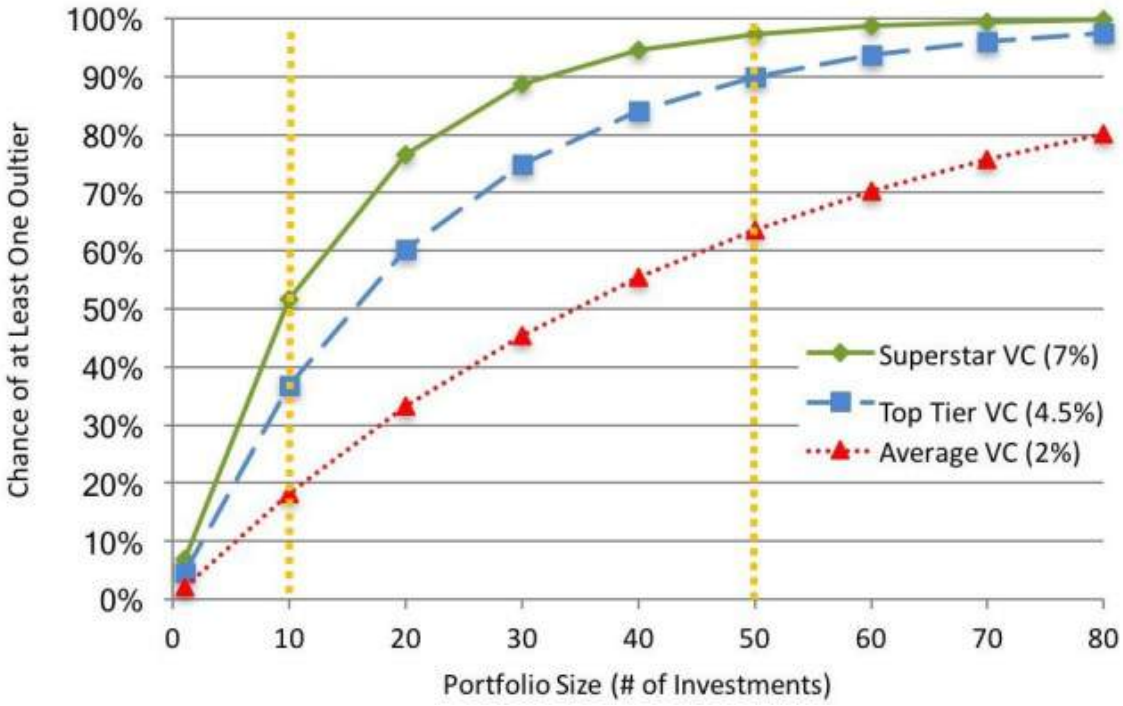

3. "In predicting things one always has only partial information." "The existence of our galaxy, the development of our particular star, the sun, similarly depend on accidents, fluctuations that are intrinsically unpredictable. The emergence of the particular planets of our solar system, likewise. The details of the development of life on the Earth, likewise. The evolution of particular forms of life, likewise, depend on utterly unpredictable accidents."

Gell-Mann's ideas about unpredictable accidents are applicable in many contexts. For example, what Gell-Mann is talking about should make you more aware that if you are in favorable position in life a lot of that outcome is based on luck. People who ascribe moral superiority to themselves when outcomes are as based on luck as they are not being intellectually honest. Luck happens, both bad and good, and it has no moral dimension in terms of its outcome. The only moral aspect is related to the lucky giving back to the unlucky. As another example, Gell-Mann's point reinforces the arguments Lean Startup advocates make about the value of conducting experiments using the scientific method in building a business or investing. If evolutionary outcomes depend on unpredictable accidents, then experimenting to test the evolutionary fitness of an idea is wise (another forms of portfolio optimization). The products and services created through this experimentation process that have greater fitness survive, and less-fit products and services die. Entrepreneurs have always experimented when creating or altering a business. What is different today is that modern tools and systems allow experiments to be conducted more cheaply and rapidly than ever before. Evolution has been put on steroids and is as a result faster and more powerful.

4. **"Think how hard physics would be if particles could think." "What I try to do in the book is to trace the chain of relationships running from elementary particles, fundamental building blocks of matter everywhere in the universe, such as quarks, all the way to complex entities, and in particular complex adaptive system like jaguars."**

Mauro Gallegati and Matteo Richiardi write: "complexity is ubiquitous in economic problems (although this is rarely acknowledged in economic modeling), since (i) the economy is inherently characterized by the interaction of individuals, and (ii) these individuals have cognitive abilities…' Consider how hard it was for forecasters to predict the lath of a hurricane. A recent Bloomberg headline read: "A $150B misfire: How Disaster Modelers Got it SO Wrong." Imagine how much harder that modeling would have been if particles could think and had emotions. The more macro the forecast, the more the effort is like trying to predict the actions of a hurricane composed of thinking and emotional particles. Howard Marks explains: "We don't know what lies ahead in terms of the macro future. Few people if any know more than the consensus about what's going to happen to the economy, interest rates and market aggregates. Thus, the investor's time is better spent trying to gain a knowledge advantage regarding 'the knowable': industries, companies and securities. The more micro your focus, the great the likelihood you can learn things others don't." Focusing on the simplest possible system (an individual company) is the greatest opportunity for an investor since a company is understandable in a way which may reveal a mis-priced bet. Howard Marks puts it simply: "We don't make macro bets."

Eric Beinhocker explains how theories can go astray if it is assumed that people behave like particles (i.e., do not think or have emotions):

My cartoonish summary would be that a group of very clever people in the late 19th century (Walras, Jevons, Menger, Pareto) wanted for very legitimate reasons to introduce mathematics and rigor into economics. But the tools they had at the time – primarily static equilibrium methods – were simply the wrong tools for the job. But they couldn't have realized that at the time, and wrong tools were better than no tools, so their work set off a multi-decade creative burst of developing mathematical theories of the economy as an equilibrium system and shifting economics out of the philosophy department and into the

new domain of social science. But as the neoclassical models became more elaborate they also became more detached from reality, and unfortunately the profession began to reward mathematical virtuosity more than empirical validity.

People in the real world are neither perfectly efficient nor fully rational because they think and have emotions. Markets do tend to discount information quickly, but they do not do so immediately and it rarely happens perfectly. Charlie Munger explains the implications:

"I think it is roughly right that the market is efficient, which makes it very hard to beat merely by being an intelligent investor. But I don't think it's totally efficient at all. And the difference between being totally efficient and somewhat efficient leaves an enormous opportunity for people like us to get these unusual records. It's efficient enough, so it's hard to have a great investment record. But it's by no means impossible. Nor is it something that only a very few people can do. The top three or four percent of the investment management world will do fine."

5. Complex adaptive systems are systems that can evolve or learn or adapt, and they would include-such systems would include biological evolution as a whole, the evolution of biological organisms on the Earth, the evolution of ecological systems on the Earth. The telical evolution that preceded the first life. That's called prebiotic chemical evolution, which one can try to imitate to some extent in the laboratory. And then, many things that arose as a result of biological evolution, for example, individual learning and thinking. Human cultural evolution, including such things as the evolution of language, the global economy as involving complex systems. All of these have a great many things in common, because learning, adaptation, and evolution are all very similar phenomena.

I sometimes hear a person say that the study of complexity is not useful since it does not allow you to make specific predictions. The best answer to that argument is: how can knowing what you can't predict not be valuable? For example, Charlie Munger wants to know where he will die so he can just not go there. This is just a part of Munger's inversion approach to looking at the world and solving problems. The reason why so many great investors attend seminars and meetings at the Sante Fe Institute is that they want to know what they do not know and can't predict. Charlie Munger believes:

"The way complex adaptive systems work and the way mental constructs work is that problems frequently get easier, I'd even say usually are easier to solve, if you turn them around in reverse. In other words, if you want to help India, the question you should ask is not "how can I help India," it's "what is doing the worst damage in India? What will automatically do the worst damage and how do I avoid it?" "Figure out what you don't want and avoid it and you'll get what you do want. How can you best get what you want? The answer: Deserve what you want! How can it be any other way?"

6. **"There is simplicity and complexity in the universe. The picture that we have, at least. Simple underlying laws, but very complex results. And among these complex systems in the universe are systems like us, that can process information."**

Michael Mauboussin describes the first of the three elements of "complexity" in this way: "the system consists of a number of heterogeneous agents, and each of those agents makes decisions about how to behave. The most important dimension here is that those decisions

will evolve over time." These heterogeneous agents might be ants, investors, businesses, genes or neurons. Mauboussin makes a key point here for investors and business people about the significance of this element: "markets tend to be efficient when the agents operate in a truly heterogeneous fashion and the aggregation mechanism is working smoothly. Diversity is essential, both in nature and in markets, and the system has to be able to take advantage of that diversity." When diversity breaks down, as was the case during the internet bubble or the lead up to the 2007 financial crisis, markets can get very inefficient. Collections of intelligent and diverse heterogeneous agents are capable of forming self-organizing, learning, adaptive collectives that can exhibit the "wisdom of crowds." The method that some people have pursued to study the interaction of heterogeneous agents is known as agent-based modeling.

7. **"You don't need something more to get something more. That's what emergence means. Life can emerge from physics and chemistry plus a lot of accidents. The human mind can arise from neurobiology and a lot of accidents, the way the chemical bond arises from physics and certain accidents. Doesn't diminish the importance of these subjects to know they follow from more fundamental things plus accidents." "The particular details of the history that we experience we can learn only by looking around us."**

Mauboussin: "The second characteristic of complexity is that the agents interact with one another. That interaction leads to the third—something that scientists call emergence: In a very real way, the whole becomes greater than the sum of the parts." To say something is "complex" is not the same as saying something is "complicated." Wendell Jones explains the difference: "Complicated linear and determined systems produce controllable and predictable outcomes. Complex adaptive systems can produce novel, creative, and emergent outcomes." An investor like Howard Marks makes his work consistent with this idea by focusing on microeconomics economics rather than macroeconomics. Microeconomics is orders of magnitude less complex and as a result is far less impacted by chaos and the flap of a butterfly's wings. What you can do is focus on what you know best. We can know a fair amount about the present if we work and pay attention. We have zero information about the future.

8."No gluing together of partial studies of a complex nonlinear system can give a good idea of the behavior of the whole."

Mauboussin elaborates on the third element of complexity in this way: "The key issue is that you can't really understand the whole system by simply looking at its individual parts. "You can't make predictions in any but the broadest and vaguest terms." Complex adaptive systems effectively obscure cause and effect." "Complexity doesn't lend itself to tidy mathematics in the way that some traditional, linear financial models do." "Increasingly, professionals are forced to confront decisions related to complex systems, which are by their very nature nonlinear… " A major implication of this point is that reductionist thinking and methods are not only useless but can lead to dangerous conclusions. It is not possible to make macro predictions by simply summing up micro empirical outcomes when complex systems are involved.

9. **"The word chaos is used in rather a vague sense by a lot of writers, but in physics it means a particular phenomenon, namely that in a nonlinear system the outcome is often indefinitely, arbitrarily sensitive to tiny changes in the initial condition."**

An MIT summary of Stuart Kauffman's book entitled *At Home in the Universe* reads as follows: "chaos theory, concerns the "butterfly effect" in which "a legendary butterfly flapping its wings in Rio changes the weather in Chicago." This point highlights the sensitivity of complex systems to miniscule changes in initial conditions. Taken together, these considerations preclude the possibility of predicting long-term behavior of such systems." How does this inform investment decisions? Chaotic systems are not always complex, and complex systems are not always chaotic. It depends.

"two states that are very close together initially and that operate under the same simple rules will nevertheless follow very different trajectories over time. This sensitivity makes it difficult to predict the evolution of a system, as this requires the initial state of the system to be described with perfect accuracy."

10. "Complex adaptive systems have the wonderful property of exploring new possibilities and trying out new possibilities and spawning new complex adaptive systems, and so on."

I like to think about nests of complex adaptive systems. One complex system impacts others and spawns more complex systems and Evolution happens. Philip Nelson writes humorously: "At the dawn of the twentieth century, it was already clear that, chemically speaking, you and I are not much different from cans of soup. And yet we can do many complex and even fun things we do not usually see cans of soup doing." Gell-Mann believes that this idea leads naturally to the conclusion that there are other forms of consciousness in the universe. Evolution on this planet reflects this same process. Ant colonies and immune systems are often used as an example to explain a complex how a system experiments and learns. Melanie Mitchell, the author of the book *Complexity: A Guided Tour* writes:

Both immune systems and ant colonies use randomness and probabilities in essential ways. The receptor shape of each individual lymphocyte has a randomly generated component, so as to allow coverage by the population of many possible pathogenic shapes. The spatial distribution of lymphocytes has a random component, due to the distribution of lymphocytes by the blood stream, so as to allow coverage of many possible spatial distributions of pathogens. The detailed thresholds for activation of lymphocytes, their actual division rates, and the mutations produced in the offspring all involve random or noisy aspects. Similarly, the movement of ant foragers has random components, and these foragers are attracted to pheromone trails in a probabilistic way. Ants also task-switch in a probabilistic manner. It appears that such intrinsic random and probabilistic elements are needed in order for a comparatively small population of simple components (ants or cells) to explore an enormously larger space of possibilities, particularly when the information to be gained is statistical in nature and there is little a priori knowledge about what will be encountered.

11. **"Anyone having a creative idea even in everyday life has to shake up the usual patterns in some way to get out of the rut (or the basis of attraction)of conventional thinking, dispense with certain accepted but wrong notions and find**

a new and better way to formulate some problem. [The stages of creativity are] actually very well-known:

a) Saturation-you fill yourself full of the contradiction between the problem you need to work on and the existing idea that's somehow not good enough, or the existing method that is somehow not good enough to deal with the problem.

b) Incubation- After you've confronted this contradiction between what's available and what's needed, for a long time, apparently further conscious thought is no good anymore. And at that point, some sort of mental process out of awareness seems to take over, I guess what the shrinks would call the pre-conscious. It starts to cook this material.

c) Illumination- One day, while cooking or shaving or cycling, by a slip of the tongue or even while sleeping and dreaming, according to certain people, an idea suddenly comes.

d) Verification- And maybe the idea is right. See if it's a good idea."

Rob Goodman, who co-authored a book about Claude Shannon, made this comment about his creativity on Reddit:

I don't mean to suggest that Shannon was lazy–like lots of remarkably successful people, he had his bouts of intense and concentrated activity. This was especially true in his younger years–we discuss some accounts from an acquaintance of his at the time he was working on his information theory paper, who says that Shannon would compulsively scribble ideas on napkins, or stare into space in deep concentration, or mention getting up in the middle of the night to work when struck by an idea. So when Shannon was in the midst of one of his highly creative periods, he certainly had a capacity for work to match anyone.

But what really distinguished Shannon was that he didn't try to force it. We called our book *A Mind at Play* because we think that captures Shannon so well. He asked silly questions, loved tinkering in his workshop, and was often seen unicycling down the hallways of Bell Labs. He had a folder of "Letters I've Procrastinated on for Too Long." And he approached his work in just the same spirit–we called it "play of the adult kind," or play with ideas and concepts.

In other words, the main lesson we take from Shannon's life in this regard is that the people who are most productive on the scale the matters–like, world-changingly productive–don't worry about being productive every single hour. They can work intensely when they need to, but they also know how much is to be gained from letting the mind wander.

As an example, my friend Craig McCaw is like Shannon in the way he approaches life which enhances his creativity. I loved it when I got a message from him that he wanted me to fly with him in his vintage Beaver seaplane to have lunch somewhere in the middle of a business day. Flying or boating makes him happy and sparks his creativity. Some play combined with hard work makes him a more creative and therefore results in better business decisions. An entire company of people like Craig would not work well but a few people like him makes it stronger and more profitable.

12. "If someone says that he can think or talk about quantum physics without becoming dizzy, that shows only that he has not understood anything whatever about it."

When I first read the sentence in bold immediately above I remember thinking to myself: If quantum physics makes Gell-Mann dizzy, what hope do I have of understanding it? It also made me think about an essay written by Michael Citchton that is related to Gell-Mann:

Media carries with it a credibility that is totally undeserved. You have all experienced this, in what I call the Murray Gell-Mann Amnesia effect. (I call it by this name because I once discussed it with Murray Gell-Mann, and by dropping a famous name I imply greater importance to myself, and to the effect, than it would otherwise have.) Briefly stated, the Gell-Mann Amnesia effect works as follows. You open the newspaper to an article on some subject you know well. In Murray's case, physics. In mine, show business. You read the article and see the journalist has absolutely no understanding of either the facts or the issues. Often, the article is so wrong it actually presents the story backward-reversing cause and effect. I call these the "wet streets cause rain" stories. Paper's full of them. In any case, you read with exasperation or amusement the multiple errors in a story-and then turn the page to national or international affairs, and read with renewed interest as if the rest of the newspaper was somehow more accurate about far-off Palestine than it was about the story you just read. You turn the page, and forget what you know. That is the Gell-Mann Amnesia effect. I'd point out it does not operate in other arenas of life. In ordinary life, if somebody consistently exaggerates or lies to you, you soon discount everything they say. In court, there is the legal doctrine of *falsus in uno, falsus in omnibus*, which means untruthful in one part, untruthful in all. But when it comes to the media, we believe against evidence that it is probably worth our time to read other parts of the paper. When, in fact, it almost certainly isn't. The only possible explanation for our behavior is amnesia.

Imagine what Gell-Man must think when reading someone else's article on quantum mechanics. I am reminded of the scene from the 1977 movie Annie Hall when the character played by Woody Allen is able to make the media philosopher Marshall McLuhan appear to correct the view of someone who is pontificating in the movie line. McLuhan tells the man: "I heard what you were saying. You know *nothing* of my work."

Gell-Mann is often not satisfied even by the way he writes about his ideas. His perfectionism is legendary, illustrated by his struggles to write his book *The Quark and the Jaguar,* as described in the New York Times:

Uneasy with any work that isn't world-class perfect, Gell-Mann for years found writing excruciating, and the book was no exception. His agent thought a ghost writer would help. Gell-Mann plowed through three. One, who had helped produce the 32-page proposal that sold the book, bowed out after that point and wrote his own book; the next one simply couldn't bear the flaws Gell-Mann would find in everything he wrote and dropped out; a third wisely decided his three-month job was only to edit and encourage as Gell-Mann agonized over his own hen-scratchings. The chapters Gell-Mann finally delivered were written by no one but himself. By then, having fallen far behind schedule, Gell-Mann was dropped by his first publisher; he found a second one, but nearly exhausted its patience with his last-minute corrections.

P.s., Here is an interesting paper from 2016 that many readers may not be aware of that Gell-Mann co-wrote entitled: "Exploring Gambles Reveals Foundational Difficulty Behind Economic Theory (and a Solution!)." In a press release announcing the paper Gell-Mann is quoted as follows:

…the following perspective arose: to assess some uncertain venture, ask yourself how it will affect you in one world only — namely the one in which you live — across time," Gell-Mann continued. "The first perspective — considering all parallel worlds — is the one adopted by mainstream economics," explained Gell-Mann. "The second perspective — what happens in our world across time — is the one we explore and that hasn't been fully appreciated in economics so far." https://publishing.aip.org/publishing/journal-highlights/exploring-gambles-reveals-foundational-difficulty-behind-economic

Notes:

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A Half Dozen Lessons About Writing and Getting a Book Published

September 22, 2017

"To write what is worth publishing, to find honest people to publish it, and get sensible people to read it, are the three great difficulties in being an author." Charles Caleb Colton (1780 – 1832)

1. **Write a book proposal first.**

I have now written and found a publisher for seven books. Most of them are listed on my Amazon author page. I have learned a fair amount during that process, which I will try to convey efficiently here.

When I wrote my first book I did not know how the publishing industry worked. I naively wrote the book, sent it to a few publishers and one of them published it. That is not the optimal way to write a book and find a publisher or the typical experience of a first time author. It makes much more sense to write a "book proposal" than a complete book. However, a first time author may have no other option than to write a complete book before landing a publisher, but that is a big upfront investment by the aspiring author that may never bear any fruit. I was lucky. My luck continued to hold six more times.

A book proposal has a standard format which varies only slightly between publishers. Many publishers will read a proposal even if it is not precisely in their format as long as it fits the general industry practice. There are lots of book proposal templates that can be found on the internet and I will provide links to a few in the notes. The types of information required in the book proposal are as follows:

AUTHOR INFORMATION

TENTATIVE BOOK TITLE

DESCRIPTION OF THE BOOK

PRIOR SUCCESS WITH SIMILAR FORMAT

TARGET READERSHIP

INFORMATION ON THE COMPETITION

MARKETING PLAN FOR THE BOOK

SAMPLE CHAPTER

Sylvia Plath said once that "Nothing stinks like a pile of unpublished writing." The book proposal cuts down on the potential or that stench, but to get a publisher, especially your first

publisher, you will need to hustle. They will consider not just whether you can write a book, but whether you can sell it in significant quantities to make their business model work.

I should emphasize that this is not a blog post about self-publishing. It is about "getting a book published." There are many people who are enthusiastic about a self-publishing option. Since I have a demanding day job and have a wide range of other things I like to do, I have never had the necessary time to self-publish. There are many things that the self-published author must do like finding editors, locating a book designer, lining up printers if you want a paper version, dealing with publicity and securing book sellers. I expect that all this can be done profitably by some people who have the necessary time and enjoy that sort of thing, but I have never done it myself.

2. You are not Michael Lewis or John Grisham.

Producing great writing is hard. Few people do it really well, but everyone can work at becoming a better writer and experience some progress. At an event held at the University of Virginia in 1957 William Faulkner said:

"At one time I thought the most important thing was talent. I think now that — the young man or the young woman must possess or teach himself, train himself, in infinite patience, which is to try and to try and to try until it comes right. He must train himself in ruthless intolerance. That is, to throw away anything that is false no matter how much he might love that page or that paragraph. The most important thing is insight, that is … curiosity to wonder, to mull, and to muse why it is that man does what he does. And if you have that, then I don't think the talent makes much difference, whether you've got that or not."

Given what Faulkner said, what should you do? I like David Carr's advice: "Keep typing until it turns in to writing." There is no substitute for hard work. Of course, there is also no substitute for having something interesting or useful to say. Y Combinator's "motto is to make something that people want. Nothing else you do is going to matter if people don't like your product." I may not be a great writer, but I try to be an interesting writer. Someone once said that my writing has high information density. Making your writing genuine is highly underrated. The singer and song writer Bill Withers puts it this way: "Your job is to make somebody interested enough in you that they'll pay you for the privilege. The odds are against you, so if you're not enjoying yourself there's no point. Whatever you're doing, if you're doing it for the sake of doing it — that's what it's about."

3. You are more or less on your own in marketing the book.

Your publisher will have a sales team that gets your book in physical stores. They will do the work to get you on Amazon and other on-line retailers. Your publisher will also do things like attending industry events to promote your book, sending out press releases and finding people who many want to do an interview. Unless you have secured a big advance or are famous they will seldom run advertising or finance a book tour. To sell books you will need to engage with your communities of interest and try to create some word of mouth sales. Madi Preda who wrote *How to Promote and Market Your Book* has said: "Writing a book without promoting it is like waving to someone in a dark room. You know what have you done but nobody else does." It is important to remember that when your book arrives in stores there will not be a line of people waiting to buy it. Amazon's servers will not be crushed by the number of people trying to buy it on line.

There is some solid marketing advice on the Internet and most much of it is free. In terms of getting free publicity, I like the recent example of Anthony Bourdain who made the smart more to get his imprint's book banned on Twitter.

Bourdain knows surely familiar with the phrase 'There's no such thing as bad publicity' is often attributed to Phineas T. Barnum. An earlier version appeared in *The Atlanta Constitution,* January, 1915: "All publicity is good if it is intelligent." Oscar Wilde said before that: "The only thing worse than being talked about is not being talked about."

4. Be emotionally ready to be attacked for your efforts.

When you write a book you are creating and putting your work in the public and therefore it is available for anyone to attack. This means you can put yourself in a very vulnerable position emotionally. That fact unfortunately comes with the book writing territory. Dale Carnegie said: "Any fool can criticize, condemn and complain – and most fools do." If you can't handle criticism, you need to learn to do so, not write a book or prepare to be unhappy. The internet enables people to attack your work like never before. Increasingly partisan and nasty posts on social media make the phenomenon worse. If you have a fragile ego, do not publish a book. Aristotle put it this way: "To avoid criticism say nothing, do nothing, be nothing." If you do write a book the best approaches to handling criticism will depend on the person.

5. **Books should be written by missionaries not mercenaries.**

In return for writing a book an author will receive royalties. Alan Jacobson describes the structure of these payments:

Typically, an author can expect to receive the following royalties: Hardback edition: 10% of the retail price on the first 5,000 copies; 12.5% for the next 5,000 copies sold, then 15% for all further copies sold. Paperback: 8% of retail price on the first 150,000 copies sold, then 10% thereafter. Exceptions to the above include sales to warehouse clubs (like Costco or Sam's Club), book clubs, and special orders; the royalty percentages for these can be half the figures listed above. Update: eBook royalties through traditional New York publishers are 25%. They should be higher because the publisher does not have the typical costs of printing,

binding, warehousing, shipping, etc. that they have with a bound book. Some digital publishers offer royalties at or near 50%.

Other publishing contract issues including topics like reserves for returns are not something I will cover in this blog post.

What is the financial opportunity?

In the US book business, instead of an 80/20 rule, we find a 97/20 rule, that is, 97% of sales are made by 20% of authors. US literary nonfiction sales are still more imbalanced; with 0.25% of books representing 50% of sales. In Canada, a 0.8% of books generated 60% of bookshop revenues. The form of the distribution can also change with time. In Italy, Pareto's homeland, the value of the exponent of the Pareto distribution for book sales in the mid-90s varied between 0.9 and 1.5, depending on the time of the year. The lowest values were found around Christmas. Mind that as the value of the exponent decreases, fewer books take a higher proportion of the sales, which means that, when buying Christmas presents, best-sellers are still more popular than during the rest of the year.

The distribution of success looks like this:

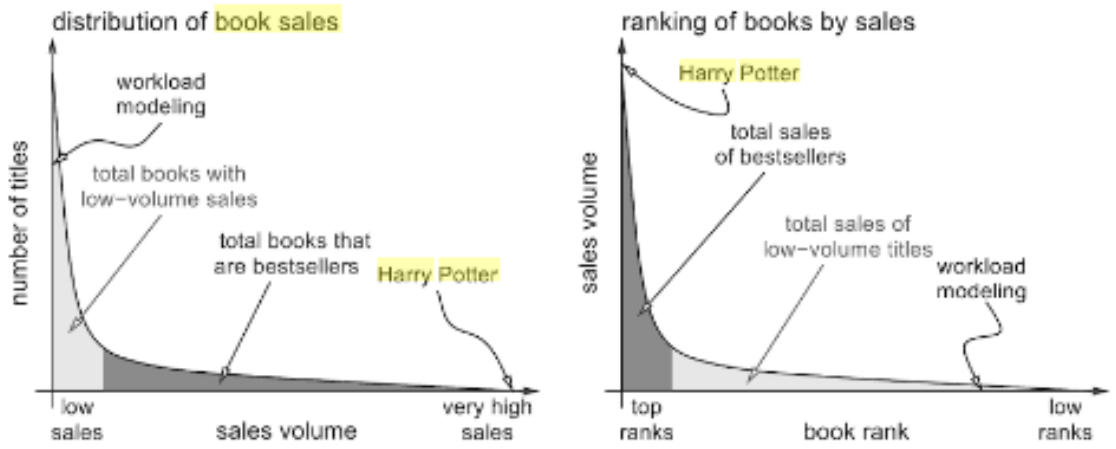

Given that financial returns for book authors reflects a power law as is the case on most creative endeavors, your motivation for writing a book should not be monetary. Michael Lewis recalls:

Before I wrote my first book in 1989, the sum total of my earnings as a writer, over four years of freelancing, was about three thousand bucks. So it did appear to be financial suicide when I quit my job at Salomon Brothers — where I'd been working for a couple of years, and where I'd just gotten a bonus of $225,000, which they promised they'd double the following year—to take a $40,000 book advance for a book that took a year and a half to write. My father thought I was crazy. I was twenty-seven years old, and they were throwing all this money at me, and it was going to be an easy career. He said, "Do it another ten years, *then* you can be a writer." But I looked around at the people on Wall Street who were ten years older than me, and I didn't see anyone who could have left. You get trapped by the money. Something dies inside. It's very hard to preserve the quality in a kid that makes him jump out of a high-paying job to go write a book….

6. Don't expect to earn more than the minimum wage and be thrilled if you earn more.

Michael Lewis describes the financial aspects of writer's life bluntly: "It's always good to have a motive to get you in the chair. If your motive is money, find another one." Here is some advice from a literary agent I know named Michael Snell:

We have seen a rather mediocre nag turn into a racehorse and sell hundreds of thousands of copies, while the son of Secretariat breaks its leg before it leaves the chute and just lies there and groans. So much depends on how well you brand and promote yourself and your book. Rule of thumb: Do not quit your day job. If you want to publish a book just to make money, you probably won't put much in the bank; but if you write it to help people, to solve their problems and maybe even to enrich or save their lives, you just might strike it rich.

I do not write my blog or the books for the money. There are no ads on my blog and I even bought back one book from Harper so I could make it available free. All profit I make on my next book *A Dozen Lessons for Entrepreneurs* which will be available this November will go to a charity I support called **No Kid Hungry.**

Even if an author is successful, pressure to repeat continues. Michael Lewis talks about the pressure a professional writer feels here:

Commercial success makes writing books a lot easier to do, and it also creates pressure to be more of a commercial success. If you sold a million books once, your publisher really, really thinks you might sell a million books again. And they really want you to do it.

Many people write a book as a way to promoting their other business. It serves as a form of marketing for what the really do for a living like sell consulting, wealth management or seminars. Books can be an excellent form of content marketing if done right.

Let's frame the financial challenge of writing a book and expecting to profit from the book itself by looking at demand and market size. Steven Piersanti in an article entitled: "The 10 Awful Truths about Book Publishing" writes:

The number of books being published every year has exploded.
According to the latest Bowker Report (September 7, 2016), more than 700,000 books were self-published in the U.S. in 2015, which is an incredible increase of 375% since 2010. And the number of traditionally published books had climbed to over 300,000 by 2013 according to the latest Bowker figures (August 5, 2014). The net effect is that the number of new books published each year in the U.S. has exploded by more than 600,000 since 2007, to well over 1 million annually. At the same time, more than 13 million previously published books are still available through many sources. Unfortunately, the marketplace is not able to absorb all these books and is hugely over saturated.

Average book sales are shockingly small—and falling fast.
Combine the explosion of books published with the declining total sales and you get shrinking sales of each new title. According to BookScan—which tracks most bookstore, online, and other retail sales of books (including Amazon.com)—only 256 million print copies were sold in 2013 in the U.S. in all adult nonfiction categories combined (Publishers Weekly, January 1, 2016). The average U.S. nonfiction book is now selling less than 250 copies per year and less than 2,000 copies over its lifetime.

A book has far less than a 1% chance of being stocked in an average bookstore.
For every available bookstore shelf space, there are 100 to 1,000 or more titles competing for that shelf space. For example, the number of business titles stocked ranges from less than 100 (smaller bookstores) to up to 1,500 (superstores). Yet there are several hundred thousand business books in print that are fighting for that limited shelf space.

Another particularly useful site if you are an aspiring writer and want to understand the book business is Author's Earnings:

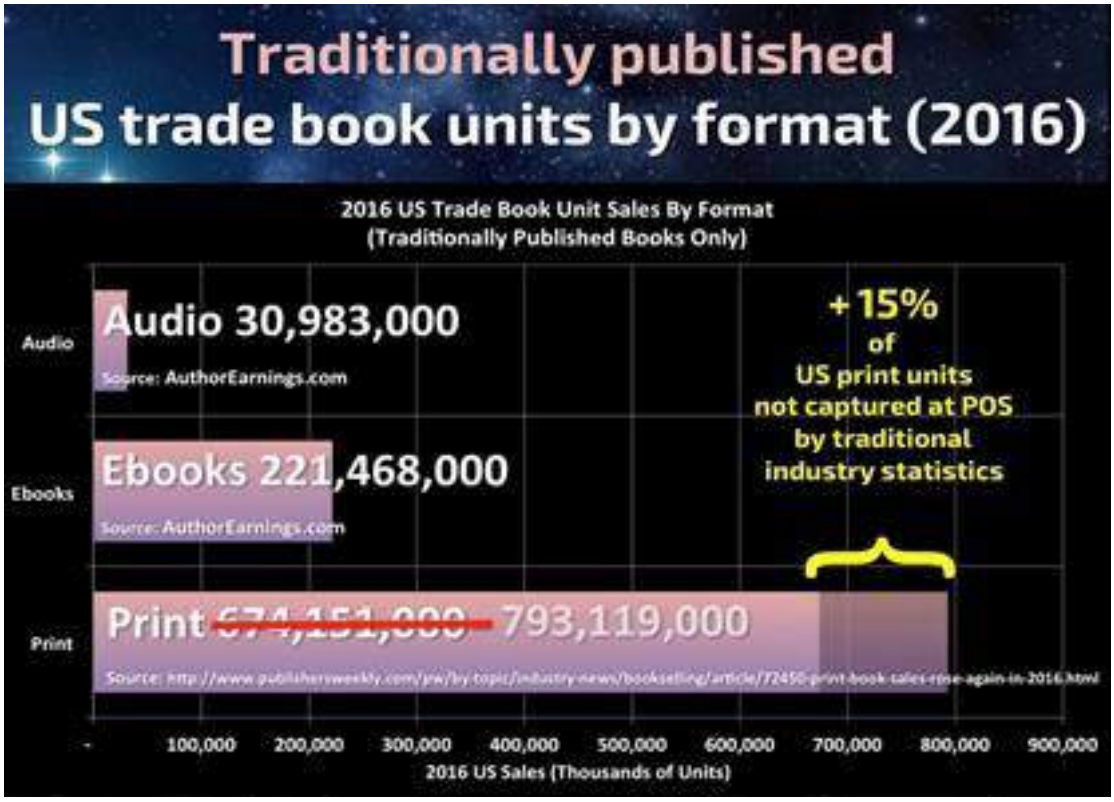

More than 50% of all traditionally published book sales of any format in the US now happen on Amazon.com. That's just the traditionally published books, though. In addition, roughly 85% of all non-traditionally published book sales of any format in the US also happen on Amazon.com. In other words, a comprehensive cross-sectional snapshot of Amazon.com's sales, like the one we are describing here in our report, is a definitive look at more than half of all daily US author earnings, period.

The Size of Publishing's Midlist: Traditionally Published vs Indie

"When we look at the leftmost set of bars, it's encouraging to see a sizeable, healthy midlist represented there — more than 4,600 authors earning $25,000 or above from their sales on Amazon.com. 40% of these are indie authors deriving at least half of their income from self-published titles, while 35% are Big Five authors deriving the majority of their income from Big Five-published titles, and 22% are authors who derive most of their income from titles published by small- or medium-sized traditional publishers. But this includes traditional publishing's longest-tenured and most recognizable names, including thousands of authors who have been actively publishing for the last several decades. When we consider only those authors who debuted sometime in the past ten years — who appear in the *second*set of bars in

each graph — a sharp dichotomy starts to become apparent. The vast majority of traditional publishing's midlist-or-better earners started their careers more than a decade ago. Their more-recently debuted peers are not doing anywhere near as well. Fewer than 700 Big Five authors and fewer than 500 small-or-medium publisher authors who debuted in the last 10 years are now earning $25,000 a year or more on Amazon — from all of their hardcover, paperback, audio and ebook editions combined. By contrast, over 1,600 indie authors are currently earning that much or more."

Maybe you will get an advance from a big four publisher, but that is rarer most people you think. My literary agent friend Michael Snell says the advance can range from: "Zero to a million dollars. Who knows?"

I have published books with big publishers (Harper Collins) and smaller publishers. One advantage you get with a smaller more specialized publishers is more attention. As in most of life there are trade-offs. One view on big vs small publishers is:

If you think a small press might be a good fit for your work, what should you know about vetting your options? Whether the books are made available as print, digital or both (formats and contract terms vary widely, which may give you room to negotiate), authors earn their money primarily through royalties—roughly 10 percent on print sales and up to 25 percent per digital purchase. On average, advances tend to be small—$1,000–2,000 is a common range—or even nonexistent. (At a larger publisher, you'd likely receive a bigger check upon signing—but remember that all advances are paid *against royalties*, meaning you aren't paid royalties until you "earn out" your advance. At a small press, you'd likely receive less payment up front, but earn royalties sooner.)

Big publishers like big blockbuster books from already famous people. This creates an opportunity: 'Major presses are inadvertently helping foster an environment where American indie presses can thrive by doing the very thing they're best at: being small and, by extension, focusing on creativity and originality over sales."

In the end you want the best publisher that will have you, just in romantic relationships. The author Robert Gottlieb put it this way: "What makes a publishing house great? The easy answer is the consistency with which it produces books of value over a lengthy period of time."

p.s., my books are:

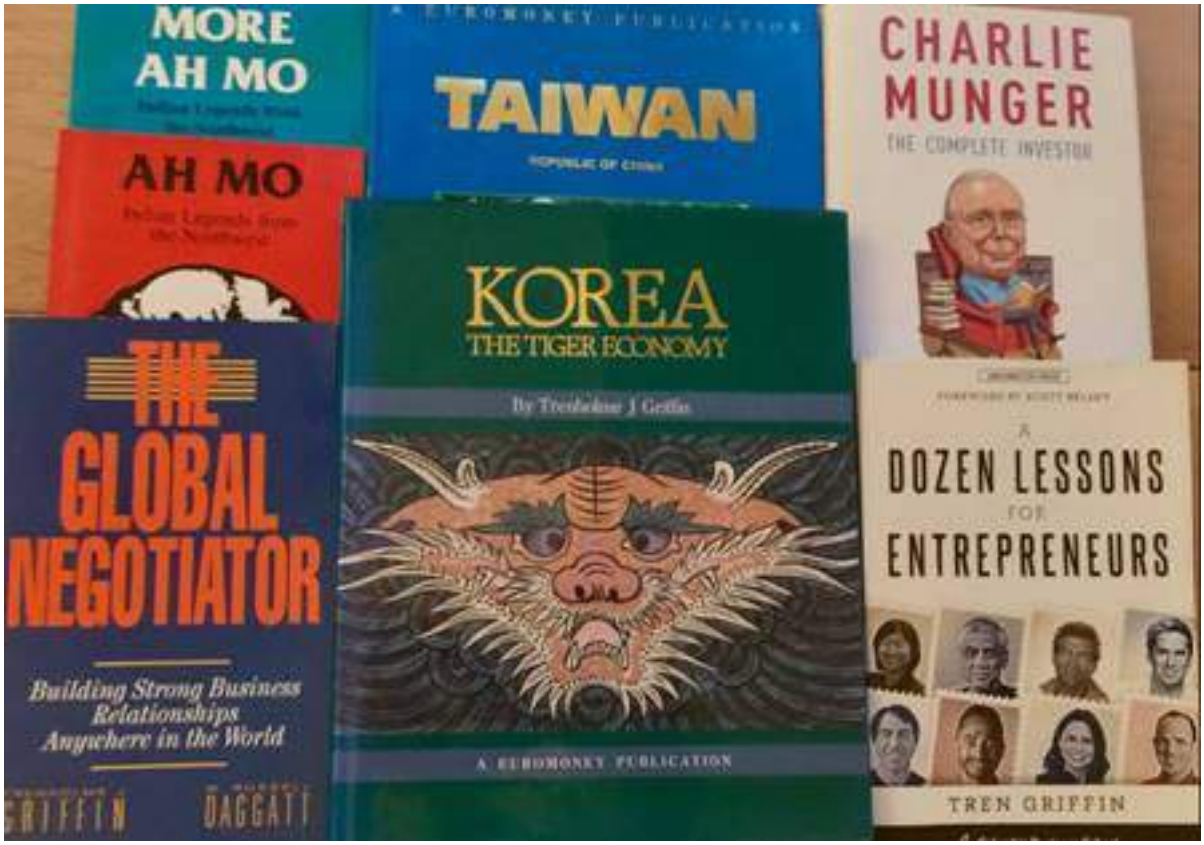

- A Dozen Lessons for Entrepreneurs will arrive in November during the so-called "fall book season." https://www.amazon.com/Lessons-Entrepreneurs-Columbia-Business-Publishing/dp/0231184824/ref=sr_1_2?ie=UTF8&qid=1501951895&sr=8-2&keywords=tren+griffin+books
- Korea: The Tiger Economy https://www.amazon.com/Korea-Tiger-Economy-Tren-Griffin/dp/1870031377/ref=sr_1_5?ie=UTF8&qid=1501951867&sr=8-5&keywords=tren+griffin+books
- The Global Negotiator: https://www.amazon.com/Global-Dealmaker-Negotiating-Successfully-1991-03-06/dp/B01K95GJ64/ref=sr_1_fkmr0_4?s=books&ie=UTF8&qid=1501952029&sr=1-4-fkmr0&keywords=trenholme+griffin+taiwan Available for free on this web site.
- Ah Mo: https://www.amazon.com/Ah-Mo-Indian-Legends-Northwest/dp/0888392443/ref=sr_1_fkmr0_1?s=books&ie=UTF8&qid=1501951997&sr=1-1-fkmr0&keywords=ah+mo+trenholme+griffin
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- The Complete Charlie Munger https://www.amazon.com/Charlie-Munger-Complete-Investor-Publishing/dp/023117098X/ref=sr_1_1?ie=UTF8&qid=1501951895&sr=8-1&keywords=tren+griffin+books
- Taiwan; Republic of China https://www.amazon.com/Taiwan-Republic-China-Tren-Griffin/dp/1870031199/ref=sr_1_5?s=books&ie=UTF8&qid=1502117956&sr=1-5&refinements=p_27%3ATren+Griffin

A Half Dozen Lessons About Writing and Getting a Book Published

September 22, 2017

"To write what is worth publishing, to find honest people to publish it, and get sensible people to read it, are the three great difficulties in being an author." Charles Caleb Colton (1780 – 1832)

1. **Write a book proposal first.**

I have now written and found a publisher for seven books. Most of them are listed on my Amazon author page. I have learned a fair amount during that process, which I will try to convey efficiently here.

When I wrote my first book I did not know how the publishing industry worked. I naively wrote the book, sent it to a few publishers and one of them published it. That is not the optimal way to write a book and find a publisher or the typical experience of a first time author. It makes much more sense to write a "book proposal" than a complete book. However, a first time author may have no other option than to write a complete book before landing a publisher, but that is a big upfront investment by the aspiring author that may never bear any fruit. I was lucky. My luck continued to hold six more times.

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SAMPLE CHAPTER

Sylvia Plath said once that "Nothing stinks like a pile of unpublished writing." The book proposal cuts down on the potential or that stench, but to get a publisher, especially your first publisher, you will need to hustle. They will consider not just whether you can write a book, but whether you can sell it in significant quantities to make their business model work.

I should emphasize that this is not a blog post about self-publishing. It is about "getting a book published." There are many people who are enthusiastic about a self-publishing option. Since I have a demanding day job and have a wide range of other things I like to do, I have never had the necessary time to self-publish. There are many things that the self-published author must do like finding editors, locating a book designer, lining up printers if you want a paper version, dealing with publicity and securing book sellers. I expect that all this can be done profitably by some people who have the necessary time and enjoy that sort of thing, but I have never done it myself.

2. You are not Michael Lewis or John Grisham.

Producing great writing is hard. Few people do it really well, but everyone can work at becoming a better writer and experience some progress. At an event held at the University of Virginia in 1957 William Faulkner said:

"At one time I thought the most important thing was talent. I think now that — the young man or the young woman must possess or teach himself, train himself, in infinite patience, which is to try and to try and to try until it comes right. He must train himself in ruthless intolerance. That is, to throw away anything that is false no matter how much he might love that page or that paragraph. The most important thing is insight, that is … curiosity to wonder, to mull, and to muse why it is that man does what he does. And if you have that, then I don't think the talent makes much difference, whether you've got that or not."

Given what Faulkner said, what should you do? I like David Carr's advice: "Keep typing until it turns in to writing." There is no substitute for hard work. Of course, there is also no substitute for having something interesting or useful to say. Y Combinator's "motto is to make something that people want. Nothing else you do is going to matter if people don't like your product." I may not be a great writer, but I try to be an interesting writer. Someone once said that my writing has high information density. Making your writing genuine is highly underrated. The singer and song writer Bill Withers puts it this way: "Your job is to make somebody interested enough in you that they'll pay you for the privilege. The odds are against you, so if you're not enjoying yourself there's no point. Whatever you're doing, if you're doing it for the sake of doing it — that's what it's about."

3. You are more or less on your own in marketing the book.

Your publisher will have a sales team that gets your book in physical stores. They will do the work to get you on Amazon and other on-line retailers. Your publisher will also do things like attending industry events to promote your book, sending out press releases and finding people who many want to do an interview. Unless you have secured a big advance or are famous they will seldom run advertising or finance a book tour. To sell books you will need to engage with your communities of interest and try to create some word of mouth sales. Madi Preda who wrote *How to Promote and Market Your Book* has said: "Writing a book without promoting it is like waving to someone in a dark room. You know what have you done but nobody else does." It is important to remember that when your book arrives in

stores there will not be a line of people waiting to buy it. Amazon's servers will not be crushed by the number of people trying to buy it on line.

There is some solid marketing advice on the Internet and most much of it is free. In terms of getting free publicity, I like the recent example of Anthony Bourdain who made the smart more to get his imprint's book banned on Twitter.

Bourdain knows surely familiar with the phrase 'There's no such thing as bad publicity' is often attributed to Phineas T. Barnum. An earlier version appeared in *The Atlanta Constitution,* January, 1915: "All publicity is good if it is intelligent." Oscar Wilde said before that: "The only thing worse than being talked about is not being talked about."

4. Be emotionally ready to be attacked for your efforts.

When you write a book you are creating and putting your work in the public and therefore it is available for anyone to attack. This means you can put yourself in a very vulnerable position emotionally. That fact unfortunately comes with the book writing territory. Dale Carnegie said: "Any fool can criticize, condemn and complain – and most fools do." If you can't handle criticism, you need to learn to do so, not write a book or prepare to be unhappy. The internet enables people to attack your work like never before. Increasingly partisan and nasty posts on social media make the phenomenon worse. If you have a fragile ego, do not publish a book. Aristotle put it this way: "To avoid criticism say nothing, do nothing, be nothing." If you do write a book the best approaches to handling criticism will depend on the person.

5. **Books should be written by missionaries not mercenaries.**

In return for writing a book an author will receive royalties. Alan Jacobson describes the structure of these payments:

Typically, an author can expect to receive the following royalties: Hardback edition: 10% of the retail price on the first 5,000 copies; 12.5% for the next 5,000 copies sold, then 15% for all further copies sold. Paperback: 8% of retail price on the first 150,000 copies sold, then 10% thereafter. Exceptions to the above include sales to warehouse clubs (like Costco or Sam's Club), book clubs, and special orders; the royalty percentages for these can be half the

figures listed above. Update: eBook royalties through traditional New York publishers are 25%. They should be higher because the publisher does not have the typical costs of printing, binding, warehousing, shipping, etc. that they have with a bound book. Some digital publishers offer royalties at or near 50%.

Other publishing contract issues including topics like reserves for returns are not something I will cover in this blog post.

What is the financial opportunity?

In the US book business, instead of an 80/20 rule, we find a 97/20 rule, that is, 97% of sales are made by 20% of authors. US literary nonfiction sales are still more imbalanced; with 0.25% of books representing 50% of sales. In Canada, a 0.8% of books generated 60% of bookshop revenues. The form of the distribution can also change with time. In Italy, Pareto's homeland, the value of the exponent of the Pareto distribution for book sales in the mid-90s varied between 0.9 and 1.5, depending on the time of the year. The lowest values were found around Christmas. Mind that as the value of the exponent decreases, fewer books take a higher proportion of the sales, which means that, when buying Christmas presents, best-sellers are still more popular than during the rest of the year.

The distribution of success looks like this:

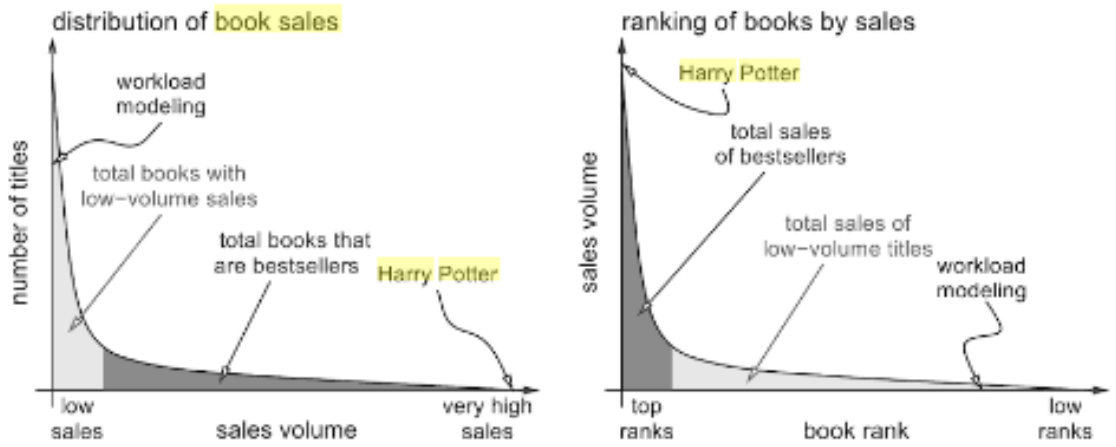

Given that financial returns for book authors reflects a power law as is the case on most creative endeavors, your motivation for writing a book should not be monetary. Michael Lewis recalls:

Before I wrote my first book in 1989, the sum total of my earnings as a writer, over four years of freelancing, was about three thousand bucks. So it did appear to be financial suicide when I quit my job at Salomon Brothers — where I'd been working for a couple of years, and where I'd just gotten a bonus of $225,000, which they promised they'd double the following year—to take a $40,000 book advance for a book that took a year and a half to write. My father thought I was crazy. I was twenty-seven years old, and they were throwing all this money at me, and it was going to be an easy career. He said, "Do it another ten years, *then* you can be a writer." But I looked around at the people on Wall Street who were ten years older than me, and I didn't see anyone who could have left. You get trapped by the

money. Something dies inside. It's very hard to preserve the quality in a kid that makes him jump out of a high-paying job to go write a book….

6. Don't expect to earn more than the minimum wage and be thrilled if you earn more.

Michael Lewis describes the financial aspects of writer's life bluntly: "It's always good to have a motive to get you in the chair. If your motive is money, find another one." Here is some advice from a literary agent I know named Michael Snell:

We have seen a rather mediocre nag turn into a racehorse and sell hundreds of thousands of copies, while the son of Secretariat breaks its leg before it leaves the chute and just lies there and groans. So much depends on how well you brand and promote yourself and your book. Rule of thumb: Do not quit your day job. If you want to publish a book just to make money, you probably won't put much in the bank; but if you write it to help people, to solve their problems and maybe even to enrich or save their lives, you just might strike it rich.

I do not write my blog or the books for the money. There are no ads on my blog and I even bought back one book from Harper so I could make it available free. All profit I make on my next book *A Dozen Lessons for Entrepreneurs* which will be available this November will go to a charity I support called **No Kid Hungry.**

Even if an author is successful, pressure to repeat continues. Michael Lewis talks about the pressure a professional writer feels here:

Commercial success makes writing books a lot easier to do, and it also creates pressure to be more of a commercial success. If you sold a million books once, your publisher really, really thinks you might sell a million books again. And they really want you to do it.

Many people write a book as a way to promoting their other business. It serves as a form of marketing for what the really do for a living like sell consulting, wealth management or seminars. Books can be an excellent form of content marketing if done right.

Let's frame the financial challenge of writing a book and expecting to profit from the book itself by looking at demand and market size. Steven Piersanti in an article entitled: "The 10 Awful Truths about Book Publishing" writes:

The number of books being published every year has exploded.
According to the latest Bowker Report (September 7, 2016), more than 700,000 books were self-published in the U.S. in 2015, which is an incredible increase of 375% since 2010. And the number of traditionally published books had climbed to over 300,000 by 2013 according to the latest Bowker figures (August 5, 2014). The net effect is that the number of new books published each year in the U.S. has exploded by more than 600,000 since 2007, to well over 1 million annually. At the same time, more than 13 million previously published books are still available through many sources. Unfortunately, the marketplace is not able to absorb all these books and is hugely over saturated.

Average book sales are shockingly small—and falling fast.
Combine the explosion of books published with the declining total sales and you get shrinking sales of each new title. According to BookScan—which tracks most bookstore, online, and other retail sales of books (including Amazon.com)—only 256 million print

copies were sold in 2013 in the U.S. in all adult nonfiction categories combined (Publishers Weekly, January 1, 2016). The average U.S. nonfiction book is now selling less than 250 copies per year and less than 2,000 copies over its lifetime.

A book has far less than a 1% chance of being stocked in an average bookstore.
For every available bookstore shelf space, there are 100 to 1,000 or more titles competing for that shelf space. For example, the number of business titles stocked ranges from less than 100 (smaller bookstores) to up to 1,500 (superstores). Yet there are several hundred thousand business books in print that are fighting for that limited shelf space.

Another particularly useful site if you are an aspiring writer and want to understand the book business is Author's Earnings:

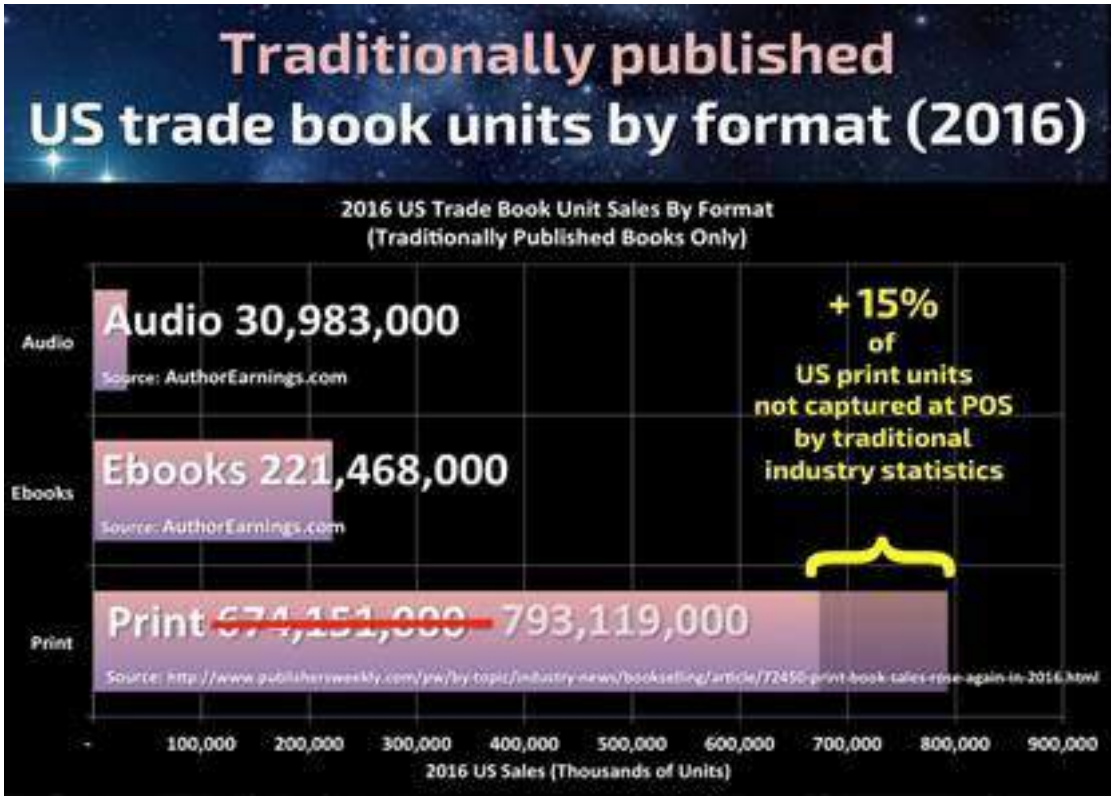

More than 50% of all traditionally published book sales of any format in the US now happen on Amazon.com. That's just the traditionally published books, though. In addition, roughly 85% of all non-traditionally published book sales of any format in the US also happen on Amazon.com. In other words, a comprehensive cross-sectional snapshot of Amazon.com's sales, like the one we are describing here in our report, is a definitive look at more than half of all daily US author earnings, period.

The Size of Publishing's Midlist: Traditionally Published vs Indie

"When we look at the leftmost set of bars, it's encouraging to see a sizeable, healthy midlist represented there — more than 4,600 authors earning $25,000 or above from their sales on Amazon.com. 40% of these are indie authors deriving at least half of their income from self-published titles, while 35% are Big Five authors deriving the majority of their income from Big Five-published titles, and 22% are authors who derive most of their income from titles

published by small- or medium-sized traditional publishers. But this includes traditional publishing's longest-tenured and most recognizable names, including thousands of authors who have been actively publishing for the last several decades. When we consider only those authors who debuted sometime in the past ten years — who appear in the *second*set of bars in each graph — a sharp dichotomy starts to become apparent. The vast majority of traditional publishing's midlist-or-better earners started their careers more than a decade ago. Their more-recently debuted peers are not doing anywhere near as well. Fewer than 700 Big Five authors and fewer than 500 small-or-medium publisher authors who debuted in the last 10 years are now earning $25,000 a year or more on Amazon — from all of their hardcover, paperback, audio and ebook editions combined. By contrast, over 1,600 indie authors are currently earning that much or more."

Maybe you will get an advance from a big four publisher, but that is rarer most people you think. My literary agent friend Michael Snell says the advance can range from: "Zero to a million dollars. Who knows?"

I have published books with big publishers (Harper Collins) and smaller publishers. One advantage you get with a smaller more specialized publishers is more attention. As in most of life there are trade-offs. One view on big vs small publishers is:

If you think a small press might be a good fit for your work, what should you know about vetting your options? Whether the books are made available as print, digital or both (formats and contract terms vary widely, which may give you room to negotiate), authors earn their money primarily through royalties—roughly 10 percent on print sales and up to 25 percent per digital purchase. On average, advances tend to be small—$1,000–2,000 is a common range—or even nonexistent. (At a larger publisher, you'd likely receive a bigger check upon signing—but remember that all advances are paid *against royalties*, meaning you aren't paid royalties until you "earn out" your advance. At a small press, you'd likely receive less payment up front, but earn royalties sooner.)

Big publishers like big blockbuster books from already famous people. This creates an opportunity: 'Major presses are inadvertently helping foster an environment where American indie presses can thrive by doing the very thing they're best at: being small and, by extension, focusing on creativity and originality over sales."

In the end you want the best publisher that will have you, just in romantic relationships. The author Robert Gottlieb put it this way: "What makes a publishing house great? The easy answer is the consistency with which it produces books of value over a lengthy period of time."

p.s., my books are:

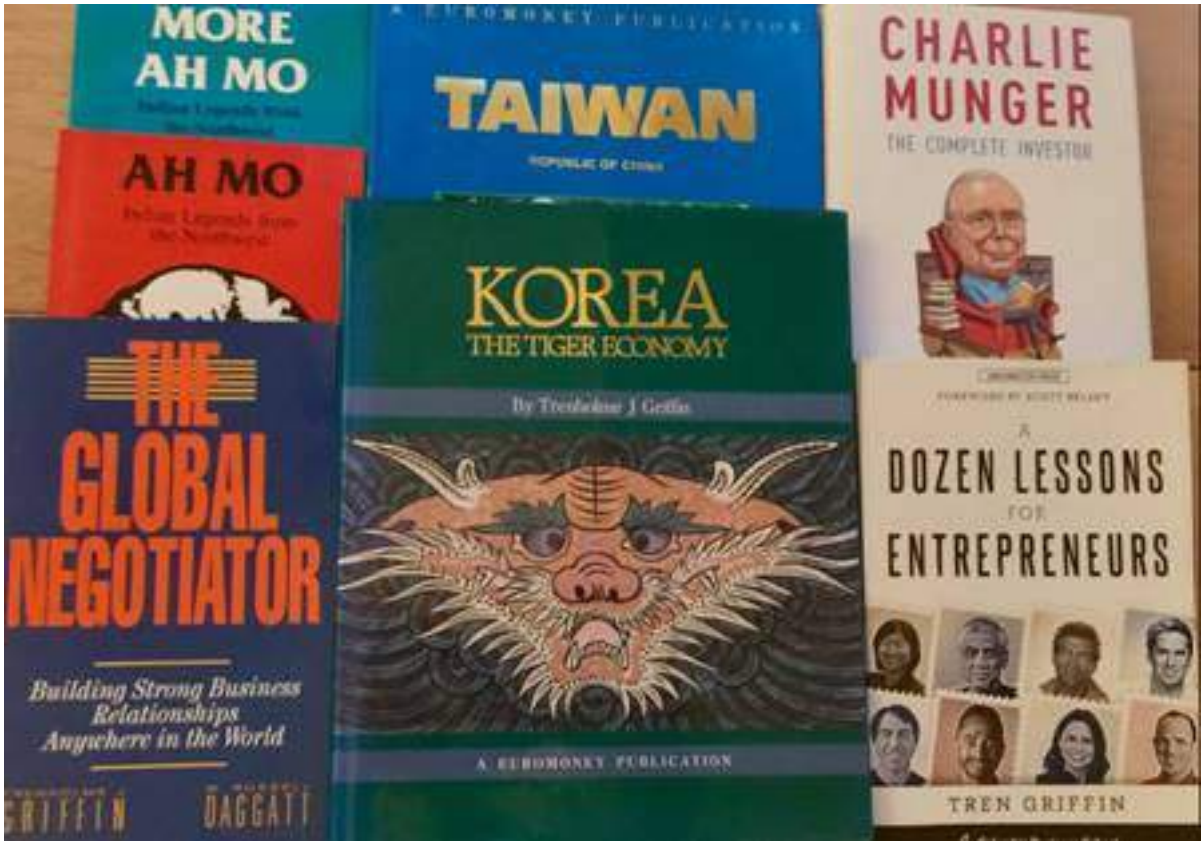

- A Dozen Lessons for Entrepreneurs will arrive in November during the so-called "fall book season." https://www.amazon.com/Lessons-Entrepreneurs-Columbia-Business-Publishing/dp/0231184824/ref=sr_1_2?ie=UTF8&qid=1501951895&sr=8-2&keywords=tren+griffin+books
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- The Global Negotiator: https://www.amazon.com/Global-Dealmaker-Negotiating-Successfully-1991-03-06/dp/B01K95GJ64/ref=sr_1_fkmr0_4?s=books&ie=UTF8&qid=1501952029&sr=1-4-fkmr0&keywords=trenholme+griffin+taiwan Available for free on this web site.
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- The Complete Charlie Munger https://www.amazon.com/Charlie-Munger-Complete-Investor-Publishing/dp/023117098X/ref=sr_1_1?ie=UTF8&qid=1501951895&sr=8-1&keywords=tren+griffin+books
- Taiwan; Republic of China https://www.amazon.com/Taiwan-Republic-China-Tren-Griffin/dp/1870031199/ref=sr_1_5?s=books&ie=UTF8&qid=1502117956&sr=1-5&refinements=p_27%3ATren+Griffin

A Dozen Lessons about Business from Anthony Bourdain

October 7, 2017

1. **"The absolute certainty that nobody was going to care about, read or buy *Kitchen Confidential* was what allowed me to write it. I didn't have to think about what people expected. I didn't care. As a result I was able to write the book, quickly and without tormenting myself. That was in many ways a very liberating place to be. I've kind of tried to stick with that business model since." "At first, I was distrustful of what was happening. I say freely it's an unreasonable attitude to think that you could ever make a living writing. And I'd been in the restaurant business long enough where there are so many failed writers, actors, performers, artists and playwrights. So even after the book came out, even after it hit the best-seller list, I was distrustful. I thought, I better keep my day job, and I continued making steak frites and salads and working in a busy kitchen until it just got crazier and crazier." "Not giving a shit has been a very successful business model for me." "[Not having] a reputation to lose, is a huge advantage." "From *Kitchen Confidential* on I made a really determined effort to not fuck up. I was very aware of that tendency. I'm a little more organized, my work is a little more rigorous than it needs to be because that was a regular feature of my whole life up until that point."**

Since Bourdain is very open about the fact that he was an addict early in his life and is a very successful business person now, his life is an interesting example of the impact of what Nassim Taleb calls "skin in the game." Taleb writes:

> Skin in the game can make boring things less boring. When you have skin in the game, dull things like checking the safety of the aircraft because you may be forced to be a passenger in it, cease to be boring. If you are an investor in a company, doing ultra-boring things like reading the footnotes of a financial statement (where the real information is to be found) becomes, well, almost not boring.

Bourdain was able to take his energy, ingenuity and intelligence and apply them in business settings after he beat his addiction. Once Bourdain had skin in the game business became a lot more interesting. He has taken his natural curiosity made himself into a focused, rigorous and organized business person by harnessing the power of skin in the game.

Bourdain is also talking about the importance of recognizing situations and placing bets when there is a huge upside and a small downside (convexity). When he was working in a kitchen he had nothing to lose in writing the book. While the probability of his book becoming a best seller was tiny, when he managed to "hit it big" he took advantage of that first success. That

success in turn resulted in other opportunities, which snowballed. His escalating success in business was the inverse of his spiral into addiction earlier in his life. Bourdain also now knows that when there is a big downside and small upside that is a situation which you should avoid wherever possible.

2. **"When Momofuku first opened, chefs brought other chefs there and they all realized, 'Look at all the stuff I don't need.' It's a really chef-friendly business model." I'm always interested to see what he does next because he's created a real game-changing business model. Pop-up restaurants where chefs from France who come in and do guest appearances for a night, that's exciting. There's this whole new democratization of fine dining that's going on. New ways of getting reservations that were unthinkable before, using online lottery system, first-come-first-serve, social networking."**

In talking about David Chang's innovative methods and practices Bourdain is bringing up the biggest theme of all in this blog and my new book: while there are no recipes for success, there are best practices. Some of these best practices and rules are always broken when an innovative business is created. Sometimes a person will ask me: "Why do you write so many profiles? Can't I read one or two and figure out the formula?" The answer is clearly "no." The point of looking at many case studies and examples is to find the patterns (some patterns are obvious and others are more subtle). As Michael Porter says: "Strategy is about making choices, trade-offs; it's about deliberately choosing to be different. The essence of strategy is choosing what not to do." No one can tell you which rules to break, but you can acquire more skill in determining which rules to break given your talents and circumstances right now.

David Chang's Momofuku restaurant significantly departs from what people thought were best practices. Chang does not break every best practice since that would be suicide for his business. The genius of Momofuku is which rules it breaks out of the many that were possible. Investing is actually very similar. Andy Kessler wrote recently in the Wall Street Journal: The core of investing is quite simple: Determine what everyone else thinks, and then figure out in which direction they are wrong. You can find the greatest story ever, but if everyone already knows it, there's not money to be made."

3. **"For much of the time as a chef I was unemployable by respectable businesses. The only people who would hire me would hire me for brunch shifts because most cooks hated doing brunch for very good reasons. I was good at it, but it was the only work I could get. I was a desperate man, often working under a pseudonym when I was cooking brunch. So I really hated it, and I also hated the whole concept of brunch. And later as a chef, I hated it because it was a huge profit center that caused problems for me as an employer because all my cooks hated to do it. But it was such a moneymaker because people are so foolishly happy to pay $22 for the same two eggs and bacon that they have during the week for $7 or even – or $3. Give them a free mimosa and a little strawberry fan and suddenly they're happy."**

Bourdain is talking about how an understanding of human nature can result in a huge variance in the unit economics of a business. Why some customers will pay more for something called "brunch" or a Starbucks experience is part of the alchemy of business. The markups on liquor in a fancy restaurant vs a fried egg at a Waffle House are vastly different. Marketing is the most important but not the only factor at work creating this difference.

Warren Buffett says about the goal: "We like companies which buy a commodity and sell a brand." Eggs, bacon, milk, vanilla, strawberries and bread are commodities, but "brunch" as an event is a brand. As another example, just as in the story *Jack and the Bean Stock*, Starbucks convinces people to give them a cow for a few ground up magic beans mixed with water. Getting a cow for a few magic beans can be a very financially attractive business.

4. **"There is the advantage [quintessential Manhattan restaurants that remain have], an important one, in that they own the building."**

If you have been reading this blog you will recognize that Bourdain is talking about wholesale transfer pricing. This quote above is from Bourdain's *Disappearing Manhattan* episode in which he pointed out that the old school restaurants that are left own their buildings. They are able to stay "old school" in the restaurant business only because they are their own landlords. If they had just been tenants, they would have been priced out of business in Manhattan long ago. In a Bloomberg podcast a restaurant owner once said: "the lease is everything in our business." His approach to the wholesale transfer pricing problem was having the landlord be his partner in the restaurant and getting a landlord to agree that the rent will be as a constant percentage of revenue. This same restaurateur said "the golden number is rent at 8% of revenue," but he said achieving that is usually impossible in a place like Manhattan.

5. **"For me, the business model is the same business model I have in all of my enterprises — if you produce really good content, someone will buy it. You don't have to talk down to people, you don't have to use television voice, you don't have to dumb stuff down, and you don't have to create stuff that makes you feel bad when you look at yourself in the morning."**

The motto of Y Combinator is essentially: make something people want to buy. If you do not make something that people value, nothing else matters. Some people like what Bourdain makes and some people don't. I have seen his live show and clearly a lot of people do. His fans love it when he writes a sentence like: "Vegetarians, and their Hezbollah-like splinter-faction, the vegans, are a persistent irritant to any chef worth a damn." Some people (e.e., vegetarians and vegans) undoubtedly will hate a sentence like that. Not only does Bourdain not care, but he knows having some people not like him it is great marketing. People love a rebel. Bourdain also knows if you try to please everyone, you will please no one and that an audience can smell a fake.

6. **"If I go to Mexico, I eat what Mexicans eat. Meaning that if there are a whole lot of Mexicans eating at a street food stall, I don't really need to know what's in it or where it came from. A whole lot of people from the neighborhood are eating it and seem to like it. This is a business model based on feeding your neighbors, meaning that no one's running a successful small food business by poisoning their neighbors." "Are the stalls busy? Are they popular with locals? Are they moving product? Those [observations] are key. Hawkers and street food people are not in the business of poisoning their neighbors. That's a bad business model."**

Incentives matter. If you are trying to decide what to do in a situation consider the incentives of the people involved. Are you asking a barber whether you need a haircut? Are the incentives of you and the other people involved aligned? Charlie Munger has learned: "I've

been in the top five percent of my age cohort all my life in understanding the power of incentives, and all my life I've underestimated it. Never a year passes that I don't get some surprise that pushes my limit a little farther."

7. **"At its root, it is factory work in the sense that the religion of any successful or busy restaurant is consistency. You have to do the same dish the same way and on time. I was a happy dishwasher. I jokingly say that I learned every important lesson, all the most important lessons of my life as a dishwasher. I liked being the worst in the kitchen and struggling every day to earn respect, you know, and status within that hierarchy. If you let the team down, everybody crashes."**

Bourdain appreciates what starting at the bottom in a service industry did for his character and work ethic. For this same reason, Charlie Munger is a huge fan of McDonald's. Munger believes: "They take people and give them a first job, which enables them to get a second job. They do a very good job of educating troubled young people to be good citizens, and they're probably more successful than charter schools."

8. **"I think a number of chefs are trying to figure out how to be good citizens of the world, and also serve the one percent. Trying to find a balance when their whole business model is built up around expensive markup of bottles of wine, only the very best parts of the fish, the rest has to be disposed of one way or another." "A lot of chefs are trying to reconcile that. Chefs generally are good-hearted people. People like Eric Ripert, he works closely with hunger relief and they try to do the best they can and try to do the best they can for the best directly as well as give food to City Harvest and places like that. We're seeing a lot of chefs go local for a lot of reasons, because it's the good thing to do to try to keep the money in the area, because it's hip, because it adds value, people like seeing it on a menu. It's better to give your money to an independently operating person in your area than to be giving your money to air freight and someone far away from your area and not feeding money back into it, that's preferable. I have no problem with people who get the best ingredients they can from all over the world, but I also admire people like Sean Brock, who are in a very real way trying to not just use local, but bring stuff that disappeared locally back, and to restore traditional food ways of the area that fell by the wayside as we entered the land of the tomato that was bred to travel."**

Giving back is good business and so is sustainability. More importantly, it is the right thing to do. Yes, sometimes assholes succeed financially, but do they really succeed overall? Not being an asshole is its own reward. My post on giving back is here: https://25iq.com/2015/12/12/what-are-charlie-mungers-views-on-giving-back-to-society/

9. **"I knew failure well because I was a failure for most of my career. This was a constant in my career. More often than not it was funny. I'm sympathetic to failure because I was such a fuck-up for most of my career. The line between tragedy and comedy is something I recognize and enjoy. Has there been anything funnier than Richard Pryor turning the most horrifying, painful anecdotes from his childhood and cocaine addiction right on the edge?" "Look, if you can't make fun of hipsters, comedy is dead. That said, I think I've been pretty explicit in the show repeatedly**

that however much fun they may be to make fun of — and the group is a fat, easy, low-hanging target — it is a hipster-driven economy right now. It's probably the salvation of the restaurant business."

Learn from mistakes. I also suggest that whenever possible you try to turn them into comedy so other people around you can learn from them. My post on mistakes is here:

10. **"I'll rummage around for something to feed them, for a 'vegetarian plate', if called on to do so. Fourteen dollars for a few slices of grilled eggplant and zucchini suits my food cost fine."**

Life is better in a business that has high gross margins. My post on gross margins is here:

11. **"Luck is not a business model." "If anything is good for pounding humility into you permanently, it's the restaurant business."**

My post on how hard it is to be financially successful in the restaurant business is here. It is a tough business with very little pricing power. When someone says "my restaurant failed since costs were to high" what they are really saying is that they could not raise their prices since they had no pricing power. Barriers to entry in the restaurant business are low and therefore competition levels are usually very high.

12. **"I urge you to travel – as far and as widely as possible. Sleep on floors if you have to. Find out how other people live and eat and cook. Learn from them – wherever you go." "I learned a long time ago that trying to micromanage the perfect vacation is always a disaster. That leads to terrible times." "I'm a big believer in winging it. I'm a big believer that you're never going to find perfect city travel experience or the perfect meal without a constant willingness to experience a bad one. Letting the happy accident happen is what a lot of vacation itineraries miss. I'm always trying to push people to allow those things to happen rather than stick to some rigid itinerary."**

I have always believed that travel is not only the very best educational experience, but that it is a tremendous source of optionality. Mohamed El-Erian points out that resilience, agility and optionality are required to deal with a world that is increasingly uncertain and nonlinear. Travel helps teach you to live with uncertainty and change. For six years of my life I traveled 500,000 miles a year on business, mostly internationally. I have also lived for long periods in four different countries. Part of what travel and living abroad teaches you is how to be a traveler rather than a tourist. Travelers, unlike tourists, know that there is no certainty in travel. You can't predict anything with certainty, but you can prepare and not take things too seriously. Unexpected stuff will inevitably and unpredictably happen and you need to learn to deal with that in a flexible and patient way. My blog post Heart Of Darkness illustrates how being a traveler and not a tourist is wise.

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What Killed Post-Break Up AT&T? What Lessons can be Learned from this Titanic Modern Failure?

October 14, 2017

While it is impossible to say that any one event started the process that resulted in the breakup of AT&T, one important personality who was involved was "Jack the Giant Killer" Goeken. He was the founder of many businesses including the long-distance provider MCI, two air-to-ground communications providers and the communications system used by FTD florists. The Washington Post wrote about him: "Beneath Mr. Goeken's frumpy appearance — he wore old business suits that were frayed and carried briefcases bursting with loose papers — was a telecommunications genius who became one of the industry's most powerful innovators.' He drove an old rusted out Cadillac El Dorado and when his briefcase broke or was too full he would use a plastic garbage bag instead. Stories about Goken's tenacity are legendary: "Early on, the business was often low on cash. In order to make hundreds of expensive photocopies for licensing hearings before the Federal Communications Commission, Mr. Goeken loosened his tie, rolled up his shirtsleeves and walked through the offices of a Washington law firm impersonating a Xerox machine attendant — and copied his pages for free." His appearance was not dissimilar to the character played by John Candy in movie *Planes, Trains and Automobiles.*

1. **“All I wanted was the opportunity to fail.” Jack Goeken**

Goeken’s formal education ended at high school. He added to what he taught himself in high school about electronics and engineering by serving in the Army Signal Corps. The LA Times wrote about Goeken’s first business in his obituary: “Goeken started Microwave Communications Inc. — the original name of MCI — in 1963 with a simple plan to increase sales at his two-way radio business in Joliet.”

It is doubtful that Goeken knew the other more famous resident of Joilet, but anything is possible (just kidding).

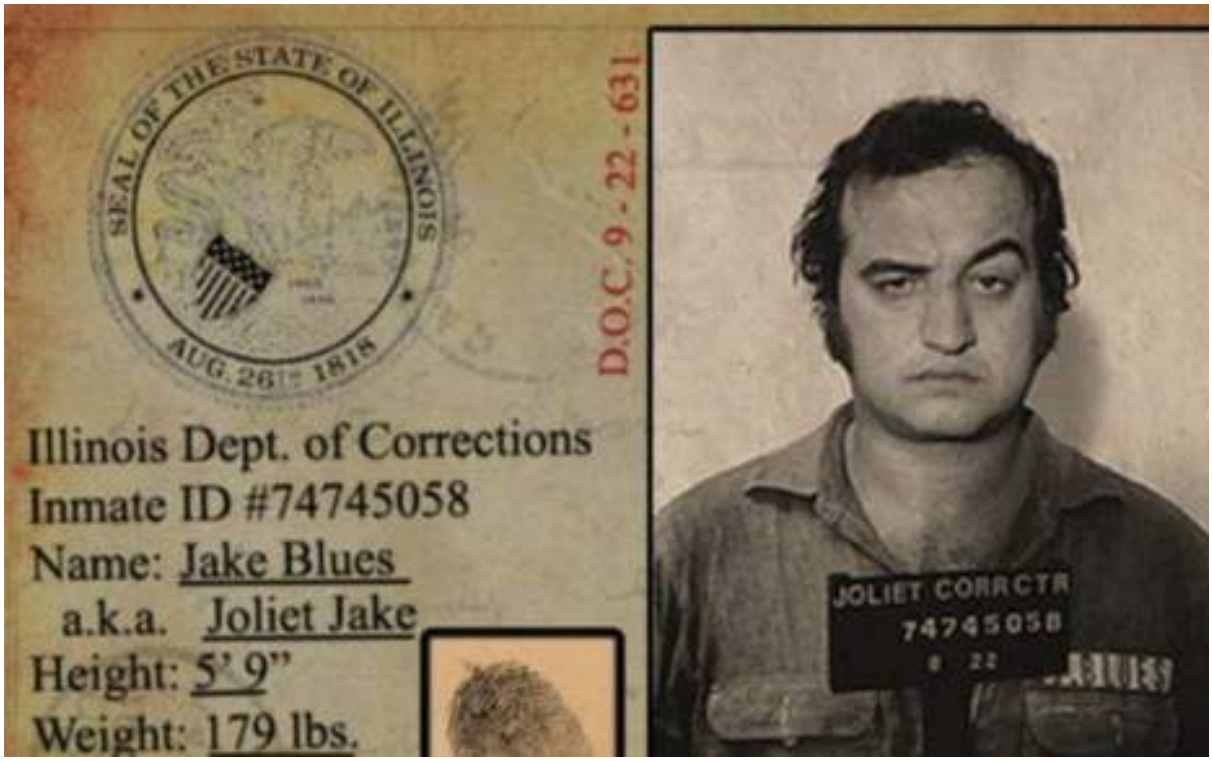

Goeken is a classic example of a missionary founder. His motivation for forming MCI was to sell more two-way radios to truckers traveling between Chicago and St. Louis on Route 66. He knew that if he could build a system using microwave towers to connect the radios that served the route that traveled through his home town, his profits would rise.

The CEO of MCI was not Goeken but a famous successor named Bill McGowan. Steve Coll wrote in his book *The Deal of the Century: The Breakup of AT&T:*

> Millions of dollars would be spent by the U.S. government, by MCI, and by AT&T in an attempt to determine precisely whether MCI was authorized to sell "FX" and "CSSA" services to its customers. Several careers would be made and broken over the issue, and more than a few lawyers would become very rich resolving it. But at the time it occurred, the controversy was perceived as just another skirmish in the ever-widening war between Bill McGowan and the phone company.

Long distance was viewed as a very attractive market by AT&T. It required far less capital than other parts of the business of AT&T and made certain ratios that are taught in business schools like *internal rate of return* (IRR), *price earnings* (P/E) and *return on net assets* (RONA) look very good. In contrast, the cost of maintaining "the last mile" physical plant that enables telecommunications was viewed as a burden to the profitability of AT&T. That MCI and other companies were able to provide long distance service without paying for that last mile infrastructure made the AT&T executives unhappy. AT&T executives hated that these upstart competitors were able to take long distance market share.

Nasty and expensive legal battles went on for years over these and other issues. Eventually AT&T formulated what it thought was a clever solution:

The recurring analogy used by AT&T Chairman Charles Brown in describing his company's reason for accepting the proposed settlement of the federal antitrust suit (BROADCASTING, Jan. 11) was that of a "fence with a one-way hole." AT&T, he said, had been confined by the 1956 consent decree that restricted it to regulated services. A one-way hole had since been opened in that fence—letting competitors like MCI and ITT enter the provision of telephone services while keeping AT&T restricted within the confines of its historical businesses. The new settlement resolves the inequality AT&T perceived in that situation by removing the fence.

A key element of the breakup of the Bell System was a consent decree signed on January 8, 1982. AT&T would provide long-distance service and seven other firms ("RBOCs) would provide local telephone service in different regions. The original seven RBOCs were:

- Ameritech
- Bell Atlantic
- BellSouth
- NYNEX
- Pacific Telesis
- Southwestern Bell
- US West

What the AT&T executives who stayed with the long distance company did not realize was that without the last mile assets the long distance business had virtually no moat even though it had high profit margins before the break-up. They did not take into account that sometimes what gives you a moat is not what delivers the profit. The profits in a situation like AT&T's before the break-up were delivered by a complementary product to the moat itself. The complementary product to the moat created by the last mile assets was long distance. AT&T did not realize that the RBOCs were not only being given the moat in the divestiture but were free to use wireless revenues to monetize that advantage.

Why didn't AT&T see what was coming? Like many business that are no longer with us, AT&T managed its business using Siren Call Ratios. What is a Siren Call Ratio? In

Greek mythology the Sirens were creatures who lured sailors with enchanting music and voices and wrecked the ships on the rocky coast of an island. In business, Siren Call Ratios like IRR, P/E and RONA create a fatal focus on short term financial results, which eventually "shipwrecks" businesses.

Set out below in four tweet format is the essence of the problem AT&T created for themselves by chasing Siren Call Ratios instead of lifetime customer value (LTV):

Morris Chang: "Americans measure profitability by a ratio. No banks accept deposits denominated in ratios."

For example, IRR is a ratio, with profit as a numerator; the denominator measures how quickly I return my investment. If managers invest only in projects that pay off quickly, IRR will rise since it reduces the denominator of the ratio. The fewer the assets, the higher the RONA! Siren Call Ratios direct capital toward short-term wins which creates an opportunity for other firms to invest in opportunities with long term payoffs.

Imagine how little the teams created by entrepreneurs like Craig McCaw and John Malone would have built their wireless and cable TV businesses if they had run their businesses based on The Siren Call Ratios. Nothing important would have been created by these great entrepreneurs since their focus would have been on short term metrics and not lifetime customer value. Fortunately these entrepreneurs did run their businesses to create shareholder value and did not optimize their businesses around Siren Call Ratios. What about the RBOCs? Why did the RBOCs run their business differently? Because McCaw and other entrepreneurs pushed the RBOCs to manage their business based on lifetime customer value (LTV) instead of Siren Call Ratios. The RBOCs had no choice but to copy the business methods of their new competitors since otherwise they would have had close to zero customers. This turned out to be the winning strategy for the RBOCs. As a result, one of the RBOCs (SBC) would eventually create enough value so that it was able to acquire AT&T and assume its more well known known brand.

When I make this point about Siren Call Ratios some people think I am arguing for a non traditional valuation method when in fact I am saying that companies should be valued on a discounted cash flow (DCF) basis just as Warren Buffett does. Warren Buffet has never bought a business based on Siren Call Ratios and never will. As Buffett says in valuing an asset like a business: "you take the cash flows that you expect to be generated and you discount them back to their present value." DCF is a methodology rather than a result. Some businesses will be overvalued and some businesses undervalued when you do the math in a DCF. It depends.

When you focus on DCF and free cash flow you can do the type of long term investing that Jeff Bezos talks about here:

"If everything you do needs to work on a three-year time horizon, then you're competing against a lot of people. But if you're willing to invest on a seven-year time horizon, you're now competing against a fraction of those people, because very few companies are willing to do that. Just by lengthening the time horizon, you can engage in endeavors that you could never otherwise pursue. At Amazon we like things to work in five to seven years. We're willing to plant seeds, let them grow—and we're very stubborn."

To illustrate how creating shareholder value in the form of lifetime customer value is the better way to do business, this letter below was sent in July 1994. Two months later McCaw Cellular was sold to to AT&T for $11.5 billion:

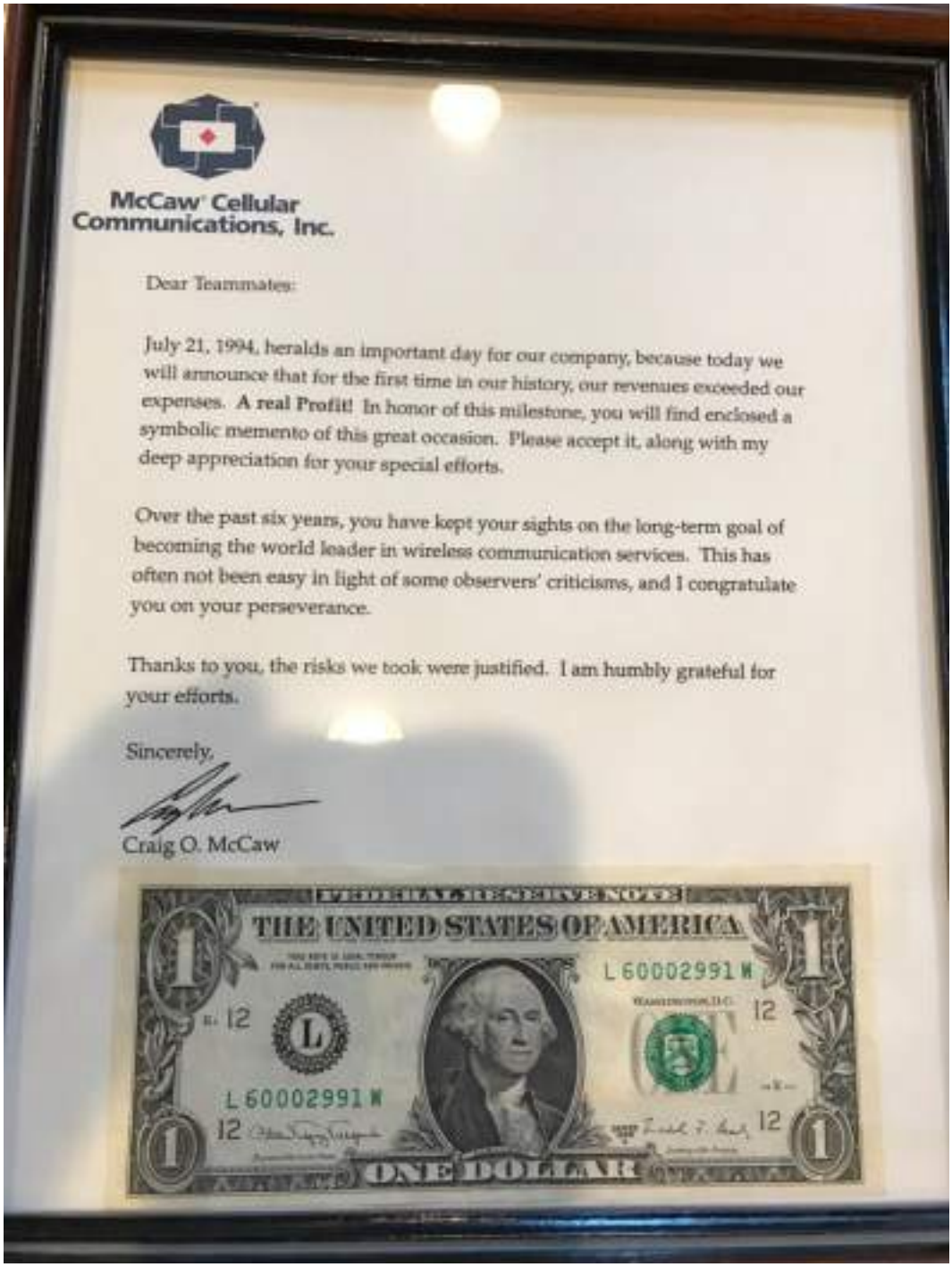

McCaw Cellular Communications, Inc.

Dear Teammates:

July 21, 1994, heralds an important day for our company, because today we will announce that for the first time in our history, our revenues exceeded our expenses. **A real Profit!** In honor of this milestone, you will find enclosed a symbolic memento of this great occasion. Please accept it, along with my deep appreciation for your special efforts.

Over the past six years, you have kept your sights on the long-term goal of becoming the world leader in wireless communication services. This has often not been easy in light of some observers' criticisms, and I congratulate you on your perseverance.

Thanks to you, the risks we took were justified. I am humbly grateful for your efforts.

Sincerely,

Craig O. McCaw

One of the great mysteries in business history is why AT&T let the RBOCs have the cellular business. AT&T certainly received some bad advice from its consultant McKinsey. *The Economist* magazine describes this bad advice, but misses the core reason why the estimate was so wrong:

"In the early 1980s AT&T asked McKinsey to estimate how many cellular phones would be in use in the world at the turn of the century. The consultancy noted all the problems with the

new devices—the handsets were absurdly heavy, the batteries kept running out, the coverage was patchy and the cost per minute was exorbitant—and concluded that the total market would be about 900,000."

The actual core mistake of the botched estimate was that McKinsey assumed customers would always use a land line phone if one was available. McKinsey did not fully understand the value of mobility. People do not want to be tied to a desk or a phone cord. Craig McCaw once described his views on this aspect of the value of wireless in this way:

"We started out as nomadic. It may be the most natural state for human beings. We're kind of returning to people freedom they lost starting in the Dark Ages. It was with the discovery of seeds that people ceased being nomadic—and my opinion, by the way, is that people remain nomadic by nature—but it is for economic reasons that we became fixed in our location."

AT&T's reliance on this McKinsey study and the conclusions of many other people that were similar is what allowed business people like McCaw to sweep in and buy licenses at far less than their real value. Fortunately other financiers disagreed with McKinsey and that allowed McCaw and others to finance the acquisition of even more licenses to operate in new regions. As the pioneers of the wireless business created more value they were able to use that new value to finance the roll up the of the business nationally and even internationally. Many people forget or were born too late to realize that this was the situation in October of 1991:

"NEW YORK — McCaw Cellular Communications Inc. Wednesday launched the North American Cellular Network (NACN), a move toward a national network of cellular telephones.The network, which McCaw says is the first system of its kind, will have automatic call-delivery while traveling anywhere in the network. It eliminates the need for a caller to know the location (roaming access codes) of the cellular customer being called. Also, a customer's individual calling features, such as call-waiting, three-way conference calling and call-forwarding, are available throughout the network."

One account of how the decision was made by AT&T to give wireless to the RBOCs, was written up by a reporter in *RCR Wireless News* in 2001. It is a very credible account since if anyone knew about what happened it was Michael Altschul, who is quoted:

How it came to pass that AT&T let its cellular licenses slip away during its 1984 divestiture is the stuff of wireless industry urban legend. Some say AT&T was less-than-concerned about giving up its cellular business, believing industry forecasts that at the time predicted limited growth for the nascent industry. Others say AT&T let the licenses go as a strategic move designed to shore itself up for impending competition in other areas. Still others contend AT&T wanted to keep cellular in its fold, but believed it would not be allowed to do so. Whatever its reason, AT&T appeared to put up little fight in the early 1980s to keep its position in the cellular industry-an industry it was instrumental in pioneering. AT&T engineers had largely developed cellular technology, and the company was a catalyst for convincing the Federal Communications Commission to free up spectrum for the new service. It had an experimental license in one market and was on its way to launching one of the first cellular markets in the country. But there was no mention of cellular in the consent decree that settled the antitrust case between AT&T and the government, according to Michael Altschul, who was responsible for part of the government's case as part of the trial staff of the Antitrust Division at the Department of Justice. Altschul is now general counsel at the Cellular Telecommunications & Internet Association. "The lawsuit was based on prior

conduct," said Altschul. "Wireless wasn't a part of the government's case. "There was absolutely no mention of cellular," he said. Altschul recalled the press conference called to announce the settlement agreement. A reporter asked executives at the company what was to become of the cellular business. Altschul said a huddle between AT&T executives and their key deputies produced the answer. Cellular would go to the Bell companies.

It is hard to imagine this now, but cellular at that time was not considered an important business asset. Wireless was a small detail in the break up of AT&T. Many of the people who ended up running the RBOCs knew the cellular AMP system and technology better than the people who ran the long distance business. In short, wireless was a small detail in a very complex and sometimes chaotic negotiation over the breakup. Wireless infrastructure was considered a local business with little relative importance by many people at AT&T. Considered more important at the time were issues like the independence of the RBOCs, including their ability to offer "enhanced services" and questions like AT&T's ability to enter the computer and videotext business. Sam Ginn, who went on to fame as a RBOC and wireless executive, said at the time of the AT&T break up the negotiators were "more interested in the Yellow Pages at that time than wireless."

Another account of the decision by AT&T to give up wireless to the RBOCs is in the book *Wireless Nation.* The author of that book wrote: "The first indication of where cellular would fall came when AT&T chairman Charles Brown was in the hot seat on a popular TV news show. In an appearance on the *MacNeil/Lehrer* Report, AT&T Chairman Charles Brown said on January 11, 1982 that AT&T would not interfere "in the local companies business…. all we'll do is make the technology available." This account in the book claims that "just like that" Brown gave away the wireless business to the RBOCs. Brown's appearance on the television show on January 11 was a few days after the press conference that took place on the 8th so it may not be true that this was the first indication of where wireless would end up.

It is worth emphasizing how much AT&T had "person with a hammer syndrome" when it came to the long distance business and the Siren Call Ratios. For example, even in 1992, when AT&T bought about 33% of McCaw and in 1995 when it bought all of the company, AT&T executives thought the reason to be in the wireless business was "to save the long distance business." I'm not guessing on this point since I heard them say it several times at McCaw HQ in Kirkland. I heard it again in the late 1990s when Craig McCaw and I flew to what we called "carpet land" in Basking Ridge New Jersey to meet with the AT&T CEO. As an aside, in that HQ building you had to walk a mile to "reach out and touch someone." To get into the AT&T CEO's office you also had to walk past many layers of executive assistants. There was carpet as far as the eye could see.

The end result of the 1982 AT&T breakup was that one of the RBOCs eventually ate AT&T. In 2005, SBC purchased AT&T for $16 billion. After this purchase, SBC adopted the better-known AT&T name. The executives who thought that they were better off staying with the long distance company since it was going to have better ratios made a massive mistake. As Warren Buffett has said: "When we see a moat that's tenuous in any way — it's just too risky. We don't know how to evaluate that. And, therefore, we leave it alone."

2. "You do it because it's something you believe in. Everybody comes in and says you can't do something, so I do it just to prove it." Jack Goeken

Goeken's persistence and tenacity were legendary as was his ability to do a lot with very little money. For example, he slept in the office of his lawyer when he did not have enough money for a hotel. His lawyer once said that Goeken was like yeast in bread dough on a warm day – he would inevitably rise.

3. "**When you do something that`s never been done before, you don`t have a blueprint. I navigate in uncharted waters." Jack Goeken**

There is no recipe for success in creating a successful startup (which is very different from executing on a known business model). When you face uncertainty, the best approach to finding success is experimentation using the scientific method. This is true whether the founders are a big company or a startup. There are best practices at least some of them must be broken in order for the business to be innovative. Selecting the right rules to break at the right time in the right industry is part of what makes for a great entrepreneur. If you break too many best practice rules the startup will surely die, just as it probably will if the founders break none.

4. "**I couldn't care less if people laugh at me." Jack Goeken**

Being a founder is far easier if you have thick skin. Most founders are told that they are going to fail many times. Not caring what naysayers think is a kind of superpower for founders.

5. "**I can see Orville and Wilbur Wright going to their lawyer and saying, `Hey, we want to invent an airplane." And the response would be: 'Oh, my God, the wing is going to fall off. Stick with bicycles!'" Jack Goeken**

It is easy to say: "That won't work." And most people do. The difference between naysayers and someone like Goeken is that he actually created winners. Creating winners is hard evidenced by the fact that distribution of success for startups it a power law. There are a few winning hands and a lot of failures when it comes to ambitious venture capital backed startups.

6. "I never believe in revenge. Our philosophy is just to do it better and do it faster than anybody else." Jack Goeken

Charlie Munger says it best: "What good is envy? It's the one sin you can't have any fun at. It's 100% destructive. Resentment is crazy. Revenge is crazy. Envy is crazy. If you get those things out of your life early, life works a lot better." Goeken made this statement about revenge after settling a lawsuit with GTE over Airfone. His response was to go out and form a competitor to Airfone. It did not work out well financially for Goeken this time, but it also did not for Airfone for GTE.

Notes:

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A Dozen Lessons from Megan Quinn about a Growth Mindset

October 21, 2017

Megan Quinn is a General Partner at Spark Capital. She was a previously a partner at Kleiner Perkins Caufield & Byers. Quinn joined KPCB from Square, where she was Director of Products. Before joining Square she spent seven years at Google working on products like Google Maps. Quinn has invested in many businesses, including Clover Health, Handshake, Pendo, Rover, and Slack.

I thought it would be useful and fun to write about Quinn in the context of the work and ideas of Stanford Professor Carol Dweck, who is the creator of the *growth mindset* mental model. Dweck's mental model has been summarized in two sentences as follows: "In a *growth mindset*, people believe that their most basic abilities can be developed through dedication and hard work—brains and talent are just the starting point. This view creates a love of learning and a resilience that is essential for great accomplishment." People with a *growth mindset* thrive on new challenges. They actively search for these new challenges understanding that in trying to solve challenges they will grow their capability and skills. In a recent article Dweck wrote about "students," which I generalize below to "people" in general:

My colleagues and I have found that mindsets—how [people] perceive their abilities—played a key role in their motivation and achievement, and we found that if we changed [people's] mindsets, we could boost their achievement. More precisely, [people] who believed their intelligence could be developed (a *growth mindset*) outperformed those who believed their intelligence was fixed (a *fixed mindset*). And when [people] learned through a structured program that they could 'grow their brains' and increase their intellectual abilities, they did better. Finally, we found that having [people] focus on the process that leads to learning (like hard work or trying new strategies) could foster a *growth mindset* and its benefits.

1. "I am a relentless advocate for great products. I love product. I test product."

Quinn once said that she loves maps so much that in the event of a house fire, she would grab the maps first and then exit the house. Maybe she is kidding, or maybe not. That she loves products clearly comes through when you listen to or read what she says in an interview. She reminds me of people I have encountered who are genuinely giddy when they encounter a new product. They get a dreamy look in their eyes as they handle or experience the product.

These people take love of a product to obsessive levels, but in a good way. Is great product sense a gift? I do think some people have savant-like qualities when it comes to products. Craig McCaw certainly has savant qualities when it comes to products like mobile phones and services. But I also believe that people who have *growth mindset* can acquire better product sense. The most successful business people are always learning and in that sense they are always students. When I listen to or read an interview of Quinn, I see a *growth mindset*. Anyone can grow their brain to become better at skills like developing and investing in new products.

2. "I read as much as humanly possible."

Quinn is clearly an enthusiastic and avid reader. Successful investors who do not read are rarer than chicken teeth. Change is happening far too quickly for anyone who does not read constantly to keep pace. Charlie Munger has observed over his decades as an investor: "In my whole life, I have known no wise people (over a broad subject matter area) who didn't read all the time – none, zero." Reading is clearly a part of how Quinn approaches the *growth mindset* mental model. For example, Quinn received her degree in Political Science and History from Stanford and yet was a product manager at Google which required that she not only develop technical chops but the business skills. You don't learn the business and technical side of what she does without reading a lot, having a love of learning and otherwise exhibiting a growth mindset. She exemplifies Dweck's idea that: "we can grow our brain's capacity to learn and to solve problems." Its important to keep in mind what Dweck talks about here: "If you want to demonstrate something over and over, it feels like something static that lives inside of you—whereas if you want to increase your ability, it feels dynamic and malleable." Business school professor Jeffrey Pfeffer faults businesses for spending too much time in rank-and-yank mode, grading and evaluating people instead of developing their skills. Pfeffer quips: "It's like the Santa Claus theory of management: who's naughty and who's nice." Businesses that hire only based on IQ tests or credentials are often missing the best employees. Dweck believes:

John Zenger and Joseph Folkman point out that most people when they first become managers enter a period of great learning. They get lots of training and coaching, they are open to ideas, and they think long and hard about how to do their jobs. They are looking to develop. But once they've learned the basics, they stop trying to improve. It may seem like too much trouble or they may not see where improvement will take them. They are content to do their jobs rather than making themselves into leaders. Or, as Morgan McCall argues, many organizations believe in natural talent and don't look for people with the potential to develop. Not only are these organizations missing out on a big pool of possible leaders, but their belief in natural talent might actually squash the very people they think are the naturals.

3. "99.9% of the time, certainly in my case, unless they're talking about maps, founders know a lot more about what they're talking about than I ever will. I'm there to learn and listen and then pass judgment, and because I will never be the subject matter expert in whatever it is that they're focused on, the empathy and experience that I have gained by building and helping mature startups over time is really useful to those entrepreneurs."

The best venture capitalists have a "learn it all" instead of a "know it all" attitude when they are talking with entrepreneurs. They have the ability to create what Zen Buddhists call *Beginners Mind* which "refers to having an attitude of openness, eagerness, and lack of

preconceptions when studying a subject, even when studying at an advanced level, just as a beginner in that subject would." Some people refer to this attitude or approach as: "strong ideas weakly held." Strong ideas should come from knowing the subject very well based on research that has examined all side of the issue. By keeping any strong ideas "weakly held" a person can adapt more easily as new information and ideas arrive. In the 2006 WESCO meeting Charlie Munger said:

The ability to destroy your ideas rapidly instead of slowly when the occasion is right is one of the most valuable things. You have to work hard on it. Ask yourself what are the arguments on the other side. It's bad to have an opinion you're proud of if you can't state the arguments for the other side better than your opponents. This is a great mental discipline.

4. "Curiosity is a requirement for identifying great entrepreneurs and companies. Read obsessively across many industries–technology, business, science, education, and so on. Find smart people in the verticals you're interested in and follow what they're reading, writing, saying, and even tweeting to develop your own point of view. An important part of tech investing is developing a strong point of view on emerging technologies and trends–curiosity is critical."

Reid Hoffman said in an interview recently: "Curiosity is a key to surviving in the modern age." Don Valentine believes: "Venture capital is reducible to a few words. You have to be interested in managing change, and you have to believe that change is necessary." If you are not curious enough to seek out what is changing you are going to be too late to the party. Piling on to an area to invest in is not a sound strategy in venture capital. When poseur venture capitalists arrive to invest in a sector, the great venture capitalists are already looking at new opportunities. Dweck wrote about Thomas Edison in her book *Growth Mindset*:

Young Tom was taken with experiments and mechanical things (perhaps more avidly than most), but machines and technology were part of the ordinary midwestern boy's experience. What eventually set him apart was his mindset and drive. He never stopped being the curious, tinkering boy looking for new challenges.

Walter Isaacson wrote this recently, which is similar to the ideas of Dweck: "Leonardo Da Vinci was a very human genius. He was not the recipient of supernatural intellect in the manner of, for example, Newton or Einstein, whose minds had such unfathomable processing power that we can merely marvel at them. His genius came from being wildly imaginative, quirkily curious and willfully observant."

The best venture capitalists I know are always asking questions. Why is this true? What can we learn from this? How can we do this better? When will this technology arrive? Who is the best person to help us solve this problem? Who is the expert on this? What is he or she like? The questions one can ask are endless because there is always more to learn. Dweck says: "it's not always the people who start out the smartest who end up the smartest."

5. "A lot of the pitches and the products that I see across my desk are iterations on existing products and services. The entrepreneur has taken a great existing product or service and made one or two tweaks to make it more compelling. It probably does make it a better product but it's not enough for a venture-level investment, per se. You really need to have a vision for the future that demands your product or service exist." "As much as I wish we could just invest in really, really great products, we need to spend

time investing in products that actually have an underlying business or business opportunity."

People have a tendency to underestimate how much better a new product must be to succeed. Tweaks in existing products aren't enough to cause people to switch for a number of reasons, not the least of which is status quo bias. People in general need significant motivation to change what they have been buying. Incumbents can also copy small iterations quickly. How do you create better products? You probably guessed I would say: "have a *growth mindset*." What are Lean Startup or Kaizen if they are not about having a growth mindset? I will write more about this soon in a post about the new book *The Startup Way* by Eric Ries. Ries writes: "Take the learning from each experiment and start the loop over again (build-measure-lean feedback loop)." You can follow the process Ries describes in your life, your career and with products. It represents a growth mindset.

6. "It's hard to build a very significant business when you don't have a direct relationship with your customer."

We live in the age of the connected customer. A business that does not have telemetry data from its customers is operating in the dark. The earlier and more often that data is obtained. the more the supplier can make the product better. Feedback loops that result in better products are shortened and made more robust when a customer is connected and suppling the supplier with data. Improvements in artificial intelligence make this telemetry more important as each day passes. If a competitor has customer telemetry any competing business that isn't connected to its customers is in big trouble.
Many business in many different industries that have had another company between it and the end customer have been deciding to abandon an indirect distribution model to regain the critical customer data. As an example, you can see this in Netflix wanting to get to a point where they own 50% of what they offer and in the fact that they will not share much of the data they generate with third party content owners. A content producer like Disney increasingly realizes this and is as a result moving to stream its content directly to end users. Ben Thompson describes this idea beautifully when he wrote this week: "the end of gatekeepers is inevitable: the Internet provides abundance, not scarcity, and power flows from discovery, not distribution. We can regret the change or relish it, but we cannot halt it: best to get on with making it work for far more people than gatekeepers ever helped — or harassed."

7. "Every investor will include these four things in their lineup, but will change the order. For me it is products, entrepreneur, markets, business model. If they are not all stellar, it is not a good fit for me."

A venture capitalist like Don Valentine puts markets first of the for attributes. Other VCs like Pitch Johnson put entrepreneur/team first. That these different points of view exist is healthy since there are different teams with different early strengths and weaknesses (and different sources of outperformance). Even with a given venture capital firm the relative priorities between the four attributes can vary.

Can a company have a *growth mindset* and if so what would it look like? A Harvard Business Review article explores this topic and concludes:

"In broad strokes, we learned that in each company, there was a real consensus about the mindset," Growth-mindset organizations are likely to hire from within their ranks, while fixed-mindset organizations reflexively look for outsiders. And whereas fixed-mindset organizations typically emphasize applicants' credentials and past accomplishments, growth-mindset firms value potential, capacity, and a passion for learning. "Focusing on pedigree…is not as effective as looking for people who love challenges, who want to grow, and who want to collaborate."

8. "Founders should have a basic level of financial literacy in order to run their startup. The good news is that there's a proliferation of VCs, like myself, who share a ton of content online, every day, all the time, more than anyone could ever possible want to read, about the fundamentals of startup businesses."

It is sometimes hard to get founders interested in learning about financial issues. They love products not term sheets. A founder's willingness to learn about financial topics can change when a transaction is actually happening since at that time they have skin on the game. But by the time the transaction is happening it is often too late at that point to get fully up to speed and they have a business to run. Too often the founders must go through a bad experience in order to learn hard lessons about things like important deal terms. For example, founders can focus too much on share price of a financing and not enough on terms. This is more than unfortunate. It is a good idea for founders to spend some time reading about financial topics that will impact their business including fund raising before they are about to face the issue. Founders are natural learners, so a reticence to learn about financial topics is unfortunate. Dweck has written this on the learning process generally:

"What on earth would make someone a non-learner? Everyone is born with an intense drive to learn. Infants stretch their skills daily. Not just ordinary skills, but the most difficult tasks of a lifetime, like learning to walk and talk. They never decide it's too hard or not worth the effort. Babies don't worry about making mistakes or humiliating themselves. They walk, they fall, they get up. They just barge forward. What could put an end to this exuberant learning? The fixed mindset. As soon as children become able to evaluate themselves, some of them become afraid of challenges. They become afraid of not being smart. I have studied thousands of people from preschoolers on, and it's breathtaking how many reject an opportunity to learn."

9. "The major difference [between being a VC working for a business and directly creating products] is that I am helping their dreams come true."

Being able to enjoy the success of other people in achieving their dreams is a common attribute of successful venture capitalists. What Quinn is talking about is another example of having a growth mindset. The best venture capitalists I know, or at least the ones who are the most fun to be around, are natural teachers. As Dweck says: "Don't judge. Teach. It's a learning process." It can be valuable content marketing for a venture capitalist to teach people about technology, products business and life via blog and speaking, but it is also the right thing to do. Teaching helps the teacher grow their intellect and their ability to be empathic. As an example, I have found it interesting to watch Ray Dalio promote his book Principles, especially when he says that his motivation is passing along what he knows, before he passes on. This blog started really when two partners at Benchmark told me about a new service called Twitter and said: "It is perfect for you." They knew me well from the days when I would commute to their office regularly. As is the case in life one thing resulted in another.

My experience on Twitter caused me to think I should do more of what Dalio is talking about and for the same reason. This caused the pace of writing on my blog to pick up speed. I have written a post every Saturday for ~250 weeks in a row now.

10. "Venture capital is a very specific type of funding vehicle for a very specific type of company. It is not broadly applicable, and there is no reason to have shame or to be disappointed if venture capital is not the right funding vehicle for you. The United States is built on small businesses that do not take venture capital."

Very few business in the United States or elsewhere raise a series A investment from a venture capital firm, let alone an additional financing round. Quinn is making a critical point that most businesses do not need venture capital and should not try to raise it. Every nation depend on business getting stared without raising venture capital. As context for this point, depending on your definition, only 800 to 1,200 series A rounds occurred in the US in 2016. This a relatively small number of business. Overall business creation numbers are far larger. For example, in 2015, 679,072 new businesses were established in the United States. These businesses created 3 million jobs, with the average business creating roughly 4.5 employees. Entrepreneurship and the formation of new businesses has declined. For example, in 1978, there were 12 new businesses created for each existing business, while in 2011 there were only 6.2 new firms created for each established business. The number of new businesses created is quite concentrated unfortunately. From 2010-2014, half of new startups created were located in just 20 counties. Every country needs to have a base of businesses that are able to grow by using sources of capital like savings, bank loans and internally generated cash flow.

11. "The absolute best way to get into venture capital is to go work at a startup." "There's no better way to help entrepreneurs build companies than to have done it yourself. You need to experience the daily highs and lows to understand the grit and fortitude required to go from customer one to 1 million. Great investors draw from their own personal experience and it's hard to be a coach if you've never been a player."

Quinn has worked at operating businesses like Google and Square. The broad experiences she encountered during those periods serve her well as a venture capitalist. For example, one key leaning from working in an operating business is the idea that you can learn from failure, Dweck puts it this way:

"If you react to a setback defensively, wanting to hide it, wanting to make up excuses for it, you're in a fixed mindset. And instead, ask what can I learn from this experience that can help me go forward next time?"

"Why waste time proving over and over how great you are, when you could be getting better? Why hide deficiencies instead of overcoming them? Why look for friends or partners who will just shore up your self-esteem instead of ones who will also challenge you to grow? And why seek out the tried and true, instead of experiences that will stretch you? The passion for stretching yourself and sticking to it, even (or especially) when it's not going well, is the hallmark of the growth mindset. This is the mindset that allows people to thrive during some of the most challenging times in their lives."

The best way to learn is by actually doing what you are trying to learn. Nothing beats the real world of business as a classroom.

12. "The most important thing for someone to do starting in the tech industry is [to find] mentors. I think it's very important for folks who are starting out in the industry [because they] can give them advice and time and be mentors and role models for them. It's not necessarily even having to find lots of mentors or people who are going to spend hours a week or hours a month with you. It's about finding people who you look up to." "I observe who has achieved success but had done so in a way that was thoughtful, collaborative and more in tune with how I wanted to develop."

I have a half-written draft blog post written on mentors that I will finish soon. Quinn's ideas on mentoring marry well with something that Sheryl Sandberg has said about careers today:

"The traditional metaphor for careers is a ladder, but I no longer think that metaphor holds. It doesn't make sense in a less hierarchical world. … Build your skills, not your resume. Evaluate what you can do, not the title they're going to give you. Do real work. Take a sales quota, a line role, an ops job, don't plan too much, and don't expect a direct climb. If I had mapped out my career when I was sitting where you are, I would have missed my career."

Quinn's point about finding people you look up to in addition to what people would traditionally think of as mentors is an excellent point. Just having the ability to watch great people operate is like going to school. You can also learn from anti-mentors what not to do. Dweck writes: "Think about your hero. Do you think of this person as someone with extraordinary abilities who achieved with little effort? Now go find out the truth. Find out the tremendous effort that went into their accomplishment—and admire them more." My heroes include my parents and Bill Gates Sr., who I have written about previously on this blog.

Notes:

https://www.startupgrind.com/blog/stop-building-for-mobile-build-to-drive-talk-and-work-says-spark-capitals-megan-quinn/

A Dozen Business Lessons from Waffle House

October 28, 2017

I enjoy being challenged to write a post on a topic like Waffle House since it is an opportunity to show that you can learn from anyone or anything. That is why I have written blog posts about people like Rza, Biggie Smalls and Louis CK. In some cases what you learn is what not to do, which can be a very valuable thing.

Waffle House co-founder Joe Rogers got his start in the restaurant business after his service in the military ended after World War II. He joined the Memphis-based chain Toddle House, starting in a restaurant kitchen in New Haven, Connecticut. He learned to be a grill cook by day and at night learned the accounting side of the business from the restaurant manager and his wife. He eventually was transferred to Georgia by Toddle House. A former Manhattan

Project security officer and real estate broker named Thomas Forkner convinced Rogers that they should open what would become the first Waffle House location in 1955 in Avondale Estates Georgia. The Waffle House restaurant's menu listed only 16 items and was open 24 hours a day.

Andrew Knowlton wrote in a Bon Appétit article in 2015:

Because of round-the-clock service, crazy stuff famously goes down at the Waffle House. There's the time Kid Rock got in a fistfight in suburban Atlanta. Another incident in which a drunk Georgia couple got horizontal in the parking lot, and when the cop told them to get dressed, the woman tried to slip a cheeseburger onto her foot, thinking it was her sandal. There are robberies, cars crashed into facades, and, more commonly, obnoxious boozed-up customers simply behaving badly late, late at night. (Let's be honest: If the French Laundry were open 24 hours a day, sketchy things would happen there too.)

Waffle House has become a cultural icon. This creates an opportunity for a comedian like Jim Gaffigan:

I love Waffle House. And not just because watching someone fry an egg while smoking reminds me of my dad. I've seen a gun five times in my life, three of those were in Waffle Houses. There's definitely a dangerous feel to them. Even the sign looks like a ransom note. There's always a letter out, occasionally it's the 'W', so it reads 'AFFLE HOUSE." Eh it's 2 am, let's go to the Affle House. Their slogan should be: 'It's 2 AM; Still Time to Make One More Bad Decision.' You go in there and everyone's drunk. You know everyone's drunk in Waffle House because they have pictures of the food on the menu. How drunk do you have to be to not remember what a waffle looks like? 'Oh yeah, it's like a plaid pancake.'"

1. **"If Toddle House had offered ownership to the management team, there never would have been a Waffle House."** Joe Rogers, Jr.

Joe Rogers maintained his job at Toddle House even after starting the Waffle House restaurant. At one point he even moved to Memphis when he was promoted by Toddle House to vice president. But in 1961 he returned to Atlanta since he was frustrated that Toddle House would not allow employees to acquire an ownership stake. After moving back to Atlanta he quit his job at Toddle House and worked full time for Waffle House. Because of his experience at Toddle House, Waffle House has a policy of allowing the employees to have an ownership stake in the business, even though it is privately held.

Waffle House borrowed concepts that it liked from Toddle House but changed other things. As examples of what it did not emulate, Toddle House had no cash register and instead had a steel box called the "Auto Cashier" in which customers dropped money as they left to pay their bill. Toddle House also did not allow tipping. But Waffle House did adopt the policy of 24-hour service and sells many of the same menu items like waffles and hamburgers.

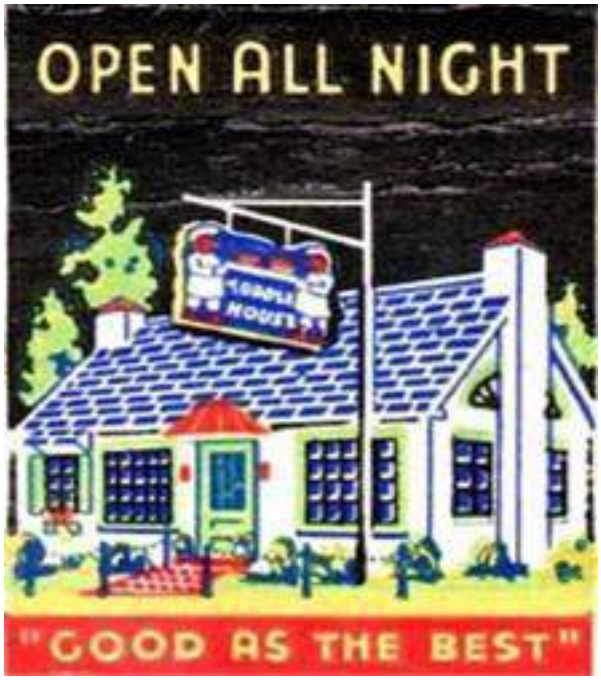

2. **"I thought everyone went to bed at night, but I was wrong."** Tom Forkner, Sr. **"The night business determines whether we have sales enough to be profitable."** Joe Rogers, Sr. **"One supreme test of whether it's a good location—take a real rainy, blistery Tuesday or Wednesday night at two o'clock in the morning, park your automobile there and see how many cars pass. If you don't have many cars, you don't have a good spot."** Tom Forkner, Jr.

These three quotations are an opportunity to talk about the rule that every innovative business must break a rule of some kind. There are many best practices and rules in business. At least one of these best practices or rules is broken by an innovative business. If a business does exactly the same things as its competitors, it is not going to be financially successful. It is that difference which can create a moat for a business. Harvard Business School Professor Michael Porter writes: "If there are no barriers to entry, you won't be very profitable." In other words, if there is no impediment to new supply of what a business sells, competition among suppliers will cause price to drop to a point where there is no long term industry profit greater than the cost of capital.

Waffle House does some things differently than its competitors, one of which is never closing. The myths that have been created about this "open 24 hours" policy include stories about Waffle House restaurants having no locks on doors or that the keys to each restaurant are buried in cement outside the building. Offering food service all night has proven to be a profitable source of differentiation for the Waffle House. One of the co-founders once quipped that a great attraction for Waffle House for customers is that if you ever see one, it is open. No one ever asks: "I wonder if the Waffle House is still open?"

3. **"We're just a shoebox. These people who've come in the past few years and built these Taj Mahals and stuff—they're not around anymore. If you could line up the restaurants we've seen come and go, that's a long list." "We serve the basic foods, and the basic foods never change."** Joe Rogers Sr. **"Good food that is fast and affordable."** Tom Forkner.

Business school professor Michael Porter believes: "[Differentiation and lower cost] combined with the scope of activities for which a firm seeks to achieve them lead to three generic strategies for achieving above average performance in an industry: cost leadership, differentiation and focus. The focus strategy has two variants, cost focus and differentiation focus." When represented graphically it looks like this:

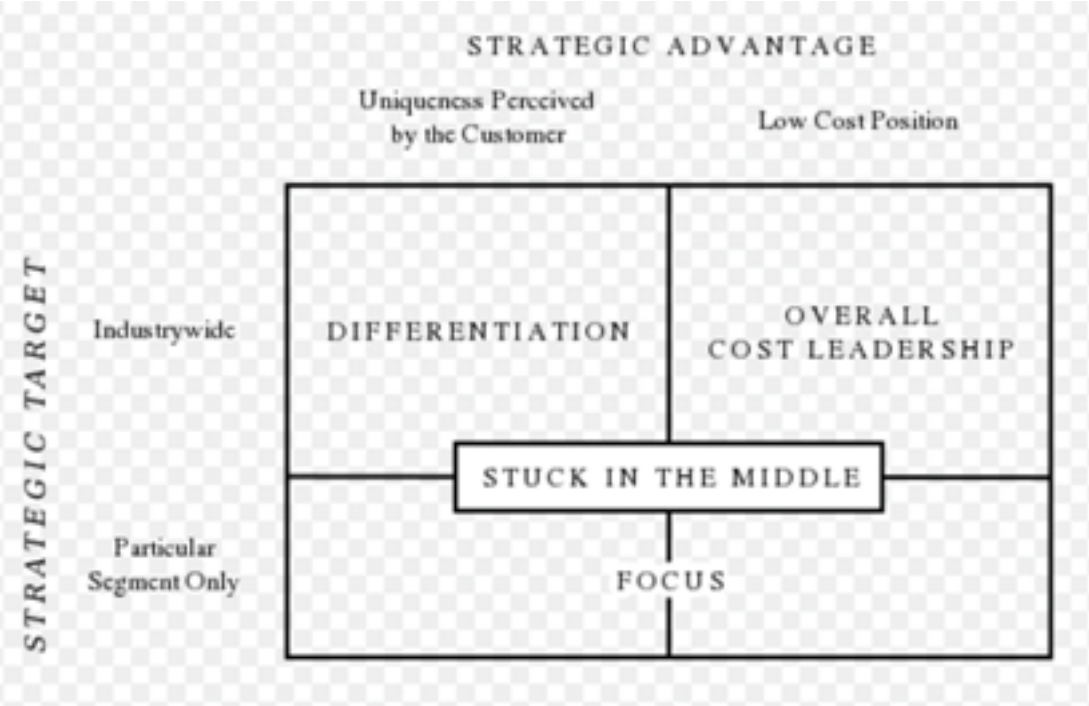

(Image from Wikipedia)

Waffle House from the beginning adopted a cost leadership strategy. Most Waffle House tickets are only $7-8 according to industry analysts. As a result the business keeps a particularly tight watch on costs. Waffle House avoids the need to amortize an expensive facility. There are no R&D expenses for items on the menu. Food waste is low since there are no left over ingredients like halibut or endive to throw out. When a business like Waffle House buys 2% of all eggs sold in the United States, it gets great prices. A plasticized menu lasts a long time. "Poor Old Cash Customer Who Made It All Possible" reads a sign at the Waffle House HQ. The business finally started accepting credit cards only in 2006, so it is capable of change.

Does Waffle House also have a focus strategy? I think so. They do not try to appeal to everyone. Someone admitted on my Twitter feed that they went to a SEC school and have never visited a Waffle House, which I believe is a crime in some states.

Is Waffle House in a situation that Professor Porter calls "stuck in the middle"? Porter believes: "The firm stuck in the middle is almost guaranteed low profitability. It either loses the high-volume customers who demand low prices or must bid away its profits to get this business away from low-cost firms. Yet it also loses high-margin businesses — the cream — to the firms who are focused on high-margin targets or have achieved differentiation overall. The firm stuck in the middle also probably suffers from a blurred corporate culture and a conflicting set of organizational arrangements and motivation system." Sears is arguably stuck in the middle. Sprint is stuck in the middle in wireless markets in the US. I'm not sure

Porter's "stuck in the middle" idea is applicable or important in every industry. International House of Pancakes might be stuck in the middle, but they do have that international element going for them, which as Carl Spackler famously said in Caddyshack "they have that goin' for them, which is nice."

4. **"It was the highest profit item you could do, so I said, 'Call it Waffle House and encourage people to eat waffles."' [The name also made it clear the restaurant was different from carryout stands.] "You can't carry out waffles. They get pretty flimsy. So we thought, 'Waffle House will work."'** Joe Rogers, Sr**.**

Life for a business is just better if a it has high gross margins (or at least higher gross margins than its competitors). I'm not saying the margins on a $3.05 waffle are huge, but instead that those margins are probably better than margins on other menu items like a $11.000 for a 10 oz T-Bone steak. Restaurants are well known for adopting business models that involve loss leaders (e.g., a steak) and high margin complementary goods (e.g., alcohol, appetizers, salads). As an example, Waffle House probably makes more profit selling eggs on a percentage basis than it does selling steaks. Mario Batali's restaurant partner Joe Bastianich says:

Restaurant math is easy. Appetizers cost only a small part of what customers are charged; desserts are almost pure profit. Linen is enemy No. 1 because buying and cleaning tablecloths and napkins is expensive and customers don't pay for it, just as they don't foot any of the bill for bread and butter. Übermeats" such as dry-aged steaks ('the *King Lear* of menu items') and veal chops are the bane of every restaurant because the initial food cost is high."

Waffle House has undoubtedly made a lot of profit on real estate. A former McDonald's CFO was once quoted as saying, "We are not technically in the food business. We are in the real estate business." It is not uncommon for a restaurateur to retire based on real estate profits instead of what he saved from selling food. The land value alone of the Waffle House real estate portfolio is probably huge.

Even though the founders did not want to create take out restaurant, Waffle House works hard to turn tables fast. A food order is expected to be in the kitchen before eight minutes have passed and the customer out of their seat in less than 20 minutes. To achieve this goal the founders created systems for the business that are all about efficiency. Andrew Knowlton wrote in his profile of Waffle House after spending 24 hours in a row there as a worker:

"Pull" means to pull whatever meat they indicate from the fridge (e.g., "Pull two sirloins, one bacon"). They then yell "Drop," which indicates how many hash browns to drop on the grill (e.g., "Drop three hash browns, two in the ring!"). And finally there is the "Mark," which tells the grill operator what the actual combination is. The server might holler, "Mark steak and eggs medium over medium on two, country ham and eggs scrambled!" (a steak cooked medium with eggs over medium, and scrambled eggs with country ham)."

Waffle House sales associates are told to stand on a mark when they call their order. Typically the mark is one red tile on the floor surrounded by grey tiles. This system allows only one sales associate to call an order at a time and lets the grill cook know where orders will be coming from.

5. **"Think about the New York Yankees—they've worn the pinstripes forever. They've never changed their logo. A team like the Padres or the Diamondbacks—every season they're wearing something different. They're struggling to find an identity. There are restaurant companies going through the same metamorphosis. They're chasing the next chic fad because they don't have an identity. We haven't had to chase an identity because we're confident in who we are, and it works for us."** Mark Miklos, Waffle House employee.

Below the gross margin line Expenses like advertising that reduce profitability of a business below are kept to a minimum by Waffle House's limited advertising policy. The Waffle House's bright yellow signs are distinctive and easily seen from the freeway. People know what will be on the menu at a Waffle House. Few people ask themselves: "What kind of food does that Waffle House serve?" or "Will they shave truffles on my waffle?" John T. Edge writes in his book: *The Larder:*

> While Waffle House presents itself as American ("America's Place to Work, America's Place to Eat," "America's Place for Inclusion"), it also presents itself as southern.[27] Its distinct building and bright yellow and black sign is part of American southern iconography: on Hootie and the Blowfish's album *Scattered, Smothered, Covered* and in rap group 112's video "It's Over Now," in *Tin Cup* and *Crossroads*. In articles and on websites, it is defined as "Southern as sweet tea" and placed at the top of "Things Southern."[28]

6. **"When I got in this business, food was number one—you got all your complaints about your egg not being cooked right. All the complaints now are on service. So we're in the service business more than we're in the food business. We kill 'em with kindness and survive 'em with a little good food. Why, I'm such a good service man, I can give you a hamburger without any meat in it and you wouldn't know it until you get down the street." "At Kress, I began to learn right off how a successful business operates. Woolworth had a bigger store up the street, but our store manager, Mr. Haskew, taught me perhaps the most important business lesson I ever learned: You never lose a satisfied customer. Mr. Haskew made sure everybody in his store smiled and treated even the sourest customer tenderly." "People never get tired of having their egos built up. You tell them something good about themselves, and they'll come back for more."** Joe Rogers, Sr.

Great service is the best way to print money from thin air. It does not costs anything to be nice to someone. Ray Kroc of McDonald's famously once said "Look after the customers and the business will take care of itself." Some people have a knack for making people happy. I had a friend who people said could fire someone and they would not know that it happened until they were at home explaining it to their spouse. I don't think he ever actually did fire anyone, but it made for a good story. Jim Barksdale used to say that this fellow could: "Talk a dog off a meat truck."

7. **"We would rather raise our babies from the start."** Bert Thornton, Waffle House's vice chairman emeritus.

Restaurants inevitably face the question of whether it should own all its own facilities or become a franchise operation, either in whole or in part. Waffle House has some franchises. Bert Thornton has said: "the list of people trying to get into the WaHo biz is "very long and very distinguished." The company owns about 80 percent of its more than 1,800 locations and has stringent franchise conditions that deter most prospective operators. Typically, only expansion plans from existing—and particularly successful—franchisees are considered. The reason, Thornton says, is that WaHo is dedicated to maintaining consistency from one location to another."

8. **"We were driving near Augusta National, and I saw a Waffle House on one corner. But the remarkable thing was that just across the street there was another Waffle House on the next corner! I turned to Joe, puzzled, and asked him, "Joe, why'd your dad do this?" He said, "My dad's a great fisherman, and he loves to fish. He always thought that if he got into a fishing hole and the fish were really biting, he'd put another line in that hole. So here, we had one location that was doing great, so we decided, let's just build another one right across the street!"** Joe Rogers Jr., as told by Fran Tarkenton

This is a good explanation of why there are so many Starbucks in a neighborhood, often across the street from each other. It is also an example of an important business principle: if you have an idea, test it and if it works, do more of it. One bigger store can be less profitable then two smaller store. It depends. This would not be a 25iq post unless I talked about wholesale transfer pricing. How does Waffle House deal with this scourge of the restaurant industry? An industry analyst writes: "The real estate subsidiary reflected Waffle House's hefty property holdings: unlike many other chains, Waffle House owns much of the property on which its restaurants were built." There is no better solution to the wholesale transfer pricing problem than owning the building. But if you have two leased stores that are not far apart, at least you can always shut one of them down if the rent gets too high.

9. **"Joe said, 'You build a restaurant and I'll show you how to run it."'** Tom Forkner **"I'm not an executive, I'm a waffle cook."** Joe Rogers, Sr.

Having partners who balance your skills and interests is a very good thing as the Waffle House example proves. No one is best at everything and we all have weakness and strengths. Diversity in the broadest possible sense makes a team stronger.

10. **"I have always worked on the idea that if you have something to worry about, you get up and go fix it. I've never been a worrier."** Joe Rogers, Sr.

There are some people who just get things done. If there is a problem they get in the car or on a plane and fix it. Some people are builders and fixers and other people are just talkers. Great business founders are all builders and fixers since they are typically missionaries about their business. Yes, some mercenaries do well financially, but they are never just talkers.

11. **We're not in the restaurant business. We're in the people business." "In the restaurant industry a bonus system must be self-monitoring and deal only with facts. All areas of judgment by a friendly or unfriendly supervisor should be absent in a bonus system."** Joe Rogers, Sr.

A fast food business is not a glamorous business and many workers in that industry live a hard life since wages are low. You can see the wages of Waffle House workers on Glasdoor as you can for most any business today. Solving that food services wage issue is not something I can do in this blog post. But it is an important issue. Joe Rogers Sr. said once about his lower paid employees:

"Most of our waitresses have hard lives. A lot of them have a bunch of kids at home, and maybe their husbands don't have good jobs. We can't solve all their problems, but we can listen to them."

Workers in Waffle House can move up. Everyone in Waffle House management starts as a unit manager. The company web sites states: "There are 5 major levels of management at Waffle House:

Unit Manager – 1 unit

District Manager – 3 units

Division Manager – 8 – 9 units

Area Vice President – 43 units

Senior Vice President – 100 -120 units

Our management team is "home grown" meaning we only promote from within the company. Everyone on our management team starts as a Manager Trainee with the intent of managing one restaurant upon completion of training. All managers are subjected to an intense 12-week paid training program. During that time, they are taught every aspect of operating a Waffle House, from waiting tables, to cooking, to analyzing the P&L statement.

12. **"It's our policy never to share information with the press."** Joe Rogers, Jr.

The business of the Waffle House has become quite large, but since it is privately-held, analysts are only guessing about the profitability of the business. One recent guess that appeared in *The New York Times* was that Waffle House: "had sales of a little more than $1 billion in 2015." Other revenue estimates for the company are similar. But they are guesses.

"There are three types of companies," explained Bryan Elliott, analyst at Robinson-Humphrey, in the September 19, 1988 *Atlanta Business Chronicle.* "There are public companies that trade stock and have to share information. Then there are private companies that don't trade stock but are somewhat open about their operations and numbers. And then there are the companies that won't even acknowledge that they exist. And that is Waffle House. They are a very, very private and tight-lipped company."

P.s., I hope that this blog post on Waffle House is better value for money than the Harvard Business School case on Waffle House that I have not read. If not, then you can have double your money back!

Notes:

My blog post on restaurant business models generally is here: https://25iq.com/2016/11/18/why-moats-are-essential-for-profitability-restaurant-edition/

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Business Lessons from Alton Brown

November 4, 2017

I decided to write a blog post about Alton Brown ("AB") not just because he is interesting, but because he is an entrepreneur who built a business without venture capital. AB has on several occasions talked about how he needed to get bank loans to grow his business. Since bank loans, together with personal savings, loans from friends/family and cash flow from operations are the way most entrepreneurs finance a business, his story is a great example for

aspiring entrepreneurs to learn from. AB is also interesting in that he was forced to deal with gatekeepers (cable channels) to get distribution for the product his business creates since his career began before the rise of streaming. The YouTube option was not available to AB when he was trying to build his business.

AB is a story teller who taught himself to be an entrepreneur so he can tell his stories. AB's back story can be told with a few quotes from him and two sentences from a Wikipedia entry:

"I started off as a cameraman when I was still in college, and moved into shooting music videos in the '80s, then became a full-time cinematographer and a director-cameraman for TV spots, which I did for about 10 years."

"I shot commercials, many of which weren't very good. I was unhappy and cooking made me feel better."

"I remember I was watching food shows, and I was like, 'God, these are boring. I'm not really learning anything.' I got a recipe, OK, but I don't know anything. I didn't even learn a technique. To learn means to really understand. You never got those out of those shows. I remember writing down one day: 'Julia Child / Mr. Wizard / Monty Python.' That was the mission. I knew I had to quit my job and go to culinary school."

"Two pilot episodes for Good Eats ("Steak Your Claim" and "This Spud's For You") aired on The Chicago PBS affiliate in 1998. The show was discovered by Food Network when an executive saw a clip of the show on the Kodak website."

The usual quotes from the subject of this blog post (AB) are:

1. **"Because I was executive producer, writing the show, directing, all this stuff, I was so busy doing the work that I didn't think about getting famous. There was no social media. So there was no feedback." "When I did my first season of 13 episodes I didn't know if people were even watching until we got renewed."**

Feedback is fundamentally important in any healthy system, particularly if someone is trying to make it grow. What the internet and connected customers have done is enable businesses to create systems that harness feedback. These systems now overwhelmingly reside in the cloud and are more powerful interpreters of customer feedback than the world has ever seen before. The availability of cloud services enables businesses to create innovative products and services for a fraction of what it would have cost just ten years ago. By combining relatively inexpensive web services with modern data science it is now possible for businesses to run many thousands of experiments that utilize the scientific method. Most of these experiments will fail, but some will be spectacular successes. The people who can operate these cloud based systems (e.g., data scientists and artificial intelligence experts) have become the new high priests of the business world. The businesses that have the best systems which harness customer feedback and the most talented high priests are outperforming the business that don't. It's that simple. This phenomenon is just getting started and will become even more pronounced as the years pass.

When AB started making television, the primary feedback system was the Nielsen ratings. Businesses today like Netflix know vastly more about what their customer's consume than businesses that rely on Nielsen as their primary source of feedback. One implication of the

increased value of data is that providers are increasingly going direct to customers and cutting out distributors. For example, you see businesses like Disney deciding that they must directly stream their own content in order to capture the customer data. As I said above, control of the customer usage data is increasingly what gives businesses a competitive advantage. If a distributor sits between the creator and the end customer that data often can't be captured.

Social media is obviously a big source of customer feedback. AB has mastered the transition to the social media era as well as anyone. One of the more interesting questions about this new "connected customer" era is whether AB would have been able to sell his show to a network today. How effectively would AB have been able to compete in today's business world if he was just now starting out? There are so many people trying to get traction on streaming network would he ever have been able to get traction? The number of cooking shows YouTube is astounding. That number isn't 24.5 million, but it is a lot. Even my neighbor's dog has a cooking show on YouTube.

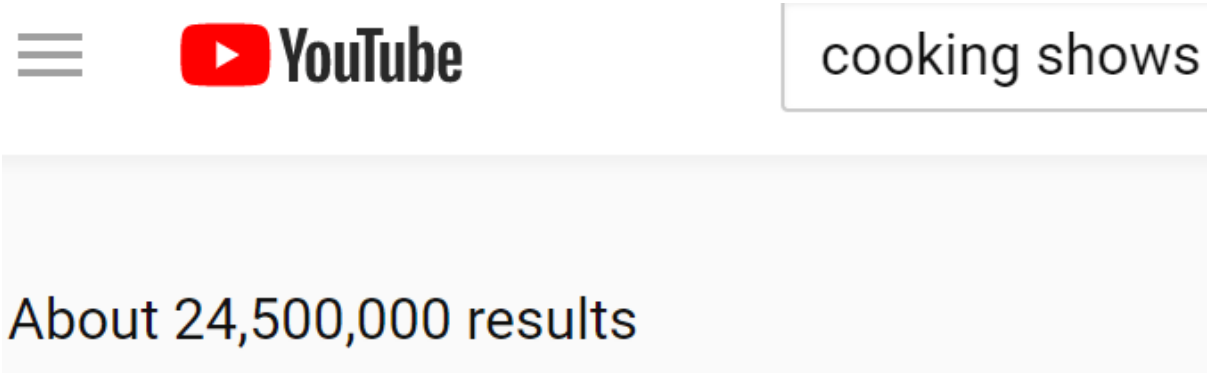

2. **"It took over a year to sell the show because we didn't know what we were doing. We couldn't get anyone at Food Network to look at it, and we didn't know the right people, so we were doubly doomed." "We managed to get the show on the PBS show in Chicago [just for the Nielsen numbers]."**

Even though AB's show was able to outperform Martha Stewart in Chicago in the same time slot he had trouble selling the show to a cable network. The story AB tells about how he was discovered is a classic case of one thing lead to another and luck. AB has said about that time in his life: "I was so sure that it was so brilliant that people would be knocking down the door. We did not know anything about the television business." Discovery wanted to make it a health show and he rejected that. AB has said that could not get a deal with PBS since he: "didn't have enough steam to get the money. That's a hard game to play when you are nobody." He had to convince Food Network to commission their first outside show. Distribution is a highly underappreciated challenge for any business. It is easy to get on the Internet but hard to get customer traction. No one may know that you are a dog on the internet, but there are millions of dogs trying to get noticed and it is hard to stand out.

AB's business was in essence a *mom and pop* operation at the start. AB and his now ex-wife were the founders. He ran production and she ran the business. Would it be possible to replicate the success of Good Eats today? AB created the right product at just the right time for the cable era. Has that window closed? Good Eats was the first show the Food Network bought that it did not make itself. How long will cable networks even be around in their current format since their bundle is disintegrating? Would AB have gone direct to consumer as an over the top (OTT) provider on YouTube if he was starting out today? That seems very

likely. Would he have been as successful? Would the market for show like Good Eats be so crowded that it would be impossible to make a living in his profession since discovery is such a hard problem?

AB started his career when distribution was scarce, but that is not the case anymore as Ben Thompson points out: "The end of gatekeepers is inevitable: the Internet provides abundance, not scarcity, and power flows from discovery, not distribution. We can regret the change or relish it, but we cannot halt it: best to get on with making it work for far more people than gatekeepers ever helped — or harassed."

Despite the fact that the latest digital tools are often available for any business, is it realistic that a mom and pop operation will be able to successfully go head-to-head in direct competition with national chains? I'm not referring to small innovative startups staffed with talented entrepreneurs often backed by venture capital but rather small businesses run by ordinary people who do not have a technical background. Businesses like these can easily adopt the latest technology and do not have legacy systems and code to worry about. But what about the hundreds of thousands of new mom and pop operations that are created each year? Does intense competition fueled by these cloud enabled systems make it much harder for a small mom and pop business like a video production company, a pharmacy or hardware store to compete successfully.

3. **"I was lucky to get out of [negotiating creative rights] owning me. I own me and the recipes. I managed to retain book rights and I get a cut of DVD and international sales."**

Understanding who owns what rights to creative output is critically important in business. Very often it is terms and not price that are the most important part of a contract. The old saying about this principle in a negotiation setting is: "You set the price and I will set the terms."

5. **"Clever plots require locations. You want to make sure that they're multi-tasking locations, meaning you can shoot a lot of different things there. You want to make sure that they're close in to where you and your crew are. And above all, you want to make sure that they're really, really cheap." "Here's a little tip for you novice producers out there. When you build your wacky sets, build them as cheaply as possible. Not only will you, of course, save money, but when you're done shooting, the sets will probably just fall down by themselves and you won't have to pay anybody to take them apart." "I'll admit sometimes skilled thespians are hard to come by, and that's why we have a rule around here: He who works on Good Eats as a technician, you must appear on Good Eats."**

AB is frugal. Any business that does not have a frugal culture has a significant problem. Competition levels are just too high to support a high cost provider. As an example, frugality is a major part of Amazon's leadership principles: "Accomplish more with less. Constraints breed resourcefulness, self-sufficiency and invention. There are no extra points for growing headcount, budget size or fixed expense." People at Amazon have desks made of doors and two by fours to reinforce the frugal aspect into company culture. AB has a range of things he does as a producer to keep costs lost low. His "Behind the Eats" episode from the 2006 *Good Eats* season reveals some of the ways he saves money during production. As Chamath

Palihapitiya has famously said: "It's fine to fail. But if you fail because you didn't have the courage to move to Oakland and instead you burned 30 percent of your cash on Kind bars and exposed brick walls in the office, you're a f*cking moron."

6. **"You should always be reinventing yourself to push yourself forward. It's easy to ride the coattails of a previous success, like Good Eats. I love that show, but I'll never go back to that, exactly. It's easy to go back to that, orbit around it. I don't have a rear view mirror, I never look back."**

What AB says here reminds me of my blog post on Jimmy Iovine who made the same statement about "not having a rear view mirror." Iovine describes his approach in this way: "I never celebrated a success. There are no victory laps. I'm always moving forward. The most important thing I ever learned: No matter how ugly it gets, keep moving. Going backwards is not an option." Looking forward like AB and Iovine do helps you tune out noise. Nostalgia and self-congratulation can sometimes cause a nasty fall due to hubris.

7. **"I get tired of hearing people tell me that the reason they should have their own show is that they love food so much. Well, so freaking what? I love food. We all love food. If we don't, we die. That doesn't make you special. People who want to be stars often make the mistake of thinking that it does, and that if they can just show you how much they love it, they will somehow become compelling. This is not the case. At best, love [for food] is the gasoline. It's not the car."**

AB is a self-described a "terrible workaholic." AB is also very talented. What is the source of that talent? How much of his talent is nature and how much is nurture? In his classic essay entitled "Is Justin Timberlake a Product of Cumulative Advantage?" Duncan Watts writes:

The reason is that when people tend to like what other people like, differences in popularity are subject to what is called "cumulative advantage," or the "rich get richer" effect. This means that if one object happens to be slightly more popular than another at just the right point, it will tend to become more popular still. As a result, even tiny, random fluctuations can blow up, generating potentially enormous long-run differences among even indistinguishable competitors — a phenomenon that is similar in some ways to the famous "butterfly effect" from chaos theory.

I believe AB would agree that he was the recipient of some early luck when he had two pilot episodes for a cooking show just at the time the Food Network was about to gain popularity. My theory about the nurture side of talent is as follows: AB was funded to do work which increased his skills, which enabled him to get more work, which increased his skills [repeat indefinitely]. Both Justin Timberlake and AB became more talented the more work they obtained. But without some early luck that talent might never have been discovered and more importantly developed further.

8. **"I'd rather be original than good. Good is fine, but in the end I want to find out the nooks and crannies of what culinary storytelling can do. That obsession with pushing myself into new areas, using new technologies, keeps me going. All of the shows that I'm creatively involved in, I do for me. I don't worry about what the fans or market wants. I do it for me and I hope it's what the audience wants. If not, then I won't be doing it for that long."**

Being genuine sells better. It it is easier to be genuine when you are a missionary rather than a mercenary. I attended AB's most recent live show when it came through Seattle and it was accurately described by my son as "a live version of Good Eats." Alton was Alton in that show and the crowd loved it. If Alton would have tried to be Eric Ripert or Anthony Bourdain it would have flopped.

8. **"I leaned in culinary school that am not a very good cook. I am not Eric Ripert." "I wasn't willing to do anything to the food that sacrificed story." "The dishes are the story points." "I did my time in kitchens, but I never worked a higher level than lead cook. I could have moved to sous chef positions, but I didn't want to tell people I was going to stay that long, which would have been kind of mean to do. It's very much a young person's game. Let's just say chefs have a very high rate of alcoholism, divorce, and suicide, and I am not interested in any of those things. No, I've got no desire. Maybe after I retire from this, I'll open a little pizza place or coffee shop. Outside of that, it would have to be decidedly lowbrow. I have no high-end culinary ambitions."**

AB knows what business he is in: he is a story teller. A friend of mine said he particularly liked my recent post on the demise of post-breakup AT&T since it was a story. He said to me:

"One of the themes of *Sapiens* is that we are a story-telling species. That's how we transmit the shared myths that bond us together in tribes (and that ability to act in a coordinated, collective manner is our great strength as a species). Story telling goes to the very core of what it means to be human. Religion, books, movies, TV, etc. We're always telling stories. Fiction outsells non-fiction. Dramas outsell documentaries (even though a good documentary can have a story every bit as compelling as drama – we've come to view documentaries as boring lectures on some subject). As any good novelist knows, don't tell your readers some fact or detail or lesson – show it to them."

AB tells vivid stories that make you smarter. That is a good thing.

9. **"When I was making Good Eats, we used to have a sign over our studio door that said, 'Laughing brains are more absorbent.'" "I knew that I was competing with TV commercials. The most expensive form of television known to man. To keep the show visually arresting for the MTV generation we would have to come up with weird models that would not cost a lot of money… camera in the back of ovens, shoot with a single camera."**

AB's wacky personality and the nutty props have a purpose. He has said about his show: "If *Good Eats* did anything worthwhile, it managed to entertain people and teach them without them realizing they were being taught anything." AB is a curious person and that comes through in his story telling. I was surprised to hear him say in an interview that he was not a particularly avid or good science student in high school given the his emphasis on the science of cooking. His aptitude and interest in science now makes the point that it is never too late in life to get more technical, if you have a growth mindset.

10. **"I'm not where I thought would be at this point in my life, but I'm wiser by a long shot."**

It is very hard to plan a career, but you can prepare. Most importantly you can show up and hustle. There was a great very recent *New York Times* essay written by Adam Bryant which is directly on point which contained these sentences:

My vote for career advice goes to something I heard from Joseph Plumeri…His biggest career inflection points, he told me, came from chance meetings, giving rise to his advice: "Play in traffic….It means that if you go push yourself out there and you see people and do things and participate and get involved, something happens," he said. "Both of my great occasions in life happened by accident simply because I showed up." "I tell people, just show up, get in the game, go play in traffic," Mr. Plumeri said. "Something good will come of it, but you've got to show up."

11. **"You stare at a computer screen for a while and then you start typing." "In the end just type. Don't sit and wait for perfection. You are not going to poop a golden word on an empty page. Just type and sort it out." "[Over time] I learned how to write faster."**

To maintain my streak of ~250 Saturday morning blog posts in a row I need to write fast. I'm not sure how much longer this writing streak can or will continue. I work without an editor, which is like working without a net as a tightrope walker. But things are going OK so far.

As an aside, many people do not notice the many links at the bottom of each post. In some ways they are the best part of the blog post. The many AB interviews in those links are both entertaining and insightful. Before writing a post I read and listen to all of them several times. I try to get a sense of who the person is in this way. Having said that I need to get the research and writing done in less than four hours each Saturday morning. Fortunately I am a fast reader and an excellent memory for words and ideas (but not numbers).

12. **"There's only two things that every people group on earth, no matter how cosmopolitan or how remote, want to do in groups. One is laugh, two is eat. It's my belief that we keep gravitating around the campfire that is food because, as a species, we require connectivity to each other. Food is actually one of the last universal things that we've got to do that. We don't have it in politics. We don't have it in religion. We don't have it in culture."**

AB has been described as "the philosopher king" of the food world. His remarks about food and comedy are right on the mark. Every region has its cultural icons and comfort foods. People who snark about something like In-N-Out Burger or Shake Shack invariably talk about some comfort food from their own region as if it was prepared by gods. There are also places where people like to eat when they have had too much to drink. Seattle many not have a Waffle House (which I wrote about last week), but it does Beth's Cafe (famous for a twelve egg omelet on hash browns served all night).

and Dick's:

If you are in Seattle and a want a truly phenomenal meal I suggest Pho from many places at about $10 a bowl.

Another reason I have written about AB is that I love food. I love it a bit too much actually given my current weight. Cooking helps me connect with my mother who I love even more than food. Eating her food makes me happy beyond words. When I make something myself that she has made for me in the past (like raspberry freezer jam) she is there virtually as a tiny imaginary figure sitting on my shoulder smiling at me. She is the reason why all the royalties from my new book will go to the charity No Kid Hungry.

Notes:

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The 1990s Telecom Bubble. What Can We Learn?

November 11, 2017

My goal when I started writing this blog post was to write a review of *The Startup Way.* In this new book Eric Ries writes about the application of *Lean Startup* principles to established businesses and organizations. Rather than write a dry book review, I will try to tell a story in this blog post about a phenomenon I lived through called the Telecom Bubble in order to illustrate a few points that Ries makes in his book. The principal character in this story is a company known as Level 3, which was in the beginning an internal startup inside a huge construction company named Kiewit.

As background, while the Telecom Bubble was related to the Internet Bubble, it was actually a different phenomenon that started in a different way and ended at a different time. How much capital was lost by investors in the Telecom Bubble is impossible to calculate with certainty. Om Malik wrote a book on this period in which he estimated that $750 billion vanished when the telecom bubble burst. That's a reasonable estimate in my view. The most interesting questions about a phenomenon like this are always: Why did it happen? What can we learn?

Most people believe the starting point of the Telecom Bubble was the purchase of Metropolitan Fiber Systems (MFS). The buyer was a construction company based in Omaha named Kiewit run by Walter Scott. Scott is a very successful business leader who is arguably as famous in Omaha as Warren Buffett. Scott's ability to build things and otherwise get things done is legendary. With the help of a talented executive named James Crowe, MFS quickly became one of the nation's biggest providers of fiber based communications operating as a "competitive local-exchange carrier" or CLEC. In 1993, MFS became a public via an IPO. The business model of MFS was relatively sound since it engaged primarily in cream skimming enabled by clever arbitrage of a broken regulatory system. An article in *Barons* described the situation at the time:

The idea was to offer bandwidth-hungry businesses a money-saving way to route their voice and data traffic past the Bells and other local monopoly providers. The Bells, of course, loathed Crowe and his renegade unit, MFS Communications, for skimming the cream off

their customer base. Reminded of this during a recent interview, a chuckling Crowe says, with a refreshing touch of malice: "As if the Bells haven't been cream-skimming for years by concentrating their efforts on the affluent metropolitan markets, while relegating the remote rural areas of the U.S. to independent phone carriers."

The mid-1990s was an interesting time in the business world since the Internet was just emerging as a major phenomenon and investing opportunity. As an example of how under the radar the Internet was then, Steve Jobs met with Craig McCaw sometime in the early 1990s and explained to him the nature of the business opportunity that the Internet would create. Craig said to Steve: "Let's buy it." Of course doing that was not possible, but people did understand that there were related places to invest that would benefit as the Internet developed. For many people investing in CLECs seemed to be a good place to start. Unfortunately there were many people who thought that same thing at the same time.

Fortune magazine described what happened next:

In April 1996, MFS bought UUNet for $2 billion, a record price for an Internet company. Meanwhile, in Mississippi, WorldCom CEO Bernie Ebbers must have watched mushrooming MFS with some alarm. MFS looked to be a step ahead of his burgeoning empire. Ebbers had a solution: Buy MFS! In late August he offered an astonishing $14 billion of WorldCom stock for MFS. "People made a bunch of money on MFS," says Omaha investor Ron Carson "people began to think about it like you could get rich overnight."

The $14 billion dollar acquisition of MFS by WorldCom kickstarted the great CLEC explosion. What was a modest cream skimming business for MFS became a gold rush. Scores of other CLECs were created in just a few years. A partial list of CLECs would include Allegiance, Covad, Northstar, Teligent, Electric Lightwave, ICG Communications, Intermedia Communications, 360networks, Broadwing, Global Crossing and Level 3. The telecommunications business empire of Craig McCaw was no exception creating a company called NextLink (later renamed XO Communications). The problem NextLink and others CLECs faced was overcapacity. Craig McCaw said to me often during this period: "You are always at the mercy of your stupidest competitors." And in this case there were scores of competitors.

Level 3 was the most glamorous company involved in the Telecom Bubble since Crowe was the leader and because of its affiliation with Scott and Kiewit. For example, when Level 3 went public the stories read like this one:

NEW YORK — April 1, 1998. In an unusual debut in the Nasdaq Stock Market today, an Internet-related company will begin trading as Nasdaq's third-largest telecommunications firm, behind giants WorldCom Inc. and MCI Communications Corp. Unlike other recent Internet start-ups such as ISS Group Inc.–which staged a stunningly popular initial public stock offering last week–this newcomer, Level 3 Communications Inc., is far from an IPO. It already has a market capitalization of $9 billion.

How did the vast bulk of telecom bubble end? *The Economist* magazine wrote in 2002: "George Gilder in February 2001 predicted that two telecoms firms, Global Crossing and 360networks, 'will battle for worldwide supremacy, but in a trillion-dollar market, there will be no loser.' Yet within a year, both had filed for bankruptcy—a graphic illustration of how quickly the industry's titans have been toppled." The end was shockingly swift. In

January of 2001 it was possible for a telecom firm to raise billions of dollars in the bond and debt markets and yet by April it was not possible to raise 5 cents those markets for a telecom business. It took a while for the CLECs to fail depending on how much cash they had on hand. Wen the new cash spigot from the bond and debt markets went dry, it was over. One press report from the time put it simply:

"Once investors noticed that little chance existed for some CLECs to raise the money they would need to continue expanding, an avalanche of selling began. Winstar closed on Monday at 34 cents, off its 52-week high of $54.13, while Teligent finished at 40 cents, down from a peak of $55.50. In essence, both have lost 99 percent of their value."

A few weeks after George Gilder had said there would be "no loser" in telecom, all of the CLECs were decidedly losers.

You might ask: What about Level 3? The were lucky in that When the financial markets essentially closed to telecom businesses Level 3 had massive amounts of cash on hand to build networks which Crowe and his team were able to use instead for operations which allowed then to ride out long painful recovery. In other words, money that was raised to build out new Level 3 capacity was usable for operations during a time when the debt and bond markets were closed. But even then, the road for Level 3 was very, very long and the financial returns modest. Crowe and his team at Level 3 did impressive things to ride out the period and eventually generate an exit with the sale to CenturyLink. People who do what Crowe did with Level 3 don't get enough credit. Sometimes just surviving something like the Telecom Bubble requires extraordinary skill and effort. This can be seen in the Level 3 chart that looks like this:

The remainder of this blog post will discuss how the CLEC/telecom bubble story, most notably the stories of MFS and Level 3, might be applied in the context of *The Startup Way* by Eric Ries. Can we learn anything by revisiting the Level 3 story?

All quotes in bold below are from the new book by Ries.

1. **"A value hypothesis tests whether a product or service really delights customers once they begin using it." (page 93)**

In *The Lean Startup* Ries wrote: "The value hypothesis tests whether a product or service really delivers value to the customers once they are using it." This is a critical factor for any business since most products fail for the simple reason that customers don't value the product enough to pay for it. This may seem obvious, but if it was easy to see whether product/market fit existed there would not be so many failures in the business world. Andy Rachleff, who invented the terms "growth hypothesis" and "value hypothesis," describes the second term as follows:

"A value hypothesis is an attempt to articulate the key assumption that underlies why a customer is likely to use your product. Identifying a compelling value hypothesis is what I call finding product/market fit. A value hypothesis identifies the features you need to build, the audience that's likely to care, and the business model required to entice a customer to buy your product. Companies often go through many iterations before they find product/market fit, if they ever do."

MFS had a proven business model based on "cream skimming" but Level 3 really didn't have one before it decided to pursue a growth hypothesis. Why? So many CLECs suddenly appeared that the business of cream skimming based on regulatory arbitrage was just to small to support them all. So everyone running a CLEC at that time grabbed on to a model that was trying to take advantage of the arrival of the Internet. Unfortunately, what looked like a glamorous Internet business was really a business involving backhoes digging up streets, high up front costs and expenses and brutal competition. Many years later Level 3 would regain a decent business model based on a proven value hypothesis after the other CLECs went though bankruptcy, but it was long painful road. Financial returns today in that business are modest and it scales poorly.

2. "An internal startup is an atomic unit of work in the context of extreme uncertainty."

In his first book Ries defined a startup as "a human institution designed to create a new product or service under conditions of extreme uncertainty." The simplest way to think about *Lean Startup* is as a process that applies the scientific method to challenges faced by businesses and other organizations. *The Lean Startup* is at its core based on a simple idea: since all businesses face inevitable extreme uncertainty the best way to discover genuine innovation is through experimentation. Innovation is discovered rather than planned. What is unique about the business environment today is that experiments cost so little to do as a result of the rise of cloud services and can be completed far more rapidly and with better results since customers are connected to the supplier by electronic networks.

Ries describes the ideal "internal startup" structure in this way:

"A small, cross-functional team with a scarcity mentality, with what we call metered funding, that has a fixed resource budget to apply, that's accountable to a board of directors. It's not governed by your usual corporate review process, which is just not at all suited to innovation. Building a minimum viable product using a system we call innovation accounting to measure results, etc. It's like a special kind of tool in your toolbox, and companies like Amazon do this all the time."

In *The Startup Way* Ries argues that large businesses and non-profit organizations can successfully create "an internal startup." Some of the CLECs including Level 3 were internal startups created inside far larger companies like Kiewit and eventually spun out as independent entities. Successfully creating an internal startup is tricky since the purpose of a business that has a proven business or operational model is to execute on that model. The unfortunate truth is that operating business and organizations tend to create antibodies against what an internal startup must accomplish to be successful. Senior management must be willing to go the last mile—which can means something that competes with existing business. For the internal startup obtaining the necessary "go to market" resources can be non-trivially hard. Ries outlines a process that he believes will accomplish this goal even inside a business that is executing on another model. Level 3 was able to do this but the teams led by Jim Crowe doing this inside Kiewit had just hit a home run with the sale of MFS to Worldcom. One can argue that this previous MFS home run made the internal startup at Kiewit too easy.

3. **"Long term growth requires a method for finding new breakthroughs repeatedly." (page 9) In order to creates cycles of continuous innovation and unlock new sources of growth, companies need to have teams that can experiment to find them."**

Paul Graham of Y Combinator talks about the importance of growth in this way: "A startup is a company designed to grow fast. Being newly founded does not in itself make a company a startup. The only essential thing is growth. Everything else we associate with startups follows from growth." Existing businesses that have proven business models want to grow too, but that is easier to say than actually do. Many business of all kinds today have dedicated "growth teams" that are responsible for driving new sources of growth. Ries succinctly describes his thesis for achieving growth here:

"The fundamental idea is to treat everything a start-up does as an experiment. Everything a start-up does should be a test — a hypothesis. You really want to organize your company so that it's built to learn. The Lean Startup idea is based on lean manufacturing—a management philosophy that we can easily adapt to the start-up culture. A key part is creating a feedback loop: build, measure, and learn. We want to get through that loop as quickly as possible. But it's not just failing fast, it's failing well."

The other point that Ries raises concerns the need for continuous innovation. "One and done" innovation simply does not apply in the real world of business. There are too many well-funded and well-run competitors for an business to feel like that can coast along without generating repeated breakthroughs.

In order to grow quickly Level 3 created a state of the art rail plow that allowed fiber to lid alongside train tracks very quickly in relative terms. Unfortunately for Level 3, competitors like Qwest acquired or created rail plows too:

Right now, an army of 1,500 latter-day railroaders is slaving to make the mammoth project a reality: 16,000 miles at an average 120 miles a week. The vast majority of the cable is being laid alongside existing railroad tracks, installed by four or more "rail plow" cars. A custom-designed 25-foot arm extends from those cars and digs up the earth 12 feet from the side of the tracks. It then lays in protective tubing – 2-inch-diameter high-density polyethylene conduit – and cables 4 feet below the surface.

People loved the plans of companies like Level 3, NextLink/XO, Global Crossing and Qwest to build these new fiber networks. Promoters like George Gilder somehow convinced investors that vastly more supply of fiber back-haul would create unprecedented profitability. Unfortunately for Level 3 (and XO which acquired a 1/3 of Level 3's long haul fiber capacity) increases in supply kills value without a moat. It is true that vastly greater supply it can create new value in complementary markets like software, but that is easier said that done. Skill in building fiber networks is not translatable into writing innovative software. The amount of fiber and conduits made suddenly available was staggering. When supply explodes, it was not good for prices. Yes, the internet was increasing demand but not as fast as supply was being added in long haul markets. I remember like it was yesterday the night I discovered that Internet capacity was not increasing as fast as UUnet/Worldcom was claiming. This was the key sentence in the paper written by Andrew Odlyzko that I read late one night in August of 2000:

In the intermediate run, there would be neither be a clear "bandwidth glut" nor a "bandwidth scarcity," but a more balanced situation, with supply and demand growing at comparable rates.

My reaction after reading Odlyzko's paper that night was: "Holy crap. UUnet is lying." What I said was similar to the reaction I had when I read about a deal between Enron and Blockbuster for internet bandwidth since I knew that Enron had no bandwidth to sell. Again, "Holy crap."

The supply limitations that existed at the time of the Telecom Bubble could be found in the metropolitan markets and specifically in the last mile. There were no rail trains to get this work done. This was expensive work that involved getting permits and digging up city streets. These metropolitan fiber build outs ate cash at prodigious rates. The cash burn was ugly and so was the outcome for investors.

4. "A growth hypothesis tests how, given some customers, it's possible to get more." (Page 93)

Ries wrote in his first book: "The growth hypothesis tests how new customers will discover a product or service." This ties to what Rachleff first described: "A growth hypothesis represents your best thinking about how you can scale the number of customers attracted to your product or service. Growth without value to the customer is likely to lead nowhere–or worse, to a big flameout." The CLECs were able to grow revenue by brute force methods. Large sales commissions and up front financial incentives for customers can result in the sale of almost anything. But unless the unit economics of the business are right and the business has a way to fund growth, that will not prevent the inevitable disaster ahead. In other words, selling five dollars for four dollars cannot scale for very long no matter how great the hype around the service. In contrast it is a very wise thing to spend fifty dollars to acquire a customer to pay you ten dollars a month for five years.

Inside the CLECs were many people who had once been in the wireless business and they knew the lifetime value (LTV) model well from that experience. Despite the excitement created by the gold rush atmosphere some of these people could see that customer acquisition cost churn was a big problem for the CLEC business model. They knew that bundling services together increased retention so they acquired related businesses like web hosting firms to add to their service bundle. While adding new services to the bundle did reduce churn, the effort would prove to be too little and too late.

5. **"Create an experiment to test [leap of faith] assumptions as quickly and inexpensively as possible (minimum viable product- MVP) (page 86)**

Ries talks about a MVP approach here:

"Minimally viable" does not mean operating in a sloppy or undisciplined way, building bad code that's going to result in a lot of technical debt, or ignoring safety or health concerns. An MVP is not an excuse to throw our beliefs about quality out the window; it's simply an experiment on the way to excellence. Instead of taking one big swing with the launch of a new product—devoting months to the design of one technical feature or spending years in stealth mode developing a product without evidence that customers want it—it is an iterative approach to learn who the customer actually is, and what's honestly required to delight them.

The CLECs were trying hard to find more services to sell as part of their bundle in 1999. As a result, a few CLECs created systems to sell hosted web services. This was the equivalent of software as a service (SaaS) today, but it was provided by firms that were called names like "Application Services Providers." The software was not optimized for operating off the promises of the customers, but the plan was to see if the dogs would eat the dog food. Many things about this effort did not scale well since few things had been automated. It was a classic MVP. Customers liked the hosted services but the costs were too high given the state of the software. Unfortunately, the clock struck midnight in early 2001 and the sources of new cash disappeared, so the MVP was never transformed into a scalable service that could have helped the CLECs. If you run out of cash nothing else matters. Bankruptcy proceeding are not something that one does happily even if it is Chapter 11 and not Chapter 7.

6. "Experiment to lean what's working and what's not (validated learning)" (page 86)

Ries argues:

Regardless of size, mission, or sector, no organization can survive without the ability to adapt continuously. I believe that ability has to be a structural part of every organization—that companies need a standardized way to test ideas, run experiments, and follow through on the ones that will bring sustainable growth and long-term impact.

One thing that the CLECs learned via experimentation was that some business was not worth chasing. The customer acquisition costs associated with a commissioned salesperson just killed the unit economics on some small accounts. The only way to stop that from happening was to not give commissions to the sales team on very small accounts.

The ability of the CLECs to experiment was limited in many cases since they were selling services based on infrastructure owned by the incumbent telephone companies. The incumbents had far better data and control over their systems than the CLECs. Competing

with someone using a competitor's facilities is a really hard thing to do. Some people will argue that it is impossible, especially in today's world where customer data is so valuable. The joke then was that all it took was a screwdriver for a incumbent telephone company to take down the network of a CLEC. As an analogy, imagine trying to run a bakery using the mixers and ovens of dominant company to compete in the business of selling bread.

The challenges of creating growth are not only numerous but particularly challenging in today's business world. I don't know anyone involved in a real business today who does not believe: (1) that the pace of business has increased and (2) that the nature of business has fundamentally changed. What is different? The answer to that question involves so many things that it is hard to know where to begin. Jeff Bezos describes one important change here:

"The balance of power is shifting toward consumers and away from companies…the individual is empowered. The right way to respond to this if you are a company is to put the vast majority of your energy, attention and dollars into building a great product or service and put a smaller amount into shouting about it, marketing it. If I build a great product or service, my customers will tell each other….In the old world, you devoted 30% of your time to building a great service and 70% of your time to shouting about it. In the new world, that inverts." "Your brand is formed primarily, not by what your company says about itself, but what the company does."

Another change is that customers are increasingly connected to businesses which generates valuable telemetry data about behavior and preferences. This data about customers, when combined with advanced analytics and artificial intelligence, enables vastly more value to be delivered to customers. When a business "knows the consumer" as a result of this connected relationship the products and services delivered to that customer are vastly better. If your competitor can do this and you can't math or better that, you are in deep trouble. The race is on to create connected relationships with customers. Everything that can be connected via a network will be connected. A radio or wired connection is going into almost everything. Key to all of this is trust- if that does not exist the data provided by the customers will not be as valuable. Customer trust is earned is an asset that is as important as anything on a balance sheet.

7. "Take the learning from each experiment and start the loop over again (build-measure-lean feedback loop)" (page 86)

What artificial intelligence enables a business to do is conduct thousands of growth experiments which can potentially enable a better products and services. Most of the growth experiments will fail, but that is a natural part of the scientific method that Ries advocates in his books. The vastly lower costs that cloud services enable means that most experiments fail or even nearly all experiments fail is OK since the payoff from the experiments that succeed can be so massive.

Ries suggests:

- Enter the Build phase as quickly as possible with an MVP that will allow us to test a clear hypothesis we have about our product or strategy.
- Measure its impact in the marketplace using actionable metrics that help us analyze customer behavior.

- Learn whether our original assumptions about the product, process, and customer needs were correct or whether we need to change strategies to better meet our vision.

The Build-Measure-Learn feedback loop does not end once we've put our first product into the market. Every new launch of an MVP is an opportunity to gain valuable information about how well we're meeting customer needs—and whether we need to adjust our strategy with a pivot.

The CLECs knew that serving building with fiber was expensive so they bought radio spectrum in the millimeter wave bands (e.g., 24 and 38 GHz) to try and connect business using an approach they called LMDS at lower cost. Rather than rolling out the service slowly after product/market fit was proven, the CLECs starting building out these LMDS wireless networks quickly. There was no iterative process where the value hypothesis was proven first based on a MVP. The result was a disaster. Why the rush? Some of it was fear of missing out (FOMO) but some of the rush was driven by the fact that people knew inside the CLECs that the fiber-based approached really wasn't working well financially and that an answer was needed quickly. It is hard not to fall prey to confirmation bias and loss aversion when the business really needs a solution and has a lot of time, money and reputation invested already.

8. "Because of the short term pressure, [businesses tend to focus] on the projects they believe will maximize that quarter or fiscal year." (Page 14)

Ries is talking in that sentence about the danger of a short-term focus in business. This short-term focus is often created by dysfunctional metrics that I call *Siren Call Ratios* (e.g., IRR, P/E and RONA). I wrote about *Siren Call Ratios* recently in my blog post about the demise of post-break up AT&T. In that example, while the long distance business seemed like be a wonderful opportunity to AT&T based on the Siren Call Ratios, it had zero barriers to entry. The long distance business without a local loop monopoly was one of the most deadly mirages in business history. If you manage a business to make ratios like P/E look good in the short-term you can end up with a long term disaster.

9. "It is important to create metrics that measure success… that often replace a company's traditional metrics- often ROI…" (page 176)

A business that is managed to achieve vanity metrics has never been more at risk. In today's economy ever business must think and act based on long-term financial returns in order to survive. If a business is instead focused on short-term metrics, competitors that do invest for the long-term will come along and crush it. Customers are far too well informed given the information transparency created by the internet to accept inferior products. One of the better examples of a company that is driven by long-term metrics is a company that has the following operational model for its internal startups: Once a year (in summer at the start of their fiscal year) the company "stack ranks" proposals that product managers believe will drive growth. Every product manager (PM) must make a case for what they want done at this stage. The PMs essentially sign up for improvements to key metrics like revenue and cash flow growth in their six page proposal. The senior leaders of the business then do the stack ranking. Some things make the cut and some don't. There is another valuation period six months later. I am making it simpler than it really is since they must write an imaginary press release first, but those are the key steps. Compensation and promotions are based on hitting

the numbers in the metrics. Post-mortems are done on failed efforts. Do you know or can you guess who this company I just described is?

10. "Provide metered funding to startup teams… denominated in a fixed budget of either time or money." (page 289)

More startups, including internal startups, die from indigestion than from starvation. Too much funding can very often be a curse for a startup rather than a blessing. When a startup is over funded, cash is too often used to solve problems that are better tackled through innovation and organizational culture. Too much funding can also cause the organization to grow headcount too quickly and to work on the growth hypothesis to begin before the value hypothesis is solved. All of this happened in the case of CLECs.

FOMO on the CLEC opportunity caused legions of business people and investors to bet massive amounts of capital on an industry that would eventually be shown not to have a sound business model. It is worth pointing out that the company that kicked the telecom Bubble off with the purchase of MFS was Worldcom. *The New York Times* article on that company that is most relevant read in part on July 22, 2002:

"WorldCom, plagued by the rapid erosion of its profits and an accounting scandal that created billions in illusory earnings, last night submitted the largest bankruptcy filing in United States history…. the chief financial officer, had devised a strategy that improperly accounted for $3.85 billion of expenses."

Over a period of years it became more and more clear that the unit economics of the CLEC business simply didn't work financially. Here is a short description of the CLEC investing thesis:

The CLECs built a fiber ring in a city and connected that system to some office towers. The landlord must agree to allow the fiber provider and access to a room for equipment, Fiber must be run up a "riser" to each floor. All that requires cash outlay up front. The CLEC then hired sales people who go to buildings and travel up and down the elevators trying to sell a bundle of local phone service, long distance and Internet connectivity. Sometimes they also sold web hosting in that bundle. The lifetime value (LTV) calculation for a small office tenant might look like this:

INPUTS	
CAC	$1,300.00
ARPU (per month)	$110.00
Churn (per month)	5.0%
Gross Margin	40%
Annual Discount Rate	10.00%
COGS (per month)	$66.00
Monthly Discount Rate	0.83%
Terminal value multiplier (months)	17.29
NPV	-$545.71
IRR	-22.07%

Excludes last period with terminal value

	Time 0	Year 1				
		Jan	Feb	Mar	Apr	May
		1	2	3	4	5
CPGA	-$1,300.00	$0.00	$0.00	$0.00	$0.00	$0.00
ARPU		110.00	110.00	110.00	110.00	110.00
COGS		-66.00	-66.00	-66.00	-66.00	-66.00
Monthly Cash Flow	($1,300.00)	$44.00	$44.00	$44.00	$44.00	$44.00
Remaining fraction of subscribers		100%	95%	90%	86%	81%
Net cash flow	($1,300.00)	$44.00	$41.80	$39.71	$37.72	$35.84
Simplified NPV calculation (check)	($545.71)					
Simplified IRR calculation (solving in NPV)	-19.38%					

That's an ugly financial outcome that continues linearly with scale. When the end to the telecom bubble came (i.e., when the cash ran out), the demise of the CELCs was swift and merciless.

11. "On a regular schedule (cadence) make a decision about whether to make a change in strategy (pivot) or stay the course." (page 86)

One of the hardest things about internal startups is that there are no market forces that sort out which efforts should be shut down and which should be funded further. The process can become arbitrary and political in a large organization. By creating a regular review cadence with a set of relatively independent reviewers these intra-company startups/ experiments all potentially face a process that mimics the market. Instead of seeking financing in rounds from venture capitalists internal startups try to convince a board that they have achieved certain success metrics. This is not an easy process to make happen in a large company, but it is a necessary one. During the Telecom Bubble the markets did not perform their usual function due to the power of FOMO (fear of missing out) until billions of dollars had been lost. Obviously the markets were neither perfectly efficient of rational and agents were not perfect informed when it came to CELCs. Level 3 survived until it was recently bought by Century Link, but it was a long painful road.

12. "Modern companies need the ability to consistently and reliably make bets on high risk, high reward projects without having to bet the whole company." (page 45)

Amazon is a leading example of what Ries is writing about in that sentence. Bezos describes the objective at Amazon as follows:

One area where I think we are especially distinctive is failure. I believe we are the best place in the world to fail (we have plenty of practice!), and failure and invention are inseparable twins. To invent you have to experiment, and if you know in advance that it's going to work, it's not an experiment. Most large organizations embrace the idea of invention, but are not willing to suffer the string of failed experiments necessary to get there. Outsized returns often come from betting against conventional wisdom, and conventional wisdom is usually right. Given a ten percent chance of a 100 times payoff, you should take that bet every time. But

you're still going to be wrong nine times out of ten. We all know that if you swing for the fences, you're going to strike out a lot, but you're also going to hit some home runs. The difference between baseball and business, however, is that baseball has a truncated outcome distribution. When you swing, no matter how well you connect with the ball, the most runs you can get is four. In business, every once in a while, when you step up to the plate, you can score 1,000 runs. This long-tailed distribution of returns is why it's important to be bold. Big winners pay for so many experiments.

If you find yourself wanting to refresh your memory about Learn Startup by reading my previous blog post about Ries, the unfortunate news is that it is now only available in my new book. About 35 of my previous blog posts have been rewritten in a revised format that has been professionally edited. That book will be available in a few days and can be pre-ordered now. 100% my royalties from that new book will go to the charity No Kid Hungry.

Notes:

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Business Lessons from Ben Thompson of Stratechery

November 18, 2017

Ben Thompson is the founder of the subscription newsletter Stratechery. He previously worked at Apple, Microsoft, and Automattic, where he focused on strategy, developer relations, and marketing. I love the way he thinks and writes. I always look at something in a new way after I read his writing. Thompson has said about the nature of his work: "I don't

think there are enough writers talking about how things work from an economics or business perspective. I try to ask 'Why do businesses do what they do?'"

1. **"Zero distribution costs. Zero marginal costs. Zero transactions. This is what the Internet enables, and it is completely transforming not just technology companies but companies in every single industry." "Aggregation Theory is a completely new way to understand business in the Internet age."**

Aggregators create platforms, which are a type of "multi-sided market," which I have written about before on this blog. Multi-sided markets bring together two or more interdependent groups who need each other in some way. Uber, Lyft, eBay, and Airbnb are examples of a multi-sided market, which are sometimes called platforms. Each of the four businesses I just mentioned is also an aggregator. Every aggregator operates a platform, but not all platforms are aggregators.

An aggregator has three essential characteristics:

- Products sold by an aggregator are digital and therefore have zero marginal cost;
- These digital products have zero distribution costs since they are delivered by the internet; and
- Transactions happen via automatic account management, credit card or other electronic payment system.

Google and Facebook are examples of how aggregators can create a rapidly scalable and profitable business at previously unimaginable scale and speed. Ben calls these two companies super aggregators:

"super-aggregators [have] zero transaction costs not just in terms of user acquisition, but also supply acquisition, and most importantly, revenue acquisition, and Google and Facebook are the ultimate examples. The vast majority of advertisers on both networks never deal with a human (and if they do, it's in customer support functionality, not sales and account management): they simply use the self-serve ad products."

Another way of thinking about this aggregator phenomenon is: an aggregator is a platform on steroids and a super aggregator has twice the steroid dosage. The world has never seen anything like aggetators before because the world can never been so digitally connected.

One aspect of aggregators that people can tend not to see is: because being an aggregator is based on network effects, their competitive advantage is strong but brittle. The idea that an aggregator cannot be displaced bu a disruptive competitor does not map to historical record of the technology industry. There is an elephant's graveyard in the technology industry that is not only large already but destined to grow. For example, a June 2016 academic paper points to these companies as cautionary tales for any technology that thinks its future is assured:

Burroughs, Sperry Univac, Honeywell, Control Data, MSA, McCormack & Dodge, Cullinet, Cincom, ADR, CA, DEC, Data General, Wang, Prime, Tandem, Daisy, Calma, Valid, Apollo, Silicon Graphics, Sun, Atari, Osborne, Commodore, Casio, Palm, Sega, WordPerfect, Lotus, Ashton, Tate, Borland, Informix, Ingres, Sybase, BEA, Seibel, PowerSoft, Nortel,

Lucent, 3Com, Banyan, Novell, Pacific Bell, Qwest, America West, Nynex, Bell South, Netscape, Myspace, Inktomi, Ask Jeeves, AOL, Blackberry, Motorola, Nokia, Sony.

Thompson believes that aggregation theory has "disrupted disruption." In making this argument Thompson describes unique attributes of some aggregators:

"instead of some companies serving the high end of a market with a superior experience while others serve the low-end with a "good-enough" offering, one company can serve everyone…. it makes sense to start at the high-end with customers who have a greater willingness-to-pay, and from there scale *downwards*, decreasing your price along with the decrease in your per-customer cost base (because of scale) as you go (and again, without accruing material marginal costs). Many of the most important new companies, including Google, Facebook, Amazon, Netflix, Snapchat, Uber, Airbnb and more are winning not by giving good-enough solutions to over-served low-end customers, but rather by delivering a *superior* experience that begins at the top of a market and works its way down…"

Being an aggregator is fantastic if you can make it happen, but it is non-trivially hard to do so. Hundreds of big and small firms fail trying to become aggregators in different categories every year. Very few aggregators ever achieve significant scale. The payoff for becoming a successful aggregator is so massive that many people are willing to invest in attempts to do so. Thompson makes clear that it is possible to have a wonderful business result and not be an aggregator. In fact, almost all businesses are not aggregators.

In the case of an aggregator, Thompson writes that: **"the network should be generating an improvement in benefits that exceeds the cost of acquiring customers, fueling a virtuous cycle."** He is describing the scalability of the business which I have also written about on this blog (you can find a link to this post in the Notes below).

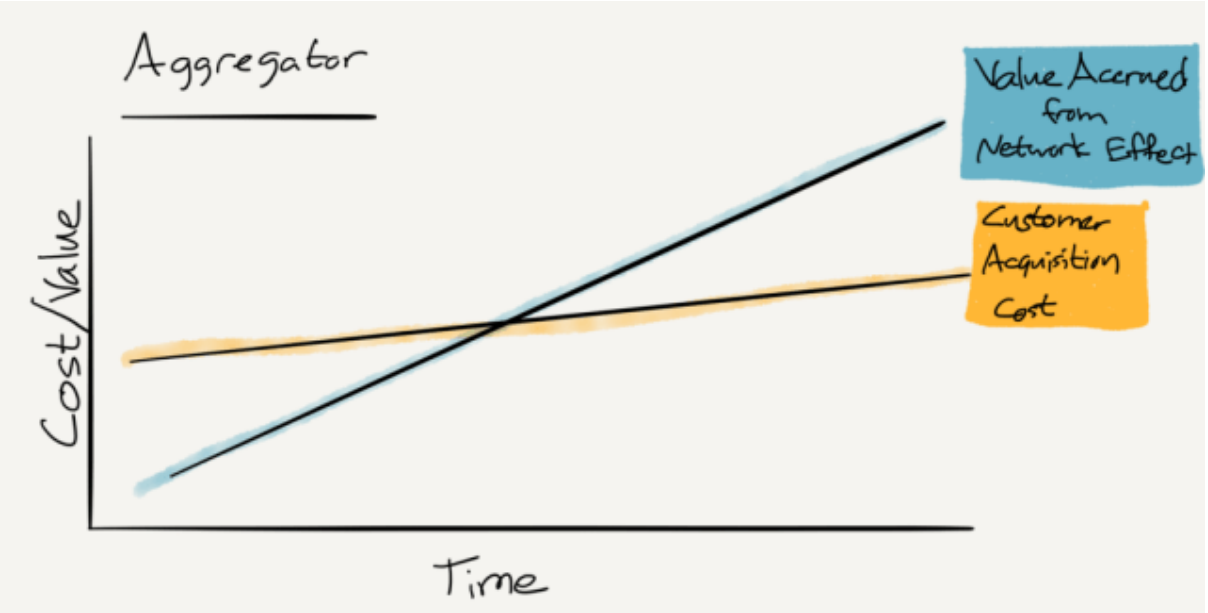

The high scalability of the business of an aggregator is a wonderful business attribute to have, but it is neither essential or common. Thompson adds that for a business that is not a aggretator: **"The keys are positive unit economics from the get-go, and careful attention**

to profitability. The reason this matters is that these sorts of companies are by far the more likely to be built."

There are real world total addressable market top down constraints that would prevent too many Google or Facebook sized aggregators being created in a given decade. Fred Wilson has written about this topic in a clear way several times: " If $100bn per year in exits is a steady state number, then we need to work back from that and determine how much the asset class can manage." You can take that $100 billion number up a bit but not too far. As an example, in the US venture exits have looked like this:

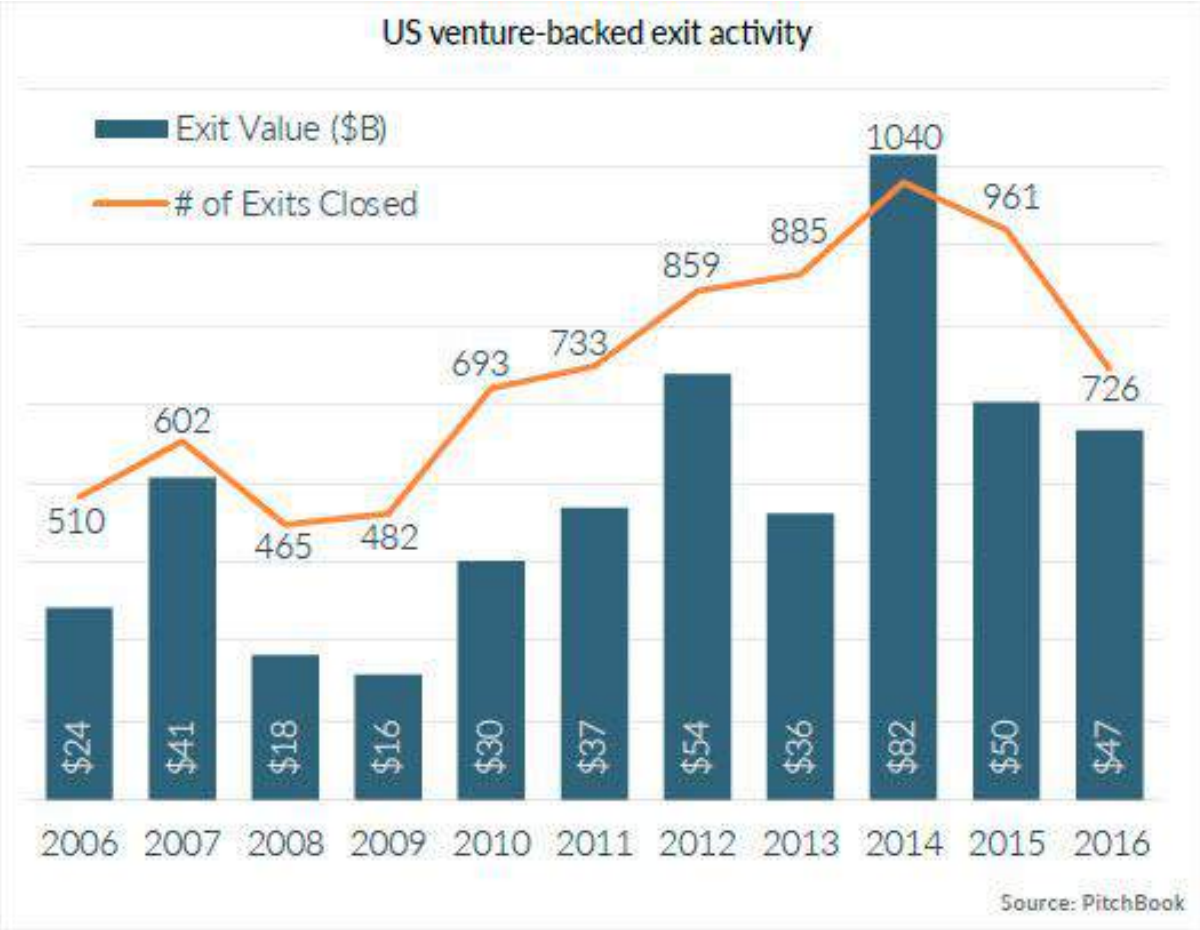

2. **"Apple and Amazon do have businesses that qualify as aggregators, at least to a degree: for Apple, it is the App Store (as well as the Google Play Store). Apple owns the user relationship, incurs zero marginal costs in serving that user, and has a network of App Developers continually improving supply in response to demand. Amazon, meanwhile, has Amazon Merchant Services, which is a two-sided network where Amazon owns the end user and passes all marginal costs to merchants (i.e. suppliers)."**

Thompson is pointing out that it is possible to be an aggregator and at the same time own and operate other platforms which do not rely on aggregation. In fact, the creation of the aggregation-based business can be enabled by the existence of the platforms that do have products with marginal costs and that are not fully digital. The economies of scale that exist for these other non-aggregated platforms can create significant barriers to entry. The Apple

and Amazon examples described by Thompson are cases which illustrate the point about physical economies of scale sometimes reinforcing demand-side economies of scale (network effects). The best opportunity to connect an aggregated digital platform with one that is physical is if they are complementary products like mobile phones and apps.

3. **"Words by themselves are easily copied. They're not necessarily worth anything in and of themselves."**

What Thompson describes in the two sentences just above is a key enabler of the aggregation phenomenon. To illustrate with an example, the words in bold were "cut" from an interview of Ben Thompson and inserted in this blog post. This is possible because of a legal doctrine called "fair use." Small snips of copyrighted material may, under certain circumstances, be quoted verbatim for certain purposes because of this doctrine.

When I made a digital copy of those sentences no one else was denied access to those words (words are non-rival). In contrast, if I had instead stolen Ben's phone, he would no longer have a phone (a phone is rival) and he would be pissed at me. Ben's words can be made "excludable" if he moves them behind an effective paywall which he does with parts of Stratechery. This is tricky to do because the ideas that the words convey are not excludable. Non-rival goods have very different economic characteristics than goods like an automobile which are rival.

The great news for Thompson's business model at Stratechery is that his actual words are super valuable even though his ideas have spread far and wide. Almost every newspaper has reached the conclusion that paid subscriptions are the business model that can best assure their future. In contrast, traditional advertising-supported journalism does not face an attractive future. This is a big societal problem since journalism is a valuable public good like education, national defense, lighthouses or mosquito control and in the past it was advertising that supported that model for the mass market. Societies need an educated electorate, but it is unclear how that will happen in the mass market given the collapse of the advertising supported business model for journalism. The mass market appears unwilling to pay for news via paid subscriptions, even though more affluent people are willing to do so. How will mass market customers get their news in this new era for journalism business models?

The monetary cost of me creating this blog post was approximately zero. My revenue is also zero since I have no paywall or business model. My purpose is educational and to get more people reading Thompson's work. I like him and want his business model to succeed since we need to find new ways to fund people who are creators like him.

4. **"Because aggregators deal with digital goods, there is an abundance of supply; that means users reap value through discovery and curation, and most aggregators get started by delivering superior discovery." "The power has shifted from the supply side to the demand side**." **"Value has shifted away from companies that control the distribution of scarce resources to those that control demand for abundant ones." "The goods 'sold' by an aggregator are digital and thus have zero marginal costs (they may, of course, have significant fixed costs)."**

In a recent blog post I discussed how hard is was for Alton Brown to get distribution for his television show *Good Eats* when there was only a few cable channels which might be

interested in his work. Now that streaming platforms like YouTube have arrived, distribution is not the most critical problem. The challenge now for a creator of content is discovery. For example, software from a provider like Unity makes it far easier than it was in the past to create a video game, but it is hard to get customers to discover it. An aggregator like Valve has been able to capitalize on that phenomenon. If you are not a gamer, you may not know about Valve. It is a private company based in the Seattle area and is the creator of Steam, a game platform that distributes and manages thousands of games directly to a community of more than 65 million players. Steam Spy estimates that over 5,000 new games launched on Steam in 2016 and that the revenue generated by paid games on that platform was $3.5 billion that year. Valve reportedly has only a couple of hundred employees so revenue per employee is astronomical. This illustration from Stratechery shows how Airbnb has become an aggregator and a similar illustration could be created for Valve's Steam service.

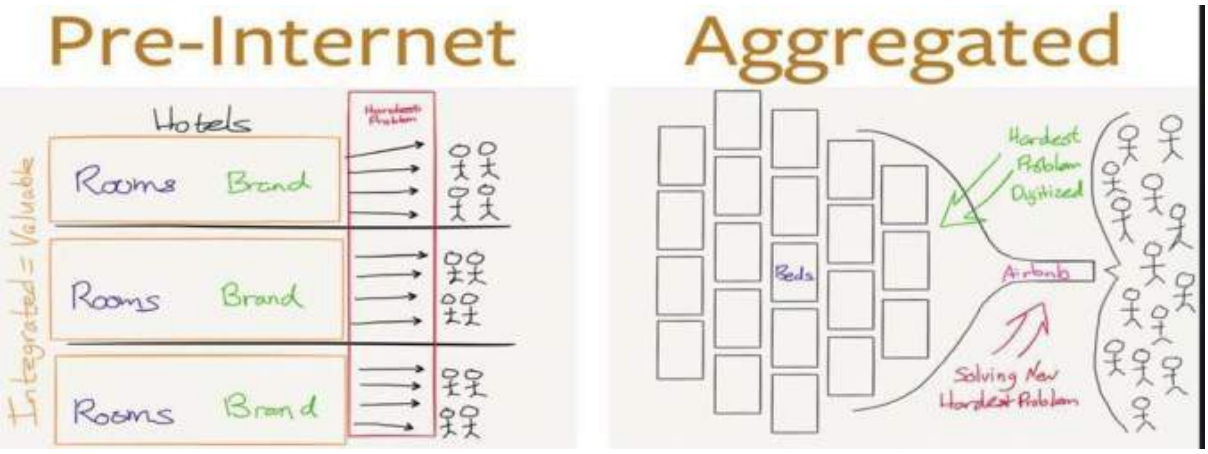

5. **"The linchpin on which everything else rests: aggregators have a direct relationship with users."**

The markets in which a successful aggregator has been created are different from single-sided markets like a grocery store in that the platform enables direct interaction between the "sides" of the multi-sided market and the aggregator extracts a fee for enabling that commerce. Importantly, there are no distributors between the aggregator and the sides. This is critical since the data that customers provide about their needs and desires is the source of competitive advantage in the aggregator's business. For example, Uber and Lyft know a lot about riders and drivers which they use to create the service and add value. But the sides of these electronic marketplaces do interact directly despite their direct relationship with the aggregator. For example, the Uber or Lyft drivers transport the riders. Similarly, Airbnb relies on owners to provide the facilities that people pay to use as accommodation. The owner providing the place to stay and the occupant paying to use the facility deal directly with each other on the platform but Airbnb still earns a fee on the transaction.

6. **"The fundamental nature of the Internet makes monetizing infinitely reproducible intellectual property akin to selling ice to an Eskimo: it can be done, but it better be some really darn incredible ice, and even then the market is limited."**

I have been arguing on this blog and elsewhere that the nature of business has been fundamentally changed by phenomena like the internet, mobile networks and data science. One thing that is different about the nature of business today is what is sometimes called "SKUmageddon." There are so many new products in markets that it can be hard or

impossible to get discovered. When I am moving through the aisles of a large supermarket today I can't help but think about how many products there are. To get sold those products in the grocery store must be darn incredible. As another example, SteamSpy estimates that there are this many video games on the Steam platform:

7. **"Once an aggregator has gained some number of end users, suppliers will come onto the aggregator's platform on the aggregator's terms, effectively commoditizing and modularizing themselves. Those additional suppliers then make the aggregator more attractive to more users, which in turn draws more suppliers, in a virtuous cycle. This means that for aggregators, customer acquisition costs decrease over time; marginal customers are attracted to the platform by virtue of the increasing number of suppliers."**

Digital systems inherently enhance the power of positive and negative feedback loops by removing friction. The feedback loops can lead to a phenomenon called "cumulative advantage," which is a situation where something gets more successful the more successful it gets. Some people forget that "cumulative disadvantage" is also just as powerful, which is a situation where something gets less successful the less successful it gets. Businesses like Blackberry or MySpace can fall as rapidly as they rose. Nassim Taleb points out that we live now in Extremistan where: "there's Domingo and a thousand opera singers working in Starbucks."

8. **"Getting started takes nothing more than an email address. There is no server software to install, no contracts to sign, and you don't even need a credit card." "The truth is that because so many folks can now get started it is that much harder–and more expensive–to cut through the noise."**

It has never been easier or cheaper to start a business. This is good news and bad news. The good news is that it is easy to start a business. The bad news is that more people than ever can do so. Competition levels are fierce as a result of all the new entrants. Because there are so many competitors and products, particularly in digital markets, there is a lot of noise that companies must cut through to be financially successful. All this competition translates into more price discounting, which creates lower margins and lower overall inflation. While the cost of creating and distributing these digital products can potentially enable high gross margins if barriers to entry can be created, below the "gross margin line," huge amounts can

be spent on sales and marketing to break though the noise. In short, getting into business with a product is easier than it has ever been, but getting discovered is harder.

9. **"There is [often] a generous free level, which means the only friction entailed in giving the product a try — or in accepting an invitation — is said sign-up."**

Software as a service (SaaS) is not just a new way to deliver services. It also a way to market software. By using the freemium model Thompson is talking about customers typically get some level of functionality for free and are charged a fee for more other services that are typically more advanced. Freemium is used in both consumer and business-to-business settings. Freemium is sometimes also called a *land and expand* business model. This term captures the idea that the free offer is used to "land" the customer which creates what is known as a sales lead. Why is the cost of sale so much lower? Most importantly the cost of educating the potential customer about the benefits of the product go way down once they have used the product in the free setting. The paid salesperson who patiently explains the services has been replaced by self-education. John Vrionis describes the less costly and more effective freemium sales process: 'Evangelizing a new religion is very hard work, and more importantly it is *expensive.* But that's essentially what selling proprietary software is like. Conversely, selling bibles to a group of believers is a lot easier. Sales people engage an account when they know that the prospect is well down the path of adoption and belief." In some settings the salesperson can be eliminated completely as the customer sells themselves with self-service capabilities of the company web site. Venture capitalist Tom Tunguz writes about whey the freemium business model works so well:

"At its core, freemium is a novel marketing tactic that entices new users and ultimately potential customers to try a product and educate themselves about its benefits on their own. By shifting the education workload from a sales team to the customer, the cost of sales can decrease dramatically… freemium startups leverage usage data to improve their product. The large amount of users using the product enables A/B testing with statistical significance, a non-trivial strategic advantage. Marketing teams can sift through the data to understand market segmentation and funnel efficiency, and product management can parse the data to improve the on-boarding experience. Third, freemium startups gather information about their customer base to prioritize their sales efforts. When customers sign up or download a free product, freemium companies should gather data about the user to understand who they are and analyze the usage patterns of these users. With enough user data, it's possible to predict with great accuracy which users will become large accounts.

10. **"The Internet has made distribution (of digital goods) free, neutralizing the advantage that pre-Internet distributors leveraged." "The end of gatekeepers is inevitable. We can regret the change or relish it, but we cannot halt it." "In a world where the default news source is the Facebook News Feed, the New York Times is breaking out of the inevitable modularization and commodification entailed in supplying the "news" to the feed. That, in turn, requires building a direct relationship with customers: they are the ones in charge, not the gatekeepers of old — even they must now go direct."**

The cost of distributing the service to customers approaches zero since the customer pays for their own bandwidth and the devices needed to consume the service. For example, once upon

a time the printing presses and physical distribution systems created barriers to entry in the newspaper business. This illustration by Thomson makes the point clearly

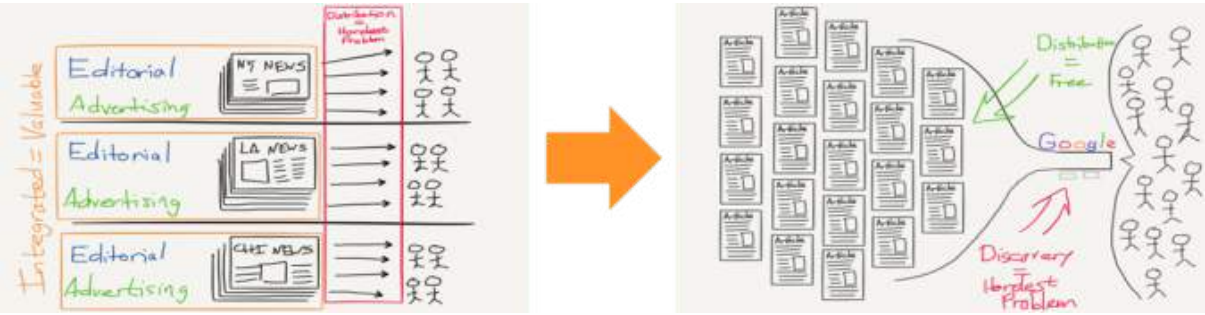

Once the need for that disappeared, the business model for journalism needed a re-boot. Business are still struggling to discover that new model. Fortunately, people like Thompson and companies like *The New York Times* are finding success with a subscription model.

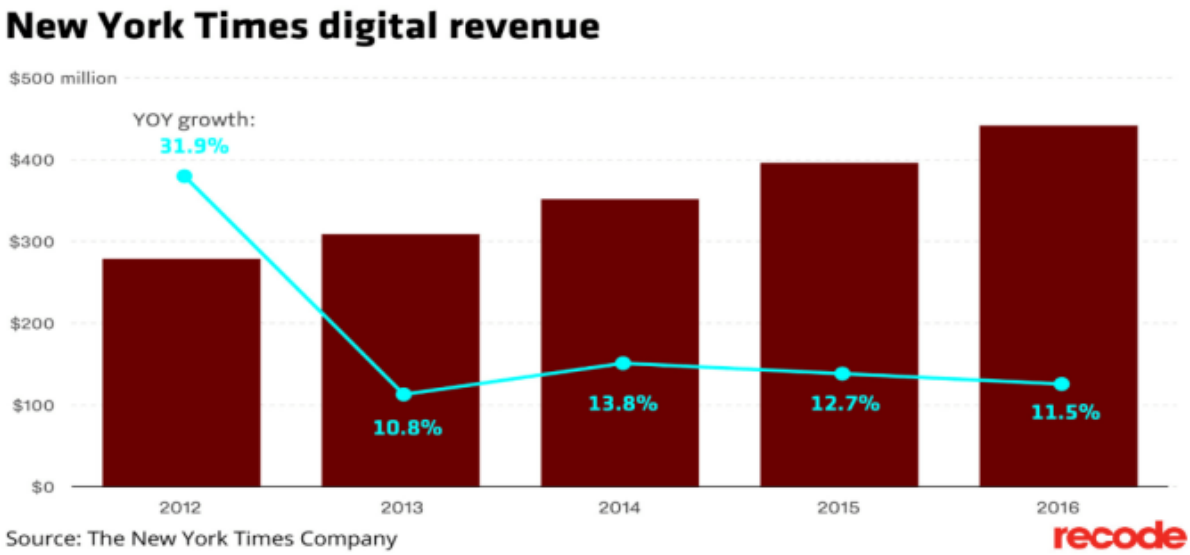

The implications of this shift are huge and not just financial in nature. There are no longer huge newspapers in every city and nationally that are able to shape public opinion in the same way but rather hundreds of thousands of potential new sources occupying every available niche. This has atomized not just the journalism industry but society itself. Hundreds of thousands of journalism "flowers" have bloomed, and some of which are poisonous. As much as someone might like to go back to the old system of a few newspapers and televisions new programs guiding public opinion toward the political center by deciding what is "fit to print," it is not possible to do so. The world has changed and we need to find a way to make this new frictionless creation reality functional.

Thompson himself is an example of how publishers can flourish financially in a business niche rather than trying to appeal to the mass market. In the advertising-supported business model era the products sought breadth of distribution to get millions of readers and therefore tended to write shallow but broad content to appeal to as many people as possible. In a world where paid subscription-based business models work best, greater depth in written material about a topic is now a feature rather than a bug. For example, Bill Bishop has created an

email newsletter called Sinocism about current affairs in China. Bishop has attracted an audience of more than 30,000 readers who pay $11 a month or $118 a year for a membership. Other writers are seeing what Thompson, Bishop and and others are doing to support their work financially and are creating deep dive subscription newsletters covering topics like the NBA.

11. "Breaking up a formerly integrated system — commoditizing and modularizing it — destroys incumbent value while simultaneously allowing a new entrant to integrate a different part of the value chain and thus capture new value."

The desire of a business founder to "integrate a different part of the value chain" has produced some of the most spectacular financial returns in the venture capital industry. This has been true since the creation of eShop which was a precursor to eBay. I love this story from a Patrick O'Shaughnessy podcast (as transcribed by Zach Ullman) since it is told by one of my favorite venture capitalists about his friend and mine Bruce Dunlevie:

Andy Rachleff: "One of our first very successful companies was eBay. Now this is a classic venture capital story, and it incorporates why Bruce Dunlevie is so great. The founder of eBay Pierre Omidyar actually started the company as a hobby. He had never intended for it to be a business. Previously, he was the number four…he was the fourth engineer hired into one of the first pen based computing software companies, a company called Ink. Back in Merrill, Pickard days, Bruce made an investment in Ink so we could have a play in pen based computing. He didn't go on the board but he made an investment. Bruce was such a great advisor that even though he wasn't on the board, anyone in the company who had a serious strategic question would come to Bruce rather than one of the board members and Omidyar was no exception. Well Ink pivoted into ecommerce. It was the first ecommerce company and changed its name to eShop. It was ultimately acquired by Microsoft. But eShop was the first company doing ecommerce on top of the CompuServe platform, so before the internet. After he left eShop, I think he joined a company called General Magic and he ran this electronic community of his apartment and he called it eBay for 'electronic bay area.' Bruce said: 'you know Pierre I think you're onto something here.' We met the company and it struck us all that this platform that was being applied to collectibles and when people wanted to insult us 'Beanie Babies, really? That's what this thing is for?' We saw it as an opportunity to sell many other things besides Beanie Babies or Pez dispensers. That was the leap of faith. That was the non-consensus idea. It wasn't until the company went public that people stopped making fun of us."

If there is something innovative that exists in the venture capital business today, Rachleff and Dunlevie are inevitably involved in it somehow.

12. **"The internet enables niche in a massively powerful way. "And because you're not constrained to a geographic area, you can reach the entire world. "If you can get a niche and own it, you can do something valuable there. And the key thing is, the business models come with it. It had to be subscription. To do an ad-based sort of business, you're just getting backed up behind Facebook and the New York Times like everyone else, and there's no way to break through." "I can publish what I need without needing to pay a newspaper or a printing press or any of that stuff. So from that perspective, the opportunity for a writer to go at it alone has never really existed previously."**

With his Stratechery newsletter and its paywall-based subscription business model, Thompson is pioneering a new way to make a living in an Internet age. He has been able to tap into a large community of people distributed globally who value his work. This approach enables Thompson to live where he wants to live (Taiwan) on his own terms. A venture capitalist said to me last week that he thought Thompson's work was better because he works in a different time zone than most of the people and businesses he writes about. We agreed that this phenomenon is similar to how Warren Buffett benefits from working in Omaha. Thompson has no boss or employees. He is interrupted less often and he is less likely to get caught up in mindless imitation. His business is scaling very well and he is making a positive difference in the world as a teacher.

Notes:

My blog post on multi-sided markets: https://25iq.com/2016/10/22/a-dozen-things-ive-learned-about-multi-sided-markets-platforms/

My blog post on scalability: https://25iq.com/2017/08/25/a-dozen-attributes-of-a-scalable-business/

Some Posts from Thompson (but read the entire newsletter start to finish):

https://stratechery.com/2017/goodbye-gatekeepers/

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https://stratechery.com/2017/defining-aggregators/

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https://stratechery.com/2016/chat-and-the-consumerization-of-it/

Related posts:

https://www.recode.net/2017/2/14/14612178/ben-thompson-stratechery-publishing-news

https://www.techinasia.com/stratechery-solo-ben-thompson-asia-apple-shifting-tides-online-media

https://medium.com/@swyx/ben-thompson-on-ben-thompson-aed48fbcbe82

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Business Lessons from Katrina Lake of Stitch Fix

November 25, 2017

Katrina Lake is the founder and CEO of Stitch Fix. The magnitude of what she accomplished in building this business is highly underappreciated: She took a clothing retailer public in November 2017. This is a remarkable accomplishment given the financial state of retail in the United States and the challenges facing Nordstrom, Macy's and others. Lake did so by finding sustainable competitive advantage using some of the most advanced technology in the retail industry.

Stich Fix investor and board member Bill Gurley has said this about what she has accomplished: "One of the unique things about Stitch Fix relative to all the unicorns in Silicon Valley is they've run a very disciplined and profitable approach. They've been profitable for several years. The reason that you never heard of them as a unicorn is that they never raised money over a billion because they didn't need to raise money."

Here are seven lessons to learn from her success.

1. **"In business school, one of the areas that interested me was hunting and fishing. [But] I was not super passionate about the category. I can't imagine devoting my whole life to it."**

Lake did not decide to create a biotech, blockchain, e-sports or enterprise security business because it would have been fashionable. She is passionate about fashion and retail.

Missionaries are far more likely to be successful business founders than mercenaries because their desire to solve a real customer problem enables them to persevere when things inevitably get tough. Mercenaries are motivated by money. Missionaries are driven by a cause.

It is a terrible idea to start a business because it is a hot sector or because people currently think it is glamorous.

2. **"I would buy clothes at boutiques around Boston, then bring them to people's houses. I'd watch them try on the clothes, ask them questions, and have them fill out a survey, gathering as much data as I could."**

Too many businesses fail to prove a value hypothesis before trying to prove a growth hypothesis. If you don't have a product that customers are willing to buy, nothing else matters. Spending cash on growth before product market or fit is discovered is a proven way to destroy shareholder value.

Lake cleverly used a classic viable product (MVP) approach to prove her value hypothesis. She intentionally did some things that she knew would not scale as part of this MVP. For example, she acquired inventory knowing that she could return products people did not buy but that would generate data that would allow her to raise funds to build her business.

3. **"It was hard to raise money. We always treated every dollar very preciously and focused early on profitability. There are companies out there that may have failed because they had too much money and never had to think about the economics of their business."**

Failure to understand the unit economics of a business is inevitably a fatal mistake. Every business has a cost to acquire a customer, a cost to serve a customer, a cost of goods sold, a revenue per customer and an opportunity cost of capital. Lake knows the only unforgivable sin in business is to run out of cash. For example, she lived through a period in which Stitch Fix had only eight weeks of cash remaining and lived to tell that tale.

Stitch Fix now has $120 million from the IPO. Criticizing the IPO for not resulting in a stock-price "pop," which benefits investment banks rather than shareholders, is rubbish. Improving the reputation of the investment bank for building future IPO order books represents zero justification for selling Stitch Fix shares at below market value.

4. **"I'm not valuation-focused, so we weren't going to raise money if we didn't need it."**

More businesses die from indigestion than starvation. Business that raise too much money often resolve problems with money that could be fixed with innovation and a stronger company culture. Too much money also tends to cause business to start off on the growth hypothesis far too early. People can lose discipline about expenses. Frugality is a part of a sound company culture.

5. **"We collect information from you, what we know from inventory, what we know from other people, and all of that helps to inform the data and algorithm side, which generates recommendations for the stylists." "Fundamentally what we're offering is personalization. Our data can say, for example, this client has a 50% chance of keeping this denim."**

Without some barrier to entry, the price of a product inevitably drops to a point where financial returns don't exceed the opportunity cost of capital. In other words, every business needs a moat, which limits supply to some extent, so they can generate a profit. Stitch Fix has had to find ways to thrive financially in a retail environment inhabited by businesses like Amazon. It is smartly focused on providing a differentiated personalized experience for its customers. Many people would be shocked by how many data scientists work at Stitch Fix and the sophistication of their technical stack.

6. **"There's going to be a day when everything is amazing and another day when everything is terrible. It's an emotional roller coaster when you're the founder, especially in those early days."**

It is thrilling to start a new business and even more thrilling if you eventually create a great financial success. But in between those two end points is a grueling period which inevitably involves struggle and gyrating emotional states. Entrepreneur, author and investor Scott Belsky (who wrote the forward my new book) has said that it is in the "messy middle" between founding a company and an event like an IPO that reputations get made via execution, optimization and endurance.

Venture capitalist Megan Quinn adds: "Katrina built an incredible business with grit and discipline. She shunned the Silicon Valley mantra of valuation at all costs in favor of sustainable unit economics and profitability. She is the real Valley success story — one founded in fundamentals and sincere dedication to solving a customer problem."

7. **"I met more than 100 entrepreneurs and realized that all these entrepreneurs were just as unqualified as I was."**

There is no magic formula for creating a successful business. Best practices do exist which you can learn on your own, in a job or in business school. But every successful business breaks at least one rule, which the root cause of innovation.

Lake has blazed a new trail in the retail industry by applying "money ball"-style analytics to retail fashion. Stitch Fix's use of machine learning and big data is unprecedented. Her story is inspirational.

Notes:

http://www.mercurynews.com/2014/03/14/qa-stitch-fix-founder-katrina-lake-on-melding-fashion-and-technology/

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http://www.businesswire.com/news/home/20131017005317/en/Stitch-Fix-Raises-12-Million-Series-Funding

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Investing Lessons from the Dude. "Or, uh, His Dudeness, or uh, Duder, or El Duderino if you're not into the whole brevity thing."

December 2, 2017

The part of The Dude in 1998 Coen Brothers' film *The Big Lebowski* is played by Jeff Bridges. The movie is so popular that it became the inspiration for Dudeism, which has been called "a religion, philosophy, or lifestyle." The entry for Dudeism in Wikipedia describes it as: "essentially a modernized form of Taoism stripped of all of its metaphysical and medical doctrines." In December of 2014 *The Big Lebowski* was designated by the Library of Congress as a "culturally, historically or aesthetically significant" film that should be preserved for future generations. They described the movie as a "tale of kidnapping, mistaken identity and bowling." In a 2001 essay entitled *That Rug Really Tied the Room Together*, a writer argued that the movie represents a counter narrative to the post-Reaganomic rush for return on investment. *The Big Lebowski* is more accurately characterized as a funny movie. Nevertheless, The Dude does teach a few lessons that can help you become a more successful investor.

1.The Dude: "Sooner or later you are going to have to face the fact that you're a moron."

One of the most important lessons you can learn about investing is the location and importance of your "circle of competence." The task is simple: How do you avoid the investing areas in which you are a moron? These areas are like blood cells, since everyone has them. In other words, mistakes tend to happen when your do not know what you are doing. It is therefore wise to stay within your circle of competence. The most effective way to learn the importance of a circle of competence is to personally make mistakes while investing. It is less painful to learn this lesson vicariously by watching or reading about the experiences of other people, but it is not nearly as vivid as peeing on the electric fence yourself.

2. The Dude: "It's like what Lenin said… you look for the person who will benefit."

If someone is selling you something, it is always wise to ask yourself: "Why are they selling?" What are the motivations of this person or organization? Are they aligned with my interests? Charlie Munger puts it this way: "If the incentives are wrong, the behavior will be wrong. I guarantee it. I've been in the top five percent of my age cohort almost all my adult life in understanding the power of incentives, and yet I've always underestimated that power. Never a year passes but I get some surprise that pushes a little further my appreciation of incentive superpower." Warren Buffett agrees with Munger: "Always look at how much the other guy is making if he is trying to sell you something."

3. The Dude: "You brought the f*in' Pomeranian bowling?"**

Staying focused on what Michael Mauboussin calls "the investing process" is something all great investors do. Mauboussin writes: "If you compete in a field where luck plays a role, you should focus more on the process of how you make decisions and rely less on the short-term outcomes. The reason is that luck breaks the direct link between skill and results—you can be skillful and have a poor outcome and unskillful and have a good outcome." Mauboussin believes a wise investing process has three elements: 1) you must find something the market does not believe and you must be right about that belief; 2) you must have control over your behavioral biases; and 3) you must not have organization issues that get in the way of a sound decisions. Remember that in investing and bowling no one calls a strike on you.

4. The Dude: "Sometimes you eat the bear and sometimes… well, he eats you"

Business cycles inevitably happen. You cannot predict their timing, but you can prepare for their arrival. The good news is that markets cycling back and forth between fear and greed present a rational investor with an opportunity to benefit, if the investor purchases assets at a bargain and doesn't try to time market prices. This is a hard concept for some people to grasp. The concept is simple: you *wait* for a bargain price and and then you wait again for the price of the asset to rise. In other words, you believe something will happen in the future, but you do not know when. If you are having trouble with this idea, I suggest you read Seth Klarman's book *Margin of Safety*. If you are not patient enough to wait, then buy a low cost diversified portfolio of index funds.

5. The Dude: "Ya well that's just like, you're opinion man."

You should adopt the same view as The Dude when reading investment bank analyst reports or listening to other pundits. Opinions are like blood cells. Everyone has them. It is important to understand any analysts is trying to accomplish in making a prediction. What are they

selling? Also ask: are they credible as forecasters? What is their record as a forecaster. Munger makes the case perfectly:

"How many in this room would have predicted negative interest rates in Europe? Raise your hands. [No hands go up]. That's exactly the way I feel. How can I be an expert in something I never even thought about that seems so unlikely. It's new territory. I think it's highly likely that the people who confidently think they know the consequences – none of whom predicted this – now they know what's going to happen next? Again, the witch doctors. You ask me what's going to happen? Hell, I don't know what's going to happen. I regard it all as very weird. If interest rates go to zero and all the governments in the world print money like crazy and prices go down – of course I'm confused. Anybody who is intelligent who is not confused doesn't understand the situation very well. If you find it puzzling, your brain is working correctly."

6. The Dude: "Look, pal, there never was any money. The Big Lebowski gave me an empty briefcase, so take it up with him, man."

Always be on the lookout for scams and frauds. As an example, Jason Zweig descried how authority and scarcity were used by Bernie Madoff to rope clients into the fraud: "The initial marketing often was in the hands of what one source described as 'a macher' (the Yiddish term for a big shot). At the country club or another exclusive rendezvous, the macher would brag, "I've got my money invested with Madoff and he's doing really well." When his listener expressed interest, the macher would reply, "You can't get in unless you're invited…but I can probably get you in." If a possible investment is too good to be true, it probably is.

7. The Dude: "By the way, do you think that you could give me that $20,000 in cash? My concern is, and I have to, uh, check with my accountant, that this might bump me into a higher, uh, tax…"

This is untypically bad financial advice from The Dude. Despite what he says about taxes, it is always better to have income than a deduction. Charlie Munger gives this advice:

"…in terms of business mistakes that I've seen over a long lifetime, I would say that trying to minimize taxes too much is one of the great standard causes of really dumb mistakes. I see terrible mistakes from people being overly motivated by tax considerations. Warren and I personally don't drill oil wells. We pay our taxes. And we've done pretty well, so far. Anytime somebody offers you a tax shelter from here on in life, my advice would be, don't buy it."

8. The Dude: "So if you could just write me my check for ten percent of a half a million… five grand… I'll go out and mingle."

The Dude is teaching an important lesson by example: Never do important financial math when you are drugged and semi-conscious. It is just that simple.

9. The Dude: "This is very complicated…. You know, a lotta ins, a lotta outs, lotta what-have-yous."

Howard Marks said once: "I keep going *back* to what Charlie Munger said to me, which is none of this is easy, and anybody who thinks it is easy is stupid." If investing was easy, everyone would be rich. Investing successfully requires work. As just one example, you need to work to find information that will lead you to investments that have positive expected value. Marks adds: "The expected value from any activity is the product of the gains available from doing it right multiplied by the probability of doing it right, minus the potential cost of failing in the attempt multiplied by the probability of failing." Making at least some investing decisions is unavoidable. Even if you have decided to adopt a diversified portfolio of low cost index fund approach, you must select the funds. If you don't do at least some work, the odds are significant that you will screw even that up. Passive investing is a misnomer. All investing is somewhat active, with some approaches far more active than others.

One point to consider is whether a low cost index fund investing approach enables a person to be more "Dudeist." One tenant to Dudeism is expressed in this this way by the Rev. Dwayne Eutsey, The Arch Dudeship:

The world is shaped by taking it easy;
It cannot be shaped by undudeness.
If one tries to steer it, the plane crashes into the mountain.

There is certainly significantly less "steering" with index fund investing, which not only leaves more time for bowling, drinking, bathing and hanging out with friends but also decreases the chances your investments will be destroyed in a plane crash. Most people should emulate the Dude their investing.

If you decide to be "undudely" by picking individual stocks, bonds and other assets, you really have a lot of work to do. Do you enjoy it? Would you rather be at a bowling alley? When you write down your investing record and look at it objectively, how does your record compare to a low cost index-based alternative? Are you willing to do the work required to overcome you biases so you can make rational investing decisions?

Even people who are picking individual stocks, bonds and other assets can learn from the Dude. As an example, one of the hardest things to do as an *investor* is to not be overly focused on daily price variations. Watching asset prices wiggle back and forth *can* be mesmerizing. But watching prices move *all* the time *can* make people do nutty things. Unfortunately, many investors seem to think there is some sort of a financial prize for hyperactivity, when it is in fact a penalty because of fees, costs and the potential for more mistakes.

10. The Dude: "And, you know, he's got emotional problems, man."

Most mistakes in investing can be traced to causes that are psychological or emotional. One way to make fewer mistakes is to devote time and energy to learning about behavioral biases. Your goal should be to know yourself better so you make fewer mistakes.

11. The Dude: "I'm sorry, I wasn't listening."

Confirmation bias is a powerful human characteristic. People far too often refuse to listen to anything that may conflict with what they believe. This is part of the reason why it is

important to evaluate whether you have changed you mind about something important in the last year. If you have not made such a change over the past year you probably aren't listening. In the scene from the movie where the quote appears The Dude is not listening to the Malibu Police Chief. The words of the policeman are not pleasant so the Dude just blocks them out. In doing due diligence and research on a possible investment people too often see what they want to see. We all need friends who can tell us when we are not being objective.

12. The Dude: "I can't be worrying about that shit. Life goes on, man." "The Dude abides."

Learning from the past is a good practice, but it is more important to stay focused on the present. The past is, well, the past. Don't dwell on your mistakes. Learn from them and move on. Abide.

Notes:

The Big Lewowski trailer: https://www.youtube.com/watch?v=cd-go0oBF4Y

The Best of Big Lebowski: https://www.youtube.com/watch?v=V0aDEvmf5u0

Too good to be true: https://www.youtube.com/watch?v=1S0Ps7CQVyU

Cognitive Bias Codex: http://ritholtz.com/2016/09/cognitive-bias-codex/

Benoit Mandelbrot's Ideas about Investing and Markets (Made as Simple as Possible, but not Simpler).

December 9, 2017

Benoit Mandelbrot was a Polish-born, French and American "mathematician with broad interests in the practical sciences." I met him only once at a lecture at Microsoft Research before he passed away in 2010. Mandelbrot and Richard Hudson are the authors of the influential book *The Misbehavior of Markets: A Fractal View of Financial Turbulence.* I suggest you read this book for yourself (even though it is not an easy book to read). My comments on Mandelbrot in this post are shorter than usual, since Mandelbrot's own words convey his ideas well. I am not going to dig deeply into fractals in this post since most of you will stop reading, but I will explain generally what they are. You might want to think about recent movements in the market price of Bitcoin as you read this post and ask yourself how Mandelbrot's ideas may help explain them.

The intent of this post is to explain Mandelbrot's influence to someone who is not an expert. The other objective is to ask whether people who say they understand Mandelbrot's ideas actually invest or implement policies in ways that reflect that understanding. Is what they actually do consistent with what they claim to believe? This issue reminds me of a quotation

often mistakenly attributed to Mark Twain: "Everybody talks about the weather, but how many people do anything about it?" Stated differently, "Everybody talks about Mandelbrot's ideas, but how many people do anything about it?"

1."The idea of chance in markets is difficult to grasp, perhaps because… the millions of people who buy and sell securities are real individuals, complex and familiar. But to say the record of their transactions, the price chart, can be described by random processes is not to say the chart is irrational or haphazard; rather, it is to say it is unpredictable."

Making short-term predictions about how a price chart reflecting the actions of millions of people will fluctuate is more than just hard. The word Mandelbrot uses is "unpredictable" rather than difficult. Again: not predictable. Mandelbrot here is talking about an aggregate or macro phenomenon. Will a blind squirrel find a nut once in a while in making a macro predictions that times a market? Sure. But not more than twice in a row. Mandelbrot is not saying that investors should throw their hands in the air and quit, but rather that they should use the tools of probability in a more refined and nuanced way. Investors who like to know what they do not know or cannot know will benefit from Mandelbrot's ideas. Risk comes from now knowing what you are doing and avoiding those areas is a very good thing. If you knew exactly where you will die, the intelligent response is to never go there. The same principle applies in investing.

The good news is that there are other approaches to investing which work around the problem Mandelbrot identifies. Why would you try to predict the unpredictable when there are other investing methods that avoid this problem? Why swim across a section of a swiftly moving river containing a deadly whirlpool when shallow relatively easy to cross sections of the same river are nearby? This is especially true since no points are awarded for degree of difficulty in investing. n approach similar to Mandelbrot's is also advocated by the investor Howard Marks when he says you cannot predict. but you can prepare. Mandelbrot's version of that advice is:

"These techniques do not come closer to *forecasting* a price drop or rise on a specific day on the basis of past records. But they provide estimates of the probability of what the market might do and allow one to *prepare* for inevitable sea changes."

2. "Human nature yearns to see order and hierarchy in the world. It will invent it where it cannot find it." "The brain highlights what it imagines as patterns; it disregards contradictory information. "So limited is our knowledge that we resort, not to science, but to shamans."

The human desire for predictability and order will result in people sometimes seeing patterns that they believe will deliver certain outcomes. This human desire is often encouraged by promoters who know how to turn dysfunctional thinking into cash – their cash. Unfortunately, our brains can conspire against us when it comes to successful investing. Much of the work a successful investor must do is related to avoiding emotional or psychological mistakes. Even a random number generator will spit out results that a human brain will see as a pattern. There are some traders who try to claim that Mandelbrot borrowed ideas from the creator of Elliot Wave Theory. Mandelbrot himself responded to that claim by saying: "The idea is ancient, but his use and mine stand in absolute contrast." Elliot claimed to have spotted a pattern that can predict price moves. Mandelbrot is saying that the reverse is true. A side bar about complex adaptive systems might be useful here, but must wait for a

future post. Until then there is my blog post on Murray Gell-Mann if you are interested. When I asked a friend about this attempt to link Elliot's ideas to Mandelbrot he said: "Mandelbrot was heavily empirical. He was interested in describing how markets work and much less interested in the mechanisms. But he absolutely understood complexity." Another friend said: "Mandelbrot described complex systems correctly as discrete/quantum like systems and not 'waves.'"

3. "If you can find some market properties that remain consistent over time or place, you can … make sounder financial decisions."

Five examples of approaches to investing which can be an investor's friend because they are what Mandelbrot calls "consistent over time and place" are:

1. Low fees and expenses- this approach should never go out of style.
2. "Diversify as broadly as you can."- this approach is the only free lunch in investing.
3. Don't try to time markets- with this approach the investor instead prepares for unpredictable outcomes.
4. Focus on microeconomic factors impacting specific understandable businesses.
5. "The multifractal model successfully predicts what the data show: that at short time frames prices vary wildly, and at longer time frames they start to settle down."

These five approaches are the equivalent of places in a river where the water level is low and crossing is relatively easy. An investing system that is consistent with some of all of these five approaches has a greater probability of being successful.

4. "If you are going to use probability to model a financial market, then you had better use the right kind of probability.

- **Wild randomness is like the gaseous phase of matter: high energies, no structure, no volume. No telling what it can do, where it will go. The fluctuation from one value to the next is limitless and frightening.**
- **Mild randomness, then, is like the solid phase of matter: low energies, stable structures, well-defined volume. It stays where you put it.**
- **Slow randomness is intermediate between the others, the liquid state.**

Real markets are wild. Their price fluctuations can be hair-raising – far greater and more damaging than the mild variations of orthodox finance. That means that individual stocks and currencies are riskier than normally assumed. It means that stock portfolios are being put together incorrectly; far from managing risk, they may be magnifying it. It means that some trading strategies are misguided, and options mis-priced." "Every so often, not so rarely, prices change dramatically, and today prices move much more quickly and these changes are much more important. But it has always been like that. There are stories in the Merchant of Venice by Shakespeare, and even much older books than that, which talked about the existence of a category of people, bankers, who knew very well from experience that ships sometimes went safely on a long trip and sometimes didn't. And when they didn't return, it was a big loss to their business. A single loss could very well sink a big company."

When Mandelbrot said: “there is no telling where wild randomness will go” he was making a statement about the fundamental unpredictability of changes in short-term prices. He was not talking about, for example, using certain statistical factors to make long term predictions about an index. He was not talking about making predictions about the long term prices of a specific business using microeconomics principles. Mandelbrot was pointing out that the magnitude of fluctuations will be far greater than many people people imagine. Charlie Munger makes a similar point: “When people talk about sigmas in terms of disaster probabilities in markets, they’re crazy. They think probabilities in markets are Gaussian distributions because it’s easy to compute and teach, but if you think Gaussian distributions apply to markets, then you must believe in the tooth fairy. It reminds me of when I asked a doctor at a medical school why he was still teaching an outdated procedure, and he replied, ‘It’s easier to teach.’” Mandelbrot put it this way: “Anywhere the bell-curve assumption enters the financial calculations, an error can come out.” Portfolio theory “regards large market shifts as too unlikely to matter or as impossible to take into account. Typhoons, in effect, are defined out of existence.”

In Mandelbrot’s view markets are “fractal,” a name created by Mandelbrot in 1975 to describe repeating or self-similar mathematical patterns. Mandelbrot elaborates here:

“A fractal is a geometric shape that can be separated into parts, each of which is a reduced-scale version of the whole. In finance, this concept is not a rootless abstraction but a theoretical reformulation of a down-to-earth bit of market folklore— namely, that movements of a stock or currency all look alike when a market chart is enlarged or reduced so that it fits the same time and price scale. An observer then cannot tell which of the data concern prices that change from week to week, day to day or hour to hour.”

Robert Hagstrom, in his wonderful book *Investing the Last Liberal Art*, elaborates:

> What I find fascinating about Mandelbrot is not the mathematical rigor of fractals (which is obviously impressive) but the realization that he looked at nature’s constituents, as we all have, but saw something different. “Clouds are not spheres, mountains are not cones, coastlines are not circles, and bark is not smooth, nor does lightning travel in a straight line.”[1] Because his description of clouds and lightning is different from ours, it should not be surprising his explanation differed. Now we can better appreciate his late-night pronouncement that “failure to explain is caused by failure to describe.”

Fractal mathematics cannot predict outcomes that results from complex adaptive systems but they can tell us that such outcomes will inevitably happen sometime. All one can do then is prepare for their arrival and wait.

In a review of the book by Mandelbrot and Hudson Nassim Taleb writes:

People are so conditioned by advice offering charlatans in business books that anything remotely away from it seems, as I was told, quite "odd". BM's, of course, does not give you a recipe. It was therefore amusing to see the book reviews complaining about the "now what?"

The answer to "now what?" is to internalize that there is no "recipe" when it comes to the behavior of complex systems. People want a recipe so badly that getting over this desire arguably requires a process similar to the famous stages of the Kubler-Ross model: denial, anger, bargaining, depression and acceptance. Wisdom in no small part depends on accepting what you do not know or cannot know.

There are times to be aggressive as an investor and times to be very cautious. Knowing the difference is critical.

5. "Wild price swings, business failures, windfall trading profits – these are key phenomena. In all their drama and power, they should matter most to bankers, regulators and investors."

A small number of outcomes can drive the lion's share of financial returns. The FT captures in this paragraph an important point made by Mandelbrot:

"Mandelbrot distinguished between 'Joseph' effects and 'Noah' effects. Joseph effects – seven fat years here, seven lean years there – occurred when markets were evolving gradually and continuously. Noah effects were cataclysms – the Flood, or the week of September 11 2001, when the New York Stock Exchange closed for five days and dropped 7.5 per cent on re-opening. Because Joseph effects rule the market most of the time, they are what models measure. But Noah effects make and unmake investors."

As just one example, Professor Bessembinder writes:

"Four out of every seven common stocks that have appeared in the CRSP database since 1926 have lifetime buy-and-hold returns less than one-month Treasuries. When stated in

terms of lifetime dollar wealth creation, the best-performing four percent of listed companies explain the net gain for the entire U.S. stock market since 1926, as other stocks collectively matched Treasury bills. These results highlight the important role of positive skewness in the distribution of individual stock returns, attributable both to skewness in monthly returns and to the effects of compounding. The results help to explain why poorly-diversified active strategies most often underperform market averages."

6. "In finance, I believe the conventional models and their more recent 'fixes' violate the Hippocratic Oath to 'do no harm.' They are not merely wrong; they are dangerously wrong." "People think that risk means that if you invest $10, you may get back $11 if you're lucky, perhaps $10.30, but somewhere close to $10. In fact, if you look at the actual data of trading, not for every price, but for the important prices on the market, large price changes are observed often enough to matter a lot." "If one does not take account of the possibility of a price going up very suddenly, or going down very suddenly, one takes a risk that is higher than anyone wants."

It is common now for people to say, "Well, I understand long tails since I have studied events like the failure of Long-Term Capital Management and I have now included the impact of these fat tails risks in my financial models." As I noted above, what some people say they believe is often not what they actually do. Mandelbrot addressed this overconfident view when he said: "Conventional models … are not merely wrong; they are dangerously wrong. They are like a shipbuilder who assumes that gales are rare and hurricanes myth; so he builds his vessel for speed, capacity and comfort — giving little thought to stability and strength." Mandelbrot co-wrote an article with Nassim Taleb in which they say:

Your mutual fund's annual report, for example, may contain a measure of risk (usually something called beta). It would indeed be useful to know just how risky your fund is, but this number won't tell you. Nor will any of the other quantities spewed out by the pseudoscience of finance: standard deviation, the Sharpe ratio, variance, correlation, alpha, value at risk, even the Black-Scholes option-pricing model.

The problem with all these measures is that they are built upon the statistical device known as the bell curve. This means they disregard big market moves: They focus on the grass and miss out on the (gigantic) trees. Rare and unpredictably large deviations like the collapse of Enron's stock price in 2001 or the spectacular rise of Cisco's in the 1990s have a dramatic impact on long-term returns –but "risk" and "variance" disregard them.

7. "In a networked world, mayhem in one market spreads instantaneously to all others—and we have only the vaguest of notions how this happens, or how to regulate it."

Mandelbrot is pointing out that an increasingly networked world is a much more turbulent and unpredictable world. Billions of people with supercomputers in their pockets interconnected by networks creates the potential for mayhem in addition to valuable new products and services. When I hear people talk about a Great Stagnation I want to laugh out loud. The pace of actual change and the potential for more massive new shifts has never been greater. As Charlie Munger says: "The great lesson in microeconomics is to discriminate between when technology is going to help you and when it's going to kill you…there are all kinds of wonderful new inventions that give you nothing as owners except the opportunity to spend a lot more money in a business that's still going to be lousy. The money still won't

come to you. All of the advantages from great improvements are going to flow through to the customers."

The types of feedback loops that can drive societal, economic and technical change have been put on steroids in this hyper connected digital era. If you think you understand all the implications of this increase in "inter-connectedness" you do not understand the problem. The old bumper sticker that said "Shit happens" must now say: "Shit happens faster and at far greater scale." Bitcoins, which are themselves digital, are another accelerator of the phenomenon Mandelbrot wrote and talked about.

8-12 are best understood by reading Mandelbrot in the original. When you read this it is a good idea to keep in mind this point made by Paul Samuelson: "Benoit Mandelbrot has been an incorrigibly original mind, and economists have been blessed by his insights. On the scroll of great non-economists who have advanced economics by quantum leaps, next to John von Neumann we read the name of Benoit Mandelbrot" (Paul Samuelson, Gaussian Self-Affinity). If you can't read this screen shot due to print quality, I suggest you buy the book. If you can read it, I suggest you buy the book anyway!

work. Like the popular-finance press, I can boil some of them down to five "rules" of market behavior—concepts that, if grasped and acted upon, can help lessen our financial vulnerability.

Rule I. Markets are risky.

Extreme price swings are the norm in financial markets—not aberrations that can be ignored. Price movements do not follow the well-mannered bell curve assumed by modern finance; they follow a more violent curve that makes an investor's ride much bumpier. A sound trading strategy or portfolio metric would build this cold, hard fact into its foundations. Exactly how depends on the resources, talents, and stomach for risk of the individual; as ever, differing opinions make a market. But already, the mere knowledge that markets vary wildly is useful. It can be—and increasingly is—used in computer simulations to "stress-test" a portfolio, to play a wider and darker range of "what-if?" games on paper, before committing hard cash to a trading strategy. Thus, a cautious investor can build a portfolio with greater security than the standard models suggest. An aggressive trader can be better prepared to pounce on moments of high volatility. And a prudent market regulator can be more alert to urgent problems—thereby averting financial catastrophe and macroeconomic harm. Some commentators have called for a "Richter scale" of market turbulence; like that famous measure of earthquake intensity, its financial analog would rank market tremors and provide a scale for regulators to judge the severity of impending problems. Forewarned is forearmed.

Rule II. Trouble runs in streaks.

Market turbulence tends to cluster. This is no surprise to an experienced trader. In financial dealing-rooms across the world, the first fifteen minutes of trading each morning are critically important; it is when experienced traders, staring at their screens, take the temperature of the market. They know that when a market opens choppily, it may well continue that way. They know that a wild Tuesday may well be followed by a wilder Wednesday. And they also know that it is in those wildest moments—the rare but recurring crises of the financial world—that the biggest fortunes of Wall Street are made and lost. They need no economists to tell them all this. But their intuition, not included in the standard model of efficient markets, is entirely validated by the multifractal model.

Rule III. Markets have a personality.

Prices are not driven solely by real-world events, news, and people. When investors, speculators, industrialists, and bankers come together in a real marketplace, a special, new kind of dynamic emerges—greater than, and different from, the sum of the parts. To use the economists' terms: In substantial part, prices are determined by *endogenous* effects peculiar to the inner workings of the markets themselves, rather than solely by the *exogenous* action of outside events. Moreover, this internal market mechanism is remarkably durable. Wars start, peace returns, economies expand, firms fail—all these come and go, affecting prices. But the fundamental process by which prices react to news does not change. A mathematician would say market processes are "stationary." This contradicts some would-be reformers of the random-walk model who explain the way volatility clusters by asserting that the market is in some way changing, that volatility varies because the pricing mechanism varies. Wrong. A striking example: My analysis of cotton prices over the past century shows the same broad pattern of price variability at the turn of the last century when prices were unregulated, as there was in the 1930s when prices were regulated as part of the New Deal.

Rule IV. Markets mislead.

Patterns are the fool's gold of financial markets. The power of chance suffices to create spurious patterns and pseudo-cycles that, for all the world, appear predictable and bankable. But a financial market is especially prone to such statistical mirages. My mathematical models can generate charts that—purely by the operation of random processes—appear to trend and cycle. They would fool any professional "chartist." Likewise, bubbles and crashes are inherent to markets. They are the inevitable consequence of the human need to find patterns in the patternless.

Rule V. Market time is relative.

There is what one may call a relativity of time in financial markets. Early on, but mostly when developing the multifractal model, I came to think of markets as operating on their own "trading time"—quite distinct from the linear "clock time" in which we normally think. This trading time speeds up the clock in periods of high volatility, and slows it down in periods of stability. Mathematically, I can write an equation showing how one time frame relates to the other and use it to generate the same kind of jagged price series that we observe in real life. This is how the successful forgery shown among the previous charts was made. It is almost as if dealing rooms need, besides the standard row of wallclocks showing the time in Tokyo, London, and New York, a fourth clock showing "Greenwich Market Time."

This last point highlights an important subtext of this book: Market professionals know far more than they even realize. Professional traders often speak of a "fast" market or a "slow" one, depending on how they judge the volatility at that moment. They would quickly recognize, and affirm, the concept of trading time. Likewise, a bit of market folk-wisdom holds that all charts look alike: Without the identifying legends, one cannot tell if a price chart covers eighteen minutes, eighteen months, or eighteen years. This will be expressed by saying that markets scale. Even the financial press scales: There are annual reviews, quarterly bulletins, monthly newsletters, weekly magazines, daily newspapers, and tick-by-tick electronic newswires and Internet services. Market folklore and anecdote, of course, cannot confirm the multifractal model; only rigorous statistical analysis can do that. But the folklore does signal that the model is on the right track.

The multifractal model also has many implications for practical finance. As indicated, portfolio theory needs rethinking; options need revaluing; trading strategies need review. A small example: "stop-loss" orders are imperfect, to put it mildly. Many investors or traders leave instructions to close a position when a price hits a particular target. But as many have learned to their grief, when prices are really flying, they typically whiz past the target so fast that even the most attentive broker cannot execute the "sell" orders fast enough. Result: Greater losses, or smaller profit, than the investor intended. Another example: the mathematics of this model offers some potentially new yardsticks to measure volatility and risk. Instead of the standard deviations and "betas" of conventional finance, one can imagine new scales based on two new variables to be described later in this book: the H exponent of price dependence, and the α parameter characterizing volatility. A few fund managers have experimented with these

Notes:

Video interviews:

FT interview: https://www.youtube.com/watch?v=vxbxXBrOPS8

Microsoft Research talk (sorry for the sound quality)
https://www.youtube.com/watch?v=AQgXmjUwsMo

Inequality and finance; differences between Bachelier and Mandelbrot
https://www.youtube.com/watch?v=6iVWFsxkdyo

Physics and Finance https://www.youtube.com/watch?v=vLiItUfqdS0

Stories: https://www.webofstories.com/play/benoit.mandelbrot/127

Mandelbrot's finance book: https://www.amazon.com/Misbehavior-Markets-Fractal-Financial-Turbulence/dp/0465043577

Wikipedia bio: https://en.wikipedia.org/wiki/Benoit_Mandelbrot

Lessons from Norman Augustine About Innovation and his Famous Laws

December 16, 2017

Norman Augustine has a reputation for saying exactly what he means. When he says something like: "If stock market experts were so expert, they would be buying stock, not selling advice," he transforms an obvious point into a humorous barb. As another example of his wit, he recently said: "We've all heard the criticism 'He talks too much.' When was the last time you heard someone criticized for listening too much?" Augustine has been the CEO of both Martin Marietta and Lockheed. He started his career at Douglas Aircraft and served as United States Under Secretary of the Army.

Augustine is the creator of the satirical Augustine's Laws, some of which appear below. All of the laws have been assembled in a book he wrote entitled *Augustine's Laws*.

1. **"There are a large number of factors that make a company good or not good at innovation. One does have to take risks that have been carefully considered if one hopes to produce change, which is what innovation is about."**

There are many important rules in business. The most fundamental aspect of innovation in a business is that the innovator must break at least one of those rules. Part of what makes innovation hard is that breaking an important rule to create change happens in the context of

risk, uncertainty and ignorance. What makes the challenge of creating a meaningful innovation even harder is an issues cause by scale: as the business gets bigger the innovation must be correspondingly bigger to financially "move the needle." For example, a Fortune 500 business must innovate in bis ways to impact its financial results. One of the very best examples of rule breaking creating breakthrough innovation at scale is what Reed Hastings has done at Netflix over the years. For example, streaming movies and creating original content may seem like obvious choices now but they were not at the time Netflix decided to do so. When mistakes were made, like decision to to spin off the company's legacy DVD business under the name Qwikster, Netflix was willing to reverse a decision. When the world is changing as quickly as it is today, being willing to change your mind when new data becomes available is increasingly an essential attribute of success.

The businesses that are most successful at creating and profiting from valuable innovations have developed skill in determining which rule or rules to break. The best way to do develop this skill without a lot of personal pain caused by making mistakes is to look at many examples of people who have successfully done and not done so. The objective is to try recognize the patterns that can increase the probability of success. After all, good judgment is fundamentally about pattern recognition. People who recognize this have said many times over the years: "Good judgment comes from experience, and experience comes from poor judgment."

Of course, in order to know which rules to break it is a good idea to know the rules in the first place. Do innovators sometimes break a rule that they did not even know was a rule? Sure. But that is relying more on luck than is wise. Being lucky is great, but I would rather be skilled and lucky than just lucky, because the expected value is higher. One caveat comes with rule breaking: the more rules that are broken in any given business at one time, the greater the probability that the consequences of breaking one of the rules will kill the innovation and or the business. As was the case with Goldilocks, the amount of rule breaking at any given time at a business should be "just right."

2. "Part of creating a culture [which generates innovation] is a willingness to tolerate occasional failure, perhaps even more than occasional failure. I say that not because I want to encourage failure, but if people are punished for every failure, then you won't have innovation. If you have a baseball manager who wants to get rid of his .300 hitter every time he strikes out, he's not going to have many .300 hitters around. When you're trying to innovate, chances are you're going to have more failures than successes."

Most attempts at innovation fail. But the innovations that are a success are so valuable that the failure is dwarfed by the resulting benefits. That is the way evolution and life works. The pain associated with the inevitable failures is best overcome by making intelligent choices, the best of which offer significant convexity (i.e., huge upside and limited downside). Here is what I wrote about Sam Zell's approach to making decisions like this in a post long ago:

"Listen, business is easy. If you've got a low downside and a big upside, you go do it. If you've got a big downside and a small upside, you run away. The only time you have any work to do is when you have a big downside and a big upside." This statement is all about the value of seeking positive optionality. Every once in a while, if you are looking hard for opportunities, you will find a mispriced bet within your circle of competence with a relatively capped downside and a huge potential upside. It is wise to bet aggressively in these cases since it allows you to harvest positive optionality. Putting money at risk when the optionality

of the situation is negative is a fool's errand. Situations with a big up side and a big downside are by contrast problematic. This situation is likely to result in the most work and for that reason alone it may be wise to put these decisions in the "too hard" pile.

What the most successful innovators do today is test innovative new solutions in the real world using the equivalent of the scientific method and modern data science driven tools. The most effective way to think about that process is that you are solving the what Andy Rachleff called "The Value Hypothesis." Rachleff describes his approach this way:

"A value hypothesis is an attempt to articulate the key assumption that underlies why a customer is likely to use your product. Identifying a compelling value hypothesis is what I call finding product/market fit. A value hypothesis identifies the features you need to build, the audience that's likely to care, and the business model required to entice a customer to buy your product. Companies often go through many iterations before they find product/market fit, if they ever do."

I was talking to an Amazon employee recently who was re-reading the book *The Everything Store*. She said that what struck her about the company and its culture is the amount of failure that it took to create the innovations that drive the business. She said that Bezos has created a company that is driven by innovation in a business that some people thought was a commodity business. Bezos has said:

"At Amazon, we have to grow the size of our failures as the size of our company grows," he said on Saturday. "We have to make bigger and bigger failures — otherwise none of our failures will be needle movers. It's a very bad sign over the long run if Amazon wasn't making larger and larger failures. If you do that all along the way, that is going to protect you from ever having to make that big 'hail Mary' bet that you sometimes see companies make right before they fail or go out of existence. …You have to be experimental to accomplish anything important. That means you will be wrong a lot. You will try something on your way to that vision and that will be the wrong decision. You'll have to back up and take a little course correction and try again. …If you already know it's going to work, it's not an experiment. "Only through experimentation can you get real invention. The most important inventions come from trial and error with lots of failure."

3. **"Another part of creating the right environment is to give people a reasonable amount of freedom to pursue opportunities that might have been unexpected. There are many examples, but the one I like best is the discovery of penicillin; its discovery was really an accident, but Fleming had the opportunity to pursue what struck him as kind of an interesting observation, and as a result he discovered penicillin. If he had been constrained to do only the things that his defined projects were calling for, those that were dictated from above, somebody else would've had to find penicillin later on. I think a big part of innovation is to give people the freedom to think out of the box."**

When people conduct experiments about a value or growth hypothesis, sometimes they discover innovation that they did not expect to find. The best innovators seize that opportunity. For example, an entrepreneur can begin an experiment to find a value hypothesis solution that was intended to create a video game and they end up with a result that is instead a communication system. Being willing to consider the unexpected like this means the

entrepreneur has captured the benefits of optionality. In other words, the best entrepreneurs recognize favorable outcomes when they occur. The beauty of this approach is that successful prediction isn't necessarily required. In short, the best entrepreneurs will know unexpected innovation when they see it and capitalize when they do.

4. **"You can say over and over that innovation is important and that it requires taking risks, and you can even write it in books, but that doesn't have much meaning. People watch how you act, what you do when someone takes a reasonable risk and fails, despite the fact that they did their very best. You have to be understanding of that. Other people watch and see how the management team reacts."**

If employees do not see management *walking the talk* about how employees are treated if an effort to create innovation fails, the right people in the company will not take risks. It is that simple. This is important since as noted above most attempts to create innovation fail. So an effort is needed to help employees who take risks associated with an innovation that is not successful. For example, at one highly innovative company known for its innovative culture anyone who works on an unsuccessful product has 90 days to find a new job in the company and receives the active assistance of a human resources person in finding that job. Another way for managers to kill innovation at a business is to politicize the process and to repeatedly not let innovation see the light of day. If employees see that the business is only focused on existing processes, product and methods, they will be far less interested in being innovative. There comes a time where the management of a business must step up and put resources behind an innovation. It is at that point the potential innovation is not just a small incubation, but rather something that requires significant resources which may distract the company from its existing business. The innovation may even be disruptive of the existing business. At this point in the business there is no substitute for courage combined with rational thought. The math of the calculation is simple: "Take the probability of loss times the amount of possible loss from the probability of gain times the amount of possible gain." Judgement about what to insert as the variables in that equation is what makes a great manager/entrepreneur/founder.

5. **"The early bird gets the worm. The early worm… gets eaten."**

Craig McCaw has said to me many times that pioneers often get killed by arrow in the back. He is an expert on this topic since he was a pioneer in both the cable TV and wireless businesses. He survived while many others died or quit. The goal of an innovator is to be the "last mover" rather than the "first mover." First-mover advantage, is the advantage gained by the initial significant business in a market. Sometimes the first mover is able to harvest network effects and is the last mover. Or not. It depends. Peter Thiel talks about a "Last Mover Advantage." In his view: "People often talk about 'first mover advantage.' But focusing on that may be problematic; you might move first then fade away…. More important than being the first mover is the last mover. You have to be durable." As an example, Facebook was not the first social network and Google was not the first search engine.

6. **"Find good people, tell them what you want, and then leave them alone. That's my management secret."**

Augustine is similar to Warren Buffett in that he believes the core of what a manager must do is find great people. If you can find great people, you can delegate with confidence. Buffett says he "delegates to the point of abdication." Augustine has a different approach: "One of the big mistakes that some leaders make is they delegate a job and then keep trying to help do the job. You've got to watch. You can't delegate a job and then walk away." Watching people who work for you while at the same time leaving them alone is tricky, but if striking the right balance was easy great managers would be far more common. The difference between these Buffett and Augustine is in part based on scope scope. Buffett's approach is more about choosing the right CEO who then finds more great people for his business, whereas Augustine is speaking more generally about placing great people at many levels of an organization. The general principle is: the more time you spend finding great people the more you can delegate with confidence.

7. **"Motivation will almost always beat mere talent." "A hungry dog hunts best. A hungrier dog hunts even better."**

Augustine is not saying that talent isn't important. He is instead saying that talent does not matter as much as motivation and dedication. Everything is relative as Einstein famously said. This point about motivation and dedication is essentially what other people are saying when they make the point that missionaries are more often successful than mercenaries. Some mercenaries do succeed. There are also plenty of missionaries who do not achieve their goals, but they are more likely to do so than mercenaries.

8. **"No. 1 is integrity. Judgment is awfully important. It's nice if you're at least halfway smart and that you work hard."**

No amount of talent or motivation will result in success if the employee does not have integrity. In fact, a talented and motivated person who does not have integrity is more dangerous and can cause more frequent and bigger problems. No one should want an employee who is smart, motivated and hardworking but who has low integrity. That is a recipe for disaster. Judgement, which is Augustine's #2 attribute, is hard to teach so it is great to find a person who has that already. Like Buffett, Augustine wants a person who works hard. He also believes that a very high IQ is not necessary. The nature of the gap between real IQ and imagined IQ is important. What you want is someone who has an IQ that is lower than what they think it is since that helps avoid mistakes cause by hubris. Humility is an underrated attribute in an employee.

9. **"The weaker the data available upon which to base one's conclusion, the greater the precision which should be quoted in order to give the data authenticity."**

This is something that you see all the time in the form of false precision. Augustine gave this example of this principle in his book:

The use of the above law is actually fairly widespread, with one example being the Army's official estimate included in a long-term contract of the inflation index which will prevail for procurement in the sixteenth year from the time of the estimate (i.e., in 1995). This index was stated to be 2.6719—five-figure accuracy—an amazing feat of prescience, particularly in view of the White House Office of Management and Budget's near-simultaneous adjustment of the inflation rate for the next twelve months by about three percentage points!

10. **"Fools rush in where incumbents fear to tread."**

If you read his book you will see that in this quote Augustine is referring to people and businesses who make bids without knowing the risks and costs involved. But there is another interpretation. Nassim Taleb wrote in his book *Antifragile*: "the idea present in California, and voiced by Steve Jobs at a famous speech: "Stay hungry, stay foolish." He probably meant "Be crazy but retain the rationality of choosing the upper bound when you see it…. Any trial and error can be seen as the expression of an option, so long as one is capable of identifying a favorable result and exploiting it…" Society does want to have a significant number of "foolish" people trying to make positive dreams come true. That is no small part of how we generate breakthrough innovation.

11. **"We knew that [Russia charging NASA more for Soyuz rides to the space station] was going to happen. I mean, when you have a unique position in the marketplace, it's almost inevitable."**

Augustine is talking in this example about wholesale transfer pricing. Wholesale transfer pricing = the bargaining power of company A that supplies a unique product XYZ to Company B which may enable company A to take the profits of company B by increasing the wholesale price of XYZ. The principle is simple- it is your options that matter. Famous *Getting to Yes* author and negotiation expert Roger Fisher referred to this as a BATNA (best alternative to a negotiated agreement). If you have a single supplier for anything or a very hard time changing your supplier you have have a wholesale transfer pricing problem.

12. **"Bulls do not win bullfights; people do. People do not win people fights; lawyers do."**

People tend to be far too quick to turn to lawyers to resolve a dispute. Litigation especially should be considered a last resort alternative. Unfortunately, the situation can rapidly deteriorate once lawyers are involved. The simplest way to avoid or resolve conflicts is to anticipate them and to act quickly to resolve them before they escalate. What makes a relationship work is a mutually beneficial relationship. No amount of lawyers, arbitration or litigation can keep a relationship in place if one party no longer sees any benefit in the

relationship. In my book on negotiation, which is available free on my web site, is this paragraph:

> Preserving the negotiated agreement can be accomplished by structuring the exchange of commitments properly, as well as by working hard at postnegotiation relations. One way of assuring that mutual interest continues is to create a commitment to the relationship itself. A negotiator who has invested significantly in building a relationship will be hesitant to breach an agreement. An investment in the relationship can be created by involving each person in the negotiating process and creating a sense of shared pride.

Extra Norman Augustine quotes:

A picture from Augustine's book on his "Laws":

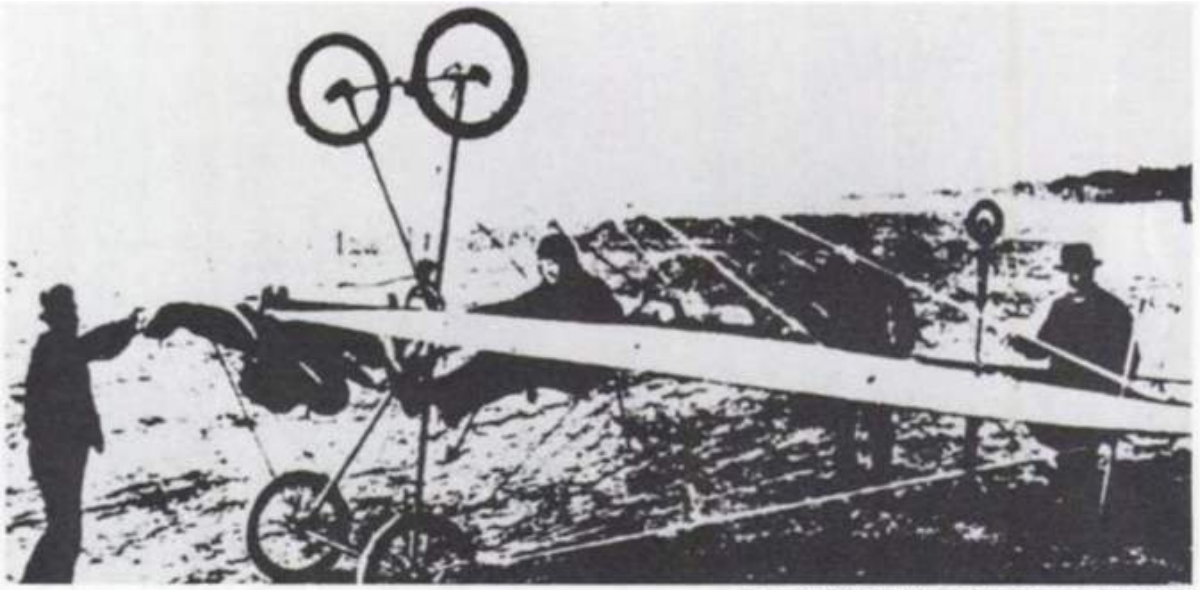

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"Even the exuberant should have a contingency plan."

"There are no lazy veteran lion hunters."

"It is better to be the reorganizer than the reorganizee."

"Most projects start out slowly – and then sort of taper off."

"For every scientific (or engineering) action, there is an equal and opposite social reaction."

“The last 10 percent of performance generates one-third of the cost and two-thirds of the problems.” “One-tenth of the participants produce over one-third of the output. Increasing the number of participants merely reduces the average output.”

“Ninety percent of the time things will turn out worse than you expect. The other 10 percent of the time you had no right to expect so much.”

“Software is like entropy. It is difficult to grasp, weighs nothing, and obeys the Second Law of Thermodynamics; i.e., it always increases.”

“The best way to make a silk purse from a sow’s ear is to begin with a silk sow. The same is true of money.”

Notes:

Augustine’s Book: https://www.amazon.com/Augustines-Chairman-Lockheed-Corporation-Augustine/dp/1563472406

Investing and Business Lessons from The Princess Bride

December 22, 2017

If you have not at least watched the movie version of *The Princess Bride*, I suggest that you review your priorities in life.

“The Princess Bride was directed by Rob Reiner, who was in the midst of a dynamite run that also included *This Is Spinal Tap*, *The Sure Thing*, *Stand By Me*, *When Harry Met Sally*, *Misery* and *A Few Good Men;* and written by William Goldman, who also wrote the

book on which it was based. Goldman also wrote the screenplays for *Butch Cassidy and the Sundance Kid* and *All The President's Men*." "The film they made together goes something like this: in a fantasy kingdom, the evil Prince Humperdinck (Chris Sarandon) decides to marry simple farm girl Buttercup (Robin Wright), who is mourning the loss of her true love, Westley (Cary Elwes), following his untimely demise. When Westley reappears, he must save her from the evil prince and his henchman, Count Rugen (Christopher Guest), with the help of bad-guys-turned-good-guys Fezzik (Andre the Giant) and Inigo (Mandy Patinkin), while avoiding their still-a-bad-guy boss, Vizzini (Wallace Shawn). And this all takes place inside a modern-day frame, in which a kind grandfather (Peter Falk) reads the book to his sick grandson (teeny Fred Savage, before *The Wonder Years*)."

Also in the movie is Billy Crystal, who plays the part of Miracle Max. Mandy Patinkin has said this about working with Crystal: "He had in cataract contact lenses so he couldn't really see. He was making up 13th-century period jokes. The only injury I received on the entire movie was I bruised a rib holding in my laughter." Variety tells this story about the movie: "Reiner had to walk away from the shooting because he couldn't stop laughing, especially when Crystal said, 'True love is the greatest thing in the world, except for a nice MLT — mutton, lettuce, and tomato sandwich, where the mutton is nice and lean and the tomatoes are ripe.'" Crystal told the makeup team that he wanted Miracle Max to look like a cross between former Yankees manager Casey Stengel and his grandmother. Crystal was filmed for three ten hour days in the making of this movie and never told the same joke twice.

True love is a great theme of the movie but so are innovation, duplicity and hubris. As the first of several asides, when the writer Goldman's two daughters were asked what they would want in a story the first replied "A princess!" and the second said "A bride!"

1.

Vizzini: "He didn't fall? Inconceivable!"

Inigo: "You keep using that word. I do not think it means what you think it means."

Vizzini is using the word "inconceivable" when he should be using the word "improbable." This difference gets to the heart of what I wrote about in my recent blog post on Benoit Mandelbrot. When you are faced with situations like investing or making a business decision, you must take into account that the probability distribution of outcomes may not be a "Bell Curve." For example, it may not be probable that Wesley survived the cutting of the rope as he tried to scale the cliff, but it is conceivable that he might do so.

In trying to understand the movie it is important to think about Goldman's most famous statement. "The thing they'll end up writing on my tombstone is the phrase 'Nobody Knows Anything.'" Goldman explains the "nobody knows anything" idea in this way:

"I look at movies and I think what works and what doesn't work, and it's got nothing to do with quality. But there is something that they can't figure out how to manufacture: word of mouth. That's the great problem the studios have. If they could figure out how to manufacture that, they could all be relaxed about the world. But you can't figure out why people say, "I want to see that," and, "No, I don't want to see that." "No one has the least idea what is going to work," he observes. "The minute people start acting like they know everything, we're all in trouble. Nobody thought Taken would do $100m. Nobody thought

Liam Neeson would make it as an action star at this stage in his career." "When I was thirty, I got to work doctoring a show on Broadway for George Abbott, who was the most successful director in the history of American theatre. He said, "You can't tell anything until you get hot bodies out there." And I said, "What are hot bodies, Mr. Abbott?" He said, "People who don't know your mother. People who want to come to the theatre and enjoy themselves or not and if they don't, they'll leave." And that's still true. They spend all this money hyping all these movies that open on Friday and they've gotten very skilful, but you still don't know what's going to work."

The Guardian illustrates Goldman's "nobody knows anything" principle with this example:

"In the late-60s, Goldman sold his first original screenplay – a little script called Butch Cassidy and the Sundance Kid – to 20th Century Fox for $400,000, a record at the time. Goldman, already a successful literary novelist who'd shown his gift for cinema by adapting Harper from a Ross McDonald book, felt the fee justified the eight years of research he'd put into the story, not to mention the script's commercial potential. But film critics, particularly those from Goldman's adopted home of New York, didn't agree. Apparently resentful of his big payday, the New Yorker review appeared under the headline "The Bottom of the Pit". Goldman and director George Roy Hill were in Manhattan the day the film was released. "When we got killed [by the critics], we were just crushed," he recalls. "So George and I walked over to a theatre at 57th and 3rd and we asked to see the manager. He came out and when we asked how the film was doing, he said, 'We're selling out all the shows and the audiences love it.' Still, we thought it might only be doing well in that theatre. So he volunteered to phone the manager at a theatre in Times Square – can you imagine anyone doing that today? – and he said the same thing. George turned to me and said: 'Well, maybe it's not a disaster after all.'" Butch went on to become the highest-grossing film of 1969 and won four Oscars, including Best Screenplay.

Predicting what people will do, particularly if it involves word of mouth is best discovered through experimentation rather than prediction. The best article on this topic is written by Duncan Watts and is entitled: "Is Justin Timberlake a Product of Cumulative Advantage?" As is usual, when I make a refence like this, a link to the article or book is in the Notes below.

A book entitled, *The Princess Bride and Philosophy: Inconceivable!* argues that Goldman is making a deeper point:

> Nevertheless, Vizzini would certainly say that the existence of Descartes's malicious demon is "Inconceivable!" And while it actually is conceivable ("You keep using that word—I do not think it means what you think it means."), it *is* exceedingly unlikely. It's a crazy idea. Not even Descartes thought that there really was a malicious demon using "all his energies in order to deceive me." He was just using this imaginative exercise to test the certainty of what he believed.

I'm somewhat skeptical of this interpretation, but I am making some unusual comments in this post myself.

2.

Miracle Max: "There's a big difference between mostly dead and all dead. Mostly dead, is slightly alive."

Miracle Max is talking about a danger associated with "Gambler's Ruin." To invest capital you must first have capital. Ed Torp describes the danger in this way:

"If you bet too much you're likely to be wiped out…. You have to make sure that you don't over-bet. Suppose you have a 5% edge over your opponent when tossing a coin. The optimal thing to do, if you want to get rich, is to bet 5% of your wealth on each toss — but never more. If you bet much more you can be ruined, even if you have a favorable situation. It's a formula Bell Labs scientist John Kelly devised in the 1950s."

To have a chance of outperforming a market index you must first stay in the game. In other words, if you have zero capital it is impossible to be an investor. For much the same reason Walter Schloss once said: "Remember it's your money and generally it is harder to keep money than to make it. Once you lose a lot of money it is hard to make it back."

3.

Inigo: "There is but one working castle gate. And it is guarded by sixty men."

This seems like a reference to something Warren Buffett has said: "Capitalism is all about somebody coming in trying to take the castle. What you need is a castle with some form of durable competitive advantage, thus an economic castle with an economic moat around it to protect the corporate profits from its fierce competitors." Unfortunately, someone eventually events a weapon like the cannon and the walls of the castle become a big cost burden rather than an asset. I have written several blog posts on moats. Prince Humperdinck's castle looks impressive, but it is breached by the heroes with a few props, a clever ruse and bravery. As an aside, the castle used in the movie is Haddon Hall, a fortified country house rather than a real castle with an origin traceable to sometime before 1087. There is no actual moat at the castle, but remember that the film's budget was tight. Changes to the book were made in the screenplay to reduce costs, such as changing the Zoo of Death into the Pit of Despair. Creating a Zoo of Death is as you know very expensive.

4.

Westley: "And our assets?"

Inigo: "Your brains, Fezzik's strength, my steel."

Goldman is describing the innovation process in this scene that I wrote about last week. Inigo believes that Westley will invent an innovative solution that will enable them to beach the defenses of the castle. A wheelbarrow, a cloak and fire are used to great effect in in breaching the walls of the castle. The making of the movie itself is an example of innovation. "Reiner had a tough time marketing The Princess Bride because it was kind of genre-less. Swashbuckling comedy? Charming, witty fable? Tale of love and revenge? Nothing felt right. Reiner feared he had a "Wizard of Oz" on his hands – and "The Wizard of Oz" was a flop when it first hit theaters in 1939." Of all the movies released in 1987, the Princess Bride ranked just 41st in domestic grosses, bringing in $30,857,814. " As a reference point, the movie "Three Men and a Baby" brought in $167,780,960 that year. Elwes, who played

Westley, explains in his book about the movie that "'The Princess Bride really didn't have an audience when it came out. It gained popularity in the VHS marketplace."

5.

Inigo: "I just work for Vizzini to pay the bills… not a lot of money in revenge."

Mandy Patinkin who played Inigo has said that this is his favorite line from the movie. Inigo is expressing a view that is similar to Charlie Munger who once said: "Generally speaking, envy, resentment, revenge and self-pity are disastrous modes of thought." A passage in the book *The Princess Bride and Philosophy: Inconceivable*! examines Inigo's situation:

> We might think that orienting your whole life to one singular purpose, especially when that purpose is revenge, is a slightly on the south side of sane. But Inigo is nothing but sane (even though he first spells out his purpose on the Cliffs of Insanity). Inigo has got his script all planned out for when he finally meets the Six-Fingered Man; this much he relates to Westley relatively soon after meeting him (as the Man in Black)[redacted]

Patinkin said that when he stabbed Count Rugen in this scene he felt like he was killing the cancer that killed his father, and "for a moment, he was alive. And my fairy tale came true."

A situation involving revenge in my own life happened when my five-year-old son opened a birthday gift from his grandfather, he discovered a water pistol. He squealed with delight and headed for the nearest sink. I was not so pleased. I turned to my father and said, "I'm surprised at you. Don't you remember how we used to drive you crazy with water guns?" My father smiled and then replied, "I remember." As another aside, "Revenge" is the name of the pirate ship of Dred Pirate Roberts. Also, there was a real and very famous pirate named Black Bart Roberts.

6.

"Everyone had told her, since she became a princess-in-training, that she was very likely the most beautiful woman in the world. Now she was going to be the richest and the most powerful as well. Don't expect too much from life, Buttercup told herself as she rode along. Learn to be satisfied with what you have."

This is a reference by Goldman to an idea that is central to a classic Charlie Munger quip: "The idea of caring that someone is making money faster is one of the deadly sins. Envy is a really stupid sin because it's the only one you could never possibly have any fun at. There's a lot of pain and no fun. Why would you want to get on that trolley?" Envy can lead to fear of missing out (FOMO) which is what causes things like the Internet bubble. Warren Buffett tells the following joke about herd behavior that can be caused by envy:

A dead oil prospector arrives at the pearly gates and is told by St Peter that Heaven's allocation for miners is full. The prospector leans through the gates and yells: "Oil discovered in Hell." A stampede of men with picks and shovels streams out of Heaven. An impressed St Peter waves the prospector through. "No thanks," says the prospector. "I'm going to check out that Hell rumor. Maybe there is some truth in it after all."

As another aside, since Buttercup never actually married Prince Humperdink, she technically wasn't a princess. But where is the fun in that?

7.

Westley: "Ha! Your pig fiance is too late. A few more steps and we'll be safe in the fire swamp.".

Buttercup: "We'll never survive."

Westley: "Nonsense. You're only saying that because no one ever has."

Westley exhibits a classic missionary attitude in this scene and many others in the movie. Miracle Max is also a bit of a missionary in the movie since at one point he says: "I never worked for so little. Except once, and that was a very noble cause." The writer Goldman himself exhibited missionary rather than a mercenary traits when he said in an interview: "You can only write what you give a shit about. You got to keep on doing that. If for example, you don't like special effects movies, don't try to write one because it will suck."

I love the following story told by Goldman about the making of *The Princess Bride* that also demonstrates a missionary attitude. The new person in a role at a business too often feels like they must throw out any idea that could be attributed to their predecessor:

"Only one person per studio has anything resembling power, and that is the GG. The GG, you see, can make a picture happen. He (or she) is the one who releases the fifty million bucks—if your movie is aimed for Sundance. Triple that if it's a special effects job. Anyway, the GG at Fox liked *The Princess Bride.*

Problem: he wasn't sure it was a movie. So we struck a peculiar arrangement—they would buy the book, but they would not buy the screenplay unless they decided to move forward. In other words, we both owned half the pie. So even though

I was tired from finishing the abridgement, I went on nervous energy and did the screenplay immediately after.

The GG at Fox sent it to Richard Lester in London—Lester directed, among others, *A Hard Day's Night,* the first wonderful Beatles film—and we met, worked, solved problems. The GG was thrilled, we were a *go*—

—then he got fired, and a new GG came in to replace him.

Here is what happens Out There when that happens: the old GG is stripped of his epaulets and his ability to get into Morton's on Monday nights and off he goes, very rich—he had a deal in place for this inevitability—but disgraced.

And the new GG takes the throne with but one rule firmly writ in stone: *nothing* his predecessor had in motion must ever get made. Why? Say it gets made. Say it's a hit. Who gets the credit? The *old* GG. And when the new GG, who can now get into Morton's on Mondays, has to run the gauntlet there, he knows all his peers are sniggering: "That asshole, it wasn't his picture." Death.

So *The Princess Bride* was buried, conceivably forever. And I realized that I had let control of it go. Fox had the book. So what if I had the screenplay; they could commission another. They could change anything they wanted. So I did something of which I am genuinely proud. I bought the book back from the studio, *with my own money.* I think they were suspicious I had some deal or plan, but I didn't. I just didn't want some idiot destroying what I had come to realize was the most important thing I would ever be involved with. After a good bit of negotiating, it was again mine. I was the only idiot who could destroy it now."

Goldman decided that Reiner was the right person to direct *The Princess* Bride based on his contributions to the movie *This Is Spinal Tap.* There is a *Spinal Tap* baseball hat in the bedroom of the sick grandchild, a cultural reference that Mark Knopfler made a condition for doing the movie's soundtrack.

8.

Vizzini: "But it's so simple. All I have to do is divine from what I know of you: are you the sort of man who would put the poison into his own goblet or his enemy's? Now, a clever man would put the poison into his own goblet, because he would know that only a great fool would reach for what he was given. I am not a great fool, so I can clearly not choose the wine in front of you. But you must have known I was not a great fool, you would have counted on it, so I can clearly not choose the wine in front of me."

Vizzini is exhibiting what Keynes called a "Beauty Contest" attitude. He would be would be a terrible investor, since his approach is speculation.

"The Keynesian beauty contest is the view that much of investment is driven by expectations about what other investors think, rather than expectations about the fundamental profitability of a particular investment. John Maynard Keynes observed that investment strategies resembled a contest in a London newspaper of his day that featured pictures of a hundred or so young women. The winner of the contest was the newspaper reader who submitted a list of the top five women that most clearly matched the consensus of all other contest entries. A naïve strategy for an entrant would be to rely on his or her own concepts of beauty to establish rankings. Consequently, each contest entrant would try to second guess the other entrants' reactions, and then sophisticated entrants would attempt to second guess the other entrants' second guessing. And so on. Instead of judging the beauty of people, substitute alternative investments. Each potential entrant (investor) now ignores fundamental value (i.e., expected profitability based on expected revenues and costs), instead trying to predict "what the market will do." The results are (a) that investment is extremely volatile because fundamental value becomes irrelevant, and (b) that the most successful investors are either lucky or masters at understanding mob psychology – strategic game playing." Economicae: an illustrated encyclopaedia of economics

Keynes himself said:

‘It is not a case of choosing those [faces] which, to the best of one’s judgment, are really the prettiest, nor even those which average opinion genuinely thinks the prettiest. We have reached the third degree where we devote our intelligences to anticipating what average opinion expects the average opinion to be. And there are some, I believe, who practise the fourth, fifth and higher degrees.’ (Keynes, General Theory of Employment Interest and Money, 1936).

9.

Westley: “Dread Pirate Roberts had grown so rich, he wanted to retire.”

In my blog post on Dan Airely I quote him as saying:

“Retirement is especially difficult because we not only don’t know exactly what we’re giving up, it’s also far away in the future. That makes it very, very difficult to think about. It’s called hyperbolic discounting — we just care less dramatically about the future so not only is it hard for us to understand what we are giving up, it’s also really, really delayed.” “If you think about the opportunity cost of money — if I spend a thousand dollars now on a new bicycle I know what I’m getting. If I put it into my retirement account I don’t really know what I’ll get in the future.”

How much wealth must you save for retirement? What should your portfolio look like to achieve that and after you retire? These are topics worthy of a future blog post. I should note that on the succession planning issue, Westley served as an apprentice for a considerable period and was able to step into the Dred Pirate Role role quite effectively. Inigo inherits the title from Westley. In the first chapter of *Buttercup’s Baby,* the unfinished sequel to the novel, Goldman refers to “’Pierre,” who seems destined to be the next Dred Pirate Roberts.

10.

Vizzini: “You fell victim to one of the classic blunders—the most famous of which is, ‘Never get involved in a land war in Asia’—but only slightly less well-known is this: ‘Never go against a Sicilian when death is on the line’! Ha ha ha ha ha ha ha! Ha ha ha ha ha ha ha! Ha ha ha…[drops dead].”

My blog post on *The Godfather* is about one type of Sicilian wisdom. Speaking of Sicilians, Reiner at one point ran into mob boss John Gotti and his entourage outside a New York restaurant. One of the men with Gotti looked at Reiner and said, “You killed my father, prepare to die!” and then started laughing.

Vizzini, like many people with high intelligence, is a danger to himself and others since he mistakenly believed that his IQ was higher than it actually was and that his IQ was a substitute for good judgment.

As for the avoid land wars in Asia comment he is referring to advice Charlie Munger often gives about avoiding situations that are painful. When Munger jokes: “I just want to know where I will die so I can just not go there” he is humorously making a broader point about avoiding certain areas in investing and in life. Munger once gave a speech where he spoke about a famous Johnny Carson talk in which the comedian described all the ways one can be miserable. Munger said: “What Carson said was that he couldn’t tell the graduating class how

to be happy, but he could tell them from personal experience how to guarantee misery. Carson's prescriptions for sure misery included: 1) Ingesting chemicals in an effort to alter mood or perception; 2) Envy; and 3) Resentment. What Carson did was to approach the study of how to create X by turning the question backward, that is, by studying how to create non-X." Invert!

11.

Man in Black (Westly): "Life is pain, Highness. Anyone who says differently is selling something."

My blog post on how Charlie Munger deals with the inevitable adversity people encounter in life is one of my more popular pages on my blog. In it I quote Munger as saying:

"Assume life will be really tough, and then ask if you can handle it. If the answer is yes, you've won."

"Life will have terrible blows in it, horrible blows, unfair blows. And some people recover and others don't. And there I think the attitude of Epictetus is the best. He said that every missed chance in life was an opportunity to behave well, every missed chance in life was an opportunity to learn something, and that your duty was not to be submerged in self-pity, but to utilize the terrible blow in constructive fashion. That is a very good idea."

The people who step up when adversity arrives inspire me. Doing the right thing is a highly underrated part of life. It is a not only a test of character, but a chance to show what you have learned and who you are as a person.

12.

Vizzini: "I don't guess. I think. I ponder. I deduce. Then I decide. But I never guess."

What do you do when your are faced with a situation in which "no one knows anything" because you are dealing with complex adaptive systems? The best response to this is to do a lot of experiments using the very best data available and modern data science tools. There has never been a better time in history to do this work since the cost of running an experiment has never been lower. Rather than try to predict the unpredictable, it is a better idea to run experiments instead and then select the most favorable outcomes. A well-constructed trial and error process allows the experimenter to identify a favorable result from a test result and to exploit it when they actually see it. This topic will be part of my next blog post entitled: "Why is Data the New Oil?"

Data is not a substitute for thinking. Bill Gates is one of the deepest thinkers I have ever known. He is interested in many things. For example, I ran into him once in an athletic club locker room and we ended up having a long talk very there about Mandelbrot sets. We completely lost track of time during that talk. Bill's "always thinking" character trait is not new. When Bill was a child, his mother Mary complained about him being slow to get into the car for a trip to a family event. When she asked Bill what he was doing, he responded by saying: "I'm thinking, mother. Don't you ever think?" Bill's father recalled that day in this way: "Imagine yourself in our place. I was in the most demanding years of my career. I was a dad, a husband, doing all the things parents in families do. My wife, Mary, was raising three

kids, volunteering for the United Way, and doing a million other things. And your child asks you if you ever take time to think."

Notes:

https://www.goodreads.com/work/quotes/992628-the-princess-bride?page=2

http://variety.com/2017/film/features/the-princess-bride-turns-30-1202565060/

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MoviePass. Premature Scaling?

December 30, 2017

Businesses are now selling subscriptions for software as a service (SaaS), but also for products like car washes and movies. Having a more predictable recurring revenue stream is often cited as a benefit of a subscription business model. If you look deeper there are more important benefits of an ongoing subscription relationship with customers that can also produce significantly higher return on investment, but only if the right conditions exist. There are big new challenges with a subscription business model. Whether value is being created with a subscription is not as easy to determine as when a business is selling one unit at a time (e.g. as in a traditional car wash business model). Perhaps the most challenging is that in a subscription business the higher customer acquisition cost (CAC) is paid up front and that cash goes out the door immediately. Whether a business likes it or not, it must play the game on the field and that game is now often a subscription business model. If business A is selling subscriptions successfully and business B cannot do so, the later business may be walking dead. Or not. The outcome depends on many factors that I will discuss below.

Some of the factors that might push a business to adopt a subscription business model can be illustrated by looking at an example. The numbers in the columns below are from the operator of Regal Cinemas (which was recently acquired by the British theater chain Cineworld for $3.6 billion). It is easy to see after looking at the numbers below that the business model for a movie theater is about selling complementary goods (concessions) associated with a loss leader (showing movies). In this example, the cost of concessions for the movie theater is only ~13% of revenue. In contrast, the cost of movie rental and advertising is 52% of revenue (Ouch!). For the movie theater owner, generating profitability is about the sodas, popcorn, candy and any other concessions they can sell. Innovation by movie theaters tends to be focused on the snack bar and not the movie experience. As an example, to improve the unit economics of the movie exhibition business, Cinemark has added liquor to at least 70 of its theaters and AMC has done so at about 250.

Key parts of Regal Cinemas' financials looked like this in a recent filing (for the quarter ending September 30, 2017).

Average ticket price(4)	$	10.19
Average concessions per patron(5)	$	4.76

	Q3 2017 Period	
	$	% of Revenue
Revenues:		
Admissions	$ 455.4	63.6%
Concessions	212.7	29.7
Other operating revenues	47.9	6.7
Total revenues	716.0	100.0
Operating expenses:		
Film rental and advertising costs(1)	236.8	52.0
Cost of concessions(2)	28.1	13.2
Rent expense(3)	107.0	14.9
Other operating expenses(3)	227.4	31.8
General and administrative expenses (including share-based compensation expense of $2.4 and $2.5 for the Q3 2017 Period and the Q3 2016 Period, respectively and $6.9 and $6.6 for the Fiscal 2017 Period and the Fiscal 2016 Period, respectively)(3)	19.9	2.8
Depreciation and amortization(3)	62.4	8.7
Net loss on disposal and impairment of operating assets(3)	11.9	1.7
Total operating expenses(3)	693.5	96.9
Income from operations(3)	22.5	3.1

Running a business like Regal's movie theater operation that only has a 3.1% incme from operations is, as the characters sing in the musical Annie, "a hard knock life." Why is the profit margin so low? A better question might be: Why isn't it negative? The answer is probably that the movie owners know that if they raise the wholesale cost of film rentals much more the theaters will go bankrupt, which would kill their ability to distribute movies in this theater format. The cost of movie rentals for a theater is made just high enough by the movie studios that the movie theaters make a thin profit margin.

What theaters pay for movie rentals isn't uniform, can vary from chain to chain/movie to movie and is complex. The limits of what a movie studio can charge are always being tested. For example, Bloomberg reports that "Disney asked some theaters for a greater share of ticket sales for big films like Star Wars, according to a person familiar with the situation. Usually the revenue is evenly split but on very popular films, Disney can claim more than 60 percent." Another news report indicates that Disney requires a 65% cut of *The Last Jedi's* domestic ticket sales and a four-week run in each theater's largest auditorium. If a theater operator breaks the contract with Disney (e.g., taking the film off-screen too early) there is a 5% penalty.

Logically, there is little point in a business like a movie studio killing its indirect distribution. But many things in life and business are not logical. If the movie theaters ever make a bigger profit, even from concessions, the studios can just raise the price of film rental. The movie theaters have this pricing power since the best movies are not just "substitutable" commodities. For example, Disney is the only supplier of *The Last Jedi* and has massive "wholesale transfer pricing power" with respect to that movie. What is wholesale transfer pricing power? I have written a blog post specifically on that but it is perhaps best explained by example:

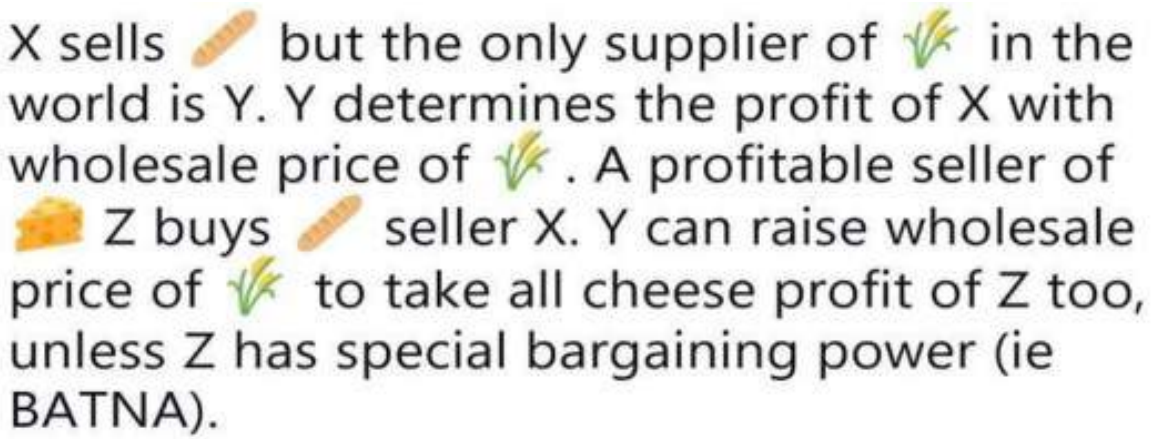

People who do not have what Roger Fisher called a "BATNA" (Best Alternative to a Negotiated Agreement) in his book *Getting to Yes* have lousy negotiating alternatives due to wholesale transfer pricing. Wholesale transfer pricing is not about moats, but rather about the red "Bargaining Power of Suppliers" category in Michael Porter's "Five Forces" model depicted below:

The "loss-leader with ugly wholesale transfer pricing" dynamic that exists in the movie theater industry results in some predictable behavior:

One theater chain executive went so far as to describe the cup holder mounted on each seat, which allows customers to park their soda while returning to the concession stand for more popcorn, as 'the most important technological innovation since sound.' He also credited the extra salt added into the buttery topping on popcorn as the "secret" to extending the popcorn-soda-popcorn cycle throughout the movie. For this type of business, theater owners don't benefit from movies with gripping or complex plots, since that would keep potential popcorn customers in their seats. …theater owners prefer movies whose length does not exceed 128 minutes. If a movie runs longer than that, and the theater owners do not want to sacrifice their on-screen advertising time, they will reduce the number of their evening audience 'turns" or showings from three to two, which means that 33 percent fewer people pass their popcorn stands.

What does the top line financial picture in movie industry look like in general? Not very good says *The Economist* magazine in a recent issue:

"Americans are on track to have bought around 3.6 movie tickets per person by the end of the year, down by 30% from 5.1 in 2002. They pay $8.93 for a ticket, 54% more than 15 years ago, which means, for now, higher total takings, but attendance is expected to decline further. Frequent filmgoers—those who go once a month or more—have dwindled, from 28% of North Americans in 2002 to 11% in 2016, according to the Motion Picture Association of America."

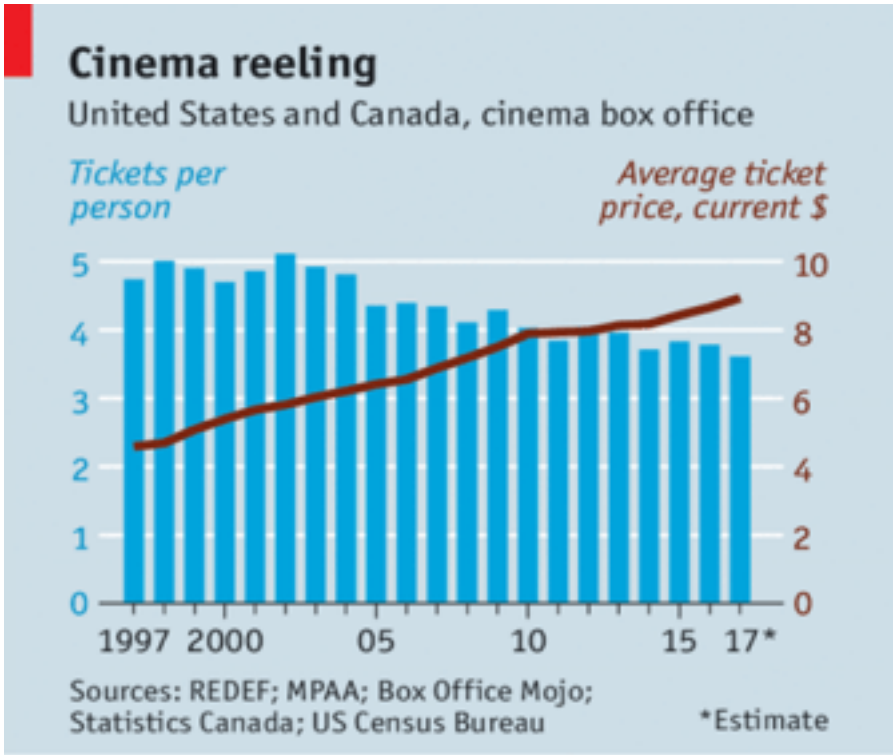

A new business known as "MoviePass" has appeared relatively recently with a new business model with new unit economics. A NPR report describes the MoviePass product:

KULAS: When you're at the theater, you pull out the MoviePass app.

SPIKES: So go through and pick a movie that you'd want to see.

KULAS: Then I walk over to the ticket kiosk, choose a ticket … to pay for it, I swipe with the MoviePass debit card. The normal price to see "Spider-Man: Homecoming" here is $16.29. MoviePass will pay that full price of my ticket to AMC. But my price is $9.95. And that's not just for one movie. That's per month. And it lets me see a movie every 24 hours. Movie theaters use loyalty programs to get data on their customers. And now some of those customers are MoviePass customers first. And that data is a really big part of MoviePass' future plans. When you go to a movie, that's something a bunch of businesses want to know about – maybe the restaurant next door, maybe the studio that will sell you the movie soundtrack later.

The key hypothesis in the MoviePass business plan is described as follows in a Forbes article linked to in the Notes:

"…after an initial burst of activity in which subscribers may attend four or five movies per month for a few months, the vast majority will settle into a pattern of seeing just enough movies to justify the subscription price." We found that on a $40 per month plan, subscribers would attend an average of 3.8 times per month," the CEO Lowe said. 'At a higher price they would attend more frequently, and at a lower price, less. At $9.95 per month we expect the average subscriber to settle into a pattern of just over a movie ticket per month.' With an average cost of around $9.00 per ticket, that would put MoviePass at breakeven. And even

one ticket per month would be good news for theater owners, because MoviePass has shown that it can dramatically expand the theater-going audience beyond frequent moviegoers. 'One way to look at what we do is that we provide reluctant moviegoers with a sort of 'bad movie insurance'," Lowe says. "We take away the hesitation and risk around buying tickets for movies that might be disappointing. People know if they see a bad movie, they don't feel like they've misspent the money because they can always just go to another movie. MoviePass can also benefit from all the data it collects on its subscribers, their locations, habits and tastes. It can package and sell that data to movie distributors and marketers, but more to the point, it can also use that information to create its own internal revenue streams.'"

People paying for 12 movies a year rather than just 3.6 as the Economist noted could be good for the movie industry if the impact on return on investment is positive. But at what cost? What is the return on investment? Even if the financial impact on the industry is positive, which business or businesses in the value chain capture that incremental financial return?

Given the experience the movie theaters and the movie studios have had with Netflix, they are no doubt concerned that they may be losing an important part of the value chain to a company like MoviePass. They seem to understand that a business that owns the customer data is in a position to make a better product, sell the product more effectively and capture more value. It already makes movie studios unhappy that Netflix does not share its movie viewing data with them. Some people in the movie studio and theater business seem to think that MoviePass in the value chain would be another lost opportunity to capture valuable data. MoviePass is trying to change that view, but this will not be easy. Some people like to say: "data is the new oil." Owning data about customers can be very valuable since it can be potentially converted into more cash flow and return on investment. In other words, having customer data has optionality, even if you do not know how to monetize that data yet. But monetizing data successfully requires a reasonable cost of acquisition, storage, processing and other factors to be present.

One risk for a business like MoviePass is that the movie studios and/or movie theaters borrow the MoviePass subscription pricing idea and do it themselves. For example, Cinemark launched a monthly subscription program called Movie Club. Members of the Cinemark system pay $8.99 a month and receive a credit for one movie ticket a month. Subscribers can also buy additional tickets for $8.99 each and get 20% off on concessions. A movie theater doing this successfully is tricky given the power the movie studios have over pricing and the complex and non-uniform pricing structure of film rentals. The Cinemark discounted price offer is very unlikely to be the last response by movie exhibitors to MoviePass. More subscription style price offerings are inevitable or at least the arrival of new methods of creating an ongoing relationship with people who see movies in theaters is inevitable.

How can MoviePass protect itself against competition from movie theaters and studios? Netflix moved to protect itself by making its own original content. It is hard to imagine MoviePass doing the same thing. MoviePass' ticket purchases represented 1.78% of domestic box office for Warner Brothers' *Justice League* on Opening Weekend (Release Date: November 17, 2017). MoviePass claims it is responsible for an average of 2% of box office revenue nationwide. It is hard to see MoviePass creating its own movies or building is own theaters. MoviePass would benefit from having state of the art data science capability. A business like StitchFix has more than 90 data scientists. How many data scientists work at MoviePass?

Effectively using modern data science approaches is important in any business today, but this is especially true in a business like movies. In my previous blog post on the movie *The Princess Bride,* I quote the writer William Goldman as saying "no one knows anything" in Hollywood. That may be true, but your odds of being right are better if you have great data about your customer and are able to implement a modern data science based approaches. To illustrate the approach here is Jeff Bezos describing Amazon's data science-based approach in a Wall Street Journal interview in February of 2000:

WSJ : Tell us how an e-commerce company like Amazon test-markets new ideas.

Bezos : The Web gives us a great way of getting customer feedback. We call it A/B testing. If you're wondering: "Will people better understand the link that uses the word X, or will they want to use a link that uses the word Y," we'll try them both at the same time, for two different populations. An hour later, you'll know the results. You get to accelerate time incredibly with that kind of testing.

Since Bezos said this about A/B testing in 2000, techniques and approaches have become vastly more accurate, substantially more revealing and massively cheaper to do.

With a subscription business model the relationship between the business and the customer is ongoing and in most cases "connected" in nature, since it is online. The subscription also creates a reason for the customers to share certain personal data that can be used to create a better product. That online connection creates a stream of data about the customer's preferences and behavior called "telemetry." That telemetry can be used to optimize each aspect of the relationship and customer experience which improves customer lifetime value.

Business do not need to guess anymore. Selling subscriptions is not new. What is new is that once a business has data from customer telemetry they have the ability to run many experiments relatively cheaply and quickly to optimize each variable. With telemetry a business no longer needs to guess about what customers want. By optimizing each variable the business creates more value for customers which in turn improves return on investment. Businesses do not do adopt this approach to doing business are toast. The race to get an online relationship with every customer is reaching a fever pitch, enabled by increasingly inexpensive cloud computing and communications and radio technology. If you have use a search engine, or Netflix, have a connected speaker in your home featuring a technology like Alexa or Cortana you are part of this phenomenon.

As an example, mobile operators have been able to do what I am talking about for decades now since the nature of what they sold was a connection. What is new is that more and more types of businesses finally have what mobile operators have been taking advantage of for years. The good news is that this new connected relationship combined with low cost cloud computing resources and modern data science tools means there has never been so much opportunity to add new customer value and create higher service provider return on investment through creative use of telemetry than is the case right now. The bad news is that

this capability can eventually become a commodity and competition means that only consumers benefit from the improvement. That is as it should be.

How is this phenomenon changing the nature of distribution? Not too long ago a business could make a product and have indirect distributors between it and the customer. For example, Disney could be very happy having movie theaters or Comcast or Netflix between it and the end customer. The business which created the product could relegate that distributor like a movie theater to terrible margins or not depending on relative bargaining power. In any event, the optimal distribution model can shift in a binary way once the creator or owner of the product needs telemetry data from the end customer. For example, Disney has discovered that it must have a direct relationship with the end customers to generate the needed telemetry. In other words, going direct to the customer without an intermediate distributor has become essential in some businesses. Businesses have "seen the movie" about the value of Amazon and Netflix's telemetry data combined with data science based advantages and have in some cases decided that they must match this direct to consumer capability or die.

What about the potential for increased return on investment in a subscription business model I talked about above? Borrowing from a great blog post from Bill Gurley, a business starts with this simplified formula which spells out the "unit economics" of a business:

$$LTV = \sum_{X=1}^{n} \frac{ARPU_x - Costs_x}{(1+WACC)^x} - SAC$$

The key statistics are as follows:

ARPU (average revenue per user)to C

Avg. Cust. Lifetime, n (This is the inverse of the churn, n=1/[annual churn])

WACC (weighted average cost of capital)

Costs (annual costs to support the user in a given period)

SAC (subscriber acquisition costs, sometimes referred to as CAC = customer acquisition costs)

By using telemetry and modern data science each of the five variables can be optimized. Every process at the business, including but not limited to the sales funnel, can be tested and retested. Bill Gurley describes my view the complexity of this process far better than I ever have:

"Tren Griffin refers to the five variables of the LTV formula as the five horsemen. What he envisions is that a rope connects them all, and they are all facing different directions. When one horse pulls one way, it makes it more difficult for the other horse to go his direction.

Tren's view is that the variables of the LTV formula are interdependent not independent, and are an overly simplified abstraction of reality. If you try to raise ARPU (price) you will naturally increase churn. If you try to grow faster by spending more on marketing, your CAC will rise (assuming a finite amount of opportunities to buy customers, which is true). Churn may rise also, as a more aggressive program will likely capture customers of a lower quality. As another example, if you beef up customer service to improve churn, you directly impact future costs, and therefore deteriorate the potential cash flow contribution.

So what about MoviePass? Before digging into that question, I should say that I do not "pick stocks" on this blog. Revenue from this blog is < $0. No subscription fee is charged and there is no advertising. I am trying to teach people how to do their own valuations. I do have my own valuations, but I do not share them with readers. For example, when I wrote about a meal delivery business or a company like StitchFix I talk about a valuation methodology and approach that I think readers should consider using. But I do not assign the business a specific valuation. The approach that I describe involves a lot of research and detective work. To understand the stock, you must understand the actual business. If you do not like my approach of leaving the specifics up to you, you can have your $0 back.

To understand these model better I suggest you get a spreadsheet and play with the model yourself. Modify the assumptions and watch how it changes with each alteration of a variable. This is called a sensitivity analysis. This spreadsheet from David Skok of Matrix Partners is a great place to start your work. No, I won't give you my spreadsheet or the simple one I used to create illustration in this post. No, I won't do the work for you. as a side bar: Do you like to do this? Is it fun? Would you rather be doing something else? If you are not going to do this work yourself, you should buy a low cost and diversified portfolio of index funds instead of buying individual stocks.

Let's assume MoviePass eventually has ongoing average revenue per user (ARPU) per month of $10.50. You can take that ARPU higher or lower in your modeling if you want. Knock yourself out on modeling different assumptions, but try to give yourself a margin of safety in the event you make a mistake. What is the probability that MoviePass will be able to generate significant data revenue on top of its break even movie subscription business? Ted Farnsworth, the CEO of the company that controls MoviePass (Helios and Matheson Analytics Inc. (HMNY)) is quoted in *The New York Times* as saying: "When you apply computer science and machine learning to an industry that we believe has lacked significant innovation, useful patterns start to emerge." That is a nice theory. Will it work in practice? The HMNY CEO claims:

"18% of users go to movies after prompting by the MoviePass app. Making money putting people in the theater is fine, but also think about the advertising side," Farnsworth said. "We're the only company out there that can tell companies exactly who and when people are going to the movies."

Sending more people to the movies with advertising seems like a mixed blessing given that each visit to a movie theater per month more than once is at least $9 in incremental CAC/COGS for MoviePass.

Remember that movie theaters are already operating at very slim margins. There are no extra profits to give away as one theater operators has made clear:

"MoviePass paid AMC, according to our records, $11.88 for each and every ticket that it purchased for our mutual guest. That's quite a gap, $9.95 a month versus $11.88 a visit. I must point out that's very gracious of them and we appreciate their business, but I think it's also important to make clear that despite claims they've made to the contrary, AMC has absolutely no intention, I repeat no intention, of sharing any – I repeat, any, of our admissions revenue or our concessions revenue with MoviePass."

Overall industry revenue can go up if spending by moviegoers increases to $9.95 a month, but at what cost? What is the return on investment?

Let's assume MoviePass can get COGs down to $9.00 a month. That seems like a stretch given tickets cost an average of $8.93. MoviePass's audience may be mostly urban residents who often pay something like $16 for a tickets as is the case in Los Angeles. MoviePass has other costs associated with its service that will be part of COGS that wil reduce gross margins too, like the cost of the debit card transaction etc.

Even assuming MoviePass eventually gets a gross margins up to a number like 18% that is a really skinny gross margin. A business will have a very hard time just paying marketing and general and administrative (G&A) costs with that gross margin, let alone any R&D.

What will the CAC of MoviePass be at scale? Well, it will include any sales and marketing costs plus the losses in the first few months when people see more than one movie a month that is in the COGS assumption. MoviePass illustrates a point I have made before: what seems like cost of goods sold (COGS) may really be CAC. People can argue about whether it is COGs or CAC from an accounting standpoint or how it should be reported, but what matters for investors is what the expense actually represents in the real world. COGS are the direct costs attributable to the *production* of the goods sold by a company. CAC is the cost associated in *convincing a customer* to buy a product/service. To illustrate, let's assume MoviePass customers watch an average of 5 extra movies a month first month before settling down to consumption of one movie a month. $9 X 5 (the cost of the 5 extra movies in month one) is an addition to CAC of $45. What if it is 12 extra movies and not 5? 12 X $9 is a $108 addition to CAC. What if it is 20? Will that work financially? This sort of anecdote which appeared in a *New York Times* article about MoviePass is not comforting regarding CAC:

> Dan Steven, 34, signed up for MoviePass in October. Mr. Steven, who lives in Orlando, Fla., said he had gone to "maybe one movie a month" before he became a subscriber. In November, he went 12 times.

An anecdote is not data. If I could know one unknown fact about MoviePass it would be the level of fully loaded CAC. In the model below I assume CAC is $60 and then in another version $100.

Any lifetime value model is also sensitive to the amount of customer churn the service experiences. Customer retention is critical in a subscription business since churn can result in "stranded CAC" (i.e., the customer churns off the service before the operator gets back the cost to acquire that customer). Retention can be a really important variable since the best way to grow is not to shrink your existing customer base that you paid a lot to acquire. An executive associated with MoviePass has said publicly that retention per month is 96%, so monthly churn in this example is assumed to be 4%. There are a lot of ways to define churn

and we could get technical about that, but let's not. The goal is to be approximately right rather than precisely wrong. As Charlie Munger has said: "Using precise numbers is foolish. Working with a range of possibilities is the better approach. The decision should be obvious."

The unit economics for MoviePass might look like this below. All inputs in blue are educated guesses.

Modeling a subscriber business

Blue are for editing
Calulation capped at a maximum of 7 years (84 months) which is 1.2% churn

INPUTS	
CAC	$60.00
ARPU (per month)	$10.50
Churn (per month)	4.0%
Gross Margin	18%
Annual Discount Rate	10.00%
COGS (per month)	$8.61
Monthly Discount Rate	0.83%
Terminal value multiplier (months)	20.86
NPV	-$20.90
IRR	-13.45%

Excludes last period with terminal value

	Time 0	Year 1					
		Jan	Feb	Mar	Apr	May	Jun
		1	2	3	4	5	6
CPGA	-$60.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
ARPU		10.50	10.50	10.50	10.50	10.50	10.50
COGS		-8.61	-8.61	-8.61	-8.61	-8.61	-8.61
Monthly Cash Flow	($60.00)	$1.89	$1.89	$1.89	$1.89	$1.89	$1.89
Remaining fraction of subscribers		100%	96%	92%	88%	85%	82%
Net cash flow	($60.00)	$1.89	$1.81	$1.74	$1.67	$1.61	$1.54

What if CAC $100? Things can get ugly fast (or not):

INPUTS	
CAC	$100.00
ARPU (per month)	$10.50
Churn (per month)	4.0%
Gross Margin	18%
Annual Discount Rate	10.00%
COGS (per month)	$8.61
Monthly Discount Rate	0.83%
Terminal value multiplier (months)	20.86
NPV	-$60.90
IRR	-33.16%

Does MoviePass really have product/market fit given the existing unit economics? Or are they trying to find a solution to a growth hypothesis before the value hypothesis has been proven and face all the dangers that can come with premature scaling? A key part of the value hypothesis is a sound business model and that includes sound unit economics. Sound unit economics are not always fully developed when growth investments start, but they need to be well along the way to being proven. "Build it and the unit economics will come" is a dangerous game.

A business that is seeking growth for its own sake is a bad idea. No one has made this point better than Warren Buffett: "Growth is always a component in the calculation of value, constituting a variable whose importance can range from negligible to enormous and whose impact can be negative as well as positive." If the startup does not have have product/market fit and yet is trying to grow they are telling customers that the product is not really valuable. Revenue alone is not enough to establish that product/market fit exists/ a value hypothesis has been proven sufficiently. What would happen if customers are asked to pay a higher price point for the same subscription is always unclear. What is known is that consumers hate to lose something they already believe they have. John Malone hates to lower prices since raising them after that price drop is hard.

Like any subscription business MoviePass must be laser focused on keeping CAC and churn at attractive levels. In the case of a business like MoviePass which has low gross margins, high CAC makes high churn a particularly dangerous phenomenon. My educated guesses about CAC and churn at MoviePass in the spreadsheets are just that, educated guesses. It is worth noting that when a business publicly or privately reveals an input into lifetime value like ARPU, CAC or churn it is almost always an average. That may hide the fact that there are big differences in the analysis by "cohort." A *cohort* is a collection of customers who share an attribute or set of attributes. For example, one type of a *cohort* would be those customers who subscribed to a service in a given quarter or year. Early MoviePass customers may be quite different than customers who arrive later. A separate a LTV analysis for each cohort should be created.

If a business pays enough CAC, it can almost always generate a lot of revenue growth. Ice can be sold to Eskimos if you make the sales commissions and customer incentives high enough. MoviePass recently announced that it has passed the 1 million mark in paid subscribers. Did they do this by selling a dollar for significantly less than a dollar? Or it's a workable business model? That determination can only be made by looking at the LTV model and you can only do that if you have data I do not have. How many movies do members see? Do they settle down to an average of one per month? If so, when? Without knowing CAC, customer churn and what the cash flow statement looks like, it is really hard to value the MoviePass business. You can do some rough math even without all the data by making some assumptions based on comparable businesses, but you are guessing. The more businesses like this you have seen in a lifetime in more industries, the better you get at making that educated guess.

The cash flow aspects of the upfront CAC are important to understand. For example, monthly positive cash flow in my first example screenshot of the spreadsheet above is only $1.89 given my assumptions, but $60 in cash has spent on CAC already. This creates a significant a hit to cash on hand. The faster you grow the subscription business, the faster cash flies out the door. A subscription business like I describe above almost always eats cash and requires outside money to deal with the negative cash flow if the business is growing. Eventually a

subscription business can flow more cash than it consumes, but that can take a very long time. An important question always is: how long does that journey to positive cash flow take? There are two important rules in this situation: (1) watch cash carefully and (2) watch cash carefully. If the business runs out of cash, it has committed the only unforgivable sin in business. Don't do that.

When mobile and cable TV operators were building their businesses Michael Milken was there supplying the growth capital. Who is going to supply the growth capital (cash) to MoviePass? MoviePass sold a majority stake to the listed company HMNY in August for less than $30 million. This is not a traditional approach to acquiring growth capital and that is not a lot of money in the world of subscriptions. High growth subscriptions businesses require a lot of cash for a long time. MoviePass selecting HMNY was unusual? The company does not have the deep pockets of Fidelity, Silver Lake, TPG or Blackstone in terms of resources. How much cash will MoviePass need to get to cash flow break even? HMNY recently raised *$60 million* for the expansion of *MoviePass*, but in the world of subscription $60 million disappears like water in the desert. Do you want another metaphor? OK. Up front CAC eats cash like the Cookie Monster eats cookies. Bill Gurley writes: "Let's say you have a company that estimates it will do $100mm in revenue this year, $200mm the next, and $400mm the year after that. In order to accomplish those goals it is going to invest heavily in marketing – say 50% of revenues. So the budget for the next three years is $50mm, $100mm, and $200mm." That's a lot of cash.

When thinking about a business like MoviePass, it is a good idea to keep in mind what Zhou Enlai is often quoted as saying when asked his opinion of the French Revolution's effect on world history. "Too soon to tell." Yes, he probably was not referring to the French revolution, but the apocryphal remark is, as the FT once wrote, "too delicious to invite correction." Unless you are a member of the MoviePass management team, a consultant who had signed a NDA, the auditor or an investor in the company, no one knows enough about MoviePass's operating metrics and financials to make a firm conclusion. But there are clues which allow you to make different models as I have above. I have hopefully given you some new tools and ways of thinking that can help you make a more informed analysis.

P.s. I wrote about the rise of subscription business models in my blog post "Amazon Prime and other Subscription Businesses: How do you Value a Subscriber?" https://25iq.com/2017/07/15/amazon-prime-and-other-subscription-businesses-how-do-you-value-a-subscriber/ and "A Half-Dozen Ways to Look at the Unit Economics of a Business." https://25iq.com/2016/12/31/a-half-dozen-ways-to-look-at-the-unit-economics-of-a-business/

Notes:

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NPR MoviePass: https://www.npr.org/2017/10/06/556041256/the-economics-of-a-monthly-movie-pass

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Sammy Hagar: Content Marketing/Bundling/Brands/Pricing Power

January 6, 2018

Why am I writing about Sammy Hagar? The answer is simple: because he has been a very successful business founder in addition to being a rock and roll star. To become an effective learning machine you will benefit from acquiring knowledge from as many sources as possible, including unconventional sources. For this same reason I have written blog posts on people like Rza, Wheezy, Kanye, Jimmy Iovine, and Biggie Smalls. Last, but not least, I am writing about Hagar to get more people to read this blog post. I have WordPress analytics which proves that blog posts that do not involve something controversial or someone famous are inversely correlated with page views. Sammy Hagar's life is not boring.

Sammy Hagar started his career in the music business as a member of the band Montrose. He then had successful solo career that included hits like "Your Love Is Driving Me Crazy" and "I Can't Drive 55." In 1985 Hagar famously replaced David Lee Roth in the band Van Halen. After his time at Van Halen Hagar performed solo and in several bands including Chickenfoot. One of the more famous businesses that Hagar has is Cabo Wabo Cantina

which has locations in many places in the United States. His Cabo Wabo tequila business was acquired by Gruppo Campari in 2010 for $91 million. Hagar and Adam Levine of Maroon 5 are now partners in a business that sells "the world's first mezquila."

The usual dozen Sammy Hagar quotes are in bold:

1. **"The exposure of the band helped promote my tequila company. Lots of people are coming up with tequilas, but you're going to have to come up with $5-10 million a year to promote a new brand. If you're me, you don't have to spend a penny on it. It was a great crossover – rolling my brand into my business."**

The ability of a founder to turn exposure from one business into content marketing for another business is a valuable thing. Hagar is a great example of this practice since few things create free media exposure like a flamboyant rock star. Free media exposure is like invisible money. Hagar was able to invest the equivalent $5-10 million dollars a year into his liquor company without actually spending any cash. That is business alchemy.

The story of how he did this is simple:

"I opened Cabo Wabo in 1990 and then invited the band members to become partners in the restaurant–it felt like the right thing to do. But then, in 1996, I got kicked out of Van Halen. They basically said, 'You can do Cabo Wabo or be in this band.' I was like, 'Why can't I do both?" At that time, I was so brokenhearted about it, but it turned out to be the best thing I've ever done." "I'm a walking billboard. I got my Cabo Wabo tattoo in 2004. The Van Halen guys hate me for this."

For any business acquiring a customer can be accomplished in two ways: (1) organically by word-of-mouth at very little cost; or (2) inorganically through expensive paid sales and marketing. The first method is much more valuable than the second not just because customers cost less money to acquire. Bill Gurley points out: "Organic users typically have a higher NPV, a higher conversion rate, a lower churn, and more satisfied than customers acquired through marketing spend." "If there are two businesses that are otherwise identical, if one requires substantial marketing and one does not, Wall Street will pay a higher valuation of the one with organic customers."

One drawback of the organic customer acquisition approach is that nothing is harder to predict that customer word of mouth. Getting the necessary bootstrap that creates the positive feedback which drives word-of mouth consumer acquisition is very hard to do and rarely happens at scale. Why? Now that Hagar has sold the Cabo Wabo tequila business, his content marketing has shifted to his other businesses. For example, that is a Beach Bar Rum t-shirt below.

Bands and musicians selling "merch" is, of course, not new. It is not a big journey from selling t-shirts and other traditional concert merchandise to selling a branded product like liquor for someone like Haggar. Yes, if it is not just a licensing deal there is a higher risk of a substantial failure for the celebrity, but the upside is much bigger too. Many other celebrities have followed the path blazed by Hagar: Carlos Santana (Casa Noble) Motley Crue's Vince Neil (Tres Rios), Toby Keith (Wild Shot) and Justin Timberlake (901 Silver); George Clooney started and sold Casamigos with partners. Filmmaker Steven Soderbergh imports a white brandy called Singani 63. The product sold by the celebrity obviously do not need to be liquor. For example, ED by Ellen DeGeneres is a consumer-products business and Jessica Alba is behind Honest Company.

For celebrities entering the liquor businesses will continue to be popular since the profit margins on sales of alcohol are particularly attractive. When a company can generate attractive margins it has pricing power which can translate into higher margins. Warren Buffett believes:

"The single most important decision in evaluating a business is pricing power. If you've got the power to raise prices without losing business to a competitor, you've got a very good business. And if you have to have a prayer session before raising the price by 10 percent, then you've got a terrible business."

Charlie Munger has made these additional points on the subject of profit margins:

"Over the years, we've tried to figure out why the competition in some markets gets sort of rational from the investor's point of view so that the shareholders do well, and in other markets, there's destructive competition that destroys shareholder wealth. in other fields—like cereals, for example. If you're some kind of a medium grade cereal maker, you might make 15% on your capital. And if you're really good, you might make 40%. But why are cereals so profitable—despite the fact that it looks to me like they're competing like crazy with promotions, coupons and everything else? I don't fully understand it. Obviously, there's a brand identity factor in cereals. That must be the main factor that accounts for it. And

maybe the cereal makers by and large have learned to be less crazy about fighting for market share—because if you get even one person who's hell-bent on gaining market share…. For example, if I were Kellogg and I decided that I had to have 60% of the market, I think I could take most of the profit out of cereals. I'd ruin Kellogg in the process. But I think I could do it. In some businesses, the participants behave like a demented Kellogg. In other businesses, they don't. Unfortunately, I do not have a perfect model for predicting how that's going to happen. For example, if you look around at bottler markets, you'll find many markets where bottlers of Pepsi and Coke both make a lot of money and many others where they destroy most of the profitability of the two franchises. That must get down to the peculiarities of individual adjustment to market capitalism. I think you'd have to know the people involved to fully understand what was happening."

Some brands are worth less now says Munger and so margins for those businesses are now lower. But some brands are holding their value. Why is there a difference? Looking at some examples can explain the difference. Corn flakes made by a cereal company are made of corn, sugar and salt. The rum that Hagar endorses is molasses yeast and water. The ingredients are similar. Why are profit margins higher for branded alcoholic drinks than cornflakes?

Daigeo's products include Johnnie Walker, Crown Royal, J&B, Smirnoff, Cîroc and Ketel One, Captain Morgan, Baileys, Don Julio, Tanqueray, and Guinness.

Profitability	
Profit Margin	22.09%
Operating Margin (ttm)	29.68%

The Kellogg Company's products include: *Special K*, *Kellogg's Frosted Flakes*, and *Kellogg's Corn Flakes.*

Profitability	
Profit Margin	6.15%
Operating Margin (ttm)	13.83%

Munger has noted one significant change since he made the previous statement abut brand value:

"Kellogg's and Campbell's moats have shrunk due to the increased buying power of supermarkets and companies like Wal-Mart. The muscle power of Wal-Mart and Costco has increased dramatically."

What does this example from Munger say about why brand devaluation is not happening in a uniform way? It seems to me that brands which convey status are generating higher margins and maintaining their value better than brands that merely convey information about something like safety or uniform quality. The brand on a box of corn flakes is less valuable in today's world than a brand of rum that Sammy Hagar drinks for his fans. Professor Robert Cialdini points out that social proof is a big reason why celebrity endorsements work. As an aside, Hagar is a huge fan of Elvis, who is a great example of a valuable celebrity endorser. Social proof was an effective way to market his music.

Munger has talked about an additional reason why celebrity endorsed brands have significantly greater value:

"A member of a species designed through evolutionary process to want often-scarce food is going to be driven strongly toward getting food when it first sees food. And this is going to occur often and tend to create some conflict when the food is seen in the possession of another member of the same species. This is probably the evolutionary origin of the envy/jealousy tendency that lies so deep in human nature."

Warren Buffett has made clear that he believes that it is *envy* that makes the world go around rather than greed. People who can't control their envy do things that are bat shit crazy, like pay a small fortune for a vodka that they saw Diddy or Kanye drink in a club or in a advertisement in GQ magazine. In saying this I'm not saying that Munger hangs out in the VIP section of clubs with Diddy and Kanye. He is just an astute student of life and envy. In any event. from what I hear, Munger prefers to hang out with Kendrick Lamar and Drake. But that is another story.

2. **"Kari, my current wife, said: 'You remind me of Jimmy Buffett.' I thought she was nuts. But then she took me to see him and I'm going, 'Holy shit. This is awesome. We beach all day, eat tacos for dinner, drink tequila. I get onstage and play. That's it.'" "After I left Van Halen, Shep Gordon, a music manager, came to visit me at Cabo Wabo. I was wearing shorts and flip-flops, and he said, 'You need to roll your whole thing into your whole thing.'"**

The realization that Jimmy Buffett was generating huge profits via content marketing and then bundling a Parrot Head lifestyle rather than just individual products was like a light bulb going off for Hagar. This encouraged Hagar to turn the dial up to 11 on his content marketing and expand the types of products he sells. Tequila, rum, different types of restaurants, a television show, "Sammy Hagar's Rock 'n' Roll Road Trip," an autobiography and cookbook are a few examples. In an interview Hagar described his broader ambitions: "[With Sammy's Island, a lifestyle brand] I'm trying to make available to people the things that I like, like a good hammock or a good barbecue," Hagar said. Among the other items he plans to offer are utensils, comfortable chairs and beach umbrellas, described as having solid quality at an affordable price for fans." While I do not think of Sammy Hagar I think about comfortable chairs and utensils, cross-selling can be a valuable way to reduce sales and marketing costs. Selling into an existing customers base is more efficient and less costly.

When Shep Gordon's suggested Hagar start "rolling his whole thing into his whole thing" he is talking about is bundling (when two or more products are sold together as a package). Jim Barksdale famously said at the end of the Netscape IPO roadshow: "There's only two ways I know of to make money– bundling, and unbundling." What did he mean? Chris Dixon has

written one of the best explanations of why bundling can make sense. There is also a good Ben Thompson post on why unbundling can also be a good strategy. You can see firms in the market today moving to expand their product lines after they have acquire a customer. Wealthfront, for example, is increasingly moving beyond its original mission of selling automated software-driven financial advice at very low cost. These new complementary products and services offered by Wealthfront have higher profit margins and benefit from lower CAC and churn due to cross-selling and bundling. Alex Rampell of Andreessen Horowitz explains the bundling/unbundling concept with an example: "The first phase of fintech was 'unbundling' banks — taking one of the features of a mega-bank, and doing it better. The next phase is rebundling — adding other services, and cross-selling products (like SoFi starting in lending and later adding wealth and insurance). Venture capital will flow to successful startups moving into their second act of rebundling." What Rampell is saying, and business like Wealthfront are doing, is this: unbundling can be an effective way for a business to build a valuable platform for customers that is eventually used as a fulcrum for rebundling other higher margin services. That rebundling reduces churn and CAC. This phenomenon which was so colorfully described by Barksdale, is a great example of the strong interconnections between lifetime value (LTV) components. A change in any one variable can impact every other variable — a LTV model is alive and since it can feed back on itself, is not always linear.

3. **"It's not that [Chickenfoot has] run its course, it's just that I'm not sure… in everyone's schedule that we can put aside a year and make a record, make some videos and go out and do a world tour, like what we would have to do. The recording side of it is what's tough; that takes so much time and finances. And if the record business for a band like that, if we could sell a million records, we'd probably say, 'Okay, at least we can pay for the record.' But when you spend half a million dollars on a record and it sells a a hundred and twenty-five thousand copies, I'm sorry, that's 'pay to play." "The record business is kind of done. I mean, I'm sorry to say that. It's sad."**

The music business has a lot of challenges and a number of potential solutions. I have written about this in a number of blog posts including this one, this one, and this one. The high production costs of a record in the face of low album sales mention by Hagar above is just one of these problems. This description that was in the 2004 book *So You Wanna Be a Rock & Roll Star* written by Jacob Slichter is sobering for anyone thinking about trying to make profit on an album:

"Elektra would lend us money, called an advance, so we could pay for the recording costs of making an album. As I already knew, those costs would be high – studio rental could run $2,000 per day and recording could take months. Producers' and engineers' fees might add another $100,000, not to mention mastering, flights, hotels, rental cars – we could easily spend $250,000. If there were anything left over, we'd get to keep it, but it wouldn't amount to much. In return, we would grant Elektra the exclusive rights to our recordings. As money from the sales of records came in, we would be allotted a percentage of the proceeds, known as points. In a typical deal, the band gets thirteen or fourteen percentage points. We'd have to give a few of our own points (four perhaps) to the producer of our record (producers typically get a fee and points). Then we'd be down to ten points. Before calculating the value of those ten points, however, Electra would subtract a large percentage of the gross sales to account for free goods, records given away for promotional and other purposes. Thus, the amount on

which our 10 percent was calculated would be reduced by 20 to 25 percent. So we'd be down even further, perhaps 10 percent on 75 percent of the wholesale album revenue. If our CD was sold in stores for fifteen dollars, the band's share of the revenue might be something between fifty cents and a dollar per CD. Would we get to keep it? No! Elektra would add up all of the expenses of recording and promoting our album – rock videos, radio promotion, touring costs, and so on. The total of those costs, which could run into the millions, would be our recoupable debt to the record company. Our share of each CD sold would be swallowed up by that debt. …. When it came time to record and release future albums, any unpaid debt from our past albums would carry forward. In fact, even if we sold millions of records (in which case the size of our share would increase), we might never recoup. As one friend of mine joked, we'd be rock-and-roll sharecroppers."

4. "Sometimes passion, wanting something different and breaking the rules is the shortest route to success." "I was a successful solo artist and I joined a band called Van Halen like in 1985 or whatever it was. That's backward. Most artists quit the big band to become a solo artist. I left being a solo artist to be in a band again."

Innovation requires that someone break at least one rule. The best founders and innovators have the ability to find the just right rule to break. Break too many rules and you are dead. Learning what rules to break and when, is a skill best accomplished by looking at a lot of examples. The value that a person can get from pattern recognition is why I have written so many blog posts about so many people. The more patterns you see the better that skill gets. For example, there is no recipe for creating a business successfully, but there are best practices and patterns to recognize. In Hagar's case, he went from being a solo performer to being a singer in a band which many people would consider a step back. Of course, Van Halen was not just any band, but Hagar still did something unusual. You cannot outperform other people in life by following the crowd all the time. Being a contrarian all the time isn't workable either. I plan to write soon about the great blues guitarist Buddy Guy. The story about the way Buddy Guy invented a new sound just by paying attention to life is a great example of how a lot of innovation happens:

Buddy first recognized the importance of guitar feedback as a creative tool in 1959 when he observed a young woman's skirt brush up against his guitar resting by the band stand and heard a squeal coming from his amps. By the time Jimi Hendrix broke out in England and came back to the states, he was heavily incorporating feedback he'd learned from Buddy.

As Yogi Berra famously said: "You can observe a lot just by watching." As another aside, if you ask Hagar what music moves him the most, he will say: "Blues. Old R&B. Otis Redding. Then you listen to John Lee Hooker or Lightnin' Hopkins or Jimmy Reed. Listen to James Brown."

5. **"I do things that make money and I do things that make me more famous, but I don't do it for those reasons." "If you get one idea that makes you excited, and you put your heart and soul into it – there is no stopping that." "I've never started a business thinking, Oh, I'm gonna make money off of this. All my ideas have come from sheer enthusiasm."**

Hagar is a missionary business founder, which increases the odds that his business ventures will be successful. Missionaries are able to power through what Scott Belsky calls "the messy middle." These are the times between the exciting first days of starting of the business and

hopefully a glamorous IPO or sale of the business. Venture capitalist John Doerr's slide on this is difference in attitude is:

Mercenaries vs.	Missionaries
drive, **paranoia**	**passion**
opportunistic	**strategic**
"the pitch, the **deal**"	"the **big idea**, partnership"
sprint, short run	**marathon**, long run
obsess on **competition**	obsess on **customers**
aristocracy of founder(s)	**meritocracy**, best idea wins
financial statements	mission, **values** statement
loners, you're on your own	**mentors**, coaches of **teams**
entitlement	**contribution**
the "**deferred life**" plan	a **whole** life (that works)
lust for making **money**	lust to **make meaning** and money
success	success AND **significance**

6. **"I didn't really want to sell the tequila company. But Campari offered me so much money that I thought, 'If I don't do this, I'm going to regret it.' Even if I don't need the money, I'd say, 'Why the hell didn't I do that?' But after I sold it, I felt like there was a hole in my life."**

What Hagar is saying reminds me of when Craig McCaw sold McCaw Cellular Communications to AT&T in 1994. McCaw was not happy after that sale. Like Hagar, he felt like there was a hole in his life. That hole was part of the reason why McCaw famously did not want to be on the AT&T board. There were other factors involved too. For example, he couldn't bear to see the machinations of a bureaucracy at such close range. The official statement by McCaw was captured by *The New York Times*:

"in a strenuously polite statement, the 45-year-old entrepreneur took pains to discourage speculation that he had fallen into a dispute with AT&T. "Much to its credit, AT&T is working exceedingly hard to develop a broad array of products and services," he said. 'Those very efforts make it difficult for me to make even minor contributions to the telecommunications industry and not be perceived to be technically in conflict with my duties as a director.'"

The best founders truly love their business. McCaw loved what was sold to AT&T. So he set out to fill the hole in his life by acquiring other businesses.

Selling a business that you created to someone else is really hard. Warren Buffett is an attractive buyer for many founders since he wants them to keep running their business. Buffett knows that his reputation as being business owner friendly is golden only as long as he does not treat the businesses he buys with respect. This reputation allows him to buy business at a more attractive valuation and he gets the management he wants.

7. **"We have a home in Maui, and we spend a lot of time there. I heard about this guy who was making vodka out of pineapples. I went to meet him and said, 'You're in the middle of these sugarcane fields. Why aren't you making rum?' A week later, he comes over with a little barrel. I tasted it and was like, 'This is the best damn rum ever.'"**

Hagar's decision to go into the liquor business again reminds me of when Craig McCaw bought Nextel to get back in the game he loves. Nextel was in many ways harder since, as Warren Buffett likes to say, "turn arounds seldom do." Craig McCaw and his family invested $1.1 million in January 1996. Founded as Fleet Call in 1987, Nextel initially focused on fleet management, and had been steadily growing through mergers with OneComm and Dial Call. iDEN was launched as a commercial network by Nextel in the US in September 1996. Nextel Direct Connect service, which allows any subscribers in the same local calling area to contact each other instantly on a private "one-to-one" call or on a group call. In December of 2004 Nextel was acquired by Sprint for $35 billion. But before then there were some days in 2002 when Nextel stock was trading at ~$2 that things were touch and go. I am old enough to remember the stock market volatility that occurred in 2002 after the Internet bubble popped. This chart shows Nextel's share price that year. Holding NXTL through July 2002 wasn't similar to a picnic in the park on a sunny day.

8. **"My strategy for running companies successfully is to find the right person."**

The better the quality of the employee, the more the founder can delegate to that employee. To do this an upfront investment is finding the better manager is required. Being able to delegate effectively makes your quality of life and business outcomes better. Delegation to the extent practiced by Warren Buffett only works if you buy the right businesses says

Charlie Munger: "Our success has come from the lack of oversight we've provided, and our success will continue to be from a lack of oversight. But if you're going to provide minimal oversight, you have to buy carefully." A good jockey on a band horse won't perform well say Buffet and Munger. Buffett and Munger also select managers who love what they do enough that financial motivation is only part of the reason they love the work they do. The best place to see this Buffett/Munger philosophy set out in the Berkshire "Owner's Manual." Costco, Munger's favorite company after Berkshire, is an example of a company that realizes to get the right people you must treat and pay them better than competitors. Jim Sinegal of Costco has put it this way: "Paying good wages is not in opposition to good productivity. You'll get good people"

9. **"El Paseo is my fine-dining restaurant in Mill Valley. Fine dining is tough: five waiters per table, crystal, finest silverware and china. I opened it because it's in my hometown, and the building was rundown and needed to be preserved."**

Hagar knows how hard the restaurant business is from actual experience. He has operated the Mill Valley restaurant El Paseo for years (until recently in a partnership with Food Network star Tyler Florence). Hagar knows well that a restaurant will make an actual profit on some dishes and merely break even on others. This info-graphic from Joe Bastianich illustrates the idea:

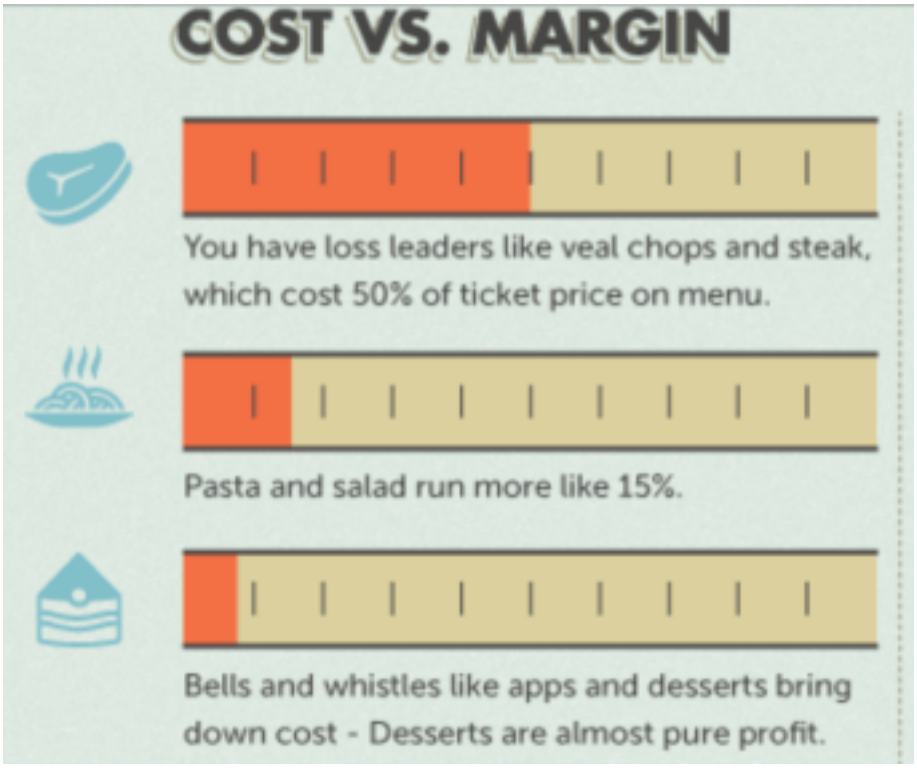

I wrote about the restaurant industry and Waffle House. The profit margins in this business are tight and the margin for error is small. Barriers to entry are low and just about everyone thinks they could successfully open a restaurant, so there are always competitors opening and closing. Even worse, some restaurant owners love the business so much they are willing to make little or no money just to do it. Whenever you have an occupation or business that people would pay to do, compensation and investing returns tend to be low. For example, river rafting guides will never be fabulously wealthy just doing that for a living.

As another aside, Hagar and another well-known Food Network personality not only seem to friends but share sartorial attributes:

10. **"I'm interested in business because I was so poor growing up. We were dirt-ass poor. My mom was basically raising four kids on her own, so things were tough. But it made me grateful for every bit of success I got. And I always wanted more. It drove me to say, 'I'll never be poor again.'"**

No one wants to "return to go" in life. The older you get, the more this is true or should be true. Charlie Munger tells this story about risk:

"I know a man named John Arriaga. After he graduated from Stanford, he started to develop properties around Stanford. There was no better time to do it then when he did. Rents have gone up and up. Normal developers would borrow and borrow. What John did was gradually pay off his debt, so when the crash came and 3 million of his 15 million square feet of buildings went vacant, he didn't bat an eyebrow. The man deliberately took risk out of his life, and he was glad not to have leverage. There is a lot to be said that when the world is going crazy, to put yourself in a position where you take risk off the table. We might all consider imitating John."

Munger also tells the story of a man who late in his life tried to get even richer by investing everything he had in a new venture. That new venture failed and the man had to support himself late in his life working as a store cashier. You are only old once. Having twice as much money when you are already financially well off does not make you anywhere close to twice as happy. Spending the last years of your life living in poverty or not being able to

financially help people you love because you went all-in on an investment and lost is a bad outcome.

11. **"My wife thinks I'm crazy. If I ever go to rehab it's because I'm a workaholic."**

Some people love what they do. Is it really work if that is the case? Are they really workaholics? Bloomberg recently published an article entitled: "People Start Hating Their Jobs at Age 35." If this article describes you, then you are doing it wrong. I mean work is often work, which is why it is called work, but "hate" your job? That's not a great outcome. One of the things I like to tell your people is that the quality of your life is often determined by the choices you have. If you must work at a job you hate you have lousy choices. Lots of people don't realize that the very best thing about having money is that you can use it to have better choices. I don't mean having the choice to buy an expensive sports car, but rather the avoid doing things that you hate. Being happy is highly underrated,

It is true that you can be so active in doing what you love that you adversely impact your health or relationships that you care about though. As an example, I think the relatively recent *Becoming Warren Buffett* special on HBO is partially an admission by Buffett that he did not pay enough attention to certain relationship in his life given the nature of his personality and his love for his work. He is a special person with unique personality attributes and I believe he recognizes that. For example, Buffett asks his wife Astrid put the money he needs in a cup for his breakfast at McDonald's is not ordinary. Depending on what breakfast he wants that day the cup may hold $2.61, $2.95, or $3.17. Everyone has things they are good at doing and things they do not very well.

12. **"If you come up with a brand or business and the idea is just for money, you won't feel it in the long run. You'll just want more and more."**

Hagar has created a charitable foundation to "walk the talk" about making his ventures about more than just accumulating more money. In an interview Hagar has said: "**I want to give a dollar to somebody and have it go right in to their pocket. I want to put food on the table. I'm a grassroots guy. The day I write the check; the next day I want to have someone benefit from it."** This view about how to give money away is more and more common. Carol Loomis writes about the trend in giving to require that money be put to use quickly in this way: "Buffett and Gates and his wife, Melinda, set the goal: They are driving to get the super-rich, starting with the *Forbes* list of the 400 wealthiest Americans, to pledge at least 50% of their net worth to charity during their lifetimes or at death." This is a big change from traditional charitable foundations which were founded to exist in perpetuity, paying out just 5% per year for charitable purposes. as an example of this trend, The Bill and Melinda Gates Foundation will have spent all its resources by 50 years after the last of the benefactor's deaths. Buffett's donations will be given away no more than 10 years after his estate is settled.

One of my own charitable activities this year was to write my seventh book and give away 100% of the royalties to a charity called No Kid Hungry. This blog is in part content marketing for that charitable effort even though the primary intent is giving back by teaching. Even if you do not buy my new book, if you like this blog, as a favor to me, please think about buying some extra non perishable food next time you are in the grocery and dropping it in the food bank box. I think Sammy Hager would also like it if you did that.

Notes:

https://www.reuters.com/article/us-money-lifelessons-sammyhagar/work-hard-play-hard-life-lessons-from-sammy-hagar-idUSKBN1ED0GJ

https://www.forbes.com/sites/danschawbel/2011/05/01/sammy-hagar-on-personal-branding-and-career-success/#651ab59e77c2

https://www.inc.com/magazine/201311/liz-welch/sammy-hagar.html

https://onmilwaukee.com/seasonal/festivals/articles/sammyhagar.html

https://www.usatoday.com/story/life/music/2017/03/17/sammy-hagar-still-accelerating-music-business-and-life/99310598/

https://www.rollingstone.com/music/features/sammy-hagar-on-james-brown-trump-van-halen-reunion-w489226

https://www.pe.com/2015/09/04/fantasy-springs-sammy-hagar-just-wants-you-to-have-a-good-time/

Click to access w11282.pdf

https://www.penguinrandomhouse.com/books/168438/so-you-wanna-be-a-rock-and-roll-star-by-jacob-slichter/9780767914710/

Business Lessons from a Blues Guitarist and Blues Club Owner (Buddy Guy)

January 13, 2018

George "Buddy" Guy (BG) was born in 1936 in Louisiana. His earliest influences included T-Bone Walker, Lightnin' Slim and Lightnin' Hopkins. BG wrote in his autobiography: "I wanted to play like B.B. King but act like Guitar Slim." In 1957, BG cut a demo tape at a Louisiana radio station and bought a one-way train ticket to Chicago. Eric Clapton has said that BG is "by far without a doubt the best guitar player alive." BG considers himself a "caretaker of the blues."

1. **"I had a blues club before The House of Blues or any of these other clubs started. A lot of people will go into business and if they don't make a lot of money in the first six months, they'll close the doors. When I first opened my blues club Legends I lost millions of dollars keeping the doors open. I used to come off the road and meet payroll with money I had just made on tour. And I still didn't close the doors." "When I came to Chicago 54 years ago, they had so many blues clubs that I didn't get to see them all. But over the years, drugs, DUIs and non-smoking really killed a lot of clubs all over the world." "The blues has the blues."**

There was a time in the history of Chicago when the city was filled with blues clubs. *The Chicago Tribune* paints the scene in this way:

"There were so many places on the West Side and South Side that some nights we would just drive around with the window down and listen for the music coming out of the clubs," remembers Jim O'Neal, a founder and former editor of Living Blues magazine, who began exploring the music in Chicago in the 1960s. "There could be as many as 30 bands playing on a weekend night in Chicago, up until the '70s," recalls Bob Koester, founder of the Chicago blues and jazz label Delmark Records.

There are many factors that resulted in the decline of Blues Clubs. In addition to the factors BG mentions, music styles and fashions have also changed which makes the business even harder. There are also many new competing forms of entertainment. Fortunately, Legends can also sell BG merchandise. While selling "merch" is a major factor in keeping the club financially healthy, it is not a panacea. BG is most certainly correct that the most important factor of all are changes in the economics of running a club. The driving force for the club owner is selling alcohol. A music venue lives or dies based on how much alcohol it can sell. That may push a club owner toward a DJ rather than a band. Here's an account of the situation in Seattle for a club:

Why would I spend $10,000 on an artist and take a ton of risk and then, y'know, 'Oh, whoops, we made a mistake and nobody showed up?' In our business, in the small,

independent venue world, we don't have the safety net for risk." A traditional live-music show typically involves multiple bands, van loads of gear and instruments, and crew members. This translates to a much higher price tag than that attached to a DJ, who might only bring a laptop and turntables. "I obviously love bands, but a band is just so much more expensive," says Chambers. "For a band, you have to put so much money down up front, versus a DJ night where you're paying one person to show up and you know there's a huge upside." According to Chambers, DJ nights on weekends draw "usually double the amount" of people who come out to rock shows in those same slots. Johnson also points out that many dance nights are longer than a traditional show, driving more business to the bar. "When you do a typical three-band bill, say you have doors at eight and it's over by midnight," he tells me. "OK, well now you have two hours left over at the end where you're not making any money at the bar because the show's done. You can still make money that way. But when we do these DJ nights, we do them nine to close. So that's just more time." Venue employees also unanimously identified increased alcohol sales as a major advantage of these nights. "Any show at a venue, you're making your money at the bar," says Chambers. "That's your primary source of income. I've been a bartender in venues forever, and you always get those big hits of people rushing the bar between sets. On a DJ night, though, there aren't sets, and you're getting that rush between songs rather than in 15-minute intervals." Or as Johnson puts it, "When there's a DJ, it's 'drink, go dance, come grab another drink. "

2. "I used to go play at clubs and the place would be packed. But the promoter would say, 'well, I didn't make no money tonight.' And I would ask for cab fare home and the guy would say, 'you heard what I said. I didn't make no money tonight.' So if I didn't end up walking home, I'd have to beg somebody for cab fare. So I said to myself then that if one day I was able to do what I'm doing now, I would never strand a musician. I have their money before the doors even open. I've been through that and I don't want any other musicians to go through that."

There are a number of ways that a club pays musicians today. They include:

1. The club guarantees a fixed payment or a percentage of the revenue from a cover charge (whichever is greater): Only the most well-known and proven drinker attracting musicians get this arrangement with the Club. This is probably the formula Buddy Guy uses at Legends given what he said above.
2. The club splits the take at the door from the first dollar of revenue: This is the best treatment a lesser known and less proven band can hope for.
3. The club takes its expenses off the top and then splits the door revenue with the musicians: This is risky for the band.
4. The club charges the band a rental fee ("pay to play"): This is obviously the worst option for a band. But there are so many bands trying to break through and so few clubs on a relative basis for them to play in that this financial arrangement is common. There are several variants of this method all of which create significant risk for the band.

Buddy Guy tells this story about the outcome of playing gig: **"Before the late Junior Wells passed away, we were in California one time and didn't get paid. So I saw a hot dog stand and we got one hot dog and got a knife and cut it into four pieces for us and the band. And we survived. And we still played. When you run into stuff like that, you**

should probably say there's no light at the end of the tunnel. But I didn't have that much sense. Music is what I had dedicated my life to and I'm still doing it."

What might the financial math look like? Here's one account of what happens Charleston:

"Two to three acts on a bill is standard. Generally, there's a local opener, a regional touring act, and either a local or national headliner that's a pretty safe bet for drawing a crowd. Let's say you had a pretty solid night and got 200 folks out, each paying a $5 cover. That means you made $1,000, right? But remember that village? They need to get paid too. First comes the production fees for the door man, security, hospitality, and the sound man. A standard production fee in a 200 capacity is around $250. That leaves roughly $750. To get that many people out might seem easy, but remember we are talking about live, original music here. That's a lot of people, and unless you want to risk potentially making zero dollars if not enough people show up, you might need a promoter. They will take another 15 percent of the net, or $112.50, leaving $637.50. Now split that evenly between three bands, and it's a little over $200 per band. If each band spent $30 in gas to get there, that goes down to $170 per band. Split that four ways, and each person in each band walks with $42.50."

3. "In 1985, no matter how much I loved my [first] club the Checkerboard was a drain. It drank up money like drunk drinking up whiskey. I would have stayed except for the landlord pulling off some underhanded moves to get rid of me."

If a club owner can't control what the supplier charges for an essential item like rent, wholesale transfer pricing can kill the business. If you know of an old school restaurant or club in a prosperous area if you investigate you will often find that the operator owns the building. If the independent operator does not own the building they may be lucky and have a landlord who is willing to offer a lease in return for a reasonable percentage of gross revenue. Chain or multi location operations have a better chance of survival, but wholesale transfer pricing makes operating a music club without owning the building a tough way to earn a financial return. How many have failed in your area over the past five years?

4. "[Legends is] kind of downtown around the hotels, and that keeps it afloat."

BG knows that without convention and tourism related business, there is simply not enough addressable market to keep a blues club alive. This is true even in Chicago. He learned this lesson the hard way. After BG's unfortunate financial experience with the Checkerboard club, he opened his Legends blues club in 1985 in a leased building inside the Loop, behind the Hilton on Michigan Avenue. When BG had enough money to buy a building in 2010 he moved the club to its current location at 700 S. Wabash. Since BG now has no landlord he has solved his wholesale transfer pricing problems on rent, but owning the building that houses legends is not enough to ensure profitability. There is perhaps no one who believes in the importance of a big market more than the venture capitalist Don Valentine who once put it this way: "I like opportunities that are addressing markets so big that even the management team can't get in its way." Whether there is a big enough market is just one business risk and it gets worse if barriers to entry are low. Opening a club is relatively easy compared to other businesses. Keeping the club open is not easy. As Warren Buffett has said: "In a commodity business, it's very hard to be smarter than your dumbest competitor."

5. **"In my pocket hugging my thigh was $600. Took me two years to get that money together."**

In his biography, BG recalls leaving Louisiana in 1957 for Chicago with just $600 to his name.

My life before September 25, 1957, was one thing, and *my* life after was something else. I had said my goodbyes and asked Bob to drive me down to Hammond, the first train stop north of New Orleans. All I had was a suitcase with a few clothes, *my* reel-to-reel tape with the song I cut as WXOK and my Les Paul Gibson guitar.

In a PBS oral history BG describes some of what happened next:

I arrived at about 11:26 the night of September 25, 1957. For some reason I can't ever forget that. And at that point, I wasn't looking to be a musician. I wanted to meet, in my book, the giants of musicians, which was Howlin' Wolf, Muddy Waters, Little Walter, Sonny Boy Williamson, Jimmy Reed, just to name a few of them. They all were living here then. And I wanted to go to work, just common labor in the day, and go out in the night and see if I would learn how I was supposed to play by watching them. My mother had had a stroke, and I was hoping to send money back down there. I got stranded; I'd never found a job. I really looked and looked – I was ready to do anything to help my family. I was too shy to sing, and I got stranded for three days with no food.

There are lessons that business startups and entrepreneurs can learn from BG's experience. The first rule was stated best by a Harold Geneen an American businessman most famous for serving as president of ITT Corporation: "The only unforgivable sin in business is to run out of cash." Lots of other problems can be fixed, having but not having any cash is deadly. How much cash to have when starting out in a new venture is always a challenging question to answer. One suggested rule of thumb for startups is to have at least 6 months of cash on hand. And you should be raising money far before you reach that point. Having at least 6 months of expenses in cash is a good rule from a personal standpoint as well. In addition to having some cash on hand, relatively low cash burn rates allow the individual or business more time to build something valuable. If the cash burn rate is too high, a business can find themselves itself under pressure to prematurely commit to something and that rushed decision can end up being fatal to the business. This is discussed in detail in my new book A Dozen Lessons for Entrepreneurs, which benefits the charity No Kid Hungry.

6. "I would've [taken the train home shortly after moving to Chicago] if someone had just loaned me a dime. Thank God they didn't."

Six months after arriving in Chicago the $600 BG brought with him from Louisiana was gone. He was hungry. BG describes what happened next in this way:

Someone dragged me into the club while Otis Rush was playing, and I went up and played a number. And whoever owned the club said, "I don't know who that is, but hire him." And I went outside and was telling people how hungry I was, and someone said, "No way, man, the way you play that, you ain't got no excuse being hungry again. I'm gonna call Muddy." Well, I was walking out the door, and someone in the aisle slapped me. I didn't know who he was; I didn't want to be bothered. He said, "I'm Muddy. I'm the Mud." And I said, "Oh, Jesus, I'm getting mugged." But it was "Mud" he was saying, not "getting mugged." He put me in the back of the car and made a salami sandwich and convinced me that I could stay and be a part of what they had invented in Chicago.

When someone like BG is a success survivor bias inevitably kicks in among onlookers. There are certainly many people who tried to do what he did but failed but who are now forgotten.

7. "I've got so many friends who have passed on who were told they had to bring some money and they just hung up their guitars. But I didn't, because I didn't have much sense." "I went many days hungry I still was going to small clubs, and I finally got a job driving a tow truck. And I would drive the tow truck from seven to five in the evening, wash the grease off of my hands, and go play the small club that night, because I loved my music so well. I didn't even dream of saying, 'One day you might hit the right note and not have to drive a tow truck anymore.' I didn't plan this; I didn't see this. Because after I played with Muddy Waters and Little Walter and all those guys, I thought I had to go right to bed. I didn't care about no record or nothing, and I just said, I met the guy I come here to meet. And that was high as I could go."

Life was still hard for BG after that initial break. But he persevered because he had a missionary attitude about his work. He loved the music and that sustained him during the hard times. Many business startups succeed for the same reason.

8. **"In 1967 I was driving a tow truck making $2.11 an hour. A man [from Canada] came to me saying, 'I guarantee you, you will make more money playing guitar than driving that tow truck.' I said: 'I got to have proof of that' because I didn't want to get out there and get stranded."**

BG was trying to create a "margin" of safety even though he probably did not know this term. The core idea behind a margin of safety approach is simple: life is often far less dangerous and painful if you have a financial or other cushion since you may make a mistake. The margin of safety concept applies in many areas of life that are not directly financial. Do you walk home or accept an automobile ride home with someone who has been drinking? Does getting in that car have a margin of safety? In a financial context Seth Klarman writes: "A margin of safety is achieved when securities are purchased at prices sufficiently below underlying value to allow for human error, bad luck, or extreme volatility in a complex, unpredictable and rapidly changing world." To better deal with inevitable mistakes we all make as human beings, Charlie Munger believes that you should have created a "margin" of sufficient size which ensures that even if mistakes happen the outcome will still be "adequate." To illustrate, if you are thinking about moving to Mongolia to look for a job, having a bank account with at least six months expenses in it and enough for a plane ticket home if things go wrong is a good idea. Munger says: "In engineering, people have a big margin of safety. But in the financial world, people don't give a damn about safety. They let it balloon and balloon and balloon. It's aided by false accounting." Buffett agrees: "When you build a bridge, you insist it can carry 30,000 pounds, but you only drive 10,000 trucks across it. And the same principle works in investing." The size of the Margin of Safety should vary with the magnitude of the risk involved. Michael Mauboussin writes in his book *The Success Equation*: "The margin of safety is available for absorbing the effect of miscalculations or worse than average luck."

9. "The last time we was talking, I said, 'B, you know all the money in the world ain't no good if you can't use it.'"

How can you say it better than BG does here? Being the richest person in heaven or hell is not a valuable thing.

10. "If you go get a tire that's got a slow leak in it, you can get it fixed before it goes down."

When I read BG saying this it reminded me of a Charlie Munger quote:

"There are two kinds of businesses: The first earns 12%, and you can take it out at the end of the year. The second earns 12%, but all the excess cash must be reinvested — there's never any cash. It reminds me of the guy who looks at all of his equipment and says, 'There's all of my profit.' We hate that kind of business."

In terms of a decisional framework, every business has maintenance capex or the amount that must be invested to maintain the earnings power of the business. Growth capex is the spending to ramp up production. BG is saying that if a business does not maintain its equipment like tires or sound systems, eventually the business will break.

11. "When I went to Chicago I was looking for a dime and I found a quarter."

In deciding to move to Chicago BG increased his optionality. It worked out for BG better than he ever could have imagined. There are lot of ways to increase your optionality. As Nassim Taleb has said: "Living in a city, going to parties, taking classes, acquiring entrepreneurial skills, having cash in your bank account, avoiding debt are all examples of activities which increase optionality." BG thought he had little to lose in leaving Louisiana. "I'm not afraid to do something. I was born on a sharecropper's farm and we had to walk everywhere we went. I know how to boil a pot of potatoes on a fireplace. I grew up with this – not knowing what you're going to eat tomorrow." He thought his downside in leaving for Chicago was low. What did he have to lose?

You might find I interesting that BG's line "looking for a dime and found a quarter" is a line in the Foo Fighters song "Something from nothing." For example, "Here lies a city on fire… it started with a spark, and burned into the dark" is inspired by the Great Chicago Fire in 1871. Someone on the web site Song Meanings did a nice job tying lines in that Foo Fighters song to Buddy Guy:

"A button on a string" *Buddy Guy talks about how we would convert anything he could into an instrument because he was broke when he was young.*

"And held you in my bloody hands
These rattled bones and rubber bands
Washed them in the muddy water" – *Muddy Waters is the Father of Chicago Blues.. also Buddy guy made a guitar like sound out of a rubber band.*

"But you can't make me change my name
They'll never make me change my name
Pay no mind now ain't that's something
Fuck it all I came from nothing"- *The suits wanted to change Buddy Guy's name to have him become more marketable.*

In the premier episode of The Foo Fighter's documentary Sonic Highways, Dave Grohl informs viewers about BG's career via interviews and old video clips. You can find the link in the End Notes.

12. "**Music is like prize fighting. If you are good enough to make the right plays in front of the right audience, then you are on your way. If not, you don't go anywhere. That's just a part of life.**"

Financial success in the music business expresses itself in a power law distribution. A phenomenon called "preferential attachment" produces the"power law distributions. This phenomenon is not new, but as Nassim Taleb points out, it has received an accelerating boost from digitization and the internet. A writer of a story about Nassim Taleb put it this way: "We live in Extremistan, where black swans proliferate, winners tend to take all and the rest get nothing –there's Domingo and a thousand opera singers working in Starbucks." Why is this the case? In the book *Entertainment Industry Economics* Harold L. Vogel argues that Metcalfe's law is a phenomenon that:

> applies to all networks, whether composed of computers, telephones, or roads, or of people who express their opinions to their families and friends about things like movies, music, television programs, or toys or books.[17]
>
> If a network has sufficient capacity to remain unclogged even while carrying lots of traffic, its utility (or value) rises by at least the number of users (or nodes) squared. More formally,
>
> $$V = aN^2 + bN + c,$$
>
> where V is the value, N is the number of users, and the other terms are constants. Figure 2.1 illustrates the concept.
>
> The only difference in the case of the Internet is that nodes are able to connect simultaneously with more than one other node, which means that unlike most (single point-to-point) telephone connections, the value rises faster than N squared. Such networks therefore show exponential, not linear, growth and increasing, not decreasing, returns to scale.[18]

The distribution of financial success in the music business looks like this:

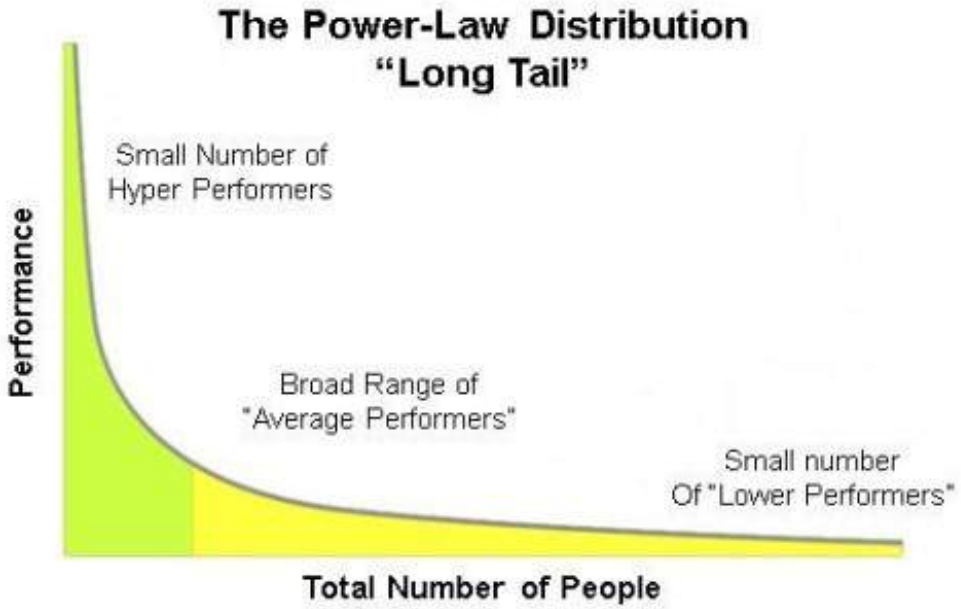

As an example of a power law distribution in the music business: The share of concert revenue taken home by the top 1% of performers has more than doubled, rising from 26 percent in 1982 to 56 percent in 2003.

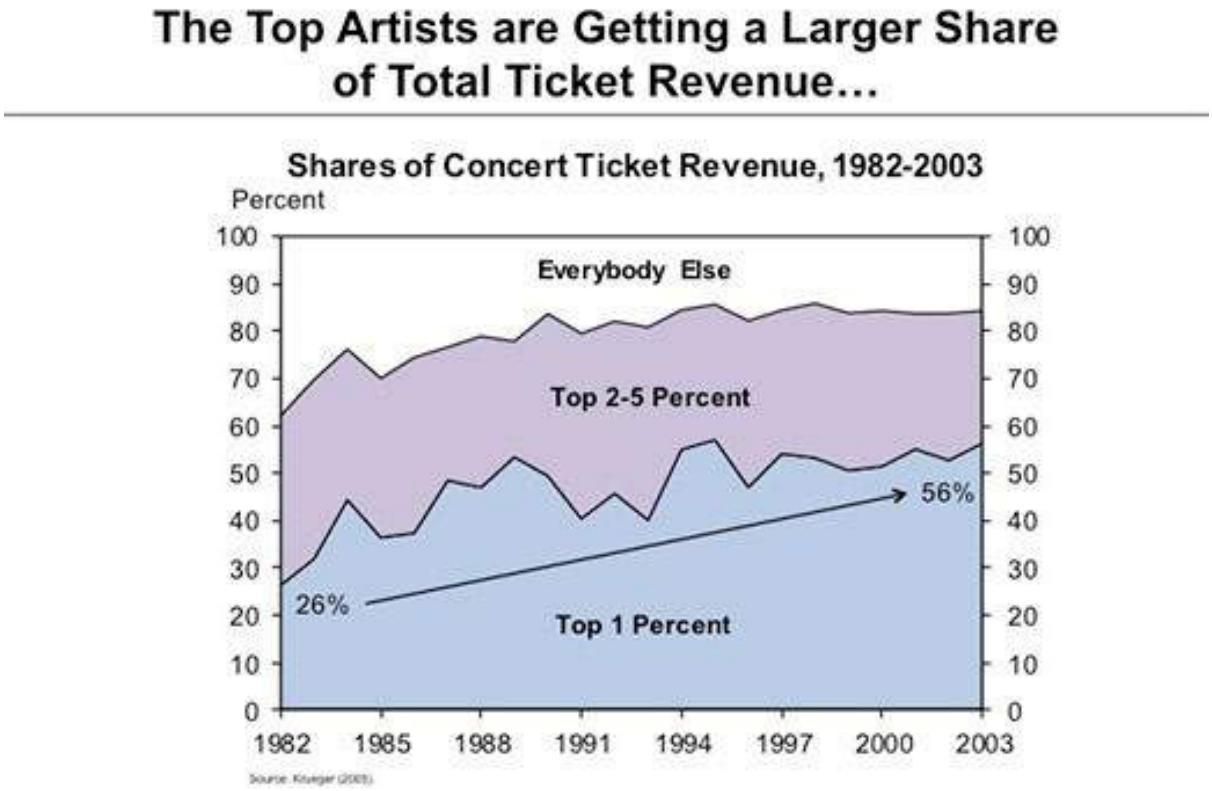

As another example, the top 5 percent of musicians take home almost 90 percent of all concert revenues.

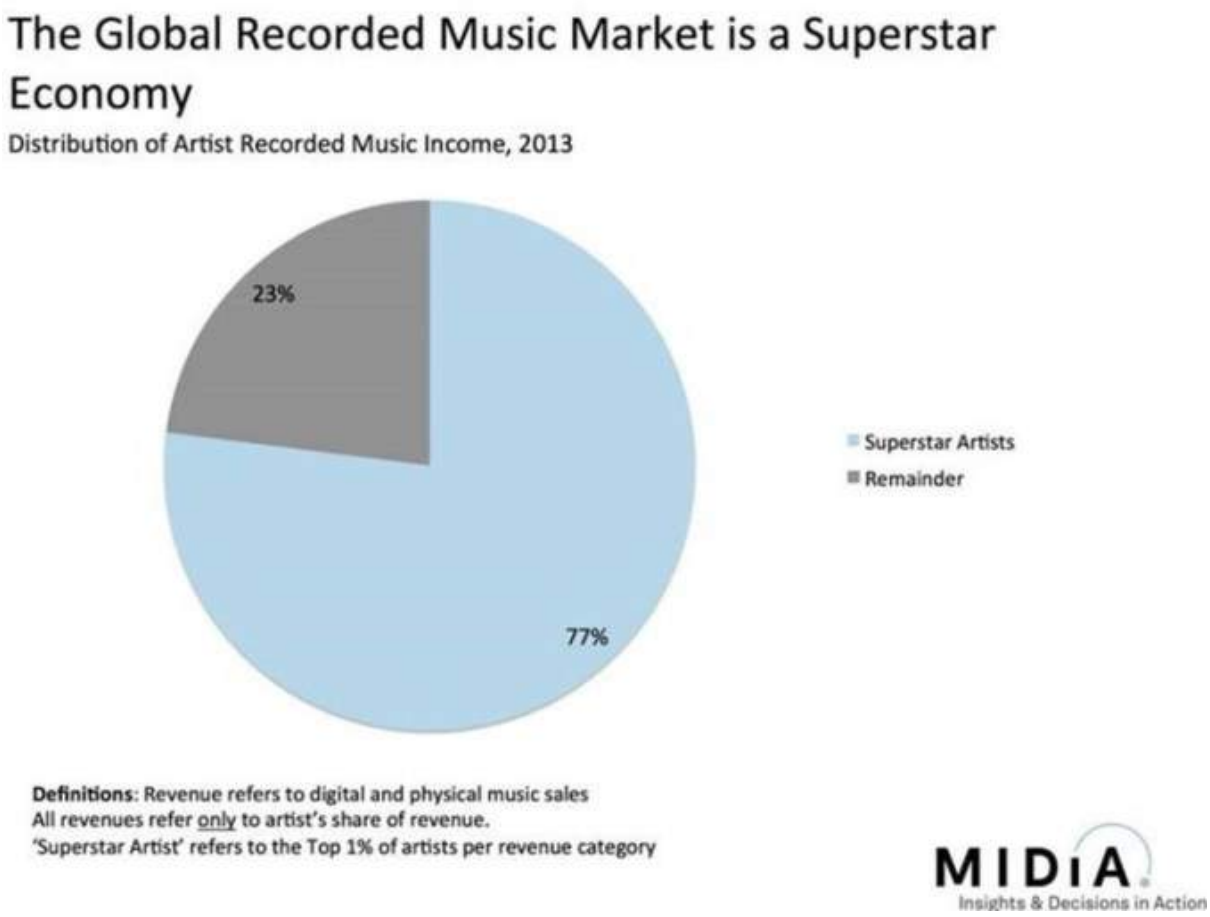

This power law outcomes means that being a musician is a winner take all business. This applies to other forms of art. Unfortunately, most performers in the arts will need another job to make ends meet financially.

Bonus quotes:

"If you don't think you got the blues, just keep livin'." "And I wanted to make my mother feel good, so I say, 'Well, I'm gonna go to Chicago and make more money than I'm making here, and I'm gonna be sending you money back and you'll see how well I'm doing. I'm gonna drive back down to you in a polka-dot Cadillac.' I knew I was lying to her. And when she passed away in 1968, I said to myself, 'You lied to your mama and never got a chance to tell her you were lying." That bothered me. And one day I said to myself, 'You know what? I'm gonna see if Fender will make me a polka-dot Strat.'"

"The blues comes in all denominations, man. It comes with your family, with your lover, with your friend. And I had some good friends until I loaned them a lot of money; then I lost them. I've got a piece of paper in my club, 'You loan your friend your money, your gonna lose your money and your friend." And that's the blues, sir." "Listen to the lyrics – we're singing about everyday life: rich people trying to keep money, poor people trying to get it, and everyone having trouble with their husband or wife!"

"I compare my guitar playing to the gumbo. I copied something from everybody." "I can't learn nothing from listening to me. That's something I already know."

"I used to tell my mother when I was about 10 or 11, 'I can't wait till I'll be a man,' and she used to look at me and say, 'Ok, when you get to be a man, you got to go where you don't want to go,' and I just realized she was telling me the truth. At that time, I couldn't see that."

Notes:

Foo Fighters Sonic Highways: Buddy Guy Extended Interview (HBO) https://www.youtube.com/watch?v=VRRC1tCIudk

When I Left Home: My Story https://www.amazon.com/When-Left-Home-My-Story/dp/0306821796

Rolling Stone https://www.rollingstone.com/music/artists/buddy-guy/biography

Rolling Stone: https://www.rollingstone.com/music/features/from-howlin-wolf-to-hendrix-the-life-and-times-of-buddy-guy-20151104

PBS Oral History: http://www.pbs.org/americanrootsmusic/pbs_arm_oralh_buddyguy.html

Seattle Weekly: http://www.seattleweekly.com/music/last-night-a-dj-saved-my-life/

Charleston: https://www.charlestoncitypaper.com/charleston/a-musicians-case-against-the-5-cover-charge/Content?oid=5846161

Song Meanings: http://songmeanings.com/songs/view/3530822107859492820/

Super Bass-O-Matic Subscriptions: Lessons from Rovco on Customer Retention

January 20, 2018

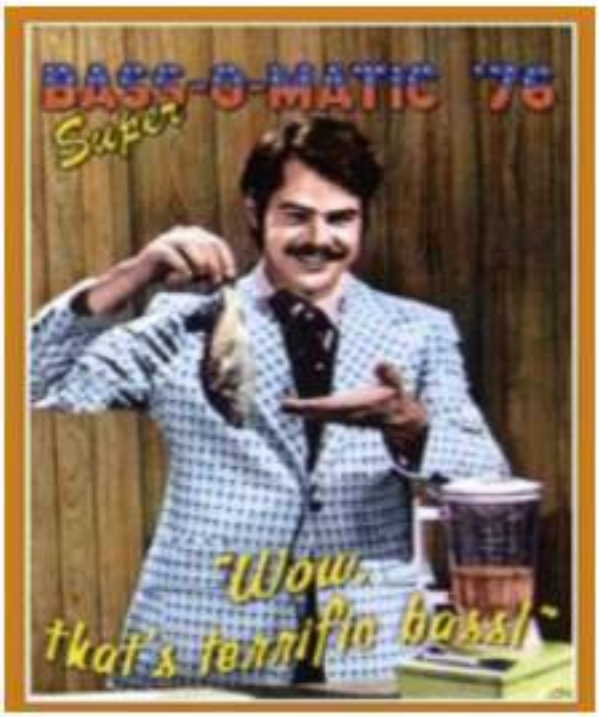

As you know, Rovco has traditionally sold delicious bass on a transactional basis to its "Super Bass-o-Matic" customers.

Spokesman: How many times has this happened to you? You have a bass, and you're trying to find an exciting new way to prepare it for the dinner table. You could scale the bass, remove the bass' tail, head and bones, and serve the fish as you would any other fish dinner. But why bother, now that you can use Rovco's amazing new kitchen tool, the Super Bass-o-Matic '76. Yes, fish-eaters, the days of troublesome scaling, cutting and gutting are over, because Super Bass-o-Matic is the tool that lets you use the bass with no fish waste, and without scaling, cutting or gutting. Here's how it works: Catch a bass, remove the hook, and drop the bass – that's the whole bass – into the Super Bass-o-Matic. [drops the bass into the blender] Now, adjust the control dial so that the bass is blended just the way you like it. [turns blender on and grinds it to a pulp] Yes, it's that simple!

[Cut to Bass-Drinker who drinks a glass of bass] **Bass-Drinker**: Wow, that's terrific bass!

Rovco's non-contractual relationship with its customers made the timing and number of bass purchases hard to model. As most of you know, Rovco has created a service which enables its customers to have fresh bass delivered to them twice a week on a subscription basis. As you can imagine, these bass subscriptions are very popular, but there are still the usual customer acquisition cost (CAC), cost of goods sold (COGS), average revenue per user (ARPU) and customer churn (retention) issues to deal with. Some customers still prefer to buy their bass when they feel like it on an a la carte basis.

I have written about the opportunities and challenges of a subscription business model here and here. I tried to keep these posts simple to make the ideas more understandable. In this post, I will provide a more nuanced view of customer retention. Among the challenges Rovco and other subscription businesses inevitably encounter is that different subscription

customers have different retention rates – some customers will go through just about anything to stay with you while others will run for the exits at the first available opportunity.

Churn is almost always reported as an average but actual churn rates can vary based on factors like sales channel, demographics, license type, license term, and so on. I know what you might be thinking – c'mon, the overall churn rate is a helpful summary measure, so what's the worst that can happen? In many situations, assuming that customers from all these different channels, demographics, and licenses have exactly the same desire to remain with your company over time can be dangerous – most of the time, it will underestimate the overall future activity and thus the value of your customer base. It can also lead to a very mistaken view of the how well a business is doing and what strategies should be pursued to make it better.

These differences across customers, which marketing professors Daniel McCarthy and Peter Fader refer to as "customer heterogeneity," should be embraced and leveraged, not ignored. A business with "good heterogeneity" (i.e., a company which has pockets of customers who are much better than the average customer in the portfolio) will be dramatically more valuable than a business with the same overall average churn rate but whose customers all tend to be the same. In other words, it is important to differentiate between businesses that have low retention heterogeneity from businesses that have high retention heterogeneity. Without that, you will not have an accurate understanding of the business – how much your business is worth and what levers can be pulled to manage the value of your customers over time.

Let's examine this idea through an example. The following spreadsheet screen shots of the Bass-o-Matic business illustrate the point. Imagine that all Bass-o-Matic customers had the same 18% chance of churning out of the subscription each month. This is how their customer lifetime value (CLV) might look:

1	**Modeling a subscriber business**		
2			
3	Blue are for editing		
4	Calulation capped at a maximum of 7 years (84 months) which is 1.2% churn		
5			
6	**INPUTS**		
7	CAC	$450.00	
8	ARPU (per month)	$110.00	
9	Churn (per month)	18.0%	
10	Gross Margin	33%	
11	Annual Discount Rate	10.00%	
12	COGS (per month)	$73.70	
13	Monthly Discount Rate	0.83%	
14	Terminal value multiplier (months)	5.35	
15			
16	NPV	-$257.26	
17	IRR	-119.24%	Excludes last period with terminal value

Now imagine instead that while Rovco's average monthly churn rate was still 18%, it actually had two customer segments – a "die-hard loyal" segment that absolutely loved getting those bass twice a week and would do so for a long time to come, and a mediocre segment that would churn out much more quickly than average. Let's assume the die-hard

loyal segment is small (30% of the customers) with a 1.7% monthly churn rate, while the mediocre segment is large (70% of the customers) with a 25% monthly churn rate. This is how the CLV figures shake out:

1	**Modeling a subscriber business**		
2			
3	Blue are for editing		
4	Calulation capped at a maximum of 7 years (84 months) which is 1.2% churn		
5			
6	**INPUTS**		
7	CAC	$450.00	
8	ARPU (per month)	$110.00	
9			
10	Segment 1 Churn (per month)	1.7%	
11	Segment 1 % of Customer Base	30.0%	
12	Segment 2 Churn (per month)	25.0%	
13	Gross Margin	33%	
14	Annual Discount Rate	10.00%	
15	COGS (per month)	$73.70	
16	Monthly Discount Rate	0.83%	
17	Terminal value multiplier (months)	40.28	
18			
19	NPV	$83.38	
20	IRR	13.36%	Excludes last period with terminal value

The average CLV moves up from -$257 to +$83 when we move from assuming one customer segment to two. The way the math works out, for a given average churn rate, assuming all customers are the same results in the most pessimistic forecast for the future value of the cohort. The more "spread out" or "heterogeneous" the customer retention rates are, the more a single retention rate will undershoot CLV, because the good customers are "thrown out with the bath water" by lumping them in with everyone else. This "heterogeneity factor" is an important but often overlooked additional dimension to customer value. This is the essence of what McCarthy and Fader do for public companies in their article on valuing subscription businesses using publicly disclosed customer data. In this work, they show not only that you can "back out" customer heterogeneity from public data, but also that it predicts far better than models which assume there is none. They have applied this same methodology to other public companies like Blue Apron and HelloFresh, and to private companies through a company they started, Zodiac. The methodology is certainly more involved, but they pretty convincingly show that the alternative, while simple, is dangerous and performs poorly in practice.

Taking it a step further, imagine that you as a manager knew that there were two customer segments that had such dramatically different loyalty profiles. The strategies you could pursue next are clear. You could find out all the features and characteristics that are associated with that better customer segment to try and acquire more like them. You might show them a bit more love than customers in the other segment, because they are worth a lot more to you. And so on. These would certainly *not* be the most natural strategies to pursue if all your customers were indeed the same.

Embracing differences across customers is the lifeblood of what McCarthy and Peter Fader call customer centricity. It is impossible to be customer centric if all your customers have the same loyalty or retention rate, and yet this is far and away the most common assumption made when the popular media discusses a company. All the worse that this assumption results in the most pessimistic view of your customers' value, for a given average churn rate.

As we venture outside of the news media and high-level analyses of the companies in them, the opposite objection often comes up: "we do that segmentation stuff already!" Unfortunately, most people do segmentation in a very suboptimal way. While it is tempting to think that you can segment your customers purely on the basis of observable features like demographics and psychographics, is this the best approach? Demographics and personas have a notoriously weak ability to sort out your good customers from your bad ones. Measures of customer satisfaction like the highly popular Net Promoter Score are significantly challenged. It is much more effective to turn to your best data source on customer loyalty – the actual renewal behavior of your customers, which you get for free from your transaction log. You may not know why Bob loves to eat Bass on subscription so much, but if his renewal data says it's true, then it's true, demographics be damned. Incorporating customer history into the segmentation procedure is easy – you can do it in Excel, and there are notes which document in detail how to go about it. The payoff for making this small leap is the ability to truly pursue customer centric business strategies. At a time when the product centric mindset is starting to show some cracks, this payoff looms large relative to its cost.

Summing up, while customer retention is more complex than the popular media would have you believe, it ultimately boils down to a very simple concept – your customers are different from one another. It's high time that we stop ignoring it and start embracing it.

Please note that these are not the actual spreadsheets I use in my work which are proprietary. They are simplified for teaching purposes. You will need to create your own spreadsheet perhaps using the one provided by David Skok here http://dskok.wpengine.netdna-cdn.com/wp-content/uploads/2017/02/What-is-your-TRUE-LTV-02-2017-1.xlsx as a starting point.

Lessons from Phil Knight about Business and Being an Entrepreneur

January 27, 2018

Phil Knight famously turned the startup Blue Ribbon Sports into the giant company known as Nike. Knight described the market at the time he started his business in this way: "The American shoes were offshoots of tire companies. Shoes cost $5 and you would come back from a five-mile run with your feet bleeding. Then the German companies came in with $30 shoes, which were more comfortable." During a trip to Japan after graduating from Stanford with a MBA he decided buy shoes from Onitsuka, the manufacturer of Tiger (now ASICS) athletic shoes. It took 14 months after placing the order for samples to finally arrive. Knight recalls: "I showed them to my old coach, Bill Bowerman, who was so impressed he asked me to let him in on the deal. We shook hands on a 50-50 partnership and each of us put up $500. We bought 300 pair of shoes. First year sales were $8,000. We made a $250 profit. By 1972 we got to $2 million in sales with a 3 percent net profit. But it hadn't been easy. After all, $500 apiece doesn't provide much equity, even for $2 million."

1. **"After posting eight thousand dollars in sales in my first year, I was projecting sixteen thousand dollars in my second year, and according to my banker this was a very troubling trend.**

'A one hundred percent increase in sales is troubling?' I asked.

'Your rate of growth is too fast for your equity,' he said.

'How can such a small company grow too fast? If a small company grows fast, it builds up its equity.'

'It's all the same principle, regardless of size,' he said. 'Growth off your balance sheet is dangerous.'

'Life is growth,' I said. "Business is growth. You grow or you die.'"

Knight has both a MBA and was a CPA when he started Blue Ribbon Sports. He knew the value of a business is the present value of expected future cash flows. He also knew the value

of *free* cash flow, which is the amount of cash generated by a business that is available to pay back debt, pay investors, and/or grow the business. The challenge of scaling a business that eats cash to generate more cash is very seldom simple to solve. This is why a great CFO is so valuable to a business. Sometimes in the early stages of a business the CEO is also the CFO. For example, Bill Gates was the first CFO of Microsoft and even when Frank Gaudete was hired to be the CFO he admitted that what Bill knew about Microsoft's finances went beyond what he knew. The venture capitalist Pitch Johnson said once: "Frank Gaudette was the first CFO that Gates hired. He'd previously been at Informatics and a number of other companies. He used to come to meetings and say that he had been in the business for years and years and thought he really knew his financial stuff but that Gates would go right by him. He said Gates really knew it instinctively."

Fred Wilson has a great explanation of why a business benefits from having a great CFO:

"A VP Finance is what you need when you want a leader who will keep the wheels on the bus, who will make sure there are financial controls in place, who will make sure the books, records, and reports are accurate and timely and well presented, and who will make sure you have the right amount of accountants and clerical staff on hand to manage the work of the finance organization. A VP Finance is largely about "what happened" and a little about "what is happening right now?" A CFO is what you need when you have all that I described above but you also need a forward looking financial mind at your side, when you need deep strategic thinking in the financial function, when you need to do big transactions (both M&A and financings), and when you need someone to manage your relationship with investors (particularly public investors). A CFO is largely about "what is going to happen and how do we get there?"… Get a VP Finance onboard as soon as you can afford one. They will let you sleep at night. Get a CFO on board when you are ready to take on the world."

Today the primary source of equity for a growing business is venture capital. Unfortunately for Knight, the venture capital industry was not developed enough in Nike's formative years to be a source of capital for his business. He did try at one point to raise venture capital for Nike but had zero success. Knight had no choice other than to use loans and other non-equity types of finance to grow his business. One of the most interesting things about Knight's story is how he bootstrapped his business in so many clever ways. While his bootstrapping approach created huge risks, the end result of not raising much equity was that he did not take a lot of dilution, which made him extraordinary wealthy as the business grew. Knight said:

"Again and again I'd gently try to explain the shoe business to my banker. If I don't keep growing, I'd say, I won't be able to persuade Onitsuka that I'm the best man to distribute their shoes in the West. If I can't persuade Onitsuka that I'm the best, they'll find some other Marlboro Man to take my place. And that doesn't even take into account the battle with the biggest monster out there, Adidas. My banker was unmoved. Unlike Athena, he did not admire my eyes of persuasion. Equity. How I was beginning to loathe this word. My banker used it over and over, until it became a tune I couldn't get out of my head. Equity—I heard it while brushing my teeth in the morning. Equity—I heard it while punching my pillow at night. Equity—I reached the point where I refused to even say it aloud, because it wasn't a real word, it was bureaucratic jargon, a euphemism for cold hard cash, of which I had none."

2.

"We weren't broke, we just had no money. Lots of assets, no cash." "I spent most of every day thinking about liquidity, talking about liquidity, looking to the heavens and pleading for liquidity. My kingdom for liquidity."

Issues related to the timing of the arrival of cash can result in the death of a business even though it is actually creating shareholder value. Cash is like oxygen for a business. Without this oxygen, a business dies. Cash flow timing issues create a need for finance which has been satisfied since before recorded history by moneylenders and investors. Michael Milken describes the process of finding the optimal solution:

Financing is an art form. One of the challenges is how to correctly finance a company. In certain periods of time, more covenants need to be put into deals. You have to be sure the company has the right covenant — to allow it the freedom to grow, but also to insure the integrity of the credit. Sometimes a company should issue convertible bonds instead of straight bonds. Sometimes it should issue preferred stock. Each company and each financing is different, and the process can't be imitative.

Fred Wilson writes: "Great CFOs are few and far between. And in order to recruit one of them, you will need an interesting business and a meaty role. VP Finance talent is in larger supply and they can take you very far." A talented CFO adds huge value to a growing business. Investors often fail to pay enough attention to a company balance sheet and instead focus on the income statement. The recent collapse of the UK based construction group Carillon is an example of cash management gone wrong among other problems. The business had been struggling given that it had £900m of debt and a £587m pension deficit before it failed. The Independent newspaper wrote: "This is a company that is expected to pay back something like 1p on the pound to creditors after its liquidation and that had just £29m left in the bank at the end. That might sound like a lot, but for a company of its size it is pin money."

3.

"Any dollar that wasn't nailed down I was plowing directly back into the business. Was that so rash? To have cash balances sitting around doing nothing made no sense to me. Sure, it would have been the cautious, conservative, prudent thing. But the roadside was littered with cautious, conservative, prudent entrepreneurs. I wanted to keep my foot pressed hard on the gas pedal. Somehow, in meeting after meeting, I held my tongue. Everything my banker said, I ultimately accepted. Then I'd do exactly as I pleased. I'd place another order with Onitsuka, double the size of the previous order, and show up at the bank all wide-eyed innocence, asking for a letter of credit to cover it. My banker would always be shocked. You want HOW much? And I'd always pretend to be shocked that he was shocked. I thought you'd see the wisdom… I'd wheedle, grovel, negotiate, and eventually he'd approve my loan. After I'd sold out the shoes, and repaid the borrowing in full, I'd do it all over again. Place a mega order with Onitsuka, double the size of the previous order, then go to the bank in my best suit, an angelic look on my face. I was forever pushing my conservative bankers to the brink, forcing them into a game of chicken. I'd order a number of shoes that seemed to them to be absurd, a number we'd need to stretch to pay for, and I'd always just barely pay for them, in the nick of time, and then just barely pay our other monthly bills, at the last minute, always doing just enough, and no more, to prevent the bankers from booting us. And then, at the end of the month, I'd empty our accounts to pay Nissho and start from zero again."

In addition to having challenges related to cash, a business like Blue Ribbon Sports can have little or no current accounting "earnings." This is upsetting to some people since current earnings are easy to determine and are simple. Unfortunately earnings are backward looking and can be manipulated. In his book *Expectations Investing* Michael Mauboussin points out the problems with just looking at earnings rather than discounting expected free cash flows:

"Shareholder value only increases if the company earns a rate of return on new investments that exceeds the cost of capital. Management, however, can achieve earnings growth not only when it is investing at or above the cost of capital but also when it is investing below the cost of capital."

To illustrate this point, Eugene Wei describes the Amazon business model:

To me, a profitless business model is one in which it costs you $2 to make a glass of lemonade but you have to sell it for $1 a glass at your lemonade stand. But if you sell a glass of lemonade for $2 and it only costs you $1 to make it, and you decide business is so great you're going to build a lemonade stand on every street corner in the world so you can eventually afford to move humanity into outer space or buy a newspaper in your spare time, and that requires you to invest all your profits in buying up some lemon fields and timber to set up lemonade franchises on every street corner…"

Warren Buffett sets out the right test for a business owner: "We feel noble intentions should be checked periodically against results. We test the wisdom of retaining earnings by assessing whether retention, over time, delivers shareholders at least $1 of market value for each $1 retained." Knight definitely met Buffett's test at Nike and so is someone like Jeff Bezos at Amazon.

When you have no cash you must watch every penny and do an opportunity cost analysis with every expenditure. Knight said about the early days in an early Nike office:

"We couldn't afford to fix the broken glass, so on really cold days we just wore sweaters. Meanwhile, in the middle of the room I erected a plywood wall, thereby creating warehouse space in the back and retail-office space up front. I was no handyman, and the floor was badly warped, so the wall wasn't close to straight or even. From ten feet away it appeared to undulate. Woodell and I decided that was kind of groovy. At an office thrift store we bought three battered desks, one for me, one for Woodell, one for "the next person stupid enough to work for us." I also built a corkboard wall, to which I pinned different Tiger models."

Every startup or business that raises a financing round has a certain "runway" to retire risks and achieve progress. Any cash not spent on achieving those goals increases the probability that it will fail to "graduate" to the next level. The odds of failure are already high. Not spending cash on high rent exposed brick office space and free Kind bars is wise because it shortens the runway. Shorter runways are a bad idea because they pressure people to do things like falsely believe they have product/market fit which can be fatal. A Herman Miller Aeron chair is especially expensive if the $1,000 used to buy it is raised in a financing at a $5 million valuation and the company eventually does an IPO. It's way too easy to justify expenses like free Kind bars and expensive view office space one by one. As Charlie Munger says: "Intelligent people make decisions based on opportunity costs." The best businesses make wise choices. You can't have everything. A company that dies but everyone has a

$1,000 chair until then is tragic. If you buy the chairs maybe don't buy something else. Life is full of trade offs. Being an adult is about making hard choices. A startup having a longer financial runway is not achieved without making hard choices.

4.

"My search for credit put me in touch with Nissho Iwai, the sixth largest Japanese trading company with annual sales of $100 billion. We began developing a positive relationship. We were no longer limited to track and field shoes. So we brought in wrestling shoes, tennis shoes, basketball shoes as well. Sales grew to $3.2 million, but we had our first-ever loss, plus one other little problem. We got kicked out of our bank. Too much leverage, not enough cash. The state of Oregon only had two big banks and we'd been thrown out of the other one just two years before. Nissho Iwai stood in for the bank until we found one: The First State Bank of Milwaukie, Oregon. It was a small bank, but we made it work."

Knight was very wise to have a backup source of finance for Nike. As I wrote above, cash is like oxygen for a business. Even if there is only a small probability of something happening, if the magnitude of that outcome is large, you must act to create a margin of safety to mitigate that risk and uncertainty. Seth Klarman makes the key point: "A margin of safety [accounts] for human error, bad luck, or extreme volatility in a complex, unpredictable and rapidly changing world." There are many ways to use the margin of safety concept that have nothing to do with finance. For example, can you think of a system that had no margin of safety that was located in located in Hawaii that sent an alert about incoming ballistic missiles? Sometimes a margin of safety is as simple as a pop up on the screen that asks: "Did you really mean to send notice to everyone in Hawaii that a ballistic missile is on the way and that this is not a drill?" An engineer named Rob Pike said something once that applies to the user interface of the system that failed so badly in Hawaii: "Failures happen no matter what you do. That means the software you use has to cope. That means replicate everything. Two pieces of crap are better than one."

5.

"Supply and Demand is always the root problem in business."

There are some aspect of a business that really can't be fully understood until someone actually operates a business. Charlie Munger likes to say operating a business is about microeconomics and that he and Warren Buffett ignore macroeconomic factors. Do they keep track of the business cycle? Sure. They do that by staying disciplined about the price they pay to buy businesses. If you focus on the micro the macro takes care of itself. "My partner Charlie Munger and I have been working together now 55 years. We've talked about every business you can imagine and stocks. We have never had one decision that involved a macro factor. It just doesn't come up." But they do think about microeconomics every day. In his classic "Five Minute University" routine on Saturday Night Live the comedian Father Guido Sarducci pointed out: "Economics? Supply and Demand. In my profile of Harvard Business School professor Michael Porter I wrote:

What Michael Porter did after graduating from Harvard Business School was to go across the Charles River and get an Economics PhD. Porter came back to the Harvard Business School to teach as a professor yelling: "Hey people, *supply* matters too when it comes to

generating a profit." It's that simple. If you have too much supply, then price drops to a point where there is no long term industry profit above the company's cost of capital. That Michael Porter's most important insight was to teach business school academics that demand *and supply* matters in determining profit is shocking, but there it is.

6.

"At first, we couldn't be establishment, because we didn't have any money. We were guerrilla marketers, and we still are, a little bit." "It's alright to be Goliath but always act like David."

Necessity is the mother of invention. A business that has very little cash for marketing must figure out some way to scale. In the beginning months and year of a business that may mean doing things that do not scale. As an example, Knight sold shoes himself at first from the trunk of his Plymouth Valiant at track meets and other events. As another example, the AirBnB founders went door-to-door with a rented camera to generate their first few listings. When a business like Nike is trying to find out what customers want to buy there is no better way to get the right answer than actually talking directly to customers.

7.

"We used to think that everything started in the lab. Now we realize that everything spins off the consumer." Now we understand that the most important thing we do is market the product. We've come around to saying that Nike is a marketing-oriented company, and the product is our most important marketing tool."

The first person Nike hired to endorse its products was the Romanian tennis professional Ilie Nastase. He signed an endorsement contract with *Nike* in 1972. Nastase was particularly interesting and newsworthy since he was a rebel and liked to stir things up. I can't resist telling a personal story about Nastase. His first wife was Dominique Grazia, a Belgian fashion model who he married at the age of 26. He was playing in a tournament in the 1970s at a tennis club that I belong to that still requires everyone to wear white. Dominique did wear white, but her top was fully fish net. I remember the commotion her transparent outfit caused at the club even today. I loved what she did even though certain conservative elderly club members nearly fainted. Of course, Nike has had a parade of athletes who have endorsed its products over the years. Steve Prefontaine the American middle and long-distance runner who competed in the 1972 Olympics famously signed with Nike in 1974. Eventually Nike would sign Michael Jordan to an endorsement contrast and the rest is history.

8.

"It's hard enough to invent, manufacture, and market a product, but then the logistics, the mechanics, the hydraulics of getting it to the people who want it, when they want it—this is how companies die, how ulcers are born."

Operating a business is much harder than people imagine and a company like Nike with an international supply chain to manage is a particularly challenging business to manage. Nike's most famous supply challenge happened in 2004. At the time a Nike spokesperson said that the supply chain software "didn't deliver on performance or functionality." Knight said about this software problem on a earnings call: "This is what you get for $400 million, huh?"

9.

“For an Entrepreneur, Every Day Is a Crisis”

I’m looking forward to Scott Belsky’s book on what he calls “the Messy Middle.” He has written about this topic on his on his blog:

In reality, the middle is extraordinarily volatile—a continuous sequence of ups and downs, expansions and contractions. Once the honeymoon period of starting a new journey dissipates, reality hits you. Hard. You’ll feel lost and then you’ll find a new direction; you’ll make progress and then you’ll stumble.

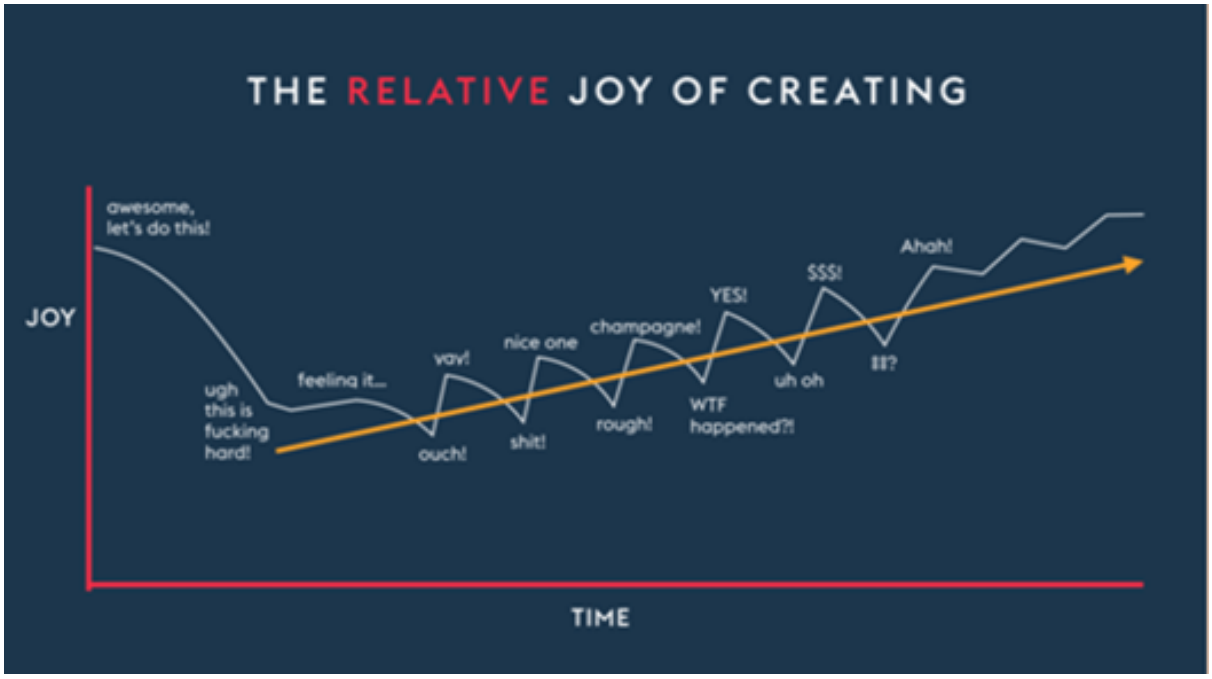

Knight’s book about his journey in creating Nike has some very influential admirers among them are Bill Gurley and Bill Gates. The Microsoft founder says about the book: **“***Shoe Dog,* Phil Knight’s memoir about creating Nike, is a refreshingly honest reminder of what the path to business success really looks like. It’s a messy, perilous, and chaotic journey riddled with mistakes, endless struggles, and sacrifice. He tells his story as honestly as he can. It’s an amazing tale.” In his review of Knight’s book Bill Gates writes: “There are no tips or checklists. Instead, Knight accomplishes something better. He tells his story as honestly as he can. It’s an amazing tale. It’s real. And you’ll understand in the final pages why, despite all of the hardships he experienced along the way, Knight says, ‘God, how I wish I could relive the whole thing.’”

10.

“Someone somewhere once said that business is war without bullets, and I tended to agree. ” “Like it or not, life is a game.” Play by the rules, but be ferocious. Dream audaciously. Have the courage to fail forward. Act with urgency.” “I wanted to leave a

mark on the world. I wanted to win. No, that's not right, I simply didn't want to lose." "You only have to succeed the last time."

This is sort of a grab bag of quotes, but it give you a sense of what Knight is like as a competitor. Adidas, Puma, Under Armor and other companies are formidable competitors and yet Nike has thrived. Knight's business did hit many speed bumps on its way to success, some of which could have been fatal. One fun story about a potential speed bump is told by Doug Houser (Knight's first cousin) who was at one time acting as the lawyer for the company in important litigation:

In 1973, Blue Ribbon Sports and Knight filed a lawsuit in federal court in Portland against Onitsuka. The lawsuit "alleged that (Onitsuka) had breached their contract by soliciting new distributors and demanding that Knight sign over control of BRS for the right to go on distributing Tigers," says Kenny Moore's book, *Bowerman and the Men of Oregon.* Federal Judge James Burns ultimately issued a ruling that entitled Blue Ribbon Sports to damages but allowed both the U.S. company and Onitsuka to continue selling identical shoes. Critically, though, only Blue Ribbon was allowed to sell them under their U.S. trademarked names, including the Cortez. Onitsuka appealed but eventually sought an out-of-court monetary settlement rather than re-fight in court. Houser said: "they came up with a figure we felt was great. At the time it was an awful lot of money and it was to be confidential. And still is. Knight and Houser were asked to come to the San Francisco office of the law firm that represented Onitsuka. The pair was under the impression that they'd sign papers and there would be a transfer of funds into a Blue Ribbon account. "So Knight and I go down and we appear in the San Francisco lawyers' conference room," Houser said. "And they have an old steamer trunk. Looks like a casket. A big steamer trunk, filled with cash." The Onitsuka lawyer explained the unorthodox payment method as the result of the difficulty of transferring money out of Japan. He encouraged Knight and Houser to sign some documents. "And I said, 'Is that X dollars?'" Houser said. "And they gulped and said, 'Well no. It's illegal to bring that much money out of Japan. And we couldn't' bring it all. That's all you get. But it's a lot of money and you ought to sign.' They knew we were desperate and needed money badly. "But it was grossly unprofessional. Grossly wrong. Morally wrong. Everything about it stunk. "And Knight said, 'Eff you. We're out of here.' "And we left the conference room and went out into the lobby, punched the elevator button and just like in the movies, just when the elevator opened, the conference room door opened and they hollered, 'Don't' leave. We've got the rest of the money.' "So we went back into the conference room, they opened a door to an adjoining conference room where there was a second steamer trunk and they said, 'Now sign the papers.' "And at that point we said, 'We're not signing anything until a bank has counted the money and we have a certificate of deposit in the company's name. This could be counterfeit for all we know and you guys have no credibility whatsoever.' "I called the Bank of America, explained our problem at, maybe, 4 o'clock in the afternoon and they said, 'It's going to take a while to count that. But we'd be delighted to stay open late and we'll have an armored car there in about five minutes.' (The money was in $100 U.S. bills, Houser said.) "And they came and got the steamer trunks and we went to the bank and waited and they gave us our certificate. We signed the release papers. The case was over. We had the certificate of deposit. We went out to celebrate. Had a wonderful dinner and drank too much."

What Onitsuka tried to use with Knight was a particular style of negotiation known as an ultimatum strategy. My co-author and I wrote I wrote about this sort of approach to a negotiation in our book *The Global Negotiator* which is available as a PDF for free here.

11.

"I'd like to publicly acknowledge the power of luck. Athletes get lucky, poets get lucky, businesses get lucky. Hard work is critical, a good team is essential, brains and determination are invaluable, but luck may decide the outcome."

Luck determines so any things in life. There is of course the saying "the harder you work the luckier you get" but that is not quite right. Michael Mauboussin points out that if you can alter the outcome with work it is not luck but rather skill. Knight knows he has been the beneficiary of many types of luck. I have found that people who understand how lucky they have been in life are more likely to give back to others. I have certainly been lucky which is why I have donated all royalties from my new book to charity.

12.

"Your goal should not be to seek a job or even a career, but to seek a calling. That search has just begun. In your time here [at Stanford Business School], you've probably gone through 50 or 100 case studies. And in the years ahead you'll probably go through thousands more. Most case studies are not about decision-making, not even about judgment. They are about a search, for wisdom."

Knight came up with his plan to create a business by importing running shoes from Japan while he was a student at the Stanford. He believed that the shift from Germany to Japan that had taken place in the camera business was possible in running shoes. His knowledge of and passion for running shoes and sports came from being a middle-distance runner for the University of Oregon track team. He knows and loves his business. He said once that if he had worked at Microsoft he would have been fired since technology is not his strong suit. Software is also not his passion. Knight is a *Shoe Dog* and that was critical to Nike's success. A final quote from Knight from his book on this point is appropriate:

"Driving back to Portland I'd puzzle over my sudden success at selling. I'd been unable to sell encyclopedias, and I'd despised it to boot. I'd been slightly better at selling mutual funds, but I'd felt dead inside. So why was selling shoes so different? Because, I realized, it wasn't selling. I believed in running. I believed that if people got out and ran a few miles every day, the world would be a better place, and I believed these shoes were better to run in. People, sensing my belief, wanted some of that belief for themselves. Belief, I decided. Belief is irresistible."

Extra Phil Knight quotes:

"We have a small percentage of our shoes right now that are made by total automation. We can't scale it overnight, but in 10 years that will probably be scaled." Technology that used to be fodder for science fiction stories is soon to become a reality."

"I do not follow conventional wisdom."

"Don't tell people how to do things, tell them what to do and let them surprise you with their results."

Notes:

Shoe Dog:

Expectations Investing:

Belsky: http://digest.scottbelsky.com/issues/positive-slope-s-belsky-the-messy-middle-killing-elephants-the-state-of-creative-process-57110

Wilson: http://www.businessinsider.com/vp-finance-vs-cfo-2011-11

http://www.oregonlive.com/playbooks-profits/index.ssf/2015/10/post_74.html

https://alumni.stanford.edu/get/page/magazine/article/?article_id=43087

https://www.cnbc.com/2016/04/26/cnbc-transcript-nike-chairman-phil-knight-speaks-with-cnbcs-sara-eisen-on-squawk-on-the-street-today.html

http://www.oregonlive.com/playbooks-profits/index.ssf/2014/06/phil_knights_address_to_the_gr.html

Business Lessons from Reed Hastings (Netflix)- Part 1

February 3, 2018

Reed Hastings is the Chairman, CEO, President and co-Founder of Netflix. After graduating from Bowdoin College in Maine Hastings joined the Peace Corps. He then obtained a master's degree in computer science at Stanford. Hastings was the founder of Pure Software which built tools for Unix software developers. Pure was acquired by Rational Software in 1997, the same year Netflix was founded.

1. **"We're figuring out every year how to use the Internet to make a great consumer experience. Every year is an experiment." "We are investing heavily in [machine learning] because we want it to be: you turn on Netflix and there's a row, there's like four choices, and you just want to watch them all. To get to that consistent view is where we are targeting." "We're very experimental so if it works well we'll do more. If it doesn't work well, you won't hear about it anymore." "Netflix 'gets me' is the emotion we are looking for." "If the Starbucks secret is a smile when you**

get your latte, ours is that the Web site adapts to the individual's taste." "We are just a learning machine. Every time we put out a new show we are analyzing it, figuring out what worked and what didn't so we get better next time." "It's not Netflix that's making the changes. It's the Internet.

Netflix is a leading example of a business which understands the power of a connected and data-driven relationship with a customer. This relationship creates a powerful platform that enables a business to constantly experiment to discover, among other things, how to: (1) deliver more value to customers; (2) expand the market for existing products and services and create new products and services and (3) help customers find what will make them happiest. The goal with this process is to drive the best indicator of customer happiness which is actual usage of the product or service. As just one data point on how powerful this approach can be: more than 80% of the video people watch on Netflix is discovered through a recommendation engine. *Wired* describes the process:

Netflix uses machine learning and algorithms to help break viewers' preconceived notions and find shows that they might not have initially chosen. To help understand, consider a three-legged stool. "The three legs of this stool would be: Netflix members; taggers who understand everything about the content; and our machine learning algorithms that take all of the data and put things together," says Todd Yellin, Netflix's vice president of product innovation.

People tend to put a lot of emphasis on Netflix using machine learning to decide what video content to create and not enough emphasis on how it is used to more efficiently acquire customers and turn them into fans of its services. The use of machine learning to improve customer acquisition and marketing has resulted in significant improvements in customer unit economics in many industries but Netflix is one of the best examples. For example, huge investments are now being made by businesses in systems which optimize every type and aspect of acquisition funnels. If one business does not use machine learning in this way and its competitors do so, that business is operating with a huge possibly fatal disadvantage. To illustrate how machine learning can be used to improve marketing, after making the initial decision to invest in *House of Cards* the most important use of machine learning by Netflix was to optimize marketing and distribution rather than production. By using machine learning approaches is it possible through experimentation to find the optimal approach to creating "fans" for Netflix's services. Modern technology enables mass customization so that the nature of the trailer each person sees and when the video is released for viewing to be optimized to create the desired word of mouth.

Once a connected relationship exists with customers the ability of the service provider to use telemetry data respond to customer desires and behavior is greatly enhanced. Systems can be created to run experiments at lower cost and greater speed than has ever been possible before due to the proliferation of a vast array of cloud-based services. Once the experimentation process is automated, people like marketers, product managers and engineers have the ability to run experiments quickly without the direct involvement of a data scientist. The speed at which optimizing product and service experiments can be run provides a business with either a significant competitive advantage or the ability of that business to stay in business if competitors are doing so. As Charlie Munger says:

"The great lesson in microeconomics is to discriminate between when technology [like machine learning] is going to help you and when it's going to kill you. And most people do

not get this straight in their heads…. that there are all kinds of wonderful new inventions that give you nothing as owners except the opportunity to spend a lot more money in a business that's still going to be lousy. The money still won't come to you. All of the advantages from great improvements [in a technology like machine learning] are going to flow through to the customers."

Can a business opt out of making machine learning investments? Well, it can't do so for very long and stay in business.

The biggest cultural change that businesses are going through as a result of this technological shift is a transition from being organizations that measured themselves by shipping products and services to organizations driven by actual customer usage of services. I heard someone say recently that "everyone needs to become a data scientist" and I like that phrase a lot. Of course, systems and tools must be created to make this "we are all data scientists now" more of a reality. Creating these systems is essential since the alternative of employees of a business getting in line to wait for their turn to talk to a "real data scientist" will not scale.

Hastings does not talk about how research is used at Netflix to supplement data science, but I suspect that the emphasis on data about actual usage does not mean that they don't conduct any research. For example, with a new product or service there is not yet any use to measure, so research can be valuable. Some blending of quantitative and qualitative data is probably happening at Netflix. This text from an article in *The Guardian* describes one aspect of decision making at Netflix that makes clear that human intuition is still a big part of how they make decisions:

Ted Sarandos once called himself a "human algorithm" because of his use of data rather than gut instinct to work out what viewers want, and he has described House of Cards as "generated by algorithm": … he used data to work out how many subscribers loved both political thrillers and Kevin Spacey. "Big data is a very important resource to allow us to see how much to invest in a project but we don't try to reverse-engineer," he says, adding that commissioning decisions are more like "70% science and 30% art".

What sort of data do they look at?

"…the focus is on the audience, and that there is no programming grid – or appointment linear-based television – that is typically used by traditional TV networks. Barometers of success are if the audience completes watching the show, the timeframe within which they finish watching a series if there is social media buzz by critics and fans."

2. "What we do is try to learn and adapt. Rather than commit to one particular point of view, we will adapt."

The truism is: the only constant is change. What is different about this truism now is that the pace of change is accelerating. When I hear people talk about a "Great Stagnation" I think: "What planet are these people living on?" and "What industry are they working in?" Developments in machine learning mean that systems can be created which allow adaptation to occur on a scale and at a speed never before possible. Prediction becomes less possible than ever (if it ever was possible) in this new environment due to rising complexity caused by connects systems and the ability to adapt quickly is vastly more important. Michael Mauboussin describes the challenge in this way: "Increasingly, professionals are forced to

confront decisions related to complex systems, which are by their very nature nonlinear… Complex adaptive systems effectively obscure cause and effect. You can't make predictions in any but the broadest and vaguest terms. … complexity doesn't lend itself to tidy mathematics in the way that some traditional, linear financial models do." A business like Netflix that has decided to focus on adaption and making decisions opportunistically at every step is trying to maximize optionality which allows them to handle complexity more effectively than their competitors. Nassim Taleb identifies the problem with a non-adaptive approach: "A rigid business plan gets one locked into a preset invariant policy, like a highway without exits —hence devoid of optionality." The accelerating pace of change is creating a need for businesses to adapt faster and more efficiently. As Darwin famously said: 'It is not the most intellectual of the species that survives; it is not the strongest that survives; the species that survives is the one that is able to adapt to and to adjust best to the changing environment in which it finds itself."

3. "By 2011 we realized that many of the firms we were buying from were eventually going to want to run their own streaming service. We had no reliable supply. We had to go vertical since it was not going to be in their interest to sell to us over time."

Hastings is saying that Netflix understands the dangers associated with "wholesale transfer pricing." Eugene Wei has written specifically about how the concept applies to Netflix:

"Netflix had a great advantage when *First Sale Doctrine* permitted them to buy DVDs at the same wholesale price as any retailer since it capped their costs. But in the TV/movie licensing world, the content owner can constantly adjust their price to squeeze almost every last drop of margin from the distributor as you can't find perfect substitutes for the goods being offered. Ask TV networks if they make any money licensing NFL, NBA, and MLB games for broadcast. Hint: the answer is no. In the digital world, transfer pricing can be even more of a cruel mistress."

To illustrate what Netflix is trying to avoid with an analogy, imagine yourself walking into a store and wanting to buy an antique chest. Also assume that the owner by listening to what you said to your friend heard you say: "I simply must own it." The merchant's power to set the price combined with your desire to buy that chest means that you are in deep trouble in setting the price of the chest. Walking into that antique store and not needing to buy anything completely changes the negotiating dynamic on price. As a reminder:

1. Don't fight a land war in Asia;
2. Don't play cards with a man called Doc;
3. Don't write really long blog posts and expect many people to read to the end; and
4. Don't negotiate the price of something the seller knows you must have.

Netflix knows it must own a significant portion of its own content. It was forced to make a "burn the lifeboats" decision to move forward with owning content once they started streaming. The conventional wisdom was that tech companies which start dealing with Hollywood are inevitably eaten alive. And yet Netflix has made it work. But there were doubters at first. I remember when:

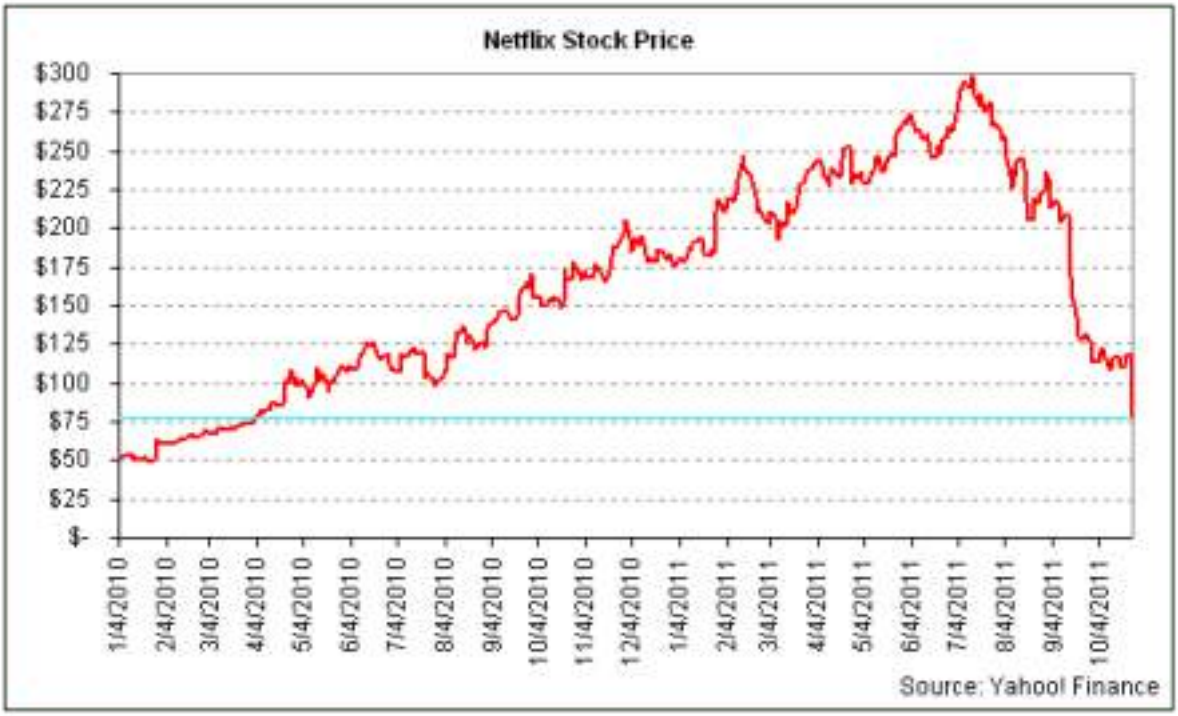

Hastings has made clear his view that a business can't dabble in something like creating content or technology. He has said that at least one third of a company's total resources must be committed in order for a business to have any financial success. He has also said that licensing content and trying to create a business around that is hard. Anyone and their dog can license and resell content to stream. Hastings believes: "It is easy to get into the streaming business– what is hard is making a profit." Hastings tried licensing a few movies at Sundance and showing them on Netflix, but notes: "You can do the 'money ball' analysis about the content to figure how much it is going to get viewed. It is easy to see that it does not work." Netflix had no choice but to start green lighting its own first party content "all in." Business which dabble in something are setting themselves up for failure. Hasting's view is that a business must jump in with both feet to be successful.

4. **"There are scale economies in companies like Netflix. Those merit investing forward to get to scale. Call that normal business. Then there are rare businesses like LinkedIn and Facebook where there are network effects. The power of getting to scale is so great, and they are such extreme winner-take-all markets, that it's worth doing anything to scale. You do crazy things because you have to grow 300% to maximize the opportunity. You do things that are sloppy. If you're in a network effect business, you get more of 'first is forever.'" "Netflix is trying to combine personalization, on demand content, smart TVs and all these great geeky things with incredible content. If we can combine them better that protects us against HBO that is very good a content but not so good at tech." "You know often the right strategy for a challenger brand which is Amazon in the case of streaming video is to try many things, because they're not sure, just copying Netflix is not going to typically get someone very far. The leader's role is to keep the main thing the main thing. Our focus is on doing even better content, getting better partnerships, better mobile streaming. We just have to have the discipline to keep**

doing what we're doing at many times the scale, and if we do that, things will work out really well for our global customer base and thus for our investors."

Netflix benefits from "data network effects" since the more people who use Netflix, the more data they have and the better the recommendation systems get. Matt Turck writes:

"Data network effects occur when your product, generally powered by machine learning, becomes smarter as it gets more data from your users. In other words: the more users use your product, the more data they contribute; the more data they contribute, the smarter your product becomes (which can mean anything from core performance improvements to predictions, recommendations, personalization, etc.); the smarter your product is, the better it serves your users and the more likely they are to come back often and contribute more data – and so on and so forth. Over time, your business becomes deeply and increasingly entrenched, as nobody can serve users as well. Data network effects require at least some level of automated productization of the learning. Of course, most well-run businesses "learn" in some way from data, but that's typically done through analytics, with human analysts doing a lot of the work, and a separate process to build insights into the product or service. The more automation you build into the loop, the more likely you are to get a flywheel effect going. Google is a classic example of data network effect at play: the more people search, the more data they provide, enabling Google to constantly refine and improve its core performance, as well as personalize the user experience. Waze, now a Google company, is another great example, essentially a contributory database built on data network effects. There are also plenty of examples of data network effects found at the feature (rather than core business) level: for example, recommendation engines that are now everywhere from Amazon (products you'll want to buy) to Netflix (movies you'll want to watch) to LinkedIn (people you'll want to connect with), and keep getting better with more users/data.

In addition to the demand-side economies of scale (network effects) just discussed, there are also supply-side economies of scale that benefit Netflix's business. In other words, Netflix benefits from the size and scale of its operations, with cost per unit of output that decreases with increasing scale as fixed costs are spread out over more units of output. Many people have doubted this over that Netflix benefits from network effects and supply side scale economies over the years. Dredging a few headlines up is useful and entertaining:

"Why Comcast will Crush Netflix" from 2012 in *Fast Company*

"Lessons from the Strategy Crisis at Netflix" from 2016 in *Strategy +Business*

"Netflix: Sell, Sell, Sell" from 2017 in *Seeking Alpha* (of course the link no longer works)

As I have said many times, I will not do a valuation for readers of this blog of a stock and that includes Netflix. It would not be helpful for me to give stock "tips" in this blog since it encourages terrible behavior, particularly among people whom it can harm the most.

Netflix's competitive position has produced a stock valuation that is quite attractive to say the least. The last time I checked NFLX was trading at ~265.

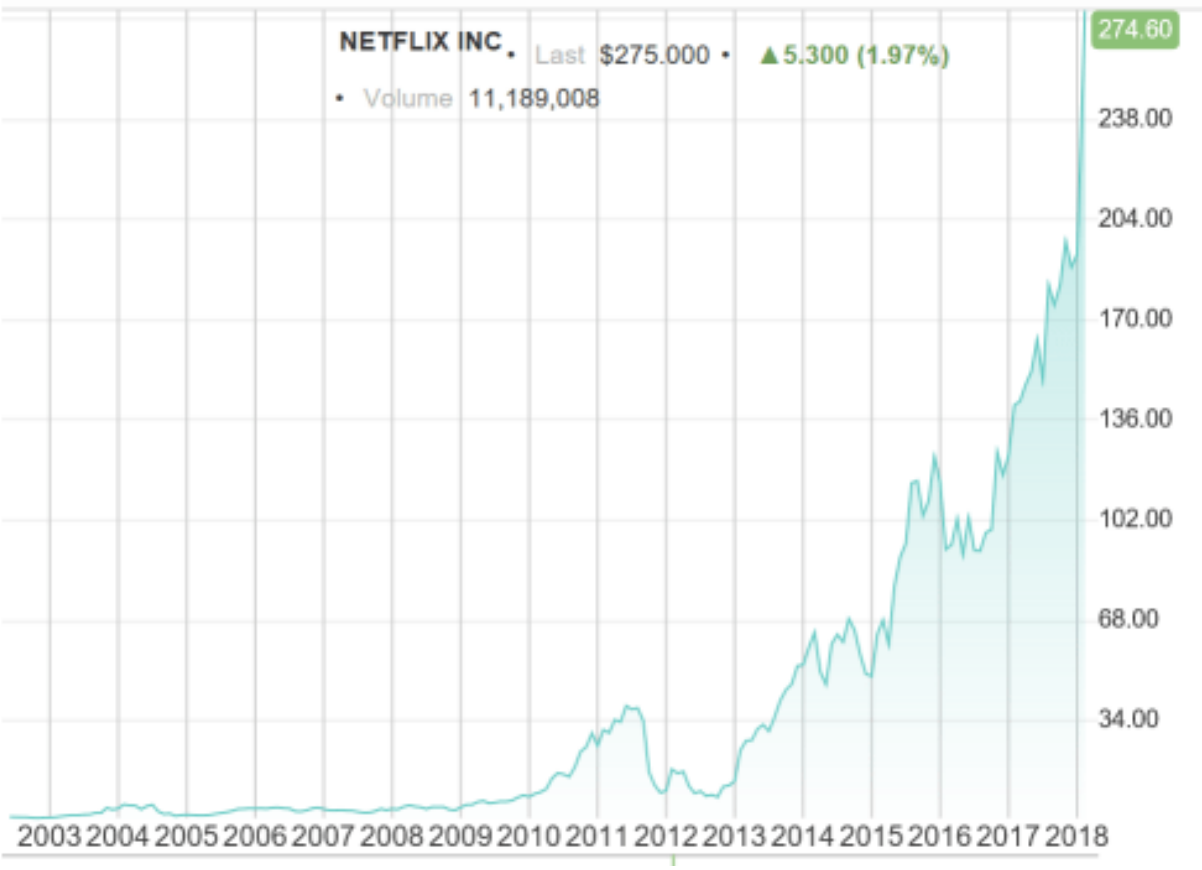

Even though I will not provide a stock tip people will be able to find them anyway from the usual mob of Wall Street sell-side analysts. Their views are depicted here in a graphical format:

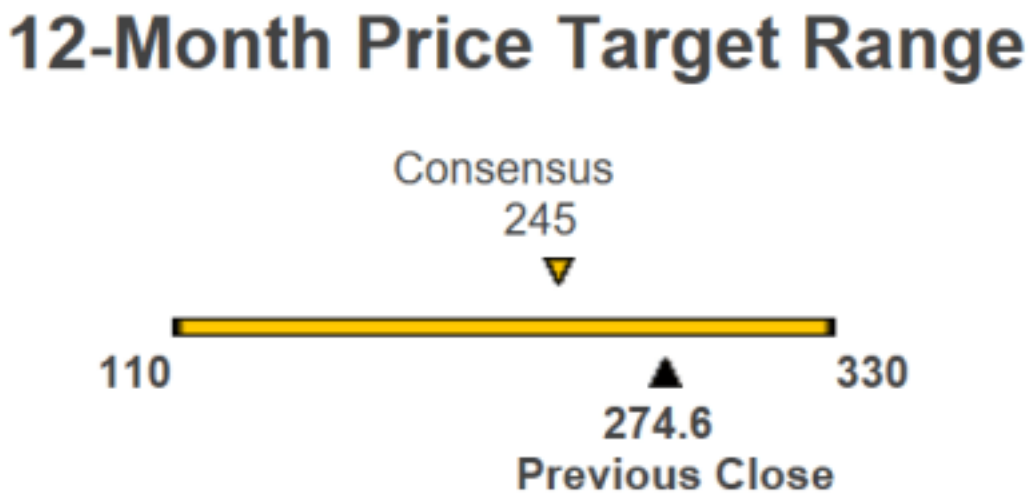

Oh, you say you want a specific prediction from these sell-side analysts? Well there are many to choose from such as:

As two example of a sell side analyst predictions, MKM Partners analyst Rob Sanderson recently raised his 12-month price target on Netflix to $320 and BTIG analyst Rich Greenfield has a $330 price target. Opinions on the Netflix stock price are like belly buttons, everyone has one! It is easy to find one that fits with a preconceived notion on valuation unless it is to sell. There is one lonely analyst says NASDAQ and one other source I saw said there are actually three.

Some people reading this blog post will inevitably jump up and down about Netflix's P/E multiple and other ratios. "The P/E ratio is too high!" they will exclaim. This jumping up and down is good exercise for them (it has cardiovascular and other health benefits). I will not take a position on whether the current NFLX stock price is too high or too low. I will say that I would make my analysis based on future absolute dollar cash flows and not current accounting earnings, especially since since it is a rapidly growing subscription business. I believe that accounting earnings are a lousy way to evaluate a business since I am an advocate of the approach suggested by Michael Mauboussin (the co-author of the book *Expectations Investing*): "Management can achieve earnings growth not only when it is investing at or above the cost of capital but also when it is investing below the cost of capital." Mauboussin's view is:

1. *Follow the cash.* Investor returns come from two sources of cash—dividends and changes in share prices. But a company cannot pay dividends unless it is able to produce positive cash flows. So without the prospect of future cash flows, a company commands no value. Stock prices therefore reflect transactions between investors willing to sell the present value of a company's expected cash flows and buyers who are betting on higher cash flows in the future. Cash flow is how the market values stocks.

2. *Forget earnings and price-earnings multiples.* Savvy investors don't rely on short-term metrics such as earnings and price-earnings multiples because they fail to capture the long-term cash-flow expectations implied by the stock price. Indeed, the most widely used valuation metric in the investment community, the price-earnings multiple, does not determine value but rather is a consequence of value. The price-earnings multiple is not an analytic shortcut. It is an economic cul-de-sac.

In making an assessment of Netflix these "up and down jumpers" that have love for PE ratios (CAPE!) should keep in mind while they are improving their fitness that Netflix's streaming business = servers mostly from third party provider, people, customer data and algorithms. Netflix is fundamentally a software-based platform. In valuing a company like Netflix it is wise to recall that it does not make its growth investments in assets like video stores which can be depreciated over time under accounting rules. A software-based services company like Netflix is investing in assets like machine learning systems that create better sales funnels (lowers customer acquisition cost), machine learning systems (improves customer retention) and algorithms that reduce the amount of bandwidth required to stream video (increases gross margin and retention). Each of these types of software improves the unit economics of Netflix's business and helps create a competitive advantage. BTW, Netflix is a software business. Is Hulu a software business? Is HBO?

Some readers of this blog may be asking about now: "Can't you at least give us a little more guidance?" I can suggest that they look at the Netflix unit economics using tools I have discussed before on this blog. This will give them a bottoms up view that they can reconcile with their top down analysis in their search for greater forecasting accuracy. Here is one set of Netflix numbers based on some educated guesses about inputs into LTV like churn and customer acquisition cost:

INPUTS	
CAC	$50.00
ARPU (per month)	$10.00
Churn (per month)	2.8%
Gross Margin	35%
Annual Discount Rate	9.00%
COGS (per month)	$6.50
Monthly Discount Rate	0.75%
Terminal value multiplier (months)	28.79
NPV	$50.00
IRR	50.73%

Here is another version:

INPUTS	
CAC	$30.00
ARPU (per month)	$10.70
Churn (per month)	2.2%
Gross Margin	36%
Annual Discount Rate	9.00%
COGS (per month)	$6.85
Monthly Discount Rate	0.75%
Terminal value multiplier (months)	34.15
NPV	$100.58
IRR	127.67%

There are a massive number of combinations you can consider by changing the variables in blue in a spreadsheet. How much can Netflix raise prices and what would the impact be? What would churn be in the business if a recession started? Will gross margins change over time? How many subscribers can Netflix can generate? You can do your own math using your own assumptions and your own spreadsheet. Doing this sensitivity analysis is a lot of work, but investing isn't supposed to be easy. If investing was easy, everyone would be rich.

The rest of my blog post on Reed Hasting and the end notes for this post will appear next week since this is getting to be too long already. I have the data that says that many of the

people who start an essay like this will have quit by now. An essay of 7,000 words would have been a bridge too far. Thanks for reading if you are still here.

Share this:

Business Lessons from Reed Hastings/Netflix (Part 2)

February 10, 2018

5. "We're competing with sleep, on the margin. It's a very large pool of time." "We are growing a whole industry. So [Netflix faces] a mix of competition that hurts, but on the other hand that competition is making internet viewing more popular with everyone." "Every incremental 10 million is a little harder than the last 10 million, but our content keeps getting better, so those forces offset each other. When you look at the last five years, everyone was worried every quarter about saturation in the U.S., and we've just continued to grow. But it doesn't mean it's going to be inherently forever. But we certainly feel good about the near-term as we're expanding and just getting bigger content budget, more shows, more marketing and so all of that feels very good. I don't see anything that's going to stop Netflix from getting to most people in the United States and then eventually hopefully most people around the world. But we're just going to focus on the everyday of making the services better and better." "Amazon is an amazing company and doing so many different things, it's really incredible. But I'm not sure if it will really affect us very much, because the market is just so vast."

Netflix has nearly 118 million streaming subscribers on a global basis, adding 8.3 million subscribers last quarter alone. 3.4 million Netflix customers still get DVDs by mail.

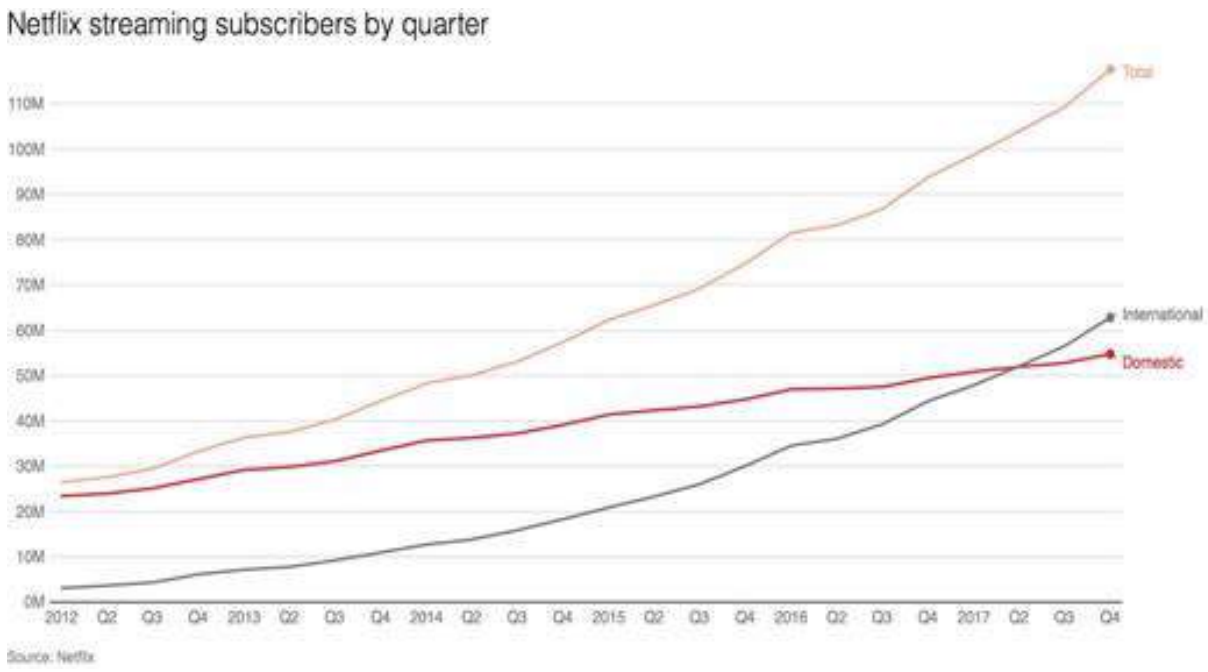

How much Netflix will grow its customer base in the future is not predictable with certainty, but that does not mean people are not willing to guess. For example, BTIG analyst Richard Greenfield believes Netflix will exceed 200 million global streaming subscribers by 2020. Hastings himself said on January 18, 2018 that "it was five years ago when we said we thought the market in the U.S. would be somewhere between 60 million and 90 million. We're still only at 55. So we got a ways to go just to cross into the bottom of our expectation range." International growth is important for Netflix. The web site *Market Realist* has complied this chart of international growth for Netflix;

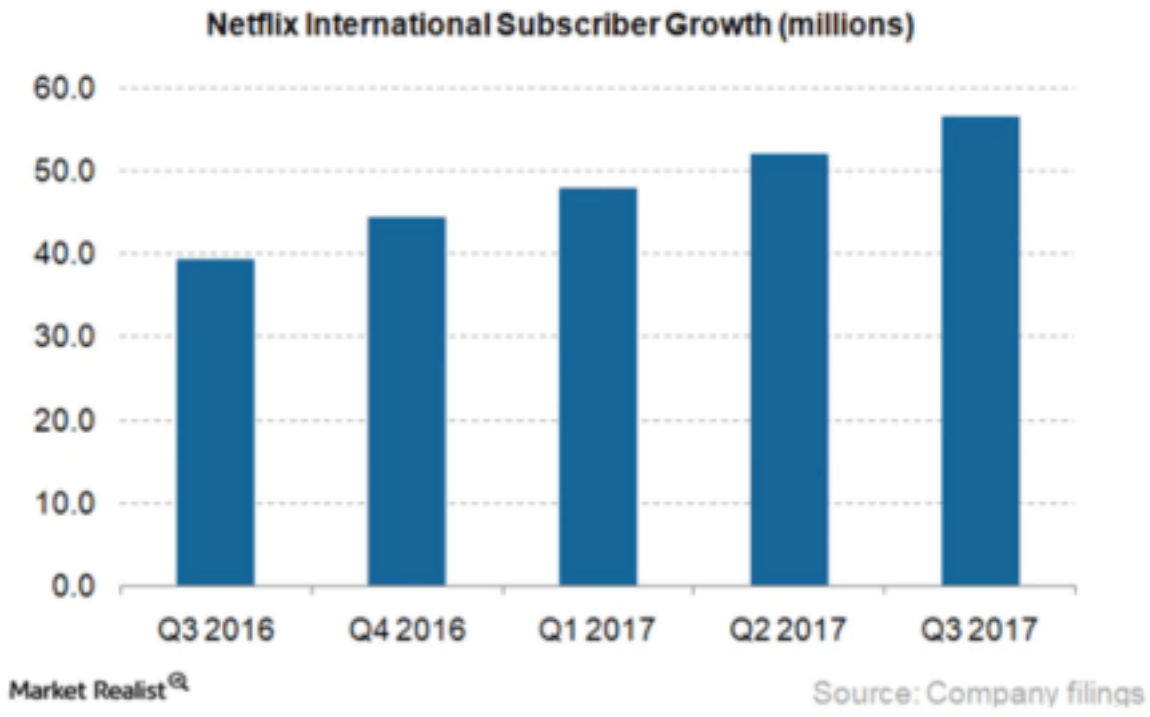

In terms of growth in general, Hastings makes a point that I saw myself in the early days of mobile phone service in the last 1980s. In those days there was an A and a B side mobile service provider. This meant that in any given city there was only a maximum of two competitors. But sometimes only the A or B side operated in a city for a while. What we experienced then was that sales were significantly higher in cities where there was competition from both A and B. As Hasting notes above, sometimes the presence of a competitor or competitors like Hulu, Disney or HBO can help grow a market. The market for software as a service (SaaS) seems to be similar in that intense competition among providers is growing the market for everyone.

6. "Prices are relative to value. We're continuing to increase the content offering and we're seeing that reflected in viewing around the world. So we try to maintain that feeling that consumers have that were a great value in terms of the amount of the content we have relative to the prices. If you look at the long-term trend in our business, we've grown the content budget, we've grown the content library, but revenues have come faster, which is what's driven the profit improvement and the margin improvement over the years."

One of the most important questions in assessing the value of a business like Netflix is the extent to which it has pricing power. Warren Buffett believes: "The single most important decision in evaluating a business is pricing power. If you've got the power to raise prices without losing business to a competitor, you've got a very good business. And if you must have a prayer session before raising the price by 10 percent, then you've got a terrible business." Can Netflix increase prices and not see a big increase in churn that offsets the benefits of that price rise for the company? That's the sort of question that is always relative. How much pricing power does Netflix have? The best test of that is what actually happened when Netflix raised prices last year. Hasting said this in an earnings call on January 22, 2018: "We moved from roughly €10 to €11 in Europe or $10 to $11 in the U.S., so about a 10% increase. And we saw very little effect on sign ups and growth and thus as you said the really strong results." That' a good sign.

I have written on pricing power before in my post on how See's Candies changed how Buffett thinks about a business. Munger puts it this way in the case of Disney: "There are actually businesses, that you will find a few times in a lifetime, where any manager could raise the return enormously just by raising prices—and yet they haven't done it. So they have huge untapped pricing power that they're not using. That is the ultimate no-brainer. Disney found that it could raise those prices a lot and the attendance stayed right up. So a lot of the great record of Eisner and Wells came from just raising prices at Disneyland and Disneyworld…"

7. "We intentionally called the company Netflix and not DVD by mail." "When I was a computer science student, I took the classic course everyone takes on networking technology. And one of the things that is mentioned in that is this example of, what is the speed of the transfer of bits in a station wagon that is filled with backup tapes and driving across the U.S. When I heard about the DVD, I realized, that's a digital distribution network. We knew that over time, the Internet would overtake the postal service. It didn't happen till ten years later. In 2007 was the very first streaming." "It's a race, but there are going to be many winners." "If you can build an iPhone app, you can start a TV channel. We are going to have to see how that plays out." "Now, what we've done is invest in codecs so that at half a megabit [per second], you get incredible

picture quality." "We're now at about 300 kilobits per second, and we're hoping someday to get down to 200 kilobits. So we're being more and more efficient with operators networks." "We want to make buffering a historic relic like where your kids say to you, 'what's buffer?'"

Marc Randolph was the other a Netflix co-founder, but left the company in 2002. CNBC describes his version of the Netflix origin story:

"[Randolph] and Hastings decided they wanted to create the Amazon.com of something. Randolph has also said that they "decided on shipping DVDs because customers were willing to buy them online and they were strong enough to mail. Since they couldn't get a DVD — which was new technology at the time — they mailed a CD a few blocks to see how it would hold up. When it arrived in one piece, they decided to start Netflix."

The trade-offs that the Netflix co-founders were dealing with are issues that I have been dealing with for most of my career. These trade-offs are particularly important to get right in an era where cloud computing is so important.

It was my great fortune in life to be able to work with Jim Gray, who wrote one of the best papers ever written on what he called "distributed competing economics." Gray dealt often with huge quantities of astronomy data. Due to cost and time issues. scientists often sent each other hard drives via UPS or Federal Express rather than use communications networks for transmittal of that data. Jim understood well the challenges of being a network services provider since he was a customer. In his wonderful paper that I mentioned Jim wrote about the key trade offs:

"What are the economic issues of moving a task from one computer to another or from one place to another? A task has four characteristic demands:

- Networking – delivering questions and answers,
- Computation – transforming information to produce new information,
- Database Access – access to reference information needed by the computation,
- Database Storage – long term storage of information (needed for later access).

The ratios among these quantities and their relative costs are pivotal. It is fine to send a GB over the network if it saves years of computation – but it is not economic to send a kilobyte question if the answer could be computed locally in a second."

Making the right trade offs is at the heart of cloud computing unit economics. What should be done at the core of the network and what should be done at the edge of the network? When should a communications network be used to move large amounts of data and when should something be delivered in a hard drive? What sort of latency penalty (lag or delay) is acceptable with a service? Eventually because of changes in distributed competing economics it became cheap enough for Netflix to make the transition to streaming. Hasting has said that he knew that it was finally possible to stream commercial video when he saw the success of YouTube. It is refreshing to hear someone say so openly that he gives credit to another company for being first. YouTube, Netflix and Amazon are competitors but also arguably each found unique product/market fit.

As an aside, this account in *The New York Times* misses by a mile how much innovation took place at Xerox PARC, but it does describe a business that was first to market, but not first to product/market fit:

The technologists at the lab, the Xerox Palo Alto Research Center, did not invent the computer mouse and graphical-user interface. But they refined them and built a usable prototype personal computer, the Alto. More than 1,000 Altos were made and put to work, including a few in Jimmy Carter's White House. At Xerox, when the corporate managers took over its personal computer project and tried to commercialize the Alto, named the Xerox Star, they priced it at more than $16,000. It flopped. The Xerox Star was priced more like a copier, an expensive office machine, rather than a personal computer. In 1981, the same year the Star came to market, IBM introduced its PC for business, pricing it at less than $1,600. Three years later, the Apple Macintosh sold for about $2,500.

The price of the Xerox Star was equivalent to $44,415 in 2017 so it really wasn't priced like a personal computer. As an aside, in 1980 I was using a Wang Word processor at work. That was the year Bill Gates Sr. first told me about Microsoft. He said: "People are saying this company will be important someday." I saw my first IBM PC in 1982. In 1983 I bought an Apple II clone for a few hundred dollars in Seoul Korea for use at home. I used it to play games and as a word processor. I wrote my first book on that machine. The Wang world processor disappeared from offices in the mid-1980s replaced by desktop machines.

8. **"We're fundamentally in the membership happiness business, as opposed to in the TV show business. Once you subscribe, our interest is purely your happiness." "If you didn't own a cable networks you couldn't break into the business. Which mean there was a significant constraint which gave then huge margins."**

In Robbie Baxter's book *The Membership Economy* she writes: "'membership' is an attitude, whereas a 'subscription' is a financial arrangement." She describes how the business environment is transitioning from providing "ownership to access, from anonymous transactions to known, formal relationships and from one-way messaging to two-way communications between the organization and its members, but also conversations among the members themselves, under the umbrella of the organization." What enables the membership economy is the connected always on relationship that delivers telemetry data about customers plus machine learning. According to Baxter people who feel like "members" will ideally experience (1) success in finding happiness, which triggers daily habits; (2) trust in the service in terms of both happiness and things like privacy and security; and (3) an emotional connection with the service that creates a "sense of belonging."

Amazon is a poster child for a membership strategy as is Netflix:

Figure 12 AMZN: US Prime Member Valuation Analysis

	Prime	Non Prime	Memo
Membership fee	$8.39	$0.00	Assumes 95% of Prime subs are on annual $99 plan
Order Frequency / Month	3.5	2.3	Cowen Survey data - Aug '16
x Avg. Basket Size	$55	$60	Assume $147MM US GMV, 69MM purchasers ordering 3x/month per Aug '16 survey
= Monthly Spend	**$193**	**$138**	**Calc**
x Gross Margin	28%	30%	We estimate ~29% AMZN Gross Margin (x-AWS).
= Gross Profit / HH / month	**$54.67**	**$41.40**	**Calc**
+ Subscription / month	$8.39	$0.00	Cowen Estimates
- Fulfillment cost / month	$9.94	$11.05	Cowen Estimates - 60% of US fulfillment exp. allocated to Prime
- G&A cost / month	$1.13	$1.26	Cowen Estimates - 60% of G&A exp. allocated to Prime
= Pre-tax profit / HH / month	**$51.99**	**$29.09**	**Calc**
- Tax ($)	$15.60	$8.73	
= Post-tax Profit / HH / month	**$36.39**	**$20.37**	**Calc**
x Customer Life (months)	167		Cowen Estimate based on CIRP churn data
= PV Pre-Acq. Lifetime Value / HH	**$3,272**		**Calc**
- SAC	$312		Cowen Estimate
= Lifetime Value / HH	**$2,960**		**Calc; 10% Discount Rate**
x US Prime Members	48.6		Survey data
= Enterprise Value ($, BN)	**$143,833**		**Calc**
memo: Churn / Month	0.60%		Note: 91% Prime subs renews after Yr 1, 96% renew after Yr. 2, CIRP
memo: Avg. Annual HH Spend	$2,310	$1,656	Calc
memo: Discount rate	10%		Cowen Estimate
memo: AMZN Gross Margin (x-AWS)	29%		Cowen Estimate
memo: Tax rate	30%		Cowen Estimate
memo: Prime Penetration of HH	44%		Cowen Survey data - Aug '16
memo: Total Addressable HH's	109.7		Cowen Estimate
memo: Prime Penetration of AMZN Purchasers	58%		Cowen Survey data - Aug '16
memo: Total AMZN US Purchasers	68.6		Cowen Survey data - Aug '16

Source: Cowen and Company; Cowen proprietary Consumer Tracking Survey, n=~2500, August 2016

"More new paid members joined Prime in 2017 than any previous year—both worldwide and in the US" said the company in its latest earning release.

9. "We need more sophisticated metaphors than 'only the paranoid survive.' Paranoid people are delusional.""We spend almost no time [at Netflix] thinking about competitors. We spend almost all our time thinking about customers."

Hastings is taking issue with a famous Andy Grove idea above. Hastings believes focusing on competitors takes your eyes off the needs of the customer. A departing Google engineer created a stir recently making a similar point. CBNC describes this engineer's remarks:

He criticized it for becoming "100% competitor-focused" and said the company "can no longer innovate." Steve Yegge, who joined Google from Amazon in 2005, wrote a blog post about his decision t quite the company saying it has become too focused on competitors instead of customers. He said product launches such as its smart speaker, Home, its chat app Allo and its Android Instant Apps copy Amazon Echo, Facebook-owned WhatsApp and WeChat, respectively. "Google has become 100% competitor-focused rather than customer focused," he wrote. "They've made a weak attempt to pivot from this, with their new internal slogan 'Focus on the user and all else will follow.' But unfortunately it's just lip service."

There is always a tension between people who are focused on making an existing business model perform and people who create a genuinely new business model. Some people are good at one thing and some are good at the other. Other people are good at both.It depends.

10. **"We had to lay off 1/3 of the company in 2001 [from 120 people to 80]. We eked our way into profitability and survived. After 2002, we realized we were going to survive and thought, it would be awful not to want to work here."**

The unfortunate experience Netflix had with layoffs in 2001 resulted in a rethinking of many aspects of the company's culture and human resources systems. The outcome of this process was originally reflected in a famous 2009 Netflix "culture" slide deck. For example, one of the slides was:

- Values are what we Value
- High Performance
- Freedom & Responsibility
- Context, not Control
- Highly Aligned, Loosely Coupled
- Pay Top of Market
- Promotions & Development

NETFLIX

Netflix would later reformat the points made in these slides into a narrative document that has been very influential. You can find a link to that document in the end notes.

11. **"The drive toward conformity as you grow as a company is very substantial" "You should have more things that don't work out. You should get more aggressive." "How did distribution innovate in the movie business in the last 30 years? Well, the popcorn tastes better, but that's about it." "Our hit ratio is way too high right now. So, we've canceled very few shows … I'm always pushing the content team: We have to take more risk; you have to try more crazy things. Because we should have a higher cancel rate overall."**

Hastings had experiences at his first company (Pure Software) that caused him to try to stop the creation of processes at Netflix that stifle innovation and creativity. Hastings views on the dangers of conformity remind me of the Jeff Bezos "Day One" concept. Bezos describes his objective in this way:

"I've been reminding people that it's Day 1 for a couple of decades. I work in an Amazon building named Day 1, and when I moved buildings, I took the name with me. I spend time

thinking about this topic. 'Day 2 is stasis. Followed by irrelevance. Followed by excruciating, painful decline. Followed by death. And that is why it is always Day 1 [here at Amazon]."

12. **"As an entrepreneur you have to feel like you can jump out of an airplane because you're confident that you'll catch a bird flying by. It's an act of stupidity, and most entrepreneurs go splat because the bird doesn't come by, but a few times it does." "I'm on the Facebook board now. Little did they know that I thought Facebook was really stupid when I first heard about it back in 2005."**

Hastings is making a statement that reflects the data on startups, most notably venture backed startups. The data makes clear that most startups will fail to achieve their goals. This is inevitable since no system can produce real world innovations without some failure. Really big ideas that are capable of generating venture capital style returns often seem like a bad idea at first as Facebook did not Hastings. Of course, some ideas that seem like a bad idea really are a bad idea (or are a good idea that is too early to capitalize on). One helpful technique for more accurately assessing what startup investments to make given uncertainty, risk and ignorance can be illustrated by looking at an example.

Assume there is a startup called Weed-2-Door that delivers weed right to its customer's home in areas where cannabis is legal. Weed-2-Door, like other startups, faces many challenges. Four of these key challenges are:

1. How big is the market?
2. Can regulatory issues be overcome?
3. Will the company have enough cash to get to cash flow positive?
4. Can the right team be created to build the business?

What is the best way for an investor to evaluate whether Weed-2-Door will be a commercial success given these and other challenges?

Many experienced investors like Elon Musk are proponents of using decision tree analysis in a situation like this. As another example, Charlie Munger points out: "One of the advantages of a fellow like Buffett is that he automatically thinks in terms of decision trees and the elementary math of permutations and combinations."

What are these decision trees that Charlie Munger is talking about? In short, they are a way of representing decisions using a tree-like structure. More technically:

Decision trees have their genesis in the pioneering work of von Neumann and Morgenstern. Decision trees graphically depict all possible scenarios. The decision tree representation allows computation of an optimal strategy by the backward recursion method of dynamic programming. Howard Raiffa called the dynamic programming method for solving decision trees "averaging out and folding back." Influence diagram is another method for representing and solving decision problems.

Here is representation of a decision tree for a landlord who is choosing between leasing a property or using it as a base for their own business from a tutorial you can find in the end notes to this post.

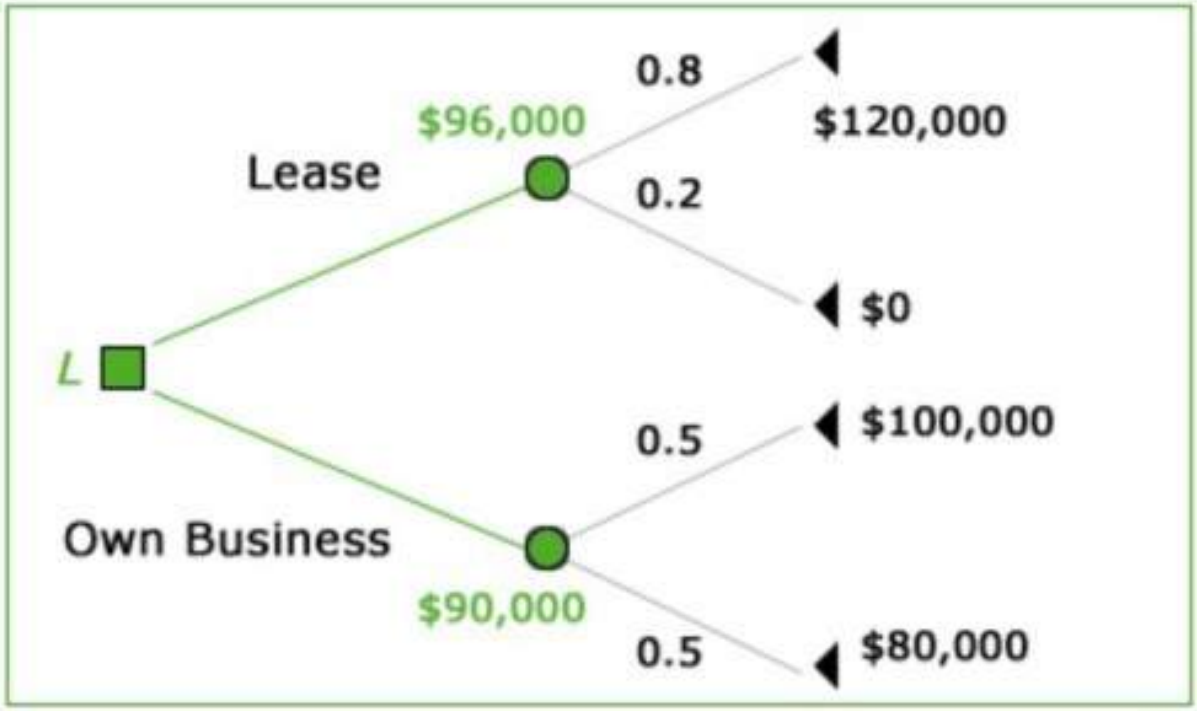

Do you want to know the outcome of this analysis? Read the tutorial in the end notes below!

One of the reasons why decision trees are useful is the reality that anyone faces in making decisions that as based on future outcomes described by a bridge playing Harvard professor named Richard Zeckhauser. Munger has said: "The right way to think is the way [Harvard Professor Richard] Zeckhauser plays bridge. It's just that simple." It can be used in many situations. For example, Zeckhauser runs a quick decision tree in his head before deciding how much money to put in a parking meter in Harvard Square. "It sometimes annoys people but you get good at doing this."

Key to all this is understanding the difference between risk, uncertainty and ignorance. Zeckhauser has written an insightful paper on this topic entitled "Investing in the Unknown and Unknowable" that I have linked to in the end notes. That paper has a chart which I refer to often. As you can see, Zeckhauser is saying that "decision theory" is an important approach in dealing with uncertainty and ignorance.

Table 1. Escalating Challenges to Effective Investing

	Knowledge of States of the World	Investment Environment	Skills Needed
Risk	Probabilities known	Distributions of returns known	Portfolio optimization
Uncertainty U	Probabilities unknown	Distributions of returns conjectured	Portfolio optimization, Decision theory
Ignorance UU	States of the world unknown	Distributions of returns conjectured, often from deductions about other's behavior. Complementary skills often rewarded along side investment	Portfolio optimization. Decision theory. Complementary skills (ideal) Strategic inference.

Zeckhauser writes with a colleague about trying to make predictions is a world where future states are not known and probability can't be calculated,

"On the continuum that proceeds from risk to uncertainty, ignorance lies beyond both. Ignorance, we show below, is the starting point of a fertile, untapped area for decision research. Given that ignorance adds the additional complexity of unidentified outcomes, it encounters all the behavioral biases of uncertainty (some magnified), plus additional biases of its own. The rational decision paradigm employs the expected utility (EU) framework. That normative framework attaches a probability, often subjective, and a utility to each potential outcome. Finally, it prescribes that the decision maker assess the decision tree and choose the preferred branch. Alas, ignorance defeats the straightforward application of such methods: metaphorically, some branches of the tree remain shrouded in darkness. Compounding difficulties, the presence of ignorance often goes unrecognized: What is unseen is not considered."

The best of the best investors understand how to assess probability and potential outcomes in a world that is mostly uncertain, often involves ignorance, and rarely is about risk as defined by Zeckhauser. Sometimes the best approach is to get in what Zeckhauser calls "the side car" of someone who you trust and who had the necessary complementary skills. Mark Cuban describes this "side car" approach to investing with an example: "If you say Jeff Bezos and Reed Hastings— those are my 2 biggest holdings. They're just nonstop startups. They're in a war. And you can see the market value accumulating to them because of that. They're the

world's greatest startups with liquidity. If you look at them as just a public company where you want to see what the P/E ratio is and what the discounted cash value– you're never going to get it, right? You're never going to see it." In deciding to be an investor in AMZN and NFLX Cuban is betting on Bezos and Hastings by getting in their "sidecar."

End Notes:

Tutorial on decision trees: http://kwanghui.com/mecon/value/Segment%202_2.htm

Zeckhauser "Unknown and Unknowable" paper: https://sites.hks.harvard.edu/fs/rzeckhau/InvestinginUnknownandUnknowable.pdf

Wall Street Analysts on NFLX: http://www.nasdaq.com/symbol/nflx/recommendations

Netflix culture Narrative:

https://www.nytimes.com/2018/01/31/business/dealbook/xerox-fujifilm.html

https://www.cnbc.com/2017/05/31/cnbc-transcript-netflix-founder-and-ceo-reed-hastings-speaks-with-cnbcs-julia-boorstin-on-squawk-alley-today-from-the-code-conference.html

https://m.youtube.com/watch?v=tCn4hdTI2jc

https://www.google.com/amp/s/amp.businessinsider.com/my-conversation-with-netflix-ceo-reed-hastings-2016-5

https://player.fm/series/masters-of-scale-with-reid-hoffman/bonus-uncut-interview-netflixs-reed-hastings

https://www.google.com/amp/s/seekingalpha.com/amp/article/4062901-netflixs-nflx-ceo-reed-hastings-q1-2017-results-earnings-call-transcript

https://a16z.com/2017/02/25/reedhastings-netflix-entertainment-internet-streaming-content/

https://www.ceo.com/tag/reed-hasting-interview/

https://medium.com/cs183c-blitzscaling-class-collection/cs183c-session-16-reed-hastings-4e1058d2439f

http://educationnext.org/disrupting-the-education-monopoly-reed-hastings-interview/

https://www.google.com/amp/amp.slate.com/articles/technology/future_tense/2017/03/how_netflix_embodies_a_seductive_myth_of_the_algorithmic_age.html

http://mattturck.com/the-power-of-data-network-effects/

Business Lessons from Snoop Dogg

February 17, 2018

Snoop Dogg was born and raised in Long Beach California. His famous nickname was created by his mother because she thought he looked like Snoopy from the Peanuts cartoon strip. His music career started in 1990 when he recorded cassette tapes with his friend Warren G, who gave them to his brother Dr. Dre. After performing on parts of an album for Dre, Snoop recorded an album for Death Row Records entitled Doggystyle and the rest is history.

Why write about Snoop? Because he is a great example of a mostly self-taught business person who has achieved significant success. Like Sammy Hagar, who I wrote about recently, Snoop learned about business by doing things himself and watching others. One of the net worth rankings compiled by professional guessers estimates Snoop has net worth of $135 million. That guess seems plausible given his many licensing and endorsement deals, investments and profits from his musical career. But a guess is just a guess.

1. **"I was on Death Row Records. Suge Knight had all the money. He gave us a little bit. When Master P came out, everybody on No Limit had money."**

The back story for this quote has been described by Snoop in this way: **"Master P had to go visit Suge Knight in the penitentiary. [They] struck a deal because everybody else was scared of [him]because that's when Suge Knight was the monster, the boogieman. He went to go see him, struck a deal, paid him, got my publishing rights and gave me three albums."** There is a lot to unpack in what Snoop said in the three previous sentences particularly, if you do not follow Snoop's genre of music. What Snoop is describing illustrates not only the nature of value chains in business but also several important points about negotiating styles. Snoop is talking about Suge Knight who founded Death Row Records and was in the penitentiary at the time he met with Master P. *The Village Voice* describes why Suge was in prison: "He was behind bars, jailed for a parole violation in connection with a Las Vegas casino beatdown the night Tupac was fatally shot." The business problem existed because Snoop had signed an exclusive six album recording

contract with Death Row but was not happy with his compensation or how he was being treated.

Master P is the founder of No Limit Records, who once described the situation that surrounded his meeting with Suge about Snoop's recording contract by saying: "I feel like I saved Snoop's life. I was always a fan of him, but when I talked to him, he wasn't in a good place. Suge was about to sign him over to some other label. I'm like, 'Man, my money don't spend?' Let me get that."

When Master P moved to Los Angeles Suge did not want another rival on his turf. Master P describes their conversation: "When I first got to LA I got a call from Suge. Probably everybody gets that call. I'm like, 'Dog, you do better talking to me in person.' He's like, 'Man, LA isn't big enough for all of us.' Puffy was out a bunch a people. I was like, 'Man, I just bought a house. I ain't going nowhere. When you moving?'"

As context, in terms of gang affiliations, Snoop = Crip and Suge Knight and Tupac = Bloods. This history made their lives complex at times. Snoop no doubt knows about "Worldly Wisdom" since Charlie Munger is a long standing member of the well-known Pasadena "Peanut Brittle" Gang. While Pasadena Peanut Brittlers are not officially affiliated with Crips or Bloods, they do have a fearsome reputation and have negotiated a truce with most other gangs. I will quote Munger often in this post to avoid any retribution from Peanut Brittle Gang members.

Every business has a value chain which is the complete range of activities that different businesses or individuals go through to bring a product or service to their customers. Everything required to bring a product or service from conception to delivery to the end consumer must be considered in creating a value chain analysis. Everyone in a value chain is trying to get as big a slice of the pie as possible unless they are trying to keep someone else alive so the entire chain does not collapse. What share any one participant in a value chain gets depends on the supply and demand for what they provide which determines their negotiating leverage. The prices paid at wholesale and retail are determined by what Roger Fisher calls a "Best Alternative to a Negotiated Agreement" (BATNA) in his famous book on negotiation entitled *Getting to Yes*. In short, it is your alternatives that matter. Without some alternative to what you seek in the negotiation the other negotiator has very strong leverage to get what they want. In a negotiation it is your alternative that matter most.

The price paid by any participant in a value chain who is not the end customer is the "wholesale transfer price" which I often write about. What Suge or Master P paid Snoop is one example of a wholesale transfer price. When Snoop started out in the music business he had a terrible BATNA so Suge signed him to a long term contract. Once Snoop had a hit record he potentially had a strong BATNA, but for the existence of that exclusive contract. Suge knew Snoop might be in that situation which is why it was a six record exclusive deal. This story is just one example of the constant battle between "the talent" and the businesses that build a business around that talent over the wholesale transfer price.

2. **"I knew the job was dangerous when I took it."**

I first heard this phrase many years ago on a cartoon called "Super Chicken," which was a companion to the animated television series "George of the Jungle." I would be willing to bet that Snoop first heard it there too. The phrase is also a line Snoop's uses on: "Neva Gonna

Give It Up." Snoop also once used the phrase in an interview with *The Guardian* in talking about his affiliation with the Rollin 20s Crips. The Warren Buffett test as always is the right way to do the math, even for a person deciding whether to be gang member: "Take the probability of loss times the amount of possible loss from the probability of gain times the amount of possible gain. That is what we're trying to do. It's imperfect, but that's what it's all about."

3. **"The rap industry takes a long time to make money. The movie industry takes a long time to make money. The tech industry takes 3-4 years to make money, and that's just what it is. If you've got something that's ahead of the curve. That's why I feel the tech game is the number one industry right now."**

Snoop likes that tech industry investments and careers can be highly convex (huge potential upside and a low relative downside). Snoop knows that change in a technology-based value chain can happen fast both in terms of upside and the downside since there are feedback loops that operate in these businesses. In other words, the power of technology cuts both ways.

As for the music business Snoop has been successful for a very long time. He has said about that experience:

4. **"I'll continue to diversify, not just invest."**

Diversification can be a sound approach to investing and life. Or not. It depends. On the positive side, diversification can help us deal with certain human traits that get us into trouble. David Swensen believes: "Overconfidence contributes to a litany of investor errors, including inadequate diversification, overzealous security selection, and counterproductive market timing." But as Howard Marks notes it can also be a problem:

I touched above on concentration risk, but we should also think about the flip side: **the risk of over-diversification**. If you have just a few holdings in a portfolio, or if an institution employs just a few managers, one bad decision can do significant damage to results. But if you have a very large number of holdings or managers, no one of them can have much of a positive impact on performance. Nobody invests in just the one stock or manager they expect to perform best, but as the number of positions is expanded, the standards for inclusion may decline. Peter Lynch coined the term "diworstification" to describe the process through which lesser investments are added to portfolios, making the potential risk-adjusted return worse.

Charlie Munger believes: "The Berkshire-style investors tend to be less diversified than other people. The academics have done a terrible disservice to intelligent investors by glorifying the idea of diversification. Because I just think the whole concept is literally almost insane. It emphasizes feeling good about not having your investment results depart very much from average investment results. But why would you get on the bandwagon like that if somebody didn't make you with a whip and a gun? Seth Klarman points out that it is better to know a lot about 10-15 companies that to know just a little about many stocks. When it comes to diversification vs. concentration Charlie feels like the Maytag repair man: "I always like it when someone attractive to me agrees with me, so I have fond memories of Phil Fisher. The idea that it was hard to find good investments, so concentrate in a few, seems to me to be an obviously good idea. But 98% of the investment world doesn't think this way."

The number of public company businesses a person can realistically understand and keep up to date on is significantly less than 20. The idea that someone like a dentist working full time in his or her profession is going to pick technology stocks and do better than they would just buying a low cost index fund is improbable. This is why more than 90% of the investing world should buy a diversified portfolio of low cost index funds. But that won't happen give human nature. Munger says: "Most people who try [investing] don't do well at it. But the trouble is that if even 90% are no good, everyone looks around and says, 'I'm the 10%.'"

5. **"I've been a part of a lot of businesses that have failed. And I believe that failure creates the best business in the world because it trains you and it gets you prepared for failure, and it teaches you how to better prepare yourself for the next time. And the businesses that I failed at, they don't, you know, make me feel bad, they just make me want to go back to the drawing board and try again and come up with something' that's different and more creative."**

I have written about mistakes and about the power of "not being stupid" before and you can find the links to that writing in the end notes to this post. By paying attention to your mistakes, you can learn from your errors and improve your methodology argues Munger: "You can learn to make fewer mistakes than other people- and how to fix your mistakes faster when you do make them." Rubbing your nose in mistakes is a very valuable habit to get into. Don't dwell on mistakes, but do perform a post mortem. Snoop knows he has made mistakes but without those mistakes he would not ave had any successes and would not have become smarter about business.

6. **"If you stop at general math, you're only going to make general math money."**

No one sets out the right objective and the necessary math skill set better than Munger: "Everything I've ever done in business could be done with the simplest algebra and

geometry. I never used calculus for any practical work in my whole damn life." Munger elaborates on the level of math needed:

"Obviously, you've got to be able to handle numbers and quantities—basic arithmetic. And the great useful model, after compound interest, is the elementary math of permutations and combinations. It's very simple algebra. At Harvard Business School, the great quantitative thing that bonds the first-year class together is what they call decision tree theory. All they do is take high school algebra and apply it to real life problems. And the students love it. They're amazed to find that high school algebra works in life So you have to learn in a very usable way this very elementary math and use it routinely in life—just the way if you want to become a golfer, you can't use the natural swing that broad evolution gave you. You have to learn—to have a certain grip and swing in a different way to realize your full potential as a golfer. If you don't get this elementary, but mildly unnatural, mathematics of elementary probability into your repertoire, then you go through a long life like a one legged man in an ass kicking contest. You're giving a huge advantage to everybody else."

7. **"I used to be focused on being the dopest rapper in the game, and then once that became what I was, I wanted something different, and I wanted to become the best businessman in the game. I wanted to learn how to master the business like I mastered the rap."**

The best business people never stop learning. It is that simple. While Snoop has said: "When I'm not longer rapping, I want to open up an ice cream parlor and call myself Scoop Dogg," I doubt he was being serious. He seems destined to be a video and music performer and mogul for a very long time.

As another aside, Snoop has an interesting view when it comes to estate planning. Snoop told *Business Insider.*

"I don't give a f— when I'm dead. What am I gonna give a f— about? This goin' on while I'm gone, you know?" Snoop hopes to be reincarnated, and observe the ruckus over his estate from the next life."Hopefully, I'm a butterfly," Snoop said. "I come back and fly around and look at all these motherf——s fighting over my money and shit, like, 'Look at all these dumb motherf——s.' Ha!"

8. **"The most important decision I've made in business? The choices of people I have around me."**

The more time you spend hiring the right people the more you can delegate to those people. This approach to business requires that you spend more time and effort in the hiring process but it will pay big dividends. "Come and see the Dogg in a hood near you-in. You don't ask why I roll wit a crew, and twist up my fingers and wear dark blue-in. On the eastside, that's the crew I choose."

9. **"Sometimes if you're lucky, someone comes into your life who'll take up a place in your heart that no one else can fill, someone who's tighter than a twin, more with you than your own shadow, who gets deeper under your skin than your own blood and bones."**

Having the right mentor can be an invaluable thing. People too often think that only older or more experienced people can be a mentor. The better view is that anyone can be your mentor. You can see that in this interchange:

"In the midst of chopping oranges, Martha Stewart finds that her knife is dull, which is unacceptable. She implores the audience, "Please make sure you have sharp knives when you're cooking in the kitchen," and when Snoop tries to tease her for fixating on the knives, she says: "You have never been to penitentiary. "I have and they don't have sharp knives. You can't even get a spoon."

10. **"If it's flipping hamburgers at McDonald's, be the best hamburger flipper in the world. Whatever it is you do you have to master your craft."**

Occasionally on weekends I go for walk in Seattle on Capitol Hill and visit the grave of Bruce Lee. He famously said: "I fear not the man who has practiced 10,000 kicks once, but I fear the man who has practiced one kick 10,000 times." I think of this Bruce Lee quotation whenever I visit a hawker center in Singapore and I see something like a fellow who has been making just Chicken Rice there for several decades. When you specialize like that you make some really special Chicken Rice. Snoop is making a similar point above when he says master your craft.

11. **"Always had the show, but I never had the business. And once I got the business, now I'm the king of show business."**

I wrote a post about musicians and the need for them to know more about business which can be found in the notes below. The lead quote in that post from Kurt Cobain is the best: **"**I wish there had been a music business 101 course I could have taken." This is tragic and part of the reason why I write this blog. Stories like the one I wrote about Sammy Hagar who learned about business on his own should be inspiring for young musicians though. It can be done. A number of really great business people started out doing things like washing dishes or driving a delivery truck and are 100% self-taught in business. For example, Snoop has found an approach to brand management that works well for him. A *Forbes* article describes Snoop's branding strategy:

"A lot of brands, you can't touch them," the rapper says. "When you're dealing with Snoop Dogg, he brings you closer to the brand and it feels like it's a part of you." Snoop's certainly trying to touch consumers in ways few rappers do. Among his products: For $12.95, TomTom GPS Navigator users can download Snoop's voice to give them directions; for $79.95, audiophiles can wear Snoop Skullcrushers headphones in black or blue paisley; and for $19.99, you can sport a Neff Snoop Micro Dogg Tee.

More recently Snoop has partnered with Jack in the Box to sell a Merry Munch Meal.

12. **[When asked how many joints he smokes a day] "Today is a bad day. That means I'm going low. Because I keep getting asked questions so I got to make sure I'm on point. On a bad day 5-10. On a good day 25-30."**

In a few other interviews and an AMA Snoop has said he smokes as many as 80 joints a day rather that the 30 mentioned in the quote above. regardless of whether it is 30 or 80 joints a day, that is a lot of weed, especially since is is almost certainly of the highest quality. There is

no business lesson to be taken from this really. But it is an amazing statistic, so there's that. With this information and a great golf swing you will not achieve total consciousness though. However, it is clear that Snoop has been able to capitalize on his love of weed from a business standpoint. Snoop's pitch is:

"As a long-time connoisseur and cannabis expert, I knew it was time to give my people what they wanted — something they can trust. Enjoying Leafs is like smoking with me — the D-O-double G — and I'm proud to finally share what that experience is. All the flowers and extracts from Leafs were hand-picked by yours truly."

SNOOP DOGG
1 1/4 ROLLING PAPERS
SNOOP DOGG

Notes:

My post on the music business: https://25iq.com/2016/09/03/a-dozen-things-ive-learned-about-the-music-business-and-businesses-like-it/

My post on mistakes: https://25iq.com/2015/09/19/a-dozen-things-ive-learned-from-charlie-munger-about-mistakes/

My post on the value of consistently not being stupid: https://25iq.com/2013/01/27/charlie-munger-on-the-importance-of-worldly-wisdom-and-consistently-not-being-stupid/

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What might the Amazon, Berkshire and JP Morgan health care joint venture actually do?

February 23, 2018

Why did Warren Buffett say the biggest issue facing American businesses as they compete abroad is the cost of healthcare?

Why did Charlie Munger recently say: "The current US health care system runs out of control on the cost side and leads to behavior that's not just regrettable, but evil."

Amazon, Berkshire and JP Morgan (ABJ) recently announced that they are creating of "an independent company free from profit-making incentives and constraints…to address healthcare for their U.S. employees" generated a lot of publicity. ABJ said that the initial focus of the joint venture will be on "technology solutions that will provide U.S. employees and their families with simplified, high-quality and transparent healthcare at a reasonable cost." A report on CNBC indicates that JP Morgan would like the effort to reduce the $1.5 billion they spend on employee health care by 20%. What will ABJ actually do and will they be successful?

Before answering the previous question, it is essential to understand both the nature and magnitude of the health care problems that exist today in the United States. Warren Buffett frames the core problem with US health care system succinctly: "In almost every field of American business, it pays to bring down costs. There's … no incentive to bring down costs." He is saying that the core of the health care problem in the United States is that the system does things like compensate people who provide products and services for procedures rather than outcomes. In short, since the right incentives do not exist in the US health care system,

no one should be surprised about the results we get. Charlie Munger has described many times how perverse incentives can create a horrific result:

"If the incentives are wrong, the behavior will be wrong. I guarantee it. Not by everybody, but by enough of a percentage that you won't like the system." "Show me the incentive and I will show you the outcome." "I think I've been in the top 5% of my age cohort all my life in understanding the power of incentives, and all my life I've underestimated it. Never a year passes that I don't get some surprise that pushes my limit a little farther."

How big is the problem? Jamie Dimon of JP Morgan points out "We spend 17% of our GDP in healthcare." Some people say that it is actually now 18%.

How do these health care cost increases cost increases show up in insurance rates? You can find a lot of data in the end notes to this blog post, but in the chart below is one set of numbers from Milliman which is representative of what is at stake for ABJ and similar businesses and their employees:

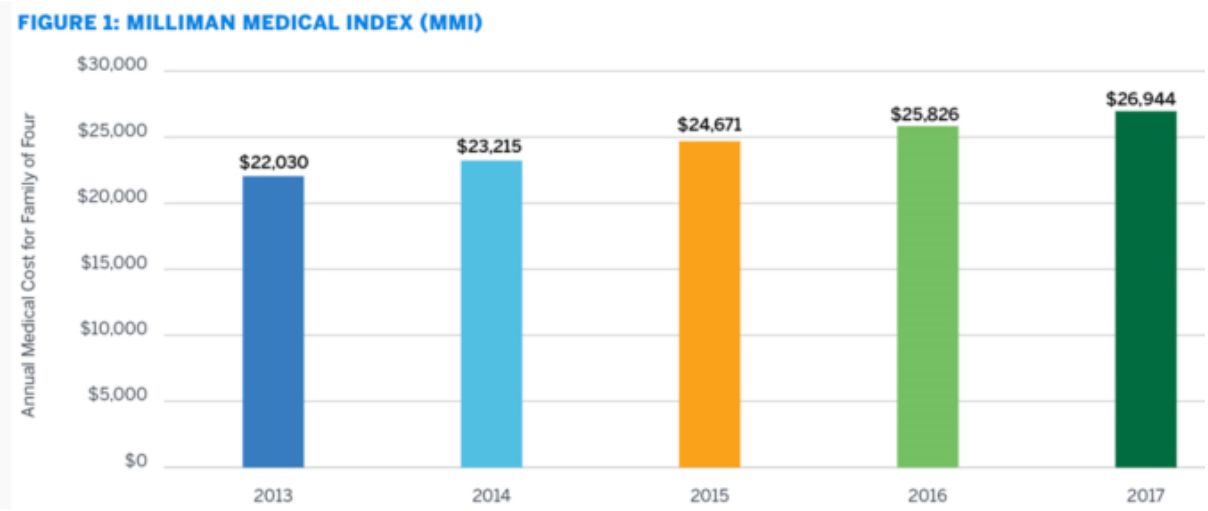

As another example of the scope and trajectory of the problem a group of more than 40 major corporations called the "Health Transformation Alliance" created this chart to capture the cost problem:

Munger knows health care issues well since he became a Trustee of Los Angeles Good Samaritan Hospital in 1979 and has served as its Chairman since 1987. As an example of Munger's views, at an event at Stanford Medical School Doctor Robert Pearl heard him tell a story to make his point about problems created by improper incentives. Pearl recounts that story and then adds his own view:

"to demonstrate the perverse economic incentives underpinning American health care, Munger recalled a story about rattlesnakes. In a small Texas town, the local government had an idea to combat the growing snake problem. They offered a bounty for every dead rattler brought into city hall. The next thing they knew, everyone in the town was raising rattlesnakes. This well-intentioned incentive didn't solve the rattlesnake problem, but it does well to demonstrate the perverse consequences created by health care's fee-for-service model. As an example, Munger talked about one surgeon who was known for removing normal gallbladders. Having been caught doing what most surgeons would describe as inappropriate surgery, what was his response? The doctor said taking out a normal gallbladder was a reasonable way to "prevent disease." He said he was helping his patients avoid the dangers of a possible rupture. However, this almost never happens in people with normal gallbladders. Of course, this isn't the only instance of a doctor abusing the system. In cities like Miami with a surplus of doctors and facilities, we see twice the number of tests, procedures and hospitalizations than in other communities. Whenever a group is paid to do more, not better, the outcome isn't hard to predict."

When the ABJ announcement appeared in the press most people assumed it would involve the creation of a non-profit "pharmacy benefit manager" with some similarity to Express Scripts and CVS Health. It could also try to negotiate drug prices directly with pharmaceutical makers as Caterpillar has done. That might be able to reduce health care costs to some degree, but more change would be needed to create the desired result. It should be

noted that the pharmacy benefit business is one that Amazon may pursue directly. Amazon is doing this in Japan already:

"Amazon.co.jp also started selling category No. 1 drugs, which require consultation with a pharmacist before purchase, at its website from Monday. Before placing orders, customers need to report their symptoms and medical history via a form on Amazon's site. Items will only be delivered after approval by a pharmacist."

Even in the US Amazon already offers over-the-counter medications like Advil and Mucinex and a line of products from Perrigo's generic GoodSense brand. A move into prescription drugs seem like a logical next step for Amazon with or without ABJ

A *Bloomberg* article cited in the end notes has an analysis of the fight between the drug makers, the pharmacy benefit managers and others about costs, prices and profits. There are enough variations in list prices and real prices and rebates in the systems to make your head spin around. ABJ bringing more transparency to this system and others copying them may therefore act as a disinfectant. *Bloomberg* speculates:

"The new [ABJ] joint venture could do something far more drastic if it bargained directly with drugmakers for top-selling medicines or even created an online bidding system for the manufacturers. The trio could partner with RX Savings Solutions, for example, a startup with an app that peers into a patient's insurance plan to help find lower-cost drugs. Amazon could eventually open its own mail-order pharmacy to compete directly with PBMs. Recent speculation about an Amazon-like market for drugs has rattled investors in PBMs, pharmacies, and drug wholesalers."

One reason why ABJ is structured as a non-profit may be that there is little profit to be obtained anyway. A *Business Insider* interview with Dimon has a good explanation:

"The three companies are self-insured employers, which means that when you're an employee going to a doctor's appointment, your employer is ultimately footing the bill for the MRI you receive, rather than a health insurer. The insurance companies are there in the middle to handle the logistics of getting the claim from one place to another. "So I tell people, JP Morgan Chase already buys a $1.5 billion of medical, and we self-insure," Dimon said. "Think of this, we're already the insurance company, we're already making these decisions, and we simply want do a better job."

Since acting as the bargaining agent for employers who self-insure is a business that generates a relatively thin profit margin, little is sacrificed by making the effort a nonprofit.

Given the range of activities that ABJ could do, it seems likely that the joint venture will create its own version of a type of marketplace called a "narrow network" for participating employees. What is a narrow network?

"They offer their enrollees a small set of 'in-network' hospitals to choose from; and if the enrollee decides to go 'out of network', s/he will have to pay all or most of the healthcare expenses out of pocket."

Narrow networks have at their center a core trade off: the employee is no longer able to go to any physician for service under the insurance system, but in return for that limitation, the

system is able to obtain medical services at lower cost by putting the work out to bid which creates more affordable premiums. The employee is free to buy service outside the narrow network if they pay the cost (this pay for it yourself alternative is sometimes called "concierge service"). What this bidding process does is help create a market price for medical services. The end result will not be perfect, but it will be better than the non-transparent situation that exists right now. Without that change the patient usually does not even know what the service costs before or even when they consume it. For example, when I visited the emergency room last year for a consultation on a kidney stone, I did not know what the service would cost until I received a bill weeks later.

Business Insider describes the leading examples of a narrow network approach:

"If the whole nation had Kaiser Permanente care, the average quality of the care would go way up and the cost would go way down," Munger has said. Narrow networks are becoming standard, especially among Medicare Advantage Plans, or private insurance alternatives to Medicare. About 35% of Medicare Advantage members were in narrow network plans, while 22% were in broad-network plans in 2015, according to the Kaiser Family Foundation. They're also common in the Affordable Care Act Marketplace. But still, the majority of health plans aren't built around narrow networks, especially employer-funded plans, which proponents of narrow networks say keeps healthcare costs high."

The most important change is the alteration of incentives for health care providers. At a recent event involving four leading health care organizations in Washington state—Kaiser Permanente, Overlake Medical Center, Seattle Children's and Virginia Mason, some of the key recommendations for reducing health care costs included

"movement from a fee-for-service model to one based on medical outcomes. There will come a day when physicians are no longer paid for every service they perform, and instead will be compensated for the quality of care provided. In fact, physicians who practice at Kaiser Permanente medical offices are already compensated this way. …Providers and carriers are [also] all working to be more upfront in their pricing, so patients can compare costs before choosing a provider, as well as know how much a service will cost before they get the bill. … Regarding [more transparent] information, Kaiser Permanente members are able to easily access their medical records online, even via their mobile device. Virginia Mason is also developing mobile access. [Health care providers will also increasingly] bring health care to where the patients are. Kaiser Permanente offers CareClinics, walk-in clinics at 10 area Bartell Drugs. Virginia Mason and Seattle Children's both have wellness centers on site for their employees. Kaiser Permanente, Seattle Children's, and Virginia Mason all have a number of regional clinics."

Why don't all employers move to narrow networks? Perhaps most importantly the competition for employees is fierce in many industries. Employees don't like to be told that their existing doctor is outside of the narrow network and that can significantly impact recruitment and retention of key employees. Another gating issue for narrow network arises because for certain more complex or rare special medical needs the best treatment can only be obtained at a high-cost provider in a region. These rare or special conditions may need to be excluded from narrow network requirements as a result. For example, how many employees would leave or not join Amazon if they did not allow employees to use the Swedish or University of Washington medical systems?

Rather than require that employees use a narrow network a system of positive incentives to use them seems more practical and likely. These incentives will need to be very significant for behavior to change. What have we learned so far from experiments in some regions of the United States so far?

"Insurers here and across the country have been launching websites and smartphone apps that offer detailed cost information on some medical procedures and services, such as knee replacements, MRIs and colonoscopies. The goal is to lower health care costs by helping people find and compare prices at area hospitals and clinics, which traditionally haven't advertised what they charge. Insurers rolled out these cost calculators as more of their customers enrolled in high-deductible health plans that require spending hundreds or thousands of dollars out of pocket each year before insurance kicks in. It's still to be determined whether price transparency on its own can substantially slow the rise or even lower the costs of health care, and, by extension, insurance premiums."

Sorting out the relative prices available is not easy since lists of the sticker prices for every procedure and service at a hospital ("charge masters") are not publicly available. making things even harder is the fact that the charge masters do not reflect the discounts available to each insurer. This means that any legislation requiring that charge masters be made publicly available must require health care providers to include the specific discounts given to each insurer in what they disclose. Without that information on per insurer discounts, the prices needed for patients to shop for services are not sufficient for them to make informed decisions. There are a range of dashboards and electronic medical records approaches which ABJ could adopt that people are speculating about including one report from *The New York Times* about what Amazon has already been doing.

Another approach to lowering the cost of health care in the US is "reference pricing," which is form of defined contribution health benefit in which plan sponsors pay a fixed amount or limit their contributions toward the cost of a specific health care service, and health plan members must pay the difference in price if a more costly health care provider or service. This slide illustrates one approach to reference pricing:

What is Reference Pricing?

- Sponsor establishes a ***maximum contribution*** (reference price) it will make towards paying for a particular service or product
  - This limit is set at some point along the observed price range (e.g., 60th percentile)
- Patient must ***pay the full difference*** between this limit and the actual price charged by the provider
  - Patient payment is not limited by OOP max
  - Provider price is the negotiated "allowed charge" not the arbitrary list price
- Patient chooses his/her cost sharing by choosing his/her service or provider
  - Patient has good coverage for low priced options but ***full responsibility for choice***

A medical school professor quoted in the Detroit Free Press has said about the impact of reference pricing usage to date: "More hospitals offered the service at the reference price once the reference price was determined." But more data and experiments are needed to see if substantial saving can be realized.

What does the data says about the impact of higher deductibles for patients? One analysis concludes:

"We find no evidence of consumers learning to price shop after two years in high-deductible coverage. Consumers reduce quantities across the spectrum of health care services, including potentially valuable care (e.g., preventive services) and potentially wasteful care (e.g., imaging services)."

JP Morgan's Jamie Dimon has said on this point: "Going into deductibles was important to get you to shop a little bit but hasn't really worked really well"

What this seems to suggest is that incentives that look like carrots (reward patients for actively shopping prices for services will work better than incentives that take the form of a stick. The Detroit Free Press gives an example of a carrot-style approach that involved a patient shopping for a colonoscopy:

"Karen Kuiper of Grand Rapids received $100 in the mail from her health insurer, simply for shopping online for good deals. What did she buy? A low-cost colonoscopy. Her insurer covered the entire bill for the roughly $530 procedure, which, thanks to Kuiper's bargain

hunting, could have saved the company $1,000 or more than if she had visited a higher-cost medical provider."

JP Morgan also uses positive incentives in its existing plans:

"JP Morgan for example has lowered deductibles for employees who make less than $60,000 a year. The deductible can also be tied to lifestyles as well, bringing that deductible even lower. "If you do your wellness stuff now, if you take care of yourself, if you don't smoke, we give you benefits and the deductible effectively goes to zero," [Dimon] he said. "So we've kind of really made it easier for folks to get proper medical care."

One of the leading voices on health care issues is Dr. Atul Gawande's who wrote an influential article in *The New Yorker* entitled 'The Cost Conundrum" which about cost variances in health care in McAllen, Texas. Charlie Munger though the article was so important he sent $20,000 to him via *The New Yorker* even though he had never met him. Part of what Dr. Gawande in that article is as follows:

"This is a disturbing and perhaps surprising diagnosis. Americans like to believe that, with most things, more is better. But research suggests that where medicine is concerned it may actually be worse. For example, Rochester, Minnesota, where the Mayo Clinic dominates the scene, has fantastically high levels of technological capability and quality, but its Medicare spending is in the lowest fifteen per cent of the country—$6,688 per enrollee in 2006, which is eight thousand dollars less than the figure for McAllen. Two economists working at Dartmouth, Katherine Baicker and Amitabh Chandra, found that the more money Medicare spent per person in a given state the lower that state's quality ranking tended to be. In fact, the four states with the highest levels of spending—Louisiana, Texas, California, and Florida—were near the bottom of the national rankings on the quality of patient care."

… nothing in medicine is without risks. Complications can arise from hospital stays, medications, procedures, and tests, and when these things are of marginal value the harm can be greater than the benefits. In recent years, we doctors have markedly increased the number of operations we do, for instance. In 2006, doctors performed at least sixty million surgical procedures, one for every five Americans. No other country does anything like as many operations on its citizens. Are we better off for it? No one knows for sure, but it seems highly unlikely. After all, some hundred thousand people die each year from complications of surgery—far more than die in car crashes.

… McAllen and other cities like it have to be weaned away from their untenably fragmented, quantity-driven systems of health care, step by step. And that will mean rewarding doctors and hospitals if they band together to form Grand Junction-like accountable-care organizations, in which doctors collaborate to increase prevention and the quality of care, while discouraging overtreatment, undertreatment, and sheer profiteering. Under one approach, insurers—whether public or private—would allow clinicians who formed such organizations and met quality goals to keep half the savings they generate. Government could also shift regulatory burdens, and even malpractice liability, from the doctors to the organization. Other, sterner, approaches would penalize those who don't form these organizations."

An example of another new approach which changes incentives is what the health care industry is now calling "bundled payments":

“A bundled payment means that instead of paying the hospital for each component of a procedure, Medicare will pay one bundled payment, which includes all services related to an episode of care and typically includes 90 days of postoperative follow-up and any related complications or readmissions that arise during that period. The price covers all providers involved, including physicians, hospitals, lab work, post-acute providers, etc. In a bundled payment system, the money paid out to the hospital is determined by how effective the procedure was based on a 90-day period after the procedure. Medicare will set a target and if the cost of the procedure goes beyond the target, it will require a refund from the hospital, while those that come in under the target would be able to keep the difference.”

Why are the businesses driving ABJ engaged in this effort together? Getting to critical mass in creating a platform is sometimes called overcoming the “chicken and egg problem.” The nature of this problem can be stated simply: How do you get one side to be interested in a platform until that other side exists, and vice versa. Part of the challenge is to get enough customers on both sides so there is critical mass. ABJ via its employee base has enough purchasing power to justify the creation of the platform and the participating by a critical mass of health care providers.

Amazon has the skills and systems to create a transparent marketplace, Berkshire has insurance expertise and JP Morgan Chase has payments and other expertise. They are also huge purchasers of health care services. The leaders of these businesses want to solve this important and very hard problem. All of that is helpful. But there are no easy answers. Th incentives for people to try to stop and meaningful reform are huge for the reasons noted by Munger here:

“If the government is going to pay A anything he wants for selling services to B, who doesn’t have to pay anything, of course the system is going to create a lot of unnecessary tests, unnecessary costs, unnecessary procedures, unnecessary interventions. Add the fact you’ve got politicians and add the fact you’ve got existing players who are enormously rich and powerful, who lobby you like crazy. Given the level of GDP going to the medical system, imagine what the lobbying is like.”

Some people may say in response to what was said above: “I like my employer provided plan.” Health care providers may also object to the changes saying that they like the financial rewards they get from the existing system. What these people may not realize fully is that another system may be implemented that will be far worse for them than what less drastic changes might produce as an outcome. Putting on their hats as citizens of the US they may also see that the current trajectory of health care costs is not sustainable and it is harming the foundation of the system that supports their quality of life. Something that cannot go on forever, like the trajectory of health care costs, must eventually stop or major important aspects of society may break.

It is easy to be cynical about these issues. Cynics may ask: just three companies in a joint venture are going to solve this massive problem? The key to meaningful change is a positive feedback loop and the way to create a jump start for the phenomenon is for groups like ABJ to act and for others to follow their example. One thing is clear, if incentives do not change, nothing will change.

P.s., Recently Charlie Munger said this about the state of heath care in the United States:

"Healthcare: There's a lot of crapola that just causes us to run out of money. Other systems like Singapore and Socialist Western Europe use smaller amounts. It is out of control, and incentives are wrong. I don't know how the deal with Amazon and JPMorgan will work out. That's a very difficult thing to take on. Atul Gawande at Harvard is best writer in the medical profession and an honorable and clear-thinking man. His parents were both physicians, and he can check all the boxes, so I listen to him. It wouldn't be hard for a benign despot to do something dramatic. Take macular degeneration. Old people need a shot. I could give that damn shot. It's not that hard to shoot a little goop in the eye. There are two substances for the goop that are both equally effective, and the one that's pricier is used all over America. Many a man who is dying is like a carcass in West Africa. In comes all the vultures and hyenas and assorted carnivores who come in to feed to bleed money out of old people. It's not right to bleed so much money out of our dying people. There's not a hospital that's not dialysising people to death. It's deeply immoral, so if someone [like Berkshire, JP Morgan and Amazon's partnership] wants to assault the asininity of the system, I welcome it. I am all for someone trying to figure it out. I don't want to do it, because I am too old. If they ask me to serve on such a panel, I'd decline."

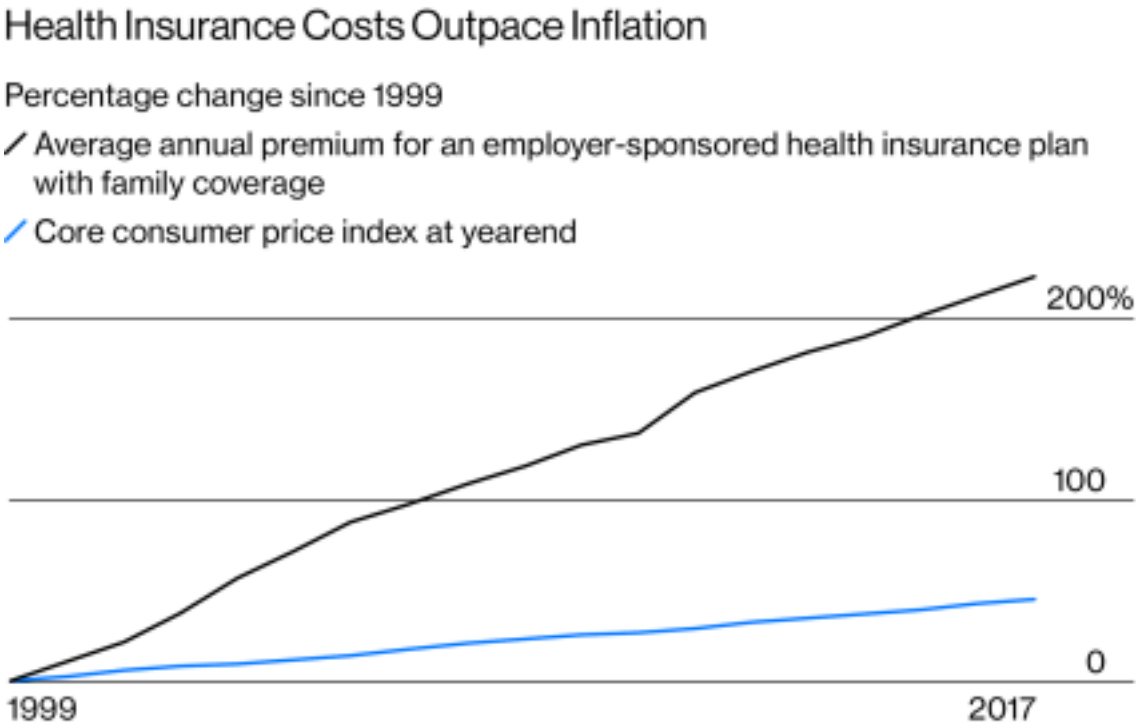

GRAPHIC BY BLOOMBERG BUSINESSWEEK; DATA: KAISER/HRET SURVEY OF EMPLOYER-SPONSORED

2017 Milliman Medical Index

By Christopher S. Girod, Susan K. Hart, Scott A. Weltz | 16 May 2017

In 2017, the cost of healthcare for a typical American family of four covered by an average employer-sponsored preferred provider organization (PPO) plan is $26,944 (see Figure 1), according to the Milliman Medical Index (MMI).[1]

1. The MMI's annual rate of increase is 4.3%. This is the lowest rate since we began tracking the MMI in 2001. Yet the total dollar amount is still bracingly high. Of the $26,944 spent by the MMI's family of four, $11,685 is paid by the employee, through a combination of $7,151 in payroll deductions for premium, and $4,534 in out-of-pocket costs incurred at time of care.

2. Prescription drug trends are lower, but still high. For the first time since 2013 and 2014, the family of four's prescription drug trends have decreased in two consecutive years. Still, the 2017 prescription drug cost increase of 8% is more than double the medical increase of 3.6%.[2]

3. Employees pay a bigger piece of the healthcare cost pie. Through their payroll deductions and through out-of-pocket expenses incurred when care is received, employees now pay for about 43% of expenses and employers pay the other 57%. The difference between these two shares has gradually narrowed since 2001, when employees contributed 39% and employers contributed 61%. High growth in per-employee healthcare expenditures have pushed employers to limit their contribution increases to amounts below the rate of healthcare inflation.

Some stakeholders have held out hope that federal healthcare reform efforts would help control healthcare cost growth. So far, those efforts have had relatively little direct impact on the MMI, because the MMI represents healthcare costs in an employer-sponsored health plan, while the primary focus of healthcare reform has been on the individual insurance marketplace and Medicaid. The employer market tends to be one of the most stable markets for health insurance companies, and one of the most financially important for healthcare providers such as hospitals and physicians. As discussed in a later section of this report, providers receive higher payment for patients in employer-sponsored plans, for the exact same basket of services, than they do for other insured patients. Employers and employees have been subsidizing other markets for many years." http://www.milliman.com/insight/Periodicals/mmi/2017-Milliman-Medical-Index/

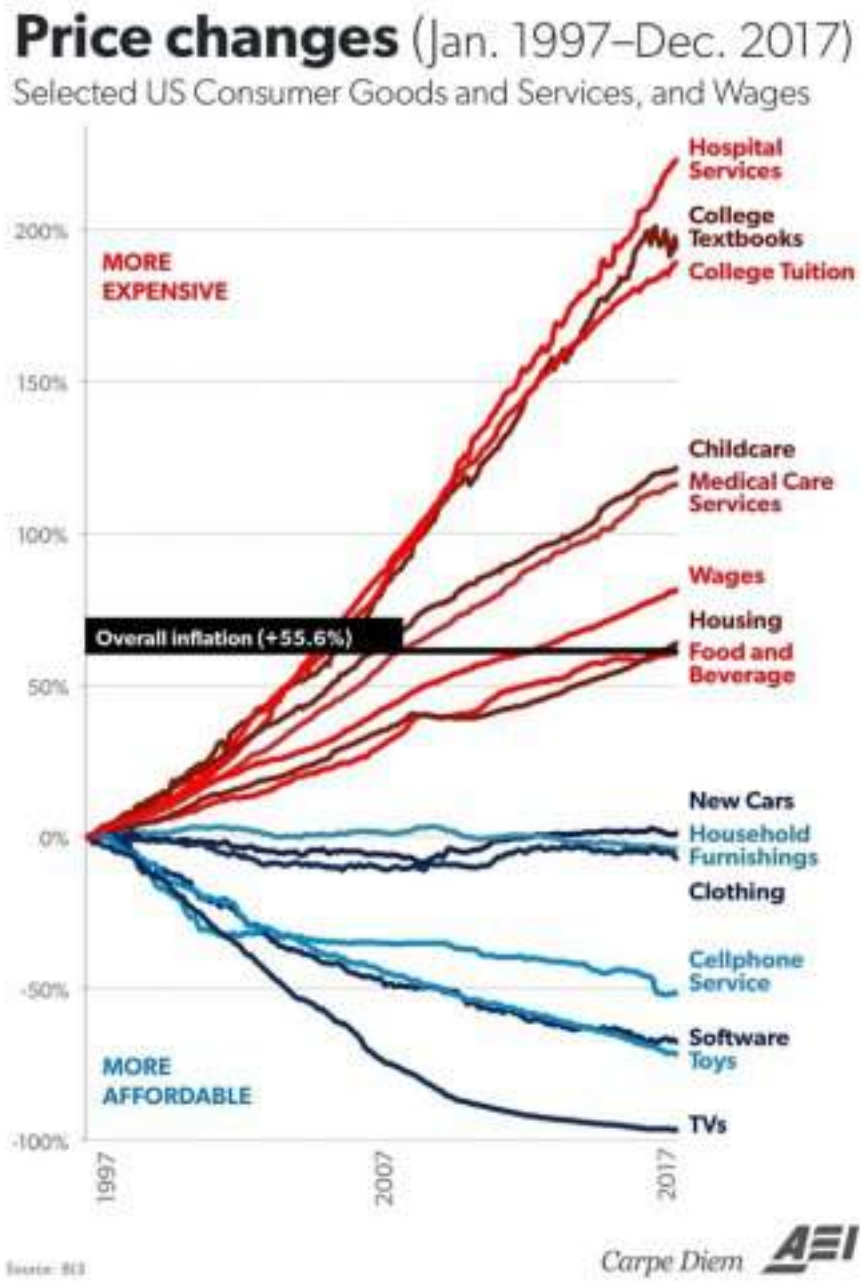

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Business Lessons from Jim Clark (Silicon Graphics, Netscape, etc.)

March 3, 2018

Jim Clark is an entrepreneur and computer scientist. He founded several important businesses including the two named in the title and Healtheon (which eventually merged with WebMD). He is currently the founder of the building management systems provider CommandScape. Clark is a friend of my friend Craig McCaw and I have heard some colorful stories about him as a result. He is not boring. As an example of the Clark's non-typical approach to life, Mark Andreessen said during an interview once: "I just ran into an entrepreneur who said, 'I just ran into Jim Clark at a resort town in Italy. Jim was in a hot tub carved into the side of a mountain. I said, 'Yes! That was Jim Clark.'"

1. **"Don't be afraid to cannibalize your product. You must be willing to challenge your own product lines. For example, Barnes and Noble could have addressed the Internet, but didn't until Amazon forced them to. That is the worst way to do it."**

Clayton Christensen argues that only the upper left quadrant in this matrix is genuinely "disruptive" in the way uses the term in *The Innovator's Dilemma*. The best way to see which view is right is to put some real businesses in the quadrants:

	Overlooked Low-end Customer Segment	**Most Demanding Customer Segment**
Inferior to existing solution	Netflix in 1997 Amazon in 1994	
	Uber/Lyft	Tesla
Superior to existing Solutions	Airbnb	iPhone

To be provocative in order to to make this blog post more interesting I will argue here that there are other ways to be disruptive. You might want to think about where some other businesses fit best in this matrix. For example:

Dropbox?	Workday?	Stripe?
Shopify?	Square?	SpaceX?
Hubspot?		
Wix?		

In thinking about this issue it is useful to review what Christensen wrote in *The Innovator's Dilemma*:

"An innovation that is disruptive allows a whole new population of consumers access to a product or service that was historically only accessible to consumers with a lot of money or a lot of skill." "The very decision-making and resource allocation processes that are key to the

success of established companies are the very processes that reject disruptive technologies. These are the reasons why great firms stumbled or failed when confronted with disruptive technology change."

This classic example is often used to explain *The Innovator's Dilemma*:

"Minicomputers were much smaller than mainframes, which had appeared in the 1950s, yet much larger than the personal desktop computers that followed them, beginning in the early 1980s. In the 1970s, minis ruled much of computation. But by the late 1980s, the business desktop microcomputer was eating DEC alive. "People attributed DEC's demise to [CEO Ken] Olsen," Christensen says. (Olsen had regarded desktop computers as toys for playing video games and publicly predicted they would fall flat in the business market.)"

What is *Innovator's Dilemma*? Is it just an academic way of describing how businesses sometimes purposefully or accidentally end up in a competitive battle possessing different strengths and weaknesses? In my view a disruption based strategy is fundamentally about using asymmetry to create competitive advantage. The key to a successful asymmetric attack in business is to pick a strategy where the competitor has a hard time responding to the attack directly from a position of strength. Guerilla warfare is a classic example of an asymmetric strategy.

2. **"Microsoft was founded the same year as SGI, and they both went public in 1986. I had the experience of my own foolhardy opinion of the PC in those days — that it was a 'toy' unworthy of the attention of real computer scientists."**

Steven Sinofsky describes the crux of the issue that Clark is talking about in this way:

"As many have recognized, when inventions and innovations first appear they are often (always) labeled as 'toys' or 'incapable' of doing 'real work' or providing 'real entertainment'. Of course, many new inventions don't work out the way inventors had hoped, though quite frequently it is just a matter of timing and the coming together of a variety of circumstances. It can be said that being labeled a toy is necessary, but not sufficient, to become the next big thing."

Sinofsky's list of one time "toys" is instructional:

1981—"PC is a toy"

1982—"C programming language is a toy"

1983—"PC Mouse is a toy"

1984—"Mac is a toy"

1985—"PC Networking is a toy"

1986—"GUI is a toy"

1987—"GUI is a toy"

1987—"Color screen is a toy"

1988—"AI is a toy"

1989—"Digital PC sound is a toy"

1990—"C++ programming language is a toy"

1991—"Linux is a toy"

1992—"Graphical Development is a toy"

1993—"Digital camera is a toy"

1994—"PC Server is a toy"

1994—"Streaming is a toy"

1994— "PC Camera is a toy"

1995—"Internet is a toy"

1996—"Java [and JavaScript] programming language is a toy"

1997—"Wi-Fi is a toy"

1998—"AI is a toy (again)"

1999—"Email on a pager is a toy"

2000—"Peer to Peer is a toy"

2001—"Intranet is a toy"

2002—"SMS [in the US] is a toy"

2003—"VOIP is a toy"

2005— "Flash storage is a toy"

2005—"Internet video is a toy"

2006—"Facebook is a toy"

2007—"Touch is a toy"

2008—"Mobile App is a toy"

2010—"Cloud is a toy"

What "toys" would you insert in these years?

2011—	2015—
2012—	2016—
2013—	2007—
2004—	2018—

Chris Dixon elaborates on the "at first it is viewed as a toy" investing thesis used by many venture capitalists and founders:

"Disruptive technologies are dismissed as toys because when they are first launched they "undershoot" user needs. The first telephone could only carry voices a mile or two. The leading telco of the time, Western Union, passed on acquiring the phone because they didn't see how it could possibly be useful to businesses and railroads – their primary customers. What they failed to anticipate was how rapidly telephone technology and infrastructure would improve (technology adoption is usually nonlinear due to so-called complementary network effects). The same was true of how mainframe companies viewed the PC (microcomputer), and how modern telecom companies viewed Skype. (Christensen has many more examples in his books).

This does not mean every product that looks like a toy will turn out to be the next big thing. To distinguish toys that are disruptive from toys that will remain just toys, you need to look at **products as processes**. Obviously, products get better inasmuch as the designer adds features, but this is a relatively weak force. Much more powerful are external forces: microchips getting cheaper, bandwidth becoming ubiquitous, mobile devices getting smarter, etc. For a product to be disruptive it needs to be designed to ride these changes up the utility curve.

…A product doesn't have to be disruptive to be valuable. There are plenty of products that are useful from day one and continue being useful long term. These are what Christensen calls sustaining technologies. When startups build useful sustaining technologies, they are often quickly acquired or copied by incumbents. If your timing and execution is right, you can create a very successful business on the back of a sustaining technology."

3. **"The decision to put money into the Internet in 1994 was considered by many of my colleagues to be borderline insane. Most people said things like, The Internet is free; you can't make money on that! I literally had people telling me I was going to screw up the Internet by bringing more traffic to it."**

Chris Dixon believes that the best ideas to invest in are good ideas that look like bad ideas (AKA "borderline insane'). If what investors like Clark and Dixon say is not true, the optionality associated with the investment is unlikely to be mispriced. In other words, if everyone thinks the idea for the business is a good idea from the beginning the entry price of the investment will be too high to be profitable in a way that is likely to generate a venture capital style financial return.

Which businesses today are good ideas that seem like bad ideas? Buying Dentacoin is a bad idea that seems like a bad idea. What other investments fall into the "what seems like bad idea is a bad idea" category? In what areas are people investing which are so flooded with money that an attractive financial return is unlikely to be realized?

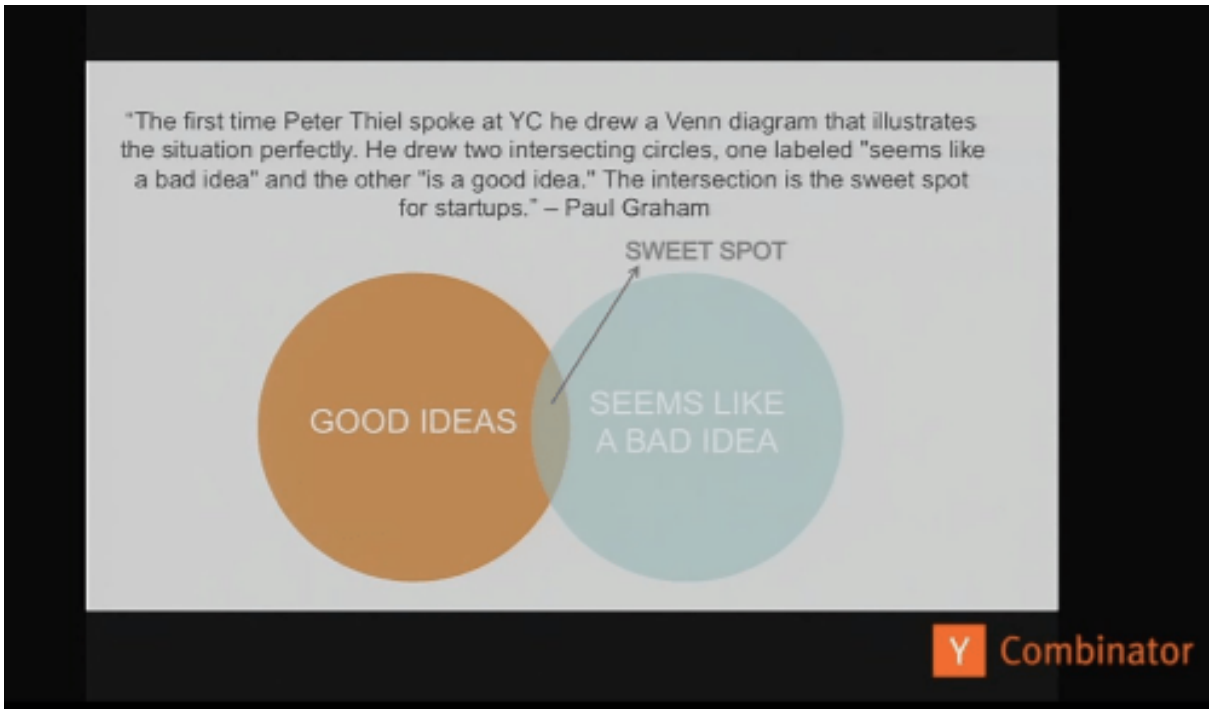

The Y Combinator slide replicated above is: (1) not drawn to scale and (2) varies over time, domain of expertise and investor. Most bad ideas are bad ideas, but a few are not.

What is an example of a business that seemed like a bad idea to some investors that turned out to be a good idea? In November of 2013, Jamie Siminoff was a guest on the television show Shark Tank, He asked for an investment that valued his WiFi enabled video doorbell business at $7 million. Four sharks passed. Kevin O'Leary offered a loan and royalty deal that Siminoff declined to accept. Five years later Amazon agreed to acquire the business for a reported $1 billion.

The founder tells the story of his Shark Tank rejection in this way:

"I will never forget leaving the set without a deal. It was horrible. I could not believe that we had done all of that work and were walking away with nothing. Sure I thought if we aired (the episode has a lower chance of airing without a deal) that we would get a little bit of traction, but I did not think it would be enough to make a real difference for us. I was gutted telling the team. But the show must go on and we went back to work, maintained focus and did what we could. And then we aired… and our lives changed forever. The bump we got from Shark Tank was not decent, it was extraordinary. And it wasn't just something that lasted for the weekend. It's still happening today, two years later. In terms of dollars, it was worth millions, but it also brought and provided an incredible amount of credibility and awareness for us with industry partners. Thanks to Shark Tank, we were able to hire more engineers and take the company to another level. It was like replacing the gas in our car with jet fuel…"

4. **"What I recognized after talking to Marc was that the Web was to networks in 1994 what the PC was to computing in 1982." "Of course, I knew what the Internet was. But I hadn't thought about what the implications were in terms of its growth rate."**

Bob Metcalfe who co-invented Ethernet and founded 3Com said once in a meeting I was in: "No one ever made a nickel directly from Ethernet technology itself. Businesses have instead made a profit using Ethernet as a foundation for something else." What Metcalfe was saying is that sometimes the profit is made indirectly from a technology or phenomenon. A classic example of a technology or approach producing profit indirectly is open source software. Many entrepreneurs have realized that a viable path to creating a new business is to create an open source software project and to then build a community around it. The business then tries to hire as many of the best people who worked on it as they can. The advantage that a business company like this brings to customers is how it adds value over and above the open source software — usually offering a combination of complementary services, tools and functions not necessarily available in the free version. Red Hat, Canonical, MySQL, WordPress and Mozilla have adopted this approach. What other businesses would you put in this category?

5. **"In the first year of business [at Netscape], we had almost no sales force. We were just taking orders." "We recognized in the beginning that the Netscape required a different marketing strategy. The only way we could get large market penetration, was to allow to be freely downloaded, and besides the internet already has that culture in place – a lot of software was free. But we felt that by letting people download the software, we would be able to create a very large market share, and it worked. In a year and a half, we created 40 million users."**

Bill Gurley describes the approach Clark is taking about: "If a disruptive competitor can offer a product or service similar to yours for 'free' and if they can make enough money to keep the lights on, then you likely have a problem." The business model Gurley describes is commonly known as "freemium." A loss-leader product is not a new concept. Free Tapas have been served in bars in Spain since at least the middle ages. Gillette selling razors at a loss to sell profitable blades is a more modern example. In this model users typically get some value for free and are charged a fee for other complementary services. In some cases the service which has a monetary cost is more advanced in other cases it is less advanced. All businesses today must be prepared for competitors to give away what they sell as an incentive for customers to buy something else. What is different about a freemium strategy today is that many of the free services are digital and have close to zero marginal costs to create and distribute.

Since I am asking many questions in this post, which businesses in the news in 2018 best exemplify this freemium business model described by Clark. Atlassian and Dropbox are two examples. Spotify has a freemium business model. What other companies have adopted a freemium business model?

6. Silicon Graphics was] an excellent group of people but they – and people at every other company – begin to define themselves by what they have been doing, not by what they can do."

What businesses fit within Clark's description in this quote? IBM? One way to avoid the trap Clark is describing is to have great "product people" who can create new products that drive the business forward. Fred Wilson their attributes here:

"The product person sets the overall requirements, specs them, focuses on the UI and UX and manages the process. The engineering person builds the product or manages the team that builds the product, or both." Great products need both types of people.

Steve Jobs was obviously a product person:

"My passion has been to build an enduring company where people were motivated to make great products. The products, not the profits, were the motivation. Sculley flipped these priorities to where the goal was to make money. It's a subtle difference, but it ends up meaning everything."

A related problem is what Yoky Matsuoka has called "the Valley of Death" between academia and business. *Business Insider* describes how Matsuoka views the challenge:

"Research is all about proving an idea that's never been done before. Have an idea, write a grant, hire research students, get proof-of-concepts and have everyone publish papers. Those papers bring in more grant money and lead to tenure. The gap comes at that point. Researchers assume that some great product person will take the research and turn it into a product to be used by millions of people. But it's not easy to take a product "that works for 10 people and getting it working for a million or a billion people," Matsuoka says. And the work required to bridge that gap "is boring for everyone," she says. Researchers want to focus on new stuff that's never been done before. They don't want take something proven and published, and make it stable for a billion users. And product people don't want to spin their wheels experimenting with early technologies that have only worked for 10 people. Their attitude is "We're working on real products," she describes."

Truly great "product people" are a rare commodity. Who are the best product people you know who are actively involved in a business today? Do you have a product person on your team?

7. At Silicon Graphics I had advocated using cable-TV systems for all kinds of media distribution, for movies on demand and things like that. We did a contract for Time Warner in Orlando that used a computer that was equivalent to the set-top box. All that stuff was expensive—$5,000 per set." "I was kind of a lone voice [at Silicon Graphics] I was babbling about cable television – and into the wind for a lot of the time. The reaction I got was, 'Well we're not a consumer electronics company. Why do we care about cable-TV boxes? Who cares?'" "I believe the Internet is the Information Highway. I'm religious about this. I don't think it is cable television."

The *Information Highway* period in history teaches important lessons about how conventional wisdom can lead businesses, investors and government leaders astray. The metaphor described a plan to create a controlled environment with defined on ramps and off ramps. It was the wrong idea at the wrong time and was buried by the rise of the Internet.

The Internet's distributed nature is the inverse of what was intended by the promoters of the *Information Highway*. The founders of the Internet adopted these four core principles:

- Each distinct network would have to stand on its own and no internal changes could be required to any such network to connect it to the Internet.
- Communications would be on a best effort basis. If a packet didn't make it to the final destination, it would shortly be retransmitted from the source.
- Black boxes would be used to connect the networks; these would later be called gateways and routers. There would be no information retained by the gateways about the individual flows of packets passing through them, thereby keeping them simple and avoiding complicated adaptation and recovery from various failure modes.
- There would be no global control at the operations level.

The Internet's explosive popularity took many people by surprise, including successful software businesses like Microsoft. Some people saw the warning signs earlier than others. *Business We*ek reported at the time:

"The Web-izing of Microsoft begins in February, 1994, when Steven Sinofsky, Gates's technical assistant, returned to his alma mater, Cornell University, on a recruiting trip. Snowed in at the Ithaca (N.Y.) airport, he headed back to the Cornell campus. That's when he saw it: students dashing between classes, tapping into terminals, and getting their E-mail and course lists off the Net.

The Internet had spread like wildfire. It was no longer the network for the technically savvy — as it had been seven years earlier when Sinofsky was studying there — but a tool used by students and faculty to communicate with colleagues on campus and around the world. He dashed off a breathless E-mail message called "Cornell is WIRED!" to Gates and his technical staff."

Bill Gates responded to the change by writing his famous "Internet Tidal Wave" memo, which today would be a rights protected document in the cloud rather than a memo.

There are many other examples of conventional wisdom that turned out to be wrong or a blind alley. Often the mistake is a result of a group of businesses trying to hype their future prospects. For example, telecommunication equipment suppliers have on several occasions been a source of problematic hype. I already mentioned the Information Highway failure but one should also attribute much of the Internet and telecom bubbles to the same source. Equipment suppliers and some operators like Worldcom/UUNet told tall tales about traffic growth which in no small part caused the telecom and Internet bubbles. These bubbles eventually popped as you know.

Is anything like the Information Highway or the telecom/Internet bubbles happening today? The press is repeating massive 5G forecasts for spending on infrastructure right now. For example:

Reuters (MARCH 2, 2018): "GSMA, which represents nearly 800 operators and some 300 suppliers, forecasts capital expenditure (capex) on mobile networks worldwide will be $500 billion over the three years between 2018 to 2020. Expanding 5G could mean capital expenditure rising to 16 to 17 percent of revenues generated by the mobile industry from 2020, up from 15 percent now."

Is that $500 billion estimate real? What could be motivating that estimate? Could it be, that: "For network equipment makers, such as Ericsson and Nokia, which are struggling with declining sales for 4G gear, the rollout cannot come soon enough." What could possibly go wrong? Have we seen anything like this before?

What is "5G" anyway? A recent report on the big event at the Mobile Word Congress repeated what was said about 5G at a panel of executives from big equipment suppliers:

"'It's a new radio, meaning, a new format in which antennae will control electro-magnetic waves,' said one panelist. Another person said it is a new 'network architecture.' Another finally concluded, 'So we don't have a definition of 5G.' The problem is not just coining a succinct description: The technology is "the most hyped thing," in one panelist's words, 'it is all things to all people." And in that, it is something of a mess at the moment.'"

The Reuters article went on to say:

"'5G is, so far, too much hype, in the sense of its position as a new revolutionary technology,' Telenor Chief Executive Sigve Brekke told Reuters at Mobile World Congress in Barcelona… CCS Insight analyst Ben Wood said one mobile handset company exhibited a showcase of 5G phones in Barcelona, only to have one display model drop on the floor and break open. 'It turned out it was completely empty inside,' he said."

A lot of what 5G is today is a marketing slogan for many things. The discussion is about to get a bit technical for the last few paragraphs but that is unavoidable. One way to look at 5G is in terms of buckets of things. Just three of these buckets are:

- One bucket of 5G is about better software and protocols. Internet of Things (IoT) applications and services may work better as a result of new and better 5G software and protocols for example. Lower latency may enable some new IoT applications. 5G standards enable things like reduce the number of functional components that data must traverse between the device and the servers, enable the deployment of a collection of services on virtualized hosts and implement better spectrum aggregation and sharing. If a wireless system does just the things in this bucket, is it 5G?
- One bucket of 5G is about more fixed wireless to homes that may capture at most 5-10% of homes vs fiber/coax cable. ALso in the bucket is more backhaul to base stations using 5G radio frequencies like 28 GHz creating better 4G densification, but small cells are only economic to deploy in some areas.
- One bucket of 5G is hype about handsets that receive signals at frequencies above 6 GHz. This claim about the use of so-called millimeter wave frequencies to serve handsets almost all slideware and press releases so far. There may be close to zero applications customers will pay more money for that would justify the higher handset and systems costs that would be required to receive millimeter wave frequencies in a hand held phone. A long time industry expert said this to me in an e-mail recently about millimeter wave frequency use at 5G in handsets:

"They're putting in lots of antennas so by using beam forming it's probable that you'll have some usable 28 GHz signal in some situations. But the primary goal is to use the 28 GHz and above spectrum to serve devices when they're not in your hand and not moving. Range will

still be limited and propagation is challenging. This is the vision, but it does depend on base sites 300-500 feet away. The highest and best use of 28 GHz is for fixed with high gain antennas, etc."

Below 6 GHz frequencies in handsets work just fine, can deliver higher data rates every year anyway and at far lower cost. The real magic that delivers higher data rates over that last wireless link from a wireless base station is a technology called MIMO.

That's enough about technology since this post is getting too long. To be consistent with the theme of this post, it seems appropriate to ask readers one final question. Can you think of a better anagram for *Information Highway?*

- Hey, ignoramus — win profit? Ha!
- A rough whimper of insanity
- Oh, wormy infuriating phase
- Hi-ho! Yow! I'm surfing Arpanet!

Notes:

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Peloton: The "SaaS Plus a Box" Business case

March 10, 2018

"We're a software company. The entire leadership team comes from consumer Internet… what differentiates us is the software, which includes the streaming and the gamification and the network. We're also a media company on top of that, because we're streaming 12 hours of live TV content each day and have another 4,000 classes on-demand." Peloton CEO John Foley

Peloton sells stylish stationary bicycles and treadmills to customers:

But despite the functionality and style of the hardware the Peloton CEO said in the quote just above that they are a software company. Why is that? Because it is in software that a business can find the best sources of sustainable competitive advantage (AKA, a moat). If a business does not have a sustainable competitive advantage alternative sources of supply will arrive in a market and price will drop to the opportunity cost of capital. Occasionally you will see or hear a nutcase argue that moats do not matter which the equivalent of saying alternative sources of supply of what you sell created by competitors do not matter. Bill Gates described the importance of a sustainable competitive advantage in an interview in 1992: "Supply is the killer of value. That's why the computer industry is such a strange industry. We're dealing with amazing increases in supply." What any business must find is some degree of scarcity which is what generates a positive return on capital. The best source of that scarcity is software, which today often takes the form of "software as a service" (SaaS). Some people like to say that "every business is now a technology business." The more precisely accurate statement is that specifically "every business is a software/SaaS business."

In his famous 1994 interview in *Playboy* magazine Bill Gates described why moats are so important in this way by commenting on a specific example: "What is the scarce resource? What is it that limits being able to get value out of that infinite computing power? Software." Software/SaaS has increasingly assumed the top dog role in creating significant profitability, especially in the start-up world because it is network effects (demand side economies of scale) that create the most meaningful barriers to entry in today's economy. If all you make is clever hardware the story is almost always that you end up in a situation like GoPro finds itself in today. GoPro is in a business that is increasingly a commodity since it lacks network effects to preserve the source of its margins. Just trying to compete on operational effectiveness alone is a very bad idea. Operational effectiveness is essential but in the long term it is not enough to guarantee success,

The Peloton founder understands the power of software/SaaS to drive return on investment and not surprisingly is focused on that part of his business. Marc Andreessen made the same point in his well-known "software is eating the world" essay. You may be asking at this point: "Why is Peloton making hardware at all if software/SaaS is so valuable? The one-word answer to this question is: distribution. No one is making low cost exercise bike or treadmill "clones" or "blanks" that Peloton can rely on. Bill Gurley described how hardware in some cases can be important for distribution in his 2003 essay: "Software in a Box" which today might be called "*SaaS plus a Box*":

"Most executives in Silicon Valley take it for granted that selling software is a better business model than selling hardware. In their minds, this goes without saying. The self-evident reasons relate to software's remarkably high gross margins. With near-zero variable costs, software businesses offer the ultimate in scalability. Software businesses are simultaneously less capital intensive than hardware. This combination of low capital intensity and high gross margins, also leads to better valuations in the public marketplace. What's not to like? Despite these seemingly irrefutable advantages, many startups are "choosing" to sell hardware instead of software."

Gurley wrote this essay just after a period when I had spent a lot of time working in the Benchmark Offices on Sand Hill Road since the private equity firm I worked for then was co-investing with Benchmark when it came to mobility investments. We talked about the "software in a box" idea often then. I was focused on this investing thesis in no small part since: (1) I loved software profit margins especially given some of the other business we were involved in that had modest or low margins and (2) I saw how hard it was to get distribution for a new product offering. Hunter Walk recently wrote about why I love the software business so much:

"Nothing gets an investor's heart racing like the phrase 'software margins.' It's shorthand for the concept than businesses which are primarily bits (not atoms) have some very attractive characteristics: fixed development costs, economies of scale in deployment & servicing, and "winner take most" markets with pricing power. The resulting impact is very profitable, fast-growing success stories with high gross and net margins. Dismissing a company as 'nice but doesn't have software margins' is the "yeah, nice personality I guess' of venture investing."

What are some examples of "*SaaS plus a box*" today? Peloton? Apple watches? GE Jet engines? John Deere tractors? Amazon Echo? Kindle? Video game consoles? Fitbit? Roku? The business model is not easy but there are not that many opportunities to create a new platform business so using hardware for distribution can be quite tempting or even necessary. Steve Jobs said in 2004:

"The more we look at it, for more and more consumer devices the core technology in them is going to be software. More and more they look like software in a box. And a lot of traditional consumer-electronics companies haven't grokked [fully understood] software."

Hardware may be a valuable way to distribute software/SaaS, but it makes for a much harder business model to execute on. The skills and business models necessary to get the product and service integration right are sometimes conflicting. Getting the hardware designed and manufactured correctly is non-trivially hard. Managing a global supply chain is tricky, as is customer service. The upfront cost of creating, manufacturing and the financing hardware for consumers can result in a higher customer acquisition cost, but the relationship can become

quite sticky. But as anyone who has tried to sell hardware devices knows the amount cash required to do so successfully is huge. Up front expenses like non-recurring engineering and work in process make it hard to finance. Add upfront costs of SaaS customer acquisition to that and you are talking about significant cash requirements. In other words, the unit economics of a *SaaS plus a box* business model can require that the business raise a lot of cash before it flows enough cash to be self-supporting.

As an example of what I talked about above, The Street.com wrote this about how hardware impacts the unit economics of Roku:

"The Roku Player, however, is a true loss leader. Revenue was actually down 7% from a year ago while the cost of that revenue was only down 1%. The company acknowledges the Player as a loss leader, but the concerns become how quickly will it slow and how much will it drag the bottom line. Gross margins for the Roku Player dropped from 14.3% a year ago to 9.5% in the fourth quarter. Fortunately, the Platform gross margins are strong, at 74.6%, but those are also lower by almost 300 basis points from a year earlier.

SaaS plus a Box can work financially, but it is not an easy business model to get right.

Let's return to talking about Peloton. Where does Peloton's moat come from?

"When I started Peloton with my cofounders, I saw clear as day what it was going to look like and how it was going to work — the technology, the hardware, the software, the business model. I saw everything except the community. The community has blown me away." Peloton CEO John Foley

What a community does, if done right, is deliver network effects. My essay on network effects-based moats is cited in the notes and it reads in part: ""Nothing scales as well as a software business, and nothing creates a moat for that business more effectively than network effects. Network effects exist when the "value" of a format or system depends on the number of users." Building a community to create those network effects is neither easy or simple. Solving the "chicken and egg" problem is hard. Somehow the services must become viral to drive community growth. Many businesses try to create community, but few actually do it well.

Gizmodo describes some of the key financial terms in the case we are looking at in this blog post:

"Peloton will sell you the new Tread for $3,995, and you can reserve a unit now with a $250 deposit. If you don't have that kind of coin lying around, you can sign up for a payment plan that costs $149 a month for 39 months—which is, by the way—with 0 percent APR. That payment includes the $39 a month membership fee for the duration of the payment plan. Still, we're talking $150 a month a little over three years to get the Peloton Tread and the classes. After that, you still have to pay that membership fee."

Five factors determine the "unit economics" of a business. Let's work though a key sensitivity analysis using educated guesses as inputs. I will assume that the Peloton equipment business is financially break even to make the math simple. This is an important assumption and the model would be a lot different if the hardware is actually a loss leader. It

could be that the equipment is sold at a loss and if so that is properly classified as being part of CAC.

1. Average revenue per user (ARPU) per month – $39- This is what we know best about Peloton.
2. Gross margin – 70%. In a SaaS business the gross margins should be very high. I would have put it at 80% if not for the cost of making the videos and instructors.
3. Customer acquisition cost (CAC) – $500. Yes, I think it is that high and it may in fact be higher. A business can spend what may seem like a lot of money on customer acquisition and still have at attractive business if the unit economics are otherwise acceptable and the business model is sound. For example, sometimes doing things like this very expensive "truck roll" (it will cost at least $150 for each one) becomes possible if gross margin and revenue per month are high and churn is low.I formulated my $500 CAC estimate by looking at ARPU relative to comparable business, noticing the frequency of their sales pitches on expensive advertising like TV and the way they distribute goods. Peloton's network of stores is not a cheap way to sell goods either. But again, spending what may seem like a lot on CAC can make sense if the business has (1) solid unit economics otherwise and (2) enough cash to get to free cash flow positive. Peloton is similar to mobile phone customer style ARPU. It is also like a satellite TV install where the product is sometimes brought to the customer via a truck roll.

4. Monthly customer churn – 1%. The company has said "Monthly subscriber churn is just 0.3%" but that will not last forever as the equipment and people age. A 1% churn rate is really good for a consumer product. The best cell phone providers are below 1% a month on churn but not by much. I asked Professor Dan McCarthy for his view on what churn might be for the service. He thinks their retention is excellent, but very uncertain:

"They say their current monthly churn rate is 0.3%, which annualizes in the very worst case scenario (i.e, assuming all customers share the same loyalty) to an annual retention rate of 96.5%. But their true underlying retention will almost surely be higher than that because of their 39 month financing plan, which forces people to be on subscription for 39 months. A lot of their customer acquisition has been more recent, which means most of their customers probably have their "asses glued to their seats" (no pun intended). I don't know how much higher their normalized base churn rate is, but to their credit, it is probably not very high because they have great user engagement and customers seem by and large very satisfied with the service (their NPS of 93 is impressive)."

Of course, the monthly retention rate of an "average" customer is just one of the two main drivers of expected customer lifetime, the other component being how much variability or "heterogeneity" there is in retention across customers. The more heterogeneous retention rates are across customers, the higher the expected lifetime an average customer has. I have no idea how heterogeneous retention is. However, I would have to imagine there are two segments – the die-hards, and those who are into it but not quite as loyal.

Running a sensitivity analysis across possible base retention rate and heterogeneity assumptions, I would estimate an average customer lifetime somewhere between 7 and 14 years. While this is a wide range, these values are high, which Peloton should be proud of. Of

course, Peloton would have a much better sense for their expected customer lifetime because they have access to their own internal transaction log data."

5. Discount rate – 10%. This assumption seems about right but you can select another discount rate for your model if you want.

How big is Peloton now in terms of revenue? In a Facebook post, the CEO shared this chart:

INPUTS	
CAC	$500.00
ARPU (per month)	$39.00
Churn (per month)	1.0%
Gross Margin	70%
Annual Discount Rate	10.00%
COGS (per month)	$11.70
Monthly Discount Rate	0.83%
Terminal value multiplier (months)	55.00
NPV	$989.09
IRR	52.72%

Excludes last period with terminal value

	Time 0	Year 1 Jan 1	Feb 2	Mar 3	Apr 4	May 5	Jun 6	Jul 7	Aug 8	Sep 9	Oct 10	Nov 11	Dec 12	Year 2 Jan
CPGA	-$500.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.0
ARPU		39.00	39.00	39.00	39.00	39.00	39.00	39.00	39.00	39.00	39.00	39.00	39.00	39.0
COGS		-11.70	-11.70	-11.70	-11.70	-11.70	-11.70	-11.70	-11.70	-11.70	-11.70	-11.70	-11.70	-11.7
Monthly Cash Flow	($500.00)	$27.30	$27.30	$27.30	$27.30	$27.30	$27.30	$27.30	$27.30	$27.30	$27.30	$27.30	$27.30	$27.3
Remaining fraction of subscribers		100%	99%	98%	97%	96%	95%	94%	93%	92%	91%	90%	90%	89
Net cash flow	($500.00)	$27.30	$27.03	$26.76	$26.49	$26.22	$25.96	$25.70	$25.45	$25.19	$24.94	$24.69	$24.44	$24.2

Peloton sells hardware and SaaS, so the revenue is higher than a software or SaaS business, but still that screenshot of the spreadsheet above chart reflects significant revenue growth. It should be noted that Peloton generates a large amount of customer data that could be very valuable to e-commerce firms and that could be an additional source of revenue. One uncertainty about the Peloton business is the size of their total addressable market (TAM). How many people are willing to pay this much for equipment and $39 a month for service? Estimating TAM is a topic for another post.

It will be fun to watch how Peloton executes on their business plan.

Notes:

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Business Lessons from Jack Ma- Alibaba and the 40 SaaS

March 17, 2018

Jack Ma is the founder and executive chairman of Alibaba. The Wall Street Journal describes Alibaba as: "a marketplace, a search engine and a bank, all in one." Wikipedia's description is longer: "Alibaba is a Chinese multinational e-commerce, retail, Internet, AI and technology conglomerate founded in 1999 that provides consumer-to-consumer, business-to-consumer and business-to-business sales services via web portals, as well as electronic payment services."

As is customary on this blog, the quotes from Ma are in bold text:

1. **"Every empire will be toppled someday, but an ecosystem is sustainable."**

The network effects generated by an ecosystem (e.g., a platform) can be very strong, which makes creation of such systems an attractive goal for entrepreneurs and investors. Unfortunately, an economy can enable only so many platforms as big as Alibaba, Amazon or Facebook at any given time since there are limits on how much revenue can collectively flow through these ecosystems. In other words, a business which generates as much revenue and profit as a company like Google appears only a few times in a decade due to fundamental top-down constraints that exist in an economy.

A platform business like Facebook scores highly when certain key attributes are evaluated, including key elements of the unit economics equation. For example, Facebook has:

1. low recurring COGS;
2. low CAC due to high virality and cross selling to the existing customer base;
3. a sticky product due to network effects;
4. attractive revenue from clear product/market fit; and

5. a huge addressable market.

Few platform businesses are as attractive as Facebook and every business ecosystem is unique. This means that some platforms are very profitable and some are not. In order to help people understand how to better compare the strengths and weaknesses of various platforms I have created this matrix below.

	Gross Margin	Network Effects	Virality	Scalability	Total Addressable Market (TAM)	Average Revenue Per User (ARPU)	Customer Acquisition Cost (CAC) includes free service	Customer Churn
Facebook	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	LOW	LOW
Spotify	LOW	MEDIUM	MEDIUM	HIGH	MEDIUM	MEDIUM	HIGH	MEDIUM
Google Search	HIGH	MEDIUM	LOW	HIGH	HIGH	HIGH	LOW	LOW
YouTube	HIGH	HIGH	HIGH	HIGH	HIGH	LOW	HIGH	LOW
Alibaba								

Understanding these attributes is important because as Warren Buffet says: When a management with a reputation for brilliance tackles a business with a reputation for bad economics, it is the reputation of the business that remains intact." Facebook arguably sets the standard for sustainable profitability since it is attractive in terms of so many important business attributes.

How would you complete the boxes in my matrix the case of Alibaba?

2. "I am just lucky to do the right things at the right time. We are just the lucky ones in this time. Like all successful people, we are not more capable or energetic."

The story of how Ma was introduced to the internet represents an interesting example of the role that luck plays in determining outcomes in life. Part of Ma's success can be traced to a series of events that happened in 1995. Geekwire tells the story in this way:

"Ma tried the Internet in Seattle in a building called U.S. Bank. His friend encouraged him to try searching the Internet for the first time. Initially, he hesitated since he knew that computers were expensive, and if he broke it, he wouldn't be able to afford to replace it. 'He said 'just search it,' so I searched the first word 'beer,' Ma said. 'I don't know why, but maybe because it was easy to spell? I see beers from Germany, U.S.A. and Japan, but I don't see any from China, so I searched for the second word 'China,' and there was nothing.' So, he recalls that they made a small, 'ugly-looking" page, and three hours after launching it, I got a phone call from my friend who said, 'Jack, you have five emails, and I said 'What is email?'" Based on the number of responses, he said, 'This is something interesting, so we should do it.'"

An article in *Science* describes the relationship between luck and skill:

"Although success is likely determined to some extent by intrinsic factors such as quality or skill, it also likely depends to some (potentially large) extent on extrinsic factors such as luck and cumulative advantage. Depending on the balance between these two sets of factors, any explanation for why a particular person, product, or idea succeeded when other similar entities did not will be limited, not because we lack the appropriate model of success, but rather because success itself is in part random."

Skill clearly played a role in what Ma accomplished in addition to luck. What sort of skills were important? Discussion that question fully would require a couple of blog posts. But it can be said one skill in this case was Ma's ability to spot and act on the new business opportunity he saw emerging. He recognized the optionality associated with the new business and aggressively acted to capitalize on that opportunity. Most people would not have seen the potential of the new business or acted to profit from it even if they did. Ma also has a range of skill that enabled him to build the business. For example, Ma has said about himself:

"At first, I knew nothing about technology. I knew nothing about management. But the thing is, you don't have to know a lot of things. You have to find the people who are smarter than you are. For so many years, I always tried to find the people smarter than I and when you find so many smart people, my job is to make sure the smart people can work together." "There's an examination for young people to go to university. I failed it three times. I failed a lot. So I applied to 30 different jobs and got rejected. I went for a job with the police; they said, 'You're no good.' I even went to KFC when it came to my city. Twenty-four people went for the job. Twenty-three were accepted."

My go to resource on all questions related to skill and luck is Michael Mauboussin:

"One of the ways I like to think about this is as a continuum of activities from pure luck and no skill on one end to pure skill and no luck on the other end. Obviously, most things reside somewhere between the extremes, and where an activity sits can be very important…. Not surprisingly, when you look out into the world, whether it's business, investing or your favorite sports team, both skill and luck are contributing. The real question is, in what proportion?"

What Ma created at Alibaba is clearly a positive outlier which is part of a power law distribution of success. In a February 2018 paper Michael Golosovsky writes: "Power-law distributions were brought to attention of scientific community about a century ago and they made sharp contrast with previously known Gaussians. The intriguing question arose- what is the generative mechanism of these weird distributions…theoretical studies indicate that the preferential attachment mechanism is plausibly robust. Namely, it generates complex networks with the power law degree distribution." Understanding a power law phenomenon would be simple if power laws had a single simple explanation. Unfortunately, there are many models that generate power laws that may or may not be accurate reflections of any real process in the world. Proving that any given factor or a combination of factors generated the power law distribution of outcomes is often impossible to specify with certainty.

When Golosovsky substantial research using a model based on "fitness" he found:

"Surprisingly, the two opposing assumptions underlying network growth- all nodes are born equal or different result in the same growth equation." With respect to the power-law degree distribution in complex networks: the preferential attachment relates it to the strategy by which the new node attaches to old nodes, while the fitness model implies that this distribution is inherited from the fitness distribution. The fitness model successfully explains the first-mover advantage, degree distribution for the nodes of the same age, different trajectories of the nodes of the same age, etc. However, this model does not account for the nonlinear dynamic growth rule that is observed in some networks".

Another February 2018 paper entitled "Talent vs Luck: the role of randomness in success and failure" reaches conclusions about the impact of how success compounds on itself:

"…although talent has a Gaussian distribution among agents, the resulting distribution of success/capital after a working life of 40 years, follows a power law which respects the "80-20" Pareto law for the distribution of wealth found in the real world. An important result of the simulations is that the most successful agents are almost never the most talented ones, but those around the average of the Gaussian talent distribution – another stylized fact often reported in the literature. The model shows the importance, very frequently underestimated, of lucky events in determining the final level of individual success. …rewards and resources are usually given to those that have already reached a high level of success, mistakenly considered as a measure of competence/talent."

My own view on this set of issues is that people who are lucky and more talented acquire more skill as a result of being successful. In other words, it is not just success that compounds, but skill. For example, an actor not only gets more acting roles the more acting roles they get, they get more talented as a result of doing the work. If both luck and fitness "result in the same growth equation" as the Golosovsky argues, then it should be hard to tease the important of two casual factors apart. In fact, it is hard to do so. The other "Talent vs Luck" paper nicely summarizes the views of many people who have written on this topic:

"In recent years many authors, among whom the statistician and risk analyst Nassim Taleb the investment strategist Michael Mauboussin and the economist Robert Frank, have explored in several successful books the relationship between luck and skill in financial trading, business, sports, art, music, literature, science and in many other fields. They reach the conclusion that chance events play a much larger role in life than many people once imagined…. they conclude that talent and efforts are not enough: luck also matters, even if its role is almost always underestimated by successful people. This happens because randomness often plays out in subtle ways, therefore it is easy to construct narratives that portray success as having been inevitable. Taleb calls this tendency "narrative fallacy," while the sociologist Paul Lazarsfeld adopts the terminology "hindsight bias." In his recent book "Everything Is Obvious: Once You Know the Answer", the sociologist and network science pioneer Duncan J. Watts, suggests that both narrative fallacy and hindsight bias operate with particular force when people observe unusually successful outcomes and consider them as the necessary product of hard work and talent, while they mainly emerge from a complex and interwoven sequence of steps, each depending on precedent ones: if any of them had been different, an entire career or life trajectory would almost surely differ too."

3. "I call Alibaba '1,001 mistakes.' We expanded too fast, and then in the dot-com bubble, we had to have layoffs. By 2002, we had only enough cash to survive for 18 months. We had a lot of free members using our site, and we didn't know how we'd make money. So we developed a product for China exporters to meet U.S. buyers online. This model saved us."

Ma is describing the inevitable process that leads to innovation. Every new business tries different approaches many of which fail. The new business is also subjected to the business cycle which can have both negative and positive effects on business outcomes. After some period of time the experimentation process hopefully discovers a business offering that has product/market fit. Most new business never find real product/market fit, which is the biggest single reason why they fail.

Ma is also saying that he did not plan well for the cash needs of the business, which is another aspect of business that he learned the hard way. Ma says about his experience with Alibaba: "My first round [of] money, I gathered from 18 founders — US$50,000. We thought this US$50,000 could last for 10 months. We even counted every cent we spent, but it lasted less than four months and we were almost bankrupt." The first rule of business is never run out of cash The second rule is: don't forget the first rule.

4. "Everybody couldn't find four things at home we could sell because we were too poor. So we gathered 21 products, we listed on the website, we waited for three days, nobody came to buy. For almost 30 days, everything people sold, we bought them. So we have a whole house of rubbish we bought online, trying to make sure that those guys who are able to sell say, 'Oh wow, this thing really can sell things'."

Ma is talking about an approach to bootstrapping a startup recommended by people like Paul Graham of YCombinator. Sometimes critical mass must be achieved in non-scalable ways before a business becomes scalable. Graham points out that sometimes doing what does not scale is essential to enabling critical mass: "One of the most common types of advice we give at YCombinator is to do things that don't scale. In Airbnb's case, these consisted of going door to door in New York, recruiting new users and helping existing ones improve their listings."

5. "A new business is like a newborn baby. Other than you, no one else thinks she is beautiful. But she'll become more beautiful as she grows, and with time and effort, it'll become great." "People who do believe in you won't say anything to support you, but those who don't will always jump out to say so."

Ma is saying that anyone starting a business will generate some viewpoints, either silent or overt, that what you are doing is, well, nuts. This is why missionaries start so many more businesses than mercenaries: they don't care as much what people think. A reality distortion zone can make taking the leap to start the business easier. Many missionaries of course fail after taking an arrow in the back and the magnitude of the unfavorable success rate is hidden by survivor bias. But there is no question that people like Ma do tend to create the really big successes that change the world in a nonlinear way.

6. "When everybody says yes, there's no chance for you – so be unique. Use your mind, think why you can do better, why you can do different." "You should learn from your competitor, but never copy. Copy and you die."

In talking about the importance of being unique Ma in part is talking about a simple idea that people like Andy Rachleff have identified. Rachleff puts it this way: **"**Investment can be explained with a 2×2 matrix. On one axis you can be right or wrong. And on the other axis you can be consensus or non-consensus. Now obviously if you're wrong you don't make money. The only way as an investor and as an entrepreneur to make outsized returns is by being right and non-consensus." Rachleff's matrix is as follows:

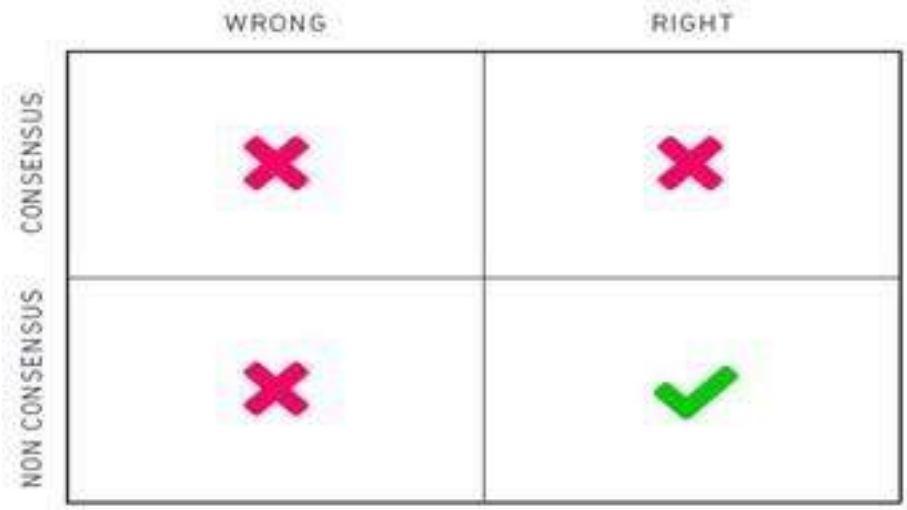

The other critical factor that uniqueness can potentially deliver is a sustainable competitive advantage (AKA a moat). If a business is not doing something that is more valuable than its competitors that comes from being unique in some way, the probably that it will deliver significant financial returns higher than its opportunity cost of capital drops to zero,

7. "E-commerce was so cold. Nobody believed in it, but we believed in it. We didn't care what other people said. We thought it had a future, we thought it would help people, so we started."

To create something valuable you must first start. Taking that first step is hard for many people to actually do. People who are accustomed to big salaries in what seem like a safe business have a hard time actually making the leap or if they do they spend so much money replicating the cushy environment that they left behind, that they fail. Talking about starting a company is easy; actually doing it is hard. If it was easy, then the creation of highly successful businesses would be much more common.

8. "Today is hard. Tomorrow will be worse. But the day after that will be beautiful. Most of your talent won't make it past tomorrow."

This comment from Ma reminds me of what Scott Belsky describes as "the messy middle." Belsky writes:

"In reality, the middle is extraordinarily volatile—a continuous sequence of ups and downs, expansions and contractions. Once the honeymoon period of starting a new journey dissipates, reality hits you. Hard. You'll feel lost and then you'll find a new direction; you'll make progress and then you'll stumble. Every advance will reveal a new shortcoming. Major upsets will give rise to new realizations that lead to breakthroughs in progress. At best, you'll move two steps forward, one step back—at worst, you'll realize you've been walking the wrong path entirely for months. This is what that journey actually looks like."

Belsky has a new book on this topic that will appear soon and I am looking forward to reading it.

9. "A great entrepreneur is optimistic for the future. And you have to ask what problem you can solve, and how you solve it is different from the others."

The greatest entrepreneurs are optimistic that they can solve a real problem. Daniel Kahneman believes that humans tend to be too optimistic: "Most of us view the world as more benign than it really is, our own attributes as more favorable than they truly are, and the goals we adopt as more achievable than they are likely to be." Many entrepreneurs are aware of the failure rate in business, but believe that those odds only apply to other people. This attitude is a great thing for society since we all benefit from it, but for the entrepreneurs it can be a hard knock life.

10. "We know well we haven't survived because our strategies are farsighted and brilliant, or because our execution is perfect, but because for 15 years we have persevered in our mission of 'making it easier to do business across the world,' because we have insisted on a 'customer first' value system, because we have persisted in believing in the future, and because we have insisted that normal people can do extraordinary things."

Missionaries tend to persevere. Mercenaries often bail too easily. Do mercenaries sometimes succeed financially? Sure, but they do not do so as often or with the same impact on society as missionaries. Ma also seem to be taking about the importance of grit to being successful. The great entrepreneurs tend to be relentless about the mission of their business. For them, their business is more of calling than a job.

11. "Don't say I want to win next month, I want to succeed next year. Impossible. Forget about it. If you think I will win this in three years, prepare for five years. "Will I win in three years or 10 years? If you have a great idea, prepare for 10 years. You're lucky if you win in one year – but most people will not have this opportunity."

Creating a successful business takes time. Despite what many people think, even a technology business is rarely about a get rich quick result and even if it is, it is usually because a big company buys the opportunity relatively early in the cycle. Both Instagram and WhatsApp fall in this latter category. Yes, there are overnight successes in businesses but they tend to be the exception and not the rule. Many entrepreneurs spend a decade of more becoming an overnight success.

12. "Yesterday's successes often hinder progress. "Successful people are the most difficult people to change."

Progress often advances one business funeral at a time. Sometimes it takes a great fall from grace by a business for old dogma to become discredited. And sometimes what made you a success later proves to be your downfall.

End Notes:

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Lessons from Robert Smith of Vista Equity Partners

March 23, 2018

Robert Smith is the Founder, Chairman, and Chief Executive Officer of Vista Equity Partners. A March 2018 Forbes profile described Vista's performance: "Since the firm's

inception in 2000, Vista's private equity funds have returned 22% net of fees annually to limited partners, according to PitchBook data. Annual realized returns, which reflect exits, stand at a staggering 31% net. His funds have already made distributions of $14 billion, including $4 billion in the last year alone. Not surprisingly given those numbers, Vista has become America's fastest-growing private equity firm, managing $31 billion across a range of buyout, credit and hedge funds." Vista owns many businesses including Marketo, Tibco, Omnitracs and Infoblox to name just a few. You can find a full list on Vista's web site.

1. **"We are very disciplined buyers." "You think about Warren Buffett and Henry Kravis, and to a great extent, Columbia seems to mint a whole bunch of people who understand value investing and go about it in a different way."**

In addition to degree in chemical engineering from Cornell, Smith obtained an MBA from Columbia University Business School. There is little doubt that at Columbia Smith was taught that value investing as an analytical style is very different from value investing as a statistical factor in an index fund. When you hear someone say something in the news or on social media like "Value stocks were up [or down] today" they are either (1) talking about value as a statistical factor or (2) are confused about the difference. To illustrate, the difference, Charlie Munger was not talking about value as a statistical factor when he said: "All intelligent investing is value investing — acquiring more that you are paying for. You must value the business in order to value the stock." What Munger means is: are there any types of intelligent investing where the objective is to pay more than an asset is worth? There are some assets for which an intrinsic value can't be easily computed, but that is a different question than whether an asset should be purchased at a discount to its value. A business like Apple or Amazon can be a value stock if you are engaged in value investing as an analytical style.

A disciplined buyer like Vista only buys a security or asset when they can make the purchase at a price which represents a bargain when compared to its value. Buying an asset for more than it is worth hoping some greater fool will buy it for even more in the future, is neither disciplined nor investing. Another Columbia graduate named Warren Buffett believes: "The very term 'value investing' is redundant. What is 'investing' if it is not the act of seeking value at least sufficient to justify the amount paid? Consciously paying more for a stock than its calculated value — in the hope that it can soon be sold for a still-higher price — should be labeled speculation."

Another point that has been made by Munger is also relevant to what Smith is talking about in the first quote in bold above. Munger has made it clear several times that Berkshire is a buyer of moats. Munger has said: "We buy barriers. Building them is tough." Vista is also a buyer and not a builder of moats from scratch. The skills and systems required to buy a moat at a bargain price are not the same as the skills and systems required to build one from scratch.

2. **"No one was doing buyouts in tech startups." "These software companies were truly value plays, from my perspective."**

You must know one or more secrets in order to acquire something for less than it is worth. As Charlie Munger says: "Everyone has the idea of owning good companies. The problem is that they have high prices in relation to assets and earnings, and that takes all of the fun out of the game. If all you needed to do is to figure out what company is better than others, everyone

would make a lot of money. But that is not the case." Howard Marks puts it this way: "If you are investing based on a fact that everybody knows, it can't possibly constitute an advantage and it can't possibly have been omitted from the price. So, you must have some knowledge that is different from that of others." Smith understood early in his career that "software is eating the world." Unlike Buffett and Munger, Smith decided that he did have a circle of competence when it came to technology stocks and that conclusion has translated into superlative financial returns for Vista. Smith decided to "fish where the fish are" and to acquire some unique skills related to that type of fish he wanted to catch. Smith was trained as a chemical engineer but realized that he needed to become an expert in software.

3. **"Software companies taste like chicken. They're selling different products, but 80 percent of what they do is pretty much the same." "We exclusively focus on enterprise software."**

I suspect that in making his "software companies taste like chicken" comment, Smith is referring to systems which can be implemented that improve what Harvard Business School Professor Michael Porter calls the "operational effectiveness" of a business. Porter has said: "Operational effectiveness is about things that you really shouldn't have to make choices on; it's about what's good for everybody and about what every business should be doing." Of course, how a business is operated based on systems is very different from how it implements a strategy and develops products. I'm skeptical that Smith believes a successful business can have goals that are purely financial. People working in a business are most productive and fulfilled if they know their work has a purpose that isn't just financial. My view is that without a purpose that is far greater than "let's double EBITDA" the financial result of investing the business will be disappointing, even if the business is enterprise software. Even if doubling EBITDA is the primary purpose of the company, that business will not be very good for very long if there is not also a sense of purpose among the employees. For example, the best product development people are motivated by helping customers do something important that creates new value for customers. Without great "product people" the franchise of the business will inevitably deteriorate. In short, all financial engineering and no genuine product improvement makes for a shorter lifetime for any moat. Of course, just because Smith believes 80% of what these businesses do operationally can be the same, that does not mean that he believes that the 20% that is different isn't what drives the creation of most value at a business.

In any event it is clear that Smith has a strong belief in the value of the standard operational systems that Vista has developed:

"Nobody ever taught these guys the blocking and tackling of running a software company. And we do it better than any other institution on the planet." "What we need to change, we have changed before, so we know how to do it." "If you are a software executive, how do you build your commission structures or run your go-to-market strategy? How do you find and train talent? Who teaches you those things?" "Financial performance of a company is just a trail in the sand of the operational performance. "The more standardized the input, the more standardized the output. You have to design your system, and you have to believe in it." Vista Standard Operating Procedures — "VSOPs" in the firm's lingo. "We have applied VSOPs again and again successfully in software companies, no matter what sector they are in — from energy to healthcare." "We capture what we have learned and transfer skills and know-how to

our companies and, through a systemic approach, leverage our investment team, Vista Consulting Group, and our portfolio managers."

This systems-based approach to improving operations at an enterprise software business is Smith's first secret. If Vista can buy a software business at the right price Smith believes Vista can substantially improve operations and increase the value of that business. He points out that Vista's acquisitions are a bargain "only if you actually know how to change the operations of those businesses." Unlike Buffett and Munger, Smith does not insist on buying a business with management already in place. For example, Vista usually brings in new management and often a new sales team as part of its operating plan. Vista may also buy other businesses in the same vertical as part of a roll up.

4. **"Software contracts are better than first-lien debt. You realize a company will not pay the interest payment on their first lien until after they pay their software maintenance or subscription fee. We get paid our money first. Who has the better credit? He can't run his business without our software."**

This statement describes Smith's second secret. Because the amounts enterprises pay to use their software are much more creditworthy than most people imagine, Vista has been able to buy companies at an attractive price and then use this secret to gain better financial terms from lenders and suppliers when it uses leverage to do so. Smith was one of the first people to buy enterprise software businesses with leverage and the results of what he has done speak for themselves.

5. **"Listen to who is the critical thinker about the platform as opposed to the product.**

It is impossible to be in the technology business today and not understand the power of platforms. Platforms can generate network effects which are the most important source of competitive advantage in the business world today. What a business wants is a product or service that gets more valuable the more people use it. This causes what are called "demand-side economies of scale" to benefit the business. I have written an post on network effects that you can find in the index to this blog.

6. **"The fourth industrial revolution is real and it is global. It relies on the ability to harness the data that is captured from real-time interactions that are taking place within the networks of their customers."**

Most people have heard someone say that "data is the new oil." What they mean is that due to the rise of cheaper storage and developments in artificial intelligence, data has become a key source of competitive advantage. This change in the business world means that a race is on to create continuous and near real time connections with every customer and every device and to create systems which can extract intelligence from that data which can be turned into more valuable products and services. Every business that has an attractive future is quickly becoming a SaaS business, even if the company sells some sort of device (see my recent blog post on "SaaS plus a box.").

7. **"Moats have to be dug over time. It may take 15 years to create a moat."**

Especially in the world of enterprise software, the sales cycle can be so long/time consuming that generating network effects can take many years to accomplish. The good news though is that for the same reason the lifetime of the customers acquired can be far longer as a result. In other words, it can cost an enterprise software company much more in time and money to acquire a customer than in a business in another sector of the economy, but the lifetime of that customer relationship and the moat in an enterprise software business tends to be longer.

8. **"The importance of developing intellectual property cannot be underestimated."**

Other than network effects, the ownership of key intellectual property is the next best way to create the sustainable differentiation necessary to acquire a moat. There are patents and then there are patents. They are not all created equal. I have many granite patent cubes in my office so I do believe they have value, but how much value they have is not completely clear.

9. **"The world is awash with capital and ambition which has led more PE tourists to invest in the highly specialized area of software."**

Vista's success in the private equity world has attracted imitators. These competitors will only be successful if they have the right circle of competence. Some of these firms are doing very well in the private equity part of the technology industry and some are not. The easy pickings that Vista once had in buying technology businesses are in no small part gone now that Smith's two secrets are more widely known. Whether these competitors of Vista will be able to be financially successful in this part of the private equity business is unclear. Smith and Vista clearly know their way around the enterprise software business, but I am not so sure that the same thing can be said about many of the private equity firms that Smith calls "tourists." As Warren Buffett likes to say, risk comes from not knowing what you are doing.

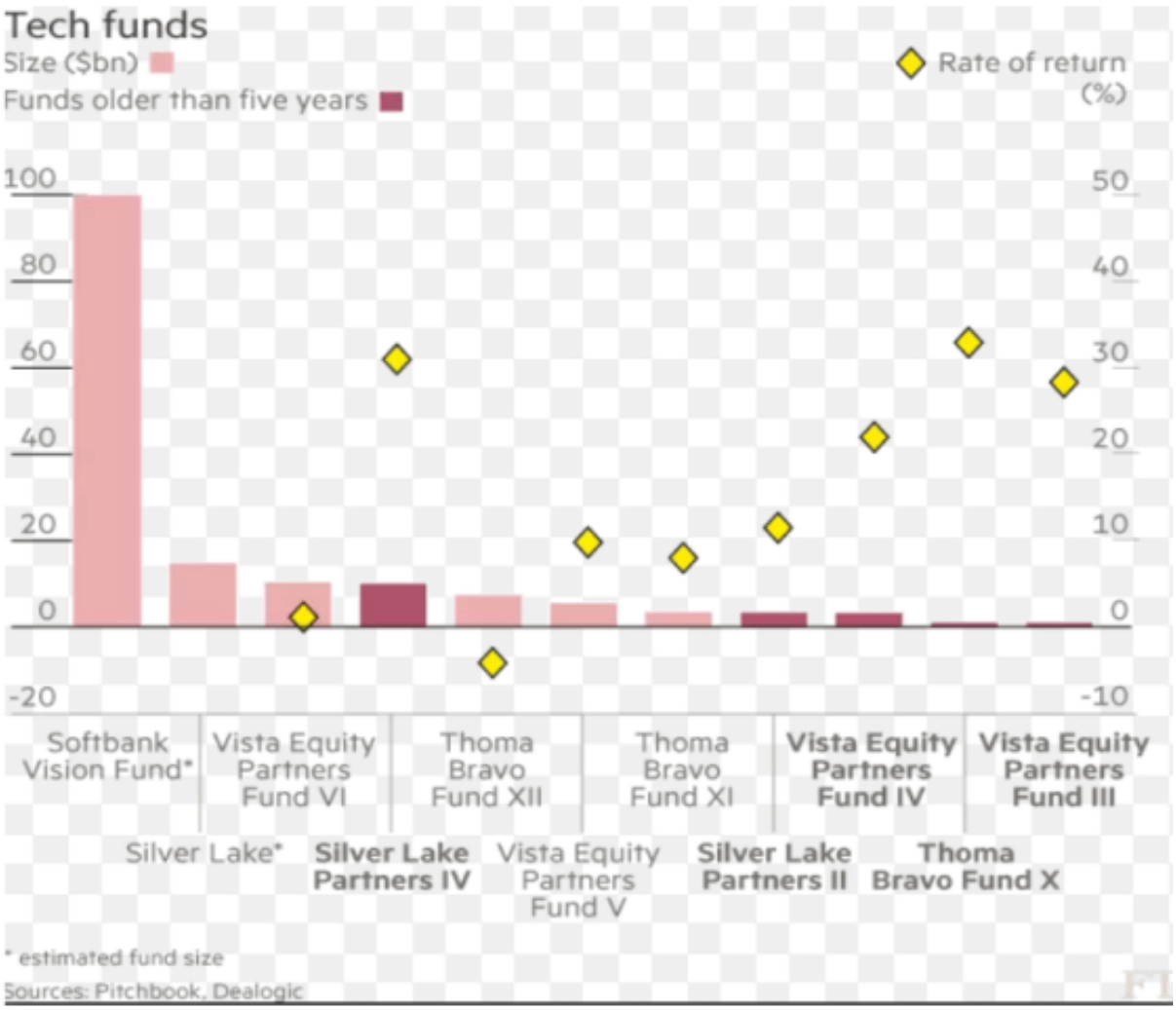

10. **"We don't underwrite to hope. We underwrite based on critical factors for success under our control."**

Failure can happen for many reasons including situations that involve a business or investor: (1) taking a dependency on something that is within the control of someone else or (2) depending on a lucky break to happen. Smith wants to invest when he knows Vista can generate a positive return based on known capabilities. Smith has said: "I am most proud of our system being a loss-prevention mechanism." Smith told the Financial Times: "We manage money for teachers and firemen and municipal workers. We have never lost money on any buyout investment. The last thing they want us to do is be irresponsible with capital and we take our fiduciary responsibilities very seriously." You may have once seen a television special shown at Christmas entitled: "Rudolph the Red-Nosed Reindeer & the Island of Misfit Toys." Sometimes there is value in finding a business that is "misfit" if you have the skills to fix it. There are some notable former misfits in the Vista portfolio. I suspect that Smith looks for "fixer uppers" rather that "turnarounds." As Buffett has said: "Turnarounds seldom turn." It can happen, but focusing on turnarounds would not have produced Smith's "we have never lost money" record of success.

11. **"The pace of change has accelerated."**

What Smith is saying here is evident to anyone who has been involved in a real business over the last few decades. That there is some sort of stagnation going on in the business world is rubbish. Sometimes during the business day I feel like the character Ned played by William Hurt in the movie *Body Heat* who says at one point: "Sometimes the shit comes down so heavy I feel like I should wear a hat." If you are constantly amazed by the pace of change you see in your business, your brain is working correctly. That is really happening. If a professor tells you that the pace of change has slowed because "we are out of new ideas," the best response is: "bullshit."

12. **"Everyone asks this question around the world. How can we be the next Silicon Valley? You can't." What [a city like] Denver has to be is the next Denver. What Denver can do is figure out how to be the best Denver as opposed to be the next Silicon Valley. Denver has attributes that no other place on the planet has."**

What a city or region should be searching for from an economic development standpoint is comparative advantage. Smith is correct that there will never be another Silicon Valley. The goal of any region should be to harvest the benefits of **unique** "agglomeration economies." Michael Porter describes the objective: "clusters tend to attract specialized human resources to their region because the multiple firms in the cluster provide a deep local labor market in the skill-sets sought by employers." A major research university is vitally important to a city's economic vitality since they tend to be a key driver of unique regional capabilities. If a city does not have its own research university it should affiliate in some way with one or more research universities in other regions. My blog post on what a region or city can do to create a more vibrant and adaptable economy is here: "A Dozen things Seattle can teach others about jobs, economic development and building a better city."

https://www.geekwire.com/2016/12-things-seattle-can-teach-others-jobs-economic-development-building-better-city/

p.s., A few more thoughts from Smith:

"The important thing was the challenge from my mentor was more than to teach me something about this obscure integrated circuit. It's a challenge that has reaped rich dividends for me over my entire career. It is the joy of figuring things out."

"Running your own race demands trusting yourself even when others don't."

"With the process of discovery, you fail a lot. And you learn a great deal from those failures, so the next time you can avoid those mistakes."

"This is not a lifestyle business. And if you want to make it a lifestyle business, this is the wrong business to be in."

"You got to have grit. And grit mean getting turned away from thing 14, 16 times, calling someone every two weeks, every day for 5 months and then finally it materializing in something that you want."

"I started Vista because I knew no private equity firm would hire me. I saw what they were looking for… So I created my own firm."

"The most important thing you can do as a young person is to become an expert. There is no substitute for becoming the best at your craft."

Notes:

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Friar Tuck Financial Services: A Classic Unbundle/Re-bundle Strategy

March 31, 2018

Financial services businesses traditionally created a broad portfolio of financial services and then packaged them in a bundle for customers. Chris Dixon has previously explained the justification for bundling in a blog post so well that I will not repeat those points here. You can find a link to Dixon's post in the end notes. Unfortunately, bundles can become so expensive or cumbersome to consume that "overshoot" can kick in. In other words, as a bundle grows in cost and complexity, it can become exposed to an unbundling attack.

I intentionally avoided the term "freemium" above which is inaccurate in this blog post since the unbundle stage of this strategy need not involve a service that is "free." The unbundle strategy is about one service done really well (or at least a small subset of the traditional bundle done really well). A business adopting an unbundle/re-bundle strategy has not adopted what Clayton Christensen describes as genuinely "disruptive" strategy in his book *Innovator's Dilemma* since there he was writing about an offering that is inferior to existing solutions in a overlooked low-end customer segment. An unbundled strategy can involve a service that is better than an existing solution and/or targeted at a high-end customer segment.

One common problem with an unbundling strategy is that the service by itself may not cover the cost of the business or at least provide an attractive return to investors. An opportunity can arise if venture capital funded business and large corporate investors can be patient enough to wait for benefits like network effects associated with adoption in the unbundle stage to take hold and for the customer base to achieve critical mass. These entrepreneurs and investors are counting on the strategy eventually shifting from unbundle to re-bundle and for higher profits from that shift.

The origin of what I am calling the "unbundle/re-bundle" strategy can be traced to this statement made by Jim Barksdale during the Netscape IPO Roadshow. He said: "In business, there are two ways to make money. You can bundle, or you can unbundle." My interpretation of what Barksdale was saying is that unbundling can be a cost-effective way for a business to build a customer base that can eventually be used as a fulcrum for re-bundling other higher margin services. Barksdale did not invent the concept but he did give it a very nice name in addition to a big dose of publicity. As an aside, I have complied a list of Barksdaleisms and you can find a link to that in the end notes like: "Nothing happens until somebody sells something. If a company doesn't have profits over the long haul, then it's gonna be a short haul".

The purpose of the unbundle part of the strategy is to acquire customers in a very cost effective way. The unique advantage of a software-based business model is that the marginal cost of providing an additional unit of the service approaches $0. One reason why the unbundle/rebundle strategy is popular is because many entrepreneurs and investors do not like raising huge amounts of money for marketing, which dilutes their equity. Writing some software and creating a free service in the cloud is like alchemy in that lines of code can be turned into a substitute for cash that would otherwise be spent on marketing.

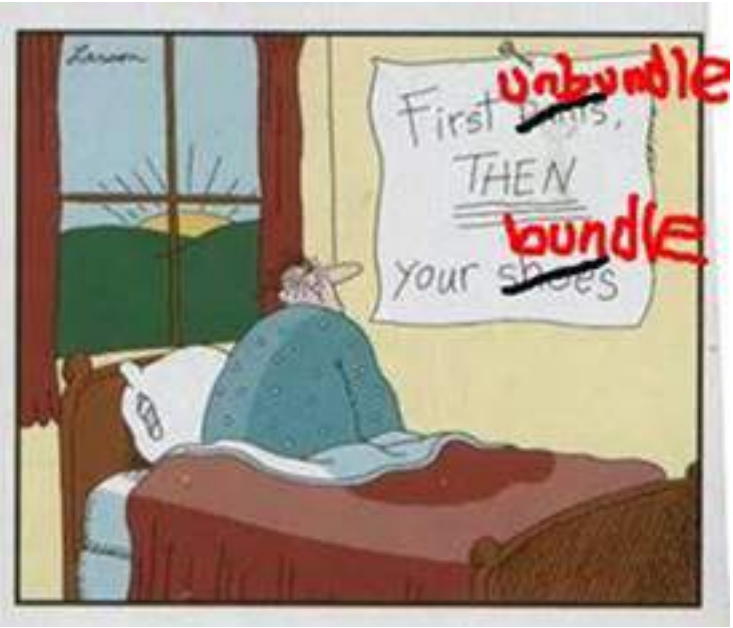

Another advantage of the unbundle/re-bundle strategy is that the service can be built from the ground up to be very simple to use. The most modern approaches to software can be used and there is no need to integrate with legacy services. That advantage starts to evaporate when the re-bundle starts, but it is useful while it lasts.

One of the best ways to explain the unbundle/re-bundle strategy is with examples. I have selected two examples that have been in the news a lot over the last few years. I could have written about other examples, but they would have been more boring.

ROBO-ADVISORS

Robo-advisors offer software-based services like asset allocation and tax loss harvesting to investors and as I said above are an example of an unbundle/re-bundle strategy. Some robo-advisors are software plus some human contact and one (Wealthfront) offers only software-based services. Robo-advisors are addressing a significant need since some people do not want to deal very often with a human and just want access to a great software based service. Other people of course want to be able to talk to a real person. They value having regularly scheduled calls with a real people and having the ability to call someone if that is necessary or desired.

When people ask me which type of financial advisor I recommend I say "it depends." Some people want to talk to an advisor and some people want a 100% software based solution. The fees charged by these two services are different as you probably know. What a customers pay for financial advisory fees is a huge determinant of their investing activities. I "roll my own" solution and don't use either approach. The bottom line for me is: I don't think any of these types of advisory firms are going way any time soon. When I hear or see advisory firms snipe at each other I am mostly amused. My view is: v*ive la différence*. More choices is better for everyone. Having said that I also think that there are very few human-based financial services firms that do not understand the increasing importance of software. Younger clients tend to be more comfortable with a software-based solution and older clients tends to like to be able to talk to a human more often.

It is worth noting that there are some human-based advisory firms who will not work with anyone who has a relatively small account. In other words, many people people with a low level of assets under management are under-serviced by human financial advisers. These accounts must be handled with a software-based approach for the customer relationship to be profitable for the provider.

A financial advisor with a low cost of customer acquisition and low churn will be more profitable. Other variables for the advisor like any business include gross margin and revenue per customers so I will say a few words about that here. On the topic of gross margin, low cost of operation is key. Software costs a significant amount to develop, but it scales really well at high assets under management. On the topic of revenue per customer, once the robo-advisor begins to offer additional services that generate a higher fee, the re-bundling process has started. The re-bundling of services by robo-advisors is natural since the basic asset allocation services are not fully capable of providing an adequate financial return to investors by themselves. The shareholders of robo-advisors did not take on a vow of poverty and some re-bundling should be expected.

Two important questions to ask any provider of financial services business are:

- Are the fees associated with these fully services revealed to customers?
- Is the advice given by the financial services provider valuable?

How would you answer these questions in the case of a robo-advisor?

ROBO-BROKER DEALERS

A new breed of company has appeared in recent years which I will call "robo-broker dealers." These robo-brokers dealers are not financial advisors. They are instead enablers of just about anything the customer wants to do in financial services. Day trading, options trading and margins loans are all enabled by most robo-brokers. Robo-brokers dealers are not really in the advice business. Robo-broker dealers are instead more similar to the firm "Duke and Duke" in the movie *Trading Place*s. A key scene in that movie includes this dialogue:

Randolph Duke: Some of our clients are speculating that the price of an asset will rise in the future. And we have other clients who are speculating that the price of the asset will fall. They place their orders with us, and we buy, or sell, their asset for them.

Mortimer Duke: Tell him the good part.

Randolph: The good part, William, is that, no matter whether our clients make money or lose money, Duke & Duke get the *commissions!*

Mortimer: Well? What do you think, Valentine?

Billy Ray: Sounds to me like you guys a couple of *bookies!*

Randolph: *[chuckling, patting Billy Ray on the back]* I told you he'd understand.

I will illustrate how a robo-broker-dealer uses an unbundle/re-bundle strategy in this blog post by writing about a fictional firm called Friar Tuck Financial Services which offers its

customers the ability to trade stocks "for free" (i.e., with no direct fees attached). Friar Tuck does disclose that it: "collects interest on the cash and securities in Friar Tuck accounts, much like a bank collects interest on cash deposits" which might make some customers think that this is all they "pay" as an indirect fee.

The goal of a robo-broker dealer like Friar Tuck's unbundling strategy is to reduce customer acquisition cost (CAC) while creating positive cash flow and lifetime customer value (LTV). Lifetime value is a way to calculates what Warren Buffett wrote about in his in his 1991 letter to Berkshire Hathaway shareholders: *"*In The Theory of Investment Value, written over 50 years ago, John Burr Williams set forth the equation for value, which we condense here: The value of any stock, bond or business today is determined by the cash inflows and outflows – discounted at an appropriate interest rate – that can be expected to occur during the remaining life of the asset."

What a business pays to acquire a customer is an important part of the calculation of LTV. One benchmark for customer acquisition cost (CAC) via traditional methods occurred when E*Trade recently purchased stock brokerage customers from Capital One for approximately $170 each.

"Capital One Financial Corp. is selling more than 1 million brokerage accounts to E*Trade Financial Corp. for $170 million as the bank exits the self-directed online investing business. The accounts include about $18 billion in customer assets."

How much Friar Tuck desires to pay in CAC per customer via the unbundle strategy is unclear, but one goal might be the amount that Friar Tuck competitor Robinhood spends to acquire a new account through its referral program.

"When you refer a friend, you also get a share of stock too – valued between $3 and $150. You won't necessarily get the same stock but you could. The stock is not automatically deposited into your account. You will get a notification (or look in your history/past invites screen) and you have 60 days to claim the reward. You can sell the stock after 2 trading days but you have to keep the cash value of the stock in your account for 30 days. That value will be reported on a 1099-MISC."

Because of breakage (some people will not claim the fee in time) the actual amount paid to acquire a customer can be less than this referral fee. Friar Tuck can create a lot of value if it can acquire financial services customers for less than $50 instead of $170. CAC is always an average number and the real CAC will certainly be higher since other higher cost customer acquisition methods will inevitably be used. Some customers are cheap for Friar Tuck to acquire and some are not.

Friar Tuck is using well proven techniques to boost customer and revenue growth including the "zero" price point for the stock trading. Daniel Ariely the author of Predictably Irrational writes "Zero is not just another price, it turns out. Zero is an emotional hot button — a source of irrational excitement." People have an irrational love of free. I am reminded of this every time some stale food item is left in a kitchen in a workplace and it disappears in minutes.

As promoters like to say on TV infomercials "there is more" to Friar Tuck's indirect fees and expenses.

- Friar Tuck generates most of its revenue by routing orders through the high frequency trading forms Apex Clearing, Citadel, KCG, and Two Sigma. Andy Rachleff has a post on pay for order flow in the end notes that is worth reading. You can see an example of such payments also in the end notes.
- A Friar Tuck competitor receives the following additional payments:

Robinhood receives payment for execution of options contracts. Payment received averaged less than $0.50 per contract for order flow executed in the fourth quarter 2017.

- Friar Tuck also matches up buyers and sellers adopting a process known as "internalization." If one client wants to buy 100 shares of X and another client wants to sell 100 shares, the two orders could be matched up internally, and the robo broker dealer can collect the very small difference between what the buyer pays and the seller receives.

What services have robo-broker dealers like Friar Tuck re-bundled? After starting out with free stock trading Friar Tuck began to sell higher profit services as extras that are less indirect in nature but still rely on the presence of the installed based of customers to serve as sales leads for a cross-sell/up-sell. For example, Friar Tuck sells a "Platinum" level of extra services that include:

1. The ability to buy stocks using margin loans;
2. Access to premarket and after-hours trading during certain periods; and
3. Faster access to deposits for trading (i.e., non-Platinum members must wait two days for deposits over $1,000 to be usable to trade again).

Friar Tuck margin loans vary in price depending on how much margin the customer wants to borrow. The lowest tier of Platinum costs $6 per month and allows users up to $1,000 of margin loans to buy more stock than they could without the loan. It is important to point out that Friar Tuck charges Platinum customers for access to margin loans regardless of whether the customer uses it.

The questions I asked about robo-advisors were:

1. Are the fees associated with these services fully revealed to customers?
2. Is the advice given by the financial services provider valuable?

How would you answer these questions in the case of a robo-broker dealer?

It is worth noting that whether Friar Tuck will make a profit is a different question than whether it is wise for people to use the service. As an analogy, being a bookie can be a great business, but for the customers of a bookie gambling when the odds are substantially in favor of someone else is not a wise thing for someone to do.

Felix Salmon recently did an excellent job of explaining the difference between these broker dealers (in this case a broker-dealer business called Robinhood) and a robo-advisor:

"Robinhood is not in the same business as the robos. Can you use your Robinhood account to just buy an S&P 500 ETF and sit back and do nothing? Yes. Does Robinhood's messaging encourage you to do so? Hell no."

Friar Tuck does unfortunately enable some of the worst types of behavior by investors, without providing any cautionary advice. Margin loans. Sure! Rapid trading of shares to the full extent permitted by law? Sure! Trading options? Sure! Crypto-currency trading? Sure! A robo-advisor is like a wise old friend giving you advice for a fee and a robo-broker dealer is like the proprietor of a casino collecting a financial rake for helping you indulge in your worst behavior. Can robo-broker dealers like Friar Tuck improve their service by providing sound financial advice? Sure! Can they make a profit even if they do not provide sound financial advice? Sure! Being a bookie can be a great business.

GENERAL THOUGHTS ABOUT THE UNBUNDLE/RE-BUNDLE STRATEGY

The two previous examples illustrate different versions of an unbundle/re-bundle strategy. The use of the unbundle-re-bundle approach is far broader than financial services. For example, Atlassian used an unbundle/re-bundle strategy as did WordPress.

The unbundle/re-bundle approach only works if a complementary profitable service can be found and maintained for the re-bundle. What can be gained by this or any other growth strategy must be continually renewed. What was at one point gained via an unbundle/re-bundle approach can quickly be lost because of what Bill Gurley points out here:

"If a disruptive competitor can offer a product or service similar to yours for "free," and if they can make enough money to keep the lights on, then you likely have a problem. **"**Digital offerings have very strange economics in that multi-sided markets are often involved and offerings in such a market can have close to zero marginal cost once it has been created. Solving the "chicken and egg" problem inherent in any platform business usually involves either a free egg or free chicken on one "side" of the market. It's easy to wake up in a digital world and have whatever you were selling now being offered "for free."

The venture capitalist Ben Horowitz (who worked with Jim Barksdale at Netscape) identifies several important product/market fit myths: "Myth #1: Product/market fit is always a discrete, big bang event; Myth #2: It's patently obvious when you have product/market fit; Myth #3: Once you achieve product/market fit, you can't lose it; and Myth #4: Once you have product/market fit, you don't have to sweat the competition." Markets and the actions of competitors in that market (which are not always visible to outsiders) are always changing. Constant adaptation is therefore required to retain product/market fit.

Ideal unbundled services are viral and have a very low or even free price. The unbundle-re-bundle can be effective as a business model because cost of educating the potential customer about the benefits of the service can be dramatically lower once that customer has used it in an unbundled setting first. The need for advertising to create awareness is lower, the need to pay third party resellers is reduced and any expenses associated with support can be replaced by self-education. The unbundle/re-bundle approach leverages other human tendencies like reciprocity and inertia, which further lower the cost of sale. John Vrionis describes why the unbundle/re-bundle has better unit economics: "Evangelizing a new religion is hard work, and more importantly it is expensive. Conversely, selling bibles to a group of believers is a lot easier…"

For any business acquiring a customer can be accomplished in two ways: (1) organically by word-of-mouth at very little cost; or (2) inorganically through expensive paid sales and marketing. The first method is much more valuable than the second not just because customers cost less money to acquire. Bill Gurley points out: "Organic users typically have a higher NPV, a higher conversion rate, a lower churn, and more satisfied than customers acquired through marketing spend." Customers acquired with an unbundle/re-bundle approach are much more likely to be acquired organically and their unit economics will be far better for the provider of the service.

The unbundle/re-bundle approach works best when there is a huge market of potential customers since the conversion rate in this model will not be high. The further way from enterprise the service is, the lower the conversion rate will be. As an example, Dropbox has 400 million active unique users and 500 million registered unique users, but only 11 million paying subscribers.

Best practices include:

1. Avoid selecting "unbundled" items that have significant variable COGs. Selecting software-based unbundled services that have almost zero marginal cost works better.
2. The best unbundled services have network effects and are viral.
3. Make sure that the item you select as the unbundled side of the marketplace has complementary services that might be sold at a profit. Unbundled checking at a bank or wealth management as a robo-advisor are good examples of a service that makes upselling natural (many types of financial services).
4. The best forms of unbundling make it natural for the users to register revealing their personal data and set up a credit card on file and making conversion to the re-bundle easier.
5. The best unbundled services have low churn since they are sticky.
6. The best complementary services that will be re-bundled are services that people are accustomed to paying real money for (convincing people to spend money in a new category is not easy).

End Notes:

Chris Dixon on bundling: http://cdixon.org/2012/07/08/how-bundling-benefits-sellers-and-buyers/

Jim Barksdale: https://25iq.com/2014/05/31/a-dozen-things-ive-learned-from-jim-barksdale-and-barksdaleisms/

Felix Salmon: https://twitter.com/felixsalmon/status/977769364626829312

Pay for order flow: https://blog.wealthfront.com/silent-assassin-fees/

Order flow payments example: https://d2ue93q3u507c2.cloudfront.net/assets/robinhood/legal/RHF%20PFO%20Disclosure.pdf

Apex Clearing Corporation – Robinhood receives payment from Apex Clearing Corporation for directing equity order flow to this venue. Payment varies based upon a number of factors including but not limited to: the type of security, time of order placement, and the underlying price. Payments received averaged less than $0.0004 per share for order flow executed in the fourth quarter 2017.

Citadel Execution Services – Robinhood receives payment from Citadel Execution Services for directing equity order flow to this venue. Payment varies based upon a number of factors including but not limited to: the type of security, time of order placement, and the underlying price. Payments received averaged less than $0.0024 per share for order flow executed in the fourth quarter 2017.

Virtu Financial, Inc – Robinhood did not receive payment from Virtu Financial for directing equity order flow to this venue.

Two Sigma Securities, LLC – Robinhood receives payment from Two Sigma Securities, LLC for directing equity order flow to this venue. Payment varies based upon a number of factors including but not limited to: the type of security, time of order placement, and the underlying price. Payments received averaged less than $0.0016 per share for order flow executed in the fourth quarter 2017.

Wolverine Execution Services, LLC – Robinhood receives payment from Wolverine Execution Services, LLC for directing equity order flow to this venue. Payment varies based upon a number of factors including but not limited to: the type of security, time of order placement, and the underlying price. Payments received averaged less than $0.0014 per share for order flow executed in the fourth quarter 2017.

Robin Hood Referral Fees: https://wallethacks.com/robinhood-referral-promotions-new-accounts/

Payments for Order Flow from High Frequency Traders: https://startupsventurecapital.com/robinhoods-exceptionally-clever-business-model-arbitraging-privacy-776663d4d855

Stash and Acorns: https://www.barrons.com/articles/tap-and-trade-apps-target-young-investors-1512789849

Capital One sale of accounts: https://www.bloomberg.com/news/articles/2018-01-25/capital-one-jettisons-online-brokerage-accounts-in-e-trade-deal

Business Lessons from Mark Leonard (Constellation Software)

April 7, 2018

Mark Leonard reminds me of Warren Buffett. Anyone who likes reading Berkshire shareholder letters will very likely enjoy Leonard's shareholder letters and his answers on earnings call transcripts. The *Globe and Mail* describes part of what Leonard has accomplished at Constellation software:

"With an initial $25-million investment from OMERS and his old associates at Ventures West Capital in 1995, Mark Leonard has built Constellation into a world-leading consolidator of vertical market software (VMS) companies—firms that create products to help run businesses in specific industries. Over the years, Constellation has made scores of acquisitions and, through its six operating groups, now provides software to over 60 industries, from health care to law to public transit…. Typically, Constellation's acquisitions are small—in the $2-million to $4-million range—but add them all up, slip in a dose of Constellation's financial and operational discipline, and you have [a company with a market cap of $18 billion….In this age of zero privacy, Mark Leonard has managed to maintain a practically unthinkable level of anonymity for just about any individual—let alone an IT executive who runs one of Canada's most dynamic, fastest-growing and most acquisitive software companies, and who has been compared favourably with Warren Buffett and Prem Watsa."

This an impressive looking chart for Constellation:

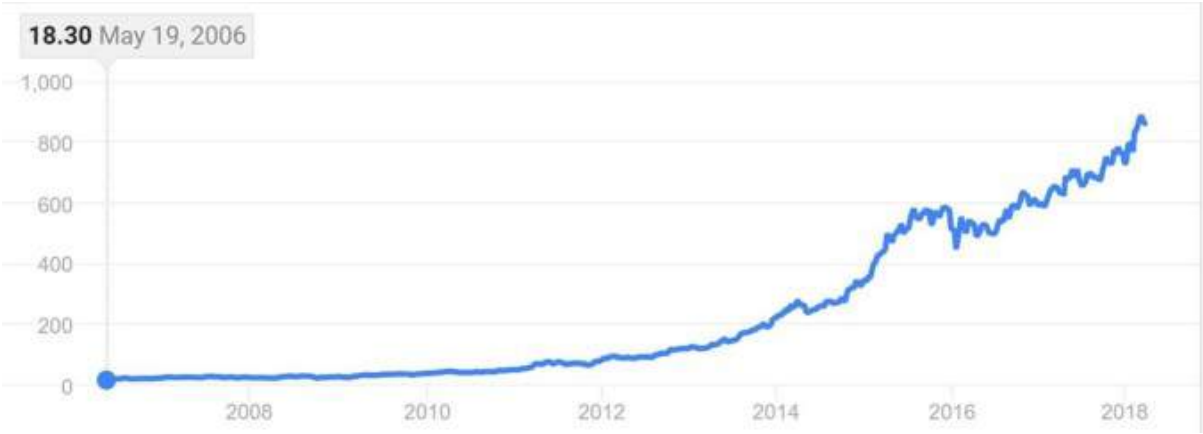

1. "Unlike most people, we would be hoping that there would be a major correction in the stock markets because the multiples are as heavy as we've seen in a very long time. If I have the access to capital and there is a downturn, we will buy as much as we can. That was the lesson we learned from the last one. We did terrific doing that [in the] '08, '09 period. We just didn't deploy enough capital." "As we sit on cash and people start clamoring for it to be distributed either via dividends or share buybacks. And I think you know my views on most share buybacks. And so my preference would be to hang on to the cash. We seem to be ramping our M&A activities and to some extent it seems to be paying off. And so rather than returning it to shareholders, rather hang on to it at least for the time being and see if perhaps we can deploy it." "The high ROIC achieved over the last decade suggests that we have very good businesses. If ROIC starts to erode significantly, then either we've damaged our existing businesses, or our new acquisitions

are less attractive than those that we have made in the past. ROIC isn't one of those metrics that is necessarily subject to 'reversion to the mean'. Some businesses seem to be able to widen their moats at reasonable cost."

Leonard is an investor who uses "value as an analytical style" to buy businesses that sell software to vertical markets. Like Buffett, Leonard think about moats, uses return on invested capital as a touchstone, prefers concentrated investments to diversification and likes it when assets he wants to own for a long time "go on sale." Of course, he is not exactly like Buffett, but they do share certain attributes and approaches.

Leonard has a superb record as an allocator of capital. In his classic book *The Outsiders,* William Thorndike writes about the capital allocation process:

"CEOs have five essential choices for deploying capital—investing in existing operations, acquiring other businesses, issuing dividends, paying down debt, or repurchasing stock—and three alternatives for raising it—tapping internal cash flow, issuing debt, or raising equity. Think of these options collectively as a tool kit. Over the long term, returns for shareholders will be determined largely by the decisions a CEO makes in choosing which tools to use (and which to avoid) among these various options. Stated simply, two companies with identical operating results and different approaches to allocating capital will derive two very different long-term outcomes for shareholders."

"Essentially, capital allocation is investment, and as a result all CEOs are both capital allocators and investors. In fact, this role just might be the most important responsibility any CEO has, and yet despite its importance, there are no courses on capital allocation at the top business schools. As Warren Buffett has observed, very few CEOs come prepared for this critical task: The heads of many companies are not skilled in capital allocation."

The founders of the businesses Constellation acquires are not often skilled in capital allocation and in addition do not have access to best practices in operating a software business. Leonard has demonstrated that by applying these new skills and processes to the acquired businesses Constellation will be able to create new value.

2. "We are the anti-economies of scale company. We believe in small teams outperforming large teams, and so given the choice of taking a 200-person business and buffing it up into two smaller ones, we would much prefer to do that and believe that the benefits are there as opposed to ramming businesses together, firing a bunch of people and moving a bunch of work offshore." "There are a couple of hundred business units and every one of those managers has their own competitive environment in which they are competing. And they are making decisions around investments and whether they be rewrites or add-ons or things of that ilk and or improving coverage or allocating between farming and hunting, those role decisions that they are making individually and what you're seeing is the sum total of those decisions. If marketing and R&D are going down as a percentage of the revenues or expenses, then I guess they aren't seeing the returns on those investments."

There are tens of thousands of providers of vertical market software which are potential targets for Constellation. Raymond James wrote about the opportunity which Constellation is harvesting in August 2016:

"Our analysis of software vendors indicate substantial fragmentation with approximately 38,000 VMS vendors spanning more than 12 vertical markets, with the highest concentrations in Retail and Media & Services verticals – see Exhibit 8. Constellation has also expanded their database of potential targets with now well over 30,000 targets (adding 4k+ targets per year for the last 3-4 years). Each target has a contact name next to it, with the expectation of staying in contact 3-4 times a year.

…with limited access to capital to pursue growth opportunities and typically lack the professional management found in larger software vendors. VMS also has high barriers to entry as they provide mission critical enterprise level software with high switching costs (relatively expensive and time consuming to replace) and long product development cycles (not many opportunities for competitors to displace you). Maintenance renewal rates are usually quite high (>90%) – customers are sticky. As a result, most of Constellation's acquired businesses carry a large maintenance revenue base. Maintenance represented ~64% of Constellation's total revenue in 2015."

Constellation has created a business development team that is constantly trying to find more software businesses to buy. They are always prospecting for new acquisitions. Capital allocation at Constellation is centralized but the actual operation of the businesses is very decentralized. What is unique about Constellation is that they have acquired so many companies (more than 330). This acquisition skill set is part of Constellation's special sauce. Leonard has admitted that this gets harder to but businesses at an attractive price as Constellation gets larger. Like Buffett, Leonard wants the businesses he buys to have a moat. Unfortunately, sometimes good moat builders are not the optimal managers of a business. I saw this first hand when I made my first investment in a vertical market software business in the mid 1980s. It took over 15 years to generate a financial exit and the return was for that reason moderate. That investment was a learning experience for me to be sure.

Constellation has set out its criteria for buying businesses on its web site:

Exceptional Businesses

- A mid- to large-sized vertical market software company (a minimum of $1-million earnings before interest and tax)
- Consistent earnings and growth — generally EBITDA/revenue + revenue growth of 20 percent or more per year
- Experienced and committed management

Good Businesses

- Number 1 or Number 2 market-share holder in a niche vertical market
- Revenues of at least $5-million
- Hundreds or thousands (not dozens) of customers
- Unimposing competitors

3. "There are two components to Constellation's growth, organic and acquired. Organic growth is, to my mind, the toughest management challenge in a software company, but potentially the most rewarding. The feedback cycle is very long,

so experience and wisdom accrete at painfully slow rates." "Growing organically while generating a high ROIC is, to my mind, the toughest task in the software business."

What Leonard calls "organic growth" is revenue that is generated by existing businesses. Organic growth is not the glamorous part of Constellation, but it is important. Raymond James said in a report linked to in the End Notes that "Constellation's organic growth has averaged a respectable ~3% per year which is in-line with US Gross National Product (GNP) growth of ~3% over that same period." In his 2009 Constellation shareholder's letter Leonard wrote:

"If you add Organic Net Revenue Growth to ROIC, you get what we believe is a proxy for the annual increase in Shareholders' value. In a capital intensive business you couldn't just add Organic Net Revenue Growth to ROIC, because growing revenues would require incremental Invested Capital. In our businesses we can nearly always grow revenues organically without incremental capital."

The significantly larger source of revenue and profit growth for Constellation has been inorganic increases via acquisitions of new businesses. This inorganic growth is where Constellation particularly shines and generates the lion's share of its attractive financial returns. The Constellation formula is relatively simple: buy a diamond in the rough in the form of a vertical market software business and then apply polish to make it shine.

Not a lot has been written about Leonard since he does not like to be interviewed, but one blog post I found on the web written by Jana Vembunarayanan points out:

"Constellation revenue consists primarily of software license fees, maintenance and other recurring fees, professional service fees and hardware sales. Customers pay license fees for using Constellation software products. Around 7 percent of Constellation revenue comes from license fees. Maintenance and other recurring revenue primarily consists of fees charged for ongoing support of software products post-delivery. It also contains recurring fees derived from software as a service, subscriptions, and other transaction related revenues. Most of the maintenance revenue is annuity based."

The mix of revenue that Constellation generates has changed over time. Raymond James notes:

"One trend that is more sustainable is the shift of revenue mix towards higher margin segments, most notably maintenance – and we expect the mix shift to continue to buoy margins to some extent. Revenue from professional services has essentially flatlined… maintenance revenue has increased to 64% of revenue (from 54% in 2010) and professional services have shrunk to 21% of revenue (from 27% in 2010)."

4. "In 2004 we separated our Research & Development and Sales & Marketing spending ("RDSM"), into two buckets: Initiatives and everything else. Initiatives are significant long-term investments required to create new products, enter new markets etc. In the mid to high ticket vertical market software business, Initiatives usually require 5-10 years to reach cash flow break-even. We felt that they should be both measured and treated differently than our other, sustaining, RDSM expenditures. The ethos of software companies requires the regular launching of visionary new products by steely-eyed tenacious developers (substitute software architects, product managers or

founders in this sentence, as the specific instance requires). We work… hard to keep the early burn-rate of Initiatives down until we had a proof of concept and market acceptance, sometimes even getting clients to pay for the early development; we triaged Initiatives earlier if our key assumptions proved wrong; and we created dedicated Initiative Champion positions so an Initiative was less likely to drag on with a low but perpetual burn rate under a part-time leader who didn't feel ultimately responsible."

Some people would say that Constellation is very disciplined about R&D spending. Others would argue that this a nice way of saying that Constellation cuts R&D once they buy the business. Leonard said that once way he gets managers to think intelligently about things like R&D spending is by creating "company-wide metrics that rank each acquired company among its peers, and which fosters peer interaction as they try to improve their relative ranking." The company web site lays out it's approach to improving operations:

"…we offer coaching and resources in a number of areas including establishing values and capital allocation processes, profit-sharing programs, benchmarking against our other businesses, the chance to share best practices with other CSI companies, formal management training and ongoing mentoring. CSI will not take over the day-to-day management of its businesses. We continue to rely on the managers and employees of our subsidiaries to run their businesses well."

5. "Models are only as good as the assumptions that go into them, and there's no substitute for thinking through scenarios on your own, with your own underlying assumptions." "The more interesting part … was using the [model] to do some sensitivity analysis and to look at alternative strategies. In all of the following examples, we assume that only one variable changes. In reality, our businesses are dynamic and changing one variable has an impact throughout the business." "We use a multi-scenario approach to forecasting and I'm struck by how frequently, even outside of our outlier forecast, we end up with actual performance, both at the low and the high end of the outliers. And so you do get a real spread on these things, and this happened to be a spread on the upside." "Just to give you some color on that impossibility of prediction. We have a sort of funnel of acquisition prospects and we can add that up, we've figured out how to use that function in Excel. And we do so periodically, and I went back and looked at those totals that we had over time, and the amount of acquisitions we actually closed during those periods, and I found the correlation between our funnel and the actual acquisitions closed was zero. And not just zero it was so close to zero that I'm thinking of commercializing our sales funnel as a random number generator."

Everything Leonard says above about modeling I have said myself hundreds of times in the same or different ways. For example: A model is only as good as the assumptions. Garbage in means garbage out. Do the modeling runs to get a sense of how sensitive the model is to changes in assumptions and model many scenarios.

7. "Our favorite and most frequent acquisitions are the businesses that we buy from founders. When a founder invests the better part of a lifetime building a business, a long-term orientation tends to permeate all aspects of the enterprise: employee selection and development, establishing and building symbiotic customer relationships, and evolving sophisticated product suites. Founder businesses tend to be a very good cultural fit with Constellation, and most of the ones that we buy, operate as standalone business units managed by their existing managers under the Constellation

umbrella. We track many thousands of these acquisition prospects and try to regularly let their owners know that we'd love the chance to become the permanent owners of their business when the time is right for them. There is a demographic element to the supply of these acquisitions. Most of these businesses came into being with the advent of mini and micro-computers and many of their founders are baby boomers who are now thinking about retirement."

Like Robert Smith at Vista Equity, Leonard has a proven operational system that Constellation can implement to improve ROIC at the acquired businesses. How has Leonard accomplished this? Raymond James writes:

"Constellation's targets have to be VMS businesses with experienced and committed management, high market share with rational competitors, and no customer dependency (hundreds or thousands of customers). With decades of acquisition experience and hundreds of operating businesses providing proprietary data on base rates (for organic revenue growth, typical margins, and potential market share improvements in specific niche markets), Constellation is in the unique position of being able to test hypotheses on M&A targets' forecasts and subsequently get more comfort on cash flow projections and whether they can hit their hurdle rate. This unique database of knowledge highly differentiates Constellation from other potential software acquirers."

8. "The most lucrative acquisitions for us have been distressed assets. Sometimes large corporations convince themselves that software businesses on the periphery of their industry would be good acquisitions. Rarely do the anticipated synergies accrue, and frequently the cultural clashes are fierce, so the corporate parent may eventually choose to sell the acquired software business. The lag is often 5 to 10 years as the proponents of the original acquisition usually have to move on before the corporation will spin off the asset. Our most attractive acquisitions from corporate vendors seem to have happened during recessions. Occasionally, we also acquire portfolio companies from a private equity fund that is getting long in the tooth. These will have been well shopped but for some reason will not have attracted a corporate buyer. While both corporate and PE divestitures tend to be much larger than the founder businesses that we buy, they are usually more of a cultural challenge for us post-acquisition."

Buffett believes that "turn arounds seldom do." Leonard has been able to make turn arounds happen at Constellation regularly via careful due diligence and the application of proven systems. Leonard believes the data they collect from the other operating businesses gives them a real advantage not only in improving the operations of the businesses they buy but also in picking the right investments. Leonard describes Constellation's advantages in this way:

"What we can offer is a degree of autonomy that people don't tend to get inside of PE companies. And the opportunity for mastery of their craft that they probably don't get inside of most PE companies. If you're focused on a playbook that requires you to, in a 2 to 3-year period, make dramatic improvements to profitability, then settle it down for a year or 2 and then flog it to some unsuspecting buyer, which seems to be the PE model. You're not going to be learning how to invest for the long haul, learning how to build a team for the long haul."

Leonard is disciplined in terms of what they buy, which means that sometimes cash can pile up as it is right now for Buffett. Leonard did say in May of 2017 about having too much cash:

"What do they call that type of problem? First world problems? You'd obviously like to be patient and wait for your opportunities, and the issue is, if cash is sitting around doing nothing, it isn't earning returns for your shareholders, and you could return it to them, and let them invest it. I've categorized it previously as the amount of embarrassment that the board is willing to put up with as we sit on cash and people start clamoring for it to be distributed either via dividends or share buybacks. And I think you know my views on most share buybacks. So my preference would be to hang onto the cash. We seem to be ramping our M&A activities, and to some extent, it seems to be paying off. And so rather than returning it to shareholders, I'd rather hang onto it at least for the time being and see if perhaps we can't deploy it.

9. "Over the last few years we have purchased a number of software businesses (usually SaaS) that have a much higher 'churn' in their client bases because of factors inherent in their industry. By high churn, we mean that they acquire a greater proportion of new clients each year, and lose a higher percentage of existing accounts, than our average business. Sometimes the higher churn is because the clients' switching costs are low. Sometimes the higher churn is because lots of new potential clients are being created, and old ones are going bankrupt and merging. If it is the latter, these software businesses may be very attractive. If it is the former, then the software businesses are likely to be unpleasant, requiring tremendous effort to stay in much the same place."

Any subscription business is on an "acquisition treadmill." In other words, the business must acquire new customers just to remain even let alone grow (as if it is on a treadmill set to a very fast speed like George Jetson). I have written a blog post on churn before and I won't repeat those points again here since it will otherwise be too long. .

10. "Ideally, we'd like Constellation's stock price to appreciate in tandem with our fundamental economics. At any point in time, we'd prefer the price to be high enough to discourage a takeover bid and low enough so that our sophisticated long term-oriented investors are not tempted to sell. It takes lots of time and effort to attract and educate competent shareholder/partners. The last thing we want them to do, is sell.""We continue to seek longer-term capital to defuse the fundamental mismatch inherent in buying permanent assets with short-term debt."

This attitude about having shareholders who understand your business model is fully consistent with the Berkshire approach. It takes both work and time to get the right shareholders. Shareholders who do not trust and share the same approach to investment as

management can be a big source of problems for a management team. For example, Constellation's shareholders share Leonard's long-term approach to investing outcomes.

Leonard is also making a point abut leverage in the quote just above. Borrowing in short term markets to buy assets for the long term is problematic to say the least. Michael Milken said once about assuming to much risk in the financial structure of a technology business like software:

"When your business depends on technology – whether it's aerospace, computer and electronics firms in the 1960s or Internet, telecom and networking companies in the 1990s – volatility is a fact of life. Unlike slower-changing industries like supermarkets, which can appropriately assemble a balance sheet with more debt, technology is an inherently risky business and needs a strong balance sheet to survive. In fact, risk in capital structure should vary inversely with business risk."

11.**"I'm happy if I find one good book to recommend to friends, family and employees each year. Currently, I'm shamelessly flogging Daniel Kahneman's *Thinking Fast and Slow.* His book is about a life (actually two) well spent. He tells the tale of his intellectual journey via a series of behavioral economics experiments. He helped me appreciate the efficiency, speed, and inherent conceit of intuitive judgment, and its infrequent but often abject failures. Understanding the major findings in behavioral economics provides profound insights into investing and managing, and this book is the most pleasant way I've found to acquire that knowledge."**

Great investors inevitably are attracted to the work of someone like Kahneman. How can you be an aware participant in the business world without seeing the wisdom of what behavioral economics teaches? Charlie Munger said once "If economics isn't behavioral, then what the hell is it?" I can't recall ever meeting anyone who actually operates a real business who believe humans are rational. Anyone like Kahneman who can provide some insight into why people are not rational and when that is most likely to happen, is a valuable resource for anyone in business.

12. "I have a feeling that acquisition multiples, acquisition size and acquisition profitability have all increased over time

Robert Smith of Vista Equity Partners complains that his success has attracted "private equity tourists" to his preferred technology hunting grounds in the private equity market. Leonard also faces increasing competition in his chosen part of the technology private equity market. The entry of new capital into any buyout sector tends to raise prices and increase pressure for investors to consider lowering their hurdle rate. This chart is from 2015, but you can see the price trend is up and to the right in terms of prices paid by Constellation:

Exhibit 12: Constellation Four-Quarter Average Size Per M&A vs. Acquisition Multiple

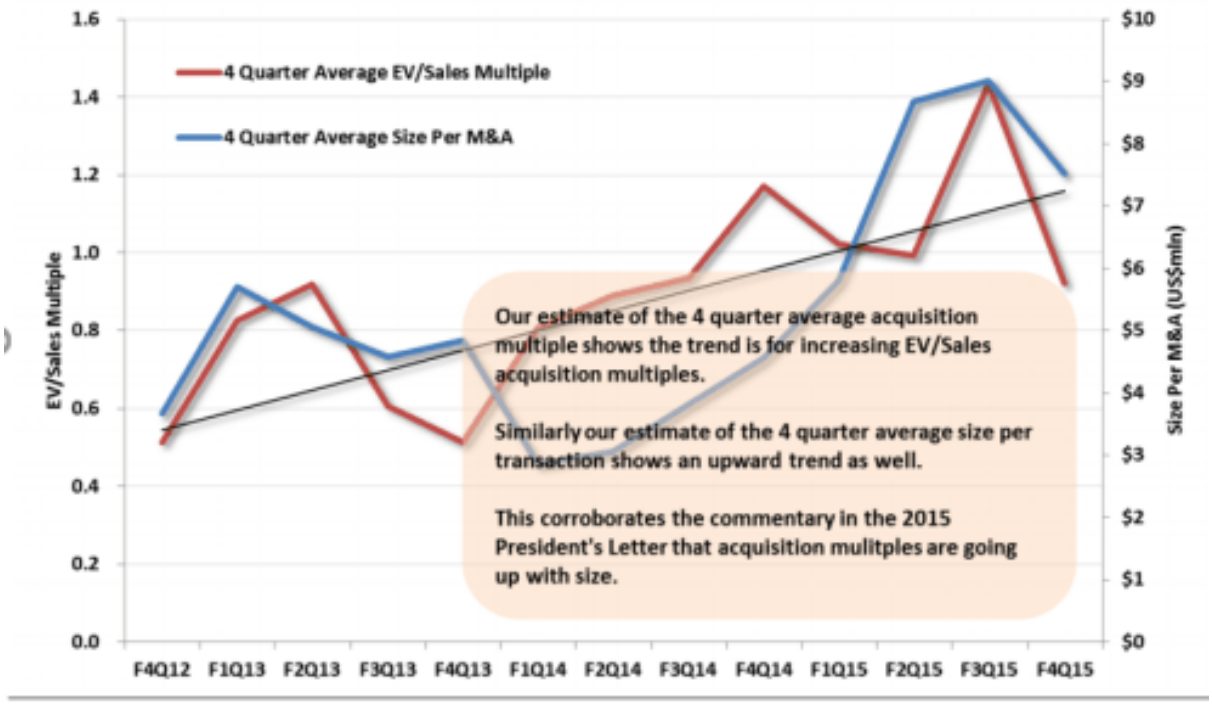

Source: Constellation Software Inc., Raymond James Ltd.

In an August 13, 2017 earnings conference call Leonard talked about the prices private equity and others have been paying for businesses:

"everything's expensive, and things of size, where we can put some dollars at play, all seem to be trading high. I think one of the data points I saw was that the average vertical market software company, with more than a $50 million market cap is trading at 3.8x revenues and those tend to be fairly hefty valuations."

P.s., **"I discovered when I was in the venture business that interviews aren't for me. What little I have to say, I generally put in my letters to shareholders. I do occasionally speak with students, but usually in the vain hope that I can distract them from pursuing careers in investment banking and private equity."**

Charlie Munger has similarly said several times that he regrets making his living "trading pieces of paper" to earn a profit. What Munger and Leonard are saying is their way of tipping their hats to people who operate a real business, which is a particularly noble calling. Creating and operating a successful business is neither easy or simple. People who do that well deserve some applause.

End Notes:

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Business Lessons from David Chang (Momofuku Noodle Bar and Food Television Personality)

April 14, 2018

Since I have already written blog posts about the "food television" personalities Anthony Bourdain and Alton Brown, I decided to write one about David Chang. If you don't know who Chang is, Time magazine has an excellent written profile. A few sentences from that article provide a brief biography of his early career:

"It may surprise you to learn that the Korean-American rebel chef David Chang, known for his delicious, creative food and brash, edgy attitude, majored in religion at preppy Trinity College in Hartford. … 9/11 had a lot to do with pushing him toward that goal a few years later. He knew people who died in the attacks, and it led him to wonder what really mattered and what should keep someone from taking a risk. Opening a restaurant was suddenly less scary, since the worst thing that could happen was failure. "Failing just seemed like a good idea at the time," he says. In August 2004, Chang opened Momofuku Noodle Bar, in New

York's East Village, where he dedicated himself to two simple staples: ramen bowls and pork buns."

Forbes described what came next:

"Chang has become the Meryl Streep of the James Beard Awards–he has won five in the past eight years, including Outstanding Chef in 2013…. Chang has long ago crossed over into pop culture: He starred in the PBS food series The Mind of a Chef , played himself convincingly on HBO's Treme and appears in commercials…"

The customary quotes from Chang follow in bold, which give you even more color on his other businesses:

1. **"When we opened Momofuku Noodle Bar in 2004, design was the last thing I was concerned about. It was 600 square feet, 27 seats and stools from this web company. If I could have afforded décor, we would have. Everything in the existing restaurant from the get-go was by default from what we could afford, which was nothing. And that's why there is no décor as we know it. Momofuku Noodle Bar became an exercise in what we don't need." "I was way too young. I didn't know enough – I needed to prove things to myself that weren't culinary; there was a lot going on in my life. I made an extraordinary number of mistakes."**

With his first business Chang turned a lack of funds into an advantage. He worked backward by necessity – he assessed how much money he had to invest and from that determined the products and services he offered. A lack of money was a spur to creativity for Momofuku rather than an impediment. Danny Meyer, the founder of Union Square Hospitality Group has said of Chang's influence: "He's liberated hundreds of young entrepreneurial chefs to open places they can afford to open." What Chang did in opening his first restaurant was essentially conduct an experiment and this particular experiment found product/market fit. Every business startup is an experiment in some way and Chang's experiment was a spectacular success. What we do not know or remember well are all the other experiments that failed. That forgetting process is called "survivor bias."

Discovering product/market fit is absolutely essential and yet so often forgotten. Businesses that have too much money too often charge off trying to grow the business before they have found product/market fit and then die due to premature scaling. To continue the food analogy, many businesses die of indigestion even though it may seem like they died from starvation. Some businesses just never find product/market fit, which must include a profitable business model that flows enough free cash. For example. Chang's *Lucky Peach* publication was a fantastic product for people like me who love to learn about food, but it could not generate enough cash to survive.

There are many interesting questions about Chang's rise to fame: How much of the popularity of the restaurant's Spartan décor and limited menu was the product of luck versus skill? What would have happened if Momofuku did not get the well-timed glowing review in *The New York Times*? Certainly Momofuku's success feed back on itself creating cumulative advantage benefits in other aspects of his business career. Success breeds more success. In a digital world this this feedback effect has been radically amplified, which effect is having enormous social implications that at some point will be the subject of another blog post.

2. **"My father and his friends pitched in the money, initially $130,000; we paid it all back in the second year." "Had I done better at school, I don't know if I would have been a chef. It was the one profession that embraced me." "I was terrible at desk jobs. After college, I had a financial job—very briefly."**

Why did Chang start Momofuku? Chang has said he was attracted it because it was a place where people who did not fit in elsewhere can become stars. He said once in Forbes: "I thought: I can't have an influence in fine dining, but maybe I can help pockets in the underground of the culinary world'–I remember telling my shrink that for sure."

What do academic studies say about why people become entrepreneurs? Hedge and Tumlinson wrote in a recent paper on this topic entitled: "Asymmetric Information and Entrepreneurship":

"Individuals signal their unobservable ability to employers (e.g., via educational qualifications). However, signals are imperfect and individuals whose ability is greater than their signals convey to employers choose entrepreneurship. Our empirical analysis of two separate nationally representative longitudinal samples of individuals residing in the U.S. and the U.K. supports the model's predictions that (i) entrepreneurs have higher ability than employees with comparable signals, (ii) employees have better signals than equally able entrepreneurs, and (iii) entrepreneurs' earnings are higher and exhibit greater variance than those of employees with similar signals."

Hedge and Tumlinson make several other points in their paper including this one about why immigrants start so many companies and another about why friends and family are often the financial backers of early stage businesses:

"Our findings may also explain why several groups with less credible ability signals, such as immigrants, gravitate toward entrepreneurship, and why families and friends are a dominant source of financing for early stage ventures when asymmetric information about entrepreneurs' quality is greatest."

Some entrepreneurs are motivated by their displeasure with a typical office work life or by the fact that such a desk life on a traditional office was not open to them as a career. Chang gradated with a BA from Trinity College where he majored in religion. But having said that, is there a special driver for people who are not college graduates for whatever reason since academic success is not a requirement for success as an entrepreneur? Many successful entrepreneurs are high school graduates or only attended college for a short time. I am not advocating that anyone stop their education at any specific point, but rather saying that more education beyond a point is not a requirement to becoming a successful entrepreneur. If you did not graduate from college for some reason, starting a business is very possible.

3. "The culinary world is a very tough business. But if anything, at its core, what I love about it is the fact that it's a little bit of everything, alright? You need to tie in so many different parts of culture. It's a little bit of craft. It's a little bit of being an artist. It's a little bit of being a businessman. It's a little bit about being a farmer. It's a little bit of being a showman. And I think that's what makes it sometimes the best job in the world."

If you read even a few of the many profiles of entrepreneurs on this blog you will see a lot of similarities, but also in each case some key differences. These entrepreneurs know the best practices in their business, but also when to break them in some important way. That selective rule breaking is where successful innovation comes from. Wolfgang Puck said in the pizza episode of Chang's Netflix series *Ugly Delicious*: Wolfgang Puck: "If you know the basics, if you know your profession really well, then you can navigate and try other things. They say, 'An Austrian making pizza? What the heck?'"

Puck has a great story about how he decided to get into the frozen pizza business based on customer feedback:

"Johnny Carson used to come in on Friday nights and get 10 or 12 pizzas to go. After the third or fourth time I said, 'Johnny are you throwing a party?' And he said, 'No, I'm putting them in my freezer. I said, 'What the hell!? You put my pizzas in the freezer? I'm not going to make them for you anymore.' I was so upset but then finally, I tried it for myself, and said, 'You know what? Maybe it's not quite as good as what we have at Spago, but it's pretty good.'"

Another chef profiled in Chang's *Ugly Delicious* series is an example of someone who learned the basics an then decided to innovate via experimentation. He said during the episode: "If you only look at how it used to be done or how it's supposed to be done, you don't allow yourself to move it forward." He now has his own Jersey cows as a source of milk for his house-made cheese and makes a sourdough-based pizza dough. The chef described how he learned to make mozzarella: "A lot of YouTube, a lot of research, a lot of experimenting, and a lot of shit mozzarella." Chang puts it this way: "It's imperative that we learn the scientific process and document what happens. I want people to own their mistakes and to just go for it–really great flavor comes from the failure."

4. **"Razor-thin does not even begin to describe just how slender the margins are in the restaurant business, and that's if you're one of the fortunate few that don't go under in the first year. If you're lucky, small single digits. Like, the smallest single digits. It's legitimately one of the dumbest businesses you could possibly get into. Restaurants are at the mercy of weather, acts of God, a sluggish economy — and if you have just one bad week, it can sink your ship. Lately, rising rents and changes in labor laws have made it even harder. And I say that as someone who has done OK! Imagine how insanely daunting this business is for most everyone else."**

I have already written a blog post on how hard the restaurant business can be financially and otherwise given factors like the level of competition due to low barriers to entry and wholesale transfer pricing power of landlords. To illustrate just one aspect of this point, in the fried chicken episode of *Ugly Delicious* Chang talks about a very popular and profitable "Memphis hot chicken" chain restaurant named Hattie B's with the owner of two restaurants named Bolton's Spicy Chicken & Fish which originated the recipe and style. Chang asks the owner of Bolton's if she would consider opening a restaurant in a "more affluent community like Hattie B's and she answers: "Yes, but everybody can't afford that $4,000, $5,000 rent." Making matters even harder for people like her is that fact that well-known chefs can sometimes obtain concessionary lease terms from landlords if they have a brand which can attract building tenants. That puts more competitive pressure on other restaurateurs who do not have the clout to be an anchor tenant and must pay market rate rents.

5. **"'There's the common misconception that restaurants make a lot of money. It's not true. If you look at maybe the top chef in the world, or at least monetarily, it's like Wolfgang Puck, but he makes as much money as an average crappy investment banker." "Why are we having a shortage of cooks if we have more culinary school entrants than ever before? If I'm a prospective culinary school student and they [actually] tell me that 50 percent of our students aren't in the culinary profession after five years. Well, I'm not going to probably enter that university. But the reality is I think that number is much higher than 50 percent."**

Not everyone who is famous is as rich as many people think they are. This can happen for a number of reasons. Some businesses are scalable and have high profit margins and some are not. Some entrepreneurs are frugal and re-invest their income well, but some do not. Some entrepreneurs dilute their equity early and some do not. It depends. One thing about the industry is clear says Chang:

Intense competition between restaurants drives down prices and wages. In his classic "Five Minute University" routine on Saturday Night Live the comedian Father Guido Sarducci pointed out: "Economics? Supply and Demand. That's it.'" Charlie Munger puts it in context: "Microeconomics is what we do, and macroeconomics is what we put up with."

People who graduate from a culinary school with or without debt are looking at a career that has very few people emerge that end up doing very well financially like like Chang. Chang is saying that most of them will leave the profession altogether. They have a better chance of playing in the NFL than becoming a food television personality. As Anthony Bourdain likes to say and write about, being a chef is hard physical work where the objective is consistency. There is very little glamour in the kitchen. Salaries are low and the restaurants regularly fail. Chang says: "I would say that in any given kitchen, with a grain of salt, 90 percent of

the day is organizing and cleaning. And 10 percent of the day is actual cooking." Chang also has a strong view on whether someone must go to culinary school: "You name a chef that's awesome and people want to work for him, I'd say a majority of the time they never went to cooking school. Whether it's Ferran [Adria], Heston Blumenthal, Alain Passard, Michel Bras, Corey Lee, Daniel Patterson. The list is pretty long."

6. **"I'm grasping with how you do something on a large scale with multiple operations and not have quality decrease." "How do you build the right culture to scale?"**

The output of a business that requires many people to have a high degree of skill to produce what it sells it is hard to scale. Well crafted systems and the right business culture can help with that scalablity problem to some degree, but that only goes so far. It is particularly hard to scale a fine dining business since the people hired in new locations have a hard time replicating the quality of the original business. Of course, chain restaurants like McDonald's try to solve this problem. Chang says in *Ugly Delicious* that Dominos is really more of a food distribution business than a restaurant (even though he says their pizza is comfort food for him that he enjoys eating it). Chang points out that there are many restaurants that make a better pizza, but their businesses can't scale like Dominos.

7. **"Getting to be a successful business and maintaining it is so hard. Anyone can be good one night, being good over several years is incredibly difficult."**

Harvard Business School Professor Michael Porter has said about what Chang is talking about:

"It's incredibly arrogant for a company to believe that it can deliver the same sort of product that its rivals do and actually do better for very long-if customers have all the power, and if rivalry is based on price- you won't be very profitable. Produc[ing] the highest-quality products at the lowest cost or consolidate[ing] their industry [is] trying to improve on best practices. That's not a strategy."

Every business must deal with this simple fact of life: If you have too much supply of a given product or service, price will inevitably drop to a point where there is no long-term industry profit above the company's cost of capital. Sometimes you will hear a knucklehead say moats don't matter since all that matters is delivering better customer value via execution of a plan. The idea that the supply of alternatives to what you sell does not matter in a business is (1) insanity or (2) inevitably argued by someone who has never actually ran a real business or has not done so for very long. In the real world, competitors eventually can copy a plan of execution that has no barriers to entry. A moat is a "sustainable competitive advantage" that goes beyond execution to limit competition since it is structural. That is why it is so valuable. A business that even your lazy and shiftless cousin could run is significantly more valuable than a business that requires a first-class manager to run flawlessly day after day and year after year. As Buffett says: "When a management team with a reputation for brilliance tackles a business with a reputation for bad economics, it is the reputation of the business that remains intact."

8. **How the restaurant industry has worked in the past will not work going forward." "The future of dining in New York, and maybe America at large, is certainly going to be affected by delivery. If mobile technology has already**

changed how you get your mail and your dry cleaning and everything else, of course it's majorly disrupting how people get their food." "There's a lot to figure out, and lots of mistakes to be made. At the end of the day, it's really hard. It's an extraordinarily difficult business that someone is going to win."

Since basic demographic limitations put a cap on the overall growth of the restaurant industry, especially in a place like the United States, people are often thinking about new ways to make it grow. A profile of Chang in *Entrepreneur* describes the situation:

"American restaurants took in around $800 billion in revenue last year, but sales have stagnated at a time when costs continue to rise. The number of independent restaurants is shrinking at a rate of 2 percent a year. For quick-service restaurants — the industry's best-performing segment these days, encompassing chains from McDonald's to Sweetgreen — traffic is expected to grow by a meager 1 percent in 2017. None of this bodes well for the current order."

In an attempt to find a way to grow profits in the food business Chang was an investor in the food delivery company Maple and was even more involved in a business called Ando. The former business closed without finding any financial success and the latter was involved in a "mercy merger" with another delivery provider. I have written a blog post already about the rough economics of the food delivery business. It is a hard knock life. Will mobile tech change the food world? Most certainly since it already has. But for a business in this sector to be significantly profitable it will need some sort of barrier to entry.

9. **"The livelihood of the restaurant is dependent upon getting the word out."**

David Chang is everywhere in the media. You can see evidence of this by looking at the many interviews cited in the End Notes to this blog post. He is a colorful quote machine and a showman in his own counterculture way. The media profile Chang has developed creates cheap "brand impressions" for his many businesses. Those brand impressions are a substitute for advertising as I have written about in other blog posts, including the post on Sammy Hagar that appeared recently. Not having to buy advertising when competitors must do so is a very good thing for profit margins.

10. **"If getting rich were all that mattered, we could have already sold off " "Over the years, if it was just about the money, I literally would have sold out–literally would have sold the company. We've had many, many, many offers. I understand how lucky I've been and what an insane ride it's been. One reason why I never sold the company or let someone give me a ton of money just to grow it obnoxiously, is that I was the only one who was going to benefit." I think for me the overriding principle is, we have the opportunity now where we can do better. Like paying our line cooks generally $25-$30 an hour, and not be limited by $15 an hour. And my sous chefs all get paid $100,000 minimum. And my managers. And can we start paying our purveyors what they should be getting?"**

Great entrepreneurs that are missionaries love their business and the people who work for them. When missionaries do sell their business they often seek to find a buyer like Warren Buffett who will not treat the business as an opportunity to create the equivalent of a strip mine. Another reason Chang has not sold Momofuku is that he does not want Momofuku to become the next Taco Bell. I do find it interesting how quickly musicians sell the rights to

their songs for commercials these days. For example, the speed at which something like a Bruno Mars song appears in a peanut butter commercial is faster a child can eat a fresh jar of Skippy. Would a Momofuku chain restaurant that appeared in places like airports spoil Chang's brand? Would he be able to look at himself in the mirror and not cringe?

11. **"Cooking and gardening involve so many disciplines: math, chemistry, reading, history."**

Investing and running a profitable business also involve many disciplines. The more you know about more things in more disciplines, the better your judgment will be, and not just about business. Charlie Munger has adopted an approach to business and life that he refers to as *worldly wisdom*. Munger believes that by using a range of different models from many different disciplines—psychology, history, mathematics, physics, philosophy, biology, and so on—a person can use the combined output of the synthesis to produce something that has more value than the sum of its parts. Someone like Chang loves to learn. He actually has fun when he is learning, and that makes the worldly wisdom investing process enjoyable. No one can know everything, but you can work to understand the big important models in each discipline at a basic level so they can collectively add value in a decision-making process. Simply put, people like Chang who think very broadly and understand many different models from many different disciplines make better decisions.

I very much like the way a pit master describes in his craft in the barbecue episode of Chang's *Ugly Delicious* series on Netflix. The pit master might just as well have been describing business or investing:

"Unless you invented fire, you didn't invent barbecue and you don't own it. I don't have the right to define what barbecue is. Real barbecue is whatever you make it. People need to have an open mind. If you want to be one of the best, then you need to be evolving and understand that you don't know everything. Barbecue has become this thing that the further I waded into the swamp, the further I want to go, because I think there's that much more to know. And that's been a really fascinating, fun part. The more people I talk to, the more there is to learn and then take back home and try to put into practice and see what I can make sense out of.

Investing and business for me are like barbecue is for that pit master, but I would like to know that much about barbecue too though. I sometimes wonder whether I would rather cook or eat. I do know that if my mother ever passes away, god forbid, I will cook and make raspberry jam until I feel that she is with me again.

12. **"Wait, why do we charge a bowl of noodles 50 percent less than a bowl of pasta?" Why is that true when they're essentially the same thing?'"**

What Chang is talking about is what Buffett calls "pricing power." He has said: "The single most important decision in evaluating a business is pricing power." These specific pricing power questions asked by Chang are hard to answer with certainty. Anthony Bourdain similarly complains that people are reluctant to pay high prices for something like high end Mexican food, but they are often willing to do so for certain types of European cuisine in a fine dining restaurant. To raise the profile of this set of questions, the writers of *Ugly Delicious* created this mock debate in the last episode of season one:

“Tonight, we pose the question, Italian stuffed pastas or Asian dumplings? Representing the sides will be chefs Mario Carbone and David Chang.

David Chang: “If I had this plate, and I put it on a plate of ravioli – Like, three of them. Three of them. For three times the price.”

Mario Carbone: “Yeah, and it’s with ricotta and it’s delicious.”

David Chang: “I’d eat it, you’d eat it, but it’d be, like, 27, 28 bucks. [An equivalent Asian dish] is eight, nine bucks. Why is that? That’s the shit that gets me mad.”

Mario Carbone: “Well, it doesn’t get me mad.”

David Chang: “It just makes me feel like non-Asian people get bamboozled easier. ‘Cause I hope they do not catch on, and feel like they can Don’t tell them what Italian people are doing. ‘Cause if they start charging more, it would be, like, outrage.I think everybody knows that what you’re paying for is ambiance, and some bullshit story about where mushrooms came from the waiter.”

Mario Carbone: “Right. And people eat that shit up.”

David Chang: “I eat that shit up. But I don’t think anybody who really knows food, really thinks that that food is better.”

Some people will argue that the explanation of the phenomenon is racism. Others might say that it is mostly the intensity of restaurant competition in the particular style of cuisine. What are people paying for in a fine dining establishment anyway? How much of it is a show, how much if it is being able to say that you ate there and how much of it is the actual food? Charlie Munger believes that some aspects of the pricing power of a business are hard to explain or unravel and I will end this post on that note:

“If it’s a pure commodity like airline seats, you can understand why no one makes any money. As we sit here, just think of what airlines have given to the world – safe travel. greater experience, time with your loved ones, you name it. Yet, the net amount of money that’s been made by the shareholders of airlines since Kitty Hawk, is now a negative figure – a substantial negative figure. Competition was so intense that, once it was unleashed by deregulation, it ravaged shareholder wealth in the airline business. Yet, in other fields – like cereals, for example – almost all the big boys make out. If you’re some kind of a medium grade cereal maker, you might make 15% on your capital. And if you’re really good, you might make 40%. But why are cereals so profitable – despite the fact that it looks to me like they’re competing like crazy with promotions, coupons and everything else? I don’t fully understand it.” “Maybe the cereal makers by and large have learned to be less crazy about fighting for market share – because if you get even one person who’s hell-bent on gaining market share…. For example, if I were Kellogg and I decided that I had to have 60% of the market, I think I could take most of the profit out of cereals. I’d ruin Kellogg in the process. But I think I could do it.” “In some businesses, the participants behave like a demented Kellogg. In other businesses, they don’t. Unfortunately, I do not have a perfect model for predicting how that’s going to happen.”

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Investing and Business Lessons from Aileen Lee (Cowboy Ventures)

April 21, 2018

Aileen Lee is the founder of the seed-stage focused venture capital firm Cowboy Ventures. She was previously a partner at Kleiner Perkins Caufield & Byers. Lee was also the founding CEO of the digital media company RMG Networks. She is a graduate of MIT and Harvard Business School.

1. **"Venture investors are looking for large addressable markets. How big is the market? What is the problem that you're trying to solve? Who's on your team? And how relevant is the team to that problem? What is the product that you've built, if you have built something? Or what do the wireframes look like? What kind of traction or feedback have you gotten from the market in terms of whether people are going to like the product, or whether they do like the product? What does the financial model and the economic model look like? What are you going to do with the money?" "What is the mission and vision of the company? Venture investors are looking for a big mission and vision that's quite ambitious and that can be backed up by, 'Here's where we want to be and here's how we're going to get there over time. This is what we want to get done the next 12 months or the next 18 months.'"**

Aileen Lee is identifying what she looks for in a startup which is useful to know if you are trying to raise funds for a startup. Marching through these factors one-by-one is a helpful exercise. Some of these factors are depicted below in a Venn diagram format I borrowed from a recent tweet by Semil Shah of Haystack. In my diagram "X marks the spot" that a

business wants to achieve. Of course, it will not look exactly like this in terms of balance in each case.

Lee and other venture capitalists are very focused on the potential size of the addressable **market** targeted by a startup which is the first factor. Pioneering venture capitalist Don Valentine describes why this is such an important factor:

"If you don't attack a big market, it's highly unlikely you're ever going to build a big company." "Great markets make great companies." "We're never interested in creating markets – it's too expensive. We're interested in exploiting markets early." "I like opportunities that are addressing markets so big that even the management team can't get in its way."

The second factor is **people.** Who are the people involved in the startup and how strong and cohesive is the team? The team is unlikely to be complete at seed stage but has the team there now shown that they are compatible? Are diverse personalities and skills part of the team? The people involved need many capabilities and skills. For example, do they have genuine zeal about solving an important problem for customers? Are they missionaries or mercenaries? People who do not deeply care about the mission of the company are significantly less likely to produce the desired financial returns because they are more likely to quit when they inevitably face challenges and are not motivated to work as hard.

The third factor **(product)** is obviously important for a venture capitalist, but often the product has only been vaguely defined at the time of a seed stage investment. Even if a product does exist it will inevitably change after a seed round investment is made as the business tries to prove that it has discovered product/market fit. In short, the earlier a venture capitalist invests in a startup the less developed a product will tend to be. This means that seed stage investing is more about people and markets than at a later stage. In other words, not all parts of the above Venn diagram will arrive at the same time.

2. **“We love to see, ideally, some kind of technical angle, or a technical solution.”**

Every business must eventually find some sort of sustainable competitive advantage to be profitable. At the seed phase of its existence a startup will also have less defined business model and unit economics, but an investor can still have a sense of what these aspects of the business may ultimately be. Among the questions the seed stage investor will begin to ask are: What will the business do differently than its competitors? What sustainable competitive advantage can the business create versus competitors? Is that differentiation sustainable in the face of competition? Is the business scalable and does it have a tailwind? Another Venn diagram that is nested within the product category like a Russian doll looks like this:

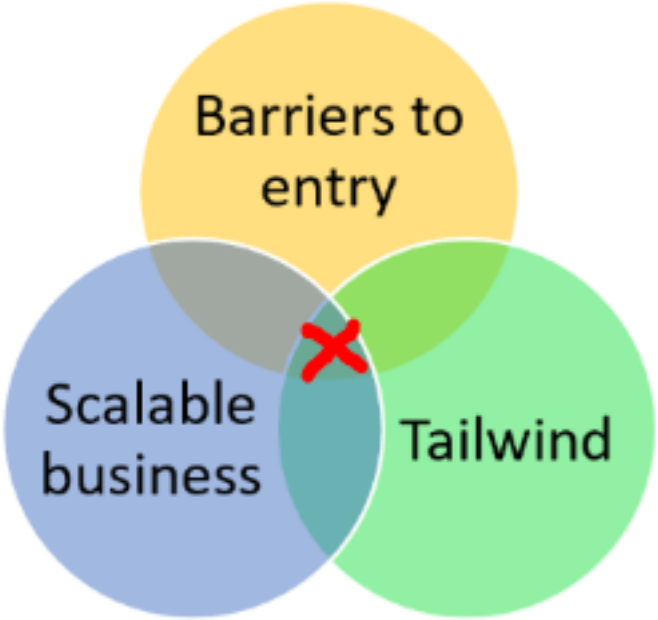

The best sources of sustainable competitive advantage in today’s business world are found in technology through phenomena like network effects.

What you are looking for in addition to s sustainable competitive advantage is a tailwind that will help the business prosper. Moore’s law is an example of a phenomenon that produces a tailwind for many businesses. Warren Buffett says that the success of a manager is more determined by the favorable nature of the boat they get into than their skill as a pilot. He does not mean that skill as a pilot is not hugely valuable. Great execution in a business really matters, but he is saying: “When a management with a reputation for brilliance tackles a business with a reputation for bad economics, it is the reputation of the business that remains intact.” The best of all worlds is a business with great economics and a management teams with fantastic management skills.

People working in a technology business often do not fully realize how much harder life for a business is outside the markets where they operate. I frequently look at a business outside the technology world and think to myself: “My god these margins are tiny. How do they survive? There is no margin for error at all.” Some of these businesses may even seem sort of romantic

in a hipster sort of way, but they operate on razor thin margins. Lifestyle businesses are often crowded since they are, well, a great lifestyle.

3. **"Spend the first six to 12 months building a great product or service that people love, rather than chasing investors. When the time comes to engage investors, you will be meeting them from a position of strength. This makes all the difference." "We usually suggest that your seed round lasts you at least 18 months, if not 24 months, or more than that." "On the financial plan, the bar has been raised in terms of how much Series A investors want to see you accomplish from seed stage before you raise A, and then from A to B, and B to C."**

It is wise for a founder to have enough financial slack so that the business can iterate but not so much capital that people try to potentially fatal things like scale the business prematurely, broaden the scope of the product too far or pivot too often. Financial constraints are a part of what drives creativity. Solving problems with just money does not scale or generate attractive financial returns for founders, employees and investors. The more money that is invested in a startup, the more importance investors will assign to hitting milestones and the less they will make the decisions based on instinct. Milestones worship can be taken too far. The venture capitalist Tom Tunguz complains: "Today, demo days are a misnomer. We should call them metrics days. Market size. Weekly growth rate. Net negative churn. The same is true for fundraising pitches." He would like to see an actual product demo more often.

There is no more important milestone for a startup than product/market fit. I have written more than one long blog post on this topic, but a simplified version of that would be to say: A startup will know it its offering has achieved product/market fit if they are having trouble meeting demand for the product.

4. **"There's a saying that the definition of 'entrepreneur' is being able to do more than anyone thought possible with less than anyone thought possible. That's the ticket. You do not have to have a Ph.D. from MIT. It's about what can you get done with the little you scrap together." "At seed stage, you do not have not enough time, not enough money, not enough people."**

What Lee is saying about the resourcefulness of a great founder reminds me of a comment that Jeff Bezos made about what he was looking for in a wife: "I wanted a woman who could get me out of a Third World prison." Investors love founders who are resourceful. The best investors know that unnecessary speeding causes unnecessary equity dilution but even more importantly they know that founders who spend money on frivolous things wastes precious resources that may determine the difference between life or death for the business. A strong company culture and work ethic combined with resourcefulness and innovation are keys to building a solid business and equity value. The best way to solve problems is with innovation and company culture.

5. **"Founders generally want advice, or help, or guidance, on multiple fronts. One is on hiring. Many times a founder has never hired certain types of people before. They've never hired a head of sales, or they've never hired a UX designer." "As a founder, one of your most important skills is as a recruiter, as an identifier of talent and a curator of talent. If you hire the wrong developer or you hire the wrong UX person, you could run out of time and make a product that nobody likes to use. It's really about attracting a lot with very little resources." "There**

are a lot of benefits to having a team of young people, but there are many benefits to having people who've made a lot of mistakes." "A lot of [venture investing] it is about the people. And so high integrity, high intelligence people, who have also shown a certain amount of hustle and scrappiness in figuring stuff out before they raise money, and then having kind of an aggressive but doable plan for what they're going to do with the money, and within a reasonable period of time." "Relevant backgrounds, if possible, or at least a personal connection to the problem that the person and the team is trying to solve."

Someone who does not know how to sell has a significant handicap in building a successful business since one of the most important tasks for founder is to sell the best people on the future of the business. Founders often underestimate how much of their time will be spent recruiting great people to work at their business. The earlier the hire happens the more it will shape the company culture and the greater the fallout of bad hire will be. The impact of a bad hire can be enormous. It is not uncommon for a founder to spend more than 50% of their time recruiting people at the seed stage of the business.

6. **"If someone asks you questions [during a pitch meeting], take notes, and send a follow-up the next day saying, 'These are the things that we discussed; I wanted to follow up on these points.' Show that you're super-conscientious, and you're on it."**

Investors like to work with founders who are responsive and organized. First impressions and small details matter, especially when an investor has little data on which to make decisions. As an analogy, when I am interviewing someone and he or she treats people they consider to be "staff" poorly or do not clean up their own mess, they will always get a "do not hire" from me.

What a founder wants is an investor who asks great questions and does not waste their time. If all a founder gets from an investor is money at the seed stage, they are wasting a big opportunity. Professional seed stage investors are much more likely to be value added capital. Raising money from you Uncle Louie may be easier and done at a lower valuation, but in the end that can be very expensive money.

7. **"It takes a long time to build a big company and companies have ups and downs, so you know that you are in year two of a ten-year journey, and you wish you knew how the movie was going to end. But that's the deal with working with startups. The journey is the beauty of it; it's not about the end. But, still, sometimes you wish you knew how the movie was going to end."**

The time scale over which an investor will obtain feedback from a seed stage investment is the longest in the venture capital business. Financial exits may not happen or 10 or more years after the investment is made. The time scale over which a seed stage venture capitalist might see a return from their carried interest is so long that some people you have read about have not yet received a distribution of carry. If you do not love working with young companies, there are more financially attractive ways to make a living than being a seed stage investor. You may find that like the Tom Petty song lyric that "the waiting is the hardest part."

8. **'For most companies, month on month (MoM) organic growth is a very useful metric and depending on the base, 20–50% MoM growth can be good. Retention, referral, and churn are all things we look at, too. 'If someone asks you, 'What's the CAC, what's the LTV, what are the margins, what's the revenue plan for next year,' just know it. Practice it." "You can't get into the trap of paying for customer acquisition."**

Lee is describing one type of milestone for a business, but she is also saying that the most valuable customers are acquired organically. Customers acquired without paid advertising (e.g., by word of mouth) churn less, stay customers longer and generate more revenue. Acquiring customers inorganically with paid marketing too often is hiding the fact that the product really does not have product market/fit. Tracking these and other unit economic variables is critically important since otherwise the business and investor do not know whether their model is scalable. When you run a financial model of the lifetime value of the customers of a business you will often see that the benefits of retention are nonlinear. In other words, the highest return on investment in generating new growth is often not to shrink.

9. **"Cowboy Ventures is still kind of a startup. I had been at Kleiner almost 13 years. At large firms [like Kleiner], just like large companies, as you get into senior management, you spend more and more of your time in meetings, less kind of doing the functional work, and more around kind of trying to help run the firm a bit. I just really love working hands-on with founders and with portfolio companies." "We always co-invest with others, and I really enjoy that. I really enjoy that and hope that does not change. I think that's the way Series A used to be, firms used to split Series A rounds. But over the years, firms wanted more and more ownership, so it's become more binary. I really like that seed is a more collaborative phase."**

Maintaining personal sanity while engaging in seed and other early stage investing requires a unique personality. The earlier the investor writes checks the higher the business mortality rate will be. I wrote about this aspect of seed stage investing in my blog posts on Jason Calacanis, Steve Anderson and other investors. Calacanis describes his math in this way:

"It's a portfolio strategy. If 7 out of 10 fail, 8 out of 10 fail, what you're trying to do is figure out what those 2 out of 3. Let's say 2 or 3 out of 10 don't fail. You want to quickly figure out who those 2 out of 3 are, and then take your 25k investment and make a 100k investment in those 3. Then you figure out, let's say you've done 100, and you have 4 of them that are really breaking out, you want to figure out which those 4 are, so you can put 250k into those. On a name basis, 7 out of 10 of your investments fail."

When any given business in a portfolio fails it will inevitably create some chaos. When this is constantly happening that creates even more chaos. Being calm proceeding through that seed investing storm is not something everyone can do well. Remaining optimistic while this is happening is not something that everyone can do well either.

People like to talk about seed stage winners, but most startups are buried in the dead of night in unmarked graves. The names of the startups disappear from the web site of the investors silently and unceremoniously. Making a decision to no longer invest in a business on a regular basis is non-trivially hard.

10. **"The math of venture capital is such that venture capitalists make money through a combination of fee income and what is called carried interest, which is basically profit sharing with their investors once you've returned the capital. And when you do the math on funds, if you have a $500, $800 billion, $800 million or a $1 billion fund, the number of multi-billion dollar companies that you have to be an investor in per fund is quite large. When you do the math, it seems very unlikely that most venture capital firms will be able to generate the kinds of returns to investors and to themselves that they have in the past. The math, I think, just works much better, and it's much more aligned with entrepreneurs if the funds are smaller." "Venture is a decades-old, multi-billion dollar annual industry and yet there has been a surprising lack of data and quantified learning about what drives the best results, the 'making of' so to speak." It was inevitable that a business-like venture capital which funds many startups which employs many data scientists would itself be increasingly analyzed using those same tools and approaches. The amount of performance data provided by PitchBook, Cambridge, and CB is more detailed and specific than ever. In this new data driven world it is harder to hide since there is a diverse group of people slicing and dicing the data on the venture capital industry. Decisions can now be made on a more objective basis by startups and limited partners."**

As Charlie Munger likes to say: "I have nothing to add." Lee explains her view on this math well enough already and this post is getting too long.

11. **"Why do investors seem to care about 'billion dollar exits'? Historically, top venture funds have driven returns from their ownership in just a few companies in a given fund of many companies." "In every fund of 30 companies, there will be one to three mega-hits: giant winners that return the capital of the fund and then make great profits for both the people who run the fund and the investors in the fund. And all the other companies are drops in the bucket, but it's really about a couple winners that are worth a billion or more?" "Traditional venture funds have grown in size, requiring larger "exits" to deliver acceptable returns. For example – to return just the initial capital of a $400 million venture fund, that might mean needing to own 20 percent of two different $1 billion companies, or 20 percent of a $2 billion company when the company is acquired or goes public."**

A seed round investor like Lee has different numbers to work with than a venture capital firm like Kleiner. Again, I have nothing to add.

12. **"Valuation is not the end. It's a means to an end. It's a nice milestone to show that you are making progress in terms of building a company to scale." "It's really hard, and highly unlikely, to build or invest in a $1 billion company. The tech news may make it seem like there's a winner being born every minute—but the reality is, the odds are somewhere between catching a foul ball at an MLB game and being struck by lightning in one's lifetime." "Relative to all the start-ups out there, getting a valuation of $1 billion is rarely accomplished."**

When I decided to write a post about Lee I made a conscious choice not to spend much time writing about her creation of the term "unicorn." That topic has been discussed enough

already for another rehash of that topic by me to be valuable. I decided to write about Lee's views on what it takes to create a successful business, a process that she clearly loves. Writing or talking about valuation before describing what is needed to create a business is to put a horse in front of a cart. The venture capitalists I admire most are roll-up your sleeves and work people like Lee, instead of fickle cheerleaders who turn and run at the first sign of a problem.

End Notes:

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Business and Life Lessons from John Cleese

April 28, 2018

John Cleese is an actor, comedian, screenwriter and producer. His comedy achievements are too numerous to list fully, but here are a few highlights: In the late 1960s, he co-founded Monty Python. Cleese's business training films use comedy as a teaching tool, including the well known classic: "Meeting, Bloody Meetings." Cleese wrote the script and played a character in the movie *A Fish Called Wanda.* He is also the co-creator of the Emmy Award winning sitcom *Fawlty Towers.*

1."He who laughs most, learns best." "People learn nothing when they're asleep and very little when they're bored." "It's absolutely no good just writing a straight script and then sticking half a dozen jokes in, because people would just remember the jokes and forget the teaching points."

When the food network personality Alton Brown was making his television series *Good Eats* he had a sign over his studio door that said: 'Laughing brains are more absorbent.'" Comedians are in their own way teachers since the core of comedy is truth. Warren Buffett is an example of someone who likes to tell jokes when making a point. To illustrate this point, Buffett tells this joke:

"A man says to a veterinarian: 'Can you help me? Sometimes my horse walks just fine and sometimes he limps.' The vet replies: 'No problem. When he's walking fine, sell him."

In telling this story Buffett was trying to convey the point that buyers must be careful when someone is trying to sell them something. Just lecturing to someone about the importance of careful due diligence is not as memorable as a joke. Buffett is trying to convey the idea that it is always important to consider a seller's motivation. For example, consider the example of an insurance company trying to wiggle out of variable annuity promises in an existing contract by offering "a buyout." An actuary points out about this "limping horse" the insurance companies are trying to sell: "common sense would suggest that all things being equal, you wouldn't want to take a buyout because there's a reason a company wants to get you off the books."

Some jokes are more successful than others, especially about financial topics. Even if most people get the point of a story, others may not. For example, Buffett tells this story that tries to teach people that being a contrarian is only valuable if you are right about that contrary view:

"A senior citizen receives a call from his wife while driving home. 'Albert, be careful,' she warns, 'I just heard on the radio that there's a car going the wrong way down the Interstate.' 'Mabel, they don't know the half of it,' replies Albert, 'It's not just one car, there are hundreds of them.'"

2. "There are two types of work. One is the work you do because you need money, and there's another kind of work — a more enjoyable kind where money is absolutely not the key thing. When I've worked for money it's been fine, but I don't often feel anything like as involved as when I do things that were not for money. But after that very expensive divorce I mentioned earlier, I was basically forced to go and earn money. I had to earn $20 million, and you don't get that sitting around drinking coffee and reading a good book. So I went off and I did all these one-man shows and I enjoyed it, but if I hadn't needed the money I wouldn't have done it. Instead I'd have gone off and written something that was more original. But I needed the money." "We wrote the whole first draft for the script for the 1979 movie Life of Brian in 13 days. But it didn't feel like work."

Buffett is famous for saying that he "tap dances to work every day." You do not need to be a genius to know that it is a good thing if you can discover a way to enjoy your work. But the results of that search for work that is fun is rarely binary. There is a reason why it is called "work" work and not "fun." Life is full of trade-offs. Some work pays a lot and is mostly not fun. Some work is mostly fun and does not pay a lot. The mix for everyone is different. As an example, I would rather drop a very large rock on my foot every day than be a dentist. But that is just me. I have nothing against dentists or dentistry in general.

As an example, comedy work but it may be enjoyable work for some people like Cleese. A comic explains: "Great comics are great precisely because they appear to be making it up as they go, when actually it's heavily crafted material. Skilled comedians spend a lot of time working out a piece, and trying different words to see which one fits best.

	Pays Well	Pay is Lousy
Fun	Top tier comedian	River rafting guide, most comedians
Not fun	Proctologist	Migrant fruit picker

2. "When you defer decisions as long as possible, it's giving your unconscious the maximum amount of time to come up with something."

This point made by Cleese reminds me of a joke:

An man enters an office expecting to find his manager, but he discovers only a cluttered desk and an open window. Peering out the window, he sees the manager perched on the ledge of the building. "I can't stand it anymore! I simply can't make any more decisions!" "You're not going to jump?" asks the man. "I might," replies the manager. "On the other hand…"

The more serious way to look at what Cleese is saying is to think about optionality. My friend Craig McCaw likes to say: "Flexibility is heaven." What he means by this is that having the option to make the best choice at a later point in time when you have more information is valuable. Craig McCaw often spends money to preserve his ability to have multiple options. You might say that someone adopting Craig McCaw's "flexibility is heaven" approach is a "flaneur" who Nassim Taleb describes as: "Someone who, unlike a tourist, makes a decision opportunistically at every step to revise his schedule (or his destination) so he can imbibe things based on new information obtained. In research and entrepreneurship, being a flaneur is called 'looking for optionality.'"

3. "You never know what's going to catch on."

Nothing is harder to predict than the outcome of word of mouth. What is easy to predict is that critics will get reviews wrong. As an example, these four sentences set the tone of a Vincent Canby review in *The New York Times* of a John Cleese movie:

"A Fish Called Wanda' sounds great. Yet it plays like an extended lampshade joke. It's not easy to describe the movie's accumulating dimness or to understand what went wrong. Everyone knocks himself out to be funny. The worse the material becomes, the harder the actors work for increasingly less effect."

Cleese explains about how others responded to the same film:

"This film then subsequently got three Oscar nominations and got a win for Kevin Kline. It was such a shock to me to read that, because I thought it was quite good. And of course, being *The New York Times*, it means a lot of people are going to be influenced by it. The word began to spread. You never know why people get so, what's the word… nasty. … A sense of humor is so much more subjective than anyone believes. *The Wall Street Journal* thinks my book *So Anyway* is completely unfunny and *The Washington Post* thinks it's brilliant. It's fascinating; it's completely the same book."

Cleese quotes Brendan Behan to finish his tirade: "Critics are like eunuchs in a harem; they know how it's done, they've seen it done every day, but they're unable to do it themselves."

4. "If you want creative workers, give them enough time to play" "Creativity doesn't have to be taught; it has to be liberated." "Psychologists write about it from the outside, like Martians trying to describe sex." "There are a lot of highly intelligent people who are incapable of it. The people who don't have creativity, don't recognize it." "Creativity is not a talent. It is a way of operating." "When you collaborate with someone else on something creative, you get to places that you would never get to on your own. The way an idea builds as it careens back and forth between good writers is so unpredictable. Sometimes it depends on people misunderstanding each other and that's why I don't think there's any such thing as a mistake in the creative process. You never know where it might lead."

Mistakes are often just unintentional experiments. Because even a blind squirrel finds a nut once in a while, positive results can be produced by a mistake. The list of major discoveries that were produced by a mistake is very long. A list of just ten examples of mistakes that resulted in innovation helps reinforce this point:

1. Pacemakers
2. Corn Flakes
3. Plastic
4. Post-it notes
5. Play-Doh
6. Slinky
7. Penicillin
8. Chocolate chip cookies
9. Tea bags
10. X-rays

Jeff Bezos puts it this way: "To invent you have to experiment, and if you know in advance that it's going to work, it's not an experiment. Most large organizations embrace the idea of invention, but are not willing to suffer the string of failed experiments necessary to get there."

5. "The enemy of incubation is interruption." "What you have to do is give yourself a place where you're not going to be interrupted for about an hour, because it takes time for your thoughts to settle. You have to create boundaries of space and then you have to create boundaries of time. You need to give yourself the time to let these ideas come up because it deals in the confusion and images and very subtle things."

I can't help but think about the current movement of employers to assign open "offices" to employees when I read this quote from Cleese. The sorts of co-working space companies like WeWork provide is one example, but so are businesses doing things like not assigning a permanent desk at all to anyone below a certain job title (e.g., VP). Employees at these businesses instead receive a locker and are required to find an open spot to work each day at what are essentially very long tables. Space in these settings may be as little as 50 square feet per employee. If this new approach to assigning work space is going to be effective, it may be that employers will need to allow employees to work sometimes from places that allow them a greater degree solitude. This can include working at home but also outside or in other quieter places.

A NPR episode quotes a researcher from Cornell on the nature of distractions that can reduce productivity:

"In general, if it's coming from another person, it's much more disturbing than when it's coming from a machine," he says, because, as social beings, humans are attuned to man-made sounds. He says overheard conversations, as well as high-pitched and intermittent noises, also draw attention away from tasks at hand.

Why is someone talking loudly on a cell phone so annoying? Another research study concludes:

“our brains more or less ignore predictable things, while paying more attention to things that are unpredictable. When both sides of the conversation are audible, it flows predictably, but a cell phone conversation is quite unpredictable. “

6. “New ideas are like babies; it’s easy to strangle them at birth.” “Most of the time in our culture, we’re a little bit hurried, a little bit anxious, a little bit on watch. We’re worried about getting things done on time,” he said. “Hair-brained thinking has dominated Western thought for a very long time. We’re so used to it. The French have a saying: ‘Fish do not know the water they swim in.’ We grow up in this culture and we’re not aware it’s a left-brained culture.” This type of thinking can be efficient at getting tasks done, but it doesn’t produce anything creative or original, he said. “It pushes us into things that are familiar, predictable, stereotypical responses. We use heuristic thinking, rules of thumb, really just to get the decision done. A lot of the time, it’s fine.” “Getting out of that pathway, that intellectual rut, requires a departure from our old way of thinking and it requires a non-anxious, non-hurried special state – in other words, tortoise mind. You’ve got to create a tortoise enclosure. You need to create time and you have to create space. You’ve got to create a place where you can sit without being interrupted. If you’re a big cheese, you tell your peers you’re not to be interrupted unless the building is on fire so you can sit down and take it all in. If you’re down on the other end of the hierarchy, you maybe have to go sit in a pub or something.”

The comments of Cleese speak for themselves. His points do remind me of a story about a mistake turning into an opportunity:

A storekeeper had for some time displayed in his window a card inscribed “Fishing Tickle.” One day a customer saw the sign and walked inside to inform the proprietor about the incorrect spelling of the word “tackle.” The customer said: “Hasn’t anyone told you of it before?” The storekeeper responded placidly: “Many people have mentioned it. But whenever they come in to tell me, they always buy something.”

Fishing stories are a fertile source of jokes of course. For example, Charlie Munger tells the story about going into a store that sells fishing tackle. After looking around the store Charlie found the merchant and said to him: “My God, they’re purple and green. Do fish really take these lures?” The store keeper responded: “Mister, I don’t sell to fish.”

7. “It’s easier to do trivial things that are urgent than it is to do important things that are not urgent, like thinking. And it’s also easier to do little things we know we can do than to start on big things that we’re not so sure about.”

It is the recognition of this tendency raised by Cleese that makes the drunk under the street light joke funny.

Late one night a police officer finds a drunk man crawling around on his hands and knees under a streetlight. The drunk tells the police officer that he is looking for his keys. When the police officer asks if he is sure this is where he dropped his keys, the drunk man replies that he believes he dropped his keys across the street. The police officer asks: “Then why are you looking over here?” The drunk explains: “Because the light’s better here.”

8. "Most of us are run by our unconscious and, unfortunately, most of us have no interest in getting in touch with our unconscious. So if the majority of people are run by something they don't know anything about, how can we have a rational society?" "Put aside intellectually smart, the trouble is that most people aren't even emotionally smart. They can't deal with reality. If they're not doing well, they'll blame someone else. That's why I have no hope of our ever having a proper, well-organized, fair, intelligent, kind society." "Imagine if, before you came to exist on Earth, God said, 'You can choose to stay up here with me, watching reruns and eating ice cream, or you can be born. But if you pick being born, at the end of your life you have to die — that's nonnegotiable. So which do you pick?' I think most people would say, 'I'll give living a whirl.' It's sad, but the whirl includes dying. That's something I accept."

I attended a lecture by Cleese recently and he argued that statistics show that only 10 to 15 percent of people are actually competent at their jobs. He also argued that competence and confidence are inversely correlated. He then suggested that ego when combined with the need to be right in arguments prevented people learn from learning anything new. The way he presented these arguments was supported by funny stores and anecdotes. Cleese is competent at his job. Some people may not find him funny, but enough people do that he will always be able to fill a theater.

9. "Even though the whole world is a complete madhouse, it's never been more interesting to me, even if stupidity has become rampant. Once you realize that things are pretty hopeless, then you just have a laugh and you don't waste time on things that you can't change." When you get to my age, and I'm 66 now, you realize that the world is a madhouse and that most people are operating in fantasy anyway. So once you realise that, it doesn't bother you much." "I am deeply pessimistic about the state of the world. I do this show called Why There is No Hope. I lay out all the reasons why there is no hope we will ever have an intelligent, fair, kind, well-organized society. There's a chance. But we never had it. Occasionally something like that happens for a couple decades before it decays. You have to notice that. I think it was Bertrand Russell who said you have to accept what a very bad place the world is before you can enjoy yourself. Once you say, 'Yes, it's ridiculous, it's insane, it's a madhouse,' then you don't spend unnecessary energy trying to improve it. There are certain things you can improve. You can be nice to everyone you meet tomorrow." "I love the fact that I've made people laugh, but the important thing, ultimately, I do believe, is a relatively small number of really close relationships."

I believe that comedy can be weaponized to make the world a better place. For example, the potential for new comedy based on financial fraud and folly is almost limitless. My goal is to provide slightly more than my statistical share of comedy.

10. "This is the reason I went on Twitter. I don't trust the British press. That's across the board. I am not talking about the tabloid press. I am talking about *The Mail, The Telegraph, The Times* to a certain extent. I don't trust them. But if I want to get my project mentioned in their papers, then I have to agree to do an interview with them. And then they will write a piece about what a charmless, curmudgeonly, rude, sour, bitter old man I am. With Twitter, all I have to do is say I am performing at such and such a time, and this is what I'll be doing. I have five and three-quarters million followers."

The ability of anyone to speak their mind without a filter on Twitter is a very good thing, even though there are some people who you would rather not hear from. That is why there are unfollow and mute buttons on Twitter, which are much more effective than the remote control that Chauncy Gardner unsuccessfully tries to use in the movie *Being There* by pointing at unpleasant people or situations and clicking on them.

11. "The Python attitude toward life is to suggest how absurd everything is. When people are younger they often look around and think it's all a bit crazy. "Humor is fundamentally a sense of perspective, and as I've grown older I've just gone back to the position I had when I was 15 or 16, when I thought most of what was going on was absolutely ridiculous. I've now re-reached that position." "If there's distance, you can laugh at something. But if you're in the middle of it, you can't. You can laugh at world history. It raises the question: Is life a tragedy or is it a comedy? I think it was (playwright) Arthur Miller who decided that on balance it's a comedy because it's so ridiculous." "Jesus is said to have never laughed in the Bible, and I think it's because laughter contains an element of surprise — something about the human condition that you haven't spotted yet — and Jesus was rarely surprised. I still laugh, but many of the things that would have made me laugh 30 years ago — paradoxes about human nature — wouldn't make me laugh anymore because I just believe them to be true. They're not revelations." "The whole point about comedy is that all comedy is critical." The best definition of humor I ever came across was from the philosopher Henri Bergson, who said it was 'a social sanction against inflexible behavior.'" "People tend to laugh together at something they disapprove of, and it is far more subjective than most people realize. What will make one audience laugh will not necessarily make another one laugh, and that can be the difference between Wednesday night and Thursday night in the same town. What Bergson means is that if you behave appropriately for what is happening around you, you are not really funny. If there is a kind of psychological rigidity that forces you to behave in a particular way, and you behave absurdly, that will be funny."

Chris Rock has said that comedy is unique in that it is being created and refined as it is being performed. Creating and performing comedy is tricky for many reasons. Perhaps most importantly, it is easy to make a mistake when you are trying to be funny. Jokes are a lot like

startups since the best way to the successful ones to run a lot of experiments. Professor John McGraw writes: "It might not seem like it, but the best comedians hone their material scientifically, by experimenting bit by bit. And the only way to learn is through hard, repetitive, empirical work. You get up there on that stage night after night, gauge which lines work and which don't, and adjust accordingly." Comedy on Twitter is particularly hard because you can't take the joke on the road first. You are live on a tightrope and there is no net.

There are a number of competing theories about comedy, each of which has advocates, including:

- Incongruity theorists believe humor is a response to, well, incongruity, but also ambiguity, logical impossibility, irrelevance, and inappropriateness.
- Superiority theory argues that humor is created when we feel "sudden glory" when we believe we have supremacy over others.
- Relief theorists believe humor is a way to release repressed feelings.

Professor McGraw adds yet another theory that he calls "benign violation": "A joke can fail in one of two ways. It can be too benign, and therefore boring, or it can be too much of a violation, and therefore offensive."

12. "I was in Miami and I had a massage in the hotel spa. Afterward they called me: 'Mr. Cleese, you left your shoes in the spa. Can we send them up to your room?' I said, 'Oh, how nice of you.' So, five minutes later, *knock knock*, someone opens the door. "Mr. Cleese, here's your shoes.' 'Thank you.' 'Could I see some form of identification?' 'Now, you know I'm Mr. Cleese because you just called me Mr. Cleese, and you know the room that Mr. Cleese was in because you came to my room number. So what are we doing asking for identification?' And the guy said, 'Well, I'm sorry, I still need to see some form of identification.' So I went over and I got a copy of my autobiography and I said, 'That's me there on the cover. And down there it says 'John Cleese.' You know what he said to me? He said, 'I'm sorry, that's not good enough.' You couldn't write something as wonderful as that."

As Charlie Munger likes to say: "I have nothing to add."

END NOTES:

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Business, Investing and Life Lessons from Quincy Jones

May 6, 2018

"The '30s in Chicago, man. Whew. No joke. My brother and I saw dead bodies every day. Guys hanging off of telephone poles with ice picks in their necks, man. Tommy guns and stogies, stacks of wine and liquor, big piles of money in back rooms." "A guy attacked me with a knife when I was 7 years old. I was on the wrong street."

Jones moved to Seattle from Chicago so suddenly that he was not even allowed to go back to his home and get his possessions. His father was a carpenter for some notorious Chicago gangsters and there was no time to ask questions.

"I started at age 13 in Seattle and met Ray Charles when he was 17. He was an amazing musician. It was never about money or fame back then. We just thought about what gave us goosebumps." "We'd play five nightclubs a night. First, we played pop for the white kids at the Seattle Tennis Club. We'd have our little cardigans on and ties. Then we'd change into our suits and go over to the Washington Social and Educational Club, which was really just a bottle club. We played everything: rock and roll, rhythm and blues. Then we'd go down to the red-light district and have bebop jam sessions."

Police and other government officials tolerated gambling and other vices in parts of Seattle city from close to the time the city founded until 1969. Occasionally someone would run on a law and order platform like a great grandfather of mine (James Trenholme), but they were rarely elected. Another great grandfather of mine (Judge Arthur Griffin) owned the Crown Hotel in Pioneer Square as an investment, which was almost certainly part of the entertainment scene at the time. Seattle's nearly continually operating bribery/tolerance system gave Seattle nightclub owners outsize profits that they could use to pay musicians enough to create a vibrant music scene in certain parts of the city (more than 40 nightclubs were in operation at one point just on Jackson Street).

One beneficiary of money flowing into nightclubs in the late 1940s was Quincy Jones who lived on 22nd Avenue, just a block from Garfield High School. Jones has said about this time in his life: "Parker Cook was my high school teacher. He never scolded me for not getting to school until 11:30 in the morning." The Wikipedia entry on Jones notes: "In 1951, Jones earned a scholarship to Seattle University, where a young Clint Eastwood – also a music major there – watched him play in the college band." People performed in places like the Trianon Ballroom "which covered a half block and had a 30-by-135-foot dance floor that accommodated more than 5,000 dancers — was hyped as "the largest dance-hall west of Chicago."

Organized crime was involved in what was called Seattle's "tolerance policy" but it was mostly tame by east coast standards. But there were some more violent incidents. For example, in 1969 I was a witness to the aftermath of the murder of my neighbor Mr. Cichy who was known as "the pinball king of Seattle." It was the first time I saw a dead body. The local newspapers at the time reported that "foul play was suspected in the death of Mr. Cichy, yet never proven. He was an excellent swimmer found dead in five feet of water." The autopsy was not correctly witnessed which, increased the controversy even more. Before his death Mr. Cichy contributed to my childhood education when, together with some friends, I found a chest buried near his home filled with Playboy magazines from the early 1960s.

Once Seattle ended the tolerance policy in the mid-1960s the vibrant live music scene mostly died off since without the revenue from illegal gambling and other vices paying musicians like Ray Charles was no longer economic. Of course, vices continue to create revenue for the music business today in the form of casinos which hire live bands.

I have not quoted some of the more colorful parts of the recent interviews that put Jones in some very hot water. I have decided to focus on them more positive aspects of what Jones has said and to write about how they apply to business, investing and life.

1. **"Since I was very young, I've played all kinds of music: bar mitzvah music, Sousa marches, strip-club music, jazz, pop. Everything. I didn't have to learn a thing to do Michael Jackson." "You're supposed to use everything from the past.**

If you know where you come from, it's easier to get where you're going." "Musical principles exist, man. Musicians today can't go all the way with the music because they haven't done their homework with the left brain. Music is emotion and science. You don't have to practice emotion because that comes naturally. Technique is different. If you can't get your finger between three and four and seven and eight on a piano, you can't play. You can only get so far without technique. People limit themselves musically. Do these musicians know tango? Macumba? Yoruba music? Samba? Bossa nova? Salsa? Cha-cha?"

There are significant parallels between music and investing and music and business. The more you know about different investing styles and different businesses the better your investing record will be. There is no single investing style that is right for everyone. There are different pools of alpha that can be captured by different approaches. And there is no formula for creating a successful business either. But you can learn best practices and adapt them to find success. Often the most important thing about best practices is knowing when to break one of them, which can enable the creation of an innovation.

2. **"Seattle is like a global gumbo, a melting pot with all kinds of people – the rich, the poor, white people, some Chinese, Filipino, Jewish and black people – they're all here. If you started in New York you were dealing with the biggest guys in the world. You're dealing with Charlie Parker and all the big bands and everything. We got more experience working in Seattle."**

This quote reminds me of Warren Buffett and Charlie Munger talking about the advantages that can come from living in Omaha and Pasadena respectively. Buffett has said:

"In some places it's easy to lose perspective. But I think it's very easy to keep perspective in a place like Omaha. "It's very easy to think clearly here. You're undisturbed by irrelevant factors and the noise generally of business investments. If you can't think clearly in Omaha, you're not going to think clearly anyplace."

3. **"People gave [music] up to chase money. When you go after Cîroc vodka and Phat Farm." "I've been driven all my life by a spirit of adventure and a criminal level of optimism." "You can't get an album out because nobody buys an album anymore." "They sell 4.5 million albums and they think it's a hit record. It's a joke. We used to do that many every weekend in the 80s." "If these people had paid attention to Shawn Fanning 20 years ago, we wouldn't be in this mess. But the music business is still too full of these old-school bean counters." "We're in another new business now. And we're going to get there. We've got to grow into the business now."**

Once music became digital it became what is called a public good (non-rival and non-excludable). Making money from hard goods that are rival like I wrote about on my Sammy Hagar post makes sense. Or you can put the music in a server and sell it as a streaming service like Spotify.

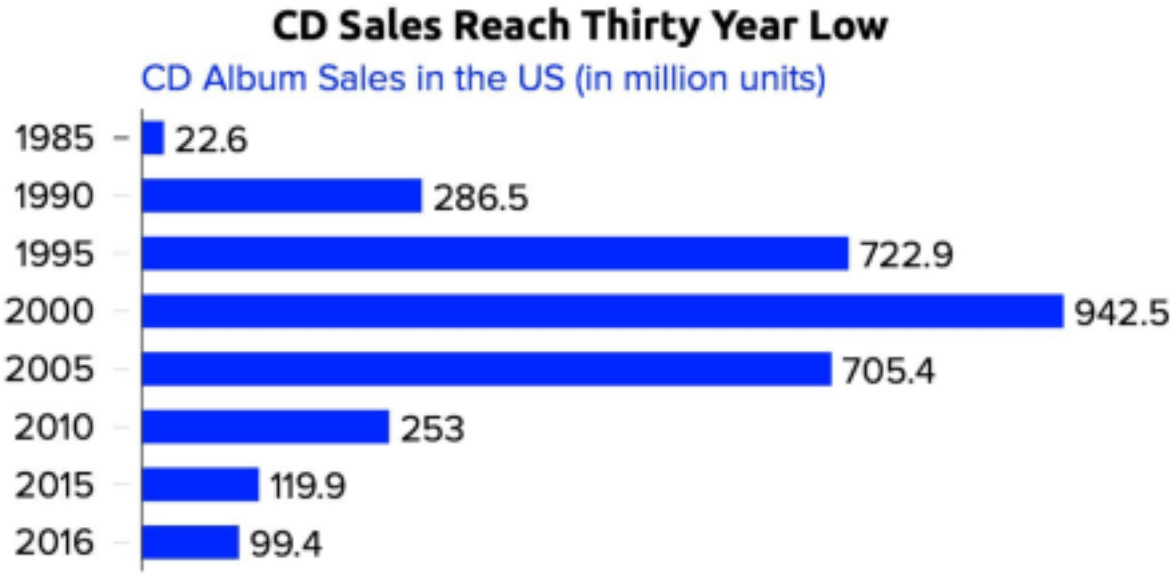

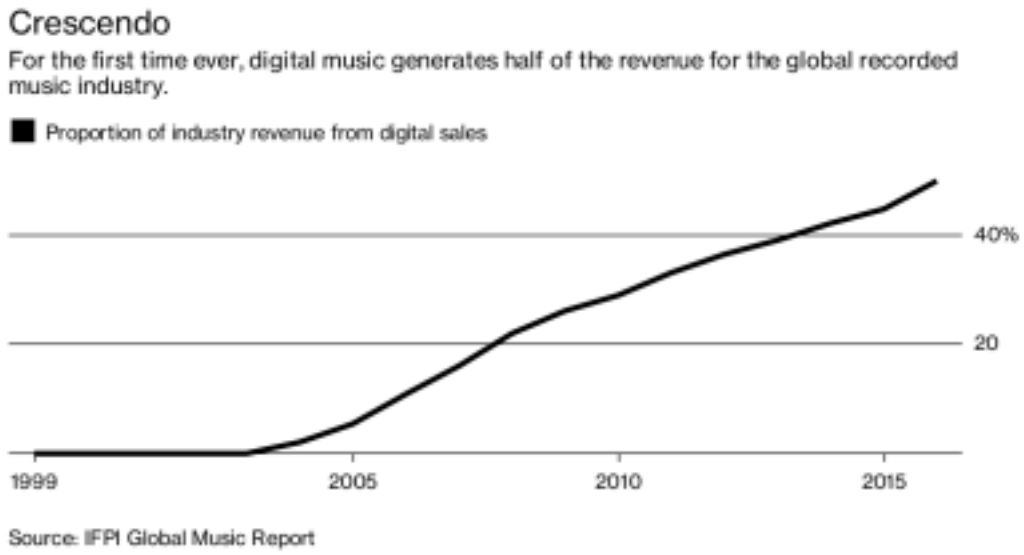

I have written before about the need for musicians to have a basic business education. The band leader and producer Bumps Blackwell, who is in the picture with Jones below, took time to teach artists the business side of music, “because I don’t want my pupils to be unprepared like I was, like [Little] Richard was, like we all were.”

Bumps Blackwell with Quincy Jones on Trumpet

4. **"It's amazing how much trouble you can get in when you don't have anything else to do."**

The key to the style of an investor like Buffett is patience. He has said: "The stock market is a no-called-strike game. You don't have to swing at everything – you can wait for your pitch. The problem when *you*'re a money manager is that your fans keep yelling, '*s*wing, you bum!'" very often the best thing you can do is nothing. But to balance this you must be aggressive when the time is right.

5. **"Cherish your mistakes, and you won't keep making them over and over again. It's the same with heartbreaks and girls and everything else. Cherish them, and they'll put some wealth in you." "You cannot get an A if you're afraid of getting an F." "If they overestimate you, they get in the way. If they underestimate you, they get out of the way."**

Jones and Munger share this sentiment about the value of mistakes. Rub you nose in your mistakes advises Munger, but then move on after you have learned the lessons. If nothing is

ventured in an investment, then nothing will be gained. The key is to make sure that you are more than compensated for the investment risk taken on by obtaining a margin of safety. Sometimes an investor will believe there is an upside is available from an action, but it is not really there.

6. "I never cared about money or fame, and I don't care now. I follow the groove, and money always follows." "I have never in my life made music for money or fame. Not even Thriller. No way. God walks out of the room when you're thinking about money."

Missionaries have more success in business than mercenaries**.** Many missionaries get an arrow in the back, but they possess a reality distortion field which means they do not see that risk as applicable to them (i.e., just other founders). Mercenaries run away too easily so fewer of them survive. Missionaries work harder because they are driven by a cause.

7. "Ghetto Gump! I don't know how it happened. I had nothing to do with it. It's divine intervention."

Jones is talking about the importance of luck in this quote. I have often told people over the years that I am a "Technology Gump." During my life I have ended up in a range of important situations in the technology business. That is mostly the result of some early luck the benefits of which compounded over the years.

8. "You could spend a million dollars on a piano part and it won't make you a million dollars back. That's just not how it works." "At the recent South by Southwest [an annual music festival in Austin], they had over 1,900 musicians, but fans didn't know where to go."

Selling something like music is super interesting topic and the best discussion of that is the Duncan Watts essay entitled: "Is Justin Timberlake a Product of Cumulative Advantage." You can find a link to this essay in the notes. Watts writes:

"Ultimately, we're all social beings, and without one another to rely on, life would be not only intolerable but meaningless. Yet our mutual dependence has unexpected consequences, one of which is that if people do not make decisions independently — if even in part they like things because other people like them — then predicting hits is not only difficult but actually impossible, no matter how much you know about individual tastes. The reason is that when people tend to like what other." ..What our results suggest is that because what people like depends on what they think other people like, what the market "wants" at any point in time can depend very sensitively on its own history: there is no sense in which it simply "reveals" what people wanted all along. In such a world, in fact, the question "Why did X succeed?" may not have any better answer than the one given by the publisher of Lynne Truss's surprise best seller, "Eats, Shoots & Leaves," who, when asked to explain its success, replied that "it sold well because lots of people bought it."

9. "Frank Sinatra used to tell us every day, 'Live every day like it's your last. And one day you'll be right.'" "Just get up every morning. If your elbows don't hit wood you're in good shape."

Life is short. When you friends start to die regularly you feel this acutely. My father is 89 and says he is more or less the only person still alive of the people he went to school with. He

does not read the obituaries any more since "there is no one left." How many summers do you have left? Each one is precious. As is each day.

10. "Je ne regrette rien de tout. I don't regret shit."

When one door closes another door opens, so it is wise to focus on the open and not the closed doors. Like envy, regret is a useless emotion that you can't have any fun with. At least with lust and gluttony, you can harness them to create a very fun weekend.

11. **"Ray (Charles) and I had a saying: 'Not one drop of my self-worth depends on your acceptance of me.'"**

The older I get the less I care about what other people think about what I say. This is a very liberating thing. Being able to say what I mean feels good. Do you know the difference between ignorance and apathy? I don't know and I don't care.

12. **"I feel like I'm just starting. It seems like at 84 all the things you used to wonder about come clear to you."**

This quote from Jones reminds me of a joke:

An old guy walks into a bar and the bartender asks for ID. "You've got to be kidding," he said. "I'm almost 60 years old." The bartender apologizes, but says he had to see the license. The guy shows his ID, then pays and tells the bartender to keep the change. "The tip's for carding me," he says as he leaves. The bartender put the change in the tip cup. "Thanks," he says. "Works every time."

Jones has said about jokes like that: "I've always thought that a big laugh is a really loud noise from the soul saying, 'Ain't that the truth.'" Almost every joke isn't funny to someone. Humor is tricky.

P.s., One more Quincy Jones quote: "I always get in trouble, you know. My daughter Kidada calls me LL QJ — Loose Lips." Sometimes you need to know when to shut up. Charlie Munger said once on this topic: "Disguise your judgement. You don't need to show people how smart you are. I didn't learn this until my early 80s."

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Business Lessons from Jess Lee (Sequoia Capital)

May 11, 2018

Jess Lee is an investing partner at Sequoia Capital and the former chief executive officer of Polyvore (a fashion web site allowing users to create shareable collages of clothing and interior designs). Before being CEO at Polyvore, Lee was a Product Manager at Google. She started her career at Google by working on the shopping engine Froogle before becoming product manager of Google Maps.

1. **"In the early days of a startup as a founder you are really focused on building your product. If you have built a product before you know you must measure a lot of aspects of the product. You will measure your conversion funnels, you will instrument your product to capture all the analytics and the event data and you will carefully build a system to measure the health of your product."**

The first phase of a startup's development is about proving "the value hypothesis" and the second phase is about proving "the growth hypothesis." Lee is saying that startups that can apply modern telemetry and analytics systems during these discovery processes have a vast competitive advantage. Simply put, businesses that have these telemetry and analytics systems can run more experiments more quickly and are more often are able to make decisions based on fact rather than just guesses. If a competitor can measure and manage their business better than a startup can manage its business, the founder of that business is in deep trouble.

Even though Lee talks about the importance of data and analytics she makes it clear that there are still aspects of product development that are an art. Lee describes it this way: “The best consumer companies reinvent the way we live. The art is in understanding the user, creating a kernel of delight, and having the resilience to ride out the storms.” The venture capitalist and entrepreneur Sarah Tavel has said something quite similar:

“Ultimately when evaluating an early stage company, I say it’s a combination of art and science. The art is understanding how products work, the science is knowing how to measure it. The earlier the company, the more it is about art, which in this case is assessing what I think of the product and the use case.”

Lee specifically refers in the sentences in bold above to one key business process called a “conversion funnel” which is a way of describing how often visitors abandon, pause or continue on a given path toward the objective of the business. By deeply understanding a consumers’ journey through a funnel, a business can maximize the number and quality of the visitors who eventually become customers and the products that they buy. Breaking down each step in that journey and running many experiments related to that experience are an essential part of almost any modern business. One essential element of this work is the application of the scientific method to business processes (i.e., build, measure, learn, alter/reject and repeat).

The value of modern data science systems has resulted in a huge shift in the skills needed by businesses today, which is reflected in this salary pyramid depicted below. Professions like machine learning engineer and data scientist are commanding substantial salary premiums because they help businesses add new value for customers.

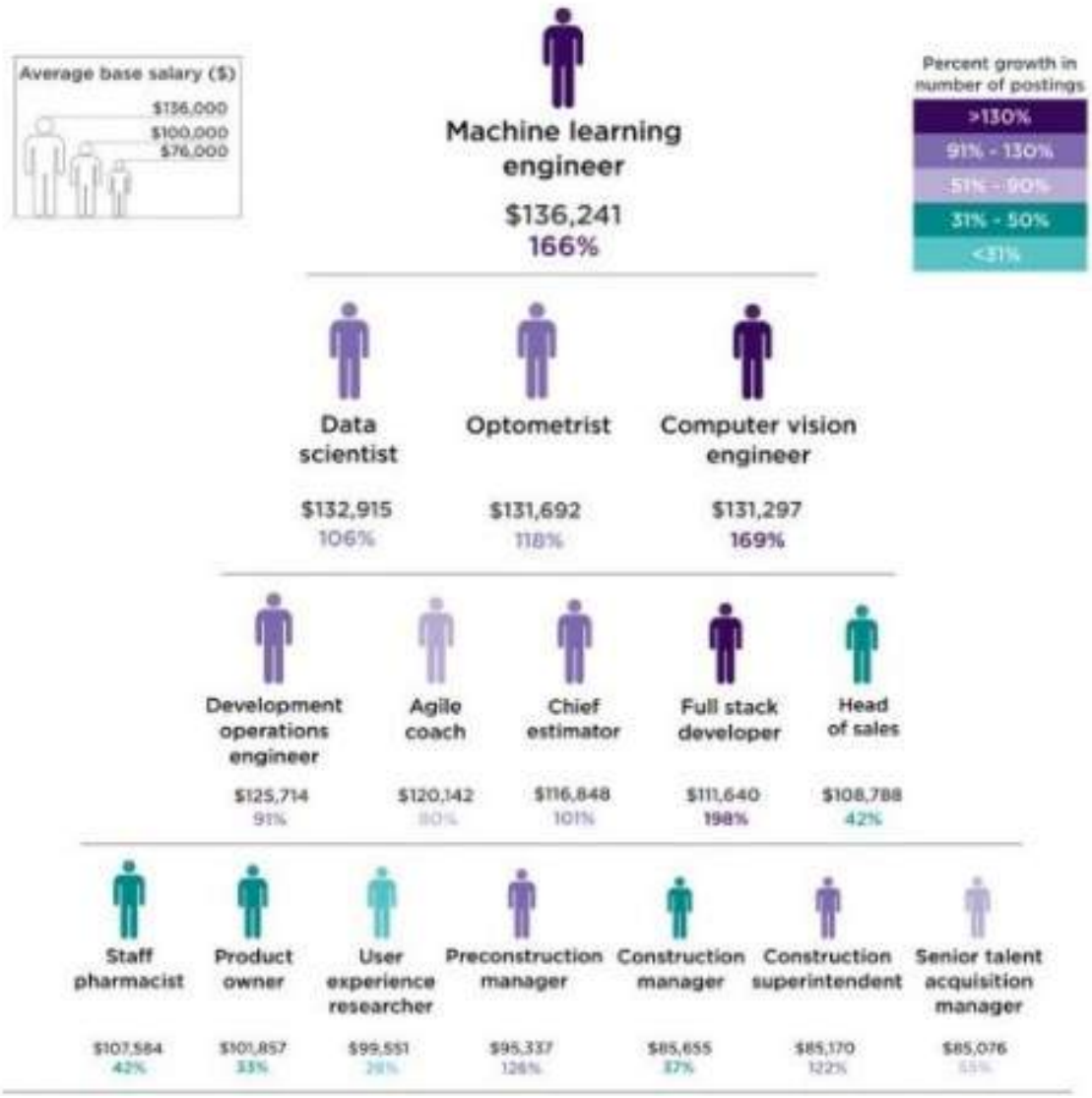

2. **"As your company grows your focus as a founder shifts from not to just the day-to-day of the product but the day-today of the company and the organization. Your product becomes your company. The same rigor you applied to your product, you must apply to the company. What you are trying to do is build an operating system for your company, the same way you tried to build a system for your product." "Culture is a huge competitive advantage."**

Lee is saying that as the business grows it becomes important to "instrument the business." Accounting, human resources, product development and other systems are must be created by the founders and key performance metrics (KPIs) chosen. As an example, as a business grows what was once done on spreadsheet will eventually need to be upgraded in sophistication, so the business can scale. A founder must also devote time and effort to building a strong culture since that culture will determine what employees will do when they want answers to questions and no one is there to answer them. Simialarly, the team that founder can hire will determine the nature of the business that they build. Since recruiting and hiring the right people is essential, the amount of time that should be devoted to those processes is greater than most people believe. The best founders know this instinctively, while others must learn this lesson the hard way. For example, a bad early hire can be hugely distracting and harmful

to a business. You may say "well that is obvious." Well I suggested that until you have actually experienced this you will underestimate the impact of a bad hire.

3. **"If I have a slightly better innate understanding of a customer that might give me a competitive advantage."**

The best missionary founders have the advantage Lee describes in the previous sentence. They want to solve a problem they deeply understand because they share the customer's core problem. They have less need to rely on third party research and can make more informed decisions. The best founders maintain "beginner's mind" when it comes to solutions and approaches. The best example from my own life of this is my friend the cable TV and wireless pioneer Craig McCaw. From the very first time I met McCaw I knew that he was a savant about what customers want and potential solutions to their problems. He truly "thinks different" than other people when he handles a product or encounters a service. One interesting aspect of his personality and working style is that McCaw has dyslexia and so he views the world in a very different way. This has been a huge business advantage for McCaw over the years.

4. **"A lot of people spend time pitching the solution, but they don't really explain the problem, and it should be so crisp and clear what the problem is you're solving that the solution almost just floats from that."**

If a founder can't describe the problem and the solution to that problem in a few declarative sentences they have not given enough thought to these critically important aspects of the business. The Jeff Bezos idea that people must write a memo before a meeting is an interesting example of this principle in the real world of business.

Lee also believes, like Jeff Bezos, that everything should start with the customer and most specifically the customer's problem. Bezos puts it this way:

"There are many ways to center a business. You can be competitor focused, you can be product focused, you can be technology focused, you can be business model focused, and there are more. But in my view, obsessive customer focus is by far the most protective of Day 1 vitality. Why? There are many advantages to a customer-centric approach, but here's the big one: customers are always beautifully, wonderfully dissatisfied, even when they report being happy and business is great. Even when they don't yet know it, customers want something better, and your desire to delight customers will drive you to invent on their behalf. No customer ever asked Amazon to create the Prime membership program, but it sure turns out they wanted it, and I could give you many such examples. Staying in Day 1 requires you to experiment patiently, accept failures, plant seeds, protect saplings, and double down when you see customer delight. A customer-obsessed culture best creates the conditions where all of that can happen."

4. "I look for the ability to explain complex things simply. That applies to so many things. It's your elevator pitch when you're talking to investors. Your ability to communicate to your team, and even more important than that though, to be able to run an all-hands and explain to your team where you're going and how you're going to get there."

Being a founder is hard to do well if you don't know how to sell. A founder's sales skills are put to the test in many settings. Founders must sell to investors, potential employees, employees, suppliers, distributors, the press and customers. As just one example, employees know when an all-hands is poorly run or a founder does not understand the issues facing the company. Often the problem is that the presenter has not done a good job selling the ideas. Lee has made some very interesting statements about the fact that she is an introvert CEO:

"I don't think I quite fit the traditional mold for what a CEO is supposed to be like. Personality-wise, a certain set of skills, being introverted—none of those things are your classic CEO. Figuring out how to lead in my own style, authentically, has shaped me tremendously. I have a lot of 1:1 conversations with people, which means that I have more time to get know someone better, or time for them to tell me if there's a problem."

I have found over the years that there is no one successful type of CEO. All of these successful CEOs vary in many ways except for one common factor: they all surround themselves with people who complement their skills and weaknesses. Ray Dalio explains this need to surround yourself with smart people particularly well.

6. **"I look for a founder who has unique insight."**

The job of a founder is to try to create product or service which is sufficiently unique that constraints are placed on other businesses which who desire to provide a competing supply of those goods or services. What this means is that the essential task is defining how a business can be unique. Creating a business strategy is fundamentally about making choices. It is not just what a business does, but what it decides not to do, that defines an effective strategy. Harvard Business School Professor Michael Porter argues that doing what everyone must do in a business is operational effectiveness and not strategy.

Unique insight is what leads to innovation which will be the source of both new value and an ability to capture that new value via a sustainable competitive advantage. Unique insight means "thinking different" in the manner of Sara Blakely, Oprah Winfrey, Steve Jobs, Bill Gates, Wang Laichun, and Jeff Bezos. They all found unique answers to these questions: What aspects of the business which people mistakenly believed was a rule will the business break that creates new value? What methods exist that no one has seen before? The people who most often create unique compelling offerings for customers are true fanatics. Jim Sinegal of Costco is just such a fanatic.

The importance of sustainable competitive advantage to a business can't be emphasized enough. Making the same product as your competitors and expecting to earn a profit greater than your cost of capital is a triumph of hope over experience. If a business sells pizza in a strip mall they do not want lots of competitors who make essentially the same pizza in that same mall or even in the same neighborhood. Every business is the same since the supply of alternatives will determine the pricing power of the business. Sometimes a person will say that some sustainable competitive advantage does not matter, but it usually mean that they are trying to sell investors a story that covers for the facts that they are not earning a return on capital.

7. "Consumers can be fickle — in love with a service one day and over it the next."

A business that obtains product/market fit can lose it as quickly as it is attained. The same factors and forces that build a business up can quickly tear it down. Word of mouth can tear apart product/market fit unpredictably and suddenly.

8. "Startups are really hard. I know that from personal experience. A million variables have to line up for things to work out, and sometimes it feels like everything that could have gone wrong is going wrong." "The average exit time for a successful startup is eight years. There's no real overnight success. Pick an idea and a co-founder that you'd be excited to be married to for at least eight years."

Every business faces a dynamic environment and the best entrepreneurs that I know are like a skilled pilot of an airplane in that they "fly" the business though what is essentially turbulence. Each business is what is called a complex adaptive system operating in a nested fashion and in an interconnected way with other complex adaptive systems. A full explanation of the previous sentence would be a good topic for another blog post. What I can say is that everything in business has many interconnections that create processes that feed back on themselves making the world unpredictable with certainty. This is what makes business and life fun and challenging.

Acquiring skill in an activity like creating or investing in a startup with feedback cycles that are measured in years is particularly challenging. This places a premium on a person's ability to learn vicariously. Charlie Munger believes:

"How do some people get wiser than other people? Partly it is inborn temperament. Some people do not have a good temperament for investing. They're too fretful; they worry too much. But if you've got a good temperament, which basically means being very patient, yet combine that with a vast aggression when you know enough to do something, then you just gradually learn the game, partly by doing, partly by studying. Obviously, the more hard lessons you can learn vicariously, instead of from your own terrible experiences, the better off you will be. I don't know anyone who did it with great rapidity. If we had been frozen at any given stage, with the knowledge hand we had, the record would have been much worse than it is. So the game is to keep learning, and I don't think people are going to keep learning who don't like the learning process."

9. **"There are some classic things that pretty much all VC's look for, like a very large market, a founding team that's capable. I also look for grit because it takes a really long time to build a great company. You want someone who can weather the storms and who can go through the ups and downs." "It's almost irrational to start a company because the odds are so bad. You need to have a lot of grit."**

Getting through the inevitable problems that arise during what Scott Belsky calls "the messy middle" between the initial days of a startup and eventual success of the business will require grit. Angela Duckworth, a professor of psychology at the University of Pennsylvania believes: **"**Grit isn't how intensely, for the moment, you want something. Instead, grit is about having what some researchers call an 'ultimate concern' – a goal you care about so much that it organizes and gives meaning to almost everything you do." You will know grit when you see it and can work to create more of it in yourself. That also is a good topic for another blog post.

10. **“If I could help the next generation of entrepreneurs and founders, and help them maybe shave off a day here, not make a mistake that I made, or just advise a little bit, I would feel great about that.”**

Being able to take pleasure in helping others achieve their dreams is an attribute you will inevitably find in the best venture capitalists. Of course, an investor should roll up their sleeves and work side by side with the founder when appropriate, but it is, in the end, the founder’s mission. Helping another human being know and do more can be a very satisfying thing. For this reason the best venture capitalists tend to be great teachers.

11. **“You can read a lot about management best practices, but there’s no replacement for actually doing it.”**

People learn best when they are doing something in the real world. The best way to become an investor is to invest. The best way to become a manger is to manage. These things are true because the most important aspects of an activity in business are not teachable solely in a classroom. Warren Buffett is a huge believer in the value of real world experience in business, He said once: “Can you really explain to a fish what it’s like to walk on land? One day on land is worth a thousand years of talking about it, and one day running a business has exactly the same kind of value.”

As an example from my own life, in the late 1990s I was asked to find a venture capital firm that might be a good fit for co-investing with the private equity firm Eagle River where I was partner. I met with several venture capital firms in Silicon Valley and we decided that Benchmark was the best fit for us. I stated flying to San Francisco each Monday from Seattle and staying in a hotel all week. I learned more about business and investing during this time than perhaps any time in my life. The experience of attending Benchmark partner meetings was like being in a greatest business classroom in life. I attended one about a year ago and it reminded me of how fun and enriching those meetings can be. Watching how the partners analyzed an investment and people was the very best type of case study possible. The way they interacted as partners and people was highly educational and fun to observe. I felt like I was watching a professional basketball team play every time I was in a meeting in their offices. I have maintained many friendships from that period that I treasure still.

12. **“You learn from people, so find the best people and observe them.”**

Many people have a limited view of what a mentor relationship should be, which is unfortunate.. The original mentor was described by Homer as a “wise and trusted counselor” named Athena. Odysseus made him the guardian and teacher of his son Telemachus which creates an image of an older and more experienced person mentoring someone who is younger person. This language from an academic paper describes a traditional mentoring relationship:

“Mentors help their proteges by providing two general types of behaviors or functions: career development functions, which facilitate the protege’s advancement in the organization, and psychosocial functions, which contribute to the protege’s personal growth and professional development. The presence of a mentor is associated with an array of positive career outcomes: Proteges receive more promotions, have higher incomes, and report more mobility and career satisfaction than non proteges. Mentoring has also been found to have a positive impact on organizational socialization, job satisfaction, and reduced turnover intentions.”

Athena's relationship with Odysseus is representative of only one type of mentor relationship. In short, a hierarchical model of what a mentor can be vastly limits the scope of what can be gained from a mentor. Mentors as broadly defined are everywhere, if you know how to find them. Andy Rachleff makes the point with an example from his own life:

"My best mentor was actually a classmate of mine from business school who I recruited to be my partner at the firm that preceded Benchmark Capital. His name is Bruce Dunlevie. And he has the best judgement of anyone I've ever met. And is the best ability to influence people of anyone I've ever met. And he's my exact opposite. Which I think is really valuable in a relationship. I think that's true in my marriage, my wife and I are very different. She's had a tremendous impact on me. But watching the way that Bruce was able to influence people had an enormous impact on me and made me realize how much better I could be if I could influence in a way that didn't feel like there was a lot of overhead or push. And I can't tell you how much better that made me. How much more confident it made me in what I do. I owe a tremendous amount of my success to someone who's my peer in terms of age. He's only two years older than I. But he's the best mentor anyone could ever have."

To illustrate my point about peer mentoring relationships further, I will write about two examples from y own life that some people would not think of as a mentoring relationship.

The first nontypical mentoring relationship developed while I was working as a consultant in Seoul Korea in 1983. Soon after I arrived in Korea I met a young expatriate named Ken Jennings. During his lunch break Ken liked to visit the electronic component and computer markets in an area of the city called Cheonggyecheon. He spoke excellent Korean and so tagging along with him allowed me to understand how the PC hardware far better. The clone of choice in Korea at that time was an Apple II.

Ken has a way of digging into topic after topic via self-education. He is one of those people Charlie Munger had in mind when he said that the smartest and most successful people are "learning machines." That his son would later become the famous Jeopardy Champion of the same name was not surprising in many ways. Both the father and son love to learn.

The second nontypical mentoring relationship that impacted me involved an entrepreneur named Dan Kohn who was the founder of NetMarket. This business was initially conceived while he was studying at the London School of Economics. The business started out selling goods like CDs and books for various offline stores on the Internet using non-digital payments. But in August of 1994 NetMarket sold Sting's CD "Ten Summoners Tales" to a customer in Philadelphia using a credit card over the Internet. The *New York Times* characterized this as: "apparently the first retail transaction on the Internet using a readily available version of powerful data encryption software designed to guarantee privacy."

NetMarket was purchased by CUC International and Dan like most new college graduates started looking for a job. I was working at a company called Teledesic that managed to convinced Dan to move to Seattle and become the 5th employee. I have written about my Teledesic experience on this blog previously. The Internet was in its earliest days. Dan taught me about the Internet in much the same way Ken Jennings taught me about Apple clones. Once Dan brought me up to speed we started learning learned new things about the Internet together. Dan is now Executive Director of the Cloud Native Computing Foundation.

Neither of these two important relationships in my life involved an older person many people associate with a mentor relationship. Ken was my peer and Dan was significantly younger. Both were mentors for me. I would like to think I was a mentor for both of them too on other topics since the best mentoring relationships are reciprocal. I have had many mentors like Ken and Dan over my life and I expect that I will have any more. The key to starting these relationships is being ready to give to the other person or more likely giving of yourself first. Most mentoring relationships are mutually beneficial rather than top down.

How do I close this post? How about a quote from Sarah Tavel

"Find a great mentor. I was incredibly lucky to get hired by Jeremy Levine at Bessemer. Not only is Jeremy one of the best investors out there, he also has that rare quality that he invests in the people around him. Jeremy went out of his way to teach me the craft of venture – many times, it would have been easy for him to do something himself, but I wouldn't have learned if he had. He asked me to do it, and then gave me feedback on what I'd done. But it's important to note here that there was a symbiosis to the relationship: I didn't just take from Jeremy, I gave too in the form of sourcing deals, giving him leverage on diligence, etc. Don't expect a mentor to just give you value – you need to be able to tit for tat."

End Notes

Videos on Jess Lee:

https://www.youtube.com/watch?v=EgPL7-WyC1o

https://www.youtube.com/watch?v=bRisoL4DDPc

https://www.youtube.com/watch?v=cwjZHFMdgLk

https://www.youtube.com/watch?v=AWePL14y6ZM

https://www.youtube.com/watch?v=KYFrKL7yT9Q

https://www.youtube.com/watch?v=A61oWJfnAuo

https://www.sequoiacap.com/people/jess-lee/

https://www.youtube.com/watch?v=KYFrKL7yT9Q

Reading about Jess Lee:

https://www.fastcompany.com/3053789/this-ceo-actually-encourages-her-employees-to-go-out-and-start-their-own-c

https://www.productmanagerhq.com/2017/03/product-qa-jess-lee/

https://medium.com/taking-note/podcast-taking-note-of-company-culture-with-jess-lee-ff6190d7d64e

https://jotengine.com/transcriptions/iGDw7VBfejJ0505n0NC37A

http://ecorner-legacy.stanford.edu/videos/3029/Learn-by-Working-in-Large-Organizations

https://medium.com/@stevesi/there-are-some-great-thoughts-about-product-management-in-this-post-i-shared-this-broadly-4f62268beaa1

Business Lessons about Growth from Andrew Chen (Andreessen Horowitz)

May 19, 2018

Andrew Chen is a general partner at Andreessen Horowitz. Previously, he led the Rider Growth teams at Uber. He holds a B.S. in Applied Mathematics from the University of Washington. He is a prolific writer and insightful Twitter participant. Speaking of Twitter, some of the quotations below are compiled from tweetstorms and are marked with an asterisk.

1. **"Without growth, you have nothing, and the status quo is death." "Scaling growth is hard."**

In one of his many blog posts, Chen points readers to a quote by the co-founder of Y Combinator (Paul Graham), who frames the challenge well:

"A startup is a company designed to grow fast. Being newly founded does not in itself make a company a startup. Nor is it necessary for a startup to work on technology, or take venture funding, or have some sort of 'exit' The only essential thing is growth. Everything else we associate with startups follows from growth."

Generating greater growth is such a big challenge that many businesses today have created dedicated "growth teams." A growth team's mission is to understand, measure and improve the flow of users into and out of the products offered by a business. Every aspect of a product has the potential to help make the business grow. Or not. The opportunities for a growth team to create growth by making wise product choices are nearly endless since it is simply not possible for a product to be technically neutral. For example, there are many ways to reduce friction, expose new value and facilitate sharing to create new value for a business.

The success of a growth team is measured by metrics which can ladder up or down depending on the starting point (top down or bottoms up). On a top down basis you can see from a macro point of view how the business is performing in trying to grow the net present value of future cash flows. One a bottoms up basis you can see on a micro basis how the business is performing in growing the net present value of the cash flows of each customer. Accounting rules and regulations require that business a top down assessment of the business but too many firms do not do the bottoms up analysis. What is lost by only looking top down is the opportunity to capitalize on the fact that customers are heterogeneous rather than homogeneous. Some customers are much more profitable than others. Modern data science tools and systems allow the business to closely track this heterogeneity. Optimizing business processes for an average customer is often highly significantly sub-optimal because of the high variability of customers. Without a the benefit of a process of that looks at the business on the basis of customer by customer data, a major opportunity for the business can be lost.

Growth teams track and measure customer journey in terms of a customer acquisition funnel. The term funnel is a metaphor for a process which tracks and measures how effectively a business is attracting, engaging, converting, and retaining its customers. Chen's recent tweetstorm's about topics like funnels will resonate with anyone who is or has worked with a growth team. While the results of the work of a growth team can be tracked an measured quantitatively often what produces the results is qualitative since a business is not a machine but rather the outputs of a nest of complex adaptive systems. The reality is that not everything that matters can be counted and not everything that can be counted, matters. What this means is that a modern growth team does as its work is both an art and a science. Reconciling both top down and bottoms up models is required.

2. **"Growth is an after effect of strong product/market fit and great distribution."**

If the product isn't something that people want to pay money for no amount of effort by a growth team will achieve the objective. Y Combinator's Jessica Livingston puts it this way: "Our motto is to make something that people want. If you create something and no one uses it, you're dead. Nothing else you do is going to matter if people don't like your product." Great growth teams magnify what consumers love about a product and how they spread that love. Too many businesses charge off trying to grow before they have product/market fit and die. The pressure to grow a business can be enormous, but if the product/market fit does not exist the message being sent is negative (i.e., it is spam).

3. **"Addiction to paid ads is bad."**

After some low hanging fruit is harvested (i.e., after some friends and family buy the product), acquiring customers will always cost real money. This is an unavoidable truth. A business can acquire customers with paid marketing (inorganic) or acquire them by using the product itself or aspects of the product as the means or acquisition (organic). Some customer acquisition cost very little and some costs an enormous amount. Whether that sales load can create net present value (NPV) depends on the totality of the unit economics of the business. Life is better if your CAC is not too high. What is too high? It depends. But as in the story Goldilocks and the Three Bears and with product/market fit you will know I when you feel/see it because it will be "just right."

Inorganic customer acquisition via paid marketing is one of the fastest methods ever invented for a business to consume cash. It is also one of the easiest ways to "strand" capital since customers can leave before the business recovers that cost of customer acquisition. Some businesses today spend huge amounts of money to acquire customers. Rules of thumb like the "Rule of 40" have been developed to give business some guidance. Fred Wilson describes the rule with some examples:

"If you are growing 100% year over year, you can lose money at a rate of 60% of your revenues

If you are growing 40% year over year, you should be breaking even

If you are growing 20% year over year, you should have 20% operating margins

If you are not growing, you should have 40% operating margins

If your business is declining 10% year over year, you should have 50% operating margins"

This chart below illustrates how no two companies are quite the same as measured by the rule and that there is significant variability.

The Rule of 40 is not the only factors to be considered since you must also consider free cash flow, whether the business is generating network effects and the ability of a business to raise funds at an attractive rate and other factors I have written about on this blog. Kristina Shen of Bessemer Venture Partners believes:

"…Growth will always be the most important metric in terms of numbers that help indicate your valuation. We believe that looking at an Annual Recurring Revenue to Growth (ARRG) multiple will be one of the great valuation frameworks that you can leverage as you go forward. What are some of the other valuation frameworks we can look at? Growth is always going to be the one we look at the most, but some of the others we look at, as well, your cap payback and your sales efficiency. Your churn, looking at what percentage of your customers are retaining on an annual basis. Your cash flow efficiency, which we define as your net new ARR divided by your net churn."

To calculate the ARRG multiple, divide the ARR multiple by year-over-year growth.

This dynamic complexity and the inability of a "capital allocator" to reduce the determination to a formula is part of what makes business and investing so much fun. All models are wrong, but some are useful. Sorting all this out in the best possible way is what makes a world class CFO so valuable. The CFO must take many factors into account including the current and likely future states of the capital markets. Looking at this set of issues in mid 2018, it may seem to some people that cash will never again be scarce, but anyone who lived through 2002 and 2008 knows that this is not the case. Business and capital market cycles and turn quickly and unexpectedly.

The sales and marketing battle between companies has become so intense that founders have been required to raise unprecedented amounts of money. As a result, what we see today are businesses going public with a founder who sometimes has only a three to four percent stake in the business. As a point of comparison from an earlier era, Bill Gates alone owned more

than 45% of Microsoft when it went public. The sales and marketing spending required to grow a business in earlier times was not the same as it is today. As a current example of high sales and marketing spending, this below is an S-1 filing from a recent public offering. The percentage of revenue devoted to sales and marketing is remarkable by historical standards.

	Year Ended December 31,		
	2015	2016	2017
Percentage of Revenue:			
Revenue:			
Subscription, license and support	90%	90%	92%
Services	10	10	8
Total revenue	100	100	100
Cost of revenue:			
Subscription, license and support	6	10	15
Services	12	8	7
Total cost of revenue	19	18	22
Gross profit	81	82	78
Operating expenses:			
Sales and marketing	79	70	66
Research and development	34	31	32
General and administrative	20	20	14
Total operating expenses	133	121	112
Loss from operations	(52)	(39)	(34)
Interest income (expense), net	(1)	—	—
Other expense, net	(2)	(1)	—
Loss before income taxes	(55)	(40)	(34)
Benefit from (provision for) income taxes	—	2	—
Net loss	(55)%	(38)%	(34)%

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It can be hard to determine the effectiveness of sales and marketing spending. John Wanamaker was a very successful retailer who started one of the first department stores in the United States. His chain of department stores grew to 16 and eventually became part of Macy's. He said once: "Half the money I spend on advertising is wasted; the trouble is I don't know which half." In a modern business world that 50% is wasted figure for advertising is too low. Businesses like Costco and Amazon have shown that it increasingly makes sense to spend money on benefits for the customer instead of shouting about how great the products are.

If paid sales and marketing does not scale well, what does a business do? The alternative is to generate growth "organically" based on the nature of the product and how people interact with other people and the products. Inorganic customer acquisition will typically require additional cost of goods sold (COGS), but if the approach is done correctly, it can be the most effective way to acquire customers. Some successful startups do not advertise at all until they reach significant scale. As an example, the growth teams that Chen writes and talks about are responsible for optimizing business models like freemium. The essence of the freemium business model is to reduce customer acquisition cost (CAC) when compared to the paid alternative (e.g., based on paid advertising). Freemium is an organic customer acquisition strategy which lowers CAC sometimes at the cost of higher cost of goods sold (COGS) in order to produce a higher LTV and increased growth. Customers acquired organically are of higher quality for the service provider (e.g., they churn less) than customers acquired via paid marketing (inorganic). My blog post on freemium is here.

4. ***"The Paid Marketing Shark Fin happens when CAC [customer acquisition cost] goes up over time, causing unprofitability, which then drives budget cuts, slower growth, and more cuts." "The first mistake is to start by thinking of everything as Blended CAC – dividing all your acquisition against dollars – as opposed to understanding CAC of each channel (Facebook, Google display, Google AdWords, etc.).**

A business with access to modern data science tools and systems which believes its customers can be understood well enough by looking at averages is missing a huge opportunity. Customers are far more heterogeneous than most people imagine. These tools and systems can give a business the ability to differentiate on a customer-by-customer and sales-channel-by-sales-channel based on transaction logs. Professor Peter Fader of Wharton points out:

"In the old days, when we didn't have the ability to see and measure differences, we had no choice but to create this idea of the average customer. But today, because of technology and the strategic importance of understanding customer differences, that's no excuse. In order to survive, businesses need to understand the differences in their customers' tastes, eccentricities, etc." "You really do need to allow for the fact that different customers are different from each other. You have some who are valuable, and some who are not so valuable; some who want to leave immediately, and some who are going to stick around for a very, very long period of time

5. *"This is an infuriating startup experience: You ship an experiment that's +10% in your conversion funnel. Then your revenue/installs/whatever goes up by +10% right?**

Wrong Turns out usually it goes up a little bit, or maybe not at all. Why is that? Let's call this the "Conservation of Intent." For all your users coming in, only some of them are high-intent. …Couple important lessons: Unblock your high-intent users. For Uber, that was things like payment methods, app quality (for Android especially!), the forgot password flow, etc. …When you focus on low-intent folks, you'll have to get creative to build their intent quickly. Things like being able to try out the product, having their friends into the product – these are the "activation" steps that generate intent. This is really a reflection of how working on product growth is really a combination of psychology and data-driven product. You can't just look at this stuff in a spreadsheet and assume that a lift in one place automatically cascades into the rest of the model."

As I noted above, the customers of a business are never homogenous. Every business will have high intent prospective customers and low intent prospective customers. They will have loyal customers and flakes. Businesses have valuable customers and customers they might want to send to a competitor since they generate a highly negative net present value. It depends.

Understanding the current intent of customers is critical. The venture capitalist Mark Suster writes:

"The three most important things to do with a sales lead [are] qualify, qualify, qualify. … The reality is that no matter how much you want to sell your products, you can't push them on a customer who isn't ready to buy."

What Suster is talking about applies to the work of a human-driven sales team but also to automated processes that can be reflected in a sales funnel. A funnel can have processes that are designed to increase intent, but that is a different issue than the importance of focusing on already high intent customers.

The most useful metaphor that people have found to describe a sales or conversion process is a leaky funnel:

People who are responsible for creating organic growth at businesses have been able to discover a range of processes that improve organic growth. In an e-book written based on interviews with Chen, he frames a significant growth challenge in this way:

"We live in world where it's easy to write code, but still hard to get the code into the hands of customers and users. Luckily, the same skills that make technology products possible – the analytical thinking that drives the engineering skills for product development – can be applied to 'engineering' the growth of your users as well."

Much of this engineering is based on the application of the scientific method to business processes like funnels using modern data science tools. The amount and frequency of experimentation required to discoverer optimal interactions with a prospective or actual customers process is astonishing to people who are not doing this work. And since every business and market is dynamic and constantly changing the need for this experimentation using the scientific method never ends. A skilled growth team is able to essentially discover invisible money that is harvestable by conducting rigorous growth experiments. This high positive financial return on growth experimentation in no small part explains why there is such a strong demand for data scientists and machine learning experts.

6. *"Most people, when they talk about viral marketing, are in fact talking about viral branding. There's another segment of viral marketing [in which] the entire focus of the PRODUCT (not marketing, but deep down into the product) is getting more people to use it…."You have features in your product that either drive growth or don't, and you have features in your product that either really help the value proposition, or don't. These are actually pretty independent factors and you can build product features that hit each different quadrant.

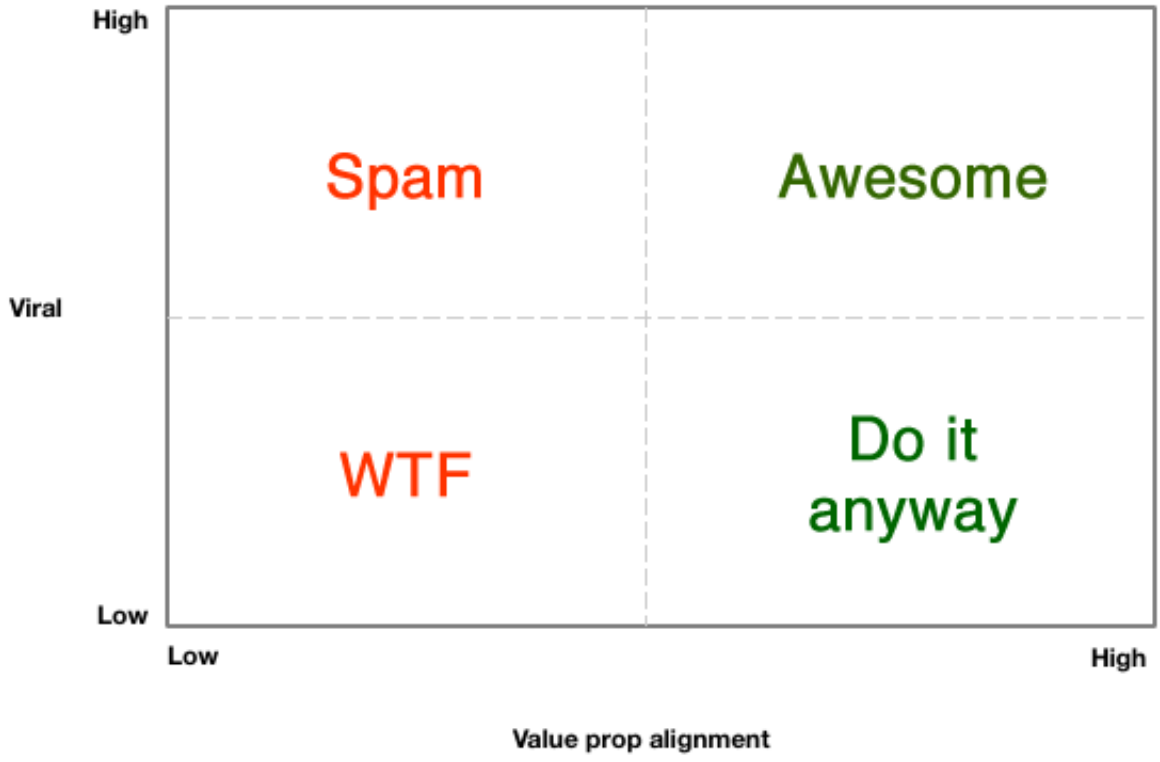

The products with the best unit economics are naturally viral. They have motions that are core to the nature of the product that are naturally about sharing something with other people. In other words, a feature like sharing naturally causes other people to learn about the product and to share it with their friends. Building a product and then trying to bolt on something that is viral later is rarely successful. This means that creating naturally viral motions should be part of the initial product development process and not something cooked up later by a marketing team.

My blog post about creating and measuring product virality is here. Chen is pointing out that viral word-of-mouth marketing (e.g., the restaurant I went to last night is great) is not a product with a naturally viral motion (e.g., Facebook). It is important to keep viral word of mouth about product quality separate from a viral process that is inherent in the nature of the product itself.

7. ***"Many of the biggest implosions in recent history – especially ecommerce – have been due to startups getting addicted to paid marketing while fooling themselves on Customer Acquisition Costs. As spend scales, it always gets more expensive and harder to track. …"Scale effects mostly work against you in paid marketing. The longer your campaigns run, the less effective they become – people start seeing your ads too often. The messaging becomes stale, and novelty effects are real. Market performance has a reversion to the mean. Saturation is also a thing. As you buy up your core demographic, the extra volume comes from non-core, who are less responsive."**

Every business has an upper limit on growth and it is just a question of when that limit appears and not whether it appears. The point where growth plateaus for any business is determined by the size of the addressable market. Andrew Chen has written a post in which he describes a business that has saturated its market as having "jumped the shark." That can happen when a company spends aggressively on sales and marketing in a business that simply does not have enough total addressable market (TAM) to justify the spending and then is hammered financially when sales start to plateau. This is an example of *Stein's First Law* at work: "If something cannot go on forever, it will eventually stop." To illustrate this point, SEO was once a great way to acquire customers but over time its value has significantly atrophied. SEO is still valuable, but as much as it once was. Sales channels and marketing techniques evolve and sometimes get better and sometimes worse. This "creative destruction" of sales channels and marketing approaches process is dynamic and not always pleasant for the business.

8. **"Getting to product/market fit is hard, and even though you feel like you're uniquely failing, you're actually not. Turns out every startup has to go through this, but not every startup survives it."**

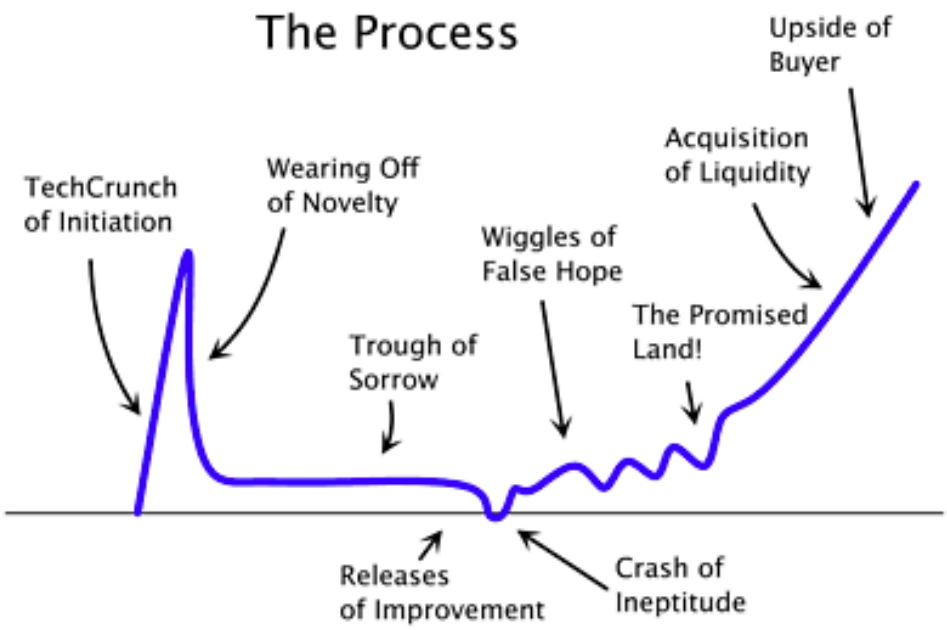

The journey founders and their teams must navigate in trying to find success is not simple, steady or predictable**.** The middle of these journeys are messy and emotionally taxing. Stressful events inevitably happen. For example, employees and even founders can leave the business. Founders can fight. Money can disappear to a point where the business is running on fumes. The startups that survive this process that Ben Horowitz in his book *The Hard Thing About Hard Things* calls "the struggle" are almost always populated by missionaries who have the necessary grit to overcome the challenges.

9. **"Competitive dynamics are real. They'll come in to copy not just your product, but also ad messaging and creative. It's not hard to fast follow."**

Barriers to entry in just about any business are declining due to advances in technology and business practices. The pace of competition is increasing and in a word: relentless. People who write or say that this is not true are not engaged in a real business and inevitably are pundits of some sort. one reason why competition levels are so high that it is easier than ever to enter many businesses since many of the basic elements can be purchased on an as needed basis rather than up front. As Professor Michael Porter writes: "It's incredibly arrogant for a company to believe that it can deliver the same sort of product that its rivals do and actually do better for very long." Innovation that delivers sustainable competitive advantage has never been so important. One way to look at a phenomenon like venture capital funded investments is as a business experiment generating machine. Failure is an essential part of this process and progressively more failure is inevitable as more experiments are conducted. One reason why Silicon Valley is so successful is that the area has a culture that has a high tolerance for and even celebrates failure. Every business can expect scores of new experiments to be funded every year that relentlessly attack its business. Exactly zero businesses are protected from this creative destruction competitive process by the tooth fairy. Every company can be disrupted by new entrants.

10. **"Time to Product/Market Fit has to be less than 1-2 years or else your startup will implode. Ask anyone who's been working on a product for more than 2 years and doesn't have traction to show: It really, really sucks. The first 6 months can be fun because it feels like you're painting on a blank canvas, but soon enough, there's just fatigue and the window of opportunity shifts. Platforms change, investors get disengaged, your employees start getting excited about other companies. So if you miss your window, then you'll run out of money or energy or both**."

A seed/early stage venture capitalist is making a bet that founder can find product/market fit. The patience of the financier is limited. Employees will also lose interest during this same time frame if the process takes to long to generate product/market fit. Wasting cash with frivolous spending during this period shortens the runway a business has to accomplish this key goal. The pressure to find product/market fit is so great that some companies pretend that they have found it and launch their growth efforts too early. This is called premature scaling and is almost always deadly. Do some businesses find product/market fit after they have started their growth phase? It can happen, but that outcome is neither a high probability event nor a wise idea. It is better to have a sound process than to rely on luck overcoming long odds.

11. **"Ideally the differentiation is baked deeply into the core of the product, not out on the edges. Something the end user can see and feel within the first 30 seconds of using the product."**

My blog post on what a growth team does is here. In that blog post I write about a challenge every startup faces: How can the potential customers be given an "A-ha" experience that demonstrates core product value in just seconds in ways that are almost frictionless? Chen is saying that delivering that differentiated experience quickly is a core challenge for every growth team. I could write more on this topic, but this post is already too long.

12. **"If you think about the idea that there's 10-15 companies every year who are breakouts, how many people really have first-hand experience making the right decisions to start and build breakout companies?" "With so few datapoints, the prediction models we generate as a community aren't great- they're simplistic and are amplified with the swirl of attention-grabbing headlines and soundbites. These simplistic models result in generic startup advice. [That can be] dangerous when applied recklessly to every situation."**

Industry data undeniably shows that financial success in venture capital reflects a power law. John Doerr has put it this way: "The key insight is that actual [VC] returns are incredibly skewed. The more a VC understands this skew pattern, the better the VC." In any style of investing it is magnitude of correctness and not frequency that matters (the Babe Ruth Effect). In venture capital, the failure rate is high enough that the math dictates that a very small number of winners will determine whether a particular fund will be financially successful. Venture capitalists are looking for significant optionality (an asymmetric upside) with a downside limited to what they invest (i.e., you can only lose 1X what you invest, but the potential upside is many multiples of what you invest).

To illustrate this point, in this chart which appears in a Chris Dixon blog post the Y-axis is the percentage of investments that lose money weighted by dollars invested per investment.

As you can see from the chart, failure happens often. Fortunately for skillful venture capitalists, so does a smaller number of outsize financial grand slams.

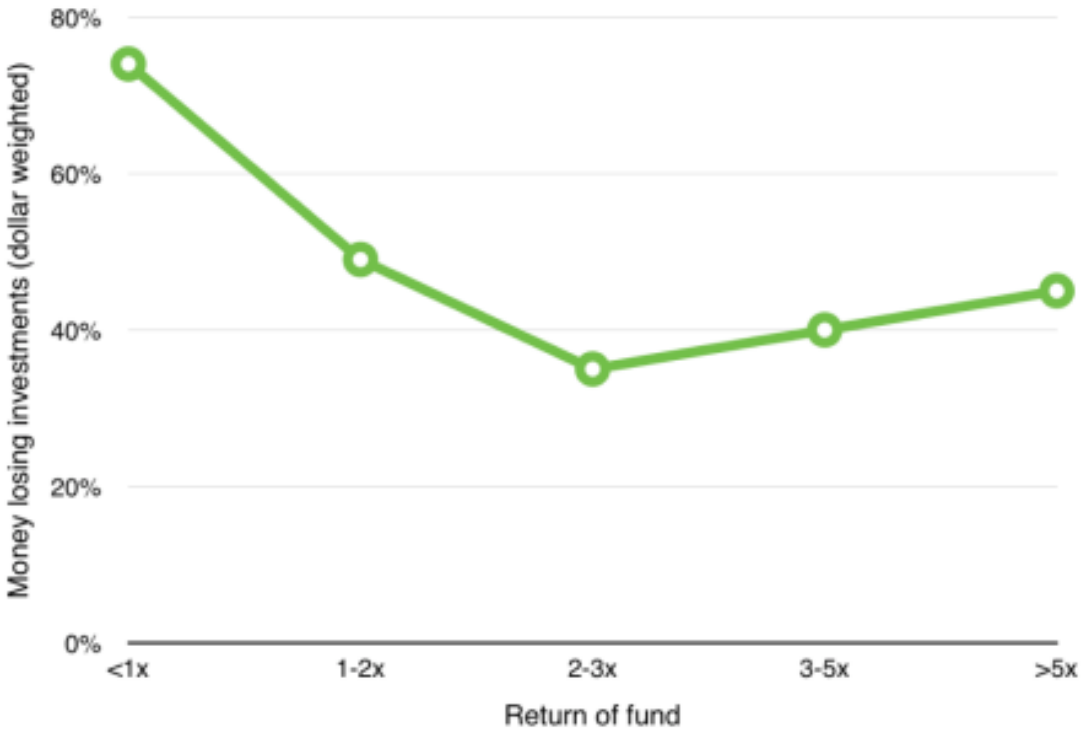

The creation of an enormous new business like Facebook is a rare enough event that people like to tell stories based on extrapolation of recent events and the particular path taken by these companies. Recency bias inevitably makes people recall and emphasize more recent events and observations than those that happened in the more distant past. Making matters worse is the fact that while stories about the path of a business in achieving that success are fun to write and read, they are not always reality-based. Michael Chrichton writes:

"Often, the article is so wrong it actually presents the story backward—reversing cause and effect. I call these the "wet streets cause rain" stories. Paper's full of them."

Mark Twain is often quoted as having said: "History doesn't repeat itself, but it often rhymes." It is wise to learn from the past, but also to expect the future to be different in important ways. Tomorrow's important successful new businesses will break what most people thought were "rules" or best practices in important ways. That is part of what creates innovation. These breakthrough successes will not be contrarian in every aspect of what they do but the will be unique enough that so that they will have found previously undiscovered optionality.

The grand slam financial success of a new business like Google will seem obvious to some people as they recall the path of the business to success. The unfortunate reality is that financial return from investing is generated from understanding the hidden value **before** it is discovered, not afterward. No points are awarded in investing or business for storytelling after the fact.

End Notes:

http://andrewchen.co

Featured essays: http://andrewchen.co/list-of-essays/

http://andrewchen.co/stop-asking-but-how-will-they-make-money /

http://andrewchen.co/facebook-viral-marketing-when-and-why-do-apps-jump-the-shark/

Business Lessons from Oprah Winfrey

May 26, 2018

Writing a blog posts about Oprah Winfrey is intimidating since she is such an influential and inspiring person. Including a short biography to start this post seems almost pointless since I can't imagine anyone reading this who does not know her story. It is possible that not everyone knows everything about her abilities as a businessperson and investor, but even that seems unlikely. The Oprah Show, O magazine, Oprah Radio, Harpo Productions and Oprah's Book Club are just a few of her many successes. As just one example, Oprah's recent successful investment in Weight Watchers has been well chronicled in the press. CNN writes: "Oprah Winfrey first bought Weight Watchers stock in October 2015 for $43.5 million. Her investment in Weight Watchers is now worth more than $400 million."

1. **"Books were my pass to personal freedom. I learned to read at age three and soon discovered that there was a whole world to be conquered that went beyond our farm in Mississippi."**

Few people demonstrate the power of reading better than Oprah. Her journey from a child living in poverty in rural Mississippi to where she is now, was powered by reading. Charlie Munger describes the importance of reading in this way: "In my whole life, I have known no wise people (over a broad subject matter area) who didn't read all the time — none, zero." Munger is using the word "wise" in a very specific sense. Oprah is most definitely wise. An interesting question that follows from that is: Why is Oprah so wise? What are the attributes which enable her wisdom? One important attribute of wisdom is the ability to know what you do not know. People who are unable to determine when something exceeds their circle of competence are not wise. Another important attribute of wisdom is understanding the importance of consistently "avoiding stupidity" instead of trying to be the "smartest person in the room." Another aspect of wisdom is the ability of the person to think broadly and to use many mental models in thinking about an issue or solving a problem. I can't convey all the points Munger makes in a short blurb on this blog post, but I can say that you should read the Munger essay on "Worldly Wisdom" linked to in the End Notes. .

2. "What material success does is provide you with the ability to concentrate on other things that really matter. And that is being able to make a difference not only in your own life but in other people's lives."

The best part of having the "material success" that Oprah is talking about is having great choices in life. The worst thing about having no cash or wealth is having few and mostly lousy choices in your life. As an extreme example, homeless person living on the street with

no money has a terrible set of choices every day. Chris Rock this same point simply: "Wealth is not about having a lot of money; it's about having a lot of options."

Having a cushion of cash is wise. People of modest means shop at dollar stores because they need to preserve optionality by maintaining a cash cushion. Even very rich people can find themselves having little or no cash even though they are wealthy on paper. That lack of cash can result in unpleasant outcomes for the otherwise wealthy person, like a forced sale of assets at an unattractive price. There are many wealthy people who learned this lesson the hard way when liquidity dried up in 2002 and 2008.

Having too much cash is also unwise. Warren Buffett once explained this tip a group of business school students in this way:

"The one thing I will tell you is the worst investment you can have is cash. Everybody is talking about cash being king and all that sort of thing. Most of you don't look like you are overburdened with cash anyway. Cash is going to become worth less over time. But good businesses are going to become worth more over time."

What amount of cash is "just right" in a portfolio? In a 2013 paper Vanguard argues:

"Each investor will have unique cash requirements, and the amount of cash to keep on hand will depend on a number of factors, such as liquidity needs, dependability of employment or other income sources, and level of financial conservativeness. The investor should first identify his or her specific needs by assessing major expenses and when those will come due, and then determine what assets are available to meet those needs. Separately, investors should keep a certain amount of cash for emergencies—typically 3 to 36 months' worth of living expenses."

Having at least three months expenses in cash seems like a minimum to me and six months even wiser. But you need to make your own determination based on your individual risk profile, which is unique.

3. "I never took a business course. I run this company based on instinct."

There are many successful business people who have never taken a single business class. They learn on the job, from watching others and by reading. People often ask me whether they should major in business as an undergraduate or obtain an MBA. Like everything in life, there are trade offs involved in that decision. If you major in business, you are not majoring in engineering unless you are ambitious enough to be a double major. If you get an MBA degree in business, you are not getting a masters in computer science. Yes, you can get two different master's degrees, but you see my point about opportunity cost I hope. Doing something like going to graduate school has opportunity cost in terms of lost income and on the job experience. One fact that is clear from the example of Oprah and others is that taking business classes is not required to be successful in business. A business school education has been helpful for many people. If circumstances prevent someone from taking business classes for whatever reason, achieving business success is still possible.

While many successful business people may not have had a formal business education, they are all highly educated about their business. It is true that some people who run a very important business have a more limited range of skills and knowledge than some other

executives or founders, but they are inevitably very street smart and dedicated to what they do. These self-educated business people know everything about their industry, business and their employees. The tend to stay within their circle of competence very well. If their business is meat packing, they know it inside and out. The may not know much philosophy or computer science, but they know meat and meat distribution cold.

When it is more likely that a business education will be helpful to a student? If the person wants a job and is deemed by the person doing the hiring not to be qualified, then maybe a degree in business will get the on the desired path. I know some entrepreneurs and investors who prefer that the people they hire not have an MBA. Some entrepreneurs and investors do like to hire people with an MBA. There is no simple answer that applies to every person. But thinking in terms of opportunity cost about that decision is wise.

4. "You have to know the business, but you also have to know what's at the heart of the business, and that's the people."

The people associated with a business will determine its success more than any other factor. These people include employees but also contractors, suppliers and customers. Selecting them wisely is essential. Some investors like Don Valentine argue that the market is more important than the people involved since you can always change the people. My view is most similar to investors like Pitch Johnson that people are paramount. Changing the people involved in a business is highly unpleasant. Why would anyone want to do that? Great people are not easy to find. As an example, Buffett and Munger always want the managers to be in place before they buy a business. In any event, life is too short to work with people who are not the very best people you can find.

5. "Your job is not always going to fulfill you. There will be some days that you just might be bored, other days you might not feel like going to work at all — go anyway." "Your job is not who you are, it's just what you're doing on the way to who you will become."

Work is called "work" and not "fun" for a reason. Every minute of every day will not be a joy for everyone. This is an annoying fact of life for some people. Sometimes a young person will come to me and complain about their manager. What I have found over the years is that managers often change and that this is especially true if they are bad managers. People who are willing to take on the hard and difficult jobs inevitably advance faster and are assigned better more fulfilling jobs. Some people do have unrealistic expectations about how quickly they will advance in their career. Charlie Munger tells a story about people approaching him for advice about how to get rich but who say that they want to do so much faster than he did. Just as getting rich slowly is the most likely outcome, so progressing your career slowly. Being pleased if you happen to experience rapid career success is a better approach than being miserable if it does not happen.

6. "Every remedial chore, every boss who takes credit for your ideas — that is going to happen — look for the lessons because the lessons are always there. And the number one lesson I can offer you where your work is concerned is this: Become so skilled, so vigilant, so flat-out fantastic at what you do that your talent cannot be dismissed."

The best way to make something happen, particularly in a very large organization, is to let other people take the credit. It also helps if you are willing to do hard and unpleasant work

since it increases the probability you will get the high quality and more enjoyable work. Oprah is saying that if you also put your focus on being skilled and talented, good things will inevitably happen. Michael Mauboussin says that in any probabilistic activity the right approach is to focus on having a sound process. His advice applies to a career as well as a process like investing. It is wise to focus on having a sound process, to be patient in waiting for the right opportunities and opportunistic and aggressive when the time is right.

7. "Lots of people want to ride with you in the limo, but what you want is someone who will take the bus with you when the limo breaks down."

Sometimes you will be involved in a business or other endeavor that will go through a rough period and one or more people that were being counted on to help will bail out. As an example, I have a friend who was on the board of a small bank along with a very prominent business person. When the bank had some struggles during the great financial crisis in 2008 this business person immediately resigned from the board. The test of a person's character is not how they behave when times are easy or profitable. People who are willing to work hard to solve problems when things get rough are the type of people you will benefit from associating with.

8. "Real integrity is doing the right thing, knowing that nobody's going to know if you did it or not."

Warren Buffet believes: "In looking for people to hire, you look for three qualities: integrity, intelligence, and energy. And, if they don't have the first, the other two will kill you." Mary Kay Ash agrees: "Honesty is the cornerstone of all success. Without honesty, confidence and ability to perform shall cease to exist." How do you find people with integrity? Watching what they do rather than what they say is perhaps the best way so find this quality. You should also realize that you will make mistakes about a person's integrity and that you will need to correct them when they happen. Oprah's point about integrity is not only applicable to people, but also in a similar way to the culture of an organization. The culture of a business helps people know what to do when no one is around to answer questions. The best business cultures foster and reflect integrity.

9. "Be thankful for what you have; you'll end up having more. If you concentrate on what you don't have, you will never, ever have enough.""I still have my feet on the ground, I just wear better shoes."

Envy and jealousy have no upside. Nothing good comes from these emotions. If you are able to remove them from your life, you will be more thankful for what you have. By not wasting energy on these negative emotions you will also, as Oprah says, end up having more. She is also saying that by concentrating on what you do not have rather than what you have you almost surely will be unnecessary unhappy. The attitude of the Stoics is helpful in dealing with this problem. The philosopher Seneca once wrote: "For many people, the acquisition of wealth does not end their troubles, it only changes them. Wealth is the slave of a wise person. The master of a fool." Nassim Taleb's has said on this topic:

"Seneca was about being long options. He wanted to keep the upside and not be hurt by the downside. That's it. It's just how to set up his method. Seneca was the wealthiest man in the world. He had 500 desks, on which he wrote his letters talking about how good it was to be poor. And people found inconsistency. But they didn't realize what Seneca said. He was not

against wealth. And he proved effectively that a philosopher can have wealth and be a philosopher…. He wanted the upside of wealth without its downside."

10. "The reason I've been able to be so financially successful is my focus has never, ever for one minute been money." "What I know is, is that if you do work that you love, and the work fulfills you, the rest will come." "I had no idea that being your authentic self could make me as rich as I've become. If I had, I'd have done it a lot earlier." "You know you are on the road to success if you would do your job and not get paid for it."

Oprah is a master at creating a personal brand based on authenticity. Who has created a more authentic brand better over her lifetime? The transparency enabled by the internet means that as each day passes the ability of businesses to create a fake brand with advertising is less possible. One can argue that Oprah benefited from the trend, but it seems more likely that she is also part of the cause of this phenomenon. She has changed the way people expect a celebrity to act. Consumers today more than ever want authentic brands and are more concerned with the product than how many times they have heard someone shouting about it on paid media. People respect celebrities who believe in the brands they promote. As just one example, Oprah's involvement in Weight Watchers wasn't just an investment of her capital but of her brand.

11. "The big secret in life is that there is no big secret. Whatever your goal, you can get there if you're willing to work."

If life could be reduced to formulas and secrets, everyone would be happy and wealthy. The difference between what makes you "happy" and what is "rewarding" is huge. For example, many things in life will not make you happy, but are rewarding. There are trade offs involved in almost everything. Work is not only profitable but can be enjoyable in itself. I am lucky that I enjoy my work so much, but that I do so is not accidental. Loads of luck was involved in may case, but the work I have done had made a difference too.

12. "Life is never dull." "I don't believe in failure. It's not failure if you enjoyed the process."

If your life is dull you are not paying sufficient attention. Interesting aspects of life are everywhere, if you know how to find them. Not only does "shit happen" but it usually does so in novel and unpredictable ways. If you look at the surprises as opportunities to grow and profit, the world never gets uninteresting. Yes, some people have very incredibly hard lives

and terrible life choices and I have been incredibly lucky. But even given that, life is too short to be unhappy and bored. When all else fails, I suggest laughing at your own jokes like I do. If you give me a metal pot and a wooden spoon I can amuse myself all day long.

Everyone makes mistakes. If you think you don't make mistakes, you are fooling yourself. This will happen sometimes since denial is not a just river in Egypt. The only people who do not make mistakes are, well, dead. By identifying your mistakes and rubbing your nose in them you can learn. This applies to your life and to a business. My blog post on mistakes is here:

End Notes:

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"Proprietary Product Distribution" is Better than Sliced Bread

June 2, 2018

Jim Barksdale once said: "Nothing happens until somebody sells something." This challenge is made harder by another business truism: if the cost of acquiring customers exceeds the ability of the business to monetize those customers, the business will inevitably fail since it has not created product market fit. Not only does someone need to "sell something" but is must be done in a way that is cost-effective.

Some people forget that a functioning business model is an essential part of product market fit. Andy Rachleff has identified the elements a business must create or discover to have

product market fit: “the features you need to build, the audience that’s likely to care, and the business model required to entice a customer to buy your product.” If you do not have a scalable and repeatable business model, you do not have product market fit.

Paying too much to acquire customers is not a solvable problem. But not paying anything to acquire customers is not an option for a real-world business. Sometimes you will hear a person claim that they pay nothing to acquire customers. They may be telling a very nice story, but it does not reflect of reality. These storytellers have often simply shifted to a “proprietary product distribution” model, which inevitably has costs that appear somewhere other than in a line in the income statement called “sales and marketing” spending. I should emphasize that in this blog post I am not writing about what some people call “organic” distribution since the term has been made less meaningful than it once was due to the marketing approaches of some companies that sell “paid distribution.”

Many businesses today are so reliant on paid product distribution that they retain little or no value from their value chain. Paid product distribution happens when the business pays another business a fee for acquiring the customer and may not even own the relationship with end customer or the data generated by that customer. The problems caused by relying on paid distribution often create a version of a “wholesale transfer pricing problem” that I have discussed many times on this blog in the past. The supplier of distribution in a paid arrangement has this power and shifts the profits to itself.

“Proprietary product distribution” is a customer acquisition system that is within the control of the business itself and which generates a customer relationship that the business owns. Owning the data generated by this direct customer relationship is increasingly valuable since it can be used to fuel machine learning and other modern business data science processes. To say that so-called “co-ownership” of the customer relationship is problematic is a significant under-statement. Do you really want another business owning the data that your customer generates? The data “exhaust” produced by direct customer relationships is increasingly what makes products more valuable since it is the fuel for machine learning and modern data science. If Business A has data from a direct relationship with a customer since it was acquired with proprietary distribution and Business B has no relationship with the customer since there is an intermediary between it and the customer, Business B is very probably walking dead.

A test for whether distribution avoids being paid is simple: Would the customer have arrived arrived regardless of marketing spending? Is your distribution paid or proprietary? Some businesses have a mix of the two approaches. Disney streaming its content direct to customers is one type of proprietary product distribution. A Disney advertisement on a third party web site is paid distribution. Additional examples of proprietary product distribution will be discussed later in this post. Businesses that can create proprietary product distribution are modern day alchemists. The best business alchemists can turn modest spending that is usually considered part of “cost of goods sold” or sweat equity, into a substitute for marketing spending.

Proprietary distribution channels always have some cost, even if it is opportunity cost. If that cost is reasonable relative to the revenue generated, it can create a very attractive business. In short, even with proprietary distribution the cost of acquiring the customer must make sense from a unit economics perspective. When a business files documents when it becomes a public company the public can see for the first time how much money is being spend on sales

and marketing. The founders and investors have known this for some time. Very high sales and marketing spending is part of what Bill Gurley calls the "game on the field" right now in many businesses. The markets love revenue growth especially if it generates an annuity-like flow of cash. If your competitor is growing based on "pedal to the metal" sales and marketing spending, what can you do other than matching them by "turning it up to eleven" as the guitarist did in the movie Spinal Tap?

The entire business model of venture capital depends on grand slam home runs. A business does not produce a grand slam home run for founders and investor by only acquiring customers with paid product distribution. That does not scale. For example, Dropbox, Atlassian and Docker do not acquire their customers by purchasing advertising in newspapers and magazines or television advertising. Proprietary product distribution is the only approach to acquiring customers that can generate the necessary scale to create businesses with multi-billion dollar valuations. While it is hard to overemphasize how important growth is to a venture capital backed business, growth is just as important for an existing company trying to grow an existing or new line of business.

The return on investment on paid product distribution has dropped significantly in recent years. In a recent post I quoted Andrew Chen as saying: "Addiction to paid ads is bad." Paid advertising on additional problems in addition to what I discussed in the previous paragraphs. The internet has created enough transparency that people aren't as influenced by traditional advertising. It is harder to fool some of the people as many times as it was in the past. Consumers have access to too much data for paid advertising to be as effective as it once was. Jeff Bezos nails key aspects of the nature of the change here:

"The balance of power is shifting toward consumers and away from companies…the individual is empowered… The right way to respond to this if you are a company is to put the vast majority of your energy, attention and dollars into building a great product or service and put a smaller amount into shouting about it, marketing it. If I build a great product or service, my customers will tell each other…. In the old world, you devoted 30% of your time to building a great service and 70% of your time to shouting about it. In the new world, that inverts." "Your brand is formed primarily, not by what your company says about itself, but what the company does."

The shift away from paid product distribution is not binary but it is significant, especially when the product is software as a service (SaaS). Advertising is unlikely to disappear as a means of acquiring customers. Zenith expects global advertising expenditures to grow 4.1 percent in 2018 to reach $578 billion by the end of the year. The United States (perhaps due in part to its scale combined with diversity, which places a very high value on targeting) also remains the largest market in the world, accounting for ~ 38 of global advertising spend in 2017. Dentsu issued a forecast for advertising in June of 2017 as follows:

"In 2018 digital will be the top media in terms of global share of spend, taking over television for the first time. Digital's share of total media spend is predicted to reach a 37.6% share in 2018 (up from 34.8% in 2017), versus 35.9% for television (down from 37.1% in 2017), amounting to a total value of US$215.8 billion. Reflecting the continued disruption by digital technology of the print media industry, Paid Search (advertising within the sponsored listings of a search engine) is forecast to overtake traditional print media (newspapers and magazines) in 2018."

Business are obviously spending a lot on advertising. Why is proprietary product distribution so important? The key words in this tweet below are "most efficient traffic acquisition possible."

Chamath Palihapitiya @chamath
It's sad when the industry confuses strategy, tactics, good execution, bad execution vs a market dominated by LTV/CAC and where the winner MUST have the most efficient traffic acquisition possible. Welcome to the future of Airbnb vs Booking and why Booking has caught up... ...

If a competitor has a more efficient traffic acquisition engine than your business, you have a significant problem. This greater customer acquisition will enable greater growth, which can create network effects. Ideally the growth feeds back on itself, creating more growth n ways that are nonlinear. The "game on the field" has forced many businesses into a battle for growth that is essentially "go big or go home." Gurley points out:

"You could sit around and say, 'We're going to get to profitability,' but you're not going to matter. You might as well lock the door and leave the building. So you're forced into a game of capital warfare that you may have not been ready to play. And so I don't know that any one person is responsible. Silicon Valley and venture capital have always been cyclical. And so there's something about human nature that causes us to be increasingly risk-seeking until someone comes along and really punishes everybody." "…there's this old saying about selling dollars for 85 cents. But there's a truism to it. You can create infinite revenue if you sell dollars for 85 cents. And if you give consumers more value than you charge them for, they will love you. And I remind entrepreneurs all the time that Webvan had the highest NPS scores of any company I've ever known. It wasn't that the consumer proposition didn't work, it was that the economics didn't work. They weren't charging enough for the service level."

In some markets the competition to acquire customers can ruin a business. Charlie Munger talks about that set of issues below and has said that he has not yet been able to figure of why this happens in some businesses but not in others:

"Over the years, we've tried to figure out why the competition in some markets gets sort of rational from the investor's point of view so that the shareholders do well, and in other markets, there's destructive competition that destroys shareholder wealth. If it's a pure commodity like airline seats, you can understand why no one makes any money. As we sit here, just think of what airlines have given to the world—safe travel, greater experience, time with your loved ones, you name it. Yet, the net amount of money that's been made by the shareholders of airlines since Kitty Hawk, is now a negative figure—a substantial negative figure. Competition was so intense that, once it was unleashed by deregulation, it ravaged shareholder wealth in the airline business. Yet, in other fields—like cereals, for example—almost all the big boys make out. If you're some kind of a medium grade cereal maker, you might make 15% on your capital. And if you're really good, you might make 40%. But why are cereals so profitable—despite the fact that it looks to me like they're competing like crazy with promotions, coupons and everything else? I don't fully understand it. Obviously, there's a brand identity factor in cereals that doesn't exist in airlines. That must be the main factor that accounts for it. And maybe the cereal makers by and large have learned to be less crazy about fighting for market share—because if you get even one person who's hell-bent on

gaining market share…. For example, if I were Kellogg and I decided that I had to have 60% of the market, I think I could take most of the profit out of cereals. I'd ruin Kellogg in the process. But I think I could do it."

To say right now the market loves growth is a huge understatement. But the standards for that growth being sufficient are high. For example, in SaaS markets Rory O'Driscoll writes:

"most venture investors prefer to invest in companies that have at least the chance to become standalone public companies (which is not to say most achieve this objective). Looking at the realistic low bar of what it takes to be a public company, this implies being at run rate revenue (ARR) of $100 million at the time of IPO, while still growing at 25 percent or greater in the following year."

In consumer markets, Ryan Metzger has created a chart which shows growth rates that look like this:

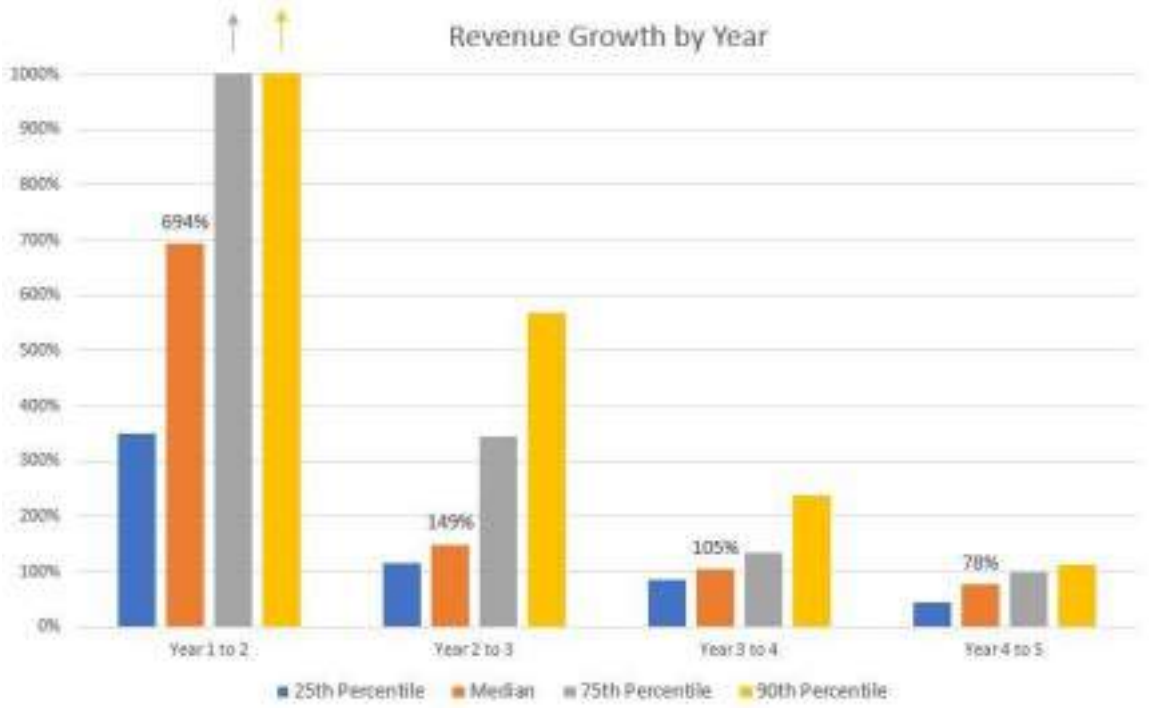

An investor or founder of a business which desires to grow quickly will want to see cost per customer acquired acquired dropping over time. If customer acquisition cost (CAC) is increasing over time it may cause a yellow or red light to start flashing for an investor or founder depending on the rate of increase and whether customer lifetime value is staying the same or growing. Customers are getting more expensive to acquire. Data supporting this view is in this chart:

Tom Tunguz explains why this increase in CAC is happening:

"Patrick at ProfitWell sent me his survey results across about 800 companies. The chart above shows the increasing cost of customer acquisition on a per company basis. Those surveyed have observed a ~65% increase in cost of customer acquisition over the last five years. This increasing customer acquisition cost likely has two root causes. The first is competition. The second is scale. As a company grows, the initial customer acquisition channels become less efficient with saturation. Consequently, the business must develop a portfolio of customer acquisition channels. Typically, each marginal channel has a higher cost of customer acquisition."

Mary Meeker's data pointed out this past week that customer lifetime value in increasingly being used as a decision making tool:

Customer Lifetime Value (LTV) = Importance Rising as... Customer Acquisition Cost (CAC) Increases

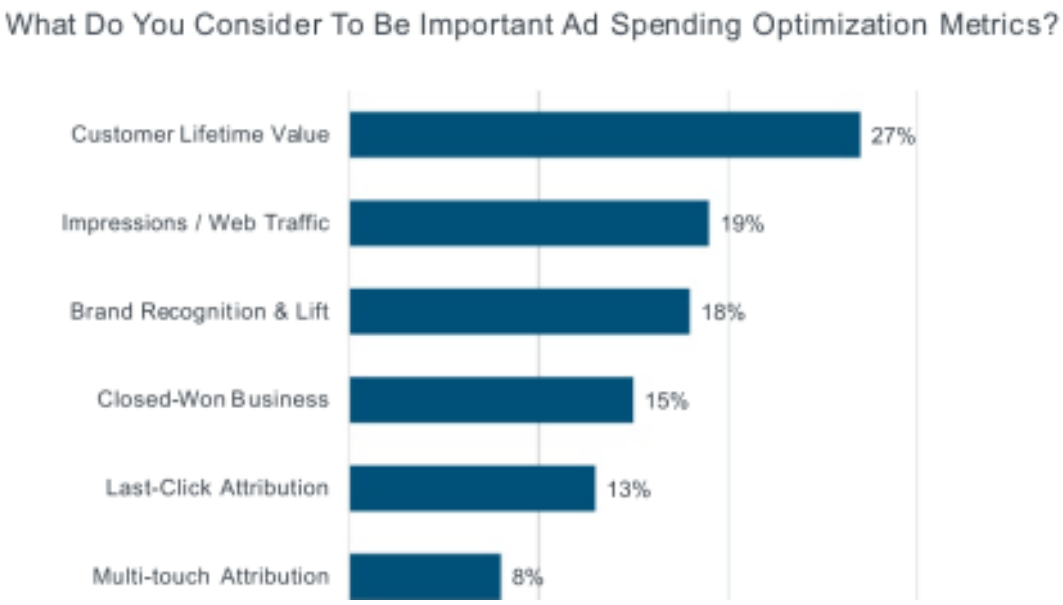

I have written a few blog posts recently about the problems with paid advertising generally and I am not going to raise and discuss all the points again. In this blog post I am going to focus more on the ways in which a business can create proprietary distribution, most notably in a software as a service (SaaS) business. Before moving on I should make two key points. The first is described by Gurley: "Users typically have a higher NPV, a higher conversion rate, a lower churn, and more satisfied [if they are not] acquired through marketing spend." Gurley is saying that customers you acquire through paid distribution channel are less valuable when you look at the unit economics. David Skok argues: "Owning the customer base is an important way to control your own destiny. It will also earn your company a higher valuation." We are seeing more and more businesses like Disney going direct to consumer since they can't take the risk of having a distributor between them and their customers. As I have also written before, the telemetry that can be generated via direct customer interaction is far too valuable to be given to an intermediary in many businesses. That telemetry can be used as a basis for experiments powered by machine learning that can make the product better. Of course, there are some markets in which advertising has never been effective. As an example, Peter Thiel has pointed out that "for most small business [customers] you can't really advertise. If you can't solve the distribution problem, your product doesn't get sold—even if it's a really great product."

A tweet from Rick Zullo describes what will be the topic of the rest of this post simply: "Knowing how to create/cultivate proprietary distribution can be huge lever." Achieving proprietary distribution can take many forms:

1. Freemium:The essence of the freemium business model is to reduce the friction associated with initial usage and to reduce customer acquisition cost (CAC) when compared to the paid alternative (e.g., based on paid advertising). Steven Sinofsky points out that "The fundamental tenant of freemium is experiencing the product is the best advertisement." For this reason, freemium can lower CAC, sometimes at the cost of higher cost of goods sold (COGS), in order to produce a higher LTV and

increased growth. In a freemium model there two very different types of services: (a) Free services from which that are upsold or cross sold to an existing revenue generating customer; and (b) free services offered when the business is starting from zero in an attempt kickstart the same motion as in (a). Starting from zero will result in a higher cost of customer acquisition (CAC) since there is an additional step. A classic example of freemium strategy is Dropbox which was described in a Harvard Business School case as follows: "Dropbox provided remote-storage over the internet of any type of computer file, along with file sharing, synchronization and backup. Using a freemium pricing strategy whereby a basic service was free-of-charge and a premium service was paid." At the end of last quarter Dropbox has 11.5 million paying customers, but supports more than 500 million users in total.

2. Community: Nextdoor is also a classic example of community-based proprietary distribution. Here is a slide from Mary Meeker's slide deck released this week that shows how the Nextdoor community has grown :

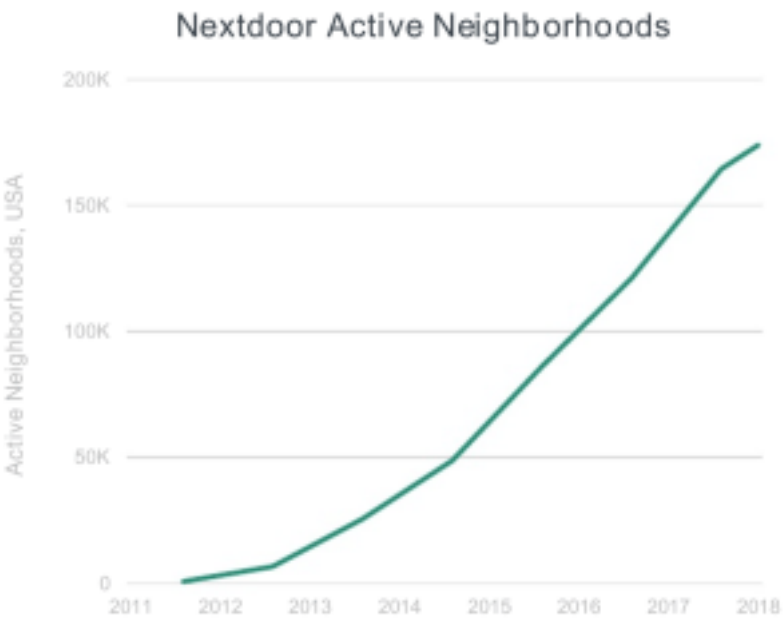

3. Referral: Business like Dropbox have offer referral credits to create proprietary distribution. For example, "Dropbox will automatically reward you with 500 MB per referral, resulting in a total of 32 x 500 MB = 16 GB of extra online storage."

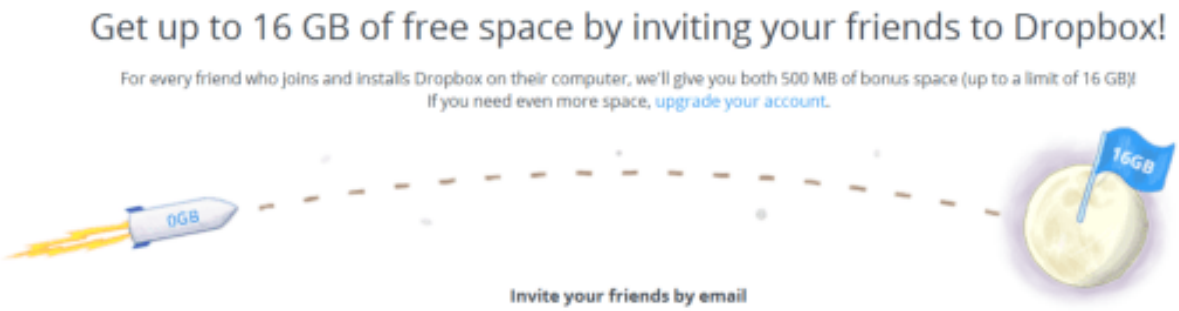

4. Content Marketing: Much of the content on Twitter and Medium is created by people who are participating in the platform's service either partially or completely in order to directly indirectly market their product. For example, wealth managers and venture capitalists that write blog posts are engaged in content marketing. There are many providers of SaaS that work hard to have a strong presence on social media and platforms like Medium. Elon Musk is an example of an entrepreneur who uses social media to generate passionate customers and shareholders. He also attracts his share of critics. The resulting controversy creates free brand impressions.

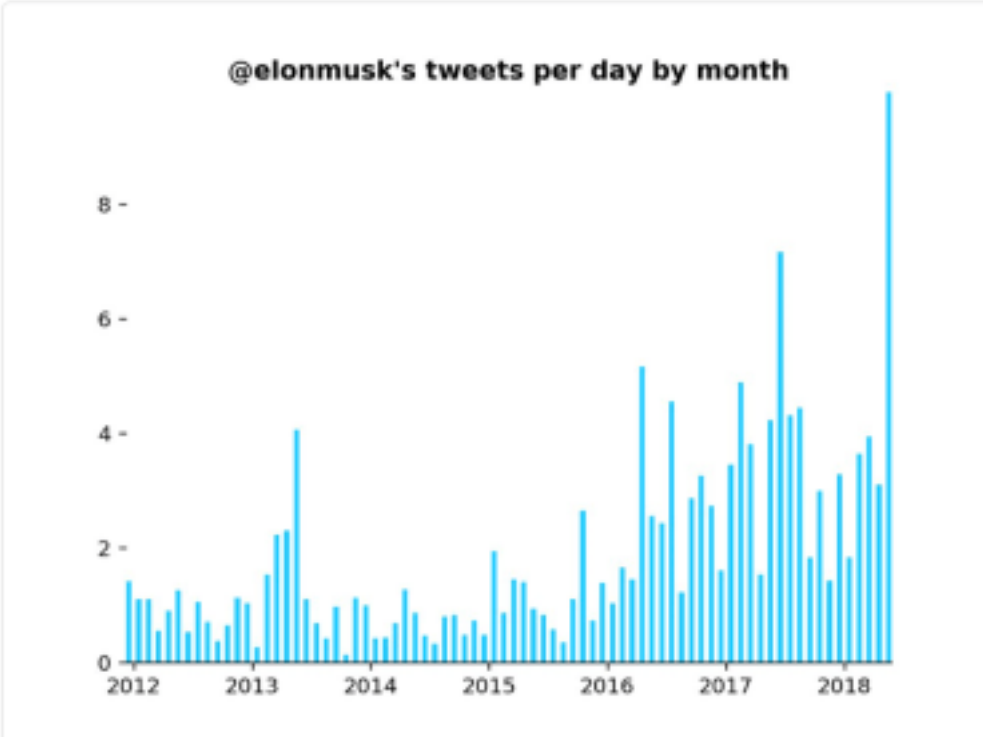

A CEO or founder who is able to make the right points in the media is able to create free brand impressions. Another form of content marketing/referrals is harnessing "influencers." As just one example, platforms like Instagram can enable a brand to turn fans into referral engines.

"it would be easy to describe Fashion Nova as 'an Instagram brand.' Saghian likes to call it a viral brand, but something about those descriptions make the company feel ephemeral and illegitimate. Fashion Nova is a bona fide apparel, accessories and beauty business that's attracted women with body measurements that don't always fit within standard sizing — although Saghian says the clothes are for everyone….. By working with a network of more than 3,000 influencers, he's made them pervasive. It's easy to assume that Fashion Nova only exists online, but it has five stores within malls across Southern California.

Influencers operate outside of consumer markets since they can promote and provide referrals to consumer, small and medium business and even enterprise markets.

The proprietary product distribution strategy will be assembled from these components. In doing so they must decide how to account for this type of marketing and the decision over whether you include it as part of CAC or generic brand marketing. Here is how a Ilya Fushman describes the goal in an enterprise software as a service (SaaS) setting:

Build Amazing Consumer-Grade Product

Leverage Virality Across Individual Users To Grow
Personal + Professional Adoption @ Low Cost

Harvest Individual Users for Enterprise Go-to-Market With
Dedicated Product + Inside / Outbound Sales

Build Enterprise-Grade Platform + Ecosystem

Net = Low Cost Product-Driven Customer Acquisition +
Strong / Sticky Business Model

- Ilya Fushman @ Kleiner Perkins

Investors carefully look at spending and want to know customers acquired by source and cost for each over time. Tom Tunguz writes: "In each of these cases [of proprietary distribution] the startup owns the distribution channel. Sometimes the channel is integrated in the product, sometimes the channel is adjacent. Challengers may try to replicate the success of the distribution channel by copying it, but cannot compete within the channel, which means it's an incredibly cost-effective channel for its owner." This is a set of sentences that is worth taking the time to unpack. If a business has developed a community that generates customer growth that community can be recreated but that community itself belongs to the business that created it. This fact gives the company that created the proprietary distribution an important competitive advantage.

Ben Horowitz has a great post on which type of distribution is right for a given product. He sorts businesses in terms of their distribution characteristics in this way:

"can be delivered online, no assistance required: GitHub; Dropbox, Slack (for small companies)
can be delivered online, minor assistance required: Okta, Salesforce (for small companies)
can be delivered online, major assistance required: Oracle Financials, Palantir; Dropbox, Salesforce, Slack (for large companies)
not delivered directly, no assistance required: Anki Overdrive, Apple Watch
not delivered directly, some assistance required: Nest Thermostat
not delivered directly, major assistance required: EMC Symmetrix"

Of course, the nature of the assistance that must be provided will impact the business model. Is the assistance required to get the product into use, to enhance value, to manage, to get the most out of, or to sell them more products? Different answers to these questions will impact the unit economics of the business model in different ways. Horowitz then adds:

"…you need to design your sales channel to meet their needs not yours. In this context, we can think about some example targets:

I. Individual — a direct consumer or a single decision maker in a company
II. Small group — a small engineering team deciding, such as with Trello
III. Entire small company (<1000 employees) — for example, deciding on HR software like Zenefits
IV. Large group — multiple decision makers, with different economic and technical motivations for deciding on the product
V. Multiple groups simultaneously — for example, sales and marketing both needing to agree on the right marketing automation solution
VI. An entire large company — for example, deciding on an HR system like Workday

…Targets I and II involve the same simple decision-making process: The customer asks herself, is this something that can help me and is worth the money and effort? These targets therefore can often be sold entirely via marketing; viral distribution (if you have a product that inherently travels by word of mouth or other organic spread); and optionally telesales …Target III decisions generally involve multiple people so are more complex. … Targets IV-VI [also] represent complex decision-making processes…"

This blog post is about to hit 4,000 words, so I need to stop writing now or I will turn into a pumpkin. More later. The linked material is excellent. I put a lot of effort into the End Notes and I hope people benefit from this work.

Business and Investing Lessons from Rebecca Lynn (Canvas Ventures)

June 9, 2018

Rebecca Lynn is a Co-founder and a General Partner at Canvas, where she focuses on early-stage venture investments. Lynn was born and raised in Missouri and began her career at Procter and Gamble. In a talk at Stanford she described part of the inspiring journey that took her to where she is today: "In this little town where I grew up, the highest-level math class was very rudimentary trigonometry. There just isn't a way for a kid to come out of that background and possibly think about being an engineer. Because of that, we moved to a town with a much better educational system…."

1. **"I have said to a lot of people: 'Why would you raise venture money? It's just going to screw it all up.' I've had a lot of people come in to our office that have interesting businesses. They're profitable. But they think they want to raise venture. I look at the business and I say: 'Wow. That's going to throw off significant cash quickly. But it's not going to be venture scalable. If you sign up for venture money, there's a different expectation for you. There are other ways to [build and finance a business] than venture." Venture is where you see there is an opportunity, but you need the capital to realize it and to scale fast enough to get there."**

A business must have certain attributes for an investment by a venture capitalist to be either possible or even beneficial. Bill Gurley points out that venture capital "is not even a home run business. It's a grand slam business…. If your idea is not something that can generate $100 million in revenue, you may not want to take venture capital." In other words, the

venture capital business model relies on convexity (i.e., the financial downside is limited to what the venture capitalist invests, but the potential financial upside can be a 10,000 X return or more).

Venture capital punches way above its weight, but it is a small part of the capital markets overall. PitchBook figures tell the story for 2017:

The Series A landscape is changing: 1,689 Series A deals were completed in 2017 at $15.4 billion in total value. Compare that to 2012, when about the same number of Series A deals were completed (1,601) at less than half the value ($7.9 billion). PitchBook data shows a median Series A in 2012 as $2.8 million, with a 2017 median Series A sitting at $6 million. That's also a 23% increase in median deal size from 2016.

Of course, definitions of a terms like "Series A" are important in trying to make apples-to-apples comparisons. For example, in October of 2014 Marc Andreessen said: "No competent VC is actually fooled when you show up after raising $6M in seed financing and say you're now raising an A!" Some seed deals are actually Series A and vice versa. The definition of various rounds matter a lot when making comparisons. But if you squint the numbers tell a rough but important story about one type of business finance: venture-backed new businesses represent a relatively small portion of total US business starts over any time frame. You can also see that valuations have been climbing recently. To give you a sense of how small the number of venture backed startups is in a relative sense when compared to business formations more generally, in a very humorous post recently Collaborative Fund pointed out that in the US: "About 9,000 new businesses formed on Wednesday. Another 8,200 dissolved."

Investing in a dental practice does not have convexity. A new business creating software for data centers may potentially have the necessary convexity. That a business is not a suitable candidate for venture capital is not a tragedy. There are many other ways to finance a business. Most successful businesses are financed by bank loans, sweat equity and money from friends and family. Loading up a business with venture capital can in many cases turn what would otherwise be an excellent opportunity into a needless failure. Roger Ehrenberg has a helpful side that describes circumstances that may favor bootstrapping a business:

Bootstrapping

- Bootstrapping generally refers to raising no external capital; funding off of personal balance sheet plus customer receipts
- Great for maximizing ownership and control
- Forces intense customer focus and "colliding with the market" early and often, as well as rapid determination of what customers will actually pay for
- Can work against building a scalable software business as near-term services revenue can delay "productization"
- However, if a bootstrapped company can build a scalable service, it can control its destiny and choose to raise venture finance to accelerate growth in the future

2. **"Our approach overall as a firm is to be very thesis-driven. "Each investment followed a pretty intensive deep dive."**

Lynn's approach to venture capital investing is to do a deep dive into an area with potential for an investment and only after that dive is completed look for the right investment opportunities. Fred Wilson has written about how people following this "thesis driven" approach differ from another style that sounds similar:

"Thematic investing involves identifying big themes and going after them. Examples from the world of web services would be 'social networking', 'online video', 'ad networks', 'social media', 'real time', 'mobile'. I know many VCs who go about it this way. They identify the themes and then get busy filling out their portfolio with companies that fit those themes.

Thesis driven investing involves drawing a picture of where your particular area of focus is going. I like to take a five to ten-year view. And once you have mapped out that picture, it becomes your thesis. And you evaluate every investment you make in the context of that thesis."

There are other approaches to venture capital that are more scattershot than thematic or thesis driven. The venture capitalist may invest based on the best opportunities that they encounter without reference to any specific theme.

3. **"I'm half intuitive and half analytical, and I'd say the same is true of venture." 'What I've learned over the course of my time in venture is: it's only about 25% picking the right company and 75% building and fixing." "For every VC their anti-portfolio is phenomenally better than their portfolio."**

Lynn uses an approach to her work as a venture capitalist that is a mix of art and science. Investing is in part an art because spotting patterns is not enough to determine success. The best venture capitalists also know when breaking a pattern or rule is valuable before others realize it is valuable and this is what you might call an analog process. Identifying exceptions well to patterns is something that humans excel at when compared to artificial intelligence. The gap between value and price produced by the breaking of a rule or patterns is what creates the mis-priced opportunity. Some people like Lynn love being actively involved in helping the business so much that being anything other than an early stage investor is unthinkable.

4. **"We have had a very concentrated portfolio." "You just don't have that much time to do a scattershot approach, serve on boards, and put a lot of money to work in those early rounds. We spend a lot of time with the companies to help make sure they're successful."**

Charlie Munger has strong views on the importance of concentration in investing: "Wide diversification, which necessarily includes investment in mediocre businesses, only guarantees ordinary results…. The idea of excessive diversification is madness." Jason Lempkin wrote a blog a post that addressed the investment concentration issue recently:

"There are 500+ new sub $200m funds raised since 2011, and my guess is 200+ in the past 2.5 years. This is great for founders:

- First time investors are generally less ownership sensitive. The longer you do it, the more you feel you need to own of each investment. You learn that owning just a little of most non-decacorns just doesn't move the needle for fund economics — unfortunately. New investors are generally less sensitive to the % they own, and just want to get into as many good deals as they can…."

Making more investments at larger valuations is not necessarily better when it comes to being a venture capitalist. As Bill Gurley said in a tweet this past week: "Money in is likely a contra-indicator of future money out."

So-called "spray and pray" systems are a particularly bad idea when it comes to venture capital investing. As an example of how spray and pray can go wrong, I know person who made the mistake of declining to participate in investing in Amazon in the seed round at a $4 million pre-money valuation. His regret over this error of omission in no small part drove him to write almost every seed stage check he possibly could during the Dot Com era. His batting average as an amateur in seed stage venture capital was terrible. His financial outcome was worse than throwing darts. He is a very nice person, intelligent, financially successful and very good at his job in his industry, but to say he is "not a good venture capital investor" as a result of his spray and pray approach is an understatement.

5. **"We focus on series A and B. What that means is you're starting to get a product market fit. The dogs are eating the dog food. And now you need to scale. You need to grow a team. It's probably a skeletal team at best at that point in time. You might have a couple of the marketing channels figured out just to prove the concept works, but you need things to scale. And you're perhaps building your sales force. So that's really where we come in, at series A and B, usually $5 to $10 million in that initial round. We always take a board seat."**

Investment risk has been significantly retired if the business is "starting to get product market fit" as Lynn notes. When this happens the value of the business rises, but the VC is less likely to forgo optionality by creating conflicts in a given area by making an early stage investment. Taking a board as Lynn desires seat gives her a ring side seat. A post on boards of directors will appear on this blog soon (perhaps next Saturday).

Mark Suster is writing a very informative series of blog posts on venture investing and startups that recently included this advice:

"If you're talking with a typical Seed/A/B round firm they often have ownership targets in the company in which they invest. Since they have limited capital and limited time availability they often try to make concentrated investments across companies in which they have the highest conviction. If a firm typically invests $5 million in its first check and its target is to own 20% or more that means that most if its deals are in the $15–20 million pre-money range. If you're raising at $40 million pre, then you might be out of their strike zone."

6. **"We invest in a few deals a year, two, maybe three, deals a year per partner. And we get really involved." "Because the angel environment has been so hot in recent years and you can now invest in so many Series A or B deals, the bar is pretty high, which is hard because there are so many interesting companies coming up, it's difficult not to do more." "The growth of angel investing [has] been funding a lot of companies that are now reaching the Series A funding level." "A small fund has the opportunity to 'return the fund' much faster."**

A venture capital firm like Canvas must put a significant amount of money to work in each investment since small investments can have significant opportunity cost. Venture capital fund size in no small part determines the fund strategy. Investing at a Series A and B is typically optimal when you have the number of investing partners and fun size that Canvas does. In an interview Bill Gurley once said this about how Benchmark settled on the right fund size:

"We experimented with expansion coming out of '99. We launched Benchmark Europe and Benchmark Israel and tried to replicate what we do, recognizing that entrepreneurism wasn't a U.S.-centric thing. And it caused all kinds of distraction. We had done a billion dollar fund in '99. So we told our limited partners in 2007, 'We're going to $400-million funds. We're only going to do early stage. We're not going to do international. We're not going to do growth. We're not going to do seed.' I think it was very fortuitous timing because almost three or four years after we did that, all of our competition started scaling out in huge ways into different geographic sectors. They became stage agnostic. They raised huge, billion dollar funds. And, to me, that's been the seminal event that led to our success — that we chose to focus. And being focused as an investor I think is the most important thing. It means giving up the notion that you're going to scale up and take over the world. But I don't believe that there are network effects to venture."

It is common for people to not know how few venture capital firms and venture capitalists there are. Here are some stats from PitchBook: In the United States there are 2,661 VC's and an average of 2.9 general partners per firm, which translates to 7,716 general partners. In other words, the number of investing general partners in ventre capital in the United States is ~ 6.6 X bigger than US Major League Baseball roster slots (about 1,200), but not by a lot. Many venture capitalists work in the business for decades, unlike professional baseball

players who have an average major league career of about 6 seasons. If your dream is to be a venture capitalist, the number of slots you are competing for is very small.

7. **"If you look at my portfolio, I'm usually not [backing] the first company with an idea. I let that company break its pick and [zero in on] the second mover, the one that figures out the model when the market is ready for it."**

Craig McCaw likes to say that pioneers often get arrows in the back. The winner is much more likely to be the business that gets to product market fit first rather than the first business to start creating or selling a product. Sometimes a business that gets product market fit is overtaken. Or not. It depends. Lynn is saying that product market fit requires: (1) a business model and (2) a market ready for the product. Sometimes a startup is too early and will get an arrow in the back. This may seem obvious, but many people involved in a startup or new business are so wrapped up in their product and have so much invested financially and emotionally they gloss over these two factors since they are running out of runway. A mistake about product market fit can easily cause death from premature scaling. Spending on growing the business to early is often deadly.

8. **"I think the biggest difference I can make as an investor is to help [founders] recruit and help with business development and strategy."**

Some venture capitalists love to help with the tasks Lynn is talking about. Others like to talk about it, but don't really do it when the time comes. Knowing the difference between these two types of investors is critical, which is why founders should do substantial amounts of due diligence before taking on an investment by calling people in the portfolio companies of the investor. The experience and nature of the investors will have a substantial impact on outcomes. For example, your friend Ralph may give you a higher valuation at the time of a financing, but you are probably screwing up you cap table and will not be getting the benefit of a professional venture investor who can help you retire risks and grow your business. Making a business into a success is in no small part about creating positive feedback loops. The more of these feedback loops a business can create the greater the probability of success. As just one example, when potential employees and investors see that a business has the best investors involved they are much more likely to get on board. The same feedback-based phenomenon applies to suppliers, distributors, the press, customer word of mouth, and many other factors that can drive business success.

9. **"Letting yourself be open and receptive to things that just happen to come your way- natural serendipity- is really important." "Startups, life and everything doesn't go necessarily according to Plan A really. Ever. What that taught me to do and to coach others to do is to say: 'OK well, that didn't work. Who cares? Put it aside. Let's look for Plan B. And Plan B could even be better.' And often it is better."**

Optionality is everywhere if you know how to find it. Sometimes a setback forces you to look for harder for optionality or in a different way. Living in a city, going to parties, taking classes, acquiring entrepreneurial skills, having cash in your bank account, avoiding debt are all examples of activities which increase optionality. Nassim Taleb wrote in his book *The Back Swa*n:

[M]aximize the serendipity around you….Many people do not realize that they are getting a lucky break in life when they get it. If a big publisher (or a big art dealer or a movie executive or a hotshot banker or a big thinker) suggests an appointment, cancel anything you have planned: you may never see such a window open up again. I am sometimes shocked at how little people realize that these opportunities do not grow on trees. Collect as many free nonlottery tickets (those with open-ended payoffs) as you can, and, once they start paying off, do not discard them. Work hard, not in grunt work, but in chasing such opportunities and maximizing exposure to them. This makes living in big cities invaluable because you increase the odds of serendipitous encounters—you gain exposure to the envelope of serendipity.

10. "In terms of what type of people we look for, of course we look for somebody who's smart and who's focused. But we look for something else. We look for somebody who has something to prove. Somebody who has a chip on their shoulder, so to speak, that really– like, the company is a part of them. And this is what really separates the founder from the CEO. Somebody who's a founder, that company is a part of them and they will do whatever it takes. When plan A doesn't work, they're going to work on plan B, C, and D. And those are the kind of people that are just incredibly driven and won't stop. They will absolutely figure it out."

There is an old joke about how some people are just more wired to look for opportunities.

"Worried that identical twin boys of five or six had developed extreme personalities – one was a total pessimist, the other a total optimist – their parents took them to a psychiatrist."

"First the psychiatrist treated the pessimist. Trying to brighten his outlook, the psychiatrist took him to a room piled to the ceiling with brand-new toys. But instead of yelping with delight, the little boy burst into tears. 'What's the matter?' the psychiatrist asked, baffled. 'Don't you want to play with any of the toys?' 'Yes,' the little boy bawled, 'but if I did I'd only break them.'"

"Next the psychiatrist treated the optimist. Trying to dampen his outlook, the psychiatrist took him to a room piled to the ceiling with horse manure. But instead of wrinkling his nose in disgust, the optimist emitted just the yelp of delight the psychiatrist had been hoping to hear from his brother, the pessimist. Then he clambered to the top of the pile, dropped to his knees, and began gleefully digging out scoop after scoop with his bare hands. 'What do you think you're doing?' the psychiatrist asked, just as baffled by the optimist as he had been by the pessimist. 'With all this manure,' the little boy replied, beaming, 'there must be a pony in here somewhere!'"

Grit isn't just a willingness to soldier on no matter what. Sometimes there is "no there there." it is time to fold up the tent and try something else. That some people are serial entrepreneurs is an outcome of this fact. Angela Duckworth's web site uses this definition: "Grit is the tendency to sustain interest in and effort toward very long-term goals. Self-control is the voluntary regulation of behavioral, emotional, and attentional impulses in the presence of momentarily gratifying temptations or diversions." Lynn seems to be including in her desired founder attributes having something to prove and being relentless about trying new approaches when encountering a problem in addition to grit.

11. **"Life just happens. Often things that may seem like the most tragic and dismal at that point in time are actually a catalyst for something even better. And what**

makes it a catastrophe or something a catalyst is really your attitude towards it and how you see the next day. Always be looking ahead and think about 'Well maybe this just created an opportunity for me to do something different.'" "I never planned on getting into venture capital. It really was through a series of very lucky events, I would say, through some really amazing mentors that I had in my past, and through just keeping an open mind and taking advantage of opportunities as they came my way."

Life is very hard to plan. Things happen. Stuff comes up. Sometimes I read obituaries when I run into one because they can often reveal a path in life that you would not believe if it was fiction. These stories illustrate how one thing often leads to another in an improbable way. Here is an example of a one thing leads to another story:

"At 10, her parents became part of what she describes as a cult-like fundamentalist Christian movement that equated intellectual pursuits with witchcraft. The family moved from central Ohio to Kentucky, where she was enrolled in a tiny private school. When she could, she read The Columbus (Ohio) Dispatch, then the Lexington (Kentucky) Herald-Leader, and 'snuck in some NPR when they weren't around.' She sold tennis shoes in high school and picked up odd jobs to pay for college – at the loan desk at the campus library, making copies on the graveyard shift at Kinko's. At the University of Kentucky, she volunteered for the student newspaper. After graduating in 1987, she met her future husband (then an architecture student at UK), got pregnant, and moved in with her husband's family in Vermont. Galloway went to the local newspaper – The Hardwick Gazette – and, based on her student newspaper clips, was hired on the spot."

What a story that is. Of course, some people's lives are not very exciting. I have always loved a short story entitled *Mayhew* by Somerset Maugham on the topic of interesting people:

"The lives of most people are determined by their environment. They accept the circumstances amid which fate has thrown them not only with resignation but even with good will. They are like streetcars running contentedly on their rails and they despise the sprightly flivver that dashes in and out of the traffic and speeds so jauntily across the open country. I respect them…and of course somebody has to pay the taxes; but I do not find them exciting. I am fascinated by people, few enough in all conscience, who take life in their own hands and seem to mould it to their own liking. It may be that we have no such thing as free will, but at all events we have the illusion of it. At a cross-road it does seem to us that we might go either to the right or the left and, the choice once made, it is difficult to see that the whole course of the world's history obliged us to take the turning we did."

12. **"When you're up you take some money off the table, and you play with your winnings. Take some money off the table. "**

I have followed the approach to life Lynn describes above. Once you have achieved a certain level of financial success do you really want to go all the way back to where you started in your professional life? Life gets substantially better if you are playing with "house money." The older you are and the more responsibilities you have, the more this statement becomes true. It is wise to risk not being able to take care of someone you love because you doubled down in order to get even richer? Should you instead find an opportunity that allows you to leave some of your money off the table? The engineering principle of margin of safety applies to this type of decision. Putting at risk: (1) what you have and need for (2) what you

want and do not need, is bonkers. The famous related Charlie Munger quote is: "I had a considerable passion to get rich, not because I wanted Ferrari's – I wanted the independence. I desperately wanted it." Independence and having great choices are really wonderful things to have in your life. Lynn puts it this way: "**Be happy. And then to continue to go forward. I think it's a very good rule of life in general."**

End Notes:

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"Bad or Good Board of Directors – You Won't Believe What Happened Next!"

June 16, 2018

1. **Trae Vassallo (Defy): "[Be] really good at quickly identifying the big questions — the big issues — never get distracted by the small minutia. [Be] laser focused on what is it going to take to turn the business into a great big opportunity."**

Vassallo has described the process of learning to become an effective board member as an apprenticeship. Both as a founder/entrepreneur (Good Technology) and while she worked in venture capital Vassallo has had the opportunity to watch John Doerr and other experienced people serve as board members. Trying to become an effective and valuable board member just by reading is a bad idea. Certain types of experiences can accelerate the learning curve for a board member. For example, in the interview from which the sentences above were extracted, Vassallo talks about how much she learned when she was asked to step into a situation where a business needed to be recapitalized and find a new CEO. When someone is put into a crucible like that they can often learn very quickly. In that situation Vassallo was able to use skills and approaches she learned from when she was an apprentice and generate the type of feedback that accelerates learning.

Even watching ineffective or value destroying board members can help someone discover what not to do (i.e., they are anti-role models). Charlie Munger suggests:

"The more hard lessons you can learn vicariously rather than through your own hard experience, the better." "I believe in the discipline of mastering the best that other people have ever figured out. I don't believe in just sitting down and trying to dream it all up yourself. Nobody's that smart."

To slightly twist Yogi Berra's famous phrase: "You can learn a lot about becoming an effective and valuable board member, just by watching."

2. **Scott Kupor (Andreessen Horowitz): "The truth is that it's hard to land your first board seat. Training helps, but it isn't enough by itself. The network of prospective board candidates is often made up of people already serving on boards."**

People have asked me: "How do I become a board member?" The best way start that process is to find opportunities to observe boards in action. A person may need to do this indirectly at first by being a member of an executive team interacting with a board or by serving on smaller or less formal boards. From that starting point, the objective of the person who wants to become a board member should be to build from that set of experiences. One of the best examples of someone acquiring the necessary skill to be a valuable board member and then laddering up to more and more responsibility is Mary Gates, the mother of a very famous son she and her husband named Bill with the same last name. She passed away far too young in 1994. Mary Gates is also one of my personal heroes, a role model and responsible in a major way for the trajectory of my life. It was impossible to be around her and not learn from her example. As just one example of starting small and building on top of that experience, even as college undergraduate she was an officer in student government. The progression of her career from that starting point illustrates how skills and responsibilities can be acquired and polished step-by-step. People observed through her actions and words how effective, smart and hardworking she was as an officer and board member. This positive impression created another opportunity, which created another opportunity, [repeat again and again]. This is a picture of Mary Gates at the university she both loved and served, followed by a list of her board positions which illustrates the progression:

"In 1975, Gates became the first woman president of King County's United Way and the first woman director of First Interstate Bank of Washington, and only the second woman regent at the University of Washington. In 1980, IBM President John Opel had already spent a couple of years on the national board of United Way with Mary. When the head of IBM's fledgling personal-computer project mentioned Microsoft to Opel, his response was, "Oh, that's run by Bill Gates, Mary Gates' son." By 1983 she'd become the first woman to chair the national United Way's executive committee." "She also served on the UW Foundation Board of Directors, the UW Medical Center Board, and the School of Business Administration's Advisory Board. Her volunteer roles in Seattle and King County included serving on the boards of the Children's Hospital Foundation, Seattle Symphony, Greater Seattle Chamber of Commerce, United Way of King County, and many other nonprofit organizations. Mrs. Gates' leadership was not limited to the nonprofit world. She served for many years on the boards of directors of major corporations: Unigard Security Insurance Group; Pacific Northwest Bell Telephone Company and later US WEST Communications; and KIRO television and radio stations."

Julie Daum of the executive search firm Spencer Stuart has a good description of what people want when they are looking for their next director:

"Boards are looking for first-time directors who demonstrate good judgement, intellectual agility, knowledge of technology or digital, and the ability to deal with complexity. [They] are prioritizing directors who are current and who are broader than one discipline and can think strategically as they confront new, ambiguous, and fast-changing marketplace challenges."

3. Sonali de Rycker (Accel): "Part of being a sophisticated board member is seeing the potholes coming. You don't take the steering wheel, but you point at the potholes that are coming."

Experienced leaders like De Ryker understand the importance of pattern recognition. One of the patterns that people can learn to spot is what she calls "potholes coming." People who have been on scores of boards and have been involved in even more businesses, can start to acquire skill in spotting problems long before the founders and executives involved in a business based on patterns they have seen in the past. Some of this "pothole spotting" skill also comes from the board member having a different perspective on the situation as well as

some some emotional distance. A well-known venture capitalist said to me once: "The situations and people will not be quite the same, but with enough experience you will start to see the important patterns. Some patterns describe practices that are worth emulating. Of course, you need to know which patterns that should be broken too."

Some people will never acquire much skill in spotting the right patterns and will see false patterns. Why some people never seem to acquire skill in improving their judgment raises complex issues that go way beyond what I am writing about here. Many people who have high IQ do not have sound judgment. And vice versa. It depends.

4. Andy Rachleff (Wealthfront; Benchmark): "[One important job of a board is] to hold the mirror up to management to assess their intellectual honesty on product market fit."

It is easy for someone to get caught up in their work and become so wrapped up in the products associated with that work that they think: "Everyone will want this product." Rachleff is saying that a board's responsibility is in part to make sure "product market fit" genuinely exists so the business does not fail due to premature scaling. Since a failure to have genuine product market fit is the most common cause of new business and startup extinction, this task is critically important. One significant advantage that a non-executive board member can have is more emotional distance from the product and the organization including its business model. For this reason, an effective board member can help the day-to-day managers of business including the founders and the CEO carefully consider and honestly determine whether the product market fit exists.

5. Fred Wilson (Union Square Ventures): "A Board's role is oversight, not day to day management. There is nothing worse than a Board which meddles."

The founders and the executive team will know the business of the company far better than the board. The board should refrain from becoming involved in the day-to-day management of the business. Andy Rachleff puts it this way: "A board member should be aware the entrepreneur knows more than them." It is not a good idea for investors or board members to "hire a dog and then do the barking for them."

Charlie Munger explains why a CEO can't be running every decision past the board and why they need to have the power to make decisions as follows:

"When you have a really complicated place and a good CEO, you want them to have power to speak for the place in dealing with outsiders…. Berkshire Hathaway of course is raised that way. Can you imagine Warren Buffett saying to somebody, "Well I'm sorry I have to go back and check with my directors?" I mean, of course he has to go back to check with his directors, but he knows what they're going to say, and everybody knows that what he says is going to govern."

Of course, there should be a governance system in place, but ideally it should be: (1) "as simple as possible, but no simpler" and (2) require that the person with delegated authority have "skin in the game." Munger argues that former Columbia University professor Charles Frankel described the best governance systems when he said:

"truly responsible, reliable systems must be designed so that people who make the decisions bear the consequences. … Frankel "said that systems are responsible in proportion to the

degree in which the people making the decisions are living with the results of those decisions…. So a system like the Romans had where, if you build a bridge, you stood under the arch when the scaffolding was removed—or if you're in the parachute corps, you pack your own parachute—those systems tend to work very well."

Munger's approach requires that a lot of work be devoted to hiring the right CEO and other managers so they can be trusted without overly elaborate and complex governance systems. Work and time spent on hiring well can pay off since less oversight overhead must be created to manage that person in Munger's view.

6. Brad Feld (Foundry Group): "There is a unique role for an outside director in a startup company and it's one that can be profoundly helpful to the CEO. But that person needs to be operating from a headspace of an independent thinker, not a proxy for one of the other participants on the board…. "

Fred Wilson has served boards of scores of businesses and been involved in some way in many more. I can't say what he says below any better:

"As a company moves from founder control to investor control, the notion of an independent director crops up. And independent director is a director who does not represent either the founder or the investors. I am a big fan of independent directors and like to see them on the Boards I am on. Boards that are full of vested interests are not good boards. The more independent minded the Board becomes, the better it usually is.

When the founder loses control of the company (usually by selling a majority of the stock to investors), it does not mean the investors should control the Board. In fact, I would argue that an investor controlled board is the worst possible situation. Investors usually have a narrow set of interests that involve how much money they are going to make (or lose) on their investment. It is the rare investor who takes a broader and more holistic view of the company. So while investor directors are a necessary evil in many companies, they should not dominate or control the board. The founder should control the board in a company he or she controls and independent directors should control a board where the founder does not control the company."

7. [Brad Feld] "Boards should not be] just a cadre of VCs sitting around the board torturing the CEO with conflicting advice and opinions."

Board chemistry is a very important part of board quality. Board members getting along with and respecting each other is important. Fred Wilson writes:

"Like a well-functioning startup or a top flight sports team, the chemistry between the participants on a Board must be strong. That doesn't mean they need to be best friends who hang out with each other outside of the job. It does mean they must respect each other and lean on each other's strengths to get to the right decisions."

After describing what can create positive board chemistry, a *Harvard Business Review* article discusses a period of time in the history of Pan Am as an example of on how it can go wrong as follows:

"[Boards with positive chemistry] seem to get into a virtuous cycle in which one good quality builds on another. Team members develop mutual respect; because they respect one another, they develop trust; because they trust one another, they share difficult information; because they all have the same, reasonably complete information, they can challenge one another's conclusions coherently; because a spirited give-and-take becomes the norm, they learn to adjust their own interpretations in response to intelligent questions.

… A common point of breakdown occurs when political factions develop on the board. Sometimes this happens because the CEO sees the board as an obstacle to be managed and encourages factions to develop, then plays them against one another. Pan Am founder Juan Trippe was famous for doing this. As early as 1939, the board forced him out of the CEO role, but he found ways to sufficiently terrorize the senior managers at the company and one group of board members that he was returned to office. When he was fired again following huge cost overruns on the Boeing 747 the company underwrote, he coerced the directors into naming a successor who was terminally ill."

8. Sonali de Rycker: "Sometimes the baton is handed to the board."

I found this sentence in an academic paper while looking for a simple way to describe one of the board's responsibilities: "One of the most important tasks of the board is to appoint and, if needed, replace a CEO. Directors are elected to the board to represent the interest of the firm's shareholders." This board responsibility is a core part of "governance" which is a complex and often boring topic (until something goes wrong). Michael Mauboussin writes: "Corporate governance is a system of checks and balances that a company designs to ensure that it faithfully serves its governing objective." There is no way the topic of governance can be discussed in any detail in a single 4,000 word blog post. But it is an interesting one that I may write about more in the future.

The best way to learn to be an effective board member during a crisis is to watch and read about effective boards in action in that setting. Buffett and Munger had just such an experience when they had to step up and "take the baton" when Salomon found itself in a bond trading scandal that nearly forced the firm to file for bankruptcy in 1991. Buffett felt compelled to transition from being a passive investor to being chairman of board of directors. Munger was also a Solomon director during that period. Having the right governance system in place is never more important than in a crisis like Salomon faced when Buffett stepped in to the role as Chairman.

An academic paper describes the challenge and one approach to dealing with it in this way:

"The need for a governance system is based on the premise that individuals working in a firm are self-interested and therefore willing to take actions to further their own interest at the expense of the organization's interests. Most large corporations today have adopted governance systems that include extensive incentives and controls. Charlie Munger, however, contends that it is unreasonable to expect such a system to work equally well in all settings. He points out that many successful organizations, including Berkshire Hathaway, operate under a model that relies on fewer rather than more controls. This system can be described as a trust-based system."

No governance system is perfect and there are inevitably trade offs involved n each approach and humans who can get in the way of proper execution of any system.

9. Mark Suster (Upfront): "In some ways being a board member is like how I've heard people describe learning to become a pilot: Many hours of boredom followed by some brief moments of absolute panic and fear." "Most early stage startups having monthly board meetings. I normally recommend eight meetings per year. It makes no sense to meet in August or December due to travel schedules of most investors. You can do calls if need be. And I often recommend that board meetings be every five or six weeks rather than four to give enough elapsed time for stuff to actually happen between meetings. Quarterly is too few for an early stage business…. most companies don't do enough between board meetings."

Suster and Fred Wilson have done an amazing job writing blog posts on how to be an effective and valuable board member as well as posts on the right board structure and governance processes and objectives. Other people like Brad Feld and Jeffrey Graham have written entire books on boards and governance. You will find links to many of these posts and books in the End Notes below. A full discussion of the mechanics of a board and its operations is also a topic for another post.

10. Jon Callaghan (True Ventures): "Creating a high-level agenda is a useful tool for gathering your thoughts and identifying areas where you need help most. High-level agendas also give you a jumping off point for starting and leading dialogue. Once a healthy discussion starts, consider your agenda's job primarily done. The last thing you want is for a room full of incredibly talented people, all of whom care tremendously about your success, to merely read your slides or follow along."

The process of preparing for a board meeting ideally forces the management team to think through what is important. If the team preparing for the meeting can't create a simple and understandable presentation, they have not fully thought it through. If there are gaps in plan and processes revealed in that preparation an effective board should be there to close those gaps by asking the right questions. Time spent going through the board presentation slides line-by-line is a terrible use of time.

11. Fred Destin (Stride): "What I do know for sure is that this old Silicon Valley proverb is grounded in age-old wisdom that still applies today: 'Good boards don't create good companies, but a bad board will kill a company every time.'"

Theranos is a classic example of a "bad" board of directors. John Carreyrou, the author of the new book on Theranos entitled "Bad Blood," describes the genesis and the progression of the problem:

"The main way that she got away with what she got away with is that she surrounded herself with larger-than-life figures. Early on, she met Don Lucas, Donald L. Lucas, who …became chair of her board, I believe, in 2006 after he invested. Really Lucas in the early years gave her credibility. Then Lucas, unfortunately, got Alzheimer's disease, and so she turned in 2011 to George Schultz, whom she met through someone at Stanford. She managed to wow George Schultz, who I happened to know through my reporting is passionate about science. Pretty soon, they were meeting on a weekly basis and he was joining the board. Then she used her budding relationship with Schultz to meet all these other very famous ex-statesmen and military commanders."

As people sometimes like to say: "What's wrong with this picture?" The answer is obvious.

Henry Kissinger	Former U.S. Secretary of State
Bill Perry	Former U.S. Secretary of Defense
George Shultz	Former U.S. Secretary of State
Sam Nunn	Former U.S. Senator
Bill Frist	Former U.S. Senator
Gary Roughead	Former Navy Admiral
James Mattis	Former Marine Corps General
Dick Kovacevich	Former CEO of Wells Fargo
Riley Bechtel	Former CEO of engineering firm Bechtel
William Foege	Former epidemiologist
Sunny Balwani	Theranos executive (President and COO)
Elizabeth Holmes	Theranos executive (Founder and CEO)

The New York Times describes the tragedy and some of its causes:

"The first line of defense should have been the board, and its failure was shocking. Some of the directors displayed a fawning devotion to Holmes — in effect becoming cheerleaders rather than overseers. Shultz helped his grandson land a job; when the kid reported back that the place was rotten, Grandpa didn't believe him. There is a larger moral here: The people in the trenches know best. The V.I.P. directors were nectar for investor bees, but they had no relevant expertise."

Investing outside of a "circle of competence" is a terrible idea, but at least you should be in the side car of some who is inside their circle of competence if you still do invest. No one who was skilled in the domains relevant to business of Theranos was an investor or on the board. The CEO (Holmes) and her "number two " (Balwani) did not have the necessary domain expertise either. There were many obvious "tells" that something was wrong in the case of Theranos. The failure "was strong with this one."

A board applying the right skills and even a reasonable degree of effort should have been triggered into action by one of the many warning signs at Theranos including, but not limited to, the absence of peer reviewed papers about the products, extremely high employee turnover and terminated pilot programs with established health-care businesses. The list of clues that the board had at their disposal is long, as *New York Magazine* describes in this passage:

"Holmes didn't have any medical experience, and for years neither did her board, until former heart surgeon and Senator Bill Frist joined in 2014. "Sources who worked with her,

even some recently, said that she never really showed any curiosity about what was going on in academia and industry," Carreyrou told me. Balwani, who ran operations at Theranos day-to-day, "was essentially a computer programmer at first, and then mostly a salesman. And he had zero training or knowledge in medicine or blood diagnostics."

12. Diane Greene (Google): "Your job as a director is to ask questions."

When board members don't ask the right questions, terrible things can happen to shareholders, employees, customers and to the board members themselves. One of the great experiences in the development of a professional skill set is to have the opportunity to observe people who are skilled in using the Socratic method. The University of Chicago Law School describes this approach: "Socrates engaged in questioning of his students in an unending search for truth. He sought to get to the foundations of his students' and colleagues' views by asking continual questions until a contradiction was exposed, thus proving the fallacy of the initial assumption." In the same conversation in which Diane Greene made the statement quoted just above, Marc Andreessen said that asking questions as a board member is a Socratic dialogue opportunity. He also said: "Even if you have a point of view, maybe the best way to express that is in the form of a question." By asking the right questions, board members skilled in using the Socratic method can help the management team find whether there are gaps, broken assumptions or weaknesses in their analysis and plans and more importantly help the management team find the right solutions.

Board members who do not ask the right questions can end up being personally financially responsible for adverse outcomes. As just one example, WorldCom was one of the greatest business frauds in history. This fraud was enabled by a weak and poorly structured board not asking the right questions. An investigative report concluded that while WorldCom's management team was responsible for driving the fraud, WorldCom's directors "served as passive observers" and "did not exert independent leadership." A report prepared by a special committee of new directors with the assistance of a law firm concluded:

"The Board — and in particular the Audit Committee — played so limited a role in the oversight of WorldCom that it is unlikely that any but the most flagrant and open financial fraud could have come to their attention. [The audit committee] devoted strikingly little time to their role, meeting as little as three to five hours per year."

Anyone who believes that serving on a board is a perk with no downside should consider the WorldCom case as evidence that directors may incur personal liability for their actions:

Ten former directors of WorldCom, the telecommunications company whose bankruptcy was the largest in history, have agreed to pay $18 million of their own money to settle a class-action lawsuit by investors who lost hundreds of millions of dollars when the company collapsed in July 2002.

The agreement by directors to dig into their own pockets, which is part of a $54 million settlement with plaintiffs led by the New York State Common Retirement Fund, is a remarkable concession. Directors have always relied on their company's insurance to cover costs associated with securities cases and settlements.

This post is well over 4,000 words so I need to cut the discussion off now and promise to write more at a later time.

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Lessons from Sonali de Rycker (Accel)

June 23, 2018

Sonali de Rycker is a general partner at the venture capital firm Accel. De Rycker focuses on investments in consumer, software and financial services businesses. She was born in Mumbai and is a graduate of Bryn Mawr and Harvard Business School. De Rycker began her professional career as an analyst at Goldman and went on to join Atlas Ventures in 2000.

1. "We advise breaking down the [process of building a business] into milestones. Don't just look at it as a ten year goal. Break it down into two year to 18 month milestones and then work backwards."

A business must have the potential to become a multi-billion dollar business to be attractive to a venture capital investor. The magnitude of what must be accomplished to achieve that objective can be daunting, especially for a startup that has not proven that it has discovered product market fit and zero revenue. To illustrate how challenging that goal can be, it is useful to review the math: Assume the goal is to create a business with a market capitalization of $10 billion. To justify this valuation the business must generate $1 billion in cash flow every year in perpetuity, assuming a 10% discount rate. If that cash flow is delayed more cash must be generated later to make up for it. How many businesses today generate $1 billion or even half of that in cash a year? As a point of reference, Boeing's o*perating cash flow* is expected to be $15 billion this year. If generating 1/15th of Boeing's cash flow is required to support a valuation of $10 billion, that's a tall order. Of course, many businesses are valued are more than $10 billion even though they have not achieved anything approaching this amount of cash flow. As will be discussed below, the market must believe that this growth will eventually happen in the future or that a "strategic buyer" will purchase the asset at an attractive price.

De Rycker is suggested that breaking a huge goal down into smaller segments marked by milestones can be helpful to the team running a business in dealing with an objective that may seem daunting. As an analogy, once upon a time, a long time ago I ran a marathon in 3 hours and 20 minutes. That requires a pace of less than 8 minutes per mile for 26.2 miles. My method for doing that was to run the race a mile at a time. Each mile completed was a milestones in my journey. My best time is nowhere close to the world record which is close enough to 2 hours that people are hard at work trying break it. Think about the math of breaking that 2 hour marathon barrier:

"One marathon is equal to 422 lots of 100m, and to break the world record you would need to run each of them in a time of 17 seconds. It might not sound too hard, running a 17-second 100m race, you could probably go out and do it right now if you are physically active, but that would be one. Try doing 421 more at the same pace, in a row, with no breaks…"

Sometimes a milestone is defined for the company by external forces and sometimes it is created by the management team. Jim Barksdale, who has been the CEO of several important companies, said once: "Your job is to run as fast as you can towards the cliff. My job [as CEO] is to move the cliff." That cliff can take the form of things like running out of cash or not having the right people to take the business to the next stage. "Moving the cliff" (e.g., a new round of funding) can be a milestone as can hiring a great CFO.

The founders and any other members of the team in the early stages of a startup will inevitably be required to do things to grow the business that do not scale. The process must include customer feedback, experimentation and product iteration among other things. As an

example, Mixpanel founder Suhail Doshi recently described his own journey in a Tweetstorm: (edited version):

+Getting my first 100 customers always felt like a puzzle. The next 1000 seemed unreachable. Besides, how can you get feedback to make the product better w/o users? After many years, we ended up w/ 6,000+ paying customers.

+ This 1st lesson comes hard learned for most engineers: get up — away from your monitor—and talk to your users! I know it's safer & comfortable to just email people but it's also easier to ignore you. Your first 100 customers are usually acquired as a result of YOU selling.

+Get early customers on chat. A few reasons: (1) a great way to get them to follow through on using the product because you can hold their hand & (2) invaluable way to get feedback & troubleshoot their issues to fix later in the product. I did this w/ the first 200+ customers.

+Acquiring your first users/customers requires creativity, resourcefulness, and, often, a lot of manual hard work in the early days. There's no silver bullet. Roll up your sleeves & make it happen.

The journalist David Carr once said: "Keep typing until it turns into writing." Similarly, in building a business, the goal is to keep experimenting with product offerings until they turn into product market fit. The rise of modern analytics and data science means the process will be more efficient than ever before. The founders can't precisely predict what the consumers will want to buy. But they can run experiments that drive them down the path to path toward possible product market fit. Guessing has been replaced by real world testing. The good news is that this process that may lead to product market fit can be accomplished faster and less expensively than ever before. The bad news is that competitors can do that too.

2. Getting to a milestones around value creation will allow you to fundraise." "Money is like oxygen. If you run out at the wrong time, no matter how big the vision is, you won't get there."

Hitting the milestones on time is critically important for a startup since doing so enables the business to refuel to reach the next stage. To grow fast in many businesses will require regular infusions of capital. If the business can be grown using cash that is internally generated, the founders should sing the Hallelujah Chorus! My own practice when the business is cash flow positive is to repeat the word four times: Hallelujah, Hallelujah, Hallelujah, Hallelujah! I like free cash flow very much.

Unfortunately, external capital will be needed to create rapid growth in most cases. What potential financiers will want to see when they fund that growth is a business that is retiring risk step-by-step. Financial risk, people risk, technical risk, market risk and product risk all must be retired step-by-step. Hitting or better yet exceeding milestones are what demonstrates to investors that these risks are being retired. When risks get retired the valuation of the business goes up and investors are happy. When risks are not retired, the valuation of the company will stay flat or drop and investors are unhappy. A falling or flat valuation is itself a risk since it can set off a negative feedback loop.

Investors are looking for a business that has a history of exceeding milestones or the potential to do so. They also want a management team that has the ability to tell a great story about its business. Unfortunately, some stories are fake and some milestones are vanity metrics. For example, when telling a story some people may try to assert that accounting earnings are the same as cash. This can be a fatal assumption. It is possible to have earnings and at the same time have no cash. It is also possible to have no earnings and a lot of cash. It depends. John Malone made the key point about cash in this way: "The first thing you do is make sure you have enough juice to survive…" As the business executive Harold Geneen once famously said: "The only unforgivable sin in business is to run out of cash."

3. "We encourage entrepreneurs to take measured risk."

As I noted above, there are many types of risk. As just one example, how do founders and employees best "measure financial risk" and make wise decisions about that risk? They should adopt an "expected value" approach. The formula is simple:

Take the probability of loss times the amount of possible loss from the probability of gain times the amount of possible gain.

Michael Mauboussin adds clarity to that simple point by explaining: 'Expected value is a function of the weighted probability of potential outcomes. Most experiments that have significant potentially positive outcomes fail. What matters is not how many times you fail, but the magnitude of success if you succeed. My friend Bruce Dunlevie likes to ask: "What can go right?" If the outcome is potentially massive in a positive way, you can take on a significant risk of failure, as long as the investment of collective investments is financially attractive in an expected value basis.

4. "There is huge pent-up demand on the buying side for growth stories."

The amount of capital that is currently engaged in a desperate search for higher yields is unprecedented. Pension funds and endowments in particular have a burning desire to generate enough financial return to support their existing and planned spending or at least have a story that indicates that they may do so. One of the few ways these investors can see to grow their financial return or to tell a story about high future rates of return is to find a business that is quickly growing and hope that this growth will translate into a return that is higher than what can delivered by a benchmark like investing in a market index. Of course, the nature of the growth is matters in a nontrivial way. Revenue is not cash flow. Earnings are not cash flow. History has shown that a desperate search for yield can produce high valuations until it doesn't.

Howard Marks describes his view on where the markets are now in this way:

"The need of investors to wring out good returns in this 'low-return world' is causing them to engage in what I call pro-risk behavior. They're paying high prices for assets and accepting risky and poorly structured propositions .In such a climate, it's hard for 'prudent' investors to insist on traditional levels of safety. Investors who don't want to sign on for risk (that is, who 'refuse to dance') can be constrained to the sidelines…. It appears many investment decisions are being made today on the basis of relative return, the unacceptability of the returns on cash and treasuries, the belief that the overpriced market may have further to go, and FOMO. That

is, they're not being based on absolute returns or the fairness of price relative to intrinsic value."

5. "The next big thing could look very different from the last big thing." "The hallmark of being a great venture capitalist is not having a fixed view. The minute you have a fixed view you are dead."

Generating above market financial outcomes is not possible if you do exactly what the market does. That is true by definition since if you are the market you can't beat the market. De Ryker is saying that investment convexity that makes the venture capital investment model work is discoverable if you know how to find it, but it is unlikely to be found where people have been exploring a lot previously. So-called "convex" venture capital style payoffs are most likely to be found where few or no other entrepreneurs are looking. Convexity is best discovered by experimentation, which the venture capital industry has systemized. Most of these experiments fail, but magnitude of success is what matters, not frequency.

6. "A [seasoned venture capitalist] investor has seen every version of the story. Tuning your gut via pattern recognition [is part of the job]." "Venture capital is a humbling experience…at least it should be because you are always wrong. Even when you think something is going to be good, you do not know how good it is going to be."

Humans are can be very skilled at pattern recognition. Or not. It depends. And some people are better at it than others. The key skill as you go through life is to keep adjusting (De Rycker calls it "tuning") your decision making skills and approaches (e.g., your instincts and judgment). If you are not growing more humble as you go through life you are not paying attention. Everyone makes mistakes.

7. "Almost every single company we've done well with has involved us chasing and hounding. Before I did this job, I thought you'd just sit at your desk and wait for people to come to you. But we've called companies 50 times before we even got to a second meeting."

Venture capital is a business which delivers a premium to people to hustle. De Rycker is saying that Accel, one of the best brands there is in venture capital, believes that they still must hustle to generate the best opportunities. If a well know brand like Accel needs to hustle then Wylie E. Coyote at Acme Venture Partners needs to hustle even more.

8. "Who is the person we are backing who will make it all happen? To invest, I need to have unwavering belief that the founder is the person we think she or he is. Almost everything else is secondary." "Is this person going to break down doors, figure stuff out in a sustainable way and create a great culture?" "People exhibit entrepreneurship, hustle and empathy because of who they are, not what they have done."

This blog has featured many venture capital investors who have said they want to invest in "missionaries" rather than "mercenaries." De Rycker is saying that hustle, empathy, drive to prove something, being a great culture builder, being inventive, being genuine and entrepreneurship are just a few of the attributes she is looking for. This is what most people would expect. Most interestingly, she is also saying that a resume style pedigree is not the key determinant in her decision. Who the the entrepreneur is as a person is vastly more important than credentials.

9. "Culture is not sufficient, but it is necessary. It is not about command and control."

It is not possible to have enough rules so that every employee will know what to do in every situation. It is organizational and community culture that best helps people fill in the gaps that inevitably exist between what the rules describe and reality. The better and stronger the culture of the organization, the more the business can operate via a seamless web of deserved trust. A strong culture cuts down administrative and bureaucratic overhead, speeds decisions and makes employees feel valued. These factors can create positive feedback loops which drive the business forward. Culture increasingly is a critical recruiting tool. In short, people want to work in environments that have an attractive culture:

"while pay can help get new talent in the door, [Glassdoor's] research shows it's not likely to keep them there without real investments in workplace culture: making a commitment to positive culture and values, improving the quality of senior management, and creating career pathways that elevate workers through a career arc in the organization."

10. "Venture capital is all about outliers. Our model it hits driven and our kind of capital forces you to be big." "The truth is that there aren't that many multi-billion dollar companies."

Venture capital is a cyclical business. Capital flows into and out of the venture capital business as it does in other markets. Because Mr. Market is bi-polar, sometimes too much capital flows into venture capital and sometimes too little. Rebecca Lynn has said on the current state of this ebb and flow of capital into venture capital: "The venture industry is overfunded. And it is not evenly distributed." Josh Wolfe has similarly said: "I worry that the amount of capital that's out there is not only raising valuations, but the speed at which people are putting it out and the expectation that they're going to be able to raise a subsequent fund." This overfunding creates a range of challenges and opportunities.

As I have written about a number of times recently, the venture industry is just not that big when compared to the size of capital markets as a whole. Why isn't the venture capital business bigger? As De Rycker says, size of the venture business is limited because there are only so many new "multi-billion dollar companies" that can be formed at any given time. In other words, there are fundamental top-down constraints on spending by businesses and consumers which limit how many financial outcomes for investors can be as big as Google or Facebook over a given period. In other words, the amount venture capitalists can earn on their investments and distribute to limited partners is limited by the economy itself. For an example of how much the economy is able to enable in exists in a given year it is useful to look at figures compiled by PitchBook:

In 2017 with $67 billion exited across 1,265 deals, according to the 2017 PitchBook Liquidity Report. Although this is the third consecutive year exit counts have declined, the maturing venture environment across North America and Europe coupled with generous valuations, allowed for the proliferation of larger exits. In 2017, exits over $100 million comprised just over a third of total exit counts, while these transactions made up 88.7% of total exit value. While larger deals have always had an outsized effect on VC exit value, the relationship continues to be more pronounced.

The returns of venture capital firms within this top down constraint reflect a power law. In other words, the share of a top 5% venture capital firm will look much different than the

share of a venture capital firm in the bottom 5%. When limited partners start moving toward the exists in the venture category it will be the marginal returns on the marginal firms that drives them to pull back. The probability that limited partners will stop investing in a top quartile venture firms is about zero, but whether they will continue to invest in the bottom quartile is a different story. The old joke that is relevant top this point is that there are no venture capital firms in the lowest quartile!

How important are the outliers in generating financial returns on venture capital?

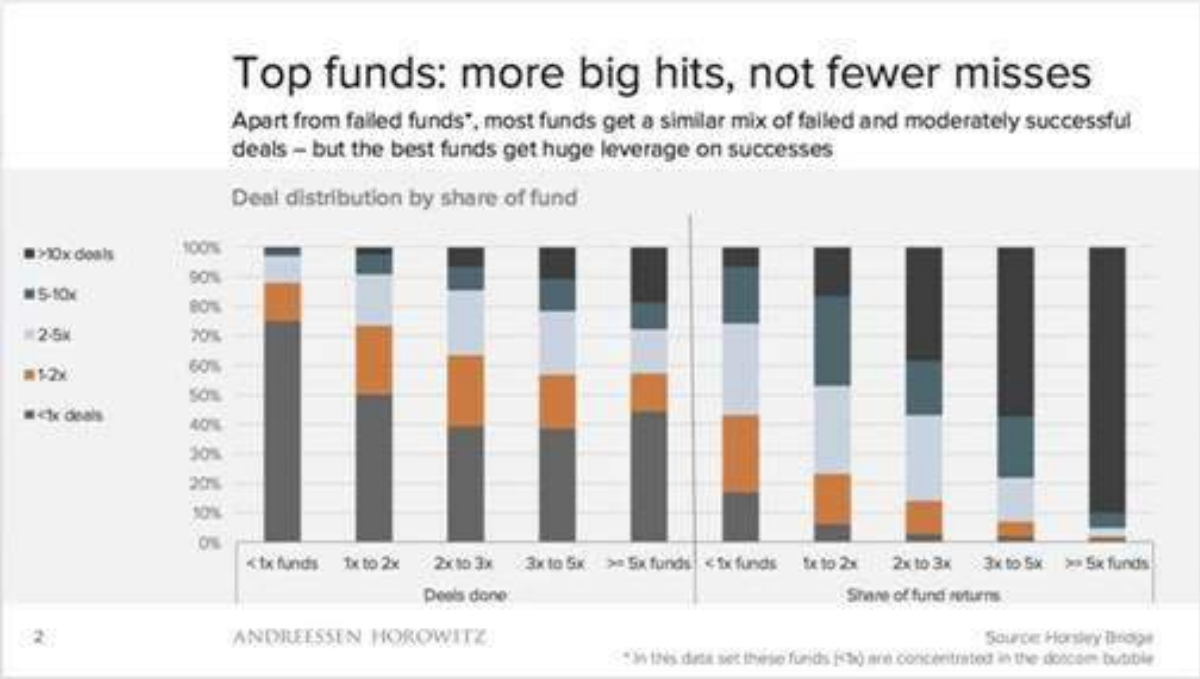

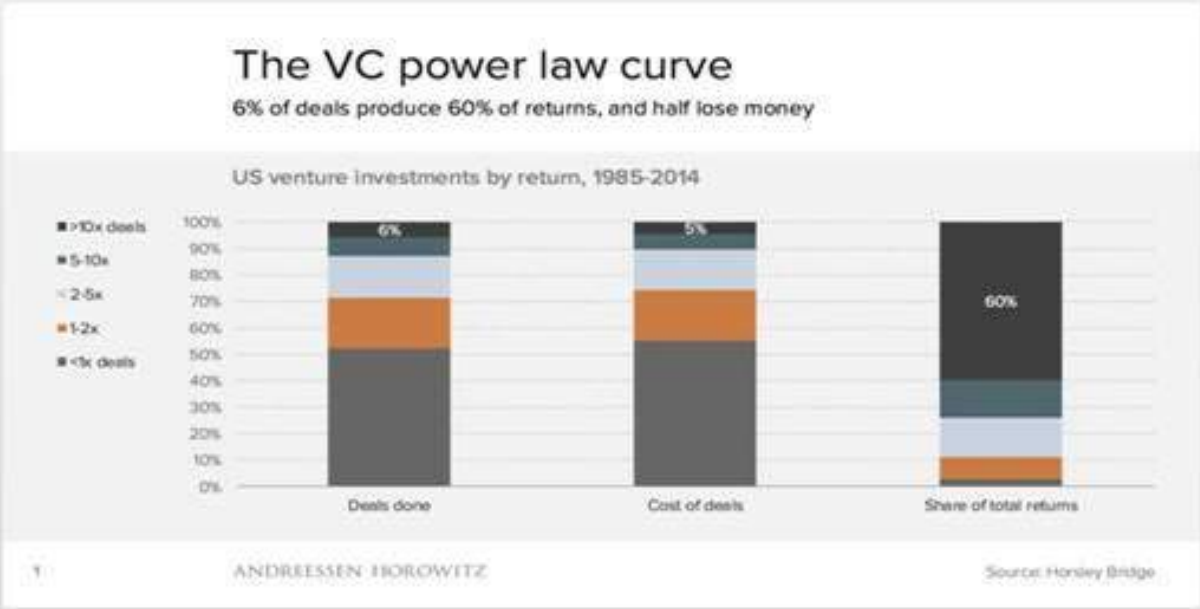

11. "Venture capital is a boutique business. It is hard to institutionalize."

Venture capital is a hard business to scale because the startups and the business of venture capital itself are complex adaptive systems interacting with other complex adaptive systems.

It is not like roulette where the future sates and the probability distribution are known. One way that people have tried to institutionalize venture capital is to create accelerators. Y Combinator and other accelerators have created a model that many people have emulated. Getting willing founders ready for their first significant early stage financing is a problem that accelerators have tackled with great enthusiasm and resources. There are hundreds of accelerators operating around the world right now. Going through an accelerator is not the right approach for everyone, but the alternative is there if a founder wants to use them. Organizations like the Kauffman Foundation and commercial businesses like PitchBook and CB Insights are tracking the outcomes of accelerated startups versus firms which decide not to do so.

12. **"The easiest part of venture capital is to invest."**

In my blog post on boards of directors last weekend I quoted De Rycker describing the ways in which board members can influence the outcome of an investment. How much the investors can help versus hurt a startup can be a contentious issue. Vinod Khosla wrote recently:

The companies need help from board members with hiring key executives and with introductions to unreachable candidates. The need help with critical decisions, and with handling internal conflicts. And they need board members who will push them to be as great as they can be without voting against them on their board or crossing the line of making board "decisions". Boards in my view should rarely make decisions. They deserve brutal honesty rather than hypocritical politeness, even when it is inconvenient to give or get. They need to be pushed to think hard and critically about complex problems that board members can see with the benefit of experience, but they need to be left alone and empowered to make their own final decisions.

What I believe Khosla is talking about is what I wrote about on this blog last week: Don't hire a dog and then try to do the barking for it. If you do not have the right dog, then hire a new dog that can do the barking. The entrepreneur and the management team know the business better than the investor. This is why boards in their effort to provide assistance and create value should focus on asking the founders and management the right questions and not try to direct the day-to-day management of the business.

End Notes:

De Rycker

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Lessons from Cliff Asness

June 30, 2018

A full biography on Cliff Asness would be a couple of pages long since he is so accomplished, but here is my shortened version in the event you do not know his background already:

Cliff is a Founder, Managing Principal and Chief Investment Officer at AQR Capital Management. Prior to co-founding AQR, he was a Managing Director and Director of Quantitative Research for the Asset Management Division of Goldman, Sachs. Cliff received a B.S. in economics from the Wharton School and a B.S. in engineering from the Moore School of Electrical Engineering at the University of Pennsylvania. He received an M.B.A. and a Ph.D. in finance from the University of Chicago.

Learning about the approaches of investors like Cliff helps me in my daily work even though what I do in my work is very different. Cliff is trying to identify statistical factors that can generate a persistent positive disparity of return across large numbers of stocks in an environment where there is extensive historical data. What Cliff is doing is both important and valuable. The growth of AQR's assets under management reflects that clients are very pleased with financial outcomes.

Richard Zeckhauser describes what people like me do at work in this way:

"[We must] identify good investments when the level of uncertainty is well beyond that considered in traditional models of finance. Many of the investments considered here are one-time only, implying that past data will be a poor guide."… Many unknowables are idiosyncratic or personal, affecting only individuals or handfuls of people, such as: Will the Vietnamese government let me sell my insurance product on a widespread basis? Will my friend's new software program capture the public fancy or, if not, might it succeed in a completely different application?"

I work in in situations where both the identity of possible future states of the world as well as their probabilities are usually unknown and unknowable. When I am able to make decisions based on statistical factors I am a very happy person. Unfortunately, that is rare enough that I must focus on creating an investment process that does not depend on using statistical factors.

As an aside, I am currently considering changing the name of my investment process to "margin of safety investing." I may start saying that "Apple is a margin of safety stock" rather than "Apple is a value stock." Trying to convince people that Apple can be a "value stock" seems increasingly futile given how often people hear the term "value investing" used to describe a highly diversified statistical factor investing process. Cliff likes to tease me when I quote Charlie Munger so I will do it just once in this post:

"The idea of a margin of safety, a Graham precept, will never be obsolete. The idea of making the market your servant will never be obsolete. The idea of being objective and dispassionate will never be obsolete. I don't want to own bad businesses run by people I don't like and say, 'no matter how horrible this is to watch, it will bounce by 25%.' I'm not temperamentally attracted to it."

After See's Candy Munger and Buffett started defining a "bargain" based on the **quality** of the business. Because I inevitably make some mistakes and my luck will also be bad sometimes, I incorporate a margin of safety into my investing process. I use this approach in my personal investing and in my work. As an example, for me Apple is currently a "margin of safety" stock. Apple is a bargain reflecting a margin of safety even though it is not statistically cheap.

A substantial part of my personal portfolio is invested in a low cost diversified portfolio of index funds. I also own individual stocks like Apple that I selected based on the "margin of safety" approach recommended by Munger. Picking stocks and working in an actual operating business is more fun for me though. But I have enough money in index funds that I have an additional margin of safety. I could live well just on the value of the indexed assets if I was required to do so in the highly unlikely event that all my stock picks went to zero. As I have written many times on this blog, most people should not be picking stocks even for part of their portfolio since they are what Warren Buffett calls "know nothing investors" and should instead buy a low cost diversified portfolio of index funds.

That's enough about what Cliff and I do differently, the material that follows is about his investment style. Set out below are the quotes arranged as dozen topics you usually find on this blog. Cliff is so articulate that I will let him speak for himself:

1. **“Hedge funds are investment pools that are relatively unconstrained in what they do. They are relatively unregulated (for now), charge very high fees, will not necessarily give you your money back when you want it, and will generally not tell you what they do. They are supposed to make money all the time, and when they fail at this, their investors redeem and go to someone else who has recently been making money. Every three or four years they deliver a one-in-a-hundred year flood. They are generally run for rich people in Geneva, Switzerland, by rich people in Greenwich, Connecticut.” “I am a defender of many things financial but we probably have too many people in finance. We need active management but whether you are getting a good deal is a separate question. Index [investing] is raising a competitive force. On average fees have been too high.”**

2. **“If I ever get an economic law named after me I want it to be ‘there is no investment product so good gross, that there isn’t a fee that could make it bad net.” “The rules are quite simple: Diversify. Rebalance. Keep costs low. There aren’t many others. But no one writes that book because it’s three pages.” “Global diversification to us is about the chance that it turns out that your country is the world’s basket case.”**

3. **“A momentum investing strategy is the rather insane proposition that you can buy a portfolio of what’s been going up for the last 6 to 12 months, sell a portfolio of what’s been going down for the last 6 to 12 months, and you beat the market. Unfortunately for the case of sanity, that seems to be true.” “I still think I give a lot more credence to efficient markets than many on my side of the table. But behavioral effects, living through things like the technology bubble, the GFC, have pushed me more toward the middle. There are small inefficiencies often and very rarely there are large inefficiencies. But people overuse the word “bubble.” They use it for things they don’t like. They say “it’s in a bubble” when they really mean “I think it’s a bad bet as I think it’s overpriced.” I believe bubbles happen but much less often than many claim.”**

4. **“I’m in a business where if 52 percent of the days I’m right, I’m doing pretty well over the long-term. That’s not so easy to live with on a daily basis. When I say a strategy works, I kind of mean six or seven out of 10 years or just a little more than half the days. If your car worked like this, you’d fire your mechanic.” “It’s riding a statistical beast which can make it hard to live with. Having a guiding star to come back to, like long-term evidence in lots of places and an intuitive economic story, helps a lot.”**

5. **“Why doesn’t everyone do it? Why doesn’t all this stuff go away?” Any of these things, value, momentum, there are other things—quality investing, low-risk investing. Ironically I think they remain attractive as they’re in a sweet spot. Good enough to really help a portfolio long-term, but not so good that they aren’t a rough ride sometimes, sometimes very rough. That makes it hard for many to stick with and thus very hard to arbitrage away. It’s possible one day they do go away but there’s no evidence we’re near that point.”**

6. **“I tend to be on the cynical side when it comes to stock-picking particularly when you have to discern the skill of external managers.” “I’ve been a long-term**

cynic, not that all stock-picking doesn't work, but to invest with active stock-pickers, you not only have to believe that it works, you have to believe you can figure out who has the skill beforehand."

7. **"I used to think that being great at investing long-term was about genius. Don't get me wrong, genius is still good, but more and more I think it's about doing something reasonable, that makes sense, and then sticking to it sticking to it like grim death through the tough times." "If you have a three year period where something doesn't work, it ages you a decade. You face an immense pressure to change your models, you have bosses and clients who lose faith, and I cannot really convey the amount of discipline you need."**

8. **"Predicting the future is harder than misremembering the past." "You've got to guess at worst cases: No model will tell you that. I'm fond of pointing out the obvious – that the worst case wasn't the worst case until it happened, so you can't always assume the worst case going forward is the worst we've ever seen. One rule of thumb is double the worst that you have ever seen. Though, I should say that's more of a guideline than a rule, as if you do that with the global financial crisis you're assuming caves and canned goods!" "Momentum itself…has negative skewness. The geeks call that a bad left tail. Nassim Taleb would call it a black swan event. It has standard deviations you're not supposed to see. Big events. These bad events have tended to be more, maybe this is luck, but they have tended to mostly occur in strong markets, not in weak markets. We don't ever like bad events, but worry less about ones that occur when the rest of a client's portfolio is doing well."**

9. **"Valuation of markets is a disastrous short-term market timing tool and a super weak strategy over all but the longest horizons." "One of my peeves is people overuse the word bubble. I am not a pure efficient marketer that believes it should never be used. It should be reserved, not for saying 'something is more expensive than I would like it to be', but for saying 'there is no possible scenario where this can work out'." "'Getting out now' is a very extreme action yet oddly often how people think about market timing (an approach to timing that we label binary, immodest and asymmetric). If, on the other hand, investors wonder whether they should own somewhat fewer stocks and bonds than usual right now — well, that's a much harder and much more interesting question. Overall, for those who think market timing is infeasible, we give hope using basic value and momentum type measures. But the hope is thin – it's still a really tough strategy. We like to say 'if market timing is a sin we recommend you only sin a little!' At the other extreme, some observers oversell market timing as easy and reliable. It ain't." "More expensive markets do lead to lower long-term expected returns even if that doesn't make them easy to time." "Both stocks and bonds [offer today] lower expected returns than normal and the combo is actually pretty bad versus history."**

10. **"Three dirty words of finance are leverage derivatives and shorting." "Of course, we think in many cases those are pretty useful things! But you have to know what you're getting into."**

11. **"Every time someone says, 'There is a lot of cash on the sidelines,' a tiny part of my soul dies. There are no sidelines. Those saying this seem to envision a seller of stocks moving her money to cash and awaiting a chance to return. But they always ignore that this seller sold to somebody, who presumably moved a precisely equal amount of cash off the sidelines."**

12. **"One of the hard things you find out in many fields but I found out in empirical finance is there might be the multiple good explanations for something but they're not mutually exclusive." "At academic seminars, this idea that there could be multiple explanations, is something I push at times because there'll always be two people who want to win. For example, somebody has an over reaction story, and somebody has an under reaction story. Somebody says it is risk, somebody says it is behavioral. But in truth it could be both! And, just to make our lives really hard, the mix of what's more important doesn't have to be the same at all points in time."**

End Notes

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Lessons from Josh Wolfe (Lux Capital)

July 7, 2018

Wolfe is the co-founder of Lux Capital, a venture capital firm which invests in emerging science and technology ventures. The firm manages $1.4 billion in assets across five funds. Before founding Lux, Wolfe worked in investment banking. He grew up in Brooklyn (Wolfe has many interesting stories to tell about his childhood in Coney Island) and graduated from Cornell with a B.S. in Economics and Finance.

1.“Edge is a key element of Lux’s investment philosophy: edge can derive from informational, analytical or behavioral sources. Get better information about an asset (an entrepreneur or technology), or the same information but sooner; analyze that information differently in a way that leads to a novel conclusion (a variant perception) on the importance or magnitude or timing of the asset’s value; or behave individually and as a team in a way that uniquely leads us to great assets (avoid herds and fads, seek what others don’t, venture out a limb as that’s where the proverbial fruit is).

It is worth taking some time to discuss a few examples of each of the sources of edge identified by Wolfe.

Informational: Bill Miller has written that this type of edge “is the easiest to exploit and the hardest to find.” One method for acquiring better information is to have what Phil Fisher called a “scuttlebutt network” of people he could consult for advice or expertise. In interviews Wolfe has talked about how his informational advantage often comes from his existing relationships with people and including board members of portfolio companies. An informational advantage can also be found by reading what few other people read which I will talk about more in the next set of quotes.

Analytical: Bill Miller view on this is: “Analytical advantages come from taking publicly available information and processing or weighting it differently from the others.” One way to generate an analytical type of edge is to focus on having a better investing process. Wolfe and I are huge fans of the work of Michael Mauboussin. If you want to improve your analytical edge, read everything Mauboussin writes and hear him speak whenever you can. Ray Dalio has worked to create an analytical edge at Bridegwater with his “principles” including radical transparency. Sustaining the idea meritocracy universally in a company is difficult, even with computer facilitation, because (1) the number of connections grows with the square of the number of involved employees; and (2) people are unwilling to accept that much unfiltered feedback all the time (human empathy evolved for a reason). As another example of someone trying to gain an analytical edge, I like to understand the business models of as many

businesses as I can. More more different types of business models I learn about, the greater my analytical edge can become. Understanding businesses makes me a better investor and understanding more about different types of investing investing makes me better at business. This idea is borrowed from a famous Warren Buffet quote. Specialization in one type of analytical edge which trying to understand the basics about all styles as best I can has worked well for me. It is also a lot of fun. If you would rather play golf, buy a low cost diversified portfolio of funds that are indexed.

Behavioral: Bill Miller believes: "Behavioral advantages are the most interesting because they are the most durable. The field of behavioral finance is still in its infancy yet has already yielded results that can be incorporated profitably into a sound investment process. The best part is that such results are likely to be systematically exploitable and not able to be arbitraged away as they become more widely known. That is because they represent broad findings about how large groups of people are likely to behave under well-defined circumstances. Until large numbers of people are able to alter their psychology (don't hold your breath), there is money to be made from prospect theory, support theory, cognitive psychology, and neuroscience." One approach to creating a behavioral edge is to arbitrage a factor like time. For example, payoffs that are later in time are less popular with most investors since most people are biased toward immediate gratification. It is easier to find mispriced bets that have longer term payoffs that acceptable to many people. The more focused Mr. Market is on realizing immediate gratification on a given type of asset, the bigger the opportunity for someone who can be patient over a longer term. Wolfe also believes that potential for gain that is too long term is also unwise. For example, basic research with very long-term payoffs is best funded by universities and governments since it is what is known as a "public good." For investors, there is an investing time horizon that is "just right" to create a behavioral edge as was the case in the Goldilocks story.

2. "Be obsessively interested in topics where you can know a little, ideally a lot more, than others. Asymmetrical knowledge is currency." "I have information anxiety. I skip a page in the newspaper, I'm like, 'I got to go back, because maybe there's a tidbit there that's going to change my life.' It's probably not the healthiest thing, because I'm insatiably curious, and I want to meet everybody, and I want to know a little bit about everything, but it's a humbling thing, because you just never know. I'm highly confident that you just never know where the next thing is going to come from." "I am trying to get some piece of information other people don't yet know." "At any point of present, any moment of 'now,' 100% of the information we have is based on the past and 100% of the value of the action we take on that information is based on the future which is inherently probabilistic and unpredictable. You can have strong beliefs loosely held, as is the scientific way. But uncertainty itself is like gravity, always present if not always felt and sometimes defied."

Wolfe believes in Charlie Munger "worldly wisdom" approach to learning and analysis. Reading voraciously and learning about many mental models allows an investor to pull in other principles and create valuable variant perceptions. I share this "information anxiety" attribute with Wolfe. Part of what is addicting about learning for me is the more I learn the more I know that there is even more to learn. When you have observed lots of failure in your own life and read about even more, it is rational to be very driven to acquire an informational edge (#2 above). Even the very best investors fail and make big mistakes. The difference between great investors and business people and most others is that they more often make

new mistakes and do a better job of avoiding circumstances and behavior that resulted in past failures.

3. "Lux started with this sort of definitional focus on areas we thought were totally neglected. Even the derivation, the etymology of Lux, Latin for 'light,' was about looking where other people weren't looking. "I like to find areas where there's really high scientific and technical complexity so people sort of don't understand something yet." "We said, 'Let's go after the chemistry, physics, and material science departments.'" "We like to think differently, but the truth is, we want people to agree with us… but later." "Try to understand what the consensus is, find a variant perception, something that people aren't thinking about, and generally for the wrong reason." "The best ideas happen when you can understand what is consensus and what is the variant perception? What is no one else thinking about?"

Markets are very efficient but not totally efficient. Wolfe shares with me an appreciation of the ideas of Charlie Munger, who has said on this point:

"I think it is roughly right that the market is efficient, which makes it very hard to beat merely by being an intelligent investor. But I don't think it's totally efficient at all. And the difference between being totally efficient and somewhat efficient leaves an enormous opportunity for people like us to get these unusual records. It's efficient enough, so it's hard to have a great investment record. But it's by no means impossible. Nor is it something that only a very few people can do. The top three or four percent of the investment management world will do fine."

One of the hardest problems in investing is identifying who these three or four percent of managers are in advance. The other problem is that far too many people believe they are in the top three or four percent.

What Wolfe is talking about when he says he strives to "think differently" is what Andy Rachleff had in mind when he created this matrix which describes the ideal quadrant for a venture capitalist:

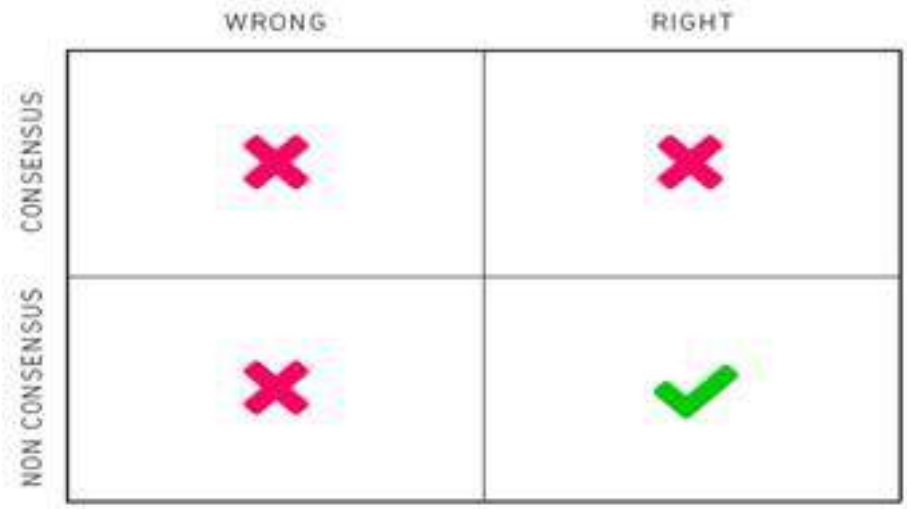

Being contrarian for its own sake is dumb. The reality is that the consensus view is usually right. Any non-consensus view is only valuable if it is also right.

The art of venture capital is to know when the investment is in the bottom right quadrant even though identity of possible future states of the world as well as their probabilities are what Richard Zeckhauser calls "unknown and unknowable." Venture capitalists like Wolfe are skilled at finding optionality in areas that are what he calls "intersection of deep tech and finance. That optionality pairs well with this investing style since venture investments reflect a power law statistical distribution (massive potential upside but, because of optionality, limited downside."

Renata Quintini who is Wolfe's partner at Lux Capital describes the objective:

"One thing about moonshot investing is that you know the market is there. If you cure cancer, are people going to buy the drug? Yes. If you figure out completely autonomous transportation, will people use it? Yes. So the market risk is close to zero. That leaves a big technical risk, I'm not underestimating that. But then you ask — What changes in science and technology would actually make this breakthrough possible? Before investing, we ask ourselves three questions. The first is "why now," which is critical for deep tech investing. It's a combination of either platform changes or a new sequence of discoveries — a big change that opens up a bunch of new experiments that weren't possible before. The other thing we spend a lot of time thinking about is whether this is feasible in the time frame that is conducive to venture capital. If a founder says they'll spend 15 years developing something, it doesn't work for the model. And the third question you ask is, "Given your timeline of development, how does a business stack on top of that?" It's really fun to invest in these types of companies because you have people who know the science deeply and they're missionaries. They're more purpose-driven than opportunistic."

4. "My work is at the intersection of science and finance. Venture capital is a perfect hybridization of those two things." "We have what I call a 100-0-100 investment philosophy. It's this mix of ambition and arrogance and intellectual humility. The arrogant part is the first 100. I am 100% certain that Lux will be investing in the most cutting-edge, crazy things that you can imagine in the next two years. The 0 part is the intellectual humility. I have no idea what those things will be. None. The next 100 is the ambition and the confidence, which is, I know with near 100% certainty where we will find those things, and it's at the edge of our already cutting-edge companies. As long as I stay curious and paranoid and ambitious, and we listen in the boardrooms about the hard problems that these companies might be solving, that's where the next thing will comes from, but it's all random until after the fact."

Wolfe's viewpoint is described by Nassim Taleb as follows:

"You don't have to be right that often. All you need is the wisdom to not do unintelligent things to hurt yourself (some acts of omission) and recognize favorable outcomes when they occur. (The key is that your assessment doesn't need to be made beforehand, only after the outcome.)"

What could possibly be more fun for someone like Wolfe than making investments at the intersection of finance and science? The investment and business environments are constantly changing and provide an investor with an endless stream of new challenges as well as

performance feedback. An investor's ideas and theories can be tested in real world situations in ways that are far more challenging than playing to most complex video game ever invented.

5. "Randomness and optionality are defining forces of my life. Ex post facto everything is an obvious linear chain of events. A priori? Intellectual honesty demands reporting I had no clue what came next…" "I got very fortunate and met a guy, Bill Conway, who's one of the founders of the Carlyle Group. And he took a stake on me and put us in business. And that was luckiest day of my life, and we never look back." "Our business especially is dominated by luck… right place, right time. You have to be smart to get access to the best entrepreneurs and you got to structure deals well and have adequate reserves. And it's a lot more art than science, but there's still some science to it. But I do think luck dominates."

Wolfe has learned how to create high levels of optionality in his life and to capitalize on that to generate superior outcomes. Wolfe knows that activities like living in a city, travel, going to parties, taking classes and acquiring a wide range of skills increase optionality. Nassim Taleb describes the objective:

"That which benefits from randomness (increased potential for upside in the presence of fluctuations) is convex. That which is harmed by randomness, concave. Convexity propositions should be embraced – concave ones, avoided like the plague…. 'optionality' is what is behind the convexity of research outcomes. An option allows its user to get more upside than downside as he can select among the results what fits him and forget about the rest (he has the option, not the obligation)."

6. "What can you do, or what can you assert that you can do that will scare competitors that nobody else can do? From that flows good unit economics. If you have a true moat of whatever kind, an unfair source of supply, something on a brand, the ability to get scale where a competitor can't, a technological innovation that somebody literally can't access, and they look at that and say, 'It's not fair. I can't make that,' that is a beautiful thing. From that, you have a moat. From moat, you have pricing power, you have monopsony, like pricing leverage with suppliers. I just, I think everything flows from competitive advantage."

The book Bill Gurley inevitably recommends when asked for list of suggested reading material is *Competitive Strategy* by Michael Porter. The principle behind what Porter calls sustainable competitive advantage (a moat) is simple: the greater the supply of any product sold in a market the more the price of that product will drop to a point where there is no long-term profit above the cost of capital. Moats need not be absolute to be valuable and are always transitory (no moat lasts forever). The test of whether a moat exists is quantitative. If a business has not earned returns on capital that substantially exceed the opportunity cost of capital for three to five years, it does not have a moat. The biggest challenge in creating moats is that they result from qualitative factors that are neither fully predictable nor understandable. Charlie Munger has said that the task of creating a moat is so hard that Berkshire instead focuses on buying them. Why is it so hard? Wolfe and I share an admiration of the work being done at the Santé Fe Institute, including understanding research complex adaptive systems. Wolfe is on the board of Trustees of SFI with people like Michael Mauboussin and Bill Gurley. What these investors and others appreciate about the work done at Sante Fe and other places on complexity is that it helps them understand (1) what they do

not know and (2) what is not knowable. Knowing what you do not know helps you define a circle of competence and knowing what is not knowable helps you to identify areas to avoid.

7. "People tend to pine for the nostalgia of yesteryear. It used to be that a single person like Ben Franklin could create large easy to understand and widely applicable breakthroughs. Today incremental discovery requires scientists to be more and more specialized. But the bigger combinatorial possibilities are bigger than ever. The best entrepreneurs put many technologies together almost in a Renaissance manner to create the big breakthroughs."

Science and business today are much more competitive and distributed today than was the case in the past. Anyone who is involved in a real business and paying attention knows this reality first hand. There are some people who "pine" for an era when a single inventor working mostly on their own produced singular easy to understand innovations like the flush toilet. The world does not work that way anymore. Scientific and business capabilities are more and more widely-distributed. Scientists and business people are connected by highly networked systems which enable collaboration at levels and with speed never before possible. As a result, innovation and credit for innovation is much more distributed than it has ever been before. As Wolfe points out, many of the most important innovations are combinatorial and incremental. There are (1) many more innovations (2) happening much more frequently (3) on a far more distributed basis (4) developed by more people, than ever before.

8. "We've had incredible executors, operators, and other people that get stuff done, that can come up with a plan and execute on it, but they can't raise money, recruit, sell a story, talk to the media. Those missing skills creates a major deficit. On the other hand, you have people who are amazing at telling stories, and they can lower the cost of capital because they can raise expectations, but they can't execute. You need a marriage of both. You need the storyteller, and you need the executor and the operator." "Passion is the best predictor of success." "Our number one job on the board is making sure that she or he, whoever is running the company, are doing a good job, and if they are, I basically view it as, we work for them, and if they're not, then we have to replace them. That's the hard thing, and you can never do that too soon." "The greatest entrepreneurs are risk killers. They think about killing failure paths. They also understand that risk and value can change form. When risk has been killed then value has been created and a subsequent investor should pay a higher price for a percentage ownership interest in a business."

Wolfe defines risk as "more things can happen than will happen." This definition was created by Elroy Dimson at the London Business School and has been adopted by other investors who share Wolfe's outlook on investing. For people who adopt this view of risk, the future is not fixed but rather an endless series of probability distributions. Great entrepreneurs are not "risk takers" and are instead "risk killers." They have skill in identifying which are the most valuable risks to kill (or at least retire). The best entrepreneurs know how to destroy pathways that can lead to harm, which results in better outcomes. The goal of a sound investment or business process is always defined by expected value: "Take the probability of loss times the amount of possible loss from the probability of gain times the amount of possible gain." Killing risk increases expected value.

9. "What is predictive of financial returns is how much capital is going into the sector. The more capital that is going into the sector, the worse financial returns will be." "The higher the price you pay, the lower your expected return."

Investing in a business at a pre-money valuation of $10 million will generate twice the financial return than if you had invested at $20 million pre-money. This applies both to individual investment but also to all investments taken as a whole. The number of financial exists is top down limited by the economy as people like Fred Wilson has pointed out. The level of financial exists in any given year has not leaped up in response to more capital being deployed to venture capital. There are only so many Facebook or Google style financial exists in the economy. More generally, the more capital and investors that inhabit a market the harder it is to find the edge that Wolfe desires. Markets in which less capital has been put to work tend to have a greater probability of generating a substantial market inefficiency.

10. "Inspired by Charlie Munger, I keep records of people that have made really bad decisions. I've debated this with Peter Thiel where he's like, you only want to focus on people that have been really successful, and I totally disagree, because a lot of that has been luck, but I think if you focus on people that have really screwed up because they've made bad choices, that's something to avoid." "Failure comes from a failure to imagine failure." "If you can imagine all the things that can go wrong, then you can flick them off the table, because I think of it almost like the first law of thermodynamics, like energy is not created or destroyed, risk and value just change form. Technology risk, product risk, market risk, finance … All those things are risks. I kill one of those risks with time or talent put into it. If you're a subsequent investor, you should be paying a higher price and demanding a lower quantum of return, because you're taking a low quantum of risk. When this entrepreneur comes in and is pitching us, maybe they've eliminated the financing risk, but all those other things exist."

Anyone going through life is constantly conducting experiments and generating feedback. Some people realize this process is happening more than others and as a result are more aware of and responsive to positive and negative feedback. One challenge for humans is properly internalizing the feedback, which can lead to repeating old mistakes. Making the challenge harder is the fact that there are many heuristics or biases that people use to get through life that are often useful or at least were useful long ago in human history that can sometimes cause people to make a bad decision or a mistake. By paying close attention to your mistakes and successes you can improve your skill. By reading and talking to a lot of people about mistakes that other people have made you can learn vicariously about more mistakes that if you have never read or heard the same stories. Learning about painful mistakes by reading books is a sound way to live your life. There is no need to pee on an electric fence yourself to learn something about that outcome. If you do pee on an electric fence yourself, it will be particularly memorable.

As an example of developing good judgment, let's assume someone approaches you with a compelling story about new product X. When you look at the projections you see a graph that resembles a hockey stick. What some with sound judgment knows is what Wolfe said here: "One of the biggest mistakes people make is creating predictions about trajectories. For example, 'Such and such market by 2020 is going to be this many billion dollars.' The trajectories in these predictions are always hockey sticks. That is never predictive of financial returns. Ever." The more hockey sticks you see in presentations the better you get at understanding them and the people who present them.

11. "Science fiction imagines what could be. The best entrepreneurs also imagine what can exist in the future. "I see the gap between science fiction once imagined and science fact now realized is ever shrinking." "I'm both an optimist about the endless frontier of technological possibility and a realist who believes failure comes from a failure to imagine failure." "The gap between– we actually catalog this in a sort of funny but true way– the gap between science fiction– that which was once imagined– and sci fact– what becomes real- – keep shrinking. You can watch Star Wars and see the Luke Skywalker robotic surgery. We've got a company called Auris from the Intuitive Surgical founder doing tiny robotic surgery. You can look at the Taser gun, which was inspired by the Star Trek phaser. You can look at the 3D scanning and 3D printing from something like Disclosure where Michael Douglas gets scanned and dons these virtual reality goggles."

In addition to what he said above, Wolfe also said that science friction authors are either getting more creative or scientists more creative. The investments that Lux has made reflect this viewpoint and reality. For example, Lux has invested in what is essentially a drone racing league and robotic surgery seen on Star Wars. He appreciates that science fiction writers let you know that they are imagining things and that they inspire people to make their imagination come to life.

12. "The best advice I ever got was Jim Watson, who co-discovered DNA. Jim is brilliant, and as many brilliant people are a little bit crazy, and Jim has this admonishment which is double meaning, three words: 'Avoid boring people.' I love it, because what he's saying is, 'Stay away from people who are not interesting,' avoid boring people, and, 'Avoid boring people. Don't be boring to people. Be interesting.'"

Being around interesting people increases the probability that you will be exposed to positive optionality. It also makes your life a lot more fun. Wolfe is about as far from boring as anyone I know. Dos Equis beer should have selected him as the new "Most Interesting Person in the World." Friends don't let friends hang out with boring people.

End Notes:

Business Lessons from Rob Hayes (First Round Capital)

July 14, 2018

Rob Hayes has been a partner at First Round Capital since 2006. I wrote about First Round previously in the chapter on John Kopelman in my newest book *A Dozen Lessons for Entrepreneurs* which is a fund raiser for the charity "No Kid Hungry." Before joining First Round, Hayes was a venture investor at Omidyar Network and prior to that he worked at Palm. Among the investments Hayes has made on behalf of First Round include Uber, Square, Mint.com and Planet Labs.

1. **"Distribution is absolutely the hardest part of creating an internet company."**

A vast gap can exist between: (1) people in a business who create and build products; and (2) the people who create the sales, distribution and marketing systems. Or not. Let's be clear: (1) creating a product and finding product market fit (the value hypothesis) and (2) finding repeatable and scalable ways to grow the business (the growth hypothesis) are both very hard. Hayes is saying that distribution is harder (and he is a trained engineer). Maybe the best way to settle some of the conflict on this issue is to say that finding profitable and scalable distribution is "harder," but creating a product and finding "product market fit" is "rarer." Regardless of which task is harder (it will vary from business to business) proving that product market fit exists should some first, since otherwise the business can be harmed by or even die from "premature scaling." There are some very helpful posts for entrepreneurs on distribution written by people like Ben Horowitz and Mark Suster. I have written a post on why direct distribution is becoming more valuable as the need for data to improve the product for customers becomes more valuable. You can find links to these posts in the End Notes.

2. **"It is a red flag for me if the founders have 20 slides in their deck on their product and are not getting into issues like distribution, team or other parts of the business. There have been very few products that cause people to beat a path to the door of the business on their own [like Google or Facebook]. Successful companies almost always have operators running them who know how to market, sell, manage an income statement and hire."**

Hayes has talked in interviews about the rarity of businesses like Google or Facebook that have product offerings that "sell themselves." Unfortunately, the existence businesses that do not face normal distribution challenges like Google and Facebook can cause other people to think that they can sell their products in the same way, especially in consumer markets. Thousands of startups and new product launches have failed by assuming that using a "viral" marketing strategy will be enough to create a successful business. A business can have some attributes of these two companies (e.g., a business can work to create factors like virality), but the probability that a founder's business will have a sales and distribution outcome that is as efficient or profitable as Google or Facebook is close to zero.

A business that can just focus on growth an ignore revenue even after they find product market fit is also uncommon. Mark Suster advises startups to: "ring the freaking cash register." I expect that he has encountered startups where growth is more important, but that is not the usual case, Ben Horowitz writes:

"When I ask new entrepreneurs what their distribution model will be, I often get answers like: "I don't want to hire any of those Rolex-wearing, BMW-driving, overly aggressive enterprise sales slimeballs, so we are going to distribute our product like Dropbox did." In addition to taking stereotyping to a whole new level, this answer demonstrates a deep misunderstanding of how sales channels should be designed. What is a sales channel? It's a route to market for a product or set of products. It can range from your website to a sophisticated sales force. The sale itself must be supported with the right marketing, process, and optimization strategy. Selecting the right channel is critical for any business — and products often fail because the company chose the wrong route to market."

I have seen more slide deck presentations and product pitches that completely ignore distribution than I can count. They often look like this:

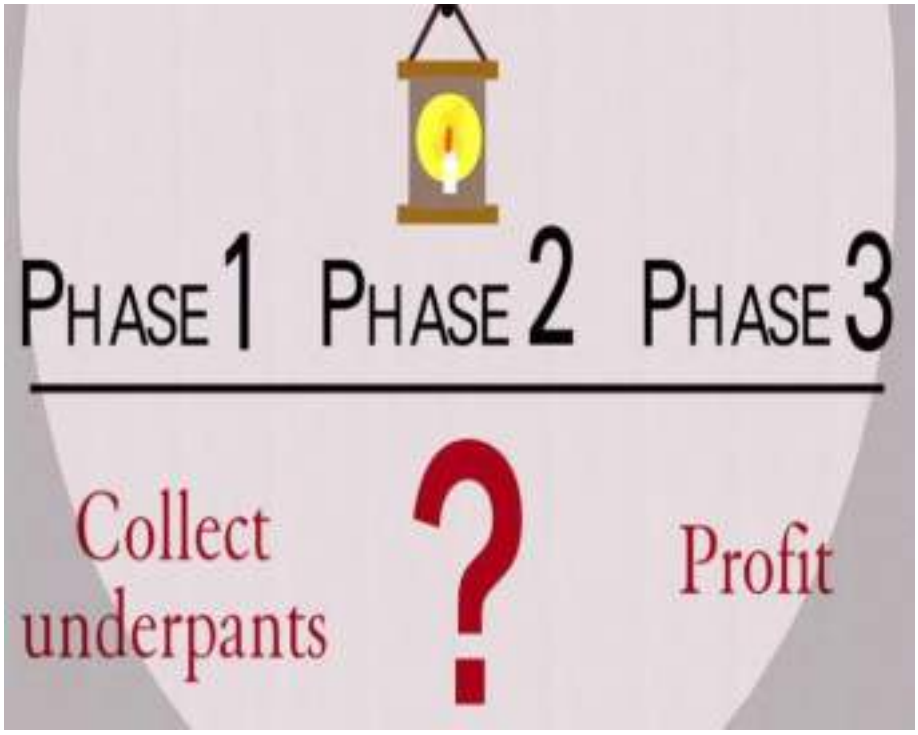

If a business can't efficiently and cost effectively distribute its products in a way that delivers positive "unit economics" it is dead (or at best is walking dead).

The best way to learn how to be a successful operator of a business and create successful distribution and other systems is to watch one do their job. All great operators I know are standing on the shoulders of other operators that came before them. A Charlie Munger admonition is applicable: "I believe in the discipline of mastering the best that other people have ever figured out. I don't believe in just sitting down and trying to dream it all up yourself. Nobody's that smart." That an operator must adapt what they know and do to the specific business does not mean that they should not learn from the best operators that have come before them.

3. **"You need to do two things as an early stage CEO: (1) hire the best possible people; and (2) make sure you don't run out of money. There is a lot underneath that, but if you do those things successfully you are likely to have a good run." "If you're not spending at least 50% of your time hiring — and that's the minimum — you're already on the road to failure." "Your job is to get great people and get the best out of them. Even if this makes you uncomfortable, you'll find that really good things happen." "You can't be a leader without having people around you who you trust to do the right thing. And that means they're not always going to do it the same way you would. It's not your job to micromanage them." "It's very common to see company founders after they're raised they're money to feel like that's the big win. They raised their money, so now they're a company. As you close that first round and the money gets wired to your account, it's really just beginning for you as a company." "In the early days, know that it's only about cash. That's all the money you have to spend and should be spending." "Founders should be worried about cash on-hand all the time. Even if employees love you, they won't stay if you can't pay them. In the early days, know that it's only about cash. That's all the money you have to**

spend and should be spending. "I hear founders saying all the time, 'This is where revenue will start flowing in, so we can do X, Y and Z.' I want to see a cash plan that assumes absolutely zero revenue, because you never know."

Great hiring is not sufficient to create a successful business, but it is necessary. Discovering product market fit and a repeatable and scalable business model that can generate growth are among the other requirements. Of these inputs, hiring is too often given insufficient attention and energy by founders who must successfully do many things at once. Keith Rabois describes the importance of hiring in this way: "First principle: the team you build is the company you build."

How much cash a business has on hand determines its "runway" which is the period it has until it is "cash out." Mark Suster advises:

"VCs want you to raise the "appropriate" amount of capital, which I would define as what is reasonable given your progress to date, your resources and your needs for an 18–24 months."

Hayes' partner Josh Kopelman believes:

"You should target 18 to 24 months of runway post Series Seed. The best time to raise follow-on capital is when you don't need it, and 2 years of runway gives you the best chance to land in that situation."

In addition to hiring the other topic discussed in the quote above is our old friend cash flow. Scott Belsky points out that the issue of hiring and retaining good employees and cash on hand are quite related:

"The cash is king (or runway is king, for a fast-growing private company). Without runway,

talent takes off. So, it is no surprise that bold moves to extend runway (think late-stage financings at technically large valuations with some tricky liquidation preferences underneath) are done even if they could hurt the company (and its people) in the long run. This is especially true when these financings are ego-driven rather than strategic. The problem is, the employees at these companies don't understand the implications."

There is an interesting tension that I see right how in that seed stage investors are getting nervous about the flood of late stage private money. These steed stage investors are even writing posts arguing essentially: "selling out early can be a great outcome." They cite cases like the recent FanDuel sale:

"The aggregate value of the consideration to be paid by the Company in the Offer is approximately $465 million. As this consideration is not sufficient to satisfy the aggregate preference payable on the A Preference Shares, no part of the consideration payable in the Offer will be payable on FanDuel's ordinary shares or options to purchase FanDuel's ordinary shares."

In short, seed stage investors are increasingly worried about same issues that employees and founders have faced for years. They are also worried that late stage private money is extending the time that they must wait to get a distribution but that is a topic for another day.

4. **"Building from nothing to [into a business with scale attractive to a venture capital investor requires a founder that can go from telling you a compelling story about her market at 50,000 feet to asking whether a radio component in the hardware should be moved 3 microns to the right. If you ask me what kind of founders I gravitate to, they're the ones who can run up and down the stack like this. You often see this quality in the best CEOs."**

People who build a successful business are never one dimensional. They may be very focused on the business, but it takes many skills to be a great CEO or founder. The good news is that CEOs and founders don't need to have perfect understanding of every skill to be successful. Founders will naturally know some aspects of growing and operating a business better than others. Knowing which approaches to use and when to seek help from others and when to do something that everyone thought was an unbreakable rule is a key part of good judgment. For better or worse, having good judgment often comes from making some bad judgments and learning from those experiences. The process of acquiring wisdom is just that – a process. And that process never ends.

5. **"Ideally, every founder is excited to get out of bed because they believe they're doing something big and important in the world. They need to know what this is — to have this kind of North Star to guide them. That's what's going to give them the energy they need and the ability to hire all these people and convince all those investors."**

Hayes is yet another investor who values the missionary founder over the mercenary founder. A missionary who can tell stories that attract investors, employees, business partners and customers is particularly desirable. Many people who are great at putting their head down and doing the work are not as good at putting their head up and telling a story. The North Star will help even a missionary get through what Scott Belsky calls "the messy middle" of the inevitably up and down journey to success. In fact, it is the North Star goal that creates a missionary in the first place.

6. **"There are very few businesses that haven't changed significantly as they have grown."**

The real world presents founders and investors with uncertainty, risk and ignorance. Give this unavoidable reality, it is wise to learn how to take advantage of optionality. Nassim Taleb frames the opportunity:

"If you 'have optionality,' you don't have much need for what is commonly called intelligence, knowledge, insight, skills, and these complicated things that take place in our brain cells. For you don't have to be right that often. All you need is the wisdom to not do unintelligent things to hurt yourself (some acts of omission) and recognize favorable outcomes when they occur. (The key is that your assessment doesn't need to be made beforehand, only after the outcome.)"

It is not always possible, but when positive optionality does appear jumping on that train is a very good idea. Fantastic opportunities don't present themselves to a human being every day, but when they do it is important to take advantage of them. Being patient and yet aggressive when an attractive opportunity presents itself is a great way to prosper and be happy in life. Low downside and a big upside? You do it. Big downside and a small upside? You don't do

it. Big downside and big upside? You ask yourself whether you are playing with house money that you really don't need and how passionate you are about what is involved. Small upside and small downside? Meh.

7. **"I'm a seed investor. My job is to find those people that people have not heard of, met or worked with and make decisions about whether that person can have a real impact." "I ask: 'Is there a real problem that this startup is solving. Is it a problem that I either feel myself or a know a lot of people feel deeply. Is there a founder who can execute against the solution to the problem?'" "I think there are two types of founders. Those that find waves to ride and those that create the waves so they can control when and where the ride happens. Elon Musk has done this twice and I can point to many other founders that have created their own destiny when others thought it was not the right time (Travis, Jack, Sergey and Larry, etc.). My question is never 'is this the right time to build this company' but 'is this the right person to build this company given that this person will also have to build the market'."**

Hayes is in part talking about what I wrote about last week in my blog post on Josh Wolfe. An investor should always be seeking an edge of some kind. Whether that edge is informational, analytical or behavioral in nature, the objective is to capture an opportunity that has positive expected value. There are many ways to acquire an edge and some ways to acquire an edge are not right for some people. For example, Josh Wolfe is not Cliff Asness, who I wrote about the week before. They both have different styles as do other successful investors I have profiled on this blog. The more you know about the many different ways that one can capture an edge in investing and operating a business the better your outcomes will be. You may not use every investing or operating style yourself, but you can learn by understanding many styles. You can even learn from styles that are not successful since you can acquire more knowledge on what not to do. It is amazing how much benefit you can generate as an investor or an operator of a business by consistently not being stupid.

8. **"Marketplaces and platforms extremely difficult to spin up, but once they're working, they can become massive businesses."**

Marketplaces and platforms bring together two or more interdependent groups who need each other in some way. Uber, eBay, and Airbnb are examples of this phenomenon. Hundreds of big and small businesses fail in trying to create marketplaces and platforms in different categories every year. The payoff from creating a significant marketplace or platform is massive and the financial downside relatively small. As I discussed above that is positive optionality. Founders and venture capital investors are willing to keep experimenting since it is magnitude of correctness and not frequency of correctness that determines financial success. Just one success in creating a platform or marketplace can pay for many dozens of failed attempts. Some people will try again and again to create a large marketplace or platform and never succeed. Successfully creating something like Uber, ebay or Airbnb is not a common event.

9. **"As a venture capitalist you can look for reason to invest or look for reason not to invest. It is sometimes harder to find reasons to invest." "There are crazy valuations and not crazy valuations. When you are talking about a 10-15% differential on a term sheet with accompany that has a binary outcome, that can**

be a big mistake. My ultimate goal is to take money from my investors and return a multiple of that. Until that happens the investment is not a success."

My friend Bruce Dunlevie likes to ask: "What could go right?" Dunlevie's friend and colleague Bill Gurley agrees:

"If you invest in something that doesn't work, you lose one times your money. If you miss Google, you lose 10,000 times your money. You must orient yourself toward [the question: what could do right?] You have to kind of think that way all the time. You're more likely, being overly analytical and talk yourself out of things. You have to twist your brain in the right way." It's not a 50/50 thing on the judgment call. If you thought it was a 20 percent chance of success, you should still do it, because the upside is so high." "You have to be very fortunate to discover what people sometimes refer to as positive black swans, these break-out plays. And I think you could spend your whole career and do extremely well and never get behind one."

10. **"There is a reason why hardware has the word 'hard' in it. Producing integrated hardware and software products is one of the hardest tasks in the technology business." "If you've ever worked in product, the first thing you know is that products are never finished. There are all these things you can do to make them better."**

Hayes learned a lot about how "hard" hardware is at Palm. Hardware is not only hard technically and in terms of issues like supply chain management, but hard financially. Life is just better and easier for a business when it has very high gross margins. This chart illustrates this point about gross margins by pointing out how many highly valued businesses have them:

CY12-CY17 (6 years)		% of Sales	
Rank[1]	Ticker	GM	R&D
1	AAPL	39%	4%
	Median of Top 30 Tech	57%	14%
	Mean of Top 30 Tech	55%	13%
	Median of Top 50 Tech	57%	13%
	Mean of Top 50 Tech	54%	12%
2	AMZN	33%	11%
3	GOOGL	61%	15%
4	MSFT	67%	14%
5	FB	85%	21%
6	INTC	62%	21%
7	CSCO	62%	13%
8	ORCL	80%	14%
9	NFLX	32%	9%
10	NVDA	57%	24%
11	IBM	49%	6%
12	ADBE	86%	18%
13	TXN	57%	11%
14	AVGO	60%	18%
15	ACN	32%	0%
16	CRM	75%	15%
17	PYPL	49%	9%
18	QCOM	60%	22%
19	BIDU	63%	14%
20	VMW	84%	22%

Apple and Amazon are exceptions on the gross margin front, but their businesses make up for lower gross margins based on amazingly high sales volumes. Netflix is similarly trying adopting a volume and scale based strategy. That Apple or Amazon has accomplished X does not mean it easy to do what they have accomplished. I have written a post on what Steve Jobs, Jeff Bezos and Reed Hasting have accomplished that are linked to in the End Notes below.

As an aside, my most interesting story about Palm was being with Craig McCaw when Jeff Hawkins flew to Seattle with a balsa wood prototype to get some input. He was famous for doing this:

"Hawkins produced a balsa wood scale model with a pasted-on screen mock-up, complete with stylus whittled down from a chopstick. In the weeks to come, Hawkins would be seen interacting with his wooden model, pretending to use it as if it were a real device."

Even with a founder/designer who is a savant about issues like product user interface and form factor, the hardware business in indeed hard. I have written another blog post entitled: " Peloton: The "SaaS Plus a Box" Business case" and you can also find a link in the End Notes. The recent IPO filing by Sonos reveals some of the challenges of lower gross margins:

	Fiscal Year Ended			Six Months Ended	
	Oct. 3, 2015	Oct. 1, 2016	Sept. 30, 2017	Apr. 1, 2017	Mar. 31, 2018
Revenue	100.0%	100.0%	100.0%	100.0%	100.0%
Cost of revenue[1]	54.7	55.2	54.1	55.7	57.7
Gross profit	45.3	44.8	45.9	44.3	42.3
Operating expenses					
Research and development[1]	11.9	12.0	12.5	10.4	10.5
Sales and marketing[1]	32.3	28.6	27.2	24.7	23.4
General and administrative[1]	7.7	7.6	7.8	6.3	6.6
Total operating expenses	51.9	48.2	47.5	41.4	40.4
Operating income (loss)	(6.6)	(3.4)	(1.6)	2.9	1.9
Other income (expense), net					
Interest expense, net	—	(0.3)	(0.4)	(0.4)	(0.3)
Other income (expense), net	(1.1)	(0.2)	0.3	(0.2)	0.5
Total other income (expense), net	(1.2)	(0.5)	(0.1)	(0.5)	0.2
Loss before provision for (benefit from) income taxes	(7.8)	(3.9)	(1.7)	2.4	2.1
Provision for (benefit from) income taxes	0.4	0.3	(0.2)	(0.4)	0.1
Net income (loss)	(8.2)%	(4.2)%	(1.4)%	2.7%	2.0%
Adjusted EBITDA margin[2]	(0.5)%	3.3%	5.6%	8.8%	7.7%

(1) Amounts include stock-based compensation expense as a percentage of revenue as follows:

11. **"This is a long-term business. Reputation is made over careers and lost over deals."**

Warren Buffett's advice on this set of issues is quite similar to the view expressed by Hayes. Buffett famously once said: "It takes 20 years to build a reputation and five minutes to ruin it. If you think about that, you'll do things differently." The old *New York Times* test should perhaps now be the Twitter test. The admonition was once phrased in this way: "Never do anything you wouldn't want to see reported by people you respect on the front page of the *New York Times*." A new version might be: "Never do anything you wouldn't want to see retweeted by people you respect." Mark Twain's famous and simple advice on this point is applicable: "Always do right. This will gratify some people and astonish the rest."

12. **"It's really important and imperative for you to be leveraging all the resources that you have, including that investor that has given you money. They want to see you succeed as much as you want to succeed." "In board meetings Bob Kagle is the kind of person who sits very quietly, listens very intently and when he speaks it is because he has something important to say."**

Many founders are going through their first startup experience and are moving along a steep learning curve. Understanding issues like capital structure, hiring, corporate governance, compensation, sales and marketing is something best done by learning from others. Whenever possible, stand on the shoulder of giants and learn from the mistakes of others. A lucky few founders get a coach like Coach Bill Campbell to help them grow into their roles. Without that resource many founders must assemble a stable of more informal advisers. Venture capitalists can be helpful to founders on some issues as long as it is remembered by

the founders that there is a core tension in their relationship on some issues. Chris Dixon puts it this way:

"VCs have a portfolio, and they want to have big wins. They'd rather have a few more lottery tickets.. while for the entrepreneurs, it's their whole life, and let's say you raised five million bucks, and you have a fifty million dollar offer, and the entrepreneurs are like, "Look, I make whatever millions of dollars. I'll be able to start another company." And the VCs are like, 'Wait! We invested billions of dollars.' That is usually where tension comes."

Getting the balance right as an adviser to a founder, CEO or another manager of a business is tricky and hard. When the adviser you are on the board and have fiduciary obligations to shareholders it is even harder. What I have learned about being a valuable board member is summarized in this blog post. In late 1990s until the Internet and telecom bubbles popped I spent some at Benchmark when I worked with Craig McCaw and it was as much fun as I have ever had in my career. I learned as much from the Benchmark partners during that time as I have from anyone ever. I did not spend as much time with Kagle as I would have liked but I did so indirectly by learning from Bill Gurley, Bruce Dunlevie, Andy Rachleff, Kevin Harvey and Steve Spurlock. If you are not learning when exposed to role models like this, you are not paying attention. If you are not working hard and seizing opportunities to be around people who can teach about important aspects of life, what are you doing instead? When you strive to be a learning machine in as many settings as you can with the smartest, most energetic and interesting people you can, your outcomes in life get better. You are never to old to learn something new.

End Notes:

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https://www.crunchbase.com/person/rob-hayes

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My blog "SaaS plus a box" post on Peloton: https://25iq.com/2018/03/10/peloton-the-saas-plus-a-box-business-case/ which talks about some of these distribution issues

My blog post on Steve Jobs https://25iq.com/2014/12/28/a-dozen-things-ive-learned-from-steve-jobs-about-business/

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Bill Gurley: https://www.recode.net/2016/9/28/13095682/bill-gurley-benchmark-bubble-uber-recode-decode-podcast-transcript

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Lessons from Jim O'Shaughnessy

July 21, 2018

Jim O'Shaughnessy is the Chairman and Chief Investment Officer of O'Shaughnessy Asset Management (OSAM). He was a pioneer in quantitative equity research, part of an early group of explorers who combed through data to find factors which predicted future stock returns. O'Shaughnessy is the author of four books on investing.

1. **"Mandelbrot basically demonstrates that markets are not log normal but chaotic normal. They have much more of a peak and the tails are much longer." "We are, by our very nature, story-loving animals, and we create stories to create narratives that help us make sense of what is going on around us in the world, and many times, those stories are wrong. And so, from our perspective, trying to make a successful forecast, short-term forecast, is a virtual impossibility, because, in the short term, there's quite a bit of noise in the marketplace. And people mistake noise for signal, and they have a narrative about it, and it's very believable, but unfortunately, often wrong. So we don't make forecasts in terms of what the market's going to do over short periods of time because quite frankly, we don't know. And if others were honest, they would have to admit that they don't know, either. However, we do make forecasts based on very long-term time in the market." "I don't know how the market will perform this year. I don't know how the market will perform next year. I don't know if stocks will be higher or lower in five years. Indeed, even though the probabilities favor a positive outcome, I don't know if stocks will be higher in 10 yrs."**

O'Shaughnessy recommends the book "The Misbehavior of Markets" by Benoit Mandelbrot and Richard Hudson. I second that recommendation. Given what Mandelbot identified in his work on financial markets, how should an investor respond? One approach is to limit your investments to areas where you can use statistically determined factors in domains where you have very large amounts of long-term data from the past to gain an investing edge. Another approach is to use an analytical style to find an investing edge that is behavioral, analytical or informational that does not involve statistical factors. I favor an approach to investing that involves an obsessive focus on microeconomic factors. Rather than focusing on "the market" I focus on "the business." Charlie Munger has said: "Micro is what we do and macro is what we put up with." Like Howard Marks I believe that: "the investor's time is better spent trying to gain a knowledge advantage regarding 'the knowable': industries, companies and securities. The more micro your focus, the great the likelihood you can learn things others don't." For someone like me, focusing on the simplest possible system (an individual business) is the greatest opportunity for an investor since a company is understandable in a way which may reveal a mispriced bet. Macroeconomic shifts are highly impactful, interesting and fun to watch, but the more profitable investing edge for someone like me is in understanding a specific real business.

Part of what I find interesting about what people like O'Shaughnessy do in making investments is that it is so much unlike what people like me do as part of our day-to-day work in an operating business. Of course, the executives at O'Shaughnessy Asset Management run their own business and must make many operational decisions that are not solely based on statistical factors. Sometimes people like me have enough data to make decisions based on statistical factors, but is not the normal case.

Like Michael Mauboussin, O'Shaughnessy is very much focused on the need to have a sound investing process. In his book *More Than You Know,* Mauboussin writes:

"In too many cases, investors dwell solely on outcomes without appropriate consideration of process. The focus on results is to some degree understandable. Results — the bottom line — are what ultimately matter. And results are typically easier to assess and more objective than evaluating processes. But investors often make the critical mistake of assuming that good outcomes are the result of a good process and that bad outcomes imply a bad process. In contrast, the best long-term performers in any probabilistic field — such as investing, sports-team management, and parimutuel betting — all emphasize process over outcome."

Someone like Charlie Munger has a similar view to O'Shaughnessy about the importance of a sound process even though Munger uses a margin of safety approach when investing. Munger has said: "Let me put it this way. As long as the odds are in our favor and we're not risking the whole company on one throw of the dice or anything close to it, we don't mind volatility in results. What we want are favorable odds." Munger and O'Shaughnessy have the same objective: "favorable odds," but they seek those odds in different ways. My view is: *Vive la difference* when it comes to investing styles. In other words, there is more than one way to outperform a benchmark financial return (generate alpha) as an investor. This blog has hundreds of profiles of different successful investors and no two of them follow exactly the same process. As I noted in my blog post on Cliff Asness, I own index funds as part of my portfolio that use statistical factors in making investments. I also own individual stocks and other assets like real estate.

Some investing styles will be right or possible for you and some will not. Among the critical gating questions for any investor no matter what their style may be: Are you willing to do the necessary work? Do you have enough time to do so given your other commitments? Do you have a temperament that will enable you to be successful?

2. **"I think I know that no matter how many times you 'prove' that we are saddled with a host of behavioral biases that make successful long-term investing an odds-against bet, may people will say they understand but continue to exhibit the biases." "A long-term perspective is required. Yet the odds are stacked against us."**

A metaphor that O'Shaughnessy uses to explain behavioral bias is that humans have "hardware" that has not evolved sufficiently to deal with a very different world. For example, human decision-making heuristics that evolved more than 50,000 years ago when it was a good idea to do things like run away when you saw a rustle in the bushes don't always serve humans well in a modern world. Biases like loss-aversion, recency and availability cause humans to repeatedly make mistakes in activities like investing. Understanding this reality is helpful for an investor since it should help teach you the importance of being humble about your ability to make forecasts successfully and the value of consistently avoiding stupidity. Overcoming these biases is far harder than most people imagine. Daniel Kahneman points out that a person like him can study sources and causes human psychological bias for decades and yet still fall for these same biases in their own lives. Kahneman has admitted that even after decades of study he still makes poor decisions based on the factors that he has studied extensively. As an example, Kahneman has said that overconfidence bias caused him to radically underestimate how long it would take him to write his book *Thinking, Fast and Slow*.

3. **"I think I know that the majority of active stock market investors—both professional and aficionado—will secretly believe that while these human foibles that make investing hard apply to others, they don't apply to them."**

Human overconfidence is one of the most powerful human heuristics and if that overconfidence is not properly taken into account by an investor it can lead to significantly unfavorable outcomes. People can believe, like Charlie Munger does, that only a low single digit percentage of managers can beat the market and yet also believe that they are included in the small group of people who can actually do so. This overconfidence can create problems if 60 percent of people believe they are in the top 3 or 4 percent of investors. One of the most helpful approaches to mitigating the harmful effects of overconfidence and other biases is to write down your investing outcomes (after fees and expenses!) and force yourself to confront the results of the application of your skills in real world markets on a regular basis. If you do not actually write your results down, you will tend to forget your losers and glorify and amplify your winners. Denial is not just a river that runs through Egypt, so working hard to avoid it is a wise practice.

4. **"It seems that the one thing that doesn't change is people's reaction to short-term conditions and their axiomatic ability to perpetuate them far into the future."**

The adverse effects of recency bias which can be amplified by availability and other biases. Morningstar describes it here:

"Recency bias occurs when people more prominently recall and emphasise recent events and observations than those in the near or distant past. Humans have short memories in general, but memories are especially short when it comes to investing cycles. During a bull market, people tend to forget about bear markets. As far as human recent memory is concerned, the market should keep going up since it has been going up recently. Investors therefore keep buying stocks, feeling good about their prospects. Investors thereby increase risk taking and may not think about diversification or portfolio management prudence. Then a bear market hits, and rather than be prepared for it with shock absorbers in their portfolios, investors instead suffer a massive drop in their net worths and may sell out of stocks when the market is low."

5. **"Arbitrage human nature. It's not going to change any time soon."**

There are at least three sources of investing edge: informational, behavioral and analytical. Human behavioral bias represents the most lasting edge can be found for the reason O'Shaughnessy notes, as long as the investor has the discipline to actually stick with a well-constructed system. In other words, it is human "hardware" that has not been updated for 50,000 years that creates the lasting opportunity for an investor or arbitrage behavioral factors. In contrast to a behavioral edge, informational and analytical edges are far more fleeting and must continually be refreshed since other people find them and the disappear. The more an investor moves into private markets the less data is available and the more they can find a behavioral, analytical or informational edge. For example, someone thinking about buying another cement truck for their business or paying developers to create a new financial services offering can't very often make decisions based on statistical factors. They can look at data on things like the overall success rates of a type of business historically, but decisions on questions like where to locate a business like a restaurant, what

food to serve and at what prices is best accomplished by creating a behavioral, analytical or informational edge over competitors.

6. **"The model never varies. It never has an ego problem; it never has a fight with its spouse; it never wants to prove that it's right. The model is never hung-over after a night of partying — it just does the same thing, time and time again. Very boring, very profitable."**

Certain people are more rational that others. These relatively more rational people have an easier time doing what O'Shaughnessy talks about above. Other people are incapable of separating their decisions from their emotions. For example, I have a friend who is a doctor who is still so traumatized from the financial market corrections in 2001 and 2008 that he is unwilling to buy anything but bank certificates of deposit. He would rather play golf and walk his dog anyway. His strategy is to work longer to finance his retirement. This doctor's approach is, shall we say, "suboptimal," but it is what it is. I once said to this friend "If you can't finish reading my Charlie Munger book you should buy a diversified portfolio of low cost index funds. If you can muster the effort to read a book written by a friend you should not be picking investments on your own." He didn't finish reading my book and still exclusively buys bank certificates of deposit. Would he benefit from consulting a capable wealth manager who charges a reasonable fee who can help him with his emotional limitations when it comes to investing? Yes. Is he even remotely willing to do so? No.

7. **"It is the emotional side of investing that destroys even the greatest minds. If you can't master your emotions all the data in the world can't save you." "I know that, as a professional investor, if my goal is to do better than the market, my investment portfolio must look very different than the market. I know that, in the short-term, the odds are against me but I think I know that in the long-term, they are in my favor."**

O'Shaughnessy's method of arbitraging human behavior is: (1) to have a statistical model that identifies factors that generate "alpha" and (2) sticking with that model. In at least two podcasts he refers to a study that showed that 60% of managers using statistical factor-based investing methods don't stick with their model when things get tough because they are at that time underperforming some well followed benchmark. O'Shaughnessy uses the analogy of diet books to make this point. He has said: "In the battle between the brownie and the dieter, the brownie always wins." There are lots of formulas that can help people lose weight. In other words, it isn't the diet's formulas or strategies that are the problem, but dysfunctional mental processes and human emotions that are the problem.

8. **"Approaches like buying an index based on the S&P 500 are strategies. The strategy is: buy big stocks based on market capitalization. We have found that there are very many other factors that work significantly better than 'buy big stocks based on market capitalization." The challenge is by definition our portfolios are very different from the benchmark of the S&P 500."**

Investing based on statistical factors requires an investor to not only know the right factors but to stay with them when the market drops if the strategy is underperforming a well-known benchmark like the S&P 500. O'Shaughnessy puts it this way: "If you don't have the discipline to stick with your strategy, factor investing won't help you." What does the data say on this so-called "behavior gap"? A study by Hsu, Myers and Whitby concludes:

"By examining the difference between mutual funds' reported buy-and-hold or time-weighted returns, and the average dollar-weighted returns or IRRs end investors earn, the authors quantify the consistently negative effect of value investors' market-timing decisions: from 1991 to 2013, value mutual fund investors underperformed the funds they invested in by 131 basis points. Their analysis also reveals that investors in growth, large-cap, and small-cap funds are similarly prone to unproductive allocation timing. They also find that less sophisticated investors tend to make poorer timing decisions. Investors who hold funds with high expense ratios had larger return gaps than those who chose less costly funds, and investors in retail funds underperformed by a greater margin than those who qualified for institutional share-class funds."

9. **"I think I know that, at least for U.S. investors, no matter how much stocks drop, they will always come back and make new highs. That's been the story in America since the late 1700s." "Since the founding of the New York Stock Exchange in the late 1700s, US stock returns have been positive 71% of the time, negative just 29% of the time, and that's a great probability to have on your side."**

Anyone who is not very long term bullish on the economy and the stock market is swimming against the tide. Investors like Jim Chanos write and talk about the fact that the inevitable rise of stocks as a whole over time makes shorting stocks particularly hard. Chanos puts it this way: "As Warren Buffett has acknowledged… shorting stocks is a tough way to make a living, because over time stock markets rise more than they fall, the transaction costs are high, and the risks great."

10. **"I know I don't know exactly how much of my success is due to luck and how much is due to skill. I do know that luck definitely played, and will continue to play, a fairly substantial role." So many people refuse to own their own mistakes, blaming others, bad luck, bad timing, you name it. If life give you a choice to compete against any type of person, always pick the ones that think most outcomes are due to luck. Does luck play a part? Almost always, but I rarely think—outside of lottery tickets—it's ever the overriding reason for an outcome. Having the ability to learn all the lessons you can from mistakes you've made makes you better prepared for the next time. For as Isaac Asimov said, "in life, unlike chess, the game continues after checkmate."**

In a podcast interview with his son, O'Shaughnessy talks about how luck is the cards you are dealt and after that how they are played is what determines outcomes. He mentions what Warren Buffett calls "the genetic lottery" (for example, where and when you were born and in what financial circumstances) while also acknowledging that this alone is not enough to create success in life or as an investor.

11. **"If you look back to the most spectacular blow ups in history, you can always tie them to a couple things: They were extraordinary complicated strategies that maybe even the practitioners themselves didn't understand, and they were overleveraged."**

O'Shaughnessy lived and worked through the internet bubble and you can't do that without acquiring some muscle memory. He was the founder of this company:

Netfolio works thus: An investor gets started on its Website by filling out a personal financial profile, which includes a couple of psychological questions meant to get at one's risk tolerance-queries about when you'd sell a losing investment and the like. In an exclusive run-through for *Barron's* , the questionnaire took less than 10 minutes to complete. Once the profile is done, the system instantly generates a suggested asset allocation, including a single recommended basket of five to 40 stocks derived from one of Netfolio's 90 quantitative strategies.

O'Shaughnessy tells a great story about not accepting a buyout offer for this business before the correction. He kept the letter from a big Wall Street bank that wanted to buy Netfolio to make sure he learned from the experience. Marc Andreessen said once that ideas for businesses like Netfolio were not wrong, but rather too early. There was also a lot of leverage that caused the Internet bubble. O'Shaughnessy tells great stories about the experience:

"Obviously, I was as wrapped up in the zeitgeist of the times, which thought that only "pure" online companies would go on to receive multi-billion-dollar valuations. At the time, venture capitalists and professional investors thought it beyond idiotic to have any association with "bricks and mortar" companies. They were so 20th Century. The rules were quite simple (and in retrospect, insane) that only pure-play Internet companies could get the backing to move to IPO, and so, I went against every instinct I had, and said no. So, incredibly bearish on the Internet and the overpriced names, I nevertheless seemed to believe (hope?) that my Internet company was the exception to the rule. After all, there were a number of other VCs who were confidently saying they could offer even better terms without me having to link the company to the offending "bricks-and-mortar" legacy firm, which was, you know, a hugely successful actual business with actual revenues and earnings! Shudder. But such was the mania of the moment that it had all of us—even those of us who in our saner moments had looked at the actual numbers—and determined that the entire thing was unsustainable."

Anyone who lived and worked through the 1997-2001 internet and telecom bubbles and was not involved in some way missed out on accumulating experiences that make for great stories. That O'Shaughnessy was "wrapped up in the zeitgeist of the times" makes him interesting! If you are living your life and are not accumulating some good stories, you might want to think about whether you are boring. In his short story entitled "Mayhew" Somerset Maugham writes:

"[Most people] accept the circumstances amid which fate has thrown them not only with resignation but even with good will. They are like streetcars running contentedly on their rails and they despise the sprightly flivver that dashes in and out of the traffic and speeds so jauntily across the open country. I respect them; they are good citizens… and of course somebody has to pay the taxes; but I do not find them exciting."

One of the many things I admire about O'Shaughnessy was his decision to create his current business (OSAM). When I was interviewed earlier this years by his son on a podcast I was asked when I felt most alive. I answered that it was in 1994 when I was part of a team that was creating a business from nothing. I would guess that O'Shaughnessy feels the same way about the early years when he was creating OSAM.

12. **"Tip number one is you have to start saving immediately."**

Spending less that you earn is a foundational part of achieving financial freedom. Using that process to acquire a "grubstake" that gets the investor into the investing game is hard, but essential. Charlie Munger put it this way once:

"The first $100,000 is a bitch, but you gotta do it. I don't care what you have to do—if it means walking everywhere and not eating anything that wasn't purchased with a coupon, find a way to get your hands on $100,000. After that, you can ease off the gas a little bit."

That $100,000 target was a long time ago and would need to be adjusted for inflation, but you need to figure out your own number anyway given your circumstances. But in any event you will need a substantial sum of money to get yourself in the investing game and the way to get that started is to start saving.

Everyone has a reason for wanting to be a successful investor. Some people want to own more things. Other people like me want to have better choices in life. Clint Eastwood famously once said in a Dirty Harry movie: "You've got to ask yourself one question: 'Do I feel lucky?' Well, do ya?" The more money you save and the earlier you do so, the better your choices in life will be. You do not have to rely as much on the luck Dirty Harry was asking about if you have money in the bank. Thinking about questions like this probabilistically is wise. For example, being unable to help someone you love is a much less likely outcome if you make the choice to maintain a healthy saving rate and put limits on your spending. Do you really want to risk not being able to help someone you love? Saving money is simple to say, but hard to do. Life is better if you have great choices and sucks if you don't.

End Notes:

Books: https://www.amazon.com/James-P.-OShaughnessy/e/B000APXXNG

Epic Tweetstorm: https://twitter.com/jposhaughnessy/status/994631936181264384

Podcast with his son: http://investorfieldguide.com/jim/

Talk at Google: https://talksat.withgoogle.com/talk/what-works-on-wall-street

Podcast: https://www.gurufocus.com/news/620299/interview-with-jim-oshaughnessy-transcript

My post on Cliff Asness: https://25iq.com/2018/06/30/lessons-from-cliff-asness/

Mauboussin: http://michaelmauboussin.com/excerpts/MTYKexcerpt.pdf

Zeckhauser: https://sites.hks.harvard.edu/fs/rzeckhau/InvestinginUnknownandUnknowable.pdf

Behavioral Gap: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2560434

Morningstar: http://www.morningstar.co.uk/uk/news/163017/why-recency-bias-is-dangerous-to-investors.aspx

Lessons from Elad Gil and High Growth Handbook

July 28, 2018

Elad Gil was a co-founder of Mixer Labs and Color Genomics. After Mixer Labs was acquired by Twitter, he was a VP at Twitter. He also previously worked at Google where he started their mobile team and worked on AdSense. Gil is an investor in and advisor to companies like: Airbnb, Coinbase, Instacart, Stripe, OpenDoor, Square, Pinterest, Stripe, Gusto, Wish and Zenefits.

Gil is the author of a new book entitled: *High Growth Handbook.* He writes in the introduction: "many of the sections of this book started life as blog posts on my website. It is not meant to be read straight through [and] is meant to be an active reference." You may want to buy an electronic version of the book since it is searchable. For example, if you want his views on late stage financing you can refer to that section of the book. *High Growth Handbook* includes a number of very informative interviews. My latest book *A Dozen Lesson for Entrepreneurs* also started its life as blog posts and like Gil I believe that including the views of people who have direct experience with these issues is a great framework for a book and makes it more interesting. As I was reading *High Growth Handbook* I repeatedly thought about how the book is also a checklist of areas where a first time founder or CEO might want to engage the services of a coach or get help from other people including their board members and investors. I have no doubt that Gil could have written more on every single topic, but his skillful way of making choices makes the the book understandable by a broad audience.

One point about the book and this blog post should be emphasized: Gil believes that startups in the *zero to one* stage of their development must deal with very different issues than businesses that are in the *one to n* stage of their development. Some of what Gil talks about in quotes featured in this blog post is about the earlier of the two stages (i.e., proving the value hypothesis) and some of what he talks about is about what comes next (i.e., proving a growth hypothesis). *High Growth Handbook* is different than this blog post because the focus is on the *one to n* or the growth hypothesis stage.

A well-written introduction to an excellent podcast conversation between Chris Dixon and Gil on the a16z web site sets the stage for a discussion of the book:

"There's a lot of knowledge out there — and networks of talent (especially in Silicon Valley) — on what to do in the early stages of a company, going from 0 to 1, and even in going from 1 to 100… but what about beyond that? It's not as simply linear as merely doubling or tripling resources and org structures; it's actually much more complex on many levels, communication to coordination. Because with great scale comes great complexity… and many, many more places for things to break down."

1. **"The only good generic startup advice is that there is no good generic startup advice."** "**All startup advice needs to be filtered through the unique context of**

your own situation or company." "Each startup is incredibly unique and yet there are multiple things that are very repetitive that you always have to do."

A key word in the sentences above is "generic." Anyone who writes a book with the word "handbook" in the title believes in the value of advice. Starting from first principles on everything in life or in business is a bad idea so having access to advice is a good thing. What Gil cautions against is advice that is not sufficiently specific to the unique situation (i.e., too generic). In other words, All advice must be considered in the context of the actual facts and circumstances involved in the specific business. Humans may have behavioral and other flaws in their decision-making systems that have been well described by many people, but as a species we still are far better than algorithms in dealing with a complex/chaotic world driven by risk, uncertainty and ignorance. This is particularly true if you do not have access to huge data sets that allow you to eploy algorithms to make decisions or provide guidance based on statistical factors. Humans are uniquely skilled at dealing with exceptions including in situations where there is very little data available. The best founders, CEOs and company employees know when to break a rule and when to follow a rule. Breaking too many rules is a bad idea (since the crowd is usually right), but breaking no rules at all is a guarantee that the decision maker will not outperform the crowd (a market average). Being a successful technology investor or founder is greatly enabled when that person is skilled at knowing which rules to break and when generic advice is a bad idea.

2. **"There are only 3 things that kill pre-product market fit companies. These are self-evident, but founders tend to forget them. To not die you need to: (1) Find product market fit. (2) Resolve co-founder conflicts. (3) Don't run out of money. Everything else is noise."**

Let's unpack the three elements Gil identifies which can kill a startup that is still in a *zero to one* stage of its development.

- Product market fit is like sex appeal in that many people falsely believe that they have it. In other words, achieving product market fit is much rarer than most people imagine. I have written a few blog posts on product market fit which you can find links too in the End Notes. The product market fit concept was developed and named by Andy Rachleff who is co-founder and CEO of Wealthfront (in addition to being a former partner at Benchmark among other things). Rachleff believes that the startup must identify the features that must be built, the audience that's likely to care, and the business model required to convince a customer to buy the product. Trouble often arises when the people working very hard to build a business want product market fit to exist so badly that they ignore anything that gets in the way of a conclusion that it exists. If the team is running out of money the tendency to falsely conclude that product market fits exists is even higher. A false conclusion that the value hypothesis has been proven usually leads to premature spending on growth and that often leads to the death of the business or at least significant destruction of value. Gil believes: "**The best signal of product/market fit and differentiation or moat is the ability to raise prices repeatedly without losing customers." "Fake customer signals include: Customers who won't actually pay for your product. Saying 'this is really interesting' is different from cutting a check. Don't get fooled or self-delude." "Companies wait too long to cut costs, raise prices, or start charging for services. If no one is willing to pay you for your product, you are in the wrong business. The exception is consumer apps or related where you monetize later."**

- Founder conflicts is a topic that Gil has written and talked about in podcasts and writes about in the book. He believes: **"Co-founder conflicts tend to arise when there is a lack of clarity on decision making, product vision, and overlapping founder roles." "One of the only advantages of a startup versus an incumbent is speed. When you fight your co-founder everything takes longer than it should and decisions don't get made. If you and your co-founder cannot work together well, one or more of you should leave. The longer you wait, the longer the company will waste time and burn." "Where is tie breaking going to happen? Ultimately there is no single correct organizational structure."** On this and other organizational issues Gil believes it is important to have a structure that allows decisions to be made in a way that does not result in a deadlock because of a "tie" vote. Deadlocks kill the speed advantage that a startup or early stage business can exploit and shorten the runway of the business to achieve necessary milestones. In his book Gil suggests a number of methods that can be used to deal with founder conflicts that are not just ordinary differences of opinion.

- Cash is oxygen for a business. If a business runs out of cash, it is an unforgivable sin. In managing how much cash is available creating a margin of safety is appropriate. What is a margin of safety in the context of cash and why is it needed? Since every business will make errors and mistakes as it develops, having a supply of cash insurance in the event a business is harmed by one of those mistakes is wise. Cash on hand allows a business to handle variance in outcomes. With a margin of safety, the people running a business can make some mistakes and still and still have enough cash to recover and prosper. As an illustrative example, early in the history of Microsoft Bill Gates famously wanted enough cash in the bank at all times to pay for all expenses for a full year even if no revenue came in during that period. In this conversation below Gates and Ballmer werer talking about being frugal during the early years of the company:

Gates: But I had this very conservative view because we'd seen a lot of customers go bankrupt. So I liked a lot of cash in the bank, relative to our payroll needs.

Ballmer: Bill had these yellow pieces of paper all over his house that had written on them the amount of cash we had in the bank, contract payments due, and the name and salary of everybody in the company, and you could see how many months of salary he had in the bank. So we had a big row about his conservatism. And Bill says to me, "I didn't have you quit business school to come up here and bankrupt us."

One way to have more cash is to be careful about spending. I enjoyed reading a blog post this week written by Eric Paley which deals with an underappreciated cause of unnecessary dilution and shortened financial runways:

"We had a saying at my last startup that "every dollar that we spend is a dollar of dilution." While that was probably a good mindset, the wording suggests that investing in a business with strong return isn't worthwhile. Today I'd revise that saying to 'every dollar that we spend that doesn't create more than a dollar of value, is dilution." May your burn rates be accretive and your financings increase your ownership value."

3. **"At some point there is a shift from being a product focused company to a company that is about distribution."**

Gil is talking about a critical aspect of shift that happens when a company moves from *zero to one* to *one to n.* The goal of the business in this second phase is to create scalable and repeatable growth and that means distribution systems. The number of businesses that are actually able to create these distribution systems at scale is far smaller and more valuable than people imagine. When you look at the businesses that are prospering in the markets today, they inevitably have powerful distribution engines.

Gil's interview of Marc Andreessen in the book covers the topic of distribution. Among the points made by Andreessen are:

"A lot of product market fit is with the early adopters. … the problem is that early adopters are only ever a small part of the overall market. And so a lot of founders, especially the technical ones, will convince themselves that the rest of the world behaves just like early adopters, which is to say the customers will find them. And that's just not true." …people have plenty of things they can spend their time on. They have to be convinced to try the next new thing. And so whether you want to call that marketing or growth hacking or user acquisition or whatever you want to call it, there's some distribution function there, for all these things, that's critical….

It may be that the product is what created the distribution engine that a business has but in the long runs it is very likely that the distribution engine is as or more important than the product itself. Andreessen describes what every business faces:

"We are in a product cycle business. Which is to say that every product in tech becomes obsolete, and they become obsolete pretty quickly. If all you do is take your current product to market and win the market, and you don't do anything else — if you don't keep innovating — your product will go stale. And somebody will come out with a better product and displace you. So you do need to get to the next product. Of course that's a punishingly hard thing to do. It was hard enough to get to the first one, and to come up with the second one is often even harder."

4. **"Startups tend to succeed by building a product that is so compelling and differentiated that it causes large number of customers to adopt it over an incumbent. This large customer base becomes a major asset for the company going forward. Products can be cross sold to these customers, and the company's share of time or wallet can expand. Since focusing on product is what caused initial success, founders of breakout companies often think product development is their primary competency and asset. In reality, the distribution channel and customer base derived from their first product is now one of the biggest go-forward advantages and differentiators the company has."**

This can be a hard concept for technical founder in particular to grasp. After all, the team developed a product and found product market fit. Why not just focus on repeating that process with a new product? The answer is that it is a mistake not to take advantage of the distribution platform that company has developed since it may be more sustainably valuable than the original product that mad the business financially successful. The Andreessen interview in Gil's book discusses this point:

"One of the things you see crystal clearly in VC is how much competition emerges whenever anything works. Every single time we say "Oh, this startup is unique" invariably six months

later there are 20 venture backed competitors doing the exact same thing…. true defensibility purely at the product level is very rare because there are a lot of good engineers…. I think pure product defensibility is obviously very desirable, but it actually quite difficult.…At some point distribution engine itself is the moat. That might be an enterprise sales team for a SaaS company or it might be a growth team at a consumer company."

4. **"Things to focus on include margin, customer churn, and organic adoption. If you have a high margin, negative churn business and a good acquisition funnel, you will do great 99% of the time. The 1% is due to competitive pressure."** "**If you grow fast but keep churning you will die. Recurrence is key unless you are monetizing via a secondary mechanism (e.g. data)."**

Gil's focus on creating solid unit economics is something I have written about often on this blog. A lot of cash coming in from investors can hide poor unit economics for a long time, but unfavorable unit economics will eventually arrive and when they do it will not be a pleasant experience. Gil said in his podcast with Chris Dixon that he believes that a lot of today's "unicorns" will not have the billion dollar valuations they claim once this reality arrives. My view is that it will be unit economics that will determine valuations the long run. I read quite a nice blog post this week about these issues written by a data scientist at Uber:

"…Boosting retention certainly helps to sustain growth rates, but it's no easy feat and can't be accomplished overnight. Marketing is an easy lever to pull and will "delay" the flat part of the S curve. But it also creates an addiction that isn't sustainable and CACs will accelerate. If we do choose to increase marketing spend to drive growth, it should be coupled with strong retention efforts to get long term benefits. Perhaps the best way to drive continued growth is to think big! Find new S curves to climb by entering new markets and launching new business lines. "

Having a strong growth team is essential. In Gil's book Andreessen talks about this in his interview:

"One interesting question is: Would you rather have another two years' lead on the product or two years' lead on having a state-of-the-art growth effort? I think the answer is actually that you'd rather have the growth effort. …Network effects are great but they are overrated. The problem with network effects is they unwind just as fast. They're great while they last, but whether they reverse, the reverse viciously. Go ask MySpace how their network effects are going."

5. **"Many founders spend time on unnecessary areas (constant speaking events, over-hiring the team, constant fundraising, chasing fake signals from their customer etc.)."**

I am fond of quoting Jim Barksdale who famously likes to say: "It's important to keep the main thing the main thing." Founders, CEOs and other companies employees need to do a lot of things and unnecessary distractions are not a good idea. For example, using a founder to create a brand can be valuable at the right time, but not if it interferes with other mission critical functions. Sometimes one founder focus on the business and the other is more of a public facing personality and evangelist. Gil's book has very specific advice on issues like

how many events a founder should speak at and what sorts of meetings and networking are important.

6. **"Great *product* management organizations help a company set product vision and roadmaps, establish goals and strategy, and drive execution on each product throughout its lifecycle. Bad product management organizations, in contrast, largely function as *project* management groups, running schedules and tidying up documents for engineers."**

I have started writing a post on product management topic several times. It is a controversial enough topic that I will probably never finish writing it. It is in some ways like writing about a crypto currency topic – you are inevitably going to take incoming fire from many directions. That is a good enough reason for me to punt on writing about product management for now at least to other people. I suggest you read Gil's book or a book from Steven Sinofsky and Marco Iansiti called *One Strategy.*

7. **"People too often view a culture as static. Culture is something that evolves over time."**

In a chapter of Gil's book on culture he writes: "Culture acts as an unwritten set of rules and values that drive behavior and cohesion across the company. Cohesive cultures are more resilient and can withstand shocks (fierce competition in the market, bad press cycles, a product failure, or other issues)." Gil gives some great advice in the book about the link between hiring and culture and the consequences of "bad hires."

8. **"Going through hyper-growth is very chaotic. Things are going to be messy. If a business is growing rapidly, you are working in a different company every six months."**

Gil is tells a great story contrasting his time working at Google going through a hyper growth stage at a company for the first time with the period in his life when he was working at Twitter in another hyper growth period. He writes that the first experience made him more comfortable with the second experience. You develop a kind of muscle memory that is helpful each time you go through experiences. If you are not comfortable with a relatively high degree of chaos a business going through hyper growth may not be the best place for you to work.

9. **"One of the reasons I've always invested in a broader range of companies is my background as an operator. I am much more market driven that many other Angel investors. I believe that when a great team meets a terrible market, the market wins."**

Leaving aside what venture capitalists do to raise funds, manage investors and source deals, one topic Gil has talked and written about is how venture capital has three elements/skills/tasks that are not necessarily present in all people. The elements he describes are: (1) investing (2) governance and (3) advice of running a business. Some venture capitalist will have one or more of these elements but not the other(s). Gil notes that some venture capital firms are using approaches like board partners to unbundle these elements and to scale the amount of capital they can have under management. Everyone has more or less

passion for one of these elements. For example, some people are only interested in assisting founders founder build the products and the business.

10. **"My role at Twitter was effectively to help scale the company. Since I was involved in a lot of aspects of managing hockey-stick growth — internationalization, user growth, scaling recruiting process, M&A, analytics, product, etc. — a number of later-stage breakout companies have asked me to get involved as an investor or advisor as I have been through the same terrifying growth curve they are now seeing."**

Gil recommends that people going through something like hyper growth for the first time as a founder benchmark (1) what other people in other businesses have done in similar situations and (2) the level of talent that will be required in key positions to successfully grow the business. For example, when a business is about to hire a CFO it is wise for founders to talk to a few great ones to see what it is that they should be looking for even if they have zero chance of hiring them.

The mission of every founder or CEO is to kill or lower risks, uncertainty and ignorance and to hit milestones that will establish that the business has created value and has momentum to create even more value. The list of questions that Gil's book asks and answers is very long but many of them are related to building the right team with the right talent at the right time. For example, there is the question of when should you hire a human resources professional is asked ab answered in the book. Lowering hiring risk alone is a critical success factor as are tasks like creating the right compensation structure.

11. **"From a purely financial perspective, I only invest in companies that I think may have anywhere from 10x to 1000x upside left. Obviously, that's easier as an early-stage investor." "I will invest at any stage as long as the investment has the potential to increase at least 10X in valuation."**

Gil is seeking convex investment opportunities (massive potential upside and capped downside limited to the amount he invests). There are lots of business that may provide a good living and financial return for someone, but that is not really venture capital investing. Venture capital when done right captures a positive Black Swan. As an example, a group of investors invested $1 million a $4 million pre money valuation in the seed round that group included Tom Alberg, Nick Hanauer, Eric Dillion and others. The most they could lose was what they invested and the upside was, well, massive by any standard.

Some founders react to being told that their business is not right for venture capital like the venture capitalist making that statement took out a rifle and shot their dog. That a particular business is not right for venture capital is not a tragedy. Most successful businesses don't raise any venture capital and fund themselves in many different ways. If it is you dream to build business X but no venture capitalists will fund that business it does not means that you should not build business X. It also does not mean you should go out a build business Y that is fundable by venture capitalists, even though you do not have passion about business Y. I was up very late last night reading a great book that will appear in stores soon written by Scott Belsky entitled *The Messy Middle* that explains why this passion is required. I will write a blog post on Belsky's book soon.

12. **"Getting very large multiples on an investment made at a valuation of $1 billion or more is very hard to do. The number of companies that sustainably grow to be worth $5 billion to $10 billion in market cap is very small."**

This blog post is already too long and so I am passing the ball to Fred Wilson who describes the venture capital "math problem" here that Gil is referring to in these last two sentences just above.

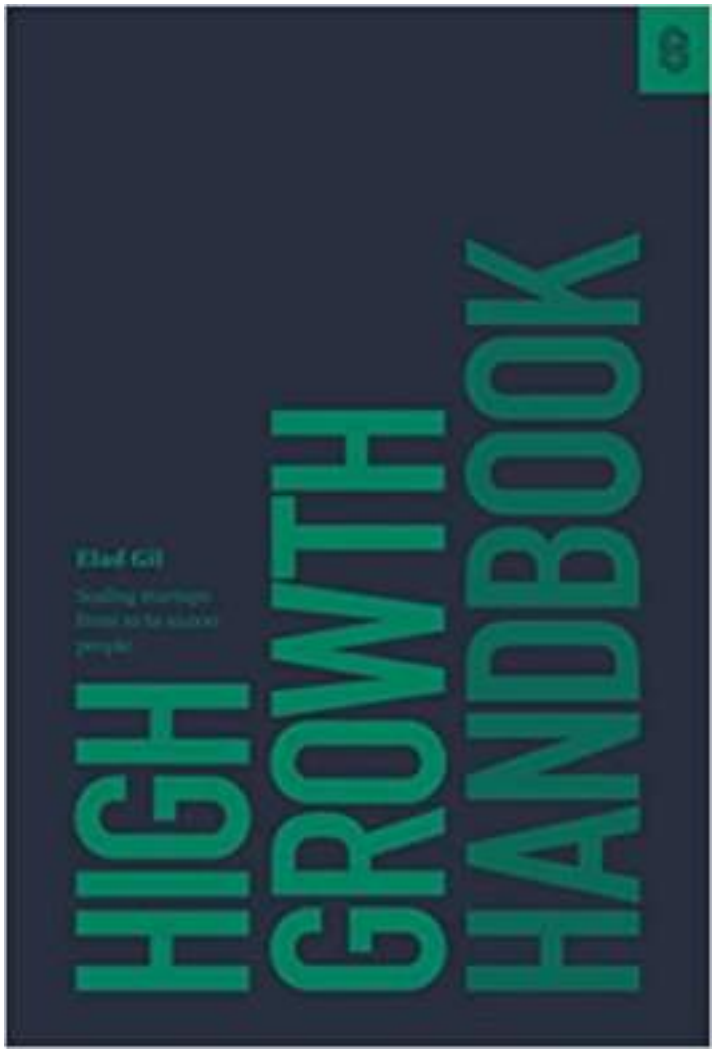

End Notes:

http://blog.eladgil.com/

Lessons from Michael Batnick (Big Mistakes)

August 4, 2018

Michael Batnick is the Director of Research at Ritholtz Wealth Management. He is also the author of a new book *Big Mistakes: The Best Investors and Their Worst Investments* "which

explores the ways in which the biggest names have failed, and reveals the lessons learned that shaped more successful strategies going forward."

1. **"A book that influenced my thinking was *Nobody Wants to Read Your Sh*t* by Steven Pressfield. This quote is burned into my memory: 'When you understand that nobody wants to read your shit, your mind becomes powerfully concentrated.'"**

I have already written a blog post about what it is like to write and publish a book. Anyone who writes a book for anyone other than themselves has never written a book before or is one of the very small number of people who strike gold writing their first book. For almost everyone who writes, that "nobody wants to read you shit" could not be more true. Of course, a few people will read your stuff (for example your mom and a few of your friends). Some of you friends will read some of your writing, but no one will read all of it. The posts that make up this 25IQ blog add up to more than one million words. I doubt anyone but me has read them all. Once you grasp this reality, it is easier to get the work done and your writing gets better since you are writing for yourself. Anthony Bourdain once made a point that is very similar to the point made above by Batnick:

"The absolute certainty that nobody was going to care about, read or buy 'Kitchen Confidential' was what allowed me to write it. I didn't have to think about what people expected. I didn't care. As a result, I was able to write the book, quickly and without tormenting myself. That was in many ways a very liberating place to be. I've kind of tried to stick with that business model since."

One of the great things about publishing a book is that you get access to editors which I do not have when writing my blog post each week. I feel terrible when I miss typos, but that happens when you don't have an editor. Mistakes will happen. THe best way to start writing is to start typing. As David Carr, the *New York Times'* veteran media reporter and columnist said once: "Keep typing until it turns into writing."

2. **"The other day I said to my wife, 'Wow, I really did it. I wrote a book.' She replied, 'What's the Netflix password?'"**

Batnick is making a point about how hard it is to get people interested in financial topics. If you write books, blog posts or tweets on finance and business topics you should not be surprised if they are not read or understood by people in your own family, let alone the general public. This is a major societal problem since the systems in many countries delegate saving and investing decisions to individuals. The standard of living of these people when they retire will be determined based on how much and well they save and invest and yet they often will spend less time on these tasks than they do picking out a new stove or reading about their favorite football team. This dysfunctional behavior creates massive negative spillovers for society as a whole. What can be done about that? I favor a system that has a higher mandatory savings rate, but that is a complex topic that I could discuss in another blog post.

Many important phenomena have resulted from the shift from print to digital media. What is underlying many of these changes is well described by Ben Thompson in this succinct way: "Zero distribution costs. Zero marginal costs. Zero transactions. This is what the Internet enables, and it is completely transforming not just technology companies but companies in

every single industry." One of the best examples of this change is actually the crew of thinkers, researchers and writers that have been assembled at Ritholtz Wealth Management which includes Batnick. These people consistently and regularly put out some of the very best writing on investing and business and yet most all of it is available for free. Their success has encouraged others in the financial industry to do the same thing. Why is this advice free? Every business must find a way to acquire customers in a cost-effective way. What people quickly learned about the digital world is that you can write words and put them on the internet and use that process as a substitute for spending on marketing. If you engage in what is called "content marketing" in the right way and in the right markets, you can turn that writing into positive unit economics for a business. Or not. That it is possible to use content marketing as a substitute for marketing does not mean that it is easy to do or will be successful.

A positive externality of this shift from print to digital is that people are getting better advice. This free educational material is not very good for unscrupulous people who want to make a living selling high fee financial products. Promoters who try to do things like sell high fee variable annuities that destroy value for buyers are far more quickly chased off by an active crew of people on services like financial Twitter. The work that people like Jim Chanos have done for years in uncovering the scams of unscrupulous promoters is now routinely supplemented by people like Batnick. As another example of this positive externality, the ugly outcomes of high fees and the beautiful outcomes of compounding are becoming much better and more widely known as a result of the free content available on the web. The move of people to index funds has also been accelerated by people who write essays on that topic as form of content marketing.

3. **"I was following Josh Brown's work, both on Twitter and the blog, and what he was talking about really resonated with me. …I was lucky enough to meet him at a train station…" "I stepped onto the platform and as luck would have it, Josh Brown walks right past me. My heart stopped, and my body froze. I *had*to turn around and introduce myself." "Josh gave me his business card and four months later I was in his office for an interview."**

I am repeating this story here because it illustrates a number of important lessons about luck and seizing opportunities when they become available. Charlie Munger likes to say that great opportunities in life aren't made available to a person that often and when they do you need to quickly and aggressively seize them. If Batnick had not been a person who reads a lot he never would have found his way to a job that he seems to love working for people who he respects. If he had not been brave enough to introduce himself to Brown, the opportunity would have been lost. I mentor a few people right now and I am trying to teach them the importance of being as brave as Batnick was at that train station. Even a small increase in bravery can help some people better establish a reputation and create a network of people who know of that reputation, which are two elements in a career that are often overlooked. There are very specific skills that can help people be braver. As an example, Warren Buffett has said about himself: "I was terrified of public speaking when I was young. I couldn't do it." *The Financial Times* describes how Buffett got over his fear of public speaking:

In his office in downtown Omaha, Nebraska, Warren Buffett displays only one certificate of his education. It is for completing the "Dale Carnegie Course in Effective Speaking, Leadership Training, and the Art of Winning Friends and Influencing people", dated January 23 1952. The instructors on the course "made you do all these crazy things to get out of

ourselves", Mr Buffett says in the new HBO documentary Becoming Warren Buffett. But "if I hadn't had done that, my whole life would have been different".

Writing for public consumption and participating on Twitter like Batnick does requires a certain type of bravery. When you create sentences and publish them you are creating the potential for people to attack your ideas. To get over the fear of sharing your thoughts publicly some people will need to do something like join Toastmasters. Maybe there should be Blogmasters or Twittermasters groups that help people express themselves in public. Learning how to sell ideas is an underappreciated skill in life. Some people naturally have storytelling skills and other people need to learn how to do it. Telling stories well and learning how to sell are highly underrated skills in life.

4. **"This is not a 'how not to' book. We grow by making our own mistakes and taking them in stride."**

I have written my own blog post on mistakes which uses the ideas, experiences and stories told by Charlie Munger as a framework. Using Munger as an example to make points is an approach that people seem to like since humans enjoy reading about other interesting humans and hearing stories. Batnick's book *Big Mistakes: The Best Investors and Their Worst Investments* is using the same storytelling approach in educating readers about a fundamentally important approach to learning. Batnick made a great choice since "how to" books tend to have fewer readers. "How to" books are far less useful since recipe approaches to investing are problematic anyway. One of the biggest selling books ever written on investing is *The Warren Buffett Way* by Robert Hagstrom. That book teaches lessons about investing while telling a story. A famous investor once said that far more people talk about Ben Graham's books than have actually read them. More people would actually read Graham if he had told better stories

5. **"I never made any big mistakes, but I did make the same mistakes over and over again." "The difference between normal people and the best investors is that the great ones learn and grow from their mistakes, while normal people are set back by them." "We can never say to ourselves, 'I'll never let that happen again!' Sure, there are very specific mistakes that you won't repeat, like buying a triple-levered inverse ETF and holding it for three months. That's something you do one time and never repeat. But like Livermore said, the mistake family is too large to avoid all of them."**

The sentence first sentence above about repeating mistakes is a core message of Batnick's book. No one can avoid making new mistakes and sometimes we will repeat old mistakes. But the best investors repeat old mistakes less often. Munger believes that it is important to rub your nose in your mistakes and then move on without dwelling in them. This is important since as Batnick said once in a blog post: "Bad news smashes your face against an amplifier, while good news just plays quietly in the background." Making your own mistakes is both memorable and inevitable. These personal mistakes give you points of reference for the many other mistakes you read and hear about. One way to learn a lot quickly is to read about mistakes made by others since making all the possible types of mistakes yourself scales poorly.

6. **"Professional win points. Amateurs lose points. Professionals should play to win and amateurs should play not to lose (try to make fewer mistakes)."**

Charlie Munger makes the point being made by Batnick in this way: "It is remarkable how much long-term advantage people like us have gotten by trying to be consistently not stupid, instead of trying to be very intelligent." If I was going to write a story about an investor who is a professional, citing the example of the billionaire reals estate investor John Arrillaga Sr. would be a good idea. Arrillaga decided to focus on developing and owning commercial buildings located very close to Stanford. By not straying into other markets and instead focusing in a specific market where he had more information than amateurs and less focused professional investors he was able to generate huge financial returns. What learning about different types of mistakes and their consequences should help teach you is the value of staying within your circle of competence. Munger believes:

"Warren and I have skills that could easily be taught to other people. One skill is knowing the edge of your own competency. It's not a competency if you don't know the edge of it. And Warren and I are better at tuning out the standard stupidities. We've left a lot of more talented and diligent people in the dust, just by working hard at eliminating standard error…."Warren and I only look at industries and companies which we have a core competency in. Every person has to do the same thing. You have a limited amount of time and talent and you have to allocate it smartly. …"You have to figure out what your own aptitudes are. If you play games where other people have the aptitudes and you don't, you're going to lose. And that's as close to certain as any prediction that you can make. You have to figure out where you've got an edge. And you've got to play within your own Circle of Competence."

Too many investors confuse familiarity with competence. For example, that a given person may fly on airlines a lot does not mean that they understand the airline industry well enough to be competent as an investor in that industry. Using Facebook, does not make you qualified to invested in a social media start up. If you have not taken a deep dive into the business of a company and its value chain/industry, and you nevertheless decide to invest in that company because you got a stock tip from someone, you are asking for trouble. There is no substitute for doing the work yourself, but you actually need to do the work.

7. **"Mark Twain was an obsessive investor but a terrible one. He couldn't stay within his circle of confidence, which was being an incredible storyteller and humorist. The first rule when you're in a hole is to stop digging. He didn't know when to stop digging. That's really dangerous. He put good money after bad constantly — in his typesetter, for example. That forced him to do humorous lectures around the world to raise money to repay his debts. When you find yourself in a bad situation, putting more money into a losing investment won't fix the problem." "Putting too much money into something you don't fully understand is a good way to lose a lot of money."**

Twain is an excellent contrast to the example set by an investor and business person like Arrillaga. The famous writer invested in numerous businesses he did not understand and paid the price for straying outside of his circle of competence. My blog post on Twain is here. One of the best reasons to read the kids of stores in Batnick's book is described by Buffett: "I suggest that you look at the behavior that you admire in others and make those your own habits, and look at what you really find reprehensible in others and decide that those are things you are not going to do."

I wish I had written this sentence: "The best way for investors to learn from mistakes is to let others make them, then read about it." That sentence was written by Scott Barlow in *The*

Globe and Mail and is most certainly true. There are both role models and anti-role models that you can learn from in life. Everyone has things about them that are not perfect. That you like X quality or behavior in a person does not necessarily mean you like Y about that same person. Life is like a shopping cart at a grocery store: you can pick out what you want as you go through life and change out what you once selected for things that are better or more suited for you as you go along. One way to accelerate that process is to read a lot of biographies.

8. **"Intelligence in investing is not absolute; it's relative. In other words, it doesn't just matter how smart you are, it matters how smart your competition is." "While Harvard is planting almonds and Renaissance Technologies is doing god knows what, the rest of us can do just fine by chasing patience, an edge that can never be arbed away."** "**Imagine that you were physically exchanging stock certificates with Jim Simons of Renaissance Technologies every time you went to buy or sell a stock."**

You are not Jim Simons and neither am I. That he can do X does not mean that you can do X. Pretending that you are Jim Simons is not good for your financial health. It is fun and helpful to your performance as an investor to learn about what someone like Jim Simons does, but don't get confused about your ability to do that too. Munger says: **"**For a security to be mispriced, someone else must be a damn fool. It may be bad for the world, but not bad for Berkshire." To paraphrase a famous line spoken on screen by Dirty Harry Callahan: "A person's got to know their limitations as an investor."

9. **"The important thing is to just do less, make less decisions. Never change a portfolio because of what happened yesterday." "The best and most important thing we should concern ourselves with is getting the big things right**."

Munger is famous for saying that he spends most of his time sitting on his ass and reading. He believes the key to investing is being patient and yet very aggressive when the time is right. There are no called strikes when you invest. You do not have to swing at every pitch. The only time you should swing is when the expected value of doing so is significantly positive. The process of calculating expected value is easy to describe, but hard to implement:

"Take the probability of loss times the amount of possible loss from the probability of gain times the amount of possible gain. That is what we're trying to do. It's imperfect but that's what it's all about."

If calculating expected value while eliminating the impact of emotions and others psychological dysfunction was easy, everyone would be rich.

10. **"Too many people invest as if their success in one area of life will translate to market beating returns, without understanding that there is little correlation between brains and alpha."**

Doctors, lawyers and dentists are well known marks for promoters of frauds and scams since they are smart, but are more likely to not know the limits of their circle of competence than less educated marks and they have more money. An IQ is not necessarily a negative factor when it comes to investing, but believing your IQ is higher than it actually is inversely correlated with positive investing outcomes. That someone is rich or famous as a media

personality does not mean they have anything valuable to say about investing. Just because you are a fantastic surgeon or lawyer doesn't mean you will be an investor who can outperform market benchmarks after fees. Buffett said once: "I always look at IQ and talent as representing the horsepower of the motor, but that the output—the efficiency with which that motor works—depends on rationality."

11. **"Emotional intelligence will have a much bigger impact on your returns than your ability to out-think the market." "Few people are spared from unforced errors, and the way they usually manifest themselves is because we can't handle people making money while we aren't." "Once something belongs to us, objective thinking flies out the window."**

Most investing errors are emotional or psychological. You will never stop making errors and mistakes completely. I have written often about these issues that some people refer to as behavioral economics now since this post is already running long. Batnick identifies just a few of the major causes of emotional and psychological mistakes. The concept of a "margin of safety" was created by Ben Graham precisely because these mistakes are inevitable. Graham believed "the function of the margin of safety is, in essence, that of rendering unnecessary an accurate estimate of the future." The key word in this Graham quote is "accurate." With a margin of safety you can still make a few mistakes and still have a satisfactory result. Seth Klarman put it this way: "A margin of safety is achieved when securities are purchased at prices sufficiently below underlying value to allow for human error, bad luck, or extreme volatility in a complex, unpredictable and rapidly changing world."

12. **"We cannot chart the future with precision." "Humans are very, very bad at forecasting." "The greatest lesson we can learn from history is that those who learn too much from it are doomed to draw parallels where none exist."**

Everyone must find their own way to arrive at a place where they can acquire a behavioral, analytical or informational edge if they are going to outperform a market benchmark after fees and expenses. Most people never do. We are all dealing with a world that is a nest of complex adaptive systems where we face risk, uncertainty and ignorance. Bill Miller wrote in his recent quarterly letter:

"It is worth reminding oneself from time to time that almost any description and every prediction about the U.S. stock market involves a gross oversimplification of an extraordinarily complex system, a system that adaptively incorporates the collective expectations of all its participants into the price of its securities."

Some people find their comfort zone as investors by moving to a portfolio that consists of a low cost diversified portfolio index funds. Some people do some of that but also find an investing edge by acquiring a microeconomic understanding of specific businesses within their circle of competence.

One process an investor can use to achieve a superior overall outcome in life that is more than just financial is to think about what matters to them and calibrate the exposure they want to incur in a world that is dominated by risk, uncertainty and ignorance. As Buffett says: "It's insane to risk what you have and need for something you don't really need."

p.s., Batnick has said he devoted 60 weekends to writing his book. I like supporting people who have worked hard to write a book. I like it when when experienced and well-known book authors give some help to people like Batnick when their first book is published. For example, when accomplished authors like Jason Zweig reached out to help Batnick get a good start on book sales, I thought: "bravo for them!"

I have written blog posts on Batnick's colleagues at Barry Ritholtz, Josh Brown and Ben Carlson. They do a lot of work to make people into better investors. That their writing is also content marketing for their business does not change the good things they accomplish when people read what they write. Bravo for them and other people like them. I often quote Charlie Munger on this point: "The best thing a human being can do is to help another human being know more." That will continue.

End Notes:

Batnick, Michael. Big Mistakes: The Best Investors and Their Worst Investments https://www.amazon.com/dp/B07D8GSXJC/ref=dp-kindle-redirect?_encoding=UTF8&btkr=1

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How Subscription Business Models are Changing Business and Investing (the Microeconomics of Subscriptions)

August 11, 2018

A subscription is at its core an arrangement with a customer that creates a periodic contractual commitment. Netflix is an example of a subscription-based business. The default in a subscription relationship is that the customer will make an additional purchase at some time in the future unless they take some action like sending a cancellation notice or not paying a renewal fee when the subscription ends. The other method used by businesses to sell products is a relationship that is based on transactions. Buying a hamburger at a Shake Shack is a transaction. Selling good in transactions does not mean that an ongoing customer relationship is not possible. Amazon sells products via subscriptions (e.g., Amazon Prime) and via transactions, but has an ongoing relationship with the customer in both cases. If a

consumer buys a soft drink at a convenience store they do not have an ongoing relationship with that store, but they do if they use a loyalty card or use of a mobile app to pay at a retail establishment like Amazon Go.

A subscription-based approach to business is not a substitute for product market fit or a business model. Whether a subscription or transaction-based relationship creates the most value for a customer or a producer depends on many factors as will be explained below. The founders of a company like MoviePass can become confused about this reality because they see other businesses which appear to be successfully selling subscriptions. As another example of a mistaken understanding of subscriptions, the founders of startups may observe businesses like Dollar Shave Club ("Razors to Your Door for Just a Couple Dollars") which was able to generate an attractive financial exit for shareholders and as a result the world ends up with thousands of business plans that are essentially "Dollar Shave Club for X." Unfortunately for these founders, product market fit is still required even if a subscription approach is adopted. In addition, what has worked for other founders in the past may no longer work in the present.

Hosting a software driven service like Adobe Creative Cloud on servers instead of selling a version that runs on a local computer is natural to sell as a subscription, but the most important aspects of this model are things like creating a connected relationship with the customer, reducing uncertainty about whether the customer will pay for upgraded versions and being an effective way to reduce piracy. There are also less tangible aspects of a subscription relationship that that Robbie Baxter writes about in her book *The Membership Economy,* that I will not write about here. My focus is instead on the microeconomics and unit economics of the subscription relationship. Charlie Munger has said "microeconomics is what we do and macroeconomics is what we put up with." As just one example of the business benefits of a subscription, in an essay entitled "Adobe's Subscription Model & Why Platform Owners Should Care," Ben Thompson writes: "to be relevant in a world where users interact with as many as five different devices in a day, then a per-device licensing model is clearly unsustainable." After its shift to subscriptions Adobe no longer had to worry about things like when a customer would upgrade to a new version. Subscription-based businesses can have some very attractive attributes, but they also create new challenges which require new skills and approaches. Most importantly, as stated above, product market fit is still required.

Why don't businesses sell subscriptions more often? After all, the revenue from a subscription is more predictable, the value of the data derived from the customer relationship can potentially be higher and other processing costs can be lower. What is not to like about subscription pricing? The answer is: it costs real money to get a customer to surrender the optionality associated with buying the product "just in time." Buying products just in time increases the ability of the consumer to direct their cash to new uses if conditions change. Warren Buffett explains the value of cash to anyone including a consumer as follows: "cash is a call option with no expiration date, an option on every asset class, with no strike price." Chris Rock puts it even more simply: "Wealth is not about having a lot of money; it's about having a lot of options." The less cash a consumer has available, the more valuable optionality is to that consumer. To illustrate this point, when a consumer is cash-poor they will do things like pay more on a unit basis just to buy just what they need in a "dollar store" or use a prepaid phone even though they pay more per unit of consumption because they want to preserve the optionality of what little cash they have.

Why do some businesses sell subscriptions but allow a customer to cancel at any time? Because the longer the customer is asked to commit to the periodic relationship, the more financial incentive the customers must be given to do so or the more in sales and marketing will be required to acquire the gross customer addition. In other words, the longer the commitment and the higher the commitment in terms of dollars, the higher the customer acquisition cost (CAC) will be. If this were not true, many people would be already paying more than $500 a month after making 30-year commitment to work out at their health club and businesses would routinely be making decades long commitments for software as a service. Some consumers are willing to pay more on a unit cost basis for a service that is terminable month-to-month than the would if they commit for a year or more for a reason. Would a business like a multi-year contractual commitment from its customers? Sure! But the CAC associated with that subscription offering may not create favorable unit economics for the business. It depends. Different prices may need to be charged to different customers as a result of the differing value placed on optionality.

When do consumers value a subscription enough that the "unit economics" associated with a subscription that I have written about many times before make sense for a business? I have a very smart friend who puts it this way: "If the value of the subscription is bigger than the price when compared to other alternatives, customers can be convinced to do it. It's the same thing for an ice cream cone: if value minus price is bigger than other alternatives, eat up!" The value of any lost optionality is part of this equation. So that analysis naturally leads to an analysis of two different types of value associated with a subscription: (1) value for the consumer of the product versus buying in transactions and (2) value for the business providing the product in a subscription format. Every different product requires a unique analysis and that analysis must deal with a constantly shifting world that may present different and unpredictable alternatives and conditions. Consumers do this math in their head and are impacted by emotional factors in making decisions, as anyone who has seen a sales pitch for a time share condominium knows.

A subscription relationship with a customer has business attributes that resemble and annuity. The economics of a subscription business are very different than the economics of the factory that people read about in places like a college accounting class. To understand and operate a subscription business like this the managers and other employees of the business must acquire new skills and understand new concepts like lifetime value, cohort analysis and viral coefficients). These teams at a modern business using subscriptions must now include new types of employees like data scientists and use new technologies and approaches like machine learning. Since the business itself must make this changes and acquire these skills, investors must also be capable of understanding this phenomenon if they are going to be able to properly value the business. These changes I just described are very confusing for people who are unwilling to do more work than looking up a price/earnings ration on a web site. As I said, investors who are willing to do the work must learn new skills like calculating CAC payback periods. The unavoidable reality is that in valuing a subscription business, a NPV must be calculated for each customer and then the collective NPV of these customers must be aggregated. When confronted with the necessity of doing this work to understand a subscription based business model that resembles an annuity, many people say, "That's too hard, let's talk about P/E ratios." That is a recipe for investing under-performance at best and financial disaster at worst. My blog post on how to value a subscription business is linked to in the End Notes. If you are unwilling to do this work, I suggest you buy a diversified portfolio of low cost index funds and spend more time on enjoyable hobbies.

McCarthy and Fader have written extensively on valuing subscription-based businesses:

The subscription business model is booming. Previously dominated by the likes of newspapers, magazines, gyms, utilities, and telecommunications firms, more products and services are being offered to more people through subscriptions than ever before. Business-to-consumer subscription businesses have attracted more than 11 million US subscribers in 2017, and the industry as a whole has been growing at 200% annually since 2011. There are over two thousand consumer-focused subscription businesses capitalizing upon customers' diverse tastes. While many companies are selling more traditional products – such as food (Blue Apron and HelloFresh), grooming products (Dollar Shave Club and Harry's), beauty supplies (Birchbox and Ipsy), and clothes (Stitch Fix and Trunk Club) While the industry is growing rapidly, it is also highly volatile.

Michael Mauboussin writes in his essay "The Economics of Customer Businesses":

One of the keys to successfully analyzing a business is getting down to the most basic unit of economic analysis. For many consumer-oriented companies, and especially those that rely on a subscription model, the basic unit of analysis is the customer. Investors need to determine whether or not current and prospective customers add value. The only way to understand customer economics is to break down the analysis into its prime components. This customer-focused approach leads us to the following definition of value:

Value of a business = value per customer x number of current and future customers

In different words, business value is a function of customer economics and the current and future users (market size). This equation is simple, but unpacking the essential elements is not.

Fader and McCarthy describe a functional valuation process in their recent HBR article, in which they suggest:

…a "bottom-up" approach to corporate valuation …explicitly recognizing that every dollar of revenue that a company generates must come from a customer – and that not all customers are "created equal." It is specifically suited for subscription businesses, driving revenue off of the flow of incoming customers over time, their retention patterns as they stay with (or abandon) their subscriptions, and the average revenue per customer (ARPU).

Let's look at some of the factors that are potentially involved in a subscription-based business and who benefits from each attribute. In each case I suggest that you think about this key question: Does this aspect of the subscription relationship create producer or consumer benefits?

- "There is considerable evidence of consumer preferences for subscription over per-use pricing. There are three main reasons that probably lead consumers to prefer flat-rate pricing: (i) Insurance: It provides protection against sudden large bills. **[Consumers Benefit]** (ii) Overestimate of usage: Customers typically overestimate how much they use a service, with the ratio of their estimate to actual usage following a log-normal distribution. **[Producers Benefit]** (iii) Hassle factor: In a per-use situation, consumers keep worrying whether each [unit] is worth the money it costs. A flat-rate plan allows them not to worry **[Consumers benefit.]**" "[With subscriptions]

the buyer faces a lower risk of price change: it is the seller that bears uncertainty about future prices. However, the payment in advance is a premium for running that risk." **[Consumers Benefit]** Some products have more uncertainty than others, which can radically change perceived customer value. Subscribing to a health club is different than subscribing to a magazine. Both are different than buying a time share condominium in a tropical resort.

- Subscriptions can reduce monetary and other transaction costs between the seller and the buyer. **[Producers and Consumers Benefit**] The need for a transaction each time a unit of the product is delivered under the terms of a subscription can be reduced. For example, if a consumer owns a pet it may be simpler to agree to have food for the animal delivered on a regular basis. Someone who regularly consumes marijuana may want to receive a new bag of weed every week. Replenishment-based subscriptions have more relative value for consumers than deliveries of discretionary products like meal delivery and are not only less expensive to sell but experience less customer churn. Why? Replenishment of a supply like pet food is less of an optional purchase than a meal preparation kit which is more of a discretionary purchase.

- "In general, subscription plans also make it easier to develop close relations with customers. I wrote about this in my blog post entitled "Peloton: The "SaaS Plus a Box" Business case." If access is on a strict per-use basis, there is less reason to obtain information about the users. But that does not stop vendors from trying to turn a transactional relationship with a customer into monetizable data. A subscription relationship lends itself more naturally to finding out what the consumers need, and to customization of offerings." **[Consumers and Producers Benefit].** A subscription relationship with a customer more naturally creates a valuable connected relationship with the end user. Better data capture via telemetry systems can lead to a more personalized offering for subscription-based firms than non-subscription-based firms (e.g., Stitch Fix versus Macy's).

- If the price of a unit of consumption of a given product is lower than its price outside of the subscription this indicates that the subscription pricing model is being used by businesses to charge customers different prices for the same product or service (i.e., price discrimination). A classic case of price discrimination with subscriptions is magazines:

"consumers that assign a high evaluation to the magazine tend to purchase a subscription instead of purchasing the magazine at the newsstand; since the cover price is higher than the subscription price, the very same consumers pay a lower unitary price."

As an example, The New Yorker magazine charges "12 weeks for $12" in its introductory subscription offer and one year for 89.99. The price for an individual copy at the news stand?

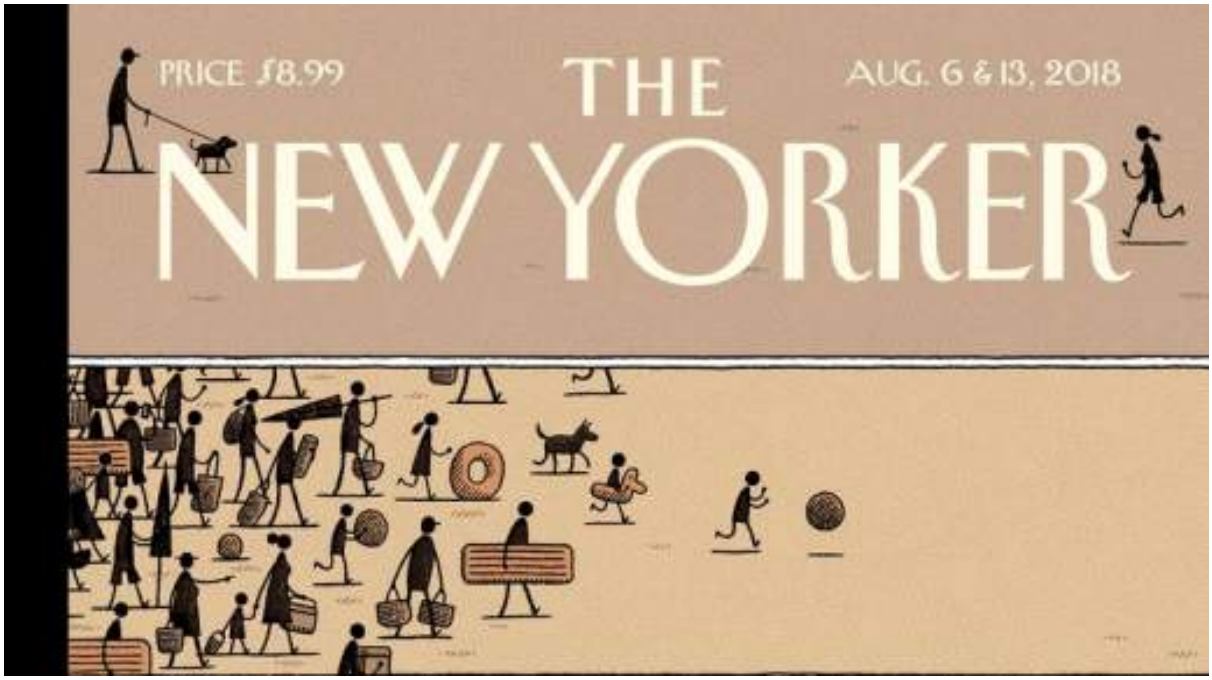

A car wash subscription is an interesting case since there is very little incremental cost of another wash just like a magazine. The Ben Thompson essay I noted above on subscriptions explores how subscriptions enable different customers to be charged different prices. **[Producers and Consumers Benefit]**

- When there is no subscription a business has to "win" a customer every time a purchase is made. When there is a subscription the default option is to stick with it even if it can be canceled at any time. This is an example of a pricing approach that benefits from a human tendency toward inertia**. [Producers Benefit]** Business love automatic subscriptions renewals precisely because of inertia and will often give customers a substantial benefit for agreeing to this arrangement. The reduction in churn can more than offset the cost of convincing the customers to accept the automatic renewal. Automatic renewals are so effective and potentially misleading that the FTC and numerous states have regulated the practice.

- Subscriptions and bundles are often coupled by businesses and this can create some confusion. One of the reasons why goods that can be naturally bundled are often sold with a subscription because a bundle is that they are likely to have something in them that is relevant for each time period. Spotify sells a bundle as does a university. Bundles are also more likely with information goods since they have little or no marginal cost and are nonrival and nonexcludable (public goods). In addition:

"There are reasons for producers, especially in areas like software, where network externalities are important, to also like these plans. Since per-use pricing does repress usage, it goes counter to the producer's desire that a software package be used as much as possible in order to lock customers into that product. Producers would like consumers to become so used to the particular features and commands of their software that they will find it hard to change to another system. Producers also want their systems to be easy to try out, and be widely used, to capture additional customers. Subscription pricing and site licensing promote these goals."

The best essay on bundles was written by Chris Dixon. There is no way to improve on it.

End Notes:

McCarthy, Fader and Hardie: https://lbsresearch.london.edu/586/1/Hardie_Valuing-subscription-based-businesses_mccarthy_et_al_16.pdf

McCarthy and Fader https://hbr.org/2017/12/subscription-businesses-are-booming-heres-how-to-value-them

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My blog post on Amazon Prime and other Subscription Businesses: https://25iq.com/2017/07/15/amazon-prime-and-other-subscription-businesses-how-do-you-value-a-subscriber/

My blog post on Peloton: https://25iq.com/2018/03/10/peloton-the-saas-plus-a-box-business-case/

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Adobe's Subscription Model & Why Platform Owners Should Care, Ben Thompson, https://stratechery.com/2013/adobes-subscription-model-why-platform-owners-should-care/

Lessons for Business Founders from Tupac Shakur

August 18, 2018

There are many biographies of Tupac, all of which have aspects that someone probably will take issue with, so I won't create my own version in this blog post. I will instead quote one sentence from Wikipedia: "Tupac Amaru Shakur, also known as 2Pac and Makaveli, was an American rapper and actor." As you probably know, in September of 1996 Tupac was shot and killed in Las Vegas, in what remains and unsolved crime.

As an aside, I hope you know that I weave the discussion of business topics around people like Tupac, Biggie, Rza, K-Dot, and Lil Wayne is to make business topics less boring. I am trying to get people to read material who would not otherwise do so.

1. **"It's time for us as a people to start making some changes."**

All great founders know they must break at least one rule everyone else thought was unbreakable. The ability to pick the right rule or rules to break is part of what makes a founder skillful or lucky. Their success depends on convincing other people to believe in the value of "making some changes" as Tupac points out. People who have charisma and are brave like Tupac will have more success in creating significant changes. Airbnb is a classic example of a founding team that decided to break some rules. Marc Andreessen said once about Airbnb: "Breakthrough ideas look crazy, nuts. It's hard to think this way — I see it in other people's body language, and I can feel it in my own, where I sometimes feel like I don't even care if it's going to work, I can't take more change…. Airbnb? People staying in each other's houses without there being a lot of axe murders?"

As another example of "making some changes," many people today do not know or have forgotten that in 1994 the "consensus" view was that the future was all about "The Information Highway." This consensus view included the assumption that cable and telephone companies would have top down control of specifically allocated on-ramps and off-ramps. The interactive pilot Information Highway systems included: NYNEX in New York, Time Warner in Orlando, Bell Atlantic in the Virginia suburbs of Washington, D.C., GTE in Cerritos, Viacom/AT&T in Castro Valley and US West in Omaha. Vendors salivated heavily at the prospect of supplying the equipment and software for these Information Highway systems. PR firms did their usual part of stir up the Information Highway hype to

extreme levels. As an example of the view at the time among many people was the 1994 *Wired Magazine* cover depicting John Malone as "The Infobahn Warrior."

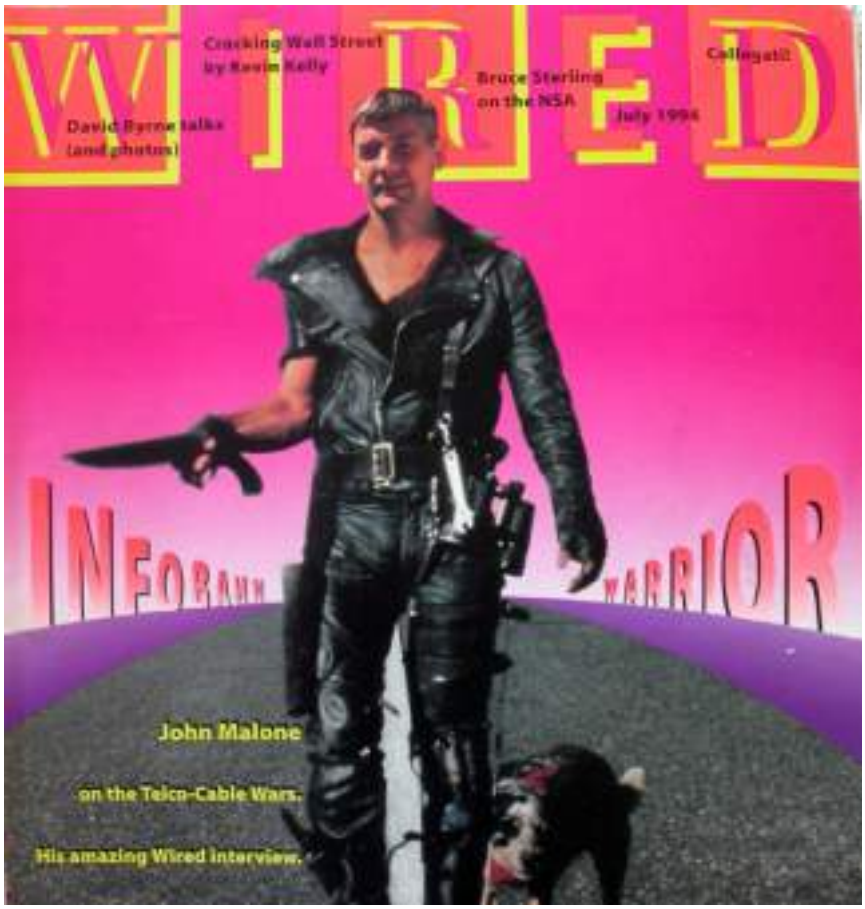

Andreessen describes the situation in 1994 and how the actual trend differed from the consensus view:

"The decision to put money into the Internet in 1994 was considered by many of my colleagues to be borderline insane. Most people said things like, The Internet is free; you can't make money on that! I literally had people telling me I was going to screw up the Internet by bringing more traffic to it."

Another person who identified the emerging trend in 1994 was Steven Sinofsky, as was described in this passage from a *Business Week* article:

The Web-izing of Microsoft begins in February 1994, when Steven Sinofsky, Gates's technical assistant, returned to his alma mater, Cornell University, on a recruiting trip. Snowed in at the Ithaca (N.Y.) airport, he headed back to the Cornell campus. That's when he saw it: students dashing between classes, tapping into terminals, and getting their E-mail and course lists off the Net.

The Internet had spread like wildfire. It was no longer the network for the technically savvy — as it had been seven years earlier when Sinofsky was studying there — but a tool used by students and faculty to communicate with colleagues on campus and around the world. He dashed off a breathless E-mail message called "Cornell is WIRED!" to Gates and his technical staff.

Many people had a hard time for a relatively long time understanding what the Internet would become. They thought to themselves: "A distributed communications network of networks that no single business actually controlled?" and it boggled their mind to think that this could ever happen. It was easy to not understand what was coming since it broke rules that people though were important. As another example, while I have a less than perfect recollection of the exact dates some events during this period, I do know that Steve Jobs met with Craig McCaw sometime in 1993 or early 1994 and first explained to him the nature of the business opportunity that the Internet would create. Craig said to Steve: "Let's buy it." Steve quickly explained why that was not possible, but people's first reaction, even if they were very smart natural contrarians/pirates like Craig, was to not understand the phenomenon.

Getting a sense of when and how radically the consensus view changed oner a short period is assistend by looking at a high truncated Internet time line of those years like this one below. People like Andreessen and Sinofsky used *variant perception* to understand that the consensus view on Information Highway was very wrong and that the Internet was instead the important trend.

1989: AOL launches the "Instant Messenger" service

1990: The World (world.std.com) is the first commercial provider of Internet dial-up

1991: Commercial Internet eXchange (CIX) Association, lifts restrictions on the commercial use of the Internet; Wide Area Information Servers (WAIS) appear; Gopher released

1992: AOL IPO

1993: CERN places its World Wide Web technology in the public domain; Mosaic appears

1994: Launch of Netscape Navigator; Amazon and Yahoo are founded. A business "spams" the Internet with email; first banner ads appear on hotwired.com and **Time Warner's Orlando Information Highway project was scheduled to start**

1995: Craigslist and eBay are founded. Netscape IPO; Microsoft ships Windows 95

1996: Google is founded.

1997: **Time Warner Orlando Information Highway project cancelled**

As late as December 1994, a policy paper still proclaimed: "Just as the automobile changed American society, so could the Information Superhighway." But other people had already figured out that something bigger was happening. This quote from May 25, 1994 is a humorous example of someone recognizing that something was coming that would be very different:

"I believe that, for a long time to come, this information superhighway, far from resembling a modern interstate, will more likely approach a roadway in India: chaotic, crowded and swarming with cows." Arthur Ochs Sulzberger

It was not until 1995 that the Internet consensus crushed the consensus view about the importance of Information Highway. The service trials mentioned above by cable and telco

providers were shut down one by one. For example, the Time Warner trial in Orlando, originally scheduled for spring of 1994, was shut down in 1997. Tupac never expressed a specific view about the Information Highway. He did say: "It's the game of life. Do I win or do I lose? One day they're gonna shut the game down. I gotta have as much fun and go around the board as many times as I can before it's my turn to leave." if the Information Highway has happened would he have been ridin in his Hummer?

2. **"I try to be somebody instead of just make money off of everybody."**

A startup will never become a successful business if it is not making something that customers are willing to pay for with real money. Making that happen is far more likely is the founder are passionate about solving real problems for customers. This is the right thing to do to create a successful business, but also the right thing to do since it makes life more meaningful and people happier. You will recall that in his song "Changes" Tupac makes clear that that even if you "made a G today' it doesn't really mean that the seller of the product is somebody if they "made it in an sleazy way." Success is more sustainable and meaningful if you are creating real value while you are doing well financially.

It is vastly easier to motivate a team, investors and customers if the business is trying to make the world a better place. As an example, traditional providers of rocket launch did not believe demand would increase if there was a drop in the price of selling rides for payloads like satellites into orbit. This assumption about the price elasticity of launching payloads like satellites on rockets for customers caused traditional providers to milk their sunk non-recurring engineering and to not invest significant amounts in price reducing innovation. The good news is that the industry has been turned on its head by Blue Origin and SpaceX which are trying to do more than "just make money off of everybody." Jeff Bezos and Elton Musk have a passion to lower the cost of space travel and that has resulted in dramatic changes, including re-usability of some rocket components.

Without a profit an endeavor can't scale and grow. Without a purpose and delivering real value, it is hard to motivate people to create the business in the first place. It is possible to create a business without delivering real value? It is rare but it can happen. But why the hell would anyone want to do that? Tupac described the rewards of creating real value: **"Happy are those who dream dreams and are ready to pay the price to make them come true."** Being happy is highly under-rated as a outcome in life.

3. **"I try to find my way in the world. So I go down paths that haven't been traveled before and I usually mess up, but I learn, I come back stronger."**

The process of discovering product market fit is iterative. Almost no startup finds product market fit with exactly what was envisioned from the start. For example, Twitter was originally a company called Odeo and wanted to find product market fit in podcasting. Flickr started as an online role-playing game called Game Neverending. Instagram began a check-in app named Burbn. This sequence is essential: (1) do a lot of experiments using the scientific method as you try to create and then operate a business and (2) measure everything you do and the results of what you do and (3) evolve and iterate based on feedback from that process (which never ends).

4. **"The only thing that comes to a sleeping man is dreams."**

If a founder is not willing to do the work necessary to create the business, they will fail. An extreme example of someone not doing the work was Color Labs co-founder and CEO Bill Nguyen. A news report once wrote this account: "According to several sources close to the company, Nguyen has not been seen at Color Lab's Palo Alto headquarters for more than two months. The speculation was that Nguyen was 'probably either in Tahoe or Hawaii.'" The financial result of this lack of work at Color Labs was what you would expect.

I spent 6 years at a startup after joining a company known as Teledesic as the fourth employee. I never worked harder of felt more alive in a work setting. I spent very little time being what Tupac called "a sleeping man" in those years. People involved in Teledesic worked incredibly hard. As just one example, I flew 500,00 air miles a year for five years in a row. People worked every day and often late into the night. One of the investors in the startup was Bill Gates who set the standard for hard work. CNBC tells this story about the early years at Microsoft:

"In a 2016 interview with BBC Radio, Gates shared just how work-obsessed he used to be. "I was quite fanatical about work," he said. "I worked weekends. I didn't really believe in vacations." Unsurprisingly, this work ethic transferred to employees. "I had to be a little careful not to apply my standards on to how hard they worked," he said. However, that didn't stop him from tracking which employees were working the longest hours. "I knew everybody's license plates so I could look out in the parking lot and see when did people come in [and] when were they leaving," Gates told the BBC. Paul Allen said as much in a 2011 first-person article for Vanity Fair. "Microsoft was a high-stress environment because Bill drove others as hard as he drove himself," wrote Allen. "He was growing into the taskmaster who would prowl the parking lot on weekends to see who'd made it in."

Startups are "all in." If someone can succeed with a startup while not working hard or making any sacrifices, well good for them. I will say that exactly zero examples jump to mind to support this alternative view.

5. **“No one knows my struggle, they only see the trouble. Not knowing how hard it is to carry on when no one loves you.” “Long live the rose that grew from concrete when no one else even cared.”**

If a founder’s ability to sustain the effort necessary to build a successful business is dependent on outside validation happening throughout the process of creating the business, the probability the founder will succeed is tiny. The author of H*igh Growth Handbook* Elad Gil points out: “As the founder of a high growth successful startup, you may feel like you are constantly *failing*. You are not alone in this.”

I’m looking forward to releasing my review of Scott Belsky’s soon to be released book *The Messy Middle*, but for now I am embargoed. But Belsky has already written about what Tupac is talking about previously on his on his blog:

“In reality, the middle is extraordinarily volatile—a continuous sequence of ups and downs, expansions and contractions. Once the honeymoon period of starting a new journey dissipates, reality hits you. Hard. You’ll feel lost and then you’ll find a new direction; you’ll make progress and then you’ll stumble.”

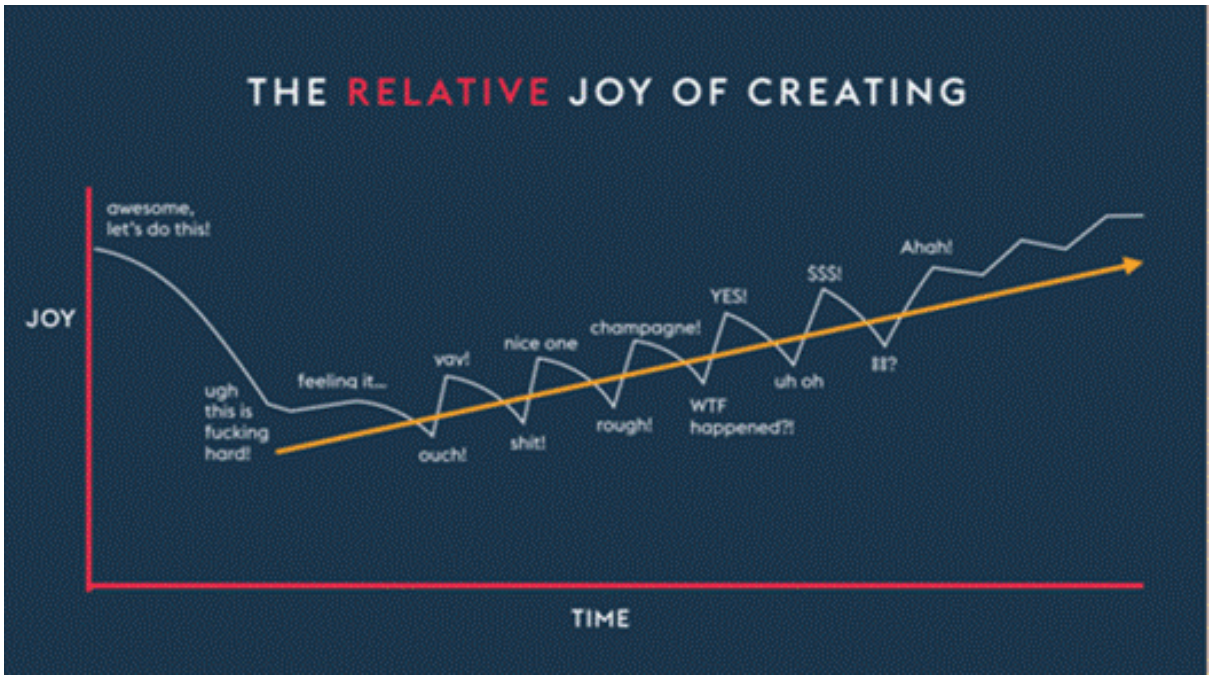

6. **“Never surrender, it’s all about the faith you got; don’t ever stop, just push it ‘till you hit the top and if you drop, at least you know you gave your all to be true to you, that way you can never fail.”**

The best founders are missionaries. They are motivated by more than money. It is that non-monetary motivation that can sustain them through the rough spots. Mercenaries sometimes succeed, but it happens far less often. John Doerr was the first person to use this metaphor:

Mercenaries	vs. Missionaries
drive, **paranoia**	**passion**
opportunistic	**strategic**
"the pitch, the **deal**"	"the **big idea**, partnership"
sprint, short run	**marathon**, long run
obsess on **competition**	obsess on **customers**
aristocracy of founder(s)	**meritocracy**, best idea wins
financial statements	mission, **values** statement
loners, you're on your own	**mentors**, coaches of **teams**
entitlement	**contribution**
the "**deferred life**" plan	a **whole** life (that works)
lust for making **money**	lust to **make meaning** and money
success	success AND **significance**

7. **"You never know how strong you can be until being strong is the only choice you have left." "Tomorrow I wake with second wind and strong because of pride. I know I fought with all my heart to keep the dream alive."**

Founders and startup employees often find they are stronger than they ever thought possible. There are companies like Open Table that almost died after the Internet bubble ended and yet rose again to success. They went through some very tough years before finding success. Ben Horowitz chronicles the power of staying strong as Tupac suggests during tough times in his book *The Hard Thing about Hard Things*.

8. **"You can spend minutes, hours, days, weeks, or even months over-analyzing a situation; trying to put the pieces together, justifying what could've, would've happened… or you can just leave the pieces on the floor and move the f*** on."**

Charlie Munger makes the same point as Tupac in this way: "It's important to review your past stupidities so you are less likely to repeat them, but I'm not gnashing my teeth over it or suffering or enduring it. I regard it as perfectly normal to fail and make bad decisions. I think the tragedy in life is to be so timid that you don't play hard enough so you have some reverses."

9. **"I'm not saying I'm gonna change the world, but I guarantee that I will spark the brain that will change the world."**

Josh Wolfe makes the same point in this way: "The detritus in this wave becomes the combinatorial fodder for the next wave. And today, the cost of capital is so low that it acts like a tractor beam, pulling far future ideas to the present." Nassim Taleb similarly believes:

Most of you will fail, disrespected, impoverished, but we are grateful for the risks you are taking and the sacrifices you are making for the sake of the economic growth of the planet and pulling others out of poverty. You are the source of our antifragility. Our nation thanks you."

10. **"I believe that everything that you do bad comes back to you."**

Reputation takes many years to create, but only minutes to destroy. Warren Buffet says: "If you think about that, you'll do things differently." One example of this happened at Salomon Brothers and resulted in a dramatic period in Buffett's life. The LA Times wrote at the time: "Today people scratch their heads in wonder that Gutfreund jettisoned his career to protect Mozer. In testimony, [the CEO Buffett put in place] Maughan called Gutfreund's actions 'inexplicable and inexcusable." Some suggest it was hubris, but others say Gutfreund may simply have been trying to hang onto his job. The result was a dramatic resignation by [the Salomon Chairman and CEO] Gutfreund. In a statement the CEO stated: "we cannot let our unfortunate mistake of not taking prompt action, when in April we learned of one unauthorized bid at a February Treasury auction to harm the firm."

11. **"There's nobody in the business strong enough to scare me."**

Every startup or business must face competition. Being fearless to a fault is positively correlated with success. The best book I have read about being an entrepreneur is *Shoe Dog* by Nike founder Phil Knight. If you are interested in business and have not read this book, what exactly are you reading? Speaking of Phil Knight this is a great story about being brave told by Knight's cousin Doug Houser:

In 1973, Blue Ribbon Sports and Knight filed a lawsuit in federal court in Portland against Onitsuka. The lawsuit "alleged that (Onitsuka) had breached their contract by soliciting new distributors and demanding that Knight sign over control of BRS for the right to go on distributing Tigers," says Kenny Moore's book, *Bowerman and the Men of Oregon.* Federal Judge James Burns ultimately issued a ruling that entitled Blue Ribbon Sports to damages but allowed both the U.S. company and Onitsuka to continue selling identical shoes. Critically, though, only Blue Ribbon was allowed to sell them under their U.S. trademarked names, including the Cortez. Onitsuka appealed but eventually sought an out-of-court monetary settlement rather than re-fight in court. Houser said: "they came up with a figure we felt was great. At the time it was an awful lot of money and it was to be confidential. And still is. Knight and Houser were asked to come to the San Francisco office of the law firm that represented Onitsuka. The pair was under the impression that they'd sign papers and there would be a transfer of funds into a Blue Ribbon account. "So Knight and I go down and we appear in the San Francisco lawyers' conference room," Houser said. "And they have an old steamer trunk. Looks like a casket. A big steamer trunk, filled with cash." The Onitsuka lawyer explained the unorthodox payment method as the result of the difficulty of transferring money out of Japan. He encouraged Knight and Houser to sign some documents. "And I said, 'Is that X dollars?'" Houser said. "And they gulped and said, 'Well no. It's illegal to bring that much money out of Japan. And we couldn't' bring it all. That's all you get. But it's a lot of money and you ought to sign.' They knew we were desperate and needed money badly. "But it was grossly unprofessional. Grossly wrong. Morally wrong. Everything about it stunk. "And Knight said, 'Eff you. We're out of here.' "And we left the conference room and went out into the lobby, punched the elevator button and just like in the movies, just when the elevator opened, the conference room door opened and they hollered, 'Don't'

leave. We've got the rest of the money.' "So we went back into the conference room, they opened a door to an adjoining conference room where there was a second steamer trunk and they said, 'Now sign the papers.' "And at that point we said, 'We're not signing anything until a bank has counted the money and we have a certificate of deposit in the company's name. This could be counterfeit for all we know and you guys have no credibility whatsoever.' "I called the Bank of America, explained our problem at, maybe, 4 o'clock in the afternoon and they said, 'It's going to take a while to count that. But we'd be delighted to stay open late and we'll have an armored car there in about five minutes.' (The money was in $100 U.S. bills, Houser said.) "And they came and got the steamer trunks and we went to the bank and waited and they gave us our certificate. We signed the release papers. The case was over. We had the certificate of deposit. We went out to celebrate. Had a wonderful dinner and drank too much."

12. **"Whatever you see you gotta keep a sense of humor; you gotta be able to smile through all the bullshit."**

Laughter and humor are amazing weapons that can be harnessed in creating anything important. Ben Horowitz said once: "As a startup CEO, I slept like a baby. I woke up every 2 hours and cried." Humor is everywhere if you know who to find it. It does not need to be found in jokes or stores but that are one important source:

A family had twin boys, who had very different personalities even though they were identical twins. One boy was an eternal optimist, the other a complete pessimist. Just to see what would happen, on the twins' birthday their father loaded the pessimist's room with a huge pile of toys and games. In the optimist's room, he brought in a huge pile of horse manure. That night the father visited the pessimist's room and found him sitting next to his new gifts crying bitterly. "Why are you crying?" the father asked. "Because my friends will be jealous, I'll have to read all these instructions before I can do anything with this stuff, I'll constantly need batteries, and my toys will eventually get broken," answered the pessimist twin. The father then went to the optimist twin's room and father found him happily digging deep in the pile of manure. "What are you so happy about?" the father asked. The optimist twin replied: "There's got to be a pony in here somewhere!"

Two friends, one an optimist and the other a pessimist, could never quite agree on anything it seemed. The optimist hatched a plan to pull his friend out of his pessimistic thinking. The optimist owned a hunting dog that could walk on water. His plan was to take the pessimist and the dog out duck hunting in a boat. They got out into the middle of the lake, and the optimist brought down a duck. The dog immediately walked out across the water, retrieved the duck, and walked back to the boat. The optimist looked at the pessimistic friend and said: "What do you think about that?" The pessimist replied: "That dog can't swim, can he?"

End Notes:

Phil Knight story https://www.oregonlive.com/playbooks-profits/index.ssf/2015/10/post_74.html

Elad Gil: http://blog.eladgil.com/2017/08/feelings-of-failure.html

Color Labs: https://techcrunch.com/2012/09/28/color-ceo-nguyen-is-out/

CNBC: https://www.cnbc.com/2018/04/25/bill-gates-memorized-microsoft-employees-license-plates-to-track-them.html

Andreessen: http://www.siliconbeat.com/2015/05/11/quoted-marc-andreessen-quotes-from-the-new-yorker-piece/

Sinofsky: https://www.bloomberg.com/news/articles/1996-07-14/inside-microsoft

Horowitz: https://www.amazon.com/Hard-Thing-About-Things-Building/dp/0062273205

Belsky: https://www.amazon.com/Messy-Middle-Finding-Through-Hardest/dp/0735218072

(I Can't Get No) Satisfaction and Negative Churn

August 25, 2018

My grandfather said to me once: "Two negatives can create a positive in English, but what is the point of that?" He continued by saying: "It is clever dialogue when Bert says to Mary Poppins 'If you don't want to go nowhere…,' but that phrasing was intended as humor, rather than to improve clarity." He was referring to the lyric "(I Can't Get No) Satisfaction" in a song by the Rolling Stones I was listening to at the time. That story reminds me of a joke:

A linguistics professor was lecturing to his class one day. "In English," he said, "a double negative creates a positive. In some languages though, such as Russian, a double negative is still a negative. However," he pointed out, "there is no language wherein a double positive can form a negative." A voice from the back of the room then spoke up, "Yeah, right."

I have similar feelings to those expressed by my grandfather when I encounter the business term "negative churn" since it is also a double negative. The origin story of the term "negative churn" I have heard is that it was invented by Bessemer Venture Partners. My guess is that Bessemer had a portfolio company that was losing customers due to customer churn, but the business was gaining enough revenue from existing customers that the net change in *revenue* was net positive. In short, the tern "negative churn" was probably created as a form of Kryptonite to downplay the existence of customer churn. It seems clear that some people believe that negative churn is useful in talking up the value an increase in net revenue to counter the existence of customer churn. This Kryptonite-style rhetorical approach reminds of the way doctors use Latin terms to impress patients or some people use terms like "adjusted EBITDA before items."

Derek Pilling identifies another problem wit the terms negative churn here:

"What if the revenue gained from existing customers who purchase more over time is less than revenue lost from existing customers who purchase less over time. Such a scenario would indicate that Negative Churn is NEGATIVE! Can Negative Churn be negative? Should we call this scenario Negative, Negative Churn? Of course not."

The simplest way to describe what some people call “negative churn” would be to rename it “expansion revenue” or “account expansion.” There are a few helpful of blog posts and articles on the internet about this type of revenue written by several people including Lincoln Murphy. After including this tweet in his essay:

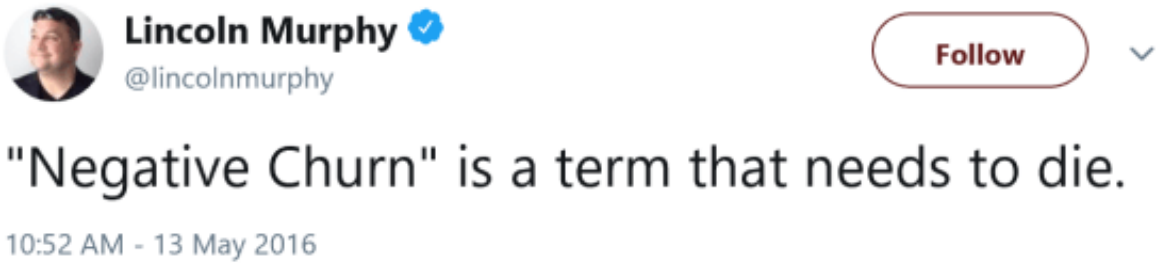

Murphy writes that businesses which know how to grow expansion revenue are:

“really good at promoting additional use that requires more resources or additional functionality which expands revenue, as well as using up-sells and cross-sells to grow per-customer revenue. In my experience, since SaaS providers with high churn rates simply don’t do the things necessary to reduce churn in the first place, they rarely do things necessary to expand revenue at all, let alone enough to overcome what is lost through churn. From what I’ve seen, providers with an unacceptable SaaS churn rate don’t know how to – or for whatever reason simply choose not to – leverage up-sell, cross-sell, or even down-sell opportunities, *so their churn rate is rarely offset by expansion revenue*.”

What are some examples of expansion revenue? One example of expansion revenue is upselling and another is cross-selling.

I will discuss upselling first, which happens when a business sells a higher-end version of the same product. David Skok explains upselling quite simply using an illustration:

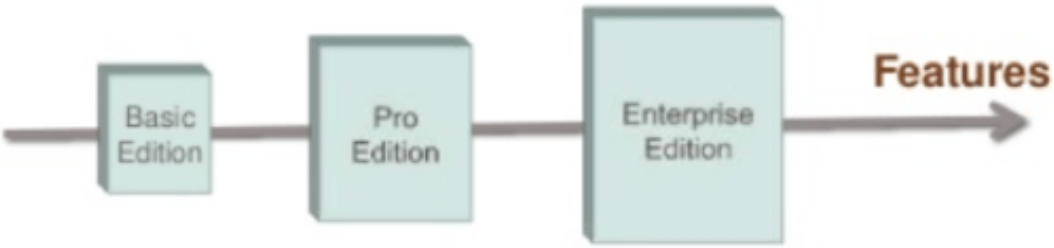

Joel York writes:

"Upselling increases the average recurring revenue per customer over time. It is an increase in price, not volume. SaaS churn is fundamentally a volume problem, negative virality. Upselling is better viewed as a transition from one average price scenario to another. It can soften the impact of churn, but it cannot reverse it."

A so-called freemium business model is just one example of an “upsell” or cross-sell. The freemium model is classically illustrated here in a *South Par*k episode:

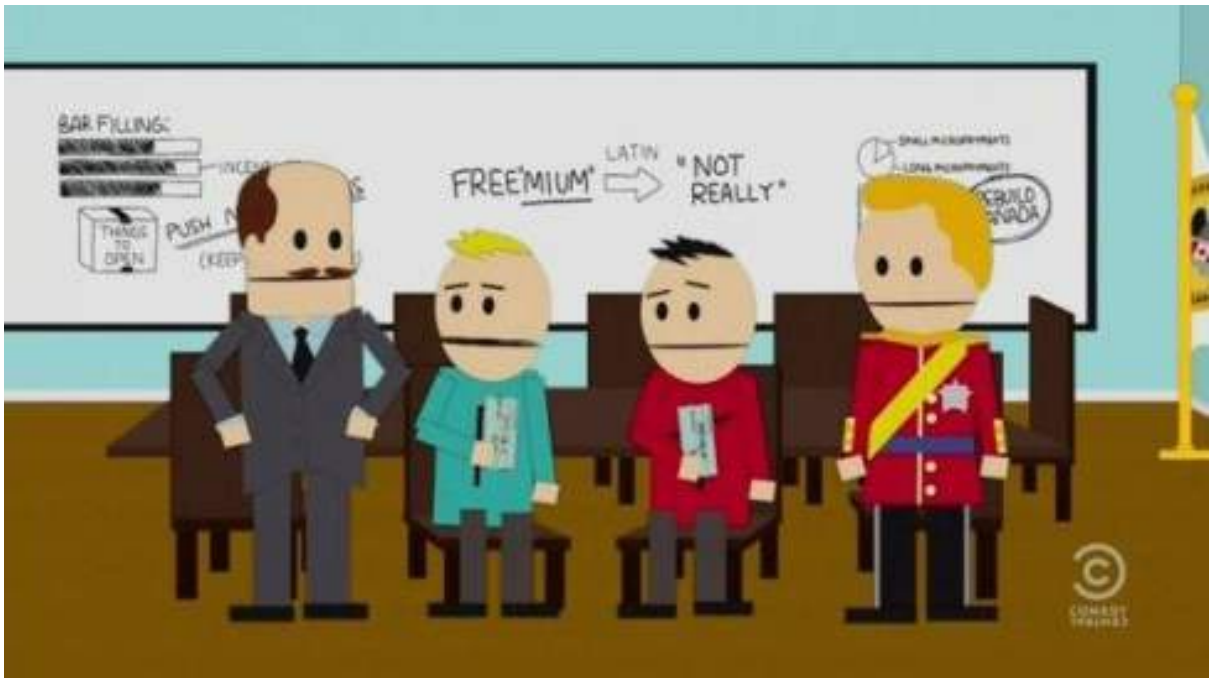

And here:

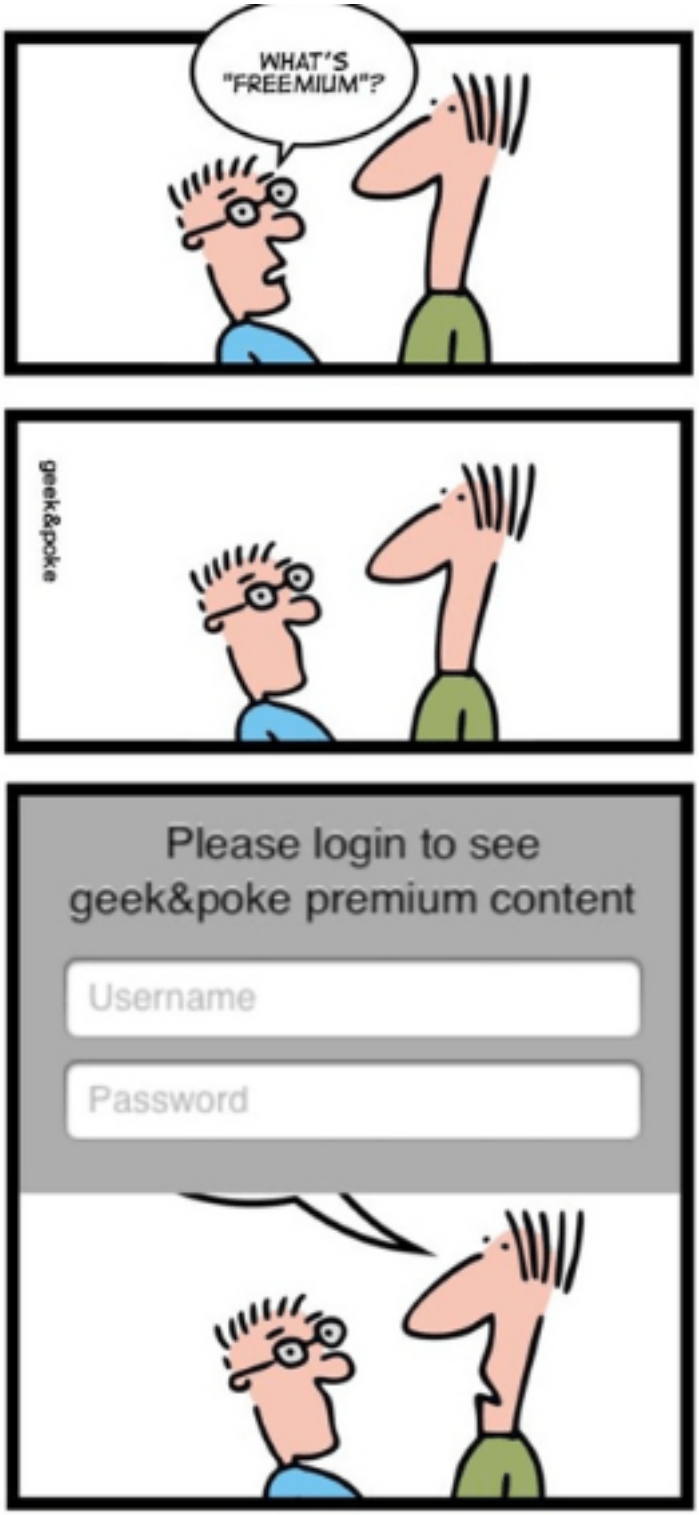

One unsavory and sometimes illegal form of upsell is the bait and switch, which is a sales tactic that lures customers into a selling environment with low prices on unavailable items with the aim of upselling them on a more expensive product. If the seller has the "bait" in stock and is willing to sell it but talks the buyer into buying something else, that is not "bait and switch." If the seller does not intend to or cannot sell the "bait," it is often illegal.

In addition to using upselling to increase revenue per customer, the same objective can be created via "cross-selling," which is selling different products to the same customers. In his post on negative churn Tomasz Tunguz explain that a cross-sell includes selling: "adjacent products that increases the value of the core product (ex. AWS S3, EMR, etc)." Salesforce.com both does cross-selling and enables it in its products:

Some examples of cross-selling include an electronics retailer offering a deal on a computer case, mouse, and screen cleaning wipes to a customer who purchases a new laptop, or an insurance provider offering renters' insurance to its car policyholders.

One of the more notable examples of a failure related to cross-selling done improperly is the Wells Fargo example. This bank created incentive programs for cross selling that went disastrously off the rails. I could write a long blog post on what went wrong in the case of Well Fargo. Have they abandoned cross-selling? No. That cross-selling remains core to any financial service supermarket's business model. American Banker magazine notes:

"Wells has stopped reporting its fabled cross-selling ratio, and executives at the bank have spoken about moving from a sales-oriented culture to one that is more service-driven. But one of the clearest messages from the embattled company's investor day was that selling additional products to existing customers remains a key part of the bank's strategy. Top Wells executives crowed Thursday about steps they are taking to improve customer referrals from the bank's sprawling branch network to its wealth management unit. And in what seemed like déjà vu, the bank's head of consumer lending said that one of his key strategies for building the mortgage business is to attract more of Wells Fargo's existing customers.

Other businesses in other industries rely on cross-selling in a big way. For example, a software business like Twilio or a hardware and software business like Cisco are successfully cross-selling other services (like video and security features) to customers. Open View Labs has a slide which illustrate cross-selling:

PRODUCT ATTACH RATE EXAMPLE StatusQuota

Percentage of customers buying 2nd product within 12 months of purchasing 1st product

		2nd Product		
		Sales Automation	Email Marketing	Social Media Monitoring
1st Product	Sales Automation		5%	23%
	Email Marketing	10%		45%
	Social Media Monitoring	55%	12%	

Upselling and cross-selling are very desirable even if conflating them by using the term negative churn is not. David Skok has created a slide explaining negative churn but underneath it all is really "expansion revenue:

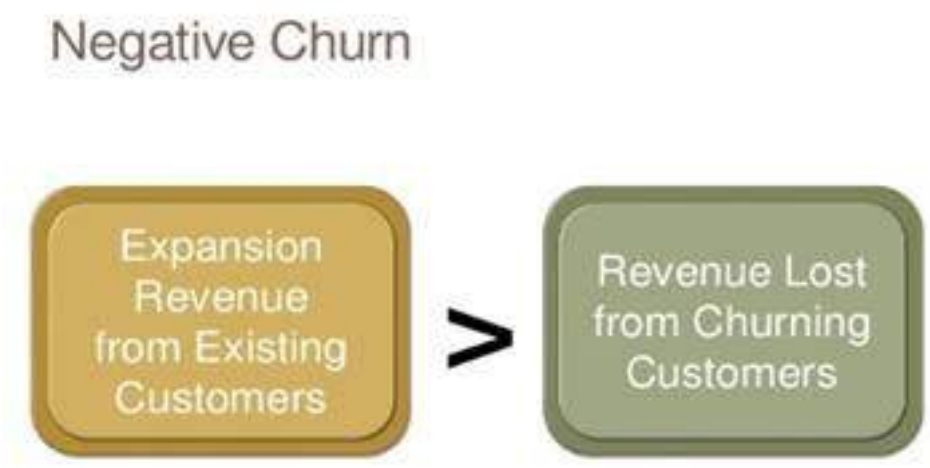

How do you do upsell? Skok again has a simple but clear explanatory slide below in which the key addition to the usual sales funnel (in blue) is an extender for expansion revenue (in green pointed to by the red arrow):

The cost to acquire a new customer by means of an upsell versus a cross-sell are quite different. David Skok points out: The median CAC ratio per $1 of upsells is $0.27, or 24% of the CAC to acquire each new customer dollar. The CAC ratio number for expansions is $0.20, or 18% of the CAC to acquire each new customer dollar. For renewals, it is $0.13, or 12%. These results are substantially similar to previous years." This survey that Skok is basing his statements on illustrates the difference:

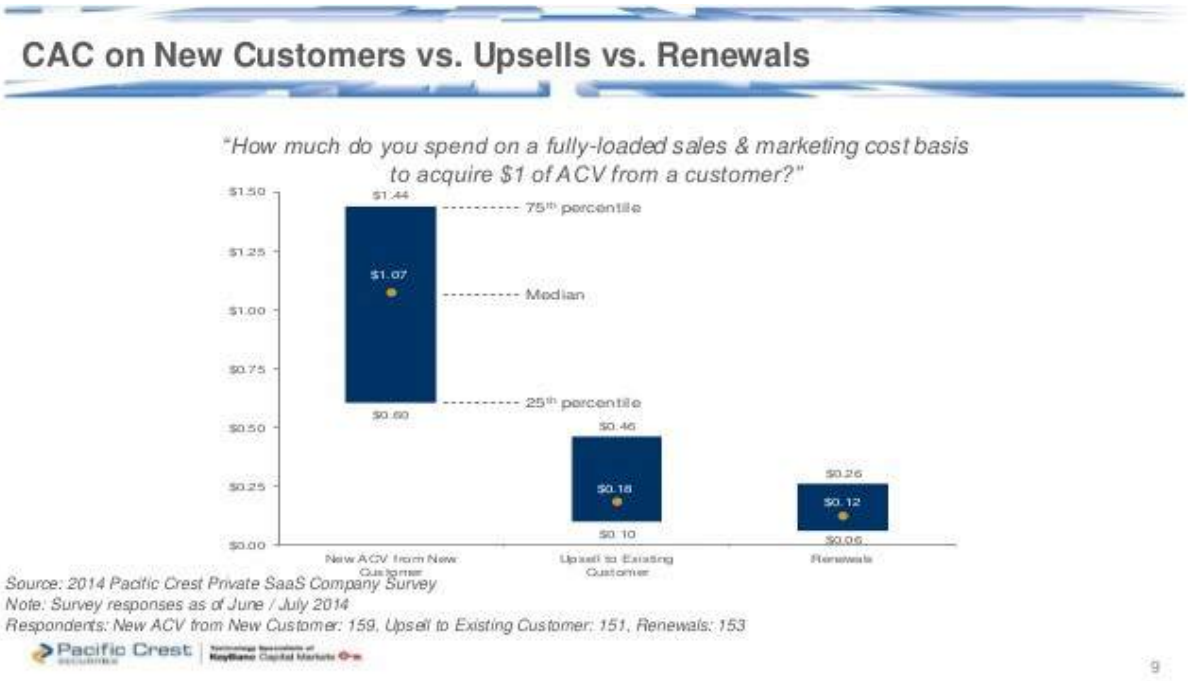

One important aspect of all this is to understand what Bill Gurley said here:

"The LTV formula, when used correctly, can be a good tactical tool for monitoring and comparing like-minded variable market programs, especially across channels. But like any model, its proper use is entirely dependent on the assumptions used in that model. Also, people who have a hidden agenda or who confuse a model with reality can misuse it."

It is possible to use a churn model that contains equations like this:

$$\gamma \times \prod_{i=0}^{t-1}(1-(\alpha+\beta\times e^{-i\times k}))\times(\alpha+\beta\times e^{-kt}) = \gamma \times \prod_{i=0}^{t-1}(1-(\alpha+\beta))\times(\alpha+\beta\times e^{-kt})$$

And many variables like this:

Parameter	Definition
SCV	Single Customer Value
AC_i	Acquisition Path through Channel i
Tr	Path to Trial Post Acquisition
C_{Tr}	Path to failure of Trial (month 0)
C_i	Path to failure at month i, post success of month $i-1$
S_{Tr}	Path to success of Trial
S_i	Path to success at month i, post success of month $i-1$
P_i	Overall probability of path i
p_i	Conditional probability of path i given success at $i-1$
P_{Tr}	Probability of entering trial after acquisition
$P_{C_{Tr}}$	Probability of churn during trial
$P_{S_{Tr}}$	Probability of continuation from Trial
P_{C_t}	Overall probability of churn after t time periods
P_{S_t}	Overall probability of continuing after t time periods
CAC_j	Cost of Acquiring Customer through channel j
CAC_{mean}	Average Cost of Acquiring Customer through all channels
CC	Cost of retaining a customer beyond the trial period
R_i	Overall contribution to revenue from path i
r_i	Conditional revenue given path i
r_{pt}	Revenue per unit time net of costs
$R_{C_{Tr}}$	Contribution to overall net revenue given churn at Trial
R_{C_t}	Contribution to overall net Revenue given churn at time t
$r_{C_{Tr}}$	Net Revenue on the path churning out during trial
r_{C_t}	Net Revenue on the path churning at time t
F	Factor variable external the process

That something is possible, does not mean it is always useful. It depends. I am sometimes pleased with the result when someone does this sort of very complex modelling work on a variable like churn and even more pleased that it is not me doing that work. The best goal is to be approximately right, rather than precisely wrong. Complex is not necessarily better. A complex model is only as good as its assumptions and the real world is filled with risk, uncertainty and ignorance. Some probability distributions of possible future states of the world are not known and some future states of the world are not known. Uncertainty and ignorance are always present. The real world is rarely merely risky like roulette. Formulas can’t make uncertainty and ignorance disappear.

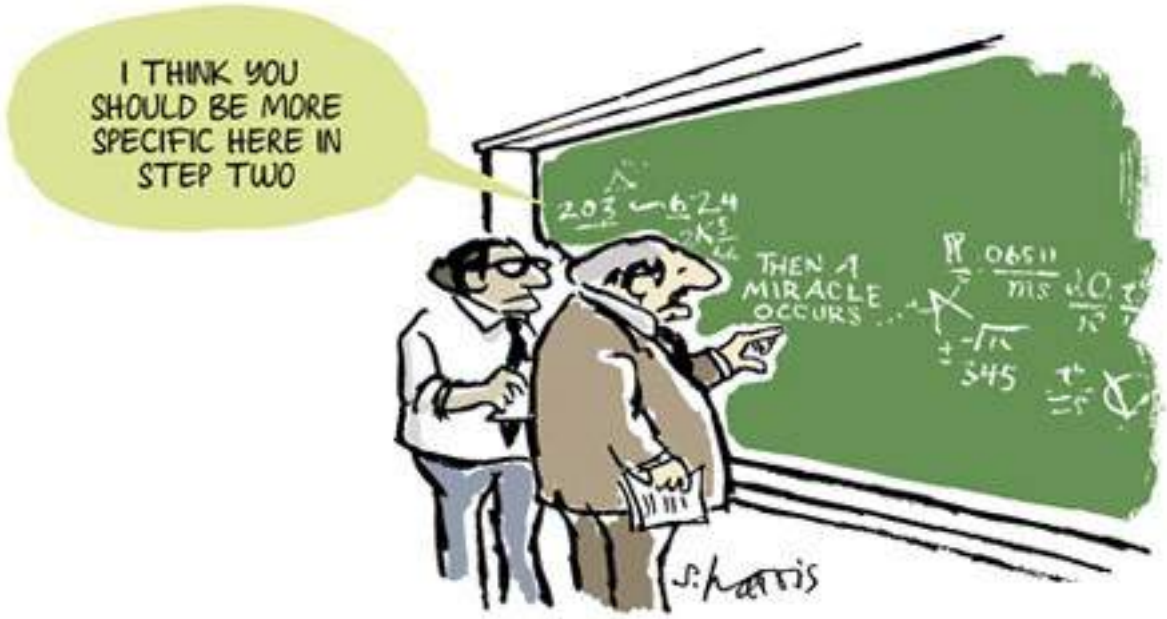

Customer churn is never good and its negative financial impact can often be nonlinear. Replacing a customer who churns means more customer acquisition cost whereas keeping that customer is usually far less expensive (renewal CAC). Pilling adds to what he said above: “Churn should be analyzed independently from the revenue lift from upsell (or extension) that has the potential to drive organic revenue growth in an installed base of customers. Conflating the two is dangerous.” It is important to start with first principles in looking a these issues related to negative churn as is illustrated in this analogous case from another problem set:

"So, Mr. Fenton . . . Let's begin with your mother."

One aspect of modern business and financial terms that isn't talked about nearly enough is how far behind Generally Accepted Accounting Principles (GAAP) are behind actual business and financial practices. GAAP often still assumes that a business is just like the pin factory that Adam Smith wrote about in his book Wealth of Nations. As just one example, customer "churn" does not have a standard definition. Churn is a measure of negative growth. But the definitions of churn people and businesses use are all over the map. One article on the topic reveals that the authors found: "43 different ways public SaaS companies were accounting for the metric." If mobile operators and other types of businesses where included the figure would be far higher.

Here are some example definitions:

Retention rate: The probability that a customer keeps his relationship with a business over a given period. The retention rate can be estimated from an analysis of historical data.

Churn Rate: The probability that a customer ends the relationship with a business during a given period. The churn rate is (1- retention rate). In other words, churn is the reciprocal of the retention rate.

To make matters even more complex, there is "user churn" and there is "revenue churn" which are not the same. There is net churn and gross churn. And there is logo churn. Will the accounting profession ever respond to the fact that we have evolved beyond an economy compose of Pin Factories? Maybe. But perhaps I should not complain since understanding the difference between a pin factory and a modern business is a huge source of investing alpha. Endowing a Pin Factory Chair of Accounting and SEC reporting might be a good idea to preserve potential investing alpha for future generations.

This is Charlie Munger on the limitations of accounting generally:

"…accounting [is] the language of practical business life. It was a very useful thing to deliver to civilization. I've heard it came to civilization through Venice which of course was once the great commercial power in the Mediterranean. However, double-entry bookkeeping was a hell of an invention. And it's not that hard to understand. But you have to know enough about it to understand its limitations because although accounting is the starting place, it's only a crude approximation. And it's not very hard to understand its limitations. For example, everyone can see that you have to more or less just guess at the useful life of a jet airplane or anything like that. Just because you express the depreciation rate in neat numbers doesn't make it anything you really know."

Despite this complexity, some definition of churn must be selected since this variable must be used in a formula that is a helpful guide to running a business when used correctly. Similarly, a definition of revenue per customer must be determined and calculated. Be careful out there.

If you want to learn more about churn you might want to try my classic essay: "Everyone Poops and has Customer Churn" https://25iq.com/2017/01/27/everyone-poops-and-has-customer-churn-and-a-dozen-notes/

End Notes:

http://chaotic-flow.com/negative-churn-its-not-that-i-dont-dislike-it-i-do/

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Lessons from Chance the Rapper (Value Chains and Profit Pools)

September 1, 2018

"Chancelor Jonathan Bennett, known professionally as Chance the Rapper, is an American rapper, singer, songwriter, actor, record producer, and philanthropist from the West Chatham neighborhood of Chicago" is a sentence from the Wikipedia biography. I will explain more about Chance in the post below.

1. **"There's no reason to [sign with a label]. It's a dead industry." "A&Rs like, 'Chano you ain't playin' fair!'"**

The music industry has been transformed by the digitization of music. Ben Thompson who writes the *Stratechery* newsletter describes this change in the fewest words possible: "Zero distribution costs. Zero marginal costs. Zero transactions. This is what the Internet enables, and it is completely transforming not just technology companies but companies in every single industry." My friend Dan Kohn was on one side of the first "secure online transaction" in August 1994. *The Smithsonian* magazine wrote: "Kohn sold a CD of Sting's "Ten Summoner's Tales" to a friend in Philadelphia…. Kohn's friend paid $12.48 plus shipping, and he used data encryption software to send his credit card." Kohn wrote about this same phenomenon in the context of music seven years later in 2001:

"In a world where there are essentially no costs to replicate content and it is effectively impossible to stop anyone from doing so at will, the current economic model underpinning content creation will be dead…. If I copy your CD, you're none the worse for it (nonrival), but if I steal your car, you will probably be upset (rival). Goods are "nonexcludable" when it becomes impractical to stop everyone from making use of the item, once one person can. It is …. very feasible to stop additional moviegoers from entering a theater (excludable)."

In a post-music digitizatization world, the music labels must find a way to deliver new value to musicians. As Jimmy Iovine once said: "Musicians believe right now that there's very little money in the recorded music business. So a lot of them are aiming their goal to be nothing but promotion. Not every industry was meant to last forever. The record industry needs to do something that artists can't do for themselves. Or else there's no reason for it to exist." In an interview at the University of Chicago Institute of Politics, Chance explained just one part of why musicians like him dislike the traditional system and are, in Iovine's words, "doing it yourself" (DIY):

"There is what's called a master and a publishing portion of the record. So the master is the recording of it, so if I sign a record deal or a recording deal, I sign away my masters, which means the label owns the recording of that music. On the publishing side, if I write a record, and I sign away my publishing in a publishing deal, they own the composition of work… so the idea of it, you know what I'm saying? So if I play a song on piano that you wrote, I have to pay you publishing money, because it comes from that idea. Or if I sing a line from that song, it's from the publishing portion. If I sample the action record, if I take a piece of the actual recorded music, that's from the master. None of that shit makes any sense right, that shit didn't make any sense to you? 'Cause that shit is goofy as hell."

Why would a musician like Chance want to use a DIY approach? Here's the lay of the land in terms of how music revenues are traditionally distributed as described by *Business Insider*:

"Recording artists received just 12% of the $43 billion that the music industry generated in 2017, according to a Citigroup report. Consumer spending on music generated an all-time high of more than $20 billion last year, but music businesses, including labels and publishers, took almost $10 billion, while artists received just $5.1 billion, the bulk of which came from touring."

Chance believes he can do much better than this 12% via DIY and more importantly he can retain control of his music, merchandise, touring revenue and other aspects of his life. He knows he must replicate some things that music labels do, but is willing and able to do that work. Life is often about trade offs and Chance is willing to take on work and some risk to have the upside of the opportunity to earn greater profits, being independent and having more optionality.

2. **"After I made my second mixtape and gave it away online, my plan was to sign with a label and figure out my music from there. But after meeting with the three major labels, I realized my strength was being able to offer my best work to people without any limit on it. My first two projects are on places where you can get music for free." "I think the free part of it is more of an attention grabbing thing and something that people can use as a marker to track what I'm doing. Since I was 15 or 16 passing out mixtapes outside of my high school, I always gave them away for free. I'd get in trouble with my pops, because we'd work to get this money and then I spend it on CDs, and literally give it away. I would always explain that I want to get it to as many people as possible." "A project, an album, an EP, a mixtape or a collection of songs is way more valuable than £14.99. I was trying to prove a point [with Acid Rap] and it was really cool that even after putting it out as a mixtape it moved enough units – illegally, nothing from my camp, not with my permission – to chart."**

Chance went with a freemium approach in creating his brand and promoting his music. This go-to-market approach includes cross-selling concerts and merchandise based on a brand that was developed by removing price as a barrier to listening to music (free is priced to sell). Freemium is the friend of the DIY musician since it does not require as much cash to create a brand for the music and the musician as traditional approaches. Most importantly, Chance does not need to hope that he is discovered by a music label. His approach put him and his fans in control. He does not have a music label telling him where and when to tour, what types of music to create or what sorts of merchandise he can sell.

3. **"Man, I learned so much from Donald Glover. I definitely learned that when you sign off on contracts you give someone a percentage of your worth. Whether it be signing a lawyer, a business manager, a label or anybody. You're giving them a percentage of all your earnings."**

Chance is talking about the many places where "wholesale transfer pricing" can take a slice of the profit pool and limit his share in a value chain. To understand the previous sentence, you must understand at least these two important ideas:

- Every industry has a "value chain." This concept was introduced on Michael Porter's influential book *Competitive Advantage: Creating and Sustaining Superior Performance* published in 1985. In a value chain analysis sources of customer value are identified and traced to where they reside within the business itself or in the network of companies involved in delivering the product or service. In this post I am more interested in the industry value chain than an internal company analysis. Dramatic advantages can be achieved by any participant in a value chain if they can find innovative ways to cut back on or entirely bypass certain intermediaries.
- Every industry also has a "profit pool." Everyone in the value chain is trying to extract the largest possible share of the profit pool for itself. Michael Mauboussin writes:

"A profit pool shows how an industry's value creation is distributed at a particular point in time. The horizontal axis is the percentage of the industry, typically measured as invested capital or sales, and the vertical axis is a measure of economic profitability… Profit pools are particularly effective because they allow you to trace the increases or decreases in the components of the value-added pie.

Chance is clearly not a fan of the traditional industry structure which looks like this graphic below. Note that this graphic is simplified. For example, it does not include businesses that Chance mentions in the quote above like lawyers and business managers. In this traditional value chain, the music label is in the center and can reap large profits via transfer prices paid and received from other members:

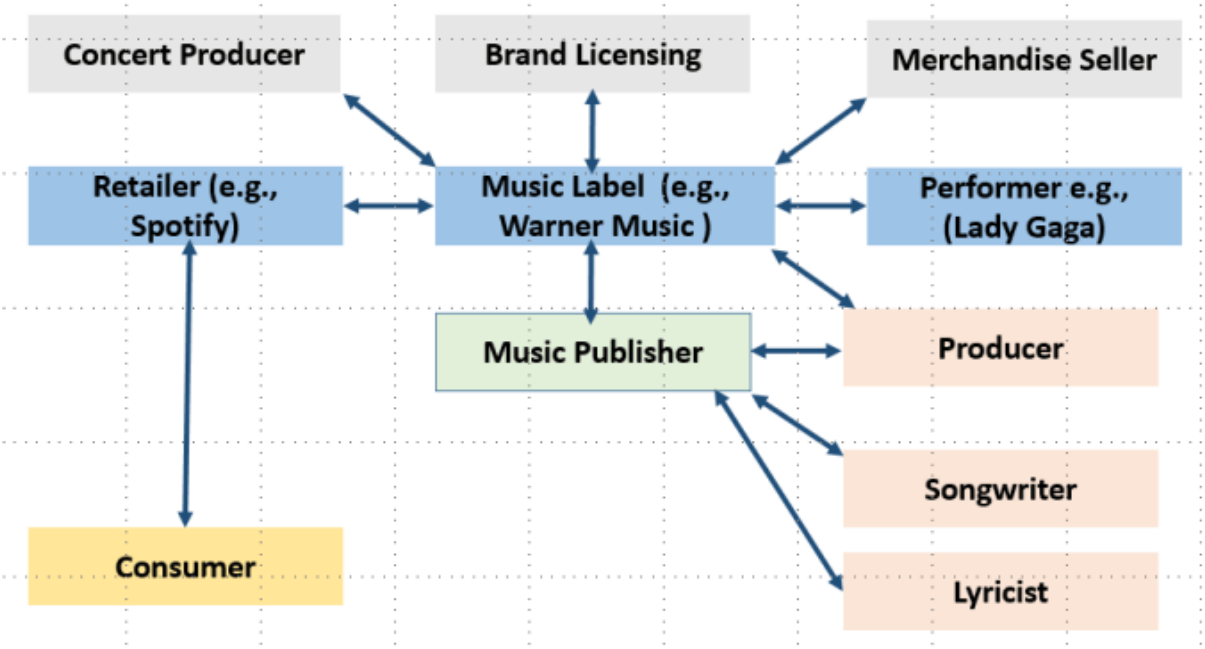

Creating a value chain graphic like this is very useful in understanding the current situation and future prospects of any business. If you want to learn more about this value chain analysis process I suggest you read's Michael Porter's book mentioned above. In Chance's case, the music industry value chain has been altered by removing the music labels and looks like this graphic below (again it is simplified for purposes of this blog post). In this new structure there are fewer businesses taking a share of the revenue from the profit pool and the share Chance receives is higher.

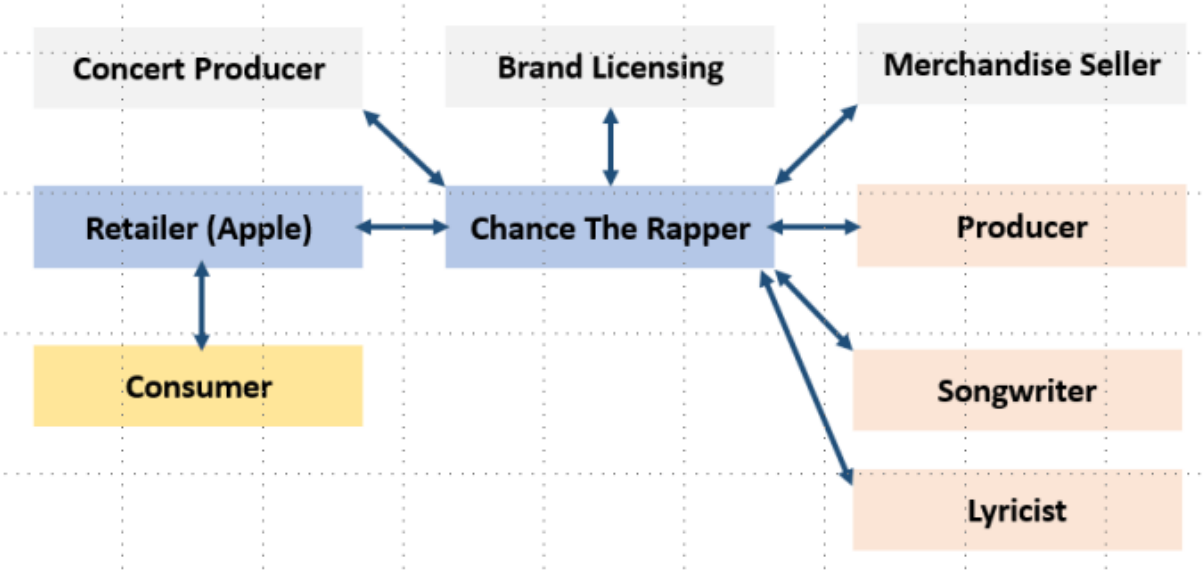

4. **"I don't agree with the way labels are set up. I don't agree that anybody should sign 360 deals or sign away their publishing or take most of the infrastructure that's included in a formal deal."**

Music labels figured out that digitized music was harder to monetize profitably so they have placed an increasing focus on creating "360 deals" with musicians. A 360 deal not only grants music labels the lion's share of a musician's music revenues, but also a percentage of

revenues from ticket sales, merchandise sales, book sales, acting and appearance fees. The battle between musicians and music labels over 360 revenues is ongoing and in many cases is pitched.

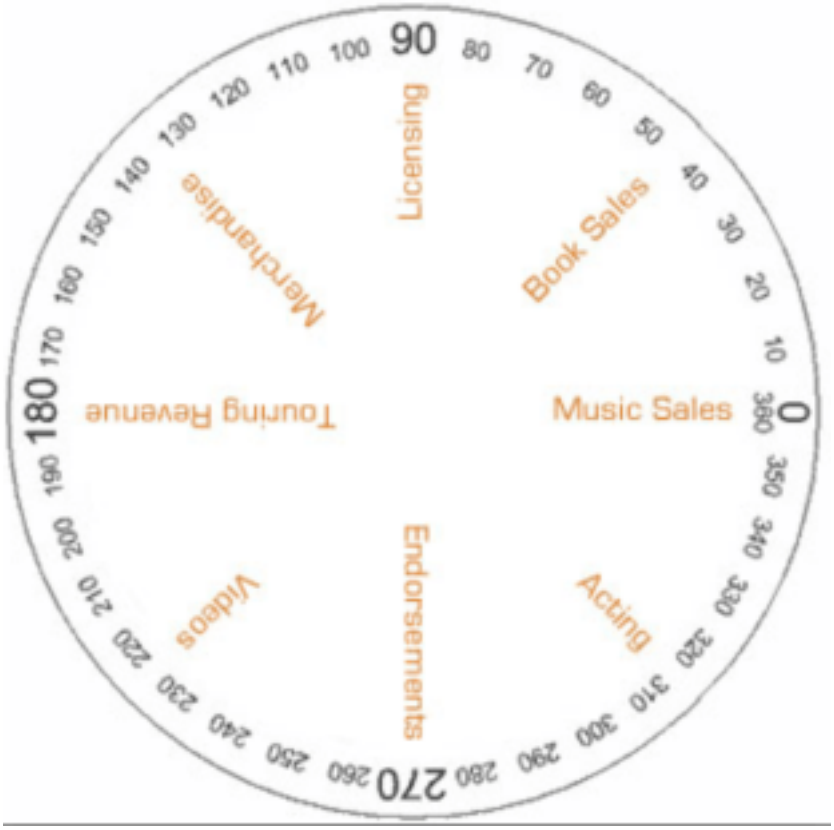

5. **"With *Coloring Book*, Apple had it on their streaming service exclusively for two weeks for free—and then it was available on all the places my earlier work is still available on." "It's not about the music being free. It's about how it is displayed and made accessible and about artistic power." "It's dope people want to partner up, but I'm a very tunnel vision guy." "I've learned to not be like, "f-ck this company, f-ck this company." Even though a lot of those people tried to make it really hard for me to release my projects."**

Chance believed he owed it to his fans to let them know exactly what he received from Apple, since being a no-music label musician is part of his brand. He did not want anyone to think he had sold out or was being in inconsistent with his "no labels" philosophy.

Apple is an interesting case since it is clearly a retailer but if they pay Chance directly are they a music label too? Apple isn't really a music label in a traditional sense since there are many things that they do that Apple does not do.

6. **"My thought process is if I'm going to give them the music away for free, there is a strong chance they'll take it and a slight chance that they'll listen to it. If I'm selling it to them and they have a choice between my music and a happy meal, they're gonna choose the happy meal. They're gonna spend their money on something that they know they want to consume." "I make money from touring and selling merchandise, and I honestly believe if you put effort into something and you execute properly, you don't necessarily have to go through the traditional ways. "I sell merchandise online, at ChanceRaps.com. That's my main revenue."**

Rich Barton said to me once that it is very hard to get people to pay for something that they previously received for free. He also said that it is easier to get people to pay for what they have traditionally purchased. Merchandise and concerts are something people are accustomed to paying for. Musicians have really been clever in increasing profits made by selling merchandise by doing things like creating custom t-shirts and other merchandise for each event. Fans today want to have something that proves they were at a specific concert. As just one example of how this approach stokes demand, at a recent Pearl Jam concert I am told the line to buy t-shirts was an hour and a half long.

7. "I need consumers right?… But also, I just wanted people to notice that, you know, there was something that was being created that no one other than the face of it had control over." "I don't make songs for free, I make em for freedom." "Build a business where you're the upper management. Where you're the creative, and you are the last decision maker and you don't ever have to feel compromised."

As I wrote on my 25IQ blog post on Oprah Winfrey, consumers increasingly today want a brand and products that are authentic. The younger the consumer, the higher value they place on authenticity. Chance has struck gold with his fans on authenticity and the reason he can do so is that he is the owner of his own business. He is not just upper management of his business, but is instead the CEO.

8. **"I think the music industry is something that's very separate from music. So, by always staying on the music side of it, I've found success." "Sometimes the truth don't rhyme." "The whole point of 'Acid Rap' was just to ask people a question: does the music business side of this dictate what type of project this is? If it's all**

original music and it's got this much emotion around it and it connects this way with this many people, is it a mixtape? What's an 'album' these days, anyways?"

When an industry is transformed by something like digitization, previous formats like albums sometimes no longer make any sense. This is just one example of how the industry has had to adapt to the fading of a format:

RIAA's platinum status was once equivalent to selling one million albums or songs, but in 2013 the company began incorporating streaming from YouTube, Spotify and other digital music services to determine certification for albums and songs. Now 1,500 streams of an album is equivalent to an album sale. Also, 10 song downloads = 1 album sale.

This change by the RIAA won't be the last time the music industry will need to change to respond to digitization.

9. **"I go broke a lot because I have this understanding that whatever I put out there, if I really am doing what's right, it's going to be rewarding, you know? If I'm working on it—if I'm diligently working on it—something will come back. And that's how every project has been since I was in high school, since I was Instrumentality [Chance's musical alter ego in high school] and I was giving out CDs for free. Everything has come back tenfold. I remember sitting on the back of the bus on the first day of the Social Experiment tour, with my face in my hands. I emptied out my bank account, and before I did that tour, that was the number one thing I said I'd never do. *I'll never empty out my savings.* But I put all that money up, and within two weeks, when everyone was getting paid, I was like, Okay, cool, we're good again. The same shit happened with And the same shit happened with *Coloring Book.* I was fucking around in this studio—like this studio is stupid expensive."**

Chance is running his own business and that inevitably involves factors like risk, expenses, capital investments and payback periods. Many of the activities the music labels do must be replicated by Chance. Capital must be put at risk and factors like expenses and cash flow managed. There is no free lunch and some musicians may not want to do any of this work or take any of this risk. As an example, one report indicated that a festival put on by Chance produced a direct loss, but overall it was an investment in his brand:

The Magnificent Coloring World [was] a Willy Wonka-inspired listening experience that included inflatable slides, Connect Four, giant murals, and, of course, coloring books. The party turned out to be a financial loss for Chance (nearly $250,000, which he tweeted out then quickly deleted), but the spirit of the event lingered among fans and spilled out into Chicago. Much like Chance's music, unattainable by label execs, the event was priceless (and also will be repaid to Chance in some form or another—merchandise, increased ticket sales, etc.—many times over)

As Jay-Z famously once rhymed: "I'm not a businessman, I'm a business, man!" Chance took a risk on the festival and overall it paid off.

10. **"Get back to work." [these four words are tattoo that is written backward on Chance's body so it faces him in the mirror.]"My dad told me to work hard. My mom told me to work for myself. And so now I work for myself really hard."**

There was a time in Chance's life when he believed he had lost his work ethic. He is saying in the previous quote that he never wants to go back to that time. To be more specific, Chance believed he lost the work ethic when he moved to Los Angeles and acquired an addiction to Xanax. He wrote about this time in his life in his song "Finish Line/Drown."

I've been lying to my body
Can't rely on myself
Last year got addicted to Xans
Started forgetting my name

In taking about that period in his life Chance said in an interview: **"I looked up and months had passed, and I hadn't made enough music."** As a result of this negative experience, he decided to move back to Chicago and get back to work.

11. "Some people are so poor, all they have is money." "Dave Chappelle is just all the things that my parents instilled in me is what he exemplifies at all times. He is integrity personified. He is, 'I don't care how much money you have. You can't have me,' personified."

There many things in life that money can't deliver. If you don't put value on them, you are an idiot. Having said that, money does give you better options in life. Cash is not only valuable, but at some level essential.

12. **"Ain't no one prettier/Ain't no one wiser/Ain't no one better! better! better!"**

This is a lyric to song Chance performed as a tribute to Muhammad Ali during the finale of the ESPY Awards. *Rolling Stone* reported that he "delivered the track, fittingly, in front of a hanging boxing ring microphone." I am mentoring some younger people right now and when I think about ways to help people gain more confidence, I often think of Ali, who was such an inspiring personality. I believe that everyone is "pretty" in their own way, everyone can be "wise" in their own way and everyone can be their own version of the greatest like Ali.

P.s., Here are a few of Chance's lines from "No Problem":

"Countin' Benjis while we meetin', make 'em shake my other hand
Milly rockin', scoopin' all the blessings on my lap….
Got a pocket full of money
And a mind full of ideas
Some of this shit may sound weird
… There go Chano ridin' through the streets, they be like, "There he go!"You don't want no problems, want no problems with me
Say so, got problems, say so
They be like, "There he go!"

End Notes:

My blog posts on Biggie: https://25iq.com/2016/11/11/a-dozen-things-you-can-learn-from-biggie-smalls-the-notorious-b-i-g-about-business/

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Kendrick Lamar: https://25iq.com/2017/05/19/a-dozen-lessons-about-money-and-investing-from-kendrick-lamar-k-dot/

Snoop Dogg: https://25iq.com/2018/02/17/business-lessons-from-snoop-dogg/

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Interview: https://www.youtube.com/watch?v=7fIIE6iOpjM

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Risk, Uncertainty and Ignorance in Investing and Business – Lessons from Richard Zeckhauser

September 8, 2018

Richard Zeckhauser is an American economist and a Professor of Political Economy at the Kennedy School at Harvard University. Charlie Munger has said about him: "The right way to think is the way [Harvard Professor Richard] Zeckhauser plays bridge. It's just that simple." "Smart people make these terrible boners. …Well maybe a great bridge player like Zeckhauser [doesn't], but that's a trained response. The list of his published work is long.

That work reveals that he is a polymath interested in many things. He has won multiple national championships in contract bridge.

1. **"People feel that 50% is magical and they don't like to do things where they don't have 50% odds. I know that is not a good idea, so I am willing to make some bets where you say it is 20% likely to work but you get a big pay-off if it works, and only has a small cost if it does not. I will take that gamble. Most successful investments in new companies are where the odds are against you but, if you succeed, you will succeed in a big way." "David Ricardo made a fortune buying bonds from the British government four days in advance of the Battle of Waterloo. He was not a military analyst, and even if he were, he had no basis to compute the odds of Napoleon's defeat or victory, or hard-to-identify ambiguous outcomes. Thus, he was investing in the unknown and the unknowable. Still, he knew that competition was thin, that the seller was eager, and that his windfall pounds should Napoleon lose would be worth much more than the pounds he'd lose should Napoleon win. Ricardo knew a good bet when he saw it."**

I started with the two quotes above to lure you in to learning more about Zeckhauser's ideas. His advice is very practical even though it is academically grounded. Once you learn his methodology, it will be broadly applicable in your life. You can't "unsee" what he teaches which is a very good thing. In part of this quotation immediately above Zeckhauser is describing what Michael Mauboussin calls "The Babe Ruth Effect." Mauboussin writes:

"…in any probabilistic exercise: the frequency of correctness does not matter; it is the magnitude of correctness that matters…. even though Ruth struck out a lot, he was one of baseball's greatest hitters…. Internalizing this lesson, on the other hand, is difficult because it runs against human nature in a very fundamental way."

Venture capital is a classic example of a business that profits from the Babe Ruth effect. Chris Dixon writes in a blog post:

"The Babe Ruth effect is hard to internalize because people are generally predisposed to avoid losses. …What is interesting and perhaps surprising is that the great funds lose money more often than good funds do. The best VCs funds truly do exemplify the Babe Ruth effect: they swing hard, and either hit big or miss big. You can't have grand slams without a lot of strikeouts."

There are many other situations in like that involve a big upside and a small downside. They are in fact common, if you know where to look and how to find them.

2. **"Risk, which is a situation where probabilities are well defined, is much less important than uncertainty. Casinos, which rely on dice, cards and mechanical devices, and insurance companies, blessed with vast stockpiles of data, have good reason to think about risk. But most of us have to worry about risk only if we are foolish enough to dally at those casinos or to buy lottery cards…." "Uncertainty, not risk, is the difficulty regularly before us. That is, we can identify the states of the world, but not their probabilities." "We should now understand that many phenomena that were often defined as involving risk – notably those in the financial sphere before 2008 – actually involve uncertainty." "Ignorance arises in a situation where some potential states of the world cannot be identified.**

Ignorance is an important phenomenon, I would argue, ranking alongside uncertainty and above risk. Ignorance achieves its importance, not only by being widespread, but also by involving outcomes of great consequence." "There is no way that one can sensibly assign probabilities to the unknown states of the world. Just as traditional finance theory hits the wall when it encounters uncertainty, modern decision theory hits the wall when addressing the world of ignorance."

I find Zeckhauser's chart below to be useful in creating the right mental model for his ideas. Each set of circumstances can be analyzed by assigning it a location on this matrix:

Categorization of Situations Where Outcomes are Unknown

		States of the World	
		Known	**Unknown**
Probabilities	**Known**	Risk	NA
	Unknown	Uncertainty	Ignorance

- RISK – Las Vegas
- UNCERTAINTY – World Series victor; weather; bin Laden in Abbotabad.
- IGNORANCE – What will happen in Syria. Financial catastrophes next decade. Consequences of climate change.

Most aspects and decisions in your life are uncertain rather than risky. It is rare that what you do is similar to the action on a roulette wheel, which is risk. In addition, the events that often have the biggest impact on what you do are often part of the domain of ignorance. Once you internalize Zeckhauser's mental model you should naturally start to value a margin of safety more highly. You may not always be able to predict, but you can prepare.

3. **"Unknown and unknowable [UU] refers "to situations where both the identity of possible future states of the world as well as their probabilities." "The first positive conclusion is that unknowable situations have been and will be associated with remarkably powerful investment returns. The second positive conclusion is that there are systematic ways to think about unknowable situations. If these ways are followed, they can provide a path to extraordinary expected investment returns. To be sure, some substantial losses are inevitable, and some will be blameworthy after the fact. But the net expected results, even**

after allowing for risk aversion, will be strongly positive." "Many UU situations deserve a third U, for unique. …An absence of competition from sophisticated and well-monied others spells the opportunity to buy underpriced securities. Most great investors, from David Ricardo to Warren Buffett, have made most of their fortunes by betting on UUU situations." "Unknowable situations are widespread and inevitable. Consider the consequences for financial markets of global warming, future terrorist activities, or the most promising future technologies." "Many unknowables are idiosyncratic or personal, affecting only individuals or handfuls of people, such as: If I build a 300-home community ten miles to the west of the city, will they come? Will the Vietnamese government let me sell my insurance product on a widespread basis? Will my friend's new software program capture the public fancy, or if not might it succeed in a completely different application? Such idiosyncratic UU situations…present the greatest potential for significant excess investment returns."

Financial returns higher than a market benchmark are most likely to be found in UUU situations. These returns are caused by the fact that investments in UUU environments are much more likely to be mis-priced. The domain with the most UUU based opportunity is the world of business. The markets in which a business operates are often not liquid and information hard to obtain. The more you know about a given business the better you will be as both an operator and a financial investor in that business. Howard Marks describes the opportunity in this way: "The investor's time is better spent trying to gain a knowledge advantage regarding 'the knowable': industries, companies and securities. The more micro your focus, the great the likelihood you can learn things others don't." Focusing on the simplest possible system (an individual business in a local market) is often the greatest opportunity for an investor since it is understandable in a way which may reveal a mis-priced bet. Market efficiency is lower and potential returns are often higher if you are willing to do the necessary work to retire uncertainty and ignorance.

4. **"Portfolio theory built on assumed normal distributions is a beautiful edifice, but in the real financial world, tails are much fatter than normality would predict. And when future prices depend on the choices of millions of human beings and on the way those humans respond to current prices and recent price movements, we are no longer in the land of martingales protected from contagions of irrationality. Herd behavior, with occasional stampedes, outperforms Brownian motion in explaining important price movements."**

Part of what Zeckhauser is talking about is the impact of positive and negative Black Swans and why they come into existence. People like Benoit Mandelbrot were pioneers in understanding and increasing awareness of this phenomenon. The Brownian motion concept borrowed by economics from physics increasingly does not map to the real world. My daily work in a technology business indicates that "this time is different" in one very important way: "highly non-normal processes" have become fundamentally more common due to digitization and the proliferation of interconnected networks and services directed by algorithms running over those networks. The basis for my conclusion is anecdotal, but some circumstantial evidence is very strong, like finding a trout in you pitcher of milk. My thesis is that changes in the structure of the world created by technology and networks mean that assuming that outcomes will be normally distributed is increasingly problematic (at least) and potentially dangerous (at worst). In short, there are more Black Swans than ever and fewer

bell-curves. More and more important investing and other outcomes are moving into UUU domains.

5. **"Financial markets are like living, breathing beings that transform themselves constantly. They move very fast and I suspect that innovation and speed will continue to be the norm."**

Financial markets are complex adaptive systems. The speed at which they adapt makes investing challenging, but also creates significant opportunities. If investing was easy, everyone would be rich. Michael Mauboussin describes the challenge here:

"Increasingly, professionals are forced to confront decisions related to complex systems, which are by their very nature nonlinear…Complex adaptive systems effectively obscure cause and effect. You can't make predictions in any but the broadest and vaguest terms. … complexity doesn't lend itself to tidy mathematics in the way that some traditional, linear financial models do."

Increasing innovation and speed in markets must be matched by increasing innovation and speed by individuals and businesses in responding to that change. As just one example: "The typical half-life of a publicly traded company is about a decade, regardless of business sector. Mortality rates are independent of a company's age." One author of that study added: "It doesn't matter if you're selling bananas, airplanes, or whatever." If a person or organization has processes that prevent a rapid and accurate response to innovation and change, they are inevitably going to feel pain. Charlie Munger's advice here has never been more important than it is now: "We all are learning, modifying, or destroying ideas all the time. Rapid destruction of your ideas when the time is right is one of the most valuable qualities you can acquire. You must force yourself to consider arguments on the other side."

6. **"If super-talented people will be your competitors in an investment arena, perhaps it is best not to invest."**

Warren Buffett believes: "The secret of life is weak competition." In other words, life is best approached with opportunity cost in mind. Why would you decide to invest in an area where you don't have a significant advantage, particularly when there are areas where you may have a significant advantage? Charlie Munger puts it this way: "You have to figure out what your own aptitudes are. If you play games where other people have the aptitudes and you don't, you're going to lose. And that's as close to certain as any prediction that you can make. You have to figure out where you've got an edge. And you've got to play within your own circle of competence." "The amazing thing is we did so well while being so stupid. That's why you're all here: you think that there's hope for you. Go where there's dumb competition."

7. **"The essence of effective investment is to select assets that will fare well when future states of the world become known." "Most investors – whose training, if any, fits a world where states and probabilities are assumed known – have little idea of how to deal with the unknowable. When they recognize its presence, they tend to steer clear, often to protect themselves from sniping by others. But for all but the simplest investments, entanglement is inevitable – and when investors do get entangled they tend to make significant errors."**

Having a variant perception that is only viewed as "right" according to the consensus later enough in time that significant value can be captured is a very good thing. Stated differently, Kevin Kwok, believes that the job of an entrepreneur is to bringing a contrarian view "to everyone else and making it non-contrarian." Creating this outcome requires work and hustle. If you don't want to do the work or hustle as a entrepreneur or an investor, you should buy a low cost diversified portfolio of index funds and work for an entrepreneur.

8. **"Virtually all of us fall into important decision traps when dealing with the unknowable." [For example] "You get 50 e-mails during the day and you answer 30 of them. On the one that you answer the most, you take 3 minutes. In all the others, you take 45 seconds. You should take 25 minutes to answer the one that is important, but you don't. Once that is pointed out to you, you will say that is really obvious. In other words, you should decide what is really important and make your choices accordingly." "The brain has difficulty focusing on multiple subjects or stimuli at the same time."**

Zeckhauser is describing why people are not always rational and then giving a few examples. This slide from one of his presentations elaborates:

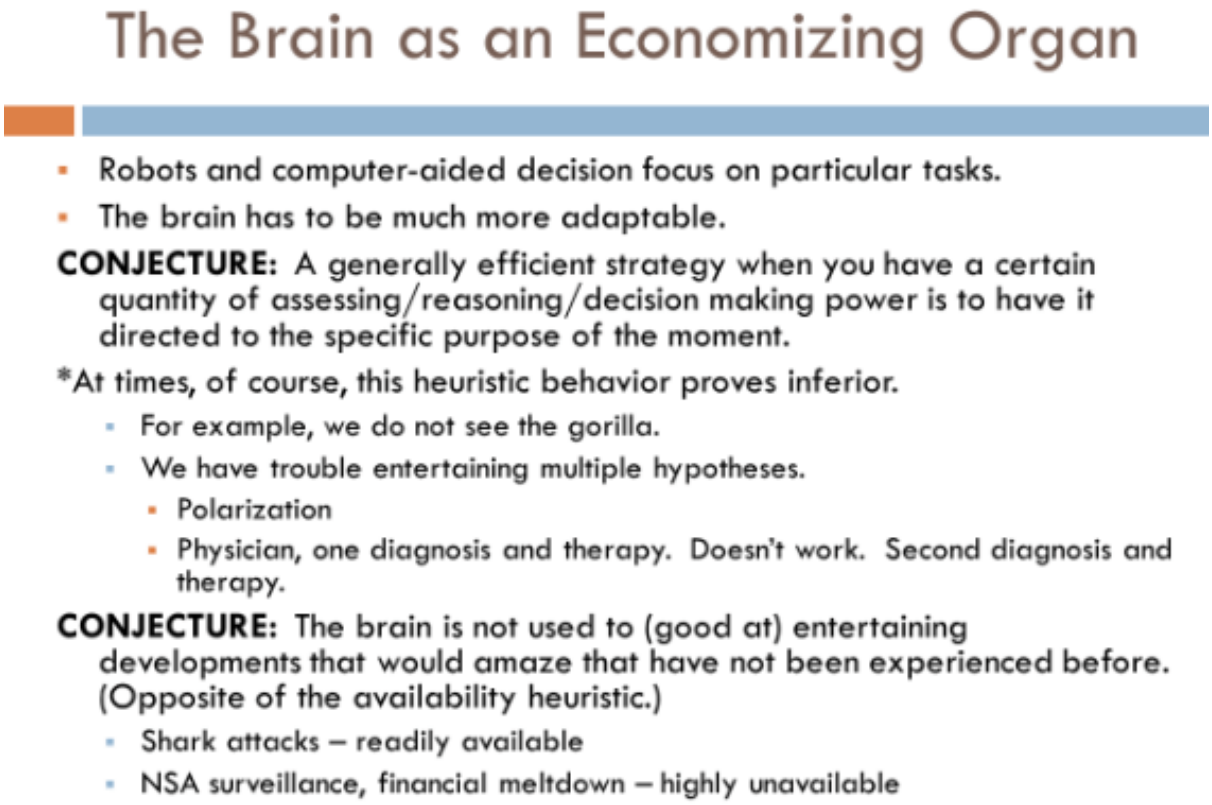

9. **"Practice improves decision performance. Awareness of problems improves decision performance."**

Zeckhauser believes people can improve their decision making skills with practice. Everyone will make some mistakes, but making fewer mistakes over a lifetime is highly correlated with

a happiness. Just one example of a technique that can improve performance via practice is what Charlie Munger calls "inversion" which is what is being advocated here in one of Zeckhauser's slides:

Sherlock Holmes –
Greatest Detective in Western Literature

"In solving a problem of this sort, the grand thing is to be able to reason backwards. That is a very useful accomplishment and a very easy one, but people do not practice it much. In the everyday affair of life, it is more useful to reason forwards, and so the other comes to be neglected. There are 50 who can reason synthetically for 1 who can reason analytically."

"Most people, if you describe a train of events to them, will tell you what the result would be. They can put those events together in their minds, and argue from them that something will come to pass. There are few people, however, who if you told them a result, would be able to evolve from their own inner consciousness what the steps were that led up to that result. This power is what I mean when I talk of reasoning backwards, or analytically."

From *A Study in Scarlet*

10. **"The lesson for regular mortals is not to imitate Warren Buffett; that makes no more sense than trying to play tennis like Roger Federer. Each of them has an inimitable skill. If you lack Buffett capabilities, you will get chewed up as a bold stock picker….These master investors need not worry about the competition, since few others possess the complementary skills for their types of investments. Few UU investment successes come from catching a secret, such as the whispered hint of "plastics" in the movie The Graduate… Individuals with complementary skills enjoy great positive excess returns from UU investments. Make a sidecar investment alongside them when given the opportunity."**

You are not Warren Buffett and neither am I. Buffett is also not James Simons, Sam Zell, Jim Chanos or David Tepper. We all need to understand as best we can what our limitations are in every situation. Zeckhauser is saying that one opportunity for an investor who does not have skill in a particular area is to get in the side car of someone who does. Of course, some people got in a side car with Warren Buffett while others were in the Bernie Madoff sidecar.

Picking which sidecar to get into is not simple, but if you can do it effectively the odds as favorable that it will produce a very nice outcome. You will sometimes see a claim that someone can replicate Warren Buffett's results with a statistical factor-based index fund and margin loans. What you do not see is anyone actually doing what they claim is possible. I

don't expect to see a "Replicate Buffett's Approach with Statistical Factors and Callable Margin Loans Fund." I say this even though I own some factor-based index funds and very much respect the approach. Statistical factor-based investing by itself is not effective in UU or UUU situations for the reason Zeckhauser describes (you do not know the probability distribution and some future states of the world). Similarly, you can't run a business like Apple solely based on statistical factors since much of the world is UUU.

11. **"When you impose new regulations, smart investors always figure out ways to dodge them, finding new financial instruments or locations that bypass regulatory strictures. Each financial crisis is distinctive. Tomorrow's financial crisis is going to be quite different from what we saw yesterday. I think we're just going to have to live with financial crises. We can make them less likely, we can make them less severe, and we can anticipate them somewhat better. But financial crises are inevitable. If we were to put this interview in a time capsule and come back a hundred years from now, we would still observe financial crises. Preventing financial crises completely by imposing punitive penalties, either financial or by prohibiting activities that entail some danger, would be akin to preventing auto accidents by saying, 'You can drive no faster than twenty miles an hour.' That would get rid of 96 percent of the auto fatalities to be sure, but it would have very deleterious effects. On net, it would not be worth it." Financial crises are predominantly situations of ignorance, not uncertainty. Once we recognize that we're in a state of ignorance, we should change the way we think about the world. We can't prevent the most likely next financial crisis by telling banks they need to keep an extra billion dollars or so in reserves. Instead, we should always be scanning the horizon for new risks. Once we recognize this, we could go to a situation where the expected magnitude of what we lose drops from 100 to 50, and the likelihood of a crisis goes from 1% to 0.5%. But crises will still occur, and when one does, we're still going to lose 50. If we could cut the likelihood and severity of auto accidents in half, we could cut auto fatalities by perhaps 75%. Not perfect, but very welcome. Preventing financial crises is not possible. Cutting their likelihood and severity would greatly benefit the world."**

I don't believe that financial regulation or fiscal and monetary policy can prevent recessions or corrections from happening. They may become a bit less frequent and better managed, but they are not going away as long as humans are human. As a result, I am always prepared for a significant market correction or recession. The older you are, the more the previous sentence should be true for you. This preparation does not mean I do not have a pool of risk assets, but I keep those funds very separate from money I will inevitably need. I have created in my portfolio what is known as a barbell portfolio with risky and non-risky assets on each side. I have avoided and will continue to avoid the situation that is depicted on the graphic which is on Nassim Taleb's book *Skin in the Game*:

12. **"Warren Buffett, a master at investing in the unknowable, and therefore a featured player in this essay, is fond of saying that playing contract bridge is the best training for business. Bridge requires a continual effort to assess probabilities in at best marginally knowable situations, and players need to make hundreds of decisions in a single session, often balancing expected gains and losses. But players must also continually make peace with good decisions that lead to bad outcomes, both one's own decisions and those of a partner. Just this peacemaking skill is required if one is to invest wisely in an unknowable world." "The ideal profession for playing bridge is unemployed. It's a terrific hobby, but if the doctor told me I could never play bridge again, I would probably say, 'oh darn.'" "A successful marriage is like a successful bridge partnership. There will be disasters in every relationship, but you have to be able to cope with the disasters effectively and try not to make the other person feel that they're to blame."**

I have nothing to add on the topic of playing contract bridge.

End Notes:

Investing in the Unknown and Unknowable
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Business and Investing Lessons from Steve Martin's Movie The Jerk

September 15, 2018

Steve Martin tells a story as part of his current comedy tour in which he encounters a teenager who asks if him he was in *The Jerk*. Martin proudly says to the teen: "Yes, that was me in that movie," which causes her to ask: "When are you gonna do another movie?"

The Jerk is in my view a funny movie with great writing:

"Carl Gottlieb, who was nominated for a Golden Globe for the screenplay for *Jaws*, co-wrote *The Jerk* and also played Iron Balls McGinty in the movie. Michael Elias was the third credited writer. 'Our goal was to have a laugh on every page,' said Martin."

Are there some people who will not find this movie funny? Yes. But that is an inevitable part of comedy. Richard Pryor said once that he could tell that even his very best jokes were not funny to some people in the audience. *The Jerk* is a satire and deals with hard to discuss issues like race and I have a note on that at the end of the blog post. When you create a satirical movie, some jokes will not be funny to some people. That comes with the territory for a director like Rob Reiner and the writers identified above who are masters of comedic satire.

This is a succinct summary of the plot if you have not seen this movie (which is a crime in some states): "Steve Martin plays Navin R. Johnson, a man who one day discovers that he is both adopted and white. Johnson sets out to see the world and becomes a millionaire by inventing the Opti-Grab, a device which keeps eyeglasses from slipping down one's nose. But because it also makes people cross-eyed, he loses it all."

1.

Navin R. Johnson: I've already given away eight pencils, two hoola dolls, and an ashtray, and I've only taken in fifteen dollars.

Frosty: Navin, you have taken in fifteen dollars and given away fifty cents worth of crap, which gives us a net profit of fourteen dollars and fifty cents.

Navin: Ah… It's a profit deal. Takes the pressure off. Get your weight guessed right here! Only a buck! Actual live weight guessing! Take a chance and win some crap!

Life as an operator of a business is just better when you have high gross margins. Just as Lieutenant Colonel Bill Kilgore in *Apocalypse* Now said: "I love the smell of napalm in the morning," I love the smell of 80% gross margins in the morning in a business. Bill Gurley describes a key point about gross margins in this way:

"There is a huge difference between companies with high gross margins and those with lower gross margins. Using the DCF framework, you cannot generate much cash from a revenue stream that is saddled with large, variable costs. As a result, lower gross margin companies will trade a highly discounted price/revenue multiples. All things being equal, gross margin percentage should have a direct impact on price/revenue multiple, as there will obviously be more gross margin dollars to contribute to free cash flow. Journalists who quickly apply 10x multiples to all private companies should at the very least consider gross margin levels in their analysis."

Like many things in life, high margins can be a double edged sword since it is much easier for a disruptive new business to attack an incumbent. Jeff Bezos famously said: "Your margin is my opportunity." In other words, Bezos sees a competitor's love of margins and other financial "ratios" as an opportunity for Amazon since the competitor will cling to them while he focuses on absolute dollar free cash flow and slices through them like a hot knife through butter. But given the choice of defending high gross margins or getting by with low

gross margins, I will take the former. It it possible to find a defendable niche in a low margin high volume business? Yep. Waffle House is an example of that, but that's not an easy business to operate.

2.

Navin: The most exciting game on the midway! Imagine the thrill of getting your weight guessed by a professional! You can blow up your cheeks, you can stick out your chest, but you're not going to fool the guesser. How 'bout you, sir? Step right up!

Carnival Rube: Hey honey, let's see how good this guy is. Now what do I win?

Navin: Ah, anything… in this general area, right in here. Anything, below the stereo, and on this side of the Bicentennial glasses. Anything between the ashtray, and the thimbles. Anything in these three inches. Right in here, this area, that includes the Chiclets, but not the erasers.

The movie script here is making the important point that marketing isn't a substitute for delivering genuine product value to customers. If a business doesn't have product market fit nothing else matters. Spending on marketing on a product that doesn't have product truth damages rather than creates value. Jeff Bezos describes recent changes in business that have reduced the power of marketing to generate higher margins:

"The balance of power is shifting toward consumers and away from companies…the individual is empowered… The right way to respond to this if you are a company is to put the vast majority of your energy, attention and dollars into building a great product or service and put a smaller amount into shouting about it, marketing it. If I build a great product or service, my customers will tell each other….In the old world, you devoted 30% of your time to building a great service and 70% of your time to shouting about it. In the new world, that inverts."

3.

Navin: Oh, this is the best pizza in a cup ever. This guy is unbelievable. He ran the old Cup 'o Pizza guy out of business. People come from all over to eat this.

"Disruption" is a subject people love to talk and write about. Much of this talking and writing has taken the concept to places where it does not belong. One major problem arises when people try to simplify what is very complex phenomenon into a very simple story. The stories get worse if the creator of the narrative is suffering from survivor bias. I have always liked this explanation of the survivor bias phenomenon written by Michael Mauboussin:

"The trouble is that the performance of a company always depends on both skill and luck, which means that a given strategy will succeed only part of the time. So attributing success to any strategy may be wrong simply because you're sampling only the winners. The more important question it: How many of the companies that tried that strategy actually succeeded?"

There is no simple answer to creating a profitable disruptive product or defending against it. There are best practices, but no generic formula exists. Business is hard which is why everyone is not rich.

4.

Navin: First they didn't have the bamboo umbrellas for the drinks, and now snails on the plate!

Waiter: Would monsieur care for another bottle of Chateau Latour?

Navin: Ah yes, but no more 1966. Let's splurge! Bring us some fresh wine! The freshest you've got – this year! No more of this old stuff.

If you can take something like fermented grape juice in a bottle or cooked snails on a plate and sell them for a significant profit, that can be a financially attractive business. If people will also pay more if they get an umbrella in their drink that can be a good thing for profit margins too. These approaches are part of one of the oldest and best ways o generate a profit in business: take something relatively cheap to buy like a few beans, describe them as "magic beans" and then exchange them for Jack's cow! Unfortunately, an approach like that is inevitably discovered and other businesses copy the innovation. As an example, once upon a time brisket was a cheap cut of beef and you could transform that via "low and slow" barbecue into a valuable product with attractive margins. Unfortunately, as competitors have copied the approach the price of brisket has risen to a point where the profit must be made mostly on alcohol and side dishes.

5.

Con man: If your initial investment is a half a million dollars and your apartments are up in March, you should have x amount of dollars rolling in by the end of this year.

Navin: Ah, x amount. That's very good isn't it.

Con Man: Not only that, you can depreciate the entire building for the full amount!

Navin: Depreciate! Hum, very good. I like that.

Once upon a time loads of people made a lot of money selling cattle, orchard and other limited partnerships to buyers like doctors, dentists and lawyers who were, in effect, financially taken to the cleaners. These buyers were not a lot different than the carnival rube in the weight guessing booth at the carnival in the movie. Charlie Munger has a great set of comments on fraudulent tax shelters:

"You'll better understand the evil when top audit firms started selling fraudulent tax shelters when I tell you that one told me that they're better [than the others] because they only sold [the schemes] to their top-20 clients, so that no-one would notice." "I talked to one accountant, a very nice fellow who I would have been glad to have his family marry into mine. He said, 'What these other accounting firms have done is very unethical. The [tax avoidance scheme] works best if it's not found out [by the IRS], so we only give it to our best clients, not the rest, so it's unlikely to be discovered. So my firm is better than the others.'

I'm not kidding. "Creative accounting is an absolute curse to a civilization. One could argue that double-entry bookkeeping was one of history's great advances. Using accounting for fraud and folly is a disgrace." "Anytime somebody offers you a tax shelter from here on in life, my advice would be don't buy it."

6.

Navin: The new phone book's here! The new phone book's here!

Harry Hartounian: Boy, I wish I could get that excited about nothing.

Navin: Nothing? Are you kidding? Page 73 – Johnson, Navin R.! I'm somebody now! Millions of people look at this book every day! This is the kind of spontaneous publicity – your name in print – that makes people. I'm in print! Things are going to start happening to me now.

[the Sniper points to Navin's name in the phone book]

Sniper: Johnson, Navin R… sounds like a typical bastard.

Navin: He hates these cans!

I agree a statement that Warren Buffett made in a very recent CNBC interview that the value of brands is changing:

"THE WILLINGNESS OF PEOPLE TO CHANGE THEIR HABITS PROBABLY HAS A HIGHER PROPENSITY THAN 20 OR 30 YEARS AGO. BRANDS ARE NOT A SENSATIONAL BUSINESS IN TERMS OF WHERE YOU CAN BE FIVE OR TEN YEARS FROM NOW."

The conclusion expressed in this quote represents a huge shift in Buffett's thinking. He is not saying that brands are not valuable, but rather that they will become less valuable over time. As just one example of how this shift impacts him, Berkshire is a partner of 3G in some very large business that depend on the value of key brands. 3G's Lemann recently acknowledged at the most recent Milken Conference that he was caught flat-footed by an onslaught of competition from challenger brands: "We bought brands that we thought could last forever. You could just focus on being very efficient. All of a sudden we are being disrupted."

7.

Navin: I'm hitchhiking.

Driver: Where are you going?

Navin: St. Louis. How far are you going?

Driver: To the end of this fence.

Navin: Okay.(he gets in the truck) I'm Navin Johnson. What's your name sir?

Driver: Here we are!

Navin: Okay, thanks for the company. I hope I can repay you someday.

Navin started small in his journey to Saint Louis, but at least he started. Sometimes in starting something important like a business, you need to take some actions that do not scale well as was the case with Navin as a hitchhiker in the movie. Paul Graham has said: "One of the most common types of advice we give at Y Combinator is to do things that don't scale. In Airbnb's case, these consisted of going door to door in New York, recruiting new users and helping existing ones improve their listings."

8.

Navin writing a letter to his family: I've got a lot to learn about handling my money and banks. You have to be careful. Poor Hobart. Hester took some money out of her savings account, and had to pay a substantial penalty for early withdrawal. (Hester is shown outside being shot at by a firing squad) Enclosed is this week's, check. Love, Navin.

Navin: Sorry about your wife Hobart.

Hobart: Federal regulations sir. Oh, dear me. Your wife has given you another gold chain. I nearly forgot. Ah, I suppose I'm still not quite over Hester's death.

Fees of all kinds can be financially painful. Some products are structured so it is easy to be assessed penalties for not doing something. For example, a financial services app that enables customers to "buy now and pay later" reported that it earned 24.4% of its income from late fees. As another example, bills are sometimes being sent with relatively short payment due dates that are designed to generate substantial income from late payments. Of course this practice of making money on late fees is not new. Blockbuster depended heavily on charging its customers late fees, which was a boon for Netflix. I almost certainly paid late fees renting *The Jerk* from Blockbuster. As an aside, Movies like *The Jerk*, *The Princess Bride* and *Caddyshack* are popular with many people who watched movies during the Blockbuster era. People watched them over and over again whereas today they would find something new to watch on Netflix. Repetitive watching of these classic comedy movies resulted in people quoting lines from the movie as a form of humor, which feed back on itself (the more they were quoted the more they were quoted).

9.

Navin: Dear mom, the big news is Marie and I were married. We couldn't wait. Luckily, we found someone at the Hollywood View Apartments who could marry us immediately. He was a certified priest (actually, he is a voodoo doctor). We were both glad we had a religious wedding. Money hasn't changed our lives that much, our one little extravagance is a live-in butler and housekeeper.

It is easy to let "lifestyle creep" put you into a financial fix. The best part of wealth is not the stuff, but the greater options cash gives you in life. People who do not have cash can find themselves with very lousy options. Navin and Marie learned that lesson the hard way in the movie and by final scene are vastly happier.

“Annual income twenty pounds, annual expenditure nineteen nineteen six, result happiness.

Annual income twenty pounds, annual expenditure twenty pounds ought and six, result misery.”

– Wilkins Micawber (David Copperfield, by Charles Dickens)

Nassim Taleb puts it this way: “Money can’t buy happiness**,** but the absence of money can cause unhappiness. Money buys freedom.”

10.

Taj: It turns out Dad’s a financial genius!

Father: All I did was take the money you sent home and embarked on a periodic investment in a no-load mutual fund.

Taj: He leveraged his ass deep in to soy beans and cocoa futures.

Was Father telling the truth? Or was Taj? My theory is that Father knew that only some people can make a living as traders and didn’t want Navin to get the wrong idea since he is one of Warren Buffett’s “know nothing” investors. Father knew a lot about commodities as a result of his experience as a farmer and he did not want Navin to get the wrong idea. Taj did not realize that father was trying to protect Navin, who is definitely a candidate for a diversified portfolio of low-cost index funds since his circle of competence is about the size of his Thermos.

11.

Stan: Damn! Damn these glasses!

Navin: Sir! I can fix those glasses!

Stan: You can? Well here, fix those suckers!

(Dramatic music plays as Navin is tossed the pair of glasses. He catches them and runs inside to fix them.)

Navin: Sir! Guess what – I fixed 'em. I was back there thinking, what causes glasses to slip on and off and it's because when you take them on and off you're always putting pressure on the frames like this – it causes them to spread, so I put a little handle right here in the center and it puts the pressure on the bridge where it belongs, just like the tierods on a 72 Buick, plus I put a little nose brake on to prevent slippage. Try it! Use the handle.

Stan: Well, I'll be. It works! You know, I make a pretty good living selling shit like this. I tell you what: if I can develop this gizmo, I'll split with you fifty fifty.

[later]

Stan: Remember, at the gas station? Boy, you are one hard guy to find! You don't remember me! The glasses handle – look!

Navin: Oh yeah, my glasses handle.

(Navin reaches for a pair of glasses)

Stan: Use the Opti-grab.

Navin: Opti-grab?

Stan: Navin, look we're in business! Fifty fifty. Just like we said. Right in here, I have your first check for two hundred and fifty big ones.

Although the opti-grab product ended up having product liability issues, the pairing of a product person like Navin and a person who really knows distribution was fortuitous while it lasted. People are increasing realizing that is it distribution that most often creates a more survivable advantage in business. Marc Andreessen notes:

"As far as defensibility, I think you construct defensibility through some combination of product innovation and distribution building. You construct it. You obviously want as much defensibility as you can get in your product, and so you try to get as far out ahead as you can. …The problem with that is true defensibility purely at the product level is really rare in the Valley, because there are a lot of really good engineers. And there are new ones every day, whether they're coming out of Stanford or coming in from other countries or whatever. And then there's the issue of leap-frogging. The next team has the opportunity to learn from what you did and then build something better. So I think pure product defensibility is obviously highly desirable, but it's actually quite difficult."

12.

"Navin: I'm gonna bounce back and when I do I'm gonna buy you a diamond so big it's gonna make you puke.

Marie: I don't wanna puke."

In my recent blog post on Chance the Rapper I quoted him as saying: **"**Some people are so poor, all they have is money." I have nothing to add.

Discard Quote Pile:

"Truck Driver Picking Up Navin which is hitch hiking: St. Louis?

Navin R. Johnson: No, Navin Johnson."

_____

Navin (reading) Well mom, remember my dream of owning a big house on a hill and how I used to wish for a living room with a plaster lion in it from Mexico and how I always wanted a large twenty four seat dining table in a dining room with original oil paintings by Michelangelo and Rembrandt and remember how I always wanted a rotating bed with pink chiffon and zebra stripes and remember how I used to chit chat with dad about always wanting a bathtub shaped like a clam and an office with orange and white stripes and remember how much I wanted an all red billiard room with a giant stuffed camel and how I wanted a disco room with my own disco dancers and a party room with fancy friends and remember how much I wanted a big backyard with Grecian statues, s-shaped hedges and three swimming pools? Well, I got that too.

_____

New Accounts Bank Manager: I will need two pieces of identification.

Navin: Ah yes. I have my temporary driver's license – and – my astronaut application form… I didn't pass that though, I failed everything but the date of birth."

_____-

Navin: The only thing I need is *this*. I don't need this or this. Just this ashtray… And this paddle game. – The ashtray and the paddle game and that's all I need… And this remote control. – The ashtray, the paddle game, and the remote control, and that's all I need… And these matches. – The ashtray, and these matches, and the remote control, and the paddle ball… And this lamp. – The ashtray, this paddle game, and the remote control, and the lamp, and that's all *I* need. And that's *all* I need too. I don't need one other thing, not one… I need this. – The paddle game and the chair, and the remote control, and the matches for sure. Well what are you looking at? What do you think I'm some kind of a jerk or something!

Note about race issues and the movie:

Hollywood Reporter: In *The Jerk*, you played the white son of black sharecroppers who doesn't realize he's adopted. Could you get away with that in today's era of heightened racial sensitivity?

Steven Martin: "I haven't looked at *The Jerk* in a long time. But looking back, everyone was treated with such respect, and we had that fabulous opening with Sonny Terry and Brownie McGhee singing on the porch, two very well-known blues artists. You might get a kind of knee-jerk reaction, but it would be hard to get a verdict in court against it. https://www.hollywoodreporter.com/news/steve-martin-jerk-would-work-799334

Cinema Blend:

"The big reason *The Jerk's* racial humor works is for the sheer fact that it's not played as a malicious slight to the black community. Navin isn't jumping for joy because he's truly white. In fact, he's kind of disappointed. Even in 1979, this was a pretty bold joke to shuffle into the deck of gems the Carl Reiner film would use, but taken in a more modern context, it works just as well as it did back when it first played. Not only does that fact speak to the strength of the film's writing, it also speaks to the comedic abilities and care of Steve Martin's skill set, because in lesser hands this could have been a much uglier joke." https://www.cinemablend.com/new/Steve-Martin-How-People-Might-React-Jerk-Humor-Today-71857.html

End Notes:

The cast includes Steve Martin as Navin Johnson, Bernadette Peters as Marie Kimball, Jackie Mason as Harry Hartounian, Catlin Adams as Patty Bernstein, Mabel King as Mother, Richard Ward as Father, Dick Anthony Williams as Taj and Bill Macy as Stan Fox.

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Business and Investing Lessons from Caddyshack

September 22, 2018

There are certainly some people who don't know that Caddyshack is a 1980 comedy movie directed by Harold Ramis and written by Brian Doyle-Murray, Douglas Kenney and the director Ramis. These people also may not know that the four biggest stars in the movie are Bill Murray (Carl Spackler), Chevy Chase (TyWebb), Rodney Dangerfield (Al Czervik) and Ted Knight (Judge Smails).

1. **Carl Spackler: This crowd has gone deadly silent, a Cinderella story outta nowhere. Former greenskeeper and now about to become the masters champion. It looks like a mirac… It's in the hole! It's in the hole! It's in the hole!**

This scene was almost completely improvised by Bill Murray, like many other key parts of Caddyshack. Ramis openly encouraged what he called: "guided improvisation, not just ad-libbing. Ad-libbing with a purpose." The scene was filmed in one take as a profile of Ramis in *The New Yorker* describes here:

The classic "Cinderella story" speech from "Caddyshack" had been written as an interstitial camera shot: Murray's character, the greenskeeper, was to be "absently lopping the heads off bedded tulips as he practices his golf swing with a grass whip." Ramis took Murray aside and said, "When you're playing sports, do you ever just talk to yourself like you're the announcer?" Murray said, "Say no more."

The Cinderella story scene in the movie represents a reminder to viewers about the value of dreaming big. Have a north star to maintain your motivation during tough times is a very valuable thing. Taking this big dream approach one step further, there are some people, including a number of famous investors, who believe in the power of visualization. The visualization approach leaves me a bit cold, but if acting like Bill Murray in the Cinderella story scene about something important to you works for you, well, just do it.

One of the other lessons someone can take away from watching Caddyshack is that the movie itself is a Cinderella story. It was panned by critics when it came out. And yet it has become a cultural icon for some people over time.

"Caddyshack isn't a bad movie per se, and it wasn't a flop — it grossed nearly $40 million (U.S.) at the North American box office, not a bad return on a $6 million budget. It ranked 17th for ticket receipts for the year, and 1980 was the year that also saw the release of *Star Wars: The Empire Strikes Back* and Stanley Kubrick's *The Shining*." The Washington Post called *Caddyshack* the "latest misbegotten spawn of *National Lampoon's Animal House*," The Hollywood Reporter compared it to "the aesthetic qualities of an outhouse" and Variety damned it with the faint praise of being a "vaguely likable, too-tame comedy" that — you guessed it — fell short of *Animal House*'s hilarity."

The movie demonstrates that can take a really long time for something to become an overnight success.

2.

Carl Spackler: So I jump ship in Hong Kong and I make my way over to Tibet, and I get on as a looper at a course over in the Himalayas.

Tony D'Annunzio: A looper?

Carl Spackler: A looper, you know, a caddy, a looper, a jock. So, I tell them I'm a pro jock, and who do you think they give me? The Dalai Lama, himself. Twelfth son of the Lama. The flowing robes, the grace, bald… striking. So, I'm on the first tee with him. I give him the driver. He hauls off and whacks one – big hitter, the Lama – long, into a ten-thousand foot crevasse, right at the base of this glacier. Do you know what the Lama says? Gunga galunga… gunga, gunga-lagunga. So we finish the eighteenth and he's gonna stiff me. And I say, "Hey, Lama, hey, how about a little something, you know, for the effort, you know." And he says, "Oh, uh, there won't be any money, but when you die, on your deathbed, you will receive total consciousness." So I got that goin' for me, which is nice.

The “big hitter the Lama” scene in the movie took seven hours to film. Chris Nashawaty in his book about the making of Caddyshack writes:

“Before he would find himself on the business end of a rusty pitchfork courtesy of Bill Murray in the film’s indelible Dalai Lama scene, Peter Berkrot, cast as caddie Angie D’Annunzio, was a 19-year-old wannabe theater actor from Queens. He wasn’t sheltered, exactly, but he certainly had never been exposed to the sort of Hollywood decadence he was about to discover in Florida.”

“Bill was standing there with this huge, rusty scythe, like Death,” says Berkrot. “He points it at me and I said, ‘Absolutely not! Are you crazy?’ This thing looked like it would have taken off my head. So Bill goes, ‘O.K.,’ and picks up a pitchfork. And that’s what he held at my neck during the whole scene. It was *sharp*.”

During each take Murray would toss in new things to keep it fresh and unpredictable. And each time, he would press the rusty tines of his pitchfork a little harder on Berkrot’s neck. “I said to Bill, ‘Can you take it easy with the pitchfork? It really hurts,’ ” says Berkrot. “And he said, ‘Quit whining, Berkrot!’ He was totally in character between takes.” Shooting that scene, Murray was “like a wild animal, you don’t know what he’s going to do,” recalls Trevor Albert, Ramis’s assistant. “I’d never seen anyone with that unpredictable power. He made me nervous.”

A number of very small parts of the dialogue in Lama scene have become a shorthand for the full scene itself. One of the hardest things to do in business is to create strong word-of-mouth that inexpensively creates brand value. Caddyshack was the beneficiary of some favorable tailwinds that kicked off a powerful positive feedback loop. Because the movie was available for home viewing before streaming services like Netflix, people often watched it multiple times. These people naturally started quoting lines from the movie and the more people did it the more people wanted to do it. This is just one example of feedback creating a self-reinforcing phenomenon. The more people say: "which is nice, the Lama" the more people say it. Of course, stories get embellished with time which further spreads the brand or meme:

On a visit to the United States, the Dalai Lama was asked by Minnesota Governor Jesse Ventura if he'd seen 'Caddyshack.' He said no; but according to Ventura, before he left, he turned to the governor and said, "Gunga, gunga la-gunga."

When asked about whether he had seen Caddyshack by ABC's Jonathan Karl the Dali Lama said that he does not play golf, but he can play an excellent game of ping pong. So the Ventura story is probably fabricated, but humorous nevertheless.

3. **Carl Spackler: I have to laugh, because I've outsmarted even myself. My enemy, my foe, is an animal. In order to conquer the animal, I have to learn to think like an animal. And, whenever possible, to look like one. I've gotta get inside this guy's pelt and crawl around for a few days.**

As you probably know, this portion of the script is quite a controversial part of the movie since it brings up the fundamental schism between: (1) the followers of Andy Grove's "Only The Paranoid Survive" dictum and (2) people like Reed Hastings who believe that worrying about competitors is a bad idea. The Hasting's views is:

"We need more sophisticated metaphors than 'only the paranoid survive.' Paranoid people are delusional." "We spend almost no time [at Netflix] thinking about competitors. We spend almost all our time thinking about customers."

The Andy Grove said believed:

"Success breeds complacency. Complacency breeds failure. Only the paranoid survive." "I believe in the value of paranoia. Business success contains the seeds of its own destruction. The more successful you are, the more people want a chunk of your business and then another chunk and then another until there is nothing left."

Grove believed that some degree of fear is healthy for any business, especially if the businesses has been successful. Two business school professors who have studied Grove point out: "A touch of paranoia—a suspicion that the world is changing against you — is what Grove prescribes." Can one be slightly paranoid and yet very focused on customer needs? I ran a poll last night on Twitter and clearly people think Murphy was an advocate of the customer focused approach and I agree.

4. Al Czervik: "Buy, buy, buy! Oh, everyone is buying? Then sell, sell,sell!"

Al Czervik is a devotee of the contrarian investing "stylings" of business people and investors like Howard Marks. Most of the time being contrarian is suicidal but occasionally you can

acquire an edge of some kind (analytical, informational or behavioral) and make a contrarian bet. The key to out-performance of an investing or business benchmark is having a variant perception that eventually is proven right soon enough that the investment pays off. Andy Rachleff puts it this way: "Investment can be explained with a 2×2 matrix. On one axis you can be right or wrong. And on the other axis you can be consensus or non-consensus. Now obviously if you're wrong you don't make money. The only way as an investor and as an entrepreneur to make outsized returns is by being right and non-consensus."

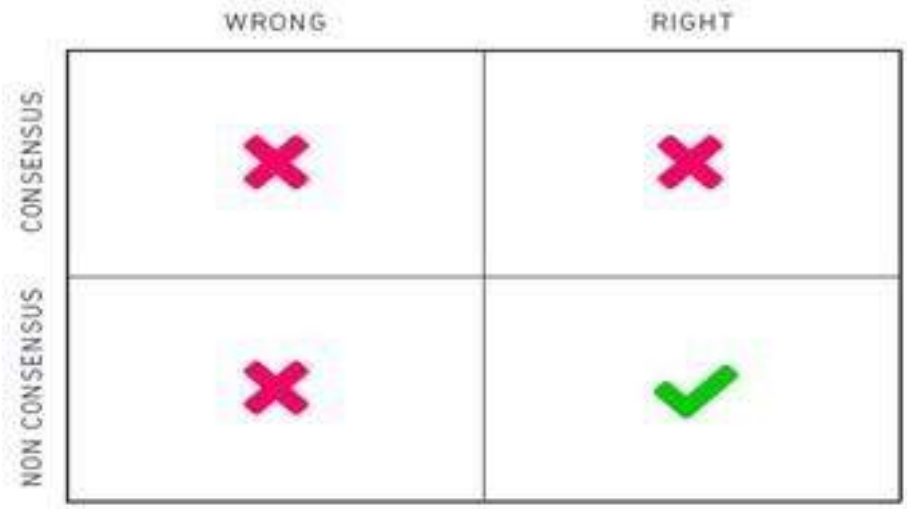

If you have views which always reflect the consensus of the crowd you will not outperform a market since a market by definition reflects the consensus view. Sometimes waves of social proof and other dysfunctional heuristics create a significant gap between price and value, which creates an opportunity for a patient investor who is at the same time aggressive about making the investment when the time is right.

5. **Carl Spackler: "Well, I got a lot of stuff on order. You know… credit trouble."**

Spackler knows, like you do, that the only unforgivable sin in business is to run out of cash. Inventory can tie up a lot of capital in a business which can create significant problems in terms of cash flow and credit. If the business is viewed as a credit risk the struggle to operate the business can get worse. Charlie Munger has talked about the dangers of contracts "full of clauses that say if one party's credit gets downgraded, then they have to put up collateral. It's like margin – you can go broke." Munger has also said that leverage is as dangerous as liquor when taken to excess,

6.

Danny Noonan: I haven't even told my father about the scholarship I didn't get. I'm gonna end up working in a lumberyard the rest of my life.

Ty Webb: What's wrong with lumber? I own two lumberyards.

Danny Noonan: I notice you don't spend too much time there.

Ty Webb: I'm not quite sure where they are.

Owning a business which earns a significant profit while you are doing something like playing golf (or whatever else makes you happy), is a very good thing. I have a friend who leases commercial properties for a percentage of revenue of the business. He literally is earning money while he plays golf.

As an aside, Ty Webb was modeled to some degree on Chevy Chase himself. One of the three writers (Kenny): "described the character of Ty Webb to Chase as being '*of* the establishment, but not *in* it.' According to Murray, it was Douglas Kenney's idea to have Chase make the mystical "Na-na-na-na-na" sound—channeling the bionic sound-effect from *The Six Million Dollar Man*—when he was putting."

7.

Tony D'Annunzio: Give me a coke.

Danny Noonan: One coke.

[gives Tony a bottle of Coke and 50 cents]

Tony D'Annunzio: Hey wait a minute. That's only 50 cents.

Danny Noonan: Yeah well Lou raised the price of coke he's been losing at the track.

Tony D'Annunzio: Well I ain't paying no 50 cents for no coke.

Danny Noonan: Oh then you ain't getting no coke. Know what I'm talking about?

Lou has pricing power on Coke sales only in a very small geography, which is a big problem since that gives people relatively easy access to alternative source of supply. When people have alternative suppliers of a product pricing power disappears. Warren Buffett (a big fan of Coke obviously) believes:

"The single most important decision in evaluating a business is pricing power. If you've got the power to raise prices without losing business to a competitor, you've got a very good business. And if you have to have a prayer session before raising the price by 10 percent, then you've got a terrible business."

On the subject of his favorite beverage, Buffett has said: "I have three Cokes during the day and two at night. I'll have one at breakfast," he explains, noting that he loves to drink Coke with potato sticks, adding: "I checked the actuarial tables, and the lowest death rate is among six-year-olds. So I decided to eat like a six-year-old It's the safest course I can take."

8. **Ty Webb: I'm going to give you a little advice. There's a force in the universe that makes things happen. And all you have to do is get in touch with it, stop thinking, let things happen, and be the ball.**

I planned to write a blog post on mentoring, but it seemed awkward so I never finished it. Telling someone you are mentoring to "be the ball" sounds silly enough to make for great comedy. Unfortunately, a lot of great advice sounds corny. Charlie Munger said once: "I

love spreading this stuff around. Just because it's trite doesn't mean it isn't right. In fact, I like to say, 'If it's trite, it's right.'"

9. **Ty Webb: Don't be obsessed with your desires Danny. The Zen philosopher, Basho, once wrote, 'A flute with no holes, is not a flute. A donut with no hole, is a Danish.' He was a funny guy.**

Web is telling Noonan that there is a lot of power in a focused approach to business and investing. Stories about a topic like the power of focus can be a wonderful way to teach a lesson. But they can be interpreted in different ways. For example, there is a famous koan:

A man traveling across a field encountered a tiger. He fled, the tiger after him. Coming to a precipice, he caught hold of the root of a wild vine and swung himself down over the edge. The tiger sniffed at him from above. Trembling, the man looked down to where, far below, another tiger was waiting to eat him. Only the vine sustained him. Two mice, one white and one black, little by little started to gnaw away the vine. The man saw a luscious strawberry near him. Grasping the vine with one hand, he plucked the strawberry with the other. How sweet it tasted!

Is this story about enjoying the present moment or is it about not getting distracted by pleasure in a moment of crisis? You decide. Some of the most popular stories allow the reader to insert wherever message appeals to them.

10.

Al Czervik: Oh, this is the worst-looking hat I ever saw. What, when you buy a hat like this I bet you get a free bowl of soup, huh?

[looks at Judge Smails, who's wearing the same hat]

Al Czervik: Oh, it looks good on you though.

When you are buying something, be careful when someone offers you a free product like a bowl of soup as part of a bundle. People have an irrational attraction to anything that is free. Using one product to sell another is a sales technique as old as time. Using one product to sell another is used in many different ways such as freemium as I have written about before, but not all such appoaches are bundles.

The movie itself created opportunities for actors to use one product to promote another. For example: Rodney Dangerfield took at pay cut to get in the movie but that resulted in other more profitable business opportunities:

"Dangerfield would end up getting $35,000 for his role. And though he would always credit *Caddyshack* for launching his movie career, he would often do so while complaining that he actually *lost* $150,000 on the film, having given up a month of headlining in Vegas to shoot it."

Bill Murray took a small role in Caddyshack and via scene stealing and creative improvisation turned that into a starring role. That created big paydays for Murray later in movies like *Ghostbusters*, *Groundhog Day* etc.

11.

Judge Smails: Ty, what did you shoot today?

Ty Webb: Oh, Judge, I don't keep score.

Webb understands that the best way to measure your progress is not by comparing yourself to other people. Charlie Munger has said "Envy is a really stupid sin because it's the only one you could never possibly have any fun at. There's a lot of pain and no fun. Why would you want to get on that trolley?" as just one example, in one scene Mrs. Haverkamp swings and hits the ball about 20 feet into a pond. Her husband responds by saying "That's a peach, hun." While Mrs. Haverkamp can't hit the ball as far and accurately as Tiger Woods, she is not competing against him. BTW, Caddyshack is Tiger Wood's favorite movie.

Caddyshack also includes an example illustrating the value of optionality. At a key point in the movie Danny had already been told that "the world needs ditch diggers too" by the Judge and knew he was not going to win the scholarship given out by the golf club. A blogger named Bob, who claims to have watched the movie 600 times, writes:

Czervik is golfing horribly so he fakes an injury, and Ty Webb asks Danny to golf with them. Danny stops and thinks for a moment, and Czervik adds, "We'll make it worth your while!"Danny chooses to golf with Ty and wins the round, thus achieving his goal and making enough money to pay for college. Opportunity knocked, and he answered the door. He took a calculated risk, and it paid off for him big time.

12. **Al Czervik: Hey *Moose*, *Rocco*, help the Judge find his check book, will ya…**

The ability to enforce of contracts is a key success factor in many businesses. That is why letters of credit and guarantors were invented. That is a boring topic which is why I have nothing to add. However, I can tell you about this story about a solution that was similar to a letter of credit from a book I co-authored entitled *The Global Negotiator* (available for free at he

link):

An acquaintance of ours had the occasion to travel to Addis Ababa, the capital of Ethiopia, in the mid-1980s. After an arduous air journey from Europe, he presented himself at the hotel to which he had been directed by his vigilant travel agent. The hotel had no record of the reservation that the travel agent had allegedly secured. His further research on the subject uncovered the existence of just one vacant room in the hotel. After trudging up the stairs behind the bellman (the elevator, it seems, had found a position in life from which it had no aspirations to rise), he found himself at the door to his room. When the protagonist of our story opened the door, he found nothing but darkness. The bellman shook his head and in halting English asked our traveler to wait. A short time later the bellman returned with a light bulb. Before our traveler could think of a good quip about the number of Ethiopians required to screw in a light bulb, the deed was accomplished. The light revealed four walls, a ceiling, floor, a bare mattress, and nothing

When our traveler had absorbed this information, he noticed the bellman smiling broadly, obviously waiting for his tip. "Preposterous," exclaimed our unaccommodating traveler to no one in particular since the bellman's simple grasp of the English language included no word with twelve letters. "No can stay," said our traveler in his best Pidgin English. The bellman and our traveler walked together to the front desk to discuss the condition of the rented room with the desk clerk. "I must have sheets and a blanket," demanded our somewhat agitated traveler. "You will steal," responded the desk clerk, frowning. Our traveler deduced that a basis of trust needed to be established. Out of his pack came four tins of sardines. In short order a deal was arranged. The sardines went into the hotel safe to be kept until the traveler left the hotel with all items on the room inventory accounted for. In due course, our somnolent traveler received sheets and a blanket.

Our traveler's solution to his problem was little different from the American buyer who arrives in the Ivory Coast and delivers a letter of credit to a trader selling cocoa. An item of value has been offered as security if the buyer proves untrustworthy. An exchange has been created that facilitates the trust-building process. There are an infinite number of exchanges that can create trust. (Consider the body parts exchanged by court eunuchs in return for steady employment in comfortable surroundings.) Eventually, if our traveler were to visit the hotel in Addis Ababa many times without stealing, and the cocoa buyer were to make repeated purchases, the security arrangements would become unnecessary [redacted]

End Notes:

Caddyshack: The Making of a Hollywood Cinderella Story, *by Chris Nashawaty. Published by Flatiron Books. Chris Nashawaty. https://www.amazon.com/Caddyshack-Making-Hollywood-Cinderella-Story/dp/1250105951/ref=sr_1_fkmr0_1?ie=UTF8&qid=1537055825&sr=8-1-fkmr0&keywords=Caddyshack%3A+The+Making+of+a+Hollywood+Cinderella+Story%2C+by+Chris+Nashawaty.+Published+by+Flatiron+Books.+Copyright+%28C%29+2018+by+Chris+Nashawaty.*

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https://blog.golfnow.com/be-the-ball-and-other-life-lessons-learned-from-caddyshack/

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Lessons from Scott Belsky's Book "The Messy Middle"

September 29, 2018

Scott Belsky is Adobe's Chief Product Officer and Executive Vice President, Creative Cloud. He co-founded Behance in 2006 and served as CEO until it was acquired by Adobe in 2012. He is the author of *Making Ideas Happen* and his new book is *The Messy Middle*.

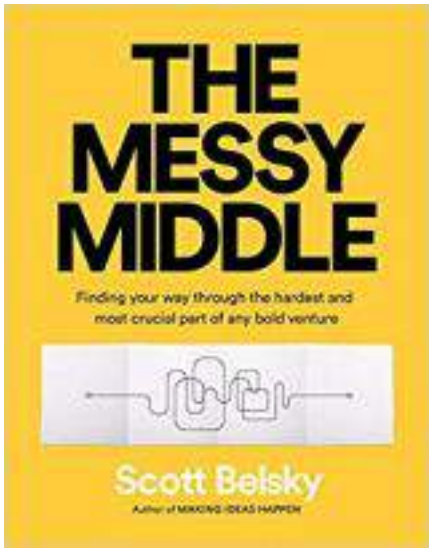

1. **"We love talking about starts and finishes, even though the middle stretch is the most important and often the most ignored and misunderstood. We don't talk about the middle because we're not proud of the turbulence of our own making and the actions we took out of despair." "Creating something from nothing is a volatile journey." "The first mile births a new idea into existence, and the final mile is all about letting go."** "**No extraordinary journey is linear. In reality, the middle is extraordinarily volatile—a continuous sequence of ups and downs, flush with uncertainty and struggle."**

Anyone who has been though a startup experience will recognize what Belsky is depicting in the graphic below. When I first saw this depiction it immediately reminded me of the way Phil Knight described the ups and downs of Nike's business in his fantastic book *Shoe Dog.* I also thought of many other businesses like OpenTable which encountered significant ups and downs along the way to eventual success that required both endurance and optimization.

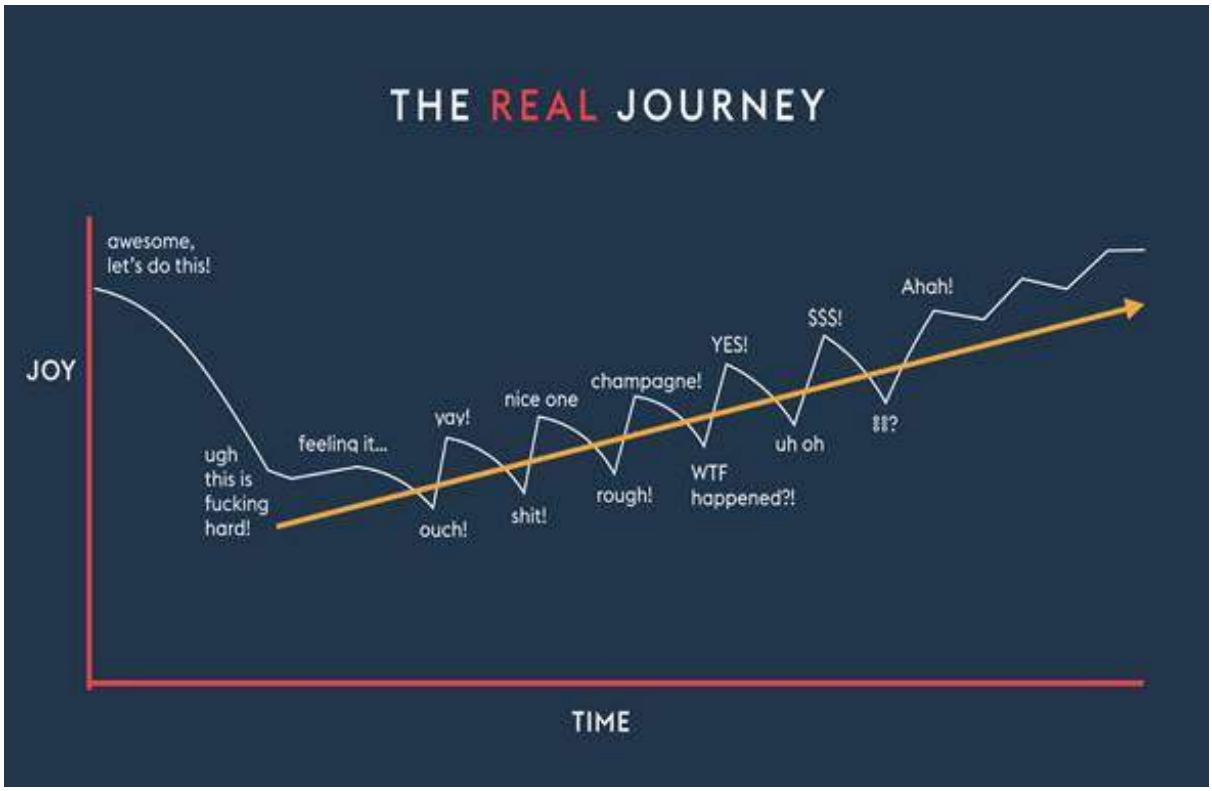

I saw this process first hand when I spent more than five years of my life working at a startup. I have also seen the same patterns as an investor. What Belsky writes about is just as applicable to working for one the largest business in the world. Might there be a dentist somewhere who started a dental practice and the trajectory was mostly up and to the right without any need for endurance and optimization? Probably not. But even if there is a dentist who experienced a smooth and steady upward slope they are inevitably not creating anything new. In other words, the more a new business is creating new value, the more what Belsky describes in *The Messy Middle* is true.

All businesses operate in an environment that is almost entirely driven by uncertainty and ignorance. Creating a business, a new product or improving an existing product involve processes that are almost never merely risky like playing games at a casino. Business inevitably involves a never-ending series of idiosyncratic decisions for which there are

sometimes best practices. This means that making decisions based solely on statistical factors and recipes is impossible. This is why business is best described as an art that is often informed by science.

2. **"The book is broken down into three sections of insights (Endure, Optimize, & The Final Mile)."“Every advance reveals a new shortcoming. Your job is to *endure* the lows and *optimize* the highs to achieve a *positive slope* within the jaggedness of the messy middle—so that, on average, every low is less low than the one before it, and every subsequent high is a little higher."**

Belsky wrote the introduction to my seventh book *A Dozen Lessons for Entrepreneurs.* When we communicated about the progress of my book I sensed that he was engaged in an intense effort to get his book "just right" from a design standpoint. Belsky's struggle to find the right structure was part of the "Messy Middle" of his book writing journey. His elegant solution for *The Messy Middle* was create a four-part structure for the book, within which are discrete insights, best practices and lessons that apply to the value creation process. I really like the way that this approach allows the book to be read in a nonlinear manner. Belsky writes: **"While the insights are organized into sections, the book is intended to be more of a buffet than a plated six-course meal. I encourage you to navigate to whatever part of the journey resonate most with you at the moment, using the table of contents."** Other authors who have adopted a modular book structure include Elad Gil with *High Growth Handbook* and myself with my blog and seventh book. Adopting this a nonlinear structure in writing a nonfiction book is often more consistent with the way people read today. Many readers want just in time advice that doesn't necessarily require long continuous reading sessions. This structure enables a "long read" to be the one method for getting value from the book and yet reading it in a linear way it is not required to capture value from the material. *The Messy Middle, High Growth Handbook* and *A Dozen Lessons for Entrepreneurs* are designed to be usable as reference books. People consume information differently today and book and web design must take this into account. Readers too must use tools in new ways. For example, if you want to know what I think about a topic, simply put the keywords "25IQ" and the topic that interest you (e.g., "wholesale transfer pricing") into a search engine and it will search over a million words on my blog. You can do the same thing if you purchase an e-book version of *The Messy Middle* and use the search function.

This graphic below is a wonderful example of Belsky as a designer. The "Start" phase of the journey kicks off with a blast of goodness and favorable publicity and then the reality hits in that this startup is going to be hard to make successful (red shading). Endurance (blue gray) depicts when negative things happen as an inevitable part of the process and Optimization (turquoise) is when the line depicting the process moves up when something positive is happening. The Finish phase of the journey (dark blue) completes the book. Each stage of the process calls for different approaches and solutions, some of which will be identified below. Within each of the four categories Belsky has identified so many different solutions that in this blog post I have been forced to pick just a few insights that resonate with me most and best enable me to embellish a bit on that insight. Picking just ten more insights from *The Messy Middle* to fit within my usual quota of twelve was really hard since there are so many in the book.

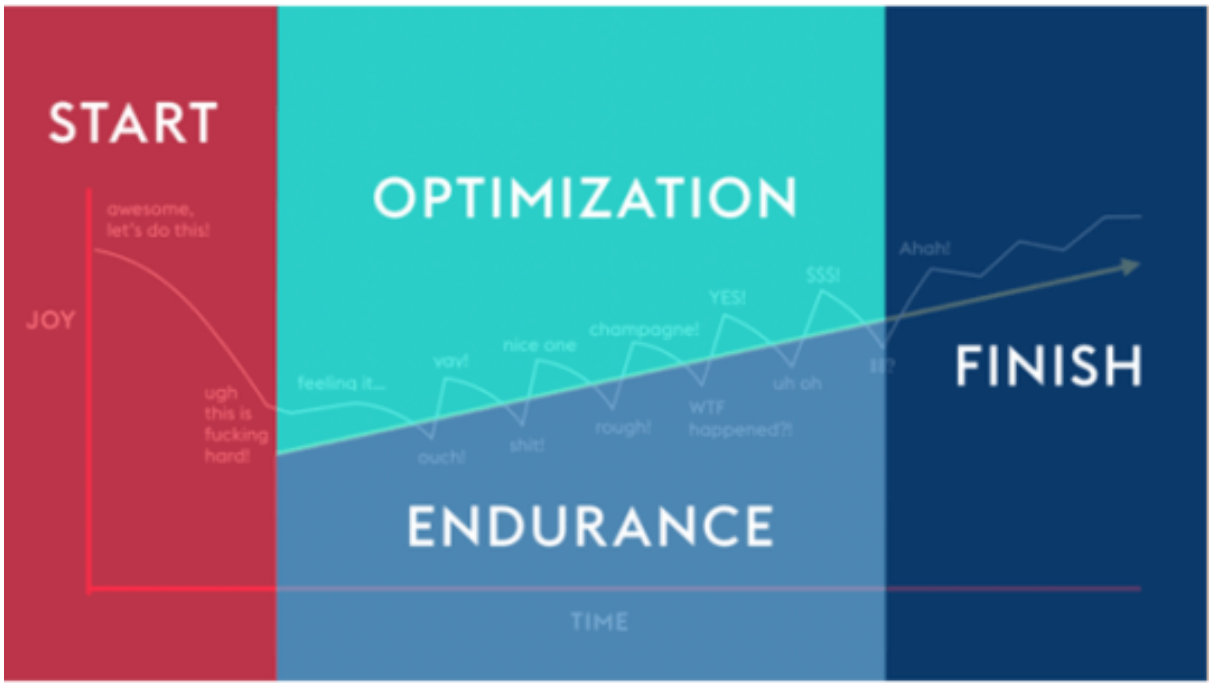

START

3. **"The start is pure joy because you're unaware of what you don't know and the painful obstacles ahead…. after the excitement of a new idea dissipates, reality sets in." "This is where the journey truly begins."**

The beginning moments of starting something seem glamorous. Early team members may find themselves featured in articles in the press and on blogs. This is true both for startups but also for work done inside a big company on a new product. The reality of the zone which Belsky depicts in red in the graphic just above is that the team quickly realizes that creating a "new new" thing is hard. Some people have called this "trough of sorrow" or the "trough of despair," but I believe a better term would be the "trough of reality." If someone is feeling sorrow or despair during this "start" phase, they are not suited for work like this. It is perfectly normal to think: "holy shit" during this process, but then to get to work creating value. It seems like I was born believing that there is no problem that more work by me can't solve. This can create problems related to overconfidence but it does leave me free and clear of most sorrow and despair related concerns. People hate losses and so there is an arbitrage for someone like a founder who can persevere though losing investments. People lose track of how much failure there is, but that is survivor bias, which is another topic I have written about before.

ENDURANCE

4. **"[Endurance] is about developing a source of renewal energy and tolerance that is not innate." "Our additions to short-term validation that trying to defy it is hopeless…. You must hack your reward system [with]… manufactured optimism." "Celebrate anything you can, from again a new customer to solving a particularly vexing problem." "We crave certainty but must learn to function without it." "Accept the burden of processing uncertainty."**

Every effective team I have ever observed has learned to manufacture milestones that create positive short-term reinforcement for the team along the way. The human species has lived as long as we do now for only a short period in its history. Thomas Hobbes wrote once that the life of a human for almost all of history involved living in "continual fear, and danger of violent death" and that it was "solitary, poor, nasty, brutish, and short." It is no wonder that humans love immediate or at least near-term gratification. The instances in which humans make mistakes due to their drive for short term optimization of present moment benefits is endless. Rather than fighting these instincts Belsky believes the most effective teams create milestones that enable people to celebrate short term wins. The best milestones represent the retirement of different types of risks. Josh Wolfe of Lux Capital believes:

"The greatest entrepreneurs are risk killers. They think about killing failure paths. They also understand that risk and value can change form. When risk has been killed then value has been created and a subsequent investor should pay a higher price for a percentage ownership interest in a business."

I heard Josh make this just point about creating team milestones in a board meeting we attended yesterday. If you create your milestones around killing or reducing technical, market, financial, people, regulatory and other risks you get a double benefit. The team is motivated in the short terms and you are killing the right risks. Sonali de Rycker of Accel "We advise breaking down the [process of building a business] into milestones. Don't just look at it as a ten-year goal. …Getting to milestones around value creation will allow you to fundraise."

5. **"Leave every conversation with energy."**

People who are most effective on teams and the most effective teams separate discussion from energy and commitment. Amazon is well-known to have a culture that has adopted what they call "disagree and commit." Jeff Bezos describes this approach as follows:

"This phrase will save a lot of time. If you have conviction on a particular direction even though there's no consensus, it's helpful to say, "Look, I know we disagree on this but will you gamble with me on it? Disagree and commit?" By the time you're at this point, no one can know the answer for sure, and you'll probably get a quick yes. I disagree and commit all the time. We recently greenlit a particular Amazon Studios original. I told the team my view: debatable whether it would be interesting enough, complicated to produce, the business terms aren't that good, and we have lots of other opportunities. They had a completely different opinion and wanted to go ahead. I wrote back right away with "I disagree and commit and hope it becomes the most watched thing we've ever made." Consider how much slower this decision cycle would have been if the team had actually had to *convince* me rather than simply get my commitment."

Even if a meeting is acrimonious, people should strive to leave that meeting with energy. In other words, Belsky is saying that words "with energy" should be added to the phrase. Disagree and commit ***with energy.***

OPTIMIZATION

6. **"Optimize the hell out of everything that works." "When something actually works… you need to tenaciously evaluate it. Why did that work? How do you do**

it again? How do you spread it to your team?" It's less about fixing what is broken and more about improving what works." "The best teams …are never ever satisfied with the current state of their product." "A/B testing is not just for digital buttons. You can use it in all areas of your life, from A/B testing your daily habits to how you team functions."

The rise of modern data science has enabled individuals and companies to put the optimization process that Belsky describes on steroids. There has never been a better time to harness processes that use the scientific method to improve people, teams and processes. Many of the most successful new products introduced over the last decade are at their core about bringing the scientific method to some area of life or business that formerly relied on guessing. Even if something is seemingly "going great" it is wise to keep trying to optimize to find improvements. This is how the most effective businesses maintain their competitive edge. Part of the reason why cities last longer than businesses is that residents of cities are continually experimenting with new solutions and those solutions over time enable the city adapt to changing conditions. Businesses that are more top down operated than a city may not adapt quickly enough to change to survive. I intend to write more about this topic soon.

7. **"Resourcefulness > Resources." "In the startup world, resources are like carbs. Resourcefulness is like muscle. When you develop it, it actually stays with you and impacts everything you do going forward." "Resourcefulness also makes you more creative. Any good designer will tell you that creative constraints help the idea generation process. With fewer resources and options you become more creative with what you have."**

Businesses die more often from indigestion than starvation. Finding ways to grow without new resources is often what creates new value value. If money is used as a substitute for creativity and a sound organizational culture, the business is weaker when challenged by a competitor which has found way to scale without just spending more money to "fix things." Belsky said once in an interview: "My former COO at Behance, Will Allen, used to always push teams to "refactor, refactor, then hire" when they came asking for more headcount and resources. Small teams can run circles around big teams faster and without as much tripping." One significant problem that startups have is that people sometimes are hired from very large companies which have lots of resources and set processes. The arrival of people from a large business can be the kiss of death for a startup or small business since speed is a competitive weapon and cash resources are more limited. This is not always true about former big company employees but it is something that must be watched carefully. A startup is not just a small version of a large business. What causes success or failure in one does not necessarily apply to the other.

8. **"Success fails to scale when we fail to focus." "We navigate most of our lives and businesses with cursory knowledge rather than local knowledge. Only when we stick with and deeply explore one area, whether by choice or accident, do we learn better routes." "Great products don't stay simple by not evolving; they stay simple by continually improving their core value while removing features and pairing back aspects that aren't central to the core. More once subtraction for every addition."**

Creating and staying within a circle of competence is a life and business superpower. It is amazing how much advantage a person can get by consistently not being stupid. Focus helps

a business stay with its circle of competence and hone its competitive advantage. If a business crates new paths to failure the probability of failure rises. A business having a focused objective doesn't mean that the goals should be small but rather that the level of risk the business takes on is optimal given resources available to that business and the competitive environment. Warren Buffett frames his approach to this set of decisions in terms of expected value:

"Take the probability of loss times the amount of possible loss from the probability of gain times the amount of possible gain. That is what we're trying to do. It's imperfect, but that's what it's all about. …coming up with likely outcomes and appropriate probabilities is not an easy task…the discipline of the process compels [you] to think through how various changes in expectations for value triggers—sales, costs, and investments—affect shareholder value, as well as the likelihood of various outcomes."

In addition to what someone might call "business objective bloat" there is a different but related point that Belsky writes about in his book: customers want simple solutions and teams that have too many resources often reduce or even kill the value of the product by creating too much complexity by introducing new "features." So-called "feature bloat" can be as deadly as the bite of a rattlesnake. Belsky once said in a *New York Times* interview:

"Indeed, new products win over users with their simplicity and add complexity over time to appeal to power users (and build a business), and then the process repeats itself. Teams that defy this practice continually simplify their products over time. For example, some teams try to remove or simplify features at the same pace as adding new features. Other teams attempt a reboot at some point in their product's life cycle where they design a new version with a vastly simpler foundation. The first step is acknowledging when you're catering too much to power users and failing to engage the latest cohort of new customers."

Accomplishing what Belsky talks about just above in the interview is what makes great designers and "product people." Some of the most talented people making the right choices about what to add and what to remove have savant-like skills in accomplishing this objective. Some of it seems like it is nature but the best designers I know what hard at nurturing their skills. Great designers are a scarce commodity and if your business has them, you should work hard to keep them.

9. **"Culture is created by the stories you tell."**

Humans are storytelling creatures. A year never goes by that I don't increase my belief in the power of stories. The best teachers know how to tell stories and the best founders and managers know that as an organization grows telling stories is often the best way to create a propagate culture. There some good books about how to write a story you can read and learn from including *The Hero with a Thousand Faces (The Collected Works of Joseph Campbell).* One key point to about stories is that it is best to show people what to do rather than telling people what they should do something.

What is the culture the stories must propagate in a business or other organization? Charlie Munger believes: "One solution fits all is not the way to go. All these cultures are different. The right culture for the Mayo Clinic is different from the right culture at a Hollywood movie studio. You can't run all these places with a cookie-cutter solution." The culture of a business is more than the sum of its parts. The totality of the vision, values, norms, systems, symbols,

language, assumptions, beliefs, and habits of a business is what creates the culture of a business. Munger and Buffett are huge proponents of creating a strong organizational culture: "Our final advantage is the hard-to-duplicate culture that permeates Berkshire. And in businesses, culture counts.…Cultures self-propagate." Bureaucratic procedures beget more bureaucracy whereas culture enables speed which is a critical competitive advantage in a changing world.

10. **"The more credit you need, the less influence you will have." "A new type of professional has emerged in the twenty first century. You'll find them working solo, in small teams or within large companies. "These 'free radicals' are the unbound energy sources of energy in the professional world."**

Another superpower in life for getting things done is to let other people take credit for something. Making someone believe that X was their idea is the best way to get X adopted. This is why some of the best coaches are often so skilled in asking the right questions instead of always giving directives. Many businesses foster roles for a few of the free radicals that Belsky is talking about just above. These people naturally press an organization to think about new ideas and to try new approaches. They are insatiably curious and willing to help out wherever is needed.

11. **"Foster Apprenticeship." "A certain percentage of your energy should be devoted to mentoring others. Apprenticeships are mutually beneficial, as you'll prepare emerging leaders on your team to take more senior roles while developing a culture of constant learning and teaching."**

Anyone who knows me knows I am interested in finding ways to increase the ability of educational systems to prepare people for life and success in business. There is no better way to learn than to be an apprentice to someone who is skillful at something. I have been lucky enough to have been an apprentice to many very successful people. This experience naturally makes me think about this questions a lot: How can scalable digital systems provide something that approaches or supplements this same luck that I experienced as an apprentice? Relying on traditional analog systems (being an apprentice to real people) that I benefited from can't economically scale to effectively serve billions of people on the planet. The value and importance of person-to-person apprenticeship will never completely go away, but how can it be made more effective using digital tools? Books are magical, but people are reading less rather than more. People are trying to solve this reading problem in clever ways. For example, Amazon has a created period that starts each meeting during which people must read a document about the meeting n a prescribed format. In other words, employees of Amazon are forced to read the material and the writer is forced to keep the writing tight and short.

FINISH

12. **"Finishes come in all shapes and sizes and are never as certain (or desirable) as they seem. In fact, finishing should never be the end goal, and you shouldn't aspire to ever feel truly 'finished'; life loses value when the challenge dissipates."**

I believe the real "winners" in life are the people who accumulate the best stories based on real life experiences. This collection of great stories is an indicator that you never stop

learning, creating and sharing. Belsky is saying that a finish is just a way station on the path to something else.

There are many other insights in *The Messy Middle* I wanted to write about that I have not mentioned in this blog post, but you can now buy and read the book yourself. One objective when you write a review is to give the reader a taste of the book but not give so much way that their is less incentive to buy the book. I can assure you that there are many topics in the book I did not cover and many important insights and questions for you to think about. As an aside, in preparing to write these blog posts I nearly always read and listen to podcasts that feature people who I write about. Scott was a guest on a recent podcast with Tim Ferris in which he is asked what thinkers he likes to read he mentioned Ben Thompson of Stratechery and then me. Ferris responded by repeating my name "Tren Griffin" in the manner of "who the heck is that?" It was quite a funny moment for me actually and it makes for a good story.

In his introduction to my latest book *A Dozen Lessons for Entrepreneurs* Belsky wrote:

You can ask for tips, but you can't adopt someone else's approach in aggregate. More than anything else, the journey of building a company is really the construction of your own one-of-a-kind playbook to build a team, culture, and product.

Belsky's words do a marvelous job of capturing an important part of why I write in the first place. I believe that while there are best practices entrepreneurs and investors should be aware of there is no single recipe they should follow. By better understanding the views and experiences of a wide range of successful the reader can better discern which of many possible paths will lead to success. In other words, entrepreneurs and investors should learn from past successes, but also be prepared to break new ground.

P.s., This graphic below not only describes Belsky's "sweet spot as an investor," but is an example of how he uses design to convey ideas and create value and the idea of circle of competence. Great design is a wonderful thing, which is something I get to experience most every day. *The Messy Middle* challenges readers to think about design in new ways. How should a book be designed? How should my investment thesis be designed? How should my business be designed?

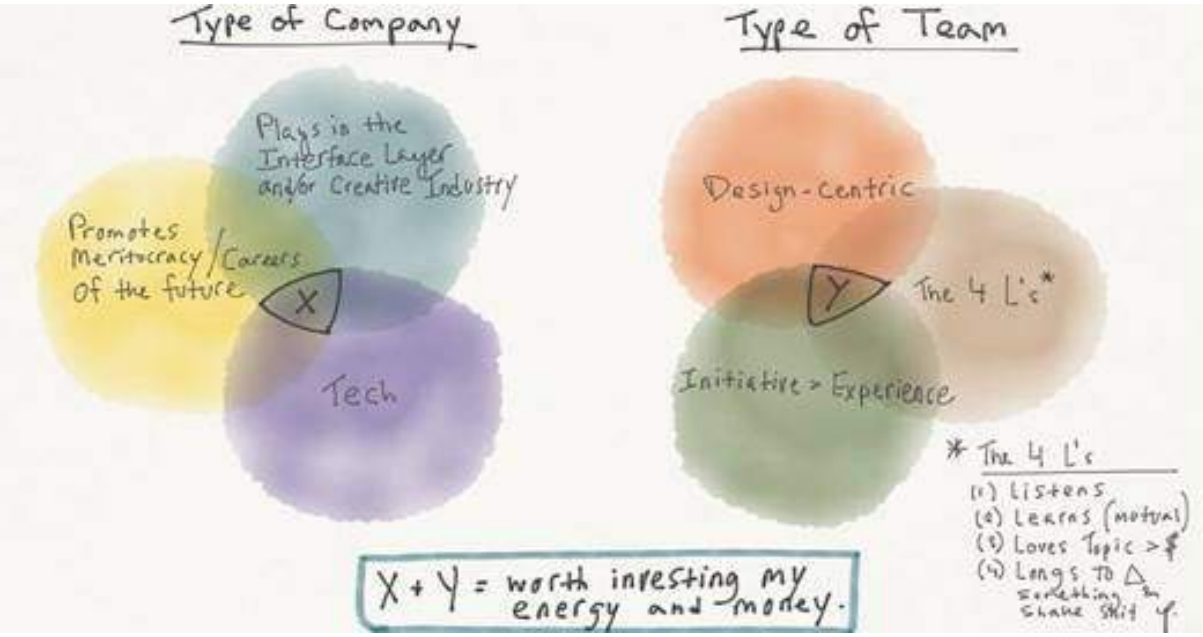

End Notes:

Scott Belsky's Official Site: http://www.scottbelsky.com/

Publishers Note for the book: https://www.penguinrandomhouse.com/books/557330/the-messy-middle-by-scott-belsky/9780735218079/

Medium Post by Belsky: https://medium.com/positiveslope/navigating-the-messy-middle-7ca6fff11966

Scott Belsky's blog: https://medium.com/positiveslope

The Messy Middle post: https://medium.com/positiveslope/crafting-product-in-the-messy-middle-efed809a3f12

Podcasts and videos:

Lessons from Howard Marks' New Book: "Mastering the Market Cycle – Getting the Odds on Your Side"

October 6, 2018

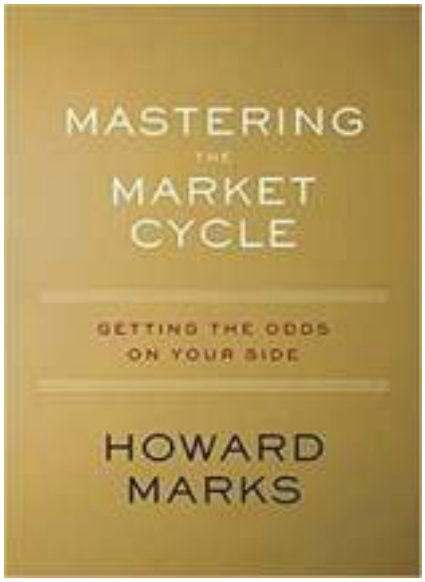

Howard Marks is co-chairman and co-founder of Oaktree Capital Management, an investment manager with more than $120 billion in assets under management. How smart is Marks and how sound is his judgement? Charlie Munger once said: "I probably know Howard Marks as well as I know anybody and he is a very smart man….[For example] you have to believe in the tooth fairy to believe [Bernie Madoff] was having those figures by the methods he claimed to be using. You wouldn't have gotten that one by Howard Marks for two seconds. I mean you wouldn't have finished your sentence before he noticed it couldn't be true. But people don't think like Howard Marks."

Marks said in a recent Barry Ritholtz podcast that he believes: "Recognizing and dealing with risk and understanding where we are in the cycle are really the two keys to success." In a masterful review of M*astering the Market Cycle,* Jason Zweig writes:

Mr. Marks admits his book is a kind of tug of war between his certainty that "we don't know what the future holds" and his belief that "we can identify where the market stands in its cycle." By studying how the economy, the markets and the psychology of investors all move in long cycles of expansion and contraction, Mr. Marks and Oaktree have been better able to cut back risk near market peaks and ramp it up near market bottoms, he says. But Mr. Marks doesn't think you can use that sort of understanding to go all in or all out of markets again and again. He likes the book's subtitle—"Getting the Odds on Your Side"—better than its title, he quips. "Recent performance doesn't tell us anything we can rely on about the short-term future," he says, "but it does tell us something about the longer-term probabilities or tendencies."

It is worth reading what Zweig wrote above is his review of the book at least twice since it represents the core message of *Mastering the Market Cycle.*

Marks explains in his new book that by doing things like reading widely, studying history and paying close attention to the state of the world right now, an investor or business person can be generally aware of where the cycle might be even though they can't predict precisely when it will shift in the short term. By doing this work an investor or business person can increase their margin of safety by "getting the odds on their side." Marks believes that the right way make this analysis is to think probabilistically." Marks suggested in an interview

with Zweig that investors calibrate their exposure to risk using: "a continuum from 0 to 100, he says, with 0 being completely out of the market and 100 being completely in using aggressive techniques like investing with borrowed money." Having said that, Marks is very wary of attempts to quantify probability given risk, uncertainty and ignorance. He writes in his latest memo:

"while they may not know what lies ahead, investors can enhance their likelihood of success if they base their actions on a sense for where the market stands in its cycle….there is no single reliable gauge that one can look to for an indication of whether market participants' behavior at a point in time is prudent or imprudent. All we can do is assemble anecdotal evidence and try to draw the correct inferences from it."

Making this determination requires judgment and there are no recipes for success. An investor has a lot of information about the past and the present, but by definition has zero information about the future. Marks describes this tension by writing in his latest memo: "While the details of market cycles (such as their timing, amplitude and speed of fluctuations) differ from one to the next, as do their particular causes and effects, there are certain themes that prove relevant in cycle after cycle." Given this reality, how does an investor or anyone making a decision in life "get the odds on their side"? One of the most important themes of *Mastering the Market Cycle* is reflected in a quote attributed to Mark Twain: "History doesn't repeat itself, but it often rhymes." Marks believes that if you read widely and pay attention to what is happening in the world by reading and doing the right research is it possible to see patterns that can inform an investor about the current state of the cycle. Charlie Munger is quoted as saying in a blurb for the new book: "There's no better teacher than history in determining the future.' Howard's book tells us how to learn from history . . . and thus get a better idea of what the future holds." The words "better idea" are critically important part of that Munger quote are since the objective is find opportunities that reflect favorable odds since decision making certainty is simply not possible to achieve. What Marks is saying is that having the same degree of conviction about all of opinions is dangerous. In an excellent podcast interview with Tim Ferriss, Marks pointed out that: "Nobody ever says, "My opinion is X, and I think I'm wrong." We all think that our opinions are correct." It is one thing to have an opinion, but quite another to believe that it is necessarily right." Marks believes in the value of humility in relation to the markets as he notes here:

There are two things I would never say when referring to the market: "get out" and "it's time." I'm not that smart, and I'm never that sure. The media like to hear people say "get in" or "get out," but most of the time the correct action is somewhere in between. Investing is not black or white, in or out, risky or safe. The key word is "calibrate." The amount you have invested, your allocation of capital among the various possibilities, and the riskiness of the things you own all should be calibrated along a continuum that runs from aggressive to defensive.

Tim Ferriss just recently posted a fantastic podcast with Mark on this web site in which Howard Marks gives this answer:

One of those most important things is knowing where we stand in the cycle. I don't believe in forecasts. We always say, "We never know where we're going, but we sure as hell ought to know where we are." I can't tell you what's going to happen tomorrow, but I should be able to assess the current environment, and that's the kind of thinking that helped us prepare for

the crisis. I think that the two most important things are where we stand in the cycle and the broad subject of risk, and in fact, where we stand in the cycle is the primary determinant of risk.

What *Getting the Odds on Your Side* means is that we don't know what's going to happen – nobody can tell you – but there are times when the outlook for the future is better and there are times when it's worse, and it's largely determined by where we stand in the cycle. When we are low in the cycle – that is to say, we're coming off a bust – the economy is starting to warm up. Investors are just barely starting to switch from pessimism to optimism and prices are starting to rise. Clearly, the odds are in your favor. The outlook is better. It doesn't mean you're going to make money, but the chances are good.

On the other hand, when the upcycle has gone on for a long time, when valuations are high, when optimism is rampant, when everybody thinks everything's going to get better forever, when the economy has been moving ahead for 10 years and it looks like it's never going to stop, then usually, the enthusiasm has carried the prices to such a high level that the odds are against you. Just knowing that is a huge advantage in investing. You should know that when we're low in the upcycle, that's a time to be aggressive, put a lot of money to work, and buy more aggressive things, and when the cycle has gone on for a long time and we're elevated, that's the time to take some money off the table and behave more cautiously."

The link to this Tim Ferriss interview of Howard Marks is in the End Notes to this blog post as is usual. I highly recommend reading the podcast transcript or listening to it. I did both. Twice.

Why economies cycle between better and worse performance is something Marks has thought about a lot. In *Mastering the Market Cycle* he writes: "The themes that provide warning signals in every boom/bust are the general ones: that excessive optimism is a dangerous thing; that risk aversion is an essential ingredient for the market to be safe; and that overly generous capital markets ultimately lead to unwise financing, and thus to danger for participants." Marks quotes a Warren Buffett on this point: "The less the prudence with which others conduct their affairs, the greater the prudence with which we must conduct our own."

What Marks say about the cause of the great financial crisis is a great illustration of what he writes about in this new book. Starting in 2005 and 2006 Marks and his partner Bruce Karsh started to see deals get done on terms that were a "piece of crap." That investors were buying the offerings anyway made the two partners conclude that something was wrong. Marks admits:

… you can prepare; you can't predict. The thing that caused the bubble to burst was the insubstantiality of mortgage-backed securities, especially subprime. If you read the memos, you won't find a word about it. We didn't predict that. We didn't even know about it. It was occurring in an odd corner of the securities market. Most of us didn't know about it, but it is what brought the house down and we had no idea. But we were prepared because we simply knew that we were on dangerous ground, and that required cautious preparation.

This graphic below appears on page 216 of the new book. It is a graphic representation of why Marks believes that there is value in knowing roughly where the cycle might be even if you can make short term forecasts about where it is going. Marks explains:

“Since market cycles vary from one to the next in terms of amplitude, pace and duration of their fluctuations, they’re not regular enough to enable us to be sure what’ll happen next on the basis of what has gone on before. Thus from a given point in the cycle, the market is capable of moving in any directions, up flat or down. But that does not mean that all tree are equally likely. Where we stand influences the tendencies or probabilities, even if it does not determine future developments with certainty…. Assessing our cycle position doesn’t tell is what will happen next, just what’s more or less likely. But that’s a lot. “

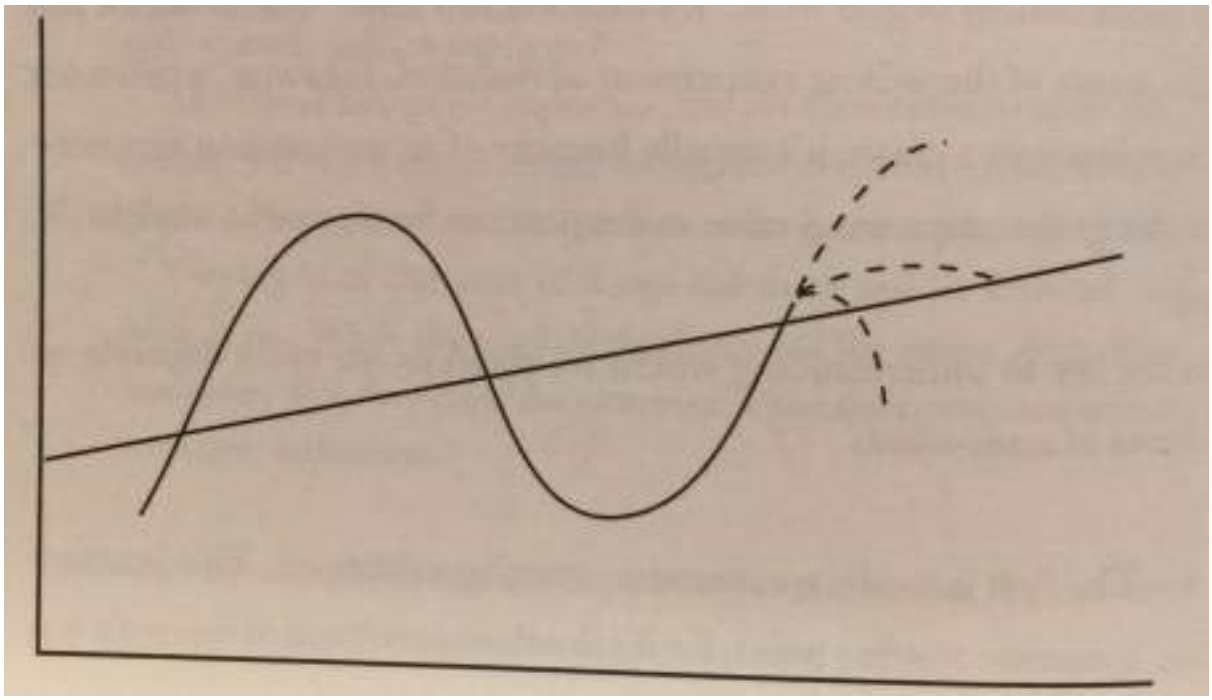

Marks is not the only person who thinks in terms of cycles. Ray Dalio, who writes a very favorable blurb for the new Marks book, believes: “In the business cycle, [a recession] that happens when capacity is constrained and inflation is accelerating and tightness of monetary policy … the long term debt cycle I think is pretty stretched.” One of the cycle charts Dalio uses is:

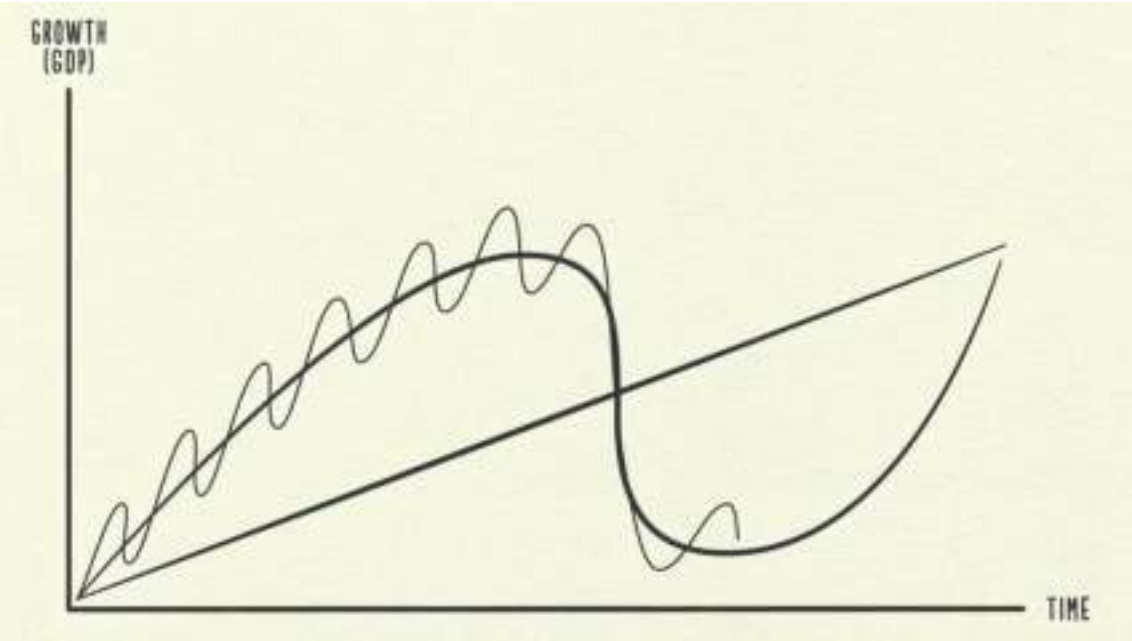

In his first book *The Most Important Thing* (which had sale to date of more than 750,000 copies) Marks wrote:

"Cycles will rise and fall, things will come and go, and our environment will change in ways beyond our control. Thus we must recognize, accept, cope and respond. Isn't that the essence of investing?" "Processes in fields like history and economics involve people, and when people are involved, the results are variable and cyclical. The main reason for this, I think, is that people are emotional and inconsistent, not steady and clinical. Objective factors do play a large part in cycles, of course – factors such as quantitative relationships, world events, environmental changes, technological developments and corporate decisions. But it's the application of psychology to these things that causes investors to overreact or underreact, and thus determines the amplitude of the cyclical fluctuations." "Investor psychology can cause a security to be priced just about anywhere in the short run, regardless of its fundamentals." "In January 2000, Yahoo sold at $237. In April 2001 it was $11. Anyone who argues that the market was right both times has his or her head in the clouds; it has to have been wrong on at least one of those occasions. But that doesn't mean many investors were able to detect and act on the market's error." "A high-quality asset can constitute a good or bad buy, and a low-quality asset can constitute a good or bad buy. The tendency to mistake objective merit for investment opportunity, and the failure to distinguish between good assets and good buys, gets most investors into trouble." "It has been demonstrated time and time again that no asset is so good that it can't become a bad investment if bought at too high a price. And there are few assets so bad that they can't be a good investment when bought cheaply enough."

Marks doesn't believe anyone should have the same degree of conviction about all of their opinions. To combat a tendency to think in binary terms he advocates that people calibrate risk. Marks recommends thinking about the future as a probability distribution. As an aside, Marks has said he first encountered probability distributions at a World's Fair in Flushing New York just as I did at the Seattle World's Fair. In each case there was an exhibit at the fair that dropped balls from the top of a box with regular spaced pegs pegs in it and the resulting cascade produced a bell curve distribution as in the picture below.

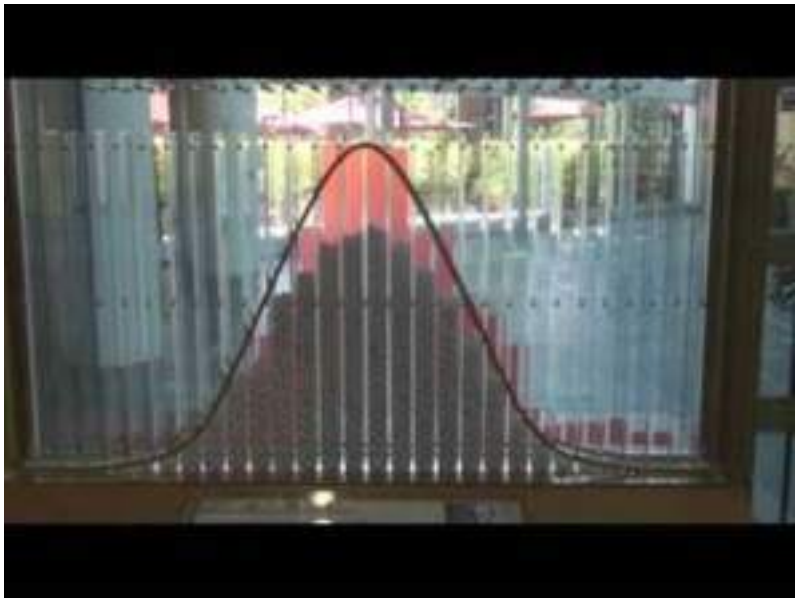

What the display at the fair did not teach us is that often the distribution is not a bell curve and that these cases can be extraordinarily important. People like Mandelbrot and Taleb would arrive later and help us understand their impact. Charlie Munger describes what can go wrong:

What they did was, they said, 'Well, financial outcomes in securities markets must be plottable on a normal curve,' – [a] so-called Gaussian curve, named for probably the greatest mathematician that ever lived. Gauss must be turning over his grave now with what's happening. Of course, the math was very helpful because you could come up with numbers and results that would make people feel confident with what they were doing. There was only one trouble with the math: The assumption was wrong. Financial outcomes in securities markets are not plottable. It is not a law of God that outcomes in securities prices will fall over time on a curve and [follow] reality according to Gauss's curve. Quite the contrary, the tails are way fatter…. People were actually making decisions about how much risk to take, based on the application of correct math, based on an assumption that wasn't true. And by the way, people gradually knew it wasn't true."

Marks tells a great story about one situation when he and his partner were worried about buying distressed asset after the great financial crisis. They eventually decided to keep buying assets and distressed prices since if the prices did not recover nothing really mattered financially anyway. This presented a situation with a huge potential upside and a very small down side from the investments (optionality). On the subject of today's markets, Marks believes that the baseball inning analogy he has used several times is not a good one since there is no set number of innings when it comes to the cycle. His most current statement on valuation is:

"equities are priced high but (other than a few specific groups, such as technology and social media) not extremely high – especially relative to other asset classes – and are unlikely to be the principal source of trouble for the financial markets…. Oaktree's mantra recently has been, and continues to be, "move forward, but with caution." The outlook is not so bad, and asset prices are not so high, that one should be in cash or near-cash. The penalty in terms of likely opportunity cost is just too great to justify being out of the markets."

One of my favorite parts of the Tim Ferriss podcast is when Marks makes a point that has been a consistent theme of this blog: "there are many ways to invest; there are many people who engage in activities that I think can't be done, and there are many people in each one who do very well. I don't say mine is the only way. Venture is an example." Marks agrees with Charlie Munger on the importance of "the discipline of mastering the best that other people have ever figured out. I don't believe in just sitting down and trying to dream it all up yourself. Nobody's that smart." During a lunch with Marks Munger once said: "It's not supposed to be easy. Anyone who finds it easy is stupid. There are many layers to this, and you just have to think well." But it can get easier if you work hard and stay humble by recognizing what you do not know. As Michael Mauboussin likes to say: "the best long-term performers in any probabilistic field — such as investing, sports-team management, and pari-mutuel betting — all emphasize process over outcome."

Speaking of probabilistic bets, Marks believes that the best games for improving decision-making involve uncertainty and ignorance. Annie Duke explains:

Trouble follows when we treat life decisions as if they were chess decisions. Chess contains no hidden information and very little luck. The pieces are all there for both players to see. Pieces can't randomly appear or disappear from the board or get moved from one position to another by chance. No one rolls dice after which, if the roll goes against you, your bishop is taken off the board. If you lose at a game of chess, it must be because there were better moves that you didn't make or didn't see. You can theoretically go back and figure out exactly where you made mistakes.

Marks meets with Munger now and then and I wish he would write a post about Charlie. Marks describes what makes Munger so interesting and effective as an investor as follows:

"The main thing is that he has read more broadly. He's had another 22 years to read further, and he was probably always a broader reader than I was, and so it's his ability to call on these references. In a way, it's kind of silly to think that we can reinvent all the wisdom in the world. It's great to borrow from others, and Charlie does that broadly, and I try to do it, but he just knows more."

Marks has over 100 memos on his web site. And he says: "The price is right, since it is free." When asked by Barry Ritholtz why he writes, Marks responded:

"For ten years I never had a response [to my memos]. Not only did nobody say they thought they were good, nobody even said that they got it. The interesting question is: What kept me going? I have no idea. The answer I think is that I was writing for myself. Number one, it is creative and I enjoy the writing process. Number two, I thought that the topics were interesting. Number three, writing helps you tighten up your thinking."

My motivation in writing over a million words on this 25IQ blog is the same. I would be writing even if no one was reading.

End Notes:

Mastering the Market Cycle: https://www.amazon.com/Mastering-Market-Cycle-Getting-Odds/dp/1328479250

The Most Important Thing: https://www.amazon.com/Most-Important-Thing-Illuminated-Thoughtful/dp/0231162847/ref=pd_lpo_sbs_14_img_2?_encoding=UTF8&psc=1&refRID=SG7YP40QCQ398D52DR2G

Memos from Howard Marks: https://www.oaktreecapital.com/insights/howard-marks-memos

Zweig Article on Marks: https://www.wsj.com/articles/you-can-time-the-market-just-not-all-the-time-1536922831

Tim Ferriss Podcast: https://tim.blog/2018/09/25/howard-marks/

Ritholtz podcasts:

https://www.bloomberg.com/news/audio/2018-10-04/howard-marks-discusses-the-interest-rates-machine-audio

https://ritholtz.com/2017/02/howard-marks-books/

https://ritholtz.com/2017/02/mib-howard-marks-matters/

Dalio on cycles: : https://www.marketplace.org/2018/09/20/world/dalio-debt-cycle and https://www.youtube.com/watch?v=PHe0bXAIuk0

My blog post: A Dozen Things I've Learned About Investing from Howard Marks (July 30, 2013) https://25iq.com/2013/07/30/a-dozen-things-ive-learned-about-investing-from-howard-marks/

My blog post: A Dozen Ways to Apply the Lessons Taught in the Book "The Most Important Thing" (September 17, 2016). https://25iq.com/2016/09/17/a-dozen-ways-to-apply-the-lessons-taught-in-the-book-the-most-important-thing-by-howard-marks/

Lessons from Annie Duke (Author of "Thinking in Bets: Making Smarter Decisions When You Don't Have All the Facts")

October 13, 2018

Annie Duke received an NSF Fellowship to attend graduate school at the University of Pennsylvania to study cognitive psychology. Because she missed the job market one year due to a stomach ailment that put her in the hospital, she decided to try to make some money by playing poker until the next academic hiring season. This detour resulted in her acquiring 20 years of experience in the real-world behavioral laboratory known as professional poker. In 2004, she won her first World Series of Poker bracelet and that same year she won the $2 million winner-take-all WSOP Tournament of Champions. In 2010 she won the NBC National Heads-Up Poker Championship beating her mentor Erik Seidel in the final event.

She is the author of *Thinking in Bets: Making Smarter Decisions When You Don't Have All the Facts.*

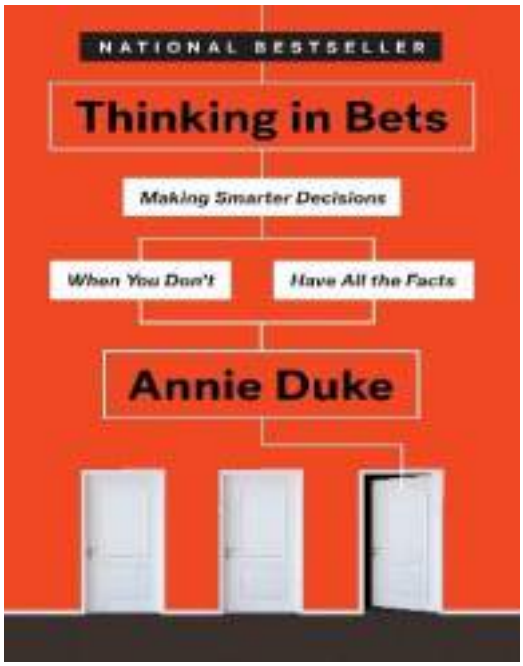

This is my 300th blog post. It is part of a streak of one blog post every weekend for that many weeks in a row. That continuous streak started in January of 2013, which seems like a long time ago. This post will be a little bit different in that I will put some links in body of the post instead of just in the End Notes. This is tricky since people may follow these links and sometimes to do not return to read the entire post. I am trusting that you will read the entire post before following the links this time.

Annie Duke is very articulate which allows me to spend more time than usual in this post just letting her make points. There is less of my usual commentary and more pointers to other material to keep the post from being too long.

1. **"There are exactly two things that determine how our lives turn out: the quality of our decisions and luck." "There are elements of luck and skill in virtually any outcome." "We can't control luck." "The world is a pretty random place." "If making the same decision again would predictably result in the same outcome, or if changing the decision would predictably result in a different outcome, then the outcome following that decision was due to skill. If, however, an outcome occurs because of things that we can't control (like the actions of others, the weather, or our genes), the result would be due to luck. If our decisions didn't have much impact on the way things turned out, then luck would be the main influence."**

No one has done more thinking and writing the impact of luck on making decisions than Michael Mauboussin. He writes that luck has three core elements: 1) it operates on an individual or an organizational basis; 2) it can be positive or negative; and 3) it is reasonable to expect that a different outcome could have occurred. Mauboussin points out: "There's a quick and easy way to test whether an activity involves skill: ask whether you can lose on purpose. In games of skill, it's clear that you can lose intentionally, but when playing roulette

or the lottery you can't lose on purpose." My blog post about Mauboussin's ideas on luck is here.

2. **"Some things are unknown or unknowable." "The influence of luck makes it impossible to predict exactly how things will turn out, and all the hidden information makes it even worse." "Making better decisions starts with understanding this: uncertainty can work a lot of mischief."**

My blog post on Richard Zeckhauser is about the impact of the "unknown and unknowable" on making decisions. Zeckhauser believes: "Uncertainty, not risk, is the difficulty regularly before us. That is, we can identify the states of the world, but not their probabilities. There is no way that one can sensibly assign probabilities to the unknown states of the world."

3. **"What good poker players and good decision-makers have in common is their comfort with the world being an uncertain and unpredictable place. They understand that they can almost never know exactly how something will turn out. They embrace that uncertainty and, instead of focusing on being sure, they try to figure out how unsure they are, making their best guess at the chances that different outcomes will occur. The accuracy of those guesses will depend on how much information they have and how experienced they are at making such guesses."**

My 299th blog post on Howard Marks is about thinking probabilistically when making decisions. I doubt that is a topic I have discussed more in course of writing this blog that the importance of thinking in terms of probability in making decisions. Marks says: "The future does not exist. It's only a range of possibilities." "The expected value from any activity is the product of the gains available from doing it right multiplied by the probability of doing it right, minus the potential cost of failing in the attempt multiplied by the probability of failing."

4. **"The book title 'Thinking in Bets' really comes from the person who wins a bet is not the one who affirms their priors, it's the person who has the most accurate model of the world." "Every decision commits us to some course of action that, by definition, eliminates acting on other alternatives. Not placing a bet on something is, itself, a bet." "When we think probabilistically, we are less likely to use adverse results alone as proof that we made a decision error, because we recognize the possibility that the decision might have been good but luck and/or incomplete information (and a sample size of one) intervened." "By treating decisions as bets, poker players explicitly recognize that they are deciding on alternative futures, each with benefits and risks. They also recognize there are no simple answers." "A decision about a stock (buy, don't buy, sell, hold, not to mention esoteric investment options) involves a choice about the best use of financial resources. Incomplete information and factors outside of our control make all our investment choices uncertain. We evaluate what we can, figure out what we think will maximize our investment money, and execute. Deciding not to invest or not to sell a stock, likewise, is a bet."**

Duke argues in her book that framing decisions as "bets" forces a decision maker to think probabilistically. She believes this framing is helpful in reducing the risk that dysfunctional heuristics will interfere with a sound decision making process. I have written often on this

topic. Most blog posts on Daniel Kahneman and Dan Airely are just two examples that come to mind quickly, as does my post on Charlie Munger's famous talk on human misjudgment.

5. **"Improving decision quality is about increasing our chances of good outcomes, not guaranteeing them." "Admitting that we don't know has an undeservedly bad reputation. Of course, we want to encourage acquiring knowledge, but the first step is understanding what we don't know." "Once you acknowledge uncertainty it should make you information hungry. We can't control luck. We can control how much information we have." "Approaching decisions in a probabilistic way, getting help from people who offer different viewpoints, exercises to get ourselves to see decisions from other perspectives, learning the right lessons from outcomes — these are all habits of mind that will improve our decision quality." "Building the most accurate model of the world which requires that you view your beliefs is in progress and once you view your beliefs is in progress, you can't really be right or wrong anymore. They're just provisional until the next upgrade."**

"Circle of competence" is a very important idea. The best and easiest way to lower a failure rate is to avoid investing in situations which you do not understand or do not have experience. The goal of an investor who follows a circle of competence approach should be to consistently avoid stupidity. It's that simple. In my blog post on Warren Buffett I quote him as saying: "We are limited, of course, to businesses whose economic prospects we can evaluate. And that's a serious limitation." The most interesting investors are information hungry and relentlessly curious.

6. **"Instead of seeking opinions that confirm what you already believe, seek out those with which you disagree. Listen with an open mind" "What makes a decision great is not that it has a great outcome." "The person who wins a bet is not the one who affirms their priors." "The goal is to be accurate rather than be right about your prior views." "A great decision is the result of a good process, and that process must include an attempt to accurately represent our own state of knowledge. That state of knowledge, in turn, is some variation of 'I'm not sure.'" "The only real failure is to learn from it." "The worst player at the table has something to teach you."**

Everyone can benefit from having wise colleagues who can help them make better decisions. Charlie Munger has said on this topic:

Everybody engaged in complicated work needs colleagues. Just the discipline of having to put your thoughts in order with somebody else is a very useful thing. We all benefit from the perspective of other people since we have lousy perspective on ourselves.

Even Einstein," says Charlie Munger, "wouldn't have been successful if there weren't other people he didn't talk to all the time. Total isolation does not work. You need interaction, putting your own thoughts into expression; you learn things just from doing it.

The best advice I ever got from Warren was to stop practicing law," says Munger. "He thought it was all right as a hobby, but as a business it was pretty stupid.

As any semi-regular reader of this blog knows, I have written a lot on Charlie Munger (more than 20 total posts just on him are linked to below). One of these posts on Munger is about how he learns from failure. His view can perhaps best be summarized in this way: "I like people admitting they were complete stupid horses' asses. I know I'll perform better if I rub my nose in my mistakes. This is a wonderful trick to learn." Why have I written so many Charlie Munger posts and only one on Warren Buffett? It was Munger's ideas that caused me to sell much of my technology stocks before the Internet bubble collapsed. His influence on the most important financial decision in my life makes me feel grateful. It is also the primary reason my I wrote my book on Munger.

7. **"There's this word that we use in poker: 'resulting.' It's a really important word. You can think about it as creating too tight a relationship between the quality of the outcome and the quality of the decision. You can't use outcome quality as a perfect signal of decision quality, not with a small sample size anyway. I mean, certainly, if someone has gotten in 15 car accidents in the last year, I can certainly work backward from the outcome quality to their decision quality. But one accident doesn't tell me much." "You can improve the probability that you will have good outcomes by improving your decision-making, but that is not making your own luck. That is increasing the chances that you have a good outcome. You can't guarantee that things will turn out well and even though you might have made decisions that increased the probability that you have a good outcome, you cannot guarantee it. You cannot make luck go your way. It's this idea of incrementally increasing the chances that things go well for you and that hopefully, those things play out over time." "You can improve the probability that you will have good outcomes by improving your decision-making, but that is not making your own luck. That is increasing the chances that you have a good outcome. You can't guarantee that things will turn out well and even though you might have made decisions that increased the probability that you have a good outcome, you cannot guarantee it. You cannot make luck go your way. It's this idea of incrementally increasing the chances that things go well for you and that hopefully, those things play out over time."**

Luck has an unappreciated impact on people's lives since it is so easy to rationalize success. Munger has said about luck: "The people who get the outcomes that seem extraordinary are the people who have discipline, and intelligence and good virtue plus a hell of a lot of luck." "I did not intend to get rich. I wanted to get independent. I just overshot."

8. **"We are wired to protect our beliefs even when our goal is to truthseek." "There's a difference between sort of being humble in the face of the game that you're playing and humble in the face of the opponents that you're facing." "We're all arguing our case. That's the thing. We all have beliefs that we think are true or false, right? We all make predictions about the future and we are really good at making a case for our stuff. And in fact, we kind of know that because we can see when other people are like clearly just like arguing their side and leaving data out and spinning the facts and putting a particular frame on it. So, here's kind of the problem when you're really statistically adapt to your very mentally agile is that we all want our beliefs to be true. We all want our predictions to be right. And so, we will argue in order to make our case. We're kind of our own best PR agent and the smarter you are, the better you are at the spin." "Hindsight bias is the tendency, after an outcome is known, to see the**

outcome as having been inevitable. When we say, 'I should have known that would happen,' or, 'I should have seen it coming,' we are succumbing to hindsight bias. Those beliefs develop from an overly tight connection between outcomes and decisions. That is typical of how we evaluate our past decisions." "I know all this stuff [about dysfunctional heuristics], but I still do it all the time."

In my blog post on poker I included this story I first heard from Mauboussin which illustrates what Duke is talking about just above:

"[A baseball executive] was in Las Vegas sitting next to a guy who has got a 17. So the dealer is asking for hits and everybody knows the standard in blackjack is that you sit on a 17. The guy asked for a hit. The dealer flips over 4, makes the man's hand, right, and the dealer sort of smiles and says, "Nice hit, sir?" Well, you're thinking nice hit if you're the casino, because if that guy does that a hundred times, obviously the casino is going to take it the bulk of the time. But in that one particular instance: bad process, good outcome. If the process is the key thing that you focus on, and if you do it properly, over time the outcomes will ultimately take care of themselves. In the short run, however, randomness just takes over, and even a good process may lead to bad outcomes. And if that's the case: You pick yourself up. You dust yourself off. You make sure you have capital to trade the next day, and you go back at it."

One person who is a model for thinking for yourself is Richard Feynman. My post on him is here. He said once: "No idea is true just because someone says so. Test ideas by the evidence gained from observation and experiment! If a favorite idea fails a well-designed test, it's wrong!"

9. **"The problem with using chess as a model for the kinds of decisions that we make in life is that chess is a very constrained problem, meaning there just isn't a lot of uncertainty in it. There is a very little bit of luck and there's no hidden information in the sense that you can see all the pieces sitting right in front of you, so I have access to your whole position. Now, there's certain things I don't have access to, like I don't know what openings you've recently been studying, for example. As far as the pieces as they lay, I can see all of those. In terms of the luck element, there's nobody rolling the dice and then if it comes up nine, I get to take your bishop off the board, so there's almost no luck in that game. What that means is that it's a very different problem than most of the kinds of problems that we have to tackle in life. Life is much more like poker where there is lots of hidden information, the cards are face-down and the relationship between your decision quality and the way that an outcome might turn out on a single try is actually quite loose."**

I have written often on this blog that some of the greatest investors like to play games. For example, Howard Marks likes backgammon. Buffett and Munger play bridge. Charlie Munger has said about one of his other favorite games:

"The teaching value of poker demonstrates that not all effective teaching occurs on a standard academic path." "Part of what you must learn is how to handle mistakes and new facts that change the odds. Life, in part, is like a poker game, wherein you have to learn to quit sometimes when holding a much-loved hand." "Playing poker in the Army and as a young

lawyer honed my business skills. What you have to learn is to fold early when the odds are against you, or if you have a big edge, back it heavily because you don't get a big edge often. Opportunity comes, but it doesn't come often, so seize it when it does come." "And the wise ones bet heavily when the world offers them that opportunity. They bet big when they have the odds. And the rest of the time they don't. It's just that simple."

10. **"Retirement saving is a discounting problem: People will take a discount to get something now instead of something more valuable in future. They will take $1 today instead of getting $2 down the line. People have to imagine themselves at the end of their careers, rather than the beginning."**

There are few topics that worry me more than this one. People have ingrained dysfunctional tendencies that may result in huge numbers of people who are elderly and poor since they can't overcome this discounting problem. In many societies people try to solve this old age problem by having a lot of children who might take care of them when they are older and that creates even more negative societal spillovers.

What's the nature of this problem? A new paper I provide a link to in the End Notes describes the issues involved:

"exponential-growth bias (EGB), is a perceptual bias whereby people underestimate exponential growth processes due to neglect of compound interest. This bias distorts individuals' perceptions of their lifetime budget constraint: a person with EGB will underestimate the returns to saving and the costs of holding debt.

present bias (PB), is the tendency to overweight present consumption relative to future consumption in a dynamically-inconsistent way. This bias is qualitatively different from EGB in that it modifies the objective function rather than the perceived budget constraint, increasing the importance of immediate consumption at each point in time."

On deferred gratification generally, Charlie Munger says it best:

"Great investing requires a lot of delayed gratification. It's waiting that helps you as an investor, and a lot of people just can't stand to wait. If you didn't get the deferred-gratification gene, you've got to work very hard to overcome that."

"There are a lot of things where the only way to win is to work a long time."

"I talked about patience. I have read Barron's for fifty years. In fifty years I found one investment opportunity in Barron's, out of which I made about $80 million with almost no risk. I took the $80 million and gave it to Li Lu, who turned it into $400 or $500 million. So, I have made $400 or $500 million from reading Barron's for fifty years and finding one idea. Now, that doesn't help you very much, does it? Well, I'm sorry, but that's the way it really happened."

"I lived all my life with people who were into deferred gratification. In fact, most of them will never have any fun. They just defer gratification all the way to end, that's what we do. And it does cause you to get rich. So we're going to have a lot of rich dead people."

11. **"Venture capitalists spread their bets. They know that any single investment is likely to fail, but the basket of investments will likely win." "You still need to be selective. Just doing stuff isn't enough. You can't just throw spaghetti against the wall. You need to think about each strand and make sure you are getting a payoff for the strand." "VCs are vetting each of their bets to make sure the payoff is going to be big enough given what they know. That's similar to what a poker player does."**

I enjoy writing about venture capital. My book *A Dozen Lessons for Entrepreneurs* reflects that interest. Part of my interest in venture capital comes from the time I spent learning from the Benchmark partners during the Internet bubble when I spent a lot of time in California. I learned more about business and investing during that period than any other time in my life. Fortunately, my understanding of the ideas of Charlie Munger meant that I was personally financially prepared for the collapse of the Internet bubble. But when it happened it still broke my heart since I was forced to turn my attention away from venture capital investing to learning other lessons about managing businesses through a severe downswing in the cycle.

12. **"If you want to get better at something try to teach it."**

I'm thinking about what I will do now that I have reached 300 blog posts. I appreciate the fact that you have read this far in this post, but understand that not many people do so. In my previous blog post, I quoted Howard Marks as saying that he writes primarily for himself. I would also write even if no one else read it. If you have something you have learned, my suggestion is that you try to find ways to teach it. I think you will enjoy it and you will be doing something that makes the world a better place. Munger advises:

"To make teaching endurable, it has to have enough wiseassery in it. And we do." "We've done a lot of preaching [about investing] to not much effect." "To the extent you're working on it, you're on the side of angels, but lots of luck."

Onward.

P.s.,

How thinking like Charlie Munger may have saved my life

Charlie Munger on The Psychology of Human Misjudgment

Why does Charlie Munger not invest in high-technology businesses?

What are Charlie Munger's views on giving back to society?

What does Charlie Munger mean when he says that something is a lollapalooza?

Will there ever be another Charlie Munger?

Charlie Munger AMA: How does Charlie Munger recommend dealing with adversity?

A Dozen Things I've Learned from Charlie Munger about Ethics

A Dozen Ways Charlie Munger Thinks like Philip Tetlock Suggests in his New Book Superforecasting

A Dozen Things I've Learned from Charlie Munger (Distilled to less than 500 Words)

Charlie Munger on the Importance of Worldly Wisdom and Consistently not being Stupid

Charlie Munger on Investment Concentration versus Diversification

Charlie Munger on Margin of Safety

Charlie Munger on Management with Talent and Integrity

Charlie Munger on "Circle of Competence"

Charlie Munger on Moats

Charlie Munger on Mistakes

A Dozen Things I've Learned from Charlie Munger about Risk

A Dozen Things Charlie Munger has said about Reading

A Dozen Things I've Learned from Charlie Munger about Capital Allocation

A Dozen Things I've Learned from Charlie Munger About Benjamin Graham's Value Investing System

A Dozen Things I've Learned from Charlie Munger about Mental Models and Worldly Wisdom

End Notes:

Thinking in Bets: https://www.amazon.com/Thinking-Bets-Making-Smarter-Decisions/dp/0735216355/ref=sr_1_1?ie=UTF8&qid=1538765600&sr=8-1&keywords=thinking+in+bets

Execution is Everything

October 28, 2018

I have wanted to write a review of John Doerr's book *Execution is Everything* since it was first published five months ago. Some of you are probably saying right now: "That's not the name of his book!" This is true, but I decided to write this post as if the book had another title to attract a different audience that might not otherwise read the book. Many people who would benefit most from reading this book are the least likely to read it because the title may lead them to believe it is a book for engineers. Doerr has said a few times that my alternative

title is the theme of the book, so I have not strayed too far from what he wrote and am instead trying the present the ideas from a different perspective. I do give readers the actual name of the book and a link at the end of the post.

In case you have forgotten since I took a week off, Doerr's statements and writing are in bold text as is usual on this blog. My thoughts and commentary follow his quotations.

1. "Andy Grove, one of the the greatest managers of his, or any other, era told me something that I've never forgotten, 'John, it almost doesn't matter what you know. It's execution that's everything.'"

The idea that execution is what matters most has long been rallying cry for people who love to create important outcomes. Notice that in this sentence I used the words "matters most" which Doerr says sometimes in addition to execution is everything, which clarifies that execution is not the only thing. Doerr's approach when saying execution is everything may be a bit like Howard Marks writing a book entitled *The Most Important Thing* which actually discusses a number of important things.

Placing the right focus on execution and actually executing well are easy to say, but hard to do in a world that is changing faster than it ever has before. In the book, Doerr quotes a business philosopher named Dov Seidman:

"'In the past employees just needed to do the next thing right.' In other words, to follow their orders. 'And culture didn't matter so much. But in today's world, we want people to do the next right thing. And a rule book is not going to solve that problem. You need your culture to make thousands of decisions the right way."

These "do the next right thing" tasks are very different than traditional tasks since they require that a person or organization successfully adapt to change rather than just repeat a known process. The world is not only changing more quickly than it ever has right now but the pace of change is increasing. For this reason alone, creating a more scalable system for execution has never been more important.

2. "Andy invented a scalable system for execution."

Doerr's book focuses on a number of important questions, including:

What is the best way to create a modern scalable goal setting system?

What is the best way to avoid creating a system with so much structure and process that it gets in the way of desired objectives?

How does an organization or individual find the right balance between process and individual employee autonomy?

The nature of the challenges and opportunities that systems can create was beautifully and humorously described by Rear Admiral Grace Hopper, who famously once said: "Life was simple before World War II. After that, we had systems." One of the most effective ways to learn about systems is to look at many examples of systems in operation. Among the most interesting and relevant systems to study are businesses. Of course, there are an endless

number of permutations of this type of system and that diversity is what makes business an endless source of fun for people like me.

In creating a system Doerr quotes Jeff Bezos on the need to avoid what he calls the "institutional no." Bezos puts it this way:

"I work hard at helping to maintain the culture. A culture of high standards of operational excellence, of inventiveness, of willingness to fail, willingness to make bold experiments. I'm the counterbalance to the institutional "no" who can say "yes." I'm not going to be here forever. Many of the traits that make Amazon unusual are now deeply ingrained in the culture. In fact, if I wanted to change them, I couldn't. The cultures are self-reinforcing, and that's a good thing."

The most effective businesses fight the tendency of organizations to become more conservative with time. Does a company tolerate the failure of intelligent experiments? Does the business have an intelligent risk taking culture? Bezos likes to say that "every day should be day one" at Amazon. One of the most powerful ways for an organization to stay vital and adapt is to take advantage of and respond to different kinds of feedback. The impact of feedback has increased as the world has become more digital. Both the greatest opportunity and challenge faced by businesses and investors today is dealing with these increasingly powerful positive and negative feedback loops. An *ad hoc* approach is unlikely to be successful.

3. "Andy Grove created a system for goal setting that was deceptively simple." "Objectives are the what. Key results are the how. If I achieve those hows, those key results, I will provably get to the objective." Objectives are significant, concrete, action oriented, and (ideally) inspirational." "They are typically longer lived. They're bold." "When properly designed and deployed, they're a vaccine against fuzzy thinking—and fuzzy execution." "The key results are aggressive, but always measurable, time-bound, and limited in number." "They're aggressive but realistic, but most of all, they're measurable and verifiable." "It's not a key result unless it has a number." "How do we set meaningful audacious goals?"

Doerr describes the OKR system as: "a collaborative goal-setting protocol for companies, teams, and individuals." In order to explain OKR concepts in a way that is more understandable, Doerr selected a different name than Grove used to describe his system. I am not going to tell you that name since it is confusing. In creating his own terminology Doerr wanted readers to break free of old mental models so they can look at the system in a fresh way. Doerr borrowed the ideas of "the master" Andy Grove and renamed them "Objectives and key results" or "OKR". The Objective establishes a goal to be achieved during a pre-specified period of time (usually a quarter). The key results will determine whether the Objective has been met. The key results should be achievable by the individual or team with as few dependencies on outsiders as possible and it should be more like a sprint than a marathon. An Objective should be hard but not impossible. Key results will let a person know if their key result has been achieved. Metrics that can be part of a key result might include revenue or cash flow growth, greater customer engagement or higher customer retention.

4. "My football analogy is the objective is the goal post and the key results are the 10 yard markers as we march our way to our objective. If you got the right key results and you achieve them you'll achieve the objective for sure. But there's a lot more going on to

have a team be operationally excellent or win a game, there's the huddles, there's the substitutions, there's the plays that you're calling in the meantime. These are the conversations, feedback, and recognition (CFR) for OKRs that are what you do to bring to life all these goals. Then if you can take those two systems and infuse them with values that people remember that they've lived, that they believe in, you can go to the moon." OKRs are transparent vessels that describe the 'what and the "how.' The values we pour into those vessels are the answers for the question: "why it is we do the work we do." And our mission and values statements are the declaration, in no uncertain terms, of what those are."

The OKR system helps guide users to identify and achieve: (1) what they want to accomplish (objectives) ; and (2) how they are going to get it done (key results). If a key result is not reflected in at least one number it is not a key result since quantification is an essential element. Doerr believes that people crave the regular conversations, feedback and recognition especially when combined with an environment in which they have the autonomy that exists when micromanagement is absent. Doerr says the human resources part of his OKR system is often called: "continuous performance management." CPM is related to but separate from OKR.

5. "One of the powerful things about this system is that at any level of an organization you're only going to have two or three, or maybe four or five, objectives. And three or so key results. So it requires a kind of rigor and discipline about saying, these are the most important things that are going on in an organization." "OKRs don't govern your day-to-day behavior. I'd say this is more of a weekly check-in. But it's not set the goals and then stuff them away in a drawer and ignore them." "By going through the process of brainstorming and writing goals, we are assured that the major goals will surface. That's good discipline."

The goal setting process has a series of flows that are illustrated in this chart.

OKR CYCLE

Let's assume you are setting OKRs at the company, team, and contributor levels.
(Larger companies may have additional levels.)

4-6 weeks before quarter	**Brainstorm Annual and Q1 OKRs for Company** Senior leaders start brainstorming top-line company OKRs. If you're setting OKRs for Q1, this is also the time to set your annual plan, which can help guide the direction of company.
2 weeks before quarter	**Communicate Company-wide OKRs for Upcoming Year and Q1** Finalize company OKRs and communicate them to everyone.
Start of quarter	**Communicate Team Q1 OKRs** Based on the company's OKRs, teams develop their own OKRs and share them at their meetings.
1 week after start of quarter	**Share Employee Q1 OKRs** One week after team OKRs are communicated, contributors share their own OKRs. This may require negotiation between contributors and their managers, typically in one-on-one settings.
Throughout quarter	**Employees Track Progress and Check in** Throughout the quarter, employees measure and share their progress, checking in regularly with their managers. Periodically through the quarter, contributors assess how likely they are to fully achieve their OKRs. If attainment appears unlikely, they may need to recalibrate.
Near end of quarter	**Employees Reflect and Score Q1 OKRs** Toward the end of the quarter, contributors score their OKRs, perform a self assessment, and reflect on what they have accomplished.

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That a business has aspirational goals does not mean that it does not also have committed goals. With committed goals only 100% realization is acceptable. With other aspirational goals, a trying to reach mars can be successful if the business only gets to the moon. Aspirational goals should be a significant stretch but should still be achievable.

6. "OKRs are not a silver bullet. They cannot substitute for sound judgment, strong leadership, or a creative workplace culture. But if those fundamentals are in place, OKRs can guide you to the mountaintop."

Doerr says that every organization must adapt the OKR system to fit their unique culture and mission. He also says that good business judgment should trump the OKR system if there is a conflict. The rules of the OKR system are not meant to be carved in stone. However, a commitment from the very top of an organization is required for the OKR system to be successful. Both OKRs and culture can help avid the need for micromanagement and yet provide the continuous feedback that most people desire. Motivational systems become intrinsic rather that extrinsically riven since the individual contributors drive the creation of their key requirements. Doerr says that a well-crafted system can avoid the types of problems that arose when the wrong goals create harm to the business and customers (e.g., indiscriminate cross-selling at Wells Fargo).

7. "[The OKR system] is the polar opposite of the conventional management by objectives (MBO) systems, which tend to be top down, hierarchical, annual, and linked to compensation." "Contributors are most engaged when they can actually see how their work contributes to the company's success. Quarter to quarter, day to day, they look for tangible measures of their achievement. Extrinsic rewards—the year-end bonus check—merely validate what they already know. OKRs speak to something more powerful, the intrinsic value of the work itself." "The first thing wrong with the annual review is that it's annual. The second thing wrong with it is it's almost always backward looking. The third thing is that it takes a lot of time to dredge up the facts of that review. Usually you're combing through emails or other reports. The fourth problem with them is all the data shows they're tremendous de-motivators. The number of people who quit or move on after an annual report — good or bad — is unreasonably high. Another problem with them is they take so much time. On almost every count, they fail. But some companies aren't willing to ditch them. So they combine an annual review with a lighter touch and more frequent one-on-one style feedback." "If you pay bonuses on the sum total of all your objectives and key results, it will inevitably lead to sandbagging while setting the goals. You won't get the risk-taking you want in the culture."

That a OKR system itself should not be used for compensation or promotion purposes will be a radical idea in some organizations. Doerr says that many business will also find the fact that the system calling for people to set their own key results and "grade themselves" may meet resistance. Not linking the OKR systems to compensation is even more heretical says Doerr. He believes that only by creating OKRs that enable people to create their own key results and to sometimes fail can organizations create the freedom required most effectively benefit from innovation and others forms of growth. This does not mean that a company can avoid having sales quotas. Again, OKR is not a system that should be used for compensation or promotions. This decoupling of OKRs from compensation enables the system of the organization to be agile, enable innovation and promote transparency and working across teams. Doerr points out that many business have decided to abandon the annual performance review in favor of a more frequent feedback system. When should compensation and promotions be a part of the process? Many people believe the right cadence for a compensation review is once or twice a year. Obviously, this must be done in connection with a budgeting and planning process which is a potential topic for another blog post.

8. "OKRs are not the sum of all tasks. It's not everything you're trying to do. It's the few things that really matter." "One of the powerful things about this system is that at any level of an organization you're only going to have two or three, or maybe four or five, objectives. And three or so key results. So it requires a kind of rigor and discipline

about saying, these are the most important things that are going on in an organization. It's not the sum total of tasks. It's not the work order for the enterprise. It's whatever we as a team agree deserves special attention, and it really matters. At Intel, Andy Grove had us post our personal OKRs outside our carrels, so everyone could see them." "We use OKRs to plan what people are going to produce, track their progress vs. plan, and coordinate priorities and milestones between people and teams. We also use OKRs to help people stay focused on the most important goals, and help them avoid being distracted by urgent but less important goals."

Michael Porter once said: "Strategy is about making choices, trade-offs; it's about deliberately choosing to be different. The essence of strategy is choosing what not to do." Doerr is saying that execution is also about making choices, trade-offs and choosing what not to do. There are only so many objectives and results that a person can focus on at any given time. Focus by definition means deciding not to spend as much time on some things as others. So much of life involves making trade offs that people who acquire skills in making them live better lives a a result. Charlie Munger is a strong believer in making decisions based on opportunity cost. He says about his long time business partner: "Warren is scanning the world trying to get his opportunity cost as high as he can so that his individual decisions are better." "Opportunity cost is a huge filter in life. If you've got two suitors who are really eager to have you and one is way the hell better than the other, you do not have to spend much time with the other. And that's the way we filter out opportunities."

9. "Focus, alignment, commitment, tracking and stretching, I love that [acronym] because it spells FACTS. And I can remember it."

Each of these ideas below is what Doerr calls a Superpower:

Superpower #1—Focus: "**We must realize—and act on the realization—that if we try to focus on everything, we focus on nothing."**

Superpower #2—Alignment: "**Transparency creates alignment." "With OKR transparency, everyone's goals—from the CEO down—are openly shared. Individuals link their objectives to the company's game plan, identify cross-dependencies, and coordinate with other teams. By connecting each contributor to the organization's success, top-down alignment brings meaning to work. By deepening people's sense of ownership, bottom-up OKRs foster engagement and innovation."**

Superpower #3—Tracking: **"OKRs are driven by data. They are animated by periodic check-ins, objective grading, and continuous reassessment—all in a spirit of no-judgment accountability. An endangered key result triggers action to get it back on track, or to revise or replace it if warranted."**

Superpower #4 — Commitment: the creation of transparent goals crates a social contract that takes the form of commitment. **"In implementing OKRs, leaders must publicly commit to their objectives and stay steadfast"**

Superpower #5— The goal with this superpower is to create a culture that takes intelligent risks. **"Stretch for Amazing." "OKRs motivate us to excel by doing more than we'd thought possible. By testing our limits and affording the freedom to fail, they release**

our most creative, ambitious selves." "The hairier the mission, the more important your OKRs."

Doerr's book has loads of great bullet point style resources and checklists that are in the back of the book. My repeating these bullet points in summary form in this review isn't useful. But I can say that you will benefit from reading them. The objective of creating an OKR system is to:

a) surface an organization's most important work;
b) focus effort and foster coordination;
c) link objectives across departments to unify and strengthen the entire company;
d) enhance workplace satisfaction; and
e) boost performance and retention.

10. "At smaller start-ups, where people absolutely need to be pulling in the same direction, OKRs are a survival tool. In the tech sector, in particular, young companies must grow quickly to get funding before their capital runs dry. Structured goals give backers a yardstick for success: We're going to build this product, and we've proven the market by talking to twenty-five customers, and here's how much they're willing to pay. At medium-size, rapidly scaling organizations, OKRs are a shared language for execution. They clarify expectations: What do we need to get done (and fast), and who's working on it? They keep employees aligned, vertically and horizontally. In larger enterprises, OKRs are neon-lit road signs. They demolish silos and cultivate connections among far-flung contributors. By enabling front line autonomy, they give rise to fresh solutions. And they keep even the most successful organizations stretching for more."

A startup is not just a smaller version of a large company. It has unique challenges like establishing product market fit for the first time. Medium-size companies have their own challenges. It can be hard to break free from challenges related to scale and sometimes a business hits an invisible asymptote which limits growth. Large organizations have a tendency over time to focus too much time on process and not enough time and energy on renewal of the franchise of the business. I have written many blog posts on this topic and won't repeat that here. Research done by Geoffrey West and his colleagues revealed: "The typical half-life of a publicly traded company is about a decade, regardless of business sector. Mortality rates are independent of a company's age." "Firms may 'die' through a variety of processes: they may split, merge or liquidate as economic and technological conditions change." Natural questions to ask when you see a public company lifespan like this include: How does the mortality of a business compare to other systems? Which systems should a business emulate if it wants to increase the probability that it will survive longer? For example, cities certainly survive far longer than businesses. Why is that true? We know that some animals live longer and some die faster. Why is that true and what can we learn from that? West explains: "[Cities] scale in what we called a super linear fashion. Instead of being an exponent less than one, indicating economies of scale, the exponent was bigger than one, indicating what economists call increasing returns to scale." In terms of physical infrastructure, cities benefit from classic economies of scale. If the population of a city doubles, its physical infrastructure must increases only by a factor of 1.85. But on the social interaction side, attributes scale by a superlinear factor of 1.15. West further explains:

"If you double the size of a city from 50,000 to a hundred thousand, a million to two million, five million to ten million, it doesn't matter what, systematically, you get a roughly 15

percent increase in productivity, patents, the number of research institutions, wages and so on, and you get systematically a 15 percent saving in length of roads and general infrastructure." "In the language that we used for a city, [with a business] you go from a kind of superlinear behavior, with lots of positive feedback loops, to those being more and more suppressed, and dominated by this economy of scale. That is not a bad thing, but it suppresses the innovative, idea-creation side of the company…The life cycle of a company then tends to follow, ironically, much more that of an organism, growing quickly at the beginning, and then turning over and becoming static."

As just one example, if the managers of the business focus too much on economies of scale in order to become more efficient at using the same processes and as a side effect lose sight of innovative new processes, unfortunate nonlinear consequences for the business may occur, which can lead to an extinction event for that business. West describes the challenge: "It's not surprising to learn that when [businesses] …allow themselves to be dominated by bureaucracy and administration over creativity and innovation" bad things happen. Systems like OKR are designed to reduce the probability that this will happen.

11. "Now that we have the cloud and shared collaborative social systems — can really improve the people science. Not just better analytics, but actually getting greater performance, higher performance, higher commitment, out of teams. Every business I've seen benefits from a stronger team and stronger leaders. They are just now getting modern tools to help them do this."

Modern data science tools create the potential for managers to apply the scientific method to what they do rather than use trial and error and guessing. Some people take data and algorithms too far and some people don't take it far enough. Creating the right balance between these two approaches is not only hard, but changes as technology changes. The best way to stay current about best practices is to read extensively and then read some more.

12. "Andy Grove loved teaching. He believed the role of a leader and CEO is to be a teacher."

Doerr included a Dedication his book to Coach Bill Campbell, who some people believe is the best business executive coach of all time. He was a teacher. One of Doerr's descriptions about how Coach Campbell worked with others is particularly insightful to read:

"Campbell did it in his characteristic style, one part Zen and one part Bud Light. Bill gave little direction. He'd ask a very few questions, invariably the right ones. But mostly he listened. He knew that most times in business there were several right answers, and the leader's job was to pick one. 'Just make a decision,' he'd say. Or: 'Are you moving forward? Are you breaking ties? Let's keep rolling.' When it came to Google's OKRs, Bill paid closest attention to the less glamorous, 'committed' objectives. (A favorite piece of coaching, served with his typical dash of salt: 'You've got to make the f—ing trains run on time.") As Google CEO Sundar Pichai recalls, 'He cared about operating excellence day in, day out.' It went back to Bill's deceptively modest sounding motto: 'Be better every day.' There is nothing more challenging—or more fulfilling— than that."

I wrote essays on both Doerr and Campbell as part of my book A Dozen Lessons for Entrepreneurs that is a fund raiser for the charity No Kid Hungry. As an aside, I know now

that I should have named my book *Get Wealthy Fast, the Kanye Blockchain Way*, but it is too late for that now. The actual title of Doerr's book is Measure what Matters.

End Notes:

https://www.whatmatters.com/stories/the-origin-story

https://sloanreview.mit.edu/video/john-doerr-on-okrs-and-measuring-what-matters/

http://fortune.com/video/2018/05/21/john-doerr-measure-what-matters/
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https://hbr.org/2018/05/how-vc-john-doerr-sets-and-achieves-goals
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50 Cent versus Kanye: Should Fiddy have used the Objectives and Key Results (OKR) system?

November 10, 2018

In interviews leading up to the September 11, 2007 release date of his album entitled *Curtis*, 50 Cent said publicly that he would retire from the music business if Kanye's album *Graduation* sold more copies during the first week. The question this 25iq blog post will attempt to answer is: Could Fiddy have obtained a better result if he had adopted the "Objectives and Key Results" (OKR) system at the time this statement was made?

MISSION:

The first step in this process is to identify what the mission is for the organization or individual. My analysis assumes Fiddy has the same mission statement as Disney:

"To be one of the world's leading producers and providers of entertainment and information."

OBJECTIVES:

From that mission Objectives can be created. My thesis is that one of Fiddy's two primary objectives is well described in an article by *Business Insider:*

"When 50 Cent came back from the boot-camp prison as a teenager, he got a job bagging drugs for a dealer. … "'After that, he swore to himself he'd never work for another person ever again. He'd rather die.'"

One of Fiddy's objectives is clearly independence. Many other people share this same goal. For example, Beyoncé Knowles described one of her objectives in this way: "I felt like it was time to set up my future, so I set a goal. My goal was independence." Charlie Munger described his goal in this way: "Like Warren, I had a considerable passion to get rich, not because I wanted Ferraris – I wanted the independence." "By the age of 42, Ben Franklin had as much money as he needed. I did not intend to get rich. I wanted to get independent. I just overshot."

I believe a second Objective for Fiddy can be identified by looking at the title of his first album: "Get Rich or Die Trying." It is interesting to note that Fiddy said he would rather die than not achieve each of these two objectives.

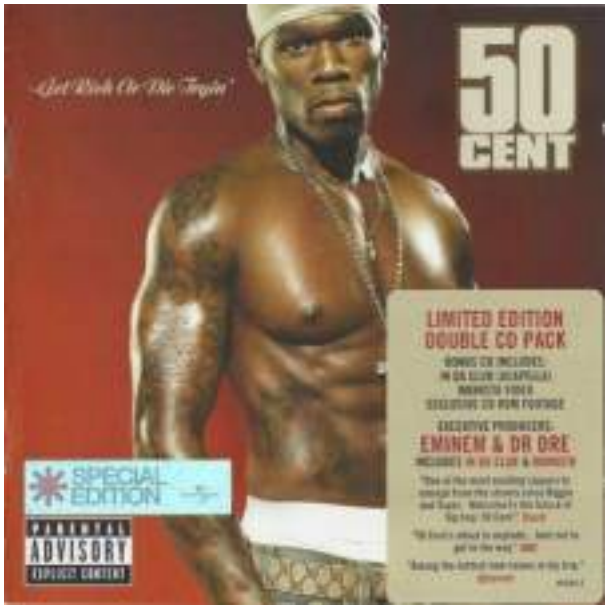

KEY RESULTS:

"Key results are aggressive, but always measurable, time-bound, and limited in number. …They're aggressive but realistic, but most of all, they're measurable and verifiable." John Doerr

What was Fiddy's Key Result for his album *Curtis*? It famously was to sell more albums than Kanye during the first week. This Key Result was aggressive given the success of Kanye's first album, measurable, time bound and verifiable. Publicizing the Key Result and turning it into a beef was a way to increase publicity Fiddy uses often, which he has proven can result in greater album sales. What was the outcome:

In US, *Curtis* sold 691,000 copies first week and *Graduatio*n sold 957,000 copies first week. *Curtis* did sell more than *Graduation* worldwide. In the U.S. in 2007 *Curtis* sold 1,225,000 total copies while *Graduation* sold 2,116,000 total that year.

Was the numerical goal for first week album sales a well-crafted Key Result? Should a Key Result that focused more on the value and the benefits delivered to his customers have been added? The goal of a great Key result should be a better outcome for customers and increasing sales is just one measure of that. What about an additional or even a replacement Key Result like: Increase average plays on songs on the album from A to B?

In creating Key Results people too often mistake the completion of a task with an outcome that benefits customers. Fiddy's Key Result in this case was based on a period of just one week, which is arguably too short term to be a good Key Result. Fiddy would have been better off making the Key Result metric "the first 90 days."

Fiddy's OKR implementation (and yours) can be summarized in a simple spreadsheet as noted below. Each objective will require its own spreadsheet.

		Time Frame	Progress
	50 Cent	**Quarter**	
Mission	To be one of the world's leading producers and providers of entertainment and other products		
Objective	Independence- never work for another person again		
Key Result	Sell more albums than Kanye in a week		
Key Result	Get Rich or Die Trying		

IMPLEMENTATION:

An essential element of the OKR system is regular check ins and an analysis of actual outcomes against Key Result metrics. I suspect that Fiddy did not do this as often as was optimal (weekly check ins is recommended as is re-working them every quarter). Were Fiddy's actions consistent with OKR best practices?

Fiddy did say many of the right things. For example, this statement by Fiddy sounds like a great way to achieve independence:

"Concentrate on your money. Try to hold your paper. It takes money to make money, so save your money, opportunities come."

It is well documented that Fiddy entered into a profitable business relationship by sponsoring Glaceau (a water business) products. The end result for Fiddy was Coca-Cola purchasing Glaceau in May 2007 for $4.1 billion. *The Washington Post* wrote about the financial outcome:

"50 Cent was thought to have walked away with a figure somewhere between $60 million and $100 million, putting his net worth at nearly a half billion dollars. On his next album, 50 Cent could barely contain his own incredulity at the power of the dollar. "I took quarter-water, sold it in bottles for two bucks," he rapped. "Coca-Cola came and bought it for billions. What the [expletive]?"

Fiddy explains his investment thesis here:

"My manager, when I told him I wanted to sell water … was like, 'Water? Where?'" "If I'd have said I want to sell vodka, he would have got it, but I wanted water. [Water] is the top-selling beverage, and it's consumed where music is played."

Fiddy spent and invested in other ventures and generated a lot of income from his music, as Fiddy's own song lyrics reveal:

"When I made fifty mill, Em got paid

When I made sixty mil, Dre got paid

When I made eighty mill, Jimmy got paid

I ain't even gotta rap now, life is made."

But there was also a lot of spending going on too in Fiddy's life:

"I come up out the jeweler, the calling me Rocky

It's the ice on my neck, man, the wrist and my left hand

Ling like Bloaw, you like my style

Ha ha – I'm heading to the bank right now."

Eventually spending on luxury products ("first it was the Benzo, now I'm in the Enzo") and other reversals forced Fiddy to file a Chapter 11 bankruptcy petition:

"In 2015, citing debts of $36m and assets of less than $20m. Judge Ann Nevins approved a plan calling for 50 Cent, whose real name is Curtis Jackson III, to pay back about $23m. Jackson's lawyers said Thursday that he paid off the five-year plan early with $8.7m of his own money and $13.65m he received in a recent settlement of a legal malpractice lawsuit against other attorneys."'

Fiddy is not the only business or individual to go through a Chapter 11. "Mark Markus [a bankruptcy lawyer] explained to *Mashable* about Fiddy's Chapter 11 filing: "insolvent, which means unable to pay all one's debts as they become due.'" Having no cash does not not mean having no assets. Everyone makes mistakes and Fiddy emerged from this Chapter 11 process with a new start, hopefully more the wiser. I believe he would benefit from a better implementation of the OKR system going forward. This might make a great theme for a new album.

Fiddy on other topics:

Freemium: "The only business model I had was from selling drugs, so that's how I marketed my product. I knew the only way to get into any market is to give out free samples. I had to build up a clientele before I could see a profit. I had to invest in my brand."

Math Literacy: "Nothing I was being told in school made sense to my reality. I could break down a kilogram of cocaine into ounces, grams or any combination of the two. That's how I learned my fractions and metric conversion, through real-life applications."

His Rap Name: "The real 50 Cent was a stickup kid from Brooklyn who used to rob rappers. Other rappers were running around, calling themselves Al Capone and John Gotti and Pablo Escobar. If I was going to take a gangster's name, then I wanted it at least to be that of someone who would say, 'What's up?' to me on the street if we ever crossed paths."

*50 Cent suggests that if you use the term "$100 bill," call him "Fifty." If you use "Benjamin," then you should call him "Fiddy."

OKR Remix (featuring John Doerr, DJ Tren)

OKRs provide a framework for scalable execution without micromanaging. John Doerr says: "When properly designed and deployed, they're a vaccine against fuzzy thinking—and fuzzy execution." OKRs require rigor and discipline about saying, these are the most important

things that are going on in my organization. OKRs are about making choices, trade-offs; it's about making choices about the focus of execution. OKRs don't govern your day-to-day behavior and are more likely to be a weekly check-in."

Objectives:

Objectives define "the what." Objectives establish a goal to be achieved during a pre-specified period of time (usually a quarter). Objectives are bold significant, concrete and action oriented. An Objective establishes a goal to be achieved during a pre-specified period of time (usually a quarter). An Objective should be hard but not impossible to achieve and can be aspirational or committed. A business will have "two or three, or maybe four or five, objectives."

Key Results:

Key Results define "the how." The Key Results will determine whether the Objective has been met. Key Results are aggressive, but always measurable, time-bound, and limited in number. They're aggressive but realistic, but most of all, they're measurable and verifiable. They should not be tasks but rather indicators of success. Key Results are about metrics. 3-5 per objective. Key Results will let a person know if their key result has been achieved. The Key Results should be achievable by the individual or team with as few dependencies on outsiders as possible. It's not a Key Result unless it has a number. Metrics that can be part of a Key Result might include revenue or cash flow growth, greater customer engagement or higher customer retention.

End Notes:

This 25IQ post and the remix especially is a supplement to my most recent post on Objectives and Key Results.

Business Insider on Fiddy's objective: https://www.businessinsider.com/principles-of-50-cent-business-philosophy

NY Post on Fiddy's life: https://nypost.com/2005/08/04/50-cent-years-dealing-crack-on-street-taught-him-how-to-make-it-in-rap/

Washington Post on Glaceaur: http://www.washingtonpost.com/wp-dyn/content/article/2010/12/17/AR2010121705271_3.html?noredirect=on

The Guardian on Fiddy's Chapter 11: https://www.theguardian.com/music/2017/feb/03/50-cent-discharged-bankruptcy

Mashable on Chapter 11: https://mashable.com/2015/07/14/50-cent-chapter-11-bankruptcy/#X_2yuDK.pPqh

Munger on independence: https://25iq.com/2016/03/19/a-dozen-things-ive-learned-from-benjamin-franklin-about-money-and-investing/

Genius on *Curtis* Lyrics: https://genius.com/albums/50-cent/Curtis

Secrets of Sand Hill Road (Venture Capital and How to Get It) — Know Venture Capital Before You Get Married to a Venture Capitalist

June 8, 2019

Scott Kupor's new book *Secrets of Sand Hill Road* is a bottom-to-top explanation of venture capital and other aspects of growing a business intended for founders, board members, employees, investors, venture capitalists and people who are curious about this investing approach. Writing a book that is interesting to an expert, but informative for a novice, is not an easy task. I think about this challenge every time I write a blog post or book. Kuper has struck an admirable balance in writing a book that appeals to many types of people with different levels of expertise.

Secrets of Sand Hill Road is the outcome of a tremendous amount of work by Kupor. Why would an extremely successful person like the author devote the time and energy necessary to do this? Aside from wanting to help people learn more, Kupor knows from experience that dealing with better educated and informed individuals and organizations will create fewer problems and produce better outcomes. Risk is created not only from not knowing what you are doing, but also from dealing with other people who don't know what they are doing. One of the reasons I enjoy watching skilled and experienced professionals interact is that they avoid time and energy wasting behavior. They tend to avoid pointless posturing and counter productive negotiating styles. This informed professionalism makes the process more fun and you can learn more. If you have a choice between dealing with an idiot or a professional, dealing with the professional is the better option.

Venture capital can seem confusing at first, especially to an entrepreneur who has never started a business before, but it is simpler than it seems. Any business has a range of specialized terms and jargon and Kupor does an admirable job of explaining them in a way that is not boring. One thing I liked about the book is that Kupor sometimes uses colorful language in the book (e.g., "schmuck insurance") to keep his readers entertained. Humor helps the learning process if the material is a bit dry. Readers of this book will learn about the meaning and purpose of terms like "dead hand control," "ROFR", "drag along," "full rachet," "no shop," "D&O," 'MIP," 'BJR," 'WARN," "green shoe, ""piggybacks" and "down round." Kupor marches the reader clearly and swiftly though term sheets, sample cap tables and term sheets. He provides readers of the book with a sound introduction to the implications of legal decisions like Trados, Bloodhound and Revlon in a way that is not too technical and not too basic (i.e., "just right" as Goldilocks said in the famous story).

Every entrepreneur I know would rather build products than learn about finance, but taking the time to learn the important concepts can pay big dividends over time. The actor Tina Fey wisely said once about learning about business even though your dominant interest is in other areas: "Today, as much as it makes me super sleepy, I have to pay a lot of attention when my

business manager talks to me about money. He talks to me about taxes, and I get really, really sleepy. But I listen." The topics Kupor covers in the book are not always exciting to read about, but they can be exciting to actually encounter in the real world. You may only encounter a situation once in your life, but when you do it will be important. Reading and thinking about these issues in advance can pay big dividends. As an example, Kupor has a chapter in which he discusses corporate governance which he starts by saying "let's eat our broccoli together," meaning you may not necessarily like it, but it will be good for you.

Kupor digs into hard and complex issues like down rounds and option pools with advice and examples that are useful even for a person with a lot of venture capital experience. As an example, he explains why an investor might want to use a "pull up" in a recap (no, a pull up is not a diaper product for toddlers). As another example, he also explains why a new investor might want a larger option pool. Kupor also has some very useful material in the book on the roles of directors and potential pitfalls in situations like acquisitions. The material is in effect a travelogue through many aspects of important processes. The author can't discuss everything in a book of this length, but what he does discuss is important. Experts can also learn how Kupor explains complex topics simply to people who are encountering them for the first time.

Kupor identifies early in his book why entrepreneurs will benefit from understanding the motivations of venture capitalists:

"Entrepreneurs need to understand their own goals and objectives and see whether they align with those of the funding sources they want to tap. To determine that calculus, entrepreneurs would be wise to understand how the VC business works, what makes VCs tick, and what ultimately motivates (and constrains) them." (Page 5) "If you are going to raise money from VCs or join a company that has venture money, the only way to know if that is a good idea is to understand why VCs do the things that they do.' (Page 7)

In short, since nothing is more powerful as a motivator in life as someone's interests, it is wise to spend time and effort making sure these interests are aligned between all participants. There is a balance that works best when it comes to entrepreneurs and founders and finding that balance is very valuable. Experienced participants in this process know this and when they are on all sides of a transaction things just go more smoothly and the result is inevitably better.

Kupor points out that there are also several reasons why venture capital might be a good choice for a business, including:

"…equity-based financing is often the better choice for businesses that (1) are not generating (or expecting to generate) near-term cash flow; (2) are very risky (banks don't like to lend to businesses where there is real risk of the business failing— because they don't like losing the principal balance of their loans); and (3) have long illiquidity periods (again, banks structure their loans to be time limited—often three to five years in length—to increase the likelihood of getting their principal back). (Page 28)

Kupor also raises another reason why someone might not want to raise venture capital:

"Even if your business *is* appropriate for VC (because of the ultimate market size opportunity and other factors), you still need to decide whether *you* want to play by the rules of the road

that venture capital entails. That means sharing equity ownership with a VC, sharing board control and governance, and ultimately entering into a marriage that is likely to last for about the same time as the average "real" marriage. (It turns out that eight to ten years is about the average length of real marriages in the US . . . make of that what you will.)" (Page 115)

Raising outside money from a venture capitalist involves real tradeoffs. But if you want to scale a business quickly, which in some cases is essential to capture an opportunity, venture capital can be the very best alternative.

Of course, some entrepreneurs will not be able to raise money from a venture capital firm, even if they want to. Kupor writes:

"Rules of thumb are overgeneralizations and crude ways to simplify complex topics, I admit. But, as a general rule of thumb, you should be able to credibly convince yourself (and your potential VC partners) that the market opportunity for your business is sufficiently large to be able to generate a profitable, high growth, several-hundred-million-dollar-revenue business over a seven-to-ten-year period." (Page 113)

One important point being made here is that not being able to raise venture capital is not a tragedy. There are other ways to fund the creation of a business.

The book informs readers that the venture capital industry is small but punches above it weight in terms of impact. Venture capital firms know the distribution of financial returns of all the portfolio companies in their fund will inevitably reflect a power law. The statistics Kupor provides are quite interesting:

"… what matters most '[in venture capital] is your "at bats per home run." In baseball, at bats per home run is the quotient obtained from dividing the number of times a player comes to bat by the total number of home runs achieved. …That is, the frequency with which the VC gets a return of more than ten times her investment—which we consider a home run. If you do the math, you'll see that VCs can get a lot of things wrong. Their overall batting average can be even less than 50 percent, as long as their at bats per home run are 10–20 percent… For most VCs, the distribution of at bats looks something like this:

50% of the investments are "impaired," which is a very polite way of saying they lose some or all of their investment.

20–30% of the investments are—to continue with the baseball analogy—"singles" or "doubles." You didn't lose all the money (congratulations on that), but instead you made a return of a few times your investment.

10–20% of investments are our home runs. "These are the investments where the VC is expecting to return ten to one hundred times her money."

Of course, in the last category above there are home runs, grand slams and tape measure grand slams. As an example, Kleiner IX was famous for having just the one tape measure grand slam named Google. The top down math limits the number of tape measure home runs. That year investing in Google $100 million pre money valuation was the only decision that mattered in venture capital.

A common source of tension between the venture capital firm and the entrepreneur springs from this reality. Kupor's partner Chris Dixon describes the tension that this can cause: **"**VCs have a portfolio, and they want to have big wins. They'd rather have a few more lottery tickets.. while for the entrepreneurs, it's their whole life, and let's say you raised five million bucks, and you have a fifty-million-dollar offer, and the entrepreneurs are like, "Look, I make whatever millions of dollars. I'll be able to start another company."

Kupor's book travels through so many phases and aspects of a entrepreneur-venture capitalist relationship that I can't cover all of them. I nevertheless decided to drill down into just one topic to illustrate how informative and useful the book is:

"Now, assuming you made the decision to raise venture capital in the first place, how much money should you raise? The answer is to raise as much money as you can that enables you to safely achieve the key milestones you will need for the next fund-raising. In other words, the advice we often give to entrepreneurs is to think about your next round of financing when you are raising the current round of financing. What will you need to demonstrate to the next round investor that shows how you have sufficiently de-risked the business, such that that investor is willing to put new money into the company at a price that appropriately reflects the progress you have made since your last round of financing?"

(Page 115)

"What are those milestones? Well, it varies significantly by the type of company, but for purposes of our example, let's assume you are building an enterprise software application. The Series B investor is likely to want to see that at least the initial version of the product is built (not the beta version, but the first commercially available product, even though the feature set will of course be incomplete). They will want to see that you have some demonstrated proof in the form of customer engagement and contracts that companies are in fact willing to pay money for the product you have built. You probably don't need to have $10 million in customer business, but something more like $3 million to $5 million is likely sufficient to get a Series B investor interested in providing new financing." (Page 116)

What Kupor just described seems simple, but is not always intuitive to everyone and there are nuances, important concepts, and useful skill to learn.

"The other consideration regarding the amount of capital to raise is the desire to maintain focus for the company by forcing real economic trade-offs during the most formative stages of company development. Scarcity is indeed the mother of invention. Believe it or not, having too much money can be the death knell for early stage start-ups. As a CEO, you may be tempted to green-light projects that might be of marginal value to your company's development, and explaining to your team members why they can't build something, or hire that next person, when they know you don't have financial constraints is harder than it may seem. Nobody is suggesting that everyone live on ramen and sleep on the floor, but having a finite amount of resources helps to refine what are in fact the critical milestones for a business and ensures that every investment gets weighed against its ultimate opportunity cost." (Page 117)

These points made by Kupor above get to the issue of why businesses so often die of indigestion rather than starvation. Too much money raised too soon by a startup can be

inversely proportional with innovation. Is often the lack of money that drives people to innovate.

"the current round of financing should be driven by the milestones needed to achieve the next round of financing *at a higher valuation that reflects the progress (and de-risking) of the business*. If you allow yourself or a VC to overvalue the company at the current round, then you have just raised the stakes for what it will take to clear that valuation bar for the next round and get paid for the progress you have made. After all, you might be able to get away with overvaluation at one round (or possibly more than one), but at some point in time, your valuation needs to reflect the actual progress of the business." (Page 118)

Having a margin of safety is also important in raising capital.

"As a result, one very important thing to do as an entrepreneur— assuming you do decide to optimize for valuation—is to make sure that you raise a sufficient amount of money to give you plenty of time to achieve the now-higher expectations that the next round of investors may have. One big mistake we at a16z have seen entrepreneurs make is to raise too small an amount of money at an aggressive valuation, which is precisely the thing you don't want to do. This establishes the high-watermark valuation, but without the financial resources to be able to achieve the business goals required to safely raise your next round well above the current round's valuation." (page 119)

Writing a book review can create a temptation to reveal all the book's secrets, especially if the book is as good as *Secrets of Sand Hill Road*. The good news is that I have revealed little of what he has written between the book's covers. I won't write much more in this review other than to recommend that you buy and read Kupor's book.

My book "A Dozen Lessons for Entrepreneurs" (Columbia Business School Publishing) which was published in November of 2017, covers some of the topics in Kupor's book, but Kupor's book deal with scores of issues my book doesn't mention. *Secrets of Sand Hill Road* and my book actually make a nice pairing. Adding in Elad Gill's book, which I write about here, makes for an excellent trilogy. Add in Scott Belsky's book, which I review here, you have crossed four bases (i.e., home run).

People asked me sometimes why I so often convey ideas by writing about the views of famous people. The answer is that people like to read about people. My book about Charlie Munger is my most popular book of the seven books I have written because he is famous and interesting. Readers are not as likely to want to dig into some of the more technical aspects of an issue like how to run a compensation committee as a company board member than they are to read a story about a famous person dealing with a hard compensation issue as a board member. One close friend of mine likes to remind me: "don't tell people how to do something, show them with a story." Are there people who want to learn more technical material and don't need to hear it in a story format? Sure. But that approach is not a mass market.

If you ever do write a book, especially one that is technical, do it for yourself and/or because you love to help other people learn more. Selling a book is hard work (my post about that process is at the previous link) and few people do it well. Writing for me is relatively easy. Getting people to read what you write is hard. Few people will read this blog post, but writing it was enjoyable.

Memo to: Oaktree Clients

From: Howard Marks

Re: What Really Matters?

I've gathered a few ideas from several of my memos this year – plus some recent musings and conversations – to form the subject of this memo: what really matters or should matter for investors. I'll start by examining a number of things that I think don't matter.

What Doesn't Matter: Short-Term Events

In *The Illusion of Knowledge* (September 2022), I railed against macro forecasting, which in our profession mostly concerns the next year or two. And in *I Beg to Differ* (July 2022), I discussed the questions I was asked most frequently at Oaktree's June 21 conference in London: How bad will inflation get? How much will the Fed raise interest rates to fight it? Will those increases cause a recession? How bad and for how long? The bottom line, I told the attendees, was that these things all relate to the short term, and this is what I know about the short term:

- Most investors can't do a superior job of predicting short-term phenomena like these.
- Thus, they shouldn't put much stock in opinions on these subjects (theirs or those of others).
- They're unlikely to make major changes in their portfolios in response to these opinions.
- The changes they do make are unlikely to be consistently right.
- Thus, these aren't the things that matter.

Consider an example. In response to the first tremors of the Global Financial Crisis, the Federal Reserve began to cut the fed funds rate in 3Q2007. They then lowered it to zero around the end of 2008 and left it there for seven years. In late 2015, virtually the only question I got was "When will the first rate increase occur?" My answer was always the same: "Why do you care? If I say 'February,' what will you do? And if I later change my mind and say 'May,' what will you do differently? If everyone knows rates are about to rise, what difference does it make which month the process starts?" No one ever offered a convincing answer. Investors probably think asking such questions is part of behaving professionally, but I doubt they could explain why.

The vast majority of investors can't know for sure what macro events lie just ahead or how the markets will react to the things that do happen. In *The Illusion of Knowledge*, I wrote at length about the way unforeseen events make a hash of economic and market forecasts. In summary, most forecasts are extrapolations, and most of the time things don't change, so extrapolations are usually correct, but not particularly profitable. On the other hand, accurate forecasts of deviations from trend can be very profitable, but they're hard to make and hard to act on. These are some of the reasons why most people can't predict the future well enough to repeatably produce superior performance.

Why is doing this so hard? Don't most of us know what events are likely to transpire? Can't we just buy the securities of the companies that are most likely to benefit from those events? In the long run, maybe, but I want to turn to a theme that Bruce Karsh has been emphasizing lately, regarding a major reason why it's particularly challenging to profit from a short-term focus: **It's very difficult to know which expectations regarding events are already incorporated in security prices.**

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One of the critical mistakes people are guilty of – we see it all the time in the media – is believing that changes in security prices are the result of events: that favorable events lead to rising prices and negative events lead to falling prices. I think that's what most people believe – especially first-level thinkers – but that's not right. **Security prices are determined by events and how investors react to those events, which is largely a function of how the events stack up against investors' expectations.**

How can we explain the company that reports higher earnings, only to see its stock price drop? The answer, of course, is that the reported improvement fell short of expectations and thus disappointed investors. So, at the most elementary level, it's not whether the event is simply positive or not, but how the event compares with what was expected.

In my earliest working years, I used to spend a few minutes each day looking over the earnings reports printed in *The Wall Street Journal*. But after a while, it dawned on me that since I didn't know what numbers had been expected, I had no idea whether an announcement from a company I didn't follow was good news or bad.

Investors can become expert regarding a few companies and their securities, but no one is likely to know enough about macro events to (a) be able to understand the macro expectations that underlie the prices of securities, (b) anticipate the broad events, and (c) predict how those securities will react. Where can a prospective buyer look to find out what the investors who set securities prices already anticipate in terms of inflation, GDP, or unemployment? Inferences regarding expectations can sometimes be drawn from asset prices, but the inferred levels often aren't proved correct when the actual results come in.

Further, in the short term, security prices are highly susceptible to random and exogenous events that can swamp the impact of fundamental events. **Macro events and the ups and downs of companies' near-term fortunes are unpredictable and not necessarily indicative of – or relevant to – companies' long-term prospects. So little attention should be paid to them.** For example, companies often deliberately reduce current earnings by investing in the future of their businesses; thus, low reported earnings can imply high future earnings, not continued low earnings. To know the difference, you have to have an in-depth understanding of the company.

No one should be fooled into thinking security pricing is a dependable process that accurately follows a set of rules. Events are unpredictable; they can be altered by unpredictable influences; and investors' reactions to the events that occur are unpredictable. Due to the presence of so much uncertainty, most investors are unable to improve their results by focusing on the short term.

It's clear from observation that security prices fluctuate much more than economic output or company profits. **What accounts for this? It must be the fact that, in the short term, the ups and downs of prices are influenced far more by swings in investor psychology than by changes in companies' long-term prospects. Because swings in psychology matter more in the near term than changes in fundamentals – and are so hard to predict – most short-term trading is a waste of time . . . or worse.**

What Doesn't Matter: The Trading Mentality

Over the years, my memos have often included some of my father's jokes from the 1950s, based on my strong belief that humor often reflects truths about the human condition. Given its relevance here, I'm going to devote a bit of space to a joke I've shared before:

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> Two friends meet in the street, and Joe asks Sam what's new. "Oh," he replies, "I just got a case of great sardines."
>
> Joe: Great, I love sardines. I'll take some. How much are they?
>
> Sam: $10,000 a tin.
>
> Joe: What! How can a tin of sardines cost $10,000?
>
> Sam: These are the greatest sardines in the world. Each one is a pedigreed purebred, with papers. They were caught by net, not hook; deboned by hand; and packed in the finest extra-virgin olive oil. And the label was painted by a well-known artist. They're a bargain at $10,000.
>
> Joe: But who would ever eat $10,000 sardines?
>
> Sam: Oh, these aren't eating sardines; they're trading sardines.

I include this old joke because I believe most people treat stocks and bonds like something to trade, not something to own.

If you ask Warren Buffett to describe the foundation of his approach to investing, he'll probably start by insisting that stocks should be thought of as ownership interests in companies. Most people don't start companies with the goal of selling them in the short term, but rather they seek to operate them, enjoy profitability, and expand the business. Of course, founders do these things to ultimately make money, but they're likely to view the money as the byproduct of having run a successful business. Buffett says people who buy stocks should think of themselves as partners of owners with whom they share goals.

But I think that's rarely the case. **Most people buy stocks with the goal of selling them at a higher price, thinking they're for trading, not for owning.** This means they abandon the owner mentality and instead act like gamblers or speculators who bet on stock price moves. The results are often unpleasant.

> The DALBAR Institute 2012 study showed that investors receive three percentage points less per year than the S&P 500 generated from 1992 to 2012, and the average holding period for a typical investor is six months. Six Months!! When you hold a stock for less than a year, you are not using the stock market to acquire business ownership positions and participate in the growth of that business. Instead, you are just guessing at short-term news and expectations, and your returns are based on how other people react to that news information. In aggregate, that kind of attitude gets you three percentage points less per year than you'd get from doing nothing at all beyond making the initial investment in the index fund of the S&P 500. ("Fidelity's Best Investors Are Dead," *The Conservative Income Investor*, April 8, 2020)

To me, buying for a short-term trade equates to forgetting about your sports team's chances of winning the championship and instead betting on who's going to succeed in the next play, period, or inning.

Let's think about the logic. You buy a stock because you think it's worth more than you have to pay for it, whereas the seller considers it fully priced. Someday, if things go well, it'll become fully priced, in

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your opinion, meaning you'll sell it. The person you sell it to, however, will buy it because he thinks it's worth still more. We used to talk about this process as being reliant on the Greater Fool Theory: No matter what price I pay for a stock, there will always be someone who will buy it from me for more, despite the fact that I'm selling because I've concluded that it has reached full value.

Every buyer is motivated by the belief that the stock will eventually be worth more than today's price (a view the seller presumably doesn't share). The key question is what type of thinking underlies these purchases. **Are the buyers buying because this is a company they'd like to own a piece of for years? Or are they merely betting that the price will go up?** The transactions may look the same from the outside, but I wonder about the thought process and thus the soundness of the logic.

Each time a stock is traded, one side is wrong and one is right. But if what you're doing is betting on trends in popularity, and thus the direction of price moves over the next month, quarter, or year, is it realistic to believe you'll be right more often than the person on the other side of the trade? Maybe the decline of active management can be attributed to the many active managers who placed bets on the direction of stock prices in the short term, instead of picking companies they wanted to own part of for years. It's all a matter of the underlying mentality.

I had a long debate on this topic with my father back in 1969, when I lived with him during my first months at First National City Bank. (It's amazing for me to think back to those days; he was so much younger than I am today.) I told him I thought buying a stock should be motivated by something other than the hope that the price would rise, and I suggested this might be the expectation that dividends would increase over time. He countered that no one buys stocks for the dividends – they buy because they think the price will go up. But what would trigger the rise?

Wanting to own a business for its commercial merit and long-term earnings potential is a good reason to be a stockholder, and if these expectations are borne out, a good reason to believe the stock price will rise. In the absence of that, buying in the hope of appreciation merely amounts to trying to guess which industries and companies investors will favor in the future. Ben Graham famously said, "In the short run, the market is a voting machine, but in the long run, it is a weighing machine." **While none of this is easy, as Charlie Munger once told me, carefully weighing long-term merit should produce better results than trying to guess at short-term swings in popularity.**

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What Doesn't Matter: Short-Term Performance

Given the possible contributors to short-term investment performance, reported results can present a highly misleading picture, and here I'm talking mostly about superior gains in good times. I feel there are three ingredients for success during good times – aggressiveness, timing, and skill – and if you have enough aggressiveness at the right time, you don't need that much skill. We all know that in good times, the highest returns often go to the person whose portfolio incorporates the most risk, beta, and correlation. Having such a portfolio isn't a mark of distinction or insight if the investor is a perma-bull who's always positioned aggressively. Finally, random events can have an overwhelming impact on returns – in either direction – in a given quarter or year.

One of the recurring themes in my memos is the idea that the quality of a decision cannot be determined from the outcome alone. Decisions often lead to negative outcomes even when they're well-reasoned and based on all the available information. On the other hand, we all know people – even occasionally ourselves – who've been right for the wrong reason. Hidden information and random developments can

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frustrate even the best thinkers' decisions. (However, when outcomes are considered over a long period of time and a large number of trials, the better decision maker is overwhelmingly likely to have a higher proportion of successes.)

Obviously, no one should attach much significance to returns in one quarter or year. Investment performance is simply one result drawn from the full range of returns that could have materialized, and in the short term, it can be heavily influenced by random events. Thus, a single quarter's return is likely to be a very weak indicator of an investor's ability, if that. Deciding whether a manager has special skill – or whether an asset allocation is appropriate for the long run – on the basis of one quarter or year is like forming an opinion of a baseball player on the basis of one trip to the plate, or of a racehorse based on one race.

We know short-term performance doesn't matter much. And yet, most of the investment committees I've sat on have had the latest quarter's performance as the first item on the agenda and devoted a meaningful portion of each meeting to it. The discussion is usually extensive, but it rarely leads to significant action. So why do we keep doing it? For the same reasons investors pay attention to forecasting, as described in *The Illusion of Knowledge*: "everyone does it," and "it would be irresponsible not to."

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What Doesn't Matter: Volatility

I haven't written much about volatility, other than to say I strongly disagree with people who consider it the definition or essence of risk. I've described my belief that the academics who developed the Chicago School theory of investment in the early 1960s (a) wanted to examine the relationship between investment returns and risk, (b) needed a number quantifying risk that they could put into their calculations, and (c) undoubtedly chose volatility as a proxy for risk for the simple reason that it was the only quantifiable metric available. I define risk as the probability of a bad outcome, and volatility is, at best, an indicator of the presence of risk. But volatility is not risk. That's all I'm going to say on that subject.

What I want to talk about here is the extent to which thinking and caring about volatility has warped the investing world over the 50-plus years that I've been in it. It was a great advantage for me to have attended the Graduate School of Business at the University of Chicago in the late '60s and to have been part of one of the very first classes that was taught the new theories. I learned about the efficient market hypothesis, the capital asset pricing model, the random walk, the importance of risk aversion, and the role of volatility as risk. While volatility wasn't a topic of conversation when I got into the real world of investing in 1969, practice soon caught up with theory.

In particular, the Sharpe ratio was adopted as the measure of risk-adjusted return. It's the ratio of a portfolio's excess return (the part of its return that exceeds the yield on T-bills) to its volatility. The more return per unit of volatility, the higher the risk-adjusted return. Risk adjustment is an essential concept, and returns should absolutely be evaluated relative to the risk that was taken to achieve them. Everyone cites Sharpe ratios, including Oaktree, because it's the only quantitative tool available for the job. (If investors, consultants, and clients didn't use the Sharpe ratio, they'd have no metric at all, and if they tried to substitute fundamental riskiness for volatility in their assessments, they'd find that there's no way to quantify it.) **The Sharpe ratio may hint at risk-adjusted performance in the same way that volatility hints at risk, but since volatility isn't risk, the Sharpe ratio is a very imperfect measure.**

Take, for example, one of the asset classes I started working with in 1978: high yield bonds. At Oaktree, we think moderately-above-benchmark returns can be produced with substantially less risk than the

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benchmark, and this shows up in superior Sharpe ratios. But the real risk in high yield bonds – the one we care about and have a history of reducing – is the risk of default. We don't much care about reducing volatility, and we don't take conscious steps to do so. We believe high Sharpe ratios can result from – and perhaps are correlated with – the actions we take to reduce defaults.

Volatility is particularly irrelevant in our field of fixed income or "credit." Bonds, notes, and loans represent contractual promises of periodic interest and repayment at maturity. **Most of the time when you buy a bond with an 8% yield, you'll basically get the 8% yield over its life, regardless of whether the bond price goes up or down in the interim.** I say "basically" because, if the price falls, you'll have the opportunity to reinvest the interest payments at yields above 8%, so your holding-period return will creep up. Thus, the downward price volatility that so many revile is actually a good thing – as long as it doesn't presage defaults. (Note that, as indicated in this paragraph, "volatility" is often a misnomer. Strategists and the media often warn that "there may be volatility ahead." What they really mean is "there may be price declines ahead." No one worries about, or minds experiencing, volatility to the upside.)

It's essential to recognize that protection from volatility generally isn't a free good. Reducing volatility for its own sake is a suboptimizing strategy: It should be presumed that favoring lower-volatility assets and approaches will – all things being equal – lead to lower returns. Only managers with superior skill, or alpha (see page 11), will be able to overcome this negative presumption and reduce return less than they reduce volatility.

Nevertheless, since many clients, bosses, and other constituents are uncomfortable with radical ups and downs (well, mostly with downs), asset managers often take steps to reduce volatility. Consider what happened after institutional investors began to pile into hedge funds following the three-year decline of stocks brought on by the bursting of the tech bubble in 2000. (This was the first three-year decline since 1939-41.) Hedge funds – previously members of a cottage industry where most funds had a few hundred million dollars of capital from wealthy individuals – did much better than stocks in the downdraft. Institutions were attracted to these funds' low volatility, and thus invested billions in them.

The average hedge fund delivered the stability the institutions wanted. But somewhere in the shuffle, the idea of earning high returns with low volatility got lost. Instead, hedge fund managers pursued low volatility as a goal in itself, since they knew it was what the institutions were after. As a result, over roughly the last 18 years, the average hedge fund delivered the low volatility that was desired, but it was accompanied by modest single-digit returns. No miracle there.

Why do I recite all this? Because volatility is just a temporary phenomenon (assuming you survive it financially), and most investors shouldn't attach as much importance to it as they seem to. As I wrote in *I Beg to Differ*, many investors have the luxury of being able to focus exclusively on the long term . . . if they will take advantage of it. Volatility should be less of a concern for investors:

- whose entities are long-lived, like life insurance companies, endowments, and pension funds;
- whose capital isn't subject to lump-sum withdrawal;
- whose essential activities won't be jeopardized by downward fluctuations;
- who don't have to worry about being forced into mistakes by their constituents; and
- who haven't levered up with debt that might have to be repaid in the short run.

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Most investors lack some of these things, and few have them all. But to the extent these characteristics are present, investors should take advantage of their ability to withstand volatility, since many investments with the potential for high returns might be susceptible to substantial fluctuations.

Warren Buffett always puts it best, and on this topic he usefully said, "We prefer a lumpy 15% return to a smooth 12% return." Investors who'd rather have the reverse – who find a smooth 12% preferable to a lumpy 15% – should ask themselves whether their aversion to volatility is mostly financial or mostly emotional.

Of course, the choices made by employees, investment committee members, and hired investment managers may have to reflect real-world considerations. People in charge of institutional portfolios can have valid reasons for avoiding ups and downs that their organizations or clients might be able to stomach in financial terms but would still find unpleasant. All anyone can do is the best they can under their particular circumstances. **But my bottom line is this: In many cases, people accord volatility far more importance than they should.**

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An Aside

While I'm on the subject of volatility, I want to turn to an area that hasn't reported much of it of late: private investment funds. The first nine months of 2022 constituted one of the worst periods on record for both stocks and bonds. Yet many private equity and private debt funds are reporting only small losses for the year to date. I'm often asked what this means, and whether it reflects reality.

Maybe the performance of private funds is being reported accurately. (I know we believe ours is.) But I recently came across an interesting *Financial Times* article provocatively titled, "The volatility laundering, return manipulation and 'phoney happiness' of private equity," by Robin Wigglesworth. Here's some of its content:

> The widening performance gap between public and private markets is a huge topic these days. Investors are often seen as the gormless [foolish] dupes falling for the "return manipulation" of cunning private equity tycoons. But what if they are co-conspirators? . . .
>
> That's what a new paper from three academics at the University of Florida argues. Based on nearly two decades worth of private equity real estate funds data, Blake Jackson, David Ling and Andy Naranjo conclude that "private equity fund managers manipulate returns to cater to their investors."
>
> **. . . Jackson, Ling and Naranjo's . . . central conclusion is that "GPs do not appear to manipulate interim returns to fool their LPs, but rather because their LPs want them to do so".**
>
>> Similar to the idea that banks design financial products to cater to yield-seeking investors or firms issue dividends to cater to investor demand for dividend payments, we argue that PE fund managers boost interim performance reports to cater to some investors' demand for manipulated returns.
>>
>> . . . **If a GP boosts or smooths returns, . . . investment managers within LP organizations can report artificially higher Sharpe ratios, alphas, and top-**

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> **line returns, such as IRRs, to their trustees or other overseers.** In doing so, these investment managers, whose median tenure of four years often expires years before the ultimate returns of a PE fund are realized, might improve their internal job security or potential labor market outcomes. . . .
>
> This probably helps explain why private equity firms on average actually reported gains of 1.6 per cent in the first quarter of 2022 and only some modest mark downwards since then, despite global equities losing 22 per cent of their value this year. (November 2, 2022. Emphasis added)

If both GPs and LPs are happy with returns that seem unusually good, might the result be suspect? Is the performance of private assets being stated accurately? Is the low volatility being reported genuine? If the current business climate is challenging, shouldn't that affect the prices of public and private investments alike?

But there's another series of relevant questions: Mightn't it be fair for GPs to decline to mark down private investments in companies that have experienced short-term weakness but whose long-term prospects remain bright? And while private investments might not have been marked down enough this year, isn't it true that the prices of public securities are more volatile than they should be, overstating the changes in long-term value? I certainly think public security prices reflect psychological swings that are often excessive. Should the prices of private investments emulate this?

As with most things, any inaccuracy in reporting will eventually come to light. Eventually, private debt will mature, and private equity holdings will have to be sold. If the returns being reported this year understate the real declines in value, performance from here on out will likely look surprisingly poor. And I'm sure this will lead plenty of academics (and maybe a few regulators) to question whether the pricing of private investments in 2022 was too high. We'll see.

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What Doesn't Matter: Hyper-Activity

In *Selling Out* (January 2022), I expressed my strong view that most investors trade too much. Since it's hard to make multiple consecutive decisions correctly, and trading costs money and is often likely to result from an investor's emotional swings, it's better to do less of it.

When I was a boy, there was a popular saying: Don't just sit there; do something. But for investing, I'd invert it: Don't just do something; sit there. Develop the mindset that you don't make money on what you buy and sell; you make money (hopefully) on what you hold. Think more. Trade less. Make fewer, but more consequential, trades. Over-diversification reduces the importance of each trade; thus it can allow investors to take actions without adequate investigation or great conviction. I think most portfolios are overdiversified and over-traded.

I devoted a good portion of *The Illusion of Knowledge* and *Selling Out* to warning investors about how difficult it is to improve returns through short-term market timing, and I quoted the great investor Bill Miller: "Time, not timing, is key to building wealth in the stock market."

On this subject, I was recently asked by a consultant, "If you don't try to get in and out of the market as appropriate, how do you earn your fees?" My answer was that it's our job to assemble portfolios that will perform well over the long run, and market timing is unlikely to add to the outcome unless it can be done

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well, which I'm not convinced is usually the case. "What about you?" I asked. "If you help a client establish an appropriate asset allocation, does it follow that you're not earning your fees if you don't change it a month later?"

Likewise, the day *The Illusion of Knowledge* came out, an old friend asked me, "But you have to take a position [on short-run events], don't you?" My answer, predictably, was, "No, not if you don't have an advantage when doing so. Why would you bet on the outcome of a coin toss, especially if it cost money to play?"

I'll end my discussion of this subject with a wonderful citation:

> A news item that has gotten a lot of attention recently concerned an internal performance review of Fidelity accounts to determine which type of investors received the best returns between 2003 and 2013. The customer account audit revealed that the best investors were either dead or inactive – the people who switched jobs and "forgot" about an old 401(k) leaving the current options in place, or the people who died and the assets were frozen while the estate handled the assets. ("Fidelity's Best Investors Are Dead," *The Conservative Income Investor*, April 8, 2020)

Since the journalists have been unable to find the Fidelity study, and apparently so has Fidelity, the story is probably apocryphal. But I still like the idea, since the conclusion is so much in line with my thinking. **I'm not saying it's worth dying to improve investment performance, but it might be a good idea for investors to simulate that condition by sitting on their hands.**

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So What Does Matter?

What really matters is the performance of your holdings over the next five or ten years (or more) and how the value at the end of the period compares to the amount you invested and to your needs. Some people say the long run is a series of short runs, and if you get those right, you'll enjoy success in the long run. They might think the route to success consists of trading often in order to capitalize on relative value assessments, predictions regarding swings in popularity, and forecasts of macro events. I obviously do not.

Most individual investors and anyone who understands the limitations regarding outperformance would probably be best off holding index funds over the long run. Investment professionals and others who feel they need or want to engage in active management might benefit from the following suggestions.

I think most people would be more successful if they focused less on the short run or macro trends and instead worked hard to gain superior insight concerning the outlook for fundamentals over multi-year periods in the future. They should:

- study companies and securities, assessing things such as their earnings potential;
- buy the ones that can be purchased at attractive prices relative to their potential;
- hold onto them as long as the company's earnings outlook and the attractiveness of the price remain intact; and
- make changes only when those things can't be reconfirmed, or when something better comes along.

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At the London conference mentioned on page one – while I was discussing (and discouraging) paying attention to the short run – I said that at Oaktree we consider it our job to (a) buy debt that will be serviced as promised (or will return the same amount or more if not) and (b) invest in companies that will become more valuable over time. I'll stick with that.

The above description of the investor's job is quite simple . . . some might say simplistic. And it is. Setting out the goals and the process in broad terms is easy. The hard part is executing better than most people: That's the only route to market-beating performance. **Since average decision-making is reflected in security prices and produces average performance, superior results have to be based on superior insight.** But I can't tell you how to do these things better than the average investor. There's a lot more to the process, and I'm going to outline some of what I think are key elements to remember. You'll recognize recurring themes here, from other memos and from earlier pages in this one, but I make no apology for dwelling on things that are important:

- Forget the short run – only the long run matters. Think of securities as interests in companies, not trading cards.
- Decide whether you believe in market efficiency. If so, is your market sufficiently inefficient to permit outperformance, and are you up to the task of exploiting it?
- Decide whether your approach will lean more toward aggressiveness or defensiveness. Will you try to find more and bigger winners or focus on avoiding losers, or both? Will you try to make more on the way up or lose less on the down, or both? (Hint: "both" is much harder to achieve than one or the other.) In general, people's investment styles should fit their personalities.
- Think about what your normal risk posture should be – your normal balance between aggressiveness and defensiveness – based on your or your clients' financial position, needs, aspirations, and ability to live with fluctuations. Consider whether you'll vary your balance depending on what happens in the market.
- Adopt a healthy attitude toward return and risk. Understand that "the more return potential, the better" can be a dangerous rule to follow given that increased return potential is usually accompanied by increased risk. On the other hand, completely avoiding risk usually leads to avoiding return as well.
- Insist on an adequate margin of safety, or the ability to weather periods when things go less well than you expected.
- Stop trying to predict the macro; study the micro like mad in order to know your subject better than others. Understand that you can expect to succeed only if you have a knowledge advantage, and be realistic about whether you have it or not. Recognize that trying harder isn't enough. Accept my son Andrew's view that merely possessing "readily available quantitative information regarding the present" won't give you above average results, since everyone else has it.
- Recognize that psychology swings much more than fundamentals, and usually in the wrong direction or at the wrong time. Understand the importance of resisting those swings. Profit if you can by being counter-cyclical and contrarian.
- Study conditions in the investment environment – especially investor behavior – and consider where things stand in terms of the cycle. Understand that where the market stands in its cycle will strongly influence whether the odds are in your favor or against you.
- Buy debt when you like the yield, not for trading purposes. In other words, buy 9% bonds if you think the yield compensates you for the risk, and you'll be happy with 9%. Don't buy 9% bonds expecting to make 11% thanks to price appreciation resulting from declining interest rates.

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Of critical importance, equity investors should make their primary goals (a) participating in the secular growth of economies and companies and (b) benefiting from the wonder of compounding. Think about the 10.5% yearly return of the S&P 500 Index (or its predecessors) since 1926 and the fact that this would have turned $1 into over $13,000 by now, even though the period witnessed 16 recessions, one Great Depression, several wars, one World War, a global pandemic, and many instances of geopolitical turmoil.

Think of participating in the long-term performance of the average as the main event and the active efforts to improve on it as "embroidery around the edges." This might be the reverse of most active investors' attitudes. Improving results through over- and underweighting, short-term trading, market timing, and other active measures isn't easy. **Believing you can do these things successfully requires the assumption that you're smarter than a bunch of very smart people. Think twice before proceeding, as the requirements for success are high (see below).**

Don't mess it up by over-trading. Think of buying and selling as an expense item, not a profit center. I love the idea of the automated factory of the future, with its one man and one dog; The dog's job is to keep the man from touching the machinery, and the man's job is to feed the dog. **Investors should find a way to keep their hands off their portfolios most of the time.**

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A Special Word in Closing: Asymmetry

"Asymmetry" is a concept I've been conscious of for decades and consider more important with every passing year. It's my word for the essence of investment excellence and a standard against which investors should be measured.

First, some definitions:

- I'm going to talk below about whether an investor has "alpha." Alpha is technically defined as return in excess of the benchmark return, but I prefer to think of it as superior investing skill. It's the ability to find and exploit inefficiencies when they're present.
- Inefficiencies – mispricings or mistakes – represent instances when an asset's price diverges from its fair value. These divergences can show up as bargains or the opposite, over-pricings.
- Bargains will dependably perform better than other investments over time after adjustment for their riskiness. Over-pricings will do the opposite.
- "Beta" is an investor's or a portfolio's relative volatility, also described as relative sensitivity or systematic risk.

People who believe in the efficient market hypothesis think of a portfolio's return as the product of the market's return multiplied by the portfolio's beta. This is all it takes to explain results, since there are no mispricings to take advantage of in an efficient market (and so no such thing as alpha). **Thus, alpha is skill that enables an investor to produce performance better than that which is explained purely by market return and beta.** Another way to say this is that having alpha allows an investor to enjoy profit potential that is disproportionate to loss potential: asymmetry. In my view, asymmetry is present when an investor can repeatedly do some or all of the following:

- make more money in good markets than he gives back in bad markets,
- have more winners than losers,
- make more money on his winners than he loses on his losers,

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- do well when his aggressive or defensive bias proves timely but not badly when it doesn't,
- do well when his sector or strategy is in favor but not badly when it isn't, and
- construct portfolios so that most of the surprises are on the upside.

For example, most of us have an inherent bias toward either aggressiveness or defensiveness. For this reason, it doesn't mean much if an aggressive investor outperforms in a good year or a defensive investor outperforms in a bad year. To determine whether they have alpha and produce asymmetry, we have to consider whether the aggressive investor is able to avoid the full loss that his aggressiveness alone would produce in a bad market and whether the defensive investor can avoid missing out on too much of the gain when the market does well. **In my opinion, "excellence" lies in asymmetry between the results in good and bad times.**

As I see it, if inefficiencies are present in an investor's market, and she has alpha, the impact will show up in asymmetrical returns. If her returns show no asymmetry, the investor doesn't have alpha (or perhaps there are no inefficiencies for her to identify). Flipping that over, if an investor doesn't have alpha, her returns won't be asymmetrical. It's as simple as that.

To simplify, here's how I think about asymmetry. This discussion is based on material I included in my 2018 book *Mastering the Market Cycle: Getting the Odds on Your Side*. While I may appear to be talking about one good year and one bad one, these observations can only be considered valid if these patterns hold over a meaningful number of years.

Let's consider a manager's performance:

Market performance	+10%	-10%
Manager A	+10%	-10%

The above manager clearly adds no value. You might as well invest in an index fund (probably at a much lower fee).

These two managers also add no value:

Market performance	+10%	-10%
Manager B	+5%	-5%
Manager C	+20%	-20%

Manager B is just a no-alpha manager with a beta of 0.5, and manager C is a no-alpha manager with a beta of 2.0. You could get the same results as manager B by putting half your capital in an index fund and keeping the rest under your mattress and in the case of manager C, by doubling your investment with borrowed capital and putting it all in an index fund.

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These two managers, however, do have alpha, as they exhibit asymmetry:

Market performance	+10%	-10%
Manager D	+17%	-12%
Manager E	+9%	-3%

Both managers' returns reflect more of the market's gain in good times than they do its loss in bad ones. Manager D might be described as an aggressive manager with alpha; she achieves 170% of the market's return when the market rises but suffers only 120% of the loss when it falls. Manager E is a defensive manager with alpha; his returns reflect 90% of the gain in an up market but only 30% of the loss in a down market. These asymmetries can only be attributed to the presence of alpha. Risk-tolerant clients will prefer to invest with D, and risk-averse ones will prefer E.

This manager is truly exceptional:

Market performance	+10%	-10%
Manager F	+20%	-5%

She beat the market in both directions: She's up more than the market when it rises <u>and</u> down less when it falls. She's up so much in a good market that you might be tempted to describe her as aggressive. But since she's down less in a down market, that description won't hold. Either she doesn't have a bias in terms of aggressiveness versus defensiveness, or her alpha is great enough to offset it.

Finally, here's one of the greatest managers of all time:

Market performance	+10%	-10%
Manager G	+20%	+5%

Manager G is up in good and bad markets alike. He clearly doesn't have an aggressiveness/defensiveness bias, since his performance is exceptional in both markets. His alpha is sufficient to enable him to buck the trend and achieve a positive return in a down year. When you find Manager G, you should (a) do extensive due diligence regarding his reported performance, (b) if the numbers hold up, invest a lot of money with him, (c) hope he won't accept so much money that his edge goes away, and (d) send me his number.

* * *

What matters most? Asymmetry.

- In sum, asymmetry shows up in a manager's ability to do very well when things go his way and not too bad when they don't.

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- A great adage says, "Never confuse brains and a bull market." Managers with the skill needed to produce asymmetry are special because they're able to fashion good gains from sources other than market advances.
- **When you think about it, the active investment business is, at its heart, completely about asymmetry. If a manager's performance doesn't exceed what can be explained by market returns and his relative risk posture – which stems from his choice of market sector, tactics, and level of aggressiveness – he simply hasn't earned his fees.**

Without asymmetry (see Managers A, B, and C on page 12), active management delivers no value and deserves no fees. **Indeed, all the choices an active investor makes will be for naught if he doesn't possess superior skill or insight.** By definition, average investors and below-average investors don't have alpha and can't produce asymmetry.

The big question is how to achieve asymmetry. Most of the things people focus on – the things I describe on pages one through nine as not mattering – can't provide it. As I've said before, the average of all investors' thinking produces market prices and, obviously, average performance. **Asymmetry can only be demonstrated by the relatively few people with <u>superior</u> skill and insight.** The key lies in finding them.

November 22, 2022

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Memo to: Oaktree Clients

From: Howard Marks

Re: The Illusion of Knowledge

I've been expressing my disregard for forecasts for almost as long as I've been writing my memos, starting with *The Value of Predictions, or Where'd All This Rain Come From* in February 1993. Over the years since then, I've explained at length why I'm not interested in forecasts – a few of my favorite quotes echoing my disdain head the sections below – but I've never devoted a memo to explaining why making helpful macro forecasts is so difficult. So here it is.

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Food for Thought

> There are two kinds of forecasters: those who don't know, and those who don't know they don't know.
>
> – John Kenneth Galbraith

Shortly after putting the finishing touches on *I Beg to Differ* in July, I attended a lunch with a number of experienced investors, plus a few people from outside the investment industry. It wasn't organized as a social occasion but rather an opportunity for those present to exchange views regarding the investment environment.

At one point, the host posed a series of questions: What's your expectation regarding inflation? Will there be a recession, and if so, how bad? How will the war in Ukraine end? What do you think is going to happen in Taiwan? What's likely to be the impact of the 2022 and '24 U.S. elections? I listened as a variety of opinions were expressed.

Regular readers of my memos can imagine what went through my mind: "Not one person in this room is an expert on foreign affairs or politics. No one present has particular knowledge of these topics, and certainly not more than the average intelligent person who read this morning's news." None of the thoughts expressed, even on economic matters, seemed much more persuasive than the others, and I was absolutely convinced that none were capable of improving investment results. And that's the point.

It was that lunch that started me thinking about writing yet another memo on the futility of macro forecasting. Soon thereafter a few additional inputs arrived – a book, a piece in *Bloomberg Opinion*, and a newspaper article – all of which supported my thesis (or perhaps played to my "confirmation bias" – i.e., the tendency to embrace and interpret new information in a manner that confirms one's preexisting views). Together, the lunch and these items inspired this memo's theme: **the reasons why forecasts are rarely helpful**.

In order to produce something useful – be it in manufacturing, academia, or even the arts – you must have a reliable **process** capable of converting the required **inputs** into the desired **output**. The problem, in short, is that I don't think there can be a process capable of consistently turning the large number of variables associated with economies and financial markets (the inputs) into a useful macro forecast (the output).

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The Machine

> The greatest enemy of knowledge is not ignorance, it is the illusion of knowledge.
>
> – Daniel J. Boorstin

In my first decade or so working at First National City Bank, a word was in vogue that I haven't heard in a long time: econometrics. This is the practice of looking for relationships within economic data that can lead to valid forecasts. Or, to simplify, I'd say econometrics is concerned with building a mathematical model of an economy. Econometricians were heard from a great deal in the 1970s, but I don't believe they are any longer. I take that to mean their models didn't work.

Forecasters have no choice but to base their judgments on models, be they complex or informal, mathematical or intuitive. Models, by definition, consist of assumptions: "If A happens, then B will happen." In other words, relationships and responses. But for us to willingly employ a model's output, we have to believe the model is reliable. When I think about modeling an economy, my first reaction is to think about how incredibly complicated it is.

The U.S., for example, has a population of around 330 million. All but the very youngest and perhaps the very oldest are participants in the economy. Thus, there are hundreds of millions of consumers, plus millions of workers, producers, and intermediaries (many people fall into more than one category). To predict the path of the economy, you have to forecast the behavior of these people – if not for every participant, then at least for group aggregates.

A real simulation of the U.S. economy would have to deal with billions of interactions or nodes, including interactions with suppliers, customers, and other market participants around the globe. Is it possible to do this? Is it possible, for example, to predict how consumers will behave (a) if they receive an additional dollar of income (what will be the "marginal propensity to consume"?); (b) if energy prices rise, squeezing other household budget categories; (c) if the price for one good rises relative to others (will there be a "substitution effect"?); or (d) if the geopolitical arena is roiled by events continents away?

Clearly, this level of complexity necessitates the frequent use of simplifying assumptions. For example, it would make modeling easier to be able to assume that consumers won't buy B in place of A if B isn't either better or cheaper (or both). And it would help to assume that producers won't price X below Y if it doesn't cost less to produce X than Y. But what if consumers are attracted to the prestige of B despite (or even because of) its higher price? And what if X has been developed by an entrepreneur who's willing to lose money for a few years to gain market share? Is it possible for a model to anticipate the consumer's decision to pay up and the entrepreneur's decision to make less (or even lose) money?

Further, a model will have to predict how each group of participants in the economy will behave in a variety of environments. But the vagaries are manifold. For example, consumers may behave one way at one moment and a different way at another similar moment. Given the large number of variables involved, it seems impossible that two "similar" moments will play out exactly the same way, and thus that we'll witness the same behavior on the part of participants in the economy. Among other things, participants' behavior will be influenced by their psychology (or should I say their emotions?), and their psychology can be affected by qualitative, non-economic developments. How can those be modeled?

How can a model of an economy be comprehensive enough to deal with things that haven't been seen before, or haven't been seen in modern times (meaning under comparable circumstances)? This is yet another example of why a model simply can't replicate something as complex as an economy.

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Of course, a prime example of this is the Covid-19 pandemic. It caused much of the world's economy to be shut down, turned consumer behavior on its head, and inspired massive government largesse. What aspect of a pre-existing model would have enabled it to anticipate the pandemic's impact? Yes, we had a pandemic in 1918, but the circumstances were so different (no iPhones, Zoom calls, etc. ad infinitum) as to render economic events during that time of little or no relevance to 2020.

In addition to the matter of complexity and the difficulty of capturing psychological fluctuations and dynamic processes, think about the limitations that bear on an attempt to predict something that can't be expected to remain unchanged. Shortly after starting on this memo, I received my regular weekly edition of Morgan Housel's always-brilliant newsletter. One of the articles described a number of observations from other arenas that have relevance to our world of economics and investing. Here are two, borrowed from the field of statistics, that I think are pertinent to the discussion of economic models and forecasts ("Little Ways the World Works," Morgan Housel, *Collaborative Fund*, July 20, 2022):

> Stationarity: An assumption that the past is a statistical guide to the future, based on the idea that the big forces that impact a system don't change over time. If you want to know how tall to build a levee, look at the last 100 years of flood data and assume the next 100 years will be the same. Stationarity is a wonderful, science-based concept that works right up until the moment it doesn't. It's a major driver of what matters in economics and politics. [But in our world,] "Things that have never happened before happen all the time," says Stanford professor Scott Sagan.
>
> Cromwell's rule: Never say something cannot occur . . . . If something has a one-in-a-billion chance of being true, and you interact with billions of things during your lifetime, you are nearly assured to experience some astounding surprises, and should always leave open the possibility of the unthinkable coming true.

Stationarity might be fairly assumed in the realm of the physical sciences. For example, thanks to the law of universal gravitation, under given atmospheric conditions, the speed at which an object falls can always be counted on to accelerate at the same rate. It always has, and it always will. But few processes can be counted on to be stationary in our world, especially given the role played by psychology, emotion, and human behavior, and their propensity to vary over time.

Take, for example, the relationship between unemployment and inflation. For roughly the last 60 years, economists relied on the Phillips curve, which holds that wage inflation will rise as the unemployment rate declines, because when there are fewer idle workers on the sidelines, employees gain bargaining power and can successfully negotiate for higher wages. It was also believed for decades that an unemployment rate around 5.5% indicated "full employment." But unemployment fell below 5.5% in March 2015 (and reached a 50-year low of 3.5% in September 2019), yet there was no significant increase in inflation (in wages or otherwise) until 2021. So the Phillips curve described an important relationship that was built into economic models for decades but, seemingly, didn't apply over much of the last decade.

Cromwell's rule is also relevant. Unlike in the physical sciences, in markets and economies there's very little that absolutely has to happen or definitely can't happen. Thus, in my book *Mastering the Market Cycle*, I listed seven terms that investors should purge from their vocabularies: "never," "always," "forever," "can't," "won't," "will," and "has to." But if it's true that those words have to be discarded, then so too must the idea that one can build a model that can dependably predict the macro future. In other words, very little is immutable in our world.

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The unpredictability of behavior is a favorite topic of mine. Noted physicist Richard Feynman once said, "Imagine how much harder physics would be if electrons had feelings." The rules of physics are reliable precisely because electrons always do what they're supposed to do. They never forget to perform. They never rebel. They never go on strike. They never innovate. They never behave in a contrary manner. **But none of these things is true of the participants in an economy, and for that reason their behavior is unpredictable. And if the participants' behavior is unpredictable, how can the workings of an economy be modeled?**

What we're talking about here is the future, and there's simply no way to deal with the future that doesn't require the making of assumptions. Small errors in assumptions regarding the economic environment and small changes in participants' behavior can make differences that are highly problematic. As mathematician and meteorologist Edward Lorenz famously suggested, "The flapping of a butterfly's wings in Brazil could set off a tornado in Texas." (Historian Niall Ferguson references this remark in the article I discuss below.)

Thinking about all the above, can we ever consider a model of an economy to be reliable? Can a model replicate reality? Can it describe the millions of participants and their interactions? Are the processes it attempts to model dependable? Can the processes be reduced to mathematics? Can mathematics capture the qualitative nuances of people and their behavior? Can a model anticipate changes in consumer preferences, changes in the behavior of businesses, and participants' reactions to innovation? In other words, can we trust its output?

Clearly, economic relationships aren't hard-wired, and economies aren't governed by schematic diagrams (which models try to simulate). **Thus, for me, the bottom line is that the output from a model may point in the right direction much of the time, when the assumptions aren't violated. But it can't always be accurate, especially at critical moments such as inflection points . . . and that's when accurate predictions would be most valuable.**

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<u>The Inputs</u>

> No amount of sophistication is going to allay the fact that all of your knowledge is about the past and all your decisions are about the future.
>
> – Ian H. Wilson (former GE executive)

Having considered the incredible complexity of an economy and the need to make simplifying assumptions that decrease any economic model's accuracy, let's now think about the inputs a model requires – the raw materials from which forecasts are manufactured. Will the estimated inputs prove valid? Can we know enough about them for the resulting forecast to be meaningful? **Or will we simply be reminded of the ultimate truth about models: "garbage in, garbage out"?** Clearly, no forecast can be better than the inputs on which it's based.

Here's what Niall Ferguson wrote in *Bloomberg Opinion* on July 17:

> Consider for a moment what we are implicitly asking when we pose the question: Has inflation peaked? We are not only asking about the supply of and demand for 94,000 different commodities, manufactures and services. We are also asking about the future path of interest rates set by the Fed, which – despite the much-vaunted policy of "forward guidance" – is far from certain. We are asking about how long the strength of the dollar will be sustained, as it is currently holding down the price of U.S. imports.

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> But there's more. We are at the same time implicitly asking how long the war in Ukraine will last, as the disruption caused since February by the Russian invasion has significantly exacerbated energy and food price inflation. We are asking whether oil-producing countries such as Saudi Arabia will respond to pleas from Western governments to pump more crude. . . .
>
> We should probably also ask ourselves what the impact on Western labor markets will be of the latest Covid omicron sub-variant, BA.5. UK data indicate that BA.5 is 35% more transmissible than its predecessor BA.2, which in turn was over 20% more transmissible than the original omicron.
>
> Good luck adding all those variables to your model. It is in fact just as impossible to be sure about the future path of inflation as it is to be sure about the future path of the war in Ukraine and the future path of the Covid pandemic.

I found Ferguson's article so relevant to the subject of this memo that I'm including a link to it here. It makes a lot of important points, although I beg to differ in one regard. Ferguson says above, "It is in fact just as impossible to be sure about the future path of inflation as it is to be sure about the future path of the war in Ukraine and the future path of the Covid pandemic." I think accurately predicting inflation is "more impossible" (if there is such a thing) than predicting the outcomes of the other two, since doing so requires being right about both of those outcomes and a thousand other things. How can anyone possibly get all these things right?

Here's my rough description of the forecasting process from *The Value of Predictions*:

> I imagine that for most money managers, the process goes like this: "I predict the economy will do A. If A happens, interest rates should do B. With interest rates of B, the stock market should do C. Under that environment, the best performing sector should be D, and stock E should rise the most." The portfolio expected to do best under that scenario is then assembled.
>
> But how likely is E anyway? Remember that E is conditioned on A, B, C and D. Being right two-thirds of the time would be a great accomplishment in the world of forecasting. But if each of the five predictions has a 67% chance of being right, then there is a 13% probability that all five will be correct and that the stock will perform as expected.

Predicting event E on the basis of assumptions concerning A, B, C and D is what I call single-scenario forecasting. In other words, if what was assumed regarding A, B, C or D turns out to have been erroneous, the forecasted outcome for E is unlikely to materialize. All of the underlying forecasts have to be right in order for E to turn out as predicted, and that's highly improbable. No one can invest intelligently without considering (a) the other possible outcomes for each element, (b) the likelihood of these alternative scenarios, (c) what would have to happen for one of them to be the actual outcome, and (d) what the impact on E would be.

Ferguson's article raises an interesting question about economic modeling: What's to be assumed regarding the general macro environment under which economic participants will operate? **Doesn't this question indicate an insoluble feedback loop: To predict the overall performance of the economy, we need to make assumptions about, for example, consumer behavior. But to predict consumer behavior, don't we need to make assumptions regarding the overall economic environment?** In *Nobody Knows II* (March 2020), my first memo of the pandemic, I mentioned that in a discussion of the coronavirus, Harvard epidemiologist Marc Lipsitch had said there are (a) facts, (b) informed

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extrapolations from analogies to other viruses, and (c) opinion or speculation. This is standard fare when we deal with uncertain events. In the case of economic or market forecasts, we have a vast trove of history and lots of analogous past events from which to extrapolate (neither of which was the case with Covid-19). But even when these things are used as inputs for a well-constructed forecasting machine, they're still highly unlikely to be predictive of the future. They may be useful fodder, or they may be garbage.

To illustrate, people often ask me which of the past cycles I've experienced was most like this one. My answer is that current developments bear a passing resemblance to some past cycles, but there is no absolute parallel. **The differences are profound in every case and outweigh the similarities. And even if we could find an <u>identical</u> prior period, how much reliance should we put on a sample size of one? I'd say not much. Investors rely on historical references (and the forecasts they foster) because they fear that without them they'd be flying blind. But that doesn't make them reliable.**

<u>Unpredictable Influences</u>

> Forecasts create the mirage that the future is knowable.
>
> – Peter Bernstein

We can't consider the reasonableness of forecasting without first deciding whether we think our world is one of order or of randomness. Put simply, is it entirely predictable, entirely unpredictable, or something in between? The bottom line for me is that it's in between, but unpredictable enough that most forecasts are unhelpful. And since our world is predictable at some times and unpredictable at others, what good are forecasts if we can't tell which is which?

I learned a new word from reading Ferguson's article: "deterministic." It's defined by *Oxford Languages* as "causally determined by preceding events or natural laws." The world is much simpler when we deal with things that function according to rules . . . like Feynman's electrons. But, clearly, economies and markets aren't governed by natural laws – thanks to the involvement of people – and preceding events may "set the stage" or "tend to repeat," but events rarely unfold in the same way twice. Thus, I believe the processes that constitute the operation of economies and markets aren't deterministic, meaning they aren't predictable.

Further, the inputs clearly are undependable. Many are subject to randomness, such as weather, earthquakes, accidents, and deaths. Others involve political and geopolitical issues – ones we're aware of and ones that haven't yet surfaced.

In his *Bloomberg Opinion* article, Ferguson mentioned the English writer G. K. Chesterton. That reminded me to include a Chesterton quote that I used in *Risk Revisited Again* (June 2015):

> The real trouble with this world of ours is not that it is an unreasonable world, nor even that it is a reasonable one. The commonest kind of trouble is that it is nearly reasonable, but not quite. Life is not an illogicality; yet it is a trap for logicians. **It looks just a little more mathematical and regular than it is; its exactitude is obvious, but its inexactitude is hidden; its wildness lies in wait.** (Emphasis added)

Going back to the lunch described on page one, the host opened the proceedings roughly as follows: "In recent years, we've experienced the Covid-19 pandemic, the surprising success of the Fed's rescue actions, and the invasion of Ukraine. This has been a very challenging environment, since all of these

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developments arrived out of the blue." I imagine the implication for him was that the attendees should let themselves off the hook for the inaccuracy of their 2020-22 forecasts and go back to work predicting future events and betting on their judgments. But my reaction was quite different: "The list of events that shaped the current environment is quite extensive. **Doesn't the fact that no one was able to predict any of them convince those present that they should give up on forecasting?"**

For another example, let's think back to the fall of 2016. There were two things that almost everyone was sure of: (a) Hillary Clinton would be elected president and (b) if for some reason Donald Trump were elected instead, the markets would tank. Nonetheless, Trump won, and the markets soared. The impact on the economy and markets over the last six years was profound, and **I'm confident no forecast that took a conventional view of the coming 2016 election got the period since then correct.** Again, shouldn't that be enough to convince people that (a) we don't know what's going to happen and (b) we don't know how the markets will react to what happens?

Do Forecasts Add Value?

> It ain't what you don't know that gets you into trouble. It's what you know for sure that just ain't so.
>
> – Mark Twain

As I mentioned in my recent memo *Thinking About Macro*, in the 1970s we used to describe an economist as "a portfolio manager who never marks to market." In other words, economists make forecasts; events prove them either wrong or right; they go on to make new forecasts; but they don't keep track of how often they get it right (or they don't publish the stats).

Can you imagine hiring a money manager (or being hired, if you are a money manager) without reference to a track record? And yet, economists and strategists stay in business, presumably because there are customers for their forecasts, despite there being no published records.

Are you a consumer of forecasts? Are there forecasters and economists on staff where you work? Or do you subscribe to their publications and invite them in for briefings, as was the case with my previous employers? If so, do you know how often each has been right? Have you found a way to rigorously determine which ones to rely on and which to ignore? Is there a way to quantify their contributions to your investment returns? I ask because I've never seen or heard of any research along these lines. The world seems incredibly short on information regarding the value added by macro forecasts, especially given the large number of people involved in this pursuit.

Despite the lack of evidence regarding its value, macro forecasting goes on. Many of the forecasters are part of teams managing equity funds, or they provide advice and forecasts to those teams. What we know for sure is that actively managed equity funds have been losing market share to index funds and other passive vehicles for decades due to the poor performance of active management, and as a result, actively managed funds now account for less than half of the capital in U.S. equity mutual funds. Could the unhelpful nature of macro forecasts be part of the reason?

The only place I know to look for quantification regarding this issue is the performance of so-called macro hedge funds. Hedge Fund Research (HFR) publishes broad hedge fund performance indices as well as a number of sub-indices. Below is the long-term performance of a broad hedge fund index, a macro fund sub-index, and the Standard & Poor's 500 Index.

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	HFRI Hedge Fund Index*	HFRI Macro (Total) Index	S&P 500 Index
5-year annualized return*	5.2%	5.0%	12.8%
10-year annualized return*	5.1	2.8	13.8

* Performance through July 31, 2022. The broad hedge fund index shown is the Fund Weighted Composite Index.

What the table above shows is that, according to HFR, the average hedge fund woefully underperformed the S&P 500 in the period under study, and the average macro fund did considerably worse (especially in the period from 2012 to 2017). Given that investors continue to entrust roughly $4.5 trillion of capital to hedge funds, they must deliver some benefit other than returns, but it's not obvious what that could be. This seems to be especially true for the macro funds.

To support my opinion regarding forecasts, I'll cite a rare example of self-assessment: a seven-page feature that appeared in the Sunday Opinion section of *The New York Times* on July 24 titled "I Was Wrong." In it, eight *Times* opinion writers opened up about incorrect predictions they made and flawed advice they had given. The most relevant here is Paul Krugman, who wrote a confession titled "I Was Wrong About Inflation." I'll string together some excerpts:

> In early 2021, there was an intense debate among economists about the likely consequences of the American Rescue Plan . . . . I was on [the side that was less concerned about the impact on inflation]. As it turned out, of course, that was a very bad call. . . .
>
> . . . history wouldn't have led us to expect this much inflation from overheating. So **something was wrong with my model** . . . One possibility is that **history was misleading** . . . . Also, disruptions associated with adjusting to the pandemic and its aftermath may still be playing a large role. And of course both Russia's invasion of Ukraine and China's lockdown of major cities have added **a whole new level of disruption. . . .**
>
> In any case, the whole experience has been **a lesson in humility**. Nobody will believe this, but in the aftermath of the 2008 crisis, standard economic models performed pretty well, and I felt comfortable applying these models in 2021. But in retrospect I should have realized that in the face of the new world created by Covid-19, that kind of **extrapolation wasn't a safe bet**. (Emphasis added)

I salute Krugman for this incredible bout of candor (although I have to say I don't remember a lot of 2009-10 market forecasts that were optimistic enough to capture the reality of the subsequent decade). **Krugman's explanation for his error is fine as far as it goes, but I don't see any mention of abstaining from modeling, extrapolating, or forecasting in the future.**

Humility may even be seeping into one of the world's biggest producers of economic forecasts, the U.S. Federal Reserve, home of more than 400 Ph.D. economists. Here's what economist Gary Shilling wrote in *Bloomberg Opinion* on August 22:

> The Federal Reserve's forward guidance program has been a disaster, so much so that it has strained the central bank's credibility. Chair Jerome Powell seems to agree that

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> providing estimates of where the Fed sees interest rates, economic growth and inflation at different points in the future should be junked. . . .
>
> **The basic problem with forward guidance is that it depends on data that the Fed had a miserable record of forecasting.** It was consistently too optimistic about an economic recovery after the 2007-2009 Great Recession. In September 2014, policy makers forecast real gross domestic product growth in 2015 of 3.40% but were forced to constantly crank their expectations down to 2.10% by September 2015.
>
> **The federal funds rate is not a market-determined interest rate but is set and controlled by the Fed, and nobody challenges the central bank. Yet the FOMC members were infamously terrible at forecasting what they themselves would do** . . . In 2015, their average projection of the 2016 federal funds rate was 0.90% and 3.30% in 2019. The actual numbers were 0.38% and 2.38%. . . .
>
> To be sure, many current events today have caused uncertainty in markets, but the Fed has been in there hot and heavy with its forward guidance. Recall that early this year the central bank believed that inflation caused by frictions in reopening the economy after the pandemic and supply-chain disruptions was temporary. Only belatedly did it reverse gears, raise rates and signal that further substantial hikes are coming. Faulty Fed forecasts resulted in faulty forward guidance and increased financial market volatility. (Emphasis added)

Lastly on this subject, where are the people who've gotten famous (and rich) by profiting from macro views? I certainly don't know everyone in the investment world, but among the people I do know or am aware of, there are only a few highly successful "macro investors." When the number of instances of something is tiny, it's an indication, as my mother used to say, that they're "the exceptions that prove the rule." **The rule in this case is that macro forecasts rarely lead to exceptional performance. For me, the exceptionalness of the success stories proves the general truth of that assertion.**

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Practitioners' Need to Predict

> Forecasts usually tell us more of the forecaster than of the future.
>
> – Warren Buffett

How many people are capable of making macro forecasts that are valuable most of the time? Not many, I think. And how many investment managers, economists, and forecasters try? Thousands, at a minimum. That raises an interesting question: why? If macro forecasts don't add to investment success over time, why do so many members of the investment management industry espouse belief in forecasts and pursue them? I think the reasons probably center on these:

- It's part of the job.
- Investors have always done it.
- Everyone I know does it, especially my competitors.
- I've always done it – I can't quit now.
- If I don't do it, I won't be able to attract clients.

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- Since investing consists of positioning capital to benefit from future events, how can anyone expect to do a good job without a view regarding what those events will be? We need forecasts, even if they're imperfect.

This summer, at the suggestion of my son Andrew, I read an extremely interesting book: *Mistakes Were Made (but Not by Me): Why We Justify Foolish Beliefs, Bad Decisions, and Hurtful Acts*, written by psychologists Carol Tavris and Elliot Aronson. **Its topic is self-justification. The authors explain that "cognitive dissonance" arises when people are confronted with new evidence that calls into question their pre-existing positions and that when it does, unconscious mechanisms enable them to justify and uphold those positions.** Here are some selected quotes:

> If you hold a set of beliefs that guide your practice and you learn that some of them are incorrect, you must either admit you were wrong and change your approach or reject the new evidence.
>
> Most people, when directly confronted by evidence that they are wrong, do not change their point of view or plan of action but justify it even more tenaciously.
>
> Once we are invested in a belief and have justified its wisdom, changing our minds is literally hard work. It's much easier to slot that new evidence into an existing framework and do the mental justification to keep it there than it is to change the framework.

The mechanisms that people generally employ when responding to evidence that throws their beliefs into doubt include these (paraphrasing the authors' words):

- an unwillingness to heed dissonant information;
- selectively remembering parts of their lives, focusing on those parts that support their own points of view; and
- operating under cognitive biases that ensure people see what they want to see and seek confirmation of what they already believe.

I have little doubt that these are among the factors that cause and enable people to continue making and consuming forecasts. What specific form might they take in this case?

- thinking of macro forecasts as an indispensable part of investing;
- pleasantly recalling correct forecasts, especially any that were bold and non-consensus;
- overestimating how often forecasts were right;
- forgetting or minimizing the ones that were wrong;
- not keeping records regarding forecasts' accuracy or failing to calculate a batting average;
- focusing on the "pot of gold" that will reward correct forecasts in the future;
- saying "everyone does it"; and
- perhaps most importantly, blaming unsuccessful forecasts on having been blindsided by random occurrences or exogenous events. (But, as I said earlier, that's the point: Why make forecasts if they're so easily rendered inaccurate?)

Most people – even honest people with good intentions – take positions or actions that are in their own interests, sometimes at the expense of others or of objective truth. They don't know they're doing it; they think it's the right thing; and they have tons of justification. As Charlie Munger often says, quoting Demosthenes, "Nothing is easier than self-deceit. For what every man wishes, that he also believes to be true."

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I don't think of forecasters as crooks or charlatans. Most are bright, educated people who think they're doing something useful. **But self-interest causes them to act in a certain way, and self-justification enables them to stick with it in the face of evidence to the contrary.** As Morgan Housel put it in a recent newsletter:

> The inability to forecast the past has no impact on our desire to forecast the future. Certainty is so valuable that we'll never give up the quest for it, and most people couldn't get out of bed in the morning if they were honest about how uncertain the future is. ("Big Beliefs," *Collaborative Fund*, August 24, 2022)

For my birthday several years ago, my Oaktree co-founder Richard Masson gave me one of his typical quirky gifts. In this case, it consisted of some bound copies of *The New York Times*. I've been waiting for an opportunity to write about my favorite sub-headline from the issue dated October 30, 1929, which followed two days on which the Dow Jones Industrial Average declined by a total of 23%. **It read, "Bankers Optimistic."** (Less than three years later, the Dow was roughly 85% lower.) Most bankers – and most money managers – seem to be congenitally optimistic about the future. Among other things, it's in their best interests, as it helps them do more business. But their optimism certainly shapes their forecasts and their resulting behavior.

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Can They or Can't They?

> I never think about the future – it comes soon enough.
>
> – Albert Einstein

Consider the following aspects of macro forecasting:

- the number of assumptions/inputs that are required,
- the number of processes/relationships that have to be incorporated,
- the inherent undependability and instability of those processes, and
- the role of randomness and the likelihood of surprises.

The bottom line for me is that forecasts can't be right often enough to be worthwhile. I've described it many times, but just for the sake of completeness, I'm going to restate my view of the utility (or rather, futility) of macro forecasts:

- Most forecasts consist of extrapolation of past performance.
- Because macro developments usually don't diverge from prior trends, extrapolation is usually successful.
- Thus, most forecasts are correct. But since extrapolation is usually anticipated by security prices, those who follow expectations based on extrapolation don't enjoy unusual profits when it holds.
- Once in a while, the behavior of the economy does deviate materially from past patterns. Since this deviation comes as a surprise to most investors, its occurrence moves markets, meaning an accurate prediction of the deviation would be highly profitable.
- However, since the economy doesn't diverge from past performance very often, correct forecasts of deviation are rarely made and most forecasts of deviation turn out to be incorrect.

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- Thus, we have (a) extrapolation forecasts, most of which are correct but unprofitable, and (b) potentially profitable forecasts of deviation, which are rarely correct and thus are generally unprofitable.
- Q.E.D.: Most forecasts don't add to returns.

At the lunch described at the beginning of this memo, people were asked what they expected in terms of, for example, Fed policy, and how that influenced their investment stance. One person replied with something like, "I think the Fed will remain very worried about inflation and thus will raise rates significantly, bringing on a recession. So I'm in risk-off mode." Another said, "I foresee inflation moderating in the fourth quarter, allowing the Fed to turn dovish in January. That will allow them to bring interest rates back down and stimulate the economy. I'm very bullish on 2023."

We hear statements like these all the time. **But it must be recognized that these people are applying one-factor models:** The speaker is basing his or her forecast on a single variable. Talk about simplifying assumptions: These forecasters are implicitly holding everything constant other than Fed policy. They're playing checkers when they need to be playing 3-D chess. Leaving aside the impossibility of predicting Fed behavior, the reaction of inflation to that behavior, and the reaction of markets to inflation, what about all the other things that matter? If a thousand things play a part in determining the future direction of the economy and markets, what about the other 999? What about the impact of wage negotiations, the mid-term elections, the war in Ukraine, and the price of oil?

The truth is that humans can hold only a few things in their minds at any given time. **It's hard to factor in a large number of considerations and especially to understand how a large number of things will interact (correlation is <u>always</u> the real stumper).**

Even if you somehow manage to get an economic forecast correct, that's only half the battle. You still need to anticipate how that economic activity will translate into a market outcome. This requires an entirely different forecast, also involving innumerable variables, many of which pertain to psychology and thus are practically unknowable. According to his student Warren Buffett, Ben Graham said, "In the short run, the market is a voting machine, but in the long run, it is a weighing machine." How can investors' short-run choices be predicted? **Some economic forecasters correctly concluded that the actions of the Fed and Treasury announced in March 2020 would rescue the U.S. economy and trigger an economic recovery. But I'm not aware of anyone who predicted the torrid bull market that lifted off well before the recovery got underway**.

As I've described before, in 2016 Buffett shared with me his view of macro forecasts. "For a piece of information to be desirable, it has to satisfy two criteria: It has to be **important**, and it has to be **knowable**."

- **Of course, the macro outlook is important.** These days it seems as if investors hang on every forecaster's word, macro event, and twitch on the part of the Fed. Unlike my early days in this business, it seems like macro is everything and corporate developments count for relatively little.
- **But I agree strongly with Buffett that the macro future isn't knowable**, or at least almost no one can consistently know more about it than the mass of investors, which is what matters in trying to gain a knowledge advantage and make superior investment decisions.

Clearly, Buffett's name goes at the top of the list of investors who've succeeded by shunning macro forecasts and instead focusing on learning more than others about "the micro": companies, industries and securities.

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* * *

In a 2001 memo called *What's It All About, Alpha?*, I introduced the concept of the "I know" school and the "I don't know" school, and in 2004, I elaborated on this at length in *Us and Them*. To close the current memo, I'm going to insert some of what I wrote in the latter about the two schools:

> Most of the investors I've met over the years have belonged to the "I know" school. This was particularly true in 1968-78, when I analyzed equities, and even in 1978-95, when I had switched to non-mainstream investments but still worked at equity-centric money management firms.
>
> It's easy to identify members of the "I know" school:
>
> - They think knowledge of the future direction of economies, interest rates, markets and widely followed mainstream stocks is essential for investment success.
> - They're confident it can be achieved.
> - They know they can do it.
> - They're aware that lots of other people are trying to do it too, but they figure either (a) everyone can be successful at the same time, or (b) only a few can be, but they're among them.
> - They're comfortable investing based on their opinions regarding the future.
> - They're also glad to share their views with others, even though correct forecasts should be of such great value that no one would give them away gratis.
> - They rarely look back to rigorously assess their record as forecasters.
>
> "Confident" is the key word for describing members of this school. For the "I don't know" school, on the other hand, the word – especially when dealing with the macro-future – is "guarded." **Its adherents generally believe you can't know the future; you don't have to know the future; and the proper goal is to do the best possible job of investing in the absence of that knowledge.**
>
> As a member of the "I know" school, you get to opine on the future (and maybe have people take notes). You may be sought out for your opinions and considered a desirable dinner guest . . . especially when the stock market's going up.
>
> Join the "I don't know" school and the results are more mixed. You'll soon tire of saying "I don't know" to friends and strangers alike. After a while, even relatives will stop asking where you think the market's going. You'll never get to enjoy that 1-in-1,000 moment when your forecast comes true and *The Wall Street Journal* runs your picture. On the other hand, you'll be spared all those times when forecasts miss the mark, as well as the losses that can result from investing based on over-rated knowledge of the future. **But how do you think it feels to have prospective clients ask about your investment outlook and have to say, "I have no idea"?**
> For me, the bottom line on which school is best comes from the late Stanford behaviorist, Amos Tversky: **"It's frightening to think that you might not know something, but more frightening to think that, by and large, the world is run by people who have faith that they know exactly what's going on."**

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It's certainly standard practice in the investment management business to come up with macro forecasts, share them on request, and bet clients' money on them. It also seems conventional for money managers to trust in forecasts, especially their own. Not doing so would introduce enormous dissonance, as described above. But is their belief justified by the facts? I'm eager to hear what you think.

* * *

A few years ago, a highly respected sell-side economist with whom I became friendly during my early Citibank days called me with an important message: "You've changed my life," he said. "I've stopped making forecasts. Instead, I just tell people what's going on today and what I see as the possible implications for the future. Life is so much better." Can I help you reach the same state of bliss?

September 8, 2022

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Memo to: Oaktree Clients

From: Howard Marks

Re: I Beg to Differ

I've written many times about having joined the investment industry in 1969, when the "Nifty Fifty" stocks were in full flower. My first employer, First National City Bank, as well as many of the other "money-center banks" (the leading investment managers of the day), were enthralled with these companies, with their powerful business models and flawless prospects. Sentiment surrounding their stocks was uniformly positive, and portfolio managers found great safety in numbers. For example, a common refrain at the time was "you can't be fired for buying IBM," the era's quintessential growth company.

I've also written extensively about the fate of these stocks. In 1973-74, the OPEC oil embargo and the resultant recession took the S&P 500 Index down a total of 47%. And many of the Nifty Fifty, for which it had been thought that "no price was too high," did far worse, falling from peak p/e ratios of 60-90 to trough multiples in the single digits. Thus, their devotees lost almost all of their money in the stocks of companies that "everyone knew" were great. This was my first chance to see what can happen to assets that are on what I call "the pedestal of popularity."

In 1978, I was asked to move to the bank's bond department to start funds in convertible bonds and, shortly thereafter, high yield bonds. Now I was investing in securities most fiduciaries considered "uninvestable" and which practically no one knew about, cared about, or deemed desirable . . . and I was making money steadily and safely. **I quickly recognized that my strong performance resulted in large part from precisely that fact: I was investing in securities that practically no one knew about, cared about, or deemed desirable.** This brought home the key money-making lesson of the Efficient Market Hypothesis, which I had been introduced to at the University of Chicago Business School: If you seek superior investment results, you have to invest in things that others haven't flocked to and caused to be fully valued. **In other words, you have to do something different.**

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The Essential Difference

In 2006, I wrote a memo called *Dare to Be Great*. It was mostly about having high aspirations, and it included a rant against conformity and investment bureaucracy, as well as an assertion that the route to superior returns by necessity runs through unconventionality. The element of that memo that people still talk to me about is a simple two-by-two matrix:

	Conventional Behavior	Unconventional Behavior
Favorable Outcomes	Average good results	Above average results
Unfavorable Outcomes	Average bad results	Below average results

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Here's how I explained the situation:

> Of course, it's not easy and clear-cut, but I think it's the general situation. If your behavior and that of your managers is conventional, you're likely to get conventional results – either good or bad. Only if the behavior is unconventional is your performance likely to be unconventional . . . and only if the judgments are superior is your performance likely to be above average.
>
> The consensus opinion of market participants is baked into market prices. Thus, if investors lack insight that is superior to the average of the people who make up the consensus, they should expect average risk-adjusted performance.

Many years have passed since I wrote that memo, and the investing world has gotten a lot more sophisticated, but the message conveyed by the matrix and the accompanying explanation remains unchanged. Talk about simple – in the memo, I reduced the issue to a single sentence: **"This just in: You can't take the same actions as everyone else and expect to outperform."**

The best way to understand this idea is by thinking through a highly logical and almost mathematical process (greatly simplified, as usual, for illustrative purposes):

- A certain (but unascertainable) number of dollars will be made over any given period by all investors collectively in an individual stock, a given market, or all markets taken together. That amount will be a function of (a) how companies or assets fare in fundamental terms (e.g., how their profits grow or decline) and (b) how people feel about those fundamentals and treat asset prices.
- On average, all investors will do average.
- If you're happy doing average, you can simply invest in a broad swath of the assets in question, buying some of each in proportion to its representation in the relevant universe or index. By engaging in average behavior in this way, you're guaranteed average performance. (Obviously, this is the idea behind index funds.)
- If you want to be above average, you have to depart from consensus behavior. You have to overweight some securities, asset classes, or markets and underweight others. **In other words, you have to do something different.**
- The challenge lies in the fact that (a) market prices are the result of everyone's collective thinking and (b) it's hard for any individual to consistently figure out when the consensus is wrong and an asset is priced too high or too low.
- **Nevertheless, "active investors" place active bets in an effort to be above average.**
    - Investor A decides stocks as a whole are too cheap, and he sells bonds in order to overweight stocks. Investor B thinks stocks are too expensive, so she moves to an underweighting by selling some of her stocks to Investor A and putting the proceeds into bonds.
    - Investor X decides a certain stock is too cheap and overweights it, buying from investor Y, who thinks it's too expensive and therefore wants to underweight it.
- **It's essential to note that in each of the above cases, one investor is right and the other is wrong.** Now go back to the first bullet point above: Since the total dollars earned by all investors collectively are fixed in amount, all active bets, taken together, constitute a zero-sum game (or negative-sum after commissions and other costs). The investor who's right earns an above average return, and by definition the one who's wrong earns a below average return.
- **Thus, every active bet placed in the pursuit of above average returns carries with it the risk of below average returns.** There's no way to make an active bet such that you'll win if it works

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but not lose if it doesn't. Financial innovations are often described as offering some version of this impossible bargain, but they invariably fail to live up to the hype.

- **The bottom line of the above is simple: You can't hope to earn above average returns if you don't place active bets, but if your active bets are wrong, your return will be below average.**

Investing strikes me as being very much like golf, where playing conditions and the performance of competitors can change from day to day, as can the placement of the holes. On some days, one approach to the course is appropriate, but on other days, different tactics are called for. To win, you have to either do a better job than others of selecting your approach or executing on it, or both.

The same is true for investors. It's simple: **If you hope to distinguish yourself in terms of performance, you have to depart from the pack. But, having departed, the difference will only be positive if your choice of strategies and tactics is correct and/or you're able to execute better.**

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Second-Level Thinking

In 2009, when Columbia Business School Publishing was considering whether to publish my book *The Most Important Thing*, they asked to see a sample chapter. As has often been my experience, I sat down and described a concept I hadn't previously written about or named. That description became the book's first chapter, addressing one of its most important topics: second-level thinking. It's certainly the concept from the book that people ask me about most often.

The idea of second-level thinking builds on what I wrote in *Dare to Be Great*. First, I repeated my view that success in investing means doing better than others. All active investors (and certainly money managers hoping to earn a living) are driven by the pursuit of superior returns.

> But that universality also makes beating the market a difficult task. Millions of people are competing for each dollar of investment gain. Who'll get it? The person who's a step ahead. In some pursuits, getting up to the front of the pack means more schooling, more time in the gym or the library, better nutrition, more perspiration, greater stamina or better equipment. But in investing, where these things count for less, it calls for more perceptive thinking . . . at what I call the second level.

The basic idea behind second-level thinking is easily summarized: **In order to outperform, your thinking has to be different and better.**

> Remember, your goal in investing isn't to earn average returns; you want to do better than average. Thus, your thinking has to be better than that of others – both more powerful and at a higher level. Since other investors may be smart, well informed and highly computerized, you must find an edge they don't have. You must think of something they haven't thought of, see things they miss, or bring insight they don't possess. You have to react differently and behave differently. **In short, being right may be a necessary condition for investment success, but it won't be sufficient. You have to be more right than others . . . which by definition means your thinking has to be different.**

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Having made the case, I went on to distinguish second-level thinkers from those who operate at the first level:

> First-level thinking is simplistic and superficial, and just about everyone can do it (a bad sign for anything involving an attempt at superiority). All the first-level thinker needs is an opinion about the future, as in "The outlook for the company is favorable, meaning the stock will go up."
>
> Second-level thinking is deep, complex, and convoluted. The second-level thinker takes a great many things into account:
>
> - What is the range of likely future outcomes?
> - What outcome do I think will occur?
> - What's the probability I'm right?
> - What does the consensus think?
> - How does my expectation differ from the consensus?
> - How does the current price for the asset comport with the consensus view of the future, and with mine?
> - Is the consensus psychology that's incorporated in the price too bullish or bearish?
> - What will happen to the asset's price if the consensus turns out to be right, and what if I'm right?
>
> The difference in workload between first-level and second-level thinking is clearly massive, and the number of people capable of the latter is tiny compared to the number capable of the former.
>
> **First-level thinkers look for simple formulas and easy answers. Second-level thinkers know that success in investing is the antithesis of simple.**

Speaking about difficulty reminds me of an important idea that arose in my discussions with my son Andrew during the pandemic (described in the memo *Something of Value*, published in January 2021). In the memo's extensive discussion of how efficient most markets have become in recent decades, Andrew makes a terrific point: **"Readily available quantitative information with regard to the present cannot be the source of superior performance."** After all, everyone has access to this type of information – with regard to public U.S. securities, that's the whole point of the SEC's Reg FD (for fair disclosure) – and nowadays all investors should know how to manipulate data and run screens.

So, then, how can investors who are intent on outperforming hope to reach their goal? As Andrew and I said on a podcast where we discussed *Something of Value*, they have to go beyond readily available quantitative information with regard to the present. Instead, their superiority has to come from an ability to:

- better understand **the significance of the published numbers**,
- better assess **the qualitative aspects of the company**, and/or
- better divine **the future**.

Obviously, none of these things can be determined with certainty, measured empirically, or processed using surefire formulas. Unlike present-day quantitative information, there's no source you can turn to for easy answers. They all come down to judgment or insight. Second-level thinkers who have better

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judgment are likely to achieve superior returns, and those who are less insightful are likely to generate inferior performance.

This all leads me back to something Charlie Munger told me around the time *The Most Important Thing* was published: "It's not supposed to be easy. Anyone who finds it easy is stupid." **Anyone who thinks there's a formula for investing that guarantees success (and that they can possess it) clearly doesn't understand the complex, dynamic, and competitive nature of the investing process.** The prize for superior investing can amount to a lot of money. In the highly competitive investment arena, it simply can't be easy to be the one who pockets the extra dollars.

Contrarianism

There's a concept in the investing world that's closely related to being different: contrarianism. "The investment herd" refers to the masses of people (or institutions) that drive security prices one way or the other. It's their actions that take asset prices to bull market highs and sometimes bubbles and, in the other direction, to bear market territory and occasional crashes. At these extremes, which are invariably overdone, it's essential to act in a contrary fashion.

Joining in the swings described above causes people to own or buy assets at high prices and to sell or fail to buy at low prices. For this reason, it can be important to part company with the herd and behave in a way that's contrary to the actions of most others.

Contrarianism received its own chapter in *The Most Important Thing*. Here's how I set forth the logic:

- Markets swing dramatically, from bullish to bearish, and from overpriced to underpriced.
- Their movements are driven by the actions of "the crowd," "the herd," and "most people." Bull markets occur because more people want to buy than sell, or the buyers are more highly motivated than the sellers. The market rises as people switch from being sellers to being buyers, and as buyers become even more motivated and the sellers less so. (If buyers didn't predominate, the market wouldn't be rising.)
- Market extremes represent inflection points. These occur when bullishness or bearishness reaches a maximum. Figuratively speaking, a top occurs when the last person who will become a buyer does so. Since every buyer has joined the bullish herd by the time the top is reached, bullishness can go no further, and the market is as high as it can go. Buying or holding is dangerous.
- Since there's no one left to turn bullish, the market stops going up. And if the next day one person switches from buyer to seller, it will start to go down.
- **So at the extremes, which are created by what "most people" believe, most people are wrong.**
- Therefore, the key to investment success has to lie in doing the opposite: in diverging from the crowd. Those who recognize the errors that others make can profit enormously from contrarianism.

To sum up, if the extreme highs and lows are excessive and the result of the concerted, mistaken actions of most investors, then it's essential to leave the crowd and be a contrarian.

In his 2000 book, *Pioneering Portfolio Management*, David Swensen, the former chief investment officer of Yale University, explained why investing institutions are vulnerable to conformity with current

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consensus belief and why they should instead embrace contrarianism. (For more on Swensen's approach to investing, see "A Case in Point" below.) He also stressed the importance of building infrastructure that enables contrarianism to be employed successfully:

> Unless institutions maintain contrarian positions through difficult times, the resulting damage imposes severe financial and reputational costs on the institution.
>
> Casually researched, consensus-oriented investment positions provide little prospect for producing superior results in the intensely competitive investment management world.
>
> Unfortunately, overcoming the tendency to follow the crowd, while necessary, proves insufficient to guarantee investment success . . . While courage to take a different path enhances chances for success, investors face likely failure unless a thoughtful set of investment principles undergirds the courage.

Before I leave the subject of contrarianism, I want to make something else very clear. First-level thinkers – to the extent they're interested in the concept of contrarianism – might believe contrarianism means doing the opposite of what most people are doing, so selling when the market rises and buying when it falls. But this overly simplistic definition of contrarianism is unlikely to be of much help to investors. Instead, the understanding of contrarianism itself has to take place at a second level.

In *The Most Important Thing Illuminated*, an annotated edition of my book, four professional investors and academics provided commentary on what I had written. My good friend Joel Greenblatt, an exceptional equity investor, provided a very apt observation regarding knee-jerk contrarianism: ". . . just because no one else will jump in front of a Mack truck barreling down the highway doesn't mean that you should." In other words, the mass of investors aren't wrong all the time, or wrong so dependably that it's always right to do the opposite of what they do. Rather, to be an effective contrarian, you have to figure out:

- what the herd is doing;
- why it's doing it;
- what's wrong, if anything, with what it's doing; and
- what you should do about it.

Like the second-level thought process laid out in bullet points on page four, intelligent contrarianism is deep and complex. It amounts to much more than simply doing the opposite of the crowd. **Nevertheless, good investment decisions made at the best opportunities – at the most overdone market extremes – invariably include an element of contrarian thinking.**

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The Decision to Risk Being Wrong

There are only so many topics I find worth writing about, and since I know I'll never know all there is to know about them, I return to some from time to time and add to what I've written previously. Thus, in 2014, I followed up on 2006's *Dare to Be Great* with a memo creatively titled *Dare to Be Great II*. To begin, I repeated my insistence on the importance of being different:

> If your portfolio looks like everyone else's, you may do well, or you may do poorly, *but you can't do different*. And being different is absolutely essential if you want a chance at being superior. . . .

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I followed that with a discussion of the challenges associated with being different:

> **Most great investments begin in discomfort.** The things most people feel good about – investments where the underlying premise is widely accepted, the recent performance has been positive, and the outlook is rosy – are unlikely to be available at bargain prices. Rather, bargains are usually found among things that are controversial, that people are pessimistic about, and that have been performing badly of late.

But then, perhaps most importantly, I took the idea a step further, moving from daring to be different to its natural corollary: daring to be wrong. Most investment books are about how to be right, not the possibility of being wrong. And yet, the would-be active investor must understand that every attempt at success by necessity carries with it the chance for failure. The two are absolutely inseparable, as I described at the top of page three.

In a market that is even moderately efficient, everything you do to depart from the consensus in pursuit of above average returns has the potential to result in below average returns if your departure turns out to be a mistake. Overweighting something versus underweighting it; concentrating versus diversifying; holding versus selling; hedging versus not hedging – these are all double-edged swords. You gain when you make the right choice and lose when you're wrong.

One of my favorite sayings came from a pit boss at a Las Vegas casino: "The more you bet, the more you win when you win." Absolutely inarguable. But the pit boss conveniently omitted the converse: "The more you bet, the more you lose when you lose." Clearly, those two ideas go together.

In a presentation I occasionally make to institutional clients, I employ PowerPoint animation to graphically portray the essence of this situation:

- A bubble drops down, containing the words "Try to be right." That's what active investing is all about. But then a few more words show up in the bubble: "Run the risk of being wrong." The bottom line is that you simply can't do the former without also doing the latter. They're inextricably intertwined.
- Then another bubble drops down, with the label "Can't lose." There are can't-lose strategies in investing. If you buy T-bills, you can't have a negative return. If you invest in an index fund, you can't underperform the index. But then two more words appear in the second bubble: "Can't win." People who use can't-lose strategies by necessity surrender the possibility of winning. T-bill investors can't earn more than the lowest of yields. Index fund investors can't outperform.
- And that brings me to the assignment I imagine receiving from unenlightened clients: "Just apply the first set of words from each bubble: Try to outperform while employing can't-lose strategies." But that combination happens to be unavailable.

The above shows that active investing carries a cost that goes beyond commissions and management fees: heightened risk of inferior performance. **Thus, every investor has to make a conscious decision about which course to follow. Pursue superior returns at the risk of coming in behind the pack, or hug the consensus position and ensure average performance.** It should be clear that you can't hope to earn superior returns if you're unwilling to bear the risk of sub-par results.

And that brings me to my favorite fortune cookie, which I received with dessert 40-50 years ago. The message inside was simple: **The cautious seldom err or write great poetry**. In my college classes in Japanese studies, I learned about the *koan*, which *Oxford Languages* defines as "a paradoxical anecdote or riddle, used in Zen Buddhism to demonstrate the inadequacy of logical reasoning and to provoke

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enlightenment." I think of my fortune that way because it raises a question I find paradoxical and capable of leading to enlightenment.

But what does the fortune mean? That you should be cautious, because cautious people seldom make mistakes? Or that you shouldn't be cautious, because cautious people rarely accomplish great things?

The fortune can be read both ways, and both conclusions seem reasonable. Thus the key question is, "Which meaning is right for you?" As an investor, do you like the idea of avoiding error, or would you rather try for superiority? Which path is more likely to lead to success as you define it, and which is more feasible for you? You can follow either path, but clearly not both simultaneously.

Thus, investors have to answer what should be a very basic question: Will you (a) strive to be above average, which costs money, is far from sure to work, and can result in your being below average, or (b) accept average performance – which helps you reduce those costs but also means you'll have to look on with envy as winners report mouth-watering successes. Here's how I put it in *Dare to Be Great II*:

> How much emphasis should be put on diversifying, avoiding risk, and ensuring against below-pack performance, and how much on sacrificing these things in the hope of doing better?

And here's how I described some of the considerations:

> **Unconventional behavior is the only road to superior investment results, but it isn't for everyone. In addition to superior skill, successful investing requires the ability to look wrong for a while and survive some mistakes.** Thus each person has to assess whether he's temperamentally equipped to do these things and whether his circumstances – in terms of employers, clients and the impact of other people's opinions – will allow it . . . when the chips are down and the early going makes him look wrong, as it invariably will.

You can't have it both ways. And as in so many aspects of investing, there's no right or wrong, only right or wrong for you.

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A Case in Point

The aforementioned David Swensen ran Yale University's endowment from 1985 until his passing in 2021, an unusual 36-year tenure. He was a true pioneer, developing what has come to be called "the Yale Model" or "the Endowment Model." He radically reduced Yale's holdings of public stocks and bonds, and invested heavily in innovative, illiquid strategies such as hedge funds, venture capital, and private equity at a time when almost no other institutions were doing so. He identified managers in those fields who went on to generate superior results, several of whom earned investment fame. Yale's resulting performance beat almost all other endowments by miles. In addition, Swensen sent out into the endowment community a number of disciples who produced enviable performance for other institutions. Many endowments emulated Yale's approach, especially beginning around 2003-04, after these institutions had been punished by the bursting of the tech/Internet bubble. But few if any duplicated Yale's success. They did the same things, but not nearly as early or as well.

To sum up all the above, I'd say Swensen dared to be different. He did things others didn't do. He did these things long before most others picked up the thread. He did them to a degree that others didn't approach. And he did them with exceptional skill. **What a great formula for outperformance.**

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In *Pioneering Portfolio Management*, Swensen provided a description of the challenge at the core of investing – especially institutional investing. It's one of the best paragraphs I've ever read and includes a two-word phrase (which I've bolded for emphasis) that for me reads like sheer investment poetry. I've borrowed it countless times:

> . . . Active management strategies demand uninstitutional behavior from institutions, creating a paradox that few can unravel. Establishing and maintaining an unconventional investment profile requires acceptance of **uncomfortably idiosyncratic** portfolios, which frequently appear downright imprudent in the eyes of conventional wisdom.

As with many great quotes, this one from Swensen says a great deal in just a few words. Let's parse its meaning:

Idiosyncratic – When all investors love something, it's likely their buying will render it highly priced. When they hate it, their selling will probably cause it to become cheap. Thus, it's preferable to buy things most people hate and sell things most people love. Such behavior is by definition highly idiosyncratic (i.e., "eccentric," "quirky," or "peculiar").

Uncomfortable – The mass of investors take the positions they take for reasons they find convincing. We witness the same developments they do and are impacted by the same news. Yet, we realize that if we want to be above average, our reaction to those inputs – and thus our behavior – should in many instances be different from that of others. Regardless of the reasons, if millions of investors are doing A, it may be quite uncomfortable to do B.

And if we do bring ourselves to do B, our action is unlikely to prove correct right away. After we've sold a market darling because we think it's overvalued, its price probably won't start to drop the next day. Most of the time, the hot asset you've sold will keep rising for a while, and sometimes a good while. As John Maynard Keynes said, "Markets can remain irrational longer than you can remain solvent." And as the old adage goes, "Being too far ahead of your time is indistinguishable from being wrong." These two ideas are closely related to another great Keynes quote: "Worldly wisdom teaches that it is better for reputation to fail conventionally than to succeed unconventionally." Departing from the mainstream can be embarrassing and painful.

Uninstitutional behavior from institutions – We all know what Swensen meant by the word "institutions": bureaucratic, hidebound, conservative, conventional, risk-averse, and ruled by consensus; in short, unlikely mavericks. **In such settings, the cost of being different and wrong can be viewed as highly unacceptable relative to the potential benefit from being different and right.** For the people involved, passing up profitable investments (errors of omission) poses far less risk than making investments that produce losses (errors of commission). Thus, investing entities that behave "institutionally" are, by their nature, highly unlikely to engage in idiosyncratic behavior.

Early in his time at Yale, Swensen chose to:

- minimize holdings of public stocks;
- vastly overweight strategies falling under the heading "alternative investments" (although he started to do so well before that label was created);
- in so doing, commit a substantial portion of Yale's endowment to illiquid investments for which there was no market; and
- hire managers without lengthy track records on the basis of what he perceived to be their investment acumen.

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To use his words, these actions probably appeared "downright imprudent in the eyes of conventional wisdom." Swensen's behavior was certainly idiosyncratic and uninstitutional, but he understood that the only way to outperform was to risk being wrong, and he accepted that risk with great results.

One Way to Diverge from the Pack

To conclude, I want to describe a recent occurrence. In mid-June, we held the London edition of Oaktree's biannual conference, which followed on the heels of the Los Angeles version. My assigned topic at both conferences was the market environment. I faced a dilemma while preparing for the London conference, because so much had changed between the two events: On May 19, the S&P 500 was at roughly 3,900, but by June 21 it was at approximately 3,750, down almost 4% in roughly a month. Here was my issue: Should I update my slides, which had become somewhat dated, or reuse the LA slides to deliver a consistent message to both audiences?

I decided to use the LA slides as the jumping-off point for a discussion of how much things had changed in that short period. The key segment of my London presentation consisted of a stream-of-consciousness discussion of the concerns of the day. I told the attendees that I pay close attention to the questions people ask most often at any given point in time, as the questions tell me what's on people's minds. And the questions I'm asked these days overwhelmingly surround:

- the outlook for **inflation**,
- the extent to which the Federal Reserve will raise **interest rates** to bring it under control, and
- whether doing so will produce a soft landing or a **recession** (and if the latter, how bad).

Afterwards, I wasn't completely happy with my remarks, so I rethought them over lunch. And when it was time to resume the program, I went up on stage for another two minutes. Here's what I said:

All the discussion surrounding inflation, rates, and recession falls under the same heading: the short term. And yet:

- We can't know much about the short-term future (or, I should say, we can't dependably know more than the consensus).
- If we have an opinion about the short term, we can't (or shouldn't) have much confidence in it.
- If we reach a conclusion, there's not much we can do about it – most investors can't and won't meaningfully revamp their portfolios based on such opinions.
- **We really shouldn't care about the short term – after all, we're investors, not traders.**

I think it's the last point that matters most. The question is whether you agree or not.

For example, when asked whether we're heading toward a recession, my usual answer is that whenever we're not in a recession, we're heading toward one. The question is when. I believe we'll always have cycles, which means recessions and recoveries will always lie ahead. **Does the fact that there's a recession ahead mean we should reduce our investments or alter our portfolio allocation? I don't think so.** Since 1920, there have been 17 recessions as well as one Great Depression, a World War and several smaller wars, multiple periods of worry about global cataclysm, and now a pandemic. And yet, as I mentioned in my January memo, *Selling Out*, the S&P 500 has returned about 10½% a year on average over that century-plus. Would investors have improved their performance by getting in and out of the market to avoid those problem spots . . . or would doing so have diminished it? Ever since I quoted Bill Miller in that memo, I've been impressed by his formulation that "it's time, not timing" that leads to real

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wealth accumulation. Thus, most investors would be better off ignoring short-term considerations if they want to enjoy the benefits of long-term compounding.

Two of the six tenets of Oaktree's investment philosophy say (a) we don't base our investment decisions on macro forecasts and (b) we're not market timers. **I told the London audience our main goal is to buy debt or make loans that will be repaid and to buy interests in companies that will do well and make money. None of that has anything to do with the short term.**

From time to time, when we consider it warranted, we do vary our balance between aggressiveness and defensiveness, primarily by altering the size of our closed-end funds, the pace at which we invest, and the level of risk we'll accept. But we do these things on the basis of current market conditions, not expectations regarding future events.

Everyone at Oaktree has opinions on the short-run phenomena mentioned above. We just don't bet heavily that they're right. During our recent meetings with clients in London, Bruce Karsh and I spent a lot of time discussing the significance of the short-term concerns. Here's how he followed up in a note to me:

> . . . Will things be as bad or worse or better than expected? Unknowable . . . and equally unknowable how much is priced in, i.e. what the market is truly expecting. One would think a recession is priced in, but many analysts say that's not the case. This stuff is hard…!!!

Bruce's comment highlights another weakness of having a short-term focus. Even if we think we know what's in store in terms of things like inflation, recessions, and interest rates, there's absolutely no way to know how market prices comport with those expectations. This is more significant than most people realize. If you've developed opinions regarding the issues of the day, or have access to those of pundits you respect, take a look at any asset and ask yourself whether it's priced rich, cheap, or fair in light of those views. That's what matters when you're pursuing investments that are reasonably priced.

The possibility – or even the fact – that a negative event lies ahead isn't in itself a reason to reduce risk; investors should only do so if the event lies ahead <u>and</u> it isn't appropriately reflected in asset prices. But, as Bruce says, there's usually no way to know.

At the beginning of my career, we thought in terms of investing in a stock for five or six years; something held for less than a year was considered a short-term trade. One of the biggest changes I've witnessed since then is the incredible shortening of time horizons. Money managers know their returns in real time, and many clients are fixated on how their managers did in the most recent quarter.

No strategy – and no level of brilliance – will make every quarter or every year a successful one. Strategies become more or less effective as the environment changes and their popularity waxes and wanes. In fact, highly disciplined managers who hold most rigorously to a given approach will tend to report the worst performance when that approach goes out of favor. Regardless of the appropriateness of a strategy and the quality of investment decisions, every portfolio and every manager will experience good and bad quarters and years that have no lasting impact and say nothing about the manager's ability. Often this poor performance will be due to unforeseen and unforeseeable developments.

Thus, what does it mean that someone or something has performed poorly for a while? No one should fire managers or change strategies based on short-term results. Rather than taking capital away from underperformers, clients should consider increasing their allocations in the spirit of contrarianism (but

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few do). **I find it incredibly simple: If you wait at a bus stop long enough, you're guaranteed to catch a bus, but if you run from bus stop to bus stop, you may never catch a bus.**

I believe most investors have their eye on the wrong ball. One quarter's or one year's performance is meaningless at best and a harmful distraction at worst. But most investment committees still spend the first hour of every meeting discussing returns in the most recent quarter and the year to date. **If everyone else is focusing on something that doesn't matter and ignoring the thing that does, investors can profitably diverge from the pack by blocking out short-term concerns and maintaining a laser focus on long-term capital deployment.**

A final quote from *Pioneering Portfolio Management* does a great job of summing up how institutions can pursue the superior performance most want. (Its concepts are also relevant to individuals):

> Appropriate investment procedures contribute significantly to investment success, allowing investors to pursue profitable long-term contrarian investment positions. By reducing pressures to produce in the short run, liberated managers gain the freedom to create portfolios positioned to take advantage of opportunities created by short-term players. By encouraging managers to make potentially embarrassing out-of-favor investments, fiduciaries increase the likelihood of investment success.

Oaktree is probably in the extreme minority in its relative indifference to macro projections, especially regarding the short term. Most investors fuss over expectations regarding short-term phenomena, but I wonder whether they actually do much about their concerns, and whether it helps.

Many investors – and especially institutions such as pension funds, endowments, insurance companies, and sovereign wealth funds, all of which are relatively insulated from the risk of sudden withdrawals – have the luxury of being able to focus exclusively on the long term . . . if they will take advantage of it. Thus, my suggestion to you is to depart from the investment crowd, with its unhelpful preoccupation with the short term, and to instead join us in focusing on the things that really matter.

July 26, 2022

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Memo to: Oaktree Clients

From: Howard Marks

Re: Conversation at Panmure House

I recently was asked by Patrick Schotanus of Edinburgh Business School to participate in their inaugural symposium on the subject of cognitive economics. The symposium took place at Panmure House, the final residence of the great economist Adam Smith, and the theme was the Market Mind Hypothesis (MMH), which Patrick developed. I spent an hour recording a video interview with him, which on May 24 was shown at the symposium and followed by a live question-and-answer session. We then used software to create a transcript of the taped interview. I've edited it only to make my remarks more intelligible and less painful to read (without changing their message); any serious additions are shown in brackets.

While little of my content is totally new (in fact, you might recognize some thoughts that I went on to incorporate in *Bull Market Rhymes*), it seems only right to share it with Oaktree's clients because it's never all been presented in one place before. I hope you'll find something worthwhile in the conversation.

* * *

Patrick Schotanus: *Hello, Howard. Thank you first of all for participating in our symposium by way of this fireside interview, in which we'll discuss some of your memos as well as other reflections that you've shared with investors over the years. For the benefit of our multidisciplinary audience, I'll introduce some of these questions with some explanatory background, especially from a cognitive angle. So I'd like to start with a few questions by MMH team members. The first one is from James Clunie:*

You often write about the concept of the pendulum. More recently, in a podcast, you applied it to international affairs. While the pendulum appears at first glance to be a mechanical model, importantly, you have also applied it to human psychology, especially mood swings. These fit much more with a spontaneous "market mind," which you have also referred to, for example, in your memo You Can't Predict. You Can Prepare. *Consequently, the question is, in what way and to what extent is the pendulum mechanical? For example, would it be correct to say that while the pendulum implies mean reversion, the latter is not a mechanical process and is thus difficult to predict?*

> HM: Thanks for that question, Patrick. I'm very pleased to be discussing these topics with you. As you know, they're something I'm fixated on, and it's great to have someone to talk with about them. I think the pendulum is a good example of many of the things we're going to discuss today. It's an idea. It's a concept. The idea is that it's something that swings back and forth. Something that oscillates, something that fluctuates around a midpoint. That's the whole concept.

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It's certainly not mechanical. In physics, I think the pendulum has certain qualities, and as a result, its behavior can be predicted. But in the things I'm talking about, no. As you know, my last book, in 2018, was called *Mastering the Market Cycle*, and I talked a lot in there about the pendulum. I got a note from Nick Train of Lindsell Train in London, saying something like, "I disagree with you, Howard: this isn't a pendulum. Its movement is not regular, it's not predictable, the speed of the fluctuations varies, and their extent varies." And I said, "Nick, let's have lunch." So, when I next got to London, we sat down and I explained to him that there are multiple definitions of a pendulum. One definition says it's mechanical and thus predictable, and governed by the laws of physics. And another definition says that it's a swing."

In your question to me, Patrick, you used the term "mood swing," and I think understanding it as a mood swing is much more useful for our purposes. As this discussion progresses this morning, I think the main thrust is going to be that these things are not scientific and thus not consistent and repeatable.

PS: *Russell Napier, another member, has a related question also covering the mechanical angle. Mainstream economics, also known as mechanical economics, which partners the unlikely bedfellows of Neoclassical and Neo-Keynesian economics, views and treats the market as some automaton, in a way, that can be centrally engineered, planned, and steered. If instead we view the market as embodying our collective extended mind, acknowledging its warts and all, which obviously is our thesis, which two episodes in your career would be best suited to study the market mind?*

HM: Russell's question about the two episodes, contained in your last sentence, would limit me too much. So, if you don't mind, I'm going to go way beyond that, because I think my answer to this question is central to our whole discussion today.

Your first few words, when you discussed what Russell said, refer to the economy as mechanical, and I think that isn't helpful. Applying the word "mechanical" (again, as with the first question) suggests that it's governed by the rules of physics, the laws of nature, that it's a science, that it performs the same each time, that it's repeatable, studiable and extrapolable. And I think these are all wrong.

And in fact, I aggressively remind people that I'm not an economist, but also that economics is called the "dismal science." And I'm not sure it's a science at all, but if it is, it's certainly dismal, in the sense that it's not like physics, where if you do A, you always get B. Sometimes you get C or sometimes nothing at all. Richard Feynman, the great physicist, once said, "Physics would be much harder if electrons had feelings." You walk into a room, you throw the light switch, and the light goes on. It always goes on, because every time you throw the switch, the electrons flow from the switch to the light. They never forget to flow; they never decide to flow in a different direction; they never flow from the light to the switch. They never go on strike or complain that they're underpaid.

So, the point is that economics is not a science, in my opinion. You know, science is all about causality and predictability, and if A happens, then B is sure to happen. Well, that's certainly not true in economics. If A happens, B might <u>tend to</u> happen most of the time. That doesn't make it a science.

Now let's talk about using these concepts to refer to investing, not economics. I have a presentation that I give, called *The Human Side of Investing, or the Difference between Theory*

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and Practice. It was inspired by a quote from a great philosopher. You may know him (or maybe not, since you're mostly not Americans): Yogi Berra. Yogi was a great catcher for the New York Yankees baseball team in the 1950s – a highly skilled baseball player, but more famous today for the things he said, or maybe he didn't say them. (One of the things Yogi said is, "I never said half the things I said.")

But anyway, he once said, supposedly, that "In theory there's no difference between theory and practice, but in practice there is." And to me, that's the essence of this answer to you. It's the essence of my work, and in my opinion, it should be the essence of your work and that of your colleagues at this conference.

What we learn in school, in my opinion, and what we should learn in school, is how things are supposed to work. That goes for the economy, and that goes for the markets. However, the teachers might also help by adding, ". . . but it doesn't always work that way. That's a framework; that's a thought model. It certainly doesn't govern all the time." And that's the key. Using the term "mechanical" to refer to the economy – or to the markets – is describing the way things are supposed to work. The "psychological" or "behavioral" is all about the way things do work. And there's a big difference between the two.

I've spent a lot of my career trying to reconcile the two: the things I learned as a student at the University of Chicago's Graduate School of Business 55 years ago and the things I've experienced in the markets since then.

I was introduced to the concept of the efficient market hypothesis and so forth back at Chicago. I was very fortunate: those things were developed there mostly, I think, between '62 and '64. I got there in '67, so by definition I was in one of the first classes taught these things, and it was very helpful to me. Not in the sense that the Chicago School of thought should govern your actions, but it should inform them. And, as I say, I've worked hard to reconcile this education with what I saw later.

As an undergraduate, I went to Wharton, which was entirely qualitative and pragmatic. Then I went to Chicago, which was entirely quantitative and theoretical. At Chicago, most of the professors dismissed anything that was qualitative and pragmatic or "real world." But I took a course in investing from James Lorie, who co-headed the Center for Research in Security Prices. His course was derided as "Lorie's Stories," because he would bring in actual practitioners every couple of weeks to talk about what they did, and that was considered heresy at Chicago. The final examination consisted of one question: "You've learned the theory at Chicago, how do you square that with real world considerations?" I think that's the key.

In the late '90s, I wrote a memo called *What's It All About, Alpha?* You may recall that there was a movie called *Alfie;* I think it starred Michael Caine (it was a long time ago, maybe 40-50 years ago). It had a theme song, "What's It All About, Alfie?", sung by Dionne Warwick. Wonderful song. I borrowed the title and changed it to "Alpha" for a memo talking about reconciling the Chicago theory, and in particular the efficient market hypothesis, with the real world. In there, I stated my view that the hypothesis says that because of the concerted actions of so many investors, security prices are "right," meaning investors price securities so that you can expect a fair risk-adjusted return, no more, no less. Again, that's how it's supposed to work, but certainly not how it does work.

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I think I said in the conclusion of that memo that if you ignore the efficient market hypothesis, you're going to be very disappointed, because you're going to find out that very few of your active investment decisions work. But if you swallow it whole, you won't be an investor, and you'll give up on active success. So the truth, if there is one, has to lie somewhere in between, and that's what I believe.

PS: *In fairness to Russell, it was in my introduction to Russell's question [i.e., not in Russell's question itself] that I said the economy is mechanical and that's the definition of mainstream economics. Russell and I do not necessarily agree on that. But to continue on mechanical economics as a theory: In your memo* On the Couch, *you talk about your own early exposure to the efficient-market-type classes. For the audience, EMH is based on the rational expectations hypothesis; EMH states that markets are rational because any pockets of irrationality are averaged away [i.e., the errors made by the group become smaller than those made by individuals]. In contrast, you also highlight the reality of irrationality that can be observed in markets, something that both Alan Greenspan and Robert Shiller called "irrational exuberance." Later, the GFC, or the Global Financial Crisis, painfully hit home that what seems rational for an individual can be dangerously irrational if done collectively. So my first question is, can we square this circle? For example, is irrationality just about semantics, or is it something real that not only exists, but because of the collective dynamic, can actually threaten the economic system and may thus not necessarily be averaged away?*

HM: To me, Patrick, the answer lies in my view of the efficient market hypothesis. Again, the efficient market hypothesis says that due to the concerted actions of so many investors, who are intelligent and numerate and computerized and informed and highly motivated and rational and objective and willing to substitute A for B, prices for securities are right, such that they presage a fair risk-adjusted return. I believe that's the definition.

But you get into a problem, because when I listed off the qualities that are necessary for a market to be efficient, I snuck in there the economist's notion of the perfect market and its requirement that the participants be rational and objective. And in investing, they're not. That's really the point.

"Economic man" is supposed to make all these decisions in a way that optimizes wealth. But she often doesn't, because she's not always objective and rational. She has moods. And those moods interfere with this arriving at the right price. So my definition of the efficient market hypothesis is that because of the concerted efforts of all the participants, the price at a given point in time is as close to right as those people can get. And because it's as close to right as most of them can get, it's very hard to outperform the market by finding errors – what theory calls "inefficiencies" and I just think of as "mistakes."

Sometimes prices are too high. Sometimes prices are too low. But because the price reflects the collective wisdom of all investors on that subject, very few of the individuals can identify those mistakes and profit from them. And that's why active investing doesn't consistently work, in my opinion. I think my version of the efficient market hypothesis makes it roughly just as hard for active managers to beat the market as does the strong form of the hypothesis, that everything's always priced right. But I think mine is more reflective of reality. I wrote in one of my memos – maybe it was *What's It All About, Alpha?* – about a stock that was $400 in 2000 and $2 in 2001. Now it's possible – but to me it's unlikely – that both of those observations were "right." Rather, I think they merely reflected the consensus of opinion at the time.

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This business – I shouldn't say "this business"; that sounds derogatory – the idea that inefficiencies will be arbitraged away by the operations of the market ignores one of the key elements that I think describes reality, and that is mass hysteria. And I think the markets – economies too, but more importantly the markets – are subject to mass hysteria.

I think it was in *On the Couch* that I said, "in the real world, things fluctuate between pretty good and not so hot. But in the markets, they go from flawless to hopeless." Just think about that one sentence. If it's true – and I believe it's true – that shows you the error, because nothing is flawless and nothing is hopeless. But markets, I believe, treat things as flawless and hopeless, and there's the error.

The book I mentioned, *Mastering the Market Cycle* (I'm going to keep repeating the title in the hope that everybody will buy a copy) . . . You know, I'm a devotee of cycles. I'm a student of cycles. I've lived through a half a dozen important cycles in my career. I've thought about them. I think they dominate what I do. And I got about two-thirds of the way through writing that book and something dawned on me, a question: Why do we have cycles?

The S&P 500 – I mentioned Jim Lorie – the Center for Research in Security Prices told us almost 60 years ago, that from 1928 to '62, the S&P 500 had returned an average of 9.2% a year. Things have been better since then, and I think if you go back and look at the whole last 90 years, it's 10½% a year, the return on the S&P 500.

Here's a question: Why doesn't it just return 10½% every year? Why sometimes up 20% and sometimes down 20%, and so forth? In fact – and I included this factoid in one of my memos – it's almost never up between 8% and 12%. So if the average return is 10½%, why isn't the return clustered around 10½%? Why is it clustered outside the central range? I think the answer is mass hysteria.

And by the way, the same is true of the economy and mainstream economics, which of course you described as mechanical, and I think that many people would describe as mechanical. But, certainly, economics is driven by decisions made by people, who are not always rational and objective. Maybe in theory they're closer than investors to being rational and objective, but still they're not always.

But anyway, my explanation for the occurrence of cycles is "excesses and corrections." You have a secular trend or a "normal" statistic. Let's say it's the secular trend of the S&P 500. Sometimes, people get too excited. They buy the stocks too enthusiastically. The prices rise. They rise at more than a 10½% annual rate until they get to a price that is unsustainable. And then everybody says, "No, I think they're too high." So then they correct back toward the trendline. But, of course, given the nature of psychology, they correct through the trendline to an excess on the downside. And then people say, "No, that's too low," so then they bring it back toward the trendline and through it to an excess on the high side.

So excesses and corrections: that's what cycles are about, in my opinion. Where do the excesses come from? Psychology. People get too optimistic, then they get too pessimistic. They get too greedy, then they get too fearful. They become too credulous, then they become too skeptical, and so forth. Oh, and the big one: they become too risk-tolerant, and then they become too risk-averse.

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PS: If I can just follow up on that – particularly for our cognitively inclined audience – implied in this you suggest that there might be mental causality, and my next questions are basically also to motivate future research as part of economics revision. But during your September podcast, in which you revisit the On the Couch *memo, you talk about causality and how complex it can be. And we agree and highlight this in our work.*

For example, when Alan Greenspan, in that famous '96 "irrational exuberance" speech, mentions the complexity of the interactions of asset markets and the economy, and I'm quoting him now: "It chiefly concerns, at least in our view, this dualism of the psychological of the former and the physical of the latter." Now, saying this, mental causality is highly controversial and complex in cognitive science, but cognitive science is the area that really studies this. So, you also specifically refer to Soros's reflexivity in that context, and as you already indicated just now, but also in your memo, you equate prices almost to psychology. And finally, we've all experienced this dangerous – to the point of existential – tail-wagging-the-dog dynamic surrounding Lehman's collapse. So my first question is, if we agree that we will not gain much by identifying yet another behavioral bias, nor by running yet another regression, what would you like to see investigated by cognitive scientists that could potentially lead to more important insights, especially regarding our understanding of the interaction between these two domains of the real and financial economies?

HM: Well, the people at this symposium know much more than I do about how to get to the bottom of these things. But clearly there's so much grist for this mill. Now, exactly how you quantify mood, and so-called animal spirits and irrational exuberance, is beyond me. I always say, Patrick, and I think I said it in *Mastering the Market Cycle*, that if I could know just one thing about every security I was thinking about buying, it would be how much optimism is in the price.

When you watch TV and you hear the newsreaders talking about what happened in the stock market today, you get the impression that prices are the result of fundamentals and changes in prices are the result of changes in fundamentals. And that is vastly inadequate. (By the way, they always say, "The market went up today because of X" or "The market went down today because of Y." I always say, "Where do they go to find that out, because I haven't found it yet?" I haven't found where you go to get an explanation of the market's behavior, even after the fact.) But it's not true that it's all about fundamentals. The price of an asset is based on fundamentals and how people view those fundamentals. And a change in an asset price is based on the change in fundamentals and the change in how people view those fundamentals. So, facts and attitudes. Any research that could capture changes in attitudes, I think is important.

Now, what about quantifying these animal spirits? In one of the more jocular portions of my first book, *The Most Important Thing*, I include something I called "the poor man's guide to market assessment." I have a list of things in one column, and I have a list of things in the other column, and whichever list is more descriptive of current conditions tells you whether it's optimism or pessimism that's governing the market. There are things like, do deals get sold out or do they languish? Are hedge fund managers being welcomed on TV or not? Who does the crowd form around at cocktail parties? What is the media saying: "We're going to the moon" or "We're cratering forever"? I don't know how to quantify these things. But these are among the very important things that I listen to in order to figure out where we stand in the cycle. And I believe where we are in the cycle plays a very strong role in figuring out where we'll go next. (In fact, take the title of my second book, *Mastering the Market Cycle*. When I was thinking

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about writing it, it was called *Listening to the Cycle*. "Listening" in the sense of taking our signals from where we are in the cycle. "Listening" also in the sense of obeying. The publisher thought we'd sell more books if the title implied the book would help you master the market cycle.) But I, as a practical investor, try to figure out what's going on around me.

Now let's go back. I didn't do what I should have, because I didn't answer Russell Napier's real question: can I name two episodes that showed this kind of thing in action? I was glad to have the questions in advance, because it allowed me to think about the two episodes I want to propose.

In the spring of 2007, I wrote a memo called *The Race to the Bottom*. This was when the subprime mortgage mania was at its apex, I think, and when the logs had been stacked in the fireplace for the conflagration that became the Global Financial Crisis. It happens that I was driving around England in the fall of '06 – maybe November or December '06 – and I was reading the *FT* (I mean I wasn't driving and reading; I was being driven so I could read), and there was an article in the *FT* that said that, historically, the English banks had been willing to lend people three-and-a-half times their salary in a mortgage. But now, XYZ Bank announced that it was willing to lend four times your salary, and then ABC Bank said, "No, we'll lend five." And that bidding contest – to make loans by lowering credit standards – seemed to me to be a race to the bottom. And I wrote that markets are an auction place where the opportunity to make a loan, or the opportunity to buy a stock or a bond, goes to the person who's willing to pay the most for it. That is to say, get the least for his money, just like in an auction of a painting. And so, in this case, the bank that was willing to have the lowest credit standards and the weakest loans was likely to win the auction and make the loans: race to the bottom. And I said this is what happens when there's too much money in the hands of providers of capital and they're too eager to put it to work. Mood! And, of course, we all know the Global Financial Crisis ensued.

Now fast forward from February '07 to October '08: Lehman Brothers goes bankrupt on September 15, 2008, and now, rather than being carefree, the pendulum has swung, and people are terrified. Rather than seeing risk as their friend, as in, "The more risk you take, the more money you make, because riskier assets have higher returns," now people say "Risk bearing is just another way to lose money. Get me out at any price."

So the pendulum swung, and of course people's optimism collapsed, the S&P 500 collapsed, and the prices of debt collapsed. So I wrote a memo right around October the 10th of '08 – maybe that day was the all-time low for credit, I don't know exactly – that was called *The Limits to Negativism*, based on an experience I had. I needed to raise some money to delever a levered fund that we had that was in danger of melting down due to margin calls, and I went out to my clients. I got more money. We reduced the fund's debt from four times its equity to two times. Now we're again approaching the point where we can get a margin call. Now I need to delever it from two times to one time. I met with a client who said, "No, I don't want to do it anymore." And I said, "You gotta do it. These are senior loans, and the default rate on senior loans has been infinitesimal over time. There's potential for a levered return of 26% a year from what I consider incredibly safe instruments."

This client – excuse me if I belabor this, but I think it's interesting – this client said to me, "What if there are defaults?" And I said, "Well, our historical default rate on high yield bonds – which are junior to these instruments – is 1% a year. So if you start with 26% and you take off

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1% for defaults, you still get 25%." So she said, "What if it's worse than that?" I said, "The high yield bond universe default rate has been 4% a year, so you're still getting 22% net." She says, "What if it's worse than that?" And I said, "The worst five years in our default experience is 7½%, and if that happens, you're still getting 19%." She says, "What if it's worse than that?", and I said, "The worst year in history is 13%. If that recurs every year for the next eight years, you'll still make 13% a year." She says, "What if it's worse than that?" And I said, "Do you have any equities?" She said, "Yes, we have a lot of equities." I said, "If we get a default rate on high yield bonds of more than 13% a year every year into the future, what happens to your equities in that environment?"

I describe myself as having run back to my office after that meeting to write that memo, *The Limits to Negativism*. What I wrote there was that it's very important when you're an investor to be a skeptic and not believe everything you hear. And most people think being a skeptic consists of dealing with excessive optimism by saying, "That's too good to be true." But when it's pessimism that's excessive, being a skeptic means saying, "That's too bad to be true." That particular investor couldn't imagine any scenario that couldn't be exceeded on the downside. So, in other words, for that person, there was no limit to negativism.

And when I conclude that the other people in the market, the people setting the market prices, are excessively negative and excessively risk averse, then I – an inherently conservative person – and my partner, Bruce Karsh, who runs our distressed debt funds – also an inherently conservative person – we go crazy spending money when we conclude there's excessive pessimism, fear, and risk aversion incorporated in asset prices [meaning they're lower than they should be]. So it's not just the mechanical aspects that determine market prices – it's psychology. It's mass hysteria, which comes in waves from time to time, that leads to market cycles that prove excessive.

PS: Before I go to my next question, I'd like to come back to your point where you say it's hard to quantify mood. But perhaps that's exactly the problem: that we're trying to capture it with analytical tools like Excel and MATHLAB. Or it is when, for example, you talk about, we need to measure the temperature of the market, and when we're perceptive, we can gauge it. And it seems to me almost like when you're trying to assess a mood in a restaurant, it's a qualitative aspect. And some people perhaps have this innate ability, whereas others would perhaps be helped with different methodologies and different tools, and we can try to grasp mood better in that way, because, nowadays, people talk about market sentiment and try to capture it by looking at the VIX or put/call ratios or things like that, which I think you would disqualify as market mood. That's not market mood.

HM: Those things are indicators or symptomatic, but they don't all move in the same direction at the same time. Sometimes A and B will go up, and C won't. Sometimes A and C will go up, but B won't. So, clearly, they're not reliable indicators, and they also can't be dealt with in a mechanical sense. But I wrote in one of my memos – I think it was *Risk Revisited Again* in 2015 – I said superior investors have a better sense for the shape of the probability distribution that will govern future stock price movements, and thus a better sense for whether the expected return justifies taking on the potential negative events that lurk in the left-hand tail. I think that's it, and there's nothing in there about measuring, Patrick, or anything mechanical.

You know, I was locked up with my son for several months during the pandemic. He and his family moved in with us, so we had a lot of time for talking. He's an optimist. (He would say

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he's not an optimist – that he's a realist – but of course all optimists think they're realists, and all pessimists think they're realists.) Anyway, he has an optimistic bent. He's a tech investor, a venture capitalist; he runs a VC fund; he does a fabulous job at it, and we talked about these things at great length. He made a point, which I incorporated in a memo called *Something of Value* in January of '21 about our conversations – and that's the memo that has gotten the most positive reaction of all of them over 30-plus years. He made the point that, as he puts it, because information and understanding are so widespread, so ubiquitous, "readily available quantitative information with regard to the present" cannot be depended on to produce superior returns.

This is the epitome of the efficient market hypothesis. If everybody has all the same "readily available quantitative information with regard to the present," then being a superior investor has to be a matter of going beyond that. You have to have something else. And if he's right in that description, then what are the things that can be the source of superior investing? It seems to me there are two:

- Number one: A better comprehension, if that's the right word, of the future. Some people see the future better than others, and that could do the trick, because, remember, what he says doesn't suffice is readily available quantitative information about the present. By definition, there's no information about the future, but maybe some people can see the future better than others.

- Or the other thing that could be a source of superior results is a superior ability to process qualitative information. Remember, what he described as not helpful is readily available quantitative information about the present. What about qualitative information? Qualitative information includes mood, and we've been talking about the market mood. And maybe some people have a better feeling than others for the collective psyche and for whether it's too depressed and therefore presenting great opportunities to buy or too enthusiastic and thus offering great opportunities to sell or short. [In addition to mood, qualitative information also includes things like the quality of management, the effectiveness of the company's product development capability, and the strength of its accounting.]

The point is that a superior investor has to do at least one of those two things better, and maybe both. I think that that's where the superiority comes in.

And, by the way, to take it one step further, we can ask, "How many people have a superior view of the future? And how many people have a superior understanding of the market mood [and other qualitative factors]?" And if the answer to both is "not so many," then that explains why active investing has been a flop for most people who've tried it.

PS: My next question goes in a somewhat different direction. Investing offers many dilemmas and conundrums. And specifically, to assume that things will remain roughly the same, also known as "history rhymes," may be just as dangerous as expecting change, also known as "it's different this time." Which side of the debate are you generally on and why?

HM: There's a quote widely attributed to Mark Twain: "History does not repeat, but it does rhyme." I'm a believer in that. When Twain says history doesn't repeat, what he's saying is

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that the causes of events vary, the consequences of events vary, the form they take varies. But there are things that do recur. For example:

- Number one: Generally speaking in the markets, when things have been going well for a few years, people become less risk-averse. When they become less risk-averse, they do riskier things. When the economy eventually turns down, those things produce outsized losses.

- Number two: When people are feeling good and things have been going well for a while, people use more leverage. And, eventually, they reach a level of leverage such that they can't survive in tough times, and they melt down when tough times arrive.

- Number three: Because borrowing for the short term is cheaper than borrowing long, people tend to borrow short for long-term projects in order to maximize the delta. But if a bad day comes when you have to refinance your short-term debts because they're due and the market is closed, you can't, and you're out of business.

These are themes that we see recur over time. Not exactly the same every time, and with different reasons from time to time. But I do think that themes – mostly relating to psychology – tend to rhyme, you know. The particulars of market mechanics, the use of different forms of fundraising, and different forms of securities – these change all the time: ETFs, algorithmic funds, index funds, senior loans, and high yield bonds. These things are innovative; they're the reflection of people's minds as applied to financial problems. But the tendencies of the human mind itself tend to rhyme over the years.

By the way, the first time I ever came across the saying you mentioned – "It's different this time" – was October the 11th of 1987. There was an article in *The New York Times* entitled "Why This Market Cycle Isn't Different." It talked about the fact that people often say it's different this time and that this saying is generally employed to explain why historical norms don't apply anymore: norms of valuation and the rhymes that I was just talking about. Anise Wallace wrote that article – it made a big impression on me – and she said, "You know what? This time it's no different; these things will eventually lead to the same outcomes as they always have." [The assertion that things were different was being used at the time to justify the very high stock market valuations. As it happens, the article ran just eight days before "Black Monday," on which the Dow Jones Industrial Average declined by 22.6% in a single day.]

Wallace mentioned that Sir John Templeton said, "About 20% of the time, things actually do change." I wrote another memo within the last two years in which I said that, given the ubiquity of technology and the high rate of innovation, I think things actually do change more than 20% of the time. So you shouldn't bet your life on the fact that the world doesn't change. But you also shouldn't bet your life on your ability to predict the change, and especially the timing.

PS: It was John Templeton who also said, "The most dangerous words in investment are 'it's different this time.'"

HM: Exactly, so I think you have to balance the two. Things like the psychological or behavioral themes I've mentioned – and by the way, this goes for the various biases, including confirmation bias – I think these things do repeat from year to year, decade to decade, cycle to

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cycle, however you want to define it. But there's also change, and a lot of that takes place in the mechanical world: changes in information processing, changes in technological products, and so forth.

PS: I'd like to talk more about the memo Investing Without People*. You basically express your worry about mechanical investing, specifically passive investing. I'll quote as follows: "When everyone decides to refrain from performing the functions of analysis, price discovery and asset allocation, the appropriateness of market prices can go out the window as a result of passive investing, just as it does from a mindless boom or bust." Do you think mechanical investing could have a negative impact on informational efficiency because it only uses market internals like market cap, bid/ask, momentum, and, in a way, therefore distorts or ignores the transmission of information coming from the real economy? And, as a consequence, if we look at a chain of discovery through the economic system – starting with a scientist having an insight, and then an inventor having an invention, and an entrepreneur making an innovation, eventually ending up in financial markets valuing this stuff – when things become more and more mechanical through the growth of these strategies – which include high frequency trading, trend-following, smart beta, which you mentioned, and of course passive investing – we run the risk that the separation between Mr. Market and the real economy just increases … that, in other words, this chain becomes more vulnerable and can break?*

HM: You know, Patrick, I think the flaw in passive investing lies in the fact that you have to view passive investing – things like indexation, especially – as kind of a hitchhiker, a free-rider on the market. In other words, there are 1,000 people out here doing active investing and distilling all the information and thinking about the future of the company and thinking about the fairness of the price, and the result is a market price. And, as I said before, that price is the best everybody collectively can do in trying to value the company and its future. And then there are ten people over there who run index funds, and they just buy at the market prices because they think those prices are probably fair, or the best you can do, so why go to all the trouble and expense of doing fundamental analysis? [The managers of passive funds feel no need to independently think about company fundamentals or the fairness of price. They take the active investors' word for it.] So, that's why I say, "free-rider." The ten free-ride on the efforts of the 1,000.

But what happens if the number of people doing fundamental analysis – active investing – declines from 1,000 to 500 to 100 to 50 to 10? Now you have 1,000 people free-riding on the efforts of the ten. The potential for divergence between price and fair price increases, and free-riding is not as easy to do or as risk-free. I think the irony, as I said in that memo, *Investing Without People*, is that active investing is no good; passive investing works better, but only if people keep doing active investing.

You mentioned conundrums. This is a conundrum: the less people invest actively, the greater scope there is for price to diverge from value. In theory, it becomes easier to find bargains and overpriced securities, and the return from active effort rises. So that's the irony.

And, the other thing is, we have to bear in mind that, let's say everybody at this conference stipulated that over the next ten years, every dollar that went into the stock market would go into the S&P 500, perhaps through index funds or ETFs. Clearly, the prices of the S&P 500 stocks would rise, maybe more than they should, and everything else would languish. Given the fundamental realities, eventually the things outside the index would be so demonstrably cheap

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relative to the things inside the index that they have to begin to do better, at which point active investing outperforms and maybe a few people at the margin give up on passive. So it's kind of reflexive. I take reflexivity to mean that the actions of the participants change the formula for success, and that's what we could be talking about here.

PS: But if we come back to the chain of discovery, if this growing mechanization has an impact on the transmission and allocation of capital at the core of where people innovate, then that clearly is detrimental for society. To put it controversially, but acknowledging this risk, should passive investing be charged for its free-riding and subsidize the extra costs of active investing?

HM: The only way to do that, of course, would be to keep the prices of assets secret and charge people for admission to that room, but I don't think that's ever going to happen. In the memo *Investing Without People*, there are three sections. The first is passive and index, which is here now in a big way. The second is algorithmic and systematic, which is here in a small way. And the third is AI and machine learning, which is really – for investing – not here yet. We know what's happened with passive investing, because it has outperformed active [and now is employed to manage a substantial portion of equity investments]. There are systematic and algorithmic funds like Renaissance that have done a fabulous job and produced very, very high returns, based primarily on finding exceptions to historical patterns, I think. But then what happens when we get into artificial intelligence and machine learning? The questions I posed in the memo included "Can a computer read five business plans and figure out which of them will be the next Amazon?" and "Can a computer sit down with five CEOs and figure out which will be the next Steve Jobs?" Things like that.

I believe not. I believe computers can't. First of all, I don't think the essence of the business plans or the CEOs can completely be converted into data and input into the computers. And I'm not an expert, but I wouldn't think computers can make those qualitative subjective judgments better than the best people. Now clearly, not every person can do those things either. Most people can't sit down with business plans and find Amazon, for example. A few can. They invested in it. Maybe it was Kleiner Perkins, maybe it was Sequoia, or maybe it was Benchmark. So not all the people can do it, but a few have been able to – we can argue about whether that was luck or skill. But I don't think computers will be able to do it, either. To me, the key conclusion of that memo was that computers can outperform most people, but not the best people. If so, there will still be room in active investing for the best. As my mother used to say, it's the exception that proves the rule.

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PS: Howard, once again, thank you very much for sharing your insights with us, and we hope to welcome you in person one day in Panmure House. There are many questions on my list that we haven't touched on. I'd like to ask them perhaps one day, another time, but thank you.

HM: Very good Patrick. Thank you for your good questions and for conducting this discussion, and I hope it's what you wanted for yourself and your colleagues.

June 23, 2022

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Memo to: Oaktree Clients

From: Howard Marks

Re: Bull Market Rhymes

While I employ a great many adages and quotes in my writings, my main go-to list consists of a relatively small number. One of my favorites is widely attributed to Mark Twain: "History doesn't repeat itself, but it does rhyme." It's well documented that Twain used the first four words in 1874, but there's no clear evidence that he ever said the rest. Many others have said something similar over the years, and in 1965 psychoanalyst Theodor Reik said essentially the same thing in an essay titled "The Unreachables." It took him a few more words, but I think his formulation is the best:

> There are recurring cycles, ups and downs, but the course of events is essentially the same, with small variations. It has been said that history repeats itself. This is perhaps not quite correct; it merely rhymes.

The events of investment history don't repeat, but familiar themes do recur, especially behavioral themes. It's these that I study.

In the last two years, we've seen dramatic examples of the ups and downs Reik wrote about. And I've been struck by the reappearance of some classic themes in investor behavior. They'll be the topic of this memo.

I want to mention up front that this memo has nothing to do with assessing the markets' likely direction from here. Bullish behavior came out of the pandemic-related bottom of March 2020; since then, significant problems have developed inside the economy (inflation) and outside (Ukraine); and there's been a significant correction. **No one, including me, knows what the sum of those things implies for the future.**

I'm writing only to place recent events in the context of history and point out a few implied lessons. This is important, because **we have to go back 22 years – to before the bursting of the tech-media-telecom bubble in 2000 – to see what I consider a real bull market and the ending of the resultant bear market**, and I imagine many of my readers entered the investment world too late to have experienced that event. You may ask, "What about the market gains that preceded the Global Financial Crisis of 2008-09 and the pandemic-related collapse of 2020?" In my view, in both cases, the preceding appreciation was gradual, not parabolic; it wasn't driven by overheated psychology; and it didn't take stock prices to crazy heights. Moreover, high stock prices weren't the cause of either crisis. The excesses in the former lay in the housing market and the creation of securities backed by sub-prime mortgages, and the latter collapse was a consequence of the arrival of Covid-19 and the government's decision to shut down the economy to limit the spread of the disease.

When I refer above to "a real bull market," I'm not talking about standard definitions such as these from *Investopedia*:

- A period of time in financial markets when the price of an asset or security rises continuously
- A situation in which stock prices rise by 20%, usually after a drop of 20%

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The first of these is too bland, failing to capture a bull market's emotional essence, and the second attempts false precision. A bull market shouldn't be defined as a percentage price movement. **For me, it's best described by what it feels like, the psychology behind it, and the behavior that psychology leads to.**

(I started investing before the development of numerical criteria for bull and bear markets, and I consider such yardsticks meaningless. Take a look, for example, at a couple of recent newspaper articles. On May 20, the S&P 500 Index's decline from the top passed the "magic" 20% threshold; thus on May 21 the *Financial Times* wrote, "Wall Street stocks slumped into a bear market yesterday . . ." But because a late rally reduced the final decline to just under 20%, the headline of the same day's *New York Times* read, "S&P 500 Drops . . . but Evades Bear Market." Does it really matter whether the S&P 500 is down 19.9% or 20.1%? I prefer the old-school definition of a bear market: nerve-racking.)

Excesses and Corrections

My second book is *Mastering the Market Cycle: Getting the Odds on Your Side*. It's well known that I'm a student of cycles and a believer in cycles. I've lived through (and been schooled by) several significant cycles during my years as an investor. I believe understanding where we stand in the market cycle can give us a hint regarding what's coming next. And yet, when I was about two-thirds of the way through writing that book, a question dawned on me that I hadn't considered before: **Why do we have cycles?**

For example, if the S&P 500 has returned just over 10% a year on average over the 65 years since it assumed its present form in 1957, why doesn't it just return 10% every year? And updating a question I asked in my memo *The Happy Medium* (July 2004), why has its annual return been between 8% and 12% just six times during this period? Why is it so far from the mean 90% of the time?

After pondering this question for a while, I landed on what I consider the explanation: excesses and corrections. If the stock market was a machine, it might be reasonable to expect it to perform consistently over time. **Instead, I think the substantial influence of psychology on investors' decision-making largely explains the market's gyrations.**

When investors turn highly bullish, they tend to conclude that (a) everything's going to go up forever and (b) regardless of what they pay for an asset, someone else will come along to buy it from them for more (the "greater-fool theory"). Because of the high level of optimism:

- Stock prices rise faster than company profits, soaring well above fair value (**excess to the upside**).
- Eventually, conditions in the investment environment disappoint, and/or the folly of the elevated prices becomes clear, and they fall back toward fair value (**correction**) and then through it.
- The price declines generate further pessimism, and this process eventually causes prices to far understate the value of stocks (**excess to the downside**).
- Resultant buying on the part of bargain-hunters causes the depressed prices to recover toward fair value (**correction**).

The excess to the upside makes for a period of above average returns, and the swing toward excess on the downside makes for a period of below average returns. There can be many other factors at work, of course, but in my view, "excesses and corrections" covers most of the ground. We saw a number of excesses to the upside in 2020-21, and now we're seeing corrections thereof.

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Bull Market Psychology

In a bull market, favorable developments lead to price rises and lift investor psychology. Positive psychology induces aggressive behavior. Aggressive behavior leads to higher prices. Rising prices encourage rosier psychology and further risk-taking. This upward spiral is the essence of a bull market. When it's underway, it feels unstoppable.

We saw a classic collapse of asset prices in the early days of the pandemic. For example, the S&P 500 reached a then-all-time high of 3,386 on February 19, 2020 before falling by one-third in just 34 days to a low of 2,237 on March 23. After that, a number of forces combined to produce massive price gains:

- The Federal Reserve cut the fed funds rate to roughly zero, and the Fed was joined by the Treasury in announcing massive stimulative measures.
- These actions convinced investors that these institutions would do whatever it took to stabilize the economy.
- The interest rate cut significantly reduced the prospective returns required to make investments look attractive in relative terms.
- The combination of these factors forced investors to bear risks they had been running from just a short time earlier.
- Asset prices rose: by late August, the S&P 500 had retraced its decline and surpassed its February high.
- The FAAMGs (Facebook, Amazon, Apple, Microsoft and Google), software stocks, and other tech stocks rose dramatically, pushing the market higher.
- **Eventually, investors concluded – as they often do when things are going well – that they could expect more of the same.**

The most important thing about bull market psychology is that, as cited in the final bullet point above, most people take rising stock prices as a positive sign of things to come. Many are converted to optimism. Relatively few suspect that the gains to date might have been excessive and borrowed from future returns and that they presage reversal, not continuation.

That reminds me of another of my favorite adages – one of the first ones I learned, roughly 50 years ago – "the three stages of a bull market":

- the first, when a few forward-looking people begin to believe things will get better,
- the second, when most investors realize improvement is actually underway, and
- the third, when everyone concludes that things will get better forever.

It's interesting to note that even though the market moved from despondent in March 2020 to booming in May, largely thanks to the Fed, the most frequent attitude I encountered during that period was dubiousness. And the question I was asked most frequently was "If the environment is so bad – with the pandemic raging and the economy shuttered – isn't it wrong for the market to rise?" It was hard to find any optimists. Many of the buyers were what my late father-in-law used to call "handcuff volunteers": they didn't buy because they wanted to; they bought because they had to, since the return on cash was so low. And once markets started to rise, people were afraid of being left behind, so they chased prices higher. Thus, the market gains seemed to be the result of the Fed's manipulation of the capital markets, rather than positive corporate developments or optimistic psychology. It was only around the end of 2020 – when the S&P 500 was up by 16.3% for the year and 67.9% from the March bottom – that investor psychology caught up with the booming stock prices.

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The bull market of 2020 was unprecedented in my experience, in that there was essentially no first stage and very little of the second. Many investors went straight from hopeless in late March to highly optimistic later in the year. **This is a great reminder that, while some themes do recur, it's a big mistake to expect history to repeat exactly.**

Optimistic Rationales, Super Stocks, and the New, New Thing

Raging bull markets are examples of mass hysteria. At the extreme, thinking and thus behavior become unmoored from reality. In order for this to occur, however, there has to be some factor that activates investors' imagination and discourages prudence. Thus, special attention should be paid to an element that almost always characterizes bull markets: a new development, invention or justification for the rising stock prices.

Bull markets are, by definition, characterized by exuberance, confidence, credulousness, and a willingness to pay high prices for assets – all at levels that are shown in retrospect to have been excessive. History has generally shown the importance of keeping these things in moderation. For that reason, the intellectual or emotional rationale for a bull market is often based on something new that history can't be used to discount.

Those last six words are very important. History amply demonstrates that when (a) markets exhibit bullish behavior, (b) valuations become excessive, and (c) the latest thing is accepted without hesitation, the consequences are often very painful. Everyone knows – or should know – that parabolic stock market advances are generally followed by declines of 20-50%. Yet those advances occur and recur, abetted by what I learned in high school English class to call "the willing suspension of disbelief." Here's another of my very favorite quotes:

> Contributing to . . . euphoria are two further factors little noted in our time or in past times. **The first is the extreme brevity of the financial memory.** In consequence, financial disaster is quickly forgotten. In further consequence, when the same or closely similar circumstances occur again, sometimes in only a few years, they are hailed by a new, often youthful, and always supremely self-confident generation as a brilliantly innovative discovery in the financial and larger economic world. There can be few fields of human endeavor in which history counts for so little as in the world of finance. **Past experience, to the extent that it is part of memory at all, is dismissed as the primitive refuge of those who do not have the insight to appreciate the incredible wonders of the present.** (John Kenneth Galbraith, *A Short History of Financial Euphoria*, 1990 – emphasis added)

I've shared that quote with readers many times over the last 30 years – since I think it so beautifully sums up a number of important points – but I haven't previously shared my explanation for the behavior it describes. **I don't think investors are actually forgetful. Rather, knowledge of history and the appropriateness of prudence sit on one side of the balance, and the dream of getting rich sits on the other. The latter always wins. Memory, prudence, realism, and risk aversion would only get in the way of that dream. For this reason, reasonable concerns are regularly dismissed when bull markets get going.**

What appears in their place is often intellectual justifications for valuations that exceed historical norms. On October 11, 1987, Anise Wallace described this phenomenon in an article in *The New York Times* titled "Why This Market Cycle Isn't Different." Optimistic thinking was being embraced at the time to justify unusually high stock prices, but Wallace said it wouldn't hold:

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> The four most dangerous words in investing are "this time it's different," according to John Templeton, the 74-year-old mutual fund manager. At stock market tops and bottoms, investors invariably use this rationale to justify their emotion-driven decisions.
>
> Over the next year, many investors are likely to repeat those four words as they defend higher stock prices. But they should treat them with the same consideration they give "the check's in the mail." No matter what brokers or money managers say, bull markets do not last forever.

It didn't take a year. Just eight days later, the world experienced "Black Monday," when the Dow Jones Industrial Average dropped by 22.6% in a single day.

Another justification for bull markets is often found in the belief that certain businesses are guaranteed to enjoy a terrific future. This applies to the Nifty-Fifty growth companies in the late 1960s; disc drive manufacturers in the '80s; and telecom, Internet and e-commerce companies in the late '90s. **Each of these developments was believed to be capable of changing the world, such that the past realities of business need not constrain investors' imaginations and willingness to pay up.** And they did change the world. Nevertheless, the highly elevated asset valuations they were thought to justify didn't hold.

In many bull markets, one or more groups are anointed as what I call "super stocks." **Their rapid rise makes investors increasingly optimistic. In the circular process that often characterizes the markets, this rising optimism takes the stocks to still-higher prices. And some of this positivity and appreciation reflects favorably on other groups of securities – or all securities – through relative-value comparisons and/or because of the general improvement in investors' mood.**

Topping the list of companies that fed investors' excitement in 2020-21 were the FAAMGs, whose level of market dominance and ability to scale had never been seen before. The dramatic performance of the FAAMGs in 2020 attracted the attention of investors and supported a widespread swing toward bullishness. By September 2020 (that is, within six months), these stocks had nearly doubled from their March lows and were up 61% from the beginning of the year. Notably, these five stocks are heavily weighted in the S&P 500, so their performance resulted in a good overall gain for the index, but this distracted attention from the far-less-impressive performance of the other 495 stocks. The performance of the super stocks inflamed investors' ardor, enabling them to disregard worries regarding the persistence of the pandemic or other risks.

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The raging success of the FAAMGs created a luster that reflected positively on tech stocks in general. Demand soared for stocks in the sector and, as is usual in the investment world, strong demand encouraged and enabled supply. One notable barometer in this case is the attitude toward IPOs from unprofitable companies. Prior to the tech bubble of the late 1990s, IPOs from companies that didn't make money were relatively rare. They became the norm during the bubble, but their number sunk again thereafter. In the 2020-21 bull market, IPOs from unprofitable companies experienced a big resurgence, as investors easily made allowance for tech companies' desire to scale and biotech companies' need to spend on drug trials.

If companies with bright futures provide fuel for bull markets, things that are new to the markets can supercharge market excesses. SPACs are a great recent example. Investors gave these newly formed vehicles blank checks for acquisitions on the proviso that investors could get their money back with interest (a) if no acquisition was consummated within two years or (b) if investors didn't like the acquisition that was proposed. This seemed like a "no-lose proposition" (three of the most dangerous words in the world), and the number of SPACs organized soared from just 10 in 2013 and 59 in 2019 to 248 in 2020 and 613 in 2021. Some produced big profits, and in other cases investors took back their money with interest. But the lack of skepticism surrounding this relatively untested innovation – fueled by bull market psychology – allowed too many SPACs to be created, by competent and incompetent organizers alike who would be highly paid for pulling off an acquisition . . . any acquisition.

Today, the average SPAC that de-SPAC-ed since 2020 by completing an acquisition (in each case, with the approval of its investors) is selling at $5.25, versus its issue price of $10.00. This is a good example of a new thing that turned out to be less dependable than investors – who fell once again for a can't-lose silver bullet – had thought. SPACs' defenders argue that these vehicles are just an alternative way to take companies public, but their potential usefulness isn't my concern. I'm focused on how readily investors embraced an untested innovation in hot times.

Another dynamic involving novel factors deserves mention, since it exemplifies the way "the new thing" can contribute to bull markets:

- Robinhood Markets began offering commission-free trading in stocks, ETFs and cryptocurrencies in the years before the pandemic. Once the Covid-19 crisis hit, this encouraged people to "play the stock market," as casinos and sports events were closed for betting.
- Generous stimulus checks were sent to millions who hadn't lost their jobs, meaning many people saw their disposable income rise during the pandemic.
- Bulletin boards like Reddit turned investing into a social activity for people shut in at home.
- As a result, large numbers of novice retail investors were recruited online, many of whom lacked the experience needed to know what constitutes investment merit.
- Newcomers were stirred by a popular cult figure who said, "stocks only go up."
- As a result, many tech and "meme stocks" soared.

The final element worth discussing is cryptocurrency. Proponents of Bitcoin, for example, cite its variety of uses, as well as the limited supply relative to the potential demand. Skeptics, on the other hand, point to Bitcoin's lack of cash flow and intrinsic value and thus the impossibility of assigning a fair price. Regardless of which side will turn out to be right, Bitcoin satisfies some characteristics of a bull market beneficiary:

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- It's relatively new (although it has been around for 14 years, it's been in most people's consciousness for only five).
- It enjoyed a dramatic price spike, rising from $5,000 in 2020 to a high of $68,000 in 2021.
- And it's certainly something that, per Galbraith, prior generations "do not have the insight to appreciate."
- In all these regards, it perfectly satisfies Galbraith's description of something "hailed by a new, often youthful, and always supremely self-confident generation as a brilliantly innovative discovery in the financial . . . world."

Bitcoin is off a little more than half from its 2021 high, but others among the thousands of cryptocurrencies that have been created have declined much more.

The striking performance of the FAAMGs, tech stocks generally, SPACs, meme stocks and cryptocurrencies in 2020 reinforced the craze for them and added to investors' general optimism. **It's hard to imagine a full-throated bull market arising in the absence of something that's never been seen or heard before.** The "new, new thing" and belief that "this time it's different" are shining examples of recurring bull market themes.

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The Race to the Bottom

Another bull market theme that rhymes from cycle to cycle is the deleterious impact of bull market trends on the quality of investors' decision-making. In short, when burning optimism takes over from levelheadedness:

- asset prices rise,
- greed grows relative to fear,
- fear of missing out replaces fear of losing money, and
- risk aversion and caution evaporate.

It's essential to bear in mind that it's risk aversion and the fear of loss that keep markets safe and sane. The developments listed above typically combine to lift markets, drive out cautious investigation and deliberation, and make the markets a dangerous place.

In my 2007 memo *The Race to the Bottom*, I explained that when there's too much money in the hands of investors and providers of capital and they're too eager to put it to work, they bid too aggressively for securities and the chance to lend. Their spirited bidding drives down prospective returns, drives up risk, weakens security structures, and reduces the margin for error.

- The cautious investor, sticking to her guns, says, "I insist on 8% interest and strong covenants."
- Her competitor responds, "I'll accept 7% interest and demand fewer covenants."
- The least disciplined, not wanting to miss the opportunity, says, "I'll settle for 6% interest and no covenants."

This is the race to the bottom. This is why it's often said that "the worst of loans are made in the best of times." This is something that can't happen when people are smarting from recent losses and afraid of experiencing more. It's not a coincidence that the record-long 10-plus-year economic recovery and stock market rise that followed the Fed's massive response to the Global Financial Crisis were accompanied by:

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- a wave of IPOs from money-losing companies;
- record issuance of sub-investment grade securities, including risky CCC-rated debt;
- debt issuance from companies in volatile industries such as tech and software that lenders are likely to shun in more cautious times;
- rising valuation multiples on acquisitions and buyouts; and
- shrinking risk premiums.

Favorable developments also encourage the increased use of leverage. Leverage magnifies gains and losses, but in bull markets, investors feel sure of gains and disregard the possibility of loss. Under such conditions, few can see a reason not to incur debt – with its piddling interest cost – to increase the payoff from their successes. But putting more debt on investments made at high prices late in the up-cycle is no formula for success. When times turn bad, leverage turns disadvantageous. And when investment banks issue late-cycle debt that they can't place with buyers, they're stuck with it. Debt "hung" on banks' balance sheets is often a "canary in the coal mine" with regard to what's in store.

Since I'm relying on time-worn investment adages, it's appropriate at this point to invoke the one I consider the greatest regarding investor behavior over cycles: "What the wise man does in the beginning, the fool does in the end." People who buy in stage one of a bull market, when prices are low because of prevailing pessimism (such as during the Global Financial Crisis of 2008-09 and in the early days of the Covid-19 pandemic in 2020), have the potential to earn high prospective returns with little risk: the main prerequisites are money to spend and the nerve to spend it. **But when bull markets heat up and good returns encourage investors' optimism, the traits that are rewarded are eagerness, credulousness, and risk-taking. In stage three of a bull market, new entrants buy aggressively, keeping it aloft for a while. Caution, selectivity, and discipline go out the window just when they're needed most.**

Particularly noteworthy is the fact that investors who are in a good mood and being rewarded for risk tolerance typically cease to practice discernment regarding investment opportunities. Not only do investors consider it a certainty that some examples of "the new thing" will succeed, but eventually they conclude that everything in that sector will do well, so differentiating is unnecessary.

Because of all the above, the term "bull market psychology" isn't a positive. It connotes carefree behavior and a high level of risk tolerance, and investors should find it worrisome, not encouraging. As Warren Buffett puts it, "The less prudence with which others conduct their affairs, the greater the prudence with which we should conduct our own affairs." Investors have to know when bull market psychology is in ascendance and apply the required caution.

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The Pendulum Swings

Bull markets don't arise out of thin air. The winners in each bull market are winners for the simple reason that a grain of truth underlies their gains. However, the bullishness I've described above tends to exaggerate the merits and pushes security prices to levels that are excessive and thus vulnerable. And the upward swing doesn't last forever.

In *On the Couch* (January 2016), I wrote, "in the real world, things generally fluctuate between 'pretty good' and 'not so hot.' But in the world of investing, perception often swings from 'flawless' to 'hopeless.'" The way things are seriously overdone in the markets is one of the key characteristics of investor behavior. During bull markets, investors conclude that difficult, unlikely, and unprecedented things are sure to work. But in less ebullient times, favorable economic news and "earnings beats" fail to

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inspire buying, and rising prices no longer make life painful for people who are underinvested. Thus, we stop seeing the willing suspension of disbelief, and psychology flips to negativism.

The key lies in the fact that investors are capable of interpreting virtually any piece of news either positively or negatively, depending on how it's reported and on their mood. (The cartoon below, one of my all-time favorites, was published many decades ago – check out those rabbit ears and the depth of the TV set – but clearly the caption is relevant to this very moment.)

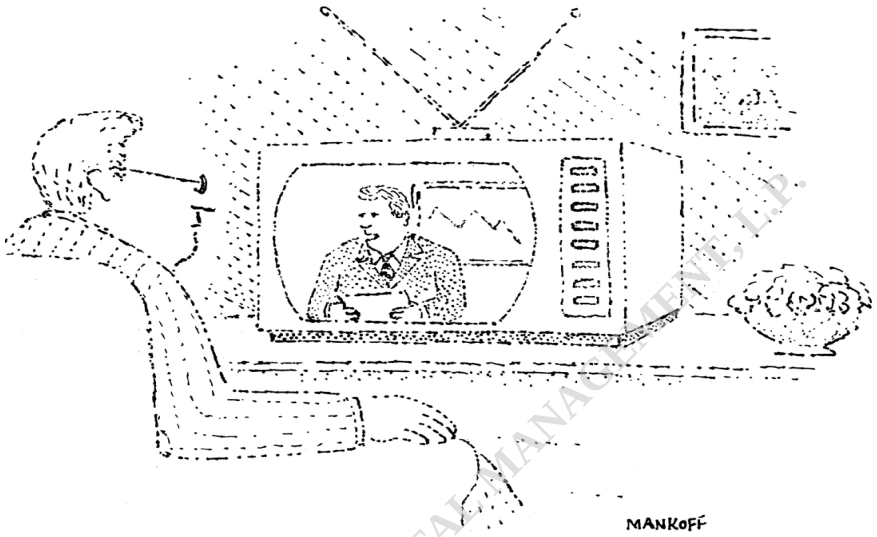

"On Wall Street today, news of lower interest rates sent the stock market up, but then the expectation that these rates would be inflationary sent the market down, until the realization that lower rates might stimulate the sluggish economy pushed the market up, before it ultimately went down on fears that an overheated economy would lead to a reimposition of higher interest rates."

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Reflecting the "flawless-to-hopeless" progression I mentioned earlier, prevailing narratives are subject to reversal. While the argument supporting the bull market may have been reasonably likely to hold, investors treated it as ironclad when all was going well. When some of the argument's flaws come to light, however, it's dismissed as all wrong.

- In the happy season (all of a year ago), the tech bulls said, "You have to buy growth stocks for their decades of potential earnings increases." But now, after a significant decline, we instead hear, "Investing based on future potential is too risky. You have to stick to value stocks for their ascertainable present value and reasonable prices."
- Likewise, in the heady times, participants in IPOs of money-losing companies said, "There's nothing wrong with companies that report losses. They're justified in spending to scale up." But in the present correction, many say, "Who would invest in unprofitable companies? They're just cash incinerators."

People who haven't spent much time watching markets may believe that asset prices are all about fundamentals, but that's certainly not so. The price of an asset is based on fundamentals **and how people view those fundamentals**. So the change in an asset price is based on a change in fundamentals **and/or a change in how people view those fundamentals**. Company fundamentals are theoretically subject to

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something called "analysis" and possibly even prediction. On the other hand, **attitudes regarding fundamentals are psychological/emotional, not subject to analysis or prediction, and capable of changing much faster and more dramatically.** There are adages that capture this dimension, too:

- The air goes out of the balloon much faster than it goes in.
- It takes longer for things to happen than you thought it would, but then they happen much faster than you thought they could.

As for the latter, in my experience, we often see positive or negative fundamental developments pile up for a good while, with no reaction on the part of security prices. But then a tipping point is reached – either fundamental or psychological – and the whole pile suddenly gets reflected in prices, sometimes to excess.

Then What Happens?

Bull markets don't treat all sectors the same. In bull markets, as I discussed earlier, optimism coalesces most powerfully around certain groups of securities, such as "the new thing" or "super stocks." These rise the most, become emblematic of the bull in this period, and attract further buying. The media pay these sectors the most attention, extending the process. In 2020-21, the FAAMGs and other tech stocks were the best examples of this phenomenon.

It goes without saying – but I'll say it anyway – that investors holding large amounts of the things that lead in each bull market do very well. And fund managers who are smart enough or lucky enough to be dedicated exclusively to those things report the highest returns while optimism prevails and show up on the front page of newspapers and on cable TV shows. **In the past, I've said our business is full of people who got famous for being right once in a row. That can go double for fund managers who are smart or lucky enough to be overweight the sectors that lead a bull market.**

However, the stocks that rise the most in the up years often experience the greatest declines in the down years. The applicable adages here are from the real world, but that doesn't reduce their relevance: "live by the sword, die by the sword;" "what goes up must come down;" and "the bigger they are, the harder they fall":

- One tech fund rose by 157% in 2020, moving from obscurity to fame. But it lost 23% in 2021 and is down another 57% so far in 2022. $100 invested at year-end 2019 was worth $257 a year later, but that's down to $85 today.
- Another tech fund, somewhat less volatile, was up by 48% in 2020 but is down by 48% since. Unfortunately, up 48% and down 48% don't combine to produce zero change, but rather a net decline of $22 per $100 invested.
- A third tech fund was up a startling 291% in year one, but it fell by 21%, 60%, and 61% in the three years that followed. $100 invested at the beginning of this four-year period was worth $43 at the end, a decline of 89% from the end of that incredible first year. But wait a minute: there haven't been four years in the current boom/bust. No, the results I cite are from 1999-2002, when the last tech bubble inflated and collapsed. I include them only as a reminder that the current performance pattern is a recurrence.

Earlier I mentioned Robinhood, the originator of commission-free trading. It epitomized the role of the digital in the 2020-21 bull market. Robinhood went public in July 2021 at $38, and over the next week, the stock price shot up to $85. Today it's at $10, an 88% drop from the high in less than a year.

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But the equity averages aren't doing that badly, right? The tech-heavy Nasdaq Composite is "only" down 27.4% in 2022. One of the characteristics of this bull market is that the biggest companies' stocks – which are the most heavily weighted – have done the best, buoying the indices. Consider what that implies for the rest; 22% of Nasdaq stocks are down at least 50%. (Data here and below are as of May 20.)

Here are the declines from the top of some well-known tech/digital/innovation stocks that I picked at random. Maybe there are a few here that, when they were at their peak, you kicked yourself for not having bought:

PayPal	-57%
Beyond Meat	-63
Coinbase	-74
Salesforce	-37
Carvana	-86
DocuSign	-50
Moderna	-46
Netflix	-69
Shopify	-74
Spotify	-54
Uber	-44
Zoom	-51
Average	-59%

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Let's say you still believe market prices are set by a consensus of intelligent investors on the basis of fundamentals. If that's the case, then why are all these stocks down by such large percentages? And do you really believe the value of these businesses has more than halved on average in the last few months? This line of inquiry leads to something else I think about often. On days when the stock market makes its biggest moves, Bitcoin often moves in the same direction. Is there any fundamental reason why the two should be correlated? The same goes for international links: when Japan starts off the day with a big decline, Europe and the U.S. often follow suit. And sometimes it seems U.S. stocks lead and it's Japan that falls in line. Are these countries' fundamentals connected enough to justify co-movement?

My answer to all these questions is generally "no." The common thread isn't fundamentals: it's psychology, and when the latter changes significantly, all of these things are similarly affected.

The Lessons

As always for students of investing, what matters most isn't what events transpired in a given period of time, but what we can learn from these events. And there's a lot to be learned from the trends in 2020-21 that rhymed with those in previous cycles. In bull markets:

- Optimism builds around the things that are doing spectacularly well.
- The impact is strongest when the upswing arises from a particularly depressed base in terms of psychology and prices.
- Bull market psychology is accompanied by a lack of worry and a high level of risk tolerance, and thus highly aggressive behavior. Risk-bearing is rewarded, and the need for thorough diligence is ignored.

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- High returns reinforce belief in the new, the unlikely, and the optimistic. When the crowd becomes convinced of those things' merit, they tend to conclude "there's no price too high."
- These influences cool eventually, after they (and prices) have reached unsustainable levels.
- Elevated markets are vulnerable to exogenous events, like Russia's invasion of Ukraine.
- The assets that rose the most – and the investors who over-weighted them – often experience painful reversals.

These are themes I've seen play out numerous times during my career. None of them relates exclusively to fundamental developments. Rather, their causes are largely psychological, and the way psychology works is unlikely to change. **That's why I'm sure that as long as humans are involved in the investment process, we'll see them recur time and time again.**

And, as a reminder, since the major ups and downs of the markets are primarily driven by psychology, it's clear that market movements can only be predicted, if ever, when prices are at absurd highs or lows.

May 26, 2022

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Memo to: Oaktree Clients

From: Howard Marks

Re: The Pendulum in International Affairs

As regular readers of my memos and books know, I'm strongly interested in – you might say obsessed with – the concept of the pendulum. The following is only a partial list of my writings on the subject:

- My second memo, written in April 1991, was creatively titled *First Quarter Performance*. It talked about the oscillation in securities markets between euphoria and depression; between celebrating positive developments and obsessing over negatives; and thus between overpriced and underpriced assets.
- *On Regulation*, written in March 2011, discussed the outlook for rulemaking stemming from the Global Financial Crisis. I said future developments were likely to be driven by the long-term pendulum-like swing in attitudes on that subject. Over time, those attitudes tend to fluctuate between "the markets best serve the country when they're unfettered by rules" to "we need the government to protect us from participants' misbehavior."
- In *The Role of Confidence*, from August 2013, I discussed the way shifts in fundamentals are translated into market volatility by often-excessive swings in investor confidence.
- And in my 2018 book, *Mastering the Market Cycle*, I interrupted my discussion of the various cycles – in the economy, corporate profits, credit availability, etc. – to use the metaphor of a pendulum, not a cycle, to describe the swings of investor psychology.

Because psychology swings so often toward one extreme or the other – and spends relatively little time at the "happy medium" – I believe the pendulum is the best metaphor for understanding trends in anything affected by psychology . . . not just investing.

People frequently ask what caused me to start writing memos in 1990. My very first memo, *The Route to Performance*, resulted from two events I witnessed in short order, the juxtaposition of which led to what I thought was an important observation. Over the years, many memos have been prompted by connections I sensed between ostensibly unconnected events.

At a recent meeting of the Brookfield Asset Management board, a discussion of Ukraine triggered an association with another aspect of international affairs – offshoring – which I first discussed in the memo *Economic Reality* (May 2016). Thus the inspiration for this memo.

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Background

The first item on the agenda for Brookfield's board meeting was, naturally, the tragic situation in Ukraine. We talked about the many facets of the problem, ranging from human to economic to military to geopolitical. In my view, energy is one of the aspects worth pondering. The desire to punish Russia for its unconscionable behavior is complicated enormously by Europe's heavy dependence on Russia to meet its energy needs; Russia supplies roughly one-third of Europe's oil, 45% of its imported gas, and nearly half its coal.

Since it can be hard to arrange for alternative sources of energy on short notice, sanctioning Russia by prohibiting energy exports would cause a significant dislocation in Europe's energy supply. Curtailing

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this supply would be difficult at any time, but particularly so at this time of year, when people need to heat their homes. That means Russia's biggest export – and largest source of hard currency ($20 billion a month is the figure I see) – is the hardest one to sanction, as doing so would cause serious hardship for our allies. Thus, the sanctions on Russia include an exception for sales of energy commodities. This greatly complicates the process of bringing economic and social pressure to bear on Vladimir Putin. In effect, we're determined to influence Russia through sanctions . . . just not the potentially most effective one, because it would require substantial sacrifice in Europe. More on this later.

The other subject I focused on, offshoring, is quite different from Europe's energy dependence. One of the major trends impacting the U.S. economy over the last year or so – and a factor receiving much of the blame for today's inflation – relates to our global supply chains, the weaknesses of which have recently been on display. Thus, many companies are seeking to shorten their supply lines and make them more dependable, primarily by bringing production back on shore.

Over recent decades, as we all know, many industries moved a significant percentage of their production offshore – primarily to Asia – bringing down costs by utilizing cheaper labor. This process boosted economic growth in the emerging nations where the work was done, increased savings and competitiveness for manufacturers and importers, and provided low-priced goods to consumers. But the supply-chain disruption that resulted from the Covid-19 pandemic, combined with the shutdown of much of the world's productive capacity, has shown the downside of that trend, as supply has been unable to keep pace with elevated demand in our highly stimulated economy.

At first glance, these two items – Europe's energy dependence and supply-chain disruption – may seem to have little in common other than the fact that they both involve international considerations. But I think juxtaposing them is informative . . . and worthy of a memo.

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Russian Energy

In 2019, Russia's top four exports were crude petroleum, refined petroleum, petroleum gas, and coal briquettes. These totaled $223 billion, or 55% of Russia's total exports of $407 billion, according to the Observatory of Economic Complexity.

As shown in the following table, Russia is exceptionally well positioned to wield influence over Europe through exports of energy commodities.

	Europe			Russia		
	Produces	**Consumes**	**Net**	**Produces**	**Consumes**	**Net**
Oil (bbl/day)	3.6 mm	15.0 mm	(11.4 mm)	11.0 mm	3.4 mm	7.6 mm
Gas (cu met/year)	230 bn	560 bn	(330 bn)	700 bn	400 bn	300 bn
Coal (tons/year)	475 mm	950 mm	(475 mm)	800 mm	300 mm	500 mm

Source: "The West's Green Delusions Empowered Putin," Michael Shellenberger, *Common Sense with Bari Weiss*, March 1, 2022. Some data is approximate or rounded. (*Common Sense* is probably as tendentious as other media outlets, but I have no reason to believe the data is inaccurate.)

The implications are clear. Europe uses far more energy than it produces and makes up the difference through imports. Russia, on the other hand, uses far less than it produces, leaving the remainder to generate economic and strategic gains.

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How did things get this way? According to Shellenberger (see source above):

> While Putin expanded Russia's oil production, expanded natural gas production, and then doubled nuclear energy production to allow more exports of its precious gas, Europe, led by Germany, shut down its nuclear power plants, closed gas fields, and refused to develop more through advanced methods like fracking.
>
> The numbers tell the story best. In 2016, 30 percent of the natural gas consumed by the European Union came from Russia. In 2018, that figure jumped to 40 percent. By 2020, it was nearly 44 percent, and by early 2021, it was nearly 47 percent.

The following chart makes the situation clear. In 1980, imports from Russia represented less than one-third of Europe's oil and gas production. European production peaked about 20 years ago and has almost halved since then, ending up near where it was in 1980. In the same roughly 40-year period, imports from Russia have tripled, meaning they're now roughly equal to Europe's production.

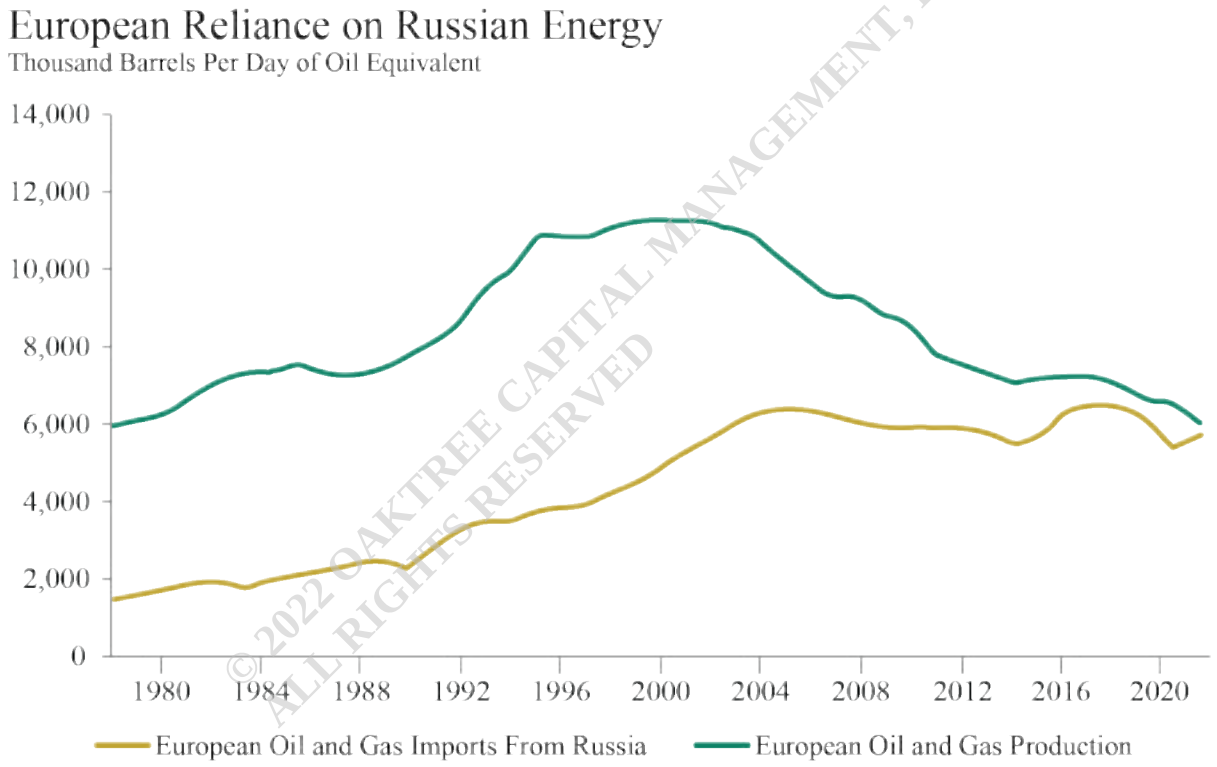

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Source: BP, Gazprom, Eurostat, Perovic et al., Russia Federal Customs Service. *Journal of Policy Analysis and Management* calculations, 2021.

Shellenberger asserts – and it seems credible – that Europe allowed its dependence on imports of energy commodities, especially from Russia, to increase so dramatically because it wanted to be more ecologically responsible at home. In addition to limiting their production of oil and gas, some nations (especially Germany) reduced their use of nuclear power generation – which could arguably offer the best energy option by providing large-scale power production without emitting greenhouse gases – in a concession to those who consider nuclear power unsafe or environmentally unfriendly. As Shellenberger puts it:

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> At the turn of the millennium, Germany's electricity was around 30 percent nuclear-powered. But Germany has been sacking its reliable, inexpensive nuclear plants. . . . By 2020, Germany had reduced its nuclear share from 30 percent to 11 percent. Then, on the last day of 2021, Germany shut down half of its remaining six nuclear reactors. The other three are slated for shutdown at the end of this year.

During a briefing earlier this month, a U.S. senator told the nonpartisan political organization No Labels, "The energy issue regarding 'Putin's war' has four components: energy, climate, security, and economics (both national and at the household level)." **Security doesn't seem to have received much consideration in the deliberations that led to Germany's energy dependency on Russia.** Just one of the four factors – climate – appears to have motivated the decision. Choosing to count on a hostile neighbor for essential goods is like building a bank vault and contracting with the mob to supply it with guards. But that's what happened.

Foreign Sourcing

The downside of Europe's dependence on Russian oil and gas has made its way into the consciousness of many people only recently, as a result of the invasion of Ukraine. But the shift to sourcing and manufacturing overseas is something that's been on people's minds for decades.

If you think back a few hundred years, limitations on transportation required that production take place near the point of consumption. But after the advent of the railroad, it became possible to separate the locations of production and consumption by hundreds – or even thousands – of miles. This must have been an important element in the creation of national champions that eventually supplied whole countries with goods such as food and building materials that previously had to be manufactured near the local customers. This enabled goods to be produced in places where labor was most readily available or where benefits from specialization could be maximized. It was inevitable that these forces would affect countries around the world and – with the emergence of airfreight and containerization – result in rapidly growing cross-border trade.

Shortly after World War II, cheap labor and skill in assembling products permitted Japan to rapidly become a major exporter of electronic goods and automobiles. The products were highly cost-competitive and initially of low quality, but Japan soon developed some of the world's most desired brands. In the late 1950s, Japanese auto companies exported just a few hundred cars a year to the U.S., the main selling point of which was low price. But quality rose even as prices remained attractive, and by the early 1980s, the Reagan administration, in an attempt to protect the U.S. auto industry, asked Japanese manufacturers to "voluntarily" limit exports to the U.S. to 1.68 million cars per year.

The lure of low manufacturing costs caused producers to shift operations from Japan to other parts of Asia over time. A large-scale shift to China began in earnest around 1995. Subsequently, the production of low-value-added goods such as T-shirts and jeans shifted to Vietnam, Bangladesh and Pakistan. As each country benefited from the growth of manufacturing, the supply of labor got tighter, and workers became able to demand higher wages. Per-capita incomes and standards of living rose, expanding the middle class and strengthening domestic consumption. Higher wages in one country caused the mantle of lowest-cost manufacturer to pass to others. Wages may have risen locally, but as a consequence, the search for low-margin, low-skill work moved on to new low-cost venues.

Asia's ability to produce goods inexpensively soon led U.S. companies to capitalize on Asia's advantages by (a) building factories abroad and (b) hiring Asian contractors to do manufacturing for them. The reasons are clear: vastly lower wages and fewer protections for workers, which permitted long days and

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poor labor conditions that wouldn't be tolerated in the U.S. **The result was more jobs for non-U.S. workers, economic growth for the countries where the manufacturing was done, increased competitiveness for U.S. importers, and bargain-priced goods for American consumers.**

In addition, offshoring undoubtedly contributed substantially to the low level of inflation experienced in the U.S. over the last 40 years. One popular gauge of inflation, the Personal Consumption Expenditures (PCE) deflator, rose by only 1.8% per year from 1995 (importantly, the blast-off point for Chinese exports to the U.S.) through 2020. Inflation was considered tame at that level, and, in fact, many in business and government wished it were a bit higher. But a look inside the numbers is instructive:

Personal Consumption Expenditures	Annual Inflation	Share of PCE
All	**1.8%**	
Non-Durables	1.6	25-30%
Durables	(2.0)	10-15
Services	2.6	55-60

Source: Federal Reserve Bank of St. Louis FRED database; *AmosWEB*

It's startling to note that the prices of durables fell by almost 40% over the 25 years in question. The availability of ever-cheaper goods like cars, appliances and furniture produced abroad was a major contributor to the benign U.S. inflation picture in this quarter-century. Likewise, although prices of non-durables didn't actually come down, cheap imports of items like clothing helped keep the lid on prices overall. This was an important benefit of globalization for the net-importing nations.

On the other hand, offshoring also led to the elimination of millions of U.S. jobs, the hollowing out of the manufacturing regions and middle class of our country, and most likely the weakening of private-sector labor unions.

> Ford, for example, reported in 1992 that 53 percent of its employees worked in the U.S. and Canada. By 2009, its North American workforce (by then Ford had expanded to Mexico) made up only 37 percent of total payroll. (*The Week*, January 11, 2015)

Capitalism is based on the desire to maximize income. Globalization allows production to be performed where the costs are lowest. The combination of these two powerful forces has had a profound influence on the world over the last half-century.

Semiconductors present an outstanding example of this trend. Many of the most important early developments in electronics – transistors, integrated circuits, and semiconductors – took place at U.S. companies such as Bell Labs and Fairchild Semiconductor. In 1990, the U.S. and Europe were responsible for over 80% of global semiconductor production. By 2020, their share was estimated to be only around 20% (data from Boston Consulting Group and the Semiconductor Industry Association). Taiwan (led by Taiwan Semiconductor Manufacturing Company (TSMC)) and South Korea (essentially Samsung) have taken the place of the U.S. and Europe as the largest producers of semiconductors. Today, "TSMC and Samsung are the only companies capable of producing today's most advanced 5-nanometer chips that go into iPhones." (*Visual Capitalist*) The upshot is well known:

> While pandemic-induced shutdowns have hampered supply, the demand for chips has continued surging with reopening economies. The resulting chip shortage has rattled

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several industries with lead times – the gap between when a semiconductor is ordered and when it is delivered is at a record high of 22 weeks.

The chip shortage is a boon to semiconductor companies, but downstream firms are struggling. Global automakers are set to make 7.7 million fewer cars in 2021, which translates into a $210 billion hit to their revenues. Consumer electronics have taken a blow as well, with popular products like the PlayStation 5 console in short supply. (*Visual Capitalist*)

The Common Thread

So, what's the connection? U.S. companies' foreign sourcing, in particular with regard to semiconductors, differs from Europe's energy emergency in many ways. **But both are marked by inadequate supply of an essential good demanded by countries or companies that permitted themselves to become reliant on others. And considering how critical electronics are to U.S. national security – what today in terms of surveillance, communications, analysis and transportation isn't reliant on electronics? – this vulnerability could, at some point, come back to bite the U.S. in the same way that dependence on Russian energy resources has the European Union.**

How did the world get into this position? How did Europe become so dependent on Russian exports of energy commodities, and how did such a high percentage of semiconductors and other goods destined for the U.S. come to be manufactured abroad? Just as Europe allowed its energy dependence to increase due to its desire to be more green, U.S. businesses came to rely increasingly on materials, components, and finished goods from abroad to remain price-competitive and deliver greater profits.

Key geopolitical developments in recent decades included (a) the perception that the world was shrinking, due to improvements in transportation and communications, and (b) the relative peace of the world, stemming from:

- the dismantling of the Berlin Wall;
- the fall of the USSR;
- the low perceived threat from nuclear arms (thanks to the realization that their use would assure mutual destruction);
- the absence of conflicts that could escalate into a multi-national war; and
- the shortness of memory, which permits people to believe benign conditions will remain so.

Together, these developments gave rise to a huge swing of the pendulum toward globalization and thus countries' interdependence. Companies and countries found that massive benefits could be tapped by looking abroad for solutions, and it was easy to overlook or minimize potential pitfalls.

As a result, in recent decades, countries and companies have been able to opt for what seemed to be the cheapest and easiest solutions, and perhaps the greenest. Thus, the choices made included reliance on distant sources of supply and just-in-time ordering.

(As an aside, I acknowledge that in countries with less-well-developed economies, environmental protection, high safety and labor standards, and green behavior may sometimes be considered unaffordable luxuries. Thus offshoring may allow companies to engage in practices that wouldn't be acceptable at home – low-cost manufacturing based on burning coal is a good example. In this way,

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offshoring may help a company's or even a country's domestic profile while being bad for the world as a whole.)

As I've written in the past, economics is the science of choice (the same seems true of geopolitics, although there's even less science regarding that realm.) Few options in these fields offer only positives and no negatives. Most entail tradeoffs. However, the negatives often become apparent "only when the tide goes out," as they have recently. The invasion of Ukraine has shown that Europe's importation of oil and gas from Russia has left it vulnerable to a hostile, unprincipled nation (worse in this case – to such an individual) at the same time that winding down nuclear power generation has increased the region's need for imported oil and gas. The practice of offshore procurement similarly makes countries and companies dependent on their positive relations with foreign nations and the efficacy of our transportation system.

The recognition of these negative aspects of globalization has now caused the pendulum to swing back toward local sourcing. Rather than the cheapest, easiest and greenest sources, there'll probably be more of a premium put on the safest and surest. For example, both U.S. and non-U.S. companies have announced that they intend to build new foundries to produce semiconductors in the U.S. And I imagine many U.S. importers of materials, components and finished goods are looking for sources closer to home. Similarly, it's now less likely that Germany will follow through on its plan to turn off its three remaining nuclear reactors on December 31 and more likely that it will reactivate the three it retired at the end of 2021 (and perhaps, with the rest of Europe, recalibrate the balance between energy imports and domestic energy production).

If the pendulum continues to move for a while in the direction I foresee, there will be ramifications for investors. Globalization has been a boon for worldwide GDP, the nations whose economies it has lifted, and the companies that reduced costs by buying abroad. The swing away will be less favorable in those regards, but it may (a) improve importers' security, (b) increase the competitiveness of onshore producers and the number of domestic manufacturing jobs, and (c) create investment opportunities in the transition.

For how long will the pendulum swing away from globalization and toward onshoring? The answer depends in part on how the current situations are resolved and in part on which force wins: the need for dependability and security or the desire for cheap sourcing.

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In complex fields like economics and geopolitics, there are few easy decisions – just choices, many of them very difficult. There are too many moving parts, too many unknowns, and too many pros and cons whose merits can't be weighed quantitatively. What sits on either side of the scale doesn't necessarily change much, but the pendulum swings radically in terms of how those things are viewed and weighted in the decision.

Here's what I wrote in *On Regulation* concerning the swing of the pendulum toward and away from regulation of the financial markets:

> It's my belief that because both free markets and regulation are imperfect – and because of the strength of people's political and philosophical biases – we will never settle permanently on either a completely free market or a thoroughly regulated system. Any position will prove merely temporary, and the pendulum will continue to swing toward one end of the spectrum and then back toward the other.

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If you substitute the words “offshoring” and “domestic sourcing” for “free markets” and “regulation,” then this passage just as accurately describes the choice between the cheapest sourcing and the most secure sourcing. **This absence of perfect, permanent solutions is characteristic of pendulums – it’s why they swing.** And after many decades of globalization and cost minimization, I think we’re about to find investment opportunities in the swing toward reliable supply.

March 23, 2022

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Memo to: Oaktree Clients

From: Howard Marks

Re: Selling Out

As I'm now in my fourth decade of memo writing, I'm sometimes tempted to conclude I should quit, because I've covered all the relevant topics. Then a new idea for a memo pops up, delivering a pleasant surprise. My January 2021 memo *Something of Value*, which chronicled the time I spent in 2020 living and discussing investing with my son Andrew, recounted a semi-real conversation in which we briefly discussed whether and when to sell appreciated assets. It occurred to me that even though selling is an inescapable part of the investment process, I've never devoted an entire memo to it.

The Basic Idea

Everyone is familiar with the old saw that's supposed to capture investing's basic proposition: "buy low, sell high." It's a hackneyed caricature of the way most people view investing. But few things that are important can be distilled into just four words; thus, "buy low, sell high" is nothing but a starting point for discussion of a very complex process.

Will Rogers, an American film star and humorist of the 1920s and '30s, provided what he may have thought was a more comprehensive roadmap for success in the pursuit of wealth:

> Don't gamble; take all your savings and buy some good stock and hold it till it goes up, then sell it. If it don't go up, don't buy it.

The illogicality of his advice makes clear how simplistic this adage – like many others – really is. However, regardless of the details, people may unquestioningly accept that they should sell appreciated investments. But how helpful is that basic concept?

Origins

Much of what I'll write here got its start in a 2015 memo called *Liquidity*. The hot topic in the investment world at that moment was the concern about a perceived decline in the liquidity provided by the market (when I say "the market," I'm talking specifically about the U.S. stock market, but the statement has broad applicability). This was commonly attributed to a combination of (a) the licking investment banks had taken in the Global Financial Crisis of 2008-09 and (b) the Volcker Rule, which prohibited risky activities such as proprietary trading on the part of systemically important financial institutions. The latter constrained banks' ability to "position" securities, or buy them, when clients wanted to sell.

Maybe liquidity in 2015 was less than it had previously been, and maybe it wasn't. However, looking beyond the events of the day, I closed that memo by stating my conviction that (a) most investors trade too much, to their own detriment, and (b) the best solution for illiquidity is to build portfolios for the long term that don't rely on liquidity for success. Long-term investors have an advantage over those with short timeframes (and I think the latter describes the majority of market participants these days). Patient

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investors are able to ignore short-term performance, hold for the long run, and avoid excessive trading costs, while everyone else worries about what's going to happen in the next month or quarter and therefore trades excessively. In addition, long-term investors can take advantage if illiquid assets become available for purchase at bargain prices.

Like so many things in investing, however, just holding is easier said than done. Too many people equate activity with adding value. Here's how I summed up this idea in *Liquidity*, inspired by something Andrew had said:

> When you find an investment with the potential to compound over a long period, one of the hardest things is to be patient and maintain your position as long as doing so is warranted based on the prospective return and risk. Investors can easily be moved to sell by news, emotion, the fact that they've made a lot of money to date, or the excitement of a new, seemingly more promising idea. **When you look at the chart for something that's gone up and to the right for 20 years, think about all the times a holder would have had to convince himself not to sell.**

Everyone wishes they'd bought Amazon at $5 on the first day of 1998, since it's now up 660x at $3,304.

- But who would have continued to hold when the stock hit $85 in 1999 – up 17x in less than two years?
- Who among those who held on would have been able to avoid panicking in 2001, as the price fell 93%, to $6?
- And who wouldn't have sold by late 2015 when it hit $600 – up 100x from the 2001 low? Yet anyone who sold at $600 captured only the first 18% of the overall rise from that low.

This reminds me of the time I once visited Malibu with a friend and mentioned that the Rindge family is said to have bought the entire area – all 13,330 acres – in 1892 for $300,000, or $22.50 per acre. (It's clearly worth many billions today.) My friend said, "I'd like to have bought all of Malibu for $300,000." My response was simple: "you would have sold it when it got to $600,000."

The more I've thought about it since writing *Liquidity*, the more convinced I've become that there are two main reasons why people sell investments: because they're up and because they're down. You may say that sounds nutty, but what's really nutty is many investors' behavior.

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Selling Because It's Up

"Profit-taking" is the intelligent-sounding term in our business for selling things that have appreciated. To understand why people engage in it, you need insight into human behavior, because a lot of investors' selling is motivated by psychology.

In short, a good deal of selling takes place because people like the fact that their assets show gains, and they're afraid the profits will go away. Most people invest a lot of time and effort trying to avoid unpleasant feelings like regret and embarrassment. What could cause an investor more self-recrimination than watching a big gain evaporate? And what about the professional investor who reports a big winner to clients one quarter and then has to explain why the holding is at or below cost the next? It's only human to want to realize profits to avoid these outcomes.

If you sell an appreciated asset, that puts the gain "in the books," and it can never be reversed. Thus, some people consider selling winners extremely desirable – they love realized gains. In fact, at a meeting of a non-profit's investment committee, a member suggested that they should be leery of increasing endowment spending in response to gains because those gains were unrealized. I was quick to point out that it's usually a mistake to view realized gains as less transient than unrealized ones (assuming there's no reason to doubt the veracity of the unrealized carrying values). Yes, the former have been made concrete. However, sales proceeds are generally reinvested, meaning the profits – and the principal – are put back at risk. One might argue that appreciated securities are more vulnerable to declines than new investments in assets currently deemed to be attractively priced, but that's far from a certainty.

I'm not saying investors shouldn't sell appreciated assets and realize profits. **But it certainly doesn't make sense to sell things just because they're up.**

Selling Because It's Down

As wrong as it is to sell appreciated assets solely to crystalize gains, it's even worse to sell them just because they're down. Nevertheless, I'm sure many people do it.

While the rule is "buy low, sell high," clearly many people become more motivated to sell assets the more they decline. **In fact, just as continued buying of appreciated assets can eventually turn a bull market into a bubble, widespread selling of things that are down has the potential to turn market declines into crashes. Bubbles and crashes do occur, proving that investors contribute to excesses in both directions.**

In a movie that plays in my head, the typical investor buys something at $100. If it goes to $120, he says, "I think I'm onto something – I should add," and if it reaches $150, he says, "Now I'm highly confident – I'm going to double up." On the other hand, if it falls to $90, he says, "I'm going to think about increasing my position to reduce my average cost," but at $75, he concludes he should reconfirm his thesis before averaging down further. At $50, he says, "I'd better wait for the dust to settle before buying more." And at $20 he says, "It feels like it's going to zero; get me out!"

Just like those who are afraid of surrendering gains, many investors worry about letting losses compound. They might fear their clients will say (or they'll say to themselves), "What kind of a lame-brain continues to hold a security after it's gone from $100 to $50? *Everyone knows* a decline like that can foreshadow further declines. And look – it happened."

Do investors really make behavioral errors such as those I've described? There's plenty of anecdotal evidence. For example, studies have shown that the average mutual fund investor performs worse than the average mutual fund. How can that be? If she merely held her positions, or if her errors were unsystematic, the average fund investor would, by definition, fare the same as the average fund. For the studies' findings to occur, investors have to on balance reduce the amount of capital they have in funds that subsequently do better and increase their allocation to funds that go on to do worse. Let me put that another way: on average, mutual fund investors tend to sell the funds with the worst recent performance (missing out on their potential recoveries) in order to chase the funds that have done the best (and thus likely participate in their return to earth).

We know that "retail investors" tend to be trend-followers, as described above, and their long-term performance often suffers as a result. What about the pros? Here the evidence is even clearer: the

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powerful shift in recent decades toward indexing and other forms of passive investing has taken place for the simple reason that active investment decisions are so often wrong. Of course, many forms of error contribute to this reality. Whatever the reason, however, we have to conclude that, on average, active professional investors held more of the things that did less well and less of the things that outperformed, and/or that they bought too much at elevated prices and sold too much at depressed prices. Passive investing hasn't grown to cover the majority of U.S. equity mutual fund capital because passive results have been so good; I think it's because active management has been so bad.

Back when I worked at First National City Bank 50 years ago, prospective clients used to ask, "What kind of return do you think you can make in an equity portfolio?" The standard answer was 12%. Why? "Well," we said (so simplistically), "the stock market returns about 10% a year. A little effort should enable us to improve on that by at least 20%." Of course, as time has shown, there's no truth in that. "A little effort" didn't add anything. In fact, in most cases, active investing detracted: most equity funds failed to keep up with the indices, especially after fees.

What about the ultimate proof? The essential ingredient in Oaktree's investments in distressed debt – bargain purchases – has emanated from the great opportunities sellers gave us. Negativity reaches a crescendo during economic and market crises, causing many investors to become depressed or fearful and sell in panic. Results like those we target in distressed debt can only be achieved when holders sell to us at irrationally low prices.

Superior investing consists largely of taking advantage of mistakes made by others. Clearly, selling things because they're down is a mistake that can give the buyers great opportunities.

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When Should Investors Sell?

If you shouldn't sell things because they're up, and you shouldn't sell because they're down, is it ever right to sell? As I previously mentioned, I described the discussions that took place while Andrew and his family lived with Nancy and me in 2020 in *Something of Value*. That experience truly was of great value – an unexpected silver lining to the pandemic. That memo evoked the strongest reaction from readers of any of my memos to date. This response was probably attributable to (a) the content, which mostly related to value investing; (b) the personal insights provided, and especially my confession regarding my need to grow with the times; or (c) the recreated conversation that I included as an appendix. The last of these went like this, in part:

> Howard: Hey, I see XYZ is up xx% this year and selling at a p/e ratio of xx. Are you tempted to take some profits?
>
> Andrew: Dad, I've told you I'm not a seller. Why would I sell?
>
> H: Well, you might sell some here because (a) you're up so much; (b) you want to put some of the gain "in the books" to make sure you don't give it all back; and (c) at that valuation, it might be overvalued and precarious. And, of course, (d) no one ever went broke taking a profit.
>
> A: Yeah, but on the other hand, (a) I'm a long-term investor, and I don't think of shares as pieces of paper to trade, but as part ownership in a business; (b) the company still has enormous potential; and (c) I can live with a short-term downward fluctuation, the threat

of which is part of what creates opportunities in stocks to begin with. Ultimately, it's only the long term that matters. (There's a lot of "a-b-c" in our house. I wonder where Andrew got that.)

H: But if it's potentially overvalued in the short term, shouldn't you trim your holding and pocket some of the gain? Then if it goes down, (a) you've limited your regret and (b) you can buy in lower.

A: If I owned a stake in a private company with enormous potential, strong momentum and great management, I would never sell part of it just because someone offered me a full price. Great compounders are extremely hard to find, so it's usually a mistake to let them go. Also, I think it's much more straightforward to predict the long-term outcome for a company than short-term price movements, and it doesn't make sense to trade off a decision in an area of high conviction for one about which you're limited to low conviction. . . .

H: Isn't there any point where you'd begin to sell?

A: In theory there is, but it largely depends on (a) whether the fundamentals are playing out as I hope and (b) how this opportunity compares to the others that are available, taking into account my high level of comfort with this one.

Aphorisms like "no one ever went broke taking a profit" may be relevant to people who invest part-time for themselves, but they should have no place in professional investing. **There certainly are good reasons for selling, but they have nothing to do with the fear of making mistakes, experiencing regret and looking bad.** Rather, these reasons should be based on the outlook for the investment – not the psyche of the investor – and they have to be identified through hardheaded financial analysis, rigor and discipline.

Stanford University professor Sidney Cottle was the editor of the later versions of Benjamin Graham and David L. Dodd's *Security Analysis*, "the bible of value investing," including the edition I read at Wharton 56 years ago. For that reason, I knew the book as "Graham, Dodd and Cottle." Sid was a consultant to the investment department at First National City Bank in the 1970s, and **I've never forgotten his description of investing: "the discipline of relative selection."** In other words, most of the portfolio decisions investors make are relative choices.

It's patently clear that relative considerations should play an enormous part in any decision to sell existing holdings.

- If your investment thesis seems less valid than it did previously and/or the probability that it will prove accurate has declined, selling some or all of the holding is probably appropriate.
- Likewise, if another investment comes along that appears to have more promise – to offer a superior risk-adjusted prospective return – it's reasonable to reduce or eliminate existing holdings to make room for it.

Selling an asset is a decision that must not be considered in isolation. Cottle's concept of "relative selection" highlights the fact that every sale results in proceeds. What will you do with them? Do you have something in mind that you think might produce a superior return? What might you miss by switching to the new investment? And what will you give up if you continue to hold the asset in your

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portfolio rather than making the change? Or perhaps you don't plan to reinvest the proceeds. In that case, what's the likelihood that holding the proceeds in cash will make you better off than you would have been if you had held onto the thing you sold? **Questions like these relate to the concept of "opportunity cost," one of the most important ideas in financial decision-making.**

Switching gears, what about the idea of selling because you think a temporary dip lies ahead that will affect one of your holdings or the whole market? There are real problems with this approach:

- Why sell something you think has a positive long-term future to prepare for a dip you expect to be temporary?
- Doing so introduces one more way to be wrong (of which there are so many), since the decline might not occur.
- Charlie Munger, vice chairman of Berkshire Hathaway, points out that selling for market-timing purposes actually gives an investor two ways to be wrong: the decline may or may not occur, and if it does, you'll have to figure out when the time is right to go back in.
- Or maybe it's three ways, because once you sell, you also have to decide what to do with the proceeds while you wait until the dip occurs and the time comes to get back in.
- People who avoid declines by selling too often may revel in their brilliance and fail to reinstate their positions at the resulting lows. Thus, even sellers who were right can fail to accomplish anything of lasting value.
- Lastly, what if you're wrong and there is no dip? In that case, you'll miss out on the ensuing gains and either never get back in or do so at higher prices.

So it's generally not a good idea to sell for purposes of market timing. **There are very few occasions to do so profitably and very few people who possess the skill needed to take advantage of these opportunities.**

Before I close on this subject, it's important to note that decisions to sell aren't always within an investment manager's control. Clients can withdraw capital from accounts and funds, necessitating sales, and the limited lifespan of closed-end funds can require managers to liquidate holdings even though they're not ripe for selling. The choice of *what to sell* under these conditions can still be based on a manager's expectations regarding future returns, but deciding *not to sell* isn't among the manager's choices.

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How Much Is Too Much to Hold?

Certainly there are times when it's right to sell one asset in favor of another based on the idea of relative selection. But we mustn't do this in a mechanical manner. If we did, at the logical extreme, we would put all of our capital into the one investment we consider the best.

Virtually all investors – even the best – diversify their portfolios. We may have a sense for which holding is the absolute best, but **I've never heard of an investor with a one-asset portfolio. They may overweight favorites to take advantage of what they think they know, but they still diversify to protect against what they don't know.** That means they sub-optimize, potentially trading off some of their chance at a maximal return to increase the likelihood of a merely excellent one.

Here's a related question from my reconstructed conversation with Andrew:

> H: You run a concentrated portfolio. XYZ was a big position when you invested, and it's even bigger today, given the appreciation. Intelligent investors concentrate portfolios and hold on to take advantage of what they know, but they diversify holdings and sell as things rise to limit the potential damage from what they don't know. Hasn't the growth in this position put our portfolio out of whack in that regard?
>
> A: Perhaps that's true, depending on your goals. But trimming would mean selling something I feel immense comfort with based on my bottom-up assessment and moving into something I feel less good about or know less well (or cash). To me, it's far better to own a small number of things about which I feel strongly. I'll only have a few good insights over my lifetime, so I have to maximize the few I have.

All professional investors want good investment performance for their clients, but they also want financial success for themselves. And amateurs have to invest within the limits of their risk tolerance. For these reasons, most investors – and certainly most investment managers' clients – aren't immune to apprehension regarding portfolio concentration and thus susceptibility to untoward developments. These considerations introduce valid reasons for limiting the size of individual asset purchases and trimming positions as they appreciate.

Investors sometimes delegate the decision on how to weight assets in portfolios to a process called portfolio optimization. Inputs regarding asset classes' return potential, risk and correlation are fed into a computer model, and out comes the portfolio with the optimal expected risk-adjusted return. If an asset appreciates relative to the others, the model can be rerun, and it will tell you what to buy and sell. The main problem with these models lies in the fact that all the data we have regarding those three parameters relates to the past, but to arrive at the ideal portfolio, the model needs data that accurately describes the future. Further, the models need a numerical input for risk, and I absolutely insist that no single number can fully describe an asset's risk. Thus, optimization models can't successfully dictate portfolio actions.

The bottom line:

- we should base our investment decisions on our estimates of each asset's potential,
- we shouldn't sell just because the price has risen and the position has swelled,
- there can be legitimate reasons to limit the size of the positions we hold,
- but there's no way to scientifically calculate what those limits should be.

In other words, the decision to trim positions or to sell out entirely comes down to judgment . . . like everything else that matters in investing.

<u>The Final Word on Selling</u>

Most investors try to add value by over- and underweighting specific assets and/or through well-timed buying and selling. While few have demonstrated the ability to consistently do these things correctly (see my comments on active management on page 4), everyone's free to have a go at it. There is, however, a big "but."

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What's clear to me is that simply being invested is by far "the most important thing." (Someone should write a book with that title!) Most actively managed portfolios won't outperform the market as a result of manipulation of portfolio weightings or buying and selling for purposes of market timing. **You can try to add to returns by engaging in such machinations, but these actions are unlikely to work at best and can get in the way at worst.**

Most economies and corporations benefit from positive underlying secular trends, and thus most securities markets rise in most years and certainly over long periods. One of the longest-running U.S. equity indices, the S&P 500, has produced an estimated compound average return over the last 90 years of 10.5% per year. That's startling performance. It means $1 invested in the S&P 500 90 years ago would have grown to roughly $8,000 today.

Many people have remarked on the wonders of compounding. For example, Albert Einstein reportedly called compound interest "the eighth wonder of the world." If $1 could be invested today at the historic compound return of 10.5% per year, it would grow to $147 in 50 years. One might argue that economic growth will be slower in the years ahead than it was in the past, or that bargain stocks were easier to find in previous periods than they are today. Nevertheless, even if it compounds at just 7%, $1 invested today will grow to over $29 in 50 years. **Thus, someone entering adulthood today is practically guaranteed to be well fixed by the time they retire if they merely start investing promptly and avoid tampering with the process by trading.**

I like the way Bill Miller, one of the great investors of our time, put it in his *3Q 2021 Market Letter*:

> In the post-war period the US stock market has gone up in around 70% of the years . . . Odds much less favorable than that have made casino owners very rich, yet most investors try to guess the 30% of the time stocks decline, or even worse spend time trying to surf, to no avail, the quarterly up and down waves in the market. Most of the returns in stocks are concentrated in sharp bursts beginning in periods of great pessimism or fear, as we saw most recently in the 2020 pandemic decline. **We believe time, not timing, is the key to building wealth in the stock market.** (October 18, 2021. Emphasis added)

What are the "sharp bursts" Miller talks about? On April 11, 2019, *The Motley Fool* cited data from JP Morgan Asset Management's *2019 Retirement Guide* showing that in the 20-year period between 1999 and 2018, the annual return on the S&P 500 was 5.6%, but your return would only have been 2.0% if you had sat out the 10 best days (or roughly 0.4% of the trading days), and you wouldn't have made any money at all if you had missed the 20 best days. In the past, returns have often been similarly concentrated in a small number of days. Nevertheless, overactive investors continue to jump in and out of the market, incurring transactions costs and capital gains taxes and running the risk of missing those "sharp bursts."

As mentioned earlier, investors often engage in selling because they believe a decline is imminent and they have the ability to avoid it. The truth, however, is that buying or holding – even at elevated prices – and experiencing a decline is in itself far from fatal. Usually, every market high is followed by a higher one and, after all, only the long-term return matters. **Reducing market exposure through ill-conceived selling – and thus failing to participate fully in the markets' positive long-term trend – is a cardinal sin in investing. That's even more true of selling without reason things that have fallen, turning negative fluctuations into permanent losses and missing out on the miracle of long-term compounding.**

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* * *

When I meet people for the first time and they find out I'm in the investment business, they often ask (especially in Europe) "what do you trade?" That question makes me bristle. To me, "trading" means jumping in and out of individual assets and whole markets on the basis of guesswork as to what prices will do in the next hour, day, month or quarter. We don't engage in such activity at Oaktree, and few people have demonstrated the ability to do it well.

Rather than traders, we consider ourselves investors. **In my view, investing means committing capital to assets based on well-reasoned estimates of their potential and benefitting from the results over the long term.** Oaktree does employ people called traders, but their job consists of implementing long-term investment decisions made by portfolio managers based on assets' fundamentals. No one at Oaktree believes they can make money or advance their career by selling now and buying back after an intervening decline, as opposed to holding for years and letting value lift prices if fundamental expectations prove out.

When Oaktree was formed in 1995, the five founders – who at that point had worked together for nine years on average – established an investment philosophy based on what we'd successfully done in that time. One of the six tenets expressed our view on trying to time markets when buying and selling:

> Because we do not believe in the predictive ability required to correctly time markets, we keep portfolios fully invested whenever attractively priced assets can be bought. Concern about the market climate may cause us to tilt toward more defensive investments, increase selectivity or act more deliberately, but we never move to raise cash. Clients hire us to invest in specific market niches, and we must never fail to do our job. Holding investments that decline in price is unpleasant, but missing out on returns because we failed to buy what we were hired to buy is inexcusable.

We've never changed any of the six tenets of our investment philosophy – including this one – and we have no plans to do so.

January 13, 2022

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Memo to: Oaktree Clients

From: Howard Marks

Re: The Winds of Change

The last 20 months have been a most unusual period, thanks primarily to the pandemic, yet many things feel like they haven't changed over that time span. Each day seems like all the others. Nancy and I mostly stay home and deal with email and Zoom calls – whether relating to work matters or grandchildren. Weekdays don't feel that different from weekends (this was especially true pre-vaccine, when we rarely ate out or visited others). We've had only one one-week vacation in two years. The best way to sum it up is through a comparison to Groundhog Day: every day feels a lot like the day before.

What has changed in our environment in the last 12 months? We've seen an election and change of president, as well as increased sensitivity on issues of race, inequality and climate change – but so far with few tangible results. Fortunately, vaccines were developed, approved and distributed. Thus, Covid-19 subsided, but there was a reemergence spurred by the Delta variant, and there might be more.

In the business world, there's little that's new:

- The economic resurgence that began in the third quarter of 2020 – with the greatest quarterly GDP gain in U.S. history – remains underway.
- The securities markets, which began to rally in March 2020, have continued to rise.
- Worry about rising inflation has turned out to be well founded thus far, but there is still no consensus as to its primary cause (Federal Reserve policy or supply chain/labor market bottlenecks?) or whether it will prove transitory or long-lasting.

All three of the conditions listed above were present months ago, and they're little changed today. Thus, in the investment environment, it's still Groundhog Day. Yet there are changes taking place, and they'll be the subject of this memo. **My focus isn't the "little macro" changes, like what will happen to GDP, inflation and interest rates next year, but rather the "big macro" changes that will have an impact on our lives for many years. Many aren't actionable today, but that doesn't mean we shouldn't bear them in mind.**

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The Changing Environment for Investing

As I've written before, the world I remember of 50, 60 and 70 years ago was a pretty static place. Things didn't seem to change very much or very fast. The homes, cars, reading matter, business technology and general environment of 1970 weren't very different from those of 1950. We were entertained by broadcast TV and radio, drove gasoline-powered cars dependent on carburetors, did most calculations on paper, composed documents on typewriters (with copies made using carbon paper), communicated via letters and phone calls, and got information primarily from books housed in libraries. The four-function calculator, personal computer, cellular phone, email and Internet didn't yet exist, and some of them wouldn't for a good while longer. I describe this environment as a mostly unchanging backdrop – I think of it as scenery in the theater – in front of which events and cycles played out.

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One of the biggest changes that did take place in the 1960s was the emergence of "growth investing" via fast-growing companies, many of which were quite new. The "Nifty Fifty" I talk about so much ruled the stock market in the late 1960s: this group included office equipment manufacturers IBM and Xerox, photography titans Kodak and Polaroid, drug companies like Merck and Eli Lilly, tech companies including Hewlett Packard and Texas Instruments, and advanced marketing/consumer goods companies such as Coca-Cola and Avon.

These companies' stocks carried very high price/earnings ratios, reaching up to 80 and 90. Obviously, investors should only pay multiples like these (if ever) if they're sure the companies will be preeminent for decades to come. And investors were sure. In fact, it was widely believed that nothing bad could happen to these companies and they could never be disrupted. **This was one of post-war America's first major brushes with newness and – in a good example of illogicality – investors embraced these companies, with their revolutionary newness, but somehow assumed that a newer and better new thing could never come along to displace them.**

Of course, those investors were riding for a fall. If you bought the stocks of "the greatest companies in America" when I started working in 1969, and held them steadfastly for five years, you lost almost all your money. The first reason is that the multiples in the late 1960s were far too high, and they were gutted in the subsequent market correction. But, perhaps more importantly, many of these "forever" companies turned out to be vulnerable to change.

The companies of the Nifty Fifty represented the first flowering of change in the new world, and many of them went on to be its early victims. At least half of these supposedly impregnable companies have either gone out of business or been acquired by others. Kodak and Polaroid lost their *raison d'etre* when digital cameras appeared. Xerox ceded much of the dry copying business to low-priced competition from abroad. IBM proved vulnerable when decentralized computing and PCs took over from massive mainframes. Seen any door-to-door salespeople lately? No, and we don't hear much about "Avon ladies." And what about one of the darlings of the day: Simplicity Pattern? Who do you know today who makes their own clothes?

The years since then have seen a massive shift in our environment. **Today, unlike in the 1950s and '60s, everything seems to change every day.** It's particularly hard to think of a company or industry that won't either be a disrupter or be disrupted (or both) in the years ahead. Anyone who believes all the firms on today's list of leading growth companies will still be there in five or ten years has a good chance of being proved wrong.

For investors, this means there's a new world order. Words like "stable," "defensive" and "moat" will be less relevant in the future. Much of investing will require more technological expertise than it did in the past. And investments made on the assumptions that tomorrow will look like yesterday must be subject to vastly increased scrutiny.

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The Changing Nature of Business

Increasingly, U.S. business is virtual, digital and information-oriented, no longer devoted to agriculture or to manufacturing physical products. Even those companies that do produce physical goods or services increasingly employ information products and other aspects of technology. These elements will have a profound impact on which legacy businesses will survive, which moats will hold up, and which newcomers will supplant the incumbents, as well as what our world will look like ten or twenty years from now.

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In my January memo, *Something of Value*, I described some of the changes technology is making in the business world. They included:

- the exceptional profitability of information-based businesses;
- these companies' low cost of incremental production, relative ease of scaling, and ability to see margins rise as the business expands, rather than suffer diminishing returns;
- their modest need for additional capital and bigger plants as they grow, and
- their reliance on a relatively small number of educated coders rather than masses of manual or unskilled workers.

Not only do these factors have the potential to create massive winners and bring down others, but they have profound implications for the overall economy. I think about one of them more than the rest. (Since Oaktree and I generally don't invest in technology, I'm not required to have opinions on much of the foregoing.) **That one is the fact that as technology and information play a bigger role in business and our lives, labor becomes less necessary.**

One hundred years ago, the U.S. was an agricultural powerhouse, and agriculture was highly labor-intensive. Thus large numbers of unskilled workers were employed on U.S. farms, largely in the South and Midwest. With the invention of machine-powered equipment, the need for labor in agriculture declined. Large numbers of workers displaced by tractors made their way to the upper Midwest to work in plants producing newly invented automobiles and household appliances. Thus workers who were displaced from one field found employment in another – there were industries on the way up as well as on the way down.

Fast forward to the 21st century. The industries to which those workers and their descendants shifted are in turn losing jobs, this time due to the importation of foreign goods made with cheap labor and, especially, automation. With manufacturing on the decline in the U.S., it's technological industries – in fields such as information, artificial intelligence, communications and entertainment – that are rising to take the place of metal-bending. And as mentioned above, tech firms can increase their production and sales without a proportional increase in the number of workers employed.

The optimists say, "some new need for labor always pops up" (as it did in manufacturing between 1920 and, say, 1970). But (a) you can't see much sign of that in the tech-based industries that are on the rise – they're just not labor-intensive – and (b) the workers that technological industries require are generally better educated than those cut adrift from the manufacturing sector. This latter element is especially worrisome given the declining quality of public education available in the U.S. (There is, however, room for growth in jobs in the service sector.)

I worry about where the workers no longer needed in manufacturing will find employment. For those who look to government for solutions, the most likely answer is support payments designed to guarantee everyone a living wage. But can we afford to support growing numbers of unemployed workers and their families? And how will we replace the non-monetary benefits from work: things like having a place to go each day and satisfaction with a job well done. Is sitting on the porch really a viable substitute for a job? I believe the opioid epidemic, for example, is highly correlated with job losses. Government largesse isn't an adequate substitute for jobs.

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Inflation/Deflation

I've written extensively on the subject of inflation of late, especially in *Thinking About Macro* four months ago. Since our knowledge of the future is so limited, there's little for me to add on the subject. But what about the possibility of deflation? People have been warning about both inflation and deflation for the last several years. The only thing I've been confident about is that we're unlikely to have both at the same time.

I recently came across a video of Cathie Wood speaking on the subject of deflation. For those who don't know, Cathie is the investor who gained great fame in 2020 for having been heavily concentrated in the FAANGs, Tesla and other tech stocks, which vastly outperformed the rest of the stock market (in 2020, the average return on five of her seven ETFs was 141%). In the video, Cathie says:

> We've been saying for some time that the risk to the economy is more on the side of deflation than inflation. So, as Covid created all the destruction that it did and with supply chains really being thrown off, we've been through a period here of inflation which I think investors are baking into the cake. . . .
>
> . . . I was in college [during the 1970s], when inflation was raging, so I know what that is, and I truly believe we are not going back there, and that anyone planning for it is probably going to be making some mistakes. . .
>
> On the innovation side, technologically enabled innovation – we are in a period today like we have never been. Never! I mean you have to go back to the telephone, electricity and the automobile to see three major technologically enabled sources of innovation evolving at the same time. **Today we have five platforms: DNA sequencing, robotics, energy storage, artificial intelligence and blockchain technology, all of which are deflationary, and not just by a little bit, either.** (Emphasis added)

She goes on to cite Jeff Gundlach, Ray Dalio and me, and maybe Stan Druckenmiller, as being concerned about a deflationary bust. (To be honest, my only comment possibly relevant to that assertion was to say that technological gains *can* be a deflationary factor – not that the *overall result* would be deflation.) She continues:

> We think [the deflationary bust] is going to be balanced by a deflationary boom, so that's where we differ. But where we agree is that there are companies who thought the world would never change and have been catering to short-term shareholders who wanted that extra penny or two in earnings and so got it by having the companies lever up and take more debt and shrink the number of shares, and they've also been focused on dividends. They are probably saddled with products and services that will become obsolete because of the record-breaking amount of innovation taking place today. And in order to service their debt, they are going to have to cut prices and move those goods and services that are on their way out anyway. . . So what it will mean is that the traditional GDP numbers we're going to be seeing are going to be very low and growth will seem very scarce. . . .
>
> There will be a lot of job displacement, there will be, no question about it. In fact, when we started our company in 2014, Oxford University had just put out a piece that said 47% of all jobs in the United States would be lost to automation and artificial intelligence by 2035. And they left it there. Hair on fire, headlines screaming, a lot of fear about automation. We got the question in every meeting. And what they had neglected to do – which we did – was finish the story.

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> With automation and artificial intelligence, productivity is going to go up dramatically. We think more than it ever has, certainly in modern times. And with productivity increases comes more wealth creation, and more GDP creation, and according to our estimates, in the year 2035, because of automation and artificial intelligence, we believe that GDP here in the United States will not be $28 trillion, which, if you drew linear growth, that's where it would be, but instead will be $40 trillion . . .

Before I move on, I want to spend a minute on exactly what Cathie Wood said: technology will prove deflationary, and its positive impact on productivity will contribute to a jump in GDP. But GDP is the product of the number of hours worked times labor productivity per hour. **Thus, if technology produces a big increase in output per hour worked, GDP can grow even if the number of hours worked declines. In other words, technology has the potential to boost GDP while adding to unemployment.**

We don't hear much these days about the possibility of deflation, and it certainly seems unlikely to arise. We also don't hear much about the deflationary impact of technology, but we shouldn't dismiss the idea.

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The Outlook for Work

While on the subject of work, I want to mention a few changes that could add up to a sea change ("a profound or notable transformation"). Whereas religious observance had long made it traditional for workers to have a day off on their Sabbath, in the early 1900s Henry Ford began to give his workers both Saturday and Sunday off. (He wasn't motivated solely by generosity. He wanted to sell cars and figured people would buy more of them if they had two-day weekends during which to enjoy them.) That was a major innovation, but today having Saturday and Sunday off is so universal that few people wonder how weekends came to be.

Now, we might be in for another major change in work patterns. It wasn't long ago that most people wanted full-time employment and pursued careers affording opportunities for advancement. Now, however, a lot of that is out the window.

- Computers made it easier to track people who wanted to work irregularly – a day or two here and a few hours there – and "gig work" such as driving for Uber became popular.
- The pandemic made working from home commonplace and the requirement to work in an office five days a week less of a default solution.
- Millions of people have left jobs over the last year as part of the "Great Resignation": 4.4 million in September alone.
- Many people seem to attach less importance to lifetime careers and advancement.
- The unemployment rate is quite low, even as millions of jobs are unfilled. Per the October Institute for Supply Management report on services: "Labor is still an issue, as it's hard to find and get people who want to work, especially in services, trucking and warehouse fulfillment."

These changes have important implications: work arrangements are less standardized, workers seem less enthralled by a steady paycheck, and many employees expect to be allowed to work from home. In 2020 we saw a drop in the labor force participation rate (the percentage of working-age Americans employed or looking for work) from 63.4% to 60.2%, and it has since rebounded to only 61.1%. What's behind these developments? Since economic phenomena aren't governed by physical laws, precise causes are hard to ascertain. In this case, I can think of a large number of possible explanations:

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- The slower economic growth seen since roughly 2000 reduced the rate of job creation and advancement, and this may have made concepts like career and long-term employment less appealing to some young people.
- Along similar lines, some members of younger generations may have become disaffected because of the increase in income inequality and decrease in prospects for economic mobility.
- Many people can afford not to work – at least for a while – perhaps because they've made more money not working than they did working (thanks to stimulus checks and/or expanded unemployment benefits). Money from these sources piled up in savings accounts, and it may not have been entirely spent yet.
- Homeowners may be reveling in the paper appreciation on their homes and borrowing against it to allow them to forgo a paycheck.
- The extensive work-from-home experience during the pandemic got people out of the habit of "going to work" and made doing so less automatic. The experience may also have highlighted how unpleasant commuting is, reducing some people's willingness to reengage in it.
- The ebullient markets may have encouraged some to quit their jobs in order to take up day trading or cryptocurrency investments.
- Some people moved during the pandemic, whether to escape Covid-19 or simply because WFH permitted it. Now some don't want to return. In particular, WFH reduced the need for some to live near jobs in urban areas with a high cost of living. Others may have enjoyed spending time with family and decided to switch to jobs permitting them to do more of it.
- Having seen how good it is for kids to have parents around, some families may have opted to become one-worker households, giving up on the fast track and potentially higher standards of living facilitated by two incomes.
- People nearing retirement may be choosing to start it now rather than seek a job for the interim.
- Labor shortages (e.g., involving truck drivers) have increased workers' bargaining power and given them the ability to move to better-paying jobs.
- Employers' desperate straits have caused some to lower job requirements, enabling workers to move up from low-paying jobs.
- People wanting to return to work may be having trouble finding childcare, since low-paid childcare workers may be able to find jobs that pay more.
- Finally, some people may still be prevented from returning to work by fear of Covid-19.

To sum up, many workers experienced a "timeout" during the pandemic – not working, working part-time, working from home, and/or certainly not traveling on business. For many, this may have occasioned a reset, giving them an opportunity to conclude, "You know, my career isn't everything; family and quality of life count for more. I'm going to reorient my life and put less emphasis on work."

At the present time, roughly 7.4 million Americans are unemployed and there are 11.2 million job openings. Sounds like it should be easy to put everyone to work and fill those positions. But the people who aren't employed may lack the required qualifications, may be unwilling to accept a job that doesn't allow them to work from home, may not want to adhere to fixed schedules, or may be unable to pass drug tests, etc. Just as with the supply chain, it may take a while to get all the moving parts to the right place.

I've listed a large number of changes here, mostly stemming from the pandemic. Some may disappear in the coming months as things get "back to normal." But others may turn out to be permanent and in five or ten years cause us to say, "Remember how different things were before 2020?"

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The Outlook for Democracy

There's a great but little-used word to describe the state of U.S. politics and governance: parlous. Google defines it as "full of danger or uncertainty; precarious." The country is highly divided in terms of politics, and discourse seems to move further toward the extremes with the passage of time.

Part of the blame goes to the media (including social media). The explanation is simple but unfortunate: a few entrepreneurs figured out that there's money in division. At the birth of television, as I understand it, the people who ran the national networks established the news division as a public service that ran losses. In TV's early decades (through the 1970s), the main networks did balanced, objective reporting – led by august figures such as Walter Cronkite, Chet Huntley and David Brinkley – and these networks pretty much still do. But over the last 20 years, some media outlets have increased their profits by catering to one side or the other, often in an inflammatory manner. More recently, we've heard about social media driving traffic by appealing to highly partisan audiences and disclaiming responsibility for content. The truth is, discord sells (how often does your daily newspaper lead with a positive headline?).

The result is very harmful. It's bad enough that some cable news stations and social media sites deliver only one side of the argument on many issues. But increasingly, they provide "alternative facts" that allow Americans to inhabit different realities. This leads to further polarization and to hostility toward those with whom one disagrees. It doesn't take long for disagreement to turn into dislike. Without a commonly agreed-on set of facts, it's easy to doubt the good faith of those with contrary views, undermining the very basis of our democracy.

Today, Americans are more likely to live near people who share their political views, express similar opinions, and favor candidates who fully back their party's agenda. Because which party will win the general election is a foregone conclusion in the vast majority of congressional elections, the real competition is in the primary election for the dominant party's nomination, which often goes to a candidate espousing an extreme version of the party's dogma. The winner – typically chosen by the small number of partisans who vote in primaries – almost always goes on to win the general election, creating a Congress heavily weighted with extremists from both parties.

Some politicians not only contribute to the division we're seeing but also benefit from it in the form of increased campaign contributions and media attention. The non-competitive nature of many congressional elections encourages behavior that in the past was considered unacceptable: acting in an uncivil manner, attacking colleagues, expressing opinions that were previously taboo, and advocating extreme measures. Many elected officials appear to follow a variation on "all's fair in love and war": all tactics are okay if they motivate my supporters, get me reelected and help my party gain or retain power.

One might conclude that all the above is innocuous – something like a TV drama. It contributes to gridlock, and there are people who believe gridlock is the best we can hope for from Washington, because so many of the government's active decisions are flawed. But these trends have worrisome implications.

Competition in the political arena has moved from intellectual/ideological to personal. As recent voting shows, our country is splitting in two, including in terms of demographics. This may be nothing new, but the forces of division are getting stronger. I believe "clustering" – the tendency to live near people like oneself – is growing, and along with it the level of dislike, disrespect and resentment toward "the other." The political impact of clustering can be exacerbated by gerrymandering, which gives the dominant party seats and power disproportionate to its share of voters. (In many states, the drawing of voting districts is in the hands of the state legislature, where the dominant party can use its ability to gerrymander, or manipulate voting district boundaries, to perpetuate and perhaps increase its hold on power.)

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These things complicate life in our so-called democracy (per Oxford University's online dictionary *Lexico*, "a system of government by the whole population or all the eligible members of a state" or "control of an organization or group by the majority of its members"). When I was a kid, we settled schoolyard disputes by insisting "majority rules." When we look at the U.S. system, however, we see numerous ways in which our form of government violates principles like representative democracy, majority rule, and "one person, one vote." For example:

- Whereas seats in the House of Representatives are allocated to the states in proportion to their populations, each state has two seats in the Senate. California, with 39 million people, has the same clout in the Senate as Wyoming with its 578,000. **Thus the 26 smallest states, with only 57.6 million people (17.7% of the total U.S. population), theoretically could elect 52 senators and control the Senate.**

- U.S. presidents aren't chosen on the basis of who gets the most popular votes, but by who gets a majority in the Electoral College. The 538 electors in the College are apportioned to the states on the basis of population, which is democratic, but in 48 states the Electoral College votes go to candidates on a winner-take-all basis, which is not. Thus, a candidate could win by one vote in each of the 39 least-populated states and Washington, D.C. (receiving 47.0 million out of their combined 93.9 million votes if all the registered voters went to the polls); get all 270 of their electors; and win the presidency even if another candidate got 100% of the 120.0 million votes in the 11 most populous states. **In other words, in this extreme example, a U.S. president can be elected with just 47.0 million votes (22.0% of the total) versus 166.9 million for his or her opponent.** (Note that if the percentage turnout in the least-populated states were lower than in the others, the former could elect a president with an even smaller percentage of the total popular vote.)

  In the last 100 years, presidents have often been elected with significant majorities of the popular vote. The highest were for Lyndon B. Johnson – 61.1% in 1964; Franklin D. Roosevelt – 60.8% in 1936; Richard Nixon – 60.7% in 1972; and Ronald Reagan – 58.8% in 1984. But the winner of the last eight presidential elections only received between 43.0% and 52.9% of the vote, and presidents were elected twice with fewer popular votes than the loser.

These anti-democratic aspects of our system of government have been present for centuries. But the U.S. version of democracy generally worked because people and parties generally: (a) recognized that democracy is fragile and can only survive if most citizens feel the system is fair and legitimate; (b) believed that majority rule should be tempered by respect for minority rights; and (c) valued progress for the country at least as highly as political power. Thus, political leaders played by unwritten rules and hewed to traditional norms of behavior intended to foster a stable democracy. For most of our history, only fringe voices suggested our elections could be conducted dishonestly or questioned the outcome. Now, this thinking is going mainstream. I worry about this trend.

Clustering and gerrymandering increase the already-substantial influence of one party or the other in many states, and state legislatures' control over elections opens the door for possible shenanigans. Secretary of state and membership on boards of elections have historically been non-partisan positions (and pretty boring). Increasingly, appointment or election can put partisan officials in charge of the election process. Both new laws and new political norms seem to have opened the door for legislators and election officials to behave in ways that were previously unthinkable. Ultimately, there's nothing to keep state legislatures from appointing slates of electors who will vote for the dominant party's nominee regardless of the popular vote in their states. **Serious potential threats to our democracy exist, and no one can say what the future holds in this regard.**

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I've written in the past about my involvement with the group No Labels and its backing of bipartisan solutions to our nation's problems. Our organization brings together both Democrats and Republicans – as well as both senators and representatives, who heretofore rarely spoke to each other – and I think No Labels deserves credit for some of the important laws that have been enacted this year on a bipartisan basis, most notably the infrastructure bill President Biden just signed into law.

In the six years I've been an active member of No Labels, my eyes have been opened to something I wasn't aware of. **In short, I think very few people appreciate how undemocratic Congress is.** As I see it, each house of Congress has been firmly under the control of the leader elected by the majority party. On matters of importance, if the Speaker of the House or Majority Leader of the Senate wanted something to happen, it generally happened. And if a leader didn't want something to happen, it generally didn't happen. This one-person rule (a) seems highly suspect in what purports to be a democracy and (b) makes you wonder why we send senators and representatives to Washington (that is, if the leader can set the agenda and tell the members how to vote, why not just let the leader in each house run the whole thing?). And if the legislators on the two opposing sides follow the instructions from their leaders, which presumably are on a strict party-line basis, by definition there can't be bipartisan legislation.

And I think bipartisan government and bipartisan legislation are absolutely essential for the health of our democracy. The alternative is that the majority party does what it wants, including passing laws with no concurrence from the other party. (Some measures can be passed in the Senate with as few as 51 votes under a process called "reconciliation," overcoming resistance via filibuster – see below). When either party passes legislation on a straight party-line vote:

- The legislation doesn't have to be moderate enough to attract votes from the other side.
- It's easy for the minority party to vilify the new law and the people behind it.
- There's every likelihood that the minority party will reverse it when they gain a majority – to the detriment of Americans who need a stable, predictable environment in which to live and do business.

And that brings me to the infrastructure bill signed into law on November 15 and the unusual course it took in contrast to what I just described. First, it passed in the Senate on August 10 with support from all 50 Democrats but also 19 Republicans (in this case, Minority Leader Mitch McConnell freed his members to vote their conscience). But the bill encountered resistance in the House, where so-called progressive Democrats refused to vote for it unless the House first passed a "Build Back Better" bill, with trillions of dollars for safety-net programs unrelated to physical infrastructure. That became the basis for the intricate kabuki theater that played out over the last three months.

The infrastructure bill approved by the Senate could have been passed in the House in August. But partisan squabbles imperiled it, since most Republicans didn't want to give President Biden's Democratic administration a victory and some progressive Democrats wanted to use their leverage to hold the bill hostage until the moderates voted for theirs. Rather than call a vote immediately on the infrastructure bill, House Speaker Nancy Pelosi (perhaps wanting to placate the progressive members of her Democratic caucus) tied the two bills together, even though the BBB bill had yet to be fleshed out, debated, or "scored" in terms of its effect on the federal budget. Later, under pressure, she agreed in writing to work to pass the infrastructure bill and hold a vote on it by September 27, but she failed to do so (with no consequences).

What ensued was a real game of chicken. The Speaker demanded that the moderates commit to vote for the BBB bill first, but a small number of moderates (enough to prevent Democrats from achieving the necessary 218-vote majority threshold for passing a bill) refused to do so and demanded a vote on the

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infrastructure bill first. The moderates' action felt like an uprising against the House leadership of a sort that has rarely been seen in recent years. But then on November 2, Democrats lost the governorship in Virginia and nearly lost it in highly Democratic New Jersey. The Biden administration's resultant need for a "win" caused the bill to be brought to the House floor just three days later, where it was approved by all the Democrats except for six progressives, as well as by 13 moderate Republicans. The result was passage by a vote of 228 to 206, an outcome achieved despite resistance from the Speaker up to the last moment.

It's easy for legislators who don't want to support a bill to find provisions they say are objectionable, and they did so in this case. But I believe that on balance the provisions of the infrastructure law will help the vast majority of congressional districts; thus I suspect some of the 206 representatives who voted against it may have done so at the expense of potential benefits for their constituents. **What's the word for that? My answer is "politics," which is, in part, defined by Oxford as "the debate or conflict among individuals or parties having or hoping to achieve power."**

Widespread dissatisfaction with both major parties could conceivably lead to the creation of a third party to appeal to Americans in the middle. But with more than two main parties dividing up the votes, there would be significant obstacles to any one of them achieving a clear win. And that's where the complications set in. Under the U.S. form of government, it's doubtful that minority party candidates can be elected and coalitions formed. More importantly, if candidates from more than two major parties vie for the presidency, it would be difficult for one to achieve a majority in the Electoral College. In that case, the election would be decided by the House of Representatives, with each state having one vote regardless of population. Thus, we'd be back to the problem regarding the Senate described on page eight: 26 states with a tiny share of the total population could end up appointing the president. **While my examples describe extreme hypothetical outcomes, these are not imaginary concerns.**

Finally under the heading of politics, I'll touch on the filibuster. For those who are unfamiliar with it, the filibuster is a procedural tool that allows the minority in the Senate to bottle up legislation and require 60 votes for passage, rather than a simple majority of 51. Because the party in power usually has fewer than 60 seats, as is the case today (seats are 50/50), the filibuster often gives the minority party a veto over legislation. And whereas the parties have always done battle over policy, today things are so politicized that the minority party often has no goal other than to thwart the majority party's agenda.

Because of Republicans' opposition to many Democratic priorities, there is growing pressure within the Democratic party to use their slim majority in the Senate to eliminate the filibuster (the vice president presides over the Senate, meaning today's Democratic vice president has the ability to break the 50/50 tie).

Will the Democrats eliminate the filibuster? Should they? And if they do, how will they feel when the Republicans someday are in the majority and are no longer constrained by the filibuster? Without rehashing the entire debate, I'll merely point to the dilemma involved. Proponents of the filibuster argue that it requires the party in power to shape legislation capable of attracting minority-party support and that this prevents the passage of extreme laws. But opponents point out that these days, with the minority often dedicated to nothing but obstruction, the existence of the filibuster merely ensures inaction. (Note, however, that the results with the infrastructure bill show that bipartisan action isn't entirely impossible, and a lot of minor legislation is passed that way with little attention.) **The ability to pass laws with a one-seat majority facilitates the tyranny of the majority. But the ability of 41 Senators to halt a bill's progress permits the tyranny of the minority.** Which is worse? Obviously, this choice of tyrannies is one of the challenges faced in our democracy. There are no easy answers. (And if Democratic traditionalists refrain from eliminating the filibuster, what's to keep Republicans from getting rid of it the next time they have a majority?)

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Generational Inequity

In 2037 and 2026, respectively, Social Security and Medicare, benefit programs that aid older Americans, will likely become unable to continue paying today's benefits. And yet we don't hear any discussion of the benefit cuts, delayed eligibility, tax increases, or means testing that would have to be part of any solution. In fact, in the last 18 months Washington has approved more than $9 trillion of spending on Covid-19 relief and infrastructure, but we haven't heard a word from either party about fixing these essential programs. That's presumably because the party that trims these programs would likely be penalized at the polls.

The 71.2 million members of the Baby Boom generation (people born between roughly 1946 and 1964) are triple the 23.0 members of the Silent Generation that preceded them and 10% more than the 65.0 million Generation Xers that followed. **The magnitude of the Boomers' votes and financial resources have given them enormous political influence over the last 40 years. The result has been extensive deficit spending on things the Boomers want and a failure to modify benefit programs that need fixing, all at the expense of future generations.**

This is an example of the generational unfairness that has been perpetrated in recent decades. In short – in a way that many Americans probably don't recognize – administrations of both parties have been (and still are) spending vast amounts, taxing less than they should relative to their spending (thus incurring deficits), and running up the national debt, largely favoring the Baby Boomers who are now America's very numerous retirees. Here's the history of the U.S. national debt:

Year	Billions $	% of GDP
1955	274	64%
1975	533	31
1995	4,794	64
2015	18,151	100
2019	22,719	107
2021	28,400	125

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In short, the Baby Boomers have been and still are consuming more than their fair share of the pie. This will leave future generations saddled with substantial debt stemming from expenditures they didn't benefit from proportionally.

Social Security, while not part of the federal budget, provides a good example. It wasn't set up as a funded program, but as an insurance scheme operating on a pay-as-you-go-basis, under which current receipts from workers are used to make payments to retirees. Social Security tax receipts aren't added to an endowment, other than on a temporary basis, and benefits are paid out of current taxes on workers, not endowment income. But nowadays we have fewer people working for each retiree they support, and retirees are living longer than they used to. These trends endanger the system. Changes have to be made, but they're not. Thus, 16 years from now (if not before), Social Security taxes will have to be raised, benefits (or at least their rate of increase) will have to be trimmed, and/or Social Security will have to become a federal obligation rather than a self-sustaining insurance scheme, adding to the deficit. This is only one of the many ways in which future generations will be penalized for the overspending my generation engaged in.

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Foundations and universities have rules governing endowment spending, the main purpose of which is to balance the interests of the current generation against those of generations to come. This is a prime fiduciary responsibility of endowed institutions. Likewise, most of today's parents won't spend their way to unreasonable credit card balances and saddle their heirs with debt. While the significance of national debt is debatable, as is the question of how much debt is "too much," it's hard to argue that recent administrations in Washington have been appropriately balancing the interests of all generations. (And, by the way, today's generations have been happy to consume an unsustainable share of the earth's resources to fuel their lifestyles, which is certain to leave future generations with a degraded environment. This is another profound aspect of generational inequity.)

In August 2008, on the way to ending my memo *What Worries Me*, I included a passage from the 2004 book *Running on Empty* by Pete Peterson (for those who weren't in the business world in the 20th century, Pete held important positions in government and co-founded Blackstone with Steve Schwarzman):

> . . . while our problems are not yet intractable, both political parties are increasingly incorrigible. They are not facing our problems, they are running from them. They are locked into a politics of denial, distraction, and self-indulgence that can only be overcome if readers like you take back this country from the ideologues and spin doctors of both the left and the right. . . .
>
> With faith-driven catechisms that are largely impervious to analysis or evidence, and that seem removed from any kind of serious political morality, both political parties have formed an unholy alliance – an undeclared war on the future. An undeclared war, that is, on our children. **From neither party do we hear anything about sacrificing today for a better tomorrow. In some ways, our most formidable challenge may be our leaders' baffling indifference to our fiscal metastasis**. (Emphasis added)

The good news is that we've muddled through and enjoyed a good measure of prosperity despite the existence of these issues. The bad news is that little or nothing has been done about them.

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The Role of the Fed

I won't spend a great deal of time on this subject since everyone knows the story. But it has to be part of a memo that purports to discuss important changes that are underway.

Historically, the job of central banks has been to control the level of inflation and make sure the economy grows fast enough to create "full employment." In recent years, however, the Fed seems to have taken on the additional task of keeping the securities markets on an upward trajectory. This has been achieved through the radical lowering of interest rates and the injection of massive amounts of liquidity into the economy.

The Fed funds rate – the bellwether of short-term interest rates in the U.S. – was reduced to zero for the first time during the Global Financial Crisis of 2008-09. And it worked – what followed was the longest economic recovery in U.S. history. But rates weren't raised when the recovery was at its strongest, and when they finally were raised in 2017-18, the markets threw a tantrum and the Fed backed down, cutting rates instead.

Now the Fed funds rate is zero again, the markets are far higher than they were in the last decade, and we're seeing serious inflation. The Fed has announced that it's going to "taper" its stimulative program of bond buying, and it is widely expected that it will begin to raise interest rates next year. Will the

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impact on the economy be highly negative? Will the markets revolt again, and will a market correction convince the Fed to go back to a low-interest-rate regime? Will the Fed keep asset prices rising in perpetuity as the optimists think is now its job?

For me, the expectation that the Fed can keep the economy and markets rising without interruption is too good to be true. And I continue to believe the economy will perform best in the long run if it's a free market economy, which does the best job of moving resources to their optimal use. As Richard Masson, my Oaktree co-founder, wrote in 2008, "Creative destruction and a functioning market economy assure change toward the best solution over time." We could use a free market in money.

Larry Goodman, president of the Center for Fiscal Stability, recently wrote as follows:

> Since [2010], Fed purchases of Treasury debt have funded as much as 60% to 80% of the entire government borrowing requirement. In other words, Fed actions have crowded out private-sector price discovery for more than 10 years, pushing yields to lows and stock prices to record highs. . . .
>
> In fiscal 2021, the Fed purchased $1 trillion in Treasury debt, and the Treasury drained $1.6 trillion from its savings account at the Fed. These actions covered nearly the entire budget deficit, equal to . . . nearly all the pandemic-related government borrowing. Based on monthly estimates, there was actually a funding surplus this past summer. It is no wonder the 10-year Treasury yield reached a low of 1.17% in August despite high inflation rates. (*The Wall Street Journal*, November 18, 2021)

So guess what: The U.S. is still able to issue debt at low interest rates, a ringing endorsement of its creditworthiness from buyers. **And who's the main buyer supplying that endorsement? The U.S.**

By the way, a few progressive Democrats have announced their opposition to the reappointment of Jerome Powell as Fed chair, because they think he's not active enough in addressing climate change. So now we have a Fed that's supposed to control inflation, foster growth and employment, support markets, and fight climate change. How many roles can one institution have and still maintain a coherent effort?

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Developments in China

In the 43 years since the Maoist period ended in 1978, China has been the fastest growing major economy in the world. And it continued to grow in 2020, when no other large economies did. Will the superior growth continue? Will China become the world's biggest economy? The answers to these questions will be very important.

My key observation is that China has had to navigate an unusually large number of transitions:

- from farm to city,
- from agriculture to manufacturing and services,
- from mass poor to a significant middle class,
- from economic reliance on exports to domestic consumption,
- from growth based on capital investment to more organic growth, and
- from emerging nation to world power.

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As these processes move forward in the years ahead, China will have to balance central control and free enterprise (for which they understand the need). At the same time, the country has to respect the rule of law but still enact the policies it wants. And I believe it will have to eliminate the reliance on bailouts from Beijing and put up with bankruptcies, the resultant losses and, dare I say, economic cyclicality.

The question I find most interesting is how China simultaneously manages central control of the economy and private enterprise, while both pursuing economic efficiency and upholding socialist ideology. This has puzzled me throughout the 15 years I've been going there. The Chinese people have great respect for the Communist Party, and it and its leaders have a lot of levers to pull, free of the impediments that come with that cumbersome thing called democracy. But the private sector is full of entrepreneurship and seems to run very well.

Within the last year, President Xi has cracked down on financial celebrities, economic inequality and industries considered unhealthy for society, such as for-profit education. Nevertheless, I believe everyone in a position of power has taken note of the economic miracle that followed the elimination of Maoism and the substitution of the profit motive for quotas and equal sharing. It's my guess that China's "dual system" will continue to function well and private enterprise will continue to be respected, as long as it operates in a way consistent with "Xi Jinping Thought."

The transitions listed above are already underway. Tackling all of them simultaneously has to be seen as a daunting task. But China has extensive resources as well as strong centralized control. No one can prove they will pull it off or that they won't – the best we can have on questions like this is a hunch. Mine is that the Chinese economy will continue to grow faster than the rest of the world and may well become the largest economy. **I believe with time we'll see all the above transitions take place. The process just won't be smooth and free of glitches.**

For the last few years, I've been a member of the Shanghai International Financial Advisory Council. This has permitted me to see the extent to which China is dedicated to attracting foreign capital and making Shanghai a world financial center, and I believe China understands that doing so will require adherence to the rule of law and good conduct as a member of the global community. Hopefully that means the worst fears regarding its behavior won't be realized.

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The T-Word

As best I can tell, 2020 was the first year the word "trillion" came into common use. Everett Dirksen (R-IL) is described (perhaps apocryphally) as having said, "A billion here, a billion there, and pretty soon you're talking real money." Now billions have been reduced to pocket change, and it takes trillions to amount to "real money."

I doubt most people could actually explain what a trillion is (that is, they likely have no idea that it's a thousand billion, or a million million). And the scale of a trillion is almost incomprehensible. I was struck 30-40 years ago to learn that whereas a million dollars is $10 a second for 28 hours, a billion dollars is $10 a second for 38 months. **Now let's think about a trillion: $10 a second for more than 3,000 years. As I said, almost incomprehensible.**

Elected officials throw around the term trillions (and spend trillions) without a way to really appreciate the implications. What's next? I saw a great cartoon the other day that consisted of a drawing of the Capitol dome and the caption "What comes after trillions?" If we live long enough, I'm sure we'll find out.

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* * *

With all these significant changes underway, it's easy to think the world is unusually complicated these days and to long for the way things were in the old days. On the other hand, at times like this I think back to something former Dallas Cowboys quarterback Don Meredith once said while providing commentary on *Monday Night Football*: "They don't make 'em the way they used to. But then again, they never did." Current times usually seem difficult, and we fondly remember the halcyon earlier days. But the past certainly wasn't as comfortable as we remember it, and there were more challenges than we often recall.

Senior economics consultant Neil Irwin summed up our situation very well in *The New York Times* on April 16, 2020 (I borrowed this quote for inclusion in my May 2020 memo *Uncertainty*.):

> The world economy is an infinitely complicated web of interconnections. We each have a series of direct economic interrelationships we can see: the stores we buy from, the employer that pays our salary, the bank that gives us a home loan. But once you get two or three levels out, it's really impossible to know with any confidence how those connections work. . . .
>
> In the years ahead we will learn what happens when that web is torn apart [by the pandemic and resultant lock-down], when millions of those links are destroyed all at once. And it opens the possibility of a global economy completely different from the one that has prevailed in recent decades.

All I have to add to that is my usual observation regarding the future: We'll see.

November 23, 2021

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Memo to: Oaktree Clients

From: Howard Marks

Re: Thinking About Macro

> For a piece of information to be desirable, it has to satisfy two criteria: it has to be important, and it has to be knowable. – Warren Buffett

Regular readers of my memos know that Oaktree and I approach macro forecasts with a high degree of skepticism. In fact, one of the six tenets of Oaktree's investment philosophy states flatly that we don't base our investment decisions on macro forecasts. Oaktree doesn't employ any economists, and we rarely invite them to our offices to share their views.

The reason for this is simple: to use Buffett's terminology, we're convinced the macro future isn't knowable. Or, rather, macro forecasting is another area where – as with investing in general – it's easy to be as right as the consensus, but very hard to be more right. Consensus forecasts provide no advantage; it's only from being more right than others – from having a knowledge advantage – that investors can expect to dependably earn above average returns.

Many investors think their job requires them to develop a macro outlook and invest according to its dictates. Successful stock pickers or real estate buyers often make pronouncements regarding the macro outlook, even in the absence of evidence linking their investment success to accurate macro forecasts. Nonetheless, since macro developments are so influential, many people think it's downright irresponsible to ignore them when investing. Yet:

- Most macro forecasts are likely to turn out to be either (a) unhelpful consensus expectations or (b) non-consensus forecasts that are rarely right.
- I can count on one hand the investors I know who successfully base their decisions on macro forecasts. The rest invest from the bottom up, one investment at a time. They buy when they think they've found bargains and sell things they consider overpriced – mostly without reference to the macro outlook.
- **It may be hard to admit – to yourself or to others – that you don't know what the macro future holds, but in areas entailing great uncertainty, agnosticism is probably wiser than self-delusion.**

But why take my word for it? How about these authoritative views?

> It's frightening to think that you might not know something, but more frightening to think that, by and large, the world is run by people who have faith that they know exactly what's going on. – Amos Tversky

> It ain't what you don't know that gets you into trouble. It's what you know for sure that just ain't so. – Mark Twain

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That brings me to the subject of forecasters' track records, or rather the lack thereof. Back in the 1970s, an elder told me, "an economist is a portfolio manager who never marks to market," and that description still seems highly appropriate. Have you ever heard an economist or macro strategist say, "I think there'll be a recession soon (and xx% of my recession predictions have turned out to be right within a year)"? Would anyone invest with an investment manager who didn't publish a track record? Why follow macro forecasters who don't disclose theirs?

Finally, I want to point out that the same comments apply to most investors. You rarely hear them say they have no idea what the macro future holds or beg off from expressing opinions. One of the most important requirements for success in investing is self-assessment. What are your strengths and weaknesses? If you invest on the basis of your macro views, how often have they helped? Is it something you should keep doing or discontinue?

Having gotten everything off my chest concerning the shortcomings of forecasts, I'm going to devote the rest of this memo to thinking about the future. Why? To invert the Buffett quote that began this memo, the macro future may not be knowable, but it certainly is important. When I think back to the years leading up to 2000, I picture a market that largely responded to events surrounding individual companies and stocks. Since the Tech Bubble burst in 2000, however, the market has appeared to think mostly about the economy, the Federal Reserve and Treasury, and world events. That's been even more true since the Global Financial Crisis in 2008. **That's why I'm devoting a memo to a subject I largely disavow.**

I'll try below to enumerate the macro issues that matter, discuss the outlook for them, and end with some advice regarding what to do about them. That reminds me to put forth my conviction that we all have views about the future, but as we say at Oaktree, **"It's one thing to have an opinion, but something very different to assume it's right and bet heavily on it." That's what Oaktree <u>doesn't</u> do.**

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<u>Inflation</u>

As of this writing, macro considerations are certainly in the ascendency, centering on the subject of inflation. Over the last 16 months, the Fed, Treasury and Congress have used a firehose of money to support, subsidize and stimulate workers, businesses, state and local governments, the overall economy and the financial markets. This has resulted in (a) confidence in the prospects for a strong economic recovery, (b) skyrocketing asset prices, and (c) fear of rising inflation.

The policy measures described above traditionally would be expected to produce the following:

- a stronger economy than would otherwise have been the case;
- higher corporate profits;
- tighter labor markets and thus higher wages;
- more money chasing a limited supply of goods;
- an increase in the rate at which the prices of goods rise (i.e., higher inflation); and, eventually,
- a tightening of monetary policy to fight inflation, resulting in higher interest rates.

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While the functioning of economies is highly variable and uncertain, economic orthodoxy considers the above process about as reliable as they come. However, I want to take a minute to highlight the uncertainty entailed in thinking about inflation.

- Among the defining elements that marked my early years in investing was the 5-15% annual inflation that prevailed in the U.S. from the early 1970s through 1982. Dr. Doom and Dr. Gloom (chief economists Henry Kaufman of Salomon Brothers and Al Wojnilower of First Boston – I forget which was which) regularly admitted in their depressing speeches that they weren't sure what was causing the inflation or how to bring it down. No one was able to make progress combatting inflation until Fed Chair Paul Volcker solved the problem by raising interest rates dramatically, bringing on a significant double-dip recession in 1980-82.
- What about the more recent experience? For years, central bankers in the U.S., Europe and Japan have targeted a healthy 2% rate of inflation, but none of them have been able to produce it. This despite continuous economic growth, significant budget deficits, rapid expansion of the money supply through quantitative easing, and low interest rates – all of which are supposed to be inflationary.
- Finally, for roughly the last 60 years, economists have trusted the so-called Phillips Curve, which posits an inverse relationship between unemployment and inflation: the lower the unemployment rate, the tighter the labor market, the more negotiating power workers have, the more wages rise, and the greater the increase in the prices of consumer goods. But the U.S. unemployment rate fell throughout the last decade – ultimately hitting a 50-year low – and still there was no material increase in inflation. Thus, few people talk about the Phillips Curve anymore.

The low reported U.S. inflation rates may be partially attributable to changes in recent decades in the way the Consumer Price Index is calculated, but the truth is that we know very little about inflation, including its causes and cures. I describe it as "mysterious," so I believe we should put even less stock in predictions surrounding inflation than in other areas. **That makes life tough for investors at the moment, because inflation and its impact on interest rates constitute the most important wildcards.**

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Inflation Outlook Today

There's been a great deal written about the current prospects for inflation, and rather than rehash it fully, I'll deliver a brief summary. Here's the background:

- To support the economy and its participants during last year's Covid-19-related shutdown, the Fed, Treasury and Congress took drastic action to prevent a global slowdown that could have rivalled the Great Depression.
- They injected trillions of dollars of liquidity into the economy in the form of benefit payments to individuals, loans and grants to businesses and governments, enhanced unemployment insurance and large-scale bond buying. In fact, I think of 2020 as the year the word "trillions" came into everyday use.
- Many people made more money in 2020 than they did in 2019, thanks to the enhanced benefits. 2020's above-trend incomes coincided with below-trend spending, as we couldn't take vacations or spend money on dinners, concerts, weddings, etc. The combination of these developments is estimated to have added roughly $2 trillion to consumer balance sheets.

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- The Fed/Treasury actions flooded the financial markets with money, driving strong price increases and the reopening of the capital markets. The wealth effect – from stock market gains totaling in the double-digit trillions of dollars, plus soaring home prices – was significant; this dwarfed the positive impact on consumer balance sheets of higher incomes and lower spending.

The following signs suggest we may be headed for a significant period of higher inflation:

- All the things described immediately above would normally be expected to result in accelerating inflation.
- Concern about rising inflation in the next few years has been a topic of elevated discussion. Initially these anxieties were based simply on economic theory, but in 2021 they've been supported by empirical evidence:
    - Used car prices rose dramatically because of shortages of imported parts.
    - Home prices skyrocketed.
    - Materials and component prices escalated: e.g., copper, lumber and semiconductors.
    - Smartphones were in short supply.
- Shortages of labor in certain sectors have added to the threat of rising prices.
- The year-over-year increase in the Consumer Price Index was 4.2% in April, 5.0% in May and 5.4% in June. These are the highest readings since September 2008.
- Not only might higher prices for inputs ("cost-push" inflation) and more dollars chasing goods ("demand-pull" inflation) result in an excess of demand over supply and thus rising inflation, but excessive money printing might reduce the demand for U.S. dollars, cutting the currency's value and causing the dollar prices of imports to the U.S. to rise.
- Particularly troubling in this regard is the recent tendency of those in Washington to spend trillions of dollars without identifying solid "pay-fors." This has coincided with the rising influence of Modern Monetary Theory, which essentially says deficits and debt don't matter. What if these ideas are ill-founded?

On the other hand, here are the arguments for why higher inflation might prove "transitory" (the word *du jour*).

- Many of the shortages affecting finished goods and manufacturing inputs – and the resultant price increases – can be seen as a natural consequence of restarting the economy and, especially, the global supply chain. **It's unrealistic to expect all parts of the global economy to immediately resume efficient functioning**, and a lack of a single part can cause significant disruption, making it hard to manufacture finished goods. Since these factors result from the restart, they may prove ephemeral.
- It should be borne in mind that the prices of raw materials or finished goods aren't solely determined by current economic developments in a direct, mechanical way, meaning prices aren't necessarily "right" given prevailing conditions, any more than stock prices are always right. Rather, prices of goods are influenced by economic participants' psyches and can easily overshoot or undershoot (just as in the stock market). As John Mauldin wrote in *Federal Reserve Folly* (July 23, 2021), "The rising prices that add up to inflation are the result of producer and consumer *expectations* for the future." **Thus prices aren't just the result of supply and demand today, but also an indication of what people think prices**

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will be in the future. We see this in the price of lumber, which rose by roughly 540% between the low in April 2020 – when no one thought there would ever be demand for new homes – and the high in May 2021 – when no one thought the supply of homes could ever meet the demand. Now the price of lumber is down by more than 60% in just the last two months, and we no longer hear much about its contribution to inflation.

- Clearly, a lot of the inflation seen in the first half of 2021 can be attributed to increased consumer spending financed by Covid-19 relief and the resultant bulge in savings and wealth. This should prove temporary: a given pool of extra dollars can't produce elevated spending forever.
- The ending of enhanced unemployment benefits in September should bring more workers into the job market, reducing the impact of labor shortages on wages and thus the prices of goods.
- The growth of the economy will undoubtedly slow after 2021 or 2022, by which time the impact of 2020's pent-up consumer demand will ebb significantly.
- There's hope that the recent levels of stimulus, deficit spending and money printing will recede in the next few years (or at least their rate of growth will slow) as the economy continues to expand, meaning these factors will decline relative to the size of the economy.
- Technology, automation and globalization are likely to continue to have significant deflationary effects.

The debate rages on regarding whether today's inflation will prove permanent or transitory. There's a great deal riding on the answer since higher inflation would doubtless lead to higher interest rates and thus lower asset values. **But in my view, it's impossible to know the answer. (There you have it: important, but not knowable.)** There are intelligent people on both sides of the argument, but I'm convinced there's no such thing as "knowing" what the outcome will be.

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What Does the Fed Know?

The Fed is responsible for keeping inflation under control (among its other jobs). However, Fed leaders admit that they're not highly confident regarding their expectations. Here's what Fed Chair Jerome Powell said in a June 16, 2021 press conference (emphasis added):

> **So I can't give you an exact number or an exact time**, but I would say that we do expect inflation to move down. If you look at the forecast for 2022 and 2023 among my colleagues on the Federal Open Market Committee, you'll see that people do expect inflation to move down meaningfully toward our goal. And I think that the full range of inflation projections for 2023 falls between 2% and 2.3%, which is consistent with our goals.

At roughly the same time, St. Louis Federal Reserve Bank President James Bullard also spoke about the uncertainty that's present:

> Mr. Bullard . . . said the U.S. economy "is in an environment where we've got a lot of volatility, **so it's not at all clear that any of this will pan out the way anybody's talking about**." (*The Wall Street Journal*, June 18, emphasis added)

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This is the kind of candid speech we need. **But it's clear from the above that we can't conclude "we have the answer" on the subject of inflation . . . or even that there is "an answer."**

What Does the Market Know?

The stock market started off 2016 with a big decline, which seemed to me to be irrational. As a result, I wrote a memo saying the market needed a trip to a psychiatrist (*On the Couch*, January 14, 2016). The next day, when I went on TV to discuss that memo, I was pressed on whether the stock market's decline foreshadowed something dire. "No," I said: the market doesn't "know" much about the future that we don't collectively know. That inspired me to write another memo five days later with the same title as this section: *What Does the Market Know?* (January 19, 2016). What is it telling us today?

In recent months, signs of rapidly rising inflation have been everywhere, and the media have tied the occasional stock market dips to inflation fears. For example, the S&P 500 Index experienced a moderate decline for the 10 trading days ending on June 18. Here's what *The Wall Street Journal* had to say the next day:

> U.S. stocks retreated Friday, as traders warily eyed the Federal Reserve for hints of where monetary policy is headed.
>
> The Dow Jones Industrial Average had its worst week since the week ended Oct. 30. The index of blue-chip stocks on Friday fell 1.6%, or 533.37 points, to 33290.08. For the week, it lost 3.45%.
>
> The S&P 500 declined 1.3%, or 55.41 points, to 4166.45 on Friday, losing 1.9% on the week. That broke a three-week streak of gains. The Nasdaq Composite lost 0.9%, or 130.97 points, to 14030.38, as large technology stocks also fell. For the week, it was down 0.3%.
>
> Policy makers had signaled Wednesday that they expect to raise interest rates by late 2023, sooner than they had previously anticipated. Sentiment waned again on Friday after Federal Reserve Bank of St. Louis leader James Bullard said on CNBC that he expects the first rate increase even sooner, in late 2022. . . .
>
> It isn't surprising that equities are falling, said ThinkMarkets analyst Fawad Razaqzada. U.S. stocks have hit a series of record highs and have been outpacing the economic recovery since last year. Now traders are repricing that "reflation trade" as they watch the Federal Reserve slowly start to alter its stance on monetary policy.
>
> "It was coming," he said. "This kind of selloff was coming because the market got ahead of itself."
>
> The Cboe Volatility Index, known as Wall Street's "fear gauge," climbed to its highest level in weeks.

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> "The markets will be more spooked by 2022 turning to a rate hike, because that will mean they have to taper as well," said Derek Halpenny, head of research for global markets in the European region at MUFG Bank. (*The Wall Street Journal*, June 19)

As usual, media commentators stand ready to explain in a logical fashion why the markets did what they did (I always wonder where they look to get the explanation). They're also glad to tell us what that means for the future, invariably through extrapolation.

Regardless, the theme thus far in 2021 has been rising inflation. That and the associated fear of higher interest rates have been used to explain much of what's been going on in the stock market. The data reflected rapidly rising inflation, and stock market investors turned negative.

So far, so good. You might say the stock market was efficiently reflecting developments and the outlook. But the bond market didn't see it the same way:

> In bond markets, the yield on the 10-year Treasury note fell to 1.449% Friday, down from 1.509% Thursday. The 10-year yield has fallen for five straight weeks . . .
>
> Consumer prices paid by city dwellers in the U.S. rose more than 7% [in May] and more than 9% in April on an annualized basis. If this keeps up the rest of the year, it will be the highest inflation rate the U.S. has experienced since the 1980s. But fear not, say some investors and the Federal Reserve, the bond market isn't worried. Yields fell over the last week and remain low by historical levels, even after rising on the back of [Fed Chair] Jay Powell's speech Wednesday. And if markets aren't worried, maybe we shouldn't be either. . . . (Allison Schrager, senior fellow at the Manhattan Institute, *Bloomberg Opinion*, June 18)

The stock market was afraid of higher inflation and interest rates, but the bond market – where price movements are governed predominantly by the outlook for rates – gave us higher prices and lower rates, seemingly unconcerned about inflation.

That brings me to gold, which historically has been bought for protection against inflation. Despite all the inflationary signs, the market for gold seems to agree with the bond market that the outlook for inflation is benign.

> Gold futures fell 0.3%, adding to their losses from Thursday, when they suffered their largest drop in over 10 months. For the week, gold fell 5.8%, its worst one-week performance since the week ended March 13, 2020. (*The Wall Street Journal*, June 19)

The price of gold hit an all-time high of $2,067 per ounce on August 6, 2020, likely driven by the Fed's enormous injection of money into the economy and markets. And then, on June 18, 2021, when concern about inflation seemed to be rising, it hit $1,773, down 14% from the high reached 10 months earlier. (Gold prices from Goldhub)

So in June we had bouts of stock market weakness, reportedly on inflation fears, and rising bond prices (declining yields), seemingly based on bond buyers' conviction that economic weakness will keep inflation subdued. And we saw gold, the classic anti-inflation tool, marked down just as stock

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market investors were described as being concerned about inflation. **Not only do the markets not know what's coming, but they often behave in ways that make little or no long-term sense.**

I concluded my 2016 memo *What Does the Market Know?* by saying that, on the subject of when to buy and sell securities, "the market has nothing useful to contribute." I think we can say the same about what it knows about future macro events. Perhaps the market's thought process is best understood through this old cartoon – one of the greatest of all time – which I included in *On the Couch*.

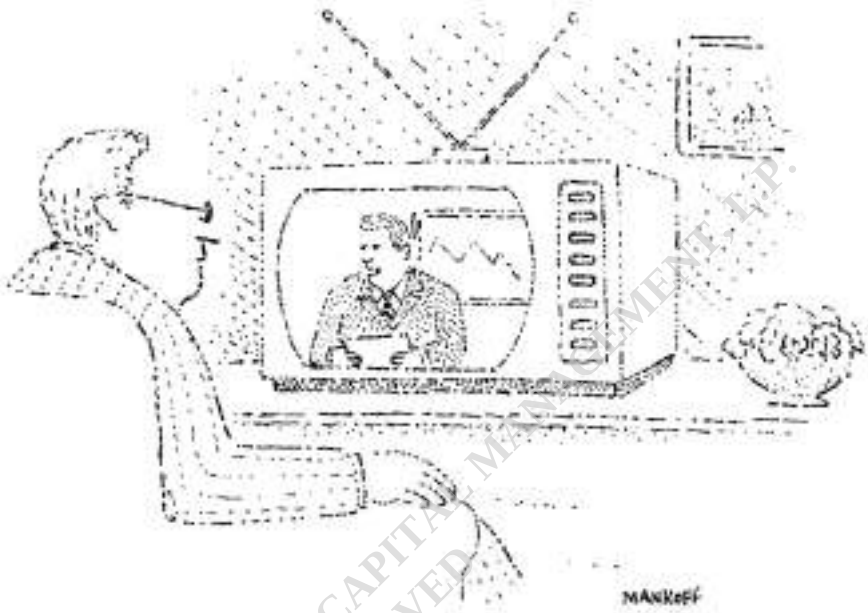

"On Wall Street today, news of lower interest rates sent the stock market up, but then the expectation that these rates would be inflationary sent the market down, until the realization that lower rates might stimulate the sluggish economy pushed the market up, before it ultimately went down on fears that an overheated economy would lead to a reimposition of higher interest rates."

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Markets function like highly sensitive instruments, absorbing events and publishing their reaction, be it bullish or bearish. **While markets are usually good "observers," hyper-attuned to current developments, they sometimes seem to view events through either a positive or a negative lens (and to oscillate between the two), as shown above. Further, they're rarely good "predictors," in the sense of knowing what comes next.**

Because their reaction to short-run developments tends toward excess, the markets provide a lot of false positives and negatives regarding their significance. But the fact that markets can overemphasize current developments and fail to look far enough into the future doesn't mean they should be ignored entirely. In particular, when security prices perform differently than what we would expect based on our views, we should consider whether the market has discerned something that throws our prior understanding into question. (Are the markets capable of exceptional insight? Check out the S&P 500's 68% gain from its low on March 23 through the end

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of 2020, which "no one" thought made sense when it began. The markets certainly did a much better job of recognizing the potential impact of the Fed/Treasury actions than did most commentators.)

What Do the Forecasters Know?

Although it's on the subject of stock market returns rather than inflation, I can't fail to share some data regarding forecasts supplied by Sheldon Stone, my longest-running partner (we just passed 38 years working together). Last December, he shared a *New York Times* article by Jeff Sommer entitled "Clueless About 2020, Wall Street Forecasters Are at It Again for 2021" (December 18, 2020). According to the article:

In December 2019, the median forecast on Wall Street held that the S&P 500 would rise 2.7% in 2020. Since the actual return on the index was 18.4%, that forecast was too low by 16 percentage points. But in April 2020, after the pandemic had taken hold (and after the initial actions on the part of the Fed, Treasury and Congress had been announced and initiated), the consensus forecast return was revised downward to negative 11% – **almost 30 percentage points below the eventual outcome**.

Obviously, nobody could have been expected to have predicted the pandemic. Ditto for the full success of the policy response or the timing and extent of the consequent market bounce. But Sommer shared longer-term data from Paul Hickey, co-founder of Bespoke Investment Group, which is more meaningful. I'll mostly use Sommer's words to convey the facts:

- Since 2000, the median analyst forecast has called for an average yearly return on the S&P 500 of 9.5%, whereas the actual average gain was 6.0%. You might say, "not bad, only off by 3.5 percentage points." Or you might say, "terrible – the forecasters overestimated the average gain by 58% (9.5/6.0 - 1)."

- "Each December since 2000, **the median forecast never called for a stock market decline** over the course of the following calendar year . . ." (emphasis added). And yet the stock market lost money in **six** of those years.

- "In 2018, for example, the market fell 6.9 percent, though the forecasters said it would rise 7.5 percent, a spread of 14.4 percentage points. In 2002, the forecast called for an increase of 12.5 percent, but stocks fell 23.3 percent, a spread of almost 36 percentage points."

- "All told, when gaps like that are taken into account, the median Wall Street forecast from 2000 through 2020 missed its target by an average 12.9* percentage points — which was more than double the [6.0%] actual average annual performance of the stock market. Year after year, these forecasts are about as accurate as those of a weatherman who always calls for balmy sunshine in a city where it rains or snows about 30 percent of the time. Some forecasts!" (* What accounts for the difference between the average error of 3.5 percentage points cited in the first bullet point and this 12.9? I assume the latter to be the average of the "absolute value" of the error. When you think in terms of absolute value, being too high by 3% in year one and then too low by 2% in year two means the absolute values of the errors add up to 5%, rather than netting out to only 1%.)

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The bottom line is that hundreds or perhaps thousands of people make their living as professional market forecasters, despite the fact that the median forecast is of no value: wrong on average, positive in good years and bad, and **way off target when an accurate forecast would have been most profitable**.

The Role of the Fed

A great deal of the current debate over the macro outlook surrounds the Fed and its policies and behavior. In March 2020, the Fed triggered the recovery we're enjoying by cutting the key federal funds rate to 0-0.25%, initiating loan and grant programs, and buying vast amounts of bonds. This combination was very successful, producing powerful recoveries in the economy and the financial markets. However, the same actions helped create the threat of persistently higher inflation.

The Fed has two primary assignments: (a) making sure the economy grows enough to create jobs, leading to full employment, and (b) keeping inflation under control. To some extent, these tasks are in conflict. **Stronger economic growth risks overheating and inflation. Higher inflation leads investors to demand higher interest rates to more than compensate for the loss of purchasing power. Higher interest rates threaten to slow the economy.**

The economic outlook turned positive last summer in response to the Fed/Treasury actions and then was further bolstered by the success of vaccines. Thus, we're seeing strong economic growth – real GDP rose at an annualized rate of 6.4% in the first quarter – and expectations remain high for the rest of 2021 and perhaps 2022. Yet, the Fed continues to hold interest rates near zero and buy $120 billion of bonds per month. **Why stimulate an economy that's doing so well, and run the risk of inflation?**

In fact, the Fed seems to be relatively unworried about inflation. At first it said it didn't think there would be inflation (recent data has disproved that). Then it said if there is inflation, it will be transitory. And the Fed went on to say if inflation appears to be other than transitory, they have the tools with which to fight it.

By maintaining its high level of accommodativeness, the Fed is showing that it's more worried about economic sluggishness than about inflation. One informed observer told me that if growth falls back to the recent norm of 2% or less despite all the stimulus that's been thrown at the economy, the Fed feels we risk serious stagnation. And let's remember that (a) ever since the turn of the century there has been slow GDP growth and serious discussion of "secular stagnation" and (b) while the economic recovery from 2009 through 2019 was the longest in history, it was also the slowest since World War II.

Fed Chair Powell's recent testimony shows how he prioritizes the considerations, several months into the recovery:

> Federal Reserve Chair Jerome Powell on Wednesday pledged "powerful support" to complete the U.S. economic recovery from the coronavirus pandemic . . .
>
> In testimony to the U.S. House of Representatives Financial Services Committee, Powell said he is confident recent price hikes are associated with the country's post-

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pandemic reopening and will fade, and that the Fed should stay focused on getting as many people back to work as possible.

Any move to reduce support for the economy, by first slowing the U.S. central bank's $120 billion in monthly bond purchases, is "still a ways off," Powell said, with 7.5 million jobs still missing from before the pandemic. (*Reuters*, July 14)

But even if economic sluggishness is the greater risk – and who's to disagree with the Fed and insist it's not – the risk of inflation is still real, as would be the consequences. I'm sure we're all much better off with the Fed possibly overshooting on stimulus, rather than undershooting. And I believe the Fed was right to do all it did despite the possibility of negative ramifications. Still, we must consider those ramifications.

- Higher inflation could lead to higher interest rates as investors demand positive real yields, but also if tighter monetary policy and higher rates are employed to fight the inflation.
- Higher interest rates could negatively affect the economy.
- Higher interest rates make investors demand higher returns, leading to lower prices for financial assets and the possibility of a market collapse (see 1972-82).
- Higher inflation would hit low-income Americans the hardest, since they spend the lion's share of their incomes on necessities, and threaten the lifestyle of the millions of retirees and others on fixed incomes.
- Higher interest rates would raise the cost of servicing the national debt, further swelling the annual deficits (and therefore the national debt).
- Larger deficits could make lenders (and foreign buyers) demand still-higher interest rates on U.S. debt securities, creating a negative feedback loop.
- If we continue to print enough money to pay the interest and fund the deficit, eventually the value of the dollar and its use as the world's reserve currency could be called into question.
- As we've experienced in the past, rapidly rising prices could cause inflationary expectations to become embedded in Americans' psyches, making the increases self-perpetuating and hard to combat.

Further, we should consider the negative aspects of accommodative monetary policy itself:

- Fed largesse can be viewed as implying the existence of a "Fed put," or a guarantee of future bailouts. The consequences can include increased moral hazard (the belief that investors can take risk without consequences) and a diminution of the risk aversion that must be present in order for markets to be safe.
- The above conditions can lead businesses and investors to use more leverage, magnifying the potential damage from a slowdown.
- As we've seen in the last 16 months, the Fed can't stimulate the economy without increasing the value of the economy. And who receives the benefit? The people who own the economy (i.e., the owners of equities, companies and real estate). Thus, stimulus and the resultant asset appreciation exacerbate the disparity in wealth, which is receiving increased consideration.
- If the Fed maintains its current level of accommodation – including keeping interest rates near zero – it will have relatively few levers to pull in case a future slowdown calls for incremental stimulus. For example, cutting interest rates was a key part of last year's rescue

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package. This wouldn't have been possible if rates had been at zero when the Fed first took action.

Some people wonder whether the Fed might produce perpetual prosperity, preventing recessions or minimizing them as it did last year. Some hope low interest rates can keep markets aloft forever. Some think the Treasury can issue as much debt as is needed, with the Fed willing to step in as the buyer of last resort. Obviously, a lot of people in the federal government think unlimited sums can be spent without negative consequences from the resulting increased deficits and debt.

I'm not smart enough to prove it, but to me these assumptions seem too good to be true. They have the appearance of a perpetual motion machine or a credit card with no credit limit and no requirement to pay off the balance. **I can't tell you exactly what the catch is, but I think there has to be one. Or, perhaps better put, I wouldn't bet the ranch on there not being a catch.**

In the 1930s, John Maynard Keynes suggested that nations should run fiscal deficits in times of weakness to stimulate demand, reenergize their economies, and create needed jobs. It's not for nothing that deficit spending is described as "Keynesian." But even Lord Keynes asserted that while deficits are a reasonable way to jumpstart a sluggish economy, governments should run surpluses in times of prosperity and use them to repay the debts incurred in times of weakness. However, in the 21st century, concepts like fiscal discipline, budget surpluses and debt repayment seem to have gone out the window.

The U.S. has run large and growing deficits for more than 20 years, and that seems less likely than ever to change. Traditional economics asserts that this will be inflationary, but as mentioned earlier, the deficits of the 2010s didn't bring on substantial inflation. Perhaps they merely helped support an economy that would have been even weaker in their absence.

Regardless, we've now entered into a time of testing. As I said earlier, in 2020, we saw trillions of dollars of increased benefits, Fed bond-buying, expansion of the Fed balance sheet, federal fiscal deficits, and additions to the U.S. national debt. All of these things increased sharply as a percentage of the total economy. We'll see the consequences in the future.

Alan Greenspan made the Fed highly activist starting in the 1990s (giving rise to the concept of the "Greenspan put" and eventually the "Fed put"), a posture that has persisted through three financial crises already in this young century. Again, the Fed's rescue actions have been essential and appropriate, but in my view they should not be permanent. I would prefer to see a Fed that isn't continually fine-tuning, but rather one taking a "hands-off" approach most of the time and acting to stimulate or restrict the economy only at extremes.

I imagine my readers believe in the free market and, especially, its power as the best allocator of resources. In a free market, Adam Smith's "invisible hand" moves resources such as labor and capital where they can be most productive. But we don't have a free market in money today, and we haven't had one since at least 2008's Global Financial Crisis; the Fed cut the federal funds rate to zero in January 2009 and has kept it low ever since. There have been attempts to raise interest rates, but the markets greeted them with a series of "tantrums," discouraging continued efforts.

I want to make clear that I don't think I know better than the people who run the Fed. However, in general, I would like to see the economy stimulated less often, and certainly not continually. **We**

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might like to have faster growth in the years ahead than the economy would provide on its own, but I don't think the long-term rate of growth can be lifted perpetually through monetary and fiscal policy, and certainly not without the risk of negative consequences.

To have a healthier allocation of capital, I'd like to see a free market in money, and to me that means interest rates that are "naturally occurring." Rates held artificially low distort the capital markets, penalizing savers, subsidizing borrowers, lifting asset prices and encouraging increased risk taking and the use of more leverage. Again, I'd prefer to see a Fed that's reluctant to intervene other than when intervention is essential.

* * *

In my first memo of the pandemic, I wrote the following about the coronavirus:

> No one knows much about it, since this is its first appearance. As Harvard epidemiologist Marc Lipsitch said on a podcast on the subject, there are (a) facts, (b) informed extrapolations from analogies to other viruses and (c) opinion or speculation. The scientists are trying to make informed inferences. Thus far, I don't think there's enough data regarding the coronavirus to enable them to turn those inferences into facts. (*Nobody Knows II*, March 3, 2020)

Substitute "economists" for "scientists" and "inflation" for "coronavirus," and I think this paragraph can serve well today. In thinking about the causes of inflation, there are few facts and only one prior inflationary episode in the U.S. in our lifetimes from which to extrapolate. **Thus, I consider anything anyone says today about inflation in the coming years to be Lipsitch's "opinion or speculation" . . . or, as I'd say, "guesswork."**

I've written in the past about the way I tend to come across great material just as memos are approaching the finish line. Thus, I want to include a quote that connects with Lipsitch's view. It's from Bill Miller, a legendary investor with an outstanding record:

> No one has privileged access to the future and market forecasts tend to be about as accurate as calling a coin toss. There are, of course, analogies that can be drawn about how the current environment maps onto previous historical data, but success in that depends crucially on how the future will, in fact, resemble the past, and whether the cited analogies turn out to be the governing ones. The record seems to show that sometimes they will and sometimes they won't and we are back at the coin toss. (*Bill Miller 2Q 2021 Market Letter*, July 9, 2021)

The following quote does a terrific job of summarizing the challenge entailed in decision-making in cases like this:

> **No amount of sophistication is going to allay the fact that all your knowledge is about the past and all your decisions are about the future.** (Ian H. Wilson, former GE executive)

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That doesn't mean people won't express forceful opinions regarding inflation in the period ahead. As I wrote 17 years ago:

> "Confident" is the key word for describing members of [the "I know"] school. For the "I don't know" school, on the other hand, the word – especially when dealing with the macro-future – is "guarded." **Its adherents generally believe you can't know the future; you don't have to know the future; and the proper goal is to do the best possible job of investing in the absence of that knowledge.** (*Us and Them*, May 7, 2004)

So what does that mean for investor behavior today? If we can't know whether today's inflation will prove transitory or be with us for a while, is there nothing for investors to do? The answer lies in the title of a 2002 memo of mine: *You Can't Predict. You Can Prepare.* No one can confidently predict whether we're entering an inflationary era, but the consequences of doing so would be significant. Thus, I'll briefly rehash the opinion regarding market exposure that I expressed in my review of 2020.

In January's memo *Something of Value*, I described the way my genetic makeup, early experiences, and success in blowing the whistle on some unsustainable financial innovations and market excesses had turned me into something of a knee-jerk skeptic. My son Andrew called this to my attention while our families lived together last year, and what he said struck a responsive chord.

The old me likely would have latched onto today's high valuations and instances of risky behavior to warn of a bubble and the subsequent correction. But looking through a new lens, I've concluded that while those things are there, it makes little sense to significantly reduce market exposure:

- on the basis of inflation predictions that may or may not come true,
- in the face of some very positive counterarguments, and
- **when the most important rule in investing is that we should commit for the long run, remaining fully invested unless the evidence to the contrary is absolutely compelling.**

Finally, I want to briefly touch on the level of today's markets. Over the four or five years leading up to 2020, I was often asked whether we were in a high yield bond bubble. "No," I answered, "we're in a bond bubble." High yield bonds were priced fairly relative to other bonds, but all bonds were priced high because interest rates were low.

Today, we hear people say everything's in a bubble. Again, I consider the prices of most assets to be fair relative to each other. But given the powerful role of interest rates in determining those prices, and the fact that interest rates are the lowest we've ever seen, isn't it reasonable that many asset prices are the highest we've ever seen? For example, with the p/e ratio of the S&P 500 in the low 20s, the "earnings yield" (the inverse of the p/e ratio) is between 4% and 5%. To me, that seems fair relative to the yield of roughly 1.25% on the 10-year Treasury note. If the p/e ratio were at the post-World War II average of 16, that would imply an earnings yield of 6.7%, which would appear too high relative to the 10-year. That tells me **asset prices are reasonable relative to interest rates**.

Of course, it's one thing to say asset prices are fair relative to interest rates, but something very different to say rates will stay low, meaning prices will stay high (or rise). And that leads us back to inflation. It isn't hard to imagine rates increasing from here, either because the Fed lifts

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them to keep the economy from overheating or because rising inflation requires higher rates in order for real returns to be positive (or both). **While the possibility of rising rates (and thus lower asset prices) troubles us all, I don't think it can be said that today's asset prices are irrational relative to rates.**

Whereas folks from the media try to get me to say "buy" or "sell" and "in" or "out," I formulate my view nowadays in terms of the appropriate mix of aggressiveness versus defensiveness. Given the above crosscurrents, Oaktree is maintaining a balance between the two that's generally in line with our normal stance (as opposed to the elevated defense we maintained going into 2020).

Having said that, it's reasonable to make some adjustments at the margin in response to the risk of inflation. Investors who feel strongly about the risk, or who worry more about interim markdowns (and less about gains they might forgo if inflation fails to materialize), might wish to emphasize:

- floating-rate debt;
- investments in businesses with largely fixed costs or the ability to pass on cost increases, or that can otherwise incorporate inflation in prices (like certain landlords); and/or
- situations where profits have the potential to grow faster than prices rise.

These are all ways one might prepare today for an inflationary environment. **I consider it reasonable for investors to give a nod to the possibility of higher inflation, but not to significantly invert asset allocations in response to macro expectations that may or may not prove accurate.**

July 29, 2021

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Memo to: Oaktree Clients Only

From: Howard Marks

Re: 2020 in Review

The opening lines of Charles Dickens's *A Tale of Two Cities* offer a fitting coda to 2020:

> It was the best of times, it was the worst of times . . . it was the season of Light, it was the season of Darkness, it was the spring of hope, it was the winter of despair.

We're left to contemplate the jaw-dropping list of extremes compiled during this turbulent year:

- The coronavirus brought on the worst global pandemic in over a century.
- In the U.S., more than 340,000 people died from Covid-19 – 85% of the number who died in battle in the four years of World War II.
- In the second quarter, the U.S. experienced the worst quarterly drop in real GDP in 74 years of recorded quarterly history, an annualized decline of 32.9%.
- But in the third quarter, it saw the biggest annualized gain in history: 33.4%.
- Initial unemployment claims jumped from 251,000 to almost 3 million in a single week in March, crested at 6.2 million two weeks later, and remained above the pre-pandemic record of 695,000 every week for the remainder of the year.
- Through bond buying, the Federal Reserve grew its portfolio by $2.7 trillion, or roughly 55%, and the U.S. Treasury funded roughly $4 trillion in grants and loans.
- After the S&P 500 Index reached an all-time high of 3,386 on February 19, it fell 33.9% in just 32 days to 2,237 on March 23.
- But from that low, the index regained the previous high in less than five months on August 18 (an increase of 51.5%). It ended 2020 up 67.9% from the low and up 18.4% overall for the year.
- Unlike the credit crunches that accompanied many past crises, capital flowed like water. High yield bond issuance for the year was $450 billion, up 57% from 2019 and well above the prior record set in 2013. Investment grade debt issuance totaled $1.9 trillion, up a similar 58% from 2019 and also ahead of the previous record, set in 2017.
- After the Fed cut its federal funds rate target to between zero and 0.25%, bond prices rose as bond yields fell in parallel. At year-end, the average A-rated bond yielded just 1.52%, and the average yield on high yield bonds (ex. energy) was just below 4%.

So we had a health emergency, an ailing economy, the most generous capital market of all time, and strong stock and bond markets. The seemingly anomalous relationship between the pandemic and recession on one hand and the strong capital and stock markets on the other can be explained by the Fed's and the U.S. Treasury's aggressive actions.

As suggested by the above catalog of events, the buying opportunity in 2020 turned out to be very brief, especially with regard to public securities and companies with the ability to access the capital markets. Defaults affected a large dollar amount of high yield debt securities, but default rates came nowhere near the highs that had been predicted and soon began to recede. Highly motivated selling was short-lived – essentially limited to the month of March – and we never saw the full-throated panic (accompanied by margin calls, meltdowns and forced selling) witnessed in prior crises. In just a few months:

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- investors grew confident about the inevitability of an economic recovery;
- optimism developed regarding the outlook for a Covid-19 vaccine;
- the near-zero fed funds rate brought down prospective returns all along the capital market line;
- risk tolerance returned, and fear of missing out took over from fear of losing money;
- asset prices rose, and the markets bounced back; and
- the exceptional buying opportunity came to what for our purposes was a premature end.

Oaktree Performance

Last year's extreme, rapid-fire developments – and especially their origin in an exogenous and unforeseeable event, the virus outbreak – created great challenges for investors. To have taken maximum advantage, one would have had to have gone into late February prepared for a significant shock and then turned bullish a month later. Obviously, few investors did both.

While we never radically shift our portfolios, I think Oaktree did a very good job under these circumstances. For years we had been leery of the markets, because of our view that they were characterized by a great deal of uncertainty, full-to-high asset prices, the lowest prospective returns in history, and pro-risk behavior on the part of investors trying for high returns in a low-return world. With our mantra in that period of "move forward, but with caution," our portfolios were as fully invested as we could make them while maintaining the highest possible standards within the context of the market realities.

When the markets fell sharply in March, our prior caution allowed 10 of our 14 open-end strategies to avoid part of their benchmarks' declines (before fees). This enabled us to remain calm under fire, hold onto positions that warranted doing so, and increase aggressiveness at the margin where appropriate. Of course, these were the right things to do.

A year ago, in my 2019 review, I included a table showing how little of our closed-end funds' capital we had invested, taking pride in our portfolio managers' discipline, and writing:

> Investors' aggressive pursuit of return – and the strong resulting cash flows into alternative and private investments – has made it challenging to put money to work in these fields. . . . In each case, our insistence on good value and controlled risk resulted in a moderate pace of investment that was somewhat below our historic norms.

In 2020, in contrast, many of our closed-end strategies turned highly aggressive, starting in the worst of the March declines. This allowed them to make great progress. For example:

- Our Opportunities group bought public debt and negotiated private rescues in quantities sufficient to complete the deployment of Opportunities Fund Xb by investing over $7 billion and then put over $4 billion to work for its successor, Opps XI.
- The same was true of our Real Estate group, which finished investing Real Estate Opportunities Fund VII and moved on to ROF VIII.
- The investments made by our Special Situations group took the invested or committed percentage of its Special Situations Fund II from 19% to 82%.
- Overall, Oaktree's closed-end funds deployed nearly $17 billion, making 2020 our best year ever in that regard.

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Given our insistence on risk control, Oaktree's open-end strategies don't always keep up with their benchmarks in highly bullish times. The fourth quarter of 2020 presented a potential challenge in that regard, as the market rally (and the low interest rates) encouraged risk-taking and caused the riskiest assets to soar. Thus, we're happy to report that 10 of the 14 strategies exceeded their benchmarks in the fourth quarter, allowing 9 of them to do so for the full year (all references to returns are before fees). Further, the ups and downs of our quarterly returns suggest we earned our returns with less volatility than the benchmarks. Overall, we're quite pleased with Oaktree's investment performance for the year.

To reiterate what you already know, none of this was predicated on forecasts. We never tried to predict when the markets would begin to recover from their Covid-19-induced declines. We didn't know better than anyone else that the new signs of life in the markets in late March were the beginnings of a rally that would take them to all-time highs. We simply favored defensiveness when we considered the markets vulnerable and then turned aggressive when price declines rendered defensiveness no longer appropriate.

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A Look at the Long Run

At the end of the most turbulent year in my five-plus decades of experience, I'm going to devote my usual section on the long run to an Oaktree strategy that really would make you think 2020 was the best of times: our Power Opportunities funds. I'll start with the interesting history of these funds.

Just a year after Oaktree's founding, a friend brought us an unusual opportunity. Three long-term corporate-employees-turned-energy-consultants had left Arthur Andersen in 1995 to form an investment boutique, GFI Energy Ventures (with "GFI" standing for "Go For It"). Larry Gilson, Richard Landers and Ian Schapiro had developed an investment thesis based on their knowledge advantage regarding the deficiencies of the U.S. power infrastructure, the need for remediation and expansion, and what the incumbents would spend money on in the process. They were a sponsor without a fund, passing the hat among a small circle of investors whenever they found an attractive investment candidate. But, in 1996, they found an opportunity too large to finance using that approach, and they were referred to us.

We were very interested in that first investment, as well as the general thesis and its application, and we entered into a deal with GFI under which we would pay their overhead, get a right of first refusal on their deal flow, and jointly manage the investments made. And, if we continued to like what we saw, in three years we would organize a fund dedicated exclusively to their power infrastructure investments, which would also be run jointly. All went well during the period in question, and so the first Oaktree/GFI Power Opportunities Fund was formed in 1999.

While we tried to get the people of GFI to join Oaktree, Larry and Richard resisted our entreaties. But when they retired in 2009, Ian and his team jumped aboard, and we've had a great ride ever since. We're now in the process of investing Oaktree Power Opportunities Fund V.

A few specific things stand out to me about the last 25 years:

- When Bruce and I first met Larry, Richard and Ian, we were immediately struck by the strength of their thesis. Everyone knew the U.S. power grid was old and hadn't kept up with the country's progress. The frequent blackouts, among other things, told us it needed extensive (and expensive) remediation and investment.
- Interestingly, GFI didn't invest in power generation or transmission infrastructure, but rather in successful companies that sold products, services and software to firms involved "downstream" in the distribution, monitoring and consumption of power. In the words we used at the time,

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"they won't try to predict which miners will find gold; they'll sell picks and shovels to all of them."

- When GFI gave us their drafts of the marketing materials for that first 1999 fund, there was extensive discussion, in a very Oaktree-like fashion, of the many types of risk they wouldn't take, such as technological risk and commodity risk. And they've stuck with that discipline.
- Larry, Richard and Ian also laid out the specific strategies that they would pursue based on the expected industry trends and company behavior. Those strategies are still guiding the Power funds to great success a quarter-century later. The GFI founders were remarkably prescient.
- Finally, it's worth observing that the Power Opportunities group has increased its capital under management only gradually. There can be little doubt that discipline in fundraising has had a favorable impact on investment results. It's simply an oxymoron to say, "I've found an incredible niche where great returns can be earned consistently and with little risk, and it's infinitely scalable." That just doesn't make sense. So, when the $1 billion Power Fund II compiled its net IRR of 59% – without its portfolio companies employing high leverage – I asked the group leaders how much capital they wanted for their next fund. The answer was simple: $1 billion. Certainly, the typical GP would have used the success of Fund II to raise far more for subsequent funds, perhaps bringing their record of exceptional performance to an end.

Lastly, I'm proud to report that the aggregate 2020 return of the Power Opportunities Funds was 131.1% net of fees, incentive allocation and expenses, and to present the lifetime performance of the constituent funds through December 31, 2020:

Power Opps Fund	Year Formed	Committed Capital	Net IRR	Multiple of Cost
I	2000	$ 453.8	13.1%	1.5x
II	2004	1,020.6	58.9	3.1
III	2010	1,062.1	13.4	1.6
IV	2016	1,105.7	29.9	2.5
V	2018	1,400.0	4.4	1.0
Total			26.5%	2.0x

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It's easy to see why we're so proud of the Power Opportunities group. Not only is the average IRR for these funds very high, but individually they've always been good, sometimes astronomical, but never poor (in fact, never a mature fund with a net IRR below the low teens). Every Power fund has had a very high batting average and a very low incidence of loss. Power Fund IV's gross return of 200% in 2020 is the best we've ever had, and we believe it will turn out to be the highest returning fund of its size in U.S. private equity history in terms of MOIC, without highly leveraging its holdings. Until now, Power Fund II has held the #2 spot; it'll be bumped down to #3. **You can see why we feel the group's track record, with the surprises clearly on the upside, represents the Oaktree ideal to the fulles**t.

The leadership of the Power Opportunities group has evolved and transitioned over these 25 years, but the talent keeps being regenerated and the returns roll on. Larry and Richard retired in 2009, as I said, and Ian took over. In 2016, Ian promoted Michael Cardito and Jason Lee to be his co-portfolio managers. Jason will be leaving us in the next few months to devote his energies to activities such as teaching, and while we're sorry to see him go, we're delighted to know he'll remain an informal advisor. At the same time, Ian is stepping back from managerial responsibilities and has passed the day-to-day reins to Michael. Since Michael has been responsible for much of the success of our most recent Power funds and

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Ian will be fully involved in the investment process, we know the strategy continues to be in excellent hands. We thank the members of the Power Opportunities group for their long-term achievement. We're confident they'll continue to adhere to the Oaktree ideals of risk control and consistency, hopefully with further great success.

Oaktree Developments

Assets Under Management – Oaktree's assets under management changed little in the years leading up to 2020, only rising from $91 billion at year-end 2014 to $95 billion at year-end 2019 (in both cases excluding our share of DoubleLine's AUM). Given the market conditions, we opted to limit asset accumulation in order to maximize our ability to be selective. Further, Oaktree's overall ability to increase AUM largely depends on the state of the market for distressed debt, the focus of our largest funds, and supply there was very modest in those years. Consequently, our fundraising for that area – and thus for Oaktree overall – was quite restrained.

In contrast, 2020, with its many difficulties (including weak markets), seemed the perfect time to raise capital for our distressed debt strategy, and we brought forward the formation of Opportunities Fund XI from its planned date in 2021. In anticipation of a pronounced increase in the supply of candidates for investment, Opps XI became, we believe, the largest distressed debt fund ever formed, with capital commitments of $14.5 billion thus far.

In addition to Opps XI, in 2020, we went out for incremental capital for several of our strategies, including ongoing open-end and evergreen efforts and closed-end funds already in the market. The response was very favorable, permitting us to raise a total of $29.4 billion in 2020, the best year for total fundraising in Oaktree's history, as well as the best for strategies other than Opps. That lifted Oaktree's year-end AUM to $121 billion ex. DoubleLine ($148 billion overall). Importantly, we're confident this total – spread over more than two dozen strategies – allows us to remain selective and flexible.

Operations During the Pandemic – My first indication of the severity of the coronavirus came on February 26, when I was at the airport waiting to fly to see a state pension fund client. I received a call telling me that the client had to cancel my appointment, as they had established a no-visitors policy (along with a no-travel policy for their staff). That decision – which soon became so common – seemed jarringly serious at the time. (However, it permitted me to curtail my trip and attend Grandparents Day at Rosie's school – a real silver lining.)

On March 5, we made the decision to cancel the in-person version of Oaktree's biennial LP conference, scheduled for the 11th, and to livestream it instead. Nancy and I flew from New York to Los Angeles for the session, little knowing that we would be there for several months. I left the Beverly Hilton after the livestreaming sessions and, like many of you, haven't been back to the office since. As those who've read my memo *Something of Value* know, my son Andrew and his family moved in with us on March 13 for a period of months, and investment discussions with him added greatly to my productivity in 2020.

Oaktree employees soon reported our first two cases of Covid-19, and to date we've had 40+ cases among our roughly 1,000 staff members around the world. Fortunately, everyone recovered nicely. We closed all of our offices in early March, and the attendance picture since then has varied from office to office. We thank both those who've been coming in and those who've worked from home.

Oaktree's people made great efforts in 2020 and were extremely effective. And clearly, we're pleased with the results. Our systems operated without a hitch, and our people worked under difficult

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circumstances to help us seamlessly acquit our responsibility to our clients. I don't think we skipped a beat. And we all mastered the phrase that best symbolizes 2020: "you're on mute."

Ensuring Opportunity – One of the signal events of 2020 was the death of George Floyd at the hands of a Minneapolis policeman, a tipping point that ignited protests across the country. **Many American individuals and corporations were moved to recognize the racial inequalities and injustices that exist and to do something about them. We at Oaktree are very much part of that group.**

Since 2016, Oaktree has had a highly organized effort to improve the diversity and inclusiveness of our organization, led by separate leadership councils for women, people of color (Black, Hispanic/Latino and multi-racial) and LGBTQ employees. The councils have significant responsibility and influence with regard to recruiting, training, mentoring and retention, and they are charged with making sure these key functions are carried out well and bias is avoided. They serve as key advisers to Oaktree's senior management on these subjects. The councils are also mentoring college students from communities that have traditionally had limited access to opportunities in investment management and making great efforts to hire from those communities. We look forward to reporting on progress as it occurs.

As part of our response to the situation, we further ramped up our efforts to increase the presence of under-represented group members at the highest levels. Thus, we sought and found the ideal person to become Oaktree's first board member of color. **As previously announced, we were privileged last month to be able to attract Depelsha McGruder to join our board**. Howard University, Harvard MBA, 17 years as an executive at Viacom and presently COO and Treasurer of the Ford Foundation – this is an ideal background, especially given her role at Ford in managing global operations and vetting investment strategies to preserve and grow the $14+ billion endowment. We are excited to welcome Depelsha to our board and look forward to her contributions.

Environmental, Social and Governance – One of the biggest changes we've seen in the investment community in recent years is the increased attention to environmental, social and governance (ESG) considerations. Each year, more and more investors are increasing their emphasis on these matters and doing more about them by requiring investment managers to demonstrate their commitment. This has very much been reflected in the evolution of Oaktree's processes.

While we've long taken ESG considerations into account as part of our investment process, a decade ago we made little effort to document our ESG assessments. Moreover, each of our investment teams had its own ESG approach. In the last few years we formed an ESG Governance Committee to help improve and harmonize the ESG practices of our strategies globally. While we've made tremendous advances in ESG, to date we've done so without any dedicated resources. Given how fast the landscape is evolving, and because we've decided to redouble our commitment, we've created the position of full-time Head of ESG, reporting to our CIO and my co-chairman, Bruce Karsh.

I am pleased to report that we recently announced the appointment of Priya Prasad Bowe to that position. Priya, who joined Oaktree in 2019 to work on our credit businesses, has been integrally involved in the design and implementation of the ESG framework for our Global Credit strategy, including authoring the beginnings of its climate-change-management strategy. Going forward, Priya will work with all Oaktree investment teams to make certain we're fully aware and educated regarding emerging ESG risks and opportunities, and she will assist us in bolstering our ESG integration, documentation and engagement practices globally.

In addition to Priya, we're fortunate to have a deep bench of industry experts to provide guidance in this area, including our partners at Brookfield Asset Management. One such expert is Mark Carney, Brookfield's Vice Chairman and newly appointed head of ESG and Impact Fund Investing. Mark is the

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former Governor of the Bank of England and Bank of Canada and serves as a United Nations Special Envoy for Climate Action and Finance. Our investment personnel have begun to work with Mark to evolve their thinking on climate change. We expect over time to have much to report to you on ESG.

Oaktree Babies – It's one of my great pleasures each year to report on the progress of the Oaktree baby count. In that connection, 55 children were born to employees in 2020, bringing our since-inception performance to 831. I always take our employees' decision to bring a new person into this world as a show of their positive attitudes and faith in the future. **I'm particularly eager to see what 2021 brings in this regard, following the work-from-home stretch that began just over nine months ago**.

Positioning for 2021

Because the market is at a possibly critical juncture and its direction is much debated these days, I'm going to spend an unusual amount of time discussing positioning going forward. Thus, you might end up feeling this memo should have been titled *Preview of 2021* rather than *2020 in Review*.

Investors often imagine there are two distinct macro environments: times when the future is clear and times when it isn't. In reality, though, these periods are all pretty much the same, since perceived clarity regarding the future often turns out to have been illusory. Most macro forecasting consists of extrapolating current levels and recent trends with minor tinkering. While predictions of "no change" are often right – as continuation is the general rule – they give rise to little in terms of profit. Only forecasts of major deviation from trend can be highly profitable. But to be so, they also must be correct, and they rarely are. That's why profitable macro forecasts (and successful forecasters) are few and far between. This negative view on forecasting is a major theme running through Oaktree's culture and the reason we don't base our investments on macro forecasts.

Most investors felt that the beginning of 2020 was a time of clarity: the economy and the stock market were both expected to continue advancing. While everyone knew they wouldn't do so forever, nothing seemed poised to make them stop. And then came the strongest exogenous shock we've ever seen – the novel coronavirus – proving once again that we never know what's going to happen (and that even though we can't predict, we should prepare – more on this later). Today's environment, in contrast, seems to be characterized by a lack of clarity. Experts are expressing highly divergent opinions regarding the outlook for U.S. markets, with strong arguments both bullish and bearish.

Most important on the positive side of the ledger, we seem highly likely to have a healthy economy for a good while, and the Fed has telegraphed its plan for years of accommodative monetary policy to keep it that way. The economy continues to reopen and recover from the pandemic, and this process should speed up as the vaccine rollout accelerates. President Biden's administration wants to provide unprecedented levels of financial support and stimulus, and the Democrats probably have enough control of the two houses of Congress to do so.

I'm particularly impressed by the potential for well above average consumer spending. Think about all the things you didn't spend money on in the last 12 months, such as vacations, dinners out, concerts and shows, and clothing for special occasions, and about the millions of Americans of whom the same is true. Now consider the households that made more money last year than they did the year before – starting with those who received support checks but didn't suffer job losses. This caused real personal income to grow at the fastest rate in 20 years. **Harvard economist Jason Furman estimates that the combination of above-trend income and below-trend spending has created roughly $1.8 trillion of extra disposable personal income since the beginning of the pandemic**. Finally, add in the very positive wealth effect from last year's multi-trillion dollar appreciation on stocks and still more on homes.

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The combination of this extra disposable income with the ending of a prolonged period of isolation and release of pent-up demand has the potential to add substantially to short-term economic growth. Many economists expect U.S. GDP to rise at a well above average rate this year, and with the early months likely to be slow, that implies big gains later in the year. Morgan Stanley, to pick one source, predicts that 4Q2021 annualized GDP will be 7.6% above 4Q2020. While the lockdown-related recession was painful, it set the stage for some very positive year-over-year comparisons in the period immediately ahead.

The strong economy will be abetted by a Fed that has promised to keep interest rates low for years and to continue buying bonds. The Fed will make every effort to keep monetary policy accommodative to support economic growth and job creation. It clearly demonstrated in the last year that its tools are varied and powerful, at least in the short run.

A related positive to consider is that market tops usually occur with the economy several years into the up-leg of the cycle and vulnerable to recession. This time, however, we have strong markets at the beginning of what may prove to be a long economic recovery. **The fact that we already see full asset prices so early in the recovery is a source of risk. But on the other hand, the fact that the economy is likely to grow for several years is very encouraging.**

Finally among the positives, I believe U.S. political uncertainty has declined somewhat, truncating the extreme tails of the distribution of possible events. With a center-left president and tiny Democratic majorities in both houses of Congress, I believe radical legislation is unlikely to be enacted.

Arrayed against the optimistic outlook regarding the two most important things, the economy and the fight against the pandemic, are a number of concerns. The shortest-term risk is the possibility of unimpressive first quarter GDP data. The latest severe wave of the virus, which took daily cases in the U.S. to record levels, may have slowed current economic activity (so far, the economic data are very mixed). But everyone knows this, and investors have been willing to "look across the valley" for the past eleven months and are unlikely to stop now, when strong growth is right around the corner.

The biggest risk of all is the possibility of rising interest rates. Rates have declined quite steadily for the last 40 years. This has been a huge tailwind for investors, since a declining-rate environment lowers the demanded returns on assets, making for higher asset prices. The linkage between falling interest rates and rising asset valuations is a good part of the reason why p/e ratios on stocks are above average and bond yields are the lowest we've ever seen (which is the same as saying bond prices are the highest).

But the downtrend in rates is over (if we can believe the Fed's assurance that it won't take nominal rates into negative territory). **Thus, while interest rates can rise from here – implying higher demanded returns on everything and thus lower asset prices – they can't decline. This creates a negatively asymmetrical proposition.**

So today's high asset prices may be justified at today's interest rates, but that's clearly a source of vulnerability if rates were to rise. (Note that today's 1.40% yield on the 10-year Treasury note is up from 0.52% at the low in August 2020 and from 0.93% in just the last seven weeks.)

The Fed says rates will be low for years to come, but are there limitations on its ability to make that happen? Can the Fed keep rates artificially low forever? On longer-maturity bonds? **And what about inflation? Can the 10-year Treasury note still yield 1.40% if inflation reaches 3%?** Will people buy it at a negative real yield? Or will the price fall so that it yields more? Where could inflation come from?

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The price of goods may not rise in dollar terms, but reduced respect for the dollar (or increased quantities of dollars in circulation) could cause it to depreciate relative to the price of goods: same result.

On TV on February 7, Treasury Secretary Janet Yellen responded to a question about inflation risk posed by the proposed Covid-19 relief package with a long discourse on the importance of delivering relief to Americans who are suffering. Few would argue with that premise. She also made clear that she believes it's better to provide too much relief than too little. True as well. **But that doesn't mean (a) the more relief the better or (b) there aren't risks attached.** Experts from both sides of the political aisle have questioned whether the $1.9 trillion relief package under discussion is too much and/or misdirected; Larry Summers, a progressive economist, wrote to that effect in *The Washington Post* on February 4:

> . . . a comparison of the 2009 stimulus and what is now being proposed is instructive. In 2009, the gap between actual and estimated potential output was about $80 billion a month and increasing. The 2009 stimulus measures provided an incremental $30 billion to $40 billion a month during 2009 — an amount equal to about half the output shortfall.
>
> In contrast, recent Congressional Budget Office estimates suggest that with the already enacted $900 billion package — but without any new stimulus — the gap between actual and potential output will decline from about $50 billion a month at the beginning of the year to $20 billion a month at its end. The proposed stimulus will total in the neighborhood of $150 billion a month, even before consideration of any follow-on measures. That is at least three times the size of the output shortfall.
>
> In other words, whereas the Obama stimulus was about half as large as the output shortfall, the proposed Biden stimulus is three times as large as the projected shortfall. **Relative to the size of the gap being addressed, it is six times as large. . . .**
>
> Another [way of assessing the scale of a fiscal program] is to look at family income losses and compare them to benefit increases and tax credits. Wage and salary incomes are now running about $30 billion a month below pre-Covid-19 forecasts, and this gap will likely decline during 2021. Yet increased benefit payments and tax credits in 2021 with proposed stimulus measures would total about $150 billion — a ratio of 5 to 1. The ratio is likely even greater for low-income individuals and families, given the targeting of stimulus measures. . . .
>
> . . . while there are enormous uncertainties, **there is a chance that macroeconomic stimulus on a scale closer to World War II levels than normal recession levels will set off inflationary pressures of a kind we have not seen in a generation, with consequences for the value of the dollar and financial stability**. (Emphasis added)

Normally one would expect such a flood of additional liquidity into the economy to cause inflation to accelerate, but the Fed says no. Of course, although central banks might like to see inflation increase (as it makes it cheaper to repay debt), they have to discourage such talk for fear of fueling inflationary expectations. On the other hand, we've had substantial deficits and accommodative monetary policy ever since 2008 and no serious inflation. We've seen a 50-year-low in the unemployment rate and yet not the inflation the Phillips Curve would have predicted. And Japan and Europe have been trying for 2% inflation for years without success. Is inflation a threat anytime soon? The answer's clear: who knows?

In addition to these major risks, there are others that – although perhaps smaller, less consequential or less imminent – should nevertheless be considered:

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- Optimism regarding the economy is based on positive assumptions about vaccines being efficacious, getting into arms, and holding up over time and against new variants. My own guess is that the U.S. will reach herd immunity in the third quarter, with life thereafter moving back in the direction of pre-pandemic norms. Disappointment regarding the speed or efficacy of vaccinations could delay and complicate the rekindling of economic growth.
- The actions of the Fed and U.S. Treasury may be leading investors to aggressively pursue high returns in today's low-return world, replacing risk aversion with risk tolerance. Signs that in the past indicated excessive optimism and complacency in stock and bond markets are present today:

    - the strong performance of speculative securities and "meme" stocks;
    - heavy retail buying of stocks, options buying, and buying on margin;
    - heated bidding for bond deals, low bond yields and weak contractual protections;
    - the Buffett Indicator (the ratio of total equity market capitalization to GDP) far above its previous high; and
    - large numbers of IPOs, including IPOs by unprofitable companies, and first-day share price jumps of tens or hundreds of percent.

- Since many investors have concluded over the last 20 years that they can't achieve the returns they want or need in traditional stocks and bonds, capital has flooded into alternative assets, complicating life for investors there, too.
- The unemployment rate may not soon fall to pre-Covid-19 levels, and the secular growth of the economy could remain unimpressive.
- U.S. relations with China are likely to continue to be thorny, flaring up from time to time, and globalization – with its economic benefits for the world overall – may be weaker than in the past.
- America's social and political divides are unlikely to close anytime soon, and the country may not easily resolve questions of unequal opportunity and treatment.

The above list omits two long-term worries that may seem theoretical and far off but I think are potentially significant:

- Can the Fed really increase its balance sheet by trillions of dollars and the U.S. run annual deficits in the trillions – in 2020 and in coming years – without negative consequences, like a decline in the dollar's value? If the dollar performs poorly, will it remain the world's reserve currency and leave unchanged the U.S.'s ability to borrow unlimited amounts of money to cover deficits? And what happens if the answer to that last question proves to be "no"?
- How will we find jobs for all the people who are displaced by technology and automation and lack the skills required to participate in the information economy? What happens to parts of the country that are left out of the new economy?

Finally, much of the worry about whether we're in a bubble relates to valuations. For the S&P 500, for example, the current ratio of price to projected 2021 earnings is roughly 22 (depending on which earnings estimates you use). This seems expensive compared to the historic average in the range of 15-16. But knee-jerk judgments based on the relationship between current valuations and historic averages are too simplistic to be dispositive. Before making a judgment about today's valuation of the S&P 500, one must consider (a) the context in terms of interest rates, (b) the shift in its composition in favor of rapidly growing technology companies, with their higher valuations, (c) the valuations of the index's individual components, including those tech companies, and (d) the outlook for the economy. **With these factors in mind, I don't think most of today's asset valuations are crazy**. Of course, a big correction in speculative stocks could have a negative impact on today's bullish investor psychology.

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In particular, as to item (a) above, we can look at the relationship between today's 4.5% earnings yield* on the S&P 500 and the yield on the 10-year Treasury note of 1.4%. The implied "equity risk premium" of 310 basis points is very much in line with the average of 300 bp over the last 20 years. Valuations can also be viewed relative to short-term interest rates. The current p/e ratio on the S&P 500 of 22 is slightly below the reading of 24 in March 2000 (the height of the tech bubble), and the fed funds rate is around zero today versus 6.5% back then. Thus, in 2000, the earning yield on the S&P 500 was 4.2%, or 230 basis points below the fed funds rate, while today it's 450 bp above. In other words, the S&P 500 is much cheaper today relative to short-term rates than it was 21 years ago.

The story is similar in the credit market. For example, the yield spread on high yield bonds versus Treasurys is below the historic range, although probably still more than adequate to offset likely credit losses. Thus, as with most other assets today, the price of high yield bonds is high in the absolute, fair-ish in relative terms, and highly reliant on interest rates staying low.

So where does that leave us? In many ways, we're back to the investment environment we faced in the years immediately prior to 2020: an uncertain world, offering the lowest prospective returns we've ever seen, with asset prices that are at least full to high, and with people engaging in pro-risk behavior in search of better returns. This suggests we should return to Oaktree's pre-Covid-19 mantra: move forward, but with caution. But a year or two ago, we were in an economic recovery that was a decade old – the longest in history. Instead, it now appears we're at the beginning of an economic up-cycle that's likely to run for years.

Over the course of my career, there have been a handful of times when I felt the logic for calling a top (or bottom) was compelling and the probability of success was high. This isn't one of them. There's increasing mention of a possible bubble based on concerns about valuations, federal government spending, inflation and interest rates, but I see too many positives for the answer to be black-or-white.

In the interest of moving toward a conclusion, I'm going to briefly recap the pros, cons and counter-arguments:

- The **economic outlook** is positive, although Chairman Powell warns that the recovery remains "uneven and far from complete," with inadequate job creation.
- Thus he says the Fed will keep **interest rates** low for years. But with fiscal and monetary policy extremely accommodative, rates are already on the move up and vulnerable to increased inflation.
- **Inflation** stayed low in the 2010s despite records being set in terms of duration of the economic recovery, deficits and low unemployment. However, inflation's ability to remain so is uncertain.
- The **temperature of the market** is elevated, and there are signs of euphoria and risky behavior.
- **Valuations** are high relative to history, as security prices have run ahead of economic gains. High multiples are justified by today's low interest rates but dependent on continued low rates.
- **Risk compensation** is skimpy, as seen in the premium valuations of favored companies and in historically narrow yield spreads on credit.
- **Washington** poses a risk because of one party's control and the anti-capitalist policies of its most progressive members. My hope is that the narrow majorities render radical legislation less likely.
- As to **exogenous risks**, President Biden will pursue greater harmony, but tension with China and Iran and the racial and social divisions at home continue to cloud the outlook.

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* -- The earnings yield on a stock or stock index is the ratio of its earnings to its price. Thus it's the e/p ratio: the inverse of the p/e ratio, or 1 divided by the p/e ratio. A forward-looking p/e ratio of 22 equates to an earnings yield of 1 ÷ 22, or 4.5%.

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With arguments on both sides, I feel the prices of most assets are in a gray area – certainly not low, mostly on the high side of fair, but not so high as to be unreasonable.

The bottom line is this: given current conditions, should investors be at their usual risk position, more defensive or more aggressive? **While the risk-adjusted returns of most asset classes seem to be at rough equilibrium relative to each other, all absolute returns are ultra-low, commensurate with today's equally low interest rates.** On balance, I think it's appropriate to be in one's normal stance, perhaps with a modest bias toward defense. Since the rewards for moving further out on the risk curve – such as yield spreads – aren't lavish, I have trouble seeing this as a time to aggressively chase high returns. **Moreover, the surer one is that rates will soon rise meaningfully, the more cautious one should be today.**

Because the primary risk lies in the possibility of rising inflation and the higher interest rates that would bring, I think portfolios have to make allowances: even though we can't predict, we should prepare. This possibility means (a) bonds with maturities much above ten years are obvious candidates for underweighting and (b) inflation beneficiaries should be considered for overweighting, including floating-rate debt, real estate capable of seeing rent increases, and the stocks of companies with the power to pass on price increases and/or the potential for rapid earnings growth.

When it comes to finding decent returns in this environment, the options are slim. Investors have plowed capital into the mainstream public "beta" markets. As a result, prospective returns have come down – fully reflecting the reduction in interest rates – and markets have become quite efficient. In most cases, price has converged with – if not run ahead of – intrinsic value. That means it's harder than ever to outperform, other than by taking on additional risk and being lucky enough to do so in an environment where such action is rewarded.

Although no markets are starved for capital these days, there may be alternative "alpha" markets where investment skill can add to returns, hopefully without a commensurate increase in overall risk. Some of this additional return is simply a premium for bearing illiquidity, and the pain suffered by some institutions during the 2008-09 crisis shows how important it is to correctly assess one's ability to live with illiquidity. And some of the return increment will come from employing managers with alpha, or the ability to add to return without a corresponding increase in risk. However, relying on positive alpha exposes investors to manager risk, or the possibility of hiring managers who turn out to have negative alpha.

This past year challenged many preconceived notions about the economy, markets and policy – and even changed the way we live. But the inescapable truth of investing remains unchanged: there is no magic answer, no solution (other than superior skill) that will enable an investor to earn a high return safely and dependably. And that's especially true in today's low-return world.

* * *

I wish you all the very best in 2021, and everyone at Oaktree looks forward to continuing our work together.

March 4, 2021

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The U.S. High Yield Bond – Broad Composite ("Composite") includes all actual, fully discretionary, fee-paying accounts that focus exclusively on the debt of solvent U.S. and Canadian corporations with an emphasis on senior, cash paying securities rated BB+ to CCC- and are benchmarked to the BB+/CCC- index.

The Oaktree Emerging Markets Equities performance results displayed herein represent the investment performance record for a composite of emerging markets long-only accounts managed by Oaktree. The Composite includes all fully discretionary accounts invested in the Emerging Markets Equity strategy.

The performance information set forth herein contains valuations of investments in companies that have not been fully realized as of December 31, 2020, or as otherwise noted. Oaktree values its investments in accordance with U.S. GAAP. Information regarding the valuation procedures and policies for each Oaktree fund, account or strategy mentioned herein is available upon request. There can be no assurance that any of these valuations will be attained as actual realized returns will depend upon, among other factors, future operating results, the value of the assets and market conditions at the time of disposition, any related transaction costs and the timing and manner of sale, all of which may differ from the assumptions upon which the valuations contained herein are based. Consequently, the actual realized returns may differ materially from the current returns indicated in this communication. Nothing contained herein should be deemed to be a prediction or projection of future performance. For more information or a description of the benchmark presented, please contact your Oaktree representative.

In addition, as noted herein, certain (but not all) of Oaktree's funds have utilized credit facilities (subscription lines), which has the effect of making fund, aggregate fund and composite level gross and net returns higher than the gross and net returns that would have been presented had drawdowns from partners been initially used to acquire the investment(s). There can be no assurance that future funds and strategies will be able to obtain comparable leverage on commercially reasonable terms.

Oaktree Performance

Important information about the statements: "When the markets fell sharply in March, our prior caution allowed 9 of our 14 open-end strategies to avoid part of their benchmarks' declines (before fees)." and "we're happy to report that 10 of the 14 strategies exceeded their benchmarks in the fourth quarter, allowing 9 of them to do so for the full year (all references to returns are before fees)."

The annual performance of the open-end strategies presented below is for the period of 1/1/2020 – 12/31/2020.

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As of 12/31/20	Annual Gross Return		Annual Net Return	
Description	**Composite**	**vs. Benchmark**	**Composite**	**vs. Benchmark**
Global High Yield Bond (USD Hedged) Composite.	6.32%	0.76%	5.79%	0.23%
ICE BofA Non-Financial Developed Markets High Yield Constrained (USD Hedged)(1)	5.56		5.56	
Expanded High Yield Bond Composite	7.37	1.77	6.84	1.24
FTSE High-Yield Cash-Pay Capped (Local)(1)	5.60		5.60	
U.S. High Yield Bond - BB-B Composite	7.00	1.88	6.47	1.35
FTSE High-Yield Cash-Pay Capped, All BB/B - rated (Local)	5.12		5.12	
U.S. High Yield Bond - Broad Composite	7.39	1.79	6.85	1.25
FTSE High-Yield Cash-Pay Capped (Local)(1)	5.60		5.60	
European High Yield Bond (EUR Hedged) Composite	3.01	0.76	2.50	0.25
ICE BofA Global Non-Financial HY European Issuers Excluding Russia (EUR Hedged)	2.26		2.26	
U.S. Convertible Securities Composite	35.04	(11.18)	34.38	(11.84)
ICE BofA US Convertible Index (Local)(1)	46.22		46.22	
High Income Convertible Securities Composite	3.87	(2.42)	3.28	(3.01)
FTSE High-Yield Market (Local)	6.29		6.29	
Non-U.S. Convertible Securities (USD Hedged) Composite	15.23	5.89	14.66	5.32
Thomson Reuters Global Focus ex US Convertible Index (USD Hedged)(1)	9.34		9.34	
Global Convertible Securities (USD Hedged) Composite	24.81	1.97	24.20	1.36
Thomson Reuters Global Focus Convertible Index (USD Hedged)	22.84		22.84	
U.S. Senior Loan Composite	1.93	(0.85)	1.42	(1.36)
Credit Suisse Leveraged Loan (Local)	2.78		2.78	
European Senior Loan (EUR Hedged) All-Currency Composite	2.54	0.16	2.02	(0.35)
Credit Suisse Western European Leveraged Loan (EUR Hedged)	2.38		2.38	
Global Credit Composite	3.91	(0.38)	3.24	(1.05)
CUST-GLOBALCREDIT(1)	4.29		4.29	
Emerging Markets Equity (MSCI) Composite	16.56	(1.75)	15.64	(2.67)
MSCI Daily TR Net Emerging (USD Unhedged)	18.31		18.31	
Global Credit Fund-OAR	6.16	5.49	5.74	5.07
ICE BofA 3-Month U.S. Treasury Bill	0.67		0.67	
	Out Performed	**9**	**Out Performed**	**8**
	Total Count	**14**	**Total Count**	**14**

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The performance of the open-end strategies presented below is for the period of 10/1/2020 – 12/31/2020.

As of 12/31/20	Annual Gross Return		Annual Net Return	
Description	**Composite**	**vs. Benchmark**	**Composite**	**vs. Benchmark**
Global High Yield Bond (USD Hedged) Composite.	6.40%	0.13%	6.27%	0.00%
ICE BofA Non-Financial Developed Markets High Yield Constrained (USD Hedged)(1)	6.28		6.28	
Expanded High Yield Bond Composite	6.54	0.27	6.41	0.14
FTSE High-Yield Cash-Pay Capped (Local)(1)	6.27		6.27	
U.S. High Yield Bond - BB-B Composite	5.84	0.21	5.71	0.08
FTSE High-Yield Cash-Pay Capped, All BB/B - rated (Local)	5.63		5.63	
U.S. High Yield Bond - Broad Composite	6.29	0.02	6.16	(0.11)
FTSE High-Yield Cash-Pay Capped (Local)(1)	6.27		6.27	
European High Yield Bond (EUR Hedged) Composite	4.94	(0.36)	4.81	(0.49)
ICE BofA Global Non-Financial HY European Issuers Excluding Russia (EUR Hedged)	5.30		5.30	
U.S. Convertible Securities Composite	15.92	(3.75)	15.78	(3.89)
ICE BofA US Convertible Index (Local)(1)	19.67		19.67	
High Income Convertible Securities Composite	7.10	0.65	6.95	0.50
FTSE High-Yield Market (Local)	6.45		6.45	
Non-U.S. Convertible Securities (USD Hedged) Composite	9.69	2.75	9.56	2.61
Thomson Reuters Global Focus ex US Convertible Index (USD Hedged)(1)	6.95		6.95	
Global Convertible Securities (USD Hedged) Composite	12.86	2.14	12.73	2.00
Thomson Reuters Global Focus Convertible Index (USD Hedged)	10.72		10.72	
U.S. Senior Loan Composite	3.38	(0.26)	3.25	(0.39)
Credit Suisse Leveraged Loan (Local)	3.64		3.64	
European Senior Loan (EUR Hedged) All-Currency Composite	3.44	(0.10)	3.31	(0.23)
Credit Suisse Western European Leveraged Loan (EUR Hedged)	3.54		3.54	
Global Credit Composite	5.91	0.94	5.74	0.77
CUST-GLOBALCREDIT(1)	4.98		4.98	
Emerging Markets Equity (MSCI) Composite	24.67	4.97	24.43	4.74
MSCI Daily TR Net Emerging (USD Unhedged)	19.70		19.70	
Global Credit Fund-OAR	0.88	0.85	0.78	0.75
ICE BofA 3-Month U.S. Treasury Bill	0.03		0.03	
	Out Performed	**10**	**Out Performed**	**8**
	Total Count	**14**	**Total Count**	**14**

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Oaktree Power Opportunities Fund IV – Preqin Record
Important information about the statement: "we believe Power Fund IV's performance makes it the highest returning fund of its size in U.S. private equity history"

The source for this information originates from Preqin, an independent alternative assets data collection and reporting service. Their 12/31/2020 report includes data and return information on Preqin's U.S. Private Equity fund universe starting from 1985 of 126 funds in the $1billion to $1.3billion fund size.

The representative metric is based on the funds' Multiple on Invested Capital ("MOIC")

Fund and Vintage Year	Net IRR	MOIC	Date Reported
Oaktree Power Opportunities Fund IV (2016)*	8.12	1.32	6-30-2020
- Fund IV (Source: Oaktree)	56	4.6	1-31-2021
OCM/GFI Power Opportunities Fund II (2005)*	58.80	3.66	12-31-2020
Other Private Equity fund (1987)*	28.85	4.49	12-31-2020

** Source: Preqin 12/31/20 Private Equity Fund Report.*

The 12/31/20 Preqin report does not reflect the current performance data of Power Fund IV. However, based on Oaktree's current data, Power Fund IV's MOIC is 4.6 as of January 31, 2021, reflecting its position as the highest performing U.S. private equity fund based on MOIC.

Further, please note we understand that you appreciate that such performance comparisons are difficult to prepare fairly. Meaningful comparisons require access to accurate data and appropriate consideration of strategy, vintage and leverage (in addition to myriad other factors). Unfortunately, we don't always have access to all of the requisite data of our competitors. Thus, while we are sharing this data that we rely upon internally, we want to be sure you understand the limits of our analysis.

As the Preqin database purports to report accurate performance data (though we are obviously not in a position to verify the data they report). The analysis provided herein is derived from that data. Needless to say, our analysis is inherently subjective. Among other things, you might question whether we have appropriately selected our competitors. Due to the limitations of the data we cannot guarantee that the competitive analysis or the investment universe provided herein is fully comparable. Moreover, we are subject to the limitations of the underlying data, which does not always include IRR or other information that might be meaningful to a competitive assessment. In addition, the information presented also does not disclose the investment objectives, risks, fees, or tax features of the peer funds included in the comparison universe, all of which is relevant information for a full comparison. Nevertheless, it is our best attempt to compare our performance and we make it available to you in that spirit and in the hope that you will find it helpful.

Calculation of Assets Under Management
References to total "assets under management" or "AUM" represent assets managed by Oaktree and a proportionate amount of the AUM reported by DoubleLine Capital LP ("DoubleLine Capital"), in which Oaktree owns a 20% minority interest. Oaktree's methodology for calculating AUM includes (i) the net asset value (NAV) of assets managed directly by Oaktree, (ii) the leverage on which management fees are charged, (iii) undrawn capital that Oaktree is entitled to call from investors in Oaktree funds pursuant to their capital commitments, (iv) for collateralized loan obligation vehicles ("CLOs"), the aggregate par value of collateral assets and principal cash, (v) for publicly-traded business development companies, gross assets (including assets acquired with leverage), net of cash, and (vi) Oaktree's pro rata portion (20%) of the AUM reported by DoubleLine Capital. This calculation of AUM is not based on the

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Memo to: Oaktree Clients

From: Howard Marks

Re: Something of Value

If asked about possible silver linings to this pandemic, I would list first the chance to spend more time with family. Our son Andrew and his wife and son moved in with Nancy and me in Los Angeles at the beginning of the pandemic, as they were renovating their house when Covid-19 hit, and we lived together for the next ten weeks. There's nothing like getting to spend months at a time building relationships with grandchildren, something we were privileged to do in 2020. I'm sure the impact will literally last lifetimes.

As I've previously reported, Andrew is a professional investor who focuses on making long-term investments in what the world calls "growth companies," and especially technology companies. He's had a great 2020, and it's hard to argue with success. Our living together led me to talk with him and think a great deal about subjects on which I hadn't previously spent much time, contributing a lot to what I'll cover in this memo.

* * *

I've written before about how the questions I'm asked give me a good sense for what's really on people's minds. These days, one I frequently field is about the outlook for "value" investing. "Growth" stocks have meaningfully outperformed "value" for the last 13 years – so long that people are asking me whether it's going to be a permanent condition. My extensive discussions with Andrew led me to conclude that the focus on value versus growth doesn't serve investors well in the fast-changing world in which we live. I'll start by describing value investing and how investors might think about value in 2021.

<u>What is Value Investing?</u>

Value investing is one of the key disciplines in the world of investing. It consists of quantifying what something is worth intrinsically, based primarily on its fundamental, cash flow-generating capabilities, and buying it if its price represents a meaningful discount from that value. Cash flows are estimated as far into the future as possible and discounted back to their present value using a discount rate made up of the prevailing risk-free rate (usually the yield on U.S. Treasurys) plus a premium to compensate for their uncertain nature. There are a lot of common valuation metrics, like the ratio of price to sales, or to earnings, but they're largely subsumed by the discounted cash flow, or DCF, method.

Now, determining this value in practice is quite challenging, and the key to success lies not in the ability to perform a mathematical calculation, but rather in making superior judgments regarding the relevant inputs. Simply put, the DCF method is the main tool of all value investors in their effort to make investment decisions based on companies' long-term fundamentals.

Importantly, value investors recognize that the securities they buy are not just pieces of paper, but rather ownership stakes in (or, in the case of credit, claims on) actual businesses. These financial instruments have a fundamental worth, and it can be quite different from the price quoted in the market, which is

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based on the manic-depressive ups and downs of a character Benjamin Graham called "Mr. Market." On any given day, Mr. Market can be exuberant or despondent, and he quotes prices for securities based on how he feels. The value investor understands that – rather than informing us as to what a given asset's value is – Mr. Market is there to serve us by offering up securities at prices, which can be meaningfully disconnected from the actual value of a stake or claim in the underlying business. In doing so, he sometimes gives us the opportunity to snatch up shares or bonds at a meaningful discount from their intrinsic value. This activity requires independent thought and a temperament that resists the emotional pull of the market cycle, making for decisions based solely on value.

Thus, to me the essential underlying principles of value investing are these:

- the understanding of securities as stakes in actual businesses,
- the focus on true worth as opposed to price,
- the use of fundamentals to calculate intrinsic value,
- the recognition that attractive investments come when there is a wide divergence between the price at which something is offered in the market and the actual fundamental worth you've determined, and
- the emotional discipline to act when such an opportunity is presented and not otherwise.

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Value vs. Growth

Over the last 80-90 years, two important developments occurred with regard to investing style. The first was the establishment of value investing, as described above. Next came "growth investing," targeting a new breed of companies that were expected to grow rapidly and were accorded high valuation metrics in recognition of their exceptional long-term potential.

It seems likely that the label "value" was applied to the value school because one of its greatest early popularizers, Ben Graham, practiced a low-valuation style. Deemed "cigar butt" investing by his protégé Warren Buffett, Graham's style emphasized the search for pedestrian companies whose shares were selling at discounts from liquidation value based on the assets on their balance sheets, which Buffett likened to searching the street for used cigar butts that had one last puff left in them. It is this style that Graham preached in his Columbia Business School classes and his books, *Security Analysis* and *The Intelligent Investor*, which are considered the bibles of value investing. His investment style relied on fixed formulas to arrive at measures of statistical cheapness. Graham went on to achieve enviable investment performance although, funnily enough, he would later admit that he earned more on one long-term investment in a growth company, GEICO, than in all his other investments *combined*.

Buffett, the patron saint of value investors, also practiced cigar butt investing with great success in the first decades of his career, until his partner, Charlie Munger, convinced him to broaden his definition of "value" and shift his focus to "great businesses at fair prices," in particular because doing so would enable him to deploy much more capital at high returns. This led Buffett to invest in growing companies – such as Coca-Cola, GEICO and the Washington Post – that he could purchase at valuations that were not particularly low in the absolute, but that he found attractive given his understanding of their competitive advantages and future earnings potential. While Buffett has long understood that a company's prospects are an enormous component of its value, his general avoidance of technology stocks throughout his career may have unintentionally caused most value investors to boycott those stocks. Intriguingly, Buffett allows that his recent investment in Apple has been one of his most successful.

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Over time, a subset of value investors adopted a harder-line approach, with a pronounced emphasis on low valuation metrics. Graham and Buffett's cigar butts had featured low valuation metrics, and this no doubt caused some value investors to elevate this characteristic to be the core consideration in their investment process. It's interesting to note that the methodology for populating the S&P 500 Value Index relies solely on finding the one-third of the S&P 500's market capitalization with the highest ratio of Value Rank (based on the lowest average multiple of earnings, sales and book value) to Growth Rank (based on the highest three-year growth in sales and earnings and 12-month price change). In other words, the stocks in the Value Index are those that are most characterized by "low-valuation parameters" and least characterized by "growth." **But "carrying low valuation parameters" is far from synonymous with "underpriced."** It's easy to be seduced by the former, but a stock with a low p/e ratio, for example, is likely to be a bargain only if its current earnings and recent earnings growth are indicative of the future. Just pursuing low valuation metrics can lead you to so-called "value traps": things that look cheap on the numbers but aren't, because they have operating weaknesses or because the sales and earnings creating those valuations can't be replicated in the future.

The growth investing camp, on the other hand, came into existence during the "go-go" early years of the 1960s, the decade in which I started my career in the equity research department at First National City Bank. Investor interest in rapid growth led to anointment of the so-called Nifty Fifty stocks, which became the investment focus of many of the money-center banks (including my employer), which were the leading institutional investors of the day. This group comprised the fifty companies believed to be the best and fastest-growing in America: companies that were considered so good that "nothing bad could happen to them" and "there was no price too high" for their shares. Like the objects of most manias, the Nifty Fifty stocks showed phenomenal performance for years as the companies' earnings grew and their valuations rose to nosebleed levels, before declining precipitously between 1972 and 1974. Thanks to that crash, they showed negative holding-period returns for many years. Their dismal performance cost me my job as director of equity research (and led to my being assigned to start funds for investment in high yield and convertible bonds – my lucky break). It's worth noting, however, that the truly durable growth companies among the Nifty Fifty – about half of them – compiled respectable returns for 25 years, even when measured from their pre-crash highs, suggesting that very high valuations can be fundamentally justified in the long term for the rare breed of company.

The two approaches – value and growth – have divided the investment world for the last fifty years. They've become not only schools of investing thought, but also labels used to differentiate products, managers and organizations. Based on this distinction, a persistent scoreboard is maintained measuring the performance of one camp against the other. Today it shows that the performance of value investing lagged that of growth investing over the past decade-plus (and massively so in 2020), leading some to declare value investing permanently dead while others assert that its great resurgence is just around the corner. My belief, especially after some deep reflection over the past year – prompted by my conversations with Andrew – is that **the two should never have been viewed as mutually exclusive to begin with**. We'll get to that shortly.

Vantage Points

An interesting aspect of my discussions with Andrew has been our joint recognition of the fact that we come from very different backgrounds, and perhaps for that reason we look at investing from considerably different vantage points.

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I began to form my investment philosophy in the 1960s. Investment thought was much less developed at that time, and what did exist was heavily dominated by the philosophy espoused by Ben Graham. Buffett was still searching for his last puff of "cigar butts" and had yet to coin the term "moat" in reference to the lasting competitive advantages that sustain high-quality businesses. My philosophy was informed by the fact that I started working in 1969, during the "Nifty Fifty" bubble, which I watched crash around me.

It was further shaped by my transition in 1978 from equities to fixed income investments in the form of convertible and high yield bonds. Importantly, Graham and his less famous co-author, David Dodd, characterized bond management as a "negative art." What did they mean? In general, bond investors' return is capped at a yield that stems from the promised interest payments and payoff at par upon maturity; that's why it's called "fixed income." The upshot is that all bonds bought at a 6% yield will return 6% when held to maturity if they pay. Bonds that don't pay, on the other hand, will produce losses of varying magnitudes. Thus, oversimplifying, you improve your performance in bonds not through which paying bonds you buy (since all 6% bonds that pay will have the same return), but through what you exclude (that is, whether you're able to avoid the ones that don't pay). Clearly, this is very different from equities, where your upside is theoretically unlimited, requiring that investors intelligently balance downside risk and upside potential.

To be a good equity investor, I think you have to be an optimist; certainly, it's no activity for doomsayers. On the other hand, the term "optimistic bond investor" is practically an oxymoron. Since bonds generally lack potential for long-term returns in excess of their promised yields, bond investing mostly requires skepticism and attention to the downside. One of the reasons I did well in fixed income is that it played to my natural conservatism. And since tech companies issue relatively few bonds, it also accommodated my lack of focus on technology, which has never been of particular interest to me and has always felt a bit "over my head." I'm certainly not an "early adopter," nor do I have a history of recognizing emerging technological trends in their infancy.

Lastly, as a child of parents who were born in the early 1900s and thus were adults during the Great Depression, my thought process was shaped by the deprivation and fear they had experienced. Because they had been made so painfully aware of the value of a dollar and how quickly things could change for the worse, they considered the future and the possibility of loss things to worry about. Adages like "don't put all your eggs in one basket" and "save for a rainy day" were watchwords I grew up with. This is very different from the experience of those whose parents were born a decade or two later than mine, never lived with deprivation, and may never have heard those words. These influences and experiences led me to adopt a value approach and the persona of a "bargain hunter," which has served me well in my chosen field, which now has come to be called "credit."

Andrew has a considerably different mindset. Clearly, his early experience was very different from mine, not marked by anything like the Depression. He was bitten by the investment bug early, and from a young age investing dominated our conversations. While he deeply appreciates some elements of my philosophy – such as the importance of understanding investor psychology, focusing on fundamentals, and contrarianism – he has forged his own path and ended up in a very different place. His first phase was spent as a "Buffett nerd," consuming everything written by the Oracle and adhering strongly to his philosophy. But over time, he has developed his own perspective and transitioned to investing primarily in technology and other growth-oriented companies. He spends the vast majority of his time managing a venture firm called TQ Ventures with his two partners, but he also steers our family's "upside-oriented investments" with great results. (I, fittingly, handle our more conservative investments).

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This contrast of viewpoints, particularly in 2020, has created extraordinary opportunities for discussion and learning. **From this point on, most of what I write will consist of what Andrew has caused me to appreciate in my 75th year.**

The False Dichotomy of Value and Growth

At some point, the camps of value and growth developed nearly the same fervent adherence as rival political factions. You pledged allegiance to one or the other, and so went your future investing actions. You believed your way was the only way and looked down on practitioners of the other. I think investors – perhaps based on their emotional makeup, intellectual orientation and understanding of things like technological innovation – naturally gravitated toward one side of the stylistic divide or the other. And there are notable differences:

- Value stocks, anchored by today's cash flows and asset values, should *theoretically* be "safer" and more protected, albeit less likely to earn the great returns delivered by companies that aspire to rapidly grow sales and earnings into the distant future.
- Growth investing often entails belief in unproven business models that can suffer serious setbacks from time to time, requiring investors to have deep conviction so as to be able to hang on.
- When they're rising, growth stocks typically incorporate a level of optimism that can evaporate during corrections, testing even the most steeled investor. And because growth stocks depend for most of their value on cash flows in the distant future that are heavily discounted in a DCF analysis, a given change in interest rates can have meaningfully greater impact on their valuations than it will on companies whose value comes mainly from near-term cash flows.

Despite these points, I don't believe the famous value investors who so influenced the field intended for there to be such a sharp delineation between value investing, with its focus on the present day, low price and predictability, and growth investing, with its emphasis on rapidly growing companies, even when selling at high valuations. Nor is the distinction essential, natural or helpful, especially in the complex world in which we find ourselves today. Both Graham and Buffett achieved success across a variety of styles and, more importantly, viewed value investing as consisting of adherence to fundamental business analysis, divorced from the study of market price action. As Buffett put it, "We don't consider ourselves to be value investors. . . . Discounted cash proceeds is the appropriate way to value any business. . . . There is no such thing in our minds as value and growth investing." It just so happened that considerable opportunity existed for them in the cigar butt arena at the time they operated – especially considering that both started with relatively small amounts of money with which to invest – so that's what they emphasized. But as the world evolved, the landscape of opportunities has changed significantly.

There's a saying that "to the man with a hammer, everything looks like a nail." The widely discussed distinction between value and growth made some people believe they only had hammers, when in fact they potentially had access to a whole toolbox. **Now we live in a complex world where a range of tools is required for success.**

A More Efficient World

As mentioned earlier, the investment world back when Buffett and Graham were first practicing their version of value investing was considerably different from the current one. First, the level of competition

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was much lower, almost unrecognizable when compared to today. Investment management wasn't a hot field in which many people aspired to spend their careers. It was instead a cottage industry, with a small number of outfits practicing quite traditional activities. Second, information was extremely hard to come by and process. There were no computers, spreadsheets or databases. Before researching a stock, you first had to find it in either the back of the newspaper (if it was a mainstream issue) or large books put together by firms like Moody's and Value Line (if it was more thinly traded). Then you had to either send a request to the company for the annual report or go to the library hoping to find a copy of the report or a broader publication that included the company's financial statements. And third, with the industry so small, nascent and unpopular, the investment thought process wasn't something broadly developed or disseminated. The key analytical frameworks were not yet codified, and folks like Graham and Buffett had a huge edge simply because they knew how to process the data they found. In short, there were few people searching; the search process was quite difficult; and few people knew how to turn the data they did find into profitable investment conclusions. In this environment, bargains could literally be hiding in plain sight for anyone with the willingness to look and the capacity to analyze.

When Buffett was applying his cigar butt approach to running his early investment partnership – which racked up a tremendous record – he famously used to sit in his back room in Omaha, flipping through the thousands of pages of *Moody's Manual*, and he would buy shares in small companies that were trading at enormous discounts from liquidation value for the simple reason that no one else paid attention to them. In one case, that of National American Fire Insurance, Buffett was able to buy the stock at 1x earnings by driving around to farmers who had decades earlier been stuffed by promoters with stock they'd since forgotten about, and handing them cash on their front porch. Thus, the Grahamian value framework was created at a time when things could be stupidly cheap based on clearly observable facts, simply because the search process was very difficult and opaque.

As time went on, the diligent analyst's information advantage began to slowly dissipate, but it still existed for a good while. Prior to the broad adoption of the Internet and the explosion of the investment industry in the early years of this century, information and analytical methods were still hard to come by. One still had to mail away for annual reports as recently as the 1990s, and while more people may have known how to find pure balance sheet arbitrages like Graham practiced in the 1950s and '60s, seemingly basic analytical concepts like return on invested capital, competitive moats and the importance of free cash flow (rather than GAAP earnings) were not widely appreciated. And certainly, most people didn't understand the dynamics around what are called "special situations," which become available when complex corporate actions create investment opportunities by giving rise to significant mispricings. There was still the opportunity to find bargains in plain sight, albeit perhaps with an extra level of sophistication required.

Fast forward to today, and everything has changed. The investment industry is wildly competitive, with tens of thousands of funds managing trillions of dollars. Investment management is one of the most desirable careers, prompting complaints about "brain drain" as intellectual prodigies eschew careers as world-changing scientists or inventors in exchange for jobs on Wall Street. Warren Buffett has evolved from a man buying cheap stocks in his home office to an international celebrity, with 50,000 investors from around the world making the pilgrimage to Omaha each year for the Berkshire Hathaway annual meeting. Information is incredibly ubiquitous, with seemingly endless amounts of data – not to mention books, articles, blogs and podcasts about investment methodologies and specific stock research – available on your mobile phone in seconds. And, not only is information broadly available and easily accessed, but billions of dollars are spent annually on specialized data and computer systems designed to suss out and act on any discernable dislocation in the marketplace. All this is largely motivated by the fact that many of the greatest fortunes made in the last forty years belong to people in the investment

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profession. In contrast, when I entered the business in the late 1960s, few investors were "household names," investment industry incomes were in line with those in other professions, and only a handful of investors had a "carried interest" in their clients' profits.

In the past, bargains could be available for the picking, based on readily observable data and basic analysis. Today it seems foolish to think that such things could be found with any level of frequency. If something about a company can be easily read in an annual report, or readily discovered by a mathematically competent analyst or a computer, it stands to reason that, in most cases, this should already be appreciated by the marketplace and thus incorporated in the prices of the company's securities. That's the essence of the Efficient Market Hypothesis. Thus, in the world we live in today, investing on the basis of rote formulas and readily available fundamental, quantitative metrics should not be particularly profitable. (This is not necessarily true during market downturns and panics, when selling pressure can cause prices to decouple from fundamentals.) **It also stands to reason that in a time when readily discernable quantitative data is unlikely to produce high-profit opportunities:**

- **if something carries a low valuation, there's probably a good reason, and**
- **successful investing has to be more about superior judgments concerning (a) qualitative, non-computable factors and (b) how things are likely to unfold in the future.**

<u>Not Your Grandfather's Market</u>

Not only are the traditional staples of classic value investing (readily discernable quantitative measures of cheapness in the here-and-now) no longer likely to produce a sustainable edge on their own, but the world has gotten more complex, with many more dynamics that can drive a decoupling of near-term metrics from valuation, both to the positive and negative.

Back in the old days, Warren Buffett could find businesses that clearly were likely to remain dominant for long periods of time and perform relatively straightforward analysis to assess their valuation. For instance, he could look at something like the Washington Post, which essentially became the monopoly newspaper in a major city, and invest on the basis of reasonable, consistent assumptions regarding a few variables like circulation, subscription prices and ad rates. It was a foregone conclusion that the paper would remain dominant because of its strong moat, and thus that the past would look very much like the future. In contrast today:

- Because markets are global in nature, and the Internet and software have vastly increased their ultimate profit potential, technology firms or technologically aided businesses can grow to be much more valuable than we previously could have imagined.
- Innovation and technical adoption are happening at a much more rapid pace than ever before.
- It has never been easier to start a company, and there has never been more capital available to fund entrepreneurship.
- There have also never been as many highly capable people focused on starting and building companies.
- Since many of these companies are selling products primarily made with code, their costs and capital requirements are extremely low and their profitability – especially on incremental sales – is unusually high. Thus, the economics of winners have never been more attractive, with very high profit margins and minimal capital requirements.

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- Because the friction and marginal cost of scaling over the Internet can be so low, businesses can grow much more rapidly than ever before.
- It has never been more acceptable for public companies to lose money in the pursuit of a large prize down the road. This in turn leads to obfuscation of the real potential economics of winners and makes differentiating between winners and losers difficult without great, insightful effort to peel back the onion.
- As developing and scaling new products is much easier in the digital world (often requiring little more than engineers and code), it's never been more possible for companies to develop completely new avenues of growth, further extending their runways (Amazon's AWS and Square's Cash App are two notable examples). This gives real value to intangibles such as exceptional management, engineering talent and strategic positioning with customers.
- The moats protecting today's winners have never been stronger, and as Brian Arthur pointed out in "Increasing Returns and the New World of Business," his amazing piece of almost 25 years ago, the winners often get stronger and more effective as they get bigger, rather than bloated and inefficient.
- Conversely, the onslaught of startups with readily available capital and minimal barriers to scaling means that the durability of legacy businesses has never been more vulnerable or uncertain.
- At the same time, however, it's important to recognize that the leading tech firms face threats from trustbusters who believe these companies have developed excessive market power.

To summarize, businesses are both more vulnerable and more dominant in today's world, with much greater opportunities for dramatic changes in fortune, both positive and negative. On the positive side, successful businesses have much more potential for long runways of high growth, superior economics, and significant durability, creating a huge pot of gold at the end of the rainbow and seemingly justifying valuations for the potentially deserving that are off-puttingly high by historical standards. On the negative side, it also creates immense temptation for investors to overvalue undeserving companies. And companies with here-and-now cash flows and seeming stability can see those evaporate as soon as a bunch of Stanford computer science students get funding and traction for their new idea.

When I consider this new world, I think fundamental investors need to be willing to thoroughly examine situations – including those with heavy dependency on intangible assets and growth into the distant future – with the goal of achieving real insight. However, this is, to an extent, antithetical to the value investor's mentality. Part of what makes up the value investor's mindset is insistence on observable value in the here-and-now and an aversion to things that seem ephemeral or uncertain. **Many of the great bonanzas for value investors have come in periods of panic following the bursting of bubbles, and this fact has probably led value investors to be very skeptical of market exuberance, especially when concerning companies whose assets are intangible.** Skepticism is important for any investor; it's always essential to challenge assumptions, avoid herd mentality and think independently. Skepticism keeps investors safe and helps them avoid things that are "too good to be true."

But I also think skepticism can lead to knee-jerk dismissiveness. While it's important not to lose your skepticism, it's also very important in this new world to be curious, look deeply into things and seek to truly understand them from the bottom up, rather than dismissing them out of hand. I worry that value investing can lead to the rote application of formulas and that, in times of great change, applying formulas that are based on past experience and models of the prior world can lead to massive error. John Templeton warned about the risk that's created when people say, "it's different this time," but he also

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allowed that 20 percent of the time they're right. Given the rising impact of technology in the 21st century, I'd bet that percentage is a lot higher today.

It's also worth noting with regard to truly dominant companies that are able to achieve rapid, durable and highly profitable growth that it is very, very hard to overprice them based on near-term multiples. The basic equations of finance were not built to handle high-double-digit growth as far as the eye can see, making the valuation of rapid growers a complicated matter. As John Malone famously said, if your long-term growth rate exceeds your cost of capital, your present value is infinite. **However, this is only true for truly special companies, which are few and far between and certainly not as ubiquitous as is generally implied by the market in times of ebullience.** It's important to note, that when markets are at extreme levels of optimism, as we saw in both the Nifty Fifty and Dot Com bubbles, (a) every company in the affected field is treated as a long-term winner, (b) if bought in times of significant optimism and extreme valuations for growth, the stocks of even the greatest companies are likely to produce outcomes that are mediocre at best, and (c) in the crashes that follow most bubbles, enormous interim markdowns can befall good companies as well as bad, requiring sharp analysis to differentiate between them, and high conviction and an iron stomach to hold on.

I want to make very clear that I do not intend this to imply an opinion about growth stocks' valuations today. I've heard a variety of views, and while I have my own, I don't want to make it the subject of this memo. In the spirit of seeking to understand this new world, market commentators (including me) would be well served to understand the fundamentals underpinning the small number of companies that currently drive a huge percentage of the market, instead of basing top-down conclusions on purely historical valuation comparisons. And it seems imprudent to opine on the level of the overall market without being fully informed regarding the tech companies that now account for so much of equity indices like the S&P 500. As Andrew repeatedly reminds me, it's hard to make a convincing case that today's market is too high if you can't explain why its tech leaders are overvalued.

But by far the most important intention of this memo is to explore the mindset that I think will prove most successful for value investors over the coming decades, regardless of what the market does in the years just ahead. It's important to note that (a) the potential range of outcomes for many of today's companies is very wide and (b) there are considerations with enormous implications for the ultimate value of many companies that do not show up in readily available quantitative metrics. They include superior technology, competitive advantage, latent earning power, the value of human capital as opposed to capital equipment, and the potential option value of future growth opportunities. In other words, determining the appropriateness of the market price of companies today requires deep micro-understanding, and that makes it virtually impossible to opine on the valuation of a rapidly growing company from 30,000 feet or by applying traditional value parameters to superficial projections. **Some of today's lofty valuations are probably more than justified by future prospects, while others are laughable – just as certain companies that carry low valuations can be facing imminent demise, while others are just momentarily impaired.** The key, as always, is to understand how today's market price relates to the company's broadly defined intrinsic value, including its prospects.

The Heart of the Problem

Consider two companies. Company A is a respected long-term competitor selling a widely consumed, fairly prosaic product. It has built a decades-long record that shows modest but steady sales growth and healthy profit margins. It manufactures its product using heavy machinery located on its own premises. Its stock sells at a modest multiple of earnings per share.

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Company B, on the other hand, was formed a few years ago with the goal of disrupting a legacy industry. It has a brief but impressive record of sales growth, albeit at modest absolute dollar levels and with limited profitability. It plans to accelerate its sales growth and build market share over the next several years, overtake its more traditional prey, and then expand its profit margins by tapering spending on R&D and customer acquisition, raising prices, and scaling into its largely fixed cost structure. Its products are constantly evolving and innovating, and they emerge not from factories, but rather the minds of engineers doing coding. It has no current earnings, but because of its potential, sells at a lofty multiple of sales.

Value investors are likely to consider it easy to predict and value Company A, with its time-tested product, stable revenues, well-established profit margins and valuable production facilities. The process requires only a few simple assumptions: that something that has been successful will remain so; that next year's sales will be equal to this year sales plus some modest growth; and that the profit margin will remain where it has been for years. **It seems intuitively obvious that chugging along as in the past is more predictable and reliable than rapid and durable growth, and thus that industrial stalwarts are more capable than innovators of being valued with precision.**

Company B, on the other hand, is at an early stage in its development, its profit margins are far from maximized, and its greatest assets go home every night rather than residing on the balance sheet. Valuing it requires guesses about the ultimate success of its products; its ability to come up with new ones; the response from competitors and the targeted industry; its growth runway; and the extent to which it will be able to increase profitability once doing so becomes its focus. Company B seems more conceptual in nature and more dependent on developments in the distant future that are subject to significant uncertainty, so valuing it might have to be done on the basis of broad ranges for future sales and profitability rather than reliable point estimates. Assessing its value also requires conversance with a technologically complex field. For all these reasons, value investors are likely to consider Company B hard to value, "speculative" and thus not investable under the canon.

Certainly, the range of potential outcomes – both good and bad – appears greater with respect to Company B than Company A, and thus Company B seems less predictable. But Company A's track record may suggest stability that could ultimately prove fleeting. And even if one can't exactly predict the future of Company B, British philosopher and logician Carveth Read reminds us that we'd rather be vaguely right than exactly wrong. The ability to formulate precise forecasts does not necessarily make something a better or even a safer investment.

- **First, the apparent ease of predicting traditional Company A's future can be quite deceptive** – for example, considerable uncertainty can exist regarding its risk of being disrupted by technology or seeing its products innovated out of existence. On the other hand, while Company B is more nascent, its products' strength and traction in the marketplace may make success highly likely.
- **Second, as noted earlier, if conclusions regarding Company A's potential can easily be reached by a finance student with a laptop, how valuable can such conclusions be?** Shouldn't a deep understanding of a company's qualitative dynamics and future potential be a greater source of advantage in making correct forecasts than data which is readily available to all?

Value investing is thought of as trying to put a precise value on the low-priced securities of possibly mundane companies and buying if their price is lower. And growth investing is thought of as buying on the basis of blue-sky estimates regarding the potential of highly promising companies and paying high valuations as the price of their potential. **Rather than being defined as one side of this artificial**

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dichotomy, value investing should instead consist of buying whatever represents a better value proposition, taking all factors into account.

Dealing with Winners

A couple of times this past year, I've committed the sin of asking Andrew how he felt about selling part of some highly appreciated holdings and "taking some money off the table." The results haven't been pretty; he has made plain my error, as described below.

Much of value investing is based on the assumption of "reversion to the mean." In other words, "what goes up must come down" (and what comes down must go up). Value investors often look for bargains among the things that have come down. Their goal, of course, is to buy underpriced assets and capture the discounts. But then, by definition, their potential gain is largely limited to the amount of the discount. Once they've benefitted from the closing of the valuation gap, "the juice is out of the orange," so they should sell and move on to the next situation.

In Graham's day, cigar butts could be found in good supply, valued precisely, bought very cheaply with confidence, and then sold once the price had risen to converge with the value. But Andrew argues that this isn't the right way to think about today's truly world-class companies, with their vast but unquantifiable long-term potential. Rather, if an investor has studied a company, reached a deep understanding of it and concluded that it possesses great potential for growth and profitability, he'll probably recognize that it's impossible to accurately quantify that potential and know when it has been realized. He also may realize that ultimate potential is a moving target, as the company's strengths may allow it to develop additional avenues of growth. **Thus he might have to accept that the correct approach is to (a) hope he has the direction and quantum approximately right, (b) buy and (c) hold on as long as the evidence suggests the thesis is right and the trend is upward – in other words, as long as there's still juice in the orange.**

My 2015 memo *Liquidity* included some observations from Andrew regarding point "c":

> When you find an investment with the potential to compound over a long period of time, one of the hardest things is to be patient and maintain your position as long as doing so is warranted on the basis of the prospective return and risk. Investors can easily be moved to sell by news, emotion, the fact that they've made a lot of money to date, or the excitement of a new, seemingly more promising idea. **When you look at the chart for something that's gone up and to the right for 20 years, think about all the times a holder would have had to convince himself not to sell.**

He hasn't changed his tune one bit over the last five years. **Andrew insists that when you're talking about today's great growth companies, the approach of "buy in cheap, set a target price, sell as it rises, and exit fully when it reaches the target" is dead wrong.** A dispassionate look at history makes clear that taking profits in a rapidly growing company with durable competitive advantages has often been a mistake. Given the properties of today's leading companies, it can be even more wrong now. **Instead, as he says, you have to talk yourself out of selling.**

I think winners are sold for four primary reasons: (a) the investor concludes that the investment has accomplished everything it's capable of, (b) she thinks it has appreciated to the point that its

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prospective return is only modestly attractive, (c) she realizes something in her investment thesis was incorrect or has changed for the worse or (d) she fears that the gains to date might be proved unwarranted and thus evaporate; in particular, she's afraid she'll end up kicking herself for not having taken profits while they were there. But fear of making a mistake is a terrible reason to sell something of value.

Here's how Andrew puts it today:

> It's important to understand the paramount importance of compounding, and how rare and special long-term compounders are. This is antithetical to the "it's up, so sell" mentality but, in my opinion, critical to long-term investment success. As Charlie Munger says, "the first rule of compounding is to never interrupt it unnecessarily."
>
> In other words, if you have a compounding machine with the potential to do so for decades, you basically shouldn't think about selling it (unless, of course, your thesis becomes less probable). Compounding at high rates over an investment career is very hard, but doing it by finding something that doubles, then moving on to another thing that doubles, and so on and so on is, in my opinion, nearly impossible. It requires that you develop correct insights about a large number of investment situations over a long period of time. It also requires that you execute well on both the buy and the sell each time. When you multiply together the probabilities of succeeding at a large number of challenging tasks, the probability of doing them all correctly becomes very low. It's much more feasible to have great insights about a small number of potentially huge winners, recognize how truly rare such insights and winners are, and not counteract them up by selling prematurely.

As I was working on this memo, I came across a very helpful article from the Santa Fe Institute:

> When it comes to investing and businesses, the mental models in our head help us answer the question, '*what does the future hold?*'. . . [But] applying the mental model of '*mean reversion*' for a '*fade-defying*' business model will lead to an erroneous conclusion. (*Investment Master Class*, December 21, 2020)

The last sentence struck a very responsive chord in me. **It suggested to me that my background had biased me toward assuming "mean reversion" and thus sometimes caused me not to fully grasp the potential of "fade-defying business models."** This bias caused me to conclude that one should "scale out" of things as they rose and "take some money off the table." I even formulated a saying on the subject: "If you sell half, you can't be all wrong." But I now see that this high-sounding verbiage can lead to premature selling, and that cutting back a holding with great potential can be a life-altering mistake. Note that, according to Charlie Munger, he's made almost all his money from three or four big winners. What if he had scaled out early?

Fortunately, (a) Oaktree's business consists mostly of garnering valuation discrepancies; (b) because of their nature, our asset classes offer up relatively few opportunities to err by prematurely selling off potential mega-multiple winners; (c) Oaktree's decentralized structure insulates our portfolio managers from the extremes of my caution; and (d) my colleagues do a better job of letting their winners run than I might have. We might have done more if I didn't have my limitations. Maybe I could have remained in equities, or even become a venture capitalist and seeded Amazon. But I can't complain – things couldn't have turned out better.

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The Value Mentality in Action

Back in 2017, my memo *There They Go Again . . . Again* included a section on cryptocurrencies in which I expressed a high level of skepticism. This view has been a source of much discussion for me and Andrew, who is quite positive on Bitcoin and several others and thankfully owns a meaningful amount for our family. While the story is far from fully written, the least I can say is that my skeptical view has not borne out to date. This brings up what Andrew considers a very important point about the value investor's mentality and what is required for success as an investor in today's world.

As I said before, the natural state for the value investor is one of skepticism. Our default reaction is to be deeply dubious when we hear "this time it's different," and we point to a history of speculative manias and financial innovations that left behind significant carnage. It's this skepticism that reduces the value investor's probability of losing money.

However, in a world where so much innovation is happening at such a rapid pace, this mindset should be paired with a deep curiosity, openness to new ideas, and willingness to learn before forming a view. The nature of innovation generally is such that, in the beginning, only a few believe in something that seems absurd when compared to the deeply entrenched status quo. When innovations work, it's only later that what first seemed crazy becomes consensus. **Without attaining real knowledge of what's going on and attempting to fully understand the positive case, it's impossible to have a sufficiently informed view to warrant the dismissiveness that many of us exhibit in the face of innovation.**

In the case of cryptocurrencies, I probably allowed my pattern recognition around financial innovation and speculative market behavior – along with my natural conservatism – to produce my skeptical position. These things have kept Oaktree and me out of trouble many times, but they probably don't help me think through innovation. Thus, I've concluded (with Andrew's help) that I'm not yet informed enough to form a firm view on cryptocurrencies. In the spirit of open-mindedness, I'm striving to learn. Until I do, I'll be referring all requests for comments on the subject to Andrew (although I'm sure he'll decline).

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Back to the Original Question

I'll move toward ending this memo by turning to the question I mentioned at the outset: Is the recent underperformance of value investing a temporary phenomenon? Will value stocks ever again have their day in the sun?

First, I think the stocks of the tech leaders are clearly being aided by a virtuous circle created by the combination of their preeminence as companies, their recent eye-popping performance, their huge market capitalizations, and the strategic considerations of the fund business. The companies' preeminence and price momentum make them essential cornerstone holdings in many ETFs, and their enormous scale places them among the largest holdings. They also dominate equity indices such as the S&P 500. Those two things mean that as long as money flows disproportionately into ETFs and index funds and the four factors enumerated above don't change, the leading tech stocks will continue to attract more than their fair share of capital and perform better than stocks not as well represented in the indices and ETFs.

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However, this is one of those trends that will continue until it stops. To the extent investors' expectations for these companies' rapid growth are realized, they can continue to be great performers. But at some point, if they keep appreciating faster than the rest of the stock market, there should come a time when even their superior growth rates are fully reflected in their stock prices and their performance should subside: their stock prices may grow "only" in line with their earnings or even slower. And other stocks may come into favor and perhaps outperform. But importantly, there's no reason why this has to happen anytime soon.

There are many similarities between today and past periods of optimism. There's immense excitement about investing in high-growth stocks, fueling continued rapid appreciation. There's very easy monetary policy, which adds fuel to the fire in any bull market. There are pockets of extreme behavior, with 30-40x sales multiples not uncommon for software businesses, and with high-priced IPOs doubling on their first trading day. But there are real differences as well. We've rarely had businesses as dominant as the tech leaders, with the growth runways they have and the profit margins and capital efficiency they enjoy making them more dominant with each passing day. We've never seen businesses with the ability to scale as rapidly and frictionlessly. We've never had such a catalyst for technology adoption as we've had in the coronavirus pandemic. We've had a boom of new public companies coming to market, both through IPOs and SPACs, reversing the long trend of a shrinkage in the number of public companies. We've never had interest rates as low as they are and as likely to stay low for as long as has been telegraphed. The Internet has permeated the world and changed it, and business models have evolved in a way that makes today's situation incomparable to the Nifty Fifty or the Dot Com Bubble of the late '90s (for example, in 1998 there were 150 million Internet users globally; today there are more than that in Indonesia alone).

I believe most types of investment are likely to go through periods of both outperformance and underperformance. There are reasons to believe (with ample counterarguments) that as the tide turns on monetary policy (if it ever does), rising interest rates will disproportionately hurt growth stocks, just as they've been disproportionately helped during this period of easy money. More importantly, it has long been true that when something works, people follow the herd, chase the gains, and bid it up to the point where prospective returns are paltry, thus positioning investments that have been out of favor to become the new outperformers. **But, as I said earlier, broad observations about historic valuations are not a sufficient foundation for market opinions today.** I also believe, as outlined earlier, that certain types of value opportunities have largely evaporated and, save for times of market panic when things become dislocated, are unlikely to deliver the returns they did in the past.

In short, there are arguments for a resurgence in value investing and arguments for its permanent impairment. But, I think this debate gives rise to a false and unhelpful narrative. The value investor of today should dig in with an open mind and a desire to deeply understand things, knowing that in the world we live in, there's likely more to the story than what appears on the Bloomberg screen. **The search for value in low-priced securities that are worth much more should be just one of many important tools in a toolbox, not a hammer constantly in search of a nail. It doesn't make sense for value investors to bar investments simply because (a) they involve high-tech companies that are widely considered to have unusually bright futures, (b) their futures are distant and hard to quantify, and (c) their potential causes their securities to be assigned valuations that are high relative to the historic averages. The goal at the end of the day should be to figure out what all kinds of things are worth and buy them when they're available for a lot less.**

* * *

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To end, I'll pull together what I consider the key conclusions:

- Value investing doesn't have to be about low valuation metrics. Value can be found in many forms. The fact that a company grows rapidly, relies on intangibles such as technology for its success and/or has a high p/e ratio shouldn't mean it can't be invested in on the basis of intrinsic value.
- Many sources of potential value can't be reduced to a number. As Albert Einstein purportedly said, "Not everything that counts can be counted, and not everything that can be counted counts." The fact that something can't be predicted with precision doesn't mean it isn't real.
- Since quantitative information regarding the present is so readily available, success in the highly competitive field of investing is more likely to be the result of superior judgments about qualitative factors and future events.
- The fact that a company is expected to grow rapidly doesn't mean it's unpredictable, and the fact that another has a history of steady growth doesn't mean it can't run into trouble.
- The fact that a security carries high valuation metrics doesn't mean it's overpriced, and the fact that another has low valuation metrics doesn't mean it's a bargain.
- Not all companies that are expected to grow rapidly will do so. But it's very hard to fully appreciate and fully value the ones that will.
- If you find a company with the proverbial license to print money, don't start selling its shares simply because they've shown some appreciation. You won't find many such winners in your lifetime, and you should get the most out of those you do find.

I once asked a well-known value investor how he could hold the stocks of fast-growing companies like Amazon – not today, when they're acknowledged winners, but rather two decades ago. His answer was simple: "They looked like value to me." **I guess the answer is "value is where you find it."**

My conversations with Andrew over the ten months of the pandemic have represented a "voyage of discovery" and culminated in this memo. I think we came to some important realizations regarding the question of value versus growth investing, and in the process, I learned a lot about myself.

I don't mean to suggest that anything I've written here pertains to all value or all growth investors. There's a lot of generalizing, and we know how imperfect generalizations can be. I also don't insist that it's correct. It's just the current state of my thinking. Not only do I not insist that my version is the only one possible, but I expect it to evolve further as the world changes and I continue to learn. I hope you'll find this memo interesting and helpful, and I wish you all the best in 2021.

January 11, 2021

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Appendix: Dealing with Winners in Practice

The conclusions described above regarding how to deal with winners shouldn't be taken to mean it was easy for Andrew and me to reach agreement on this subject. The discussion here was our most spirited, and we returned to it many times. Our talks usually went something like this:

Howard: Hey, I see XYZ is up xx% this year and selling at a p/e ratio of xx. Are you tempted to take some profits?

Andrew: Dad, I've told you I'm not a seller. Why would I sell?

H: Well, you might sell some here because (a) you're up so much, (b) you want to put some of the gain "in the books" to make sure you don't give it all back and (c) at that valuation, it might be overvalued and precarious. And, of course, (d) no one ever went broke taking a profit.

A: Yeah, but on the other hand, (a) I'm a long-term investor, and I don't think of shares as pieces of paper to trade, but as part ownership in a business, (b) the company still has enormous potential, and (c) I can live with a short-term downward fluctuation, the threat of which is part of what creates opportunities in stocks to begin with. Ultimately, it's only the long term that matters. (There's a lot of a-b-c in our house. I wonder where Andrew got that.)

H: But if it's potentially overvalued in the short term, shouldn't you trim your holding and pocket some of the gain? Then if it goes down, (a) you've limited your regret and (b) you can buy in lower.

A: If I owned a stake in a private company with enormous potential, strong momentum and great management, I would never sell part of it just because someone offered me a full price. Great compounders are extremely hard to find, so it's usually a mistake to let them go. Also, I think it's much more straightforward to predict the long-term outcome for a company than short-term price movements, and it doesn't make sense to trade off a decision in an area of high conviction for one about which you're limited to low conviction.

H: Well for one thing, the p/e ratio is awfully high.

A: The p/e ratio is just a very quick heuristic that doesn't necessarily tell you much about the company. You can't say a stock is overvalued just because its p/e ratio is high relative to historic average p/e's for the market. All that matters is thinking about how much cash flow the company can produce over a long period of time, discounting that at a reasonable discount rate, and comparing the resultant present value against the current price. There are lots of things – about both the company's present condition and its future potential – that don't get picked up in a p/e ratio, so a high multiple alone shouldn't scare you off.

H: Aha! That's just what they said during the Nifty Fifty bubble around the time I started working. "No price too high," was a widespread mantra. Coca-Cola reached 46x earnings at the height of the bubble in mid-1972 – 2.4x the p/e on the S&P 500. From there it fell 65% over the next year and a half.

A: First, saying a high p/e alone shouldn't stop you from owning something doesn't mean there's no price too high. It simply means that no single metric can hold the key to investment decisions, and the price of something should be weighed against its fundamental potential. Coke may have been overvalued in 1972 at its p/e of 46. In particular, since it dealt in a physical product and required incremental capital to grow,

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it didn't have potential for exponential growth. But note that Coke holders did earn a compound return of 16% percent a year for 26 years even if they bought at the 1972 pre-crash high. So, even without the growth prospects of today's best businesses, companies that can compound earnings at high rates can merit very high p/e ratios.

H: Aren't you concerned that if the leading stocks of today go out of style, you could see XYZ down a third or more?

A: Stocks can go in and out of style, causing their prices to fluctuate wildly. And when a group is in vogue, it may be more likely to experience a reversal. But, at the end of the day, all I care about is this specific company and its long-term potential which, even when using conservative assumptions, I find to be immense relative to its current price. Seeing it fall wouldn't be fun, but I think selling here and missing out on part of that future would be far worse. Some years XYZ may do well, and some years it may do poorly (even perhaps very poorly). But if I'm right, I think it has a great long-term future ahead of it. The only way to be sure we participate in that future is to hold on throughout. And, by the way, if you don't sell, you get to compound without paying capital gains taxes until the end.

H: You run a concentrated portfolio. XYZ was a big position when you invested, and it's even bigger today, given the appreciation. Intelligent investors concentrate portfolios and hold on to take advantage of what they know, but they diversify holdings and sell as things rise to limit the potential damage from what they don't know. Hasn't the growth in this position put our portfolio out of whack in that regard?

A: Perhaps that's true, depending on your goals. But trimming would mean selling something I feel immense comfort with based on my bottoms-up assessment and moving into something I feel less good about or know less well (or cash). To me, it's far better to own a small number of things about which I feel strongly. I'll only have a few good insights over my lifetime, so I have to maximize the few I have.

H: Isn't there any point where you'd begin to sell?

A: In theory there is, but it largely depends on (a) whether the fundamentals are playing out as I hope and (b) how this opportunity compares to the others that are available, taking into account my high level of comfort with this one.

H: If there's a point at which you'd start to sell, what it is? Isn't setting a target price based on intrinsic value an important part of value investing?

A: This company can't be valued with a single number – and it's not a mature company with a fixed value I'm trying to capture – so I can't tell you where I'd start to sell. There are a lot of moving parts; most importantly, it has very strong management that I believe will continue to leverage the company's strong position in the marketplace to develop new avenues of growth. I can't say what those will be, or how they'll be valued, but I'm confident the team will continue to add value. Amazon is the classic example; it created a completely new business out of nothing, AWS, that today accounts for a large percentage of the company's total market value. Selling should be a function of watching how the future develops relative to your expectations and weighing the opportunity as it stands at any point in time against whatever else is out there.

H: Okay. I'm convinced. I hope you hold on!

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Memo to: Oaktree Clients

From: Howard Marks

Re: Coming into Focus

Roughly two months have passed since my last memo, *Time for Thinking*, and still not much has changed in the economy or the markets. The toll from Covid-19 continues to rise, the economic outlook is largely the same, vaccines remain some time off, and the S&P 500 is back where it was in early August. So I'll repeat what I said then: it's mainly been time for thinking. Fortunately, the more I've thought about the issues, the more things have come into focus for me. Thus, I'm going to use this memo to go into greater detail on a few topics.

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The Prerequisite

In *Time for Thinking* I talked about the fact that I don't consider this year's developments to be cyclical. You could say, "Why not? The economy and the markets went down, and now they're recovering. Isn't that a cycle?" What I really mean is that this is very different from a normal cycle, and I've figured out a way to better explain that, borrowing a bit of what I said in my 2018 book, *Mastering the Market Cycle*.

Most of the up-cycles I've witnessed occurred because things were going well in the economy, causing psychology and decision-making to become increasingly optimistic and eventually euphoric. Corporations favored expansion, stock prices rose and financial innovation became possible, even encouraged. Eventually, productive capacity exceeded what was needed, stock prices exceeded underlying value, and shaky investment innovations were embraced. When these trends outstripped the fundamentals and became unsustainable, the result was a downturn. Often a recession triggered a market correction, and sometimes the impact of that recession was reinforced by negative exogenous events that further darkened the previously-blue skies.

A good example is the first non-investment grade debt crisis Bruce Karsh and I managed through, in 1990-91. There was a recession, exacerbated by the shock of going to war to help Kuwait repel an invasion by Iraq. The newly developed high yield bond market experienced its first major spate of defaults, the result of a recession and credit crunch and exacerbated by the prosecution of Michael Milken and the failure of Drexel Burnham, precluding remedial bond exchanges that otherwise might have helped companies stay alive. Stocks declined, but high yield bonds went into free-fall. Notably, many of the prominent LBOs of the 1980s – which had been financed with perhaps 95% or so of debt – went bankrupt. Investor psychology collapsed and bondholders headed for the exits.

A collapsing economy needs a good dose of stimulus to pull it out of its swoon, and that's what occurred. Usually that's enough. Eventually the economy recovers; consumers resume buying; investors regain their equilibrium – some even sense the bargains that have been made available; and the upswing takes the economy back toward good health . . . and the cyclical process continues.

So, most of the time, downturns stem primarily from economic weakness, and they are repaired with economic tools. But this episode is different. It was caused by an exogenous, non-economic development, the pandemic. The recession – rather than being the cause – was the result: a closure of business induced intentionally in order to minimize inter-personal contact and halt the spread of the disease.

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Thus, this down-cycle cannot be fully cured merely through the application of economic stimulus. Rather, the root cause has to be repaired, and that means the disease has to be brought under control. An effective vaccine will do this – in time – but healthy behavior will be required in the meantime. Spikes like much of Europe is seeing represent something of a step backward in this regard.

And even with the disease controlled, economic stimulus is unlikely to reverse all the damage. The trauma has been deep, and the impact may not be easily shaken off. Large firms will continue to automate and streamline. Large numbers of smaller businesses – such as restaurants, bars and shops – will never re-open. Thus millions of people will not be rehired into the jobs they formerly held. For this reason, the expectations with regard to economic recovery have to be realistic. To me, as I've said, "V-shape" has too positive a connotation.

The Need for Further Assistance

One of the things weighing on the recovery is the matter of help from Washington. Whereas the Treasury was able to announce aggressive spending programs in the spring, there has been no new package here in the fall. Partisan differences have arisen regarding the size of a package and its contents. Further, we're so close to the upcoming election – less than a month away – that neither side wants to give the other anything that might be described as a victory.

But this is not an academic matter. The trillions of dollars paid out thus far were not stimulus payments, but support. They weren't made to get the recipients to spend so much as to keep them and the economy alive. In short, the amounts distributed – to the unemployed, families with incomes below $100,000, companies and institutions – were designed to replace lost income and maintain, rather than stimulate, the economy. Individuals got money so they could buy the necessities of life. Companies got money to replace lost revenues, so they could continue to employ people. These needs have not dried up, even as the disease has ground on and the supplemental unemployment benefits have expired.

As one of my Oaktree colleagues wrote me last week, "I was chatting today with the owner of a small movie theater chain. One wouldn't trade places. All of their theaters in California are closed; the ones out of state are operating with high costs and no patrons; and there is virtually no product to attract audiences. And the lenders and landlords are banging on the door."

Individuals have problems, too. According to *Morning Brew* on September 25:

> With the economy still in the basement, people are straining to pay their mortgages. According to industry analyst Keith Jurow, "several million" people will have gone nine months without making a payment when the Federal Housing Finance Agency's foreclosure and eviction moratorium expires at the end of the year.
>
> 17% of FHA-insured mortgages were delinquent in July, per the Department of Housing and Urban Development. In NYC, 27.2% of mortgages were.

Another pressing need can be found at state and local governments. Their revenues have withered as the take from taxes and fees has declined. But their need to spend is unabated – they're not enjoying any savings in connection with the slower economy – and in fact it has grown. Police, firefighters and EMTs are no less essential, and the need for health care and family services has only increased. And yet, unlike

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the federal government, cities and states can't engage in unlimited deficit spending since they can't print money or issue seemingly unlimited amounts of debt. Like companies and individuals, they need significant aid.

On September 24, *The Wall Street Journal* reported on Fed officials' testimony to Congress:

> The recovery would move along faster "if there is support coming both from Congress and from the Fed," Chairman Jerome Powell said during the second of three days of congressional testimony Wednesday.
>
> Chicago Fed President Charles Evans told reporters that his projection that the unemployment rate would fall below 6% by the end of next year had been premised on around $1 trillion in additional fiscal relief.
>
> "If that doesn't happen, then I think it's going to be a lot harder, and much more unlikely that we make that much progress," he said. . . .
>
> **"The power of fiscal policy is really unequaled by anything else,"** Mr. Powell told lawmakers on a House panel overseeing the U.S. response to the coronavirus. (Emphasis added)

The same day, Dennis DeBusschere of Evercore ISI wrote:

> On monetary policy, the Fed is not out of bullets and still has quasi-fiscal programs like the Main Street Lending Program (MLSP) and the Municipal Liquidity Facility (MLF). But as our friends at Macro Policy Partners pointed out, "Powell all but waved the white flag on those programs in his remarks, which is troubling. The Fed has already adopted a 'set it and forget it' stance on rates and QE, and these tools are not as well-suited to the current economic challenges as MSLP and MLF." **So either there is a fiscal package soon and risk assets move higher, or inflation expectations trend lower, forcing the Fed to use more bullets.** Our hunch is the Fed will be forced to react. (Emphasis added)

The economic recovery everyone's counting on is not an independent event, unaffected by developments. Rather, it is highly dependent on progress against the disease, as described above, but also on the continuation of fiscal expenditures in the interim. Sadly, the outlook for action in this latter regard is not good. Partisan enmity is at a level I've never seen before, especially given the fight over the Supreme Court nomination. With the two houses of Congress in the hands of warring parties, I'd be pleasantly surprised if they can agree on anything before the election.

The bipartisan Problem Solvers Caucus in the House restarted the negotiations a couple of weeks ago by surfacing a proposal that would come out in the middle between the Democrats' target of $3 trillion and the Republicans' willingness to spend $500 million, and compromise on the individual components as well. [Note: I'm a national co-chair of No Labels, the organization that supports the caucus and the goal of bipartisan cooperation.] Let's be hopeful that something can be done to appropriate needed aid even while the election campaign is underway.

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The Power of Interest Rates

One of the biggest financial stories of 2020 is the powerful market rally that began in late March and quickly caused the equity indices to regain the ground they had lost and in some cases reach new highs. **And the more I think about it, the more credit I attribute to the low level of interest rates.**

As you know, the Fed reduced the fed funds rate – the base rate that influences many other interest rates – by a half-percent on March 3, from 1.50-1.75% to 1.00-1.25%, and by an additional percent on March 15, to 0-0.25%. Low rates like those of today exert influence in a broad variety of ways. I touched on a few of them in my last memo, but I'm going to undertake a fuller treatment of the subject here.

First, there's the stimulative effect of low interest rates. This is probably the aspect people think of first when there's a rate cut. In short, everything that entails financing is made more attractive. It becomes cheaper to buy a house because the monthly mortgage payment is smaller. Ditto for cars and boats. Monthly payments on existing adjustable-rate mortgages decline, leaving consumers more disposable income. Corporate interest expense declines as well, reducing the cost of a new factory or production line. A faster-growing economy improves the general mood and makes transactions more likely. And fear of missing out on the low rates gives people a reason to act now, accelerating transactions that might otherwise have taken place in the future.

Second, lower rates increase the discounted present value of future cash flows. In the most theoretical sense, the current value of an asset is the discounted present value of the cash flows it will produce in the future. We discount future cash flows because a dollar to be received in the future isn't worth a dollar today: money invested today should bring back more in the future. If you demand a return of 7%, you'll pay $0.51 today for $1 to be received in ten years.

(Discounted cash flow, or "DCF," is widely used to quantify the potential return from investments. The discount rate that sets the estimated future cash flows equal to the initial investment is the return the investment will produce if the flows materialize as expected. Thus, reversing the sentence just above, if you can put up $0.51 today and get back $1 in ten years, the implied return is 7%.)

The rate at which we discount future cash flows depends on the risks involved in waiting for them. These include the risk of actual loss as well as the loss of purchasing power to inflation. If something's risky, we should demand a high return and thus use a high discount rate. However, the rate we use is also a function of prevailing interest rates and the returns available on other investments (opportunity costs). When those things are low, a low discount rate will be used. And the lower the discount rate, the higher the resulting present value. **Thus low interest rates raise the DCF value of all investments.**

Third, a low risk-free rate brings down demanded returns all along the capital market line. The yield on the 30-day Treasury bill is often referred to as the risk-free rate. There's no credit risk, since the obligor is the government (which can print all the money it needs for repayment), and there's no risk of losing purchasing power to inflation, since repayment at maturity is only days away.

Since the risk-free rate can be earned with complete safety, and most people prefer safety over risk (all else being equal), investors shouldn't take risk without being compensated for doing so. As investments increase in terms of the level of uncertainty, an incremental "risk premium" should be incorporated in their potential returns. Thus the notion of the "capital market line" that slopes upward and to the right, showing the relationship between risk and return, as follows:

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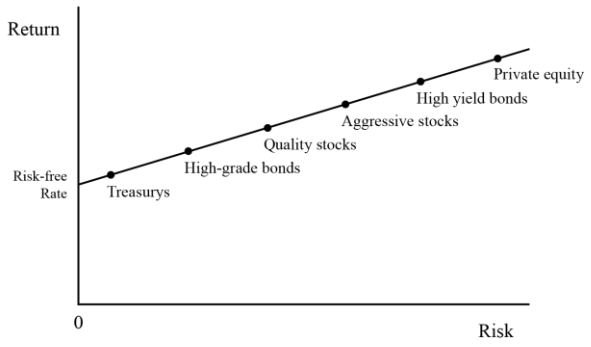

In this graphic, the capital market line shows a coherent relationship between expected return and expected risk. When I studied at the University of Chicago business school, they called this "equilibrium": as perceived risk increases, each asset class appears to offer a higher a priori return, such that the prospective risk-adjusted return on each asset is fair relative to the others. **Nothing else makes sense in a market that's functioning well.**

But in March, the Fed lowered the fed funds rate by 1.5%. Predictably, other interest rates, bond yields and prospective returns generally followed suit, as suggested in the next graphic.

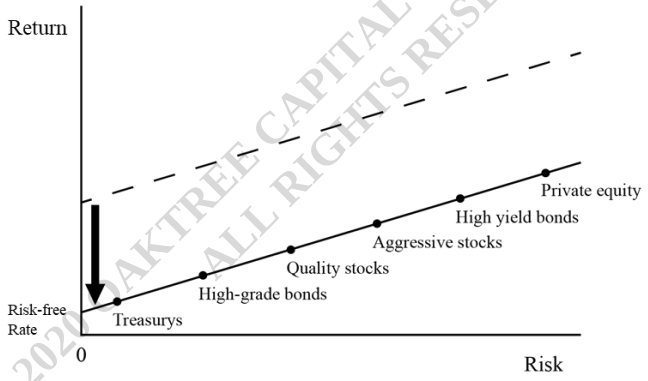

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The risk/return relationships among asset classes are still reasonable, but all prospective returns are much lower in the absolute. **Thus, in general, the lower the point at which the capital market line originates, the lower all returns will be.**

Or to get away from the graphic and say it in words, when I began to manage high yield bonds in late 1978, the fed funds rate and the yield on the ten-year Treasury note both stood around 9%. As a result, high yield bonds had to offer yields above 12% in order to attract capital (and yet few investors were willing to buy them because of the stigma and because they didn't need yields that high to reach their return goals). But today, with the fed funds rate and yield on the ten-year well below 1%, people are flocking to high yield bonds paying 5-6% like it's free money. The point is that the lower the risk-free rate, the lower the prospective return needed to attract capital to other asset classes.

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So the lower the fed funds rate is, the lower bond yields will be, meaning outstanding bonds with higher interest rates will appreciate. And lower yields on bonds means they offer less competition to stocks, so stocks don't have to be cheap to attract buying. They, too, will appreciate. And if high-quality assets become high-priced and thus offer low prospective returns, then low-quality assets will see buying – implying rising prices and falling prospective returns – because they look cheap relative to high-quality assets.

Most decisions in investing are relative decisions. Investors try to find the most attractive opportunity so as to be able to achieve the highest risk-adjusted return. Thus a great deal of the selection process is comparative. "I'm considering buying X. How does its risk/return proposition compare with the one on Y?" That means the lower the return is on Y, the less X has to offer to be the superior investment. And if X is to offer less return, the way it gets that way is through an increase in its price. **Thus, assets and asset classes are inherently interconnected. Money moves from one asset class to the next in search of the best bargains, which get bought up until they're at equilibrium with everything else. Changing the risk-free rate has the potential to reset the returns on everything.**

Fourth, lower demanded returns lead directly to higher valuations. When Treasury notes yield a more normal 3%, investors might demand a return of, say, 6½% (incorporating an "equity premium" of 350 basis points) if they're to invest in the S&P 500 instead of Treasurys. The S&P offers such an "earnings yield" when its earnings represent 6½% of its price, which written as a fraction is 6½/100. The ratio of earnings to price is obviously the inverse of the ratio of price to earnings, or the p/e ratio. An earnings yield of 6½/100 equates to a p/e ratio of 100/6½, or 15.4, which is a rough approximation of the S&P's average p/e ratio since World War II.

Now let's assume a Treasury yield like today's 1%. To offer the same 350 basis point equity risk premium, the earnings yield only has to be 4½%. And an earnings yield of 4½/100 implies a p/e ratio of 22.2. So, in theory, assuming S&P earnings are unchanged, a reduction of the required earnings yield from to 6½% to 4½% calls for an increase in the p/e ratio, and thus in the price, of 44%. This is another way to describe the impact of lower interest rates on asset prices. Lower rates mean higher prices for stocks, just as they do for bonds. (Note: since companies' earnings generally grow while bonds' interest coupons don't, it can be argued that required return on stocks should be even lower, meaning p/e ratios can be even higher.)

Fifth, the Fed also has the ability to lower yields by buying bonds. This is really an extension of the point just above. In addition to lowering the fed funds rate, the Fed can goose the markets by buying Treasury bonds and notes and other types of securities. If the Fed buys securities, that lifts the prices of those securities. When their prices go up, their expected yield to maturity goes down. And when the yield on bonds goes down, other assets can attract capital without offering as much prospective return as they used to, so their prices can rise, too.

Further, when the Fed buys securities, it puts money into the hands of the people who sell them to the Fed, and that money will be spent or loaned (helping the economy) or reinvested (driving up asset prices). In the <u>four months</u> from mid-March to mid-July of this year, the Fed bought mostly Treasury bonds and notes, but also other securities, to the tune of more than $2.3 trillion. That was roughly 20 times what it bought in <u>18 months</u> during the Global Financial Crisis.

Sixth, low interest rates and the resultant low prospective returns encourage risk tolerance and reaching for return. When a lower risk-free rate pulls down the capital market line as shown above, most assets promise less return than they used to. That means people who in the past got the return they

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want or need from an asset with a given level of risk now have to move out the risk curve to riskier assets in order to try for that same return.

Today, many U.S. institutional investors are saddled with target returns (in the case of endowments) or actuarial assumptions for return (for defined-benefit pension funds) in the area of 7%, give or take. Unfortunately, these needed returns have not come down nearly as much as interest rates (and thus prospective investment returns) have fallen. For return targets to decline as much as interest rates, universities and charities would have to be content with receiving reduced support from their endowments, and pension plan sponsors would have to come up with increased funding.

The investments one might have made in the past now promise far less return than they used to. With prospective returns on cash near zero, the ten-year Treasury at 0.7%, high grade bonds yielding 2-3% and stocks expected to return 5-6%, what's an investor needing 7% to do? The usual answer is to take on more risk in pursuit of the higher returns that riskier investments appear to promise.

In this way, low rates make risk aversion a challenging thing to practice and risk taking much more palatable. The alternative is to accept today's lower promised returns. But most people opt for the former, and that means risky asset classes become crowded with eager capital, something that's not beneficial for risk-adjusted returns. Bad things tend to happen when FOMO – the fear of missing out – takes over from risk aversion, or the fear of losing money.

Seventh, the need to put money to work causes the capital markets to reopen. In most financial crises, the "credit window" slams shut because people with capital (a) are nursing losses on the assets they own and (b) are terrified about the future of the environment. Those two factors make them reluctant to provide new financing, and that in turn means capital is unavailable – even to deserving companies and potentially lucrative projects. That, in turn, means risk assets decline in price, causing prospective risk-adjusted returns to rise.

But today, the Fed and Treasury have reassured investors that they will ride to the rescue, that large amounts will be made available to companies and other participants in the economy, and that they can depend on a prompt recovery. This has enabled investors to "look across the valley" to better times. This in turn has enabled low rates to coerce sources of capital to provide generous levels of financing.

Thus, today, credit is liberally available, and bond issuance has equaled or eclipsed many prior records. For example, despite the biggest quarterly decline in GDP in recorded history and the closure of the capital markets for a while, $345.6 billion of U.S. high yield bonds have been issued so far this year, according to S&P. That's more than the record $344.8 billion issued in all of 2012.

In all these ways, a low risk-free rate makes even low investment returns seem attractive. **Thus, today, it seems to me that most assets are offering expected returns that are fair relative to their expected risk, relative to everything else. But the prospective returns on everything are about the lowest they've ever been.**

Changes in the Composition of the Stock Market

In *Time for Thinking*, I also mentioned the increased bifurcation of the U.S. equity market. In short, the leading tech and software companies (a) have become more different from other companies as the role and power of technology have expanded and (b) have become a much larger part of equity indices as such

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companies have grown and become more highly valued, and as indices like the S&P 500 have changed their composition to remain relevant. While I'm no expert, I'm going to cite a few of the arguments regarding the significance and implications of this trend. (Thus I pass on these appealing arguments; I don't endorse them).

First, the attributes and returns on the two groups of stocks have become more differentiated.

- The gap between the growth outlook for FAAMG (Facebook, Apple, Amazon, Microsoft and Google) and similar companies and that for the rest (in the slow-growing 21st century) is huge and expanding.
- The adoption of technology has been pulled forward by the pandemic. Thus virtual meetings, ecommerce and cloud computing are now commonplace, not the exception.
- Current profits severely understate the tech leaders' potential. They currently choose to spend aggressively on new product development to expand share and head off competition, voluntarily suppressing profit margins. Thus enormous potential exists for the tech companies to increase profit margins in the future when they become willing to moderate their growth rates.
- Their addressable markets are larger than ever and growing, giving them greater "runway." For example, at the end of 1999, during the tech bubble, there were 248 million Internet users in the world. Now there are more than that in the U.S. alone and almost 5 billion worldwide. Thus 62% of the world's population carries a computer with Internet connectivity in his or her pocket.
- Finally, it's easier than ever to scale these businesses. In the past, one would have to go to a dealer to buy software on a disc, take it home and install it. Now we download apps from the web in seconds.

For these reasons, a large differential in terms of p/e ratios is warranted.

Second, these groups will not merely coexist and perform differently. Rather, the tech companies have the potential to negatively impact some of the non-tech companies. The common term for this phenomenon is "disruption." Amazon has endangered brick-and-mortar retailers. Netflix has challenged the traditional TV and movie ecosystem. Facebook has cut into newspapers and other traditional media – industries thought to be protected by moats and thus "defensive." Tesla has revolutionized the auto industry and outperformed the incumbents in developing electric vehicles. The list of industries immune to technological change – in terms of profitability if not their essential nature – is limited.

Finally, it's argued that the leading tech companies of today are stronger than the Nifty Fifty of the late 1960s. Today's leaders are often compared to the Nifty Fifty, but they're much better companies: larger; faster growing with greater potential for prolonging that growth; capable of higher gross margins (since in many cases there's no physical cost of production); more dominant in their respective markets (because of scale, greater technological superiority and "lock in," or impediments to switching solutions); more able to grow without incremental investment (since they don't require much in the way of factories or working capital to make their products); and possibly valued lower as a multiple of future profits. This argues for a bigger valuation gap and is perhaps the most provocative element in the pro-tech argument.

Of course, many of the Nifty Fifty didn't prove to be as powerful as had been thought. Xerox and IBM lost the lead in their markets and experienced financial difficulty; the markets for the products of Kodak and Polaroid disappeared, and they went bankrupt; AIG required a government bailout to avoid bankruptcy; and who's heard from Simplicity Pattern lately? Today's tech leaders appear much more powerful and unassailable.

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But fifty years ago, the Nifty Fifty appeared impregnable too; people were simply wrong. If you invested in them in 1968, when I first arrived at First National City Bank for a summer job in the investment research department, and held them for five years, you lost almost all your money. The market fell in half in the early 1970s, and the Nifty Fifty declined much more. Why? Because investors hadn't been sufficiently price-conscious. In fact, in the opinion of the banks (which did much of the institutional investing in those days) they were such good companies that there was "no price too high." **Those last four words are, in my opinion, the essential component in – and the hallmark of – all bubbles.** To some extent, we might be seeing them in action today. Certainly no one's valuing FAAMG on current income or intrinsic value, and perhaps not on an estimate of e.p.s. in any future year, but rather on their potential for growth and increased profitability in the far-off future.

And note that a lot of the strength and potential of today's tech leaders derives from their dominant market shares and market power. This same element creates one of their greatest vulnerabilities: potential exposure to anti-trust action. Bigness and the successful tactics that led to it are enough to make some people call for constraints on the incumbents. Here's what Barclays reported on October 7:

> Yesterday, US large-cap technology stocks (i.e. Facebook, Amazon, Google and Apple) came under pressure after the House antitrust subcommittee released a 449-page report proposing far-reaching antitrust reforms. Recommendations include structural separation, prohibiting a dominant platform from operating in competition with the firms dependent on it and line-of-business restrictions, limiting the markets in which a dominant firm can engage.

There are two groups of stocks in the indices, and the representation of tech stocks is large and expanding. In the S&P 500, for example, roughly one-quarter by value consists of tech and software companies that are fast growing and have the ability to increase both revenues and profit margins, and the remaining three-quarters is slow growing and already enjoying maximum margins. Today's tech leaders are more superior than ever to run-of-the-mill companies, rendering indices that include both types of company less relevant than ever. Or so it's argued. Regardless of where you come out on that question, if an index consists 25% of great growth companies at high multiples (up roughly 30% this year as of the end of September) and 75% more pedestrian companies at low multiples (up 4%), **the average figures in terms of growth, valuation and performance might not be meaningful enough to support conclusions about "the stock market."**

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A Different Kind of Crisis

One question I'm often asked nowadays is how the coronavirus crisis of 2020 differs from the past crises we've managed through:

- the high yield bond crisis of 1990-91, when many prominent LBOs of the '80s went bankrupt,
- the telecom/scandal company meltdown in 2001-02, and
- the Global Financial Crisis of 2008-09, brought on by the implosion of sub-prime mortgages and marked by the meltdown of financial institutions.

The clear difference I want to cover here relates to the characteristics of the current go-round. The best way to start might be to describe the crises of the past:

- In each of the three crises listed above, recessions caused or exacerbated economic weakness.

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- Negative economic and corporate developments, collapsing markets and rising fear caused a credit crunch in which financing became impossible to obtain.
- The combination of economic weakness and the unavailability of financing led to vastly increased defaults and bankruptcies.
- Asset prices cratered.
- Companies and investment entities marked by asset/liability mismatches and/or high levels of leverage experienced margin calls and meltdowns.
- The downward spiral seemed unstoppable.
- Pessimism ran rampant, leading to soaring risk aversion.
- This led to panic selling of assets and rendered most investors absolutely unwilling to buy.
- Because of all the above, it was possible to purchase assets at prices from which extremely high returns could be achieved, often with low attendant risk.

Now, contrast that with the events of 2020. In mid-February, developments regarding the coronavirus pandemic and the lockdown implemented to fight it began to hammer the markets. Prices for equities and credit fell, and the mood turned darkly negative. From the all-time high reached on February 19, the S&P 500 fell 34% in only 33 days. The prices of high yield bonds and leveraged loans were hard-hit as well. Security issuance stopped cold. The pieces were in place for a crisis just like those described above, and things were moving in that direction in March.

But as everyone knows, the Treasury and Fed announced rescue programs in mid-March and an enlarged Fed program during the week of March 23: zero interest rates, bond buying, grants, loans and significantly enhanced unemployment payments. The total ran to multiple trillions of dollars. And the authorities made it clear that there was more behind that: that the available resources were unlimited.

- People accepted that the recession would end and a recovery take its place in short order.
- With short-term interest rates near zero, investors lined up to buy bonds in the quest for return. Thus rather than a credit crunch, there's been record amounts of capital available.
- Even though the rescue provided "liquidity but not solvency," whole industries (like the airlines) were saved from sure bankruptcy.
- There were none of the spectacular implosions that mark most crises.
- Ditto for panic selling.
- Pessimism was replaced by willingness to think about better times ahead.
- With interest rates at zero, investors couldn't afford to be risk averse. They had to embrace risk assets in order to have a shot at returns above the low single digits.
- Thus asset prices recovered.

To illustrate the effect, since April 1, investors in distressed debt have had opportunities to make large rescue loans to companies or entities needing a quick response to problems related to illiquidity or pending debt maturities, and there's still a good pipeline. But with investor optimism reinforced, competition to lend has increased, and the ultra-low returns available on safe assets have made the possibility of double-digit returns something people compete to achieve. The sum of all this has kept prospective returns far lower than is usual in times of crisis.

Thus this is an unusual crisis: one marked by a non-financial, exogenous cause and a lack of lasting pain for most investors . . . and not by widespread opportunities for bargain hunters. Great investments are often made when an investor is willing to buy something no one else will touch at any price. We were able to do just that in past crises, because what you needed was money to spend and the nerve to spend it,

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and we had those things when most didn't. **Other investors' lack of money and nerve in past crises made them great times for buying. Today, thanks to the Fed and Treasury, everyone's got a lot of both. That makes things much tougher.**

But what happens if people exhaust the support payments they've received, Washington fails to deliver sufficient additional assistance, widespread layoffs ensue (as seems to be beginning) and business slows again? Mightn't we see a rise in defaults and bankruptcies and a softening of investor psychology and thus asset prices?

The Potential Downside of the Rescue

Along with the sweep of the Covid-19 epidemic and the magnitude of the recession that resulted from combatting it, the size and success of the Fed/Treasury rescue effort is one of the big stories of 2020. In the Global Financial Crisis, it took the authorities months to figure out what to do and do it. But this year, they dusted off the 2008 playbook and implemented it in a couple of weeks.

We've never seen an economic environment like the one brought on by the lockdown. Many industries (plus other entities and institutions) with zero activity and no revenues, but still high costs. And millions of people without jobs or incomes. There's a belief (never documented) that a large part of the American population lacks resources with which to survive a $400 emergency. How would they survive months without paychecks? Without paychecks, how would they patronize merchants? Without making sales, how would merchants pay their rent? Or their taxes? Without rental income, how would property owners service their debt? Without income from debt service, how would lenders stay solvent? Without tax revenues, how would state and local governments pay their employees and continue to provide services? And how would developed nations purchase the exports that emerging economies need to make to survive? The picture we faced in mid-March was truly the worst I've seen. Global depression seemed possible.

But the Fed and Treasury brought their massive concerted effort, simulating the activity of the economy and replacing a good bit of the lost cash flows. It succeeded to a startling degree. Most investment markets recovered, and the economy has shown surprising strength. Thus the next thing I want to discuss are the possible ramifications of the rescue. I've touched on this before, but it's one more thing on which I want to go into greater depth.

First, what are the policy implications of zero rates? To me, the most obvious one is that there's no more room to cut. (Fed officials insist they won't take rates into negative territory, and negative rates certainly can't be said to have rekindled economic growth in Japan and Europe.) Thus the question is how the Fed would counter an economic relapse connected with something like a second wave of Covid-19 and resultant second lockdown.

Second, rescues and bailouts have the potential to cause moral hazard. When the government saves people from losses, it teaches that it's okay to make risky investments: if they work out, you get rich; if they don't work, you'll be bailed out. That's a bad lesson. This year, for example, lifelines have been thrown to industries that over-borrowed, over-expanded and/or spent too much of their cash on stock-buybacks. Yet it was decided that they wouldn't be permitted to go bankrupt.

Further, by dramatically lifting the markets, the Fed may have caused some people to believe that it will always do so – that there's a "Powell put" that can be counted on to keep things humming. (Think back

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to the tantrum the stock market threw in the fourth quarter of 2018, when the yield on the ten-year Treasury got up to 3.25%. It was enough to end the program of interest rate increases that Janet Yellen had initiated and bring on a series of cuts instead.) If investors believe the Fed can always be counted on to keep the markets aloft, that will encourage dangerous behavior. And, anyway, it seems like an impossible task and, in my opinion, a questionable goal for the Fed.

Third, the kneejerk reaction to trillions of dollars of deficit spending on the part of the Treasury and further trillions of dollars of bond buying by the Fed is worry about inflation. The injection into the economy of trillions in added liquidity would seem to have the potential to create too much money chasing too little in the way of goods, causing prices to rise (as it has done for assets). Further, as a result of the rescue measures, we're running a multi-trillion-dollar deficit and adding trillions to the national debt, which as a percentage of GDP now approaches the high established after World War II.

Printing large amounts of money has had severe consequences in the past. One wonders whether the 2020 version might bring about some of the things traditionally associated with currency debasement:

- undesirably high inflation,
- weakness of the U.S. dollar,
- a downgrade of the U.S. credit rating,
- an increase in the cost of borrowing to cover the increased deficit,
- rising interest rates generally, adding further to the cost of debt service, and thus to the deficit and debt,
- the allocation of an increasing share of the federal budget to debt service, and
- the dollar's loss of status as the world's reserve currency.

Of course, there are rejoinders:

- We've been engaged in deficit spending for a long time without any rekindling of inflation or other ill effects. (Of course, this can be likened to the frog sitting in the pot of water that's being heated. It doesn't notice the gradually rising temperature until it's too late.)
- Nations have been trying to create 2% inflation for years without success. Thus (a) inflation isn't easily ignited and (b) inflation isn't the problem – the lack of it is.
- Modern Monetary Theory says (over-simplifying) that deficits and debts don't matter. (But most economists disagree, and common sense suggests it's unlikely a country can spend beyond its means to an unlimited degree without repercussions.)
- Finally, there's no obvious candidate to replace the dollar as the reserve currency.

All I know is that (a) the Fed and Treasury seem unworried about the possibility of any of the above and (b) anyway, they consider continuing the program indispensable.

Fourth, what the Fed does worry about is anemic growth. It will certainly take a fair while – a year or more following the low reached in the second quarter of this year – for GDP to regain the level achieved in 2019 and what it was supposed to be in 2020. A stagnant economy would fail to put people back to work who lost their jobs as a result of the lockdown, and it certainly wouldn't provide jobs for a growing population.

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> "The risk here is a downward spiral," [Lael Brainard, a Fed governor, noted in a recent speech], warning that the economy could be trapped in a vicious cycle of low interest rates, muted inflation and weak growth.
>
> Long-term trends such as disappointing productivity gains and limited labor force growth are sapping the economy's potential. In July, the Congressional Budget Office said the U.S. economy could expand in the long run at an average annual rate of just 1.8 percent — down from more than 4 percent in 2000. (*The Washington Post*, October 3)

Because this is the Fed's prime concern, it's less worried about the risks entailed in its efforts to rescue and stimulate the economy as described above. It is perfectly willing to see inflation at 2%, something that it hasn't been for years. In fact, it recently announced an averaging approach under which monetary policy will remain loose and rates low until inflation averages 2%. That is to say it will be permitted to run above 2% for a while as a way to bring the average up to 2%.

Some say the worst of all worlds would be stagflation, which I lived through in the 1970s: high inflation and economic weakness. Certainly it was a dismal decade. But others think economic sluggishness is more likely to lead to disinflation (declining inflation) or even deflation, a phenomenon so rare we know little about it.

> The secular deterioration in economic growth has created a condition of excess resources and disinflation. (*Hoisington Quarterly Review and Outlook*, Third Quarter 2020)

My answer is that I have no idea whether we'll see inflation, stagflation, stagnation, disinflation or deflation, and Oaktree won't bet on any of them. It's one of the tenets of our investment philosophy that our investment decisions aren't driven by macro forecasts. Not that it wouldn't be nice to know what the future holds in these regards; rather it's simply that most investors – and certainly we – aren't capable of superior judgments about the macro. So why bet?

Finally, I want to state clearly that nothing I've written on the subject of the rescue and its possible ramifications is intended to be critical of the Fed and Treasury and their actions. I put it simply: just because something has potential negative consequences doesn't mean you shouldn't do it. In the case of the pandemic and associated recession, there was absolutely no alternative. While not perfect, the policy response has been brilliant.

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Further Exposing Inequality

Especially in this environment of heightened attention to social and racial justice, I can't end this memo without touching on some of the many ways in which the recent experience has shed additional light on inequality in our society:

- People further down the economic ladder have had less in terms of financial resources to fall back on during the lockdown, and they generally haven't benefitted from the increase in asset prices that's been driven by the reduction of interest rates.
- Low-income workers have been more likely to lose their jobs due to the lockdown and recession.
- Those who've kept their jobs (often in industries like food production, retail and hospitals) are more likely to be essential workers, required to work and put in harm's way. White-collar and administrative employees, on the other hand, are much more likely to be able to work from home.

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- Low-income people are more likely to live in cramped quarters and crowded neighborhoods, giving them a lower quality of life if working from home and an increased chance of contracting the disease.
- For all these reasons, the incidence of Covid-related sickness and death has been disproportionately high among these populations.
- People with lower incomes are more dependent on the schools to help with childcare. Thus school closings have had a greater impact on lower-income families, which are less able to keep kids home when given the choice. Rather they have to send them to school, where they are exposed to contracting the disease and bringing it home to parents and grandparents.
- Finally, women are more exposed to this phenomenon than men: they make up a higher percentage of single parents, their wages may be lower than those of male partners, and they're often expected to be the ones shouldering the responsibility for childcare.

Of course, "lower income" is disproportionately synonymous with "non-white." Taken together, I believe there's been a "tale of two cities." The overall experience of lower-income Americans during the pandemic – and thus of Blacks and Hispanics – has been a far cry from that of whites and those with higher incomes and greater financial resources. These observations are likely to be part of the conversation on equality of opportunity that lies ahead for our country.

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What It All Means for the Markets

For years leading up to 2020, I described the investment environment as follows:

- An unusually high level of uncertainty (mostly exogenous and geopolitical)
- The lowest prospective returns ever
- Asset prices that were full to excessive
- Pro-risk behavior being engaged in by investors trying for high returns

Taken together, these things told me we were living in a low-return world in which the promised returns didn't fully compensate for the risks. It wasn't a bubble, characterized by absurdly high prices. And there was no way to say for sure when the good times would end or why. It was merely the absence of justification for taking full risk.

Thus Oaktree operated under the mantra "Move forward, but with caution." We invested, and we tried to be fully invested. But we endeavored to do so "with caution." And since we always take a cautious approach to our risk-asset strategies, it really meant "more caution than usual." Being fully invested in a cautious portfolio caused us to lag the benchmarks a bit in some of the asset classes where we have them, as it turned out that caution generally wasn't needed – until this year.

Our cautious stance was rewarded in the difficult first quarter of 2020. **The conditions I described above made the markets vulnerable to exogenous shock, and we got a doozy.** Importantly, that caution enabled us to approach our portfolios calmly, generally unconcerned about price declines and not burdened with widespread problems requiring remediation. In drawdown funds with capital available, we were able to act affirmatively, picking up bargains when their availability peaked in March.

Now, however, I think we've returned to the market conditions I used to go on about.

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- The same uncertainties exist as were present last year (except that the recession and ending of the bull market that were considered ultimately inevitable have come and gone). In addition, we have some new uncertainties. The full list includes the battle against Covid-19, the shape of the recovery, the implications of the election and whether it will go smoothly, worry about higher taxes and more redistribution, the divisiveness in our country, and the outlook for racial harmony.
- If prospective returns were low in the last few years, they're even lower today thanks to the reduction of interest rates. A near-zero return on cash, 2% on investment grade debt, 5% on high yield bonds, 5-6% expected from equities – at the same time as lots of capital is eager to be put to work. Adequate returns are likely to be hard to come by.
- The stock market is back near the high reached in February and selling at an above average valuation (as described earlier). The only things that appear to be low-priced are the ones that appear fundamentally most risky, such as oil & gas, retailers and retail real estate, office buildings and hotels, and low-rated tranches of structured credit. As I said earlier, everything appears to be fairly priced relative to everything else, but nothing is cheap thanks to the low base interest rate.
- Thus, after a brief foray into bargain-land in March, we're back to a low-return world. But since most investors haven't reduced their required or targeted returns, they have to engage in elevated risk in order to pursue them.

In my view, the low interest rates represent the dominant characteristic of the current financial environment, creating the dominant consideration for investors: the lowest prospective returns in history (for the reasons described on pages 4-6). Thus I've dusted off a presentation I've been giving in recent years called "Investing in a Low-Return World." At its end, after laying out much of the above, I conclude by enumerating the strategic alternatives for investors:

- **Invest as you always have and expect your historic returns.** Actually, this one's a red herring. The things you used to own are now priced to provide much lower returns.
- **Invest as you always have and settle for today's low returns.** This one's realistic, although not that exciting a prospect.
- **Reduce risk in deference to the high level of uncertainty and accept even-lower returns.** That makes sense, but then your returns will be lower still.
- **Go to cash at a near-zero return and wait for a better environment.** I'd argue against this one. Going to cash is extreme and certainly not called for now. And you'd have a return of roughly zero while you wait for the correction. Most institutions can't do that.
- **Increase risk in pursuit of higher returns.** This one is "supposed" to work, but it's no sure thing, especially when so many investors are trying the same thing. The high level of uncertainty tells me this isn't the time for aggressiveness, since the low absolute prospective returns don't appear likely to compensate.
- **Put more into special niches and special investment managers.** In other words, move into alternative, private and "alpha" markets where there might be more potential for bargains. But doing so introduces illiquidity and manager risk. It's certainly not a free lunch.

None of these alternatives is completely satisfactory and free from downside. But in my view there are no others.

To put it into the terms I've been using over the last several years, how should the balance be set today between aggressiveness and defensiveness? How should you "calibrate" the riskiness of your portfolio? Should it be at your normal level; titled toward offense to try to wrest high returns from a low-return world; or tilted toward defense in deference to the uncertainties, requiring you to settle for lower returns?

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As I'm sure is my bias, I lean toward defense at this time. In my view, when uncertainty is high, asset prices should be low, creating high prospective returns that are compensatory. But because the Fed has set rates so low, returns are just the opposite. **Thus the odds aren't on the investor's side, and the market is vulnerable to negative surprises. This is how I described the prior years, and I'm back to saying it again.** The case isn't extreme – prices aren't grievously high (assuming interest rates stay low, which they're likely to do for several years). But it's hard in this context to find anything mouth-watering.

October 13, 2020

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Memo to: Oaktree Clients

From: Howard Marks

Re: Time for Thinking

In the early weeks and months of the novel coronavirus pandemic and the related shutdown of the economy, the pace of economic and health developments was frenetic. My memo writing followed suit: one a week for the first six weeks, and a total of ten over 18 weeks. After starting off at that rapid clip, I haven't issued a memo in more than a month – which might seem like a long interval until you realize the norm in recent years has been only one per quarter.

The pace of events has certainly slowed over the last month or two, to the point where most of us are struck by the sameness of our days. We stay in one place for both work and leisure; weekdays aren't very different from weekends; and the idea of vacation seems almost irrelevant: where would we go and what would we do? My acronym of choice is SSDD, the family-friendly translation of which is "same stuff, different day."

But the slower pace of developments allows for more rumination, and I've come up with some thoughts about our present circumstances.

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The Health Crisis

Earlier this month, I prepared a presentation for one of our sovereign-wealth-fund clients. Their annual forum had been expected to entail the last bit of foreign travel still on my calendar, but of course I participated by video conference instead. I started my PowerPoint presentation with the following metaphor:

To deal with particularly serious diseases, doctors sometimes have to take extreme action to save the patient: they induce a coma to permit the administration of harsh remedies, maintain life support, treat the disease, and bring the patient back to consciousness.

In the case of Covid-19, one of the worst pandemics of the last century, policymakers were similarly required to take desperate measures. Upon the eruption of the disease, epidemiologists told us it would spread exponentially, possibly killing millions.

In the absence of a vaccine, the only way to deal with the outbreak was to prevent those who had contracted the disease from spreading it to others. In order to do so, the authorities decided it was necessary to put the patient into a coma. Thus the economy was shut down to minimize interpersonal contact. Stores, restaurants, schools, places of worship, and entertainment and sports venues were ordered closed, travel was restricted, and people were told to work from home whenever possible. As we all know, the U.S. economy was largely frozen, causing 54 million Americans to file for unemployment benefits since March 21 and second-quarter GDP to shrink by an annualized 32.9%, three times the greatest quarterly decline in the 70 years of recorded quarterly history. (Please see

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the end of this memo for postscript in which I discuss the significance of that reported 32.9% decline.)

The comatose patient – the economy – required life-support, and the Fed and Treasury supplied it. They rushed in with trillions of dollars to keep the patient alive: payments to individuals and households; grants to distressed industries; general business loans and tax relief; loans to small businesses; aid to states, hospitals and veterans' care; and guarantees for money market funds and commercial paper. These are sometimes described as stimulus programs, but that's a misnomer: they were support payments designed to replace cash that normally would have circulated throughout the economy.

With the economy comatose and on life support, elected officials proceeded to administer the cure. In the absence of a vaccine, this was designed to take the form of testing to identify those who had the disease and tracing to identify those with whom they'd come into contact; quarantining and social distancing to keep them separate from others; and masking to prevent the asymptomatic sick from infecting the healthy.

When the number of new cases, hospitalizations and deaths declined, and in view of the desirability of allowing economic activity to resume, those in charge turned to resuscitating the patient. The economy began to reopen in May, supported by a near-zero base interest rate and the Fed's provision of abundant liquidity, and the initial response was positive. Retail sales moved up 17.7% in May (after a 22.3% decline in March/April), and the unemployment rate fell to 11.1% in June, from a peak suspected to have been near 20%. Case closed.

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Failure to Fix It

If only it was that simple. Unfortunately, in some instances the reopening took place before the number of new cases had declined enough for the spread of Covid-19 to be brought under control, and people in areas that had been spared in the early days acted cavalierly, allowing the disease to regain a foothold in their regions. Borrowing from Churchill (who probably borrowed it from Machiavelli), people who regulate economies and manage businesses say "never let a good crisis go to waste." **But in the case of Covid-19, the U.S. did just that.**

The nations of Asia and Europe had the earliest outbreaks, but they took swift and stern action – some say Draconian – including enforcing isolation and fining violators. But they got the disease under control. Unfortunately, a number of elements combined to weaken the actions taken in the U.S. and permit a resurgence of the disease:

- The absence of uniform national policies on shutdowns, social distancing, masking and re-opening.
- Inadequate support for the recommendations of health professionals and scientists.
- The foolhardiness of youth, who were misled by early statistics into believing they were immune.
- "National hubris and belief in American exceptionalism," according to Martha L. Lincoln, a medical anthropologist and historian. As one of our elected leaders stated on March 11, "The virus will not have a chance against us."

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- The turning of masking and social distancing into partisan issues, raising suspicion that the virus is a hoax and protective rules an infringement of personal freedom.
- The politicization of the difficult choice between reopening the economy and minimizing infections. The states currently seeing the greatest increases in new cases are mostly ones that emphasized the former over the latter.

Clearly, society reopened and people began to congregate before the virus was reduced to controllable levels, allowing it to reemerge. And shutting down to fight the disease in some locations but not others was dangerous when people can travel freely among them. Now contact tracing – a very important weapon in the arsenal of the countries that got the spread of Covid-19 under control – is said to have been rendered useless in the U.S. by the sheer number of people who've been infected.

So rather than the desired progression of infection, coma, life support, treatment, cure and resuscitation, we've had a progression of infection, coma, life support, treatment and resuscitation. **The cure is missing.** Because much of America reopened before the disease was brought fully under control, the early lockdowns went to waste, and the current number of daily new cases far exceeds that of March and April. RockCreek Group's July 27 report put it well:

> By reopening when COVID-19 was still spreading and pervasive in many places, the US may have gotten the worst of both worlds: a sharp recession, which will leave scars in terms of business closures, bankruptcies and disrupted lives, and continued disease, that will be difficult if not impossible to eradicate, in the absence of effective treatments and vaccines.

Thus, on July 30, *The New York Times* reported as follows:

> "The path forward for the economy is extraordinarily uncertain and will depend in large part on our success in keeping the virus in check," [Fed Chairman Jerome] Powell said at a news conference following the Fed's two-day meeting, noting that **infections have surged since late June and the "pace of recovery looks like it has slowed."**
>
> Mr. Powell said policymakers needed more data before drawing firm conclusions about the scope of the pullback, but he noted that **debit and credit card spending were slowing and labor market indicators suggested that recent job gains might be weakening**. (Emphasis added)

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Not a Cycle

Two of the questions I get most often these days are, "What kind of cycle are we in?" and "Where do we stand in it?" My main response is that the developments of the last five months are non-cyclical in nature, and thus not subject to the usual cycle analysis.

The normal cycle starts off from an economic and market low; overcomes psychological and capital market headwinds; benefits from gathering strength in the economy; witnesses corporate results that exceed expectations; is amplified by optimistic corporate decisions; is reinforced by increasingly positive investor sentiment; and thus fosters rising prices for stocks and other risk assets until they

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become excessive at the top (and vice versa on the downside). **But in the current case, a moderate recovery – marked by reasonable growth, realistic expectations, an absence of corporate overexpansion and a lack of investor euphoria – was struck down by an unexpected meteor strike.**

People also ask what's different about this episode from those I've lived through in the past.

- As described above, the normal cyclical progression of ups and downs – and the normal series of events, each of which causes the next – had nothing to do with it. The current downturn didn't result from excessively optimistic business decisions or too-high growth expectations that were disappointed, but rather from an exogenous event that brought a sudden end to the expansion. Thus the factors that result in and normally characterize a cyclical recovery – most of all the recognition that negativism is excessive and stimulative measures are required to turn things around – are unlikely to do the trick this time. Since the root cause of the current problem is medical rather than economic, merely cutting interest rates and flooding the economy with liquidity may not kickstart a recovery as usual. Rather, the virus has to be brought under control.

- Additionally, there may be permanent changes to our way of life – altering things like travel, business's reliance on offices, and activities involving crowds – that affect the path of recovery.

- Something else that keeps me from thinking about the coming months as a normal recovery is that just five months after the onset of the pandemic in the U.S., and just a few months after the bottom was reached in the market and the economy, investor optimism has been restored and the prices of many assets have regained their prior highs. That's a much faster recovery than normal by historic standards, and it seems to give short shrift to the conditions that continue to challenge the economy.

- Lastly, the effects this time are highly uneven, with people of color and low-income Americans affected disproportionately, at a time of heightened sensitivity to this issue. They're more likely to have lost their jobs and less likely to have enjoyed gains in net worth from asset appreciation – not to mention their higher rates of infection and death due to the pandemic. Whites and white-collar workers and professionals, on the other hand, are more likely to have kept their jobs and to have benefited from asset price inflation through home ownership and participation in the stock market.

I'm convinced cycles will continue to occur over time, highlighted by excessive movements away from "normal" and toward extremes – both high and low – that are later followed by corrections back toward normalcy, and through it to excesses in the opposite direction. **But that's not to say that every event in the economy or markets is cyclical. The pandemic is not.**

<u>What Shape Are We In?</u>

Another frequent question is, "What shape will the economic recovery take?" Everyone has his or her favorite candidate: a W, an L, a U or maybe a Nike Swoosh. Of course, the one we hear the most

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about is a V. While the terminology used isn't crucial, and may basically be just a matter of semantics, I find the label "V-shaped" misleading.

Of all the people who use the label "V-shaped" to describe this recovery, I don't think I've ever seen anyone define it. To me, a "V" has to satisfy two important requirements:

- First, the essential nature of the pattern has to be **down-and-up**, meaning it doesn't spend much time skating along the bottom. One that stays down for a while, on the other hand, would be called U-shaped or what in the 1970s we called saucer-shaped.
- Second, when I hear "V," it seems to me the two sides should be basically **symmetrica**l. That is, the economy should come back at a rate similar to that at which it went down.

That second criterion makes me doubt that the current recovery will be a V. The U.S. economy deteriorated in the second quarter at the highest annualized rate in history, almost 33%, and it's certainly not going to come back at the same rate (leaving aside the fact that it takes a 49% gain to offset a 33% decline).

Most observers seem to think quarterly U.S. GDP will regain its level in the corresponding quarter in 2019 sometime between the fourth quarter of 2020 and the middle of 2021. That means it'll take at least until 2021 for annual GDP to equal or exceed 2019's. Whereas I think history will show that the decline took place over just a few months (perhaps only February, March and April), the recovery may take 8 to 14 months. And the rate of unemployment is unlikely to return to its recent low of 3.5% for years, if ever.

- The renewed spike of Covid-19 cases has caused the reopening of the U.S. economy in some areas to be delayed or reversed.
- The emergence of politics as the general election approaches decreases, in my opinion, the likelihood that future support payments will be as generous as the early rounds.
- People with the choice may not return to the office for several months, holding back both overall productivity and the recovery of businesses that exist to serve office populations.
- People who are reliant on mass transit to commute to work – or on schools to care for their kids – may be slower to return to work than they otherwise would be.
- Some industries whose business models have been affected – like airlines, resorts and entertainment – may take years to recover to their prior levels.
- Many restaurants and other small businesses may never reopen.
- With industries evolving, more being done digitally and management teams having had an opportunity to watch their companies function with fewer people, some jobs may never return.
- Finally, the pandemic has accelerated preexisting trends such as automation and the decline of brick-and-mortar retail, and thus their contribution to job losses.

Fast down and slow up: to me, that's no V. I prefer to think of it as a checkmark, like this:

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The Markets and the Fed

The U.S. stock market continues its ascent, and as measured by the S&P 500, it's just about back to where all this started: the all-time record of 3,386 attained on February 19. The market for corporate credit has been strong as well. Here's the macro situation, hopefully reduced to the bare essentials:

The positives:

- The reduction of interest rates to near zero has increased the value of investment assets and spurred a global bidding war that has raised their prices.
- The Fed has flooded the economy and the markets with liquidity and other forms of support for individuals, companies and institutions.
- The Fed and the Treasury seem willing to provide support and stimulus well into the future.

The negatives:

- The economy has suffered the greatest quarterly setback in history.
- Covid-19 still isn't under control.
- A second spike is complicating efforts to re-open the economy.

In short, titanic forces are arrayed against each other: Fed and Treasury versus disease and recession. Which will win?

No one knows about the long run, but it's clear which has come out on top so far. Lower interest rates increase the discounted present value of future cash flows and reduce the *a priori* return demanded from every investment. In layman's terms, when the fed funds rate is zero, 6% bonds look like a giveaway, so buyers bid them up until they yield less (thus I believe 97% of outstanding bonds yield less than 5% today, and 80% yield less than 1%). And Fed buying drives up the price of financial assets and puts money into sellers' hands with which they can buy other assets, further elevating prices. For all these reasons, monetary actions have come out on top so far, validating the old maxim that "you can't fight the Fed."

But what does it mean if the prices of stocks and listed credit instruments are where they are not primarily for fundamental reasons – such as current earnings and the outlook for future gains – but rather in large part because of the Fed's buying, its injection of liquidity, and the resultant low cost of capital and low demanded returns? **If high asset prices are substantially the result of tailwinds from technical factors such as these, does it mean those actions have to be continued in order for asset prices to remain high, and that if the Fed reduces its activity, those prices will fall? And that leads to the ultimate question (as Bruce Karsh seems to ask daily): can the Fed keep it up forever?** Are there any limits on its ability to create bank reserves, buy assets and expand its balance sheet? And are there limits on the Treasury's willingness to run deficits, now that it has taken this year's to $4 trillion and shown an inclination to go well beyond that?

Since I'm out of my depth regarding the last three questions, I've again turned to my friend Randall Kroszner, Deputy Dean for Executive Programs at the University of Chicago Booth School of Business. From 2006 to 2009, Randy was a member of the Board of Governors of the U.S. Federal

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Reserve System and accordingly a voting member of the Federal Open Market Committee. Here's his reply:

> There is no limit on the ability of a central bank to create reserves, as long as someone is willing – or through government edicts, forced – to take them. This was true in the extreme circumstances of Weimer Germany, Brazil in the 1970s/80s, and it is true Zimbabwe today, as well as in the much more benign current situation in Japan. The key question is the impact of that reserve creation on money supply and the demand for money. Treasury's appetite for deficit financing will remain high as long as real and nominal interest rates remain low.

In the last five months, the Fed has swollen its balance sheet by $3 trillion and the Treasury has added $3 trillion to the expected deficit, for a total increase of liquidity in the economy of $6 trillion, probably with more to come. It's normal to assume that an increase in liquidity on that order will increase the demand for goods relative to the supply, bringing on increased inflation, as it already has for financial assets. (Note, however, that even with interest rates low for a decade and near zero today, inflation hasn't come close to the Fed's target of 2%. If growth remains weak and inflation stays low, the Fed is likely to believe it can continue an activist regime.) Here's Randy Kroszner's view:

> I think this is the key point: whether it is Japan, where the BoJ's balance sheet exceeds 100 percent of GDP and continues to grow rapidly, or the ECB with a balance sheet of more than 50 percent of Eurozone GDP and growing, or the Fed with a balance sheet of just over a third of US GDP and growing, inflation has been below the 2 percent target, and expectations of inflation over short and long horizons remain low. Even when the U.S. was growing 2-3 percent pre-Covid, we didn't see an uptick in inflation or inflation expectations. As long as there continues to be a very large demand for super liquid safe assets like bank reserves and cash, the central banks can maintain large balance sheets – and even increase them – without a sharp increase in money supply that ignites inflation. The ongoing uncertainty over the course of the virus and the policy responses will undoubtedly keep the demand for safe liquid assets high for some time.

It's also normal to assume that monetary expansion like this can lead to a weaker dollar, downgrades of the U.S.'s creditworthiness by rating agencies, higher interest costs on national debt, and/or jeopardy to the dollar's status as the world's reserve currency. All these things could increase the difficulty of servicing the U.S.'s expanded national debt, feeding back into still-higher deficits. **This isn't pie-in-the-sky, since between March (when the Fed/Treasury programs were announced) and the end of July, the dollar depreciated by 9% versus a basket of currencies.** That could be related to the dollar's tendency to benefit from flight to quality, which probably reached its apex in March, and to do less well when fear recedes. But it's still down 3% for the year to date and particularly weak in July.

These are the traditional concerns with regard to monetary expansion. Modern Monetary Theory ("MMT") stands ready to refute them. The actual outcome is unknowable. **But does it really make sense that bank reserves, the Fed balance sheet and the federal deficit can be increased *ad infinitum* without negative effects?** My answer is the usual: we'll see. But I'll let Randy Kroszner have the last word on the subject:

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> I always find it difficult to understand MMT – it seems to suggest that there isn't a budget constraint. I'm very old-fashioned about that and still believe in them. Countries like Argentina, Zimbabwe, etc. show that the less "modern" monetary theory still applies, at least in those places. **There is a delicate balancing act: Markets certainly allow credible governments like Japan and the US to borrow enormous amounts without much concern, but the key issue is what could undermine that credibility? If that does happen, the consequences certainly could be titanic.** (Emphasis added)

The Bull Case

One thing the pandemic has given many of us is lots of time for reading and thinking, and I've had a chance to bone up on some of the arguments supporting current stock and bond market prices. Given my "value" leanings and acknowledged conservative bias, I found it a valuable process. And it was important to undertake it, since it certainly can't be said that caution regarding the damaged economy and elevated p/e ratios has been rewarded of late.

As for the stock market, several points are advanced to justify the current level – which is so mystifying to value investors – and assert its bright future:

The first is that many investors have underestimated the impact of low rates on valuations. In short, what should the stock market yield? Not its dividend yield, but its earnings yield: the ratio of earnings to price (that is, p/e inverted). Simplistically, when Treasurys yield less than 1% and you add in the traditional equity premium, perhaps the earnings yield should be 4%. That yield of 4/100 suggests a p/e ratio (the inverse) of 100/4, or 25. Thus the S&P 500 shouldn't trade at its traditional 16 times earnings, but roughly 50% higher.

Even that, it's said, understates the case, because it ignores the fact that companies' earnings grow, while bond interest doesn't. Thus the demanded return on stocks shouldn't be (bond yield + equity premium) as suggested above, but rather (bond yield + equity premium - growth). If the earnings on the S&P 500 will grow to eternity at 2% per year, for example, the right earnings yield isn't 4%, but 2% (for a p/e ratio of 50). And, mathematically, for a company whose growth rate exceeds the sum of the bond yield and the equity premium, the right p/e ratio is infinity. **On that basis, stocks may have a long way to go.**

The rest of the bulls' arguments mostly surround the exceptional nature of the market-leading tech companies:

- They grow much faster than the large companies of the past, and their growth is much less likely to prove cyclical.
- In fact, the current crisis, with the accompanying movement on-line of a larger share of everyday life, has (a) served to accelerate their growth or (b) given them an opportunity to demonstrate their ability to grow regardless of conditions in the environment.
- They have scale, technological advantages and network effects that give them much greater protection against competition than their old-economy predecessors enjoyed.

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(Correspondingly, however, regulatory efforts to restrain their market power represent their greatest risk.)

- Thanks to the role of intellectual property as the main "raw material" in their products, most of these companies can create additional units for sale at very low marginal cost.
- Likewise, they can grow without much additional capital, if any (all five of the top tech firms are in a "net cash" position, meaning their cash holdings exceed their debt).
- Finally , their high p/e ratios today mean less than usual, since these tech champions are vastly under-reporting earnings: if they were to cut back on things like customer-acquisition costs and R&D and settle for lower (but still rapid) growth, they could report far higher earnings.

Thus, it's said, the skeptics seriously underestimate the ability of the technological leaders to grow, and to pull up the overall growth rate for the universe of common stocks. They grow every day, and so does their representation in the equity indices and in corporate America, creating a virtuous circle.

Thus, with these dominant large-cap tech companies making up a large and growing percentage of the stock market, to be bearish one has to have a thesis on why they should fall. Or else you would have to bet on the non-tech sectors to decline a great deal and pull down the averages – despite the fact that they're already down a lot.

The S&P 500 is basically flat on the year, but without FAAMG (Facebook, Apple, Amazon, Microsoft and Google, its five heaviest-weighted components) and other tech/software stocks, it would be considerably lower. (The top five are up by an average of 36% so far this year, while the median change for all 500 stocks is minus 11%.) Does it make sense that the FAAMG-plus-tech/software stocks are up a lot in this context? It seems that it does, because (a) Covid-19 has accelerated tech adoption in many ways, and thus these companies' growth, and (b) today's ultra-low interest rates justify much higher p/e ratios (see above). If instead the tech giants were flat against this backdrop – or had just performed in line with the rest of the index – we'd probably say something was wrong.

I don't know whether these bullish arguments are absolutely correct or merely have gained luster thanks to their having driven the 46% gain of the S&P 500 over the last four months. Regardless, I want to share the bull case as a public service and because it has obvious merit . . . and certainly has won out thus far.

* * *

So let's try to find a bottom line:

- **On one hand, we have the surprisingly rapid recovery of the stock and credit markets to roughly their all-time highs**, despite the fact that the spread of Covid-19 hasn't been halted, and that it will take a good number of months for the economy to merely return to its 2019 level (and even longer for it to give rise to the earnings that were anticipated at the time those market highs were first reached). Thus p/e ratios are unusually high today and debt yields are

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at unprecedented lows. Extreme valuations like these are usually justified with protests that "this time it's different," four words that tend to get investors into trouble.

- **On the other hand, John Templeton allowed that when people say things are different, 20% of the time they're right.** And in a memo on this subject in June of last year, I wrote, "in areas like technology and digital business models, I'd bet things will be different more than the 20% of the time Templeton cited." It certainly can be argued that the tech champions of today are smarter and stronger and enjoy bigger leads than the big companies of the past, and that they have created virtuous circles for themselves that will bring rapid growth for decades, justifying valuations well above past norms. Today's ultra-low interest rates further justify unusually high valuations, and they're unlikely to rise anytime soon.

- **But on the third hand, even the best companies' stocks can become overpriced**, and in fact they're often the stocks most likely to do so. When I first entered the business in 1968, the companies of the Nifty Fifty – deploying modern wonders like computing (IBM) and dry copying (Xerox) – were likewise expected to outgrow the rest and prove impervious to competition and economic cycles, and thus were awarded unprecedented multiples. In the next five years, their stockholders lost almost all their money.

For these reasons and more, I find today's stock and credit markets opaque . . . as usual.

We reach our conclusions, limited by the inadequacy of our foresight and influenced by our optimistic or pessimistic biases. And we learn from experience how hard it is to get the answer right. That leads me to end with a great bit of wisdom from Charlie Munger concerning the process of unlocking the mysteries of the markets: "It's not supposed to be easy. Anyone who finds it easy is stupid."

August 5, 2020

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P.s.: We were all struck by the enormity of the reported decline in second quarter real GDP. **Before now, no one's ever seen an economy contract by one-third in three months!** However, thinking about the results in connection with writing this memo raised some questions:

- I had immediately assumed Q2 GDP was down $1.81 trillion, or 32.9%, from Q2 of last year. But the actual decline was only $0.45T, from $4.76T to $4.31T, or 9.5%.
- Could it have been a decline of $1.81T from Q1's $4.63T, bringing Q2 GDP to $2.82T? But going from $4.63T to $2.82T would mean a decline of 39.1%. And anyway, that couldn't have been the case, since actual Q2 GDP was $4.31T.
- Or was it a projected drop of $1.81T from actual 2019 full-year GDP of $19.09T? No, that would represent a decline of only 9.5%.

I couldn't make sense of the numbers, so I consulted Conrad DeQuadros of Brean Capital for help understanding them. I found his answer surprising, and you might as well.

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Have you thought about what the reported 32.9% decline in second quarter GDP really means? Answer: **it's the percentage by which 1Q2021 GDP would be below 1Q2020 GDP if GDP were to decline in the next three quarters at the same rate as it did in 2Q2020.** If that seems incredibly complex, so was Conrad's explanation:

- Actual second quarter real GDP (without seasonal adjustment or annualization) was $4.31 trillion. That was down 7.0% from $4.63T in Q1 on the same basis.
- If the three subsequent quarters were also down 7.0% from quarter to quarter, 3Q2020 would be $4.00T, 4Q2020 would be $3.72T, and 1Q2021 would be $3.46T. (These are figures you'd never see, since they omit seasonal adjustment, annualization and adjustment for inflation. But I think they present a fair if not technically correct picture for these purposes.)
- **It's that figure of $3.46T for 1Q2021 GDP that – after annualization and adjustments for seasonality and inflation – would be 32.9% below GDP in 1Q2020.**
- Interestingly, after the assumed declines, GDP in the four quarters 2Q2020 through 1Q2021 (as enumerated above) would sum to $15.49T for the year. But that would be down only 18.9% from the actual total of $19.11T in the four prior quarters (2Q2019 through 1Q2020).

So, again, the 32.9% reported decline in Q2 is the difference between 1Q2020 GDP and projected 1Q2021 GDP assuming quarterly GDP continues to fall at the 2Q2020 rate. But nobody expects that to happen. Which means the 32.9% is a highly misleading, exaggerated figure. **Nothing went down by one-third, and nothing is likely to do so.**

It's the same for nominal GDP. The decline in GDP from 1Q2020 to 2Q2020 was reported as $2.15T, or 34.3%, but those also are annualized figures. The $2.15T decline is the difference between 1Q2020 annualized GDP of $21.56T and 2Q2020 annualized GDP of $19.41T. But the decline in actual quarterly nominal GDP from Q1 to Q2 was only $0.38T (from $5.25T to $4.87T), or 7.2%. So what do the reported annualized Q2 declines of $2.15T and 34.3% mean? Also nothing.

In the business world, we'd be looking at the relationship between GDP in 2Q2020 and what it was in 2Q2019. As mentioned above, real Q2 GDP fell from $4.76T in 2019 to $4.31T in 2020, for a decline of 9.5%. Nominal Q2 GDP fell from $5.36T in 2019 to $4.87T in 2020, down 9.1%. **Obviously, neither of these year-over-year declines bears any resemblance to the reported 32.9% decline.**

Here's Conrad's conclusion:

> Annualization is useful in normal times for comparing a quarter to the recent prior years, but not very useful for current circumstances. . . . Most other major economies do not report annualized changes in GDP (for example, when the change in Eurozone GDP is reported [on August 3], it will be a non-annualized change). It is not reasonable to expect the second quarter's drop to continue for a year.

Finally, at year-end, the GDP that's reported for each year is the sum of the actual dollar GDP in its four quarters (without annualization or seasonal adjustment). **Thus, when GDP is reported for 2020, it's unlikely to show a decline of 32.9% or anything like it.** After reported quarter-over-quarter declines in annualized GDP of 5.0% in Q1 and 32.9% in Q2, Morgan Stanley (for example) expects increases of 21.3% in Q3 and 0.3% in Q4. If we were to chain those quarterly percentage changes, as we do with quarterly portfolio returns, we

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would get a decline for the year of 22.5%. Or if we (incorrectly) added them together, ignoring the impact of compounding, we would get a decline of 16.3%. **But MS expects full-year 2020 GDP to be down only 5.3% year-over-year and 6.2% Q4-over-Q4.**

So what I've learned is that annualized quarter-over-quarter changes are quite meaningless, **including Q2's reported decline of 32.9%.**

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Memo to: Oaktree Clients

From: Howard Marks

Re: The Anatomy of a Rally

The background is well known to all.

- On February 19, the U.S. stock market hit a new all-time high, with the S&P 500 reaching 3,386.
- Then investors began to price in the novel coronavirus, causing the market to make its fastest trip ever into bear territory, with the S&P 500 down 34% in five weeks to a low of 2,237.
- That low was reached on March 23, the day the Fed announced a major expansion of its response to the Covid-19-induced shutdown of the U.S. economy.
- Following that, the stock market – along with the credit markets – began a recovery of massive proportions.

The advance started off with a bang – a 17.6% gain for the S&P 500 on March 24-26, the biggest three-day advance in more than 80 years – and by June 8 it had lifted stocks from the low by almost 45%. The market rose on 33 of the 53 trading days between March 24 and June 8, and on 24 of those 33 up days (including the first nine in a row), it gained more than one percent. By June 8, the S&P 500 was down only 4.5% from the February peak and even for the year to date.

I'm writing to take a closer look at the market's rise and where it leaves us. The goal as usual isn't to predict the future but rather to put the rally into perspective.

The questions I get are always indicative of what's going on in investors' minds at the time. Around the early-June high and in the time since, the most frequent ones have been, "How can stocks be doing so well during a severe pandemic and recession?" "Have the securities markets decoupled from reality?" and "Is this irrational exuberance?"

The process of answering these questions gives me an opportunity to dissect the breathtaking market rise. **The world is combatting the greatest pandemic in a century and the worst economic contraction of the last 80+ years. And yet the stock market – supposedly a gauge of current conditions and a barometer regarding the future – was able to compile a record advance and nearly recapture an all-time high that had been achieved at a time when the economy was humming, the outlook was rosy, and the risk of a pandemic hadn't registered. How could that be?**

The possible reasons for the markets' recovery are many and, as I write this memo, the list is growing as people find more things to take positively. (As usual, the higher the market goes, the easier it becomes for investors to find rationalizations for a further rise.) I'll survey the apparent reasons below:

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- **Investors placed great credence in the ability of the Fed and Treasury to bring about an economic recovery.** Investors were cheered by the steps taken to support the economy during the shutdown, reopen it, put people back to work and begin the return to normalcy. Everyone understands that the recovery will be gradual and perhaps even bumpy – few people are talking about a powerful V-shaped recovery these days – but a broad consensus developed that recovery is a sure thing.
- As the market recovery took hold, the total number of Covid-19 cases and deaths, and the statistics in states like New York that had experienced the earliest and worst outbreaks, were going in the right direction. Daily new cases declined to very low levels in many places, and the signs of a second-wave rebound were limited. **The curve in most locations clearly had been flattened.**
- In short, the worst fears – things like massive shortages of hospital beds and PPE, and an immediate "second wave" as soon as reopening began – weren't realized. This was cause for relief.
- Rising optimism with regard to vaccines, tests and treatments added to investors' willingness to write off the present episode.
- People became comfortable looking past the pandemic, considering it one-of-a-kind and thus not fundamental. In other words, for some it seemed easy to say, "I'm glad that's over (or soon will be)."
- Positive economic announcements reinforced this conclusion. And the unprecedented extent of the economic carnage in the current quarter made it highly likely that we'll see substantial quarter-over-quarter gains in the next three quarters and dramatic year-over-year comparisons in mid-2021.
- **Thus, overall, investors were glad to "look across the valley" at better times ahead. There will be a substantial dip this year in GDP and corporate earnings, but investors became willing to anticipate a time – perhaps in 2022 – when full-year earnings for the S&P 500 would exceed what they were in 2019 and had been expected to be in 2020.**
- With the outlook now positive, investors likely concluded that they no longer needed to insist on the generous risk premiums afforded by low entry prices, meaning purchase prices could rise.
- **In other words, with regard to economic and corporate developments, investors concluded that it was "all good" or at least heading in the right direction.**

Monetary and fiscal actions made an enormous contribution to the market rebound:

- **The chant went up during the week of March 23: "You can't fight the Fed."** Certainly the evidence convinced investors that interest rates will be what the Fed wants them to be, and the markets will do what the Fed wants them to do. **The higher the market went, the more people believed that it was the goal of the Fed to keep it going up, and that it would be able to.**
- The Fed and Treasury demonstrated their dedication to doing absolutely everything they could think of. Fed Chairman Jay Powell and Treasury Secretary Steve Mnuchin acted

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early and dramatically, and Powell's assurances that "we will not run out of ammunition" had a very positive effect.

- The Fed said it would continue buying securities "for as long as it takes," and since its actions suggested it was unconcerned about the ballooning deficits and debt, there was no apparent reason why its ability to keep buying had to have a limit.
- When the Fed buys securities, it puts money into the hands of the sellers, and that money has to be reinvested. The reinvestment process, in turn, drives up the prices of assets while driving down interest rates and prospective returns.
- There's been a related expectation that the Fed's buying might be less than discriminating. That is, there's no reason to believe the Fed insists on good value, high prospective returns, strong creditworthiness to protect it from possible defaults, or adequate risk premiums. Rather, its goal seems to be to keep the markets liquid and capital flowing freely to companies that need it. **This orientation suggests it has no aversion to prices that overstate financial reality.**
- Everyone is convinced that interest rates will be lower for longer. (On June 10, the Fed strongly indicated that there will be no rate increases through 2021 and possibly 2022.)
- Low interest rates engineered by the Fed have a multifaceted, positive impact:

    - The lower the fed funds rate, the lower the discount rate used by investors and, as a result, the higher the discounted present value of future cash flows. This is one of the ways in which declining interest rates increase asset values.
    - **The risk-free rate represents the origin of the yield curve and the capital market line. Thus a low risk-free rate brings down demanded returns all along these continua.** All *a priori* returns on potential investments are viewed in relation to the risk-free rate, and when it's low, even low returns seem attractive.
    - The pricing of all assets is interconnected through these relative considerations. Even if the Fed is buying asset A but not asset B, the rising price and falling expected return on A mean that B doesn't have to appear likely to return as much as it used to, so its price can rise, too. Thus if buying on the part of the Fed raises the price of investment grade debt, the price of non-investment grade debt is likely to follow suit. And if the Fed buys "fallen angels" that have gone from BBB to BB, that's likely to lift the price of B-rated bonds.
    - **Lower yields on bonds means they offer less competition to stocks, etc.** This is yet another way of saying relative considerations dominate. Fewer people refuse to buy just because prospective returns are low in the absolute.

- In all, the Fed created capital market conditions that gave rise to readily available financing, bond issuance at record levels, and deals that were heavily oversubscribed. **As long as money-losing companies are enabled to refinance their debt and borrow more, they're likely to stay alive and out of bankruptcy, regardless of how bad their business models might be.** Zombie companies (debt service > EBITDA) and moral hazard don't appear to trouble the Fed.

Obviously, behavioral factors also had a significant impact:

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- Although suspended from February 19 until March 23, the ever-hopeful "buy the dips" mentality and belief in momentum quickly came back to life. **The large percentage of trading in today's markets accounted for by index funds, ETFs and other entities that don't make value judgments probably contributes to the perpetuation of trends like these once they're set in motion.**
- Investors have been cheered by the fact that today's Fed seems to be offering a "Powell put," a successor to the Greenspan put of the late 1990s/early 2000s and the Bernanke put induced by the Global Financial Crisis. The belief in the Powell put stems from the view that the Fed has no choice but to keep the markets levitated to reassure financial market participants and keep the credit markets wide open for borrowers.
- **Thus FOMO – fear of missing out – seemed to take over from the prior fear of losing money, a transition that's always pivotal in determining the mood of the market.**
- Retail investors are said to have contributed substantially to the stock market's rise, and certainly to its most irrational aspects, like the huge gains in the stock prices of some bankrupt companies. In the exceptional case of Hertz, it seemed for a while that the buoyant stock price might enable the company to sell large amounts of new equity, even though the equity would probably end up worthless. (Equity capital raised by a company in bankruptcy is extremely likely to end up going straight to the creditors, whose improbability of otherwise being paid gave rise to the bankruptcy filing in the first place.) Large numbers of call options have been bought in recent days, and it was reported that small investors accounted for much of the volume. Developments like these suggest the influence of speculative fever and the absence of careful analysis.
- There's a widely held theory that government benefit checks have been behind some of the retail investors' purchases. And that makes sense: in the last three months, there've been no games for sports bettors to wager on, and the stock market was the only casino that was open.
- **Importantly, fundamentals and valuations appeared to be of limited relevance.** The stock prices of beneficiaries of the virus – such as digital service providers and on-line merchants – approached "no-price-too-high" proportions. And the stocks of companies in negatively affected industries like travel, restaurants, time-sharing and casinos saw massive recoveries, even though their businesses remained shut down or barely functioning. Investors were likely attracted to the former by their positive stories and to the latter by their huge percentage declines and the resulting low absolute dollar prices.

In all these ways, optimistic possibilities were given the benefit of the doubt, making the terms "melt-up" and "buying panic" seem applicable. We saw numerous records smashed in the 11-week recovery of the stock market from its March 23 low.

To sum up and over-simplify, as my partner Bruce Karsh asks in his role as devil's advocate: can the Fed keep buying debt forever, and can its doing so keep asset prices up forever? **In short, many investors appeared to conclude that it could.**

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And on the Other Hand . . .

I'm not going to go to the same lengths in cataloging the negatives that exist today. Especially given their appeal to my cautious bias, I've done so plenty in recent memos. But they certainly have been and are out there:

- The likelihood that, since the U.S. engaged in a more voluntary and less sweeping shutdown than the countries that were most successful in suppressing Covid-19, the reopening of the economy would trigger a second wave of the disease.
- The simultaneous likelihood that, due to fatigue and because many consider "the cure to have been worse than the disease," there won't be the same enthusiasm for a new shutdown, meaning there may be significant stress on the health care system and/or large numbers of fatalities.
- **The possibility that we won't have a vaccine as soon as hoped,** or that it will be limited in its duration or its effectiveness with various strains of the disease.
- The reporting of actual GDP declines on the order of 20-30% for the second quarter and 5-10% for the full year, and of an unemployment rate around 10% in late 2020 and into 2021.
- **The impact on the economic recovery if the return to work is slow, large numbers of small businesses never reopen, and millions of jobs turn out to be permanently lost.** In particular, the slow return of customers and the regulations that limit the scale of operation may prevent newly opened public-facing businesses from being much more profitable than they were when they were fully closed.
- Worry that political or financial considerations will keep the Fed and/or Treasury from renewing their monetary and fiscal tools to combat the economic slowdown.
- The significant long-term damage done to state and city finances.
- The likelihood that there'll be widespread defaults and bankruptcies despite the Fed and Treasury machinations.
- **The impact of potentially permanent changes to business models in industries like retail and travel, and on office buildings and high-density urban centers.**
- The possibility of increased inflation (or, some say, deflation), long-term damage to the reserve status of the dollar, a downgrade of the U.S. credit rating, or an increase in the cost to finance our vastly expanded deficits.

There are always positives and negatives, and we can list them, consider their validity and try to assess what they boil down to. But what matters most at a given point in time in determining market behavior is which ones investors weight most heavily. Following the March 23 low, the emphasis certainly was on the positives.

Does It Make Sense?

Yes, there had been something approaching a selling panic between mid-February and late March in response to the pandemic, with the S&P 500 collapsing and the yields on high yield

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bonds tripling in just four and a half weeks. And yes, the Fed and the Treasury seem to have averted a depression and put us on the path to recovery. **But was there justification for the stock market's 45% gain from the low and the halving of high yield bond yields from their high? And were the resulting security prices appropriate?** In other words, some recovery was not unreasonable, but was the magnitude of the one that occurred justified?

Of course, the answers to these questions lie in the eye of the beholder. If there were a straightforward, reliable and universally accepted way to arrive at appropriate security prices, (a) securities would likely sell at or near those prices and (b) over-optimistic highs and over-pessimistic lows wouldn't be reached. But the most optimistic psychology is always applied when things are thought to be going well, compounding and exaggerating the positives, and the most depressed psychology is applied when things are going poorly, compounding the negatives. This guarantees that extreme highs and lows will always be the eventual result in cycles, not the exception. (For a few hundred pages more on this subject, see my 2018 book, *Mastering the Market Cycle: Getting the Odds on Your Side*.)

Maybe it's the increased availability of information and opinion; maybe it's the popularization of investing; and maybe it's the vastly increased emphasis on short-term performance. But for whatever reason, things seem to happen faster in the markets these days. That certainly has been true in the last four months. In the current episode, the 34% decline from the all-time high to the crisis low took less than five weeks, and the 45% recovery to the June 8 high took only 11 weeks. These fluctuations were incredibly swift and powerful.

In my memo, *On the Couch* (January 2016), I wrote that:

> That's one of the crazy things: in the real world, things generally fluctuate between "pretty good" and "not so hot." But in the world of investing, perception often swings from "flawless" to "hopeless."

Thus far in 2020, the swing from flawless to hopeless and back has taken place in record time. The challenge is to figure out what was justified and what was aberration.

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The Bottom Line

I tend to return to a select few investment adages to make my points, for the simple reason that these time-honored standards contain so much wisdom. And I've written often about the first one shared with me by an experienced investor in the mid-1970s: the three stages of a bull market. There's a usual progression in market advances according to this beauty, and as far as I'm concerned, it's absolutely accurate and fully captures the reality:

- the first stage, when only a few unusually perceptive people believe improvement is possible;
- the second stage, when most investors realize that improvement is actually taking place; and

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- the third stage, when everyone concludes everything will get better forever.

Looking back (which is the main way we know these things), the first stage began in mid-March and culminated on March 23. Certainly very few people were thinking about economic improvement or stock market gains around that time. Then we passed briefly through stage two and went straight to stage three.

Certainly by the time the interim high was reached on June 8, it felt like the market was being valued in a way that focused on the positives, swallowed them whole, and overlooked the negatives. That's nothing but a value judgment on my part. It's just my opinion that the imbalance of attention to – and blanket acceptance of – the positives was overdone.

I had good company in being skeptical of the May/June gains. On May 12, with the S&P 500 up a startling 28% from the March 23 low, Stan Druckenmiller, one of the greatest investors of all time, said, "The risk-reward for equity is maybe as bad as I've seen in my career." The next day, David Tepper, another investing great, said it was "maybe the second-most overvalued stock market I've ever seen. I would say '99 was more overvalued."

On the days those two spoke, both the plain vanilla forward-looking p/e ratio and the Shiller cyclically adjusted price-to-earnings ratio were well above normal levels, disregarding all the uncertainties present and the big declines that lie ahead for GDP and earnings.

And yet, over the next four weeks leading up to the June 8 high, the S&P 500 rose an additional 13%. What this proves is that either (a) "overpriced" isn't synonymous with "sure to decline soon" or (b) Druckenmiller and Tepper were wrong. I'll go with (a). On June 8, Druckenmiller described himself as "humbled." (In this line of work, if you never feel humbled, it just means you haven't realistically appraised your performance.) All I know is that a lot of smart, experienced investors concluded that asset prices had become too high for the fundamentals. Time will tell.

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* * *

There's no way to determine for sure whether an advance has been appropriate or irrational, and whether markets are too high or too low. But there are questions to ask:

- Are investors weighing both the positives and the negatives dispassionately?
- What's the probability the positive factors driving the market will prove valid (or that the negatives will gain in strength instead)?
- Are the positives fundamental (value-based) or largely technical, relating to inflows of liquidity (i.e., cash-driven)? If the latter, is their salutary influence likely to prove temporary or permanent?
- Is the market being lifted by rampant optimism?

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- Is that optimism causing investors to ignore valid counter-arguments?
- How do valuations based on things like earnings, sales and asset values stack up against historical norms?

Questions like these can't tell us for a fact whether an advance has been reasonable and current asset prices are justified. But they can assist in that assessment. **They lead me to conclude that the powerful rally we've seen has been built on optimism; has incorporated positive expectations and overlooked potential negatives; and has been driven largely by the Fed's injections of liquidity and the Treasury's stimulus payments, which investors assume will bridge to a fundamental recovery and be free from highly negative second-order consequences.**

A bounce from the depressed levels of late March was warranted at some point, but it came surprisingly early and quickly went incredibly far. The S&P 500 closed last night at 3,113, down only 8% from an all-time high struck in trouble-free times. As such, it seems to me that the potential for further gains from things turning out better than expected or valuations continuing to expand doesn't fully compensate for the risk of decline from events disappointing or multiples contracting.

In other words, the fundamental outlook may be positive on balance, but with listed security prices where they are, the odds aren't in investors' favor.

June 18, 2020

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Memo to: Oaktree Clients

From: Howard Marks

Re: Not Enough

> Whatever affects one directly, affects all indirectly. I can never be what I ought to be until you are what you ought to be. This is the interrelated structure of reality. (Rev. Dr. Martin Luther King, Jr., 1965)

> Justice will not be served until those who are unaffected are as outraged as those who are. (Benjamin Franklin, 1750)

In recent weeks we have witnessed the killing of George Floyd by a Minneapolis policeman who knelt on his neck for almost nine minutes while three others stood by doing nothing, and we have watched peaceful protests and violent riots take place in cities across America and around the world.

We understand the death of George Floyd as one more of the glaring injustices suffered by black people and other people of color in our country. It adds to a long list of injustices ranging from profiling, harassment, brutality and killing at the hands of police; to disproportionate rates of addiction, prosecution, incarceration and sentencing; to highly unequal access to education, jobs, pay, health care, safe neighborhoods, decent housing and financial security; to having to live everyday with demoralizing indignities and fear for one's children's lives; and lately to above average rates of infection and fatality due to Covid-19.

Many Americans are speaking out in recognition of the grievances of black people. Leaders of society, government and business have made public statements designed to show their support. I want to add my voice to theirs and express my rejection of the status quo.

I've struggled to write this memo, and for that reason it's late in coming. I'm not a social commentator, and I have little to add that is unique, only my humanity. I certainly don't feel I know the solution or have the means to implement it. I'm afraid of coming across as holier-than-thou, and especially of saying something that anyone finds insensitive, patronizing or hurtful. I hold good thoughts in my heart and have always tried to be a good, thoughtful, inclusive person. **But I now know that's not enough.**

I find the statistics relating to the injustices listed above appalling, the result of individual as well as institutionalized racism going all the way back to the original sin of slavery. But behind the statistics – unpleasant as they are – are millions of individuals suffering. While the battle for civil rights was "won" a half-century ago, and we have talked about progress in the area of race, our society still denies equal opportunity to many.

The teenagers denied a quality education, who can't think of things to hope for or can't imagine achieving their dreams. The mothers who can't provide food and shelter for their families, and who have to look on with sadness, resentment or anger at a world full of things they're denied. The fathers who have to have "the talk" with their children, warning them to "yes, sir" the police, not move their hands too fast and not run down the street at night. The men who are stopped and asked

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why they're walking in upscale neighborhoods. The workers who don't have the luxury of ensuring safety by socially isolating, but have to go to work in proximity to others and then come home to close quarters and possibly infect their children or parents. The parents who have to send their children out into the world each day without confidence that they'll come back. These thoughts break my heart. **I feel deeply for every individual forced to live under these conditions. But I know I must do more than simply feel.**

I have talked in my memos of the fact that in the latter half of the 20th century, there was an economic "tide that lifted all boats." That tide may have enriched nations but not all people in those nations; instead, the benefits went to some but not others. Today the economic tide is no longer rising as strongly and the distribution is still more uneven; the advantages enjoyed by those with education or capital are being magnified; and the inequality of outcomes is simply no longer acceptable – hopefully to society and certainly to those getting less. It's a shame that it has taken so long for many of us to articulate that.

Our nation cannot endure for long if some people are denied basic human rights and opportunities simply because they belong to groups defined by color or race. This is true today and will become even truer as we move toward being a nation where the majority are members of minorities.

Millions of minority group members suffer as a result of the supposedly "human" tendency – which certainly is inhuman – to search for someone to look down on and thus impose a hierarchy based on race, skin color or ethnicity. Whether for reasons of history, economic insecurity, upbringing, the attractiveness of us-versus-them as an organizing principle, or their own bad luck or shortcomings, many people try to make themselves feel better by subjugating or abusing others, or at a very minimum they are indifferent to and unmoved by the suffering, deprivation and unequal lives of others. One of the lessons of recent weeks is that we must not tolerate the damage done by racists.

They say we should "walk a mile" in the shoes of others. And yet we can't. Fortunate folks like me can think about injustice and inequality as much as we like, but we can't live the constant sadness, fear or rage of those who are victimized by it. I and many others have come to understand those feelings more deeply because of the events surrounding the death of George Floyd. Now I believe the truth will finally be seen and something will be done about it – because it's the right thing to do and because of the growing realization that a civilization cannot long endure with people living lives of excessively different quality. **Each of us must commit to playing an active part in dismantling systemic racism and bringing about equality.**

The idea of racial justice goes hand-in-hand with the general concern over economic inequality that has increasingly motivated parts of the political spectrum in recent years. I've written about the need to grow the economic pie, but that's not enough. We must also repair how the pie is divided. Yes, the free market does a technically superior job of allocating resources. But we must no longer accept outcomes that are so unequal. Enrichment of a few and suffering for the rest is not a workable outcome for our society. We must address things like the poor quality of public education, the impediments to access to jobs and the limited progressivity of the tax system. The free market of economic theory must be adapted for modern life, and there are degrees of disparity that just cannot be accepted.

Oaktree's founders and senior management have worked to create a harmonious environment and one of shared opportunity and reward, where there is little hierarchy. We love and treasure all of our

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colleagues and want the best for them, and we revel in their success. But thoughts and words are not enough. We all have to redouble our efforts and come up with active solutions.

In 2017, Oaktree formalized what had been for many years an informal diversity and inclusion strategy intended to expand the population of women and underrepresented professionals at the firm. Since then our Diversity & Inclusion Council, in partnership with other employee groups, has launched a number of recruiting, development and training initiatives around equity, inclusion, mentorship and bias. But there is much more to do.

Next week we will convene a meeting led by our Underrepresented Groups Council as an opportunity to listen to our employees so as to be in position to implement programs in direct response to the events of these past weeks and ensure that Oaktree remains a place where all employees feel they can bring their whole selves to work. Under the banner of Our Communities Matter, Oaktree's program for community engagement and support, we will also launch a charitable giving program and special matching initiative to support front-line organizations nominated by our employees. And, moving forward, I will be devoting a significant amount of my personal energy and resources to combatting systemic racism.

It is imperative that all Americans see the recent events as a call for action and work to ensure equality for people of color. I pledge that Oaktree and I will heed this call and listen, learn and act.

June 11, 2020

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Memo to: Oaktree Clients

From: Howard Marks

Re: Uncertainty II

I've written a few times about the frequency with which I come across something additive just before finalizing a memo. This time I wasn't so lucky: my wife Nancy brought an important article to my attention two weeks after the publication of *Uncertainty*. The article's appearance, along with a second potential addition, prompts me to write this post-script to that memo. I have a few thoughts to add, all generally related to the topic of foreknowledge.

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No One Knows What's Going to Happen

The above heading was the title of an excellent article by Mark Lilla, a professor of humanities at Columbia University, which appeared in *The New York Times* this past Sunday. (You may remember my previous discussion of our tendency to think highly of people who agree with us. I readily admit that the reason I like this article so much may lie in the fact that it confirms a great deal of what I said in *Uncertainty*.) Here are some excerpts from that article:

> **The best prophet, Thomas Hobbes once wrote, is the best guesser.** That would seem to be the last word on our capacity to predict the future: We can't.
>
> **But it is a truth humans have never been able to accept.** People facing immediate danger want to hear an authoritative voice they can draw assurance from; they want to be told what will occur, how they should prepare, and that all will be well. We are not well designed, it seems, to live in uncertainty. **Rousseau exaggerated only slightly when he said that when things are truly important, we prefer to be wrong than to believe nothing at all**. . . .
>
> **Apart from the actual biology of the coronavirus – which we are only beginning to understand – nothing is predestined. How many people fall ill with it depends on how they behave, how we test them, how we treat them and how lucky we are in developing a vaccine.**
>
> The result of those decisions will then limit the choices about reopening that employers, mayors, university presidents and sports club owners are facing. Their decisions will then feed back into our own decisions, including whom we choose for president this November. And the results of that election will have the largest impact on what the next four years will hold.
>
> The pandemic has brought home just how great a responsibility we bear toward the future, and also how inadequate our knowledge is for making wise decisions and anticipating consequences. Perhaps that is why our prophets and augurs can't keep up with the demand for foresight.

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> At some level, people must be thinking that the more they learn about what is predetermined, the more control they will have. This is an illusion. **Human beings want to feel that they are on a power walk into the future, when in fact we are always just tapping our canes on the pavement in the fog.**
>
> A dose of humility would do us good in the present moment. It might also help reconcile us to the radical uncertainty in which we are always living. Let us retire our prophets and augurs. [Emphasis added]

Lilla's article pulls together in one place several themes from *Uncertainty* and other recent memos:

- the very human hunger for forecasts to help us navigate the future,
- the conditionality of the future on multiple future developments,
- our own ability to influence the future through the decisions we make,
- the unpredictability of each development,
- thus the futility of forecasting,
- the importance of accepting our ignorance of the future, and thus
- the general importance of intellectual humility.

Articles like this one and those cited in my last memo should drive home these points to everyone's satisfaction. **But rarely will people fully accept that we must make decisions regarding the future without knowing it.**

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<u>The Future as Path-Dependent</u>

Forecasters seem to act as if the future already exists, and all we have to do is be smart enough to discern it. **But that ignores the fact that all of us – and many other influences – are constantly creating the future through our collective activity.**

In his article, Lilla stated, ". . . the post-Covid future doesn't exist. It will exist only after we have made it." I think this is a very important concept. We might predict the future today, and we might even correctly assess what today's conditions and actions are likely to produce in the future. But that prediction will be shown to have been right only if no one and nothing causes the future to become different between now and the day it arrives. Thus I'll repeat what I quoted from Lilla earlier:

> How many people fall ill with [the coronavirus] depends on how they behave, how we test them, how we treat them and how lucky we are in developing a vaccine.

Not only how will the virus behave, morph, travel, react to warm weather and infect, but also how fast will we reopen the economy, how will people behave when we reopen it, and what will the virus do at that time? Thomas Sowell, a Hoover Institution economist and social theorist, provided a glimpse at how these things work in another field:

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> Economists are often asked to predict what the economy is going to do. But economic predictions require predicting what politicians are going to do – and nothing is more unpredictable.

The unpredictability of politicians is only one of the many variables complicating the future today. Not only can't we predict people's actions and the many other things that will determine the course of the virus and its impact on the economy, but we also certainly can't predict when they'll take those actions – and that will count just as much.

Which Expert to Follow?

In the memo *Uncertainty*, I quoted at considerable length from an article by Erik Angner. One of its most interesting points was as follows:

> People who lack the cognitive skills required to perform a task typically also lack the metacognitive skills required to assess their performance. Incompetent people are at a double disadvantage, since they are not only incompetent but also likely unaware of it. (*Behavioral Scientist*, April 13)

By definition, people who lack the expertise in a given field required for superior judgments also lack the expertise required to assess their level of expertise. As I mentioned, they qualify as John Kenneth Galbraith's forecasters "who don't know they don't know."

While re-reading my memo, I realized I had left out an important further ramification. Not only do most people fail to possess superior expertise – as well as the ability to know it – but they also lack the ability to figure out who does have it. **That's the catch: you may have to be an expert in a field in order to be able to figure out who the true experts are.** That's why research in most fields is subjected to "peer review," meaning a review by experts (not to be confused with "a jury of one's peers," meaning other lay citizens).

And yet, where does the buck stop on the biggest of questions, like those of today? The answer can't be "with the experts." An article in *The Wall Street Journal* set out the dilemma:

> To govern, at least at the level of the presidency, is to make hard choices among competing options with incomplete information. Easier problems are resolved before they ever reach the Oval Office. Neither scientific data nor public sentiments can properly answer the questions that face elected officials. Both are important and must be integrated into the judgments that political leaders make. But neither can substitute for that crucial act of judgment. . . .
>
> The president's job, and not only in times of crisis, frequently involves listening to experts disagree with one another and taking responsibility for choosing among them, plotting a course through opportunities and dangers. **The capacity to do this well involves its own sort of practical wisdom, an expertise in judging expertise**. . . . ("Experts Aren't Enough," May 16-17, emphasis added)

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Nowadays, like everyone else, I'm bombarded with conflicting views regarding the wisdom of rapidly reopening the U.S. economy. **Yet I recognize that not only is my opinion on that topic of little value, but I also don't have the expertise required to know for sure whose opinion does count.** What I do know is that the last thing I should do is choose an expert because his or her opinions agree with mine, and allow confirmation bias to affect my decision.

Further, in considering expertise, we must be leery of some dangerous tendencies in our society:

- to confuse general intelligence with knowledge of the facts relative to a given field,
- to confuse factual knowledge with superior insight,
- to conflate expertise and insight with the ability to predict the future,
- to treat experts in one field as if they're knowledgeable about all others, and
- to credit rich and successful people with all of the above.

Thus, as I've described in previous memos, when I travel abroad, I'm often asked what I think of my host countries' economies and their potential. "Why ask me?" I respond, "you live here." Just because I know something about investing and the U.S., why should I necessarily have meaningful insight into other fields and countries?

We see doctors or public health officials on TV who inveigh against quickly reopening the economy. They may well know much more than most about the medical and public health aspects of the coronavirus and how it should be dealt with, and their advice is likely to keep the most people alive. But on the other hand, since they're not economists, we should assume they're only answering from the standpoint of minimizing deaths. They may not take into consideration the importance of restarting the economy or how to balance the two considerations.

On the other hand, we see businesspeople and economists talking about the need to reopen in order to minimize the damage done to the economy by keeping it in a deep freeze. But what do they know about the cost in human lives? And certainly there is no algorithm or accepted process for deciding between the two. It's a matter of judgment, not expertise.

I recently read an article about an often-cited libertarian lawyer and legal scholar (unnamed here because of my general practice of not criticizing individuals) who predicted in mid-March that no more than 500 people would die from Covid-19 in the U.S. (revised upward to 5,000 when he later found a statistical error in his analysis). While he admitted to having no medical expertise, he said he did know more than the doctors about evolutionary theory and its applicability to the virus. His opinion apparently carried great weight at the time in conservative quarters.

Reporters, not being experts themselves, have to consult experts in order to write their stories. But how do they choose and vet the experts they cite? And to what extent are their selections a function of the biases we all tend to confirm and the conclusions they want to justify? In my experience, the more I know about a subject, the less I'm impressed with related media coverage.

And likewise, elected officials are rarely expert in the fields about which they have to make decisions. They, too, have no choice but to depend on experts. But how do they choose their experts? Would they ever consult an expert who belongs to the other party? I recently read a *Wall*

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Street Journal op-ed piece by a conservative senator suggesting categorically that conservatives and liberals are different in how they weigh re-opening the economy versus minimizing infections. Is such a sweeping (and probably unscientific) generalization more likely to be an appropriate observation or an example of intellectual bias stemming from ideological division?

So (a) true expertise is scarce and limited in scope, (b) expertise and predictive ability are two different things, and (c) we all should be careful about whom we listen to and how much weight we give to their pronouncements.

And one other thing: As Lilla wrote, "People facing immediate danger want to hear an authoritative voice . . ." Thus they tend to put inordinate faith in a popular "prophet." And when he or she turns out to be a less-than-perfect forecaster, and thus only human, they go looking for the next one to anoint. **They never say, "I guess forecasting doesn't work."** I would say the same about people in general, including those looking for help making money without risk or effort.

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A Living Example

Finally, in a related vein, I want to mention a May 19 article by Morgan Housel of Collaborative Fund, an insightful commentator whose philosophical and behavioral observations tend to resonate with me. In it, he told the story of two friends with whom he regularly took the risk of skiing out of bounds at the resort they frequented as teens. One day, his friends went out for a second run while he begged off for no particular reason, and a freak avalanche took their lives. Here's his summation:

> I don't know if Brendan and Bryan's death actually affected how I invest. But it opened my eyes to the idea that there are three distinct sides of risk:
>
> - **The odds you will get hit.**
> - **The average consequences of getting hit.**
> - **The tail-end consequences of getting hit.**
>
> The first two are easy to grasp. It's the third that's hardest to learn, and can often only be learned through experience.
>
> We knew we were taking risks when we skied. We knew that going out of bounds was wrong, and that we might get caught. But at 17 years old we figured the consequences of risk meant our coaches might yell at us. Maybe we'd get our season pass revoked for the year.
>
> Never, not once, did we think we'd pay the ultimate price.
>
> But once you go through something like that, you realize that the tail-end consequences – the low-probability, high-impact events – are all that matter. In investing, the average consequences of risk make up most of the daily news headlines. But the tail-end consequences of risk – like pandemics, and depressions – are what make the pages of history books. *They're all that matter*. They're all you should focus on. We spent the last decade debating whether economic risk meant the

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Federal Reserve set interest rates at 0.25% or 0.5%. Then 36 million people lost their jobs in two months because of a virus. It's absurd.

Tail-end events are all that matter.

This introduces one of the great conundrums associated with investing. Since we know nothing about the future, we have no choice but to rely on extrapolation of past patterns. By "past patterns," we mean what has normally happened in the past **and with what severity**. And yet, there's no reason why (a) things can't happen that differ from those that happened in the past and (b) future events can't be worse than those of the past in terms of severity and thus consequences. While we look to the past for guidance as to the "worst case," there's no reason why future experience should be limited to that of the past. But without reliance on the past to inform us regarding the worst case, we can't know much about how to invest our capital or live our lives.

Many years ago, my friend Ric Kayne pointed out that **"95% of all financial history happens within two standard deviations of normal, and everything interesting happens outside of two standard deviations."** Arguably, bubbles and crashes fall outside of two standard deviations, but they are the events that create and eliminate the greatest fortunes. We can't know much in advance about their nature or dimensions. Or about rare, exogenous events like pandemics.

In 2001, I wrote a memo titled *You Can't Predict. You Can Prepare.* At first glance, that seems like an oxymoron. How can we prepare for something if we can't predict it? Turned around, if the greatest extremes and most influential exogenous events are unpredictable, how can we prepare for them? We can do so by recognizing that they inevitably will occur, and by making our portfolios more cautious when economic developments and investor behavior render markets more vulnerable to damage from untoward events.

That line of reasoning suggests a glimmer of good news: we may not be able to predict the future, but that doesn't mean we're powerless to deal with it.

May 28, 2020

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Memo to: Oaktree Clients

From: Howard Marks

Re: Uncertainty

I wrote a memo a week for six weeks starting on March 3, but I've skipped the last three weeks. First, the string had to end sometime. And second, I try to adhere to the principle that if I don't have anything additive to say, I don't write. Hopefully you'll find this one worth reading.

Our inability to know the future is a theme I've touched on repeatedly over the years, but now I've decided to devote an entire memo to it. Being at home for nearly two months means I've had a lot of time on my hands, like everyone else. And it's a good thing, because getting philosophical musings down on paper is a lot harder than writing about current events and what to do about them.

And while I'm explaining myself, I'll apologize up front for the number of citations and their length – but there's so much wisdom I want to share.

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All We Don't Know

As everyone knows, today we're experiencing unprecedented (or at least highly exceptional) developments in four areas: the pandemic, the economic contraction, the oil price collapse and the Fed/government response. Thus a number of considerations make the future particularly unpredictable these days:

- The field of economics is muddled and imprecise, and there's good reason it's called "the dismal science." Unlike a "real" science like physics, in economics there are no rules that one can count on to consistently produce a given outcome, as in "if a, then b." There are only patterns that tend to repeat, and while they may be historical, logical and often-observed, they're still only tendencies.
- In some recent memos, I've mentioned Marc Lipsitch, Professor of Epidemiology at Harvard's T.H. Chan School of Public Health. In my version of his hierarchy, there are (a) facts, (b) logical inferences from past experience and (c) guesses. Because of the imprecision of economics, there certainly are no facts about the economic future. Economists and investors make inferences from past patterns, but these are unreliable at best, and I think in many cases their judgments fall under the heading of "guesses."
- These days I'm often asked questions like "Will the recovery be V-shaped, or a U, W or L?" and "Which of the crises you've lived through does this one most resemble?" Answering questions like those requires a historical perspective.
- Given the exceptional developments enumerated above, however, there's little or no history that's relevant to today. That means we don't have past patterns to fall back on or to extrapolate from. **As I've said, if you've never experienced something before, you can't say you know how it's going to turn out.**
- While unique developments like those of today make forecasting unusually difficult, the presence of all four elements at once probably renders it impossible. In addition to the

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difficulty of understanding each of the four individually, we can't be sure how they'll interact. For example:

- Will the massive, multi-faceted Fed/Treasury program of loans, grants, stimulus and bond buying be sufficient to offset the unparalleled damage done to the economy by the fight against Covid-19?
- To what extent will reopening bring back economic activity, and to what extent will that cause the spread of the disease to resume, and the renewal of lock-downs?

For investors, the future is determined by thousands of factors, such as the internal workings of economies, the participants' psyches, exogenous events, governmental action, weather and other forms of randomness. Thus the problem is enormously multi-variate. Take the current situation, with its four major components (Covid-19, the economy, oil and the Fed), and consider just one: the disease. Now think about all the questions surrounding it:

- How many people have it, including those who are asymptomatic?
- How likely is contact with someone who's infected to create another case?
- To what degree will distancing and masks deter its spread?
- Will the cases be severe, mild or asymptomatic? Why?
- Will the supply of protective gear for medical personnel, hospital beds and ventilators be adequate?
- Will a treatment be developed? To what extent will it speed recovery and prevent fatalities?
- What will the fatality rate be relative to age, gender and pre-existing conditions? Will the impact of the disease on young people worsen?
- Will people who've had it and recovered be immune? Will their immunity be permanent?
- Will the virus mutate, and will immunity cover the new forms?
- Will it be possible to inject antibodies to prevent infection?
- How many people have to be immune for herd immunity to effectively stop the further spread?
- Will social distancing delay the achievement of herd immunity? Is the Swedish approach better?
- Will a vaccine be invented? When? How long will it take to produce and deliver the needed doses? Where will the U.S. stand in the line to get it?
- How many people will refuse to be vaccinated? With what effect?
- Will vaccination have to be renewed annually?
- Will the virus succumb to warm weather and humidity?
- Will the virus be with us permanently, and will it be controllable like "just another seasonal disease"?

Where am I going with this? My point is that very few people can balance all these considerations to figure out our collective risk. And that's just Covid-19. Now think about the many questions that pertain to each of the three other factors. **Who can respond to this many questions, come up with valid answers, consider their interaction, appropriately weight the various considerations on the basis of their importance, and process them for a useful conclusion regarding the virus's impact?** It would take an exceptional mind to deal with all these factors simultaneously and reach a better conclusion than most other people. (I believe a computer couldn't do so either, especially given all the subjective decisions required in the absence of historic precedent.)

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The challenge lies in trying to be **above average** in assessing the future. Why is that so hard?

First of all, forecasting is a competitive arena. **The argument for the difficulty of out-forecasting others is similar to the argument for market efficiency (and thus the limitations of active management).** Thousands of others are trying, too, and they're not "empty suits." Many of them are educated, intelligent, numerate, hard-working, highly motivated and able to access vast amounts of data and computing power. So by definition it shouldn't be easy to be better than the average.

In addition, since economics is imprecise, unscientific and inconsistent in its functioning, as described above, there can't be a method or process for forecasting that works consistently. To illustrate randomness, I say that if, when I graduated from business school, I was offered a huge budget, an army of PhDs and lavish financial incentives to predict the coin toss before each Sunday's football games, I would have been a flop. **No one can succeed in predicting things that are heavily influenced by randomness and otherwise inconsistent.**

Now consider the possibility that reaching conclusions is especially difficult in times of stress like today:

> [Recent advances in neuroscience] suggest that we are no more than "inference machines" with various degrees of sophistication in how we explain our thoughts. In other words, we use a lot of pattern-driven guesswork as we go about our daily lives or to fill in the gaps in an incomplete narrative.
>
> This is especially true in times of stress, as many of the mental processes that govern our reactions are associated with an urgent search for patterns to determine our moves. **That is our snap reaction in economic or financial crises and why we cling to our repertoire of charts of V, U or L-shapes of recovery, among many.**
>
> But, in very dislocated environments, we find serious limitations to this approach.
>
> Looking at the current environment, with disruptions to supply, demand, health and liquidity tensions, we could build an ensemble of the Spanish flu, the Fukushima earthquake and components of the 2008 crisis, for example. But given the very specific contexts of each event, we may run into endless combinations of the lessons learnt from these events.
>
> **As a matter of fact, in a side-by-side comparison of many economic forecasts, even similar assumptions drive very different outcomes on how this crisis will play out.** This may be a case of the "Anna Karenina principle" coined by Professor Yossi Sheffi at Massachusetts Institute of Technology. Paraphrasing Tolstoy, while happy economies are all alike, every unhappy economy is unhappy in its own way.
>
> We can't assume that the response to public health or financial interventions will be similar across vastly different contexts. **The root cause of this mistake is to look at average responses from past events. But the reality is not like that.** (Juan-Luis Perez, head of research, Evidence Lab and Analytics, at UBS, the *Financial Times*, April 22, emphasis added)

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So forecasting is difficult for a large number of reasons, including our limited understanding of the processes that will produce the future, their imprecise nature, the lack of historical precedent, the unpredictability of people's behavior and the role of randomness, and these difficulties are exacerbated by today's unusual circumstances.

Senior economics consultant Neil Irwin put it together very well in *The New York Times* on April 16:

> The world economy is an infinitely complicated web of interconnections. We each have a series of direct economic interrelationships we can see: the stores we buy from, the employer that pays our salary, the bank that gives us a home loan. But once you get two or three levels out, it's really impossible to know with any confidence how those connections work.
>
> And that, in turn, shows what is unnerving about the economic calamity accompanying the spread of the novel coronavirus.
>
> In the years ahead we will learn what happens when that web is torn apart, when millions of those links are destroyed all at once. And it opens the possibility of a global economy completely different from the one that has prevailed in recent decades.

I couldn't agree more with what Irwin says. Or, to use one of my all-time favorite quotes, from John Kenneth Galbraith:

> We have two classes of forecasters: Those who don't know – and those who don't know they don't know.

While I'm in the subject of favorite quotes, I'll take advantage of the occasion to share some others on this subject that I've stored up over the years (I think the first one may be the greatest ever):

> **No amount of sophistication is going to allay the fact that all of your knowledge is about the past and all your decisions are about the future.**
>
> Ian Wilson (former GE executive)

> Those who have knowledge don't predict; those who predict don't have knowledge.
>
> Lao Tzu

> People can foresee the future only when it coincides with their own wishes, and the most grossly obvious facts can be ignored when they are unwelcome.
>
> George Orwell

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Forecasts create the mirage that the future is knowable.

Peter Bernstein

I never think of the future – it comes soon enough.

Albert Einstein

The future you shall know when it has come; before then forget it.

Aeschylus

Forecasts usually tell us more of the forecaster than of the future.

Warren Buffett

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I think you get the point. I seem to be in good company in my belief that the future is unknowable.

Having made that assertion, I'll admit that it's an extreme oversimplification and not entirely correct. There actually are things we know about the macro future. The trouble is that, mostly, they're things everyone knows. Examples include the fact that U.S. GDP grows about 2% per year on average; heating oil consumption increases in winter; and a great deal of shopping is moving on-line. But since everyone knows these things, they're unlikely to be much help in the pursuit of above average returns. As I've described before, the things most people expect to happen – consensus forecasts – are by definition incorporated into asset prices at any point in time. Since the future is usually a lot like the past, most forecasts – and especially macro forecasts – are extrapolations of recent trends and current levels, and they're built into prices. Since extrapolation is appropriate most of the time, most people's forecasts are roughly correct. But because they're already reflected in security prices, **most extrapolations aren't a source of above average returns**.

The forecasts that produce great profits are the ones that presciently foresee radical deviations from the past. But that kind of forecast is, first, very hard to make and, second, rarely right. **Thus most forecasts of deviation from trend <u>also</u> aren't a source of above average returns.**

So let me recap: (a) only correct forecasts of a very different future are valuable, (b) it's hard to make forecasts like that, (c) such unconventional predictions are rarely right, (d) thus it's hard to be an above average forecaster, and (e) it's only above average forecasts that lead to above average returns.

So there's a conundrum:

- Investing is the art of positioning capital so as to profit from future developments.
- Most professional investors strive for above average returns (i.e., they want to beat the market and earn their fees).

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- However, according to the above logic, macro forecasts shouldn't be expected to lead to above average returns.
- Yet very few people are content to invest while practicing agnosticism with regard to the macro future. They may on some level understand the difficulty entailed in forecasting, but their reluctance to admit their ignorance of the future (especially to themselves) usually overcomes that understanding with ease.
- And so they keep trying to predict future events – and the investment industry produces a large volume of forecasts.

As I've expressed in recent memos, I feel the process through which most of us arrive at our view of the future is highly reflective of our biases. Given the unusually wide chasm between the optimistic and pessimistic cases at this time – and the impossibility of choosing between them based on facts and historical precedents (since there are none) – I continue to think about the role of bias.

One of the biggest mistakes an investor can make is ignoring or denying his or her biases. If there are influences that make our processes less than objective, we should face up to this fact in order to avoid being held captive by them.

Our biases may be insidious, but they are highly influential. When I read articles about how difficult it will be to provide adequate testing for Covid-19 or to get support to small businesses, I'm pleased to see my wary views reinforced, and I find it easy to incorporate those things into my thinking. But when I hear about the benefits of reopening the economy or the possibility of herd immunity, I find it just as easy to come up with counter-arguments that leave my concerns undented. This is a clear example of "confirmation bias" at work:

> Once we have formed a view, we embrace information that confirms that view while ignoring, or rejecting, information that casts doubt on it. Confirmation bias suggests that we don't perceive circumstances objectively. We pick out those bits of data that make us feel good because they confirm our prejudices. Thus, we may become prisoners of our assumptions. (Shahram Heshmat, *Psychology Today*, April 23, 2015)

As Paul Simon wrote 50 years ago for the song *The Boxer*, ". . . a man hears what he wants to hear and disregards the rest."

While I didn't know the name for it, I've long been aware of my bias. In a recent memo, I told the story from 50 years ago, when I was Citibank's office equipment analyst, of being asked who the best sell-side analyst on Xerox was. My answer was simple: "The one who agrees with me most is so-and-so." Most people are unlikely to think highly of anyone whose views they oppose. So when we think about which economists we quote, which investors we respect, and where we get our information, it's likely that their views will parallel ours.

Of course, taken to an extreme, this has resulted in the unfortunate, polarized state in which we find the U.S. today. News organizations realized decades ago that people would rather consume stories that confirm their views than those that challenge them (or are dully neutral). Few people follow media outlets that reflect a diversity of opinion. Most people stick to one newspaper, cable news channel or political website. And few of those fairly present both sides of the story. Thus most people hear a version of the news that is totally unlike the one heard by those on the other side of the

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debate. When all the facts and opinions you hear confirm your own beliefs, mental life is very relaxed but not very enriching.

What's the ideal? A calm, open mind and an objective process. Wouldn't we all be better off if those things were universal?

In Praise of Doubt

Another favorite theme of mine – and I'm mildly apologetic for its repetition in these memos – is how important it is to acknowledge what we don't know.

First of all, if we're going to out-invest the rest, we need a game plan. There are a lot of possible routes to success on which to base your process: in-depth research into companies, industries and securities; arbitrage; algorithmic investing; factor investing; even indexation. But if I'm right about the difficulty of macro forecasting, for most people that shouldn't be it.

Second, and probably more importantly, excessive trust in forecasting can be dangerous to your financial health. It's never been put better than in the quote that's often attributed to Mark Twain, but also to several others:

> **It ain't what you don't know that gets you into trouble. It's what you know for sure that just ain't so.**

Just a few words, but a great deal of wisdom. No statement that starts with "I don't know but . . ." or "I could be wrong but . . ." ever got anyone into big trouble. If we admit to uncertainty, we'll investigate before we invest, double-check our conclusions and proceed with caution. We may sub-optimize when times are good, but we're unlikely to flame out or melt down. **On the other hand, people who are sure may dispense with those things, and if they're sure and wrong, as the quote suggests, the outcome can be catastrophic.**

Investing is challenging in this way, as in so many others. **Active investors have to be confident.** Yale's David Swensen said it as well as it can be said (that's why I go back to this quote so often in my memos and books):

> Establishing and maintaining an unconventional investment profile requires acceptance of uncomfortably idiosyncratic portfolios, which frequently appear downright imprudent in the eyes of conventional wisdom. (*Pioneering Portfolio Management*)

To do better than most, you have to depart from the crowd. As I said in my April 6 memo *Calibrating*, echoing Swensen, all great investments begin in discomfort, since the things everyone likes and feels good about are unlikely to be on the bargain counter. But to invest in things that are out of favor – at the risk of standing out from the crowd and appearing to have made a big mistake – takes confidence and resolve. It also requires confidence to hold onto a position when it declines – and perhaps add to it at lower prices – in the period before one's wisdom becomes clear and it turns into a winner. And it takes confidence to continue holding a highly appreciated investment you think still has upside potential, at the risk of possibly giving up some of the gains to date.

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But when does reason-based confidence turn into hubris and obstinateness? That's the key question. Holding and adding to declining positions is only a good idea if the underlying thesis turns out to be right and things eventually go as expected. In other words, when do you allow for the possibility that you're wrong?

From the very beginning of my investing career, I've felt a sense of uncertainty. But I don't think that's a bad thing:

- "Investing scared" – a less glamorous term than "applying appropriate risk aversion" – will push you to do thorough due diligence, employ conservative assumptions, insist on an ample margin of safety in case things go wrong, and invest only when the potential return is at least commensurate with the risk. **In fact, I think worry sharpens your focus.** Investing scared will result in making fewer mistakes (although perhaps at the price of failing to take maximum advantage of bull markets).
- When I started investing in high yield bonds in 1978, and when Bruce Karsh and I first targeted distressed debt in 1988, it seemed clear that the route to long-term success in such uncertain areas lay in limiting losses rather than targeting maximum gains. That approach has permitted us to still be here, while many one-time competitors no longer are.
- I can tell you that in the Global Financial Crisis, following the bankruptcy of Lehman Brothers, we felt enormous uncertainty. If you didn't, there was something wrong with you, since there was a meaningful possibility the financial system would collapse. When we started buying, Bruce came to me often saying, "I think we're going too slow," and then the next day, "I think we're going too fast." But that didn't keep him from investing an average of $450 million per week over the last 15 weeks of 2008. **I think Bruce's ability to grapple with his doubts helped him arrive at the right pace of investment.**

The topic of dealing with what you don't know brings me to a phrase I came across a few years ago and think is very important: intellectual humility.

Here's part of the article that first brought it to my attention:

> "Intellectual humility" has been something of a wallflower among personality traits, receiving far less scholarly attention than such brash qualities as egotism or hostility. Yet this little-studied characteristic may influence people's decision-making abilities in politics, health and other arenas, says new research from Duke University. . . .
>
> As defined by the authors, **intellectual humility is the opposite of intellectual arrogance or conceit. In common parlance, it resembles open-mindedness. Intellectually humble people can have strong beliefs, but recognize their fallibility and are willing to be proven wrong on matters large and small**, Leary said. (Alison Jones, *Duke Today*, March 17, 2017, emphasis added)

To get a little more technical, here are a couple of useful paragraphs from a discussion of the paper cited above:

> The term, intellectual humility (IH), has been defined in several ways, but most definitions converge on the notion that IH involves recognizing that one's beliefs and

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> opinions might be incorrect. . . . Some definitions of IH include other features or characteristics – such as low defensiveness, appreciating other people's intellectual strengths, or a prosocial orientation . . .
>
> **One conceptualization defines intellectual humility as recognizing that a particular personal belief may be fallible, accompanied by an appropriate attentiveness to limitations in the evidentiary basis of that belief and to one's own limitations in obtaining and evaluating relevant information**. This definition qualifies the core characteristic (recognizing that one's belief may be wrong) with considerations that distinguish IH from mere lack of confidence in one's knowledge or understanding. IH can be distinguished from uncertainty or low self-confidence by the degree to which people hold their beliefs tentatively specifically because they are aware that the evidence on which those beliefs are based could be limited or flawed, that they might lack relevant information, or that they may not have the expertise or ability to understand and evaluate the evidence. (*The Psychology of Intellectual Humility*, Mark Leary, Duke University, emphasis added)

"Attentiveness to limitations in the evidentiary basis" (or to the limitations imposed by future uncertainty) is a very important further concept. Here's how I discussed it in my book *Mastering the Market Cycle*:

> Most people think the way to deal with the future is by formulating an opinion as to what's going to happen, perhaps via a probability distribution. I think there are actually two requirements, not one. In addition to an opinion regarding what's going to happen, people should have a view on the likelihood that their opinion will prove correct. Some events can be predicted with substantial confidence (e.g., will a given investment grade bond pay the interest it promises?), some are uncertain (will Amazon still be the leader in online retailing in ten years?) and some are entirely unpredictable (will the stock market go up or down next month?) It's my point here that not all predictions should be treated as equally likely to be correct, and thus they shouldn't be relied on equally. I don't think most people are as aware of this as they should be.

In short, we have to have a realistic view of the probability that we're right before we choose a course of action and decide how heavily to bet on it. And anyone who's sure about what's going to happen in the world, the economy or the markets is probably deceiving himself.

It all comes down to dealing with uncertainty. To me, that starts with acknowledging uncertainty and having an appropriate degree of respect for it. As I quoted Annie Duke this past January, in my memo *You Bet!*:

> What good poker players and good decision-makers have in common is their comfort with the world being an uncertain and unpredictable place. They understand that they can almost never know exactly how something will turn out. They embrace that uncertainty and, instead of focusing on being sure, they try to figure out how *unsure* they are, making their best guess at the chances that different outcomes will occur. (*Thinking in Bets*)

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To put it simply, intellectual humility means saying "I'm not sure," "The other person could be right," or even "I might be wrong." I think it's an essential trait for investors; I know it is in the people I like to associate with.

As so often happens when I'm thinking about a memo, I recently got an incredibly helpful note from my friend Leslie Lichtenstein at the University of Chicago, connecting the concept of humility to the current episode. Here's what she wrote:

> This morning I read an article from *Behavioral Scientist* by Erik Angner [professor of practical philosophy at Stockholm University] called "Epistemic Humility – Knowing Your Limits in a Pandemic," which made me think of you and several of your recent memos. The article opens with a quote from Charles Darwin in 1871 – "**Ignorance more frequently begets confidence than does knowledge." It goes on to say, "Being a true expert involves not only knowing stuff about the world but also knowing the limits of your knowledge and expertise**." (Emphasis in Leslie's note)

I couldn't agree more. People who are always sure are no more helpful than people who are never sure. The real expert's confidence is reason-based and proportional to the weight of the evidence. Leslie's note sent me to the original of the article she cited, and I found so much to share:

> In the middle of a pandemic, knowledge is in short supply. We don't know how many people are infected, or how many people will be. We have much to learn about how to treat the people who are sick – and how to help prevent infection in those who aren't. There's reasonable disagreement on the best policies to pursue, whether about health care, economics, or supply distribution. Although scientists worldwide are working hard and in concert to address these questions, final answers are some ways away.
>
> Another thing that's in short supply is the realization of how little we know. . . .
>
> Frequent expressions of supreme confidence might seem odd in light of our obvious and inevitable ignorance about a new threat. The thing about overconfidence, though, is that it afflicts most of us much of the time. That's according to cognitive psychologists, who've studied the phenomenon systematically for half a century. Overconfidence has been called "the mother of all psychological biases. . . ."
>
> The point is not that true experts should withhold their beliefs or that they should never speak with conviction. Some beliefs are better supported by the evidence than others, after all, and we should not hesitate to say so. The point is that true experts express themselves with the proper degree of confidence – meaning with a degree of confidence that's justified given the evidence. . . .
>
> [Compare what you hear on TV against a tweet from medical statistician Robert Grant]: "I've studied this stuff at university, done data analysis for decades, written several NHS guidelines (including one for an infectious disease), and taught it to health professionals. **That's why you don't see me making any coronavirus forecasts. . . .**"

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> The concept of epistemic humility is . . . an intellectual virtue. It is grounded in the realization that our knowledge is always provisional and incomplete – and that it might require revision in light of new evidence. Grant appreciates the extent of our ignorance under these difficult conditions; the other characters don't. A lack of epistemic humility is a vice – and it can cause massive damage both in our private lives and in public policy.
>
> Calibrating your confidence can be tricky. As Justin Kruger and David Dunning have emphasized, our cognitive and metacognitive skills are intertwined. People who lack the cognitive skills required to perform a task typically also lack the metacognitive skills required to assess their performance. **Incompetent people are at a double disadvantage, since they are not only incompetent but also likely unaware of it [Galbraith's forecasters "who don't know they don't know"!].** This has immediate implications for amateur epidemiologists. If you don't have the skill set required to do advanced epidemiological modeling yourself, you should assume that you can't tell good models from bad.
>
> . . . it's never been more important to learn to separate the wheat from the chaff – the experts who offer well-sourced information from the charlatans who offer little but misdirection. The latter are sadly common, in part because they are in greater demand on TV and in politics. It can be hard to tell who's who. But paying attention to their confidence offers a clue. People who express themselves with extreme confidence without having access to relevant information *and* the experience and training required to process it can safely be classified among the charlatans until further notice. . . .
>
> Again, it is fine and good to have opinions, and to express them in public – even with great conviction. **The point is that true experts, unlike charlatans, express themselves in a way that mirrors their limitations.** All of us who want to be taken seriously would do well to demonstrate the virtue of epistemic humility. (Erik Angner, *Behavioral Scientist*, April 13, emphasis added)

The more I think about it, the bottom line is clear:

- The world is an uncertain place.
- It's more uncertain today than at any other time in our lifetimes.
- Few people know what the future holds much better than others.
- **And yet investing deals entirely with the future, meaning investors can't avoid making decisions about it.**
- Confidence is indispensable in investing, but too much of it can be lethal.
- The bigger the topic (world, economy, markets, currencies and rates), the less possible it is to achieve superior knowledge.
- **Even our decisions about smaller things (companies, industries and securities) have to be conditioned on assumptions regarding the bigger things, so they, too, are uncertain.**
- The ability to deal intelligently with uncertainty is one of the most important skills.

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- In doing so, we should understand the limitations on our foresight and whether a given forecast is more or less dependable than most.
- Anyone who fails to do so is probably riding for a fall.

As Neil Irwin wrote in the article cited on page 4:

> It would be foolish, amid such uncertainty, to make overly confident predictions about how the world economic order will look in five years, or even five months.

Or maybe Voltaire said it best 250 years ago: **Doubt is not a pleasant condition, but certainty is absurd.**

May 11, 2020

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Memo to: Oaktree Clients

From: Howard Marks

Re: Knowledge of the Future

As I showed by using it again in last week's memo, I was impressed by the observation of Marc Lipsitch, Harvard epidemiologist, that there are (a) facts, (b) informed extrapolations from analogies to other viruses and (c) opinion or speculation. He said it in connection with the novel coronavirus, but I've been thinking about its relevance to investing.

In the past, I've defined investing as the act of positioning capital so as to profit from future developments. I've also mentioned the challenge presented by the fact that there's no such thing as knowing what future developments will be. This is the paradox we must deal with.

To follow Lipsitch's analysis, in our world of investing:

- there are few if any facts regarding the future,
- the vast majority of our theorizing about the future consists of extrapolating from past patterns, and
- a lot of that extrapolation – and just about all the rest of our conclusions – consists of what Lipsitch calls opinion or speculation and what I call guesswork. (George Bernard Shaw said, "All professions are conspiracies against the laity." Thus the rules of the investment profession seem to require that its members describe their views about the future using high-sounding terms like "analysis," "assessment," "projection," "prediction" and "forecast." Rarely do we see the word "guess.")

Last week, in *Calibrating*, I mentioned having written to an Oaktree colleague that, "These days everyone has the same data regarding the present and the same ignorance regarding the future." I chose the title of this memo because it's such an oxymoron: there's practically no such thing as meaningful knowledge regarding the future investment environment. Thus, this memo will be about some things people think they know but may not.

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Extrapolating from the Past

We use extrapolation from the past as the best way to deal with the future. If not for the ability to research past patterns and apply them to decisions regarding the future, we'd have to reach a new conclusion every day about every future possibility. So, for example, in investing we study typical past cycles, the exceptions from the norm, and details like the up-and-down pattern that's part of most rallies, as described last week in *Calibrating*.

But blind faith in the relevance of past patterns makes no more sense than completely ignoring them. There has to be good reason to believe the past can be extrapolated to the future; as Lipsitch says, it has to be informed extrapolation. And that brings me to the current episode.

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What does the U.S. see today?

- one of the greatest pandemics to reach us since the Spanish Flu of 102 years ago,
- the greatest economic contraction since the Great Depression, which ended 80 years ago,
- the greatest oil-price decline in the OPEC era (and, probably, ever), and
- the greatest central bank/government intervention of all time.

The future for all these things is clearly unknowable. We have no reason to think we know how they'll operate in the period ahead, how they'll interact with each other, and what the consequences will be for everything else. **In short, it's my view that if you're experiencing something that has never been seen before, you simply can't say you know how it'll turn out.**

In my last two memos, I stressed my conviction that there's no "informed" way to choose between the positive and negative scenarios we face today, and that most people decide in a way that reflects their biases. While searching the Internet for the source of the quote above about professions, I came across something that I think supports my view that most people reach conclusions for reasons that are questionable:

> An ignorant mind is precisely not a spotless, empty vessel, but one that's filled with the clutter of irrelevant or misleading life experiences, theories, facts, intuitions, strategies, algorithms, heuristics, metaphors, and hunches that regrettably have the look and feel of useful and accurate knowledge. This clutter is an unfortunate by-product of one of our greatest strengths as a species. We are unbridled pattern recognizers and profligate theorizers. Often, our theories are good enough to get us through the day, or at least to an age when we can procreate. But our genius for creative storytelling, combined with our inability to detect our own ignorance, can sometimes lead to situations that are embarrassing, unfortunate, or downright dangerous – especially in a technologically advanced, complex democratic society that occasionally invests mistaken popular beliefs with immense destructive power (See: crisis, financial; war, Iraq). ("We Are All Confident Idiots," David Dunning, Professor of Psychology, University of Michigan, *Pacific Standard* magazine, October 27, 2014)

In other words, we may not be able to know the future, but that doesn't keep us from reaching conclusions about it and holding them firmly.

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Getting Back to Normal

One of the greatest uncertainties we face today surrounds the outlook for the economy. The optimists expect a V-shaped recovery, and a great deal is riding on the question of whether it'll materialize. It depends on when America will go back to work, and that, in turn, depends to a great extent on the trend in infections.

Early on, we were told the growth of the disease would be "exponential." We learned what that meant – the number of new cases would grow from one day to the next by a constant percentage – and about the idea of "flattening the curve." Thus, in the language of investing, the number of cases

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would "compound." Because new cases would rise each day by a constant percentage, their number would increase as the fixed growth rate was applied to an expanding base.

In order to get the disease under control, the following progression has to take place:

- The growth in the number of daily new cases has to come in below expectations, meaning the rate of growth has to decline rather than remain constant.
- Then the number of daily new cases has to stabilize, meaning the rate of growth is declining.
- Then the number of daily new cases has to decline, meaning the rate of growth is negative.
- Then the number of daily new cases has to go to zero, meaning the disease has been stopped.

Different places around the world and in the U.S. are at different stages in this progression. There are places where the number of daily new cases is continuing to rise; places where the curve is flattening and the new cases are declining (e.g., trends are positive in U.S. cities that were beset early); and places that had good results early but are seeing rebounds as rules are relaxed and people start to return to their normal behavior. Here are a few of the questions that bear on the outlook for the curve:

- Will testing and contact mapping facilitate keeping infected people out of circulation?
- Will large numbers of asymptomatic infections impede the effort to isolate carriers?
- Will it be possible to test people to learn whether they've had the disease and developed antibodies, such that they can go out in public without fear of reinfection?
- Will herd immunity develop? Will it be permanent?
- Will the arrival of warm weather be helpful?
- Will a cure be developed?
- Will the virus morph into other forms, requiring new cures?
- Will a vaccine be developed, and when?

One of the thorniest questions remains how society and its leaders will make the trade-off between minimizing deaths from the virus and restarting the economy. In other words, at which step in the progression at the top of this page will the back-to-work message be delivered? The longer people stay at home and the economy remains shut down, the further the progression will be allowed to go, and the closer we'll get to containing the disease. Simultaneously, however, the more damage will be done to the economy and the harder it'll be to restart.

A decision to end the stay-at-home orders on May 1 rather than May 31 will be better for the economy in the short run, but it'll also send people into society while there are still infected people around, and thus it's likely to result in a "rebound" or "echo," as Hong Kong and Singapore have seen; in a re-steepening of the curve; and in further infections and deaths. **How will we make that trade-off? There's no algorithm for deciding whether to favor life for a few (or for thousands) versus economic improvement for millions.** On one hand, choosing the economy seems hard-hearted. On the other, we permit or even encourage many activities that result in large numbers of deaths, such as driving. Here's how renowned investor Edward Lampert put it in *The New York Sun* on April 6:

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> Driving an automobile is risky. In 2018, the number of auto-related fatalities in the United States was 36,560, according to the National Highway Traffic Safety Administration. Yet we don't ban automobiles, nor do we impose a 10 mile an hour speed limit. Doing so would eliminate most of those deaths and injuries, but it would also adversely affect economic activity enabled by faster transportation of people and products.
>
> Overall, the benefits of automobiles exceed the costs. Individuals knowingly assume the risks. Businesses compete to make money by reducing those risks. To deal with market failures and externalities, and to provide a certain minimum floor, we have regulatory mechanisms imposed by government to mitigate risks and compensate for losses.
>
> These same approaches can be useful in guiding the public policy response to the coronavirus, showing the way to a middle ground that minimizes harm without excessive costs to either the economy or individual freedom. . . .
>
> We need to get America back to work quickly. Businesses and individuals can adapt dynamically to intelligently guard their interests, seek opportunities, and make trade-offs. The government can provide the traffic signals and the safety standards. That approach to public health is consistent with a free and economically vibrant country, rather than in conflict with it. It's tested on our highways every day.

The last issue I want to raise on this subject surrounds the decisions each individual will have to make regarding the point in the progression of control at which they and their loved ones will cease practicing social distancing. Oaktree debt traders Justin Quaglia (who's been showing up in these memos a lot) and Sam Rotondo came up with a few questions on this subject:

Assuming the quarantine is lifted:

- when will you take your first flight? How will you react when the person next to you starts coughing?
- what has to happen to make you feel it's safe to send your child back to school?
- what will happen when everyone returns to work, allergy season begins, and a few of your colleagues begin to sound nasally and cough persistently?
- when you go out to dinner with your wife/husband/friend/family, do you want to be served by a waiter/waitress wearing a mask and gloves?

I'll add two more: If a test says you have immunity, will you stop social distancing and go back into public spaces while new infections are still being reported? And for us New Yorkers, when will you get back on the subway?

Questions like these suggest that a mere message from government is unlikely to get everyone to return to their former habits, including their jobs (if they have a choice). **Instead, the reopening of the economy is likely to be gradual and, until a vaccine is perfected or herd immunity is reached, subject to alternating periods of progress and retreat.**

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Washington Goes to Battle

Over the last few weeks, the Fed, SEC and Treasury have announced an unprecedented program of stimulus, support, rescue and regulatory relief. They continue to bring new actions forward and expand the size and scope of existing ones. There's no reason to believe there's anything they won't do or any magnitude they won't exceed. I was among many who were worried a month ago about the limited scope of the Fed arsenal, given that the federal funds rate stood at only 1½% and most past rate-cutting programs ran to about 500 basis points. Now we see the vast extent of the Fed's potential toolkit.

On March 15, in announcing the second of two rate cuts totaling 150 basis points that took the short-term federal funds rate to nearly zero, Fed Chairman Jay Powell said the following: "We really are going to use our tools to do what we need to do here." (*Reuters*, March 16). Two weeks later, he elaborated on the Fed's intentions (emphasis added):

> Mr. Powell has made clear that **even with interest rates at zero, the Fed's firepower is limitless**. "When it comes to lending, we are not going to run out of ammunition," he said Thursday [March 26] in an interview on NBC's "Today" show. "That doesn't happen." (*The Wall Street Journal*, March 30)

Here are some excerpts from *Bulletin Intelligence's* April 10 recap regarding the Fed's actions (emphasis added):

> CNBC reports that the Federal Reserve has "dramatically expanded its efforts to save the economy, even adding junk bonds to the list of assets it can buy, as a wave of businesses are anticipated to have trouble surviving the expected recession." According to CNBC, "Stocks jumped, Treasury yields rose and the dollar sagged after the Fed said it would provide $2.3 trillion in programs that expand its operations to reach small and midsized businesses and U.S. cities and states." CNBC says **the Fed "expanded its corporate lending programs to take it into an entirely new area, including ETFs of companies that are rated below investment grade.** It had previously announced a program to buy investment-grade corporate debt and ETFs. It also will now accept triple-A-rated commercial mortgage-backed securities and collateralized loan obligations."
>
> Bloomberg reports that "investors quickly bid up prices on corporate bonds and stocks after the announcement. High-yield debt was among the biggest gainers, with some of the largest ETFs tracking those bonds surging the most in a decade." According to Bloomberg, **"The nature of the Fed's actions pass the traditional boundaries of the central bank to purchase lower-rated debt and the credit of municipalities, raising questions about its future role."**
>
> The Washington Post editorializes, **"The Fed is putting its balance sheet at the service of the private sector** for what we must hope is the shortest period absolutely necessary," but "it will be up to Congress to provide whatever needed funding – for health care, state budget relief and individual income support – lies beyond the Fed's ambit."

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> **An editorial in the Wall Street Journal views the Fed's move as a misstep** that increases the Fed's exposure to risky assets [see page 8], and overlooks Main Street in favor of Wall Street. **The decision also poses a threat to the traditional concept of American capitalism, as the Fed and Treasury become the leading lenders to US businesses.**

There's no doubt in anyone's mind that there was a pressing need for a swift and pronounced response to the economic impact of the effort to combat the pandemic. Less than a month ago, Bruce Karsh and I were pondering the possibility of a global depression. We never hear about that topic anymore, and much of the discussion centers around whether 2019 GDP will be exceeded in 2021 or whether it'll take until 2022.

Now, instead of discussing depression, we wonder about the propriety and long-term impact of the various government actions. I don't intend to dissect the program emanating from Washington in detail, but I do want to raise some questions:

"Limitless" is an interesting word (see previous page). **Is the program really limitless? And is that okay?** The stimulus, loans, bailouts, benefits and bond buying that have been announced thus far add up to several trillion dollars. What are the implications of the resultant additions to the federal deficit and the Fed's balance sheet? To be facetious, the government could send every American a check for $1 million, at a cost of $330 trillion. **Would there be negative consequences from doing this, such as burgeoning inflation, a downgrade of U.S. creditworthiness or the dollar losing its status as the world's reserve currency?** If the answer is yes, is there a point below $330 trillion at which those ramifications might kick in? And if so, where? Could we be there already?

Obviously, what these government entities are doing is cushioning the financial impact of the economic deepfreeze. And as I mentioned on March 31 in *Which Way Now?*, they clearly have the ability to distribute enough money to make up for businesses' lost revenues and workers' lost wages. **But what'll be the impact on America of the loss of a substantial portion of the second quarter's production of goods and services? How will the economy rebound, and at what speed? If we have stops and starts, and if workers return gradually as suggested on page 4, is a V-shaped recovery still likely?** What'll be the effect if some unemployed workers who used to earn less than $1,200 per week can receive more than that in benefits?

Finally, I want to talk about the Fed's role and the impact of its behavior. Just two months ago, I attended a dinner with the president of one of the 12 Federal Reserve Banks. I asked him whether the Fed might adopt the tactic of buying corporate bonds, given the limited room for rate cuts. No, he said, it would only buy government and agency obligations. As mentioned above, a few weeks ago the Fed added investment grade corporates to its buying list, and last week it dropped down to include some high yield securities (BBBs downgraded to BB and some high yield ETFs).

It also gave regulatory relief to business developments companies, or BDCs, which buy or make loans to mid-size businesses. In order to help them avoid tripping limits on their activities, the Fed said they can value the loans on their books at December 31 prices. "The SEC is primarily trying to address the issue that a temporary markdown in the fair value of BDC portfolio companies could increase leverage above the regulatory maximum, thus limiting further lending by a BDC. As such,

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the SEC is allowing BDCs to use an adjusted portfolio value when calculating their asset coverage (leverage) ratio." (Keefe, Bruyette & Woods, April 9) **In other words, we're in a regulatory wonderland where there's no pretense that financial statements have to be accurate or current.**

I was particularly surprised by these latter actions. **What's the Fed's purpose in buying non-investment grade debt?** Does it want to make sure all companies are able to borrow, regardless of their fundamentals? Does it want to protect bondholders from losses, and even mark-to-market declines? Who'll do the buying for the government and make sure the purchase prices aren't too high and defaulting issuers are avoided (or doesn't anyone care)?

And why should the SEC provide relief to leveraged investment vehicles? If such an entity proves to be over-leveraged and sees its collateral marked down such that it's constricted or even liquidated, what's the loss to society? Why should leveraged investors – ostensibly not systemically important – be protected from pain?

In the aftermath of the Global Financial Crisis, the Fed and Treasury undertook a number of actions to encourage price discovery, rekindle risk-bearing and reopen markets. They worked well, their goals were accomplished, and the U.S. recovery from the GFC was swift and strong. (Of course, we can debate whether the willingness to bear risk snapped back too fast and too far.) But some of these things were done through encouraging the operation of market mechanisms, not direct action. Now bonds are being bought and rules waived. **Is there a point at which these things become undesirable?**

Most of us believe in the free-market system as the best allocator of resources. Now it seems the government is happy to step in and take the place of private actors. We have a buyer and lender of last resort, cushioning pain but taking over the role of the free market. When people get the feeling that the government will protect them from unpleasant financial consequences of their actions, it's called "moral hazard." People and institutions are protected from pain, but bad lessons are learned.

A company uses its cash and perhaps borrows more to repurchase its shares. A corporate acquiror chooses to use more leverage rather than less. Or the organizer of a REIT or CLO takes on more debt in order to amplify its returns. In each case, the chosen tactic will magnify profits if things go well, but it'll also magnify losses if things go poorly **and reduce the probability of surviving tough times**. If these parties get to enjoy the fruits of their actions when they're successful but are protected from loss when they fail, risk-taking is encouraged and risk aversion is suppressed.

There's an old saying – variously attributed – to the effect that "capitalism without bankruptcy is like Catholicism without hell." It appeals to me strongly. **Markets work best when participants have a healthy fear of loss. It shouldn't be the role of the Fed or the government to eradicate it.**

Some people argue these days that there's no way those who took on leverage that turned out to be excessive could have been expected to anticipate a pandemic and the resultant damage to the economy. Thus, the argument goes, the jam the government is rescuing them from "isn't their fault," meaning the bailout isn't unreasonable. As I wrote in *Which Way Now?*, I understand they aren't guilty of having ignored a likely risk. But unlikely (and even unforeseeable) things happen from time to time, and investors and businesspeople have to allow for that possibility **and expect to**

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bear the consequences. In other words, they have to think like the six-foot-tall man hoping to get across the stream that's five feet deep *on average*. **I see no reason why financiers should be bailed out simply because the event they're being harmed by was unpredictable.**

Here's the reaction of *The Wall Street Journal* to last week's Fed actions (April 9; emphasis added):

> The big winners included non-investment grade corporate bonds and real-estate investment trusts that will now qualify for Fed programs despite their credit risk. High-yield and municipal bond prices also rose. Growth companies like Amazon, Intel and Nvidia fell or were flat, and the overall market reaction was underwhelming.
>
> This reflects the priorities of the Fed's new lending facilities, and how far out on the risk curve it is going. Take the Term Asset-Backed Securities Loan Facility that the Fed first used in 2008 and that it revised last month. In 2008 TALF accepted only triple-A-rated securities and it made money on the loans. On Thursday the Fed said it will now accept much riskier credits including commercial mortgage securities and collateralized loan obligations.
>
> **These are loan pools packaged into securities by Wall Street, which lobbied the Fed and Treasury hard for the TALF expansion. This means the Fed will in effect buy the worst shopping malls in the country and some of the most indebted companies. The opportunities for losses will be that much greater.** Treasury is backstopping losses, but the taxpayer risks here are greater than what the Fed took on in 2008-2009.
>
> The Fed may feel all of this is essential to protect the financial system's plumbing and reduce systemic risk until the virus crisis passes, but make no mistake that the Fed is protecting Wall Street first. The goal seems to be to lift asset prices, as the Fed did after the financial panic, and hope that the wealth effect filters down to the rest of the economy.

The bank bailout of 2008 has been roundly cited as a case of the government putting Wall Street ahead of Main Street, and it contributed significantly to the populism that has riven American politics ever since. This recent step to rescue leveraged lenders may add further fuel to that fire.

* * *

The market seems to have passed judgment with regard to the future. U.S. deaths have reached 23,000 and continue to rise. Weekly unemployment claims are running at 10 times the all-time record. The GDP decline in the current quarter is likely to be the worst in history. But people are cheered by the outlook for therapies and vaccines, and investors have concluded that the Fed/Treasury will reduce the pain and bring on a V-shaped recovery. There's an old saying that "you can't fight the Fed" – that is, the Fed can accomplish whatever it wants – and investors are buying it. Thus, the S&P 500 has risen 23% since its bottom on March 23, and there's little concern about the retrenchments that typically have been part of past market rallies.

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But Justin Beal, my artist son-in-law, is mystified. "I don't get it," he told me on Saturday. "The virus is rampant, business is frozen, and the government's throwing money all over the place, even though tax revenues have to be down. How can the market be rising so strongly?" We'll find out as the future unfolds.

April 14, 2020

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Memo to: Oaktree Clients

From: Howard Marks

Re: Calibrating

I set a personal record by writing four memos in the month of March, responding to the rapidly unfolding coronavirus crisis. The task was made easier by the dearth of available data, meaning I was able to proceed without doing much research, mostly providing personal views.

In the first of the four memos, *Nobody Knows II*, I described the distinction made by Harvard epidemiologist Marc Lipsitch. He said there are (a) facts, (b) informed extrapolations from analogies to other viruses and (c) opinion or speculation. At that point, I thought the scientists were trying to make informed inferences, and there wasn't enough data regarding the novel coronavirus to enable them to turn those inferences into facts. I also noted that anything a non-scientist said was highly likely to be a guess. In that vein, I wrote the following to an Oaktree colleague last week: **"These days everyone has the same data regarding the present and the same ignorance regarding the future."** That pretty much sums up the state of affairs.

Most of what we have today is opinion, and much of it tilts either optimistic or pessimistic. The gulf in between is massive: if you read just the optimistic pieces, you'd think the virus will soon be eradicated and the economy brought back to health, and if you read just the negative ones, you'd think we're all done for.

In my opinion, the difference between most people's positive and negative views is likely to stem largely from their innate biases, and thus the data points they choose to overweight. Future scenarios comprise a large number of variables: today even more than usual. It's relatively easy to build a spreadsheet listing the many things that will contribute to the future and rate them as likely to turn out well or poorly. **But merely toting up the plusses and minuses won't tell you whether the future will be favorable or unfavorable. The essential element is figuring out which ones will be most influential. That's often where optimistic or pessimistic biases come in.** The optimist takes cheer from the favorable outlook for the positive data points, and the pessimist is depressed by the unpleasant possibilities for the negative ones . . . even if they're both working from the same underlying spreadsheet in terms of elements and ratings.

There's rarely such a thing as "knowing the future." But usually the future will be mostly like the past. This time, I think we can agree that the near-term future isn't likely to look much like it did a year ago. As I wrote last week in *Which Way Now?*, **we have to consider our situation "in the context of unprecedented uncertainty and the total absence of guidance from analogies to the past."**

Whereas the future is always uncertain, today the uncertainty is much greater than usual: the probability distribution governing future events is much wider and the tails much fatter. In fact, there are potential negatives (and perhaps positives) that few living people have faced before. Most of what we have is subjective opinion and interpretation.

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I don't think I'm likely to have superior knowledge regarding the outlook for the virus, its impact on the economy, the success of Fed/government actions or the direction of oil prices. I organized and discussed the possibilities for each of these things in the March memos, but I'm unlikely to be a better predictor than anyone else.

I do, however, hope to help by discussing how you might think about your behavior in the current context. That's my subject today. But before I end with the conclusion I've reached, I want to summarize the relevant statements from the March memos. (As you'll see, I wrote two memos in mid-March that only went to Oaktree clients, although one was made available on our website a few days later.) Here we go (emphasis in the originals):

Nobody Knows II **– March 3**

We were still early in the crisis at this time, with just a handful of cases of the disease reported in North America. We were also early in the process of economic decline and market reaction. In fact, the S&P 500 was only down 13% from its level on February 19. In this first memo of the crisis, I struck a number of themes I would return to in the following weeks:

> These days, people have been asking me whether this is *the time* to buy. My answer is more nuanced: it's probably *a time* to buy. There can be no unique time to buy that we can identify. The only thing we can be sure of today is that stock prices, for example, are a lot lower in the absolute than they were two weeks ago.
>
> Buy, sell or hold? I think it's okay to do some buying, because things are cheaper. But there's no logical argument for spending all your cash, given that we have no idea how negative future events will be. What I would do is figure out how much you'll want to have invested by the time the bottom is reached – whenever that is – and spend part of it today. **Stocks may turn around and head north, and you'll be glad you bought some. Or they may continue down, in which case you'll have money left (and hopefully the nerve) to buy more. That's life for people who accept that they don't know what the future holds.**
>
> But no one can tell you this is *the* time to buy. Nobody knows.

An Update **– March 12 (to Oaktree clients only)**

A week and a half later, after we cancelled the Oaktree client conference and livestreamed instead, after Nancy and I had begun the social distancing that is still going on full-bore, and with the S&P 500 down 29%, I emphasized a contrarian theme, concluding that the damage done had created pronounced opportunities.

> As always, it's important to be conscious of the investment environment and behave like a contrarian. For years, investors thought conditions were good, and we at Oaktree believed that consequently, prices were high and markets were characterized by risky behavior. That's what made us cautious. Now the "flawless decade" is certainly over, and asset prices have been cut. The great contrarian, Warren Buffett is

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famous for saying he likes hamburgers, and when hamburgers go on sale, he eats more hamburgers.

My roughly quarterly memos pale when compared to the output of Doug Kass, who writes at least daily. His March 11 note had a terrific title: "When the Time Comes to Buy, You Won't Want To." The best time to buy generally comes when nobody else will; other people's unwillingness to buy tends to make securities cheap. But the factors that render others averse to buying will affect you, too. The contrarian may push through those feelings and buy anyway, even though it's not easy. **As I put it, "All great investments begin in discomfort." One thing we know is that there's great discomfort today.**

Latest Update **– to clients March 19, on website March 24**

This memo was issued with the S&P 500 down 29% and within a few days of the low (down 34%) that would be reached on March 23. The panic we were observing, and the great purchases we made that week, convinced me to take a firmer tone in arguing for buying. I took the position that it would be a mistake to wait for an ascertainable bottom before doing so.

What do we know? Not much other than the fact that asset prices are well down, asset holders' ability to hold coolly is evaporating, and motivated selling is picking up. I'll sum up my views simply – since there's nothing sophisticated to say:

- "The bottom" is the day before the recovery begins. Thus it's absolutely impossible to know when the bottom has been reached . . . ever. Oaktree explicitly rejects the notion of waiting for the bottom; we buy when we can access value cheap.
- Even though there's no way to say the bottom is at hand, the conditions that make bargains available certainly are materializing.
- Given the price drops and selling we've seen so far, I believe this is a good time to invest, although of course it may prove not to have been the best time.
- No one can argue that you should spend all your money today . . . but equally, no one can argue that you shouldn't spend any.
- The more you want to garner potential gains and don't mind mark-to-market losses, the more you should invest here. On the other hand, the more you care about protecting against interim markdowns and are able to live with missing opportunities for profit, the less you should invest.

But is there really an argument for not investing at all? In my opinion, the fact that we're not necessarily at "the bottom" isn't such an argument.

Which Way Now? **– March 31**

Word of the Fed/Treasury response to the economic difficulty emerged on March 24 and was immediately accepted as likely to succeed. By the time the program was enacted, the stock market

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had experienced a rally on March 24-26 that delivered the best three-day gain since the 1930s, leaving the S&P 500 down just 24%.

> . . . the market prices of assets have responded to the events and outlook (in a very micro sense, I feel last week's bounce reflected too much optimism, but that's me). I would say assets were priced fairly on Friday [March 27] for the optimistic case but didn't give enough scope for the possibility of worsening news. Thus my reaction to all the above is to expect asset prices to decline. **You may or may not feel there's still time to increase defensiveness ahead of potentially negative developments. But the most important thing is to be ready to respond to and take advantage of declines.**

My message wasn't uniform across the four memos, but there were some common threads.

- My observations waxed and waned, in particular as security prices did.
- I never urged selling, as I thought a fair bit of the damage had been done. In other words, it was probably too late to make portfolios less risky.
- I talked about the reasonableness of buying – to varying degrees – primarily in response to the extent securities had cheapened.
- I never said it was *the* time to buy (or that it wasn't). I urged an incremental approach, not all-in or all-out.
- **The most consistent observation was probably that not buying anything at the new low prices would be a mistake.**

The vagueness and variation of the message summarized above make it less than concrete and perhaps less than satisfying for someone who's looking for unequivocal advice. **In my opinion, however, there's simply no room for certainty in investing, and today more so than usual.**

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Portfolio Positioning

One of the benefits I derive from writing my memos is that the more I work on a memo about something, the more it comes into focus. Thus the four March memos gave me a great opportunity to ponder what the events imply for investment behavior. I'm glad to say I've reached a conclusion on that subject. I feel strongly that it's right . . . and I fully expect to amend it in the future. (To set the scene, the next few paragraphs will be repeat things I've said in the past.)

In recent years I've become more and more convinced that the fund manager's most important job for the intermediate term isn't to decide the allocation of capital between stocks versus bonds; U.S. versus foreign; developed markets versus emerging; large-cap versus small-cap; high-quality versus low-quality; or growth versus value. And it isn't choosing among strategies, funds and managers. **The most important job is to strike the appropriate balance between offense and defense.** Those other things won't help much if you get offense/defense wrong. And if you get offense/defense right, those other things will take care of themselves.

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One way to think about the balance between offense and defense is to consider the "twin risks" investors face every day: the risk of losing money and the risk of missing opportunity. At least in theory, you can eliminate either one but not both. Moreover, eliminating one exposes you entirely to the other. Thus we tend to compromise or balance the two risks, and every individual investor or institution should develop a view as to what their normal balance between the two should be.

Next, investors might consider trying to calibrate their balance over time in response to conditions in the environment – thus the title of this memo:

- The more propitious the environment – the more prudently other investors are behaving, the better the outlook for earnings, and the lower security prices are relative to intrinsic value or "fundamentals" – the more an investor might want to shift toward offense.
- On the other hand, the more precarious the environment – the more others are embracing risk, the more headwinds to profits there are, and the higher valuations are – the more an investor might choose to emphasize defense.

In recent years, it's been my view that the investment world was marked by the following characteristics:

- more uncertainty than usual,
- extremely low prospective returns,
- full to high asset prices, and
- pro-risk behavior on the part of investors reaching for higher returns.

These things told me the world was a risky, low-return place, and for that reason Oaktree's mantra has been "move forward, but with caution." We've generally been fully invested, but with even more than our usual caution. We made a decision to overweight defense, and there were years in which higher risk produced higher returns, and we paid a price for being cautious. We had no idea what the catalyst would be that turned the risk into loss, and there were no obvious candidates. But we felt the world was a risky place, exposed to negative developments. Now we know the catalyst, and now portfolio risk has produced loss. That's the background.

As described above, I felt the uncertain, low-return environment called for defense to be over-weighted relative to offense. Now, however, as opposed to the conditions of 2, 6, 12 or 24 months ago:

- the risks in the environment are recognized and largely understood,
- prospective returns have turned from paltry to attractive (for example, the average yield on high yield bonds ex. energy has gone from 3½% to almost 9%),
- security prices have declined, and
- investors have been chastened, causing risk-taking to dry up.

Given these new conditions, I no longer feel defense should be favored. Yes, the fundamentals have deteriorated and may deteriorate further, and the disease makes for risk (remember, I'm the one who leans toward the negative case). **But there's a big difference between a market where no one can find a flaw and one where people have given up on risk-taking. And there's a big difference between one that's priced for perfection and one that allows for bad outcomes.**

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Cautious positioning in recent years has served its purpose. Investors who favored defense over offense have experienced smaller losses this year, have the satisfaction that comes from relative outperformance, and are able to spend more of their time looking for bargains than dealing with legacy problems. **Thus, I feel it's a time when previously cautious investors can reduce their overemphasis on defense and begin to move toward a more neutral position or even toward offense** (depending on how sure they want to be of grasping early opportunities).

I'm not saying the outlook is positive. I'm saying conditions have changed such that caution is no longer as imperative. With part of the crisis-related losses having already taken place, I'm somewhat less worried about losing money and somewhat more interested in making sure our clients participate in gains. **My 2018 book, *Mastering the Market Cycle*, carries the subtitle *Getting the Odds on Your Side.* In that vein, I now feel the odds are more in investors' favor or, at a minimum, somewhat less against them. Portfolios should be calibrated accordingly.**

Looking for the Bottom

Before I close, just a word on market bottoms. Some of the most interesting questions in investing are especially appropriate today: **"Since you expect more bad news and feel the markets may fall further, isn't it premature to do any buying? Shouldn't you wait for the bottom?"**

To me, the answer clearly is "no." As mentioned earlier, we never know when we're at the bottom. A bottom can only be recognized in retrospect: it was the day before the market started to go up. **By definition, we can't know today whether it's been reached, since that's a function of what will happen tomorrow. Thus, "I'm going to wait for the bottom" is an irrational statement.**

If you want, you might choose to say, "I'm going to wait until the bottom has been passed and the market has started upward." That's more rational. However, number one, you're saying you're willing to miss the bottom. And number two, one of the reasons for a market to start to rise is that the sellers' sense of urgency has abated, and along with it the selling pressure. That, in turn, means (a) the supply for sale shrinks and (b) the buyers' very buying forces the market upward, as it's now they who are highly motivated. These are the things that make markets rise. **So if investors want to buy, they should buy on the way down. That's when the sellers are feeling the most urgency and the buyers' buying won't arrest the downward cascade of security prices.**

Back in 2008, on the heels of Lehman Brothers' September 15 bankruptcy filing, Bruce Karsh and his team embarked on an unprecedented program to buy the debt of companies in distress. They invested an average of roughly $450 million per week over the last 15 weeks of the year, for a total of nearly $7 billion. Debt prices collapsed throughout that period, and they continued to fall in the first quarter of 2009 (along with the stock market). But because the hedge funds facing withdrawals had been gated – and because the leveraged, securitized vehicles that would melt down had all been liquidated – large amounts ceased to be for sale after year-end. In short, if we hadn't bought in the fourth quarter, we would have missed our chance.

The old saying goes, "The perfect is the enemy of the good." Likewise, waiting for the bottom can keep investors from making good purchases. **The investor's goal should be to make a large number of good buys, not just a few perfect ones.** Think about your normal behavior. Before

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every purchase, do you insist on being sure the thing in question will never be available lower? That is, that you're buying at the bottom? I doubt it. You probably buy because you think you're getting a good asset at an attractive price. Isn't that enough? And I trust you sell because you think the selling price is adequate or more, not because you're convinced the price can never go higher. **To insist on buying only at bottoms and selling only at tops would be paralyzing.**

On the contrary, I gave this memo the title *Calibrating* because of my view that a portfolio's positioning should change over time in response to what's going on in the environment. As the environment becomes more precarious (with prices high, risk aversion low and fear lacking), a portfolio's defensiveness should be increased. And as the environment becomes more propitious (with prices low, risk aversion high and fear prevalent), its aggressiveness should be ramped up. **Clearly, this process is one of gradual readjustment, not a matter of all-or-nothing. It shouldn't be the goal to do this only at bottoms and tops.**

So it's my view that waiting for the bottom is folly. What, then, should be the investor's criteria? **The answer's simple: if something's cheap – based on the relationship between price and intrinsic value – you should buy, and if it cheapens further, you should buy more.**

I don't want to give the impression that it's easy to buy while prices are tumbling. It isn't, and in 2008, Bruce and I spent a lot of time supporting each other and debating whether we were buying too fast (or too slow). The news was terrible, and for a good while it seemed as if the vicious circle of financial institution meltdowns would continue unchecked. **Terrible news makes it hard to buy and causes many people to say, "I'm not going to try to catch a falling knife." But it's also what pushes prices to absurdly low levels.** That's why I so like the headline from Doug Kass that I referred to above: "When the Time Comes to Buy, You Won't Want To." **It's not easy to buy when the news is terrible, prices are collapsing and it's impossible to have an idea where the bottom lies. But doing so should be the investor's greatest aspiration.**

As for the current episode, here's some data from Gavekal Research's Monthly Strategy piece for April, bearing on the question of whether the bottom was passed in March:

> . . . markets rarely clear after one massive decline. In 15 bear markets since 1950, only one did not see the initial major low tested within three months . . . In all other cases, the bottom has been tested once or twice. Since news-flow in this crisis will likely worsen before it improves, a repeat seems likely.

And here's some data from my son Andrew regarding the movements of the S&P 500 index around the time of the last two big crises. The first and second declines were followed by substantial rallies . . . which then gave way to even bigger declines:

9/1/00 - 4/4/01	-27%
4/4/01 - 5/21/01	+19%
5/21/01 - 9/21/01	-26%
9/21/01 - 3/19/02	+22%
3/19/02 - 10/9/02	-33%

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10/9/07 - 3/10/08	-18%
3/10/08 - 5/19/08	+12%
5/19/08 - 11/20/08	-47%
11/20/08 - 1/6/09	+25%
1/6/09 - 3/9/09	-27%

Gavekal's and Andrew's data tell us markets rarely rally in a straight line. Rather, their movements represent a continuous tug-of-war between the bulls and the bears, and the result rarely goes in just one direction. After the optimistic buyers of the initial dips have responded to the low prices and bought, the pessimists find the new, higher prices unsustainable and engage in another round of selling. And so it goes for a while. Thus, as Oaktree's Wayne Dahl points out, it took until mid-May 2007, or almost seven years, for the stock market to regain the September 2000 highs, and it took until mid-March 2013, or five and a half years, to regain the highs of October 2007.

The bottom line for me is that I'm not at all troubled saying (a) markets may well be considerably lower sometime in the coming months and (b) we're buying today when we find good value. I don't find these statements inconsistent.

April 6, 2020

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Memo to: Oaktree Clients

From: Howard Marks

Re: Which Way Now?

In the last six weeks the markets have seen the best of times and the worst of times:

- From February 19 to March 23, the U.S. stock market saw the quickest meltdown in history, for a loss of 33.9% on the S&P 500. Then its 17.5% gain from Tuesday through Thursday of last week made for the best three-day stretch since the 1930s.

- Of the 21 trading days between February 27 and March 27, a total of 18 days saw moves in the S&P 500 of more than 2%: eleven down and seven up. They included the biggest daily percentage gain since 1933 and the second-biggest percentage loss since 1940 (exceeded only by Black Monday in 1987).

- From March 9 through March 20, issuing a new investment grade bond seemed inconceivable. Then, as our trader Justin Quaglia points out, last week's news of the government's rescue package enabled 49 companies to issue $107 billion of IG bonds. That made it the biggest week for issuance on record; part of the biggest month on record ($213 billion from 106 issuers); and part of the biggest quarter on record ($473 billion, up 40% from the first quarter of 2019). In fact, there was more issuance **last week** than in nine of the 12 **months** in 2019.

- Finally, on March 26, Justin wrote, **"It's hard to believe I used the words 'panic' and 'FOMO' within two weeks of each other."**

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Looking at the above, it's important to note the degree to which people (and thus markets) seem to think long-term phenomena can change in the short run.

It's common knowledge that the coronavirus is still gaining ground in the U.S. and elsewhere; the economy is destined for a serious recession; leveraged entities have to worry about their sources of loans and liquidity; and the price of oil is among the very lowest since the 1973 OPEC embargo. But the prices of financial assets have moved down as well: appropriately, too much or too little? In other words, **we have to consider the outlook and the appropriateness of value, in the context of unprecedented uncertainty and the total absence of guidance from analogies to the past.**

There's no doubt about the ability of the government's and the Fed's massive cash injections to make things better in the short run, and certainly the market has treated them as sure winners. But I think it's important to take time out for a serious discussion of possible scenarios. Are this past week's remedies certain to work? Are the prior week's negatives really erased? **Which will win in the short and intermediate term: the disease, economic ramifications or Fed/Treasury actions?** To try to think about these things in a responsible way, I've decided to try cataloging the optimistic and pessimistic elements.

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The Positive Case

No one thinks things are good right now, but the optimist's view is built around the early cessation of bad news and the arrival of better news in the not-too-distant future. Here are the components. (As you know, I usually avoid using macro forecasts and never make my own. I will borrow from others for the purposes of exposition in this memo, but not because I have reason to believe they're correct):

- The earliest countries to contract the virus have shown good progress. The reported data on their new cases has flattened, and in South Korea, more people are being released from the hospitals than are entering. Hermann Dambach, head of our Frankfurt office, reports that the numbers are improving in Italy, Germany and Austria.

- Every forecast I've seen assumes **the virus will be brought under control within three months or so.** The curve is flattened and then turned downward. The virus is contained and then eliminated.

    - Testing identifies those infected, and isolation/quarantine keeps them from infecting others.
    - Herd immunity develops, reducing the number of people capable of transmitting the disease.
    - Warmer weather causes the disease to recede.
    - Treatments are found that aid recovery.
    - A vaccine is developed.

- **The negative impact of the disease on the economy will be sharp but brief.** The term "V-shaped" dominates most forecasts, both between Q2 and H2 and between 2020 and 2021. Thus, for example, one forecaster who has the earnings of the S&P 500 companies down 120% in Q2 thinks they may rise roughly 80+% in Q3 on a quarter-over-quarter basis (that is, to down just 20% from 2019) and then rise by a further 50% in Q4. And after a decline of 33% in 2020, earnings will rise by 55% in 2021 and exceed what they were in 2019.

- Telling people to stay home – and thus causing businesses to close – is the economic equivalent of putting a patient into a coma to facilitate curing a serious disease. **The government will provide life support to the economy during the coma and bring the patient out of the coma after the cure has been effected.**

  The economic recovery will be abetted by better news about the disease, but the improvement will mainly be the result of the success of the Fed/Treasury package of rescue and stimulus. These organizations have announced unprecedented expenditures and have indicated that they'll do whatever else it takes. Actions that were taken after months of deliberation in the Global Financial Crisis have been rolled out in the early weeks of the current episode. Further steps are likely to include everything anyone can think of and be unconstrained as to amount.

- The banks are much less vulnerable than they were during the Global Financial Crisis, with only a third of the leverage. Thus concerns for the health of the overall financial system are greatly reduced.

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- The U.S.'s effective private sector will supplement the public health efforts of government, producing massive amounts of supplies and equipment, and developing testing, treatments and vaccines.

- The price declines of securities will draw in buyers, and ample capital is available in the form of dry powder in funds.

When I read the more positive views regarding the current episode, I can't help but think back to my favorite newspaper headline, which included the phrase **"Bankers Optimistic."** Usually the case, perhaps, but it's worth noting that the story in question was published on October 30, 1929, reporting on the prior day's stock market crash. On that day of optimism, the Great Depression still had eleven years to run.

<u>The Negative Case</u>

I always say we have to be aware of and open about our biases. I admit to mine: I'm more of a worrier than a dreamer. Maybe that's what made me a better credit analyst than equity analyst. On average I may have been more defensive than was necessary (although somehow I was able to shift to aggressive action when crisis lows were reached during my career). Thus it shouldn't come as a surprise today that my list of cons is longer than my pros (and I will elaborate on them at greater length).

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- **I'm very worried about the outlook for the disease, especially in the U.S.** For a long time, the response consisted of suggestions or advice, not orders and rules. I was particularly troubled last weekend by pictures of college kids on the beach during spring break, from which they would return to their communities. The success of other countries in slowing the disease has been a function of widespread social distancing, testing and temperature-taking to identify those who are infected, and quarantining them from everyone else. The U.S. is behind in all these regards. Testing is rarely available, mass temperature-taking is non-existent, and people wonder whether large-scale quarantining is legal.

    - The total number of cases in the U.S. has surpassed both China's and Italy's and is still rising rapidly (and is likely understated due to under-testing).
    - The number of deaths doubled from 1,000 to 2,000 between Thursday and Saturday.
    - From a recent tweet by Scott Gottlieb, MD, former commissioner of the FDA: "I'm worried about emerging situations in New Orleans, Dallas, Atlanta, Miami, Detroit, Chicago, Philadelphia, among others. In China no province outside Hubei ever had more than 1,500 cases. In U.S. 11 states already hit that total. Our epidemic is likely to be national in scope."
    - The U.S. is under-equipped to respond in terms of hospitals, beds, ventilators and supplies. Under-protected doctors, nurses and first responders are at risk.

  I'm concerned that the number of cases and deaths will continue to rise as long as we fail to emulate the successful countries' actions. The health system will be overwhelmed. Triage decisions – including who lives and who dies – will have to be made. There will be a point where there doesn't seem to be an end in sight. **I'm afraid the headlines are going to get much uglier in this regard.**

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- **The economy will contract at a record rate.** Many millions will be thrown out of work. People will be unable to patronize businesses. Not only will workers miss paychecks and businesses miss revenues, but businesses' physical output will tail off, meaning essentials like food may run short. Last week, 3.3 million new unemployment claims were filed, versus the previous week's 282,000 and the weekly record of 695,000. Prior to the government's actions, expectations included the following:

    - unemployment would return to 8-10%, and citizens would soon run short of cash;
    - businesses would close;
    - second-quarter GDP would decline from the year-ago level by 15-30% (versus a decline of 10% in the first quarter of 1958, the worst quarter in history);
    - some forecasters said the combined earnings of the S&P 500 companies would decline 10% in the second quarter, but that seems like a ridiculously small decline. **At the other end of the spectrum, I've seen a prediction that S&P earnings would decline by 120% (that's right: in total, the 500 companies would shift from profits to losses).**

  Government payments plus augmented unemployment insurance will replace paychecks for many workers, and aid to businesses will replace some of their lost revenues. But how long will it take to get these funds to recipients? How many should-be recipients will be missed? For how long will the aid continue? ($3,400 to a family of four won't last long.) What will it take to bring the economy back to life after it's been in a deep freeze? How fast will it recover? **In other words, is a V-shaped recovery a realistic expectation?**

- **It will be very challenging to resolve the conflict between social isolation and economic recovery.** How will we know whether the disease merits the cure? The longer people remain at home, the more difficult it will be to bring the economy back to life. But the sooner they return to work and other activities, the harder it will be to get the disease under control.

  First, the growth in the number of new cases each day has to be reduced. Next, the number of new cases has to begin to decline from one day to the next (that is, the growth rate has to turn negative). Then new cases have to stop appearing each day. (Of course, we'll need increased testing and mandatory quarantining for these things to occur.) As long as there are new cases each day, there are people who are infectious. If we send them back into the world and into contact with others, the disease will persist and spread. **And if we seize the opportunity provided by a decline in the number of new cases to resume economic activity, we risk a rebound in the rate of infection.**

- For the most part, we have companies whose revenues are down and companies whose revenues are gone. They can reduce their expenses, but because many of them are fixed (like rent), they can't reduce expenses as fast as revenues decline. That's why second-quarter profits will shrink, dry up or turn negative. Revenues may come back relatively soon for some industries (like entertainment), but less rapidly for others (like cruise lines).

- Many companies went into this episode highly leveraged. Managements took advantage of the low interest rates and generous capital market to issue debt, and some did stock buybacks,

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reducing their share count and increasing their earnings per share (and perhaps their executive compensation). The result of either or both is to increase the ratio of debt to equity. The more debt a company has relative to its equity, the higher the return on equity will be in good times . . . but also the lower the return on equity (or the larger the losses) in bad times, and the less likely it is to survive tough times. Corporate leverage complicates the issue of lost revenues and profits. Thus we expect to see rising defaults in the months ahead.

- Likewise, in recent years, the generous capital market conditions and the search for return in a low-interest-rate world caused the formation of leveraged investment entities. As with leveraged companies, debt increased their expected returns but also their vulnerability. **Thus I believe we're likely to see defaults on the part of leveraged entities, based on price markdowns, ratings downgrades and perhaps defaults on their portfolio assets; increased "haircuts" on the part of lenders (i.e., reduced amounts loaned against a dollar of collateral); and margin calls, portfolio liquidations and forced selling.**

  In the Global Financial Crisis, leveraged investment vehicles like Collateralized Mortgage Obligations and Collateralized Debt Obligations melted down, bringing losses to the banks that held their junior debt and equity. The systemic importance of the banks necessitated their bailouts (the resentment of which contributed greatly to today's populism). This time, leveraged securitizations are less pervasive in the financial system, and their risk capital wasn't supplied by banks (thanks to the Volcker Rule), but mostly by non-bank lenders and funds. Thus I feel government bailouts are unlikely to be made available to them. (As an aside, it's not that the people who structured these leveraged entities erred. They merely failed to include an episode like the current one among the scenarios they modeled. How could they? If every business decision had to be made in contemplation of a pandemic, few deals would take place.)

- Finally, in addition to the disease and its economic repercussions, we have one more important element: oil. **Due to a confluence of reduced consumption and a price war between Saudi Arabia and Russia, the price of oil has fallen from $61 per barrel at year-end to $19 today.** The price of oil was only slightly lower immediately before the OPEC embargo in 1973, and in the 47 years since then it has only been lower on two brief occasions. While many consumers, companies and countries benefit from lower oil prices, there are serious repercussions for others:

  - Big losses for oil-producing companies and countries.
  - Job losses: the oil and gas industry directly provides more than 5% of American jobs (and more indirectly), and it contributed greatly to the decline of unemployment since the GFC.
  - A significant decline in the industry's capital investment, which recently has accounted for a meaningful share of the U.S.'s total.
  - Production cuts, since consumption is down and crude/product storage capacity is running out.
  - The damage to oil reservoirs that results when production is reduced or halted.
  - A reduction in American oil independence.

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As recounted above, the negative case encompasses rising numbers of infections and deaths, unbearable strain on the healthcare system, job losses in the many millions, widespread business losses and mounting defaults. If these things arise, investors are likely to shift from the optimism of last week to the pessimism that was prevalent in the rest of March. Contributing factors may include:

- negative psychology surrounding the combination of threats to the economy and life itself,
- fear of more, and
- a very negative wealth effect that depresses spending and investing.

The Government Programs

Last week the government enacted the CARES (Coronavirus Aid, Relief, and Economic Security) Act, with roughly $2 trillion of rescue and support. At the same time, the Fed will spend several trillion more to provide liquidity and buttress the financial system, and it has "committed to using its full range of tools." I will dispense with listing all the provisions of the CARES Act, and merely note that J.P. Morgan's description runs to eight pages. And as mentioned above, the list of ingredients and their magnitude are likely to grow.

I'll share a useful description of the economic situation and the government response from Conrad DeQuadros of Brean Capital, an economist I've taken to quoting:

> The CARES Act should not be thought of as fiscal stimulus but as an economic stabilization package. The collapse of economic activity in March 2020 is not a normal cyclical recession but is the result of a mandated "time out" of individuals and businesses by the government. Many of the provisions of the Act are designed to prevent the private sector from unraveling so that when the containment of the virus permits shutdowns to be lifted, activity can bounce back. . . .
>
> There is no avoiding recession because the output of airlines, hotels, restaurants, movie theaters, etc. is lost. However, these programs will support businesses so that when the virus permits the resumption of activity, we can see a sharp rebound in activity. Skilled labor was a scarce resource just one month ago and the key is to keep that labor and businesses connected. The support for businesses is really support for labor because if companies cannot pay workers from cash flows, the layoff figures will dwarf the numbers suggested by the latest jobless claims data.
>
> How effective will the measures be? In the latest quarter, labor compensation was $2.9 trillion (actual, non-annualized) and, to consider a purely illustrative number, a 20% (actual) drop in labor incomes amounts to $577 billion, which is about the magnitude of direct income support to households without considering the impact of support for businesses, which will head off a steeper decline in labor incomes. The fiscal package will unlock upward of $4 trillion of capital market support programs from the Fed. In addition there are the funds to help combat the spread of the virus and the sooner the virus can be contained, the more lives will be saved and the sooner America can get back to work. After a few months of being housebound, we suspect there will be plenty of pent up demand. The fiscal deficit in 2020 could be of the magnitude of $2.5 trillion but if the package fails, the recession would be longer and

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deeper and the fiscal cost would be greater.

As always, I don't know which economists are right, but I'm happy to go with Conrad's summation.

Moving on from understanding the actions to date, I want to talk about the outlook for this effort. The government seems able, as Conrad says, to support and stabilize the economy. **In my simplistic view, I imagine it can print enough checks to replace every American worker's lost wages and every business's lost revenues. In other words, it can "simulate" the effect of the economy on incomes. But I have two questions: is that okay, and is it enough?**

First of all, as I mentioned above, we actually need the output of workers and businesses. If all businesses shut down, we won't have the things we need. These days, for example, people are counting on grocery deliveries and take-out food. But does anyone wonder where food comes from and how it reaches us? **The Treasury can make up for people's lost wages, but people need the things wages buy. So replacing lost wages and revenues will not be enough for long: the economy has to produce goods and services.**

Second, let's assume the government writes checks to replace wages and revenues forever, and that the economy continues to produce at a minimal but sufficient level, so the things we need materialize. What will be the long-term effect? **As with oil reservoirs, what will be the impact of long-term inactivity on the ability of the economy to produce? How long will it take to restart the economy and bring it back to its previous level of functioning?**

Lastly, what would be the effect of the Treasury continuing to add trillions of dollars each quarter to the deficit (which was running at $1 trillion even before the virus hit) **and of the Fed continuing to pump trillions more into the monetary system?** Last June, in my memo *This Time It's Different*, I discussed Modern Monetary Theory, which – to simplify – says federal deficits and debt don't matter. It's no longer just a theory; we have to deal with its implications now:

- What would be the effect of the above on the value of the dollar, and thus on the dollar's status as the world's reserve currency? (Of course, in this environment, other countries are likely to behave much the same as we do, meaning **the dollar may not be debased relative to other currencies**.)

- Might a reduction of the dollar's reserve-currency status make it harder for us to finance our deficits and raise the interest rates we have to pay to do so?

- Might money-printing to that degree bring on an increase in inflation?

- **Might a supply shock stemming from reduced global output of raw materials and finished goods add to the increase in inflation?** The factors that create inflation are truly mysterious, but these certainly seem like reasonable candidates, especially when combined.

Possibly without serious vetting and a conscious decision to adopt it, Modern Monetary Theory is here. Whether we like it or not, we'll get to see its impact much quicker than I had thought. (And remember, 100% of the "top scholars" polled by The University of Chicago Booth School of Business disagreed with some of MMT's claims).

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Summing Up

Rather than reinvent the wheel – and to show you how others are viewing the situation (albeit in ways that parallel my view) – I'm going to share the workload by recycling the conclusion from a note I received from Jason Klein, CIO of Memorial Sloan Kettering:

> The bull case from here seems to be that monetary policy will work, fiscal policy will kick-in, valuations have reset, society will follow effective healthcare policies (e.g., social distancing) that will be effective, the real economy will adapt, and geopolitics will remain subdued. The bear market seems to be the flip side of each issue, and has the potential to be much darker as the prospects of a hot war with China, or even Iran, seem rather ominous. Across all recent events, I find it in some ways most interesting that Saudi Arabia chose to instigate a supply shock targeting U.S. shale at a moment when the demand for U.S. energy was already reeling from the demand-side shock from COVID-19 restrictions. It highlights the unpredictability of events. As you've said, nobody knows.

Richard Masson, my Oaktree co-founder and resident scold, might say Twitter isn't a worthy source, but nevertheless I want to include a concise summary tweeted by @yourMTLbroker:

> Bull case: everything opens in 6 weeks. The unemployed can go back to old jobs or as true Americans, bootstrap. Economy back to normal within 6 months. 2T $ in PE dry powder, low gas prices and 0% interest rates pour fuel onto on the economy. The roaring 20's mean the 2020's now.
>
> Bear case: Unemployment goes to 20%+. Everything does NOT go back to normal before at least a year or two, and in the meantime, there is a huge demand shock. The effects of the lockdown on businesses as well as the oil shock create depression-like conditions.

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In the Global Financial Crisis, I worried about a downward cascade of financial news, and about the implications for the economy of serial bankruptcies among financial institutions. But everyday life was unchanged from what it had been, and there was no obvious threat to life and limb.

Today the range of negative outcomes seems much wider, as described above. **Social isolation, disease and death, economic contraction, enormous reliance on government action, and uncertainty about the long-term effects are all with us, and the main questions surround how far they will go.**

Nevertheless, the market prices of assets have responded to the events and outlook (in a very micro sense, I feel last week's bounce reflected too much optimism, but that's me). I would say assets were priced fairly on Friday for the optimistic case but didn't give enough scope for the possibility of worsening news. Thus my reaction to all the above is to expect asset prices to decline. **You may or may not feel there's still time to increase defensiveness ahead of potentially negative developments. But the most important thing is to be ready to respond to and take advantage of declines.**

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The world will be back to normal someday, although today it seems unlikely to end up unchanged. **What matters most – in terms of both health and finances – is how we do in the interim. Stay safe!**

March 31, 2020

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Memo to: Oaktree Clients Only

From: Howard Marks

Re: Latest Update

I'm going to do all I can to provide information and views throughout this crisis, albeit perhaps without the kind of narrative or literary flourish I usually try for.

Flattening the Curve

The spread of the virus has been described as "exponential." Most people use this word without understanding precisely what it means. In short, exponential growth is the real-world version of what people in our business refer to as compounding. In other words, there's a growth percentage, and the parameter in question increases by that percentage every period. Thus **the rate of growth is constant, but the magnitude of the increase grows in each period**. For years, we've talked about things on the Internet "going viral." This is what exponential growth means.

If the number of daily new cases grows at a constant 10% (almost certainly a substantial understatement in the current case), and we start with 100 new cases on day 1, there will be 110 new cases on day 2; 121 on day 3; 133 on day 4; and 146 on day 5. The ultimate potential number of daily new cases is ugly. If the number of new cases continues to grow at 10% per day, there will be 1,745 new cases on day 31. (I'm very sorry to have to write about a number like that.)

Short-term success in fighting the virus isn't described in terms of eliminating the disease but rather "flattening the curve." In other words, (a) reducing the growth rate will result in a smaller increase in new cases each day (but still an increase), and (b) making the growth rate negative means there will be fewer new cases each day than the day before (but still new cases).

Observers seem to be working under the assumption that, sooner or later, "the curve will be flattened and then bent downward," meaning the disease will be controlled and perhaps disappear in three to six months. The reasons for optimism in this regard are as follows:

- People will isolate increasingly. The closures of schools, businesses and gathering places will help in this regard.
- Testing will allow us to identify those with the disease and separate them from the healthy population.
- The disease will fade when warm weather sets in (other epidemics that have appeared in recent decades have proved seasonal in this way).
- A preventive vaccine or therapeutic medication will be developed and approved.

Of course, no one knows whether or when these things will happen. But we can hope that the combination will limit the disease to the next three to six months as described above.

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Short-Term Response

It's clear that strong actions are essential in order to halt or reverse the rising trend in the number of new coronavirus cases. Things we've seen in other countries include:

- Not suggesting, but ordering people to desist from going out, gathering and socializing.
- Imposing punishment for stepping over the threshold of their homes.
- Prohibiting movement on the part of people who have been diagnosed, and tracking their movement through cell phones.

There seems to be no doubt about the fact that success in flattening the curve comes best from identifying the people who have the disease and preventing them from passing it on to others. Thus the battle against the virus may bring public health considerations into conflict with civil liberties. It's "un-American" to restrict people's movements, but so far the American spirit of independence seems to be allowing some people to justify maintaining their usual behavior. **Rules may be required, not just warnings, suggestions and encouragement.** Restrictions will increase our chances of winning the war. People should not be surprised to see them, although their promulgation may come as a shock.

Likewise, people coming together to do business would prolong and exacerbate the epidemic. The more businesses that close, the more success we're likely to have against the disease. In addition, the fact that closings reduce the spread should alleviate the flow of patients to doctors and hospitals, improving the health system's ability to help sufferers. But, of course, the impact on individuals and the economy will be painful.

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Unavoidable Pain

The news in the near term is unlikely to be good; instead it'll probably include:

- Business closures
- Job losses
- Supply-chain disruption
- Shortages of life's necessities, stemming from reduced production and distribution difficulties
- Challenges to the health system

Many businesses have been ordered to close (e.g., restaurants and bars). Some have seen their revenues evaporate (e.g., airlines, hotels and theaters). All of these things will cause job losses, with a particularly heavy impact on lower-income workers.

On March 17, Treasury Secretary Mnuchin warned that failure of the government to take appropriate action could take the U.S. unemployment rate to nearly 20% (by way of comparison, it reached 25% in 1933, during the Great Depression, and hit 10% as a result of the Global Financial Crisis). Regardless of the action taken, it seems sure to rise substantially from the 50-year low of 3.5%.

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In recent years observers have made a big thing out of the fact that a large percentage of Americans would be unable to respond to a $400 emergency. There's some disagreement as to whether it's true, but clearly many people don't have much money in the bank. Where will they get money to buy essentials if they lose their jobs? The government is highly likely to distribute cash, but the speed and adequacy remain to be seen.

In coming weeks we are likely to see over-taxed hospitals; shortages of beds, ventilators and supplies; triage of care based on patients' age and health; infection among health professionals; and rising numbers of fatalities. There's no question that the health system is underprepared; the question is how much preparedness can be improved. I find it hard to believe the short-term news will be good.

In all these ways and more, the early news is bound to be bad. I think that's indisputable. The only good news in this regard would be if it doesn't reach the levels people expect and fear.

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Fiscal and Monetary Actions

- The Fed has cut the short-term interest rate to zero – including a record emergency cut of 100 basis points on Sunday, March 15 – but unfortunately the total reduction has been only 150 basis points, whereas past rate-cut programs have amounted to roughly 500 basis points.

- The Fed and Treasury have taken other extraordinary actions to aid market functioning and financial system liquidity. The commercial paper market will be supported. Tax holidays and asset purchases are possible.

- Banks are likely to be hard-hit as a result of borrowers' defaults or moratoria on customers' payments. Thus we're highly likely to see steps designed to bolster the solvency of financial institutions and the availability of credit. Since banks need equity, dividends could be prohibited/discouraged.

Economists and forecasters are still plentiful – the challenging environment hasn't created a shortage there – and each one has an opinion. I never know which ones are right, but I find myself drawn to the views of Conrad DeQuadros of Brean Capital:

> In addition to Sunday's actions [cutting rates and initiating asset purchases], the alphabet soup of liquidity facilities is back with the relaunch of the Commercial Paper Funding Facility and the Primary Dealer Credit Facility yesterday. With the PDCF, dealers can even pledge equities to the Fed, with only a 16% haircut, and receive a 90-day loan at 0.25%. Non-investment grade corporate debt gets a 20% haircut.
>
> We also have continued actions by the Fed to encourage discount window loans. A key difference between now and 2008 is the speed with which the Fed is launching these facilities. In 2008, the PDCF was rolled out in March, the CPFF in October, and the first round of Large-Scale Asset Purchases in November. In this episode, we have rates slashed to the zero-lower bound, massive asset purchases, discount window actions (including regulatory guidance), the CPFF, the PDCF—all in a

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matter of days. The speed with which COVID-19 events are unfolding is astonishing, but so is the speed of the Fed's response to financial strains.

The Fed is in "whatever it takes" mode. Fiscal authorities will likely follow suit (especially when next week's unemployment claims reading is a multiple of the highest reading we have ever seen in the past). The ECB joined the parade tonight.

All these are appropriate actions. Hopefully we'll see benefits from them and more. The Fed and Treasury will do everything they think might help. Clearly there's little interest in abstaining simply because expenditures will add to the national deficit and debt.

However, it's unfortunate that there was no appetite for refraining from stimulus and restocking the tool kit during the period of prosperity that prevailed in recent years. No one knows whether that failure will inhibit the monetary and fiscal response. But I wish (for example) that we were cutting short rates from 5.0%, not 1.5%.

Market Behavior

A few observations regarding the markets:

It's easy to say that something approaching panic is present in the markets. We've seen record percentage declines several times within the last month (exceeded since 1940 only by Black Monday – October 19, 1987 – when the S&P 500 declined by 20.4% in a day). This week and last included down days as follows: -7.6%, -9.5%, -12.0% and -5.2% yesterday. These are enormous losses.

However, it's worth noting that every one of those declines was followed by similar gains: +4.9%, +9.3% and +6.0% (before a small gain today). Given that almost all of the biggest down days in the last 80 years were followed by up days, so far the strategy of "buy the dips" has continued to be in favor. That's fine as far as it goes, but it has nothing to do with fundamental improvement. **What this tells me is that optimism still hasn't been entirely eradicated and replaced by capitulation. Typically, the bottom is reached only when optimism is nowhere to be found.**

On the other hand, there has been a rush to cash. Both long positions and short positions have been closed out – a sure sign of chaos and uncertainty. Cash in money market funds has increased substantially. This doesn't tell us anything about fundamentals, but the outlook for eventual market performance is improved:

- the more people have sold,
- the less they have left to sell, and
- the more cash they have with which to buy when they turn less pessimistic.

This is a good time to point out that, thus far in this episode, there's additional evidence that there's no such thing in the investment world as a sure thing, magic potion or silver bullet:

- I find it interesting that the price of gold – historically considered the greatest source of protection again tough times – has declined several percent over the last month. Here's the

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headline of a story from a gold site: "Gold prices sharply down as dread pervasive in marketplace." It wasn't supposed to work that way.

- Bitcoin, which partisans had said would serve as a safe harbor in times of crisis, may be down more than any other "asset class." (I apply that term to Bitcoin advisedly.) It's lost 47.6% over the last month, from $10,188 to $5,337.
- Risk-parity funds, which were designed to do well in most environments, experienced double-digit losses in February.
- Even the world's greatest algorithmic fund – which sports a fabulous long-term record – is reported to have suffered a loss of several percent last month.

Of course this is a short, chaotic period, but we can say that so far, the evidence of a miracle investment is lacking. Nothing new here.

To wrap up, I'll share some color from Justin Quaglia, one of our debt traders:

> After two days of a basically stalled, but stressed market, we "finally had the rubber band snap." Forced sellers (needing to sell for immediate cash flow needs) brought the market lower in a hurry. We opened 3-5 points lower, and the Street was again hesitant to take risk (from their couch/kitchen table/living room/weekend house) so risk only transferred into a bid from another market participant. Clearing levels quickly became 6-8 points lower.
>
> One of the brokers said it was flat-out mayhem . . . and he was working from home! Imagine what an actual trading floor would have been like. It basically became "duck and cover" if you were a market maker, as their risk-taking abilities are being hindered by the C-suite. Beside immediate needs, investors sold to prepare for quarter-end redemptions, FX movements, and to fund margin calls. Short settlements were rampant, and larger blocks cleared in high-quality BB credits. Most people don't even want to guess what the mark is on CCC risk. This ultimately ended up being the first real day of panic we have seen in a long time.

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We're never happy to have the events that bring on chaos, and especially not the ones that are underway today. But it's sentiment like Justin describes above that fuels the emotional selling that allows us to access the greatest bargains.

Oaktree Asset Classes

To give you an indication of what has happened to date in U.S. credit, I'm going to provide data on prices, yields and performance as of yesterday's close. This information will be to be out of date by the time it reaches you, but hopefully it will still be useful.

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(As of the close, March 18)	Average Price	Average Yield	Average Yield Spread	Performance Feb 19-Mar 18
High Yield Bonds ex-energy	88.42	8.9%	787 bps	(13.9)%
High Yield Bonds with energy	83.06	10.0	901	(17.2)
Senior Loans	81.57	9.6	874	(15.1)
BB CLOs	74.24	12.4	1,135	(20.7)

Yields and yield spreads have increased significantly (which is another way of saying there's been a lot of damage done). The price declines have been substantial, but the increase in yield for each point of price decline tends to put on the brakes. A yield of 9%, 10% or 12% is impressive in a world of 1% Treasurys, and thus tends to slow the fall. Declines to date of 15-20% for the bond and loan indices have brought substantial losses to holders, but also vastly improved opportunities for new investment.

* * *

What do we know? Not much other than the fact that asset prices are well down, asset holders' ability to hold coolly is evaporating, and motivated selling is picking up. I'll sum up my views simply – since there's nothing sophisticated to say:

- **"The bottom" is the day before the recovery begins. Thus it's absolutely impossible to know when the bottom has been reached . . . ever. Oaktree explicitly rejects the notion of waiting for the bottom; we buy when we can access value cheap.**

- **Even though there's no way to say the bottom is at hand, the conditions that make bargains available certainly are materializing.**

- **Given the price drops and selling we've seen so far, I believe this is a good time to invest, although of course it may prove not have been the best time.**

- **No one can argue that you should spend all your money today . . . but equally, no one can argue that you shouldn't spend any.**

- **The more you want to garner potential gains and don't mind mark-to-market losses, the more you should invest here. On the other hand, the more you care about protecting against interim markdowns and are able to live with missing opportunities for profit, the less you should invest.**

But is there really an argument for not investing at all? In my opinion, the fact that we're not necessarily at "the bottom" isn't such an argument.

March 19, 2020

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The indices referenced herein are represented by: ICE BofA US High Yield Index, ICE BofA US High Yield Excluding Energy, Metals & Mining Index, Credit Suisse Leveraged Loan Index and J.P. Morgan CLO BB Post-Crisis Index.

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Memo to: Oaktree Clients

From: Howard Marks

Re: Nobody Knows II

I wrote most of this memo over this past weekend, on the heels of the tumultuous seven-day correction. But I couldn't get it out on Monday, and that day the S&P 500 rallied by 4.5%, or 135 points, for the biggest point gain in its history. I just can't update it daily to take into account every rise or fall (or rate cut). And my real goal – as usual – is to suggest how to think about developments, not to say "buy" or "sell." **So please read this memo as of Sunday afternoon – whatever the markets have done since – and let me show how I assess the recent events.**

* * *

I last used this memo title on September 19, 2008, two days after Lehman Brothers' bankruptcy filing. This is certainly an appropriate time to recycle it.

Over the last few weeks, I've been asked repeatedly for my view of the coronavirus and its implications for the markets. I've had a ready answer, thanks to something from my January memo, *You Bet!* As you may remember, I drew heavily on quotations from Annie Duke's book on decision making, *Thinking in Bets*. The one that stayed with me most – and that I've used a lot since the memo was published on January 13 – is this one:

> An expert in any field will have an advantage over a rookie. But neither the veteran nor the rookie can be sure what the next flip will look like. **The veteran will just have a better guess**. (Emphasis added)

In other words, if I said anything about the coronavirus, it would be nothing but a guess.

I've written in the past about my reaction when people in China ask for my view of their country's future. "You live there," I say. "I don't. Why are you asking me?" Not only am I not an expert on China, but I firmly believe the future of a country isn't subject to prediction, especially one that operates under a system that's unique. I furnish my opinion of China's future, but I hasten to point out that it's nothing but a hunch. **People may ask me for my opinion because they think I'm intelligent, think I've been a successful investor, or know I've lived through a lot of history. But none of that should be confused with expertise on subjects of every kind.**

And that leads me back to the coronavirus. No one knows much about it, since this is its first appearance. As Harvard epidemiologist Marc Lipsitch said on a podcast on the subject, there are (a) facts, (b) informed extrapolations from analogies to other viruses and (c) opinion or speculation. **The scientists are trying to make informed inferences. Thus far, I don't think there's enough data regarding the coronavirus to enable them to turn those inferences into facts. And anything a non-scientist says is highly likely to be a guess.**

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So, overall, there are facts, inferences and guesses. It's always essential to know which you're dealing with. As for the virus, I don't think anybody knows the answers to the following questions:

- **How does the virus travel from person to person and community to community?** – People have tested positive who had no known contact with other people who had it or who were in countries in which there are known outbreaks.
- **How many people will contract it?** – On February 28, the head of the World Health Organization said it had "increased our assessment of the risk of spread and the risk of impact of COVID-19 to very high at a global level." According to Dr. Lipsitch, it will affect 40% to 70% of all adult Americans. (I only provide this as an example. I don't assert that it's correct, or that his is the opinion to accept.)
- **Will it recede?** – According to the reported data, the number of new cases in China has declined substantially, from 9 out of 13 days with more than 3,000 the first half of February, to 8 out of 9 with less than 500 at the end of the month. How much of this is a function of the restriction of people's freedom of movement? To what extent can this downtrend be extrapolated to the rest of the world? Some say the virus will recede when the weather turns warm, as happens with other flus. Will that apply in this case?
- **What will its effect be?** – To date, only 20% of those contracting the virus have experienced something described as more than "mild," and the fatality rate has been only 2-3% of those infected. Will these percentages hold? Will the fatalities continue to be primarily among people who are elderly and/or compromised? 2% of Dr. Lipsitch's 40-70% suggests **a million deaths** in the U.S. On the other hand, according to Dean Jamison, a global health economist and professor emeritus at University of California, San Francisco:

  > . . . the U.S. has a superior health system to China, where the outbreak is centered, and months of warning. . . . "I think we're unlikely to see a really large outbreak in the U.S. — meaning **thousands of deaths**," he said. (*The Wall Street Journal*, March 2)

- **What countermeasures will be taken?** – Will schools and offices be closed? Will people be told to stay in their homes? Will food be delivered to homes as in China? Will large public events be canceled? Will a vaccine be invented, and when?
- **What will be the effect on the economy?** – If people are shut in at home and unable to go to work, shop, eat out or travel as usual, how will GDP be impacted? How will a negative wealth effect impact people's propensity to spend? "Zero GDP growth" means the same thing as "same as last year" – is that an optimistic expectation or a realistic one?
- **How will the markets react?** – Since the markets' reaction ultimately will be a function of both economics <u>and</u> emotion, it seems impossible to quantify how far it'll go.

I want to stress that the purpose of the above discussion isn't to give answers or to appear to be complete or authoritative. If anything, it's to indicate the degree of uncertainty. If it's true, as I think, that these things are currently unknown and unknowable, then clearly there can be no such thing as a reliable statement regarding the implications of the virus.

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The Economic Impact

In the early days of the disease, when the coronavirus was something that was happening "over there," the effects likewise were mostly second-hand:

- obviously, a major contraction of the Chinese economy due to factory closures,
- the decline in retail spending in Asia,
- the curtailment of travel to and from Asia, and
- the important impact of shutting down an essential part of the world supply chain.

The supply-chain effects are particularly important. The unavailability of a small Chinese component can cripple the production of a large piece of equipment. And it only takes one, unless there are alternative sources. Relocating sourcing will be a challenge: it'll take time, and there's no assurance that the new locations won't become engulfed in the disease.

More recently, the repercussions have moved beyond Asia and closer to the U.S., and they have grown in scale for the non-Asia world:

> Nestlé SA told more than 290,000 employees to suspend international business travel until March 15. Several U.S. airlines are canceling flights to China and waiving change fees for passengers traveling to other affected destinations. U.S. apparel and footwear companies are facing supply-chain delays, which could result in a shortage of spring goods. Toy aisles may be bare as production of Barbies and Nerf guns in China flattened. And containership operators have canceled 40 sailings at the Port of Los Angeles through April 1, mostly for vessels coming from China. (*The Wall Street Journal*, March 2)

The reasons for the economic impact are understandable, but their collective impact can't be quantified any more than most economic phenomena, and probably less given how much the elements in this situation are in flux. **There are as many forecasts as there are forecasters:**

> S&P Global is forecasting the U.S. economy to slow to a 1% annual growth rate in the first quarter from 2.1% pace in the fourth quarter of 2019, with a half-percentage point attributable to the coronavirus. For the full year, the effect would be modest, shaving one or two tenths of a percentage point off growth. But that forecast assumes the impact is mainly overseas. (*The Wall Street Journal*, March 2)

> Mr. Jamison [the UCSF emeritus professor introduced above] said such a scenario could still cause U.S. businesses and schools to close, grind transportation networks to a halt, and trim a half percentage point from economic growth for the year. That is enough to slow the economy but not cause a recession, or two straight quarters of economic contraction. He expects any event wouldn't last longer than several months and be followed by a sharp increase in economic activity. (Ibid.)

> "You have all the ingredients for an interruption of economic activity here," said Carl Tannenbaum, chief economist for Northern Trust. "The impact of what's going on is being underappreciated," he added. "I don't think the presumption of a month ago, that this will blow over, is an appropriate posture at this point." (Ibid.)

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> Self-Fulfilling Expectations Pose Real Economic Risks: Consumers increasingly expect the economy to get worse. Morning Consult's Index of Consumer Expectations (ICE) fell 2.5 points since Feb. 24 and currently stands at 112.9. The fear for policymakers is that the slide in consumers' future expectations becomes a self-fulfilling prophecy: As more consumers expect the economy to contract in the coming months, they become more likely to delay discretionary purchases, which in turn drives down aggregate U.S. demand. (Morning Consult, March 1)

Investor Reaction

The markets' decline in the seven trading days February 20-28 certainly represents a very strong negative reaction. The S&P 500, for example, declined by 432 points, or 12.8%. Here are a couple of indications of its magnitude:

> The market crash in the past two weeks has been truly historic: its probability of occurrence is ~0.1% since 1896; the velocity of the plunge and of the VIX surge is the fastest on record; and the 10-year [Treasury yield] is at all-time low. (Hao Hong, BOCOM International, a subsidiary of Bank of Communications, March 1)

> While we are merely days into it, this stress episode is already among the most substantial of the last 25 years, joining an elite group that includes Asian Contagion (1997), LTCM (1998), the WTC attack (2001), the Accounting Scandals (2002), the Big One (2008-2009), the Flash Crash (2010), the Eurozone Crisis (2011), the China "re-peg" (2015) and the VIX event (2018). (Dean Curnutt, Macro Risk Advisors, March 1)

There's no doubt about the fact that the coronavirus represents a major problem, or that the reaction so far has been severe. **What really matters is whether the price change is proportional to the worsening of fundamentals.**

For most people, the easy thing is to say that (a) the disease is dangerous, (b) it will have a negative impact on business, (c) it has kicked off a major reaction to date, and (d) we have no way of knowing how far the decline will go, so (e) we should sell to avoid further carnage. But none of the above means selling is necessarily the right thing to do.

All these statements reflect a measure of pessimism. However, there's no way to tell whether that pessimism is appropriate, inadequate or excessive. I wrote in *On the Couch*, (January 2016) that "**in the real world, things generally fluctuate between 'pretty good' and 'not so hot.' But in the world of investing, perception often swings from 'flawless' to 'hopeless.' "** What I can say is that a month ago, most people thought the macro outlook was uniformly favorable, and they had trouble thinking of a possible negative catalyst with a serious likelihood of materializing. And now the unimaginable catalyst is here and terrifying.

(There are a few important lessons here. First, the catalyst for a recession or correction isn't always foreseeable. Second, it can seemingly appear out of thin air, as this virus seems to have done. And

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third, the negative effect of an unforeseeable catalyst is likely greater when it collides with a market that reflects so much optimism that it is "priced for perfection.")

Before leaving this subject, I want to make mention of some illogicalities that mark the current market reaction, telling me that the market can't be relied on to reflect reason:

- Some people are comparing the coronavirus and its market reaction to the events of 9/11. But that was a one-day event, and there's no reason to consider that an appropriate model for this instance.
- It can be argued that the carnage to date has been indiscriminate. The shares of Amazon and Alphabet (Google) experienced declines in line with that of the overall market. But certainly since they don't rely on visits from customers, they might be expected to be more immune to the effect of the virus than most. And Amazon – featuring e-tail orders and at-home deliveries – could actually find advantages in the current situation.
- Not only were stocks hit over the last week, but so was gold. Since gold is supposed to be the ultimate source of protection in times of dislocation, I can't imagine any reason why it should decline in sympathy with stocks in a market correction.
- In a flight to safety, people have flocked to the 10-year Treasury note, bidding up its price and dropping its yield to 1.1%. If you think about it, this isn't very different from the negative interest rates I complained about in October. How can it be anything but a manifestation of extreme fear to make an investment that guarantees a return of 1.1% a year for the next ten years? And consider that question in the light of the 2% dividend yield on the S&P 500, or perhaps its earnings yield of almost 6% (based on prior earnings forecasts). I'm not a dyed-in-the-wool devotee of equities, but how can buying the 10-year at these yields make better sense.

Finally I want to call your attention to the "elite group of stress episodes" of the last 25 years enumerated just above by Dean Curnutt. Every one of them was gut-wrenching. And they were followed by recoveries that produced significant gains for stalwart investors.

Most investors seem to think in terms of a very simple relationship: bad news → price declines. And certainly we've seen some of that over the last week or so. But I've argued in the past that there's more to the story. The real process is: bad news + decline in psychology → price declines. We've had bad news, and we've had price declines. **But if psychology has declined too much, it might be argued that the price declines have been excessive given the news, as bad as it is.**

Monetary and Fiscal Policy

The good news is that many market participants are counting on the world's central banks and treasuries to help pull us out of any economic slowdown. Here's one example:

> [On February 28,] Fed Chairman Powell released a short statement saying, "The fundamentals of the U.S. economy remain strong. However, the coronavirus poses evolving risks to economic activity. The Federal Reserve is closely monitoring developments and their implications for the economic outlook. We will use our tools and act as appropriate to support the economy." Following Powell's statement,

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> futures markets moved to fully price in a 50-basis-point rate cut on March 18. (RDQ Economics, February 28)

Market participants seem to think that (a) rate cuts and other stimulus are always a good thing and (b) they'll work. Yet, given that the economic impact of the disease is unknowable, how can investors be sanguine about the ability of the Fed (plus other central banks and treasuries) to counteract it?

Fifty basis points this month may or may not be enough to stem the tide. But investors probably infer from Powell's "we will use our tools and act as appropriate" language that the Fed will "do what it takes." But we must be mindful of the limitations on "ammunition" that exist. In *On the Other Hand* (August 2019), I supplied a list of "ways in which low rates are undesirable and potentially harmful." The last one was this:

> Finally, but very importantly, when interest rates are low, central banks don't have at their disposal as much of their best tool for stimulating economies: the ability to cut rates.

The normal program of rate cuts covers roughly 500 basis points. That's not a very encouraging thought when we think about the fact that the short rate already stands at a mere 150 bps. So the one thing we know is that the Fed doesn't have room for a normal regime of rate-cutting (there's uniform insistence that it won't cut into negative territory).

Further, we have to wonder about the desirability of using 50 bps of the 150 bps the Fed does have at its disposal. Will it be enough? **And what will the Fed be able to do when the economic impact of the virus has been muted but we only have 100 bps or less left with which to fight any recession that appears?**

The facts regarding monetary and fiscal policy are these:

- In 2009, to fight the Global Financial Crisis, the Fed cut short-term rates to zero for the first time.
- Not wanting to derail the subsequent recovery, it hesitated to raise rates before Chair Yellen enacted a series of rate increases in 2015-18 that took the Fed funds rate to 2.25-2.50%.
- When around the end of 2018 interest rates reached levels that investors feared would jeopardize the economic expansion, Chair Powell's Fed reversed course and embarked on a series of three rate cuts.
- Thus today we have the 150 bps I mentioned above – "limited ammunition."
- In addition to rate cuts, the Fed has the ability to pump liquidity into the economy by engaging in quantitative easing through purchases of government securities. But we can't know the long-term impact of expansion of the Fed's balance sheet.
- Finally, looking away from the Fed, we can think about fiscal policy (i.e., increased deficit spending). But this will add even more to our national debt.

Normally, fiscal and monetary stimulus is applied in times of economic weakness. (Even Lord Keynes, whom many people consider the father of deficit spending, advocated running deficits and accumulating debt when the economy grows too slow to create jobs, and then repaying the debt when the stimulus produces surpluses.) Now we have near-zero interest rates and trillion-dollar deficits in

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times of prosperity. No one wants a recession, but using up our ammunition preemptively may not have been smart.

The Fed/government's tool for fighting the economic impact of coronavirus are very limited. Thus I believe it's undesirable to be highly sanguine about their powers at this juncture.

What to Do?

These days, people have been asking me whether this is *the time* to buy. My answer is more nuanced: it's probably *a time* to buy. There can be no unique time to buy that we can identify. The only thing we can be sure of today is that stock prices, for example, are a lot lower in the absolute than they were two weeks ago.

Will stocks decline in the coming days, weeks and months? This is the wrong question to ask . . . primarily because it is entirely unanswerable. Since we don't have answers to the questions about the virus listed on page two, there's no way to decide intelligently what the markets will do. We know the market declined by 13% in seven trading days. There can be absolutely no basis on which to conclude that they'll lose another 13% in the weeks ahead – or that they'll rise by a like amount – since the answer will be determined largely by changes in investor psychology. (I say "largely" because it will also be influenced by developments regarding the virus . . . but likewise we have no basis on which to judge how actual developments will compare against the expectations investors already have factored into asset prices.)

Instead, intelligent investing has to be based – as always – on the relationship between price and value. In other words, not "will the collapse go further?" But rather "has the collapse to date caused securities to be priced right; or are they overpriced given the fundamentals; or have they become cheap?" I have no doubt that assessing price relative to value remains the most reliable way to invest for the long term. (It is the thrust of the whole discussion just above that there's nothing that provides reliable help in the short term.)

I want to acknowledge up front that ascertaining intrinsic value is never a simple, cut-and-dried thing. Now – given the possibility that the virus will cause the world of the future to be very different from the world we knew – is value too unascertainable to be relied upon? In short, I don't think so. What I think we do know is that the coronavirus is not a rerun of the Spanish flu pandemic of 1918, "which infected an estimated 500 million people worldwide – about one-third of the planet's population – and killed an estimated 20 million to 50 million victims, including some 675,000 Americans." (history.com) Rather, it's one more seasonal disease like the flu, something we've had for years, have developed vaccines for, and have learned to deal with. The flu kills about 30,000-60,000 Americans each year, and that's terrible, but it's very different from an unmanageable scourge.

So, especially after we've learned more about the coronavirus and developed a vaccine, **it seems to me that it is unlikely to fundamentally and permanently change life as we know it, make the world of the future unrecognizable, and decimate business or make valuing it impossible.** (Yes, this is a guess: we have to make some of them.)

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The U.S. stock market's down about 13% from the top. That's a big decline. It would be a lot to accept that the U.S. business world – and the cash flows it will produce in the future – are worth 13% less today than they were on February 19. That sentence may make it sound like I think the market's undervalued. But that's not the proper interpretation. If it was overvalued on the 19th, rather than being undervalued today, after the decline, it could just be less overvalued. Or it could be fairly valued, or even undervalued, but it isn't necessarily.

I think the stock market was overvalued two weeks ago . . . somewhat. That means I think that today, even with the short-term prospects of business somewhat diminished, it's closer to fairly valued, but not necessarily a giveaway. In the starkest numerical terms, before the rout, the p/e ratio on the S&P 500 was 19 or so, roughly 20% above the post-World War II average (and there are arguments on both sides regarding the current applicability of that average). Thus, after a 13% decline, you'd have to say the p/e ratio is pretty close to fair (unless earnings for the year will be very different from what they previously had been expected to be).

Buy, sell or hold? I think it's okay to do some buying, because things are cheaper. But there's no logical argument for spending all your cash, given that we have no idea how negative future events will be. What I would do is figure out how much you'll want to have invested by the time the bottom is reached – whenever that is – and spend part of it today. **Stocks may turn around and head north, and you'll be glad you bought some. Or they may continue down, in which case you'll have money left (and hopefully the nerve) to buy more. That's life for people who accept that they don't know what the future holds.**

But no one can tell you this is *the* time to buy. Nobody knows.

March 3, 2020

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Memo to: Oaktree Clients

From: Howard Marks

Re: You Bet!

As I've written in past memos, I have an indelible recollection of the first book I read as a Wharton freshman in 1963. The book was *Decisions Under Uncertainty: Drilling Decisions by Oil and Gas Operators* by C. Jackson Grayson, Jr. (who in 1971 would take on the role of "price czar" in the Nixon administration's efforts to get inflation under control).

The best and most lasting thing I took away from Grayson's book – and the first thing I remember learning in college – was the observation that **you can't tell the quality of a decision from the outcome.** This revelation had a profound influence on me as a 17-year-old and represented the first critical building block in my understanding of how the world works.

As Grayson explained, you make the best decision you can based on what you know, but the success of your decision will be heavily influenced by (a) relevant information you may lack and (b) luck or randomness. **Because of these two factors, well-thought-out decisions may fail, and poor decisions may succeed. While it might seem counterintuitive, the best decision-maker isn't necessarily the person with the most successes, but rather the one with the best process and judgment. The two can be far from the same, and especially over a small number of trials, it can be impossible to know who's who.**

By my stage in life – if not well before – one should have figured out his strengths and weaknesses and tilted his activities toward the former. I've concluded that my strengths include the ability to:

- frame questions,
- logically organize data and weigh pros and cons,
- know what I don't know,
- accept that future outcomes aren't predictable,
- think about the future probabilistically, and
- make decisions incorporating all of the above (although far from always correctly).

Also very important has been the ability to internalize Grayson's point about decision quality (and thus live with my unsuccessful decisions from time to time). This set of attributes equipped me for a career in investing . . . **and for finding enjoyment in games of chance.**

My Life as a Gambler

Although I've made reference to them in some past memos, games have played a bigger part in my life than you probably know. Because of the many connections between investing and gambling, many of the investors I respect play blackjack, poker or backgammon. You might enjoy learning about my past in this regard.

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Like most people my age, I spent time as a child playing card games like "War" and "Old Maid" (there were no videos to watch or video games to play, and my parents considered television a pernicious influence that had to be strictly rationed). My first brush with "grown-up" games and betting involved gin rummy starting around age 12. Hours spent playing with my three closest buddies established a pattern for life.

When I was a sophomore in college (1964-65), card games at the fraternity house took up an embarrassingly large fraction of my time. A different game occupied our afternoons each semester, including gin, pinochle, cribbage, hearts, casino, bid whist, spades and tonk (many of these have since been relegated to the dustbin of leisure-time history). Most evenings were devoted to poker. (You're right to wonder when I studied. I actually can't remember doing much of it that year.) And when I eventually got serious about my studies as an upper-classman, I took up the commensurately serious game of bridge.

The next big step came in 1970-72, when I began to ski and was introduced to backgammon back at the lodge. Although probably dismissed by non-game players as trivial, backgammon, like bridge, is a game that requires a great deal of thought and one where study and practice can lead to a very high level of skill. More on it later.

As you may know, I got Citibank to move me to Los Angeles in 1980. One of the big ways this changed my life was that it led me to meet my great friend Bruce Newberg, whose mind is perfect for handling the odds and strategies involved in games (as it is for investing). Bruce and I have had thousands of hours of enjoyment playing backgammon and gin over the last 40 years. We're probably about even financially after all that time, and if not, the winner's hourly rate of pay is in pennies. **All we get out of it is fun.** Our motto is, "The only thing worse than losing is not playing."

I also enjoy visiting a casino once in a while, and the opportunity to play blackjack. In blackjack, you and the dealer are each dealt two cards. You can "hit" or "stay" as you choose – take additional cards from the deck or decline to do so. The dealer has no choice; he's required to hit (or forced to stay) depending on his card total. In the end, whoever's total is closer to 21 without going over is the winner.

Lots of people go to casinos every year and lose money at blackjack without knowing the first thing about how to play successfully. Instead, they count on luck and hunches and say they "just play to have fun." But there are actions you can learn to take in blackjack – mostly regarding when to hit or stay – that will improve your results. These have been codified into what's called "basic strategy."

Beyond that, the key to further improving your probability of winning lies in the fact that, unlike most games of chance, in blackjack the outcomes of future hands aren't independent of the outcomes of past hands. This is so because in blackjack the dealer deals several hands in succession without returning the cards that have been played to the "shoe" from which he deals. Thus, which cards have already been dealt directly determines which cards remain to be dealt. If you can track the former through "card-counting," you can have an idea about the latter. But since the dealer's shoe can contain six or eight 52-card decks, keeping track of the cards played in itself requires exceptional skill.

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Edward Thorp wrote the definitive book on this, called *Beat the Dealer*. When he won too much money, Ed was banned from the casinos and had to turn to "straight" pursuits. As a result, he studied warrants on Japanese stocks and developed the art of arbitrage. When I last saw Ed he was living an idyllic life in Newport Beach, prospering even in the absence of suits, ties or regular office hours.

But let's return to backgammon. In this game, two opponents – one moving clockwise and the other counter-clockwise – try to bring their pieces around the board while simultaneously preventing the other from doing so, and then be the first to take them off the board. Each player's ability to move forward is determined by rolling a pair of dice. It's a total disaster if you're ignorant of the probabilities governing rolls of the dice and instead rely on luck, gut instinct or what you think is your innate skill. (In fact, the most important skill in backgammon consists of knowing these probabilities and thus what actions to take given your position.)

More recently, through study Bruce has gotten too good for me at backgammon, so now we're mostly down to gin. In gin, each player is dealt 10 cards, and by alternatingly picking from the deck and discarding, you try to form them into "melds" of three or four cards of the same kind (such as 9-9-9) or in a run of the same suit (such as 4-5-6-7 of spades). As the hand goes on, you can opt to "knock" (if your un-melded cards add up to less than a certain number) or try to get "gin" (all 10 cards melded), which pays off in more points – unless your opponent knocks or gets gin first.

An aside: when I speak to students, I often say, "For me, the thing that makes investing fascinating is the fact that there's no action you can take that is sure to work, no strategy that's always a winner." To illustrate, I go on: "It's like gin. Sometimes knocking is the best thing to do, and sometimes you should play for gin." And all I get are blank stares. Few young people play cards anymore, and even fewer have ever heard of gin.

Another aside. While I don't think they're the result of conscious decisions, my life as a gambler has always exhibited two characteristics:

- First, I haven't made a serious study of the games I play. I feel if I want to work, I can go to the office.
- And second, I only play for small stakes. Some people dream of big killings, and some like the frisson attached to risking large sums. I've never felt that my enjoyment increased with the amount of money on the table. I play for fun and to test my decision-making, not to win big money. (Point of reference: back around 1990, I was visiting Ric Kayne at Lake Tahoe and he said, "Tonight I'm going to take you to the casino and make a man of you. We're going to play until you win or lose real money!" So he called the casino host and asked him to arrange a $25,000 line of credit for me. The host called back a few minutes later and said, "Sorry, Ric, I can't justify a $25,000 line for someone whose average bet is $11.")

What about coming full circle? One of the best things I ever did was to teach my son Andrew to be a game player at an early age. I now have a built-in opponent for gin and backgammon. There can be few sweeter memories than sitting on a log with him at Big Bear State Park playing War in 1992, when he was five. And it continues; my five-year-old granddaughter, Rosie, is my new opponent at War. There's nothing better!

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Thinking in Bets

In a past memo, I told a story from my days as a buy-side analyst following the business equipment industry for First National City Bank. In 1970, one of the bank's portfolio managers asked me whom I considered to be the best brokerage-house analyst on Xerox. "Well," I answered, "the one who most agrees with me is so-and-so."

In other words, we tend to respect people who think like we do. Did you ever hear someone say, "I think Bob's a genius, and he thinks my views are all wrong"? That's something few people would ever say. No, we tend to think highly of people whose opinions mirror ours.

And that brings me to the source of the inspiration for this memo: a book called *Thinking in Bets: Making Smarter Decisions When You Don't Have All the Facts* by Annie Duke. (I provided a blurb for the dust jacket when it was published in 2018.) Duke completed the coursework and dissertation for a Ph.D. in psychology from the University of Pennsylvania but stopped short of receiving her degree, and for many years she was the best-known female professional poker player (with over $4 million of tournament winnings). I was rereading Duke's book while on vacation, and so many of her thoughts on poker and on decision-making in general agreed with mine that I became motivated to start on the memo you're reading now. Here are some excerpts that will show you why I was drawn to it [emphasis added]:

> Over time, those world-class poker players taught me to understand **what a bet really is: a decision about an uncertain future**. . . .
>
> Thinking in bets starts with recognizing that **there are exactly two things that determine how our lives turn out: the quality of our decisions and luck**. Learning to recognize the difference between the two is what thinking in bets is all about. . . .
>
> The result of each hand provides immediate feedback on how your decisions are faring. But it's a tricky kind of feedback because **winning and losing are only loose signals of decision quality**. You can win lucky hands and lose unlucky ones. . . .
>
> **What makes a decision great is not that it has a great outcome.** A great decision is the result of a good process, and that process must include an attempt to accurately represent our own state of knowledge. That state of knowledge, in turn, is some variation of "I'm not sure." . . .
>
> . . . we must recognize that no strategy can turn us into perfectly rational actors. In addition, we can make the best possible decisions and still not get the result we want. **Improving decision quality is about *increasing* our chances of good outcomes, not *guaranteeing* them**. . . .
>
> We are discouraged [in life] from saying "I don't know" or "I'm not sure." We regard these expressions as vague, unhelpful and even evasive. But getting comfortable with "I'm not sure" is a vital step in being a better decision-maker. **We have to make peace with *not knowing*. . . .**

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> **What good poker players and good decision-makers have in common is their comfort with the world being an uncertain and unpredictable place. They understand that they can almost never know exactly how something will turn out. They embrace that uncertainty and, instead of focusing on being sure, they try to figure out how *unsure* they are, making their best guess at the chances that different outcomes will occur. . . .**
>
> An expert in any field will have an advantage over a rookie. But neither the veteran nor the rookie can be sure what the next flip will look like. **The veteran will just have a better guess**. . . .

You don't have to read far in *Thinking in Bets* before it becomes clear that Annie Duke shares Jack Grayson's interest in decision-making under uncertainty. Duke looked for real-world applications at the poker table, and Grayson in the oil patch. **But both worked on how to make decisions when faced with imperfect information and uncertain outcomes. That brings me to the subject of investing . . . and this memo.**

<u>Parsing the World of Gambling</u>

People who aren't very familiar with games or who don't dwell on them probably think they're all variations on the same theme. But actually there are big differences. I want to touch on them so I can go on to create an effective analogy between gaming/gambling and investing. Importantly, games vary in three primary dimensions: information availability, luck and skill.

Some games (but not all) require players to deal with uncertainty. Whether you or your opponent will win – or what action you should take – might hinge on information that's not available to you, and about which you can make inferences or guesses at best. **Thus in some games, there's important "hidden information,"** and in others there isn't. In poker, blackjack and gin you don't know what cards your opponent is holding. But in chess and backgammon, everything's plain to see: the position of the playing pieces on the board. Nothing is hidden. Obviously this is a big difference. Where no information is hidden, the game is reduced to the other two elements.

After the conditions have been set (the cards have been dealt or the pieces are in their positions on the board), there's another source of uncertainty. **In some games subsequent developments will be influenced by luck**, and in some they won't. Take the two games I said don't involve hidden information: chess and backgammon. In chess, there's no such thing as luck – no dice to throw or cards to draw; the key variable is the moves your opponent chooses to make. (I guess there is one element of luck: how skillful is the opponent you've drawn?)

In backgammon, on the other hand, the moves a player gets to make are entirely determined by what numbers come up when he rolls the dice. And in card games, what cards he and his opponent draw is subject to luck. Sometimes these things are total unknowns – a matter of sheer randomness – and in others, while the outcome can't be predicted with certainty, probabilities can be assigned.

- In blackjack, for example, we can know something about the cards that will come out in the future if we can keep track of the ones that already have been played.

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- And in backgammon, we know with absolute certainty the probability of every possible result of rolling the dice: over a large number of rolls, the number seven will come up 16.7% of the time (six of the 36 possible outcomes on a roll of the dice), and the number twelve will come up only 2.8% of the time (one out of the 36). Of course, even if we know the probabilities, we still don't know which number will come up on any one roll.

Finally, in some games skill is important, and in others it isn't. There's skill (albeit with varying degrees of difficulty) in all the games I've discussed so far: chess, backgammon, poker and gin. Games with and without hidden information can entail skill, and games affected and unaffected by luck can entail skill.

But the role of skill isn't universal in games/gambling. Roulette and wheel-of-fortune are games of pure chance or luck. The outcome is entirely a matter of random events that can't be predicted at all, like which slot in a roulette wheel the ball will fall into when the wheel stops spinning. And since there's no ability to predict future developments, there's no such thing as skill: only luck.

- In the early 1980s, I used to go to Las Vegas with a now-departed friend. He spent a lot of time (and money) on wheel-of-fortune, which is nothing but vertical roulette. I used to tell him he was "the world's greatest wheel-of-fortune player." Since he thought there actually was such a thing as playing the game well, he never got the joke.
- There's a very interesting example in *punto banco*, a form of baccarat. As Wikipedia says, "In *punto banco*, each player's moves are forced by the cards the player is dealt." That is, there are no decisions to make, so clearly no such thing as skill in decision-making. You sit down, place your bet, receive your cards, and either win or lose. One version of history says baccarat was invented for the enjoyment of a king who wasn't smart enough to learn to play games; thus one was developed that required no decisions . . . and thus entailed no skill.

Note from the above the different types of games:

- No hidden information, no luck, skill. (Chess)
- No hidden information, luck, skill. (Backgammon)
- No hidden information, luck, no skill. (Roulette)
- Hidden information, luck, skill. (Blackjack, poker)

Now we can drill down. Here are some important observations:

- Where there's no skill involved, the outcome has to depend entirely on luck.
- But even if skill is involved, luck can still play a role.
- The presence of luck doesn't necessarily preclude a role for skill. **In fact, making intelligent decisions when future events are uncertain is one of the greatest forms of skill.** It's what Grayson's and Duke's books are all about.
- **Likewise, the ability to deal intelligently with hidden information has to be based on skill.**

Creating this taxonomy, or "scheme of classification," not only allows me a chance to educate non-game-players, but it also provides a framework for a comparison to investing (if you hadn't noticed).

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How Is Investing Like Gambling?

Hidden information, luck and skill can play a part in investing. In active investing involving public companies, for example, all three are involved.

- Clearly, no one knows all the relevant facts. The SEC tries to make sure all investors have **equal access** to information, but not necessarily **complete access**. For example, investors won't know about first-quarter developments at a company until it reports earnings in May. And no one is supposed to know the results of drug trials and beta tests until they're made public.
- Luck – random, unpredictable, often-exogenous events – affects companies and their stocks all the time. Many aspects of corporate performance and profitability can be influenced by weather, for example. And the TV network carrying the World Series is likely to enjoy much greater ad revenue if the teams playing come from major markets rather than small ones.
- Finally, the superior investor has the skill required to better assess revenue and profit potential, where we stand in the cycle, the fairness of an asset's price and the margin of safety it affords. No one gets these things right all the time, but the superior investor does so more often than most.

Not all investing, however, entails all – or necessarily any – of the three elements. Take, for example, index investing. The index fund manager's job is to produce the same return as the relevant index.

- There's no such thing as hidden information. The only information the investor needs to succeed at his job relates to the composition of the index in question, and there's no mystery in that regard.
- Likewise, there's no luck. The forces that influence the securities in the index will have exactly the same influence on a properly constructed index fund.
- And finally, there's no skill. All it takes is a well-programmed computer to keep the fund's portfolio in line with the index, and that isn't hard to find.

It's worth delving into the matter of investing skill. The efficient market hypothesis posits that (a) markets are "efficient," (b) thus assets are priced fairly and there are no bargains or overpriced assets, and (c) as a result, there's no scope for skill or "alpha," defined as the ability to outperform by capitalizing on mispricings. The traditional view of active investing, which ignores this hypothesis, is that investing is like blackjack, meaning it's possible for some people to be better at it than others. But if the efficient market hypothesis is right, investing is like roulette, with investors' returns beyond their control and solely a function of luck, or what the market does. (Of course, a portfolio's return can be amplified or diminished relative to the market's return by the portfolio's relative sensitivity to it: the "beta." And that leads to the question of whether investors have the skill to move beta up and down in a timely fashion.)

In most markets, the concept of efficiency is neither an absolute truth nor completely inapplicable. **Some markets may be less efficient than others; thus skill may be more relevant in some markets than in others.** Where skill is highly relevant, markets are called "alpha" markets. Where

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it's not – and the portfolio return is mostly a function of the market's return and the portfolio's sensitivity to market movements – they're called "beta" markets. Obviously it's important to figure out which type of market you're working in.

For years, people (whether consciously or not) treated the stock market as an "alpha" market, and equity portfolio managers were able to charge substantial management fees for their efforts. But over time, it was increasingly observed that most active investors were incapable of consistently outperforming the market indices (especially after fees). That meant skill was lacking: you could get the same result or better by passively emulating an index. Investors concluded that they would no longer pay for alpha in a beta market, and that's the main reason for the growth of passive investing. **Why pay someone to play for you in a game where there's no such thing as skill?**

What's the bottom line? **In my view, the active investing I'm interested in – hopefully in markets that are less efficient – involves all three of the ingredients under discussion: hidden information, luck and skill. Thus it's most like poker and blackjack, not chess.** It's in that vein that I'll proceed.

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The Essence

One of the most important aspects of skill in gambling consists of figuring out which possible outcome to bet on, and when to bet heavily and when not to. This is where all facets of the decision come together.

Gauging the likely outcome – How likely is one participant (you?) to win, and how likely is someone else? Whether in card games, backgammon or sports betting, there are a number of factors to consider. The most important are these:

- How good is your current position?
- How many paths do you have to winning (and to losing)?
- To what extent would it require good luck regarding throws of the dice or draws of the cards for you to win? And what's the probability your opponent will enjoy good-enough outcomes for him to be the winner instead?

The job here is to "handicap" the outcome, defined by Merriam-Webster as "to assess the relative winning chances of (contestants) or the likely winner of (a contest)." Which poker player has the best hand? Who's in the better position on the backgammon board? Or for the bettor, which horse is likely to win the race, or which team is likely to win the game? **To put it simply, who's the favorite?**

Many people think figuring out who's most likely to win is all you have to do to successfully bet on card games, backgammon or sports. They're missing a huge part of the matter, and perhaps the far more important part.

Assessing the proposition – There's usually not much mystery involved in identifying the favorite. It's pretty clear who's ahead in backgammon. It's more of a challenge in card games, where players hold cards the others don't know about, but still it's possible to have a sense for how good one's

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hand is in absolute terms. And in most cases there's a solid consensus around which horse or team is most likely to win.

But one of the most important things to know about gambling is that information that's available to everyone isn't likely to produce winnings. Since most people know who the likely winner is in a hand of cards, a backgammon game that's underway or a sports bet, that isn't valuable information. **Everyone might like to bet on a favorite, but that means it's unlikely they'll be able to find someone to take the other side of the wager: to bet against the favorite without an inducement.**

That inducement takes the form of a "proposition." Consider a football matchup in which Team A is considered twice as likely to win as Team B. Stated another way, Team A is viewed as likely to win two times out of three, and Team B only once. If it's common knowledge that Team A is that much better, no one will bet on Team B unless the person who favors Team A is willing to "lay odds." That is, Joe might tell Ed, "I'll give you 2-to-1 odds; I'll bet $10 against your $5 that Team A will beat Team B." Assuming the outcomes go according to expectations, Joe wins $5 two times out of three and loses $10 one time. Over three games, then, the two bettors come out even. That means 2-to-1 odds are "fair" in this situation.

So here's the bottom line: the goal isn't to figure out who the favorite is and bet on it. Rather, the goal is to figure out who the favorite is **and whether the odds are fair or not**.

- If the odds are fair, as illustrated above, there's no reason (other than sentiment) to bet on one team or the other.
- If the odds don't penalize the favorite enough – let's say the odds on the above matchup are only 6-to-5 – you should bet on the favorite. Team A will win two-thirds of the time. The one time out of three when they lose, the $6 you pay won't offset the total of $10 you win on the two occasions when they come out ahead.
- But if the odds are tilted against the favorite – the odds are "too long," maybe 4-to-1 – it's better to bet on the underdog. You'll still lose $1 two times out of three (for a total of $2), but on the one game you win, the $4 payoff will more than compensate.

A great example can be seen in the world of backgammon. The player who's ahead can offer to double the stakes from $5 to $10 by "turning the cube," in which case the other player has to choose between surrendering for $5 or playing on for $10. Since the leader offers to double because he's ahead, does that mean it's a mistake for the player who's behind to accept? Not necessarily.

- Clearly, if the laggard surrenders, he loses $5.
- But what if, let's say, he has a 25% chance of winning and plays on for $10? In that case, his expected outcome is ($10 loss x .75) + ($10 gain x .25), which works out to the same $5 loss.

The lesson from the above is that a player who is behind should accept a double whenever his chance of winning exceeds 25%, which would give him an expected loss that's less bad than surrendering for $5. **Sometimes it's a good idea to bet on an inferior position . . . even though doing so is expected to result in a loss most of the time. It all depends on the proposition.**

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My friends Matt Bensen and Corey Robinson provided an apt excerpt from a speech titled "The Art of Stock Picking" by Charlie Munger. In it, Charlie compares investing with the pari-mutuel betting system at the racetrack, where the payoff for each horse winning is determined by how many people bet on it:

> If you stop to think about it, a pari-mutuel system is a market. Everybody goes there and bets and the odds change based on what's bet. . . . Any damn fool can see the horse carrying a light weight with a wonderful win rate and a good post position etc., etc. is way more likely to win than a horse with a terrible record and extra weight and so on and so on. But if you look at the odds, the bad horse pays 100 to 1, whereas the good horse pays 3 to 2. Then it's not clear which is statistically the best bet . . .

Success in gambling doesn't go to those who pick winners, but to those with the ability to identify superior propositions. The goal is to find situations where the odds are generous to one side or the other, whether favorite or underdog. In other words, a mispricing.

It's exactly the same in investing. People often say to me, "XYZ is a great company with a bright future, so I bought the stock." They're picking a favorite but ignoring the proposition. The former alone isn't enough; they should consider the latter as well.

Likewise, one might say that even the best venture capitalists are poor at picking winners, since a lot of their investments result in losses. But the payoff on the ones that succeed is so large, it's sufficient to pay for the losers many times over and make the overall effort a great success.

While in investing we generally aren't offered explicit odds, the attractiveness of the proposition is established by the price of the asset, the ratio of the potential payoff to the amount risked, and what we perceive to be the chance of winning versus losing.

Superior investors may be superior because they can figure out which companies are likely to be winners. **But the best investors I know also have a sense – perhaps innate and instinctive – for situations where the proposition is too favorable relative to the underlying fundamentals.** It might be a company whose securities are cheap enough to more than compensate for its poor prospects, or one where the future is exceptionally bright, but its securities aren't priced high enough to charge fully for that potential.

In May 1968, when I showed up at First National City Bank for a summer job in the investment research department, the bank (and many other banks) invested primarily in the "Nifty Fifty." These were considered to be the best and fastest-growing companies in America: companies so good that there was "no price too high." And if you bought those stocks the day I arrived and held them firmly for five years, **you lost almost all of your money . . . investing in the best companies in America.** All the companies were considered future winners. Some actually were, but far from all. (What happened to Kodak, Polaroid and my favorite, Simplicity Pattern?) The proposition was wrong: they were priced as if they couldn't lose, and it turned out several would.

Then, in 1978, I switched to Citi's bond department, and I was asked to start a high yield bond fund. Now I was investing in **the bonds of the worst public companies in America** – all rated speculative grade, or "junk." And I was making good money safely and steadily. Not because the companies

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were flawless – in fact, about 4% by dollar amount would go on to default each year on average – but because "the price" was too favorable to those who bet on them.

This experience produced two of my most important observations:

- **Success in investing doesn't come from buying good things, but from buying things well, and it's essential to know the difference.**
- **It's not a matter of what you buy, but what you pay for it.**

Nifty Fifty investors spent all of their time picking favorites and failed to notice that the prices they paid were too high. **Mostly winning companies, but poor investments.**

And because popular opinion was stacked so heavily against high yield bonds, those who invested in them received excessive compensation for taking the associated risk: **the proposition was too good**. Moody's defined a B-rated bond as one that "fails to possess the characteristics of a desirable investment." In other words, Moody's panned those bonds because they were underdogs but never asked about the price. It's usually non-objective, too-positive or too-negative attitudes like these that give rise to propositions that are too good or too bad for the takers. That's what we should search for as investors.

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Guest Contributor

As I mentioned on page three, one of the best things I ever did was to encourage my son Andrew to develop a love of games. In Andrew's case, he applied the same seriousness to games that he does to investing and his other pursuits. This gave him the thought process of a gambler and enables him to suggest the following ways in which gambling has parallels to investing:

- **Game selection versus skill** – When considering where to invest, it's important to understand both how much of the requisite skill you possess and the quality of the competition. Being a consistent winner among the best gamblers or in the most intensely competitive markets can be very difficult. Instead, your energy might be better spent looking for less-efficient niches. Unfortunately, it's harder to find them than it was decades ago.
- **Increasing efficiency/the tendency of markets to adapt** – In the early days of online poker, it was easy for decent players to win, and a lot of amateurs were enticed to play by seeing a newcomer win the World Series of Poker. After some time, however, the games became tougher as they attracted professional players, and the amateurs lost their money. The new, more sophisticated generation of competitors learned their predecessors' tendencies, improved on their strategies and started beating them. In this way, changes in the arena and in participants' behavior can cause what worked years ago to not work today.
- **Circle of competence** – Just because you're great at gin rummy doesn't mean you should play Texas Hold'em against a professional poker player. It's important to know your strengths and stick to them.
- **Not having to play every hand** – There's no requirement to bet on every game or every hand. You can wait until you get a particularly attractive proposition, one that you feel particularly capable of analyzing and understanding, and where the odds are on your side. In the interim, it's better to sit out and protect your bankroll.

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- **The importance of not just winning and losing, but of maximizing wins and minimizing losses** – The key is to bet big when you have a big edge and small when you have less of an edge . . . and to know the difference. As Charlie Munger puts it, "The wise ones bet heavily when the world offers them that opportunity. They bet big when they have the odds. And the rest of the time, they don't. It's just that simple." Everyone will have both winners and losers. Various factors will determine the ratio. But the ability to assess propositions can enable you to win more on your winners than you lose on your losers. The size of your bet should take into account both the probability you are correct about who's going to win and the asymmetry of the potential payout. "Getting your money in" when you have a great hand is one of the most important keys to winning at poker. You don't get many great hands, so when you do, you have to be sure to take maximum advantage.
- **Being able to make it through downturns** – It's important to have discipline when risking your capital, so that you can survive unfavorable periods and still be around when the winners show up. You have to avoid the risk of ruin, and this requires solid discipline (you must "never forget the six-foot-tall man who drowned crossing the river that was five feet deep on average"). To that end, good play isn't just a function of relying on the expected value of your holdings and pure math, but also of thinking broadly about risk. Would you bet all your money on an 80/20 favorite?
- **Adjusting your play based on the environment** – In poker, if your competition is weak, you may decide to play more hands regardless of their strength and bet more aggressively, while against strong players you may tighten up and only play premium hands.
- **Overcoming emotion and biases** – Human failings can cause gamblers to "chase" in poker (overstay in a hand in the hope of getting a lucky card), play loose (bet too much) when they're "steaming" (smarting from losses and thus driven by heated emotion), and take bad doubles in backgammon. Hope, emotion and optimism are the gambler's enemies.
- **Second-level thinking** – It's not just how good your hand is. There's much more. How good does your opponent think your hand is? How good do you think your opponent's hand is? How good does he think you think his is? How is that motivating his actions? The consistent winner has to be able to think at a higher, more complex level than the rest.

All the ideas discussed above are important in investing, just as they are in gambling. In both pursuits, it all comes down to Jack Grayson's title: *Decisions Under Uncertainty*. As I've learned in the 56 years since first reading his book:

- You have to be able to understand which companies or assets are favored <u>and</u> the attractiveness of the proposition.
- You need a sense for whether your holding is a good one <u>and</u> for the chance the competition – the market, which you're playing against – might have better.
- You need the discipline to follow a process <u>and</u> the wisdom to accept that no process is sure to produce good results.
- You have to understand the significance of the information you have, as well as that which you don't have. You need the nerve to bet heavily based on what you think you know <u>and</u> a healthy respect for what you may not know.
- You need to control greed and fear, hopefulness and despondency. You have to resist making an unwise bet just because it could enable you to catch up with the indices or the competition.

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Since her book provided the impetus for this memo, I'll let Annie Duke sum up. She'll be talking about poker, but it'll sound a lot like investing [emphasis added]:

> When we think probabilistically, we are less likely to use adverse results alone as proof that we made a decision error, because we recognize the possibility that the decision might have been good but luck and/or incomplete information (and a sample size of one) intervened.
>
> Maybe we made the best decisions from a set of unappealing choices, none of which were likely to turn out well.
>
> Maybe we committed our resources on a long shot because the payout more than compensated for the risk, but the long shot didn't come in this time.
>
> Maybe we made the best choice based on the available information, but decisive information was hidden and we could not have known about it.
>
> Maybe we chose a path with very high likelihood of success and got unlucky. . . .
>
> But it also means we must redefine "right." **If we aren't wrong just because things didn't work out, then we aren't right just because things turned out well**. . . .
>
> First the world is a pretty random place. The influence of luck makes it impossible to predict exactly how things will turn out, and all the hidden information makes it even worse. If we don't change our mindset, we're going to have to deal with being wrong a lot. . . .
>
> Poker teaches that lesson. A great poker player who has a good sized advantage over the other players at the table, making significantly better strategic decisions, will still be losing over 40% of the time at the end of eight hours of play. **That's a whole lot of wrong. And it's not just confined to poker**. . . .
>
> How can we be sure that we are choosing the alternative that is best for us? What if another alternative would bring us more happiness, satisfaction, or money? The answer, of course, is we can't be sure. Things outside our control (luck) can influence the result. **The futures we imagine are merely *possible*. They haven't happened yet.** We can only make our best guess, given what we know and don't know, at what the future will look like. . . . When we decide, we are betting whatever we value . . . on one of a set of possible and uncertain futures. **That is where the risk is.**

Investing is a game of skill – meaning inferior players can't expect to be above average winners in the long run. But it also includes elements of chance – meaning skill won't win out every time. In the long run, superior skill will overcome the impact of bad luck. But in the short run, luck can overwhelm skill, and the two can be indistinguishable.

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These are the things that make investing both challenging and stimulating. They're the reason I feel good about the way I chose to spend my career.

January 13, 2020

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Memo to: Oaktree Clients

From: Howard Marks

Re: Mysterious

Most of the time, my memos have their origin in something interesting that's happening in the world or in a series of events I come across that I think can be interestingly juxtaposed. This one arises from a less usual source: a request.

The other day, my colleague Ian Schapiro, the leader of Oaktree's Power Opportunities and Infrastructure groups, suggested I write a memo about negative interest rates. My reaction was immediate and unequivocal: **"I can't. I don't know anything about them." And then I realized that's the point. No one does.** But Ian thinks I can make a contribution, so I'll try. I've been saving up clippings on this subject, as you'll see. Ian's urging set me to work.

* * *

For a good while now, I've used the term "mysterious" in connection with inflation (and deflation). What causes rapid inflation? How can it be stopped? Economists offer explanations and prescriptions regarding each occurrence, but they rarely apply the next time.

And that brings us to the subject of negative interest rates. I find them no less mysterious. **The fact that we know what they are** – as we do with inflation and deflation – **doesn't alter the fact that we don't know for sure why negative rates are prevalent today, how long they'll continue in force, what might cause them to turn positive, what their consequences are, or whether they'll reach the U.S.**

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No, I'll Pay You!

Historically – until the European Central Bank took the rate on its credit facility to -0.10% in 2014 – borrowers paid interest to the people from whom they borrowed money. But in the recovery from the Global Financial Crisis, interest rates went negative for the first time in recent history, meaning some lenders paid borrowers for the privilege of lending them money.

I had my first direct brush with negative interest rates in 2014, when I was making an investment in Spain. The closing was due to take place on Monday, and I wired funds on the prior Wednesday so as to be in position to close. The following conversation ensued with my Spanish lawyer:

> Carlos: The money has arrived. What should I do with it between now and Monday?
>
> HM: Put it in the bank.

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Carlos: You know that means you'll get less out on Monday than you put in today.

HM: Okay, then don't put it in the bank.

Carlos: You have to put it in the bank.

HM: So put it in the bank.

That's it in a nutshell. Money can't be free-floating in space. It has to be someplace. And you can't keep much of it in your wallet or under the mattress. Thus, in general, any substantial sum has to go into the bank. And in Europe – then and now – doing so means you'll get out less than you put in.

I have to admit that this didn't come as a shock to me. Oaktree and I had turned very cautious in 2005-06, and as a result, all of my money that wasn't in Oaktree funds was in a "laddered portfolio" of U.S. Treasurys. (In my case, equal amounts of 1, 2, 3, 4, 5 and 6-year maturities. When the closest-in note matures, you roll it to the end of the line. It's the most mindless form of investing known to man.)

At the time I put that portfolio together, I signed up for a yield in the range of 5-6%. And I was thrilled: the greatest safety, total liquidity and a meaningful yield. But then, in 2007, the Fed started cutting rates to rescue the economy from the sub-prime mortgage crisis. And one day in late 2008, my banker called to say, "The 6% note has matured. You can roll it over at five-eighths." I asked, "What-and-five-eighths?" "No, that's it," he said, "just five-eighths."

The world had changed. **Up until the Global Financial Crisis, we could store money with the government and be well paid to do so. But now my reaction was, "given the level of fear in the financial world, maybe one of these days people will end up paying to store their money safely."**

In the period 2008-14, Europe experienced the Global Financial Crisis, a European debt crisis (with concern over the solvency of "peripheral" nations on Europe's southern tier), and rapidly escalating prices for commodity raw materials. In response, the European Central Bank and some non-EU countries moved to adopt negative interest rates. Here's how it goes:

> Commercial banks usually earn interest on the extra reserves they keep with central banks, like the Fed or the European Central Bank. Negative policy interest rates force them to pay to keep money in those accounts, a penalty aimed at pushing them to lend more and goose the economy. (*The New York Times*, September 9)

Central banks determine short-term base rates ("policy rates") as described above. That establishes the origin of the yield curve, and rates/yields on other types of short-term debt, as well as longer-term instruments, can be expected to respond by moving to a logical relationship with the base rate. Eventually, negative interest rates paid on bank deposits should be reflected in negative yields on bonds. (Note: for the most part, negative rates are applied today only to large deposits. Small depositors have thus far been spared.)

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Today, large numbers of bonds – the vast majority being government bonds from Europe and Japan – carry negative yields to maturity. They constitute roughly two-thirds of the bonds in Europe and 25-30% of all the investment grade debt in the world. A few corporate bonds also offer negative yields, however, and there's even a handful of negative-rate high yield bonds (the ultimate oxymoron).

Further, on September 4 *Bloomberg* pointed out the prevalence of negative real rates:

> While over $17 trillion of the global stock of debt trades at nominal yields below zero, the figure jumps to $35.7 trillion when inflation is taken into account. . . . In the U.S., more than $9 trillion of the nation's government debt carries yields lower than the CPI rate.

With a negative-rate instrument, the price you pay for a bond today exceeds the sum of the face amount that will be repaid when it matures plus the interest you'll receive in the interim. That means if you buy a negative-yield bond and hold it to maturity, you're guaranteed to lose money. Why, then, would anyone want to buy a negative-yield bond? Here are some reasons that make sense:

- Fear regarding the future (relating to recession, market declines, credit crisis or further declines in interest rates, among other factors) that causes investors to engage in a **flight to safety**, in which they elect to lock in a sure but limited loss.
- A belief that interest rates will go even more negative, giving holders a profit, as it implies bonds will appreciate in price (as they would with any decline in rates).
- An expectation of deflation, causing the purchasing power of the repaid principal to rise.
- Speculation that the currency underlying the bond will appreciate by more than the negative interest rate.

The concept behind negative rates is simple. It's merely the reverse of the traditional norm, in which lenders receive interest from borrowers. Generally speaking, interest rates are a function of two variables: (a) the time value of money and (b) expected changes in the purchasing power of money (i.e., inflationary or deflationary expectations). (Of course, interest rates should also incorporate a risk premium to compensate for any credit risk entailed.) If, for example, lenders want a 2% annual real return to compensate for the time value of money and expect 2% inflation over the next five years, a five-year Treasury note should yield 4%. But if lenders expect deflation at 3% per year, that note should theoretically yield *negative* 1%.

Are today's negative rates in Europe and Japan telling us deflation lies ahead? Or have lenders changed their views regarding the time value of money? Or are rates negative simply because governments and central banks want them to be?

Reasons for Negative Rates

Here are some of the reasons I've come up with for negative interest rates, some I've read about, and some my friends have suggested:

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- The obvious one: **central banks in Europe and Japan want rates to be negative to stimulate their economies**. (They want to supply more stimulus than had been afforded by the reduction of rates to near-zero, since that level of stimulus didn't prove up to the task.)
- ". . . central banks around the world are racing to cut interest rates in an effort to stay ahead of the Fed and support their economies by weakening their currencies." (*The Wall Street Journal*, August 12)
- Ongoing quantitative easing – central banks' bond purchases – is pushing up the price of longer-dated bonds, and thus pushing their yields down into negative territory.
- Quantitative easing means the central banks flood the financial system with money that needs investing. Since borrowers don't have much demand for long-term capital, they won't pay to use it. Thus holders have to pay a small fee to store that money.
- **Fearful investors have little interest in making investments that represent bets on their countries' economies and companies.** They certainly don't want to borrow for that purpose.
- Current economic weakness reinforces investors' pessimism. **Fear of increasing weakness in the future strengthens their desire for safe storage.**
- There's so much money in the system that the excess of supply over demand drives down the price of money – borrowing rates – into negative territory. "In today's global economy, private investment demand is manifestly unable to absorb private savings . . ." (Lawrence Summers, *Financial Times*, October 12)
- Unfavorable demographic trends mean central banks can't maintain positive rates without curbing growth.
- The lack of inflation means investors needn't demand protection against the loss of purchasing power over time. The wonders of technology may continue to make products available cheap or free, capping inflation.
- Fear of deflation adds further to the willingness to invest without such protection.
- "The rise of businesses dealing in intangible products has rendered the economy less capital-intensive . . ." said *Grant's Interest Rate Observer* on July 26. This reduces the demand for long-term borrowings.
- **Certain regulations require financial institutions to invest in home-country sovereign bonds regardless of the yield they offer (and whether it's positive).** This artificially lifts the demand for (and thus the prices of) those bonds.

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Everyone has favorites from this list. But everyone differs, including the "experts." Some people think we have negative rates because central bankers want them, some think it's because the market sets them, and some think it's some of each. "Did interest rates fall, or were they pushed?" asks *Grant's*. Given all the above, no one should feel the reasons for negative rates are fully understood.

The Impact of Negative Rates

A quote attributed to Albert Einstein in various forms is relevant to this discussion.

> Compound interest is the 8th wonder of the world. He who understands it, earns it; he who doesn't, pays it. (*RateCity*)

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Under compound interest, by not withdrawing interest as it is earned, not only does an investor earn interest on his principal year after year (as with simple interest), but each year he also earns interest on the interest that was earned in the preceding years. Thus principal can grow powerfully if left invested for a long period. (At 10%, $100 grows to $300 in 20 years under simple interest, but to $673 if allowed to compound.) What a wonder!

There's one problem, however. The miracle of compound interest works in reverse if the interest rate is negative, making Einstein wrong about its virtue. Who would want to reinvest income at negative rates? And where would income come from for that purpose?

It's not just Einstein's observation that may be rendered invalid. Negative rates turn a lot of the usual processes upside down. Here are several examples:

- Negative rates make life more difficult in a TINA ("there is no alternative") world. Many investors don't want to knowingly sign on for negative rates. **That makes risky investments preferable, even if they promise historically low prospective returns. In this way, risk aversion is discouraged. "I have no choice but to go into risky assets, because I can't accept a negative return on safe ones."**

  > There is clear evidence that this is happening among institutional investors. The flow of pension fund money into any asset that promises to beat zero-rate bonds has been so dramatic that equities, junk bonds, property, private equity and a host of other more abstruse areas of investment have spiraled in value – and to such an extent that they look highly vulnerable to any shock . . ." (*Financial Times*, August 5)

  Proof? What about the fact that in early July, a €3 billion offering of Italian sovereign bonds maturing in 2067(!) was almost six times oversubscribed thanks to its lavish 2.877% yield? What a bonanza Italy was at the time, with a 10-year bond out-yielding Germany's 10-year by 215 basis points, 1.78% to -0.37%.
- There's no longer any reason to pay slowly in order to make money on "float."
  - In the old days, people paid their bills on the last possible day, preferring to keep the money in the bank and earn interest as long as possible. Under negative rates they may prefer to pay sooner.
  - Many insurers traditionally have made money primarily because they paid claims years after they collected the premiums on the policies they issued. What happens if it costs them money to hold float until claims are paid?

- Likewise, there's no impetus to collect receivables quickly. In the past, wholesale customers were offered discounts for paying bills early. Now the seller might say, "No, you keep it. I'd rather you paid me in six months."
- Negative rates put pressure on people, such as retirees, who live on the income from their investments.

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- **Importantly, the pessimistic signals sent by negative rates may mean they have a contractionary rather than stimulative effect.**

  > Research has suggested that Japan's negative rate policies may have backfired, actually lowering inflation expectations instead of firming them, as hoped. (*The New York Times*, September 11)
  >
  > Last week famously blunt ING boss Ralph Hamers excelled himself, all but calling the ECB idiotic for planning to shift rates further downwards. "The negative rate environment is making consumers so uncertain about their financial environment that they're starting to save more rather than less," he said.
  >
  > Mr. Hamers has a point. Rather than encouraging people to borrow and spend, the data suggests nervous eurozone consumers are hoarding. Eurostat reports the eurozone household savings ratio is at a five-year high of nearly 13 per cent. (*Financial Times*, August 5)

- If interest rates for small savers ever were to go negative, it would give rise to the juxtaposition of income penalties for households with benefits for "the elites" through their ability to profit from rising equity prices. **Economic impact aside, the boost to populist politics would likely be dramatic.**
- Negative rates can distort the workings of floating-rate financial products. Lenders and depositors might have been happy in the past receiving interest rates at a spread over the base rate Euribor. With a negative base rate, however, loans and deposits might leave them with less money than they anticipated as time passes.
- Negative rates on U.S. Treasurys would, for example, harm the Social Security Fund (which can only invest in Treasurys), hastening the day when it runs out of money.
- **Negative rates can warp the calculation of discounted present values.** In particular, when the discount rate is negative, the present value of future pension obligations can exceed their future value. The combination of high discounted obligations and low yields on investments can be disastrous for the funded status of pension funds.
- **Ditto for the impact on bank profitability.** Negative rates charged to borrowers can sap the returns banks depend on, throwing countries' banking systems into reverse. Already, some banks have seen the need to issue mortgages with negative interest rates. "In a negative rate environment, the bank must pay to hold loans and securities. In other words, banks would be punished for providing credit . . ." (Jim Bianco on *Bloomberg*, September 3) "Certainly Europe's bankers are squealing, as they feel margins squeezed by low rates on lending and a reluctance to pass on negative rates to depositors." (*Financial Times*, August 5) Big banks can charge negative rates to corporate and HNW depositors, but as I mentioned earlier, thus far retail banks haven't passed them on to small savers. Doing so could cause those savers to leave the banking system, depriving it of a traditional source of deposits.
- What about the application of negative interest rates to corporate bonds? How will the markets value businesses that hold cash versus those that are deep in debt? Traditionally,

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markets have penalized heavily levered companies and rewarded those that are cash-rich. But if having negative-yield debt outstanding becomes a source of income, will levered companies be considered more creditworthy? Conversely, how will the market value businesses that hold a lot of cash and thus have to pay banks to keep it on deposit?

- **Financial models and algorithms – which essentially are a matter of looking for and profiting from deviations from historic relationships – may not work as well as they did in the past**, since history (all of which has been based on positive interest rates) may be out the window.

> Nobel prizes have been awarded to economists that developed concepts such as the efficient frontier, the Capital Asset Pricing Model and the Black-Scholes option pricing model. But when a negative value is assumed for the risk-free rate in these types of models, fair value results shoot off toward infinity. With trillions of securities and derivatives dependent on these models, valuation is critical. (Jim Bianco, *op. cit.*)

The one thing we can't be sure of is that negative rates increase economic growth (or produce more growth than is generated by low rates). First, this requires "what-if" analysis, which is one of the most difficult kinds: are Europe and Japan growing faster today than they would have if their rates weren't negative? And second, you surely can't look at their current growth and pronounce negative rates a huge success. Are negative rates stimulating demand, or are they a matter of "pushing on a string," powerless to convince pessimistic consumers to spend?

In the financial world, most of our actions are based on the assumption that the future will be a lot like the past. Positive interest rates and the desirability of compounding have been among the most fundamental historical building blocks.

> If negative rates become more widespread across the globe, then the financial system needs to be rebuilt on a new set of assumptions. The problem is that we do not yet know what those should be or how they would work. (Jim Bianco, *op. cit.*)

At minimum, negative rates mean there's increased uncertainty, and thus we have to proceed with more trepidation. Whatever we knew in the past about how things worked, I think we know less when rates are negative.

Will the U.S. See Negative Interest Rates?

As stated above, the vast majority of today's negative-yield bonds are in Europe and Japan. One of the biggest questions surrounds whether negative rates will reach the U.S.

This question takes me back to my immediate response to Ian's suggestion that I write this memo: **nobody knows, and certainly not me.** When something hasn't happened in the past, it's impossible to be sure you know how it'll end up. **Different people will express opinions on**

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this subject with differing degrees of confidence. Yet I remain certain that none of them "know."

If I had to take a guess – and that's all it would be – I'd say interest rates won't go negative in the U.S. in the current cycle. If we go back to the possible reasons for them listed on page four, I think we'll conclude that the factors at play in the U.S. make negative rates less likely:

- Stronger current economic growth
- Better growth prospects
- Thus no need for emergency measures
- Higher inflation expectations (especially given the tightness of the labor supply)
- Less pessimism
- Better uses for long-term capital

So I don't think current conditions in the U.S. call for negative rates. But that doesn't rule them out. When you express an opinion, the real question is whether you'll bet on it and whether you'll give odds. I might put up $60 to win $50 from you if negative rates don't materialize. But that's not a sign of much confidence on my part.

In particular, I wonder about monetary stimulus. The U.S. fed funds rate is below 2% as I write, thanks to the two recent rate cuts (and there might be another cut on the way soon). Yet most stimulus programs have entailed rate cuts totaling several percent. So there's every possibility that in the future, the Fed's response to economic weakness could take rates into negative territory.

And the current slowdown in U.S. manufacturing – plus the uncertainty brought on by the on-again/off-again prospect of an escalating trade war with China – raises the possibility of a recession, and thus the need for stimulus through rate-cutting.

Some argue that strong demand for safe assets and negative demographic trends apply in the U.S. also, and thus U.S. bond yields can fall below zero.

Finally, negative rates abroad strengthen demand for dollars so foreigners can invest at the positive U.S. yields, causing the dollar to appreciate. Thus the Fed may have to lower rates to keep the foreign-currency cost of U.S. exports from rising too much, and thus their competitiveness from declining and our economy from weakening. **How long can the Fed maintain rates that are much higher than those in the rest of the world?**

Maybe I should reconsider my offer of 6-to-5 in favor of rates staying positive . . .

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What, Then, Is There to Do?

I'm convinced that no one should be categorical about how to deal with a mystery like this in such unprecedented and confusing circumstances. But the *Financial Times* of August 5 advanced one idea that seems perfectly logical:

> For SFr1,000 a year, your typical Swiss private bank will give you a cubic metre of vault storage for your valuables. Thanks to Switzerland's high-value SFr1,000 notes, that should be enough space to salt away close to SFr1 billion in hard cash. The fee is a sight cheaper than the SFr7.5 million charge that a 0.75 per cent negative interest rate would imply.

If you don't like that idea, there is one more: **move out the risk curve to strive for returns above those offered by safe instruments in this low-return (or negative-return) world . . . but do so with caution.**

What does moving out the risk curve consist of? Essentially it means pursuing greater rewards while accepting the reduced certainty that by definition accompanies that pursuit. (If greater rewards could be obtained without a corresponding increase in uncertainty, that return increment would represent a free lunch, and most of the time they're not available.)

In a world like the one described above, perhaps the most reliable solution lies in buying things with durable cash flows. Bonds, loans, stocks, properties and companies with the likelihood of producing steady (or hopefully growing) earnings or distributions that reflect a substantial yield on cost all seem like reasonable responses in times of negative yields. **In my view, durability and dependability are highly desirable (rather than hail-Mary attempts at a moonshot). They are the Oaktree way.**

While all this might be self-evident, the challenge lies in accurately predicting the durability and growth of cash flows and making sure the price you pay allows for a good return. In today's market environment, assets with predictability are often priced extraordinarily rich, and investors are unusually willing to extrapolate growth far into the future. At the same time, with the economy and markets operating under rules that are different from those of the past in many ways – some of which are reflected above – accurate predictions are apt to prove harder to make than usual. **These are some of the reasons why, while simple in concept, investing is far from easy . . . especially today.**

October 17, 2019

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Memo to: Oaktree Clients

From: Howard Marks

Re: On the Other Hand

It often happens that just as I'm about to release a memo, I come across something that absolutely has to be incorporated. That was the case on June 12, the day "This Time It's Different" was published. I was reading a first-quarter report from Ruffer, a London-based money manager, and I came across the following question:

> Can the Fed, with its discretions and its firepower, keep a market dislocation at bay, or halt it once it has begun?

That question caused me to think back to remarks made a few days earlier by Federal Reserve Chairman Jerome Powell regarding how the Fed would deal with the possibility of a trade war and its potential ramifications:

> We are closely monitoring the implications of these developments for the U.S. economic outlook and, as always, we will act as appropriate to sustain the expansion, with a strong labor market and inflation near our symmetric 2% objective. (CNBC, June 4)

Together, these two inputs prompted me to reflect on the role and powers of the Fed. **In short, is it the Fed's job to sustain expansions and keep market dislocations at bay *ad infinitum*?** I concluded that "This Time It's Different" shouldn't ignore this subject and, as a result, reworked the end of its section on quantitative easing, adding a new final paragraph:

> Can government actions permanently raise the level of demand in an economy, or do they mostly accelerate future demand into the present? If the latter, can QE elevate GDP forever above what it otherwise would have been? I doubt it. But if it could, wouldn't that eventually cause what I call an "excess," leading to a recession?
>
> **Finally, when I hear people talk about the possibility that the Fed will prevent a recession, I wonder whether it's even desirable for it to have that goal.** Per the above, are recessions really avoidable or merely postponable? And if the latter, is it better for them to occur naturally or be postponed unnaturally? **Might efforts to postpone them create undue faith in the power and intentions of the Fed, and thus a return of moral hazard? And if the Fed wards off a series of little recessions, mightn't that just mean that, when the ability to keep doing so reaches its limit, the one that finally arrives will be a doozy?**

I'm so glad these last-minute inspirations caused me to include the above. I think the topic is very important, so much so that I'm now going to devote a memo to the subject of Fed interest-rate management.

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What Do Fed Actions Tell Us?

Many people look at the operation of an economy and the efforts of a central bank to influence it and see things that are logical and straightforward. Others see a complex ecosystem that has financial, political and behavioral components, with tendencies that are understandable but certainly subject to significant uncertainty and ambiguity. I'm one of the latter. I think of the Fed and its considerations as complex, multi-faceted and characterized by a great deal of on-the-one-hand-but-on-the-other-hand. I'll explain at length below, right after issuing my usual caveats: I'm not an economist, an expert on monetary policy or a Fed watcher – just a casual observer.

Many people take Fed actions at face value. **When the Fed cuts interest rates, as the consensus expects it to do soon, investors take that as a "buy" signal. Their thought process is simple: weak economy → rate cuts → economic stimulus → stronger GDP → higher corporate profits → higher stock prices.** For this reason, many people – first-level thinkers that they are – take a statement like Powell's above as simplistic and a positive.

But there's much more to the story. Digging deeper, one should ask, "Why is the Fed cutting rates?" The answer, of course, is that the Fed anticipates economic weakness (or sees it taking place) and wants to ward it off. So the second-level thinker wonders how bad the outlook is, how much worse it might have gotten without the rate cut, and whether the cut will be sufficient to avert a slowdown.

In 2006, on the way to the Global Financial Crisis, delinquencies on sub-prime mortgages began to rise. The trend became more noticeable in mid-2007, leading to falling prices for mortgage-backed securities; margin calls for mortgage-backed-securities funds (from banks that had given them leverage); and, eventually, fund meltdowns. Most prominently, on July 31, 2007, two mortgage-backed-securities funds managed by Bear Stearns filed for bankruptcy.

Investors wanted help, and the Fed rode to the rescue. On September 18, it cut the fed funds rate by 50 basis points, from 5.25% to 4.75%, and issued a statement that included the following:

> Today's action is intended to help forestall some of the adverse effects on the broader economy that might otherwise arise from the disruptions in financial markets and to promote moderate growth over time. . . .
>
> Developments in financial markets since the Committee's last regular meeting have increased the uncertainty surrounding the economic outlook. The Committee will continue to assess the effects of these and other developments on economic prospects and will act as needed to foster price stability and sustainable economic growth.

The rate cut and message were warmly received, with the S&P 500 rising more than 6% over the next two weeks. Few people, I think, questioned whether this really was good news.

Shortly after that first cut, I considered the following question: If you went to the doctor for an ailment and he pulled out a huge hypodermic needle, would you take that as good news or bad? Since the vast majority of Fed actions consist of 25-basis-point interest rate cuts or increases, doesn't a cut of 50 basis points mean the Fed finds the outlook particularly worrisome? If a rate cut of 25 basis points is good news for the markets, is a cut of 50 basis points better or worse?

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My point is that a rate cut's implications aren't always as simple a matter as they may appear to be. Assuming the Fed is a good diagnostician, a decision to cut rates isn't necessarily good news. You can argue that, if there's trouble ahead, we're better off with a rate cut than without one. **But that still doesn't make it good news. First, it means the Fed thinks trouble is looming. And second, it certainly doesn't guarantee the problem will be solved.** (It's worth noting that 18 months after that first rate cut in September 2007 – during which time ten more cuts followed, eventually taking the fed funds rate to nearly zero – the S&P 500 finally bottomed out, **down more than 50% from where it stood on the day of the first cut**.)

Are Low Interest Rates a Good Thing?

The Fed's decision early this year to depart from its announced program of rate increases is widely recognized as a main contributor – if not the main contributor – to investors' decision to stop pushing down the markets through selling, as well as to the rally indicated by the S&P 500's gain of roughly 20% so far this year. Since then the rally has been propelled by the expectation of rate cuts, and by statements like Powell's on page one.

This is the case because of the widespread general faith in the progression I laid out above: weak economy → rate cuts → economic stimulus → stronger GDP → higher corporate profits → higher stock prices. But how, exactly, do low rates contribute to wealth creation?

- Low interest rates encourage spending on the part of consumers. Low rates reduce the cost of borrowing, lifting demand for things that are often bought on time or leased, like cars, homes and appliances. Further, low rates translate into lower monthly payments on floating-rate mortgages, leaving consumers more disposable income to spend. Finally, with rates low, spending instead of saving entails little in the way of opportunity costs.
- Low rates likewise encourage investment on the part of businesses by reducing the cost of capital, and therefore the return hurdle for expenditures.
- Increased demand for goods and services leads to increased hiring, reduced unemployment and a tighter labor market, and thus to wage inflation. Rising wages encourage consumer spending by putting more money into wage-earners' pockets and improving their mood.
- By reducing the interest expense on companies' floating-rate debt, low rates enhance companies' profits; make it easier for them to service their debt; and leave them more cash for capital expenditures (which add to GDP), and dividends and stock buy-backs (which put money in investors' pockets).
- **Low rates reduce the discount factor used in calculating the net present value of future cash flows. Thus, all else being equal, there's a direct connection between declining interest rates and rising asset prices. (I consider this to have been the dominant feature of the world of finance over the last ten years.)**
- Low rates on savings and fixed-income investments drive investors to accept increased risk in order to pursue decent returns in a low-return world. This increased risk tolerance makes the financial markets more accommodating, increasing the availability of financing for ventures that otherwise might find capital in short supply.
- Finally, rate cuts are taken as a predictor of further rate cuts, implying more of all the above. **When they're moving in a positive direction, the things described above contribute to the appearance of a virtuous circle.**

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For these reasons, most market participants (a) would rather have low rates than high rates and (b) seem to believe that the lower rates are, the better. At this point in time, the U.S. is led by a great cheerleader for low rates. In fact, Powell's 2018 decision to continue his predecessor's rate increases and quantitative tightening earned him a place on the list of people experiencing President Trump's wrath. Here are a few indications of the esteem in which Trump holds Powell:

> My biggest threat is the Fed. Because the Fed is raising rates too fast, and it's independent, so I don't speak to him, but I'm not happy with what he's doing. (Trump, speaking to Fox Business Network, October 16, 2018)
>
> "Here's a guy, nobody ever heard of before, and now I made him and he wants to show how tough he is? O.K. Let him show how tough he is," Mr. Trump said on Wednesday. "He's not doing a good job."
>
> . . . "We should have [European Central Bank head] Draghi, instead of our Fed person," Mr. Trump said. "Draghi, last week, he said lower interest rates and we're going to stimulate the economy. They're going to put money into the economy."
>
> . . . Those comments came after Mr. Trump on Monday accused the Fed of botching the job. "Now they stick, like a stubborn child, when we need rate cuts and easing, to make up for what other countries are doing against us. Blew it!" Mr. Trump said on Twitter. (*The New York Times*, June 26)

Why would Trump want lower rates? Here are a few possible explanations:

- He's a real estate guy, and the real estate industry lives on high leverage.
- Trump has been a substantial borrower for much of his life, so for him low rates are "all good."
- Right now Trump is tightly focused on getting reelected, and ensuring economic growth and a rising stock market over the next 16 months is one of the best things he can do to make that a reality.
- Along those lines, if reelection is his main goal, he may be relatively indifferent as to what happens after Election Day 2020, when the scorecard he cares about most will be closed out.

Here's an expression of Trump's position on rates:

> "Our country's doing unbelievably well economically," he told reporters Friday. Yet even as Mr. Trump celebrated the robust hiring numbers, he called again for the Federal Reserve to cut interest rates – a step that would ordinarily suggest worries about the economy's direction. Growth "would be like a rocket ship" if the Fed acted, he declared. (*The New York Times*, July 6)

On the basis of the above, one might conclude that Trump thinks rates should always be low. But there was at least one instance when he thought rates were being held too low:

> In late 2015 then-candidate Donald Trump accused Janet Yellen, chair of the Federal Reserve, of being part of a political conspiracy. Yellen, he insisted, was keeping

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> interest rates unjustifiably low in an attempt to help Hillary Clinton win the presidency. (*The New York Times*, June 20)

Regardless, it's clear that, at this time, Trump thinks low rates are good and there's no reason to worry about potential negative ramifications. But that doesn't mean they don't exist.

Is There a Downside to Low Interest Rates?

The truth is, there are ways in which low rates are undesirable and potentially harmful. They include these:

- Low rates stimulate the economy, as described above, and most economists and businesspeople believe there's such a thing as the economy becoming too hot. **The principal worry is excessive inflation.** While some inflation is a good thing, too much isn't. It's generally accepted that too much of the positives described on page three can lead to excessive demand for goods and services; too-tight labor conditions, leading to excessive wage inflation; too much market power in the hands of sellers of goods; and thus rising prices.
- Too much inflation imposes a hardship on people living on fixed incomes, since their costs increase rapidly while their incomes don't. Also, low-income households typically don't have the means to hedge against inflation that high-income ones do, such as through investments in equities and real assets.
- When low rates penalize savers by reducing the returns available on safe instruments like cash, money market funds, savings accounts, Treasury securities and high grade bonds, savers' alternative to accepting lower incomes is to assume increased risk in pursuit of the higher returns they used to earn safely.
- Thus low rates can lead to investment in undeserving companies and shaky securities, encourage the use of excessive leverage, and create asset bubbles that eventually can burst.
- Ultimately, investors' tendency to reach for yield and assume excessive risk can introduce risk to overall financial stability.
- **Finally, but very importantly, when interest rates are low, central banks don't have at their disposal as much of their best tool for stimulating economies: the ability to cut rates.**

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The following is from a report from RDQ Economics dated June 27:

> What seems lost in the policy assessment is a careful discussion of the risks of overly accommodative monetary policy. Powell did say this week, "we are also mindful that monetary policy should not overreact to any individual data point or short-term swing in sentiment. Doing so would risk adding even more uncertainty to the outlook." However, our view is that Powell's observation of the downside of a dovish overreaction is an inadequate assessment of the risk from unnecessarily adding monetary accommodation at this time.
>
> . . . underlying inflation is already close to target and the Fed's past attempts (in the late 1960s/early 1970s) to trade off a little more inflation for sustained lower rates of unemployment turned out very badly. Alternatively, higher labor costs from an

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overheated jobs market might squeeze company profit margins and lead to a pullback in investment and hiring.

A Daunting Task

The juxtaposition of the above lists of positives and negatives shows that low interest rates – just like most other aspects of economics – have both pros and cons. A lot depends on how they're viewed. This is illustrated by one of the greatest cartoons from my collection:

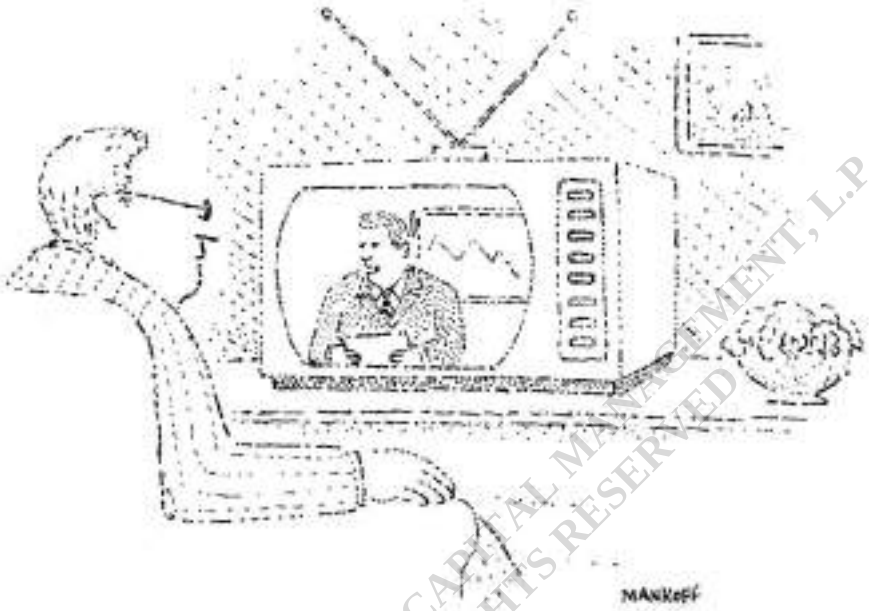

"On Wall Street today, news of lower interest rates sent the stock market up, but then the expectation that these rates would be inflationary sent the market down, until the realization that lower rates might stimulate the sluggish economy pushed the market up, before it ultimately went down on fears that an overheated economy would lead to a reimposition of higher interest rates."

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That cartoon is 38 years old. Here's how *The Times* put it as recently as a couple of weeks ago:

> The gains this week began after Federal Reserve chair, Jerome Powell, suggested the nation's central bank was worried about the economy. Just days earlier, strong data on the job market had the opposite effect on stocks.
>
> This counterintuitive reaction to the news is a phenomenon that's explained by expectations for interest rates. The weakening outlook for the economy means, in all likelihood, borrowing costs are coming down — and in the right circumstances, this can be good for stocks. (*The New York Times*, July 12)

Many people think of an economy as a dependable machine that operates according to diagrams and rules, and of central bank actions as levers that can be pulled to adjust the functioning of that machine. But, instead, I believe a lot of uncertainty and variability exist regarding the functioning of

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economies and central banks. This means the task of managing an economy is difficult, and its goals shouldn't be thought of as dependably achievable.

I think a recent article from *The Times* provides a great picture of how challenging the job is, and how many ways there are to be wrong. Here's most of it:

> Heading into their policy decision and news conference Wednesday [June 19], there were a lot of ways Federal Reserve officials could have messed things up.
>
> **One possibility** was a repeat of the meeting in December, when markets judged Chairman Jerome Powell and the Fed to be oblivious about negative forces building in the markets and in the global economy, and sold off precipitously over the next days.
>
> But **the opposite risk** was present as well — that out of fear of repeating the December episode, Mr. Powell would exhibit too much of a hair-trigger reaction to recent signs of a slowdown in inflation pressures and industrial activity. If those turn out to be false alarms, a rate cut now would be counterproductive by signaling pessimism and making the Fed look jittery and perhaps even overly influenced by President Trump's threats to try to demote Mr. Powell over interest rate policy. . . .
>
> In effect, Fed officials are indicating they think it's pretty likely they will need to cut rates, but are waiting for more evidence.
>
> The relatively muted reaction of financial markets suggests that Wall Street viewed the move [i.e., no change in rates on June 19 but foreshadowing likely cuts later in the year] as appropriately balanced. The stock market was up, but only a little, which helps reduce the sense the Fed is just acting to prop up stocks, while bond yields fell further as markets became more confident that rate cuts were on the way.
>
> So in terms of the narrow goal of getting through Wednesday without either markets falling apart or the Fed's credibility being shredded, it was a good day for Mr. Powell.
>
> But **the flip side** of that is that some lingering questions have been put off to another day.
>
> Deciding to wait for more evidence is a decision, too. Waiting might buy the Fed more time to make sure it's getting the decision right, but at the cost of losing the opportunity to show it is aggressive and willing to get ahead of a potentially serious problem.
>
> Put differently, if you wait until there is completely compelling evidence of an economic shift before doing something about it, you're probably too late.
>
> **On the other hand**, if the Fed later judges that the recent bad news really was just a temporary blip and that rate cuts were actually not needed, they will face the reality of rate cuts even more baked into the prices of Treasury bonds. It would be a doozy of an adjustment to bring them into alignment. If the sharp drop in rates that has

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> taken place since November were to reverse quickly, it could cause huge damage to interest-sensitive sectors like housing and automobiles. ("The Fed Threads the Needle, for Now," June 21 – emphasis added)

In other words, there's the risk of being unresponsive or over-responsive, along with the risk of doing too much or too little, and of doing it too soon or too late.

The Fed usually acts in response to the overall outlook for the economy: hundreds of millions of transactions entered into by Americans each day. But among the "developments" Powell said the Fed is monitoring today are some very specific, largely political actions. In particular, the Fed has to anticipate and cope with the possibility of a trade war, probably the greatest source of economic uncertainty today. It has to make interest rate and quantitative easing decisions based on its judgment as to what Trump will do (and its impact). Not to mention the lingering risk that Powell's job hangs in the balance if the answer isn't low rates. Certainly little of this can be thought of as scientific or reliable.

Further, the Fed has to practice psychology:

> . . . Mr. Powell was asked at the news conference about academic research suggesting that when interest rates are near zero, a central bank actually should be more aggressive, rather than less, about cutting rates in the event of a slump — **to maintain credibility that it will not let deflation take hold**.

In "This Time It's Different," I expressed my view that one of the reasons interest rate adjustments work is that it's commonly accepted that they will work. When a rate cut is announced, people take it on faith that it will cause the economy to strengthen and markets to rise. Thus they conclude it's appropriate to spend more and invest more, and their resulting behavior produces the desired response in the economy and markets. Do the lower rates cause the rise, or is it belief in the efficacy of rate cuts? Both, I'd say. But certainly the latter's contribution isn't insignificant. As I asked in "This Time," would a rate cut have the same impact if it weren't accompanied by an announcement? **Clearly, prevailing opinion regarding Fed management matters a great deal in the efficacy of its actions.**

Not only does the Fed have to figure out what actions it should take to keep the economic machine humming, but also whether people will react positively and trust in them to work. In other words, psychology, not just economics.

> [Powell] acknowledged the idea behind that [academic] work, saying that "an ounce of prevention is worth a pound of cure," but declined to connect it to what exactly the Fed might do in the current circumstance. "I don't know what that means in terms of the size of a particular rate cut going forward," he said.
>
> So did the Fed get it right Wednesday with the balanced, nuanced approach Mr. Powell chose? The answer is: Ask in a few months.

* * *

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So what's the bottom line? **On one hand, our economy is still expanding.** Monetary stimulus via rate cuts (just like fiscal stimulus via deficit spending) is in order when the economy is weak and failing to create jobs. **But stimulus may be somewhere between unneeded and counter-productive at times like today, when the economy is growing acceptably, the unemployment rate is at a 50-year low, wages are rising, and the recovery has just become the longest in history.** As I said when the Trump tax cut was enacted in December 2017, doctors don't prescribe adrenaline for healthy patients. The economy today is healthy. But the Fed has to worry about whether it will remain so, and in particular whether there will be a full-fledged trade war with China.

Thus, on the other hand, people are concerned about the potential for economic weakness. Recent market reaction suggests investors are following their usual elementary take: weak economy → rate cuts → economic stimulus → stronger GDP → higher corporate profits → higher stock prices. When Powell indicated on July 10 that a rate cut could be more imminent than most had thought, the market sat up and saluted, taking the S&P 500 above 3,000 for the first time. **It's always worth considering whether investors are reacting too positively to the prospect of rate cuts and paying too little heed to the economic weakness on which they're predicated (and the potential unintended consequences they might bring on).**

Thus, on the "third hand," I want to return to the paragraph I included above from "This Time It's Different":

> **Finally, when I hear people talk about the possibility that the Fed will prevent a recession, I wonder whether it's even desirable for it to have that goal.** Per the above, are recessions really avoidable or merely postponable? And if the latter, is it better for them to occur naturally or be postponed unnaturally? **Might efforts to postpone them create undue faith in the power and intentions of the Fed, and thus a return of moral hazard? And if the Fed wards off a series of little recessions, mightn't that just mean that, when the ability to keep doing so reaches its limit, the one that finally arrives will be a doozy?**

Should we be happy to see the Fed trying to prolong the economic expansion and the bull market when they're already the longest in history? Should it try to produce perpetual prosperity and permanently ward off a correction? Are there risks in its trying to do so? It all depends on which hand is doing the weighing.

July 26, 2019

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Memo to: Oaktree Clients

From: Howard Marks

Re: This Time It's Different

I first came across the title of this memo in an article titled "Why This Market Cycle Isn't Different" by Anise C. Wallace in *The New York Times* of October 11, 1987. It went as follows:

> The four most dangerous words in investing are "this time it's different," according to John Templeton, the highly regarded 74-year-old mutual fund manager. At stock market tops and bottoms, investors invariably use this rationale to justify their emotion-driven decisions.
>
> Over the next year, many investors are likely to repeat these four words as they defend higher stock prices. But they should treat them with the same consideration they give "the check is in the mail. . . ."
>
> Nevertheless, in the bull market's sixth year, the "this time it's different" chorus is beginning to be heard. Wall Street professionals predict that, before the bull market ends, individual investors, who have mostly stayed on the sidelines, will be swept along in the mania characterizing a market peak.
>
> They will invest in stocks despite the fact that the Dow Jones Industrial average has more than tripled in the last five years. They will be hearing overwhelmingly compelling reasons why stock prices should go higher, why the bull market should last considerably longer than any other in history, why this boom will not be followed by a 1929-like crash and why "this time it's different."
>
> Many of these arguments will be tempting because they will have some element of truth to them. Even Mr. Templeton concedes that when people say things are different, 20 percent of the time they are right. But the danger lies in thinking that the different factor – like the recent investment in United States stocks by the Japanese – will be uninterrupted.

Wallace's essential message is that investors must take heed when the four words are in widespread use. Why? Look back at the paragraph introducing the above quote: when you first read it, did you happen to notice the date of publication? **It was just eight days before Black Monday (October 19, 1987), the worst day in stock market history.** We know how bad it feels when the market falls 20% in a year. Try 22% in a day!! Wallace's warning was particularly important at the time the article was published, but for me it's always important.

* * *

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Typically in investing, historical norms put limits on asset prices. Thus, for example, bull markets can generally go to extremes only if investors discard the notion that the p/e ratio on the S&P 500 stock index shouldn't go much above its post-World War II average of 15 or 16. If the earnings of the S&P's underlying companies grow at 10% a year, by definition the index can rise 20% a year (as it did in the 1990s) only if the ratio of price to earnings is viewed as highly expandable. It was such a perspective that allowed the index to reach 32 times earnings at the start of this century (with highly negative implications for equity returns in 2000-02).

Think of a rocket launched from Cape Canaveral. Gravity has to be overcome in order for it to escape the earth's atmosphere. Likewise, the limitations imposed by past norms have to be overcome in order for asset prices to slip their historic moorings and blast off into outer space.

Today we're not hearing much about historic valuations being irrelevant, as they're not terribly high. **Instead, what we're told is different this time is the relevance of restrictions on future economic and market performance:**

- There doesn't have to be a recession.
- Continuous quantitative easing can lead to permanent prosperity.
- Federal deficits can grow substantially larger without becoming problematic.
- National debt isn't worrisome.
- We can have economic strength without inflation.
- Interest rates can remain "lower for longer."
- The inverted yield curve needn't have negative implications.
- Companies and stocks can thrive even in the absence of profits.
- Growth investing can continue to outperform value investing in perpetuity.

I rarely participate in a meeting these days without someone asking about one or more of these propositions. **The bottom line is that for any of the nine to be true, things really have to be different this time.** I'll discuss the outlook for each below.

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<u>The avoidable recession</u> – The questions I get most often these days are "Is the U.S. heading for a recession?" and "When will it start?" My answer to the first is a simple "yes." (At least I can never be proved wrong.) We've always had economic cycles, and I believe we always will. Eventually, favorable developments will lead people to engage in behavior premised on excessively optimistic assumptions, and eventually the over-optimism of those assumptions will be exposed and the excesses will correct in a period of negative growth. Moreover, even economies that aren't marked by excesses are subject to exogenous shocks.

When people ask about the coming recession, what they mostly mean is "Might it be a long way off?" Well, the longest U.S. recovery on record lasted ten years, and the current one is in the twelfth month of its tenth year. There's no reason a recovery can't go beyond ten years; no gate will come down on June 30, foreclosing further progress. And it's important to note that since this has been the most sluggish U.S. recovery since World War II, it hasn't been characterized by excesses to the upside, meaning there needn't be a recessionary correction on the usual schedule.

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Very soon, the current recovery is bound to become the longest in U.S. history. However, I believe the odds are that it's closer to the end than the beginning. (We never know for sure what's going to happen in the future. At best we can think in terms of the probabilities. That's the thinking behind my latest book's subtitle: *Getting the Odds on Your Side*.) The recovery is likely to go on longer, but perhaps not much longer. Still, I wouldn't place a wager on when it will end.

About a year and a half ago, following the enactment of President Trump's stimulative tax cuts, people started to ask me whether the U.S. might emulate Australia, whose last recession was in 1990. While not quite the same as asking "might there never be another recession?" the idea of 28 years between recessions would represent a radical difference this time.

My answer to the above question is "probably not," since there are significant differences between the two countries that probably render Australia's example inapplicable to the U.S.:

- A much bigger part of Australia's GDP is based on exporting natural resources such as iron ore and coal, of which it has so much. Thus in recent decades it has drafted off the unusually strong growth of its much larger neighbor to the north, China.
- In addition, ". . . having a conservative, domestically focused, highly concentrated banking system meant that Australia wasn't stuck importing other countries' financial contagions when crises hit." (*The New York Times*, April 7, 2019)
- In fact, I see in Australia a conservatism and discipline capable of extending financial good times without creating excesses. My favorite example is the Australia Future Fund, which the government formed in 2006 to deal with the country's pension liabilities, with funding that came from fiscal surpluses (!) and the privatization of Telstra, the formerly state-owned telecommunications company. The fund's assets, now standing at A$154 billion, were essentially put into a lockbox until 2020, which now appears likely to extend until at least 2026. What's the likelihood that U.S. politicians would (a) fund government pension obligations up front, rather than deal with them on a pay-as-you-go basis, and (b) keep their hands off the assets for 20 years, rather than use them to pay for constituent-pleasing spending increases or tax cuts?

So no, I don't think the U.S. is about to emulate Australia's 28-years-and-counting recovery. That I will bet on.

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<u>Perpetual prosperity from quantitative easing</u> – In the aftermath of the Global Financial Crisis, the Fed engaged in quantitative easing, a program of purchasing bonds in the open market. The effect of the Fed's purchases was to (a) inject bank reserves into the financial system, (b) strengthen the demand for bonds, thereby bringing down long-term interest rates (which are unaffected by the Fed's normal open market operations related to short-term rates), and (c) with prospective returns on high-quality bonds brought down, reignite risk-bearing on the part of investors seeking higher returns, thereby causing the credit window to reopen. QE was a success in the U.S., and the economy recovered. Thus some people are now proposing that the Fed could engage in QE forever, with similarly positive results.

First, I think some part of the impact of QE may be psychological. In other words, QE stimulates the economy in part because people accept that QE is stimulative. If the Fed took exactly the same actions but did so without making an announcement, would the effect be the same? (I believe there's

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a self-fulfilling, placebo-like component to many of the Fed's tactics.) In this regard, I think its first round of QE was more effective than its second, and its second round was more effective than its third. Accordingly, there could be a diminishing return from permanent QE, as the psychological effect abates.

And who knows exactly how QE works? Last week, at a conference I attended, a participant suggested that under Modern Monetary Theory (see more below), the Treasury could issue a potentially unlimited amount of debt, and if third-party buyers failed to take it up, the Fed could buy it under QE. Does this seem reasonable? If the Fed credits banks with reserves, the banks lend a multiple of those reserves, and the borrowers use the loan proceeds to make purchases or investments, does the process really inject money into the economy, or is it mostly a matter of bookkeeping? Or are they one and the same? Of course, this question is relevant to all nations with fiat currencies.

Quantitative easing is generally considered to have contributed to the past decade's low prospective investment returns, resultant risk-taking, asset inflation, and increasing wealth divide. As with any other prescription, shouldn't we worry about possible side effects like these?

Can government actions permanently raise the level of demand in an economy, or do they mostly accelerate future demand into the present? If the latter, can QE elevate GDP forever above what it otherwise would have been? I doubt it. But if it could, wouldn't that eventually cause what I call an "excess," leading to a recession?

Finally, when I hear people talk about the possibility that the Fed will prevent a recession, I wonder whether it's even desirable for it to have that goal. Per the above, are recessions really avoidable or merely postponable? And if the latter, is it better for them to occur naturally or be postponed unnaturally? **Might efforts to postpone them create undue faith in the power and intentions of the Fed, and thus a return of moral hazard? And if the Fed wards off a series of little recessions, mightn't that just mean that, when the ability to keep doing so reaches its limit, the one that finally arrives will be a doozy?**

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Benign federal deficits – Over the years, some in government have pursued balanced federal budgets, or at least have paid them lip service. Democrats have generally been described as wanting to "tax and spend" in order to do more for citizens. But they've sometimes spent before they've taxed. Republicans, on the other hand, have positioned themselves as the party of fiscal restraint. It's often been their official position that there could be no increases in spending if not accompanied by corresponding increases in funding.

Regardless of the debate, federal budgets are rarely tendered on time or in balance these days. We've had deficits in 46 of the last 50 years (with the exception of 1998-2001), and in recent years they've risen as a percentage of GDP despite the prosperity we've been enjoying. Often there isn't even a pretense of interest in fighting deficits. Democrats have big spending ideas even in the absence of ways to fund them. And Republicans cut taxes but not always spending.

Both parties now seem to feel that the way to win elections is to simply ignore deficits. In the 1930s, John Maynard Keynes said that in periods when private economic activity isn't generating enough demand to create full employment, governments should spend more than they take in,

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counting on deficit spending to stimulate demand. And then, during the resulting periods of growth, they should spend less than they take in, using the surplus to pay down the debt that was taken on to fund deficits. But departing from this, at the end of 2017, in the ninth year of a recovery, the Republicans enacted sweeping tax-rate cuts capable of ballooning the deficit.

A new entrant in this area is receiving a lot of attention: Modern Monetary Theory ("MMT"). One of its components is the belief that government deficits currently are too small, and in any event not a bad thing:

> Tax revenues are not what finance the government's expenditures, argues Stephanie Kelton, an economist at Stony Brook University and one of the most influential modern monetary theorists. What actually happens in a country that controls its own currency, she says, is that the government first decides what it's going to spend. In the United States, Congress agrees on a budget. Then government agencies start handing out dollars to the public to pay for those tanks, earth movers and salaries. Afterward, it takes a portion back in the form of taxes. If the government takes back less than it gave out, there will be a deficit. . . .
>
> Ms. Kelton . . . points out that every dollar the government spends translates into a dollar of income for someone else. So a deficit in the public sector simultaneously produces a surplus outside the government. . . . (*The New York Times*, April 7, 2019)

Thus, according to MMT, deficits are benign – not a sign of profligacy – and merely an indication that the government has put more money into the economy than it has taken out in taxes. MMT is modern in that it has moved past the old-fashioned concept of balancing spending and revenues, opening the door for bigger deficits.

Does Ms. Kelton think deficits don't matter? No, the *Times* article goes on:

> Of course they matter, she said. . . . They can be too big, especially if they are not used to increase the nation's productive capacity, or if there is a shortage of labor, raw materials and factories.

In this connection, we should note that Ms. Kelton served as an economic adviser to Bernie Sanders in 2016. Thus it may be reasonable to suspect that MMT is largely a rationale for governments to give away more free stuff, expanding their deficits. **Sometimes it can be hard to separate economic opinions from political leanings.**

This relaxed view of deficits reminds me of a hypothetical consumer who has a credit card with no credit limit. He can spend whatever he wants without having to worry about paying off the balance. In theory, this could work (although it's challenging to figure out what's in it for the card issuer). But at a minimum it doesn't allow for unforeseen developments. **I believe here, as elsewhere, the workings of economics are too uncertain for a perpetual motion machine like MMT to be relied upon. In other words, Modern Monetary Theory is just that: a theory. What if it's wrong?**

> . . . when the University of Chicago's Booth School of Business asked top scholars about a couple of [MMT's] claims, they split between the 28 percent who disagreed and the 72 percent who strongly disagreed. (ibid.)

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Disregarded national debt – I recall a heated debate when I was young over whether it's okay for nations to permanently be in debt. More recently, any such doubt has been forgotten, and almost all nations are debtors. The main issue became whether there can be a level of debt that's too high. But now, thanks to MMT, there's a belief that there's no such thing.

Continuing from the *Times*'s description of Modern Monetary Theory:

> "The national debt is nothing more than a historical record of all of the dollars that were spent into the economy and not taxed back, and are currently being saved in the form of Treasury securities," Ms. Kelton said.

In other words, national debt is just a sign of all the government has accomplished.

While I can't prove that Modern Monetary Theory is off the beam, I also can't see making it the economic law of the land. Does it have a weakness? I think there may be one hidden in the middle of the long quote above, regarding **"a country that controls its own currency."** I don't know exactly what Ms. Kelton meant by this phrase, but it might be a reference to a country that can print as much money as it wants without having to worry about its currency depreciating, and thus one that is always able to issue and refinance debt without limits.

Today the U.S. dollar is the world's reserve currency, and there aren't any obvious candidates to replace it. Further, the U.S. benefits from an unlimited appetite for its debt, since it's the safest of any major sovereign. For these reasons, expanding the national debt isn't a problem. And like the cardholder described above, since there's no limit to its credit, the U.S. can add the interest that accrues to the unpaid balance.

What happens if these conditions change? Could a tipping point be reached at which there's so much debt that people question the U.S.'s creditworthiness and ability to repay its borrowings? In that case, the demanded interest rate would rise, meaning the debt and interest mightn't be repayable without massive money printing that would result in debasement of the dollar. Thus, could there come a day when it takes unacceptably more purchasing power to pay off U.S. debt denominated in dollars that have depreciated?

I put these questions to my friend Randy Kroszner, former member of the Fed's Board of Governors and Deputy Dean at the University of Chicago's Booth School of Business. Here's his response:

> I think the last three decades for Japan and the last decade for the U.S. have shown (and continue to be showing) that countries with credible institutions can "get away with" higher debt levels without a raid by bond vigilantes than most had once thought. That said, it leaves the country vulnerable to a change in sentiment, exactly as you describe. "Getting away with it" for too long erodes the credibility of the institutions over time.

Again, MMT might work, and vastly expanded national debt might prove viable or even advantageous. But I wouldn't bet the ranch on it.

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Economic strength without inflation – For the last 60 years, there has been widespread (albeit not universal) acceptance of the so-called Phillips curve, which posits an inverse relationship between the rate of unemployment and the rate of inflation. In other words, as unemployment falls and the labor market tightens, workers gain bargaining power and employers have to compete for a declining number of available workers. This results in rising wages, which translates into increasing inflation.

The U.S. has seen unusually little unemployment during the Trump presidency, and today it's at a 50-year low. Nevertheless, there hasn't been much wage inflation until very recently, and there still isn't much general inflation.

There are reasons why the relationship underlying the Phillips curve as defined above might be different from what it was in the past:

- Since the U.S. labor force participation rate (percentage of adults who are either employed or looking for work) is at its lowest level in more than 40 years, it might be more meaningful to look at the non-employment rate (the percentage of adults who aren't working) rather than the unemployment rate (the percentage of adults looking for work who aren't working). By the former measure, the labor market isn't so tight.
- Inflation might be structurally lower now and in the future than it was in the past, altering its relationship to conditions in the labor market. Automation, the shift of manufacturing to low-cost countries and the prevalence of free/cheap stuff in the digital age might help explain today's unusually low rate of inflation. For examples of the third of these, think about recent trends in the price of photographs, cellphone calls, messages (texts and emails versus telegrams and faxes) and books.
- On the other hand, the cheapening of things like those listed just above could halt, and a more traditional relationship between inflation and unemployment could resume.

Excessive inflation creates a number of serious economic and social problems, typically requiring central banks to raise interest rates to cool it off, with the effect of dampening economic growth and job creation. Likewise, rising inflation can cause investors to demand higher interest rates on bonds and loans to compensate for the risk of losing purchasing power. This can make it harder for borrowers to service their debt, causing defaults to rise and discouraging investors from taking risk and providing financing. (On the other hand, there's a level of inflation that's desired such that, among other things, workers will see wage growth, and the U.S. can repay outstanding debt with dollars representing a reduced amount of purchasing power. Today that desired rate is about 2%, and policymakers worry about the fact that it hasn't materialized despite the low unemployment rate.)

Rising inflation could be seen as a potential contributor to the end of the recovery. So far it hasn't shown up despite the tightness of the labor market. Has the Phillips curve relationship been revoked for good, or is inflation in the offing? Who knows?

The word I use to describe inflation is "mysterious." It's rarely clear how it gets started, and in the 1970s and early '80s, when it reached the mid-teens in the U.S., no one could figure out how to stop it until after Paul Volcker became Fed chair. It's mysterious why there's so little inflation today, and whether there'll be inflation in the future. But I'm not confident that it'll still be below 2% a few years from now.

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Persistently low interest rates – "Lower for longer" has been another rallying cry of the bull market. If interest rates remain low, economic growth is encouraged, defaults are scarce, risk-taking is encouraged and financing is easy. So far – against the odds – the strength of the U.S. economy hasn't caused interest rates to rise.

The Fed has raised interest rates nine times since the end of 2015, taking the short-term fed funds rate from roughly zero to 2¼-2½%, and in late 2018 it said it would go further. But in January, in response to fears of economic weakness that arose in 4Q2018, the Fed reversed course and declared that there would be no more increases for now. Whereas the yield on the 10-year Treasury note hitting 3¼% early last October coincided with (and probably contributed to) the start of the stock market's fourth-quarter swoon, the promise of low rates has played a big part in the rally this year.

In mid-2007, in a real economy that felt to me a lot like this one, the fed funds rate and the yield on the 10-year Treasury note both were around 5¼%. Today, with the fed funds rate and 10-year Treasury yield below 2½% instead, the Fed describes interest rates as "neutral": neither low enough to be stimulative nor high enough to be restrictive. (I considered the 2007 rates to be neutral – how can that be true of rates at both levels?)

Will the Fed leave rates low? Can it do so if inflation strengthens? Will it leave rates so low that there's little room to reduce them in the future should stimulus be needed? If deficits and debt grow faster than GDP, won't that put upward pressure on interest rates? Or if the Fed cuts rates, as many people now consider likely, will the markets be cheered by the stimulus, or will they fall in response to the economic concerns at which the rate cuts are directed? Certainly no one can say.

Equanimity regarding the inverted yield curve – Something else we've heard a lot about over the last couple of years is how risky it is when the yield curve inverts.

The yield curve is usually upward-sloping, meaning lenders demand higher interest rates when they lend for longer periods as compensation for the increased uncertainty (especially with regard to possible declines in the purchasing power of the currency between the time the loan is made and when it's repaid). But sometimes, long-term rates fall below short-term rates, and the curve is said to be "inverted." The curve has been unusually flat in recent months, and today it's actually inverted.

Because most periods of inversion have been associated with recessions, the condition is considered worrisome. In that regard, the *Financial Times* noted on June 1 that "the [yield curve] has 'inverted' before every US recession in 50 years." (Note, however, that this is different from saying every inversion has been followed by a recession.) What people should be focusing on isn't the usual coincidence of inversions and recessions, but rather the reason for this particular inversion. Understanding the latter might allow observers to sense whether a recession is implied and avoid a "false positive."

The explanation for inversions isn't always clear, since interest rates (like inflation) can be mysterious. Today I would say the inversion of the curve may be due to the fact that the Fed has brought short rates up at the same time that (a) there's a surplus of capital for investment at the long end of the yield curve, putting downward pressure on rates there, and (b) there's less reliance on

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capital investment in the information age, so less demand for long-term debt capital. One more thing that may be bringing down long-term yields is an increase in general worry among investors, and thus a flight to the safety of Treasurys. When demand for bonds rises, sellers are able to require buyers to pay higher prices, which translate into lower yields.

I don't fully understand why an inverted yield curve should be a negative, but its fans swear that it is. I merely can't prove that it's not. One possible ramification is the threat to bank profitability: an inverted yield curve takes away banks' ability to make money simply by borrowing short to lend long.

Profitless success – Historically, companies have been considered valuable primarily because they produce profits – if not immediately, then at least they were expected to do so in the foreseeable future. Then the view arose in the tech-media-telecom bubble of the late 1990s that companies could be great (and valuable) even in the absence of profits for years to come. Today, profitless companies are back in vogue and sometimes valued in the tens of billions of dollars.

Tech and venture investors have made a lot of money over the last ten years. Thus there's great interest in tech companies (including ones like Uber and Lyft that are applying technology to enable new business models) and willingness to pay high prices today for the possibility of profits far down the road. **There's nothing wrong with this, as long as the possibility is real, not over-rated and not over-priced.** The issue for me is that in a period when profitless-ness isn't an impediment to investor affection – when projected tech-company profitability commencing years from now is valued as highly as, or higher than, the current profits of more mundane firms – investing in these companies can be a big mistake.

Today there are a lot of investors who weren't around to see the 2000 bursting of the TMT bubble, in which large numbers of Internet and e-commerce companies were given the benefit of the doubt, only to end up worthless. Venture capital funds showed triple-digit annual returns in the late 1990s, but the ones started around 2000 performed very poorly (and people began to ask me if venture capital was a legitimate asset class).

Today, some tech and venture investments have again produced great results, and the doubts seem to be gone. **In investing, however, the truth usually lies somewhere between the extremes of infinite value and worthlessness.** Investor sentiment seems to be closer to the positive end of the pendulum's arc these days, but it's unlikely to stay there in perpetuity.

Growth investing preeminence forever – Since future-oriented "growth investing" has been so successful for so long, and has so seriously trounced "value investing," people are asking me whether this will ever end. In particular, value investing is being likened to the out-of-favor "cigar-butt" school of investing, in which people buy assets regardless of their quality just because they're low-priced. Critics of value investing argue that, since the technological leadership that's often associated with growth stocks is so essential for success in today's world, old-economy companies lacking it are unlikely to be top performers in the future.

My answer is simple: low price is very different from good value, and those who pursue low price above all else can easily fall into "value traps." And certainly it's true that old-economy companies

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are less likely to be the fast growers of the future or benefit as much from the "moats" that protected them in the past.

It may also be true that given the ease today of searching the universe of securities, it may be harder than it used to be to find "value" companies with current assets or earning power that are broadly unrecognized and thus underpriced. Since the best returns come from buying things whose merits others aren't aware of, it's certainly possible that easy, widespread access to data is making it harder for value investors to excel.

On the other hand, companies that do have better technology, better earnings prospects and the ability to be disrupters rather than disrupted still aren't worth infinity. Thus it's possible for them to become overpriced and dangerous as investments, <u>even as they succeed as businesses</u> (this was often the case with the Nifty-Fifty in 1968-73). And I continue to believe that eventually, after the modern winners have been lauded (and bid up) to excess, there will come a time when companies lacking the same advantages will be so relatively cheap that they can represent better investments (see value versus growth in 2000-02).

Understandably, the stocks of companies with bright futures are likely to be outperformers in times of economic growth and optimism, when investors are happy to pay up for potential. But stocks of companies with tangible value in the here-and-now are likely to hold up better in less positive times because (a) they've previously been disrespected and valued lower and (b) the rationale underlying their prices is less a matter of conjecture and faith. Thus a swing in favor of value may have to await a period in which the "champions" lose some of their luster, perhaps in a market correction (see 4Q2018). But it'll come.

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* * *

What do all the theories propounded above have in common? That's easy: they're optimistic. Each one provides an explanation of why things should go well in the future, in ways that didn't always go well in the past.

In recent years, the U.S. has simultaneously experienced economic growth, low inflation, expanding deficits and debt, low interest rates and rising financial markets. **It's important to recognize that these things are essentially incompatible. They generally haven't co-existed historically, and it's not prudent to assume they will do so in the future.**

Many of the beliefs discussed above suggest we're in a so-called "Goldilocks" environment: one that's not too hot and not too cold.

- Economic growth won't be so strong that it brings on excessively high inflation, or so weak that it ends in recession.
- Inflation won't be so low that the economy stagnates, or so high that it leads to burdensome increases in the cost of living and requires contractionary interest-rate increases to cool it off.

I've seen times in the past when people believed such an ideal state would continue in perpetuity, but it has never worked out that way. Maybe it will this time – no one can prove it won't until it doesn't

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– but certainly broad acceptance of such a proposition indicates that optimism prevails in the current investment environment.

We keep an eye out for the widespread belief that "this time it's different" because we want to know if markets are being lifted by bullishness, optimism, risk tolerance and low levels of skepticism. **Everything else being equal, these things result in asset prices that are high relative to intrinsic values, and their presence exposes us to the risk that they'll abate, taking asset prices down with them.**

In *On the Couch* (February 2016) I said:

> **That's one of the crazy things: in the real world, things generally fluctuate between "pretty good" and "not so hot." But in the world of investing, perception often swings from "flawless" to "hopeless."** The pendulum careens from one extreme to the other, spending almost no time at "the happy medium" and rather little in the range of reasonableness.

Widespread attaching of "the four words" to bullish propositions suggests that the environment is being perceived as flawless. When and if that swings to hopeless, the result is pain for investors.

Of course, no one can prove that the nine propositions discussed above won't hold. Economics and markets aren't governed by immutable laws like the physical sciences, and there's no schematic diagram that shows how they work. Thus, I want as usual to make it explicit that these are the musings of someone who (a) isn't an economist and (b) doesn't claim to know exactly how economic and monetary mechanisms function. **But who does?**

Now, sometimes things really are different, as Templeton said. (And in areas like technology and digital business models, I'd bet things will be different more than the 20% of the time Templeton cited.) Certainly the world today is very different from that of the past. As I've written before, 40 years ago it felt like the world was a stable place that was subject only to limited change in areas like scientific progress, fads and politics. Today the idea of an unchanging world is out the window: things change every minute, and anyone who doesn't keep up with the changes is fated to miss out. Technological prowess can be essential for success, and every company or industry that lacks it is susceptible to being disrupted by those who possess it.

I readily admit that, at my stage in life, I may not fully grasp the forces that will determine the future. At times like this, when tech stocks are in the middle of a great run, I'm reminded of a classic book from my youth, *The Money Game* (1967). In it, the pseudonymous Adam Smith introduced the Great Winfield, a veteran broker who, despite the limitations associated with having reached middle age, was minting money in the new tech stocks. When asked about the source of his success, he introduced Smith to his traders:

> "My boy," said the Great Winfield over the phone, "Our trouble is that we are too old for this market. The best players in this kind of a market have not passed their twenty-ninth birthdays."

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> . . . "My solution to the current market," the Great Winfield said. "Kids. This is a kids' market. This is Billy the Kid, Johnny the Kid, and Sheldon the Kid."
>
> . . . "See? See?" said the Great Winfield. "The flow of the seasons! Life begins again! It's marvelous! It's like having a son! My boys! My kids!"

Of course, veteran that he was, the Great Winfield knew the truth. Thus he went on:

> **. . . "The strength of my kids is that they are too young to remember anything bad, and they are making so much money they feel invincible," said the Great Winfield. "Now you know and I know that one day the orchestra will stop playing and the wind will rattle through the broken window panes . . ."**
> [Emphasis added]

To close, I'll return to a concept I consider indispensable for anyone hoping to succeed at investing – the three stages of a bull market:

- the first, when only a few forward-looking people begin to believe things will get better,
- the second, when most investors realize improvement is actually underway, and
- the third, when everyone concludes that things can only get better forever.

Clearly the few who buy in the first stage – when optimism is scarce and thus asset prices are low – can access great bargains. But those who buy in the last stage – out of a belief that the news will always be good – can be making a big mistake. **The nine propositions reviewed above all represent variations on "things can only get better forever." If they're the ideas guiding investors today, that should be considered worrisome.**

The best investments often are made in times of fear and desperation. That's rarely possible when investors are willing to blithely dismiss the limitations of the past with the words "this time it's different." I would remind those investors of a quote usually attributed to Mark Twain: "History doesn't repeat itself, but it does rhyme." **Of course it's important that investors keep up with current developments and those that will shape the future. But it's also essential that they not completely unlearn the lessons of the past.**

June 12, 2019

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Memo to: Oaktree Clients

From: Howard Marks

Re: Growing the Pie

A few weeks ago, we were pleased to announce a partnership with Brookfield Asset Management that created an alternative investment manager with one of the broadest slates of strategies and greatest asset totals. And what question did I get? "Will there still be memos?" Well, here's your answer.

* * *

One thing I'm not happy being right about is the tenor of the current debate over our economic system. Most of my January memo, *Political Reality Meets Economic Reality*, was devoted to fretting over the rise of populism from the left and the resulting anti-capitalist sentiment, and it has risen further since.

I mentioned legislation that had been introduced to appropriate some of corporations' cash and governance rights for workers, as well as a proposal for a higher income-tax bracket for top earners. Since then we've seen additional suggestions covering a wealth tax, higher estate taxes and, in New York City, a tax on *pieds-à-terre*. Clearly companies and wealthy individuals are being viewed by some as attractive political targets and good sources of incremental revenue.

One of the main reasons behind populism's ability to stir people is the favorable reception its rhetoric receives. "They have too much." "We've been short-changed." "The system's rigged." "They got where they are by cheating." "The rich don't pay their fair share." **Sound bites like these find receptive audiences among people who are unhappy with their lot, whereas detecting the error in these statements requires an insight, sense of history and understanding of economics that many people lack.**

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What's Going On?

In the January memo, I set forth my view that in the last 10-20 years, the rising economic tide had stopped lifting all boats. In addition, major social and economic trends contributed to increases in economic inequality. These developments, I said, were largely behind the rise of populism.

Ray Dalio and Bridgewater actually beat my memo by two days, publishing on January 28 an excellent note titled *Populism + Weakening Economy + Limited Central Bank Power to Ease + Elections = Risky Markets and Risky Economies*. I was particularly drawn to the following passage:

> Disparity in wealth, especially when accompanied by disparity in values, leads to increasing conflict and, in the government, that manifests itself in the form of

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> populism of the left and populism of the right. **As a rule, populists of the right (who are usually capitalists) don't know how to divide the pie well, while populists of the left (who are usually socialists) don't know how to grow the pie.** [Emphasis added]

Populism of both the right (behind Donald Trump) and the left (behind Bernie Sanders) played a big part in the 2016 presidential election season. It's the latter that's my subject here.

In my January memo, I argued at length that capitalism can be credited with much of what made the United States what it is today. **In short, to borrow Ray's terminology, the capitalist system achieved this by creating the biggest pie: the largest total GDP in the world and one of the highest per-capita GDPs.** And only capitalism is likely to cause the pie to continue to grow. The failure of non-capitalist systems to produce economic growth and prosperity is well documented.

Obviously, however, when the pie is divided up under capitalism, not everyone gets the same-sized piece. That's the idea underlying the following line in Winston Churchill's speech in the House of Commons on October 22, 1945:

> **The inherent vice of capitalism is the unequal sharing of blessings . . .**

As with so many things, Churchill said it best. Under capitalism we're likely to see bigger slices of the pie go, for example, to those who are smarter, more talented and more hardworking, but also to those who are luckier or born into wealth. The first three of these explanations are generally considered valid, the fourth is not, and people fight about the last. **The gains produced by capitalism are inseparable from – actually they derive from – the opportunity for those who are smarter, more talented and more hardworking to end up with bigger slices of the pie.** On the other hand, no one considers it inherently desirable that lucky people do so also. And many think the benefits of inheritance should at least be watered down (although generally not the benefactors or beneficiaries).

And what do the "populists of the left" want? For the most part, "fairer" and more equal outcomes. They say relatively little about expanding the pie but more about fairness in how it's apportioned. That's why Churchill went on from the above to add:

> **. . . The inherent virtue of Socialism is the equal sharing of miseries.**

When we look around the world, we see countries that have stressed equal sharing of the pie and others that have cared more about expanding the pie. The equal sharers include Cuba, North Korea, Venezuela and the USSR, while the expanders, in addition to the U.S., include South Korea, Hong Kong and Singapore. In which group of countries do people generally live better? In which group would you rather live?

Today, many people apparently fail to understand the role of capitalism in creating the wealth that Americans share. Others may feel the capitalism that got us here may have been fine in its time but isn't needed anymore; thus, we should shift our attention to more equal distribution instead. And a last cohort may consider equal sharing more important than the creation of more prosperity.

Socialism superimposes socio-political considerations on an economic system, such that equality is elevated relative to self-interest and individual motivation. Capitalism omits that emphasis. In this

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context, last month Charlie Munger called my attention to China's agricultural history following the death of Mao Zedong in 1976. The following excerpts are from a 1986 paper in the *Journal of International Affairs* regarding the then-recent agricultural reforms in China. This'll be a long slog, but I think it's worth studying how China transitioned from the "equal sharing of miseries":

> The long-term (1957-1978) growth of cereal output just kept up with the expansion of the population. Over this period, China actually was becoming more dependent on imported grain to feed its population. . . . By 1978, about 30 million urbanites, roughly 40 percent of the population of China's municipalities, were dependent on imported cereals. The performance of most non-grain crops was even less impressive. . . . The slow growth of farm output, not surprisingly, was accompanied by extraordinarily modest growth of peasant income. . . .
>
> By 1978 an apparent consensus had been reached at the highest levels of the Chinese Communist party that the painfully slow growth of agricultural output was caused . . . by certain inefficiencies of China's collective production structure, the loss of productivity resulting from the promotion of local self-sufficiency, the curtailment of rural marketing and the disincentive of relatively low prices for farm products. Beginning in 1978 the Central Committee endorsed a series of sweeping reforms that addressed each of these problems. Collectivized agriculture . . . was replaced with a system of household farming in which the land was divided among existing households. . . . Decisions on cropping patterns and the quantities of fertilizers and other inputs to be used are now made by each household rather than by team and brigade leaders. . . . Peasants are now encouraged to specialize and produce for the market rather than being forced to be self-sufficient. Comparative advantage cropping has been encouraged by reopening rural markets . . .
>
> These reforms . . . have led to an unprecedented pace of growth since 1978. Grain output, for example, had grown from 305 to 407 million metric tons, an average annual rate of almost 5 percent, well over twice the historic rate of 2.1 percent achieved between 1957 and 1978. . . .
>
> The official jettisoning of the policy of local cereals self-reliance, encapsulated in the Maoist slogan "Take grain as the key link," and the reopening of rural markets have stimulated an upsurge of production of non-cereal crops. . . .
>
> The unprecedented growth of agricultural output also has been accompanied by substantial growth in real farm income. . . . Average per capita farm income in current prices rose from 134 yuan in 1978 to 355 yuan in 1984. . . . The gains derive not only from the growth of farm output . . . but also from the substantial expansion of rural non-farm employment and income. . . .
>
> Although decollectivization has provided the incentives for improved productivity growth, it has created . . . significant and partially unanticipated adverse consequences. . . . Over the longer run it is not clear how the local labor-intensive maintenance of existing irrigation systems will be sustained. . . . The current system appears almost certain to have an adverse effect on the distribution of income in rural areas and may lead, ultimately, to significant rural unrest. . . . Another seemingly

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> unanticipated consequence of the demise of the collective system is the impaired delivery of rural social services. State budgetary funds for rural health-care and primary-school education always have been limited. Most of these programs . . . were financed by collectively accumulated welfare funds. . . . A final unanticipated consequence of the reform is its budgetary impact. While the higher farm quota prices the state introduced along with decollectivization have contributed significantly to greater incentives and productivity for peasant producers, the financial burden to the state of these incentives has mounted far more rapidly than expected. [Nicholas R. Lardy, "Agricultural Reforms in China"]

The Chinese experience described above tells the whole story in eight short years: deregulation and decontrol; free enterprise and the profit motive; increased flexibility and choice; the benefits of specialization; and the allocation of resources via the free market. The results: vastly increased production, but also greater inequality and reduced government services. **In other words, you can't have it all. Most people lived much better because of the reforms, whereas under the prior system everyone had it the same, but most people lived far less well. Which was fairer?**

Capitalism doesn't know about or care about fairness in the sense of equal sharing. **What it considers fair is the proposition that people who have greater ability or work harder should be able to earn more.** That potential, it says, provides incentives for hard work and rewards those who achieve, ultimately resulting in a better life for almost everyone. The story of China – just like that of America – shows that it works.

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A Case in Point: We Like Our Pie the Way It Is

One of the biggest stories in the business world over the last two years was Amazon's search for a location for another headquarters. A total of 238 cities, towns and other entities submitted proposals, trumpeting their merits as a possible location for HQ2 and, in many cases, offering financial inducements.

The big news came last November, when Long Island City in Queens, New York was chosen for Amazon's expansion, as was Northern Virginia. The parameters in Queens included a $2.5 billion investment on Amazon's part; approximately 25,000 new Amazon jobs (plus the likelihood of thousands more in construction, local infrastructure and support businesses); $27 billion of projected incremental state and city tax revenues over the subsequent 25 years; and $3 billion returned to Amazon over that period in the form of tax credits and subsidies.

The deal's supporters were elated. But opposition soon began to form, and, on February 14, Amazon pulled out.

> The plan fell apart in the face of a backlash over public subsidies, resentment of the covert process in which the city and the state negotiated the deal, and concern about its neighborhood impact. (*The New York Times*, February 22)

Labor unions that would want to organize Amazon's operation opposed the deal because of Amazon's policy of resisting unionization (although, unsurprisingly, the bargain was supported by unions for construction workers and others anticipating expanded work opportunities).

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Politics reared its head, of course, especially when the State Senate Majority Leader nominated Michael Gianaris, who represents Long Island City, to the obscure Public Authorities Control Board, which had the power to thwart the project. According to the *New York Post*, Gianaris opposed the subsidies and was "miffed" at not having been consulted by the mayor and governor when the deal was negotiated. Some say his nomination, while never effective, was the nail in the deal's coffin.

Finally, populist rhetoric injected resentment into the process, as per an article in *The New Yorker* magazine of November 17:

> Richard Florida, the urban-studies theorist, told [writer Anand Giridharadas] that Amazon's HQ2 competition "captures the zeitgeist of early 21st century American late capitalism." He added, "The very idea that a trillion-dollar company run by the world's richest man could run an *American Idol* auction on more than two hundred thirty cities across the United States (and Canada and Mexico) to extract data on sites and on incentives, and pick up a handy three billion dollars of taxpayer money in the process, is a sad statement of extreme corporate power in our time" . . .
>
> Alexandria Ocasio-Cortez, the [then-]representative-elect of New York's Fourteenth Congressional District, which spans parts of the Bronx and Queens, criticized the deal on Twitter. "The idea that [Amazon] will receive hundreds of millions of dollars in tax breaks at a time when our subway is crumbling and our communities need MORE investment, not less, is extremely concerning to residents here," she wrote . . .
>
> Reached by telephone on Thursday, Ocasio-Cortez called the Amazon deal "dressed-up trickle-down economics." "What we're seeing here is a complete public cost for a private corporate benefit," she told me. "When you give a three-billion-dollar tax break to the richest company in the world, that means that you're giving up our schools. You're giving up our infrastructure. You're giving up our community development." In other words, there is an opportunity cost to luring the world's richest man by letting him free-ride on the public services that other New Yorkers must pay for.

Although the majority of New Yorkers supported the deal in polls, the combined forces in opposition were sufficient to turn Amazon away. In a statement, the company said:

> For Amazon, the commitment to build a new headquarters requires positive, collaborative relationships with state and local elected officials who will be supportive over the long term.

That doesn't sound unreasonable.

But Amazon's decision not to go forward was cause for victory celebrations on the left. City Councilman Jimmy Von Bramer said:

> Even when we were faced with the richest man in the world and the richest company in the world, we did not buckle. Amazon doesn't need our $3 billion . . . (*New York Post*, February 15)

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And Rep. Ocasio-Cortez tweeted the following:

> Anything is possible: today was the day a group of dedicated, everyday New Yorkers & their neighbors defeated Amazon's corporate greed, its worker exploitation, and the power of the richest man in the world.

In other words, the response from the "progressive" left was that Amazon could take those jobs and shove them.

I don't mean to single out Ocasio-Cortez, and I have nothing against her. But she is the most prominent spokesperson for the approach that so troubles me, and what she says exemplifies that which I want to resist. Here's what *The Washington Post* (owned by Amazon's Jeff Bezos) said in a February 21 article titled "Alexandria Ocasio-Cortez is an economic illiterate — and that's a danger to America":

> Case in point: Last week, Ocasio-Cortez celebrated the tanking of the deal negotiated by her fellow Democrats in which Amazon promised to build a new headquarters in Long Island City, New York, right next to her congressional district. Amazon's departure cost the city between 25,000 and 40,000 new jobs. Forget the tech workers whom Amazon would have employed. Gone are all the unionized construction jobs to build the headquarters, as well as thousands of jobs created by all the small businesses — restaurants, bodegas, dry cleaners and food carts — that were preparing to open or expand to serve Amazon employees. They are devastated by Amazon's withdrawal.
>
> Ocasio-Cortez was not disturbed at all. "We were subsidizing those jobs," she said. "**Frankly, if we were willing to give away $3 billion for this deal, we could invest those $3 billion in our district, ourselves, if we wanted to. We could hire out more teachers. We can fix our subways**. We can put a lot of people to work for that amount of money if we wanted to." [Emphasis added]

She entirely misses the point. **There was no $3 billion sitting in a city bank account, waiting to be spent on either subsidies for Amazon or enhanced services for New Yorkers. The $3 billion going to Amazon wouldn't have represented a diversion of resources from other potential uses.** It consisted entirely of contingent future payments: the part that would be kicked back to Amazon from the taxes it would pay, the balance of which could be used to support infrastructure or services. **No Amazon, no $3 billion paid out** (and no $24 billion of net taxes received by the city and state). Ocasio-Cortez either (a) completely misunderstood the deal she was criticizing or (b) overlooked the facts in favor of rhetoric calculated to play on resentment and scare up votes. Which explanation would you consider preferable?

A lot of readers enjoyed the story in my January memo about the ten men who drank beer in a bar every night, with each paying according to his ability. (It was included as an appendix. Nancy missed it the first time through; I hope you didn't.) When the grateful bar owner took 20% off their collective tab, the ten disagreed over how the reduction should be divided up, since most of it appeared likely to go to the richest man (who'd been paying most of the bill). In their anger, the other nine men beat up the tenth. He didn't come back after that, leaving the nine unable to afford their daily beer. **They sure showed him!**

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And likewise, New York showed Amazon! They beat Amazon up, and it's not coming back. If you look back at the politicians' statements above, you'll see they're all about resentment of Amazon's (and Bezos's) wealth and how unwarranted the subsidies were. But there was no mention of the lost potential jobs or what's good for New York's economy or, more importantly, for its people. New York had a great chance to expand the pie, and the populists of the left found a way to scuttle it.

Another example of channeling resentment toward the rich is the *pied-à-terre* tax that's been proposed in New York City. The tax was inspired by a money manager's purchase of a $238 million apartment as a second (or possibly third) home. It would impose a levy on houses and apartments worth more than $5 million that aren't primary residences, on the grounds that the owners benefit from their homes' New York location without paying New York income tax. But is it smart?

Absentee owners pay real estate tax even though they use few city services. And when they come to town, their spending contributes to the economy. Do they really abuse the city? And the new tax would exacerbate the current glut of high-end homes by turning away some of the potential purchasers for whom they were built. *The New York Times* (March 24) says ". . . the tax is one small way to make New York City a little fairer." It also mentions the political palatability of a tax on wealthy absentee owners. But given that the obvious effect will be to depress the market for homes and diminish employment in a broad range of related industries, does it make economic sense?

The rhetoric of the far left plays on resentments and differences, and it's easily swallowed. But the policies are more likely to equalize the sharing of misery than to expand blessings, however unequal.

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* * *

About 50 years ago, an older friend described for me what he felt made America great:

> When the worker in Britain sees the boss drive out of the factory in his Rolls Royce, he says, "I'd like to put a bomb under that car." But when the worker in the U.S. sees the boss drive out of the factory in his Cadillac, he says, "Someday I'll own a car like that."

Today, too few Americans feel they might own that Cadillac. Taken to the logical extreme, that has the potential to bring the American miracle to an end. **Thus, business should do all it can to arrest the trend toward stagnant and unequal incomes . . . not just to be fair or generous, but to assure perpetuation of the system that got us here.**

Capitalism is the most dependable route to prosperity. And it has to be responsible capitalism. **The solution can't lie in turning away the Amazons of the world, imposing extra taxes on Cadillacs or otherwise shrinking the pie.**

April 1, 2019

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Memo to: Oaktree Clients

From: Howard Marks

Re: Political Reality Meets Economic Reality

In 2016 I wrote *Economic Reality* (in May) and *Political Reality* (in August), two memos covering subjects I thought were important and timely. In the latter, I summed up *Economic Reality* as follows:

> [It] describes the ways in which economics defines and constrains reality in business, investing and everyday life. Economics establishes the rules of the game and the boundaries of the playing field, and these things can't be ignored. They can be altered, but not without consequences.
>
> The realities of economics are stark and consistent, but also logical. They aren't absolute, like the laws of physics (e.g., gravity), but they reliably establish tendencies and limits.

The point is that the field of economics covers the choices people and organizations face; the costs, possible rewards and potential consequences; and how decisions regarding those choices are made. These are the bases on which people enter into economic transactions. More than anything else, perhaps, economics is the study of choice.

Three months later, in *Political Reality*, I said:

> I've always gotten a kick out of oxymorons – phrases that are internally contradictory – such as "jumbo shrimp" and "common sense." I'll add "political reality" to the list. The world of politics has its own, altered reality, in which economic reality often seems not to impinge. No choices need be made: candidates can promise it all. And there are no consequences. If something might have negative consequences in the real world, politicians seem to feel free to ignore them. . . .

The purpose of this memo is to describe what happens when political behavior collides with economic reality, as illustrated in one area where the government is taking steps – tariffs – and another in which debate among politicians is heating up – restrictions on the capitalist system.

Before I move forward, I'd like to state up front, as I did in *Economic Reality* in 2016, that I'm not writing to make political judgments or to make any politician or party look bad. But economic pronouncements can't be separated from the people who make them. If you read through to the end, you'll see I find something to complain about in the approach of members of both parties.

Tariffs

Tariffs are very much in the news these days, and their complexity renders them ripe for error and thus appropriate for discussion here.

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Many people – albeit President Trump's supporters more often than economists in general – applaud his decision to impose tariffs against China. Whereas the simple story was that he was doing so to (a) reduce our trade deficit with China, (b) support U.S. manufacturers and (c) protect U.S. jobs, there's more in play. In *The Wall Street Journal* of October 20, Richard Haass, president of the Council on Foreign Relations, an independent, nonpartisan organization, enumerated complaints that have been lodged against China in the area of trade:

> . . . higher-than-warranted tariff and non-tariff barriers, forced transfers of technology, theft of intellectual property, government subsidies and currency manipulation designed to make exports cheaper and to reduce the demand for imports.

Everyone knowledgeable tells me these complaints are warranted. While they're not new, past presidents don't seem to have done much about them, or at any rate didn't produce any results. Clearly Trump likes to take action and doesn't shy away from confrontation. Given that China's economy is much more reliant on exports to the U.S. than ours is on exports to China – and given China's need for rapid economic growth in order to reach its goals – imposing tariffs represents a possible way for Trump to get China to alter its behavior.

Thus rather than criticize Trump's tariffs, I'm going to use them as an example to illustrate the central messages of this memo: (a) economic actions have costs and consequences, (b) for that reason, it's generally safe to say there are no simple solutions to complex problems, (c) given the complexities, few people thoroughly understand economics, and (d) because of that understanding deficit, politicians' proposed solutions often fail to receive the scrutiny they should.

First, there's misunderstanding. The U.S. runs chronic trade deficits with most of its trading partners, and with China it amounted to $335 billion in 2017. Trump takes these deficits to mean our trading partners are winning and we're losing. "We have countries ripping us off for years. . . . We have trade deficits; they have surpluses." In particular, he says "China's been killing us," suggesting there's something nefarious about trade deficits. But is that the correct inference? The other day I went to the barber for a haircut, and when I paid him, I ran a trade deficit. He got my money, and I got a haircut. I didn't feel like I had lost. Likewise, Chinese businesses make money from the U.S., and U.S. consumers get the low-priced goods they want. **Both sound like winners to me.**

Trump has said, "If we didn't trade, we'd save a hell of a lot of money." Would we? That would be true only if we didn't otherwise buy the things we've been importing, or if we were able to buy them cheaper domestically. Would it really save us money to not trade with China?

After all, who pays tariffs? They're a tax paid by exporters and presumably passed on to consumers in the countries into which goods are imported. So it's not enough to say "exporters are paying increased tariffs." It's also likely that U.S. consumers are paying increased prices for the goods they consume.

If tariffs are paid by consumers in the importing nations, what's to be accomplished by imposing them? **In short, it's done to raise the cost of foreign goods and thus discourage their consumption. But that leads us to the knock-on effects: what else happens?**

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Let's take the first shot fired in last year's escalation on trade: the imposition of tariffs of 25% on imported steel and 10% on imported aluminum. Here are some of the many possible complications, ramifications and second-order consequences:

- Tariffs on imported intermediate goods such as steel and aluminum might increase the cost of finished goods manufactured in the U.S., rendering them less competitive if their prices are raised (or less profitable if they're not). According to *The New York Times* of July 4, 2018:

  > The Aluminum Association, which represents the bulk of the American industry, says that 97 percent of American jobs in aluminum are at what are called "downstream" businesses that shape the metal into things like auto parts and other goods. Those companies are hurt by Mr. Trump's tariffs, because they now must pay higher prices for their raw materials.

- To avoid paying tariffs, American manufacturers could reduce their imports of foreign steel and aluminum for use in the finished goods they make, and instead increase their imports of finished goods – which are not subject to the tariffs – made abroad with foreign steel and aluminum.

- Going beyond importing finished goods, American companies could move their manufacturing overseas, cutting domestic jobs. The overseas use of untaxed, low-cost metals could provide a competitive edge when those finished goods are imported into the U.S.

- Non-U.S. companies likewise could gain an advantage over their American competitors. Their use of untaxed, low-cost materials could give them lower selling prices or higher profit margins when exporting finished goods to the U.S.

- Despite the cost increases caused by tariffs, imports might not actually be discouraged and U.S. production encouraged, simply because U.S. capacity doesn't exist:

  > "The reality is there's not enough aluminum made here," said Eric Krepps, who runs the North American automotive business at Constellium NV, a Dutch aluminum company. "We could not source everything out of the U.S. even if we wanted to," . . . since the U.S. produces just 13% of the 5.6 million metric tons of raw aluminum it uses each year. (*The Wall Street Journal*, July 18, 2018)

- Since tariffs might raise selling prices on imported goods (or goods incorporating imported materials and components), the reduced competitiveness of those imports could enable domestic producers to raise their prices. The result would be higher consumer prices on all brands.

- Countries whose goods are subjected to tariff increases are unlikely to just sit there and take it. Retaliation is always a reasonable expectation. "While tariffs help some companies, they have the potential to hurt thousands of others. Businesses that depend on access to overseas markets are being hit with retaliatory tariffs . . . ." (*The New York Times*, August 7, 2018)

- Finally, a trade war centered on escalating tariffs makes the global environment less stable, reducing predictability and increasing uncertainty. This isn't good for any economy.

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Going beyond steel and aluminum, increased tariffs on imported automobiles and auto components have been under discussion for much of the past year. Some of the considerations described above regarding steel and aluminum don't apply to cars, since they're finished goods, not intermediate goods. But a number of additional elements create exceptional complexity:

- U.S. companies manufacture cars in the U.S. for sale abroad.
- U.S. companies manufacture cars abroad for import to the U.S.
- Some of the biggest manufacturers of cars in the U.S. are non-U.S. companies.
- Many of the cars produced in the U.S. by non-U.S. companies are destined for export.
- Cars made in the U.S. incorporate a lot of components made elsewhere.
- Of the cars sold in the U.S. last year, 44% were imported.

On July 20, *The New York Times* discussed the possibility of increased tariffs on autos as follows:

> If imposed, the tariffs would most likely have deeper and wider-reaching repercussions for the economies than levies on fish or steel. Cars don't come together in one plant, with one work force – they're the final result of hundreds of companies working together in a supply chain that can snake through small American towns and cross oceans.

Thus increased tariffs on automotive imports could bring about:

- an increase in the price of all cars bought by Americans,
- a resultant decline in the number of cars sold,
- tougher times for manufacturers, dealers, support businesses and their employees, and
- thus a general contraction of the economy. (In July the IMF projected that "currently announced tariffs would reduce global economic output by $430 billion, or half a percent, in 2020, if they remained in place and shook consumer confidence." (*The New York Times*, July 23, 2018))

The bottom line is that tariffs aren't a simple solution or a sure thing. They're a tool or tactic with potential benefits, but also costs and risks. They can help some parts of the economy and simultaneously harm others. In other words, they're a tradeoff. That's the key word in economics. The question is whether they're worth it. In good part, it depends on whom you ask.

> One study of the Obama tire tariffs found in a single year, 2011, Americans spent an extra $1.1 billion on tires as a result of a tariff that preserved, at most, 1,200 jobs. That is almost $1 million per job, for jobs paying an average of about $40,000.
>
> Steel tariffs imposed in 2002 by President George W. Bush yielded similar results, penalizing not just consumers but companies that use steel to make other products, like construction companies and carmakers. The Dartmouth economist Douglas Irwin estimated 140,000 American workers make steel, while 6.5 million workers make products that include steel.
>
> "If for some reason you said, 'We just want to help steel producers, shareholders, possibly steel workers,' it makes sense," Mr. Irwin said. "If you care about manufacturing employment or the manufacturing sector, it doesn't make sense." (*The New York Times*, September 17, 2018)

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I'll move to wrap up on the subject of tariffs with a few paragraphs from *Economic Reality*:

> Have the voters who think it's a great idea to "bring back the jobs" thought about what goods manufactured at U.S. wages – or tariffs designed to bring the cost of Chinese goods up to those levels – would do to their cost of living? I'd guess not. **How will the interests of the 3.2 million Americans estimated to have lost their manufacturing jobs to China be balanced against the hundreds of millions who would have to pay considerably more for imported goods? Not an easy question.**
>
> Quotas, tariffs and subsidies are all ways for countries to protect industries that can't hold their own against international competitors without these things. Thus they're a good example of ways in which policy decisions can lead to distortions. **Since the industries for which tariffs and subsidies are established are, by definition, industries that can't compete without them, for these things to be enacted, someone has to make a decision that (a) these industries should be kept afloat and (b) consumers of these industries' goods should be prevented from paying the lower prices that would prevail if consumers had easy access to goods from abroad, free of tariffs. . . .**
>
> The bottom line, as with so many of the things I'm discussing here, is that economic laws cannot be ignored or magical solutions willed to appear. While it's far from the entire explanation, the main reason the U.S. has lost manufacturing jobs to foreign countries is that people there are willing to work for much less. **In this globalized world, that means Americans can't enjoy both the high-paying manufacturing jobs they used to have <u>and</u> the low-cost goods they've been buying of late. The imposition of tariffs can't solve that conundrum.**

On two occasions last summer, while discussing the steel and aluminum tariffs, *The Wall Street Journal* did a good job of summing up the key considerations:

> The fallout, while so far limited, illustrates how efforts to protect some companies can cause unintended pain for others. (June 4, 2018)
>
> Put into practice, tariffs are a complex economic weapon that can ricochet through an economy in ways even proponents don't expect. (July 17, 2018)

As mentioned earlier, I'm not writing here to criticize tariffs (or administrations that impose them), but rather to show (a) it's not easy for government actions to improve the functioning of economies and (b) there are ramifications to be considered. Tariffs are typical of economic reality, and economic reality is complex, in large part because it consists mainly of dividing resources among participants, not of creating more for everyone. As economists like to say, "There's no such thing as a free lunch."

<u>Anti-Capitalism</u>

Something else is going on that I worry about far more than the imposition of tariffs: increasing anti-capitalist sentiment.

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One of the big trends in politics in recent years has been the rise of populism. While populism is somewhat amorphous, here's a definition for the purposes of this memo:

> A political philosophy supporting the rights and power of the people in their struggle against the privileged elite. (*The Free Dictionary*)

I think it's important to add another word with regard to the adoption of populism as a political strategy: it plays on **resentment** on the part of "the people" toward "the elite."

Populism has been on the rise in Europe for a number of years, generally associated with the political right and characterized by resentment toward economic, liberal and urban elites. It has often been accompanied by authoritarianism, allowing charismatic strongmen to present themselves as protecting "the people" from looming threats like immigration.

A good part of the credit for Donald Trump's election in 2016 has likewise been attributed to populism. This instance, also coming from the right, was largely built on resentment from rural, white, older and less-educated voters directed at urban, establishment, educated and cultural elites, as well as unhappiness with social and demographic trends that are disrupting the status quo.

But as shown in the 2016 presidential Democratic primary contests and since, another wave of populism has arisen from the left. **I'm most concerned that in this case, the principal targets of popular resentment are capitalism and capitalists.**

One of the big stories of the 2016 primary season was the success of avowed Democratic Socialist Senator Bernie Sanders. Sanders launched a challenge to Hillary Clinton, the heir-apparent to the leadership of the Democratic Party and eventually the chosen nominee. He gained a lot of followers and gave Clinton a run for her money, in particular by emphasizing economic justice, the corrosive effect of money (and especially corporate money) in politics, and the promise of healthcare and education for all.

Following on Sanders's performance, the so-called "progressive" or left wing of the Democratic Party is becoming a formidable bloc. **I expect progressives to be a force to be reckoned with in the coming years. They will show up strongly in the 2020 primaries and influence the debate. In fact, their influence is already being seen. And thus this section of my memo.**

In a possibly isolated but telling incident, in a Democratic congressional primary last year in Queens, New York, Alexandria Ocasio-Cortez came from the far left to beat Joe Crowley, a ten-term, center/left congressman. Crowley was #4 in the Democratic leadership in the House of Representatives and considered a likely eventual successor to Nancy Pelosi as House Speaker. Instead he was ousted by Ocasio-Cortez: 28 years old at the time and sporting a storybook bio featuring a working-class upbringing, academic distinction and stints as a bartender and waitress. She had been politically oriented but had never held elected office. And yet she became the youngest woman ever elected to Congress. She's been very outspoken since and has attracted disproportionate attention for a freshman legislator.

Ocasio-Cortez, like Sanders, is a member of the Democratic Socialists of America, and she willingly accepts the label "radical." A *New Yorker* article titled "Left Wing of the Possible" quotes her as follows:

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> I do think we are in a crisis of late-stage capitalism, where people are working sixty, eighty hours a week and they can't feed their families. There is a lot that is economically dystopic in this country. So that's why people are open to change. (July 23, 2018)

Julia Salazar, another member of the D.S.A., also ousted a Democratic incumbent last year and won election to the New York State Senate with the "ardent support of Ocasio-Cortez." The same article included a statement from her that I found chilling:

> . . . a democratic socialist "recognizes the capitalist system as being inherently oppressive, and is actively working to dismantle it and to empower the working class and the marginalized in our society."

Does this group genuinely want to abolish capitalism? Thankfully, the same article went on to reflect some moderate sentiment:

> Michael Kazin, a co-editor of *Dissent* and a D.S.A. member, [said]: "The radical left's major influence in American history is to push liberals, progressives, to the left. And that is going to be the impact. I don't believe we are going to have a socialist transformation of America in my lifetime."

In July, *The New York Times* explored the Democratic Socialists' agenda as follows:

> "So what are we talking about here?" the host Stephanie Ruhle asked in an MSNBC segment, with background graphics highlighting that democratic socialism is "NOT Socialism" and "NOT Communism" but something more like a fondness for Social Security and Amtrak. The D.S.A. itself both embraces and rejects such friendly definitions, explaining that it "fights for reforms today" but still seeks to overturn "an international economic order sustained by private profit, alienated labor" and other forms of exploitation. . . .
>
> When today's leftists talk about socialism, they point to places like Sweden and France (home to robust maternity leave and universal health care) or even to lost relics of America's recent past (stable jobs, union power, a collective investment in human welfare). (July 22, 2018)

Ocasio-Cortez and Salazar may not be indicative of a broad movement, as they hail from New York City, where a Democratic candidate is a sure thing in a general election and extremism is unlikely to be an impediment. But some trends among our citizens are very much worth noting. According to the *New Yorker* article cited above:

> In 2016, the Institute of Politics, at Harvard's Kennedy School, polled people between the ages of eighteen and twenty-nine, and discovered that support for capitalism was surprisingly low. Fifty-one percent of the cohort rejected capitalism; thirty-three percent supported socialism. A later edition of the survey found that fifty-one percent were "fearful about the future," while only twenty percent were hopeful. . . .
>
> Seventy-eight percent of Americans working full time live paycheck to paycheck; nearly half do not have four hundred dollars at the ready. . . .

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> . . .while ninety percent of people born in the nineteen-forties outearned their parents – the traditional American expectation – this number has fallen to fifty percent for people born in the nineteen-eighties. [Of course, they could be too young to have done so yet.]

These are the dystopic trends Ocasio-Cortez cites and the source of the resentment of capitalism that gives rise to today's populism from the left.

As I see it, for the 60 years immediately following World War II, much of the world enjoyed a rising tide of prosperity that lifted all boats. That made nearly everyone economically content and thus happy with capitalism and free-market solutions. Even though some people did better than others, most did quite well. Living standards rose and the incidence of poverty declined. Ronald Reagan and Margaret Thatcher celebrated the efficacy of free markets, and the world agreed.

Now the rate of economic progress has receded and current trends are less cheering:

1. The possibility that economic growth will be slower than that of the post-war period
2. The negative impact of globalism and automation on specific groups
3. The increased importance of advanced education or the ownership of capital
4. As a consequence of numbers 2 and 3 above, increased income inequality

In short, the tide is no longer rising to the same extent, and many fewer people are happy with their circumstances and outlook. Their unhappiness crystalizes in populism. And it needs a target. Why not capitalism?

My point here is that, as I said above, I expect the rising influence of the left to impact the 2020 election cycle. Left-wing Democratic candidates will present challenges to moderates in their party, and the latter will have to tailor their messages to compete. And it's starting. In particular, I cite two pieces of proposed legislation that emerged recently from prominent Democrats:

- Senator Elizabeth Warren, already an announced 2020 presidential candidate, has introduced her Accountable Capitalism Act. Two of its provisions caught my attention:

  > . . . incorporation for large companies would become a federal matter, . . . These federally chartered companies would be mandated to consider the interests of a list of stakeholders, from investors to employees to customers and communities. These groups could then sue if they deemed the company had breached their duties. . . .
  >
  > . . . Senator Warren's legislation calls for 40 percent of directors to be elected by employees. (*The Financial Times*, September 24, 2018)

- Senator Cory Booker of New Jersey, often mentioned as a presidential hopeful, has introduced legislation that I view as related:

  > The Worker Dividend Act would mandate that companies buying their own shares must also pay out to their own employees a sum equal to the lesser of either the total value of the buyback or 50 percent of all profits beyond $250 million. (*Vox*, January 10, 2019)

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I absolutely am not writing to defend stock buybacks or criticize labor representation on boards. What I oppose is (a) the idea of governments deciding how companies will be run and (b) the appropriation of corporations' economics for parties other than their owners.

What would be the effects of turning over some of businesses' capital to workers, or requiring that they be put on corporate boards? Clearly, to do the former would be comparable to saying to shareholders, "That thing you thought you owned – the company – you don't really own that." Stock buybacks are a way of returning capital to companies' owners. Why should each one be accompanied by giving an equivalent amount to workers? Wouldn't the next step be to say, "Whenever a company pays a dividend, it has to distribute an equal amount to its workers"? **And wouldn't that be tantamount to saying, "As for corporate capital, the workers own half"? Consequences? Ask yourself who would start a corporation in the future if it meant the workers would be entitled to half the gains.**

What about requiring that workers be put on boards? To date, it has been the job of a corporation's directors to represent its shareholders. Requiring that 40% of them be workers would be, in essence, another way of saying the shareholders aren't in full control. If workers were put on boards, whose interests would they represent: the corporation and its shareholders, or labor? To whom would they work to deliver benefits? If an opportunity arose to increase efficiency and profitability by investing in automation, for example, how would labor's directors be expected to vote?

And that leads to the matter of requiring corporations to serve multiple interests. Today, directors are legally deemed to have done their jobs if they applied "business judgment" for the benefit of the company (and thus its shareholders). **How would they be expected to simultaneously work for the good of the company and its owners as well as its workers, customers and communities? Can you imagine the lawsuits that would fly over the issue of whether too much had gone to one group rather than another? How could a court decide whether the multiple constituencies had benefitted in the appropriate proportions?**

What I'd like to do is get some of the progressive politicians and the less-capitalist young people in a room and ask them a simple question: **To what do you attribute America's preeminence in the world over the last hundred years and the generally superior living standards of its people? In short, what has been behind the United States' progress to the top of the heap?**

What's absolutely clear to me is what it's not: that we're superior people, smarter, better, more virtuous or more deserving. Instead, I think it's our democracy, our freedoms, and our less rigid social and financial structures. But, extremely importantly, I also think there have been enormous contributions from capitalism/free enterprise, the free-market system, economic incentives, private ownership of property, individual economic opportunity, and the very limited involvement of government in the economy.

Capitalism is an imperfect economic system, because differential performance in the pursuit of economic success – as well as luck – results in there being (a) some people who are less successful as well as some who are more and (b) a few who are glaringly successful. Obviously I'm someone who has profited from capitalism, so my views could be dismissed as hopelessly biased. However, I'm 100% convinced that the capitalist system has produced the most aggregate gains for our society, exceptional overall progress, and a better life for most. For me, the best assessment of capitalism is the one Winston Churchill applied to democracy:

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> No one pretends that democracy is perfect or all-wise. Indeed, it has been said that democracy is the worst form of Government except all those other forms that have been tried from time to time.

In the same way, I'm convinced that capitalism is the worst economic system . . . except for all the rest. No other economy has accomplished what the U.S. has, accompanied by extensive personal freedom, and especially not the ones centrally controlled by government. In particular, no other economy has produced inventions and innovations – and distributed life-enhancing products – like the U.S. has.

I'm not arguing in favor of unfettered behavior on the part of corporations. They can't be allowed to use just any tactics to get ahead. They mustn't be permitted to compete unfairly against each other, behave in anti-social ways, or do damage in pursuit of profit. Thus laws, regulations and active supervision on the part of diligent directors are needed to police corporate behavior. I also think the leaders of society should encourage companies to operate with a conscience and voluntarily work for the betterment of their communities. **But this must be done within the framework of the elements that made America great – not by subverting them.**

Also, I feel it's essential that governments create effective safety nets to assist the less-fortunate members of society who end up at the bottom of the income distribution. Capitalism can make countries successful through the operation of economic incentives and healthy competition, but I'm not in favor of unmitigated "dog eat dog" or "survival of the fittest."

Progressives and Democratic Socialists promise increased equality of income and improvement for people below the top. These are worthy goals, and I support them. But trying to achieve them by dismantling capitalism would be worse for just about everyone. There is no proof that restrictions on capitalism and government involvement in economies can promote equality other than by shrinking the pie. **Consider what it would be like if the U.S. didn't have the sanctity of private ownership, the efficiency of privately run business, and the incentive of personal economic advancement.** The hard-left thinks government can do things better than free markets and increase wellbeing. Which government agencies would you like to see managing our economic engine?

A lot of the left's economic approach is based on closing the income gap, not just by making things better for people at the bottom, but also by pulling down people at the top.

- Thus on the TV show *60 Minutes*, Ocasio-Cortez expressed fondness for a top federal income tax rate of up to 70% on incomes over $10 million. Combined with the top New York State and City rates, for example, that would give government 83% of the marginal income of people in the top bracket. (That's not terribly far from the suggestion from Jean-Luc Mélenchon, the Communist Party's candidate for president of France in 2017, of a 100% tax rate on incomes above €400,000, or 20 times France's average wage.)
- Not dissimilarly, in November members of the House considered adjusting its rules to require a 60% super-majority to increase income taxes on the bottom 80% of Americans, but only a simple majority to raise taxes on the top 20%. Is it fair for government to employ different sets of rules when deciding how different groups will be taxed?

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- On January 24, just under the wire for inclusion in this memo, Elizabeth Warren took the issue of differential taxation to its ultimate extreme: a wealth tax. I'll let her words on Twitter speak for themselves:

> The rich & powerful run Washington. Here's one benefit they wrote for themselves: After making a killing from the economy they've rigged, they don't pay taxes on that accumulated wealth. It's a system that's rigged for the top if I ever saw one.
>
> We need structural change. That's why I'm proposing something brand new – an annual tax on the wealth of the richest Americans. I'm calling it the "Ultra-Millionaire Tax" & it applies to that tippy top 0.1% – those with a net worth of over $50M.

Any populist appeal to resentment there?

And what exactly is the benefit that the "rich & powerful . . . wrote for themselves"? That they get to keep what they earn net of taxes. **Senator Warren omits to mention that under the American system, <u>nobody</u> pays tax on accumulated wealth. But she sure makes it sound egregious that the rich don't do so.** The rich didn't arrange an exemption for themselves; there is no wealth tax. But why let facts like those get in the way of political rhetoric?

Over the centuries, one thing that has brought successful democracies to an end has been the realization on the part of the majority that they can appropriate more for themselves by taxing those at the top. This is an example of the so-called "tyranny of the majority." As *The New York Times* said the other day, albeit in direct reference to Brexit:

> During debates over the American Constitution, James Madison warned in one of the essays that became the Federalist Papers that unbridled majoritarianism had made earlier democracies "as short in their lives as they have been violent in their deaths." Only "a republic" of representatives subject to rules and institutions as well as the public, he wrote, "promises the cure for which we are seeking."
>
> . . . as Mr. Madison warned in the Federalist Papers, a democracy imposed "by the superior force" of an "overbearing majority" may not always remain democratic. (January 22, 2019)

Does the left understand the long-term consequences of the majority imposing confiscatory taxes on the rich, and do they really want them? Will reducing the incentive to earn more (or incentivizing successful Americans to transfer their citizenship to other nations) really result in the betterment of most people? **Americans generally accept the concept of progressive tax rates. But they must not be punitive and de-motivating.** Note in this regard that in 2015, the top 5% of taxpayers (with 37% of all income) paid 60% of all income taxes, and the top 1% (with 21% of income) paid 39%. To the political left: are those proportions of taxes paid "fair"? And would it still be fair if they were much higher?

(I want to make clear that I believe room does exist for increases in tax rates on the biggest earners since (a) today's top rate of 37% is one of the lowest in the 106-year history of the U.S. income tax and (b) dividends and capital gains are taxed at rates that are far lower still. It could be argued that all forms of income should be taxed the same.)

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While there are ways in which the system can be improved, I consider it problematic when people denounce capitalism without acknowledging its benefits. It's ironic to think of politicians criticizing the capitalist system via platforms like Twitter and Facebook (accessed on their iPhones); at rallies reached via airlines and cars (perhaps employing ride-sharing services such as Uber); in meetings over a Starbucks coffee; and via cable news networks. All of these are innovations that came out of a system that encourages people to take significant risks to start companies on the premise that they'll reap the rewards of ownership if their businesses succeed.

I'm sure if they thought about it, the list of innovations these people wouldn't want to live without – ranging from drugs to consumer products, to services, to technology – would be a long one. Which of those would we have today if not for the profit motive and the possibility of ending up with accumulated wealth? And in the absence of those expectations, to whom would we look for the innovations of the future? How's the record of non-capitalist countries such as the U.S.S.R., Cuba and Venezuela in this regard?

A great deal of America's economic progress has resulted from people's aspiration to make more and live better. Take that away and what do we have? The people at the bottom won't have as many at the top to resent. But without the contributions of those who aim for the top, everyone will have less to enjoy (see the appendix for an informative parable). This is why I worry about the rise of negative sentiment toward capitalism and antipathy toward those who succeed under it.

* * *

Politicians, depending on their ideology, can pose simple questions that suggest simple solutions to the problems people face, like these:

- Should we impose tariffs on imports to save American jobs?
- Should workers have a say in how companies are run?
- Should we enact rent control laws to protect tenants from rent increases?
- Should the government provide jobs for all?

For many people, it's easy to answer "yes." The benefits from doing these things are obvious. Who would oppose them?

But it turns out they aren't such easy questions, since economic reality shows them all to have downsides that just might exceed their upsides:

- Should we impose tariffs on imports in order to save American jobs?
    - Do the potential gains for a limited number of workers warrant the broadly shared increase in costs to all consumers?

- Should workers have a say in how companies are run?
    - Will they act in the interests of the companies, society as a whole, or only labor?

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- Should we enact rent control laws to protect tenants from rent increases?
    - If rents are regulated, will landlords maintain and expand the stock of rental housing?

- Should the government assure every citizen a job?
    - What incentive will people have to work hard if they're guaranteed employment?

One of the key elements running through economics is its complexity: there are few decisions that face us that aren't multivariate and that are free of second- and third-order consequences. **Thus we shouldn't take actions – like imposing tariffs – just because they offer potential benefits, without considering their costs. And we shouldn't condemn things – like capitalism – solely because they're imperfect, without taking into account their benefits.**

Because economics is just about dollars and consumption, the belief is encouraged that it can be understood intuitively. The truth, however, is that few people are educated regarding economics, and its complexity and ramifications render it far less easy to understand than many people may believe. Yet, while this stuff is complicated, we can all benefit by applying some common sense. You don't have to be an economist to recognize that if you raise the prices of inputs, it increases the cost of goods and reduces the quantity sold, and if you reduce the rewards for success, you'll get less effort to create value.

The bottom line is that politicians are able to offer simple economic solutions that have considerable appeal but fail to hold up in real life. **Since politics is largely about how costs and benefits are distributed – rather than about increasing aggregate benefits – politicians' simplistic economic prescriptions mustn't be swallowed whole.**

January 30, 2019

P.s.: Just prior to publication (I can hardly keep up with the developments in this area!) I received a mass email from a candidate for New York City's Public Advocate, effectively a "public watchdog," stating the following:

> . . . we fought for, and won, a $15 minimum wage, though as we all know, $15 just isn't enough to support a family in this city. So we need to keep fighting. . . . A $30 minimum wage, adjusted with inflation, for New York City government workers and businesses that employ over 75 New Yorkers would be where we start.

This brings to mind the description Winston Churchill used regarding the folly of a nation trying to tax its way to prosperity: "**like a man standing in a bucket and trying to lift himself up by the handle."**

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Appendix: The Tax System Explained in Beer

Suppose that every day, ten men go out for beer, and the bill for all ten comes to $100. If they paid their bill the way we pay our taxes (by taxpayer decile), it would go something like this:

The first four men (the poorest) would pay nothing.
The fifth would pay $1.
The sixth would pay $3.
The seventh would pay $7.
The eighth would pay $12.
The ninth would pay $18.
The tenth man (the richest) would pay $59.

So, that's what they decided to do.

The ten men drank in the bar every day and seemed quite happy with the arrangement, until one day, the owner threw them a curve ball. "Since you're all such good customers," he said, "I'm going to reduce the cost of your daily beer by $20." Drinks for the ten men would now cost just $80.

The group still wanted to pay their bill the way we pay our taxes. So the first four men were unaffected. They would still drink for free. But what about the other six? How could they divide up the $20 windfall so that everyone would get his fair share?

The bar owner suggested that it would be fair to reduce each man's bill by a higher percentage the poorer he was, to follow the principle of the tax system they had been using, and he proceeded to suggest the new lower amounts each should now pay.

And so the fifth man, like the first four, now paid nothing (a 100% saving).
The sixth now paid $2 instead of $3 (a 33% saving).
The seventh now paid $5 instead of $7 (a 29% saving).
The eighth now paid $9 instead of $12 (a 25% saving).
The ninth now paid $14 instead of $18 (a 22% saving).
The tenth now paid $50 instead of $59 (a 15% saving).

The first four continued to drink for free, and the latter six were all better off than before. But, once outside the bar, the men began to compare their savings.

"I only got a dollar out of the $20 saving," declared the fifth man. He pointed to the tenth man, "But he got $9!"

"Yeah, that's right," exclaimed the sixth man. "I only saved a dollar, too. It's unfair that he saved nine times more than me!"

"That's true!" shouted the seventh man. "Why should he get $9 back, when I got only $2? The wealthy get all the breaks!"

"Wait a minute," yelled the first four men in unison, "we didn't get anything at all. This new tax system

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exploits the poor!"

The nine men surrounded the tenth and beat him up.

The next day, the tenth man didn't show up, so the other nine sat down and had their beers without him. But when it came time to pay the bill, they discovered something important: They didn't have enough money between all of them for even half of the bill!

And that is how our tax system works. The people who already pay the highest taxes will naturally get the most benefit from a tax reduction. **Tax them too much, attack them for being wealthy, and they just may not show up anymore.** In fact, they might start drinking overseas, where the atmosphere is friendlier.

* * *

I've been waiting a long time for a chance to use this. The numbers may not be exactly right, but the idea is. **The unarguable bottom line is that everyone's view of the fairness of the tax system – like most such matters – depends largely on the angle from which you look at it.**

HM

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Memo to: Oaktree Clients

From: Howard Marks

Re: The Seven Worst Words in the World

I have a new book coming out next week titled *Mastering the Market Cycle: Getting the Odds on Your Side*. It's not a book about financial history or economics, and it isn't highly technical: there are almost no numbers in it. Rather, the goal of the book, as with my memos, is to share how I think, this time on the subject of cycles. As you know, it's my strong view that, while they may not know what lies ahead, investors can enhance their likelihood of success if they base their actions on a sense for where the market stands in its cycle.

The ideas that run through the book are best captured by an observation attributed to Mark Twain: "History doesn't repeat itself, but it does rhyme." While the details of market cycles (such as their timing, amplitude and speed of fluctuations) differ from one to the next, as do their particular causes and effects, there are certain themes that prove relevant in cycle after cycle. The following paragraph from the book serves to illustrate:

> The themes that provide warning signals in every boom/bust are the general ones: that excessive optimism is a dangerous thing; that risk aversion is an essential ingredient for the market to be safe; and that overly generous capital markets ultimately lead to unwise financing, and thus to danger for participants.

An important ingredient in investment success consists of recognizing when the elements mentioned above make for unwise behavior on the part of market participants, elevated asset prices and high risk, and when the opposite is true. We should cut our risk when trends in these things render the market precarious, and we should turn more aggressive when the reverse is true.

One of the memos I'm happiest about having written is *The Race to the Bottom* from February 2007. It started with my view that investment markets are an auction house where the item that's up for sale goes to the person who bids the most (that is, who's willing to accept the least for his or her money). **In investing, the opportunity to buy an asset or make a loan goes to the person who's willing to pay the highest price, and that means accepting the lowest expected return and shouldering the most risk.**

- Like any other auction, when potential buyers are scarce and don't have much money or are reluctant to part with the money they have, the things on sale will go begging and the prices paid will be low.
- But when there are many would-be buyers and they have a lot of money and are eager to put it to work, the bidding will be heated and the prices paid will be high. When that's the case, buyers won't get much for their money: all else being equal, prospective returns will be low and risk will be high.

Thus the idea for this memo came from the seven worst words in the investment world: "too much money chasing too few deals."

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In 2005-06, Oaktree adopted a highly defensive posture. We sold lots of assets; liquidated larger distressed debt funds and replaced them with smaller ones; avoided the high yield bonds of the most highly levered LBOs; and generally raised our standards for the investments we would make. Importantly, whereas the size of our distressed debt funds historically had ranged up to $2 billion or so, in early 2007 we announced the formation of a fund to be held in reserve until a special buying opportunity materialized. Its committed capital eventually reached nearly $11 billion.

What caused us to turn so negative on the environment? The economy was doing quite well. Stocks weren't particularly overpriced. And I can assure you we had no idea that sub-prime mortgages and sub-prime mortgage backed securities would go bad in huge numbers, bringing on the Global Financial Crisis. Rather, the reason was simple: with the Fed having cut interest rates in order to prevent problems, investors were too eager to deploy capital in risky but hopefully higher-returning assets. Thus almost every day we saw deals being done that we felt wouldn't be doable in a market marked by appropriate levels of caution, discipline, skepticism and risk aversion. As Warren Buffett says, "the less prudence with which others conduct their affairs, the greater the prudence with which we should conduct our own affairs." **Thus the imprudent deals that were getting done in 2005-06 were reason enough for us to increase our caution.**

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The Current Environment

What are the elements that have created the current investment environment? In my view, they're these:

- In order to counter the contractionary effects of the Crisis, the world's central banks flooded their economies with liquidity and made credit available at artificially low interest rates.
- This caused the yields on investments at the safer end of the risk/return continuum to range from historically low in the United States to negative (and near zero) in Europe and elsewhere. At least some of the money that in the past would have gone into low-risk investments, such as money market instruments, Treasurys and high grade bonds, turned elsewhere in search of more suitable returns. (In the U.S. today, most endowments and defined-benefit pension funds require annual returns in the range of 7½-8%. It's interesting to note that the notion of required returns is much less prevalent among investing institutions outside the U.S., and where they do exist, the targets are much lower.)
- Whereas I thought while it was raging that the pain of the Crisis would cause investors to remain highly risk-averse for years – and thus to refuse to provide risk capital – by injecting massive liquidity into the economy and lowering interest rates, the Fed limited the losses and forced the credit window back open, rekindling investors' willingness to bear risk.
- The combination of the need for return and the willingness to bear risk caused large amounts of capital to flow to the smaller niche markets for risk assets offering the possibility of high returns in a low-return world. And what are the effects of such flows? Higher prices, lower prospective returns, weaker security structures and increased risk.

In the current financial environment, the number "ten" has taken on particular significance:

- **This month marks the tenth anniversary of Lehman Brothers' bankruptcy filing on September 15, 2008**, and with it the arrival of the terminal melt-down phase of the Crisis.

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- Thanks to the response of the Fed and the Treasury to the Crisis, **the U.S. has seen roughly ten years of artificially low interest rates, quantitative easing and other forms of stimulus.**
- **The resulting economic recovery in the U.S. has entered its tenth year** (and it's worth noting that the longest U.S. recovery on record lasted ten years).
- **The market's upswing from its low during the Crisis is in its tenth year.** Some people define a bull market as a period in which a market rises without experiencing a drop of 20%. On August 22, the S&P 500 passed the point at which it had done so for 3,453 days (113 months), making this the longest bull market in history. (Some quibble, since the market could be said to have risen for 4,494 days in 1987-2000 if you're willing to overlook a decline in 1990 of 19.92% – i.e., not quite 20%. I don't think the precise answer on this subject matters. What we can say for sure is that stocks have risen for a long time.)

What are the implications of these events? I think they're these:

- **Enough time has passed for the trauma of the Crisis to have worn off; memories of those terrible times to have grown dim; and the reasons for stringent credit standards to have receded into the past.** My friend Arthur Segel was head of TA Associates Realty and now teaches real estate at Harvard Business School. Here's how he recently put it: "I tell my students real estate has ten-year cycles, but luckily bankers have five-year memories."
- Investors have had plenty of time to get used to monetary stimulus and reliance on the Fed to inject liquidity to support economic activity.
- While there certainly is no hard-and-fast rule that limits economic recoveries to ten years, it seems reasonable to assume based on history that the odds are against a ten-year-old recovery continuing much longer. (On the other hand, since the current recovery has been the slowest since World War II, it's reasonable to believe there haven't been the usual excesses that require correcting, bringing the recovery to an end. And some observers feel that in the period ahead, a proactive or politicized Fed might well return to cutting interest rates – or at least stop raising them – if weakness materializes in the economy or the stock market.)
- **Finally, it's worth noting that nobody who entered the market in nearly ten years has experienced a bear market or even a really bad year, or seen dips that didn't correct quickly. Thus newly minted investment managers haven't had a chance to learn firsthand about the importance of risk aversion, and they haven't been tested in times of economic slowness, prolonged market declines, rising defaults or scarce capital.**

For the reasons described above, I feel the requirements have been fulfilled for a frothy market as set forth in the citation from my new book on this memo's first page.

- Investors may not feel optimistic, but because the returns available on low-risk investments are so low, they've been forced to undertake optimistic-type actions.
- Likewise, in order to achieve acceptable results in the low-return world described above, many investors have had to abandon their usual risk aversion and move out the risk curve.
- As a result of the above two factors, capital markets have become very accommodating.

Do you disagree with these conclusions? If so, you might not care to read further. But these are my conclusions, and they're the reason for this memo at this time.

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* * *

In memos and presentations over the last 14 months, I've made reference to some specific aspects of the investment environment. These have included:

- the FAANG companies (Facebook, Amazon, Apple, Netflix and Google/Alphabet), whose stock prices incorporated lofty expectations for future growth;
- corporate credit, where the amounts outstanding were increasing, debt ratios were rising, covenants were disappearing, and yield spreads were shrinking;
- emerging market debt, where yields were below those on U.S. high yield bonds for only the third time in history;
- SoftBank, which was organizing a $100 billion fund for technology investment;
- private equity, which was able to raise more capital than at any other time in history; and
- cryptocurrencies led by Bitcoin, which appreciated by 1,400% in 2017.

I didn't cite these things to criticize them or to blow the whistle on something amiss. Rather I did so because phenomena like these tell me the market is being driven by:

- optimism,
- trust in the future,
- faith in investments and investment managers,
- a low level of skepticism, and
- risk tolerance, not risk aversion.

In short, attributes like these don't make for a positive climate for returns and safety. Assuming you have the requisite capital and nerve, the big and relatively easy money in investing is made when prices are low, pessimism is widespread and investors are fleeing from risk. The above factors tell me this is not such a time.

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A Case In Point: Direct Lending

In the years immediately following the Crisis, the banks – which remained traumatized and in many cases were marked by low capital ratios – were reluctant to do much lending. Thus a few bright credit investors began to organize funds to engage in "direct lending" or "private lending." With the banks hamstrung by regulations and limited capital, non-bank entities could be selective in choosing their borrowers and could insist on high interest rates, low leverage ratios and strong asset protection.

Not all investors participated in the early days of 2010-11. But many more got with the program in later years, after private lending had caught on and more managers had organized direct-lending funds to accommodate them. As the *Wall Street Journal* wrote on August 13:

> The influx of money has led to intense competition for borrowers. On bigger loans, that has driven rates closer to banks' and led to a loosening of credit terms. For smaller loans, "I don't think it could become any more borrower friendly than it is today," said Kent Brown, who advises mid-sized companies on debt at investment bank Capstone Headwaters.

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> The market is poised to grow as behemoths and smaller outfits angle for more action. . . . Overall, firms completed fundraising on 322 funds dedicated to this type of lending between 2013 and 2017, **with 71 from firms that had never raised one before**, according to data-provider Preqin. That compares with 85 funds, including 19 first-timers, in the previous five years. (Emphasis added)

And what about the quality of the loans being made? The *Journal* goes on:

> Companies often turn to direct lenders because they don't meet banks' criteria. A borrower may have a one-time blip in its cash flows, have a lot of debt or operate in an out-of-favor sector. . . .
>
> Direct loans are typically floating-rate, meaning they earn more in a rising-rate environment. But borrowers accustomed to low rates may be unprepared for a jump in interest costs on what is often a big pile of debt. That risk, combined with the increasingly lenient terms and the relative inexperience of some direct lenders, could become a bigger issue in a downturn.

Observations like these tempt me to apply what I consider the #1 investment adage: "What the wise man does in the beginning, the fool does in the end." It seems obvious that direct lending is taking place today in a more competitive environment. More people are lending more money today, and they're likely to compete for opportunities to lend by lowering their standards and easing their terms. That makes this form of lending less attractive than it used to be, all else being equal.

Has direct lending reached the point at which it's wrong to do? Nothing in the investment world is a good idea or a bad idea *per se*. **It all depends on when it's being done, and at what price and terms, and whether the person doing it has enough skill to take advantage of the mistakes of others, or so little skill that he or she is the one committing the mistakes.**

At the present time, the managers raising and investing large funds are showing the most growth. But in the eventual economic correction, they may be shown to have pursued asset growth and management fees over the ability to be selective regarding the credits they backed.

Lending standards and credit skills are seldom tested in positive times like we've been enjoying. That's what Warren Buffett had in mind when he said, "It's only when the tide goes out that you learn who has been swimming naked." **Skillful, disciplined, careful lenders are likely to get through the next recession and credit crunch. Less-skilled managers may not.**

<u>Signs of the Times</u>

Unfortunately, there is no single reliable gauge that one can look to for an indication of whether market participants' behavior at a point in time is prudent or imprudent. All we can do is assemble anecdotal evidence and try to draw the correct inferences from it. Here are a few observations regarding the current environment (all relating to the U.S. unless stated otherwise):

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Debt levels:

- "One remarkable feature of the past decade is that between 2007 and 2017, the ratio of global debt to GDP jumped from 179 per cent to 217 per cent, according to the Bank for International Settlements." (*Financial Times*)
- "In the last year Congress has passed a gargantuan tax cut and spending increase that, according to Deutsche Bank, represents the largest stimulus to the economy outside of a recession since the 1960s. It sets the federal debt, already the highest relative to GDP since the 1940s, on an even steeper trajectory [and] stimulates an economy already at or above full employment which could fuel inflation . . ." (*Wall Street Journal*)
- "Debt levels crept up as central banks suppressed [interest rates], with the proportion of global highly-leveraged companies – those with a debt-to-earnings ratio of five times or greater – hitting 37 percent in 2017 compared with 32 percent in 2007, according to S&P Global Ratings." (*Bloomberg*)
- The debt of U.S. non-financial corporations as a percent of GDP has returned to its Crisis level and is near a post-World War II high. (*New York Times*)
- Total leveraged debt outstanding (high yield bonds and leveraged loans) is now $2.5 trillion, exactly double the amount in 2007. Leveraged loans have risen from $500 billion in 2008 to almost $1.1 trillion today. (*S&P Global Market Intelligence*)
- Most of this growth has been in levered loans, not high yield bonds. Whereas the amount of high yield bonds outstanding is roughly unchanged from the end of 2013, leveraged loans are up $400 billion. In the process, we think the risk level has risen in loans while remaining stable in high yield bonds. These trends in loans are due in large part to strong demand from new Collateralized Loan Obligations and other investors seeking floating-rate returns.
- "Some $104.6 billion of new [leveraged] loans were made in May, according to Moody's Investors Service, topping a previous record of $91.4 billion set in January 2017, and the pre-crisis high of $81.8 billion in November 2007." (*Barron's*)
- BBB-rated bonds – the lowest investment grade category – now stand at $1.4 trillion in the U.S. and constitute the largest component of the investment grade universe (roughly 47% in both the U.S. and Europe, up from 35% and 19%, respectively, ten years ago). (*IMF*, *NYT*)
- The amount of CCC-rated debt outstanding currently stands 65% above the record set in the last cycle. (It is, however, down 10% from the peak in 2015, thanks primarily to reduced issuance of CCCs; numerous defaults of energy-related CCCs; and strong demand – largely from CLOs – for first lien loans rated B-, which otherwise might have been unsecured CCC bonds.) (*Credit Suisse*)

Quality of debt:

- The average debt multiple of EBITDA on large corporate loans is just above the previous high set in 2007; the average multiple on large LBO loans is just below the 2007 high; and the average multiple on middle market loans is at a clear all-time high. (*S&P GMI*)
- $375 billion of covenant-lite loans were issued in 2017 (75% of total leveraged loan issuance), up from $97 billion (and 29% of total issuance) in 2007. (*S&P GMI*)
- BB-rated high yield bonds are now coming to market with the looser covenants common in investment grade bonds.
- More than 30% of LBO loans (and more than 50% of M&A loans) incorporate "EBITDA adjustments" these days, versus roughly 7% and 25%, respectively, ten years ago. A mid-

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teens percentage of LBO loans include adjustments of more than 0.5x EBITDA, as opposed to a few percent ten years ago. (*S&P GMI*)

- Loans to raise money for stock buybacks or dividends to equity owners are back to pre-Crisis levels. (*S&P GMI*)
- The all-in yield spread on BB/BB- institutional loans is down to 200-250 basis points, as opposed to roughly 300-400 bps in late 2007/early 2008. Spreads on B+/B loans also have narrowed by 100-150 bps. (*S&P GMI*)

Other observations:

- At the beginning of 2018, 2,296 private equity funds were in fund-raising mode, seeking $744 billion of equity capital. (*FT*) These are all-time highs.
- As of June, SoftBank had been able to raise $93 billion of the $100 billion it sought for its Vision Fund for technology investments, and it was trying to raise $5 billion of the remainder from an incentive scheme for its employees. Lacking capital, the employee pool would borrow it from SoftBank, which in turn hoped to borrow it from Japanese banks. (*FT*)
- Challenged to bid for deals against SoftBank's huge firepower, other venture capital funds are expanding in response. They're seeking capital in much greater amounts than they invested in the past, and investors – attracted by the returns being reported by the best funds – are eager to supply it. Of course this onslaught of money is bound to have a deleterious impact on future returns.
- "According to Crunchbase, there have been 268 [venture capital] mega-rounds ($100 million rounds), invested during the first seven months of this year, almost equal to a record of 273 mega-rounds for the entire year of 2017. And during the month of July alone, there were 50 financing deals totaling $15 billion, which is a new monthly high." (*The Robin Report*)
- From 2005 to 2015, the oil fracking industry increased its net debt by 300 percent, even though, according to Jim Chanos, from mid-2012 to mid-2017 the 60 biggest fracking firms had negative cash flow of $9 billion per quarter. "Interest expenses increased at half the rate debt did because interest rates kept falling," said a Columbia University fellow. (*NYT*)
- Student debt has more than doubled since the Crisis, to $1.5 trillion, and the delinquency rate has risen from 7½% to 11%. (*NYT*)
- Personal loans are surging, too. The amount outstanding reached $180 billion in the first quarter, up 18%. "Fintech companies originated 36% of total personal loans in 2017 compared with less than 1% in 2010, Chicago-based TransUnion said." (*Bloomberg*)
- Emerging market countries have been able to issue vast amounts of debt, much of it repayable in dollars and euros to which they have only limited access. "According to the Bank for International Settlements, . . . the total amount of dollar-based loans [worldwide] has jumped from $5.8 trillion in the first quarter of 2009 to $11.4 trillion today. Of that, $3.7 trillion has gone to emerging markets, more than doubling in that period." (*NYT*)
- In a relatively minor but extreme example, yield-hungry Japanese investors poured several billion dollars into so-called "double-decker" funds that invested in Turkish assets and/or swapped into wrappers denominated in high-yielding (but depreciating) Turkish lira. (*FT*)

Moving on from the general to the specific, I've asked Oaktree's investment professionals, as I did at the time of *The Race to the Bottom*, for their nominees for imprudent deals they've seen. Here's the evidence they provided of a heated capital market and a strong appetite for risk, with their commentary in quotes in a few cases. (Since my son Andrew often reminds me of Warren Buffett's admonition, "praise by name, criticize by category," I won't identify the companies involved.)

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- Capital equipment company A issued debt to finance its acquisition by a private equity fund. "While we thought the initial price talk was far too tight, the deal was oversubscribed and upsized, and the pricing was tightened by 25 bps. Final terms were highly aggressive with covenant-lite structure, uncapped adjustments to EBITDA, and a large debt incurrence capacity." The company missed expectations in the first two quarters after issuance, in reaction to which the first lien loan traded down by as much as five points and the high yield bonds traded down by as much as 15.
- The European market isn't insulated from the trend toward generosity. Company B is a good services company, albeit with exposure to cyclical end-markets; is smaller than its peers; has lower margins, higher leverage and limited cash-generation ability; and went through a restructuring a few years ago. Nevertheless, on the back of adjusted EBITDA equal to 150% of its reported figure, the company was able to issue seven-year bonds paying just over 5%.
- Energy product company C recently went public. Despite a retained deficit of $2.4 billion and an S-1 stating "we have incurred significant losses in the past and do not expect to be profitable for the foreseeable future," its shares were oversubscribed at the IPO price and are now selling 67% higher. One equity analyst says that's a reasonable valuation, since it's 5x estimated 2020 revenues. Another has a target price 25% below the current price, although to get to that valuation the analyst assumes the company will be able to expand its gross margin by 30% a year for the next 12 years and be valued at 6x EBITDA in 2030.
- Over the last two years, company D has spent an amount on buybacks equal to 85% of a year's EBITDA. In part because of the buybacks, the company now has much more debt than it did two years ago. In contrast to the last two years, we estimate that in the seven preceding years, it spent only one-tenth as much on buybacks as in the last two years, at an average purchase price 85% below the more recent average.
- A buyout fund just bought company E, a terrific company, for 15x EBITDA, a very high "headline figure." The price is based on adjusted EBITDA which is 125% of reported EBITDA; thus the transaction price equates to 19x reported EBITDA. Stated leverage is 7x adjusted EBITDA, meaning 9x reported EBITDA. "We aren't saying this will wind up being a bad deal. Just saying that IF this ends up being a bad deal, no one will be surprised. Everyone will say, with the benefit of hindsight, 'they paid way too much and put way too much debt on the balance sheet, and it was doomed out of the gate.' "
- Company F earns substantial EBITDA, but 60% comes from a single unreliable customer, and its growth is constrained by geography. We arrived at a price where we thought it would constitute a good investment for us. But the owners wanted twice as much . . . and they got it from a buyout fund. "We are generally seeing financial sponsors being very aggressive, pricing to perfection with very little room for error, on the back of very liberal lending practices by banks and non-traditional lenders. We all know how this will end."
- A year ago, a buyout fund financed the acquisition of company G by one of its portfolio companies with 100% debt and took out a dividend for itself. The deal was marketed with an adjusted EBITDA figure that was 190% of the company's reported EBITDA. Based on the adjusted figure, total leverage was more than 7x, and based on the reported figure it was 13.5x. The bonds are now trading above par, and the yield spread to worst on the first lien notes is below 250 bps.
- Company H is a good, growing company that we were ready to exit, and our bankers sent out 100 "teasers." We received 35 indications of interest: three from strategic buyers and 32 from financial sponsors. "The strategic buyers offered the lowest valuations; it's always a big warning sign when financial sponsors with no hope of synergies are offering prices much

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higher than strategics." We received four purchase offers from buyout funds, one with the price left blank. We ended up selling at 14x EBITDA, with total leverage of more than 7x.

- In 2017, investors bought over $10 billion of debt from Argentine and Turkish local-currency-earning corporates that now trades, on average, 500 bps wider than at issuance (e.g., at an 11% yield today versus 6% at issue).
- The high point in emerging market debt (or was it the low point?) was Argentina's ability in June 2017 to issue $2.75 billion of oversubscribed 100-year bonds despite a financial history marked by crises in 1980, 1982, 1984, 1987, 1989 and 2001. The bond was priced at 90 for a yield of 7.92%. Now it's trading at 75, implying a mark-down of 17% in 16 months.

Of particular note, David Rosenberg, Oaktree's co-portfolio manager for U.S. high yield bonds, provides an example of post-Crisis restraints being loosened. The government's Leverage Lending Guidelines, "introduced in 2013 to curb excessive risk-taking, capped leverage at 6x – subject to certain conditions – and contributed to less aggressive dealmaking [*sic*] among regulated banks. . . ." Now the head of the Office of the Comptroller of the Currency has indicated, "it's up to the banks to decide what level of risk they are comfortable with in leveraged lending. . . ." Here's what the OCC head said on the subject: "What we are telling banks is you have capital and expected loss models and so if you are reserving sufficient capital against expected losses, then you should be able to make that decision." (The quotes above are from *Debtwire*.) And here's my response: how did that work out last time?

David goes on: "Not surprisingly, bankers have told me they are now testing the waters with 7.5x levered LBOs. **A banker recently told me that for the first time since 2007, he has been in a credit review and heard the credit deputy rationalize approving a risky deal because it is a small part of a larger portfolio so they can afford for it to go wrong, and if they pass on the deal they will lose market share to their competitors**." That sounds an awful lot like "if the music's playing, you've gotta dance." I repeat: how'd that work out last time?

The bottom-line question is simple: does the sum of the above evidence suggest today's market participants are guarded or optimistic? Skeptical or accepting of easy solutions? Insisting on safety or afraid of missing out? Prudent or imprudent? Risk-averse or risk-tolerant? To me, the answer in each case favors the latter, meaning the implications are clear.

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* * *

Before closing, I want to share my view that equities are priced high but (other than a few specific groups, such as technology and social media) not extremely high – especially relative to other asset classes – and are unlikely to be the principal source of trouble for the financial markets. I find the position of equities today similar to that in 2005-06, from which they played little or no role in precipitating the Crisis. (Of course, that didn't exempt equity investors from pain; they were hit nevertheless with declines of more than 50%.)

Instead of equities, the main building blocks for the Crisis of 2007-08 were sub-prime mortgage backed securities, other structured and levered investment products fashioned from debt, and derivatives, all examples of financial engineering. In other words, not securities and debt instruments themselves, but the uses to which they were put.

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This time around, it's mainly public and private debt that's the subject of highly increased popularity, the hunt by investors for return without commensurate risk, and the aggressive behavior described above. Thus it appears to be debt instruments that will be found at ground zero when things next go wrong. As often, *Grant's Interest Rate Observer* puts it well:

> Naturally, the lowest interest rates in 3,000 years have made their mark on the way people lend and borrow. Corporate credit, as [Wells Fargo Securities analyst David] Preston observes, is "lower-rated and higher-levered. This is true of investment-grade corporate debt. This is true in the loan market. This is true in private credit."
>
> So corporate debt is a soft spot, perhaps *the* soft spot of the cycle. It is vulnerable not in spite of, but because of, resurgent prosperity. The greater the prosperity (and the lower the interest rates), the weaker the vigilance. It's the vigilance deficit that crystalizes the errors that lead to a crisis of confidence.

Conditions overall aren't nearly as bad as they were in 2007, when banks were levered 32-to-1; highly levered investment products were being invented (and swallowed) daily; and financial institutions were investing heavily in investment vehicles built out of sub-prime mortgages totally lacking in substance. **Thus I'm not describing a credit bubble or predicting a resulting crash.** But I do think this is the kind of environment – marked by too much money chasing too few deals – in which investors should emphasize caution over aggressiveness.

On the other hand – and in investing there's always another hand – there is little reason to think today's risky behavior will result in defaults and losses until we see serious economic weakness. And there's certainly no reason to think weakness will arrive anytime soon. The economy, growing but relatively free of excesses, feels right now like it could go on a good bit longer.

But on the third hand, the possible effects of economic overstimulation, increasing inflation, contractionary monetary policy, rising interest rates, rising corporate debt service burdens, soaring government deficits and escalating trade disputes do create uncertainty. And so it goes.

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* * *

Being alert for the ability of others to issue flimsy securities and execute fly-by-night schemes is a big part of what I call "taking the temperature of the market." By also incorporating awareness of historically high valuations and euphoric investor attitudes, taking the temperature can give us a sense for whether a market is elevated in its cycle and it's time for increased defensiveness.

This process can give you a sense that the stage is being set for losses, although certainly not when or to what extent a downturn will occur. Remember that *The Race to the Bottom*, which in retrospect seems to have been correct and timely, was written in February 2007, whereas the real pain of the Global Financial Crisis didn't set in until September 2008. Thus there were 19 months when, according to the old saying, "being too far ahead of one's time was indistinguishable from being wrong." In investing we may have a sense for what's going to happen, but we never know when.

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Thus the best we can do is turn cautious when the situation becomes precarious. We never know for sure when – or even whether – "precarious" is going to turn into "collapse."

To close, I'm going to recycle two of the final paragraphs of *The Race to the Bottom*. Doing so permits me to provide an excellent example of history's tendency to rhyme:

> Today's financial market conditions are easily summed up: There's a global glut of liquidity, minimal interest in traditional investments, little apparent concern about risk, and skimpy prospective returns everywhere. Thus, as the price for accessing returns that are potentially adequate (but lower than those promised in the past), investors are readily accepting significant risk in the form of heightened leverage, untested derivatives and weak deal structures. . . .
>
> This memo can be recapped simply: there's a race to the bottom going on, reflecting a widespread reduction in the level of prudence on the part of investors and capital providers. No one can prove at this point that those who participate will be punished, or that their long-run performance won't exceed that of the naysayers. But that is the usual pattern.

It's now eleven years later, but I can't improve on that.

I'm absolutely not saying people shouldn't invest today, or shouldn't invest in debt. Oaktree's mantra recently has been, and continues to be, "move forward, but with caution." The outlook is not so bad, and asset prices are not so high, that one should be in cash or near-cash. The penalty in terms of likely opportunity cost is just too great to justify being out of the markets.

But for me, the import of all the above is that investors should favor strategies, managers and approaches that emphasize limiting losses in declines above ensuring full participation in gains. You simply can't have it both ways.

Just about everything in the investment world can be done either aggressively or defensively. In my view, market conditions make this a time for caution.

September 26, 2018

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Memo to: Oaktree Clients

From: Howard Marks

Re: Investing Without People

Over the last twelve months I've devoted three memos to discussing macro developments, market outlook, and recommendations for investor behavior. These are important topics, but usually not the ones that interest me most; I prefer to discuss things that are likely to affect the functioning of markets for years to come. Since little in the environment has changed from what I described in those three memos, I feel I now have the liberty to turn to some bigger-picture issues.

This memo covers three ways in which securities markets seem to be moving toward reducing the role of people: (a) index investing and other forms of passive investing, (b) quantitative and algorithmic investing, and (c) artificial intelligence and machine learning.

Before diving in, I want to state loud and clear that I don't claim to be an expert on these subjects. I've watched the first for decades; I've recently learned a little about the second; and I'm trying to catch up regarding the third. On the other hand, since many of the "experts" in these fields are involved in them, I think they may be biased favorably toward them as potential successors to traditional active investing. What follow are just my opinions; as always you should make of them what you wish.

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Passive Investing and ETFs

I've told this story many times, but I want to repeat it here to lay a foundation for what follows. I arrived at the University of Chicago Graduate School of Business (not yet the Booth School) just over 50 years ago, in September 1967. The "Chicago school" of finance and investment theory – largely developed there in the early '60s – had just begun to be taught. It was methodically constructed on theoretical underpinnings, as well as on a healthy dose of skepticism regarding what investors had been doing previously.

One of the major foundational components was the "Efficient Market Hypothesis" and its conclusion that "you can't beat the market." First there was the logical argument: it seemed obvious that collectively all investors have to do average before fees and expenses, and thus below average after. And then there was the empirical evidence that for decades most mutual funds had performed behind stock indices like the Standard & Poor's 500.

My professors' response in the late 1960s was simple, albeit hypothetical and fanciful: why not just buy shares in every company in an index? Doing so would allow investors to avoid the mistakes most people made, as well as the vast majority of the fees and costs associated with their efforts. And at least they would be assured of performing in line with the index, not behind it. As far as I know, no one invested that way at the time and there were no publicly available vehicles for doing so: no "index funds" and no "passive investing." I don't think the terms even existed. But the

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logic was clear and convincing, per the following citation from Wikipedia (with apologies to Richard Masson, my conscience regarding sources, for relying on it):

> In 1973, Burton Malkiel wrote *A Random Walk Down Wall Street*, which presented academic findings for the lay public. It was becoming well known in the lay financial press that most mutual funds were not beating the market indices. Malkiel wrote:
>
> > What we need is a no-load, minimum management-fee mutual fund that simply buys the hundreds of stocks making up the broad stock-market averages and does no trading from security to security in an attempt to catch the winners. **Whenever below-average performance on the part of any mutual fund is noticed, fund spokesmen are quick to point out "You can't buy the averages." It's time the public could.**
> >
> > . . . there is no greater service [the New York Stock Exchange] could provide than to sponsor such a fund and run it on a nonprofit basis. . . . Such a fund is much needed, and if the New York Stock Exchange (which, incidentally has considered such a fund) is unwilling to do it, I hope some other institution will. (Emphasis added)

The first index fund appeared around that time. Again according to Wikipedia, the registration statement for the Qualidex Fund, designed to track the Dow Jones Industrial Average, became effective in 1972. I have no reason to believe it attracted many investors.

But then Jack Bogle formed the Vanguard Group in 1974, and Vanguard's First Index Investment Trust went operational on the last day of 1975.

> At the time, it was heavily derided by competitors as being "un-American" and the fund itself was seen as "Bogle's folly." Fidelity Investments Chairman Edward Johnson was quoted as saying that he "[couldn't] believe that the great mass of investors are going to be satisfied with receiving just average returns." Bogle's fund was later renamed the Vanguard 500 Index Fund, which tracks the Standard & Poor's 500 Index. It started with comparatively meager assets of $11 million but crossed the $100 billion milestone in November 1999. (Wikipedia)

The merits of index investing are obvious: vastly reduced management fees, minimal trading and related market impact and expenses, and the avoidance of human error. **Thus index investing is a "can't lose" strategy: you can't fail to keep up with the index. Of course it's also a "can't win" strategy, since you also can't beat the index (the two tend to go together).**

Index or passive investing got off to a relatively slow start. In the early years, I feel it was treated as a bit of an oddity or sideline: perhaps a candidate to take the place of one or two of an institutional investor's active managers. As they did with many potential alternatives to traditional stock and bond investing – such as emerging market stocks, private equity, venture capital, high yield bonds, distressed debt, timber and precious metals – some institutions put a smattering of capital into index funds, but rarely enough to meaningfully alter the performance of their overall portfolios. Few

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institutions if any made passive investing a substantial part of their portfolios: thus it added a little spice but wasn't a main dish.

The empirical evidence of assets continuing to flow to passive management suggests that many active managers are still falling short of the indices. There have been lots of years in the last dozen in which the shortfall has been pronounced, and I'm not aware of many that were the reverse. As a result, the trend toward passive investing has steadily gained momentum (e.g., the Vanguard 500 Index Fund now stands at $410 billion). According to data from Morningstar, roughly similar amounts went into active and passive equity mutual funds from 2005 through 2011, but the flows into passive funds accelerated in 2012, while the inflows to active funds began to decline and, in 2015, turned into outflows. According to the *Los Angeles Times*, April 9, 2017:

> Conventional U.S. stock mutual funds that invest passively now hold $1.9 trillion in assets, triple what they had in 2007. Add in the $1.7 trillion in U.S. equity exchange-traded funds, another type of index portfolio, and the total in passive funds accounts for 42% of all U.S. stock fund assets — up dramatically from 24% in 2010 and just 12% in 2000.

These figures apply mostly to "retail" investments, leaving out institutional portfolios where passive investing also has grown dramatically. Rather than being an exotic add-on with a few percent of a portfolio's assets, passive investing is now mainstream among institutions, perhaps often accounting for 20% or so of total assets.

Given the *L.A. Times* quote above, I want now to introduce ETFs, or exchange-traded funds. In the 1990s, money managers came up with a new way to offer participation in the markets, in competition with index mutual funds. Whereas investors can only invest in or redeem from mutual funds at the close of trading each day, when the daily closing net asset value (or NAV) is calculated, ETFs can be bought or sold like company shares anytime exchanges are open. The ability to transact much more freely has attracted a lot of attention to ETFs. And while index ETFs gave this new field its start and still represent the vast bulk of ETFs, there are many other types these days.

In the late 20th century, "index investing" and "passive investing" were synonymous: vehicles designed to passively emulate market indices. But now there's a difference. Today this is called index investing. Passive investing has grown to include not just index funds and index ETFs, but also "smart-beta" ETFs that invest according to portfolio construction rules. Think of them as actively designed, rules-based vehicles. Once the rules are set, they're followed without discretion. As I wrote a year ago:

> [To grow their businesses], ETF sponsors have been turning to "smarter," not-exactly-passive vehicles. Thus ETFs have been organized to meet (or create) demand for funds in specialized areas such as various stock categories (value or growth), stock characteristics (low volatility or high quality), types of companies, or geographies. There are ETFs for people who want growth, value, high quality, low volatility and momentum. Going to the extreme, investors can now choose from funds that invest passively in companies that have gender-diverse senior management, practice "biblically responsible investing," or focus on medical marijuana, solutions to obesity, serving millennials, and whiskey and spirits.

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> But what does "passive" mean when a vehicle's focus is defined so narrowly? **Each deviation from the broad indices introduces definitional issues and non-passive, discretionary decisions.** Passive funds that emphasize stocks reflecting specific factors are called "smart-beta funds," but who can say the people setting their selection rules are any smarter than the active managers who are so disrespected these days? Steven Bregman of Horizon Kinetics calls this "semantic investing," meaning stocks are chosen on the basis of labels, not quantitative analysis. [For example, he points out that because it's so big and liquid, Exxon Mobil is included in both growth and value ETFs.] There are no absolute standards for which stocks represent many of the characteristics listed above. ("There They Go Again . . . Again" July 2017)

According to Wikipedia, "as of January 2014, there were over 1,500 ETFs traded in the U.S. . . ." That compares with 3,599 stocks in the Wilshire 5000 Total Market Index (per *Barron's*). To me, the number and variety of ETFs serves as a reminder of the financial industry's customary eagerness to accommodate people's desire in good times to "get action" in the markets. And how else should we view the levered ETFs that have been designed to appreciate or depreciate by a multiple of what an index does?

That's the background. Now I'm going to turn to the implications of passive investing and its increasing popularity. **The first question is, "Is passive investing wise?"**

In passive investing, no one at the fund is studying companies, assessing their potential, or thinking about what stock price is justified. And no one's making active decisions as to whether particular stocks should be included in a portfolio and, if so, how they should be weighted. They're just emulating the index.

Is it a good idea to invest with absolutely no regard for company fundamentals, security prices or portfolio weightings? Certainly not. But passive investing dispenses with this concern by counting on active investors to perform those functions. The key lies in remembering why it is that the Efficient Market Hypothesis says active management can't work, and thus why it expects everyone (good or bad luck aside) to just end up with a return that's fair for the risk borne . . . no more and no less. I touched on this in "There They Go Again . . . Again," which will be the source for the next three citations:

> **. . . the wisdom of passive investing stems from the belief that the efforts of active investors cause assets to be fairly priced – that's why there are no bargains to find.**

And where do the weightings of the stocks in indices come from? From the prices assigned to stocks by active investors. **In short, in the world view that gave rise to index and passive investing, active investors do the heavy lifting of security analysis and pricing, and passive investors freeload by holding portfolios determined entirely by the active investors' decisions.** There's no such thing as a capitalization weighting to emulate in the absence of active investors' efforts.

The irony is that it's active investors – so derided by the passive investing crowd – who set the prices that index investors pay for stocks and bonds, and thus who establish the market

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capitalizations that determine the index weightings of securities that index funds emulate. If active investors are so devoid of insight, does it really make sense for passive investors to follow their dictates?

And what happens if active investors quit doing that job? **Thus the second question is, "What are the implications of passive investing for active investing?"** If widespread active investing makes it impossible for active investing to succeed (by making markets too efficient and security prices too fair, per the Efficient Market Hypothesis), will the increasing prevalence of passive investing make active investing once again potentially profitable?

> **. . . what happens when the majority of equity investment comes to be managed passively?** Then prices will be freer to diverge from "fair," and bargains (and over-pricings) should become more commonplace. This won't assure success for active managers, but certainly it will satisfy a necessary condition for their efforts to be effective.

How much of the investing that takes place has to be passive for price discovery to be insufficient to keep prices aligned with fair values? No one knows the answer to that. Right now about 40% of all equity mutual fund capital is invested passively, and the figure may be moving in that direction among institutions. That's probably not enough; most money is still managed actively, meaning a lot of price discovery is still taking place. Certainly 100% passive investing would suffice: **can you picture a world in which nobody's studying companies or assessing their stocks' fair value? I'd gladly be the only investor working in that world.** But where between 40% and 100% will prices begin to diverge enough from intrinsic values for active investing to be worthwhile? That's the question. I don't know, but we may find out . . . to the benefit of active investing.

The third key question is: **"Does passive and index investing distort stock prices?"** This is an interesting question, answerable on several levels.

The first level concerns the relative prices of the stocks in a capitalization-weighted index. People often ask whether inflows of capital into index funds cause the prices of the heaviest-weighted stocks in the index to rise relative to the rest. I think the answer is "no." Suppose the market capitalizations of the stocks in a given index total $1 trillion. Suppose further that the capitalization of one popular stock in the index – perhaps one of the FAANGs – is $80 billion (8% of the total) and that of a smaller, less-adored one is $10 billion (1%). That means for every $100,000 in an index fund, $8,000 is in the former stock and $1,000 is in the latter. It further means that for every additional $100 that's invested in the index, $8 will go into the former and $1 into the latter. Thus the buying in the two stocks occasioned by inflows shouldn't alter their relative pricing, since it represents the same percentage of their respective capitalizations.

But that's not the end of the story. The second level of analysis concerns stocks that are part of the indices versus those that aren't. Clearly with passive investing on the rise, more capital will flow into index constituents than into other stocks, and capital may flow out of the stocks that aren't in indices in order to flow into those that are. It seems obvious that this can cause the stocks in the indices to appreciate relative to non-index stocks for reasons other than fundamental ones.

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The third level concerns stocks in smart-beta funds. The more a stock is held in non-index passive vehicles receiving inflows (*ceteris paribus*, or everything else being equal), the more likely it is to appreciate relative to one that's not. And stocks like Amazon that are held in a large number of smart-beta funds of a variety of types are likely to appreciate relative to stocks that are held in none or just a few.

What all the above means is that for a stock to be added to index or smart-beta funds is an artificial form of increased popularity, and it's relative popularity that determines the relative prices of stocks in the short run.

> The large positions occupied by the top recent performers – with their swollen market caps – mean that as ETFs attract capital, they have to buy large amounts of these stocks, further fueling their rise. **Thus, in the current up-cycle, over-weighted, liquid, large-cap stocks have benefitted from forced buying on the part of passive vehicles, which don't have the option to refrain from buying a stock just because its overpriced.**
>
> **Like the tech stocks in 2000, this seeming perpetual-motion machine is unlikely to work forever.** If funds ever flow out of equities and thus ETFs, what has been disproportionately bought will have to be disproportionately sold. **It's not clear where index funds and ETFs will find buyers for their over-weighted, highly appreciated holdings if they have to sell in a crunch. In this way, appreciation that was driven by passive buying is likely to eventually turn out to be rotational, not perpetual.**

The vast growth of ETFs and their popularity has coincided with the market rally that began roughly nine years ago. Thus we haven't had a meaningful chance to see how they function on the downside. Might the inclusion and overweighting in ETFs of market darlings – a source of demand that may have driven up their prices – be a source of stronger-than-average selling pressure on the darlings during a retreat? Might it push down their prices more and cause investors to turn increasingly against them and against the ETFs that hold them? **We won't know until it happens, but it's not hard to imagine the popularity that fueled the growth of ETFs in good times working to their disadvantage in bad times.**

Question number four: **"Can the process of investing in indices be improved relative to simply buying the stocks in proportion to their market capitalizations, as the indices are constituted?"** For many years my California-based friend Rob Arnott of Research Affiliates has argued for passive investing on the basis of fundamentally based indices as opposed to market-weighted indices. Rob is one of the real thinkers in our field, and I won't try to recount his entire argument or do it justice.

Suffice it to say, however, that a given company with a given amount of earnings will have a greater market capitalization the higher its price/earnings ratio is . . . that is, the more it's loved. **Thus, everything else being equal (there's that *ceteris paribus* again), the heavier-weighted stocks in an index are likely to be the more highly priced ones.** Do you want to put more of your index-investing money into the more expensive stocks or the ones that are cheaper? I'd rather do the latter. Thus it makes sense to invest in the index stocks in proportion to something like their earnings, not their market caps.

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Question number five: **"Is there anything innately wrong with ETFs and their popularity?"** ETFs are just another vehicle for buying stocks and bonds. They're neither good nor bad *per se*. But there is a way in which I worry about ETFs' impact, and it has to do with the expectations of the people who invest in them.

My thinking goes back to the reason ETFs gained popularity in the first place: the ability to buy or sell them anytime the market is open. I'd bet a lot of the people who make use of ETFs do so for the simple reason that they think they're "more liquid." There are a couple of problems with this.

First, as I wrote in "Liquidity" (March 2015), the fact that something is able to be sold legally, or the fact that there's a market for it, can be very different from the fact that it can always be sold at a price that's intrinsically fair or close to the last price at which it sold. If bad news or a downturn in investor psychology causes the market to drop, invariably there'll be a price at which an ETF holder can sell, but it may not be a "good execution." **The price received may represent a discount from the value of the underlying assets, or it may be less than it would have been if the market were functioning on an even keel.**

If you withdraw from a mutual fund, you'll get the price at which the underlying stocks or bonds closed that day, the net asset value or NAV. But the price you get when you sell an ETF – like any security on an exchange – will only be what a buyer is willing to pay for it, and I suspect that in chaos, that price could be less than the NAV of the underlying securities. Mechanisms are in place that their designers say should prevent the ETF price from materially diverging from the underlying NAV. But we won't know if "should" is the same as "will" until the mechanisms are tested in a serious market break.

Some people may have invested in ETFs in the mistaken belief that they're inherently more liquid than their underlying assets. For example, high yield bond ETFs have been very popular, probably because it's far easier to buy an ETF than to assemble a portfolio of individual bonds. But what's the probability that in a crisis, a high yield bond ETF will prove more liquid than the underlying bonds (which themselves are likely to become quite illiquid)? The weakness lies in the assumption that a vehicle can provide more liquidity than is provided by its underlying assets. **There's nothing wrong with the fact that ETFs may prove illiquid. The problem will arise if the people who invested in them did so with the expectation of liquidity that isn't there when they need it.**

In March I noticed a Bloomberg story about the $900 million BTS Tactical Fixed Income Fund managed by Matt Pasts, which on February 9 went from "almost entirely in junk bonds" to fully in cash:

> [BTS] employs no credit analysts to study the fundamentals of bonds. Pasts is a market timer, trying to suss out whether the whole high-yield asset class is going to rise or fall in value. He watches trend and momentum measures, such as the moving average of the price of exchange-traded funds that track the junk bond market. When not in junk, BTS is either in Treasuries or cash.
>
> Trading completely in and out of the market is simple for BTS because the fund doesn't directly hold the bonds. Instead, it has the unusual strategy for a fund of

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investing almost entirely via ETFs. In late January, before it sold, BTS had about 95% of its assets in the two largest junk-bonds ETFs.

Leaving aside the question of whether a manager can add value by predicting the short-run direction of a market – about which I would be highly skeptical – **I think one of these days, this investor may want to execute a trade that wouldn't be doable in the "real" high yield bond market, and he'll find that it can't be done via ETFs either.** In short, building a strategy around the assumption that ETFs can always be counted on to quickly get you into or out of an illiquid market at a fair price seems unrealistic to me. The truth on this will become clear when the tide goes out.

* * *

Passive/index investing got its start because of a view that the stock market would grind on as it always had, with active investors setting "proper" prices for securities. That would enable passive investors to participate in the markets – assembling portfolios that mimic the indices and "free-riding" on the work and price discovery performed by active investors – without picking up their share of the analytical tab.

But that misses the reality behind George Soros's Theory of Reflexivity: that the actions of market participants change the market. Nothing in a market always continues, independent and unchanged. A market is nothing more than the people in it and the decisions they make, and the behavior of those people shapes the market. When people invest more in certain stocks than others, the prices of those stocks rise in relative terms. And when everyone decides to refrain from performing the functions of analysis, price discovery and capital allocation, the appropriateness of market prices can go out the window (as a result of passive investing, just as it does in a mindless boom or bust). **The bottom line is that the wisdom of investing passively depends, ironically, on some people investing actively. When active investing is dismissed totally and all active efforts cease, passive investing will become imprudent and opportunities for superior returns from active investing will reemerge**. At least that's the way I see it.

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Quantitative Investing

My next topic – which, as I said, I'm just learning about (and thus I write with some trepidation) – goes by names such as quantitative, algorithmic and systematic investing. In this memo I'll use the first of those. As I understand it, quantitative investing consists of establishing a set of rules (perhaps with help from a computer) and having a computer carry them out.

There are at least two principal forms of quantitative investing. The first might be called "systematic factor investing." The process goes like this:

- The manager conducts an examination of a period in history, which shows that superior returns were associated with certain "factors." Factors are attributes that characterize securities, such as value, quality, size and momentum. Perhaps in a given period the stocks that did best were characterized by strong value, high quality, large capitalizations and recent

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appreciation (or "momentum"). Thus the manager concludes that his portfolio should consist of stocks that rank high in those factors. (Of course those factors don't always lead to above average returns; if things change, growth, low quality, smallness and recent under-performance might be associated with superior returns instead.)

- The manager instructs its computer to search for securities that offer the most of those factors for the money. Thus, for example, the computer might search for value based on measures including price/earnings ratio, enterprise value/EBITDA ratio, price/book ratio and price/free cash flow ratio, as well as industry-specific metrics such as the ratio of price to reserves for oil companies.
- Then the manager tells the computer in what proportion to weight the search criteria, and the computer proceeds systematically to populate the portfolio with securities that deliver the optimal mix of the factors.
- Finally, the computer is instructed to assess the attendant risk. The portfolio is optimized, constraining even the most attractive components in order to limit the representation of individual stocks and perhaps industries, as well as the risk introduced by likely correlations among the stocks. The portfolio is formulaically derived according to the rules, usually without human intervention.

The end product of this process is a portfolio that, according to the algorithm, will deliver the highest expected return with the least risk (under the assumption that the factors associated with superior returns in the past will continue to be so associated in the future, and that assets will be volatile and correlated as in the past).

The other main form of quantitative investing is "statistical arbitrage" or "stat arb." For an example of stat arb, let's assume an investor wants to buy 100,000 shares of XYZ, and the market for that stock is "one cent wide" at $20.00/20.01 (perhaps 5,000 shares are bid for at $20.00 and 8,000 shares are offered at $20.01). The broker takes the 8,000 shares offered at $20.01. The next offering is 6,000 shares at $20.02, and the broker takes those. Then a seller offers 5,000 shares at $20.03, and the broker takes those as well. This buying may move the market to $20.03/20.04.

A quant's computer takes note of the fact that the market has moved up and stock has been bought at progressively higher prices.

- If other stocks haven't moved in similar fashion, the computer concludes that these events are "idiosyncratic" – related to that one stock – rather than "systematic," or present throughout the market.
- If that stock's price has moved up idiosyncratically and there's no news from the company to explain it, the computer concludes the price move took place because of investor buying, not fundamental developments.
- The computer considers the price move a short-term dislocation that resulted from the broker's efforts to fill the investor's order.
- It also decides on the basis of the trading to date, the current market, and the status of the order book that buying for that purpose is likely to continue to take place at prices above where the stock would be in the absence of that buying.
- Thus the computer decides the quant should "short" stock (sell stock the quant doesn't own) to the buyer who's elevating its price, on the assumption that the quant will be able to cover

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later, when the buying has stopped and the price has receded. It might be possible to sell stock today at $20.03 or $20.04 that can be bought back at $20.00 or 20.01 in a few days.

- Thus the quant provides liquidity that otherwise wouldn't exist and is willing to carry positions overnight. In exchange the quant gets a couple pennies more for the stock he supplies than he'll have to pay to buy it back.

We might say that for the most part, the stat arb computer responds to disequilibria between the price of one stock and the prices of other stocks or the market as a whole, and it acts on the assumption that the relationships will revert to normal. The pennies made aren't a big deal (perhaps a 0.1% profit in the above example), and as Renaissance Technologies said in a statement to a Senate subcommittee in 2014 concerning its core Medallion fund, "The model developed by Renaissance . . . makes predictions that are profitable only slightly more often than not." But if you do it often enough and on enough leverage, stat arb can produce meaningful returns on equity.

This is like what Long-Term Capital Management did in the late 1990s, looking for statistical divergences that could be arbitraged. One of its executives described what it did as going around the world picking up nickels and dimes. But in 1998, LTCM's enormously levered portfolio encountered an improbably long period in which, rather than converging, the relationships diverged further. Mark-to-market losses caused Long-Term's lenders to require the posting of additional capital; unable to do so, the fund melted down; and securities industry leaders had to take on its portfolios. It turned out that LTCM had been picking up nickels and dimes in front of a steamroller, and the steamroller caught up with it.

Among the lessons learned in the LTCM experience were that (a) the opportunities for stat arb are limited in size, (b) the capital directed at it must likewise be limited, (c) the leverage employed must be reasonable in order for the investor to survive those periods when historic relationships and probabilities fail to hold, and (d) likewise, it's important to appropriately hedge out the market's overall directional risk.

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* * *

Quantitative investors program their computers to emulate behavior that was profitable in the past or that is expected to be profitable in the future. In other words, they set rules or formulas for their computers to live by. The key question is whether, in a competitive, dynamic and interconnected arena like investing, the route to profitability can be captured in a formula, and whether changes in the investment environment (perhaps caused by the very implementation of the formula) won't negate the formula's effectiveness.

Just the other day, I got an email from Rosalie J. Wolf, a former CIO and consultant to some of our clients' boards, asking which memo contained a quote she likes to use. It turned out to be from "Dare to be Great" (September 2006), and ironically it's extremely relevant to the question raised above:

> How can we achieve superior investment results? The answer is simple: not only am I unaware of any formula that alone will lead to above average investment

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performance, but I'm convinced such a formula cannot exist. According to one of my favorite sources of inspiration, the late John Kenneth Galbraith:

> There is nothing reliable to be learned about making money. If there were, study would be intense and everyone with a positive IQ would be rich.

Of course there can't be a roadmap to investment success. First, the collective actions of those following the map would alter the landscape, rendering it ineffective. And second, everyone following it would achieve the same results, and people would still look longingly at the top quartile . . . the route to which would have to be found through other means.

Before going further, let me elaborate on my skepticism regarding the potential for a formula that alone will lead to above average investment performance.

First, while there are ways to invest that I think can't work, there also are exceptional people who succeed at them. I include here active trading, macro investing and quantitative investing. As for the last, Renaissance Technologies and Two Sigma enjoy excellent reputations for their performance. My mother used to say, "It's the exception that proves the rule." She meant, for example, the fact that only a tiny number of people can do something proves that most people can't. So while I wouldn't say my skepticism is always justified, I do think it's generally appropriate. By definition it doesn't make sense to think large numbers of people can arrive at formulas that produce exceptional performance.

Second, the key word is "alone." Any old formula cannot unlock the secret of investment success. **An exceptional formula, arrived at on the basis of exceptional intelligence and insight, conceivably can do the job, although maybe just for a limited time.**

It seems obvious that a formula's application and popularization eventually will bring an end to its effectiveness. Let's say (in an incredibly simplified example) your study of the market shows that small-company stocks have beaten the market over a given period, so you overweight them.

a) Since "beating the market," "out-appreciating" and "out-performing" often are just the flip side of "becoming relatively expensive," I doubt any group of stocks can outperform for long without becoming fully- or over-priced, and thus primed for underperformance.
b) And it seems equally clear that eventually others will detect the same "small-cap effect" and pile into it. In that case, small-cap investing will become widespread and – by definition – no longer a source of superiority.

To reiterate, George Soros's Theory of Reflexivity says the behavior of market participants alters the market. Thus no formula will be a winner forever. For me, that means the achievement of superior returns through quantitative investing requires the ability to constantly and correctly update the formula. **Since investing is dynamic, the rules relied on in quantitative investing have to be dynamic.**

According to Raj Mahajan of Goldman Sachs, my principal tutor on these matters, "The best models today will change exposures as the environment changes and as the dynamics of the factors change

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(e.g., as they become cheaper or more expensive). The rules have become increasingly complex, and they are able to 'learn' (that is, they are 'conditional' or 'contextual') in that they understand more of the environment." **Constant renewal – not "a formula alone" – seems to be a minimum requirement for any quants' long-term success.**

* * *

It seems to me that while the members of both fraternities might reject the comparison, quantitative investing has some things in common with smart-beta ETF investing:

- Both are rules-based, pursuing the attributes the managers want in their holdings.
- In both, once the rules are set, the humans (largely) take their hands off the wheel and leave implementation up to computers.

The main differences I see – and they are very substantial – are that:

- There's much more trading in quantitative investing. Since index funds and ETFs are "passive" and thus indifferent to company fundamentals and the attractiveness of security prices, they largely buy and hold. On the other hand, quantitative investors' computers constantly recheck their portfolios against the algorithms or rules.
- The quantitative process is much more . . . quantitative. As Steven Bregman said, smart-beta ETFs buy based on "semantics": on how securities are labeled (without any quantitative standards for membership in groups). Quantitative investors, on the other hand, do so based on quantitative assessment of securities' fundamentals and price.

In closing on the subject of quantitative investing, I want to mention a few issues related to timeframe (some of them suggested by my son Andrew).

- Most quantitative investing is a matter of taking advantage of standard patterns (the factors that have been correlated with outperformance) and normal relationships (like the usual ratio of one stock's price to another's or to the market).
- Quants invest on the basis of historic data regarding these things. But what will happen if patterns and relationships are different in the future from those of the past?
- Is it important that most quantitative investors have operated only in periods when interest rates were declining, inflation was low and volatility was low, and when the trends in these regards were fairly stable? **Will their approaches prove dynamic enough to adjust if rates, inflation and volatility rise or become more variable? And if they do rise or become more variable, what historic data will quants use in their rule-making?**
- Likewise, is it significant that there's limited history of investment performance in periods influenced by quants? **In other words, will increased quantitative investing influence the effectiveness of quantitative investing, and thus alter the requirements for success?**

We'll see, but certainly it can't be said that most quantitative investors are proven in these regards.

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Artificial Intelligence and Machine Learning

Since I'm now well beyond the limits of my technological expertise, I'm going to rely on Wikipedia again to introduce a discussion of these next topics:

> Artificial intelligence is intelligence demonstrated by machines, in contrast to the natural intelligence displayed by humans and other animals. In computer science AI research is defined as the study of "intelligent agents": any device that perceives its environment and takes actions that maximize its chance of successfully achieving its goals. Colloquially, the term "artificial intelligence" is applied when a machine mimics "cognitive" functions that humans associate with other human minds, such as "learning" and "problem solving."
>
> . . . Capabilities generally classified as AI as of 2017 include successfully understanding human speech, competing at the highest level in strategic game systems (such as chess and Go), autonomous cars, intelligent routing in content delivery network and military simulations.
>
> . . . The traditional problems (or goals) of AI research include reasoning, knowledge representation, planning, learning, natural language processing, perception and the ability to move and manipulate objects.

In other words, artificial intelligence means the ability of machines to think. Quantitative investing consists of giving computers instructions to follow. But a computer with artificial intelligence can figure out what to do for itself. As *Investor's Business Daily* put it on May 10, "AI uses computer algorithms to replicate the human ability to learn and make predictions."

Bernard Marr goes on in *Forbes* (December 6, 2016) to make the distinction between artificial intelligence and machine learning:

> In short, the best answer is that Artificial Intelligence is the broader concept of machines being able to carry out tasks in a way that we would consider "smart."
>
> And Machine Learning is a current application of AI based around the idea that we should really just be able to give machines access to data and let them learn for themselves. . . .
>
> Two important breakthroughs led to the emergence of Machine Learning as the vehicle which is driving AI development forward with the speed it currently has.
>
> One of these was the realization – credited to Arthur Samuel in 1959 – that rather than teaching computers everything they need to know about the world and how to carry out tasks, it might be possible to teach them to learn for themselves.
>
> The second, more recently, was the emergence of the internet, and the huge increase in the amount of digital information being generated, stored, and made available for analysis.

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> Once these innovations were in place, engineers realized that **rather than teaching computers and machines how to do everything, it would be far more efficient to code them to think like human beings, and then plug them into the internet to give them access to all of the information in the world.** (Emphasis added)

So, as this non-techie sees it, AI can enable machine learning whereby computers sift through huge amounts of data and discern the route to success. They don't have to be fed rules as in quantitative investing; **they figure out the rules for themselves.**

(One of the ways the best chess players become Grand Masters is by studying past chess matches, watching the moves that were made, and remembering what move was most successful in each situation, and the best response to that move. But there are obvious limits to the number of games a person can study and the number of moves that can be remembered. That's the thing: a powerful-enough computer can review every game that's ever been played, assess the consequences of every move, and decide on moves that will lead to success. Thus computers are beating Grand Masters these days, and no one's surprised anymore when they do.)

Machine learning is still in its infancy. It may be that AI and machine learning will someday permit computers to act as full participants in the markets, analyzing and reacting in real time to vast amounts of data with a level of judgment and insight equal to or better than many investors. But I doubt it will be anytime soon, and Soros's Theory of Reflexivity reminds us that all those computers are likely to affect the market environment in ways that make it harder for them to achieve success.

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The Impact on Investing

It's only taken me until page fourteen to get to the issue that prompted me to start in on this memo: what these things imply for the future of our profession.

For me, the situation regarding index and passive investing is clear:

- Most people can't and don't beat the market, especially in markets that are more-efficient. On average, all portfolios' returns are average before taking costs into account.
- Active management introduces considerations such as management fees; commissions and market impact associated with trading; and the human error that often leads investors to buy and sell more at the wrong time than at the right time. These all have negative implications for net results.
- The only aspect of active management with potential to offset the above negatives is alpha, or personal skill. However, relatively few people have much of it.
- For this reason, large numbers of active managers fail to beat the market and justify their fees. **This isn't just my conclusion: if it weren't so, capital wouldn't be flowing from active funds to passive funds as it has been.**
- Regardless, for decades active managers have charged fees as if they earned them. Thus the profitability of many parts of the active investment management industry has been without reference to whether it added value for clients.

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It's important to note that the trend toward passive investing hasn't occurred because the returns there have been great. It's because the results from active management have been poor, or at least not good enough to justify the fees charged.

Now clients have wised up, and unless something changes with regard to the above, the trend toward passive investing is going to continue. What could arrest it?

- More active managers could become capable of delivering alpha (but that's not likely).
- The markets could become easier to beat (that'll probably happen from time to time).
- Fees could come down so that they're competitive with passive investment fees (but in that case it's not clear how the active management infrastructure would be supported).

Unless there are flaws in the above reasoning, the trend toward passive investing is likely to continue. **At the very least, it reduces or eliminates management fees, trading costs, overtrading and human error: not a bad combination.**

Of course, there are active investors who outperform. Not most, and not half. **But there's a minority who do earn their fees, and they should continue to be in demand.**

* * *

Moving on to quantitative investing, it's particularly interesting to assess the future. The good news about quantitative investing is that it corrects many of the shortcomings of active management:

- It can do much of what people do, generally without making "human mistakes."
- It can handle infinitely more data.
- It excludes emotion; it never buys on euphoria or sells in panic.
- It never forgets to rebalance: to sell the things that are expensive and buy the things that are cheap.

Quantitative investing makes good use of the ability of computers to handle vast amounts of data and their freedom from human error. **In short, I think computers can do more than the vast majority of investors, and do it better.**

Now for limitations. I think of quantitative investing as also a free-riding strategy: it profits from disequilibria caused by others. **The supply of "nickels and dimes" is limited to the extent of those disequilibria, and thus only a limited amount of capital can be run this way to great advantage.** There has to be a reason why the best quant firm – Renaissance Technologies – has returned all outside capital from its flagship Medallion Fund; if an investment approach is infinitely scalable, by definition it's never economic to limit the capital under management. (Of course, all "alpha strategies" are based on taking advantage of the errors of others; thus the opportunities are limited to the scale of the errors – see "It's All a Big Mistake" from June 20, 2012.)

And there are bigger-picture questions: **Can quantitative investing make superior qualitative decisions? And can it invest for the long term?**

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This brings me back to one of my very favorite quotations. It's from sociologist William Bruce Cameron, although many people attribute it to Albert Einstein (I've done so in the past):

> **. . . not everything that can be counted counts, and not everything that counts can be counted.**

Computers can do an unmatched job dealing with the things that can be counted: things that are quantitative and objective. But many other things – qualitative, subjective things – count for a great deal, and I doubt computers can do what the very best investors do:

- Can they sit down with a CEO and figure out whether he's the next Steve Jobs?
- Can they listen to a bunch of venture capital pitches and know which is the next Amazon?
- Can they look at several new buildings and tell which one will attract the most tenants?
- Can they predict the outcome of a bankruptcy reorganization where the parties may have motivations other than economic maximization?

Further, quantitative investing's emphasis on profiting from short-term dislocations leaves a lot more to be mined. So much of investing these days considers only the short run that I think there's great scope for superior active investors to make value-additive decisions concerning the long run. I have no reason to believe computers can make these in a superior way.

The greatest investors aren't necessarily better than others at arithmetic, accounting or finance; their main advantage is that they see merit in qualitative attributes and/or in the long run that average investors miss. And if computers miss them too, I doubt the best few percent of investors will be retired anytime soon.

Will machine learning enable computers to study the entirety of financial history, figure out what made for the most successful investments, and sense what will work in the future? I have no way of knowing, but even if so, I think that's not enough. **Computers, artificial intelligence and big data will help investors know more and make better quantitative decisions. But until computers have creativity, taste, discernment and judgment, I think there'll be a role for investors with alpha.**

(My confidence that our jobs are safe is not unlimited, however. It's interesting to note that in 2016, a group at Stanford developed a computer program that correctly distinguished between suspenseful and non-suspenseful written passages 81% of the time. The researchers got it to do this by agreeing on what features contribute to suspense and then getting the program to recognize them and learn to identify new ones.)

Importantly, the trends toward both quantitative investing and artificial intelligence presuppose the availability of vast amounts of data regarding fundamentals and prices. A great deal of such data is on hand with regard to public companies and their securities. On the other hand, many of the things Oaktree and other alternative investors are involved in are private, non-traded and relatively undocumented: things like distressed debt, direct lending, private equity, real estate and venture capital. AI/machine learning eventually will make its way into these fields, but a good bit of time is

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likely to pass before it is sufficiently sophisticated and data is sufficiently available to permit computers to act autonomously.

Finally, I view this situation kind of like index investing: if the day comes when intelligent machines run all the money, won't they all (a) see everything the same, (b) reach the same conclusions, (c) design the same portfolio, and thus (d) perform the same? **What, then, will be the route to superior performance? Humans with superior insight. At least that's my hope.**

June 18, 2018

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Memo to: Oaktree Clients

From: Howard Marks

Re: Latest Thinking

Travel to clients abroad and preoccupation with my coming book on cycles (final draft submitted just the other day) have combined to keep me from writing a memo since September, but fortunately not from thinking. Thus I have ideas to set down on two significant subjects: the market environment and the new tax law. Further, I'm highly motivated to do so, since if I skip a few months, people start writing in, "Are you sick?"

More on the Markets

As I wrote in September ("Yet Again?"), some readers of my July memo, "There They Go Again . . . Again," perceived my stance as ultra-bearish. This was epitomized by the TV commentator who reported, "Howard Marks says it's time to get out." As I said in September, there are two things I would never say (since they require far more certainty than I consider attainable): "get out" and "it's time." It's rare for the market pendulum to reach such an extreme that views can properly be black-or-white. Most markets are far too uncertain and nuanced to permit such unequivocal, sweeping statements.

In September I observed that the cautionary July memo hadn't said much with respect to what people actually should do about the markets, and I tried to remedy that. Now I want to provide a more complete discussion regarding today's markets, covering the pros as well as the cons.

Positives – Whereas in my last two memos I talked primarily about reasons to be cautious, I want to make it clear here that I do recognize the positives in the current situation. Most of them have to do with fundamentals – primarily the healthy macro-economic outlook and thus the potential for increasing EPS.

- **The U.S. economy is chugging along, and the recovery that started in 2009 has become one of the longest in history (103 months old at this point). The rest of the world's economies are joining in for that rare thing, worldwide growth. Most economies seem to be gaining rather than losing steam, and they don't appear likely to run out of it anytime soon.**
- Since the economic recovery hasn't been marked by excesses to the upside, when a recession eventually does occur, it doesn't have to be extreme. In short, no boom, no bust.
- One of the reasons for the sluggish recovery during the Obama administration was the low level of capital investment (a frequent site of excesses during recoveries). I think that was due to corporate concern over the president's seeming indifference to business and his tendency to regulate. No one wants to make long-term investments in an inhospitable environment for business. **In contrast, it's very clear that President Trump is committed to being a pro-business president and a deregulator.** This change has led to a rise in optimism, confidence and "animal spirits" among corporate executives, things that have great potential to be self-reinforcing. Thus, for example, in the first three quarters of 2017, capital spending rose at an annualized rate of 6.2%.
- The recent tax law will put money into the pockets of corporations that pay U.S. taxes by reducing their tax rate, and it will result in the repatriation of large amounts of foreign profits that

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U.S. companies have been holding abroad. The results will generally be very positive for corporate profits, cash flows and perhaps capital investment (see below).

- The unemployment rate is down to 4.1%, nearly the lowest level in 60 years, meaning we're nearing "full employment" (albeit with an unusually low percentage of adults participating in the workforce). With so little employment slack remaining, it seems reasonable to think near-term GDP growth will translate into wage gains, and thus back into further increases in demand.
- Although low, today's prospective returns are described as being reasonable in the context of low interest rates.
- The low levels of inflation worldwide mean central bankers needn't rush to raise interest rates to restrain it. There's no obvious reason to predict hyperinflation.
- **Thus the near-term rise in interest rates – while probable – can be expected to be gradual and limited in scope.**
- Except in pockets, investor psychology can't be described as euphoric and imprudent (although it has been strengthening of late). **For years the markets have been "climbing a wall of worry," an old-fashioned phrase used to describe a healthy ascent that's occurring not because of euphoria and risk-obliviousness, but rather despite a catalog of perceived ills.**
- The known catalysts for a market downturn – recession, ballooning inflation, much-higher interest rates, major central bank missteps, a governmental breakdown in Washington, and war – can't be assigned probabilities that are more than modest.

Negatives – As opposed to the positives listed above, most of the negatives surround either (a) positive fundamental factors that have the potential to deteriorate or (b) the high prices being paid for those macro-positives, and the investor behavior creating those prices.

- While the outlook isn't dire, a number of subjects do represent genuine uncertainties and provide basis for concern: the possibility of slow long-term economic growth, the potential for rising interest rates and inflation, the impact of reversing stimulative monetary policy and the Fed switching to being a net seller of securities, the implications for employment as automation increases, the world's dependence on China's growth, and political and geopolitical tail risks. **As the markets have risen, talk of all these things seems to have gone quiet.**
- We know interest rates are likely to rise (creating competition for most asset classes and arguing for lower asset prices). We just don't know by how much.
- Some of the elements characterizing the macro-economic environment can be described as "long in the tooth" or "unusually elevated." For example, the current recovery is one of the longest ever; the GDP growth rate is at the top of the range for the last decade; and profit margins are well above average. Things like these can continue or even get better, but the odds are against it. It feels as if we may get through the next 18 months without a recession, but if we do, that'll make this the longest recovery since the 1850s. Certainly not impossible, but against the odds.
- **Most valuation parameters are either the richest ever** (Buffett ratio of stock market capitalization to GDP, price-to-sales ratio, the VIX, bond yields, private equity transaction multiples, real estate capitalization ratios) **or among the highest in history** (p/e ratios, Shiller cycle-adjusted p/e ratio). **In the past, levels like these were followed by downturns. Thus a decision to invest today has to rely on the belief that "it's different this time."**
- Prospective returns in the vast majority of asset classes are some of the lowest in history.
- **The need of investors to wring out good returns in this "low-return world" is causing them to engage in what I call pro-risk behavior.** They're paying high prices for assets and accepting risky and poorly structured propositions. In such a climate, it's hard for "prudent" investors to insist on traditional levels of safety. Investors who don't want to sign on for risk (that is, who "refuse to dance") can be constrained to the sidelines.

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- As a result, we see a lot of the reaction that greeted my July memo: "the market's expensive, but I think it has further to go." How healthy can it be when investors think an asset or market is rich but they're holding anyway because they think it might go up some more? Fear of missing out (or "FOMO") is one of the more powerful reasons for investor aggressiveness, and also one of the most dangerous.
- Market behavior implies a level of equanimity on investors' part that could prove unrealistic (and thus subject to reversal). For example, 2017 was the first year in history in which the S&P 500 didn't decline from high to low by more than 3% at least once. Likewise, in a six-month period late in the year, the VIX (an indicator of the level of volatility implied by investors' pricing of S&P 500 options) closed below a reading of ten more than 40 days; never before had it done so more than six times in a six-month period (*The New York Times*, January 14).
- **It appears many investment decisions are being made today on the basis of relative return, the unacceptability of the returns on cash and Treasurys, the belief that the overpriced market may have further to go, and FOMO. That is, they're not being based on absolute returns or the fairness of price relative to intrinsic value.** Thus, as my colleague Julio Herrera said the other day, "valuation is a lost art; today it's all about momentum."
- The potential catalysts for decline that we have to worry about most may be the unknown ones. And although I read recently that bull markets don't die of old age or collapse of their own weight, I think sometimes they do (a dollar for anyone who can identify the catalyst for the collapse of the bull market and tech bubble in 2000 – it's not easy).

The bottom line of the above is that some people are excited about the fundamentals, and others are wary of asset prices. Both positions have merit, but as is often the case, the hard part is figuring out which one to weight more heavily.

As I wrote in September, most people (and certainly the media) want definite answers: in or out? buy or sell? risk-on or risk-off? But it's rare for answers that simple to be correct. There's a wide range of possible stances that investors might adopt. At one end of the spectrum there's maximum aggressiveness (100% invested in high-beta, high-risk assets, or maybe more than 100% through the use of leverage), and at the other there's maximum defensiveness (100% cash, or perhaps being net short). Most investors are never either of those.

And I certainly wouldn't be either of them today; I'd be someplace in between. That's easy to say. But where? Closer to the bullish end of the spectrum or the bearish end? Or balancing the two equally? **My answer today, as readers know, is that I would favor the defensive or cautious part of the spectrum.** In my view, the macro uncertainties, high valuations and risky investor behavior rule out aggressiveness and render defensiveness more sensible.

For one thing, I'm convinced the easy money has been made. For example, the S&P 500 has roughly quadrupled, including income, from its low in 2009. It was certainly easier for the p/e ratio to go from the low teens in 2011-12 to 25 today than it would be for it to double again from here. Thus the one thing we can say for sure is that the current prospects for making money in U.S. equities aren't what they were half a dozen years ago. And if that's the case, isn't it appropriate to take less risk in equities than one took six years ago?

Prospective returns are well below normal for virtually every asset class. Thus I don't see a reason to be aggressive. Some investors may adopt an aggressive stance to be in the riskiest (and thus hopefully the highest-returning) assets; to squeeze out the last drop of return as the markets continue to rise (under the assumption they'll be able to get out at the top, something that's present in every strongly rising market); or to achieve a high return in this low-return world. I don't view any of those as good ideas.

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For years my description of the factors characterizing the markets has been essentially unchanged:

- a large number of big-picture uncertainties,
- sub-par prospective returns,
- above average valuations, and
- pro-risk investor behavior.

For as long as I have been discussing this view, no one has ever taken issue with any of these observations. Do you? That's the key question. And if not, what will you do about it?

You could have made the above four points a year ago, and two years ago, and three years ago, etc. And in general I did. Thus it was possible to argue for raising some cash at a variety of times over the last few years. However, going meaningfully to cash would have been a big mistake – certainly based on how markets performed, but also on the merits – and I think it still would be wrong today.

When I came up with the mantra that has governed at Oaktree over the last several years – "move forward, but with caution" – I described my position as follows:

- the outlook is not so bad, and prices are not so high, that it's time for maximum defensiveness (and if you turn to maximum defense today, your return will be near zero, something most people can't stomach), but
- the outlook is not so good, and prices are not so low, that it's right to be aggressive. In fact, the only thing I was sure of was that there was no place for aggressiveness.

So I didn't say, "Get out now," and I still wouldn't. But I think this continues to be a time to incorporate a good helping of defensiveness in portfolio management. Being fully invested in a cautious portfolio has been an appropriate stance over the last few years. It gave Oaktree performance that in general was respectable or better. **Aggressiveness would have produced higher returns, of course, but I don't think it could have been justified a priori.** (Is an incorrect decision one that didn't work out well, or one that was wrong at the time it was made? I insist it's the latter, as you know.)

And today? What has changed? To the four descriptors of the investment environment listed above, I would add three more:

- the economy is strengthening, not slowing, and Washington is supporting its progress,
- prices are even higher and valuation metrics have moved up,
- and, as I said, the easy money has been made.

Thus the current environment is still mixed – better fundamentally and worse price-wise. The positive near-term economic outlook, lowness of interest rates, need of most investors for return and moderate psychology all seem to suggest it would be a mistake to get out. On the other hand, the extremely high asset prices, macro-fragility and risky behavior going on all around us argue for considerable caution.

At times when the economy does well, risk doesn't rear its head, risk-takers prosper and the returns on low-risk alternatives are unattractive, investors tend to drop their prudence and conclude that high prices aren't a problem in and of themselves. This usually turns out to be a mistake, but it can take years.

For authority, I'll cite a passage that seconds that view:

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> The market seems extremely comfortable with the proposition that as long as the macro-environment remains benign, stocks prices can continue to appreciate at rates that far outstrip the growth of their issuers' profits, and thus the growth of their intrinsic value. Few market participants seem concerned about appropriate valuation levels – the relationship between assets and their prices – and this is a condition that we think must eventually have negative consequences. . . .
>
> Today's combination of a stable economy, low interest rates, enormous cash flows and strong investor optimism has created a climate in which capital is available for both good investments and bad, and in which risk is rarely seen as something to be shunned.

I wrote that in 1997, in a clients-only memo entitled "Are You an Investor or a Speculator?" I was cautionary then, like I am now. And it took almost three years for that to turn out to be correct. That doesn't mean it wasn't correct when it was written . . . just early.

Today there's beginning to be talk of a possible late-bull-market melt-up, making investors more money but perhaps fulfilling the requirements for a full-fledged bubble. (This may be part of the usual pattern of capitulation that occurs when those who haven't fully participated lose the will to keep abstaining after years of market gains.) The basic themes supporting the "melt-up" theory include (a) the existence of the fundamental positives listed above and (b) the arrival of euphoric psychology, which has been absent to date.

For me the key points regarding the general market outlook are as follows:

- The absence of widespread euphoria certainly is an important flaw in any near-term bearish view.
- Thus there's no reason for confidence in the existence of a soon-to-burst bubble.
- Investor psychology continues to grow more confident, however.
- Asset prices are already unusually high.
- Future events remain unpredictable, but today's high prices mean the odds are against a significant long-term upward move from here.
- No one can say what's going to happen in the short term.

Asset prices and valuation metrics are certainly worrisome, but psychology and its implications – as well as timing – are unpredictable. I think that's about all we can know.

Thus Oaktree will continue to invest on the basis of value and its relationship to price, and to refrain from trying to time markets based on predictions regarding economies, markets or psychology. The "melt-up" school says securities that already are highly priced may become more so. We'd never bet on whether they will or won't.

Our post-2011 mantra remains in force: we're investing when we find reasonable propositions, albeit with caution. We're investing, and with the exception of the distressed debt fund specifically raised to await an upsurge in opportunities, we aren't intentionally uninvested. If we find things with decent return prospects, structure and risk, we don't pass them by because we think they'll be cheaper a year from now. And we're making our views clear to clients so that, especially in our open-end strategies, they can make their own choice between aggressiveness and defensiveness. We would be happy to continue this discussion with clients off-line.

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Reactions to the New Tax Law

The Republicans in Congress have passed and the president has signed a bill they hailed as "sweeping tax reform." It's worthy of comment. Everything going on in Washington is more politicized and less bipartisan than ever, but I'll attempt here to remain objective and not partisan while making what I think are the important observations.

First, with respect to the taxation of individuals, it's not much of a reform. It doesn't fundamentally change what income is taxed, how it is taxed, or the structure of the tax process. It reduces or eliminates some write-offs or loopholes, but not a great many. And I doubt it shortens the tax code.

I think what matters most is that it's primarily a tax cut for the majority of Americans, and tax cuts are stimulative. As I said before, the current U.S. economic recovery is one of the longest in history. The economy is doing well; it seems to be gaining strength; and it feels like the recovery can go on longer. With the unemployment rate nearing full employment, GDP growth may well go into a more dynamic period. So why stimulate?

- **It doesn't make sense to try to artificially prolong an already-long recovery.** Economies go up and down, and growth rates rise and fall. Governments (and central banks) should accept this rather than attempt to bring about rapid growth forever, which increases the risk of overheating. In the last twenty years we've had painful first-hand experience with the results of efforts to prevent the economy from slowing. GDP growth can be enhanced temporarily through a shot of fiscal adrenaline (like a tax cut), but that can't raise it permanently.
- **And doesn't it seem odd that the government is implementing a stimulative tax cut just as the Fed is raising interest rates and reversing its purchases of securities?** The Fed is concerned that a continuation and possible strengthening of the recovery will cause inflation to accelerate; thus it's acting to "remove the punchbowl." That makes sense. Why is the government taking fiscal actions in the opposite direction?
- The unanimous willingness of former "deficit hawks" to pass a bill that adds more than $1 trillion to deficits and debt is indicative of what I've seen described as "ideological pliability." Those who voted for it must have concluded that giving out goodies garners the most votes. **That bodes ill for fiscal discipline in the future.**

The centerpiece of the tax law is the reduction of the stated tax rate on corporate profits from 35% to 21%. What are its merits?

- Our corporate tax rate shouldn't be higher than the rates in other countries, as it has been to date. A higher rate gives companies an incentive to increase capacity abroad rather than in the U.S.; encourages U.S. companies to merge into foreign companies or relocate overseas; and gives foreign companies superior profitability.
- Lower rates will be good for our companies, and now our tax rate on corporate profits is one of the lowest in the developed world. Those of us who attribute much of the U.S.'s leading position in the world to capitalism think that's a good idea. I'm a strong believer that, within limits, "What's good for General Motors is good for America."
- Because of our previous corporate tax system, U.S. companies have $2.8 trillion of cash from foreign profits stranded overseas. Now that will be brought back at tax rates as low as 8%.
- **There's every reason to believe the rate cut and repatriation will put money in corporate coffers, enhance credit ratings, fatten dividend payments and finance stock buybacks.**
- But none of the above was the basis on which the corporate tax cut was sold to the public. Instead, it was billed as a job-creator. With unemployment already below average, many CEOs

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tell me they're hamstrung by a scarcity of qualified workers. So who will fill the new jobs if corporations expand in the U.S.? And if workers aren't available, will new plants (and jobs) really be created?

- In the last days of the effort to pass the tax bill, I heard a talk-show guest say corporations and their owners would share its benefits with employees and consumers. We've seen a number of companies give raises or bonuses following the enactment of the tax law, but I doubt it was done out of generosity. Corporations may increase compensation if needed to attract, retain and motivate workers, and they may cut prices for competitive reasons, but the motivation will be to maximize profits – as always. I doubt the tax law will fundamentally alter their behavior.

So call it a gift to the corporate sector if you want, but I think it's unlikely to be much of a job-creator or long-term boon for the American middle class.

There will be pluses from the law, and there will be minuses. For me, the bottom line was captured best in a January 11 speech by William Dudley, the long-term and highly respected president of the New York Fed:

> While the recently passed Tax Cuts and Jobs Act of 2017 likely will provide additional support to growth over the near term, it will come at a cost. After all, there is no such thing as a free lunch. The legislation will increase the nation's longer-term fiscal burden, which is already facing other pressures, such as higher debt service costs and entitlement spending as the baby-boom generation retires. While this does not seem to be a great concern to market participants today, the current fiscal path is unsustainable. In the long run, ignoring the budget math risks driving up longer-term interest rates, crowding out private sector investment and diminishing the country's creditworthiness. These dynamics could counteract any favorable direct effects the tax package might have on capital spending and potential output.

Of all the possibilities, I find myself agreeing with Dudley's take on the likely consequences. **All else equal, the tax law is likely to result over time in higher deficits, higher national debt, higher economic growth, higher inflation, higher interest rates, higher federal debt service requirements, and thus still-higher deficits and debt. These things tend to go together, and together they constitute the fiscal path Dudley describes as unsustainable. The outlook was troubling before; the tax cuts will make it worse.**

The reward from the tax law is pretty clear: it's likely that in the short run the economy will strengthen, corporate profits will increase and take-home pay will rise for most Americans. But the long-term benefits are less certain, and meaningful hidden risks exist.

* * *

Next I want to spend some time on SALT. It wasn't long ago that most of us thought of this as the acronym for "strategic arms-limitation talks," but all of a sudden (in just the last few months, as far as I know), it has come to stand instead for "state and local taxes."

People who live in states with low or no income taxes may not have paid particular attention to the aspects of the new law relating to SALT, but it's a big topic in New York, where I live, and very much worth discussing. Up until now, to limit the impact of double taxation, itemizers have been able to deduct

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all state and local taxes paid from the income that was taxed at the federal level, the principle being that one should pay federal income tax only on what's left after state and local taxes have taken their cut (including income, property and sales taxes).

The proposed House bill eliminated this deduction completely, but the final law permitted deductibility up to $10,000. This avoided harming people with incomes below $100,000 or so, but those who earn more will feel it directly.

To simplify my calculations, I'm going to ignore tax rates on lower-bracket income, as well as the effect of exclusions and credits, and talk about the impact of this change on the higher earner's marginal dollar of income. I'm also going to round the figures and ignore Social Security and Medicare taxes.

- Before the new tax law, a top-bracket earner in New York City, for example, took home about $53 from $100 of marginal earnings (after federal income tax at 40% and state/city income taxes at 12%, less the benefit from recouping 40% of that 12% on the federal return because of its deductibility).
- Under the new law, take-home pay from $100 of incremental earnings will be about $51 (after federal tax at 37% and state/city tax at 12%).

Thus take-home pay per incremental dollar of earnings will decline by about 4%. The impact under the House bill would have been worse, but it was eased by a reduction from 39.3% to 37.0% of the tax rate applied to top earners. Still, 4% of take-home pay is a painful loss for most people.

Is the elimination of SALT deductibility unfair? The debate is complex, and like many things it depends on your point of view.

- On one hand, some states choose to give their citizens a lot of services (or have populations that require a lot of services, which has the same effect), and to pay for those services, they impose high income taxes. **Why, some say, should the federal government (and through it, residents of the low-tax and no-tax states) subsidize the high-tax states by absorbing some of their residents' tax burden?**
- On the other hand, according to estimates from *WalletHub*, the residents in fourteen "donor states" pay more to the federal government than they get back. They generally include states with high per capita incomes, such as New York, California, New Jersey and Illinois, and exclude states with the most people depending on federal largesse for their incomes. **Thus high-tax, high-business states subsidize the rest.**

One thing is not debatable: high-tax states are hurt in the absolute by this tax law, and hurt very much relative to low- and no-tax states. Because the deductibility of state and local income taxes is limited to $10,000, the impact will fall primarily on people in states with higher per capita incomes. There's a parallel treatment of property taxes, with deductibility also capped at $10,000. (The $10,000 is an aggregate limit for any combination of income, property and sales taxes.) And, relatedly, the law lowers the limit on the size of the mortgage on which interest is deductible. Not surprisingly, high incomes are correlated with high property values (and large mortgages), so people in some states are likely to be hit by all these limitations, and people in other states by none of them.

Is it a coincidence that most of the negative effect falls on states that are primarily Democratic or "blue"? Did President Trump mind reducing upper-bracket take-home pay in states that gave Hillary Clinton overwhelming pluralities a year ago? No one can say for sure, but there's no doubt about where the

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impact falls. As conservative economist and CNBC commentator Larry Kudlow put it, "It's a blue-state tax."

What are the important conclusions?

- **The reduction in take-home pay increases the penalty for living in high-tax states**. (For example, in 2015, 34% of California taxpayers itemized deductions, and on average they deducted $18,500 of state income tax. On average those taxpayers will lose an $8,500 deduction and thus pay roughly $3,000 more in federal income tax.)
- **Especially when added to high property taxes, this can give top-bracket earners a significant incentive to move to no-tax states such as Florida, Texas, Nevada and Washington.** As I wrote in "Economic Reality" in May 2016, states can raise their income tax rates (and the loss of federal deductibility is the equivalent of an increase in tax rates), but they can't prevent taxpayers from moving away.
- It's true the top federal income tax rate was reduced in the final law, perhaps halving the pain on taxpayers in high-tax states. But residents of no-tax states also get the tax rate reduction without having lost any deductions. I estimate for someone with a given large income, marginal take-home pay will be about 20% higher in a no-tax state than it is in New York, and that's a lot.
- **The bottom line is that the incentives for high earners to move in order to avoid SALT, always substantial, have increased.** I expect this to have a strong impact on the economies of the high-tax states. What CEO will move his company to New York or California in the future? Won't future company relocations and formations tend to favor the low-tax and no-tax states?
- I know a Republican congressman from New York who voted in favor of the tax bill. How could he? Won't his constituents turn against him and vote him out? He may figure that since he represents a low-income district, his voters won't be hurt by the loss of SALT deductibility. And that may be true as far as direct effects go. But the second-order consequences could easily see employers move away, taking their companies and the jobs of the congressman's constituents with them. **High-income people may move to chase lower state income tax rates, but folks with low incomes generally are much less able to do so.**
- The other day a friend told me the top 1% of New York taxpayers pay 50% of the state income taxes. **If and when their emigration accelerates, states like New York may get into a negative spiral**: a few big earners leave; the state has to raise tax rates to make up for the lost revenues; that increases the differential and causes more big earners to leave; which requires further tax-rate hikes, and so forth. High-tax cities and states may be greatly affected. New York City residents may feel there are attractions that justify the high rates, but neighboring "bedroom communities" lacking those attractions may be affected even more.

For me the bottom line on the new tax law is as follows:

- Our tax system is not fundamentally reformed. Such changes will be feasible only in the unlikely event that bipartisan cooperation returns to Washington.
- The net income of corporations that pay U.S. taxes will be enhanced, but the impact of the corporate tax reduction on other segments of the economy will be limited.
- The outlook is enhanced for no-tax and low-tax states and impaired for high-tax states.
- Overall, the tax law is likely a short-term positive and a long-term negative in a variety of ways.

* * *

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The forthcoming book I mentioned earlier, due out in October, is about cycles. Why do cycles occur? Why doesn't the U.S. economy just grow at the average rate of 2-3% every year? And since the average return on the S&P 500 is in the range of 9-11%, why isn't the return between 9% and 11% every year (and, in fact, why does the yearly return fall between 9% and 11% so infrequently)?

The simple explanation is that because of the involvement of people, economies and markets – as well as other cyclical phenomena – tend first to overshoot in one direction (and given how people are wired, usually to the upside) and then they are bound to correct in the opposite direction.

I think that description is highly relevant to the two topics discussed above.

- When markets do too well for a while – that is, when equity returns far exceed the growth rate of companies' profits, and when bonds return more than their promised yield to maturity – it usually means they've become overpriced and will correct sooner or later.
- And when an economy expands faster than the potential growth rate determined by its population growth and increases in productivity – usually because companies or consumers borrow, invest or spend to excess – it's likely to contract eventually. This happens either because the excesses are unsustainable in and of themselves or because central bankers take steps to cool things off in order to avert hyperinflation.

That's the common thread here: markets that may have been doing too well, and an economy that may be in the process of being overstimulated. Both feel good right now, but each has potential negative consequences.

* * *

I've been able to devote four pages to the new tax law primarily because so little has changed in the markets. Investors are still pursuing high returns in a low-return world. This entails a decline in risk aversion and produces risky behavior, rising asset prices, diminished prospective returns and increased risk. **It's impossible to say the negatives will win the tug-of-war anytime soon, but that doesn't mean caution should be discarded . . . especially now.**

January 23, 2018

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Memo to: Oaktree Clients

From: Howard Marks

Re: Yet Again?

"There They Go Again . . . Again" of July 26 has generated the most response in the 28 years I've been writing memos, with comments coming from Oaktree clients, other readers, the print media and TV. I also understand my comments regarding digital currencies have been the subject of extensive – and critical – comments on social media, but my primitiveness in this regard has kept me from seeing them.

The responses and the time that has elapsed have given me the opportunity to listen, learn and think. Thus I've decided to share some of those reflections here.

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Media Reaction

The cable news shows and blogposts delivered a wide range of reactions – both positive and negative. The best of the former came from a manager who, when asked on TV what he thought of the memo, said, "I'd like to photocopy it and sign it and send it out as my quarterly letter." Love that guy.

I haven't spent my time reveling in the praise, but rather thinking about those who took issue. (My son Andrew always reminds me about Warren Buffett's prescription: "praise by name, criticize by category." Thus no names.) Here's some of what they said:

1. "The story from Howard Marks is 'it's time to get out.' "
2. "He's right in the concept but wrong to execute right now."
3. "The market is a little expensive, but you should continue to ride it until there are a couple of big down days."
4. "There are stocks that are past my sell points, and I'm letting them continue to burble higher."
5. "I appreciate Howard Marks's message but I think now is no more a time to be cautious than at any other time. We should *always* invest as if the best is yet to come but the worst could be right around the corner. This means durable portfolios, hedges, cash reserves . . . etc. There is no better or worse time for any of these things that we can foresee in advance."

I take issue with all these statements, especially the last, and I want to respond – not just in the sense of "dispute," but rather to clarify where I stand. In doing so, I'll incorporate some of what I said during my appearances on TV following the memo's publication.

Numbers one and two are easy. As I explained on CNBC, there are two things I would never say when referring to the market: "get out" and "it's time." I'm not that smart, and I'm never that sure. The media like to hear people say "get in" or "get out," but most of the time the correct action is somewhere in between.

I told Bloomberg, "Investing is not black or white, in or out, risky or safe." **The key word is "calibrate." The amount you have invested, your allocation of capital among the various possibilities, and the riskiness of the things you own all should be calibrated along a continuum that runs from aggressive to defensive.**

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And as I told CNBC, what matters is "the level that securities are trading at and the emotion that is embodied in prices." Investors' actions should be governed by the relationship between each asset's price and its intrinsic value. **"It's not what's going on; it's how it's priced. . . . When we're getting value cheap, we should be aggressive; when we're getting value expensive, we should pull back**."

Here's how I summed up on Bloomberg:

> It's all about investors' willingness to take risk as opposed to insisting on safety. And when people are highly willing to take risk, and not concerned about safety, that's when I get worried.

If it's true, as I believe, that (a) the easy money in this cycle has been made, (b) the world is a risky place, and (c) securities are priced high, then people should probably be taking less risk today than they did three, five or seven years ago. Not "out," but "less risk" and "more caution."

And from my visit to CNBC:

> All I'm saying is that prices are elevated; prospective returns are low; risks are high; people are engaging in risky behavior. Now nobody disagrees with any of the four of those, and if not, then it seems to me that this is a time for increased caution. . . . It's maybe "in, but maybe a little less than you used to be in." Or maybe "in as much as you used to be in, but with less-risky securities."

Numbers three and four – arguing that it's too early to sell even if the market is expensive or holdings are past their sell point – are interesting. They're either (a) absolutely illogical or (b) signs of the investor error and lack of discipline that are typical in bull markets.

- If the market is expensive, why wouldn't you lighten up?
- Why would you prefer to sell after a few big down days, rather than today? (What if the big down days are the start of a slide so big that you can't get out at anything close to fair value? What if there's a big down day followed by a big up day that gets you right back where you started? Does the process re-set? And is it three big down days in a row, or four?)
- And if you continue to hold past your sell points, what does "sell point" mean?

Bottom line: I think these things translate into "I want to think of myself as disciplined and analytical, but even more I want to make sure I don't miss out on further gains." In other words, fear of missing out has taken over from value discipline, a development that is a sure sign of a bull market.

The fifth and final comment – that one should exercise the same degree of care and risk aversion at all times – gives me a lot to talk about. In working on my new book, I divided the things an investor can do to achieve above average performance into two general categories:

- selection: trying to hold more of the things that will do better and less of the things that will do worse, and
- cycle adjustment: trying to have more risk exposure when markets rise and less when they fall.

Accepting that "there is no better or worse time" simply means giving up on the latter. Whereas Buffett tells us to "be fearful when others are greedy and greedy when others are fearful" – and he's got a pretty good track record – this commentator seems to be saying we should be equally greedy (and equally fearful) all the time.

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I feel strongly that it's possible to improve investment results by adjusting your positioning to fit the market, and Oaktree was able to do so by turning highly cautious in 2005-06 and highly aggressive in 1990-91, 2001-02 and immediately after the Lehman bankruptcy filing in 2008. This was done on the basis of reasoned judgments concerning:

- how markets have been acting,
- the level of valuations,
- the ease of executing risky financings,
- the status of investor psychology and behavior,
- the presence of greed versus fear, and
- where the markets stand in their usual cycle.

Is this effort in conflict with the tenet of Oaktree's investment philosophy that says macro-forecasting isn't key to our investing? My answer is an emphatic "no." **Importantly, assessing these things only requires observations regarding the present, not a single forecast.**

As I say regularly, "We may not know where we're going, but we sure as heck ought to know where we stand." Observations regarding valuation and investor behavior can't tell you what'll happen tomorrow, but they say a lot about where we stand today, and thus about the odds that will govern the intermediate term. They can tell you whether to be more aggressive or more defensive; they just can't be expected to always be correct, and certainly not correct right away.

The person who said "there is no better or worse time" was on TV with me, giving me a chance to push back. What he meant, he said, was that the vast majority of people lack the ability to discern where we stand in this regard, so they might as well not try.

I agree that it's hard. **Up-and-down cycles are usually triggered by changes in fundamentals and pushed to their extremes by swings in emotion. Everyone is exposed to the same fundamental information and emotional influences, and if you respond to them in a typical fashion, your behavior will be typical: pro-cyclical and painfully wrong at the extremes. To do better – to succeed at being contrarian and anti-cyclical – you have to (a) have an understanding of cycles, which can be gained through either experience or studying history, and (b) be able to control your emotional reaction to external stimuli.** Clearly this isn't easy, and if average investors (i.e., the people who drive cycles to extremes) could do it, the extremes wouldn't be as high and low as they are. But investors should still try. If they can't be explicitly contrarian – doing the opposite at the extremes (which admittedly is hard) – how about just refusing to go along with the herd?

Here's what I wrote with respect to the difficulty of doing this in "On the Couch" (January 2016):

> I want to make it abundantly clear that when I call for caution in 2006-07, or active buying in late 2008, or renewed caution in 2012, or a somewhat more aggressive stance here in early 2016, I do it with considerable uncertainty. My conclusions are the result of my reasoning, applied with the benefit of my experience (and collaboration with my Oaktree colleagues), but I never consider them 100% likely to be correct, or even 80%. **I think they're right, of course, but I always make my recommendations with trepidation**.

When widespread euphoria and optimism cause asset prices to meaningfully exceed intrinsic values and normal valuation metrics, at some point we must take note and increase caution. And yet, invariably, the market will continue to march upward for a while to even greater excesses, making us look wrong. **This is an <u>inescapable</u> consequence of trying to know where we stand and take appropriate action.** But

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it's still worthwhile. Even though no one can ascertain when we're at the exact top or bottom, a key to successful investing lies in selling – or lightening up – when we're closer to the top, and buying – or, hopefully, loading up – when we're closer to the bottom.

FAANGs

There's been a lot of discussion regarding my comments on the FAANGs – Facebook, Amazon, Apple, Netflix and Google – and whether they're a "sell." Some of them are trading at p/e ratios that are just on the high side of average, while others, sporting triple-digit p/e's, are clearly being valued more on hoped-for growth than on their current performance.

But whether these stocks should be sold, held or bought was never my concern. As I said on Bloomberg:

> My point about the FAANGs was not that they are bad investments individually, or that they are overvalued. It was that the anointment of one group of super-stocks is indicative of a bull market. **You can't have a group treated like the FAANGs have been treated in a cautious, pessimistic, sober market.** So that should not be read as a complaint about that group, but rather indicative [of the state of the market].

That's everything I have to say on the subject.

Bitcoin

As I said earlier, there has been particularly spirited response to my comments on digital currencies. It prompted me to sit down with people ranging from some of my Oaktree colleagues to Steven Bregman and Murray Stahl of Horizon Kinetics (my July memo incorporated some of Steven's observations on ETFs), and I learned that I've been looking at Bitcoin the wrong way. In particular, I realized that the memo incorporated the wrong joke from my father; instead of "the half-million-dollar hamster," it should have been this one:

> Two friends meet in the street, and Jim tells Sue he has some great sardines for sale. The fish are pedigreed and pure-bred, with full papers and high IQs. They were individually de-boned by hand and packed in the purest virgin olive oil. And the label was painted by a world-renowned artist.
>
> Sue says, "That sounds great. I could use a tin. How much are they?" and Jim tells her they're $10,000. Sue responds, "That's crazy, who would eat $10,000 sardines?" **"Oh," says Jim, "these aren't eating sardines; these are trading sardines."**

I had been thinking about digital currencies like Bitcoin as investing sardines, and that may have been a mistake. Their fans tell me they're spending sardines, and while that may be the case, I think at the moment they're being treated largely as trading sardines. The question remains open as to whether Bitcoin is (a) a currency, (b) a payment mechanism, (c) an asset class, or (d) a medium for speculation.

The main complaint expressed in my memo was as follows:

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> Serious investing consists of buying things because the price is attractive relative to intrinsic value. Speculation, on the other hand, occurs when people buy something without any consideration of its underlying value or the appropriateness of its price, solely because they think others will pay more for it in the future.

In the memo I talked about Bitcoin as an investment asset that should have a value that can be appraised. While its fans tell me this isn't the right way to view it, I note that in their February "Bitcoin Review," even Steven and Murray called it "a new asset class." I think this is the weakest claim being made about Bitcoin. As I said in the memo, "it's not real" – there is no intrinsic value behind it.

What Bitcoin partisans have told me subsequently is that Bitcoin should be thought of as a currency – a medium of exchange – not an investment asset. Given that the evolution of Bitcoin is so topical, I think further discussion is in order. To start, I'm going to present the case for it as a currency. What are the characteristics of a currency?

- **Most importantly, it's something that people agree can be used as legal tender** (to buy things and pay debts), used as a store of value, and exchanged for other currencies.
- Currencies generally are created by governments. However, there have been exceptions: banks issued their own currencies in our nation's first century, and it can be argued that the "Green Stamps" of my childhood, and airline miles today, have a lot in common with currencies.
- For a long time currencies were backed by (and exchangeable for) gold or silver, but that's no longer the case. The truth is, there's nothing behind currencies these days other than their issuing governments' "full faith and credit." But what do they promise? New currencies are sometimes created out of thin air (like the euro, which wasn't legal tender sixteen years ago), and sometimes they're devalued.
- Currencies change in value relative to each other, in theory based on differential purchasing power, and in practice based on changes in supply and demand (which can stem, among other things, from changes in purchasing power).

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Bitcoin fans argue that it qualifies as a currency under these criteria: most importantly, it's something that parties can agree to accept as legal tender and a store of value. That actually seems right.

When I first responded to comments on the memo – even before my recent enlightenment – I found myself admitting that much of the criticism I had leveled at Bitcoin is applicable to the dollar as well. Whereas I said Bitcoin "isn't real" because it has no intrinsic or underlying value, that's certainly true of the dollar and other fiat currencies: there's nothing behind them either. You can no longer exchange them for gold (and what is gold, anyway? But that's another subject). In fact, government-issued fiat currencies are accorded value only because of a government edict. **Why, the fans of Bitcoin ask, is such an edict superior to an agreement among people to accept a non-government-issued currency? Fiat currencies have value simply because of faith in the governments that issue them. If enough people believe in it, why can't faith in Bitcoin suffice? If you consider the properties of fiat currencies, these are darn good questions.**

So my initial bottom line is that I see no reason why Bitcoin can't be a currency, since it shares the characteristics listed above, especially the fact that there are people (and businesses and even countries) that accept it as legal tender.

But that's not good enough for Bitcoin's fans. **It's not the same as the dollar, they say; it's better.** In all the following ways, they've told me, Bitcoin is superior to government-issued currency:

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- All the relevant data regarding Bitcoin – number outstanding, number newly created, and transactions – are recorded in the "blockchain," a sort of transparent electronic ledger of which everyone can have his or her own copy.
- Bitcoin can't be debased by unlimited issuance, since the blockchain process has been set to permit only a gradual increase from today's 16 million, to 21 million in 2140. In this sense Bitcoin is better than the dollar, of which a lot more can be issued at any time, diminishing its purchasing power through inflation. As Steven and Murray have written, "a purchase of Bitcoin is nothing other than a short sale of the currencies of the world. Merely by limiting the growth of supply, Bitcoin would become more valuable as other currencies devalue."
- Since the blockchain exists on each person's individual computer, rather than in a central location, it can't be hacked, and thus Bitcoin can't be stolen, counterfeited, or secretly created in amounts exceeding the authorized total. Likewise, Bitcoin isn't subject to the currency controls on portability that are often imposed by failing governments. (But I wonder whether the technological claims made for the blockchain might be its Achilles' heel. While I certainly don't have the ability to assess these claims for myself, I wonder how many of Bitcoin's advocates do either.)

Where will we go from here? The partisans claim the outlook for Bitcoin as a currency is bright:

- Since very few people own it today but millions more will want it in the future, demand is sure to rise faster than supply, meaning the price will rise.
- Specifically, the U.S. money supply is almost $14 trillion, so if people and businesses decide to hold just one-third of their wealth in Bitcoin rather than dollars, (and who wouldn't want to do so given all the advantages described above?), the value of the Bitcoin in circulation will rise to $4.5 trillion, from today's $73 billion, for a gain of roughly 60x.
- There's sure to be a network effect: the more people join the Bitcoin movement, the more it will be accepted as legal tender, the more useful it will be, and the more demand will increase.
- Ignoring Bitcoin's utility as currency, many people will buy just because they believe someone else will pay them more for it. (This time-honored "greater-fool theory" lies at the heart of all speculative manias.) Likewise, people will buy it because of fear of missing out, another bull-market standard.

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There's absolutely no reason why Bitcoin – or anything else – can't serve as a currency if enough people accept it as such. While I'd point out that no private currency has gained widespread use in a long, long time, there's nothing to say it can't happen.

Being willing to agree that Bitcoin may become an accepted medium of exchange is not the same as saying you should buy it now to make money. Think about the fact that the price of Bitcoin has risen more than 350% so far this year and 3,900% in the last three years. To the degree people argue that Bitcoin is a currency, then (a) why is it so volatile? and (b) is that desirable? You might want to consider whether a real currency can do that, or whether speculative buying is determining Bitcoin's price. And whether what's gone up can come down.

The immediate issue of Bitcoin as a currency still comes down to the question of whether today's price is right. The price of a Bitcoin is around $4,600 today. Can one Bitcoin buy the same amount of goods as 4,600 dollar bills? Or the much higher amounts that Bitcoin bulls think it will soon be worth? I don't think we have enough information to know, but the question isn't irrelevant. If it were, this would be another case of "there's no price too high."

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The other purported use for Bitcoin, given its status as what Marc Andreessen calls a "digital bearer instrument," is as a payment mechanism. Its advantages in this regard include the following:

- transactions in Bitcoin can be anonymous (I understand it is often used to pay for opioids),
- payments are made without fees like those charged on credit card transactions and wire transfers,
- there can't be fraud and merchant charge-backs like with credit cards, and
- it can be particularly useful in emerging nations lacking developed payment systems.

But I see two issues here:

- First, I expect there to be many competing transaction systems. Will the banks and other financial institutions cede this territory to Bitcoin? Wouldn't banks' systems be more likely to gain acceptance from people other than perhaps millennials? What would happen to Bitcoin's utility as a payment mechanism if Amazon announced its own? Would you rather transact in Bitcoin or Amazonians?
- Second, if Bitcoin were to become the leading non-governmental payment system, what would cause it to appreciate? If you want to pay me in Bitcoin and I'll accept it, what would cause its price to rise? Adherents would argue that the limited supply relative to the growing use will make the price rise. But that assumes there's no price so high for Bitcoin that transferees won't accept it in lieu of dollars. The "pro" side of the argument foresees limitless appreciation, but that doesn't make sense. Think of any other currency: isn't there a price at which you wouldn't accept it? Would you sell your house for euros that are said to be worth two or three times as much as the dollar?

Marc Andreessen wrote an excellent article in The New York Times' *Dealbook*, titled "Why Bitcoin Matters" (January 21, 2014). The article outlined Bitcoin's potential as a payment system and described many of the advantages listed above. But it didn't include one word about why these advantages give Bitcoin appreciation potential.

So what's my real bottom line?

- Advocates say if Bitcoin is accepted as described above, you'll make more than 50 times your money. Thus success doesn't have to be highly probable for buying Bitcoin to have a huge expected return. **This is called "lottery-ticket thinking," under which it seems smart to bet on an improbable outcome that offers a huge potential payoff.** We saw it in full flower in the dot-com boom in 1999-2000, and I think we're seeing it in action again today with regard to Bitcoin. Nothing is as seductive as the possibility of vast wealth.
- Several of the "seeds for a boom" that I listed in "There They Go Again . . . Again" are at work in the Bitcoin surge: (a) there is **a grain of underlying truth** as set out above; (b) there's **the prospect of a virtuous circle**: widespread demand will lead to wider acceptance as legal tender, which will lead to widespread demand; and (c) thus **this tree may grow to the sky,** as there is no obvious limit to this logic. None of these things necessarily make Bitcoin a mistake. They merely say elements that contributed to past bubbles can be detected today with regard to Bitcoin.
- Finally, Bitcoin isn't alone. There are hundreds of digital currencies already – including eleven with market capitalizations over a billion dollars – and no limits on the creation of new ones. So even if digital currencies are here to stay, who knows which one will turn out to be the winner? Hundreds of e-commerce start-ups appreciated rapidly in the tech bubble based on the premise that "the Internet will change the world." It did, but most of the companies ended up worthless.

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Thanks to the people who took the time to educate me, I'm a little less of a dinosaur regarding Bitcoin than I was when I wrote my last memo. I think I understand what a digital currency is, how Bitcoin works, and some of the arguments for it. But I still don't feel like putting my money into it, because I consider it a speculative bubble. I'm willing to be proved wrong.

Passive Investing

Passive investing can be thought of as a low-risk, low-cost and non-opinionated way to participate in "the market," and that view is making it more and more popular. But I continue to think about the impact of passive investing **on** the market.

One of the most important things to always bear in mind is George Soros's "theory of reflexivity," which I paraphrase as saying that the efforts of investors to master the market affect the market they're trying to master. **In other words, how would golf be if the course played back: if the efforts of golfers to put their shot in the right place caused the right place to become the wrong place? That's certainly the case with investing.**

It's tempting to think of the investment environment as an unchanging backdrop, that is, an independent variable. Then all you have to do is figure out the right course of action and take it. But what if the environment is a dependent variable? Does the behavior of investors alter the environment in which they work? Of course it does.

The early foundation for passive or index investing lay in the belief that the efforts of active investors cause stocks to be priced fairly, so that they offer a fair risk-adjusted return. This "efficiency" makes it hard for mispricings to exist and for investors to identify them. "The average investor does average before fees," I was taught, "and thus below average after fees. You might as well throw darts."

There's less talk of dart-throwing these days, but much more money is being invested passively**. If you want an index's performance and believe active managers can't deliver it (or beat it) after their high fees, why not just buy a little of every stock in the index? That way you'll invest in the stocks in the index in proportion to their representation, which is presumed to be "right" since it is set by investors assessing their fundamentals.** (Of course there's a contradiction in this. Active managers have been judged to be unable to beat the market but competent to set appropriate market weightings for the passive investors to rely on. But why quibble?)

The trend toward passive investing has made great strides. Roughly 35% of all U.S. equity investing is estimated to be done on a passive basis today, leaving 65% for active management. However, Raj Mahajan of Goldman Sachs estimates that already a substantial majority of daily trading is originated by quantitative and systematic strategies including passive vehicles, quantitative/algorithmic funds and electronic market makers. In other words, just a fraction of trades have what Raj calls "originating decision makers" that are human beings making fundamental value judgments regarding companies and their stocks, and performing "price discovery" (that is, implementing their views of what something's worth through discretionary purchases and sales).

What percentage of assets has to be actively managed by investors driven by fundamentals and value for stocks to be priced "right," market weightings to be reasonable and passive investing to be sensible? I don't think there's a way to know, but people say it can be as little as 20%. If that's true, active, fundamentally driven investing will determine stock prices for a long time to come. But what if it takes more?

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Passive investing is done in vehicles that make no judgments about the soundness of companies and the fairness of prices. More than $1 billion is flowing daily to "passive managers" (there's an oxymoron for you) who buy regardless of price. I've always viewed index funds as "freeloaders" who make use of the consensus decisions of active investors for free. **How comfortable can investors be these days, now that fewer and fewer active decisions are being made?**

Certainly the process described above can introduce distortions. At the simplest level, **if all equity capital flows into index funds for their dependability and low cost, then the stocks in the indices will be expensive relative to those outside them.** That will create widespread opportunities for active managers to find bargains among the latter. **Today, with the proliferation of ETFs and their emphasis on the scalable market leaders, the FAANGs are a good example of insiders that are flying high, at least partially on the strength of non-discretionary buying.**

I'm not saying the passive investing process is faulty, just that it deserves more scrutiny than it's getting today.

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The State of the Market

There has been a lot of discussion about how elevated I think the market is. I've pushed back strongly against people who describe me as "super-bearish." **In short, as I wrote in the memo, I believe the market is "not a nonsensical bubble – just high and therefore risky."**

I wouldn't use the word "bubble" to describe today's general investment environment. It happens that our last two experiences were bubble-crash (1998-2002) and bubble-crash (2005-09). But that doesn't mean every advance will become a bubble, or that by definition it will be followed by a crash.

- Current psychology cannot be described as "euphoric" or "over-the-moon." Most people seem to be aware of the uncertainties that are present and of the fact that the good times won't roll on forever.
- Since there hasn't been an economic boom in this recovery, there doesn't have to be a major bust.
- Leverage at the banks is a fraction of the levels reached in 2007, and it was those levels that gave rise to the meltdowns we witnessed.
- Importantly, sub-prime mortgages and sub-prime-based mortgage backed securities were the key ingredient whose failure directly caused the Global Financial Crisis, and I see no analog to them today, either in magnitude or degree of dubiousness.

It's time for caution, as I wrote in the memo, not a full-scale exodus. There is absolutely no reason to expect a crash. There may be a painful correction, or in theory the markets could simply drift down to more reasonable levels – or stay flat as earnings increase – over a long period (although most of the time, as my partner Sheldon Stone says, "the air goes out of the balloon much faster than it went in").

Investing in a Low-Return World

A lot of the questions I've gotten on the memo are one form or another of "So what should I do?" Thus I've realized the memo was diagnostic but not sufficiently prescriptive. I should have spent more time on the subject of what behavior is right for the environment I think we're in.

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In the low-return world I described in the memo, the options are limited:

1. Invest as you always have and expect your historic returns.
2. Invest as you always have and settle for today's low returns.
3. Reduce risk to prepare for a correction and accept still-lower returns.
4. Go to cash at a near-zero return and wait for a better environment.
5. Increase risk in pursuit of higher returns.
6. Put more into special niches and special investment managers.

It would be sheer folly to expect to earn traditional returns today from investing like you've done traditionally (#1). With the risk-free rate of interest near zero and the returns on all other investments scaled based on that, I dare say few if any asset classes will return in the next few years what they've delivered historically.

Thus one of the sensible courses of action is to **invest as you did in the past but accept that returns will be lower**. Sensible, but not highly satisfactory. No one wants to make less than they used to, and the return needs of institutions such as pension funds and endowments are little changed. Thus #2 is difficult.

If you believe what I said in the memo about the presence of risk today, you might want to opt for #3. In the future people may demand higher prospective returns or increased prospective risk compensation, and the way investments would provide them would be through a correction that lowers their prices. **If you think a correction is coming, reducing your risk makes sense.** But what if it takes years for it to arrive? Since Treasurys currently offer 1-2% and high yield bonds offer 5-6%, for example, fleeing to the safety of Treasurys would cost you about 4% per year. What if it takes years to be proved right?

Going to cash (#4) is the extreme example of risk reduction. **Are you willing to accept a return of zero as the price for being assured of avoiding a possible correction?** Most investors can't or won't voluntarily sign on for zero returns.

All the above leads to #5: **increasing risk as the way to earn high returns in a low-return world**. But if the presence of elevated risk in the environment truly means a correction lies ahead at some point, risk should be increased only with care. As I said in the memo, every investment decision can be implemented in high-risk or low-risk ways, and in risk-conscious or risk-oblivious ways. High risk does not assure higher returns. It means accepting greater uncertainty with the goal of higher returns and the possibility of substantially lower (or negative) returns. I'm convinced that at this juncture it should be done with great care, if at all.

And that leaves #6. **"Special niches and special people,"** if they can be identified, can deliver higher returns without proportionally more risk. That's what "special" means to me, and it seems like the ideal solution. But it's not easy. Pursuing this tack has to be based on the belief that (a) there are inefficient markets and (b) you or your managers have the exceptional skill needed to exploit them. Simply put, this can't be done without risk, as one's choice of market or manager can easily backfire.

As I mentioned above, none of these possibilities is attractive or a sure thing. But there are no others. What would I do? For me the answer lies in a combination of numbers 2, 3 and 6.

Expecting normal returns from normal activities (#1) is out in my book, as are settling for zero in cash (#4) and amping up risk in the hope of draws from the favorable part of the probability distribution (#5) (our current position in the elevated part of the cycle decreases the likelihood that outcomes will be favorable).

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Thus I would mostly do the things I always have done and accept that returns will be lower than they traditionally have been (#2). While doing the usual, I would increase the caution with which I do it (#3), even at the cost of a reduction in expected return. And I would emphasize "alpha markets" where hard work and skill might add to returns (#6), since there are no "beta markets" that offer generous returns today.

These things are all embodied in our implementation of the mantra that has guided Oaktree in recent years: "move forward, but with caution."

Since the U.S. economy continues to bump along, growing moderately, there's no reason to expect a recession anytime soon. As a consequence, it's inappropriate to bet that a correction of high prices and pro-risk behavior will occur in the immediate future (but also, of course, that it won't).

Thus Oaktree is investing today wherever good investment opportunities arise, and we're not afraid to be fully invested where there are enough of them. But we are employing caution, and since we're a firm that thinks of itself as always being cautious, that means more caution than usual.

This posture has served us extremely well in recent years. Our underlying conservatism has given us the confidence needed to be largely fully invested, and this has permitted us to participate when the markets performed better than expected, as they did in 2016 and several of the last six years. **Thus we'll continue to follow our mantra, as we think it positions us well for the uncertain environment that lies ahead.**

September 7, 2017

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Memo to: Oaktree Clients

From: Howard Marks

Re: There They Go Again . . . Again

Some of the memos I'm happiest about having written came at times when bullish trends went too far, risk aversion disappeared and bubbles inflated. The first and best example is probably "bubble.com," which raised questions about Internet and e-commerce stocks on the first business day of 2000. As I tell it, after ten years without a single response, that one made my memo writing an overnight success.

Another was "The Race to the Bottom" (February 2007), which talked about the mindless shouldering of risk that takes place when investors are eager to put money to work. Both of those memos raised doubts about investment trends that soon turned out to have been big mistakes.

Those are only two of the many cautionary memos I've written over the years. In the last cycle, they started coming two years before "The Race to the Bottom" and included "There They Go Again" (the inspiration for this memo's title), "Hindsight First, Please," "Everyone Knows" and "It's All Good." When I wrote them, they appeared to be wrong for a while. It took time before they were shown to have been right, and just too early.

The memos that have raised yellow flags in the current up-cycle, starting with "How Quickly They Forget" in 2011 and including "On Uncertain Ground," "Ditto," and "The Race Is On," also clearly were early, but so far they're not right (and in fact, when you're early by six or more years, it's not clear you can ever be described as having been right). **Since I've written so many cautionary memos, you might conclude that I'm just a born worrier who eventually is made to be right by the operation of the cycle, as is inevitable given enough time. I absolutely cannot disprove that interpretation**. But my response would be that it's essential to take note when sentiment (and thus market behavior) crosses into too-bullish territory, even though we know rising trends may well roll on for some time, and thus that such warnings are often premature. **I think it's better to turn cautious too soon (and thus perhaps underperform for a while) rather than too late, after the downslide has begun, making it hard to trim risk, achieve exits and cut losses.**

Since I'm convinced "they" are at it again – engaging in willing risk-taking, funding risky deals and creating risky market conditions – it's time for yet another cautionary memo. **Too soon? I hope so**; we'd rather make money for our clients in the next year or two than see the kind of bust that gives rise to bargains. (We all want there to be bargains, but no one's eager to endure the price declines that create them.) Since we never know when risky behavior will bring on a market correction, I'm going to issue a warning today rather than wait until one is upon us.

I'm in the process of writing another book, going into great depth regarding one of the most important things discussed in my book *The Most Important Thing*: cycles, their causes, and what to do about them. It will be out next year, but this memo will give you a preview regarding one of the most important cyclical phenomena.

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Before starting in, I want to apologize for the length of this memo, almost double the norm. First, the topic is wide-ranging – so much so that when I sat down to write, I found the task daunting. Second, my recent vacation gave me the luxury of time for writing. Believe it or not, I've cut what I could. I think what remains is essential.

Today's Investment Environment

Because I don't intend this to be a "macro memo," incorporating a thorough review of the economic and market environment, I'll merely reference what I think are the four most noteworthy components of current conditions:

- **The uncertainties are unusual in terms of number, scale and insolubility** in areas including secular economic growth; the impact of central banks; interest rates and inflation; political dysfunction; geopolitical trouble spots; and the long-term impact of technology.

- In the vast majority of asset classes, **prospective returns are just about the lowest they've ever been**.

- **Asset prices are high across the board**. Almost nothing can be bought below its intrinsic value, and there are few bargains. In general the best we can do is look for things that are less over-priced than others.

- **Pro-risk behavior is commonplace**, as the majority of investors embrace increased risk as the route to the returns they want or need.

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Ditto

In January 2013, I wrote a memo entitled "Ditto." Its thrust was that (a) history tends to repeat, (b) thus my memos often return to the same topics and (c) if I've handled them well in the past, rather than re-invent the wheel, I might as well borrow from what I've written before. Ergo, "ditto."

Few topics are more susceptible to this treatment than the process through which (a) investment fundamentals fluctuate cyclically; (b) investors overreact to the fluctuations; (c) the level of risk aversion incorporated in investor behavior fluctuates between excessive and inadequate; and thus (d) market conditions swing from depressed to elevated and treacherous. Here's how I summed up on this topic in "There They Go Again" (May 2005):

> Given today's paucity of prospective return at the low-risk end of the spectrum and the solutions being ballyhooed at the high-risk end, many investors are moving capital to riskier (or at least less traditional) investments. But (a) they're making those riskier investments just when the prospective returns on those investments are the lowest they've ever been; (b) they're accepting return increments for stepping up in risk that are as slim as they've ever been; and (c) they're signing up today for things they turned down (or did less of) in the past, when the prospective returns were much higher. This may be exactly the wrong time to add to risk in pursuit of more

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> return. You want to take risk when others are fleeing from it, not when they're competing with you to do so.

Do you see any differences between then and now? Is there any need to redo this description? Not for me; I think "ditto" will suffice. I'll simply go on to borrow the conclusion from "The Race to the Bottom" (February 2007):

> **Today's financial market conditions are easily summed up: There's a global glut of liquidity, minimal interest in traditional investments, little apparent concern about risk, and skimpy prospective returns everywhere. Thus, as the price for accessing returns that are potentially adequate (but lower than those promised in the past), investors are readily accepting significant risk in the form of heightened leverage, untested derivatives and weak deal structures.** The current cycle isn't unusual in its form, only its extent. There's little mystery about the ultimate outcome, in my opinion, but at this point in the cycle it's the optimists who look best.

The Seeds for a Boom

My son Andrew worked extensively with me in preparing this memo. We particularly enjoyed making a list of the elements that typically form the foundation for a bull market, boom or bubble. We concluded that some or all of the following are necessary conditions. A few will give us a bull market. All of them together will deliver a boom or bubble:

- **A benign environment** – good results lull investors into complacency, as they get used to having their positive expectations rewarded. Gains in the recent past encourage the heated pursuit of further gains in the future (rather than suggest that past gains might have borrowed from future gains).
- **A grain of truth** – the story supporting a boom isn't created out of whole cloth; it generally coalesces around something real. The seed usually isn't imaginary, just eventually overblown.
- **Early success** – the gains enjoyed by the "wise man in the beginning" – the first to seize upon the grain of truth – tends to attract "the fool in the end" who jumps in too late.
- **More money than ideas** – when capital is in oversupply, it is inevitable that risk aversion dries up, gullibility expands, and investment standards are relaxed.
- **Willing suspension of disbelief** – the quest for gain overcomes prudence and deference to history. Everyone concludes "this time it's different." No story is too good to be true.
- **Rejection of valuation norms** – all we hear is, "the asset is so great: there's no price too high." Buying into a fad regardless of price is the absolute hallmark of a bubble.
- **The pursuit of the new** – old timers fare worst in a boom, with the gains going disproportionately to those who are untrammeled by knowledge of the past and thus able to buy into an entirely new future.
- **The virtuous circle** – no one can see any end to the potential of the underlying truth or how high it can push the prices of related assets. It's broadly accepted that trees can grow to the sky: "It can only go up. Nothing can stop it." Certainly no one can picture things taking a turn for the worse.

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- **Fear of missing out** – when all the above becomes widespread, optimism prevails and no one can imagine a glitch. That causes most people to conclude that the greatest potential error lies in failing to participate in the current market darling.

Certainly many of the things listed above are in play today. Performance has been good – with minor exceptions, quickly rectified – since the beginning of 2009 (that's more than eight years). There's certainly more money around these days than high-return possibilities. "New ideas" are readily accepted, and some things are viewed as representing virtuous circles.

On the other hand, some of the usual ingredients are missing. **Most people (a) are conscious of the uncertainties listed above, (b) recognize that prospective returns are quite skimpy, and (c) accept that things are unlikely to go well forever.** That's all healthy.

But on the third hand, most people can't think of what might cause trouble anytime soon. But it's precisely when people can't see what it is that could make things turn down that risk is highest, since they tend not to price in risks they can't see. **With the negative catalyst so elusive and the return on cash at punitive levels, people worry more about being underinvested or bearing too little risk (and thus earning too low a return in good markets) than they do about losing money.**

This combination of elements presents today's investors with a highly challenging environment. The result is a world in which assets have appreciated significantly, risk aversion is low, and propositions are accepted that would be questioned if investors were more wary.

Most of what remains for the meat of this memo will consist of descriptions of things afoot in the markets today. They are intended – as usual with my memos – to be anecdotal and thought-provoking, not complete and scientific. Think about how many of the things listed above you see in the examples that follow.

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U.S. Equities

The good news is that the U.S. economy is the envy of the world, with the highest growth rate among developed nations and a slowdown unlikely in the near term. The bad news is that this status generates demand for U.S. equities that has raised their prices to lofty levels.

- The S&P 500 is selling at 25 times trailing-twelve-month earnings, compared to a long-term median of 15.
- The Shiller Cyclically Adjusted PE Ratio stands at almost 30 versus a historic median of 16. This multiple was exceeded only in 1929 and 2000 – both clearly bubbles.
- While the "p" in p/e ratios is high today, the "e" has probably been inflated by cost cutting, stock buybacks, and merger and acquisition activity. Thus today's reported valuations, while high, may actually be understated relative to underlying profits.
- The "Buffett Yardstick" – total U.S. stock market capitalization as a percentage of GDP – is immune to company-level accounting issues (although it isn't perfect either). It hit a new all-time high last month of around 145, as opposed to a 1970-95 norm of about 60 and a 1995-2017 median of about 100.

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- Finally, it can be argued that even the normal historic valuations aren't merited, since economic growth may be slower in the coming years than it was in the post-World War II period when those norms were established.

The thing that is clearest is that the low Fed-mandated short-term interest rates make high valuations seem reasonable. When yields are low on fixed income instruments, low earnings yields on equities (that is, low e/p ratios, which equate to high p/e ratios) seem justified. As Buffett said in February, "Measured against interest rates, stocks actually are on the cheap side compared to historic valuations."

But he went on to say, ". . . the risk always is that interest rates go up a lot, and that brings stocks down." **Are you happy counting on continued low interest rates for your investment security, especially at a time when the Fed has embarked upon a series of rate increases?** And if interest rates do remain low for several more years, isn't it likely to be as a result of a lack of vigor in the economy, which would likely cause earnings growth to be sluggish?

<u>VIX</u>

The value of an option contract is largely a function of the volatility of the asset under option. For example, the owner of a "call" has the right – but not the obligation – to buy something at a fixed "strike price." Thus he should hope the asset will be volatile: if its price rises a lot, he can buy at the strike price and sell at the new, higher price, locking in a profit. And what if it goes down a lot? No matter; he isn't obligated to buy.

Thus the expected volatility of the underlying asset is a key ingredient in determining the proper price for an option. For example, everything else being equal, the more volatile an asset is expected to be, the more the buyer of a call should be willing to pay for it (since he participates in the gains but not the losses) and the more the seller of a call should charge for it (since he is forgoing upside potential but retaining downside risk). This is reflected through option-pricing formulas such as the Black-Scholes Model.

The formulas can also be used backwards. Starting with the option price, you can figure out what level of volatility the buyers and sellers are anticipating. Thus, ever since 1990, the Chicago Board Options Exchange has published the CBOE Volatility Index, or "VIX," showing how volatile investors in options on the S&P 500 expect it to be over the next 30 days. The attention paid to the VIX has increased in recent years, and it has come to be called the "complacency index" or the "investor fear gauge." When the VIX is low, investors are pricing in stable, tranquil markets, and when it's high they're anticipating major ups and downs.

The bottom line is that last week's VIX was the lowest in its 27-year history – matching a level seen only once before. The index was last this low when Bill Clinton took office in 1993, at a time when there was peace in the world, faster economic growth and a much smaller deficit. Should people really be as complacent now as they were then?

What's the significance of the VIX, anyway? **Most importantly, it doesn't say what volatility will be, only what investors think volatility will be.** Thus it's primarily an indicator of investor sentiment. In "Expert Opinion" I quoted Warren Buffett as having said, "Forecasts usually tell us

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more of the forecaster than of the future." In a similar way, the VIX tells us more about people's mood today than it does about volatility tomorrow.

All we really know is that implied volatility expectations are low today. As with most things in investing, the VIX can be subject to multiple interpretations. As *Business Insider* wrote on July 18:

> While alarmists may view this [low level of VIX] as a negative — a signal that complacency has made traders vulnerable to an unforeseen shock — many investors simply see it as a byproduct of conditions ideal for stocks to continue edging higher.

I would add one last thing: people extrapolate. So when volatility **has been** low, they tend to assume it **will be** low and build that assumption into the prices for options and assets. **The two are not the same.**

<u>Super-Stocks</u>

Bull markets are often marked by the anointment of a single group of stocks as "the greatest," and the attractive legend surrounding this group is among the factors that support the bull move. When taken to the extreme – as it invariably is – this phenomenon satisfies some of the elements in a boom listed on page four, including:

- trust in a virtuous circle incapable of being interrupted;
- conviction that, given the companies' fundamental merit, there's no price too high for their stocks; and
- the willing suspension of disbelief that allows investors to extrapolate these positive views to infinity.

In the current iteration, these attributes are being applied to a small group of tech-based companies, which are typified by "the FAANGs": Facebook, Amazon, Apple, Netflix and Google (now renamed Alphabet). They all sport great business models and unchallenged leadership in their markets. Most importantly, they're viewed as having captured the future and thus as sure to be winners in the years to come.

True as far as it goes . . . just as it appeared to be true of the Nifty-Fifty in the 1960s, oil stocks in the '70s, disk drive companies in the '80s, and tech/media/telecom in the late '90s. But in each of those cases:

- the environment changed in unforeseen ways,
- it turned out that the newness of the business model had hidden its flaws,
- competition arose,
- excellence in the concept gave rise to weaknesses in execution, and/or
- it was shown that even great fundamentals can become overpriced and thus give way to massive losses.

The FAANGs are truly great companies, growing rapidly and trouncing the competition (where it exists). But some are doing so without much profitability, and for others profits are growing slower

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than revenues. Some of them doubtless will be the great companies of tomorrow. But will they all? Are they invincible, and is their success truly inevitable?

The prices investors are paying for these stocks generally represent 30 or more years of the companies' current earnings. There are clear reasons to be excited about their growth in the near term, but what about the durability of earnings over the long term, where much of the value in a high-multiple stock necessarily lies? Andrew points out that the iPhone is just ten years old, and twenty years ago the Internet wasn't in widespread use. That raises the question of whether investors in technology can really see the future, and thus how happy they should be paying prices that incorporate optimistic assumptions regarding long-term earnings power. Of course, this may just mean the best is yet to come for these fairly young companies.

Here's a passage from one company's 1997 letter to shareholders:

> We established long-term relationships with many important strategic partners, including America Online, Yahoo!, Excite, Netscape, GeoCities, AltaVista, @Home, and Prodigy.

How many of these "important strategic partners" still exist in a meaningful way today (leaving aside the question of whether they're important or strategic)? The answer is zero (unless you believe Yahoo! satisfies the criteria, in which case the answer is one). The source of the citation is Amazon's 1997 annual report, and the bottom line is that the future is unpredictable, and nothing and no company is immune to glitches.

The super-stocks that lead a bull market inevitably become priced for perfection. And in many cases the companies' perfection turns out eventually to be either illusory or ephemeral. Some of the "can't lose" companies of the Nifty-Fifty were ultimately crippled by massive changes in their markets, including Kodak, Polaroid, Xerox, Sears and Simplicity Pattern (do you see many people sewing their own clothes these days?). Not only did the perfection that investors had paid for evaporate, but even the successful companies' stock prices reverted to more-normal valuation multiples, resulting in sub-par equity returns.

The powerful multiple expansion that makes a small number of stocks the leaders in a bull market is often reversed in the correction that follows, saddling them with the biggest losses. But when the mood is positive and things are going well, the likelihood of such a development is easily overlooked.

Finally, a rationale often arises to the effect that, thanks to market technicals, investors' powerful buying of the leading stocks is sure to continue non-stop, meaning they can't help but remain the best performers. In the tech bubble of the late 1990's, for example, investors concluded that:

- stocks were doing so well that they would continue to attract capital,
- since tech companies and tech stocks were the best performers, they were sure to continue attracting a disproportionate share of the new buying,
- the superior performance of the tech stocks would cause more of them to be added to the stock indices,
- this would require index funds and closet indexers to direct a rising share of their buying to tech stocks,

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- in order to keep up with the returns on the indices, benchmark-conscious active managers would have to respond by increasing their tech stock holdings, and,
- thus tech stocks couldn't fail to attract an ever-rising share of buying, and were sure to keep outperforming.

You can call this a virtuous circle or a perpetual motion machine. It's the kind of thing that fires investors' imaginations in a bull market. But the logic that says it will work forever always collapses, sometimes just under its own weight, as was the case in 2000.

Many of the most important considerations in investing are counterintuitive. One of those is the ability to understand that no market, niche or group is likely to outperform the others forever. Given human nature, "the best" will always come eventually to be overpriced, even for their stellar fundamentals. Thus even if the fundamentals hold up, the stocks' performance from those too-high prices will become ordinary. And if they turn out not really to have been the best – or if their business falters – the combination of fundamental decline and multiple contraction can be really painful.

I'm not saying the FAANGs aren't great, or that they'll suffer such a fate. Just that their elevated status today is a sign of the kind of investor optimism for which we must be on the lookout.

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Passive Investing/ETFs

Fifty years ago, shortly after arriving at the University of Chicago for graduate school, I was taught that thanks to market efficiency, (a) assets are priced to provide fair risk-adjusted returns and (b) no one can consistently find the exceptions. In other words, "you can't beat the market." Our professors even advanced the idea of buying a little bit of each stock as a can't-fail, low-cost way to outperform the stock-pickers.

John Bogle put that suggestion into practice. Having founded Vanguard a year earlier, he launched the First Index Investment Trust in 1975, the first index fund to reach commercial scale. As a vehicle designed to emulate the S&P 500, it was later renamed the Vanguard 500 Index Fund.

The concept of indexation, or passive investing, grew gradually over the next four decades, until it accounted for 20% of equity mutual fund assets in 2014. Given the generally lagging performance of active managers over the last dozen or so years, as well as the creation of ETFs, or exchange-traded funds, which make transacting simpler, the shift from active to passive investing has accelerated. Today it's a powerful movement that has expanded to cover 37% of equity fund assets. In the last ten years, $1.4 trillion has flowed into index mutual funds and ETFs (and $1.2 trillion out of actively managed mutual funds).

Like all investment fashions, passive investing is being warmly embraced for its positives:

- Passive portfolios have outperformed active investing over the last decade or so.
- With passive investing you're guaranteed not to underperform the index.
- Finally, the much lower fees and expenses on passive vehicles are certain to constitute a permanent advantage relative to active management.

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Does that mean passive investing, index funds and ETFs are a no-lose proposition? Certainly not:

- While passive investors protect against the risk of underperforming, they also surrender the possibility of outperforming.
- The recent underperformance on the part of active investors may well prove to be cyclical rather than permanent.
- As a product of the last several years, ETFs' promise of liquidity has yet to be tested in a major bear market, particularly in less-liquid fields like high yield bonds.

Here are a few more things worth thinking about:

Remember, the wisdom of passive investing stems from the belief that the efforts of active investors cause assets to be fairly priced – that's why there are no bargains to find. But what happens when the majority of equity investment comes to be managed passively? Then prices will be freer to diverge from "fair," and bargains (and over-pricings) should become more commonplace. This won't assure success for active managers, but certainly it will satisfy a necessary condition for their efforts to be effective.

One of my clients, the chief investment officer of a pension fund, told me the treasurer had proposed dumping all active managers and putting the whole fund into index funds and ETFs. My response was simple: ask him how much of the fund he's comfortable having in assets no one is analyzing.

As Steven Bregman of Horizon Kinetics puts it, "basket-based mechanistic investing" is blindly moving trillions of dollars. ETFs don't have fundamental analysts, and because they don't question valuations, they don't contribute to price discovery. **Not only is the number of active managers' analysts likely to decline if more money is shifted to passive investing, but people should also wonder about who's setting the rules that govern passive funds' portfolio construction.**

The low fees and expenses that make passive investments attractive mean their organizers have to emphasize scale. To earn higher fees than index funds and achieve profitable scale, ETF sponsors have been turning to "smarter," not-exactly-passive vehicles. Thus ETFs have been organized to meet (or create) demand for funds in specialized areas such as various stock categories (value or growth), stock characteristics (low volatility or high quality), types of companies, or geographies. There are passive ETFs for people who want growth, value, high quality, low volatility and momentum. Going to the extreme, investors now can choose from funds that invest passively in companies that have gender-diverse senior management, practice "biblically responsible investing," or focus on medical marijuana, solutions to obesity, serving millennials, and whiskey and spirits.

But what does "passive" mean when a vehicle's focus is so narrowly defined? **Each deviation from the broad indices introduces definitional issues and non-passive, discretionary decisions.** Passive funds that emphasize stocks reflecting specific factors are called "smart-beta funds," but who can say the people setting their selection rules are any smarter than the active managers who are so disrespected these days? Bregman calls this "semantic investing," meaning stocks are chosen on the basis of labels, not quantitative analysis. There are no absolute standards for which stocks represent many of the characteristics listed above.

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Importantly, organizers wanting their "smart" products to reach commercial scale are likely to rely heavily on the largest-capitalization, most-liquid stocks. For example, having Apple in your ETF allows it to get really big. Thus Apple is included today in ETFs emphasizing tech, growth, value, momentum, large-caps, high quality, low volatility, dividends, and leverage.

Here's what Barron's had to say earlier this month:

> With cap-weighted indexes, index buyers have no discretion but to load up on stocks that are already overweight (and often pricey) and neglect those already underweight. That's the opposite of buy low, sell high.

The large positions occupied by the top recent performers – with their swollen market caps – mean that as ETFs attract capital, they have to buy large amounts of these stocks, further fueling their rise. **Thus, in the current up-cycle, over-weighted, liquid, large-cap stocks have benefitted from forced buying on the part of passive vehicles, which don't have the option to refrain from buying a stock just because its overpriced.**

Like the tech stocks in 2000, this seeming perpetual motion machine is unlikely to work forever. If funds ever flow out of equities and thus ETFs, what has been disproportionately bought will have to be disproportionately sold. **It's not clear where index funds and ETFs will find buyers for their over-weighted, highly appreciated holdings if they have to sell in a crunch. In this way, appreciation that was driven by passive buying is likely to eventually turn out to be rotational, not perpetual.**

Finally, the systemic risks to the stock market have to be considered. Bregman calls "the index universe a big, crowded momentum trade." A handful of stocks – the FAANGs and a few more – are responsible for a rising percentage of the S&P's gains, meaning the stock market's health may be overstated.

All the above factors raise questions about the likely effectiveness of passive vehicles – and especially smart-beta ETFs.

- Is Apple a safe stock or a stock that has performed well of late? Is anyone thinking about the difference?
- Are investors who invest in a number of passive vehicles described in different ways likely to achieve the diversification, liquidity and safety they expect?
- **And what should we think about the willingness of investors to turn over their capital to a process in which neither individual holdings nor portfolio construction is the subject of thoughtful analysis and decision-making, and in which buying takes place regardless of price?**

<u>Credit</u>

Corporate debt instruments are good candidates for spotting bull-market behavior given that (unlike equities, for example), we can readily determine their prospective returns. We know that, as described in "The Race to the Bottom," in overpopulated markets providers of credit compete to make loans and investments that embody low returns, weak structures and slender margins of safety.

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Whatever the level of fundamental risk, sometimes the reward for bearing it is demonstrably inadequate, and sometimes it is highly excessive. **It's an over-simplification, but sometimes I think we could base our strategic decisions almost exclusively on the relationship between risk in the market and investors' willingness to bear it.**

It's very helpful to know – and a lot of my new book will be about – where we stand in that swing. In that regard, I'll remind you that "The Race to the Bottom" was prompted by a *Financial Times* article about U.K. banks' willingness to compete for mortgage business by increasing the multiple of annual income they would lend. Earlier this month, ironically, I read the following in another London newspaper, the *Daily Mail*:

> In a chilling echo of the sub-prime mortgage crisis of 2007, car finance firms packaged and sold £5.5 billion of risky loan debt to investors last year – twice as much as the year before.

Such eagerness to finance low-quality loans will always be a sign of elevated, over-financed, risk-oblivious credit markets. At the late-2008 trough of the financial crisis, high yield bonds and leveraged loans yielded almost 2,000 basis points more than comparable Treasurys, meaning anyone who bought and held couldn't really lose. Then, as investors recovered their equilibrium and bought, prices rose and the yield spread contracted. Now the spread is merely average relative to history – a few hundred basis points. The net yields on these securities are still highly likely to be well in excess of those on Treasurys, but any capital appreciation would have to come from further spread contraction, and that certainly can't be counted upon.

The credit investors of today clearly aren't gun-shy, leaving investment opportunities to languish at excessive yields and yield spreads. At best these investments are fairly priced today in relative terms and fully priced – offering low returns like everything else – in absolute terms.

I'll use an example to illustrate the acceptance being accorded low-grade credit instruments. In early May, Netflix issued €1.3 billion of Eurobonds, the lowest-cost debt it ever issued. The interest rate was 3.625%, the covenants were few, and the rating was single-B. Netflix's GAAP earnings run about $200 million per quarter, but according to *Grant's Interest Rate Observer*, in the year that ended March 31, Netflix burned through $1.8 billion of free cash flow. It's an exciting company, but as *Grant's* reminded its readers, bondholders can't participate in gains, just losses. **Given this asymmetrical proposition, any bond issue should be characterized by solidity and a meaningful promised return, not the sex appeal of its issuer.**

Is it prudent to lend money to a company that goes through it at such a prodigious rate? Will Amazon or Google be able to loosen Netflix's hold on its customers? Is it wise to buy bonds based on a technology position that could be overtaken? Positive investor sentiment has taken the company's equity value to $70 billion; what would happen to the bond price if worries about rising competition took a bite out of that one day**? Should you take these risks to make less than 4% per year? In Oaktree's view, this isn't a solid debt investment; it's an equity-linked digital content investment totally lacking in upside potential, and it's not for us. The fact that deals like this can get done easily should tell you something about today's market climate.**

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Finally, let's consider whether risk tolerance and carefree behavior are isolated or widespread in today's credit market. Here are some quotes from a July 14 article by Lisa Abramowicz of *Bloomberg Gadfly* (emphasis added):

> Over the last eight years, junk-rated corporate debt has been transformed from a fringe asset to a staple for many fixed-income investors. As they've become more popular, these risky bonds and loans have increasingly lost a feature that made them so attractive (and lucrative) – the investor protections known as covenants written into the documents that govern the debt. These are aimed at ensuring investors can recover their money if the company fails.
>
> Last month, the $26.9 billion of junk bonds sold had the highest proportion of deals on record with weak investor protections, Moody's Investor Service reported this week. About 60 percent of the risky U.S. corporate bonds sold had few protections written into their deal documents, Moody's said. In the leveraged-loan market, nearly three quarters of the debt is "covenant lite" after three years of record issuance . . .
>
> **Investors have grown so confident about the seemingly interminable corporate-debt rally that many are dismissing the likelihood of large swaths of risky companies going bankrupt. After all, these covenants usually don't matter until there's a problem.**

It's a standard cycle: cautious investing produces good performance in a salutary environment . . . which leads to a reduction of caution . . . which leads to bad performance when the environment turns less favorable. This is part of the race to the bottom I wrote about in 2008.

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Emerging Market Debt

The emerging markets are another place where investor opinion fluctuates wildly and visibly. "Everyone knows" the emerging markets have more growth potential than the developed world, but attitudes regarding the realizability of that potential – and thus the price one should pay for it – gyrate wildly over time.

I described the phenomenon in "The Role of Confidence" (August 2013). When confidence is running high, the emerging markets are viewed as being just like developed markets, only faster-growing, meaning it's reasonable for their securities to sell at yields and p/e ratios like those in the developed world. But when confidence declines, it becomes clear that there are risks that don't exist in the developed world – like coups, institutionalized corruption, maxi-devaluation and debt repudiation – and thus significant valuation discounts are in order. Again, as with corporate credit, which is this? **Are investors appropriately sensitive to the risks and imposing reasonable discounts, or are they ignoring the risks and happily paying up?** That's a lot of what you have to know.

To answer the question, I'll make reference to $2.75 billion of bonds that were issued by Argentina in mid-June. The maturity was 100 years – "century bonds" – and the interest rate was 8%.

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> You might have thought this would be a hard thing to sell. After all, Argentina had defaulted on its debts eight times in its 200-year history, with no fewer than five defaults in the past century alone, most recently in 2014 amid a legal dispute with the Elliott hedge fund. . . .
>
> But investors do not seem to care: there were $9.75bn of bids. And Argentina is not the only peculiar event in bond markets this month. Take a look, for example, at Ivory Coast. In recent weeks, this West African nation underwent yet another military uprising. But this month it sold 16-year bonds with a 6.25 per cent yield – and these were also heavily oversubscribed. Places such as Senegal and Egypt have also seen hot demand for their debt. (*Financial Times*, June 27)

To conclude on this subject, I can't resist citing (but am too polite to name) the head of research and strategy for a likewise-unnamed broker/investment bank:

> "It's just shocking that they exit default and their bond issue is a century bond," said [Ms. X]. . . Nevertheless, she is advising her clients to buy the bonds as at least a short term trade.

Let me get this straight: it's incredible that Argentina is able to issue this thing, but it's a good buy for a moment. **It's a sign of the times: "something may go wrong, but probably not soon."** I much prefer Warren Buffett's view: "If you aren't willing to own a stock for ten years, don't even think about owning it for ten minutes."

For only the third time in history, emerging market debt is selling at yields below those on U.S. high yield bonds. Is Argentina, a country that defaulted five times in the last hundred years (and once in the last five), likely to get through the next hundred without a rerun?

The essential bottom line in all investing is simple: is the risk premium at least adequate? Can we answer in the affirmative with regard to emerging market debt today?

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Private Equity

In today's low-return world, it's clear that institutional investors needing 7-8% a year aren't likely to get it from Treasurys yielding 1-2%, high grades at 3-4%, or mainstream stocks that most people expect to return 5-6%. *Heck, you can't even get it from Ivory Coast bonds!* Where is one to turn?

The good news for firms like Oaktree is that the answer is felt to most likely lie in what have come to be called "alternative investments" (there was no collective term for them when my partners and I started off 30 years ago). Since essentially no public "beta" markets offer the returns institutions need, many have turned instead to so-called "alpha strategies," where skillful, active management has the potential to augment market returns, producing what's needed.

But one of the biggest alternatives categories – hedge funds – has been largely discredited as a result of the meager average return over the last dozen years. And some of the others, like venture capital, are hard to access and too small to absorb much capital. That brings investors mainly to real estate, distressed debt and, especially, private equity.

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Private equity firms market double-digit return track records, and even their top-of-the-cycle 2005-07 funds now sport respectable gains. As a result, they're attracting capital at all-time-high rates:

> Private equity is experiencing the best fundraising climate in years – perhaps ever. In the first half of the year, 224 North America-focused funds closed, raising $133 billion, while globally there have been 412 private equity funds closed, which raised a combined $221.4 billion, surpassing slightly the record $220.8 billion raised in 2008, according to Preqin. (*Mergers & Acquisitions* newsletter)

Private equity funds have been raising total capital in the hundreds of billions for the last few years, and even before the latest spate of mega-funds, they already had several hundred billion of "dry powder." Importantly, since private equity managers mostly engage in leveraged buyouts, these amounts have to be viewed in terms of the levered-up total capital they'll produce. Thus the PE firms will probably add more than a trillion dollars to their buying power this year. Where will it be invested at a time when few assets can be bought at bargain prices? Sellers of private companies, too, tend to set asking prices for their firms based on what cash flows are worth in this low-return world.

I'm not saying private equity isn't a solution, or even that it's not the best solution. It's just that **its record fund-raising is yet one more sign of the willingness of investors to trust in the future.**

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SoftBank Vision Fund

Perhaps the ultimate demonstration of faith in fund managers is SoftBank's recent raising of $93 billion for its Vision Fund for technology investments – presumably on the way to $100 billion. SoftBank is a Japanese telecom company showing an 18-year annual return of 44% on investments that have included chipmakers, ride-hailing and telecom. But I see issues with the fund:

First, SoftBank's record of investment success has relied heavily on one phenomenal investment. The $20 million Softbank invested in Alibaba in 2000 has grown in value to more than $50 billion. **Skill or luck? And extrapolatable?**

Second, size matters. In 1999/2000, the venture capital industry got into trouble because it followed massively successful mid-1990s funds of hundreds of millions, with funds of $1-2 billion. The Vision Fund isn't for startups, but still, can you wisely invest $100 billion in technology?

Third, here's an organization that has never managed money for third parties, starting the biggest fund in history to do just that. Is their experience transferrable? **In all these regards I think the fund indicates a high level of enthusiasm and a low level of skepticism.**

Fourth, and perhaps more importantly for my purposes here, I want to spend some time on the fund's structure. For each 38 cents they put into the fund's equity, outside investors are required to put 62 cents into preferred units of the fund. On the other hand, SoftBank itself invested $28 billion in equity but nothing in preferred.

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- That means when the fund reaches $100 billion, SoftBank will have put up only 28% of the capital but will own 50% of the equity. Adding in management fees and carried interest, its 28% of the capital may give it 60-70% of the gains.
- Even the private equity industry – with its willingness to take risk – has traditionally shied away from piling debt on technology companies (although less so lately). SoftBank doesn't hesitate to lever its tech investments.
- The preferred units will pay a 7% annual coupon. Lending money to a tech fund at that modest rate apparently is part of the price demanded of the LPs for an opportunity to invest in the fund's equity. I can imagine the sales pitch about how lucky the LPs are to get a chance to provide leverage for their own investment, but I doubt I'd be convinced.
- Finally, as the *Financial Times* wrote on June 11:

> While the preferred unit holders will eventually receive their principal back [plus 7% per year], they will only receive [an equity] return for the equity portion of their investment in the fund.
>
> All outside backers of the fund are receiving 62 per cent in preferred units and the rest in equity, allowing them to reduce their downside risk, while still generating a good return.

Sounds good on the surface. But how much does this diversion of the investors' capital into preferred units really reduce their downside risk? **The *FT* says investors in the preferred units "will eventually receive their principal back." Should that really be "will," or perhaps "may" or "hopefully will"?** Does a $100 million investment in the fund put only the $38 million of equity at risk, or is there risk associated with the preferred, too? I guess I don't consider the preferred units as rock-solid as the *FT* suggests. Aren't they more like the Netflix bonds: tech-linked downside with no upside? Would an arm's-length lender give an LP money at 7% to lever his equity in this fund 1.6 times?

The willingness of investors to invest in a shockingly large fund for levered tech investing with a questionable structure is a further indication of an exuberant, unquestioning market.

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Digital Currencies

The discussion of innovative investments brings me to Bitcoin, Ether and other digital currencies. I'd guess these things have arisen from the intersection of (a) doubts about financial security – including the value of national currencies – that grew out of the financial crisis and (b) the comfort felt by millennials regarding all things virtual. But they're not real.

Some businesses accept Bitcoin as payment. Some buyers want to own Ether because it can be used to pay for computing power on the Ethereum network. Some people are eager to speculate on digital currency for profit. Others want to put a little money into these to-date-profitable phenomena rather than run the risk of missing out. But they're not real!

People tell me these currencies are solid, because (a) they're secure against hacking and counterfeiting and (b) the software used to generate them strictly limits the amount that can be

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created. **But they're not real!!!!!** Nobody has been able to make sense to me of these currencies. Here are a few paragraphs on Ether from *The New York Times* of June 19:

> The sudden rise of Ethereum highlights how volatile the bewildering world of virtual currency remains, where lines of code can be spun into billions of dollars in a matter of months. . . .
>
> Ethereum was launched in the middle of 2015 by a 21-year-old college dropout, Vitalik Buterin . . . Mr. Buterin was inspired by Bitcoin, and the software he built shares some of the same basic qualities. Both are hosted and maintained by the computers of volunteers around the world, who are rewarded for their participation with new digital tokens that are released into the network every day.
>
> Because the virtual currencies are tracked and maintained by a network of computers, no government or company is in charge. The prices of both Bitcoin and Ether are established on private exchanges, where people can sell the tokens they own at the going market price. . . .
>
> Many [new currency] applications being built on Ethereum are also raising money using the Ether currency, in what are known as initial coin offerings, a play on initial public offerings.
>
> Start-ups that have followed this path have generally collected Ether from investors and exchanged them for units of their own specialized virtual currency, leaving the entrepreneurs with the Ether to convert into dollars and spend on operational expenses.
>
> These coin offerings, which have proliferated in recent months, have created a surge of demand for the Ether currency. Just last week, investors sent $150 million worth of Ether to a start-up, Bancor, that wants to make it easier to launch virtual currencies.

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Bottom line: you can use the imaginary currency Ether to buy other new imaginary currencies, or to invest in new companies that will create other new currencies. In "bubble.com," I highlighted some illogical aspects of e-commerce by including some of my father's old jokes regarding how to make money. Here's another that seems 100% appropriate for the digital currency movement:

> Two guys meet in the street. Joe tells Bob about the hamster he has for sale: pedigreed and highly intelligent. Bob says he'd like to buy a hamster for his kid: "How much is it?" Joe answers, "half a million," and Bob tells him he's crazy.
>
> They meet again the next day. "How'd you do with that hamster?" Bob asks. "Sold it," says Joe. "Did you get $500,000?" Bob asks. "Sure," says Joe. "Cash?" "No," Joe answers, "I took two $250,000 canaries."

One of my very favorite quotes concerning the market's foibles, from John Kenneth Galbraith, says that in euphoric times, **"past experience, to the extent that it is part of memory at all, is dismissed as the primitive refuge of those who do not have the insight to appreciate the incredible wonders of the present."**

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Maybe I'm just a dinosaur, too technologically backward to appreciate the greatness of digital currency. But it is my firm view that **the ability of these things to gain acceptance is just one more proof of the prevalence today of financial naiveté, willing risk-taking and wishful thinking**.

In my view, digital currencies are nothing but an unfounded fad (or perhaps even a pyramid scheme), based on a willingness to ascribe value to something that has little or none beyond what people will pay for it. But this isn't the first time. The same description can be applied to the Tulip mania that peaked in 1637, the South Sea Bubble (1720) and the Internet Bubble (1999-2000).

Serious investing consists of buying things because the price is attractive relative to intrinsic value. Speculation, on the other hand, occurs when people buy something without any consideration of its underlying value or the appropriateness of its price, solely because they think others will pay more for it in the future.

It isn't unreasonable for someone to use Bitcoin to pay for something – or for a seller to accept Bitcoin in payment – based on an agreement between the parties: barter takes place all the time. But does that make it "currency"?

The price of Bitcoin has more than doubled since the start of the year. Can something that does that seriously be considered a "medium of exchange" or "store of value," rather than the subject of a speculative mania? Maybe not, but Bitcoin looks staid in comparison to Ether, which has appreciated 4,500% so far this year. The outstanding Ether is now worth 82% as much as all the Bitcoin in the world, up from 5% at the beginning of the year.

The New York Times notes that together, the outstanding Bitcoin and Ether are worth more than Paypal and almost as much as Goldman Sachs. Would you rather own all of the two digital currencies or one of those companies? In other words, are these currencies' values real? They're likely to keep working as long as optimism is present, but their performance in bad times is far from dependable. **What will happen to Bitcoin's price and liquidity in a crisis if people decide they'd rather hold dollars (or gold)?**

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We Agree, But . . .

Andrew told me about a conversation he had recently with some fund managers, in which he went over a lot of what I'm discussing here. Given today's conditions, their response started predictably: "We agree, but . . ."

We hear a lot of that these days:

- We agree, but the things we're doing offer higher returns than the rest.
- We agree, but cash isn't an option when it returns nearly nothing.
- We agree, but we can't take the risk of being out of the market.
- We agree, but there's no alternative.

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Investors should choose their risk posture based on an assessment of what's being offered in terms of absolute return, absolute risk, and thus absolute risk-adjusted return. But today – on that famous other hand – investors generally don't have the luxury of holding out for absolute returns and safety like they enjoyed in the past.

Many of the things I've highlighted above offer good returns and risk premiums relative to the returns on Treasurys and high grade debt. But (a) low rates may be – generally are expected to be – a temporary condition and (b) it might be wiser to gauge reward in absolute terms. **The bottom line is that while the prices and prospective returns on many things are justifiable today relative to other things, you can't eat (or spend) relative returns.**

Everyone's investing on the basis of relatives these days; they see no alternative. But that reminds me of former Citigroup CEO Chuck Prince, who gained fame in the months leading up to the Global Financial Crisis for saying of the bank's leveraged lending practices, "When the music stops, in terms of liquidity, things will be complicated. But as long as the music is playing, you've got to get up and dance. We're still dancing." **Today I think most investors know the good times will end someday, as Prince did, but for now they feel they, too, have no choice but to dance.**

And there's one other thing we hear a lot these days:

- We agree things can't go well forever – we agree the cycle is extended, prices are elevated and uncertainty is high – but we don't see anything that's likely to bring the bull market to a close anytime soon.

In other words, there'll be a time for caution, just not today. In that connection, Andrew reminds me about Saint Augustine, who said: "Give me chastity and continence, but not yet." **Is there something other than the punitive returns on safe assets that keeps this from being a time for caution?**

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Observations and Implications

As I said, most of the phenomena described above seem reasonable given the rest of what's going on in today's economic and financial world. But step back for perspective and put them together, and what do we see?

- Some of the highest equity valuations in history.
- The so-called VIX index of fear at an all-time low.
- The elevation of a can't-lose group of stocks.
- The movement of more than a trillion dollars into value-agnostic investing.
- The lowest yields in history on low-rated bonds and loans.
- Yields on emerging market debt that are lower still.
- The most fundraising in history for private equity.
- The biggest fund of all time raised for levered tech investing.
- Billions in digital currencies whose value has multiplied dramatically.

I absolutely am not saying stocks are too high, the FAANGs will falter, credit investing is risky, digital currencies are sure to end up worthless, or private equity commitments won't pay off.

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All I'm saying is that for all the things listed above to simultaneously be gaining in popularity and attracting so much capital, credulousness has to be high and risk aversion has to be low. It's not that these things are doomed, just that their returns may not fully justify their risk. And, more importantly, that they show the temperature of today's market to be elevated. Not a nonsensical bubble – just high and therefore risky.

Try to think of the things that could knock today's market off kilter, like a surprising spike in inflation, a significant slowdown in growth, central banks losing control, or the big tech stocks running into trouble. The good news is that they all seem unlikely. The bad news is that their unlikelihood causes all these concerns to be dismissed, leaving the markets susceptible should any of them actually occur. **That means this is a market in which riskiness is being tolerated and perhaps ignored, and one in which most investors are happy to bear risk. Thus it's not one in which we should do so.**

What else:

- My observations are always indicative, not predictive. **The usual consequences of the conditions I describe – like an eventual increase in risk aversion – should happen, but they don't have to happen.**
- **And they certainly don't have to happen soon.** No one knows anything about timing. Certain consequences are implied, but even if they're going to happen, we have no way of knowing when. It feels like we're in the eighth inning, but I have no idea how long the game will go on.
- **I'm never sure of my market observations.** As you'll see in my new book, I believe strongly that where we are in a cycle says a lot about the market's likely tendencies, but I never state opinions on this subject with high confidence.
- **As a natural worrier, I tend to be early with warnings**, as described on page one. 'Nuff said.
- **Finally, while my observations are uncertain and should be taken with a grain of salt, what I am sure of is that valuations and markets are elevated, and the easy money in this cycle has been made.**

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What to Do

To me, the four components of the current environment listed on pages 2 and 3 – high uncertainty, low prospective returns, high prices and pro-risk behavior – are indisputable. The question is whether you agree. If so, I trust you'll grant that they make for a troubling combination. Markets normally respond to elevated uncertainty with lower asset prices and compensatorily higher returns. But not today. Thus we're living in a low-return, high-risk world. Period.

For that reason, this might seem like an attractive time to refrain from investing, or at least from bearing risk. However, organizations for which investing is an essential part of the business model – like pension funds, insurance companies, endowments and sovereign wealth funds – generally don't have the option to not invest. That's especially true when the return on cash is as low as it is today.

Further, the case for cash that can be built today from all the above could have been made years ago, and doing so would have resulted in huge penalties. Oaktree's investment philosophy

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generally causes us to eschew the raising and lowering of cash. We might make an exception in extraordinary circumstances, but today doesn't seem to warrant doing so. **Instead, Oaktree will continue to follow its 2012 mantra: "move forward, but with caution" – and, given today's conditions, with even more caution than in the recent past. If one is going to invest at times like this, investment professionalism – knowing how to bear risk intelligently, striving for return while keeping an eagle-eye on the potential adverse consequences – is the absolute *sine qua non.***

Environments like today's call to mind the applicability of something I was told more than 40 years ago by Sid Cottle, editor of the later editions of Graham and Dodd's *Security Analysis*: **"Investment is the discipline of relative selection."** I interpret that to mean we have no alternative but to choose from among the available options based on their relative merit.

"There They Go Again" was written in May 2005, at the front end of a string of cautionary memos leading up to the last cyclical peak. It was the first time I explicitly raised the question – too early as usual – of how one should invest in a low-return world. I went on to list a few possibilities, none of which was sure to work, but I concluded with the one thing I was convinced of:

> . . . there's no easy answer for investors faced with skimpy prospective returns and risk premiums. But there is one course of action – one classic mistake – that I most strongly feel is wrong: **reaching for return**.

The events of 2007 and 2008 showed this observation to have been prudent and appropriate. And given today's similarities to the last cycle, I think it's applicable again.

Here's a great observation on the subject from Berkshire-Hathaway's 2010 letter to shareholders:

> We agree with investment writer Ray DeVoe's observation, "More money has been lost reaching for yield than at the point of a gun."

Or as Peter Bernstein put it, "The market is not an accommodating machine; it won't give you high returns just because you need them."

The key strategic decision for anyone shaping investment strategy is whether to apply aggressiveness or defensiveness at a given point in time. In other words, should we worry more today about losing money or about missing opportunity? The answer at all times depends on what's available in the investment environment.

- I have no doubt that the ascent to the apex from which the Global Financial Crisis took place was powered by the willing acceptance of risk in the low-return world of 2004-07. **In other words, excessive risk tolerance and the resulting incautious behavior provided the foundation for the vast losses experienced in the move from peak to trough.**

- And in the trough of late 2008/early '09, I likewise have no doubt that most investors were saying, "I don't care if I ever make another penny in the market; I just don't want to lose any more. Get me out!" **Their excessive risk aversion created the opportunity for the huge returns enjoyed in the recovery.**

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Where are we today? As I said earlier, risk is high and prospective return is low, and the low prospective returns on safe investments are pushing people into taking risk – which they're willing to do – at a time when the reward for doing so is low.

Given my view of the environment, the only reason to be aggressive today is because defensive investing implies low prospective returns. But the question is whether pursuing high expected returns through aggressiveness can be counted on to be rewarded. If the answer is no, as I believe, then this is a time for caution.

That doesn't mean you have to be content with a low-return portfolio. If you need returns higher than those available in the beta markets at the low-risk end of the spectrum, it is reasonable to move into riskier asset classes. **But for every asset class, there are high-risk and low-risk approaches. When the market is rational, low-risk investments will always appear to offer prospective returns lower than those on high-risk ones. But in tough times, the former are less likely to bring losses than the latter. In my opinion that makes them right for today.**

* * *

Perhaps the best way to understand investment cycles is through that great statement attributed to Mark Twain: "History doesn't repeat, but it does rhyme." The duration, pace, amplitude and details of each investment cycle are different from those of its predecessors, but the basic themes and essential ingredients are usually vaguely familiar. What Twain calls rhyming history I describe as "common threads."

The themes or threads that repeatedly characterize too-bullish markets are the ones listed on page 4. **While they don't all have to be present for a top, bull market or boom to form, (a) usually many are present when one does and (b) it's hard for a full-throated bubble to come into existence without them. They truly are the raw materials for market excesses on the upside.**

On the other hand, the keys to avoiding the classic mistakes also recur, and I listed them in "There They Go Again":

- awareness of history,
- belief in cycles rather than unabated, unidirectional trends,
- skepticism regarding the free lunch, and
- insistence on low purchase prices that provide lots of room for error.

Adherence to these things – all parts of the canon of defensive investing – invariably will cause you to miss the most exciting part of bull markets, when trends reach irrational extremes and prices go from fair to excessive. **But they'll also make you a long-term survivor. I can't help thinking that's a prerequisite for investment success.**

The checklist for market sanity and safety is simple, and the answers will tell you what to do:

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- Are prospective returns adequate?
- Are investors appropriately risk-averse?
- Are they applying skepticism and discipline?
- Are they demanding sufficient risk premiums?
- Are valuations reasonable relative to historic standards?
- Are deal structures fair to investors?
- Are investors declining any of the new deals?
- Are there limits on faith in the future?

The basic proposition is simple: Investors make the most and the safest money when they do things other people don't want to do. But when investors are unworried and glad to make risky investments (or worried but investing anyway, because the low-risk alternatives are unappealing), asset prices will be high, risk premiums will be low, and markets will be risky. That's what happens when there's too much money and too little fear.

I'll close with a final "ditto," from "The Race to the Bottom" of just over ten years ago:

> If you refuse to fall into line in carefree markets like today's, it's likely that, for a while, you'll (a) lag in terms of return and (b) look like an old fogey. But neither of those is much of a price to pay if it means keeping your head (and capital) when others eventually lose theirs. In my experience, times of laxness have always been followed eventually by corrections in which penalties are imposed. It may not happen this time, but I'll take that risk. In the meantime, Oaktree and its people will continue to apply the standards that have served us so well over the last [thirty] years.

July 26, 2017

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Memo to: Oaktree Clients

From: Howard Marks

Re: Lines in the Sand

In my 2016 year-end review, which went only to clients, I included a discussion of the use of subscription lines by closed-end funds in areas such as private equity, real estate, distressed debt and private credit. It's my impression that their use has become fairly pervasive in recent years, and in response to clients' requests and market trends, Oaktree has utilized subscription lines in some of its newer funds.

That year-end note prompted some interesting and spirited discussion of lines and their merit and effect. Thus I decided to write this memo on the topic for general circulation.

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How Do Subscription Lines Work?

As I wrote in the year-end review, subscription lines are bank loans extended to funds that enable them to use borrowed money, rather than LP capital, to make early investments or pay fees and expenses. While there is no universal description, I believe it's safe to say in general that subscription lines:

- are limited as a percentage of the LPs' capital commitments. (Commitments from the most creditworthy LPs earn a 90% advance rate, and commitments from lesser credits earn lower advance rates or, in some cases, zero),
- are secured by the LPs' capital commitments, and
- generally must be repaid in the early or middle part of the fund's life (unless extended), although terms are beginning to lengthen.

The key element is that a subscription line can substitute for LP capital, but it can't be used to allow the fund to invest more than its committed capital. That is, a $100 million fund with a subscription line might be able to buy $50 million of assets without calling LP capital, but it still can't invest more than $100 million in total (other than by recycling proceeds from liquidated investments). **The bottom line is that essentially all subscription line financing does is defer the calling of LP capital.**

So the starting point for this discussion is the fact that these lines lever LP capital but do not lever funds in the sense of allowing funds to invest more than their committed capital. Fund-level debt that allows funds to invest more than their committed capital is different from subscription lines and not my subject here.

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What Are the Effects?

Since a subscription line doesn't lever a fund, its use doesn't increase the total dollar profits that the fund will earn from investments over its lifetime (assuming the GP makes the same investments that it would have made if the fund didn't have a line).

Also, the use of a subscription line – obviously – doesn't alter the fund's committed or invested capital. **Thus, assuming all LP capital eventually is drawn, the fund's ratio of distributions to LP capital – either the multiple of committed capital (MOCC) or the multiple of invested capital (MOC) – isn't improved by the use of a line.**

So much for what isn't changed. The question, then, is "what is?" First the positives:

- The original purpose of subscription lines was (a) to enable GPs to make investments and pay fund fees and expenses without frequent capital calls and (b) to prevent opportunistic funds that don't sit on large amounts of cash from missing out on attractive investments requiring quick funding. More recently, however, their use has grown for the additional reasons discussed below.

- With calls for LP capital postponed**, the reported Internal Rate of Return or IRR in the early years – the dollar-weighted return on LP capital – will increase substantially** (assuming the early profits exceed the interest and expenses on the line).

- **The use of borrowed money can reduce or even eliminate the deleterious impact on early returns of the so-called "J-curve."** The J-curve results from (a) the fact that in a fund's early years, management fees are usually charged on total committed capital, while a relatively small percentage of the capital has been put to work, and (b) the tendency of private investments to take a while to show results.

- Over the course of a fund's life, LP capital will typically be called for investments or to repay the borrowings under the subscription line. This will cause the ratio of subscription line capital employed to LP capital to decline. As a result, the fund's IRR will retreat from its elevated early level and move down toward what it would have been if the fund hadn't employed a subscription line. **However, all other things being equal, the fund's lifetime IRR will remain higher than it otherwise would have been, since the impact of using the line will taper off but not reverse.**

- Finally, any committed capital that hasn't been called because of borrowing under the line will remain in the hands of the LPs. **Thus any return the LPs earn on the uncalled capital in excess of their share of the fund's subscription line costs will be additive to their results.**

What about the negatives?

- **If a fund finances investments by borrowing under a subscription line, interest and expenses will be paid that wouldn't have been paid if LP capital had been called instead.** The payment of these costs, even with interest rates below LIBOR+2%, is a permanent net negative for the fund: since the fund isn't becoming levered, it won't be offset by an increase

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in dollar profits (see above). Thus it eats into the fund's dollar lifetime gains as well as its multiple of capital.

Some LPs may actually want to have their capital called and earn their preferred return. That will jibe with their expectations and preserve the historic hurdle for incentive fees. The preferred return that must be earned before the GP receives incentive fees is calculated based on how much LP capital has been called and for how long it has remained outstanding. Thus the use of a subscription line in lieu of LP capital shrinks the dollar preferred return hurdle. **Lowering the hurdle can increase the GP's probability of collecting incentive fees and cause the payment of incentive fees to the GP to begin sooner,** although it will have no effect on the amount of incentive fees ultimately paid by a fund that would easily have cleared the percentage hurdle rate if it hadn't used a line. (At the same time, however, the interest and expenses paid on the line will reduce the fund's lifetime net dollar gains, and thus the eventual amount of incentive fees received by the GP. The interaction of these effects can be complex.)

- **Less disciplined or less diligent GPs may be induced to lower the standards to which they subject investments** because (a) their effective cost of capital seems so low and/or (b) they perceive an increased likelihood that the reported IRR will exceed the preferred return hurdle and thus a greater potential to earn incentive fees.

- Some LPs seek to avoid so-called Unrelated Business Taxable Income ("UBTI"). Without getting into further details, **suffice it to say the use of subscription lines increases the risk of UBTI to these LPs.**

- Since each LP's commitment to the fund is an essential part of the bank's collateral, **the existence of a line could conceivably complicate the process of selling an LP interest in a secondary transaction**, in particular if the would-be buyer is less creditworthy.

- As the use of subscription lines increases, many banks are requiring greater and more intrusive information on the financial wherewithal of fund LPs to ensure the sufficiency of collateral. Some LPs are now starting to push back on providing this information, while others are expressly demanding to be excluded from borrowings, which can create an awkward dynamic among the LPs and between the LPs and GP.

Given the existence of so many pros and cons, what factors have caused the use of subscription lines to become widespread? I believe they're these:

For LPs:

- the desire for high reported IRRs,
- better cash management, including fewer drawdowns, and
- the potential to use their capital more efficiently (i.e., to use undrawn capital to make investments that may add to overall profits)

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For GPs:

- the expectation that higher IRRs will enhance their reputations and enable them to raise more money,
- the potential to lower the hurdle that must be cleared before incentive fees are received,
- the ability to enhance reported results in a low-return world or mask otherwise-low investment returns, and
- defensively, a way to be competitive with other GPs who raise IRRs through the use of lines

Impact on Fund Performance Metrics

The most important question in assessing fund performance is clear: **Did the GP do a good job?** It's a simple question, but answering it is anything but. **In particular, if a fund that used a subscription line shows a high IRR, does that confirm that the GP did a good job?**

Since a fund's total dollar profits and multiple of capital aren't improved by the use of a subscription line, the increase in IRR, while pleasant, might be thought of as illusory. Remember, as I wrote in a 2006 memo with the same title, **you can't eat IRR**.

My basic point in that memo was that what really matters is how much money an LP makes as a result of having committed to a fund. It's that simple.

But the deeper message was that, while valuable, neither IRR nor MOCC nor MOC – nor any other single metric – is sufficient to tell us whether the GP did a good job. There are many elements that must be taken into account, and if you hold all the others equal, one metric might be sufficient to answer the question. But the others rarely are equal. For example:

- **A high IRR certainly is desirable.** But that's what a fund can show if the GP makes only one investment, with a small fraction of the fund's committed capital, and that investment produces a substantial profit. For example, if a $100 million fund invests $1 million in something and sells it a month later for $2 million, that doubling will annualize to an IRR of roughly 400,000%. And if that's the only investment the GP makes, that'll be the fund's IRR, too. But it certainly doesn't mean the GP did a good job – I doubt the LP who committed $10 million to the fund will be happy with $10.1 million back in the end.

  To understand what an IRR really says about fund performance, you have to know what percentage of the capital was called and how long the GP held onto it. In short, LPs want to see their committed capital become fully invested and remain invested at solid rates of return for a long time. That's the formula for a big gain. A high return earned on a small amount of capital for a brief period doesn't help in that regard. High annualized IRRs on investments of less than a year can be especially misleading.

- **A big multiple of invested capital is good, too.** But it also may be of limited significance. Let's say the GP of that $100 million fund invests $10 million, keeps it invested for the fund's entire ten-year life, and earns an annual return of 15% on that investment. That will result in proceeds of $40 million and thus an MOC of 4x. That's great for the LPs . . . as far as it goes. But if that's the only investment the GP makes, the LPs collectively will earn

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profits of only $30 million, certainly not what they had in mind when they committed $100 million to the fund. **So, again, to know if the GP did a good job, you have to know what percentage of the committed capital was invested and how long the investment was outstanding. You have to know what the GP did with the entire commitment, not just the part that was invested.**

- **Finally, a big multiple of committed capital sounds almost perfect. But it, too, isn't sufficient.** Let's say all of the fund's $100 million of committed capital is invested, and $300 million comes back to LPs, for an MOCC of 3x. That's good, isn't it? That depends on how long the GP kept that $100 million. If it took six years to turn $100 million into $300 million, the IRR on the fund is 20%. But if it took ten years to generate the same proceeds and MOCC, the IRR is just 11.6%. **So it's not enough to know how much capital was invested and how much was returned. We have to know how long the process took.**

The answer is simple. In order to be able to assess fund performance, we have to know:

- how much capital was committed,
- how much capital was invested,
- how long it was kept invested, and
- how much was returned to LPs.

IRR, MOCC and MOC are all significant indicators, but none of them takes all four of those parameters into consideration. Thus no single metric is sufficient to tell us how good a job a GP did. We have to consider multiple metrics, and sometimes they will give conflicting answers. Fund A may look better on one of them and Fund B on another. So this is really just one more way in which investing isn't subject to easy answers. Performance assessment requires consulting a variety of performance metrics; considering other factors as well, some of which are subjective (like how risky the portfolio was); and making judgments regarding the results.

One fund with a higher IRR didn't necessarily outperform another. And, provocatively, a fund that used a subscription line and came in with a high IRR may not have done as good a job – or made its LPs as much money – as one that didn't use a line (or used a line less extensively) and reported a lower IRR.

Let's take that to its logical extreme. What if the typical race to the bottom happens at the banks, making financing available on ever-easier terms? What if we reach a point where GPs are able to obtain lines equal in size to the vast majority of their LPs' commitments and keep the borrowings outstanding for most of the funds' life? In that case, there will be little need for a GP to draw LP capital, and even low returns on investments could give rise to ultra-high IRRs at the fund level. **The bottom line on all this is that the use of subscription lines sheds considerable doubt on the significance of IRR. And when IRR becomes suspect, anyone wanting to evaluate fund results has no choice but to put greater emphasis on the multiple of capital.**

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Bigger Questions

All the above discussion is essentially mechanical, regarding matters of arithmetic. But there are other questions surrounding subscription lines that involve investment risk, and some that have bigger consequences . . . even potentially systemic.

Investments are invariably viewed as safe when it is assumed that the things that should happen will happen. But I always hasten to point out that "should" isn't the same as "will."

Let's consider the process that's supposed to apply with subscription line borrowings:

- The GP organizes a fund and arranges for a subscription line.
- LPs commit capital.
- The LPs put in an actual or virtual lock-box the funds they'll need when capital is called.
- The GP uses borrowings under the subscription line to pay for investments, in lieu of calling LP capital.
- When the subscription line reaches its end, LP capital is called and the line is repaid.

That's what's supposed to happen. But there are ways in which actual events can deviate from that idealized progression. Most of these would be the result of negative developments in the financial markets or the larger world.

- Since the use of subscription lines results in there being fewer but larger capital calls, the magnitude of potential defaults by LPs is increased, along with the potential consequences.

- Suppose the fund makes $5 million of investments against an LP's $10 million commitment – borrowing $5 million on the line – and there's a financial crisis (or the investments simply turn out to be big losers) and those investments decline in value to $2 million. **And suppose the line comes due, the fund calls $5 million from the LP with which to repay it, and the LP – perhaps receiving simultaneous capital calls from a number of similarly affected managers – concludes it's in its best interest (or its fiduciary duty) to NOT put up $5 million to secure investments now worth $2 million. Instead, it defaults on the capital call, depriving the fund of capital, potentially limiting the fund's ability to repay the line and/or make further investments, and thereby possibly harming the remaining LPs.** (Please note, however, that strategic defaults are an extreme hypothetical, since they would expose LPs to penalties, lawsuits and the forfeiture of their assets in the fund, in addition to the obvious reputational consequences.)

- Some funds (although none of Oaktree's) rely on subscription lines that are due on demand, rather than at the end of a stated term. What would be the effect if a large number of those lines were pulled simultaneously during a financial crisis? Or what if regulators required banks to call in their lines, even those that aren't callable or whose terms haven't expired?

- There's no question that the increasing use of subscription lines is altering the pattern of drawdowns and distributions. **Going years without seeing much capital called could convince an LP that calls have become less likely. Suppose that, in response, rather than set aside capital equal to its commitments, the LP puts it into other investments.** Although subscription lines don't result in funds becoming levered, this kind of behavior can

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result in the LP becoming levered (i.e., having total investments plus commitments that exceed its available capital). Now suppose a financial crisis brings large losses to fund investments in general. **If the LP has made excess commitments, it could (a) suffer levered losses and (b) be forced to liquidate marketable securities in a crisis to satisfy capital calls in connection with their commitments to closed-end funds.** Taken to a hopefully unrealistic extreme, could this cause LPs to become insolvent and banks to experience a wave of defaults on these lines?

Market meltdowns and financial crises can increase the probability that banks will recall lines and decrease the probability that all LPs will meet the calls. If an LP has taken advantage of subscription line financing to become more than 100% committed, it might be more likely to default on the calls.

If a fund has diversified commitment sources and just a couple of LPs default, the fund will probably manage just fine. But suppose many LPs default? In that circumstance it's easy to imagine a fund being forced to sell assets during a market downturn to pay off its line and/or lacking the capital it thought it would have with which to take advantage of market opportunities. Both outcomes could be very negative for funds and LPs alike.

The obligations of the LPs in a fund with a subscription line are interrelated; for example, one LP's default on its capital commitment requires the other LPs to contribute more (up to the amount of their commitment) to repay the subscription line. Could this mean that failures by some LPs would increase the likelihood of failures by others? In the extreme, if defaults on lines are widespread, could lines become a source of significant risk to banks?

In order to figure out the full impact of the use of subscription lines, one would have to know what LPs do with the uncalled capital during the period before it's drawn by the funds. It does seem, however, that subscription lines may be adding to risk at a variety of levels.

These hypothetical examples imagine financial crises, asset meltdowns and – in some cases – less-than-conservative behavior on the part of LPs. They're all unlikely. But are they impossible? **It's mostly during crises that weaknesses are exposed, things that are supposed to happen fail to do so, and unanticipated consequences and linkages manifest themselves.**

As I mentioned at the outset, some Oaktree funds have made use of subscription lines, in recognition of the advantages described above and because many of our LPs – almost all of which are sophisticated institutional investors capable of understanding how lines work and their pros and cons – have indicated that they want us to do so. However, I can report that the concerns discussed above have caused us to begin an internal process to develop guidelines intended to mitigate the risks of subscription lines while preserving their benefits.

The key to financial security – individual or societal – doesn't lie in counting on things to work in good times or on average. Rather, it consists of figuring out what can go wrong in bad times, and of only doing things that will prove survivable even if they materialize. Has anyone thought through all the implications of closed-end funds' increasing use of subscription lines? Are they all tolerable, for the individual parties and for the financial system? I haven't read much on this subject, but we should all be thinking about it. That's the reason I'm writing today.

April 18, 2017

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Memo to: Oaktree Clients

From: Howard Marks

Re: Expert Opinion

In August, I mentioned that I had chosen the title "Political Reality" for my memo in part because of my liking for oxymorons. I classed that title with other internally contradictory statements, such as "jumbo shrimp" and "common sense." Now I'm going to discuss one more: "expert opinion."

This memo was inspired by a thought that popped into my head when the outcome of the election settled in. You may point out that at the end of my November 14 memo "Go Figure!," I said I wouldn't write any more about politics. True, but I didn't say I wouldn't *think* about politics. Anyway, this memo isn't about politics, it's about opinions.

Last spring I attended a dinner where one of Hillary Clinton's senior advisers was soliciting input, as she and her campaign were struggling to come up with an effective counter to Bernie Sanders's populist message. Most of those present expressed frustration on the subject, until an experienced, connected Democrat assured everyone, "Don't worry. She'll win. The math is irresistible." The Hillary supporters were relieved, and he turned out to be right: she won the nomination going away.

In late October, with the issue of Clinton's private email server and the FBI's new investigation further dogging her, that same seasoned Democrat was asked whether the election was in jeopardy. "Don't worry," he said. "She'll win. The math is irresistible." We all know the result.

The opinions of experts concerning the future are accorded great weight . . . but they're still just opinions. Experts may be right more often than the rest of us, but they're unlikely to be right all the time, or anything close to it. This year's election season gave us plenty of opportunities to see expert opinion in action. I'll start this memo by reflecting on them.

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The Year Polls Stopped Working

Pollsters got off to a tough start last year with the June referendum concerning Britain's membership in the European Union. Right up to the end, both pollsters and bookmakers considered U.K. citizens 70% likely to vote to remain a member. But, in the end, "Leave" won by a few percent.

The reaction was shock. Voters on both sides of the issue were unprepared for the outcome. Within a day or two, the leaders of Britain's main political parties had stepped down. People began to seriously discuss what that outcome meant and how "Brexit" would be accomplished.

The explanations for the pollsters' error centered around Britain's lower level of experience with, and expertise in, polling. It couldn't happen in the U.S. In fact, in the 2008 and 2012 presidential elections, Nate Silver, the proprietor of website *FiveThirtyEight*, correctly predicted the outcome in all 50 states once and in 49 the other time.

In 2016, *FiveThirtyEight* estimated the odds of Hillary Clinton winning as slightly better than 50/50 as of the end of the Republican convention in July. Then it had her as an 8-to-1 favorite in August, when the Democrats concluded their convention and Donald Trump's perceived missteps peaked. And then it

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again said she was slightly ahead just before the first presidential debate on September 26. It never made her out to be an underdog. And on election day, it estimated that she was 71.4% likely to win.* Most other pollsters put her chances of winning at between 80% and 99%, and only one considered Trump the favorite.

In the end, of course, Trump won in the Electoral College by a final count of 304 to 227, despite losing the popular vote by almost 2.9 million votes, or about 2%. In particular, he won in a number of "swing states," such as Pennsylvania, Michigan and Wisconsin, where the polls had him well behind. So much for experts' forecasts.

Finally, rounding out the pollsters' failures in 2016, the reform referendum that Italy's Prime Minister Matteo Renzi bet his career on – which had been considered 3% behind – lost by 20%. The outcome wasn't a surprise, but the margin certainly was.

No one really knows why polling failed so miserably last year. Clearly there was a groundswell of populist, anti-establishment and anti-insider sentiment, but shouldn't it have been detected? In particular, Trump did much better than predicted (or much less badly) with a number of important groups, such as Hispanics and college-educated women.

For some reason, in 2016 pollsters in all three countries either failed to talk to a representative sample of voters, failed to elicit honest responses, or failed to accurately interpret the data. Thus their opinions may be accorded less weight in the future.

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So Much for the Experts

I'm struck by how dramatically opinion can flip-flop:

- During the run-up to the election, Clinton's campaign organization and "ground game" were considered sophisticated, efficient and unstoppable, and Trump's were thought of as rag-tag, underfunded and uncoordinated. Now Trump's machine is described as having been highly effective, and Clinton's as having missed important signs and opportunities.

- Clinton's message was thought likely to carry a lot of weight with a broad swath of the electorate, while Trump's was viewed as appealing deeply to a few fervent but narrow fringe constituencies without enough voters for him to win. After the fact, Trump is described as having had "perfect pitch" and Clinton as having a "tin ear."

- In particular, now it's considered to have been a big mistake for Clinton to fail to address the concerns of white men and set out a solution for those who lost jobs and were omitted from economic progress. But during the campaign, no one pointed to this error.

---

* It should be noted – to his credit – that Silver insisted repeatedly that Trump could win. In fact, he often reminded his followers that the Clinton landslide most people expected was no more likely than a modest Trump victory. Silver also entered Election Day citing a 10.5% probability that Trump would lose the popular vote but win the presidency. We can't say he predicted that outcome, but (a) he was more explicit about it than most and (b) he assigned a fairly material probability to an event that in the past has been quite rare (so it can't be said that he was just extrapolating).

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- Finally, up until Election Day, most observers (including me) talked about the likelihood that the Republican Party would emerge from the election torn between its traditional faction, the Tea Party conservatives, and Trump's economically disgruntled, anti-establishment supporters. That may turn out to be the case, but now the Democratic Party is described as being at risk as well because of the schism between the Clinton-type moderates and the Sanders/Warren progressives.

Here's some of what I wrote in "Go Figure!," six days after the election:

> Think back to just before last week's election. What did we know?
>
> - The polls were almost unanimous in saying Hillary Clinton would win . . .
> - There was a near-universal belief that a Trump victory – as unlikely as it was – would be bad for the markets.
>
> So what happened? First Clinton didn't win. . . . And second, the U.S. stock market had its best week since 2014! . . . Thus two key observations can be made based on last week's developments:
>
> - First, no one really knows what events are going to transpire.
> - And second, no one knows what the market's reaction to those events will be.

One of the key conclusions we should draw from the surprises of 2016 is that the pundits often failed to understand people and their views. It's clear that people who work in the media hadn't understood many average Americans; people with college degrees hadn't understood those without them; and people living on the coasts and in metropolises hadn't understood the rest. Strong sentiments and beliefs swung a pivotal election in ways the experts absolutely failed to grasp and thought were virtually impossible.

Of course there are no "facts" regarding most future events, just opinions. Experts – especially people who are paid to be experts – often couch their statements as facts, but that doesn't mean they're sure to come true.

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And the Media?

When I was young, a limited number of media outlets were the public's primary source of information. There were three TV networks and four local stations – no more room on the dial – and until 1987 they were subject to the FCC's Fairness Doctrine that required broadcasters to discuss controversial matters of public interest and air contrasting views. Edward R. Murrow, a TV news anchor, was one of America's most respected men, and I often make reference to the time he said, "Anyone who isn't confused doesn't really understand the situation." Walter Cronkite, Chet Huntley and David Brinkley were similarly trusted. Newspapers may have had Democratic or Republican leanings, but outside the editorial pages they largely avoided partisanship in covering events.

The subsequent proliferation of cable TV networks set off powerful competition for viewers. A few chose to be full-time purveyors of news, along with some talk-radio stations. Rush Limbaugh, Roger Ailes and Rupert Murdoch realized that a big following – and big money – could result from highly partisan, even inflammatory, broadcasting. Radio "shock jocks" like Don Imus and Howard Stern chipped away at standards for language and demeanor, and news and talk shows emulated them. So now we have outspoken, boisterous speech, along with highly partisan messaging.

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These days the news media shows little resemblance to what it was 30, 40 or 50 years ago. **Many outlets are highly biased to one side or the other and make it possible to read, watch and listen all day and never be exposed to all aspects of the issues.** Thus most people find something to complain about in the media coverage of the 2016 presidential election.

Today's media personalities rarely express the confusion Murrow did. Rather, they tend to state forecasts as certainties. When do you hear a TV commentator say "I think" or "it seems to me"?

In fact, they often remind me of the description of economists I heard in the 1970s: "portfolio managers who never mark to market." That is, they find it easy to overlook the times when they're wrong. In August or September of 2015, when Donald Trump was beginning to achieve success in his pursuit of the Republican nomination, a *New York Times* columnist flatly stated that because Trump couldn't stand the prospect of losing, he would drop out of the race before the primaries began in January. We didn't see that happen . . . or any further mention of his assertion.

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What to Do About the Media

Given the nature of the candidates for the presidency, the starkness of the choice, and the recent trends in media coverage, I spent a great deal of time last year following political developments via websites, newspapers and television coverage. Most people I know did, and you may have as well. For many it became a preoccupation, even a mania.

My son Andrew has helped me dope out the media effects:

- Following events makes people feel they're actively involved in them and well informed.
- People think and act with more confidence when they consider themselves informed.
- But the media pundits often are no more insightful than the rest of us.
- And anyway, people tend to follow media outlets that confirm their beliefs rather than challenge them.
- Thus following the media experts, while entertaining, can be a waste of time intellectually.

For these reasons, I greatly enjoyed an article that appeared in the *Observer* on November 16, a week after the election. It was entitled "Want to Really Make America Great Again? Stop Reading the News." Ryan Holiday, its author, talked about what it's like to be caught up in the news cycle.

For a number of reasons, there has arisen in the media:

> . . . a system that needs more and more eyeballs for longer periods of time while gutting high-quality, reliable sources of information. We have more "news" but less original reporting than ever before, an order of magnitude more in the way of opinion and analysis, but as [author and academic] Tom Nichols has pointed out, somehow less expertise.
>
> Chuck Klosterman [a writer on American culture] once remarked at how strange it was to walk through the front offices of a football team and find that everyone there was watching ESPN. Didn't they have better information than the average viewer or

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> reporter? Turns out, no – they're addicted to the same media we are and subject to the same groupthink. . . .
>
> Twitter isn't designed to help you get in and out with the best information as quickly as possible – it's supposed to suck you into either a contentious world of argument and debate or an echo chamber that reassures you everyone thinks like you do. . . .
>
> We're "participating" in the ecosystem because it's addicting and because we're curious.

So author Holiday came up with a useful prescription in response:

> It's not that I am going underground or completely disconnecting from current events. It's that I have decided I am no longer going to watch them develop in real time. I'm going to watch the Saints play every Sunday, [but] I'm not going to fool myself into thinking that tuning into "Sports Center" on Tuesday will help.

A lot of people's lives would be more tranquil and more productive if they accepted that what the media says about an upcoming event – and whether you watch or not – won't have any impact on the outcome.

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What Do the Experts Know?

One of the reasons I crafted this memo this way is so I would have a chance to return to a subject I introduced in 2015: the *New York Post*'s "NFL Bettor's Guide." Each week during football season, the *Post*'s eleven experts advise its readers as to which teams to bet on. Here's how the experts did over the full 17-week season, covering 256 games:

- The best picker was right 55.1% of the time.
- The worst picker was right 48.8% of the time.
- On average the pickers were right 51.6% of the time.

The experts further help readers by specifying up to three "best bets" each week. Here's how they did on their strongest picks:

- The best picker was right 62.7% of the time.
- The worst picker was right 43.1% of the time.
- On average the pickers were right 54.0% of the time.

The available observations from this data are as follows:

- The way the overall results are distributed around 50/50 suggests the experts' process is little more than a coin toss.
- On average the experts were right just 2.4% more often on their "best bets" than on all their picks.
- Two of the experts did worse on their "best bets" than on their other picks.

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- Eight of the eleven pickers were right more than half the time. But since it costs about 5% per week on average to bet with the bookies, **virtually none of the eleven experts' overall picks added value after fees (sound familiar?). Even the average of the experts' "best bets" wouldn't have produced a positive return after fees.**

Two additional observations:

- In week 16, all eleven of the experts predicted the favored New York Giants would beat the Philadelphia Eagles, and five of the eleven thought the underdog New York Jets would beat the New England Patriots (in both cases, after adjusting the scores for the "point spread" that the bookies impose to equalize the two teams' chances of winning). When the games were played, the favored Giants lost by five points (meaning they did even worse after the 2½-point spread was subtracted from their score), and the Jets (who were expected to lose by 16½ points) lost by 38 instead. In other words, (a) the experts may have been heavily biased in favor of the New York teams and (b) they were wrong 73% of the time on these two games.

- Bettors also have the option to bet on the "over/under" in a game – that is, whether the two teams' combined score will exceed or fall short of a threshold set by the bookies. It's just another way for bettors to get "action." The results show the experts were right in 128 games (52% of the time) and wrong in 123 (there were five ties). Again no value added, especially after fees.

If economists won't publish their performance data, the *Post* at least performs a service by showing how its football experts did. The bottom line is that their opinions are of little help, and the related coverage omits all discussion of their lack of predictive value.

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The Importance of the Macro

Interest in "macro" has amped up meaningfully over the last dozen years or so. I think it largely started with the increased activism on the part of the Greenspan Fed, and investors' heightened interest in it. Today many analysts seem preoccupied with central bank behavior, government actions, trends in interest rates and currencies, and the movement of markets, as opposed to the fortunes of individual companies.

These things are almost all we hear about. And most people think knowledge regarding the outlook for them holds the key to investment success. Thus I want to make this a major topic here.

Since I speak a lot to clients, prospects, CFA societies and student groups, I get a lot of chances to hear what's on people's minds. And usually they focus on a relatively small number of questions. Over the last few years, the ones I've gotten most often have been these:

- What month will the Fed raise interest rates?
- What could go wrong in the economy or the market?
- What inning are we in?
- And in each country I visit, how's the outlook for that country?

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When will the Fed raise interest rates? – On May 22, 2013, in testimony to Congress, then Fed Chairman Ben Bernanke surprised the world by saying, "If we see continued improvement, and we have confidence that that is going to be sustained, in the next few meetings we could take a step down in our pace of purchases [of bonds]. . . ." By indicating the Fed could "taper" its bond buying – the quantitative easing that was an important part of its stimulus program – Bernanke was foreshadowing that interest rates, which had been suppressed for years, would begin to rise.

Ever since then, people have been preoccupied with when interest rate increases would take place, and that's the question I've been asked most often. My response has been consistent: **How would I know, and why do you care?**

First, how would I know? I always point out that I'm not an economist or Fed watcher. And I don't think economists or Fed watchers know the answer, either. No one consistently knows the timing of these things in advance, in particular because the Fed itself probably doesn't know.

But more importantly, why would anyone care? If I say December, I ask them, what actions would you take? And if I changed that to March, would you do something different? The idea that you would do something different with a March expectation rather than a December expectation ignores the likelihood that the expectation of a March rate rise would begin to be reflected in asset prices well before March. That means the likely date of a rate rise is not a very useful piece of information.

What could go wrong? – For years it has felt to most people that we've been in a Goldilocks environment: neither too hot nor too cold. The economy hasn't grown slowly enough to cause recession or deflation, or fast enough to bring on hyperinflation and the need for restrictive action. The markets have been strong enough to bode well, but not so strong as to suggest a bubble. Ditto for investor psychology.

Most people don't want to tempt fate by saying things will go well forever, and in fact they know they won't. It's just that they can't decide what it is that will go wrong. The truth is that while I can enumerate them, the obvious candidates (changes in oil prices, interest rates, exchange rates, etc.) are likely to already be anticipated and largely priced in. It's the surprises no one can anticipate that would move markets most if they were to happen. But (a) most people can't imagine them and (b) most of the time they don't happen. **That's why they're called surprises.**

So I can guess at "improbable disasters" like acts of war, disinflation or a sudden seizing up of the economy, but they're unlikely to happen, and I don't know much more about them than anyone else. The greatest single influence of the last three years was doubtless the 75% decline in the price of oil from June 2014 to February 2016. But who predicted it?

In my memo "It's All Good" (July 2007), on the doorstep of the financial crisis, I insisted that the good times couldn't roll on forever. But I didn't know it was sub-prime mortgages that would be the catalyst for a turn for the worst, and when I listed my candidates, I ended with "the things I haven't thought of." That's still about the best I can do . . . or most others, it seems.

What inning are we in? – Perhaps no one can say just what it is that will ring the bell on today's positive trends, but people still want to know how advanced we are in the process, and thus when it will come to an end. People began to ask me what inning we're in during the financial crisis of 2008, and they've continued ever since.

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First of all – admittedly I'm being picky here – people rarely specify which game they're asking about. Is it the economic recovery, the credit expansion, the string of low-default years, the upswing in investor psychology, or the stock market rise? Certainly the answer could be different for each.

But, more importantly, the question assumes we know how long each game will go on. A standard baseball game consists of nine innings, so "second inning," "sixth" or "ninth" has a clear meaning. But with the things we're wondering about here, we never know how long the game will run.

So rather than "what inning," I'd suggest investors ask whether things are or are not in an extended state. Is psychology depressed, average or euphoric? Is the capital market shut tight, normal or unthinkingly generous? These are questions that can be answered in a helpful way, not how close the game is to being over. No one knows the answer to the latter.

What's the outlook for country xyz? – The bottom line for me here is that people tend to confuse general intelligence, good investment records, expertise in specific areas, and all-around insight. Thus I'll reiterate that I'm no economist (and even if I were, my chances of being right would be limited). And then I'll add that being experienced as an investor and even hopefully intelligent says nothing about being able to divine a specific country's macro potential.

After I spend a day or two in a country, people often ask for my conclusions. But in the course of my visits, I generally (a) visit only big cities, (b) meet only with financial types, and (c) spend more time answering questions than gathering information. In fact, on one recent visit I responded to the usual question by telling my audience that I hoped each member knew more about their country than I did. I sometimes gain visceral impressions of the countries I visit, but they're usually data-lite and likely to come true only in the longest run, if at all.

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Implications of the Election

Of course, the U.S. presidential election was the biggest story of 2016, and it brought me endless questions. Who would win? I'd read the same polls as everyone else, lived on the coasts, and reached the same conclusions. I could bring no unique insight on the basis of which to question the likelihood of a Clinton victory.

How would the two candidates differ as president? It didn't take any brilliance to conclude that a Clinton administration would be quite predictable and operate within rather narrow boundaries, while anything was possible from a Trump presidency – in some cases better than a Clinton one, but also with considerable potential for worse.

I was in Australia on Election Day and just after, and questions about the implications started immediately. In fact, they're what inspired me to write "Go Figure!" over the following weekend in Seoul. In it, I described the following questions as being open:

- How much of what Trump said while campaigning did he mean?
- How much of what he actually meant will he try to implement?
- And how much of what he tries to implement will he be able to effect?

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We still don't have answers. As for the markets, it's clear Trump intends to be a very pro-business president. But what actions he'll take and whether they'll succeed is very much up in the air.

Of course, only nine weeks have elapsed since the election. Any expert who tells you what's in store from the Trump administration – or from Britain's departure from the EU; Italy without reform and Renzi; the Indian economy with 85% of its currency cancelled (the highest-denomination notes, 500 and 1000 rupees, were declared no longer legal tender in order to rein in corruption and the underground economy); or the coming elections in France and Germany – is talking through his hat.

My Opinion of Opinions

Since I've discussed these things at great length over the years, I'll try here to sum up succinctly:

- There are no facts about the future, just opinions. Anyone who asserts with conviction what he thinks will happen in the macro future is overstating his foresight, whether out of ignorance, hubris or dishonesty.

- Developments in economies, interest rates, currencies and markets aren't the result of scientific processes. The involvement in them of people – with their emotions, foibles and biases – renders them highly unpredictable. As physicist Richard Feynman put it, "Imagine how much harder physics would be if electrons had feelings!"

- It's one thing to have opinions on these subjects, but something very different to be confident they're right (and act on them).

- Taking bold action based on forecasts of things that are uncertain isn't just misguided; it's dangerous. As Mark Twain said, "It ain't what you don't know that gets you into trouble. It's what you know for certain that just ain't true."

- Everyone at Oaktree has opinions on the macro. And when we see extremes in markets and, especially, capital market behavior, we're apt to take strong action. But we're highly aware of what we don't know, and when conditions are moderate or indistinct, we don't bet heavily.

I'll end this section by sharing my latest epiphany on the macro. I realized recently that in my early decades in the investment business, change came so slowly that people tended to think of the environment as a fixed context in which cycles played out regularly and dependably. But starting about twenty years ago – keyed primarily by the acceleration in technological innovation – things began to change so rapidly that the fixed-backdrop view may no longer be applicable.

Now forces like technological developments, disruption, demographic change, political instability and media trends give rise to an ever-changing environment, as well as to cycles that no longer necessarily resemble those of the past. That makes the job of those who dare to predict the macro more challenging than ever.

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What about Facts?

While I take a dim view of forecasts, and especially of opinions presented as facts, I do believe there are such things as facts. Unfortunately, however, the concept of "facts" is among the casualties of the increasingly partisan environment. **Recently we have seen both the elevation in status of "non-facts," as well as the tearing down of "real facts."**

"Fake news" emerged as a significant issue in 2016. Some people believe it influenced the election. Ease of access to social media makes it quite simple to create and disseminate statements that others will believe, even if they're total fabrications. The pizzeria fronting for a child-abuse ring led by Hillary Clinton is just one of 2016's wilder examples. I expect to see continuing discussion of the proper role of social media in taking down untrue posts, and of the conflict between defending freedom of expression and preventing the publication of falsehoods.

At the same time, I'm concerned about the disappearance of real facts. Nowadays it seems almost anything can be characterized as questionable. There's broad agreement among scientists that humans play a significant role in climate change – as there is among sitting world leaders – and yet we hear this idea dismissed as "a matter of opinion." The other day I heard a former U.S. Senator who now leads a policy think tank describe as "fake news" a Congressional Budget Office report with which his organization takes issue. If the non-partisan CBO isn't accepted as objective and truthful, who will be?

In a time of raging partisanship, disrespect for experts, and drastically debased standards for discourse, is there such a thing as a fact? Can there be no distinction between opinion, fact and fake fact? Can there be a figure everyone trusts, another Edward R. Murrow? Can any statement be safe from disparagement even though it's not 100% measurable and provable? Is history subject to unlimited revision if there are no video images? What will our grandchildren be taught is the meaning of the word "true"? What authorities will they trust? We certainly live in interesting times.

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Macro Investor Performance

The acid test of an investment strategy is whether it produces good results. So here we are: first, "everyone knows" macro is a key determinant of investor performance these days, and second, there have been a lot of significant macro developments of late, providing opportunities for those with foresight to apply their predictive powers. Thus the ingredients have been in place for significant gains on the part of macro-oriented investors.

Let's take a look at the results for two Hedge Fund Research macro fund indices and compare them against the HFR index of all hedge funds:

	Periods ended November 30, 2016		
Annualized Net Returns	1 year	3 years	5 years
HFRI Macro (Total) Index	(1.17%)	1.64%	0.74%
HFRI Macro: Discretionary Thematic Index*	(1.96)	(0.47)	0.35
HFRI Fund Weighted Composite Index	3.37	2.46	4.23

* Macro funds run by individuals, not algorithms

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While the average hedge fund's return has been puny, I think it's fair to say the average macro fund's return has been seriously deficient. **In fact, the average macro fund's net return may not have been statistically different from zero**. Thus, based on the indices, it's hard to say managers paid to profit from macro developments have done so.

The Last Word

To close, I'll weave together a few recent inputs:

First, I had dinner with Warren Buffett about a year ago, and he pointed out that **for a piece of information to be worth pursuing, it should be important, and it should be knowable**. These days, investors are clamoring more than ever for insights regarding the macro future, because it's important: it moves markets. But there's a hitch: Warren and I both consider these things largely unknowable. He rarely bases his investment actions on them, and neither does Oaktree.

Second, I want to include a final paragraph from the *Observer* article about the media that I mentioned earlier. I think it's golden:

> **"If you wish to improve," Epictetus [first-century Greek philosopher] once said, "be content to appear clueless or stupid in extraneous matters." One of the most powerful things we can do as a human being in our hyperconnected, 24/7 media world is say: "I don't know." Or more provocatively, "I don't care."** Not about everything, of course – just *most things*. Because most things don't matter, and most news stories aren't worth tracking. (Emphasis added)

Finally, I want to describe a great phone call I received this past spring, from a sell-side economist I worked with in the early '70s and have stayed in touch with since. "You've changed my life," he said. "I've stopped making forecasts. I study data and report on my inferences. But I no longer express opinions about the future." Mission accomplished.

January 10, 2017

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Bonus section: I've been collecting (and recycling) quotations for almost forty years, more of them concerning forecasts than anything else. Here are five of the very best. **Together they say virtually everything that has to be said on the subject:**

> We have two classes of forecasters: Those who don't know – and those who don't know they don't know.
>
> – John Kenneth Galbraith

> No amount of sophistication is going to allay the fact that all of your knowledge is about the past and all your decisions are about the future.
>
> – Ian Wilson (former GE executive)

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Forecasts create the mirage that the future is knowable.

– Peter Bernstein

Forecasts usually tell us more of the forecaster than of the future.

– Warren Buffett

I never think of the future – it comes soon enough.

– Albert Einstein

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Memo to: Oaktree Clients

From: Howard Marks

Re: Go Figure!

Think back to just before last week's election. What did we know?

- The polls were almost unanimous in saying Hillary Clinton would win the popular vote by about 3%.
- FiveThirtyEight, an analytical website whose forecasts had proved quite accurate in the two prior presidential elections, gave Clinton a 71% probability of winning, and almost everyone else was between 80% and 90%.
- Clinton was favored in most of the "swing states" that would make the difference in the Electoral College. Thus she was expected to win more than 290 electoral votes, leaving just 250 or so for Donald Trump.
- Clinton was the obvious choice of the people who move the markets. This could be seen in the fact that the markets went up when Clinton's odds improved in late October (recovering from some unpleasant Wikileaks disclosures), and then they fell after the FBI's James Comey announced the discovery of an additional cache of Clinton emails on October 28, lifting Trump's chances.
- Thus there was a near-universal belief that a Trump victory – as unlikely as it was – would be bad for the markets.

So what happened? **First Clinton didn't win.** There's much soul-searching, particularly among the forecasting fraternity. Everyone knew intellectually that Trump had a non-zero chance of winning, but few people thought it could actually happen.

And second, the U.S. stock market had its best week since 2014! The Dow Jones Industrials rose almost 5% for the week, taking them to a new all-time high. The Dow was up every day last week. It rose on Monday and Tuesday, when Clinton was expected to win. And then it rose Wednesday, Thursday and Friday, after she had lost.

That behavior calls to mind my January memo, "On the Couch," on the subject of the market's irrationality. Clearly, the election was the biggest event last week, so it must have been the main influence behind the changes in stock prices. But how could the expectation of a Clinton victory make stock prices rise, and then the reality of her defeat make them rise further?

In that memo, I included a cartoon showing a newscaster saying, "Everything that was good for the market yesterday was no good for it today." In the case of the election, it might have been, "Whatever was good for the market yesterday, its polar opposite was good for it today." It just doesn't make sense.

While people search the market's behavior for logic, there really doesn't have to be any. In "On the Couch," I mentioned that sometimes the market interprets everything positively, and sometimes it

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interprets everything negatively. The market often fails to act rationally in the short run, primarily because of the role played by people in determining its course.

Thus two key observations can be made based on last week's developments:

- First, no one really knows what events are going to transpire.
- And second, no one knows what the market's reaction to those events will be.

These observations reinforce my belief that it's a mistake to base investment decisions on macro forecasts. But you knew that.

Impact on the Markets

Of course there's logic to the market's rise last week, just a logic different from that which would have made it go up if Clinton had won. The reasons one might cite are these:

- **As a businessman, Trump doubtless intends to be a pro-business president.** In fact, he'll probably make more of an effort to nurture business than Clinton would have (especially when being pushed to the left by Sanders and Elizabeth Warren), and more than I think characterized the Obama administration.
- Trump's campaign promises have included tax reform; reduced income tax rates on corporations and big earners; some form of tax holiday to enable corporations to bring in profits stranded abroad; a reduction of business regulation (Carl Icahn tells me this will be huge); a big infrastructure program ($1 trillion announced); an end to bank-bashing; less pressure on pharmaceutical and health care companies to cut prices; and an end to the estate tax. That's quite a pro-business agenda.
- The populist power of Sen. Warren will be reduced.
- Businessmen and Wall Streeters will be welcome to serve in the administration, not verboten as in recent years.

At the bottom line – if everything works as promised – there will be massive fiscal stimulus; big increases in GDP growth, corporate profits and jobs; higher inflation than otherwise would have been the case; a big increase in the national debt; and more of everything for everybody.

> Writing in the Financial Times, Anthony Scaramucci, a member of Mr. Trump's economic advisory council, said the president-elect would finance the new spending plan with "historically-cheap debt and public-private partnerships" and said it would cut deficits by stimulating economic growth. "Economies around the world are fighting deflation largely because of a post-crisis move toward fiscal austerity. We can close the wealth gap in America by replacing emergency-level interest rates with fiscal stimulus." (*Financial Times*, November 12-13)

No austerity here!

Trump's statements regarding business and the economy contain some real positives and are the best part of his platform . . . if he and his administration are up to the task of putting them into practice.

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However, some of his promises may test the limits of what can be accomplished under the limitations imposed by economic reality.

And there are negatives, including:

- Trump's express disdain for Janet Yellen, and the resulting possibility that Fed independence will be reduced,
- his stance on international trade pacts (an area in which a president has unusually broad power to take unilateral action), his threat of imposing import duties on goods made in China and Mexico, and the resulting possibility of trade wars, and
- the possibility that this plus his unconventional positions on things such as climate change and defense treaties bode ill for international relations in general.

That brings us to the outlook for bonds. Just as the U.S. stock market has celebrated Trump's election, the bond markets have been discouraged. Interest rates rose very rapidly last week following Trump's election, bringing big losses to bond holders. The *FT* wrote the following, citing Henry Kaufman, the Salomon Brothers chief economist who correctly called the bond bear market in the 1970s:

> "It's a tectonic shift" . . . the end of a three-decade bond bull market, because of the likelihood of unfunded tax cuts, infrastructure spending and a radically reshaped Federal Reserve. "I would say the secular trend is going to be upwards now," he told the FT. "Secular swings are hard to forecast, but the secular sweep downwards in interest rates is over, and we are about to have a gentle swing upwards."

I always feel it takes a degree of innate optimism to be a devotee of stocks (with their reliance on conjectural returns awarded by the market) as opposed to bonds (which bring contractual returns guaranteed by their issuers). Thus U.S. equity investors have exhibited an optimism regarding the Trump administration that virtually no one foresaw a week ago.

Equity investors like inflation because it pumps up profits. Bond investors dislike it because it raises interest rates, reducing the value of the bonds they hold. But the two can't go in opposite directions forever. At some distant point, higher interest rates can cause bonds to offer stiffer competition against highly appreciated stocks.

Finally on the subject of the market outlook, I'll pass on some observations from Stanley Druckenmiller – the owner of one of the very best investment records in history, and certainly not someone congenitally biased to optimism (or anything else):

> Billionaire investor Stanley Druckenmiller told CNBC on Thursday he's "quite, quite optimistic" about the U.S. economy following the election of Donald Trump.
>
> "I sold all my gold on the night of the election," the founder and former chairman of Duquesne Capital said in a "Squawk Box" interview.

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He said he's betting on growth by shorting bonds globally, and he likes stocks that respond to growth. He also likes prospects for the dollar, especially against the euro.

This rosier outlook is in sharp contrast to what Druckenmiller said at the Sohn Investment Conference in New York in May. At the time, he told attendees they should sell their stock holdings. He also had said gold was his "largest currency allocation."

Despite Druckenmiller's past negativity, he said Thursday: "It's as hopeful as I've been in a long time." He added, "I would not be surprised if we're not looking at the peak of the divisiveness."

"[But] I hope economic policy is deferred to Mike Pence and Paul Ryan," he said, referring to the vice president-elect and the speaker of the House. He pointed out he did not support Hillary Clinton. (Druckenmiller had supported John Kasich for the Republican nomination and said he's philosophically in favor of Ryan's economic policies.)

"I don't think Donald Trump is Ronald Reagan," he added.

Since Republicans maintained control of the House and Senate while winning the White House, Druckenmiller said "this is the greatest chance" to get tax reform and deregulation passed.

"If it wasn't for the messy conflict of rates rising with the stronger economic growth through [fiscal] policy, I would think there's so much low-hanging fruit in terms of deregulation and tax reform, we could get a jolt of 4 percent [growth] for about 18 months," he said.

"I do think interest rates could cut that back into the high 2s, low 3s [percent]," he continued, adding markets are pointing to the cost of borrowing money going up a lot. "I think the market is going to force this. The market is going to push them to raise interest rates if my hopeful scenario turns out to be right." (CNBC on-line)

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I usually inveigh against macro forecasting and macro investing, but Stan is the exception who proves I'm far from 100% right. I supply his words unabridged. No one should ignore them.

Why Were the Forecasters So Wrong?

Trump won in 30 states, whereas Clinton won in 20 states and the District of Columbia. Trump won in three states that were expected to go for Clinton plus the two largest of the three states rated "toss-ups," while Clinton didn't upset Trump in any of the states people expected him to win. Trump won vastly more counties than Clinton (although not the most populated, obviously), including those populated by both below-average and above-average incomes. Many of these things came as surprises.

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The amalgamation of Trump voters that I described in "Implications of the Election" came together as expected, but in greater quantity than expected. His supporters were moved by great fervor, and while they may not have admitted to the pollsters that they favored the candidate derided by most of the media and intelligentsia, they voted for him in surprising numbers. The surprises included some college-educated whites, people with higher incomes, and even Hispanics, the vast majority of whom were expected to vote for Clinton.

And in the end, the "enthusiasm deficit" people had talked about all campaign came home to haunt Clinton. While more people had told pollsters they would vote for her than for Trump, many of them were probably motivated by aversion to Trump rather than any great love of Clinton. In the end, her voters' lack of enthusiasm seems to have kept enough from the polls to make the difference. Turnout was below expectations in Florida, Michigan, Pennsylvania and Wisconsin, and the results in these states were largely responsible for the election surprise.

The *Financial Times* of November 12-13 made a telling observation:

> In Michigan and Wisconsin, the two states that arguably swung the election, [Mrs. Clinton] received roughly 300,000 fewer votes than Mr. Obama did, suggesting his supporters either stayed home, or cast their votes for Mr. Trump or a third-party candidate.

The bottom line is that Trump won virtually all the counties that Romney won in 2012 plus a fair number of the ones Obama won. Clinton lost Pennsylvania by 1.4%, whereas two weeks ago she was thought to be ahead by double digits; Wisconsin by 1.5%, a state she was expected to win; and Michigan by 0.3%, a state Obama carried in 2012.

Obama's supporters were passionate, often because of his stirring oratory and/or his potential to be/remain the first black president. Despite the possibility of her being the first woman in the White House, Clinton ran into trouble relating to her difficulty connecting with the "common man," in addition to the controversies relating to her private email server and the Clinton Foundation. Finally, she never picked up some of the Democrats, especially young ones, who had coalesced behind Bernie Sanders's more liberal agenda. Thus her vote count fell short of expectations.

A combined shortfall of just 113,000 votes in Pennsylvania, Wisconsin and Michigan made Clinton the loser. If she had won just 57,000 of those votes (or 0.4% of the 13.6 million total votes cast there), she would be the president-elect.

For whatever reason, Trump, who almost everyone thought had no significant chance, was the surprise winner. After this and the Brexit vote – which also ran counter to forecasts – prognosticators are likely to be followed less assiduously in the future than in the past.

I keep saying "almost everyone" thought Clinton would win. That's because there was one prominent exception: the USC Dornslife/Los Angeles Times Presidential Election Poll consistently predicted a Trump victory in the popular vote. They had him up by 3% at the end.

Now the USC poll's Arie Kapteyn is being lauded for having gotten the outcome right, and Bloomberg reports that he employed "what experts called a unique and more complex weighting model." Does his success redeem the forecasting profession?

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Not really. Trump didn't win the popular vote as USC predicted; he lost it (by just under half a percent). Thus you can't say USC had it right. They were wrong. Or rather, they were right about a Trump victory, but for the wrong reason. (How often do we see that in the investment world?) In the end, who was more right: USC (which said he would win the popular vote) or the others (who were correct in saying Clinton would win it – only to see her lose the election)? That's what I would call a Talebian question.

The bottom line is that popular vote polls get headlines, but the presidency is determined in the Electoral College. The latter made Trump the winner – as USC had said, but not for the reason it had predicted. (More on the Electoral College later.)

Outlook for the Trump Presidency

I was in Australia on Election Day, and right away I was asked what the future holds. First, I said, there's far too much we don't know to permit any conclusions. Here are a few of the key open questions:

- How much of what Trump said while campaigning did he mean?
- How much of what he actually meant will he try to implement?
- And how much of what he tries to implement will he be able to effect?

- Will he seek advice? (While campaigning he gave the impression he thinks he knows best.)
- Will he appoint expert, experienced advisors?
- Will he heed their advice?

Second, I'd look for some initial signs.

- Would his acceptance speech be conciliatory or vindictive? Certainly it was the former.
- Will his first appointments be constructive or less so? Will they primarily reward loyalty or expertise and experience?
    - We can take some encouragement from the mainstream choice of Mike Pence to head his transition team.
    - Less cheering is his appointment of Myron Ebell, an outspoken climate change denier, to lead the transition at the Environmental Protection Agency.
    - I had thought that Trump's selection of his chief of staff would be somewhat telling, given the rumored choice between the controversial campaign adviser Steve Bannon, formerly head of the alt-right Breitbart News, and Republican National Committee Chair Reince Priebus, who is respected in Washington and has an insider's understanding of how it works. Sunday's appointment of Priebus as chief of staff and Bannon as chief strategist/senior counselor leaves the question unanswered and suggests there's room in the Trump administration for both traditionalists and outsiders.
    - One of the things we have yet to see is whether experienced and respected veterans of government will join an unpredictable and potentially controversial administration.
- Will Trump's early behavior indicate that the man we saw on the stump was the real Trump, or that the fiery populist and outside-the-box persona was exaggerated for effect? I am

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somewhat encouraged that, so far, he's appearing about as "presidential" as we could have thought possible.

Third, it will be interesting to see the extent to which Trump is supported in Congress. Republicans lost a net of six seats in the House of Representatives, but they still enjoy a solid majority of 45 seats out of the 435 there.

But they lost some ground in the Senate and thus now hold only a bare majority of the 100 seats. Here are some of the key considerations there:

- The Senate has a special role, as its approval is required for treaties (a two-thirds majority) and for appointments such as those of cabinet members, ambassadors, and judges of the Supreme Court.
- Certainly some candidates ran for the Senate this year – and won – explicitly rejecting Trump and saying they would vote for Clinton. Thus not all of the Republican senators are sure to support Trump's initiatives; his majority isn't bulletproof.
- Further, the tradition of filibuster in the Senate allows a member to prevent action on a bill (other than a budget) unless the filibuster is lifted through the invocation of "cloture" Cloture requires support from 3/5 of the senators voting (usually 60), with the very new exception of certain executive and judicial appointments (but not Supreme Court nominees), when a simple majority is sufficient. Thus the Republicans' small majority isn't enough to ensure smooth sailing in most cases.

For all these reasons, even though Republicans control both houses of Congress, I don't think Trump necessarily has a blank check. Hopefully circumstances in the Senate will push him toward moderation.

I felt during the campaign that, as opposed to Hillary Clinton, the range of possible actions and outcomes in a Trump administration was far too broad to be predicted. I'm still convinced that's the only thing we know for certain.

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Majority Doesn't Rule

In "The Implications of the Election" last week, I talked about the shortcomings of the Electoral College. Now they have been made clear. As mentioned earlier, even though Hillary Clinton won the popular vote by about 0.5%, Donald Trump is projected to win in the Electoral College by a big margin, 306 to 232, when it votes officially next month. Thus his 47.3% of the popular vote (Clinton got 47.8%, and 4.9% voted for the candidates of so-called "third parties") translated into 57.9% of the Electoral votes.

This alchemy is attributable primarily to the fact that all of the states other than Maine and Nebraska allocate their electoral votes not in proportion to the candidates' popular votes in the state, but rather on a winner-take-all basis.

Clinton won a few big states by huge margins – like NY's 29 electoral votes by 58% to 37%, and the top prize, California with its 55 electoral votes, by 62% to 33%. But since all the electoral votes go to the person with the most popular votes, anything in excess of a simple majority is "wasted." In

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these two states combined, with 15.2 million votes cast, Clinton got 9.6 million, which was 2 million more than she needed to win. Those extra votes padded her popular vote total, but they could do nothing to help her win the presidency.

Trump, on the other hand, won a larger number of states – many of them small to mid-sized – and in six cases by less than 5%. But, as I said above, 51/49 produces the same outcome as 70/30. So even though Trump received fewer popular votes in total than Clinton, he used them much more efficiently (meaning his average margin of victory was smaller). He got 5.1 electoral votes per million popular votes, whereas Clinton got only 3.8. Of course that's basically undemocratic.

This process translates into outcomes that can deny the election to the candidate for whom more people voted. Last week's election was the fourth time that has happened in our nation's history, but also the second time in the last 16 years.

Here's what CBS reports one astute observer to have said about this arrangement in 2012:

> The phoney [sic] electoral college made a laughing stock out of our nation. The loser one!
>
> He lost the popular vote by a lot and won the election. We should have a revolution in this country!

That observer was Donald Trump, responding erroneously to Obama's 2012 reelection (Obama actually won the popular vote). For some odd reason, those tweets have now been taken down.

There have been unsuccessful efforts to change the process so that future presidents will be chosen on the basis of the national popular vote, including one as recently as 1969. Another is currently underway, but the road is long and arduous. I hope the situation will be revised . . . and that I live to see it.

But in the meantime, the vote in the Electoral College is the vote that counts. Thus candidates allocate their time, effort and resources to maximize those votes, rather than popular votes. Although I'd prefer a different system, it's the one we've got, and complaints about the legitimacy of a victory that isn't accompanied by a popular vote majority don't resonate with me.

As an aside, a very similar phenomenon impacted the battle for this year's Republican nomination. A few years ago, the party changed the system to winner-take-all in the early primary races. The purpose was to quickly winnow the field to focus the contest on candidates capable of garnering significant support.

Thus when Trump was up against 16 other candidates in the primaries, he distinguished himself from the others and was able to win 100% of the delegates at stake with vote percentages generally in the twenties. This enabled him to take a commanding lead before the Republican establishment was able to respond to his insurgent candidacy. Here too, winner-take-all voting may come under examination.

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The Outlook for the Parties Revisited

In "The Implications of the Election," I mentioned the uncertain future of the Republican party – with a schism possible between Trump's followers and the unsupportive party establishment. (Now that Trump has won, it's possible all will be forgiven.)

Now I want to point out the possibility of a schism among Democrats.

- There was a clear divide during the primaries between Clinton's centrist supporters and Bernie Sanders's considerably more liberal backers.
- Many of the latter became disgruntled when Clinton received the nomination, and some are likely to have abstained from voting in the general election.
- It's possible some will attribute Clinton's loss to an easily-beatable Republican candidate to her less liberal agenda and membership in the party's old guard. This may cause the liberal faction to try to exert more effort next time to ensure that their kind of candidate is nominated.

Thus I think the 2016 presidential election – and Trump's catalyzing role in it – will have implications on both sides of our political process for years to come. These too, however, are unpredictable.

* * *

This is the last memo on politics for a while, I hope (as may you).

November 14, 2016

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Memo to: Oaktree Clients

From: Howard Marks

Re: Implications of the Election

I'm starting this memo a week before Election Day. I promise to try to stay away from the merits of the candidates and the question of who will win, and instead confine myself to the important messages that we should take away from the election and the actions we should push for as a result. The outcome of tomorrow's election won't change these things as far as I'm concerned.

Angry Voters

Of course, the big story of this election year has been the unprecedented, unconventional rise of Donald Trump. Trump threw his hat into the ring with a complete lack of experience in elected office or other public service, and without an established campaign organization. In fact, he had no established party's ideology. He adopted some Republican elements but rejected others. And yet he has been able to attract a large group of voters, probably about 50 million strong.

He did this by assembling backing from an unusually diverse mix of elements. These included dedicated Republicans who weren't about to vote for a candidate of another party; the many Clinton haters who've had 24 years to gel since Bill's first inauguration; people who were attracted to Trump's celebrity, reputation for business success, outspokenness and colorful manner; and supporters of the right. But this tells only part of the story.

The aspect I consider most important for the future relates to the Trump supporters – and some of the most active and vocal ones – who are motivated by an anger regarding "the system" that is neither purely emotional nor illegitimate.

Many are older, white, non-college-educated men who might be described as "demographically dislocated." When these men were born, white males ran America; their communities weren't mixed and becoming more so; and the cultural shifts occasioned by the civil and women's rights movements, technological change and mass immigration were unimagined. **Certainly the shift to the America of today – with all these things quite different – might be jarring and unpleasant to the people I describe.**

At the same time, many Americans – and often the same ones – are experiencing the effects of job loss and diminished economic prospects. Fifty or even thirty years ago, men without college degrees could easily obtain good-paying jobs and the pride associated with being able to maintain their families at a good standard of living. One earner per household was enough, and one job per earner. Strong labor unions ensured adequate pay and benefits and protected workers from too-rapid changes in work rules and processes.

Now the number of unskilled jobs has been reduced by automation, foreign manufacturing and increased globalization of trade. Unions are much less powerful in the private sector (name a powerful union leader of today who comes to mind). **Men of the sort described above – older, white and non-college-educated – are likely to have lost jobs, know someone who has, or seen the impact on their communities.**

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Importantly, until 2000, most Americans felt their children would live better than they did. Now this is no longer true:

> When asked if "life for our children's generation will be better than it has been for us," fully 76 percent said they do not have such confidence. Only 21 percent did. That was the worst ever recorded in the poll; in 2001, 49 percent were confident and 43 percent were not. . . . virtually all polling shows a steep decline in optimism since the late 1990s and early 2000s. (*The Washington Post*, August 12, 2014)

Here's a quote from Thomas Friedman in *The International New York Times* of June 30 that I used to sum up in "Political Reality" (August 2016). As I wrote there, I think it does a great job of capturing the situation:

> It's the story of our time: **The pace of change in technology, globalization and climate have started to outrun the ability of our political systems to build the social, educational, community, workplace and political innovations needed for some citizens to keep up.**
>
> We have globalized trade and manufacturing, and we have introduced robots and artificial intelligent systems, far faster than we have designed the social safety nets, trade surge protectors and educational advancement options that would allow people caught in this transition to have the time, space and tools to thrive. It's left a lot of people dizzy and dislocated.

What we have is a country – in fact, a world – that is changing rapidly and in ways that are unpleasant and disorienting for large segments of the population. The present is different from the past, and the future looks worse than it used to. Slower economic growth is producing less opportunity overall, and a number of forces are supplementing slow growth in diminishing the outlook. Rising income inequality is directing an increasing share of the gains to top earners. Older people lacking higher education are particularly ill-equipped to deal with the changes.

I think this is an apt description of conditions in the U.S., but it seems equally applicable to much of the developed world. In an opinion piece on October 26, starting from the German point of view, Jochen Bittner of the *International New York Times* described a broad group he called Wutbürgers, or "angry citizens." I think they're rising everywhere:

> It is a relatively new expression, with a derogatory connotation. A Wutbürger rages against a new train station and tilts against wind turbines. Wutbürgers came out in protest after the Berlin government decided to bail out Greece and to accept roughly one million refugees and migrants into Germany.
>
> Wutbürgers lie at both ends of the political spectrum; they flock to the right-wing Alternative für Deutschland and the socialist Linke (Left) Party. The left wing has long had a place in German politics, and the Linke has deep roots in the former East Germany's ruling party. And we've had a fringe right wing since the postwar period began. But the populist anger of the A.F.D. is something new: Anti-establishment, anti-European Union and anti-globalization. . . .
>
> The same thing is happening elsewhere in Europe: Many British Wutbürgers voted for Brexit. French Wutbürgers will vote for Marine Le Pen's National Front. Perhaps the most powerful Wutbürger of them all is Donald J. Trump.

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Which raises the question: How was anger hijacked?

In its pure form, anger is a wonderful force of change. Just imagine a world without anger. In Germany, without the anger of the labor movement, we would still have a class-based voting system that privileged the wealthy, and workers would still toil 16 hours a day without pension rights. Britain and France would still be ruled by absolute monarchs. The Iron Curtain would still divide Europe, the United States would still be a British colony and its slaves could only dream of casting a vote this Nov. 8.

Karl Marx was a Wutbürger. So were Montesquieu [who articulated the concept of separation of powers within a government], William Wilberforce [the leader of the abolitionist movement in Britain], the Rev. Dr. Martin Luther King Jr. and the tens of thousands of Eastern German protesters who brought down the Berlin Wall in 1989. . . .

Now: Compare these spirits to the current parties claiming to stand for necessary change. . . . Sadly, the leaders of today's Wutbürger movements never grasped the difference between anger driven by righteousness and anger driven by hate.

Anger works like gasoline. If you use it intelligently and in a controlled manner, you can move the world. That's called progress. Or you just spill it about and ignite it, creating spectacular explosions. That's called arson.

Unfortunately, this lack of maturity and prudence today exists among not just the new populist class, but parts of the political establishment. The governing class needs to understand that just because people are embittered and paranoid doesn't mean they don't have a case. **A growing number of voters are going into meltdown because they believe that politicians – and journalists – don't see what they see. . . .**

The grievances of white, often less-educated voters on both sides of the Atlantic are often dismissed as xenophobic, simplistic hillbillyism. But doing so comes at a cost. Europe's traditional source of social change, its social democrats, appear to just not get it. When Hillary Clinton calls half of Mr. Trump's voters a "basket of deplorables," she sounds as aloof as Marie Antoinette, telling French subjects who had no bread to "eat cake."

. . . Amid their mutual finger-pointing, neither populist nor established parties acknowledge that both are squandering people's anger, either by turning this anger into counter-productive hatred or by denouncing and dismissing it. Mrs. Clinton [making the presumption that she would win, as seemed clear on October 26] has the chance to change, by leading a political establishment that examines and processes anger instead of merely producing and dismissing it. If she does, let's hope Europe once again looks to America as a model for democracy. (Emphasis added)

The point of all of this is that Trump is importantly supported by dislocated, disoriented voters who are angry about a number of unquestionably significant trends that are impacting them and their communities. Regardless of the outcome of the election, they and their sentiments will remain a powerful force.

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Here's how I concluded the relevant section of "Political Reality." I'll let it do the same here:

> **What, then – if anything – should be done to arrest the trends described above?** If we don't do something, it's likely that the income and wealth gap will continue to grow; the downside of globalization will continue to be felt; and our political process will continue to be riven by widespread dissatisfaction.
>
> Eduardo Porter, an economics columnist, summed up succinctly in *The New York Times* of May 25:
>
>> We shouldn't try to stop globalization, even if we could. But if we don't do a better job managing a changing world economy, it seems clear that it will end badly . . .
>
> **The trends discussed above – and resentment over experiencing them, fear of doing so, and anger upon seeing them at work in one's community – have been big contributors to Trump's popularity over the last year, and also to Sanders's appeal to large numbers of Democratic primary voters. Similar sentiment played a big part in the Brexit vote to Leave and is on the rise in Europe. The issues won't end with this year's presidential election.** Rather, I believe they are likely to prove long-lasting and difficult to resolve. They and the non-economic forces at play in this election are likely to have significant influence on U.S. politics for years to come.

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A Call to Action

As Bittner wrote, voter anger can be a potentially-powerful force for change. It is my hope that the presence of this anger will make it clear to our elected leaders that change is needed, rather than that they should dig in their heels further to fight the opposing party.

As I recall, it was in the 1980s that a massive ideological gulf opened between the Democrats and Republicans, with the liberal views Carter had espoused while in office (1976-80) contrasting sharply with the strict conservative philosophy Reagan brought to his presidency (1980-88). After the quieter presidency of Bush the Elder, Bill Clinton held office in 1992-2000, and the attitude of the right approached revulsion, whether based on his liberal agenda or his personal conduct. Very negative feelings also befell George W. Bush in 2000-08 (who was named president after an election decided by the Supreme Court, and who took us into war in the Middle East) and Barack Obama in the last eight years (with what the right considered his overreaching plan for health care).

Over the last 36 years, then, politicians have become more combative and less willing to compromise – and certainly unwilling to take their lead from the occupant of the White House if he's from the other party. It often seems the members of both parties have devoted themselves primarily to denying the other any accomplishment. And in our system of government – where the two houses of Congress and the presidency can be under the control of different parties, and where in the Senate it can take 60 votes out of 100 (not 51) to advance legislation – it's easy to prevent progress. The result has been gridlock and a total lack of forward movement.

Some people – and especially conservatives who think the size and role of government should be limited, and libertarians who generally oppose "coercive institutions" – think gridlock is a good thing. They think the less government does, the better. This was a particularly popular sentiment around the time of the Reagan presidency, when conservative ideology was in its heyday.

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But we cannot cope in this complex, rapidly changing world without some solutions. Inaction can't always be depended on, especially given that we're not starting from the ground zero of virgin territory. Government has taken action in the past – for example, setting the rules for Social Security – and it legitimately may have to rewrite those rules when circumstances change: when there are fewer people working per retiree, or when people live longer. You can't say "I prefer gridlock" and assume the system will remain solvent.

We need good decisions made and action taken on not just Social Security and other entitlements, but also the health care system, trade agreements, infrastructure spending and other fiscal stimulus, our defense posture and – yes – appointments to the Supreme Court. This year, Republicans refused to deal with President Obama's nominee to fill a Court vacancy. That vacancy will remain for the new president to fill, and two to three more are likely to open up in the next four years. Will they be dealt with constructively – by whichever party doesn't occupy the White House? Or will there be continued obstructionism and a lack of decision making.

The writer of the 2014 *Washington Post* piece cited above, regarding diminished optimism, attributes some of this to the slowness of the economic recovery since the financial crisis of 2008, and some to increasing inequality, meaning fewer and fewer people are participating in the gains. And then she goes on to cite another possible reason:

> The lost optimism, [Fred Yang, a Democratic pollster] said, "says a lot about how shaken we are by the inability of our political system to address seemingly easy issues, and it leaves us worried about the future."
>
> Yang doesn't see that improving much, even as the economy does. "The unsettledness of the public is what is normal now," he said. "To me, this is less about economic reality than about our political system — our lack of confidence that our political leaders, regardless of party, are equipped to deal with the future."

Thus I believe that citizens are angry not just because of recent trends, but also because the government hasn't done enough to stem them or lessen their impact. Even a "conservative" who favors a limited role for government may want some action taken if he has lost his job due to globalization or automation. **Trump promised to help, and it has won him a lot of votes.**

It is my hope that constructive action will be taken. Here's what Blackstone founder and former Secretary of Commerce Pete Peterson wrote in his book *Running on Empty*:

> . . . while our problems are not yet intractable, both political parties are increasingly incorrigible. They are not facing our problems, they are running from them. They are locked into a politics of denial, distraction, and self-indulgence that can only be overcome if readers like you take back this country from the ideologues and spin doctors of both the left and the right. . . .
>
> With faith-driven catechisms that are largely impervious to analysis or evidence, and that seem removed from any kind of serious political morality, both political parties have formed an unholy alliance – an undeclared war on the future. An undeclared war, that is, on our children. **From neither party do we hear anything about sacrificing today for a better tomorrow. In some ways, our most formidable challenge may be our leaders' baffling indifference to our fiscal metastasis**. As former Treasury Secretary Larry Summers puts it, "The only thing we have to fear is the lack of fear itself." (Emphasis added)

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The Importance of Bipartisanship

I think we're on the way to a geometry proof (remember high school?).

- The voters are angry about the level of government inaction.
- Positive steps must be taken if we're to solve today's pressing problems.

So what's the next step, the next essential ingredient? To me, it's bipartisan compromise.

When I was a kid, the leaders of the two parties in Congress worked with the president to solve problems and achieve legislative compromise. Here's what I wrote on this subject in "A Fresh Start (Hopefully)," after the last election in 2012:

> The opposite of gridlock is compromise. That's what we need today. **Compromise, however, doesn't mean one party saying "We get all we want and you get none of what you want."** Deals like that can only be inked if one party holds all the cards: either the White House plus majorities in both the Senate (and preferably the 60 votes required to stop a filibuster) and the House of Representatives or, at minimum, majorities in both houses of Congress and enough votes to override a presidential veto. Both parties are far from that today, and that may remain the case for a long time.
>
> **No, compromise means, "We get some of what we want and you get some of what you want." In practice, it means elected officials have to vote for things they promised to fight and give up on things they swore to deliver.** Unless you do that, the other guy doesn't get any of what he wants – meaning he has no reason to go along. This is a reality that our political leaders have failed to confront and accept.
>
> While compromise comes at a cost, gridlock can cost more. Last year, some long-term U.S. debt was downgraded after a particularly unseemly battle over the federal debt ceiling. This occurred not so much because of our fiscal situation, but because our dysfunctional government showed itself to be unable to rise to the occasion and solve problems. . . .
>
> On November 7, *The New York Times* carried an excellent article by Thomas L. Friedman entitled "Hope and Change, Part II." In it, Friedman did a great job of outlining some of the things Washington will have to do in order for the outlook to improve.
>
>> The next generation is going to need immigration of high-I.Q. risk-takers from India, China and Latin America if the United States is going to remain at the cutting edge of the Information Technology revolution and be able to afford the government we want. . . .
>>
>> . . . my prediction is that the biggest domestic issue in the next four years will be how we respond to changes in technology, globalization and markets that have, in a very short space of time, made the decent-wage, middle-skilled job – the backbone of the middle class – increasingly obsolete. The only decent-wage jobs will be high-skilled ones.
>>
>> The answer to that challenge will require a new level of political imagination – a combination of educational reforms and unprecedented collaboration between business, schools, universities and government to change how workers are

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> trained and empowered to keep learning. It will require tax reforms and immigration reforms. America today desperately needs a center-right Republican party offering merit-based, market-based approaches to all these issues – and a willingness to meet the other side halfway. The country is starved for practical, bipartisan cooperation, and it will reward politicians who deliver it and punish those who don't. . . .

I'm frustrated when I see Americans of both parties failing to punish – or even encouraging – behavior on the part of their elected officials that is fractious, partisan, ideological and non-compromising. Gridlock and inaction won't solve our problems. Cooperation, adaptability and Friedman's "imagination" must be the watchwords for the years ahead.

We need constructive action to solve the many problems we face, and there's only one way for it to materialize: bipartisanship.

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Flaws in Our Democracy

There's a good chance that this year's election result will demonstrate the presence of elements capable of rendering our elections less than perfectly democratic. The main culprit is the Electoral College. Here's more from "A Fresh Start" in 2012:

> How did the "too close to call" headlines of the days just before the election turn into a resounding victory, which the Democrats will argue has given them a mandate to lead? How did Obama's small edge in the popular vote turn into a 62%-38% margin in terms of the electoral votes that determine the winner? The answer lies in the peculiarities of our electoral college.
>
> I was traveling in Asia and the Middle East at election time, and I found myself having to explain a system in which:
>
> - In all but a few states, 100% of the electoral votes go to whoever wins the popular vote there, regardless of the margin.
> - Most of the 50 states – this year it was roughly 43 – are considered "uncompetitive," meaning one party or the other enjoys a substantial, dependable majority. For that reason, a vote for a Republican is totally meaningless in a Democratic state like California, as is a vote for a Democrat in Republican Utah.
> - On the other hand, the electoral system gives voters in a few states disproportionate influence. Since the uncompetitive states' electoral votes are not in play, elections are determined by only the few so-called "swing" or "battleground" states. In fact, this year many people thought the election might be determined largely by who won in just one state: Ohio.
> - Perhaps most glaringly, a candidate can be elected president with a majority of electoral votes despite having received fewer popular votes than another.
>
> Our system was designed in the eighteenth century to centralize the job of choosing a president in the hands of a few wise leaders and avoid the uncertainties associated with a widespread and uninformed populace with which it was hard to communicate.

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> But in the twenty-first century, with the impediments to a meaningful popular election much reduced, it's time to reassess the benefits of the electoral college – it's hard to say what they are – versus the costs in terms of potentially weird outcomes. **In the days just before the election, it seemed that for the second time in twelve years we could have a president who'd lost the popular vote. That tells me it's time to reassess our system of voting.**

The existence of the Electoral College can lead to other possible complications. In "Political Reality" in August, I raised the question of what happens if no candidate receives a majority of the 538 electoral votes:

> I'll give you the answer: in the absence of an electoral majority, the president is chosen through a vote of the House of Representatives, with each state having one vote. **Thus, theoretically, the 26 least-populous states – containing just 17% of America's people and, by definition, almost none of its big cities – could choose the president.** For me, regardless of the political makeup of the House, the loss of proportional election is of great concern . . .

Lastly under this heading, I want to touch on the role of money. In our elections (a) the vast bulk of campaign funding is provided privately, not publicly, and (b) the Supreme Court has ruled, in effect, that the amounts donated largely cannot be limited. The result, in my view, approaches the undoing of "one man, one vote." While each person's actual vote is the same, his or her influence on the outcome is not. Here are just a few data points, according to *Business Insider* (October 31):

- Nearly $6.6 billion is the amount candidates, parties, and outside groups are raising and spending in trying to move things their way in the 2016 election cycle, the Center for Responsive Politics estimates on its website, OpenSecrets.org. It's a new record. It's up by $86.5 million, adjusted for inflation, from the 2012 presidential cycle, which had also been a record.
- The biggest increases in money flows, compared to 2012, came from outside money groups "that purportedly work independently from candidates," the report said. They've greased this election with $1.3 billion so far (through October 24), $190 million more than at this point in 2012, accounting for 26.8% of total spending.
- And it's getting more concentrated: "The top 100 families" contributed $654 million to candidates, political parties, and outside groups so far, or 11.9% of the total raised, up from 5.6% in the 2012 election cycle.
- The top ten families have given a total of $281 million so far this year.

It wasn't many years ago that contributions were limited to a couple of thousand dollars per candidate per race. Now $100,000 isn't an uncommon ask, and there are legitimate (but possibly cynical) ways to donate millions. Given the amounts involved and the private sourcing, I find it hard to believe that elected officials are able to entirely ignore donors' interests and preferences when they do their jobs. I'm not talking about corruption, just a not-quite-level playing field. This area is ripe for change. But given that the Supreme Court ruled that political donations are "speech" and thus can't be regulated, change would require a constitutional amendment or a different decision from the Supreme Court.

The Outlook for the Parties

One thing that's uncertain as we move forward from here is what the future holds for the two main parties.

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Many voters crossed long-standing party lines during this campaign:

- Working class Americans, traditionally Democrats, were attracted to Trump by his anti-establishment, non-politically-correct, "Make America Great Again" approach.
- Big business, traditionally Republican, failed to support Trump, perhaps because of his anti-trade positions – even though he might well be a more pro-business president than Clinton.
- College-educated white Republicans – and especially women among them – backed Clinton, presumably because of Trump's controversial behavior and Clinton's role as the first woman candidate.

Will these new party allegiances hold? Or, if they arose largely because voters felt either attracted to or repelled by one of the 2016 candidates, will some or all of these developments reverse when the candidates are different?

The leaders of both parties were challenged this year by angry members. Will those members stay with their parties, or will they be less rooted in the future and "up for grabs"? **The make-up – and the cohesiveness – of both parties is in flux, and thus the next election may be another that deviates from the usual path.**

The Democrats have their issues. It's one of Trump's assertions that the Democratic party has been taking its working class members for granted, talking up the connection at election time but failing to come through with solutions, especially for displaced workers. (Democrats will counter that it's because Republicans have been successful in implementing gridlock so as to stymy programs like retraining.) The fight between moderates and liberals for control of the Democratic party – made clear in the divided primary results between Clinton and Sanders – is far from over. Sanders supporters may decide that the party leadership isn't liberal enough.

But I think it's the Republican party that faces greater challenges. Over the last few decades, the party has been thrown together from largely unrelated and disjointed elements. As I described in "Political Reality," the traditional Republicans of 60 years ago – fiscally responsible, pro-business, socially moderate and strong on defense – have been joined more recently by conservatives, the Tea Party, Evangelical Christians, anti-gun-control voters, anti-abortion groups, and now the economically dislocated. The glue is weak; rather than by ideology, they have been unified primarily by the fight against Democrats.

Will all these groups stay within the party? Perhaps some of the last will "vote with their feet" with regard to House Speaker and party leader Paul Ryan, who first refused to endorse Trump, then did endorse him, then described Trump's raunchy 2005 video as "troubling" and said he wouldn't campaign for him or support him, and then voted for him and expressed support but did so – pointedly? – without mentioning his name. After Ryan responded to the video by disinviting Trump from a joint campaign event in his home state of Wisconsin, he was booed by some in the crowd. Will Trump supporters remain Republicans if Ryan continues to lead the party? Will Trump supporters elected to the House support Ryan in his leadership of their caucus?

Ryan's experience wasn't unique: numerous Republican politicians had problems with Trump's policies or actions but needed his supporters, who constitute a large part of Republican voters. The conflict between principle and pragmatism is very real, and the painfulness of their dilemma has been clear. It has produced flip-flopping and confusing stances (raising the question of whether it's possible to support a candidate but not endorse him).

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If Trump's supporters desert the Republican party (or the political process) due to disenchantment with the behavior of its leaders, the party may have a hard time pulling together a meaningful following in future elections.

> "Trump has essentially run as an outsider who staged a hostile takeover of the Republican party. If he loses, as is expected, he will still have won the votes of some 50 million voters or more, and they will represent a continuing, potent force, roiling with resentments," said [David Gergen, an adviser to four presidents – three of them Republicans]. "Before Donald Trump brought his wrecking ball to the party, one might have thought it highly likely that Republicans could unite after yet another losing election. But one of Trump's many ugly legacies is that the chances of the party losing its coherence – or even breaking up – now seems better than 50:50. (*Financial Times*, October 29/30 – clearly not a Democratic, or even an American, publication)

The Republicans' plan after the defeat of Mitt Romney in 2012 centered around increasing its appeal to women and Hispanics and other minorities. In this campaign, however, that effort probably went into reverse.

I think the Republican party faces real issues. And my point here is that **our country needs two strong parties, not an elected dictatorship. With two strong parties there can be an active debate of ideas, and neither is able to operate unopposed in a Washington devoid of meaningful resistance. The complete opposite of gridlock – free rein – isn't desirable either.**

* * *

On November 2, John Cassidy wrote in *The New Yorker* of:

> . . . an America bitterly divided along class, racial, and cultural lines. To quote Benjamin Disraeli, the nineteenth-century British statesman, we now have "two nations between whom there is no intercourse and no sympathy; who are as ignorant of each other's habits, thoughts, and feelings, as if they were dwellers in different zones, or inhabitants of different planets."
>
> Disraeli was writing about the rapidly industrializing England of the eighteen-forties, and the two nations he referred to were the rich and the poor. In the United States, because of its history of slavery, the Civil War, and mass immigration, the divisions have never been that simple: vertical cleavages along racial, ethnic, and regional lines have often trumped the horizontal class divide. But the gulf between Clinton's America and Trump's America, even though it can't be traced entirely along economic lines, is now a yawning chasm.

It's very much worth noting that the electoral map showing who's expected to win which states has the West Coast, the Northeast and the Upper Midwest quite solid for Clinton and a broad swath down the middle of the country for Trump. The regions' differences from each other are very significant, with the people in Trump country more likely to live rural lives, to have been born in the U.S. (and often in the same town in which they now live), and to have worked in manufacturing. These differences contribute to the divide described above.

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The political arena this year seems like a battlefield, divided much more than usual by antagonism, incivility, anger and downright hatred. Elites, establishments, experts, incumbents, insiders, internationalists and political correctness all came under attack, with no one to defend them. Slow economic growth – accentuated by continuing automation and international trade – is likely to continue to leave dissatisfaction within the working class. And after having seen behavioral norms wiped away in the first x-rated campaign – and doubts raised about the impartiality of the FBI and even the fairness of our elections – large numbers of people may be left alienated. **When the election is over, these things are likely to remain the case.**

But as I look forward, I see the need for constructive, bipartisan governmental action. Is that wishful thinking? Winning future elections could become a function of producing solutions, and that in turn could lead to cooperation and compromise between the two parties. I'll use a rarely seen word to describe my dream: comity. Its definition makes it perfect for this use: "courtesy and considerate behavior toward others."

The environment described above doesn't feel like one that encourages comity or one in which the parties can function internally and work together. Therefore we might have to hope that politicians will conclude not only that the future of the country requires bipartisanship, but that their own success does as well.

Unlikely? Perhaps. But after a post-election memo in 2012 that proved far too optimistic, I say, "why quit now?"

November 7, 2016

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Memo to: Oaktree Clients

From: Howard Marks

Re: Political Reality

My last memo, in May, was on the subject of "Economic Reality." Its goal was to describe the realities imposed by economics and point out the many ways in which governments and, especially, candidates for elected office ignore and promise to override them. Since then I have been struck by the way developments have moved economic reality to center stage. Of course, foremost among them has been the affirmative vote of June 23 on Brexit: whether the United Kingdom should leave the European Union.

I have no interest in writing a memo about Brexit itself. There's a huge number of moving parts, too little past experience, too many varying opinions, and zero clarity on how the departure will be handled. There are many pundits out there telling us what the consequences of Brexit will be. The only thing I'm sure of is that most of them are wrong, and if I were to join their ranks, I'd probably be wrong, too.

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Economic Reality: Choices and Consequences

The May memo described the ways in which economics defines and constrains reality in business, investing and everyday life. Economics establishes the rules of the game and the boundaries of the playing field, and these things can't be ignored. They can be altered, but not without consequences.

The realities of economics are stark and consistent, but also logical. They aren't absolute, like the laws of physics (e.g., gravity), but they reliably establish tendencies and limits. If the price of something goes up, the amount consumed is likely to go down. If wages rise, the number of people employed for a task is likely to decline. If tax rates go up, there's likely to come a point at which there's less incentive to work, and thus less output. If a government spends more, to pay the bills it has to either print money (which tends to be inflationary), raise taxes or borrow.

Shortly after publishing "Economic Reality," I added a new section to the version appearing on Oaktree's website, saying **economics is largely the study of choice**. If you only have $10, do you want to buy a $10 book or two $5 hamburgers, or make a $10 gift, or add $10 to your savings? The only thing we know you can't do is do them all. **Further, decisions and actions have consequences**. For example, spending can provide us with enjoyment, but it will also make us poorer.

Reality in Politics

I've always gotten a kick out of oxymorons – phrases that are internally contradictory – such as "jumbo shrimp" and "common sense." I'll add "political reality" to the list. The world of politics has its own, altered reality, in which economic reality often seems not to impinge. No choices need be made: candidates can promise it all. And there are no consequences. If something might have negative consequences in the real world, politicians seem to feel free to ignore them. If someone annoying, like a journalist or an opposing candidate, asks about potential consequences, it's easy these days to misrepresent them or deny they exist. And if it turns out that costs or consequences were willfully

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ignored, no redress is available: election victories based on unmet promises can't be rescinded, and candidates can't be sued over falsehoods on the stump.

In the addendum to "Economic Reality," I pointed out that candidates rarely talk about choice. Instead, they're likely to promise "all of the above." And rarely if ever do they mention the cost that will be attached to something, or the downside, as in "I'll give you A, but you'll have to give up B." I imagine page one of *The Politician's Handbook* must say "never deliver an unpleasant message."

In "What Worries Me" (August 2008), I wrote:

> Imagine two candidates for president. One says, "I'm going to give you eight years of discipline and denial – of higher taxes and lower spending – but I'll leave the country in better shape." The other says, "I have a secret plan that will solve all of our problems without requiring any sacrifice on your part." Who do you think would win?

How about a real-world example? In 1984, Walter Mondale was the Democratic candidate for president, running against Republican incumbent Ronald Reagan. Mondale became famous for his candor in accepting his party's nomination:

> Whoever is inaugurated in January, the American people will have to pay Mr. Reagan's bills. The budget will be squeezed. Taxes will go up. And anyone who says they won't is not telling the truth to the American people. . . . **Mr. Reagan will raise taxes, and so will I. He won't tell you. I just did.**

The result? Mondale lost in a landslide, with the popular vote of 59% to 41% representing the seventh-biggest percentage deficit in presidential election history. Far worse, of the 538 electoral votes, he won only 13 (the District of Columbia and his home state of Minnesota). That stands as the second-lowest electoral total for a presidential runner-up since 1824. **So much for the benefits of candor.**

Today many politicians promise to safeguard the Social Security system, but rarely do we hear anyone talk about (a) reduced benefits, (b) higher Social Security tax rates, (c) a higher ceiling on wages taxed, (d) delayed onset of benefits, or (e) means-testing for recipients. **And yet, either some combination of these or the insolvency of the system is an actuarial certainty.** Instead, we get the candidate's mantra: more for all, with no cost or consequences . . . and, in the case of Social Security, a complete absence of progress.

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Brexit: Political Reality in Action

Being in Europe at the time of the Brexit vote gave me an opportunity to see the imperfections of political reality in action. I'll review a few:

- **The decision to conduct the referendum was a matter of political expediency** (defined as "the quality of being convenient and practical despite possibly being improper or immoral"). A schism in the Conservative Party between the pro-Europe faction and the Euro-sceptics (pronounced "skeptics") – as well as opposition from the UK Independence Party, or UKIP – threatened to hand Britain's 2015 election to the Labour Party. To put down this threat, Conservative Party leader David Cameron promised in 2013 to put the issue of membership in the European Union to a popular vote. We often see politicians paper over a problem with promises

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today, preferring to put off the possible consequences until tomorrow (they seem to assume tomorrow will never come – see page 4). This is a very practical stratagem, since elected officials often leave office well before consequences appear, and at any rate, there's no consolation prize for losing an election, so a candidate might as well do everything he can to win.

- **Potential consequences are often overlooked or not understood.** Of course, the ramifications of a Brexit referendum couldn't be known in 2013; even now in 2016 no one knows what they'll be, although the decision to leave is a fait accompli. It was a glaring error to leave a decision of this importance and permanence up to a simple majority of those going to the polls. The referendum could have been structured so that a decision to leave required a supermajority of those voting, or a majority of registered voters (whether they voted or not). **Since neither of these was required, the decision was made to take the UK out of the EU** – possibly tearing the country asunder (e.g., Scotland may well secede from the UK, since it was tempted to do so before and strongly wishes to be part of the EU) – **because 37% of registered voters said that's what they wanted** (whereas 35% voted to Remain and the other 28% didn't vote).

- **The decision was likely influenced by factual inaccuracies and false promises.** For example, probably most importantly, "Leave" voters were told that exiting the EU would enable Britain to gain control over its borders and thus exclude immigrants. Further, voters were told the UK was sending £350 million weekly to the EU, and leaving would enable that to be spent on the National Health Service instead. Within days after the election, however, some of those who had made the promises admitted that (a) maintaining unfettered access to the European market – and its 500 million consumers – will probably make it impossible to close Britain's borders to immigrants from Europe; (b) the £350 million was a gross figure that ignored the money the EU sent back to subsidize British farmers, and the real net figure was closer to £200 million per week; and (c) no one really thought the whole savings could go to the NHS – maybe just "a good part."

- **It became clear soon afterward that winning the election and implementing the decision are two different things.** Britain soon saw that (a) no one had a plan for how the departure would take place and (b) implementing wouldn't be as much fun as campaigning. Thus:

  - David Cameron (who had urged a vote to "Remain") announced the next day that, since he wasn't the right person to engineer a departure, he would resign as Prime Minister and head of the Conservative Party.
  - Ex-London Mayor Boris Johnson, a leading Conservative agitator for Leave, who it was widely assumed would become the next Prime Minister, walked away after his unsuitability was made clear in something of a coup.
  - Jeremy Corbyn, the head of the Labour Party, whose tepid effort failed to reflect his party members' strong support for Europe, was the subject of a 172-40 no-confidence vote by the Labour members of the House of Commons.
  - The leader of UKIP, Nigel Farage, stepped down, saying he wanted his life back after many years of advocating for Britain's departure from Europe.

  Thus, two weeks after the referendum, no one knew who would lead any of these parties. (Since then Theresa May has ascended, surprisingly quickly, as Prime Minister and head of the majority Conservatives.)

The English have a great expression: "a dog's breakfast." The meaning is simple: a complete mess. I think that's an apt way to describe the Brexit referendum.

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To pull this part of the memo together, I can't overstate my appreciation for the way Thomas Friedman described the UK's situation in *The New York Times* on June 29:

> A major European power, a long-time defender of liberal democracy, pluralism and free markets, falls under the sway of a few cynical politicians who see a chance to exploit public fears of immigration to advance their careers. They create a stark, binary choice on an incredibly complex issue, of which few people understand the full scope – stay or quit the E.U.
>
> **These politicians assume that the dog will never catch the car** and they will have the best of both worlds – opposing something unpopular but not having to deal with the implications of the public actually voting to get rid of it. But they so dumb down the debate with lies, fear-mongering and misdirection, and with only a simple majority required to win, that the leave-the-E.U. crowd carries the day by a small margin. The dog catches the car. And, of course, it has no idea what to do with this car. There is no plan. There is just barking.

<u>The Voting Booth</u>

Now let's think about the nature of elections. In *The Intelligent Investor*, Ben Graham described the stock market as a weighing machine in the long run but a voting machine in the short run. What he meant by the latter reference was that in the short run, intrinsic value is often ignored and the stocks that do best are usually the ones capable of winning a popularity contest.

I believe that, over time, elections have become more like popularity contests. The successful campaign speech isn't one that does the best job of analyzing the challenges and supplying optimal solutions. It's one that most provides what people want to hear.

In business and investing, people invariably compare the benefits and costs of A against the benefits and costs of B. Then they select the alternative with the better expected net result (and hopefully one whose bad outcomes are survivable). A lot of mistakes may be made, and the process is sometimes misguided, but the effort to make good economic decisions is undeniably there. Decisions usually have clear consequences, and they are likely to become known before the people responsible depart.

In contrast, politicians tend to believe the best decision is the one that is most likely to lead to election or reelection. Responsibility for outcomes is highly diffused, and the results may only become clear years – or decades – after the elections are held and the decisions are made. Few voters have the ability to assess the reasonableness of candidates' promises, and – given the time lags mentioned just above – it can be difficult to judge candidates for reelection on the basis of their performance on the job.

Time for an aside: I don't claim that people in the private sector "do God's work." But we generally pull together to work for the collective good when the incentives are aligned properly. While everyone at Oaktree wants to advance his or her own financial position, status and career potential, I'm certain they also want Oaktree and its clients to succeed, as that is a prerequisite for – and will be a prime contributor to – each individual's own success. In Washington, on the other hand, many elected officials (Republicans and Democrats alike) give the impression that the success of the government – and the country – takes a backseat to making sure that (a) they and their fellow party members are elected and reelected and (b) members of the other party aren't. To this end, some members of party A seem to consider it more important to ensure that party B is unable to claim any accomplishments, than it is that

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party A actually gets something done. I saw a political advisor interviewed on TV, and when asked what makes a politician successful, he answered, "getting reelected by his or her constituents." He quickly amended that to "getting legislation done," but the message was clear.

The Quality of Debate

It's only hesitantly that I use the above section heading to describe what I want to cover here. First, it seems there's little of quality in political speech today, and second, I don't see a lot of debate (in the sense of "a method of formally presenting an argument in a disciplined manner" – Wikipedia).

- Rather than organized point and counterpoint, voters today – certainly in the U.S. – are subjected to sound bites, insults and assertions that aren't in response to anything. During a presidential debate in 2012 (which in retrospect seems so prim and well-mannered compared to today), one candidate – when told by the moderator that he hadn't answered the question – said "you asked the question you wanted to ask; I answered the question I wanted to answer."

- Unlike earlier years, there do not seem to be any rules governing what some people will say, or subjects that are off-limits.

- Some candidates seem to believe the truth is dispensable. In past elections, candidates could be heavily damaged if it could be shown that they'd said something inaccurate or untrue. This time around, the truth doesn't seem to be accorded a universally high priority. According to PolitiFact, an independent fact-checking outlet, 28% of Hillary Clinton statements that they've checked are "Mostly False" or worse. In Donald Trump's case, it's an astounding 70%.

- In fact, it seems to me that, among certain portions of the electorate, there's little concern for what's said – just how it's said. Over and over I hear people on TV say, "I like Trump because he tells it like it is." They're not necessarily commenting on his policies or the accuracy of his statements; more likely it's his outspokenness and disdain for political correctness. In recent decades, it seems "this is someone I'd like to have a beer with" has taken the place of "this is the person who's best qualified to lead the country."

I've thought for the last year that the Republican primary "debates" had the feeling, more than anything else, of the professional wrestling matches I watched on television when I was a boy. Each wrestler had a persona that appealed to a certain segment of the crowd, and the fans of the villains would scream their support, faces contorted in rage. Dirty tricks and cheating didn't push away these fans – in fact, these things just stirred their bloodlust. That certainly seems to be the case with some of today's campaign moments. The parallels between politics and pro wrestling might even extend to attempts to rig the outcome. Just last month, the head of the Democratic National Committee was forced to resign because of staffers' leaked emails proposing that it favor one candidate over another.

Ignoring Economic Reality

I listed above some of the false promises that led to the victory for "Leave" in the Brexit referendum. I also mentioned that there was a lot of backtracking on those promises in the weeks following the vote. Now I want to discuss a few questionable statements that have been made in the lead-up to the U.S. presidential election.

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- **Some of Donald Trump's most prominent economic pronouncements have been with regard to imports, job losses and the balance of trade.**

    - He says of China, "they're killing us." But trade is a two-way street. Barring unfair competition, when we run trade deficits – meaning we buy more from other countries than they buy from us – it's for one main reason: they provide a better price/value proposition than we do. They sell products (and take jobs), but we get bargains. China isn't "winning" in that case, and the U.S. isn't "losing": it's a win for both countries. **Of course it's also true that while the result may be positive for the countries overall, there still can be negative consequences for individuals. For example, people may lose their jobs because of cheap imports, and society should take steps to ease their loss.** I'll return to this later.

    - Trump cites unfair competition from China as a main source of our loss of manufacturing jobs. As I pointed out in "Economic Reality," however, in recent decades the U.S. has lost roughly ten times as many potential jobs to increased productivity, mechanization and automation as it has actual jobs to low-cost competition from China.

    - Trump blames part of China's ability to sell cheap goods on the fact that it has held its currency artificially low versus the dollar. But it's interesting to note that when China recently made its exchange rate less rigid, the yuan declined rather than rose, suggesting that perhaps it hadn't been held artificially low.

    - As for economic reality, never has Trump said anything like this: "We may be able to increase manufacturing jobs by imposing protective tariffs, but that would require all consumers to pay higher prices for their purchases of goods from abroad." What would the average American's everyday shopping experience be if imported goods were barred, discouraged or heavily taxed?

- **Further, Trump doesn't point out that, in response to the adoption of protectionist measures by the U.S., other countries could retaliate with increased tariffs on U.S.-made goods, costing some Americans their jobs.** Here's what Moody's Analytics says about his original economic agenda (I haven't yet seen analysis of the plan he announced on August 8):

    > Broadly, Mr. Trump's economic proposals would result in a more isolated U.S. economy. Cross-border trade and immigration will be significantly diminished, and with less trade and immigration, foreign direct investment will also be reduced. While globalization has created winners and losers in the U.S. economy in recent decades, it contributes substantially to the ongoing growth of the U.S. economy. Pulling back from globalization, as Mr. Trump is proposing, will thus diminish the nation's growth prospects.

    Trump's campaign is mainly targeting people who fear being left behind by globalization, and ignoring the individual winners and positive overall effects (much as "Leave" campaigners did in the UK).

- **Trump claims his expertise and experience in business would enable him to put the U.S. economy on a better track.** Here's Moody's take on the original plan:

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> Mr. Trump's economic proposals will also result in larger federal government deficits and a heavier debt load. His personal and corporate tax cuts are massive and his proposals to expand spending on veterans and the military are significant. Given his stated opposition to changing entitlement programs such as Social Security and Medicare, this mix of much lower tax revenues and few cuts in spending can only be financed by substantially more government borrowing.

According to Moody's, Trump's program would cause the federal budget deficit to increase from $640 billion today to $3,151 billion in 2026 (rather than $1,289 billion under current law), and federal government debt to increase from $14 trillion today to over $37 trillion in 2026 (versus about $24 trillion under current law – all figures in 2009 dollars, adjusted for inflation).

- **Finally, I'll mention Trump's most unrealistic claim: that he could trim the federal debt by negotiating the ability to pay it off at a reduced amount.** He built his net worth in part by borrowing money and not paying it back, and he seems proud of his companies' repeated use of bankruptcy as a strategic tool. But Trump doesn't have an ongoing need to tap the world capital markets, as the U.S. does (he now operates under an asset-lite business model that emphasizes licensing fees rather than asset ownership; perhaps this is because his multiple defaults have caused the credit window to be closed to him). **The United States could refuse to pay its debts in full – that's called "rescheduling" or "default" – but we'd be unlikely to have the same access to the credit markets, and we would certainly cease to enjoy the benefits of a high credit rating and resulting low interest rates.**

As for my picking on Trump here: I'm quick to point out that Clinton has her own shortcomings as a candidate and potential president. Her use of a private email server while Secretary of State is just one prime example. And she has embraced positions, such as opposition to the Trans-Pacific Partnership and her promise of free public college at certain income levels, that seem intended simply to help her compete against Bernie Sanders in the primaries and win over his supporters in the general election. But I think it's fair to say that she hasn't been anywhere near as guilty as Trump of defying economic reality on the campaign trail, and that's my subject here.

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The Sources of Today's Division

One prominent characteristic of the political arena today is the rise in discontent, much of it based on economics. The world is changing in ways that are uncomfortable for many, especially those lacking the ability to change with it. Here's some of what I wrote in "What Worries Me" (August 2008):

> In many ways, including materially, Americans have enjoyed a wonderful standard of living over the last hundred years. Considering creature comforts such as housing, food, sanitation, healthcare, leisure and luxuries, ours may have been the highest standard of living in the world. That raises three questions:
>
> - Why should we continue to enjoy the highest standard of living?
> - Why should it continue to improve?
> - And why should the rate of improvement outpace that of the rest of the world?

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> We often see poll results showing that increasing numbers of Americans doubt their children will live better than they do. We'd like them to, but why should they? Other than technological improvements which doubtless will continue to make life better for everyone, why should our standard of living improve monotonically? And improve relative to the rest of the world? Certainly the advantage in this regard can shift to other countries, just as it shifted to us in the past.
>
> One of the reasons for our high standard of living is the fact that Americans have been paid more for doing a given job than everyone else. This was fine as long as (a) the U.S. enjoyed significant post-war competitive advantages and (b) significant barriers protected the status quo. But why should this go on? How can it go on?
>
> Think about two cities. City A has more jobs than people, and city B has more people than jobs. Initially, people in city A – where labor is relatively scarce – will be paid more for doing a given job than people in city B. The key to their continuing to earn more is the existence of barriers that prevent people from moving to city A. Otherwise, people will move from city B to city A until the ratio of people to jobs is the same in both cities and so are the wages. Among other things, geographic inequalities are dependent on the immobility of resources.
>
> For much of the last century, barriers kept our pay high. Other countries' output wasn't as good as ours. Some lacked investment capital, and some were decimated by war from time to time. Perhaps they didn't possess our ability to generate technological advancements or our managerial skills. High transportation costs, tariffs, prejudices (when I was a kid, "Japanese transistor radio" was considered synonymous with "low quality") or legal restrictions (e.g., keeping foreign airlines from competing freely in our markets) may have protected American wages. International trade wasn't what it is today. **But all of these things can change over time, and it's hard to see how the earnings supremacy of U.S. workers will be sustainable.** (Emphasis added)

Unfortunately, these 2008 observations, and especially the final sentence, proved to be on target. And the central issue – globalization of trade, or the opening of national borders for the free movement of goods – has raised serious issues and become a source of controversy in the current election.

The good news about free trade is that an overwhelming majority of economists believe it contributes to economic progress. For example:

> A study by the Peterson Institute found that past trade liberalization laws added between $7,100 to $12,900 in additional income to the average household. A study by Peter Petri and Michael Plummer estimates that the Trans-Pacific Partnership, which Trump opposes and Clinton sort of opposes, would boost American incomes by $131 billion. (David Brooks, *The New York Times*, July 1)

What's the source of these gains? They come primarily from specialization. When borders are closed, each country has to produce all the goods it needs. But when borders are open, each country will produce the goods it can make best or cheapest. Each will sell some of its output to other nations that can't make those things as well or as cheaply, and each will buy from other nations that which it can't produce as well.

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> There are good reasons for international specialization, and by and large Americans have benefited tremendously. Do we really want to produce T-shirts here and pay $60 for something that now costs $15? (Professor Gregory Mankiw, chairman of the Council of Economic Advisers under President George W. Bush, in *The New York Times*, July 15)

Clearly this process makes the overall global production system more efficient – everything is made where it can be done best – to the enrichment of all nations . . . but not all people. The benefits to date have been far from evenly distributed. In the U.S. they have gone overwhelmingly to those who are better educated and technologically adept or who own the companies that profit. Real incomes for people in the lower portion of the distribution have been stagnant at best, and the percentage of Americans participating in the work force – either employed or looking for a job – has declined.

As I described in 2008, Americans historically have been paid more than their counterparts around the globe. **This creates incentives to both manufacture abroad and automate at home.** (It also creates a condition that attracts immigrants – some illegal – who are willing to work for less.) Manufacturing employment is down a third since 1979, despite economic growth and increased manufacturing output. **Americans who lack education and thus are suited only for manual work** – who may have found jobs in agriculture a hundred years ago or in auto and appliance plants fifty years ago – **now face declining income trends . . . to some degree in absolute terms, and significantly when compared to (a) Americans with the education required for higher incomes and (b) the way things used to be, especially for their parents.**

> **In the past, in addition to the fact that incomes weren't so enormous at the top, the income gap was narrowed by the fact that people could do pretty well at the bottom. Millions of menial and blue-collar jobs were created as our economy expanded.** Even without much education, people could enjoy the good things in life, including cars, TVs and vacations, along with good public school educations for their kids and the possibility that most of those kids would have better jobs than their parents. Which of those elements is equally true today? ("What Worries Me")

I remember first becoming aware of income inequality – and certainly of unequal quality of life – during my first business trip in 1970, which was to Los Angeles. As a kid who grew up in Queens, New York, I had never seen anything like the verdant neighborhoods and beach communities of Southern California. Now the divergent trends in income are tearing at our society and influencing political events. A deteriorating income outlook and increasing income disparity have led to frustration, resentment, economic nationalism, protectionism and xenophobia among those affected.

As *The New York Times* put it on July 13:

> In the years that followed [the mid-1990s], the number of immigrants living in the United States illegally would double and then triple before leveling off under the Obama administration around 11 million. Deindustrialization, driven in part by global trade, would devastate the economic fortunes of white men accustomed to making a decent living without a college degree.

The economic reality is that these trends – international specialization, automation, rising productivity, job losses, the need for education, and a feeling of hopelessness among those affected negatively – are real and powerfully influential. Whether we like them or not, they're here to stay. They're economic reality, and they cannot be ignored or refuted.

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I'll move toward summing up on the causes of today's conditions by quoting from Thomas Friedman in *The International New York Times* of June 30. I think he did a great job of capturing the situation:

> It's the story of our time: **The pace of change in technology, globalization and climate have started to outrun the ability of our political systems to build the social, educational, community, workplace and political innovations needed for some citizens to keep up.**
>
> We have globalized trade and manufacturing, and we have introduced robots and artificial intelligent systems, far faster than we have designed the social safety nets, trade surge protectors and educational advancement options that would allow people caught in this transition to have the time, space and tools to thrive. It's left a lot of people dizzy and dislocated.

Friedman's statements appeal to me very strongly and remind me of *Future Shock*, a book written by Alvin Toffler in 1970. Toffler defined future shock – which he viewed as destabilizing our society – very simply: "too much change in too short a period of time."

Arthur M. Schlesinger, Jr. discussed the results of economic decline and dissatisfaction in *The Politics of Upheaval* (cited in *The New York Times* of June 20):

> The followers of the demagogues mostly came from the old lower-middle classes, now in an unprecedented stage of frustration and fear, menaced by humiliation, dispossession and poverty. . . . They came from provincial and traditionally non-political groups in the population, jolted from apathy into near-hysteria by the shock of economic collapse. . . . Old America [is] in resentful revolt against contemporary politics and contemporary economics.

These words do an excellent job of summing up current conditions. But Schlesinger, who died in 2007, obviously didn't write them for that purpose, but rather in 1960, to describe the Great Depression. The populism we're seeing today is not a unique phenomenon, but rather a standard occurrence in periods of economic difficulty. Populism has a record of giving rise to very destructive leaders and movements.

The combination of productivity improvements and foreign competition has been very hard on unskilled and semi-skilled labor – what's called "the working class." **People employed in uncompetitive industries at the time globalization takes place are particularly disadvantaged.** Their incomes decline at a minimum, and they may lose their jobs and be unable to find new ones. Society should cushion the blow on these people. Here's one proposal:

> Last March, the ranks of the incensed included 78 percent of Bernie Sanders's supporters and a whopping 98 percent of those backing Donald J. Trump.
>
> More than half of voters – including 61 percent of Mr. Trump's supporters – feel they are not keeping up with the cost of living. Three quarters of Mr. Trump's supporters feel that life for people like them is worse than it was 50 years ago.
>
> **Some of this is due to irreversible forces. The days when white men kept an uncontested hold on political power, when young adults without a college degree could easily find a well-paid job, are not coming back. . . .**

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> Last month, four academics – Jeff Madrick from the Century Foundation, Jon Bakija of Williams College, Lane Kenworthy of the University of California, San Diego, and Peter Lindert of the University of California, Davis – published a manual of sorts. It is titled "How Big Should Our Government Be?". . .
>
> The scholars laid out four important tasks: improving the nation's productivity, bolstering workers' economic security, investing in education to close the opportunity deficit of low-income families, and ensuring that Middle America reaps a larger share of the spoils of growth.
>
> The strategy includes more investment in the nation's buckling infrastructure and expanding unemployment and health insurance. It calls for paid sick leave, parental leave and wage insurance for workers who suffer a pay cut when changing jobs. And they argue for more resources for poor families with children and universal early childhood education. (*The International New York Times*, August 3, emphasis added)

This is a very liberal agenda, and many Americans would say the whole and many of its parts constitute undesirable government intervention. **What, then – if anything – should be done to arrest the trends described above?** If we don't do something, it's likely that the income and wealth gap will continue to grow; the downside of globalization will continue to be felt; and our political process will continue to be riven by widespread dissatisfaction.

Eduardo Porter, an economics columnist, summed up succinctly in *The New York Times* of May 25:

> We shouldn't try to stop globalization, even if we could. But if we don't do a better job managing a changing world economy, it seems clear that it will end badly . . .

The trends discussed above – and resentment over experiencing them, fear of doing so, and anger upon seeing them at work in one's community – have been big contributors to Trump's popularity over the last year, and also to Sanders's appeal to large numbers of Democratic primary voters. Similar sentiment played a big part in the Brexit vote to Leave and is on the rise in Europe. The issues won't end with this year's presidential election. Rather, I believe they are likely to prove long-lasting and difficult to resolve. They and the non-economic forces at play in this election are likely to have significant influence on U.S. politics for years to come.

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The Implications for Politics in the Future

The historical alignment of the two main parties was quite stable for a long time. For most of my life, the Democrats have stood for "the working class"; a bigger and more active government; more taxation, spending and wealth redistribution; and more-liberal social policies. The Republicans, on the other hand, have been considered the party of big business and economically better-off Americans, and they have fought for free enterprise; smaller, less-activist government; lower taxes; a muscular defense posture and foreign intervention; conservative social policies; free trade; and supply-side ("trickle-down") economics. The two parties – and their candidates and voters – generally have stuck to these ideologies.

I've seen the parties evolve from the above positions, but only modestly and gradually:

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- The Democratic Party swung toward support for civil rights and became the primary party for non-whites. And when Bill Clinton's administration adopted a more centrist, less-liberal approach, it stood less for welfare and economic redistribution and was more sympathetic to big business and free trade.

- The Republicans, on the other hand, attracted rural whites antagonized by the Democrats' support for desegregation. The party became more motivated by religion, morality and personal freedom, more socially conservative, and less concerned with maintaining military strength and (outside of the Tea Party faction) shrinking government and reforming entitlements.

In the current presidential race, Donald Trump and Bernie Sanders – both outsiders to the traditional parties – have fared quite well thanks to support from millions of voters who are unhappy with the historic political arrangement and how it deals with today's conditions. Thus change appears to have accelerated, and there's talk of political revolution.

Given the events of 2016, the positions described above may well be realigned. There may be a party in the future built largely around:

- economic disadvantage and discontent,
- "cultural grievances" and disregard for political correctness, experts, establishments, and economic, social, political and media elites,
- fear of terrorism, xenophobia, law and order, nativism, protectionism, closed borders, and isolationism, and
- pragmatism and self-interest (national and individual) as opposed to philosophy and ideology.

The above factors, which Trump sums up as "America First" and "Make America Great Again," may well rearrange or supplant the traditional positions of the parties. Depending in part on the outcome of the current election, it may turn out – as many people are saying – that the Republican establishment of the past has lost control of its party. Thus the party described above may be what today is called "Republican," or it may be something brand new. While the Democratic Party establishment remains in control at present, Sanders shook it, assembling a substantial minority attracted to his socialist principles.

It is particularly intriguing to consider the possibility of a reshuffling of the historical blocs into three parties rather than two. Will a party of "the Dissatisfieds" be formed from today's Trump supporters to compete against both the Republicans and the Democrats? Might they be joined by Sanders supporters, with their own dislike of free trade, banks and big money; hostility toward elites and the Washington establishment; preference for economic redistribution; and disappointment with their economic prospects? Can the glue of alienation and dissatisfaction overcome these two groups' vast political, demographic and cultural differences? If Trump loses this year, will this group fade away or become institutionalized under the leadership of more conventional politicians? These things will become clear over time.

Here's a particularly provocative potential issue to consider: Our constitution calls for election of the president by a majority of the electoral college. But if there come to be three major parties, it's easy to imagine no candidate getting a majority. What happens then?

Few Americans may have known the answer a year ago, but I think many have begun to research it, and still more are likely to do so in the years ahead. I'll give you the answer: in the absence of an electoral majority, the president is chosen through a vote of the House of Representatives, with each state having

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one vote. **Thus, theoretically, the 26 least-populous states – containing just 17% of America's people and, by definition, almost none of its big cities – could choose the president.** For me, regardless of the political makeup of the House, the loss of proportional election is of great concern, particularly given the way the House is elected (see below).

My Prescriptions

I like and admire many of the politicians I meet – of both parties. I just don't like the actions (or inaction) the system produces collectively. So I want to make it clear that my reservations about politicians in general are not as sweeping as I may make them sound above. Here's what I said in "What Worries Me":

> Condemnation of politicians needn't be universal. There actually are some I like. More than anything else, they're marked by a spirit of bipartisanship. Rather than consider politics a blood sport in which the only important goals are to embarrass the other side and win elections, they want to solve our nation's problems.

Nevertheless, despite the above, the bottom line is that I find myself more worried than optimistic (also from "What Worries Me"):

> I confess that I feel the deck is stacked against government getting better. Less attention paid to newspapers and TV news, declining interest in national and international affairs, the rising role of the sound bite, generally shorter attention spans, a vanishing spirit of self-sacrifice, rising me-first-ism . . . where would optimism come from in this regard? We can hope, but I'm not that hopeful. The truth is that most people vote for the candidate who looks and sounds best in TV ads, who says what they want to hear, and who they think will put money in their pocketbooks today and brighten their lives tomorrow.

To the above I would add a very powerful force: the decline of balance in the media. Unlike the days of my youth, in which broadcasters operated under the "fairness doctrine," today there are networks (as well as newspapers and websites) that act more like spokespeople for one party or the other than like impartial journalists. That enables people who follow election news through these outlets to hear only one party's rhetoric and avoid all exposure to the other side's case. This encourages extremism, widens the gulf between people and parties (the statistical evidence in this regard is compelling), and makes bipartisanship less likely.

Can the current political conditions be improved upon? Is the situation hopeless? While the economic and social trends discussed above won't be easily altered, there are some "mechanical" fixes that could make our political process work better.

First, the drawing of district lines for elections to the House of Representatives should be de-politicized. Under the current rules, district lines are redrawn every ten years, after the census, by the party controlling each state's legislature. That means they're able to "gerrymander" the congressional map, drawing the lines so that opposition voters are concentrated into a small number of districts and allowing the party in power to win a disproportionately high number of House seats. Thus, for example, in the 2012 election in Pennsylvania, Democrats received 51% of the votes for the House of Representatives. But, thanks to the way the lines had been drawn by the Republican-dominated state legislature, that 51% majority was crammed mostly into a small number of districts, such that the Democrats won only five (or 28%) of Pennsylvania's eighteen House seats.

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As a result of gerrymandering, most House races are easy pickings for the party that drew the lines, and many that remain are equally easy pickings for the opposition party. Thus the vast majority of seats in the House are viewed as "noncompetitive": **there's only one party that can win**.

> The outcome of 94 percent of House races is a foregone conclusion. **If this happened in any country but the U.S., we'd question whether it was a democracy**. (*Christian Science Monitor*, October 14, 2014)

For example, according to *The New York Times*, in the ten years prior to the enactment of the changes in redistricting and primaries described below, congressional seats in California were so safe that in 255 elections, only one shifted from the control of one party to the other.

If the lines for House districts were drawn by independent, non-political committees, I think House members would be less ideological and more likely to compromise, on average, and the process of governing would be less combative and more productive. This process is underway already in my former home state of California. Congressional districts were redrawn by an independent commission in 2011. Although it's too early to judge the results, it appears that the new districts, which follow more natural geographic and demographic boundaries – combined with the new primary system described below – have created races that are more competitive and more inclined toward moderation.

Second, the structure of primaries should be reformed. As described above, district lines usually ensure that a given party will win each House seat. That means in a noncompetitive district, being nominated by the unbeatable party is tantamount to being elected. Thus the real contest today is in the primaries, which are likely to be won by ideologically-zealous candidates. This is so because (a) according to the website *fivethirtyeight*, in 2014 less than 15% of eligible voters participated in congressional primaries, (b) the few who do vote in primaries are likely to be the most motivated, and thus ideological, party members, and (c) gerrymandering has freed the candidate of the inevitable winning party from having to appeal to members of the other party or to independents. This combination encourages extremism.

The results might be different if the rules provided that (a) there's only one primary, in which everyone can vote, and (b) the two top vote-getters in that primary – regardless of party – get to run in the general election. Thus, for example, both of the general election candidates for a House seat in a heavily Republican district could be Republicans, with no Democrat taking up space on the ballot in an election he has no chance to win. In that case, the more moderate of the two Republicans might pick up support from other moderate Republicans (when they turn out in greater numbers in the general election), as well as from Democrats, and be elected to Congress.

This "top-two primary" system is already in place in California, Louisiana and Washington, with the potential to elect moderates rather than extremists. According to *fivethirtyeight*, that's exactly what happened in Washington's 4th district in 2014. A "Tea Party hero" beat out a moderate Republican in the primary, 32% to 26%, while the leading Democrat got only 12% of the vote. In a state with separate Republican and Democratic primaries, the Tea Partier would have run against the Democrat in the general election and been a sure winner. But in Washington, the top two Republicans faced off, and the more moderate candidate won with support from moderate Republicans and some Democrats.

If more moderates won – as was much more common a few decades ago – it would be easier to imagine the two parties working together, producing compromise rather than gridlock. Some people think gridlock is more desirable than government action, but the way I see it, there are serious problems that need solving, and as long as the two houses of Congress are in the hands of extremists from

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two different parties – or are both led by extremists from a party that's different from the one occupying the White House – solutions are unlikely to be found.

The third improvement would be a reduction in the role of money in politics. Money is everywhere in American politics, and the trends are negative in this regard.

- The 2012 presidential election cost a total of $2 billion, and 2016's may dwarf that.
- The total amount spent on all federal elections in 2012 is estimated at $7 billion.
- Virtually all the cash comes from private interests, rather than public funding as in some other countries. In addition to individual donors, corporations and unions can have great influence.
- Recent court decisions have made it possible for the amounts given to increase and harder for union members to refuse to share in their union's giving. Political giving has been interpreted to be a form of free speech, making it quite difficult to regulate.
- The lobbying industry has over 11,000 members and bills over $3 billion per year.
- Every interest group has its paid lobbyists, especially the ones (like tobacco 50 years ago) that will only maintain profits if they can hold back reforms.

Elected representatives have to drum up contributions in order to fill their war chests. What politician can fail to support his big donors? Thus some may come to serve more as advocates than prudent policymakers.

Several years back I met a young man whom I decided to support in his first House race. When he called me the day after his election, I assumed it was to celebrate and thank me. But instead he asked for a contribution for his next race! With terms of just two years, Congressmen are never not running. This is only one example of the ways in which fundraising is too important in American elections.

I have a fourth suggestion, but fortunately it's one that is superfluous at the Federal level: **avoid the use of referendums to make decisions**. Wisely, the Founding Fathers omitted referendums from the process that governs the U.S. I like to think it was because they knew better than to leave big decisions up to a direct vote of the populace and were worried about "the tyranny of the majority," but it also seems they expected the referendums to occur at the state level.

It's interesting in the current context to note Prime Minister Margaret Thatcher's 1975 opposition to referendums (in defending membership in the European Union against its unpopularity):

> Without the protections and definition afforded by a written constitution, referendums, she said, sacrificed parliamentary sovereignty to political expediency. In a system such as Britain's, that threatened minorities by trading liberal democracy for majoritarianism. "Perhaps the late Lord Attlee was right," she observed, "when he said that the referendum was a device of dictators and demagogues." (*Financial Times*, September 11, 2007)

We just cannot allow a simple majority of those who vote to directly decide important issues like Brexit. First, fewer people vote than we would hope, so decisions can turn on the wishes of a relatively small group. And second, many voters may lack the knowledge and analytical skills necessary for good decision-making. Consider the questions asked most often on Google in the UK in the hours <u>after</u> the Brexit polls closed: "What does it mean to leave the EU?" and "What is the EU?" Presumably many of the people asking these questions were the same ones who had just decided Britain's future. It might have been better if they had asked those questions before the vote.

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* * *

I wrote this memo to explain what happened in the UK this year and what I think is happening in the U.S. I wanted to point out that politics rarely hews to economic reality; rather, it has a reality all its own.

The recent trends in income, wealth, trade and employment are causing a lot of dissatisfaction in the U.S. and Europe, and I expect them to have a strong impact on politics for years to come. **Widespread economic dislocation can cause voters to choose the wrong leaders. The U.S. is not exempt, and we must be highly vigilant in this regard.**

August 17, 2016

P.S.: Some readers may feel it's wrong for me to make any statements regarding the presidential candidates, and to criticize what I see as Trump's take on economic issues. Others may simply disagree with my views – but they are my views, and I hope you'll feel I have the right to express them. I've tried hard to stick to matters of economics and fact, rather than non-economic policy or programs, opinion or personal preference. I'm sorry if my statements cause unhappiness. Anyone who takes factual issue with anything I say here is welcome to let me know.

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Memo to: Oaktree Clients

From: Howard Marks

Re: Economic Reality

Addendum, June 13: There's been a lot of response since the memo that follows was originally published on May 26. In the discussions that have ensued, I realized that I should have led with something like this:

> ***Ultimately, economics is the study of choice.*** *Because choices range over every imaginable aspect of human experience, so does economics. . . .*
>
> *How do individuals make choices: Would you like better grades? More time to relax? More time watching movies? Getting better grades probably requires more time studying, and perhaps less relaxation and entertainment. Not only must we make choices as individuals, we must make choices as a society. Do we want a cleaner environment? Faster economic growth? Both may be desirable, but efforts to clean up the environment may conflict with faster economic growth. Society must make choices. . . .*
>
> *We would always like more and better housing, more and better education – more and better of practically everything.*
>
> ***If our resources were . . . unlimited, we could say yes to each of our wants – and there would be no economics. Because our resources are limited, we cannot say yes to everything. To say yes to one thing requires that we say no to another. Whether we like it or not, we must make choices.***
>
> ***Our unlimited wants are continually colliding with the limits of our resources, forcing us to pick some activities and to reject others.*** *Scarcity is the condition of having to choose among alternatives. (Macroeconomics Principles, Libby Rittenberg and Tim Tregarthen. Emphasis added)*

Because of the above, we make economic choices every day. Everyone knows choices like these are inescapable.

Everyone, that is, except for politicians. The politician promises better grades and more leisure time. A cleaner environment and faster economic growth. That's what caused me to write the memo: ***in politics and government – unlike the real world – the word "or" often goes out the window, replaced by "and." No choices are necessary.***

*A few months ago I saw a cartoon featuring caricatures of two primary opponents. Under one it said "bulls**t" and under the other it said "free s**t." There's bound to be a lot of the former in any election season, but economics tells us the latter is unrealistic. I wrote this memo to help readers understand why.*

* * *

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In 1977, responding to the difficult energy outlook brought on by the Arab Oil Embargo, President Jimmy Carter created the position of Secretary of Energy and chose James Schlesinger as America's first "energy czar." Previously Schlesinger had served as Chairman of the Atomic Energy Commission, Director of Central Intelligence, and Secretary of Defense, and in his early days he taught economics at the University of Virginia. I was tickled by a story – undoubtedly apocryphal – about his days in academia that made the rounds when Schlesinger was in his new energy post.

As the story went, Schlesinger was such a convincing evangelist for capitalism that two students in his economics class decided to go into business after graduation. Their plan was to borrow money from a bank, buy a truck, and use it to pick up firewood purchased in the Virginia countryside, which they would then sell to the grandees in Georgetown. Schlesinger wholeheartedly endorsed their entrepreneurial leanings, and they proceeded with great enthusiasm. From the start of their venture, the former students could barely keep up with the demand.

Thus it came as quite a shock when their banker called to tell them the balance in their account had reached zero and the truck was about to be repossessed. They contacted Schlesinger, and he listened attentively as they recounted their experience: they had, in fact, been able to acquire vast amounts of wood for $50 a cord, and they'd been able to sell all they had for $40 a cord. How could they be broke? Where had they gone wrong? Schlesinger puffed on his ever-present pipe and said: "The answer's obvious: you need a bigger truck."

* * *

While it certainly wasn't the case with Schlesinger (despite what the above tale suggests), most ordinary citizens don't have what it takes to figure out what is and isn't economically feasible. Since we're in the midst of election season, with promises of cures for our economic woes being thrown around, this seems like a particularly appropriate time to explore what can and can't be achieved within the laws of economics. Those laws might not work 100% of the time the way physical laws do, but they generally tend to define the range of outcomes. It's my goal here to point out how some of the things that central banks and governments try to do – and election candidates promise to do – fly in the face of those laws.

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When I was in high school, one of my buddies convinced me to take a class in accounting. I found the double-entry bookkeeping we learned to be logical, symmetrical and unambiguous. After accounting I moved on to economics, and I found it equally logical. The die was cast for my career in business.

Like the lesson of the Schlesinger story, the rest of economics is also pretty straightforward, and its laws are quite reliable. If you buy for $50 and sell for $40, you won't make money . . . period (or stay in business long). That reminds me of a joke I used in "bubble.com" in January 2000, one my father told me roughly 60 years ago:

"I lose money on everything I sell."
"Then how do you stay in business?"
"I make it up on volume."

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For those of us in the business world, economics defines reality. (You may think you've heard me poke at it, but what I deride is economic forecasting, not economics. There's a big difference.) The realities of economics are the subject of this memo. My primary methodology will be to describe ways in which people (and especially politicians) tend to propose things that conflict with economic reality, and explain why they're unlikely to work.

* * *

Let's start with central banks' attempts to achieve monetary stimulus. When central banks want to help economies grow, they take actions such as reducing the interest rates they charge on loans to banks or, more recently, buying assets ("quantitative easing"). In theory, both of these will add to the funds in circulation and encourage economic activity. The lower rates are, and the more money there is in circulation, the more likely people and businesses will be to borrow, spend and invest. These things will make the economy more vibrant.

But there's a catch. Central bankers can't create economic progress; they can only stimulate activity temporarily. GDP, or national output, can be seen roughly as the amount of labor employed times productivity, or the amount of output per unit of labor. In the long term, these things are independent of the amount of money in circulation or the rate of interest. The level of economic activity is determined by the nation's productiveness.

Central bank actions can encourage or accelerate economic activity, but they can't create economic activity that otherwise wouldn't occur. Much of what central banks do consists of making things happen today that otherwise would happen sometime in the future. It's not clear that the effects are long-lasting or anything more than an acceleration of events within the confines of a zero-sum game. What is beneficial, however, as Professor Randall Kroszner of the Chicago Booth School of Business wrote me, is the fact that:

> [Central banks] can help to prevent a complete financial meltdown and the negative economy-wide externalities associated with a financial collapse. In these circumstances, and if done appropriately, their actions can do more than just move up future production to the present by helping to avoid economic activity losses due to a panic.

In the old days, when cars often failed to start, there were fluids we could squirt into the carburetor to get them going. But they weren't fuel for long-term operation.

For example, lending people money can enable them to buy things today that they otherwise mightn't have bought until later (if at all). If a consumer buys a boat today with money made available through a low-interest loan, that's a boat he won't buy next year. Lending people money doesn't alter their lifetime incomes, meaning consumers may buy fewer boats later, when the loans have to be repaid, causing disposable income to contract.

So far, as the last seven years show, (a) central banks haven't been able to generate the growth they hoped for and (b) the impact of each successive jolt of stimulus seems to have been less powerful.

Rather than believing central banks can make economies more productive, it's my bottom line that there's a naturally occurring growth rate for each economy, and that rate dictates the long-term output, not central bankers' actions.

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What have the following places had in common in recent years: China, Ireland, Spain and Arizona? The answer's simple: large numbers of empty new homes. In the last decade-plus, governments and central banks chose to encourage economic growth in these jurisdictions by making financing readily available for construction. This can do wonders for an economy . . . as it did in these cases in the years leading up to the crisis of 2007-08.

Construction increases the demand for labor, building materials, support services and ancillary businesses. There's only one catch: easy financing – especially if sufficient to cover 100% of costs – can encourage developers to create space for which there's no demand. The process of creating unsalable homes, unneeded office space and uneconomic infrastructure adds to GDP in the short run but burdens the countries' financial systems, especially the institutions that make the loans to builders. In the end, the bad loans stay with the banks, perhaps necessitating bailouts.

Another example can be seen in the case of Sainty Marine, a Chinese state-owned enterprise that recently made headlines by becoming China's first listed company to file for bankruptcy. Sainty Marine first bought and sold ships and then transitioned into shipbuilding, acting on contracts that – unlike elsewhere in the industry – were entered into without the benefit of financial guarantees. It needed financing in order to build those ships, and got it from state-owned banks. **But when a state-owned bank lends money to a state-owned shipbuilder, who's making business-like decisions? Who worries about issues like whether there'll be charters for the ships and whether owning them will be profitable?**

The point is that mistakes like overbuilding are always possible – but they're much more likely to occur if no one's making decisions on an economic basis. If lending personnel are making loans without a direct stake in their repayment, they're less likely to say "no" to weak loan applicants. And if borrowers won't be affected by a failure to repay loans, which of them will decline offers of financing?

Not all loans work. And when they don't work, both the lender and the borrower are usually affected. As someone once said, "bankruptcy is to capitalism as hell is to Catholicism." **When the parties involved aren't motivated by profit or worried about loss, good economic decisions are unlikely to be made.**

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Riding to work the other day, I heard about protests occurring in France. Workers were complaining about potential changes in labor regulations that would make their jobs less secure. In brief, French workers like it the way things are: they can't be pushed beyond 35 hours a week, and employers' ability to terminate them is subject to a drawn-out, torturous and uncertain program. They also like their lengthy vacations and the extensive benefits provided by the state. **The question is where the ability to pay for above average benefits will come from if neither the hours worked nor the productivity per hour is above average.** Governments and regulations can't produce prosperity.

In the current campaign, Bernie Sanders has called for free health care and free public college education for all. And all the candidates have sworn to protect the current level of Social Security benefits, which are sure to render the system insolvent absent other changes. Benefits like these have to be paid for. This can be done either out of "current earnings" – a share of GDP (i.e., tax revenues) – or through

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borrowings. But governments can't create out of thin air the means with which to make disbursements. In that way they're not so different from households or businesses.

* * *

One way some governments think they can pull off the miracle of providing more is by raising taxes on the rich. After all, the rich have – by definition – more money than they need: everyone else gets by on much less.

"Populism" has been a strongly rising element in politics over the last decade. It primarily means drawing class distinctions and claiming to be on the side of the common man. This often comes down to playing on the resentment of the lower-earning majority toward the wealthy minority. Populism is a particularly strong force in the U.S. presidential election now underway, fed by economic dissatisfaction among the working class due to the effects of globalization, job outsourcing, and technological progress with which some haven't kept up. "Outsider" or non-establishment candidates in both parties – Donald Trump and Bernie Sanders – are having a lot of success telling voters the economy isn't working for them and appealing to resentment toward those who are doing better. Now even Hillary Clinton is saying of the wealthy and powerful, "The deck is stacked in their favor . . . my job is to reshuffle the cards."

Taxes are the main instrument for politicians to put class resentment to work. Many eventually resort to an old saw: "We're not out to soak the rich. We just want them to pay their fair share." I discussed this subject at length in "It's All Very Taxing" (November 2011). In my view, however, (a) there's no way to determine what the fair share is, (b) there are only the opinions of self-styled experts on this subject, and (c) "fair share" always seems to come down to "more than they've been paying."

It makes sense to assume that most democratic societies eventually will reach the point where the majority views the top tier as a cash cow available for unlimited milking. "Let's hit them for a little more; there's nothing they can do about it." But the truth is, this "tyranny of the majority" is an unhealthy development. First, society does better when able members have strong incentive to contribute. Second, upward aspiration and mobility will be constrained when taxes become confiscatory. Finally, taxpayers aren't necessarily powerless in the face of rising tax rates.

That brings me to an article that appeared in *The New York Times* on April 30, entitled "One Top Taxpayer Moved, and New Jersey Shuddered." It concerns the impact of rising rates on taxpayer behavior, starting from the fact that New Jersey's biggest single earner had moved to Florida. (New Jersey has raised its top income tax bracket from 6.37% in 1996 to 8.97% today, whereas Florida doesn't have a state income tax.)

> "If you're making hundreds of millions of dollars and you're paying close to 10 percent to the state of New Jersey, you do the math," said John Bramnick, the Republican leader in the New Jersey Assembly. "You can save millions a year by moving to Florida. How can you blame him?" . . .
>
> In New York, California, Connecticut, Maryland and New Jersey, the top 1 percent pay a third or more of total income taxes. Now a handful of billionaires or even a single individual . . . can have a noticeable impact on state revenues and budgets. . . .
>
> In California, 5,745 taxpayers earning $5 million or more [or only 4/100s of a percent of the 13.6 million returns filed] generated more than $10 billion of income taxes in 2013,

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> or about 19% of the state's total, according to state officials. "Any state that depends on income taxes is going to get sick when one of these guys gets a cold . . ."

While not everyone would change their residence to reduce their taxes, some will. Remember that seven of the 50 states do not tax their residents' incomes. **Thus the bottom line on this – I think the good news in terms of fiscal responsibility – is that states have no choice but to think of taxpayers as mobile. If you raise the top tax rate by 10%, you won't collect 10% more taxes from them.** A surprisingly large number of the people Nancy and I meet in New York have their residences in Florida. That's a reflection of economic reality – and should restrain the tendency to excessively tax the rich.

The U.S. is one of only a tiny number of countries whose citizens are taxed on all their worldwide income, regardless of where they live or where their income is earned. Thus, Americans don't have a good way to escape federal income taxation by moving abroad. (Technically, they can leave the U.S. tax system by paying the taxes that would be due if they were to sell all their assets and realize all the appreciation to date. But they also have to surrender their citizenship and sacrifice frequent visits to the U.S., and the number of people willing to do all this is limited.)

Citizens of almost every other country have an easier way to respond when the "soak-the-rich" movement arrives (see the big earners who moved away when France enacted a 75% top rate a few years ago). **Thus most governments are aware that while they can raise tax rates on people of means, in most cases they can't make them sit still and take it.**

* * *

Another way national governments can make it easier to accomplish their financial goals is by printing money. But flooding the market with more currency debases the value of the currency. They can increase people's nominal incomes, but eventually they'll find their fatter wallets don't contain any more spending power than they used to.

In "The Limits to Negativism" (October 2008), I discussed the fact that in Weimar Germany, the government took the 1,000 mark note and over-stamped it "One Million Marks." But it still only bought one goat.

> The mark fell from 60 to the U.S. dollar in early 1921 to 320 to the dollar in early 1922 and 8,000 to the dollar by the end of 1922. It's hard to believe, but according to Wikipedia (user-maintained and perhaps not always the most authoritative):
>
> > In December 1923 the exchange rate was 4,200,000,000,000 Marks to 1 U.S. dollar. In 1923, the rate of inflation hit 3.25×10^6 percent per month (prices double every two days).
> >
> > One of the firms printing these [new 100 trillion Mark] notes submitted an invoice for 32,776,899,763,734,490,417.05 (3.28×10^{19}, or 33 quintillion) Marks. [That's not a misprint.]

The great advantage for governments in creating inflation lies in the ability to meet obligations with debased currency. That was the motivation behind Germany's hyperinflation in the 1920s – to make it easier to cover expenses and debts denominated in Marks.

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Today most nations want to see inflation. That would reduce the "real" value of their national debt and ease repayment in real terms. Treasuries and central banks have tried to encourage inflation by cutting interest rates and increasing the amount of money in circulation. Quantitative easing, for example, consists of the Fed using newly printed dollars to buy outstanding debt; this should increase the amount of money in circulation and thus raise the dollar price of goods. Voilà: inflation.

But governments' efforts have been strikingly unsuccessful and, so far, inflation is MIA. Inflation is a mysterious (and, I think, largely psychological) phenomenon. **The U.S. government couldn't figure out how to stop it in the 1970s, and the nations of the world can't find a way to start it today.** Classically, inflation has resulted from (a) "demand pull" – too many buyers for a fixed supply of goods, or (b) "cost push" – rapid increases in the costs of production. Neither of these causes is in evidence today. Thus inflation is quite feeble, and that's disappointing to countries that would like to pay their debts with cheaper currency.

* * *

A related tool for national economic betterment consists of another route toward currency debasement: devaluation. A nation can increase its ability to deal with the rest of the world by adjusting its currency's rates of exchange.

Let's say the U.S. wants to increase its exports of manufactured goods. One way to do this is to make the goods cheaper. But what if the dollar costs of manufacturing can't be reduced? In that case, why not just reduce the amount of foreign currency it takes to buy a dollar's worth of goods?

For example, let's say the selling price of a U.S. widget is $100, and there are 10 Ruritanian kopeks to the dollar. Thus a widget costs 1,000 kopeks in Ruritania. Say we change the exchange rate to 8 kopeks to the dollar. Now that widget costs a Ruritanian buyer only 800 kopeks. The number of dollars the U.S. seller receives is unchanged, but the number of kopeks the Ruritanian buyer has to pay for a widget is reduced by 20%. Sales of U.S. widgets to Ruritanians skyrocket.

Of course, while a weaker currency makes a country's exports more competitive, it also means its citizens have to pay more of their home currency to buy imports. **So, as in the case of the other things under discussion here, there's no free pass. There's little a country can do in terms of policy actions to improve its situation that (a) doesn't have negative ramifications and (b) will enhance the long-run outlook in the absence of fundamental improvement in economic efficiency.**

And, by the way, here's another wrinkle: you can't just devalue your currency; you can only devalue it **against another currency**. What happens when multiple countries want to devalue at the same time? China tries to devalue the yuan versus the yen, but Japan tries to devalue the yen relative to the yuan. This is called "competitive devaluation." **The one thing we can be sure of is that every country can't simultaneously devalue versus all the others . . . try as they may.**

* * *

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This discussion of devaluation and exchange rates leads eventually to the entire issue of globalization and international competition. Globalization is one of the most important and influential topics today, and it is shaping economic progress and political discourse.

Let's go back to the early post-World War II period. The U.S. mainland was physically and economically intact – having been spared from combat – while Europe and Japan had been decimated. U.S. corporations were performing strongly, and the prosperous U.S. consumer was the source of powerful demand. In most fields, American products were the best in the world. "Imported cars" were essentially non-existent, and the television sets, hi-fis and appliances our parents (or grandparents) bought were produced here. Even our clothing was made in America.

In this very positive economic environment, consumers, producers and workers all thrived, and in most regards, Americans enjoyed the highest standard of living in the world. Now that is in doubt, and this has become a main issue in the presidential campaign. Here's how I put things in "What Worries Me" (August 2008):

> One of the reasons for our high standard of living is the fact that Americans have been paid more for doing a given job than everyone else. This was fine as long as (a) the U.S. enjoyed the benefits listed [earlier], and (b) significant barriers protected the status quo. But why should this go on? How can it go on?
>
> Think about two cities. City A has more jobs than people, and city B has more people than jobs. Initially, people in city A – where labor is relatively scarce – will be paid more for doing a given job than people in city B. **The key to their continuing to earn more is the existence of barriers that prevent people from moving to city A.** Otherwise, people will move from city B to city A until the ratio of people to jobs is the same in both cities and so are the wages. **Among other things, geographic inequalities are dependent on the immobility of resources.**
>
> For much of the last century, barriers kept our pay high. Other countries' output wasn't as good as ours. Some lacked investment capital, and some were decimated by war from time to time. Perhaps they didn't possess our ability to generate technological advancements or our managerial skills. High transportation costs, tariffs, prejudices (when I was a kid, "Japanese transistor radio" was synonymous with "low quality") or legal restrictions (e.g., keeping foreign airlines from competing freely in our markets) may have protected American wages. International trade wasn't what it is today. But all of these things can change over time, and it's hard to see how the earnings supremacy of U.S. workers will be sustainable. . . .

In 1949 we saw the arrival of a little car called the Volkswagen Beetle. It was odd, with its rounded shape and the engine in the back, but boy was it cheap: roughly $1,300. The quality of foreign cars was initially the subject of skepticism, but over time quality improved, the superior price/value bargain overcame cultural resistance, and the share of car sales going to imports grew.

Two Volkswagens were sold in the U.S. that year, then hundreds, and then many thousand. Soon Japan started to send over the Toyota, Datsun (now Nissan) and Honda, and they were successful, too. To put their success into perspective versus those two Beetles in 1949, in 1981 the Japanese automakers entered into a "voluntary restraint agreement" limiting the number of cars they could bring into the U.S. to 1.68 million per year. More recently Korea began sending cars to the U.S. Today foreign brands account for more than 55% of car sales in the U.S. market. Of course a good part of the success of imports has been

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related to lower costs. (A substantial number of the "foreign brand" cars sold in the U.S. today are actually made here, but in non-unionized plants at total labor costs including benefits that average $10/hour, or $250/car, less than the U.S. carmakers' unionized plants. In the past, when foreign cars were actually made abroad, the cost differential was much more dramatic.)

U.S. automakers' market share was destined to decline if foreign cars were some combination of better and cheaper. And when it did, U.S. autoworkers' income and standard of living had to start to equalize relative to those building better-value-for-the-money cars abroad. Trade barriers, high transportation costs, a strong union and inertia kept the U.S. worker ahead as the 20th century wore on, but eventually reality caught up with the industry.

Here's an example: the autoworkers' union had bargained for excellent benefits for auto workers, and according to the Economic Policy Institute:

> In 2005, there was a gap of $3.62 between the average hourly wage of $27.41 at Ford and $23.79 for [foreign-owned plants]. When fringe benefits, legally required payments, pension benefits, retiree health care, and other post-employment labor costs are added in, the gap grew to $20.55 ($64.88 versus $44.33).

There was a limit on the ability of U.S. automakers to sell cars burdened with substantial benefit costs while foreign car costs included much less for benefits. **The bottom line is that, in a globalized world, if people in country A will work for less than those in country B, there are only four possibilities for manufacturers in country B:**

- **charge a higher price for the same product and lose market share,**
- **charge the same price for the higher-cost product and enjoy smaller profit margins (or even suffer losses),**
- **charge the same price for an inferior product (this probably can't be done for long), or**
- **get the government to erect trade barriers on imported goods, such as a tariff that equalizes selling prices or a quota that restrains competition.**

Thus the operating and financial condition of U.S. automakers deteriorated such that, during the Global Financial Crisis, General Motors and Chrysler declared bankruptcy (enabling them to cut costs and shed benefits), and Ford underwent a thorough restructuring with the same result. Workers' more modest contracts since then have, of necessity, caused their relative standard of living to decline. This is an example of the reasons behind the working class's current discontent.

* * *

Of course, this leads me to the idea that probably did more than any other to set the wheels in motion for this memo: "we'll bring back the jobs." One of Donald Trump's most emphatic promises is that he will respond to America's loss of manufacturing jobs to other nations by causing goods to be made here again. Bernie Sanders opposes free trade and argues we must "develop trade policies which demand that American corporations create jobs here, and not abroad." Are these actionable positions?

(A minute for an aside: U.S. manufacturing employment of 12.3 million workers is down 37% from the peak of 19.5 million reached in 1979. So when did the value of manufacturing output hit its peak? The answer may surprise you: **today!** The current level of U.S. manufacturing output is in the vicinity of the

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all-time high and roughly double the 1979 level. Twice the output with less than 2/3 the workers means output per worker has more than tripled. Thus, if we were producing today's output at the 1979 level of productivity, we'd be employing 25 million more workers! So while we've lost 3.2 million jobs to China since 2001, for example, we've lost many times that to improvements in productivity. **Perhaps if the government wants to preserve jobs it should just outlaw productivity gains.** That thought reminds me of the early-19th-century Luddites, English textile workers who were unhappy about industrialization and banded together to destroy labor-saving factory machinery. Of course, history shows it's hard to hold back economic progress by edict or force of will.)

Let's assume it's possible to manufacture high-labor-content goods like cellphones much more cheaply in China than in the U.S. (not an unreasonable assumption, since the average manufacturing worker in China makes less than $9,000 per year). And let's assume the resulting cost to deliver a cellphone to an American retailer is $100 if made in China versus $150 if made in the U.S. In that case, a Trump or Sanders administration would have the following choices:

- forbid imports of cellphones, requiring that they be made in the U.S. at a cost of $150,
- find Americans willing to work at Chinese wages, bringing the cost down to $100, or
- impose a trade tariff on Chinese imports that equalizes the U.S. retailer's cost for phones at $150.

I'm not aware of any other possibilities. The first probably isn't feasible in this day and age. The second is equally unlikely, since few Americans are likely to elect to do the tedious work involved, and the Chinese wage of less than $5 per hour would violate our federal minimum. That leaves the third option: tariffs. And, in fact, Mr. Trump has said he would impose a 45% tariff on Chinese imports, 35% on Mexico, and various tariffs on goods from other countries. Here are some of the problems with that:

- First, such tariffs are probably barred under trade agreements that are in place. To impose them, we would have to abrogate those agreements.
- We have to wonder about retaliatory actions – wouldn't other countries impose offsetting tariffs on U.S. exports that would further harm our manufacturing base? As *The New York Times* wrote on May 3, "starting a trade war might be cathartic for workers who have lost jobs, but it is unlikely to create a lot of factory work."
- What would happen to our ability to refinance our perpetually growing national debt if China, our biggest creditor, decided one day it wasn't quite as eager to participate in new Treasury financings?
- What would rising barriers do to one of the main motivations behind the broadening of U.S. trade agreements since World War II: preventing conflict?
- **Finally, but most simply, what American wants to pay 50% more for a cellphone than he does today?**

What we have here is a reminder that "economic common sense" isn't so common. Have the voters who think it's a great idea to "bring back the jobs" thought about what goods manufactured at U.S. wages – or tariffs designed to bring the cost of Chinese goods up to those levels – would do to their cost of living? I'd guess not. **How will the interests of the 3.2 million Americans estimated to have lost their manufacturing jobs to China be balanced against the hundreds of millions who would have to pay considerably more for imported goods? Not an easy question.**

Quotas, tariffs and subsidies are all ways for countries to protect industries that can't hold their own against international competitors without these things. Thus they're a good example of ways in which policy decisions can lead to distortions. **Since the industries for which tariffs and subsidies are**

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established are, by definition, industries that can't compete without them, for these things to be enacted, someone has to make a decision that (a) these industries should be kept afloat and (b) consumers of these industries' goods should be prevented from paying the lower prices that would prevail if consumers had easy access to goods from abroad, free of tariffs.

Do we want to subsidize our farmers, or do we want to allow Americans to buy cheap crops from abroad (and let the farmers go out of business)? Leaving aside strategic national considerations, do we want to protect the jobs of those who work in industries where the U.S. is uncompetitive, or do we want to allow U.S. consumers as a whole to minimize their cost of living? **In each case, it's one or the other . . . but not both.**

The bottom line, as with so many of the things I'm discussing here, is that economic laws cannot be ignored or magical solutions willed to appear. While it's far from the entire explanation, the main reason the U.S. has lost manufacturing jobs to foreign countries is that people there are willing to work for much less. **In this globalized world, that means Americans can't enjoy both the high-paying manufacturing jobs they used to have <u>and</u> the low-cost goods they've been buying of late. The imposition of tariffs can't solve that conundrum.** As long as American workers demand wages higher than people elsewhere, they're unlikely to manufacture much for the rest of the world, or for themselves, either. This is an incredibly clear example of how economic reality makes it hard to find easy solutions to difficult problems.

* * *

While on the subject of wages, it's appropriate to mention the minimum wage. The U.S. government first established a federal minimum wage of $0.25 an hour in the Fair Labor Standards Act of 1938. It has been raised 22 times since then and now stands at $7.25. At the state level, there's a patchwork of regulation. A few states don't have a minimum wage. Some have minimums that are below the federal level. Many states use the federal minimum, and a bunch have minimums higher than the federal level.

Just this year, however, increases in the state minimum to $15 (with exceptions) have been enacted in California (by the end of 2021, from $10 today) and in New York (by the end of 2018-19, from $9 today). As the wages of the lowest-paid workers increase, where does their newfound prosperity come from, and what will be the effects?

The debate over increasing the minimum wage is loud and inconclusive . . . and mainly a matter of ideology. Conservatives and business interests are sure an increase in the minimum wage will be disastrous for both business and workers. If higher wages drive up selling prices vis-à-vis competitors who face lower labor costs, business and jobs will suffer. If selling prices and non-labor costs are unchanged, there's a fixed pie to be divided up (between workers' wages and business owners' profits). Thus, if you mandate higher pay per worker and the owners' slice remains the same, the wage slice of the pie by definition will cover fewer recipients; the result is job losses. And if instead you take the higher wages out of the owners' part of the pie, fewer businesses will start up, and some might close, again resulting in job losses.

Liberals and labor organizations, on the other hand, insist there will be no material impact. For example, according to a study from the National Employment Law Project, following most of the 22 federal increases since 1938, job formation didn't slow from what it had been. And in the few cases where it did slow, the increase took place in recessionary times, so maybe it wasn't the result of the wage increase.

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In between these polar positions (neither of which is probably completely right), there are lots of things to think about:

- What's right for undifferentiated businesses (think fast food) in a high-minimum-wage state abutting one where the wage is much lower?
- Is the same minimum wage right for all businesses in a given state regardless of their varying degrees of labor-intensiveness?
- Is the same minimum wage right for all businesses in a state regardless of their profitability? And what about non-profits like hospitals, with their heavy reliance on low-cost labor?
- Is the same minimum wage right for all parts of a state regardless of the differences in their economic vibrancy and cost of living?
- And is a benign job-formation-impact history relevant given that we're now talking about increases of 50-100%, large changes relative to history, and given that the U.S. no longer has all the growth potential and competitiveness that it did when the prior increases took place?

Senator Sanders has said he'll enact a $15 minimum federal wage. Is it possible that $15 is an appropriate minimum for all regions, states and cities? (It's interesting to note in this regard that the proposed changes in New York and California treat New York City differently from Rochester, and Los Angeles differently from Bakersfield.) And if a single minimum wage isn't right for every location, what government commissariat will perform the impossible task of setting the right minimum for each one?

I don't mean to decide the minimum-wage issue here, but rather to say it's not an easy subject. **It seems unlikely that you can make everyone better off just by mandating a higher wage.** Some businesses will become less successful or non-viable. Business formation may be discouraged. The breakeven cost for further investment in automation will decline. (Headline from today's *Washington Post*: "Ex-McDonald's CEO says raising the minimum wage will help robots take jobs") Some workers may lose their jobs or fail to get jobs. Remember, governments and regulators don't create wealth, they only redistribute it. Their impact is largely a zero-sum game except in the longest-term sense.

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As an avowed "democratic socialist," Bernie Sanders expresses hostility toward business, especially the financial sector – "The business model of Wall Street is fraud" – and he sounds like he'd go pretty far to regulate the economy. For instance, he's said he will break up the big banks (without much mention of how).

Rather than go into all the economic laws his policies violate, I'll simply ask some questions I consider relevant:

- What has been behind the United States' progress to the top of the world's economic heap? (If he doesn't attribute a lot of our success to the capitalist, free-market system, then we disagree.)
- Where are the countries that have thrived under control economies? How about the U.S.S.R. and East Germany? (Didn't the ability to watch the former East Germany and West Germany side-by-side provide a good controlled experiment?) How do average folks live in Cuba, Venezuela and Vietnam? Why is China continually increasing its use of free-market techniques?

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How about an example of central economic control in action? Here are some excerpts from an article about Venezuela that appeared in *The Atlantic* of May 12, 2016 (I've added some emphasis and reordered the paragraphs):

> A case in point is the price controls, which have expanded to apply to more and more goods: food and vital medicines, yes, but also car batteries, essential medical services, deodorant, diapers, and, of course, toilet paper**. The ostensible goal was to check inflation and keep goods affordable for the poor, but anyone with a basic grasp of economics could have foreseen the consequences:** When prices are set below production costs, sellers can't afford to keep the shelves stocked. Official prices are low, but it's a mirage: The products have disappeared.

Here's a shocker: you can set prices for goods, but you can't make people produce them. That sounds a lot like economic reality.

These ineffective – or counterproductive – price controls were only one part of a huge economic mess. How did it arise?

Not long ago, Venezuela – "a seemingly modern, seemingly democratic nation just a few hours' flight from the United States" – was wealthy and a good place to live.

> Sitting atop the world's largest reserves of oil at the tail end of a frenzied oil boom, the government led first by [Hugo] Chavez and, since 2013, by [Nicolas] Maduro, received over a trillion dollars in oil revenues over the last 17 years.

But then it saw the beginning of:

> The experiment with '21st-century socialism' as introduced by . . . Chavez, a self-described champion of the poor who vowed to distribute the country's wealth among the masses, and instead steered the nation toward the catastrophe the world is witnessing under his handpicked successor Maduro . . .
>
> In the last two years Venezuela has experienced the kind of implosion that hardly ever occurs in a middle-income country like it outside of war. Mortality rates are skyrocketing; one public service after another is collapsing; triple-digit inflation has left more than 70 percent of the population in poverty; an unmanageable crime wave keeps people locked indoors at night; shoppers have to stand in line for hours to buy food; babies die in large numbers for lack of simple, inexpensive medicines and equipment in hospitals, as do the elderly and those suffering from chronic illnesses.

This is the fate that has befallen a once-wealthy and once-modern nation operating under central economic control. Shall we give it a try?

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For me, the bottom line on economic reality is that, in the short run, governments theoretically have the ability to:

a) **accelerate economic activity**, bringing forward to today otherwise-future activity,
b) **make life better for one group of citizens at the expense of another** (e.g., the rich versus the poor), and
c) **encourage one form of activity versus others** (e.g., investing for capital gains versus investing for dividends).

One could view these things as potentially helpful policy tools, or as actions that distort the workings of the economy. By definition, they are designed to accomplish results that wouldn't occur if the market were left free. Perhaps not all the goals are truly desirable, and some may cease being considered desirable after they've been enshrined in law, possibly because of unintended consequences. Some issues – for example, the question of whether income on capital should be taxed higher or lower than income from labor – are just a matter of opinion based largely on political point of view. Some actions taken may be nothing more than patronage and rewards for voter loyalty.

In contrast to the above list of things governments can do to affect economies, there's a significant list of things they can't do.

a) **They can't create much net growth, wealth or prosperity through stimulus alone.** A certain quantum of wealth is produced by an economy. It can be moved around, but governments can't increase it magically.
b) **They can't make everyone better off simultaneously.** For the most part they can only take from one group to give to another. An example is the ability to improve the fortunes of workers in an endangered industry through import tariffs that raise prices for the industry's customers.
c) **There aren't many actions they can take that won't have repercussions for people other than the ones they're intending to benefit, and second-order consequences for everyone.** France can enact regulations that protect current jobholders by making it difficult to lay them off, but those same regulations will deter entrepreneurs and owners from starting or expanding businesses and hiring new employees.
d) While governments can provide incentives and nudge people in a given direction, **they can't make economies (or the people in them) perform as desired**. For example, in the 1990s the Japanese government tried to stimulate consumption by mailing out checks (something that's referred to today as "helicopter money"). But its conservative citizens put the money in the bank rather than spend it, turning the government's action into a classic case of "pushing on a string."

Fundamental improvements – intelligent changes in investment incentives, the tax system or infrastructure, for example – can increase the slope of the growth curve and provide substantial net long-term benefits for a society (although not necessarily for every individual member). Short-term fixes simply cannot create wealth out of thin air. I'll close with something Winston Churchill said, with some additions of my own: "We contend that for a nation to try to tax [or stimulate or devalue] itself into prosperity is like a man standing in a bucket and trying to lift himself up by the handle."

May 26, 2016

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Memo to: Oaktree Clients

From: Howard Marks

Re: What Does the Market Know?

My buddy Sandy was an airline pilot. When asked to describe his job, he always answers, "hours of boredom punctuated by moments of terror." The same can be true for investment managers, for whom the last few weeks have been an example of the latter. We've seen bad news and prices cascading downward. Investors who thought stocks were priced right 20% ago and oil $70 ago now wonder if they aren't risky at their new reduced prices.

In Thursday's memo, "On the Couch," I mentioned the two questions I'd been getting most often: "What are the implications for the U.S. and the rest of the world of China's weakness, and are we moving toward a new crisis of the magnitude of what we saw in 2008?" Bloomberg invited me on the air Friday morning to discuss the memo, and the anchors mostly asked one version or another of a third question: "does the market's decline worry you?" That prompted this memo in response.

The answer lies in a question: "what does the market know?" Is the market smart, meaning you should take your lead from it? Or is it dumb, meaning you should ignore it? Here's what I wrote in "It's Not Easy" in September and included in "On the Couch":

> Especially during downdrafts, many investors impute intelligence to the market and look to it to tell them what's going on and what to do about it. This is one of the biggest mistakes you can make. **As Ben Graham pointed out, the day-to-day market isn't a fundamental analyst; it's a barometer of investor sentiment. You just can't take it too seriously.** Market participants have limited insight into what's really happening in terms of fundamentals, and any intelligence that could be behind their buys and sells is obscured by their emotional swings. It would be wrong to interpret the recent worldwide drop as meaning the market "knows" tough times lay ahead.

The rest of this memo will be about fleshing out this theme (meaning you can stop reading here if you've had enough or are short on time).

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The Nature of Consensus Opinion

I based the above reference to Ben Graham on his famous observation that in the long run the market's a weighing machine, but in the short run it's a voting machine. In other words, in the long term the consensus of investors figures out what things are really worth and moves the price there. But in the short term, the market merely reflects consensus opinion regarding an asset's future popularity, something that's highly susceptible to the ups and downs of psychology.

So, what does the market know? **First it's important to understand for this purpose that there really isn't such a thing as "the market." There's just a bunch of people who participate in a market.** The market isn't more than the sum of the participants, and it doesn't "know" any more than their collective knowledge.

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This is a very important point. If you believe the market has some special insight that exceeds the collective insight of its participants, then you and I have a fundamental disagreement. The thinking of the crowd isn't synergistic. In my view, the investment IQ of the market isn't any higher than the average IQ of the participants. And everyone who transacts gets a volume-weighted vote in setting an asset's price at a given point in time.

People of all different levels of ability act together to set the price. They vary all over the lot in terms of knowledge, experience, insight and emotionalism. The market doesn't give the ones who are superior in these regards any more influence than the others, especially in the short run. **My bottom line on this subject is that the market price merely reflects the average insight of the market participants.** That's point number one.

If anything, I think it's emotion that's synergistic. It builds into herd behavior or mass hysteria. When 10,000 people panic, the emotion seems to snowball. People influence each other, and their emotions compound, so that the overall level of panic in the market can be higher than the panic of any participant in isolation. That's something I'll return to later.

Now let's think about the first goal of investing: to buy low. We want to buy things whose price underestimates the value of the underlying assets or earnings (value investing) or the future potential (growth investing). **In either case, we're looking for instances when the market is wrong.** If we thought the market was always right – the efficient market hypothesis – we wouldn't spend our lives as active investors. Since we do, we'd better believe we know more than the consensus. **So by definition we must not think the market – that is, the sum of all other investors – knows everything, or knows more than we do, or is always right.** That's point number two.

And that leads logically to point number three: why take instruction from a group of people who know less than you do? In "On the Couch," I wrote that it all seems obvious: investors rarely maintain objective, rational, neutral and stable positions. Do you agree with that or not? Is the market a clinical and rational fundamental analyst, or a barometer of investor sentiment? Does the market's behavior these days look like something a mature adult should emulate?

It seems clear to me: the market does not have above average insight, but it often is above average in emotionality. Thus we shouldn't follow its dictates. In fact, contrarianism is built on the premise that we generally should do the opposite of what the crowd is doing, especially at the extremes, and I prefer it.

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A Case in Point – The Crash of 2008

The year 2008 culminated in the greatest panic I've ever seen. The events that built up to it included:

- massive subprime mortgage defaults and the failure of mortgage backed vehicles,
- meltdowns at funds that had invested in those vehicles, notably two Bear Stearns funds,
- the collapse of Bear Stearns, necessitating its purchase by JPMorgan for almost no consideration,
- rescues of Merrill Lynch by Bank of America; Wachovia by Wells Fargo; and Washington Mutual by JPMorgan (after it was first seized by the Office of Thrift Supervision),
- decisions on the part of BofA and Barclays not to acquire Lehman Brothers, and on the part of the U.S. Treasury not to bail it out, leading to Lehman's bankruptcy filing,
- the appearance that Morgan Stanley would be next if it couldn't secure additional capital, and
- widespread speculation regarding other firms that might follow.

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A massive downward spiral ensued. Among the contributing factors were:

- precipitous declines in the prices of bank stocks,
- large-scale short selling of the stocks (the "uptick rule" previously mandated that a stock could only be sold short at a price above the last trade, meaning short selling couldn't force the price down. But the rule was repealed in 2007, so there ceased to be limits on when stocks could be shorted. Thus short sellers could force stock prices down – whether intentionally, in what in the 1920s were called "bear raids," or just because they thought the stocks were right to sell),
- dramatic increases in the cost to insure the debt of banks through credit default swaps.

In the environment described above, the downward spiral in bank stocks was intensified by the following factors (whether they were intentionally manipulated, I can't say for sure):

- It was easy to bet against the banks by buying credit default swaps (CDS) on their debt.
- It was easy to depress bank stocks by selling them short.
- The declining stock prices were taken as a sign that the banks were weakening, causing the cost of buying CDS protection to rise.
- The rising cost of CDS protection was taken as an additional negative sign, causing the stocks to fall further.

I can tell you, it had the feel of an unstoppable vicious circle. Some compared it to the "China Syndrome": a 1979 movie with Jane Fonda and Michael Douglas in which an out-of-control nuclear reaction threatens to propel reactor components through the earth's core, from the U.S. to China. Thus the stock of panic-ridden Morgan Stanley (for example) fell 82%, to less than $10.

But it's important to note that the negative feedback loop described above was able to continue without reference to – and not necessarily in reasonable relationship to – actual developments at the banks or changes in their intrinsic value. Eventually, however, the Treasury restricted short selling in the stocks of 19 financial institutions deemed "systemically important." Morgan Stanley secured a $9 billion injection of convertible equity from Mitsubishi UFJ Financial Group. The panic subsided. The economy and capital markets recovered. And Morgan Stanley's stock traded at $33 a year later.

Do you wish you had taken the market's instruction in 2008 and sold bank stocks? Or do you wish you had rejected its advice and bought instead? In short, did the market know anything?

There are three possible answers:

- The market was flat wrong in 2008 when it took Morgan Stanley's stock so low.
- The market was right; it properly reflected the possibility of a meltdown that could have happened but didn't.
- The market was wrong in the case of Morgan Stanley in 2008, but most of the time it isn't.

I like the first, and the second is appealing as well. But while a meltdown certainly was possible, the below-$10 price probably assigned it too high a likelihood. And, of course, I'm not persuaded by the third.

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A Case in Point – Senior Loans in the Financial Crisis

While on the subject of 2008, I want to review the performance of senior loans. In the old days, banks made corporate loans, sometimes sharing part with a syndicate of a few friendly banks but retaining the rest. More recently the custom changed, with banks syndicating their loans widely to buyers of all types and retaining rather little. This process has more in common with investment banks' underwriting of securities than with the commercial banks' prior lending process.

Senior loans became a significant area of activity for credit investors like us. They're typically their issuers' senior-most debt, so they're perceived to carry little credit risk. And since they pay interest at floating rates, there is no interest rate risk. (Of course, with so little risk, they offer low yields.) They're the highest-quality instruments I've ever dealt in.

Because they were considered so safe, loans were widely deemed appropriate for levered investment, and prior to the financial crisis large numbers of highly levered Collateralized Loan Obligations, or CLOs, were formed to hold them. Borrowing at low floating rates to buy senior debt paying high floating rates was very enticing, and the CLO business mushroomed.

Senior loans were affected dramatically by the events of 2008. Since senior loans had been used to fund buyouts with purchase prices at high multiples of cash flow, investors became concerned about the issuers' ability to service them, and especially to refinance them when they came due (since the capital markets had slammed shut). Loan prices fell to levels never seen before in the absence of a default; whereas non-distressed senior loans had rarely sold below 95 in the past, now they fell to the 80s, and then to the 60s. Because of the collapsing prices, "market-value" CLOs received margin calls they couldn't meet, and banks seized portfolios and liquidated them in overnight BWIC (bid-wanted-in-competition) transactions. The indiscriminate selling put further pressure on prices, leading to more margin calls and more BWICs: another prototypical negative feedback loop.

The senior loan index was down 29% in 2008. That exceeded the 25% decline of the high yield bond index. Why would senior debt fall more during a crisis than junior debt? The answer is that senior loans had been ground zero for buying with leverage (and thus for margin calls and forced selling) whereas high yield bonds had not.

The key questions were rarely asked while things melted down: what were the loans worth, and would they pay? That depended on the outlook for defaults, but in late 2008 few people felt they could assess it or could take the time required to do so. **And neither did they question the extent to which the price collapses had been caused by margin calls and forced selling, rather than investment fundamentals.** They just succumbed to negativity and sold.

When 2008 ended, and with it the cycle of selling, price declines, margin calls, more selling and more price declines, the prices of loans stopped going down. And then they went up. The senior loan index rose 45% in 2009, meaning someone who invested on December 31, 2007 and didn't sell was up 3% overall by December 31, 2009. What if you had taken the market's advice in the post-Lehman meltdown and sold in response to the negative signal? You'd have a valid complaint, but whom would you blame? The market . . . or yourself?

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What Does a Falling Market Say About Value?

What do big price declines mean? They mean market participants sense fundamental deterioration. But what price declines say is reflective, not predictive. They tell you about the events that have occurred, and how investors have reacted to them. They don't tell you anything that the average investor doesn't know about future events. And, again, I'm firmly convinced (a) the average investor doesn't know much, and (b) following average opinion won't help you attain above average results.

Most of my readers want to perform better than the average investor. As I've set out in "Dare to Be Great II" (April 2014) and in the discussion of "second level thinking" in my book *The Most Important Thing*, to accomplish that, you have to invest differently than the average investor. To do that, you have to think differently than the average investor. And to do that, you have to consider different inputs than the average investor, or consider inputs differently. You simply can't follow the signals their behavior provides.

It's a matter of logic: if price movements reflect average opinion, following their supposed advice can't help you perform above average.

Now let's think about the question of whether to sell. Here are some possible reasons to do so:

- Belief that the price is high relative to the fundamentals.
- Belief that while the current price may not be high relative to the current fundamentals, the fundamentals will deteriorate in ways that aren't anticipated by the price. (In other words, the price is high relative to how the fundamentals will come to be viewed.)
- Belief that the price will fall regardless of the fundamentals, meaning that by selling today you can avert a loss and/or position yourself to profit by buying lower later.

Do you agree that these are the main reasons to sell? Are there others? Are these all legitimate?

For me the first two are compelling. This is what the skilled investor thinks about. Both of these decisions are made relative to something called "intrinsic value." **There's only one intelligent form of investing: figure out what something's worth and see if you can buy it at or below that price**. It's all about value.

But note that the third reason to sell shown above has nothing to do with value. The price may be high, low or fair relative to the fundamentals today or what they're expected to be tomorrow. You just sell because you think the price will fall.

First, does it make sense to sell something if the price is low relative to the fundamentals, just because you fear it may fall in the short run? A long-term value investor holds or buys when price is low relative to value. Low price relative to value is his dream. Why sell a low-priced asset just because you think it's going to fall for a while? Most people understand the challenge in dealing with "two-decision stocks": you sell because you think the price may fall (even though it may be something you'd like to hold for the long term), and then you have to figure out when to buy it back. Last year Charlie Munger complained to me that they're really "three-decision stocks": you sell it because you think the price is full, you have to figure out when to buy it back, and in the meantime you have to come up with something else to do with your money. **In my experience, most people who are lucky enough to sell something before it goes down get so busy patting themselves on the back that they forget to buy it back.**

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All other things being equal, as something falls in price, you should want to own it more, not less. The buy-and-hold value investor is stalwart, ignoring price fluctuations. Even better, the contrarian moves opposite to the market, buying when the price falls and selling when it rises.

Second, if not on the basis of fundamentals, how does one make the decision to sell for the third reason listed above? Essentially, two things give rise to changes in asset prices: changes in the outlook (macro or asset-specific) and changes in attitudes toward the asset. In other words, fundamentals and valuation. Fundamentals are dealt with above. If you're going to try to benefit from changes in price that are unrelated to changes in fundamentals, you're left having to predict investor psychology. If "On the Couch" wasn't successful in convincing you this isn't possible, this memo probably won't be, either.

My bottom line is that markets don't assess intrinsic value from day to day, and certainly they don't do a good job during crises. Thus market price movements don't say much about fundamentals. **Even in the best of times, when investors are driven by fundamentals rather than psychology, markets show what the participants think value is, rather than what value really is.** Value is something the market doesn't know any more about than the average investor. **And advice from the average investor obviously can't help you be an above average investor.**

What Does a Falling Market Say About Psychology?

Fundamentals – the outlook for an economy, company or asset – don't change much from day to day. **As a result, daily price changes are mostly about (a) changes in market psychology and thus (b) changes in who wants to own something or un-own something.** These two statements become increasingly valid the more daily prices fluctuate. Big fluctuations show that psychology is changing radically.

And, I said on page two, emotional fluctuations – swings in market sentiment or psychology – do seem to be synergistic. That is, in crowd psychology, 2 + 2 = 5. **While I don't think the price of an asset reflects more wisdom than is possessed by the average of its market's members, I do believe mass psychology will make a group swing to reach greater emotional extremes than its members would separately.** In short, people make each other crazy. And when times are bad – like now – they depress each other. That was a factor in the edge enjoyed by our distressed debt team in 2008: they were able to buy at the market's lows because they weren't in New York, where everyone was trading scary stories and getting each other down.

Again, we can gain insight through logic. **We all know we want to buy (not sell) at the lows, and sell (not buy) at the highs. So then how can it be right to sell because of a decline or buy because of a rise?** Advocates of this latter approach must think (a) declines and rises tend to continue more than they reverse and/or (b) they can tell which declines mean "buy" and which mean "sell." Some savants may have that latter ability, but not many. In general, I think it's ridiculous to sell something because it's down (just as it is to buy because it's up).

As prices fall, there are some very genuine reasons to sell:

- Some people feel rising fear and have to lighten their positions in order to retain their composure.
- Some, having lost a lot of money, sell to be sure they won't experience losses they can't survive.
- Some have to sell to repay demanding creditors or satisfy investor withdrawals.

These reasons are not "invalid." It's just that none of them has anything to do with making money.

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Most mature investors know intellectually that short-term price fluctuations are low in fundamental significance, and that the best results will be achieved if they hold on to their positions and ride out the volatility. But sometimes people sell anyway, perhaps for the above reasons. **Doing so has the potential to convert a short-term fluctuation into a permanent loss by causing any subsequent recovery to be missed. I consider this the cardinal sin in investing.**

What Do the Media Know?

I'm usually able to find something in the print or broadcast media that helps me make my point. Here's how *The New York Times* led the business section on Saturday:

> **Concern Grows That Market Sell-off is an Early Warning of a U.S. Slowdown**
>
> It may be time for everyone to take the markets seriously again.
>
> As stock prices started tumbling in the first trading days of the year, many Wall Street professionals were tempted to describe the declines as the sort of adjustment that the market has gone through in recent years before moving higher.
>
> But that opinion evaporated this week as the selling intensified. Concerns are now growing that the markets are signaling that the United States economy, despite its recent bright spots, is on the verge of a slowdown.
>
> The fear is that economic problems in China have set off negative reactions around the world that could ultimately weigh on American households and corporations.

So the bottom-line question is simple: does the market reflect what people know, or should people base their actions on what the market knows? And if the latter, where does "the market" get its information, other than from people? For me it's simple: if people follow the market's dictates, they're taking advice from . . . themselves!

I set a trap at the beginning of this memo, and I want to spring it now. In the first paragraph, I wrote, "We've seen bad news and prices cascading downward." You probably glossed over it. But is it true? Leaving aside China and the markets' gyrations, have we really been seeing negative news on balance? Isn't it just that people are fixating on bad news, ignoring good news, and tending to interpret things negatively?

There are ways in which psychology can become "real," feeding back to influence fundamentals. One is that declining asset prices produce a negative "wealth effect," making people feel poorer and causing them to spend and invest less. And there are others. But despite the feedback influences of the market declines, I still would say U.S. and European economic fundamentals aren't negative on balance.

On Friday, in the midst of the declines, I participated in a small lunch attended by investment professionals and current and former senior government economic and financial leaders. I'll spare you the details: **there was a lot of "on one hand" and "on the other hand," but no one thought there would be a recession this year**. So then who are the people creating price signals to which others should accord significance?

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I want to end by making one thing completely clear. I'm not saying the market is never right when prices go down (or up). I'm merely saying the market has no special insight and conveys no consistently helpful message. **It's not that it's always wrong; it's that there's no reason to presume it's right.**

It is the goal of some investors to sell on declines when the subsequent movements will be down, but "buy the dips" when the subsequent movements will be up. If you think you can tell which is which from watching the market movements themselves, then we – again – have a fundamental disagreement. Future price movements can only be predicted on the basis of the relationship between price and fundamentals. And, given the market's short-term volatility and irrationality, this can only be done in the long-term sense**. The market has nothing useful to contribute on this subject.**

January 19, 2016

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Memo to: Oaktree Clients

From: Howard Marks

Re: On the Couch

I woke up early on Saturday, December 12 – the morning after a day of significant declines in stocks, credit and crude oil – with enough thoughts going through my mind to keep me from going back to sleep. Thus I moved to my desk to start a memo that would pull them together. I knew it might be a long time between inception and eventual issuance, since every time I dealt with one thought, two more popped into my head. In the end, it took a month to get it done.

Professor Richard Thaler of the University of Chicago is a leading expert on behavioral economics and decision-making (in fact, he's such a significant figure in the field that he was given a cameo role in the movie *The Big Short*). He opens his new book, *Misbehaving*, with Vilfredo Pareto's assertion that "the foundation of political economy and, in general, of every social science, is evidently psychology." I'd apply that equally to the not-so-scientific field of investing.

It has been one of my constant refrains – dating back all the way to "Random Thoughts on the Identification of Investment Opportunities" (January 1994) – **that in order to be successful, an investor has to understand not just finance, accounting and economics, but also psychology**. A thorough understanding of how investors' minds work is essential if one is to figure out where a market is in its cycle, why, and what to do about it. For me, the markets' recent behavior – certainly on December 11, but also at other points in 2015 – reinforces that observation.

This memo is my attempt to send the markets to the psychiatrist's couch, and an exploration of what might be learned there.

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2012-14: An Uncertain World

In September 2012, I wrote a memo called "On Uncertain Ground." To begin it, I observed that "The world seems more uncertain today than at any other time in my life." I went on to list the things that worried me. Few of them are less troubling today. Certainly the period of the post-crisis recovery hasn't been carefree. Here are the things that concerned me in 2012, as viewed from that perspective:

- **Macro growth** – It seems to be broadly accepted that overall economic growth will be slower in the years ahead than in the latter part of the twentieth century. Do lower birth rates and slowing gains in productivity doom us to reduced macro gains? What does this mean for everything else? In particular, if growth remains slow, will it lead to slowing inflation, or even deflation?
- **Trends in the developed world** – Will the developed nations be able to compete in a globalized economy? How will incomes hold up as developing nations produce goods cheaper, and as the quality of those goods improves? As we increasingly become knowledge-based economies, will we need as many less-educated workers as in the past? If not, what will be the ramifications for unemployment, income inequality and society as a whole?
- **Consumer behavior** – Will consumers regain the confidence required to return to their expansive spending behavior? Will they employ credit as in the past to perpetuate growth in consumption?

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- **Europe** – Will Europe move forward in terms of cohesion, coordination and productivity? What happens if it doesn't? Will the ECB be able to engineer an economic recovery? Will the departure from the European Union of Greece – or new Greeces – return as a worry in the future? (And now, will the coming referendum mandate Great Britain's departure? Will there be a new referendum in Scotland with regard to remaining in the UK? Will Catalonia vote to leave Spain, and what will that mean for its membership in the EU?)
- **Leadership** – For years I gave speeches using PowerPoint slides listing sources of uncertainty, but where it was supposed to say "dearth of leadership," someone had mistakenly typed "death of leadership" . . . and nobody quibbled. Throughout the world, few countries if any have leaders on par with history's best. Certainly that's true in the U.S. You may think it's a good thing, or you may not, but it's clear that Washington is too gridlocked to accomplish much. As I wrote in "On Uncertain Ground," ". . . U.S. politicians seem to value things like 'ideological purity' (i.e., toeing the party line) and being reelected above real attempts at problem solving. Partisanship and open warfare has surely reached a new zenith."
- **Entitlements** – Social Security is a locomotive rumbling down the track to ruin. The cost of health care programs is growing rapidly, as drugs become more expensive and Americans live longer. Defined-benefit pensions have been promised to public employees but not fully funded. How will federal, state and city governments meet their obligations? Not only does no one know, but also few people in government (certainly not in Washington) seem to care.
- **China** – As the world's second-largest economy, China plays a very important role in determining global growth. Its GDP advanced at double-digit rates over the last 20+ years – without recessions – on the basis of (a) millions of people moving from farms to cities (and to more productive roles in manufacturing), (b) the low-cost exports they produced and (c) readily available capital and the heavy fixed-asset investment it permitted. Henceforth China will gain less from the above and will have to transition to domestic consumption of goods and services, as well as a slower-growing economy . . . perhaps with ups and downs like the rest of the world. Will this result in a near-term hard landing? And what will be the impact on nations that sell commodities and finished goods to China?
- **Geopolitical hotspots** – From the fall of the Soviet Union at the end of 1991 until the 9/11 attacks in 2001, investors' positive feelings were abetted by the presence of peace in the world. But in recent years we have faced challenges involving Iran, Israel and the rest of the Middle East; Russia and Ukraine; China and North Korea; and terrorist threats in many places. How will markets react to the inevitable flare-ups?

The worries listed above confronted investors throughout the period 2012 through 2014. And in the last few months of that period, we saw a halving of the price of oil; additional slowing in China; worsening news from the Middle East; and continuing uncertainty regarding the Fed's likely action on interest rates.

Given markets' abhorrence of uncertainty, we normally would expect such issues to result in low asset prices and negative returns. But in 2012-14, despite the many negatives, we saw a cumulative return of 74% on the S&P 500, as well as strong appreciation on the part of real estate and companies that had been the subject of buyouts. Further reflecting investor confidence, the yield spread versus Treasurys for the average U.S. high yield bond narrowed from 706 basis points at the end of 2011 to 522 b.p. at the end of 2014, at which point the prospective yield to worst was down to 6.67%. Thus, as 2014 moved to a close, we saw:

- the litany of meaningful macro risks described above,
- investors engaging in pro-risk behavior in pursuit of adequate returns in a low-return world,
- as a consequence, full asset prices, and thus
- little likelihood of achieving returns high enough to compensate for the risks.

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To sum up, psychology (and thus prices) were high given the fundamentals. Our world was marked by low prospective returns and plentiful problems, a troubling combination.

Here's what I wrote in "Risk Revisited" in September 2014:

> While investor behavior hasn't sunk to the depths seen just before the crisis (and, in my opinion, that contributed greatly to it), in many ways it has entered the zone of imprudence. . . .
>
> It's the job of investors to strike a proper balance between offense and defense, and between worrying about losing money and worrying about missing opportunity. Today I feel it's important to pay more attention to loss prevention than to the pursuit of gain. For the last three years Oaktree's mantra has been "move forward, but with caution." At this time, in reiterating that mantra, I would increase the emphasis on those last three words: "but with caution". . . .
>
> Although I have no idea what could make the day of reckoning come sooner rather than later, I don't think it's too early to take today's carefree market conditions into consideration. What I do know is that those conditions are creating a degree of risk for which there is no commensurate risk premium.

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<u>The Negatives Build</u>

Given the many concerns, performance in the first half of 2015 was sluggish at best. Most markets eked out positive returns, but gains came grudgingly, and few investors had a good time. Then, during the summer, the accumulation of worries accelerated and became too much to withstand:

- Growth remained flat or slowed in the U.S., Europe and Japan.
- China's economy continued to slow.
- The Fed continued to dither regarding interest rates. A potential increase caused worry, but so did the appearance that the Fed considered growth too weak to allow an increase.
- The oil price decline resumed, and other metals and commodities joined in, weakening the prices of related stocks and bonds.
- The geopolitical picture went from bad to worse:
    - Syria presented a choice between (a) enabling a despot to remain and (b) ousting him and turning over another country to instability and insurgency.
    - Russia intervened, flexing its muscles and reminding us of its intransigence.
    - ISIS and the flow of immigrants to Europe took on the appearance of insoluble problems; Paris and San Bernardino showed terrorism to be a serious ongoing threat.
    - An agreement was reached to limit Iran's nuclear progress, but no two experts seemed to agree on whether it was a good or bad thing.
    - Iraq, Afghanistan, Israel and Palestine got no better.
    - The South China Sea heated up from time to time.
- There was nothing positive to say about the U.S. political situation. Partisanship and gridlock remained the rule. The grinding two-year campaign took up increased airtime and mindshare, without a positive consensus concerning most candidates.
- Finally, a number of issues internal to the markets – ranging from reduced liquidity to market-reporting glitches to the meltdown of high-risk credit funds – shook investors' faith.

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Somehow, market participants are able to live with uncertainties like these and retain their equanimity, sometimes for long periods. **Maybe it's conviction, maybe it's obliviousness, and maybe it's denial.** And that's what prevailed in recent times; as Doug Kass put it in mid-2014, we've been experiencing "a bull market in complacency."

But eventually something else happens – perhaps the house of cards grows too high – and investors' feeling of serenity is pierced. A point is reached beyond which equanimity can no longer be maintained. It was getting to that point that led to meaningful declines in U.S. credit markets in the latter half of 2015.

The Tipping Point

One of the most notable behavioral traits among investors is their tendency to overlook negatives or understate their significance for a while, and then eventually to capitulate and overreact to them on the downside. I attribute a lot of this to psychological failings and the rest to the inability to appreciate the true significance of events.

As negatives accumulate – whether they surface for the first time or just are finally recognized as significant – eventually a time comes when they can no longer be ignored, and instead they come to be treated as being of overwhelming importance. The latest tipping point was reached last August.

Up to that point, investors had pretty much resisted the negatives, and the S&P 500 was up 3.3% in the first seven months of the year. (The media might say investors had "coped with" the negatives, but of course they hadn't dealt with them; they'd ignored them.)

But then, in August, a series of negatives occurred in China: reports of still more economic slowing; a decline in A-share prices from June to August that reached 45%; an unexpected devaluation of the renminbi (whose value many people complained for years had been artificially depressed); and market-support measures that some found ham-handed (e.g., restrictions on actions such as short selling, and investigations of journalists writing negative articles about the stock market).

"Everyone knew" for years that the Chinese economy had been overstimulated with cheap financing, and that this had led to excessive investment in fixed assets. The effect was exceptional GDP growth, but also a large stock of unneeded buildings and infrastructure. Everyone also knew that a hard landing – a painful slowing in economic growth, and perhaps a recession – was among the possible outcomes. **But it wasn't until August that investors outside China began to notice A-shares' collapse; consider the possibility that a slowdown in China could have negative ramifications for the rest of the world; and import those worries to their own markets.** Thus between August 17 and 25, the S&P 500 declined 11%. What was behind the extrapolation of China's woes to other markets, like ours? Here's how I explained it in "It's Not Easy," published in September on the heels of the events in China:

> Especially during downdrafts, many investors impute intelligence to the market and look to it to tell them what's going on and what to do about it. **This is one of the biggest mistakes you can make. As Ben Graham pointed out, the day-to-day market isn't a fundamental analyst; it's a barometer of investor sentiment. You just can't take it too seriously.** Market participants have limited insight into what's really happening in terms of fundamentals, and any intelligence that could be behind their buys and sells is obscured by their emotional swings. It would be wrong to interpret the recent worldwide drop as meaning the market "knows" tough times lay ahead. Rather, China came out with some negative news and people panicked, especially Chinese investors who had

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> bought stocks on margin and perhaps were experiencing their first serious market correction. Their selling prompted investors in the U.S. and elsewhere to sell also, believing that the market decline in China signaled serious implications for the Chinese economy and others.

Whatever the reason, the bottom line for me is that whereas risk tolerance had ruled through July, risk aversion was reawakened in August. I picture an investor who's oblivious to risk in the earlier months and then suddenly says, "Oh yeah: there are things to worry about." **The tipping point finally arrives, a sudden wake-up call to the existence and importance of risk.**

Half-Full or Half-Empty?

Almost 25 years ago, in my second memo ("First Quarter Performance," April 1991), I introduced the concept of the investment pendulum:

> Although the midpoint of its arc best describes the location of the pendulum "on average," it actually spends very little of its time there. Instead, it is almost always swinging toward or away from the extremes of its arc. But whenever the pendulum is near either extreme, it is inevitable that it will move back toward the midpoint sooner or later.

One of the most significant factors keeping investors from reaching appropriate conclusions is their tendency to assess the world with emotionalism rather than objectivity. Their failings take two primary forms: selective perception and skewed interpretation. In other words, sometimes they take note of only positive events and ignore the negative ones, and sometimes the opposite is true. And sometimes they view events in a positive light, and sometimes it's negative. But rarely are their perceptions and interpretations balanced and neutral.

Ever since the August events in China, I've repeatedly found myself harking back to one of the oldest cartoons in my file, and still one of the very best:

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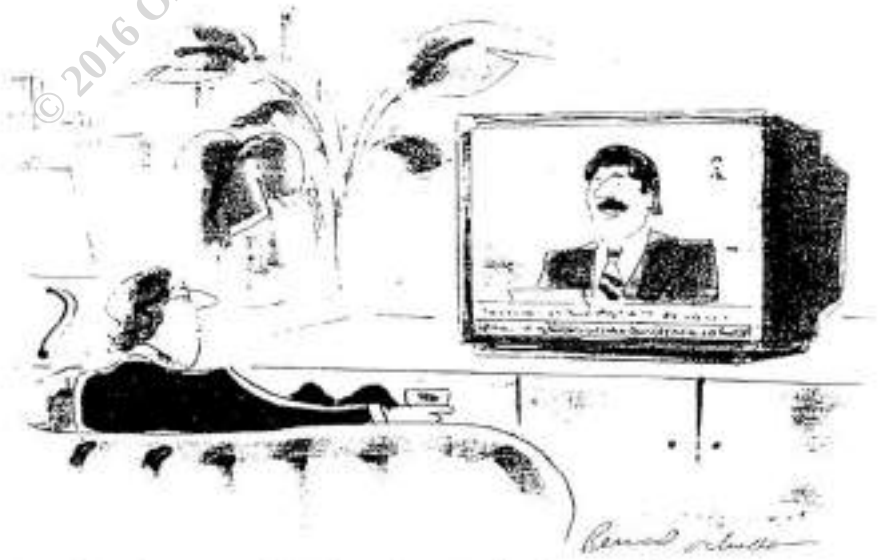

"Everything that was good for the market yesterday is no good for it today."

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In 2015 we saw old problems get worse, new ones arise, and a general absence of anything to feel good about. The sense of hopelessness regarding problems like ISIS and runaway immigration is something investors handle particularly poorly. In August, the events in China sparked a revival of risk aversion and fear, with effects that carried around the world for a couple of weeks. And with the door opened to fearful interpretation, Pollyanna tolerance gave way to widespread negativism.

The bottom line is that investor psychology rarely gives equal weight to both favorable and unfavorable developments. Likewise, investors' interpretation of events is usually biased by their emotional reaction to whatever is going on at the moment. Most developments have both helpful and harmful aspects. But investors generally obsess about one or the other rather than consider both. And that recalls another classic cartoon:

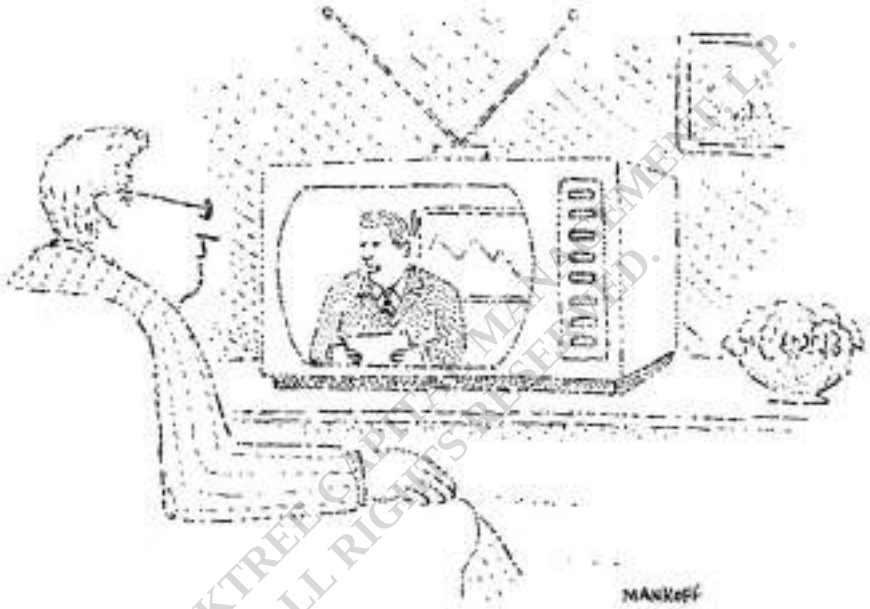

"On Wall Street today, news of lower interest rates sent the stock market up, but then the expectation that these rates would be inflationary sent the market down, until the realization that lower rates might stimulate the sluggish economy pushed the market up, before it ultimately went down on fears that an overheated economy would lead to a reimposition of higher interest rates."

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It all seems so obvious: investors rarely maintain objective, rational, neutral and stable positions. **First they exhibit high levels of optimism, greed, risk tolerance and credulousness, and their resulting behavior causes asset prices to rise, potential returns to fall and risk to increase. But then, for some reason – perhaps the arrival of a tipping point – they switch to pessimism, fear, risk aversion and skepticism, and this causes asset prices to fall, prospective returns to rise and risk to decrease.** Notably, each group of phenomena tends to happen in unison, and the swing from one to the other often goes far beyond what reason might call for.

That's one of the crazy things: in the real world, things generally fluctuate between "pretty good" and "not so hot." But in the world of investing, perception often swings from "flawless" to "hopeless." The pendulum careens from one extreme to the other, spending almost no time at "the happy

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medium" and rather little in the range of reasonableness. **First there's denial, and then there's capitulation.**

The Sources of Error

To explain why these bipolar episodes occur, I want to spend a little time on some of the factors behind investor psychology. For the most part they're easily observed and dissected, and not mysterious. I discussed some of them in "It's Not Easy":

> Emotion is one of the investor's greatest enemies. Fear makes it hard to remain optimistic about holdings whose prices are plummeting, just as envy makes it hard to refrain from buying the appreciating assets that everyone else is enjoying owning. Confidence is one of the key emotions, and I attribute a lot of the market's recent volatility to a swing from too much of it a short while ago to too little more recently. **The swing may [result] from disillusionment: it's particularly painful when investors recognize that they know far less than they had thought about how the world works.** It's important to remain moderate as to confidence, but instead it's usually the case that confidence – like other emotions – swings radically.
>
> While China was the "proximate cause" of the recent volatility, other things often contribute, and last month was no exception. The word that always comes to mind for me is "confluence." **Investors can usually keep their heads in the face of one negative. But when they face more than one simultaneously, they often lose their cool.** One additional negative last month was the glitch in Bank of New York Mellon's SunGard software, and the bank's consequent inability to price 1,200 mutual funds and ETFs that it administers. It was another dose of disillusionment: no one enjoys learning that the market mechanisms they need to work can't be depended on.

Another area of error – be it the result of flawed perception or inadequate insight and analysis – can be seen in investors' repeated failure to understand the potential for ramifications and second-order consequences. One instance was the general lack of concern about contagion from sub-prime mortgage backed securities that prevailed between early 2007 – when mortgages began to default in large numbers – and the tumultuous events of mid/late 2008. Most people overlooked the potential for contagion, and thus (for example), as of May 2008 the S&P 500 was essentially unchanged from the first quarter of 2007. Yet sub-prime mortgage defaults contributed significantly to the subsequent bank collapses and bailouts, the bankruptcy filing of Lehman Brothers, and the late-2008 emergence of fear of a financial system meltdown. As a consequence, between May 2008 and March 2009 the S&P lost 52%. **The events that produced such extreme distress in late 2008 and early 2009 were unforeseen and unimagined just a few months before . . . even though the clues had been there for a year.**

There are many more ways in which non-objective, non-rational quirks commonly affect behavior. As Carol Tavris points out in her May 15, 2015 *Wall Street Journal* review of Professor Thaler's book:

> As a social psychologist, I have long been amused by economists and their curiously delusional notion of the "rational man." Rational? Where do these folks live? Even 50 years ago, experimental studies were demonstrating that people stay with clearly wrong decisions rather than change them, throw good money after bad, justify failed predictions rather than admit they were wrong, and resist, distort or actively reject information that disputes their beliefs.

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The difficulty of understanding events, their significance and their potential ramifications comes in good part from the kinks in investors' psyches, and it contributes to – and feeds back to exacerbate – investors' responses. Thus investors tend to emphasize just the positives or the negatives much more often than they take a balanced, objective approach. And they tend to become optimistic and eager to buy when good news, positively interpreted, has forced prices up . . . and vice versa. All of this is obvious (especially in retrospect), and thus equally obviously, understanding and dealing with it presents a potential way to improve results.

Notions of market efficiency – the idea that most assets are priced "right" – are based on belief in investor rationality and objectivity. But certainly those traits are little seen in real life. "Inefficiencies" – in everyday language, "mispricings" – stem from biases against one asset or in favor of another: legal, cultural, informational, and especially behavioral and emotional. The first three of these exist much less nowadays than they did 30 or 40 years ago, but the latter two still rear their head from time to time. And I'm sure they always will.

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Case In Point – Oil

On December 12, as I began to write this memo, the *Financial Times* provided several examples of the negative thinking being applied. Here are some excerpts from an article about the recent market action:

> Oil prices fell sharply to a seven-year low, rattling stock markets at the end of a choppy week. . . . The price of Brent crude, the global energy benchmark, was down 5.6% to $37.49 . . . after Opec at its meeting a week ago failed to agree output cuts, leaving prices at the mercy of a global glut.
>
> "Lower oil prices are here to stay."
>
> The CBOE Oil Vix is holding above the 54 level . . . as investors pay up to protect themselves [against], or speculate upon, further sharp moves in crude.

That all sounds very serious. But is it? Does it make any sense? What's the real significance of declining oil prices?

The bottom line for me is that, if you aren't an oil company or a net oil-producing country, low oil prices aren't necessarily a bad thing. For net oil importers like the U.S., Europe, Japan and China, the drop we've seen in the price of oil is analogous to a multi-hundred-billion-dollar tax cut, adding to consumers' disposable income. It can also increase an importer nation's cost-competitiveness.

The U.S. is both a producer of oil and an importer. That means the macro economy will enjoy the benefit of cost reduction and income enhancement, but domestic oil companies and those who provide them with products and services will gain less from production than had been expected, and some state and local governments will be hard-hit. (And I must add that, thus far, the indicators fail to suggest a salutary impact on the broad economy.) Eighteen months ago I thought the ability to produce oil through fracking at a cost of $40-60 per barrel would give the U.S. a cost advantage in manufacturing; that's no longer likely, at least for now.

But the one thing that's beyond doubt is that the impact of the fall in the price of oil is far from all bad. In fact, I'd say that it's positive on balance for the U.S. and an unmitigated boon for the UK, Europe and East Asia. So why did the *FT* attribute market weakness to it? First, the media have taken on the unpleasant task of telling us why the markets went up or down each day, and the falling oil price is an

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easy answer . . . until you give it any real thought. Second, though, as the *FT* went on to explain, some worry might be appropriate regarding what it connotes:

> The fall in commodity prices is causing market anxiety because investors are worried that it signals a slowdown in global demand, and that any economic benefit from cheaper costs for consumers and businesses is being counteracted by the cutting of investments and jobs by the resources sector.

In other words, they're inferring that the price of oil declined because demand is off, and that this signals economic weakness. But economic growth is what it is; we don't need the oil price to tell us it's weak. And the price of oil is off another third in the last few months, even though world GDP is still growing.

The important thing isn't what the oil price decline tells us about today. It's what it says about tomorrow. And to me, everything else being equal, I think low energy prices today will contribute to better economic growth tomorrow. (Low prices today probably also imply higher prices eventually, through their impact on supply and demand.) It's just that everybody's interpreting everything negatively these days.

Case In Point – Interest Rates

The *FT* also pointed out that investors were reacting to the likelihood the Fed would raise interest rates, even though that should have been a foregone conclusion:

> Next week, the Federal Reserve will raise interest rates. That at least now appears likely. Anything else would be the biggest shock of a year in which markets and monetary authorities have had serious misgivings. Let us assume for now that it happens.
>
> This will be the longest-awaited and most-previewed tightening of monetary policy in history.

There's something wrong if an event that has been widely anticipated for years – and considered a near certainty for months – can be thought capable of significantly impacting the market when it becomes a fact. People's expectations should be incorporated into the prices they assign to assets. So a negative reaction to the imminence of a widely heralded interest-rate increase must imply that either (a) investors are too dense to have incorporated it into prices before this, (b) the increase will be a bigger deal than people thought, or (c) the market is irrational.

On December 15, Dow Jones published the following quote:

> "It's been more shoot first, ask questions later" in the shares of large asset managers, said Kenneth Hill, an analyst at Barclays PLC. "The concern is largely that as rates move higher, investors think returns will move lower and there will be some rotation out of fixed income. People are anxious to see how that plays out," he added.

When Mr. Hill said that, more than two and a half years had passed since May 2013, when Ben Bernanke foreshadowed a "tapering" of bond purchases and the possibility of higher interest rates. How can investors not have had enough time to adjust to the possibility of higher rates and incorporate it into asset prices? Indeed, the increase that was just days away should have been mostly a non-event, and the idea that it was a significant contributor to the declines on December 11 makes no apparent sense.

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Over the years since Bernanke's statement in 2013, the question I've been asked more often than any other has been, "What month will the Fed begin to raise interest rates?" My response has been consistent: "I have no idea, and why do you care?" If someone tells me he'll do one thing if he thinks the Fed's going to raise rates in March and something different if it's going to happen in January, what he's demonstrated is that he doesn't understand how asset prices incorporate expectations. The difference in timing should have little effect on the choice of a course of action. What matters is how far rates will go, and how fast. I don't expect much of either from this dovish and cautious Fed . . . unless the economy surprises on the upside. **And that would be good news, wouldn't it?**

While on the subject of interest rates, I want to mention the thing about them that most annoys me these days. People who acted one way when rates were unchanged (even though everyone knew they wouldn't remain that way for long) are acting very differently now that there's been a quarter-point increase. This, they say, is because "we're in a rising-rate environment." But the issue of interest rates, like most others, shouldn't be viewed as binary . . . black or white . . . flat rates or rising. **The essential questions are, "how much will rates rise?" and "when the series of increases is over, will rates be high enough to meaningfully alter behavior?" That's what counts.**

Yesterday, *The Wall Street Journal* wrote as follows: "Analysts and investors attribute the [auto stocks' recent greater-than-market] declines to worries that rising U.S. interest rates could crimp auto finance and to fears that auto sales may have peaked." Does the interest rate outlook really mean significantly fewer cars will be sold . . . especially given that low gas prices are making consumers richer and driving cheaper? I think people may have jumped to an unwarranted – and negatively tinged – conclusion.

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Case In Point – Third Avenue

In terms of investor reaction, I find the announcement that Third Avenue's Focused Credit Fund would liquidate to be the most interesting recent event. According to the *FT*:

> The liquidation of the biggest US mutual fund since 2008 has intensified concern for the health of the US corporate bond market.
>
> Some distinguished between a risk to the system, where issues at one fund trigger redemptions from others, and so-called idiosyncratic problems related to a single fund.
>
> Corporate bonds sold off again yesterday in the wake of the FCF liquidation announcement and many investors rushed to buy default insurance contracts on junk debt.

There isn't much to be in doubt about in the meltdown of the Focused Credit Fund; clearly it reflected problems peculiar to that fund alone. In 2014, while a $3½ billion fund, it had substantial holdings in particularly-high-risk, illiquid debt. Then it encountered snowballing capital withdrawals at a time of reduced market liquidity. Under circumstances like these, portfolio managers generally raise cash by liquidating their most salable holdings, causing the quality and liquidity of the remaining portfolio to decline. Continuing withdrawals took FCF's assets below $800 million in December 2015, and I hear it was down to 20 or fewer holdings, all of extremely low quality. Further redemptions would have forced the manager to sell those, realizing extremely low prices, eliminating any liquidity that may have been present, and leaving investors who hadn't redeemed holding the bag.

The fault certainly lies with the fund's managers. Risky, illiquid investments may be appropriate for closed-end funds whose capital is secure, but probably not for mutual funds or other vehicles subject to daily redemptions. It's debatable whether a fund should be expected to be able to handle both an 80%

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loss of AUM and a substantial decline in liquidity. But, as I wrote in "Liquidity" (March 2015), "no investor should shoulder more illiquidity than its realities permit" and, in particular, "no investment vehicle should promise more liquidity than is afforded by its underlying assets." **Illiquid assets and the possibility of capital flight: there are few surer recipes for investment disaster.**

Investors lacking strong emotional and analytical foundations might have been scared into believing that FCF's problems connoted – or presaged – widespread weakness among high yield bonds and other forms of risky debt. Those who were a bit less panicky might have understood that high yield bonds in general were probably secure but still feared that illiquidity would combine with cascading redemptions to cause a chain reaction of capital withdrawals from other funds, forced sales, and collapsing bond prices. But those with adequate emotional and analytical resources would have recognized that FCF's problems were more endogenous and idiosyncratic than a function of high yield bonds broadly, and that adequate creditworthiness provides the debtholder's ultimate protection against chaos in the market.

Recent Developments

Behavioral economics and its younger cousin, behavioral investing, aren't theoretical. In fact, they're the essence of practical: they're about how human foibles cause real-life behavior to deviate from what theory might dictate.

In recent months we've had occasion to watch how mood swings can alter the investment environment. I'll describe below the events that have occurred in the market for distressed debt.

In the U.S., the years 2010-14 were characterized by gradual economic improvement, increasing corporate profits, a dramatic switch of the credit markets to accommodativeness, and – because of all this – some of the lowest default rates in history on low-grade debt. As a result, there was a paucity of distressed debt. Further, the little that was available was concentrated in just a few areas: European NPLs, real estate, shipping and power companies. Put these factors together, and Oaktree found itself unable to assemble large or thoroughly diversified distressed debt portfolios. Noting this, we followed up our record $10.9 billion fund raised in 2007-08 (and largely invested in the quarter following Lehman Brothers' bankruptcy filing) with one of $5.5 billion in 2010 and then another of $2.7 billion in 2011. In other words, we halved our investable capital and then halved it again.

There is no immediate connection (other than for companies doing business there) between the slowdown in China or the price decline in the oil patch, on one hand, and the general creditworthiness and desirability of high-risk debt on the other. And yet, over the last few months, pronounced changes have occurred in the market for distressed debt:

- After a period of very stable prices – even for "iffy" debt – some securities have "gapped down" in the last few months (i.e., fallen several points at a time rather than correcting gradually). In particular, investors have become highly intolerant of bad corporate news.
- For the first time since 2008-09, the debt of some companies outside of energy and mining has fallen from 90 to 60, and others from 50 to 20.
- **There is a general sense among my colleagues that investors have gone from evaluating securities based on the attractiveness of their yield (with company fundamentals viewed optimistically) to judging them on the basis of the likely recovery in a restructuring (with fundamentals viewed pessimistically).**
- The capital markets have begun the swing from generous toward tight, as is their habit. Thus, whereas they used to find it easy to refinance debt in order to extend maturities or secure "rescue

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financing," now it's hard for companies – especially those experiencing any degree of difficulty – to obtain capital.

On December 7, Oaktree held a dinner in New York for equity analysts who follow our publicly traded units. Bob O'Leary, a co-portfolio manager of our distressed debt funds, planned to be among the hosts. But he called me on December 3 with a question I hadn't heard in a long time from my distressed debt colleagues: "Would you mind if I don't come? There's too much going on for me to leave the office." The change in investor attitudes had created investment opportunities where they hadn't existed just a few months before – in some cases out of proportion to the change in fundamentals.

Developments like these are indicative of rising pessimism, skepticism and fear. They're largely what Oaktree hopes for, since – everything else being equal – they make for vastly improved buying opportunities. But note that we may be just in the early stages of a downward spiral in corporate performance and credit market behavior. **Thus, while this may be "a time" to buy, I'm far from suggesting it's "the time."**

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My Prescription

To help investors deal with their potential for "human error," this shrink would prescribe a number of elements that can help with the task:

- The first essential element in coping with markets' irrationality is **understanding**. The importance of psychology and its influence on markets must be recognized and dealt with.
- The second key lies in **controlling one's emotions**. An investor who is as subject as the crowd to emotional error is unlikely to do a superior job of surviving the markets' swings. Thus it is absolutely essential to keep optimism and fear in the appropriate balance.
- Emotional self-control isn't enough. It's also important to have **control over one's circumstances**. For professionals, that primarily means structuring one's environment so as to limit the impact on them of other people's emotional swings. Examples include inflows to and outflows from funds, fluctuations in market liquidity, and pressure for short-term performance. At Oaktree we never fail to appreciate the benefit we enjoy from being able to reject "hot money" and limit our funds' redemption provisions.
- And finally there's **contrarianism**, which can convert other investors' emotional swings from a menace into a tool. Going beyond just fending off emotional fluctuation, it's highly desirable to become more optimistic when others become more fearful, and vice versa.

I'm lucky to have received many gifts of investment insight early in my career. Perhaps foremost among them is one I picked up in New York about 40 years ago, at a lunch meeting of what we called the Third Thursday Group. It concerned the three stages of a bull market:

- the first, when only a few especially insightful people suspect improvement might occur,
- the second, when most people accept that improvement is actually taking place, and
- the third, when everyone concludes that things are sure to improve forever.

Between the first stage and the last, nothing has to have changed in terms of fundamentals. The difference lies in the perspective investors are bringing to their decisions. But clearly, it's great to be a buyer in the first stage and essential not to be in the last.

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We know investors swing from rejecting all possibilities to drinking the Kool-Aid, just as the three stages say. Thus at Oaktree we want to buy when they're pessimistic, not when they're eager participants. **If I could know only one thing about an investment I'm contemplating, it might be how much optimism is embodied in the price.** In the first stage of the bull market, no optimism is present, and that makes for great bargains. In the last stage, the level of optimism is terribly high, and thus so are purchase prices relative to fundamentals. I want to buy when I can benefit from the herd's neuroses, not when they'll penalize me just as they do everyone else.

As I mentioned above, since the middle of 2011 – by which time the quest for return had resulted in rather full prices for debt, over-generous capital markets and pro-risk investor behavior – Oaktree's mantra has been "move forward, but with caution." We've felt it was right to invest in our markets, but also that our investments had to reflect a healthy dose of prudence. Except for the occasional air pocket, investors didn't suffer significant negative consequences prior to the last year or so. Thus, as usual, we were early in turning cautious. But opportunities (and returns) in the credit sphere have been only so-so since mid-2011, and I don't think our caution caused us to miss much.

Now, as discussed above, investors' optimism has deflated a bit, some negativity has come into the equation, and prices have moved lower. Depending importantly on which market we're talking about and how it has fared in recent months, we consider it appropriate to move forward with a little less caution.

* * *

While I have your attention, I want to devote a few paragraphs to the two questions I'm asked most often these days: What are the implications for the U.S. and the rest of the world of China's weakness, and are we moving toward a new crisis of the magnitude of what we saw in 2008?

At a time when the environment is marked by so many potential problems, it's important to figure out which if any are likely to present real problems. Declining oil prices: the implications for non-oil producers seem mixed at worst. A terrorist event: horrifying, but for any one person or location, I'd put it in the category of an "improbable disaster." The political picture: we'll probably continue to muddle through no matter who's elected.

I would say that, of all the things on the list, the possibility of a hard landing in China is of the greatest significance when you combine magnitude, potential ramifications and the probability of it occurring. So it's important to look objectively at what it means for the U.S.

First, let's remember that China doesn't play a pivotal role in the U.S. economy (other than as a provider of finished goods). It is estimated to account for only 1% of the combined profits of the S&P 500 companies. Exports account for about 13% of U.S. GDP, and in the first eleven months of 2015 less than 8% of our exported goods went to China ($106 billion of goods, versus an annual GDP approaching $18 trillion – again, well below 1%).

Going on from there, I want to share Paul Krugman's analysis from *The New York Times* of January 8. (I generally don't agree with Krugman's politics, but I don't think they're relevant here.):

> Yes, China is a big economy, accounting in particular for about a quarter of world manufacturing, so what happens there has implications for all of us. And China buys more than $2 trillion worth of goods and services from the rest of the world each year.

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> But it's a big world, with a total gross domestic product excluding China of more than $60 trillion. Even a drastic fall in Chinese imports would be only a modest hit to world spending.
>
> What about financial linkages? One reason America's subprime crisis turned global in 2008 was that foreigners in general, and European banks in particular, turned out to be badly exposed to losses on U.S. securities. But China has capital controls – that is, it isn't very open to foreign investors – so there's very little direct spillover from plunging stocks or even domestic debt defaults.
>
> All of this says that while China itself is in big trouble, the consequences for the rest of us should be manageable. But I have to admit that I'm not as relaxed about this as the above analysis says I should be. If you like, I lack the courage of my complacency. Why?
>
> Part of the answer is that business cycles across nations often seem to be more synchronized than they "should" be. For example, Europe and the United States export to each other only a small fraction of what they produce, yet they often have recessions and recoveries at the same time. Financial linkages may be part of the story, but one also suspects that there is psychological contagion: Good or bad news in one major economy affects animal spirits in others.
>
> So I worry that China may export its woes in ways back-of-the-envelope calculations miss . . .

I want to highlight Krugman's reference to "psychological contagion." It's interesting in this regard that, last week, the world's stock markets saw the following declines: S&P 500 – 6.0%, FTSE 100 – 5.3%, DAX – 8.3% and Nikkei – 7.0%. **I consider it highly unlikely that such uniform declines were the result of independent, objective analysis of the impact of events on each economy and company. Rather, I think they show the extent to which markets are linked by their investors' shared psychology.**

So what about the likelihood of another 2008-style crash? The bottom line for me is that a rerun of the Global Financial Crisis isn't in the cards:

- We haven't had a boom (either in the economy or in the stock market), so I don't think we're fated to have a bust. Because most businesses have been particularly loath to expand their facilities, I don't think they'll be slammed if revenues flatten or turn down.
- The leverage in the private sector has been reduced. This is particularly true of the banks, where leverage has gone from the region of 30+ times equity before the crisis to very low double digits today. And, of course, banks are now barred from investing adventurously for their own account.
- Finally, the main villain in the crisis was sub-prime mortgage backed securities. The raw material – the underlying mortgages – was unsound and often fraudulent. The structured mortgage vehicles were highly levered and absurdly highly rated. And the risky tranches ended up in banks' portfolios, causing them to require rescues. **Importantly, this time around I see no analog to sub-prime mortgages and MBS in terms of their combination of fragility and magnitude.**

I don't mean to suggest there aren't a lot of things to worry about: swollen central bank balance sheets; complete ignorance as to how they will be unwound and how interest rates will be moved higher; the seeming inability to generate economic growth and inflation; and the many other macro negatives

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listed earlier. A hard landing and substantial devaluation in China, the world's second largest economy, certainly could have far-reaching effects.

It's important that investors (as well as economists) avoid using words like "always," "never," "will," "won't," "has to" and "can't," and I try to do just that. But it's my view that the GFC and its preconditions were highly unusual, and I don't think we're heading for an encore. Remember, however, that I'm not a seer, and Oaktree and I never bet heavily on opinions regarding the future – mine or anyone else's.

* * *

Before I close, I want to make it abundantly clear that when I call for caution in 2006-07, or active buying in late 2008, or renewed caution in 2012, or a somewhat more aggressive stance here in early 2016, I do it with considerable uncertainty. My conclusions are the result of my reasoning, applied with the benefit of my experience (and collaboration with my Oaktree colleagues), but I never consider them 100% likely to be correct, or even 80%. **I think they're right, of course, but I always make my recommendations with trepidation**.

I read the same newspapers as everyone else. I see the same economic data. I'm buffeted by the same market movements. The same factors appeal to my emotions. Maybe I'm a little more confident in my reasoning, and certainly I have more experience than most. But the key is that – for whatever reason – I'm able to stand up to my emotions and follow my conclusions. **None of them can be documented or proved.** If they could be, most intelligent people would reach the same conclusions, with the same degree of confidence. I tell you this only to communicate my feeling that no one should fear he's not up to the task just because he's unsure of his conclusions. **These aren't things about which certainty is attainable.**

* * *

Lastly, they tell me Oaktree is now on social media. That means you can follow @oaktree on Twitter to receive updates about my memos, videos and speaking engagements, and to hear from others at the firm. You can also subscribe to my memos on our website, oaktreecapital.com/insights.

January 14, 2016

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Memo to: Oaktree Clients

From: Howard Marks

Re: Inspiration from the World of Sports

I'm constantly intrigued by the parallels between investing and sports. They're illuminating as well as fun, and thus they've prompted two past memos: "How the Game Should Be Played" (May 1995) and "What's Your Game Plan?" (September 2003). In the latter memo, I listed five ways in which investing is like sports:

- It's competitive – some succeed and some fail, and the distinction is clear.
- It's quantitative – you can see the results in black and white.
- It's a meritocracy – in the long term, the better returns go to the superior investors.
- It's team-oriented – an effective group can accomplish more than one person.
- It's satisfying and enjoyable – but much more so when you win.

Another angle on the investing/sports analogy has since occurred to me: an investment career can feel like a basketball or football game with an unlimited number of quarters. We may be nearing December 31 with a substantial year-to-date return or a big lead over our benchmarks or competitors, but when January 1 rolls around, we have to tackle another year. Our record isn't finalized until we leave the playing field for good. Or as Yogi Berra put it, "It ain't over till it's over." It was Yogi's passing in late September that inspired this memo. [Since most of the references in this memo are to American sports, with their peculiarities and unique terminology, this is a good time for an apology to anyone who's unfamiliar with them.]

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Yogi Berra, Baseball Player

Lawrence "Yogi" Berra was a catcher on New York Yankees baseball teams for eighteen years, from 1946 to 1963. Although he was rarely number one in any offensive category, he often ranked among the top ten players in runs batted in, home runs, extra-base hits (doubles, triples and home runs), total bases gained and slugging percentage (total bases gained per at bat). He excelled even more on defense: in the 1950s he was regularly among the top three or four catchers in terms of putouts, assists, double plays turned, stolen bases allowed and base stealers thrown out.

Yogi was selected to play in the All-Star Game every year from 1948 through 1962. He was among the top three vote-getters for American League Most Valuable Player every year from 1950 through 1956, and he was chosen as MVP in three of those years. The Yankee teams on which he played won the American League pennant and thus represented the league in the World Series fourteen times, and they won the World Series ten times. He was an important part of one of the greatest dynasties in the history of sports.

To me, the thing that stands out most is Yogi's consistency. Not only did he perform well in so many different categories, but also:

- He led the American League in number of games played at the grueling catcher position eight years in a row.

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- He was regularly among the catchers with the fewest passed balls and errors committed.
- He had around 450-650 at bats most years, but over his entire career he averaged only 24 strikeouts per year, and there was never one in which he struck out more than 38 times. (In 1950 he did so only 12 times in nearly 600 at bats.) Thus, ten times between 1948 and 1959 he was among the ten players with the fewest strikeouts per plate appearance.

In short, Yogi rarely messed up.

Consistency and minimization of error are two of the attributes that characterized Yogi's career, and they can also be key assets for superior investors. They aren't the only ways for investors to excel: some great ones strike out a lot but hit home runs in bunches the way Reggie Jackson did. Reggie – nicknamed "Mr. October" because of his frequent heroics in the World Series – was one of the top home run hitters of all time. But he also holds the record for the most career strikeouts, and his ratio of strikeouts to home runs was four times Yogi's: 4.61 versus 1.16. **Consistency and minimization of error have always ranked high among my priorities and Oaktree's, and they still do.**

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Yogi Berra, Philosopher

Although Yogi was one of the all-time greats, his baseball achievements may be little-remembered by the current generation of fans, and few non-sports lovers are aware of them. He's probably far better known for the things he said:

- It's like déjà vu all over again.
- When you come to a fork in the road, take it.
- You can observe a lot by just watching.
- Always go to other people's funerals, otherwise they won't come to yours.
- I knew the record would stand until it was broken.
- The future ain't what it used to be.
- You wouldn't have won if we'd beaten you.
- I never said most of the things I said.

I've cited Yogi's statements in previous memos, and I borrowed the Yogi-ism at the top of the list above for the title of one in 2012. "Out of the mouths of babes," they say, comes great wisdom. The same was true for this uneducated baseball player, and many of Yogi's seeming illogicalities turn out to be profound upon more thorough examination.

"Baseball is ninety percent mental and the other half is physical." That was another of Yogi's dicta, and I think it's highly useful when thinking about investing. Ninety percent of the effort to outperform may consist of financial analysis, but you need to put another fifty percent into understanding human behavior. **The market is made up of people, and to beat it you have to know them as well as you do the thing you're considering investing in.**

I sometimes give a presentation called, "The Human Side of Investing." Its main message surrounds just that: while investing draws on knowledge of accounting, economics and finance, it also requires insight into psychology. Why? Because investors' objectivity and rationality rarely prevail as much as investment theory assumes, and emotion and "human nature" often take over instead. That's why my presentation is subtitled, **"In theory there's no difference between theory and practice. In practice there is."** Yogi said that, too, and I think it's absolutely wonderful.

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Things often fail to work the way investment theory says they should. Markets are supposed to be efficient, with no underpricings to find or overpricings to avoid, making it impossible to outperform. But exceptions arise all the time, and they're usually attributable more to human failings than to math mistakes or overlooked data.

And that leads me to one of the most thought-provoking Yogi-isms, concerning his choice of restaurant: "Nobody goes there anymore because it's too crowded." What could be more nonsensical? If nobody goes there, how can it be crowded? And if it's crowded, how can you say nobody goes there?

But as I wrote last month in "It's Not Easy," a lot of accepted investment wisdom makes similarly little sense. And perhaps the greatest – and most injurious – of all is the near-unanimous enthusiasm that's behind most bubbles.

"Everyone knows it's a great buy," they say. That, too, makes no sense. **If everyone believes it's a bargain, how can it not have been bought up by the crowd and had its price lifted to non-bargain status as a result?** You and I know the things all investors find desirable are unlikely to represent good investment opportunities. But aren't most bubbles driven by the belief that they do?

- In 1968, everyone knew the Nifty Fifty stocks of the best companies in America represented compelling value, even after their p/e ratios had reached 80 or 90. That belief kept them there . . . for a while.

- In 2000, everyone thought tech investing was infallible and tech stocks could only rise. And they were sure the Internet would change the world and the stocks of Internet companies were good buys at any price. That's what took the TMT boom to its zenith.

- And here in 2015, everyone knows social media companies will own the future. But will their valuations turn out to be warranted?

Logically speaking, the bargains that everyone has come to believe in can't still be bargains . . . but that doesn't stop people from falling in love with them nevertheless. Yogi was right in indirectly highlighting the illogicality of "common knowledge." **As long as people's reactions to things fail to be reasonable and measured, the spoils will go to those who are able to recognize this contradiction.**

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Looking for Lance Dunbar

There may be a few folks in America who, like the rest of the world's population, are unaware of the growing popularity of daily fantasy football. In this on-line game, contestants assemble imaginary football teams staffed by real professional players. When that week's actual football games are played, the participants receive "fantasy points" based on their players' real-world accomplishments, and the participants with the most points win cash prizes. (Why is it okay to engage in interstate betting on fantasy football but not on football itself? Because proponents were able to convince the authorities that the act of picking a team for fantasy football qualifies it as a game of skill, not chance. But last week, Nevada became the sixth state to ban daily fantasy sports, concluding that it's really nothing but gambling.) **The commercials for fantasy football say things like, "Sign up, make your picks, and collect your winnings." That sounds awfully easy . . . and not that different from discount brokers' ads during bull markets.**

In daily fantasy football, the challenge comes from the fact that the participants have a limited amount of money to spend and want to acquire the best possible team for it. **If all players were priced the same**

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regardless of their ability (a completely inefficient market), the prize would go to the participant who's most able to identify talented players. And if all players were priced precisely in line with their ability (a completely efficient market), it would be impossible to acquire a more talented team for the same budget, so winning would hinge on random developments.

The market for players in fantasy football appears to be less than completely efficient. Thus participants have the possibility of finding mispricings. A star may be overpriced, so that he produces few fantasy points per dollar spent on him. And a journeyman might be underpriced, able to produce more rushing (i.e., running) yards, catches, tackles or touchdowns than are reflected by his price. That's where the parallel to investing comes in.

Smart fantasy football participants understand that the goal isn't to acquire the best players, or players with the lowest absolute price tags, but players whose "salaries" understate their merit – those who are underpriced relative to their potential and might amass more points in the next game than the cost to draft them reflects**. Likewise, smart investors know the goal isn't to find the best companies, or stocks with the lowest absolute dollar prices or p/e ratios, but the ones whose potential isn't fully reflected in their price. In both of these competitive arenas, the prize goes to those who see value others miss.**

There's another similarity. Sports media employ "experts" to cover this imaginary football league, and it's their job to attract viewers and readers by offering advice on which players to draft. (What other talking heads does that remind you of?) My musings on fantasy football started in late September, when I heard a TV commentator urge that participants take a look at Lance Dunbar, a running back for the Dallas Cowboys, based on the belief that Dunbar's price might understate his potential to earn fantasy points. The commentator's thesis was that the Cowboys' star quarterback was injured and, because of the replacement quarterback's playing style, Dunbar might get more opportunities – and run up more yardage – than his price implied. Thus, Dunbar might represent an underappreciated investment opportunity.

Or not. Dunbar tore his anterior cruciate ligament in the next game, meaning he won't produce any more points – real or virtual – this season. It just proves that even if your judgment is sound, randomness has a lot of influence on outcomes. You never know which way the ball will bounce.

"Sign up, make your picks, and collect your winnings." If only everyone – fantasy football entrants and investors alike – understood it's not that easy.

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Are the Helpers Any Help?

In investing, there are a lot of people who'll offer to enhance your results . . . for a fee. In an allegorical treatment in Berkshire Hathaway's 2005 annual report, Warren Buffett called them "Helpers." There are helpers in sports, too, especially where there's betting. This memo gives me a chance to discuss an invaluable clipping on the subject that I collected nine months ago and have been looking for an occasion to mention.

The *New York Post*'s sports writers opine weekly as to which professional football games readers should bet on (real games, not fantasy). Each week, the *Post* reports on the results of the prognostications for the season to date. When they published the results last December 28, they might have thought they demonstrated the value of those helpers. But I think that tabulation – nearly at the end of the football season – showed something very different.

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By the time December 28 had rolled around, the eleven forecasters had tried to predict the winner of each of the 237 games that had been played to date, as well as what they thought were their 47 or so "best bets." By "the winner," I assume they meant the team that would win net of the bookies' "point spread." (Without doing something to even the odds, it would be too easy for bettors to win by backing the favorites. To make betting more of a challenge, the bookies establish a spread for each game: the number of points by which the favored team has to beat the underdog in order to be deemed the winner for betting purposes.) How often were the *Post*'s picks correct? Here's the answer:

Percentage correct	**Total picks (2,607 games)**	**Best bets (522 games)**
All forecasters	50.9%	49.4%
Median forecaster	50.6	47.9
Best forecaster	58.5	56.2
Worst forecaster	44.8	39.6

An incorrigible optimist – or perhaps the *Post* – might say these results show what a good job the forecasters did as a group, since some were right more often than they were wrong. But that's not the important thing. For me, the key conclusions are these:

- The average results certainly make it seem that picking football winners (net of the points spread) is just a 50/50 proposition. Evidently, the folks who establish the point spreads are pretty good at their job, so that it's hard to know which team will win.

- The symmetrical distribution of the results and the way they cluster around 50% tell me there isn't much skill in predicting football winners (or, if it exists, these pickers don't have it). The small deviations from 50% – both positive and negative – suggest that picking winning football teams for betting purposes may be little more than a matter of tossing a coin.

- Even the best forecasters weren't right much more than half the time. While I'm not a statistician, I doubt the fact that a few people were right on 56-58% of their picks rather than 50% proves it was skill rather than luck. Going back to the coin, if you flipped one 47 times (or even 237 times), you might occasionally get 58% heads.

- **Lastly, all eleven writers collectively – and seven of them individually – had worse results on the games they considered their "best bets" than on the rest of the games.** So clearly they aren't able to accurately assess the validity of their own forecasts.

And remember, these forecasts weren't made by members of the general populace, but rather by people who make their living following and writing about sports.

My favorite quotation on the subject of forecasts comes from John Kenneth Galbraith: "We have two classes of forecasters: Those who don't know – and those who don't know they don't know." Clearly these forecasters don't know. But do they know it? And do their readers?

The bottom line on picking football winners seems to be that the average forecaster is right half the time, with exceptions that are relatively few in number, insignificant in degree and possibly the result of luck. He might as well flip a coin. **And that brings us back to investing, since I find this analogous to the**

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observation that the average investor's return equals the market average. He, too, might as well flip a coin . . . or invest in an index fund.

And by the way, the average participant's average result – in both fields – is before transaction costs and fees. **After costs, the average investor's return is below that of the market. In that same vein, after costs the average football bettor doesn't break even.**

What costs? In sports betting, we're not talking about management fees or brokerage commissions, but "vigorish" or "the vig." Wikipedia says it's "also known as *juice*, the *cut* or the *take* . . . the amount charged by a bookmaker . . . for taking a bet from a gambler." This obscure term refers to the fact that to try to win $10 from a bookie, you have to put up $11. You're paid $10 if you win, but you're out $11 if you lose. N.b.: bookies and sports betting parlors aren't in business to provide a public service.

If you bet against a friend and win half the time, you end up even. But if you bet against a bookie or a betting parlor and win half the time, on average you lose 10% of the amount wagered on every other bet. So at $10 per game, a bettor following the *Post*'s football helpers through December 28, 2014 would have won $13,280 on the 1,328 correct picks but lost $14,069 on the 1,279 losers. Overall, he would have lost $789 even though slightly more than half the picks were right. **That's what happens when you play in a game where the costs are high and the edge is insufficient or non-existent.**

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Another Look at Performance Assessment

This memo gives me an opportunity to touch on another recent sporting event: Super Bowl XLIX, which was played last February. I'm returning to a subject I covered at length in the "What's Real?" section in "Pigweed" (February 2006), which was about the meltdown of a hedge fund called Amaranth. Among the ways I tried to parse the events surrounding Amaranth was through an analogy to the Rose Bowl game played at the end of the 2005 college football season to determine the national champion. In the game, the University of Texas beat the favored University of Southern California. While leading by five points with less than three minutes left to play, USC had a fourth down with two yards to go for a first down. They lost largely because – in something other than the obvious choice – the coach elected to go for it rather than punt the ball away, and they were stopped a yard short. UT got the ball and went on to score the winning touchdown. Before the game, USC had widely been considered one of the greatest teams in college football history. Afterwards there was no more talk along those lines. Its loss hinged on that one very controversial play . . . controversial primarily because it was unsuccessful. (Had USC made the two yards and earned a first down, they would have retained the ball and been able to run out the clock, sealing a victory.)

Something very similar happened in this year's Super Bowl. The Seattle Seahawks were trailing the New England Patriots by a few points. On second down, with just 26 seconds to go and one timeout remaining, the Seahawks had the ball on the Patriots' one-yard line. Everyone was sure they would try a run by Marshawn Lynch (who in the regular season had ranked first in the league in rushing touchdowns and fourth in rushing yards), and that he would score the winning touchdown. But the Seahawks' maverick coach, Pete Carroll – ironically, also the coach of USC's losing Rose Bowl team – tried a pass play instead. The Patriots intercepted the pass, and the Seahawks' dreams of a championship ended.

"What an idiot Carroll is," the fans screamed. "Everyone knows that when you throw a pass, only three things can happen (it's caught, it's dropped or it's intercepted) and two of them are bad." The Seahawks lost a game they seemed to be on the verge of winning, and Carroll was vilified for being too bold and wrong . . . again. **His decision was unsuccessful. But was it wrong?**

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With assistance from Warren Min in Oaktree's Real Estate Department, I want to point out some of the considerations that Carroll may have taken into account in making his decision:

- Up to that point in the season, more than 100 passes had been attempted from the one-yard line, and none of them had been intercepted. So Carroll undoubtedly expected that, at the very worst, the pass would be incomplete and the clock would stop (as it does after incomplete passes) with just a few seconds elapsed. That would have given the Seahawks time for one or two more plays.

- With only 26 seconds remaining and the Seahawks down to their last timeout, if they ran and Lynch was stopped, the clock would have kept running (as it does after rushing plays). Seattle would then have been forced to either use their precious timeout or try a hurried play.

- Malcolm Butler, the defender who intercepted Seattle's pass, was a rookie playing in the biggest game of his life, and he was undersized relative to Ricardo Lockette, the wide receiver to whom the pass was thrown.

- According to *The Boston Globe*, of Lynch's 281 carries during the 2014 regular season, 20 had resulted in lost yardage and two more had yielded fumbles. In other words, the Seahawks had experienced a setback 7.8% of the time when Lynch carried the ball. Further, Lynch had been handed the ball at the one-yard line five times in 2014, but he scored only once, for a success rate of 20%. Thus it was no sure thing that Lynch would be able to gain that needed yard against a defense expecting him to run.

To the first-level thinker, Carroll's decision to pass looks like a clear mistake. Maybe that's because great running backs seem so dependable, or because passing generally seems like an uncertain proposition. Or maybe it's just because the pass was picked off and the game lost: outcomes strongly bias perceptions.

The second-level thinker sees that the obvious call – to run – was far from sure to work, and that doing the less-than-obvious – passing – might put the element of surprise on the Seahawks' side and represent better clock management. Carroll made his decision and it was unsuccessful. But that doesn't prove he was wrong.

Here's what my colleague Warren wrote me:

> The media and "talking heads" completely buried the decision to throw because of one data point: the pass was intercepted and the Seahawks lost the game. But I don't believe this was a bad decision. In fact, I think this was a very well-informed decision that more people possessing all the data might have made given ample time to analyze the situation.
>
> As you always say, you can't judge the quality of a decision based on results. If we somehow were able to replay this game in alternative realities to test the results, I think the Seahawks' decision wouldn't look so bad. But they certainly lost, perhaps because of bad luck. Now, similar to the USC/Texas situation, the media has written some very significant storylines regarding legacies:
>
> - The Patriots secured "dynasty" status by winning four Super Bowls since 2001.
> - Tom Brady, the Patriots' quarterback, is hailed as one of the greatest of all time.
> - The Seahawks' defense, which was talked about as being "the greatest ever," is lauded no more (despite the fact that it wasn't defense that lost the game).

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But should this one victory – which swung on a single play – really place the Patriots and Tom Brady among the greatest? And was Carroll actually wrong? All of this goes back to one of my favorite themes from *Fooled by Randomness* by Nassim Nicholas Taleb, for me the bible on how to understand performance in an uncertain world.

In his book, Taleb talks about "alternative histories," which I describe as "the other things that reasonably could have happened but didn't." Sure, the Seahawks lost the game. But they could have won, and Carroll's decision would have made the difference in that case, too, making him the hero instead of the goat. **So rather than judge a decision solely on the basis of the outcome, you have to consider (a) the quality of the process that led to the decision, (b) the *a priori* probability that the decision would work (which is very different from the question of whether it did work), (c) the other decisions that could have been made, (d) all of the events that reasonably could have unfolded, and thus (e) which of the decisions had the highest probability of success.**

Here's the bottom line:

- There are many subtle but logical reasons for arguing that Coach Carroll's decision made sense.
- The decision would have been considered a stroke of genius if it had been successful.
- Especially because of the role of luck, the correctness of a decision cannot necessarily be judged from the outcome.
- You clearly cannot assess someone's competence on the basis of a single trial.

What all the above really illustrates is the difference between superficial observation and deep, nuanced analysis. **The fact that something worked doesn't mean it was the result of a correct decision, and the fact that something failed doesn't mean the decision was wrong. This is at least as true in investing as it is in sports.**

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The Victor's Mindset

It often seems that just as I'm completing a memo, a final inspiration pops up. This past weekend, the *Financial Times* carried an interesting interview with Novak Djokovic, the number one tennis player in the world today. What caught my eye was what he said about the winner's mental state:

> I believe that half of any victory in a tennis match is in place before you step on the court. **If you don't have that self-belief, then fear takes over.** And then it will get too much for you to handle. It's a fine line. (Emphasis added)

Djokovic's statement reminded me of a conversation I had earlier this month, on a subject I've written about rarely if ever: self-confidence. It ranks high among the attributes that must be present if one is to achieve superior results.

To be above average, an athlete has to separate from the pack. To win at high-level tennis, a player has to hit "winners" – shots his opponents can't return. They're hit so hard, so close to the lines or so low over the net that they have the potential to end up as "unforced errors." In the absence of skill, they're unlikely to be executed successfully, meaning it's unwise to try them. But people who possess the requisite skill are right in attempting them in order to "play the winner's game" (see "What's Your Game Plan").

These may be analogous to investment actions that Yale's David Swensen would describe as "uncomfortably idiosyncratic." The truth is, most great investments begin in discomfort – or, perhaps

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better said, they involve doing things with which most people are uncomfortable. To achieve great performance you have to believe in value that isn't apparent to everyone else (or else it would already be reflected in the price); buy things that others think are risky and uncertain; and buy them in amounts large enough that if they don't work out they can lead to embarrassment. What are examples of actions that require self-confidence?

- Buying something at $50 and continuing to hold it – or maybe even buying more – when the price falls to $25 and "the market" is telling you you're wrong.
- After you've bought something at $50 (thinking it's worth $200), refusing to "prudently take some chips off the table" when it gets to $100.
- Going against conventional wisdom and daring to "catch a falling knife" when a company defaults and the price of its debt plummets.
- Buying much more of something you like than it represents in the index you're measured against, or entirely excluding an index component you dislike.

In each of these cases, the first-level thinker does that which is conventional and easy – and which doesn't require much self-confidence. The second-level thinker views things differently and, as a consequence, is willing to take actions like those described above. **But they're unlikely to be done in the absence of conviction.** The great investors I know are confident second-level thinkers and entirely comfortable diverging from the herd.

It's great for investors to have self-confidence, and it's great that it permits them to behave boldly, **but only when that self-confidence is warranted. This final qualification means that investors must engage in brutally candid self-assessment.** Hubris or over-confidence is far more dangerous than a shortage of confidence and a resultant unwillingness to act boldly. That must be what Mark Twain had in mind when he said, "It ain't what you don't know that gets you into trouble. It's what you know for sure that just ain't so." **And it also has to be what Novak Djokovic meant when he said, "It's a fine line."**

So there you have some of the key lessons from sports:

- For most participants, success is likely to lie more dependably in discipline, consistency and minimization of error, rather than in bold strokes – high batting average and an absence of strikeouts, not the occasional, sensational home run.
- But in order to be superior, a player has to do something different from others and has to have an appropriate level of confidence that he can succeed at it. Without conviction he won't be able to act boldly and survive bouts of uncertainty and the inevitable slump.
- Because of the significant role played by randomness, a small sample of results is far from sure to be indicative of talent or decision-making ability.
- The goal for bettors is to see value in assets that others haven't yet recognized and that isn't reflected in prices.
- At first glance it seems effort and "common sense" will lead to success, but these often prove to be unavailing.
- In particular, it turns out that most people can't see future outcomes much better than anyone else, but few are aware of this limitation.
- Before a would-be participant enters any game, he should assess his chances of winning and whether they justify the price to play.

These lessons can serve investors very well.

October 22, 2015

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Memo to: Oaktree Clients

From: Howard Marks

Re: It's Not Easy

In 2011, as I was putting the finishing touches on my book *The Most Important Thing*, I was fortunate to have one of my occasional lunches with Charlie Munger. As it ended and I got up to go, he said something about investing that I keep going back to: **"It's not supposed to be easy. Anyone who finds it easy is stupid."**

As usual, Charlie packed a great deal of wisdom into just a few words. Let's take the first six: "It's not supposed to be easy." While it's pretty simple to achieve average results, it shouldn't be easy to make superior investments and earn outsized returns. John Kenneth Galbraith said something similar years ago:

> There is nothing reliable to be learned about making money. If there were, study would be intense and everyone with a positive IQ would be rich.

What Charlie and Professor Galbraith meant is this: Everyone wants to make money, and especially to find the sure thing or "silver bullet" that will allow them to do it without commensurate risk. Thus they work hard (actually, study *is* intense), searching for bargain securities and approaches that will give them an edge. They buy up the bargains and apply the approaches. The result is that the efforts of these market participants tend to drive out opportunities for easy money. Securities become more fairly priced, and free lunches become harder to find. **It makes no sense to think it would be otherwise.**

And what about the next seven words: "Anyone who finds it easy is stupid"? It follows from the above that given how hard investors work to find special opportunities, and that their buying eliminates such prospects, **people who think it can be easy overlook substantial nuance and complexity.**

Markets are meeting places where people come together (not necessarily physically) to exchange one thing (usually money) for another. Markets have a number of functions, one of which is to eliminate opportunities for excess returns.

Ed calls me and bids $10,000 for my car. Then he offers to sell it to Bob for $20,000. If Ed's lucky and we both say yes, he doubles his money overnight. To put it simply, anyone who expects to make money easily trading cars this way either thinks (a) Bob and I are idiots or (b) the market won't function in a way that enables us to know about the fair value of my car. If these conditions were met, it would be an "inefficient market."

But if Bob and I have access to market data on used car pricing, Ed's chances of pulling off this deal are greatly reduced. **In most markets, transparency tends to reveal and thus preclude obvious mispricings.** (Thanks to the incredible gains in access to data by way of the Internet, this is certainly more true today than ever before.) **In my view, this is a good part of the basis for Charlie's comment: anyone who thinks it's easy to achieve unusual profits is overlooking the way markets operate. This memo is largely about the challenges they present.**

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Second-Level Thinking

I always thought that when I retired, I would write a book pulling together the elements of investment philosophy discussed in my memos. But in 2009, I got an email from Warren Buffett saying that if I'd write a book, he'd give me a blurb for the jacket. It didn't take me long to move up my timing.

Columbia Business School Publishing had been talking to me about a book, and when I told them I was ready, they asked to see a sample chapter. For some reason, I was able to sit down – without previously having given the topic any organized thought – and knock out a chapter about the importance of something I labeled "second-level thinking." This is a crucial subject that has to be understood by everyone who aspires to be a superior investor. And yet I've never covered it explicitly for the readers of my memos. I want to correct that now.

In what ended up being the book's first chapter, I introduced the subject as follows:

> Remember your goal in investing isn't to earn average returns; you want to do better than average. Thus your thinking has to be better than that of others – both more powerful and at a higher level. Since others may be smart, well-informed and highly computerized, you must find an edge they don't have. You must think of something they haven't thought of, see things they miss, or bring insight they don't possess. You have to react differently and behave differently. In short, being right may be a necessary condition for investment success, but it won't be sufficient. You must be more right than others . . . which by definition means your thinking has to be different. . . .
>
> For your performance to diverge from the norm, your expectations – and thus your portfolio – have to diverge from the norm, and you have to be more right than the consensus. Different and better: that's a pretty good description of second-level thinking.

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Second-level thinking is what immediately pops into my mind when I think about Charlie's observation. And it's a good general heading under which to discuss the great many things that make superior investing a challenge. **In short, to borrow from Charlie, anyone who thinks it's easy must be a first-level thinker**. Let me use some simple examples from the book to illustrate the difference.

- First-level thinking says, "It's a good company; let's buy the stock." Second-level thinking says, "It's a good company, but everyone thinks it's a great company, and it's not. So the stock's overrated and overpriced; let's sell."

- First-level thinking says, "The outlook calls for low growth and rising inflation. Let's dump our stocks." Second-level thinking says, "The outlook stinks, but everyone else is selling in panic. Buy!"

- First-level thinking says, "I think the company's earnings will fall; sell." Second-level thinking says, "I think the company's earnings will fall far less than people expect, and the pleasant surprise will lift the stock; buy."

First-level thinking is simplistic and superficial, and just about everyone can do it (a bad sign for anything involving an attempt at superiority). All the first-level thinker needs is an opinion about the future, as in, "The outlook for the company is favorable, meaning the stock will go up."

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Second-level thinking is deep, complex and convoluted. The second-level thinker takes many things into account:

- What is the range of likely future outcomes?
- Which outcome do I think will occur?
- What's the probability I'm right?
- What does the consensus think?
- How does my expectation differ from the consensus?
- How does the current price for the asset comport with the consensus view of the future, and with mine?
- Is the consensus psychology that's incorporated in the price too bullish or bearish?
- What will happen to the asset's price if the consensus turns out to be right, and what if I'm right?

The bottom line is that first-level thinkers see what's on the surface, react to it simplistically, and buy or sell on the basis of their reactions. **They don't understand their setting as a marketplace where asset prices reflect and depend on the expectations of the participants. They ignore the part that others play in how prices change. And they fail to understand the implications of all this for the route to success.**

For example, when I lived in Los Angeles, a stockbroker often spoke on the radio station I listened to while driving to work. His advice was simple: "If there's a company whose product you like, buy the stock." That's first-level thinking. How seductively easy. But also how error-prone, in that it ignores the possibility that a company with a good product can have a bad business; the good product can become obsolete; or the stock can be priced too high to be a good investment.

On the other hand, second-level thinkers double-think (and triple-think) every angle of every situation. A good example can be seen in the hypothetical newspaper contest John Maynard Keynes wrote about in 1936. Readers would be shown 100 photos and asked to choose the six prettiest girls, with prizes going to the readers who chose the girls readers voted for most often. Naive entrants would try to win by picking the prettiest girls. **But note that the contest would reward the readers who chose not the prettiest girls, but the most popular.** Thus the road to winning would lie not in figuring out which were the prettiest, but in predicting which girls the average entrant would consider prettiest. Clearly, to do so, the winner would have to be a second-level thinker. (The first-level thinker wouldn't even recognize the difference.)

Wikipedia points out that one vying to win the contest might go beyond this distinction:

> This can be carried one step further to take into account the fact that other entrants would each have their own opinion of what public perceptions are. Thus the strategy can be extended to the next order and the next and so on, at each level attempting to predict the eventual outcome of the process based on the reasoning of other agents.
>
> "It is not a case of choosing those [faces] that, to the best of one's judgment, are really the prettiest, nor even those that average opinion genuinely thinks the prettiest. We have reached the third degree where we devote our intelligences to anticipating what average opinion expects the average opinion to be. And there are some, I believe, who practice the fourth, fifth and higher degrees." (Keynes, *The General Theory of Employment, Interest and Money*, 1936).

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Keynes created his contest to make a point about the stock market. In the short run, beating the market requires the ability to predict which stocks will win the popularity contest among investors. Higher-level thinkers who recognize this dynamic have a head start toward earning the greatest gains. Ben Graham applied the same thinking when he described the market as a "voting machine" in the short run (although he made plain his belief that it's a "weighing machine" in the long run).

The first-level thinker simply looks for the highest-quality company, the best product, the fastest earnings growth or the lowest p/e ratio. He's ignorant of the very existence of a second level at which to think, and of the need to pursue it.

The second-level thinker goes through a much more complex process when thinking about buying an asset. Is it good? Do others think it's as good as I think it is? Is it really as good as I think it is? Is it as good as others think it is? Is it as good as others think others think it is? How will it change? How do others think it will change? How is it priced given: its current condition; how I think its condition will change; how others think it will change; and how others think others think it will change? And that's just the beginning. No, this isn't easy.

(Please note that the above discussion is entirely on the subject of short-term investing, and I go through it only to provide a graphic illustration of the difference between first-level and second-level thinking. Oaktree and I aren't focused on short-term results, and the thinking we apply to long-run considerations is quite different. We think much less about what others will make popular in the short run; instead, we rely on the eventual functioning of the weighing machine. The highest priority – by far – should be an objective evaluation of fundamentals. Market participants can get so caught up in predicting other participants' behavior that they ignore value and fail to buy bargains out of fear that the assets in question will remain unpopular or become more so. This creates great opportunities for those investors whose willingness to think independently and endure the short-term pain that comes with temporary unpopularity enables them to purchase attractive investments from the bargain counter.)

What Keynes's hypothetical contest shows most clearly is that the route to success in the competitive arena may not be what it seems at first glance. When the goal is to lift the greatest weight, achieve the lowest score on the golf course, get the highest grade on a math test or finish a crossword puzzle in the shortest time, the competition is against oneself and the objective challenge at hand. But when the goal, as it is in investing, is to outdo other people in a largely mental pursuit involving a lot of psychology – while they're trying to do the same to you – the challenge is much more complex.

The investor's basic goal of buying desirable assets at fair prices is sensible and straightforward. But the deeper you look, the more you see how many aspects of successful investing are counterintuitive and how much of what seems obvious is wrong. There's a lot more that matters, of course, but these realizations are key.

<u>The Things Everyone Likes</u>

The most outstanding characteristic of first-level thinkers – and of the investing herd – is that they like things with obvious appeal. These are the things that are easy to understand and easy to buy. But that's unlikely to be the path to investment success. Here's how I put it in "Everyone Knows" (April 2007):

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What's clear to the broad consensus of investors is almost always wrong.

First, most people don't understand the process through which something comes to have outstanding moneymaking potential. And second, the very coalescing of popular opinion behind an investment tends to eliminate its profit potential.

Take, for example, the investment that "everyone" believes to be a great idea. In my view by definition it simply cannot be so.

- If everyone likes it, it's probably because it has been doing well. Most people seem to think outstanding performance to date presages outstanding future performance. Actually, it's more likely that outstanding performance to date has borrowed from the future and thus presages sub-par performance from here on out.

- If everyone likes it, it's likely the price has risen to reflect a level of adulation from which relatively little further appreciation is likely. (Sure it's possible for something to move from "overvalued" to "more overvalued," but I wouldn't want to count on it happening.)

- If everyone likes it, it's likely the area has been mined too thoroughly – and has seen too much capital flow in – for many bargains to remain.

- If everyone likes it, there's significant risk that prices will fall if the crowd changes its collective mind and moves for the exit.

Superior investors know – and buy – when the price of something is lower than it should be. And the price of an investment can be lower than it should be only when most people don't see its merit. Yogi Berra is famous for having said, "Nobody goes to that restaurant anymore; it's too crowded." It's just as nonsensical to say, "Everyone realizes that investment's a bargain." If everyone realizes it, they'll have bought, in which case the price will no longer be low.

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So the things with the most obvious merit become the things that everyone likes. They're also likely to be the things that are most hotly pursued and most highly priced, and thus least promising and most treacherous. What are some examples?

When I first showed up for work in First National City Bank's investment research department in 1968, the bank was investing heavily in the "Nifty Fifty": the stocks of America's best, fastest growing companies. Since these were companies where nothing could go wrong, the official dictum said it didn't matter much what price you paid. It didn't seem unreasonable to pay p/e ratios of 80 or 90 given these companies' growth rates.

But it turned out that the price you pay does matter, and 80-90 times earnings had been too high. Thus, when the market ran into trouble in the early 1970s, many of these stocks lost the vast majority of their value, and investors learned the hard way that it's possible to like a good thing too much. Unsurprisingly, it also turned out that predictions of a flawless future can be wrong, as once-dominant companies such as Kodak, Polaroid and Xerox eventually went bankrupt or required turnarounds.

Roughly ten years ago, everyone was gaga over real estate, especially residential. This was underpinned by some bits of "accepted wisdom" that seemed compelling, such as "you can always live in it," "home

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prices always go up" and "real estate is a hedge against inflation." Conservative debt investors (rather than buyers of homes themselves) were persuaded to buy levered and tranched mortgage-backed securities by the fact that "there has never been a nationwide wave of mortgage defaults."

But in 2007 it turned out that home prices can go down as well as up, and mortgage loans extended casually based on their flawless record can have flaws. Homes and mortgages, bought when everyone liked them, turned out to be terrible investments.

The fact is, painful bubbles can't come into existence if there isn't an underlying grain of truth. The Nifty Fifty *were* generally terrific companies. Home prices *do* tend to rise over time and offset inflation. Mortgages generally *are* repaid or carry adequate collateral. The Internet *would* change the world. Oil at $147/barrel *was* indispensable and in short supply. But in each case the merits were too obvious; the investment ideas became too popular; and asset prices consequently became dangerously high.

Following the trends that are popular at a point in time certainly isn't a formula for investment success, since popularity is likely to lead investors on a path that is comfortable but pointed in the wrong direction. Here's more from "Everyone Knows":

> The fact is, there is no dependable sign pointing to the next big moneymaker: a good idea at a too-low price. Most people simply don't know how to find it. . . .
>
> Large amounts of money (and by that I mean unusual returns, or unusual risk-adjusted returns) aren't made by buying what everybody likes. They're made by buying what everybody underestimates.
>
> In short, there are two primary elements in superior investing:
>
> - seeing some quality that others don't see or appreciate (and that isn't reflected in the price), and
> - having it turn out to be true (or at least accepted by the market).
>
> **It should be clear from the first element that the process has to begin with investors who are unusually perceptive, unconventional, iconoclastic or early. That's why successful investors are said to spend a lot of their time being lonely.**

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Risk and Counterintuitiveness

If what's obvious and what everyone knows is usually wrong, then what's right? The answer comes from inverting the concept of obvious appeal. The truth is, the best buys are usually found in the things most people don't understand or believe in. These might be securities, investment approaches or investing concepts, but the fact that something isn't widely accepted usually serves as a green light to those who're perceptive (and contrary) enough to see it. A great example can be found in the area of risk (again from "Everyone Knows"):

> **"I wouldn't buy that at any price – everyone knows it's too risky."** That's something I've heard a lot in my life, and it has given rise to the best investment opportunities I've participated in. In fact, to an extent, it has provided the foundation for my career. In the 1970s and 1980s, insistence on avoiding non-investment grade bonds kept them out of most institutional portfolios and therefore cheap. Ditto for the debt of bankrupt companies: what could be riskier?

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The truth is, the herd is wrong about risk at least as often as it is about return. A broad consensus that something's too hot to handle is almost always wrong. Usually it's the opposite that's true.

I'm firmly convinced that investment risk resides most where it is least perceived, and vice versa:

- When everyone believes something is risky, their unwillingness to buy usually reduces its price to the point where it's not risky at all. Broadly negative opinion can make it the least risky thing, since all optimism has been driven out of its price.

- And, of course, as demonstrated by the experience of Nifty Fifty investors, when everyone believes something embodies no risk, they usually bid it up to the point where it's enormously risky. No risk is feared, and thus no reward for risk bearing – no "risk premium" – is demanded or provided. That can make the thing that's most esteemed the riskiest.

This paradox exists because most investors think quality, as opposed to price, is the determinant of whether something's risky. But high-quality assets can be risky, and low-quality assets can be safe. It's just a matter of the price paid for them.

For me, it follows from the above that the bottom line is simple: **the riskiest thing in the world is the widespread belief that there's no risk**. That's what most people believed in 2006-07, and that belief abetted the careless behavior that brought on the Great Financial Crisis. Only an understanding that risk was high could have discouraged that behavior and rendered the world safe.

I call this "the perversity of risk." For most people it's hard to grasp that a perception of safety brings on risk, and a perception of risk can lead to safety. But it's clear for the deeper second-level thinker. This is just another example of the fact that what "everyone knows" is what shapes the environment, bringing high prices when things are perceived to be good, and vice versa.

A perception that fundamental risk is low and the future is positive causes investors to be optimistic. This, in turn, causes asset prices to rise, and thus investment risk to be high. **The problem that befalls most people – the first-level thinkers – is that they fail to distinguish between fundamental risk and investment risk.**

What has to be remembered is the defining role of price. Regardless of whether the fundamental outlook is positive or negative, the level of investment risk is determined largely by the relationship between the price of an asset and its intrinsic value. There is no asset so good that it can't become overpriced and thus risky, and few so bad that there's no price at which they're a buy (and safe). **This is one of the greatest examples of counterintuitiveness. Only those who are able to see its logic can hope to be superior investors.**

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What Else?

I've covered a few of the most important topics under the headings of complexity and counter-intuitiveness:

- the importance of second-level thinking,
- the lack of identity between "good company" and "good investment,"
- the unhelpfulness of the things everyone knows, and
- the perversity of risk.

I see, however, that I've already filled seven pages. So rather than continue to provide a full treatment of all the topics I want to cover, let's conduct an exercise. I'll list below a number of elements of time-honored investment wisdom. See if you can tell which are helpful and which aren't:

- The market is "efficient," meaning asset prices reflect all available information and thus provide accurate estimates of intrinsic value.
- Because people are risk-averse, risky deals are discouraged and the market awards appropriate risk premiums as compensation for incremental risk.
- Risky investments produce high returns.
- Adding risky assets to a portfolio makes it riskier.
- It's desirable that everything in a well-diversified portfolio performs well.
- Understanding the science of economics will enable you to safely harness the macro future.
- Sometimes the outlook is clear, and sometimes it's complicated and unpredictable. You have to be careful when it's the latter.
- Correct forecasts lead to investment gains.
- A forecast has to be correct in order to be profitable.
- The earning of a profit proves the investor made a good decision.
- A low price makes for an attractive investment.
- Assets that are appreciating deserve your attention.
- Contrarianism will bring consistent success.
- It's important to do what feels right.
- Assets with greater liquidity are safer.
- The level of risk in a portfolio can be kept low by applying a simple formulaic process.

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My answer is that all sixteen reflect potential misconceptions, and they have to be (a) understood at the second level, not the first, and (b) dismissed as always holding the keys to success. Here's why:

- **The market is "efficient," meaning asset prices reflect all available information and thus provide accurate estimates of intrinsic value** – The efficient market hypothesis assumes people are rational and objective. But since emotion so often rules in place of reason, the market doesn't necessarily reflect what's true, but rather what investors think is true. Thus prices can range all over the place. Sometimes they're fair, but sometimes they're way too high or low. It's a big mistake to impute rationality to the market and believe its message.

- **Because people are risk-averse, risky deals are discouraged and the market awards appropriate risk premiums as compensation for incremental risk** – The truth is that investors' risk-averseness fluctuates between too much and too little. When it's the latter, skepticism and conservatism dry up, due diligence is inadequate, risky deals are easy to pull off, and

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compensation for risk bearing usually turns out to be insufficient. **Investors absolutely cannot depend on the market to discipline itself.**

- **Risky investments produce high returns** – This is one of the greatest of the old saws, and one of the wrongest.

    - A collection of low-risk investments can produce a high return if the low-risk character of the components permits them to perform dependably and keeps there from being any big losers to pull down the overall result. An absence of losses can give you a great start toward a good outcome. **This is the cornerstone of Oaktree's investment philosophy.**

    - On the other hand, high-risk investments can't be counted on for high returns. If they could, they wouldn't be high-risk. High-risk investments can fail to provide the high returns they seemed to promise if the analysis underlying them proves to have been ill-founded or if they run into negative developments.

The presumed positive relationship between risk and return is predicated on the assumption that there's no such thing as investment skill and value-adding decision making. If markets are efficient and there's no skill, it's reasonable to believe that higher returns can be attained only through the bearing of increased risk. **But if outstanding skill is present, there's no reason to think it can't be used to create portfolios with low risk *and* high return potential.**

- **Adding risky assets to a portfolio makes it riskier** – One of Nobel prize-winner William Sharpe's greatest contributions to investment theory came in the realization that if a portfolio holds only low-risk assets, the addition of a risky asset can make it safer. This happens because doing so increases the portfolio's diversification and reduces the correlation among its components, reducing its vulnerability to a single negative development.

- **It's desirable that everything in a well-diversified portfolio performs well** – The truth is, if all the holdings were to perform well in one scenario, they could all perform poorly in another. That means the benefits of diversification wouldn't be enjoyed. It shouldn't be surprising – or totally disappointing – to have some laggards in a portfolio that's truly well-diversified.

- **Understanding the science of economics will enable you to safely harness the macro future** – There are no immutable rules in play. "In economics and investments, because of the key role played by human nature, you just can't say for sure that 'if A, then B,' as you can in real science. The weakness of the connection between cause and effect makes outcomes uncertain. In other words, it introduces risk." ("Risk Revisited," September 2014).

- **Sometimes the outlook is clear, and sometimes it's complicated and unpredictable. You have to be careful when it's the latter** – The truth is, the future is never worry-free. Sometimes it seems to be, because no risks are apparent. But the skies are never as clear as they seem at their clearest. **Which is more treacherous: when everyone understands that the future presents risks, or when they believe it to be knowable and benign? As I mentioned earlier, I worry about the latter much more than the former.**

- **Correct forecasts lead to investment gains** – The easiest way to have a correct forecast is to extrapolate a trend and see it continue as expected. Most forecasters do a lot of extrapolating, meaning their forecasts are usually broadly shared. Thus when the trend does continue, everyone's right. But since everyone held the same view, the continuing trend was probably

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discounted in advance in the price of the asset, and the fact that it rolls on as expected doesn't necessarily produce profit. For a forecast to be highly profitable, it has to be idiosyncratic. But, given how often trends continue, idiosyncratic forecasts aren't often right.

- **A forecast has to be correct in order to be profitable** – Just as correct forecasts aren't necessarily profitable, profitable forecasts don't have to be correct. A forecast – even if it's not correct – can be profitable if it's merely less wrong than others. If a trend that everyone else extrapolates turns out not to continue, a prediction of the deviation can be very profitable . . . even if it's not exactly on target.

- **The earning of a profit proves the investor made a good decision** – One of the first things I learned at Wharton was that you can't necessarily tell the quality of a decision from the outcome. Given the unpredictability of future events and, especially, the presence of randomness in the world, a lot of well-reasoned decisions produce losses, and plenty of poor decisions are profitable. Thus one good year or a few big winners may tell us nothing about an investor's skill. We have to see a lot of outcomes and a long history – and especially a history that includes some tough years – before we can say whether an investor has skill or not.

- **A low price makes for an attractive investment** – I talked at the bottom of page seven about the importance of price in determining whether an investment is risky. But if you reread the part in bold, you'll see it doesn't say a low price is the essential element. An asset may have a low absolute dollar price, a low price compared to the past, or a low p/e ratio, but usually the price has to be low relative to the asset's intrinsic value for the investment to be attractive and for the risk to be low. **It's easy for investors to get into trouble if they fail to understand the difference between cheapness and value.**

- **Assets that are appreciating deserve your attention** – Most people impute intelligence to the market, and thus they think rising prices signal fundamental merit. They may be attracted to "momentum investing," which is based on the belief that something that has been appreciating is likely to continue doing so. But the truth is, the higher the price (everything else being equal), the less attractive an asset is. Momentum investing works until it stops, at which time the things that have been doing worst – and may be most undervalued – take over market leadership.

- **Contrarianism will bring consistent success** – It's true that the investing herd is often wrong. In particular, it behaves more aggressively the more prices rise, and more cautiously the more they fall – the opposite of what should happen. But doing the opposite of what the crowd does isn't a sure thing either. Much of the time there isn't anything dramatic to either do or avoid. Contrarianism is most effective at the extremes, and then only for those who understand what the herd is doing and why it's wrong. And they still have to summon the nerve to do the opposite.

- **It's important to do what feels right** – The best investors know intellectually what the right thing to do is. But while this knowledge gives them comfort, they have to tamp down their feelings in order to follow it. The best ideas are ones others haven't tumbled to, and as I wrote in "Dare to Be Great," "Non-consensus ideas have to be lonely. By definition, non-consensus ideas that are popular, widely held or intuitively obvious are an oxymoron. . . . **Most great investments begin in discomfort." Good investors are subjected to the same misleading influences and emotions as everyone else. They're just more capable of keeping them under control.**

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- **Assets with greater liquidity are safer** – Greater liquidity generally means you can get out of an asset easier and closer to the price of the last trade. But first, liquidity can dry up when other investors change their mind about the asset. And second, the theoretical ability to get out when you want says nothing about fundamental safety and relatively little about investment safety in the long run. It's much safer to be in well-analyzed assets with good fundamentals and attractive prices, in which case you can hold for a long time without needing to exit. The best defense against a lack of liquidity is arranging your affairs so there's little need for it.

- **The level of risk in a portfolio can be kept low by applying a simple formulaic process** – Rather, risk comes in many forms and they can be overlapping, contrasting and hard to manage. For example, as I said in "Risk Revisited," efforts to reduce the risk of losing money invariably increase the risk of missing out on gains, and efforts to reduce fundamental risk by buying higher-quality assets often increase valuation risk, given that higher-quality assets often sell at elevated valuation metrics.

What does the above consist of? It's a collection of time-honored bromides that range from (a) only effective part of the time to (b) just plain wrong. These investment myths are pervasive but of little help. That fact leaves the investor to struggle in a complex, challenging environment.

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Recent Experience

The recent volatility in the world's markets, the S&P 500's 11% drop between August 17 and 25, and the decline of nearly 40% in Chinese equities have given investors an opportunity to experience something else that's not easy: portfolio management under adverse conditions. A few lessons are worth noting, none of which are always easy to employ:

- Emotion is one of the investor's greatest enemies. Fear makes it hard to remain optimistic about holdings whose prices are plummeting, just as envy makes it hard to refrain from buying the appreciating assets that everyone else is enjoying owning. As I mentioned just above, everyone is buffeted by the same influences and emotions. **Superior investors may not be insulated, but they manage to act as if they are.**

- Confidence is one of the key emotions, and I attribute a lot of the market's recent volatility to a swing from too much of it a short while ago to too little more recently. **The swing may have resulted from disillusionment: it's particularly painful when investors recognize that they know far less than they had thought about how the world works.** In this case, when China's growth slowed, its currency depreciated and its market corrected, I think a lot of investors realized they don't know what the implications of these things are for the economies of the U.S. and the world. It's important to remain moderate as to confidence, but instead it's usually the case that confidence – like other emotions – swings radically.

- Especially during downdrafts, many investors impute intelligence to the market and look to it to tell them what's going on and what to do about it. **This is one of the biggest mistakes you can make. As Ben Graham pointed out, the day-to-day market isn't a fundamental analyst; it's a barometer of investor sentiment. You just can't take it too seriously.** Market participants have limited insight into what's really happening in terms of fundamentals, and any intelligence that could be behind their buys and sells is obscured by their emotional swings. It would be wrong to interpret the recent worldwide drop as meaning the market "knows" tough times lay ahead. Rather, China came out with some negative news and people panicked, especially

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Chinese investors who had bought stocks on margin and perhaps were experiencing their first serious market correction. Their selling prompted investors in the U.S. and elsewhere to sell also, believing that the market decline in China signaled serious implications for the Chinese economy and others. **The analysis of fundamentals and valuation should dictate an investor's behavior, not the actions of others. If you let the investing herd – which determines market movements – tell you what to do, how can you expect to outperform?**

- While China was the "proximate cause" of the volatility, other things often contribute, and last month was no exception. The word that always comes to mind for me is "confluence." **Investors can usually keep their heads in the face of one negative. But when they face more than one simultaneously, they often lose their cool.** One additional negative last month was the glitch in Bank of New York Mellon's SunGard software, and the bank's consequent inability to price 1,200 mutual funds and ETFs that it administers. It was another dose of disillusionment: no one enjoys learning that the market mechanisms they need to work can't be depended on.

- In good times – perhaps emulating Warren Buffett – investors talk about how much they'd like to see the stocks they own decline in price, since it would allow them to add to positions at lower levels. **But when prices collapse, the chance to average down is usually a lot less welcome . . . and a lot harder to act on.**

- Investors can be tempted to sell during corrections like this one. Oftentimes emotional behavior is cloaked in intelligent-sounding rationalizations like "it's important to sell down to your comfort level." But the valid reasons to sell are principally because you feel fundamentals have deteriorated or because the price has risen enough. **Selling to get more comfortable as prices fall (just like buying for that purpose in a rising market) has nothing to do with the relationship between price and value.**

- Another reason to sell, of course, is fear that the slide will continue. But if you're tempted to do so, ask yourself first whether you think the stock market is going to rise or fall tomorrow, and second how much you'd bet on it. If you can tackle those decisions in your head rather than your gut, you'll probably admit you have no idea what's going to happen in the short term.

- Regardless of the outlook for fundamentals or the relationship between price and value, many people sell in a downdraft because, well, you have to do something, and they feel it's unreasonably passive to just sit there. **But something about which I feel strongly is that it's not the things you buy and sell that make you money; it's the things you hold.** Of course you have to buy things in order to hold them. But my point is that transactions merely adjust what you own, and engaging in them doesn't necessarily increase potential profit. Sticking with what you own may be enough – although it may not be easy in tough times.

- In my memo on liquidity in March, I borrowed an idea from my son Andrew: If you look longingly at the chart for a stock that has risen for twenty years, think about how many days there were when you would've had to talk yourself out of selling. That's not always easy. Two of the main reasons people sell stocks are because they go up and because they go down. When they go up, people who hold them become afraid that if they don't sell, they'll give back their profit, kick themselves, and be second-guessed by their bosses and clients. And when they go down, they worry that they'll fall further.

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There may be absolutely no intellectual justification for that feeling. If you liked it a month ago at $80, should you sell it now just because it's at $60? **The best way to get through a downdraft is to verify your thesis, tighten your seatbelt and hang on. If you sell just because there's a downdraft (or an updraft), you'll never get that twenty-year winner.** When you look closely, you'll see that every twenty-year rise included a lot of ups and downs. To enjoy long-term success, you have to hold through them.

- A lot has been written of late about reduced liquidity in the current investment environment, in part a result of restrictions under the Volcker rule. This may have contributed to last month's volatility, but it should be viewed as having exacerbated the short-term pain, not as altering the long-term fundamentals.

Coping with a declining market seems easy ahead of time, since emotions aren't in play and investors know what they should do. It's only when prices start falling in earnest, as they have recently, that it turns out to be harder than expected.

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So What Will Work?

Superior investing isn't easy. I've set forth a number of examples of its complexity, and a long list of simplistic rules that can't be depended on. Among the many things that keep investing from being easy is the fact that no tactic works every time. Almost every tool an investor might employ is a two-edged sword. Here's how I put it last year in "Dare to Be Great II":

- If you invest, you will lose money if the market declines.
- If you don't invest, you will miss out on gains if the market rises.

- Market timing will add value if it can be done right.
- Buy-and-hold will produce better results if timing can't be done right.

- Aggressiveness will help when the market rises but hurt when it falls.
- Defensiveness will help when the market falls but hurt when it rises.

- If you concentrate your portfolio, your mistakes will kill you.
- If you diversify, the payoff from your successes will be diminished.

- If you employ leverage, your successes will be magnified.
- If you employ leverage, your mistakes will be magnified.

Each of these pairings indicates symmetry. None of the tactics listed will add value if it's right but not subtract if it's wrong. Thus none of these tactics, in and of itself, can hold the secret to dependably above average investment performance.

There's only one thing in the investment world that isn't two-edged, and that's "alpha": superior insight or skill. Skill can help in both up markets and down markets. And by making it more likely that your decisions are right, superior skill can increase the expected benefit from concentration and leverage. But that kind of superior skill by definition is rare and elusive. . . .

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Why should superior profits be available to the novice, the untutored or the lazy? Why should people be able to make above average returns without hard work and above average skill, and without knowing something most others don't know? And yet many individuals invest based on the belief that they can. (If they didn't believe that, wouldn't they index or, at a minimum, turn over the task to others?)

No, the solution can't lie in rigid tactics, publicly available formulas or loss-eliminating rules . . . or in complete risk avoidance. **Superior investment results can only stem from a better-than-average ability to figure out when risk taking will lead to gain and when it will end in loss.** There is no alternative.

Superior skill is an essential ingredient if superior investment results are to be achieved reliably. **No tactic or technique will lead to superior results in the absence of superior judgment and implementation.** But by definition, only a small percentage of investors possess superior skill.

It is mathematically irrefutable that (a) the average investor will produce before-fee performance in line with the market average and (b) active management fees will pull the average investor's return below the market average. This has to be considered in light of the fact that average performance can generally be obtained through passive investing, with tiny fees and almost no risk of falling short.

Superior investors and their well-thought-out approaches can produce superior returns on average in the long run. But even they are far from perfect. The best they can hope for is that they'll be right more often than they're wrong, and that their successful decisions will add more than their mistakes subtract.

So, in the end, there's only one absolute truth about investing. Charlie's right: it isn't easy.

September 9, 2015

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Memo to: Oaktree Clients

From: Howard Marks

Re: Risk Revisited Again

The operators of racetracks take a dim view of bettors who engage in "past-posting": trying to get a bet down after the race is over (and the horses are "past the post"). In that vein, it's been my practice not to rewrite old memos as new developments arise or new ideas strike me. However, while preparing "Risk Revisited" of September 2014 for inclusion in a compilation of my memos, I thought of a number of ways in which it could be made better. And since it was my original intention to have it contain everything I know about risk, I've decided to incorporate them. To make it clear which sections are new, I've put them in italics.

In April 2014, I had good results with *Dare to Be Great II*, starting from the base established in an earlier memo (*Dare to Be Great*, September 2006) and adding new thoughts that had occurred to me in the intervening years. Also in 2006 I wrote *Risk*, my first memo devoted entirely to this key subject. My thinking continued to develop, causing me to dedicate three chapters to risk among the twenty in my book *The Most Important Thing*. This memo adds to what I've previously written on the topic.

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What Risk Really Means

In the 2006 memo and in the book, I argued against the purported identity between volatility and risk. Volatility is the academic's choice for defining and measuring risk. I think this is the case largely because volatility is quantifiable and thus usable in the calculations and models of modern finance theory. In the book I called it "machinable," and there is no substitute for the purposes of the calculations.

However, while volatility is quantifiable and machinable – and can be an indicator or symptom of riskiness and even a specific form of risk – I think it falls far short as "the" definition of investment risk. In thinking about risk, we want to identify the thing that investors worry about and thus demand compensation for bearing. I don't think most investors fear volatility. In fact, I've never heard anyone say, "The prospective return isn't high enough to warrant bearing all that volatility." **What they fear is the possibility of permanent loss.**

Permanent loss is very different from volatility or fluctuation. A downward fluctuation – which by definition is temporary – doesn't present a big problem if the investor is able to hold on and come out the other side. A permanent loss – from which there won't be a rebound – can occur for either of two reasons: (a) an otherwise-temporary dip is locked in when the investor sells during a downswing – whether because of a loss of conviction; requirements stemming from his timeframe; financial exigency; or emotional pressures, or (b) the investment itself is unable to recover for fundamental reasons. We can ride out volatility, but we never get a chance to undo a permanent loss.

Of course, the problem with defining risk as the possibility of permanent loss is that it lacks the very thing volatility offers: quantifiability. **The probability of loss is no more measurable than the probability of rain.** It can be modeled, and it can be estimated (and by experts pretty well), but it cannot be known.

In *Dare to Be Great II*, I described the time I spent advising a sovereign wealth fund about how to organize for the next thirty years. My presentation was built significantly around my conviction that risk

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can't be quantified *a priori*. Another of their advisors, a professor from a business school north of New York, insisted it can. This is something I prefer not to debate, especially with people who're sure they have the answer but haven't bet much money on it.

One of the things the professor was sure could be quantified was the maximum a portfolio could fall under adverse circumstances. But how can this be so if we don't know how adverse circumstances can be or how they will influence returns? We might say "the market probably won't fall more than x% as long as things aren't worse than y and z," but how can an absolute limit be specified? I wonder if the professor had anticipated that the S&P 500 could fall 57% in the global crisis.

While writing the original memo on risk in 2006, an important thought came to me for the first time. Forget about *a priori*; if you define risk as anything other than volatility, it can't be measured **even after the fact**. If you buy something for $10 and sell it a year later for $20, was it risky or not? The novice would say the profit proves it was safe, while the academic would say it was clearly risky, since the only way to make 100% in a year is by taking a lot of risk. I'd say it might have been a brilliant, safe investment that was sure to double <u>or</u> a risky dart throw that got lucky.

If you make an investment in 2012, you'll know in 2014 whether you lost money (and how much), but you won't know whether it was a risky investment – that is, what the probability of loss was at the time you made it. To continue the analogy, **it may rain tomorrow, or it may not, but nothing that happens tomorrow will tell you what the probability of rain was as of today. And the risk of rain is a very good analogue (although I'm sure not perfect) for the risk of loss.**

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<u>*People Smarter Than Me*</u>

Peter Bernstein, who passed away in 2009, was one of the smartest people I ever met: a real investment sage. He combined a brilliant and learned mind, great common sense, and the ability to express himself with incredible clarity. I found a great deal of inspiration in his newsletter "Economics and Portfolio Strategy," in his book "Against the Gods: The Remarkable Story of Risk," and in our correspondence.

One of the newsletter's best issues, from June 2007, was titled "Can We Measure Risk with a Number?" It provided Peter's answer to that question, buttressed by the words of a number of great thinkers. It's so good that I want to share parts here (with all emphasis added but the first). This memo is greatly enhanced by their inclusion:

> *In life – and in investing – the biggest risks cannot be reduced to a hard number. As Bill Sharpe put it to me recently, "It's dangerous, at least in general, to think of risk as a number . . . . The problem we face is that there are many scenarios that can unfold in the future. . . ." John Maynard Keynes, [in the 1920s], had this to say: "There is little likelihood of our discovering a method of recognizing particular probabilities, without any assistance whatever from intuition or direct judgment. . . . A proposition is not probable because we think it so."*
>
> *Consider the following story. In 1703, the great Swiss mathematician Jacob Bernoulli wrote Leibniz he thought it strange that we knew the odds of throwing a seven instead of an eight with dice, but we do not know the probability that a man of twenty will outlive a man of sixty. He proposed following a large number of pairs of men to see whether he could arrive at the probability that a man of twenty will outlive a man of sixty. Leibniz was unimpressed. "Nature has established patterns originating in the return of events, **but only for the most part**. . . . No matter how many experiments . . . you have*

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conducted, you have not thereby imposed a limit on the nature of events so that in the future they would not vary." Leibniz had written to Bernoulli in Latin, as was customary for exchanges between intellectuals in those days, but he put "but only for the most part" in Greek, to give it maximum emphasis. If it were "always," there would be no uncertainty, no risk.

"But only for the most part" is what risk is all about: uncertainty. *The key hazard of quantitative risk management is the illusion of control the models and their results impart to us. No model has an R^2 of 1.000. Even if you have a so-called statistically significant outcome, which is 95% certain – and that is surely "for the most part" – 95% still leaves 5% you know nothing about. The devil is in the residuals, as all of us have discovered to our sorrow.*

I have pursued this discussion of the nature of risk, and our inability to accurately measure risk, because I think it sheds important light on how we should think about the current environment, where the economic risks appear to be moderate and manageable and where the environment itself seems to have so many self-reinforcing elements. I believe we have to look at the environment in qualitative terms, not quantitative terms. Only then can we develop an answer to the question of whether, in today's global economy, we have ended "the slings and arrows of outrageous fortune," as so many appear to believe. [Bernstein demonstrated considerable foresight in writing this paragraph and the next four in the lead-up to the global financial crisis.]

Can we sustain the low-risk character of the environment when it leads many investors to take high risks and to overvalue risky assets in search for higher returns? . . . The more risk we take because we believe the environment is low-risk in character, the less the environment continues to be low-risk in character.

. . . The more we emphasize the low risks in the environment, the more we point out and explain its features, and the more we believe we understand what is going on – unique as this environment may be – the weaker our normal and rational inclination to risk aversion becomes and the more our actions alter the character of the environment.

The economist Hyman Minsky has reminded us, ***"Each state nurtures forces that lead to its own destruction."*** *All of history testifies to the truth of this observation. Greater liquidity [by which Bernstein meant greater availability of funds] leads firms to borrow more than before. But higher levels of debt mean increasing vulnerability to adversity and negative shocks in an ever-changing world. For these reasons, as Minsky put it, stability leads inevitably to instability. . . .*

Even places that were once banana-republics, like Argentina and Brazil, are issuing long-term bonds and even issuing bonds denominated in foreign currencies. The eagerness to lend in so many different ways in so many different markets is a potent symptom of confidence in the underlying stability of the global system. . . .

Shocks and surprises are what the history of investment is all about. Here is what G. K. Chesterton had to say on this matter . . . :

> *The real trouble with this world of ours is not that it is an unreasonable world, nor even that it is a reasonable one. The commonest kind of trouble is that it is nearly reasonable, but not quite.* ***Life is not an***

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> ***illogicality; yet it is a trap for logicians. It looks just a little more mathematical and regular than it is; its exactitude is obvious, but its inexactitude is hidden; its wildness lies in wait.***

Beginning on page 9, you'll find a section borrowed from a memo I wrote back in 2007. Its first bullet point starts off as follows: "Risk exists only in the future. . . ." That notion holds a good part of the key to understanding investment risk. ***If you accept that the underlying processes affecting economics, business and market psychology are less than 100% dependable, as seems obvious, then it follows that the future isn't knowable. In that case, risk can be nothing more than the subject of estimation – Keynes's "intuition or direct judgment" (see page 2) – and certainly not reliably quantified.***

The Unknowable Future

It seems most people in the prediction business think the future is knowable, and all they have to do is be among the ones who know it. Alternatively, they may understand (consciously or unconsciously) that it's not knowable but believe they have to act as if it is in order to make a living as an economist or investment manager.

On the other hand, I'm solidly convinced the future isn't knowable. I side with John Kenneth Galbraith who said, "We have two classes of forecasters: Those who don't know – and those who don't know they don't know." There are several reasons for this inability to predict:

- We're well aware of many factors that can influence future events, such as governmental actions, individuals' spending decisions and changes in commodity prices. But these things are hard to predict, and I doubt anyone is capable of taking all of them into account at once. (People have suggested a parallel between this categorization and that of Donald Rumsfeld, who might have called these things "known unknowns": the things we know we don't know.)

- The future can also be influenced by events that aren't on anyone's radar today, such as calamities – natural or man-made – that can have great impact. The 9/11 attacks and the Fukushima disaster are two examples of things no one knew to think about. (These would be "unknown unknowns": the things we don't know we don't know.)

- There's far too much randomness at work in the world for future events to be predictable. As 2014 began, forecasters were sure the U.S. economy was gaining steam, but they were confounded when record cold weather caused GDP to fall 2.9% in the first quarter.

- And importantly, the connections between contributing influences and future outcomes are far too imprecise and variable for the results to be dependable.

That last point deserves discussion. Physics is a science, and for that reason an electrical engineer can guarantee you that if you flip a switch over here, a light will go on over there . . . every time. But there's good reason why economics is called "the dismal science," and in fact it isn't much of a science at all. In just the last few years we've had opportunity to see – contrary to nearly unanimous expectations – that interest rates near zero can fail to produce a strong rebound in GDP, and that a reduction of bond buying on the part of the Fed can fail to bring on higher interest rates. In economics and investments, because of the key role played by human behavior, you just can't say for sure that "if A, then B," as you can in real science. The weakness of the

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connection between cause and effect makes outcomes uncertain. In other words, it introduces risk.

Given the near-infinite number of factors that influence developments, the great deal of randomness present, and the weakness of the linkages, it's my solid belief that future events cannot be predicted with any consistency. In particular, predictions of important divergences from trends and norms can't be made with anything approaching the accuracy required for them to be helpful.

Coping with the Unknowable Future

Here's the essential conundrum: investing requires us to decide how to position a portfolio for future developments, but the future isn't knowable.

Taken to slightly greater detail:

- Investing requires the taking of positions that will be affected by future developments.
- The existence of negative possibilities surrounding those future developments presents risk.
- Intelligent investors pursue prospective returns that they think compensate them for bearing the risk of negative future developments.
- But future developments are unpredictable.

How can investors deal with the limitations on their ability to know the future? **The answer lies in the fact that not being able to know the future doesn't mean we can't deal with it.** It's one thing to know what's going to happen and something very different to have a feeling for the range of possible outcomes and the likelihood of each one happening. Saying we can't do the former doesn't mean we can't do the latter.

The information we're able to estimate – the list of events that might happen and how likely each one is – can be used to construct a probability distribution. **Key point number one in this memo is that the future should be viewed not as a fixed outcome that's destined to happen and capable of being predicted, but as a range of possibilities and, hopefully on the basis of insight into their respective likelihoods, as a probability distribution.**

Since the future isn't fixed and future events can't be predicted, risk cannot be quantified with any precision. I made the point in *Risk*, and I want to emphasize it here, that risk estimation has to be the province of experienced experts, and their work product will by necessity be subjective, imprecise, and more qualitative than quantitative (even if it's expressed in numbers).

There's little I believe in more than Albert Einstein's observation: **"Not everything that counts can be counted, and not everything that can be counted counts."** I'd rather have an order-of-magnitude approximation of risk from an expert than a precise figure from a highly educated statistician who knows less about the underlying investments. British philosopher and logician Carveth Read put it this way: "It is better to be vaguely right than exactly wrong."

By the way, in my personal life I tend to incorporate another of Einstein's comments: "I never think of the future – it comes soon enough." We can't take that approach as investors, however. We have to think about the future. We just shouldn't accord too much significance to our opinions.

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We can't know what will happen. We can know something about the possible outcomes (and how likely they are). People who have more insight into these things than others are likely to make superior investors. As I said in the last paragraph of *The Most Important Thing*:

> Only investors with unusual insight can regularly divine the probability distribution that governs future events and sense when the potential returns compensate for the risks that lurk in the distribution's negative left-hand tail.

In other words, in order to achieve superior results, an investor must be able – with some regularity – to find asymmetries: instances when the upside potential exceeds the downside risk. That's what successful investing is all about.

Thinking in Terms of Diverse Outcomes

It's the indeterminate nature of future events that creates investment risk. **It goes without saying that if we knew everything that was going to happen, there wouldn't be any risk.**

The return on a stock will be a function of the relationship between the price today and the cash flows (income and sale proceeds) it will produce in the future. The future cash flows, in turn, will be a function of the fundamental performance of the company and the way its stock is priced given that performance. We invest on the basis of expectations regarding these things. It's tautological to say that if the company's earnings and the valuation of those earnings meet our targets, the return will be as expected. The risk in the investment therefore comes from the possibility that one or both will come in lower than we think.

To oversimplify, investors in a given company may have an expectation that if A happens, that'll make B happen, and if C and D also happen, then the result will be E. Factor A may be the pace at which a new product finds an audience. That will determine factor B, the growth of sales. If A is positive, B should be positive. Then if C (the cost of raw materials) is on target, earnings should grow as expected, and if D (investors' valuation of the earnings) also meets expectations, the result should be a rising share price, giving us the return we seek (E).

We may have a sense for the probability distributions governing future developments, and thus a feeling for the likely outcome regarding each of developments A through E. The problem is that for each of these, there can be lots of outcomes other than the ones we consider most likely. The possibility of less-good outcomes is the source of risk. **That leads me to <u>key point number two</u>, as expressed by Elroy Dimson, a professor at the London Business School: "Risk means more things can happen than will happen."** This brief, pithy sentence contains a great deal of wisdom.

People who rely heavily on forecasts seem to think there's only one possibility, meaning risk can be eliminated if they just figure out which one it is. The rest of us know many possibilities exist today, and it's not knowable which of them will occur. Further, things are subject to change, meaning there will be new possibilities tomorrow. **This uncertainty as to which of the possibilities will occur is the source of risk in investing.**

Even a Probability Distribution Isn't Enough

I've stressed the importance of viewing the future as a probability distribution rather than a single predetermined outcome. **It's still essential to bear in mind <u>key point number three</u>: Knowing the**

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probabilities doesn't mean you know what's going to happen. For example, all good backgammon players know the probabilities governing throws of two dice. They know there are 36 possible outcomes, and that six of them add up to the number seven (1-6, 2-5, 3-4, 4-3, 5-2 and 6-1). Thus the chance of throwing a seven on any toss is 6 in 36, or 16.7%. There's absolutely no doubt about that. But even though we know the probability of each number, we're far from knowing what number will come up on a given roll.

Backgammon players are usually quite happy to make a move that will enable them to win unless the opponent rolls twelve, since only one combination of the dice will produce it: 6-6. The probability of rolling twelve is thus only 1 in 36, or less than 3%. But twelve does come up from time to time, and the people it turns into losers end up complaining about having done the "right" thing but lost. As my friend Bruce Newberg says, **"There's a big difference between probability and outcome."** Unlikely things happen – and likely things fail to happen – all the time. **Probabilities are likelihoods and very far from certainties.**

It's true with dice, and it's true in investing . . . and not a bad start toward conveying the essence of risk. Think again about the quote above from Elroy Dimson: "Risk means more things can happen than will happen." **I find it particularly helpful to invert Dimson's observation for <u>key point number four</u>: Even though many things can happen, only one will.**

In *Dare to Be Great II*, I discussed the fact that economic decisions are usually best made on the basis of "expected value": you multiply each potential outcome by its probability, sum the results, and select the path with the highest total. *But while expected value represents the probability-weighted average of all possible outcomes, we can be certain it will <u>not</u> be the outcome (unless by coincidence it's one of the possibilities). Clearly just one of the many things that can happen will happen – not the average of all of them. And if some of the paths under consideration include individual outcomes that are absolutely unacceptable, we might not be able to choose on the basis of the highest expected value. We may have to shun the quantitatively optimal path in order to avoid the possibility of an extreme negative outcome.* I always say I have no interest in being a skydiver who's successful 95% of the time.

Investment performance (like life in general) is a lot like choosing a lottery winner by pulling one ticket from a bowlful. The process through which the winning ticket is chosen can be influenced by physical processes, and also by randomness. But it never amounts to anything but one ticket picked from among many. **Superior investors have a better sense for what's in the bowl, and thus for whether it's worth buying a ticket in a lottery.** *But even they don't know for sure which one will be chosen.* Lesser investors have less of a sense for the probability distribution and for whether the likelihood of winning the prize compensates for the risk that the cost of the ticket will be lost.

<u>Risk and Return</u>

Both in the 2006 memo on risk and in my book, I showed two graphics that together make clear the nature of investment risk. People have told me they're the best thing in the book, and since readers of this memo might have not seen the old one or read the book, I'm going to repeat them here.

The first one below shows the relationship between risk and return as it is conventionally represented. The line slopes upward to the right, meaning the two are "positively correlated": as risk increases, return increases.

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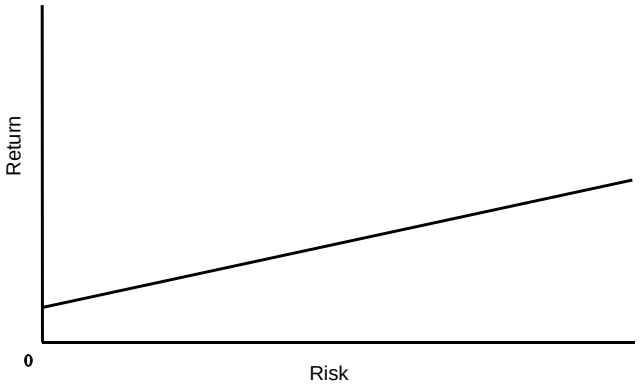

In both the old memo and the book, I went to great lengths to clarify what this is often – but erroneously – taken to mean. We hear it all the time: "Riskier investments produce higher returns" and "If you want to make more money, take more risk."

Both of these formulations are terrible. **In brief, if riskier investments could be counted on to produce higher returns, they wouldn't be riskier.** Misplaced reliance on the benefits of risk bearing has led investors to some very unpleasant surprises.

However, there's another, better way to describe this relationship: "Investments that seem riskier have to appear likely to deliver higher returns, or else people won't make them." This makes perfect sense. If the market is rational, the price of a seemingly risky asset will be set low enough that the reward for holding it appears adequate to compensate for the risk present. But note the word "appear." We're talking about investors' opinions regarding future return, not facts. Risky investments are – by definition – far from certain to deliver on their promise of high returns. For that reason, I think the graphic below *(with the probability distributions redrawn from those of the 2014 version of this memo)* does a much better job of portraying reality:

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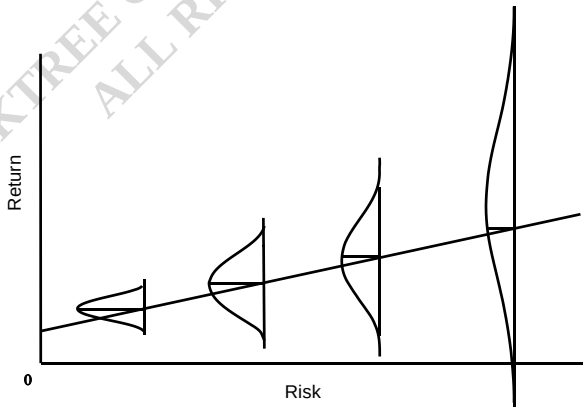

Here the underlying relationship between risk and return reflects the same positive general tendency as the first graphic, but the result of each investment is shown as a range of possibilities, not the single outcome suggested by the upward-sloping line. At each point along the horizontal risk axis, an investment's prospective return is shown as a bell-shaped probability distribution turned on its side.

The conclusions are obvious from inspection. As you move to the right, increasing the risk:

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- the expected return increases (as with the traditional graphic),
- the range of possible outcomes becomes wider, and
- the less-good outcomes become worse.

This is the essence of investment risk. Riskier investments are ones where the investor is less secure regarding the eventual outcome and faces the possibility of faring worse than those who stick to safer investments, and even of losing money. These investments are undertaken because the expected return is higher. But things may happen other than that which is hoped for. Some of the possibilities are superior to the expected return, but others are decidedly unattractive.

The first graph's upward-sloping line indicates the underlying directionality of the risk/return relationship. But there's a lot more to consider than the fact that expected returns rise along with perceived risk, and in that regard the first graph is highly misleading. The second graph shows both the underlying trend and the increasing potential for actual returns to deviate from expectations. While the expected return rises along with risk, so does the probability of lower returns . . . and even of losses. **This way of looking at things reflects Professor Dimson's dictum that more than one thing can happen. That's reality in an unpredictable world.**

The Challenge of Managing Risk

The foregoing has been somewhat philosophical and theoretical. To provide a glimpse at how risk operates in the real world, and even though you may have read it earlier, I reproduce here (with minor modifications) a section that appeared with the above title in my memo "No Different This Time – The Lessons of '07" (December 2007). It points out some of the ways in which risk deviates in practice from the risk of theory. Each of these "realities" adds a degree of complexity that wouldn't exist if risk were quantifiable, linear and dependable, and thus easily treated. ***But then it wouldn't be risk.***

One of the reasons investor confidence was hit so hard [in 2007] is simply that it was too high (as is required for unsustainable market highs to be reached). And much of investors' excessive comfort was in the area of risk, where it was roundly believed things were under control. But the truth is, it's hard to manage risk.

As I stated in "Risk" (February 2006), investment risk is largely invisible – before the fact, except perhaps to people with unusual insight, and even after an investment has been exited. For this reason, many of the great financial disasters we've seen have been failures to foresee and manage risk. There are several reasons for this:

- ***Risk exists only in the future, and it's impossible to know for sure what the future holds. Expectations are often formulated on the basis of what happened in the past, but the events of the past must be taken with a substantial grain of salt.*** *No ambiguity is evident when we view the past. Only the things that happened happened.* ***But that definiteness doesn't mean the process that creates outcomes is clear-cut and dependable. Many things could have happened in each case in the past, and the fact that only one did happen understates the potential for variability that existed.*** *What I mean to say (inspired by Nicolas Nassim Taleb's "Fooled by Randomness") is that the history that took place is only one version of what it could have been. If you accept this, then the relevance of history to the future is much more limited than many believe to be the case. [Along these same lines, Peter Bernstein wrote the following in his November 2001 newsletter: "****We like to rely on history to justify our forecasts of the long run, but history tells us over and over again that the unexpected and the unthinkable are the norm, not an anomaly. That is the real lesson of history."]***

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- ***Decisions whether or not to bear risk are made in contemplation of normal patterns recurring, and they do most of the time. But once in a while, something very different happens.*** *Or as my friend (and highly skilled investor) Ric Kayne puts it, "Most of financial history has taken place within two standard deviations, but everything interesting has occurred outside of two standard deviations." That's what happened in 2007. We heard all the time that summer, "that was a 5-standard deviation event," or "that was a 10-sigma event," implying it should have happened only once every hundred or thousand or ten thousand years. So how could several such events have happened in a single week, as was claimed in August? The answer is that the improbability of their happening had been overestimated.*

- *Projections tend to cluster around historic norms and call for only small changes. The point is,* ***people usually expect the future to be like the past and underestimate the potential for change****. In August 1996, I wrote a memo showing that in the Wall Street Journal's semi-annual poll of economists, on average the predictions are an extrapolation of the current condition. And when I was a young analyst following Textron, building my earnings estimates based on projections for its four major groups, I invariably found that I had underestimated the extent of both the positive surprises and the shortfalls.*

- ***We hear a lot about "worst-case" projections, but they often turn out not to be negative enough****. What forecasters mean is "bad-case projections." I tell my father's story of the gambler who lost regularly. One day he heard about a race with only one horse in it, so he bet the rent money. Half way around the track, the horse jumped over the fence and ran away. Invariably things can get worse than people expect. Maybe "worst-case" means "the worst we've seen in the past." But that doesn't mean things can't be worse in the future. In 2007, many people's worst-case assumptions were exceeded.*

- ***Risk shows up lumpily****. If we say "2% of mortgages default each year," and even if that's true when we look at a multi-year average, an unusual spate of defaults can occur at a point in time, sinking a structured finance vehicle. Ben Graham and David Dodd put it this way: ". . . the relation between different kinds of investments and the risk of loss is entirely too indefinite, and too variable with changing conditions, to permit of sound mathematical formulation. This is particularly true because investment losses are not distributed fairly evenly in point of time, but tend to be concentrated at intervals . . ." (Security Analysis, 1940 Edition). It's invariably the case that some investors – especially those who employ high leverage – will fail to survive at those intervals.*

- ***People overestimate their ability to gauge risk and understand mechanisms they've never before seen in operation****. In theory, one thing that distinguishes humans from other species is that we can figure out that something's dangerous without experiencing it.* ***We don't have to burn ourselves to know we shouldn't sit on a hot stove. But in bullish times, people tend not to perform this function.*** *Rather than recognize risk ahead, they tend to overestimate their ability to understand how new financial inventions will work.*

- ***Finally and importantly, most people view risk taking primarily as a way to make money.*** *Bearing higher risk generally produces higher returns. The market has to set things up to look like that'll be the case; if it didn't, people wouldn't make risky investments. But it can't always work that way, or else risky investments wouldn't be risky.* ***And when risk bearing doesn't work, it <u>really</u> doesn't work, and people are reminded what risk's all about.***

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Most of the time, risk bearing works out just fine. In fact, it's often the case that the people who take the most risk make the most money. However, there also are times when underestimating risk and accepting too much of it can be fatal. ***Taking too little risk can cause you to underperform your peers – but that beats the heck out of the consequences of taking too much risk at the wrong time. No one ever went bankrupt because of an excess of risk consciousness. But a shortage of it – and the imprudent investments it led to – bears responsibility for a lot of what went on in 2007.***

The Many Forms of Risk

The possibility of permanent loss may be the main risk in investing, but it's not the only risk. I can think of lots of other risks, many of which contribute to – or are components of – that main risk.

In the past, in addition to the risk of permanent loss, I've mentioned **the risk of falling short**. Some investors face return requirements in order to make necessary payouts, as in the case of pension funds, endowments and insurance companies. Others have more basic needs, like generating enough income to live on.

Some investors with needs – particularly those who live on their income, and especially in today's low-return environment – face a serious conundrum. **If they put their money into safe investments, their returns may be inadequate. But if they take on incremental risk in pursuit of a higher return, they face the possibility of a still-lower return, and perhaps of permanent diminution of their capital, rendering their subsequent income lower still.** There's no easy way to resolve this conundrum.

There are actually two possible causes of inadequate returns: (a) targeting a high return and being thwarted by negative events and (b) targeting a low return and achieving it. In other words, **investors face not one but two major risks: the risk of losing money and the risk of missing opportunities**. Either can be eliminated but not both. And leaning too far in order to avoid one can set you up to be victimized by the other.

Potential opportunity costs – the result of missing opportunities – usually aren't taken as seriously as real potential losses. But they do deserve attention. **Put another way, we have to consider the risk of not taking enough risk.**

These days, the fear of losing money seems to have receded (since the crisis is all of six years in the past), and the fear of missing opportunities is riding high, given the paltry returns available on safe, mundane investments. Thus a new risk has arisen: **FOMO risk, or the risk that comes from excessive fear of missing out**. It's important to worry about missing opportunities, since people who don't can invest too conservatively. But when that worry becomes excessive, FOMO can drive an investor to do things he shouldn't do and often doesn't understand, just because others are doing them: if he doesn't jump on the bandwagon, he may be left behind to live with envy.

Over the last three years, Oaktree's response to the paucity of return has been to develop a suite of five credit strategies that we hope will produce a 10% return, either net or gross (we can't claim to be more precise than that). I call them collectively the "ten percent solution," after a Sherlock Holmes story called *The Seven-Per-Cent Solution* (we aim to do better). Talking to clients about these strategies and helping them choose between them has required me to focus on their risks.

"Just a minute," you might say, "the ten-year Treasury is paying just 2½% and, as Jeremy Grantham says, the risk-free rate is also return-free. How, then, can you target returns in the vicinity of 10%?" The

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answer is that it can't be done without taking risk of some kind – and there are several candidates. I'll list below a few risks that we're consciously bearing in order to generate the returns our clients desire:

- Today's ultra-low interest rates imply low returns for anyone who invests in what are deemed safe fixed income instruments. So Oaktree's pursuit of attractive returns centers on accepting and managing **credit risk**, or the risk that a borrower will be unable to pay interest and repay principal as scheduled. Treasurys are assumed to be free of credit risk, and most high grade corporates are thought to be nearly so. **Thus those who intelligently accept incremental credit risk must do so with the expectation that the incremental return promised as compensation will prove sufficient**.

  Voluntarily accepting credit risk has been at the core of what Oaktree has done since its beginning in 1995 (and in fact since the seed was planted in 1978, when I initiated Citibank's high yield bond effort). But bearing credit risk will lead to attractive returns only if it's done well. Our activities are based on two beliefs: (a) that because the investing establishment is averse to credit risk, the incremental returns we receive for bearing it will compensate generously for the risk entailed and (b) that credit risk is manageable – i.e., unlike the general future, credit risk can be gauged by experts (like us) and reduced through credit selection. **It wouldn't make sense to voluntarily bear incremental credit risk if either of these two beliefs were lacking.**

- Another way to access attractive returns in today's low-rate environment is to bear **illiquidity risk** in order to take advantage of investors' normal dislike for illiquidity (superior returns often follow from investor aversion). Institutions that held a lot of illiquid assets suffered considerably in the crisis of 2008, when they couldn't sell them; thus many developed a strong aversion to them and in some cases imposed limitations on their representation in portfolios. Additionally, today the flow of retail money is playing a big part in driving up asset prices and driving down returns. Since retail money has a harder time making its way to illiquid assets, this has made the returns on the latter appear more attractive. It's noteworthy that there aren't mutual funds or ETFs for many of the things we're investing in.

- Some strategies introduce it voluntarily and some can't get away from it: **concentration risk**. "Everyone knows" diversification is a good thing, since it reduces the impact on results of a negative development. But some people eschew the safety that comes with diversification in favor of concentrating their investments in assets or with managers they expect to outperform. And some investment strategies don't permit full diversification because of the limitations of their subject markets. Thus problems – if and when they occur – will be bigger *per se*.

- Especially given today's low interest rates, borrowing additional capital to enhance returns is another way to potentially increase returns. But doing so introduces **leverage risk**. Leverage adds to risk two ways. The first is magnification: people are attracted to leverage because it will magnify gains, but under unfavorable outcomes it will magnify losses instead.

  The second way in which leverage adds to risk stems from **funding risk**, one of the classic reasons for financial disaster. The stage is set when someone borrows short-term funds to make a long-term investment. If the funds have to be repaid at an awkward time – due to their maturity, a margin call, or some other reason – and the purchased assets can't be sold in a timely fashion (or can only be sold at a depressed price), an investment that might otherwise have been successful can be cut short and end in sorrow. Little or nothing may remain of the sale proceeds once the leverage has been repaid, in which case the investor's equity will be decimated. This is commonly called a meltdown. It's the primary reason for the saying, "Never forget the six-foot-

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tall man who drowned crossing the stream that was five feet deep on average." In times of crisis, success over the long run can become irrelevant.

- **When credit risk, illiquidity risk, concentration risk and leverage risk are borne intelligently, it is in the hope that the investor's skill will be sufficient to produce success. If so, the *potential* incremental returns that appear to be offered as risk compensation will turn into *realized* incremental returns** (per the graphic at the top of page 8). That's the only reason anyone would do these things.

  As the graphic at the bottom of page 8 illustrates, however, investing further out on the risk curve exposes one to a broader range of investment outcomes. In an efficient market, returns are tethered to the market average; in an inefficient market, they're not. **Inefficient markets offer the possibility that an investor will escape from the "gravitational pull" of the market's average return, but that can be either for the better or for the worse**. Superior investors – those with "alpha," or the personal skill needed to achieve outsized returns for a given level of risk – have scope to perform well above the mean return, while inferior investors can come out far below. So hiring an investment manager introduces **manager risk**: the risk of picking the wrong one. It's possible to pay management fees but get decisions that detract from results rather than add.

Some or all of the above risks are potentially entailed in our new credit strategies. Parsing them allows investors to choose among the strategies and accept the risks they're more comfortable with. The process can be quite informative.

Our oldest "new strategy" is Enhanced Income, where we use leverage to magnify the return from a portfolio of senior loans. We think senior loans have the lowest credit risk of anything Oaktree deals with, since they're senior-most among their issuer's debt and historically have produced very few credit losses. Further, they're among our most liquid assets, meaning we face relatively little illiquidity risk, and being active in a broad public market permits us to diversify, reducing concentration risk. Given the relatively high degree of safety stemming from these loans' seniority, returns aren't overly dependent on the presence of alpha, meaning Enhanced Income entails less manager risk than some other strategies. But to have a chance at the healthy return we're pursuing in Enhanced Income requires us to take some risk, and what we're left with is leverage risk. The 3-to-1 leverage in Enhanced Income Fund II will magnify the negative impact of any credit losses (of course we hope there won't be many). However, we're not worried about a meltdown, since the current environment allows us to avoid funding risk; we can (a) borrow for a term that exceeds the duration of the underlying investments and (b) do so without the threat of margin calls related to price declines.

Strategic Credit, Mezzanine Finance, European Private Debt and Real Estate Debt are the other four components of our "ten percent solution."

- All four entail some degree of credit risk, illiquidity risk (they all invest heavily or entirely in private debt) and concentration risk (as their market niches offer only a modest number of investment opportunities, and securing them in today's competitive environment is a challenge).

- The Real Estate Debt Fund can only lever up to 1-to-1, and the other three borrow only small amounts and for short-term purposes, so none of them entails significant leverage risk.

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- However, in order to succeed they'll all require a high level of skill from their managers in identifying return prospects and keeping risk under control. Thus they all entail manager risk. Our response is to entrust these portfolios only to managers who've been with us for years.

It's reasonable – essential, really – to study the risk entailed in every investment and accept the amounts and types of risk that you're comfortable with (assuming this can be discerned). It's not reasonable to expect highly superior returns without bearing some incremental risk.

I touched above on concentration risk, but we should also think about the flip side: **the risk of over-diversification**. If you have just a few holdings in a portfolio, or if an institution employs just a few managers, one bad decision can do significant damage to results. But if you have a very large number of holdings or managers, no one of them can have much of a positive impact on performance. Nobody invests in just the one stock or manager they expect to perform best, but as the number of positions is expanded, the standards for inclusion may decline. Peter Lynch coined the term "diworstification" to describe the process through which lesser investments are added to portfolios, making the potential risk-adjusted return worse.

While I don't think volatility and risk are synonymous, there's no doubt that **volatility does present risk**. If circumstances cause you to sell a volatile investment at the wrong time, you might turn a downward fluctuation into a permanent loss. Moreover, even in the absence of a need for liquidity, volatility can prey on investors' emotions, reducing the probability they'll do the right thing. **And in the short run, it can be very hard to differentiate between a downward fluctuation and a permanent loss.** Often this can really be done only in retrospect. Thus it's clear that a professional investor may have to bear consequences for a temporary downward fluctuation simply because of its resemblance to a permanent loss. When you're under pressure, the distinction between "volatility" and "loss" can seem only semantic. Volatility is not "the" definition of investment risk, as I said earlier, but it isn't irrelevant.

One example of a risk connected with volatility – or the deviation of price from what might be intrinsic value – is **basis risk**. Arbitrageurs customarily set up positions where they're long one asset and short a related asset. The two assets are expected to move roughly in parallel, except that the one that's slightly cheaper should make more money for the investor in the long run than the other loses, producing a small net gain with little risk. Because these trades are considered so low in risk, they're often levered up to the sky. But sometimes the prices of the two assets diverge to an unexpected extent, and the equity invested in the trade evaporates. That unexpected divergence is basis risk, and it's what happened to Long-Term Capital Management in 1998, one of the most famous meltdowns of all time. As Long-Term's chairman John Meriwether said at the time, "the Fund added to its positions in anticipation of convergence, yet . . . the trades diverged dramatically." This benign-sounding explanation was behind a collapse some thought capable of bringing down the global financial system.

Long-Term's failure was also attributable to **model risk**. Decisions can be turned over to quants or financial engineers who either (a) conclude wrongly that an unsystematic process can be modeled or (b) employ the wrong model. During the financial crisis, models often assumed that events would occur according to a "normal distribution," but extreme "tail events" occurred much more often than the normal distribution says they will. **Not only can extreme events exceed a model's assumptions, but excessive belief in a model's efficacy can induce people to take risks they would never take on the basis of qualitative judgment**. They're often disappointed to find they had put too much faith in a statistical sure thing.

Model risk can arise from **black swan risk**, for which I borrow the title of Nassim Nicholas Taleb's popular second book. People tend to confuse "never been seen" with "impossible," and the consequences can be dire when something occurs for the first time. That's part of the reason why people lost so much

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in highly levered subprime mortgage securities. The fact that a nationwide spate of mortgage defaults **hadn't happened** convinced investors that it **couldn't happen**, and their certainty caused them to take actions so imprudent that it **had to happen**.

As long as we're on the subject of things going wrong, we should touch on the subject of **career risk**. As I mentioned in *Dare to Be Great II*, "agents" who manage money for others can be penalized for investments that look like losers (that is, for both permanent losses and temporary downward fluctuations). Either of these unfortunate experiences can result in **headline risk** if the resulting losses are big enough to make it into the media, and some careers can't withstand headline risk. Investors who lack the potential to share commensurately in investment successes face a reward asymmetry that can force them toward the safe end of the risk/return curve. They are likely to think more about the risk of losing money than about the risk of missing opportunities. Thus their portfolios may lean too far toward controlling risk and avoiding embarrassment (and they may not take enough chances to generate returns). There are consequences for these investors, as well as for those who employ them.

Event risk is another risk to worry about, something that was created by bond issuers about twenty years ago. Since corporate directors have a fiduciary responsibility to stockholders but not to bondholders, some think they can (and perhaps should) do anything that's not explicitly prohibited to transfer value from bondholders to stockholders. Bondholders need covenants to shield them from this kind of pro-active plundering, but at times like today it can be hard to obtain strong protective covenants.

There are many ways for an investment to be unsuccessful. The two main ones are **fundamental risk** (relating to how a company or asset performs in the real world) and **valuation risk** (relating to how the market prices that performance). For years investors, fiduciaries and rule-makers acted on the belief that it's safe to buy high-quality assets and risky to buy low-quality assets. But between 1968 and 1973, many investors in the "Nifty Fifty" (the stocks of the fifty fastest-growing and best companies in America) lost 80-90% of their money. Attitudes have evolved since then, and today there's less of an assumption that high quality prevents fundamental risk, and much less preoccupation with quality for its own sake.

On the other hand, investors are more sensitive to the pivotal role played by price. **At bottom, the riskiest thing is overpaying for an asset (regardless of its quality), and the best way to reduce risk is by paying a price that's irrationally low (ditto).** A low price provides a "margin of safety," and that's what risk-controlled investing is all about. **Valuation risk should be easily combatted, since it's largely within the investor's control. All you have to do is refuse to buy if the price is too high given the fundamentals.** "Who wouldn't do that?" you might ask. Just think about the people who bought into the tech bubble.

Fundamental risk and valuation risk bear on the risk of losing money in an individual security or asset, but that's far from the whole story. **Correlation** is the essential additional piece of the puzzle. Correlation is the degree to which an asset's price will move in sympathy with the movements of others. **The higher the correlation among its components, all other things being equal, the less effective diversification a portfolio has, and the more exposed it is to untoward developments.**

An asset doesn't have "a correlation." Rather, it has a different correlation with every other asset. A bond has a certain correlation with a stock. One stock has a certain correlation with another stock (and a different correlation with a third). Stocks of one type (such as emerging market, high-tech or large-cap) are likely to be highly correlated with others within their category, but they may be either high or low in correlation with those in other categories. **Bottom line: it's hard to estimate the riskiness of a given asset, but many times harder to estimate its correlation with all the other assets in a portfolio, and thus the impact on performance of adding it to the portfolio.** This is a real art.

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Fixed income investors are directly exposed to another form of risk: **interest rate risk**. Higher interest rates mean lower bond prices – that relationship is absolute. The impact of changes in interest rates on asset classes other than fixed income is less direct and less obvious, but it also pervades the markets. Note that stocks usually go down when the Fed says the economy is performing strongly. Why? The thinking is that stronger economy = higher interest rates = more competition for stocks from bonds = lower stock valuations. Or it might be stronger economy = higher interest rates = reduced stimulus = weaker economy.

One of the reasons for increases in interest rates relates to **purchasing power risk**. Investors in securities (and especially long-term bonds) are exposed to the risk that if inflation rises, the amount they receive in the future will buy less than it could today. This causes investors to insist on higher interest rates and higher prospective returns to protect them against the loss of purchasing power. The result is lower prices.

Finally, I want to mention a new concept I hear about once in a while: **upside risk**. Forecasters are sometimes heard to say "the risk is on the upside." At first this doesn't seem to have much legitimacy, but it can be about the possibility that the economy may catch fire and do better than expected, earnings may come in above consensus, or the stock market may appreciate more than people think. Since these things are positives, there's risk in being underexposed to them.

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To move to the biggest of big pictures, I want to make a few over-arching comments about risk.

The first is that risk is counterintuitive.

- The riskiest thing in the world is the widespread belief that there's no risk.
- Fear that the market is risky (and the prudent investor behavior that results) can render it quite safe.
- As an asset declines in price, making people view it as riskier, it becomes less risky (all else being equal).
- As an asset appreciates, causing people to think more highly of it, it becomes riskier.
- Holding only "safe" assets of one type can render a portfolio under-diversified and make it vulnerable to a single shock.
- Adding a few "risky" assets to a portfolio of safe assets can make it safer by increasing its diversification. Pointing this out was one of Professor William Sharpe's great contributions.

The second is that risk aversion is the thing that keeps markets safe and sane.

- When investors are risk-conscious, they will demand generous risk premiums to compensate them for bearing risk. Thus the risk/return line will have a steep slope (the unit increase in prospective return per unit increase in perceived risk will be large) and the market should reward risk-bearing as theory asserts.
- But when people forget to be risk-conscious and fail to require compensation for bearing risk, they'll make risky investments even if risk premiums are skimpy. The slope of the line will be gradual, and risk taking is likely to eventually be penalized, not rewarded.
- When risk aversion is running high, investors will perform extensive due diligence, make conservative assumptions, apply skepticism and deny capital to risky schemes.

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- But when risk tolerance is widespread instead, these things will fall by the wayside and deals will be done that set the scene for subsequent losses.

Simply put, risk is low when risk aversion and risk consciousness are high, and high when they're low.

The third is that risk is often hidden and thus deceptive. Loss occurs when risk – the possibility of loss – collides with negative events. Thus the riskiness of an investment becomes apparent only when it is tested in a negative environment. It can be risky but not show losses as long as the environment remains salutary. The fact that an investment is susceptible to a serious negative development that will occur only infrequently – what I call "the improbable disaster" – can make it appear safer than it really is. Thus after several years of a benign environment, a risky investment can easily pass for safe. That's why Warren Buffett famously said, ". . . you only find out who's swimming naked when the tide goes out."

Assembling a portfolio that incorporates risk control as well as the potential for gains is a great accomplishment. But it's a hidden accomplishment most of the time, since risk only turns into loss occasionally . . . when the tide goes out.

The fourth is that risk is multi-faceted and hard to deal with. In this memo I've mentioned 24 different forms of risk: the risk of losing money, the risk of falling short, the risk of missing opportunities, FOMO risk, credit risk, illiquidity risk, concentration risk, leverage risk, funding risk, manager risk, over-diversification risk, risk associated with volatility, basis risk, model risk, black swan risk, career risk, headline risk, event risk, fundamental risk, valuation risk, correlation risk, interest rate risk, purchasing power risk, and upside risk. And I'm sure I've omitted some. Many times these risks are overlapping, contrasting and hard to manage simultaneously. For example:

- Efforts to reduce the risk of losing money invariably increase the risk of missing out.
- Efforts to reduce fundamental risk by buying higher-quality assets often increase valuation risk, given that higher-quality assets often sell at elevated valuation metrics.

At bottom, it's the inability to arrive at a single formula that simultaneously minimizes all the risks that makes investing the fascinating and challenging pursuit it is.

The fifth is that the task of managing risk shouldn't be left to designated risk managers. I'm convinced outsiders to the fundamental investment process can't know enough about the subject assets to make appropriate decisions regarding each one. All they can do is apply statistical models and norms. But those models may be the wrong ones for the underlying assets – or just plain faulty – and there's little evidence that they add value. In particular, risk managers can try to estimate correlation and tell you how things will behave when combined in a portfolio. But they can fail to adequately anticipate the "fault lines" that run through portfolios. And anyway, as the old saying goes, "in times of crisis all correlations go to one" and everything collapses in unison.

"Value at Risk" was supposed to tell the banks how much they could lose on a very bad day. During the crisis, however, VaR was often shown to have understated the risk, since the assumptions hadn't been harsh enough. Given the fact that risk managers are required at banks and *de rigueur* elsewhere, I think more money was spent on risk management in the early 2000s than in the rest of history combined . . . and yet we experienced the worst financial crisis in 80 years. Investors can calculate risk metrics like VaR and Sharpe ratios (we use them at Oaktree; they're the best tools we have), but they shouldn't put too much faith in them. **The bottom line for me is that risk management should be the responsibility of every participant in the investment process, applying experience, judgment and knowledge of the underlying investments.**

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The sixth is that while risk should be dealt with constantly, investors are often tempted to do so only sporadically. Since risk only turns into loss when bad things happen, this can cause investors to apply risk control only when the future seems ominous. At other times they may opt to pile on risk in the expectation that good things lie ahead. But since we can't predict the future, we never really know when risk control will be needed. Risk control is unnecessary in times when losses don't occur, but that doesn't mean it's wrong to have it. The best analogy is to fire insurance: do you consider it a mistake to have paid the premium in a year in which your house didn't burn down?

Taken together these six observations convince me that Charlie Munger's trenchant comment on investing in general – **"It's not supposed to be easy. Anyone who finds it easy is stupid." –** is profoundly applicable to risk management. Effective risk management requires deep insight and a deft touch. It has to be based on a superior understanding of the probability distributions that will govern future events. Those who would achieve it have to have a good sense for what the crucial moving parts are, what will influence them, what outcomes are possible, and how likely each one is. **Following on with Charlie's idea, thinking risk control is easy is perhaps the greatest trap in investing, since excessive confidence that they have risk under control can make investors do very risky things.**

Thus the key prerequisites for risk control also include humility, lack of hubris, and knowing what you don't know. No one ever got into trouble for confessing a lack of prescience, being highly risk-conscious, and even investing scared. Risk control may restrain results during a rebound from crisis conditions or extreme under-valuations, when those who take the most risk generally make the most money. But it will also extend an investment career and increase the likelihood of long-term success. **That's why Oaktree was built on the belief that risk control is "the most important thing."**

Lastly while dealing in generalities, I want to point out that whereas risk control is indispensable, risk avoidance isn't an appropriate goal. The reason is simple: risk avoidance usually goes hand-in-hand with return avoidance. While you shouldn't expect to make money just for bearing risk, you also shouldn't expect to make money without bearing risk.

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At present I consider risk control more important than usual. To put it briefly:

- Today's ultra-low interest rates have brought the prospective returns on money market instruments, Treasurys and high grade bonds to nearly zero.
- This has caused money to flood into riskier assets in search of higher returns.
- This, in turn, has caused some investors to drop their usual caution and engage in aggressive tactics.
- And this, finally, has caused standards in the capital markets to deteriorate, making it easy for issuers to place risky securities and – consequently – hard for investors to buy safe ones.

Warren Buffett put it best, and I regularly return to his statement on the subject:

> . . . the less prudence with which others conduct their affairs, the greater the prudence with which we should conduct our own affairs.

While investor behavior hasn't sunk to the depths seen just before the crisis (and, in my opinion, that contributed greatly to it), **in many ways it has entered the zone of imprudence**. To borrow a metaphor

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from Chuck Prince, Citigroup's CEO from 2003 to 2007, anyone who's totally unwilling to dance to today's fast-paced music can find it challenging to put money to work.

It's the job of investors to strike a proper balance between offense and defense, and between worrying about losing money and worrying about missing opportunity. **Today I feel it's important to pay more attention to loss prevention than to the pursuit of gain**. For the last *four* years Oaktree's mantra has been "move forward, but with caution." At this time, in reiterating that mantra, I would increase the emphasis on those last three words: "but with caution."

Economic and company fundamentals in the U.S. are fine today, and asset prices – while full – don't seem to be at bubble levels. But when undemanding capital markets and a low level of risk aversion combine to encourage investors to engage in risky practices, something usually goes wrong eventually. **Although I have no idea what could make the day of reckoning come sooner rather than later, I don't think it's too early to take today's carefree market conditions into consideration. What I do know is that those conditions are creating a degree of risk for which there is no commensurate risk premium.** We have to behave accordingly.

June 8, 2015 (updating *Risk Revisited* published September 3, 2014)

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a zoning change, an increase in property taxes, the imposition of height or density limitations, the requirement that buildings be accessible to disabled persons, the requirement for environmental impact studies, the potential costs of remediation of environmental contamination or damage, the imposition of special fines to reduce traffic congestion or to provide for housing, competition from other investors, changes in laws, wars, and earthquakes, typhoons, terrorist attacks or other similar events. Income from income-producing real estate may be adversely affected by general economic conditions, local conditions such as oversupply or reduction in demand for space in the area, competition from other available properties, and the owner provision of adequate maintenance and coverage by adequate insurance. Oaktree may be required for business or other reasons to foreclose on one or more mortgages held in such strategy's portfolio. Foreclosures can be lengthy and expensive and borrowers often assert claims, counterclaims and defenses to delay or prevent foreclosure actions.

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Memo to: Oaktree Clients

From: Howard Marks

Re: Liquidity

My wife Nancy's accusations of repetitiveness notwithstanding, once in a while I think of something about which I haven't written much. Liquidity is one of those things. I'm not sure it's a profound topic, and perhaps my observations won't be either. But I think it's worth a memo.

Liquidity Defined

Sometimes people think of liquidity as the quality of something being readily saleable or marketable. For this, the key question is whether it's registered, publicly listed and legal for sale to the public. "Marketable securities" are liquid in this sense; you can buy or sell them in the public markets. "Non-marketable" securities include things like private placements and interests in private partnerships, whose salability is restricted and can require the qualification of buyers, documentation, and perhaps a time delay.

But the more important definition of liquidity is this one from *Investopedia*: "The degree to which an asset or security can be bought or sold in the market *without affecting the asset's price*." (Emphasis added) **Thus the key criterion isn't "can you sell it?" It's "can you sell it at a price equal or close to the last price?"** Most liquid assets are registered and/or listed; that can be a necessary but not sufficient condition. For them to be truly liquid in this latter sense, one has to be able to move them promptly and without the imposition of a material discount.

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Liquidity Characterized

I often say many of the important things in investing are counter-intuitive. Liquidity is one of them. **In particular, it's probably more wrong than right to say without qualification that something is or isn't "liquid."**

If when people ask whether a given asset is liquid they mean "marketable" (in the sense of "listed" or "registered"), then that's an entirely appropriate question, and answering it is straightforward. Either something can be sold freely to the public or it can't.

But if what they want to know is how hard it will be to get rid of it if they change their mind or want to take a profit or avoid a possible loss – how long it will take to sell it, or how much of a markdown they'll have to take from the last price – that's probably not an entirely legitimate question.

It's often a mistake to say a particular asset is either liquid or illiquid. Usually an asset isn't "liquid" or "illiquid" by its nature. Liquidity is ephemeral: it can come and go. An asset's liquidity can increase or decrease with what's going on in the market. One day it can be easy to sell, and the next day hard. Or one day it can be easy to sell but hard to buy, and the next day easy to buy but hard to sell.

In other words, the liquidity of an asset often depends on which way you want to go . . . and which way everyone else wants to go. If you want to sell when everyone else wants to buy, you're likely to

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find your position is highly liquid: you can sell it quickly, and at a price equal to or above the last transaction. But if you want to sell when everyone else wants to sell, you may find your position is totally illiquid: selling may take a long time, or require accepting a big discount, or both. **If that's the case – and I'm sure it is – then the asset can't be described as being either liquid or illiquid. It's entirely situational**.

There's usually plenty of liquidity for those who want to sell things that are rising in price or buy things that are falling. That's great news, since much of the time those are the right actions to take. But why is the liquidity plentiful? For the simple reason that most investors want to do just the opposite. The crowd takes great pleasure from buying things whose prices are rising, and they often become highly motivated to sell things that are falling . . . notwithstanding that those may be exactly the **wrong** things to do.

Further, the liquidity of an asset is very much a function of the quantity involved. At a given time, a stock may be liquid if you want to sell a thousand shares but highly illiquid if you want to sell a million. **If so, it can't be said categorically that the stock is either liquid or illiquid. But people do it all the time.**

Investment managers are often asked how long it would take to liquidate a given portfolio. The answer usually takes the form of a schedule that says: "We could sell off x% of the portfolio in a day, y% in a week, and z% in a month, etc."

But that's a terribly simplistic answer. It doesn't say anything about how the price received would compare with the last trade or the price at which the assets were carried on the previous valuation date. Or about how changing market conditions might make the answer different a month from now. Bottom line: to the statement "we could sell off z% in a month" one should add "but who knows what the price will be, or what effect changing market conditions might have on that percentage?" Anything else requires an assumption that the assets' liquidity is constant. That's often far from the case.

Usually, just as a holder's <u>desire</u> to sell an asset <u>increases</u> (because he has become afraid to hold it), his <u>ability</u> to sell it <u>decreases</u> (because everyone else has also become afraid to hold it). Thus (a) things tend to be liquid when you don't need liquidity, and (b) just when you need liquidity most, it tends not to be there. (In the 2014 Berkshire Hathaway Annual Letter, released early this month, Warren Buffett expresses his dislike for "substitutes for cash that are claimed to deliver liquidity and actually do so, *except* when it is truly needed.") The truth is, things often seem more liquid when you buy than when you go to sell.

The bottom line is that it can be wrong to assume it'll be easy and painless to get out of your holdings, and especially to exit a position after its price has begun to drop.

<u>Liquidity and Opportunities</u>

We watch TV, listen to radio or read newspapers. I'm always amused when the pundits say, "stocks went up today because several companies beat analysts' earnings forecasts" or "the market dropped because of increased uncertainty regarding the price of oil." How do they know? Where do buyers or sellers register their motivations, such that the media can discern them so definitively?

There's only one indisputable explanation for why the market went up on a given day: there were more buyers than sellers. When buyers have greater influence in the market than sellers – because would-be

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buyers predominate relative to sellers; buyers feel more urgency than sellers; or buyers want to buy more shares than sellers want to sell – prices rise. Under those circumstances, sellers enjoy great liquidity, and buyers have to pay a premium over prior prices.

So there's the germ of a plan. Why not sell the things people are bidding for most strongly and buy the things they're eager to dump? That sounds like a good idea. It is, and that's why smart investors flock to it: **it's called contrarianism**.

One of the main reasons why opportunistic strategies like distressed debt investing can perform well is that investors are sometimes able to buy from sellers who outnumber them . . . who are in a hurry . . . who want to sell really badly . . . or who have to sell regardless of price. To achieve "immediacy" (a term for a quick exit coined by Richard Bookstaber), the sellers tend to sacrifice something else: price. And the price discount they accept makes an important contribution to the bargain hunter's excess return. (See *Investment Miscellany*, November 2000, for a thorough discussion of immediacy).

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Random Thoughts on Liquidity

Here are a number of truths about liquidity. Some are important, but they don't fit into a coherent narrative.

- It's possible that liquidity can be relied on when sellers and buyers are balanced in number and degree of motivation. But more often, given the herd mentality in markets, "everyone" wants to either sell or buy at once.

  There's an old saying to the effect that "In times of crisis all correlations go to one." The prices of everything move in unison during crises because investors are driven by mob psychology, not fundamentals. Thus – and for the same reason – **in times of crisis liquidity often goes to zero**.

- Usually, as described above, it's either hard to buy but easy to sell, or hard to sell but easy to buy. **Sometimes, however, when everyone's confused and intimidated, the market freezes up and it can be hard to do both**.

  For example, after securities backed by sub-prime mortgages were thoroughly impugned in the crisis of 2007-08, there was a total lack of trading. The fact that the "last trade" occurred months ago made it hard for potential buyers and sellers to feel confident regarding what a fair price might be. I believe it was for this reason that the U.S. Treasury organized the Public Private Investment Partnership program, under which nine investment managers raised equity capital from clients for investment in mortgage backed securities, with the Treasury matching the equity and then supplying an equal amount of zero-cost leverage. The goal was to cause trading to occur, and with it "price discovery." After transactions resumed, buyers and sellers had a better idea what a fair price was, so trading and liquidity increased. This was one of the ways in which the government coaxed the capital markets to reopen. Yet this program is little known and its brilliance is unrecognized.

- It's one of my standing rules that **"No investment vehicle should promise greater liquidity than is afforded by its underlying assets."** If one were to do so, what would be the source of the increase in liquidity? Because there is no such source, the incremental liquidity is usually

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illusory, fleeting and unreliable, and it works (like a Ponzi scheme) until markets freeze up and the promise of liquidity is tested in tough times.

Some hedge funds provided an example in the last crisis. They raised capital with which to buy assets of uncertain liquidity, sometimes using leverage, and they promised investors the ability to withdraw their money quarterly or annually. But when the end of 2008 rolled around, the desire of LPs for liquidity overwhelmed the capacity of the marketplace to absorb the assets that were for sale (or perhaps the GPs wisely refused to sell because a fair price couldn't be obtained). When that occurred, the funds told LPs they couldn't have the liquidity they'd been promised. Illiquid assets went into locked-up "side pockets," and "gates" came down delaying the effective dates of withdrawals. These little-known provisions gave LPs an unpleasant surprise, demonstrating that **in a crisis, the promise of withdrawal from a vehicle holding illiquid assets can easily turn out to be too good to be true.**

- People often think about liquidity constraints as relating to specific assets; they don't necessarily think about the knock-on effects of illiquidity from asset to asset and market to market. For example, in the crisis, institutional investors had to sell liquid assets at steep discounts and redeem from the most liquid hedge funds because of the heavy allocations to illiquid strategies and gated funds elsewhere in their portfolios. The resulting elevated supply of assets for sale from these funds reduced the liquidity for sellers in those markets and put downward pressure on assets that shouldn't have been so affected.

- Specific investor actions can have a dramatic impact in illiquid markets. For example, the price of an illiquid asset can rise simply because one buyer is buying, in which case selling the asset becomes very easy. When that buyer stops buying, however, the market can quickly reset to much lower levels in terms of both price and the liquidity enjoyed by sellers (and it can overshoot in the other direction if the buyer decides to sell what he's bought).

- In assessing an asset's liquidity, one should think about the other people who hold it. Are they all the same type of investor, and thus likely to react the same to a given story on *Bloomberg*? Do many of them own it in funds whose investors have the right to make quick withdrawals? And, in particular, are they highly levered and subject to potential margin calls? The more ownership is concentrated in the hands of investors who could become motivated to sell *en masse*, the faster liquidity can disappear.

- **Taking on large amounts of illiquidity is neither a winning nor a losing strategy *per se*.** Like any other form of risk, it's advantageous to bear illiquidity when the incremental return for doing so is high, but a bad idea when it's not. And, needless to say, the liquidity premium is neither always there nor always generous.

  In my view, some endowments emulated Yale to excess in the years before the crisis, taking on too much illiquidity in the belief that (a) as ultra-long-term investors they could bear it and (b) they were sure to be well paid for doing so. **But risk premiums arise from risk aversion, meaning they may not exist when investors are risk-tolerant.** The willing acceptance of illiquidity in the early to mid-2000s caused the premium for bearing it to be inadequate, and investors who did so were penalized, not rewarded.

- On the other hand, at the right time, investors can make tremendous amounts of money simply by being willing to supply liquidity (or accept illiquidity). When everyone else is selling in panic or

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sitting frozen on the sideline, refusing to buy, cash can be king. Often when a crash follows a bubble-driven run-up, most people are short of cash (and/or the willingness to spend it).

But it may not be a good idea to always sit with a large amount of cash so as to be able to provide liquidity and scoop up bargains in a once-a-decade crash. This may equate to sub-optimizing. It would have paid off in 1990-91, 2001-02 and 2008-09, but what about the other 19 years in the last 25?

- **A high degree of concern over illiquidity can push investors to avoid it to excess.** For example, institutions whose realities could permit a long-term investment approach sometimes decide to invest only in things they can get out of quickly. Is this prudence, or merely sub-optimizing? Is it done in response to a threat that has a reasonable likelihood of materializing, or to a crisis while it is fresh in memory ("fighting the last war")? Is it realistic, or the result of an irrational desire to be able to turn the whole portfolio into cash in short order? Or is it done in order to always be able to comply with a sell order from the boss or the investment committee? **Liquidity is a good thing (everything else being equal). But is it smart to require that a portfolio be able to provide more liquidity than is ever likely to be called on? Let's remember that liquidity isn't free. There's usually a cost, and it comes in the form of return forgone.**

- I think the best way to deal with the issue of liquidity is to think of the portfolio in terms of layers ranging from highly liquid to totally illiquid. The appropriate size for each layer at a given point in time is a function of each investor's specific situation, as well as the position of the market in its cycle.

  In sizing those layers, it's clear that no investor should shoulder more illiquidity than its realities permit, as happened in 2008 with serious consequences for some endowments. Portfolios may be required to (a) meet their owners' needs for current cash with which to operate, (b) fund capital drawdowns at a time when lock-up funds aren't making distributions, or (c) enable the owners to avoid having to sell assets at depressed prices. Thus portfolio liquidity should be set so these needs can be met in bad times.

  But how bad is bad? Should the portfolio have to respond to the last bad year, the average of the last five bad years, the worst year ever . . . or something worse? These decisions require judgment.

- Finally, excessive liquidity can do more harm than good, and investors can be better off if they're able to trade less rather than more. **My son Andrew makes a number of excellent points on the theme that liquidity is a good thing, but not necessarily all good:**

  - The siren song of liquidity can convince investors to try their hand as traders. The result can be increases in (a) emphasis on short-term considerations relative to long-term ones, (b) transaction costs and taxes, and (c) exposure to negative surprises when the liquidity they've been enjoying and counting on disappears.

  - Liquidity can cause you to lower the bar for investments. If you're thinking about making an investment you know you won't be able to exit for years, you'll probably do thorough due diligence, make conservative assumptions and apply skepticism, etc. But when you have something that appears very liquid, you may take a position casually, with little work or

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conviction, under the assumption that it would be easy and cheap to get out. Here's a great quote on the subject from Warren Buffett:

> If you aren't willing to own a stock for ten years, don't even think about owning it for ten minutes. Put together a portfolio of companies whose aggregate earnings march upward over the years, and so also will the portfolio's market value.

- Certainly owners of companies wouldn't (and couldn't) trade in and out of them every day. If you intend to invest in businesses based on their fundamentals – rather than trading based on short-term market dynamics – it's critical to think and act like a long-term owner.

- When you find an investment with the potential to compound over a long period of time, one of the hardest things is to be patient and maintain your position as long as doing so is warranted on the basis of the prospective return and risk. Investors can easily be moved to sell by news, emotion, the fact that they've made a lot of money to date, or the excitement of a new, seemingly more promising idea. **When you look at the chart for something that's gone up and to the right for 20 years, think about all the times a holder would have had to convince himself not to sell.** An abundance of liquidity can be a handicap in this regard. Here's some more good advice from Warren: "If you can enjoy Saturdays and Sundays without looking at stock prices, give it a try on weekdays." Looking less often would improve most investors' results.

I have particularly strong feelings about the insistence that 401(k) retirement accounts include only investment choices that provide daily pricing and liquidity. I've heard from Oaktree pension clients about employees who frequently trade their 401(k) accounts. It can't be a good thing for these portfolios to be constantly rejiggered. **It's hard enough to make an occasional well-reasoned long-term decision, but much harder to make a large number of correct short-term decisions.** Rather than ensuring daily liquidity, the people in charge could help plan participants by limiting them to annual changes at most.

So liquidity – like most other things in the investment world – is multi-faceted and complex, not simple. There are a lot of considerations to be taken into account, and certainly no simple formula for doing so. Like everything else in investing, there's no surefire way to manage the issue of liquidity in the absence of superior insight.

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Influences on Liquidity Today

Many factors cause the availability of liquidity to change over time. The biggest factor lately in some of our credit markets has been the growth of demand through mutual funds and ETFs, or Exchange-Traded Funds. While there's been no real mania for stocks, the ultra-low level of interest rates has driven many retail investors (who in the past may have invested in Treasurys and money market funds) to credit vehicles instead.

Witness, for example, the fact that senior loan mutual funds saw net inflows of capital for 95 straight weeks leading up to April 2014. That's almost two solid years without a break. You might expect that to cause an imbalance of demand over supply, rendering buyers unable to get their fill. But Wall Street abhors a vacuum, and the banks were able to round up enough issuers to satisfy the buyers. **And with large numbers of retail buyers on one side and obliging issuers on the other, the market certainly**

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looked liquid. But when mutual fund inflows turned into outflows in the second half of 2014, the supply of loans put up for sale to meet redemptions added to the supply of loans issued by companies seeking capital. Thus the total supply of loans for sale exceeded the demand, causing prices to decline and the market to become less liquid for holders.

Investors in mutual funds think of them as highly liquid. "You can get out any day," the ads say, "Just call the 800 number." But withdrawing from a mutual fund (if there isn't adequate cash in the fund to meet the redemption) is equivalent to requiring the portfolio manager to enter a "market held" order for some of the securities in the fund's portfolio: sell regardless of price. And the depressed price that results from the involuntary sale of securities is the same price that's paid to the redeeming fund investor.

That's because the mutual fund investor may enter his redemption order at 6:00 p.m. on Monday or 10:00 a.m. on Tuesday, but the price he gets will be determined in an NAV calculation after the close of trading Tuesday. He doesn't get the price that prevailed before the sell order occasioned by his redemption was entered. Thus a mutual fund may be "highly liquid," but that's not the same as "100% liquid," and **it's certainly not more liquid than the assets in its portfolio.**

The other source of increasing demand for securities of late has been ETFs. ETF-like vehicles, sometimes known as "tracking shares," began to appear in the early 1990s, and they proliferated significantly after 2000. According to Wikipedia, "As of January 2014, there were over 1,500 ETFs traded in the U.S., with over $1.7 trillion in assets." (Several years ago I cited Wikipedia in a memo, and Oaktree co-founder Richard Masson – a stickler for correctness – told me in no uncertain terms that it wasn't a respectable source. I think things have changed enough since then, Richard: I'm citing it!)

ETF's have become popular because they're generally believed to be "better than mutual funds," in that they're traded all day. Thus an ETF investor can get in or out anytime during trading hours, whereas with mutual funds he has to wait for a pricing at the close of business. "If you're considering investing," the pitch goes, "why do so through a vehicle that can require you to wait hours to cash out?" **But do the investors in ETFs wonder about the source of their liquidity?**

Here's what Wikipedia has to say about the liquidity of ETFs:

> An ETF combines the valuation feature of a mutual fund or unit investment trust, which can be bought or sold at the end of each trading day for its net asset value, with the tradability feature of a closed-end fund, which trades throughout the trading day at prices that may be more or less than its net asset value. . . .

Consider the possibility that many of the holders of an ETF become highly motivated to either buy or sell. Their actions theoretically could cause the trading price of the ETF to diverge from the value of the securities in the underlying portfolio. To minimize that risk, the creators of ETFs established a mechanism through which financial institutions can trade in wholesale quantities of "creation units" of the fund at NAV.

> The ability to purchase and redeem creation units gives ETFs an arbitrage mechanism intended to minimize the potential deviation between the market price and the net asset value of ETF shares. Existing ETFs have transparent portfolios, so institutional investors will know exactly what portfolio assets they must assemble if they wish to purchase a creation unit, and the exchange disseminates the updated net asset value of the shares throughout the trading day, typically at 15-second intervals.

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> If there is strong investor demand for an ETF, its share price will temporarily rise above its net asset value per share, giving arbitrageurs an incentive to purchase additional creation units from the ETF and sell the component ETF shares in the open market. The additional supply of ETF shares reduces the market price per share, generally eliminating the premium over net asset value. A similar process applies when there is weak demand for an ETF: its shares trade at a discount from net asset value.

What would happen, for example, if a large number of holders decided to sell a high yield bond ETF all at once? In theory, the ETF can always be sold. Buyers may be scarce, but there should be some price at which one will materialize. Of course, the price that buyer will pay might represent a discount from the NAV of the underlying bonds. In that case, a bank should be willing to buy the creation units at that discount from NAV and short the underlying bonds at the prices used to calculate the NAV, earning an arbitrage profit and causing the gap to close. But then we're back to wondering about whether there will be a buyer for the bonds the bank wants to short, and at what price. **Thus we can't get away from depending on the liquidity of the underlying high yield bonds. The ETF can't be more liquid than the underlying, and we know the underlying can become highly illiquid.**

This whole discussion calls to mind a Wall Street Wonder called "auction rate securities." They were popular ten years ago, but today they're only a footnote to financial history. In brief, auction rate securities were developed to satisfy the desire of borrowers for long-term financing at the lower interest rates on short-term debt. The securities were described as safe and liquid because Dutch auctions would be held every week or month, resetting the yield on the securities to contemporary levels and thereby ensuring a price near par, as well as plentiful liquidity. Certainly there would always be **some** yield capable of enticing investors to buy at par. Thus the securities would be free from the risks associated with long-term debt. That's what **should** have happened. Here's what Wikipedia says did happen:

> Beginning on Thursday, February 7, 2008, auctions for these securities began to fail when investors declined to bid on the securities. The four largest investment banks who make a market in these securities (Citigroup, UBS AG, Morgan Stanley and Merrill Lynch) declined to act as bidders of last resort, as they had in the past. *This was a result of the scope and size of the market failure, combined with the firms' needs to protect their capital during the 2008 financial crisis.* (Emphasis added)
>
> On February 13, 2008, 80% of auctions failed. On February 20, 62% failed (395 out of 641 auctions) . . . .

When the auctions failed, auction rate securities became frozen. Holders saw large markdowns and for years were unable to obtain liquidity. Eventually, the investment banks that had issued the securities bought many of them back at par, under threat of investigation by U.S. attorneys general. And one more "miracle" disappeared from the scene.

Lastly on the subject of ETFs, a senior loan ETF can be sold for settlement in three days, whereas if there are tenders of creation units, sales of loans to raise the funds with which to pay for those units may require a week or considerably more to settle. What are the implications of such a mismatch?

So-called "liquid alternatives" or "liquid alts" are another recent innovation. They're supposed to deliver performance comparable to other alternative investments without the illiquidity they entail. To me it sounds like just one more promise of something for nothing. How many portfolio managers are smart enough, for example, to deliver the alpha of a well-managed hedge fund without accepting the illiquidity that the clever manager of that hedge fund feels he has no choice but to bear?

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Financial innovations created in good times often fool people into thinking a silver bullet has been invented that offers a better deal than traditional investments. (By "traditional" I mean investments that are acknowledged to entail increased risk as the price for targeting increased return . . . not the "miracles" where increased return comes gratis.) Many recent innovations have promised high liquidity from low-liquidity assets. As I said on page three, however, no investment vehicle should promise more liquidity than is afforded by its underlying assets. Do these recent promises represent real improvements, or merely the seeds for subsequent disappointment?

Auction rate securities were a way to buy long-term debt securities without interest-rate risk and illiquidity. Likewise, ETFs offer a liquid way to invest in potentially illiquid markets. But these instruments rely for their desirable outcomes on the assumption that other parties will do what they "should" do. Over the course of my career I've seen many instances when market participants failed to do what they were supposed to do. The related financial innovations often remind me of my father's story about the habitual gambler who finally found a sure thing: a race with only one horse. He bet all his money, but halfway around the track the horse jumped over the fence and ran away. **Will ETFs prove liquid in the next crisis? And what impact will mass sales of ETFs have on the prices of underlying assets? We'll find out.**

Finally under the heading of recent developments, I want to mention the Volcker Rule, which arose from a suggestion from former Fed chairman Paul Volcker. The main reason for the 2008 government bailouts of systemically important banks was the losses the banks had suffered thanks to unsuccessful investments made with their proprietary capital in mortgage backed securities and other levered assets. When these collapsed, the banks lost a great deal of their capital, such that they required capital injections only the government could or would make.

In response to that experience, legislators decided to incorporate the Volcker Rule into the Dodd–Frank Wall Street Reform and Consumer Protection Act, the main piece of regulation to emerge after the crisis. Although there has been much back-and-forth regarding its modification and enactment, the main thrust of the Volcker Rule is to prevent banks from making speculative investments that aren't related to their activities on behalf of clients; in other words, to impose a general ban on proprietary trading**.**

Often during crises, investors take to the sidelines, such that there are no buyers for the assets that come up for sale. Liquidity dries up, and prices plummet. In the past, banks have stepped forward, risking their proprietary capital in pursuit of profit. Many times in our experience, banks have competed strongly against us to buy distressed debt, thereby supplying liquidity to the market. Although the eventual impact of the Volcker Rule is unknown, **any diminution of the banks' likelihood of engaging in proprietary buying during crises suggests a significant reduction in liquidity just when it may be needed most.**

For the last few years I've been expressing my view that (a) investors – driven by central bank-mandated interest rates near zero – have been moving into riskier investments in pursuit of higher returns and (b) in taking that step they've often ignored the need for caution or been ignorant as to how to achieve it. **I believe that as an important part of this behavior, those investors have extrapolated the high level of liquidity they've witnessed in the last five years, failing to understand its transitory nature.**

The impact on liquidity of ETFs, liquid alternatives and the Volcker Rule has yet to be tested in tough times. We'll see what happens in the next serious downturn.

* * *

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The bottom line is unambiguous. Liquidity can be transient and paradoxical. It's plentiful when you don't care about it and scarce when you need it most. Given the way it waxes and wanes, it's dangerous to assume the liquidity that's available in good times will be there when the tide goes out.

What can an investor do about this unreliability? The best preparation for bouts of illiquidity is:

- **buying assets, hopefully at prices below durable intrinsic values, that can be held for a long time – in the case of debt, to its maturity – even if prices fall or price discovery ceases to take place, and**
- **making sure that investment vehicle structures, leverage arrangements (if any), manager/client relationships and performance expectations will permit a long-term approach to investing.**

These are the things we try to do.

And the worst defenses against illiquidity – or, better said, the approaches that make you most dependent on the availability of liquidity – are (a) employing trading strategies under which you buy things because of how you think they'll perform in the short run, not what they'll be worth in the long run, (b) being focused on what the market says your assets are worth, not what your analysis shows them to be worth, and (c) buying with leverage that exposes you to the risk of a margin call in a declining market.

One of the great advantages of investing in performing debt is that if our credit judgments are correct, the return will come from our contractual relationship with the issuers – from the interest and principal they've promised to pay us – not the operation of the market. **At Oaktree, trading is what we do to implement portfolio managers' long-term investment decisions. We generally consider it a cost of doing business, not something we engage in to make money.**

There are two benefits to this approach:

- we aren't highly reliant on liquidity for success, and
- rather than be weakened in times of illiquidity, we can profit from crises by investing more – at lower prices – when liquidity is scarce.

We're not immune to occasional periods of illiquidity; our holdings become just as hard to sell as anyone else's. But with the proper structure and approach, it's possible to turn such periods to our advantage rather than just endure them.

* * *

I started this memo by saying liquidity might not be a profound topic. But when I ran a draft by our CEO Jay Wintrob, who came to us in November from AIG, he took issue. I'll give him the last word:

> In September 2008, AIG experienced serious liquidity issues (despite its $1 trillion balance sheet) when it couldn't post $20-25 billion of liquid collateral related to credit default swap contracts written by one of its subsidiaries. The U.S. government stepped in

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as a result, lending support that eventually reached $182.3 billion, massively diluting AIG shareholders in the process. **When you can't meet a margin call because you have insufficient liquidity, that's profound.**

March 25, 2015

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Memo to: Oaktree Clients

From: Howard Marks

Re: The Lessons of Oil

I want to provide a memo on this topic before I – and hopefully many of my readers – head out for year-end holidays. I'll be writing not with regard to the right price for oil – about which I certainly have no unique insight – but rather, as indicated by the title, about what we can learn from recent experience.

- Despite my protestations that I don't know any more than others about future macro events – and thus that my opinions on the macro are unlikely to help anyone achieve above average performance – people insist on asking me about the future. Over the last eighteen months (since Ben Bernanke's initial mention that we were likely to see some "tapering" of bond buying), most of the macro questions I've gotten have been about whether the Fed would move to increase interest rates, and particularly when. These are the questions that have been on everyone's mind.

  Since mid-2013, the near-unanimous consensus (with credit to DoubleLine's Jeffrey Gundlach for vocally departing from it) has been that rates would rise. And, of course, the yield on the 10-year Treasury has fallen from roughly 3% at that time to 2.2% today. This year many investing institutions are underperforming the passive benchmarks and attributing part of the shortfall to the fact that their fixed income holdings have been too short in duration to allow them to benefit from the decline of interest rates. **While this has nothing to do with oil, I mention it to provide a reminder that what "everyone knows" is usually unhelpful at best and wrong at worst**.

- **Not only did the investing herd have the outlook for rates wrong, but it was uniformly inquiring about the wrong thing**. In short, while everyone was asking whether the rate rise would begin in December 2014 or April 2015 (or might it be June?) – in response to which I consistently asked why the answer matters and how it might alter investment decisions – few people I know were talking about whether the price of oil was in for a significant change.

  Back in 2007, in *It's All Good*, I provided a brief list of some possibilities for which I thought stock prices weren't giving enough allowance. I included "$100 oil" (since a barrel was selling in the $70s at the time) and ended with "the things I haven't thought of." I suggested that it's usually that last category – the things that haven't been considered – we should worry about most. **Asset prices are often set to allow for the risks people are aware of. It's the ones they haven't thought of that can knock the market for a loop.**

- In my book *The Most Important Thing*, I mentioned something I call "the failure of imagination." I defined it as "either being unable to conceive of the full range of possible outcomes or not understanding the consequences of the more extreme occurrences." Both aspects of the definition apply here.

  The usual starting point for forecasting something is its current level. Most forecasts extrapolate, perhaps making modest adjustments up or down. In other words, most forecasting is done incrementally, and few predictors contemplate order-of-magnitude changes. Thus I imagine that with Brent crude around $110 six months ago, the bulls were probably predicting $115 or $120 and the bears $105 or $100. **Forecasters usually stick too closely to the current level, and on**

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those rare occasions when they call for change, they often underestimate the potential magnitude. Very few people predicted oil would decline significantly, and fewer still mentioned the possibility that we would see $60 within six months.

For several decades, Byron Wien of Blackstone (and formerly of Morgan Stanley, where he authored widely read strategy pieces) has organized summer lunches in the Hamptons for "serious," prominent investors. At the conclusion of the 2014 series in August, he reported as follows with regard to the consensus of the participants:

> Most believed that the price of oil would remain around present levels. Several trillion dollars have been invested in drilling over the last few years and yet production is flat because Nigeria, Iraq and Libya are producing less. The U.S. and Europe are reducing consumption, but that is being more than offset by increasing demand from the developing world, particularly China. Five years from now the price of Brent is likely to be closer to $120 because of emerging market demand.

I don't mean to pick on Byron or his luncheon guests. In fact, I think the sentiments he reported were highly representative of most investors' thinking at the time.

As a side note, it's interesting to observe that growth in China already was widely understood to be slowing, but perhaps that recognition never made its way into the views on oil of those present at Byron's lunches. **This is an example of how hard it can be to appropriately factor all of the relevant considerations into complex real-world analysis**.

- Turning to the second aspect of "the failure of imagination" and going beyond the inability of most people to imagine extreme outcomes, the current situation with oil also illustrates how difficult it is to understand the full range of potential ramifications. **Most people easily grasp the immediate impact of developments, but few understand the "second-order" consequences . . . as well as the third and fourth**. When these latter factors come to be reflected in asset prices, this is often referred to as "contagion." Everyone knew in 2007 that the sub-prime crisis would affect mortgage-backed securities and homebuilders, but it took until 2008 for them to worry equally about banks and the rest of the economy.

  The following list is designed to illustrate the wide range of possible implications of an oil price decline, both direct consequences and their ramifications:

  - Lower prices mean reduced revenue for oil-producing nations such as Saudi Arabia, Russia and Brunei, causing GDP to contract and budget deficits to rise.
  - There's a drop in the amounts sent abroad to purchase oil by oil-importing nations like the U.S., China, Japan and the United Kingdom.
  - Earnings decline at oil exploration and production companies but rise for airlines whose fuel costs decline.
  - Investment in oil drilling declines, causing the earnings of oil services companies to shrink, along with employment in the industry.
  - Consumers have more money to spend on things other than energy, benefitting consumer goods companies and retailers.
  - Cheaper gasoline causes driving to increase, bringing gains for the lodging and restaurant industries.

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- With the cost of driving lower, people buy bigger cars – perhaps sooner than they otherwise would have – benefitting the auto companies. They also keep buying gasoline-powered cars, slowing the trend toward alternatives, to the benefit of the oil industry.
- Likewise, increased travel stimulates airlines to order more planes – a plus for the aerospace companies – but at the same time the incentives decline to replace older planes with fuel-efficient ones. (This is a good example of the analytical challenge: is the net impact on airplane orders positive or negative?)
- By causing the demand for oil services to decline, reduced drilling leads the service companies to bid lower for business. This improves the economics of drilling and thus helps the oil companies.
- Ultimately, if things get bad enough for oil companies and oil service companies, banks and other lenders can be affected by their holdings of bad loans.

- **Further, it's hard for most people to understand the self-correcting aspects of economic events**.

  - A decline in the price of gasoline induces people to drive more, increasing the demand for oil.
  - A decline in the price of oil negatively impacts the economics of drilling, reducing additions to supply.
  - A decline in the price of oil causes producers to cut production and leave oil in the ground to be sold later at higher prices.

  In all these ways, lower prices either increase the demand for oil or reduce the supply, causing the price of oil to rise (all else being equal). In other words, lower oil prices – in and of themselves – eventually make for higher oil prices. **This illustrates the dynamic nature of economics**.

- Finally, in addition to the logical but often hard-to-anticipate second-order consequences or knock-on effects, negative developments often morph in illogical ways. Thus, in response to cascading oil prices, "I'm going to sell out of emerging markets that rely on oil exports" can turn into "I'm going to sell out of all emerging markets," even oil importers that are aided by cheaper oil.

  In part the emotional reaction to negative developments is the product of surprise and disillusionment. Part of this may stem from investors' inability to understand the "fault lines" that run through their portfolios. Investors knew changes in oil prices would affect oil companies, oil services companies, airlines and autos. But they may not have anticipated the effects on currencies, emerging markets and below-investment grade credit broadly. Among other things, they rarely understand that capital withdrawals and the resulting need for liquidity can lead to urgent selling of assets that are completely unrelated to oil. **People often fail to perceive that these fault lines exist, and that contagion can reach as far as it does. And then, when that happens, investors turn out to be unprepared, both intellectually and emotionally.**

  A grain of truth underlies most big up and down moves in asset prices. Not just "oil's in oversupply" today, but also "the Internet will change the world" and "mortgage debt has historically been safe." Psychology and herd behavior make prices move too far in response to those underlying grains of truth, causing bubbles and crashes, but also leading to opportunities to make great sales of overpriced assets on the rise and bargain purchases in the subsequent fall. **If you think markets are logical and investors are objective and unemotional, you're in for a lot of surprises.** In tough times, investors often fail to apply discipline and discernment;

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psychology takes over from fundamentals; and "all correlations go to one," as things that should be distinguished from each other aren't.

- To give you an idea about how events in one part of the economy can have repercussions in other economic and market segments, I'll quote from some of the analyses I've received this week from Oaktree investment professionals:

  - Energy is a very significant part of the high yield bond market. In fact, it is the largest sector today (having taken over from media/telecom, which has traditionally been the largest). This is the case because the exploration industry is highly capital-intensive, and the high yield bond market has been the easiest place to raise capital. The knock-on effects of a precipitous fall in bond prices in the biggest sector in the high yield bond market are potentially substantial: outflows of capital, and mutual fund and ETF selling. It would be great for opportunistic buyers if the selling gets to sectors that are fundamentally in fine shape . . . because a number of them are. And, in fact, low oil prices can even make them better.

  - An imperfect analogy might be instructive: capital market conditions for energy-related assets today are not unlike what we saw in the telecom sector in 2002. As in telecom, you've had the confluence of really cheap financing, innovative technology, and prices for the product that were quite stable for a good while. [To this list of contributing factors, I would add the not-uncommon myth of perpetually escalating demand for a product.] These conditions resulted in the creation of an oversupply of capacity in oil, leading to a downdraft. It's historically unprecedented for the energy sector to witness this type of market downturn while the rest of the economy is operating normally. Like in 2002, we could see a scenario where the effects of this sector dislocation spread wider in a general "contagion."

  - Selling has been reasonably indiscriminate and panicky (much like telecom in 2002) as managers have realized (too late) how overexposed they are to the energy sector. Trading desks do not have sufficient capital to make markets, and thus price swings have been predictably volatile. The oil selloff has also caused deterioration in emerging market fundamentals and may force spreads to gap out there. This ultimately may create a feedback loop that results in contagion to high yield bonds generally.

- Over the last year or so, while continuing to feel that U.S. economic growth will be slow and unsteady in the next year or two, I came to the conclusion that any surprises were most likely to be to the upside. And my best candidate for a favorable development has been the possibility that the U.S. would sharply increase its production of oil and gas. This would make the U.S. oil-independent, making it a net exporter of oil and giving it a cost advantage in energy – based on cheap production from fracking and shale – and thus a cost advantage in manufacturing. Now, the availability of cheap oil all around the world threatens those advantages. So much for macro forecasting!

- There's a great deal to be said about the price change itself. A well-known quote from economist Rudiger Dornbusch goes as follows: **"In economics things take longer to happen than you think they will, and then they happen faster than you thought they could."** I don't know if many people were thinking about whether the price of oil would change, but the decline of 40%-plus must have happened much faster than anyone thought possible.

- "Everyone knows" (now!) that the demand for oil turned soft (due to sluggish economic growth, increased fuel efficiency and the emergence of alternatives) at the same time that the supply was

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increasing (as new sources came on stream). Equally, everyone knows that lower demand and higher supply imply lower prices. Yet it seems few people recognized the ability of these changes to alter the price of oil. A good part of this probably resulted from belief in the ability of OPEC (meaning largely the Saudis) to support prices by limiting production.

A price that's kept aloft by the operation of a cartel is, by definition, higher than it would be based on supply and demand alone. Maybe the thing that matters is how far the cartelized price is from the free-market price; the bigger the gap, the shorter the period for which the cartel will be able to maintain control. Initially a cartel or a few of its members may be willing to bear pain to support the price by limiting production even while others produce full-out. But there may come a time when the pain becomes unacceptable and the price supporters quit. **The key lesson here may be that cartels and other anti-market mechanisms can't hold forever.** As Herb Stein said, "If something cannot go on forever, it will stop." Maybe we've just proved that this extends to the effectiveness of cartels.

- Anyway, on the base of 93 million barrels a day of world oil use, some softness in consumption combined with an increase in production to cut the price by more than 40% in just a few months. **What this proves – about most things – is that to Dornbusch's quote above we should append the words ". . . and they go much further than you thought they could."**

  The extent of the price decline seems much greater than the changes in supply and demand would call for. Perhaps to understand it you have to factor in (a) Saudi Arabia's ceasing to balance supply and demand in the oil market by cutting production, after having done so for many years, and (b) a large contribution to the decline on the part of psychology. (In the "conspiracy theory" department, consider the rumor that Saudi Arabia is allowing or abetting the price drop in order to either punish Iran, Iraq and ISIL; put the U.S. shale oil industry out of business; or discipline the more profligate members of OPEC . . . take your pick.)

  The price of oil thus may have gone from too high (supported by OPEC and by Saudi Arabia in particular) to too low (depressed by negative psychology). It seems to me with regard to the latter that the price fell too far for some market participants to maintain their equanimity. I often imagine participants' internal dialogues. At $110, I picture them saying, "I'll buy like mad if it ever gets to $100." Because of the way investor psychology works, at $90 they may say, "If it falls to $70, I'll give serious thought to buying." But at $60 the tendency is to say, "It's a falling knife and there's no way to know where it'll stop; I wouldn't touch it at any price."

  It feels much better to buy assets while they're rising. But it's usually smarter to buy after they've fallen for a while. **Bottom line, as noted above: there's little logic in investor psychology.**

- I said it about gold in *All That Glitters* (November 2010), and it's equally relevant to oil: **it's hard to analytically put a price on an asset that doesn't produce income**. In principle, a non-perishable commodity won't be priced below the variable production cost of the highest-cost producer whose output is needed to satisfy total demand. But in reality and in the short run, strange things can happen. It's clear that today's oil price is well below that standard.

  It's hard to say what the right price is for a commodity like oil . . . and thus when the price is too high or too low. Was it too high at $100-plus, an unsustainable blip? History says no: it was there for 43 consecutive months through this past August. And if it wasn't too high then, isn't it laughably low today? The answer is that you just can't say. Ditto for whether the response of the price of oil to the changes in fundamentals has been appropriate, excessive or insufficient. And if

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you can't be confident about what the right price is, then you can't be definite about financial decisions regarding oil.

In the last few years, as I said in *The Role of Confidence* (August 2013), investor sentiment has been riding high. Or, as Doug Kass pointed out this past summer, there's been "a bull market in complacency." Regardless, it seems that a market that was unconcerned about things like oil and its impact on economies and assets now has lost its composure. Especially given the pervasive role of energy in economic life, uncertainty about oil introduces uncertainty into many aspects of investing.

"Value investing" – the form of investing Oaktree practices – is supposed to be about buying based on the present value of assets, rather than conjecture about profit growth in the far-off future. But you can't assess present value without taking some position on what the future holds, even if it's only assuming a continuation of present conditions or perhaps – for the sake of conservatism – a considerably lower level. Recent events cast doubt on the ability to safely take any position.

One of the things that's central to risk-conscious value investing is ascertaining the presence of a generous cushion in terms of "margin of safety." This margin comes from conviction that conditions will be stable, financial performance is predictable, and/or an entry price is low relative to the asset's intrinsic value. But when something as central as oil is totally up for grabs, as investors seem to think is the case today, it's hard to know whether you have an adequate margin. Referring to investing, Charlie Munger told me, "It's not supposed to be easy." The recent events surrounding oil certainly prove that it isn't.

On the other hand – and in investing there's <u>always</u> another hand – high levels of confidence, complacency and composure on the part of investors have in good measure given way to disarray and doubt, making many markets much more to our liking. For the last few years, interest rates on the safest securities – brought low by central banks – have been coercing investors to move out the risk curve. Sometimes they've made that journey without cognizance of the risks they were taking, and without thoroughly understanding the investments they undertook. Now they find themselves questioning many of their actions, and it feels like risk tolerance is being replaced by risk aversion. **This paragraph describes a process through which investors are made to feel pain, but also one that makes markets much safer and potentially more bargain-laden.**

In particular with regard to the distress cycle, confident and optimistic credit markets permit the unwise extension of credit to borrowers who are undeserving but allowed to become overlevered nevertheless. Negative subsequent developments can render providers of capital less confident, making the capital market less accommodative. This cycle of easy issuance followed by defrocking has been behind the three debt crises that delivered the best buying opportunities in our 26 years in distressed debt. We think it also holds the key to the creation of superior opportunities in the future.

We've argued for a few years that credit standards were dropping as investors – chasing yield – became less disciplined and less discerning. But we knew great buying opportunities wouldn't arrive until a negative "igniter" caused the tide to go out, exposing the debt's weaknesses. **The current oil crisis is an example of something with the potential to grow into that role. We'll see how far it goes.**

For the last 3½ years, Oaktree's mantra has been "move forward, but with caution." For the first time in that span, with the arrival of some disarray and heightened risk aversion, events tell us it's appropriate to drop some of our caution and substitute a degree of aggressiveness.

December 18, 2014

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Memo to: Oaktree Clients

From: Howard Marks

Re: Risk Revisited

In April I had good results with *Dare to Be Great II*, starting from the base established in an earlier memo (*Dare to Be Great*, September 2006) and adding new thoughts that had occurred to me in the intervening years. Also in 2006 I wrote *Risk*, my first memo devoted entirely to this key subject. My thinking continued to develop, causing me to dedicate three chapters to risk among the twenty in my book *The Most Important Thing*. This memo adds to what I've previously written on the topic.

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What Risk Really Means

In the 2006 memo and in the book, I argued against the purported identity between volatility and risk. Volatility is the academic's choice for defining and measuring risk. I think this is the case largely because volatility is quantifiable and thus usable in the calculations and models of modern finance theory. In the book I called it "machinable," and there is no substitute for the purposes of the calculations.

However, while volatility is quantifiable and machinable – and can also be an indicator or symptom of riskiness and even a specific form of risk – I think it falls far short as "the" definition of investment risk. In thinking about risk, we want to identify the thing that investors worry about and thus demand compensation for bearing. I don't think most investors fear volatility. In fact, I've never heard anyone say, "The prospective return isn't high enough to warrant bearing all that volatility." **What they fear is the possibility of permanent loss.**

Permanent loss is very different from volatility or fluctuation. A downward fluctuation – which by definition is temporary – doesn't present a big problem if the investor is able to hold on and come out the other side. A permanent loss – from which there won't be a rebound – can occur for either of two reasons: (a) an otherwise-temporary dip is locked in when the investor sells during a downswing – whether because of a loss of conviction; requirements stemming from his timeframe; financial exigency; or emotional pressures, or (b) the investment itself is unable to recover for fundamental reasons. We can ride out volatility, but we never get a chance to undo a permanent loss.

Of course, the problem with defining risk as the possibility of permanent loss is that it lacks the very thing volatility offers: quantifiability. **The probability of loss is no more measurable than the probability of rain.** It can be modeled, and it can be estimated (and by experts pretty well), but it cannot be known.

In *Dare to Be Great II*, I described the time I spent advising a sovereign wealth fund about how to organize for the next thirty years. My presentation was built significantly around my conviction that risk can't be quantified *a priori*. Another of their advisors, a professor from a business school north of New York, insisted it can. This is something I prefer not to debate, especially with people who're sure they have the answer but haven't bet much money on it.

One of the things the professor was sure could be quantified was the maximum a portfolio could fall under adverse circumstances. But how can this be so if we don't know how adverse circumstances can be or how they will influence returns? We might say "the market probably won't fall more than x% as long

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as things aren't worse than y and z," but how can an absolute limit be specified? I wonder if the professor had anticipated that the S&P 500 could fall 57% in the global crisis.

While writing the original memo on risk in 2006, an important thought came to me for the first time. Forget about *a priori*; if you define risk as anything other than volatility, it can't be measured **even after the fact**. If you buy something for $10 and sell it a year later for $20, was it risky or not? The novice would say the profit proves it was safe, while the academic would say it was clearly risky, since the only way to make 100% in a year is by taking a lot of risk. I'd say it might have been a brilliant, safe investment that was sure to double <u>or</u> a risky dart throw that got lucky.

If you make an investment in 2012, you'll know in 2014 whether you lost money (and how much), but you won't know whether it was a risky investment – that is, what the probability of loss was at the time you made it. To continue the analogy, **it may rain tomorrow, or it may not, but nothing that happens tomorrow will tell you what the probability of rain was as of today. And the risk of rain is a very good analogue (although I'm sure not perfect) for the risk of loss.**

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<u>The Unknowable Future</u>

It seems most people in the prediction business think the future is knowable, and all they have to do is be among the ones who know it. Alternatively, they may understand (consciously or unconsciously) that it's not knowable but believe they have to act as if it is in order to make a living as an economist or investment manager.

On the other hand, I'm solidly convinced the future isn't knowable. I side with John Kenneth Galbraith who said, "We have two classes of forecasters: Those who don't know – and those who don't know they don't know." There are several reasons for this inability to predict:

- We're well aware of many factors that can influence future events, such as governmental actions, individuals' spending decisions and changes in commodity prices. But these things are hard to predict, and I doubt anyone is capable of taking all of them into account at once. (People have suggested a parallel between this categorization and that of Donald Rumsfeld, who might have called these things "known unknowns": the things we know we don't know.)

- The future can also be influenced by events that aren't on anyone's radar today, such as calamities – natural or man-made – that can have great impact. The 9/11 attacks and the Fukushima disaster are two examples of things no one knew to think about. (These would be "unknown unknowns": the things we don't know we don't know.)

- There's far too much randomness at work in the world for future events to be predictable. As 2014 began, forecasters were sure the U.S. economy was gaining steam, but they were confounded when record cold weather caused GDP to fall 2.9% in the first quarter.

- And importantly, the connections between contributing influences and future outcomes are far too imprecise and variable for the results to be dependable.

That last point deserves discussion. Physics is a science, and for that reason an electrical engineer can guarantee you that if you flip a switch over here, a light will go on over there . . . every time. But there's good reason why economics is called "the dismal science," and in fact it isn't much of a science at all. In just the last few years we've had opportunity to see – contrary to nearly

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unanimous expectations – that interest rates near zero can fail to produce a strong rebound in GDP, and that a reduction of bond buying on the part of the Fed can fail to bring on higher interest rates. In economics and investments, because of the key role played by human behavior, you just can't say for sure that "if A, then B," as you can in real science. The weakness of the connection between cause and effect makes outcomes uncertain. In other words, it introduces risk.

Given the near-infinite number of factors that influence the future, the great deal of randomness present, and the weakness of the linkages, it's my solid belief that future events cannot be predicted with any consistency. In particular, predictions of important divergences from trends and norms can't be made with anything approaching the accuracy required for them to be helpful.

Coping with the Unknowable Future

Here's the essential conundrum: investing requires us to decide how to position a portfolio for future developments, but the future isn't knowable.

Taken to slightly greater detail:

- Investing requires the taking of positions that will be affected by future developments.
- The existence of negative possibilities surrounding those future developments presents risk.
- Intelligent investors pursue prospective returns that they think compensate them for bearing the risk of negative future developments.
- But future developments are unpredictable.

How can investors deal with the limitations on their ability to know the future? **The answer lies in the fact that not being able to know the future doesn't mean we can't deal with it.** It's one thing to know what's going to happen and something very different to have a feeling for the range of possible outcomes and the likelihood of each one happening. Saying we can't do the former doesn't mean we can't do the latter.

The information we're able to estimate – the list of events that might happen and how likely each one is – can be used to construct a probability distribution. **Key point number one in this memo is that the future should be viewed not as a fixed outcome that's destined to happen and capable of being predicted, but as a range of possibilities and, hopefully on the basis of insight into their respective likelihoods, as a probability distribution.**

Since the future isn't fixed and future events can't be predicted, risk cannot be quantified with any precision. I made the point in *Risk*, and I want to emphasize it here, that risk estimation has to be the province of experienced experts, and their work product will by necessity be subjective, imprecise, and more qualitative than quantitative (even if it's expressed in numbers).

There's little I believe in more than Albert Einstein's observation: **"Not everything that counts can be counted, and not everything that can be counted counts."** I'd rather have an order-of-magnitude approximation of risk from an expert than a precise figure from a highly educated statistician who knows less about the underlying investments. British philosopher and logician Carveth Read put it this way: "It is better to be vaguely right than exactly wrong."

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By the way, in my personal life I tend to incorporate another of Einstein's comments: "I never think of the future – it comes soon enough." We can't take that approach as investors, however. We have to think about the future. We just shouldn't accord too much significance to our opinions.

We can't know what will happen. We can know something about the possible outcomes (and how likely they are). People who have more insight into these things than others are likely to make superior investors. As I said in the last paragraph of *The Most Important Thing*:

> Only investors with unusual insight can regularly divine the probability distribution that governs future events and sense when the potential returns compensate for the risks that lurk in the distribution's negative left-hand tail.

In other words, in order to achieve superior results, an investor must be able – with some regularity – to find asymmetries: instances when the upside potential exceeds the downside risk. That's what successful investing is all about.

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Thinking in Terms of Diverse Outcomes

It's the indeterminate nature of future events that creates investment risk. **It goes without saying that if we knew everything that was going to happen, there wouldn't be any risk.**

The return on a stock will be a function of the relationship between the price today and the cash flows (income and sale proceeds) it will produce in the future. The future cash flows, in turn, will be a function of the fundamental performance of the company and the way its stock is priced given that performance. We invest on the basis of expectations regarding these things. It's tautological to say that if the company's earnings and the valuation of those earnings meet our targets, the return will be as expected. The risk in the investment therefore comes from the possibility that one or both will come in lower than we think.

To oversimplify, investors in a given company may have an expectation that if A happens, that'll make B happen, and if C and D also happen, then the result will be E. Factor A may be the pace at which a new product finds an audience. That will determine factor B, the growth of sales. If A is positive, B should be positive. Then if C (the cost of raw materials) is on target, earnings should grow as expected, and if D (investors' valuation of the earnings) also meets expectations, the result should be a rising share price, giving us the return we seek (E).

We may have a sense for the probability distributions governing future developments, and thus a feeling for the likely outcome regarding each of developments A through E. The problem is that for each of these, there can be lots of outcomes other than the ones we consider most likely. The possibility of less-good outcomes is the source of risk. **That leads me to my <u>second key point</u>, as expressed by Elroy Dimson, a professor at the London Business School: "Risk means more things can happen than will happen."** This brief, pithy sentence contains a great deal of wisdom.

Here's how I put it in *No Different This Time – The Lessons of '07* (December 2007):

> No ambiguity is evident when we view the past. Only the things that happened happened. **But that definiteness doesn't mean the process that creates outcomes is clear-cut and dependable. Many things could have happened in each case in the past, and the fact that only one did happen understates the variability that existed.** What I mean to say (inspired by Nicolas Nassim Taleb's *Fooled by Randomness*) is that

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> the history that took place is only one version of what it could have been. If you accept this, then the relevance of history to the future is much more limited than may appear to be the case.

People who rely heavily on forecasts seem to think there's only one possibility, meaning risk can be eliminated if they just figure out which one it is. The rest of us know many possibilities exist today, and it's not knowable which of them will occur. Further, things are subject to change, meaning there will be new possibilities tomorrow. **This uncertainty as to which of the possibilities will occur is the source of risk in investing.**

Even a Probability Distribution Isn't Enough

I've stressed the importance of viewing the future as a probability distribution rather than a single predetermined outcome. It's still essential to bear in mind **key point number three: Knowing the probabilities doesn't mean you know what's going to happen.** For example, every good backgammon player knows the probabilities governing throws of the dice. They know there are 36 possible outcomes, and that six of them add up to the number seven (1-6, 2-5, 3-4, 4-3, 5-2 and 6-1). Thus the chance of throwing a seven on any toss is 6 in 36, or 16.7%. There's absolutely no doubt about that. But even though we know the probability of each number, we're far from knowing what number will come up on a given roll.

Backgammon players are usually quite happy to make a move that will enable them to win unless the opponent rolls twelve, since only one combination of the dice will produce it: 6-6. The probability of rolling twelve is thus only 1 in 36, or less than 3%. But twelve does come up from time to time, and the people it turns into losers end up complaining about having done the "right" thing but lost. As my friend Bruce Newberg says, **"There's a big difference between probability and outcome."** Unlikely things happen – and likely things fail to happen – all the time. **Probabilities are likelihoods and very far from certainties.**

It's true with dice, and it's true in investing . . . and not a bad start toward conveying the essence of risk. Think again about the quote above from Elroy Dimson: "Risk means more things can happen than will happen." **I find it particularly helpful to invert Dimson's observation for key point number four: Even though many things can happen, only one will.**

In *Dare to Be Great II*, I discussed the fact that economic decisions are usually best made on the basis of "expected value": you multiply each potential outcome by its probability, sum the results, and select the path with the highest total. But while expected value weights all of the possible outcomes on the basis of their likelihood, there may be some individual outcomes that absolutely cannot be tolerated. Even though many things can happen, only one will . . . and if something unacceptable can happen on the path with the highest expected value, we may not be able to choose on that basis. We may have to shun that path in order to avoid the extreme negative outcome. I always say I have no interest in being a skydiver who's successful 95% of the time.

Investment performance (like life in general) is a lot like choosing a lottery winner by pulling one ticket from a bowlful. The process through which the winning ticket is chosen can be influenced by physical processes, and also by randomness. But it never amounts to anything but one ticket picked from among many. **Superior investors have a better sense for the tickets in the bowl, and thus for whether it's worth buying a ticket in a lottery**. Lesser investors have less of a sense for the probability distribution and for whether the likelihood of winning the prize compensates for the risk that the cost of the ticket will be lost.

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Risk and Return

Both in the 2006 memo on risk and in my book, I showed two graphics that together make clear the nature of investment risk. People have told me they're the best thing in the book, and since readers of this memo might have not seen the old one or read the book, I'm going to repeat them here.

The first one below shows the relationship between risk and return as it is conventionally represented. The line slopes upward to the right, meaning the two are "positively correlated": as risk increases, return increases.

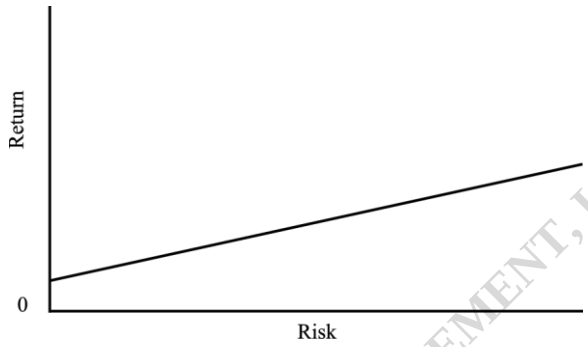

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In both the old memo and the book, I went to great lengths to clarify what this is often – but erroneously – taken to mean. We hear it all the time: "Riskier investments produce higher returns" and "If you want to make more money, take more risk."

Both of these formulations are terrible. **In brief, if riskier investments could be counted on to produce higher returns, they wouldn't be riskier.** Misplaced reliance on the benefits of risk bearing has led investors to some very unpleasant surprises.

However, there's another, better way to describe this relationship: "Investments that seem riskier have to appear likely to deliver higher returns, or else people won't make them." This makes perfect sense. If the market is rational, the price of a seemingly risky asset will be set low enough that the reward for holding it seems adequate to compensate for the risk present. But note the word "appear." We're talking about investors' opinions regarding future return, not facts. Risky investments are – by definition – far from certain to deliver on their promise of high returns. For that reason, I think the graphic below does a much better job of portraying reality:

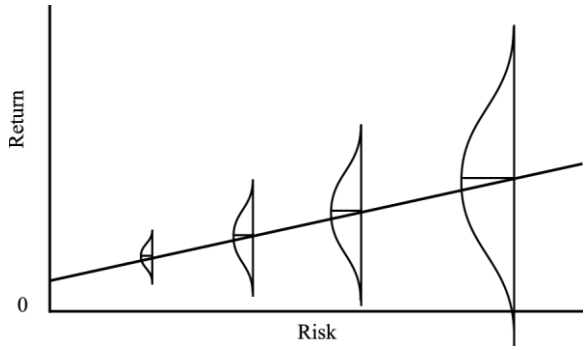

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Here the underlying relationship between risk and return reflects the same positive general tendency as the first graphic, but the result of each investment is shown as a range of possibilities, not the single outcome suggested by the upward-sloping line. At each point along the horizontal risk axis, an investment's prospective return is shown as a bell-shaped probability distribution turned on its side.

The conclusions are obvious from inspection. As you move to the right, increasing the risk:

- the expected return increases (as with the traditional graphic),
- the range of possible outcomes becomes wider, and
- the less-good outcomes become worse.

This is the essence of investment risk. Riskier investments are ones where the investor is less secure regarding the eventual outcome and faces the possibility of faring worse than those who stick to safer investments, and even of losing money. These investments are undertaken because the expected return is higher. But things may happen other than that which is hoped for. Some of the possibilities are superior to the expected return, but others are decidedly unattractive.

The first graph's upward-sloping line indicates the underlying directionality of the risk/return relationship. But there's a lot more to consider than the fact that expected returns rise along with perceived risk, and in that regard the first graph is highly misleading. The second graph shows both the underlying trend <u>and</u> the increasing potential for actual returns to deviate from expectations. While the expected return rises along with risk, so does the probability of lower returns . . . and even of losses. **This way of looking at things reflects Professor Dimson's dictum that more than one thing can happen. That's reality in an unpredictable world.**

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<u>The Many Forms of Risk</u>

The possibility of permanent loss may be the main risk in investing, but it's not the only risk. I can think of lots of other risks, many of which contribute to – or are components of – that main risk.

In the past, in addition to the risk of permanent loss, I've mentioned **the risk of falling short**. Some investors face return requirements in order to make necessary payouts, as in the case of pension funds, endowments and insurance companies. Others have more basic needs, like generating enough income to live on.

Some investors with needs – particularly those who live on their income, and especially in today's low-return environment – face a serious conundrum. **If they put their money into safe investments, their returns may be inadequate. But if they take on incremental risk in pursuit of a higher return, they face the possibility of a still-lower return, and perhaps of permanent diminution of their capital, rendering their subsequent income lower still.** There's no easy way to resolve this conundrum.

There are actually two possible causes of inadequate returns: (a) targeting a high return and being thwarted by negative events and (b) targeting a low return and achieving it. In other words, **investors face not one but two major risks: the risk of losing money and the risk of missing opportunities**. Either can be eliminated but not both. And leaning too far in order to avoid one can set you up to be victimized by the other.

Potential opportunity costs – the result of missing opportunities – usually aren't taken as seriously as real potential losses. But they do deserve attention. **Put another way, we have to consider the risk of not taking enough risk.**

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These days, the fear of losing money seems to have receded (since the crisis is all of six years in the past), and the fear of missing opportunities is riding high, given the paltry returns available on safe, mundane investments. Thus a new risk has arisen: **FOMO risk, or the risk that comes from excessive fear of missing out**. It's important to worry about missing opportunities, since people who don't can invest too conservatively. But when that worry becomes excessive, FOMO can drive an investor to do things he shouldn't do and often doesn't understand, just because others are doing them: if he doesn't jump on the bandwagon, he may be left behind to live with envy.

Over the last three years, Oaktree's response to the paucity of return has been to develop a suite of five credit strategies that we hope will produce a 10% return, either net or gross (we can't claim to be more precise than that). I call them collectively the "ten percent solution," after a Sherlock Holmes story called *The Seven-Per-Cent Solution* (we aim to do better). Talking to clients about these strategies and helping them choose between them has required me to focus on their risks.

"Just a minute," you might say, "the ten-year Treasury is paying just 2½% and, as Jeremy Grantham says, the risk-free rate is also return-free. How, then, can you target returns in the vicinity of 10%?" The answer is that it can't be done without taking risk of some kind – and there are several candidates. I'll list below a few risks that we're consciously bearing in order to generate the returns our clients desire:

- Today's ultra-low interest rates imply low returns for anyone who invests in what are deemed safe fixed income instruments. So Oaktree's pursuit of attractive returns centers on accepting and managing **credit risk**, or the risk that a borrower will be unable to pay interest and repay principal as scheduled. Treasurys are assumed to be free of credit risk, and most high grade corporates are thought to be nearly so. **Thus those who intelligently accept incremental credit risk must do so with the expectation that the incremental return promised as compensation will prove sufficient**.

  Voluntarily accepting credit risk has been at the core of what Oaktree has done since its beginning in 1995 (and in fact since the seed was planted in 1978, when I initiated Citibank's high yield bond effort). But bearing credit risk will lead to attractive returns only if it's done well. Our activities are based on two beliefs: (a) that because the investing establishment is averse to credit risk, the incremental returns we receive for bearing it will compensate generously for the risk entailed and (b) that credit risk is manageable – i.e., unlike the general future, credit risk can be gauged by experts (like us) and reduced through credit selection. **It wouldn't make sense to voluntarily bear incremental credit risk if either of these two beliefs were lacking.**

- Another way to access attractive returns in today's low-rate environment is to bear **illiquidity risk** in order to take advantage of investors' normal dislike for illiquidity (superior returns often follow from investor aversion). Institutions that held a lot of illiquid assets suffered considerably in the crisis of 2008, when they couldn't sell them; thus many developed a strong aversion to them and in some cases imposed limitations on their representation in portfolios. Additionally, today the flow of retail money is playing a big part in driving up asset prices and driving down returns. Since retail money has a harder time making its way to illiquid assets, this has made the returns on the latter appear more attractive. It's noteworthy that there aren't mutual funds or ETFs for many of the things we're investing in.

- Some strategies introduce it voluntarily and some can't get away from it: **concentration risk**. "Everyone knows" diversification is a good thing, since it reduces the impact on results of a negative development. But some people eschew the safety that comes with diversification in favor of concentrating their investments in assets or with managers they expect to outperform.

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And some investment strategies don't permit full diversification because of the limitations of their subject markets. Thus problems – if and when they occur – will be bigger *per se*.

- Especially given today's low interest rates, borrowing additional capital to enhance returns is another way to potentially increase returns. But doing so introduces **leverage risk**. Leverage adds to risk two ways. The first is magnification: people are attracted to leverage because it will magnify gains, but under unfavorable outcomes it will magnify losses instead.

  The second way in which leverage adds to risk stems from **funding risk**, one of the classic reasons for financial disaster. The stage is set when someone borrows short-term funds to make a long-term investment. If the funds have to be repaid at an awkward time – due to their maturity, a margin call, or some other reason – and the purchased assets can't be sold in a timely fashion (or can only be sold at a depressed price), an investment that might otherwise have been successful can be cut short and end in sorrow. Little or nothing may remain of the sale proceeds once the leverage has been repaid, in which case the investor's equity will be decimated. This is commonly called a meltdown. It's the primary reason for the saying, "Never forget the six-foot-tall man who drowned crossing the stream that was five feet deep on average." In times of crisis, success over the long run can become irrelevant.

- **When credit risk, illiquidity risk, concentration risk and leverage risk are borne intelligently, it is in the hope that the investor's skill will be sufficient to produce success. If so, the *potential* incremental returns that appear to be offered as risk compensation will turn into *realized* incremental returns** (per the graphic at the top of page 6). That's the only reason anyone would do these things.

  As the graphic at the bottom of page 6 illustrates, however, investing further out on the risk curve exposes one to a broader range of investment outcomes. In an efficient market, returns are tethered to the market average; in an inefficient market, they're not. **Inefficient markets offer the possibility that an investor will escape from the "gravitational pull" of the market's average return, but that can be either for the better or for the worse**. Superior investors – those with "alpha," or the personal skill needed to achieve outsized returns for a given level of risk – have scope to perform well above the mean return, while inferior investors can come out far below. So hiring an investment manager introduces **manager risk**: the risk of picking the wrong one. It's possible to pay management fees but get decisions that detract from results rather than add.

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Some or all of the above risks are potentially entailed in our new credit strategies. Parsing them allows investors to choose among the strategies and accept the risks they're more comfortable with. The process can be quite informative.

Our oldest "new strategy" is Enhanced Income, where we use leverage to magnify the return from a portfolio of senior loans. We think senior loans have the lowest credit risk of anything Oaktree deals with, since they're senior-most among their issuer's debt and historically have produced very few credit losses. Further, they're among our most liquid assets, meaning we face relatively little illiquidity risk, and being active in a broad public market permits us to diversify, reducing concentration risk. Given the relatively high degree of safety stemming from these loans' seniority, returns aren't overly dependent on the presence of alpha, meaning Enhanced Income entails less manager risk than some other strategies. But to have a chance at the healthy return we're pursuing in Enhanced Income requires us to take some risk, and what we're left with is leverage risk. The 3-to-1 leverage in Enhanced Income Fund II will magnify the negative impact of any credit losses (of course we hope there won't be many). However, we're not worried about a meltdown, since the current environment allows us to avoid funding risk; we

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can (a) borrow for a term that exceeds the duration of the underlying investments and (b) do so without the threat of margin calls related to price declines.

Strategic Credit, Mezzanine Finance, European Private Debt and Real Estate Debt are the other four components of our "ten percent solution."

- All four entail some degree of credit risk, illiquidity risk (they all invest heavily or entirely in private debt) and concentration risk (as their market niches offer only a modest number of investment opportunities, and securing them in today's competitive environment is a challenge).

- The Real Estate Debt Fund can only lever up to 1-to-1, and the other three borrow only small amounts and for short-term purposes, so none of them entails significant leverage risk.

- However, in order to succeed they'll all require a high level of skill from their managers in identifying return prospects and keeping risk under control. Thus they all entail manager risk. Our response is to entrust these portfolios only to managers who've been with us for years.

It's reasonable – essential, really – to study the risk entailed in every investment and accept the amounts and types of risk that you're comfortable with (assuming this can be discerned). It's not reasonable to expect highly superior returns without bearing some incremental risk.

I touched above on concentration risk, but we should also think about the flip side: **the risk of over-diversification**. If you have just a few holdings in a portfolio, or if an institution employs just a few managers, one bad decision can do significant damage to results. But if you have a very large number of holdings or managers, no one of them can have much of a positive impact on performance. Nobody invests in just the one stock or manager they expect to perform best, but as the number of positions is expanded, the standards for inclusion may decline. Peter Lynch coined the term "diworstification" to describe the process through which lesser investments are added to portfolios, making the potential risk-adjusted return worse.

While I don't think volatility and risk are synonymous, there's no doubt that **volatility does present risk**. If circumstances cause you to sell a volatile investment at the wrong time, you might turn a downward fluctuation into a permanent loss. Moreover, even in the absence of a need for liquidity, volatility can prey on investors' emotions, reducing the probability they'll do the right thing. **And in the short run, it can be very hard to differentiate between a downward fluctuation and a permanent loss.** Often this can really be done only in retrospect. Thus it's clear that a professional investor may have to bear consequences for a temporary downward fluctuation simply because of its resemblance to a permanent loss. When you're under pressure, the distinction between "volatility" and "loss" can seem only semantic. Volatility is not "the" definition of investment risk, as I said earlier, but it isn't irrelevant.

One example of a risk connected with volatility – or the deviation of price from what might be intrinsic value – is **basis risk**. Arbitrageurs customarily set up positions where they're long one asset and short a related asset. The two assets are expected to move roughly in parallel, except that the one that's slightly cheaper should make more money for the investor in the long run than the other loses, producing a small net gain with little risk. Because these trades are considered so low in risk, they're often levered up to the sky. But sometimes the prices of the two assets diverge to an unexpected extent, and the equity invested in the trade evaporates. That unexpected divergence is basis risk, and it's what happened to Long-Term Capital Management in 1998, one of the most famous meltdowns of all time. As Long-Term's chairman John Meriwether said at the time, "the Fund added to its positions in anticipation of convergence, yet . . . the trades diverged dramatically." This benign-sounding explanation was behind a collapse some thought capable of bringing down the global financial system.

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Long-Term's failure was also attributable to **model risk**. Decisions can be turned over to quants or financial engineers who either (a) conclude wrongly that an unsystematic process can be modeled or (b) employ the wrong model. During the financial crisis, models often assumed that events would occur according to a "normal distribution," but extreme "tail events" occurred much more often than the normal distribution says they will. **Not only can extreme events exceed a model's assumptions, but excessive belief in a model's efficacy can induce people to take risks they would never take on the basis of qualitative judgment**. They're often disappointed to find they had put too much faith in a statistical sure thing.

Model risk can arise from **black swan risk**, for which I borrow the title of Nassim Nicholas Taleb's popular second book. People tend to confuse "never been seen" with "impossible," and the consequences can be dire when something occurs for the first time. That's part of the reason why people lost so much in highly levered subprime mortgage securities. The fact that a nationwide spate of mortgage defaults **hadn't happened** convinced investors that it **couldn't happen**, and their certainty caused them to take actions so imprudent that it **had to happen**.

As long as we're on the subject of things going wrong, we should touch on the subject of **career risk**. As I mentioned in *Dare to Be Great II*, "agents" who manage money for others can be penalized for investments that look like losers (that is, for both permanent losses and temporary downward fluctuations). Either of these unfortunate experiences can result in **headline risk** if the resulting losses are big enough to make it into the media, and some careers can't withstand headline risk. Investors who lack the potential to share commensurately in investment successes face a reward asymmetry that can force them toward the safe end of the risk/return curve. They are likely to think more about the risk of losing money than about the risk of missing opportunities. Thus their portfolios may lean too far toward controlling risk and avoiding embarrassment (and they may not take enough chances to generate returns). There are consequences for these investors, as well as for those who employ them.

Event risk is another risk to worry about, something that was created by bond issuers about twenty years ago. Since corporate directors have a fiduciary responsibility to stockholders but not to bondholders, some think they can (and perhaps should) do anything that's not explicitly prohibited to transfer value from bondholders to stockholders. Bondholders need covenants to shield them from this kind of pro-active plundering, but at times like today it can be hard to obtain strong protective covenants.

There are many ways for an investment to be unsuccessful. The two main ones are **fundamental risk** (relating to how a company or asset performs in the real world) and **valuation risk** (relating to how the market prices that performance). For years investors, fiduciaries and rule-makers acted on the belief that it's safe to buy high-quality assets and risky to buy low-quality assets. But between 1968 and 1973, many investors in the "Nifty Fifty" (the stocks of the fifty fastest-growing and best companies in America) lost 80-90% of their money. Attitudes have evolved since then, and today there's less of an assumption that high quality prevents fundamental risk, and much less preoccupation with quality for its own sake.

On the other hand, investors are more sensitive to the pivotal role played by price. **At bottom, the riskiest thing is overpaying for an asset (regardless of its quality), and the best way to reduce risk is by paying a price that's irrationally low (ditto).** A low price provides a "margin of safety," and that's what risk-controlled investing is all about. **Valuation risk should be easily combatted, since it's largely within the investor's control. All you have to do is refuse to buy if the price is too high given the fundamentals.** "Who wouldn't do that?" you might ask. Just think about the people who bought into the tech bubble.

Fundamental risk and valuation risk bear on the risk of losing money in an individual security or asset, but that's far from the whole story. **Correlation** is the essential additional piece of the puzzle.

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Correlation is the degree to which an asset's price will move in sympathy with the movements of others. **The higher the correlation among its components, all other things being equal, the less effective diversification a portfolio has, and the more exposed it is to untoward developments.**

An asset doesn't have "a correlation." Rather, it has a different correlation with every other asset. A bond has a certain correlation with a stock. One stock has a certain correlation with another stock (and a different correlation with a third). Stocks of one type (such as emerging market, high-tech or large-cap) are likely to be highly correlated with others within their category, but they may be either high or low in correlation with those in other categories. **Bottom line: it's hard to estimate the riskiness of a given asset, but many times harder to estimate its correlation with all the other assets in a portfolio, and thus the impact on performance of adding it to the portfolio.** This is a real art.

Fixed income investors are directly exposed to another form of risk: **interest rate risk**. Higher interest rates mean lower bond prices – that relationship is absolute. The impact of changes in interest rates on asset classes other than fixed income is less direct and less obvious, but it also pervades the markets. Note that stocks usually go down when the Fed says the economy is performing strongly. Why? The thinking is that stronger economy = higher interest rates = more competition for stocks from bonds = lower stock valuations. Or it might be stronger economy = higher interest rates = reduced stimulus = weaker economy.

One of the reasons for increases in interest rates relates to **purchasing power risk**. Investors in securities (and especially long-term bonds) are exposed to the risk that if inflation rises, the amount they receive in the future will buy less than it could today. This causes investors to insist on higher interest rates and higher prospective returns to protect them against the loss of purchasing power. The result is lower prices.

Finally, I want to mention a new concept I hear about once in a while: **upside risk**. Forecasters are sometimes heard to say "the risk is on the upside." At first this doesn't seem to have much legitimacy, but it can be about the possibility that the economy may catch fire and do better than expected, earnings may come in above consensus, or the stock market may appreciate more than people think. Since these things are positives, there's risk in being underexposed to them.

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To move to the biggest of big pictures, I want to make a few over-arching comments about risk.

The first is that risk is counterintuitive.

- The riskiest thing in the world is the widespread belief that there's no risk.
- Fear that the market is risky (and the prudent investor behavior that results) can render it quite safe.
- As an asset declines in price, making people view it as riskier, it becomes less risky (all else being equal).
- As an asset appreciates, causing people to think more highly of it, it becomes riskier.
- Holding only "safe" assets of one type can render a portfolio under-diversified and make it vulnerable to a single shock.
- Adding a few "risky" assets to a portfolio of safe assets can make it safer by increasing its diversification. Pointing this out was one of Professor William Sharpe's great contributions.

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The second is that risk aversion is the thing that keeps markets safe and sane.

- When investors are risk-conscious, they will demand generous risk premiums to compensate them for bearing risk. Thus the risk/return line will have a steep slope (the unit increase in prospective return per unit increase in perceived risk will be large) and the market should reward risk-bearing as theory asserts.
- But when people forget to be risk-conscious and fail to require compensation for bearing risk, they'll make risky investments even if risk premiums are skimpy. The slope of the line will be gradual, and risk taking is likely to eventually be penalized, not rewarded.
- When risk aversion is running high, investors will perform extensive due diligence, make conservative assumptions, apply skepticism and deny capital to risky schemes.
- But when risk tolerance is widespread instead, these things will fall by the wayside and deals will be done that set the scene for subsequent losses.

Simply put, risk is low when risk aversion and risk consciousness are high, and high when they're low.

The third is that risk is often hidden and thus deceptive. Loss occurs when risk – the possibility of loss – collides with negative events. Thus the riskiness of an investment becomes apparent only when it is tested in a negative environment. It can be risky but not show losses as long as the environment remains salutary. The fact that an investment is susceptible to a serious negative development that will occur only infrequently – what I call "the improbable disaster" – can make it appear safer than it really is. Thus after several years of a benign environment, a risky investment can easily pass for safe. That's why Warren Buffett famously said, ". . . you only find out who's swimming naked when the tide goes out."

Assembling a portfolio that incorporates risk control as well as the potential for gains is a great accomplishment. But it's a hidden accomplishment most of the time, since risk only turns into loss occasionally . . . when the tide goes out.

The fourth is that risk is multi-faceted and hard to deal with. In this memo I've mentioned 24 different forms of risk: the risk of losing money, the risk of falling short, the risk of missing opportunities, FOMO risk, credit risk, illiquidity risk, concentration risk, leverage risk, funding risk, manager risk, over-diversification risk, risk associated with volatility, basis risk, model risk, black swan risk, career risk, headline risk, event risk, fundamental risk, valuation risk, correlation risk, interest rate risk, purchasing power risk, and upside risk. And I'm sure I've omitted some. Many times these risks are overlapping, contrasting and hard to manage simultaneously. For example:

- Efforts to reduce the risk of losing money invariably increase the risk of missing out.
- Efforts to reduce fundamental risk by buying higher-quality assets often increase valuation risk, given that higher-quality assets often sell at elevated valuation metrics.

At bottom, it's the inability to arrive at a single formula that simultaneously minimizes all the risks that makes investing the fascinating and challenging pursuit it is.

The fifth is that the task of managing risk shouldn't be left to designated risk managers. I'm convinced outsiders to the fundamental investment process can't know enough about the subject assets to make appropriate decisions regarding each one. All they can do is apply statistical models and norms. But those models may be the wrong ones for the underlying assets – or just plain faulty – and there's little evidence that they add value. In particular, risk managers can try to estimate correlation and tell you how things will behave when combined in a portfolio. But they can fail to adequately anticipate the "fault

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lines" that run through portfolios. And anyway, as the old saying goes, "in times of crisis all correlations go to one" and everything collapses in unison.

"Value at Risk" was supposed to tell the banks how much they could lose on a very bad day. During the crisis, however, VaR was often shown to have understated the risk, since the assumptions hadn't been harsh enough. Given the fact that risk managers are required at banks and *de rigueur* elsewhere, I think more money was spent on risk management in the early 2000s than in the rest of history combined . . . and yet we experienced the worst financial crisis in 80 years. Investors can calculate risk metrics like VaR and Sharpe ratios (we use them at Oaktree; they're the best tools we have), but they shouldn't put too much faith in them. **The bottom line for me is that risk management should be the responsibility of every participant in the investment process, applying experience, judgment and knowledge of the underlying investments.**

The sixth is that while risk should be dealt with constantly, investors are often tempted to do so only sporadically. Since risk only turns into loss when bad things happen, this can cause investors to apply risk control only when the future seems ominous. At other times they may opt to pile on risk in the expectation that good things lie ahead. But since we can't predict the future, we never really know when risk control will be needed. Risk control is unnecessary in times when losses don't occur, but that doesn't mean it's wrong to have it. The best analogy is to fire insurance: do you consider it a mistake to have paid the premium in a year in which your house didn't burn down?

Taken together these six observations convince me that Charlie Munger's trenchant comment on investing in general – **"It's not supposed to be easy. Anyone who finds it easy is stupid." –** is profoundly applicable to risk management. Effective risk management requires deep insight and a deft touch. It has to be based on a superior understanding of the probability distributions that will govern future events. Those who would achieve it have to have a good sense for what the crucial moving parts are, what will influence them, what outcomes are possible, and how likely each one is. **Following on with Charlie's idea, thinking risk control is easy is perhaps the greatest trap in investing, since excessive confidence that they have risk under control can make investors do very risky things.**

Thus the key prerequisites for risk control also include humility, lack of hubris, and knowing what you don't know. No one ever got into trouble for confessing a lack of prescience, being highly risk-conscious, and even investing scared. Risk control may restrain results during a rebound from crisis conditions or extreme under-valuations, when those who take the most risk generally make the most money. But it will also extend an investment career and increase the likelihood of long-term success. **That's why Oaktree was built on the belief that risk control is "the most important thing."**

Lastly while dealing in generalities, I want to point out that whereas risk control is indispensable, risk avoidance isn't an appropriate goal. The reason is simple: risk avoidance usually goes hand-in-hand with return avoidance. While you shouldn't expect to make money just for bearing risk, you also shouldn't expect to make money without bearing risk.

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At present I consider risk control more important than usual. To put it briefly:

- Today's ultra-low interest rates have brought the prospective returns on money market instruments, Treasurys and high grade bonds to nearly zero.
- This has caused money to flood into riskier assets in search of higher returns.
- This, in turn, has caused some investors to drop their usual caution and engage in aggressive tactics.
- And this, finally, has caused standards in the capital markets to deteriorate, making it easy for issuers to place risky securities and – consequently – hard for investors to buy safe ones.

Warren Buffett put it best, and I regularly return to his statement on the subject:

> . . . the less prudence with which others conduct their affairs, the greater the prudence with which we should conduct our own affairs.

While investor behavior hasn't sunk to the depths seen just before the crisis (and, in my opinion, that contributed greatly to it), **in many ways it has entered the zone of imprudence**. To borrow a metaphor from Chuck Prince, Citigroup's CEO from 2003 to 2007, anyone who's totally unwilling to dance to today's fast-paced music can find it challenging to put money to work.

It's the job of investors to strike a proper balance between offense and defense, and between worrying about losing money and worrying about missing opportunity. **Today I feel it's important to pay more attention to loss prevention than to the pursuit of gain**. For the last three years Oaktree's mantra has been "move forward, but with caution." At this time, in reiterating that mantra, I would increase the emphasis on those last three words: "but with caution."

Economic and company fundamentals in the U.S. are fine today, and asset prices – while full – don't seem to be at bubble levels. But when undemanding capital markets and a low level of risk aversion combine to encourage investors to engage in risky practices, something usually goes wrong eventually. **Although I have no idea what could make the day of reckoning come sooner rather than later, I don't think it's too early to take today's carefree market conditions into consideration. What I do know is that those conditions are creating a degree of risk for which there is no commensurate risk premium.** We have to behave accordingly.

September 3, 2014

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Memo to: Oaktree Clients

From: Howard Marks

Re: Dare to Be Great II

In September 2006, I wrote a memo entitled *Dare to Be Great*, with suggestions on how institutional investors might approach the goal of achieving superior investment results. I've had some additional thoughts on the matter since then, meaning it's time to return to it. Since fewer people were reading my memos in those days, I'm going to start off repeating a bit of its content and go on from there.

About a year ago, a sovereign wealth fund that's an Oaktree client asked me to speak to their leadership group on the subject of what makes for a superior investing organization. I welcomed the opportunity. The first thing you have to do, I told them, is formulate an explicit investing creed. What do you believe in? What principles will underpin your process? The investing team and the people who review their performance have to be in agreement on questions like these:

- Is the efficient market hypothesis relevant? Do efficient markets exist? Is it possible to "beat the market"? Which markets? To what extent?
- Will you emphasize risk control or return maximization as the primary route to success (or do you think it's possible to achieve both simultaneously)?
- Will you put your faith in macro forecasts and adjust your portfolio based on what they say?
- How do you think about risk? Is it volatility or the probability of permanent loss? Can it be predicted and quantified *a priori*? What's the best way to manage it?
- How reliably do you believe a disciplined process will produce the desired results? That is, how do you view the question of determinism versus randomness?
- **Most importantly for the purposes of this memo, how will you define success, and what risks will you take to achieve it? In short, in trying to be right, are you willing to bear the inescapable risk of being wrong?**

Passive investors, benchmark huggers and herd followers have a high probability of achieving average performance and little risk of falling far short. But in exchange for safety from being much below average, they surrender their chance of being much above average. All investors have to decide whether that's okay. And, if not, what they'll do about it.

The more I think about it, the more angles I see in the title *Dare to Be Great*. Who wouldn't dare to be great? No one. Everyone would love to have outstanding performance. **The real question is whether you dare to do the things that are necessary in order to be great. Are you willing to be different, and are you willing to be wrong? In order to have a chance at great results, you have to be open to being both.**

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Dare to Be Different

Here's a line from *Dare to Be Great*: **"This just in: you can't take the same actions as everyone else and expect to outperform."** Simple, but still appropriate.

For years I've posed the following riddle: Suppose I hire you as a portfolio manager and we agree you will get no compensation next year if your return is in the bottom nine deciles of the investor universe but $10 million if you're in the top decile. **What's the first thing you have to do – the absolute prerequisite – in order to have a chance at the big money?** No one has ever answered it right.

The answer may not be obvious, but it's imperative: you have to assemble a portfolio that's different from those held by most other investors. If your portfolio looks like everyone else's, you may do well, or you may do poorly, *but you can't do different*. And being different is absolutely essential if you want a chance at being superior. In order to get into the top of the performance distribution, you have to escape from the crowd. There are many ways to try. They include being active in unusual market niches; buying things others haven't found, don't like or consider too risky to touch; avoiding market darlings that the crowd thinks can't lose; engaging in contrarian cycle timing; and concentrating heavily in a small number of things you think will deliver exceptional performance.

Dare to Be Great included the two-by-two matrix and paragraph below. Several people told me the matrix was helpful.

	Conventional Behavior	Unconventional Behavior
Favorable Outcomes	Average good results	Above-average results
Unfavorable Outcomes	Average bad results	Below-average results

> Of course it's not that easy and clear-cut, but I think that's the general situation. If your behavior and that of your managers is conventional, you're likely to get conventional results – either good or bad. **Only if your behavior is unconventional is your performance likely to be unconventional . . . and only if your judgments are superior is your performance likely to be above average.**

For those who define investment success as being "average or better," three of the four cells of the matrix represent satisfactory outcomes. But if you define success strictly as being superior, only one of the four will do, and it requires unconventional behavior. More from the 2006 memo:

> The bottom line on striving for superior performance has a lot to do with daring to be great. **Especially in terms of asset allocation, "can't lose" usually goes hand-in-hand with "can't win."** One of the investor's or the committee's first and most fundamental decisions has to be on the question of how far out the

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> portfolio will venture. **How much emphasis should be put on diversifying, avoiding risk and ensuring against below-pack performance, and how much on sacrificing these things in the hope of doing better?**

In the memo I mentioned my favorite fortune cookie: "the cautious seldom err or write great poetry." Like the title *Dare to Be Great*, I find the fortune cookie thought-provoking. It can be taken as urging caution, since it reduces the likelihood of error. Or it can be taken as saying you should avoid caution, since it can keep you from doing great things. Or both. No right or wrong answer, but a choice . . . and hopefully a conscious one.

It Isn't Easy Being Different

In the 2006 memo, I borrowed two quotes from *Pioneering Portfolio Management* by David Swensen of Yale. They're my absolute favorites on the subject of institutional behavior. Here's the first:

> Establishing and maintaining an unconventional investment profile requires acceptance of uncomfortably idiosyncratic portfolios, which frequently appear downright imprudent in the eyes of conventional wisdom.

"Uncomfortably idiosyncratic" is a terrific phrase. There's a great deal of wisdom in those two words. What's idiosyncratic is rarely comfortable . . . and in order for something to be comfortable, it usually has to be conventional. The road to above average performance runs through unconventional, uncomfortable investing. Here's how I put it in 2006:

> Non-consensus ideas have to be lonely. **By definition, non-consensus ideas that are popular, widely held or intuitively obvious are an oxymoron.** Thus such ideas are uncomfortable; non-conformists don't enjoy the warmth that comes with being at the center of the herd. Further, unconventional ideas often appear imprudent. The popular definition of "prudent" – especially in the investment world – is often twisted into "what everyone does."

Most great investments begin in discomfort. The things most people feel good about – investments where the underlying premise is widely accepted, the recent performance has been positive and the outlook is rosy – are unlikely to be available at bargain prices. Rather, bargains are usually found among things that are controversial, that people are pessimistic about, and that have been performing badly of late.

But it isn't easy to do things that entail discomfort. It's no coincidence that distressed debt has been the source of many successful investments for Oaktree; there's no such thing as a distressed company that everyone reveres. In 1988, when Bruce Karsh and I organized our first fund to invest in the debt of companies seemingly at death's door, the very idea made it hard to raise money, and investing required conviction – on the clients' part and our own – that our analysis and approach would mitigate the risk. The same discomfort, however, is what caused distressed debt to be priced cheaper than it should have been, and thus the returns to be consistently high.

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Dare to Be Wrong

"You have to give yourself a chance to fail." That's what Kenny "The Jet" Smith said on TV the other night during the NCAA college basketball tournament, talking about a star player who started out cold and as a result attempted too few shots in a game his team lost. It's a great way to make the point. Failure isn't anyone's goal, of course, but rather an inescapable potential consequence of trying to do really well.

Any attempt to compile superior investment results has to entail acceptance of the possibility of being wrong. The matrix on page two shows that since conventional behavior is sure to produce average performance, people who want to be above average can't expect to get there by engaging in conventional behavior. Their behavior has to be different. **And in the course of trying to be different and better, they have to bear the risk of being different and worse.** That truth is simply unarguable. There is no way to strive for the former that doesn't require bearing the risk of the latter.

The truth is, almost everything about superior investing is a two-edged sword:

- If you invest, you will lose money if the market declines.
- If you don't invest, you will miss out on gains if the market rises.

- Market timing will add value if it can be done right.
- Buy-and-hold will produce better results if timing can't be done right.

- Aggressiveness will help when the market rises but hurt when it falls.
- Defensiveness will help when the market falls but hurt when it rises.

- If you concentrate your portfolio, your mistakes will kill you.
- If you diversify, the payoff from your successes will be diminished.

- If you employ leverage, your successes will be magnified.
- If you employ leverage, your mistakes will be magnified.

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Each of these pairings indicates symmetry. None of the tactics listed will add value if it's right but not subtract if it's wrong. Thus none of these tactics, in and of itself, can hold the secret to dependably above average investment performance.

There's only one thing in the investment world that isn't two-edged, and that's "alpha": superior insight or skill. Skill can help in both up markets and down markets. And by making it more likely that your decisions are right, superior skill can increase the expected benefit from concentration and leverage. But that kind of superior skill by definition is rare and elusive.

The goal in investing is asymmetry: to expose yourself to return in a way that doesn't expose you commensurately to risk, and to participate in gains when the market rises to a greater extent than you participate in losses when it falls. But that doesn't mean the avoidance of all losses is a reasonable objective. Take another look at the goal of asymmetry set

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out above: **it talks about achieving a preponderance of gain over loss, not avoiding all chance of loss.**

To succeed at any activity involving the pursuit of gain, we have to be able to withstand the possibility of loss. A goal of avoiding all losses can render success unachievable almost as readily as can the occurrence of too many losses. Here are three examples of "loss prevention strategies" that can lead to failure:

- I play tennis. But if when I start a match I promise myself that I won't commit a single double fault, I'll never be able to put enough "mustard" on my second serve to keep it from being easy for my opponent to put away.

- Likewise, coming out ahead at poker requires that I win a lot on my winning hands and lose less on my losers. But insisting that I'll never play anything but "the nuts" – the hand that can't possibly be beat – will keep me from playing lots of hands that have a good chance to win but aren't sure things.

- For a real-life example, Oaktree has always emphasized default avoidance as the route to outperformance in high yield bonds. Thus our default rate has consistently averaged just 1/3 of the universe default rate, and our risk-adjusted return has beaten the indices. But if we had insisted on – and designed compensation to demand – zero defaults, I'm sure we would have been too risk averse and our performance wouldn't have been as good. As my partner Sheldon Stone puts it, "If you don't have any defaults, you're taking too little risk."

When I first went to work at Citibank in 1968, they had a slogan that "scared money never wins." **It's important to play judiciously, to have more successes than failures, and to make more on your successes than you lose on your failures. But it's crippling to have to avoid all failures, and insisting on doing so can't be a winning strategy. It may guarantee you against losses, but it's likely to guarantee you against gains as well.** Here's some helpful wisdom on the subject from Wayne Gretzky, considered by many to be the greatest hockey player who ever lived: **"You miss 100% of the shots you don't take."**

There is no formulaic approach to investing that can be depended on to produce superior risk-adjusted returns. There can't be. In a relatively fair or "efficient" market – and the concerted efforts of investors to find underpriced assets tend to make most markets quite fair – asymmetry is reduced, and a formula that everyone can access can't possibly work.

As John Kenneth Galbraith said, "There is nothing reliable to be learned about making money. If there were, study would be intense and everyone with a positive IQ would be rich." If merely applying a formula that's available to everyone could be counted on to provide easy profits, where would those profits come from? Who would be the losers in those transactions? Why wouldn't those people study and apply the formula also?

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Or as Charlie Munger told me, "It's not supposed to be easy. Anyone who finds it easy is stupid." In other words, anyone who thinks it can be easy to succeed at investing is being simplistic and superficial, and ignoring investing's complex and competitive nature.

Why should superior profits be available to the novice, the untutored or the lazy? Why should people be able to make above average returns without hard work and above average skill, and without knowing something most others don't know? And yet many individuals invest based on the belief that they can. (If they didn't believe that, wouldn't they index or, at a minimum, turn over the task to others?)

No, the solution can't lie in rigid tactics, publicly available formulas or loss-eliminating rules . . . or in complete risk avoidance. **Superior investment results can only stem from a better-than-average ability to figure out when risk-taking will lead to gain and when it will end in loss.** There is no alternative.

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Dare to Look Wrong

This is really the bottom-line: not whether you dare to be different or to be wrong, but whether you dare to look wrong.

Most people understand and accept that in their effort to make correct investment decisions, they have to accept the risk of making mistakes. Few people expect to find a lot of sure things or achieve a perfect batting average.

While they accept the intellectual proposition that attempting to be a superior investor has to entail the risk of loss, many institutional investors – and especially those operating in a political or public arena – can find it unacceptable to look significantly wrong. Compensation cuts and even job loss can befall the institutional employee who's associated with too many mistakes.

As *Pensions & Investments* said on March 17 regarding a big West Coast bond manager currently in the news, whom I'll leave nameless:

> . . . asset owners are concerned that doing business with the firm could bring unwanted attention, possibly creating headline risk and/or job risk for them. . . .
>
> One [executive] at a large public pension fund said his fund recently allocated $100 million for emerging markets, its first allocation to the firm. He said he wouldn't do that today, given the current situation, because it could lead to second-guessing by his board and the local press.
>
> "If it doesn't work out, it looks like you don't know what you are doing," he said.

As an aside, let me say I find it perfectly logical that people should feel this way. Most "agents" – those who invest the money of others – will benefit little from bold decisions that work but will suffer greatly from bold decisions that fail. The possibility of receiving an "attaboy" for a few

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winners can't balance out the risk of being fired after a string of losers. Only someone who's irrational would conclude that the incentives favor boldness under these circumstances. Similarly, members of a non-profit organization's investment committee can reasonably conclude that bearing the risk of embarrassment in front of their peers that accompanies bold but unsuccessful decisions is unwarranted given their volunteer positions.

I'm convinced that for many institutional investment organizations the operative rule – intentional or unconscious – is this: "We would never buy so much of something that if it doesn't work, we'll look bad." For many agents and their organizations, the realities of life mandate such a rule. But people who follow this rule must understand that by definition it will keep them from buying enough of something that works for it to make much of a difference for the better.

In 1936, the economist John Maynard Keynes wrote in *The General Theory of Employment, Interest and Money*, "Worldly wisdom teaches that it is better *for reputation* to fail conventionally than to succeed unconventionally" [italics added]. For people who measure success in terms of dollars and cents, risk taking can pay off when gains on winners are netted out against losses on losers. **But if reputation or job retention is what counts, losers may be all that matter, since winners may be incapable of outweighing them. In that case, success may hinge entirely on the avoidance of unconventional behavior that's unsuccessful.**

Often the best way to choose between alternative courses of action is by figuring out which has the highest "expected value": the total value arrived at by multiplying each possible outcome by its probability of occurring and summing the results. As I learned from my first textbook at Wharton fifty years ago (*Decisions Under Uncertainty* by C. Jackson Grayson, Jr.), if one act has a higher expected value than another and ". . . if the decision maker is willing to regard the consequences of each act-event in purely *monetary* terms, then this would be the logical act to choose. Keeping in mind, however, that *only one event and its consequence will occur* (not the weighted average consequence)," agents may not be able to choose on the basis of expected value or the weighted average of all possible consequences. **If a given action has potential bad consequences that are absolutely unacceptable, the expected value of all of its consequences – both good and bad – can be irrelevant**.

Given the typical agent's asymmetrical payoff table, the rule for institutional investors underlined above is far from nonsensical. But if it is adopted, this should be done with awareness of the likely result: over-diversification. This goes all the way back to the beginning of this memo, and each organization's need to establish its creed. In this case, the following questions must be answered:

- In trying to achieve superior investment results, to what extent will we concentrate on investments, strategies and managers we think are outstanding? Will we do this despite the potential of our decisions to be wrong and bring embarrassment?

- Or will fear of error, embarrassment, criticism and unpleasant headlines make us diversify highly, emulate the benchmark portfolio and trade boldness for safety? Will we opt for low-cost, low-aspiration passive strategies?

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In the course of the presentation described at the beginning of this memo, I pointed out to the sovereign wealth fund's managers that they had allocated close to a billion dollars to Oaktree's management over the preceding 15 years. Although that sounds like a lot of money, it actually amounts to only a few tenths of a percent of what the world guesses their assets to be. And given our funds' cycle of investing and divesting, that means they didn't have even a few tenths of a percent of their capital with us at any one time. Thus, despite our good performance, I think it's safe to say Oaktree couldn't have had a meaningful impact on the fund's overall results. Certainly one would associate this behavior with an extreme lack of risk tolerance and a high aversion to headline risk. I urged them to consider whether this reflects their real preference.

Lou Brock of the St. Louis Cardinals was one of baseball's best base stealers between 1966 and 1974. He's the source of a great quote: **"Show me a guy who's afraid to look bad, and I'll show you a guy you can beat every time."** What he meant (with apologies to readers who don't understand baseball) is that in order to prevent a great runner from stealing a base, a pitcher may have to throw over to the bag ten times in a row to hold him close, rather than pitch to the batter. But after a few such throws, a pitcher can look like a scaredy-cat and be booed. Pitchers who were afraid of those things were easy pickings for Lou Brock. Fear of looking bad ensured their failure.

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Looking Right Can Be Harder Than Being Right

Fear of looking bad can be particularly debilitating to an investor, client or manager. This is because of how hard it is to consistently make correct investment decisions. Some of this comes from my last memo, on the role of luck.

- First, it's hard to consistently make decisions that correctly factor in all of the relevant facts and considerations (i.e., it's hard to be right).

- Second, it's far from certain that even "right" decisions will be successful, since every decision requires assumptions about what the future will look like, and even reasonable assumptions can be thwarted by the world's randomness. Thus many correct decisions will result in failure (i.e., it's hard to look right).

- Third, even well-founded decisions that eventually turn out to be right are unlikely to do so promptly. This is because not only are future events uncertain, their timing is particularly variable (i.e., it's impossible to look right on time).

This brings me to one of my three favorite adages: **"Being too far ahead of your time is indistinguishable from being wrong."** The fact that something's cheap doesn't mean it's going to appreciate tomorrow; it can languish in the bargain basement. And the fact that something's overpriced certainly doesn't mean it'll fall right away; bull markets can go on for years. As Lord Keynes observed, "the market can remain irrational longer than you can remain solvent."

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Alan Greenspan warned of "irrational exuberance" in December 1996, but the stock market continued upward for more than three years. A brilliant manager I know who turned bearish around the same time had to wait until 2000 to be proved correct . . . during which time his investors withdrew much of their capital. He wasn't "wrong," just early. But that didn't make his experience any less painful.

Likewise, John Paulson made the most profitable trade in history by shorting mortgage securities in 2006. Many others entered into the same transactions, but too early. When the bets failed to work at first, the appearance of being on the wrong track ate into the investors' ability to stick with their decision, and they were forced to close out positions that would have been extremely profitable.

In order to be a superior investor, you need the strength to diverge from the herd, stand by your convictions, and maintain positions until events prove them right. Investors operating under harsh scrutiny and unstable working conditions can have a harder time doing this than others.

That brings me to the second quote I promised from Yale's David Swensen:

> . . . active management strategies demand uninstitutional behavior from institutions, creating a paradox that few can unravel.

Charlie Munger was right about it not being easy. **I'm convinced that everything that's important in investing is counterintuitive, and everything that's obvious is wrong.** Staying with counterintuitive, idiosyncratic positions can be extremely difficult for anyone, especially if they look wrong at first. So-called "institutional considerations" can make it doubly hard.

Investors who aspire to superior performance have to live with this reality. **Unconventional behavior is the only road to superior investment results, but it isn't for everyone. In addition to superior skill, successful investing requires the ability to look wrong for a while and survive some mistakes.** Thus each person has to assess whether he's temperamentally equipped to do these things and whether his circumstances – in terms of employers, clients and the impact of other people's opinions – will allow it . . . when the chips are down and the early going makes him look wrong, as it invariably will. Not everyone can answer these questions in the affirmative. It's those who believe they can that should take a chance on being great.

April 8, 2014

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Memo to: Oaktree Clients

From: Howard Marks

Re: Getting Lucky

Sometimes these memos are inspired by a single event or just one thing I read. This one – like my first memo 24 years ago – grew out of the juxtaposition of two observations. I'll introduce one here and the other on page seven. Contrary to my wife Nancy's observation that my memos are "all the same," the subject here is one I've rarely touched on.

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The Role of Luck

The first inspiration for this memo came in early November, when I picked up a copy of the *Four Seasons Magazine* in my hotel room in Riyadh, Saudi Arabia. I happened to turn to an article entitled "In Defence of Luck" by Ed Smith. It's been in my Oaktree bag ever since. In his two opening paragraphs, Smith presents a thesis for dismantling:

> "Success is never accidental," Twitter founder Jack Dorsey recently tweeted. No accidents, just planning; no luck, only strategy; no randomness, just perfect logic.
>
> It is a tempting executive summary for a seductive speech or article. If there are no accidents, then winners are seen in an even better light. Denying the existence of luck appeals to a fundamental human urge: to understand, and ultimately control, everything in our path. Hence the popularity of the statement "You make your own luck."

That's all it took to get my juices flowing. I – along with Smith – believe a great many things contribute to success. Some are our own doing, while many others are beyond our control. There's no doubt that hard work, planning and persistence are essential for repeated success. These are among the contributors that Twitter's Dorsey is talking about. But even the hardest workers and best decision makers among us will fail to succeed consistently without luck.

What are the components of luck? They range from accidents of birth and genetics, to chance meetings and fortuitous choices, and even to perhaps-random but certainly unforeseeable events that cause decisions to turn out right.

In discussing the existence and importance of luck, Smith cites the popular book *Outliers* by Malcolm Gladwell:

> Attacking luck has never been more fashionable. No matter how flimsy the science behind the theory, popularized by author Malcolm Gladwell, that success must follow from 10,000 hours of dedicated practice, it has hardened into folklore.

Outliers is best known for Gladwell's observation that it's this magic number of hours of practice that makes the difference for those who are most successful. But that's only part of Gladwell's message, and people who think his book is all about hard work and practice miss the point. Having set out the "10,000-hours" thesis, Gladwell largely stops talking about it and turns to spend much more time on something he calls "demographic luck." This is actually the antithesis of an insistence that hours of effort suffice.

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Demographic Luck

Gladwell's term for this key ingredient in success has a simpler everyday label: "being born at the right time and the right place." Gladwell's examples are compelling:

- By the time the first hockey tryouts take place for all the little Canadian boys born in a given calendar year, those born in January will be eleven months older – and thus much bigger and stronger and more coordinated – than those born in December. They're likely to be put on better teams, receive better coaching, and spend more time on the ice. They're more likely to get 10,000 hours of practice and – all other things equal – to have their skills honed and showcased.

- When I went to college in the mid-sixties, we inputted computer projects via punch cards; they ran overnight; and we went back for our results the next morning. But going to a private high school a few years later enabled Bill Gates to enter his work via a time-sharing terminal connected directly to a central computer, and to see the results in real time. Thus he could perform hundreds of iterations a week, not seven, and develop his skills and his ideas much faster. In addition, the University of Washington was a short bus ride from his home, and his family's contacts enabled him to use its computer lab.

- When Joe Flom and his Jewish cohorts graduated from law school in the 1930s, there were no jobs for them with prestigious Wall Street law firms. They formed their own firm, Skadden, Arps, Slate, Meagher and Flom, but their work was largely confined to matters the "white shoe" firms rejected as unseemly and disreputable. Thus when proxy fights and hostile takeovers became commonplace in the 1970s and '80s, Joe Flom had superior experience and became a leader in advising on them, earning multi-million dollar fees.

It seems like more than a coincidence that not only was Bill Gates born in 1955, but his Microsoft co-founder Paul Allen was born in 1953; Sun Microsystems founders Bill Joy and Scott McNealy were born in 1954; Steve Jobs and Eric Schmidt were born in 1955; and Steve Ballmer was born in 1956. Ten years earlier and there would have been no remote computer terminals for them to work at in high school and college; ten years later and the kids born before them would have beat them to the "new, new thing."

Likewise, the greatest pioneers of the M&A bar were born at the right time to benefit from the upsurge in corporate activities that the legal establishment had frowned upon: Joe Flom in 1923 and all four founders of Wachtell, Lipton, Rosen and Katz in 1930-31.

During the holidays, I enjoyed spending time with three legends of the pop music business: producer David Geffen, entertainment attorney Allen Grubman, and Robbie Robertson, leader of the group "The Band." I was struck by the fact that they were all born in the same year: 1943. I came along three years later, and I remember my parents picking me up from summer camp in 1956 and telling me about a new singing sensation, Elvis Presley, and a new kind of music called rock and roll. The three men listed above were born at the right time to become leaders of the newly minted rock and roll industry. It's a good thing they weren't born a few decades later, since cheap downloads and file sharing have now decimated the profitability of the record business.

The bottom line is simple: it's great to be in the vanguard of a new development. Talent and hard work are essential, but there's nothing like getting there early and being pushed ahead by the powerful trends in demographics and taste that follow.

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Perhaps the ultimate description of demographic luck comes from Warren Buffett:

> I've had it so good in this world, you know. The odds were fifty-to-one against me being born in the United States in 1930. I won the lottery the day I emerged from the womb by being in the United States instead of in some other country where my chances would have been way different.
>
> Imagine there are two identical twins in the womb, both equally bright and energetic. And the genie says to them, "One of you is going to be born in the United States, and one of you is going to be born in Bangladesh. And if you wind up in Bangladesh, you will pay no taxes. What percentage of your income would you bid to be the one that is born in the United States?" It says something about the fact that society has something to do with your fate and not just your innate qualities. The people who say, "I did it all myself," and think of themselves as Horatio Alger – believe me, they'd bid more to be in the United States than in Bangladesh. That's the Ovarian Lottery. (*The Snowball*, Alice Schroeder)

Buffett is insightful enough to realize – and secure enough to admit – that he isn't solely responsible for his success. What if he'd been born in Bangladesh instead of the U.S.? Or a woman rather than a man in 1930, having much fewer opportunities? Or in 1830 (when there would be no hedge fund industry for a century) or 2014 (when there are smart people crawling all over it)? Or to different parents? Or if he'd missed out on studying under Ben Graham at Columbia? Or if he hadn't partnered with Charlie Munger?

I'm impressed when people credit others – as well as luck – for the essential part they played in their accomplishments. And I agree 100% with the following sentiment from Smith's article:

> Michael Young, the sociologist who coined the term "meritocracy," described the danger of thinking that success must be deserved just because it has happened: "If meritocrats believe, as more and more of them are encouraged to, that their advancement comes from their own merits . . . **they can be insufferably smug**." (Emphasis added)

<u>Did You Do It All Yourself?</u>

Buffett's mention of "people who say, 'I did it all myself' " reminds me of one of President Obama's reelection campaign speeches, which included a comment that became a lightning rod: "If you've got a business – you didn't build that. Somebody else made that happen."

His remark serves quite poorly when taken on its own. It suggests he thinks that there's no such thing as individual success, only group accomplishments. It denies the efficacy of hard work and grit. In short, it reflects a very un-American view of success.

It's hard to be sure that every sentence we speak or write can stand on its own. When taken in context, Obama's statement makes more sense:

> If you were successful, somebody along the line gave you some help. There was a great teacher somewhere in your life. Somebody helped to create this unbelievable American system that we have that allowed you to thrive. Somebody invested in roads and bridges. If you've got a business – you didn't build that. Somebody else made that happen.

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Clearly Obama omitted a few key words from those two last sentences, perhaps assuming his listeners would carry them over from those that went before. The addition of just four words (italicized below) would have made his message more palatable: "If you've got a business – you didn't build that *alone*. Somebody else *provided assistance that* made that happen."

In other words, you were lucky enough to get help. Weren't we all?

Did I Do It All Myself?

You may think of me as intelligent, insightful and/or hard-working. I hope you do. But when I finished reading *Outliers*, I was moved to write down for my kids all the ways in which demographic luck contributed to my success. To illustrate my point, I want to share the list with you:

- First of all, it was great to be born in America at the very beginning of the "baby boom." Baby boomers – the generation born right after World War II – benefitted from the return of servicemen from the war; the ending of war-time limits on consumption; and explosive subsequent growth of the population, which fired strong economic growth. I was conceived during the war and born just after it ended. You couldn't get much closer to the front of the line.

- I was born to middle-class parents – members of the first generation in their families to be born in America – who encouraged me in education and work. They made me the first member of our family to receive a college degree.

- The timing of my birth enabled me to get a good, free education in the New York City public schools. The schools benefitted from the presence of smart women teachers to whom corporate careers weren't available, and who liked being on the same vacation schedule as their kids.

- My high school guidance counselor said my grades weren't good enough to get me into Wharton, but I was lucky to have had an accounting teacher whose letter of recommendation may have done the trick. Or perhaps it was the college entrance exams or SATs, standardized tests that had been introduced shortly before to counter the elite universities' bias against public-school kids.

- Regardless of what made it possible, it's clear that attending Wharton taught me a lot, exposed me to finance (previously I had planned on a career in accounting) and burnished my resume. Would my career, and thus my life, have been the same if I hadn't gotten into Wharton and instead had attended my second-choice school, a large state university?

- When I went off to college, I'd never heard of something called an MBA. But the existence of the Vietnam War provided an incentive to stay in school, and three years for law school seemed like too much, so business school it would be. Turned down by Harvard because of my lack of work experience, I instead attended the University of Chicago, whose theoretical, quantitative approach provided the perfect complement to my pragmatic Wharton undergraduate education.

- Just as I was lucky to be at the front of the line of baby boomers, my timing was fortuitous in attending Chicago. I arrived on campus in 1967, just a few years after the new Chicago approach to finance had begun to be taught. No more than a few hundred students could have beat me to the capital asset pricing model, modern portfolio theory, the efficient market hypothesis, the random walk, and the other components of today's investment theory.

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- I'm not one of those investors who started reading prospectuses at age ten. In fact, even as I approached graduation from Chicago in 1969, I was unsure of my career direction. I accepted a permanent position in investment research at First National City Bank (the predecessor of Citibank), largely because I'd had a good summer job there a year earlier. Ten years in equity analysis there, including three as director of research, provided an ideal foundation for my investment career.

- And then, when a new chief investment officer wanted to make room for his own head of research in 1978, he asked me to start up funds in convertible bonds and – in the ultimate stroke of luck – the newly created field of high yield bonds. How could anyone have been better positioned to participate in the financial developments of the last 35 years?

- And of course, I was at my luckiest when I teamed up with my wonderful partners – Bruce Karsh, Sheldon Stone, Larry Keele and Richard Masson – between 1983 and 1988. Bruce had the idea to organize a fund to invest in "distressed debt" at TCW, the first one from a mainstream financial institution. And then the five of us left to start Oaktree in 1995. The rest, as they say, is history.

You make your own luck? Success is never accidental? Bull!! I contributed to some of the positive developments described above, but many of them were pure luck. Pull out a few of the steps on this progression, and where would I be today? Here's one more: Of all the jobs I applied for when leaving Chicago in 1969, I wanted one much more than the rest but didn't get it. A few years ago, the company's campus recruiter told me I had been chosen, but on the relevant morning the partner in charge came in hung over and failed to call me with the positive message he was supposed to deliver. **Just think: but for that bit of "bad luck" I could have spent the next 39 years at Lehman Brothers!**

I know how lucky I've been. I find it incredibly uplifting and the source of great optimism regarding the future to know and appreciate my good fortune. Rather than detract from my satisfaction over the success I've enjoyed – because of having to admit it wasn't all my own doing – this realization makes me feel fortunate to have been born when and where I was and to have benefitted from the developments that came along. I revel in my good luck.

And what about the things I may have brought to my career: perhaps intelligence, insight and a talent for writing? **Isn't having these things a form of luck?** Intelligent and innately talented people didn't do anything to earn their gifts. No one can take credit for them as "something I did" or "something that was within my control." These things, too, are luck, and something for which we should give thanks rather than take credit.

<u>Luck in Investing</u>

Rather than "you make your own luck," there's an old saying that provides a better way to put it: "luck is what happens when preparation meets opportunity." If you prepare through study and practice, work hard and bring your talents to bear, you'll be positioned to make the most out of opportunities that arise. This way of looking at life is in line with my formulation regarding investment results: **performance is what happens when events collide with an existing portfolio**.

We arrange our lives – or, in investing, our portfolios – in expectation of what we think will happen in the future. In general, we get the desired results if future events conform to our hopes or expectations, and less-desired results if they don't.

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What about people – like those of us at Oaktree – who don't consider themselves macro forecasters or market timers? Even the most devoted value investor acts on the basis of expectations: that an asset selling at x will turn out to be worth 2x, and that one of these days everyone else will recognize its value and bid it up. And the agnostic buy-and-hold equity investor operates under the assumption that the economy will expand, companies will increase their profits, and stock prices will rise as a result.

Let's say investors reach their conclusions about current intrinsic value or future earnings growth by applying skillful analysis to accurate data and reasonable assumptions. Let's grant, in short, that their conclusions are "right" in some abstract sense. It still takes a great deal of luck for their version of future events to materialize.

Elroy Dimson of the London Business School is responsible for one of the most trenchant observations: "Risk means more things can happen than will happen." In other words, the future isn't a predetermined scenario that's sure to unfold, but rather a range of possibilities, any one of which may happen. Investors formulate opinions as to which of them will happen. Those opinions may be well-reasoned or dart throws. But even the most rigorously derived view of the future is far from sure to be right. Many other things may happen instead.

Nassim Nicholas Taleb's views, expressed in *Fooled by Randomness*, connect up with Dimson's. The world is an uncertain, even random, place. What "should happen" might be totally clear, meaning we know what the future should hold. But the things that should happen may not happen – and other things may happen instead – for any of a variety of reasons, many of them extraneous, unpredictable and even nonsensical**. Those things can be described as random: the result of luck, either good or bad.**

The point is that we assemble our portfolios, and future events determine whether our performance will be rewarded or punished. People whose expectations are borne out generally make money, and those whose aren't lose. That process sounds very fact-based, meritocratic and luck-free, and thus dependable. But that's only the case on average and in the longest-term sense.

- Sometimes, even though an investor's projections may be far too optimistic relative to what he should have expected – a.k.a. "wrong" – the investor is bailed out by unforeseeable positive developments, or even by non-fundamentally based price appreciation. Either way, the stock rises and the investor is applauded. I'd say he was "right for the wrong reason" (or "lucky").
- Alternatively, a prudent, skillful investor may formulate a reasonable view of the future, only to see the world go off the rails and his investments fail. He might be described as "wrong for the wrong reason" (or "unlucky").
- An investor may take an appropriately cautious stance – let's say toward tech stocks in 1997 or residential mortgage backed securities in 2005 – only to see an irrationally overpriced market become more so, as prices soar for years. He looks terrible, a victim of the old adage that "being too far ahead of your time is indistinguishable from being wrong."
- Further, in a special case of being wrong as to timing although perhaps not fundamentals, an investor may take a concentrated position in a laughably underpriced stock, using a huge amount of borrowed money. But before the expected appreciation can take place, a market crash brings on a margin call, and he's wiped out. As John Maynard Keynes said, "The market can remain irrational longer than you can remain solvent."
- Last year marked the passing of Joe Granville, a technical analyst whose warning in 1976 was followed by a 26% two-year decline, winning him respect and fame. But his next accurate call wouldn't come for 24 years, when he told people to sell tech stocks in 2000. Was it skill back in 1976, or a lucky call that turned out right when events went his way? Regardless, he became one of many in the investment business who get famous for having been "right once in a row."

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The first thing I remember learning at Wharton in 1963 was that the correctness of a decision can't be judged from the outcome. Because of the randomness at work in the world and the unpredictability of the future, lots of bad decisions lead to good results, and lots of good decisions end in failure.

In other words, for an investor to both be right *and* make money:

- his view of what will happen in the future – and what should be done about it – has to be analytically correct *a priori*,
- the things he thinks will happen have to actually happen, and
- those things have to happen on schedule.

But in investing, it's hard to know what will happen and impossible to know *when* it will happen. Many things influence performance other than (a) investors' hard work and skill and (b) the market's dependable discounting of information about the future. Luck – randomness, or the occurrence of things beyond our knowledge and control – plays a huge part in outcomes.

Investment success isn't just a question of whether the investor put together the "right" portfolio, but also whether it encountered a beneficial environment. Thus being successful requires a significant degree of luck. No one gets it right every time. (That's why even the best investors diversify, hedge and/or limit their use of leverage.) But the skillful investor is right more often, over a long period of time, than an assumption of randomness would permit. **We say about such investors, "it can't be luck."**

* * *

Where Is It Easiest to Get Lucky?

The second inspiration for this memo came from a report entitled *Alpha and the Paradox of Skill* by Michael Mauboussin of Credit Suisse. In it he talks about Jim Rutt, the CEO of Network Solutions. As a young man, Rutt wanted to become a better poker player, and to that end he worked hard to learn the odds regarding each hand and how to detect "tells" in other players that give away their position.

Here's the part that attracted my attention:

> At that point, an uncle pulled him aside and doled out some advice. "Jim, I wouldn't spend my time getting better," he advised, **"I'd spend my time finding weak games."**
>
> Success in investing has two aspects. The first is skill, which requires you to be technically proficient. Technical skills include the ability to find mispriced securities (based on capabilities in modeling, financial statement analysis, competitive strategy analysis, and valuation all while sidestepping behavioral biases) and a good framework for portfolio construction. **The second aspect is the game in which you choose to compete**. (Emphasis added)

Mauboussin goes on to talk primarily about changes in the relative importance of luck and skill. But for me, what his words keyed first and foremost were musings about market efficiency and inefficiency. What they highlighted is that the easiest way to win at poker is by playing in easy games in which other

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players make mistakes. **Likewise, the easiest way to win at investing is by sticking to inefficient markets.**

Luck and Efficiency

Here's my take on the efficient market hypothesis: Thousands of intelligent, computer-literate, objective, unemotional, highly motivated and hard-working investors spend a great deal of time searching for information about assets and analyzing what it means for their value. For this reason, all available information is incorporated instantaneously in market prices. This causes the market price of every asset to accurately reflect its intrinsic value, such that an investor in the asset will enjoy a risk-adjusted return that is fair relative to the return on all other assets: no more and no less. Thus there are no "inefficiencies," or instances where assets are priced incorrectly so as to provide an "excess return" or a "free lunch." For this reason, no individuals are able to demonstrate superior investment skill ("alpha"). Even if some people were smart enough to take advantage of pricing errors, the market doesn't present errors for them to take advantage of. As a result, nobody can beat the market.

I have one main disagreement with the theory as presented above. Whereas the academics say in an efficient market the price of each asset **accurately reflects** its intrinsic value, I say the price set by the consensus **does the best job of estimating** the asset's intrinsic value. In other words, the academics say market prices are right, while I say they may be wrong but can't consistently be improved upon (and the errors taken advantage of) by any individual. A market may not be efficient in the sense that prices are "right," but it can be efficient in that it swiftly incorporates new information. The resulting prices may not be equal to the value, but they reflect everyone's best collective thinking at a point in time. **The result is the same: no one can beat the market.**

I think of the test for market efficiency as being twofold: if markets are efficient, (a) one market's risk-adjusted return can't be better or worse than any other market and (b) no investor in the market can outperform the rest in risk-adjusted terms. **In other words, there can't be opportunities for outperformance . . . either through skill or luck. In an efficient market – as with a Swiss watch (or, as Taleb would say, in dentistry) – luck plays no part.**

Are Markets Efficient? Is the Hypothesis Relevant?

Let me say up front that I have always considered the reasoning behind the efficient market hypothesis absolutely sound and compelling, and it has greatly influenced my thinking.

In well-followed markets, thousands of people are looking for superior investments and trying to avoid inferior ones. If they find information indicating something's a bargain, they buy it, driving up the price and eliminating the potential for an excess return. Likewise, if they find an overpriced asset, they sell it or short it, driving down the price and lifting its prospective return. **I think it makes perfect sense to expect intelligent market participants to drive out mispricings.**

The efficient market hypothesis is compelling . . . as a hypothesis. But is it relevant in the real world? (As Yogi Berra said, "In theory there is no difference between theory and practice, but in practice there is.") The answer lies in the fact that no hypothesis is any better than the assumptions on which it's premised.

I believe many markets are quite efficient. Everyone is aware of them, basically understands them, and is willing to invest in them. And in general everyone gets the same information at the same time (in fact,

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it's one of the SEC's missions to make sure that's the case). I had markets like that in mind in 1978 when, on going into portfolio management, my rule was, "I'll do anything but spend the rest of my life choosing between Merck and Lilly."

But I also believe some markets are less efficient than others. Not everyone knows about them or understands them. They may be controversial, making people hesitant to invest. They may appear too risky for some. They may be hard to invest in, illiquid, or accessible only through locked-up vehicles in which some people can't or don't want to participate. Some market participants may have better information than others . . . legally. **Thus, in an inefficient market there can be mastery and/or luck, since market prices are often wrong, enabling some investors to do better than others.**

(Time for an aside: the fact that a market is inefficient doesn't mean everyone in it gets rich. It simply means there are overpricings and underpricings, to profit from or fall victim to. Thus there can be winners *and losers*. Even in an inefficient market, not everyone can be above average.)

Ultimately, there's one reason why I think no markets are perfectly efficient. Remember the assumptions underlying market efficiency: the participants have to be objective and unemotional. Regardless of the market, few investors pass that test. How many are unemotional enough to resist buying into a fast-rising bubble, or selling in a crash when the price of an asset appears to be on the way to zero?

The bottom line for me is that (a) you mustn't ignore the concept of efficiency, and at the same time, (b) you mustn't accept it as universally true. As I wrote in *What's It All About, Alpha* (July 2001):

> If we entirely ignore theory, we can make big mistakes. We can fool ourselves into thinking it's possible to know more than everyone else and regularly beat heavily populated markets. . . . But swallowing theory whole can make us turn the process over to a computer and miss out on the contribution skillful individuals can make.

Rather than expect markets to routinely provide a free lunch, I think there should be a presumption that they're efficient. The burden of proof should be on anyone who thinks a market provides underpriced investments that no one else is smart enough to detect and pursue. It's safer to be skeptical of the existence of freebies than to assume unappreciated bargains are rife for the taking.

It's important to note, however, that market efficiency shouldn't be considered something that's universally applicable, but rather what Bruce Karsh has taught me to call a "rebuttable presumption." You should start out thinking it's the general rule, but its applicability can be disproved in individual situations. The possibility of inefficiency shouldn't be ignored.

In the old story on this subject, the professor of finance theory is taking a walk across the campus with one of his students. The student says, "Look professor: isn't that a $10 bill on the ground?" The professor answers, "It can't be a $10 bill. If it were, someone would have picked it up by now." The professor turns and walks away, and the student picks it up and has a beer.

My History with Inefficiency

As mentioned above, I was lucky in 1978 when Citibank asked me to manage a portfolio for the brokerage house Bache, which wanted to offer a high yield bond mutual fund. This was the first of many opportunities I've enjoyed for free lunches.

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Thirty-five years ago, the high yield bond market was a classic example of market inefficiency.

- It was little known and little researched.
- There was little reported performance history.
- There was no centralized trading and no reported data on prices.
- Few professionals invested in them.
- Most importantly, high yield bonds were viewed as unseemly and investing in them was considered improper. I'll never forget Moody's definition of a B-rated bond: "fails to possess the characteristics of a desirable investment."
- For this reason, they were banned under most institutions' policies, which limited investment to bonds rated "A or better" or "investment grade (triple-B or better)."
- And, of course, they were known by the derogatory term "junk bonds." Like the finance professor in the story, most investors turned up their noses and walked away.

The elements listed above caused high yield bonds to be disrespected and shunned, **and thus to be underpriced and offer yields that were too high for the risk involved**. How do I know? Because (a) the yield spread offered as compensation for bearing risk has proved to be excessive, (b) the bonds have outperformed other forms of fixed income investing over the long term, and (c) Sheldon Stone has been able to compile a risk-adjusted net return above his benchmarks for the 28 years over which he's managed our portfolios. High yield bonds have provided the foundation for much of Oaktree's success and many of its subsequent initiatives.

Ten years later, in 1988, Sheldon and I agreed with Bruce Karsh that we should organize our first distressed debt fund, and Bruce hired Richard Masson to join him in the task. While the prominence of Drexel Burnham and Michael Milken had attracted attention to high yield bonds by that time, distressed debt was still little known and poorly understood. What could be more unseemly and frightening than the debt of companies that were bankrupt or that appeared overwhelmingly likely to become so? No mainstream financial institutions invested in distressed debt or offered distressed debt funds, leaving an open playing field for us. Bruce's aggregate since-inception return of 23% per year before fees (17½% after) – without the benefit of leverage – certainly suggests that inefficiencies have been present. And the fact that he has earned that return over 25 years while investing $35 billion says it wasn't luck.

My point here is that these markets – and others that Oaktree entered over the years – have been inefficient markets. The lack of information, infrastructure, understanding and competition created many opportunities for us to find bargains, and for our clients in those markets to enjoy favorable returns with less-than-commensurate risk.

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The Durability of Inefficiency

If efficiency should be the going-in presumption, so should "efficientization." That's my term for the process through which a market becomes more efficient. In short, over time the actions of diligent investors should have the effect of driving out bargains. If at first bargains exist, their holders will enjoy superior risk-adjusted returns, other investors will take note, and they'll study them and bid them up enough to eliminate the bargain element and thus the potential for further excess returns. If the inefficiency is caused by underdeveloped market infrastructure, you can expect centralized trading, price reporting, performance data and consultant focus to develop.

It requires a certain degree of malfunction for the market to allow an investor to find a bargain, buy it on the cheap and enjoy an excess return. But it takes a much greater degree of malfunction

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for everyone else to fail to notice that investor's success, fail to emulate his methods, and thus allow the bargain to persist. Usually a free-lunch counter should be expected to be picked clean.

The Current State of Market Efficiency

Let's compare the current environment for efficiency with that of the past.

- Data on all forms of investing is freely available in vast quantities.
- Every investor has extensive computing power. In contrast, there were essentially no PCs or even four-function calculators before 1970, and no laptops before 1980.
- "Hedge fund," "alternative investing," "distressed debt," "high yield bond," "private equity," "mortgage backed security" and "emerging market" are all household words today. Thirty years ago they were non-existent, little known or poorly understood. Today, as I say about the impact of the browsers on our mobile phones, "everyone knows everything."
- Nowadays few people make moral judgments about investments. There aren't many instances of investors turning down an investment just because it's controversial or unseemly. In contrast, most will do anything to make a buck.
- There are about 8,000 hedge funds in the world, many of which have wide-open charters and pride themselves on being infinitely flexible.

It's hard to prove efficiency or inefficiency. Among other reasons, the academics say it takes many decades of data to reach a conclusion with "statistical significance," but by the time the requisite number of years have passed, the environment is likely to have been altered. Regardless, I think we must look at the changes listed above and accept that the conditions of today are less propitious for inefficiency than those of the past. **In short, it makes sense to accept that most games are no longer as easy as they used to be, and that as a result free lunches are scarcer. Thus, in general, I think it will be harder to earn superior risk-adjusted returns in the future, and the margin of superiority will be smaller.**

People often ask me about the inefficient markets of tomorrow. Think about it: that's an oxymoron. It's like asking, "What is there that hasn't been discovered yet?" **The markets are greatly changed from 25, 35 or 45 years ago. The bottom line today is that there's little that people don't know about, understand and embrace.**

How, then, do I expect to find inefficiency? My answer is that while few markets demonstrate great **structural inefficiency** today, many exhibit a great deal of **cyclical inefficiency** from time to time. Just five years ago, there were lots of things people wouldn't touch with a ten-foot pole, and as a result they offered absurdly high returns. Most of those opportunities are gone today, but I'm sure they'll be back the next time investors turn tail and run.

Markets will be permanently efficient when investors are permanently objective and unemotional. In other words, never. **Unless that unlikely day comes, skill <u>and</u> luck will both continue to play very important roles**.

January 16, 2014

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The aggregate performance of Oaktree's Distressed Debt Funds presented herein represents dollar-weighted internal rates of return ("IRR") on an absolute basis for the time period October 15, 1988 through September 30, 2013.

Prior to the formation of Oaktree in the second quarter of 1995, this record includes performance which the U.S. High Yield Bond and Distressed Debt teams achieved at Trust Company of the West.

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Memo to: Oaktree Clients

From: Howard Marks

Re: The Race Is On

I've written a lot of memos to clients over the last 24 years – well over a hundred. One I'm particularly proud of is *The Race to the Bottom* from February 2007. I think it provided a timely warning about the capital market behavior that ultimately led to the mortgage meltdown of 2007 and the crisis of 2008. I wasn't aware and didn't explicitly predict (in that memo or elsewhere) that the unwise lending practices that were exemplified in sub-prime mortgages would lead to a global financial crisis of multi-generational proportions. However, I did detect carelessness-induced behavior, and I considered it worrisome.

As readers of my memos know, I believe strongly that (a) most of the key phenomena in the investment world are inherently cyclical, (b) these cycles repeat, reflecting consistent patterns of behavior, and (c) the results of that behavior are predictable.

Of all the cycles I write about, I feel the capital market cycle is among the most volatile, prone to some of the greatest extremes. It is also one of the most impactful for investors. **In short, sometimes the credit window is open to anyone in search of capital (meaning dumb deals get done), and sometimes it slams shut (meaning even deserving companies can't raise money).** This memo is about the cycle's first half: the manic swing toward accommodativeness.

An aside: I recently engaged in an exchange with a reader who took issue with my use of the word "cycle." In his view, something is a cycle only if it's so regular that the timing and extent of its ups and downs can be predicted with certainty. The cycles I describe aren't predictable as to timing or extent. However, their fluctuations absolutely can be counted on to recur, and that's what matters to me. I think it's also what Mark Twain had in mind when he said "History doesn't repeat itself, but it does rhyme." The details don't repeat, but the rhyming patterns are extremely reliable.

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Competing to Provide Capital

When the economy is doing well and companies' profits are rising, people become increasingly comfortable making loans and investing in equity. As the environment becomes more salutary, lenders and investors enjoy gains. This makes them want to do more; gives them the capital to do it with; and makes them more aggressive. Since this happens to all of them at the same time, the competition to lend and invest becomes increasingly heated.

When investors and lenders want to make investments in greater quantity, I think it's also inescapable that they become willing to accept lower quality. They don't just provide more money on the same old terms; they also become willing – even eager – to do so on weaker terms. **In fact, one way they strive to win the opportunity to put money to work is by doing increasingly dangerous things.**

This behavior was the subject of *The Race to the Bottom*. In it I said to buy a painting in an auction, you have to be willing to pay the highest price. To buy a company, a share of stock or a building – or to make a loan – you also have to pay the highest price. And when the competition is heated, the bidding goes higher. This doesn't always – or exclusively – result in a higher explicit price; for example, bonds rarely come to market at prices above par. Instead, **paying the highest price may take the form of accepting**

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a higher valuation parameter (e.g., a higher price/earnings ratio for a stock or a higher multiple of EBITDA for a buyout) **or accepting a lower return** (e.g., a lower yield for a bond or a lower capitalization rate for an office building).

Further, rather than paying more for the asset purchased, **there are other ways for an investor or lender to get less for his money. This can come through tolerating a weaker deal structure or through an increase in risk.** It's primarily these latter elements – rather than securities merely getting pricier – with which this memo is concerned.

History Rhymes

In the pre-crisis years, as described in the 2007 memo, the race to the bottom manifested itself in a number of ways:

- There was **widespread acceptance of financial engineering techniques**, some newly minted, such as derivatives creation, securitization, tranching and selling onward. These innovations resulted in the creation of such things as highly levered mortgage-backed securities, CDOs and CLOs (structured credit instruments offering tiered debt levels of varying riskiness); credit default swaps (enabling investors to place bets regarding the creditworthiness of debtors); and SPACs (Special Purpose Acquisition Companies, or blind-pool acquisition vehicles). Further, the development of derivatives, in particular, vastly increased the ease with which risk could be shouldered (often without a complete understanding) as well as the amount of risk that could be garnered per dollar of capital committed.

- While not a novel development, there was **an enormous upsurge in buyouts**. These included the biggest deals ever; higher enterprise values as a multiple of cash flow; increased leverage ratios; and riskier, more cyclical target companies, such as semiconductor manufacturers.

- There was **widespread structural deterioration**. Examples included covenant-lite loans carrying few or none of the protective terms prudent lenders look for, and PIK-toggle debt on which the obligors could elect to pay interest "in kind" with additional securities rather than cash.

- Finally, there was simply **a willingness to buy riskier securities**. Examples here included large quantities of CCC-rated debt, as well as debt issued to finance dividend payments and stock buybacks. The last two increase a company's leverage without adding any productive assets that can help service the new debt.

Toward the end, my 2007 memo included the following paragraph:

> **Today's financial market conditions are easily summed up: There's a global glut of liquidity, minimal interest in traditional investments, little apparent concern about risk, and skimpy prospective returns everywhere. Thus, as the price for accessing returns that are potentially adequate (but lower than those promised in the past), investors are readily accepting significant risk in the form of heightened leverage, untested derivatives and weak deal structures.** The current cycle isn't unusual in its form, only its extent. There's little mystery about the ultimate outcome, in my opinion, but at this point in the cycle it's the optimists who look best. (emphasis in the original)

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Now we're seeing another upswing in risky behavior. It began surprisingly soon after the crisis (see *Warning Flags*, May 2010), spurred on by central bank policies that depressed the return on safe investments. It has gathered steam ever since, but not to anywhere near the same degree as in 2006-07.

- Wall Street has, thus far, been less creative in terms of financial engineering innovations. I can't think of a single new "modern miracle" that's been popularized since the crisis.

- Likewise, derivatives are off the front page and seem to be created at a much slower pace. A full resumption of derivatives creation and other forms of financial innovation appears to be on hold pending clarification of the regulatory uncertainty surrounding acceptable activity for banks.

- Buyout activity seems relatively subdued. In 2006-07, it seemed a buyout in the tens of billions was being announced every week; now they're quite scarce. Many smaller deals are taking place, however, including a large number of "flips" from one buyout fund to another, and leverage ratios have moved back up toward the highs of the last cycle.

- "Cov-lite" and PIK-toggle debt issuance is in full flower, as are triple-Cs, dividend recaps and stock buybacks.

It's highly informative to assess how the other characteristics of 2007 enumerated above compare with conditions today:

- global glut of liquidity – check
- minimal interest in traditional investments – check (relatively little is expected today from Treasurys, high grade bonds or equities, encouraging investors to shift toward alternatives)
- little apparent concern about risk – check
- skimpy prospective returns everywhere – check

Risk tolerance and leverage haven't returned to their pre-crisis highs in quantitative terms, but there's no doubt in my mind that risk bearing is back in vogue.

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Examples from the Media

My preparation for writing these memos often includes amassing media citations around a central theme. Here are some from the last few weeks:

- Now, eight years since the PIK-toggle entered the market, companies are again using the esoteric structures, along with a host of riskier borrowing practices associated with the buyout boom that helped inflate the 2006-07 credit bubble. (*Financial Times*, October 22)

- At the same time, more than $200bn of "cov-lite" loans have been sold so far this year, eclipsing the $100bn issued in 2007. That means 56 per cent of new leveraged loans now come with fewer protections for lenders than normal loans. (*Ibid.*)

- Bankers say much of that issuance has been a result of the return of another pre-crisis market vehicle – the collateralised [sic] loan obligation. . . . Like the rest of the leveraged

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loan market, CLOs have enjoyed buoyant demand. At least $55.41bn of the vehicles have been sold this year – the highest amount since the $88.94bn issued in 2007. (*Ibid.*)

- Bonds rated CCC or lower -- at least eight steps below investment grade -- by S&P have gained 11 percent this year, compared with about a 6 percent gain for all dollar-denominated junk bonds or a loss of more than 1 percent for investment-grade debt, according to Bank of America Merrill Lynch index data. (*Bloomberg*, November 19)

- . . . the amount of indebtedness in leveraged buyout deals is creeping up. The average amount of debt used to finance LBOs has jumped from a low of 3.69 times earnings in 2009 to an average of 5.37 so far this year, according to data from S&P Capital IQ. At the height of the LBO boom, average leverage was 6.05. (*Financial Times*, October 22)

- Subprime loans, given to people with little proven ability to pay, are making a comeback, this time to buy cars. Issuance of bonds linked to loans for the shakiest borrowers hit $17.2 billion this year, more than double the amount sold during the same period in 2010, according to Harris Trifon, a debt analyst at Deutsche Bank AG. (*Bloomberg*, November 19)

- A Goldman Sachs index of [the stocks of] companies with weaker balance sheets has rallied 42 percent this year, almost doubling the gain in a measure of more creditworthy firms. (*Ibid*.)

- Twitter took the first steps in the pricing of its eagerly awaited initial public offering. . . . The social media darling disclosed that it planned to sell 70 million shares at $17 to $20 each. At the midpoint of that range, the offering would raise about $1.3 billion and would value Twitter at about $10 billion, excluding options. . . . Such a valuation would make Twitter more than three times as big as one of the first big Internet giants, AOL . . . (*The New York Times Dealbook*, October 24)

- Twitter is feeling more optimistic about investor appetite for its imminent initial public offering. On Monday morning, the company raised the price range for its I.P.O. to $23 to $25, signaling a bullish outlook ahead of its trading debut this week. The new range increases Twitter's potential market value by several billion dollars. If it prices at the high end, Twitter would be valued at $13.9 billion at the start of its first day of trading. (*Dealbook*, November 4)

- [Twitter] priced its shares at $26 on Wednesday night, giving it a market value of $18.1 billion. On Thursday, Twitter closed at $44.90 a share, 73 percent above its initial public offering price. (*Dealbook*, November 7)

- In a sign of the fervor once again rising around Internet startups, the 23-year-old CEO of [Snapchat] a two-year-old company with no revenue has rejected a $3 billion buyout offer. (*The Wall Street Journal*, November 14)

- Cash is returning to emerging markets, sparking big stock rallies and a surge in fundraising . . . Yield-hungry investors are venturing far into risky territory. Investors snapped up $1.8 billion worth of stock sold by Chinese banks in Hong Kong over the past two weeks, while India's stock market has climbed to record highs. Brazil sold $3.25 billion of debt, its biggest dollar-denominated offering on record, and Pakistan said Monday it plans to sell debt overseas for the first time in six years. (*The Wall Street Journal*, November 7)

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- Emerging markets IPOs creep back into London; Emerging market companies are staging a return on the London Stock Exchange after a few quiet years. (*Financial News*, November 5)

Perhaps most tellingly, the November 19 *Bloomberg* story referenced above included the following observation from a strategist whom I'll allow to go nameless: "The analysis at some point shifts from fundamentals to being purely based on the price action of the stock." **When people start to posit that fundamentals don't matter and momentum will carry the day, it's an omen we must heed.**

While the extent is nowhere as dramatic as in 2006-07 – and the psychology behind it isn't close to being as bullish or risk-blind – I certainly sense a significant increase in the acceptance of risk. The bottom line is that when risk aversion declines and the pursuit of return gathers steam, issuers can do things in the capital markets that are impossible in more prudent times.

Why Is Risk Bearing on the Rise, and What Are the Implications?

To set the scene for answering the above questions, I'm going to reiterate and pull together some observations from recent memos.

Psychologically and attitudinally, I don't think the current capital market atmosphere bears much of a resemblance to that of 2006-07. Then I used words like "optimistic," "ebullient" and "risk-oblivious" to describe the players. Returns on risky assets were running high, and a number of factors were cited as having eliminated risk:

- The Fed was considered capable of restoring growth come what may.
- A global "wall of liquidity" was coming toward us, derived from China's and the oil producers' excess reserves; it could be counted on to keep asset prices aloft.
- The Wall Street miracles of securitization, tranching, selling onward and derivatives creation had "sliced and diced" risk so finely – and directed it where it could most readily be borne – that risk really didn't require much thought.

In short, in those days, most people couldn't imagine a way to lose money.

I believe most strongly that the riskiest thing in the investment world is the belief that there's no risk. When that kind of sentiment prevails, investors will engage in otherwise-risky behavior. By doing so, they make the world a risky place. And that's what happened in those pre-crisis years. When *The New York Times* asked a dozen people for articles about the cause of the crisis, I wrote one titled "Too Much Trust; Too Little Worry." Certainly a dearth of fear and a resulting high degree of risk taking accurately characterize the pre-crisis environment. But that was then. It's different today.

Today, unlike 2006-07, uncertainty is everywhere:

- Will the rate of economic growth in the U.S. get back to its prior norm? Will unemployment fall to the old "structural" level?
- Can America's elected officials possibly reach agreement on long-term solutions to the problems of deficits and debt? Or will the national debt expand unchecked?
- Will Europe improve in terms of GDP growth, competitiveness and fiscal governance? Will its leaders be able to reconcile the various nations' opposing priorities?
- Can Abenomics transform Japan's economy from lethargy to dynamism? The policies appear on paper to be the right ones, but will they work?

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- Can China transition from a highly stimulated economy based on easy money, an excess of fixed investment and an overactive non-bank financial system, without producing a hard landing that keeps it from reaching its economic goals?
- Can the emerging market economies prosper if demand from China and the developed world expands more slowly than in the past?

Looking at the world more thematically, a lot of questions surround the ability to manage economies and regulate growth:

- Can low interest rates and high levels of money creation return economic growth rates to previous levels? (To date, the evidence is mixed.)
- Can inflation be returned to a salutary level somewhat above that of today? Right now, insufficient inflation is the subject of complaints almost everywhere. Can the desired inflation rate be reinstated without going beyond, to undesirable levels?
- Programs like Quantitative Easing are novel inventions. How much do we know about how to end them, and about what the effects of doing so will be? Will it prove possible to wind down the stimulus – the word du jour is "taper" – without jeopardizing today's unsteady, non-dynamic recoveries? Can the central banks back off from interest rate suppression, bond buying and easy money policies without causing interest rates to rise enough to choke off growth?
- How will governments reconcile the opposing goals of stimulating growth (lower taxes, increased spending) and reining in deficits (increased taxes, less spending)?
- Will prosperous regions (e.g., Germany) continue to be willing to subsidize profligate and poorer ones (e.g., Spain and Portugal)?

As to investments:

- When the Fed stops buying bonds, will interest rates rise a little or a lot? Does that mean bonds are unattractive?
- Are U.S. stocks still attractive after having risen strongly over the last 18 months?
- Ditto for real estate following its post-crash recovery?
- Can private equity funds buy companies at attractive prices in an environment where few owners are motivated to sell?

As I've said before, most people are aware of these uncertainties. Unlike the smugness, complacency and obliviousness of the pre-crisis years, today few people are as confident as they used to be about their ability to predict the future, or as certain that it will be rosy. **Nevertheless, many investors are accepting (or maybe pursuing) increased risk.**

The reason, of course, is that they feel they have to. The actions of the central banks to lower interest rates to stimulate economies have made this a low-return world. This has caused investors to move out on the risk curve in pursuit of the returns they want or need. Investors who used to get 6% from Treasurys have turned to high yield bonds for such a return, and so forth.

Movement up the risk curve brings cash inflows to riskier markets. Those cash inflows increase demand, cause prices to rise, enhance short-term returns, and contribute to the pro-risk behavior described above. **Through this process, the race to the bottom is renewed.**

<u>In short, it's my belief that when investors take on added risks – whether because of increased optimism or because they're coerced to do so (as now) – they often forget to apply the caution they</u>

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should. That's bad for them. But if we're not cognizant of the implications, it can also be bad for the rest of us.

Where does investment risk come from? Not, in my view, primarily from companies, securities – pieces of paper – or institutions such as exchanges. No, in my view the greatest risk comes from prices that are too high relative to fundamentals. And how do prices get too high? Mainly because the actions of market participants take them there.

Among the many pendulums that swing in the investments world – such as between fear and greed, and between depression and euphoria – one of the most important is the swing between risk aversion and risk tolerance.

Risk aversion is the essential element in sane markets. People are supposed to prefer safety over uncertainty, all other things being equal. When investors are sufficiently risk averse, they'll (a) approach risky investments with caution and skepticism, (b) perform thorough due diligence, incorporating conservative assumptions, and (c) demand healthy incremental return as compensation for accepting incremental risk. This sort of behavior makes the market a relatively safe place.

But when investors drop their risk aversion and become risk-tolerant instead, they turn bold and trusting, fail to do as much due diligence, base their analysis on aggressive assumptions, and forget to demand adequate risk premiums as a reward for bearing increased risk. **The result is a more dangerous world where asset prices are higher, prospective returns are lower, risk is elevated, the quality and safety of new issues deteriorates, and the premium for bearing risk is insufficient.**

It's one of my first principles that we never know where we're going – given the unreliability of macro forecasting – but we ought to know where we are. "Where we are" means what the temperature of the market is: Are investors risk-averse or risk-tolerant? Are they behaving cautiously or aggressively? And thus is the market a safe place or a risky one?

Certainly risk tolerance has been increasing of late; high returns on risky assets have encouraged more of the same; and the markets are becoming more heated. The bottom line varies from sector to sector, but I have no doubt that markets are riskier than at any other time since the depths of the crisis in late 2008 (for credit) or early 2009 (for equities), and they are becoming more so.

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Is This a Sell Signal? If Not, Then What?

No, I don't think it's time to bail out of the markets. Prices and valuation parameters are higher than they were a few years ago, and riskier behavior is observed. But what matters is the degree, and I don't think it has reached the danger zone yet.

First, as mentioned above, the absolute quantum of risk doesn't seem as high as in 2006-07. The modern miracles of finance aren't seen as often (or touted as highly), and the use of leverage isn't as high.

Second, prices and valuations aren't highly extended (the p/e ratio on the S&P 500 is around 16, the post-war average, while in 2000 it was in the low 30s: now that's extended).

A rise in risk tolerance is something that should get your attention and focus your concentration. But for it to be highly worrisome, it has to be accompanied by extended valuations. I don't think we're there yet. **I think most asset classes are priced fully – in many cases on the high side of fair – but not at bubble-type highs.** Of course the exception is bonds in general, which the central banks are

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supporting at yields near all-time lows, meaning prices near all-time highs. But I don't find them scary (unless their duration is long), since – if the issuers prove to be money-good – they'll eventually pay off at par, erasing the interim mark-downs that will come when interest rates rise.

* * *

In the 1950s, when I was a kid, I watched old movies on TV when I got home from school. One from the 1940s was called *It Happened Tomorrow*. In it, a struggling young journalist made a deal with the devil to be given a peek at the next day's news. His scoops brought him huge success, and everything ran smoothly until he received a newspaper headlined "Reporter Shot Dead at Racetrack." He tried all he could to avoid it, but as a result of some very clever plot devices, he of course ended up at the track (where he learned that the headline had resulted from a case of mistaken identity).

I go through all of the above to explain that – try as I might to avoid it – my memos on excessive risk bearing and what to do about it invariably end up back at the same place: my favorite Buffettism:

> . . . the less the prudence with which others conduct their affairs, the greater the prudence with which we should conduct our own affairs.

I repeat Warren's injunction for the simple reason that you just can't put it any better. When others are acting imprudently, making the world a riskier place, our caution level should rise in response. (It's equally true that when others become overly cautious and run from risk, assets get so cheap that we should turn aggressive.)

Over the last 2-3 years, my motto for Oaktree has been consistent: "move forward, but with caution." I feel the outlook is not so bad, and asset prices are not so high, that it's time to apply maximum caution (or, as they said in *The Godfather*, "go to the mattresses"). But by the same token, the outlook is not so good, and asset prices are not so low, that we should be aggressive. That's the reason for my middling stance.

Having said that, however, there's no doubt in my mind that the trend is in the direction of increased risk, and I see no reason to think that trend will be arrested anytime soon. Risk is likely to reach extreme levels someday – it always does, eventually – and great caution will be called for. Just not yet.

Here's my conclusion from *The Race to the Bottom*. I'll let it stand – another case of "ditto."

> . . . there's a race to the bottom going on, reflecting a widespread reduction in the level of prudence on the part of investors and capital providers. No one can prove at this point that those who participate will be punished, or that their long-run performance won't exceed that of the naysayers. But that is the usual pattern.

November 26, 2013

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Memo to: Oaktree Clients

From: Howard Marks

Re: The Role of Confidence

Confidence is generally defined as belief in one's ability to choose a course of action and execute on it. Although it's not part of the definitions I've consulted, I think confidence also connotes optimism (at least it does among investors). Finally, there's an element of certainty: beyond an optimistic view of the future, there's conviction that view is correct. **Taken together, the ingredients I see in confidence – belief, optimism and certainty – combine to create a feeling of well-being. Confident investors are sure big returns lie ahead.**

The Confidence Effect

The so-called "wealth effect" plays an important and well recognized part in the functioning of an economy. In short, when assets appreciate in value, the owners of those assets translate their increased wealth into increased spending. While at first glance this is unsurprising, it should be noted that this is true even if the appreciation is unrealized, and thus the increased wealth exists solely on paper. The relationship can be simply stated as follows: the richer people feel, the more they spend.

Changes in confidence have an impact on behavior similar to the wealth effect. That's what this memo is about.

I have long been impressed by the role of confidence in an economy. In fact, I've written in the past – exaggerating only slightly – that sometimes I think confidence is all that matters. I consider its impact to be significant, pervasive, self-reinforcing and self-fulfilling.

The primary impact of confidence on the economy is simple. **If people think the economic future will be good, they'll spend and invest . . . thus things will be good.**

- Consumers' optimism will translate into incremental demand for goods, adding to GDP.
- Consumer buying will convince businesses to invest in expanded facilities and additional workers in order to keep up with growing demand.
- Businesses' investment in plant and workers will add to GDP.
- Newly hired workers will have money to spend, and their buying will add further to the cycle.
- The reports of confidence-fueled increases in GDP and other positive mentions of the economy in the media will reinforce this virtuous circle of optimism: back to step one.

So, just like the wealth effect, increased confidence makes people and businesses spend more, and this in turn cycles back into the economy. **Confidence leads to spending; spending**

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strengthens the economy; and economic strength buttresses confidence. It's a circular, self-fulfilling prophesy.

Confidence can also fuel market movements. Belief that the price of an asset will rise causes people to buy the asset . . . making its price rise. This is another way in which confidence is self-fulfilling.

Of course, the confidence that underlies economic gains and price increases only has an impact as long as it exists. Once it dies, its effect turns out to be far from permanent. As the economist Herb Stein said, "If something cannot go on forever, it will stop." This is certainly true for confidence and its influence.

<u>Confidence Today</u>

Back in September, I wrote a memo entitled "On Uncertain Ground." It began as follows: "The world seems more uncertain today than at any other time in my life." I went on to review the many elements contributing to uncertainty. For the sake of completeness, I'm going to restate and update my list. These are things I'm asked about all the time. I don't recall another time when the list was as long:

In the U.S.:

- Will the recovery from the recession of 2008 – long in the tooth but still halting and unsteady – ever gain vitality? Today it seems we're experiencing "two steps forward, one step back," as positive reports are regularly mixed with disappointments. Further, even the improvements – in areas like job creation, consumer confidence and manufacturing output – seem tepid rather than eye-popping. This is quite different from the recoveries of the last few decades.
- To what extent will the recovery be impaired by recent tax increases and the budget cuts mandated by "sequestration"?
- When will sales increases overcome businesses' resistance to spending on plant and personnel?
- How much longer will the Fed keep interest rates low? Three months? Three years? In perpetuity?
- What will happen when it no longer does? Will rates rise? How much? Will the effect of higher rates on the cost of financing purchases and investments be enough to slow the economy? And what will be the impact of higher rates on the government's cost of financing, and thus on the deficit?
- What are the implications of the fact that the Fed's balance sheet has swelled to over $3 trillion? How does the Fed pay for the bonds it buys under QE? Will it have to pay that money back? Will the Treasury have to pay off the Fed when the debt matures? Where will it get the money? And where will the money go? (Think about this for a minute: do you feel you understand the workings of this process? Do you know anyone who does?)
- Will our economy ever get back to the higher growth rates of the late twentieth century, or will we be stuck in a slow-growth mode?

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- Will "structural unemployment" in the future remain stubbornly above the 5% or so of the last few decades?
- Will profit margins retreat from their current record levels, and if so, what will be the effect on corporate profits?
- Longer term, can progress ever be made on cutting the budget deficit and reducing the unfunded entitlement obligations?
- What will be the social ramifications of slow growth, high unemployment and increased income disparity?
- Will the U.S. devalue the dollar, the usual path to dealing with excessive national debt?
- Will slow growth lead to Japan-style deflation? Or will high-volume money printing to make it easier to repay the debt bring on chronic inflation? (The mere fact that intelligent people worry simultaneously about both these polar opposites is in itself an indicator of the high level of uncertainty that is present.)

In Europe:

- Can the seeming downward spiral in peripheral Europe's economies be arrested?
- Can Europe's excessive indebtedness be brought down, and can the chronic deficits that led to that level of indebtedness be trimmed through austerity?
- Will richer nations continue to support poorer without insisting on the latter applying painful austerity?
- In practical terms, can austerity be undertaken at a time of economic weakness? If austerity is continued, are recession, suffering and unrest unavoidable?
- Won't voters demand isolationism in the richer nations and relief from the pain of austerity in the poorer nations? Won't elected leaders offering anything else be ousted?
- Will the highly restrictive regulations and labor laws be eased so as to enable Europe to compete on an equal footing with the rest of the world?
- Longer term, will the nations of Europe give a central body the control over economies and financial institutions required for an effective economic union?
- Will UK voters vote in the coming referendum to stay in the European Union or leave?
- Will the EU remain intact? Is a political union in which actions require unanimous support practical? Can governance and coordination be improved?

Regarding Leadership:

- Are there leaders – anywhere in the world – of the caliber we need to see us through these uncertain times?
- Can officials who seek re-election first and foremost rise to the occasion and make the tough decisions needed to apply unpopular solutions to problems, rather than palliative Band-Aids?
- Will the successors to Geithner and Bernanke prove up to the task of continuing the recovery while weaning the economy from ultra-low interest rates?
- Is it conceivable that America's elected leaders will create an environment in which uncertainty over taxation, regulation and healthcare costs no longer discourages businesses from investing in plant and personnel?

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Miscellany:

- Will China's credit-abetted economy experience a hard landing or a soft one?
- If China's growth slows, what will be the effect on nations such as Brazil, Australia and Canada that have prospered by supplying it with commodities? What will happen to commodity prices?
- Will Prime Minister Abe's monetary and fiscal program be enough to wake Japan's economy from its lethargy?
- Will fracking allow the U.S. to achieve energy self-sufficiency? If so, what will that do to its manufacturing competitiveness and to the price of oil?
- What will happen in hot spots such as the Middle East, Iran and North Korea?

Significant uncertainty is one of the outstanding characteristics of today's investing environment. It discourages optimism regarding the future and limits investors' certainty that the future is knowable and controllable. In other words, it saps confidence. **This is a major difference from conditions in the pre-crisis years.**

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Confidence in 2007

When I think about how the investment environment of today differs from earlier times, the greatest change of all jumps out at me. Let's go back to just before the onset of the sub-prime crisis in mid-2007. I think in those days most people were 100% certain they knew:

- what made the global economy tick,
- what the economic and business world would look like in five or ten years, and
- what it would take to fix something that went wrong.

Belief in the things listed above largely eliminated uncertainty regarding the future and contributed to an extremely high level of confidence. No one thinks that way today.

Confidence: Good or Bad?

Let's say I have accurately described that confidence, optimism and certainty were high in 2007 and low in 2013. **Here's a key question that I've been wrestling with: which is more desirable?**

The answer is largely a function of your timeframe. The high level of confidence in 2007 – not unlike that of the 1990s – contributed to a feeling of great well-being. **The feeling that nothing would go wrong – that a perpetual-motion machine could be counted on to keep things on an upward course forever – contributed to rampant consumer optimism, aggressive spending, rising economic aggregates, accommodative capital markets and strong asset prices.** It sure felt good.

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But was it desirable? It was not, in my view, because hindsight shows perception to have been very much out of proportion with reality, and thus dangerous:

- Consumer confidence, and thus spending, was too high relative to incomes.
- Excessive spending – all around the world, at all economic levels – led to excessive use of credit, making the world highly overleveraged.
- Buying fueled by confidence and leverage caused asset prices to rise out of proportion to value.

I often say the riskiest thing in the world is widespread belief that there's no risk. And certainly that was the prevailing condition in the pre-crisis years of 2005-07, as well as during the tech bubble of the late 1990s. In both instances the "era of well-being" was followed by a significant economic slowdown and market decline.

A feel-good environment characterized by strong confidence creates pleasant current conditions but encourages dangerous behavior and an ascent (in the economy and the markets) from which a correction becomes inevitable. In that way, the less confident attitudes of 2013 create a lackluster, less enjoyable environment, but also a preferable and more prudent base for the future. (The wild card, as described in "Ditto," January 7, 2013, is that the actions of central banks to lower interest rates have caused even unconfident investors to engage in pro-risk behavior, setting the stage for the market declines of June and perhaps for additional pain in the future.)

I've previously told the story of having been in New York on 9/11, and of requiring several days to get back to Los Angeles. When I eventually reached home, my son Andrew asked me, "Dad, is the world less safe than it used to be?" My answer was, "Maybe it's less safe than it used to be, or maybe it was never as safe as everyone thought it was." **Certainly it's healthier to recognize and accept uncertainty than to act as if the world is a safe place if it's not. That goes double for the world of investing.**

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The Pendulum in Confidence

I probably write more about the pendulum of investor psychology than I do anything else. It was the subject of my second memo, in 1991, and my belief in its impact has grown unabated ever since.

The pendulum swings with regard to many facets of the market, and it often swings to extremes:

- between optimism and pessimism,
- between greed and fear,
- between euphoria and depression,
- between credulousness and skepticism,
- between risk tolerance and risk aversion, and thus
- between reckless aggressiveness and excessive caution.

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While the pendulum moves with regard to all these things, the swinging movement, the extent and the error all reflect common themes. They're all examples of the ways in which, as Mark Twain said, history rhymes.

Let's take for an example one regard in which the pendulum swings: investor attitudes toward emerging markets. Sometimes they're considered scary and exotic places, and sometimes they're the attractive high-growth alternative to the stagnant developed world. When people have confidence in the emerging markets and see only their virtues, the stocks sell at U.S.-style p/e ratios (where they're described as being cheap given the superior growth rates). But when problems emerge and confidence falters, investors will only buy emerging market stocks at discount p/e's so as to have the benefit of the risk premiums they consider necessary. I've seen this swing – just like the others – numerous times.

I'm thinking back to 1994, when NAFTA was enacted, easing trade in North America. People were in awe of Mexico: "It's just like the U.S., but it grows much faster." So money flowed to Mexican stocks, and they boomed. But then, in short order, there occurred a revolt in the state of Chiapas, the assassination of a presidential candidate, and the devaluation of the Mexican peso, triggering the so-called "Tequila Crisis." And the pendulum swung back toward concern: "Oh, right – there are differences."

And just a few years ago, the consensus of investors held that it was all over for the developed world, and China was the only economy with potential thanks to its growing population, low labor costs and expanding consumer class. As a result there was too much confidence in China and too little in the rest of the world. China does have many advantages, and the problems of the developed world aren't imaginary. But that doesn't mean Chinese equities are worth the moon and developed world equities are without value. So after Chinese stocks did much better than developed world stocks in 2009, they were primed for subsequent underperformance.

Now with China reporting slower growth – and with the threat of reduced bond buying by the Fed eating into expectations for growth worldwide (and, with it, demand for China's exports) – confidence in China has receded. As a hedge fund strategist said in *The Wall Street Journal* on July 15, "It's not all sunshine in emerging markets anymore."

Summing up, I think it's fair to say one of the key swings of the investment pendulum is between too much confidence and too little.

- At the positive extreme, people believe only good outcomes are possible, and that they (or their managers) are competent to fashion portfolios that will expose them to all of the market's gains and few of its losses, to pick the winners and avoid the losers, and to ride the market's rise and get out just as it crests.

- And at the negative extreme, they conclude only bad outcomes are possible, and that any efforts to add value or cope with the market's vicissitudes on their part or the part of their now-defrocked managers will be utterly unavailing.

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As we've seen endless times, investors reach the overconfident state when things have been going well for a while, meaning prices have already soared. And, alternatively, the latter hopeless state is inevitably reached after a bubble has been punctured, the news has turned unremittingly negative, and prices have collapsed.

This is the pattern that makes the herd wrong at the extremes and creates the rewards for contrarianism. And it's behind my favorite Warren Buffett quote: "the less prudence with which others conduct their affairs, the greater the prudence with which we should conduct our own affairs." **When most investors are driven to drop their prudence by an excess of confidence, we should be terrified. In the same way, when most investors become devoid of confidence and flee the market, we should turn aggressive.**

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All Good or All Bad?

One of the things worth noting about the swing in confidence is not merely that it rises and falls, but that it is often marked by "all-good" or "all-bad" thinking. In short, when investors are optimistic regarding the future:

- They tend to see the positives, by which they're incredibly impressed, and overlook the negatives.
- If they consider negatives at all, they fall for rationalizations that refute them. Foremost here is the old standby: "It's different this time."
- Isolated positive developments, often random or fortuitous, are generalized into an irresistible virtuous circle. Coincidences are accepted as part of a bullet-proof cause-and-effect process.

This unobjective process eliminates balanced analysis and leads to dangerously unwarranted levels of confidence, and thus of investment risk.

The years leading up to the financial crisis of 2008 were marked by the most extreme all-good thinking I've ever seen. In fact, when *The New York Times* asked me to write an article on the cause of the crisis, the one I wrote was titled "Too Much Trust; Too Little Worry." I said an excessive level of confidence had caused investors in 2005-07 to:

- stop applying skepticism,
- stop worrying about losing money,
- stop doing thorough due diligence,
- stop factoring in conservative assumptions,
- stop applying risk aversion,
- stop denying capital to risky schemes, and
- stop demanding adequate risk premiums.

In mid-2007 I was working on a memo with the projected title "The Mother of All Cycles." But I got worried about how people would react to my borrowing a phrase from Saddam Hussein, so

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when it was published on July 16, I changed the title to "It's All Good." In the memo I complained that every asset class, every asset and every region was appreciating.

> In terms of amplitude, breadth and potential ramifications, I consider it the strongest, most heated upswing I've witnessed. A lot of this is because people seem to think everything's good and likely to stay that way.

As I saw it, overconfident investors were ignoring the possibility of things going down as well as up, swallowing promises of limitless potential, suspending disbelief, accepting financial innovation as sure to work, and embracing the trend toward increased leverage.

Of course, this house of cards fell apart in short order. Thus that memo was followed by "It's All Good . . . Really?" two weeks later, on July 30, and then by "Now It's All Bad?" on September 10. In just eight weeks, confidence had evaporated and been replaced by widespread pessimism. And just a year after that, we witnessed the bankruptcy of Lehman Brothers and the onset of the worst financial crisis in 80 years.

What this reminds us is how dangerous the world can be when confidence is too high and people are too comfortable. Also, the speed with which things can reverse demonstrates, as my partner Sheldon Stone says, that the air goes out of the balloon much faster than it goes in. It usually takes years for confidence to reach a dangerous zenith, but then only weeks or months for it to collapse.

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"Everything that was good for the market yesterday is no good for it today."

When people conclude that all the merit is on either the positive or negative side of the argument, they reach extreme conviction regarding their view of the future and become certain they know

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what to do. But all-good or all-bad attitudes are rarely right, since there are invariably valid points on both sides and they mustn't be ignored. Mark Twain said, "It ain't what you don't know that gets you into trouble. It's what you know for sure that just ain't so." **Most of the time, limits on confidence are more desirable than cocksureness. Over-confidence in one's judgment is very dangerous.**

The Bull/Bear Cycle

In March 2008, in "The Tide Goes Out," I repeated one of the most helpful of all the adages to which I hold – the description of the three stages of a bull market:

- the first stage, when a few forward-looking people begin to believe things will get better,
- the second, when most investors realize improvement is actually underway, and
- the third, when everyone's sure things will get better forever.

What does it really mean? **The essential raw material for a bull market is cheapness, and that cheapness exists in stage one precisely because there are so few believers and so little confidence that favorable developments and good times lie ahead.** Thus stage one provides the launching pad for a bull market.

Equally, in the third stage the bull market is primed to end – with the bubble popping and a down-cycle setting in – for the simple reason that there are too many believers (and too few skeptics). **In short, there's too much confidence and too little cheapness. It's this imbalance that creates market tops.** The extremeness of the bull-market upswing – just like the downswing of its bear-market counterpart – gives investors what should be an important signal.

The Sure Thing

Investors may profess confidence in their ability to grapple with the future, but deep down many sense their own limitations and feel at sea. Thus they're prime targets for the newly minted "silver bullet" that's touted as sure to deliver return without commensurate risk. They develop outsized confidence in it, especially if at first it provides the hoped-for results. The most attractive of these are often mechanical, since their perfection stems from a dependable machine rather than a mysterious swami.

- In 1987, investors fell for "portfolio insurance," under which they could take on disproportionately large equity allocations, secure in the knowledge that if the market started down, the technique would automatically enter sell orders. But when the Dow Jones Industrial Average fell 22.6% on Black Monday (October 19), many brokerage firms refused to answer their phones, the sell orders weren't executed, and the "sure thing" turned out not to be.

- In the early 2000s, "portable alpha" promised high returns by overlaying hedge funds with equity futures. But when stocks fell, it became clear that the previous high returns

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had come not from the value added by a dependable process, but from the fact that in essence the futures had allowed people to be more than 100% invested in a rising market.

- And more recently, "risk parity investing" worked through volatile times because it gave its followers greater strategic diversification, defensiveness and bond exposure than most other investors had. But it, like most other things, failed to prevent losses when Ben Bernanke spooked the market by threatening to ease off bond buying and let interest rates rise. This year's results for risk parity show that nothing works all the time.

The point is that no mechanical tools can enable investors to prosper under all circumstances. They can provide tilts or reduce exposures, but the tool that promises a mix of good results and great results without the possibility of bad results is too good to be true. And when excessive confidence develops in such things, investors are heading for trouble.

The same is true for the Greenspan put and its successor, the Bernanke put. Alan Greenspan's tenure as Fed chairman was marked by efforts to avoid problems by injecting liquidity and lowering interest rates. Investors put great stock in his ability to keep things moving ever upward. His policies prevented occasional corrections along the way, but the price paid was a big one: the financial crisis of 2008. Those who had believed in Greenspan's omnipotence were unprepared for the consequences. Ben Bernanke succeeded Greenspan, and his own successor is likely to be announced soon. We must beware of equally excessive confidence in any individual's abilities.

There is no magic solution. Nothing and no one can render economies, markets or portfolio results capable of rising but never falling. Awareness of that is wise. Belief to the contrary is dangerous.

* * *

As mentioned above, I think recently many investors have been holding riskier positions than are natural for them, largely because, thanks to the Fed's low-rate policies, the lower-risk things they might have preferred offered so little return. Thus their investing actions were coerced, rather than being undergirded by confidence in the fundamentals.

The uncertainty that has been present in the last few years should have had a healthy effect on the environment by calling for a high level of prudence . . . if the Fed had let it take effect. But instead the Fed forced people into risk taking, and the combination of risk taking and weak resolve had the anticipatable effect when the first doubts reared their heads.

In May, Chairman Bernanke indicated that with the economy performing acceptably, the Fed's bond buying might soon taper off, implying that higher interest rates were acceptable. This shouldn't have come as a surprise, since when recovery occurs, a reduction of stimulus should be anticipated. The stock and bond markets' subsequent dramatic swoons showed that the fundamental confidence underlying investors' holdings of risk assets had been weak and

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vulnerable, and that there had been too much reliance on the Fed keeping rates low. All of a sudden investors were less sure the world looked right, what the future held, and how to make money in it.

Investors remain uncertain, and that's good. Now that a bout of worry has been experienced, the credit markets are healthier (e.g., offering higher returns) than they were two months ago.

If the economy continues to recover and the Fed's bond buying eases off, interest rates are likely to go further on the upside. But given the modest level of confidence at play, the markets should not turn out to be perilous. Most assets are neither dangerously elevated (with the possible exception of long-term Treasury bonds and high grades) nor compellingly cheap. **It's easier to know what to do at the extremes than it is in the middle ground, where I believe we are today. As I wrote in my book, when there's nothing clever to do, the mistake lies in trying to be clever. Today it seems the best we can do is invest prudently in the coming months, avoiding aggressiveness and remembering to apply caution.**

* * *

A word about the long run: While conditions, confidence and asset prices all seem moderate today, meaning there's nothing brilliant to say about the short-term outlook, the long term remains worrisome. Because the U.S. is still able to attract capital from abroad and print money, our financial problems aren't pressing at the moment. But the combination of intractable deficit spending, unsustainable entitlement promises and a total dearth of responsible action in Washington certainly raises alarms regarding the future.

Since I see no reason to reinvent the wheel when someone I respect has said something better than I could, I'll close with a few words from Seth Klarman (emphasis added). Seth doesn't find much in the things he discusses to inspire confidence, and I agree:

> There is no free lunch in economics: if governments could print or borrow money in astronomical amounts without any major adverse consequences, why wouldn't they always do this, forever avoiding downturns while their countries bask in the sunshine of limitless prosperity? Indeed it seems clear that prior misplaced confidence in the Fed contributed greatly to years of complacency that turned the 2008 downturn into a full-blown crisis. Of course there will be a price to pay for today's policy excesses – an equal and opposite reaction. We just haven't seen it yet. Will it take the form of a collapse of the dollar and the end of dollar hegemony, high interest rates, failed auctions of U.S. government securities and runaway inflation, a wrenching and protracted downturn requiring exceptional sacrifice, or something else? We will find out soon enough.
>
> In most sectors of the economy – government, individual but also corporate – the U.S. has borrowed heavily to live beyond its means; we have been consuming through easy credit what we otherwise would have had to wait to buy. In the words of Michael Lewis, "Leverage buys you a glimpse of a prosperity you

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haven't really earned." Asset values are contingent, as Jim Grant once said. But debt is forever. Instead of cutting back on leverage and getting our house in order, government response to the crisis has been to shift unaffordable debt from individual balance sheets onto the national ledger, where every day we owe more than ever before. . . .

I believe it is possible that the average citizen understands our country's fiscal situation better than many of our politicians or prominent economists. Most people seem to viscerally recognize that the absence of an immediate crisis does not mean we will not eventually face one. They are wary of believing promises by those who failed to predict previous crises in housing and in highly leveraged financial institutions. They regard with skepticism those who don't accept that we have a debt problem, or insist that inflation will remain under control. (Indeed, they know inflation is not well under control, for they know how far the purchasing power of a dollar has dropped when they go to the supermarket or service station.) They are pretty sure they are not getting reasonable value from the taxes they pay.

When an economist tells them that growing the nation's debt over the past 12 years from $6 trillion to $16 trillion is not a problem, and that doubling it again will still not be a problem, this simply does not compute. They know the trajectory we are on, and that the most successful country in the history of the world can go into decline if it becomes arrogant or complacent. When politicians claim that this tax increase or that spending cut will generate trillions over the next decade, they are properly skeptical over whether anyone can truly know what will happen next year, let alone a decade or more from now. They are wary of grand bargains that kick in years down the road, knowing that the failure to make hard decisions is how we got into today's mess. . . .

And when you tell the populace that we can all enjoy a free lunch of extremely low interest rates, massive Fed purchases of mounting treasury issuance, trillions of dollars of expansion in the Fed's balance sheet, and huge deficits far into the future, they are highly skeptical not because they know precisely what will happen, but because they are sure that no one else – even, or perhaps especially, the policymakers – does either.*

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August 5, 2013

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Memo to: Oaktree Clients

From: Howard Marks

Re: The Outlook for Equities

It doesn't take much to get me started on a memo. In this case one sentence was enough, in an article from the February 4 online edition of *Pensions & Investments*, as described by *FierceFinance* on February 28: "The long-term equity risk premium is typically between 4.5% and 5%."

There's little I hate more than investment generalizations. For years, for example, self-styled authorities on the high yield bond market would say "bond defaults typically take place 2-3 years after issuance." That always set my teeth on edge. The time to default might average 2-3 years, but unless (1) that's also the most common time period (the mode) and (2) not a highly variable parameter (which I think it is), that generalization is absolutely useless.

In fact, I like the way Mark Twain summed up on the subject more than 100 years ago: "all generalizations are false, including this one." I consider most investment generalizations as useless as that great oxymoron: "common sense."

Back to equity risk premiums. The *FierceFinance* article in question led with the sentence, "The 'great rotation' back into equities from bonds is unlikely to be seen in 2013 among most defined benefit pension funds in major markets, including the U.S., U.K. and Netherlands." It included a number of what I consider provocative statements:

- that pension funds do want fewer bonds but generally not more stocks (raising the question of where the money will go, and specifically how much money can responsibly be absorbed in asset classes other than stocks and bonds),

- that, according to one consultant "There is recognition that bonds represent minimal-risk assets, so it's difficult for (plan executives) to abandon bonds in favor of equities. . ." (This overlooks the fact that there's no such thing as a minimal-risk asset regardless of price, and few assets that have been the beneficiaries of years of strong cash inflows can really be "minimal-risk"), and

- "that investors are taking short-term tactical advantage of the rising equity premium by, for example, allowing multiasset managers to drift toward the higher end of the equity allocation range."

So there we are, in the third bullet point, back to the matter of the equity risk premium.

Everything You Ever Wanted to Know About Equity Risk Premiums (and Much More)

The equity risk premium is generally defined as, "the excess return that an individual stock or the overall stock market provides over a risk-free rate." (Investopedia) Thus it is the incremental return that investors in equities receive relative to the risk-free rate as compensation for bearing the risk involved.

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The term is also used to describe the extent to which the return on stocks exceeds the return on bonds, again as compensation for bearing incremental risk. (For example, an August 18, 2011 article on the *Seeking Alpha* website, entitled "What the Equity Risk Premium Is Saying," discusses the prospects for stocks versus the ten-year U.S. Treasury note.)

My real problem with the term – or, more correctly, the way it's used – has to do with one of the littlest words in the English language. Or, to paraphrase a former President of the United States, "it all depends on the meaning of the word is."

Many people know what they think they mean when they talk about the existence and magnitude of the equity risk premium – or even what they actually mean – but I don't think many are logical or consistent in using it. My complaints surround the definition they apply to the term, and specifically the tense of the verb they employ (I'm not just being grammatically picky).

Most specifically, I strongly dislike the use of the present tense, as exemplified by the writer for *P&I*: "The long-term equity risk premium <u>is typically</u> between 4.5% and 5%." This suggests that the premium is something that solidly exists in a fixed amount and can be counted on to pay off in the future.

Imagine instead that she had said "The long-term equity risk premium <u>has typically been</u> between 4.5% and 5%." This makes the premium seem more like a historical fact but also less dependable in the future (probably as it should be).

The equity risk premium can actually be defined at least four different ways, I think:

1. The historic excess of equity returns over the risk-free rate.
2. The minimum incremental return that people demanded in the past to make them shift from the risk-free asset to equities.
3. The minimum incremental return that people are demanding today to make them shift away from the risk-free asset and into equities.
4. The margin by which equity returns will exceed the risk-free rate in the future.

The four uses for the term are different and, importantly, all four are applied from time to time. And I'm sure the four uses are often confused. Clearly the import of the term is very different depending on which definition is chosen. **The one that really matters, in my opinion, is the fourth: what will be the payoff from equity investing. It's also the one about which it's least reasonable to use the word "is," as if the risk premium is a fact.**

<u>What Will Equities Give You?</u>

There are problems with at least three of the four meanings. Only **number one** can be measured. There's a lot of data on the historic performance of stocks versus bonds and cash. In fact, in the 1990s Wharton Professor Jeremy Siegel documented to a fare-thee-well that stocks always won out over long periods of time. Of course the subsequent decade proved that didn't have to remain the case.

Now it gets more interesting. Although we can calculate the amount by which stocks outperformed bonds or cash in the past (assuming you were looking at periods prior to 2000), I don't think that's the same as saying what risk premium was demanded by investors in the sense of **definition number two** above. If stocks outperformed by 5% over a ten-year period, that doesn't mean people demanded a 5% higher return to buy equities rather than bonds or the risk-free asset. They might have "demanded" more or less. It's just that they got 5%.

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In a similar vein, we can also talk about **number three**, the minimum return increment people are demanding today. But (a) the answer you come up with will depend on whom you ask, (b) they may or may not have given it rigorous thought, and (c) whatever they say is likely to have little impact on what relative returns turn out to be. Their answer is likely to tell you more about what they think they'll get than about what they're actually demanding . . . or what they will get.

What matters for today's investor isn't what stocks returned in the past, or what equity investors demanded in the past or think they're demanding today. What matters is **definition number four**, what relative performance will be in the future. **The most important thing of all is to realize that this can't be read anyplace.** As Einstein said, in one of my favorite quotes, "Not everything that counts can be counted, and not everything that can be counted counts."

Just as number four is the most important definition of the equity risk premium, the questions surrounding it are also significant. In my view, people tend to think of the equity risk premium (and other risk premiums) like credit spreads on bonds. I've been dealing with credit spreads for 35 years. They are the entire *raison d'être* for high yield bond investing. **And they have almost nothing in common with the equity risk premium.**

Let's say we want to assess the adequacy of the reward being offered for bearing the credit risk of a given B-rated high yield bond. We compute the yield to maturity or yield to call on the bond and subtract from it the yield to maturity on a Treasury security of the same duration. The result is the "yield spread" or "credit spread." That spread tells us what the prospective relative return is and – when assessed in the light of historic spreads, the spreads on other bonds, the riskiness of the bond in question, and the spreads on other bonds of similar, lesser or greater riskiness – whether the bond is rich or cheap.

Now let's apply the same process to a stock, or the stock market. First, compute the prospective return on the stock. Oh yeah; right. There's no way to do that. Or rather there is, but it requires one to either (a) make an assumption about the growth rate of earnings per share to infinity or (b) make an assumption about the growth rate of earnings for a number of years and also the terminal p/e ratio that the market will apply to e.p.s. at the end of that period (which in turn will be a function of the growth of earnings from then to infinity). **In other words, a simple mathematical calculation will tell us exactly what the promised return on a bond is (albeit not the probability that it will be received), while coming up with the future return for a stock requires making some massive guesses about the far-off future. That difference – in a nutshell – encapsulates a lot of the fundamental difference between investing in stocks and bonds.**

The bottom line: given that it's impossible to say with any accuracy what return a stock or the stock market will deliver, it's equally impossible to say what the prospective equity risk premium is. **The historic excess of stock returns over the risk-free rate may tell you the answer according to definition number one, with relevance depending on which period you choose, but it doesn't say anything about the other three . . . and especially not number four: the margin by which equity returns will exceed the risk-free rate in the future.**

<u>Another Call for Counter-Intuitiveness</u>

Many of the important things about investing are counterintuitive. Low-quality assets can be safer than high-quality assets. Things get riskier as they become more highly respected (and thus appreciate). There can be more risk in thinking you know something than in accepting that you don't. This counter-intuitiveness is a favorite theme of mine.

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And the theme is importantly at work with regard to the equity risk premium, and especially *P&I*'s use of the term. I take great issue with their statement "The long-term equity risk premium is typically between 4.5% and 5%." **That may be what it "was" or "has been," but it doesn't tell us anything about what it "is" or "will be."** We know we can't extrapolate returns on bonds or the risk-free asset from the past; certainly changes in interest rates over the last five years mean investors in these things will enjoy far lower returns in the years ahead than they used to. **So then is it possible to know what we will get from equities? Or from equities relative to bonds or the risk-free rate? Clearly not. Thus I think it's dangerously misleading to say what the risk premium "is."** That's probably enough on this subject.

Let's move on to the final bullet point on page one and its reference to "the rising equity premium." The article discusses the case for an attractive equity risk premium in terms of definition number one – historically superior performance – since it goes on to point out that stocks outperformed bonds by an unusually large margin in the six months ended January 31, 2013 (11.23% for the Russell 3000 versus -0.29% for the Barclays Capital U.S. Aggregate Bond Index). But do six months of good performance say anything about a rising equity premium? And do they tell us anything at all about the future?

Well, the answer to the first question lies in which definition you're following. Of course the data tells us what the relative performance was (and 2012 was a great year, for example, with the S&P 500 up roughly 16% while the risk-less rate was close to zero). An equity risk premium defined this way is certainly in the best part of the historic distribution. But it tells us little about investors' past or present demanded returns. And what does it say about the prospects for continued outperformance?

To me, the answer is simple: the better returns have been, the less likely they are – all other things being equal – to be good in the future. Generally speaking, I view an asset as having a certain quantum of return potential over its lifetime. The foundation for its return comes from its ability to produce cash flow. To that base number we should add further return potential if the asset is undervalued and thus can be expected to appreciate to fair value, and we should reduce our view of its return potential if it is overvalued and thus can be expected to decline to fair value.

So – again all other things being equal – when the yearly return on an asset exceeds the rate at which it produces cash flow (or at which the cash flow grows), the excess of the appreciation over that associated with its cash flow should be viewed as either reducing the amount of its undervaluation (and thus reducing the expectable appreciation) or increasing its overvaluation (and thus increasing the price decline which is likely). The simplest example is a 5% bond. Let's say a 5% bond at a given price below par has a 7% expected return (or yield to maturity) over its remaining life. If the bond returns 15% in the next twelve months, the expected return over its then-remaining life will be less than 7%. An above-trend year has borrowed from the remaining potential. The math is simplest with bonds (as always), but the principle is the same if you own stocks, companies or income-producing real estate.

In other words, appreciation at a rate in excess of the cash flow growth accelerates into the present some appreciation that otherwise might have happened in the future. Or to paraphrase Warren Buffett, "when people forget that corporate profits are unlikely to grow faster than 6% per year, they tend to get into trouble." I doubt he intended anything special about 6%, but rather a reminder that when assets appreciate faster than the rate at which their value grows, it isn't just a windfall but also a warning sign.

Let's take a look at the 1990s, a decade full of lessons about equities. As of 1990, the historic return on equities stood at 9% or 10%, and for that reason attitudes toward them were generally favorable, with that 9-10% return expected to repeat in future decades. But the '90s were a salutary period in terms of economic growth, corporate performance, technological and productivity gains, declining interest rates, low inflation and relative peace in the world (as well as naïve optimism regarding the benefits of a credit-

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fueled expansion, the profit potential of e-commerce companies, and the extent to which equity gains could be perpetuated). As a result, equity returns averaged 20% per year over the decade.

What was investors' response? They ratcheted up their expectations. I believe by 2000 the professional consensus for future equity returns had risen from the 9-10% range to 11%. A decade of the highest returns in history had convinced people that more good years lay ahead. Few people seemed concerned that the extraordinary returns of the 1990s might have borrowed from the 2000s (as certainly seems to have been the case in retrospect). As a result, just when stock prices were reaching levels they wouldn't see again for more than a decade, bonds were being dumped so that equity allocations could be expanded to all-time highs.

When I look at the *P&I* article, I see a statement that the equity risk premium is on the rise, but not a lot of reason why equities will do better in the future than they have in the past (or even specific mention of which past they'll do better than). **Extrapolation or analysis? They're two very different things.**

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Valuing Stocks Today

The underlying reason it took so little from *FierceFinance* to get me going on this memo is that I had a lot of pent-up thoughts about equities and their current valuation. That's what the following pages will be spent on.

Ironically given the extent to which I railed above about limiting the importance attached to the equity risk premium, some of the strongest arguments for stocks today surround their relative earning power. In view of the difficulty in quantifying the prospective returns on stocks, appraising their value relative to bonds or the risk-free asset is often best done through comparing their yields.

Since most companies pay out a modest percentage of their earnings, dividend yields greatly understate companies' ability to earn money for their shareholders, and thus for their stocks to appreciate. A better measure of stocks' long-term potential may be found in their "earnings yield." The earnings yield is the reciprocal of the p/e ratio: the e/p ratio or ratio of earnings to price. To gauge relative price-attractiveness, it isn't unreasonable to compare the earnings yield on a stock against the yield on a bond (or against the risk-free rate).

Let's review a few data points:

- If the post-WWII average p/e ratio on equities was something like 16 (for an e/p ratio of 1/16, or an earnings yield of about 6.25%) and if I guess at a "normal" risk-free rate of 3%, we get a historic yield differential – we might call it the equity risk premium, defined this way – of 3.25% (6.25% minus 3.00%), or 325 basis points. The ratio between the yields was 6.25%/3.00%, or 2.08x.

- At the high in 2000, the p/e ratio on the S&P 500 was more like 32 (for an e/p ratio of 1/32, or an earnings yield of 3.12%), and the 30-day T-bill rate was probably 2%. In that case the yield differential or equity risk premium was a skimpy 1.12% (3.12% minus 2.00%), or 112 basis points, and the ratio of the two was only 3.12%/2.00%, or 1.56x. In other words, stocks didn't offer enough relative to fixed income, and that's the main reason why they've performed so poorly – both in absolute terms and relative to bonds – over the thirteen years since.

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- Where are we today? The p/e ratio on the S&P 500 is back to about 16, meaning the earnings yield is 6.25% once again. I'll use a 30-day T-bill rate of 1.00% (it's actually closer to zero, but a yield ratio approaching infinity wouldn't be meaningful). That gives us a yield differential of 5.25% (6.25% minus 1.00%), or 525 basis points, and a yield ratio of 6.25%/1.00%, or 6.25x.

So let's recap:

	Post-WWII Norm	2000	Today
Yield differential	325 b.p.	112 b.p.	525 b.p.
Yield Ratio	2.08x	1.56x	6.25x

Certainly the yield comparison is highly favorable for stocks today. In fact it's one of the best in the last century (probably barring only the early 1980s, when the p/e ratio on the S&P 500 fell to mid-single digits). Is that the whole story? It never is; nothing's that simple, especially in the world of investing.

The problem with basing a pro-equities argument on the yield comparison is that most of equities' current attraction on that basis comes from the lowness of interest rates. Just about everyone knows (a) interest rates are artificially low because of central banks' efforts at stimulus and (b) rates will be considerably higher at some point in the intermediate term. In that case, rising rates would render stocks less attractive (all other things being equal, but they're not – see below).

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The Other Pros and Cons of Equities

There are many ways to view valuation, and many elements in the current debate over equities. Here are a few of them (I'll start by reiterating the above for the sake of completeness):

- The differential between the S&P earnings yield and the risk-free rate or the yields on bonds – and their ratio – makes stocks look extremely cheap. PRO

- The attractiveness of these relative valuation parameters is highly dependent on interest rates staying low. CON (or LESS PRO)

- Relative to normal post-WWII p/e ratios, stock prices are average to slightly low as a multiple of projected earnings for the year ahead. PRO

- Robert Schiller's cycle-adjusted p/e ratios are gaining increased attention, and they suggest full rather than fair valuations. CON

- Arguably earnings growth in the years ahead will be slower than that which prevailed in the decades following WWII. Thus the post-war valuation norms are too high under the changed circumstances and should be discounted. CON

- The outlook for earnings is restrained by the questionable macro environment, including the challenges in restarting growth and the dire prognosis for the federal deficit. These problems may not be easily solved. CON

- Among the things keeping earnings high – and thus making stocks seem attractive – are some of the highest profit margins in history. If profit margins were to move toward normal levels, this

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would bring down earnings, either taking stock prices down with them or lifting p/e ratios and thus reducing stocks' attractiveness. CON

- Corporate cash hoards are high, implying some combination of safety, potential for stock buybacks, and possible dividend increases. These are all good for shareholders. PRO

- Investor attitudes toward stocks remain tepid (see below). PRO

- However, with the S&P 500 up 16% last year and 10% so far this year, it can't be argued that stocks have been overlooked and or that attitudes towards them are still mired in the doldrums. CON

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The Role of Investor Attitudes

I covered this subject at length in "Déjà Vu All Over Again" (March 19, 2012). I'm not going to drag you through it again, but I will copy over parts of that memo from a year ago:

> . . . people have been throwing in the towel and selling stocks. Other things have come into vogue, attracting the capital that used to be invested in stocks. Mutual fund investors have turned their attention elsewhere. . . . Stocks have gone through a decade in which their absolute return was negligible and their real return was negative. . . . They face a litany of negatives, without any real possibility of relief . . .
>
> The negative factors are clear to the average investor. And from them he draws negative conclusions. But the person who applies logic and insight, rather than superficial views and emotion, sees something very different.
>
> He sees an asset class that is unloved. He sees stocks that have cheapened for a decade – once dividends have been subtracted from the returns, and especially when prices are viewed relative to earnings. He sees securities that are priced below the value of the underlying assets on which they have a claim. He sees outflows of capital that, rather than being a negative, have lowered prices and can give rise to a strong price rebound when and if they reverse. Most of all, he sees an asset class to which no optimism is being applied. . . .

The thing to notice about the preceding paragraphs is that when I wrote them a year ago, I didn't do so to describe then-current market conditions. Rather, I was trying to capture conditions as they were in 1982, when *BusinessWeek* magazine carried a cover story trumpeting "The Death of Equities." My point was that in 1982, overly negative investors were fixated on the reasons for continued lethargy on the part of stocks, just when the scene was set for the greatest upsurge in stock market history.

> . . . As something goes in one direction for a while, people conclude increasingly that it always will . . . often just when the likelihood grows that it will reverse instead. And that was the greatest shortcoming of "The Death of Equities." **The extrapolator threw in the towel on stocks, just as the time was right for the contrarian to turn optimistic. And it will always be so.**

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I didn't think last year that the extent of the undervaluation was anywhere as great as it had been in 1982, but I did think the conditions were similar in kind. Nothing sets the stage for an upturn as well as excessive negativism – or at minimum excessive disinterest. And that's what I sensed in the stock market last year, following on the heels of a twelve-year malaise. Thus I don't consider it a freak occurrence that stocks all around the world went on to have an excellent year in 2012.

Many conditions remain similar . . . again, in kind. Equity mutual funds are seeing only modest inflows, albeit the outflows have stopped. Even though they've appreciated, stocks still aren't highly valued. Many institutions have allocations to equities that are well below the average of the last fifty years, and no one's rushing to move them up. In other words, I'm comfortable saying attitudes toward equities are characterized by relative disinterest and apathy.

This is certainly something that can turn. If it turns, it can have a significant impact. And what is most likely to turn it? It won't necessarily take a "grand bargain" in Washington to solve the nation's fiscal problems, or a sudden rebirth of economic growth worldwide, or the invention of the next iPhone. All that's required is another good year or two for stocks and a switch in investor psychology from "stocks are unlikely to do anything but extend the 'lost decade' " to "hey, I'm afraid I might not be positioned adequately to participate in the next bull market."

A move upward can be powered by a switch from the fear of losing money to the fear of missing opportunity. When attitudes are moderate and allocations are low, it doesn't take much.

* * *

In the mid-1970s I was fortunate to happen upon one of the first of the time-worn pearls of wisdom that contributed so much to my education as an investor. It described the three stages of a bull market:

- the first, when a few forward-looking people begin to believe things will get better,
- the second, when most investors realize improvement is actually underway, and
- the third, when everyone's sure things will get better forever.

In "The Tide Goes Out," written in March 2008, several months before the lows of the financial crisis, I applied the same thinking to the converse – the three stages of a bear market:

- the first, when just a few prudent investors recognize that, despite the prevailing bullishness, things won't always be rosy,
- the second, when most investors recognize things are deteriorating, and
- the third, when everyone's convinced things can only get worse.

Hindsight always makes it clear what was going on at a particular point in time. It's a snap now to say the second quarter of 2007 marked the third stage of a bull market: no one could think of a way to lose money. And in the fourth quarter of 2008 (for credit) and the first quarter of 2009 (for equities), we were certainly in the third stage of a bear market: most people thought the financial system was about to collapse, and securities that had halved in price could do nothing but halve again.

But the study of market history only makes us better investors if it teaches us how to assess conditions as they are, rather than in retrospect. When I wrote "Déjà Vu All Over Again" a year ago, it was my feeling that equities were in the first stage of a bull market. Experience had been so bad for so

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long – and the level of disinterest was so high – that only a few investors thought equities could ever catch on again. Those low expectations, when combined with modest fundamental and psychological improvement, gave the S&P 500 a return of about 13% over the year since that memo was written.

So now we have a somewhat improved fundamental environment, a generally more optimistic group of investors, and stock prices that are a fair bit higher. **No one should say the likelihood of improvement is entirely unrecognized today, as would have to be the case for this to still be stage one. I think the existence of improvement is generally accepted, but that acceptance is neither extremely widespread nor terribly overdone. Thus I'd say we're somewhere in the first half of stage two. Pessimists no longer control market prices, but certainly neither have carefree optimists taken over.**

* * *

A great rotation? Maybe . . . or maybe not. Nowadays pundits and the media are quick to come up with cute labels – usually just the right size for a headline or sound bite – to describe things that are taking place or that "everyone knows" are just around the corner. **I don't know whether it's going to be great. Heck, I don't even know if it'll happen.** But I like to enumerate the pros and cons and try to put them in perspective, as much as I like skewering excessive generalizations and pat pronouncements.

Of course, doing that isn't enough. I feel I should come down on one side or the other. **Thus I'm quite comfortable imagining a few years of equity performance that provide a pleasant surprise relative to what I think is the prevailing expectation of 6% or so per year.**

And if I'm wrong – if there is no rotation from fixed income to stocks – I'm not that worried that I'll end up with great regret over having failed to pile into T-bills yielding zero or the 10-year note guaranteeing 2.0%. When attitudes are moderate and allocations are low, like I feel is currently the case with equities, there's little likelihood of investing being a big mistake. And when interest rates are among the lowest in history, it would take deflation, depression or calamity to make failing to invest in Treasurys and high grade bonds a serious omission.

March 13, 2013

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Memo to: Oaktree High Yield Bond Clients

From: Howard Marks and Sheldon Stone

Re: High Yield Bonds Today

Clients often ask for our views on the high yield bond market: "Do we think prices are too high?" "Are yields too low?" "What returns can we expect next year?" We caution them that it's nearly impossible to accurately predict these things, and anyone who makes such forecasts is unlikely to be right.

These days the question is primarily whether high yield bonds are in a bubble and poised to collapse, given last year's strong performance and today's historically low yields. We don't think high yield bonds are any more vulnerable to rising rates than other fixed income instruments. We don't downplay the risk in the market nowadays and the fact that bond prices are quite high. **However, the situation isn't unique to high yield bonds; rather, it is true of virtually all bonds and reflects the concerted effort on the part of central banks around the world to hold down interest rates.** Yields are at historic lows and prices are unusually high all across the fixed income spectrum.

However, **two factors argue strongly that high yield bonds are less vulnerable to rising interest rates than other fixed income sectors**:

- A high yield bond of a given maturity has a shorter duration than an investment grade rated bond of the same maturity, since duration is a measure of the weighted average time to receipt of the promised cash flows, and the larger interest coupons on high yield bonds mean the expected payments from interest and principal are received sooner on average. Thus an increase in interest rates of a certain amount implies less of a price decline for a high yield bond than for an investment grade rated bond of the same maturity.

- In addition, rising interest rates usually imply a growing economy, and a growing economy usually means improving creditworthiness and fewer defaults.

Of course it's most unlikely that high yield bonds will deliver returns even close to 2012's performance. On the other hand, they don't have to equal last year's return to warrant holding today.

While yields are near all-time lows, yield spreads tell a very different story. Today the average spread on our U.S. high yield bond portfolios – approximately 490 basis points – is toward the high end of the normal historical range we've invested in for nearly three decades. We believe such an average spread provides more-than-adequate compensation for our default experience, which over the last 27 years has averaged 1.4% per annum. With corporate balance sheets in relatively good shape (thanks in large part to all of the refinancing activity over the past two years), the capital markets awash in liquidity, and economies (at least in the U.S.) showing some

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strength, default rates are projected to remain below the long-term average for at least the next twelve months.

Given their current average yield spread, we estimate that our portfolios could suffer a default rate of approximately 9% every year and still do no worse than Treasurys – and it's worth noting that we have never had even one year with a 9% default rate. So we don't think high yield bonds are overpriced in relative terms. **In fact, we feel the odds favor their delivering relative performance that is superior to Treasurys and high grade corporates over multi-year holding periods ahead.**

Finally, let's consider the potential absolute result for high yield bonds from today. Suppose we hold (or buy) high yield bonds currently at around 5.7% average yield, and we have Oaktree's average experience: an annual default rate of 1.4% and loss of about half the money invested in the defaulting bonds, or 0.7% of our portfolio per year. **This results in 5% net return per year before fees and price fluctuations. Given the alternatives today, that's an attractive absolute return. What else is better?**

If interest rates rise and/or yield spreads expand, we will suffer price declines (as will holders of all other fixed-rate securities). **But if Oaktree is right in its credit judgments, those declines will prove to be temporar**y. The bonds will be paid off at par upon maturity, and if the other assumptions above are met the 5% return will be achieved.

While we believe spreads are attractive given the risks we see in our portfolios, it is true that there is little room for price upside, making the reward for risk taking limited. (This is in essence what Howard concluded in his most recent memo, "Ditto.") **In this type of environment, superior returns are more likely to be earned through minimizing mistakes than through stretching for yield. Rather than behaving aggressively, the search for return should involve risk control, caution, discipline and selectivity.** Of course, this is what we emphasize in our portfolios.

Considering these factors, should investors sell their high yield bonds and wait for a better time to invest? We don't think so, as **market timing is next to impossible to do right and costly to attempt** in less liquid markets like high yield bonds.

February 21, 2013

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Important Information about Lower-Rated Securities

Because high yield bonds are rated in the lower rating categories by the various credit rating agencies, investors must take into account the special nature of such securities and certain special considerations in assessing the risks associated with such investments. Securities in the lower rating categories are subject to greater risk of loss of principal and interest than higher-rated securities and are generally considered to be predominantly speculative with respect to the issuer's capacity to pay interest and repay principal. They are also generally considered to be subject to greater risk than securities with higher ratings in the case of deterioration of general economic conditions. Because investors generally perceive that there are greater risks associated with the lower rated securities, the yields and prices of such securities may be more volatile than those for higher-rated securities. The market for lower-rated securities is thinner, often less liquid, and less active than that for higher-rated securities, which can adversely affect the prices at which these securities can be sold and may even make it impractical to sell

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such securities. The limited liquidity of the market may also adversely affect the ability of investors to arrive at a fair value for certain lower-rated securities at certain times and could make it difficult to sell certain securities. It should be recognized that an economic downturn or increase in interest rates is likely to have a negative effect on the lower-rated bond market and on the value of the lower-rated securities as well as on the ability of the securities' issuers, especially highly leveraged issuers, to service principal and interest payment obligations to meet their projected business goals or to obtain additional financing. Moreover, the prices of lower-rated securities have been found to be less sensitive to changes in prevailing interest rates than higher-rated investments. If the issuer of a fixed-income security defaults, the holder may incur additional expenses to seek recovery and the possibility of any recovery can be subject to the expense and uncertainty of insolvency proceedings.

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Memo to: Oaktree Clients

From: Howard Marks

Re: Ditto

Here's how I started *Whad'Ya Know* in March 2003:

> I always ask Nancy to read my memos before I send them out. She seems to think being my wife gives her license to be brutally frank. "They're all the same," she says, "like your ties. They all talk about the importance of a high batting average, the need to avoid losers, and how much there is that no one can know."

The truth is, anyone who reads my memos of the last 23 years will see I return often to a few topics. This is due to the frequency with which themes tend to recur in the investment world. Humans often fail to learn. They forget the lessons of history, repeat patterns of behavior and make the same mistakes. As a result, certain themes arise over and over. Mark Twain had it right: "History doesn't repeat itself, but it does rhyme." The details of the events may vary greatly from occurrence to occurrence, but the themes giving rise to the events tend not to change.

What are some of my key repeating themes? Here are a few:

- the importance of risk and risk control
- the repetitiveness of behavior patterns and mistakes
- the role of cycles and pendulums
- the volatility of credit market conditions
- the brevity of financial memory
- the errors of the herd
- the importance of gauging investor psychology
- the desirability of contrarianism and counter-cyclicality
- the futility of macro forecasting

Most or all of these have to do with behavior that's observed in the markets over and over. When I see it recur and want to comment, I'm often tempted to dust off an old memo, update the details, and just insert the word "ditto." But I don't, because there's usually something worth adding.

<u>Cycles</u>

One of the most important themes in investing – and one I often find worthy of discussion – relates to cycles. What is a cycle? Dictionaries define it as "a series of events that are regularly repeated in the same order" or "any complete round or series of occurrences that repeats or is repeated." And here's the definition of the term "business cycle": "The recurring and fluctuating levels of economic activity that an economy experiences over a long period of time."

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As you can see, the common thread is the concept of a series of events that is repeated. Many people think of a cycle as a continuous pattern in which a rise is followed by a fall, followed by another rise and another fall, and so forth.

These definitions are fine as far as they go, but I think they all miss something very important: the sense that each of the events in a cycle not only follows the one preceding it but is a result of the one preceding it. **I think in the economic, investment and credit arenas, a cycle is usually best viewed not merely as a progression through a standard sequence of positive and negative events, but as a chain reaction.**

Before I launch into the discussion of cycles that will follow, I want to make the point that it's hard to know where to start. It's tough to say, "The cycle started with y," since usually y was caused by x, and x by w. But we have to start someplace.

The Real Estate Cycle

I'll use the cycle in real estate as an example. In my view it's usually clear, simple and regularly recurring:

- Bad times cause the level of building activity to be low and the availability of capital for building to be constrained.
- In a while the times become less bad, and eventually even good.
- Better economic times cause the demand for premises to rise.
- With few buildings having been started during the soft period and now coming on stream, this additional demand for space causes the supply/demand picture to tighten and thus prices and rents to rise.
- This improves the economics of real estate ownership, reawakening developers' eagerness to build.
- The better times and improved economics also make lenders and investors more optimistic. Their improved state of mind causes financing to become more readily available.
- Cheaper, easier financing raises the pro forma returns on potential projects, adding to their attractiveness and increasing developers' desire to pursue them.
- Higher projected returns, more optimistic developers and more generous providers of capital combine for a ramp-up in building starts.
- The first completed projects encounter strong pent-up demand. They lease up or sell out quickly, giving their developers good returns.
- Those good returns – plus each day's increasingly positive headlines – cause additional buildings to be planned, financed and green-lighted.
- Cranes fill the sky (and additional cranes are ordered from the factory, but that's a different cycle).
- It takes years for the buildings started later to reach completion. In the interim, the first ones to open eat into the unmet demand.
- The period between the start of planning to the opening of a building is often long enough for the economy to transition from boom to bust. Projects started in good times often open in bad, meaning their space adds to vacancies, putting downward pressure on rents and sale prices. Unfilled space hangs over the market.

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- Bad times cause the level of building activity to be low and the availability of capital for building to be constrained. Or, as we said in computer programming in the 1960s, "go to top" and begin again.

This process is highly illustrative of the cyclical chain reaction I'm talking about. Each step in this progression doesn't merely follow the one that preceded it; it is caused by the one that preceded it.

Cycles and Risk

This memo is devoted to the cycle in attitudes toward risk. Economies rise and fall quite moderately (think about it: a 5% drop in GDP is considered massive). Companies see their profits fluctuate considerably more, because of their operating and financial leverage. But market gyrations make the fluctuations in company profits look mild. **Securities prices rise and fall much more than profits, introducing considerable investment risk. Why is that so? Primarily, I think, because of the dramatic ups and downs in investor psychology.**

The economic cycle is constrained in its fluctuations by the existence of long-term contracts and the fact that people will always eat, pay rent, buy gasoline, and engage in many other activities. The quantities involved will rise and fall, but not without limitation. Likewise for most companies: cost reductions can mitigate the impact of sales declines on earnings, and there's often some base level below which sales are unlikely to go. In other words, there are limits on these cycles.

But there are no checks on the swings of investor psychology. At times investors get crazily bullish and can imagine no limits on prosperity, growth and appreciation. They assume trees will grow to the sky. Nothing's too good to be true. And on other occasions, correspondingly, despondent investors can't think of any limits to how bad things can get. People conclude that the "worst case" scenario they prepared for isn't negative enough. Highly disastrous outcomes are considered plausible, even likely.

Over the years, I've become convinced that fluctuations in investor attitudes toward risk contribute more to major market movements than anything else. I don't expect this to ever change.

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The Source of Investment Risk

Much (perhaps most) of the risk in investing comes not from the companies, institutions or securities involved. It comes from the behavior of investors. Back in the dark ages of investing, people connected investment safety with high-quality assets and risk with low-quality assets. Bonds were assumed to be safer than stocks. Stocks of leading companies were considered safer than stocks of lesser companies. Gilt-edge or investment grade bonds were considered safe and speculative grade bonds were considered risky. I'll never forget Moody's definition of a B-rated bond: "fails to possess the characteristics of a desirable investment."

All of these propositions were accepted at face value. But they often failed to hold up.

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- When I joined First National City Bank in the late 1960s, the bank built its investment approach around the "Nifty Fifty." These were considered to be the fifty best and fastest growing companies in America. Most of them turned out to be great companies . . . just not great investments. In the early 1970s their p/e ratios went from 80 or 90 to 8 or 9, and investors in these top-quality companies lost roughly 90% of their money.

- Then, in 1978, I was asked to start a fund to invest in high yield bonds. They were commonly called "junk bonds," but a few investors invested nevertheless, lured by their high interest rates. Anyone who put $1 into the high yield bond index at the end of 1979 would have more than $23 today, and they were never in the red.

Let's think about that. You can invest in the best companies in America and have a bad experience, or you can invest in the worst companies in America and have a good experience. **So the lesson is clear: it's not asset quality that determines investment risk.**

The precariousness of the Nifty Fifty in 1969 – and the safety of high yield bonds in 1978 – stemmed from how they were priced. A too-high price can make something risky, whereas a too-low price can make it safe. Price isn't the only factor in play, of course. Deterioration of an asset can cause a loss, as can its failure to produce profits as expected. **But, all other things being equal, the price of an asset is the principal determinant of its riskiness.**

The bottom line on this is simple. No asset is so good that it can't be bid up to the point where it's overpriced and thus dangerous. And few assets are so bad that they can't become underpriced and thus safe (not to mention potentially lucrative).

Since participants set security prices, it's their behavior that creates most of the risk in investing. This is true in many other activities as well, the common thread being the involvement of humans.

- Jill Fredston, an expert on avalanches, has observed that "better safety gear can entice climbers to take more risk – making them in fact less safe." (*Pensions & Investments*)

- When all traffic controls were removed from the town of Drachten, Holland, traffic flow doubled and fatal accidents fell to zero, presumably because people drove more carefully. (Dylan Grice, Societe Generale)

So improvements in safety equipment can be neutralized by human behavior, and driving can become safer despite the removal of safety equipment. It all depends on how the participants behave.

The Cycle in Attitudes toward Risk

The riskiest thing in the investment world is the belief that there's no risk. On the other hand, a high level of risk consciousness tends to mitigate risk. I call this the perversity of risk. It's the reason for Warren Buffett's dictum that "The less prudence with which others conduct their affairs, the greater the prudence with which we should conduct our own affairs." When other people love investments, we should be cautious. But when others hate them, we should turn aggressive.

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It is essential to observe that investor attitudes in this regard are far from constant. A memo called *The Happy Medium* (July 21, 2004) said that while it would be good for most investors (the ones not suited to be contrarians) to always hold a moderate position that balances risk aversion and risk tolerance – and thus the fear of losing money and the fear of missing opportunities – this is something very few people can do. Rather, attitudes toward risk cycle up and down, usually counter-productively. **Becoming more and less risk averse at the right time is a great way to enhance investment performance. Doing it at the wrong time – like most people do – can have a terrible effect on results.**

How does the up-cycle in risk taking develop?

- **When economic growth is slow or negative and markets are weak, most people worry about losing money and disregard the risk of missing opportunities. Only a few stout-hearted contrarians are capable of imagining that improvement is possible.**
- Then the economy shows some signs of life, and corporate earnings begin to move up rather than down.
- Sooner or later economic growth takes hold visibly and earnings show surprising gains.
- This excess of reality over expectations causes security prices to start moving up.
- Because of those gains – along with the improving economic and corporate news – **the average investor realizes that improvement is actually underway**. Confidence rises. Investors feel richer and smarter, forget their prior bad experience, and extrapolate the recent progress.
- Skepticism and caution abate; optimism and aggressiveness take their place.
- Anyone who's been sitting out the dance experiences the pain of watching from the sidelines as assets appreciate. The bystanders feel regret and are gradually sucked in.
- The longer this process goes on, the more enthusiasm for investments rises and resistance subsides. **People worry less about losing money and more about missing opportunities.**
- Risk aversion evaporates and investors behave more aggressively. People begin to have difficulty imagining how losses could ever occur.
- Financial institutions, subject to the same influences, become willing to provide increased financing. In the words of Citibank's Chuck Prince, when the music's playing, they see no choice but to dance. Thus they compete for market share by reducing the return they demand and by being willing to finance riskier deals (see *The Race to the Bottom*, February 14, 2007).
- Easier financing – along with the recent gains – encourages investors to make greater use of leverage. Borrowed capital increases their buying power, and they move to put it to work.
- Leveraged investors report the greatest gains, consistent with the old Las Vegas maxim: "the more you bet, the more you win when you win." This causes others to emulate them.
- The market takes on the appearance of a perpetual-motion machine. Appreciation accelerates, possibly leading to a mania or bubble. **Everyone concludes that things can only get better forever. They forget about the risk of losing money and fixate on not missing opportunities.** Leveraged buyers become convinced that the things they buy with borrowed money are certain to appreciate at a rate above their borrowing cost.
- Eventually things get as good as they can get, the last skeptic capitulates, and the last potential buyer buys.

That's the way the cycle of attitudes toward risk ascends. **The skeptic in times of moderation becomes a true believer at the top.**

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But as Herb Stein brilliantly observed, "If something cannot go on forever, it will stop." Applying that thought here, I'd say when things are as good as they can get, they can't get any better. That suggests eventually they'll get worse.

It always turns out that – investors' hopes to the contrary – economies, profits and asset prices can't rise forever. Or, at a minimum, they can't keep pace with investors' ever-rising hopes. And thus the down-cycle begins.

- Once the last potential buyer has bought, there's nobody left to take prices higher.
- **A few unemotional, disciplined and foresighted investors conclude that things have gone too far and a correction is in the cards.**
- Economic activity and corporate earnings turn down, or they begin to fall short of people's irrationally expanded expectations.
- The error of those expectations becomes obvious, causing security prices to start declining. Perhaps someone is daring enough to point out publicly that the emperor of limitless growth has no clothes. Sometimes there's a catalyzing event. Or sometimes (see early 2000) security prices begin to fall of their own accord, simply because they had moved too high.
- The first price declines cause investors to rethink their analysis, conclusions, commitment to the market and risk tolerance. It becomes clear that appreciation will not go on *ad infinitum*. "I'd buy at any price" is replaced by "how can I know what the right price is?"
- Weak economic news takes the place of positive reports.
- **The average investor realizes that things are getting worse.**
- Interest in investing declines. Selling replaces buying.
- Investors who sat out the dance – or who just underweighted the depreciating assets – are lionized for their wisdom, and holders start to feel stupid.
- Giddy enthusiasm is replaced by sober skepticism. Risk tolerance declines and risk aversion is on the upswing. **People switch from worrying about missing opportunity to worrying about losing money.**
- Financial institutions become less willing to extend credit to investors. At the extremes, investors receive margin calls.
- Investors who borrowed to buy are heavily penalized, and the media report on leveraged entities' spectacular meltdowns. Forced selling in response to margin calls and covenant violations causes price declines to accelerate.
- Eventually we hear some familiar refrains: "I wouldn't buy at any price," "There's no negative case that can't be exceeded on the downside," and "I don't care if I ever make another penny in the market; I just don't want to lose any more."
- The last believer loses faith in the market, selling accelerates, and prices reach their nadir. **Everyone concludes that things can only get worse forever.**

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Coping with the Risk Cycle

The important conclusions from observing the above pattern are these:

- Over time, conditions in the real world – the economy and business – cycle from better to worse and back again.

- Investor psychology responds to these ups and downs in a highly exaggerated fashion.

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- When things are going well, investors swing to excessive euphoria, under the assumption that everything's good and can only get better.

- And when things are bad, they swing toward depression and panic, viewing everything negatively and assuming it can only get worse.

- When the outlook is good and their mood is ebullient, investors take security prices to levels that greatly overstate the positives, from which a correction is inevitable.

- And when the outlook is bad and they're depressed, investors reduce prices to levels that overstate the negatives, from which great gains are possible and the risk of further declines is limited.

The excessive nature of these swings in psychology – and thus security prices – dependably creates opportunities of over- and under-valuation. **In bad times securities can often be bought at prices that understate their merits. And in good times securities can be sold at prices that overstate their potential. And yet, most people are impelled to buy euphorically when the cycle drives prices up and to sell in panic when it drives prices down.**

"Buy and hold" used to be a popular approach among investors, and it performed admirably when the markets rose almost non-stop from 1960 to 1972 and from 1982 to 1999. But thanks to the lackluster results of the last thirteen years, it has nearly disappeared. Nowadays, investors are much more likely to trade in an effort to profit from – or at least avoid losses connected to – economic, corporate and market developments. However, when most investors unite behind a macro trading decision, they're usually wrong in the ways described above. This is the reason why contrarianism often pays off big.

In order to be a successful contrarian, you have to do the opposite of what the herd does. And to do that, you have to diverge from the conventional cycle in attitudes toward risk. Everyone would like to profitably resist this error-prone and thus costly cycle. The fact that most people succumb anyway shows how strong its power is, and that most people are not above average in this regard (of course). Markets move in response to decisions made by the majority of investors. Most investors are guilty of the sin of overreacting (and, even worse, the sin of moving in the wrong direction), demonstrating that the ability to resist the cycle is uncommon.

To be a successful contrarian, you have to be able to:

- see what most people are doing,
- understand what's wrong about most people's behavior,
- possess a strong sense for intrinsic value, which most people ignore at the extremes,
- resist the psychological pressures that make most people err, and thus
- buy when most people are selling and sell when most people are buying.

And one other thing: you have to be willing to look wrong for a while. If the herd is doing the wrong thing, and if you're capable of seeing that and doing the opposite, it's still highly unlikely that the wisdom of what you do will become apparent immediately. Usually the crowd's irrational euphoria will continue to take prices higher for a while – possibly a long while – or its excessive negativism

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will continue to take prices lower. The contrarian will appear wrong, and the fact that his error comes in acting differently from most people will make him look like nothing but an oddball loser. **Thus, in addition to the five requirements listed above, successful contrarianism requires the ability to stick with losing positions that, as David Swensen has written, "frequently appear downright imprudent in the eyes of conventional wisdom."**

If you can't stand living with the embarrassment of being unconventional and wrong, contrarianism may not be for you. Rather than trying to do the difficult opposite of what the crowd is doing, you might have to settle for merely refusing to join in its errors. That would be a very good thing. But even that is not easy.

Risk and Return Today (2004 Version)

The name of this section served as the title of a memo in October 2004. It was one of my first cautionary responses to the vertiginous market ascent that would be exposed by the sub-prime mortgage collapse in 2007 and would culminate in the global financial crisis in 2008.

In the memo I observed that the "capital market line" connecting risk and return had become "lower and flatter." The lowness meant that the line started off with low returns on low-risk assets (due to the Fed's efforts to stimulate the economy through low interest rates) and, as one moved out the risk curve, even riskier investments offered low potential returns. "Due to the low interest rates," I said, "the bar for each successively riskier investment has been set lower than at any time in my career."

The flatness of the line was a result of sanguine attitudes toward risk. Here are excerpts from my explanation (emphasis in the original):

- **First, investors have fallen over themselves in their effort to get away from low-risk, low-return investments**. **When you're especially eager not to make safe investment A, it takes less compensation than usual (in terms of prospective return) to get you to accept risky investment B**. . . .

- **Second, risky investments have been very rewarding for more than twenty years and did particularly well in 2003**. . . . **Thus investors are attracted more (or repelled less) by risky investments than perhaps might otherwise be the case and require less risk compensation to move to them.**

- **Third, investors perceive risk as being quite limited today.** Because rising inflation isn't seen as a significant risk, bond investors don't require much of a premium to extend maturity. And because the combination of a recovering economy and an accommodating capital market has brought default rates to record lows, investors are unconcerned about credit risk and thus are willing to accept below-average credit spreads. **Prospective return exists to compensate for perceived risk, and when there isn't much perceived risk, there isn't likely to be much prospective return**.

  In summary, to use the words of the "quants," risk aversion is down. . . .

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> . . . **would-be buyers are optimistic, unafraid, undemanding in terms of return, and moving *en masse* to small asset classes**. Holders of assets, who play a part in setting market prices by deciding where they'll sell, also are optimistic. The result is an unappetizing, risk-tolerant, high-priced investment landscape. . . .
>
> There are times when the investing errors are of omission: the things you should have done but didn't. Today I think the errors are probably of commission: the things you shouldn't have done but did. **There are times for aggressiveness. I think this is a time for caution.**

In other words, everything seemed positive, attitudes toward risk bearing were on the upswing, and security prices moved higher, bringing down potential returns. That memo may have been too early, but it wasn't wrong. There was a fair bit of money to be made in the next few years, but its pursuit brought investors close to the peril that lay ahead.

<u>Risk and Return Today (2013 version)</u>

For about a year from the middle of 2011 to the middle of 2012, I was thinking and saying that given the many problems and uncertainties afflicting the investment environment, the biggest plus I could find was the near-total lack of optimism on the part of investors. And I thought it was a major plus. There's little that's as helpful for the availability of bargains as widespread low expectations.

Arguably the eight pages of this memo leading up to this point are there for the sole purpose of establishing that when investors are sanguine risk is high, and when investors are afraid risk is low. Today there's no question about it: investors are highly aware of the uncertainties attaching to the sluggish recovery, fiscal imbalance and political dysfunction in the U.S.; the same or worse in Europe; lack of growth in Japan; slowdown in China; resulting problems in the emerging markets; and geopolitical tensions. **If the global crisis was largely the product of obliviousness to risk – as I'm sure it was – it's reassuring that there is little risk obliviousness today.**

Sober attitudes on the part of investors should be a source of comfort, since in normal times we would expect them to bring down asset prices to the point where they're attractive. **The problem, however, is that while few people are thinking bullish today, many are acting bullish. Their pro-risk behavior is having its normal dangerous impact on the markets, even in the absence of pro-risk thinking. I've become increasingly conscious of this inconsistency in recent months, and I think it is <u>the most important issue</u> that today's investors have to confront.**

What's the reason for this seeming inconsistency between thoughts and actions? The answer is simple. **These people aren't buying because they want to, but because they feel they have to.** In the past I've referred to them as "handcuff volunteers."

The normal response of investors to uncertain times is to say, "Because of the risks that are present, I'm going to shy away from risky investments and stick with a very safe portfolio." Such views would tend to depress prices of risky assets. But, thanks to the actions of the world's central banks to keep rates near zero, that very safe portfolio – especially in the credit markets – will produce little if any return today.

Many investors have sought the safety of money market and T-bill funds yielding zero, Treasury notes at +/-1%, and high grade bonds at 3%. But some can't or won't. The retiree living on his

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savings may not be able to abide the 90% reduction in short Treasury note returns. I imagine him picking up the phone, calling the 800 number and telling his mutual fund company "get me out of that fund yielding zero and get me into one yielding 6%. I have to replace the income I used to get from intermediate Treasurys." And thus he becomes a high yield bond investor . . . whether consciously or not.

A similar process can affect a pension fund or endowment that needs a return of 7-8% and doesn't want to bet its future on the ultra-low yields on high grade bonds and Treasurys, or the 6% that the institutional consensus expects stocks to return (especially given how badly stocks performed in 2000-02 and 2008 and their overall lack of gains since 1999).

Take high yield bonds for example. They provide some of the highest contractual returns and greatest current income, they are attracting considerable capital. When capital flows into a market, the resulting buying brings down the prospective returns. And when offered returns go down, investors desirous of maintaining income turn to progressively riskier investments. In the bond world that's called "chasing yield" or "stretching for yield." **Do it if you want, but do it consciously and with full recognition of the risks involved. And even if you refuse to stretch for yield, be alert to the effect on the markets of those who do.**

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Getting Rid of Money

It's relatively easy to make good investments when capital is in short supply relative to the opportunities and investors are reticent. But when there's "too much money chasing too few deals," investors compete to put it to work in ways that are injurious to everyone's financial health. I've written often about the tendency of people to accept lower returns, higher risk and weaker terms in order to deploy their capital in "hot" times (again as described in *The Race to the Bottom*). The deals they do get worse, and that makes investing riskier and less profitable for everyone.

Because the returns on "safe" investments are so low today, people are moving further out on the risk curve to pursue returns that meet their needs and are close to what they used to get. And the weight of their capital is bringing down prospective returns and making riskier deals doable.

As noted on page 9, I wrote in 2004's *Risk and Return Today* that, "The result is an unappetizing, risk-tolerant, high-priced investment landscape. . . ." At that time it happened because of excessive bullishness and a paucity of risk aversion. This time around it's occurring despite the absence of bullishness, mainly because interest rates have been rendered artificially low by the Fed and other central banks. **Regardless of the reason, things are happening again today – especially in the credit world – that are indicative of an elevated, risk-prone market:**

- Total new issue leveraged-finance volume – loans and high yield bonds – reached a new high of $812 billion in 2012, according to Standard & Poor's, surpassing by 20% the previous record set in pre-crisis 2007.

- The yields on fixed income securities have declined markedly, and in many cases they're the lowest they've ever been in our nation's history. Yield spreads, or credit risk premiums, are fair to full – meaning the relative returns on riskier securities are attractive – but the absolute returns are minimal.

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I find it remarkable that the average high yield bond offers only about 6% today. Daily I see my partner Sheldon Stone selling callable bonds at prices of 110 and 115 because their yields to call or yields to worst start with numbers – "handles" – of 3 or 4 percent. The yields are down to those levels because of strong demand for short paper with prospective returns in that range. I've never seen anything like it.

- As was the case in the years leading up to the onset of the crisis, the ability to execute aggressive transactions indicates the presence of risk tolerance in the markets. Triple-C bonds can be issued readily. Companies can borrow money for the purpose of paying dividends to their shareholders. And CLOs are again being formed to buy leveraged loans with heavy leverage.

- The amount of leverage being applied in today's private equity deals also indicates a return to risk taking. As *The Wall Street Journal* reported on December 17:

> Since the beginning of 2008, private-equity firms have paid an average of 42% of the cost of large buyouts with their own money, also known as "equity," while borrowing the rest. In the past six months, the percentage has fallen to 33%, according to Thomson Reuters, close to the 31% average in 2006 and the 30% average in 2007. . . .
>
> Other measures also suggest that debt loads are hovering around pre-crisis levels. The average debt put on companies acquired in leveraged-buyout deals from July to December amounted to 5.5 times the companies' annual earnings (defined as earnings before interest, taxes, depreciation and amortization). That is higher than any two consecutive quarters since the beginning of 2008, according to S&P Capital IQ LCD. The average deal leverage was 5.4 times earnings in 2006 and 6.2 times earnings in 2007.

The good news is that today's investors are painfully aware of the many uncertainties. The bad news is that, regardless, they're being forced by the low interest rates to bear substantial risk at returns that have been bid down. **Their scramble for return has brought elements of pre-crisis behavior very much back to life.**

Please note that my comments are directed more at fixed income securities than equities. Fixed income is the subject of investors' ardor today, since it's there that investors are looking for the income they need. Equities are still being disrespected, and equity allocations reduced. Thus they are not being lifted by comparable income-driven buying.

* * *

In 2004, as cited above, I stated the following conclusion: "There are times for aggressiveness. I think this is a time for caution." Here as 2013 begins, I have only one word to add: ditto.

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The greatest of all investment adages states that "what the wise man does in the beginning, the fool does in the end." The wise man invested aggressively in late 2008 and early 2009. I believe only the fool is doing so now. Today, in place of aggressiveness, the challenging search for return should incorporate goodly doses of risk control, caution, discipline and selectivity.

January 7, 2013

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Memo to: Oaktree Clients

From: Howard Marks

Re: A Fresh Start (Hopefully)

For years I kept these memos away from anything related to politics. But more recently I began to discuss issues facing the United States, and this has required some mention of policy and thus of politics. I've tried very hard to be non-partisan, with a goal of not having readers know my leanings. I hope I've succeeded; at least no one has complained. (But lots of people deceive themselves regarding how unbiased they are, and I may be one of them.)

Because I found America's recent presidential election – and especially the results – so fascinating, I'm going to move explicitly to the field of politics, but with the same goal of non-partisan expression.

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The Votes Are In

To me, the most interesting statistics are these:

- Obama beat Romney by less than three percentage points. That's more than most people projected, but still a modest edge. It's a narrow win relative to the long-term history of our elections, but five of the last thirteen were closer.
- Four years ago, Obama beat his Republican rival by 9.5 million votes.
- This year, he got 6.8 million fewer votes and won by only 3.5 million votes (meaning Romney pulled in 0.8 million fewer votes than McCain did in 2008).
- 7.6 million fewer votes were cast in total this year, even though there must now be several million more eligible voters in the U.S. than there were four years ago.

What do these things mean?

- For months I've been asking people, "Among those who voted for Obama last time, how many are disappointed?" Clearly the answer turned out to be, "A lot." (Note that many of the people who did vote for Obama may also have been disappointed, but not enough to not back him.)
- Despite that disappointment – and the persistent high level of unemployment – Obama still won. Many voters apparently saw him as the better choice between two unexciting candidates.

Behind the Numbers

On November 9, *The Wall Street Journal* ran an interesting article entitled "U.S. Voting Numbers Show Changing Nation." It suggested a number of observations relating to voting trends.

- While Obama and Romney received similar numbers of total votes, few sub-sectors of the electorate were closely divided. The *Journal* listed a number of voting groups where Romney had commanding leads: white, male, older, working-class, and rural and small-town. In contrast, Obama owes his victory to strong, sometimes overwhelming majorities among other groups: Latino, African-American and Asian-American, female, younger, college-educated, unmarried,

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and urban and suburban. **Clearly, at the margin, the two candidates' constituencies were very different demographically.**

- When I think of the Romney-leaning groups listed above, I'm reminded of a 1930 painting by Grant Wood titled "American Gothic." It shows an older white couple standing in front of their obviously Midwestern farmhouse, with the husband holding a pitchfork. I think the typical Republican voter of this last election is nostalgic for that era and wants that America back. The problem the Republican Party faced in this election is that America is moving away from that demographic, not toward it.

- Immigration is an important aspect of life in America and a significant political issue. Our immigrant populations are large and are growing faster than our non-immigrant populations (note, however, that almost every "non-immigrant" is descended from someone who wasn't born in the U.S.). Immigrants who have become U.S. citizens and thus are eligible to vote have a hard time with candidates who adopt a punitive stance toward illegal (today's politically correct term is "undocumented") immigrants. But a strong stand on illegal immigration is among the things demanded by a vocal and significant segment of the voters who choose the candidates in Republican primaries. **Immigrants tend to be more religious and conservative (in the everyday sense of the word), and thus they might be expected to vote Republican. But right now the Republican Party is denied a huge percentage of their votes.**

- There are significant ironies in some other groups' voting patterns. I usually expect people to "vote their pocketbooks" and support the candidate most likely to enhance their financial well-being. But this year's results show that's not always the case.

    - Voters over 40 years of age supported the Republican ticket, which placed great emphasis on curtailing retirement and healthcare benefits (although avowedly not for today's senior citizens).
    - Voters under 40 came out more for the Democrats, even though the young pay a lot today for the entitlement programs Democrats are protecting for older citizens, and the day when they'll benefit from them is far off.
    - Lower-income, less-educated voters – who are unlikely to progress far up the economic ladder – gave majorities to the Republican candidate, with his promise to protect the wealthy from tax increases.
    - College graduates and higher-income whites – with their greater probability of achieving big incomes – came out for the Democratic candidate, who considers it essential to raise tax rates at the top.

- The *Journal* makes the point that "Republicans enjoy historically high levels of control over governorships and state legislatures, which they say shows the party's potential if it can improve its message to minorities." What I think it shows is that, unsurprisingly, traditional Republicans can win state and local elections in traditional states, and highly conservative Republicans can win elections in highly conservative states. **The challenge the party faces lies in uniting behind a single candidate for nationwide office who can win in both.** As long as the two Republican factions are unable to agree on a candidate who appeals to the huge number of independents in the middle of the political spectrum, the Republicans will be swimming upstream.

When you put it all together, you see challenges and conundrums. Right now, the voting trends and demographics make it seem as though the Republicans will be out of power for a long time to come. But

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I've seen many pendulum-like swings in politics in my life, and I'm sure we'll see many more in the battle between the left and the right for the middle-of-the-roaders who decide American elections.

It's the Weather, Stupid!

In a curious aside, consider these facts:

- According to CBS, 41% of voters said in an exit poll that Hurricane Sandy had played a significant role in their choice between the two candidates. 26% said it was "an important factor" and 15% said it was "the most important factor."

- Presumably most of the people who said they were influenced by Sandy were expressing a positive view on Obama's handling of it. (It's hard to imagine the logic under which Sandy would have caused someone to vote for Romney.)

If you believe the exit polls, people who were positively influenced by the handling of Sandy could have made up all or more of Obama's 2.8% margin of victory. If it's true that Sandy was the deciding factor for 15% of the electorate, and if it caused just a fifth of those people to switch to Obama, that means without Sandy, Romney would have won. I find it shocking that the choice of a president for four years could turn on something as fickle as the weather.

College Daze

How did the "too close to call" headlines of the days just before the election turn into a resounding victory, which the Democrats will argue has given them a mandate to lead? How did Obama's small edge in the popular vote turn into a 62%-38% margin in terms of the electoral votes that determine the winner? The answer lies in the peculiarities of our electoral college.

I was traveling in Asia and the Middle East at election time, and I found myself having to explain a system in which:

- In all but a few states, 100% of the electoral votes go to whoever wins the popular vote there, regardless of the margin.
- Most of the 50 states – this year it was roughly 43 – are considered "uncompetitive," meaning one party or the other enjoys a substantial, dependable majority. For that reason, a vote for a Republican is totally meaningless in a Democratic state like California, as is a vote for a Democrat in Republican Utah.
- On the other hand, the electoral system gives voters in a few states disproportionate influence. Since the uncompetitive states' electoral votes are not in play, elections are determined by only the few so-called "swing" or "battleground" states. In fact, this year many people thought the election might be determined largely by who won in just one state: Ohio.
- Perhaps most glaringly, a candidate can be elected president with a majority of electoral votes despite having received fewer popular votes than another.

Our system was designed in the eighteenth century to centralize the job of choosing a president in the hands of a few wise leaders and avoid the uncertainties associated with a widespread and uninformed populace with which it was hard to communicate.

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But in the twenty-first century, with the impediments to a meaningful popular election much reduced, it's time to reassess the benefits of the electoral college – it's hard to say what they are – versus the costs in terms of potentially weird outcomes. **In the days just before the election, it seemed that for the second time in twelve years we could have a president who'd lost the popular vote. That tells me it's time to reassess our system of voting.**

The First Order of Business

What do you think of when you hear the word "Greece"?

- An uncompetitive, low-growth economy,
- for years, a higher credit rating than it deserved,
- the resultant ability to borrow money it shouldn't have been able to, at interest rates that were unjustifiably low,
- excessive public spending,
- generous benefit promises that it can't fulfill given the realities and, as a result,
- soaring debt and deficits.
- Consequently, the need to cut spending and increase taxes, and
- mandated austerity and delevering, with very negative implications for economic growth.

Now ask yourself what you think of when you hear the words "United States." Certainly the facts aren't the same: our economy is the world's greatest (although not what it used to be), and we can print the world's reserve currency, which Greece certainly can't. But there are similarities. The situation in the U.S. isn't a repeat of Greece's but, as Mark Twain would have said, "it does rhyme."

The truth is that the U.S. has pressing fiscal problems, stretching as far as the eye can see:

- in the short term, the "fiscal cliff," in which already-mandated tax increases and spending cuts have the potential to take 4% off of GDP if nothing is done about them within the next six weeks,
- in the medium term, trillion-dollar deficits unless there's radical improvement, and
- in the long term, entitlement promises that absolutely cannot be met. (With millions of Baby Boomers entering their senior years and living longer, we cannot afford the pensions and healthcare benefits that have been promised. The math is inescapable. If these programs are left unchanged, Social Security benefits will grow inexorably, and spending on healthcare has the potential to escalate without limitation.)

The bottom line is that if we don't want to be Greece, we can't act like Greece. Something has to be done . . . and soon. Every year in which we add another trillion dollars to the national debt (and tens of billions to the annual interest bill) – and every year the excessive entitlement promises are allowed to compound – makes it harder to solve the problem.

Vote "No" on Gridlock

Political conservatism is associated with a desire for a small federal government, and that often leads to a preference for a divided government and the gridlock that goes with it. The argument is that since government doesn't do much well, we're better off if gridlock prevents government from doing much.

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People are entitled to a preference for inaction if they view things that way, but I'd venture that inaction is desirable only when conditions are benign. I wouldn't want to see the government paralyzed by gridlock if we were attacked militarily, or if an epidemic needed fighting, or if we were on the edge of a depression, as I think we were in 2008. And I believe strongly that the fiscal problems outlined above need solving; they won't go away by themselves.

Our debt and deficits will recede only if we do some or all of the following:

- cut spending
- reduce waste
- reform Social Security, Medicare and Medicaid
- raise taxes
- speed up economic growth

In theory, even a gridlocked government can take action against waste, but I think the idea of big savings from doing so is largely an impossible dream. And conservatives would eagerly argue that the best way to foster growth isn't for government to take action, but for it to get out of the way of the free enterprise system (I don't fully disagree). But, especially to solve the shorter-term problems, I think we need progress on the other elements, and that will require constructive decision making in Washington.

The opposite of gridlock is compromise. That's what we need today. **Compromise, however, doesn't mean one party saying "We get all we want and you get none of what you want."** Deals like that can only be inked if one party holds all the cards: either the White House plus majorities in both the Senate (and preferably the 60 votes required to stop a filibuster) and the House of Representatives or, at minimum, majorities in both houses of Congress and enough votes to override a presidential veto. Both parties are far from that today, and that may remain the case for a long time.

No, compromise means, "We get some of what we want and you get some of what you want." In practice, it means elected officials have to vote for things they promised to fight and give up on things they swore to deliver. Unless you do that, the other guy doesn't get any of what he wants – meaning he has no reason to go along. This is a reality that our political leaders have failed to confront and accept.

While compromise comes at a cost, gridlock can cost more. Last year, some long-term U.S. debt was downgraded after a particularly unseemly battle over the federal debt ceiling. This occurred not so much because of our fiscal situation, but because our dysfunctional government showed itself to be unable to rise to the occasion and solve problems.

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Help Wanted

In past big-picture memos, I have discussed some of the threats to American industrial performance in the years ahead, the dim job prospects of those not suited to work in the Information Age, and my belief that Americans will have to get used to declining relative standards of living.

On November 7, *The New York Times* carried an excellent article by Thomas L. Friedman entitled "Hope and Change, Part II." In it, Friedman did a great job of outlining some of the things Washington will have to do in order for the outlook to improve.

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> The next generation is going to need immigration of high-I.Q. risk-takers from India, China and Latin America if the United States is going to remain at the cutting edge of the Information Technology revolution and be able to afford the government we want. . . .
>
> . . . my prediction is that the biggest domestic issue in the next four years will be how we respond to changes in technology, globalization and markets that have, in a very short space of time, made the decent-wage, middle-skilled job – the backbone of the middle class – increasingly obsolete. The only decent-wage jobs will be high-skilled ones.
>
> The answer to that challenge will require a new level of political imagination – a combination of educational reforms and unprecedented collaboration between business, schools, universities and government to change how workers are trained and empowered to keep learning. It will require tax reforms and immigration reforms. America today desperately needs a center-right Republican party offering merit-based, market-based approaches to all these issues – and a willingness to meet the other side halfway. The country is starved for practical, bipartisan cooperation, and it will reward politicians who deliver it and punish those who don't. . . .

I'm frustrated when I see Americans of both parties failing to punish – or even encouraging – behavior on the part of their elected officials that is fractious, partisan, ideological and non-compromising. Gridlock and inaction won't solve our problems. Cooperation, adaptability and Friedman's "imagination" must be the watchwords for the years ahead.

We need constructive action to solve the many problems we face, and there's only one way for it to materialize: bipartisanship.

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Signs of Spring

While I was on my recent travels, several people asked me to suggest a potential catalyst for better markets. There isn't any mystery. **I felt (and feel) the clearest answer lies in bipartisan action to resolve our fiscal crises, starting with the fiscal cliff.** In that connection, John Boehner, Speaker of the House of Representatives, gave a noteworthy speech the day after the election. I'm going to quote some of the encouraging statements here (highlighting my very favorites).

> The American people have spoken. They have re-elected President Obama. And they have again elected a Republican majority in the House of Representatives. **If there is a mandate in yesterday's results, it is a mandate for us to find a way to work together on solutions to the challenges we face together as a nation.**
>
> My message today is not one of confrontation, but of conviction. In the weeks and months ahead, we face a series of tremendous challenges – and a great opportunity. . . .
>
> The American people this week didn't give us a mandate to do the "simple" thing. They elected us to lead. They gave us a mandate to work together to do the best thing for our country.
>
> We know what the best thing would be. It would be an agreement that sends the signal to our economy, and to the world, that after years of punting on the major fiscal challenges we face, 2013 is going to be different. It would be an agreement that begins to pave the

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> way for the long-term growth that is essential if we want to lift the cloud of debt hanging over our country. . . .
>
> . . . the American people . . . expect us to solve the problem. And for that reason, in order to garner Republican support for new revenues, the president must be willing to reduce spending and shore up the entitlement programs that are the primary drivers of our debt. . . . For purposes of forging a bipartisan agreement that begins to solve the problem, we're willing to accept new revenue, under the right conditions. . . .
>
> **The president has signaled a willingness to do tax reform with lower rates. Republicans have signaled a willingness to accept new revenue if it comes from growth and reform. Let's start the discussion there.**
>
> I'm not suggesting we compromise on our principles. But I am suggesting we commit ourselves to creating an atmosphere where we can see common ground when it exists, and seize it. . . .
>
> **Mr. President, this is your moment. We're ready to be led, not as Democrats or Republicans, but as Americans. We want you to lead -- not as a liberal or a conservative, but as the President of the United States of America. We want you to succeed.**
>
> **Let's challenge ourselves to find the common ground that has eluded us. Let's rise above the dysfunction, and do the right thing together for our country in a bipartisan way.**

"We want you to succeed." Wow!

As a point of contrast, two years ago, another Republican leader said, "The single most important thing we want to achieve is for President Obama to be a one-term president." That was full-contact politics at its worst, with a goal not of solving the nation's problems, but of winning the next election. Speaker Boehner's remarks are 180 degrees from that . . . and all we could ask for at this point.

I'm not a cynic. I want to believe Speaker Boehner means what he says. The important thing is that a spirit of cooperation exists. Hopefully the details can be worked out (although the two parties are at absolute loggerheads on the subject of raising taxes on big earners, and no one should underestimate the difficulty this presents). I am encouraged for now, and I'm going to stay that way until given reason not to be.

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<u>President Obama's Reply</u>

I'm proud to share the news that on the strength of my memos, I have been asked to craft a response for President Obama on this subject. I include my first draft below. (Actually, there was no such request, but I've done it anyway.)

> Ladies and gentlemen: I am speaking to you tonight, not to revel in victory, but to chart a course for progress. Not to assert just the goals of my administration and my supporters, but to describe what we're going to get done for all the American people, and how.

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In our first term, we took stimulative actions that rescued our country from the threat of depression, and we fought to enact a controversial program that will make healthcare more readily available. There's far more we didn't get done, and much of that was because of a lack of bipartisanship in Washington.

A lot has to be dealt with in the next four years. The list starts with handling the fiscal cliff looming ahead and goes on to include a large number of economic, social and international issues. The basic facts in Washington are unchanged by the election. Democrats occupy the White House and possess a slender majority in the Senate, but we're in the minority in the House and our numbers in the Senate aren't sufficient to cut off debate. Thus control of government continues to be divided. That means progress will be grudging and limited unless we can resurrect a genuine spirit of compromise.

For me to succeed in my job under these circumstances, I must recognize that almost as many people voted for my opponent as voted for me, and that there are almost as many Republicans in the Senate as there are Democrats (and more in the House).

Thus I promise not to act as if only our ideas have merit, or as if only our principles are valid. In order to win support for the things we think are most important, we will make room to the greatest degree possible for the things our colleagues across the aisle deem important, as long as the overall result moves our country in the right direction.

What matters most isn't winning elections, it's doing right for America. I believe the party that does more of that will win most elections anyway. The end will be won if the means are right. You have my pledge that they will be.

That's the best I can do. The rest is up to our elected officials. As my British friends say, "fingers crossed."

November 19, 2012

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Memo to: Oaktree Clients

From: Howard Marks

Re: On Uncertain Ground

The world seems more uncertain today than at any other time in my life. That's a simple sentence but one with significant implications. And it's not just me. Here's what *The New York Times* said on August 12 in an article about John Bogle, the founder of Vanguard:

> "It's urgent that people wake up," he says. This is the worst time for investors that he has ever seen – and after 60 years in the business, that's saying a lot. . . . "The economy has clouds hovering over it," Mr. Bogle says. "And the financial system has been damaged. The risk of a black-swan event – of something unlikely but apocalyptic – is small, but it's real."

I'm going to devote this memo to the uncertainty in the world and the investment environment and then offer my take on the appropriate strategy response. This will require me to touch on a large number of topics, but I will try to dwell less than usual on each of them. If after reading this memo you find yourself hungry for more, you might go back to "What Worries Me" (August 28, 2008) and "The Long View" (January 9, 2009).

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The Macro-Economic Setting

It's my belief that we're going to see relatively sluggish economic growth in the U.S. for a prolonged period of time. My expectations for other developed nations, given their specific issues, are even less positive. (This is a good time for my typical reminder that I am not an economist, and far from all of my observations would be supported by that fraternity. And please note that one of the key tenets of Oaktree's investment philosophy dictates that our investing will not be governed by macro forecasts. We say it's one thing to have an opinion on the macro, but something very different to act as if it's correct. I urge you to consider adopting a similar attitude toward all macro forecasts, especially mine.)

Around 2008 or '09, I had a visit from a senator looking – surprise! – for a campaign contribution. I suppose to make conversation, he asked if I could assure him we were headed for a vigorous recovery. "Forget vigorous," I told him. "I'm hoping for lackluster." I haven't changed my tune.

There's a very human tendency to think things will stay as they are, and if they change, that they'll revert to what we're used to. Most people think of economic growth as the norm; after all, that's been the general rule during our lifetimes. In fact, the global economy has grown nicely for hundreds of years. That's something "everyone knows." But how many people think about where economic growth comes from, and whether it's naturally occurring and inevitable?

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Economic growth doesn't just happen. Its vigor depends on a combination of population gains, a conducive infrastructure, positive aspiration and profit motive, advances in technology and productivity, and benign exogenous developments. In many ways and to varying degrees, I think the future for these things in the U.S. is less good than it was in the past. The birthrate is down; our infrastructure is out of date; it's uncertain whether technology can add as much to productivity in the future as it has in the recent past (but perhaps it always is); and mobility up the income curve has stagnated.

I think a lot about the role of deficit spending and credit. In the forty or so years leading up to the crisis of 2008, consumers could grow their spending faster than their incomes because of the increasing availability of credit (and their increasing willingness to make use of it). Likewise, generous capital markets greatly facilitated deficit spending on the part of governments. Economic units around the world were able to spend money they didn't have and thus buy things they couldn't afford. This made a big contribution to economic growth, but few people recognized the negative implications: increased leverage, increased dependency on the continued generosity of the capital markets, and thus increased precariousness. In other words, unwise behavior in the short run led directly to problems in the long run. This is a normal aspect of the economic process.

Few debtors can tap the capital markets today to the same extent they could five or ten years ago. In a radical turn of events, lenders now appear to care about borrowers' ability to repay, and they find some of their customers less than creditworthy. Since almost no borrowers actually have the ability to pay off their debts, this has led to credit difficulties ranging from home foreclosures, to municipal bankruptcies in the U.S., to debt crises in peripheral Europe.

American consumers seem to have concluded that they should owe less (or have found that they can't borrow as much). For whatever reason, the savings rate has risen, suggesting a decline in the propensity to spend all one makes and more. All around the world, there's movement on the part of borrowers – sometimes voluntary and sometimes involuntary – toward austerity (reducing the excess of spending over incomes) or even delevering (spending less than you make and using the surplus to pay down debt).

These trends are healthy for individual borrowers' balance sheets, but they imply reduced consumption and thus are negative for GDP growth. If everyone does these things at the same time, the results can be quite contractionary. Regardless of how you look at it, less use of consumer credit implies less economic growth.

The other specific element that gives me pause relates to confidence. Psychology plays a huge role – perhaps a dominant and self-fulfilling one – in influencing economic growth. In short, if people think things will be good in the future, they'll spend and invest, and things will be good. But if they turn pessimistic regarding the future and go into their shells, refusing to spend and invest, growth will slow down.

Consumers were traumatized by the crisis of 2008: laid off, forced out of their houses, made poorer by market declines, and denied credit. Those who didn't feel these influences directly

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were still pounded by headlines trumpeting economic weakness, the collapse of financial institutions, the need for bailouts, and malfeasance in the banking and mortgage industries. It could require significant healing before these influences abate.

Much of an economy's resilience comes from what economists call "animal spirits": the bullishness that drives things upward when people's innate optimism, acquisitiveness and tendency to forget harsh lessons are sparked by some bits of good economic news. Right now, with animal spirits largely in hibernation, a reversal of the crisis's trauma may not come easy. But that doesn't mean there won't be one. The U.S. consumer has a tendency to surprise on the upside.

Business investment plays a key role in economic recovery. When managers conclude that consumers are about to resume spending after a downturn, they hire workers and invest in new equipment in order to meet the increased demand they believe is coming. Yet the current recovery has seen little in this regard. I think the prevailing attitude has been, "Let's see how far we can stretch our current capacity before spending to expand it." Or as I heard on the radio the other day, in a report on productivity gains, "Businesses continue to do more with less." Thus companies have built cash hoards, not productive capacity.

Much of this has been attributed to uncertainty on the part of executives concerning the business environment. In contrast to the preceding 28 years of pro-business and pro-free market administrations under Presidents Reagan, Bush, Clinton and Bush, today many business people detect antipathy – or, at minimum, indifference – on the part of the Obama administration, in which the private sector is little represented. In addition, there is uncertainty and anxiety regarding the outlook for the economy, regulation and taxes. All of these things have deterred expansion.

Most recently, concern has shifted to the "fiscal cliff" – the combination of automatic tax increases and spending cuts that will go into effect at the beginning of 2013 if nothing is done before then by the seemingly gridlocked government (more on this later). Finally, most business people probably want Mitt Romney to be the next president, but he's behind in the polls. The sum of these doubts is contributing to the sluggish expansion we're seeing. (Of course, one of these days deferred spending could give way to invigorated investment in capacity.)

It's easy to view problems like these as insoluble and part of a self-feeding vicious circle. When people who are overly indebted reduce their spending, their collective action weakens the economy. The weak economy discourages businesses from hiring and expanding, and thus it stays weak. **It's essential, however, to remember that it can be just as wrong to see things as hopeless as it is to consider an environment risk-free.** One mustn't overreact in either direction.

Potential economic pluses do exist, and they tend to be overlooked in downcast periods like today. These include the incipient housing recovery; the possibility of energy self-sufficiency; the fact that U.S. manufacturing has slimmed down and our Chinese competitors have seen costs rise; and the fact that the U.S. still leads in higher education, creativity and entrepreneurship.

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For me, the bottom line of all this is that we aren't looking at a period of prosperity. A recovery is underway and is likely to continue, but it is more likely to be lackluster than vigorous. Most Americans' financial memory consists of V-shaped recoveries and periods of good feeling like the 1990s, when they couldn't think of reasons not to borrow and spend. Five years from now, I think people will still be asking, "When will the economy get going? When will we get back to good times?"

Black Swans, Landmines and Long-Term Problems

In addition to this unexciting general outlook, I (like most others) can reel off a litany of current and potential problems like I've never seen before. Each one deserves a memo, but – as I said – I'm trying to be economical with your time and attention.

- **Europe** represents a problem of enormous proportions, huge risk and limitless uncertainty. The nations and banks of Europe – and especially Portugal, Italy, Ireland, Greece and Spain (the PIIGS) – partook liberally of the excessive ability to borrow described above. They squandered the proceeds in a variety of ways, ranging from excessive benefit programs for citizens to ill-fated investments. They owe amounts they can't ever repay and will have trouble servicing in times of economic weakness. They'll be forced to spend less in the period ahead, but that will further weaken their economies and add to the pain felt by their citizens. The results have included unrest and may continue to do so. And yet – despite attempts at austerity and delevering – in many countries the ratio of total public and private debt to GDP is now greater than it was five years ago (according to Jamil Baz of GLG Partners).

  People ask all the time what will happen in Europe. I tell them the situation is enormously complex, murky and uncertain, but I'm absolutely sure of three things: (a) I don't know, (b) nobody knows, and (c) if you ask an expert for advice and follow it, you'll probably be making a mistake.

  When people invest in an Oaktree fund, it's on the basis of a limited partnership agreement that spends a few pages on what we're going to do and dozens more on things like the rules we'll follow and what happens if we don't. I get the impression that in the case of the European Union, politicians wrote the first section based on glowing hopes but forgot about the rest. When faced with conditions like these, in my view, there's absolutely no alternative to saying we have no idea what the future holds. Period.

  Since the nuts and bolts stuff was omitted, there's no schematic diagram or instruction manual for Europe. There are no procedures for ensuring nations don't run excessive deficits, or for moving a member state out of the European Union. Any actions that are taken will require unanimous decisions on the part of elected officials from nations with divergent interests. Taking all of this together, I feel there can be no certainty about:

  - what should be done to fix the problem,
  - what can be done,

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- what will be done, and
- what the ramifications will be, especially the second-order consequences.

I imagine Europe's leaders will muddle through, continuing to do the absolute minimum that suffices at the last possible moment. There will be palliatives, but solutions will be hard to achieve (the latter would require the nations of Europe to significantly surrender sovereignty). Last week the European Central Bank announced a program of bond buying, and this was viewed positively. Buying bonds will keep borrowing costs down for as long as it's practiced, but it won't solve the problems. The important tasks facing the peripheral nations are much greater: cutting deficits and policing them, reducing the excessive debt burden that was allowed to build up, and restoring growth and competitiveness. Thus the problem is likely to drag on for years, assuming it doesn't flare up into a global crisis. Everyone hopes Europe will do what's needed, but hope isn't much of a plan.

- **The U.S. fiscal situation** is less acute, less immediate, and easier to duck given that we can print the world's reserve currency . . . but little better. In fact, in some ways it is more dangerous because the problems are more back-end loaded and perhaps less overt.

  Our politicians, too, used easy money to give everyone everything: generous benefit programs as well as significant tax reductions (and major stimulus programs when needed). Entitlements, interest and other mandatory expenditures consume all of the taxes collected; forget about the rest of government spending – on things like defense, education, transportation and scientific research. We face huge annual deficits and ballooning national debt.

  As an aside, one reason our deficit situation isn't worse today is the ultra-low level of interest rates, which constitute a tremendous subsidy of the government by savers. Even with these low rates, interest on the federal debt consumes roughly 10% of all federal taxes collected. Imagine what the deficit would be if the 10-year Treasury note were at 7% rather than less than 2%.

  Entitlement programs are the biggest problem, primarily Medicare (healthcare for the elderly), Medicaid (healthcare for the poor) and Social Security (retirement benefits). Politicians in years gone by granted benefits without much thought to the rate at which they would grow and where the money to pay them would come from. Benefits have been expanded or indexed to inflation, and the post-war Baby Boomers, with their much-increased life expectancies, are bound to create an incredible burden; the national debt of $16 trillion is dwarfed by unfunded future benefits, the present value of which is variously estimated at an additional $50-90 trillion.

  We have problems at the state and local level, in addition to the federal. The federal government is pushing burdens off to states and reducing funding; at the same time the soft economy is cutting into state and local tax collections and increasing citizens' needs. I recently read about a city that had to choose between policemen, firemen and teachers for the layoffs through which to balance its budget. In other words, the city has been

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providing a level of services that it can't afford. Painful austerity is unavoidable; neither firemen, policemen nor teachers can be easily dispensed with. Also, for years state and local politicians have promised public employees retirement and health benefits without regard for how they would be paid. Pension plans that are currently underfunded by $1-3 trillion represent a ticking time bomb. We've seen a spate of municipal bankruptcies this year, and I believe more are coming.

- **The depressing state of politics** deserves special mention among the problems we face. Having acted in the past to create unfunded, ballooning benefit burdens, politicians – albeit a new crop – now largely refuse to agree on action to reduce them. And no one seems to be penalized for failing to find a solution.

  Just as the need for unanimity will frustrate Europe's attempts to solve its problems, U.S. politicians seem to value things like "ideological purity" (i.e., toeing the party line) and being reelected above real attempts at problem solving. They say they want to solve the deficit problem, but tax increases are off limits for many; cuts in entitlements are anathema for others; there isn't enough discretionary spending left to cut in order to solve the problem; and "compromise" has become a dirty word.

  In 2010 a group of active and retired politicians – the Simpson-Bowles Commission – was asked to come up with a solution. Eleven of the eighteen members supported a responsible proposal including, of course, some pain, but there wasn't the fourteen-vote supermajority needed to formally endorse it. Congress and the White House let it die of inattention. Despite the enormous danger presented by our current and future deficits, too few were willing to touch matters representing the "third rail" of American politics.

  Of course, it's not just the politicians. Many voters say they prefer elected officials who will refuse to "desert their principles" (that is, compromise with the other side in pursuit of a solution). While some voters may understand the risk presented by entitlement programs, most reject any reduction of their own benefits.

  Paul Ryan, the Republican nominee for vice president, is a "fiscal wonk" who cares about the deficit and has a "Ryan Roadmap" to shrink it. Here's what he says on the subject:

  > Washington has not been telling you the truth. If we don't reform spending on government health and retirement programs, we have zero hope of getting our spending – and as a result our debt crisis – under control. (*The New York Times*, August 12, 2012)

  Ryan was chosen for the ticket because his hawkishness on the deficit and overall conservatism were expected to appeal to the Republican "base." But ironically, Ryan's interest in reforming entitlements may constitute a disadvantage on the campaign trail, requiring some serious backtracking. Too many people simply vote their wallets: self-interest usually trumps ideology. While we can disagree with Ryan's approach, we should applaud the rare politician who is willing to tackle this unpopular subject.

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- Given the way "inflation hawks" on the Federal Reserve Board resist stimulating the economy when a recovery is underway, there's **concern over the ability to count on further stimulus**. However, I expect the Fed to keep interest rates low for a prolonged period of time and/or undertake other stimulus actions. Recent statements from Chairman Bernanke leave little doubt on this subject. On the other hand, just as I think a lot of economics is determined by psychology, so do I believe a lot of the impact of stimulus programs is psychological. Interest rate cuts, and bond buying programs like QE, have shock value when first announced, but I think it diminishes over time. In the end, it's not easy to make an economy grow when people aren't thinking expansively.

- Today's low interest rates, engineered by the central banks, mean that investors are consigned to doing business in a **low-return world**. Interest rates near zero on T-bills, and yields of 1-3% on Treasury notes and bonds, set the base from which the prospective returns on investments entailing risk are established. And because that floor is so low today, even with healthy risk premiums added, the absolute prospective return on many investments isn't nearly what it was in the past.

- The long-term competitive position of the U.S. is threatened by our **deteriorating infrastructure** in areas like education, healthcare and transportation (as well as trends that are enabling other nations to catch up to us in these regards). These are things that made America great following World War II, but there seems to be little will (or money) to restore them to previous levels.

- In my view, **growing income inequality** is a significant problem. The difference in incomes between those at the top and those at the bottom has risen dramatically, and the ability of those at the bottom to move up the chain has declined. Tax rates applied to income on capital (capital gains and dividends) have been cut relative to those on labor. Finally, everyone knows more than ever about how well the people at the top are doing. A lot of America's economic success has stemmed from the fact that people in the lower income brackets felt the system would allow them to move up through hard work. To the extent that becomes less true – and the outlook today is guarded, especially given the low quality of public education – there can be negative ramifications for society overall.

- **The world of today seems full of intractable challenges**. Think about the list of actual and potential problem areas: Iraq, Afghanistan, Iran, Israel/Palestine, Syria, Pakistan, North Korea, and occasional flare-ups in former Soviet republics. In contrast, the period from the fall of the Berlin Wall (1989) and the USSR (1991) up until the attacks on September 11, 2001 seems like a halcyon one largely free of conflicts considered capable of destabilizing the world. The comparison is stark and troubling.

- The last big element of uncertainty on my list is the **outlook for China**. In the years leading up to today, what characterized China?

    - underused resources, largely human, and low manufacturing costs,
    - an economy directed centrally, not by free market forces,
    - rapidly growing financial resources,

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- a strong desire for economic growth and industrialization in order to move the population to the cities and upward in economic terms,
- the need to respond to the global financial crisis of 2008 and the non-performing loans it produced,
- an expectation that manufacturing would expand without limit as China supplied goods to nations around the world as well as its own growing consumer class, and
- resulting certainty that China couldn't miss.

The upshot of all of the above was massive provision of capital in order to advance China's economic development and urbanization. State-owned enterprises were created and expanded, and infrastructure building was accelerated. Residential construction, in particular, took place at an elevated rate.

This may have been yet another instance where too much money led to bad capital allocation decisions. China's modern era had seen only growth, not cycles of boom and bust. Even when the central government wanted to rein in the rate of building, local governments – which derive a lot of their revenue from sales of land for development – were not similarly motivated. Chinese individuals faced very limited options for investing their capital: bank interest was below the rate of inflation and thus negative in real terms, and foreign investment was prohibited. This combination drove large-scale investment into either properties or savings products known as "trusts," the proceeds of which flowed into fixed asset development. Thus the process went out of control. Good intentions around urbanization and infrastructure development fell victim to massive speculative capital flows. The consequence was excessive fixed investment.

(One great way for authorities or central bankers to stimulate an economy is by providing capital for residential construction. This results in increased employment and spending on materials and components. When the economy heats up in response, however, a housing bubble often ensues. Home prices rise and speculative buying follows. The only thing missing is end-buyers for the unneeded or unaffordable homes. It's particularly interesting to note that excess residential investment contributed in a major way to the recent problems in China, Ireland, Spain and the U.S. In all four countries "Potemkin villages" of new homes grew up, suggesting economic vigor . . . but standing empty.)

In China's case, capital wasn't withdrawn by external lenders. Rather, the central planners decided it was time to reduce stimulus. In this way leverage would be reduced, the rate of fixed asset investment would ease, and the economy would be kept from overheating and inflating. However, as has been seen throughout history, planned economies tend to defy the planners, and cycles are hard to modulate.

China's economic growth has slowed, and living with declining growth has turned out to be no easier in China than elsewhere. Worldwide economic weakness and cost-advantage-eroding inflation have reduced the demand for Chinese exports, a main prop supporting China's economy. It has been made clear that (a) internal consumption isn't enough to give China's economy the growth it needs and thus (b) China isn't without

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dependence on the rest of the world. **It has yet to be determined whether China's landing will be soft or hard.**

And if China lands hard – in part because of weak demand from the rest of the world – will its weakness feed back, further weakening those nations from which China buys raw materials and finished goods? The world's economy is complex, interrelated and interdependent. China is a major example of this and, at this moment, a contributor to worldwide uncertainty.

So what do we find? Economic fragility throughout the world, I think, as well as a number of factors capable of exacerbating the situation in the short run or keeping it weak in the long. I can't remember a time when no jurisdiction was considered completely safe for investment, but that seems to be the case today. When people enthuse about the U.S., it's usually only in relative terms: "the best house on a bad block."

At the University of Chicago in the 1960s, I was taught that U.S. Treasury bills paid the "risk-free rate of return." Nowadays most investors have trouble thinking of anything as riskless. When I talk to investors, most of them snicker uncomfortably about the proposition of even U.S. Treasurys being entirely safe.

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Is There No Good News?

Isn't there anything on the positive side of the ledger, capable of balancing against the weak fundamental picture described above and making investment attractive? A few things deserve mention, I think.

The first is **the possibility that things won't turn out to be as bad as I describe.** Because of the impact of psychology on people's thought processes, it often turns out that things aren't as bad (or as good) as they seemed at the extremes. But since I'm not a big believer in macro forecasting, I don't believe there's a way to prove that my negativism isn't fully warranted.

The second is **the fact that asset prices are reasonable in many cases, at least relative to other investments or to history.**

- In 1999, when everyone was unworried, the S&P 500 traded at more than 30 times earnings. Today the p/e ratio has more than halved, and it is well below the post-World War II average. In addition, dividend and earnings yields on equities are unusually favorable relative to the yields on bonds. There's no doubt that stocks have cheapened relative to historic parameters – although the case can also be made that they aren't cheap enough, since future growth is unlikely to be at the historic rate.

- Yield spreads on high yield bonds relative to Treasurys are at levels that historically have been considered generous and have consistently given rise to subsequent returns well above those on Treasurys. In other words, the reward for accepting credit risk via high yield bonds is at a level that in the past has more than compensated for the credit risk

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entailed. Although there's far less historic data, the same seems true of senior loans and mezzanine debt.

- Real estate prices have corrected from the peak of 5-6 years ago and are largely back to the pre-bubble levels of a decade ago. Residential real estate prices are well down from the peak, and the same is true for commercial real estate in all but a half dozen first-tier cities.

And why is this true? Because of the third factor: **investor psychology that is much curtailed from pre-crisis levels**. This is very healthy from a buyer's point of view.

The Psychological Environment

These are uncertain times – there's no doubt about it. The macro outlook is quite unclear, and the level of investor confidence is commensurately low. This reminds me of something that happened – in the larger, non-investment world – eleven years ago this week.

I was in New York on 9/11, and I experienced the uncertainty, fear and confusion firsthand. When I finally got to California several days later, I sat down with my son Andrew, then fourteen years old, to make sure he was okay given what had transpired. He asked me, with his usual perceptiveness, "Dad, is the world less safe than it used to be?" The right answer came to me: "Maybe it's less safe than it used to be . . . and maybe it was never as safe as people thought it was." **Similarly, the macro future seems far more uncertain today than at any time in my experience, but there's a good chance it was never as certain as people thought.**

In the 1980s and '90s, everything went right. Economic growth was strong. Companies thrived. There were great gains in productivity and technology. Profits rose dramatically. Interest rates declined. Inflation was quiescent. Equities soared. Houses and 401k accounts appreciated, producing a positive "wealth effect." The world was largely at peace. All of this contributed to positive psychology, feeding back to further spur economic strength in a classic virtuous circle. Was this a period in which favorable outcomes were entirely dependable, or just one in which the underlying processes met up with good luck, producing favorable outcomes? And if the latter, were the results better than people should have expected to continue?

Regardless, people did extrapolate them. When stocks returned 20% a year in the 1990s, rather than the normal 10%, investors ratcheted up their return expectations for the subsequent years, and with them their allocations to equities. **Everyone knows that if you reach into a bag containing both black and white balls and pull out ten white ones in a row, the probability has increased that the next one will be black. But in the investment world, events like that serve to convince people that there are only white balls – favorable outcomes – in the bag. That's part of the illogical, emotional thinking that makes for bull markets and bubbles.** So by the time the late 1990s rolled around, many investors had concluded that the world was a benign place in which profits were inevitable. That is, that there was little risk or uncertainty.

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It's my firm belief that the riskiest thing in the investing world is widespread belief that there's no risk. Usually that dangerous condition stems from excessive conviction that the future is knowable and known . . . and benign. Today there's very little of that. I think that's a substantial positive.

It was one of the outstanding characteristics of the pre-crisis period of 2005-07 that most people were sure they completely understood (a) what made the economy work, (b) what the world would look like in five or ten years, and (c) how things could be fixed if problems arose. Today very few people feel that way. There's nothing pleasant about the transition from feeling you know something to realizing you don't.

But the risk in an activity doesn't stem just from the activity itself, but from how people approach it. When equipment is developed that makes mountain climbing safer, people change their behavior in ways that make it more risky. Equally, much of the risk in investing stems not from securities, companies or exchanges, but from investor behavior. **In short, risk is low when investors behave prudently and high when they don't.**

A world that's perceived as safe can be rendered unsafe if the perception of safety causes investors to move out the risk curve, bid up prices, or take actions that assume greater certainty than turns out to be the case. I think that perfectly describes the years leading up to the crisis. **Conversely, an uncertain world can be safer than people perceive if their concern causes them to behave cautiously (and especially if it causes them to sell down assets to prices from which the likelihood of further declines is reduced).** Certainly few people in the world today are oblivious to the litany of outstanding negatives.

Please note, however, that while investor ardor and risk-blindness are at reassuringly low levels today – and that may be the best single thing that can be said for the current environment – the actions of central banks to minimize interest rates have served to force investors out on the risk curve in search of return. They may not be blind to the risks, but many are participating in pro-risk activities nevertheless. I refer to these coerced participants with a phrase from my late father-in-law, Sam Freeman: "handcuff volunteers."

The Role of Macro

These days we hear little about anything other than macro considerations. Security movements are highly correlated, meaning investment returns are more a function of broad market movements than individual security characteristics. And market movements are, in turn, primarily in response to macro developments.

Thus investors believe more than ever that the route to investment success lies in correct judgments about the macro future. This has given rise to so-called "risk-on, risk-off" investing, consisting of investors' attempts to profit by increasing their risk exposure when they expect favorable macro developments, and decreasing it when they foresee unfavorable developments. Since macro events determine most of the results, it's on the macro that investors believe they should spend their time.

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I couldn't agree less. Playing the market in the short term based on macro forecasts is one of the many things in investing that could add greatly to results if it could be done right . . . but it can't, certainly not consistently.

The expected value from any activity is the product of the gains available from doing it right multiplied by the probability of doing it right, minus the potential cost of failing in the attempt multiplied by the probability of failing. Investors are often blinded by the potential gains from a tactic and thus don't think much about the likelihood they can get it right. Because I think so little of the ability to make correct forecasts – and especially of the ability to get the timing right – I dismiss attempts to benefit from short-term macro judgments.

The best response when seas are choppy is to focus on completing the long-term voyage and not think about whether the next wave is going to push the nose of the boat up or down. Our investment destination is best reached by accurately valuing assets, assessing the relationship between price and that value, and acting resolutely and unemotionally when mispricings are detected. That's still the best – I think the only – reliable path to investment success. Nothing about the current environment alters that one bit.

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Some Thoughts on Strategy

While I don't believe in short-term tactical adjustments based on macro expectations, I do think clients, portfolio managers and strategists should take macro conditions into account when positioning portfolios for the medium term. And while I'm a big skeptic regarding forecasting, I think we can't ignore the long-term secular outlook. (Is that an inconsistency? Absolutely!)

On January 10 of this year, I sent out a "clients-only" memo called "What Can We Do For You?" It has since been posted to the website, and I hope you'll take a look at it. I said in that memo that I had come up with three questions that might help in setting strategy.

- Do you expect prosperity or not? A simple, not-necessarily-precise judgment on this subject can strongly influence our choice of investment media and approach. As described at length above, it's my conclusion that we won't soon see a return to the prosperity of the pre-crisis years.

- Of the two main risks in investing, which should you worry about more today: the risk of losing money or the risk of missing opportunities? Certainly today's macro uncertainties argue for worrying about loss. But even as the low-return climate suggests we needn't give much thought to opportunity costs, the near-zero returns offered on the safest investments (and the moderate level of asset prices) argue for assuming some risk in the pursuit of a more satisfactory return.

- What kind of investing attributes should you employ today, aggressive or cautious? As above, I feel the pros and cons are balanced, and thus so should be our behavior.

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On one hand, we face a lackluster general economic outlook and the threat of further negative developments that could be impactful but hopefully are not overwhelmingly likely. On the other, these worries may be offset to a degree by the lowness of asset prices and investor psychology. The former elements argue strongly against aggressive investing, but the latter – and the low promised returns on highly safe investments – argue that one's investment program should include some forward movement.

When I attended the University of Chicago it was very fashionable to use the qualifier *ceteris paribus*: "all other things being equal." So I can flatly state that, *ceteris paribus*, an outlook characterized by slow growth, potential serious problems and great uncertainty should call for (a) more fixed income investments than equities, (b) more pursuit of value today than growth tomorrow and (c) more safe investments and less use of leverage.

However – and it's the biggest possible "however" – all else is far from equal today. Safe investments have been bid up, such that the returns available on them are paltry at best. If you buy the ten-year U.S. Treasury note today at 1.7%, it's hard to imagine environments other than depression and deflation in which you'll be happy with the outcome. So one of the more important conclusions is that this isn't a black-and-white world in which it's reasonable to insist on safety and eschew risk. **Unless you consider loss avoidance overwhelmingly important and can truly forgo making money, the approach for today has to balance risk aversion and the pursuit of return**.

Moderate investment expectations are an important element in setting one's course. Anyone who insists on returns like "the good old days" is heading for trouble. A somewhat reliable return in the high single digits or low double digits to mid-teens would represent an outstanding result today. I would counsel against trying for much more – or at least that any attempt to do so should be recognized as entailing some very real risk.

What should one do when faced with the conditions confronting us today? I think the smartest response still consists of investing in well-priced corporate securities and income-producing assets. Corporations still have the best chance of adjusting to environmental phenomena such as inflation, dislocation and competition.

An obscure 1958 book, *Corporate Bond Quality and Investor Experience* by W. Braddock Hickman, is said to have given Michael Milken a lot of his inspiration to popularize high yield bonds and foster new issue and secondary markets for them in the 1970s. In his book, Hickman reports on the performance of corporate bonds between 1900 and 1943. He shows that the lower a bond's quality and rating, the higher the return from holding it.

This is a very important conclusion. Aside from arguing for high yield bond investing, it shows that even in this period, which included the Great Depression, corporate bond investing was quite successful. What that tells me is that despite the extremely tough economic climate, many corporations were able to make money and service their debt. This supports my belief that corporate investing represents an attractive strategy for uncertain times.

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The simplistic view says that because the world is uncertain today, we shouldn't venture forth. But I think it's much wiser to say that despite the uncertainty, we shouldn't automatically settle for assets believed to be entirely safe – especially since (a) flight of capital to their seeming safety has rendered their promised returns low and (b) that safety can prove to be illusory. Instead we should attempt to take control of our fate and strive for reasonable returns with the risks handled responsibly.

And one of the most interesting aspects of investing stems from the fact that you can't just do nothing. **In the investing world, even doing nothing is doing something.** It's choosing to stay with what you have rather than switch to what you could have. It's deciding to deal with the environment passively rather than actively. And it's avoiding the risky to stay with the seemingly safe. These are significant actions, and they must be undertaken on the basis of serious analysis and active decision making.

The challenge today is that while you can get less-than-safe things relatively cheap because the crowd is desperate for safety, the crowd's concerns are not imaginary. If you turn up the risk because you think the premium being paid for safety is too high, there are scenarios under which you will have made a big mistake. Because the probability of those scenarios occurring is materially above zero, we can't dispense entirely with caution.

The presence of arguments on both sides renders strategy setting difficult today. But when all the arguments are on the same side, making the choice clear, that clarity can lead the investing herd to create a bubble or a crash. Thus our criterion for moving ahead can't be that the way forward has to be obvious. I'm going to repeat what Charlie Munger told me about investing a couple of years ago, even though I used it in my last memo, too: "It's not supposed to be easy. Anyone who finds it easy is stupid."

The outlook certainly isn't so propitious (and assets aren't so cheap) as to call for investing aggressively. But at the same time, market conditions tell me this isn't a time for hiding under the bed. "Move forward, but with caution" -- that's my mantra today. The environment is uncertain, but we shouldn't find that paralyzing.

September 11, 2012

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Memo to: Oaktree Clients

From: Howard Marks

Re: It's All a Big Mistake

Mistakes are a frequent topic of discussion in our world. It's not unusual to see investors criticized for errors that resulted in poor performance. But rarely do we hear about mistakes as an indispensible component of the investment process. **I'm writing now to point out that mistakes are all that superior investing is about. In short, in order for one side of a transaction to turn out to be a major success, the other side has to have been a big mistake.**

There's an old saying in poker that there's a "fish" (a sucker, or an unskilled player who's likely to lose) in every game, and if you've played for an hour without having figured out who the fish is, then it's you. Likewise, in every investment transaction you're part of, it's likely that someone's making a mistake. The key to success is to not have it be you.

Usually a buyer buys an asset because he thinks it's worth more than the price he's paying. But the seller sells the asset because he thinks the price he's getting exceeds its value. It's pretty safe to say one of them has to be wrong. Strictly speaking, that doesn't have to be true, thanks to differences in things like tax status, timeframe and investors' circumstances. **But in general, win/win transactions are much less common than win/lose transactions. When the dust has settled after most trades, the buyer and seller are unlikely to be equally happy.**

I consider it highly desirable to focus on the topic of investing mistakes. First, it serves as a reminder that the potential for error is ever-present, and thus of the importance of mistake minimization as a key goal. Second, if one side of every transaction is wrong, we have to ponder why we should think it's not us. Third, then, it causes us to consider how to minimize the probability of being the one making the mistake.

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Investment Theory on Mistakes

According to the efficient market hypothesis, the efforts of motivated, intelligent, objective and rational investors combine to cause assets to be priced at their intrinsic value. Thus there are no mistakes: no undervalued bargains for superior investors to recognize and buy, and no over-valuations for inferior investors to fall for. **Since all assets are priced fairly, once bought at fair prices they should be expected to produce fair risk-adjusted returns, nothing more and nothing less. That's the source of the hypothesis's best-known dictum: you can't beat the market.**

I've often discussed this definition of market efficiency and its error. The truth is that while all investors are motivated to make money (otherwise, they wouldn't be investing), (a) far from all of them are intelligent and (b) it seems almost none are consistently objective and rational.

Rather, investors swing wildly from optimistic to pessimistic – and from over-confident to terrified – and as a result asset prices can lose all connection with intrinsic value. In addition, investors often fail to unearth all of the relevant information, analyze it systematically, and step forward to adopt unpopular positions. **These are some of the elements that give rise to what are called "inefficiencies," academics' highfalutin word for "mistakes."**

I absolutely believe that markets can be efficient – in the sense of "quick to incorporate information" – but certainly they aren't sure to incorporate it correctly. Underpricings and overpricings arise all the time. However, the shortcomings described in the paragraph just above render those mispricings hard to profit from. While market prices are often far from "right," it's nearly impossible for most investors to detect instances when the consensus has done a faulty job of pricing assets, and to act on those errors. Thus theory is quite right when it says the market can't be beat . . . certainly by the vast majority of investors.

People should engage in active investing only if they're convinced that (a) pricing mistakes occur in the market they're considering and (b) they – or the managers they hire – are capable of identifying those mistakes and taking advantage of them. Unless both of those things are true, any time, effort, transaction costs and management fees expended on active management will be wasted. **Active management has to be seen as the search for mistakes.**

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Behavioral Sources of Investment Error

As described above, investment theory asserts that assets sell at fair prices, and thus there's no such thing as superior risk-adjusted performance. But real-world data tells us that superior performance does exist, albeit far from universally. Some people find it possible to buy things for less than they're worth, at least on occasion. But doing so requires the cooperation of people who're willing to sell things for less than they're worth. What makes them do that? Why do mistakes occur? The new field of behavioral finance is all about looking into error stemming from emotion, psychology and cognitive limitations.

If market prices were set by a "pricing czar" who was (1) tireless, (2) aware of all the facts, (3) proficient at analysis and (4) thoroughly rational and unemotional, assets could always be priced right based on the available information – never too low or too high. In the absence of that czar, if a market were populated by investors fitting that description, it, too, could price assets perfectly.

That's what the efficient marketers theorize, but it's just not the case. Very few investors satisfy all four of the requirements listed above. And when they fail, particularly at number four – being rational and unemotional – it seems they all err in the same direction at the same time. That's the reason for the herd behavior that's behind bubbles and crashes, the biggest of all investment mistakes.

According to the efficient market hypothesis, people study assets, assess their value and thereby decide whether to buy or sell. Given its current value and the outlook for change in that value, each asset's current price implies a prospective return and risk level. Market participants engage

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in a continuous, instantaneous auction through which market prices are updated. The goal is to set prices such that the relationship between each asset's potential return and risk – that is, its prospective risk-adjusted return – is fair relative to all other assets.

Inefficiencies – mispricings – are instances when one asset offers a higher risk-adjusted return than another. For example, A and B might seem equally risky, but A might appear to offer a higher return than B. In that case, A is too cheap, and people will sell B (lowering its price, raising its potential return and reducing its risk) and buy A (raising its price, lowering its potential return and increasing its risk) until the risk-adjusted returns of the two are in line. That condition is called "equilibrium."

It's one of the jobs of a functioning market to eliminate opportunities for extraordinary profitability. Thus market participants want to sell overpriced assets and buy underpriced assets. They just don't do so consistently.

Most investment error can be distilled to the failure to buy the things that are cheap (or to buy enough of them) and to sell the things that are dear. Why do people fail in that way? Here are just a few reasons:

- Bias or closed-mindedness – In theory, investors will shift their capital to anything that's cheap, correcting pricing mistakes. But in 1978, most investors wouldn't buy B-rated bonds – at any price – because doing so was considered speculative and imprudent. In 1999, most investors refused to buy value stocks – also at any price – because they were deemed to lack the world-changing potential of technology stocks. Prejudices like these prevent valuation disparities from being closed.

- Capital rigidity – In theory, investors will move capital out of high-priced assets and into cheap ones. But sometimes, investors are condemned to buy in a market even though there are no bargains or to sell even at giveaway prices. In 2000, in venture capital, there was "too much money chasing too few deals." In 2008, CLOs receiving margin calls had no choice but to sell loans at bankruptcy prices. Rigidities like these create mispricings.

- Psychological excesses – In theory, investors will sell assets when they get too rich in a bubble or buy assets when they get cheap enough in a crash. But in practice, investors aren't all that cold-blooded. They can fail to sell, for example, because of an unwarranted excess of optimism over skepticism, or an excess of greed over fear. Psychological forces like greed, fear, envy and hubris permit mispricings to go uncorrected . . . or become more so.

- Herd behavior – In theory, market participants are willing to buy or sell an asset if its price gets out of line. But sometimes there are more buyers for something than sellers (or vice versa), regardless of price. This occurs because of most investors' inability to diverge from the pack, especially when the behavior of the pack is being rewarded in the short run.

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The foregoing goes a long way to support Yogi Berra's observation that "In theory there is no difference between theory and practice. In practice there is."

Theory has no answer for the impact of these forces. **Theory assumes investors are clinical, unemotional and objective, and always willing to substitute a cheap asset for a dear one. In practice, there are numerous reasons why one asset can be priced wrong – in the absolute or relative to others – and stay that way for months or years. Those are mistakes, and superior investment records belong to investors who take advantage of them consistently.**

A Case In Point

Bruce Karsh and his distressed debt team have averaged returns of roughly 23% per year before fees and 18% after fees for more than 23 years without any use of borrowed capital. All eighteen of their funds have been profitable, and money-losing years have been quite scarce. **I consider this record nothing short of aberrant. You're simply not supposed to be able to make that kind of return for that long, and especially without the use of leverage.** Investing skill aside, what made it possible?

- Is it because it's called "distressed debt"? That can't be it; there's nothing in a name.

- Is it because distressed debt is an undiscovered market niche? That can't be it either; distressed debt may have been little-known and under-appreciated when we raised our first fund in 1988. But there can't be many institutional investors who haven't heard of distressed debt by now; certainly the secret's out.

- Can it be because people are unwilling to venture into the sordid world of default and bankruptcy? That might have been the case in the 1980s, but today most investors will do anything to make a buck.

So, then, why? I think it's largely a matter of mistakes.

At our London client conference in April, I listened as Bob O'Leary, a co-portfolio manager of our distressed debt funds, described his group's work as follows: **"Our business is often an examination of flawed underwriting assumptions."** In other words, it's their *raison d'être* to profit from the mistakes of others.

Hearing Bob put it that way gave me the immediate inspiration for this memo. The active investor only achieves above average performance to the extent that he can identify and act on mistakes others make. The opportunities invested in by our distressed debt funds are a glaring example. What's the process through which the mistakes arise?

- The analysis performed by a company's management, or the due diligence performed by a prospective acquirer, understates the stresses to which a business will be subjected

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and/or overstates its ability to withstand them. Using Bob's terminology, they employ overly optimistic underwriting assumptions, particularly in good times.

- As a result, debt is piled on that turns out to be more than the company can service when things turn down.

- Just as companies and acquirers are often too optimistic in good times, debt holders tend to become too pessimistic in bad times. As a result, they become willing to sell the debt of financially distressed companies at prices that overstate the negatives and thus are too low, giving us the potential for superior returns with less-than-commensurate risk.

All three of these are foundational elements for success in distressed debt investing.

- The first two contribute to the creation of high-potential-return situations. **If no one underestimated risk and thus overloaded capital structures with debt, there wouldn't be many defaults and bankruptcies.** We call these lending decisions "the unwise extension of credit" or, alternatively, "stacking wood for the bonfire."

- **And if no one panicked in response to negative developments and scary prospects, and thus sold out too cheaply, there would be no reason to expect higher risk-adjusted returns from distressed debt than from anything else.**

Many of the biggest mistakes made in the business and investment worlds have to do with cycles. People extrapolate uptrends and downtrends into eternity, whereas the truth is that trends usually correct: rather than go well or poorly forever, most things regress to the mean. The longer a trend has gone on – making it appear more permanent – the more likely it usually is that the time for it to reverse is near. And the longer an uptrend goes on, the more optimistic, risk-tolerant and aggressive most people become . . . just as they should be turning more cautious.

So, for example, when the economy is thriving and profits are rising, people conclude that company operations should be expanded, acquisitions should be undertaken, and more debt can be borne. That same bullishness causes providers of debt to bestow larger amounts of money on weaker borrowers, at lower interest rates and with looser covenants. **Thus cycles are big sources of error, and pro-cyclical behavior is one of the biggest destroyers of capital.**

The point here is that one of distressed debt investing's great advantages is that it embodies an anti-error business model. Distressed debt investors . . .

- . . . almost never invest in companies where everything's going well and investors are enthralled; there's no such thing as a financially distressed company that everyone loves;

- . . . by definition rarely invest before the emergence of significant problems, hopefully meaning fewer negative surprises are left in the bag;

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- . . . are in business to buy debt at significant discounts, often from forced or highly motivated sellers. "Distressed debt at par" is an oxymoron and, at least in theory, distressed debt investors are bargain hunters whose ardor rises as prices fall . . . not the reverse like so many other investors.

It's not that distressed debt investors can't make mistakes; just that their likelihood of doing so is reduced by the very nature of their investment activity. Anything that decreases an investor's chance of erring – even an involuntary safety mechanism – works to his advantage.

Distressed debt is, by definition, an area where:

- borrowers and lenders have made grave mistakes,
- at least some of those mistakes have come to light, and
- the stress, unpleasantness and uncertainty that attend a downturn often make debt holders sell out at the wrong time and price.

In other words, it's an area where negativism and error are crystallized, maximized and magnified. And nothing is more likely to make an asset too cheap than excessively negative psychology.

When we're out raising a new fund, investors often ask whether people have wised up such that they'll no longer make these mistakes. Thus far the answer has been no, and in fact there's no reason to believe there's been any progress at all up the learning curve. The proof? The distressed debt opportunities that built up in 2005-07 and flowered in the crisis of 2008 were some of the best we've ever encountered, and certainly the most plentiful.

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<u>One Classic Mistake</u>

I want to take this occasion to touch on a favorite thought of mine. Investing consists of just one thing: choosing which assets to hold in order to profit in the future. Thus there's no getting away from the need to make decisions concerning the future.

In deciding which future to prepare for, you need two things: (a) an opinion about what's likely to happen and (b) a view on the probability that your opinion is right. Everyone knows about the former, but I think relatively few think about the latter.

In short, most people believe in their opinions. "Of course they do," you might say. "If they didn't have faith in their opinions, they wouldn't hold them." And that's the point. **Everyone's entitled to his or her opinion. But one of our favorite sayings around Oaktree states that "it's one thing to have an opinion, and something very different to act as if it's right."**

Clearly, our opinions are our opinions because we believe them. (We rarely hear anyone say "Here's what I think, and I'm probably wrong.") But just as clearly, we believe (or should believe) more in some of our opinions than others. The probability of being right about the

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weather tomorrow in California, a B-rated bond issuer paying its debts, and Greece being part of the European Union in three years is different in each case. Few people would take issue with that.

If that's true, the reliance we place on each prediction – and the action we take in that reliance – should vary. **Yet, as I see it, most people who believe in forecasting come up with their opinions and then act on them with equal amounts of confidence. This is one of the greatest sources of investment error.**

It's perfectly okay to say you don't know something. It's also okay to say you have a view on what might happen but you're not so sure you're right. In that case you're likely to moderate your actions and emerge intact even if you turn out to be wrong. As Mark Twain put it, "It ain't what you don't know that gets you into trouble. It's what you know for sure that just ain't so." Or as Treasury Secretary Robert Rubin told the 1999 graduating class of the University of Pennsylvania, ". . . understanding the difference between certainty and likelihood can make all the difference." **Forecasting error is much less likely to prove fatal in the absence of excess conviction.**

I've mentioned before the frequency with which I feel I come across a particularly apt quote just when I need it for a memo in the making. Thus I'll close this section with one on the present subject from Yaser Anwar's "Exclusivo Listserv" of May 29:

> . . . while every one well knows himself to be fallible, few . . . admit the supposition that any opinion, of which they feel very certain, may be one of the examples of the error to which they acknowledge themselves to be liable. (John Stuart Mill, "On Liberty," 1859)

In other words, nearly everyone accepts that his or her opinion might be wrong . . . just not this time.

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A Big Mistake in the News

A vast amount of ink and airtime is being devoted to the subject of JP Morgan's loss of multiple billions of dollars in its effort to hedge credit risk. People – and especially politicians – have seized on the loss to prove that Jamie Dimon isn't perfect and bank regulation is inadequate.

Clearly, JP Morgan made a mistake – or more than one. Jamie Dimon has described the hedge as "poorly designed," "sloppy" and "a terrible, egregious mistake." How could that be the case – and how could the result be such an enormous loss – in a field as inherently defensive as hedging? The answer's simple: as Charlie Munger once said to me about investing, "It's not supposed to be easy. Anyone who finds it easy is stupid." The truth is, it's hard to get it all right all the time, and that's just as true of hedging as it is of investing.

Hedging sounds easy: you own something, so you sell something to lessen the impact if your investment performs badly. But there are lots of ways to be wrong.

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- **Hedging with the wrong thing**. Let's say you own some A but don't want to suffer the full impact if its price declines. Why not just sell short an equal amount of A to hedge? The answer is that owning A and simultaneously shorting A is the same as not owning anything. The long and short positions exactly offset each other, meaning you can't make (or lose) any money. That's not hedging, that's negating.

  You want to dampen fluctuations, not eliminate them. So you hedge by selling short something you think will move in sympathy with A, but not exactly. The hope is that by doing it very well, you can eliminate more of the risk of loss than you do of the potential for gain. That's the meaning of a "positive arbitrage."

  Buying Ford stock and simultaneously shorting Ford accomplishes nothing. So perhaps you buy Ford and short General Motors, which you think will perform less well, going up less than Ford or down more. But by transacting in two different assets, you by definition introduce the possibility of an unfavorable divergence. This is called "basis risk." In short, it's the risk that the behavior of the two assets relative to each other will differ from what you expected. For example, Ford goes down, giving you a loss, but rather than go down in sympathy (which would give you an offsetting gain on the short position), a favorable development at GM makes it go up, compounding your loss as the hedge goes against you.

- **Hedging in the wrong amount.** You hold 1,000 Ford shares, and you think that – given their likely relative performance – you should short 500 GM shares to hedge your risk. But it turns out that while they move in opposite directions, their relative movements aren't what you expected. Thus you either hedged too much (and thus you lose more on the hedge than you make on the underlying position) or you hedged too little (so the protection you sought doesn't materialize). There's no sure way to choose the right "hedge ratio."

- **Time risk.** The two sides of the position may work as you expect, but not when you expect. Thus the hedge may fail to work in the short run, meaning the loss on one side of the hedge may occur before the gain on the other, in which case you'll look flat-out wrong for a while. And if you're required (by regulation, margin call, capital withdrawals, etc.) to close out the position at that point, the result could be quite negative.

- **Insufficient liquidity.** If conditions or goals change, you might want to adjust or remove your hedge. But market developments in terms of liquidity might make it impossible to alter one or both sides of the position.

In other words, hedging consists of an attempt to cede some potential gain in exchange for a greater reduction in potential loss. It's a very reasonable course of action. But it doesn't necessarily have to work.

In attempting to set up effective hedges, there's little choice but to extrapolate past relationships between things. If they could be counted on to persist unchanged, there'd be little risk of being

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wrong about which asset to hedge with, how much to hedge, or whether the two sides of the hedge will move simultaneously. But, just like everyone else in the investment world, would-be hedgers must understand that relationships that held in the past can't be counted on to hold in the future.

And let's remember, as *The New York Times* wrote on May 26, "Yes, Morgan lost big – but, as Mitt Romney has pointed out, someone else won." That's the bottom line on all investing. There's generally a right side and a wrong side to every investment. Which will you be on?

* * *

Risk control isn't an action so much as it is a mindset. It stems largely from putting at least as much emphasis on avoiding mistakes as on doing great things.

Risk control – and consistent success in investing – requires an understanding of the fact that high returns don't just come along for the picking; others must create them for us by making mistakes. And looked at that way, we'll do a better job if we force ourselves to understand the mistake we think is being made, and why.

Risk control requires that we avoid the analytical and psychological errors to which others succumb.

In particular, risk control requires that we temper our belief in our opinions with acceptance of our fallibility.

In the end, superior investing is all about mistakes . . . and about being the person who profits from them, not the one who commits them.

June 20, 2012

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Memo to: Oaktree Clients

From: Howard Marks

Re: Déjà Vu All Over Again

What good is history? After all, it's in the past.

The truth is, history can be one of our greatest aids . . . in investing as in life. Here in the fifth decade of my investment career, I feel a lot of my ability to add value comes from the amount of history I've witnessed and the significance I've extracted from it.

Regular readers know I often include time-tested quotations in my memos. Why wouldn't I? They've endured precisely because they're so relevant and so well put. Why try to reinvent the wheel, rewriting them, only to come up short? On this subject, several stand out. I've used them all before, some more than once:

> Those who cannot remember the past are condemned to repeat it. (George Santayana)
>
> The farther back you can look, the farther forward you are likely to see. (Winston Churchill)
>
> History doesn't repeat itself, but it does rhyme. (Mark Twain)
>
> Contributing to . . . euphoria are two further factors little noted in our time or in past times. The first is the extreme brevity of the financial memory. In consequence, financial disaster is quickly forgotten. In further consequence, when the same or closely similar circumstances occur again . . . they are hailed by a new, often youthful, and always supremely self-confident generation as a brilliantly innovative discovery . . . . There can be few fields of human endeavor in which history counts for so little as in the world of finance. Past experience, to the extent that it is part of memory at all, is dismissed as the primitive refuge of those who do not have insight to appreciate the incredible wonders of the present. (John Kenneth Galbraith)

One of the greatest differences between humans and animals is supposed to lie in the fact that we can learn other than through direct experience. We don't have to sit on a hot stove to learn not to do it. We can learn from history and from lessons passed on by our predecessors – things they experienced or learned from others in turn – so that we needn't experience them ourselves. But to enjoy this benefit, we must pay heed to the people and events that preceded us.

As Twain said, the events of history don't repeat exactly. It's rarely the very same thing over and over. In investing, for example, the duration and amplitude of fluctuations are rarely the same from cycle to cycle. (It drives me crazy when people say, "high yield bonds tend to default around the second anniversary of their issuance." That happened to be the average for one particular period, but there's no reason for it to be true, and thus no reason it should be a useful rule going forward.)

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But as Twain also said, there are themes that rhyme. It's what I would call "tendencies" or "behavioral patterns" that present the important lessons. The tendency of investors to overlook or forget the past is noteworthy. So is their habit of succumbing to emotion and swallowing tall (but potentially lucrative) tales. In particular, people tend to forget the cyclical nature of things, extrapolate past trends to excess, and ignore the likelihood of regression to the mean.

The tech bubble may not recur anytime soon. No online grocer may ever again sell at 200 times revenues. There may never be another CDO-squared or SIV. Those aren't the things that matter. **But there's sure to be another cycle, another bubble and another crisis. There'll be another time when people overpay for exciting investment ideas because their future appears limitless, and then a time of disillusionment and price collapse. There'll be another period when leverage is embraced to excess, and then, consequently, a period when it gets people killed. And there'll certainly be another time when people can only imagine the possibility of gain, and then one when – after huge sums have been lost – they can think only of further declines.**

These are the kinds of things that rhyme. If we stay alert, we can anticipate and recognize them and thus avoid the losses and opportunity costs they bring so reliably.

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The Death of Equities

Sometimes the ideas for my memos come from the gradual accretion of insights over a long period of time, and sometimes they come from a single inspiration. This time it's the latter.

Lying in bed sleepless on Sunday the 11th, while on a business trip to South America, I dug into my Oaktree bag for something to read. I came across a reprint of "The Death of Equities" from *BusinessWeek* magazine of August 13, 1979. I'd spoken about it over lunch with Josh Kuntz of Rivulet Capital, and he was good enough to send it to me at my request. As I read it thoroughly for the first time in 33 years, my wife Nancy's battle cry rang out: "This calls for a memo."

This was a seminal article, signaling a tectonic shift in investing. Here was its thrust:

- Seven million shareholders have defected from the stock market since 1970.
- The Labor Department has interpreted ERISA as giving institutions that invest pension money the ability to go beyond listed stocks and high grade bonds and into "shares of small companies, real estate, commodity futures and into gold and diamonds." Thus they were "pouring money into . . . mortgage-backed paper, foreign securities, venture capital, leases, guaranteed insurance contracts, indexed bonds, stock options, and futures."
- "Whereas stocks once made up 80% of mutual fund assets, today that figure has slumped to less than 50%."
- "Few corporations can find buyers for their stocks."
- All of these things were the result of thirteen years of rapid inflation and ten years of returns on equities averaging less than 3% per year.
- "The Labor Department ruling is just one more in a nearly endless string of unhealthy things that have happened to the stock market over the past decade."
- "This 'death of equity' can no longer be seen as something a stock market rally – however strong – will check."
- "For better or for worse, then, the U.S. economy probably has to regard the death of equities as [a] near-permanent condition – reversible some day, but not soon."

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According to *BusinessWeek*, then, it was all over for equities. No one would ever buy them again.

> Whatever caused it, the institutionalization of inflation – along with structural changes in communications and psychology – have killed the U.S. equity market for millions of investors.

What a negative article, ostensibly the death knell for an entire market. **What was the shift that it marked? Simply this: the end of a lost decade for equities and the beginning of the greatest bull market in history.**

There's literally a lifetime of memos in that one magazine article, but I'll spend a little less than that dissecting it. I hope you'll find these comments useful.

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Yogi Lives

Lawrence "Yogi" Berra was a baseball catcher and an integral part of the New York Yankees' successful dynasty in the middle of the twentieth century. While a great player, he was also the undisputed king of the tortured phrase or malapropism. Here are a few:

- "It ain't over 'til it's over."
- "Ninety percent of the game is half mental."
- "When you come to a fork in the road, take it."
- "Always go to other people's funerals, otherwise they won't go to yours."

In fact, Yogi supplied the title for this memo, saying "It's déjà vu all over again." Rising to his own defense, however, he denied the tendency for which he is so well known, saying, "I really didn't say everything I said."

Do people really say things like these? Or was it just Yogi? Well, the writer of "The Death of Equities" gave him stiff competition:

> . . . with ever-escalating real estate prices . . . land is a hedge against loss.

One of the few things I'm sure of is that no price will be "ever-escalating."

> Individuals . . . are flocking into money market funds to nail down high rates.

In a money-market fund, the period for which you nail down a rate of interest is measured in just days. In fact, the prime drawback of holding short-term paper is its failure to lock in a yield. One of the biggest mistakes I've witnessed took place when people invested in one-year certificates of deposit in 1981 at 16%, rather than multi-year CDs at rates a little lower.

> For investors . . . low stock prices remain a disincentive to buy.

What the writer is saying is that low prices point up how badly stocks have done over the preceding period and thus discourage investors from participating in the market. This is totally illogical, but in the investment world we hear things like it every day:

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- "Everyone knows XYZ is underpriced." If everyone knows it's underpriced, why haven't they bought it and forced up its price?

- "Nobody will touch ABC; it's too risky." If they know it's risky – presumably because its price is too high – and are shunning it or selling, why hasn't its price settled down to a level where it's safe?

The writer continued:

> Indeed, the average stock price is now about 60% of the replacement value of the underlying assets . . .
>
> . . . companies have jumped on low stock prices to set off the biggest takeover binge in history . . .
>
> . . . buying at these prices is cheaper than building.

The writer would look smarter today if he had recognized the implications of the fact that stocks were selling for less than their underlying asset value, and that companies were buying up other companies for that reason. But he didn't. He also didn't ask why, if it was smart for companies to buy other companies' shares, it didn't make sense for investors to buy those same shares. (Note: it was largely the ability to buy companies cheaper in the stock market than you could build them that gave pioneers of leveraged buyouts such as KKR, Apax and Warburg Pincus the great returns on their purchases in the 1970s.)

> It would take a sustained bull market for a couple of years to attract broad-based investor interest and restore confidence.

This one reminds me of my absolute favorite Yogi-ism: "Nobody goes [to that restaurant] anymore. It's too crowded." Wait a minute: how can a restaurant be crowded if nobody goes there?

Likewise, in this case, according to the writer, it will take a bull market to attract investor interest and confidence. That sounds reasonable. But isn't investor interest and confidence a prerequisite for a bull market? Without it, how can a bull market get started?

The answer is that when prices are low enough, stocks can begin to rise without help from a full-fledged bull market, just as when they're high enough, stock prices can collapse under their own weight.

The bottom line here is simple, and I'm thoroughly convinced of it: **Common sense isn't common. The crowd is invariably wrong at the extremes. In the investing world, everything that's intuitively obvious is questionable and everything that's important is counter-intuitive. And investors prove repeatedly that they can be less logical than Yogi.**

The Penalty of Youth

Let's think back to Galbraith's statement that "Past experience . . . is dismissed as the primitive refuge of those who do not have insight to appreciate the incredible wonders of the present." In other words, when a hot new investment fad gets rolling and an idea is elevated to bubble status,

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those with memory of the past – who might point out that the merits are overstated and the price is too high – are dismissed as "too old to get it."

The Money Game, written in 1968 by George Goodman under the pseudonym Adam Smith, included among its characters the Great Winfield. Even though he was the dean of the brokerage office, he was able to make money in the hot stocks of the day. When asked how, he said, "My solution to the current market: kids. This is a kids' market. . . . The strength of my kids is that they are too young to remember anything bad, and they are making so much money they feel invincible." This exactly parallels Galbraith's observation.

In other words, veterans are often held back by experience and historic norms, and thus they miss out on the "new thing." Only those who are free of those strictures can participate fully in the latest miracle . . . as long as it lasts.

"The Death of Equities" leaned heavily on this line of reasoning, but in the opposite direction. You have to be young, it said, not to comprehend the new miracle, but to note the obsolescence of the old standby:

> Only the elderly, who have not understood the changes in the nation's financial markets, or are unable to adjust to them, are sticking with stocks.
>
> Today, the old attitude of buying solid stocks as a cornerstone for one's life savings and retirement has simply disappeared. Says a young U.S. executive: "Have you been to an American stockholders' meeting lately? They're all old fogeys. The stock market is just not where the action's at."

And what consistently provides the foundation for this insistence that the game has permanently changed? Four of the most dangerous words in the investment world: it's different this time.

When investors choose to believe that historic valuation standards have become irrelevant; that one industry or product can maintain superior growth and profitability in perpetuity; or that one asset or market can outperform all the others forever regardless of how high its price goes in the process – that is, that trees can grow to the sky – the bubble is invariably undergirded by a steadfast belief that it's different this time. Here's the support *BusinessWeek* advanced:

> Says Alan Coleman, dean of Southern Methodist University's business school, "We have entered a new financial age. The old rules no longer apply."

When you see or hear words like these, you should go on high alert. Sometimes the world changes and the past becomes irrelevant, but most of the time I'll take the other side of that bet.

<u>Getting to the Truth</u>

In some ways, understanding the market is like mathematics. You don't have to be knowledgeable regarding the specifics of the underlying subject matter to know whether a conclusion makes sense. You just have to be able to apply principles, tell logic from illogic, and exclude the deleterious effects of emotion and psychology.

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Let's dissect "The Death of Equities" in that vein. What it says is that inflation has eaten into the outlook for the economy and companies, and there's no hope for improvement. Thus people have been throwing in the towel and selling stocks. Other things have come into vogue, attracting the capital that used to be invested in stocks. Mutual fund investors have turned their attention elsewhere. Most corporations can't issue new equity because of the dearth of buyers. Stocks have gone through a decade in which their absolute return was negligible and their real return was negative. They're selling below replacement value, showing how poor psychology is. They face a litany of negatives, without any real possibility of relief; that's the writer's "nearly endless string of unhealthy things that have happened to the stock market over the past decade."

The negative factors are clear to the average investor. And from them he draws negative conclusions. But the person who applies logic and insight, rather than superficial views and emotion, sees something very different.

He sees an asset class that is unloved. He sees stocks that have cheapened for a decade – once dividends have been subtracted from the returns, and especially when prices are viewed relative to earnings. He sees securities that are priced below the value of the underlying assets on which they have a claim. He sees outflows of capital that, rather than being a negative, have lowered prices and can give rise to a strong price rebound when and if they reverse. Most of all, he sees an asset class to which no optimism is being applied.

If I were asked to name just one way to figure out whether something's a bargain or not, it would be through assessing how much optimism is incorporated in its price.

- No matter how good the fundamental outlook is for something, when investors apply too much optimism in pricing it, it won't be a bargain. That was the story of the Internet bubble; the Internet was expected to change the world, and it did, but when the optimism surrounding it proved to have been excessive, stock prices were decimated.

- Conversely, no matter how bad the outlook is for an asset, when little or no optimism is incorporated in its price, it can easily be a bargain capable of providing outsized returns with limited risk.

- Even with a bad "story," the price of an asset is unlikely to decline (other than perhaps in the very short term) unless the story deteriorates further or the optimism abates. And if there's no optimism built into its price, certainly the latter can't happen.

It was primarily this line of reasoning that allowed me to feel positive in the teeth of the financial crisis in late 2008. The outlook was as bad as it could get – total meltdown – and prices clearly incorporated zero optimism. How, then, could buying be a mistake (providing the world didn't end)?

In "The Tide Goes Out" (March 18, 2008), I described the three stages of a bear market. The third stage occurs when everyone becomes convinced that things can only get worse. Invariably this represents a great buying opportunity. And certainly it was such a level of negativity that "The Death of Equities" documented.

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So the insightful, unemotional, contrarian investor will read an article like "The Death of Equities" and conclude that things are about as bad as they can get. And if things can't get worse, they'll probably get better eventually. It's no more scientific than that. **If in mid-1979 people thought things could only get worse, there was no optimism to evaporate. That meant the litany of negatives actually foreshadowed something very different: The Rebirth of Equities. And that's exactly what happened.**

The S&P 500 gained 18.4% in 1979, the year "The Death of Equities" was written, and went on to average 18.9% a year for the next 20 years. There were only two down years during that span: a measly 4.9% in 1982 and 3.1% in 1990. This has to have been the best 21-year period in the modern era. **Importantly, the stage had been set for this rise in 1979 by the accumulation and excessively pessimistic discounting of negatives.**

Way back in February 1993 – it would be yellowed by now, except that electronic copies don't turn yellow – I wrote a memo entitled "The Value of Predictions, or Where'd All This Rain Come From?" One of the things it discussed was the tendency of forecasters to extrapolate, especially when a trend has gone in one direction for a long time. They tend to conclude it will go that way forever . . . and increasingly so just as it becomes more likely to revert to the mean.

In the memo, I mentioned that California had undergone a five-year drought. And that scientists had concluded from looking at ancient trees that a fifty-year drought couldn't be ruled out. And that torrential rainstorms had begun just a few months later.

That's the way it goes. As something goes in one direction for a while, people conclude increasingly that it always will . . . often just when the likelihood grows that it will reverse instead. And that was the greatest shortcoming of "The Death of Equities." **The extrapolator threw in the towel on stocks, just as the time was right for the contrarian to turn optimistic. And it will always be so.**

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Go Around, Come Around

It's easy with the benefit of hindsight to see that the writer of "The Death of Equities" was too negative at the bottom. But being too negative isn't the only pitfall. Most people also tend to be too positive at the top.

The bookend to "The Death of Equities" is the work published in the 1990s by Jeremy Siegel, a highly respected professor of finance at the Wharton School and the author of *Stocks for the Long Run*. Through his work, Siegel showed that in almost two centuries, there had never been a 30-year period in which stocks didn't outperform cash, bonds and inflation, and very few such ten-year periods. Based on the consistency of this record, Siegel labeled stocks very safe (as long as you hold them for the long run). In fact, I heard him tell an audience that risk-averse investors should have 80-odd percent of their net worth in stocks, and risk-tolerant investors should have well over 100%.

Siegel's research contributed to the fervor for equities that characterized the 1990s. And as stocks did better, the appetite for them rose. The period 1995-99 saw a compound average return of 28.6% on the S&P 500, the greatest five years in history. The ardor this reflected was explosive. Arguments were advanced to the effect that stocks – and tech stocks in particular – could only rise, and that they had to rise faster than anything else.

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Again the enemy was extrapolation. The average annual return had risen from about 10% for 1929 to 1980, to 20.4% for 1980 to 1989, and to 28.6% for 1995 to 1999. But investors drew the wrong conclusions, the inverse of those of "The Death of Equities": they thought the good times could only roll on. However:

- They forgot that in the long run the gains of stocks stem primarily from growth in corporate profits, and that profits don't grow anywhere near 20-30% a year.
- They ignored the possibility that the ultra-high returns of the 1990s had borrowed from future returns.
- They failed to wonder whether the adoration of stocks had lifted their prices to dangerous heights.
- They asked "What has been the historic return on stocks?" and bought based on the favorable answer. But they didn't ask "What has been the historic return on stocks after they're risen almost 19% a year for 21 years?" or "What has been the historic return on stocks if bought at price/earnings ratios in the 30s?" The answer to these latter questions would have been very different.

Extrapolation was at the root of these omissions, disregarding the possibility that events had changed the environment and thus the outlook.

What did I say about the drought and rain? Of course, after stocks had done well enough in the 1990s to encourage maximum bullishness and maximum allocations, their returns were primed for regression to the mean. **And so stocks lagged bonds for the first time in the thirty years ending late last year.**

What's the lesson here? Not that history always repeats, or that it never repeats. And not that stocks can only do well or only do poorly. But rather that the trends that lead up to a point in time have a profound effect on people's thinking and on the environment, and thus on the trends that will occur thereafter. That price gains increase danger and price declines increase opportunity. And that most investors and observers tend to be too positive at the top and too negative at the bottom.

These lessons are invaluable. The study of history makes them clear, just as ignorance of history makes them potentially lethal.

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<u>One More Round</u>

I'm amazed at how often, just as I'm about to complete a memo, I come across the right coda with which to bring it to an end. This time I found it in *The Wall Street Journal* of March 12, just a day after I'd started writing.

In an article entitled "Why Stocks Are Riskier than You Think," Zvi Bodie and Rachelle Taqqu go through – in my opinion – another Death of Equities-like recitation. I won't discuss the article in depth, but I will point out some of its illogicalities:

- It says "despite the assurances of the financial industry, stocks are *always* a risky investment." This isn't very helpful. The outlook for stocks is always uncertain, perhaps even risky, but it's essential to note that they aren't always <u>equally</u> risky. They're riskier

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when valuations are high and prices embody great optimism, and they're much less risky when the reverse is true (see 1979).

- It says "the longer you hold [stocks], the better your chances of getting blindsided by a downturn." I find this highly misleading. The longer you do anything, the better the chance that something bad will happen. But that doesn't mean you shouldn't do it, or that it's safer to do it for just a short time. Maybe the participant for a short period will time it just wrong and run straight into a bad patch. And maybe by holding stocks for just a short time he'll miss out on the long-term benefits. The question isn't whether something bad can happen to the long-term investor in equities, but what's likely to happen overall, considering good times as well as bad. And whether, given his particular circumstances, an investor can survive the bad while waiting for the good to arrive.

- In deciding how much risk a prospective retiree can bear, the authors make reference to not wanting to see 2008-style losses of 30% to 40% ever again. But using the worst time in generations to argue against investing in stocks is no better than using the best time to argue for it. What matters isn't the best or worst possible outcome (or even the single most likely outcome). What matters is the range of outcomes and their respective probabilities and consequences. No one observation provides a very useful perspective.

- The strategy the authors spend the most time recommending is what's called a "zero-cost collar" where, for example, you buy an S&P 500 ETF at $136, buy a put at $116 (ensuring against losses beyond that) and get the money with which to buy the put by selling a call at $143 (giving up any gains above that). The good news is that one option pays for the other so the collaring is free, and that your downside is limited to 15%. But the bad news is that to go with your maximum loss of 15%, you have a maximum gain of 6%. I'm not crazy about that tradeoff. The benefits of the strategy seem largely illusory and the posture excessively defensive.

This article isn't without merit. My complaint is that it's simplistic – and the last thing that should be done regarding investing is to make it appear simple. It's also biased to the negative side at a time when stocks appear reasonably situated.

- Stocks have returned almost nothing over the last twelve years.
- For the first time, the 30-year return on stocks has been below the return on bonds.
- The price of the S&P 500 index is still 8% below its 2000 high, while its companies' earnings per share have nearly doubled over the intervening period.
- Thus the p/e ratio on the S&P 500 is in the low double digits, a substantial discount from the post-World War II norm and down from the low 30s at the peak.
- Just as in 1979, institutional investors have lost interest in equities and are looking increasingly to alternatives. The love affair with equities that ran from 1979 to 1999 seems to be over.
- Allocations to equities have been cut substantially in favor of bonds and alternatives. For example, according to *What I Learned This Week* of March 15, "The ICI reports that $408 billion was redeemed from U.S. equity mutual funds between 2007 and 2011 and $792 billion was invested in U.S. bond funds in the same period."

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The story isn't as hopeless as it was in 1979, but it is uniformly negative. Thus, while I don't expect an equity rally anything like what followed on the heels of "The Death of Equities," I don't find it hard to conjure up positive scenarios.

* * *

The media usually gets it wrong, and the pieces that get the most attention tend to be highly sensational and to get it the most wrong. This is one of the many reasons why the deck is stacked against the average investor. "The Death of Equities" would have gotten you out or kept you out of the stock market at very attractive levels in 1979. Professor Siegel's work would have gotten you to increase your holdings at high prices in the 1990s. And this new article argues against stocks at a time when valuations are below average, investors have turned against them, and companies are doing well.

The great irony here is that the extrapolator actually thinks he's being respectful of history: he's assuming continuation of a trend that has been underway. But the history that deserves his attention isn't the recent rise or fall of an asset's price, but rather the fact that most things eventually prove to be cyclical and tend to swing back from the extreme toward the mean.

History amply demonstrates the tendency of investors and commentators alike to be pessimistic when the negatives collect, depressing prices, and optimistic when things are going well and prices are soaring. The lessons of history are highly instructive. Applying them isn't easy, but they mustn't be overlooked.

March 19, 2012

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Memo to: Oaktree Clients

From: Howard Marks

Re: Assessing Performance Records – A Case Study

What are the non-negotiable requirements for accurately assessing investment performance? I'd say:

- a record spanning a significant number of years,
- a period that includes both good years and bad, enabling us to assess performance under a variety of circumstances, and
- a benchmark or peer universe that makes for a relevant comparison.

The other day, at an event for alumni and other constituents of the University of Pennsylvania, president Amy Gutmann reviewed the performance of the university during the financial crisis. In the process, she had some kind words for Penn's Investment Board, which I chaired for the ten years from June 30, 2000 through June 30, 2010. Thinking about it afterward, I realized that I should share with you the story of Penn's endowment and its lessons. Penn has agreed that I may do so. The data is a little out of date, but the lessons aren't.

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A Little Background

For roughly two decades starting in the late 1970s, Penn's endowment was led by John Neff, probably the most respected investor of that era, in strict adherence to the principles of value investing. Thus, its fortunes fluctuated along with the performance of that school of thought. It did extremely well in the 1980s, when value beat growth and Penn outperformed the value school, and it lagged a little in the early '90s, when those trends reversed.

Penn's portfolio completely lacked exposure to growth stocks, tech stocks, buyouts or venture capital. Thus it fell behind substantially in fiscal 1995 through fiscal 1999, when it gained 16% a year but the average of its peers gained about 23%. Then, in fiscal 2000, the last year before I became chairman, value stocks stagnated, tech stocks soared, and returns on venture capital ranged well into triple digits. Penn lost 2% while its peers averaged returns in the twenties and those with investments in the right venture capital funds made twice that. Penn constituencies such as alumni/donors and the administration were very unhappy in those years, despite the endowment's high absolute overall return.

Penn appointed its first Chief Investment Officer in the late 1990s and began to diversify the portfolio beyond value. Having been on the Investment Board for a few years, I became its chairman at the start of fiscal 2001. The events of the next decade, along with the decisions made and actions taken, provide a number of valuable lessons.

What Matters?

The first of those lessons is that the ability to ignore relative performance depends on the circumstances and, in particular, the constituencies the performance has to please. Endowments provide an outstanding example of this phenomenon. Intellectually, no one could be unhappy with 16% a year for five years. In fact, the trustees of a private foundation probably would have been delighted with such a return in FY1995-99. But it's harder for an institution with outside constituents, like a university, to dismiss relative performance. Alumni question the management of the endowment, and prospective donors start to say, "I love the school, but it makes no sense for me to make my gift now. I'll hold onto the money, grow it at a rate above what you're achieving, and give it later." No university president wants to be the recipient of that message.

In order to survive and have a chance to produce long-term performance, investors have to live up to their constituents' expectations in the short run. Of course, it's important to inculcate reasonable expectations, or to choose clients who have them. **But ultimately, the manager's job isn't to make money, it's to deliver client satisfaction, so expectations have to matter.** All of us, on both sides of the process, should be sure we know what pattern of performance is expected. How else can we know how satisfaction can be delivered?

As a result of holding a highly idiosyncratic portfolio, Penn experienced performance that deviated – unfavorably – from that of its peers to an extent that became intolerable. This necessitated change.

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Do It Now?

Upon starting in on the job, I was immediately confronted by one of the truly classic investment dilemmas: You take on the management of a portfolio, and you just know it's structured wrong in principle. In Penn's case, it was clearly unwise – probably in terms of optimizing risk and return, and certainly in terms of keeping up with peers, and thus expectations – to completely omit the things that had been excluded from Penn's portfolio.

I knew right away that Penn's portfolio should include some exposure to growth, tech, buyouts and venture capital. But the reason their exclusion had become so painful is that they had done so well for a half-decade. **So in principle you should own something, but its price is sky-high. Should you hold your nose and buy at what may be excessive prices? Or should you wait for a correction, at the risk of continuing to underperform if it goes higher** (since we know how often things that are overpriced can continue upward)?

Whenever I'm presented with this dilemma, I trot out a 1957 cartoon from *The New Yorker Magazine* that was reproduced in the *Financial Analysts Journal* in 1975. It's my absolute favorite, and I've been waiting for an opportunity to share it with you:

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"To hell with a balanced portfolio. I want to sell my Fenwick Chemical and sell it now."

For me, this cartoon frames the question precisely: Should we do the thing that's right in principle, or should we alter our behavior to reflect today's real-world conditions? There's no one right answer; it goes back to expectations. If it's important to track the competition, you should start to make the portfolio less idiosyncratic, regardless of price attractiveness. But if you care more about absolute performance, achieved with risk under control, you should refuse to buy sky-high assets.

The latter is my preference, and it was reflected in my decision. Penn held off from buying tech and growth stocks. But I had declared my intention before taking the job. To put it in horribly mixed metaphors, **having missed the boat for six years, I said I wouldn't jump on the bandwagon just in time to ride it over the cliff.** I hoped making this clear would condition expectations and provide cover in case our actions initially proved wrong.

Offense or Defense?

The dilemma just discussed relates to the biggest single issue facing anyone tasked with structuring a portfolio: whether to stress offense – trying for high returns – or defense – reducing the likelihood of losses. Of course most investors balance these two things. The question is in what proportion.

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Penn's historic emphasis on value investing and its eschewing of bigger potential money makers had a lot to do with defense, especially in the environment of the late 1990s. Likewise, I believe I am known – and I certainly know myself – to be one who usually puts great emphasis on defense. **Would a cautious approach continue to penalize Penn, or was it what was called for under the circumstances? Having fallen so far behind, should we continue to stress defense to avoid losses if the market reversed course, or should we go on the offensive in an attempt to make up the lost ground?**

This question had particular importance at Penn. Given its early history as a commuter school rather than an elite institution like some of its peers, Penn came into the 21st century under-endowed; it ranked only 70th in the country in endowment per student. **So the stewards of Penn's endowment faced a particular dilemma: should we invest conservatively because we can't afford to lose the little bit we had, or aggressively in an attempt to close the gap?**

Again, there's no one right answer to that question, and perhaps there was no one right answer for Penn. But the answer was clear for me: I wouldn't preside over a shift to offense . . . and especially not on the heels of one of the best decades for stocks in history.

Working with CIOs Landis Zimmerman (now at Howard Hughes Medical Institute) in the early years and especially closely with Kristin Gilbertson in 2004-2010, the Investment Board and I led gradual diversification into growth stocks, emerging markets and defense-oriented hedge funds, with an emphasis on managers stressing risk-control. We established an allocation for private equity but implemented it very slowly. We kept an above-average percentage of the portfolio in publicly traded securities. And, importantly, we maintained a substantial allocation to cash and U.S. Treasurys, solely to enable us to meet the need for cash for operations and thereby avoid having to sell assets in a time of depressed prices.

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The Results

The performance produced by these decisions was quite predictable. With its low-risk portfolio, Penn outperformed when risk taking was penalized but trailed when risk taking was rewarded. It outperformed when value stocks did well but lagged when more aggressive tools, including leverage and portable alpha, paid off. For the decade overall it lagged the average of its peer institutions by a small margin and exhibited lower volatility. No surprise there. Penn's return was about 5½% for FY2001-10, while most of its peers made 6% or 7%.

But average results don't tell the whole story. It's important to remember one of my favorite adages, about the six-foot-tall man who drowned crossing the stream that was five feet deep on average. In investing, it's not enough to survive "on average." You have to survive on the worst days, when the low points in the market are reached. My decade as chairman provided an outstanding opportunity to see that adage in action.

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The Realities of Risk and Return

In late 2008 and early 2009 (in other words, for universities, fiscal year 2009), the global financial crisis presented the greatest sinkhole in eighty years. Those caught mid-stream without life jackets were penalized. Many of Penn's leading peer institutions lost 25-28% that year, while Penn's loss was "only" 15½%. I described Penn's results, loosely speaking, as "the least worst."

Going from the investment arena to the real world of university operations makes it clear that investment risk isn't an abstraction. No, risk isn't just volatility. It's what happens to owners of capital when downward fluctuations occur and principal losses are experienced.

Many of Penn's peers were forced to curtail some of their spending, ranging from hot breakfasts to student aid. Some had to suspend construction projects. There were freezes on hiring and wages. Some put illiquid partnership interests up for sale to raise cash and/or escape continuing funding obligations. And some had to borrow in the taxable bond market to meet cash needs.

Penn, on the other hand, had lots of liquidity and faced little in the way of capital calls. Thus it didn't have to go on the defensive operationally. Instead, it was able to keep hiring faculty, keep giving grants instead of loans, and take advantage of an attractive opportunity to purchase adjacent acreage. The benefits of risk control were made concrete. And the performance of the endowment, the CIO and the Investment Board – and, as I said earlier, yours truly – became the subject of some very nice words.

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What If? – Part I

All of the above is history. It presented taxing dilemmas and important choices, but other than as to degree, nothing portfolio managers, CIOs and investment committees don't face routinely. But there are two hidden issues – both somewhat philosophical – that I find far more interesting, provocative and important. They surround questions of timing and chance.

Sometimes investors feel something is going to happen in the period ahead, and that they should do something about it in their portfolios. And sometimes they're right. But rarely do the anticipated events occur as expected, and thus rarely are investors' actions proved correct immediately. Overpriced assets continue to appreciate, and cheap stocks decline further. Even if they do the right thing, very few investors do it at just the right time. **Thus timing – and in particular the selection of the beginning point and end point for studying a performance record – plays an incredibly important role in perceptions of success or failure.**

In his important book *Fooled by Randomness*, Nassim Nicholas Taleb points out how easily random events can make good decisions look wrong and bad decisions look right. Clearly one of the reasons for this is that events don't happen on schedule. I think of investment performance as what happens when events collide with a pre-existing portfolio. **A good decision can wisely anticipate the range of things that might happen, but the one thing that actually happens may not have been one of the ones that reasonably could have been considered highly likely**

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– or even possible. Or it may just happen at a time other than when it "should" have. The bottom line is that investors are often "right for the wrong reason," and vice versa.

So the first key observation is this: **I came into the job at the end of a highly bullish period, maintained a cautious approach, and it worked. What if I'd gotten the job two years earlier?** I probably would have done many of the same things. But now my tenure would have included the horrendous FY2000, with Penn's 3,000 basis point underperformance. And it would have omitted FY2009, in which Penn lost 1,200 basis points less than many peers and avoided being hamstrung. If I had led Penn's endowment to take the same actions in FY1999-2008 as it did in FY2001-2010, which is quite likely, I'd be considered a very average chairman . . . at best.

The principle lesson of this tale is the observation that investment timing is imprecise and difficult but extremely significant in terms of outcomes. The bottom line: be understanding when evaluating track records, and refuse to accept the results at first glance. Taleb reminds us to wonder about "alternative histories" – the other things that reasonably, probably could have happened. Doing so isn't easy, but it's essential in any field in which randomness plays a big part.

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What If? – Part II

The second philosophical question is similar but even simpler: **what if the global financial crisis hadn't occurred?**

My tenure as chairman of Penn's endowment was marked by my characteristic preference for being able to survive bad times over acting to take maximum advantage of good times. And the worst financial event in eighty years materialized, making that the right approach for the times. **But was I "right"?**

As I said before, during my tenure, Penn underperformed by a bit: 5½% versus 6-7%, a very reasonable sacrifice in exchange for side-stepping the pain of the crisis. But if we take out FY2009, the results for the other nine years were 8% for Penn versus 10½-11½% for its peers. Is that still a reasonable sacrifice?

It was largely the arrival of the crisis – with its influence on the ten-year record and its highly visible impact on university operations – that made my tenure a successful one. But could the crisis reasonably have been anticipated, making my caution appropriate? Or was it unforeseeable and thus fortuitous, meaning I was right for the wrong reason? I wonder about this a lot, in order to derive the significance of my tenure as chairman and learn from it. (If you want to read more about "what if" questions like these, you might enjoy the section called "What's Real?" in my memo *Pigweed*, from December 7, 2006.)

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The conclusions of my introspection are as follows:

- I lean strongly toward investing defensively unless asset prices are so low and investors so chastened that less cautious behavior is called for.
- In Penn's position endowment-wise, an emphasis on defense was appropriate.
- The euphoric market behavior of the late 1990s, and especially 1999, made elevated caution particularly compelling.
- It was certainly the events that unfolded that made my actions seem as right as they do.
- The events marking the crisis came largely as a surprise. Although I was increasingly worried in the period from late 2004 through the first half of 2007, I did not foresee the specific events of the global financial crisis of 2008, or its severity.
- Although Penn's approach was generally cautious throughout, we increased the defensiveness of the portfolio significantly in 2006-08. Thus it can't be argued that the portfolio stayed equally cautious all the time and eventually was bailed out by the crisis.

The bottom line – however you slice it – is that a cautious approach was appropriate under the circumstances, and it paid off for Penn. **No strategy works all the time, but defensiveness was right for Penn as things turned out. Lucky or good? It's always hard to tell.**

* * *

A full ten years, but still the results were obviously highly dependent on the vagaries of timing and on some largely unforeseeable events. **Were the actions taken at Penn right? Wrong? Or right for the wrong reason? We should insist on engaging in this kind of examination. Only then can we draw reliable conclusions and hope to improve our decision making.** Let me know if Oaktree can help in this regard.

February 15, 2012

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Memo to: Oaktree Clients

From: Howard Marks

Re: What Can We Do For You?

We'd love to be able to "do it all" for our clients and give them everything they hope for. It would be great if we could predict what economies and markets will do, move in and out with perfect timing, foresee which industries and companies will fare best, and hold only the securities with the highest returns. **But to paraphrase John Kenneth Galbraith on forecasters, I feel there are two kinds of investment managers: those who can't do these things and those who don't know they can't do these things.**

At Oaktree we've always emphasized being brutally honest – with ourselves and with our clients – about what we can and cannot do. Some managers claim to be able to do it all. Either they really think they can, or they think to be successful they have to pretend they can. The late Amos Tversky of Stanford University made it quite clear which is preferable:

> It's frightening to think that you might not know something, but more frightening to think that, by and large, the world is run by people who have faith that they know exactly what's going on.

In any endeavor involving uncertainty, not knowing what lies ahead isn't nearly as bad as thinking you know if you don't. If you're setting out for a drive and recognize that you don't know the way, you're likely to check a map, follow your GPS, ask directions and drive slowly, watching for indications you've gone off course. But if you're sure you know the way, you're more likely to skip these things, and if it turns out you didn't know, that'll make it much harder to reach your destination.

Rather than commit the error of overconfidence, at Oaktree we consider it essential to acknowledge the limits of our capabilities and act accordingly.

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What Can't We Do?

The main thing we can't do is see the future, and particularly the macro future. That simple statement has serious ramifications. It means a lot that we'd love to know is beyond us:

- we can't know what the economies of the world will do,
- we can't know whether markets will go up or down, and by how much and when,
- we can't know which market or sub-market will do best, and
- we can't know which securities in a given market will be the top performers.

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And what does the fact that we can't know these things mean for our portfolio management? **Simple: it means we mustn't act as if we can.**

If you could know these things, the path to success would be clear: Stick to markets that will do well and avoid the rest. Concentrate on the individual securities that will be the best performers. Load up when the market's about to rise and get out at the top. And use maximum leverage when the return will exceed the cost of capital and none when it won't.

But what if you can't? You should acknowledge your limitations, enroll in the "I don't know" school of thought, and accommodate your behavior to reality (see "Us and Them," May 7, 2004). The more you acknowledge you don't know what the future holds:

- the more you should diversify, spreading your bets to make sure you don't miss the winners or, more importantly, overload on the losers,
- the less you should attempt to augment performance through adroit short-term market timing, and
- the less you should employ leverage.

The difference in behavior between those who think they can know the future and those who don't is potentially enormous. It's essential to be on the right side of this choice because, as Mark Twain said, "It ain't what you don't know that gets you into trouble. It's what you know for sure that just ain't so." That's an essential component of the formula for investment survival.

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What Can We Do?

Investing consists almost entirely of making preparations for the future, and I just stated that the future is largely unknowable. Does this mean that there's nothing we managers can do for our clients? No, quite the contrary. Investors who understand reality can restrict their efforts to areas in which they can make a difference and avoid wasting their time (or – even worse – taking unjustified risks) where they can't. In fact, there's a long list of things we can do for our clients despite our lack of prescience:

- **We can highlight potentially fruitful asset classes, strategies and approaches.** Clients generally have no choice but to know a little bit about a great many things. But because specialist managers are supposed to know a lot about a few things, they should be able to identify superior opportunities and the best way to access them.

- **We can help inform the capital allocation decision by describing the attractiveness of our asset classes.** We should know more than others about our markets' fundamental strengths and weaknesses, technical conditions and price attractiveness. This doesn't mean just speaking up when our markets are cheap; it also means admitting when they aren't. **It can't always be "the greatest time" for any asset class.**

- **We can strive to know more than others about companies, industries and securities.** A knowledge advantage is a clear prerequisite for consistently superior investment

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performance. While we can't know these things with certainty, specialized expertise can help us do a better job of assessing prospects and estimating intrinsic value.

- **We can try to find bargains and avoid overpriced securities.** By applying a disciplined approach to security selection, a manager should be able to judge the relationship between the price of each security and its intrinsic value. This can't be done flawlessly, of course, and at any rate the impact of this relationship on performance is often outweighed in the short run by trends in investor psychology and perception. Thus, like everything else, this won't work every time. But on balance the superior manager should be able to assemble portfolios whose holdings have a higher collective probability of moving in the right direction.

- **We can limit risk.** The risk in investing increases along with the degree to which the future is unknowable. Recognizing this, managers who acknowledge the limits on their foresight tend to incorporate a good measure of risk control in their portfolios. They try to make fewer investments whose success is heavily dependent on knowing what the future holds, thereby creating an increased margin of safety. **This approach to investing shouldn't be expected to maximize return – especially in good times – but rather to maximize <u>risk-adjusted</u> return. This is a mission-critical part of the investment manager's job.**

- **We can control our egos and emotions.** The biggest errors are made when the investing herd is driven by emotion: to buy at the top by greed and excitement, and to sell at the bottom by fear and despondency. These errors are compounded when investors – even professionals – surrender to their egos and overestimate the degree to which their judgments are correct. Superior managers can help their clients by refusing to mirror these flaws.

- **We can act as contrarians.** Given the way the emotion-led consensus is wrong at the extremes as described above, there's money to be made by doing the opposite. Objectivity, insight and ego control are all you need. But it's far from easy. The successful contrarian has to have a sense for what the herd is doing, understand what's wrong with its behavior, resist the emotions driving it and do the opposite – all of this despite being "only human" and thus not immune to the forces driving others.

- **We can behave counter-cyclically.** The cycles in economies and markets conspire to cause investment mistakes. For example, in advanced up-cycles:

    - the economic indicators show gains,
    - companies report earnings increases,
    - assets appreciate,
    - investors enjoy good returns,
    - riskier approaches outperform,
    - leverage adds to gains, and
    - the capital markets eagerly provide financing.

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Developments like these encourage investors to behave aggressively. However, the right time to do so isn't when things have been going well, but after economies and markets have declined. But then, conditions make doing them much more difficult. Akin to contrarians, counter-cyclical investors can produce good performance with low attendant risk by doing the right thing at the right time. This, too, isn't easy. But anyone can do things that are easy . . . which don't add any value. Superior managers are supposed to do the things that are hard. **I consider behaving counter-cyclically to be one of a manager's most important responsibilities.**

So there's quite a list of things that should be within managers' capabilities. Superior managers should be able to keep very busy and make a significant contribution to their clients' performance . . . even though they can't know the future.

Oaktree on Market Timing

This memo provides an ideal opportunity for me to discuss Oaktree's position on these matters and address some potential inconsistencies.

In the weeks before Oaktree opened its doors in April 1995, my partners and I spent a great deal of time turning the ideas that had guided our actions over the preceding years into the explicit investment philosophy that would govern our new company. We wrote out the six tenets of our philosophy, and we haven't changed a word since. The first two concern the values that we hope we're best known for: risk control and consistency. But questions sometimes arise about numbers five and six, in which we disavow macro-forecasting and market timing. Certainly these disavowals are consistent with what I've said managers can and can't do. But do we adhere to them?

It's plain to see that our tactical approach to our markets varies over time:

- In marketable securities, we open and close for new capital; raise and lower the defensiveness of our holdings; stay fully invested or allow cash to increase modestly; and adjust our allocation to cyclical companies.

- In private partnerships, we raise larger and smaller funds; occasionally organize follow-on "b" funds before their predecessors are fully invested; raise and lower the percentage invested in senior securities; and invest at a rapid pace sometimes and gradually at others.

So it's appropriate to ask whether our behavior is consistent with our philosophy. Can our actions be reconciled with our professed non-reliance on foreknowledge? Or are we really secret forecasters or closet market timers? The questions are simple, but the answer is not.

First, we don't undertake the tactical actions described above in response to what we or some economists think the future holds, but rather on the basis of what we see going on in the marketplace at the time. What kind of things do we react to?

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- The simplest signs surround valuation. What's the yield spread between high yield bonds and Treasurys? And between single-B and triple-C? Where are the yields and premiums on convertibles? Are distressed senior loans selling at 60 cents on the dollar or 90? Is the S&P 500 selling at 30 times earnings or 12? These things tell us whether markets – and investor ardor – are overheated or ice cold.

- We find nothing as terrifying as the ability to easily do dumb deals (see "The Race to the Bottom," February 14, 2007). When large numbers of transactions occur that leave us shaking our heads, it's a strong signal that the market is lacking in the risk aversion and skepticism that are needed to keep it safe and sane.

- Equally worrisome is the presence of investor ebullience. When results are good and everyone's certain that more of the same must lie ahead, the pendulum of investor psychology invariably swings to extremes of greed, optimism, confidence and credulousness – the raw material for bubbles and subsequent crashes. I constantly go back to Warren Buffett's formulation: "The less prudence with which others conduct their affairs, the greater the prudence with which we should conduct our own affairs."

- It's also troubling if aggressive investment vehicles are popular and over-subscribed. For the value-conscious investor, the seven scariest words in the world are "too much money chasing too few deals." But that's likely to be the case when everyone's certain that each new issue, fund and black box represents the chance of a lifetime.

The key lies in the fact that our strongest actions are undertaken in response to currently observable phenomena like these, not predictions. The way I put it, "we may never know where we're going, but we'd better know where we are."

Second, I confess: I think about the future. So do my colleagues. If someone who's spent decades investing doesn't have opinions about what lies ahead, there's something wrong. I believe our clients want us to apply the benefit of our experience in gauging and reacting to the opportunities and risks that lie ahead.

But I have a mantra on this subject, too: "It's one thing to have an opinion; it's something very different to assume it's right and act on that assumption." We have views on the future. And they can cause us to "lean" toward offense or defense. Just never so much that for the results to be good, our views have to be right.

Here's the full text of the tenets in question. I think you'll see that we're true to the limitations expressed above, albeit perhaps not slavishly.

> Macro-forecasting not critical to investing – We believe consistently excellent performance can only be achieved through superior knowledge of companies and their securities, not through attempts at predicting what is in store for the economy, interest rates or the securities markets. Therefore, our investment process is entirely bottom-up, based upon proprietary, company-specific research. We use overall portfolio structuring as a defensive tool to help us avoid dangerous

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concentration, rather than as an aggressive weapon expected to enable us to hold more of the things that do best.

Disavowal of market timing – Because we do not believe in the predictive ability required to correctly time markets, we keep portfolios fully invested whenever attractively priced assets can be bought. Concern about the market climate may cause us to tilt toward more defensive investments, increase selectivity or act more deliberately, but we never move to raise cash. Clients hire us to invest in specific market niches, and we must never fail to do our job. Holding investments that decline in price is unpleasant, but missing out on returns because we failed to buy what we were hired to buy is inexcusable.

You'll occasionally see modest increases in the cash levels in our portfolios. However, they occur largely because we're finding more things to sell than buy, not because we're predicting a market decline. Most of our actions along these lines are micro-driven.

Likewise, we never say, "It's cheap today, but it'll be cheaper tomorrow, so we'll wait." If it's cheap today, we buy it. If it gets cheaper, we'll buy more. Waiting to buy until it gets cheaper could help us avoid a decline, but if we're right about the asset's merit, that decline will prove temporary. On the other hand, if the decline never materializes, waiting will keep us from making a good investment . . . that is, from doing what our clients pay us to do.

So the bottom line is that we walk a fine line between not trying to be forecasters or market timers, but also not being so oblivious to what's going on around us that we miss opportunities to avoid dangerous markets or take advantage of bargains.

Thoughts on Portfolio Positioning

I'm going to use the context of this memo to set out a way of thinking about portfolio structuring that I've developed recently, and to show how I would apply it today. I'm not saying it's an unerring thought process, or the only way to think, but I hope you'll find it potentially useful. I'm sure I'll have more to suggest in the future. But I've been thinking and talking about these things in recent months, and I want to share them here.

The thought process centers on three questions I think an asset allocator should ask each day upon coming to the office:

First, do you expect prosperity or not? Why do I ask? Didn't I say above that investors can't know the future? Yes, I think the economic future is unknowable – that is, that few among us are able to know more than the consensus about what the economy's going to do. And that's especially true at inflection points, when it's important to stop extrapolating recent trends.

But we cannot escape the responsibility for deciding whether to position our portfolios aggressively or defensively, and thus to decide what asset classes and tactics to emphasize.

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Doing so requires us to make some gross assumptions about the economic outlook. Again, however, we shouldn't act boldly out of conviction that our assumptions are right.

If the economic environment will reflect prosperity, we might want to put more into growth stocks, cyclical companies, risky assets and levered strategies. If it won't, it might be better to favor value stocks, "real" assets, safer companies and unlevered strategies. Unless we're willing to flatly say we don't know anything about the future and always hold a fixed or "policy" portfolio, we have to try to assess the outlook and adjust accordingly.

Second, which of the two main risks with which investors have to contend should you worry about more: the risk of losing money or the risk of missing opportunities? A skilled investor can eliminate one or the other of these risks, but nobody can eliminate them both. How, then, should one behave? You can put all your efforts into avoiding one risk or the other, but that's imprudent. Or you can maintain a fixed balance between the two, but that seems to excessively ignore variation in the outlook for upside potential and downside risk. Instead, I think the right approach is to adjust your stance as the environment changes.

To me, the answer to this question lies primarily in the degree of cheapness prevailing in the markets. When asset prices are high, there's more risk to be aware of and less opportunity to worry about missing. On the other hand, when prices are low, it's appropriate to worry less about the risk of loss and more about missing out on the opportunities created by those low prices.

Third, what are the right investing attributes for today? Three years ago, at the depths of the post-Lehman crisis, you only needed two things to achieve big gains: money and the nerve to spend it. With prices so low, you didn't need caution, prudence, conservatism, risk control, patience or selectivity. In fact, the more of those things you had, the more you were held back and the less money you made. In that crisis climate, "money and nerve" was enough.

Does that mean money and nerve is always a surefire formula for success? Absolutely not. Think about 2005-07: money and nerve was a recipe for disaster. Then you needed caution, prudence, conservatism, risk control, patience and selectivity. Only if you had a good dose of those things might you avoid the full brunt of the financial crisis that lay ahead.

The formula for success in investing changes, based largely on the conditions in the environment. What are the right attributes for today? Money and nerve, or risk control and selectivity?

These three questions are interrelated and overlapping, and in sum they come down primarily to the choice between offense and defense. Unless you insist on maintaining a constant position in this regard, determining your stance is one of the most important investment decisions.

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Portfolio Structuring Today

As I've written in recent years, I don't see a quick return to the prosperity of the past. In the 1990s, for example, we experienced the best of all worlds:

- the economy did well,
- although incomes grew slowly, the growing use of credit buttressed consumers' ability to spend,
- there were great strides in technology and productivity,
- companies reported rising earnings,
- stocks appreciated every year, not by their "normal" 10%, but by 20% on average,
- the wealth effect from growing 401k's added to consumers' willingness to spend,
- interest rates declined continually,
- capital was readily available,
- inflation remained under control,
- faith ran high in the ability of the Fed to keep the economy on a steady path, and
- there was peace in the world.

Now that's good times!

Today, the U.S. economy is doing fairly well, and it should continue to recover in the years ahead. In fact, I think the main immediate risk to recovery stems from uncertainty connected to the European crisis. Will Europe experience a recession (or is it in one already)? Will a European recession cut into America's growth? Will Europe's political leaders prove unable to arrive at and implement the required solutions? Will countries exit the euro and/or reschedule debt? Will uncertainty surrounding Europe's financial institutions impact the U.S. economy and its own institutions?

I'd say "maybe" to all these things. And maybe not. But to me the bottom line is that, regardless of these specifics, the outlook isn't positive enough to call for prosperity or anything approaching the good feelings of the 1990s.

- After spending more than they made for a good while, American consumers should realize the attraction of owing less and having some money in the bank. So maybe for a while they'll spend less than they make. And credit may be harder to come by than it was in the past, similarly limiting credit-fueled consumption. While good for individual balance sheets, these trends will constrain aggregate economic growth.

- The U.S. has its own deficits and debt to worry about. We have to consider the impact on growth of reduced government spending and increased taxes, the same austerity the rest of the world is experiencing. Even without any action on the part of government, significant, already-mandated tax increases and spending cuts have the capacity to impede GDP growth.

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- A few months ago there was talk of a double-dip recession in the U.S. We don't hear much about it today, but that doesn't mean it's off the table.

- Nobody can prove that the U.S. won't fall into a slow-growth malaise similar to what Japan has been experiencing, although I believe it will avoid doing so thanks to the spirit of creativity and optimism that remains in force.

Taking all of these things together, I think the probabilities favor slow growth at best, making it unlikely that this is the time for aggressive investment behavior.

On the other hand – and there definitely is an "other hand" – there are significant factors arguing against extreme risk aversion. They relate primarily to market conditions.

First, in many cases valuations are quite reasonable. U.S. stocks, for example, are much cheaper than usual, selling at low absolute p/e ratios. The S&P 500 has failed to appreciate over the last twelve years, while corporate earnings have grown substantially. Thus its p/e ratio has tumbled. The average p/e in the postwar era was 15 or 16, and in 1999 it reached 30. Today it's about 12. Of course there are caveats:

- While equity valuations are down, it can be argued that they're not down enough to reflect all of the deterioration in the secular outlook. Conversely, it's impossible to prove that they are.

- In addition, it's always possible that earnings estimates are too high, meaning stocks aren't as cheap as their p/e ratios suggest.

The one thing I know for sure, however, is that U.S. stocks are cheap versus historic norms.

Another example of cheapness can be seen in high yield bonds. In the 33 years since I organized Citibank's first high yield bond fund, the normal yield spread between the high yield indices and comparable-duration Treasurys has been 300 to 550 basis points. Today the spread is closer to 700 b.p.

History shows that if you invest in the high yield bond indices when spreads go above 550 b.p., you usually outperform Treasurys by a wide margin over the next few years. Thus it's clear that with spreads at 700 b.p., they're priced to outperform. High yield bonds – like stocks – could turn out not to have been cheap enough, but there's no arguing with the fact that they (and senior leveraged loans) are relatively very cheap. (Of course you can't eat relative performance, and the current attractiveness of high yield bonds is very much a function of how low Treasury yields are. Nevertheless, after staring at 2% yields on Treasurys for a few years, 8% seems like a lot.)

So we have valuation on our side in today's markets. What else? The other positive, in my view, relates to the "temperature" of the market. I've often written that the key to understanding what might lie ahead is a sense for what's going on in the investment environment.

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- The riskiest things are investor eagerness, a high level of risk tolerance, and a belief that risk is low. That's a pretty good description of 2005-07.

- In contrast, we can take heart when investors are discouraged, risk aversion is running high, and economic difficulty is all over the headlines . . . like today.

Twelve years ago, equity returns were ending one of their best decades ever; p/e ratios were way above the norms; investors were participating in a love affair with stocks; equity allocations had been built up; and no one could think of a reason why the performance of stocks might flag. Now stocks have produced no gain for years, and no one's excited about them, even though they're vastly cheaper. **In 1999, sky-high valuations and investor ardor positioned stocks for a "lost decade." Today, low valuations and investor indifference just might mean they're poised to surprise on the upside.**

Unlike the pre-crisis days, virtually no one is oblivious to the macro risks. Most investors hold modest expectations for the developed economies and for the markets. I think this is quite favorable. To put it succinctly, the potential for investment gains is above average when expectations don't fully anticipate the eventual reality. This potential comes not from a future that will be positive, but from a future – whether positive or not – that is underestimated. Underestimation creates the possibility of favorable surprises and, in general, when things turn out better than expected, markets rise.

At the risk of oversimplifying, I see a long list of macro risks on one side of the scale, and low valuations and joyless investors on the other. Prices are neither so high that we must be hyper-cautious nor so low as to call for aggressiveness. Thus I think it's time to balance defense and offense, and to move forward, albeit with caution. That's what we plan on doing in the coming months, while attempting to execute on my list of the things a manager can do for you.

January 10, 2012

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Memo to: Oaktree Clients

From: Howard Marks

Re: It's All Very Taxing

The issue is simple: the U.S. government generally spends more than it brings in . . . and recently, a lot more. For years Congress was willing to serially raise the federal debt ceiling and monetize the deficit. But this past summer, some legislators balked. When the early August deadline for an increase in the ceiling arrived, our elected officials kicked the can down the road, but less far than usual. They created a Congressional supercommittee with unprecedented power to propose solutions, and they designed automatic spending cuts in case no proposal won approval.

With the committee working under a November 23 deadline to find ways to reduce the federal deficit by $1 trillion-plus over the next decade, and with a presidential election less than a year away, the subject of taxes is all over the headlines and likely to remain there. Thus I've decided to provide a background piece on the issues.

What form will the deficit-cutting action take? In fact, the possibilities fall into only four categories:

- cut discretionary spending,
- reduce expenditures on entitlements,
- cut waste and fraud, or
- increase tax revenues.

Given the magnitude of the problem, the limited number of potential solutions, and the differences between the parties on the subject, there's already debate regarding the fourth of those listed above. Democrats generally feel tax increases should be part of any solution, and Republicans often insist that while they're open to overhauling the tax code, total taxes must not rise.

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What's Fair is Fair

This memo got its start as an excuse for me to write about one of my greatest pet peeves: the so-called "fair share."

Ask your typical Democrat or liberal about the idea of increasing taxes on upper-bracket earners, and what will they say? In my experience, the answer's always the same: "**We're not out to soak the rich. We just want them to pay their fair share.**" We've seen it over and over for years. For example:

> Were [the politicians levying taxes on Americans] seeking to redistribute wealth, to recast society along more egalitarian lines? Or were they simply trying to ensure that rich people paid **their "fair share**"? The answer, predictably, is both. . . .
>
> If poor and middle class Americans were going to be asked [by President Roosevelt], of necessity, to shoulder much of the fiscal burden, then they needed assurance the rich were **paying their share**. . . .
>
> No one made the case more succinctly than Rep. Cordell Hull, legislative father of the 1913 income tax. "I have no disposition to tax wealth unnecessarily or unjustly," he explained in his memoirs. "But I do believe that the wealth of the country should bear **its just share** of the burden of taxation and that it should not be permitted to shirk that duty."
>
> ("Soaking the Wealthy: An American Tradition" *The Wall Street Journal*, January 29-30, 2011)

The rhetoric remained unchanged in the late twentieth century:

> "We will lower the tax burden on middle class Americans," [Bill Clinton] pledged in 1992, "by asking the very wealthy to pay **their fair share**." ("The Middle-Class Tax Trap" *The New York Times*, April 17, 2011)

More recently, President Obama carried on the tradition.

> I will veto any bill that changes benefits for those who rely on Medicare but does not raise serious revenues by asking the wealthiest Americans or biggest corporations to pay **their fair share**. (*The New York Times*, September 20, 2011)

And here's another reference from just a month ago:

> In proposing a 5 percent surtax on incomes of more than $1 million a year to pay for job-creation measures sought by President Obama, Senate Democratic leaders on Wednesday escalated efforts to strike a more populist tone and to draw Republicans into a confrontation over how much affluent Americans should pay to help others cope with a struggling economy. . . .
>
> "It's interesting to note that independents, Democrats and Republicans and even the Tea Party agree it's time for millionaires and billionaires to pay **their fair share** of taxes," [Senate Majority Leader] Reid said Wednesday.
>
> (*The New York Times*, October 6, 2011)

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But what is the fair share? How is it to be determined, and by whom? When Senator Reid says, "it's time for millionaires and billionaires to pay their fair share," he implies they haven't been doing so thus far. How does he know? What's the standard? If there's an objective standard for one's fair share, why does it only seem to be those from the left side of the political spectrum who say it's not being paid? And if there isn't an objective standard, how can the fair share be determined? **The truth is, fairness is almost entirely in the eye of the beholder, and "get them to pay their fair share" seems like just another way to say "raise their taxes."**

There's probably only one element of fairness that's beyond discussion: those with higher incomes should pay more in taxes. After that, everything is up for grabs.

- For example, we have a progressive system of taxation, meaning that higher earners don't merely pay more in terms of dollars; they generally pay a higher percentage of their incomes in taxes. Most people agree that this is fair. But is it? Why should success be penalized through greater taxation? And if the tax rate for those who earn more should be higher, how much higher? Should the top marginal tax rate be double that applicable to lower-income taxpayers? Triple? What's fair?

- Are some forms of income more desirable to society and thus deserving of taxation at lower rates?

- And should we encourage certain expenditures by making them deductible from taxable income?

The fairness of all of these things is subject to discussion and disagreement. They come under the heading of tax policy.

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Is Taxation Progressive? Progressive Enough?

Under the U.S. system, people in higher income brackets pay tax at higher rates. (However, Mark Twain said, "All generalizations, including this one, are false." For an exception to the generalization above, see the discussion of the "Buffett Rule" on page 5.) **In large part, the question of fairness primarily surrounds whether the higher rates are high enough.**

Talk about "the eye of the beholder." There's evidence on both sides of this debate:

- The top 1% of U.S. taxpayers pay 38% of all individual federal taxes. The top 10% pay 70% of all taxes, the top 25% pay 86%, and the top 50% pay 97%.

- That leaves the bottom 50% of all taxpayers paying only 3% of the total.

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- About half of Americans pay no federal income tax, and almost 25% pay no federal taxes at all.

- The average federal income tax rate for the top 1% of Americans is 23% (and for the top half it's 14%), while the average rate for the bottom half is 3%.

Notwithstanding the rhetoric, there's no doubt about the fact that America's top earners are taxed more heavily than the rest. On the other hand, they pay at lower rates than they used to (when I was a boy the top marginal rate was 94%), and it seems progressivity has declined.

> . . . the effective federal tax rate, including payroll taxes, for the wealthiest 0.01 percent of earners fell to 31.5 percent in 2005, from 42.9 percent in 1979 [for a decline of 26.6%], according to data from the Congressional Budget Office. Over the same time, effective rates for taxpayers in the center of the range fell to 14.2 percent, a decrease of just 4 percentage points [or 22.0%]. (*The New York Times*, September 21, 2011)

Total revenues from income taxes have declined in the U.S. – they "are at a historical low of 15.3 per cent of the gross domestic product, compared with a postwar average of 18.5 per cent" (*Financial Times*, September 25) – and they've declined more for top earners than for the rest. This is because of both specific rate cuts that have been enacted and the fact that the rates applied to dividends and capital gains – which clearly flow more to people in the upper income brackets – have declined relative to the rates on salaries and wages.

On average, higher earners absolutely do pay a higher percentage than those who earn less. But the decision as to whether the differential is just right, too little or too great is highly subjective and certainly a valid topic for debate.

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Righteous Income

In the U.S., different types of income are taxed at different rates, suggesting some are considered more virtuous than others. For example, profits on investment assets held for more than a year, so-called "long-term capital gains," are taxed less than "ordinary income" such as salaries and interest. This has been the case for so long that we consider it the norm, and what we're used to often becomes the baseline for "fairness."

Long-term capital gains are taxed at reduced rates because of a judgment that long-term investment in things like securities, companies and real estate is beneficial for the economy and should be encouraged. Right now, the top tax rate on long-term investment profit is less than half that on short-term gains and ordinary income. And in recent years, the taxes on dividends have been reduced to similar levels, in part to mitigate double taxation of corporate profits but also because of a judgment that the equity investments

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that give rise to dividends are good for our society.

Is it appropriate to tax profits on long-term investments at rates below those on other forms of income? Certainly we should encourage investment, but there's no consensus that the tax code is the place to do it. Some foreign jurisdictions don't tax capital gains at all, while others tax them at the same rate as all other income.

What about interest? Why are dividends taxed at preferential rates and interest at ordinary rates? The explanation may lie in the fact that interest is deductible for corporations, while dividends aren't. Interest is paid out of pretax income, while in theory dividends are paid out of after-tax income – although the existence of corporate deductions and credits means dividends may, in fact, be paid out of income that hasn't been taxed by the U.S. Alternatively, the difference in tax treatment may be the result of a desire to encourage investment in "risky" equities rather than "safe" debt. But some companies' dividends are no doubt safer than some other companies' interest payments, so this distinction is questionable. If the goal is to encourage risk bearing, is dividend versus interest the right criterion?

While on the subject of gains from investments, it's interesting to note that, not long ago, dividends were included with interest under the rubric "unearned income." This pejorative phrase implied that income on capital, not requiring labor, was less virtuous than that stemming from labor, so-called "earned income." Thus unearned income – primarily dividends and interest – was taxed more heavily than wages.

But now things have turned 180 degrees, and returns on capital are taxed at lower rates than wages. It's worth noting that the Democrats – commonly considered the party of labor – controlled the government for much of the period 1928 to 1980, when earned income was favored. On the other hand, the Republicans – the party of those with capital to invest – have been in control more of the time since 1980, and the taxation of returns on capital has declined in relative terms. **The definition of virtuous income that should be encouraged through lower taxes clearly is subjective, impermanent and subject to change with the winds of politics.**

One debate that has arisen recently surrounds the so-called "Buffett Rule." For the last few years, Warren Buffett has been speaking about the fact that he pays a smaller percentage of his income in taxes than does his secretary. Presumably this is because his income consists primarily of long-term capital gains and very little of salary, bonus and interest.

(As an aside, it should be noted that Buffett's lower tax rate, while not unique, is far from the norm. According to *The New York Times* of September 24, "The number of people who fall under the Buffett Rule is quite small, only 60,000" out of 450,000 taxpayers who make over $1 million. "And the amount of revenue that would be generated [by the Buffett Rule] over the next 10 years is equally small – just $13 billion. . . .")

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Buffett's tax status is a function of policy choices made by the people who wrote our tax laws. According to *The New York Times* of September 21, "President Obama's proposal for a new tax on millionaires . . . would counteract decades of tax reductions for most Americans that have given the wealthy the most benefit. . . ." Do we consider these decisions appropriate in principle and Buffett's just an extreme case? Or do we want to change things so returns on capital are less favored and big earners can never pay overall taxes at lower rates than those who earn less? (And, as an aside, are all long-term profits truly beneficial to society? How, for instance, does society benefit when someone buys a bar of gold?)

Deductions, Loopholes and Tax Incentives

Speaking of gold, in "All That Glitters" on that subject, I quoted from a speech by Mississippi state legislator "Soggy" Sweat that showed his ability to simultaneously praise and condemn whiskey with equal conviction. Outdoing Soggy, depending on who's talking, Washington politicos use the three very different terms above to describe the same thing: offsets to taxable income.

The drafters called them **deductions**: provisions that reduce the net income on which taxes are levied. Critics call them **loopholes**, suggesting there's something underhanded about those provisions. And politicians use the laudatory-sounding term **tax incentives** to describe tax code provisions that reduce tax revenues in order to encourage certain behavior. It all depends on your point of view.

Let's take a look at one of the most popular deductions: interest on mortgages. For as long as I can remember, interest on home mortgages has been treated as a desirable expenditure that should be encouraged. Because home ownership is considered part of the American dream, the tax code subsidizes it by reducing the after-tax cost for those who borrow to buy homes (and are able to itemize rather than take the standard deduction). While everything else may be arguable, certainly this seems fair. But is it?

- Are homeowners more virtuous than renters? If mortgage interest is deductible but rent isn't, we're requiring renters to subsidize owners. Is that appropriate?

- On average, homeowners are from the middle and upper income brackets. Is it fair that poorer renters provide a benefit for richer owners?

- And is it desirable that those able to buy more expensive homes should get more of a subsidy than those consigned to cheaper ones?

As with the taxation of dividends, judgments on these matters change over time. Until 1987, there was no limit on the amount of mortgage interest that could be deducted. If you could afford to own ten homes with multiple million-dollar mortgages on each one,

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taxpayers would collectively share the cost by reducing your income taxes due. Today interest is deductible on only a maximum of $1.1 million of debt, and only on first and second mortgages, and only on a primary residence and a second home. So the tax treatment of owners of many homes and more expensive homes has become less generous. But it's still better than that of renters. Is that proper?

What about the tax deductibility of charitable donations? As I travel the world visiting with clients, I see that two things about the U.S. are quite uncommon: (a) Americans give a lot of money to charity and (b) donations to charity are deductible in calculating taxable income. Everyone tells me the latter is the main reason for the former. In particular, these things are part of the explanation for the existence of the many private, non-state-supported colleges and universities in the U.S., the best of which are so good at least in part because of their significant donor-provided endowments. For example, Harvard and Yale are only half as old as England's Oxford and Cambridge, but they benefit from endowments that are far larger.

Part of this is true because legislators decided at some point to subsidize non-profits by encouraging contributions through the tax code. That's certainly understandable. And yet, changes were made in recent years to limit upper-bracket taxpayers' use of deductions in order to ensure that they pay some minimum tax rate.

What about the unevenness of the subsidy? The cost of giving $1 to charity is reduced by the amount of taxes it saves the donor, which is equal to $1 times the person's tax rate. So today, speaking simplistically, it costs a top-bracket taxpayer 65 cents to give a dollar to charity, while it costs a bottom-bracket taxpayer 85 cents. Is that fair? Should the bigger earner receive a greater reward for a dollar of philanthropy than someone who can afford it less easily? And should those who aren't inclined to give to charity be required to subsidize those who are?

Finally, what about state and local taxes, the third of the significant deductions? Here tax deductibility isn't due to a decision to encourage people to pay non-federal taxes, but rather to cushion the effect of being taxed in multiple jurisdictions. Texas, Florida and five other states have no personal income tax, California has a heavy one, and someone living in Manhattan pays tax to both New York State and New York City. Deductibility on the federal tax return somewhat evens out the burden and ensures that (a) the states get first crack at taxing income and (b) the federal government can only tax what's left, in line with federalist principles.

This raises a number of questions. Is the deductibility of state and local taxes fair? As with other deductions, the key question is "fair to whom?" Some people pay more state and local taxes than others, meaning they get greater deductions than others. As a result, while a person with a given income who lives in a high-tax state pays higher total taxes, he or she pays less federal tax than someone in a low-tax state. Is that fair?

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Further, what all of this means is that by providing more benefits to its residents (or at least spending more money, whether beneficially or not), a high-tax state creates a deduction for its residents and thus reduces the federal government's total tax take. Is this right? Should the federal government subsidize spending on the part of high-tax states? That is, should residents in low-tax states bear part of the expenses of high-tax states? There's nothing simple about these matters.

While the source of an exemption rather than a deduction, what about interest on "municipal bonds" issued by states, counties, cities and local agencies. This is exempt from federal taxation, under the legal doctrine that the federal government mustn't tax the operations of the states. ("The power to tax is the power to destroy," one of our great Supreme Court decisions held.) But here again, we're talking about a federal benefit (in the form of a lower cost of capital) for the biggest-spending local governments and their citizens, and a tax break for people who lend to them.

And what about property taxes? These are deductible without limitation. Thus the owner of a mansion – or ten mansions – receives more of a tax benefit than a low-income earner. And it's another subsidy for homeowners versus renters. Is this right, or should it be changed?

To date, it has been deemed fair for state and local income tax to be deductible on federal tax returns. But is this immutable? Sales tax used to be deductible, too (meaning the buyer of a Rolls Royce got assistance from the federal government). Now it's not. More fair?

What if the deduction for state and local taxes and the exemption for muni interest were ended? This would increase the cost of financing for state and local governments and most impact the highest-spending states, potentially requiring higher taxes causing people to move away. This would reduce those states' revenues and require them to raise taxes further (and drive away still more taxpayers) in a painful cycle. And are those states profligate or just burdened (like California by a substantial low-income population) or natural-resource-poor (lacking Texas's oil)?

So even in "small" matters like the tax deductibility of mortgage interest, charitable donations, and state and local taxes, there are lots of difficult questions. While on their face the deductions seem fair to homeowners, philanthropists and residents of high-tax states, they're simultaneously penalizing renters, non-donors and residents of low-tax states (as well as taxpayers in low tax brackets and those without enough deductions to itemize).

How about the biggest exclusions of all: employer-provided health care and the deferral of taxation of contributions to pension plans? In both cases, those receiving these employer-paid benefits enjoy a substantial benefit not shared by those not fortunate enough to participate. For instance, is it fair that many better-paid workers get thousands

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of dollars a year in untaxed health-care benefits, while other workers enjoy no such subsidy?

Fairness turns out to be quite an elusive concept.

Reasons for Increasing Taxes

As U.S. leaders wrestle to reduce the budget deficit in the coming months and years, spending cuts are a certainty. But the question of whether taxes should be increased is sure to be hotly debated. A number of justifications for doing so are advanced:

- Some people want wealth to be redistributed throughout society by taxing the rich and giving to the poor. They want the government to do more for those who are less fortunate (or less able), and that means having the rest pay for it.

- There's an argument that for the deficit solution to be equitable, all citizens should contribute to it. Though some government spending benefits all citizens alike, such as national defense, national parks and the administration of justice, much spending disproportionately benefits lower earners, in the form of public education and transportation (which are supported by the federal government), unemployment insurance, food stamps, Medicare and Medicaid, etc. Thus the effect of the coming spending cuts will fall more heavily on the poor. Some argue that since they receive less in benefits and are therefore less likely to experience their loss, the wealthy should share the burden of reducing the deficit through increased tax payments.

- As opposed to the ideological arguments reviewed above, tax increases are among the limited number of possible contributors to deficit reduction listed on page 1. Thus, in the simplest terms, we can cut more from the deficit if we tax more (all else being equal).

- The ultimate practical point is that spending cuts alone won't do much to eliminate the deficit.

- Viewed another way, promises of entitlements have been in place for decades, people have relied on them, and those promises have to be kept. This is clearly impossible without increased taxes and/or exploding deficits.

Is redistribution a valid goal? To some people, it is part of the process of helping every citizen in the "pursuit of happiness." To others, it's akin to socialism and contrary to the American ethic in which rewards follow ability and hard work.

Should everyone contribute to deficit reduction, including bigger earners through the biggest tax increases? Or should the savings come primarily through sacrifices

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on the part of those who to date have been the primary beneficiaries of excessive government spending? I have no doubt that we'll see fireworks on these topics.

Reasons for Not Increasing Taxes (or for Lowering Them)

Before concluding that the above points are persuasive, you should consider the equally numerous arguments to the contrary.

- Many believe our massive deficit stems from a government (and an entrenched army of government employees) willing and able to spend all available cash (and more). A bureaucracy will always find uses – many of them wasteful – for available revenues. Thus the only solution is to "starve the beast": only tax cuts and restraints on borrowing will force the government to limit spending.

- It is argued that by decreasing the after-tax proceeds from a dollar earned, tax increases reduce people's incentive to work, and thus cut into a nation's overall productivity. From 1974 to 1979, Britain's top marginal rate was 83% (although with a 15% surcharge on interest and dividends, it could rise to 98%). I remember reading about a banker who took time off without pay to paint his house. Society benefits when each of us does the things we're best at. But if a banker who earns $20,000 a month only gets to keep $3,400, he's better off forgoing a month's salary to avoid paying a painter who gets $5,000 a month.

  Research into the "elasticity of taxable income" (ETI) shows that "when marginal tax rates go up, the amount of reported incomes goes down," suggesting higher taxes do reduce productivity. (*The Wall Street Journal*, March 30, 2010). Of course, it's also possible that when rates go up, the incentives for failing to report income also go up. Thus part of the ETI effect could come from under-reporting, as opposed to reduced effort.

- Taking the above a step further, the "Laffer curve," named after economist and presidential adviser Arthur Laffer, posits that by discouraging work (and thus reducing incomes), raising income tax rates actually reduces income tax collections. Thus, by increasing taxable income, rate reductions bring revenue gains.

- Last but especially timely is the classic Keynesian argument that raising taxes and thus reducing after-tax incomes shouldn't be done at a time when the economy is weak and spending should be encouraged, not inhibited.

For me the bottom line – the real reason why many people don't want rates to go up – is that they don't want to pay more taxes. I think people tend to "vote their pocketbooks," meaning many people with incomes to tax will vote for the candidate who promises lower taxes. **But the economic theories discussed above certainly lend validity and**

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even nobility to the pursuit of higher after-tax income . . . and the fact that their supporters are self-interested doesn't make them wrong. Finally, for whichever reason, a good portion of the electorate buys these arguments. And *The New York Times* reported on November 2 that "Americans for Tax Reform, a taxpayer advocacy group . . . says that 41 senators and more than 235 House members have pledged in writing to oppose all tax increases."

Topics in the News – Income Inequality

One of the outstanding characteristics of the U.S. economy at this time is the rising dispersion between incomes. The percentage of total income going to higher earners has been increasing dramatically, whether because of (a) the rising importance of education and technological literacy or (b) the movement of work offshore, the declining availability of blue-collar jobs and the reduced power of private-sector unions to garner wage gains. And given the pattern of tax cuts and the special treatment given to income on capital, the tax system has magnified the divergence.

A recent report from the Congressional Budget Office provided dramatic evidence of the divergent trends in income. It outlined the percentage gain in average inflation-adjusted after-tax income of various income groups between 1979 and 2007:

- Top 1% of the population in terms of income 275%
- Next 19% 65
- Middle 60% 40
- Bottom 20% 18

According to the CBO:

> The share of income going to higher-income households rose, while the share going to lower-income households fell.
>
> - The top fifth of the population saw a 10-percentage-point increase in their share of after-tax income.
> - Most of that growth went to the top 1 percent of the population.
> - All other [quintile] groups saw their shares decline by 2 to 3 percentage points.

An October 26 article in *The New York Times* reported the following conclusions:

> . . . the report said government policy has become less redistributive since the late 1970s, doing less to reduce the concentration of income.

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> "The equalizing effect of federal taxes was smaller" in 2007 than in 1979, as "the composition of federal revenues shifted away from progressive income taxes to less-progressive payroll taxes," the budget office said.
>
> Also, it said, federal benefit payments are doing less to even out the distribution of income, as a growing share of benefits, like Social Security, goes to older Americans, regardless of their income. . . .
>
> Also cited as factors contributing to the rapid growth of income at the top [in addition to federal tax and spending policies] were the structure of executive compensation; high salaries for some "superstars" in sports and the arts; the increasing size of the financial services industry; and the growing role of capital gains, which go disproportionately to higher-income households.

The implications for tax discussions are obvious. Upper earners have moved further ahead relative to lower earners, and tax policies have contributed to this trend. **For those who think progressivity should be bolstered, income should be redistributed, and those most able to pay should contribute more heavily to solving the deficit problem, upper-bracket earners make a most attractive target.**

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Topics in the News – The Sputtering Economy

In early 2011, there was a growing consensus that the U.S. economy was on an upward trajectory – that recovery had taken hold. Reported growth in GDP was accelerating. Orders, sales and profits were strong. Cash was piling up in corporate coffers. The Fed gave increased thought to increasing interest rates to cool off the economy and prevent the rekindling of inflation.

But in the summer it was reported that the economy had cooled, and earlier estimates of GDP were revised downward. A possible double-dip recession became the topic of the day. At the same time, an unseemly political confrontation regarding the U.S. federal debt ceiling exposed a flawed, unconstructive political system at work; produced a downgrade of long-term Treasury debt on the part of Standard & Poor's; seemed to take us to the brink of a default; and sapped confidence at all levels.

Despite the economy's weakness, further government aid for the economy has been rendered untenable by widespread negative feelings about the stimulus programs of 2007-08 and the popular view that the government took care of Wall Street but not Main Street, combined with the nearness of the next presidential election. **Especially with stimulus unlikely, government actions that discourage growth should be viewed skeptically.**

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In the U.S. – just like in Greece and elsewhere in Europe – the answer to problems of excessive deficit and debt can be summed up in one word: austerity. Everyone's after debtor nations to practice austerity; that is, to spend less and tax more. The problem is that such behavior will reduce citizens' incomes, discourage consumer spending and slow or reverse economic growth. While on paper austerity will cut deficits, it may actually add to them by reducing government tax collections. In this way, it would necessitate further borrowing.

There's no doubt that, along with spending cuts, tax increases would have a detrimental impact on the prospects for economic recovery. Thus even people who are open to tax increases may not want them to be effective until the economy is out of danger. As the *Financial Times* put it on October 29, "Many households are so badly overleveraged that a balanced federal budget would ruin them."

But our economic problems aren't just cyclical. There are worrisome secular trends, many surrounding the scarcity of new jobs, the movement of manufacturing overseas, and the low level of business investment in the U.S. **The best cure for our cyclical and secular difficulties would be growth based on industrial expansion.** This would put people to work, support increases in spending, reinvigorate the housing sector, increase tax revenues and shrink the deficit. **But for this to happen, we need (a) tax rates that allow successful entrepreneurs to retain a substantial percentage of the resulting profits and (b) confidence that the tax system won't be made more confiscatory after they've made their investments. At the present time, the latter, in particular, is very much lacking.**

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Topics in the News – Flat Tax

It's interesting to note that writers of tax law have two main routes to a given revenue total: low rates without deductions, exemptions and credits, or high rates with them. To date they have chosen the latter course. An article in *The Wall Street Journal* of January 29, 2011 marked down this choice to pure politics:

> Why did [Roosevelt's high tax rates] last so long . . . beginning their long steady decline only during the Kennedy administration? . . . In part to fund the Korean conflict and the Cold War, but also to grease the skids of modern politics. Lawmakers were able to blunt the effect of high statutory rates by handing out tax preferences to their friends, constituents and contributors. Steep rates preserved the appearance of progressivity (and, to be fair, some of the reality), while supplying politicians with their stock in trade: favors.

There are periodic calls for lower "flat" income tax rates and the elimination of deductions and other wrinkles, and we are hearing them today. The main goal is tax simplification. I commend this. (I have to admit that I, with my MBA in accounting, stopped being able to understand my own tax return decades ago.) **But of course we**

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cannot convert to a flat tax system without altering people's relative taxes. A change would require sweeping policy decisions.

Flat tax proposals are often accompanied by calls for a national sales, consumption or "value added" tax on spending, such as many other nations have. The problem here is that those with low incomes spend most or all of their earnings on life's necessities, and as incomes rise, people gain the possibility of spending less of their incomes and saving more. Thus sales taxes tend to take a higher percentage of income the lower one's income. That's why, in contrast with progressivity, sales taxes are described as "regressive."

Last month, Republican presidential candidate Herman Cain announced his "9-9-9 plan," which features a flat 9% income tax rate, 9% national sales tax and 9% business tax. Let's take a look at it. The Tax Policy Center is a non-partisan joint venture of the Urban Institute and Brookings Institution. The *St. Petersburg Times*'s politifact.com summarized the results of the TPC's analysis as follows: "83.8 percent of tax filers would get a tax increase . . . compared with current tax policy. On the other hand, most of the tax filers who make more than $1 million would get a tax cut . . . about 95.4 percent of this high income group."

Would it be right to make poor people pay income tax at the same rate as rich people <u>and</u> pay a higher percentage of their incomes in a national sales tax? Anything's fair game, I guess, but if the TPC's analysis is correct, this plan would represent a step away from progressivity and further skew after-tax income toward the wealthy. Yet we're likely to hear a lot more about flat tax during the coming campaign. **When confronted with complex problems, people often welcome simple solutions.**

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<u>Topics in the News – Political Posturing</u>

A Democratic politician I know decided not to run for president in 2008 because he expected a rising tide of populist rhetoric to be required. He was right: classist speech rose substantially. And the rise continues unabated.

Democrats tend to lean toward bigger entitlement programs, greater governmental involvement in the economy, deficit spending, progressive taxation and income redistribution. These things are in contrast to Republicans' averred traditions of small government, individual self-sufficiency, free markets, balanced budgets and tax reduction. At the present time, with the economy performing poorly, Democrats are glad to describe Republicans' *laissez faire* policies as having contributed to joblessness and economic hardship. With difficulty more prevalent than prosperity today, populism – appealing to disadvantaged economic classes based on claimed inequities – represents a compelling brand of politics.

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Thus in recent months we've increasingly heard Democratic politicians sneer at "millionaires and billionaires" (see Senator Reid on page 2), an epithet aimed at a group that's supposedly been getting away with something. (In the past, I seem to recall, it was instead a group most people wanted to be part of.) To date, the preferred Republican label for people with money has been "job creators," although this line of defense may be tough to maintain in the current climate.

The *Financial Times* of October 29 carried an article headlined "Obama takes high-risk stance against the rich." It described a decision to emulate Roosevelt's Depression-era rhetoric and point an accusing finger at the Republicans as the party of wealth.

> Throwing out the standard presidential playbook dictating an aspirational approach to centrist voters, the White House is cementing a message that strikes at wealth and privilege.
>
> "There is surging sentiment among voters that the economy is weighted towards the wealthy," said a senior White House official.
>
> The White House strategy will make the 2012 election a generational test of the Republican push of the last three decades for cutting taxes, in ways their critics say have been constantly skewed towards the highest earners.

However, the article goes on to say Republicans may respond in kind to this tactic, joining in support of the common man rather than standing up for wealthier supporters:

> . . . Republicans are tweaking their public message, with the hardline [H]ouse majority leader, Eric Cantor, recently acknowledging the need to address the rich-poor gap.
>
> Mitt Romney, the frontrunner in the race to challenge Barack Obama in 2012, has taken to saying that he is standing up for the "middle class" because the rich "can look after themselves."

With candidates in both parties competing to sound less pro-wealth, top earners and their supportive tax policies should expect to be rhetorical targets in the coming election. Whether this will extend to Republican candidates dropping their resistance to tax increases remains to be seen.

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The Ultimate Worry: Tyranny of the Majority

The elements that contributed importantly to America's success included economic aspiration, upward mobility and a tax system that encouraged labor and risk-taking. In short, we all could get rich. **As a result**, **both those with money and those hoping to make money were attracted to the idea of low taxes. This made tax reduction a very popular theme over the last few decades.**

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But when people without money start to believe they can't make money, there's little to keep them from taking it from those who have it. This represents a threat to our way of life.

As I've written before, I was very impressed when, as a young man, I heard an interesting explanation for America's economic progress relative to Great Britain: "When the worker in Britain sees the boss drive out of the factory in his Rolls Royce, he says 'I'd like to put a bomb under that car.' When the worker in America sees the boss drive out of the factory in his Cadillac, he says 'I'd like to have a car like that someday.' " This tale says a lot about how we achieved our success . . . and also about what we'd better retain if we want to keep it.

The truth is, in a democracy, the lower-earning majority is perfectly capable of voting to confiscate the wealth of the minority. A lot of people have written about this and associated threats to our system:

> "If Sparta and Rome perished," asked Rousseau in his Social Contract, "how can any state hope to live forever? The Body Politick, like the body of a man, begins to die as soon as it is born; it contains the seeds of its own destruction. (*Financial Times*, October 29)
>
> "When men get in the habit of helping themselves to the property of others," warned the New York Times in 1909, "they are not easily cured of it." (*The Wall Street Journal*, January 29, 2011)
>
> Some people regard private enterprise as a predatory tiger to be shot. Others look on it as a cow they can milk. Not enough people see it as a healthy horse, pulling a sturdy wagon. (Winston Churchill)
>
> As Margaret Thatcher famously said, the problem with socialism is that sooner or later "you run out of other people's money." (*New York Post*, January 12, 2011)

The risk is exacerbated today by the fact (as noted earlier) that about half of all Americans pay no federal income tax. This makes me wonder whether our democracy can make good decisions about taxation when half the people are outside the system.

Obviously, it's tempting to many to increase taxes on the rich, seeing it as a harmless way to enhance the welfare of the many at a small cost to the few. But the damage to the U.S.'s success machinery could vastly outweigh the sums confiscated from those who are targeted. **The "fair share" taken from upper bracket earners has to be kept as small as possible if the tax system is to benefit all of our society. The coming debate over tax increases will be very important in this regard.**

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There can be no easy solution. Social programs and tax policies have been put in place that will combine with demographic and income trends to create challenging conditions. "The Middle-Class Tax Trap" (*The New York Times*, April 17, 2011) outlined the consequences:

> [Consider] the "current law baseline," a Congressional Budget Office projection in which the Bush-era tax rates aren't renewed in 2012, the Alternative Minimum Tax (which is supposed to hit only the rich but increasingly bites into middle-class paychecks) isn't indexed for inflation, and Medicare payments to doctors are slashed 20%.
>
> With these changes, the deficit drops away in the next 10 years, and more important, it stays manageably low for the decades after that. . . .
>
> This is how the "current law baseline" cuts the deficit: Thanks to inflation and bracket creep, its tax code generally subjects more and more Americans to rates that now fall only on the wealthy.
>
> Today, for instance, a family of four making the median income . . . pays 15% in federal taxes. By 2035, under the C.B.O. projection, payroll and income taxes would claim 25% of that family's income. The marginal tax rate on labor would rise from 29% to 38%. Federal tax revenue, which has averaged 18% of G.D.P. since World War II, would hit 23% by the 2030s and climb ever higher after that.
>
> **Such unprecedented levels of taxation would throw up hurdles to entrepreneurship, family formation and upward mobility. . . .**
>
> They could have ugly political consequences as well. Historically, the most successful welfare states (think Scandinavia) have depended on ethnic solidarity to sustain their tax-and-transfer programs. But the working-age America of the future will be far more diverse than the retired cohort it's laboring to support. Asking a population that's increasingly brown and beige to accept punishing tax rates while white seniors receive roughly $3 in benefits for every dollar they paid in (the projected ratio in the 2030s) promises to polarize the country along racial as well as generational lines.
>
> **The Republican vision for entitlement reform, President Obama said last week, would lead to a "fundamentally different America" than the one we inhabit today. He's right: asking the elderly to pay more for their health care, as [Representative] Paul Ryan proposes to do, would transform the American social contract, and cause no small amount of pain.**

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> **But what Obama doesn't acknowledge is that the alternative path could lead to a different country as well – a more stagnant and balkanized society, in which our promise to the elderly crowds out the fundamental promise of America itself.** (Emphasis added)

Will we keep the promise of entitlement programs or cut them back? Given the prominence of entitlements in the U.S. budget, in large part it comes down to that.

Over the last 80 years, politicians in the U.S. created entitlement programs that we cannot afford. Likewise, to varying degrees citizens throughout the developed world have been given promises their governments can't keep. That a day of reckoning would arrive is not news – credible observers have warned of our current problems for decades – but few politicians have been willing to fall on the sword of unpopular solutions.

Whatever action is taken now, it will not be pain-free. The unpayable debts run up in the past will have to be dealt with. And as for the future, there are only three possibilities: the promises will have to be scaled back, the tax burden will have to grow, and/or the deficits will have to be permitted to increase. If nations are to limit deficits – and it seems they may be forced to – there is no alternative to the first two of these. This fundamental truth will constitute a major portion of the public debate in coming years.

Tax policy consists of deciding who to take from (and how much) and who to give it to. There are no easy answers. We should all throw our support behind the common good and not just our individual interests.

November 16, 2011

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Memo to: Oaktree Clients

From: Howard Marks

Re: What's Behind the Downturn?

In May, I observed in "How Quickly They Forget" that investors had returned to pro-risk behavior despite the lingering presence of significant macro worries. And then just three months later, a number of exogenous events caused the markets to undergo a significant decline and one of the greatest paroxysms of volatility ever seen. All of the reasons existed well before. Investors simply hadn't taken them to heart.

I never cease to marvel, and complain, about the way investors flip-flop – focusing on just the positives at one moment and just the negatives at another – and the speed at which they do it. But I learned long ago not to be surprised by this phenomenon or expect it to stop occurring, but instead to look past the market's behavior and assess the underlying realities. Thus I decided to take the occasion of my summer vacation to write a memo parsing the recent events and touching on the outlook.

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Confluence

Markets usually do a pretty good job of coping with problems one at a time. When one arises, analysts analyze and investors reach conclusions and calmly adjust their portfolios. But when there's a confluence of negative events, the markets can become overwhelmed and lose their cool. **Things that might be tolerable individually combine into an unfathomable mess whose extent and ramifications seem beyond analysis. Market crises are chaotic, not orderly, and the multiplicity and simultaneity of contributing causes play a big part in making them so.**

That was certainly the case in the three crises we've lived through as investors in credit. In addition to the recession and credit crunch that marked each one, we saw:

- in 1990, the collapse of the most prominent leveraged buyouts of the 1980s; the Gulf War, with Iraq's invasion of Kuwait and the allies' response; and the government's crusade against high yield bonds, Drexel Burnham and Michael Milken;

- in 2002, the aftermath of 9/11, including our invasion of Afghanistan; the unraveling of the overbuilt fiber telecom industry; and the exposure of accounting scandals at Enron, WorldCom and Adelphia and the fall of Arthur Andersen; and

- in 2008, the sub-prime mortgage meltdown; the defrocking of tranching, leverage and derivatives as constructive forces; the outing of credit rating agencies as no more

reliable than their models; the banks' major losses in off-balance-sheet investments; and, as a result of all of the above, the collapse or rescue of a number of prominent financial institutions and grave concern about the rest.

It's my sense that it was the simultaneous nature of these occurrences – in addition to, or perhaps rather than, their force individually – that rendered the markets so incapable of maintaining their equanimity.

Certainly that was the case in early August. For the first time in history, the Dow Industrials either rose or fell by at least 400 points four days in a row. What was it that sent the markets on that wild ride? I can think of a number of factors:

- rising awareness of the import of the U.S.'s fiscal deficit, and the bitterly disappointing display that played out in Washington as we approached the date on which the debt ceiling would bind,
- Standard & Poor's downgrading of U.S. government debt,
- increasing worry about Europe's ability to deal with the excessive debts of its peripheral countries, and thus about the health of European banks holding them,
- concern over the possibility of a double-dip recession, and
- mounting evidence that China and the rest of the emerging world are something less than unstoppable economic miracles.

Importantly, we saw the onset of one of those negative feedback loops where intelligence is imputed to market developments. We're told the falling prices reflect problems lying ahead, and thus investors sell in response to the message being provided by . . . investors who're selling.

Again, I think it was the collective force of these things that convinced people the world was a scary place. **What could be worse than the convergence of a number of major worries whose extent, interaction and solution seem beyond comprehension?**

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Washington Debt Follies

Where can I start on this sorry subject? As described in "Down to the Wire" in late July, America and the world contemplated the collision of an irresistible force (the U.S. government's need to borrow due to its habit of spending more than it brings in) with an immovable object (the debt ceiling and Washington's seeming inability to reach a constructive solution to it).

With control of the government divided and many legislators committed to preventing either tax increases or cuts in social programs, it was obvious to most level-headed observers that any solution would require compromise. But while it could have been a negotiating stance, several of the participants in the debate seemed not to attach much

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importance to reaching a solution if it required compromising on their positions. In the process, a disappointing number gave the impression that they didn't understand or care much about the significance of deficits, defaults and downgrades.

On July 27, *The New York Times* ran an article on political negotiating. Its mention of the game of chicken reflected what was going on in Washington: "two players [drive] toward each other, each wanting the other to swerve. The one who does, loses. The trick to winning is for one player to convince the other that under no circumstances will he or she veer off course." One way to do that, *The Times* suggested, is to unscrew your car's steering wheel and toss it out the window. I must say I found that an accurate metaphor for what we were watching. **While that may have been an effective tactic for winning the political game, however, it didn't do much to reassure onlookers hoping for a reasonable solution. Instead, it gave the strong impression that reason couldn't be counted on to prevail.**

Nevertheless, the situation played out as expected. We saw the short-term problem papered over; little movement toward meaningful spending cuts or revenue increases; and the formation of a bipartisan commission to come up with a solution to the long-term problems. But if the plan formulated a year ago by another panel including some of our most eminent former legislators couldn't gain traction, what's the likelihood a new one will fare any better?

Anyhow, the markets breathed a collective sigh of relief and went back to normal when the can was kicked down the road. Investors were hungry for reassurance that Washington was up to solving the problem of deficits and debt and alleviating the uncertainty, but I don't think they got it. **All decisions to invest – whether in factories, new employees or securities – require confidence that there'll be a salutary, stable and predictable environment. Our leaders' response to the debt crisis did nothing to foster one.**

Confidence was further eroded when, a few days later, Standard & Poor's announced that it had downgraded long-term U.S. debt from AAA to AA+, and all hell broke out. Was the downgrade appropriate? What did it mean? And how many of those who reacted in the markets really understood its significance?

According to S&P, a triple-A debt issue means "Extremely strong ability to meet financial commitments. Highest rating." **Certainly the U.S.'s ability to meet financial commitments remains "extremely strong." But is it the "highest"? And is it as high as it used to be, or do recent events suggest it is diminished? I find the issue hard to wrestle with:**

- Given that the U.S. has the power to print the world's reserve currency, it doesn't make sense to think it will fail to pay its obligations. (Of course, if it runs the printing

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presses to pay its debts, the dollars with which it does so will likely have diminished purchasing power.)

- The truth is that an AA+ rating is far from meaning "default-prone." Since only a few percent of single-B bonds default each year on average, at worst AA+ must imply a probability of default of a small fraction of a percent. In fact, many potential triple-As opt for AA+ instead in order to be able to carry more debt. That's one reason S&P rates only four companies triple-A.

- Getting a little more esoteric, what does it mean for a debtor to "meet financial commitments"? As I mentioned in "Down to the Wire," debtors generally aren't expected to pay off their debts; rather, it's the normal expectation that interest will be paid and principal will be refinanced. **Interesting, then: even triple-A doesn't necessarily connote an ability to extinguish one's debts.**

- While credit ratings are explicitly defined as relative, relating primarily to the likelihood of payment, **I've always thought triple-A has a connotation for most people that absolutely nothing can go wrong. For that matter, U.S. Treasurys have traditionally been described as "riskless," which sounds pretty absolute to me. If that's a fair description, it doesn't seem to fit the political process we've witnessed in the last few months.**

- The events of July suggest some of those currently in control in Washington don't think failing to meet commitments would be a big deal. Certainly it seemed possible on July 31 that some of the people to whom the U.S. owed money might go unpaid within a few days. So, is the risk on Treasurys really non-existent?

- If the U.S. was triple-A in 2000, when it was running a surplus, its national debt was far smaller, and Washington functioned much more constructively, mightn't it deserve a lower rating today?

- Our deficits are far bigger than ever, and the commitment to do what it takes to reduce them seems quite weak. As I wrote in "I'd Rather be Wrong" (March 2010), "Everyone wants to see the deficit narrowed, but today's circumstances seem to prohibit both expenditure reduction and revenue increases. Everything else is on the table." The process of governing seems to be running less well than ever.

- The long-term outlook is particularly bleak. In "Down to the Wire" I described how entitlement programs endanger our fiscal future. I failed, however, to mention that the present value of our future unfunded obligations is estimated at $64 to $99 trillion depending on the source (per J.P. Morgan), a burden that dwarfs our current national debt of $14.3 trillion.

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So S&P and Egan-Jones downgraded U.S. debt (while Moody's and Fitch didn't). There was one main moving part on August 5: that's the day S&P labeled U.S. debt less safe. What was the upshot? A buying panic in U.S. Treasury securities, with the yield on the 10-year note falling below 2%.

As an aside, let's spend a minute thinking about that reaction. If there had been near unanimity about anything, it was that a downgrade would raise the yield demanded on U.S. debt. **Certainly the fact that so many people could be wrong about this supposedly simple linkage should disabuse investors of the notion that they know how markets work.** The expected reaction was much more logical than the one that actually played out: after it was labeled less safe, the yield demanded on U.S. debt declined markedly. **I find the explanation fully worthy of Yogi Berra: the downgrade of Treasurys made people so worried about the elevated risk in the world that they ran to Treasurys for safety. So much for the supposed rationality of markets.**

The bottom line for me in all the above is that, while on an emotional basis I find the debt situation depressing, intellectually I believe U.S. Treasury obligations will prove money good. At bottom I agree with former Treasury secretary Hank Paulson:

> While the players in Washington certainly haven't performed at AAA level, I would certainly take U.S. Treasuries over other AAA sovereigns any day." (*The New York Times*, August 9)

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<u>The European Version</u>

The problem in Europe isn't overwhelmingly different, just manifested differently. **In the credit boom of the last forty years, debtors all around the world – nations as well as states and cities, consumers, home buyers and buyout companies – borrowed amounts that they couldn't repay now if required to do so. The key questions are whether the loans will be renewed, or who'll pay them off, or how they'll otherwise be discharged.** Only the details vary from instance to instance.

As I described in "It's Greek to Me" (July 2010), for years, especially thanks to their membership in the European Union, peripheral nations with weak economies and little fiscal discipline were able to borrow sums disproportionate to their incomes. Thus Greece, Portugal, Spain and others could run continuous deficits to support excessively generous programs with features such as retirement ages in the fifties and a thirteenth month of pay each year. Lenders were unconcerned about the impossibility of repayment, it seemed, until early 2010. But then they awoke.

Economically stronger nations such as Germany and France, on the other hand, applied much greater prudence. They and their citizens and financial institutions didn't participate as much in the trend toward over-borrowing, and thus don't share the

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particular problems of the peripherals. But they have problems of their own, since they took the capital piled up by their strong economies and lent it to the profligate borrowers. **Thus the direct problems in the strong nations relate not to unpayable debts, but to questionable receivables**: their banks and other providers of capital are owed large sums lent to the governments and institutions of the peripheral nations.

All member countries are impacted by the general uncertainty present. As in the U.S., the divided, fractious nature of Europe's governing bodies will complicate the process of problem solving. Will the governance structure of the European Union permit a solution to be reached? What can be done about the weaker members? How much of the relief will the strong nations be expected to provide? Will the untested, loose confederation of the monetary union hold together or, alternatively, have to provide for the exit of the weaker links? Will voters in the strong nations allow their elected officials to use resources to support the weak ones?

The basic problems are similar to those in the U.S. in terms of scale, novelty, and the difficulty of identifying solutions. How will the transition be handled from the easy-money environment of the past to the more restrictive one of today? Who will bear the burdens of excessive debt and shoulder the losses? How will the banks' bad-debt problem be solved and their capital rebuilt? Will the political system produce the needed solutions? Are the leaders up to the task? Here's how the *Financial Times* put it on August 20:

> There is no magic medicine and the best solution would be a combination of [several] policies, wrapped up in a show of political will that restored confidence to the global economy. But political will is in short supply, and that may be the most worrying economic sign of all.

If markets abhor uncertainty – as we know they do – then these issues imply little in the way of tranquility. And when multiple problems of this nature coincide, as they did in early August, the result is chaos, at least until the markets become inured to the uncertainty and the gyrations themselves run out of energy.

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Possibility of a Double Dip

In 2010 and early 2011, the economic reports suggested a healthy recovery. They contributed to confidence that things were going in the right direction, and thus to investors' feeling of wellbeing and willingness to bear risk. In fact, I expressed in "How Quickly They Forget" my belief that risk tolerance had become excessive relative to the fundamental outlook.

Even when the economic reports were positive, I didn't feel they were as dynamic as in past recoveries. And this one was from the worst recession I've seen, which should have

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made for a strong rebound. In particular, job growth was slow and unemployment remained at stubbornly high levels.

But then, concurrent with the explosion of uncertainty over debt in the U.S. and Europe, slower growth was reported for the second quarter and the gains of the first quarter and late 2010 were revised downward. All of a sudden, another contributor to the sense that "it's all good" had turned negative instead.

I always hasten to point out that I am not an economist (and Oaktree doesn't have one). **Thus I don't have a strong opinion as to whether the U.S. will relapse into a double dip. (I also have no idea how people reach firm conclusions on such things, other than as expressions of their biases and hunches.) For our purposes, it suffices that we have operated since the financial crisis under the assumption that the recovery would be sluggish, rather than V-shaped. We still feel that way.** And that feeling is inconsistent with moving out on the risk curve or down in credit quality, investing more in cyclicals or taking on leverage.

Our enthusiasm regarding the macro economy has been muted for a number of reasons, including:

- conviction that it was largely the growing use of credit that enabled consumption to grow faster than sluggish incomes over the last 20-30 years, and that in the future credit will not be equally available or equally employed,

- the potentially counter-stimulative effect of austerity as government spending shrinks and taxes rise relative to GDP, and of delevering in general on the part of over-indebted governments, businesses and individuals,

- concern (thus far unfounded) over the potential for rising interest rates and their depressant effect on the economy,

- continuing challenges regarding manufacturing competitiveness due to our status as a high-cost location, and

- belief that unemployment will remain a persistent problem due to the above-mentioned decline in manufacturing, our problems in education, and the shift to an information-based and more productive economy (read: fewer hours of labor per dollar of output).

In addition, we mustn't ignore the part played by confidence. I think confidence is everything in determining the economic future. If participants in the economy believe things will be good in the future, they'll spend and invest and things will be good, and vice versa. **Economic expectations are self-reinforcing in many ways, and right now**

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that bodes ill. When people see nothing on TV but news of how bad things are, they tend to pull in their horns. Certainly the recent events haven't been helpful in this regard.

Finally, there's no longer much confidence in the efficacy of the Fed, its chairman and its arsenal. Clearly confidence in Alan Greenspan and his Fed was overdone in his last decade (and thus contributed to the moral hazard of the period). Today the reverse seems to be true, but at least that means we're not burdened with unrealistically high expectations in this area.

On the positive side, many companies are reporting healthy orders and profits. Further, I believe the likelihood or potential severity of another recession is reduced by the fact that economic comparisons now and in the coming months will be against non-dynamic prior periods, and thus relatively easy. In short, without a boom, it's harder to have a bust.

My overall vision continues to be of an airplane rising weakly, perhaps overloaded or with an engine sputtering and thus having difficulty getting above "stall speed." Its sluggishness constitutes a drag and introduces risk, but predicting deceleration is going too far . . . and not necessary to convince us to remain cautious in deciding on our course of action.

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Emerging Markets Play Their Part

The emerging markets' contribution to the unsettled environment is of a very different nature. Their economies are growing strongly and generally not over-indebted. Rather, here the issues stem from the juxtaposition – as often seen – of investors' high expectations with a new, less rosy reality.

I've written in the past (e.g., in "Hemlines," September 2010) about the propensity of markets to become captivated by simple themes, like "the Internet will change the world," "equities are good" or "who needs bonds?" One such easy-to-swallow story line that prevailed over the past decade has been with regard to the "emerging market miracle" and, especially, the inevitability of China.

I don't mean in the least to suggest that the outlook for China, India and the rest of the emerging markets is less than bright. In fact, I'm sure they'll out-grow the developed world over the remainder of the century. **The problem, however, is that simplistic, mania-following investors elevated emerging markets to the pedestal of the "sure thing" where nothing can go wrong. And when prices incorporate unlimited virtue, the eventual result is bound to be disappointment, disillusionment and depreciation. Even favorable developments can lead to losses when they fail to measure up to expectations. That's been the case in the emerging markets.**

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So now we see:

- concern that the emerging market economies have been over-stimulated,
- the rising inflation that occurs as a consequence,
- uncertainty over whether the monetary tightening which is taking place will result in a soft landing or something worse,
- questions about corruption, fraud, non-transparency and inefficiency, and
- realization – again – that their economic success isn't independent of that of the developed world.

The fundamental outlook in the emerging markets is still excellent. It's just that at times in recent years, when problems arose in the U.S., Europe and Japan, investors turned to the emerging markets for investment solutions, and the view that their future would be "superior" morphed into "flawless." When their securities became priced for that perfection, the realization that they actually had feet of clay – at a time when investor confidence was weakened by the other things I've mentioned – took a toll on investor equanimity and security prices.

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Taken Together

None of the issues described above is illusory. The U.S. is a fiscal and political mess, and its leaders inspire little confidence regarding their ability to effect a solution. The outlook in Europe is similarly murky, and the emerging markets have turned out not to be as foolproof as had been believed. However:

- none of these is a new development; they all existed three or six months ago, when the markets were sanguine,
- their scariness is due to the fact that many are relatively unprecedented, and thus the solutions aren't obvious or time-tested, and
- this uncertainty is among the greatest contributors to the markets' unease.

So, as is often the case, the swing we've had is more in psychology than in fundamentals. The positives of June are diminished, forgotten or eclipsed, and now investors are preoccupied with the negatives. As usual, the truth probably lies in between.

We face a new world nowadays in terms of the speed of media coverage, the vast number of outlets competing for people's attention, and in many cases their seeming lack of concern over their own partiality, volatility and non-objectivity. I have no doubt that the media contribute significantly to the manic swing from "it's all good" to "it's all bad," with its highly unsettling effect on the markets. Emotion takes over from reason.

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Hysteria rules the day. Nobody knows what the developments mean or what to do about them. But that doesn't prevent investors from acting in response.

With the strong flight to the perceived safety of Treasurys and the pronounced cheapening of everything else, the dearth of bargains that I bemoaned a few months ago is much eased. In U.S. high yield bonds, for example, the yield to worst and spread on the Citi High Yield Market Index went from 6.8% and 526 basis points on May 31 to 8.3% and 719 b.p. on August 31, just three months later. As for European issuers, the yield and spread on the BofA Merrill Lynch Global High Yield ex. Russia Index went from 7.7% and 545 b.p. to 10.0% and 840 b.p. in the same period. Not only are the current spreads well above the historic averages, but the yields are actually quite reasonable in the absolute (and suitable for institutions with 8-ish actuarial assumptions or required returns). And what's been the response? Massive redemptions from high yield bond mutual funds.

So the pattern of the last few weeks hews to the norm:

- There's a period in which the news is good, reaction is favorable, psychology is positive, willingness to bear risk grows, and assets move to higher prices, attracting additional buyers into the markets.

- Then something takes a turn for the worse and, in the most serious downturns, there is a confluence of negative events.

- The worrisome elements gain sway over investor psychology, and the positives are forgotten.

- Disillusionment replaces sanguineness: "How could I ever have put so much trust in the markets?"

- Money flows out of the markets rather than in; it's sellers who influence prices rather than buyers; and securities eventually move from dear toward cheap.

Certainly some of these developments have taken place. **Nobody waves a banner when assets have gotten cheap enough, but it's incumbent on investors to recognize things like these and react appropriately, rather than follow the herd. Thus right now I would be a better buyer, albeit in moderation since fundamentals still pose threats.**

* * *

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Rather than end there, as I originally thought I would, I want to add a little about the longer-term future. I could prepare the way by repeating my standard confession that I'm given more to worrying than to enthusing, but you already know that.

What I want to say is this: the worries concerning the U.S. economic outlook enumerated on page seven are not limited to the current short-term cycle. I touched on most of them in "What Worries Me" (August 2008), "The Long View" (January 2009) and "Tell Me I'm Wrong" (January 2010), and my view of their importance hasn't changed. I think they're likely to influence the environment for years.

I feel today's distribution of possible futures is shifted to the left – that is, generally less attractive – relative to the distribution that governed the late twentieth century. The picture in the U.S. is less positive today in terms of consumer-led growth and the supercharging impact of increased credit use, competitiveness and job creation, and the government's fiscal situation (and thus its ability to stimulate the economy).

I think we benefited greatly in that earlier period from the luck of the draw. Things went about as well as they could have for the economy (despite sluggish income growth). Inflation was very much under control, and we benefited from steadily declining interest rates. We were even lucky enough to see the collapse of our great enemy, the USSR, and to live in a world that was generally at peace.

It was a period in which the markets benefited from positive developments and overwhelmingly bullish attitudes. As my partner David Kirchheimer points out, the favorable underlying trends constituted a rising tide in the Buffett sense, meaning for a long time we didn't get a chance to see which borrowers, risk takers and financial innovators were swimming unclothed. The picture has become less alluring with the tides less favorable, and I expect only moderate improvement in that regard.

David adds that "it took many years, trillions of dollars in credit extension, and countless well-intentioned but misguided policies to get us into this mess, so it's likely that under the best of circumstances it will take many years for the economy – and standards of living – to reach a new equilibrium, and for the financial markets to acclimate to a 'new normal' of possibly lower returns without the artificial effect of record government stimulus."

I feel the prosperity we enjoyed in the final decades of the twentieth century was considerably better than "normal," and better than we're likely to see up ahead. I'm not implying a world without growth or otherwise permanently negative. Just one without the prosperity, dynamism or positive feelings of past decades. In addition, the newness of the macro picture and some of the problems – and the opacity of the solutions – certainly make it less clear in which direction we'll go.

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It's my belief that things went better in the late twentieth century than we have reason to expect in the years ahead. We could get lucky again, of course, but it would be downright imprudent to make investments predicated on that assumption. **Thus at Oaktree we're making allowance for things that may go less well than they did in past periods. Cheapness provides a margin of safety today, but only so much. We're moving forward, but cautiously.**

September 7, 2011

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Memo to: Oaktree Clients

From: Howard Marks

Re: Down to the Wire

Here are the ingredients in the plot: A problem everyone's aware of. If it isn't resolved, a shutdown with unspecified but possibly disastrous consequences. A deadline which seems indispensable, since in its absence it appears nothing would be done. And despite the presence of the oncoming freight train, movement toward a solution is deterred by highly entrenched positions. It's truly white-knuckle time, and if the progress toward a solution continues to lag, the things that must happen won't.

I'm not talking about the nearly concluded drama at the National Football League, where failure to reach a labor settlement for just a few more days would have caused significant changes in the schedule for the coming year, upsetting the flow of wealth to owners and players and depriving fans of the game they love. I'm talking about the down-to-the-wire battle over the U.S. debt ceiling. I've decided to devote a memo to the debt issue and its significance. I especially hope it'll be helpful to our non-U.S. clients, for whom the lack of progress to date must be absolutely incomprehensible.

Interestingly, the immediate debt crisis is somewhat artificial. It is occasioned now only because of our debt ceiling, which currently limits the net debt of the United States to $14.29 trillion. Such ceilings are far from the norm worldwide. Many other nations seem to function no worse without them.

But the U.S. has the historical accident of a ceiling, and we must deal with it. Because the limitation is set in terms of absolute dollars and not indexed for inflation or growth, we would run into it every few years even if our debt only grew apace with the economy. "In fact, it's been raised nearly 100 times over the decades." (*Financial Times*, July 16) But thanks to the especially rapid growth of our debt relative to GDP in recent years – exacerbated by the Afghan and Iraq wars and the financial crisis – the ceiling has the potential to provide some real excitement every once in a while.

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The Relentless Growth of Debt

Greece, Ireland, Portugal, Spain, Italy, Iceland, the U.S., California . . . the list of governments with debt problems is long and grows longer. The issue has flared up in the last fifteen months and is often in the headlines nowadays.

And yet, the general conditions causing the concern are nothing new. The deficits and debt that worry people today have existed for a good while: similar in kind albeit perhaps

not in degree. This merely shows that in the economic/investment world, what matters most in the short run isn't necessarily what's true but, rather, what's on people's minds.

Serious attention began to be paid to government debt in April 2010, when the Greek crisis burst into the news. Prior to that, no one seemed to worry about the way Greece – like many other countries – increased its budget deficit and national debt each year relative to its GDP. Banks and investors around the world were perfectly willing to extend credit without limitation based on Greece's strong EU-backed credit rating, and without thought as to whether there was any prospect for Greece ever paying down the debt, or even slowing its growth or growing out of it.

If you ask me, one of the most pronounced trends in the global economy over the course of my 42-year career has been the growth in the use of credit. And it's not just governments that have vastly expanded their use of credit over this period.

If I wanted to buy something upon my arrival at college in 1963, I had two choices: I could spend money I had in my pocket, or I could write a check against money I had in the bank. The one thing I couldn't do – now here's a radical concept – is spend money I didn't have. As a result, I had no way to buy things I couldn't afford.

But then, around 1967, Bank of America came out with the first credit card, the BankAmericard, and First National City Bank countered with The Everything Card. (When I was hired into FNCB that year for my first summer job, it was to go door-to-door trying to convince merchants to accept the card. But then volume on the New York Stock Exchange spiked to 25 million shares a day and banks like FNCB couldn't keep up with the related paperwork; thus I was assigned instead to a task force whose job it was to eliminate bottlenecks in the back office. But that's another story.)

Before the BankAmericard and The Everything Card, the only plastic in circulation consisted of T&E ("travel and entertainment") cards – American Express, Diners Club and Carte Blanche – which generally were limited to people in the upper economic strata and had to be paid off each month. It was only in the last forty years that we've seen the morphing of BankAmericard into Visa and The Everything Card into MasterCard. With them came the ability of consumers to maintain an outstanding balance. Now it was easy for people to buy things they couldn't afford. And so they did.

When I was a boy, as I recall, owing money was considered undesirable and debts were generally expected to be paid off. When people bought homes, they put down 30% and took out thirty-year mortgages to finance the rest. They made level payments that included a substantial principal component that grew over time, eventually extinguished their debt, invited their friends over for mortgage-burning parties, and owned their homes free and clear in time for retirement.

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But attitudes toward debt underwent significant change, and in the last forty years we've seen the following:

- Vast expansion of the use of credit cards, the balances on which are never expected to be paid off.
- Innovative mortgages requiring little or no principal amortization; reverse mortgages, where you owe more at the end than the beginning; declining down payment requirements; and eventually the availability of mortgage loans exceeding purchase prices.
- Home equity loans enabling owners to drain off any equity in their homes. Fifty years ago these were called second mortgages, and people who had them were considered by their neighbors to be in financial trouble.
- Growth in corporate debt, and the extension of borrowing power to companies with "speculative" credit ratings.
- The development of the commercial paper market, where companies could access "permanent" capital with maturities measured in days, on the assumption that the paper could always be rolled over.
- Creation of highly levered investment entities.
- Vastly increased steady-state borrowing on the part of nations, whereas, previously, deficit spending had been limited to occasional efforts to fight recession through stimulus.

What's the upshot of all of this? For the last several years, as I've visited with clients around the world, I've described the typical American as follows (exaggerating for effect, of course): He has $1,000 in the bank, owes $10,000 on his credit card, makes $20,000 a year after tax, and spends $22,000. And what do lenders do about this? They mail him additional credit cards.

Most people laugh – perhaps uncomfortably – when they hear this. But no one says it's inaccurate or benign. The bottom line is that consumer credit has been extended without any thought for how the full balance might ever be paid off. As long as the borrower is able to make monthly payments covering the interest and a tiny bit of principal, the situation is considered acceptable. But that's not my version of fiscal health.

So now let's jump from the top of the above list of developments to the bottom. In much the same way, credit has been available to governments deemed creditworthy without limit and without concern for the fact that:

- Countries were constantly spending more than they were taking in.
- Their deficits were growing non-stop relative to GDP.
- Their national debts likewise were expanding relative to GDP.
- In other words, repayment of principal was absolutely unimaginable.

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One of the most striking aspects of debt in the modern era is that little if any attention is paid to repayment of principal. No one pays off their debt. They merely roll it over . . . and add to it. Thus credit ratings are highly deficient (shocker!) in a way that few people talk about. What ratings describe isn't the borrower's ability to repay principal, but its ability to make interest payments and refinance principal. But the assessment of their ability to roll their debt – likewise – isn't based on an ability to repay, but rather to refinance again. So ultimately the security of capital providers stems not from the borrower, but from the continued willingness of other capital providers to roll debts in the future. (It was their occasional refusal in 2007-08 that caused the worst moments of the financial crisis.)

With no one asking how debt could be repaid, nations were allowed for decades to increase their deficits and debt non-stop relative to their GDP. And then, in the first quarter of 2010, the little boy stepped out from the crowd, took note of the emperor's non-existent new clothes, and said "Hey, wait a minute: Greece will never be able to repay even the debt it has, forgetting that it takes on more all the time. Its economy is non-competitive and stagnant, and tax compliance is non-existent. They shouldn't be able to borrow."

That's all it took. Greece was denied further credit. And then people took a look around peripheral Europe and saw more of the same. Today, although the situation is nowhere as dire, they're also looking at the U.S. and some of its states.

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It's Not the Ceiling

In June, the debt of the U.S. reached the ceiling, meaning no more could be issued. That's bad news for a country that continuously spends more than it takes in. Thus the deadline imposed by the debt ceiling has brought the issue to the forefront. (If the debt limit was reached in June and we've continued to spend more than our revenues, how have we financed the shortfall? The federal government has borrowed from federal retirement funds; the courts ruled in the past that when we do this, it's not an expansion of our net debt, since America is borrowing "from itself." The well-known deadline of August 2 is the date on which the capacity for borrowing in this way is projected to be exhausted.)

The problem isn't the ceiling, it's our behavior. The debt ceiling merely imposes a discipline that our national leaders should provide but generally haven't. On this note, in his press conference on July 15, when asked about conservatives' insistence on a balanced-budget amendment to the Constitution, President Obama replied, "We don't need a constitutional amendment to do that [balance the budget]; what we need to do is to do our jobs." **But clearly we do need some enforced discipline, because the years in which we haven't run a deficit have been by far the exception of late, not the rule.**

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The U.S. has run deficits almost every year since World War II, with prominent surpluses only in 1998-2001.

Go back a few decades, and the characterizations of the two political parties were fairly well established. The Democrats stood for progressive taxation (meaning a higher percentage burden on top earners) and more government spending, especially in aid of those in need. The Republicans were the party of strong defense, small government, fiscal responsibility and balanced budgets.

More recently, neither party has shown resolute fiscal discipline. Both have added unfunded programs. Tax reduction has been discovered as a growth stimulant. The upward march of our deficit and debt has been nearly uninterrupted.

We've seen the enactment of spending programs without providing for increased revenues to pay for them, and cuts in taxes without corresponding reductions in spending. As President Obama put it on July 15:

> . . . we cut taxes without paying for them over the last decade; we ended up instituting new programs like a prescription drug program for seniors that was not paid for; we fought two wars, we didn't pay for them; we had a bad recession that required a Recovery Act and stimulus spending and helping states . . .

The blame isn't limited to one party. The increases in deficits and debt took place when both Democrats and Republicans were in power, and while control of government was both divided and in the hands of a single party.

It seems apparent that in recent decades, politics has become more partisan, and solving the nation's problems has taken a back seat to adhering to ideology and getting re-elected. And what gets people elected? Promises of more: more benefits without increased taxation, and more take-home pay without reduced largesse. Only recently have large numbers of politicians begun to face the music, admitting that the government has to either do less or charge people more or both.

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Obstacles to a Solution

From my point of view, so much that's illogical is going on regarding these issues that I sometimes find it hard to get my head around the current "debate" (if we can call it that when so few people are conversing). Here's what I think is the logic of the situation (with data from *FactCheck*, July 15):

- Expenditures have risen relative to the economy even as revenues have declined.

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> Washington's spending has recently been higher as a percentage of the nation's economic output than at any time since World War II. But by the same measure, Washington's revenues are the lowest in more than 60 years.

- The government is spending far more than it brings in. The current deficit is in excess of $1 trillion, and "the U.S. is borrowing about 36 cents of every dollar spent so far this year. It borrowed 37 cents on the dollar last year, and 40 cents in 2009."

- **There's no way to change these facts in the short run**. In particular:

> The largest components of federal spending are Social Security and Medicare programs for the elderly (33.5 percent of total outlays in 2010) and national defense (20.1 percent). Interest payments on federal debt . . . accounted for 5.7 percent of all federal spending.

Thus revenues (which equate to 64% of spending) just slightly more than cover the 59.3% of the budget that went for these inescapable expenditures. What about cutting programs that are unpopular and more discretionary? That wouldn't accomplish much:

> Foreign aid . . . amounts to less than 1 percent of the entire budget. . . . All agriculture programs – including farm subsidies – make up just over one-half of 1 percent.

- When deficit spending is unavoidable, we have to borrow.

- Since we're at the current debt ceiling, continuing to borrow requires that the ceiling be raised.

- If the ceiling isn't raised and we can't borrow, we won't be able to make good on all of our obligations. Someone will have to go unpaid: employees, creditors, soldiers, retirees, vendors, etc. I don't think anyone believes we can make good on all of our obligations without borrowing.

- Thus we have to solve this immediate problem. We can enact spending cuts and/or tax increases, but invariably these things will only take effect over the long run. **In the short run we have no choice but to raise the debt ceiling and keep borrowing.**

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* * *

- **When the House of Representatives is under the control of one party and the other party is in charge of the Senate and the White House, solving gritty problems requires compromise.**

- A compromise is defined as a solution in which both sides make sacrifices, giving up some of what they want and making concessions to the other side that they find distasteful. On July 14 *The New York Times* cited Sen. Alan Simpson on President Ronald Reagan's pragmatic attitude toward compromise:

  > He had a rule: If you can agree on 80 percent, take it. He raised taxes 11 times in eight years. He did it to make the country run.

- **But compromise runs directly against ideology and is incompatible with lines drawn in the sand.** Some of today's elected officials have pledged not to permit any increases in taxes. Others have vowed to resist any cuts in entitlement programs such as Social Security and Medicaid. **Some even campaigned on explicit promises not to compromise and not to raise the debt ceiling; for people like these, reaching agreement would be a problem, not a solution.**

- Even among Republicans, it seems that some put the highest priority on balancing the budget while others insist on shrinking the government. This creates a fundamental intra-party conflict, since increasing government revenues represents a way to accomplish the former but is in direct contravention of the latter. (See "Anarchists and Tassel Loafers," *The New York Times*, July 14.)

- There's another important difference of opinion; which is more important, adherence to avowed principles or action to address the short-term problem? Many politicians have made public pronouncements that render the two mutually exclusive.

- **Thus to date enough people have refused to accord first priority to solving the debt problem in the short term that a compromise solution has been rendered unreachable.**

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- The picture is complicated by the fact that any action to reduce the deficit and related borrowing – be it through reduced spending or increased revenues – would have a depressing impact on an economy that is already anemic.

- Thus many people want to maintain or increase spending or cut taxes to stimulate the economy, even though doing so would exacerbate the problems of deficit and debt in the short run.

- There is considerable disagreement over which would be worse for the economy: a $1 reduction in government spending or a $1 dollar increase in taxes? Economics is too imprecise to produce a definitive conclusion. And economists have ideologies, too; Republican economists tend to describe revenue increases as more harmful, while Democratic economists are more likely to resist spending cuts.

* * *

- If the debt ceiling isn't raised, as I said, some people will have to go unpaid. Among the candidates are our nation's creditors. Failure to pay creditors is called default.

- Some lawmakers believe that, even if the ceiling isn't raised, we'll manage to pay creditors and avoid default.

- At least until recently, and perhaps still, some of those involved have been unconvinced that failure to act would have grave consequences.

> At a closed-door meeting Friday morning [July 15], GOP leaders turned to their most trusted budget expert, Rep. Paul D. Ryan of Wisconsin, to explain to rank-and-file members what many others have come to understand: A fiscal meltdown could occur if Congress fails to raise the debt ceiling. House Speaker John A. Boehner of Ohio underscored the point to dispel the notion that failure to allow more borrowing is an option. "He said if we pass Aug. 2, it would be like 'Star Wars,' " said Rep. Scott DesJarlais, a freshman from Tennessee. "I don't think the people who are railing against raising the debt ceiling fully understand that." (*Los Angeles Times*, July 16)

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- If the U.S. defaults on its debt, our credit rating will likely be cut from triple-A. But there may be people who don't believe this, while others seem unconvinced that it would be a serious development.

- I believe, however, that (a) our rating will be cut if there's a default, (b) this would have serious repercussions for our cost of borrowing, and (c) even if we were able to avoid default and/or downgrade, the feeling that our political leaders had engaged in irresponsible action could reduce lenders' view of our credit and increase our cost of borrowing anyway. **I strongly doubt the dollar can remain the world's reserve currency, of which unlimited amounts are accepted, without unflinching adherence to the associated responsibilities.**

- **Another thing I'm most sure of is that no one knows what the repercussions of default and downgrade would be.** They don't call economics "the dismal science" for nothing. When some people warn of Armageddon, others feel they're exaggerating for effect. There's no way to prove anything on this subject other than by letting it happen.

- Finally, I'm convinced that while it's not certain exactly what will happen if a solution isn't reached, some of the possible results could be very negative.

This situation is incredibly complex and serious. I feel we need a compromise solution, because I'm just not willing to conduct an experiment with consequences that are unforeseeable and could be grave. But the events to date show us that compromise solutions are assured only when there's a broad consensus that an agreement is desirable, and that the consequences of not reaching one are worse than the disadvantages of the compromise. Nothing tells me that such a consensus is prevalent enough to guarantee that the underlying problem of deficit spending will be solved.

<u>The Most Likely Outcome</u>

If you want to get re-elected and suspect that failure to raise the ceiling might hurt your chances – or if you just believe raising the ceiling would be good for the country – you might agree to a compromise in the end. But, given the ideological divide, lawmakers will be more likely to accept a compromise if there's less substance and less teeth in it.

Thus I think a solution will be reached. But given the complexity and difficulty of the issue and the short time remaining before the deadline, it's unlikely to be either detailed or iron-clad. T**he most likely outcome here is a short-term, stopgap solution**. It probably won't require the balanced-budget amendment desired by conservatives, the broad spending cuts Republicans want, or the tax increases Democrats insist should be part of any deal . . . some or all of which we clearly need.

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In other words, the "solution" is unlikely to represent much fundamental progress; for the most part it'll just kick the can down the road. It may call for a new commission to study the problem, but:

- the last commission came up with a plan that was hailed by the commission members who were former elected officials, rejected by many of those still in office (who have to face voters), and quickly forgotten, and

- it's hard to believe that the likelihood of a plan being adopted will be greater without the presence of a deadline for raising the debt ceiling, as opposed to lower.

Progress will be touted, but much of it will be illusory. In that regard, I'm reminded of the recently announced solution in the Minnesota budget stalemate. A good part of the financial shortfall was bridged with an agreement to securitize and sell off payments scheduled to be received in the future as a result of the tobacco settlement. But raising money by selling assets doesn't permanently fix an excess of expenses over revenues. That's like selling off manufacturing equipment to save a company that's operating in the red. (Note that one of the things that keeps government from taking a "businesslike" approach to fiscal issues is the fact that government accounting treats spending on capital assets the same as expenses, and the proceeds from asset sales the same as revenues. No business would join in these mistakes.)

Regardless of the exact methodology, I believe that any "solution" announced this month will (a) fail to make fundamental improvement, and thus in the words of Rahm Emanuel will let the current crisis – with its potential to compel real change – go to waste, (b) delay any real action and (c) fail to reduce the likelihood of recurrence of the debt ceiling problem.

* * *

What we need is this:

- government expenditures that are limited to revenues, with the exception of isolated instances of deficit spending designed to fight recession, where after the deficits are promptly reversed by amassing surpluses, and

- encouragement for economic growth that enables the pie to grow and government to pay for its activities on a current basis.

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Anything else would be a short-term palliative . . . or a continued exercise in imprudence. **Spending that grows no faster than GDP should be an imperative. Shrinking government's share of the economy seems highly desirable. National debt that is stable or declining as a percentage of GDP sounds compelling.**

(In addition to balancing the budget and growing the economy, I think we have to accept that the coming decades are likely to see U.S. standards of living decline relative to the rest of the world. Unless our goods offer a better cost/benefit bargain, there's no reason why American workers should continue to enjoy the same lifestyle advantage over workers in other countries. I just don't expect to hear many politicians own up to this reality on the stump.)

To close, I'm going to borrow some quotations and data from Michael Cembalest, Chief Investment Officer of J.P. Morgan Private Bank (*Eye on the Market*, July 18):

The long-term threat:

> . . . there are serious questions, most immediately about the sustainability of our commitment to growing entitlement programs . . . the time we have is growing short. (Paul Volcker, *The New York Review of Books*, June 24, 2010)
>
> According to the CBO alternative case (tax cuts do not sunset as planned; AMT keeps getting indexed to inflation; no Medicare cuts take place, etc.), by the year 2024, entitlements plus interest spending will be equal to total government revenue. Just 12 years ago, in 1999, the CBO estimated that this would not happen until 2060. The crossing point has moved in by 36 years.
>
> In 1967, the government estimated that Medicare expenses would grow by 7x by 1990 (unadjusted for inflation); they grew by 61x instead. In addition to the lack of cost controls on entitlements, demographic changes are a problem as well: the ratio of workers to Social Security recipients has declined from 17-to-1 in 1950 to 3-to-1 today.

The short-term threat:

> As the largest buyer and holder of U.S. Treasury bonds, we need to seriously assess the risks. We hope that the U.S. government adopts a serious policy to ensure the interests of the investors. (China Cabinet Development Research Center, and the Chinese Foreign Ministry, after the Moody's downgrade watch was announced and S&P reportedly told lawmakers it might downgrade U.S. debt if payments were missed.)

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The essential element in any real solution:

> The country is so thoroughly given up to the spirit of the party, that not to follow blindfolded the one or the other is an inexpiable offense. Between both, I see the impossibility of pursuing the dictates of my own conscience without sacrificing every prospect, not merely of advancement, but even of retaining that character and reputation that I have enjoyed. Yet my choice is made; I am at least determined to have the approbation of my own reflections. (John Quincy Adams in his diary, on sticking to his principles and supporting the British embargo, knowing that it would harm his home state of Massachusetts and get him thrown out of the Federalist party)

The world has awakened to the undesirability of ever-growing government debt. Repairing the situation will require difficult decisions and great sacrifices, especially on the part of lawmakers required to vote for unpopular solutions. This would be a great time to start taking positive steps.

July 21, 2011

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Memo to: Oaktree Clients

From: Howard Marks

Re: How Quickly They Forget

In January 2004 I received a letter from Warren Buffett (how's that for name dropping?) in which he wrote, "I've commented about junk bonds that last year's weeds have become this year's flowers. I liked them better when they were weeds."

Warren's phrasings are always the clearest, catchiest and most on-target, and I thought this Buffettism captured the thought particularly well. Thus for Oaktree's 2004 investor conference we used the phrase "Yesterday's Weeds . . . Today's Flowers" as the title of a slide depicting the snapback of high yield bonds. It showed the 45% average yield at which a sample of ten bonds could have been bought during the Enron-plus-telecom meltdown of 2002 and the 6% average yield at which they could have been sold in 2003; **on average, the yields had fallen by 87% in just thirteen months**. The idea went full-circle in 2005, when Warren used our slide at the Berkshire Hathaway annual meeting to illustrate how rapidly things can change in the world of investing.

And that's the point of this memo. Asset prices fluctuate much more than fundamentals. This happens because, rather than applying moderation and balancing greed against fear, euphoria against depression, and risk tolerance against risk aversion, investors tend to oscillate wildly between the extremes. They apply optimism when things are going well in the world (elevating prices beyond reason) and pessimism when things are going poorly (depressing prices unreasonably). Shortness of memory plays a major part in abetting these swings. If investors remembered past bubbles and busts and their causes, and learned from them, the swings would moderate. But, in short, they don't. And they may be forgetting again.

High yield bonds and many other investment media have once again gone from being weeds to flowers – from pariahs to market darlings – and it happened in a startlingly short period of time. As is so often the case, things that investors wouldn't touch in the depths of the crisis in late 2008 now strike them as good buys at twice the price. The swing of this pendulum recurs regularly and creates some of the greatest opportunities to lose or gain. Thus we must always be mindful.

<u>The Importance – and Shortcomings – of Investment Memory</u>

A number of my favorite quotations are on the subject of history and memory, and I've used them all in past memos. Humorist and author Mark Twain talked about the relevance of the past:

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> History doesn't repeat itself, but it does rhyme.

The philosopher Santayana stressed the penalty for failing to attach sufficient importance to history:

> Those who cannot remember the past are condemned to repeat it.

And economist John Kenneth Galbraith described the shabby way investors treat history and those who consider it important:

> Contributing to . . . euphoria are two further factors little noted in our time or in past times. The first is the extreme brevity of the financial memory. In consequence, financial disaster is quickly forgotten. In further consequence, when the same or closely similar circumstances occur again, sometimes in only a few years, they are hailed by a new, often youthful, and always supremely self-confident generation as a brilliantly innovative discovery in the financial and larger economic world. There can be few fields of human endeavor in which history counts for so little as in the world of finance. Past experience, to the extent that it is part of memory at all, is dismissed as the primitive refuge of those who do not have the insight to appreciate the incredible wonders of the present.

String together these three pearls of wisdom and you get a pretty accurate picture of investment reality. **Past patterns tend to recur. If you ignore that fact, you're likely to fall prey to those patterns rather than benefit from them. But when markets get cooking, the lessons of the past are readily dismissed.** These are nothing short of eternal verities, and their collective message is indispensible.

Why Does Investment Memory Fail?

Think back to the emotions you felt so strongly during the recent financial crisis, and the terrifying events that brought them on. You swore at the time that you'd never forget, and yet their memory has receded and nowadays has relatively little influence on your decisions. Why does the collective memory of investment experiences – and especially the unpleasant ones – fade so thoroughly? There are a number of reasons.

- **First, there's investor demographics.** When the stock market declined for three straight years in 2000-02, for example, it had been almost seventy years since that had last happened in the Great Depression. Clearly, very few investors who were old enough to experience the first such episode were around for the second.

  For another example, I believe a prime contributor to the powerful equity bull market of the 1990s and its culmination in the tech bubble of 1999 was the fact that in the quarter century from 1975 through 1999, the S&P 500 saw only three minor annual

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declines: 6.4% in 1977, 4.2% in 1981, and 2.8% in 1990. In order to have experienced a bear market, an investor had to have been in the industry by 1974, when the index lost 24.3%, but the vast majority of 1999's investment professionals doubtless had less than the requisite 26 years of experience and thus had never seen stocks suffer a decline of real consequence.

- **Second, the human mind seems to be very good at suppressing unpleasant memories.** This is unfortunate, because unpleasant experiences are the source of the most important lessons. When I was in army basic training, I was sure the memories would remain vivid and provide material for a great book. Two months later they had disappeared. After the fact, we may remember intellectually but not emotionally: that is, the facts but not their impact.

- **Finally, the important lessons of the past have to fight an uphill battle against human nature, and especially greed.** Memories of crises tell us to apply prudence, patience, moderation and conservatism. But these things seem decidedly outdated when the market's in a bull phase and risk bearing is paying off, and if practiced they appear to yield nothing but opportunity costs.

  Charlie Munger contributed a great quote to my recent book, from Demosthenes: "Nothing is easier than self-deceit. For what each man wishes, that he also believes to be true." **In other words, there's a powerful tendency to believe that which could make one rich if it were true**.

I've tried to spend the last 42 years with my eyes open and my memory engaged. As a result, a lot of what I write is based on recognition of past patterns. It's time to put my recollections to work, because I'm definitely seeing a trend in the direction of Galbraith's "same or closely similar circumstances."

The Not-So-Distant Past

It seems it was impossible – unless you were John Paulson – to escape entirely unscathed from the financial crisis of 2007-08. Most investors could only hope to have turned cautious in the run-up to the crisis, sold assets, increased the defensiveness of their remaining holdings, reduced or eschewed leverage, and secured capital with which to buy at the bottom in order to benefit from the subsequent recovery.

What might have prompted investors to do these things in advance of the mid-2007 onset of the crisis? Almost no one fully foresaw the impending subprime meltdown, and few macro-forecasts and market analyses were sufficiently pessimistic. Rather, I think investors would have been most likely to take the appropriate actions if they were aware of the pro-risk behavior taking place around them.

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One of the most important things we can do is take note of other investors' attitudes and behavior regarding risk. Fear, worry, skepticism and risk aversion are the things that keep the market at equilibrium and prospective returns fair. When investors fear loss appropriately, too-risky deals can't get done, and risky investments are required to offer high prospective returns and generous risk premiums. (And when fear reaches extreme levels during crises, the capital markets turn too stingy, asset prices sink too low, and potential returns become excessive.)

But when investors don't fear sufficiently – when they're risk tolerant rather than risk averse – they let down their guard, surrender their discipline, accept rosy projections, enter into unwise deals, and settle for too little in the way of prospective returns and risk premiums.

The years immediately preceding the onset of the crisis in mid-2007 constituted nothing short of a "silly season." It seemed the financial world had gone crazy, with deals getting done that were beyond reason. Investors acted as if risk had been banished. They believed that the markets had been rendered safe by the combination of (a) an omniscient, omnipotent Fed providing a "Greenspan put," (b) the wonders of securitization, tranching and selling onward and (c) the "wall of liquidity" coming toward our markets, composed of excess reserves being recycled by China and the oil-producing nations. They accepted the alchemy under which financial engineering could turn sub-prime mortgages into triple-A debt. And they viewed leverage as sure to have a salutary effect on returns.

There's nothing more risky than a widespread belief that there's no risk . . . but that's what characterized the investment world. It was possible to conclude in 2005-07 that investors were applying insufficient risk aversion and thus engaging in risky behavior, elevating asset prices, reducing prospective returns, and raising risk levels. What were the signs?

- The issuance of non-investment grade debt was at record levels.
- An unusually high percentage of the issuance was rated triple-C, something that's not possible when attitudes toward risk are sober.
- "Dividend recaps" went unquestioned, with buyout companies borrowing money with which to pay dividends, vastly increasing their leverage and reducing their ability to get through tough times.
- Credit instruments were increasingly marked by few or no covenants to protect lenders from managements' machinations, and by interest payments that could be made with debt rather than cash at the companies' discretion.
- Collateralized loan and debt obligations were accepted as being respectable instruments – with the risk made to vanish – despite the questionable underlying assets.
- Buyouts of larger and larger companies were done at increasing valuation multiples, with rising debt ratios and shrinking equity contributions, and despite the fact that the target companies were increasingly cyclical.

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- Despite all of these indications of falling credit standards and rising riskiness, the yield spread between high yield bonds and Treasury notes shrank to record lows.
- The generous capital market conditions and low cost of capital for borrowers caused buyout fund managers to describe the period as "the golden age of private equity." Conversely, then, for lenders it was the pits.

In 2005-07, investors suspended skepticism and disbelief, ignored the risk of loss, and obsessed instead about avoiding the risk of missing opportunities. This caused them to buy securities at low implied returns; employ vast amounts of low-cost debt to lever up those returns; loosen the terms on debt they would provide; and participate in black-box vehicles on the basis of investment banks' recommendations, the nontransparent machinations of financial engineers, and the imprimatur of far-from-perfect rating agencies.

In short, investors were oblivious to risk and thus failed to demand adequate risk premiums. The environment could only be described as euphoric. Here's how I put it in "It Is What It Is" (March 2006):

> The skinniness of today's risk premiums can be observed most clearly in the high yield bond market, where prospective returns can be calculated with precision and yield spreads are in the vicinity of historic lows, and in certain real estate markets, where actual cash returns are similarly low. But the difficulty of quantifying prospective returns in public and private equity doesn't mean the offerings there are any less paltry. And, as Alan Greenspan said, **". . . history has not dealt kindly with the aftermath of protracted periods of low risk premiums."**

Market Conditions Today

In May 2005, I wrote a memo entitled "There They Go Again," complaining that investors were taking excessive comfort from mindless platitude of the type that accompany and abet the creation of every bubble. These are accepted as a substitute for putting rational intrinsic valuations on the assets that are the subject of the bubble, and despite repeated evidence that trees can't grow to the sky. I touched on the mania for real estate, as well as the growing popularity of hedge funds and private equity. I went on to assert that this behavior – and the supportive underlying capital market trends – had turned the markets into a "low-return world."

I recite all of this because I have no doubt that investors are making substantial movement back in the same direction. To illustrate, here's an account of capital market conditions in 2011 (*Bridgewater Daily Observations*, February 15):

> Consistent with the pickup in credit creation that we have seen elsewhere, LBO activity and the credit pipes that are supporting it have recently improved. Since the first quarter of 2010 we have seen a steady rise in LBO activity, starting from a very

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> low base. The rate of activity is now roughly similar to the average level of activity since 1985, excluding the boom and bust period of 2006 to 2009. . . . today's deals are similar in size but the number of deals has risen by more than the dollar value of deals. We also see that the leverage in the deals is increasing. For example, so far this year the average deal was financed with 30% equity, down from last year's 38%, though still up from the most leveraged period of 2005 to 2009 when deals were financed with an average of 25% equity. The leveraged loan market has also picked up and an increasing percentage of leveraged loans are going toward LBOs. A few new CLOs and mutual funds have been created that are concentrated on the leveraged loan market, indicative of renewed demand. Investor demand has pushed prices back up to par and allowed a decline in the average credit quality of the loans, with increasing indications of "covenant light" loans getting done.

In other words, in most regards the capital markets – and investors' tolerance of risk – are retracing their steps back in the direction of the bubble-ish pre-crisis years. Low yields, declining yield spreads, rising leverage ratios, payment-in-kind bonds, covenant-lite debt, increasing levels of LBO activity and the beginnings of the return of levered, structured vehicles . . . all of these are available for the eye to see.

For a case in point, let me recap a note I received from one of our veteran high yield bond analysts regarding a deal that recently had come to market:

- PIK/toggle bonds: the company can elect to pay interest in debt rather than cash
- Holdco obligation: debt of a holding company, removed from the moneymaking assets
- Use of proceeds: to pay a dividend to the equity sponsor, returning half of the equity it put into the company just a few months earlier
- The sponsor's purchase price for the company in 2010 was 1.45 times what the seller had bought it for in 2008
- The company operates in a commodity industry where annual sales are shrinking and costs are variable and unpredictable
- Negative earnings comparisons are expected, since the environment makes it hard to pass on rising raw material costs
- EBITDA coverage of interest expense plus capital expenditures is modestly above 1x
- The company is incorporated in Luxembourg, an uncertain bankruptcy environment
- The assessment of Oaktree's Sheldon Stone: "I know they don't ring a bell at the top, but they should on this deal!"

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It's easy to gauge bond investors' attitudes. Here are the yield to maturity and yield spread versus Treasurys on the average high yield bond at a few points in the recent past and today:

	Yield to Maturity	Spread vs. Treasurys
"Normal" – December 31, 2003	8.2%	443 b.p.
Bubble peak – June 30, 2007	7.6	242
Panic trough – December 31, 2008	19.6	1,773
Recovered – March 31, 2010	9.0	666
Shrinking again – April 30, 2011	7.5	492

The yield spread on the average high yield bond is still on the generous side relative to the 30-year norm of 350-550 basis points, a range of spreads that has given rise to excellent relative returns over that period. On the other hand, (a) spreads have fallen back to the normal range from the crisis-induced stratosphere and (b) the lowness of today's interest rates means that reasonable spreads translate into promised returns that are low in the absolute. The story's the same for many asset classes.

I don't mean to pick on high yield bonds. I use them here as my prime example only because of my familiarity with them and because their fixed-income status facilitates quantification of attitudes toward risk. In fact, high yield bonds still deliver above average risk compensation, and they remain the highest returning contractual instruments and excellent diversifiers versus high grade bonds.

If you refer back to a memo called "Risk and Return Today" (November 2004), you'll see that today's expected returns and risk premiums – especially on the left-hand side of the risk/return spectrum – are eerily similar to those prevailing in late 2004: money market at 1%; 5-year Treasurys at 3%; high grade bonds at 5%; high yield bonds at 7%; stocks expected to return 6-7%. I said at the time that low base interest rates and moderate demanded risk premiums had combined to render the risk/return curve "low and flat." In other words, absolute prospective returns were at modest levels, as were the return increments that could be expected for taking on incremental risk. I described that environment as "a low-return world." I think we're largely back there.

(Please note that late 2004 was nowhere near the cyclical peak. Security prices continued to rise and prospective returns to fall for two and a half years thereafter. In particular, in the 30 months following the publication of that memo, high yield bonds went on to return a total of 19.7%. So similarities to 2004 don't constitute a sign of impending doom, but perhaps a foreshadowing of a potential move into bubble territory.)

I want to state very clearly that I do not believe security prices have returned to the 2006-07 peaks. It doesn't feel like the silly season is back in full. Investors aren't euphoric. Rather they seem like what my late father-in-law used to call "handcuff

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volunteers" – people who do things because they have no choice. They're also not oblivious to the risks that exist. I imagine the typical investor as saying, "I'm not happy, but I have to buy it." Finally, the leverage used at the peak of risk-prone pursuit of return in 2005-07 isn't nearly as prevalent today, perhaps because investors are chastened, but more likely because it's not available in the same amounts.

There may be corners of the market where elevated popularity and enthusiastic buying have caused prices to move beyond reason: high-tech stocks, social networks, emerging markets from time to time, perhaps gold and other commodities (what's the reasonable price for a non-cash-flow-producing asset?) But for the most part, I think investors are taking the least risk they can while assembling portfolios that they think can achieve their needed returns or actuarial assumptions.

In general, I would describe most security prices as falling somewhere between fair and full. Not necessarily bubbly, but also not cheap.

Especially since the publication of my book, people have been asking me for the secret to risk control. "Okay, I'll read the 180 pages. But what's really the most important thing?" **If I had to identify a single key to consistently successful investing, I'd say it's "cheapness."** Buying at low prices relative to intrinsic value (rigorously and conservatively derived) holds the key to earning dependably high returns, limiting risk and minimizing losses. It's not the only thing that matters – obviously – but it's something for which there is no substitute. Without doing the above, "investing" moves closer to "speculating," a much less dependable activity. When investors are serene or even euphoric, rather than discomforted, prices rise and we become less likely to find the bargains we want.

So if you could ask just one question regarding an individual security, asset class or market, it should be "is it cheap?" Oaktree's investment professionals try to ask it, in different ways, every day.

And what makes for cheapness? In sum, the attitudes and behavior of others.

I try to get away from it, but I can't. The quote I return to most often in these memos, even 17 years after the first time, is another from Warren Buffett: "The less prudence with which others conduct their affairs, the greater prudence with which we should conduct our own affairs." When others are paralyzed by fear, we can be aggressive. But when others are unafraid, we should tread with the utmost caution. **Other people's fearlessness invariably translates into inflated prices, depressed potential returns and elevated risk.**

Today, pension funds and endowments simply can't achieve their goal of nominal returns in the vicinity of eight percent if they keep much money in Treasurys or high grade bonds, and they may not even expect public equities to be much help. They've moved into high yield bonds, private equity and hedge funds . . . not because they want to, but

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because they feel they have to. They just can't settle for the returns available on more traditional investments. Thus their risk taking is in large part involuntary and perhaps unenthusiastic.

So where do we stand today?

- General interest rates are some of the lowest in history.
- Yield spreads are about normal.
- Returns on low-risk assets are reasonable in relative terms but skimpy in the absolute.
- Investors are forced toward pro-risk behavior because of the lowness of returns in the safer, low-risk portion of the risk/return curve.
- Thus investors are jettisoning the conservatism they adopted at the depths of the financial crisis, in many cases not out of choice.
- Investors are once again engaging in risky behavior, albeit not at peak levels of riskiness.

Those of us who calibrate our behavior based on what others are doing should increase watchfulness and, as Buffett suggests, apply rising amounts of prudence.

How Did Things Get This Way?

Just two and a half years ago, in the depths of the financial crisis, I was convinced that pro-risk psychology had undergone lasting damage. With investment banks, rating agencies and financial engineers defrocked, no-lose investments collapsing, account balances decimated and investors disillusioned, it seemed it might be years before market psychology recovered. And yet markets began a dramatic recovery in early 2009, investors have returned to bearing risk, and many indices are back in the vicinity of their pre-crisis peaks. What's behind this turn of events?

In 2007 and 2008, governments around the world rushed to support financial institutions and stimulate economies. They did this by making liquidity readily available and cutting interest rates to near zero.

Everyone knew the rate cuts would stimulate the economy by encouraging borrowing and reducing the cost of doing business, and that they would increase the profit margin in lending, buttressing financial institutions. But I don't think anyone fully appreciated the impact they would have on reviving pro-risk behavior.

In short, the rate cuts made it unrewarding to hold cash, T-bills and high grade bonds. Investors looking for returns in line with their needs – or income on which to live – were literally forced to move into riskier asset classes in pursuit of returns in excess of a few percent.

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Much of the money that normally would be invested in the giant Treasury market simply couldn't stay there because the yields were so low. Thus large amounts flowed toward smaller markets where they were quite capable of lifting prices. Nothing can reduce returns, worsen terms or raise risk faster than "too much money chasing too few deals." **It's disproportionate flows of capital into a market that give rise to the disastrous race to the bottom such as we saw in 2005-07. Greater sums are provided to weaker borrowers at lower interest rates and with looser terms. Higher prices are paid for assets: first less of a discount from intrinsic value, then the full intrinsic value, and eventually premiums above intrinsic value.** These processes account for many of the trends decried here.

In addition, I would point out that the pain of the crisis was surprisingly short-lived. The real panic began on September 15, 2008, the day Lehman Brothers filed for bankruptcy. Until then, the world seemed to be coping and investors retained their equanimity. But Lehman, Fannie Mae, Freddie Mac, Merrill Lynch, Washington Mutual and AIG fell like dominoes in short order, and in the last fifteen weeks of 2008 people were paralyzed by fear of a global financial meltdown.

And then things turned in the first quarter of 2009, primarily, I think, because people were coerced to move further out on the risk curve as described above. Since then the markets have risen dramatically from their lows.

In distressed debt, for example, the post-Lehman days and weeks were characterized by terror, uncertainty, forced selling, illiquidity and huge mark-to-market losses. But if you look back, you see that the panic and pain – and thus the greatest buying opportunity – really lasted only fifteen weeks, through the end of 2008. Prices continued downward in the first quarter of 2009, but without the deluge of supply brought on by the previous quarter's forced selling. By April prices were headed up. So the lesson was painful but short-lived and, apparently, easily forgotten.

As usual, the cyclical upswing is circular and self-reinforcing. It takes on the appearance of a virtuous cycle that will proceed non-stop, and it does so . . . until it fails. Here's an example of the process at work:

- The pursuit of return caused people to move from Treasurys to high yield bonds.
- The revival of demand enabled companies to raise money.
- The reopening of the capital markets made it possible for companies to do bond exchanges and refinancings: extending maturities, extinguishing covenants and capturing bond discounts, converting them into reduced amounts of debt outstanding. In some cases equity could be issued to delever balance sheets.
- These remedial actions improved companies' creditworthiness and brought down the default rate on high yield bonds from 10.8% in 2009 to a startling 1.1% in 2010, the greatest one-year decline in history.

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- The resulting price appreciation produced profits for those who'd bought, turning investor psychology more rosy and producing envy – and thus a rush to join in – among those who had been slow to invest.
- And the combination of these things convinced people that conditions had improved, making them still more willing to take on increased risk.

I thought the lessons of 2007-08 had been etched into people's psyches, and that the return to pro-risk behavior would therefore be slow. But clearly that hasn't been the case.

Prudent Behavior in a Low-Return World

The 2005 memo I mentioned earlier, "There They Go Again," proceeded from the discussion of the low and flat risk/return curve contained in "Risk and Return Today" to ponder what investors might do in times of low prospective returns and risk premiums. The possibilities fell into just a few categories:

- Go to cash – not a real alternative for most investors.
- Ignore the lowness of absolute returns and pursue the best relative returns.
- Forget that elevated prices might imply a correction, and buy for the long run.
- Reach for return, going out further on the risk curve in pursuit of returns that used to be available with greater safety.
- Concentrate investments in "special niches and special people"; by this I meant emphasizing strategies offering exceptional bargains and managers with enough skill to wring value-added returns from assets of moderate riskiness.

Of all of these, I consider reaching for return to be the most flawed, especially if it's done without being fully conscious (which is often the case when return becomes hard to come by). I've described this approach as "insisting on achieving high returns in a low-return world" and reminded people of Peter Bernstein's admonition: "The market's not a very accommodating machine; it won't provide high returns just because you need them."

Here's what I wrote in May 2005:

> Given today's paucity of prospective return at the low-risk end of the spectrum and the solutions being ballyhooed at the high-risk end, many investors are moving capital to riskier (or at least less traditional) investments. But (a) they're making those riskier investments just when the prospective returns on those investments are the lowest they've ever been; (b) they're accepting return increments for stepping up in risk that are as slim as they've ever been; and (c) they're signing up today for things they turned down (or did less of) in the past, when the prospective returns were much higher. This may be exactly the wrong time to add to risk in pursuit of more return. You want to take risk when others are fleeing from it, not when they're competing with you to do so.

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Even six years later, I can't think of any responses to a low-return world beyond those enumerated above. Limit risk, sacrificing return. Accept risk in pursuit of return, and pray the consequences will be tolerable. Or strive to find ways to augment returns through means other than risk bearing.

None of these possible solutions is perfect and without pitfalls. In fact, each brings its own form of risk. Staying safe entails the risk of inadequate return. Reaching for return increases the risk of financial loss. And the search for "alpha" managers introduces the risk of choosing the wrong ones. But, as they say, "it is what it is." When it's a low-return world, there are no easy solutions devoid of downside.

The Right Approach for Today

One of the things that makes investing interesting is the ever-changing nature of the route to profit, the pitfalls that are present, and the tools and approaches that should be employed. Conscious decisions regarding these things should underlie all efforts to manage capital, and they must be revisited constantly as circumstances and asset prices change. What's right today?

First, should you prepare for prosperity or not? By prosperity I mean a return to the happy days of the 1980s and '90s, when reported economic growth was strong and consumers were eager to spend. My answer is that we're not likely to see anything like that, in large part because in those decades the gap between stagnant incomes and vigorous consumption growth was bridged through buying on credit. Instead, in the years ahead I think (a) growth in employment and incomes will be sluggish, (b) consumers should be restrained in their borrowing as a result of having experienced the crisis, (c) consumer credit shouldn't be available as readily, and (d) borrowing against home equity will be much less of a factor, especially because home equity is so scarce.

Second, should you worry more about losing money or about missing opportunities? This one's easy for me. First, the macro uncertainties tell me we won't be seeing a highly effervescent economy or market environment. Second, other people's increasingly aggressive behavior tells me to seek cover. And third, since I don't see many compellingly cheap assets, I doubt there will be gains big enough to make us kick ourselves for having invested too cautiously.

And that brings me to my third question: what tools should you employ? In late 2008 and early 2009, you needed just two things to achieve big profits: money to commit and the nerve to commit it. If you had caution, conservatism, risk control, discipline and selectivity, you probably achieved lower returns than otherwise (although having factored those things into your analysis might have given you the confidence needed to implement favorable conclusions in that terrible environment). The short answer was simple: money and nerve.

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But what if you had money and nerve in 2006 or early 2007? The results would have been disastrous. In those times you needed caution, conservatism, risk control, discipline and selectivity to stay out of trouble. **In short, when the market is defaulting on its job of being a disciplinarian, discernment becomes our individual responsibility.**

So then, which is the right set of equipment for today? I think we're back to needing the cautious attributes, not the aggressive. An unusually large number of thorny macro issues are outstanding, including:

- the so-so U.S. recovery;
- the U.S.'s deficit, debt ceiling impasse and dysfunctional political process;
- the economic impact of deleveraging and austerity;
- the over-indebtedness of peripheral eurozone countries;
- the possibility of rekindled inflation and rising interest rates;
- the uncertain outlook for the dollar, euro and sterling; and
- the instability in the Middle East and resulting uncertainty over the price of oil.

With all of these, plus prices that are fair to full and investor behavior that has increased in aggressiveness, I would rather gird for the things that can go wrong than ensure maximum participation if things go right. (Of course that's not an unfamiliar refrain from me.)

The other day, the investment committee of a non-profit on which I sit decided to take the first steps toward marshaling resources and managers so as to be ready to buy into beaten-down assets after the next round of bubble and bust. And it wasn't even my idea!

We can never be sure what will happen – and certainly not when – but it's important to be prepared for what's likely to lie ahead. And understanding the inevitable pendulum swing in the way investments are viewed – from weeds to flowers and back – is an essential ingredient in being able to do so.

May 25, 2011

P.s.: I hope you'll consider rereading "Risk and Return Today" (November 2004) and "There They Go Again" (May 2005) (see http://www.oaktreecapital.com). Hopefully they'll strengthen the case for reflecting on past patterns and help you think through the current conditions. You might also take a look at "The Cat, the Tree, the Carrot and the Stick" in "What's Going On" (May 2003) for a metaphorical look at the process of risk acceptance. Today's echoes of those past times are worth noting.

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Memo to: Oaktree Clients

From: Howard Marks

Re: On Regulation

I've been asked why there weren't any memos during the twelve weeks between September 9 and December 1. Lack of ideas? Writer's block? Carpal tunnel syndrome? CIA posting? The answer is "none of the above." I was putting the finishing touches on a book, *The Most Important Thing: Uncommon Sense for the Thoughtful Investor*. It pulls together all of the strands of my philosophy into what might be thought of as a super-memo. It will be published in late April and I hope you'll let me know what you think.

* * *

In the 3½ years since the financial crisis surfaced in July 2007, there has been extensive discussion of the part deregulation played in creating it, as well as the need for increased regulation to prevent the next one. The release last month of the report of the Financial Crisis Inquiry Commission reawakened the debate. Thus I'm often asked nowadays how I feel about regulation and what I think the future holds in that regard.

The Swing of the Regulatory Pendulum

I've written before that attitudes toward regulation follow the same pendulum-like swing as most other aspects of market behavior. They oscillate not only in response to events in the economic environment, but also because neither total regulation nor total deregulation produces an entirely satisfactory answer. As in so many things, there's no perfect solution.

A great source on the subject is *Wall Street Under Oath*, a 1939 book on the causes of the Great Crash of 1929 written by Ferdinand Pecora, who was counsel to the Senate committee investigating the crash and later a New York State judge. I first read it about twenty years ago, and I brought it out of storage in 2007. It is a typical polemic, assigning blame and touting regulation pursuant to what I assume were the author's philosophical/political biases (see page 4).

Pecora describes a Wall Street that, up to and including the 1920s, was like the Wild West. Bankers and brokers were out to make money for themselves; their behavior was largely unregulated; and conflicts between their interests and those of their clients were widespread and disregarded. In particular, according to Pecora, disclosure standards were non-existent.

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These facts combined with other causes to produce a market crash of epic proportions; widespread losses; a drying up of capital; deflation; and a massive depression with a resulting increase in unemployment to 25%. Unsurprisingly, fingers were pointed at the prior administration and political power shifted to believers in an activist role for government. The most lasting result was the enactment of laws that governed the financial system for decades and in many cases still do: the Securities Act, the Securities and Exchange Act, and the Glass-Steagall Act. Thus the 1930s saw a massive swing of the pendulum in favor of regulation.

The next several decades on Wall Street were – perhaps thanks to the impact of those laws – a relatively placid period. This led to a view that, with rare exceptions, market participants are well-behaved by nature. Further, steady growth with only moderate dips caused a perception of an inherently benign and productive economy that could achieve even more if only the regulatory shackles were loosened. After President Carter deregulated the transportation industry in the late 1970s, the door was open for much of the regulatory apparatus built in the early part of the century to be relaxed. Ronald Reagan, whose famously free-market views coincided with a period of peace and prosperity, led the deregulatory charge. We saw a similar turn in Britain under the leadership of Margaret Thatcher; the collapse of the USSR and a resounding victory for capitalism; and the ascendance of free market adherents Alan Greenspan and George W. Bush.

With the economy and financial system generating prosperity, people wanted more of the same. And with manufacturing in decline, we relied heavily on the financial sector for an increased contribution to GDP, job creation and standards of living. The prevailing view was that the less regulation we had, the more productive business and finance could be. And what was there to be feared from an unregulated economy, anyway? The result in the past decade, according to a great newspaper quote that sadly I can't locate, was "the kind of regulation you get from an administration that doesn't believe in regulation."

Thus, coming full circle from the 1930s, starting in 1999 we saw revocation of Glass-Steagall; elimination of the up-tick rule limiting short sales to instances when stock prices were rising; a pivotal decision to exempt derivatives from regulation; increased permitted leverage at investment banks; and starvation of regulatory agency budgets. These developments were followed by the global financial crisis of 2007-08. Coincidence or causality?

<u>Free Markets Are Dangerous – Regulation is Essential</u>

The free-market, capitalist system runs on self interest and the desire for profit. We need regulation to ensure those things are kept within reasonable limits. Thus the goals of financial regulation are roughly as follows:

- to limit risk, especially risk to the overall financial system,
- to restrict the concentration of economic power,
- to protect customers, especially "the little guy,"
- to prevent error, fraud, misrepresentation and theft, and
- to democratize finance and make it a tool of social policy.

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If ethics, self-regulation, personal responsibility, respect for risk and a sense of limits could be counted on, we wouldn't need much in the way of regulation. But, sadly, they can't.

Since the profit motive can lead financial institutions to aggressive risk taking, error and even misdeeds, regulation is counted on to prevent these things. There's also concern that individuals' self-interest might drive them to actions that collectively might injure their companies and society.

Free markets do a great job of allocating economic resources – especially on average over the long run – but the interim fluctuations produced by miscalculation can be intolerable and have to be modulated. This makes regulation indispensable. **Bottom line: the financial system can't be entrusted to untrammeled free markets.**

Regulation is Imperfect and Harmful – Free Markets Do It Best

On the other hand, regulation is too imperfect to be relied on. (Thanks to "Soggy" Sweat for this dialectical approach – see "All that Glitters," December 17, 2010.) It's easy to write hard-and-fast rules, but rules sometimes impose undue costs or restrict activity in undesirable ways. And their specificity often makes them capable of being circumvented. Because financial institutions are intent on innovation, rules rarely keep pace and regulators usually find themselves playing catch-up. Rule-writing is reactive: rules are written in response to the last problem, not to foresee and prevent the next one, which invariably is different. In addition, regulators lack the financial motivation that drives those who can profit from getting around regulations and exploiting loopholes.

Since rules become outdated and circumvented, it might be preferable to regulate through principles. In other words, rather than numerical limits and defined borders, regulations might be written in general terms to produce adherence to ideals and policy goals. But regulating this way requires that judgments be made, and regulators are rarely accorded the license required for judgment-making. Imagine the second-guessing, legal appeals and phone calls to congressmen that would follow an individual regulator's decision that a financial institution's actions have violated vague principles . . . especially during a halcyon period when the warned-of consequences are slow in coming.

Principle-based regulation requires not only flexibility that is hard to build into and nurture in bureaucracies, but also significant business acumen, perspicacity and foresight. The evidence is *prima facie*: very few people saw the risk posed by sub-prime mortgages and structured mortgage products, and certainly not the regulators. And no one I know of – regulator or otherwise – foresaw the effect these things would have on banks, money market funds and the commercial paper market.

Why didn't regulators say a word about rating agencies' dispensing many thousands of triple-A ratings to structured mortgage vehicles? Why were the highly regulated banks ground zero for the consequences of the financial crisis, while unregulated hedge funds were relatively unscathed? I just can't imagine that regulators will ever have the ability to fully anticipate the consequences of changes in the fast-developing financial system, or to foresee the development

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of new problems for which rules and responses have yet to be drawn up. Here's how Peter Sands, chief executive of Standard Chartered, was quoted in the *Financial Times* of January 27: "It is not clear why some regulators who were there before the crisis should believe they now have all the right solutions."

What regulator would have been able to make a difference in protecting our financial institutions (and the overall economy) from the developments of 2004-07? And given how valuable his skills would be in the private sector, how long would he have remained a regulator? No, it just doesn't make sense to expect government employees to safeguard the financial system. **The conclusion is inescapable: responsibility for the safety of the financial system can't be delegated to regulators.**

The Origin of Attitudes

In December I wrote of gold that it's like religion: either you believe in it or you don't. I think something very similar can be said about regulation of business and the economy.

Liberals who champion an expanded role for government tend to be pro-regulation, while conservatives favoring laissez-faire policies and limitations on government will argue against it with vehemence. Democrats generally like an activist government: that's what makes them Democrats. Republicans don't.

Those partaking in the benefits of economic growth tend to favor free-markets and oppose further regulation, since they're happy with things the way they are. The reverse is true for those who are failing to participate and those working in the public sector . . . although there are millions of exceptions on both sides. Businesspeople who trust the economy to perform for them generally oppose regulation, while members of labor want it to prevent their being taken advantage of by management and the owners of capital.

I think our attitudes in this regard are highly correlated with those of our parents and largely a function of the time and place we grew up in. They can be altered through exposure to opposing points of view, but I think most people's attitudes toward regulation stem far more from upbringing and circumstances than from analytical and intellectual processes. Attitudes toward regulation, like politics, are largely hereditary and change slowly if at all.

Reconciling the Two Positions

It's my belief that because both free markets and regulation are imperfect – and because of the strength of people's political and philosophical biases – we will never settle permanently on either a completely free market or a thoroughly regulated system. Any position will prove merely temporary, and the pendulum will continue to swing toward one end of the spectrum and then back toward the other.

- Scandals and crashes will cause a cry for regulation.
- Regulation will curb the excesses and punish the wrongdoers, discouraging repetition.

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- The environment will calm, and economic progress will become the rule.
- Memory of the events behind the demand for regulation will fade.
- Free-marketeers will gain sway, and they'll argue that we could do even better if the system were deregulated.
- Regulation will be eased.
- Risk-taking and misdeeds will rise.
- Scandals and crashes will occur anew.
- Pro-regulation forces will regain influence, and free-marketeers will be in the doghouse.
- And the pendulum will swing back toward regulation.

There will never be total, lasting agreement on either complete regulation or totally free markets. **Importantly, however, it might well be the case that compromise between the two has the most dangerous consequences.**

- In the decade leading up to the crisis, politics favored home ownership and liberal mortgage availability. These forces, combined with unregulated mortgage securities markets, gave rise to excessive lending, exaggerated demand for mortgage securities (given the illusion of safety), and thus artificially low mortgage rates and loose terms.

- Which bailout recipients remain the biggest sinkholes, without any real chance of repaying the government's investment? The answer is Fannie Mae and Freddie Mac, the government-created mortgage agencies: supposedly private enterprises whose operations were distorted by a tacit federal guarantee. They engaged in uneconomic behavior, advancing the policy goal of making home ownership available to people who couldn't afford it, and accepting vast risk on the basis of inadequate capital because they (and their lenders) had no fear of loss.

- Legislators turned regulation over to the private sector by putting credit rating agencies in charge of financial institutions' investing standards, giving commercial organizations excessive imprimatur. Financial temptation pressured them to drop their standards, and when they succumbed, the previously sacrosanct triple-A rating became a meaningless label.

- Having witnessed the rescue of the banks and the financial system, we now have a system where free-market rewards will continue to motivate risk taking and no one believes the ultimate price – meltdown – will be demanded of too-big-to-fail institutions that take it too far. A free-market mechanism undercut by moral hazard may perform adequately 95% of the time, but it will pose terrible risks in the remainder.

The real bottom line is that since both free markets and regulation are imperfect, our financial systems will continue to be imperfect. They will work well for us most of the time, although not perfectly, and they will be subject to bubbles and crises every few decades (hopefully not more often).

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The Recent Experience

Think about the last few years: the depth of the financial crisis, the pain it caused, the blunders (or worse) that were behind the crisis, the financial sector bailouts it necessitated, and the acrimony they elicited from a Main Street feeling left to fend for itself. Then add in a White House and Congress controlled by Democrats, with their leaning toward government involvement in the economy. Certainly this was a formula for a powerful upswing in regulation.

In this context, I'm surprised that we haven't seen much more government activism. The new financial regulations are mild and constrained, in my opinion. Increases in financial institution capital requirements and controls over executive compensation have generally been more moderate in the U.S. than in Europe. No one has gone to jail (or even been subjected to heavy fines) as in the Enron/Adelphia era. And there have been no punitive increases in taxes on "the rich."

And yet there have been enough steps toward regulation for their limitations to be manifest. One of the primary components of last year's new financial reform law was the so-called Volcker Rule, under which banks can no longer risk their capital on trading and investing for their own account. The bankers I meet with rail against the extent to which this will interfere with their ability to serve their customers and lay off risk. They further complain that actions inherent in market-making can be hard to distinguish from Volcker Rule violations. Where do positions held for trading and hedging stop and prop trading start? Think about Goldman Sachs's bets against subprime mortgages:

- Did they hedge Goldman's long positions in mortgages?
- Did they lessen the risk in Goldman's overall portfolio?
- Were they bets against Goldman's clients?
- Or did they enable Goldman to take positions that served its clients and otherwise engage in client facilitation?

I'd guess the answer is "all of the above." Clearly, however, a market maker can do far more to provide liquidity if it is allowed to hedge through offsetting positions.

Mortgage shorts also shored up Goldman's finances and made it one of the least needy financial institutions. Which would we like to have more of, Goldman Sachs or Lehman Brothers, which plunged into mortgages and derivatives without significant risk control and consequently went bankrupt? And yet Goldman's actions have been vilified and proprietary investing has been outlawed.

On February 6, a front-page *New York Times* story indicated how difficult it is to rein in free-market forces and self-interest. Although Washington pushed financial institutions to compensate executives through stock grants in order to align interests with shareholders (and mandated it at the very top), the article described non-mandated employees' success in hedging their shareholdings and thus sidestepping exposure to the risks affecting their companies.

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> "Wall Street is saying it is reforming itself by granting stock to executives and exposing them to the long-term risk of that investment," said Lynn E. Turner, a former chief accountant at the Securities and Exchange Commission. "Hedging the risk can substantially undo that reform. . . ."
>
> More broadly, critics say, the practice of hedging represents another end run around financial reform.
>
> For example, new rules that cracked down on debit card fees have led several big banks to eliminate free checking. Firms also plan to make up missing revenue by adapting their businesses to the tougher new regulations on derivatives and trading with the banks' own capital.

The *Wall Street Journal* of February 18 provided another example:

> In November, Barclays PLC quietly changed the legal classification of the U.K. bank's main subsidiary in the U.S. so that the unit would no longer be subject to federal bank capital requirements. . . .
>
> The maneuver allows them to escape a provision of the financial-overhaul law that forces the pumping of billions of dollars of new capital into the U.S. entities, known as bank-holding companies.
>
> "It's just not worth it to have all that capital trapped" in the holding company, said a New York lawyer who is advising banks on how to restructure.
>
> The moves are the latest example of how banks are scrambling to cushion the impact of new laws and rules around the world.

The article went on to illustrate how a patchwork system can be evaded through regulator-shopping. By deregistering its subsidiary as a bank-holding company, Barclays escaped regulation by the Federal Reserve Bank, which would insist on greater capital. Instead its units now fall under the FDIC and the SEC, which will impose no such requirement.

The bottom line as far as I'm concerned is that you can enact a law or rule and tell businesspeople precisely what to do, but you can't make the economy or companies comply with policies and social aims. Regulations are limited in their scope and effect, and like a balloon, when you push in one place, self-interested behavior pops out in another. As these articles indicate, **those who enact regulation sometimes get it right at first glance, but they're rarely able to anticipate and control the response of those being regulated or the second-order consequences of the rules.**

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Errors and misdeeds will occur as long as imperfect, self-interested humans stray into excessive risk-taking. And as long as these things lead to bubbles and resulting crashes, the willingness to dispense with regulation and rely on free markets will never be complete, regardless of regulation's limitations.

* * *

I believe a free market is the best decision maker, causing financial resources, labor and intellectual capital to flow where they are most valuable and thus have the potential to be best rewarded. But the ride will be bumpy – by necessity – and some of society's goals will go unfulfilled. Of course, those who favor limits on government involvement in business argue that financial and market regulation shouldn't be a vehicle for implementing social policy.

The collapse of the USSR shows the limits of a thoroughly controlled economy. On the other hand, it's likely that China's impressive accomplishments over the last decade have been aided by the fact that its economy is controlled, such that the movement of resources can be centrally mandated in the short run. China's purposefulness is impressive, and China likely would have accomplished less if it had to work entirely through free-market forces. Would we trade our system (and results) for theirs? Will our answer be the same in twenty years? And will China remain the same, or once the highly regulated system has raised standards of living, will people insist on freer markets as well?

The debate will inevitably go on:

- What system is most likely to produce the results we seek? In the last few years we've seen calls for regulations to require "prudent" mortgage lending and prevent "excessive" compensation. What system is best able to define these amorphous terms and produce these results?
- How will economic goals be integrated and balanced with society's other priorities, and should they be?
- How will laissez-faire economics and financial regulation coexist, and what will be the consequences?

These questions will never be answered conclusively. The swing of the pendulum will continue unabated.

March 2, 2011

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Memo to: Oaktree Clients

From: Howard Marks

Re: All That Glitters

In 1952, Noah S. "Soggy" Sweat, Jr., a member of the Mississippi House of Representatives, was asked about his position on whiskey. Here's how he answered:

> If you mean whiskey, the devil's brew, the poison scourge, the bloody monster that defiles innocence, dethrones reason, destroys the home, creates misery and poverty, yea, literally takes the bread from the mouths of little children; if you mean that evil drink that topples Christian men and women from the pinnacles of righteous and gracious living into the bottomless pit of degradation, shame, despair, helplessness, and hopelessness, then, my friend, I am opposed to it with every fiber of my being.
>
> However, if by whiskey you mean the oil of conversation, the philosophic wine, the elixir of life, the ale that is consumed when good fellows get together, that puts a song in their hearts and the warm glow of contentment in their eyes; if you mean Christmas cheer, the stimulating sip that puts a little spring in the step of an elderly gentleman on a frosty morning; if you mean that drink that enables man to magnify his joy, and to forget life's great tragedies and heartbreaks and sorrow; if you mean that drink the sale of which pours into our treasuries untold millions of dollars each year, that provides tender care for our little crippled children, our blind, our deaf, our dumb, our pitifully aged and infirm, to build the finest highways, hospitals, universities, and community colleges in this nation, then my friend, I am absolutely, unequivocally in favor of it.
>
> This is my position, and as always, I refuse to compromise on matters of principle.

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Sweat's response shows, depending on how you look at it, either how views can diverge on a given subject or how differently a tale can be spun. Thus it serves well to introduce the topic of this memo: gold.

Before the global financial crisis, most participants in the world of finance felt they understood how things worked, and that in addition to the underlying processes, they could rely on institutions and currencies.

Then the crisis occurred and a lot changed. Things happened during the crisis that were described as "five-standard-deviation occurrences" (or three or eight). In other words,

things happened that had never happened before and had been considered capable of happening only once in several generations or centuries. But they happened, and sometimes a few in a single week.

These were negative "black swan" developments, and they had a number of ramifications. First, they imposed substantial losses. Second, they called into question the predictability and understandability of the financial world and introduced new levels of uncertainty. And third, they set off a search for things that would provide certainty and safety in the newly uncertain world. This search led many to look to gold.

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On the Merits of Gold

I have no doubt: gold is the ideal investment. It serves as a reliable store of value, especially in challenging and uncertain times. It's a hedge against inflation, since its price rises in sympathy with the general level of prices. It exists without the involvement of man-made constructs such as governments. And it's desired and accepted all around the world (and always has been).

The supply of gold is finite. It can't be created out of thin air. Thus it's not subject to dilution or debasement, as is paper currency when governments decide to print more. In comparison, currency can be similarly reliable only if backed by gold.

Finally, gold is tangible, meaning you can take delivery and store it. Most other investment media exist only in the form of figures on a computer screen. But gold is something you can actually hold and know you own. Thus it's one of the few things you can depend on in an uncertain world. Gold is perfect.

Except, of course, gold is nothing but a shiny metal. Since its real-world applications are limited to jewelry and electronics, very little of its value comes from actual usefulness. Further, the amount put to those uses each year is small compared to the total amount in existence, so its value for those purposes is at the margin and can't be of much help in putting a price on the world's gold reserves.

There's little intrinsic to gold that enables it to serve as a store of value and a hedge against inflation. Gold serves those purposes only because people impute to it the ability to do so. It's self-deception, nothing but the object of mass hysteria like that exhibited in "The Emperor's New Clothes." **Gold has no financial value other than that which people accord it, and thus it should have no role in a serious investment program. Of this I'm certain.**

A Never-Ending Argument

The foregoing aren't my views, of course. Rather, they're my effort to summarize the prevailing – and obviously polar – points of view regarding gold. I think gold engenders

attitudes that are the furthest apart of those regarding any potential investment. The "gold bugs" think it's ideal and dependable, and the naysayers think it's unanalyzable and anachronistic.

Due to the trauma and uncertainty introduced by the financial crisis, the subject of gold has attracted increased attention and the debate has heated up. It has doubled in price over roughly the last two years. And I've been asked about gold more in those two years than in all the rest put together.

I didn't think about gold very much during my first 39 years in the money management business. First I was an equity guy, and then I became a bond guy. I never had a client who held gold (as far as I knew) and no one asked for my views on it. In a world in which people thought they knew how things worked and everything went smoothly most of the time, gold was considered largely irrelevant.

For the last few years, I've advised a Swiss charitable foundation that, as is customary in its home country, holds substantial amounts of precious metals. Thus I've had to think about gold – which I never had to do before – and come to a conclusion.

My view is simple and starts with the observation that gold is a lot like religion. No one can prove that God exists . . . or that God doesn't exist. The believer can't convince the atheist, and the atheist can't convince the believer. It's incredibly simple: either you believe in God or you don't. **Well, that's exactly the way I think it is with gold. Either you're a believer or you're not.**

<u>My View</u>

In the past, the only thing I considered certain about gold was that I didn't have to consider it. But in the last few years, I did think (and write) on a subject very germane to gold: the valuation of non-income-producing assets.

Show me a company, security or property that produces a stream of cash, and I think I can value it reasonably accurately. P/E ratios, yields and capitalization rates give us a framework for valuing these things, and by comparing them to prevailing interest rates, to historic valuation parameters and to each other, we can assess whether an asset is dear or cheap.

But there's no analytical way, in my opinion, to value an asset that doesn't produce cash flow . . . and especially one that doesn't at least have the prospect of doing so. (What I mean by the latter is that it's more challenging to value an empty building than a rented one; or an empty lot compared to one with an office building on it; or a young company relative to an established, profitable one. But at least you can attempt to value the former asset in each case on the basis of its potential to produce cash flow.) How do you put a value on an asset that will never throw off cash?

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Take oil, for example. As I wrote in "There They Go Again" (May 6, 2005), you can say the supply of oil is finite; that we're using it up faster than we're finding it; and that much of it is in the hands of nations we can't depend on. But what does that make it worth? You could have said those things in December 2008, when oil was $35 a barrel, and if you'd bought you'd be up 150% today. But they were equally true in July 2007, when oil was at $147, and if you bought you would have lost three-quarters of your money in six months. Qualitative statements like those simply cannot be converted into a price.

And how do you value a home? The appraisals that were relied on by mortgage lenders in 2002-07 obviously did more harm than good. All the appraisers did is compare each home to the last similar one that sold, and their work-product literally turned out not to be worth the paper it was printed on. You might value a home based on what it could be rented for, but today's vacancies show that you can find tenants for some houses but not all of them. No, the value of a home at a given point in time ultimately is just what a buyer will pay for it.

In fact, that's true of all non-income-producing assets: they're only worth what buyers will pay for them. You might say that about income-producing assets as well, given how their prices fluctuate, but that's completely true only in the short run and mostly when markets function poorly. If assets produce cash flow, that gives them value, and it's reasonable to believe that eventually their prices will move in the direction of that value. They aren't required to do so in any particular time frame, but that expectation provides the most solid basis there is for investing. **Everything else is mere conjecture by comparison, and that goes for gold.**

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At What Price?

In "Hemlines" in September, I said investors were pursuing safety – simplistically, as they usually do the flavor of the day – but ignoring the price they were paying for it. I titled that section "At What Price?"

I'm reusing that heading here, because that's really the key question in investing. We all would prefer to have growth, quality, income and safety in our investments. But how much will we pay for them? **I've said it many times: no asset can be considered a good idea (or a bad idea) without reference to its price.** How can we evaluate whether the price of gold is right?

As with oil, you can list gold's attractions as enumerated on page two. But how do you turn them into a price? And don't you have to be able to turn them into a price in order to invest intelligently? Consider this conversation:

Howard: How do you feel about gold here at $1,400 an ounce?

Gold bug: Great. I'm sure it will hold its value from here and keep up with inflation.

Howard: Would you be equally sure if it were $2,000?

Gold bug: A little less, but yes.

Howard: At $5,000?

Gold bug: That's a tough one.

Howard: And at $10,000?

Gold bug: No; there it would be ahead of itself.

Howard: So the price of gold matters?

Gold bug: Sure.

Howard: Then how can you be sure it's fairly priced at $1,400?

Gold bug: Hmm . . . . .

The point is, in investing, price has to matter. Nothing can be a good buy solely on the basis of its attributes alone, without considering the value they give rise to and the relationship of price to that value. And there's no quantifiable value against which to compare price in the case of gold. There; that's it. Either you agree with those statements or you don't.

The gold bug's usual recourse to the difficulty in pricing gold is to point to a past price for the metal and how little it has appreciated since then. For example, gold hit a high of $850 in 1980 and has gained only 2% per year since then. The Leuthold Group is often quoted (e.g., *Reuters*, November 29) as observing that it would have to be at $2,400 today to merely equal the 1980 price in inflation-adjusted terms.

But those making a claim for gold's cheapness on the basis of comparisons against historic prices typically point to hand-selected observations, as in Leuthold's case. What about the fact that gold was $250 in mid-1999 (*Financial Times*, November 13), meaning it's been up 16% a year for the last decade-plus? And even if the snail-like appreciation from $850 in 1980 seems persuasive, how do we know gold was priced reasonably in 1980, and thus that the fact that it's low relative to 1980 makes it reasonable today? If gold was overpriced in the past, then even having failed to show much appreciation in the interim, it could still be overpriced today.

<u>In Gold We Trust</u>

In the 1970s I came across a book called *Money Is Love* by Richard Condon. I bought it because I had enjoyed *The Manchurian Candidate*, a 1962 movie based on another

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Condon book. All I remember about *Money Is Love* is that it was set in a period when people were crazy about collectable plates and amassed them as a store of value. One person had so many that their weight made his apartment collapse into the one beneath it.

In the book, collectable plates had value for the simple reason that people felt they did. That sounds silly. But is gold any different? Are there better reasons for it to have value?

My point here is the one I've held longest on this topic: that gold works as a store of value solely because people agree it will. For years I've felt that there's nothing special about gold that makes it right for this role. It just happens to be the metal people began to lust after a few millennia ago. It could have been iron, but iron is too common and thus not special enough: it doesn't shine, and it rusts. It could have been platinum, but people couldn't find it, or enough of it for it to be popular. Perhaps the fact that gold got the job is just a coincidence.

But what about the other hand? (For thoughtful people, I think there's always another hand.) **Let's say we disrespect gold given that it has value only because people agree it does. What about the U.S. dollar?** Why do we accord the dollar value, or any other paper currency for that matter? It has value because the government says it does, and we go along. Sound familiar?

Forty years ago, you could turn in paper money and get an ounce of gold for each $35. Then President Nixon ended the convertibility of gold in 1971 and that was no longer possible. Now there's nothing behind the dollar but people's belief in it.

As an aside, when I was working on Wall Street for the first time in the summer of 1967, the government announced that it was going to terminate the convertibility of banknotes labeled "silver certificates." So I found a dozen or so in my wallet and took them to the Federal Assay Office on a nearby street called Old Slip. The clerk counted them, put the equivalent weights on one side of a huge balance scale, poured granulated silver onto the other side from a bag, and handed the silver to me in an envelope. I'm very glad that I still have it today, plus a few silver certificates that I didn't convert . . . plus the rest of my memories of those early days.

Wikipedia defines "fiat currency" as "state-issued money which is neither legally convertible to any other thing, nor fixed in value in terms of any objective standard." Today the non-convertible dollar (like most other currencies) is a fiat currency. Wikipedia goes on to say fiat currencies "lack intrinsic value."

So if I complain that gold lacks intrinsic value, perhaps my wariness should also make me question dollars (and euros, pound sterling and yen). If gold has the limitations I describe in this regard, what can we say about currencies? (Bruce Karsh goes on to raise a further conundrum: we may prefer income-producing assets, with their intrinsic value, to fiat currency. But the income they produce is reckoned in currency, and thus their value is as well. So, is the value of those assets any more "real"

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than currency? What does have real value? Maybe just things with actual usefulness and not just monetary value, like farms. It certainly does get complicated.)

We can talk about the fact that gold's value isn't intrinsic or quantifiable. But the question really comes down to whether people's faith in gold will increase or erode. Relevant here is a profound observation regarding markets from John Maynard Keynes.

In Keynes's time, a London newspaper ran photos of a large number of young women, with a prize going to the reader whose list of the five prettiest most closely paralleled the votes of all readers. The winning strategy wouldn't be to try to pick the prettiest contestants, but rather the ones most voters will say are the prettiest. In other words, one's contest submission shouldn't be based on intrinsic merit, but on guesses regarding the other participants' views of intrinsic merit. The same is true for investments, including gold. Thus it's not whether gold has value, but whether people will impute value to it.

But it goes further. Especially in the short run, the superior investor may not be the one who's right about the merit of something, or even the one who's right about the consensus view of merit. Rather, the superior investor may be the one who's right about the judgments other people will make about the consensus view of merit.

> It is not a case of choosing those [faces] that, to the best of one's judgment, are really the prettiest, nor even those that average opinion genuinely thinks the prettiest. We have reached the third degree where we devote our intelligences to anticipating what average opinion expects the average opinion to be. And there are some, I believe, who practice the fourth, fifth and higher degrees. (*General Theory of Employment Interest and Money*, 1936).

Will people continue to impute value to gold? Or will they bet that others will continue to impute value to gold? Those are the key questions. It's hard to predict change in these things, but it's the change that makes and eliminates fortunes.

<u>Gold in Times of Uncertainty</u>

In the last six weeks, in addition to North America, I have visited with clients and contacts in Europe, Asia, Australia and South America. **Perhaps the greatest common thread I detected was a sense that the world is more uncertain, and the range of possible outcomes wider, than ever before.** People who before the crisis felt they understood how economies and governments work – and thus what could be expected in the future – now feel very differently.

Today we're faced with uncertainty regarding a vast list of issues including:

- the outlook for economic growth,

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- the ramifications of high debt levels and the necessary austerity measures,
- the economic future of the developed world,
- the impact of China and other emerging nations,
- the likelihood of deflation versus hyperinflation, and
- the soundness of currencies and sovereign debt.

Thus it shouldn't come as a surprise that people are groping for something they can depend on. **Since gold acts as a barometer of expectations regarding inflation and concern about economies and currencies, its popularity has risen as sentiment regarding these things has declined.**

Being away from home tends to alter one's perspective. While traveling, I was shocked to hear someone (okay, a gold producer possibly "talking his book") describe the U.S. as having a corrupt political system in the grip of special interests and being committed to the debasement of the dollar. While I know the stimulative actions being undertaken may well cause the dollar to weaken, I like to think the part about corruption isn't true.

But I have to admit that I'm not all that happy with what's going on in the U.S., and especially in Washington, D.C. (see "What Worries Me," August 2008 and "I'd Rather Be Wrong," March 2010). While other nations are enacting austerity measures to trim their deficits and debt, I don't see much coming from Washington. So if not corrupt, then perhaps just weak-kneed.

- The recent compromise tax "solution" is a good example (merits of the provisions aside): "I'll agree to continue the tax cuts and reduce estate tax rates for the wealthy (exacerbating the deficit) if you'll vote to extend unemployment benefits, cut payroll taxes and increase tax credits (exacerbating the deficit)." There's something for everyone in this bill, with its estimated cost of $858 billion over ten years. The only element missing from both sides' agendas is fiscal discipline.

- And what about the vote on the proposals from the President's commission on the deficit? While the appointed members of the commission generally backed them, they failed to get the needed supermajority because six of the ten elected officials who care about reelection voted no. These are tough issues, and by definition every possible solution will raise taxes or reduce government services. The fact is that most elected legislators seem unable to take any actions that might cost them votes.

Questions about the dollar are being raised worldwide. Thus an interesting result of being abroad is that **what looks like an increase in the dollar price of gold becomes easier to view as a decrease in the amount of gold a dollar will buy. So perhaps we should think about the dollar's weakness rather than gold's strength.** Here's a post from a Reuters blogger:

> If you look at the price of gold in a currency other than U.S. dollars, for instance Australian dollars, it hasn't gone up at all over the last few years. Gold isn't booming at the moment. The U.S. dollar is crashing. You

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> think [gold is] worth a lot of U.S. dollars now? Just wait until QE4 or QE5.

This may or may not be from a qualified observer, but it's indicative of current sentiment. It's interesting in this connection that *The Wall Street Journal* reported as follows on December 3:

> Data cited Thursday by China's state-run Xinhua news agency showed that China imported 209.7 metric tons of gold in the first 10 months of the year, a fivefold increase compared with the same period last year.
>
> That surpassed purchases made by ETFs and surprised analysts, who until now had no clear insight into the size of China's buying. . . .
>
> "Everybody in the gold market knew there was a surge in investment demand, but they didn't know it was China," said Jeff Christian, managing director at CPM Group. . . .
>
> [This news] comes as the government loosens its restrictions on gold purchases by financial institutions and individual investors.

Money has to go someplace, and in these uncertain times, gold seems to be a destination of choice. Further, some of the objections to gold have eased:

- It used to be difficult and costly to transact in, especially in small amounts. But the creation of easily tradable ETFs has eased that concern.
- In the past, people would complain about the fact that gold doesn't throw off current income. But with interest rates ultra-low thanks to central banks, not much else does, either.

Removing impediments like these has the effect of increasing demand relative to supply. The short-run impact on price is clear.

<u>The Usefulness of Gold as a Reserve Currency</u>

In many ways, the rise in the popularity of gold may be largely the result of a process of elimination. Here's a helpful analysis from "Gold's Allure Grows Amid Instability," by James Saft writing in the *International Herald Tribune* (November 10):

> Real assets are the place to be when the solvency of the banking system is threatened and the authorities refuse to deal directly with it.
>
> With trillions in bank collateral that is worth less than its stated value on paper and with a U.S. economy mired in a balance sheet recession, the temptation to take care of these issues by creating more backed-by-nothing

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> money is too great. This is exactly what the Federal Reserve is doing in its latest $600 billion round of quantitative easing.
>
> This in turn is an invitation to the rest of the world to print money right back. There is no brake on this system other than the ability of nations to cooperate, and right now cooperation is not in everyone's individual interest. . . .
>
> You could argue that where we are now was a likely outcome of the current system. A global reserve currency in a fiat system creates tremendous incentives to take on too much debt.

In other words, **when (a) your income is inadequate to cover your spending, (b) you can borrow from abroad to cover the shortfall, (c) you can print the world's reserve currency with which to repay debt and (d) that currency isn't required to be backed by something tangible such as gold, printing money seems like the easy way out.** But as the world is learning about many things, that won't work without limitation.

The *Financial Times* reported as follows on November 13:

> Some policymakers think it is dangerous to rely on a single reserve currency, the dollar, from an economy that needs to borrow heavily from abroad. Amid Friday's failure of the Group of 20 industrial and emerging nations to reach any meaningful accord on global imbalances, France has promised as part of its G20 presidency next year to start a debate about the world's future monetary arrangements.

The world needs a reserve currency (or more than one). What candidates are there? The U.S. dollar, euro, sterling, yen, renminbi and gold.

The dollar has problems these days, and the world's opinion of it as a reserve currency is on the decline. If it hasn't fallen much in recent years relative to the euro and sterling – and in fact it's up strongly since late 2007 – that's mainly because the other two have bigger problems. Only the yen has strengthened relative to the dollar, due to belief in Japan's conservatism and solidity (although its massive national debt suggests otherwise).

Here's how World Bank president Robert Zoellick put it a month ago in arguing for a limited role for gold in the world monetary system:

> Gold has become a reference point because holders of money see weak or uncertain growth prospects in all currencies other than the renminbi, and the renminbi is not free for exchange.

That leads by default to gold. It's unlikely to take over from the others, but it may see further increases in demand, especially if nations conclude that the gold component of

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their reserves is too small relative to currency holdings. On the other hand, the role for gold appears likely to be limited because the small amount of gold that trades – and the swings in sentiment (and thus supply and demand) – render it awfully volatile for a serious component of the world monetary system. Further, the finiteness of the gold supply would limit potential economic growth in a gold-backed monetary system.

Most things in the international arena seem to argue against the dollar, and that can be viewed as implicitly arguing for an increased role for gold relative to the dollar. **But remember that because it can't be assessed quantitatively, no one can say definitively that the current price for gold doesn't already recognize and reflect all of the dollar's problems (and all of gold's merits).**

The Bottom Line

It was about two years ago that I first noted the similarity between gold and religion. Before that, I had always been a non-believer in gold (not strongly anti, just indifferent). But I concluded at the time – just as any wary agnostic might about God – that whereas I didn't believe in gold, I couldn't be 100% certain that was the right position. (It's like someone who considers himself non-superstitious but still favors lucky numbers and daily rituals "just in case.") So I stopped arguing against gold with any vehemence.

More importantly, I also concluded that since gold has "worked" for hundreds of years, it probably will keep on doing so. It might not do so forever, but what's the probability this will be the year it stops? So I wouldn't bet against it, and I might recommend a position "just in case." Not because I view gold affirmatively as a moneymaker, but rather as a useful contributor to safety through diversification. Surely the uncertain world situation seems to call for all the protection against the unknown that we can amass.

Still, the other hand brings me back to price. Yes, gold is probably more likely to continue serving as a store of value than to quit. And yes, maybe one should have a position. But is this the right price at which to start . . . ?

December 17, 2010

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Memo to: Oaktree Clients

From: Howard Marks

Re: Open and Shut

Mark Twain is described as having said, "History doesn't repeat itself, but it does rhyme." Thanks to the tendency of investors to forget lessons and repeat behavior, it sometimes seems there's no longer a need for me to come up with new ideas for these memos. Rather, all I have to do is recycle components from previous memos, like a builder reusing elements from old houses. I'm willing to try an experiment along those lines for this memo. Here are my building blocks:

From "First Quarter Performance," April 11, 1991:

> The mood swings of the securities markets resemble the movement of a pendulum. Although the midpoint of its arc best describes the location of the pendulum "on average," it actually spends very little of its time there. . . . This oscillation is one of the most dependable features of the investment world, and investor psychology seems to spend much more time at the extremes than it does at the "happy medium."

From "The Happy Medium," July 21, 2004:

> The capital market oscillates between wide open and slammed shut. It creates the potential for eventual bargain investments when it provides capital to companies that shouldn't get it, and it turns that potential into reality when it pulls the rug out from under those companies by refusing them further financing. It always has, and it always will.

From "You Can't Predict. You Can Prepare." November 20, 2001:

> Overpermissive providers of capital frequently aid and abet financial bubbles. . . . In *Field of Dreams*, Kevin Costner was told, "if you build it, they will come." In the financial world, if you offer cheap money, they will borrow, buy and build – often without discipline, and with very negative consequences.

From "Genius Isn't Enough," October 9, 1998:

> Look around the next time there's a crisis; you'll probably find a lender.

The above citations provide the themes for this memo. I'll just update them, put them into the current context and discuss the ramifications for investing today. We'll see how

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it goes. If it works well this time, readers may conclude that in the future they can fashion their own memos from bits and pieces of my old ones.

The Credit Cycle at Work

Consider this: the ups and downs of economies are usually blamed for fluctuations in corporate profits, and fluctuations in profits for the rise and fall of securities markets. However, in recessions and recoveries, economic growth usually deviates from its trendline rate by only a few percentage points. Why, then, do corporate profits increase and decrease so much more? The answer lies in things like financial leverage and operating leverage, which magnify the impact on profits of rising and falling revenues.

And if profits fluctuate this way – more than GDP, but still relatively moderately – why is it that securities markets soar and collapse so dramatically? I attribute this to fluctuations in psychology and, in particular, to the profound influence of psychology on the availability of capital.

In short, whereas economies fluctuate a little and profits a fair bit, the credit window opens wide and then slams shut . . . thus the title of this memo. I believe the credit cycle is the most volatile of the cycles and has the greatest impact. Thus it deserves a great deal of attention.

In "The Happy Medium," I discussed the workings of the credit cycle in creating market extremes:

> Looking for the cause of a market extreme usually requires rewinding the videotape of the credit cycle a few months or years. Most raging bull markets are abetted by an upsurge in the willingness to provide capital, usually imprudently. Likewise, most collapses are preceded by a wholesale refusal to finance certain companies, industries, or the entire gamut of would-be borrowers.

Then, in "You Can't Predict. You Can Prepare." I described this expand-and-contract process in detail, along with its ramifications:

- The economy moves into a period of prosperity.
- Providers of capital thrive, increasing their capital base.
- Because bad news is scarce, the risks entailed in lending and investing seem to have shrunk.
- Risk averseness disappears.
- Financial institutions move to expand their businesses – that is, to provide more capital.
- They compete for share by lowering demanded returns (e.g., cutting interest rates), lowering credit standards, providing more capital for a given transaction, and easing covenants.

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When this point is reached, the up-leg described above is reversed.

- Losses cause lenders to become discouraged and shy away.
- Risk averseness rises, and with it, interest rates, credit restrictions and covenant requirements.
- Less capital is made available – and at the trough of the cycle, only to the most qualified of borrowers, if anyone.
- Companies become starved for capital. Borrowers are unable to roll over their debts, leading to defaults and bankruptcies.
- This process contributes to and reinforces the economic contraction.

Of course, at the extreme the process is ready to be reversed again. Because the competition to make loans or investments is low, high returns can be demanded along with high creditworthiness. Contrarians who commit capital at this point have a shot at high returns, and those tempting potential returns begin to draw in capital. In this way, a recovery begins to be fueled. . . .

Prosperity brings expanded lending, which leads to unwise lending, which produces large losses, which makes lenders stop lending, which ends prosperity, and on and on.

The bottom line is that the willingness of potential providers of capital to make it available on any given day fluctuates violently, with a profound impact on the economy and the markets. There's no doubt that the recent credit crisis was as bad as it was because the credit markets froze up and capital became unavailable other than from governments.

Impact of the Credit Cycle

The section above describes how the capital cycle functions. My goal below is to describe its effect.

From time to time, providers of capital simply turn the spigot on or off – as in so many things, to excess. There are times when anyone can get any amount of capital for any purpose, and times when even the most deserving borrowers can't access reasonable amounts for worthwhile projects. The behavior of the capital markets is a great indicator of where we stand in terms of psychology and a great contributor to the supply of investment bargains. **(**"The Happy Medium")

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An uptight capital market usually stems from, leads to or connotes things like these:

- Fear of losing money.
- Heightened risk aversion and skepticism.
- Unwillingness to lend and invest regardless of merit.
- Shortages of capital everywhere.
- Economic contraction and difficulty refinancing debt.
- Defaults, bankruptcies and restructurings.
- Low asset prices, high potential returns, low risk and excessive risk premiums.

On the other hand, a generous capital market is usually associated with the following:

- Fear of missing out on profitable opportunities.
- Reduced risk aversion and skepticism (and, accordingly, reduced due diligence).
- Too much money chasing too few deals.
- Willingness to buy securities in increased quantity.
- Willingness to buy securities of reduced quality.
- High asset prices, low prospective returns, high risk and skimpy risk premiums.

The point about the quality of new issue securities in a wide-open capital market deserves particular attention. A decrease in risk aversion and skepticism – and increased focus on making sure opportunities aren't missed rather than on avoiding losses – makes investors open to a greater quantity of issuance. The same factors make investors willing to buy issues of lower quality.

When the credit cycle is in its expansion phase, the statistics on new issuance make clear that investors are buying new issues in greater amounts. But the acceptance of securities of lower quality is a bit more subtle. While there are credit ratings and covenants to look at, it can take effort and inference to understand the significance of these things. In feeding frenzies caused by excess availability of funds, recognizing and resisting this trend seems to be beyond the majority of market participants. This is one of the many reasons why the aftermath of an overly generous capital market includes losses, economic contraction and a subsequent unwillingness to lend.

The bottom line of all of the above is that generous credit markets usually are associated with elevated asset prices and subsequent losses, while credit crunches produce bargain-basement prices and great profit opportunities.

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The Events of the Past Decade

The last several years have provided a typical example of the credit cycle at work – typical in its pattern, that is, but unique in its extent and impact.

The highs in risk tolerance, credulity, financial innovation and leverage seen between 2004 and early 2007 gave rise to a credit crunch in late 2007 and 2008 – the

greatest of our lifetimes – and to vast capital destruction. Structured and levered investment vehicles melted down, bringing unprecedented losses to those who had provided their capital, and forcing the sale of holdings regardless of price. Financial institutions flirted with potential insolvency, requiring their capital to be rebuilt via government programs. Money market funds and commercial paper had to be buoyed as well. Lehman Brothers went under. General Motors and Chrysler went bankrupt and required bailouts, and companies such as Fannie Mae, Freddie Mac, Merrill Lynch and Bear Stearns had to be supported or absorbed. All of this stemmed in large part from the too-easy availability of capital and from market participants' irresponsible behavior in the middle of the decade. The result was a massive flight to quality and widespread refusal to take risk.

In 2009, miraculously in my opinion, the responses of governments caused investor psychology to turn positive, and the pursuit of return caused risk tolerance to be restored. Risk capital became available again, enabling financial institutions to raise equity capital and highly indebted companies to access the capital markets, extending maturities and capturing the discounts on their debt. As a result – thanks to the rise in risk appetites – many markets showed their greatest gains ever.

This year, even though economic and geopolitical fundamentals are still shaky and new things to worry about arise from time to time, the credit markets are generally wide open for companies deemed to have critical mass. In "Warning Flags" in May, I observed that certain types of deals could be completed that exemplified behavior in the most heated pre-crisis days but had become impossible in late 2007 and 2008. These included issuance of CCC-rated, covenant-lite and payment-in-kind bonds; dividend recap transactions; and the organization of structured entities for investing in debt.

Recently there have been additions to that list:

- The issuance of 100-year bonds.
- The issuance of 50-year bonds callable in five years (if interest rates go up, the buyer will be stuck with a low-rate bond, but if interest rates go down, the issuer can quickly replace the bond with one bearing a lower rate).
- The issuance of inflation-adjusted Treasury Inflation-Protected Securities (TIPS) that will return minus 0.55% plus the rate of inflation (if there's no inflation, the return will be negative, and if the rate of inflation is positive, the yield on the TIPS will be below that rate).
- The issuance of bonds through so-called "drive-by deals." When a deal is announced in the afternoon and priced the next morning, investors have little time to study its creditworthiness and covenants.

Each of these things is indicative of the following on the part of investors:

- **rising confidence and declining risk aversion,**
- **emphasis on potential return rather than risk, and**
- **willingness to buy securities of declining quality.**

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Why These Developments?

As with any economic event, there are numerous explanations for these things. But the one I want to concentrate on is government stimulus.

In the depths of the credit crisis, governments around the world took steps to deal with the liquidity contraction, economic slowdown and banks' depleted capital accounts. These included reductions of interest rates to record lows. The motivations and effects are many and varied.

First, everyone knows it's the primary goal of rate cuts to stimulate economic activity by making it cheaper and thus more attractive for businesses to borrow money with which to invest in factories, capital good and inventories. Retail credit should be cheaper, too, encouraging consumers to borrow and buy.

Second, providing low cost borrowings is a way to rebuild the health of financial institutions. If a bank can borrow $100 million from the central bank at 1% and lend it out at 6%, it's as though the government gave it $5 million per year (assuming the loans turn out to be money-good). Thus, in addition to enhancing banks' profitability and equity, in principle this should lead to increased lending.

To date, the results in these areas have been mixed. Economic activity is still muted and lending is slow. But another by-product has become particularly pronounced: encouragement to take risk.

So third, Treasury bill rates near zero – and note yields of 1 or 2 percent (depending on which country we're talking about) **– have the effect of driving investors toward riskier investments**. Especially when fear and risk aversion recede, returns like these on Treasurys become unacceptable. Thus some money that otherwise would have been invested in the safe part of the fixed income market is forced to more aggressive places.

Whatever fundamental doubt – and resulting reticence – might exist is in part offset by the unacceptably low returns on the safest of investments. Thus, for example, people who wouldn't buy high yield bonds in the past at their traditional 12% yields, or at 20% in 2008, will buy them today at 7% primarily because they can't stomach Treasurys at 2%. In the same way, alternative investment categories that fared poorly in the crisis can attract equity capital again (albeit in smaller amounts and to be paired with less leverage).

The fourth impact is that interest rate declines cause asset appreciation. This restores wealth – household and otherwise – and with it the bullish feelings that give rise to increased willingness to spend money and bear risk.

Fifth, quantitative easing (QE) puts cash in investors' hands in exchange for the securities the Fed buys. This, too, should add to investors' appetite for investing.

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However, a program such as QE that increases liquidity has additional consequences. For example, other countries are complaining that (a) excess capital from the low-rate U.S. will flood their markets, inflating asset and commodity prices, and (b) increasing the supply of money in the U.S. will weaken the dollar, unfairly strengthening the appeal of U.S. exports and reducing U.S. demand for imports.

The Ramifications

In 2003, my memo "What's Going On?" included a tortured metaphor called "The Cat, the Tree, the Carrot and the Stick." In low-return environments, I said, investors are forced to move further out on the risk curve because of the paltry returns available on safe investments, and lured to riskier investments by the higher returns promised there. Conscious risk bearing can be done responsibly and perhaps even profitably. **But low-return environments often lead investors to unconsciously reach for return, with results that are painful. One of our greatest imperatives is to be alert to the emergence of such behavior.**

A final reference to past memos: you might want to look back to 2004's "Risk and Return Today." It describes an investment environment in which rates on short-term Treasurys, reduced by the Fed, had brought down returns in the safe part of the capital market. As a result, I said, the capital market line was "low and flat," with inflated asset prices, low returns, skimpy risk premiums and high risk. I went on to urge caution when investing in such a low-return environment. It was early, but it turned out to have been in order.

There are differences today. Yield spreads on non-investment grade debt are above average. Leverage is only available in more moderate amounts. With investors chastened by cash squeezes in 2008, the flow of capital to private strategies is limited. Equity p/e ratios are below the historic average. And investors seem to be conscious of the economic and geopolitical uncertainties.

But there are also direct similarities, primarily in the fact that inadequate yields on Treasurys are driving bond investors elsewhere to apply their rekindled risk-taking, and thus absolute yields are low on all fixed income instruments.

On November 12, *The New York Times* reported on comments by Martin Feldstein, former president of the National Bureau of Economic Research and chairman of the Council of Economic Advisers under Ronald Reagan:

> Anticipation of QE2, he wrote in the *Financial Times*, caused prices of commodities and common stocks to rise.
>
> "Like all bubbles, these exaggerated increases can rapidly reverse when interest rates return to normal levels," he said. "The greatest danger will then be to leveraged investors, including individuals who bought these assets with borrowed money and banks that hold long-term securities.

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> These risks should be clear after the recent crisis driven by the bursting of asset price bubbles. **Although the specific asset prices that are now rising are different from last time, the possibility of damaging declines when bubbles burst is worryingly similar**." (Emphasis added)

In 2006-07, the most appreciated assets were real estate, mortgages and buyout companies. This year they're Treasury securities around the world, gold, commodities, currencies (versus the U.S. dollar), and real estate and stocks in emerging markets. Buyout companies could return to the list due to the combination of cheap debt, equity capital needing investing, and strong competition to put it to work.

The bottom line is that for whatever the reason, some asset prices have risen again, risk bearing has returned, and the risky transactions of 2004-07 are once again doable. Thus it strikes me that it's time to dust off the ultimate piece of advice from Warren Buffett:

> **The less prudence with which others conduct their affairs, the greater prudence with which we must conduct our own affairs.**

Investors who engaged in aggressive behavior just a few years ago experienced significant pain as a result. Perhaps the punishment was too brief, and perhaps it was reversed too soon. Thus some are acting aggressively once again. It's possible that such behavior won't be punished again the second time around, but prudent investors shouldn't take the risk.

At the depths of the markets in the fourth quarter of 2008, after Lehman Brothers' bankruptcy filing and other events had unnerved the world, great assets were on sale at irrationally low prices. The result – as always in crashes – was that high prospective returns were available with low attendant risk. Just two ingredients were required in order to take advantage: capital and the nerve to invest it.

Today some assets are fairly priced and others are high, but there are no bargains like those of 2008. Capital and nerve can't hold the answers in such an environment. We're no longer in a high-return, low-risk market, especially in light of the inability to know how today's many macro uncertainties will be resolved. **Instead of capital and nerve, then, the indispensable elements are now risk control, selectivity, discernment, discipline and patience.**

December 1, 2010

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Memo to: Oaktree Clients

From: Howard Marks

Re: Hemlines

While the details change, the pendulum-like fluctuation of investment styles is a constant. Fear versus greed, pursuit of safety versus aggressiveness, stocks versus bonds, and growth versus value are just a few examples of the areas in which we see this take place. In this way, the investment world proves the wisdom of Mark Twain's observation that, "History doesn't repeat itself, but it does rhyme."

The limits of the pendulum's swing are fixed, and it tends to move back and forth over the territory between them. This occurs because (a) people tend to take trends to extremes, (b) neither extreme of the pendulum's arc represents a perfect or permanent solution, and (c) there's no place else to go in these regards. **Thus the best way to view investment trends may be through an analogy to hemlines: all they can do is go up and down, and so they do**. The style mavens call for short skirts, and people fall into line, raising hemlines until they're as high as they can go. And then they drop (and so forth).

The reasons behind the rise and fall of investment fashions rarely repeat exactly, in that the details, timing and effects vary from instance to instance. But the underlying process is a recurring one. For example:

- An idea is born when an undervalued asset is discovered.
- Its undervaluation attracts attention, as do pioneering investors' early gains.
- Its popularity rises, attracting more and more adherents, even as undervaluation moves to fully valued.
- It turns into a mania or "bubble," and price becomes immaterial.
- Eventually, the last potential buyer becomes convinced and comes on board.
- With no one else left to convert to the trend, the bubble of overvaluation is ripe for bursting.
- When followers experience the first price declines, disillusionment sets in.
- One-time devotees flee en masse, and the bubble turns into a crash.

This cycle of discovery, mania and crash is best summed up by the most useful of all investment adages: **"What the wise man does in the beginning, the fool does in the end."** This memo will be about recurring patterns, the history of stocks and bonds as I know it, and the adage's applicability to that history.

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A Brief History of Stocks

A significant milestone occurred in October 2008, attracting a lot of attention. For the first time in almost fifty years, it was reported, the dividend yield on the Standard and Poor's 500 stock index was equal to the yield to maturity on the U.S. 10-year Treasury Note. People knew this meant stocks had cheapened, but it took an understanding of history to grasp the real significance. **The truth is that stocks, like other investment media, tend to go in and out of style, and this was just one more example of the latter.**

Prior to the 1950s, common stocks were viewed as a speculative, inferior (i.e., junior) asset class. For that reason, stocks had to pay higher yields than bonds in order to attract buyers; of course a riskier asset should yield more. In fact, most states had laws restricting holdings of stocks in fiduciary portfolios. This attitude toward stocks largely traced from the speculative stock bubble in the 1920s – featuring high-margin buying, bucket shops and shoe shine boys sharing stock tips – which collapsed in the Crash of '29. Poor economic and market performance stretching from 1929 to the end of World War II further contributed to the skepticism toward stocks.

It was only after WW II that economic performance began to support optimism. Brokerage firms led by Merrill, Lynch, Pierce, Fenner and Smith trumpeted the merits of stocks. Equity investing became widespread, and "customers' men" in local brokerage offices delivered stock investing to a great many households: I remember my mother buying 10 shares of Columbia Gas and 15 shares of Chock Full of Nuts around 1959.

I also remember a brochure on "growth stock investing" that Merrill put out in the mid-1960s, touting the desirability of rapid earnings growth and the strength of companies like IBM, Xerox, Avon, Coke, Texas Instruments and Johnson & Johnson. This idea grew into "nifty-fifty" investing, a true mania adopted by many of the large banks, among others. Ballyhoo took over from logic – excitement from value-consciousness – and these growth stocks' prices reached 80 and 90 times earnings.

The nifty-fifty stocks were tested – and found wanting – when the tide went out in the 1970s. Prosperity shifted to recession. The Arab oil embargo, a period of strong cost-push, and self-reinforcing cost-of-living adjustments created hyperinflation to which few people saw a chance for an end. Those growth stock p/e ratios went from 80 or 90 to 8 or 9. And stocks, Wall Street and the general economy went through a truly dreary decade, culminating in a *BusinessWeek* cover story entitled "The Death of Equities," in August 1979. For evidence of the cyclicality of attitudes toward stocks, consider its final paragraph:

> Today, the old attitude of buying stocks as a cornerstone for one's life savings and retirement has simply disappeared. Says a young U.S. executive: "Have you been to an American stockholders meeting lately? They're all old fogies. The stock market is just not where the action is."

In the investment world, lows in sentiment usually coincide with lows in price, and the late Seventies were no exception. Because of the dreadful environment, you could buy an existing company in the stock market for less than it would cost to start one. I was fortunate to become a portfolio manager in mid-1978, and thus to benefit from the subsequent recovery of investor psychology from its nadir.

In general (albeit with some prominent exceptions), the last half of the twentieth century was marked by the rise of a cult of equities, and the last quarter century was probably the best ever. From 1979 through 1990, the S&P 500 averaged an annual return of 15.4% and showed losses in only two years (4.8% in 1981 and 3.1% in 1990). Economic prosperity, rising corporate profits, a trend among consumers toward borrowing to spend, and the subsidence of inflation and interest rates all made for a most hospitable environment.

When the stock market's performance improved even further in 1991-99, with an average return of 20.6% and no down years, the fawning kicked up a notch. From the low of 7 reached in 1980, the p/e ratio on the S&P 500 eventually exceeded 33 in 1999. The market's dramatic

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performance led to steady increases in the capital allocated to equities, and eventually to the tech stock bubble. It culminated in books such as the fact-based *Stocks for the Long Run* and the more fanciful *Dow 36,000*. If you asked institutional investors what return they expected from stocks going forward, I think just about all would have said 11%.

An aside: investors consistently seize upon above average returns as an encouraging sign and extrapolate them, and the 17.6% compound return on the S&P 500 from 1979 through 1999 was certainly a case in point. But rarely do they ask what gave rise to those good returns, or what it implies for the future. In essence, stock ownership conveys the benefits of owning a corporation, and stock appreciation should be powered by increases in profits. Thus long-run returns should reflect corporate growth. But as Warren Buffett has pointed out, ". . . people get into trouble when they forget that in the long run, stocks won't appreciate faster than the growth in corporate profits." Although that growth is the underlying source of equity profits, it is often overshadowed and obscured in the short run by trends in valuation. People took that 17.6% gain as an encouraging sign, overlooking the fact that it stemmed primarily from the rise of p/e ratios described above and thus was unlikely to continue unabated. Rather than healthy performance that could be extrapolated, this swollen return should have come as a warning that valuations were unsustainable and likely to regress toward the mean. **But investors consistently fail to recognize that past above average returns don't imply future above average returns; rather they've probably borrowed from the future and thus imply below average returns ahead, or even losses.** The tendency on the part of investors toward gullibility rather than skepticism is an important reason why styles go to extremes.

Wharton's Professor Jeremy Siegel, the author of *Stocks for the Long Run*, used historical data (a) to demonstrate that there had never been a long period when stocks didn't outperform cash, bonds and inflation, and thus (b) to argue that most people of average risk tolerance should have roughly 100% of their capital in the stock market. But Siegel, like many laymen, failed to pursue the most critical line of inquiry. **The right question to ask in the late 1990s wasn't, "What has been the normal performance of stocks?" but rather "What has been the normal performance of stocks if purchased when the average p/e ratio is 33?"**

Many investors were seduced by the performance of stocks in the late 1990s by the promise of wealth and a secure retirement, and by the meshing of equity participation with the allure of the technology, media and telecom industries. The results are well known: the first three-year decline for stocks since the Great Depression; a peak-to-trough decline of 51% for the S&P 500; massive losses for tech investors; shrunken 401-k accounts; and general disillusionment with stocks.

Basically, I think equity investors had their hearts broken, as happens from time to time in the investment world. The promise of easy money turned out to be empty – as usual – and investors who had adopted overblown expectations promised "never again." A good economy, low interest rates and resurgent general psychology brought stocks back between 2002 and 2007, but just to their 2000 peak. Versus the 11% prospective return they were sure of in 1999, by 2003 many investors expected only 6-7% from stocks (despite the fact that they were now much cheaper). With the bloom off the rose, people looked elsewhere – to private equity, real estate, hedge funds and mortgage backed securities, for example – for the next solution. I didn't hear any investors say, "We don't have enough stocks." Their glory truly had faded.

But having recovered to their previous high, stocks were buffeted again in the credit crisis. They fell 58% from their 2007 peak to their 2009 trough. Stocks weren't singled out for punishment; non-government bonds, real estate, mortgage securities and private equity all shared the pain as panic and loss of confidence were everywhere.

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With the panic now gone, stocks have recovered, but only about half their 2007-09 losses. The S&P 500 stands at a level that was first reached in 1998, meaning over the last twelve years, the average stockholder's paltry return of less than a percent a year came entirely from dividends. People talk about the "lost decade in equities," and still no one seems to feel he owns too few stocks.

A Brief History of Bonds

The recent history of bonds requires less telling. Bonds were the bedrock of investment portfolios in the first half of the last century. Along with Treasurys, utilities and corporates, business was brisk in railroad and streetcar bonds. Graham and Dodd's classic, *Security Analysis*, devoted more than 200 pages to "fixed-value investments" including preferred stock, of which next to nothing is heard today.

The story of bonds in the last sixty years is the mirror opposite of what happened to stocks. First bonds wilted as stocks monopolized the spotlight in the 1950s and '60s, and at the end of 1969, First National City Bank's weekly summary of bond data died with the heading "The Last Issue" boxed in black. Bonds were decimated in the high-interest-rate environment of the '70s, and even though interest rates declined steadily during the '80s and '90s, bonds didn't have a prayer of standing up to equities' dramatic gains.

By the time the late 1990s rolled around, any investment in bonds rather than stocks felt like an anchor restraining performance. I chaired the investment committee of a charity and watched as a sister organization in another city – which had suffered for years with an 80:20 bond/stock mix – shifted its allocation to 0:100. I imagined a typical institutional investor saying the following:

> We have a little money in bonds. I can't tell you why. It's an historical accident. My predecessor created it, but his reasons are lost in the past. Now our fixed income allocation is under review for reduction.

Even though interest in stocks remained low in the current decade, little money flowed to high grade bonds. The continued decline in bonds' popularity was fed, among other things, by the decision on the part of the Greenspan Fed to keep interest rates low to stimulate the economy and combat exogenous shocks (like the Y2K scare). With Treasurys and high grade bonds yielding 3-4%, they didn't do much for institutional investors trying for 8%.

As a result of a process I consider quite standard, bond allocations reached all-time lows at just the time they became needed. Other than cash and gold, Treasurys were the only asset that performed well in 2008. In fact, they benefited from a massive flight to quality. Corporate high grade and high yield bonds suffered along with everything else in 2008, but less than stocks, and they've enjoyed a comparable recovery. Thus bonds have performed much better than stocks since the onset of the crisis in July 2007, as shown on the next page.

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	June 30 to June 30			
	2007-08	2008-09	2009-10	three years
10-year Treasury bond	12.6%	7.3%	8.3%	30.8%
Barclay's Govt/Credit	7.2	5.3	9.7	23.8
Citi High Yield Index	-0.5	-4.2	24.7	18.8
S&P 500	-13.1	-26.2	14.4	-26.6
MS EAFE Index	-22.5	-26.1	7.1	-38.7
MS Emerging Markets	2.6	-30.0	20.6	-13.4

Clearly, the recent performance edge of bonds over stocks has been dramatic.

What's Going On Today?

Now, suddenly, investors seem to have awakened to bonds' attractions. This after failing to do so in time for the crisis, when holding bonds would have been of great value. Is this just another case of investors driving while looking in the rearview mirror? And are they shifting from stocks to bonds at just the wrong time?

The headlines are dramatic and the facts are clear. In just the last few weeks, we've seen newspaper stories like these: "Investors Fleeing Stocks with Cash Flow Lure JP Morgan" (Bloomberg, August 16), "Treasury Bears Cave as Bond Yields Keep Tumbling" (*The Wall Street Journal*, August 16), and "Growing Concern over Bond Bubble" (*Financial Times*, August 21). Bloomberg reported as follows:

> About $33 billion flowed out of funds owning U.S. shares this year . . . About $185 billion was sent to bond funds through July 31, the most on record, according to the Investment Company Institute.

These statistics relate to mutual funds and their retail investors. While not necessarily the same for institutions, they are indicative of trends in investor psychology. In other words, the disaffection with stocks is continuing, and the withdrawn capital and much more is flowing to bonds. (It must be noted, however, as Tom Petruno of the *Los Angeles Times* pointed out on August 21, that gross inflows to equity mutual funds are still very substantial – and larger than those into bond funds – although exceeded in this period by outflows.)

The first question I want to tackle is "why these trends?" The answer with regard to stocks is simple. They were over-hyped in the 1990s; they disappointed in the 2000s; and investors are extrapolating the poor performance (even at lower prices) just like they previously extrapolated good performance (at higher prices). **This tendency to expect trends to continue is typical of investor behavior, especially with regard to phenomena that should instead be expected to regress toward the mean.**

In the late 1990s, when stocks were performing so well and universally expected to far exceed most investors' return needs, no one saw a reason to hold fixed income instruments with their modest yields. Now stocks have performed poorly for a decade and expectations have been cut back. Equities are no longer considered the sure thing they were. The other day *The New York Times* ran an article entitled "In Striking Shift, Investors Flee Stock Market":

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> Renewed economic uncertainty is testing American's generation-long love affair with the stock market. . . . Small investors are "losing their appetite for risk." . . . "Like everyone else, I lost" during the recent market declines [an individual investor] said. I needed to have a more conservative allocation." . . . Investors pulled $19.1 billion from domestic equity funds in May, the largest outflow since the height of the financial crisis in October 2008. (August 22, 2010)

Turning conservative after a crisis smacks of closing the barn door after the horse has left, but it's a regular feature of investor psychology.

Of course, there has to be a fundamental rationale for investor behavior, and the current low opinion of stocks is based on the spreading belief that the recovery will be anemic and there could be a double dip. Also behind it may be the expectation that tax rates on dividends and long-term capital gains will rise relative to the rates on ordinary income.

And why is so much capital flowing to bonds? The analogy to hemlines serves well in this regard. Take a long-established style, stir in changed circumstances, and add a significant swing in psychology. **Bonds became passé over a long period of time, and stocks caught everyone's attention. When these trends had gone as far as they could, and the error of the fashion extreme ultimately was exposed, bonds came back into style.**

Bonds used to constitute the majority of portfolios; then a 70:30 equity/bond mix became the norm; and then bonds went further out of style. And then, when bond allocations got as small as they could, the style mavens began to call for more, instead. Of course it helped that bonds outperformed during and after the crisis.

So few people held bonds going into the crisis, and in such small amounts, that the attractions of bonds must seem like a sudden revelation: They're senior in the capitalization to equities, of course, so they're less subject to fundamental risk. Then there's what I call the "power of the coupon." In addition to redemption at maturity, most bonds provide an interest check every six months. Not only are these cash flows spendable and investable, but they also serve to stabilize bond prices, restraining volatility. Sounds like a great deal. So why, people now wonder, did we hold so few? **Take historically small allocations, add in newly discovered merits, and you get a buying trend and rising prices.**

The fundamental underpinnings for the buying trend in bonds are the converse of those compelling equity reductions: concern about economic sluggishness, the chance for a double dip, and even the distant possibility of deflation. Under any of these circumstances, companies are likely to do poorly, so you'd rather own senior securities (debt) with the promise of positive returns if held to maturity, rather than junior ones (equities), to which just about anything can happen.

And if inflation is declining – taking interest rates with it – you'd rather secure a fixed rate of return with a bond than hold a totally variable instrument like a stock. With inflation at zero or negative, the thinking goes, locking in today's interest rates will prove to have been a godsend.

Finally, if we get back into another crisis, wouldn't we rather hold bonds? Look how well they did during the last one.

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At What Price?

That question – at what price? – isn't just the right question to ask about bonds versus stocks today. It's the right question regarding every investment at every point in time.

I try every chance I get to convince people that in investing, there's no such thing as a good idea . . . or a bad idea. Anything can be a good idea at one price and time, and a bad one at another. Here's how I've put it in the past:

> It has been demonstrated time and time again that no asset is so good that it can't become a bad investment if bought at too high a price. And there are few assets so bad that they can't be a good investment when bought cheap enough. . . No asset class or investment has the birthright of a high return. It's only attractive if it's priced right. ("The Most Important Thing," July 1, 2003)

> Investment success doesn't come primarily from "buying good things," but rather from "buying things well" (and the difference isn't just grammatical). ("The Realist's Creed," May 31, 2002)

The thing to think about isn't whether you'd rather have junior or senior securities in a recession, or fixed rate securities versus variable ones in deflation. The question is which securities are priced right for the future possibilities: which ones are priced to give good returns if things work out as expected and not lose a lot if they don't? You mustn't fixate on a security's intrinsic merits, but rather on how it's priced relative to those merits.

So, for example, it's not enough to say "We want fixed rate securities in deflationary times." You'll be glad to be holding 2½% ten-year Treasurys if deflation materializes, but how will you feel if it doesn't? And what's the probability of each outcome?

If bonds are ideal for deflation and stocks will bear the brunt of the associated economic weakness, is that all that matters? Would you rather buy overpriced bonds than underpriced stocks? Is there an objective standard for overpriced and underpriced? And, for example, if the ten-year note will pay 2½% regardless of the environment, and stocks will return 15% if deflation is avoided and lose 10% if it's not, doesn't deflation have to have a likelihood exceeding 50% for bonds to be preferred? (Check the math.)

My point here is that simplistic blanket statements are no help at all in making investment decisions. How have investors gotten killed in the past? By falling for statements like these:

- High-growth stocks are a good thing (1970).
- Bonds rated below triple-B aren't appropriate for investment (1977).
- No one will ever buy equities again (1979).
- There can never be too many disc-drive manufacturers (1988).
- The Internet and optical fiber will change the world (1999).
- Home prices can only go up, and there can't be a nationwide surge in mortgage defaults (2006).
- High yield bonds are unattractive given the risk of Armageddon (2008).

<u>Most of today's positive articles about bonds are totally devoid of discussion of prices and probabilities. But it's only by assessing those things that attractiveness can be determined.</u>

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What To Do Now?

Ever since the financial crisis started in mid-2007, I've been saying any recovery would be lackluster and investors shouldn't be planning on prosperity. To me that called for investing in solid, stable, non-cyclical companies; avoiding levered companies and strategies; emphasizing risk-controlled strategies and managers; and, perhaps foremost, holding more bonds and fewer stocks. These were general principles: my own blanket statements, if you will. But now that stock prices have drifted lower and bond prices have continued to surge, I find I must reconsider the emphasis on bonds.

How are bonds priced today? What returns can we expect? Let's consider that 2½% ten-year note. With regard to Treasury securities, where it still seems safe to say there's no credit risk, there are three possible states of nature.

- If we buy at a yield to maturity of 2½% and interest rates don't change, we'll enjoy an annual return of 2½% per year for the next ten years. (With interest rates unchanged, there'll be no change in price other than from accretion to par at maturity, and we'll be able to reinvest the interest payments at the yields available at the time of purchase, an assumption implicit in the yield-to-maturity calculation.)

- If interest rates fall in response to economic weakness or deflation, we're likely to see interim appreciation. And if we sell at the appreciated prices, our holding-period return will exceed the yield to maturity at which we bought. Even if we just hold, our 2½% notes will be desirable museum pieces, as in, "Do you remember the good old days, when you could get 2½% on Treasurys?" (In truth, though, how much lower can yields go from here?).

- Finally, if the economy, inflation and interest rates surprise on the upside relative to today's low expectations, having locked in a yield of 2½% won't turn out to have been a good thing. From 2½%, it's clear that rates have much further to go up than down. Any substantial increase in bond yields would bring meaningful interim price declines. It must be borne in mind that holders of the bonds of creditworthy issuers don't have to worry about permanent capital losses (unless they're frightened into selling when things are down). A bond that's money-good will outlive any negative interim fluctuations, pay par at maturity and deliver the yield at which it was bought. So the real risk for people who invest in these bonds is that their returns turn out to be sub-par under the circumstances. If inflation turns out to be normal, investors in the 2½% note may end up with no more purchasing power down the road than they have today – that is, a real return of zero. Thus, if there are positive surprises in the environment, bond holders are likely to wish they had stocks instead.

Portfolio construction is supposed to strike an appropriate balance between safety and certainty on one hand and aggressiveness and gains-seeking on the other. The key question is whether today's bond buyers are leaning too heavily toward the former and forgetting too much about the latter. Are they too pessimistic and thus honoring uncertainty to excess?

An article by Richard Thaler of the University of Chicago, in *The New York Times* of August 22, makes an important point. He wrote about CFOs, but I think it's largely the same for investors:

> . . . the confidence limits [of their forecasts] widen after bear markets, mostly because estimates at the lower bound become more pessimistic. This puts a new light on the recent comment by Ben S. Bernanke . . . that the economic outlook was "unusually uncertain." . . . Yes, things *feel* more uncertain after bad times,

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but severe market downturns tend to occur after long bull markets when we are feeling least uncertain.

In other words, investors become so accustomed to good times that bad times seem unsettling in comparison. **That could explain excessive appetites for the safety of bonds and thus why, according to Deutsche Bank, "the top 10 lowest-yielding U.S. corporate new issues in history have been sold in the last 14 months"** (Bloomberg, August 16).

And what about sellers of stocks? I'm no longer an "equity guy" by profession, and Oaktree manages far more bonds than stocks, so this isn't a commercial. But I feel investors may be overlooking some substantial merits on the part of stocks today (data from Bloomberg, August 16, except as noted):

- Having made their organizations lean and benefited from declining floating-rate interest costs, cheaper labor or staff downsizing, companies are doing a good job of making money despite today's lackluster economic environment. "Earnings for S&P 500 companies may rise 36% in 2010 and 16% in 2011, the largest two-year advance since 1994-5."

- Rather than spend that money on expansion or acquisitions, most companies are piling it up. "The Federal Reserve reported in June that nonfinancial companies were holding cash totaling more than $1.8 trillion, having built up their hoards at a rate unmatched in more than 50 years" (*LA Times*, August 25). This pile of cash adds greatly to companies' financial security and to the potential for dividend increases or stock buybacks in the future.

- Finally, those selling or shunning stocks today seem to be overlooking some very attractive valuation parameters.

    - Price/earnings ratios are lower than usual. "The S&P 500 trades at 14.4 times annual earnings, compared with an average of 16.5, according to data . . . that goes back to 1954." Not giveaway levels, but 13% below the post-war average.

    - Annual free cash flow for American companies excluding banks is running at 6.8% of their market value. This "cash flow yield" is roughly capable of being compared against the yield on bonds. Although (unlike dividends or interest) the cash flow isn't necessarily received by investors as it's earned, it should contribute to stocks' value one way or another.

The bottom line is that, as bond prices rise (reducing yields) and p/e ratios fall, the chances increase that stocks will outperform bonds. Thus the benefits high grade bond investors feel they're gaining through **what they're buying** can be undone by **what they're paying**. I'll say it another way: **the attractiveness of one investment relative to another doesn't come from what it's called or how it's positioned in the capital structure, but largely from how it's priced relative to the other.**

I'm impressed today by the ability to assemble a portfolio of iconic, high quality, large-cap U.S. growth stocks that will provide appreciation in a strong environment, a measure of protection in a weak environment, and a meaningful dividend yield regardless. To me, and given my standard view that we don't know what the macro future holds, these stocks' potential over a range of possible scenarios is more attractive than bonds which will do well in periods of economic weakness or deflation but poorly in strength or inflation.

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Compared to stocks, I feel Treasurys and high grade bonds currently reflect all of the environmental factors in their favor and perhaps more and are priced rich relative to stocks. For them to do well from here, with yields so low, everything has to work out as the bond bulls hope.

My friend, hedge fund manager Doug Kass, publishes a daily note to investors. (Given that I average a memo every couple of months, I find the very idea daunting.) I usually like what he writes, which is another way of saying we think a lot alike. Doug's August 18 note carried a catchy headline, "Setting Up For the Trade of the Decade." His nominee for that sobriquet: shorting the U.S. bond market.

What about high yield bonds, one of Oaktree's flagship asset classes? They're selling at yield spreads over Treasurys that are well above the historic norms, and their promised yields to maturity (before credit losses) should help institutional investors toward their return goals. On the other hand, it must be said that if interest rates rise, high yield bonds will see interim markdowns (albeit cushioned by their modest durations and the "gravitational pull" of price toward par at maturity). In all, given today's yield spreads, we believe high yield bonds will outperform high grade bonds in most foreseeable long-term environments.

Leveraged loans may deserve consideration as well. The yields on these loans are low in the absolute, like other fixed income instruments, but relatively attractive at 5½-6%. The loans are senior-most in the capital structure, meaning they should provide some protection in a sluggish economy, and the fact that their interest rates float with LIBOR should insulate them against interest rate increases.

Oaktree manages half a dozen large "multi-strategy fixed income" accounts, in which we are responsible for allocating capital to our various marketable securities strategies. Recently, in recognition of the developments described above, we made a modest initial shift away from high yield bonds and into convertibles, with their sensitivity to equity market trends. Here's what I wrote to our multi-strategy clients a month ago:

> Certainly by the onset of 2000, people believed too much in stocks and thought too little of bonds. Now, a decade later, these things are reversing. As we enjoy our portfolios' performance, we should be alert for a day when bonds will have become too popular and stocks' outcast status will have rendered them too cheap. We can pat ourselves on the back for being in the right asset classes today, but we shouldn't fail to consider what these diverging performance trends can do to tomorrow's returns.

Since few investment trends continue forever, it's usually smarter to expect ultimate regression to the mean rather than growth to the sky. No one should view the great popularity of bonds relative to stocks without reservation.

September 10, 2010

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Memo to: Oaktree Clients

From: Howard Marks

Re: It's Greek to Me

In the early part of this decade, I reviewed a few books for the *Sunday Los Angeles Times*. Here's how I began my assessment of Pete Peterson's *Running on Empty* in 2004:

> Consider Sam. He's always been regarded as the brightest guy in town, and maybe the handsomest. He has the best job and lives in the best house. He spends aggressively – detractors would say hedonistically – to support a lifestyle that many others envy, but he shows good character by providing generously for his sick and elderly relatives.
>
> There are, however, a few problems. In recent years, he's been spending more than he makes, and his expenditures appear likely to grow faster than his income. He covers each year's shortfall by borrowing from other members of the community. (They've always been glad to lend him money because of his good standing in town.) But this adds increasingly to his debt, and thus to the next year's interest (and shortfall). In other words, he seems to follow Winston Churchill's dictum: "It saves a lot of trouble if, instead of having to earn money and save it, you can just go and borrow it."
>
> Finally, with the number of family members Sam cares for increasing, with him promising each of them an increasing stipend, and with his relatives – even the sick ones – living longer, it seems clear that in the future, the cost of supporting them will grow considerably faster than his income.
>
> An annual deficit. Attachment to a lavish lifestyle. Growing indebtedness and related increases in interest costs. Dependence on others to finance the shortfall and the risk that those lenders will withdraw their loans or charge higher interest rates. A commitment to pay for the welfare of others that threatens to grow out of control.

Pete's book focused on the tendency of the United States to ignore the cost of its social programs, run deficits and expand debt, and the "Sam" in my analogy was, of course, Uncle Sam. But now other nations have jumped the line and usurped the above description. Like most of Western civilization, it started with Greece.

Because I was in London much of the time since Greece burst into prominence, I may be able to add some insight from a European vantage point. This period in London was unusual for me, in that with this topic in the headlines I was far more a student than a teacher. Most Americans don't start off sensitized to international economics and, especially, currency matters. It's been challenging to organize all I've learned and boil it down for a memo, but here it is.

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Strange Bedfellows

"Shared values" is one of the things I credit for Oaktree's success over the years. All of Oaktree's senior managers are conservative, cautious people; we all agree that risk control and consistency hold the keys to long-term investment success; and we all put clients' account performance ahead of our company's profit. Shared values make it easy to run an organization and particularly easy to reach agreement on policies and tactics.

Now imagine what it would be like to run an enterprise where (a) some of the constituents believed much more in thrift, discipline and transparency than others and (b) there was no mechanism for making sure everyone played according to the agreed-upon rules. Welcome to Europe.

In the 1950s Belgium, France, Italy, Luxembourg, the Netherlands and West Germany came together to form the European Coal and Steel Community, European Atomic Energy Community and European Economic Community, which in 1967 combined as the European Community. Denmark, Ireland and the U.K. joined in 1973, and Greece, Spain and Portugal joined in the 1980s. Membership has since expanded to 27 nations, and the name "European Union" (E.U.) was adopted in 1993. In 1999, eleven nations (since expanded to 16) agreed to form the euro zone and replace their individual currencies with the euro. Europe seemed to have accomplished the daunting task of pulling together its nations and adopting a single currency. This was a delicate balancing act, but for years it seemed to go quite well.

It was a requirement for success that all the nations share fiscal policy. However, as in most economic alliances, there were incentives to nibble at the rules. And, believing more is better, the E.U. admitted nations with less uniform values. The desire to create a common currency and expand the reach of the union – to achieve a scale more comparable to economic powers like the United States – colored decisions regarding expansion and ultimately led to trouble.

To get a feeling for what happened, let's say you and I are such good friends that we decide to combine our economic strength to apply together for a credit card with better terms and a higher limit. We agree we'll each (a) refrain from spending more than we earn and (b) receive and pay that part of the bill that relates to our own charges. All goes well, and eventually we agree to admit a third member to our association. But the new member doesn't share our commitment to thrift and integrity, wants to live a better life than he can afford, and thus charges more on the card than he earns. Our strong combined credit rating enables him to do so, and his balance on the credit card starts to swell. When it comes out that our association is heavily indebted, we chip in to pay off the unpaid balance, even though only one of us ran it up. In fact, since the prodigal third member spent more than he made, he has nothing to contribute to paying off the debt; thus you and I – despite having behaved more responsibly – are stuck with the burden.

Greece is that new member of the arrangement, and it (like a number of other countries) wanted to give its people a better life than they can afford, financed from the public treasury. Without membership in the E.U. – or if the rules on deficits had been enforced – Greece's economic reality would have limited what it could do for its citizens. But E.U. membership enabled it to borrow and spend to excess. Here's what the Bank of Spain's governor said in April 2007: "The single monetary policy has meant that excessively loose conditions for our economy have been almost continuous" (*Telegraph.co.uk*, May 30). The same was true of Greece.

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My English friend Rodney Leach is a Member of Parliament and a committed leader of the "Eurosceptics" who have campaigned to improve the E.U. and prevent Britain from adopting the euro in place of sterling. His draft of a coming paper influenced my understanding of the situation: "Once inside the Club," he writes, " . . . the Mediterraneans resumed their old habits. The temptation was irresistible to borrow at the low interest rates bestowed on them by Germany's participation. Greece in particular indulged itself by completely abandoning financial discipline."

Greece was able to violate the agreed-upon 3% cap on E.U. members' deficits, abetted by generous capital markets and the failure to enforce the limit, and it engaged in financial transactions designed to hide its growing debt. It bears noting that much of what's true today about Greece has been true for years. But people didn't understand its significance to the extent they do today, or didn't find it worrisome, and short-term-oriented politicians had every incentive to ignore the problem rather than confront it and admit that their noble experiment was fraying.

Thus it emerged in early April that Greece and Greek companies had run up substantial debts that would be hard to repay. It didn't take long for people to figure out that the same was true about the rest of the "PIIGS": Portugal, Italy, Ireland, Greece and Spain. In May, some unfortunate remarks by Hungary's Finance Minister made it a candidate for similar treatment. Then Estonia came under the spotlight, and the process seemed to cascade non-stop.

A Problem of Substance

The real problem in Greece and the other countries – especially what Rodney calls the "Mediterraneans" – isn't one of deficits and debt. Those are merely the results and the symptoms. And if the problem were Greece alone, the smallness of its economy and financial system would render it easily fixable. The problems are more substantial, structural and widespread. (I looked at 17 European nations; they all ran deficits in 2009, and only two of those deficits were below the E.U.'s target of 3% of GDP. In ascending order, the deficits in Belgium, Cyprus, Slovakia, France, Portugal, Spain, the United Kingdom, Greece and Ireland were all between 6% and 14%.)

The ingredients that contributed to the European crisis are many:

- Slow-growing, unproductive and uncompetitive economies.
- Low birthrates and aging populations. ("In the 1950s there were seven workers for every retiree in advanced economies. By 2050, the ratio in the European Union will drop to 1.3 to 1." – *New York Times*, May 23)
- Generous benefits and social services; cradle-to-grave safety nets.
- Extensive vacations and strict limits on the work week.
- Early retirement.
- Artificially high debt ratings and resultant low interest rates.

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In "What Worries Me" (August 28, 2008), I expressed concern about the fact that Americans expect the world's highest standard of living even though the U.S. is no longer a leader in manufacturing output and global competitiveness. Certainly this is the case in spades for Greece, whose economy is largely irrelevant but which wanted to meet its people's demands.

In April, as the problem began to unfold, I heard a Greek taxi driver express his worry on the radio: "I might not be able to retire at 53," the average retirement age. How can it be rational for a nation with a limited economy to enable its citizens to retire at age 53? Well, it isn't. Greece was able to outspend its revenues for years because it benefited from the "reflected halo" of the E.U.'s financial strength and low euro-related interest rates.

On June 4, 2005, the *International Herald Tribune* carried an op-ed piece by Thomas Friedman in which he presciently observed the following:

> . . . [the forces of globalization are] eating away at Europe's welfare states. It is interesting because French voters are trying to preserve a 35-hour work week in a world where Indian engineers are ready to work a 35-hour day. Good luck. . . .
>
> I feel sorry for Western European blue-collar workers. A world of benefits they have known for 50 years is coming apart, and their governments don't seem to have a strategy for coping.
>
> A few weeks ago, Franz Muentefering, chairman of Germany's Social Democratic Party, compared private equity firms which buy up failing businesses, downsize them and then sell them to "a swarm of locusts."
>
> The fact that a top German politician has resorted to attacking capitalism to win votes tells me just how explosive the next decade in Western Europe could be, as some of these aging, inflexible economies which have grown used to six-week vacations and unemployment insurance that is almost as good as having a job become intimately integrated with Eastern Europe, India and China in a flattening world. . . .
>
> Next to India, Western Europe looks like an assisted-living facility with Turkish nurses.

In a nation with closed borders, a government can do almost about anything it wants. It can print money with which to buy things for people who don't earn those things themselves . . . as long as sellers will accept that newly printed money at face value. **But in a global economy, competitive forces make it hard for people – or countries – to live better than their output justifies.**

Less fundamental but more colorful, I've learned about a number of factors which exacerbate the situation in Greece and elsewhere. While just anecdotal, these tales are rampant in Europe:

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- As may be typical of Mediterranean nations, compliance with Greek tax laws is, shall we say, "spotty." In this country of 11 million people, just a few thousand report incomes above €100,000.
- There's a box to check on the tax form if you have a swimming pool, and 324 residents of Athens said "yes." However, when tax investigators checked satellite photos, they got a slightly different figure: 16,974. That's 2% compliance. (*The New York Times*, May 10)
- As part of the unorthodox arrangement, these countries have significant "black" or "shadow" economies. In Greece, 20-30% of transactions are said to take place in cash and/or through overseas bank accounts, unreported in both cases.
- The prevailing rule in Greece seems to be "4-2-4." If you have a pending tax obligation of €10, you meet with the tax collector. You hand him four for himself, you pay the authorities two, and you keep four. It's not a fluke that the typical Athens tax collector, with a salary of €50,000, is said to own real estate worth €2 million.
- Going the proverbial baker's dozen one better, workers in Greece's public sector had quite a deal: they were paid two "bonus months" per year.
- In Spain, half of all employees are unionized and protected by very strict work rules that limit efficiency and essentially preclude layoffs. This means any steps to cut costs fall on the rest of the work force, which is hit disproportionately.
- It seems that Italy (an E.U. founder but also a "Mediterranean") maintains "a fleet of more than 626,000 official cars, more than 10 times the number in France, Germany or the UK." (*Financial Times*, May 12)

Together these things – low output, high government spending, under-the-table business dealings, tax evasion, and financial profligacy – represent a recipe for trouble. **Today's developments merely prove that things that don't make sense can't go on forever**:

- Perpetually spending more than you bring in.
- Enjoying a standard of living you can't afford.
- Running an annual deficit that increases constantly as a percentage of GDP.
- Owing amounts that increase constantly as a percentage of GDP.
- Doing all the above while having a currency as strong – and an interest rate as low – as in nations where these things are not the case.

Things can go on longer than they should, and these probably have, but eventually there's a price to be paid. The world is up in arms today over everything that's wrong with the European financial picture, even though these conditions probably aren't much changed from a few years ago. It's just that now people have decided to focus on them.

<u>The Role of Debt</u>

As I mentioned above, debt isn't the problem, or the cause of the problem. But it has been the facilitator.

In "The Long View" (January 9, 2009), I wrote (albeit without reference to Greece) about a strong uptrend over the last few decades in what I called "expansiveness":

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> Every business, government, non-profit organization or individual has a certain amount of equity capital, net worth or surplus. That capital, in turn, will support a certain level of activity: production and sales, lending, government action, charitable grants or consumption. **But over the last several decades, if you wanted to do more of these things than your capital permitted, you could borrow capital from someone else.**

Without credit – I think back to my pre-credit card college days of 45 years ago, for example – you couldn't spend money you didn't have. Thus you couldn't buy things you couldn't afford. Then the miracle of credit came along and it became easy to get in over your head.

What would have happened if governments couldn't finance deficits by issuing debt? Greece would only have been able to pay the benefits it could afford. Less pleasant, but perhaps healthier.

And what would have happened if builders weren't able to borrow, and thus had to sell each newly built home before they could erect the next? Spain wouldn't have been the site of a boom in which 2.8 million homes were built (with only 1.5 million sold), and with as many building permits issued as in France, Germany, Italy and the Netherlands put together.

The Wall Street Journal of November 24, 2008 carried the following quotation from Irving Fisher, writing 76 years ago ("The Debt-Deflation Theory of Great Depressions," *Econometrica*, March 1933):

> When it comes to booms gone bust, "over-investment and over-speculation are often important; but they would have far less serious results were they not conducted with borrowed money."

While this statement wasn't made with regard to Greece or even to government activities in general, it is clearly relevant to the current situation.

In recent years, most of the nations of the world spent more than they took in to give their citizens more of what they wanted. As long as the capital markets were open, few could think of a reason why this policy wouldn't work forever. Economic units all over the globe were able to borrow to cover deficits. All that mattered was the ability to service the debt, even if that required borrowing money to pay interest. No one seemed to demand the ability to repay.

When I was younger – in what seems like a distant past – national debt began to expand, and I remember heated debate regarding the significance, wisdom and likely consequences of that trend. The subject receded in recent years, since every nation now does it to some extent and people became inured to the controversy, as they tend to do.

Two sentences stand out on this subject, from Bill Julian of Bill Julian Research on April 11. He quotes John Maynard Keynes as having said, "Government debt is really debt we owe to ourselves. So it doesn't matter." But today, most nations' debt is no longer all "to ourselves," as nations with surpluses are largely financing the ones with deficits. Thus it's hard to conclude national debt doesn't matter. Welcome to 2010.

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In the "old days," government deficits were often part of counter-cyclical stimulus, a concept with which Lord Keynes is identified. It seems logical that when its economy is depressed, a nation will spend more than it receives in taxes in order to stimulate. Then, in times of prosperity, it will cut expenditures, run a surplus and pay down debt. But permanent deficits appeared in the late twentieth century, and thereafter national debt has grown in good times and bad. The idea of national debt being repaid has evaporated. Today, public and private institutions in Greece, Spain and Portugal owe €2 trillion to foreigners, with no possibility of repayment in sight.

Solutions and Stumbling Blocks

Thus far, most of the actions being taken to address the crisis are of two types: financial maneuvers to calm the financial markets in the short term, and austerity measures designed to reduce deficits in the long term.

The United States' credit crisis of late 2008 serves as a model for what must be done. The elements that arise in a credit crisis are consistent: uncertainty regarding the future, fear of credit losses, and refusal to make loans. **Financial systems run on confidence, and, when confidence dries up, things can grind to a halt.** Clearly, then, the most immediate efforts must be to restore confidence and keep credit flowing.

This problem is particularly severe at financial institutions (and what is a national economy today other than a financial system, hopefully with a manufacturing sector tacked on?). Financial institutions are, by definition, marked by high leverage, and if confidence declines, the providers of credit tend to ask for their money back. Since these institutions never have enough cash on hand to satisfy the demands of the would-be withdrawers, they can fall prey to a run on the bank. The first task, then, is to restore confidence and keep capital available.

Thus, at the beginning of May, the E.U. put together a rescue package for Greece worth €110 billion. And then, when the possibility of contagion to Spain, Italy and Portugal began to be recognized, that was increased on May 10 to €750 billion (or $900 billion, a figure remarkably similar to the U.S.'s program). In addition, the European Central Bank established a program to buy government bonds of the affected nations, along the lines of our "quantitative easing."

Many European governments have announced plans to reduce deficits. Their tactics include reduced spending, freezes or cuts in public sector employment and wages, and higher retirement ages. Some have enacted tax increases to augment revenues. Greece even says it's going to start collecting more of the taxes that are owed. Austerity is all the talk in Europe, and some leaders are predicting periods of substantial suffering. That's what happens when a borrow-and-spend cycle that has advanced beyond prudence is brought to a halt.

It's important to recognize, however, that one potential solution – traditionally perhaps the easiest – isn't available to the members of the European Union: currency devaluation.

A key element in the situation is the absence of independently floating exchange rates. Think for a moment about international finance. Countries differ in terms of growth rates, productivity and inflation rates. In recognition of the differences, interest rates and exchange

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rates change relative to those of other countries. In general, countries that are better off in terms of growth, productivity and inflation will have stronger currencies and pay lower interest rates.

The easiest way for a nation with excessive foreign debt to solve its problem is through devaluation. If the drachma weakens relative to the deutschemark, a Greek who owes a German a certain number of drachmas now owes him fewer deutschemarks (of course, if the debt is denominated in deutschemarks, he now owes him more drachmas). This process can occur through an explicit devaluation or through hyperinflation, and we'd be overwhelmingly likely to see it in action from a standalone Greece.

Between 1980 and 2000, the drachma depreciated by roughly 85% relative to the deutschemark, a reflection of economic reality. But with the countries of Europe tied together with a single currency, this can't happen.

Nations throughout Europe are doing what they can. That means reassuring financial markets and implementing austerity measures, but not devaluing (as long as the debtor nations in question remain part of the E.U.).

So, Will It Work?

"Will It Work?" was the title of a memo I wrote on March 5, 2009, discussing whether the Obama administration's rescue plan would be successful. The problems were new and huge, like today's in Europe, and the solutions being attempted were untested, also like today's.

The last section of "Will It Work?" was devoted to the three things I said had to be accomplished in order for the rescue to be effective: delever the economy, replace the capital that has been destroyed, and restore confidence. The recipe in Europe is no different, although the U.S. government had to shore up the financial institutions, whereas in Europe governments first have to support other governments.

In addition, there are wrinkles in Europe that the U.S. didn't face to the same degree. They can make it challenging to solve problems and especially to reach agreement quickly:

- The European Union consists of 27 sovereign nations, each with its own central bank and finance ministers. In addition there are the European Central Bank ("ECB"), the European parliament and the E.U. ministers.
- The countries have very different political views and are led by people from all over the political spectrum.
- The approach of nations to the problem will be colored by history that in some cases includes war and occupation. Countries will be asked to bail out others they fought against in the past.
- Finally, the countries' financial status varies widely. Only a few – primarily Germany – can contribute meaningfully to a bailout, and they will be asked to carry the vast majority of the burden. Will they be willing to do so?

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As an indication of the intra-European differences, *The Wall Street Journal* said the following on June 15:

> Germany views the crisis on the euro zone's Southern fringe as a symptom of other countries' failure to copy Germany's fiscal discipline and structural overhauls to its economy. Its proposed remedies focus mainly on pushing other countries to cut budget deficits.
>
> France, however, believes Germany's large trade surplus and weak domestic demand are part of the euro zone's problem, since they force weaker economies to pay for their imports with debt, rather than through exports to the German market, Europe's biggest.

In addition to political complexity, efforts to solve the problem will run into two important issues:

- **Austerity measures and tax increases are anti-stimulative, and they are being applied at a time when the economies in question are weak and need stimulus. Economic historians such as Ben Bernanke recognize that adding liquidity is the best way to deal with a slowdown, and that the withdrawal of liquidity exacerbated the Great Depression.**

- **In the long run, reducing deficits and debt will not be enough. The countries in question have to increase their productivity and competitiveness.**

In "Will It Work?" I quoted from Paul Krugman (*The New York Times* of February 16, 2009):

> As the great American economist Irving Fisher pointed out in the 1930s, **the things people and companies do when they realize they have too much debt tend to be self-defeating when everyone tries to do them at the same time**. Attempts to sell assets and pay off debt deepen the plunge in asset prices, further reducing net worth. Attempts to save more translate into a collapse of consumer demand, deepening the economic slump. (Emphasis added)

The yoking together of the European nations introduces some interesting ramifications. Some Northern European export economies – Germany in particular – are doing quite well. At this stage of the cycle, they might be considering rate increases and their currencies might be strengthening. But it's doubtful the ECB will raise rates anytime soon, and the euro has weakened versus other currencies. Thus, for example, the German economy and German exports will be stimulated when they arguably don't need it. Germany will export more than it otherwise might have, with some of its gains recirculated in the form of aid to other countries. Good so far, but possibly inflationary. Complicated and not easy.

The analysis of sovereign debt is in large part political, not economic. Thus the open questions are political, as described above, complicated by the multi-national aspect of the E.U. and the absence of provisions for disciplining financial non-compliers, ejecting members or winding down the Union.

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But as we saw in the U.S. in 2008 and 2009, there should be little doubt that everything possible will be done to save the euro and the E.U. (albeit perhaps with one or two fewer members and/or a touch of "debt rescheduling"). They're likely to continue to exist, but many of the key questions in Europe surround the level of economic vibrancy we'll see.

My purpose in writing this memo was to summarize and explain the developments in Europe, and that's the vein in which I started. But then I started to think more broadly.

We Have Met the Enemy and He Is Us

According to *The New York Times*, a leading central banker addressed his legislature on June 9 regarding his country's fiscal operation, which he said "appears to be on an unsustainable path."

> "**A variety of projections** that extrapolate current policies and make plausible assumptions about the future evolution of the economy," he said "**show a structural budget gap that is both large relative to the size of the economy and increasing over time**. . . ."
>
> "In addition, government expenditures on health care for both retirees and non-retirees have continued to rise rapidly as increases in the costs of care have exceeded increases in incomes. **To avoid sharp, disruptive shifts in spending programs and tax policies in the future, and to retain the confidence of the public and the markets, we should be planning now how we will meet these looming budgetary challenges**." (Emphasis added)

Greece? No. Spain? No. Portugal, Italy or Great Britain? None of the above. **That was Ben Bernanke speaking before the Budget Committee of the House of Representatives.** Thus my use above of the most famous line from Walt Kelly's comic strip "Pogo." Greece and the other members of "Club Med" may be on the hot seat today, but few developed nations are exempt, and certainly not the U.S. The differences between the countries in the headlines and many others are matters of degree, not kind.

David Leonhardt's column in *The New York Times* of May 12 provides a good way to start in on this subject:

> It's easy to look at the protesters and the politicians in Greece – and at the other European countries with huge debts – and wonder why they don't get it. They have been enjoying more generous government benefits than they can afford. No mass rally and no bailout fund will change that. Only benefit cuts or tax increases can.
>
> Yet in the back of your mind comes a nagging question: how different, really, is the United States?
>
> The numbers on our federal debt are becoming frighteningly familiar. The debt is projected to equal 140 percent of gross domestic product within two decades. Add in the budget troubles of state governments, and the true shortfall grows

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> even larger. Greece's debt, by comparison, equals about 115 percent of its G.D.P. today.
>
> **The United States will probably not face the same kind of crisis as Greece, for all sorts of reasons. But the basic problem is the same. Both countries have a bigger government than they're paying for.** And politicians, spendthrift as some may be, are not the main source of the problem.
>
> We, the people, are.
>
> We have not figured out the kind of government we want. **We're in favor of Medicare, Social Security, good schools, wide highways, a strong military – and low taxes. Dealing with this disconnect will be the central economic issue of the next decade, in Europe, Japan and [the U.S.]. . . .**
>
> As societies become richer, citizens tend to want better schools, better medical care and other government services. [The U.S.] is following that pattern, but without paying the necessary taxes. That combination has us on a course to Greece-like debt.
>
> As a rough estimate, the government will have to find spending cuts and tax increases equal to 7 to 10 percent of GDP. The longer we wait, the bigger the cuts will need to be (because of the accumulating interest costs).
>
> Seven percent of GDP is about $1 trillion today. In concrete terms . . . the combined budgets of the Education, Energy, Homeland Security, Justice, Labor, State, Transportation and Veterans Affairs Departments are less than $600 billion. (Emphasis added)

Leonhardt provides some data for "cyclically adjusted primary balance as a percentage of GDP" that make for frightening comparisons:

Portugal	- 2.8%
France	- 3.7
Spain	- 5.6
Greece	- 6.0
Iceland	- 6.5
Britain	- 6.8
United States	- 7.3
Ireland	- 8.2

The Times defines "primary balance" as ". . . a measure of each country's medium-term deficit as a percentage of GDP excluding interest payments and assuming that unemployment in all countries drops significantly (to what economists consider 'full employment')." In other words, these projections incorporate a good bit of optimism. The U.S. deficit is swollen by stimulus measures that should shrink, but the data still make us look bad in some pretty bad company.

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The U.S. is better off than Europe in a number of ways:

- Its national debt isn't high as a percentage of GDP (according to CIA data, our ratio in 2009 was only 53%, versus 113-115% for Greece and Italy, and 62-77% for the Netherlands, the United Kingdom, Germany, Portugal and France).
- It benefits from having the world's primary reserve currency.
- Its Treasury securities are still a primary destination during any flight to quality (thereby reducing its interest costs).
- It possesses advantages in terms of top educational institutions, natural resources, creativity and intellectual progress.

On the other hand, its drawbacks include a tradition of deficit spending; heavy total indebtedness (especially at the household level); many of the demographic issues that I described as affecting Europe (e.g., aging population, potential for structurally high unemployment); costly entitlement programs; declining competitiveness and a shrinking manufacturing base.

Including the private sector, total U.S. debt stood at 358% of GDP in late 2008. That compares to about 200% of GDP prior to the Great Depression and a peak of 300% in 1933 (sources: Bureau of Economic Analysis, Federal Reserve and Census Bureau). **The U.S., too, will have to go through some major belt-tightening . . . painful if it starts soon, but much more so if it is delayed until the future promises are allowed to build up further.**

I think David Brooks put it very well in *The New York Times* on May 13:

> If you're elected president or prime minister in pretty much any country in the developed world today, you're faced with the same set of challenges: to reduce national deficits without choking off a fragile recovery; to trim the welfare state and raise taxes while still funding the things that lead to long-term growth; to try to enact brutally painful measures at a time when voters don't trust their leaders; to do it at a time when politics are polarized and a hundred different interest groups have the ability to block change.
>
> The chances that the world's leaders are going to be able to do these things successfully are between slim and none. It's hard enough to figure out the right mix of spending cuts and tax increases. It's nearly impossible to build a political majority willing to enact them. Sometime over the next decade or so, the world will probably suffer from another series of crushing fiscal crises with significant economic pain and maximum political turmoil.

While Brooks led off with the paragraphs reproduced above, he found "Glimmers of Hope" (the title of his column) in the constructive budgetary approach being adopted by the new governing coalition in Great Britain.

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This assessment from the Milken Institute should provide some motivation for problem solving:

> By 2020, trillion-dollar deficits will become the norm even in years of solid economic growth and low unemployment, rather than an unpleasant aberration linked to a deep recession.
>
> Absent wrenching changes in fiscal policy, things will only get worse after that. The retirement of the baby boom generation and the growth of health costs at a rate far faster than the growth of GDP mean that government spending on Social Security, Medicare and Medicaid (which pays for most nursing-home care for the elderly) is likely to explode. By the nonpartisan Congressional Budget Office's reckoning, spending on those three programs alone is expected to reach 18 percent of GDP in the year 2040. That is the average level of revenues, measured as a portion of GDP, that the federal government has collected over the past 50 years. So, in this scenario, there would be nothing left to pay for everything from defense to interest on the debt. Thus, unless those entitlement programs (and other spending) can be drastically curtailed or taxes raised significantly, large and growing deficits are a certainty.
>
> But the auguries aren't good. Both political parties have become advocates of low taxes. President Obama's State of the Union address was a veritable panegyric to the virtues of tax cuts (although he is willing to raise taxes a bit for the rich in general, and rich bankers in particular). And now that Republicans have become defenders of spending every last dollar that Medicare recipients are currently promised, the prospect of reining in entitlement programs seems more remote than ever.
>
> In a politics-as-usual scenario, with no changes in the current policy of low taxes and unrestrained entitlement growth, the federal debt is projected to reach 100 percent of GDP by 2023. By 2038, it would reach 200 percent of GDP.

I'll close on this subject with some even more pessimistic words from Bill Julian:

> Add to the debt woes of European nations and US states the unfunded liabilities of the US government ($30 to $50 trillion, depending on who you ask) the bearded nationalization of the largest financial institutions in the world, Fannie and Freddy, and you have to ask, how could it have gotten this bad?
>
> . . . conditions of instability could reappear [quickly]. And this time, the crisis will center on government debt and the bond markets. The collectivist impulse spawned by Keynes as a solution to fiscal problems brought on by the bad behavior of the banks and the governments who cover for them will have gone as far as they can. There will be no one left to bail out "the system." The US government will be left with a nasty choice: austerity and fiscal discipline, or monetizing the debt [through devaluation or hyperinflation] and face a likely collapse of the bond market.

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The bottom line appears to be that the U.S. must anticipate austerity, higher taxes, and the sluggish growth that combination is likely to produce. Failing that, we may face devaluation, default and other unthinkable developments. We are not exempt from the problems besetting Greece, or the awakening regarding the notions listed on page 5.

The State of the States

Many professional investors include *What I Learned This Week* from 13D Research among their highest-priority reading. Its discussions are big-picture and almost academic, but Kiril Sokoloff seems more likely than most to cover the big market-movers of tomorrow. He discussed the financial condition of the states in his June 24 issue, and I can't resist quoting extensively (I could give you more, but there has to be a limit):

> Across the U.S., state governments are on the edge of fiscal calamity . . . Last month, a report from the U.S. Center on Budget and Policy Priorities issued estimates that in fiscal 2010 the U.S. states collectively posted a near $200 billion budget shortfall, equivalent to 30% of all state budgets. As *Time*'s David von Drehle recently observed: *"Such persistent budget woes are unparalleled in the era of modern American government. You'd have to go back to the 1930s to find a parallel."*
>
> **After plunging in 2009, tax revenues are starting to stabilize in some places**, but revenues are still far off pre-recession levels. Collection of sales, personal-income and corporate taxes – which constitute 80% of state revenue – slumped 12% over the past two years. Meanwhile, fixed costs continue to keep states deep in the red.
>
> As would be expected, state and local governments have begun to take some much-needed steps – cutting costs, trimming pension eligibility, and depleting their rainy-day funds. In fiscal 2010, forty-five states reduced services to residents and over 30 states have raised taxes, in some cases significantly, according to the Center on Budget and Policy Priorities. **Fourteen states are expected to have reserves of less than 1% of their annual spending by the end of fiscal 2010 – they are basically living hand-to-mouth. . . .**
>
> But **the states, it must be remembered, have a large number of fixed costs, which continue to expand.** In addition to soaring pension obligations, the federal government has pushed a lot of its burdens onto the states, beginning with the sprawling mess that is Medicaid. Created by Congress, administered by the states, and funded by a mishmash of state, local and federal funds, *the healthcare system for America's poor is a train wreck waiting to happen.*
>
> **Medicaid spending, which accounted for 21% of state general fund expenditures in 2009, rose 6.6% that year and is expected to rise 10.5% in fiscal 2010,** according to Linda Bilmes, a professor at the Harvard Kennedy School. But while the number of enrollees increases, funding for the system will barely budge. As Arizona's Governor Jan Brewer said in her state-of-the-state

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address this year: "Government revenues have sagged to 2004 levels and some people say we should just adopt the 2004 budget" – easier said than done when your state's Medicaid rolls have grown by nearly half a million since then. . . .

The states, like the federal government, are facing a demographic headwind that will continue to shrink their tax revenues and compound their growing social safety net obligations. As Graham-Fisher's Josh Rosner reminds us, the baby boomer's peak earnings potential is behind them:

> *These boomers are now moving to become the largest tax on the social safety net. The largest generation in U.S. history will retire with less equity in what has historically been the largest retirement and intergenerational wealth transfer asset for most families – their homes.* ***In many cases, these people will have no new*** [sic] ***personal savings when they reach the end of their working lives and will essentially become wards of the state.*** *This increased burden on the U.S. Treasury, in a decade, is the largest unconsidered impact of the current crisis.*

Last year, the states' fiscal woes were partly assuaged by the federal stimulus package. But nearly 70% of the $787 billion of stimulus funds approved early last year will have been spent by September, according to the CBO. (And while the emergency cash infusion helped the states keep their heads above water, it ultimately compounded their plight, since even though the federal funds are not necessarily recurring, the jobs and obligations they fund are.) This year, however, **the federal stimulus money is going to be thinned dramatically.**

The Obama administration has asked for about $50 billion for 2011, but *experts believe it would require another $160 billion in cash just to meet demands for the next two years.* And this assumes there is no increase in unemployment or decrease in tax revenues. Even though there is scant appetite among election-susceptible Democrats in Washington to add more zeroes to the end of the federal deficit, there may be no alternative. If the federal government does not intervene, the entire U.S. economy could be put at risk. **After all, aren't California and Illinois, like the country's banks, "too big to fail"?** (Emphasis in the original)

I touched on the subject of the states' fiscal condition in "Tell Me I'm Wrong" (January 22); that and the passages above from Sokoloff's piece should suffice for now. However, I do want to go into a bit more detail regarding one of the key contributors to Greece's troubles: pensions.

Pension promises have long been used in the U.S. as a budgetary quick fix. As in some parts of the private sector (see auto companies and "legacy" airlines), the public sector has a history of substituting sweetened pension benefits (and retiree medical benefits) for higher wages in the here-and-now, a prime example of "kicking the can down the road." Employees bargained for promises of enhanced retirement payments in exchange for agreeing to limit increases in current compensation, but the cost of keeping those promises will be high and, as of today, is far from fully funded.

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The Pew Center on the States estimates that as of June 30, 2008, the states had set aside $1 trillion less than would be needed to pay future pensions and medical benefits. On July 6, *The New York Times* reported on a study by Joshua Rauh of the Kellogg School of Management: ". . . assuming states make contributions at recent rates and . . . earn 8 percent, 20 states will run out of cash by 2025; Illinois, the first, will run dry in 2018. . . . Illinois, once its funds were depleted, would be forced to devote a third of its budget to retirees; Ohio fully half."

States such as California and Illinois clearly have debts that will be hard to pay and budgets that will be hard to balance. Fractious politics, the requirement for super-majorities on tax and budget matters, and the role (in my state) of referenda all render solutions elusive. **Will there be a bailout?** This is a great question to start thinking about today (although the prevailing ethic is to not worry about anything until doing so is absolutely unavoidable).

I have no doubt that the federal government wants to avoid a bailout at all costs, and that the rhetoric will remain staunchly anti-rescue. But when push comes to shove, I sincerely doubt a state will be permitted to go bankrupt. As Warren Buffett said at this year's Berkshire Hathaway annual meeting, "I personally think it would be very hard, in the end, for the federal government to turn away a state that is having extreme financial difficulties." (*Financial Times*, May 4)

Just as the E.U. doesn't want to give deficit spending a green light, fiscally responsible states don't want to pay debts that others created through overspending. **If the federal government were to bail out a defaulting state, what would keep any state from running deficits, knowing they could count on others to pay off their debts? When overspending isn't punished, what is there to discourage it? What better example is there of moral hazard?** Wouldn't it actually be irrational for a state politician to vote to deny his constituents a benefit if he knew the tab eventually would be picked up by others?

And by the way, like Europe, the U.S. has its own differences. Certain regions will be asked to foot the bill for others in a federal bailout. And certainly some states have been more "expansive" than others and have run up bigger debts. All just like in Europe. In the same way that Germans may be hesitant to bail out free-spending Greece, Texans may think twice about bailing out California, and North Dakotans may have doubts about New York. "Red" states are unlikely to leap to help struggling "blue" states given the Republican view that Democrats over-expand the role of government.

* * *

Experience shows how radically markets fluctuate between seeing the proverbial glass half full and seeing it half empty. Rather than achieve a happy medium, sometimes the markets focus exclusively on good news (as during the twelve months through April) and sometimes exclusively on bad. Greece kicked off a turn to the negative in late April, which was exacerbated by the Gulf oil spill and rising concern over the possibility of an economic double dip. On May 8, after Greece's troubles blossomed, *The New York Times* quoted Bill Gross as saying, "Up until last week there was this confidence that nothing could upset the apple cart as long as the economy and jobs growth was positive. Now, fear is back in play."

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Just a few months ago, no one seemed to have a problem with nations that ran chronic deficits and continuously increased their debt. Then investors changed their mind – as they tend to do – and today they take a dim view of these practices. Government solvency is considered a critical issue. Here's how guest contributor and hedge fund analyst Andrew Marks (also my son) sums up current sentiment:

> Sovereign debt has become like fiat currency, as it is supported only by people's willingness to believe in other people's willingness to refinance it. The debt of an issuer with no plan to repay and no underlying way to meet maturities other than through refinancing sounds eerily like a subprime mortgage.

Markets are safer when fear balances greed, and when worry about losing money balances worry about missing opportunity. We don't like it when fear rears its head and stocks drop, but certainly that creates a healthier environment in which to be a holder, and one which should offer better buying opportunities. **Over the first part of this year it was easy to say prices had gotten ahead of fundamentals; all things being equal, that now seems less true.**

The current positives for investors include moderate valuations, rising corporate earnings and the likelihood we're already in a recovery. On the other hand, I continue to feel consumers are too traumatized to resume spending strongly, and I see unpleasant and rarely contemplated long-term possibilities including those discussed above. In particular, conservatism, austerity and increased savings are good for economic units individually but bad for a stagnant overall economy. **Bottom line: anyone who invests today in a pro-risk fashion out of belief in the recovery must be confident he'll be agile enough to take profits before the long-term realities set in.**

I've had a heck of a time pulling together all of these ideas, and I've found it even harder to come up with anything like answers. But I hope the discussion has been helpful, and that you'll think about the questions I've raised and encourage others to do so as well. **I don't enjoy feeling like a worrywart, but I doubt my concerns are unfounded, and I can't imagine silence would be preferable.**

July 19, 2010

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Memo to: Oaktree Clients

From: Howard Marks

Re: Warning Flags

For about a year, I've been sharing my realization that there are two main risks in the investment world: the risk of losing money and the risk of missing opportunity. You can completely avoid one or the other, or you can compromise between the two, but you can't eliminate both. One of the prominent features of investor psychology is that few people are able to (a) always balance the two risks or (b) emphasize the right one at the right time. Rather, at the extremes they usually obsess about the wrong one . . . and in so doing make the other the one deserving attention.

During bull markets, when asset prices are elevated, there's great risk of losing money. And in bear markets, when everything's at rock bottom, the real risk consists of missing opportunity. Everyone knows these things. But bull markets develop for the simple reason that most people are buying – ignoring the risk of loss in order to keep from missing opportunity – just when elevated prices imply losses later. Likewise, markets reach their lows because most people are selling, trying to avoid further losses and ignoring the bargains that are everywhere.

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The Never-Ending Cycle

Why do people buy when they should sell, and sell when they should buy? The answer's simple: emotion takes over. Price increases excite investors and encourage them to buy, and price declines scare them into selling.

When the economy and markets boom, people tend to assume more of the same is in the offing. They find little to worry about, other than the possibility that others will make more money than they will. Fear of loss recedes, and fear of opportunity costs takes over. Thus risk aversion evaporates and risk tolerance rises.

Risk aversion is absolutely essential in order for markets to function properly. When sufficient risk aversion is present, people shrink from riskier investments and prefer safer ones. Thus riskier investments have to appear to offer higher returns in order to attract capital. That's as it should be.

But when people get excited about the prospect of easy money – even if from assets or investment strategies that have become far too popular, turning into overpriced manias – they frequently drop their risk aversion and adopt risk tolerance instead. Thus they swarm into the investment *du jour* without concern for its elevated price and risk. This behavior should constitute an important warning flag for prudent investors.

In the same way that expanded risk tolerance accompanies appreciated asset prices and contributes to the risk of loss, so does risk aversion tend to rise in times of depressed prices, increasing the risk of missed opportunity. When people refuse to buy assets regardless of their low prices, they miss out on the best, lowest-risk returns of the cycle.

Recent History – on the Upside

Just as the recent market cycle was extreme, so was the swing in attitudes regarding the "twin risks." And thus so are the resultant learning opportunities.

Risk aversion was clearly inadequate in the years just before the onset of the crisis in mid-2007. In fact, I consider this the main cause of the crisis. (Last year, *DealBook*, the online business publication of *The New York Times*, asked me to write about what I thought had been behind the crisis. My article, entitled "Too Much Trust, Too Little Worry," was published on October 5, 2009. It offers more on this subject should you want it.) Here's the background regarding the early part of this decade:

Interest rates kept low by the Fed combined with the first three-year decline of stocks since the Depressionto reduce interest in traditional investments. As a result, investors shifted their focus to alternative and innovative investments such as buyouts, infrastructure, real estate, hedge funds and structured mortgage vehicles. In the low-return climate of the time, much of the appeal of these asset classes came from the fact that they promised higher returns thanks to their use of leverage, whether through borrowing, tranching or derivatives.

Given the high promised returns, investors forgot about (or chose to ignore) the ability of leverage to magnify losses as well as gains. Contributing to investors' rosy view of leverage's likely impact was their belief that risk had been banished by (a) the efficacy of the Fed and its "Greenspan put," (b) the combination of securitization, disintermediation, tranching, decoupling and financial engineering, and (c) the "wall of liquidity" coming toward us from China and the oil producing nations.

For these reasons, few market participants were afraid of losing money. Most just worried about missing opportunity. The unattractive outlook for stocks and bonds meant investors would have to be aggressive and innovative if they were going to earn significant returns in the low-return environment. Thus risk aversion (a) was unnecessary and (b) would be counter-productive. "You'd better invest in this new financial product," people were told. "If you don't, you'll miss out. And if you don't and your competitor does – and it works – you'll look out-of-step and fall behind." When contemplating a virtuous circle without end, investors usually think of only one word: "buy."

This describes the process through which fear of missed opportunity can overcome skepticism and prudence. And in this period, that's what happened. No one worried

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about losing money. Fear of missed opportunity drove most investors, and Citibank's Chuck Prince famously said, ". . . as long as the music is playing, you've got to get up and dance. We're still dancing." Although he worried about a possible decline in liquidity, he worried more about falling behind in the manic race to provide capital.

Recent History – on the Downside

The events from mid-2007 through late 2008 or early 2009 demonstrate the reverse in operation. The upward trend in home prices ground to a halt and subprime mortgages began to default in large numbers. Leveraged vehicles melted down. Credit became unavailable, and financial institutions needed rescuing. Recession caused spending to contract, and corporate profits declined. Bear Stearns, Merrill Lynch, AIG, Fannie Mae, Freddie Mac, Wachovia and Washington Mutual all required rescues. Bank capital, commercial paper and money market funds needed federal guarantees. After the bankruptcy of Lehman Brothers, people began to ponder the collapse of the financial system. As often happens in scary times, "possible" morphed into "probable," or at least something very much worth worrying about.

Now a vicious circle replaced the virtuous one of just a few months earlier. And with its arrival, the fear of losing money replaced the fear of missing opportunity. As I've said before, I imagine most investors' cry was, "I don't care if I ever make a penny in the market again; I just don't want to lose any more. Get me out!"

For most investors, no assumption was too negative to be true, and no potential return made the risk of loss worth bearing. High yield bonds at 19% yields. First lien leveraged loans at 18%. Investment grade bonds at 11%. None of these was sufficient to induce risk-taking.

As I wrote in "The Limits to Negativism" (October 15, 2008), "Skepticism calls for pessimism when optimism is excessive. But it also calls for optimism when pessimism is excessive." By the fourth quarter of 2008, risk aversion ruled and risk tolerance had disappeared. A skeptical view toward excessive pessimism was called for at a time of unprecedented low asset prices, but few people could muster it. The credit markets offered the highest returns in their history, but fear of losing money kept most investors from seizing the opportunity.

In the middle of this decade we saw a manic period in which losses were unimaginable. The resultant shortages of risk aversion and skepticism caused investors to buy at highs and assume unprecedented risks in order to avoid missing opportunity. This was followed – as usual – by a collapse in which no negative event could be ruled out and no return was high enough to induce buying, all because investors wanted nothing other than to avoid losing money.

This cycle produced a treacherous, low-return period in which it was very hard to find investments promising good returns earned with safety, and then a period of collapse in which there were bargains everywhere but few investors possessed the requisite "dry

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powder" and intestinal fortitude with which to buy. That's the background. Where do we stand today?

Signs of the Times

Optimism, adventurousness and unworried behavior characterized the pre-crisis period, and investor behavior reflected those attitudes. In my memo "It's All Good" (July 16, 2007), just before the onset of the crisis, I mentioned some of the warning signs in the credit markets:

> Unlike the historic norm, it's routine today to issue CCC-rated bonds. It's easy to borrow money for the express purpose of distributing cash to equity holders, magnifying the company's leverage. It's so easy to issue bonds with little or no creditor protection in the indenture that a label has been coined for them: "covenant-lite." And it's possible to issue bonds whose interest payments can be paid in more bonds at the option of the borrower.
>
> The first requirement for an elevated opportunity in distressed debt is the unwise extension of credit, which I define as the making of loans which borrowers will be unable to service if things get a little worse. This happens when lenders fail to require a sufficient margin of safety. . . .
>
> The default rate in the high yield bond universe is at a 25-year low on a rolling-twelve-month basis. Under such circumstances, how could the average supplier of capital be expected to maintain a high level of risk aversion and prudence, especially when doing so means ceding all the loan making to others? It's not for nothing that they say "The worst of loans are made in the best of times."

The inspiration for today's memo came as my pile of clippings began to swell with indications that pre-crisis behavior is coming back. Here are excerpts from a few, with emphasis added in each case:

On covenant-lite loans –

> **Are debt investors just stupid? That might help explain why they're buying covenant-lite loans again.** These deals, which carry few restrictions on borrowers, became a standard bearer for easy money. They may have helped some companies limp through the downturn – but they've left lenders saddled with lots of risk and little return.
>
> It's easy to see why companies like covenant-lite loans. . . . But for owners of the debt, the attraction is far less clear beyond the familiar short-term reach for yield. . . .

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Lyondell Chemical is paying [Libor plus 400 basis points] on its recent $500 million covenant-lite deal. And the energy refiner will emerge from bankruptcy with a much slimmer debt load than before it filed for Chapter 11.

Lyondell's terms are better than 2007's crop of covenant-lite loans, to be sure, but lenders still are essentially relinquishing their right to force companies into paying them more money, or exiting the loan entirely, should their creditworthiness tumble.

So why are lenders doing it again? Lyondell Chemical's answer: investor demand for higher yielding assets. This is a familiar mantra while official interest rates remain low. **But lenders should be mindful of loosening standards or risk finding themselves once again on the short end of the stick.** ("Don't call it a comeback," *breakingviews*, April 5)

On payment-in-kind loans and flexibility –

Clint Eastwood's Dirty Harry character famously held a gun to a suspect and asked: "Do you feel lucky?" Investors in credit markets seem to be saying yes, if Cerberus' refinancing of Freedom Group, maker of Remington firearms, is any indication.

A deflating gun bubble backfired on the private equity firm's plans last year for an initial public offering of Freedom. Now trigger-happy credit investors are taking off their safeties and letting Cerberus unload some of its stake.

The $225 million of notes are useful ammo for Cerberus. They allow Freedom to either pay the interest in cash or half in cash and half in additional notes at the company's discretion. The financing allows Cerberus to get cash back on its investment today by buying back preferred stock held by the private equity group ahead of an eventual IPO. . . .

The buyers of these notes, though, are taking their chances. Freedom doesn't look overleveraged according to its historic cash flow – the company's debt level is about three times "adjusted EBITDA" for 2009. But sales of rival gun-makers are continuing to fall. . . .

Moreover, these sorts of notes are notoriously difficult to price. The investor has to figure out the risk of the company encountering cash flow problems, whether the firm will actually pull the toggle trigger, and how much the PIK feature may reduce their potential recovery in the event of default. Indeed, many investors took drubbings on similar notes issued at

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the top of the credit boom. **Caution is warranted when investors remove their trigger locks.** ("Do you feel lucky?" *breakingviews*, March 31)

On initial public offerings –

> **It is springtime for IPOs. . . . KKR and Bain, two of the most aggressive private-equity firms during the buyout boom, are now as aggressively looking to cash out**. They are leading what is expected to be a season of IPOs as long as the markets continue to stabilize or climb. The IPOs would allow the firms to partially cash out their stakes and return money to investors. They also could use the proceeds to pay down the sizable debt used to finance the takeovers. ("Bain, KKR to Push New Crop of IPOs," *The Wall Street Journal*, April 9)

On leveraged loans –

> Even as worries escalate about the ability of highly rated countries to fund themselves, there is a buzz at the other end of the credit spectrum. **Leveraged loans, a source of funding for private-equity acquisitions, are drawing investor interest again after a long period in the doldrums.**
>
> **In the U.S., there are signs of life in the collateralized-loan-obligation market, with the year's first deal not only refinancing an existing CLO but bringing in new money, too.** In Europe, HarbourVest Partners is launching a listed fund to invest in mid-market leveraged loans. Leveraged-finance bankers are more bullish, and new loans have started to flow. . . .
>
> There are wider implications, too: **Cash moving into the loan market represents a greater willingness to hold more illiquid assets, an important development. . . .** ("A Pulse Finally Returns to the Leveraged-Loan Market," *The Wall Street Journal*, April 12)

On dividend recaps –

> **Blackstone Group LP and other private-equity firms are accelerating sales of junk bonds and leveraged loans to pay themselves dividends in a sign the market for the riskiest debt may be overheating.**
>
> Apria Healthcare Group Inc., owned by Blackstone, is seeking consent from bondholders to sell notes to issue a dividend, following at least six similar offerings this year, according to data compiled by Bloomberg.

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Including loans, companies have raised $10.8 billion in debt to fund payouts this year, compared with $1 billion in all of 2009 and $1.3 billion in the prior 12 months, according to Standard & Poor's LCD.

Private-equity firms are taking advantage of record high-yield, high-risk bond sales and a rally in loans to extract cash from companies they own, awaiting a rebound in leveraged buyouts and initial public offerings. So-called dividend deals, which permeated debt markets in 2006 and 2007 before the credit seizure, may signal investors are becoming too complacent, said William Quinn, chairman of American Beacon Advisors Inc.

"You start to be concerned that you're increasing leverage, which was one of the things that created these problems in 2008," said Quinn, who helps oversee $45 billion for the fund manager in Fort Worth, Texas. **"I understand why private-equity firms do it, but I would be concerned."** ("Dividend Deals Rebound as Blackstone Seeks Cash," *Bloomberg*, April 16)

Companies may increase borrowing to pay shareholder dividends in a record year for junk bonds, Standard & Poor's said. . . .

"We are starting to see the proceeds of high-yield issues being channeled to shareholders as dividends, something that is less-welcome from a credit perspective, reminiscent of the leveraged finance market back in 2007," analysts led by Taron Wade wrote . . . .

Companies owned by LBO firms in 2007 issued a record 6.1 billion euros of loans in the first half to pay dividends to shareholders, data compiled by Fitch Ratings show.

Private-equity firms "essentially decreased the risk of their portfolio equity investments, boosting their near-term equity returns at the expense of the credit quality of the companies themselves," according to S&P. ("Junk Bond Issuers Increase Dividend Deals, S&P Says," *Bloomberg*, April 20)

On collateralized loan obligations –

Citigroup is set to launch its second leveraged loan structured products transaction this year, this time for a large private equity client, as **debt managers and bankers look to revitalise the markets which drove the buyout boom. . . .**

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If the transaction goes ahead soon, it will be only the second CLO to be sold since the beginning of 2009. Last month Citigroup structured a $525m CLO managed by US fund manager Fraser Sullivan Investment Management. . . .

Leveraged finance bankers are hopeful the CLO market can take off again as it would provide greater availability of finance for leveraged loans, the engine of the private equity industry. The market for CLOs ground to a halt after the collapse of Lehman Brothers pushed credit markets into freefall. Even the most actively traded leveraged loans lost as much as a third of their face value in the depths of the crisis. ("Citigroup markets second CLO," *Financial News*, April 19)

On buyouts –

Private equity firms bear some resemblance to children at a fairground: they jump on a ride as dealmaking gathers pace, whizzing faster and faster, before jumping off as the cycle slows down. As the ride starts to gather pace again, buyout firms are back, with some eyeing the biggest rides. (Emphasis in the original)

Mega-deals – transactions over $10 bn that were favoured in the boom years of 2006-2008 but have been crimped by the lack of debt – are making a comeback. Last week, Blackstone Group and other investors were in talks to acquire financial data processing company Fidelity National Information Services, according to The Wall Street Journal.

The acquisition of Fidelity, which has a market capitalisation approaching $10 bn and about $3 bn in debt, would be the largest leveraged buyout since the credit crisis struck. . . .

Bankers and buyout executives said the resurrection of large buyouts was being driven by a booming high-yield bond market. With low interest rates in Europe and the US, investors are more willing to take the risk of weaker credits because it allows them to secure yields unavailable in other forms of lending. ("Are dealmakers ready for another white-knuckle ride?" *Financial News*, May 10)

On investor psychology –

Irrational equanimity is back. Not only are developed market stocks back to pre-Lehman levels, but investors' comfort levels are in a zone not seen since the eve of the credit crisis in early 2007. Apart from US stock indices, this shows up in the price investors will pay to insure

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> against volatility, with the CBOE Vix index down to its lowest since the crisis eve of July 2007, and in sharp reductions in cash cushions held by institutions.
>
> Merrill Lynch's widely followed survey of fund managers . . . finds that more now want companies to pay higher dividends or make more capital expenditures than see them pay down debts. . . .
>
> Such equanimity is not totally irrational. Macroeconomic data in the past month have run ahead of expectations. When the herd trampling forward is this bullish, it is not a good idea to stand in its way. But it would be easier to feel comfortable with current share price levels if investors showed a little more unease. **Complacency on this scale suggests risk of a correction.** ("*Investor sentiment*," Financial Times, April 14)

Just as one returning swallow doesn't make a summer, anecdotal evidence of rising risk tolerance does not mean entire markets have returned to dangerous levels. But it's a fact that issuers and investment bankers can do things today that they couldn't do a year or two ago. **The door is open to transactions that wouldn't be possible if risk aversion were running high. The clear inference is that fear of loss has declined and fear of missed opportunity has come back to life. That's an important observation.**

Where Did the Unease Go?

Just a short while ago, I believed investors had been sufficiently traumatized that the willingness to bear risk would be absent for years. But it came back in just a matter of months. What explains that?

For one thing, the crisis – as painful as it was – was surprisingly brief. The worst of it began in the third quarter of 2008 with the disclosure of weakness at financial institutions. The onset of the most intense part of the crisis can be dated to Lehman Brothers' September 15 bankruptcy filing. Remarkably, high yield bonds began to recover just three months later, with most of the indices showing gains of roughly 5% for the month of December. So in the credit markets, the worst pain lasted only about three months and quickly gave way to recovery.

And what kicked off the recovery? Fear of missing opportunity was resurrected by the Fed and other central banks which forced interest rates on short-term government debt to near zero. It might have been the banks' intent, or it might have been an unintended consequence, **but those low rates pushed investors to engage in riskier behavior**. The returns on T-bills and money market funds went to a fraction of a percent, meaning investors had to crawl out on the limb in pursuit of returns they could live with.

Further, governments flooded the system with liquidity and produced the opposite of crowding out. When governments are big issuers of debt, it can be hard for non-

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government issuers to raise money. But when governments are big buyers of securities instead, the capital they inject into the markets can make it easy for others to issue securities.

> Investors flooded risky companies with money in March even as the government prepares to shut down a key engine driving one of the greatest corporate-bond rallies in history.
>
> A total $31.5 billion in new high-yield debt, otherwise known as junk bonds, hit the market through Tuesday, exceeding the previous monthly record in November 2006. Partly propelling the activity: The Federal Reserve's massive mortgage-buying program, [which recently came to an end].
>
> By buying $1.25 trillion of mortgage securities, the Fed absorbed a flood of assets that otherwise would have needed buyers. That kept money in the hands of investors, who went searching for something else to buy. The Fed's underpinning encouraged investors to seek riskier, higher-yielding securities. A natural choice: corporate bonds. ("Bonds Cap Epic Comeback," *The Wall Street Journal*, March 31)

One of the prime tasks investors must perform is to stay alert to extreme behavior and take hints as to what we should do from what we see taking place around us. This is best expressed in Warren Buffett's helpful reminder: "The less prudence with which others conduct their affairs, the greater the prudence with which we should conduct our own affairs."

Investor behavior between 2003 and mid-2007 was sending some very worrisome signals. It's obvious in retrospect that all one had to do was take heed and lean in the opposite direction. But observations regarding the past are no help for purposes other than education. For observations to be profitable, they must relate to the present and the future.

Investors have made a substantial move back in the direction of pre-crisis behavior. That behavior has to be recognized and monitored. The pendulum has moved away from the depression, panic, skepticism and excessive risk aversion we saw in the fourth quarter of 2008, and with the disappearance of those characteristics have gone the great bargain opportunities.

Uncertainty and fundamental weakness at the depth of the crisis were offset by irrationally low prices and the potential for a rebound in risk tolerance, making most assets a screaming buy. With most of the great bargains gone – along with excess risk aversion – macro uncertainties should no longer be overlooked. **Thus the caution, discipline, patience, selectivity and discernment that were so unnecessary in 2009 are absolutely essential today.**

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* * *

I started this memo in late April, but I didn't get it out before Greece's financial crisis burst into full bloom last week. This gives me an opportunity to discuss the significance of the recent developments (not the substance, however; that'll have to await another memo).

Investing defensively requires that when everything seems to be going well and investors are feeling positive, we must sense the implicit danger and prepare for negative developments.

In the mid-2000s, I began to warn that with asset prices full, investors optimistic and their behavior aggressive, it was important to worry about things that could come along to derail the markets. When asked what they might be, my list of possibilities would go like this:

- recession,
- credit crunch,
- $100 oil,
- collapse of the dollar,
- exogenous events such as terrorist attacks, or
- something else.

The most dangerous possibility, I pointed out, was the last one. Markets and market participants can adjust to things they see coming. What usually knocks them for a loop are things they don't anticipate. "We're not expecting any surprises" is one of my favorite oxymorons. By definition, surprises are things that aren't anticipated, and thus their arrival can be traumatizing.

Just a few months ago, I published a memo called "Tell Me I'm Wrong" (January 22), in which I listed a number of things that worried me. These included our reliance on government stimulus and artificially low interest rates; the uncertain outlook for consumer spending, jobs and state and municipal finances; and the risks pertaining to inflation, exchange rates and interest rates. Here's how I concluded:

> My goal in this memo isn't to express a forecast. I know no forecast – and certainly not mine – is likely to be correct. What I do want to do is caution that the considerable risks I see may be less than fully appreciated by those setting asset prices today. The greatest market risks lie in failure of the macro economy to live up to the expectations embodied in today's prices. . . .
>
> Most people view the future as likely to repeat past patterns, which it may or may not do. They tend to think of the future in terms of a single

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scenario, whereas it really consists of a wide range of possibilities. (Remember Elroy Dimson's trenchant observation that "risk means more things can happen than will happen.") And to the extent they do consider a variety of possibilities, few people include ones that haven't been part of recent experience.

The uncertainties discussed above tell me today's distribution of possibilities has a substantial left-hand (i.e., negative) tail, probably greater than at most times in the past. The proper response should be to discount asset prices, allowing a substantial margin for error. Forecasts should be conservative, yield spreads should incorporate ample risk premiums, valuation parameters should be below the long-term norms, and investor behavior should be prudent.

Conspicuously missing from my list of worries was Greece (and all it entails); thus it falls firmly in the category of "something else." Last week it dominated the headlines and depressed markets worldwide. Thus in this short time I have proved two things: first, I know little more than others about what the future will bring and, second, when most investors turn optimistic, it becomes important to worry.

The issue of Greece and its debt has been on investors' radar screens for months, but few people seem to have understood its ramifications and the risks it presented to the markets. Then, in recent weeks, things began to be discussed daily in the media – such as Greece's profligacy and the risks involved in admitting it to the European Union; Europe's lack of an established mechanism for dealing with a problem of this nature; and its reliance on Germany to contribute voluntarily to a solution – that in hindsight it seems should have been obvious. This tells us a few important things about investing:

- Investors generally overestimate their ability to see the future, and the worst of them act as if they know exactly what lies ahead.
- It's important to worry about what's coming next. The fact that we don't know what it is shouldn't permit us to think there's nothing to worry about.
- Low asset prices allow us to invest aggressively, without much consideration given to worrisome fundamentals and the possibility of negative surprises. But as prices rise, so should our degree of concern over these things.

The bottom line is this: the fact that we don't know where trouble will come from shouldn't allow us to feel comfortable in times when prices are full. The higher prices are relative to intrinsic value, the more we should allow for the unknown.

The recovery of 2009 in the face of significant fundamental uncertainty meant that the markets were reincorporating optimism and thus vulnerable to surprise and disappointment. This in itself should be sufficient to induce caution.

May 12, 2010

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Memo to: Oaktree Clients

From: Howard Marks

Re: I'd Rather Be Wrong

Just a few weeks ago, I published "Tell Me I'm Wrong," my latest list of things in the investment environment that I find worth worrying about. I'm going to devote a few pages here – I promise this'll be the shortest memo in years – to a point I touched on in "What Worries Me" (August 28, 2008) but omitted from the more recent piece.

This memo will be about one of the inarguably most depressing topics of our time: the seeming inability of governments and politicians to solve – or even tackle – the financial problems we face. Here's the situation in Washington:

- Many of our most sweeping financial problems, such as deficits, national debt, healthcare costs, Social Security and Medicare, are long-term problems.
- It's important that we tackle them early, since limiting their further growth can reduce the eventual cost and difficulty of fixing them.
- But the process of solving them will be unpleasant in the short term, entailing bad-tasting medicine, while the benefits will only be seen in the long term, when today's politicians will have left the stage.
- Finally, most politicians' main concern seems to be getting themselves and other members of their party elected. Voting for short-term pain in order to solve long-term problems is generally viewed as the wrong way to go about that.

This memo is inspired by two excellent newspaper articles that appeared within the last month: "Party Gridlock Feeds New Fear of a Debt Crisis," by Jackie Calmes (*The New York Times*, February 17)[*] and "Perils of the California Model" by David Wessel (*The Wall Street Journal*, March 4).[†] Indicating their importance, *The Times* piece ran in the upper right-hand corner of the front page, always the place for the top story of the day, and the *Journal* story was carried on page A2. I've included links below in the hope they'll increase your likelihood of reading them. As Calmes wrote in *The Times* (in both cases below, emphasis added):

> After decades of warnings that budget profligacy, escalating health care costs and an aging population would lead to a day of fiscal reckoning, economists and the nation's foreign creditors say that moment is approaching faster than expected, hastened by a deep recession that cost trillions of dollars in foregone tax revenues and higher spending for safety-net programs.
>
> **Yet rarely has the political system seemed more polarized and less able to solve big problems that involve trust, tough choices and little or no short-**

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[*] http://www.nytimes.com/2010/02/17/business/economy/17gridlock.html
[†] http://online.wsj.com/article/SB20001424052748704541304575099371249822654.html

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> **term gain.** The main urgency for both parties seems to be about pinning blame on the other, before November's elections, for budget deficits now averaging $1 trillion a year, the largest since World War II relative to the size of the economy.

Two weeks later, Wessel put it this way in *The Journal*:

> The stalemate over health-care legislation, despite widespread acknowledgment that the status quo is unsustainable, underscores the inability of the political system to cope with complex, long-term fiscal issues. . . .
>
> Today, the deficits projected are bigger than ever, baby boomers are beginning to retire, health-care costs keep rising and, surely, we're closer to the day when Asian governments grow reluctant to lend ever-greater sums to the U.S. Treasury at low interest rates.
>
> The Congressional Budget Office projects current policies would take the deficit from today's 10% of gross domestic product to over 20% by 2020 and over 40% by 2080. **Yet today's politics appear more toxic, and the ranks of congressional leaders with the skill and desire to fashion compromises instead of talking points are depleted.**

Here we have remarkably similar themes voiced in what some would call "a Democrat newspaper" and in a stalwart of the pro-business Republican establishment. Both articles complain that the current trends in politics reduce the likelihood that major problems will be tackled and solved . . . a rare example of agreement across the aisle.

That brings me to the subject of one of today's greatest stumbling blocks, the absence of that elusive ideal: bipartisanship. Let's discuss this issue in principle. It's likely that the "ins" always think the fact that voters gave them control means they should mostly get their way, and that "bipartisanship" consists of the "outs" going along with them. The outs, on the other hand, don't take the election results to mean the minority has no rights, and they feel perfectly within their rights to use Congress's rules and processes to fight for their point of view (which, on us-versus-them issues, equates to thwarting the efforts of the ins).

The Times article points out ironically that when control of government is divided between the two parties, they both feel some responsibility for solving problems, while today, with full control seemingly in the hands of the Democrats, the Republicans are free to view their only role as dissenting and obstructing. And as the party in control, the Democrats evidently feel no obligation to yield on their positions.

Frankly, I wouldn't be so unhappy if I were sure today's battles were being fought over principles. What worries me most is the appearance that, instead, they're being fought for personal and political advantage and to win elections.

Today I think few legislators from either party will vote for anything that would let members of the other party claim to have accomplished something. That may be an exaggeration, but I think it's more true than false. And I think that's behind the recent decisions by a number of senior legislators not to run for re-election. I've had the privilege of getting to know Byron

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Dorgan, the senator from North Dakota, and I have no trouble believing that was behind his decision. We've spoken about his frustration with the contentious environment in Washington. More recently, Evan Bayh of Indiana also said he wouldn't seek another term in the Senate because it's impossible to get anything done in dysfunctional Washington. Here's how he put it in a February 21 Op-Ed piece in *The Times*:

> There are many causes for the dysfunction: strident partisanship, unyielding ideology, a corrosive system of campaign financing, gerrymandering of House districts, endless filibusters, holds on executive appointees in the Senate, dwindling social interaction between senators of opposing parties and a caucus system that promotes party unity at the expense of bipartisan consensus.

Today's positions seem unusually unyielding. The Republicans' conservative base demands adherence to the no-tax pledge, while liberal Democrats demand that their representatives prevent cuts in spending for domestic programs. These hardened (and polar) positions greatly narrow the possible grounds for problem-solving.

When the seller says "I won't accept any price below $20" and the buyer says "I'll never pay more than $18," no deal can be struck, whereas in more flexible times they might meet at $19. Maybe one party or the other (or both) is right and should stand on principle. But when we need them to find common ground on which to solve critical problems, refusal to reach agreement isn't to our advantage.

- Everyone wants to see the deficit narrowed, but today's circumstances seem to prohibit both expenditure reduction and revenue increases. Everything else is on the table (as the kids say, lol).

- We know Social Security has to be fixed in order to prevent its inevitable insolvency, since there are fewer and fewer working people paying into the system per retiree. However, some people find it unacceptable to raise tax rates or the limit on taxed income, and others resist reducing or delaying benefits. Thus no one in Washington seems to prefer tackling the problem over sweeping it under the rug (Congress's version of "extend and pretend").

- On the state and local level, there's massive underfunding of pensions, but few officials consider it possible to either reduce benefits or increase employee/employer contributions. Thus only two possibilities remain: ignore the problem or hide it by increasing the assumed return on assets (from today's already-challenging levels of 8% or more).

In the old days, the Lyndon Johnsons in Congress would sit down for a drink with the other side, swap a "yes" vote on this for something else, and get things done. For any of a million reasons, this seems impossible today. Calmes quotes G. William Hoagland, a former fiscal policy adviser to Senate Republicans, as follows:

> I used to think it would take a global fiscal crisis to get both parties to the table, but we just had one. These days I wonder if this country is even governable.

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I hasten to state that I don't view this as a question of one side being right and the other wrong. At this moment, with the Democrats in control of the White House and both houses of Congress, the Republican minority seems to be hell-bent on frustrating the Democrats' plans (and capable of doing so). But my criticism isn't reserved for today's minority party. I have absolutely no doubt that unless something changes, the next time the Republicans are in power, the roles will be reversed and the Democrats will be the obstructionists.

You can think the things President Obama wants to do are either right or wrong, but you can't deny the fact that, even with majorities in both houses of Congress, he can't do them. This truly is gridlock.

Some people think gridlock is a good thing. They think either (a) government should do less rather than more or (b) government is incapable of doing anything right (or both). In my opinion, you have to hold attitudes like those in order to be optimistic about the situation in Washington. However, there are some things only government can do. **Even the founding fathers, as leery of government as some were, created one. Many of today's problems are government-created, so government will have to solve them.**

I believe most Americans want to see the problems solved. Of course, they disagree on how best to do so. But our leaders should work together to find solutions and explain to the voters why compromise is necessary. **That's an important part of leadership . . . perhaps more important than simply resisting the other party's suggestions.**

The people in Washington may be of good will; certainly most of those I've met seem to be. They probably believe the positions they hold are the right ones. But they have to let go of their obsessions with re-election, personal preferences and politics as a contact sport. We need them to take up and solve the important problems, and I see no movement in that direction.

In fact, I see additions to the arsenal of delay and frustration. When I was a boy, filibusters – weeks-long orations – were employed on rare occasions to hamper legislative action. Now filibusters can be virtual, meaning no talking is required; you just say, "I filibuster." It takes 60 votes in the Senate to bring something to the floor over an objection. Thus, with filibusters more frequent, 60 votes have replaced 51 as the threshold for forward motion. (Since I'm from California, where it takes two-thirds of the legislature to approve a budget, I can assure you that supermajorities don't result in better decisions, just inaction.)

When I see tactics like this in use – and this brand of partisan warfare, where it's all about winning and losing – I tend to agree with Will Rogers: **"The more you observe politics, the more you've got to admit that each party is worse than the other."**

I don't think any elected official who puts re-election above all else can do the right thing when it comes to hard choices. If the decisions were easy and the remedies palatable to the electorate, they would have been implemented by now. Instead, the answers to today's problems will be painful and displease some voters (if not all). Here's how Wessel puts it:

> Imagine this plausible scenario: Public confidence in government continues to decline. Unemployment remains high. Americans demand more government services, more benefits and lower taxes.

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> Politicians, seeking re-election, go along. Exhibit A: John McCain, the Arizona Republican who called for cutting Medicare as a presidential candidate last year and now, fighting for reelection to the Senate, proposes to erect new parliamentary obstacles to Medicare cuts.
>
> In this scenario, even deficit-fearing politicians avoid taking on the long-term deficit. [Syracuse University's Leonard Burman] imagines a White House political adviser saying: "Mr. President, if you raise taxes or cut popular programs, you or your party will be defeated in the polls and the bad guys will take over. The bad guys do not share your priorities and they do not care about the deficit. Therefore, you cannot effectively deal with the deficit."

Unusually for me, I have a remedy in mind. **Let's tell our elected officials we want solutions, not warfare; compromise, not intransigence. And let's try to elect moderates in both parties, not extremists.** I don't know if it'll work, but I don't see many alternatives.

I'll move toward my conclusion with a quote (per *The Times*) from former Republican Senate leader Alan Simpson, who has been selected to co-chair the commission on the deficit:

> There isn't a single sitting member of Congress – not one – that doesn't know exactly where we're headed. And to use the politics of fear and division and hate on each other – **we are at a point right now where it doesn't make a damn whether you're a Democrat or a Republican if you've forgotten you're an American.** (emphasis added)

And where is it that every single member knows we're headed? At a reception I was fortunate to attend earlier this month, Hank Paulson described the situation roughly as follows (I paraphrase):

> At the family level, we try very hard to leave the next generation better off than we are. But at the national level, we're living in the present and ignoring massive problems with which the next generation will be saddled.

Wessel ends with a quote from President Ronald Reagan, and I'll go along with him. In 1982, Reagan had to sell a package of spending cuts and tax increases. In other words, there was something for everyone to dislike. But Reagan didn't shrink from such things. Here's what he said:

> Do we tell . . . Americans to give up hope, that their ship of state lies dead in the water because those entrusted with manning that ship can't agree on which sail to raise? We're within sight of the safe port of economic recovery. Do we make port or go aground on the shoals of selfishness, partisanship, and just plain bullheadedness?

March 17, 2010

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Memo to: Oaktree Clients

From: Howard Marks

Re: Tell Me I'm Wrong

My readers treat me well. They indulge my penchant for dissecting the past, and they send kind messages of encouragement. To repay their generosity, I'm going to venture into something I usually avoid: the future of the U.S. economy.

This memo won't be about the future in general, just the elements I find worrisome. As I see it, every investor is either predominantly a worrier or predominantly a dreamer. I've come clean many times: I'm a worrier. By saying that, I absolve myself of having to describe the whole future. I'm going to cover the negatives, starting with the immediate and ending with the systemic (some of the latter repeats themes from "What Worries Me," August 28, 2008). For the other side of the story, I'd suggest you consult the optimists who seem to be in charge of the markets these days.

The Near Term

One thing is indisputable: the rally in financial markets worldwide has outpaced the fundamentals. At the beginning of 2009, most onlookers expected a generally weak economy and were concerned that the behavior of consumers and banks would remain conservative. They were 100% right, and fundamentals are still tenuous. And yet, the rally has exceeded all expectations of which I'm aware.

Market participants have grasped at slender "green shoots": things that are declining but at a slower rate, or that have stopped getting worse, or that have begun to improve, albeit anemically (e.g., "At some of the nation's largest lenders, the number of consumer loans that are going bad is starting to level off." *The New York Times*, January 21). Most of the good news falls into those categories; little or nothing has blown anyone's socks off. We haven't seen much economic news that's overwhelmingly positive, despite the fact that (a) today's comparisons are against very weak periods a year ago, (b) our exports have been made cheaper by a dollar that's 10-20% lower, and (c) there's been an enormous amount of government stimulus. The gains being reported are often in tenths of a percent, and the other day my drive-time radio commentator said, "Hirings are almost equal to firings." That doesn't tell me we're in the midst of a strong recovery, or on track for one.

In particular, most companies' sales remain quite weak. The economy is generating very little growth at the so-called "top line" on which Gross Domestic Product is based. Rather, the profit gains being reported have been aided in large part by cost cutting. But "cost cutting" and "productivity gains" are nice-sounding ways of saying companies are getting by with less labor. Thus the employer's productivity gain can be the employee's job loss. It doesn't bode well for

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the general welfare, consumer spending or GDP growth if the level of business activity, as seen in revenues, isn't rising; GDP doesn't benefit from profit margin expansion.

Reliance on Government Stimulus

A year or so ago, the government came to the rescue of the economy with massive stimulus. With the Great Depression as a reference point, Bernanke et al. were determined to limit the contraction in liquidity, support financial institutions and encourage economic activity. Some say too much has been spent, the resulting deficits are worrisome, and the program's a flop, since the economy's still languishing and unemployment remains high.

But the fact that growth is sluggish doesn't mean the stimulus has failed. The relevant question isn't how the economy is doing, but how growth compares against what it would have been without the stimulus. "What if" questions like that are largely unanswerable, but I'm sure we're much better off than we would have been without the government's help.

Home sales are weak, but what would they be if the federal government wasn't directly or indirectly backing 80-85% of all new mortgages and providing $8,000 tax credits to first-time home buyers? What would 2009 auto sales have been without the "cash for clunkers" program? GDP growth is insubstantial, but what would it be if government spending hadn't risen by double digits?

Although not all the money has been well spent – "a blunt and messy solution" according to William Dudley, president of the New York Federal Reserve (*The New York Times*, January 21) – it seems clear the stimulus program has prevented a much more dire outcome. Regardless, the economy's response is tepid, and I wonder whether the slow growth reflects negative underlying secular trends. This makes me tend toward an expectation that the recovery will be lackluster, and that it will take years before we get back to anything approaching the vibrancy of the period preceding the crisis.

I fall back on the analogy of a stalled car (the economy) being pulled by a tow truck (government stimulus). The tow truck will want to let the car down one of these days and go on its way. Will the car be able to move on its own? We can only wait and see. I think it's more likely to sputter along than it is to move forward energetically. But at least we don't have to worry any longer about the analogy of fifteen months ago: an airplane whose engine has flamed out. A powerless plane in mid-flight presents a far more troubling image than a stalled car.

The Role of Interest Rates

Interest rate reduction has played an extremely important part in the government's efforts to end the crisis and bring the economy back to life.

- By reducing short-term interest rates (in this case to near-zero), the government makes it more attractive to spend and invest, stimulating the economy. This is the most direct effect.

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- Lower rates also provide a direct subsidy to financial institutions, which can borrow cheaply and lend at higher rates. (If a bank can borrow $100 from the government at 1% and lend it out at 6%, it's as if the government wrote the bank a check for $5 – but more subtle and perhaps less vexing to Main Street, and with potentially positive multiplier effects.) Given the state of financial institutions in 2008, it's clear this element was essential.

- There's a third, less direct effect. Rock-bottom rates on Treasurys push people to chase high returns by undertaking riskier investments. A year ago, the pensioner living on interest opened his year-end mutual fund statement and saw that the return on his T-bill or money market fund was close to zero. He grabbed the phone and called the company to say, "Get me out of that fund and into the one that's paying 15%" . . . and so became a high yield bond investor.

It's clear from the behavior of the markets that something has been goosing investment performance, since the best gains have been seen in the fundamentally riskiest assets. Part of it is general easing of the excessive risk aversion and fear of a year ago, and part is a justified rebound from too-low prices. But certainly near-zero interest rates have played a major part.

As with most remedies – economic and otherwise – ultra-low interest rates raise questions:

- Will economic recovery continue if rates go to market levels?
- Will financial institutions remain viable without the subsidy of low rates?
- Can the residential real estate market recover without support from cheap mortgages?

But what if rates remain low?

- Will foreigners continue to lend the U.S. the money it needs to cover its deficits?
- Can the dollar hold its value against other currencies if international demand weakens for dollars with which to invest in the low-yielding U.S.?
- Most market participants tend to extrapolate currency movements (rather than project their reversal). So if low rates cause the dollar to weaken, will non-U.S. investors shy further from our currency to avoid continued weakness, exacerbating these issues?

Global considerations call for higher rates, but fighting domestic economic weakness relies on low rates. Resolving this dilemma won't be easy . . . or painless.

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The Importance of Consumer Spending

At two-thirds of GDP, consumer spending was the linchpin of U.S. economic growth in the decade-plus leading up to the credit crisis. And the foundation for the rapid growth in that spending was the availability of consumer credit and the willingness to use it.

The innovation and explosion of consumer credit, which I view as having begun in the 1970s, enabled Americans to spend money they didn't have to buy things they couldn't afford. This was compounded in the current decade by vastly lowered credit standards for first mortgages and by radical expansion of what used to be called second mortgages but were re-labeled "home

equity loans." The final element in the equation was the decline in the savings rate to roughly zero in the last decade. Thus consumers spent all they made and, in many cases, more.

These trends enabled growth in spending to exceed the growth in incomes, adding substantially to the growth in GDP. Few people seemed to understand that increases in home prices weren't inexorable, or that there was anything wrong with incurring debts without a foreseeable way to repay them. Shopping became a national pursuit, and fads like "investment dressing" and "investing in collectibles" made reckless spending seem rational.

This all fell apart when the uptrend in home prices collapsed and consumer credit and home loans became unavailable. Fear suddenly replaced limitless optimism among consumers, shopping became dispensable, and the savings rate rebounded to around 5% – meaning spending suddenly grew slower than incomes (which themselves were contracting). The trend in consumer spending, which had buoyed the economy, now led its decline. Further, businesses saw no reason to expand inventories or factory capacity, transferring the slowdown to the manufacturing sector.

What will happen in the future? Will spending rebound? Or will the swing toward frugality and savings be permanent? I recently read an article which dismissed the latter possibility, saying, "People still want a better life." **I don't doubt that, but what if that "better life" comes to be defined as having more savings and less debt, rather than a new car or another handbag?**

According to *The Wall Street Journal* of December 17:

> . . . businesses ranging from shoemakers to financial services to luxury hotels don't expect American consumers to return to their spendthrift ways anytime soon. They see consumers emerging from the punishing downturn with a new mindset: careful, practical, more socially conscious and embarrassed by flashy shows of wealth.

Prudence dictates that people should have savings. But I hasten to point out that "should" isn't the same as "will." There's a maxim that "No one ever went broke underestimating the intelligence of the American consumer." I'd prefer to see consumers save rather than return to over-spending – it's healthier for families and for the economy in the long run, providing reserves in case of emergency and capital for investment. But I won't be shocked if they don't.

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The Outlook for Real Estate

Just as happened in homes, commercial real estate saw an explosion of excesses in the years leading up to the crisis. Investors and funds – perhaps pursuing the myth that real estate is a good inflation hedge regardless of the price paid – were aggressive buyers.

Capitalization rates or "cap rates" (the demanded ratio of net operating income to price) fell to 4% and sometimes less, implying price/earnings ratios of 25 or more. Property buyers applied those ratios to peak operating income and financed their purchases with copious amounts of debt.

Right now, most borrowers are avoiding default, sometimes abetted by lenders practicing "pretend and extend." What they're pretending is that commercial real estate loans will be repayable upon maturity.

It seems inescapable that over the next few years:

- higher vacancy rates and lower rents will keep net operating income from returning to the peak levels of the last cycle,
- property buyers won't go back to finding sufficient risk compensation in pre-crisis cap rates, and
- financial institutions aren't going to lend the same high percentage of property purchase prices as they did 3-4 years ago.

Any one of these factors would make it hard for commercial real estate to again command its pre-crisis prices, or for it to be financeable or refinanceable at those levels. Together, the three elements mean many properties are "upside-down" today. That is, their market value is less than the debt against them.

Will a $100 million loan secured by an $80 million building be repaid or refinanced? Unlikely. And since that description covers a great deal of commercial real estate today, many real estate loans will go unpaid at maturity. That implies widespread losses for investors and write-downs for lenders.

Many small and medium-sized banks have too much local real estate and construction loans in their portfolios. They fell for the myth of safety in real estate and forgot about the need for geographic diversification. Thus, in addition to real estate bankruptcies, the next few years may see numerous small bank failures.

<u>State and Local Governments</u>

I'm surprised how little we read today about municipal finances. In addition to regularly spending more than they took in (thanks to the miracle of borrowing), many state and local governments got into the habit of ratcheting up budgets in good times, establishing or expanding irreversible spending programs. Thus, today's substantial declines in sales, income and property tax revenues can't be met with corresponding cuts in spending.

So now we have massive deficits in places like New York and California – the result of strong spending at a time of soft income. The situation in the latter, my home state, is further complicated by (a) the ability of voters to enact new spending programs through referendums without having to worry about where the money will come from, (b) the fact that the most famous referendum of them all – Proposition 13 – essentially prevents homes from being reassessed to reflect appreciation and (c) the requirement that the annual budget be approved by two-thirds of the legislators in each house, virtually ruling out any unpleasant medicine. It's for that reason that California resorted to paying its bills in scrip (a practice since discontinued) and furloughing state employees.

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Will states and cities go bankrupt in coming years? What will be the effect on their bondholders, and on the municipal bond market as a whole? How will bankruptcy be reconciled with municipal bond issuers' promises to dedicate their full faith and credit to paying interest and principal (and thus, implicitly, to raise taxes without limitation)? How will the federal government respond? If it opens its coffers to bail out profligate states, what will that say to states that were prudent enough to stay out of trouble? No answers here, but lots of trouble in sight.

Our Dance with China

Here are the facts:

- China has vast resources, human and otherwise.
- It produces goods cheaper than the developed countries.
- China's likely undervalued currency aids its competitiveness as an exporter.
- The U.S. buys more from China than it sells to China.
- That means dollars keep piling up in China.
- The U.S. has to borrow back those dollars to fund its fiscal and trade deficits.
- We'd prefer low interest rates in order to minimize our interest payments, and a weak dollar so we can repay our debts (as if!) in devalued currency.
- China, with its reserves growing, has to invest large amounts of dollars.
- China wants high rates and a strong dollar in order to maximize the value of our future payments to them.
- China would probably like to diversify the investment of its reserves away from the dollar, but (a) it's hard to figure out where to better invest them and (b) doing so would further weaken the dollar, of which China already owns so many.

The great thing about not being an economist is that I don't have a view on how all of this will play out. But I'm sure it implies considerable uncertainty.

Wherefore Jobs?

I wonder what will occupy the millions of Americans dependent until now on "physical" jobs. In the late nineteenth century, agriculture became mechanized and many people left the South to find manufacturing jobs in the Midwest. Then manufacturing was automated over time, and the economy went global, reducing the need for American factory workers. Today, relatively little manufacturing takes place in the high-cost U.S. Increasing percentages of our jobs are now in services, government, healthcare, retailing, intellectual property and information.

In "What Worries Me," I expressed concern about an American economy that manufactures less and less, as well as puzzlement regarding the consequences. Where will jobs come from as the population grows and manufacturing continues to shrink?

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> In addition to replacing 7.2 million lost jobs [since the recession began in December 2007], the economy needs an additional 100,000 a month to keep up with population growth. If the job market returns to the rapid pace of the 1990s – adding 1.25 million private-sector jobs a year, double the 2001-2007 pace – the U.S. wouldn't get back to a 5% unemployment rate until late 2017, Rutgers University economist Joseph Seneca estimated. (*The Wall Street Journal*, October 5, 2009)

"We'll give each person a diploma and a laptop" seems to resonate from the last presidential campaign, but I don't see that as much of an answer to the problem since (a) not every strong back can be redirected to a desk job, especially given that our system of public education is in crisis, and (b) one of the advantages of an information economy is supposed to be that it needs fewer workers to get business done.

In short, I worry that the growth in jobs in the recovery will be slow, and that unemployment and underemployment will remain stubbornly at higher levels than in the past. That doesn't bode well for either the short-term cyclical recovery or the long-term outlook.

Global Competitiveness

Now that the world is one big market and consumers have their choice of goods from anywhere in it, success in producing and selling is largely a function of cost competitiveness. For years, things like the superiority of American products blunted foreign competition. One of the results was that the American worker enjoyed the highest wages and standard of living in the world. But now China, Korea and other nations have eclipsed much of our manufacturing advantage, allowing them to produce goods that are not just cheaper but at times better.

It stands to reason that today, goods produced with high-priced inputs will not compete successfully. In order for U.S. goods to be competitive, our costs will have to come down, and with them our relative standard of living. Why should any country's workers be able to command a higher standard of living if the goods they produce aren't demonstrably superior?

These trends have already taken effect in "legacy industries" like airlines and autos. For example, one of the main goals of the auto bankruptcies was to limit retirees' lifetime benefits. I think we'll continue to see declining relative costs in the U.S., to the betterment of our competitiveness but the detriment of our workers.

Inflation, Exchange Rates and Interest Rates

The macro question I get most often concerns the outlook for inflation. And as someone who lived through stagflation in the 1970s and paid interest at 22-¾%, I think it's very much worth considering.

The hyperinflation of the '70s was sparked by the Oil Embargo of 1973. Labor contracts and benefit plans containing cost-of-living adjustments built on that to create a cost-plus cycle in

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which inflation lifted wages, contributing further to inflation, and so forth. Rising prices frightened people into demand-pull inflation by convincing them to stock up on goods to avoid higher prices later. And people borrowed to invest in assets like land out of a belief that no matter what interest rate they paid to finance their purchase, the asset's price would increase at a faster rate (the epitome of inflationary thinking).

No one knew how to solve the problem. I used to go to hear "Dr. Gloom" and "Dr. Doom" (economists Al Wojnilower of First Boston and Henry Kaufman of Salomon Brothers) compete to be more depressing. They talked about how hard it would be to get inflation down to "an acceptable level." One day, I heard someone ask for the definition of "an acceptable level." He was told "one-third less than whatever it is at the time."

Finally, however, in the early 1980s Paul Volcker and the Fed implemented the painful solution of significantly higher interest rates, inflation subsided, and the stock market took off. Over the next 25 years, rising inflation and interest rates were forgotten as possible sources of risk.

Today, labor in the U.S. lacks the power to demand strong wage increases or COLAs. Further, the sluggish macro picture argues against demand-pull. Strong inflation is usually associated with higher levels of prosperity and stronger demand for goods than I foresee. Finally, inflation often presupposes pricing power on the part of manufacturers, which I also don't see.

Those are the factors that argue against an increase in inflation. However, because of other forces – primarily financial and international – it could take increasing numbers of dollars to buy a given quantity of the imported goods on which we've become so dependent (a.k.a. inflation).

- As I mentioned earlier, debtors want there to be inflation so they can repay their debts with currency that's worth less. To accomplish this, debtor nations have the ability to debase their currencies by printing more of it. For the clearest example, see "The Limits to Negativism" (October 15, 2008) on the subject of the Weimar Republic. Post-World War I Germany was assessed war reparations it couldn't afford, so it simply over-stamped its 1,000 mark notes "1 million marks." All of a sudden it had created enough marks to pay its debt to the world . . . and destroyed the purchasing power of its currency.
- A dollar weakened by reduced demand for it (e.g., as a vehicle for the investment of China's reserves) would, likewise, equate to more dollars per item bought from abroad.
- Finally, "stores of value" like gold hold value only because people agree they will. The same goes for currencies. Profligate spending, runaway deficits and declining world position could reduce the role of the dollar as a reserve currency, again cutting into its purchasing power.

I'm certainly in no position to predict a decline in the purchasing power of the dollar (that is, a bout of strong inflation). However, I do think it's very much worth worrying about.

When Paul Volcker left the Fed in 1987, he was asked at his first public appearance, "Will interest rates go up or down?" He answered presciently: "Yes." Of course, his answer is still the right one. **But from today's levels, I think rates are more likely to go up than down (there's so little room for the latter).**

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Reduced faith in the dollar means it would take higher interest rates to attract non-U.S. buyers to dollar investments. And, even domestically, (a) one of these days the government will stop holding rates down and (b) higher inflation would require rates to rise to compensate for the fact that the dollars with which debts are repaid will buy less. For all these reasons, I think investors must consider the prospect of higher inflation, dollar weakness and higher interest rates.

What to do about them? The list of possibilities is long:

- Buy TIPS.
- Buy floating rate debt.
- Buy gold (but only at the "right" price, and what's that?)
- Buy real assets, such as commodities, oil and real estate (ditto).
- Buy foreign currencies.
- Make investments denominated in foreign currencies.
- Buy the securities of companies that will be able to pass on increased costs.
- Buy the securities of companies that own commodities, or that own assets denominated in foreign currencies.
- Buy the securities of companies that earn their profits outside the U.S.
- Hold cash (to invest once interest rates have risen).
- Sell long-term bonds (and possibly go short).

These are the actions that can profit from – or that provide the flexibility to adjust to – increased inflation, a decline in the dollar and increased interest rates, all of which are interconnected. The most important one is the last one: long-term bonds could suffer worst in an inflationary, higher-rate environment, especially given today's low starting yields.

One final point: When I provide this answer to the frequent question about inflation, I ask people whether they agree. Usually they do. Then I ask how much of their portfolio they're willing to devote to protecting against these macro forces. If their answer is 5%, 10% or 15%, I point out that that's pretty close to doing nothing. The question is whether you're willing to devote at least 30-40%. Few people are.

But that's the thing: It's easy to say, "I'm worried about inflation." It's something very different to say, "I'm worried enough about inflation to do something meaningful about it." Let me know when you decide how much you're willing to devote.

<u>The Environment for Business</u>

Moving all the way out on the timescale, I'd like to say a few words about some of my biggest-picture concerns.

I worry about long-term problems that are being left untreated, such as our massive deficits and our under-funded Social Security, Medicare and education systems.

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I worry about the long-term impact of government involvement in business decisions: telling companies what they should pay top employees and setting minimums for the percentage of premium revenue that a health insurer should pay out in benefits, for example. The Obama administration has the smallest percentage of Cabinet secretaries with backgrounds in the private sector of any president since Teddy Roosevelt, according to the November 24 issue of *Forbes*. People in the executive and legislative branches with no experience in business are telling business how to operate.

Lastly, I worry about the rising tide of populism and anti-business sentiment. I've never seen negative attitudes like those toward financial institutions today. Administration members with Wall Street backgrounds are regarded with suspicion; high incomes are considered wrongful; and banks and investment banks are seen as victimizing America, not rendering it prosperous. Schadenfreude is in the ascendancy, with people wishing ill for successful bankers. Politicians pander by throwing gasoline on the fire. With an election coming up, I expect candidates to compete to see who can be tougher on Wall Street.

I mentioned in "What Worries Me" that decades ago, when a socialist-leaning labor movement was ascendant in the U.K., I came across a good explanation for the success of U.S. business:

> When the worker in England sees the boss drive out of the factory in his Rolls Royce, he says, "I'd like to put a bomb under that car." When the American worker sees the boss drive out in his Cadillac, he says "I'd like to own a car like that someday."

More recently, in 2005, Thomas Friedman compared old and new economies as follows:

> **French voters are trying to preserve a 35-hour work week in a world where Indian engineers are ready to work a 35-hour day. Good luck. . . .**
>
> Voters in "old Europe" – France, Germany, the Netherlands and Italy – seem to be saying to their leaders: stop the world, we want to get off; while voters in India have been telling their leaders: stop the world and build us a stepstool, we want to get on. . . .
>
> A few weeks ago Franz Müntefering, [then] chairman of Germany's Social Democratic Party, compared private equity firms – which buy up failing businesses, downsize them and then sell them – to a "swarm of locusts."
>
> **The fact that a top German politician has resorted to attacking capitalism to win votes tells you just how explosive the next decade in Western Europe could be,** as some of these aging, inflexible economies – which have grown used to six-week vacations and unemployment insurance that is almost as good as having a job – become more intimately integrated with Eastern Europe, India and China in a flattening world. ("A Race to the Top," *The New York Times*, June 3, 2005 – emphasis added)

Capitalism, free enterprise, pro-business policies, adaptability, work ethic and profit – these are the concepts that have generated most of the material progress in this world.

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They were behind much of America's relative gains in the twentieth century, just as they now hold great promise for China, India and Brazil. Compare the growth records and prospects of countries that exhibit them against countries that don't. **Which kind of country will the U.S. of the future be?**

Today people seem to think of companies like Goldman Sachs and JPMorgan Chase as enemies, not friends – companies to be rooted against, not for (and there are non-financial examples as well). I'd like those people to tell me what engine of progress will propel America ahead in the twenty-first century. It's not going to be the barbershops and fast-food outlets. It has to be big, world-leading businesses, working on behalf of their investor-owners.

We're a big country, and we'd better pull for big business – not against it. We'd better remember that "what's good for business is good for America." If we don't, and if big business isn't allowed to thrive, wondering about the shape of the coming recovery or the outlook for security prices in 2010 will amount to nothing more than "rearranging the deck chairs on the Titanic."

Investment performance in a single year should matter principally to people who're going to liquidate their portfolios at the end of that year. Most of us expect our holding periods to go on well beyond 2010. So we'd better hope for a salutary long-term environment in which to hold.

* * *

I'm not writing to be negative or to depress readers. And as I said earlier, I don't claim to be presenting the whole picture. Nevertheless, I hope I'm providing a service.

The question isn't whether there'll be a recovery, but what type. In fact, a recovery is doubtless underway as I write. But for the reasons enumerated above, I think it'll turn out to be anemic and possibly marked by fits and starts, not a powerful "V."

- The recovery will face headwinds in the form of declining manufacturing and weak job creation.
- Slow job growth, sluggish incomes, spending that grows slower than incomes, and scarcer consumer credit likely will combine to limit the consumer's ability to energize the economy.
- Removing the props of elevated government spending, debt guarantees and artificially low interest rates will limit its vibrancy.
- We'll continue to face challenges in terms of real estate losses, bank write-downs and fiscal and trade deficits.

On the other hand, near-term economic statistics will benefit from the following:

- easy comparisons against depressed prior levels,
- the rebuilding of inventories and refilling of pipelines to meet recovering demand, and

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- big companies' large cash holdings, delevered balance sheets and eagerness to respond to increased orders.

When people ask me when we'll get back to normal, I ask what they mean by normal. If they mean an environment like 1992-2007, I tell them those were unusually good times, not what the "normal" of the future is going to look like.

The fifteen (or 25) years just prior to the credit crisis were marked by strong, consumer-led growth; rapidly increasing use of credit; American leadership in media, software, technology and financial products; and powerful bullishness and expansiveness. I doubt the years just ahead will be equally positive.

My goal in this memo isn't to express a forecast. I know no forecast – and certainly not mine – is likely to be correct. What I do want to do is caution that the considerable risks I see may be less than fully appreciated by those setting asset prices today. The greatest market risks lie in failure of the macro economy to live up to the expectations embodied in today's prices. **Please tell me if you think I'm wrong in letting the factors described above push me toward caution. In fact, I'd love it if you told me my worries are unfounded, and that our economic and business future will see a complete return to good times.**

Most people view the future as likely to repeat past patterns, which it may or may not do. They tend to think of the future in terms of a single scenario, whereas it really consists of a wide range of possibilities. (Remember Elroy Dimson's trenchant observation that "risk means more things can happen than will happen.") And to the extent they do consider a variety of possibilities, few people include ones that haven't been part of recent experience.

The uncertainties discussed above tell me today's distribution of possibilities has a substantial left-hand (i.e., negative) tail, probably greater than at most times in the past. The proper response should be to discount asset prices, allowing a substantial margin for error. Forecasts should be conservative, yield spreads should incorporate ample risk premiums, valuation parameters should be below the long-term norms, and investor behavior should be prudent.

And yet, the powerful rally of 2009 has more than offset the decline of 2008 in many asset classes. To the extent that the resultant valuations incorporate optimism, I would argue for caution today. A lot of "easy money" was made last year; in retrospect, all you had to do was have access to capital and the guts required to invest it at the absurd low prices of late 2008/early 2009 and hold on during the wild recovery. **Of course, those things were far from easy at the time.**

The profits ahead won't be easy money. They'll require careful selection, appropriately high risk consciousness, insistence on margin for error, and cooperation from the forces that determine outcomes (such as luck). With most assets valued about fairly today, caution, discernment and discipline – not much needed in 2009 – have replaced guts as the essential elements in profitable investing.

January 22, 2010

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Memo to: Oaktree Clients

From: Howard Marks

Re: Touchstones

In the two-plus years since the onset of the financial crisis, it's been a regular theme of mine that we should look back, identify the causes and learn from them. I've tackled this assignment in a number of memos and a variety of ways. Now, despite the fact that you've heard much of this from me before, I'm going to try to pull it all together, using the quotations, adages and images that I feel best capture the essence of what we've been through. When I think back, these are the ones that stand out.

"Greed Is Good"

There's no debating which line from the film *Wall Street* is the most memorable. It's hard to forget the image of slicked-back takeover artist Gordon Gekko urging on his troops, invoking the positive power of self-interest. What he meant by "greed is good," of course, was that greed – or self-interest, or the profit motive – is what drives people and companies operating in a free-market setting to strive for more and better, and thus to work hard and optimally allocate resources. It's the force that motivates Adam Smith's "invisible hand" and carries economies to increased output and higher standards of living.

Among the many pendulum-like phenomena we occasionally witness is the swing in people's willingness to rely on the free market. First they trust the market to come up with solutions. Then the shortcomings of those solutions are laid bare and there's a call for regulation. Then the folly of government involvement becomes evident and people want the free market back, and so forth. Because neither extreme is perfect, the oscillation between them goes on. Governments can't run economies or companies. But it's equally true that in a free market, the rules will occasionally be stretched and participants harmed.

In a free market, things will inevitably go past the optimal to the extreme. When they swing back, the retreat can be painful. **Thus, if we're going to rely on the market to settle things, we have to be willing to accept the consequences.**

In the pre-crisis years, the free market was revered and deferred to, and regulation was thought of as little more than a potential impediment to the market's processes. (An article I can't locate in my pile of clippings beautifully explained the dearth of government action: "That's the kind of regulation you get from an administration that doesn't believe in regulation.") That attitude permitted financial institutions to take actions and bear risks that turned out to be unwise, unprofitable and unsustainable. Their strategies took them to the brink of disaster in 2008.

In a truly free market, Bear Stearns, Merrill Lynch, Citibank, AIG, Fannie Mae, Freddie Mac and others likely would have gone bankrupt. Those bankruptcies would have been quite instructive,

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but also quite painful. If the world is unwilling to live with such lessons from time to time – and if some institutions are considered to be "too big to fail" for society's purposes – then free markets and self-interest have to be restrained. **Greed may be good, but it can be permitted to run free only up to a point.**

Nothing's More Risky Than a Widespread Belief That There's No Risk

The recent crisis came about primarily because investors partook of novel, complex and dangerous things, in greater amounts than ever before. They took on too much leverage and committed too much capital to illiquid investments. **Why did they do these things? It all happened because investors believed too much, worried too little, and thus took too much risk. In short, they believed they were living in a low-risk world.**

In 2006 and early 2007, for instance, we heard a lot about the "wall of liquidity" that was coming toward us from China and the oil producing countries, a flow that could be counted on to provide capital and raise asset prices non-stop. Likewise, we were told (a) the Fed had tamed the business cycle through its adroit management, (b) securitization, tranching and disintermediation had reduced risk by putting it where it could best be handled, and (c) the "Greenspan put" could always be counted on to bail out investors who made mistakes. These and other things were said to have lowered the risk level worldwide.

Belief that risk has been banished is a key element in allowing people to engage in practices they would otherwise view as risky, and in permitting assets to be bid up to prices that would clearly be too high in a world perceived to involve risk.

> . . . former Fed Chairman Paul A. Volcker noted that one of the causes of the financial crisis "was the ultimately explosive combination of compensation practices that provided enormous incentives to take risks" just as new financial innovations "seemed to offer assurance – falsely, as it turned out – that those risks had been diffused." (*The Wall Street Journal*, September 18, 2009)

Worry and its relatives, distrust, skepticism and risk aversion, are essential ingredients in a safe financial system. To paraphrase a saying about the usefulness of bankruptcy, fear of loss is to capitalism as fear of hell is to Catholicism. Worry keeps risky loans from being made, companies from taking on more debt than they can service, portfolios from becoming overly concentrated, and unproven schemes from turning into popular manias. When worry and risk aversion are present as they should be, investors will question, investigate and act prudently. Risky investments either won't be undertaken or will be required to provide adequate compensation in terms of anticipated return.

But only when investors are sufficiently risk averse will markets offer adequate risk premiums. When worry is in short supply, risky borrowers and questionable schemes will have easy access to capital, and the financial system will become precarious. Too much money will chase the risky and the new, driving up asset prices and driving down prospective returns and safety.

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> For a market to function, those who invest and lend in that market must believe that their money is actually at risk. (President Obama, September 14, 2009)

Clearly, in the months and years leading up to the crisis, few participants worried as much as they're supposed to.

Soros's Theory of Reflexivity

Some of the biggest problems arise because market participants think of their environment as a static arena in which they act. What they miss – to their frequent detriment – is that their actions alter the environment, causing the results to differ from their expectations.

George Soros has written and spoken most articulately about the ability of investors' actions to change the environment. He calls this process "reflexivity."

> The generally accepted theory is that financial markets tend towards equilibrium, and on the whole, discount the future correctly. I operate using a different theory, according to which financial markets cannot possibly discount the future correctly because they do not merely discount the future; they help to shape it. In certain circumstances, financial markets can affect the so-called fundamentals which they are supposed to reflect. When that happens, markets enter into a state of dynamic disequilibrium and behave quite differently from what would be considered normal by the theory of efficient markets. Such boom/bust sequences do not arise very often, but when they do, they can be very disruptive, exactly because they affect the fundamentals of the economy. . . . (George Soros, MIT Department of Economics World Economy Laboratory Conference, Washington, D.C., April 26, 1994)

My son Andrew, now starting his investment career, has provided an illustration of reflexivity at work that's clear and topical. For several years prior to the crisis, the desire for high returns with low risk (what else is new?) created strong demand for mortgage-based investment products such as RMBS and CDOs. Underpinning it all was the fact that there had never been a nationwide decline in home prices, and thus participants were confident that geographic diversification would render levered mortgage pools safe, warranting triple-A ratings for most of the resulting securities. Rising demand for these products required an increasing volume of underlying mortgages. This need caused lending standards to be weakened and loans to be provided to home buyers with dubious creditworthiness. Easy financing allowed buyers to bid up home prices to levels that exceeded the homes' realistic values and made it tough for borrowers to make their mortgage payments. When the perpetual-motion machine of house appreciation ground to a halt in 2007, the combination of too-high prices and record mortgage defaults resulted in the first nationwide decline in home prices. **Thus, in the end, the belief that an asset was safe led to investor behavior that made it unsafe. That's reflexivity.**

In 2003-07, as described above, investors considered the world a low-risk place. Thus they rushed to buy assets they found attractive, borrowing in order to buy more when their own capital was exhausted. They expected purchases made with cheap leverage to produce high

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profits with low risk. But their buying drove up both the cost of the assets and the riskiness of the environment, transforming their "low-risk" strategies into high-risk ones. The consequences have become clear.

Greenspan and Bubbles

One of the most obvious ways in which investors change the environment is through the creation of asset bubbles, like the one that popped in the summer of 2007. In a process that invariably looks silly after the fact, they reach the conclusion that an investment is a sure winner, usually on the basis of simplistic platitudes that simply can't hold up under scrutiny. These include "Internet stocks must rise because these companies are going to change the world," "real estate (or gold) is a good hedge against inflation," "home prices can never decline nationwide," "oil will appreciate because it's being consumed faster than it's being found," and "alternative investments (or hedge funds or private equity funds) hold the key to meeting investment goals."

Because of the strength attributed to these platitudes, investors go on to conclude that the investments they support will be profitable regardless of the price at which they're undertaken. How can this be right? **It's not possible that something can be a good investment regardless of the price paid. But when a logical-seeming platitude is adopted by the stampeding herd, that belief is the result.** That's how we get bubbles.

Bubble thinking is irrational, given that it's built on a belief that there's no price too high. This goes on to manifest itself in a variety of ways. In the 1970s, when hyper-inflation was rampant and interest rates were astronomical, people concluded that no matter the interest rate paid, borrowing to buy "inflation protected" assets like real estate would be profitable. That's bubble thinking.

In my forty-year career, I've seen bubbles in growth stocks, small stocks, oil stocks, emerging market stocks and tech stocks, as well as such surefire winners as silver, homes and buyouts. In each instance, there was a logical underlying rationale for the desirability of the subject assets, but people overlooked the possibility that bubble thinking had raised prices to dangerous levels.

Alan Greenspan greatly influenced economic and market developments during his term as Fed Chairman from 1987 to 2006, and his record on the subject of bubbles was poor. He set the world on its ear in 1996 by railing against "irrational exuberance" as the Dow Jones Index soared past the 6,000 level, but he was quiet thereafter, rationalizing appreciation well beyond 10,000 based on gains in productivity. Here's his position on bubbles:

> . . . bubbles generally are perceptible only after the fact. To spot a bubble in advance requires a judgment that hundreds of thousands of informed investors have it all wrong. While bubbles that burst are scarcely benign, the consequences need not be catastrophic for the economy. (June 17, 1999)

> . . . it was far from obvious that bubbles, even if identified early, could be preempted short of the central bank inducing a substantial contraction in economic

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> activity – the very outcome we would be seeking to avoid. Prolonged periods of expansion promote a greater rational willingness to take risks, a pattern very difficult to avert by a modest tightening of monetary policy . . . we recognized that, despite our suspicions, it was very difficult to definitively identify a bubble until after the fact. . . . the idea that the collapse of a bubble can be softened by pricking it in advance is almost surely an illusion. (August 30, 2002)

Thus it was his view that (a) bubbles can only be detected in retrospect, not as they occur, (b) even if detected, bubbles are hard to deflate benignly, (c) rather than deflate them, bubbles can be managed, and (d) deflating bubbles isn't the job of the Fed. This relaxed position on bubbles can easily be seen as having abetted their growth. For example:

> . . . testimony before Congress last week refutes, once and for all, the existence of an alleged housing market "bubble," said chief economists of the National Association of Home Builders. . . . "The time has come to put this issue to rest," said NAHB Chief Economist David Seiders. "The nation's home builders have said it, the Realtors have said it, and **now Alan Greenspan has said it once again, in no uncertain terms: there is no such thing as a current or impending house price bubble**."
>
> Asked about the issue during his testimony, Greenspan said, "We've looked at the bubble question and we've concluded that it is most unlikely." He attributed recent "sizeable gains" in home prices to "the effects on demand of low mortgage rates, immigration and shortages of buildable land." (*Business Wire*, July 22, 2002, emphasis added)

Ignoring bubbles is a special case of ignoring risk in general. The philosopher George Santayana is famous for having said, "Those who cannot remember the past are condemned to repeat it." Likewise, **those who fail to learn from past bubbles are bound to suffer in the bursting of new ones.**

<u>The More You Bet, the More You Win When You Win</u>

In the years just prior to the crash, obliviousness to risk encouraged numerous forms of risky behavior. One of the greatest was the use of leverage to increase returns, a phenomenon that became widespread.

People make investments on the basis of positive expected returns. When the cost of borrowing is below the expected return, using leverage appears certain to magnify the gain. Thus the Las Vegas maxim that heads this section comes into play, and it's that kind of thinking that gives leverage its seductive power.

But there's so much more to leverage than that, and unfortunately the rest is learned only when things go badly. Leverage doesn't make an investment better; it merely magnifies the gains and losses. Leverage is what James Grant of *Grant's Interest Rate Observer* calls "money of the mind," meaning it can vanish if the lender is able to take his money back. And any combination

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of fundamental difficulty, falling asset prices, reduced market liquidity, collateral value tests and margin calls can be the ruination of investors employing leverage. That's what befell many in the fourth quarter of 2008.

In 2003-07, interest rates brought low by the Fed, modest demands for risk premiums on the part of unworried investors, and financial institutions' competition to lend conspired to make low-cost leverage readily available. That cheap financing (a) convinced people that high leverage was the route to increased returns (even from low-yielding underlying investments), (b) armed all parties for a bidding war for assets, and (c) made people rush to borrow and buy before the river of financing ran dry. The result was a buying spree of massive proportions, the bill for which – in terms of debt maturities, often unpayable – will come due in the next few years.

Like just about everything else in investing, leverage is neither good nor bad per se. Used at the right time, in judicious amounts, to purchase low-priced assets, it's a good thing. But that's not the story of the pre-crisis years. And that's a big reason for the trouble we've had since.

"Risk Means More Things Can Happen Than Will Happen"

The above quote from Elroy Dimson of the London Business School helps bring risk into focus. Risk has been the subject of excessive complication and sophistication, but Dimson's simple formulation makes clear what it's all about.

Investing consists entirely of dealing with the future. To do that, people must form opinions about what lies ahead. But few things are more potentially harmful than projections. I've collected a lot of quotations on this subject. Here are my two favorites, but I have a million more:

> We have two classes of forecasters: Those who don't know – and those who don't know they don't know.
>
> John Kenneth Galbraith

> It's frightening to think that you might not know something, but more frightening to think that, by and large, the world is run by people who have faith that they know exactly what's going on.
>
> Amos Tversky

One of the errors committed in 2003-07 – forming a cornerstone of the crisis – consisted of believing too much in the ability to predict the future. Investors, risk managers, financial institution executives, rating agencies and regulators trusted forecasts, extrapolations and computer models. **This made them comfortable with risk, always a dangerous arrangement.**

The "I know" school of investing has received frequent mention in my memos (e.g., "Us and Them," May 7, 2004). Its members – money managers, Wall Street strategists and media

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pundits – believe that there's a single future, it is knowable in advance, and they're among the people who know it. They're eager to tell you what the future holds, and equally willing to overlook the inaccuracy of their past predictions. **What they repeatedly ignore is the fact that (a) the future possibilities cover a broad range, (b) some of them – the "black swans" – can't even be imagined in advance, and (c) even if it's possible to know which one outcome is the most likely, the others have a substantial combined probability of occurring instead.**

Thus one key question each investor has to answer is whether he views the future as knowable or unknowable. An investor who feels he knows what the future holds will act assertively: making directional bets, concentrating positions, levering holdings and counting on future growth – in other words, doing things that in the absence of foreknowledge would increase risk. On the other hand, someone who feels he doesn't know what the future holds will act quite differently: diversifying, hedging, levering less (or not at all), emphasizing value today over growth tomorrow, staying high in the capital structure, and generally girding for a variety of possible outcomes.

The first group of investors did much better in the years leading up to the crash. But the second group was better prepared when the crash unfolded, and they had more capital available (and more-intact psyches) with which to profit from purchases made at its nadir.

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Never Forget the 6'-Tall Man Who Drowned Crossing the Stream That Was 5' Deep on Average

The range of possibilities – the environments with which we must deal – invariably will include some bad ones. We must prepare for them, and the unavoidable prerequisite for doing so is being aware of them. Following from the section above, **the key is to view the future as a range of possibilities, not a reliable point estimate**.

How does the successful investor prepare for the uncertain future? By building in what Warren Buffett calls "margin for error" or "margin of safety." It's having this margin that enables us to do okay even when things don't go our way.

If an investor prepares for a single future and attempts to maximize under the assumption that his view will prove right, he'll be in big trouble if it doesn't. The investor who backs off from the maximizing position is likely to do better when negative surprises occur. Thus it's essential to realize a few things:

- It's not sufficient to think about surviving "on average" – investment survival has to be achieved every day, under all circumstances.
- The ability to survive under adverse conditions comes from a portfolio's margin for error.
- **Ensuring sufficient margin for error and attempting to maximize returns are incompatible**.

The use of leverage illustrates a special case of the above. Leverage increases the gains if you succeed and the losses if you fail. Thus leverage increases the probability of maximizing under favorable outcomes and reduces your margin of safety under unfavorable ones. In 2008, leveraged loans that ultimately proved to be money-good declined in price for psychological and

technical reasons. **Loan investors who were able to hold on recovered, but many who had bought with leverage couldn't do so. They drowned in the deep part of the stream.**

Chuck Prince on Dancing

A quotation from the former CEO of Citigroup contains just 30 words, but it could serve as a case study regarding the events leading up to the crash:

> When the music stops, in terms of liquidity, things will be complicated. But as long as the music is playing, you've got to get up and dance. We're still dancing. (Charles Prince, July 9, 2007)

I suspected in mid-2007 that this quotation would end up being emblematic of the cycle. It's been replayed many times, but usually without the first dozen words. Prince seems to have been more aware of what was going on than people give him credit for. He may have sensed the bank was on thin ice in lending and levering, like the rest. The problem wasn't that he overlooked the danger; the problem was that he felt he had to participate anyway.

One of the dilemmas faced by businesses is that they can conclude that they have no choice but to take part in dangerous behavior. Usually this is because they're unwilling to cede market share. On October 5, Leo Strine, Vice Chancellor of the Delaware Court of Chancery, wrote as follows in *The New York Times Dealbook*:

> . . . the ability of any particular firm to resist imitating the overly risky, but law-compliant behavior of competitors will be compromised to the extent that managers face criticism or even removal for not keeping up with so-called industry leaders whose high, short-term returns have pleased a stock market filled with short-term investors looking for alpha.

In "The Race to the Bottom" (February 14, 2007), I described the dangerous behavior that providers of capital engage in when the competition becomes heated. The formula is one of the simplest: **when there's too much money chasing too few deals, asset prices are driven up, prospective returns are driven down, and risk rises**.

Those seven little words – too much money chasing too few deals – represent an absolute death knell for the availability of good returns earned with safety. It should be possible to know when this is the case, as Prince did, but people tend to join in nevertheless. Often this is true because, even if they recognize the danger, they're also aware that "being too far ahead of your time is indistinguishable from being wrong," and they don't want to be out of step.

The way I see it, investors face two main risks: the risk of losing money and the risk of missing out. Although investors should balance the two, in reality this is yet another of those arcs along which the pendulum swings regularly between extremes.

The disposition of a market – the position of the pendulum – can be inferred from the behavior of participants regarding these two risks. In the years just before the crash, encouraged by the

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purported risk-reducers described on page 2 above, investors generally ignored the risk of loss. In those heady times, they feared only missing opportunities, looking too conservative, and losing business. This combination spurred them to employ aggressive strategies, innovative products, leverage and illiquidity. **When most people think the worst imaginable outcome is failing to participate fully in gains, the result is risky behavior. They're inevitably reminded that there's worse, but it can take a long time to happen.**

"It's Only When the Tide Goes Out That You Find Out Who's Been Swimming Naked"

When I came across the above quotation from Warren Buffett, I borrowed it for "It's All Good" (July 16, 2007) and later devoted an entire memo to it ("The Tide Goes Out," March 18, 2008). Buffett's way of saying things combines brevity, humor and pinpoint accuracy, and this is a great example.

Financial innovation was a major component in building the base for the crisis. As I've said before, **popularization of new investment products is possible only in rising markets, with their suspension of skepticism, easy access to money, and dearth of trying moments. On the other hand, innovations are only tested in falling markets, and few pass the ultimate test.** Californians' homes may contain construction flaws, but we only learn about them during earthquakes. Likewise, a fatally flawed investment product can easily survive until it's tested in a bear market.

The extensive investment innovation of 2003-07 was driven by the poor performance of stocks in 2000-02 and the low yields available on high grade bonds. A large number of new products and strategies emerged, increasing in popularity in a salutary environment. Few investors were troubled by the products' dependence on high leverage or suddenly commonplace triple-A ratings, or by the fact that they hadn't been tested in tough times.

It's not surprising that bull market developments were defrocked in the tougher times of 2007-08, but it's somewhat shocking how many examples there are. It turned out that:

- losses on investments involving leverage, illiquidity or risky assets could be much worse than the "worst case" that had been predicted,
- beta had been confused for alpha, just as leverage had for value added,
- there was nothing absolute about "absolute return," and "market neutral" strategies were correlated with the market,
- the "golden age of private equity" had been a function of easy money, not bargain purchases,
- sharing the upside with investment managers isn't sufficient to align their interests with those of their clients, and
- things that "should happen" often don't.

While an extreme case, the story of Bernie Madoff presents an apt example of this phenomenon. Madoff's fictitious returns weren't very high, but they were remarkably steady; thus his clients thought of his fund as a high-yielding T-bill. This made it easy for the skilled Ponzi schemer to satisfy the few withdrawal requests with cash from eager new investors. This could have continued *ad infinitum* if not for the market collapse in 2008. Madoff's investors had complete

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confidence in him, but they couldn't get money they needed from other funds that had put up gates, or they didn't want to sell other investments that, unlike Bernie's, were showing big losses. So Madoff received requests for $7 billion of withdrawals, an amount he simply couldn't raise from new suckers, and his nakedness became apparent.

The Madoff story exemplifies the ability of ill-founded investments to prosper in bull markets, and the role of bear markets in exposing them. **Now that the tide has gone out, many pre-crisis miracles have been exposed as non-value based, overly dependent on prosperity and easy money, pro-cyclical, over-hyped or just plain flawed. Hopefully next time, investors will give more thought to how their bull-market dalliances will fare when the tide goes out.**

The Opposite of a Bubble

On the heels of the lessons regarding the run-up to the crash, the latter part of 2008 provided several lessons about behavior in times of crisis. With the fundamental outlook terrible, psychology depressed and technical conditions featuring a great deal of forced selling, that period represented one of the greatest buying opportunities I've ever seen.

I expressed my view that, having been too optimistic before the crash, people were now taking things too far on the downside. It's not easy to resist emotional excesses at highs and lows, but it's by doing so that the best investment decisions can be made:

> . . . it's improbable events that brought on the credit crisis. Lots of bad things happened that had been considered unlikely (if not impossible), and they happened at the same time, to investors who'd taken on significant leverage. So the easy explanation is that the people who were hurt in the credit crisis hadn't been skeptical – or pessimistic – enough. But that [realization] triggered an epiphany: **Skepticism and pessimism aren't synonymous. Skepticism calls for pessimism when optimism is excessive. But it also calls for optimism when pessimism is excessive.** ("The Limits to Negativism," October 15, 2008)

The swing of the pendulum to one extreme or another is a constant in the investment world: from optimism to pessimism, from credulous to skeptical, from sanguine to panicked, from wide-open capital markets to windows slammed shut, from more buyers than sellers to more sellers than buyers and, consequently, from overpriced to underpriced. Thus I was thrilled when an article by my friend James Grant provided a quotation that beautifully sums up the end result of this process:

> To the English economist Arthur C. Pigou is credited a bon mot that exactly frames the issue. **"The error of optimism dies in the crisis, but in dying it gives birth to an error of pessimism. This new error is born not an infant, but a giant."** (*The Wall Street Journal*, September 19, 2009, emphasis added)

Optimism thrives in bubbles. That's what they're built on, with optimism and rising prices reinforcing each other. Likewise, crises are brought on by an extreme turn toward pessimism. Falling prices and pessimism contribute to each other on the way down.

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In the years just before the crash, no view was considered too optimistic. There were few skeptics around to point out that a notion might be too good to be true. And then, as Pigou says, the opposite became true post-Lehman Brothers. There was no scenario of which someone wouldn't suggest, "But what if it's worse than that?" Now no idea was considered too negative to be true.

The error is clear. The herd applies optimism at the top and pessimism at the bottom. Thus, to benefit, we must be skeptical of the optimism that thrives at the top, and skeptical of the pessimism that prevails at the bottom.

Pigou makes an excellent additional point. Bubbles usually build gradually over time, the result of a steady accretion of logical basis, favorable developments, high returns being achieved, platitudes taken to extremes, willing suspension of disbelief, rising optimism and the recruitment of new buyers. But when the bubble's faulty underpinnings are exposed, it tends to collapse in a rush. The excess of pessimism does arrive quickly, "born a giant." Or as my partner Sheldon Stone puts it, "the air goes out of the balloon a lot faster than it went in."

A recent report by Ian Kennedy and Richard Riedel of Cambridge Associates, entitled "Behavioral Risk," provides an excellent explanation for this process and describes its effect:

> [During good times,] we suffer from what James Montier characterizes as "the illusion of control: the belief that if things go wrong, we will be able to sort them out." When that illusion is shattered during a selling panic, we don't know where to turn or what to think. . . .
>
> What happens when we humans (and, indeed, other animals) are slammed by shock? Unless trained otherwise, our instincts tell us to retreat, conserve, seek the comparative safety of groups, and search for a path out of danger. These are ancient survival instincts, hard-wired. Slammed by *financial* shock, the same instincts result in heightened risk aversion (gimme cash!), a dramatic foreshortening of our normal investment time horizon, an overwhelming impulse to flee with the herd, a tendency to extrapolate current trends all the way to Armageddon . . .
>
> In times of crisis, when risk aversion spikes, panicked investors tend to stampede for the exits. The temptation to join them is well-nigh irresistible because the whole financial edifice seems to be collapsing. Carefully wrought models are rendered irrelevant overnight, as correlations converge on 1.0, and "fat tail" risk wags the dog. . . .
>
> **When markets are falling, we instinctively feel that risk is rising, and when markets are rising, that risk is ebbing. In the short term, this instinct may be right since markets often run on momentum in the short run. But for long-term investors it is dead wrong**. . . . **As equity markets plummet, investors' risk aversion rises even as the fundamental risk is in fact declining**. (emphasis added)

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In other words, our instincts and emotions conspire to make us do the wrong thing at the wrong time: to trust at the top and worry at the bottom, and to think something's riskier at $10 than it was at $100, as if the emotion-fed price decline is correct in suggesting that something's wrong.

Buy Low, Sell High

Of all the adages that bear on the events of this extreme cycle we're living through, the simple one just above – probably the first one any of us learned – is still the most important.

In my early years in this business, people who spent all their time on security selection were told that asset allocation can be more important. I'd like to nominate a third candidate for primacy: countercyclical behavior. Consider any intermediate-term period of 3-5 years or so in which the market pendulum makes a significant swing (and that's about all of them). The period 2004-08 presents a good example. Individual security selection had limited impact on the return from a diversified portfolio. Asset allocation mattered much more, but primarily because it determined your posture with regard to the market's swing. **By far the most pivotal thing is whether your investing was anti-cyclical or pro-cyclical. Did you buy more at the bottom or more at the top? Did you invest defensively at the top and aggressively at the bottom, or vice versa? In other words, did you buy low and sell high, or buy high and sell low?**

The Cambridge study describes the importance of resisting the cycle and acting counter to it. It also outlines the difficulty of doing so, and some of the reasons. But it is the most important thing. Did you participate in the errors of 2004-08 or resist? That's the key.

Resisting – and thereby achieving success as a contrarian – isn't easy. Things combine to make it difficult, including natural herd tendencies and the pain imposed by being out of step, since momentum invariably makes pro-cyclical actions look correct for a while. (That's why it's essential to remember that "being too far ahead of your time is indistinguishable from being wrong.") Given the uncertain nature of the future, and thus the difficulty of being confident your position is the right one – especially as price moves against you – it's challenging to be a lonely contrarian.

A few things that can help, however. First, after even a little time spent in the investment business, everyone should know that the herd is usually wrong at the extremes and pays dearly for its error. Second, some contrarians have records that are very impressive. And third, **an accurate reading of investor mood and behavior – perceptive inference of danger or opportunity based on what others are doing in the market – can give investors a good leg up toward being effective contrarians.**

I say we never know where we're going, but we sure as heck ought to know where we are. The cycle isn't unknowable or unbeatable. Touchstones like those enumerated above are there for everyone to see, but few people take full advantage. The key is to be among those who do.

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* * *

The philosopher Hannah Arendt wrote:

> . . . no matter how much we may be capable of learning from the past, it will not enable us to know the future. (*The Origins of Totalitarianism*, 1951)

We cannot know what the future holds, and history cannot tell us. But awareness of that limitation is a key lesson in itself. Mastering it increases our likelihood of investment success.

November 10, 2009

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Memo to: Oaktree Clients

From: Howard Marks

Re: So Much That's False and Nutty

As reported in *The New York Times* of May 5, Warren Buffett told the crowd at this year's Berkshire Hathaway annual meeting:

> There is so much that's false and nutty in modern investing practice and modern investment banking. If you just reduced the nonsense, that's a goal you should reasonably hope for.

As we look back at the causes of the crisis approaching its second anniversary – and ahead to how investors might conduct themselves better in the future – Buffett's simple, homespun advice holds the key, as usual. I agree that investing practice went off the rails in several fundamental ways. Perhaps this memo can help get it back on.

<u>The Lead-up: Progress and Missteps</u>

Memory dims with the passage of time, but when I think back to the investment arena I entered forty-plus years ago, it seems very different from that of 2003-07. Institutional investing was done mainly by bank investment departments (like the one I was part of), insurance companies and investment counselors – a pretty dull bunch. And as I like to point out when I speak to business school classes, "famous investor" was an oxymoron – few investment managers were well known, chosen for magazine covers or listed among the top earners.

There were no swaps, index futures or listed options. Leverage wasn't part of most institutional investors' arsenal . . . or vocabulary. Private equity was unknown, and hedge funds were too few and outré to matter. Innovations like quantitative investing and structured products had yet to arrive, and few people had ever heard of "alpha."

Return aspirations were modest. Part of this likely was attributable to the narrow range of available options: for the most part stocks and bonds. Stocks would average 9-10% per year, it was held, but we might put together a portfolio that would do a little better. And the admissible bonds were all investment grade, yielding moderate single digits.

We wanted to earn a good return, limit the risks, beat the Dow and our competitors, and retain our clients. But I don't remember any talk of "maximization," or anyone trying to "shoot the lights out." And by the way, no one had ever heard of performance fees. Quite a different world from that of today. Perhaps it would constitute a service if I pulled together a list of some of the developments since then:

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- In the mid-1960s, **growth investing** was invented, along with the belief that if you bought the stocks of the "nifty-fifty" fastest-growing companies, you didn't have to worry about paying the right price.
- The first of the **investment boutiques** was created in 1969, as I recall, when highly respected portfolio managers from a number of traditional firms joined together to form Jennison Associates. For the first time, institutional investing was sexy.
- We started to hear more about **investment personalities**. There were the "Oscars" (Schafer and Tang) and the "Freds" (Carr, Mates and Alger) – big personalities with big performance, often working outside the institutional mainstream.
- In the early 1970s, **modern portfolio theory** began to seep from the University of Chicago to Wall Street. With it came indexation, risk-adjusted returns, efficient frontiers and risk/return optimization.
- Around 1973, put and call **options** escaped from obscurity and began to trade on exchanges like the Chicago Board Options Exchange.
- Given options' widely varying time frames, strike prices and underlying stocks, a tool for valuing them was required, and the **Black-Scholes model** filled the bill.
- A small number of **leveraged buyouts** took place starting in the mid-1970s, but they attracted little attention.
- 1977-79 saw the birth of the **high yield bond market**. Up to that time, bonds rated below investment grade couldn't be issued. That changed with the spread of the argument – associated primarily with Michael Milken – that incremental credit risk could responsibly be borne if offset by more-than-commensurate yield spreads.
- Around 1980, **debt securitization** began to occur, with packages of mortgages sliced into securities of varying risk and return, with the highest-priority tranche carrying the lowest yield, and so forth. This process was an example of disintermediation, in which the making of loans moved out of the banks; 25 years later, this would be called the **shadow banking system.**
- One of the first "quant" miracles came along in the 1980s: **portfolio insurance**. Under this automated strategy, investors could ride stocks up but avoid losses by entering stop-loss orders if they fell. It looked good on paper, but it failed on Black Monday in 1987 when brokers didn't answer their phones.
- In the mid- to late 1980s, the ability to borrow large amounts of money through high yield bond offerings made it possible for minor players to effect buyouts of large, iconic companies, and "**leverage**" became part of investors' everyday vocabulary.
- When many of those buyouts proved too highly levered to get through the 1990 recession and went bust, investing in **distressed debt** gained currency.
- Real estate had boomed because of excessive tax incentives and the admission of real estate to the portfolios of S&Ls, but it collapsed in 1991-92. When the Resolution Trust Corporation took failed properties from S&Ls and sold them off, **"opportunistic" real estate** investing was born.
- Mainstream investment managers made the big time, with Peter Lynch and Warren Buffett becoming famous for consistently beating the equity indices.
- In the 1990s, **emerging market investing** became the hot new thing, wowing people until it took its knocks in the mid- to late 1990s due to the Mexican peso devaluation, Asian financial crisis and Russian debt disavowal.

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- **Quant investing** arrived, too, achieving its first real fame with the success of Long-Term Capital Management. This Nobel Prize-laden firm used computer models to identify fixed income arbitrage opportunities. Like most other investment miracles, it worked until it didn't. Thanks to its use of enormous leverage, LTCM melted down spectacularly in 1998.
- Investors' real interest in the last half of the '90s was in **common stocks,** with the frenzy accelerating but narrowing to **tech-media-telecom stocks** around 1997 and narrowing further to **Internet stocks** in 1999. The "limitless potential" of these instruments was debunked in 2000, and the equity market went into its first three-year decline since the Great Crash of '29.
- **Venture capital funds**, blessed with triple-digit returns thanks to the fevered appetite for tech stocks, soared in the late 1990s and crashed soon thereafter.
- After their three-year slump, the loss of faith in common stocks caused investors to shift their hopes to **hedge funds** – "absolute return" vehicles expected to make money regardless of what went on in the world.
- With the bifurcation of strategies and managers into "beta-based" (market-driven) and "alpha-based" (skill-driven), investors concluded they could identify managers capable of **alpha investing**, emphasize it, perhaps synthesize it, and "port" or carry it to their portfolios in additive combinations.
- **Private equity** – sporting a new label free from the unpleasant history of "leveraged buyouts" – became another popular alternative to traditional stocks and bonds, and funds of $20 billion and more were raised at the apex in 2006-07.
- Wall Street came forward with a plan to package prosaic, reliable home mortgages into **collateralized debt obligations** – the next high-return, low-risk free lunch – with help from tranching, securitization and selling onward.
- The key to the purported success of this latest miracle lay in **computer modeling**. It quantified the risk, assuming that mortgage defaults would remain uncorrelated and benign as historically had been the case. But because careless mortgage lending practices unknowingly had altered the probabilities, the default experience turned out to be much worse than the models suggested or the modelers thought possible.
- Issuers of **collateralized loan obligations** bought corporate loans using the same processes that had been applied to CDOs. Their buying facilitated vast issuance of syndicated bank loans carrying low interest rates and few protective covenants, now called **leveraged loans** because the lending banks promptly sold off the majority.
- Options were joined by futures and swaps under a new heading: **derivatives**. Heralded for their ability to de-risk the financial system by shifting risk to those best able to bear it, derivatives led to vast losses and something new: counterparty risk.
- The common thread running through hedge funds, private equity funds and many other of these investment innovations was **incentive compensation**. Expected to align the interests of investment managers and their clients, in many cases it encouraged excessive risk taking.
- Computer modeling was further harnessed to create **"value at risk"** and other risk management tools designed to quantify how much would be lost if the investment environment soured. This fooled people into thinking risk was under control – a belief that, if acted on, has the potential to vastly increase risk.

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At the end of this progression we find an institutional investing world that bears little resemblance to the quaint cottage industry with which the chronology began more than forty years ago. Many of the developments served to increase risk or had other negative implications, for investors individually and for the economy overall. In the remainder of this memo, I'll discuss these trends and their ramifications.

Something for Everyone

One thing that caused a lot of people to lose money in the crisis was the popularization of investing. Over the last few decades, as I described in "The Long View" (January 2009), investing became widespread. "Less than 10% of adults owned stocks in the 1950s, in contrast to 40% today." (*Economics and Portfolio Strategy*, June 1, 2009). Star investors became household names and were venerated. "How-to" books were big sellers, and investors graced the covers of magazines. Television networks were created to cover investing 24/7, and Jim Cramer and the "Money Honey" became celebrities in their own right.

It's interesting to consider whether this "democratization" of investing represented progress, because in things requiring special skill, it's not necessarily a plus when people conclude they can do them unaided. The popularization – with a big push from brokerage firms looking for business and media hungry for customers – was based on success stories, and it convinced people that "anyone can do it." **Not only did this overstate the ease of investing, but it also vastly understated the danger**. ("Risk" has become such an everyday word that it sounds harmless – as in "the risk of underperformance" and "risk-adjusted performance." Maybe we should switch to "danger" to remind people what's really involved.)

To illustrate, I tend to pick on Wharton Professor Jeremy Siegel and his popular book "Stocks for the Long Run." Siegel's research was encyclopedic and supported some dramatic conclusions, perhaps foremost among them his showing that there's never been a 30-year period in which stocks didn't outperform cash, bonds and inflation. This convinced a lot of people to invest heavily in stocks. But even if his long-term premise eventually holds true, anyone who invested in the S&P 500 ten years ago – and is now down 20% – has learned that 30 years can be a long time to wait.

The point is that not everyone is suited to manage his or her own investments, and not everyone should take on uncertain investments. The success of Bernard Madoff's Ponzi scheme shows that even people who are wealthy and presumed sophisticated can overlook risks. Might that be borne in mind the next time around?

At Ease with Risk

Risk is something every investor should think about constantly. We know we can't expect to make money without taking chances. The reason's simple: if there was a risk-

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free way to make good money – that is, a path to profit free from downside – everyone would pursue it without hesitation. That would bid up the price, bring down the return and introduce the risk that accompanies elevated prices.

So yes, it's true that investors can't expect to make much money without taking risk. But that's not the same as saying risk taking is sure to make you money. As I said in "Risk" (January 2006), if risky investments always produced high returns, they wouldn't be risky.

The extra return we hope to earn for holding stocks rather than bonds is called an equity risk premium. The additional promised yield on high yield bonds relative to Treasurys is called a credit risk premium. All along the upward-sloping capital market line, the increase in potential return represents compensation for bearing incremental risk. Except for those people who can generate "alpha" or access alpha managers, investors shouldn't plan on getting added return without bearing incremental risk. And for doing so, they should demand risk premiums.

But at some point in the swing of the pendulum, people usually forget that truth and embrace risk taking to excess. In short, in bull markets – usually when things have been going well for a while – people tend to say, "Risk is my friend. The more risk I take, the greater my return will be. I'd like more risk, please."

The truth is, risk tolerance is antithetical to successful investing. When people aren't afraid of risk, they'll accept risk without being compensated for doing so . . . and risk compensation will disappear. This is a simple and inevitable relationship. When investors are unworried and risk-tolerant, they buy stocks at high p/e ratios and private companies at high EBITDA multiples, and they pile into bonds despite narrow yield spreads and into real estate at minimal "cap rates."

In the years leading up to the current crisis, it was "as plain as the nose on your face" that prospective returns were low and risk was high. In simple terms, there was too much money looking for a home, and too little risk aversion. Valuation parameters rose and prospective returns fell, and yet the amount of money available to managers grew steadily. Investors were attracted to risky deals, complex structures, innovative transactions and leveraged instruments. In each case, they seemed to accept the upside potential and ignore the downside.

There are few things as risky as the widespread belief that there's no risk, because it's only when investors are suitably risk-averse that prospective returns will incorporate appropriate risk premiums. Hopefully in the future (a) investors will remember to fear risk and demand risk premiums and (b) we'll continue to be alert for times when they don't.

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Embracing Illiquidity

Among the risks faced by the holder of an investment is the chance that if liquidity has dried up at a time when it has to be sold, he'll end up getting paid less than it's worth. **Illiquidity is nothing but another source of risk, and it should be treated no differently**:

- All else being equal, investors should prefer liquid investments and dislike illiquidity.
- Thus, before making illiquid investments, investors should ascertain that they're being rewarded for bearing that risk with a sufficient return premium.
- Finally, out of basic prudence, investors should limit the proportion of their portfolios committed to illiquid investments. There are some risks investors shouldn't take regardless of the return offered.

But just as people can think of risk as a plus, so can they be attracted to illiquidity, and for basically the same reason. There is something called an illiquidity premium. It's the return increment investors should receive in exchange for accepting illiquidity. But it'll only exist if investors prefer liquidity. If they're indifferent, the premium won't be there.

Part of the accepted wisdom of the pre-crisis years was that long-term institutional investors should load up on illiquid investments, capitalizing on their ability to be patient by garnering illiquidity premiums. In 2003-07, so many investors adopted this approach that illiquidity premiums became endangered. For example, as of the middle of 2008, the average $1 billion-plus endowment is said to have had investments in and undrawn commitments to the main illiquid asset classes (private equity, real estate and natural resources) equal to half its net worth. Some had close to 90%.

The willingness to invest in locked-up private investment funds is based on a number of "shoulds." Illiquid investments should deliver correspondingly higher returns. Closed-end investment funds should call down capital gradually. Cash distributions should be forthcoming from some funds, enabling investors to meet capital calls from others. And a secondary market should facilitate the sale of positions in illiquid funds, if needed, at moderate discounts from their fair value. But things that should happen often fail to happen. That's why investors should view potential premium returns skeptically and limit the risk they bear, including illiquidity.

Comfortable with Complexity

Investors' desire to earn money makes them willing to do things they haven't done before, especially if those things seem modern and sophisticated. Technological complexity and higher math can be seductive in and of themselves. And good times and rising markets encourage experimentation and erase skepticism. These factors allow Wall Street to sell innovative products in bull markets (and only in bull markets). But these innovations can be tested only in bear markets . . . and invariably they are.

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Many of the investment techniques that were embraced in 2003-07 represented quantitative innovations, and people seemed to think of that as an advantage rather than a source of potential risk. Investors were attracted to black-box quant funds, highly levered mortgage securities critically dependent on computer models, alchemical portable alpha, and risk management based on sketchy historical data. The dependability of these things was shaky, but the risks were glossed over. As Alan Greenspan wrote in *The Wall Street Journal* of March 11:

> It is now very clear that the levels of complexity to which market practitioners at the height of their euphoria tried to push risk-management techniques and products were too much for even the most sophisticated market players to handle properly and prudently.

Warren Buffett put it in simpler terms at this year's Berkshire meeting. "**If you need a computer or a calculator to make the calculation, you shouldn't buy it**." And Charlie Munger added his own slant: "Some of the worst business decisions I've ever seen are those with future projections and discounts back. It seems like the higher mathematics with more false precision should help you, but it doesn't. They teach that in business schools because, well, they've got to do something."

To close on this subject, I want to share a quote I recently came across from Albert Einstein. I've often argued that the key to successful investing lies in subjective judgments made by experienced, insightful professionals, not machinable processes, decision rules and algorithms. I love the way Einstein put it:

> **Not everything that can be counted counts, and not everything that counts can be counted.**

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Relying on Ratings

My memos on the reasons for the crisis, like "Whodunit" (February 2008), show that there's more than enough blame to go around and lots of causes to cite. **But if you boil it down, there was one indispensable ingredient in the process that led to trillions of dollars of losses: misplaced trust in credit ratings.** The explanation is simple:

- Competitive pressure for profits caused financial institutions to try to keep up with the leaders. As is normal in good times, the profit leaders were those who used the most leverage.
- Thus institutions sought to maximize their leverage, but the rules required that the greatest leverage be used only with investments rated triple-A.
- A handful of credit rating agencies had been designated by the government as Nationally Recognized Statistical Rating Organizations, despite their highly imperfect track records.
- The people who guard the financial henhouse often have a tough time keeping up with the foxes' innovations. Whereas traditional bond analysis was a relatively

simple matter, derivatives and tiered securitizations were much more complex. This allowed rating agency employees to be manipulated by the investment banks' quantitatively sophisticated and highly compensated financial engineers.

- The rating agencies proved too naïve, inept and/or venal to handle their assigned task.
- Nevertheless, **financial institutions took the ratings at face value, enabling them to pursue the promise of highly superior returns from supposedly riskless, levered-up mortgage instruments. This deal clearly was too good to be true, but the institutions leapt in anyway.**

It all started with those triple-A ratings. For his graduation from college this year, Andrew Marks wrote an insightful thesis on the behavior that gave rise to the credit crisis. I was pleased that he borrowed an idea from "Whodunit": "if it's possible to start with 100 pounds of hamburger and end up selling ten pounds of dog food, 40 pounds of sirloin and 50 pounds of filet mignon, the truth-in-labeling rules can't be working." That's exactly what happened when mortgage-related securities were rated.

Investment banks took piles of residential mortgages – many of them subprime – and turned them into residential mortgage-backed securities (RMBS). The fact that other tranches were subordinated and would lose first allowed the rating agencies to be cajoled into rating a lot of RMBS investment grade. Then RMBS were assembled into collateralized debt obligations, with the same process repeated. In the end, heaps of mortgages – each of which was risky – were turned into CDO debt, more than 90% of which was rated triple-A, meaning it was supposed to be almost risk-free.

John Maynard Keynes said ". . . a speculator is one who runs risks of which he is aware and an investor is one who runs risks of which he is unaware." Speculators who bought the low end of the CDO barrel with their eyes open to the risk suffered total losses on a small part of their capital. But the highly levered, esteemed investing institutions that accepted the higher ratings without questioning the mortgage alchemy lost large amounts of capital, because of the ease with which they'd been able to lever holdings of triple-A and "super-senior" CDOs. Ronald Reagan said of arms treaties, "Trust, then verify." If only financial institutions had done the same.

The rating agencies were diverted from their mission by a business model that made them dependent on security issuers for their revenues. This eliminated their objectivity and co-opted them into the rating-maximization process. Regardless of that happening, however, it's clear that the stability of our financial institutions never should have been allowed to rely so heavily on the competence of a few for-profit (and far-from-perfect) rating agencies. **In the future, when people reviewing the crisis say, "If only they had . . . ," the subject will often be credit ratings. Bottom line: investors must never again abdicate the essential task of assessing risk. It's their number-one job to perform thorough, skeptical analysis.**

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The More You Bet . . .

If I had to choose a single phrase to sum up investor attitudes in 2003-07, it would be the old Las Vegas motto: "The more you bet, the more you win when you win." Casino profits ride on getting people to bet more. In the financial markets just before the crisis, players needed no such encouragement. They wanted to bet more, and the availability of leverage helped them do so.

One of the major trends embedded in the chronology on pages two and three was toward increasing the availability of leverage. Now, I've never heard of any of Oaktree's institutional clients buying on margin or taking out a loan to make investments. It might not be considered "normal" for fiduciaries, and tax-exempt investors would have to worry about Unrelated Business Taxable Income.

None of us go out and buy Intel chips, but we've all seen commercials designed to get us to buy products with "Intel inside." In the same way, **investors became increasingly able to buy investment products with leverage inside . . . that is, to participate in levered strategies rather than borrow explicitly to make investments**. Think about these elements from my earlier list of investment developments:

- Investors who would never buy stocks on margin were able to invest in private equity funds that would buy companies on leverage of four times or more.
- The delayed and irregular nature of drawdowns caused people who had earmarked $100 for private investment funds to make commitments totaling $140.
- Options, swaps and futures – in fact, many derivatives – are nothing but ways for investors to access the return on large amounts of assets with little money down.
- Many hedge funds used borrowings or derivatives to access the returns on more assets than their capital would allow them to buy.
- When people wanted to invest $100 in markets with skill-derived return bolted on, "portable alpha" had them invest $90 in hedge funds with perceived alpha and the rest in futures covering $100 worth of the passive market index. This gave them a stake in the performance of $190 of assets for every $100 of capital.

Clearly, each of these techniques exposed investors to the gains or losses on increased amounts of assets. If that's not leverage, what is? In fact, an article entitled "Harvard Endowment Chief Is Earning Degree in Crisis Management" in *The New York Times* of February 21 said of Harvard, "The endowment was squeezed partly because **it had invested more than its assets** . . ." (emphasis added). I find this statement quite remarkable, and yet no one has remarked on it to me.

It shouldn't be surprising that people engaging in these levered strategies made more than others when the market rose. But 2008 showed the flip side of that equation in action. **In the future, investors should consider whether they really want to lever their capital or just invest the amount they have**.

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Sharing the Wealth

Apart from the increasing use of leverage, another trend that characterized the five years before the crisis was the widespread imposition of incentive fees.

In the 1960s, at the start of my chronology, only hedge funds commanded incentive fees, and there were too few for most people to know or care about. But fee arrangements that can be simplified as "two-and-twenty" flowered with private equity in the 1980s, distressed debt, opportunistic real estate and venture capital funds in the 1990s, and hedge funds in the 2000s. Soon they were everyplace.

Here are my basic thoughts on this sort of arrangement. (Oaktree receives incentive compensation on roughly half its assets; my objection isn't with regard to the fees themselves, but rather the way they've been applied.)

- **It seems obvious that incentive fees should go only to managers with the skill needed to add enough to returns to more than offset the fees – other than through the mere assumption of incremental risk.** For example, after a high yield bond manager's .50% fee, a 12% gross return becomes 11.5% net. A credit hedge fund charging a 2% management fee and 20% of the profits would have to earn a 16.375% gross return to net 11.5%. That's 36% more return. **How many managers in a given asset class can generate this incremental 36% other than through an increase in risk? A few? Perhaps. The majority? Never.**

- **Thus, incentive fee arrangements should be exceptional, but they're not**. These fees didn't go to just the proven managers (or the ones whose returns came from skill rather than beta); they went to everyone. If you raised your hand in 2003-07 and said "I'm a hedge fund manager," you got a few billion to manage at two-and-twenty, even if you didn't have a record of successfully managing money over periods that included tough times.

- The run-of-the-mill manager's ease of obtaining incentive fees was enhanced each time a top manager capped a fund. As I wrote in "Safety First . . . But Where?" (April 2001), "When the best are closed, the rest will get funded."

- In fact, whereas two-and-twenty was unheard-of in the old days, it became the norm in 2003-07. This enabled a handful of managers with truly outstanding records to demand profit shares ranging up to 50%.

- Clients erred in using the term "alignment of interests" to describe the effect of incentive compensation on their relationships with managers. Allowing managers to share in the upside can bring forth best efforts, but it can also encourage risk bearing instead of risk consciousness. Most managers just don't have enough money to invest in their funds such that loss of it could fully balance their potential fees and upside participation. **Instead of alignment, then, incentive compensation must be viewed**

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largely as a "heads we win; tails you lose" arrangement. Clearly, it must be accorded only to the few managers who can be trusted with it.

- **Finally, the responsibility for overpaying doesn't lie with the person who asks for excessive compensation, but rather with the one who pays it.** How many potential LPs ever said, "He may be a great manager, but he's not worth that fee." I think most applied little price discipline, as they were driven by the need to fill asset class allocations and/or the fear that if they said no, they might miss out on a good thing (more on this subject later).

I'm asked all the time nowadays what I expect to happen with investment manager compensation. First, I remind people that what should happen and what will happen are two different things. Then I make my main point: there should be much more differentiation. **Whereas in past years everyone's fees were generous and pretty much the same, the post-2007 period is providing an acid test that will show who helped their clients and who didn't.** Appropriate compensation adjustments should follow.

Managers who actually helped their clients before and during this difficult period – few in number, I think – will deserve to be very well compensated, and their services could be in strong demand. The rest should receive smaller fees or be denied incentive arrangements, and some might turn to other lines of work. Oaktree hopes to be among the former group. We'll see.

<u>Ducking Responsibility</u>

The inputs used by a business to make its products are its costs. The money it receives for its output are its revenues. The difference between revenues and costs are its profits. At the University of Chicago, I was taught that by maximizing profits – that is, maximizing the excess of output over input – a company maximizes its contribution to society. This is among the notions that have been dispelled, exposing the imperfections of the free-market system. (Hold on; I'm not saying it's a bad system, just not perfect.)

When profit maximization is exalted to excess, ethics and responsibility can go into decline, a phenomenon that played a substantial role in getting us where we are. The pursuit of short-term profit can lead to actions that are counterproductive for others, for society and for the long run. For example:

- A money manager's desire to add to assets under management, and thus profits, can lead him to take in all the money he can. But when asset prices and risks are high and prospective returns are low, this clearly isn't good for his clients.
- Selling financial products to anyone who'll buy them, as opposed to those for whom they're right, can put investors at unnecessary risk.
- And cajoling rating agencies into assigning the highest rating to debt backed by questionable collateral can put whole economies in jeopardy, as we've seen.

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One of the concepts that governed my early years, but about which I've heard little in recent years, is "fiduciary duty." Fiduciary duty is the obligation to look out for the welfare of others, as opposed to maximizing for yourself. It can be driven by ethics or by fear of legal consequences; either way, it tends to cause caution to be emphasized.

When considering a course of action, we should ask, "Is it right?" Not necessarily the cleverest practice or the most profitable, but the right thing? The people I think of perverting the mortgage securitization process never wondered whether they were getting an appropriate rating, but whether it was the highest possible. Not whether they were doing the right thing for clients or society, but whether they were wringing maximum proceeds out of a pile of mortgage collateral and thus maximizing profits for their employers and bonuses for themselves.

A lot of misdeeds have been blamed on excessive emphasis on short-term results in setting compensation. The more compensation stresses the long run, the more it creates big-picture benefits. Long-term profits do more good – for companies, for business overall and for society – than does short-term self-interest.

Focusing on the Wrong Risk

The more I've thought about it over the last few months, the more I've concluded that investors face two main risks: (1) the risk of losing money and (2) the risk of missing opportunity. Investors can eliminate one or the other, but not both. More commonly, they must consider how to balance the two. How they do so will have a great impact on their results. This is the old dilemma – fear or greed? – that people talk about so much. It's part of the choice between offense and defense that I often stress (see, for example, "What's Your Game Plan?" September 2003).

The problem is that investors often fail to strike an appropriate balance between the two risks. In a pattern that exemplifies the swing of the pendulum from optimistic to pessimistic and back, investors regularly oscillate between extremes at which they consider one to the exclusion of the other, not a mixture of the two.

One of the ways I try to get a sense for what's going on is by imagining the conversations investors are having with each other . . . or with themselves. In 2003-07, with most investors worried only about achieving returns, I think the conversation went like this: "I'd better not make less than my peers. Am I behaving as aggressively as I should? Am I using as much leverage as my competitor? Have I shifted enough from stocks and bonds to alternatives, or am I being an old fogey? If my commitments to private equity are 140% of the amount I actually want to invest, is that enough, or should I do more?"

Few people seemed to worry about losses. Or if they were worried, they played anyway, fearing that if they didn't, they'd be left behind. That must be what drove Citigroup's Chuck Prince when he said, "as long as the music's playing, you've got to get up and

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dance. We're still dancing." **The implication's clear: No worries; high prices. No risk aversion; no risk premiums**. Certainly that describes the markets in 2003-07.

In the fourth quarter of 2008, when asset prices were collapsing, I imagined a very different conversation from that of 2003-07, with most investors saying, "I don't care if I never make another dollar in the market; I just don't want to lose any more. Get me out!" Attitudes toward the two risks were still unbalanced, but in the opposite direction.

Just as risk premiums disappear when risk is ignored, so can prospective returns soar when risk aversion is excessive. In late 2008, economic fundamentals were terrible; technical conditions consisted of forced selling and an absence of buyers; and market psychology melted down. Risk aversion predominated, and fear of missing out disappeared. These are the conditions under which assets are most likely to be available for purchase at prices way below their fair value. They're also the conditions in which most people go on buying strikes.

In the future, investors should do a better job of balancing the fear of losing money and the fear of missing out. My response is simple: Good luck with that.

Pursuing Maximization

When markets are rising and investors are obsessed with the fear of missing out, the desire is for maximum returns. Here's the inner conversation I imagine: "I need a return of 8% a year. But I'd rather have 10%. 14% would be great, and the possibility of 16% warrants adding to my risk. It's worth using leverage for a shot at 20%, and with twice as much leverage, I might get 24%."

In other words, more is better. And of course it is . . . except that to pursue higher returns, you have to give up something. That something is safety. But in hot times, no one worries about losing money, just missing out. So they try to maximize.

There should be a point at which investors say, "I need 8%, and it would be great if I could get 16%. But to try, I would have to do things that expose me to excessive loss. I'll settle for a safer 10% instead." **I've labeled this concept "good-enough returns**." **It's based on the belief that the possibility of more isn't always better. There should be a point at which investors decline to take more risk in the pursuit of more return, because they're satisfied with the return they expect and would rather achieve that with high confidence than try for more at the risk of falling short (or losing money).**

Most investors will probably say that in 2003-07, they didn't blindly pursue maximization; it was the other guys. But someone did it, and we're living with the consequences. **I like it better when society balances risk and return rather than trying to maximize. Less gain, perhaps, but also less pain.**

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"Apropos of nothing," as my mother used to say, I'm going to use the opportunity provided by this memo to discuss market conditions and the outlook. On the plus side:

- We've heard a lot recently about "green shoots": mostly cases where things have stopped getting worse or the rate of decline is slowing. A few areas have shown actual improvement, such as consumer confidence and durable goods orders. It's important when you consider these improvements, however, to bear in mind that when you get deep into a recession, the comparisons are against depressed periods, and thus easier.
- It's heartening to see the capital markets open again, such that banks can recapitalize and borrowers can extend maturities and delever. Noteworthily, Michael Milken and Jonathan Simons wrote in *The Wall Street Journal* of June 20 that, "Global corporations have raised nearly $2 trillion in public and private markets this year . . ."
- Investor opinion regarding markets and the government's actions has grown more positive, and as Bruce Karsh says, "Armageddon is off the table." (He and I both felt 6-9 months ago that a financial system meltdown absolutely couldn't be ruled out.)

These positives are significant, but there also are many unresolved negatives:

- Business is still terrible. Sales trends are poor. Where profits are up, it's often due to cost-cutting, not growth. (Remember, one man's economy measure is another's job loss – not always a plus for the overall picture.)
- Unemployment is still rising, and with incomes shrinking, savings rising as a percentage of shrinking incomes, and credit scarcer, it's hard to see whose spending will power a recovery.
- The outlook for residential and, particularly, commercial real estate remains poor, with implications for further write-offs on the part of the banks. Ditto for credit card receivables.
- Many companies are likely to experience debt refinancing challenges, defaults, bankruptcies and restructurings.
- Developments such as rising interest rates and rising oil prices have the power to impede a recovery.
- Finally, no one can say with confidence what will be the big-picture ramifications of trillions of dollars of federal deficit spending, or the states' fiscal crises.

I'm not predicting that these things will turn out badly, merely citing potential negatives that may not be fully reflected in today's higher asset prices. My greatest concern surrounds the fact that we're in the middle of an unprecedented crisis, brought on by never-seen-before financial behavior, against which novel remedies are being attempted. And yet many people seem confident that a business-as-usual recovery lies ahead. They're applying normal lag times and extrapolating normal decline/recovery relationships. **The words of the late Amos Tversky aptly represent my view: "It's frightening to think that you might not know something, but more frightening to**

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think that, by and large, the world is run by people who have faith that they know exactly what's going on."

Peter Bernstein, a towering intellect who sadly passed away a month ago, made some important contributions to the way I think about investing. Perhaps foremost among them was his trenchant observation that, "Risk means more things can happen than will happen." **Investors today may think they know what lies ahead, but they should at least acknowledge that risk is high, the range of possibilities is wider than it was ever thought to be, and there are a few that could be particularly unpleasant.**

Unlike 2003-07 when no one worried about risk, or late 2008 when few investors cared about opportunity, the two seem to be in better balance given the revival of risk taking this year. Thus the markets have recovered, with most of them up 30% or more from their bottoms (debt in December and stocks in March).

If you and I had spoken six months ago, we might have reflected on the significant stock market rallies that occurred during the decade-long Great Depression, including a 67% gain in the Dow in 1933. How uncalled-for those rallies appear in retrospect. But now we've had one of our own.

Clearly, improved psychology and risk tolerance have played a big part in the recent rally. These things have strengthened even as economic fundamentals haven't, and that could be worrisome. (On June 23, talking about general resilience – not investor attitudes – President Obama said the American people ". . .are still more optimistic than the facts alone would justify.") On the other hand, there's good reason to believe that at their lows, security prices had understated the merits. So are prices ahead of fundamentals today, or have they merely recovered from "too low" to "in balance"? There's no way to know for sure.

Unlike the fourth quarter of last year – when assets were depressed by terrible fundamentals, technicals and psychology – they're no longer at giveaway prices. Neither are they clearly overvalued. Maybe we should say "closer to fair."

With price and value in reasonable balance, the course of security prices will largely be determined by future economic developments that defy prediction. Thus I find it hard to be highly opinionated at this juncture. Few things are compelling sells here, but I wouldn't be a pedal-to-the-metal buyer either. On balance, I think better buying opportunities lie ahead.

July 8, 2009

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Memo to: Oaktree Clients

From: Howard Marks

Re: Will It Work?

The other day, my son Andrew – college senior and credit-analyst-to-be – asked whether I think Treasury Secretary Geithner is doing the right things. As has happened before, his question elicited a fatherly response that grew into this memo.

When you want a bridge built, you hire a civil engineer whose "calcs" will determine exactly how much concrete and steel should be used. Then it'll be sure to hold the weight of the cars you expect to cross it. And if you have to perform a task in carpentry, you can employ specialized tools developed and tested expressly for the job: esoteric things like miter boxes, routers and extractors.

One of the most important things to bear in mind today is that **economics isn't an exact science.** It may not even be much of a science at all, in the sense that in science, controlled experiments can be conducted, past results can be replicated with confidence, and cause-and-effect relationships can be depended on to hold. It's not for nothing that economics is called "the dismal science."

Solutions in economics aren't nearly as dependable as engineers' calculations, and there may not be a tool that's just right for fixing an economy. Of course, the toolbox offers lots of possibilities, including interest rate reductions; quantitative easing; tax cuts, rebates and credits; stimulus checks; infrastructure spending; capital injections; loans, rescues and takeovers; regulatory forebearances and on and on. **But no one should think there's a "golden tool," such that solving the problem is just a matter of figuring out which one it is and applying it.** Anyone who holds the problem solvers to that standard is being unfair and unrealistic. There are a number of reasons why, including these:

- Every situation is different, and none is exactly like any that has come before. That means fixed recipes can't work. Certainly this one has never been seen before.
- Most policy actions aren't all good or all bad. They merely represent imperfect compromises as to ideology, goals, problem solving and resource allocation.
- Economic problems are multi-faceted, meaning the solution for one aspect might not work on – and in fact might exacerbate – another aspect.
- Economies are dynamic, and the problems are moving targets. The environment changes constantly, rather than sitting still and waiting for a solution to work.
- **The main ingredient in economics is psychology, and the workings of psychology clearly can't be fully known, controlled or fixed.**

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Here's how Thomas Friedman put it in *The New York Times* of January 31:

> Everyone is looking for the guy – the guy who can tell you exactly what ails the world's financial system, exactly how we get out of this mess and exactly what you should be doing to protect your savings. . . . But here's what's really scary: the guy isn't here. He's left the building. . . .
>
> There is no magic bullet for this economic crisis, no magic bailout package, no magic stimulus. We have woven such a tangled financial mess with subprime mortgages wrapped in complex bonds and derivatives, pumped up with leverage, and then globalized to the far corners of the earth that, much as we want to think this will soon be over, that is highly unlikely.

The "I know" school (which first appeared in a memo in 2001) is still making predictions. Statistical comparisons are being made to past recessions and solutions extrapolated from those experiences. Thus it's the consensus of this school that the recovery will start during the first quarter of 2010. I also see people projecting a stock market rebound based on the average time between past declines and the recoveries therefrom.

I think it's a mistake to hold confident opinions about the events of today. Instead, I think this is a great time to reaffirm faith in the "I don't know" school, of which I'm a card-carrying member. No one should feel certain they know what's going to unfold, or when. **The only things we have to fall back on at this juncture are intrinsic value, company survival and our own staying power as investors. Of course, even these things mean we have to make judgments about what the future is likely to look like. That requirement, in turn, means nothing can be approached with complete safety or certainty. Nevertheless, we can take action if we think those three elements will be present under most circumstances. That's the right mindset for today.**

Harder Than Sudoku

The impossibility of reaching into the economic toolbox for that one perfect tool is easily illustrated with a list of some of the challenges present today. For a learning exercise, skip today's Sudoku or crossword puzzle and take a crack at resolving these dilemmas:

- Consumer confidence and spending are weak. We want to stimulate, but we don't want to replace weakness with hyperinflation.
- We're willing to drop fiscal discipline in favor of stimulus through deficit spending, but we don't want to scare away offshore investors from the Treasury securities we'll issue to fund our deficits.
- We're willing to distribute stimulus checks, but we seem unable to make frightened individuals spend the money rather than save it.
- In fact, we know consumers got into trouble by spending more than they earned, and

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now they should build some savings. But whereas in the recent past consumer spending grew faster than incomes, a rising savings rate means spending would grow slower than incomes, just at a time when incomes are falling and spending is needed.

- Likewise, with tax revenues down, states and cities have to balance their budgets. One way to do so is to raise income tax and sales tax rates, but this will further depress local economies and increase the burden on their beleaguered citizens.
- We want to recapitalize the banks, but we don't want to reward past mistakes.
- We're thinking about buying the banks' "toxic" assets. But if we pay above-market prices, that's a subsidy to the reckless (see above), and if we pay market or below-market prices, that will further erode bank capital through write-downs.
- We know suspending mark-to-market accounting would end write-downs, but doing so might also reduce confidence in balance sheets and postpone the day of reckoning needed for our financial institutions to reach bottom and recover.
- We want the banks to lend, but we can't – and shouldn't – make them extend loans to non-creditworthy borrowers.
- We want to reduce the incidence of home foreclosure, but we don't want to reward people who speculated by buying multiple homes or lied on mortgage applications. And we'd rather not treat people who bought more house than they could afford better than those who acted prudently.
- We want to make mortgage relief available to those who are unable to service their mortgages, but we don't want to give people incentives to stop making payments.
- We're considering letting bankruptcy judges reset mortgage contracts, but we don't want to tell lenders that loan contracts are no longer sacrosanct, which certainly would deter them from making new loans.
- We don't want the depressant impact of auto companies going bankrupt and suppliers and dealers following suit. But we also don't want to pump money into the industry unless we're confident it can produce good cars at competitive prices.
- We want to see the auto industry "rationalized," but that means seeing people lose their jobs or have their paychecks reduced, which would spread pain, put stress on benefit funds, and cut into GDP.
- We want taxpayer-supported automakers to use American steel, but (assuming it's more expensive than imported steel) that will either (a) raise car prices, making cars more expensive for hard-pressed buyers and making the Big 3 less competitive, or (b) require the companies to eat the difference, making it harder for them to achieve profitability.
- We want to curb speculation in derivatives, but we don't want to make it harder for businesses, farmers, insurers and investors to legitimately hedge risk.
- In fact, we want to prevent excesses on the part of business, but most people don't think it's a good idea to nationalize companies or have the government tell them how to operate.

It's abundantly clear from this list – and it's only a partial list – that solving the current problem will require compromises and a combination of disparate elements. Some will work, while others will fail and have to be replaced. And some will work with regard to one facet of the problem but aggravate another. Lastly, no one should think that even a wise combination will produce quick results.

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Regulating Excess Compensation

Some of the excesses the government wants to stop are in the area of compensation at rescued banks. Excessive compensation seems to have a lot in common with hard-core pornography: As Potter Stewart, Associate Justice of the United States Supreme Court, wrote about the latter, it's hard to define but "I know it when I see it."

It's easy to react adversely when an institution that lost billions and needed a taxpayer bailout is seen paying millions or billions in executive bonuses. But how do we define excessive compensation, and what should be done about it? **More importantly, how do we make sure the cure won't be worse than the disease?**

On February 14, *The Wall Street Journal* reported that,

> The giant stimulus package that cleared Congress Friday includes a last-minute addition that restricts bonuses for top earners at firms receiving federal cash . . . The most stringent pay restriction bars any company receiving funds from paying top earners bonuses equal to more than one-third of their total annual compensation.

Some limitation on compensation at taxpayer-supported institutions seems reasonable and unavoidable. But is this provision a good thing? Here are some of the problems:

- It doesn't limit compensation, just bonuses.
- **Bonuses – especially if tied to achievements – should be preferable to high salaries from the point of view of shareholders and taxpayers**. In fact, it was just a few years ago that federal legislation created a preference for incentive compensation tied to benchmarks.
- An executive with a $1 million salary is in compliance with this restriction if he receives a bonus of $500,000. But one who's paid $250,000 is in violation if he receives a bonus of $200,000. Should the taxpayer prefer the former to the latter?
- Past challenges, like mobilizing industry for World War II, were met by recruiting "dollar-a-year" leaders. **One hope here might be that able businesspeople will come forward to work for nothing but a big success fee**. Citigroup CEO Vikram Pandit is receiving a salary of $1. Should we really limit his bonus to 50 cents?
- **The new law will limit bonuses at taxpayer-assisted banks, not all banks. Will that doom the rescued banks to second-rate management? And thus second-rate profitability? Is that desirable?**
- **Bank managements and boards may want to avoid this limitation, and to do that they may turn down or rush to repay federal money. Doing so may reduce the banks' capital, weakening them and inhibiting their ability to lend.**
- Even the biggest losers among the banks had some profitable units and excellent managers. Do we want the weak institutions to lose these to their stronger peers because they can't pay competitively?
- **Does the fact that some bank managers made grave mistakes in recent years mean no bank executives can be deserving of high compensation? Does the**

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government really want to stigmatize the field of banking and chase able executives from it to industries where compensation is unregulated?

- The last time I saw legislation with near-unanimous appeal on a corporate-behavior issue was in 2002, after the Enron scandal. American business is still suffering from some of Sarbanes-Oxley's less-well-conceived provisions.

Observers are disappointed when recovery plans aren't announced quickly or in detail. Yet here's a provision that was inserted quickly and in detail, and it doesn't do a lot to advance the ball. Bottom line: a quick fix will prove hard to come by.

Who's Right?

My mother used to tell a story about the *shtetls* – villages – in the old country where disagreements were settled by the rabbi. In one, an argument was raging with no possible grounds for compromise. The villagers brought the two parties to the rabbi. "Tell your side," the rabbi said to one fellow, and he did. "**You're right**," the rabbi declared.

One of the bystanders piped up: "You can't tell him he's right, rabbi; you haven't heard the other side of the story." So the rabbi told the other party to tell his side, and he did. His story was the polar opposite of the other party's. "**You're right**," said the rabbi.

"Hold on, rabbi," a villager said, "the first guy told his story and you said he was right. Then the other guy told his story – different in every regard – and you said he was right. They both can't be right." "**And you're right**," said the rabbi.

The current disagreement over bank nationalization shows that (a) there can be valid arguments on both sides of an issue and (b) it can be hard to figure out who's right. Here are a few of the pros and cons as advanced by *The Wall Street Journal* on February 24:

> **What are the pluses to nationalizing firms?**
>
> Some banks are bleeding slowly toward insolvency. Nationalizing them promptly would allow the government to wipe out the most toxic assets, reorganize what is left and sell the remains to private investors. On a broader front, nationalization could help heal the banking system and encourage the remaining firms to boost lending.
>
> **What are the minuses?**
>
> Investors in the nationalized bank would likely be wiped out. And nationalizing even one or two banks could create a chain reaction of failing confidence. . . .
>
> Nationalization would also be expensive and complicated, taxing a bureaucracy that isn't set up to operate mega-firms. And while the goal of

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> nationalization may be to return companies to private hands, the temptation to run them for political purposes would be immense.

Obviously, there are arguments on both sides.

One Proposal

The other night, I had dinner with my friend Richard Ressler, principal and founder of CIM Group. He has an idea as to how things can be fixed (as usual), and it's a pretty good one. I'll summarize below his thoughts on the banking industry:

- There are banking institutions which, because of their magnitude and significance, should be supported through deposit insurance, government guarantees and rescues.
- These banks should engage only in the prosaic acts of accepting deposits and making loans. They should not take on ultra-high leverage or make exotic investments. And they shouldn't do business through unregulated, off-balance-sheet subsidiaries.
- Institutions that wish to do things that are off-limits to these banks should do so, but without the benefit of government protection. If they want to take on 30-times leverage and pursue proprietary profits, they should bear the consequences themselves.
- Thus banking and risky investing should be separated.

In *The New York Times* of February 2, Professor Paul Krugman of Princeton argued that we have to avoid "lemon socialism: taxpayers bear the cost if things go wrong, but stockholders and executives get the benefits if things go right." One way to prevent this, as Richard suggests, is to make sure government support and high-octane risk taking don't take place in the same firms.

I've been told it isn't his, but a saying widely attributed to Mark Twain seems to be on the mark: "History doesn't repeat itself, but it does rhyme." There's no need to invent the mechanism through which to accomplish the above; we can look to history and gain inspiration from the Glass-Steagall Act.

After the Great Crash, congressional committees investigated its causes, some of which remind one of today's. The result was this 1933 law, which mandated that banking be separated from investment banking and investment services. It's far from irrelevant to the current situation that Glass-Steagall's powers ended in 1999, when key parts were repealed by the Gramm-Leach-Bliley Act. This new law had the goal of encouraging competition in banking, investment services and insurance, by permitting common ownership by financial conglomerates.

Protecting society against risky investment activities on the part of government-insured institutions is a good thing. And competition in providing financial services is a good thing. But the two goals can be in conflict and have to be balanced, and the consensus as to which should prevail will oscillate from time to time. **So in addition to**

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there not being perfect solutions, there also may not be permanent solutions. That's why crises will recur and history will continue to rhyme.

Politics as Usual

Few phrases strike terror in the hearts of businesspeople and many just-plain-citizens more than the three little words that are the title of this section. The other day, a friend with high-up experience explained the facts of life in Washington. He organized his observations into the "Three P's."

- **Policy** is fashioned through intellectual debate conducted on a high plane. Well-meaning people can disagree, but policy analysis follows from facts and underlying ideology in a relatively straightforward way.
- **Process** is the mechanism through which policy is turned into action. It is complex and arcane and the exclusive province of people with experience in Washington.
- **Politics** shapes the law that policy becomes. My friend had lots of words for it, but the one that stood out to me was "distasteful."

As an aside, my friend laid out an important difference between government and business, in which he's also highly experienced. **In business, he says, everyone's main goal is the success of the company.** Contributing to the success of the company enables an individual to demonstrate ability and thus rise in the organization. Success for the company creates a pool of profits from which the individual can be well paid. It also amounts to a "win" for a team of which every person wants to be a member.

But in government, success is hard to measure, difficult to connect to any one individual's contribution, and slow in coming. Thus it's hard to view success for the government as constituting elected officials' primary motivation. Instead, the most important thing is getting re-elected. That personal, short-term consideration can have nothing to do with the long-term well-being of the nation. This is especially true in the House of Representatives, he says, where two-year terms mean the members are never done running for re-election.

Despite the crisis facing the country and the crying need for prompt action, we're seeing a good dose of politics as usual. YouTube provides an up-close look at this stuff. It also gives politicians the audience many seem to crave.

Today a lynch-mob attitude prevails toward bankers, mortgage lenders and credit-rating agencies. I'm not saying a lot of it isn't deserved, but it still can be overdone. It's always good political theater to pile on a purported villain, whether through a perp-walk for handcuffed inside traders in 1986 or a televised congressional hearing for bankers in 2009.

Check out Congress's grilling of bankers on YouTube and you'll see what I think is vilification and *ad hominem* attack ("appealing to one's prejudices, emotions, or special

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interests rather than to one's intellect or reason" – Random House Dictionary) intended for public consumption. One congressman told Vikram Pandit, Citibank's CEO, he was amazed by a deal the bank had made: "The government gets $7 billion in preferred stock and the government's on the hook for $250 billion of losses. . . . You tell me, Mr. Pandit: where can I get a deal like this?" Pandit explained that it was insurance: for a premium of $7 billion, Citibank got a policy covering $301 billion of mortgage securities, with Citi taking the first $30 billion of losses and 10% of any losses beyond that.

Should it come as a surprise that an insurance policy costs significantly less to buy than the amount of risk assumed by the insurer? If it didn't, why would anyone buy one? Under this policy, Citi will lose money if there aren't $38 billion in losses (in which case Citi would receive nothing on the first $30 billion but 90% of the next $8 billion, so proceeds would be equal to the $7 billion premium it had paid). Was this deal really such a giveaway? And should the Congressman really be surprised to learn the government has a preference for seeing Citi survive and is willing to cut it a good deal?

On the campaign trail and in victory, President Obama called for non-partisanship and united action. With Democrats controlling the White House and Congress, to him that means Republicans should vote in favor of solutions crafted primarily by Democrats. So far, it's not happening. On the stimulus package, only three of the 217 Republican votes in Congress – just over one percent – were cast with the Democratic majority. (And only seven of the 308 Democratic votes went with the Republicans.) Not much aisle crossing in either direction. Of course, there are lots of reasons why broad agreement is rarely seen:

- Genuine **ideological differences** exist between individuals and between parties. Some want an expanded government to fix problems, and others prefer to rely on free markets to do so. Some view increased government spending as holding the key to the solution, and others prefer to reduce taxes. Some want to rescue weak financial institutions, and others want only the strongest, best-run to survive. Thus, failing to go along with the majority isn't necessarily a sign of a character flaw.

- There are also valid **differences in motivation**. The president is a national officer whose job it is to find an overall solution. But legislators are elected locally to represent local interests, and those can diverge from the interests of other regions or the nation. It shouldn't come as a surprise that they push for particular benefits for their constituents.

- Finally there comes **self-interest**. The truth is that each party has the underlying goal of wanting to elect its members and make the other side look bad. And even if it's needed to solve a grave national problem, a conservative answer might be repugnant and unacceptable to voters in a liberal district, and vice versa. Thus, doing the "right thing" can be tantamount to political suicide. How many elected officials will choose the latter?

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Today's Rhetoric

I think people in government who're addressing the situation have a difficult row to hoe:

- First and most immediately, they've had to play up the emergency in order to convince legislators (and the voters who put them in office) that the situation is dire and strong action is required. Thus we've heard words like "catastrophe," "collapse" and "worst since the Great Depression."

- Second, however, they're well advised to play down the threat. Franklin D. Roosevelt receives a lot of credit for having said, "The only thing we have to fear is fear itself." Given the crucial role of confidence in the functioning of an economy, it's not a great idea to spread panic. The rational response of frightened people is to save rather than spend, and to sell investments rather than buy, making things worse.

- Third, the President likely wants to create modest expectations. If there's a feeling that a valid response should work right away, slow progress will look like failure. No one wants consumers and businesses to further pull in their horns if economic recovery isn't forthcoming in 2009.

It's hard not to be sympathetic to this dilemma. It shows another of the ways in which conflicting goals have to be compromised in the real world of economics and politics.

The Bottom Line

There are so many moving parts to the current situation – and to its causes and what we hope will be its solution – that I've tried to boil things down to the essentials. **In order to right the system and get the economy moving forward again, I think three main things have to be accomplished:**

- **Our economy and its component parts have to be delevered;**
- **The vast destruction of capital has to be dealt with; and**
- **Confidence has to be restored.**

Here's how Paul Krugman described the challenge in *The New York Times* of February 16:

> For most of the last decade America was a nation of borrowers and spenders, not savers. . . .
>
> Yet until very recently Americans believed they were getting richer, because they received statements saying that their houses and stock portfolios were appreciating in value faster than their debts were increasing. . . .

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> Then reality struck, and it turned out that the worriers had been right all along. The surge in asset values had been an illusion – but the surge in debt had been all too real. . . .
>
> . . . this is a broad-based mess. Everyone talks about the problems of the banks, which are indeed in even worse shape than the rest of the system. But the banks aren't the only players with too much debt and too few assets; the same description applies to the private sector as a whole.
>
> As the great American economist Irving Fisher pointed out in the 1930s, the things people and companies do when they realize they have too much debt tend to be self-defeating when everyone tries to do them at the same time. Attempts to sell assets and pay off debt deepen the plunge in asset prices, further reducing net worth. Attempts to save more translate into a collapse of consumer demand, deepening the economic slump.
>
> . . . Government officials understand the issue: we need to "contain what is a very damaging and potentially deflationary spiral," says Lawrence Summers, a top Obama economic adviser.

Debt has to be reduced, and it's happening (other than at the federal level, of course). But the way it happens is usually unpleasant: bankruptcies, foreclosures and debt restructurings. **"Debt reduction" sounds like a good thing, but it's likely to be accompanied by the painful loss of the assets that had been bought with borrowed money.**

Many assets are worth far less than they used to be – that's one of the main reasons why the debt load has become unbearable and has to be reduced. **Investors, consumers, homeowners and financial institutions will have to rebuild their capital as they – and the economy – attempt to again move ahead.**

And confidence has to be rebuilt, too. **The willingness to borrow, spend and invest will rebound only when people believe incomes and asset values will resume their growth.**

In the past, we've seen a standard pattern unfold, with the best examples falling in the corporate debt arena. **Once denial ends and people accept capital destruction as a fact, restructurings can take place in which debt is discharged and ownership changes hands. The transition of assets to new owners, who may have lower cost bases and the ability to inject additional capital, brings the possibility of attractive returns, the onset of which restores interest in investing. It seems inescapable that this pattern will be a major feature of the next few years.**

The government's actions clearly are aimed at accomplishing the three things I say we need. Some will work, and some won't. **I believe that, eventually, the combination of things they try – along with the pattern described above and the positive bent that**

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underlies the free market system – will return us to an upward trajectory. It just won't be easy, quick or painless.

And that's why I think the investment decisions we make today must emphasize <u>value</u>, <u>survivability</u> and <u>staying power</u>. I readily acknowledge that assuring survival in bad times is inconsistent with return maximization in good times. Insistence on these three things won't produce the greatest rewards if the economy and markets surprise on the upside, but that's not my main concern.

Given the uncertainty present today, it's hard enough to find investments that can be relied on to deliver solid returns in good times but also assure survival in bad. **In that interest, we've always been willing to cede to others much of that part of the return distribution lying between "solid" and "maximum." This time is no different.**

March 5, 2009

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Memo to: Oaktree Clients

From: Howard Marks

Re: The Long View

Many of my memos over the last year and a half have touched on the developments in 2003-07 that brought on the current financial crisis. By now, everyone understands the role of innovation, risk tolerance and leverage in the boom that led to the bust, so I think it's now time to look back considerably further.

The Importance of Cycles

In my opinion, there are two key concepts that investors must master: value and cycles. For each asset you're considering, you must have a strongly held view of its intrinsic value. When its price is below that value, it's generally a buy. When its price is higher, it's a sell. In a nutshell, that's value investing.

But values aren't fixed; they move in response to changes in the economic environment. Thus, cyclical considerations influence an asset's current value. Value depends on earnings, for example, and earnings are shaped by the economic cycle and the price being charged for liquidity.

Further, security prices are greatly affected by investor behavior; thus we can be aided in investing safely by understanding where we stand in terms of the market cycle. What's going on in terms of investor psychology, and how does it tell us to act in the short run? We want to buy when prices seem attractive. But if investors are giddy and optimism is rampant, we have to consider whether a better buying opportunity mightn't come along later.

The Lessons – and Limits – of Experience

I feel good about having been aware of where we stood in terms of the market cycle and investor behavior over the last four or five years. There were memos that talked about low prospective returns and meager risk premiums ("Risk and Return Today," October 2004), repetition of past mistakes ("There They Go Again," May 2005), investor inattention to warning signs ("Hindsight First, Please," October 2005), and the rising willingness to accept lower returns and less safety ("The Race to the Bottom," February 2007). Importantly, these views were factored into Oaktree's actions, enabling us to make some good decisions on behalf of our clients.

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I recite these successes not for the purpose of self-congratulation, but to point out that while I was highly aware of the short-term cycle, I – like almost everyone else, it seems – failed to fully appreciate the big-picture peril implied by the level to which the cycle had risen. In short, I thought 2003-07 was like the other cycles I've lived through, just more so. I missed the fact that it was different not only in degree, but also in kind.

This episode is different because over the preceding decades, the accretion of progressively higher highs and higher lows – in a large number of phenomena – brought us to a macro-high that hadn't been witnessed for many years and held great danger . . . as we're seeing.

Forty years have passed since I first served as a summer trainee in First National City Bank's Investment Research Department. My experience in seeing investors punished in 1969-70, 1973-74, 1977, 1981, 1987, 1990, 1994 and 2000-02 is what enabled me to detect the excesses of 2003-07. But since I didn't live through the Great Depression or work through the full run-up to the painful 1970s, I didn't have the perspective needed to understand where those relatively short cycles of boom/bust/recovery were taking us.

Long-Term Trends

Looking back over my career, it's clear that the securities markets have been riding a number of salutary secular trends ("secular," as in "of or relating to a long term of indefinite duration" per *Webster's New Collegiate Dictionary*). Some of these actually began at the end of World War II and ran through 2007, for a total of more than six decades.

Macro Environment – The period following World War II was one of American dominance and prosperity. The U.S. benefited from the "baby boom," the fact that our shores hadn't been reached by the war, and the effective transition of our factories and labor force to peacetime use. We were aided by a modern infrastructure, strong education and healthcare systems, and gains in technology.

Corporate Growth – The last sixty years have seen strong growth in corporations and their profits. Especially in the early part of this period, the U.S. developed superior products, produced them very efficiently and found ready markets in the rest of the world. Gains in automation, information technology, management practices and productivity all contributed. Growth in sales was supported by strong consumer demand.

The Borrowing Mentality – As further discussed below, advances in financing – and greater acceptance of the use of debt – allowed companies to augment their growth rates and returns on capital and allowed consumers to increase consumption. In fact, over the last several decades, economic units of all sorts in the U.S. increased their use of debt. Consumers, businesses, governments and investors all wanted to borrow more, and the financial services industry developed products to accommodate them. Spending and

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investment was facilitated through the extension of credit at all levels, contributing to economic expansion but also sowing the seeds for the current situation.

Popularization of Investing – Back in 1968, working in investment management was no different from entering banking or insurance. Investing wasn't the high-profile area it's been the last two decades. "Famous investor" was an oxymoron; none were household names, like Warren Buffett, George Soros and Peter Lynch would become. Investment firms weren't the B-school employer of choice, and investment managers didn't dominate magazine covers and the top income brackets. But over the last forty years, increased attention was paid to equities, mutual funds, hedge funds and alternative niche markets. Even homes came to be viewed as investment vehicles.

Investor Psychology – Attitudes morphed over time. Instead of a generation scarred by the Great Depression, people became increasingly confident, optimistic and venturesome. Experience convinced prospective investors that stocks could be counted on for high returns. In the last few decades, there've been times when people concluded the business cycle had been tamed. During Alan Greenspan's reign, people came to believe inordinately in his ability to keep the economy growing steadily. And most recently, people swallowed the canard that innovation, financial engineering and risk modeling could take the uncertainty out of investing.

The developments enumerated above constituted a strong tailwind behind the economy and the markets over the last several decades, and they produced a long-term secular uptrend.

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Short-Term Cycles

Despite the underlying uptrend, there's been no straight line. The economy and markets were punctuated every few years by cyclical bouts of short-term fluctuation. Cycles around the trend line made for frequent ups and downs. Most were relatively small and brief, but in the 1970s, economic stagnation set in, inflation reached 16%, the average stock lost almost half its value in two years, and *Business Week* magazine ran a cover story trumpeting "The Death of Equities." No, my forty years haven't been all wine and roses.

From time to time we saw better economies and worse – slowdown and prosperity, recession and recovery. Markets, too, rose and fell. These fluctuations were attributable to normal economic cycles and to exogenous developments (such as the oil embargo in 1973 and the emerging market crisis in 1998). The S&P 500 had a few down years in the period from 1975 to 1999, but none in which it lost more than 7.5%. On the upside, however, 16 of those 25 years showed returns above 15%, and seven times the annual gain exceeded 30%.

Despite the ups and downs, investors profited overall, investing became a national pursuit, and America's richest man got that way by buying common stocks and whole companies. A serious general uptrend was underway, reaching its zenith in 2007.

<u>The Rest of the Elephant</u>

There's an old story about a group of blind men walking down the road in India who come upon an elephant. Each one touches a different part of the elephant – the trunk, the leg, the tail or the ear – and comes up with a different explanation of what he'd encountered – a tree, a reed, a palm leaf – based on the small part to which he was exposed. **We are those blind men. Even if we have a good understanding of the events we witness, we don't easily gain the overall view needed to put them together. Up to the time we see the whole in action, our knowledge is limited to the parts we've touched.**

Until mid-2007, my experience as a money manager had been limited to part of the long-term story. Perhaps **what looked like an underlying long-term uptrend should have been viewed instead as the positive part of a long-term cycle incorporating downs as well as ups.** Only when you step back from the beast can you gauge its full proportions.

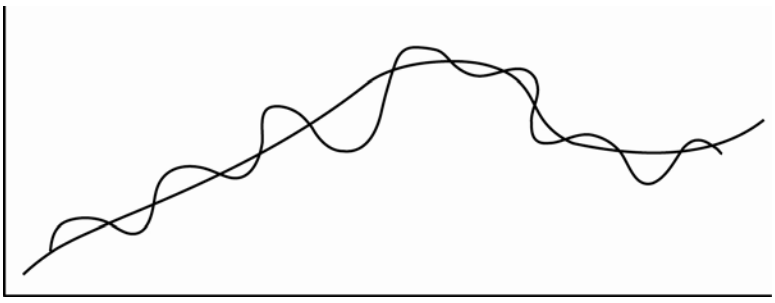

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Cycles in Long-Term Trends

The main thing I want to discuss in this memo is my realization that there are cycles in the long-term trend, not just short-term cycles around it, and we've been living through the positive phase of a big one.

Over the last few decades, investors have reacted to the generally positive economic environment by taking actions reflecting increased optimism and trust, as well as reduced caution and conservatism. **In hindsight, we can see nearly uninterrupted growth in behavior that (a) relied on a continuation of the favorable underlying trends and thus (b) can be described as increasingly bullish.**

Looking for just one word, I'd say there was a steady rise in "willingness." Over my forty years in business – but probably carrying on from the end of the World War II – I believe investors grew increasingly willing . . .

- to forget old-fashioned concepts like "saving for a rainy day," fiduciary responsibility and preservation of capital,
- to pursue capital appreciation rather than settle for more modest, steady income,
- to invest on the basis of growth potential rather than existing value,
- to trust that stocks would provide superior performance (see separate section below),
- to drastically reduce the representation of high grade bonds in portfolios,
- to move away from stocks and bonds and toward more exotic investments,
- to believe that diversification into risky assets would increase return more than risk,
- to pursue profit through proprietary investing if you were a bank or investment bank, and for endowments to try to be "more like Yale,"
- to assume that markets would function smoothly even in tough times,
- to trust in markets to solve all problems, induce constructive behavior and efficiently allocate capital, allowing regulation to be reduced,
- to accept that, thanks to market efficiency, asset prices are always "right,"
- to trust in the Fed, Alan Greenspan and the ability to restrain cycles,
- to rely on quants and financial engineers, spreadsheets and risk modeling,
- to feel confident they had a good handle on what the future held,
- to believe in alpha, absolute return, widespread genius among money managers, free lunches, and superior asset classes regardless of how they're priced,
- to revere and trust money managers sporting good returns,
- to share investment gains with money managers, perhaps in ways that motivated them to take increased risk in pursuit of short-term profits,
- to view houses, art, jewelry and collectibles as financial assets,
- to believe that real estate prices couldn't go down,
- to treat investing as a national pastime via TV, magazines and books,
- to "buy the dips,"
- **to accept new paradigms,**
- **to relax diligence standards and forget to question skeptically,**

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- **to use past statistical averages – sometimes covering brief time periods – to gauge the safety of prospective investments,**
- **to partake in financial innovation and invest in things too complex or opaque to be understood,**
- **to believe that risk had been banished, most recently through securitization, tranching and decoupling,**
- **to forgo liquidity,**
- **to make increasing use of leverage (see separate section below),**
- **to finance investment activities with undependable capital: short-term borrowings and deposits, impermanent equity, and future cash receipts,**
- **to forget to worry and be risk-averse, and thus**
- **to accept additional risk at shrinking risk premiums.**

The "era of increasing willingness" carried many trends to higher highs. The last ten listed above were the prime ingredients giving rise to the current crisis. Together they produced an investment house of cards that was enormously dependent on continued prosperity, bullishness and easy money.

<u>Expansiveness</u>

In addition to "willingness," one of the most significant trends during the period under discussion has been a massive increase in "expansiveness," my new label for the desire to increase the ratio of activity to capital. If that sounds unfamiliar, the common term in America is "leverage," and in England it's "gearing."

My last memo was on the subject of leverage and its major role in the crisis we're all experiencing. Today's problems are largely a function of the high levels of leverage employed in 2003-07, but those levels were just the apogee of a progression that spanned decades.

Every business, government, non-profit organization or individual has a certain amount of equity capital, net worth or surplus. That capital, in turn, will support a certain level of activity: production and sales, lending, government action, charitable grants or consumption. **But over the last several decades, if you wanted to do more of these things than your capital permitted, you could borrow capital from someone else.**

Over the course of my lifetime, there have been extraordinary changes in the extent of borrowing:

- **Consumers** – When I went off to college 45 years ago, I paid for purchases with checks or cash, and I saved up coins for the payphone. "Travel and entertainment" cards like American Express and Diners Club were available only to those with top credit ratings, and the masses lived without credit cards until Citibank introduced The Everything Card (now MasterCard) around 1967. In the old days, consumers who lived beyond their incomes were often described as being "in debt." We don't hear

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that term anymore, since people with unpaid credit card balances and consumer loans are the rule, not the exception. As a result, consumer credit outstanding grew 260 times from 1947 to 2008, increasing from 4.2% of gross domestic product to 17.9%. (Federal Reserve data and Economagic)

- **Homeowners** – In the old days, homebuyers, having saved for years, usually put down 20% of the cost of a home and borrowed the rest through a thirty-year fixed-rate mortgage. They made payments until that debt was eliminated, and they held mortgage-burning parties to celebrate the event, which would enable them to retire mortgage-free. Only people who were "in trouble" took out second mortgages, perhaps to meet emergency expenses. All of these concepts went out the window in recent times, when down payments, fixed rates and paid-off mortgages became things of the past, replaced by 100% financing, adjustable rates, teasers and serial refinancings. Second mortgages were relabeled "home equity loans," little miracles that would let people draw out the inevitable appreciation in their homes, spend it, and end up with the same home and larger payments – perhaps just as interest rates moved up or as the borrowers hoped to be able to retire.

- **Corporations** – "In the beginning," corporate borrowing was most undemocratic. Prior to the late 1970s, only firms with investment-grade credit ratings of triple-B or better could publicly issue bonds. But that changed with the introduction of high yield bonds, an innovation permitting low-rated issuers to borrow at high interest rates. Before the advent of high yield bonds, companies could be acquired only by companies bigger than themselves. But with high yield bonds, small firms and even wealthy individuals could borrow enough to acquire corporate giants. This created the leveraged buyout industry. In recent years, not only was debt added to capital structures (particularly through buyouts), but equity was subtracted. Buyout companies used borrowed funds to dividend out their owners' equity and provide quick profits, and non-buyout companies bought back their shares, often using borrowed money. These activities substituted debt for equity in companies' capital structures, levering up their results and reducing their margin for error. In the current credit crisis, this has led to large-scale capital destruction.

- **Financial Institutions** – Over the decades in question, banks and investment banks moved away from working for interest, fees and commissions as lenders, advisers, brokers and agents. Instead, they went increasingly into positioning (buying or selling blocks of stock to accommodate clients when the market wouldn't take that side of a trade), proprietary trading (making investments for their own accounts, not on behalf of clients), and creating derivatives (sometimes ending up with a holding), all on the basis of increased leverage. "In 1980, bank indebtedness was equivalent to 21 percent of U.S. gross domestic product. In 2007 the figure was 116 percent. . . . It was not unusual for investment banks' balance sheets to be as much as 20 or 30 times larger than their capital, thanks in large part to a 2004 rule change by the Securities and Exchange Commission that exempted the five largest of those banks from the regulation that had capped their debt-to-capital ratio at 12 to 1." (*Vanity Fair*, December 2008)

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- **Governments** – Similarly, governments at all levels learned increasingly to spend borrowed money in addition to their revenues. Federal, state and local debt ballooned to facilitate both capital projects (reasonably) and deficit spending (less reasonably). The Federal debt grew from $1 trillion in 1980 to $11 trillion today. How? In 2003 and 2004, for example, the government spent $1.42 per $1 of income taxes. In this way, the U.S. became a debtor nation, dependent on bond buyers – particularly from abroad – to let it spend beyond its means. Likewise, state and local debt grew from $1.19 trillion in 2000 to $1.85 trillion in 2005, an average increase of 9.2% per year. In an extreme example of unwise innovation, much of the issuance of muni bonds was made possible because weak issuers could obtain bond insurance; few prospective investors, however, looked into the financial strength of the insurers.

- **Investors in General** – Fifty years ago, the main way investors expanded their activities was through the use of "margin," borrowing from their brokers to buy stock. Initial margin for new purchases was strictly limited to 100% (e.g., at most you could buy $2 worth of stock for every $1 of equity in your account). But Wall Street proved increasingly creative, and in the current decade it came up with products "with the leverage inside." These made much more than 100% leverage available to investors without any explicit borrowing. Hedge and arbitrage funds, collateralized loan obligations, collateralized debt obligations, leveraged buyout funds, credit default swaps and other derivatives; all of these delivered participation in highly leveraged investments without requiring the end investor to use margin or take out loans. In what approached a joke, the prim limit on margin was maintained even as regulators declined to apply any limits or regulation to these other investment structures, despite their ability to provide almost infinite leverage.

- **Institutional Investors** – Given their tax-exempt status, pension funds and charitable and educational endowments can't borrow to increase their returns. But they can (and did) make use of some of the strategies listed above. Institutional investors also employed "portable alpha," overlaying hedge fund investments with index futures to simulate more-than-100%-invested positions, and they overcommitted to private equity partnerships to ensure their capital would be fully deployed.

The use of borrowed money expanded at all levels over the last few decades. This occurred largely without changes in laws or institutions. Instead, the changes were in customs and attitudes, abetted by financial institutions' innovation of new products.

<u>Of all the investment adages I use, this one remains the most important: "What the wise man does in the beginning, the fool does in the end</u>." Practices and innovations often move from exotic to mainstream to overdone, especially if they're initially successful. What early investors did safely, the latecomers tried in 2003-07 with excessive leverage applied to overpriced and often inappropriate assets. As I wrote in "It's All Good" (July 2007), leverage was the "ketchup" of this period, used to make unattractive underlying investments appear tasty. The results have been disastrous.

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Here's another way to put it, from *The Wall Street Journal* of November 24,

> When it comes to booms gone bust, "over-investment and over-speculation are often important; but they would have far less serious results were they not conducted with borrowed money."

That statement wasn't made in reference to current events; that was Irving Fisher writing 76 years ago ("The Debt-Inflation Theory of Great Depressions," *Econometrica*, March 1933). Borrowed money lets economic units expand the scale of their activity. But it doesn't add value or make things better; it just makes gains bigger and losses more painful. There's an old saying in Las Vegas: "The more you bet, the more you win when you win." But they always forget to add ". . . and the more you lose when you lose."

In one of those beautiful phrasings that demonstrate his mastery of language, Jim Grant of *Grant's Interest Rate Observer* has described liquidity and leverage as **"money of the mind."** By this he means they're intangible and ephemeral, not dependable like assets or equity capital. Someone may lend you money one day but refuse to renew your loan when it comes due. Thus, **leverage is purely a function of the lender's mood.** The free-and-easy lending of 2003-07 has turned into an extreme credit crunch, and the unavailability of credit is both the root and the hallmark of today's biggest problems. **Those who expand the scope of their operations on the basis of borrowed money should always consider the possibility that lenders will change their mind.**

Use of Debt in the Corporate World

Note three things regarding debt. **First, all businesses borrow**. Debt is used broadly to finance things ranging from inventories to capital investment. If companies had to wait to get paid by buyers before ordering new goods to sell, business would go much slower. And if all their capital had to be equity, capital would be much more costly and companies would be much smaller. Borrowing makes the business world go 'round.

Second, debt is rarely repaid. Businesses rarely reduce their total indebtedness. Rather than being paid off, debt is simply rolled over. That makes the solvency of the borrowers contingent on the continuous availability of credit.

Third, given that the yield curve normally slopes upward, short-term borrowing is almost always the least expensive. That's what led First National City Bank to invent commercial paper in the 1960s, enabling companies to borrow at short-term rates through short-dated paper that would be renewed every month or so. The upward slope of the yield curve encourages people to borrow short even when investing long, resulting in economic maximization when they're able to roll over their debts but disaster when they aren't. (The recent failure of "auction-rate preferreds" was a good example of the folly of trying to game the yield curve by financing for the long term at short-term rates.)

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Here's what follows from the above:

- Most companies have debt, not just those that have made acquisitions or built plants. Companies borrow in the normal course of business.
- Many companies have heavy short-term borrowings and thus the need to deal with substantial maturities in the period immediately ahead.
- With the capital markets closed, not only will growth be difficult to finance, but significant defaults may also arise due to a widespread inability to refinance.

While I always hesitate to predict the future, I think there's a good chance the next year or so will be characterized by significant difficulty repaying and refinancing borrowings. It's worth noting in that context that "In November, there wasn't one sub-investment grade corporate bond issued, according to Reuters – the first such hiatus since March 1991." (*breakingviews.com*, December 3)

Attitudes Regarding Equities

One of the biggest changes in the past century – fully visible only to those who already were adults several decades ago or who've read about it – took place in terms of attitudes towards equities (or what we used to call common stocks).

Up until the middle of the last century, stocks were considered highly speculative, and bonds were the bedrock of most investment portfolios. Interestingly in that connection, it was reported recently that the S&P 500 now out-yields the 10-year Treasury for the first time in 50 years. **Until the 1950s, equities always provided higher current yields . . . for the simple reason that they had to. People invested primarily for yield, and riskier securities – stocks – would attract buyers only if they promised higher yields than bonds.**

This changed in the second half of the 20th century:

- Common stock investing was popularized; I believe Charlie Merrill of Merrill Lynch deserves a lot of the credit for this.
- Prior to some pioneering computer work at the University of Chicago in the 1960s, the historic returns on stocks had never been scientifically quantified. Then the Center for Research in Security Prices came up with the 9.2% compound annual return that fired many investors' appetites.
- The concept of growth-stock investing was popularized in the 1960s; I remember reading a broker's brochure about companies with exciting earnings growth. This led to the "nifty-fifty" investing craze, in which investors (and especially bank trust departments) bought the stocks of fast-growing companies regardless of valuation.

The equity boom burst in the 1970s. We experienced an oil embargo, a very serious recession, inflation rates ranging up to 16%, a 45% decline in the S&P 500 in 1973-74,

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and considerably larger losses in nifty-fifty stocks. The stock market stayed in the doldrums for years, brokers drove cabs (literally), and *Business Week* ended a dismal decade with its downbeat cover story on stocks.

In fact, the economy, markets and attitudes turned so negative for so long in the 1970s that rather than a ***downward cycle around* the long-term upward trend,** one might say the decade marked a ***downturn in* the long-term trend** (clearly there's no standard for these things). Regardless of what you call it, the decline was so big that it took almost eleven years for the Dow Jones Industrials to get back to the high it reached at the beginning of 1973.

But in 1982, stocks returned to what would be a 25-year bull market, and there arose an even greater cult of equities. Wharton Professor Jeremy Siegel wrote *Stocks for the Long Run*, showing there'd never been a long period in which stocks hadn't outperformed cash, bonds and inflation. Everyone concluded stocks were the asset class of choice and the ideal investment. "65/35" was the usual stock/bond balance in institutional portfolios, but eventually stocks became more heavily weighted, as strong performance in the 1980s and '90s further fired peoples' ardor and as stocks' long-term return was upgraded to 11%. **Few investors recognized that increasing past returns bode poorly – not well – for subsequent returns, or that common stock returns couldn't forever outpace the rate of growth in corporate profits.** In 1999, James Glassman chimed in with his book *Dow 36,000*, asserting that because stocks were such solid investments, equity risk premiums were higher than they should have been, meaning their prices were too low. That pretty much marked the long-cycle top.

When the "tech-media-telecom" bubble burst in 2000, stocks went into their first three-year decline in almost 70 years. The broad indices stabilized after 2002 and returned to their 1999 highs in 2007 but, wanting more than equities' unlevered return, investors shifted their focus to private equity and to equity hedge funds. All of this occurred just in time for the onset of the credit crisis. Last year's 38.5% decline in the S&P 500 was the biggest since 1931, zeroing out more than a decade of gains.

I wonder whether and to what extent equities will be returned to the pedestal of popularity. *The Wall Street Journal* put it aptly on December 22:

> One of the hallmarks of the long market downturns in the 1930s and the 1970s has returned: Rank-and-file investors are losing faith in stocks.
>
> In the grinding bear markets of the past, huge stock losses left individual investors feeling burned. Failures of once-trusted firms and institutions further sapped their confidence. Many disenchanted investors stayed away from the stock market, holding back gains for a decade or more.
>
> Today's investors, too, are surveying a stock-market collapse and a wave of Wall Street failures and scandals. Many have headed for the exits:

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> Investors pulled a record $72 billion from stock funds overall in October alone . . . .
>
> If history is any guide, they may not return quickly.

I want to make a heretical assertion: that equities aren't the greatest thing since sliced bread, but rather an asset class that can do well or poorly depending on how it's priced. Investors fell into a trap at the 1999 peak because they were seduced by stocks' long-term average return in addition to their recent gains. Rather than ask "What's been the historic return on stocks?" they should have asked "What's been the historic return on stocks if you bought them when the average p/e ratio was 29 (which it was at the time)?" Once again, investors came to believe in the magic asset class and forgot the importance of reasonable valuation.

The truth is, rather than being superior, equities are an inferior asset class . . . structurally, that is. Unlike debt, they don't promise annual interest or repayment at maturity, and they don't carry a senior claim against the company's assets in case of trouble. All they offer is an uncapped participation in profits. Debt promises a stream of contractual payments, and common stocks provide the residual that remains after those payments have been made. **Thus equities' higher historic average and potential future returns should be viewed as nothing more than compensation for their inferior status and greater volatility. They're not magic, just securities that can perform well when they're priced right for the coming profits. If sluggish growth lies ahead for the economy in the next few years, it's no given that common stocks will outperform corporate bonds.**

<u>Go Around, Come Around</u>

Mark Twain is alleged to have said "History doesn't repeat itself, but it does rhyme." Mistakes follow long-standing patterns, but applied in new ways. Thus it's worth noting a few of the many ways in which events of the pre-crisis years are reminiscent of the Roaring Twenties that preceded the Great Crash.

- In the 1920s, stock manipulators banded together to force down the price of stocks through non-stop short selling. The damage caused by these "bear raids" led to implementation of the "uptick rule," under which shares could be shorted only at prices higher than the last. This rule made it hard for short sellers to drive down prices, and it remained in effect right up until July 2007. Its elimination enabled bears to once again drive down the stocks of weakened financial institutions, an emblematic event in 2008.

- The combination of banking and investment banking under the same roof received a good part of the blame for the Great Crash (see one of my favorite books, *Wall Street Under Oath* by Ferdinand Pecora, 1939). This led to passage of the Glass-Steagall Act mandating separation of the two. It was revoked in 1999, and when they were

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recombined, the battle between bankers' caution and investment bankers' risk tolerance was won by the latter, putting institutions that were "too big to fail" in jeopardy. This played no small part in the current crisis.

- Also in the '20s, "bucket shops" provided easy access to investment risk. They would take "side bets" on the direction of stocks from small customers without actually sending orders to the exchange. Instead, they'd throw order slips "in the bucket" and hold the risk themselves. *Voilà*: investment exposure without a stock market transaction. The other day, Charlie Munger reminded me of the similarity of bucket shops to today's derivative contracts, which likewise permit bets on investments without any actual transactions taking place in the underlying securities. Massively levered derivatives played a big part in this decade's build-up of risk.

Developments like these don't happen randomly. They're the logical next step after optimism and ardor have increased, caution has subsided, and the desire for protective regulation has abated. The relaxation of worry eventually leads to environmental changes that permit excesses.

<u>The Culmination</u>

When the long-term pendulum is at its negative extreme, it can be counted on to turn for the better at some point, passing the midpoint and continuing toward the positive part of its arc. Eventually the pendulum will reach an apex so high that it'll be incapable of staying there. Then it will swing back, whether under its own weight or because of exogenous forces, or both. **In the course of moving from merely heated to torrid, however, I believe it can be counted on to bring out behavior which is manic and dangerous.**

The current long-term cycle may have begun in the post-World War II recovery. It benefited from the positive factors discussed on pages 2 and 3 and resulted in great capital creation for consumers, homebuyers, businesses, non-profits and investors. But it continued on from "healthy" to "excessive," resulting in the events of the last eighteen months, many of which can be summed up under the heading of capital destruction.

The greatest single example may be the case of Bernard Madoff, in which a trusted, high-performing investment manager allegedly fabricated his record, deceived friends and strangers alike, and lost or stole $50 billion. An increase in fraud can be viewed as a normal component – in fact, perhaps emblematic – of frothy, cycle-driven markets. Who hears of embezzlement during bearish times? A few lines from the *Financial Times* of December 20 indicate the cyclical aspects of the Madoff affair:

> The size of the alleged Bernard Madoff scam . . . is astounding, yet unsurprising. History tells us that bubbles spawn swindles. After the biggest credit bubble of all time, we now may have the biggest swindle of all time. . . . The historian Charles Kindleberger believed that "swindling

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> is demand-determined, following Keynes's law that demand determines its own supply. . . ."
>
> Mr. Madoff's story was dull . . . but compelling in a credit bubble where yields were everywhere falling. . . .
>
> When a wave of redemptions hit the Madoff funds, the Ponzi scheme . . . became unworkable. . . . Reputations inflated in the bubble [of the 1920s] promptly evaporated in the 1929 crash, which exposed a plethora of swindles. Redemptions of the hedge funds business are having the same effect today.

Having appreciated in the up cycle, mainstream securities offered only meager returns going forward, causing investors to turn elsewhere. Madoff's steady 10-11% returns wouldn't have blown off anyone's socks in the 1990s, but they were enticing in the 2000s. **Add in the optimism, credulity and loosey-goosey attitudes that always accompany the top of a cycle, and the atmosphere was right for what John Kenneth Galbraith called a good "bezzle."** But when things retreated from the lofty level that couldn't be maintained, investors put in for redemption and the falsehoods came to light.

The Madoff scam was cut from the same up-cycle-gone-wild cloth as the elimination of the uptick rule. Scams; unsupportable mortgages on overpriced homes; over-leveraged hedge funds, debt pools and buyouts; insurers with inadequate capital; managers incapable of doing what they said they could . . . as Warren Buffett says, they're all exposed when the tide goes out. What are the results to date? The outing of the biggest fraud in history; $1 trillion of write-offs by the banks thus far; $7.8 trillion committed to "recovery activities" by the U.S. alone; the biggest decline in the Dow Jones Industrials in 77 years; more than a decade of equity appreciation lost; the disappearance of every major U.S. non-bank investment bank; and a cry for more and better regulation. Now that the bursting of the credit bubble has affected the general economy, we're seeing declining consumer incomes, confidence and spending; plummeting home sales, home prices and housing starts; and the highest unemployment rate in many years. **All of this is part and parcel of the long-term cycle.**

<u>Trends Just Ahead</u>

Unlike the "era of increasing willingness," many things will face increased difficulty in the months and years just ahead. It'll be tougher times for anything dependent on:

- **bullishness, willingness and expansiveness,**
- **increasing economic activity and consumer spending,**
- **the ability to incur, service, repay or refinance debt,**
- **asset sales and the ability to delever, and**
- **strong asset values and investment returns.**

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Clearly, it was in the financial world, not the "real world," that the great excesses of bullishness, willingness and expansiveness developed, planting the seeds for the current crisis. But financial-sector attitudes and innovations allowed excesses in all the things listed above to be visited upon the real world, where we're now experiencing difficulty in them. It's no coincidence that history-making excesses in the financial sector – and the correction thereof – led to history-making weakness in the real economy.

It may be a good while before the elements listed are fully restored and the long-term trend roars upward again. The government is doing everything it can to reinstate them, but there's no roadmap for success. We all have to wait with fingers crossed. However, in the coming period, while we'll be hoping for the short-term cycle to recover, it's quite likely that the long-term trends listed on pages 2 and 3 will be less salutary than they were in decades leading up to the current crisis.

When will cyclical recovery arrive? For this, too, there's no roadmap. Most economists rely for their predictions on models that extrapolate relationships between investment, production, employment and consumption, for example, but they omit psychological considerations such as bullishness, willingness and expansiveness. On January 3, a *New York Times* article reported that a survey of economists had found consensus that recovery would commence in the second half of 2009. But it added that the economists:

> . . . base their forecasts on computer models that tend to see the American economy as basically sound, even in the worst of times. That makes these forecasters generally a more optimistic lot . . . their computer models do not easily account for emotional factors like the shock from the credit crisis and falling housing prices that have so hindered borrowing and spending.
>
> Those models also take as a given that the natural state of a market economy like America's is a high level of economic activity, and that it will rebound almost reflexively to that high level from a recession.
>
> But that assumes that banks and other lenders are not holding back on loans, as they are today, depriving the nation of the credit necessary for a vigorous economy.

These forecasters might assert that their models have worked on average. But I'd guess the period during which they worked didn't include sluggishness in long-term trends of the nature I'm discussing here. **Recognizing times when historic data shouldn't be extrapolated is an important part of dealing prudently with the future.**

Importantly in this context, I want to point out that the recent decades shouldn't be considered a norm to which we're sure to return. Instead, they were the best of times. Most years saw good returns; most investments paid off (often the riskier the better); and most investors made a lot of money. The financial services industry

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prospered, and its people made a lot of money and had inordinate fun doing so. From 1987 to 2007, "securities, commodity contracts, and investments" grew twice as fast as total gross output. And according to *The New York Times* of December 19, in 2007, ". . . the average salary of employees [in that category] was more than four times the average salary in the rest of the economy."

In other words, it was high tide. All financial boats were lifted, obscuring who was swimming without a bathing suit. In times like those, you can make money through skill or just aggressiveness, and it's hard to tell which is which.

In my view, superior investors are the ones who make more money in the good times than they give back in the bad. The ebb tide in the next few years will show us which they were. Managers who perform relatively well for their clients in this period will be recognized and rewarded. The rest shouldn't be able to amass funds or command fees as effortlessly as they did in the past. Of course, we hope Oaktree will be among the former. We'll all know in a few years. **In the new, chastened environment, I don't think anyone will jump to conclusions as readily as they did in the past.**

The other day, I was speaking with a reporter who summed up what I had said: "So skepticism will be greater; investors will be more risk-averse; fund raising will be harder; and fees will receive more scrutiny. That'll be worse for business, right?" For the short run and for managers who failed their clients, it likely will. **But in the long run, it'll make for a much healthier environment for all of us.**

<u>The Importance of the Long View</u>

As usual, some of the most important lessons concern the need to (a) study and remember the events of the past and (b) be conscious of the cyclical nature of things. Up close, the blind man may mistake the elephant's leg for a tree – and the shortsighted investor may think an uptrend (or a downtrend) will go on forever. But if we step back and view the long sweep of history, we should be able to bear in mind that the long-term cycle repeats and understand where we stand in it. The failure to do so can be most painful. John Kenneth Galbraith provided a reminder in *A Short History of Financial Euphoria*:

> Contributing to . . . euphoria are two further factors little noted in our time or in past times. The first is the extreme brevity of the financial memory. In consequence, financial disaster is quickly forgotten. In further consequence, when the same or closely similar circumstances occur again, sometimes in only a few years, they are hailed by a new, often youthful, and always supremely self-confident generation as a brilliantly innovative discovery in the financial and larger economic world. There can be few fields of human endeavor in which history counts for so little as in the world of finance. Past experience, to the extent that it is part of memory at

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> all, is dismissed as the primitive refuge of those who do not have the insight to appreciate the incredible wonders of the present.

Jim Grant did a good job of putting a cyclical movement into perspective in the January 31, 2003 issue of *Grant's Interest Rate Observer*:

> Wall Street today is in one of its recurrent sinking spells. Many call it a crisis of confidence, by which they mean under-confidence. Less attention is given to the preceding crisis of overconfidence. Material progress is cumulative, but markets are cyclical. First, investors trust too much, then they doubt too much. They believe that no price is too high to pay for a stock or a bond, then they doubt that any price is too low. So credulity is followed by cynicism, unreasonably high prices by ridiculously low ones.

Central banks will try to stabilize economies, and company managers will strive for smooth earnings growth. But as long as human beings determine security prices, market cycles will be the rule, not the exception. The extremes of greed, fear and worry over missing out will never be banished.

At times investors will be too risk-tolerant, and at others they'll be too risk-averse. They'll forget to inquire skeptically after things have gone well for a while, just as they'll ask too many questions and hesitate too much when recent events have decimated securities prices (and investors' psyches). **As little as two years ago, investors rushed headlong into things, fearing that if they didn't, they'd miss out on big gains. Now they're keeping their money in their wallets, saying "I don't care if I ever make a penny in the market again, I just don't want to lose any more." This change in attitudes – throughout the financial system – is responsible for a lot of today's deep freeze.**

Over the last several decades, our economy and markets benefited from positive underlying trends and investors were well rewarded for bearing risk. As a result, there was rising bullishness, willingness and expansiveness. When these trends reached unsustainable excesses, they were corrected with a vengeance. **I'm now of the opinion that not only will short-term economic cycles of boom and bust repeat regularly, but also that favorable long-term trends are bound to see a recurrence of this sort of occasional massive pullback . . . at that moment when the passage of time has erased all memory of past corrections and taken investor behavior (and thus asset prices) to unsustainable highs.**

Buoyant, decades-long up-trends and their explosive endings are the inevitable results of the tendency of human nature to go to extremes. Hopefully the current bursting of the long-term bubble will end within the next few years, and hopefully the next iteration is another 30, 50 or 70 years away. This one's providing enough excitement for a lifetime.

January 9, 2009

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Memo to: Oaktree Clients

From: Howard Marks

Re: Volatility + Leverage = Dynamite

Nearly fifteen years ago, in April 1994 – at a time when absolutely no one was reading my memos – I published one called "Risk in Today's Markets Revisited." That's when I first proposed the formula shown above. I recycled it in "Genius Isn't Enough," on the subject of Long-Term Capital Management (October 1998).

The last few years have provided a great demonstration of how dangerous it can be to combine leverage with risky assets, and that's the subject of this memo. It'll also pick up on some ideas from my last memo, "The Limits to Negativism."

My memo "Plan B" on the bailout proposal went out on September 24, and as I lay in bed later that night, I realized that I hadn't taken one part of it nearly far enough. In discussing a prime cause of the credit crisis, I wrote the following:

> I'll keep it simple. Suppose you have $1 million in equity capital. You borrow $29 million and buy $30 million of mortgage loans. Twenty percent (or $6 million) of the mortgages go into default, and the recovery on them turns out to be only two-thirds ($4 million). Thus you've lost $2 million . . . your equity capital twice over. Now you have equity capital of minus $1 million, with assets of $28 million and debt of $29 million. Everyone realizes that there'll be nothing left for the people who're last in line to withdraw their money, so there's a run on the bank. And you slide into bankruptcy.

That's true as far as it goes, but I'm going to devote this memo to things which could have followed that paragraph.

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The Problem at Financial Institutions

It's no coincidence that today's financial crisis was kicked off at highly leveraged banks and investment banks. The paragraph above shows why that's true, and why the problem is as big as it is. As I wrote in "Plan B":

> Because of the high regard in which financial institutions were held; because of the implied government backing of Fannie Mae and Freddie Mac; and because permissible leverage increased over time, financial institutions' equity capital was permitted to become highly inadequate given the riskiness of the assets they held. Or perhaps I should say

> institutions took on too many risky assets given the limitations of their equity capital. That, in a nutshell, is why institutions have disappeared.

So what exactly did these institutions do wrong? Here are a few examples, using Bank X, with $10 billion of capital, to illustrate:

- Bank X uses leverage to buy $100 billion of triple-A mortgage-related debt, under the assumption that it can't lose more than 1%. Instead, home prices decline nationwide, causing it to write down its holdings by 10%, or $10 billion. Its capital is gone.

- Alternatively (but in fact probably simultaneously), Bank X sells Hedge Fund G $10 billion of credit default swaps on the bonds of Company A, and it buys $10 billion of the same credit protection from Investment Bank H. Company A goes bankrupt, and Bank X pays Hedge Fund G $10 billion. But Investment Bank H goes bankrupt, too, so Bank X can't collect the $10 billion it's due. Its capital is gone.

- Bank X lends $50 billion to Hedge Fund P with equity of $10 billion, which then buys $60 billion of securities. The value of the fund's portfolio falls to $50 billion; the bank sends a margin call; no additional collateral can be posted; so the bank seizes and sells out the portfolio. But in the downward-spiraling market, the bank only realizes $40 billion. Its capital is gone.

- Hedge Fund Q also borrowed to buy securities. When Hedge Fund P got its margin call and its portfolio was sold out, that forced securities prices downward. So Fund Q – which holds many of the same positions – also receives a margin call, perpetuating the downward spiral and bringing more losses to more institutions.

All of these scenarios, and many others, are connected by a common thread: the combination of leverage and illusory safety, which allowed institutions to take on too much risk for the amount of capital they had.

First, it should be clear from the above that the amount of borrowed money – leverage – that it's prudent to use is purely a function of the riskiness and volatility of the assets it's used to purchase. The more stable the assets, the more leverage it's safe to use. Riskier assets, less leverage. It's that simple.

One of the main reasons for the problem today at financial institutions is that they underestimated the risk inherent in assets such as home mortgages and, as a result, bought too much mortgage-backed paper with too much borrowed money.

Let's go back to the paragraph on page one. Here it is again:

> I'll keep it simple. Suppose you have $1 million in equity capital. You borrow $29 million and buy $30 million of mortgage loans. Twenty percent (or $6 million) of the mortgages go into default, and the recovery on them turns out to be only two-thirds ($4 million). Thus you've lost $2

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> million . . . your equity capital twice over. Now you have equity capital of minus $1 million, with assets of $28 million and debt of $29 million. Everyone realizes that there'll be nothing left for the people who're last in line to withdraw their money, so there's a run on the bank. And you slide into bankruptcy.

Suppose you set up your leveraged portfolio as described but only 2% of your mortgage holdings go bad, not 20%. Then, you only lose $200,000 (not $2 million) of your $1 million of equity, and you're still solvent. Or suppose 20% of your mortgages default as in the original example, but you only levered up ten times, not 30. You lose the same 6.7% of your assets, but based on $10 million, so it's just $670,000, or two-thirds of your equity. You're still alive. **The problem lies entirely in the fact that the institutions combined highly risky assets with a large amount of leverage.**

By now, everyone recognizes (a) how silly it was for the financial modelers to be so sure there couldn't be a nationwide drop in home prices (they felt that way because there never had been one – but did their data include the Depression?) and (b) the terrible job the agencies did of rating mortgage-related securities. So the risk was underestimated, permitting the leverage to become excessive: end of story. **Reason number one for today's problem, then, is the mismatch institutions turned out to have made between asset risk and leverage.**

The second reason is that, given the degree by which mortgage defaults have exceeded expectations, no one feels like taking a chance on how bad things will get. Everyone agrees it'll be bad, but no one can say how bad.

As I said in October in "The Limits to Negativism," when things are going well, no assumption is too optimistic to be accepted. But when things turn down, none seems too pessimistic. Today, with the ability to lose money on mortgages having been demonstrated so painfully, investors consider themselves unable to say where the losses will stop.

So if a highly leveraged financial institution has significant mortgage holdings, few people are willing to risk money in the belief that the losses will be bearable. If a financial institution has book equity of $100 million and $500 million of mortgage assets, no one will grant that future losses will be less than $100 million – that is, that it'll remain solvent. Maybe the writedowns will be $100 million. Or $300 million. Or $500 million. There's no assumption too negative. As a result, investors will just keep their money in their pockets.

A few sovereign wealth funds and others jumped in a year ago, and based on results so far, it looks like they acted too soon. In July, Goldman Sachs reported that 52 banks had raised capital and the providers of that capital were underwater at 50 of them, by an average of 45%. Certainly things are much worse now.

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Most people are behaving as if there's no such thing as investing safely in a financial institution. This widespread belief has the ability to greatly delay the restoration of faith, capital and viability. Peter Bernstein put it succinctly in *The New York Times* of September 28. (Peter's one of the very wisest men around, in part because he's one of the few who can talk about the Depression from experience. I recommend his op-ed piece, "What's Free About Free Enterprise?")

> This time around, assets are evidently so rotten in so many places that no financial institution wants to risk doing business with any other financial institution without a government backstop.

That's the reason why no buyer could be found for Lehman Brothers over the weekend preceding its bankruptcy. No one could assess its assets and get comfortable regarding the status of its highly levered net worth, so everyone required a government backstop . . . which wasn't forthcoming.

<u>The Right Level of Leverage</u>

Although I communicate primarily in words, I tend to think a lot in pictures – certainly more than in numbers. My concept of appropriate leverage can easily be demonstrated through a few diagrams. I'm going to overlook the differences between accounting value, market value and economic value and confuse the terms. But I think you'll get the idea.

The drawings below show the value of companies of different types. Due to the variability of their earnings, the values fluctuate differently over time.

Here's a financial structure, except with the equity above the debt, not below as it would be on a balance sheet:

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Now let's combine the two concepts. The bottom line is that in order for a company to avoid insolvency, its financial structure has to be such that its value won't fall through the equity and into the debt. In naïve and far-from-technically correct terms, when the amount of debt exceeds the value of the company, it's insolvent, as suggested below.

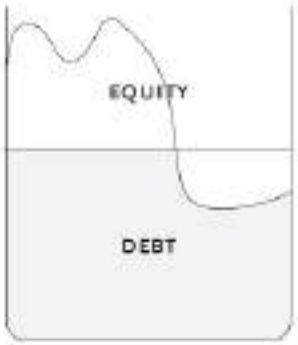

What the following doodles illustrate is that for every level of riskiness and volatility, there's an appropriate limit on leverage in the capital structure.

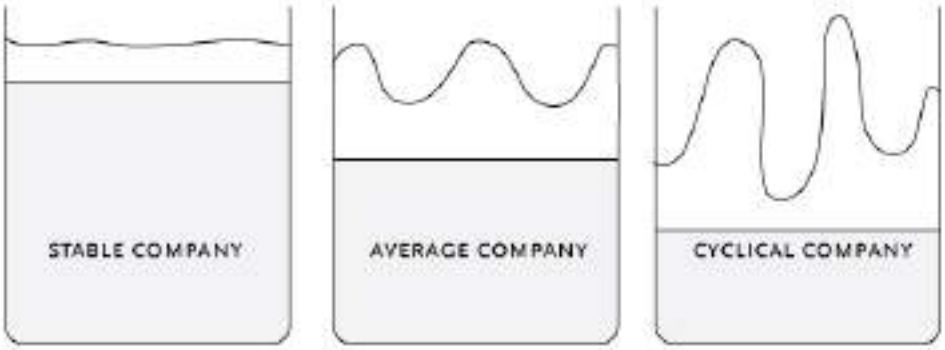

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During the first leveraged buyout boom in the late 1970s and the 1980s, it was a watchword that they should be done only with stable companies. But in bullish times, rules like that are forgotten or ignored, and we get buyouts of companies in cyclical industries like semiconductors or autos.

Extremely leveraged companies have existed for more than a century. They're called utilities. Because their profits are regulated by public commissions and fixed as a percentage of their stable asset bases, they've been extremely dependable. **This shows that high leverage isn't necessarily risky, just the wrong level of leverage given the company's stability.**

It can be safe for life insurance companies to take risk on limited capital, because their operations are steady and their risks can be anticipated. They know everyone will die, and roughly when (on average). But if a firm like MBIA was going to guarantee mortgage securities, it should have recognized their instability and unpredictability and limited its leverage. The insurance industry's way of saying that is that its capital should have been higher as a percentage of the risks assumed. MBIA insured $75 billion of residential and commercial mortgage paper on the basis of total capital – not capital devoted to its insuring mortgage securities, but total capital – of only $3 billion. Did anyone worry about the possibility that 5% of the mortgages would default?

Leverage is always seductive. If you have $1 million of capital and write $25 million of insurance at a 1% annual premium, you bring in $250,000 of premiums, for a 25% return on capital (before losses and expenses). But why not write $50 million of insurance and bring in $500,000? The answer is that policy losses might exceed 2% of the insurance written, in which case your losses would be greater than the capital you have to pay them with . . . and you might be insolvent. **But in order to resist using maximum available leverage, you need discipline and an appreciation for the risks involved. In recent years, few firms had both.**

Why Mortgages?

Why is it residential mortgage-related paper that set off the process endangering our institutions? Why not high yield bonds or leveraged loans or even equities? One reason, of course, is the sheer size of the residential mortgage-related securities market: $11 trillion. But there are two others.

The first is the inability to value the underlying collateral. I feel comfortable when Oaktree's analysts value the debt or equity of a cash-flow-producing company. To the extent an asset produces a stream of cash flows, and assuming they're somewhat predictable, the asset can reasonably be valued. But assets that don't produce cash flows can't be valued as readily (this has been a regular theme of mine of late).

What's a barrel of oil worth? $33 in January 2004, $147 in mid-2008, or $42 earlier this month? Which price was "right"? All of them? Or none of them? We all know about

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the things that will influence the price of oil, such as finite supply, growing demand, and the unreliability of some of the producing nations. But what do those factors make it worth? **No one can convert these intangibles into a fair price.** That's why, a few months ago at $147, we were seeing predictions of $200 oil. And now, with the price down two-thirds, there's talk of $25.

The same is true of commodities, gold, currencies, art and diamonds. And houses. **What's a house worth? What it cost to build? What it would cost to replace today? What it last sold for? What the one next door sold for? The amount that was borrowed against it? (Certainly not.) Some multiple of what it could be rented for? What about when there are no renters? The answer is "none of these." On a given day, houses – and all of the things listed just above – are worth only what someone will pay for them.** Well, that's true in the short run for corporate securities, too, as we've seen in the last few months. But in the long run, you can expect security prices to gravitate toward the discounted present value of their future cash flows. There's no such lodestone for houses.

Think about one of the biggest jokes, the home appraisal. If a house doesn't have a "value," what do mortgage appraisers do? They research recent sales of similar houses nearby and apply those values on a per-square-foot basis. But such an appraisal obviously says nothing about what a house will bring after being repossessed a few years later.

Nevertheless, in recent years, a purchase price of $X, supported by an appraisal of $X, was used to justify lending 95% of $X – or maybe 100% or 105% – when a home was bought or refinanced. No wonder homes valued in the biggest boom in history have turned out to be unreliable collateral.

Second, these overrated mortgages were packaged into the most alchemical and fantastic leveraged structures. It is these, not mortgages themselves, that have jeopardized our institutions. There was a limited market for whole mortgage loans; they were considered a specialist market entailing risk and requiring expertise. But supposedly those worries would be obviated if one bought the debt of structured entities that invested in residential mortgage-backed securities (RMBS).

First question: where did the risk go? We were told it disappeared thanks to the magic of structuring, tranching and diversifying, permitting vast amounts of leverage to be applied safely. Second question: how reliable was the diversification? Answer: again we were told, highly reliable; there had never been a national decline in home prices, so mortgages could be considered uncorrelated with each other. The performance of a mortgage on a house in Detroit would be unaffected by what went on in Florida or California. (Well, so much for what we were told.)

The institutions' writedowns generally are in collateralized debt obligations (CDOs), debt issued by special-purpose entities that borrowed huge amounts relative to their equity in order to purchase mortgage-related securities. As described earlier, underestimated risk

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led to the use of unwise amounts of leverage. But interestingly, the key losses aren't in the riskier junior tranches of CDO debt, about which there was some leeriness. Rather, they're in the triple-A-rated tranches. It's to buy those tranches that our leading institutions took on too much leverage. **Once again, greatly underestimated risk led to great leverage and thus great losses.**

What did you need to steer clear of CDO debt? Computers, sophisticated programs and exceptional analysis? Genius? No: skepticism and common sense. In RMBS, CDOs and CDO-squareds (entities that borrowed to buy CDO debt), **90% or so of their capital structure was rated higher than the underlying collateral, all based on the linchpin assumption that mortgages were uncorrelated. That's all you had to know.**

How good a piece of collateral is a subprime mortgage covering 100% of the purchase price of a house bought in a soaring market by an applicant who'll pay a higher interest rate to be able to skip documenting income or employment? That's not a secured loan; it's an option on future appreciation. If the house goes up in price, the buyer makes the mortgage payments and continues to own it. If it goes down, the buyer walks away, in which case the lender gains ownership of a house worth less than the amount loaned against it. Thus the viability of the mortgages was entirely dependent on continued home price appreciation.

Given the above, what was the credit quality of subprime mortgages? I'd say double-B at best. (I'd much rather buy even the single-B "junk bonds" of profitable companies that we've held over the last 30 years than this inflated "home option" paper.) And yet, in a typical CDO, 80% of the debt was rated triple-A and 97% was rated investment grade (triple-B or better). Those high ratings made CDO debt very attractive to financial institutions that were able to borrow cheaply to buy high-rated assets, satisfying the strict rules regarding the "quality" of their portfolio holdings.

Financial engineers and investment bankers took unreliable collateral and packaged it into highly leveraged structures supporting debt that was rated high enough to attract financial institutions. What a superb example of the imprudent use of leverage. And what a simple explanation of how our highly leveraged institutions got into trouble.

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How Bad is Bad?

One of the prime lessons that must be learned from this experience is that in determining how much leverage to put on, you'd better make generous assumptions about how risky your assets might turn out to be.

The example in the paragraph on page one demonstrates the role of risk in the equation. The more your assets are prone to permanent loss, the less leverage you should employ. But it's also important to recognize the role of volatility. Even if losses aren't permanent, a downward fluctuation can bring risk of ruin if a portfolio is highly leveraged and (a) the

lenders can cut off credit, (b) investors can be frightened into withdrawing their equity, or (c) the violation of regulatory or contractual standards can trigger forced selling.

The problem is that extreme volatility and loss surface only infrequently. And as time passes without that happening, it appears more and more likely that it'll never happen – that assumptions regarding risk were too conservative. Thus it becomes tempting to relax rules and increase leverage. And often this is done just before the risk finally rears its head. As Nassim Nicholas Taleb wrote in *Fooled by Randomness*:

> Reality is far more vicious than Russian roulette. First, it delivers the fatal bullet rather infrequently, like a revolver that would have hundreds, even thousands of chambers instead of six. After a few dozen tries, one forgets about the existence of a bullet, under a numbing false sense of security . . . Second, unlike a well-defined precise game like Russian roulette, where the risks are visible to anyone capable of multiplying and dividing by six, one does not observe the barrel of reality. . . . **One is thus capable of unwittingly playing Russian roulette – and calling it by some alternative "low risk" name.** (p. 28; emphasis added)

The financial institutions played a high-risk game thinking it was a low-risk game, all because their assumptions on losses and volatility were too low. We'd be watching an entirely different picture if only they'd said, "This stuff is potentially risky. Since home prices have gone up so much and mortgages have been available so easily, there just might be widespread declines in home prices this time. So we're only going to lever up half as much as past performance might suggest."

It's easy to say they should have made more conservative assumptions. But how conservative? **You can't run a business on the basis of worst-case assumptions. You wouldn't be able to do anything.** And anyway, a "worst-case assumption" is really a misnomer; there's no such thing, short of a total loss. Now we know the quants shouldn't have assumed there couldn't be a nationwide decline in home prices. But once you grant that such a decline can happen – for the first time – what extent should you prepare for? Two percent? Ten? Fifty?

One of my favorite adages concerns the six-foot-tall man who drowned crossing the stream that was five feet deep on average. It's not enough to survive in the investment world on average; you have to survive every moment. The unusual turbulence of the last two years – and especially the last three months – made it possible for that six-foot-tall man to drown in a stream that was two feet deep on average. **Should the possibility of today's events have been anticipated? It's hard to say it should have been. And yet, it's incumbent upon investors to prepare for adversity. The juxtaposition of these sentences introduces an interesting conundrum.**

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Consider these tales from the front lines:

- There had never been a national decline in home prices, but now the Case-Shiller index is down 26% from its peak in July 2006, according to the *Financial Times* of November 29.

- In my twenty-nine previous years with high yield bonds, including four when more than 10% of all outstanding bonds defaulted, the index's worst yearly decline was 7%. But in 2008, it's down 30% (even though the last-twelve-months' default rate is only about 3%).

- Performing bank loans never traded much below par in the past, and holders received very substantial recoveries on any that defaulted. Now, even though there have been few defaults, the price of the average loan is in the 60s.

The headlines are full of entities that have seen massive losses, and perhaps meltdowns, because they bought assets using leverage. Going back to the diagrams on pages 4-5, these investors put on leverage that might have been appropriate with moderate-volatility assets and ran into the greatest volatility ever seen. **It's easy to say they made a mistake. But is it reasonable to expect them to have girded for unique events?**

If every portfolio was required to be able to withstand declines on the scale we've witnessed this year, it's possible no leverage would ever be used. Is that a reasonable reaction? (In fact, it's possible that no one would ever invest in these asset classes, even on an unlevered basis.)

In all aspects of our lives, we base our decisions on what we think probably will happen. And, in turn, we base that to a great extent on what usually happened in the past. We expect results to be close to the norm (A) most of the time, but we know it's not unusual to see outcomes that are better or worse (B). Although we should bear in mind that, once in a while, a result will be outside the usual range (C), we tend to forget about the potential for outliers. And importantly, as illustrated by recent events, we rarely consider outcomes that have happened only once a century . . . or never (D).

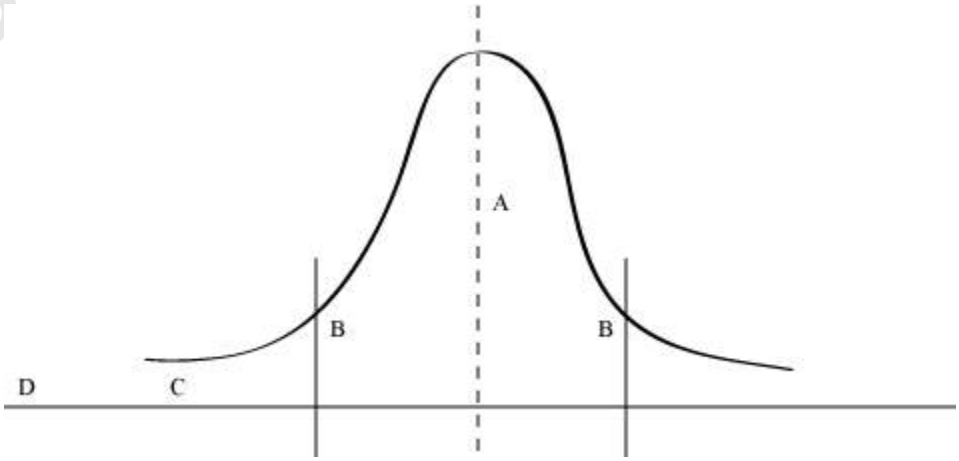

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Even if we realize that unusual, unlikely things can happen, in order to act we make reasoned decisions and knowingly accept that risk when well paid to do so. Once in a while, a "black swan" will materialize. But if in the future we always said, "We can't do such-and-such, because we could see a repeat of 2007-08," we'd be frozen in inaction.

So in most things, you can't prepare for the worst case. It should suffice to be prepared for once-in-a-generation events. But a generation isn't forever, and there will be times when that standard is exceeded. What do you do about that? **I've mused in the past about how much one should devote to preparing for the unlikely disaster. Among other things, the events of 2007-08 prove there's no easy answer.**

Are You Tall Enough to Use Leverage?

Clearly it's difficult to always use the right amount of leverage, because it's difficult to be sure you're allowing sufficiently for risk. Leverage should only be used on the basis of demonstrably cautious assumptions. And it should be noted that **if you're doing something novel, unproven, risky, volatile or potentially life-threatening, you shouldn't seek to maximize returns. Instead, err on the side of caution. The key to survival lies in what Warren Buffett constantly harps on: margin of safety.** Using 100% of the leverage one's assets might justify is often incompatible with assuring survival when adverse outcomes materialize.

Leverage is neither good nor bad in and of itself. In the right amount, applied to the right assets, it's good. When used to excess given the underlying assets, it's bad. It doesn't add value; it merely magnifies both good and bad outcomes. So leverage shouldn't be treated as a silver bullet or magic solution. It's a tool that can be used wisely or unwisely.

Our attitude at Oaktree is that it can be wise to use leverage to take advantage of high offered returns and excessive risk premiums, but it's unwise to use it to try to turn low offered returns into high ones, as was done often in 2003-07.

Once leverage is combined with risky or volatile assets, it can lead to unbearable losses. Thus leverage should be used in prudent amounts, to finance the right assets, and with a great deal of respect. And it's better used in the trough of the cycle than after a long run of appreciation. **Bottom line: handle with care.**

* * *

I never want to give the impression that doing the things I discuss is easy, or that Oaktree always gets it right. This memo calls on investors to gauge risk and use only appropriate leverage. At Oaktree we assess fundamental riskiness and look to history for how markets might behave, and we heavily emphasize trying to build in sufficient room for

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error. But history isn't a perfect guide. While we've made no use of leverage in the vast majority of our investment activities, three of our evergreen funds did borrow to buy bank loans: the senior-most debt of companies, which in the past always has traded around par. Another used it to buy low-priced Japanese small-cap stocks. The companies generally are doing fine, but the prices of their loans and equities have collapsed under current market conditions, causing the funds to suffer. **This shows how tough it is to prepare for all eventualities . . . in other words, to know in advance how bad is bad**. So I apologize if I ever come across as holier-than-thou. We've tried to use leverage only when it's wise, but no one's perfect. Certainly not us.

* * *

The financial markets have delivered a lifetime of lessons in just the last five years. Some of the most important ones center around the use and abuse of leverage.

- **Leverage doesn't add value or make an investment better.** Like everything else in the investment world other than pure skill, leverage is a two-edged sword – in fact, probably the ultimate two-edged sword. It helps when you're right and hurts when you're wrong.

- **The riskier the underlying assets, the less leverage should be used to buy them.** Conservative assumptions on this subject will keep you from maximizing gains but possibly save your financial life in bad times.

- A levered entity can be caught up in a downward spiral of asset price declines, market-value tests, margin calls and forced selling. Thus, in addition to thinking about the right amount of leverage, it's important to note that there are two different kinds: permanent leverage, with its magnifying effect, and leverage which can be withdrawn, which can introduce collateral tests and the risk of ruin. Both should be considered independently. **Leverage achieved with secure capital isn't nearly as risky as situations where you are subject to margin calls or can't bar the door against capital withdrawals.**

Leverage was too easily accessed as recently as two years ago, and now it's virtually unavailable. And just as its use was often unwise a few years ago, this might be just the right time to employ some if you can get it . . . and if you can arrange things so you won't drown if the streambed dips ahead.

December 17, 2008

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Memo to: Oaktree Clients

From: Howard Marks

Re: The Limits to Negativism

The markets acted on Monday as if the credit crisis is behind us – how incredible it is to be able to even write those words, whether true or not. Whichever is the case, however, it's important to reflect on what can be learned from the recent events. (I developed these thoughts last week but just wasn't quick enough to turn them into a memo. So I'm reduced to discussing what we all hope is history rather than displaying foresight.)

The Swing of Psychology

The last few weeks witnessed the greatest panic I've ever seen, as measured by its severity, the range of assets affected, its worldwide scope and the negativity of the accompanying tales of doom. I've been through market crashes before, but none attributed to the coming collapse of the world financial system.

It's worth noting that few of the recent sharp price declines were associated with weakness in the depreciating assets or the companies behind them. Rather, they were the result of market conditions brought on by psychology, technical developments and their interconnection. The worst of them reflected a spiral of declining security prices, mark-to-market tests, capital inadequacy, margin calls, forced selling and failures.

It was readily apparent that such a spiral was underway, and no one could see how or when it might end. **That was really the problem: no scenario was too negative to be credible, and any scenario incorporating an element of optimism was dismissed as Pollyannaish.**

There was an element of truth in this, of course: nothing was impossible. **But in dealing with the future, we must think about two things: (a) what might happen and (b) the probability it will happen.**

During the crisis, lots of bad things seemed possible, but that didn't mean they were going to happen. In times of crisis, people fail to make that distinction. Since we never know much about what the future holds – and in a crisis, with careening causes and consequences, certainly less than ever – we must decide which side of the debate is more likely to be profitable (or less likely to be wrong).

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For forty years I've seen the manic-depressive cycle of investor psychology swing crazily: between fear and greed – we all know the refrain – but also between optimism and pessimism, and between credulity and skepticism. In general, following the beliefs of the herd – and swinging with the pendulum – will give you average performance in the long run and can get you killed at the extremes.

Two or three years ago, the world was so different as to be almost beyond remembering. It was ruled by greed, optimism and credulity. **In short, it was the opposite of the last few weeks: no story was too positive to be believed.**

- "There's a worldwide 'wall of liquidity' that can never dry up."
- "Triple-A CDOs are as safe as triple-A corporate debt but will deliver higher returns."
- "Leverage holds the key to better investment results."
- "Tranching and selling onward are spreading the risk, thereby eliminating it."
- "Decoupling has reduced nations' economic reliance on the U.S."

Boy, what a good time that was for a dose of skepticism! What benefits it could have provided (in terms of losses avoided). But when conventional wisdom is rosy, few can stand against it. People who do so too early look woefully wrong and are swept aside. That discourages others from trying the same thing, even as the cycle swings further to the positive extreme.

The Black Swan

You may recall that in "The Aviary" in May, I wrote about *The Black Swan*, the second book from Nassim Nicholas Taleb, author of *Fooled by Randomness*. In *The Black Swan*, Taleb talks about unlikely, extreme, unpredictable events that have the potential for dramatic impact. His title was derived from the fact that, never having traveled to Australia and seen its black swans, Europeans of a few centuries ago were convinced all swans were white. In other words, because they'd never seen something, they considered it impossible.

The message of *The Black Swan* is how important it is to realize that the things everyone rules out can still come to pass. That might be generalized into an understanding of the importance of skepticism.

I'd define skepticism as not believing what you're told or what "everyone" considers true. In my opinion, it's one of the most important requirements for successful investing. If you believe the story everyone else believes, you'll do what they do. Usually you'll buy at high prices and sell at lows. You'll fall for tales of the "silver bullet" capable of delivering high returns without risk. You'll buy what's been doing well and sell what's been doing poorly. And you'll suffer losses in crashes and miss out when things recover from bottoms. **In other words, you'll be a conformist, not a maverick (an overused word these days); a follower, not a contrarian.**

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Skepticism is what it takes to look behind a balance sheet, the latest miracle of financial engineering or the can't-miss story. The idea being marketed by an investment banker or broker has been prettied up for presentation. And usually it's been doing well, making the tale more credible. **Only a skeptic can separate the things that sound good and are from the things that sound good and aren't.** The best investors I know exemplify this trait. It's an absolute necessity.

The White Swan

Most people probably took away from *The Black Swan* the same lessons I did (and the lessons mentioned in "The Aviary"): "unlikely" isn't the same as "impossible," and it's essential for investors to be able to get through the low spots.

Of course, it's improbable events that brought on the credit crisis. Lots of bad things happened that had been considered unlikely (if not impossible), and they happened at the same time, to investors who'd taken on significant leverage. So the easy explanation is that the people who were hurt in the credit crisis hadn't been skeptical – or pessimistic – enough.

But that triggered an epiphany: **Skepticism and pessimism aren't synonymous. Skepticism calls for pessimism when optimism is excessive. But it also calls for optimism when pessimism is excessive.** I'll write some more on the subject, but it's really as simple as that.

Contrarianism – doing the opposite of what others do, or "leaning against the wind" – is essential for investment success. But as the credit crisis reached a peak last week, people succumbed to the wind rather than resisting. **I found very few who were optimistic; most were pessimistic to some degree**. Some became genuinely depressed – even a few great investors I know. Increasingly negative tales of the coming meltdown were exchanged via email. No one applied skepticism, or said "that horror story's unlikely to be true." Pessimism fed on itself. People's only concern was bullet-proofing their portfolios to get through the coming collapse, or raising enough cash to meet redemptions. The one thing they weren't doing last week was making aggressive bids for securities. So prices fell and fell – the old expression is "gapped down" – several points at a time.

The key – as usual – was to become skeptical of what "everyone" was saying and doing. One might have said, "Sure, the negative story may turn out to be true, but certainly it's priced into the market. So there's little to be gained from betting on it. On the other hand, if it turns out not to be true, the appreciation from today's depressed levels will be enormous. I buy!" **The negative story may have looked compelling, but it's the positive story – which few believed – that held, and still holds, the greater potential for profit.**

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The Future

I write a lot to dissect and explain past events, but I'll try here to make a contribution by taking the riskier path of talking about the future. What do I see?

As for the short term, it's been amply demonstrated that governments and central banks will do everything they can to resolve the credit crisis. No stone will go unturned, and few options will be declined. Most people now believe that letting Lehman Brothers go was a big mistake: as a result of a calculated decision, discipline took precedence over rescue. The results were disastrous, as the commercial paper market froze up, money market funds "broke the buck," and the crisis was ratcheted up several notches.

Most people don't repeat their mistakes; they make new ones. So we should expect that all key players will be rescued in the period ahead. Some elements of that effort will be mistakes, but at least those mistakes won't pull down the financial system. Morgan Stanley was the next big worry but, after Lehman, it became unlikely that Morgan would be allowed to fail. I was asked, "Will the U.S. government guarantee a capital investment made by a Japanese institution?" Absolutely, if that's what it takes. It beats the U.S. having to put up its own money.

The sums being thrown around are the biggest ever: hundreds of billions, adding up to trillions. But there's no hesitation: everything will be done. That doesn't mean it has to work, but it's likely to.

Walter Wriston led Citibank from 1967 to 1984, all but my final year there. He was the world's leading banker and a great guy. One of his most famous observations was, "countries don't go bust." I assume he was making reference to their ownership of printing presses, and thus their unlimited ability to pay their local-currency obligations. That's the main reason why we shouldn't expect there to be any limit on the resources thrown at the problem. All it will take is running the printing presses long enough to rebuild financial institutions' capital accounts, make good guarantees and enable borrowers to roll over their outstanding debt, all of which is reckoned in nominal terms. **The philosophical bridge of unlimited aid to private institutions appears to have been crossed, and printing the necessary money is unlikely to be an issue.**

Of course, that doesn't mean we're out of the woods. **Creating money isn't the end of the story.** What will be the effect?

First, the people who have money have to make the decision to lend to those who need it to fund their businesses. The Fed's provision of capital to financial institutions – even at ultra-low interest rates – isn't enough. If banks borrow money cheaply and lend it to people who don't repay them, they'll be out a lot of low-cost capital. And if they're on the hook for repaying the Fed, they'll be way behind. Because of residual conservatism, the steps so far might have the ineffectiveness of "pushing on a string," something I

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mentioned in "Now What?" in January. We still have to see money begin to circulate throughout the system.

Jim Grant, the creator of *Grant's Interest Rate Observer*, uses a great phrase to describe liquidity and credit: "money of the mind." Unlike actual currency, it grows and shrinks depending on people's moods – we've just seen a great demonstration. So it's not enough for the Fed to give money to financial institutions; they have to be convinced to provide liquidity and credit.

In recent times, the Fed has provided a lot of capital to banks, but it has also taken in a lot of deposits from banks. We want to see the Fed's advance reloaned, not put on deposit. That's what it'll take to restart the credit machine.

Even when credit starts flowing again, however, I doubt things will return immediately to their old pace. Losses have been taken and capital destroyed, and more losses may still be incoming (ask yourself if home prices are finished going down). More importantly, psyches have been damaged: consumer psychology, lenders' willingness, even investor confidence – all have taken a beating. I doubt if things will bounce right back. There just won't be the same expansiveness. I'll stick with what I said in "Now What?"

> Undoubtedly, credit will be harder to obtain. Economic growth will slow: the question is whether it will remain slightly positive or go negative, satisfying the requirement for the label "recession." Regardless, positive thinking and thus risk taking are likely to be diminished. All I can say for sure is that the world will be less rosy in financial terms, and results are likely to be less positive than they otherwise would have been.

<u>Awash in Money</u>

In the longer term, we have to wonder about the effect on the world of a glut of newly printed dollars, sterling and euros. The reason owning printing presses makes repayment easy is that it lets a nation cheapen its currency. But one would think that more units of currency per unit of GDP means a debasement of the currency, and thus reduced purchasing power (read: higher inflation).

Walking along Hyde Park on Sunday, I saw a street vendor selling old stock certificates. Do you have any banknotes, I asked? Anything from the Weimar Republic? For the last few weeks, I've wanted to get some of those.

In Weimar Germany, the government enabled itself to pay World War I reparations by cheapening its currency . . . literally. So the 1,000 mark note I bought was simply over-stamped One Million Marks in red. Voila! Now we're all rich.

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The mark fell from 60 to the U.S. dollar in early 1921 to 320 to the dollar in early 1922 and 8,000 to the dollar by the end of 1922. It's hard to believe, but according to Wikipedia (user-maintained and perhaps not always the most authoritative):

> In December 1923 the exchange rate was 4,200,000,000,000 Marks to 1 U.S. dollar. In 1923, the rate of inflation hit 3.25×10^6 percent per month (prices double every two days).
>
> One of the firms printing these [new 100 trillion Mark] notes submitted an invoice for 32,776,899,763,734,490,417.05 (3.28×10^{19}, or 33 quintillion) Marks. [That's not a misprint.]

Lord Keynes judged the situation this way:

> The inflationism of the currency systems of Europe has proceeded to extraordinary lengths. The various belligerent governments, unable, or too timid or too short-sighted to secure from loans or taxes the resources they required, have printed notes for the balance.

But it's not that easy. People with things to sell aren't that stupid. So instead of 1,000 marks, a goat now costs one million marks. That piece of paper used to be a thousand mark note – and now it's a million mark note – but it still buys the same goat.

The benefit to the government is that it's able to pay off its old nominal debts in currency of which it suddenly has a lot more . . . but which no longer has much purchasing power. So when repaid in the cheapened currency in 1923, the person to whom the government owed 1,000 marks can only buy one-thousandth of a goat – not a whole goat as in 1920.

My late friend Henry Reichmann was a boy then, working as a busboy in a restaurant in Berlin. He told me he used to be paid at lunchtime and immediately ran out to spend his salary, since it would buy less if he waited until after work to shop.

That's hyperinflation. Just as the Great Depression became a model during the credit crisis, Weimar Germany gives us something to think about regarding our new future. **I'm not smart enough to know what's coming, but I'm also not dumb enough to think a few government actions on Monday were enough to solve all our problems.** At best, we usually substitute one problem for another – usually one later on in lieu of today's.

I don't know what to do about this risk, whether it'll come home to roost, or to what extent. And I certainly don't think hyperinflation can be assigned a high enough probability to make it worth doing much about. But it may cause one to rethink holdings of low-yielding, flight-to-quality-elevated, long-term Treasurys.

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The New Financial Order

My daughter Jane – the artistic member of the family – has developed a strong interest in politics and economics of late. (I think this is happening to young people all across the U.S., and it's a very favorable development.) On Saturday she called to ask what I thought about government ownership of banks.

First, I said, I thought it could make an important contribution to solving the short-term problem, and that's good.

Second, however, the U.S. has a strong tradition of government non-involvement in business, and we'd probably like to see it stay that way. "Nationalization" is a much dirtier word in America than in most other places (*International Herald Tribune* headline, October 14 – "Nationalization rule: Do it, but don't say it"). My preference, I told Jane, is for free enterprise with some adult supervision. When we make fundamental changes in the system, it's hard to foresee all the consequences. Consider these questions:

- Will legislators push bankers to make more loans to their constituents (remember Fannie and Freddie)?
- Will the banks have to lend to everyone, even weak borrowers? Will they be allowed to reject any applicants?
- Will they be prevented from foreclosing when mortgages are unpaid?
- Will they be deterred from financing "anti-social" investments like leveraged buyouts?
- Will they be limited in compensating executives? Will that make them less attractive as employers?
- Will bank employees worry about being penalized for errors of commission but not errors of omission?
- If so, will banks be staffed by people who are overly risk-averse? Will they lean toward saying "no"?
- Will capital be harder to come by, especially for smaller, younger companies?
- Will economic growth be slower than it otherwise would have been?
- Will non-government-owned banks be at a disadvantage because, as weaker credits, they'll have to pay more than the competition for their capital?

No one knows, but these questions deserve consideration. **Here's the underlying question: if the government's equity is non-voting, will that be enough to keep it out of the banks' affairs? It's far too soon to say (and hard to be completely optimistic).**

I continue to believe the financial sector of the future will be less leveraged, less risk-prone, less profitable, slower growing and more regulated. And that'll make it less exciting, less glamorous and less the employer of choice. But the beauty of the free-market system is that most developments entail plusses as well as minuses. **I've believed for many years that just as success carries within itself the seeds of failure (see 2003-08), so does failure carry the seeds of success.**

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If the banks are made more bureaucratic and risk-averse – and less aggressive and competitive – I'm sure independent boutiques will arise and prosper. The model I have in mind is a forest fire: a year after, bright green shoots grow from the ashes; in fact, I think they're fertilized by the ashes. Think what a landscape like that means for advisory firms like Moelis, Evercore, Gleacher and Greenhill.

In a free-market environment, not even a good knock can keep aggressive people from responding to opportunities. The financial sector will look very different in ten years from what it was a year ago – and that won't be all bad.

* * *

I find that I often end with a quote from Warren Buffett, and often it's the same one:

> The less prudence with which others conduct their affairs, the greater the prudence with which we should conduct our own affairs.

But now I want to talk about the flip side: **When others conduct their affairs with excessive negativism, it's worth being positive.** When others love 'em, we should hate 'em. But when others hate 'em, we can love 'em.

In "The Tide Goes Out" in March, I listed the stages of both bull and bear markets. I said that in the terminal third stage of a bull market, everyone is convinced things will get better forever. The folly of joining that consensus is obvious; people who invest thinking there'll never be anything to worry about are sure to get hurt.

In the third stage of a bear market, on the other hand, everyone agrees things can only get worse. The risk in that – in terms of opportunity costs, or forgone profits – is equally clear**. There's no doubt in my mind that the bear market reached the third stage last week. That doesn't mean it can't decline further, or that a bull market's about to start. But it does mean the negatives are on the table, optimism is thoroughly lacking, and the greater long-term risk probably lies in not investing.**

The excesses, mistakes and foolishness of the 2003-2007 upward leg of the cycle were the greatest I've ever witnessed. So has been the resulting panic. The damage that's been done to security prices may be enough to correct for those excesses – or too much or too little. But certainly it's a good time to pick among the rubble.

* * *

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I want to take this opportunity to congratulate and thank my Oaktree colleagues for their ongoing steadfastness. There's a simple formula for taking maximum advantage of opportunities in a collapsing market:

(a) have a firm, well-reasoned estimate of an asset's intrinsic value;
(b) recognize when the asset's price falls below its value, and buy;
(c) average down if the price goes lower; and
(d) be right about the value.

Acumen and resolve are **both** essential. My colleagues continue to show both. In recent weeks our list of purchases has been long most days, and our list of sales almost non-existent. Where there's cash we've put a lot to work, averaging down aggressively, in what we think are great buys.

I also want to thank our clients for trusting us and sticking with us. As Bruce Karsh and I wrote ten days ago in a memo to investors in our Opportunities Funds for distressed debt, ". . . in a few years we'll reminisce together about how easy it was to take advantage of the bargains of 2008-09." Whether or not the worst of the crisis is now truly behind us, I continue to feel that way.

October 15, 2008

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Memo to: Oaktree Clients

From: Howard Marks

Re: Plan B

Over the last decade or two, Plan A consisted of relying on the free market to maximize economic growth and efficiency (as described in "The Aviary," May 2008). What can we say about that? Oops? We don't hear much at this moment about market efficiency, or about the proposition that it would cause complex mortgage-backed securities to be priced right.

So now we have Plan B, better known as TARP, the Troubled Asset Relief Program. On the heels of other injections of capital by the U.S. Treasury and Fed and central banks elsewhere, it was proposed on Friday that up to $700 billion be spent to purchase "toxic" mortgage securities from financial institutions that are weighed down with them.

Ya' Gotta Believe

Those who have more money than they need lend it to those with use for more money than they have. This process is called providing credit. The movement of credit puts otherwise-idle money to work and thus adds to economic output. Economies run on credit.

According to Merriam-Webster, the word "credit" is derived from the Latin *credere*: "to believe, entrust." We provide credit when we believe in borrowers and trust that they'll pay us back (although we believe in some more than others and charge the latter more interest). Further, the entire economy runs on trust: that the people to whom we provide goods and services will pay their bills; that contracts will be adhered to; and that money will retain value, or at least the part that inflation doesn't erode.

Belief is what makes the economic world go round. Take a minute to think about how we would behave in a world in which there wasn't trust in money, the institutions that store it and the mechanisms that move it from one place to another. Clearly, we'd be sunk without trust in the financial system.

I've described in the past how financial institutions are vulnerable to loss of faith because of their unique combination of opacity, leverage, conscious risk bearing, and their use of short-term deposits and borrowings to fund longer-term, illiquid assets. When providers of capital lose faith in a financial institution, they line up to withdraw their money. But the institution can't give them all back their money, because it can't liquify all of its assets immediately. Attempts to do so increase the downward

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pressure on asset prices, further weakening financial positions and reinforcing the loss of faith. And thus the circle becomes vicious and we have a "run on the bank."

We saw many runs on banks during the Great Depression; the result was the introduction of federal deposit insurance. We also saw a bank run in the U.K. last year, when depositors lined up at the Northern Rock building society until the Bank of England calmed fears by guaranteeing all deposits. (I had money there, and believe me, absent the guarantee, the 2% penalty for early withdrawals would have been powerless to dissuade me from moving the remaining 98% to a safer institution. Take a few hundred or thousand of me, and you have a run on the bank.)

In short, the government is attempting to prevent a loss of belief. Is such a thing possible? Ask yourself whether eight months ago you thought possible this year's developments at Bear Stearns, IndyMac, Lehman Brothers, AIG, Fannie Mae and Freddie Mac. To some extent, they all stemmed from a loss of faith.

The Source of the Problem

There are two principal fundamental causes behind the events we're seeing. The first is the huge losses in complex mortgage-backed securities. As I've written before, the issuance and purchase of these securities resulted from the following confluence of factors:

- Quest for return, decline in risk aversion and lowering of skepticism.
- A boom in home prices and a belief that they couldn't fall back *en masse*.
- Securitization and selling onward of debt – which eliminated lenders' hesitance to lend and led to a process in which everyone profited when a loan was made.
- Thus an increased willingness to lend higher percentages of the skyrocketing prices of homes, even where the borrower couldn't demonstrate creditworthiness.
- Widespread use of leverage (because the risks were underrated) and complexity in fashioning mortgage-backed securities.
- Massive shortcomings at rating agencies that erroneously described the resulting securities as investment grade, and sometimes even "super senior."

In this way, enormous amounts of overrated securities came to the market. They went to financial institutions that didn't understand the riskiness of what they were buying and thus permitted themselves to become vastly overleveraged.

I'll keep it simple. Suppose you have $1 million in equity capital. You borrow $29 million and buy $30 million of mortgage loans. Twenty percent (or $6 million) of the mortgages go into default, and the recovery on them turns out to be only two-thirds ($4 million). Thus you've lost $2 million . . . your equity capital twice over. Now you have equity capital of minus $1 million, with assets of $28 million and debt of $29 million. Everyone realizes that there'll be nothing left for the people who're last in line to withdraw their money, so there's a run on the bank. And you slide into bankruptcy.

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Because of the high regard in which financial institutions were held; because of the implied government backing of Fannie Mae and Freddie Mac; and because permissible leverage increased over time, financial institutions' equity capital was permitted to become highly inadequate given the riskiness of the assets they held. Or perhaps I should say institutions took on too many risky assets given the limitations of their equity capital. That, in a nutshell, is why institutions have disappeared.

The second fundamental factor leading up to the current mess was the creation of the vast market in derivatives, especially credit default swaps (CDS). In the current decade, CDS came into broad use as a mechanism for insuring against defaults. For an up-front fee and an annual premium, holders of debt could get someone else to promise that they'd buy that debt at face value in the case of a default or other "credit event."

The buyers of CDS accepted at face value that the writers of the insurance would pay if there was a default. For this reason, because Bank A had bought insurance on Company X's debt from Hedge Fund B, it considered it safe to sell insurance to Bank C. **But what if X defaults and A has to pay C but can't collect from B?** There's over $60 trillion of CDS outstanding, and a lot of it is well hedged in theory; thus the net exposure to defaults if everyone pays might be rather small. But if some counterparties are unable to pay, institutions that bought insurance from them (or from others that bought from those institutions) might fail to receive billions in payments. Consider it one big daisy chain. It's probably because of its position as a counterparty that Bear Stearns wasn't permitted to fail in March (while Lehman was cut adrift this month when its failure was judged to be bearable).

Of course, these two developments have been complicated by (a) the fact that no one can reasonably say what the home underlying a mortgage is worth (the intrinsic value of a non-cash-producing asset is a useless concept in the short run), (b) the fact that no one knows how the credit swap market will function in a crisis, and (c) their own sheer magnitude. The sum of the foregoing has the potential to place in jeopardy any financial institution that lacks federal backing. It's for this reason that the government has assumed the liabilities of Fannie Mae and Freddie Mac, lent money to AIG, accepted Goldman Sachs and Morgan Stanley as bank holding companies (with permanent access to Fed borrowings), backstopped money market funds, and now proposes to purchase $700 billion of mortgage securities.

<u>Does Ben Know Something We Don't?</u>

I cited the above headline in "Now What?" last January. That's what *breakingviews.com* asked about the Fed's September 2007 decision to cut rates by 50 basis points rather than the expected 25. Clearly Fed Chairman Ben Bernanke thought the circumstances called for stronger medicine than most observers.

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Now it's clear that both Bernanke and Treasury Secretary Hank Paulson envision possible consequences justifying the strongest possible action. Last weekend, for example, Paulson said in an interview, "I don't like the fact that we have to do this. I hate the fact that we have to do it. **But it's better than the alternative**." (Emphasis added)

What is the alternative? As I suggested last week in "Nobody Knows," there really is no outcome so negative that it can't be imagined. That doesn't mean terrible things will happen if no action is taken, but the possibilities are there, causing fear. Obviously, Bernanke and Paulson feel some of them could come to pass, and I respect their opinion.

So what is that alternative Paulson alludes to? Cascading bank failures? Interlocking dependence on counterparties in the derivatives markets who lack the ability to make good on their liabilities? Ultimately, reduced faith in U.S. Treasury securities and the dollar? As I said last week, I don't know. But it's not unreasonable to respect these possibilities. Our leaders want to justify the strongest action in history without spooking the market by enumerating the possibilities, so they're not being too specific. The Great Depression is our only model. I believe it justifies strong action.

Let me take a moment to say we're enormously lucky to have the right team in place at this time. Bernanke is a highly respected academic expert on the Great Depression, and Paulson is the very successful practitioner who chaired Goldman Sachs, an institution for which I have enormous respect. Being human, they're unlikely to get it all right. But I can't think of anyone I'd rather have in their jobs.

<u>The Plan and the Stumbling Blocks</u>

The plan is simple. In fact, to some it's too un-bureaucratic to be acceptable. The Treasury will use up to $700 billion to purchase the most toxic mortgage-backed securities from financial institutions – both U.S. and foreign – that do business in the U.S. This will reduce the doubt about the institutions' solvency and, in place of unsalable assets, give them cash they can lend. No external oversight or internal process is specified, and the result will be immune from examination by other authorities and from litigation.

Having described the plan in one paragraph, it'll take much more space to discuss the complaints being voiced and the obstacles in its path.

- We're asked to trust the judgment and integrity of the Treasury Department. I find this a pragmatic and direct solution. Others more skeptical than me disagree. Some think Paulson will be biased in favor of Goldman Sachs and the rest of Wall Street, but I'm convinced he took the job out of *noblesse oblige* – not for money or fun, I think – and I trust him to do his level best.

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On that subject, let me share a little history. Fifteen years ago, the staff of the Resolution Trust Company asked if we could help them achieve fair prices in disposing of the assets they'd taken on from failed S&Ls. I outlined a plan under which brokers would be asked for bids and we would watch the brokers, judging the adequacy of those bids. **"But who'll watch you," they asked.** My reply: "I've got bad news: you're going to have to trust someone." I'm perfectly happy trusting the Paulson-led Treasury.

- In a similar vein, some are complaining about the lack of supervision in the plan. The *Financial Times* quoted Barack Obama as saying, "We cannot give a blank check to Washington with no oversight or accountability . . ." Well, for my part, I'd rather entrust power to one wise man than a committee or bureaucracy consisting of average people. I think Paulson is that one wise man, but I'm also sure he's smart enough to surround himself with others who are equally capable.

- What will the marching orders be? In particular, what sort of prices will be paid? Fair market prices or higher? First of all, it's almost impossible to come up with a fair or "market" price for many of these assets today. Second, paying just the market price in the current highly depressed market wouldn't do much for the institutions' net capital position. But third, if more than the market price is paid, that'll be seen as a "giveaway to Wall Street." **It has to be made explicit – to those expected to approve the plan, and certainly to those expected to carry it out – whether these will be straight sales at market or they'll include a subsidy**. I think a bunch of the latter is called for.

- **Even beyond the points listed above, another issue may present a bigger stumbling block. The greatest reluctance may relate to the fact that, under the plan, when the process restores the viability of institutions that now are burdened with negative book value and inadequate confidence, the immediate financial benefits would go to shareholders and executives who either participated in the creation of the problem or, at any rate, should be penalized for the companies' failings.**

  To solve the problem, some say that in exchange for taking securities off institutions' hands – especially at above-market prices – the government should get ownership positions in those institutions. But how much? What would be the proper quid pro quo? If a $1 billion purchase of debt at $200 million above market saved a $15 billion institution, what piece of the company should the government receive? Do we want the government owning large pieces of private companies, or running them? And would that ownership stake then put the government in a conflict position vis-à-vis the institutions where it's not an owner? This is obviously a complex issue, and I'd hate to see it delay the solution of the problems we face.

  Further, there are calls for requiring executives at the institutions involved to accept limits on their compensation. What could be worse than setting up reasons for people to hesitate before reaching for this lifeline?

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- Certainly politics will be a major factor in whether the plan is enacted and in what form. In that regard, **there couldn't be a worse time for this to be debated than six weeks before the election.**

  After being well ahead in the polls until late August, Barack Obama lost his lead when the Republicans held their convention and made Sarah Palin their vice presidential candidate. But last week, when the economic crisis exploded and John McCain described the economy as strong, the Democrats pulled back into the lead. That's not lost on them, and I'm sure they'll continue to use the issue to maximum advantage. They'll complain about the one-sidedness of the Wall Street bailout and demand something for "the rest of us," like further economic stimulus, direct relief for mortgage borrowers, and loans to the auto makers. This politicizing might delay the process, encumber it with baggage, or make it unattractive to its supporters.

  Democrats will attack the plan to make Republicans look bad, and conservative Republicans may resist it as an unwarranted extension of the government's reach. In the end I feel it'll pass, but who knows in what form.

I don't view the plan as mainly a bailout for Wall Street and fat cats. Saving the financial system will benefit all users of capital, including home buyers and auto makers. Of course, that may sound like "trickle-down economics," which some are happy to rail against.

I think federal ownership would be a very hairy matter. But in this case I do have a solution, at least regarding the prices at which the government resells the debt: **Why not simply say that the government should receive half of the buyers' return in excess of a 20% yearly rate,** or some such? Ownership would present challenges, but sharing in the benefit would not.

Who's In the Wrong?

There'll be cries for scalps, and politicians will play to the crowd by assigning blame. This should be primarily a side-show, but it can grow into a significant distraction.

Short sellers are in the crosshairs most prominently. It is a simple fact that ever since the up-tick rule was revoked fourteen months ago, short sellers have had the ability to drive down stock prices, which they couldn't do if a short sale could only take place at a price higher than the last trade. It's also a fact that some financial stocks have fallen, and that their declines have added to worries about the companies, inducing further declines. Of course, no connection between the two has yet been proved.

As a result of the recent market action, short selling was outlawed in roughly 800 financial stocks, including outliers such as General Electric. This action was coincident with last Friday's rally, and people breathed a sigh of relief. Had short sellers been

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responsible for the demise of Lehman? Should short selling be banned? As usual, the answer isn't clear.

Balancing out the simple truths stated above, a number of factors argue in favor of short selling or against a ban:

- Short selling isn't "worse" than outright buying. One makes stocks go down; the other makes them go up. Why is shorting – selling what you don't own – any worse than buying what you don't own?
- Short selling is a highly legitimate way for investors to act on their belief that a stock's price is too high. Thus it tends to help stocks sell at fair prices.
- Short selling can bring losses to those who hold stock, but unabated buying can force stock prices to too-high levels where no one should buy. What can we do to prevent injury from purchases during unjustified booms?
- **Sure you can keep stock prices from being forced down by outlawing short selling. But then why not outlaw all selling? Think of what that would do for stock prices!**

In the short run, protecting the financial system is more important than preserving market efficiency or heeding the above arguments. Thus I do not think it was a mistake to ban short selling for the time being.

In the long run, however, I feel a ban on short selling is not in order, although I consider it desirable for the up-tick rule to be brought back.

Finally, as with many other things, the real problem isn't with short selling, but with abusive short selling. Manipulating the market to make short positions profitable by spreading negative rumors or bidding up CDS (see "Nobody Knows" from last week) should be driven out . . . although doing so won't be easy.

* * *

The trouble with memo writing at times like these is that there's always more. But this is a good time to wrap up regarding the Treasury's plan. My conclusions are as follows:

In the period 2003-07, the government, and especially the Fed, stimulated the economy and the financial system when they should have been acting restrictively to curb excesses. On the contrary, stimulation is in order today to prevent serious damage. I think we're going to get it.

But I also expect to see a rising tide of regulation of financial institutions in the period ahead, and I don't think restrictiveness will be the right thing until the system is on a firm footing. It's widely agreed that the authorities contributed to the severity of the

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Depression by withdrawing liquidity when they should have been increasing it. Let's not tighten again.

In "Doesn't Make Sense" in July, I listed four things that have to happen in order for the trends in mortgages and financial institutions to turn positive:

- Home prices have to stop going down.
- Home mortgages have to be made available.
- Financial institutions have to stop experiencing incremental write-offs.
- Financial institutions have to be able to raise additional capital with which to rebuild their balance sheets.

I also pointed to the complication: that each of these four things is dependent on the occurrence of another. **The good news is that the Treasury plan has the potential to break into the cycle of negativity, directly address the third and fourth of these, and thus contribute to the first and second. That's why I'm all for it.**

In the Depression, the engine of capital provision went into a long-term stall, and we know the consequences. The attempt now is to jump-start processes that have stalled and prevent the rest from doing so. I'm sure this is the right thing to do, and I hope for its success.

September 24, 2008

P.s., In "You Can't Predict. You Can Prepare." (November 2001), I described the process through which stock markets pull out of declines and turn upward:

> Stocks are cheapest when everything looks grim. The depressing outlook keeps them there, and only a few astute and daring bargain hunters are willing to take new positions. Maybe their buying attracts some attention, or maybe the outlook turns a little less depressing, but for one reason or another, the market starts moving up.

In the latest development, it was announced yesterday that Berkshire Hathaway would invest $5 billion in Goldman Sachs stock. Warren Buffett exemplifies the kind of person who can step out of the crowd. **Perhaps his example can make a few more people stop worrying about losing money and start worrying about missing out on gains.** One of these days, that'll happen, and things will turn for the better.

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Memo to: Oaktree Clients

From: Howard Marks

Re: Nobody Knows

The title of this memo isn't a joke; I mean it. Nobody knows the real significance of the recent events in the financial world, or what the future holds. Everyone has an opinion – there's an off-color joke to that effect – but opinions are entirely different from knowledge. As usual, the bulls are optimistic, the bears are pessimistic, and the rest are uncertain.

This is a great time for my favorite quote from John Kenneth Galbraith: "There are two kinds of forecasters: those who don't know, and those who don't know they don't know." No one knows about the future, and that's more true now than ever . . . literally. Excesses were committed at financial institutions that we've never seen before in terms of their scale or their breadth, and many new inventions are in place that never existed before. So clearly no one can know how things will pan out.

My conviction that this is true frees me from having to methodically assess the strength and weakness of economies and institutions, and it permits me to limit my comments to what I consider strategic realities.

I'm flattered that people have asked for my opinion, and I will give it. But that's all it is: an opinion. In setting it down, I will repeat things I've written before. So if you find something that you think you're reading for the second time, you're probably right.

<u>Boom-Bust</u>

Those two words say it all. If you have a boom, eventually you'll have a bust. And the further the boom goes, the worse the bust is likely to be. If there's no boom, on the other hand, there needn't be a bust.

There was no great boom in the U.S. economy in 2003-07, and that's one of the reasons why it has held up reasonably well despite the recent turmoil.

But there was an incredible boom in the financial sector, and it has led to an incredible bust. (It remains to be seen whether its effects will slop over into the real economy. As you know, we think they will.)

Finally, there wasn't a boom in the U.S. stock market, and so it hasn't busted. (If you think your stocks have given you pain, realize that their decline isn't at all commensurate with the end-of-the-world thinking roiling the financial sector).

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How Things Got This Way

Much of the current problem can be attributed to a decades-long bubble in the financial sector that made it the employer of obvious choice; attracted employees who were "the best and the brightest" (although often untrammeled by experience); contributed to greed and risk taking; drove out fear and skepticism; and carried institutions, behavior, expectations and asset prices to unsustainable levels.

What are the factors that got us in the current mess?

- Excess liquidity, which had to find a home.
- Interest rates that had been reduced to stimulate the economy.
- Dissatisfaction with the resulting prospective returns on low-risk investments.
- Inadequate risk aversion, and thus a willingness to step out on the risk curve in search of higher returns.
- A broad-scale willingness to try new things, such as structured products and derivatives, and to employ massive leverage.
- A desire on the part of financial institutions to supplement operating income with profits from proprietary risk taking – that is, to be "more like Goldman."
- A system of disintermediation, selling onward, and slicing and dicing that caused many participants to overlook risk in the belief that it had been engineered away.
- Excessive reliance on rating agencies which were far from competent to cope with the new instruments, and on black-box financial models that extrapolated recent history.
- Unquestioning acceptance of financial platitudes without wondering whether altered circumstances and elevated asset prices had rendered them irrelevant:
    - Houses and condos are good investments and can be counted on to appreciate.
    - Mortgages rarely go into default.
    - There can never be a nation-wide decline in home prices.
    - It's okay to grossly lever a balance sheet if you've hedged enough through derivatives.
    - It's safe to borrow and invest funds equal to a huge multiple of your equity capital if the probabilistic expected value is positive, because "disasters rarely happen."
- Individuals such as mortgage brokers and mortgage borrowers who were given incentives to do the wrong thing.
- Newly minted financial "masters of the universe" encouraged to maximize returns for themselves and their employers without concern for whether they were adding value to the financial system or endangering it.

In general, the above can be summed up as a shortage of adult supervision, common sense, skepticism, ethical concern and good old-fashioned prudence. As often happens in booms, the kids shouldered the adults aside or impressed them too much.

The list of errors can make you laugh . . . or cry. I mentioned in "Hindsight First, Please" how often financial people do things that look downright silly afterwards. But that never stops them from repeating the old mistakes or making new ones.

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So now we find financial institutions that endangered themselves by using extensive short-term borrowings or deposits to make investments that turned out to be enormously risky when an unlikely disaster – a nationwide decline in home prices – occurred.

In many ways, changes in the environment contributed as well. They crept up one by one, unnoticed, but their combined effect is significant. For example,

- The Glass-Steagall Act was repealed, permitting banks and investment banks to combine. (It had been enacted in 1933 to outlaw such combinations because they were felt to have contributed to the Crash of '29. It's ironic – and certainly not irrelevant – that it was repealed in 1999, in time to contribute to the current credit crunch.)
- The rule limiting short sales to up-ticks was revoked in July 2007, enabling short selling to force stock prices down unabated.
- Derivatives were created whose prices were determined by the price of their "real" underlying securities; now we see that in an Alice-in-Wonderland way, they're able to influence the price of real securities (see below).
- And mark-to-market accounting exposed precariously leveraged institutions to the risk that technically-driven declines in asset values might leave them too weak to make it through to a better day.

It was during my working lifetime that the phrase "too big to fail" was coined. More recently, Citibank caused some people to observe that it had become too big to manage. In the current go-round, financial institutions have been described as too big to understand and, finally, too big to disentangle (given the proliferation of derivatives and swap transactions, a key element in assessing an institution's essentialness is the degree of counter-party risk it presents to others). There's no doubt that these developments are frightening. But heroes aren't people who're unafraid, but rather those who act bravely despite their fears. Investors mustn't let emotion control their actions.

Because of this combination of altered behavior, financial innovation and changes in the environment, I feel unable to tell you what lies ahead. But that doesn't mean I'm not going to suggest a course of action.

<u>Does the Market Know?</u>

For reasons both systematic and unsystematic, the market is in many cases taking its lead from . . . the market. Price declines cause fear, and thus further price declines.

In some cases, the signal for increased worry comes from increases in the price of credit default swaps, which provide insurance against debt defaults. Rising CDS prices imply that creditors have become more concerned. This can send down the prices of a

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company's stock and debt instruments and frighten customers and depositors into withdrawing funds, potentially leading to downgrading and failure. In other words, increases in prices for credit insurance can serve as self-fulfilling prophesies. This is the unintended consequence of one of the recent innovations.

I want to mention the potential for manipulation present in this situation. One strong bid for default protection in the thin market for CDS on a given company can massively depress the price of billions of dollars worth of stock and/or debt. Clearly, an unscrupulous short-seller can use this tactic to his advantage. No one knows the extent to which it is in play . . . or how to stop it.

In the end, people once again have to apply skepticism and their own judgment, this time to bad news. Is the market smart or dumb? Is it giving us a valid signal to get out or the buying opportunity of a lifetime? I seem to remember a useful quotation to the effect that "The market is an ass." Thus I think there's more money to be made by being a contrarian than a trend follower.

The End of the Financial System

We're seeing and hearing things today that we never imagined.

- The demise or bailout of Lehman Brothers, Bear Stearns, Freddie Mac, Fannie Mae and AIG.
- Concern about the viability of Goldman Sachs and Morgan Stanley, and huge declines in their stocks.
- Rising prices for CDS protection on U.S. Treasury securities.
- Rates on short-term T-bills close to zero because of an extreme flight to safety.
- Awareness for the first time, I think, that the U.S. government's financial resources are finite, and that there are limits on its ability to run the printing press and solve problems.

Will the financial system melt down, or is this merely the greatest down cycle we've ever seen? My answer is simple: we have no choice but to assume that this isn't the end, but just another cycle to take advantage of.

I must admit it: I say that primarily because it is the only viable position. Here are my reasons:

- It's impossible to assign a high enough probability to the meltdown scenario to justify acting on it.
- Even if you did, there isn't much you could do about it.*
- The things you might do if convinced of a meltdown would turn out to be disastrous if the meltdown didn't occur.

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- Most of the time, the end of the world doesn't happen. The rumored collapses due to Black Monday in 1987 and Long-Term Capital Management in 1998 turned out to be just that.

* -- Money has to be someplace; where would you put yours? If you put it in T-bills, what purchasing power would be accorded the dollars in which they're denominated? If the government's finances collapsed, what good would your dollars be, anyway? What depository wouldn't be in danger? If you and many others decided to put billions into gold, what price would you have to pay for it? Where would you store it, and how would you pay for the truck to move it? How would you spend it to buy the things you need? What would people pay you for your gold, and what would they pay you with? And what if you bought credit insurance on all of your holdings: who would be able to make good on your claims?

No, I don't see any viable way to plan for the end of the world. I don't know any more than anyone else about its probability, but I see no use in panicking.

I think the outlook has to be viewed as binary: will the world end or won't it? If you can't say yes, you have to say no and act accordingly. In particular, saying it will end would lead to inaction, while saying it's not going to will permit us to do the things that always have worked in the past.

We will invest on the assumption that it will go on, that companies will make money, that they'll have value, and that buying claims on them at low prices will work in the long run. What alternative is there?

What Kind of Future Do We Face?

Of course, even assuming there will be a recovery, we have to think about what it will look like. As I wrote in "Doesn't Make Sense," we aren't counting on a "V." We will continue to emphasize companies that we feel serve basic economic functions and can do relatively well even in bad times. Many elements in the economy are being damaged, especially confidence, and they may take a relatively long time to recover. In particular, the mechanism for providing capital is in great disrepair, and less credit certainly means a slower recovery and less growth.

The financial institutions deserve a special mention. If there's ever been a sector that's down-and-out, this is probably it. Nevertheless, Oaktree generally demands more transparency in order to invest than most of them provide. It can seem almost impossible to ascertain their condition through due diligence, and absolutely impossible without access to their books. For example, possible buyers probably found the risks at Lehman Brothers to be unanalyzable. As *The Wall Street Journal* said on Tuesday,

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> Even understanding Lehman's current trading positions was tough. Lehman's roster of interest-rate swaps (a type of derivative investment) ran about two million strong . . .

What kind of effort would it require to understand the significance of two million derivatives positions: are they thoroughly hedged, or bullish or bearish on balance? And what about Lehman's millions of other derivatives and complex securities? This opacity, combined with heavy leverage, reliance on short-term funds, liquidity and conscious risk taking, is the reason why a loss of confidence is conceivable at any financial institution in times of panic.

What will the Wall Street of the future look like? We read – and I don't doubt – that for at least a while it will be smaller, less leveraged, less profitable, and more highly regulated. But I also think it will be less competitive and less risky.

In the course of my career, Wall Street went from being (1) brokers handling riskless trades for commission to (2) dealers buying and selling inventory for a spread to (3) block traders purchasing large amounts of stock when market liquidity was inadequate to (4) proprietary traders risking their own capital in pursuit of profit for the house. Backing down this progression wouldn't be the worst thing in the world.

What Will Start the Recovery?

Eventually, someone will walk out of the crowd and take advantage of the lows. He may start an investment bank unburdened with a legacy of losing positions. Or a bond insurer like Warren Buffett did when MBIA and Ambac became impaired. **The cause of the recovery can't be predicted. There may not even be a visible one. Maybe things will just get so cheap that they can't stay down.** (In ancient history – November 2001 – I wrote "You Can't Predict; You Can Prepare," with a thorough description of how cycles happen, based on energy all their own. It might be worth digging up.)

I like to point out that, even in retrospect, no one can say what started the collapse of the tech stock bubble in 2000. But it did start . . . just, I think, because stock prices rose far too high. That works in reverse, too.

In March, in "The Tide Goes Out," I mentioned the three stages of a bull market, a notion I've been carrying around in my head for about 35 years:

- the first, when a few forward-looking people begin to believe things will get better,
- the second, when most investors realize improvement is actually underway, and
- the third, when everyone's sure things will get better forever.

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As we all know, buying during the first stage can be highly profitable, while buying during the last euphoric stage usually leads to disaster.

Then I went on to create the converse of the above, the three stages of a bear market:

- the first, when just a few prudent investors recognize that, despite the prevailing bullishness, things won't always be rosy,
- the second, when most investors recognize things are deteriorating, and
- the third, when everyone's convinced things can only get worse.

In the final stage, you can buy assets at prices that reflect little or no optimism. There can be no doubt that we are in the third stage with regard to many financial institutions. Not necessarily at the bottom, but in a serious period of unremitting pessimism. **No one seems able to imagine how the current vicious circle will be interrupted. But I think we must assume it will be.**

It must be noted that, just like two years ago, people are accepting as true something that has never held true before. Then, it was the proposition that massively levered balance sheets had been rendered safe by the miracle of financial engineering. Today, it's the non-viability of the essential financial sector and its greatest institutions.

Everyone was happy to buy 18-24-36 months ago, when the horizon was cloudless and asset prices were sky-high. Now, with heretofore unimaginable risks on the table and priced in, it's appropriate to sniff around for bargains: the babies that are being thrown out with the bath water. We're on the case.

September 19, 2008

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Memo to: Oaktree Clients

From: Howard Marks

Re: What Worries Me

Especially in times like these, people often ask what keeps me up at night. Well I'll tell you a few things it's not: that Oaktree will suddenly depart from its investment philosophy; that some of our accounts will trail their benchmark for a year; or that the markets will be so weak that we can't earn returns (or so strong that there aren't any bargains). And it's certainly not that I'll meet up with that bus I hear so much about.

My real worries concern the big picture and the long term. Most of them have to do with America's future and the world in which my children and grandchildren will live. In this regard, I think there's a lot to worry about. I'm not going to spend this memo discussing things as mundane as investment cycles, or as cosmic as environmental deterioration, global warming or terrorism. There's enough to talk about in terms of largely economic issues without going into areas like those. And having covered them below, I promise to go back to my day job thinking about investments.

I hope this memo will be well received. I fear some may think it's un-American or unpatriotic, but I assure you I'm neither. It'll certainly seem negative and dreary; I admit up front that I see the problems more clearly than the solutions. But I hope this memo will raise some questions in readers' minds and contribute to constructive debate.

Further, I hope it'll be of interest to Oaktree's clients outside the U.S. While you may not be exposed to these issues to the degree we are at home, (a) you may want to know what I think the U.S. is up against, and (b) at bottom, we're all in this together – all nations are intertwined. And who knows: you might be looking for farsighted help with your countries' long-term problems, just like I am.

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The American Century

The truth is that it's great to live in America. Ours isn't the only wonderful country, or the only good place to live, but we've benefited from:

- 230 years of stable democratic government;
- 140 years without civil war;
- the generally peaceful co-existence of a highly heterogeneous population;
- very high levels of personal freedom and opportunity;
- a highly functioning free-market economy;
- great educational institutions;
- vast land mass and natural resources; and
- a highly productive, inventive and entrepreneurial citizenry.

No one alive today has experienced anything other than American preeminence. In fact, the twentieth century has been called "The American Century." But there's no reason why the twenty-first century necessarily will be another.

National preeminence – like most other things – is cyclical, not permanent. Given time, leading nations overextend themselves, lose their energy or squander their advantages. They get fat and happy, and they relax. Underdogs try harder and rise from a lower base. Perhaps they study the leaders and learn how to emulate them. And perhaps they begin to make better use of untapped resources and underutilized labor forces. They may even benefit as the leaders share the wealth (such as the U.S. did through the Marshall Plan after World War II). Regardless of the reasons, just as the U.S. supplanted colonial powers like England, France, Spain and Portugal that had held sway earlier, countries like China, India, Russia and Brazil now seem likely to grow faster than the U.S. in the twenty-first century, narrow the gap and enjoy their time in the sun.

In Praise of the Melting Pot

One of the greatest sources of America's growth and preeminence has been the bounty of immigration. With the exception of the Native American Indians, there was no one here 500 years ago. We're a country of immigrants. We've benefited as waves of foreigners moved to the U.S. to escape mistreatment or seek opportunity. I never forget that my grandparents weren't born here, and how far I've been able to progress nonetheless.

When I was a kid in the 1950s, a joke asked why we were ahead of the Russians in technology. The answer: our German scientists were better than theirs. **This country attracted people from all over the world, gave them unprecedented opportunity, and permitted the most talented to rise to the top. What a great recipe for success.**

But today the outlook isn't the same:

- The stick isn't as strong as it used to be: economies and living conditions in other countries have gotten better and continue to do so.
- The carrot isn't as strong, either: we're no longer the only country offering opportunity.
- The barriers to entry threaten to rise, as some Americans consider immigration one of our biggest problems. And 9/11 has made visas, including those for students, much harder to obtain.

My involvement as a university trustee has exposed me to a developing trend. It used to be that foreign students were eager to come to the U.S. to gain a higher education and then stay to pursue their fortunes. They still want to come for the education, but today many want to return to participate in economic booms in their native countries. This makes me wonder whether there'll come a day when the opportunity for a first-class U.S. education isn't as much of a draw, because other countries will have developed

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comparable educational institutions of their own. That day seems far off – institutions like these don't arise in an instant – but it isn't an impossibility.

Many newcomers to the U.S. have found success in engineering, where their technical skills could be put to good use and language skills may have been less critical. Now, however, we hear from Silicon Valley that engineers are harder to attract and retain because of the trends described above. I'm told that in certain fields (like aerospace), U.S. engineers are declining in number and their average age is rising.

America's preeminence depends in part on continuing to attract the world's best and brightest, but the outlook for doing so is not all it was in the past.

Standard of Living

In many ways, including materially, Americans have enjoyed a wonderful standard of living over the last hundred years. Considering creature comforts such as housing, food, sanitation, healthcare, leisure and luxuries, ours may have been the highest standard of living in the world. That raises three questions:

1. Why should we continue to enjoy the highest standard of living?
2. Why should it continue to improve?
3. And why should the rate of improvement outpace that of the rest of the world?

We often see poll results showing that increasing numbers of Americans doubt their children will live better than they do. We'd like them to, but why should they? Other than technological improvements which doubtless will continue to make life better for everyone, why should our standard of living improve monotonically? And improve relative to the rest of the world? Certainly the advantage in this regard can shift to other countries, just as it shifted to us in the past.

The World's Highest Earners

One of the reasons for our high standard of living is the fact that Americans have been paid more for doing a given job than everyone else. This was fine as long as (a) the U.S. enjoyed the benefits listed on page one, and (b) significant barriers protected the status quo. But why should this go on? How can it go on?

Think about two cities. City A has more jobs than people, and city B has more people than jobs. Initially, people in city A – where labor is relatively scarce – will be paid more for doing a given job than people in city B. **The key to their continuing to earn more is the existence of barriers that prevent people from moving to city A.** Otherwise, people will move from city B to city A until the ratio of people to jobs is the same in both cities and so are the wages. **Among other things, geographic inequalities are dependent on the immobility of resources.**

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For much of the last century, barriers kept our pay high. Other countries' output wasn't as good as ours. Some lacked investment capital, and some were decimated by war from time to time. Perhaps they didn't possess our ability to generate technological advancements or our managerial skills. High transportation costs, tariffs, prejudices (when I was a kid, "Japanese transistor radio" was synonymous with "low quality") or legal restrictions (e.g., keeping foreign airlines from competing freely in our markets) may have protected American wages. International trade wasn't what it is today. But all of these things can change over time, and it's hard to see how the earnings supremacy of U.S. workers will be sustainable.

Among other things, our legacy airlines became weighted down with high-cost labor contracts and all have gone through bankruptcy to shed them. Likewise, high healthcare costs added to the cost of every car built in the U.S. to an extent that hurt our competitiveness. Thus the U.S. auto industry lost domestic market share, sent production overseas, and consists of three companies of uncertain creditworthiness.

Protectionism favors the erection of trade barriers, but it's usually resisted based on the totality of its effects. **In international trade, just as in local markets, the only real way to maintain and grow market share – and thus to protect earnings power – is to offer the best combination of price and value. Regulations and tariffs won't make us competitive in the long run, and without offering a superior bargain, the supremacy of our standard of living will not be preserved in a world of lower barriers.**

<u>What Do You Make?</u>

We're all familiar with the pattern: as communications improve and barriers and transportation costs come down, jobs move from the U.S. to China, India or some other low-cost country, spurred by producers' desire to increase profits or just remain competitive. There's even a word for it: outsourcing. As a result, with each passing year, the U.S. manufactures less of its needs and the world's.

I looked at myself on the way to work this morning. Everything I had on was made outside the U.S.: suit, shirt, tie, shoes, eyeglasses, even underwear. My car, TV and stereo are imports. So's my computer. I bought some of these things from American companies, but they were made elsewhere. (I don't think I'm unpatriotic in buying these things: I'm just pursuing high-quality goods at the best ratio of value to price.)

There's no way around it: we don't make much anymore. What does that mean? I have to admit I don't know. I'm not enough of an economist to have the answer. But I wonder a lot about how an economy can function if it doesn't make much.

Joe does Ed's legal work, and Ed keeps Joe's books. Sarah cuts Bob's hair, and Bob cooks in the restaurant where Sarah eats. Rich drives the bus that takes Sue to the bank,

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and Sue handles Rich's loan application. And, of course, someone like me manages investments for all of them. But how does an economy function if nobody actually makes anything – and if we have to buy all of our stuff from other countries? I'm exaggerating for impact, but you get my meaning. We make less and less each year – and we consume more.

Can an economy be successful if it consists of nothing but service providers, government workers and retailers? (Think about the unions you hear the most about in connection with the upcoming presidential election: the Service Employees International and the American Federation of State, County and Municipal Employees – no longer the Teamsters and Auto Workers.) Can a nation prosper without producing goods? I just don't know the answer.

And then there's the question of where we'll get our stuff from. Of course, we'll buy it from other countries. **But that leads to other questions: To what extent will rising inflation in cheap-labor countries raise the cost of the imports on which we depend so thoroughly? What will we sell to the rest of the world in order to get currency with which to buy their stuff? And for how long will they buy it from us?**

Certainly American goods have become less price-competitive, and other countries have learned to produce for themselves. Think about what we export. Movies? Computer software? Other countries are increasingly making their own. Financial products? Now there's an area where we're still exporting. But given the results with subprime and CDOs, might we have damaged that franchise? (Here's a piece of trivia for you: what's our biggest export by volume? This trick question hinges on the inclusion of the words "by volume," and the answer is waste paper for recycling. Certainly this doesn't indicate a manufacturing advantage on our part, or value we're adding to the global economy.)

Increasingly, we're reduced to designing products, styles, software and media content for production elsewhere. What's the long-term outlook in that regard? How long will others need us in that role? It's been said we're becoming a nation of burger flippers. An exaggeration, certainly, but how much of one? And what are the ramifications? One last thing (and don't tell my friends I said this): **What does it mean when investment bankers and money managers – who add relatively little to economic output – are among a society's highest paid members?**

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Earning and Spending

When I meet with people in other countries, here's how I describe the typical American (again, exaggerating for effect): $1,000 in the bank and $10,000 owed on the credit card; makes $20,000 a year after taxes and spends $22,000. That may not be strictly accurate, and I haven't checked my facts. But I think it presents the general picture.

Many people have little if anything saved up – we often read about people being bankrupted by a bout of sick leave – and the savings rate has fallen to roughly zero.

People probably think of their pension plans, IRAs and home ownership as eliminating the need for savings. But certainly recent events have shown the holes in that approach.

U.S. consumers increase their debt continually, seemingly without ever thinking about paying off the balance or of how they might accomplish that (short of winning the lottery). It doesn't seem to trouble people when they spend more than they earn, whether through the use of credit cards or by taking out loans, including borrowing and spending the equity in their homes. In all of these regards, the American consumer doesn't seem to give any thought to how this movie will end (I last raised this in "Hindsight First, Please" in October 2005). **It's just a matter of people wanting to consume more than their income supports. Saying "I want it, but I can't afford it" seems hopelessly old-fashioned in the America of today.**

Who Else?

I wish only consumers acted this way. Go back three paragraphs, though, and ask whether my description of the typical American doesn't also relate equally to our government: constant deficit spending and continually increasing debt.

Our fiscal deficit and national debt aren't enormous relative to other developed nations and to our GDP. And I don't make a value judgment that it's wrong to run deficits from time to time. The traditional view of fiscal policy is that deficit spending should be used counter-cyclically, expanding it in weak times to stimulate the economy, and contracting it (perhaps paying down debt) to throw on some cold water when the economy becomes heated. **But I wonder whether constant deficits, and a national debt that always grows faster than GDP, can be right in the long run**.

Right now, the U.S. Treasury has to borrow to cover our fiscal deficit. As the debt grows, the interest bill rises – and in connection with the rescue of Fannie Mae and Freddie Mac, Congress just approved an increase in the national debt ceiling from $9.8 trillion to $10.6 trillion. Pretty soon, we may have to borrow just to pay the interest.

Might we ever pay off our debt? How? More importantly, what are its ramifications? Dependence on foreign lenders puts us in quite a box:

- To attract foreign capital, it's better to pay high interest rates. But the need to keep them high could complicate the job of stimulating our economy when it slows.
- The fact that our negative balance of payments pumps excess dollars into circulation abroad can put downward pressure on the value of the dollar.
- Weakness in the dollar can make foreigners reluctant to hold reserves in dollars, and to buy Treasury debt that will be repaid later in dollars that buy fewer goods. What happens when we pump out so many dollars – and they depreciate so much – that foreigners refuse to accept our promises of payment? How then will we fund our deficits?

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This debate has gone on for years. Our politicians want to borrow so they can continue to spend more than comes in via taxes. But shouldn't we ask what amount of debt is right to leave for future generations? As the federal deficit grows relative to GDP, so will the national debt, and future generations will be saddled with an increased interest burden (even if there's never a need to repay).

Again, I'm not enough of an economist to know the answers. (And even economists disagree about the significance of national deficits and debt.) **But I wonder whether it's prudent for a country to spend more than it makes in both good times and bad**.

Affording Retirement

In college macroeconomics, I learned that Social Security was one of the important components of the "safety net" preventing a recurrence of the Depression. With help from their personal savings and the private pension system, Americans would be able to afford retirement, rather than end up on the streets in their old age.

Now I worry about the outlook for my fellow Americans in this regard. Many have little saved, as I mentioned above. According to Tom Friedman, writing in *The New York Times* on June 29, "[Since 2000,] our national savings have gone from 6 percent of gross domestic product to 1 percent . . ."

The defined benefit pension system is shrinking, especially with regard to new enrollments. Defined contribution plans and IRAs replace it somewhat, but their voluntary nature leaves big holes in the safety net. (I admire the wisdom of mandatory pension plan participation in countries like Australia, Denmark and the Netherlands; people can find it hard to save rather than spend, so it's a good idea to give them "encouragement" in that regard.)

Finally, the impending shortages in the Social Security System have been very well documented, and the best the optimists can say is "it won't be a problem anytime soon." Add in more years spent in retirement by people living longer and a declining ratio of workers paying into Social Security to retirees drawing out, and the outlook is very problematic.

Will large numbers of Americans be unable to afford retirement? Will they experience deprivation? Will they become a burden on the community and the nation? I see no easy or pleasant answers to these questions.

The Healthcare Dilemma

Healthcare is another example of a problem crying out for a solution, but the stumbling blocks are many.

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- Healthcare is expensive, and the cost rises all the time, in part because costly new medicines and procedures are developed.
- Americans are living far longer, so there are more years in which sickness is high and costs are elevated. In the modern era, few people (understandably) are content to slip into decline and death without a fight.
- Remarkably in our advanced society, nutrition and health awareness seem to be going in the wrong direction, along with the level of exercise for large portions of the population. Obesity has become an epidemic, bringing with it serious health problems.
- Patients want the best care, and doctors want to provide it. How can society respond to this demand when many patients can't afford the care, or even a reasonable co-payment? I once read a *Wall Street Journal* op-ed piece on healthcare with a title something like, "If You're Paying, I'll Have Steak." That's the inevitable outcome when third parties foot much of the bill.
- It's hard to effect triage: who'll tell an 80- or 90-year-old that he shouldn't get a joint replacement or costly drug therapy? If a hospital or the insurance company wants to say "no," all hell breaks loose.
- The economics of medical care have become somewhat anti-social. Doctors face declining pay and status, and systems designed to control healthcare costs stick healthcare professionals with very distasteful administrative burdens.
- Amazingly for such a rich nation, statistics rank American healthcare low in the developed world. (I'd guess, however, that this is the result of averaging a lot of people enjoying very good treatment with the less fortunate who fare much worse than their counterparts in countries with broader government-sponsored programs.)
- One answer is some form of socialized or universal healthcare, but by nature such a system is likely to be costly, bureaucratic and/or ineffective. Other countries have national health systems, but it's hard to get appointments, and I imagine everyone gets care that's okay but not great.
- If there's a collective scheme, can the healthiest and wealthiest be forced to participate? If not, how will it function if they opt out of it, pulling away healthcare resources for "concierge" medical service and draining low-burden members from the pool of insureds?

Taken together, these points suggest possible compromises but no ideal answer. **The bottom line is that we can't afford to give the best possible medical care to every citizen. No country can, and anyone who says we can is probably running for office.** We can either (a) give moderate care to everyone or (b) retain a system under which the results are all over the map and the less fortunate get very little. Neither of those is perfect, but I think they're the choices.

Growing Inequality

The capitalist system produces gains because of a Darwinian process in which participants are spurred on by economic incentives and the most successful enjoy great rewards. The system runs on the ability of those who are more talented and/or work

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harder to do better than others. Inevitably the better life also goes to some who are undeserving and just lucky or born into wealth; that's undesirable but inescapable. But it's not good if the margin by which some do better than others is too big.

I think it was in the '70s that I came across a great explanation for America's economic success:

> When the English factory worker sees the boss drive out in his Rolls Royce, he says, "I'd like to put a bomb under that car." But when the American worker sees the boss drive out in his Cadillac, he says, "I'm going to own a car like that some day."

That's one of those little stories containing a great deal of truth. **Economic motivation and a feeling of opportunity are great positive forces, while class resentment is equally negative. We want America to remain a meritocracy where all citizens believe in their ability to get ahead.** Too much of a disparity could eat into the belief in our system.

Pay at the top has exploded relative to all else. At Citibank in the mid-1980s if my memory's correct, CEO Walter Wriston, the world's top banker, made about $250,000 a year. Twenty-five years later, the CEO of a money-center bank or large corporation makes 50 to 100 times that . . . and 400 times in a year when options pay off big. What other segment of our workforce has done as well? We're in a period of general income stagnation, when lots of Americans haven't made strides like the executive class . . . or any strides at all.

I don't expect executives to indulge in self-restraint, since people rarely do things against their own short-term interests. But I'd like to see boards take the position that huge incomes should come only with great benefits for the companies' owners. And that a single great year might not merit enormous compensation that year. Entrepreneurial rewards can be appropriate for successful executives, but they should come only for long-term success and should be at risk in the event of failure.

I believe thoroughly in the free market system, and that the worst thing imaginable would be government regulation of salaries or incomes. But I also worry about the consequences when the benefits to the fortunate few are perceived by everyone else to be unfairly disproportionate and unrelated to achievement.

In the past, in addition to the fact that incomes weren't so enormous at the top, the income gap was narrowed by the fact that people could do pretty well at the bottom. Millions of menial and blue-collar jobs were created as our economy expanded. Even without much education, people could enjoy the good things in life, including cars, TVs and vacations, along with good public school educations for their kids and the possibility that most of those kids would have better jobs than their parents. Which of those elements is equally true today?

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In the "Information Age," the lack of a college degree or computer literacy is a much greater handicap than it used to be. With non-information jobs increasingly moving overseas, what jobs will our less-educated citizens occupy? You might say education holds the answer, but (a) our public education system is in decline, and (b) how, especially given these jobs' greater productivity, can there be enough tech-based jobs to keep our entire population gainfully employed?

The Energy Problem

When I began to drive in 1964, oil was $4 a barrel and gasoline was 29 cents a gallon. Then, in 1973, OPEC put an embargo on oil exports. We saw lines around the block at gas stations, and we were permitted to fill up just every other day. The price of oil jumped to $35 by 1980 or so, and then it subsided. It spent the period from 1986 to 2001 between $10 and $30 before going on to hit $92 in 2007 and $148 earlier this year.

The bottom line, however, is that from about 1880 until a few years ago, we were in an environment of cheap energy. **For over a hundred years, the price of oil didn't rise, meaning it got dramatically cheaper in inflation-adjusted terms. This encouraged exactly the behavior one would expect: rapidly growing oil consumption, lagging increases in supply, little attention to the development of alternative energy sources, insufficient investment in mass transit, and weak efforts at conservation.**

We're guilty of profligate energy consumption. Americans use SUVs or pickups capable of carrying eight people or huge payloads to do their grocery shopping. And they feel free to live 50 to 75 miles from work and to drive there alone in their behemoths. We just haven't had incentives to use energy thoughtfully.

Maybe you have your favorite example of energy waste; mine is supermarkets' removal of doors from their freezer displays. Can you imagine what future archaeologists will say about the decision to cool a whole store just to make it easier to buy some frozen food?

It's not a coincidence that with oil much more expensive, Europe uses far less energy per unit of GDP than we do. Because of high taxes, gasoline traditionally has cost 2 to 4 times as much in Europe as it has in the U.S. Today it's about $9 per gallon, and yet I don't hear Europeans complain much. That's because they drive smaller, more fuel-efficient cars, live closer to their jobs, and make major use of mass transit. They even ride bicycles to work.

The most important element in responding to the energy problem is expensive oil. Low prices have encouraged high demand and discouraged additions to supply. The opposite will be the case only if prices are high. Politicians' attempts to play to the crowd by artificially reducing the price of oil – through releases from the government's Strategic Petroleum Reserve, banning "speculation" or providing a holiday from gas taxes, as was suggested in the spring by would-be presidential candidates from both parties – will do nothing but add to demand and depress supply.

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In the future, pre-industrial societies will become industrialized, and millions of newcomers to the middle class worldwide will want cars. **We need an energy policy that is constructive for the long run, encouraging us to use less oil and find more.** Everyone's squawking about gas prices and looking for culprits. **But as long as gasoline costs much less than Snapple or Evian water, resources will be misallocated and we won't see real progress.**

We also would benefit from regulations that mandate fuel efficiency, encourage alternatives and penalize high oil use (or at least don't motivate the opposite). Business use of SUVs has been abetted over the years by tax rules giving them the superior depreciation treatment accorded trucks, based on weight. No doubt this was a result of lobbying on the part of auto companies enjoying the high profitability of SUVs. Thus it's been cheaper for businesses to use a $30,000 SUV than a $30,000 car. We and our government have to make more responsible decisions.

Finally, in order to make a genuine difference, we must invest on a vast scale in mass transit, energy efficiency and non-petroleum-based energy. This will have short term consequences: some combination of higher taxes, slower growth, reduced government spending in other areas, higher deficits and/or lower consumption levels. We can't spend to solve the energy problem and simultaneously avoid all of these effects. **Does the will exist to do these things in advance of the day we have no alternative?**

Rather than tap the Strategic Petroleum Reserve (which is designated for emergencies, and high prices aren't an emergency), we could add to it. **We could say, "Let's use less than all the oil that's available – and that we can afford – so as to leave some for future generations." But that requires selflessness and farsightedness that's far from in fashion.**

Who'll Own the World?

In addition to the practical and geopolitical ramifications of the energy situation, we'd better consider the financial ones. When the price of oil gapped up in the 1970s, vastly increasing numbers of dollars started to move offshore in exchange for oil. The process of bringing them back came to be called "recycling petrodollars." There are both benefits and risks in this process.

Earlier this month it was reported that our trade deficit declined in June because of rising foreign purchases of our products. That's one of the positive effects of the piling up of dollars abroad, and also of the fact that our goods priced in dollars look cheap to those outside the U.S. In short, we like having buyers for the things we have to sell.

But sometimes we resent their presence. It doesn't take much for xenophobia to rear its ugly head. In the 1980s, there was fear that Japan's economic juggernaut would lead to a wholesale takeover of U.S. assets by Japanese buyers. A couple of years ago, proposed

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investments by China and Dubai in our oil and port industries were rebuffed, and last fall (before it was clear how desperately we needed more capital), people were grumbling about sovereign wealth funds' growing influence over our financial institutions.

Well, what do you expect to happen? If we spend more than we bring in, and thus send dollars overseas to pay our tab, isn't it reasonable to expect that some will be brought back and spent here? Clearly, the oil producers will have the ability to buy our assets. And some, like Qatar and Abu Dhabi, are far too small for the amounts involved to be invested or spent in those countries without making their inflation worse than it already is.

We're already seeing the effects. Financial institutions ran to sovereign wealth funds when they needed to add to their capital; who else is there? Room rates in hotels around the world are soaring in dollar terms. Powered by foreign buying, prices in the contemporary art market are moving out of sight, and so are high-end real estate prices in London and other cities of choice. Last month it was reported that a villa in the south of France had been sold to a Russian for $750 million: **a great outcome for the seller, but also a sign that eventually we may be priced out of our own assets.**

With dollars moving abroad and exchange rates going against us, Americans are likely to find it harder to afford the goods and the standard of living they're used to, enjoy holidays overseas, and hold on to assets rather than succumbing to bids.

The numbers involved are very substantial. On July 10, *The New York Times* wrote:

> With oil hovering near $140 a barrel, analysts expect countries in the [Persian] gulf to generate yearly cash surpluses of $300 billion . . . with sovereign funds in this area forecast to reach a size of $15 trillion by 2020.

And of course, the numbers will do nothing but increase with time. The other day I was given a shorthand way to think about the situation: for every $1 in the price of a barrel of oil at a point in time, approximately $1 trillion will move from oil consumers to oil producers over the subsequent hundred years. **Oil at $120 means the producers will reap about $120 trillion. To put this into perspective, the total value of the world's stock markets currently stands at about $47 trillion. So it's not much of an exaggeration to say the oil producers could own the world.**

You might argue that more fuel-efficient cars, electric cars, atomic cars, hydrogen power and cold fusion will alter the equation and prevent this massive shift of wealth. And we know for sure that high oil prices will reduce demand, encourage exploration and make invention and substitution economic. **But I think it's smarter to think about the issue than just count on things to work out.**

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We're From the Government and We're Here to Help

Last month, in "Doesn't Make Sense," I labeled the obsession with the short term the worst thing about American business. But short-termism is far from limited to business. The process under which we're governed is even worse.

In 2004, the *Los Angeles Times* asked me to write a review of Pete Peterson's excellent book on the looming fiscal crisis, "Running on Empty." One of his messages was that politicians are increasingly loath to take on the big issues of the future. Why should they? The prospects are unpleasant, and any solutions will entail pain. **What politician would trade away votes today to solve problems that are likely to come to a head long after he or she has retired?** As Peterson put it:

> . . . while our problems are not yet intractable, both political parties are increasingly incorrigible. They are not facing our problems, they are running from them. They are locked into a politics of denial, distraction, and self-indulgence that can only be overcome if readers like you take back this country from the ideologues and spin doctors of both the left and the right. . . .
>
> With faith-driven catechisms that are largely impervious to analysis or evidence, and that seem removed from any kind of serious political morality, both political parties have formed an unholy alliance – an undeclared war on the future. An undeclared war, that is, on our children. **From neither party do we hear anything about sacrificing today for a better tomorrow. In some ways, our most formidable challenge may be our leaders' baffling indifference to our fiscal metastasis**. As former Treasury Secretary Larry Summers puts it, "The only thing we have to fear is the lack of fear itself." (Emphasis added)

It doesn't require higher math to see that we face serious problems in areas such as Federal deficits, the balance of payments, international competitiveness, energy, Social Security, Medicare and education. Certainly those problems won't solve themselves. But when did you last hear of any serious debate on them?

Take the Social Security system. There are only four possibilities: (1) higher taxes, (2) lower benefits, (3) privatization, or (4) dealing with the system's insolvency when it occurs. But the first two are unpopular, and the third is politically contentious, given that it's inherently less egalitarian than the current system and could result in the government being on the hook as the payer of last resort. So that leaves the fourth . . . which is where we stay. **This just is not an acceptable approach to problem solving**.

Likewise, everyone knows the tax code is overly complex, indecipherable and larded with provisions benefiting special interests. It desperately needs reworking from the ground up, but no one considers that politically doable.

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As *The Wall Street Journal* pointed out on June 24:

> When President Clinton tried to overhaul the health-care system, he couldn't get even a committee vote on his plan in a Congress his party controlled. When President George W. Bush tried to revamp Social Security, he couldn't get even a committee vote on his plan in a Congress his party controlled.

Washington's failure to solve the big problems really gets me going, calling to mind a great quote from Will Rogers: "The more you observe politics, the more you've got to admit that each party is worse than the other."

Condemnation of politicians needn't be universal. There actually are some I like. More than anything else, they're marked by a spirit of bipartisanship. Rather than consider politics a blood sport in which the only important goals are to embarrass the other side and win elections, they want to solve our nation's problems. I just think they're few in number, and much fewer than I recall from my youth.

I confess that I feel the deck is stacked against government getting better. Less attention paid to newspapers and TV news, declining interest in national and international affairs, the rising role of the sound bite, generally shorter attention spans, a vanishing spirit of self-sacrifice, rising me-first-ism . . . where would optimism come from in this regard? We can hope, but I'm not that hopeful. The truth is that most people vote for the candidate who looks and sounds best in TV ads, who says what they want to hear, and who they think will put money in their pocketbooks today and brighten their lives tomorrow.

Imagine two candidates for president. One says, "I'm going to give you eight years of discipline and denial – of higher taxes and lower spending – but I'll leave the country in better shape." The other says, "I have a secret plan that will solve all of our problems without requiring any sacrifice on your part." Who do you think would win?

<u>What Won't Work</u>

There are no simple solutions to these issues. But that's not going to keep simple solutions from being demanded. Two areas where we're likely to see them tried are tax progressiveness and global trade.

A lot of populist rhetoric is coming from certain candidates for office this season, and if they're elected, they might try to redress the income disparity through tax increases at the top. As usual, they'll say, "We're not out to 'soak the rich.' We're just trying to make them pay their fair share." I don't know where the populists will go for their definition of a "fair share," but I'm pretty sure it'll turn out to be just a synonym for "more."

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The result would be tax increases on people who – not according to value judgments, but in sheer economic terms – are our most productive citizens. Such increases aren't the answer, and they can affect the economy negatively. Back in Britain's low days in the 1970s, the top income tax rate was in the mid-90s (as was ours when I was a boy), and I read about a banker taking a week off from work to paint his house. The calculus was simple: it was cheaper for him to give up a week of after-tax salary than to pay the painter's bill.

Taxation creates incentives: to work less, to hide income and, ultimately, to relocate income to avoid taxes. When a professional finds it economically attractive to forgo his pay to perform a physical task, the net result is a loss for the aggregate economy. **This isn't the kind of incentive we should be presenting.** What supply-siders did in the 1980s was convince lawmakers of the effect of tax decisions on the operation of the macro economy. Their lesson mustn't be forgotten.

Likewise, trade barriers sound like an easy solution but don't work.

- Operating freely, global trade causes each good to be produced where it can be done cheapest and best. In this way, aggregate efficiency is maximized, and thus so is aggregate societal welfare. Actions that interfere with efficiency and the free-market allocation of resources invariably will have a negative overall effect.
- It's highly unlikely that we can raise barriers and tariffs against others without causing them to retaliate.
- A protectionist decision is just a choice among potential beneficiaries. A ban on imports of cheap clothing, for example, would protect the incomes of Americans working in the garment and textile industries but cause all Americans to pay more for what they wear.

As the last bullet point suggests, taxes and tariffs don't add value or make society better off; they merely represent decisions about how some elements in society are to be treated via-à-vis others. However, by interfering with the free-market allocation of resources, they're highly likely to detract from the overall economy. Bottom line: handle with care.

* * *

The more I think about solving problems, the more I believe one of the crucial choices is with regard to time frame. Short-term answers are very different from long-term answers. **America's problems are long-term in nature and require long-term solutions. There are things that can help in the short term but be counterproductive in the long term, and we mustn't let them get in the way.**

Take the earlier discussion of oil prices. We know high prices discourage consumption and encourage conservation, fuel efficiency, exploration and the development of

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alternatives, and that low prices do the opposite. When people complain about high prices, vote-hungry politicians rush forward with short-term palliatives. **But quick fixes will do nothing but exacerbate the long-term problem, while short-term pain is probably an essential part of its solution.** In order to bring down oil prices in the long run, we need high oil prices in the short run.

Because gasoline prices were up, Americans drove 12.2 billion (or 5%) fewer miles in June than they did a year earlier. That was the eighth down month in a row. In other words, high prices made people treat energy like the finite and valuable commodity it is. High prices aren't pleasant, but eventually they could help get us to the desired result. **It's not for nothing that they say "no pain, no gain."** (And for this reason, the 20% decline in oil prices over the last six weeks shouldn't be viewed as an unmitigated boon.)

The short-term pleasure principle that seemingly governs today will make it challenging to implement disciplined and possibly painful solutions to the problems enumerated above, but they're the only way forward.

* * *

I hope you'll consider this memo constructive, and that it'll inform or inspire debate. The solutions to the problems I raise aren't obvious and won't come easily. But that's why these things must be tackled by skilled, apolitical problem solvers in and out of government. We need boldness, hard work and resolve from our leaders. **And we need officeholders capable of imagining outcomes worse than losing an election.** I can think of several.

We tend to lurch from crisis to crisis. In difficult times like today, we're too busy putting out fires to pay attention to long-term problems. And then, when the crises recede, people celebrate the return of prosperity and forget about the distant future and the big picture. **We'd all like to not have to face the problems I list. Indeed, we wish they didn't exist. But they do exist, and we must deal with them. And there can't be a better time than the present.**

August 28, 2008

P.s.: I always circulate my memos for comment before they're published, and this time I got a good one from Richard Masson. He's a very thoughtful guy, especially on bigger-picture matters – a bit of a libertarian, but also impossible to pigeonhole. I want you to have the benefit of his response:

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> The best thing about our country is the resourcefulness of our citizenry and the flexibility of our institutions and laws. Creative destruction and a functioning market economy assure change toward the best solution over time. I generally agree with all your observations and concerns, but I have faith in our ability to create (rather than impose or legislate) solutions over time. Perhaps America will enjoy a manufacturing renaissance, or the cost of oil will force communities back together and facilitate greater interdependence between neighbors? Perhaps a slowing economy will slow immigration and create job opportunities for our less educated citizens (and youngsters). Perhaps our best and brightest will gravitate toward engineering and science rather than finance. In many ways, the next generation could enjoy a higher quality of life even at a measurably lower standard of living.

I'd love it if Richard turned out to be right.

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Memo to: Oaktree Clients

From: Howard Marks

Re: Doesn't Make Sense

Academics have their theories about market efficiency. Because market participants are well-informed and rational, they say, markets make correct decisions and smoothly assign the right price to each asset. It's for this reason that investors can't routinely find the mispricings they need in order to be able to beat the market.

But investors – and most of the people living on this planet, for that matter – are far from the unemotional computing machines the academics assume them to be. They make faulty decisions, fall for scams and swing from one irrational position to another all the time. **In fact, I marvel at how many things take place in the worlds of business, investments and politics that stem from irrationality and just don't make sense**. It's my purpose here to write about a few.

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Letting the Market Call the Tune

In "Whodunit," I talked about Chuck Prince, the ex-CEO of Citigroup. Early in July of 2007, he astutely observed, "When the music stops, in terms of liquidity, things will get complicated." However, he went on to add, **"as long as the music is playing, you've got to get up and dance. We're still dancing."** Because Citigroup danced as much as the other banks or more – and lost as much or more on subprime-related write-downs – Prince lost his job in November 2007.

The portion of Prince's statement that I've highlighted seems emblematic of the attitudes that prevailed from early 2003 until the summer of 2007. People were doing risky things – often even though they recognized the attendant risk, as Prince seemed to do – because they saw no alternative if they wanted to remain competitive.

Upon hearing of Prince's departure, my immediate reaction was to think (a) when a firm fares so badly, the CEO may deserve to lose his job, and (b) to avoid that fate, Prince just had to cause Citi to avoid the risky behavior he identified. If he had done the latter, Citi would be among the big winners today instead of the losers; it wouldn't have to recapitalize by selling equity at depressed prices; and instead it would have funds with which to take advantage of today's better market environment. So in saying that if the music was playing, Citi had to dance – and thus letting the market call the tune – Prince's leadership was flawed.

Compulsory Short-Termism

But is it right to say Prince and Citi could have avoided trouble by refusing to go along? Let's do what some DVDs let you do nowadays: go back and consider an alternative ending. It's July 2005 instead of July 2007. Presciently, Chuck Prince says, "When the music stops, in terms of liquidity, things will get complicated. We're not going to get caught in that trap. As of today, we're adopting a conservative stance toward loans, mortgages, subprime, CDOs and SIVs. The others can dance all they want; we're sitting this one out."

What would've happened? Rather than lose his job in late 2007, he probably would have lost it sooner. Why? Because from whenever he made that statement until July 2007, Prince would have looked dumb. While other banks were gaining market share, Citi's share would have been shrinking. And while other banks were borrowing on the cheap to make mortgage-related investments at seemingly attractive spreads, Citi would have been on the sidelines, forgoing easy profits. Shareholders would have been yelling for Prince's scalp.

The bottom line is one of my three favorite adages: **Being too far ahead of your time is indistinguishable from being wrong.**

Of the two things I think are most wrong about American business, the worst is short-termism. (The other is the ability of executives to thrive while their companies do poorly.) **Companies are rewarded for short-term success and penalized for short-term failure, whereas few people ask about the long term**. The only thing that matters is "What have you done for me lately?" A lot of this emanates from stockholders.

In a memo several years ago, I listed a few phrases that have sunk into obscurity over the course of my career. They included "fiduciary duty," "preservation of capital" and "dividend yield." Another is "long-term investor."

Most investment managers are measured against a benchmark every quarter and expected to add value. Some clients have their fingers on the trigger, ready to axe a manager who underperforms for a year or two. For this reason, managers sit with their own fingers on the trigger, ready to dump a stock or bond whose short-term performance lags. And company CEOs whose securities are laggards are likewise on the hot-seat, with boards that rarely support executives who disappoint Wall Street.

Too many people think of the long run as nothing but a series of short runs. The way to have the best five-year investment record, they think, is by sequentially assembling the twenty portfolios that will produce the best performance in each of the next twenty quarters. No one wants to invest in a company that may lag until long-term investments pay off down the road. They'll just sell its stock today, assuming they'll be able to buy it back later.

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Understanding this, companies face great pressure to emphasize short-term results. What might they do in response?

- Maximize revenues (perhaps by stuffing pipelines and offering discounts that accelerate future sales into the present).
- Minimize expenses in slow-to-bloom areas like research and development.
- Borrow to buy back stock, because debt capital is cheap and equity is expensive (despite the fact that equity provides safety and leverage amplifies risk).

Do you want your companies doing these things? Probably not. But do the collective external pressures force companies in these directions? Absolutely. **The things that maximize profits in the short run often serve to decrease profits and increase risk in the long run, but they can be mandatory these days.**

Investors are increasingly short-sighted, and none more so than some hedge funds, with their emphasis on year-by-year incentive fees. The average stock might deliver a return roughly in line with the growth in corporate profits, and the stocks of better companies should outperform in the long run, but hedge funds (and their investors) expect more. They're strongly motivated to hold a subset of stocks that will be the best near-term performers. One approach is to take positions and then pressure companies to "maximize shareholder value." With their focus on short-run performance and short-run compensation, many of the things they advocate – like spin-offs, stock buy-backs and oversized dividends – can be less than optimal for the long run. But that's not their concern.

This kind of behavior exemplifies the debate over *laissez-faire* described in "The Aviary" in May. **In the long run, it should be good for society to have capital in the hands of sophisticated, focused, bright managers who are free of guidelines and can go anywhere in pursuit of profit. In theory, it should be a positive that they're willing to bet against the herd, adopt unpopular positions and take on unresponsive managements. But in the short run, they can have a destabilizing effect, especially when several act in common**. Maybe it just proves that free-market solutions – like just about everything else – have both positive and negative aspects.

If Chuck Prince had taken Citigroup to the sidelines in 2005, it's highly likely that some hedge funds would have tried to force him out. And with Citi looking unduly conservative, the board might not have been in a position to resist. **So being right isn't always enough when you run a public company. You have to be right in the short run. And in choosing a course of action, the one that's right for the short run generally will be preferred over the one that's right for the long run. None of this seems ideal.**

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Unreliable Ratings

Probably the group that had the most power and yet covered itself with the least distinction over the last few years – and has been outed to the greatest extent – are the credit rating agencies. The rating agencies were accorded quasi-official status as the policemen of the credit markets, and they failed miserably.

This is nothing new. I've always considered the rating agencies to be error-prone, and much of my career has consisted of taking advantage of their mistakes. They've often rated seemingly safe bonds too high and risky bonds too low. They've been slow to adjust ratings, but when finally they did change, they usually overshot. **The bottom line is that managing a bond portfolio according to ratings would be somewhere between unavailing and disastrous. Profits are more likely to be found in gaming against the ratings.**

Nevertheless, when the government felt Wall Street had to be policed and debt investors protected, they turned to the agencies. Before doing so, I doubt anyone checked to see how accurate ratings have been. Now we know. Thousands of ratings of structured mortgage securities turned out to be too high and were adjusted downward, often many notches at a time. The CDO tranche that didn't have to be downgraded is the exception, not the rule. In other words, the ratings were grossly wrong.

In my view, a triple-A rating shouldn't just imply a low probability of default, but a low probability of downgrading as well. The agencies may say they were blindsided by developments in residential defaults, but I think a triple-A rating should also imply a low probability of being blindsided. To follow on with the "black swan" thought process, something potentially subject to an "improbable disaster" shouldn't receive a triple-A rating. But clearly a lot did.

A Model Destined to Fail

The bottom line's simple: you can't get dependable results from a faulty process. Most people realize now that the rating process was highly flawed.

I've written before about the biggest weakness: the fact that rating agencies are hired and paid by the issuers whose debt they're rating. In "Now It's All Bad?" (September 2007), I compared this to a trial where the defendant picks and pays the judge. But I realize now that I overlooked an important element in the equation. **It's actually a trial where the defendant gets to ask a number of prospective judges what verdict they'd reach before choosing one**. Issuers can describe a proposed issue to multiple agencies, hear back as to what rating they're likely to assign, and then hire the one they want.

Think about an agency's incentives under this arrangement: the fee goes to the one willing to supply the highest rating. Go along and your profits grow; stand on principle and you're left behind.

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When I came into this business in the 1960s, Moody's and Standard & Poor's made their money selling subscriptions to their publications. Thus their customers were investors, and they weren't beholden to the issuers. But when they began to derive most of their revenue from the issuers, the agencies understood who was buttering their bread.

There's a further problem: only above-average judgment can make you a superior investor. The consensus view of the future is incorporated in market prices. Only someone more astute than the consensus can help you do better than average.

Now let's turn to the rating process. **Anyone can compute current financial ratios and see how a company's doing today. And the future looks the same to the average person as it does to the consensus. Thus, for a helpful assessment of a company's prospects, you need someone who can foresee possibilities and risks better than most.** But if someone possesses above-average insight into bonds' prospects, will he assign credit ratings for a living, or will he get a job managing investments? Money isn't everything, but most people tend toward their highest and best use. **I think it's fair to say the rating agencies don't attract bond gurus.**

Since the ratings business is highly competitive and profit margins are slim, agency analysts tend to be paid for high ratings and "responsiveness," as opposed to unique insight. Principled, conservative decisions aren't rewarded, as is now plain to see.

Moody's disclosed in May that, because of a programming error, eleven European CPDOs (complex investment vehicles formed to write large amounts of credit insurance) had been incorrectly rated triple-A instead of double-A. Okay, everyone makes mistakes. But the plot thickens.

According to *The New York Times* of July 2, the law firm of Sullivan & Cromwell conducted an investigation for Moody's and found that the ratings hadn't been corrected even after the error came to light. Its report,

> . . . blamed employees in charge of monitoring and adjusting ratings for considering "factors inappropriate to the rating process" after the errors were discovered. . . . In a statement, Moody's said unidentified employees had violated a code that required analysts to consider only credit factors, not "the potential impact on Moody's, or an issuer, an investor or other market participant."

It's not exactly clear what happened, and I don't think anyone's trying to make it particularly clear. It seems, however, that Moody's employees overlooked the ratings errors that came to light for "business reasons."

According to an article on ratings in *The Wall Street Journal* of May 23, Moody's and Fitch,

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> . . . acknowledged they have switched analysts assigned to rate bonds after receiving requests to do so from bond issuers or their bankers. Changes usually were made after a specific bond was rated, meaning the analyst wouldn't work on the bond issuer's next deal, according to current and former officials at the credit-rating firms. . . .
>
> At Moody's, at least one analyst in the group that rated collateralized debt obligations, or CDOs, was moved off a particular investment bank's deals within the past few years after bankers requested an analyst who raised fewer questions, according to people familiar with the matter.
>
> Another mortgage analyst at Moody's was moved to the firm's surveillance unit after a Moody's official agreed with an investment banker's opinion that the analyst was too fussy, a person familiar with the situation said. . . .
>
> "**We're a service business**," says John Bonfiglio, group managing director of structured finance at Fitch. [Emphasis added]

Lastly, on July 9, *The New York Times* provided these tidbits from internal rating agency emails, which were part of an SEC report on its investigation of the agencies:

> "We do not have the resources to support what we are doing now."
>
> "I am trying to ascertain whether we can determine at this point if we will suffer any loss of business because of our decision and if so, how much?"
>
> "We are meeting with your group this week to discuss adjusting criteria for rating C.D.O.'s of real estate assets this week because of the ongoing threat of losing deals."

It doesn't make sense for unregulated and sometimes unprofessional organizations, operating under the wrong incentives and performing tasks that are above their heads, to be appointed watchdogs of the capital markets. But that's what happened.

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When It's Good to Be Bad

Only in an Alice-in-Wonderland world can there be benefits in having a weak credit rating. But today's complex, rules-based accounting system makes it possible.

On May 18, *The Wall Street Journal* published the story of Radian Group, a bond and mortgage insurer. Although its business was poor, an accounting gain enabled it to report a $195 million net profit for the first quarter, as opposed to the $215 million loss it would have reported otherwise. However, this was an unusual gain. It didn't arise because the value of Radian's assets went up, but rather because the value of its liabilities went down.

Here's how, according to the *Journal*:

> One of the basic rules of accounting says that a reduction in the value of a liability leads to a gain that usually boosts profit. Under the new [mark-to-market accounting] rule, companies have to take into account the market's view of their own financial health when considering the market value of some liabilities. In this case, a company's poor health can lead to a reduction in the liability's value. . . .

In other words, if you owe money and the probability you'll pay your debts declines, your financials strengthen. But shouldn't a declining ability to pay be associated with weakness, not strength? **Before enacting rules like this one, someone should ask if they make sense. It doesn't seem anyone did**.

Similarly, mark-to-market accounting can – in the extreme – require a company to value its assets at the prices that would be realized if they all had to be sold today. And those prices are likely to decline as more assets are assumed to need dumping. Liquidation values are far different from intrinsic values or going-concern values. Do we really want to value assets on the assumption that they're all going to be sold immediately? What purpose does that serve?

<u>Blame the Speculators</u>

The current debate over the role of speculators in oil pricing reminds me of Rep. Noah Sweat's classic answer when asked in 1952 what he thought about whiskey:

> If you mean whiskey, the devil's brew, the poison scourge, the bloody monster that defiles innocence, dethrones reason, destroys the home, creates misery and poverty, yea, literally takes the bread from the mouths of little children; if you mean that evil drink that topples Christian men and women from the pinnacles of righteous and gracious living into the bottomless pits of degradation, shame, despair, helplessness, and hopelessness, then, my friend, I am opposed to it with every fiber of my being.
>
> However, if by whiskey you mean the oil of conversation, the philosophic wine, the elixir of life, the ale that is consumed when good fellows get together, that puts a song in their hearts and the warm glow of contentment in their eyes; if you mean Christmas cheer, the stimulating sip that puts a little spring in the step of an elderly gentleman on a frosty morning; if you mean that drink that enables man to magnify his joy, and to forget life's great tragedies and heartbreaks and sorrow; if you mean that drink the sale of which pours into our treasuries untold millions of dollars each year, that provides tender care for our little crippled children, our blind, our deaf,

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> our dumb, our pitifully aged and infirm, to build the finest highways, hospitals, universities, and community colleges in this nation, then my friend, I am absolutely, unequivocally in favor of it.
>
> This is my position, and as always, I refuse to be compromised on matters of principle.

I guess you could say Rep. Sweat found the merits of whiskey to be in the eye of the beholder. So, it seems, is the role of "speculators" in the escalation of oil prices.

Politicians don't seem eager to tell constituents the truth about oil:

- We use too much of it (perhaps because it's cheaper in the U.S. than elsewhere).
- Our cars are less efficient than they should be.
- A good bit of this year's increase in the dollar price of oil may be attributable to the fact that a dollar now buys considerably less goods (or other currencies) than it did in December.
- Oh yeah: and Washington completely dropped the ball in areas like fuel efficiency standards.

So it shouldn't come as a surprise that some politicians are blaming the price rise on other people: speculators. But what is a speculator? That'll bring an answer like Rep. Sweat's. Ask a lay person, and the answer will be a shiftless gambler who takes unwise chances in pursuit of unjustified profits.

In the commodities market, a distinction is made between "commercial" and "non-commercial" traders. A commercial trader may buy oil, for example, in the course of its main business (like an airline, utility or oil refiner) and thus have a reason to hedge against price rises. Or it may be an oil producer that wants to protect against falling prices by selling its future production at the current price. People making value judgments deem these to be "legitimate" reasons.

Speculators, on the other hand, are non-commercial traders – anyone without direct reliance on oil in its business. The current furor implies they don't have valid reasons for buying oil.

But what about the long-term investor who wants to own natural resources as part of a balanced portfolio? Or the individual seeking protection against inflation? Or the sovereign nation that wants to put part of its reserves into something other than depreciation-prone dollars? These motives aren't "illegitimate," and they don't deserve to be disparaged.

In particular, some have suggested that pension funds should be barred from trading in oil. This has to have more to do with scapegoating and short-term perception than it does with preventing improper behavior or solving our nation's energy problem.

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Prices – for everything – are set by the interaction of supply and demand, and short-term swings in these things can swamp long-term fundamentals. Certainly, incremental demand from the kinds of buyers described above may have lifted the recent price of oil above what it otherwise would have been. But upward pressure doubtless came as well from (1) increased consumption (especially in developing countries like China and India), (2) rising international tensions, and (3) the simple fact that, **because a dollar now buys less than it used to, it's logical for sellers to demand more of them per barrel**. How much of the blame rightly falls on the speculators?

Thirty billion barrels of oil are consumed each year worldwide, worth over $4 trillion at today's prices. Can the buying of oil by investors – even speculators – really be responsible for much of this year's $1 trillion increase in the total cost of those thirty billion barrels? I don't think that explanation makes much sense.

When major problems arise in the economy or markets, politicians and the media often find it attractive to point fingers at alleged evil doers. That's a lot easier than admitting that regulation fell short, or that we face intractable problems. We're sure to see criticism and even prosecutions following the current economic episode. But any misdeeds are likely to be symptomatic of a lax environment, not causes of the problem, and punishing them is unlikely to be an effective part of the solution.

<u>Eliminating the Fear of Loss</u>

A couple of weeks ago, I had a great talk with Tom Petruno, an insightful business reporter for the *Los Angeles Times*. Calling on our shared experience as Californians, he presented what I consider a very apt analogy. It went like this:

We've all heard about the connection between the Fed's actions and moral hazard. There've been many incidents and scares over the last couple of decades: Black Monday, the meltdown of Long-Term Capital Management, Y2K, the bursting of the tech bubble, 9/11, and a recession here and there. Each time, the Fed rushed in with interest rate cuts and increases in liquidity designed to prevent or offset their depressing effects. A few times, it was said, these actions averted a collapse of the world financial system.

But the cost was moral hazard: a growing expectation that the Fed would bail out imprudent risk takers. By behaving in ways that cause people to think they'll always come to the rescue, authorities encourage risky behavior. And we all share the cost of rescuing the risk takers, whether we participated or not. In this way, the risk taking encouraged by the Fed's policy of protecting participants caused the risks to grow ever-higher. The result is a housing bubble and full-scale credit crunch that together have cost millions of people money and perhaps their homes, pushed financial institutions to the brink, and caused the government to expend a lot of its problem-solving resources.

Tom asked if I didn't see a parallel between the management of our financial system and the policy toward forest fires. The western states experience forest fires all the time, for

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any number or reasons: lightning, stray cigarettes, campfires that get out of control, even arson. While undesirable, these frequent fires have a good side: they get rid of the relatively small amount of dry brush created each year during our dry season.

But in recent years, the authorities promptly extinguished these fires to make sure they wouldn't get out of control. As a result, brush was permitted to accumulate from year to year. And this May, when a series of freak lightning storms started 2,000 fires, the built-up brush turned some of them into major conflagrations at a time when fire-fighting resources were stretched thin.

This past Sunday, the 27th, the *Los Angeles Times* kicked off a major series on forest fires. Here's part of what it said:

> The government's long campaign to tame wildfires has, perversely, made the problem worse. . . . By stamping out most wildland blazes as quickly as possible, the Forest Service has stymied nature's housekeeping – the frequent, well-behaved fires that once cleaned up the pine forests of the Sierra Nevada and the Southwest. Now, woodlands are tangled with thick growth and dead branches. When fires break out, they often explode.

Sound familiar? Clearly, the analogy between financial crises and forest fires is solid. And I told Tom that just as the Fed's growing tendency to solve every problem led people to take greater risks, the policy of fighting fires early also created moral hazard by encouraging people to build homes further into the forest. It fell to the community to keep those unwisely built structures safe, just as the government now feels it has to rescue subprime borrowers and financial institutions.

Capitalism can produce great results, but participants have to be allowed to both win and lose. If they aren't, they come to believe the only possible outcomes are winning or, at worst, breaking even. **Good business decisions can be made only if the hope for gain is balanced by the fear of loss. The latter must not be eliminated. The system must be allowed to work. Of course, this has to be balanced against the desire to prevent catastrophes, necessitating some very difficult choices.**

<u>Counting on a "V"</u>

Finally, I want to provide a word of caution regarding expectations for recovery. I hear predictions that things will come back next year. Earlier this month, for instance, an elevator news display cited a forecast that home prices will rise 4% in 2009, almost offsetting 2008's decline.

People have become conditioned to expect V-shaped declines and recoveries. We saw quick downs and ups in the markets or the economy in 1987, 1990, 1994, 1998 and 2002. But it doesn't have to be that way. Those of us who were in this business in the 1970s know different.

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The ‘70s saw a 37% decline in the S&P 500 in 1973-74; huge losses in the “nifty-fifty” growth stocks; the Arab oil embargo in 1973; inflation in the high teens; short-term interest rates in the 20s; and an infamous *Business Week* cover story, “The Death of Equities.” Stagflation ruled, and there seemed to be no way out of the wage-price spiral. People wore buttons promoting President Ford’s WIN program (“Whip Inflation Now”), but neither the buttons nor the program did any good. New York stockbrokers were driving cabs, and it was extremely difficult to find employment in the investment industry. That means that in order to be part of the investment industry in the ‘70s, you pretty much had to have your job by 1969. And that in turn means you had to be at least 21 by 1969 . . . and sixty or older today. There aren’t many of us still working.

I can tell you, no one was talking about a “V” in the 1970s. We experienced financial malaise lasting almost a decade. The best we felt we could hope for was a “saucer-shaped” recovery, a far different story.

As I said in “The Tide Goes Out” in March, economies aren’t hard-wired, and no one knows in advance how things will go. Further, some of the ingredients this time never have been seen before. When taken together, I see problems that may not go away any time soon and the possibility of a sluggish period lasting more than months or quarters.

First, let’s consider financial institutions and the housing market. In recent years, as everyone knows, the former combined with the latter to create a bubble based on the combination of leverage, innovative structuring and heedless buying. Institutions and housing have been gravely hurt, and they’re likely to bring harm to additional sectors of the economy. For their downward spiral to be arrested, I see four things that have to happen:

- Home prices have to stop going down.
- Home mortgages have to be made available.
- Financial institutions have to stop experiencing incremental write-offs.
- Financial institutions have to be able to raise additional capital with which to rebuild their balance sheets.

The problem I see is that each of these four things is dependent on the occurrence of another – a classic chicken-or-the-egg problem. Write-offs won’t stop until home prices stop going down. Prices won’t stop going down until mortgages become available. Mortgages won’t become available until lenders can raise capital. And capital won’t be freely available until write-offs stop coming. Which will happen first, facilitating the others? What will cause it to happen? When?

These things will happen, of course. Maybe for reasons we can’t foresee. Maybe for no apparent reason. And maybe just because things got so bad they couldn’t get any worse. I go through this only to show why I don’t see an easy or quick solution. But then I’m rarely an unbridled optimist.

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Second, consumer spending is a principal lynchpin of the economy, and there's no reason to think the near-term outlook here is positive:

- Employment, earnings, the wealth effect and consumer psychology in general are all likely to be negative, and thus to act as depressants on the economy.
- Higher energy costs and higher mortgage payments (driven up as inflation worries lift interest rates) both have the potential to hamper consumer spending.
- Consumers aren't likely to be able to borrow as easily as in the past. Credit cards may not be available as freely. Borrowing on home equity could be nearly impossible and, anyway, there isn't as much equity to borrow against.
- The American consumer hasn't saved in years and thus has very little in the bank to spend.
- The consumer may realize that savings are essential – at last. If so, in order to save, he'll have to spend less than he makes – at last. This, too, will depress spending.

The record over the last decade – and even the first half of 2008 – shows the American consumer to be incredibly resilient and unwilling to break the spending habit. **Thus it isn't impossible that spending will stay strong . . . just illogical.**

Basically, I think this economy has to hunker down. Financial institutions have to strengthen their balance sheets. Consumers should do so as well. There should be less risk tolerance and financial innovation. Regulation is destined to increase, and in exchange for its support of financial institutions, the Federal government is likely to demand that they carry less leverage and take less risk. Thus financing could be scarce.

But positives do exist. Dollar-denominated exports look very cheap to the rest of the world and will bolster the U.S. economy. And the Fed will do everything possible to help (but it can reduce rates only so far and has to remain vigilant regarding inflation).

The usual tug-of-war is taking place between the optimists and the pessimists. On July 18, the *Financial Times* quoted Deutsche Bank chief executive, Josef Ackermann, as saying, "We are seeing the beginning of the end of the crisis." But the very next day, *The New York Times* quoted Alan Blinder (ex-vice chairman of the Fed board of governors): "The financial system looks substantially worse now than it did a month ago."

On balance, I continue to think the odds favor economic sluggishness for a not-insubstantial period of time. **Given today's general dearth of beaten-down assets outside of residential real estate and financial institutions, investing gradually probably won't cause you to miss great opportunities. But it will keep you out of trouble and ensure that you have capital with which to take advantage of any bargains ahead. In my book, going slow here makes the most sense.**

July 31, 2008

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Memo to: Oaktree Clients

From: Howard Marks

Re: The Aviary

Rather than dwell this time on a single subject, I want to cover a few. They may not seem related at first, but I believe they're birds of a feather.

A Dead Duck

While it's important that we have a sense for where we stand in terms of the market cycle, figuring that out can require some sophisticated inference. It's not often that we get crystal clear evidence of the pendulum's swing, or get it in short order. That's what makes the case I'll describe so distinctive.

"The Race to the Bottom" (February 2007) is one of my favorite memos. I think it presented clear evidence of the degree to which the pendulum of innovation and risk taking had swung to the undisciplined end of its arc. As I described, I was prompted to write it by an article in the Financial Times of November 1, 2006, which reported the following:

> Abbey, the UK's second-largest home loans provider, has raised the standard amount it will lend homebuyers to five times either their single or joint salaries, eclipsing the traditional borrowing levels of around three and a half times salary. It followed last week's decision by Bank of Ireland Mortgages and Bristol and West to increase standard salary multiples from four to 4.5 times.

After quoting that paragraph, I went on to draw what I thought was the compelling conclusion:

> **Any way you slice it, standards for mortgage loans have dropped in recent years, and risk has increased. Logic-based? Perhaps. Cycle-induced (and exacerbated)? I'd say so.** The FT quoted John Paul Crutchley, a banking analyst at Merrill Lynch, as saying "When Abbey are lending a multiple of five times salary, that could be perfectly sensible – or it could be tremendously risky." Certainly mortgage lending was made riskier. We'll see in a few years whether that was intelligent risk taking or excessive competitive ardor.

Auctions were taking place in the capital markets, and suppliers of capital were bidding against each other to make deals. In the case of UK home mortgages, the right to make loans would go to the institution willing to lend the highest multiple of annual salary . . . that is, willing to accept the most risk. In the last few years, there were many ways in which lenders and investors vied for deal flow on the basis of lowered return expectations and heightened risk. I considered Abbey's decision emblematic of this trend.

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Thus, you can imagine my reaction upon reading the following in the Financial Times of April 8:

> First-time buyers with no cash savings were shut out of the housing market yesterday after Abbey became the last mainstream lender to stop offering 100 per cent mortgages. Borrowers who a month ago had a choice of mortgages offering 100 per cent of a property's value, will now need a deposit of at least 5 per cent . . . More than 20 lenders . . . offered 100 per cent mortgages at the start of last month. These have been pulled out of the market one by one as banks and building societies have distanced themselves from riskier lending.

Eighteen months ago, Abbey was the **first** to take lending standards to a new low in terms of times-salary-loaned. Now, it's the **last** to raise them with regard to down payments. Can there be a clearer example of the credit cycle at work?

For now, high-risk, no-worries lending seems to be a dead duck, a casualty of the corrections in risk aversion and demanded returns that have accompanied – or are at the root of – the current credit crunch. At the highs of the credit cycle, anyone can get money for any purpose. At the lows, even deserving borrowers are shut out. The former is highly expansionary, and the latter depresses economic activity. It'll always be so.

The Canard of Free Market Infallibility

"*Canard*" is the French word for "duck." In English, however, a "canard" is "a false or unfounded report or story." That English meaning comes from the French phrase "vendre des canards à moitié": to cheat, literally, to half-sell ducks.

A canard gained broad acceptance over the last decade or two, as faith in the ability of the free market to optimally allocate assets morphed into an irrational expectation that the free market would produce a continually rising tide, lifting all boats and bringing a better life for everyone. Here's my version of the saga.

One of the longest cycles I've witnessed has taken place in the area of government involvement in the financial industry. Prior to 1929 (I wasn't around for this part), there was little regulation. When much of the subsequent market collapse was attributed to improper conduct in investment banking and in investments generally, this led to significant new regulation.

For an interesting look at behavior in the 1920s, I'd recommend *Wall Street Under Oath*, written in 1939 by Ferdinand Pecora, who led the Senate investigation into the causes of the Great Crash and then became a New York State judge. It's a scathing indictment: imagine Wall Street operating in the 1920s unhampered by today's securities laws. Among other things, the Street's conduct led to the enactment of the Glass-Steagall Act of 1933 that mandated the divorce of commercial banks from investment banks, the Securities Act of 1933 and the Securities Exchange Act of 1934. Thus a strong regulatory regime prevailed – particularly under the

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Democrats who controlled the White House for 28 of the 36 years from 1933 to 1969, and the Senate for 44 of the 48 years from 1933 to 1981. (In America, regulation is generally associated with Democrats and liberalism, and deregulation with Republicans and conservatism.)

The last 28 years have been very different, however, thanks primarily to Ronald Reagan and Margaret Thatcher, bolstered by centrist Clinton and Blair administrations, and helped along by Bush, Bush and Brown. For much of that time, the Fed was under the leadership of Alan Greenspan, who is philosophically indebted to Ayn Rand, a strong believer in free markets. **Free-market solutions were deemed certain to yield optimal economic decisions. Deregulation, privatization and market pricing went into full swing. Government involvement in policy making and control was disrespected. In short, it was assumed that the profit motive – Adam Smith's "invisible hand" – would maximize capital efficiency and, therefore, societal welfare.**

This trend reached its apogee in the last ten years. The Glass-Steagall Act was nullified; this allowed, for example, the combination of Citibank and Salomon Brothers. Other than lowering interest rates and providing liquidity to fend off weakness, the Fed employed a hands-off approach. Investment managers and investment bankers gained fame and huge fees for performance that showed which of them were the most talented. In every corner, the cry was "let the market decide."

Clearly, however, the events of recent years attest to excesses prompted by the profit motive. More was better: more leverage, more innovation, higher ratings for a given security and more activity in areas like residential real estate. **Equally clearly, not all of the free-market decisions were salutary; the proof can be found in the fact that *laissez-faire* has landed us in a financial crisis that some observers consider the potentially most serious since the Depression.**

How can we reconcile theory and practice: the way free-market decisions are supposed to work and the way they do work? The answer lies, I think, in the difference between short term and long, and in the coexistence of beneficial general trends and harmful exceptions. **Free markets allocate resources efficiently in the long run. But they can't make the tide rise continually, and while some boats rise, others will crash. Properly functioning free markets will give rise to times that set the stage for ruin, and then to times of ruin itself. They must create losers as well as winners, and capital destruction as well as capital creation.**

In pursuit of profit in a free market, people can engage in any behavior that's not illegal. (Well, actually, they can do illegal things too, but hopefully not for long.) Ethical considerations constrain some but not all, and ethicality seems to wax and wane. There's no doubt that profit pursuers sometimes push the envelope. Examples?

- The fees for appraising houses and rating securities went to those willing to assign the highest values. Did they let this affect their valuations?

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- Thanks to disintermediation, financial institutions saw that they could earn fees for originating loans and selling them onward. Did the rewards for achieving volume displace the prudence they used to employ when putting their own capital at risk?

- Once financial engineers had built their new tranched products, they could sell them at lower yields (higher prices), sell more of them, and earn bigger fees if they could get them rated higher. For a given instrument, single-A was good, double-A was better and triple-A was best. The investment bankers marshaled the data and fed it into their models, tweaked to yield the best possible result. **I find it hard to believe they ever said, "Wait a minute; triple-A's too high given the underlying collateral" or "It can't be triple-A, because there are a few scenarios that, although unlikely, would yield terrible results."**

I'm not suggesting these people engaged in illegal activity or consciously did the wrong thing. They were just trying to make more money for their employers and themselves. But I believe their economic self-interest caused them to go to extremes in an environment that allowed candor, skepticism and ethics to be forgotten in pursuit of revenue maximization.

A New Canard Takes Flight

Government involvement in the private sector is like hemlines: it goes up and down. But it does so in very long cycles. It takes decades for it to reach maximums and minimums, and it can take a long time for the error of the extremes to be exposed.

In the last couple of months, we've read a great deal about the need for increased regulation, and there'll be more. There are several reasons for this:

- First, when there's a crisis, people tend to look for easy explanations. Insufficient regulation can be a good candidate.

- Members of the out-of-power political party can always make hay by blaming the governing party and its philosophy.

- **The truth is, whichever philosophy is in the ascendancy will deserve some responsibility for crises . . . because no approach is perfect. Regulation will always produce red tape and some inefficient, non-market solutions, and deregulation will always permit a degree of cowboy behavior.**

- It's easy to allege that the solution can be found in reversing the trend in regulation, and hard to disprove *a priori*.

So now the cry has been raised. People are jumping on the bandwagon, and those opposed are trying to head it off with promises of better behavior and self-regulation. As the Financial Times noted on April 10,

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> Now credit and consumer confidence are ebbing, to the likely detriment of company profits. State intervention, which free marketers have argued against for centuries, has been royally legitimized.

Paul Volcker put it this way in the FT of April 12: "The bright new financial system – for all its talented participants, for all its rich rewards – has failed the test of the marketplace." Belief in free market omniscience has been laid to rest for a while.

The New York Times of April 15 described Bob Steel, Treasury Under Secretary for Domestic Finance, as being highly optimistic about a "superregulator" or "market stability regulator" that "would pass judgment on the capital levels, trading exposure and leverage of Wall Street's most sophisticated institutions." Yet within just the last two years, it says, "Mr. Steel has been co-chairman of one commission that claimed heavy-handed regulation was stanching financial innovation and another that argued that hedge funds could police themselves." Times certainly do change.

And in a sign of the times, *breakingviews.com*, an online interpreter of financial news, put it this way on May 14:

> The hands-off approach to financial markets now looks neglectful. . . . Greenspan's laissez-faire attitude to asset prices went along with paying little attention to bank supervision and positively welcoming the growth of less regulated financial institutions. Trusting financial markets to self-correct now looks wrongheaded. . . . **The authorities need to relearn that financial markets are too important and too impulsive to be left to operate unconstrained**. They work better with careful, consistent supervision. (Emphasis added)

In place of market-based decisions, we're likely to see more limits on free-market activity. I find it impossible to believe that the government will do a better job than the market of allocating assets and preventing excesses. But the current pain – when combined with regulation's avowed goals of avoiding harm, limiting predatory conduct and protecting the little guy – will make the trend hard to resist. As Martin Wolf wrote in the FT of April 16,

> More regulation is on its way. After frightening politicians and policy makers so badly, even the most optimistic banker must realize this. **The question is whether the additional regulation will do any good.** (Emphasis added)

Some specific actions have the potential to increase financial security, such as (a) increases in the capital reserves required against complex structured products and off-balance-sheet vehicles and (b) full and detailed disclosure of the latter. Some increase in regulation seems appropriate, especially with regard to off-balance-sheet entities, the source of most of the banks' losses. It's remarkable that just six years after Enron, where the worst abuses were hidden off balance sheet, another crisis was able to arise there. Banks benefit from deposit insurance (the government's seal of approval) and access to cheap Fed funds. Thus it's reasonable that, in exchange, **all of their entities** should be tightly regulated. This is especially true since it's been made clear that non-bank activities won't be permitted to sink our large banks.

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But I think there are dozens of reasons why generally increased regulation won't work to the hoped-for extent. Here are my first twelve:

1. **It's far easier to find holes in regulations than to plug them.** Financial professionals innovate and expand. Regulators must try to catch up, often with outdated tools. By the time new rules are enacted, the financiers have moved on to invent new products and open new loopholes.

2. It's a simple fact that the regulated are more financially motivated to act than the regulators are to respond. It's not without effect that investment bankers work two or three times as many hours per week as the people who're counted on to police them.

3. The most skillful regulators often move eventually to work in regulated institutions, weakening the effectiveness of the regulatory process and spilling its secrets.

4. **Hedge funds and derivatives are behind many of the excesses, and it will be particularly hard to get them under control.** Today, one huge area of uncertainty is credit default swaps, particularly with regard to capital adequacy and counterparty risk. It's not a coincidence that CDS are derivatives with heavy hedge fund involvement. How might they be regulated?

5. **Derivatives are particularly hard to regulate because it's difficult to quantify the risk they entail.** Let's take the simplest example: you sell someone a "naked call" that gives him the right to buy from you for $2 apiece 100 shares of a stock you don't own. If the stock goes to $5, you lose $300 (the difference between the $2 you've been paid and the $5 you now must pay to buy 100 shares to deliver). If it goes to $10, you're down $800. At $100, you're down $9,800. At $1,000, you're down $99,800. At $10,000, it's $999,800, and so on. With naked call writing (and its equivalent, naked short selling), the potential loss is theoretically unlimited. So what's the right amount of risk to show on your balance sheet? No one can say. Should it be the "worst case"? And what is that? Or how about a model-derived estimate of the likely outcome? The last few months certainly showed those to be useless.

6. **It's worth noting that banks, probably the most regulated of our financial institutions, are reporting the biggest losses. Regulation can be improved and tightened, but it's hard to believe that it actually can be counted on to prevent crises.** Similarly, the weaknesses in the mortgage loan generation process were huge, but no regulator spoke out against them.

7. It's been proposed that financial institutions should be required to stress-test their ability to cope in difficult times. But how bad an environment should they be able to survive? What is the worst case, and should banks have to prepare for it? **If banks always were required to be able to survive the conditions of February and March, for instance, they might never make a loan.**

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8. **Regulatory proposals are also likely to include calls for more and better risk management**. But the risk management profession's exertions in the last ten years probably exceeded the sum of its efforts prior thereto. Those efforts certainly didn't head off the current crisis. In fact, it's highly likely that risk managers' blessings led to a false sense of security in recent years, and thus to more confident (and greater) risk taking.

9. Since many of the biggest recent errors occurred in the area of credit ratings, **it's appropriate to ask whether regulation could make ratings more accurate.** According to an article in the Herald Tribune of April 25,

   > Senator Chris Dodd . . . practically begged Christopher Cox, the SEC chairman, to ask for new authority. He suggested that perhaps it would be a good idea to leave credit ratings to some kind of non-profit agency that would not have conflicts of interest. Both he and [Senator] Shelby suggested that the SEC should revoke the operating license of a credit rating agency that was wrong too often.

   Can you imagine anything along these lines working? **Would you like to see credit ratings being set by an agency lacking economic motivation?** Who would determine whether they'd been "wrong too often"? And would "wrong too often" include ratings that proved to be too low, or just too high? I've seen a lot of both in the last forty years.

10. Likewise, some of this cycle's greatest gaffes came from having people make loans who lacked an ongoing stake in their creditworthiness. So it's been suggested that lenders should be required to have money at risk in loans even after they've been securitized and sold onward. Could regulators possibly prevent a highly motivated lender from getting around this requirement? How, for instance, would they keep an institution from hedging its bets through offsetting positions in derivatives?

11. A number of the proposals I've read relate to financial executives' compensation. Bankers' bonuses should be related to performance that has been adjusted for the risks entailed. And they should be long-term in nature and subject to being clawed back if profits turn into losses later on. **Can government possibly regulate compensation in the private sector? And should it under our system?** I would say "no" to both.

12. **Finally, the main things that gave rise to the pain this time around were imprudence, insufficient skepticism and excessive faith in innovation**. The International Herald Tribune of March 29 said, "Democrats in Congress . . . are pushing for tougher restrictions on risky lending." And I read elsewhere a suggestion that mortgage lenders should have to act responsibly. How can these things be regulated? **How might a regulator require good judgment, and how would it be measured?**

I think Alan Greenspan did an excellent job of summing up the situation in an op-ed piece in the Financial Times of April 7,

> Regulators, to be effective, have to be forward-looking to anticipate the next financial malfunction. This has not proved feasible. Regulators confronting real-

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> time uncertainty have rarely, if ever, been able to achieve the level of future clarity required to act pre-emptively. Most regulatory activity focuses on activities that precipitated previous crises.
>
> Aside from far greater efforts to ferret out fraud (a long-time concern of mine), would a material tightening of regulation improve financial performance? I doubt it. **The problem is not the lack of regulation but unrealistic expectations about what regulators are able to prevent.** How can we otherwise explain how the UK's Financial Services Authority, whose effectiveness is held in such high regard, fumbled Northern Rock? Or in the US, our best examiners have repeatedly failed over the years. These are not aberrations.
>
> The core of the subprime problem lies with the misjudgments of the investment community. . . . Even with full authority to intervene, it is not credible that regulators would have been able to prevent the subprime debacle. (Emphasis added)

Martin Wolf sized the challenge in the FT of April 16:

> If regulation is to be effective, it must cover all relevant institutions and the entire balance sheet, in all significant countries; it must focus on capital, liquidity and transparency; and, not least, it must make finance less pro-cyclical.

That's a tall order. The results are unlikely to stack up well against the goals.

No, government intervention doesn't hold the key to a financial system existence free of extremes and crises . . . any more than *laissez-faire* does. But the trend is likely to be in the direction of regulation. The truth is that cycles, with their dangerous excesses, will cease to occur only when human emotion and the pursuit of profit no longer go to extremes. Neither government intervention nor the free market will ever produce that result.

The Black Swan

The best-known bird around today is *The Black Swan*, the second book from Nassim Nicolas Taleb. You may remember Taleb as the author of *Fooled by Randomness*, which I've described as an essential read (see "Returns and How They Get That Way," October 2002, and "Pigweed," December 2006). He's an ex-hedge fund manager and self-styled philosopher whose books are nearly impenetrable (I suspect intentionally). But they also contain some incredibly important ideas.

The main thrust of *Fooled by Randomness* was that while many of the forces that shape investment performance – or history in general – are random in nature, people often ignore that fact and give them meaning that would be warranted only if they weren't random. Thus the top performing investor in a given year may be the manager – in Taleb's terminology, the "lucky

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idiot" – who took an extreme and unwise position and was bailed out by a highly improbable event that occurred by chance. For that reason, one year of outstanding performance says absolutely nothing about the likelihood of another.

The Black Swan continues in that vein, emphasizing the dangers of overestimating knowledge and predictive power. The book gets its name – and its theme – from some unusual Australian birds which, never having been seen before foreigners began to visit, were considered in Europe not to exist.

According to Taleb, there are three criteria for a "black swan." The first two are that it should be "an outlier" and carry "an extreme impact." **The fact that these "highly consequential events" are infrequently occurring and improbable often is taken to mean they're nonexistent and impossible. The difference between the two may be small, but it's highly significant.**

Taleb's third criterion is that black swan phenomena have "retrospective (though not prospective) predictability." **And because people are able to "concoct explanations" for them after the fact, they end up believing themselves capable of understanding the causes and predicting future occurrences**. In short, they underestimate the limits on foreknowledge with regard to these events – a regular theme of mine, as you know – and underrate the role of randomness. To simplify their world and render it subject to established statistical analysis, quants attribute standard properties – like the familiar bell-shaped curve – to events that are far less regular than they should be for this approach to be valid.

The publication of *The Black Swan* last year was extremely well timed, because many of the infamous recent events satisfy Taleb's criteria.

- The greatest errors in mortgage securitization arose because "home prices have never declined nationally" was taken to mean "home prices can't decline nationally."
- Innovative financial products were modeled on the basis of common probability distributions that may have been inapplicable to the phenomena being studied. Thus the possibilities were oversimplified by recent business school graduates who'd never been out bird-watching in the real world.
- In the end, events that had been described as highly unlikely happened. But they shouldn't have come as complete surprises and should have been anticipated. Models had led people to consider things with a 1% chance of loss as riskless. **Once in a while, however, people need a reminder that "unlikely" isn't synonymous with "impossible."** Black swans do occur.

Now, with the final bullet point above in mind, let's talk about the black swan as a practical matter, not a topic for philosophic rumination. It's easy to say black swans should be prepared for, and that the people who fell into the last few years' traps ignored obvious risks. My December memo "No Different This Time" included the following among the key lessons of '07:

> **Investment survival has to be achieved in the short run, not on average over the long run.** That's why we must never forget the six-foot-tall man who

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> drowned crossing the stream that was five feet deep on average. **Investors have to make it through the low points.**

This statement makes obvious sense. Certainly investors must brace for untoward developments. There are lots of forms of financial activity that reasonably can be expected to work on average, but they might give you one bad day on which you melt down because of a precarious structure or excess leverage.

But is it really that simple? It's easy to say you should prepare for bad days. But how bad? What's the worst case, and must you be equipped to meet it every day?

Like everything else in investing, this isn't a matter of black and white. **The amount of risk you'll bear is a function of the extent to which you choose to pursue return. The amount of safety you build into your portfolio should be based on how much potential return you're willing to forgo.** There's no right answer, just trade-offs. That's why I went on from the above as follows:

> **Because ensuring the ability to [survive] under adverse circumstances is incompatible with maximizing returns in the good times, investors must choose between the two.**

One of the most interesting questions I've pondered over the years is this: **How much should we spend – be it in the form of insurance premiums or forgone returns – to protect against the "improbable disaster" (my term for the black swan)?** But that's all it remains: a question. It's for each of us to answer in our own way.

Birds on a Wire

There's an old riddle about ten birds sitting on a telephone wire. A hunter shoots one. How many are left? The usual response is nine. But the correct answer is none; the rest are frightened by the gunshot and fly away. Maybe it's a joke, but it illustrates the ease with which ramifications – what my British friends call "knock-on effects" – are overlooked.

In "It's All Good . . . Really?" I discussed the way people were describing the events of last summer as an isolated subprime crisis and ignoring the potential for contagion. Now most see that the "subprime crisis" was just the first act in what might be a long period of generalized economic difficulty and market weakness.

The longer I think about economic and investment trends, the more I view every development as a reaction to something else. And you've probably noticed my inability to talk about current events without discussing their precursors. I see the events since last summer – and those that will stretch into the coming months and perhaps years – as a chain reaction:

- The **subprime crisis** resulted from trends that had been building during the preceding years: leverage, securitization and tranching, financial engineering, looser ratings, unregulated non-

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bank lending, weaker loan standards and rising risk tolerance. The risk embodied in these things came home to roost in residential mortgages first because it's there that they were applied to the greatest extent and to the weakest underlying collateral. Too many triple-A securities were created from each pool of non-investment grade mortgages, and they collapsed as soon as default rates surpassed the models' assumptions.

- The **credit crunch** was an obvious next step. A number of more generalized developments resulted from the mess in residential mortgages:

    - rising risk aversion,
    - higher demanded risk premiums, and thus lower prices for risky assets,
    - the withdrawal of leverage and liquidity,
    - leveraged fund meltdowns and frightening headlines,
    - losses at banks and thus endangerment of their capital adequacy, and
    - hoarding of capital and the unavailability of new loans.

- This resulted in **problems at financial institutions**. Losses on highly leveraged investments were sure to lead to a crisis mentality, which could morph easily into a plain old crisis. What are the characteristics of financial institutions?

    - **high leverage**,
    - **near-total reliance on short-term deposits and borrowings** to fund illiquid, longer-term assets,
    - **risk bearing** – that's what their business consists of, and it's by doing so that they earn lending spreads (if they borrowed safe and lent safe, where would the spread come from?), and
    - **extremely low transparency**.

  What greater recipe could there be for a drying up of confidence? If a financial institution loses the confidence of its customers, what's to prevent a run on the bank? Nothing, as the UK found out in September with Northern Rock and the US found out in March with Bear Stearns. And what can inject fear into an economy more than doubt about the safety of its financial institutions?

- The main shoe left to drop concerns **the impact on the broader economy**. Economies run on confidence. People spend on non-necessities because they expect the future to be good and their incomes to grow. Businesses expand plant, workforce and inventory because they expect sales to increase. Financial institutions lend because they expect to be repaid with interest. Investors provide capital because they expect the value of assets to increase. When doubt is shed on these expectations, the growth process stalls. When the economy contracts for two consecutive quarters, a recession is declared, and positive assumptions become further in doubt.

Already, businesses are reporting declining or disappointing earnings (even General Electric). Unemployment is on the rise. Higher prices for oil and food are likely to cut into consumers' ability to spend. And their psyches have been damaged by scary headlines they may or may not

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understand. Consumer confidence is at low levels, and fewer Americans expect an improving future. Much of the growth in consumer spending has been abetted by the more widespread availability of credit. Now, less credit should mean less spending. These aren't the conditions for a vibrant economy.

There's a strong consensus that we'll see a recession – and a possibility we're in one already. GDP grew in the first quarter, but final sales were down and output increased only because businesses added to inventories. These additions likely were involuntary, and when stopped or reversed, GDP growth certainly could go negative.

Please note that a depressed economy isn't the end of the line. Slower consumer and industrial activity could feed back to the beginning of the process, causing further house price depreciation, further write-downs, a further credit contraction and so forth. And then, when levels get low enough, something mysteriously will cause the cycle to turn positive.

Things don't happen in isolation in economies and markets. Birds do flock together. The implications of past events will spread further.

Phoenix from the Ashes?

As always, there's a tug-of-war going on between the optimists and the pessimists. This time, however, the stakes are unusually high and the rhetoric proportional to the potentially momentous consequences.

Over the last few weeks, the markets rose based on statements to the effect that the worst had passed: "We're closer to the end than the beginning" (Lloyd Blankfein of Goldman Sachs). "Maybe 75 to 80 percent over. . . " (Jamie Dimon of JPMorgan Chase). The worst is "behind us" (Richard Fuld of Lehman Brothers). The subprime market in the U.S. has reached its eighth inning or maybe the "top of the ninth" (Morgan Stanley's John Mack).

On the other hand, John Thain of Merrill Lynch said, "I hope those who say we are at the end are correct. I am somewhat more skeptical." Dan Fuss of Loomis Sayles, a highly experienced bond manager with an excellent track record, said, "This is the most worrisome financial situation I've seen in my working lifetime" [which approximates fifty years]. And George Soros described this go-round as "much more serious than any other financial crisis since the end of World War II."

People are talking about March 17, the day JPMorgan Chase rescued Bear Stearns, as the bottom. Psychology was terrible in the weeks leading up to that event; things would have melted down much further in the absence of a rescue; and psychology and markets picked up substantially thereafter. **Certainly that day was "a bottom," but I'm not so sure it was "the bottom."**

The Bear Stearns rescue dealt with the credit crunch, investor attitudes and the possibility of a downward spiral among financial institutions. But it didn't mark the end of mortgage

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defaults or economic weakness. Mortgages will continue to go unpaid, and the numbers may accelerate if interest rates take adjustable-rate loan payments higher and if house prices continue to fall. Further, nothing that was done in March will preclude economic slowdown, falling corporate profits or defaults on debt. Finally, it doesn't seem to have done much for the availability of credit. Several elements are likely to remain – or become – further depressants:

- **Bank write-downs will continue to be reported.** The majority of the banks' subprime-related losses may have surfaced **as relate to the current level of house price depreciation and mortgage default.** That doesn't mean these trends won't go further, and thus that the reservoir of unreported losses won't be refilled. The IMF has projected total mortgage-related losses of $1 trillion. Certainly the write-downs announced to date haven't approached that figure. And there's a broad consensus that most holders haven't been as forthcoming on this subject as the U.S. banks.

  Progress is being made toward breaking the logjam, but we're not done yet, and there continue to be additions to the backlog. As banks report large write-downs, I can't help but sense that the immediate reaction is, "I wonder how much more remains." Only when people stop thinking that way will real progress have been made toward easing the credit crunch.

- Similarly, sales of "hung" bridge loans are increasing, and clearly some investment banks are willing to take their medicine with regard to the extent to which loans bought in 2006 and 2007 are unsalable at par. Recently we have seen sales at 90, often with financing provided by the sellers. **But just as in the case of mortgage losses, it's quite possible that new obligations to lend will re-burden the financial institutions' balance sheets**, as companies draw against the excess credit lines that were arranged at the time they changed hands in buyouts.

- **The availability of credit is still a question mark**, although things seem to be getting better. Despite the Fed's low rates and all central banks' massive injections of liquidity, inter-bank interest rates still incorporate significant yield spreads and volumes are limited. On April 28, the Financial Times quoted John Maynard Keynes:

  > Whilst the weakening of credit is sufficient to bring about a collapse, its strengthening, though a necessary condition of recovery, is not a sufficient condition.

  In other words, the FT said, "just because the banks are not going bust does not mean that they can lend as before – nor would they if they could."

- Commercial real estate prices, like home prices, are coming off irrational highs achieved because of the oversupply of investment capital in the last few years. **The coincidence of a broad real estate collapse with a significant recession has the potential to make this a painful episode.** But few prominent commercial defaults and failed refinancings have been reported to date.

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- **The economic news, while not dire at the moment, isn't rosy**. Consumer spending, inflation, employment and business investment all remain exposed to negative future developments. Default rates among highly levered companies have just begun to rise.

- **Finally, the viability of derivatives such as credit default swaps has yet to be tested**. That means either (a) they're not going to cause trouble, or (b) they're going to cause trouble and have yet to do so. This is another case where potential negatives have yet to be dispelled.

The markets have seen substantial gains since the time of Bear Stearns's rescue. They give me the impression that people who refrained from trying to "catch a falling knife" may have concluded that they waited too long, and thus they rushed to buy out of fear that they'd look bad if they stayed uninvested. The FT of April 28 summed up in a way I thought was very much on target:

> The awkward truth is that nobody knows for sure how severe an impact the credit crunch will prove to have on the global economy and on financial markets.
>
> On fundamental grounds a wealth-preserving investor might well feel justified in being cautious until the extent of the downside becomes clearer. **The beauty contest approach** [in which, rather than bet on who's the prettiest contestant, people bet on who most people will judge to be the prettiest contestant]**, however, suggests that many professional investors are taking the view that however bad their private fears, the majority of their counterparts are looking through the immediate fallout to a rosier future.**
>
> Just as markets anticipate eight of the next five recessions, so too they can look forward to eight of the next five bull market recoveries. (Emphasis added)

I'm not saying the pessimists are right and the optimists are wrong, or that we truly face an ongoing crisis. Rather, I think the possibility is there and several more shoes remain capable of dropping. Importantly, while mortgage securities and leveraged loans have gone through the wringer and arguably might be cheap, most other assets are as yet unscathed or have rebounded. Stocks, in particular, do not seem to reflect the possibility that this economy's goose is cooked, having declined only slightly from 2007's all-time highs.

* * *

So you want to know, "Is it over?" Here's my bottom line:

- **There's been a significant correction of the excesses of a year ago.** Prices are down and risk premiums are up. Fear and risk aversion have been brought back into the equation; unbridled optimism is no longer the norm.

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- **A good part of the losses have been recognized that relate to the fundamental deterioration – and especially the mortgage defaults – to date.**

- **Psychology, which reached "end-of-the-world" levels in the days leading up to the rescue of Bear Stearns, is back from the brink and on the upswing.** Although this could be a worrisome sign of inadequate caution, the risk that psychology will spur a massive downward spiral seems to be off the table for now.

- **However, the foreseeable future is not without significant risks, many of which are real, not psychological** (to the extent the two can be distinguished in economics). There could easily be further house price depreciation, causing more mortgage defaults and requiring additional write-downs. American consumers, buffeted by rising prices for energy and food and concerned about the future, could easily slow their spending and further weaken the economy. And we continue to believe that many high-priced, highly leveraged private equity deals will fail to survive an economic slowdown.

The outlook continues to call for prudence . . . although not as much or as urgently as a year or two ago. Then, people were investing at low returns in the belief that nothing could go wrong. Today, that optimism has been dispelled and prospective returns embody more generous risk premiums.

However, only when a great deal of caution has been built into the markets – and hopefully an excess of caution – is it time to turn highly aggressive. We're not there yet, but there's reason to believe we're moving in that direction.

May 16, 2008

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Memo to: Oaktree Clients

From: Howard Marks

Re: The Tide Goes Out

For every period, there's a quotation which serves perfectly to explain what's going on, and I often find myself borrowing it. Warren Buffett provides more than his share; not only is his insight unmatched, but so is his ability to express it. Thus, starting with "It's All Good" last July, I've found frequent use for this one:

> When the tide goes out, we find out who's been swimming without a bathing suit.

Certainly, "swimming without a bathing suit" – or perhaps a life preserver – serves beautifully to describe investor behavior during the carefree period that ended last summer. And equally, the ebbing of the tide – and the exposing of those who engaged in that behavior – sums up the unpleasant disclosures which have taken place since. Financial sector participants indulged in unprecedented amounts of leverage, innovation and risk taking between late 2002 and mid-2007, the consequences of which have become readily apparent.

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Leveraging and Inflating

When we look at the last few years, we see a rather ordinary period of economic growth and prosperity, accompanied by good corporate health and profitability. **But what distinguished this period from all others was a runaway boom in financial sector activity.** The whole financial sector inflated, like a balloon into which increasingly more hot air was forced.

The greatest contributor to the 2002-07 boom likely was leverage; the recent past saw a steady flow of equity capital to levered entities, accompanied by willingness on the part of lenders to provide unprecedented amounts of leverage. Now the reversal of that process is underway, with consequences that are equally dramatic but much less pleasant.

Let's review the process which was often described and embraced as a virtuous circle:

- Equity capital was provided to would-be leveraged entities.
- Debt was readily available for them to use in expanding their total capital and thus their ability to pursue profit.
- This combined capital was used to purchase assets, forcing prices higher.
- Price appreciation caused the entities' equity to expand at a faster rate thanks to their financial leverage.

- The increases in equity were matched by further increases in borrowings.
- In fact, the good performance convinced lenders to increase the amount of leverage they would supply per dollar of equity. This meant the entities could grow their portfolios even faster than the rates at which equity capital flowed in and assets appreciated.
- Further, because of the seeming impregnability of the leveraged entities' profitability, risk aversion shrank and the risk premiums and returns demanded by lenders declined. Leverage became cheaper and thus even more attractive.
- As is typical of virtuous circles, everything ran smoothly . . . for a while: additional equity flowed in; it was leveraged up increasingly; buying caused assets to appreciate further; and the upward spiral continued.

With things working increasingly well and investors becoming more and more excited, processes like this one seem destined to go on forever. Of course, they cannot. But people forget that, satisfying one of the key prerequisites for a cycle that goes to excess. Overestimating the longevity of up legs and down legs is one of the mistakes that investors insist on repeating.

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Deleveraging and Deflating

Over the years I've written a number of memos about cycles, and in each one I've tried to remind readers that trees don't grow to the sky, and that success carries within itself the seeds of failure. Just as the balloon of levered entities expanded beyond reason in the last few years, now it's well into the process of deflating. And, as I mentioned in "Now What?" the air always goes out a lot faster than it went in.

Eventually, developments that are exogenous to the process interfere, or perhaps the process collapses of its own weight. In the current instance, consider subprime mortgages. The process described above was going along just fine, with increasing numbers of ever-larger mortgages being granted to cover a rising percentage of the cost of houses bought at rising prices by borrowers of declining creditworthiness. So far, so good: a process unhampered by discipline or restraint. But it must be seen that, eventually, reality will intrude. For example, eventually the amounts borrowed will necessitate payments that exceed what the borrowers can afford. **Oops; investors forgot that part.**

To understand what's going on now, all you have to do is reverse the process described above and squeeze (the squeeze – the force behind the deflating – comes from the pain that accompanies disclosure of the process's flaws).

- Something causes asset prices to weaken.
- Now the leverage works in reverse, causing the entities' equity to shrink faster than the rate of decline in asset prices, and their ratios of borrowings to assets to rise.
- Lenders, worried about declining asset prices, either call in their loans or refuse to roll over debt when it matures. In some cases, the entities' now-shrunken collateral fails a

market value test and triggers a margin call, which can be met only through the posting of additional collateral (which usually isn't available) or sales of assets (which add to market weakness).

- Further, with the world suddenly feeling much riskier, lenders demand increased risk premiums, raising the cost of borrowed funds and further impairing borrowers' economics.
- Equity investors – panicked by the combination of asset price declines, leveraged equity losses and margin calls – withdraw equity capital to the extent they can. The sight of investors lining up at the withdrawal window, and often being told they can't have their money, adds to the negative climate.
- The need to raise cash with which to satisfy the demands of lenders and equity investors places further downward pressure on asset prices, reinforcing what is suddenly a vicious circle. Fire sales of collateral add to this pressure.
- In particular, think what happens to banks. In this negative environment, it's hard to imagine these highly leveraged entities extending credit, given that (a) banks' equity is shrinking, (b) they feel they may need the money themselves, and (c) they fear further losses on loans and assets.

It shouldn't come as a surprise that this vicious circle seems as obvious and inescapable as did the virtuous one just a short time earlier. This is the point at which we may start to hear talk about the unstoppable downward spiral and thus the pending collapse of the financial system. **Unquestioning euphoria gives way to full-blown depression.**

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Mark-to-Market Accounting

If you watch enough cop shows on TV, you know that investigators of suspicious fires use the term "accelerant" for the chemical used by an arsonist to encourage the spread of a blaze. The current capital market cycle has been accelerated by an element that was added to the capital market equation in the 1990s: mark-to-market accounting.

In the simpler but still not totally stable financial world I entered forty years ago, stability was desired in financial institutions. So, for example, banks and insurance companies were allowed to carry a loan or a bond at cost on their balance sheets as long as it was (a) fundamentally unimpaired and (b) intended to be held to maturity. Even if its market value fell temporarily, it was assumed that a creditworthy claim would be repaid in full at maturity. Thus, price fluctuations were ignored as long as fundamentals were sound.

More recently, "transparency," "accountability" and "market signals" became more highly prized. A lot of this had to do with skullduggery unearthed at companies like Enron. As a result, accounting increasingly came to require that assets be valued at actual or estimated market prices. I'd had a preview of this in 1990 when, as part of efforts to "get" the high yield bond industry (and Drexel and Milken), S&Ls were required to market price their holdings of high yield bonds – dooming many of them in a time of price weakness.

There is no perfect accounting standard – just choices, with each alternative stronger on some desired traits but weaker on others. "Cost" is objective but often out of date and far from accurate. "Lower-of-cost-or-market" is conservative but asymmetrical in its error. "Market value" is contemporary but not always reliable; it discloses value declines faster than Enron did, but it also requires subjective judgments and bakes in price fluctuations that may prove transitory. **So when accounting regulators mandated mark-to-market, they decided in favor of currentness and transparency but against stability with regard to marketable securities and objectiveness with regard to privates**.

(When we began to organize closed-end funds in 1988, and for about fifteen years thereafter, Bruce and I established a policy for valuing privates based on "cost unless there's been a change which is fundamental, material and permanent." We felt it served us well. But since Enron and Sarbanes-Oxley, we've been forbidden to use that approach. Now funds are required to price each asset based on opinions regarding its worth. We preferred the old way. Who's better served now?)

Mark-to-market accounting turns out to be one of the main contributors to the current boom/bust cycle. In the old days, a bank (for example) would have carried assets at cost. In this decade's up years, since that bank was required to mark them to market, it was able to expand its balance sheet, and thus its operations, as assets appreciated in the virtuous circle. Equally, contracting asset values now mean the bank's portfolio is worth less, and that its equity is smaller and can support less debt and thus less lending. Loan portfolios have to be reduced, and new loans can't be made. A bank's regulatory capital can become insufficient; it's this, in part, that has been behind the banks' trips to sovereign wealth funds for re-equitization.

Since they operate in a world that combines rigid regulatory capital requirements, high leverage, fluctuating asset prices and, now, mark-to-market accounting, financial institutions can fail to be viable in extreme bear markets. (And as *The Wall Street Journal* of March 6 said, "What's the difference between a hedge fund and a bank? Banks are more highly leveraged.")

In 1990, when high yield bonds had the brush with difficulty described above (meaning spreads widened to 1,100 basis points, and a law was passed that required S&Ls to reflect price declines on their balance sheets), I was asked to brief the board of TCW on the risks. I presented a parable about a regulated financial institution that went bankrupt under the weight of mark-to-market accounting. I joked with Bill Spencer, who was president of Citibank when I worked there, that in the 1980s, that could have been Citibank if it was required to recognize mark-to-market losses on real estate loans. **Guess what: today that's the rule.**

This raises one of my favorite questions: **what's an asset's price?**

- Is it what you could get for it if you wanted to sell it?
- Is it what you would have to pay to buy it?
- Is it the price to buy or sell $1 million worth, or $100 million worth?

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- Is it the likely proceeds from the patient sale of an asset in isolation, or what you'd get for it as part of a large portfolio that has to be liquidated in one day?
- Is it the price in today's chaotic market, or what the price would be in a calmer one? And if the latter, who says what that is?
- Is it Goldman's price or Morgan's? Or the average of the two? And what if you find out that Lehman's is lower than both of them?
- What's the price if the asset doesn't trade? Or if you hold the whole thing and have no intention to sell?

I don't have the answer. Mainly because there is no answer. In short, an asset doesn't have "a price." It has many possible prices, and no one can say which is the right one. The ads for a jeweler here in Los Angeles lead with a great headline: "guaranteed to appraise for more." In other words, either (a) he sells jewelry for less than it's worth (and, if so, why?), or (b) he sells things for what they're worth but guarantees they'll appraise for more, which makes you wonder about the appraisals. The way I see it, the appraisals he touts are just as meaningless as many of the "market prices" being used today to price assets at banks, hedge funds, CDOs and CLOs.

A view has begun to be expressed that mark-to-market accounting – in conjunction with the vicious circle that prevails today – is causing asset values to be understated, writeoffs to be overstated, and the credit crisis to be exaggerated. Certainly there's every reason to believe that:

- Assets are being valued based on what people will pay for them (which is the goal), but with few people in a buying mood, market prices can far understate value.
- Supply and demand have completely supplanted fundamentals in determining prices.
- With little trading taking place, assets are often priced via reference to indices. But those indices fluctuate wildly in connection with speculation and hedging activity, and they may have little relevance to the individual asset being priced.
- Lenders are switching their valuations of collateral from going concern basis to liquidation basis.
- Margin calls are resulting in liquidations, which depress prices, leading to more margin calls.

It's hard to believe these are really the bases on which financial institutions should value their trillion-dollar balance sheets. But we're stuck for now with mark-to-market accounting. At minimum, you should expect it to contribute extensively to continued volatility. Believe me, it already has.

<u>"Should" ≠ "Will"</u>

Lately I've enjoyed comparisons of recent developments to Frankenstein's loss of control over his monster, or to a man-made mutation that has escaped from the laboratory. Extensive financial sector experimentation took place involving unprecedented combinations of volatile elements such as leverage, securitization, tranching, derivatives

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and mark-to-market accounting. In the lab, experimental microbes would be quarantined until their dangers were fully understood. In the financial markets of this decade, on the other hand, they were rapidly popularized and peddled world-wide.

In 1998, Long-Term Capital Management became the poster child for the ability of sophisticated investment strategies to malfunction with grave consequences. This hedge fund invested in a highly diverse portfolio of fixed income arbitrage positions. These were situations where two related assets were trading in violation of their normal price relationship: one was a little more expensive relative to the other than history said it should be. LTCM bought into these small mispricings in large quantities, on enormous leverage, in the expectation that they would correct. The explanation for its subsequent meltdown was simple, according to the founder, John Meriwether: "The Fund added to its positions in anticipation of convergence, yet . . . the trades diverged dramatically."

For years these memos have quoted my good friend, Bruce Newberg, as saying, "Improbable things happen all the time, and things that are supposed to happen often fail to do so." Acting in excessive reliance on the fact that something "should happen" can kill you when it doesn't. That's why I always remind people about the 6-foot-tall man who drowned crossing the stream that was 5 feet deep on average. You have to be able to get through the low points. And the success of your investment actions shouldn't depend on normal outcomes prevailing; instead, you must allow for outliers.

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Recent tales from the bust include a number of disasters that arose because things didn't work as they were supposed to:

- Although defaults **should** be independent, subprime-related securities collapsed when mortgage borrowers all over the country began to default at the same time.
- Auction rate notes should have delivered the benefits of both long-term financing (permanence) and short-term financing (low rates), because frequent rate resets **should have** eliminated the price risk that accompanies fixed-rate long-term debt holdings. But the reset process failed to work when the auctions attracted no bidders.
- At the top in commercial real estate during the second quarter of 2007, real estate investors were willing to buy New York office buildings at 3½% cash yields (with money borrowed at 5½%) because (a) rents **should** double to $150 sq. ft./year or, anyway, (b) someone else **should** be willing to pay more for it. So far . . . no.
- "Absolute return funds" **should** provide steady returns without vulnerability to market fluctuations. It turned out, however, that only completely hedged vehicles are completely without market correlation, and now a good absolute return fund may be one that goes down only half as much.
- A London hedge fund called Peloton gained 87% in 2007 and was named Credit Hedge Fund of the Year in January. Its long positions in AAA mortgage paper **should have** continued to hold up better than its subprime shorts. But the AAAs declined this year, and they'd bought enough on leverage to make the fund melt down in February.
- Credit default swaps **should** serve as a great way to transfer credit risk. But the market grew out of control – to $40-odd trillion of insurance coverage on $6 trillion

of debt – and no one knows just how it'll all work out. When CDS are traded around, the people who bought coverage have no way of knowing if their insurers' capital is adequate. Thus, efforts to off-load credit risk may have replaced it with "counterparty risk."

Clearly, investors only make investments because they expect them to work out, and their analysis will center on the likely scenarios. But they mustn't fixate on that which is supposed to happen to the exclusion of the other possibilities . . . and load up on risk and leverage to the point where negative outcomes will do them in.

At the same time, however, it's very hard to figure out how broad the range of considered possibilities should be. No investment action can withstand every possible development. Is there really such a thing as a "worst case assumption" short of a total loss? I often find myself asking one of the classic questions in investing: **How much effort and capital should we devote to preparing for the improbable disaster?**

Many of the recent problems occurred because investors expected outcomes other than the ones that arose. Had they been too optimistic? Or did the environment simply throw curves that no one should have been expected to handle?

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Leverage and Risk

Two important investment principles should be embraced concerning leverage and risk:

First, leverage magnifies outcomes but doesn't add value. I've said that so often that I ought to stop. But just a few reminders:

- Leverage magnifies losses as well as gains. In Las Vegas, they say, "The more you bet, the more you win when you win." But they always forget to add ". . . and the more you lose when you lose." **Leverage is just a way to bet more**.

- Leverage magnifies outcomes but doesn't add value. It will make for higher highs and lower lows, and it might even produce an increase in the expected value . . . assuming outcomes are normal. But it can't make something a fundamentally better investment. **Thus, leverage absolutely cannot be equated to the contribution to return that comes from skill in selecting investments or in restructuring company operations or finances**.

- From time to time, people come up with structures that are purported to add to an investment's upside without adding proportionally to its downside. They rarely work. Or, expressed properly, **it makes no sense to expect them to enhance the expected return without increasing the range of outcomes and the risk of loss**. You may be able to take an investment with a 10% promised return and turn it into a vehicle that has a 90% chance of earning 13% and a 10% chance of losing everything. **But can**

you end up with something that has a higher expected return but isn't riskier? That's too good to be true.

- Finally, in addition to magnifying losses as well as gains, **leverage carries an extra risk on the downside that isn't offset by accompanying upside: the risk of ruin**. Leverage, when added to losses, can lead to margin calls and meltdowns. There is no corresponding benefit. This lesson is being well learned today.

Second, every investment or portfolio entails a variety of risks, and its overall risk is the sum of those.

Every investment embodies both the specific risk related to the individual company or asset and the systematic risk that is a function of its membership in a market – its beta. There also can be liquidity risk, legal risk, currency risk and political risk. Finally, risk is introduced by the structure in which an asset is held. Here I'm referring to the risk that comes with leverage.

To simplify for my current purpose, risk comes from the combination of what you buy and how you finance it. You can buy very risky assets, but if you don't lever up to do so, you'll never lose them to a margin call. Or you can buy fundamentally safe assets, but the combination of enough leverage and a sufficiently hostile environment can cause a meltdown. **In other words, investing in "safe" assets isn't necessarily safe, particularly if you've borrowed to buy them.**

We've seen this at work in recent days, as entities that invested in top-quality assets have run into trouble. For example, Carlyle Capital Corp. ("CCC") invested in AAA-rated debt of the two government-sponsored housing agencies, Freddie Mac and Fannie Mae. But it levered its equity 31 times to do so, buying $21.7 billion of securities on the basis of just $670 million of equity. That meant that if values declined 3%, its equity would be gone. Worried bankers pulled back their loans; CCC received margin calls it couldn't meet; the banks seized its assets; and the fund melted down.

Investment safety doesn't come from doing safe things, but from doing things safely. Put another way, anything can be screwed up by using so much leverage that its fluctuations can't be survived. That's why, in writing about LTCM in "Genius Isn't Enough" (January 1999), I said **leverage + volatility = dynamite**.

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Financial Self-Destruction

The dramatic cyclical up leg of nearly five years (I'd say November 2002 through June 2007), as well as the far shorter but equally dramatic down leg that started last summer, have given me opportunity to reflect on a number of phenomena to be noted and lessons to be learned. You've seen the results in the last three memos ("No Different This Time," "Now What?" and "Whodunit"). I've reached a new view of how some things work, based on tying together several separate observations.

- **I've pointed out that one of the reasons models can fail to work is because markets are dynamic, not static**. Through frequent play, you can increase your mastery over a golf course, as you learn the consequences of each action and thus which are the right ones: if you hit the ball to spot A it'll roll toward the hole, whereas if you hit to spot B it'll roll toward the water. Eventual mastery is possible because the golf course doesn't change in response to your play. But fixing on tactics through which to master a market is unavailing, because the market is shaped by those who participate in it, and thus it responds and changes. No course of investment action – even if executed perfectly – can be right for all markets and all times. **In fact, when an approach becomes too well accepted, the widespread reliance on it becomes a source of danger.**

- I've devoted a lot of ink to Wall Street's innovation of financial products. Innovation becomes possible in up markets, when optimistic investors:

    - think about what might work and dismiss the likelihood of failure,
    - are willing to give something new the benefit of the doubt,
    - are impressed by early, easy successes, and
    - fear the consequences of failing to emulate competitors who enjoy those successes.

  In the last five years, these factors abetted unprecedented financial innovation, as quants assured prospective investors that the "fat-tail" events that could cause the new products to fail were most unlikely to occur.

- **But while the quants' predictions usually center on the high probability that events will fall within the normal range, the last nine months have given all of us the opportunity to witness events at the extreme.** This started last summer, when "once-in-a-lifetime events" became common. David Viniar, CFO of Goldman Sachs, may be remembered for saying in August that "we were seeing things that were 25-standard deviation moves, several days in a row." It's unusual for 100-year floods to become daily occurrences, but sometimes they do.

- **Finally, I've reminded readers about past bull market innovations that promised miracles but often failed when tested in bear markets.** One of the most easily recognized of these is "portfolio insurance." PI was a statistically derived technique that would enable equity exposure to be increased without a commensurate increase in risk. This was made possible by a process through which computer-generated sell orders would be implemented automatically in the event of a market decline, instantaneously scaling back portfolio risk. PI had its heyday in the period just before "Black Monday." But then, on October 19, 1987, the U.S. stock market declined 20%; beleaguered brokers didn't answer their phones; the sell orders weren't implemented; and PI ceased to be heard of.

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A few months ago, the twentieth anniversary of Black Monday gave me the opportunity to reflect on the short life of portfolio insurance. **I began to think – and now I'm convinced – that PI didn't fail because Black Monday just happened to occur. Rather, it <u>contributed</u> to Black Monday's occurrence, and thus to its own demise.**

In my December memo "No Different This Time" I listed twelve lessons of 2007. Number four said that "widespread disregard for risk creates great risk." **In that way, in 1987 the widespread belief that equity exposure could be increased without similarly increasing risk led to an unjustified – and unsustainable – expansion of equity allocations. And the carefree buying this generated led to elevated stock prices from which a retreat was increasingly likely.** When the S&P 500 fell 10% on the Wednesday-Friday leading up to Black Monday and users of PI had the weekend to think things over, it seems they concluded that they had accepted too much risk; that they couldn't depend on PI to save them; and that they had to dump stocks en masse. **Thus, this innovation was not undone by a chance event. Its undoing was brought about by an event which it had, at least in part, caused.**

Innovation generally requires bullish assumptions, and thus it's easily accomplished in bullish times. Those optimistic assumptions add to the risk in the environment, and when eventually proved to be too rosy, they contribute to losses and to the products' failure. **The naked swimming which is encouraged by the rising tide certainly is exposed when the tide goes out. But I'd go further: in the dynamic environment of the marketplace, naked swimming eventually <u>can cause</u> the tide to go out.**

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<u>A New Kind of Crisis</u>

People ask me whether things look familiar, and how this cycle compares to others I've experienced. I tell them this one's different in both degree and kind.

We've had collapses in the past, but never so broad-gauged and systemic. The earlier ones were the result of things going on in specific sectors or regions: LBO debt in 1990, real estate in 1992-94, emerging markets in 1997-98, and tech/telecom stocks in 2000-02. Most people would prefer to see the weakness centered in specific areas . . . and thus containable, treatable and avoidable.

This bust isn't sector-based, although it was ignited first in subprime mortgages. Instead, it stems from the broad application of the techniques I've been discussing: leverage, securitization, tranching and derivatives. Because Wall Street applied those techniques in so many ways, the current problems are generalized and pervasive and have the ability to cause losses in a wide variety of areas, irrespective of the underlying fundamentals.

The current bust arose against a backdrop of healthy fundamentals. The economy was growing. Commercial real estate wasn't overbuilt. Bond defaults were at record lows. Yet huge markdowns have taken place in these areas. Thus the solution will not come

from addressing localized fundamental problems. Instead, the problem is hydra-headed, affecting a large number of areas due to contagion. Larry Summers put it this way:

> You have three vicious cycles going on simultaneously. A liquidity vicious cycle -- in which asset prices fall, people sell and therefore prices fall more; a Keynesian vicious cycle -- where people's incomes go down, so they spend less, so other people's income falls and they spend less; and a credit accelerator, where economic losses cause financial problems that cause more real economy problems.

There is no schematic diagram for the workings of the economy and the markets, as in "if we do A, the result will be B." That's particularly true for the current crisis, since some of the financial techniques that gave rise to it are new; others haven't been used to the same extent; and they've never been combined as they were in the last few years. **In particular, the workings of economies and markets depend heavily on psychology, which can't be treated as if it's hard-wired.** Thus the people trying to address this bust can only work from hypotheses and try possibilities.

The Fed and the administration are determined to solve the problem, but we're unlikely to have the unwind we need without pain. As I wrote in "Whodunit," in order for efficient capital allocation decisions to be made, an economic system that aims to create capital has to witness capital destruction from time to time. Efforts to avoid the pain would cause problems like unrecognized bad loans to linger, delaying a solution. **I'm no expert, but it makes sense to me that the quantum of pain on the way down has to at least approach the pleasure everyone felt during the boom.**

Other than just through the passage of time, the solution to the credit crunch – to the extent there is one – might be found in short-circuiting the deleveraging process described on pages 2 and 3. Thus, the authorities will try to get people to:

- face the music by recognizing and writing down problem assets,
- borrow money, even though the possible uses for it may seem ill-fated,
- make loans, despite the scarcity of capital and the risk of loss, and
- buy assets that are underpriced, even though prices seem only to go lower.

Interest rate cuts have made borrowing cheaper, and there will be more. Loans to banks will give them money they can turn around and lend. The government's decision to let Fannie Mae and Freddie Mac make bigger loans should make capital available in the starved housing market. If necessary, a government backstop of the agencies would do even more (but it also would introduce moral hazard). A holiday from capital requirements would allow regulated financial institutions to take writeoffs and clear their balance sheets without having to worry about falling below minimums. They might even try suspending mark-to-market accounting.

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The Fed's recent announcement that it will swap Treasury securities for AAA-rated mortgage debt that isn't trading well is such an attempt to stem the deleveraging process. If things go as the Fed hopes, this exchange should:

- take some mortgage paper out of circulation, improving the supply/demand balance and relieving the downward pressure on prices,
- make it more palatable to hold and buy mortgage paper and, especially, for dealers to maintain inventories and make markets in it,
- reduce yields, and thus the cost of money in the economy, and
- give institutions collateral against which they can borrow (and then lend).

The collapse of Bear Stearns, on the other hand, illustrates a few important limitations. Brokers, like other financial institutions, are highly leveraged entities. The nature of their assets makes it impossible for them to repay their liabilities on demand. Thus, none can survive a "run on the bank" stemming from a loss of confidence. As I said in "The Race to the Bottom," they all offer the same product – basically, money – and if confidence declines, nobody will say, "Okay, there's a 5% chance I'll lose my capital, or access to it for a while, but it's worth it because their product is so superior." **Who'll stay despite a decline in confidence? No one. And what financial institution absolutely can't be the subject of a loss of confidence? I'll let you answer that.**

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Where Will It End?

When I was a kid, there were a lot of cartoons showing men carrying sandwich boards (who remembers what they were?) that said, "The end of the world is at hand." So far, though, they've been wrong. Likewise, people said we had approached the end of the financial system around Black Monday in 1987, and when LTCM melted down in 1998. But we're still here. It seems we muddle through, despite all attempts to screw things up. It's my guess we always will.

It's tempting for worriers like me to consider apocalyptic possibilities. But it's not productive, so I've quit. I can come up with "China Syndrome" theories, but (a) I can't give them a high probability of coming to pass, and (b) there's little I can do. **The things one would do to gird for the demise of the financial system will turn out to be huge mistakes if the outcome is anything else . . . and chances are high that it will be.**

* * *

Fortunately, one of the most valuable lessons of my career came in the early 1970s, when I learned about the three stages of a bull market:

- the first, when a few forward-looking people begin to believe things will get better,
- the second, when most investors realize improvement is actually underway, and
- the third, when everyone's sure things will get better forever.

Buying during the first stage can be highly profitable, while buying during the last will carry you over the cliff with the rest of the herd.

Relatively few people were eager to buy at the depressed prices of 2002-03. But buying grew in 2004-05 as prices rose and bargains became scarcer, and the pace became fevered in 2006 and the first half of 2007. This trend was captured in the soaring amounts investors committed to U.S. buyout funds:

2002-03	$ 52 billion
2004-05	200
2006-07	557

This growth in buyout capital was spurred on by high reported IRRs, which in turn were facilitated by dividend recaps and quick flips, themselves a symptom of the increasingly overheated capital market environment. **Had the high IRRs been the result of genuine investment skill or just well-timed risk taking?** So far we've learned a little about who swam naked – that is, for whom it was the latter rather than the former. We'll know for sure when the tide is fully out.

To aid in your consideration of the future, I've formulated the converse of the above, the three stages of a bear market:

- the first, when just a few prudent investors recognize that, despite the prevailing bullishness, things won't always be rosy,
- the second, when most investors recognize things are deteriorating, and
- the third, when everyone's convinced things can only get worse.

Certainly we're well into the second of these three stages. There's been lots of bad news and writeoffs. More and more people recognize the dangers inherent in things like innovation, leverage, derivatives, counterparty risk and mark-to-market accounting. And increasingly the problems seem insolvable.

One of these days, though, we'll reach the third stage, and the herd will give up on there being a solution. And unless the financial world really does end, we're likely to encounter the investment opportunities of a lifetime. **Major bottoms occur when everyone forgets that the tide also comes in. Those are the times we live for.**

March 18, 2008

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Memo to: Oaktree Clients

From: Howard Marks

Re: Whodunit

> **who·dun·it**– (hōō dun´ it) *n*. a narrative dealing with a murder or a series of murders and the detection of the criminal (The Random House Dictionary of the English Language)

The subprime crisis, credit crunch and possible recession are subjects of daily conversation. In addition to wanting to talk about how things got this way and what's going to happen in the future, a lot of people are eager to discuss who's to blame. It's the purpose of this memo to say where I think responsibility lies.

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The Subprime Factory

I've heard it said about laws that, "like sausages, you don't want to see how they're made." I'd like to suggest something else where the manufacturing process was particularly distasteful: subprime mortgages.

This decade's vast expansion of the subprime factory originated in the ability of **Wall Street** to sell a lot of mortgage-related Collateralized Debt Obligations, or CDOs. The high interest rates on subprime mortgages enabled the Street to promise a lot of return on the lower CDO tranches and a lot of safety on the upper ones. With high-enough ratings, the debt looked very attractive to potential buyers. Thus, there was a use for large amounts of the underlying raw material: subprime mortgages. It happened, however, that Wall Street could sell more bologna sandwiches than there was bologna. That is, there was more appetite for securities built from high yielding mortgages than there were qualified borrowers. No problem: just provide incentives to increase production and turn a blind eye to creditworthiness.

Mortgage brokers played an essential and often ugly part in this process. They were tasked with creating mortgages in quantity, and that's where their incentives lay. **Since neither they nor the Wall Street firms would hold the mortgages for long, the emphasis was on volume rather than creditworthiness.** Making loans was good; rejections were bad. The website of broker Kevin Schmidt's firm in Louisiana said it best, "We don't get paid unless we say YES." (*The Wall Street Journal*, January 17) The *Journal* went on to point out that, "Key players often get a cut from what a transaction is supposed to be worth when first structured, not what it actually delivers in the long term."

Thus I believe mortgage brokers committed many sins. They offered more debt than many subprime borrowers could carry. They assured borrowers that they'd always be able to refinance into new loans at teaser rates, so they needn't worry about a reset to market rates. They probably weren't clear on all the terms and practiced the old bait-and-switch. They hid from first-mortgage lenders the fact that borrowers were borrowing their equity too. And I'm sure some encouraged borrowers to lie about their incomes, invoking "Everyone does it," "Why should Joe and Sue have a nicer house than you?" and "Nobody gets hurt."

Appraisers made a similarly negative contribution to the process. In the days when home prices were stable, appraisals were based on established parameters like price per square foot. But with prices rising rapidly, they could only reference "comps" to other highly appreciated homes. **Like the credit rating agencies, appraisers lent a veneer of respectability to a faulty process.** And like rating agencies, the job probably went to the appraiser willing to assign the highest value. I've read about appraisers being black-listed because they were too conservative, restraining loan volume. According to the *L.A. Times* of January 27, a Wharton professor, Susan Wachter, has estimated that "appraisers helped inflate mortgage values by $135 billion during 2006 alone." Borrowers, home sellers, mortgage brokers and Wall Street all had a vested interest in seeing high values assigned. **There's something fundamentally wrong when there's no party to a transaction who wants the appraisal to be conservative.** But that became the case when far-away, ratings-assured buyers of sliced-and-diced mortgage securities took the place of lenders risking their own money and expecting to hold to maturity.

Mortgage insurers played a similar role by lending their imprimatur and thus implying instruments were safe. Everyone thinks of taking out insurance as a cautious thing to do. When risks are insured, the people exposed to them believe they're safe to behave differently than they otherwise would. But what happens when the insurers miscalculate the risks involved, and thus issue more coverage than their capital can support in tough times? In the extreme, losses can go unreimbursed, meaning the insureds don't really have the protection they think they have and their situation is riskier than they intended. **Certainly in this cycle, insufficiently cautious insurers abetted the bearing of risks that have exceeded expectations.**

Let's remember that the **mortgage borrowers** don't deserve a free pass. It was stupidity or cupidity, naïveté or moral turpitude. At best they took on massive financial responsibilities they didn't understand, and at worst they were fraudsters. Many took out "no-doc loans" at interest rates above those charged on loans requiring documentation of income. Why? I assume they wanted to be free to lie. And many agreed to terms they couldn't decipher. But why worry, if the result is a great house at a low initial monthly payment (and maybe cash taken out in the process)? I hate to see the borrowers' suffering, but each one willingly participated in a deal that was too good to be true.

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Turning Mortgage Loans into CDOs

CDO investors are in the headlines for having lost $100 billion-plus (thus far) on subprime-related obligations. Someone sold them something that turned out to have been massively overpriced. Thus I have to start with the **investment bankers**. Again, was it naïveté or avarice?

When Oaktree considers a new product, we ask a number of questions: First, will it work for our clients; what's the return potential; and are the risks controllable? And second, can we sell it; and will it be profitable for us? Which of these did Wall Street ask regarding subprime CDOs? The second group of questions undoubtedly, but the results provide no assurance regarding the first. They sold something that failed massively, and they've gotten off somewhat easy in terms of society's judgment. Fittingly, investment banks like Merrill Lynch, Citigroup and UBS ate a lot of their own cooking (and a good part of the losses). But that does not absolve them of responsibility, for others were hurt as well.

I believe firmly in *caveat emptor*, but that doesn't mean there's no such thing as misconduct on the part of sellers. Did they perform thoughtful and balanced due diligence? Did they give enough thought to the buyers' downside risk? Did they suspect that the good deal might be illusory? Did they see the flaws in the mortgage origination process? When they marshaled data with which to prove to customers and rating agencies that CDOs were secure, did they consider the data's sparseness or limited relevance? Did they fail to disclose information regarding the "exceptions" in CDO portfolios – mortgages that didn't meet minimum lending standards – as the New York Attorney General is investigating (*WSJ*, January 31)?

Some of the same questions can be asked about the role of **CDO managers**. I haven't been close to the process – Oaktree didn't have any involvement – but I believe managers met with investment bankers who offered a near-turnkey proposal: "Here's how it works. The documents are ready to go. We have the assets in inventory. The debt is teed up for issuance. Your fees will be x million per billion." Did the managers vet the process? Did they undertake an independent effort to gauge the risks? Or did they just sign on to the magical fee machine?

Next up, in my opinion, are the **credit rating agencies**. In summary, everything was wrong with the process through which CDO debt was rated, a process fed by the agencies' hunger for profit. The agencies worked with CDO sponsors to design the products, so how could they then be objective in evaluating them? They accepted payment from the companies whose offerings they were rating; they all did, but that doesn't mean the arrangement left them objective. They competed for the business, with the fees going to the agency that would assign the highest rating.

But in the end, the rating agencies' greatest failing lay in giving their blessing to securities whose risk they couldn't accurately assess. The eventual default rate was crucial and unknowable. The historic data on subprime defaults related to mortgages that

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were issued through a far different process and incentive system. But I can't imagine any agency saying, "The risks are unknowable; we just can't assign a rating."

How do we know the agencies bobbled the ball? The **twelve-digit losses** to date give a pretty good indication. An article in *The Wall Street Journal* of January 31 gives another:

> Standard & Poor's downgraded or threatened to downgrade more than 8,000 mortgage investments and projected a widening array of financial institutions would ultimately face mortgage securities losses totaling more than $265 billion. . .
>
> S&P's rating actions touched on $534 billion in mortgage-related investments, including **47%** of the U.S. subprime mortgage bonds rated in 2006 and the first half of 2007. . .
>
> **S&P . . . has now placed 69% of the triple-A rated subprime bonds from 2006 on negative watch**. (emphasis added).

I'd call that a thorough indictment. It indicates a flawed process, not occasional error.

The situation is remarkably similar for the **monoline insurers** . . . but with an added wrinkle. These firms carved out a good but dull and slow-growing business in insuring municipal bonds. Since munis default so infrequently, they needed little in the way of capital to cover potential losses, and they probably started to feel they were pretty good at gauging losses. In the 1990s, they concluded that mortgage-backed securities were no more risky than munis. (Not so, it turns out: MBIA recorded mortgage-related losses of $714 million in the fourth quarter, versus losses of $920 million on munis over its 36-year history, for an average of $26 million a year.) Thus the insurers applied their capital and acumen to insuring $125 billion of CDO debt. They acted out of the same ignorance as the rating agencies, **but they promised to make good on any losses**.

The results are potentially disastrous. Their capital is clearly insufficient to cover their responsibilities. ACA Financial Guaranty Corp., for example, wrote $69 billion of credit protection on the basis of its $425 million of capital. And if CDO losses eat into the monoline insurers' capital and/or cause them to lose their triple-A ratings, it will diminish the reliability of their assurance with regard to $1 trillion-plus of munis they backed. Loss of the triple-A rating would hurt the outstanding insured munis, wreak havoc in the muni market generally, and make it harder for new bonds to be issued, at just the time that cities and states need money to cover economy- and subprime-related revenue declines. Also of critical importance, it will require holders of insured CDO paper to take additional writedowns. The monoline situation has begun to contribute to the credit crisis, and people are scurrying to find a solution (thus far without success).

All the participants in the CDO creation process took part in an activity we can call "ratings arbitrage." If you can take a bunch of assets with low ratings and – without adding to the intrinsic value of the collateral in any way – turn them into securities with

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much higher average ratings, you can make a lot of money. But the ability to do so means there's something wrong. (In other words, if it's possible to start with 100 pounds of hamburger and end up selling ten pounds of dog food, 40 pounds of sirloin and 50 pounds of filet mignon, the truth-in-labeling rules can't be working.) **In the case of CDOs, ratings and insurance were supplied by parties who underestimated the risk, and the end product was sold – and bought – by people who were willing to participate in this purported miracle without asking the hard questions.**

The Failure of Risk Management

I've long been critical of risk management as a distinct investment discipline. Now, a convincing case for my view can be made on the basis of *prima facie* evidence: The fact that most financial institutions appointed **risk managers** after the collapse of Long-Term Capital Management in 1998 doesn't seem to have helped them avoid the subprime mess.

If you trust someone to be expert enough to make an investment, then that's the person who can best assess its risk. If you trust someone to assemble portfolios, it's they who can best judge how things will behave in combination. In the isolated risk management function, I feel people who know less about the underlying investments second guess the people who know more.

There's an ongoing dilemma, as expressed in a joke I posted on my bulletin board in 1970, about the fact that analysts know a great deal about a few things, while portfolio managers know a little bit about a lot of things. In my view, however, risk managers know the littlest bit about the most things, so they're least suited to evaluate portfolio risk.

In December's "No Different this Time," I included a discussion of the leading risk modeling tool, "value at risk" or VaR, which provides a "worst case" estimate of the risk in a portfolio. I mentioned that in the first nine years after the model was adopted, its predicted maximum trading loss was never exceeded. And then, in the third quarter of 2007, it was exceeded on a quarter of the trading days. So clearly, this model proved to be less than totally reliable. The model may be flawed, the historic data on which it was based may have been non-representative or insufficient, or the world may have changed. Regardless of the reason, VaR failed.

When you read about Goldman Sachs's success in avoiding the CDO turmoil and getting net-short, (see *The Wall Street Journal* of December 14), you see it was done on the basis of the reasoned judgment of executives on its proprietary trading desk. Ironically, when mortgage-related security prices first began to plummet, the increase in volatility raised Goldman's VaR, causing the elimination of positions that eventually would have been highly profitable. According to the *WSJ*, "a client who had similar positions at the time . . . says he made $100 million by relieving Goldman of [a] short bet. 'It appeared to me that [the traders] constantly fought a VaR battle with the firm once the market started to

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break.'" But in the end, subjective judgment was permitted to override risk management science, with great results.

Interestingly, many banks got into trouble because their top executives wanted to "be like Goldman" and demanded that more be bet for the house's account. But they lacked people capable of correctly making the needed judgments and relied instead on statistical risk managers. They've lost a lot of money, and a lot of the executives and the risk managers are out of a job.

Enough with the Quants Already

Over the forty years since I attended grad school at the University of Chicago – largely inspired by theories originated there – there's been a pronounced rise in the participation of "quants" in the investment business. These are people who know a lot about statistics and computer modeling. They specialize in manipulating large amounts of data and predicting how portfolios are likely to perform under a variety of scenarios. But usually they don't know much about the individual securities that make up the portfolios . . . or feel the need to do so. **In other words, you might say they know the price of everything and the value of nothing.**

In recent years – and in the excesses we're examining – the ranks of quants grew to include the risk managers discussed just above; "financial engineers" at investment banks who structured complex entities and simulated their future performance; analysts at monoline insurers who assessed the risks they were asked to insure; and people who managed portfolios, usually hedge funds, on the basis of mathematical algorithms.

However, it should be noted that **quants and their computer models primarily extrapolate the patterns that have held true in past markets. They can't predict changes in those patterns; they can't anticipate aberrant periods; and thus they generally overestimate the reliability of past norms.**

To give you a context in which to think about that, I'll again borrow some wisdom from my friend Ric Kayne: **"99% of financial history has taken place within two standard deviations," he says, "but everything interesting has taken place outside of two standard deviations."** In other words, most of the time markets follow their normal patterns, and when they do, assets are priced reasonably and there isn't much to do. But on rare occasion, the markets go off the rails, and that's when big money is made and lost.

Now think about the quants. They know all about how things will work if times are normal, but their analysis is of no help when events occur that reside in the far-off, improbable tails of the probability distribution – like when it turns out that 2% isn't the right default rate for subprime mortgages, and the actual figure is several times that.

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One of the great investment books of the 1960s was *The Money Game* by the pseudonymous Adam Smith. Smith talked about a veteran investor, the Great Winfield, who knew he was falling behind the times but had the answer: "Our trouble is that we are too old for this market. . . . My solution to the current market: kids." In the last decade or two, everyone hired quantitative whiz kids, and the results were disastrous. **Hopefully, the events of the last few years will produce a sea change, in which investors come to rely more on seasoned judgment and less on financial engineers.**

Greenspan and the Fed

Alan Greenspan deserves a lot of credit for presiding over one of the greatest periods of prosperity and market gains in our history, and for saying, presciently, ". . . history has not dealt kindly with the aftermath of protracted periods of low risk premiums." With apologies to my indirect personal connection to the ex-Fed Chairman, I must express my view that his stewardship wasn't perfect. (Of course, I doubt he'd say it was perfect.)

- Because he rarely used his bully pulpit to warn about excesses, advances were permitted to run unchecked. For example, his warning against "irrational exuberance" attracted a lot of attention, but I've always wondered why, if he considered it justified in 1996 with the Dow at 6,400, we heard nothing from him on the subject in 2000, when it topped out at 11,700. And mightn't he have warned in recent years about overheated home prices and aggressive mortgage lending tactics?

- He did little to "remove the punchbowl," or puncture bubbles. He could have pushed for higher margin requirements in 1998-99, or for mortgage reforms in 2004 or 2005, but he didn't, insisting that it's difficult to identify bubbles other than in hindsight.

- He was too much of a cheerleader, providing justification for market advances, often on the basis of productivity gains.

- In 2004, he urged people to take out adjustable rate mortgages rather than fixed-rate loans, since they always carry the lowest initial interest rate. But he overlooked the fact that (a) low-income borrowers might be ill-equipped to handle the risk of resets to higher rates, and (b) with mortgage rates at multi-generational lows, that would have been a great time for them to fix their interest cost. Just think where we'd be if a good portion of today's adjustable-rate mortgages carried fixed rates instead.

- **Having cut interest rates to head off negative ramifications from the bumps in the road, he left them low for too long. I learned in the hyperinflationary late 1970s and early '80s that when people feel an asset will always appreciate at an annual rate in excess of the cost of money, the result is speculative demand. That certainly was the case this decade.**

In general, it seems the Fed – including the current Bernanke regime – wants to let advances run and limit declines, whether in the economy or the markets. Everyone wants

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advances and no one – except bargain hunters and investors in distress – relishes pullbacks. But I wonder if that stance makes sense.

How can we have gains but not losses? How can a free-market economy allocate capital effectively if capital creation is abetted and capital destruction is prevented? The fact is, excesses like we've just seen have to be corrected – painfully – and if they aren't, they'll just grow bigger and bigger as the cycles wear on. "Moral hazard" will arise, convincing people that risk takers will always be bailed out, something that's bound to encourage greater risk taking.

The Fed's actions in the current situation have been dramatic:

- an unexpectedly large half-point cut in the discount rate in September,
- strong steps to inject liquidity and encourage borrowing by banks, and
- an unusual ¾-point rate cut on January 21, followed by another ½ point a week later.

In two decades as Fed Chairman, Alan Greenspan was required to deal with the emerging market crisis and meltdown of Long Term Capital Management in 1998; the possibility of a Y2K glitch; the tech stock and broader bear market in 2000-02; the ramifications of the 9/11 attack; and concern over the possibility of deflation. **And yet he never cut rates by ¾ point in one step or by 1-¼ points in just eight days.** Thus Bernanke's actions seem extreme. Is the Fed attempting to prevent a normal recession? Does it foresee an unusually serious one, perhaps driven by unprecedented weakness in home prices? Or is it concerned about profound financial system weakness, centered at banks and the monoline insurers?

Kudos and Brickbats

I hesitate to single out an individual for criticism, especially after he's been punished through loss of his job, but CEO **Chuck Prince of Citigroup** contributed the unfortunate quote that just has to stand as the symbol of the last few years' excesses. In early July, he showed foresight by saying "when the music stops, in terms of liquidity, things will get complicated." Unfortunately, he added, **"as long as the music is playing, you've got to get up and dance. We're still dancing."**

What I think Prince was saying is that even if the market's overheated, a financial institution has to participate or risk losing market share to those who will. But that's my point. **Is there any business a company won't do? Is there any profit a company won't pursue? Might there be something worse than losing market share?** What a wonderful thing it would have been to lose market share in the crazy period leading up to last summer. Doing so held the key to avoiding the CDO carnage. **Short-termism is one of the greatest problems in U.S. business today, and it makes it tough to go left when all your competitors are going right. But our business leaders should dare to be great.**

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Bank of America CEO Ken Lewis won my respect early last year when he said, "We are close to a time when we'll look back and say we did some stupid things . . . We need a little more sanity in a period in which everyone feels invincible and thinks this is different." He was dead right. The question is what he did about it. B of A took a $5.4 billion write-down in the fourth quarter and has $12 billion of CDO exposure left. Those numbers are about a third of Citigroup's. Is that good or bad?

Who else saw what was coming?

- **Jim Grant** was very outspoken about CDO excesses in his newsletter, "Grant's Interest Rate Observer," and early enough for heedful investors to have done something about it. He was one of the first, for example, to question the fact that most of the collateral behind CDOs was rated below investment grade, and yet a vast majority of CDO debt was rated above investment grade.

- **William Conway** of Carlyle Group attracted a lot of attention – but perhaps not all he deserved – for a January 2007 memo to his Carlyle colleagues, in which he wrote:

  > As you all know (I hope), the fabulous profits that we have been able to generate for our limited partners are not solely a function of our investment genius, but have resulted in large part from a great market and the availability of enormous amounts of cheap debt. . . . Frankly, there is so much liquidity in the world financial system, that lenders (even "our" lenders) are making very risky credit decisions. . . . I know that this liquidity environment cannot go on forever. . . . I know that the longer it lasts, the greater the pressures will be on all of us to take advantage of this liquidity. And I know that the longer it lasts, the worse it will be when it ends.

- **John Paulson** won well-deserved fame for generating returns up to 590% in his hedge funds last year. He did three things well: He recognized the excesses in the residential real estate arena. He figured out how to profit from their inevitable reversal. And he was lucky enough to get the timing right; rather than reach his conclusion earlier, look wrong for a long time and give up – as others did – he turned bearish in 2005 and was able to hold on until events began to prove him right in 2006.

- I'm glad to say **our clients' sectors of the investment world** – such as pension and endowment funds and insurance companies – generally haven't reported much participation in the most highly leveraged entities.

- **Goldman Sachs** has distinguished itself thus far by avoiding subprime and CDO losses, being short mortgage paper and skating through the crisis. **Lehman Brothers, Credit Suisse, Deutsche Bank** and **JP Morgan Chase** are other institutions that seem to have signed on for less subprime pain than their competitors.

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Finally, a statement by the Chief Executive of **UBS** provided another insight into the recent events. Early last December, he said, "the ultimate value of our subprime holdings . . . remains unknowable." I admire his candor, and I'm sure he's right. But the question I'm left with is whether it might have been possible for buyers of subprime-related paper to reach that realization at the time they first evaluated those assets?

Where Does the Buck Stop?

In affixing ultimate responsibility for losing investments, I tend to look to the investors who made them. Sometimes investors are blind-sided by unforeseeable events, and sometimes they're preyed upon by unethical or even criminal purveyors. **But usually the process couldn't have gone as far as it did if it wasn't for buyers who sought return too avidly, trusted too much, failed in some way to be alert to the potential for loss, and fell for something that was too good to be true.**

Everyone dreams of return without high risk. But where can it be found? Not in markets that are working properly – that is, markets that are efficient. Not in leverage, which should be expected to cut both ways, magnifying both risk as well as return. Not in doing what everyone else is doing, or in buying the product *du jour* that's being touted broadly and purchased unquestioningly. At best it can be found, with regard to markets that are less than fully efficient, in possessing – or aligning yourself with investors who possess – that scarce attribute: personal skill . . . superior insight . . . alpha.

To fully understand how superior returns are achieved and why they're rare, you have to grasp the concept of "excess return." It's what everyone wants. It's "superior risk-adjusted return": the amount by which an active investor's return exceeds that which can be achieved through a passive portfolio of the same riskiness. **For active investing to work and for excess return to exist, market participants – and thus, collectively, the market – have to be making mistakes. That's how I think of the thing called "market inefficiency."** Thus, people who think excess return is readily available fail to ask a few simple questions:

- Why should a free lunch exist despite the presence of thousands of investors who're ready and willing to bid up the price of anything that's too cheap?
- Why is the seller of the asset willing to part with it at a price from which it'll give me an excessive return? Do I really know more about the asset than he does?
- If it's such a great proposition, why hasn't someone else snapped it up?
- Why is the broker offering it to me (rather than grabbing it for his prop desk)?
- **And if the return appears so generous in proportion to the risk, might I be overlooking some hidden risk?**

How do the CDO buyers measure up in this regard? I'd guess they were told they could get better returns from a double-A mortgage security than a double-A corporate without any incremental risk (or else leveraging up wouldn't have seemed so safe). I believe they were told the source of this return would be the market, as opposed to great skill on the

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part of CDO managers. I imagine they relied heavily on the participation of the rating agencies and monoline insurers. Each of these was flawed.

What made them believe that mortgage loans could be bought up and packaged into CDO securities (with multiple fees paid along the way) with the resulting return still excessive? Why should one legitimate double-A significantly out-yield another? Why didn't they ask more about the process through which this miracle was being accomplished? Why did they accept that narrow spreads could safely be turned into generous returns through leverage? Why did they trust so heavily in the simulated performance of securities for which the existing track record wasn't applicable? Did they look into the motivation and capabilities of the rating agencies and insurers on which they depended? **In short, were they skeptical enough?**

Many CDO buyers had no independent ability to assess the risks of CDOs. But they bought anyway. They followed their desire for high risk-adjusted returns, took action based on the relationship between promised return and rating, and went astray.

The bottom line of all of this is that one of the main functions of markets is to drive out excess return by bringing buyers and sellers together at prices from which the return will be just fair. Realizing that makes skepticism an indispensable ingredient in superior investing. Most investment failures are preceded by a dearth of it.

* * *

I often think back to an early 1990s issue of *Forbes* on the subject of compensation. It quoted an experienced corporate director as saying something like, "I've given up on trying to get people to do what I tell them to do. They do what I pay them to do."

It's clear that in recent years, improper incentives caused a lot of people to do the wrong thing. Loan originators with nothing riding on the loans' long-term performance. Investment bankers who expected to package and resell loans before they went bad. Rating agencies and appraisers – the investor's protectors – incentivized to come in high. Companies that (a) were lured by potential profit into areas where there was no way to understand what would happen in tough times, and thus (b) accepted risks for which they were unprepared. Financial institutions that failed to sit out when the markets became overheated.

My wife Nancy says she likes this memo more than most, because the lesson is so easy to understand. **"People can't be counted on to do the right thing," she said, "when they don't have anything at risk."**

Far more participants in this process covered themselves with dishonor than with distinction, as attested to by the magnitude and ubiquitousness of the losses. But the

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blame for the current problems falls primarily on two groups, and there's nothing new about either:

- middlemen who were improperly motivated by the ability to profit from actions for which they wouldn't remain responsible, and
- buyers who believed too readily that return was available without proportionate risk and thus were willing to buy things they didn't understand.

Errors in process, judgment and character like those of the last few years cannot be kept from occurring. All any of us can do is try to avoid joining in.

February 20, 2008

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Memo to: Oaktree Clients

From: Howard Marks

Re: Now What?

My memos mostly try to explain what's been going on in the financial arena and how things got that way. With three published this past summer plus December's review of the lessons of 2007, I've done a lot of that. Hopefully they were helpful. Given what I consider to be the importance of the current situation, I have decided to venture beyond the familiar ground and into an area where I'm on shakier footing: the future. Before doing so, however, I can't resist the temptation to recap how we got here.

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Boom

There's a process through which bullish excesses set the stage for bearish corrections. It's known as "boom/bust," a label that succinctly describes the last few years and, I think, the next few.

- In 2001-02, heavy borrowing to overbuild optical fiber capacity led the telecommunications industry to the brink of financial collapse. This came to a head around the time that scandals were unearthed at Enron, WorldCom, Adelphia, Tyco and Global Crossing. This combination of events – set against the backdrop of a sluggish economy and some very negative geo-political events – led to a **widespread crisis of confidence regarding corporate financial statements, corporate managements and corporate debt**. The environment was quite bleak.

- The Fed took interest rates as low as 1% to offset the negative effects of these events and others. Because of this – and with U.S. equities having fallen for three consecutive years for the first time since the Great Depression – many investors concluded that their **return aspirations couldn't be met in traditional investments**. Pressure for higher returns had the effect of increasing the acceptance of alternative investments, hedge funds, emerging market securities, leverage and financial innovation . . . in the process, suppressing customary risk aversion.

- **Leverage and risk taking became the dominant features of the financial landscape**, facilitated by a "global wall of liquidity." The low promised return on most investments, the pressure for more and the availability of low-cost capital all combined to make leveraged structures the flavor of the day.

- Importantly, much of the growth in leverage took place free of regulatory oversight. In the past, the creation of debt was limited by margin requirements, Fed regulations, bank capital requirements and bankers' prudence. But under the new order, **an**

explosion of non-bank lending rendered the traditional restraints impotent, with unregulated hedge funds and derivative traders doing what financial institutions wouldn't or couldn't. And when traditional providers of capital did participate, competition to lend caused them to join in the trend to "covenant-lite," "PIK/toggle" and other loosey-goosey structures.

- Financial innovation enjoyed enormous popularity. **The application of leverage, securitization and tranching permitted debt backed by assets such as mortgages to be created and sold around the world.** This process, it was said, enabled just the right level of risk and return to be delivered to each investor.

- Financial sector participants and observers concluded that the world had been made a less risky place by disintermediation (in which banks sold off loans rather than hold them), adroit central bank management and developments that made debt more borrower-friendly. In many cases, this **sense of reduced risk** encouraged individuals to assume correspondingly more risk.

- Because the structured products were so new, sophisticated and opaque, **high ratings would be needed** if they were to gain acceptance. Wall Street's persuasiveness, combined with the rating agencies' susceptibility, caused the needed ratings to be assigned. Thus the final element was in place for the financial innovations to gain widespread popularity.

- Among the innovations, **collateralized debt obligations**, or CDOs, deserve particular mention. CDO originators would issue tranches of debt with varying levels of priority regarding the cash flows from debt portfolios assembled with the proceeds. In many cases, the portfolios consisted heavily of residential mortgage-backed securities, each comprised of large numbers of mortgages, often subprime. I find it inconceivable that buyers of CDO debt really understood the riskiness of the tranched debt of leveraged pools of tranched mortgage securities underlaid by thousands of anonymous loans. But solid ratings made the debt highly salable.

- With vast sums available for high-fee investment products, **managers' incentives favored the rapid amassing and deploying of large pools of capital**. The usual effect of such a process is to drive up asset prices, drive down prospective returns and narrow investors' margin of safety. It was no different this time.

- Due to widespread prosperity, large amounts of capital flowing into the mortgage market, and the flowering of the American dream of home ownership (and of wealth therefrom), **rapid home price appreciation became a prominent feature of this period**. Price gains further inflamed the people's hopes, and behavior regarding residential real estate grew increasingly speculative.

- Thanks to the combination of the wealth effect from home appreciation, the ability to borrow liberally against increased home equity, and strong competition among financial institutions to provide credit, **consumer spending grew faster than**

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consumer incomes, propelling the economy ahead but rendering households increasingly leveraged.

As this process moved onward, it depended on a continued supply of the underlying ingredients: confidence, liquidity, leverage, risk tolerance and acceptance of untested structures. The resulting "virtuous circle" was described in glowing terms just as its perpetuation was growing increasingly unlikely.

Bust

It took five years or so for the bullish background described above to be established in full. As usual, far less time was required for the excesses to be exposed and the process of their unwinding to begin. The air always goes out of the balloon a lot faster than it went in.

Regular readers know that if there's one thing I believe in, perhaps more strongly than anything else, it's the fact that cycles will prevail and excesses will correct. For the bullish phase described above to hold sway, the environment had to be characterized by greed, optimism, exuberance, confidence, credulity, daring, risk tolerance and aggressiveness. But these traits will not govern a market forever. Eventually they will give way to fear, pessimism, prudence, uncertainty, skepticism, caution, risk aversion and reticence. A lot of this has happened.

Busts are the product of booms, and I'm convinced it's usually more correct to attribute a bust to the excesses of the preceding boom than to the specific event that sets off the correction. But most of the time there is a spark that starts the swing from bullish to bearish. This time it came in the world of subprime mortgages.

Subprime mortgages (as if there's a person alive who doesn't know) are loans made to people whose credit scores fall below the "prime" standards that government-sponsored agencies Fannie Mae and Freddie Mac require of the loans they buy. In the last few years, as part of the rosy process described above, subprime mortgages were issued in rapidly increasing numbers. They were often placed by independent mortgage originators paid for volume rather than credit quality; through salesmanship that caused excessive amounts to be borrowed; for the purchase of highly appreciated homes; with temporarily low "teaser" interest rates; in structures that reduced or delayed principal repayment; and without requiring borrowers to document the incomes they claimed. **Of course, with the clarity that comes with hindsight, everyone now sees that these elements constituted breeding grounds for trouble.**

Anyway, here's how things went:

- In late 2006 and early 2007, **defaults among subprime mortgages began to rise**. But as is usually the case with the first crack in the financial dam, this attracted little attention and was generally described as an "isolated development."

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- By July 2007, however, the defaults became serious and could no longer be ignored. This precipitated **wholesale downgradings of CDO debt securities**.

- The **defaults and downgrades led to price declines**. This caused leveraged investment entities that held CDO debt to receive margin calls and capital withdrawals. When they went to the market to sell the debt to raise cash, they found either that it couldn't be sold or that the bids were way below fair value. When some investors announced significant losses, the mark-to-model approach often used for pricing was questioned and then rejected in favor of market prices.

- In times of crisis, you sell what you can sell, not what you want to sell. Many of the entities that held CDO debt also held leveraged loans (the new term for bank loans, since most banks no longer hold on to loans for long). Thus, **when they couldn't get fair prices for CDO debt, they sold leveraged loans**, putting their prices under pressure as well. And when the creation of new Collateralized Loan Obligations slowed to a trickle, the decline in demand from CLOs removed an important prop from loan prices.

- Some leveraged entities that couldn't sell enough CDO debt (or other holdings) at fair prices suspended withdrawals. In extreme cases, they melted down and investors lost everything. In sum, **entities that had borrowed short to invest in longer-term, potentially illiquid assets fell victim to their funding mismatch**. The precariousness of this position is easy to overlook when all is going well, asset prices are firm and capital is freely available. But it regularly leads to ruin when financial crises take hold.

- With these developments, **psychology turned from positive to negative overnight**. Lenders became more nervous, requiring repayments, raising lending standards and refusing to roll over maturing loans. In particular, there was a dramatic contraction in the market for commercial paper backed by assets (rather than by promises from creditworthy firms).

- Among other things, **the investment banks found their balance sheets clogged with debt for buyouts** that they had promised to place ("bridge loans") before the music stopped, and the debt became unsalable on the agreed terms. This cut into their ability to make new loans. Discount sales were talked of, and funds were formed to buy up the loans.

- **Central banks stepped in to calm the waters**. The European bank injected significant capital. The Fed cut short-term rates. The Bank of England guaranteed deposits at Northern Rock, a building society (S&L), and extended emergency loans. And so the panic eased. The reaction seemed to be "boy, I'm glad that's over." But the calm lasted only from early September to mid-October.

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- CDO downgrades continued, price declines deepened, and **financial institutions began to report third-quarter losses on mortgage-related holdings.** These occurred around the world, but they were concentrated in U.S. commercial and investment banks. There was some surprise when it turned out that, despite disintermediation, banks still had ended up holding the bag. Also surprising was the fact that new and unheard-of types of (usually bank-controlled) off-balance-sheet entities – structured investment vehicles ("SIVs") and conduits – were among the big losers. Because some couldn't renew their asset-backed financing, their debts had to be taken onto the banks' balance sheets (to avoid holding fire sales in order to repay lenders), bringing the supposedly alchemical process of disintermediation full circle.

- **Banks warned of fourth-quarter losses**, people wondered whether the warnings were sufficient, executives lost jobs, and suppliers of credit became even more restrictive. Due to the combined effect of losing equity to writedowns and having to take SIV debt onto balance sheets, there was **talk of bank equity capital becoming inadequate**. Citigroup found it appropriate to sell convertible equity to Abu Dhabi with an 11% starting dividend, and others like UBS and Merrill Lynch followed suit.

- Mortgage lending ground to a near halt, even for "prime" borrowers. Homebuilders and housing-related retailers issued profit warnings. Inventories of unsold homes swelled. A few money market funds threatened to "break the buck" and had to be rescued. Towns in Norway that had bought CDO debt neared insolvency. Florida's pooled fund for localities had to suspend withdrawals. Mono-line insurers that had guaranteed mortgage-related securities came under pressure, casting doubt on the safety of municipal bonds they had insured. **The "isolated development" had sprouted surprising and widespread repercussions.**

In just four months – from mid-July to mid-November – we saw the development of a full-fledged credit crunch, with that term regularly appearing in the headlines. Whereas anyone could get money for any purpose a year earlier, now deserving borrowers had a tough time securing funds.

And there you have it: five pages devoted to the past in a memo about the future.

<u>Clouds on the Horizon</u>

The Fed and other central banks have taken strong action to lower the cost of credit and inject reserves into the system. And in the last month or so, things went quiet. But with everyone back from the holidays, events are likely to heat up again.

Clearly things have just begun to be sorted out in the financial sector. Year-end pricing of mortgage-related securities may bring further writedowns. Auditors may view low prices as more defensible than high ones, and avoiding legal risk can influence their decisions. Conservative auditors will do battle with bank managements desirous of maintaining equity reserves and financial flexibility. On the other hand, there may be a

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wish on the part of managements – especially new ones – to clear the decks by marking down or selling off problem assets. All of this may result in bigger losses in the short run.

There's still some mystery about whether mortgage losses will pop up in new places. For example, relatively little has been reported by insurance companies and pension funds. We also thought Asian institutions were big buyers of CDO paper over the past year or two, yet nothing's been heard from them to date.

Fundamentals are really bad in the housing sector: Record home price declines. High levels of foreclosure, and neighborhoods where for-sale signs are everywhere. Swollen inventories of unsold homes. Mortgage interest rate resets that are likely to add further to the above. Very low sale volumes (meaning sellers haven't adjusted to reality in terms of the prices it'll take to tempt buyers). Financing and refinancing difficult to obtain. People unable to buy homes because they can't sell the ones they own.

What will happen to mortgage defaults? It's hard to say how bad it'll get. Anyone who bought a home in 2005-07 and borrowed a high percentage of the cost is likely to be "upside-down" – that is, to owe more on the mortgage than the house is worth. Will these people keep on making mortgage payments? And what will happen as interest rates reset from teaser to market? Will borrowers be able to afford the increased payments? Will they stop paying on car loans and credit cards to make the mortgage payment? Or are the former more essential for survival in the short run?

Implications for the Broader Economy

Everyone wants to know whether there's a recession ahead. They're even asking me . . . someone who certainly doesn't know.

I don't think about it much. First of all, thinking isn't going to produce a useful answer. People have opinions, and while they may be considered opinions, I wouldn't bet on whether they'll be right. Most people say the probability is about 40-50%, which I think is their way of saying they don't know but they feel it's not unlikely.

A recession is a technical matter: two consecutive quarters of negative real growth. Sure, recessions are bad, but if there isn't a recession, that doesn't mean everything's okay. **What matters to us is whether the economy will or won't be sluggish. It is generally believed that highly leveraged companies run into trouble and defaults rise significantly when economic growth falls below 2% per annum.**

Several things suggest that in the months and perhaps a year or two ahead, economic growth will be less than vibrant. Many are related to the consumer. The housing situation described above particularly bodes ill.

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- Rising mortgage payments are likely to hinder consumer spending.
- It's hard to believe consumer psychology will be positive. With home prices well below the levels of a year or two ago, the "wealth effect" will be negative. Feeling poorer is likely to discourage consumer spending. So is negative news about the economy, and the receipt of much larger bills for gasoline and heating.
- The combination of rising home prices and generous capital markets in the past permitted home equity to be withdrawn and spent. Neither of those is likely to be a positive in the near future.

Consumer spending is the engine of the U.S. economy's growth. I just don't see it staying strong. I heard the other day that we should applaud consumers' "resilience": their willingness to spend even when incomes and news are negative. Personally, I find it frightening. Eventually there'll be a day of reckoning for spending growth which isn't supported by income growth – that is, for dissaving.

The second element with a negative prognosis is capital availability. Banks' losses on mortgage-related securities have eaten into both (a) the capital they need to support their lending and (b) their appetite for risk. Less credit is available to hedge funds and private equity funds. Fewer CDOs and CLOs will be formed in the near future, so they won't be able to provide debt capital as aggressively as they did in the past. **Just as leverage and willingness to bear risk were the twin engines of the recent boom, so their reduction is likely to cause things to slow.**

Third, business expansion is unlikely to contribute to growth. Already-slow holiday spending, employment growth and orders for durables are unlikely to encourage businesses to expand production, build inventories or create jobs. The announcement of corporations' fourth quarter results in a month or so will give us a hint regarding direction.

The main offset to concern about a slowdown comes from overseas. In the past, a recession in the U.S. was sure to have effects worldwide. Now, it seems possible that developing economies such as those of China and India will see enough demand from elsewhere – including domestic demand – to avoid importing our slowdown. The most optimistic case holds that foreign demand might avert a recession in the U.S. Such demand could be buttressed by the softness of the dollar, which makes our goods very attractive to buyers spending foreign currencies. We'll see.

As usual, there are optimists and pessimists. The optimists see enough strength to offset the effect of the mortgage losses. The pessimists think a massive contraction in the prices of assets – mostly homes – implies a calamitous contraction that can only be averted through massive government action (if at all). We won't bet on which is right, but we believe the economy – and thus business – will be less vibrant in the period ahead than it has been.

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The Fed's Dilemma

Investors are hoping the Fed will ride to the rescue with rate cuts and capital injections that bolster the economy. It did so in September, allowing sentiment to improve and debt prices to recover for a while, and again in December.

The markets rejoice when the Fed cuts rates (all but the bond market, which worries that rekindled inflation will push up interest rates, which will push down bond prices). Personally, I think a rate cut sends a mixed message. It implies help is on the way, but it makes me wonder about the peril that made the Fed take the step. It's like the guy who goes to the doctor and sees him pull out a gigantic hypodermic. Nice to know he's getting treatment, but isn't the condition worrisome? Along those lines, the Fed's 50 basis point cut on September 14, which exceeded most expectations, caused *breakingviews.com* to run the headline "Does Ben [Bernanke] know something we don't?"

Around November 27, investors concluded they could count on a significant rate cut, causing the Dow to move up 546 points in just the next two days. Surely they think lower rates will stimulate the economy and help offset the credit crunch. But here are the counters:

- **Will making money cheaper cause financial institutions to borrow and lend, or people to borrow and spend?** Can a rate cut offset the frightening aspects of declining creditworthiness? Low interest costs provide scant compensation when loans go unpaid. Thus the Fed can offer cheap money, but it can't make people borrow it, spend it or risk it. The phrase for that problem is "pushing on a string." It's a big part of the reason why Japanese economic growth has never been successfully restarted. For this reason, some observers are suggesting that Washington add fiscal stimulus (tax cuts and spending increases) to the Fed's monetary policy. In this way, consumers' reticence can be offset by direct government spending.

- **Will fear of rising inflation deter the Fed from stimulative action?** In general, central bankers view their primary job as keeping inflation from accelerating as the economy grows. Avoiding slowdowns is usually secondary. Prices are moving up sharply in food and fuel, and the overall rate of inflation has broken out from the low levels of the past decade. This may limit the Fed's freedom to stimulate the economy and risk a reheating. And I hear some worry about a return to the "stagflation" of the 1970s, in which inflation roared ahead but economic growth couldn't gain traction.

- **What will lower rates do to the willingness of foreigners to hold dollar reserves?** We need foreigners to hold dollar-denominated securities. They're the swing buyers of billions of dollars of Treasury securities each year. If they won't do so, who'll finance our fiscal and trade deficits? If investing at U.S. interest rates is seen as implying too great an opportunity cost, a spreading conclusion that dollar holdings are unattractive will put us in quite a financing pickle. Of course, this worry will be

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ameliorated if there's widespread rate cutting among the central banks of the developed world.

- **Finally, the Fed has to think about moral hazard**. Yes, the Fed wants to prevent financial catastrophes and widespread resulting pain. But at the same time, it doesn't want to give risk takers the impression that they can count on the central bank to make them whole, and thus encourage greater adventurousness in the future. The Fed will have to balance its reluctance to rescue sophisticated speculators against its desire to protect "innocent bystanders."

I'm sure the Fed will take strong steps to keep the credit crunch from becoming as bad as it otherwise might. But there are limits on its freedom to take action and its ability to save the day.

Averting Fire Sales

Many of the full-blown crises I've seen have been caused (or exacerbated) by the following process, which eventually ends in something commonly called a fire sale:

- take on short-term capital,
- invest it in longer-term or illiquid assets,
- experience price declines and writedowns that eliminate your resolve to hold, unsettle your suppliers of capital and/or jeopardize your capital adequacy,
- receive a margin call or capital withdrawal notice,
- need to raise cash on a day of market chaos, and
- be forced to sell into an inhospitable market regardless of price.

In the distressed debt funds that we organized in 1990 and 2002, both times of chaos in financial markets, we earned net IRRs in the 30s and 40s. If you think about it, those IRRs have to be described as aberrant. No one should be able to earn returns like those without significant leverage. And yet we did. Like all active investors, we try to buy things for less than they're worth. **The above results suggest we were aided in those funds by people who were willing to sell things far below their worth.** Why would they do so? Often because of the fire sale process described above.

Not surprisingly, our financial leaders are attempting to short-circuit this process. Mortgage defaults are real and widespread and will produce losses for holders of related securities. Eventually those losses will have to be recognized and dealt with. But I think several of the actions we're seeing are aimed at avoiding exaggerated, panicked fire sales:

- injections of liquidity,
- mortgage reset holiday,
- taking SIVs (and their debt) onto balance sheets, and
- proposing a Super-SIV (which now seems to be history).

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But we need to recognize that in addition to potentially enriching buyers of distressed assets, fire sales clear problems from balance sheets and speed solutions. They bring pain and chaos, but they also move things ahead. One of the reasons for Japan's lingering malaise may be that it denied its bad-debt problems for too long, allowing sluggishness to dominate the economy. The questions in the U.S. and Europe will be what's being done and whether it will work.

I looked at the Super-SIV particularly quizzically. Its avowed purpose was to prevent fire sales on the part of SIVs that had financed debt purchases with asset-backed commercial paper that couldn't be rolled over. So financial institutions would fund an entity that would buy assets rather than require their sale in the open market, where they would bring lower prices. But that's perverting economics! Let's see: "We'll buy something for 90 rather than see it come to a frozen market where it might bring 70. Yes, we'll buy it now even though we might have gotten a chance later to buy it for less." That just shouldn't happen, and now it appears it won't, as the Super-SIV mission has been scrubbed.

A Word on the Monoline Insurers

I usually emphasize discussion of macro developments, but at this time there's a micro story that very much deserves telling. Over the last two decades, a few companies developed the business of insuring municipal bonds. Since this was their only business, they're called monoline insurers. Because of the extremely low historic frequency of defaults on munis, a relatively small amount of capital was enough to allow MBIA, Ambac and a handful of smaller companies to guarantee the payments on $2 trillion of municipal bonds.

In the last few years, rather than be left behind as old fogeys, these companies "got modern" like almost everyone else: in addition to munis, they began to insure leveraged entities such as CDOs. And like everyone else, the actuarial calculations they used to determine how much debt they could afford to insure and the premiums they should charge were based on default experience from a brief period that shouldn't have been extrapolated. Thus, like so many others, they took on propositions that have trashed their balance sheets, with grave implications for their basic business.

Here's where it gets interesting. Many muni buyers either want or are required to hold only AAA-rated bonds. And many munis gained their AAA ratings not because the issuers were eminently creditworthy, but because they were insured by companies with AAA ratings. But several of the insurers have landed on the credit rating agencies' watchlists for downgrades, given the possibly unknowable risks they assumed. **If they lose their AAA ratings – and thus the bonds they insured do so as well – will there be a rush of muni holders to the exit? A fire sale at which buyers are scarce?**

One or more of the insurers may need injections of equity capital to bolster their reserves. But what price will investors pay for their stock? (Warburg Pincus committed to invest

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in MBIA about a month ago, when the stock was at $31, and today it's less than half that). And if the potential CDO losses are so great that a monoline insurer's net worth may be negative on an expected value basis, would anyone put in equity capital when the first of it basically will go to cover creditors? Certainly the monolines' future has been complicated by Warren Buffett's decision to compete by forming a new company that's not burdened by a CDO legacy.

A relatively minor sideshow, but one very much worth watching. And one which illustrates the potential of "isolated developments" to have surprisingly widespread ramifications.

The Shoe That Hasn't Dropped

Amid all the chaos, one area has been unaffected thus far: corporate credit-worthiness. Defaults on high yield bonds and non-investment-grade loans are usually the site of most of the pain in this area, and to date there have been almost none.

Defaults among high yield bonds have averaged 4.2% over the last 20+ years and reached double digits in 1990-91 and 2001-02, giving us huge opportunities to buy depressed assets. In contrast, over the last year or two defaults have been near 25-year lows . . . and practically zero. Oaktree's high yield bond portfolios are in their 47th month without a default. Will default rates on high yield bonds reach or exceed the historic average? And how will the new asset class of leveraged loans weather its first test?

First, with a **slower economy**, there's every reason to believe creditworthiness will decline and defaults will rise. It's just hard to believe that the incidence of default will be unaffected if the economic environment turns less salutary.

Second, over the last few years we've seen **a highly elevated level of buyout activity**, with deals priced at increasing multiples of cash flow and financed with rising proportions of debt. Better companies can support higher debt levels, and some of the buyouts have been of top companies. But we feel that prices and leverage ratios have been high in the absolute, and that competition to buy companies in a heated environment made buyout funds stretch on purchase price. **Some of the assumptions underlying these deals undoubtedly will prove to have been overly optimistic**, and eventually we'll have the opportunity to buy debt in those deals at discounts.

Non-performing debt related to leveraged buyouts gave us great buying opportunities when the LBOs of the 1980s cratered in 1990. Chastened providers of capital cut back their lending in the 1990s, and thus buyouts didn't contribute to the 2002 debt crisis. But we expect unsuccessful buyouts to be a primary source of distressed opportunities in the next go-round. Given the high volume of non-investment-grade debt issuance recently, even a moderate rate of default implies a heavy supply of distressed debt, contributing to the perception of a credit meltdown.

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Third, lots of potential defaults will be delayed or prevented because recent issuance has emphasized **issuer-friendly debt**. Default occurs when an interest payment isn't made or a debt covenant (non-cash financial requirement) is breached. But in some recent issues, the borrowers obtained the right to pay interest for a while in the form of additional debt ("toggle" bonds, because the borrower can throw the switch), and in some there were few if any maintenance covenants ("covenant-lite" debt). Some borrowers also arranged for standby credit facilities, giving them further financial flexibility in tough times. Fewer tripwires – fewer defaults. These features will delay defaults but won't necessarily preclude them. It all depends on what happens in the period between the day the default otherwise would have occurred and the day the music has to be faced. Maybe there'll be fewer defaults. Maybe bigger ones. And anyway, there's lots of "normal" (non-issuer-friendly) debt outstanding, especially in connection with small- and mid-size buyouts.

In addition, it's not as if debt became more borrower-friendly without there being a response. **Financial engineers, who decide what risks can be taken on the basis of what's likely, don't see risk decline and leave it at that. They tend to build back the risk so as to fully utilize their "risk budget."** So I imagine people said, "Debt has become easier to bear; let's take on more of it." Which is safer: a company with a moderate amount of demanding debt, or one which has been highly levered with debt that's less burdensome? The answer is that you can't tell without knowing how things will unfold. You certainly can't say the latter company is less risky than the former.

Buyouts in **Europe** have been at least as aggressive as in the U.S. and on average have been associated with less solid companies. In addition, Europe has never seen a full-fledged debt crisis, and the first one could be traumatic. Thus we expect numerous defaults and lots of discounted debt there. On the other hand, **Asia** hasn't yet been the site of many highly leveraged buyouts, so high levels of defaults and distress don't figure into our expectations for Asia. Maybe next cycle, after some aggressive buyouts have taken place there.

Looking ahead, private equity will be subject to crosscurrents. The less accommodating capital markets will have a number of effects:

- Buyout funds will find it harder to finance acquisitions, especially large ones.
- Similarly, a lot of existing buyout debt won't be refinanceable on the same terms in the new environment.
- The speed and ease of recaps will be reduced, rendering quick withdrawals of equity capital at ultra-high IRRs much less likely.
- It will be harder for funds to achieve profitable exits, as would-be buyers from private equity funds won't find it as easy to finance purchases or pay high prices, and IPOs will be an uncertain route to realizations.
- But these same factors will also affect the competition to invest, meaning private equity funds' purchase prices in the future will likely be lower than they otherwise would have been.

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Finally, underperforming companies will crop up in private equity portfolios, and the need for turnarounds and restructurings will take up time and pull down returns.

In many ways, the private equity industry may have to operate as it did in an earlier era, when funds were smaller, the volume of transactions was more moderate, both purchase and sale prices were lower, holding periods were longer, and IRRs were lower (but perhaps more meaningful in terms of times-capital-returned). Funds will have to make money the way they used to, with more emphasis on buying cheap and adding value and less on financial engineering and quick flips. Large funds formed within the last 12-18 months may find themselves uninvested for a while, and thus in high-fee limbo.

* * *

It's worth remembering that the boom of the last few years arose in the financial sector, not the "real world." Economies grew around the world – as did corporate profits – but there was no economic boom other than in developing nations. **It was optimism, risk tolerance, innovation, liquidity, leverage, credulity and the race to compete that reached multi-generational highs. Thus the ramifications will be (actually, have been) felt first and most strongly in the financial sector. The question is how far they'll spread from there**.

Undoubtedly, credit will be harder to obtain. Economic growth will slow: the question is whether it will remain slightly positive or go negative, satisfying the requirement for the label "recession." Regardless, positive thinking and thus risk taking are likely to be diminished. All I can say for sure is that the world will be less rosy in financial terms, and results are likely to be less positive than they otherwise would have been. That can be enough to make highly leveraged transactions falter.

I've said many times that for each period there's a mistake waiting to be made. Sometimes it's buying too much, and sometimes it's buying too little. Sometimes it's being too aggressive, and sometimes it's not being aggressive enough. Which it is depends on the combination of the going-in opportunities and the environment that unfolds.

What mistake is on offer today? How aggressive should one be? **Although the extent of the coming softness has yet to be fully defined, I feel we're in the second or third inning.** (For readers who aren't followers of baseball, that means the standard nine-inning game has barely begun.) I recently read a piece asserting that we're still singing the national anthem before the start of a game destined to go beyond nine innings, but I find it hard to engage in such extreme thinking. The damage has begun to be felt and the correction has begun to take place.

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Nevertheless, I do think we're in the early going: the pain of price declines hasn't been felt in full (other than perhaps in the mortgage sector), and it's too soon to be aggressive. Things are somewhat cheaper (e.g., yield spreads on high yield bonds went from all-time lows in June to "normal" in November) but not yet on the bargain counter. **Thus, I'd recommend that clients begin to explore possible areas for investment, identify competent managers and take modest action. But still cautiously, and committing a fraction of their reserves.**

"Don't try to catch a falling knife." That bit of purported wisdom is being heard a lot nowadays. Like other adages, it can be entirely appropriate in some instances, while in others it's nothing but an excuse for failing to think independently. Yes, it can be dangerous to jump in after the first price decline. But it's unprofessional to hang back and refuse to buy when asset prices have fallen greatly, just because it's less scary to "wait for the dust to settle." It's not easy to tell the difference, but that's our job. We've made a lot of money catching falling knives in the last two decades. **Certainly we'll never let that old saw deter us from taking action when our analysis tells us there are bargains to be had.**

In the period leading up to the current crisis, investors acted like they were loaded down with too much cash and desperate to put it to work. To do so, they ventured into uncharted waters and unknowingly accepted high risks in investments providing less-than-commensurate compensation. **With too much money chasing too few deals, the bargaining power was in the hands of the takers of capital.** They used it to their advantage, making deals that were good for them but bad for the suppliers of capital. **In the period ahead, cash will be king**, and those able and willing to provide it will be holding the cards. This is yet another of the standard cyclical reversals, and it will afford bargain hunters a much better time than they had in 2003-07.

Some of those who came to the rescue of troubled financial firms in 2007 may have jumped in too soon. There's a fair chance they didn't allow maximum pain to be felt before acting, (although the prices they paid eventually may turn out to have been attractive). **I'd mostly let things drop in the period just ahead. My view of cycles tells me the correction of past excesses will give us great opportunities to invest over the next year or two.**

January 10, 2008

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Memo to: Oaktree Clients

From: Howard Marks

Re: No Different This Time – The Lessons of '07

On July 16, I published a memo called "It's All Good." I wrote it while on vacation in late June and early July, and then it took a week after my return to get it out. It reviewed the excesses that had occurred in the preceding few years and the extent to which people were overlooking them, thinking instead that everything was ideal and would stay that way. It discussed the recurring tendency of investors in bullish times to feel that "it's different this time" – that the process which caused past cyclical highs to correct wouldn't apply in the current instance.

The bullish balloon remained unpunctured as of July 16, and some may have thought my memo unduly pessimistic. It's a good thing it didn't take another week or two to put it out, however, because by July 30, things had started to go bad, set off by defaults among subprime mortgages and downgrades of securities based on them.

"An isolated development," the bulls replied, as is usual when the first crack in the dam appears. It's hard to believe that less than five months later, the effects are widespread, significant losses have been registered, and negativism has taken over from euphoria. No one doubts that we're in the throes of a full-fledged credit crunch. But in that way, **it truly is no different this time.**

<u>Investor Behavior in a Low-Return Market</u>

> Each player must accept the cards life deals him or her. But once they are in hand, he or she alone must decide how to play the cards in order to win the game.

I found that quote on the wall of a Melbourne, Australia coffee shop last month, with an attribution to Voltaire. I was struck immediately by its applicability to the financial markets. As I've pointed out in the past, we must never overlook the need to deal with the investment environment **as it is**. The environment is the product of natural phenomena as well as the decisions made by millions of "economic units" such as consumers, investors, companies and nations. We are presented with it, and no one of us can alter it. What matters is what we do with it.

To succeed as investors, we must recognize the environment for what it is and act accordingly. In any given environment, some actions will lead to success and others to failure. Which is which varies greatly over time. Our first task as investors is to assess the environment and map a course which is appropriate for it.

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As I noted a few years ago, (see "Risk and Return Today," October 2004) we were living in a low-return world. The prospective returns offered on traditionally safe investments were low in the absolute. Moving out on the risk curve added little to expected returns; i.e., risk premiums were in many cases at record lows. Overall, then, the Capital Market Line – the risk/return curve – was "low and flat." In all, the rewards offered for risk bearing were paltry.

So what was an investor to do in that low-return world? You could make your usual investments and accept returns below those you're used to, perhaps deciding to allocate your capital for the long term and ignore the short term. Or you could decline to invest and hold cash instead, despite the fact that the expected return for doing so is invariably the lowest. Or – as I think most people did – you could reject the low returns available on your usual investments and go for more. **That is, you could insist on achieving high returns in a low-return world.** But insisting on them is one thing, and positioning your portfolio to get them is another. How might the latter be accomplished?

The answer is simple: many reached for return. Primarily that meant making riskier investments or using leverage to increase the capital at risk (or both). That's the main story of the last few years, and the reason behind the jam the markets are in today.

<u>So What Happened?</u>

As I wrote in "Risk and Return Today," in recent years investors did things they'd never done before – or hadn't done as much of – because they wanted more than the 4-5% they could get in high grade bonds and the 6-7% they felt they could expect from U.S. equities. They put more into hedge funds, for example, and their commitments expanded the largest buyout funds from $3-5 billion to $20 billion-plus in just a year or two.

Investors succumbed to the siren song of leverage. They borrowed cheap short-term funds – the shorter the cheaper (you can get money cheap if you're willing to pledge assets and promise repayment monthly). And they used that money to buy assets that offered higher returns because they entailed illiquidity and/or fundamental risk. And institutional investors all over the world took Wall Street up on the newest promises of two "silver bullets" that would provide high returns with low risk: securitization and structure.

On the surface, these investments made sense. They promised satisfactory absolute returns, as the returns on the leveraged purchases would more than pay the cost of capital. The results would be great . . . as long as nothing untoward happened.

But, as usual, the pursuit of profit led to mistakes. The expected returns looked good, but the range of possible outcomes included some very nasty ones. The success of many

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techniques and structures depended on the future looking like the past. And many of the "modern miracles" that were relied on were untested.

A Dearth of Skepticism

Unlike market bottoms, where investors are too skeptical, during upswings most people believe too much, worry too little and fail to apply enough skepticism. Since all investors want a good deal – and see the people around them making money so easily – they tend to jump aboard. They want to see the good times roll on, not to pour cold water on the party by questioning what's going on.

Everyone dreams of easy riches – of high returns earned without risk. Wall Street comes up with surefire solutions to which the hopeful flock, such as portfolio insurance in the 1980s and dot-com IPOs in the 1990s. In the current decade, investors became convinced that securitized mortgages and highly leveraged entities offered the magic solution. People who long ago stopped believing in Santa Claus jumped aboard, and now they're disappointed. But past results never deter new generations of dreamers from chasing the next silver bullet.

In the last few years, people accepted myths that now have been exposed. Let's review a few:

- In 2006-07, we heard a lot of talk to the effect that **disintermediation had reduced risk**. Because lending banks were moving loans off their books through syndication to other banks and non-bank lenders alike, the risk residing at any one bank – and thus in the financial system as a whole – had been reduced. Of course, the feeling that the world had become a safer place led many participants to take on more risk than they otherwise would. **And where are we seeing the biggest losses reported? At those supposedly safer banks.**

- A lot of people have lost money as a result of **excessive reliance on credit ratings**. How is it, for example, that investors are showing up with such large losses on mortgage-related CDO debt? Well, rather than accept the low yields on AA-rated corporate bonds, they went for the AA-rated tranches from CDOs . . . because they offered higher yields. **But wait a minute! More yield for the same quality? A free lunch? Not likely.** Maybe the buyers relied too much on ratings in lieu of their own due diligence. Maybe the credit rating agencies didn't fully understand the debt under review, or had biases which led to too-high ratings. Maybe they didn't intend the AA rating on CDO debt to mean the same thing as an AA rating on corporate debt. And maybe the rating-agency analysts lacked the above-average skills that are needed to add value in the investment world; if they possessed them, wouldn't they be spending their time more lucratively as investors?

- Perhaps most telling, it seems people were willing to drink up without asking, **"Who's paying the tab?"** Take the CDO creation process: Acting on behalf of a

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mortgage company, a mortgage broker made a loan. The mortgage company sold the loan to an investment bank. The investment bank packaged it into a residential mortgage-backed security and sold it to a CDO originator. The originator packaged it into a CDO, having raised the money for the CDO through sales of debt to institutional investors. The sale of the debt was facilitated by a placement agent or investment bank. I count at least five parties who got paid each time a mortgage loan was placed, securitized and distributed. Someone was paying a lot of fees. **Even if the original mortgage loan was priced reasonably at the beginning, is it possible the CDO debt was fairly priced at the end?** Wall Street's answer is simple: The overall process may have been heavily laden with fees, but the individual tranches were attractive. Huh? Few people looked at the multiple fees and asked if the deals could withstand paying so many middlemen. In 2003-07, they didn't feel the need.

Widespread failings of skepticism are significant in two ways. Individually, each one represents a way to lose money through an ill-considered investment. And collectively, they're indicative of the market climate. In times of excess on the upside, fairy tales gain currency and encourage risk taking. And then they are debunked, as is happening today. **Or as Warren Buffett puts it, "when the tide goes out, we find out who's been swimming without a bathing suit." This time around, the answer is "lots of people."**

<u>The Magic of Leverage</u>

It's obvious that the key element in many of the errors that tripped up investors this time around was cheap and easy credit, utilized without much awareness of risk. An oversupply of capital looking for a home in non-traditional investments caused vast sums to be pushed into mortgage loans at low-cost teaser rates to un-creditworthy homebuyers who often weren't required to document their incomes. It let hedge funds bulk up on the carry trade and buyout funds bid enough to acquire world-class companies, taking on enough leverage to target high expected returns. And it was the building block supporting CLOs, CDOs, CDO^2s, conduits, SIVs and other highly leveraged entities.

The Fed delivered cheap credit for the best of reasons: to counter the depressing effects of the emerging market crisis, 9/11, the tech bubble bust, the first three-year stock market decline since the Depression, Y2K, the telecom meltdown, concern about deflation, and whatever else was on its mind. Interest rates were the lowest most of us had ever seen, anchored by 1% on cash. The low rates both (a) drove down returns on investments at the safe end of the risk curve and (b) provided the fuel for elevated risk taking.

One must never forget that leverage doesn't make investments better; it just magnifies the gains and losses. Since most investments have a positive expected value, meaning that gains are expected on average, leverage has the effect of appearing to enhance the expected return. And most of the time, that works just fine.

But once in a while, something goes awry. Maybe asset prices go so high they become unsupportable. Maybe the analysis behind an investment proves to have been faulty.

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Maybe an exogenous event negatively influences asset prices or funding availability or both. And maybe they all happen at once. When the unlikely occurs – when asset prices decline unexpectedly – the impact as magnified by leverage can be unbearable, setting off a negative chain reaction.

Falling asset prices cause lenders to shy away from providing credit, and eventually to demand repayment. With credit less available, repayment might have to come from asset sales, putting additional downward pressure on prices in an already unaccommodating market. Prices go down further; confidence worsens; lenders grow more cautious; and credit becomes even less available. **What used to be a virtuous circle becomes a vicious circle. This is how credit crunches occur.**

There is a recurring element in most investor meltdowns. Lured by attractive promised returns or spurred on by the perceived inadequacy of unleveraged returns, **investors borrow short-term capital with which to buy long-term assets.** And then eventually there comes a bad day, on which the short-term capital flows out (in response to demands for repayment, the maturing of borrowings, or investor withdrawals). And on that particular day, perhaps (a) the outgoing capital can't be replaced and (b) portfolio assets can't be sold at fair prices. Sales, if feasible, may have to be made at prices so low that, if all the assets were marked there, the entity's net worth would be negative. That's it: meltdown. That's what happened this summer to Bear Stearns's High-Grade Structured Credit Strategies Enhanced Leveraged Fund. It happened to Long-Term Capital Management in 1998 and to the Granite Fund in 1994. And it'll happen again – because financial memory is short and the attraction of leverage can be irresistible.

Investors must remember that it's not enough that an investment has a good expected return, or that the negative outcomes are unlikely. One of the overlooked effects of leverage is that it "fattens the tails" – increases the likelihood of extreme outcomes in both directions – and worsens the consequences of negative events. **Every portfolio or investing entity must be examined to make sure it will be able to survive that bad day – that it has been set up so the interaction of its terms, its borrowings and the riskiness of its assets won't cause it to implode.** Of course, this leads to the question of how negative a set of circumstances we should allow for. Each investor's degree of risk averseness will determine what level of negative developments a portfolio should be built to withstand. But certainly these are topics that must be considered.

When I think about investors using leverage to try to wring acceptable results from low-return investments, it seems like folly. Let's see: You have $100 to invest, and you come across a fundamentally sound investment that yields 6%. But you consider the 6% return too low. So rather than buy $100 worth, you borrow another $400 at 5% interest and buy $500 worth. If you can borrow at 5% and invest at 6%, each "turn" of leverage adds 1% to your expected return. Thus, in addition to the $6 earned on your own $100 of capital, you'll earn an additional $1 per $100 of borrowed capital, or $4 on $400. Thus the total return on your $100 of capital, leveraged four times, is $10. Voila! That inadequate 6% return has been turned into a handsome 10%.

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But wait a minute. Remember, you originally thought the 6% return on the investment was too low. What happens when everyone comes to agree that it should be higher? Well, the normal way for an investment's prospective return to go up is for its price to fall. **So now, with help from leverage, you've bought five times as much of an asset that's under-returning and due for a price decline. It all reminds me of my friend Sandy, whose favorite restaurant review is "the food's terrible, but the portions are huge." In this case, it's "the return's inadequate, but thanks to leverage you can buy a lot."** Is that a good thing?

Garbage In, Garbage Out

This expression was in broad circulation 10-20 years ago, but I haven't heard it much lately. It's meaning is simple: models and decision-making processes can't produce good decisions if they don't begin from valid inputs. Roughly stated, I think all computers can do is maintain and search data bases, compare one thing against another, and perform calculations. They cannot think (yet).

I think the importance of this for financial decision makers is that while computers can find, verify and extrapolate relationships that have held in the past, they can't tell when those relationships will cease to work and what new relationships will take their place.

Put another way, computers know a lot about the past but much less about the future. In order for computers – or people lacking foresight, for that matter – to know what will happen in the future, they need reliable data regarding the past and an ability to expect that the future will be like the past. People were let down in both regards in 2007.

Most people have heard of "value at risk," or VAR, a worst-case estimate of a portfolio's one-day loss potential. *The Economist* reported on November 1 that on no fewer than 16 trading days in the third quarter (a quarter of all the days), UBS's trading losses exceeded the VAR calculated the preceding day. In all the preceding years since UBS began to use VAR in 1998, there hadn't been one such day. What went wrong? Maybe VAR isn't a good measure. Maybe the data UBS used was erroneous. Maybe the model was based on a period that was atypical or too short to be statistically significant. Or maybe the world changed, invalidating the model.

In the last few years, financial alchemy led to the creation of large numbers of high-rated securities out of pools of low-grade mortgages. Investors relied on the ratings, and I suppose the rating agencies relied on default rate assumptions that looked reasonable in the light of experience. But they didn't allow for changed circumstances (e.g., for the fact that since mortgage initiators no longer risked their own money for long, they had stopped making lending decisions the way they used to). It's for reasons like this that assumptions can turn out to be inappropriate.

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I'm not saying you can't invest profitably when the inputs are garbage. But only after critically assessing the reliability of assumptions can sufficient allowance for risk be built in via demands for an appropriate risk premium. In the last few years, people bought "safe" securities where they really had little understanding of their workings or foundations. The results are now clear.

I'm Shocked . . . Shocked

Given that market upswings are often accompanied by insufficient skepticism, it's not unusual for lofty expectations to be disappointed. A story on Citibank's results in the Wall Street Journal of November 2 contained words such as "unnerved" and "unsettled." Few things have a more corrosive effect on investor psychology than disillusionment like we're seeing today.

I remember getting a kick out of an article that ran in the Wall Street Journal around 1991. After taking big losses in high yield bonds, a mutual fund investor was quoted as saying, "I thought I was investing in a high yield bond fund. If I'd known it was a junk bond fund, I never would've bought it." It's common for investors to act without adequate understanding, and for them to feel betrayed when their hopes are unfulfilled. This time they're saying, "It was rated triple-A, and now no one can tell me what it's worth."

The disillusionment has been swift and dramatic (not to mention terrifying). Most CDO investors must now realize they had no idea how the mechanisms would work or how much risk they were taking. Holders have seen investment grade debt downgraded to single-C in a single rating action. Investors in Bear Stearns's High-Grade Structured Credit Strategies Enhanced Leveraged Fund lost all their money, finding no protection in all those great adjectives. Some assets became unsalable at any reasonable price. A lot of asset-backed commercial paper became unrenewable. And $5 billion anticipated writedowns turned into $8 billion actual writedowns in just a few weeks.

In a statement that seems representative of this period, Marcel Rohner, the Chief Executive of UBS, said last week the "ultimate value of our subprime holdings . . . remains unknowable." I don't doubt that it is, and for that reason his statement calls to mind a 2005 memo titled "Hindsight First, Please (or, What Were They Thinking?)." Why couldn't investors figure out in advance that the result of these investments were unpredictable? What caused them to make investments that now are described that way? It truly makes me wonder what they were thinking.

The Challenge of Managing Risk

One of the reasons investor confidence has been hit so hard is simply that it was too high (as is required for unsustainable market highs to be reached). And much of

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investors' excessive comfort was in the area of risk, where it was roundly believed things were under control. But the truth is, it's hard to manage risk.

As I stated in "Risk" (February 2006), investment risk is largely invisible – before the fact, except perhaps to people with unusual insight, and even after an investment has been exited. For this reason, many of the great financial disasters we've seen have been failures to foresee and manage risk. There are several reasons for this.

1. **Risk exists only in the future, and it's impossible to know for sure what the future holds. Or as Peter Bernstein puts it, "Risk means more things can happen than will happen . . ."** No ambiguity is evident when we view the past. Only the things that happened happened. **But that definiteness doesn't mean the process that creates outcomes is clear-cut and dependable. Many things could have happened in each case in the past, and the fact that only one did happen understates the variability that existed.** What I mean to say (inspired by Nicolas Nassim Taleb's *Fooled by Randomness*) is that the history that took place is only one version of what it could have been. If you accept this, then the relevance of history to the future is much more limited than may appear to be the case.

2. **Decisions whether or not to bear risk are made in contemplation of normal patterns recurring, and they do most of the time. But once in a while, something very different happens.** Or as my friend (and highly skilled investor) Ric Kayne puts it, "Most of financial history has taken place within two standard deviations, but everything interesting has occurred outside of two standard deviations." That's what happened in 2007. We heard all the time this past summer, "that was a 5-standard deviation event," or "that was a 10-sigma event," implying it should have happened only once every hundred or thousand or ten thousand years. So how could several such events have happened in a single week, as was claimed in August? The answer is that the improbability of their happening had been overestimated.

3. Projections tend to cluster around historic norms and call for only small changes. The point is, **people usually expect the future to be like the past and underestimate the potential for change**. In August 1996, I wrote a memo showing that in the Wall Street Journal's semi-annual poll of economists, on average the predictions are an extrapolation of the current condition. And when I was a young analyst following Textron, building my earnings estimates based on projections for its four major groups, I invariably found that I had underestimated the extent of both the positive surprises and the shortfalls.

4. **We hear a lot about "worst-case" projections, but they often turn out not to be negative enough**. What forecasters mean is "bad-case projections." I tell my father's story of the gambler who lost regularly. One day he heard about a race with only one horse in it, so he bet the rent money. Half way around the track, the horse jumped over the fence and ran away. Invariably things can get worse than people expect. Maybe "worst-case" means "the worst we've seen in the past." But that

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doesn't mean things can't be worse in the future. In 2007, many people's worst-case assumptions were exceeded.

5. **Risk shows up lumpily**. If we say "2% of mortgages default" each year, and even if that's true when we look at a multi-year average, an unusual spate of defaults can occur at a point in time, sinking a structured finance vehicle. Ben Graham and David Dodd put it this way 67 years ago: ". . .the relation between different kinds of investments and the risk of loss is entirely too indefinite, and too variable with changing conditions, to permit of sound mathematical formulation. This is particularly true because investment losses are not distributed fairly evenly in point of time, but tend to be concentrated at intervals . . ." (*Security Analysis*, 1940 Edition). It's invariably the case that some investors – especially those who employ high leverage – will fail to survive at those intervals.

6. **People overestimate their ability to gauge risk and understand mechanisms they've never before seen in operation**. In theory, one thing that distinguishes humans from other species is that we can figure out that something's dangerous without experiencing it. **We don't have to burn ourselves to know we shouldn't sit on a hot stove. But in bullish times, people tend not to perform this function.** Rather than recognize risk ahead, they tend to overestimate their ability to understand how new financial inventions will work.

7. **Finally and importantly, most people view risk taking primarily as a way to make money.** Bearing higher risk generally produces higher returns. The market has to set things up to look like that'll be the case; if it didn't, people wouldn't make risky investments. But it can't always work that way, or else risky investments wouldn't be risky. **And when risk bearing doesn't work, it <u>really</u> doesn't work, and people are reminded what risk's all about.**

Most of the time, risk bearing works out just fine. In fact, it's often the case that the people who take the most risk make the most money. However, there also are times when underestimating risk and accepting too much of it can be fatal. **Taking too little risk can cause you to underperform your peers – but that beats the heck out of the consequences of taking too much risk at the wrong time. No one ever went bankrupt because of an excess of risk consciousness. But a shortage of it – and the imprudent investments it led to – bears responsibility for a lot of what's going on now.**

<u>Recapping the Lessons – Nothing New</u>

The markets are a classroom where lessons are taught every day. The keys to investment success lie in observing and learning, which is what I've tried to do in the 40 years since I got my first job at Citibank.

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I think the credit cycle that began around 2002 will go down as one of the most extreme on record and be the subject of discussion for years to come. It is one of the most important, potentially most serious financial episodes I've witnessed, and it presents a great learning experience. (Of course, it's said that "experience is what you got when you didn't get what you wanted.")

People were blindsided this summer when the financial markets went wobbly in just a few weeks on the basis of unhappiness in a remote corner of the mortgage market. But nothing that happened should have come as a surprise. While the details of each financial crisis may seem new and different, the major themes behind them are usually the same, and several were repeated in the current cycle. Not one of the following twelve lessons is specific to 2007 or to subprime mortgages or CDOs. And each one is something I've seen at work before.

1. **Too much capital availability makes money flow to the wrong places**. When capital is scarce and in demand, investors are faced with allocation choices regarding the best use for their capital, and they get to make their decisions with patience and discipline. But when there's too much capital chasing too few ideas, investments will be made that do not deserve to be made.

2. **When capital goes where it shouldn't, bad things happen.** In times of capital market stringency, deserving borrowers are turned away. But when money's everywhere, unqualified borrowers are offered money on a silver platter. The inevitable results include delinquencies, bankruptcies and losses.

3. **When capital is in oversupply, investors compete for deals by accepting low returns and a slender margin for error.** When people want to buy something, their competition takes the form of an auction in which they bid higher and higher. When you think about it, bidding more for something is the same as saying you'll take less for your money. Thus the bids for investments can be viewed as a statement of how little return investors demand and how much risk they're willing to accept.

4. **Widespread disregard for risk creates great risk.** "Nothing can go wrong." "No price is too high." "Someone will always pay me more for it." "If I don't move quickly, someone else will buy it." Statements like these indicate that risk is being given short shrift. This cycle's version saw people think that because they were buying better companies or financing with more borrower-friendly debt, buyout transactions could support larger and larger amounts of leverage. This caused them to ignore the risk of untoward developments and the danger inherent in highly leveraged capital structures.

5. **Inadequate due diligence leads to investment losses.** The best defense against loss is thorough, insightful analysis and insistence on what Warren Buffett calls "margin for error." But in hot markets, people worry about missing out, not about losing money, and time-consuming, skeptical analysis becomes the province of old fogeys.

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6. **In heady times, capital is devoted to innovative investments, many of which fail the test of time.** Bullish investors focus on what might work, not what might go wrong. Eagerness takes over from prudence, causing people to accept new investment products they don't understand. Later, they wonder what they could have been thinking.

7. **Hidden fault lines running through portfolios can make the prices of seemingly unrelated assets move in tandem.** It's easier to assess the return and risk of an investment than to understand how it will move relative to others. Correlation is often underestimated, especially because of the degree to which it increases in crisis. **A portfolio may appear to be diversified as to asset class, industry and geography, but in tough times, non-fundamental factors such as margin calls, frozen markets and a general rise in risk aversion can become dominant, affecting everything similarly.**

8. **Psychological and technical factors can swamp fundamentals**. In the long run, value creation and destruction are driven by fundamentals such as economic trends, companies' earnings, demand for products and the skillfulness of managements. But in the short run, markets are highly responsive to investor psychology and the technical factors that influence the supply and demand for assets. In fact, I think confidence matters more than anything else in the short run. Anything can happen in this regard, with results that are both unpredictable and irrational.

9. **Markets change, invalidating models.** Accounts of the difficulties of "quant" funds center on the failure of computer models and their underlying assumptions. The computers that run portfolios primarily attempt to profit from patterns that held true in past markets. They can't predict changes in those patterns; they can't anticipate aberrant periods; and thus they generally overestimate the reliability of past norms.

10. **Leverage magnifies outcomes but doesn't add value.** It can make great sense to use leverage to increase your investment in assets at bargain prices offering high promised returns or generous risk premiums. But it can be dangerous to use leverage to buy more of assets that offer low returns or narrow risk spreads – in other words, assets that are fully priced or overpriced. **It makes little sense to use leverage to try to turn inadequate returns into adequate returns.**

11. **Excesses correct**. When investor psychology is extremely rosy and markets are "priced for perfection" – based on an assumption that things will always be good – the scene is set for capital destruction. It may happen because investors' assumptions turn out to be too optimistic, because negative events occur, or simply because too-high prices collapse of their own weight.

12. **Investment survival has to be achieved in the short run, not on average over the long run.** That's why we must never forget the six-foot-tall man who drowned crossing the stream that was five feet deep on average. **Investors have to make it through the low points. Because ensuring the ability to do so under adverse**

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circumstances is incompatible with maximizing returns in the good times, investors must choose between the two.

Most of these twelve lessons can be reduced to just one: be alert to what's going on around you with regard to the supply/demand balance for investable funds and the eagerness to spend them. We know what it feels like when there's too little capital around and great hesitance to part with it (like now). Worthwhile investments can go begging, and business can slow throughout the economy. It's called a credit crunch. But the opposite deserves to receive no less attention. There's no official term for it, so "too much money chasing too few ideas" may have to do. **Regardless of what it's called, an oversupply of capital and the accompanying dearth of prudence such as we saw in the last few years – with their pernicious effects – can be dangerous for your investing health and must be recognized and dealt with.**

All of the rules enumerated above can be depended on to take effect . . . eventually. But rarely do they operate on schedule. That's why, as markets go further to excess, more and more people join in bullish behavior at worse and worse moments. Remember, though, as Larry Summers put it, "in economics things happen slower than you expected they would, but when they finally do, they happen faster than you imagined they could."

These are the themes behind the current crisis. Master them and you'll have a better chance of side-stepping the next one.

December 17, 2007

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Memo to: Oaktree Clients

From: Howard Marks

Re: Now It's All Bad?

I'm a great believer in the cyclical nature of the markets, but I never cease to be amazed at how far they can go in one direction and for how long; the extremes they can reach, despite logical arguments to the contrary; and the swiftness of the swing back. It all reminds me of a point I made in my second memo, "First Quarter Performance" (April 1991): Although the midpoint of its arc best describes the location of the pendulum "on average," it actually spends very little of its time there. Instead it is almost always swinging toward or away from the extremes of its arc.

Just seven weeks ago, I complained in "It's All Good" that investors were acting as if nothing could go wrong. "Priced for perfection" was the concept underlying values, and people were more than willing to pay prices set that way.

Now, of course, the prevailing attitude appears to have swung from "it's all good" to "it's all bad." Pessimism has replaced optimism, perhaps also to excess. There are days on which no one seems able to tell me how the developing credit crisis might be resolved in short order and a full-scale meltdown avoided, and when no one seems able to find a ray of sunshine in the current situation (other than bargain hunters).

It's like the aspiring actor who takes acting classes, waits on tables and hustles auditions for a decade . . . and then gets his big break and becomes an "overnight success." Except that in this case, having built up great excesses over a period I date from November 2002, people are now acting as if this market has become an overnight flop.

Some of us have been saying for years that a swing back of the market cycle was due, but it took a long time to happen (calling to mind, as so often in my case, the dictum that "being too far ahead of your time is indistinguishable from being wrong"). This delay does a good job of illustrating Lord Keynes's famous observation that "markets can remain irrational longer than you can remain solvent."

Markets can swing in a single direction for a longer period and to a greater extent than anyone might expect. That's crowd psychology. But the swing back can be equally surprising – in terms of what kicks it off and how fast it moves. I recently came across a great quote from Larry Summers: "in economics things happen slower than you expected they would but when they finally do, they happen faster than you imagined they could." Certainly the recent transition from all good to all bad demonstrates this phenomenon.

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The Virtuous Circle

The financial world seems to have melted down in just a few weeks. But the truth is, the seeds of the crisis have been growing for years – unnoticed by most – as a seemingly virtuous circle spun unabated.

Henry Kissinger was a member of TCW's board when I worked there, and a few times each year I was privileged to hear him hold forth on world affairs. Someone would ask, "Henry, can you explain yesterday's events in Bosnia?" and he'd say, "Well, in 1722 . . ." The point is that chain reaction-type events can only be understood in the context of that which went before. The challenge is figuring out how far back to go. In talking about how the market got to its current condition, I'll just look back five years.

Everyone remembers the last corporate debt crisis, during the summer of 2002. Recession, credit crunch, 9/11, Afghanistan, the telecom meltdown, and scandals at Enron and the like combined to make bonds available at ridiculously high yields. Those who were willing to buy had an opportunity to earn ultra-high returns with what turned out to be very little risk.

Around the beginning of November 2002, however, it felt like a switch was thrown. Maybe distressed debt managers who hadn't been aggressive enough during the summer concluded they had to get invested before year-end. For whatever reason, bond prices started to rise. Our active distressed debt funds gained 20% that month, and the markets never looked back. Investors in all asset classes forgot the panic that had gripped them just a few months earlier and became preoccupied with making money.

Because only modest returns were expected from high grade bonds (with their 4-5% yields) and U.S. common stocks (following the 2000-02 bear market), investors sought solutions in non-traditional investments with brief track records at best, and thus little or no clarity regarding the risks involved.

Vast sums flowed to hedge funds, and thousands of new ones were formed. High yield bonds and leveraged loans began to be issued again . . . because now there were buyers. This enabled buyouts to be financed and then recapitalized, and quick payouts to equity holders resulted in eye-popping IRRs, attracting more capital to buyout funds. Real estate attracted vast amounts of capital, too, even when "cap rates" – current cash yields – sunk below 5%; what could be better than a tangible asset providing inflation protection?

Borrowing power became virtually unlimited, as is often the case when providers of capital are eager to put money to work. Thus the financial environment reflected (1) a vast ability to leverage, (2) an uninhibited search for return, and (3) investors competing to make investments by accepting lower returns and decreased safety. This combination supported new investment techniques, which grew rapidly despite being untested. Securitization, tranching and selling onward were employed extensively, often in combination. **For investors seeking high returns in a low-return world, leverage seemed to hold the answer, and it was used in ways never seen**

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before. Collateralized loan obligations and collateralized debt obligations, for example, grew practically unchecked. These debt factories bought up vast amounts of raw material – in the form of underlying portfolio assets – in order to generate a salable product.

The bottom line of it all: high leverage, untested vehicles and inadequate preparedness for adverse developments. Little awareness of risk, low credit standards, slender risk premiums and little margin for error. In short, a recipe for possible disaster.

The Vicious Circle

It's easy to explain what happens at this point in the typical market cycle: eventually, everything goes the other way. That's exactly what happened this summer.

There's a bump in the road. It doesn't matter what it is, and it's usually different each time. This year the problem occurred in the field of subprime mortgages. There was a surprising rise in delinquencies, the immediate effect of which was limited to a small segment of the economy and the few investors who'd bought securities backed by these loans. In the months leading up to July, the impact went largely undetected outside the subprime arena.

But from time to time in the investment world, a chain reaction is set off – maybe you'd say a "tipping point" is reached – which causes one sort of problem to create others and to cascade from one asset class, market or region to others.

I think the first step toward a broadening-out of the subprime problem came in a few days during which rating agencies downgraded hundreds of mortgage-backed securities and the debt of CDOs built on them. The repercussions were many and swift. Not only did the downgradings have a direct negative effect on mortgage portfolios and their holders, but they provided a wake-up call, a shocking reminder of some forgotten realities:

- That risk had been underestimated.
- That things investors thought they knew – truths they held so strongly – they really hadn't known at all.
- That elements they had relied on – in this case, debt ratings – had let them down. Nothing works, they were reminded, except analysis that is first-hand, in-depth and superior.

Then there were the holders' problems. Bear Stearns, for example, announced significant losses in two of its hedge funds, as falling prices for subprime holdings rendered collateral inadequate and margin calls eliminated maneuvering room. A few days later, it was reported that the investors' equity was all gone.

And then there are technical factors. These are developments that encourage selling or deter buying but are unrelated to investment fundamentals. A number soon arose:

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- Suddenly, market participants realized how hard it can be to value obscure, infrequently-traded assets and how much the prices of such assets can diverge from their value. In fact, "value" can be an empty concept in times of crisis, when it becomes painfully clear that an asset is only worth what it can be sold for. Thus people came to question the prices funds were using to value subprime-related holdings, as well as the model-derived prices their investment bank creators had charged for them.

- Worried about both subprime fundamentals and pricing, and suddenly under increased scrutiny, many lenders stopped providing financing. Short-term commercial paper, which many investors had used to leverage their subprime-related asset investments, became largely impossible to roll over.

- Funds that had promised liquidity to their investors – even some money market funds – became worried about their ability to accurately value subprime holdings and sell them at fair prices. Thus they suspended withdrawals. What could have a more traumatic effect on investor confidence?

- Where leverage was withdrawn, margin calls arrived, or funds had to meet actual or feared withdrawals, holders of subprime assets became forced sellers. Few things have a more devastating effect on investment performance.

Metastasis

The fundamental, psychological and technical influences described above devastated the market for subprime investments, of course, but they also spread quickly to other assets and markets and metastasized into new forms of trouble.

Investor psychology turned in all markets, even those totally unconnected to subprime loans. Caution replaced optimism. Risk aversion took over from risk tolerance (or risk-blindness). Skepticism and the concept of capital preservation were resurrected. Concern over being under-invested gave way to fear of buying too soon. Cash came to be viewed as a source of security and buying power, not a drag on results. All over the investment world, people started to think more about what can go wrong rather than what can go right. **In short, the things that contributed to the virtuous circle began to be reversed, in ways that were unimaginable just two months ago.**

Bridge financing for buyouts represents an outstanding example. Buyouts were an area of great enthusiasm – and some of the greatest excesses, I think – in the 2002-07 up leg:

- Vast sums were raised in buyout funds, likely increasing the managers' motivation to buy companies.
- Purchase prices for target companies were lifted by stock market strength, bidding wars and the demands of stockholders and boards.

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- Acceptable debt/equity ratios – and thus the prices funds were willing to pay for companies – increased as the cost of debt financing fell.
- Companies became even more leveraged as recapitalizations allowed debt to replace equity on post-acquisition balance sheets.

Although purchase prices and leverage ratios were rising rapidly, the banks were ready and willing to "bridge" – or accept the risk involved in completing – future financings for buyouts. Often this came in the form of "staple financing," through which banks enabled buyers to include committed financing as a component of their bids. As of a month ago, banks had committed to supply $277 billion of financing for buyouts, a figure that omits equity bridges (promises to raise some of the equity required in a buyout) as well as non-U.S. transactions. These bridges have become one of the big stories of 2007.

Prior to July, investors competed to put money to work despite rising buyout prices, increasing leverage ratios, declining yield spreads and weaker terms and covenants. The banks counted on this eagerness in extending their financing commitments, and for years they were not disappointed.

But then the negative developments in subprime mortgages reminded investors about risk.

- The sight of funds melting down and suspending withdrawals was sobering.
- Worry about the economic impact of falling home prices and less buoyant consumer spending became pervasive.
- In this new, chastened environment, investors who'd bought CLO and CDO debt realized they had put too much faith in favorable ratings and thus were in trouble. This caused their appetite for debt to dry up.
- Bond pricing and terms no longer seemed adequate – and the risk associated with declining to purchase a new issue no longer loomed so large.

In short, in the unique way in which markets can turn from red-hot to frigid, potential buyers lost interest in the financings the banks had committed to place. And so the bridges became "hung." The banks recognize that this isn't par paper anymore, and thus they're likely to accept discount bids to clear it off their balance sheets. **Observers describe this process by saying "risk has been repriced." They mean investors now realize they've been accepting inadequate compensation for bearing risk and are insisting on more**. "Risk repricing" is a good term for what's happening.

Clearly this phenomenon isn't limited to subprime debt and bridge financings. In fact, the complete list of impacted securities, markets and participants is staggeringly long and diverse:

- subprime loans, and thus large amounts of residential mortgage-backed securities and CDO debt,
- money market funds that experienced losses in subprime-backed paper and were forced to freeze redemptions,

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- Alt-A mortgages – not subprime, but similarly weak on documentation,
- mortgage lenders,
- commercial mortgage-backed securities, not because rents or property values are down, but because these securities may be held by residential mortgage investors forced to raise cash,
- bridge financings – and with them the likelihood of future buyouts looking anything like those of the recent past,
- the investment and commercial banks that committed to the bridges,
- the stocks of target companies in announced buyouts that are shaky as to completion and/or likely to be renegotiated,
- merger arbitrageurs, or "risk arbs," who assumed the risk of these deals failing to be consummated as announced,
- others who bet that good times and low volatility would continue, and that probable things would happen and improbable things wouldn't. These include sellers of put options and credit default insurance,
- "quant firms" that built highly leveraged portfolios with help from models that extrapolated past market behavior,
- hedge funds and other leveraged investors in a wide variety of fields that pursued "spread" or "carry" trades using large amounts of borrowed money (more on this later),
- banks (e.g., Germany's IKB) and fund managers (e.g., Carlyle and KKR) that formed highly leveraged subsidiaries that would employ extensive leverage in the pursuit of profit,
- anyone dependent on issuing commercial paper or other forms of short-term debt to finance leveraged investments, and
- CLOs and CDOs, their investors, and those who depended on them to continue buying debt providing inadequate risk compensation.

The list of affected areas is long and could grow longer. On bad days, losses on U.S. stocks, European stocks and emerging market stocks all are attributed to the credit crunch. Exchange rate swings – and strength in the yen in particular – are blamed on declining use of the carry trade, a regular feature of which was borrowing at low rates in Japan and investing for more elsewhere. And the other day, I read that lower profits at London investment banks will likely result in smaller bonuses for investment bankers . . . and thus in lower prices for London real estate.

How could investors in the areas listed above have expected that a crisis in subprime mortgages would affect them this way? Who would have guessed, for example, that low-grade mortgage delinquencies would depress returns on risk arb funds? The New York Times of August 18 described *A Demon of Our Own Design*, by Richard Bookstaber (see "Investment Miscellany," November 2000) as pointing out that "the proliferation of complex financial products like derivatives, combined with use of leverage to bolster returns, will inevitably mean that there will be a regular stream of market contagions like the one we're having now – one of which, someday, could be calamitous."

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This pattern of contagion exemplifies the hidden fault lines that I say can run through portfolios and – like construction flaws in California homes – become apparent only during infrequent catastrophes. But their invisibility most of the time doesn't mean they're not there. The existence of these common threads is one of the things that make it difficult to predict the correlation between assets, one of the key ingredients in intelligent portfolio construction. And it's a good reason to attach a significant premium to managers with alpha, or superior investment insight and skill.

Leverage and Liquidity

It's clear that when the story of 2002-07 is written, leverage and liquidity will be among the main players. For much of the last few years, we saw a vast appetite for securities. It created enormous demand for – and pushed up prices of – real estate- and asset-backed paper, CLO and CDO debt, buyout funds, hedge funds, high yield bonds and leveraged loans. In fact, there seemed to be unlimited demand for non-mainstream investments. With all that money to put to work, few potential buyers refrained from participating in an upswing that some observers thought lacked a sufficient *raison d'être*, reasonable limits and adequate risk compensation.

One of the factors contributing most strongly to that demand was an ability to borrow excessive amounts, for questionable purposes, on loose terms and at a low cost. It was a result of the unattractiveness of yields on high grade debt . . . which stemmed largely from the Fed's campaign to lower interest rates in order to mitigate the depressant effect of the stock market slump and recession. It was abetted by the fact that after a few years of good results, many people forget how money is lost.

Extensive use of leverage was behind many of the gains of the last few years, and it is at the root of many of the problems being suffered today.

> If I mistake not, the distress . . . was produced by an enemy more formidable than hostile armies; by a pestilence more deadly than fever or plague; by a visitation more destructive than the frosts of Spring or the blights of Summer. I believe that it was caused by a mountain load of DEBT.

Flowery commentary on the crisis of 2007? No; according to the Financial Times, the quote from T.E. Burton's *Crises and Depressions* refers to events that occurred in 1857. **The point is that leverage is nothing new, and neither are its deleterious effects.**

There are numerous reasons to use debt to leverage results, and none of them is likely to evaporate any time soon:

1. Hope springs eternal, as my mother used to say, and greed usually drives markets. Thus any tool that has the power to magnify gains is very tempting.

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2. Of course, leverage can magnify losses as well as gains. But investors make investments because they expect them to work, not fail, and thus the attraction of magnified gains far outweighs the fear of magnified losses.
3. **Long-term bonds almost always offer higher yields than short-term debt, and riskier investments invariably seem to promise higher returns than safe ones. For these reasons, using short-term borrowings to finance lower grade and/or longer-term investments invariably appears likely to produce positive returns**.
4. Most seductively, the incremental risk entailed in investments that are slightly longer in term or slightly lower in quality usually appears quite small. **For this reason, these trades seem safe – but that doesn't mean they can't be rendered extremely risky when leveraged up enough.**
5. Of course, when an upward cycle is generating strong returns and making risk aversion recede, the equation becomes even more attractive. In the FT column that provided the above quotation, John Authers describes the regular pattern of good times, easy credit, increasing leverage and eventual crashes. I don't see that ever changing.

It's for these reasons – and especially #4 – that highly leveraged positions are at the root of most fund collapses. Long-Term Capital Management, the Granite Fund, Amaranth Advisors, the two Bear Stearns funds, Sowood Alpha Fund and Basis Yield Alpha Fund were all marked by "safe" positions leveraged to the sky. And they all melted down.

In a number of ways, perpetuation of the market conditions of the last few years was dependent on several assumptions about liquidity:

- that investors with liquidity would be eager to put it to work,
- that providers of capital would make liquidity available, meaning that leveraged investors would be able to maintain their portfolio holdings and buy more,
- that securities markets would remain liquid, such that holdings could always be sold at prices close to their intrinsic value, and
- that funds would therefore be able to keep the promise of liquidity that they'd made to their investors.

In short, it was assumed that liquidity would continue to flow in the direction of leveraged investment funds (in the form of financing and incremental capital commitments) rather than away (in the form of margin calls and investor withdrawals). Two or three months ago the world was described daily as "awash in liquidity." Where is it now?

Investments requiring nothing more than the perpetuation of favorable market conditions can be very seductive. And they work most of the time . . . until the pit has been dug deep enough, the branches have been spread, and everyone has forgotten about the existence of risk.

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The investment environment of the last few years could have been negatively impacted by the removal of any one of the elements of liquidity listed above. But if you look at the list, it becomes clear that they're highly interrelated. Weakening one assumption could render the others less reliable. And, in truth, a single exogenous development – such as a major decline in psychology – could simultaneously harm them all. That's the main story of the last few weeks.

Investments costing many times the investor's equity. Dependence on unreliable short-term financing. Susceptibility to margin calls or capital withdrawals. Assets that can become unsalable at a moment's notice. Prices that can collapse because the markets are thin and everyone wants out at the same time. The formula is simple and the results are predictable. Not every fund that's so disposed collapses, but the potential's always there – with borrowing to buy at its core.

Fundamental problems are present in most investment conflagrations, but exposure to excessive leverage and disappearing liquidity is often the accelerant. As breakingviews.com (my new favorite) put it in The Wall Street Journal of August 2, **"The markets may hurt you, but your lenders will finish you off."**

Risk Reduction

Of the many fairy tales told over the last few years, one of the most seductive – and thus dangerous – was the one about global risk reduction. It went this way:

- The risk of economic cycles has been eased by adroit central bank management.
- Because of globalization, risk has been spread worldwide rather than concentrated geographically.
- Securitization and syndication have distributed risk to many market participants rather than leaving it concentrated with just a few.
- Risk has been "tranched out" to the investors best able to bear it.
- Leverage has become less risky because interest rates and debt terms are so much more borrower-friendly.
- Leveraged buyouts are safer because the companies being bought are fundamentally stronger.
- Risk can be hedged by long/short and absolute return investing and through the use of derivatives designed for that purpose.
- Improvements in computers, mathematics and modeling have made the markets better understood and thus less risky.

As described in "It's All Good . . . Really?" I thought many things that hinted at risk reduction actually had the effect of decreasing understanding and increasing risk. Up to July, all we read about was the beneficial nature of these developments. Now, with the benefit of hindsight, these are the judgments of our leading business periodicals:

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> A system designed to distribute and absorb risk might, instead, have bred it, by making it so easy for investors to buy complex securities they didn't fully understand. (The Wall Street Journal, August 7)
>
> [Loans] are now often bundled into securities that are sold in pieces to investors around the world, changing hands many times. It spreads risk, which policy makers believe keeps the overall financial system sound and stable. But the downside to this system could be serious. (WSJ, August 10)
>
> "The market appears to be finding it harder to truly understand the inherent and underlying risks involved," [according to Chris Rexworthy, a former regulator with Britain's FSA]. The backlash is particularly sharp abroad, in countries that were surprised to find that problems with United States homeowners could be felt so keenly in their home markets. (New York Times, August 31)
>
> "Low volatility has created complacency, and that has translated into poorly structured derivative markets," says Randall Dodd, director of the Financial Policy Forum . . . The low volatility world of the past few years may have worsened the situation, leading to lax lending standards for derivative investors. (WSJ, August 2)
>
> It is estimated that there are seven times as many credit derivatives outstanding as there are outstanding bonds. You need to ask the question: is risk being transferred or created? Are the new gladiators hedging with derivatives or just leveraging up? (Jeff Pantages in Pensions & Investments, August 20)

An apt metaphor came from Pension & Investments: "Jill Fredston is a nationally recognized avalanche expert . . . She knows about a kind of moral hazard risk, where better safety gear can entice climbers to take more risk – making them in fact less safe." **Like opportunities to make money, the degree of risk present in a market derives from the behavior of the participants, not from securities, strategies and institutions. Regardless of what's designed into market structures, risk will be low only if investors behave prudently.**

The bottom line is that tales like this one about risk control rarely turn out to be true. Risk cannot be eliminated; it just gets transferred and spread. And developments that make the world look less risky usually are illusory, and thus in presenting a rosy picture they tend to make the world more risky. These are among the important lessons of 2007.

<u>Other Lessons Not Learned</u>

In addition to the above, a number of other recurring themes can be seen as underlying the recent difficulties. Here are a few:

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- Belief in market efficiency – Although academics say the actions of intelligent investors cause assets to be priced right, I often find prices screwy. Rather than increasing market efficiency, improvements in computer and communications technology may have made the markets even more unstable. As my partner Sheldon Stone says, it's like a cruise ship where everyone is told to stand on the port side. Then everyone simultaneously gets a message telling them to run to starboard. It makes for a rocky crossing. The New York Times wrote on August 17 that "Information may arrive instantly, but insight takes longer." Certainly the cycles don't seem any less volatile than they used to be, or the extremes any less irrational. In fact, in recent years, over-reliance on market efficiency may have kept people from questioning asset prices.

- Inefficacy of models – Quant funds invest according to models that extrapolate past patterns, operated by people who know computers and probabilities, not investment fundamentals. But models can't tell you when past market behavior has been irrational (and thus unreliable), and they can't predict when those patterns will change. They lead to investments that "would have worked almost all the time in the past," but it's amazing how often we see them derailed by once-in-a-lifetime events. Matthew Rothman of Lehman Brothers has become famous for saying in early August that "events that models only predicted would happen once in 10,000 years happened every day for three days." Are those models you want to bet on?

- Di-worst-ification – Warren Buffett harps on the folly of branching out into things you know less about solely for the purpose of increasing the number of baskets in which you have your eggs. Investing in things about which you aren't expert doesn't reduce risk, it increases it. And I think it's particularly unwise to finance diversification with borrowed money.

- Conflicts between managers and clients – Investors should look very closely at the alignment of their managers' interests with their own. The mere fact that a manager is working for incentive compensation, or has money in his fund, isn't enough. Recent events have shed some unusual – and provocative – light on the question of alignment. Consider Sowood Capital, which lost half of its investors' capital, sold off its portfolio in a block and closed down. Why did the loss of half the LPs' equity occasion a liquidation? Might further losses have activated a clawback of previous years' incentive fees? And might the interests of a manager with 100% of his net worth in his fund have diverged from the interests of LPs who invested 1% of theirs? I'm just speculating from the sidelines without knowledge of the facts in this situation, but I wonder whether this doesn't show that to protect their own investment in their funds, managers can be driven to take actions that damage their LPs.

- The unreliability of ratings – Many investors act in reliance on ratings, and some require ratings before taking actions they're considering. But ratings must be taken with a big grain of salt. **In fact, a lot of my career (and Oaktree's success) has been based on conviction that the rating agencies are often wrong.** They routinely rate securities too high when things are going well, and then overcorrect

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when problems surface. It's instructive to note that a lot of CDO debt built on subprime mortgages received triple-A ratings, many of which already have required downward adjustment. And that rating agencies helped CDO managers design structures so they would receive the desired rating. And that managers would run a structure past a few agencies and hire the one that arrived at the highest rating. And that ratings are paid for by those sponsoring the securities being rated, something which sounds like a trial where the defendant picks and pays the judge.

All of these paragraphs highlight errors made by investors this time around . . . of a type that always will be made (but with variations on the theme). The lesson isn't to distrust managers, or models, or ratings, or diversification, or market efficiency.

What investors must learn – but most will not – is that there's no easy answer, surefire tool or silver bullet. Lots of tools will help when applied thoughtfully, but they'll bring harm otherwise – with the additional risk that excessive reliance on them will increase the damage done when they turn out to be unavailing. **Certainly none of the highly-touted things discussed above held the answer this time around. Only truly superior skill, discipline and integrity are likely to produce consistently high returns in the long run with limited risk.**

My advice: expect CEOs, regulators, rating agencies and other market participants to make mistakes. Expect things to go wrong and cycles to swing to extremes and then recover. Worry about outcomes, and hire worriers. Doing these things is sure to stand between you and top returns in up-cycles, but it will deliver some degree of safety when things turn bad. **Ensuring the protection of capital under adverse circumstances is incompatible with maximizing returns in good times, and thus investors must choose between the two. That's the real lesson. The things discussed above are just a few of the details.**

What Next?

Lots of people are asking whether this is going to get ugly. Is this the beginning of a credit crunch? Will it lead to a recession? How bad will it get? When will the bottom be reached? How long will the recovery take? The answer's simple: no one knows.

Some of the psychological and technical preconditions for a challenging market environment have been met. The bubble of positive investor psychology has been pricked and could become seriously deflated. **When others are aggressive, we should be worried, but when others are worried, we can be confident. That's the essence of contrarianism, and by that standard these are better times.**

The easy-money machine has had some sand thrown in its gears and seems to be grinding to a halt. Previously, anyone could get any amount of money for any purpose. Right now, deserving borrowers are unable to obtain financing, and this could continue or get worse.

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The outlook for the economy is murky, as usual. It continues to limp along, not growing strongly but not sagging. The big question surrounds the effect of the subprime crisis on consumers. Home prices are through rising. Home equity borrowing is probably finished for a while as a supporter of consumer spending. Ditto for the "wealth effect." The reset of adjustable rate mortgages from artificially low teaser rates to full market rates over the next 18-24 months is likely to have a depressing effect on a large number of households, and thus on the economy. I would think furniture and auto manufacturers, building materials suppliers, retailers and financial institutions have seen their best days for a while. I consider the economy unpredictable, of course, and thus a lot of people's answers will be more definite than mine. But not necessarily more correct.

Everyone's looking to the Fed to take action. Its last act – cutting the discount rate on August 17 – was largely symbolic but had a positive effect. A reduction of the federal funds rate would mean more, telling investors the Fed's there to help, cutting the cost of borrowing and stimulating the economy. But it wouldn't do much for banks' balance sheets or willingness to lend.

It's my view that Bernanke would rather not cut rates. Stimulative action that looked like an investor bailout would contribute further to moral hazard and the expectation that the Fed will always protect investors on the downside. This is an unhealthy expectation, as each bailout encourages risk taking and thus increases the likelihood that another will be needed. But the Fed is being importuned for a rate cut, and there are few people to argue on the other side, for a good dose of unpleasant medicine.

I'm usually cautious, so I might as well keep my record intact. The economy should weaken. Deals built on optimistic assumptions and paid for with a lot of borrowed money shouldn't all thrive. Generous capital markets should not be expected to bail out ailing companies. Bargain hunters and distressed debt investors will have more to do. Eventually. But no one at Oaktree would advise you to act as if these views are sure to be correct. We certainly won't.

* * *

An observation I made last October regarding the meltdown of Amaranth, in "Pigweed," is equally applicable to the recent problems:

> Orin [Kramer] notes that Amaranth "occurred when the skies were blue; the fund unraveled because a small and volatile commodity behaved in an unpredicted fashion." This collapse didn't require an adverse economic environment or a market crash. The combination of arrogance, failure to understand and allow for risk, and a small adverse development can be enough to wreak havoc. **It can happen to anyone who doesn't spend the time and effort required to understand the processes underlying his portfolio.**

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Certainly the magnitude of this summer's crisis has been out of proportion to its underlying fundamental cause: the increase in subprime delinquencies. Instead, a standard combination has proved perfectly incendiary:

- underlying greed,
- good returns in the up-leg of the cycle,
- euphoria and complacency,
- a free-and-easy credit market,
- Wall Street's inventiveness and salesmanship, and
- investors' naiveté.

This formula often results in crushing losses. **Or as Marc Faber put it, a surplus of cash leads to a shortage of sense.**

An obscure economist named Hyman Minsky is having his fifteen minutes of fame in the current environment. Here's how The Wall Street Journal summarized his views on August 18:

> When times are good, investors take on risk; the longer those times stay good, the more risk they take on, until they've taken on too much. Eventually they reach a point where the cash generated by their assets no longer is sufficient to pay off the mountains of debt they took on to acquire them. Losses on such speculative assets prompt lenders to call in their loans. "This is likely to lead to a collapse of asset values," Mr. Minsky wrote. When investors are forced to sell even their less-speculative positions to make good on their loans, markets spiral lower and create a severe demand for cash.

The foregoing aptly describes the current cycle. . . and, I think, the way things always are. It certainly seems inevitable that, eventually, investment merit becomes overpriced, and the combination of good results and easy money causes dangerous leverage to be employed in the pursuit of profit.

When will market cycles be banished or made more muted? That'll happen when greed, human failings and herd behavior are eliminated. Or, in other words, never. In "You Can't Predict. You Can Prepare." I wrote of cycles that success carries within itself the seeds of failure, and failure carries the seeds of success. It'll always be so.

September 10, 2007

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Memo to: Oaktree Clients

From: Howard Marks

Re: It's All Good . . . Really?

As I worked on "It's All Good" during my vacation in late June – and even when I issued it two weeks ago – I had no reason to believe that the universally upward cycle about which I was writing could be curtailed before the end of July. But the good times certainly have stopped rolling in many areas, at least for now. I think it's extremely important to study the way this has happened, as it provides a highly instructive object lesson.

It's folly to think we know in advance just what it is that will cause the market pendulum to stop swinging in one direction and start in the other, but it's even greater folly to think that nothing of that nature will happen. That's my twist on one of my favorite quotes, from behaviorist Amos Tversky:

> It's frightening to think that you might not know something, but more frightening to think that, by and large, the world is run by people who have faith that they know exactly what's going on.

My friend Bruce Newberg thinks a quote attributed to Mark Twain says it best, and he may be right:

> It ain't what you don't know that gets you into trouble. It's what you know for sure that just ain't so.

Over the last few years, some people went around saying, "We don't know what bad thing will happen, but something will," and others said, "We're confident that nothing bad will happen." Now, as is often the case, unassuming caution seems to be winning out over cocksure optimism.

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The Seed

This memo isn't about the events of July 2007, but rather how recent events exemplify the time-honored pattern that kicks off the swing back of the pendulum. That pattern often begins with a single seed, and sometimes one that's hard to identify. That difficulty isn't there this time; it's just that the seed seems so small compared with the repercussions.

The seed of the current cyclical downturn sprouted in the area of subprime mortgages, residential loans made to homeowners with less-than-stellar creditworthiness. The mere

making of those loans didn't create the problem. Rather, it's the fact that both borrowing and lending decisions were quite poor and in many cases misguided.

As I described in "It's All Good," loan originators and mortgage brokers were incentivized by fees to generate loan volume and often were able to do so without having to risk their own capital. They were paid to produce quantity, not quality, and – surprise! – they did. Capital providers' lack of concern regarding creditworthiness enabled borrowers to borrow more than they could repay and more than was justified under prudent lending standards . . . at adjustable rates even if the borrowers couldn't withstand an upward adjustment . . . often supported by inadequate documentation regarding incomes and assets. Deficiencies in due diligence even permitted numerous cases of mortgage fraud, where borrowers bought houses, marked them up through sales to related parties, and then borrowed against them in amounts far in excess of their actual value (and their cost).

It's not surprising that these circumstances combined to produce a high volume of deficient loans. In fact, it would be amazing if they hadn't. Who could have looked at this system without expecting this outcome?

Okay – bad loans were made, and delinquencies and foreclosures have been rising among the weakest of mortgage borrowers. How can these isolated developments have jumped the rails to affect commercial real estate? How could they possibly have led to difficulty for the private equity industry, which does no mortgage lending? And how can these specific linkages have been generalized into widespread repercussions on the economy and the credit and equity markets?

<u>Contagion</u>

Among the many cyclical phenomena that recur regularly, one of the most interesting is the attitude toward contagion. When the environment is rosy and market participants are optimistic, negative developments are described as "isolated incidents." Market participants find it easy to maintain their equilibrium, and the possibility of repercussions is easily dismissed. This is no more realistic than what we see at the pessimistic end of the pendulum's swing, where negatives are generalized into epidemics, contagion is overstated and participants totally lose their cool.

Early in June, I met with Marty Fridson of FridsonVision. Marty is a longtime friend and one of the deans of the high yield bond business – by any standard an expert on credit. In his discussion of the subprime crisis, Marty referenced a complex flowchart labeled "Possible Paths to Contagion." It showed a number of ways in which the subprime problem could affect high yield bonds. Linkages like these can be foreseen if you're thoughtful and willing to look ahead. Marty focused on contagion to high yield bonds, but I'll discuss below how this small problem has spread far more broadly.

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Animal, Vegetable or Mineral?

These were the categories into which things fell on the old TV quiz show "Twenty Questions," and they were always the subject of the panelists' first question. In the case of the subprime crisis, the factors contributing to contagion can be sorted into three other categories: fundamental, psychological and technical. Here are some examples:

Fundamental influences are those with tangible consequences for business. When mortgage delinquencies rise sharply, first there are the obvious direct effects:

- Lenders lose money, and some go bankrupt.
- Real estate brokers' commissions dry up.
- Homebuilders see less demand for their product.
- Building materials companies see lower volumes.

Then there are the second-order consequences, or what the British would call the "knock-on effects":

- Home prices fall. Mortgages based on the old, high prices cannot be refinanced, and simple economics makes it smarter to default rather than service a $500,000 mortgage on what is now a $400,000 house. Thus delinquencies rise further.
- Lower home prices at the bottom of the ladder ripple through other sectors of the housing market.
- All consumers feel poorer due to the negative wealth effect and curtail their expenditures, crimping revenues at retailers and then manufacturers.
- Borrowing declines, depressing the level of business at financial institutions.

All of these things have direct consequences for the economy and the markets – from just the little seed of bad subprime loans. But there will also be extensive **psychological repercussions**:

- Losses that are experienced – or even just imagined – cause investors and providers of capital to realize they've been overstating positives and understating negatives.
- Their confidence ebbs and they start to worry. Thus they make less capital available for risky investments, or they charge more for the capital they will provide.
- Thus risk premiums and expected returns must rise if investors are to be induced to make further risk-bearing investments. One way this happens is through higher interest rates – depressing consumer and business activity.
- Another way prospective returns are raised is through price declines for existing assets, and these can course through many markets.

Finally, the environment is altered by **technical factors** that influence the supply/demand balance for capital and assets.

- As capital dries up, deals become less attractive (because the cost of capital is higher) and maybe downright impossible to execute (because capital is unavailable).

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- If portfolio holdings have to be sold to reduce leverage or raise cash to meet actual or feared withdrawals, this has a depressant effect on asset prices that reinforces the cycle.
- Lower asset prices may lead to margin calls, and thus possibly to fire sales.
- Forced sellers sell what they can sell, not necessarily what they want to sell. As a result, the prices of assets that are entirely unrelated to the fundamental problem can join the downward spiral. It's for this reason that they say, "In times of crisis, all correlations go to one."

Every one of the above factors has been seen in the last few weeks – all growing from just the subprime seed. **The economy is still showing good strength overall and most companies are doing fine; the default rate among high yield bonds continues to run at 25-year lows. But strong fundamentals mean little if technical factors combine with a fundamental problem to profoundly depress investor psychology.**

It's important to remember the extent to which these factors interrelate. Fundamentals influence psychology, which determines technicals, which feed back to further affect fundamentals. **Just as these things can create a virtuous circle on the upside – such as the one that has prevailed since late-2002 – they're now behind the apparent start of a vicious circle on the downside.**

The L Word Revisited

Most explanations of the financial dynamism of the last few years have centered on something called "excess liquidity." Vast amounts of liquidity in the hands of investors, it's been said, caused them to avidly pursue investments, neglect due diligence, accept low prospective returns, and therefore bid up asset prices.

But where does excess liquidity come from? Not from more currency. The amount of currency in the world is somewhat fixed, and each person's receipt is another person's expenditure. The fact that China has massive reserves to invest merely means those sums came out of someone else's account.

I think the "L word" that should be focused on isn't liquidity, but leverage. This is the one I discussed in "It's All Good," and the element behind many of the excesses of late. High levels of lending and borrowing relative to capital balances can increase buying power and fire up economies and markets. The question is whether that expansion will be maintained and increased. If not, this source of growth will peter out . . . as has been the case in the last few weeks.

A decade or so back, the ability of parties other than the Fed to increase the leverage in the system was limited. Margin debt for purchases of stock couldn't exceed 100% of an investor's equity, and bank loans likewise were restricted to a multiple of capital. But in recent years, some new factors have meaningfully changed the picture, including derivatives, hedge funds and non-bank lending. All three of these – among which there is

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significant overlap – have negated the old limits and made vast amounts of leverage available to investors and asset buyers.

This leveraging up was the greatest single element in the asset surge of the last few years. In fact, the breadth of the gains tells me we didn't have an "asset bubble," but rather a "leverage bubble." As Jeremy Grantham points out in his latest letter, leveraged loans (so-called "bank loans" often funded by hedge funds rather than banks) are a good candidate for the "bubble" label, as their volume in the first half of 2007, at $545 billion, was up 60% over the same period in 2006, which showed a similarly dramatic increase over 2005. Leverage (along with the lowered standards that resulted from eagerness to put borrowed capital to work) was the common thread in much of the appreciation that took place across asset classes and regions.

Now we're having a chance to see – once again – that the process works in both directions. And as so often is the case, the air tends to come out of the balloon far faster (and more violently) than it went in. The process is mesmerizing – like watching a train wreck happen.

<u>The Engine of Growth Seizes Up</u>

The pervasiveness of leverage throughout the financial system means the slowing process comes in many forms and takes many twists and turns. It's not possible – or necessary – to enumerate all of them. All we need are a couple of examples. For these we'll take a look at collateralized debt obligations, or CDOs.

For a simple example, consider commercial mortgage-backed securities, or CMBS. Over the last few months, Bruce Karsh has pointed out that prices for CMBS were falling even though the business of being a landlord was good and prices of buildings were increasing.

His explanation has been that many CDOs held both subprime paper and the riskier tranches of CMBS. Because of the developments in the subprime area, (1) they were affected by psychological contagion, (2) new ones couldn't be formed, meaning CDOs ceased to be buyers of new CMBS, and (3) some faced the need to reduce their leverage and raise cash. Unable to sell subprime assets (or not wishing to recognize losses if they could be deferred), they've been selling CMBS, putting downward pressure on prices. That's how problems in one asset class can depress prices in another.

Now let's look a little deeper. Bear in mind that CDO managers are paid to (1) issue debt in tranches that vary in terms of seniority and promised return and (2) use the proceeds to assemble portfolios of debt instruments. Borrow and buy, borrow and buy. A CDO manager's compensation increases in proportion to the amounts involved and is locked in for the term of the CDO. Thus CDO managers, like mortgage brokers, were motivated to play a major part in what I described in "The Race to the Bottom" in February: **"a market where a desire for quantity and speed has taken over from an insistence on**

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quality and caution." Not all managers succumbed to this temptation, of course, but it was there.

CDOs have been among the greatest contributors to the recent upswing. To a large extent they were a bottomless pit that could never be filled, a prime source of demand for debt. Why was their growth so strong? Because they offered a terrific deal, attracting vast quantities of money that had to be invested. What was that deal? Simple: high-rated debt at low-grade yields.

Too good to be true? Of course. The ratings were too high because rating agency analysts had to rate exotic structured products with which they had no experience (and probably no true understanding). And I'm confident the CDO managers were very persuasive, using sophisticated statistical models to explain how safe they were thanks to portfolio diversification and over-collateralization. For this reason, many tranches of CDOs stuffed with non-investment grade debt received investment grade ratings, looked cheap based on their attractive promised yields, and thus sold out rapidly.

CDOs were among the greatest buyers of residential mortgage-backed securities (RMBS) and non-investment grade leveraged loans. I'll bet some investors even leveraged up to buy the debt of these highly leveraged entities, which in turn used their capital to buy highly leveraged paper. Could the end be in doubt? This mode of response to the low-return environment of the last few years was doomed to end badly.

Now the fallacies in this approach have been exposed, with widespread ramifications:

- Because the ability to create new CDOs may be greatly curtailed, they're unlikely to represent much of a source of demand for new leveraged loans.
- In that case, future buyouts dependent on leveraged loan issuance won't be funded as readily.
- Billions in bridge loans that investment banks extended for buyouts appear to be "hung" because of the difficulty in refinancing them through sales to investors.
- The investment banks behind the loans are likely to encounter substantial losses as they're marked down to make them salable.
- Outstanding high yield bonds and leveraged loans will have to decline in price (and rise in yield) to make them competitive with this marked-down buyout paper.
- Debt that has been inventoried to facilitate the formation of new CDOs may have to be dumped at losses now that the CDO creation process has shrunk.
- Investment banks that made bridge loans and amassed inventories for non-existent CDOs may be unwilling to extend new financing from their balance sheets.
- Fewer buyouts will be able to be financed as long as the debt markets remain in this condition.
- Thus the "LBO put" may no longer be a force in the stock market, in which case investors will no longer be able to count on buyout funds to purchase companies at premium prices.

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How did the increase in subprime mortgage delinquencies lead to last week's 580 point drop in the Dow? These are some of the ways. **Fault lines run through portfolios, markets and economies, and usually they are exposed only in times of crisis. The fault line this time came in the form of pervasive leverage.**

The Role of Psychology

At the end of each day, Oaktree's debt trading desk sends out an email recapping our buys and sells, along with market developments and the day's biggest headlines. On July 26, (the day the Dow declined 312 points), one of the headlines read "Paulson Says Subprime-Mortgage Collapse Doesn't Threaten Economic Growth."

On the simplest level, there's every reason to understand that the failure to make monthly payments on the part of a bunch of mortgage borrowers at the bottom of the credit ladder won't have direct effects far beyond their local communities and the holders of their loans. But (1) the government usually does a poor job of anticipating second-order consequences and (2) politicians have every incentive to act as cheerleaders for the economy and downplay the negatives. Unlike distressed debt investors and other bargain hunters, no officeholder wants to see economic weakness, since it tends not to do much for re-electability.

Even leaving aside this factor, the issue here comes down to the difference between the direct workings of the "real" economy and the follow-on effects of psychology. **I believe the latter are profound and have the ability to overwhelm the former. In fact, I sometimes think there's little to the economy other than psychology – and thus that the real economy simply can't be distinguished from the psychological one.**

- If consumers feel insecure about their economic future, they won't buy.
- If they don't expect consumers to buy, manufacturers of consumer goods will cut back production, and they certainly won't produce to build inventories. Instead they'll downsize by laying off workers, further adding to consumer woes.
- Pessimistic consumer goods manufacturers won't invest in plant expansion, so construction companies and manufacturers of production equipment will suffer as well.
- All of this will be exacerbated by the reduced willingness of worried lenders to provide debt capital, or at least their insistence on higher interest rates to cover the increased risks.
- At the extreme, government tax revenues might decline, necessitating restrictive tax increases or the troubling growth of deficits.

It's all a matter of expectations. So when someone says, "psychological influences aside, I don't think there'll be much of an impact," I wouldn't give that statement much weight. It's entirely understandable that, despite favorable fundamentals, newly chastened investors have pulled back into their shells, largely because of the profound effect of a downturn in psychology.

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* * *

In the last few weeks, investors have learned some painful lessons. They went from feeling they understood exactly what was going on to realizing they merely had been carried along in a rosy environment. They learned (1) that they hadn't accurately gauged the risks they were taking when they invested in innovative and highly leveraged structured entities, (2) that the rating agencies they'd relied on didn't know either, and (3) that in understating risk they hadn't demanded enough of a risk premium or sufficient protective covenants. They learned the hard way that leverage magnifies losses as well as gains. And they learned that negative developments in a far-off corner of the economy can affect them profoundly. There's absolutely nothing new in any of this.

In just the last two weeks, we've seen headlines such as these:

- Subprime Uncertainty Fans Out
- Bear Stearns Tells Investors Funds Worthless
- Crisis Forces Banks to Make Hobson's Choice
- Banks Delay Sale of Chrysler Debt As Market Stalls
- Chrysler, Boots Financing Woes Dim "Golden Era" for Leveraged Buyout Firms
- A Second Day of Declines Caps the Worst Wall Street Week in Years
- Credit Crunch May Derail Buyout Boom; LBOver
- Fears Intensify on Economy, Despite Growth
- Hedge Fund Deleveraging Could Be Next Big Worry

What these developments mean for the future – and how far this swing toward negative events and negative psychology will go – is absolutely unknowable. Is this just a bump in the road, like the Asia-related declines that rippled through markets in the second quarter of 2006 and the first quarter of 2007, from which the recovery was swift? Or are these events the first steps toward a major credit crunch that will bring on a recession? No one knows, including us.

But what we do know is that the bull-market excesses I decried in my memo of two weeks ago (and in "The New Paradigm" in October and "The Race to the Bottom" in February) have reversed for the moment, with profound effects on asset prices. **Just as risky companies could obtain ridiculously cheap and easy financing a month ago, now the debt of perfectly good companies is providing generous promised returns and sometimes is unsalable.** Oaktree bottom fishers who've felt like they've been cooling their heels for the last few years are smiling for a change.

And mindfulness of cycles is on the way to being restored. When things can't get better – as some buyout GPs pointed out earlier this year – they won't. When the pendulum reaches the extreme of its arc, it will swing back. When markets are priced for perfection, they will disappoint. And when investors demand inadequate compensation for bearing risk, they will learn the error of their ways. With the word "eventually" implicit in these statements, I'm 100% sure they're all correct.

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I can't say, "This is it," but I am willing to say, "This is more like it." **It'll always go this way. Investors should learn that simple lesson. But most never will.** That's what the philosopher Santayana had in mind when he said, "Those who cannot remember the past are condemned to repeat it."

July 30, 2007

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Memo to: Oaktree Clients

From: Howard Marks

Re: It's All Good

Readers of my memos know that one thing I believe in most strongly – and harp on most frequently – is the inevitability of cycles. They're something we can depend on absolutely.

Several of my memos have dealt with cycles, starting from the very beginning: "First Quarter Performance" (April 11, 1991), "Will It Be Different This Time?" (November 25, 1996), "You Can't Predict. You Can Prepare." (November 20, 2001) and "The Happy Medium" (July 21, 2004). I've said in the past that I consider "You Can't Predict," a primer on cycles, to have been one of my best, and also that it evoked the least response of any memo in this decade. Thus I'm offering it as a twofer with this memo; copies are available on request at no additional cost.

I always say that while we can't know where we're going, we ought to know where we are (in cyclical terms). Understanding our environment can help us decide what tactics to employ, how aggressive to be, and which potential mistakes we should try hardest to avoid. Being conscious of cycles can be extremely helpful, even if we can't see the future.

Thus I'm going to devote this memo to the cycle that's been underway for the last few years. **In terms of amplitude, breadth and potential ramifications, I consider it the strongest, most heated upswing I've witnessed. A lot of this is because people seem to think everything's good and likely to stay that way.**

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Cycles in the World of Investing

The basics of cycles are simple. The economic cycle gives rise to recessions and recoveries, creating the business environment. This produces a business cycle marked by rising and falling sales and profits. The credit cycle swings more radically, such that capital market conditions alternate between irrationally generous and unfairly restrictive. Likewise, market cycles fluctuate much more than do the more "fundamental" economic and business cycles, due largely to the volatile cycle in investor psychology.

In this latter regard, I'll reprint a few paragraphs from "First Quarter Performance," the 1991 memo cited above. I think they capture investors' pattern of behavior.

> The mood swings of the securities markets resemble the movement of a pendulum. Although the midpoint of its arc best describes the location of the pendulum "on average," it actually spends very little of its time there. Instead, it is almost always swinging toward or away from the extremes of its arc. But whenever the pendulum is near either extreme, it is inevitable that it will move back toward the midpoint sooner or later. In fact, it is the movement toward the extreme itself that supplies the energy for the swing back.

Investment markets make the same pendulum-like swing:

- between euphoria and depression,
- between celebrating positive developments and obsessing over negatives, and thus
- between overpriced and underpriced.

This oscillation is one of the most dependable features of the investment world, and investor psychology seems to spend much more time at the extremes than it does at the "happy medium."

Polar Opposites

My 2004 memo, "The Happy Medium," took its title from this last phrase and went beyond the three listed above to discuss additional pairs of opposites between which the investment pendulum oscillates:

- between greed and fear,
- between optimism and pessimism,
- between risk tolerance and risk aversion,
- between credence and skepticism,
- between faith in value in the future and insistence of concrete value in the present, and
- between urgency to buy and panic to sell.

I find particularly interesting the degree to which the polarities listed above are interrelated. When a market has been rising strongly for a while, we invariably see all nine of the elements listed first. And when the market's been declining, we see all nine of the elements listed second. Rarely do we see a blend of the two sets, given that the components in each are causally related, with one giving rise to the next.

Usually, when either set of polar extremes is in the ascendancy, that fact is readily observable, and thus the implications for investors should be obvious to objective observers. **But of course, the swing of the market pendulum to one set of extremes or the other occurs for the simple reason that the psyches of most market participants are moving in the same direction in a herd-like fashion.** Few of the people involved actually are objective. To continue a thread from my last memo, "Everyone Knows," **expecting widespread clinical observation during a market mania makes about as much sense as saying "everyone knows the market has gone too far." If many people recognized that it had gone too far, it wouldn't be there.**

Between the two sets of cyclical extremes, I have no doubt that the environment of the last few years has been marked by the elements listed first above, not second: euphoria, greed, optimism, risk tolerance and credence; not depression, fear, pessimism, risk aversion and skepticism. Certainly it's been the recent consensus of investors that, "It's all good."

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Unusual Breadth

In the past we've seen bull markets in equities, commodities and real estate. And we've seen bull markets in the U.S., Japan and the emerging markets. But this time around, we've been seeing a near-global bull market, where the participating sectors vastly outnumber those left out.

In his April letter to investors, entitled "The First Truly Global Bubble," Jeremy Grantham summed up the worldwide nature of the good times.

> Never before have all emerging countries outperformed the U.S. in GDP growth over a 12-month period until now, and this when the U.S. has been doing well. Not a single country anywhere – emerging or developed – out of the 42 listed by *The Economist* grew its GDP by less than Switzerland's 2.2%! Amazingly uniform strength, and yet another sign of how globalized and correlated fundamentals have become, as well as the financial markets that reflect them.
>
> Bubbles, of course, are based on human behavior, and the mechanism is surprisingly simple: perfect conditions create very strong "animal spirits," reflected statistically in a low risk premium. Widely available cheap credit offers investors the opportunity to act on their optimism. Sustained strong fundamentals and sustained easy credit go one better; they allow for continued reinforcement: the more leverage you take, the better you do; the better you do, the more leverage you take.
>
> A critical part of the bubble is the reinforcement you get for your optimistic view from those around you. And of course, as often mentioned, this is helped along by the finance industry, broadly defined, that makes more money when optimism and activity are high. . . . To say the least, there has never ever been anything like the uniformity of this reinforcement.

The March issue of Marc Faber's Gloom, Boom & Doom Report described the pervasiveness of the positive effect on markets. He listed four "bubbles of epic proportions" that he has witnessed: metals, mining and energy in the 1970s; Japanese equities and real estate and Taiwanese equities in the late 1980s; emerging markets in the 1990s; and TMT at the end of the 1990s. In contrast to the present experience, he pointed out,

> . . . all had one common feature: they were concentrated in just one or very few sectors of the economic or investment universe and were accompanied by a poor performance in some other asset classes. . . . Currently, looking at the five most important asset classes – real estate, equities, bonds, commodities, and art (including collectibles) – I am not aware of any asset class that has declined in value since 2002! Admittedly some assets have performed better than others, but in general every sort of asset has risen in price, and this is true everywhere in the world.

It's interesting not only to see just about everything rise at the same time, but also to see people act as if this is likely to continue for a prolonged period. Usually that just doesn't happen.

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It's Different This Time

My memos are full of quotations, adages and old saws. I'm attached to a few and tend to use them over and over. Why reinvent the wheel, especially if the old one can't be improved upon? Hopefully the things I borrow contain enough wisdom to make them worth repeating.

Equally worth repeating are the statements I cite as investor mistakes. They, too, are highly instructive . . . in the sense that they're heard often and must be recognized for how potentially toxic they are. **None is as dangerous as "it's different this time." Those four little words are always heard when the market swings to dangerously high levels. Like so many of the polar opposites enumerated above, it's not just the sign of an absurd condition. It's a prerequisite.**

I first came across the phrase in what for me was a seminal article, "Why This Market Cycle Isn't Any Different," by Anise C. Wallace (New York Times, October 11, 1987). The stock market's rapid ascent at the time was being attributed to (or excused by), among other things, (1) the outlook for continued economic growth, given that the economy had learned how to correct itself painlessly, (2) the likelihood of continued buying of U.S. stocks by foreign investors piling up dollars with no better place to go, and (3) the fact that stocks weren't overvalued compared to other assets, which had also appreciated.

But Ms. Wallace countered as follows: "No matter what brokers or money managers say, bull markets do not last forever. In general, investment professionals say, cycles and markets differ only by degree." **And of course, in the next eight days the Dow fell 30%.**

It wasn't just 1987. People also came to believe the business cycle had been tamed in 1928 and in the late 1990s. And wouldn't you know, I'm hearing it again today:

- The Fed's skillfully walking the tightrope between stimulus and restrictiveness. (A few years ago people felt Greenspan was indispensable; now there's suddenly faith in Bernanke.)
- A service economy is less volatile than a manufacturing-based economy.
- As the Chinese and Indians get rich, their purchases from us will buoy our economy.

The truth is, we couldn't have great cyclical extremes if people didn't occasionally fall for a justification that's never held true before. How else might investors rationalize holding or buying despite highly elevated valuation parameters, low prospective returns and just-plain-wacky security structures? I still believe what I wrote in "The Happy Medium":

> Cycles are inevitable. Every once in a while, an up- or down-leg goes on for a long time and/or to a great extreme and people start to say "this time it's different." They cite the changes in geopolitics, institutions, technology or behavior that have rendered the "old rules" obsolete. They make investment decisions that extrapolate the recent trend. And then it turns out that the old rules do still apply, and the cycle resumes. In the end, trees don't grow to the sky, and few things go to zero. Rather, most phenomena turn out to be cyclical.

I'm hearing again – as often in the past – that we're in a Goldilocks economy. It's not so hot that there's risk of inflation accelerating, which would require restrictive measures on the part of the Fed.

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Or so cold that business will slow, with a depressing effect on profits. No, it's just right. Of course, this condition has never held for long in the past.

Earlier this year, Kenneth Lewis, chairman of Bank of America, summed it up candidly and simply: "We are close to a time when we'll look back and say we did some stupid things . . . We need a little more sanity in a period in which everyone feels invincible and thinks this is different."

And while I'm on the subject, I want to offer an important observation. No matter how favorable and steady fundamentals may be, the markets will always be subject to substantial cyclical fluctuation. <u>The reason is simple: even ideal conditions can become overrated and therefore overpriced.</u> And having reached too-high levels, prices will correct, bringing capital losses despite the idealness of the environment (see tech stocks in 2000). So don't fall into the trap of thinking that good fundamentals = positive market outlook (and especially not forever). As I said in "Everyone Knows," profit potential is all a matter of the relationship between intrinsic value and price. There is no level of fundamentals that can't become overpriced.

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<u>Willing Suspension of Disbelief</u>

One of the key requisites for enjoying a trip to the movies is a willingness to suspend disbelief. If they wanted to, moviegoers invariably could find plot glitches, technological impossibilities or historical inaccuracies. But they tend to overlook them in the interest of having a good time.

Similarly, investors' recurring acceptance that it's different this time – or that cycles are no more – is exemplary of a willing suspension of disbelief that springs from glee over how well things are going (on the part of people who're in the market) or rationalization of the reasons to throw off caution and get on board (from those who've been watching from the sidelines as prices moved higher and others made money).

The fact is, the higher asset prices go, the more people think assets are worth, and the more eager they become to buy them. A rip-roaring rally fuels buying appetites rather than make people think the appreciation may have moved prices to precarious levels. In the same way, price collapses cause people to worry rather than start combing the market for bargains.

In this way, the bullish swing of the investment cycle tends to cause skepticism and risk tolerance to evaporate. Faith, credence and open-mindedness all tend to move up – at just the time that skepticism, discrimination and circumspection become the qualities that are most needed.

<u>Financial Innovation</u>

Another element that I notice tends to rise and fall with the cycles is the level of financial innovation. Again, this is a cycle that's easily understood.

Wall Street exists to develop and sell new products, no less so than toothpaste manufacturers and movie studios. So why is it that some periods are rife with innovation and other periods totally lacking? It's because it's only in bullish times that investors accept financial inventions. When the market's in an up-swing, people tend to say, "Sure, I'll give it a chance" or "Good, I've

been looking for new ways to make money." But when the market has been moving down and people are tallying their losses, they tend to be much less open to new ideas. **In the financial world, the mother of invention isn't necessity, its salability.**

In the roaring 1960s we saw Nifty-Fifty investing, dual shares from mutual funds and discounted shares issued through unregistered private placements without any mechanism for subsequent liquidity. In the '80s we saw portfolio insurance – a surefire way to enjoy the appreciation potential that comes with large commitments to equities, but with much less risk. And in the '90s, no one could think of a reason why every dot-com, e-tailer, media aggregation and venture capital fund wouldn't be successful. Of course, all of these things failed to function as promised and either disappeared forever or experienced severe corrections.

And what have we seen in the last few years? CDOs, CLOs, CPDOs, SPACs and securitizations of every type. In the current environment – marked by decent returns; disinterest in conventional, safe assets; and openness to risky investments – few people seem to dwell on the reasons why something new might not work. No one asks why, if a $2 billion fund was successful, a $20 billion fund shouldn't be as well.

Derivatives deserve particular attention in this regard. On July 8 The Wall Street Journal noted that,

> Over the last six years, global futures trading on exchanges has grown nearly 30% a year. The total derivatives market is valued at about $500 trillion, four times the value of all publicly traded stock and bonds. . . . The four biggest futures exchanges have launched more than 300 new derivatives products in just the last few years . . .

Particularly intriguing, it seems the value of outstanding credit default swaps – insurance against defaults among corporate debt instruments – exceeds the value of the instruments insured. How will this work if a wave of defaults occurs? How well are the provisions of these insurance contracts documented? How readily will the writers of the insurance pay up? What will be the effect if conditions are chaotic? No one knows the answers to these questions. **Inventions originate in up markets, but they're tested in down markets. Rarely do they work entirely as hoped.**

In down markets, people see potential risks that can't be argued away. But in markets like this one, they see opportunities they must seize to avoid being left behind. Thus, like the other things I'm discussing, a high level of financial innovation is symptomatic of a market that's been rising for a good while and may be behaving in an overconfident manner.

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What, Me Worry?

Two recent innovations deserve particular attention here: structured entities and what the British call "selling onward." **Both embody an impractical expectation: that financial engineering can eliminate risk. Combined, they're particularly dangerous.**

In creating structured entities such as CDOs, managers bring together investors with different risk/return appetites. To satisfy those varying appetites, the investors are sold claims with different priorities with regard to the entity's portfolio and cashflows, and with projected returns that are proportional. The managers use the investors' capital to assemble a portfolio of assets. And each investor receives a security with risk and return tailored to its needs.

It should work . . . in theory. My biggest knocks on structuring are these: First, many of the people who develop the structured entities and rate their securities know more about probabilities than they do about the specific assets in the portfolio, something that's particularly dangerous when portfolios are highly leveraged. And second, there seems to be a belief that this process – at Oaktree we call it "slicing and dicing" – can reduce the overall risk in the system.

If risk is reduced, I'd like to know where the eliminated part goes. If ten people each hold a share of ten highly correlated risky assets, I don't think the overall system is much less risky than if each of the ten people held one entire risky asset. At the extreme, however, it may be true that risk sharing reduces the likelihood that a spate of failures will precipitate a generalized credit crunch.

Selling onward is the process through which the originating of assets and the owning of assets are separated. In the old days, banks made loans and mostly held on to them, syndicating a bit to build relationships and limit risk. Nowadays, banks originate loans largely to generate loan and syndication fees, and actually living with the loans is much less prevalent. After they're originated, assets such as corporate loans, mortgages, auto paper and credit card receivables are often packaged and sold, sometimes in the form of securities. There's a belief that this process, too, makes the world less risky.

I fail to see net benefits here as well. Instead, I think this process introduces great moral hazard. When the people making loans aren't going to remain dependent on the borrowers they give money to, they have little incentive to actively police risk. Thus I have grave doubts about a lot of the credit decisions being made.

For an extreme example, take a look at the subprime mortgage brokers. Were they motivated to make prudent credit decisions? No; they were motivated to create a lot of paper. **There's something wrong when it's in someone's best interests to lend money to unqualified borrowers, but this was the case in subprime mortgages.** Obviously this occurred because mortgage brokers weren't risking their own money. With selling onward so prevalent, an originator just had to hope the borrower would make the first few payments, so that delinquencies wouldn't surface before the originator's repurchase obligation expired and the loans became the buyer's problem. How could buyers have been silly enough to purchase loans made by brokers operating under this set of incentives?

Now, let's combine structuring and selling onward. Here's how I see it working:

- A mortgage broker makes a bunch of loans without knowing much about creditworthiness (think about so-called "liar loans") or caring much about creditworthiness (because he intends to sell them momentarily).
- An investment banker buys a few hundred of these loans, also without knowing much about them (because of their sheer numbers), in order to package them into residential mortgage-backed securities (RMBS) and sell them onward.
- An investment manager buys a few dozen RMBS, about which he doesn't know much (also the numbers) or care much (because the fees and potential profits incentivize him to put a lot of money to work fast). They become part of the portfolio of a CDO, against which debt is issued.
- A rating agency analyst assigns ratings to the CDO debt, about which he can't know much (lack of specialized expertise; vast number of underlying assets; structural complexity and the newness

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- A hedge fund manager buys CDO debt about which he doesn't know much (with thousands of underlying mortgages having been sliced and diced) or worry much (given the high debt ratings).

Concoctions like this are tolerated only in heady times. Clearly the results can be incendiary. We're waiting to see the final outcome – and perhaps to pick among the ashes.

One last thought: **Let's say slicing, dicing and selling onward do have the potential to reduce the overall level of risk in the system, all other things being equal. Even if that were true, the other things wouldn't remain equal; market participants would adjust their behavior to the new reality and in so doing return risk to its old level.** On May 23, the Financial Times said this about trying to reduce risk by selling onward and by obtaining credit insurance via derivatives:

> This makes banks less vulnerable to individual defaults. **But it could also be making them feel so comfortable about lending risks that they are making more risky loans.** Outside investors such as hedge funds are gobbling them up, either because they also think they are protected with credit derivatives or because they are desperate to find somewhere to place their cash. This has triggered a collapse in the standards used to conduct and fund deals. (Emphasis added)

Again, no matter how good fundamentals may be, humans exercising their greed and propensity to err have the ability to screw things up. **Perhaps Myron Scholes put it most succinctly (The Wall Street Journal, March 6): "My belief is that because the system is now more stable, we'll make it less stable through more leverage, more risk taking."**

The L Word

Some of the most glaring innovation this time around has taken place in the area of leverage. It's not that leverage hasn't been available and been used before: In the late 1980s, companies like RJR were the subject of leveraged buyouts in which 95% of the purchase price was borrowed. Nowadays, debt rarely constitutes much more than 80% of buyout capital structures, but the terms of the debt and the ease of obtaining it are startlingly accommodating.

Unlike the historic norm, it's routine today to issue CCC-rated bonds. It's easy to borrow money for the express purpose of distributing cash to equity holders, magnifying the company's leverage. It's so easy to issue bonds with little or no creditor protection in the indenture that a label has been coined for them: "covenant-lite." And it's possible to issue bonds whose interest payments can be paid in more bonds at the option of the borrower.

The first requirement for an elevated opportunity in distressed debt is the unwise extension of credit, which I define as the making of loans which borrowers will be unable to service if things get a little worse. This happens when lenders fail to require a sufficient margin of safety.

Here the interrelatedness of cycles is quite evident. Good economic times bring rising profits. Rising profits cause the default rate to subside. And the low default experience erases lenders' reticence. Among other things, they become willing to lend money so that troubled companies can

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stay afloat and hopefully outgrow their problems. Today that's called "rescue finance"; in less rosy times it might be called "throwing good money after bad."

The default rate in the high yield bond universe is at a 25-year low on a rolling-twelve-month basis. Under such circumstances, how could the average supplier of capital be expected to maintain a high level of risk aversion and prudence, especially when doing so means ceding all the loan making to others? It's not for nothing that they say "The worst of loans are made in the best of times."

The Downside of Leverage

If lenders are acting in an imprudent fashion, what's the effect on the borrowing companies? If loans are available too readily, is it right or wrong to borrow? These are among the most interesting questions of the day.

Lots of good things have been said about leverage. In the late 1980s, when venerable American companies were being bought in leveraged buyouts structured with debt/equity ratios of 25-to-one, we were told that an underleveraged balance sheet is indicative of a sub-optimal capital structure and excessive use of high-cost equity, and that significant leverage sharpens management's focus on cash flow and leads to better expense control.

The only thing omitted was the reminder that equity – which doesn't require the periodic payment of interest or the repayment of principal at maturity – represents a company's margin of safety. It's the capital layer that absorbs the first blow in tough times without occasioning an event of default. **While leverage may magnify gains in good times, it's a healthy layer of equity that gets companies through the bad times.**

It's inescapable that, all other things equal, greater leverage increases a company's likelihood of experiencing financial distress. Thus, with lenders enjoying a carefree recent experience and consequently financing some unwise deals – and with borrowers eager for the enhanced upside potential that comes with leverage – it seems clear that we'll see rising rates of default and bankruptcy a few years down the pike. This is especially true if, as has often been the case recently, debt is incurred not just to leverage the company's equity, but to finance payouts to equity holders that reduce or eliminate the equity.

So then, are private equity funds – raising much more equity capital than ever, and doing the biggest deals in history at a rapid-fire pace, at rising transaction prices and rising leverage ratios – doing a smart thing or making a mistake? It all depends on how you look at things. The funds seem to be looking in terms of optionality.

Ketchup, Easy Money and Optionality

I was a picky eater when I was a kid, but I loved ketchup, and my pickiness could be overcome with ketchup. I would eat hamburgers, frankfurters, veal cutlets, filet of sole and frozen fish sticks, but as far as I was concerned, they were all just vehicles for ketchup. The ketchup of today is easy borrowing, and private equity managers are entering into a large number of transactions to access it.

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Let me illustrate what I consider to be the thought process: If you were offered the chance to buy companies with 100% debt financing and no money of your own, how many would you buy? The smart answer is, "All of them." Not just the well-run ones? Or the growing ones? Or the profitable ones? No; all of them. Some would produce positive cash flow and/or appreciation, which you'd welcome. The others would be unsuccessful, but with none of your own money invested, you'd just walk away. That's optionality.

Optionality is a new-age finance term for the ability to cheaply obtain a call on asset appreciation, creating the possibility of profits out of proportion to potential losses. That's the way it is in venture capital: all you can lose is your investment, but you can multiply it hundreds of times simply by finding the next Google. Even though venture capital investing produces only occasional success, it's justified by the occasional outsized payoff.

I think that's the deal today in mega-private equity. In their highly successful first decade of 1975-85, LBO funds invested in small, underpriced industrial concerns or orphaned corporate spinoffs. They paid low prices for stable companies, financed their purchases with moderate amounts of debt, and put a lot of energy into improving the companies' operations. Both their batting averages and their overall rates of return were attractive.

But I'm not sure that's the model today. Few companies are languishing on the bargain counter, and everyone knows that if buyout funds bid for a company, the shareholders had better take a good look at what they're giving up. Likewise, buyout funds are buying well into a period of economic expansion, and the scope for improvement in operations may be limited.

No, the model today seems different: pay premiums to open-market prices for prominent, multi-billion dollar companies, sometimes after the boards, shareholders or other bidders have forced prices higher. Borrow large sums to finance the deals. Generate whatever fundamental improvement you can. Hope the market will provide a highly leveraged payoff. And, given the enormity of the scale, get rich off management fees, ancillary fees and the profits from the ones that work.

In other words, it seems that, relative to the past, the thought process in mega-private equity is based on the combination of (1) ultra-cheap financing, (2) high fees, (3) quick withdrawal of equity capital and (4) a lower batting average but big payouts on the winners. The optionality is certainly on the GPs' side. Let's hope it works for the LPs as well.

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If the Lender's a Sap, Is the Borrower a Genius?

I have a lot of experience looking at leveraged transactions from the standpoint of the lender, but less experience as a borrower. Thus I found it novel – even surprising – to read a January memo on this subject from Carlyle founder William Conway to his colleagues, with thoughts echoing mine:

> As you all know (I hope), the fabulous profits that we have been able to generate for our limited partners are not solely a function of our investment genius, but have resulted in large part from a great market and the availability of enormous amounts of cheap debt. This cheap debt has been available for almost all maturities, most industries, infrastructure, real estate, and at all levels of the capital structure. Frankly, there is so much liquidity in the world financial system, that lenders (even "our" lenders) are making very risky credit decisions. . . .

> I know that this liquidity environment cannot go on forever. I know that the longer it lasts the more money our investors (and we) will make. I know that the longer it lasts, the greater the pressures will be on all of us to take advantage of this liquidity. And I know that the longer it lasts, the worse it will be when it ends. And of course when it ends the buying opportunity will be a once in a lifetime chance. But, I do not know when it will end. . . .
>
> Last year, I asked you to be humble, ethical and optimistic. This year I am asking you to be careful as well.

In 1990-91, our distressed debt funds made a fortune buying the obligations of companies that had been loaded up with too much debt in LBOs in the late '80s. Chastened by that experience, lenders in the '90s didn't provide enough leverage to make buyout companies much of a factor in the debt collapse of 2002. But with the memory of having 1990-91 faded, leverage became freely available in the last few years, and thus we have little doubt we'll be buying a great deal of distressed LBO debt the next time around.

When all the above is taken together, it seems likely that a few years out, we'll see a landscape littered with companies that were crippled with excessive debt loads and lenders who weren't repaid. What happens to private equity funds and their investors will depend on the outcome of a game of hot potato: will they get their capital – and their gains – out of the over-leveraged companies before they go sour? We'll see.

<u>But Don't the Borrowers Have a Free Pass?</u>

Much is being made of the possibility that today's debt is default-proof. "Toggle bonds" give borrowers the option of paying interest in the form of more bonds for a while. And covenant-lite indentures mean the likelihood of an interim technical default has been reduced. Do these developments reduce the overall risk?

This, too, goes back to the concept of optionality. The value of an option is greater the longer it has to run, and options that can't be extinguished early are worth more than those that can.

Think of someone who issues ten-year bonds to raise the money with which to buy a company. On the surface, it seems he has ten years for his purchase to work out profitably, at the end of which period he has to repay his lenders. In other words, he has a ten-year option on the company's appreciation potential. But what if the company gets in a bind in the early years and misses an interest payment? Or if an economic slowdown causes a technical breach of a covenant? In past downturns, these things have forced borrowers to pay lenders for extensions or forbearance, and they have led to defaults. Those things may be somewhat less likely nowadays.

It is true that payment-in-kind and covenant-lite loans reduce the likelihood of interim defaults. But does that mean the credit landscape is risk-free and lenders can breathe easy? Sooner or later, debt has to be repaid or refinanced, and the credit market may not be accommodating at that moment; this is especially true if the company's fortunes have deteriorated. Not enough of a company's debt may be default-proof to make it invulnerable. The price of the debt may decline with the fundamentals,

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even if default isn't an immediate threat. And the free pass in the interim may just delay – but also worsen – the eventual outcome.

Under a traditional structure, a company might default in the third year of a bond's life, by which time 20% of its value may have evaporated. But with these new wrinkles, it might not happen until year five . . . when 60% of the value is gone. **Yes, lenders are giving borrowers more rope. But will it prove to be a lifeline for the company or a hangman's noose?** A lot will depend on how things go while the postponed default is in abeyance.

This is yet another area where up-cycle faith that risk has been reduced can convince people to add back the risk. As The Wall Street Journal said of standby revolvers on May 11, "Thanks to debt arrangements like this, some private-equity buyers say they are doing deals they would otherwise not do."

What Could Cause This Upward Cycle to Falter?

Since I insist that the good times can't roll on forever, I'm often asked what might make them stop. I don't have any inside information on this subject, but I can enumerate the possibilities:

1. economic slowdown,
2. reduced willingness to lend or insistence on higher interest rates, perhaps due to increased worry about credit risk,
3. systemic problems like a crisis in derivatives or a cluster of hedge fund meltdowns,
4. exogenous factors such as $100 oil, a dollar crisis, terrorist acts, and
5. the things I haven't thought of.

First, I want to point out that these things are not unrelated. A reduction in lenders' willingness to lend may stem from an economic slowdown. An economic slowdown could be brought on by an exogenous event. It's when there's a confluence of these things that the debt market gets into real trouble, as was the case in 1990 and 2002.

Second, these things are often unpredictable. I like to remind people that the best buying opportunity we ever had in distressed debt arose in the summer of 2002, when recession, credit crunch, 9/11, Afghanistan, telecom meltdown and the scandals at Enron et al. occurred all at once. Few if any of these were predictable twelve months earlier.

And third, the one we should worry about most is number five. Investors can cope with the things they can anticipate, analyze and discount. They have more trouble with the rest. I love hearing people from the "I know" school say, "I'm not anticipating any surprises." Those are the developments that can knock a market into a cocked hat. As Martin Wolf wrote in the Financial Times on May 2, "The most obvious reason for taking today's euphoria with a barrel of salt is that nobody ever expects shocks. That is what makes them shocks."

Where do we stand in the cycle? In my opinion, there's little mystery. I see low levels of skepticism, fear and risk aversion. Most people are willing to undertake risky investments, often because the promised returns from traditional, safe investments seem so meager. This is true even though the lack of interest in safe investments and the acceptance of risky investments have rendered

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the slope of the risk/return line quite flat. Risk premiums are generally the skimpiest I've ever seen, but few people are responding by refusing to accept incremental risk.

Peter Bernstein put it this way in the February 15 issue of Economics and Portfolio Strategy:

> I hear over and over that we live in an era of low expected returns. The rational response to low expected returns is to withdraw and wait until expected returns are higher. That response to low expected returns appears to have gone out of fashion. Today's response is to seek higher returns from higher risks in a low-risk environment – or, worse, to underestimate the risks taken. [Of course, I am less certain than Peter that we are in a low-risk environment.]

Markets have tended recently to move up on positive developments and to recover easily from negatives. I see few assets that people are eager to get rid of, and few forced sellers; instead, most assets are strongly bid for. As a result, I'm not aware of any broad markets that I would describe as under-priced or uncrowded. I will say, however, that some of the excess confidence that usually accompanies booms may be missing. Some of the people making risky investments today seem to be doing so with their fingers crossed. And even though they're optimistic enough to make these prosperity-oriented investments, they're also wary enough to want to hedge their bets by participating in distressed debt as well.

It is what it is. We've been living in optimistic times. The cycle has been swinging strongly upward. Prices are elevated and risk premiums are slender. Trust has replaced skepticism, and eagerness has replaced reticence. Do you agree or disagree? That's the key question. Answer it first, and the implications for investing become clear.

In the first quarter of this year, significant delinquencies occurred in subprime mortgages. Those directly involved lost a lot of money, and onlookers worried about contagion to other parts of the economy and other markets. In the second quarter, the impact reached CDOs that had invested in subprime mortgage portfolios and hedge funds that had bought CDO debt, including two Bear Stearns funds. Those who had to liquidate assets were forced – as usual – to sell what they could sell, not what they wanted to sell, and not just the offending subprime-linked assets. We began to read about ratings downgrades, margin calls and fire-sales, the usual fuel for capital market meltdowns. And in the last few weeks we've begun to see investor reticence on the rise, with new low-grade debt issues repriced, postponed or pulled, leaving bridge loans un-refinanced.

It is in this way that awareness of the inevitability of cycles is reawakened, and it is for reasons like these that the pendulum starts to swing back from one extreme toward the center of its arc . . . and then the other extreme. We never know whether a little jiggle is the start of the swing back and, if so, how far it will go. But we always should be aware that reversion will occur.

The last 4½ years have been carefree, halcyon times for investors. That doesn't mean it'll stay that way. I'll give Warren Buffett the last word, as I often do: "It's only when the tide goes out that you find out who's been swimming naked." **Pollyannas take note: the tide cannot come in forever. Time, tide and cycles wait for no man.**

July 16, 2007

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Memo to: Oaktree Clients

From: Howard Marks

Re: Everyone Knows

> **par·a·dox** *n* **1** a seemingly absurd or self-contradictory statement that is or may be true . . . **4** an opinion that conflicts with common belief. (Collins English Dictionary)

I'm sometimes asked to speak about investing with the choice of topic wide open. I like to begin by saying the thing I find most interesting about investing is how paradoxical it is: how often the things that seem most obvious – on which everyone agrees – turn out not to be true.

I'm not saying accepted investment wisdom is sometimes valid and sometimes not. The reality is simpler and much more systematic: **What's clear to the broad consensus of investors is almost always wrong.**

First, most people don't understand the process through which something comes to have outstanding moneymaking potential. And second, the very coalescing of popular opinion behind an investment tends to eliminate its profit potential.

I've been saving up ideas for a memo about how often the investing herd is wrong and accepted wisdom should be bet against. Then along came the March 1 issue of Mark Faber's "Gloom, Boom and Doom Report" and its lead quotation from William Stanley Jevons (1835-1882). Another chance for someone else to help me say it better, this time from 100-plus years ago:

> As a general rule, it is foolish to do just what other people are doing, because there are almost sure to be too many people doing the same thing.

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"Common Sense" and Other Oxymorons

Take, for example, the investment that "everyone" believes to be a great idea. In my view by definition it simply cannot be so.

- If everyone likes it, it's probably because it has been doing well. Most people seem to think outstanding performance to date presages outstanding future performance. Actually, it's more likely that outstanding performance to date has borrowed from the future and thus presages sub-par performance from here on out.
- If everyone likes it, it's likely the price has risen to reflect a level of adulation from which relatively little further appreciation is likely. (Sure it's possible for something to move from "overvalued" to "more overvalued," but I wouldn't want to count on it happening.)
- If everyone likes it, it's likely the area has been mined too thoroughly – and has seen too much capital flow in – for many bargains to remain.

- If everyone likes it, there's significant risk that prices will fall if the crowd changes its collective mind and moves for the exit.

Superior investors know – and buy – when the price of something is lower than it should be. And the price of an investment can be lower than it should be only when most people don't see its merit. Yogi Berra is famous for having said, "Nobody goes to that restaurant anymore; it's too crowded." It's just as nonsensical to say, "Everyone realizes that investment's a bargain." If everyone realizes it, they'll have bought, in which case the price will no longer be low.

The Anatomy of a Bargain

"Is it a good idea?" That's what everyone wants to know. And from time to time, popular opinion unites behind an investment, anointing it as a good idea – the next solution – the low-risk sure thing – the "silver bullet." Often this crowd mentality creates a self-fulfilling prophecy . . . for a while.

I've seen it many times in my 39 years in this business: "it's a good idea to invest in the stocks of high-growth companies" (or energy stocks, small companies, disc drive companies, emerging markets, venture capital funds, technology stocks, hedge funds, real estate, China and India, or private equity). But just as often, I've stated my view: **There's no such thing as a good idea. Only a good idea at a price.** Something can be a very good idea at one price and a very bad idea at another.

Invariably when I hear the media and the herd describe something as a good buy, it's without regard for price. They never say, "Internet stocks are a good buy at p/e ratios up to 50." Or "class-A office buildings are a good buy as long as the cap rate exceeds 7%." Or "private equity's a good idea at purchase prices below seven times EBITDA." Just "it's a good buy."

My response is simple: **There is no investment idea so good that it can't be ruined by a too-high entry price. And there are few things that can't be attractive investments if bought at a low-enough price.** When investors forget these simple truths, they tend to get into trouble.

How Money Is Made

The fact is, there is no dependable sign pointing to the next big moneymaker: a good idea at a too-low price. Most people simply don't know how to find it. If someone really knew, why would he share his knowledge? And when the investing herd or some media commentator expresses an opinion, they're invariably pointing in the wrong direction.

Large amounts of money (and by that I mean unusual returns, or unusual risk-adjusted returns) aren't made by buying what everybody likes. They're made by buying what everybody underestimates.

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In short, there are two primary elements in superior investing:

- seeing some quality that others don't see or appreciate (and that isn't reflected in the price), and
- having it turn out to be true (or at least accepted by the market).

It should be clear from the first element that the process has to begin with investors who are unusually perceptive, unconventional, iconoclastic or early. That's why successful investors are said to spend a lot of their time being lonely. As I wrote in "Dare to Be Great," non-conformists don't get to enjoy the warmth that comes with being at the center of the herd. But it should be clear that when you're one of many buying something, it's unlikely to be a special opportunity. It's only when few others will buy that you can get a bargain.

That's the thinking behind a brilliant observation that I heard in the 1970s, describing the three stages of a bull market:

- the first, when a few forward-looking people begin to believe things will get better,
- the second, when most investors realize improvement is actually underway, and
- the third, when everyone believes things will get better forever.

The loners who buy from a crowd of dispirited sellers can get a good deal – and high returns – because they're few in number and early. But when every Tom, Dick and Harriet joins the herd, after the merits of the situation have become obvious to all, they can't expect a bargain; the merits must be reflected fully – or to excess – in the price. In fact, each of those latecomers bears the risk of being the last to jump on the bandwagon . . . just before it goes off the cliff.

The Best Companies in America

As readers of these memos know, I first worked in the Investment Research Department of First National City Bank (now Citibank) in 1968. Whereas common stocks traditionally were bought on the basis of their issuers' current book value and earnings, "growth investing" recently had come into fashion. Under this new approach, buyers paid higher-than-usual valuation multiples for the stocks of "growth companies" in recognition of the above-average rates at which their earnings were projected to increase in the future.

Growth investing reached its zenith in the pursuit of the "Nifty Fifty," and that's the style the bank pursued to the virtual exclusion of all others. It consisted of buying the stocks of the best, fastest-growing companies in America, companies like IBM, Xerox, Polaroid, Kodak, Hewlett Packard, Texas Instruments, Perkin Elmer, Merck, Lilly and Avon. Each one was a corporate icon, or what I call a "head nodder" – one person says "Xerox" and everyone else nods and says "great company." **Head nodders are like silver bullets: always the subject of broad, unquestioning adoration, and thus invariably overpriced.**

The trap, of course, is that when everyone agrees something's a great company, it invariably comes at a great-company price. Some will turn out to actually be great companies, but the

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buyers of their stocks have already paid in full for greatness. Others will disappoint, and the stock of a disappointing company that's been bought at a great-company price can be a disaster.

By 1970, the scene had been set for just such a development by the Nifty Fifty investors' attitude toward valuation: "**These companies are so good, and growing so fast, that there's no such thing as a price that's too high**. If the price seems excessive given this year's earnings, just wait; the earnings will grow enough to justify the price." Those who participated can say they cared about price, but I never heard of anyone refusing to hold those stocks just because they were priced too high. Such discipline is rarely seen during investment manias.

The rest, as they say, is history. In the early and mid-70s, the wheels fell off. Common stock investing, which had become extremely popular, fell out of favor. Business Week ran its famous cover story, "The Death of Equities." The economy became mired in stagflation. Great companies' earnings failed to grow and sometimes contracted. Nifty Fifty stocks that had traded at p/e ratios of 80 and 90 fell to p/e ratios of 8 and 9 (really). And The Wall Street Journal eventually ran its customary listing of stocks that had lost 90% – a possible buy signal that depressed investors routinely ignore.

So we had a quick lesson in the folly of buying on supposed merit alone, without regard to price. But the lesson continued. Here in 2007, only a few of those "Best Companies in America" are still thought of as such. In fact, IBM, Xerox, Kodak and Polaroid all became distressed in the interim and required turnarounds. Warren Buffett made a related observation in this year's Berkshire Hathaway Annual Report: "Of the ten non-oil companies having the largest market capitalization in 1965 – titans such as General Motors, Sears, DuPont and Eastman Kodak – only one made the 2006 list."

The lesson is simple: beware sweeping statements, accepted wisdom and eternal verities, and look for pearls others haven't recognized.

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The Worst Companies in America

I know I tend to repeat myself in these memos – my wife Nancy never fails to remind me – but I don't think I've ever told the whole story of my entry into the world of high yield bonds.

In 1978, shortly after having organized and begun to manage Citibank's convertibles securities fund, I got a call from the boss: "There's some guy named Milken or something who works for a small brokerage firm in California. He deals in 'high yield bonds,' and a client wants us to manage a portfolio for them; can you find out what they are?" Obviously, that brief conversation changed my life.

Everyone associates Michael Milken with high yield bonds (no one says "junk" anymore), but few people know exactly why or how. Mike was neither the inventor (first to create) nor the discoverer (first to find) of bonds rated below investment grade. He's just the person who did the most with them. Here are the facts:

- For as long as bonds have been rated, there've been low-rated bonds. But prior to the late 1970s, non-investment grade bonds couldn't be issued as such. Rather, they were "fallen angels": bonds issued with investment-grade ratings that were subsequently downgraded due to deterioration on the part of their issuers.

- At Wharton, Mike read a 1958 study by W. Braddock Hickman which showed that over the period 1900 to 1949, lower-rated bonds had produced higher realized returns on average than higher-rated bonds. Sure some low-rated bonds defaulted, but higher yields and lower purchase prices on the many that didn't default more than made up for the ones that did.

- Mike concluded that low-rated bonds were an overlooked asset class; even for a weak credit, there had to be some yield that would compensate for the credit risk; thus it should be possible to issue bonds with speculative ratings; and he could make it happen.

- Thus Mike's contribution consisted of raising the profile of the asset class and proselytizing for it, making a market in high yield bonds and underwriting new issues. He wasn't the only one, just the most prominent figure by far. And the expansion of the universe of new issue high yield bonds from $2 billion to $200 billion that Mike presided over between 1978 and 1990 provided early impetus for the growth of buyout investing into the major activity it is today.

By the time I got the call described above, Mike had joined Drexel Burnham Lambert, started the high yield bond department, moved it to California and begun to underwrite new issue high yield bonds for corporate borrowers. He visited me at the bank in the fall of 1978, and it was even more of a learning experience than the one I got from the Nifty Fifty. Mike's logic was the direct opposite, and to me much more appealing. Here's what he told me:

- If you buy triple-A or double-A bonds, there's only one way for them to go: down. The surprises are invariably negative, and the record shows that few top-rated bonds remain so for very long.
- On the other hand, if you buy B-rated bonds and they survive, all the surprises will be on the upside.
- Because the investment process is prejudiced against high yield bonds, they offer yields that more than compensate for the risk.
- Thus you'll earn a superior yield for having accepted the incremental credit risk, and favorable developments can lead to capital gains as well.
- Your main goal should be to weed out bonds that may default.
- But diversification is essential, too, because some of the bonds you hold will default anyway, and your positions in them mustn't be large enough to jeopardize the overall return.

What an object lesson! What an epiphany! Buy the stocks of the best companies in America at prices that assume nothing can go wrong? Or buy the bonds of unloved companies at prices that overstate the risk of default, and from which the surprises are likely to be on the upside? Having seen fortunes lost investing in the best, it seemed much smarter to buy the worst at too-low prices.

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"If we avoid the losers, the winners will take care of themselves." Sound familiar? The motto we chose for Oaktree was inspired by a lot of people and events, but the morning I spent with Mike Milken in 1978 was the biggest single source of inspiration.

The Perversity of Risk

"I wouldn't buy that at any price – everyone knows it's too risky." That's something I've heard a lot in my life, and it has given rise to the best investment opportunities I've participated in. In fact, to an extent, it has provided the foundation for my career. In the 1970s and 1980s, insistence on avoiding non-investment grade bonds kept them out of most institutional portfolios and therefore cheap. Ditto for the debt of bankrupt companies: what could be riskier?

The truth is, the herd is wrong about risk at least as often as it is about return. A broad consensus that something's too hot to handle is almost always wrong. Usually it's the opposite that's true.

I'm firmly convinced that investment risk resides most where it is least perceived, and vice versa:

- When everyone believes something is risky, their unwillingness to buy usually reduces its price to the point where it's not risky at all. Broadly negative opinion can make it the least risky thing, since all optimism has been driven out of its price.

- And, of course, as demonstrated by the experience of Nifty Fifty investors, when everyone believes something embodies no risk, they usually bid it up to the point where it's enormously risky. No risk is feared, and thus no reward for risk bearing – no "risk premium" – is demanded or provided. That can make the thing that's most esteemed the riskiest.

This paradox exists because most investors think quality, as opposed to price, is the determinant of whether something's risky. But high quality assets can be risky, and low quality assets can be safe. It's just a matter of the price paid for them.

The foregoing must be what Lord Keynes had in mind when he coined one of my favorite phrases: ". . . a speculator is one who runs risks of which he is aware and an investor is one who runs risks of which he is unaware." In 1978, triple-A bonds were considered respectable investments, while buying B-rated bonds was viewed as irresponsible speculation. Yet the latter have vastly outperformed the former, few of which remain triple-A today.

Elevated popular opinion, then, isn't just the source of low return potential, but also of high risk. Broad distrust, disregard and dismissal, on the other hand, can set the stage for high returns earned with low risk. This observation captures the essence of contrarianism.

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The Unhelpful Consensus

The bottom line is that what "everyone knows" isn't at all helpful in investing. What everyone knows is bound to already be reflected in the price, meaning a buyer is paying for whatever it is that everyone thinks they know. Thus, if the consensus view is right, it's likely to produce an average return. And if the consensus turns out to be too rosy, everyone's likely to suffer together. That's why I remind people that merely being right doesn't lead to superior investment results. If you're right and the consensus is right, your return won't be anything to write home about. **To be superior, you have to be more right than the average investor.**

Let me give you an outstanding example of a dangerous consensus. Historic data, buttressed by two decades of good returns, produced near unanimity in the late 1990s regarding future equity returns. Ask 100 institutional investors and consultants in 1999, and virtually 100 would say "about 11%." There was little serious dissent. As a result, equity allocations were ratcheted up. Those who'd fallen behind because they were underweighted in equities earlier in the decade capitulated and bought more.

Where did the support for that 11% number come from? It's simple: recent results. Earlier work at the University of Chicago had put the average annual return on stocks closer to 9% into the 1960s, but a couple of decades of much higher returns pushed the cumulative experience – and thus the expectation – toward 11%. Shouldn't there have been support apart from experience? Was there an underlying economic process that would make stocks worth 11% more each year? Couldn't the last fifteen years, averaging well above 11%, have borrowed from the future by pushing up p/e ratios? Few people inquired. "You can't fight the tape," they said in essence. Who was willing to take the risk associated with a below-average weighting?

Well, the elevated prices produced by that unanimously positive expectation, a reversal of the optimism it embodied, and the fact that those above-trend results had in fact borrowed heavily from the future all led eventually to the first three-year decline in equities since 1930. And, not surprisingly, to a new consensus. Now everyone says "about 7%." But is today's consensus any more likely to be right? Or does it just reflect more of that oxymoronic quality, common sense?

Asset Class Returns

Further on the topic of consensus expectations, let me visit the question of whether asset classes even "have" expected returns. I learned from managing fixed income portfolios that bonds come closest to having a dependable return. Over its life, a bond that's bought at a 10% yield to maturity and doesn't default will return 10%, won't it? An obvious truth? No, actually something of a misstatement.

The majority of the lifetime return on a long-term bond comes not from the promised interest payments and redemption at maturity, but from the interest earned on interest payments after they're received. The yield to maturity at which a bond is bought expresses the overall return that will be earned if interest rates don't change – that is, if interest payments are reinvested at the rates prevailing at the time of purchase. But because interest rates are highly variable, so is the "interest on interest" component. Few non-bond people realize how un-fixed even fixed

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income investing is, and how substantial is the "reinvestment risk." And beyond bonds, it's even more up for grabs.

What rate of return is implicit in equity investing? Certainly we should look to more than just returns over the last ten or twenty years for the answer. The rate of growth in corporate profits provides a clue, but in the short run, changes in p/e ratios tend to swamp changes in profits.

In 1999, investors asked, "What's been the return on common stocks?" and were seduced by the 11% answer propounded by authorities like Prof. Jeremy Siegel in his book, "Stocks for the Long Run." What they should have asked, however, is, **"What's been the return on common stocks bought when the Standard & Poor's 500 was priced at 29 times earnings?"** (which it was at the time). In other words, people made the mistake of believing that common stocks have a single rate of return you can depend on, regardless of entry point. **They forgot the great extent to which the return on an asset is dependent on the price you pay for it.**

In the March/April 1997 issue of the Financial Analysts Journal, Peter Bernstein set forth a helpful way to consider returns from equities – one I'd thought about but had never seen in use. He calculated returns on the S&P 500 for periods spanning widely separated dates between which the p/e ratio didn't change. He called the result "valuation-adjusted long-run equity returns." In December 2006, he published some interesting results. With the S&P 500 trading at 17.2 times earnings, he looked at four periods which had begun with the p/e at the same 17.2 and found that the returns over those periods had ranged from 10.4% to 11.1%.

In other words, over periods when multiples were unchanged, the S&P 500 did deliver roughly 11%. And in the very long run, over the course of which the impact of p/e fluctuations is watered down, stocks also have returned 11%. Thus it seemed reasonable for buyers of stocks in 1999 to expect returns of 11% per year. But they failed to think about what might happen if p/e ratios fell in the short run.

It shouldn't take a Ph.D. (or even an MBA) to know that if you buy the S&P in 1999 at a p/e ratio of 29, one of the highest multiples ever seen, the p/e ratio could decline and the resulting return could be below 11% – well below 11% if it happened quickly. In 1999, investors derived excessive comfort from an optimistic consensus that was based on long-run data. But in 2002, they were licking wounds inflicted in the short run. It's worth noting that for the seven years that ended March 31, 2007, the annualized return on the S&P 500 was 0.9%. **So much for the crowd's certainty regarding 11%.**

And what about the return on private equity? Before saying what it'll be, investors should think about where returns come from. Some markets derive their returns from an underlying process. As far as I'm concerned, owning interests in money-making companies and income-producing real estate has such an underlying basis for returns, whereas owning gold and art does not.

Companies produce profits, and thus buying interests in them represents buying into a stream of returns. When a private equity fund buys a company today at nine times EBITDA (which, let's say, equates to eleven times cash flow after capital expenditure needs), that implies a 9% free-cash-flow return on invested capital – and maybe 5% after fees and expenses. The rest of the return that's hoped for must come from doing other things: leveraging up the equity at a cost

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below 9%, making the company more productive, or selling it at an increased valuation. But the ability to do these things is either highly dependent on market conditions (leveraging cheap or selling dear) or skill-based. The wide disparity among private equity results for any given period of time shows how much they are a function of the skill of the general partners, and thus that most of the return on private equity is far from intrinsic to the asset class.

Everyone Knows

Two years ago, the herd knew residential real estate was a can't-miss way to build wealth. "You can live in it," "it's a hedge against inflation," and "they're not making any more land" were oft-recited mantras . . . just as they had been in the mid-1980s (See "There They Go Again," April 2005). After ten years of rapid appreciation, owners of condos felt they had it made, and non-owners felt they were on the outside looking in. People lined up to put down deposits on condos that hadn't been built yet, and many assembled portfolios that way.

No one talks that way anymore. The air came out of the condo balloon fast once prices stopped going up, putting the virtuous circle into a stall. The cheap financing that appeared to provide a ticket to financial security is now seen to have lured many buyers into water over their heads. **"It can only go up" and "if it stops working, I'll get out" – two phrases that are heard in the course of virtually every financial mania – proved once again to be highly flawed.**

To avoid the trap in residential real estate, one needed a memory of events that occurred more than ten years earlier, the ability to understand their implications, and the discipline to resist joining the herd. Many failed the test and succumbed to yet another investment craze.

Just think about the many things everyone agreed on in the last decade, and how overdone these fads turned out to be – or may turn out to be in the future.

- "Everyone" loved emerging markets in the mid-90s, with their concept of per capita consumption catch-up . . . until the Russian debt debacle and the collapse of Long-Term Capital Management busted that bubble for a while.
- A fellow member of a non-profit investment committee insisted in 1999 that we had to invest the endowment in a hi-tech fund . . . just before its portfolio lost more than 90%.
- Hedge funds were widely touted as the surefire solution to the weakness that stocks demonstrated in 2000-02, in time to see the average return recede to unexciting single digits.

Great recent performance and a failure to detect risky patterns have cost investors money on several recent occasions . . . and always will. Now silver bullets ranging from private equity to art are being touted as ways to make big money without risk . . . ignoring the unlikely nature of that proposition, as usual. There's plenty of evidence of the popularity of these ideas. Maybe they'll work forever. Maybe these trees will grow to the sky. But if they do, they'll be the first.

* * *

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Finally, it's important to remember that investment trends regularly go to great extremes, meaning "overpriced" and "overdone" are far from synonymous with "going down tomorrow." As Lord Keynes said, "The market can remain irrational longer than you can remain solvent." Thus, whatever it is the herd is favoring, a manager might either (a) hold a little to ensure that it doesn't continue doing well without him on board, making constituents question his judgment, or (b) avoid holding any, but he should be prepared to look wrong for a while. Anyone who's tempted to blow the whistle on a market trend just because it has gone too far or is priced too high must bear in mind one of the greatest adages of all: **"Being too far ahead of your time is indistinguishable from being wrong."**

There's always a period – sometimes a long one – when those who follow the crowd look smart and the abstainers look dumb. But the roles are inevitably reversed in the long run. **Insisting on buying value and controlling risk can seem awfully dowdy at times, but for us, there is no other way.**

April 26, 2007

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Memo to: Oaktree Clients

From: Howard Marks

Re: The Race to the Bottom

Cheapening Money

If you make cars and want to sell more of them over the long term – that is, take permanent market share from your competitors – you'll try to make your product better. (You might cut your prices or increase your advertising, but neither of those will work for long if your cars are demonstrably inferior.) "Building a better mousetrap" should also be effective for sellers of toothpaste, computers, televisions, magazines, movies and dresses, or any other product that can be differentiated from its competitors. That's why – one way or the other – most sales pitches say, "Ours is better."

However, there are products that can't be differentiated, and economists call them "commodities." These are generic goods like gold, West Texas crude oil, pork bellies, steel ingot, orange juice, electricity and telecommunications bandwidth. They're goods where no seller's offering is much different from any other. They tend to trade on price alone, and each buyer is likely to take the offering at the lowest delivered price.

Thus, if you deal in a commodity and want to sell more of it, there's generally one way to do so: cut your price. It's futile to make claims for product superiority, and advertising is unlikely to alter buying habits. Thus in order to gain market share, **you have to make your product cheaper than someone else's.**

It helps to think of money as a commodity just like those others. **Everyone's money is pretty much the same.** Yet institutions seeking to add to loan volume, and private equity funds and hedge funds seeking to increase their fees (see "The New Paradigm"), all want to move more of it. **So if you want to place more money – that is, get people to go to you instead of your competitors for their financing – you have to make your money cheaper.** As with the other commodities, low price is the most dependable route to increased market share.

One way to lower the price for your money is by reducing the interest rate you charge on loans. A slightly more subtle way is to agree to a higher price for the thing you're buying, such as by paying a higher p/e ratio for a common stock or a higher total transaction price when you're buying a company. **Any way you slice it, you're settling for a lower prospective return. But there are other ways to cheapen your money, and they're the primary subject of this memo.**

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Congratulations!

What else is there – besides return – that you can accept less of in order to accelerate the pace at which you put out your money? The answer is simple: safety. So a provider of capital who wants to increase market share – that is, make a bigger percentage of the loans or investments that are made – will accept risks that others won't. That's another way to get the deal instead of having it go to someone else.

I sometimes buy at auctions. When the bidding's over, the auction house personnel come up and say "congratulations." I usually say, "On what? All I did is pay more than anyone else would pay." That's how auctions work – most market mechanisms, in fact: **the deal goes to the person who'll pay the most for the goods (or, looked at conversely, get the least for his money). The capital markets are no different**.

Of course, when the subject is price, it's obvious that the person who's willing to pay the most wins the auction. It's a little more subtle that, when it comes to quality and safety, the person who'll accept the least is likely to be congratulated as the "winner." Winner in quotes, that is, because **in putting out capital, the person who gets the deal is likely to be a loser if he accepts a level of safety that turns out to be inadequate.**

That leads me to one of my pet peeves. The "industry rags" in private equity are devoted almost exclusively to reporting who bought what company, with accounts of how competitors were outbid and innovative financing arranged. But the articles should focus instead on whether the price was right, and the champagne should probably be kept on ice until the company has been sold at a profit. Buying shows who was the highest bidder, not necessarily the smartest bidder.

(Let me hasten to point out here that while I generalize as usual for simplicity and effect, there are always exceptions. Oaktree routinely gains admittance to deals because we provide prompt commitments, certainty of closure, assistance in structuring and/or the promise of constructive behavior should problems arise. But much of the time – especially today – deals go to the capital providers who'll pay the most and/or accept the least. We try to gain access to deals by adding value, not by paying the most.)

The Auction's On

While the last few years have given me many opportunities to marvel at excesses in the capital markets, in this case the one that elicited my battle cry – "that calls for a memo" – hit the newspapers in England during my last stay. As the Financial Times reported on November 1,

> Abbey, the UK's second-largest home loans provider, has raised the standard amount it will lend homebuyers to five times either their single or joint salaries, eclipsing the traditional borrowing levels of around three and a half times salary. It followed last week's decision by Bank of

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> Ireland Mortgages and Bristol and West to increase standard salary multiples from four to 4.5 times.

In other words, there had been a traditional rule of thumb saying that borrowers can safely handle mortgages with a face amount equal to three-plus times their salaries. But now they can have five times – roughly 50% more. What inference should be drawn? There are at least four possibilities:

1. The old standard was too conservative, and the new one's right;
2. Conditions have changed, such that the new standard is as conservative for today as the old one was for its times;
3. It's reasonable for mortgage lenders to accept higher default experience, and thus lower net returns, because their cost of capital has declined; or
4. The rush to place money has caused a supplier of capital to loosen its standards.

Now, I am no expert on the UK mortgage market, and it's my intention in this memo to comment on general capital market trends, not any one sector. Further, it's certainly true that today's lower interest rates mean a given salary can support a bigger mortgage (and that's likely to hold true so long as (1) borrowers keep their jobs and (2) their mortgages carry fixed rates). But if you think Abbey's reason for taking this step might be a logical one like that, the question to ask is "why now?"

Logical reasons and sober decision making might be involved here. But so might competition to put out money and the usual late-stage belief that "it's different this time." Lenders and investors invariably depart from time-honored disciplines when cycles move to extremes, out of a belief that current conditions are different from those that prevailed in the past, when those disciplines were appropriate. And just as invariably, they're shown that cycles repeat and nothing really changes.

What did we see in the U.S. mortgage market as home prices rose and interest rates declined? First, low teaser rates. Then higher loan-to-value ratios. Then 100% financing. Then low-amortization loans. Then no-amortization loans. Then loans requiring no documentation of employment or credit history. These things made it possible for more buyers to stretch for more expensive homes, but at the same time they made mortgages riskier for lenders. And these developments took place when home prices were at sky-high and interest rates were at multi-generation lows. In the end, buyers took out the biggest mortgage possible given their incomes and prevailing interest rates. Such mortgages would land them in the houses of their dreams . . . and leave them there for as long as conditions didn't deteriorate, which they invariably do.

Do you remember the game Bid-a-Note from the TV show "Name that Tune"? Contestant x said, "I can name that tune in six notes." Then contestant y said, "I can name that tune in five notes." Then contestant x said, "I can name that tune in four notes." The contestant who eventually got the chance to guess the name of the tune was the one who was willing to accept the riskiest proposition – to try on the basis of the least information.

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So the Bank of Ireland entered the competition to lend money for home purchases and said, "I'll lend four and a half times the borrower's salary." And Abbey said, "I'll lend five times." The so-called winner in this auction is the one who'll put out the most money with the least safety. Whether that's really winning or losing will become clear when the cycle turns, as it did in the U.S. last year. But certainly there's a race to the bottom going on . . . a contest to become the institution that'll make loans with the slightest margin for error.

By the way, were the people who made those U.S. mortgages loans big losers? Defaults spiked last year, but often the originators of the loans had escaped by selling the loans onward to others, some of whom packaged them into mortgage-backed securities or CLOs and sold them once again or borrowed against them on a non-recourse basis. Since many of the people who make loans today flip them quickly, an aspect of "moral hazard" has entered the equation, in which decision makers are insulated from the consequences of their actions.

Any way you slice it, standards for mortgage loans have dropped in recent years, and risk has increased. Logic-based? Perhaps. Cycle-induced (and exacerbated)? I'd say so. The FT quoted John Paul Crutchley, a banking analyst at Merrill Lynch, as saying "When Abbey are lending a multiple of five times salary, that could be perfectly sensible – or it could be tremendously risky." Certainly mortgage lending was made riskier. We'll see in a few years whether that was intelligent risk taking or excessive competitive ardor.

Everyone's Got a Favorite

A lot of Oaktree's activities center around buying bonds, making loans and trying to profit when debt that others hold goes bad. So who better than my colleagues for me to turn to for examples of mistakes in the making? I asked for examples of the race to the bottom, and the response was immediate and substantial. I won't embarrass individual issuers or borrowers by describing specific transactions; the names have been omitted to protect the guilty. But here are some of the themes our people told me about:

- Hot potato – There's big money today in buying companies and then having them borrow money with which to pay you a dividend, even if doing so reduces the companies' creditworthiness. Just a few years back, companies generally wouldn't have been able to issue bonds or loans where the projected use of proceeds was dividends to their equity owners. But since people are so eager to invest today, they'll lend to companies where much or all of the equity paid in – or maybe more than all of it – will be dividended out. They're doing so on the expectation that they'll be able to exit before risk turns into loss. **"If things take a turn for the worse, I'll get out" is a refrain that accompanies most market excesses (tech stocks in 1999 and condos in 2005 come immediately to mind), but rarely does it turn out that way.**

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- Heads We Win/Tails You Lose – Part of being willing to pay more for less relates to the balance between upside potential, downside risk and who gets what. SPACs – or Special Purpose Acquisition Companies, also known as "blank check companies" or "blind pools" – seem like a good example of miscalibration. People put equity capital into a SPAC with no certainty as to what will be done with it. The SPAC's "portfolio" is likely to consist of just one company. And the investors will get no return on their money as long as it remains unspent, which can be up to 18 or 24 months. The sponsor, on the other hand, gets 20% of any profits, as there's no preferred return. It does so through warrants, which it can liquidate even without having sold the acquired company. And if it can't make an acquisition, it just returns the money without penalty – usually reduced by banking and other fees.

- Not My Problem – One of the stories I was told pertained to a company whose accounting problems had prevented it from issuing audited financial statements for a relatively long period of time. After the company went bankrupt, we were determined to learn more about its accounting issues than anyone else and then intelligently make a debtor-in-possession loan, through which we might gain ownership of the company. But before we could make the loan, someone else made the company a better offer: more leverage on cheaper terms, with no provision for accounting due diligence. When later we were able to ask about why we had lost out, we were told that one reason the other lender was able to be more aggressive than Oaktree was the fact that it had "pre-syndicated" most of the loan to hedge funds. This was accomplished in the absence of financial statements or accounting due diligence, but with validation from the high trading price of the company's public securities (which was being set, again, in a financial-statement void). Okay, so the lender's risk was limited. But how about the funds that bought the loan?

- Complexity Outruns Analysis – Wall Street is incredibly inventive. It's staffed by bright people, pursuing massive incentives, trying to out-think their competitors in order to win assignments to serve companies' financial needs. Sometimes this results in structures that few people understand, fraught with hidden risks. My latest nominee is the CPDO, or Constant Proportion Debt Obligation. CPDOs provide capital to finance structured entities writing credit insurance on investment grade debt. Because this debt entails little credit risk, the returns that can be earned from writing credit insurance on it are similarly low. Thus, these entities have to lever up substantially – typically 15-to-1 – to provide the LIBOR+200 returns promised on the bottom-tier CPDO. The rating agencies bestow triple-A ratings on the CPDOs because (a) the riskiness of investment grade bonds is low and (b) the projected interest spreads and the net asset values initially are far more than sufficient to satisfy the covenants. But because the portfolios are so highly leveraged, these cushions can evaporate quickly.

  I find two things about CPDOs worthy of particular note. First, this is the first-loss equity piece beneath a highly leveraged entity where consequences can be triggered by breaches of income and market value covenants. Thus, the equity

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beneath a portfolio of bonds averaging single-A, leveraged up 15-to1, gets a triple-A rating. Huh? Second, as the Financial Times wrote on November 13, "if there are losses and the CPDO's net asset value begins to fall from its target, the leverage is increased to try to earn more at a faster rate." **In other words, if you did a little of something and it didn't work, try to recoup your losses by doing a lot.**

- What Due Diligence? – The other day, Orin Kramer (see "Pigweed") observed skeptically that "the most profitable way to be a lender today is to have no underwriting department." In other words, default rates are too low, and the market is too competitive, for credit analysis to be worth paying for. In December, Reuters described a takeover bid whose competitiveness was enhanced by a reduced due diligence period and a short list of information requirements. And most interestingly, one of the major investment banks told us recently that on most syndicated loans, about 70% of the buyers never visit the data rooms set up to facilitate due diligence.

- Put the Pedal Down – FT.com pointed out on January 21 that, "One-tenth of the capital committed [to private equity funds] in 2002 was . . . put to work within one year. For funds invested in 2005, the corresponding proportion was almost 30 percent." If the amount raised in 2005 was triple the 2002 level, as I believe was the case, that means private equity funds deployed capital in 2005 roughly nine times as fast as they had in 2002.

No one of these is evidence of misfeasance or terminal laxness by itself. But together they describe a market where a desire for quantity and speed has taken over from an insistence on quality and caution. And with that insistence goes the margin of safety that Warren Buffett urges investors to demand.

The Amazing Disappearing Covenant

Evaluating and negotiating covenants is an important part of the high yield bond investor's job. The law says a company's board of directors has a fiduciary duty to its shareholders, but generally speaking there is no analogous duty to creditors such as banks and bondholders. In fact, some companies behave as if they feel a responsibility to actively take value from creditors and transfer it to the shareholders. Because companies can do anything to creditors that isn't prohibited by law or the bond indenture, covenants are a key component in creditor safety.

It's important to bondholders, for example, that the companies to which they lend money remain as little changed as possible. They want the creditworthiness they lend against to still be there years down the road, and strong covenants can do a lot to ensure that's the case. Bondholders can't prevent problems in the economy, the company's markets, its products' competitiveness or its executive suite. But with good covenants, they can put limits on leverage, acquisitions, cash distributions or asset transfers, and they can tighten financial tests and insist on rights that will be triggered if cash flow falls below a

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specified multiple of the company's indebtedness or interest obligation. On the other hand, just as people who are eager to buy bonds can increase their chances of being able to do so by accepting less interest, they also can do so by settling for weaker covenants.

When credit markets are tight and providers of capital are reticent, money can be hard to come by. Companies' demand for financing can exceed the supply, putting negotiating power in the hands of the lenders. Thus lenders can insist on – and obtain – strict covenants, and bonds issued in such an environment are likely to be relatively safe.

But when usually disciplined bond buyers have to compete against others who aren't acting in a disciplined fashion, their ability to insist on covenant protection goes out the window. In economics, Gresham's Law says "bad money drives out good." That's why, when paper money joined gold as legal tender, gold was put in the strongbox rather than spent, and only paper money circulated. The same thing happens in the investing world: **bad investors drive out good**. When undisciplined investors are out there with lots of money to get rid of, there's less scope for disciplined investors to insist on strong covenants. That's why the level of covenant protection is a good barometer of the market climate.

Covenants are the province of a special breed of analysts who are willing to "sweat the details" and able to make sense of paragraph-long, highly technical sentences. "A Review of Covenant Trends in 2006" by Adam B. Cohen is no less challenging reading. It reviews last year's trends in a number of complex indenture provisions, but I'll limit myself to quoting its general conclusions:

> For years, investors have periodically lamented the declining quality of high yield bond covenants but the trends have become especially pronounced amidst a flurry of leveraged buyout (LBO) financings . . . . a careful review of covenant packages – particularly in sponsor-backed [i.e., LBO] offerings – during 2006 reveals a systematic dismantling of longstanding covenant protections . . .

And as Reuters reported on February 6, Standard and Poor's added the weight of its opinion:

> While credit quality is under even greater pressure, the amount of cash on offer has meant private equity sponsors have been able to dilute lenders' rights through weaker covenants and loan documentation, [S&P] said. "Loan structures have become so borrow-friendly that private equity sponsors can write their own term sheets, using their last term sheet as the template for their next."

And, in our view, that template usually serves as the starting point for the next round of erosion of covenants and terms.

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Effects Short-Term and Long

In the short term, the effect of generous capital market conditions is to make more money available to more companies for more reasons, at lower rates of interest and with fewer covenants. This leads to higher levels of acquisitions, buyouts and corporate expansion (not to mention rapid recapitalizations of buyout companies and thus high short-term rates of return). In the short run, this contributes to a high level of general financial activity.

Another effect is to forestall financial stringency at weak companies. When lenders are strict and covenants are tight, operating problems can lead quickly to both technical defaults (violations of covenants) and "money defaults" (non-payment of interest or principal). But looser conditions can permit default to be forestalled: if covenants are lax; if borrowers have the option to convert cash-pay bonds into payment-in-kind bonds (through a recent innovation, "toggle bonds"); or if they can raise money and thus postpone the day of reckoning.

Eventually, one would think, many of the forestalled defaults will demonstrate their inevitability, with the companies falling from more highly leveraged heights. And certainly the capital markets' willingness to finance less-than-deserving companies will lead ultimately to a higher level of corporate distress. **Thus, everything else being equal, the bigger the boom – the greater the excesses of the capital markets in the upward direction – the greater the bust.** Timing and extent are never predictable, but the occurrence of cycles is the closest thing I know to inevitable. And usually, the air goes out of the balloon a lot faster than it goes in.

* * *

Today's financial market conditions are easily summed up: There's a global glut of liquidity, minimal interest in traditional investments, little apparent concern about risk, and skimpy prospective returns everywhere. Thus, as the price for accessing returns that are potentially adequate (but lower than those promised in the past), investors are readily accepting significant risk in the form of heightened leverage, untested derivatives and weak deal structures. The current cycle isn't unusual in its form, only its extent. There's little mystery about the ultimate outcome, in my opinion, but at this point in the cycle it's the optimists who look best.

As is often the case, I could have made this a shorter memo by simply invoking my two favorite quotations, both of which have a place here.

The first is from John Kenneth Galbraith, who passed away last year. I was fortunate to be able to spend a few hours with Mr. Galbraith a year and a half earlier and to have the

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benefit of his wisdom firsthand. This quote, however, is from his invaluable book, "A Short History of Financial Euphoria." It seems particularly apt under the current circumstances:

> Contributing to . . . euphoria are two further factors little noted in our time or in past times. The first is the extreme brevity of the financial memory. In consequence, financial disaster is quickly forgotten. In further consequence, when the same or closely similar circumstances occur again, sometimes in only a few years, they are hailed by a new, often youthful, and always supremely self-confident generation as a brilliantly innovative discovery in the financial and larger economic world. There can be few fields of human endeavor in which history counts for so little as in the world of finance. Past experience, to the extent that it is part of memory at all, is dismissed as the primitive refuge of those who do not have the insight to appreciate the incredible wonders of the present.

The second is Warren Buffett's bedrock reminder of the need to adjust our financial actions based on the investor behavior playing out around us. Fewer words, but probably even more useful:

> The less prudence with which others conduct their affairs, the greater the prudence with which we should conduct our own affairs.

This memo can be summed up simply: there's a race to the bottom going on, reflecting a widespread reduction in the level of prudence on the part of investors and capital providers. No one can prove at this point that those who participate will be punished, or that their long-run performance won't exceed that of the naysayers. But that is the usual pattern.

If you refuse to fall into line in carefree markets like today's, it's likely that, for a while, you'll (a) lag in terms of return and (b) look like an old fogey. But neither of those is much of a price to pay if it means keeping your head (and capital) when others eventually lose theirs. In my experience, times of laxness have always been followed eventually by corrections in which penalties are imposed. It may not happen this time, but I'll take that risk. In the meantime, Oaktree and its people will continue to apply the standards that have served us so well over the last twenty years.

February 14, 2007

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Memo to: Oaktree Clients

From: Howard Marks

Re: Pigweed

At Citibank back in the ’70s, Chief Investment Officer Peter Vermilye placed a lot of emphasis on building team spirit. His tools included skits at our annual staff outings, and he never hesitated to participate in costume. My favorite was his portrayal of Johnny Carson’s savant, “Carnac the Magnificent.” He would hold a sealed envelope to his forehead and intone “Schlum-bair-zhjay,” as the French pronounce the oil service company’s name. Upon opening the envelope, he would read, “What they call it at $75.” Holding up the next envelope, he’d say “Slum-burger.” The explanation inside: “What they call it at $15.”

In other words, investors love things as long as they’re riding high but lose all respect when they’re brought low. It doesn’t take long to become discredited in the investment world. And so it is for Amaranth Advisors, which now might be relabeled “pigweed” – another word for the plant that gave the fund its name.

For those who’ve been incommunicado over the last few months, Amaranth is a hedge fund that was formed in 2000. In the beginning it stressed relatively safe strategies like convertible arbitrage. But more recently it ventured into other things and in 2004 hired a young man named Brian Hunter to engage in energy trading, leading to the recent events. On September 18, it announced that it had lost 40% of its $9.5 billion of total capital on natural gas trading, a percentage that was revised upward to 65% over the next few days. The fund sold off its energy trading book, Brian Hunter departed, and Amaranth threw in the towel and is liquidating.

Now that Amaranth’s collapse has earned it a place on the list of investment disasters, we should consider the lessons that can be learned from it. I’ll try to provide some useful insights regarding Amaranth, as usual without claiming to be an expert on the subject.

You Bet!

As I read about Amaranth, one thing stood out: the repeated use of the words “trade” and, especially, “bet.” Nothing about “invest” or “own.” And certainly no reference to “value.” The pattern really is striking.

Of course, part of this change in attitude could be attributable to the defrocking described above. Six months ago, the articles might have described Amaranth as an astute energy investor, rather than the reckless gambler it’s considered today. But certainly the new nomenclature is everywhere, and I find it appropriate.

What’s the distinction? Investors want to own things for the long run, under the belief they’ll grow and strengthen over time (or that today’s values will come to be better appreciated).

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Traders buy and sell, usually in short order, to take advantage of momentary phenomena. I usually think of them as betting on the direction of the next price move. Certainly we can say their timeframe is hours or days, or maybe weeks, but rarely months and never years.

And what is a "bet"? That's one of those words we all know the meaning of but would be hard-pressed to define without using the synonym "wager" or the word "bet" itself. I consulted The Random House Dictionary of the English Language and found a very useful definition: a bet is "a pledge of a forfeit risked on some uncertain outcome." In other words, you attempt to profit from an uncertain event, and if it doesn't go as you hope, you forfeit something of value. Well then, Amaranth certainly was a bettor.

One question: If it's so obvious today that Amaranth was "betting," were people equally aware of that fact a few months ago? I don't think so. **Gains are often presumed to be the result of carefully considered investments, while it's usually losing ventures that are described as having been bets.**

What Was Their Game?

Amaranth's energy trading operation was in business to bet (there I go!) on short-term movements in energy prices. But it didn't base its activities on saying "we want to own natural gas" or "we want to be short." That would be risky.

Instead, it said things like this: "The price of natural gas is always higher in the winter than in the summer, as is proper, because cold weather causes the demand for gas to increase. But right now, we think the price discrepancy is wider than it should be: January gas is too high relative to July gas. So we'll short January gas and buy an equal amount of July gas." Under this approach, there's no net exposure to the overall direction of gas prices, just a bet (if you will) on the wideness of the spread. The fund won't gain if the price of gas rises or lose if it falls. Instead, it'll gain if the spread narrows in a reversion to the mean, or it'll lose if the spread anomalously widens further.

This is a true hedged position: an arbitrage. I define arbitrage as **taking largely offsetting positions in the same or closely related assets exhibiting a price discrepancy, with the goal of profiting, with very little risk, when the mispricing corrects**. Its aim is to profit from the movement of asset prices relative to each other (the relationship between which usually can be counted on to stay within a normal range), not from the movement of the price of a single asset (which can behave any way at all in the short run). This is a very valid approach for a hedge fund to take. It epitomizes hedging, something that most hedge funds now seem to engage in infrequently or not at all.

So where did Amaranth's risk – and the possibility of catastrophic loss – come in? The answer's simple: **Positions that are low in risk can be rendered quite risky with the help of leverage.**

Back in ancient history (1998), a fixed income hedge fund called Long-Term Capital Management pursued arbitrage transactions like Amaranth's (on a much more diversified basis but with more leverage) and experienced a similar meltdown. I noted that earlier, when things

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were going well, one of Long-Term's principals had said, **"We're going around the world scooping up nickels and dimes."** There's great appeal to his notion of profiting from a large number of small mispricings that others aren't smart enough to seize upon. But he had left off a few key words from the end of his sentence: **". . . in front of a steamroller."** The steamroller enters the picture when so much leverage is employed that a fund can't survive a moment of aberrant market behavior.

In a memo on hedge funds in October 2004, I mentioned that when there's a big increase in the number of little fish attempting to live off each big fish's leavings (or in the number of hedge funds relative to mainstream investors), the pickings become slimmer. Given the increased efforts to exploit inefficiencies today and the fact that strong cash inflows and resultant high prices have depressed prospective returns in many markets, managers are often resorting to increased leverage in order to reach their return targets. **But it's essential to remember that leverage is the ultimate two-edged sword: it doesn't alter the probability of being right or wrong; it just magnifies the consequences of both.**

The Perils of Diversification

The Amaranth saga demonstrates that the riskiness of a portfolio is not just a function of the fundamental nature of its holdings, but also of things like concentration and leverage. I often say there is no investment so good that it can't be ruined by too-high an entry price. **There's also no investment so safe that can't be rendered risky by buying too much of it with borrowed money**.

Diversification has long been considered a pillar of conservative investing. It's a simple concept: "Don't put all your eggs in one basket." Spreading your capital among a number of assets or strategies reduces the likelihood of a disaster.

In the 1960s, Bill Sharpe pointed out that adding in a risky but uncorrelated asset can reduce a portfolio's overall riskiness. It has become accepted wisdom that overall risk can be reduced (and return increased) by adding alternative investments to a portfolio of stocks and bonds.

But people don't always take note of a dangerous outgrowth of these dicta: **that diversifying into uncorrelated assets with borrowed money can increase, not reduce, the risk of the portfolio.**

Let's say you have $100 invested in U.S. stocks. You realize how undiversified your portfolio is, and that a market crash can bring a substantial loss. So you sell off $75 worth of stocks and put $25 each into emerging market stocks, high yield bonds and natural gas futures. Now your portfolio is invested equally in four asset classes rather than one and thus probably safer.

But what if, instead, you hold onto your $100 worth of U.S. stocks and borrow another $300, investing $100 in each of those three new asset classes. You're again invested equally in four asset classes. **Equally diversified but much less safe**. That's because leverage has magnified the sensitivity of your portfolio to market movements.

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A crash that wipes out one of the four asset classes in the diversified $100 portfolio will reduce your net worth by 25%. But that same crash, when experienced in the leveraged and equally diversified $400 portfolio, will eliminate your entire net worth. So investors should always consider the combined effect of diversification and leverage. Amaranth was much safer when it was all in convertible arbitrage than after it increased its leverage in order to diversify into energy trading. **Diversification is a good thing, but a lot depends on how you finance it.**

"Multi-strategy" is one of today's hot buzz words. But as Orin Kramer puts it (see page 12 for who he is), "Amaranth is a reminder that a multi-strategy structure is not a proxy for risk diversification." That is, I think, multi-strategy + risk control = protective diversification, while **multi-strategy + leverage = more ways to lose.**

Generating Alpha

I want to say up front that I have absolutely no idea how one dependably achieves above average profits from trading or investing in commodities, precious metals or currencies. That's not to say it can't be done. There are people who've gotten very rich that way, managing both their own money and that of others.

Of course, the efficient market crowd would say someone will get rich doing everything – even playing the lottery or flipping coins – simply because the tails of a probability distribution usually aren't entirely unpopulated. **But who it is that gets rich that way may be purely random. If that's the case, the mere existence of a few winners doesn't in itself prove that something is an "alpha" activity in which hard work and skill will produce consistent performance, or that large numbers of people can pull it off.**

I believe firmly that the markets for commodities and currencies are generally efficient. That means a lot of highly motivated people participate; many are intelligent and computer-literate; they all have access to similar information; and they're willing to take either side of most propositions. These people cause all of the available information to instantly be incorporated in the market price of each asset, such that the market price always reflects the consensus view of the significance of the available information. As a further consequence, few people if any can dependably identify and profit from instances when the market price is wrong. **That, in turn, makes it difficult to consistently achieve high absolute returns or perform better than others. That difficulty constitutes the ultimate proof that a market's efficient.**

Take currencies for example. Exchange rates exist so that currencies will be valued fairly relative to each other in view of countries' differing growth rates, interest rates, inflation prospects and fiscal and trade deficits, etc. Further, exchange rates change as the outlook for these things changes. Their current status is widely known, and predicting changes is something few people can do right more often than others. Thus it seems unlikely that some people will be able to regularly generate higher returns than others.

If it's so hard to value currencies, commodities and precious metals, why do I think we can invest intelligently in equities, corporate debt and whole companies? It's because these things generate income, and an expected stream of future income can be translated into a current value.

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But how do you determine the intrinsic value of a Euro, a bar of gold or a barrel of oil? You can talk about the positives and the negatives associated with these goods. But how do you convert those things into a price?

For example, the factors that argue for high oil prices are obvious. "The supply is finite." "We're using it up at an accelerating rate." "Environmental issues in the U.S. will constrain the domestic supply." "Much of the foreign supply is in the hands of hostile or unpredictable governments: Iran's a worry, Venezuela is turning anti-American, and Saudi Arabia is subject to instability." Sure they make oil a valuable good, but how valuable? How do we know the current price doesn't adequately reflect these things already? What's the right price for it?

We had a particularly instructive lesson in July. The price of oil had been strong, and the outlook was for more of the same. With the price at $77 per barrel, it was reported that the Alaskan pipeline had to be shut down to repair damage. With domestic shipments restricted, the price had to rise; oil had to be a buy. But the $77 price at which oil traded on the day of the announcement hasn't been seen since. Within just four months, the price of oil fell to $55 (down 28%) – and the factors listed above were just as true at $55 as they were at $77. Without the ability to reliably convert fundamentals into prices, I don't see how one can achieve consistently superior risk-adjusted gains.

Above average investment performance (in any market) has to be the result of either unusual insight into values or the intersection of risk taking and luck. It's hard to tell the difference between the two in the short run, but the truth always becomes clear in time, because luck rarely holds up for long.

The Short-Term Performance Trap

That leads me to Amaranth's experience in natural gas, and to the key lesson to be learned from it. Is anyone capable of regularly generating skilled-based (as opposed to luck-based) returns at an ultra-high level by trading natural gas? I don't know for sure, but I would think not.

I'm not saying no money can be made that way. But while the capital markets might permit one to steadily earn 5-8% a year (or maybe even 8-10%) by committing capital to this activity, returns in the teens should be infrequent, and **returns above 20% probably should be considered the result of extreme good fortune (and thus as having been just as likely to go the other way).** There are exceptions, but a good statistician can live with a few exceptions without feeling they disprove the main point.

I think it's essential to realize that Amaranth's troubles in natural gas didn't start this year, with the positions that didn't work. They started with the $1 billion in profits that Hunter generated in 2005, which permitted Amaranth to report a return roughly double that of the average hedge fund.

In the investment business, clients love high returns and hate low returns. That makes sense. And when the market's up 10% and their manager is up 20%, clients are really happy. But that's my pet peeve. Rarely does anyone say, "Whoa. That return's too high. How did it happen?

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How much risk did my manager take in order to generate that?" **No, in the investment world few people find high returns worrisome.**

Everyone talks about beta, (which I'm tempted to pronounce "bee-tah" now that I've spent six weeks in London), but few people dwell on it when returns are soaring. Credulous investors think the manager who generated 20% in an up-10% market contributed alpha of 10%. But maybe he had zero alpha and a beta of 2 instead . . . or maybe negative alpha of 20% and a beta of 4. Regardless, I almost never hear people talk about returns being so high that they're suspect.

According to Hillary Till of Premia Capital Management (in her report on Amaranth published by France's EDHEC Business School), "Since May, investors knew [Amaranth's] energy portfolio had typical up or down months of about 11%. . . . Therefore, it would not have been unusual for the fund's energy trades to lose 24% in a single month. . . ." But nobody seemed to care, since the energy book gained $2 billion in just the first four months of 2006. In other words, Amaranth had enjoyed the up months. That certainly didn't imply that down months weren't lurking. In fact, just the opposite.

Here's the most important thing: My wife Nancy often quotes a few lines from Rudyard Kipling's poem, "If":

> If you can meet with Triumph and Disaster
> And treat those two Impostors just the same; . . .
> Yours is the Earth and everything that's in it,
> And – which is more – you'll be a Man, my son!

Likewise, short-term gains and short-term losses are potential impostors, as neither is necessarily indicative of real investment ability (or the lack thereof).

Surprisingly good returns are often just the flip side of surprisingly bad returns. One year with a great return can overstate the manager's skill and obscure the risk he took. Yet people are surprised when that great year is followed by a terrible year. Investors invariably lose track of the fact that they both can be impostors, and of the importance of digging deep to understand what underlies them.

One gets the impression that no one at Amaranth asked the right question when Brian Hunter shot the lights out in 2005: "How'd you do that?" Or if they asked, they were satisfied with what turned out to be the wrong answer: skill, rather than leveraged aggression combined with luck. They let him move to Calgary, and they gave him a large enough capital and/or risk budget to enable him to bring down the firm.

But The Wall Street Journal of September 19 laid out how this came about. ". . . late last year, the double-whammy of Hurricanes Katrina and Rita made Mr. Hunter a hero at Amaranth and a minor legend on Wall Street, as he made $1 billion for Amaranth." Hunter liked to buy deep-out-of-the-money options. While these things expire worthless most of the time, a major, unexpected price move in the underlying asset can produce huge profits.

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But does betting on a long shot and profiting from a freak occurrence make someone a skilled investor, or just the "lucky idiot" that Nassim Nicholas Taleb describes in "Fooled by Randomness"? Should that kind of performance inspire reverence or concern? Well, Amaranth's 2005 gas profits produced awe, but anyone looking behind them should have been worried. **What would have happened, investors might have asked, if events had unfolded differently?** Taleb's "alternative histories" are always worthy of consideration (see below).

The events in the gas market that decimated Amaranth in 2006 may have been unforeseeable and unprecedented. But those adjectives might apply just as well to the elements that made it successful in 2005, and no one – especially not the fund's managers – seems to have mentioned that fact at the time. When people profit from such things, it's considered all right and good, but then when they reverse into losses, it comes as a shock. **They're two sides of the same coin, but investors have a really tough time keeping that in mind.**

What's Real?

To be able to attach the proper significance to short-run performance, it's essential that one understand the idea of "alternative histories." I came across it in Taleb's book, which I consider the bible on such topics.

This concept is related to Orin Kramer's description of past performance as "the interaction of particular historical and market conditions and the judgments and beliefs of managers during that period." **In other words, investment performance is what happens to a portfolio when events unfold.** People pay great heed to the resulting performance, but the questions they should ask are, "Were the events that unfolded (and the other possibilities that didn't unfold) truly within the ken of the portfolio manager? **And what would the performance have been if other events had occurred instead?" Those other events are Taleb's "alternative histories."** How about an example of the right way to view outcomes? Well, with the college football bowl season upon us, I'd like to discuss last year's championship game, something I've been musing about for almost a year.

The University of Southern California football team was undefeated in the 2005 regular season. It boasted two successive years' Heisman Trophy winners and many other great players. It won its games in spectacular fashion and was widely touted as one of the best college football teams of all time. In fact, in the week leading up to the championship game against the University of Texas, ESPN ran daily segments that compared USC against a top team from the past, each time stating that USC was better, and why.

When it came down to game time, however, Texas played very well and USC couldn't contain their talented quarterback, Vince Young. With two minutes to go in the game, holding a slim five-point lead, USC's coach, Pete Carroll, chose to "go for it" on fourth down, rather than punt the ball downfield – undoubtedly out of concern that if Texas got the ball with two minutes left on the clock, his team would be unable to keep them from scoring. USC failed to make a first down, and Texas got the ball with good field position, scored a touchdown and won the game.

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If USC had made the two yards they needed on that fourth down play, it's extremely likely they would have won the game. And if they'd won the game, they doubtless would be described today as the best college football team in history. But it didn't happen that way, and no one talks anymore about their being the best, or even the second best. Now they're considered just another great team. **What this shows is how tenuous the connection can be between outcomes (which most people take for reality) and the real, underlying reality.** What do I mean by that distinction?

Consider this: What's the probability that if USC had made the needed two yards – and today was considered the best team ever – they really would **be** the best team ever? Certainly not 100%. And just as interestingly (or to me maybe more so), what's the probability that, even though they **didn't** make the two yards, they **actually are** the best team that ever played? Certainly not zero. But since USC lost that game, most people would find nonsensical a suggestion that they're the best team in history. To contemplate that possibility, they would have to consider an alternative history in which USC made those two yards.

Can the result of one play really decide the issue? That's the one thing we all can probably agree shouldn't be the case. "Everyone knows" that the score of a game doesn't necessarily tell you which is the better team. So then outcomes aren't necessarily indicative of reality, meaning that alternative histories **should** be given significant weight. (I guess the ultimate step would be to suggest that USC actually won the game, the score notwithstanding. That would be going too far . . . although we often hear a losing team's fans say, "We won that game.")

While we're looking deeply into things, let's spend a minute on Pete Carroll's decision to go for it on fourth down. Was he right or wrong? He has gone for it on fourth down many times in his coaching career, and most of the time it worked. In fact, USC twice had run on fourth down earlier in the championship game, making the needed yardage once and scoring a touchdown. But on that final attempt they were unsuccessful. Does that mean Pete made a wrong decision? Or was it a right decision that just happened not to work on that occasion? One of the first things I learned at Wharton in 1963 was that **you can't judge the correctness of a decision from the outcome**. This is another concept that many people find nonsensical. But good decisions fail to work all the time – just as bad ones lead to success – simply because it's so hard to predict which history will materialize.

It seems ridiculous for something as momentous as the label "best team ever" – and the measure of a team's real worth over an entire season – to hinge on the outcome of one play that took four seconds. Clearly that's a distortion, but no less of a distortion than many people's response to short-term investment performance, both good and bad.

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King for a Day

In the current environment, there can be little ability to restrain a hot manager. According to Amaranth's head of Human Resources until 2004, the CEO of the fund ". . . sought to centralize oversight of traders and keep big discretionary trading authority on the fund's Greenwich trading floor. After big gains in 2005, Mr. Hunter was allowed to trade from Calgary. 'To have a

relative newcomer . . . receive so much discretion is just shocking to me.' " (The Wall Street Journal, September 20)

But today, if a hedge fund CEO tells a trader who's been generating great performance that he can't have more capital, or take risky positions, or pursue the maximum imaginable incentive fee, or move to Calgary, he'll lose him. There's always another employer who'll meet a hot trader's demands. No, this isn't a time when discipline and risk control come easy.

In this climate, even an earlier dust-up at Deutsche Bank regarding Brian Hunter's gas trading and bonus wasn't enough to keep him from becoming the linchpin of a $9.5 billion fund, managing half its capital. And it wouldn't have deterred others from hiring him if he quit because Amaranth had tried to restrain him.

A decade ago, if an employee who'd run up big profits in his first year asked for a huge bonus, we'd say, "Come back after you've put together a few good years." But in today's climate, if a hedge fund doesn't come up with an out-sized bonus after one good year, it's unlikely the employee will stick around to give it a second. **Thus Brian Hunter was paid $75 to $100 million in 2005, his first full year at Amaranth, arguably for betting right on the weather.**

It doesn't take much to be venerated today. One or two good years make somebody a "top trader." Three years can enable someone to raise a billion-dollar hedge fund. In fact, even after the fall, The Wall Street Journal described Brian Hunter as an "experienced manager" . . . at 32. Doesn't anyone think that before someone is elevated to the investment peerage, he or she should have a record spanning more than a few years, and have been tested in down markets? I knew the world had been turned on its head when I read on "dailyii.com" about Hedge Funds Investment Management, a London fund of funds that **will invest only with people who've been in the business for 3½ years or less.**

Unlikely Things Happen

The EDHEC report mentioned above makes a number of interesting observations concerning Amaranth's portfolio:

- As of June 2006, energy trades accounted for about half of Amaranth's capital and generated 75% of its profits.
- Amaranth had 6,700 energy positions, leveraged 4.5 to one, including open positions to buy or sell tens of billions of dollars of commodities.
- Amaranth was responsible for a substantial portion of all of the gas trades that took place.
- In the far-out months, in which fewer traders participate, "the fund's positions were indeed massive."
- Many of Amaranth's trades probably had "physical-market participants" on the other side, people who had taken positions to hedge risks intrinsic to their business. Because they would be unlikely to unwind their trades at Amaranth's convenience, exits were problematic.
- In view of all of the above, "the magnitude of Amaranth's energy position-taking was inappropriate relative to its capital base."

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Hillary Till describes Amaranth's loss as a 9-standard-deviation event (Long-Term Capital's is estimated at "8-sigma"). By way of reference, 5 standard deviations include the central 99.99994% of a normal probability distribution. A 5-sigma event below that range should happen about three times in every ten million trials (thus a given daily occurrence should happen once every 10,000 years). But **it's amazing how often this kind of event seems to occur when derivatives are combined with leverage.**

Everyone speaks about preparing for "worst-case" outcomes, but invariably things can get even worse. Statistical reassurance should be relied on only to a reasonable extent. Common sense has to come into play as well.

Risk Management and Risk Managers

You know from my memo of February entitled "Risk" that I'm not a big fan of quantitative risk management. It's often said of a man that "he knows the price of everything but the value of nothing" – and it's not meant as a compliment. Likewise, I feel effective assessment of portfolio risk is less likely to come from Ph.D. statisticians who lack intimate knowledge of the assets in the portfolio than through wise judgments made subjectively by investors possessing "alpha."

In the memo on risk, I enumerated several criteria that should be present if modeling is to prove effective. I also observed that most of them are lacking in the investment world. In an article in the Financial Times of October 10, John Kay wrote of the risk that arises because of "uncertainty about whether the model you have developed describes the world accurately." He concluded that **"mathematical modeling of risk can be an aid to sound judgment but never a complete substitute."** My first boss, George Egbert, Jr., Citibank's Director of Research in the 1960s, used to say of economists, "They should be on tap but not on top." Reliance on risk modeling should be similarly limited.

"What Brian is really good at is taking controlled and measured risk." Thus spoke Nick Maounis, the CEO of Amaranth, less than a month before its collapse. He cited the more than a dozen members of his risk management team who served as a check on his star gas trader, and he said "spreads and options are of their very nature instruments for positions which are designed to allow the user to capture upside with a much clearer understanding with respect to downside exposure" (The Wall Street Journal of September 19 and 20). **But in the end, outsized profit potential without risk turned out to be a pipe dream as usual.**

> Amaranth's systems didn't appear to measure correctly how much risk it faced and what steps would limit losses effectively. The risk models employed by hedge funds employ historic data, but the natural gas markets have been more volatile this year than any year since 2001, making models less useful. They also might not predict how much selling of one's stakes to get out of a position can cause prices to fall.
>
> "It was a total failure of risk control to put your entire business at risk and not seem to know it," says Marc Freed [of Lyster Watson & Co., an advisory firm that

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invests in hedge funds]. "They were more leveraged than they realized." (The Wall Street Journal, September 20)

After the fall, the Journal quotes Mr. Maounis as saying Amaranth's traders "were surprised not only by adverse market moves that triggered the losses but also by the lack of ability to exit the losing positions." **That's it, right there: the word "surprise**." It's one thing to make an investment you know is risky and have it come out wrong. It's something entirely different to make an investment that entails risk of which you're unaware.

Mr. Maounis and Amaranth's risk managers shouldn't have been surprised. They should have been alerted by the volatility of the fund's energy results. According to Till, its LPs should have been as well. "Investors would not have needed position-level transparency to realize that Amaranth's energy trading was quite risky." **But the evidence of that potential risk came primarily in the form of outsized gains, and these are rarely recognized as the red flag they are.**

Amaranth's investors relied heavily on its vaunted risk management capability and on the assurance that risk was under control. But the fund failed to survive its seventh year. Quantitative risk managers can only opine on whether a disaster is likely or not. Even if they're right about that, it's up to you to decide whether you're willing to bear the risk of an improbable disaster. They do happen!

Classic Investment Mistakes

Hemlines go up and down. Ties go from wide to narrow and back again. There are only so many ways in which things can vary. Likewise, there are only a few mistakes one can make in investing, and people repeat them over and over. It seems Amaranth made several.

- **Borrowing short to buy long (and illiquid).** This cardinal sin is at the root of most great investment debacles. A fund's capital should be as long-lived as its commitments. And no fund should promise more liquidity than is provided by its underlying assets. You can successfully invest in volatile assets if you're sure of being able to ride out a storm. But if you lack that certainty and face the possibility of withdrawals or margin calls, a little volatility can mean the end. In the case of Amaranth, just as had been true of Long-Term Capital Management and the big junk bond holders that were forced to sell out at the 1990 lows, many of the losses would have turned back into profits if they had just been able to hold on through the crisis. That's why I always caution, "Never forget the six-foot-tall man who drowned crossing the stream that was five feet deep on average." It's not enough to be able to get through on average; you have to be able to survive life's low points.

- **Confusing paper profits with real gains.** The Wall Street Journal of September 20 points out that Hunter was encouraged by the positive marks to market showing up in his statements, so much so that he added further to his positions. But he seems not to have asked whether the gains were real and realizable. The Journal also points out that Hunter was such a big buyer in thin markets that his buying often supported prices and created the very profits he found so encouraging. But if the profits were the product of his buying, and thus

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dependent on it for their continued existence, he clearly had no way to realize them. My father used to tell a joke about the guy who insisted that his hamster was worth thousands more than he had paid for it. "Then you should sell it," his friend urged. "Yeah," he responded, "but to whom?"

- **Being seduced by loss limitation.** Hunter is said to have liked buying deep-out-of-the-money options, and everyone knows that one great thing about buying options is that in exchange for a small option premium you receive the right to benefit from price movements on lots of assets. You can only lose 100% of the amount you put up . . . and in deep-out-of-the-money options people do just that all the time.

- **Misjudging liquidity.** People often ask me whether a given market is liquid or not. My answer is usually, "that depends on which side you're on." Markets are usually liquid in one direction or the other but not necessarily both. When everyone is selling, a buyer's liquidity is great, but a seller will find the going difficult. When sellers' urgency increases, they're likely to have to give on price in order to achieve the "immediacy" they crave (see my memo "Investment Miscellany," November 16, 2000). If their desire for immediacy is extreme, the bids they see might be absurdly low. Thus markets can't be counted on to accommodate a seller's need to realize fair value.

- **Ignoring the impact of others.** In small markets, everyone may know about your trades. That means they can copy them (making buying tough and adding to the crowd that will eventually jam the exits), and they can deny you fair prices if they know you have to sell. Aggressive traders, especially at hedge funds, don't wear kid gloves.

- **Underestimating correlation.** There's another old saying: "In times of crisis, all correlations go to one." It means that assets with no fundamental or economic connection can be caused by market conditions to move in lockstep. If a hedge fund experiences heavy withdrawals during a period of illiquidity, assets of various types may have to be dumped at once, and thus they can all decline together. Further, hidden fault lines in portfolios can produce unexpected co-movement. Let's say you're long sugar and gas, two unrelated commodities. Unusually warm weather can reduce the demand for gas for heating and also cause a record sugar crop (as happened this year). Thus the prices of seemingly unrelated goods can decline together. **Intelligent diversification doesn't mean just owning different things; it means owning things that will respond differently to a given set of environmental factors. Thus it requires a thorough understanding of potential connections.**

The case of Amaranth is highly and painfully instructive, and it bears out another of my favorite expressions: **Experience is what you got when you didn't get what you wanted.**

* * *

Orin Kramer manages the Kramer-Spellman hedge fund and, more famously, chairs the State of New Jersey Investment Council, which oversees the state's $80 billion pension fund. He is

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extremely knowledgeable concerning risk and return, herd behavior and the vicissitudes of investing in an institutional setting. In a speech a few weeks ago, he made some excellent points:

> My own view is that we exaggerate the utility of standard performance measures. In general, past performance reflects the interaction of particular historical and market conditions and the judgments and beliefs of managers during that period. In particular, managers may consciously or unconsciously pursue strategies which assume the risk of low-frequency, high-severity outcomes. Strategies which can only be torpedoed by low-frequency events will mostly produce favorable outcomes; identifying the tail risk implicit in such strategies is an extraordinary challenge. **The absence of the severe negative outcome is not, regrettably, proof that it cannot occur**. (Emphasis added)

In other words, (1) short-term investment performance is not a helpful indicator of ability, (2) good results can arise just because a manager chose a high-risk course and was bailed out by events, and (3) that same course could just as easily have led to disaster . . . and certainly could do so next time. However, it's rare for either managers or clients to recognize the unreliability implicit in short-term results, especially when they're good.

Orin also notes that Amaranth "occurred when the skies were blue; the fund unraveled because a small and volatile commodity behaved in an unpredicted fashion." This collapse didn't require an adverse economic environment or a market crash. The combination of arrogance, failure to understand and allow for risk, and a small adverse development can be enough to wreak havoc. **It can happen to anyone who doesn't spend the time and effort required to understand the processes underlying his portfolio.**

December 7, 2006

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Memo to: Oaktree Clients

From: Howard Marks

Re: The New Paradigm

When I was a kid, no one ate kiwi fruit or heirloom tomatoes – or had ever heard of them, for that matter. And then, all of a sudden, they were everywhere. The same is true for the word "paradigm": no one had heard the word, and then one day it was part of everyday speech, especially that of management consultants and other savants.

"Paradigm" seems to invariably be used along with the word "new." No one ever talks about the old paradigm. Just as there's newness to the word, there's usually newness to the subject it describes. And there's usually a connotation that the new paradigm represents progress.

I believe a new paradigm has taken hold in the investment world, bringing with it vast changes – and not necessarily for the better. The situation today is very different from that of just five or six years ago, and the implications for the future are nothing short of profound. But I haven't seen this overall subject given much attention.

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The Good Old Days

In the old days – meaning prior to the current millennium – the investment world was different from that of today in a number of important ways:

- **Risk capital was in limited supply**.

- **Risk aversion was reasonably present, such that in order for risky investments to be undertaken, that risk aversion had to be overcome by high promised returns.** The reluctance to make risky investments also meant that they had to be supported by research and analysis performed by skeptical experts.

- **There was a particular aversion to new, unproven and "alternative" forms of investment**. Fiduciary caution was an overarching consideration. With the returns from U.S. equities expected to handily exceed the overall return needs of pension funds and endowments, alternative investments were something of an exotic luxury: tempting but also non-essential and somewhat forbidding.

- Because the amounts of capital pursuing alternative investments were limited, **investors had negotiating power** and were able to insist on, among other things, an incentive system that aligned their interests with those of their money mangers, in which fixed fees merely covered managers' expenses and incentive fees offered managers the hoped-for brass ring.

The Great New Days

In my view, all of the elements listed above have changed drastically in the last few years. (You've seen some of this from me before, but not all in one place.)

- **The stock market's losses in 2000-02 substantially cooled investors' ardor for equities.** Instead of 9-11%, U.S. stocks now are universally expected to return just 5-7%. **Thus pension funds and endowments that need 8% or more are looking elsewhere for return.** That "elsewhere" means non-traditional market niches such as buyouts, venture capital, hedge funds, real estate and emerging market equities and debt.

- **This stretch for return has overcome innate caution.** Any aversion to the risks entailed in these markets has been wiped away by the combination of (1) the perceived paucity of return in traditional stocks and bonds, (2) the high returns achieved recently in the alternate markets, and (3) the failure of risk to turn into loss in the last few years. Recent successes have erased from the collective consciousness any reluctance to undertake the new, unproven or risky.

- **As a result, large amounts of money are demanding access to the alternative markets.** However, these markets are much smaller than the traditional stock and bond markets that now seem uninteresting. (The Financial Times reported on September 11 that according to JPMorgan, the alternative investment world amounts to $3 trillion, while the size of the mainstream bond and equity world is estimated at $60 trillion.) Thus the amounts people are trying to invest can overwhelm these markets. **For this reason, investors may attach more importance to the ability to put large sums to work than to being able to attain historic returns and risk premiums, clear high due diligence hurdles, or structure fee arrangements that channel managers' energies for the benefit of clients.**

- **For now, the high level of liquidity is creating a "virtuous cycle."** The inflows have (1) given rise to asset appreciation, high returns and further demand, and (2) made it easy for weak companies to finance their way out of trouble, thus contributing to the impression that the level of risk is low.

- **The business model for managers in these areas has been completely altered by these developments**. Because the amounts under management are so large (and the ability to charge high management fees is so great), managers can get rich off management fees and deal fees alone. **For managers, then, high returns may be a nice-to-have, not a need-to-have, and avoiding endangering the fee machine can become a greater preoccupation.**

It is my view that, in combination, these developments have had a number of undesirable effects on the investment environment such that:

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- Willingness to bear risk is up.
- Insistence on high risk premiums is down.
- Skepticism is down, and there's widespread willingness to suspend disbelief.
- Demand for t-crossing and i-dotting is in retreat.
- Quantity can replace quality as the *sine qua non* for portfolio construction.

I'll provide a few examples below to illustrate what I think is going on in the alternative markets.

Buyouts: Where's the Magic?

A startling revolution has taken place among buyout funds in the last year or so. Let's take a look at how we got here.

So many of the big-name, highly leveraged buyouts of the late 1980s went bankrupt in 1990 – Macy's, Federated, National Gypsum, etc., etc. – that the industry had to recreate itself, dropping the discredited word "leveraged" and the previously ubiquitous acronym LBO. Instead, the industry began to call what it does "buyouts" or "private equity." It switched its model from loading massive leverage on venerable, multi-billion dollar companies to the mantras of "platform and buildup" and "consolidate the industry."

In the 1990s, the low levels of leverage permitted by chastened lenders kept the buyout boys from closing any landmark acquisitions, but also from loading on enough debt to render their companies vulnerable to distress. In order to lose huge amounts of capital, buyout funds had to venture into the tech and telecom arenas, and relatively few rose to the occasion. Thus buyout funds got through the 2002 debt debacle largely unscathed. The buyouts of the 1990s did not give rise to a high level of bankruptcies, but neither were the returns spectacular, even with leveraged equity in a rising stock market.

The pioneers of the buyout business – like KKR, Warburg Pincus and Apax Partners – enjoyed the spectacular success that can come with early entry and good execution. But as a result of the trends since the mid-1980s, results for most buyout funds have been anything but spectacular. As I mentioned in "Dare to be Great," from 1980 to 1997 the typical fund performed just in line with the unleveraged S&P 500. So what's happened since then?

- The stock market declined for three consecutive years for the first time since the 1930s.
- Buyout funds did okay.
- Expectations for returns from stocks have been almost halved.
- Financial engineering (in an extremely benign capital market) has enabled buyout funds formed in the last few years to report sky-high internal rates of return on their early winners.

As a result of the above, the demand for funds in the buyout field – and especially "big buyout" – is absolutely booming. I believe that in 2000, KKR couldn't get $10 billion for its Millennium Fund and closed at $6+ billion instead. Their current fund is at $15 billion, and that on top of $5 billion they raised through a public offering in Amsterdam earlier this year. Several funds have

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been raised with capital in eleven figures, and $15 billion has become the new $5 billion. $6 billion is considered a mid-sized fund, and $2-3 billion feels like small-fry.

What's behind the boom? As elsewhere in the investment business, the buyout managers talk a great game, and the best have produced excellent results over the years – although perhaps not always as good as they intimate. In 1999, I explained distressed debt investing to a state pension fund and said I thought we could make 20% before fees. "Buyout fund x was just in here," they said, "and they think they can make 30%." I'm confident that most 1999 vintage buyout funds didn't make 30%.

But in the last couple of years, cheap money made available by avid lenders – willing even to lend money that would be paid out immediately to stockholders, increasing indebtedness but not adding to assets, revenues or profits – has enabled buyout funds to shrink their equity investments and supercharge their IRRs. Not always larger dollar profits or higher ratios of terminal value to committed capital, but higher reported rates of return – probably in many cases on small amounts of equity for brief periods of time (See "You Can't Eat IRR"). But people are turned on by high percentage returns, and the dollars have followed.

I believe the largest pools of investment capital have given up on getting the returns they need from now-debased equities and have turned to buyouts and the like for help. I imagine a thought process that goes like this: "Historically, good buyout funds have had returns in the high teens net of fees. Even though the environment isn't what it used to be, it should be a lay-up for them to reach the low teens. I'd even be happy with 10%; it would certainly help me with my 8% required return. And I can put a billion to work in one phone call."

Well, I'm not sure many buyout firms have produced historic average returns in the high teens. (According to Bloomberg, "U.S. buyout funds produced returns of 13.3% during the past two decades.") And even if the best did, that doesn't mean earning even low teens will be easy in the environment ahead. Finally, I'm not convinced that returns in the low teens are enough to make it worth bearing the risk that comes with leverage, illiquidity and competition for deals. But the money flowing into buyout funds makes it clear that I'm in the minority.

The Outlook for Buyout Returns

Investors – in any field – can make money in four broad ways: buy cheap, add value, apply financial engineering and sell dear. Let's examine each one as it applies to buyouts.

Buying cheap – The golden age of buyouts lasted from approximately the mid-1970s to the mid-1980s. What was the environment like as that period began?

- The stock market was in a terrible slump, with Business Week heralding "The Death of Equities."
- Companies could be bought cheaper through the stock market than they could be built for.
- Historically, before the age of leverage, one company could buy another only if the would-be acquirer was larger than the target. Thus the competition to acquire was limited.

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- As the LBO era dawned, only a few organizations had the inclination and know-how required to buy companies bigger than themselves.
- Buyout funds were tiny, and their *modus operandi* consisted of paying bargain prices for small, little-known companies or orphaned divisions of larger companies with stable cash flows.

Today's environment bears little resemblance to that one. As I mentioned in a memo earlier this year, I'd heard a buyout mogul say, "It's our job to buy good companies at fair prices and make them better." I doubt he was content with fair-priced purchases thirty years ago.

- Listed companies are cheaper today than they were in 1999, but not nearly as cheap as in 1976. The P/E ratio on the S&P 500 is 17.5 today versus 10.3 at the inception of the LBO movement three decades ago.
- To deploy unspent capital that in August was estimated by The Financial Times at $297 billion, buyout funds will have to acquire companies worth roughly $1.5 trillion in the years ahead. That's a few percent of all of the world's stock markets.
- The buyout funds are competing with each other to spend their capital, and they also have to compete against strategic corporate buyers that have enjoyed strong profitability and are cash-rich. (Nevertheless, buyout funds often outbid strategic buyers, who in theory should be able to pay more because they can combine the acquiree's operations with their own and garner efficiencies.)
- In some cases, activist shareholders and cash-swollen hedge funds are pushing managements (and boards under increased scrutiny) to demand higher prices before turning over their companies to buyout funds, and escalating purchase prices are frequently the result.

Under this combination of circumstances, are there still bargains to be found? Here's the big question that's nagging at me: **Everyone is convinced that investing in listed U.S. equities at today's prices will produce gross returns of 5-7% in the years ahead. If that's true, then how can buyout funds go into that same market, pay substantial control premiums over their target companies' stock prices, and generate double-digit annual returns after deducting 2-4% per year in management fees, deal fees and incentive fees? Will there be enough "value added" and financial engineering to bridge that gap?**

Adding value – The buyout funds claim that they'll be able to create gains by making companies better. But many companies have been working hard for years to improve their efficiency and profitability. There's always room for improvement, but it's a lot harder to make money this way than by buying something cheap and selling it at a fair price. **As in everything else, the best managers will add substantial value, but if it was easy enough for everyone to do it, it probably would have been done already.**

Financial engineering – Between the two, I'd rather bet on fundamental improvement than smoke and mirrors. Withdrawing equity in order to leverage up the IRR doesn't add any value. It couldn't be done in the stingier debt market of five years ago, and it may not be doable five years from now if a business slowdown shows lenders its folly. Rising interest rates would be a negative, and factoring in a more restrictive capital market would ring the bell on radical financial engineering for a while.

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Selling dear – Of course, you can always hope to sell at valuation multiples higher than you paid, but it's not reasonable to count on being able to do so all the time. Purchase multiples below the historic norms could buttress such an expectation, but we're not there now. Today's valuation multiples are being supported by low interest rates (prices of financial instruments rise as demanded yields decline, and vice versa), and higher interest rates would be expected to reduce sale prices for companies. And as the subject companies get bigger and bigger, the number of possible buyers shrinks. For the $30 billion companies that are being talked about today, the stock market may be the only exit, and that's something that can't be counted on year-in and year-out.

So in contrast to the description of the golden days of buyouts on the previous page, today we have:

- A buyout phenomenon that everyone's aware of and eager to play.
- A stock market that can't be described as cheap.
- Heavy competition to buy target companies.
- Dependence on financial engineering based on low interest rates and generous capital markets that may not stay that way forever.

We also see companies being sold from one buyout fund to another. What does that imply? In most transactions, one party's right and the other's wrong. Generally, the buyer can't be getting a bargain unless the seller is accepting less than he should. And shouldn't the seller know the company best (and be expected to have made the available improvements)? So are the selling buyout funds being generous? Are buyers overpaying? Or are the transactions motivated by a desire to lock in incentive fees and generate further deal fees? If there is a free lunch, where's it coming from? I'll leave those questions to you.

Buyout prices have been rising as a multiple of company earnings, and companies are being bought with greater proportions of debt in an attempt to squeeze out higher returns on the buyout firms' equity. As companies become more highly geared, the outcomes become more dependent on a favorable environment. As they say in Las Vegas, "The more you bet, the more you win when you win." **But, simply put, when you increase leverage, the probability of getting into a jam increases and the consequences of that jam worsen.** Certainly this is not a cautious, capital-starved environment for buyouts in which people have girded for tough times.

I have to admit it: if I could push the fast-forward button and see how a movie ends, it would be this one. Like most "silver bullets," I think buyouts will fail to live up to the highest expectations of those who're making it the darling of the investment world today.

I find the outlook for funds in the "big buyout" category particularly intriguing. Certainly the managers spin a convincing tale: Because there are so few buyers capable of tackling the biggest transactions, the competition to buy will be limited and transaction prices will be kept low. The few big funds will tend to join forces in "club deals," further precluding bidding wars. And, based on the supposed correlation between corporate bigness and inefficiency, it's claimed that vast gains will be wrought from streamlining the acquired companies. We'll see.

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How About Real Estate?

The other day, I was privileged to hike with a friend who I consider one of the very best value-added real estate investors, Dean Adler of Lubert-Adler. I thought I was listening to a tape of my worrisome self. Dean told a tale that I found scary – even though I don't stand to lose a penny if his warnings hold true. Here's what he says is going on in the real estate arena:

As in other parts of the world of investment and finance, the ability to borrow is what's keeping the wheels turning. And the ability to borrow for real estate investments is under the control of a group of people called appraisers.

Dean's firm spends months performing in-depth analysis on the properties it owns and wants to finance, and on those it wishes to buy. Then it takes the data to lenders . . . who don't care. All that matters, they say, is what the appraiser thinks. If the appraiser says your property is worth 100, you can borrow 80. But if he says it's worth 50, you can only borrow 40.

Interestingly, the data generated by Lubert-Adler through months of analysis is dismissed by the lender, but the opinion of the appraiser – who spends perhaps a week or two looking at the property – is accepted unquestioningly. But – I have to say it – if the appraiser was as good as Dean at putting values on property, wouldn't he be a leading real estate investor rather than an appraiser?

The real estate story has other negative aspects. The first is that whereas I posit being able to borrow 80% of appraised value, it has become possible to borrow more than 100%, as lenders will finance not just the purchase price, but development and other expenses as well. In "Field of Dreams," they said "If you build it, they will come." In real estate, it's more like, "If you'll lend them money, they will buy or build." Just imagine what goes through the heads of real estate dreamers when the capital markets allow them to take risks with other people's money.

Lastly, Dean pointed to construction loans. These short-term (and, in today's market, low-rate) loans bear the substantial risks associated with delays, cost overruns and the like. And yet they are being made by hedge funds that lack real estate expertise, experience and infrastructure.

If having a sense for the behavior going on around us can be highly instructive, as I feel it can, then these observations from the real estate industry should be cautionary. As I often quote Warren Buffett as saying, "The less prudence with which others conduct their affairs, the greater the prudence with which we should conduct our own affairs." **Dean Adler's description of the state of affairs in real estate doesn't suggest there's a lot of prudence out there, meaning it's time for us to apply our own.**

Give Me Structure

Ten years ago, we would raise $100 from a client and use it to buy $100 worth of high yield bonds. We still do it that way, but in many quarters, that $100 is used as the equity for a structured investment vehicle, such as a CDO, CBO or CLO, in which it supports the purchase of $1,000 worth of (management fee-generating) bonds.

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Collateralized Debt Obligations, Bond Obligations and Loan Obligations are entities that collect capital from investors and lenders with which to construct portfolios of the relevant instruments. The capital structure of the entity is tiered, so that the providers of capital have varying priorities in terms of being repaid and participating in losses.

The senior-most lender enjoys security from the entire portfolio, and because his loan is thus heavily over-secured and highly rated, he demands only a low rate of return. The second-most-senior loan is a bit less well secured and less highly rated, and thus the rate demanded on his debt is a bit higher, and so forth. Because the interest rates promised to the senior lenders are below the average coupon on the portfolio, there should be a lot of cash left over for the junior lenders and the equity investors – if things go well. But the equity is also in the first-loss position, so it's truly a make-it-or-break-it proposition.

Vast sums have been raised for this "silver-bullet" solution to the problems of allocating risk, leveraging returns and putting money to work. Clearly, the key to seeing all this work out lies in enough credit expertise being present for risks to be controlled and defaults minimized. But today the necessary ingredient for the establishment of these structured vehicles isn't credit expertise, but the ability to structure the entity so as to win high-enough ratings on the senior tranches to attract capital and permit a lot of leverage. This distinction is highly significant. In a clear analogue to real estate appraisers, the people controlling the all-important credit spigot are the financial structurers assembling the entities and the CDO analysts at the credit rating agencies.

In a June 2 article entitled "Structured Complacency," the often-brilliant "Grant's Interest Rate Observer" went into great (and, as usual, critical) detail on this phenomenon. As to the popularity of structured vehicles, it wrote, **"Credit markets are sanguine. Structured credit is proliferating. Could the first fact be related to the second?"** And as a key part of this trend, it says, **"Financial engineering is displacing credit analysis."** What's the difference? **"Financial engineering is the science of structuring cash flows; credit analysis is the art of getting paid."**

Why the declining interest in credit analysis? Grant's advances the thesis that it is linked to disintermediation, in which many lenders no longer hold on to the loans they make, but more often syndicate or sell them onward to other providers of capital. Holding the keys in this process are the risk manager who structures the entity based on statistical likelihoods and the rating agency that applies the stamp of approval for buyers lacking direct knowledge of the underlying instruments and the ability to understand the structure. Grant's quotes the IMF's 2006 Global Financial Stability Report:

> Not surprisingly, the development of structured credit markets has coincided with the increasing involvement of people with advanced financial engineering skills required to measure and manage these often complex risks. In fact, for many market participants, the application of such skills may have become more important than fundamental credit analysis. . . .

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> Discussions with market participants raised questions as to whether the increased focus on structuring skills, relative to "credit" analysis, may itself present a concern.

The structurers are "risk managers." They assemble mathematical models that extrapolate historic default rates and recovery rates (which may or may not have relevance in today's environment). They look at probabilities, expected values and correlations. But they count heavily on the statistical properties of the universe as it has been and may know rather little about the actual assets contained in the portfolios. **Of course, this sort of reliance on statistically derived expectations was behind the undoing of Long Term Capital Management in 1998 – of which so little seems to be remembered.**

Grant's describes an interview with a junior analyst at a rating agency whose job it is to monitor the health of a large number of CDOs each day, plugging numbers into an Excel spreadsheet. According to Grant's, "he doubts that many people really understand what these structures own, how their assets are correlated, or what might happen to them in the liquidation portion of a credit cycle." To wrap up, Grant's quotes Michael Lewitt of Harch Capital Manager, a manager of bank loans:

> . . . having a credit market priced on a non-credit basis – meaning priced off quantitative and arbitrage bases, and not on credit fundamentals – is not a healthy thing.

Interestingly in this connection, Wachovia Structured Products reports that as of April, of the 47 Collateralized Loan Obligations that had gone full cycle, 30 generated positive returns for their equity. Put the other way around 17, or 36%, had lost money. I doubt that was the expectation on which they were sold. And that in relatively good times.

My favorite investment adage warns about the things "the fool does in the end." Clearly, turning over the administration of credit to appraisers, raters and structurers who know relatively little about the underlying assets they're dealing with – and who are hired hands without their own capital at risk – signals a dangerous late stage of the inevitable cycle.

It's Time to Hedge

Given the laxness, euphoria and credulousness that I detect in the market for money today, it's time for caution. Where better to find it than in funds that hedge?

Well, of course, today the term "hedge fund" has nothing to do with hedging and everything to do with incentive fees. In no way does that label connote risk control. And whereas the shortcomings of the structured entities described above go along with the activities fitting their charter, most hedge funds have unlimited charters and can roam free in search of return. Here are a few recent trends:

- Hedge funds are making "second lien loans" in large numbers. In some cases, however, there are no assets left (after the claims of first lien loans) to have a lien against. They may

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or may not be made by people who have previously been lenders. Those people may or may not possess workout experience. And it's an open question how hedge funds holding large portfolios of small loans will behave when companies get into financial hot water. Lately I've heard mention that hedge funds might be making these loans to gain control of companies that default. But it isn't clear to me how appreciation will routinely be wrung from loans that are made at par and subsequently become non-performing.

- Since I moved to Los Angeles in 1980, my friends in "The Industry" have been unanimous in one piece of advice: never invest in movies. Yet The Wall Street Journal of April 29 carried a story headlined, "Defying the Odds, Hedge Funds Bet Billions on Movies."

  > For decades, movie studios have gladly accepted millions of dollars from a group of investors collectively dismissed as "dumb money": deep-pocketed dentists, oil tycoons and other wealthy individuals eager for a piece of the glamorous but high-risk game of film production. But the biggest influx of money in Hollywood these days is coming from sharks, not suckers: hedge funds, private equity funds and investment banks.

  Take the example of "Poseidon," which was co-financed by hedge fund-backed Virtual Studios. It has brought in gross revenues of $180 million worldwide since May against its production budget of $160 million, meaning that after the deduction of at least half the revenues for distribution charges, advertising costs and exhibitors' fees, it's still a big loser.

- If there's one thing I've never claimed to understand, it's how you put a price on a highly improbable disaster. Thus I have a lot of respect for anyone who can do a consistently superior job of underwriting catastrophe insurance against earthquakes, hurricanes and terrorist events. Is the right premium for insuring a Caribbean hotel against hurricanes $1 million or $5 million, given that the loss may be zero or $100 million? The difficulty of setting these premiums isn't keeping hedge funds from filling the gap in the "cat insurance" market.

- Along similar lines as catastrophe insurance, hedge funds are among the leading writers of Credit Default Swaps, the equivalent of issuing insurance against bond defaults. Hedge funds find it attractive to write this coverage for multi-year periods, perhaps in part because the premiums are taken into earnings each year, adding to returns and giving rise to incentive fees, while the defaults are likely to come later. **As in any form of risk transfer, the ultimate profitability of this proposition will depend on how well the insurers know the risks and on what they're able to charge in terms of premiums.** When lots of hedge funds are eager to sell CDS, however, premiums are driven down, and they can easily prove inadequate when defaults occur down the road.

- In recent months we've seen hedge funds take major losses (sometimes prompting them to close their doors) in natural gas trading and unhedged emerging market equities. I've read of hedge funds that trade in carbon dioxide emissions and one backing a fledgling fashion designer. And hedge funds are making the construction loans that Dean Adler discussed.

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None of these activities is imprudent in and of itself. But they all involve substantial risk and should be undertaken only by people possessing the essential edge: sufficient expertise in the relevant field to be able to know when the opportunities are truly attractive.

Why This Appetite for Risk?

In my memo on hedge funds of two years ago, I cited an insightful piece from Byron Wien of Morgan Stanley called "In Praise of Hedge Fund Volatility." In it, he observed that many hedge funds have become asset gatherers for whom the retention of assets and the receipt of management fees have become more important than the achievement of high returns and the earning of incentive fees. Thus low volatility has supplanted high return in the pantheon of virtues.

In my view, this trend has reached beyond hedge funds to additional corners of the alternative investing world. The concept of management fees sufficient to "pay the light bill" seems obsolete. For example, even at just 1¼% per annum, a $15 billion buyout fund can generate more than $1 billion of management fees over its lifetime. Add to that the "deal fees" and "monitoring fees" commonly charged and it's easy to picture managers becoming wealthy irrespective of performance. Indeed, the ancillary fees can be so massive that even where some or all of them must be applied to offset management fees, managers can receive total fees that far exceed the stated management fee percentage.

Of course, if a fund can generate $1 billion or more in fees, you as its manager would love to perpetuate that flow. While you don't need high returns in order to get rich, it would be nice to be able to repeat this process, so returns should be good enough to permit further funds to be raised. **But the notion of managers who are entirely dependent on high returns for the achievement of their financial dreams may to some extent have become a thing of the past.**

So what's the new paradigm?

- **First, raise a lot of money.**
- **Second, try for a rate of return that clients will find acceptable.**
- **Third, don't take enough risk to possibly preclude an encore.**
- **Fourth, invest as fast as is prudently possible, so that another fund can be raised while the market remains accommodating.**

I believe this last point may be part of the reason for managers' ever-growing willingness to invest in large transactions and afield from the tried-and-true. In view of today's incentive structure for managers, speed and size can count for more than investment excellence. Some managers will sell out knowingly, even proactively. Others may be influenced more insidiously. And some will be egged on by clients emphasizing their desire to invest large amounts of money with low volatility and downplaying the need for high returns. Managers who do not want to be so affected (and their clients) must strongly resist this trend. Recognizing it is the first step in doing so.

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It doesn't give me pleasure to talk about an environment in which risk aversion is in short supply, risk premiums are skimpy and danger lurks. Or in which there's a new paradigm capable of contributing to a misalignment of interests between investors and their managers.

But it is what it is. Take a look at the lists of elements on pages 2, 3 (top), 6 and 11 and tell me which ones you think aren't described accurately. **If you agree that the investment world of today is captured in those lists, then the prescription is unambiguous: it's time for caution and risk control.**

The workings of free capital markets require that in order to overcome investors' innate aversion to risk, seemingly riskier investments must offer the possibility of higher returns providing "risk premiums." But when risk aversion is at cyclical lows, risk premiums needn't be generous; people will invest anyway. Too many people trying to dine at the buffet simultaneously can lead to a disorderly process and skimpy portions. I recommend that you look twice at the cost of admission and – if you do decide to partake – proceed carefully.

For the last few years, my mantra has been "special niches, special people." By the "special people" part I mean it's important to find managers who possess the skills required to safely pursue return in high-priced markets. It's at least as important in the current environment, however, that they also can be counted on to resist the conditions described above in the interest of serving their clients.

October 19, 2006

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Memo to: Oaktree Clients

From: Howard Marks

Re: Dare to Be Great

In one of the most colorful vignettes of the early 1970s, Glenn Turner, the head of Koscot Interplanetary, would fly into a small Midwestern town in his Learjet (when that was a huge deal). Two dwarfs would hop out and unroll a red carpet. Turner would emerge under a banner reading "Dare to Be Great" and vacuum up money through a pyramid marketing scheme based on selling motivational tapes containing the secret of getting rich. **Turner's long gone from the scene, but daring to be great still deserves our consideration, even in the absence of a surefire recipe for success.**

This memo stems from an accumulation of thoughts on the subject of how investment management clients might best pursue superior results. Typically my thoughts pile up, and then something prompts me to turn them into a memo. In this case, the impetus came while I read "Hedgehogging" by Barton Biggs. I'll come back to it later.

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How Can We Achieve Superior Investment Results?

The answer is simple: not only am I unaware of any formula that alone will lead to above average investment performance, but I'm convinced such a formula cannot exist. According to one of my favorite sources of inspiration, the late John Kenneth Galbraith:

> There is nothing reliable to be learned about making money. If there were, study would be intense and everyone with a positive IQ would be rich.

Of course there can't be a roadmap to investment success. First, the collective actions of those following the map would alter the landscape, rendering it ineffective. And second, everyone following it would achieve the same results, and people would still look longingly at the top quartile . . . the route to which would have to be found through other means.

I'll make a few suggestions below on what investors should and shouldn't do. In the end, though, the things I suggest will be of little help without highly skilled implementation, and the results will depend almost entirely on that implementation and rather little on my suggestions.

First, Get Out of Lake Wobegon

Nori Gerardo Lietz of Pension Consulting Alliance, in a paper on the performance of real estate opportunity funds, was the latest to remind me about Garrison Keillor's fictional Lake Wobegon, where all the children are above average. **Investing, likewise, is a world where it seems everyone claims to be terrific and can back it up with performance data.** Especially in

alternative investing areas such as real estate and private equity, the managers make it sound like they've done great. But the long-term average returns in most such areas have been lackluster, and many managers' records are inconsistent. One of my favorite quotes came from "Dandy Don" Meredith while announcing on Monday Night Football: "They don't make 'em anymore the way they used to," he said, "but then again they never did." Rarely are the real records as good as the ones people (and especially the managers who created them) fondly remember.

Take a look at the performance over time in venture capital, buyouts and real estate and you'll see results for the median manager that are far from exciting. Professor Steven Kaplan, head of the entrepreneurial studies department at the University of Chicago's Graduate School of Business, authored a paper showing that a dollar invested in the totality of buyout funds between 1980 and 1997 did no better than a dollar invested in the S&P 500. And that was despite the fact that the buyout funds were leveraged in a rising equity market and the S&P wasn't.

The eye-popping results of the funds at the top of the performance range draw money magnetically to alternative investment areas, while the average return usually deserves a big yawn. **For superior results, it's absolutely essential to invest with superior managers.**

My old boss at Citibank, Peter Vermilye, is famous for saying that only 5% of analysts add value. That's probably true as well of portfolio managers, consultants and investment committees and their members. (Of course you and I are in that 5%, but I have my doubts about the others.)

The consensus opinion of market participants is baked into market prices. Thus, if investors lack insight that is superior to the average of the people who make up the consensus, they should expect average risk-adjusted performance. Few people are able to consistently identify cases where the market price is wrong and act on them to their advantage. "But how about Peter Lynch?" people respond. That's just the point. His singular reputation is proof how rare the Peter Lynches are. As my mother used to say, it's the exception that proves the rule.

So, the first job in trying to access superior performance consists of getting in with the best funds and managers. Everyone wants above-average results, but far from everyone can achieve them. (Of course, the chore is complicated by the fact that the investment capacity of superior investment vehicles is limited, and the inrush of money can itself render them less superior, since the cost of investing will be pushed up as the money arrives.)

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Escape From the Crowd

This just in: you can't take the same actions as everyone else and expect to outperform. The search for superior results has to lead to the unusual, perhaps the idiosyncratic. Take manager selection.

Above-average managers aren't easy to find. When you choose on the basis of a manager's track record, it's the same record that everyone else sees. In order to make superior choices, clients have to do in-depth analysis; get to know more than the record, reputation and printed word; fully understand managers' approaches; make judgment calls based on that knowledge;

and take chances. Especially as to that last point, **unusual success cannot lie in doing the obvious.** Two specific examples:

- New managers – Someone has to fund them (or else they'll never become established managers). But clearly that decision can't be based on reams of data. It involves making a bet on people and their investment approaches. Hiring new managers can pay off very well . . . when it's done right.

- Underperforming managers – Retain or fire . . . or add money? That's the real question. Good investors hold fast to their approach and discipline. But every approach goes out of favor from time to time, and the manager who adheres most firmly can do the worst. (Page 217 of the book "Hedgehogging" provides fascinating data on some great managers' terrible times.) A lagging year or two doesn't make a manager a bad one . . . maybe just one whose market niche has been in the process of getting cheap. But how often are managers given more money when they're in a slump (as opposed to being fired)?

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Buck the Trend

As in manager selection, bucking the trend is a key element in all aspects of the pursuit of superior investment results. First, going along with the crowd will, by definition, lead to average performance. Second, the crowd is usually in broad agreement – and wrong – at the extremes. That's what creates the extremes (and the highly profitable recoveries therefrom). But going against the crowd isn't easy. As Yale's David Swensen puts it,

> Establishing and maintaining an unconventional investment profile requires acceptance of uncomfortably idiosyncratic portfolios, which frequently appear downright imprudent in the eyes of conventional wisdom.

Non-consensus ideas have to be lonely. **By definition, non-consensus ideas that are popular, widely held or intuitively obvious are an oxymoron.** Thus such ideas are uncomfortable; non-conformists don't enjoy the warmth that comes with being at the center of the herd.

Further, unconventional ideas often appear imprudent. The popular definition of "prudent" – especially in the investment world – is often twisted into "what everyone does." When courts interpret Prudent Man laws, they take them to mean "what most intelligent, careful people would do under those circumstances." **But many of the things that have worked out best over the years – betting on start-ups, buying the debt of bankrupt companies, shorting the stocks of world-altering tech companies – looked downright imprudent to the masses at the time. (If they weren't so out of favor, they couldn't have been implemented at such advantageous prices and produced such huge returns.)**

Bucking the trend does not have to be synonymous with taking a lot of investment risk. In fact, it's following the crowd that's risky, since the crowd's actions take security prices to such extremes.

Staying away from tech stocks in the late 1990s meant refusing to pay ridiculously high prices. It wasn't risky in fundamental terms, but in that it required daring to be different. Those who moved to underweight tech stocks when they first became overpriced were on the hot seat for a long time. I don't think any other stock group in history has done as well as the techs in the late 1990s, and the 1999 divergence between growth stock returns and value stock returns was the greatest ever. In the years leading up to March 2000, lots of managers were fired for having underweighted tech stocks. That didn't make them wrong – just too early. While it wasn't easy for them to stick to their guns – or for their clients to stay with them – it sure paid off.

Unconventionality

Unconventionality is required for superior investment results, especially in asset allocation. As I mentioned above, you can't do the same things others do and expect to outperform.

Unconventionality shouldn't be a goal in itself, but rather a way of thinking. In order to distinguish yourself from others, it helps to have ideas that are different and to process those ideas differently. I conceptualize the situation as a simple 2-by-2 matrix:

	Conventional Behavior	Unconventional Behavior
Favorable Outcomes	Average good results	Above-average results
Unfavorable Outcomes	Average bad results	Below-average results

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Of course it's not easy and clear-cut, but I think that's the general situation. If your behavior and that of your managers is conventional, you're likely to get conventional results – either good or bad. **Only if the behavior is unconventional is your performance likely to be unconventional . . . and only if the judgments are superior is your performance likely to be above average.**

Contrarian investing, which is akin to unconventional investing, has been behind many of the greatest successes. But that's not the same as saying all contrarian decisions are successful. As is the case with unconventionality, you should not aim for contrarianism for its own sake, but only when the reasons are good and the actions of the crowd look particularly foolish. If your actions aren't founded on solid logic, (a) they're unlikely to work consistently, and (b) when the going gets tough, you might find it hard to hold on through the lows. David Swensen puts it well in his book, "Pioneering Portfolio Management":

> Contrarian, long-term investing poses extraordinary challenges under the best of circumstances. . . . Unfortunately, overcoming the tendency to follow the crowd, while necessary, proves insufficient to guarantee investment success. . . . While courage to take a different path enhances chances for success, investors face likely failure unless a thoughtful set of investment principles undergirds the courage.

I like to say Oaktree buys when people say "no way" and sells when they say "no sweat." We bought Tumi in 2002, when people believed that because of 9/11, nobody would ever travel again (or need luggage), and we sold it in 2004 when no one remembered having felt that way. We gained control of Regal, Loews, Edwards and Landmark when people thought overexpansion had sounded the death knell for the movie exhibition industry, and we began to sell when industry capacity was rationalized and profitability rebounded. We bought land in Chicago when everyone was sure there would never be another skyscraper built in the Loop, and we sold it when they decided more were in fact needed. These transactions were highly profitable.

When someone says, "I wouldn't buy that at any price," it's as illogical as, "I'll take it regardless of price." The latter can get you killed (see Nifty-Fifty growth stocks in 1969 and tech stocks in 1999), and the former can make you miss an opportunity. When everyone's eager to buy the same thing, it's probably overpriced. And when no one is willing to buy something, it's equally likely to be underpriced.

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Be a Pioneer

In my experience, many of the most successful investments have entailed being early. **That's half the reason why I consider the greatest of all investment adages to be: "What the wise man does in the beginning, the fool does in the end."**

While there's no surefire route to investment success, I do believe one of the easiest ways to make money is by buying things whose merits others haven't yet discovered. You ask, "When do you get that chance?" Not often, (and certainly not easily today), but not never.

In 1978, Bache asked Citibank to manage a new mutual fund for it. Citibank turned the job over to me: "There's some guy named Milken or something who works for a small brokerage firm in California, issuing and trading high yield bonds. Can you find out what that means?"

Few people had ever heard of high yield bonds. There wasn't much historic performance data, and what little there was came from a few obscure mutual funds. Buying bonds with a meaningful probability of default certainly seemed imprudent. Most institutional portfolios had an inviolate minimum credit rating for bonds of single-A or triple-B. Corporate CEOs said, "My buddy's company was just threatened by a corporate raider backed by junk bonds; our pension fund will never own any!" And no public or union pension trustee wanted the headline risk associated with bankruptcy. **In other words, the perfect buying opportunity.**

Thus, our high yield bond portfolios have outperformed high grade bonds for two decades-plus, by more than enough to compensate for their defaults, volatility and illiquidity. It's been a long-term free lunch, and **the earliest investors got the biggest helping**.

Everyone craves market inefficiency, but most people are vague on what it means or where it comes from. I've always thought a likely source can be a market niche that most people don't know about, don't understand and don't feel comfortable with. That certainly describes high yield bonds in 1978. It helps to be a pioneer.

Likewise, we were fortunate to turn to distressed debt in 1988. There weren't any distressed debt funds from mainstream financial institutions, and the area was a little-known backwater. What could be more unseemly – and less intuitively attractive – than investing in the debt of companies that are bankrupt or sure to become so? Actually, what else could have been as profitable? Distressed debt buyers have reaped high returns while enjoying the relative safety that comes with paying low prices, investing in asset-rich companies and deleveraging their capital structures.

To take early advantage of areas like these, you have to put your faith in concepts and people, based on logical arguments and analyses but without the benefit of historic performance data. That's how you make the big bucks.

(Today, of course, everyone is willing to do anything to make money. Moreover, everyone assumes that the more *outré* the concept, the more likely it is to produce high returns. Thus, today (a) few if any free lunches are available, and (b) risk-taking is likely to generate sub-par rewards. **That brings me to the second half of my favorite adage, regarding that which "the fool does in the end.")**

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Up Against the Institution

Large investment management firms, pension funds, endowments, investment committees; they're all institutions. As such, they tend to engage in what is described as "institutional behavior" – an oft-heard phrase that's rarely intended as a compliment. We all know what's implied: shared decision making, diffused responsibility, personal risk minimization, and go-along-to-get-along interaction. All of these things work to discourage unconventionality, and thus to render superior investment results elusive.

David Swensen takes direct aim at institutional behavior. In fact, he makes repeated use of the word "institution," as if invoking a negative mantra.

> . . . **active management strategies demand uninstitutional behavior from institutions, creating a paradox that few can unravel**. (my personal favorite, emphasis added)
>
> By operating in the institutional mainstream of short-horizon, uncontroversial opportunities, committee members and staff ensure unspectacular results, while missing potentially rewarding longer-term contrarian plays.
>
> Creating a governance process that encourages long-term, independent, contrarian investing poses an enormous challenge to endowed institutions.

Whether the connotation has to be negative is unclear. **But certainly it is true that "idiosyncratic" and "unconventional" seem to go with "unusual investment results," but probably not with "institutional" and "bureaucratic."** I encourage everyone to examine the

sorts of behavior that characterize their organizations and see if anything can be changed to increase the likelihood of success.

Committees

I don't like being on committees. I was on five of them at Citibank (before moving downward in the organization from Director of Research to just-plain portfolio manager in 1978), and thus I had eleven hours of meetings scheduled per week before I walked in the door each Monday morning. I've always felt that committee meetings tend to last as long as the person who wants them to last the longest wants them to last. Since that's never me, they make me impatient (unless they're doing really interesting stuff). Oaktree generally doesn't have committees, but it's a matter of local option; our Principal Group works through investment committees that everyone seems happy with and that have produced great results.

In "Hedgehogging," under the heading "Groupthink Stinks," Barton Biggs lists a number of the shortcomings of committees, borrowing from Yale psychologist Irving Janis. He says these structures encourage:

- collective rationalization of shared illusions generally believed,
- negative stereotypes of out-of-favor groups, techniques and individuals,
- unwarranted confidence in chosen approaches,
- unanimity, suppression of doubts and pressure on dissenters,
- docility on the part of individual members,
- free-floating conversations during meetings, and
- non-adherence to standardized methodologies.

It's easy to believe that these elements are fostered in decision making groups. And certainly they are undesirable and must be guarded against. As Barton Biggs puts it,

> . . . groups of intelligent people have so many inherent liabilities that a lone individual has a far better chance of making good decisions. The collective intelligence of the group is surely less than the sum of its parts, and the more people on a committee, the less chance it has to be wise and crisp in its decision making.

I'd rather say, "The collective intelligence of the group often is less than the intelligence of its one or two smartest members." By that I mean committees rarely aggregate the insights of their members; rather they tend to reflect the average insightfulness of their members.

At Citibank in the mid-1970s, the senior-most panel, the Investment Policy Committee, would go off-site for semi-annual retreats. The high point consisted of voting on which industries' stocks would perform best over the coming year.

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For some people, the result was a bell-shaped curve.

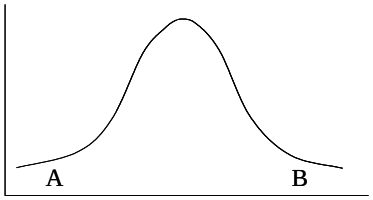

For others it was also bell-shaped, but with the placement of the industries reversed.

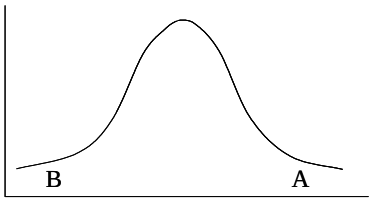

Some saw only big winners and big losers.

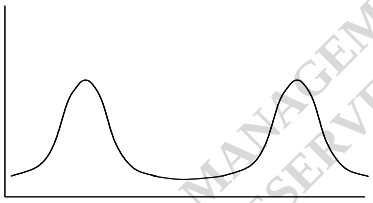

The bulls thought most would do average or better.

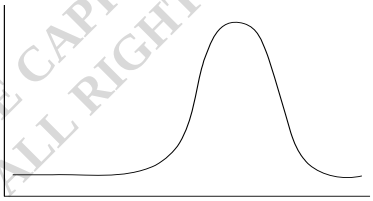

The bears thought most would do average or worse.

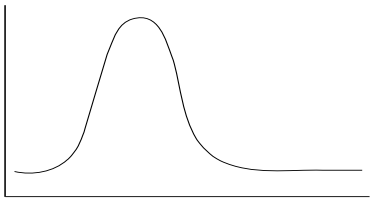

And the agnostics thought they'd all do about the same.

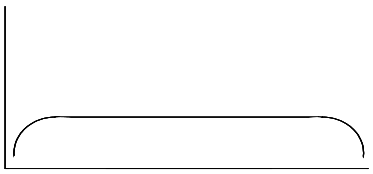

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It was my sense that if you added up the members' individual distributions of expected performance, you'd get a summary distribution that was pretty close to what would have been generated randomly, and one largely devoid of valuable information. Certainly any unique insight that a member of the committee might have would be lost in such an aggregation process.

Committees rarely take high-risk positions for which the members can be criticized. They rarely embrace idiosyncratic opinions. They rarely capture the most insightful member's uniqueness, as expressed in a lone non-conformist viewpoint. And thus they rarely produce highly superior investment results. It's not impossible, just against the odds. Barton Biggs says the chances of its happening can be improved if one or two members seize more-than-equal power. It'll also help if it's the right ones who do so.

I think the key to successful committee efforts lies in "sparks." There should be intellectual friction capable of generating heat and light: spirited discussion leading to unique insight. Professor Janis urges the leader to create an atmosphere that fosters "intellectual suspicion amidst personal trust." Barton Biggs suggests praising those who disagree with the trend; designating devil's advocates; and holding second-chance meetings where members can take another, skeptical look at decisions the group has made. He says, **"harmonious, happy meetings may be a warning of groupthink and complacency, whereas agitation, passionate arguments and some stress are good signs."** While these latter things are no guarantee of correct, unconventional decisions, such decisions may prove elusive without them.

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Agency Risk

Why don't investing institutions strive for unconventionality as often as they should? When they don't dare to be great, why is that the case? One reason is the limitations inherent in institutional behavior and committee decision making, as described above. Another is agency risk.

I first read about agency risk in 1983, in an article by Dean LeBaron of Batterymarch. It's risk that arises when agents are hired to do a job in lieu of their principals, and it arises because the agents' motivations may diverge from those of the principals. **When you manage your own money, the decisions are made according to your view of what's best for you. When other people manage your money, the decisions may also be influenced by what's best for them.** How many times have you heard a hired hand say, "It's not worth my while to take that risk"?

The most basic agency issue arises because staff and investment committee members may gain relatively little if their decisions are successful but can lose a lot (like their jobs and reputations) if the decisions are unsuccessful. All else being equal, this can lead them to care more about limiting risk than about achieving gains. (On the other hand, because hedge fund managers participate in profits but not losses, this can make them care more about achieving gains than about limiting risk.)

The litany of agency risks goes on, per David Swensen, "from trustees seeking to make an impact during their term on the investment committee, to portfolio managers pursuing steady fee

income at the expense of investment excellence, to corporate managers diverting assets for personal gain."

Whenever parties other than the owners are engaged in a process, there's a chance that they will act (wittingly or unwittingly) in their own interests in addition to (or instead of) the interests of the owners. This is inescapable, but not unmanageable.

The best way to deal with an issue is usually to put it on the table. Sunlight is a great disinfectant. All decision-making processes should recognize and take into consideration the factors influencing the decision makers. Candid discussion is usually the first step.

Another way to address the issue is through incentives, to which creative principals should pay a lot of attention. An experienced director told Forbes in the early 1990s, "I've given up on trying to get people to do what I tell them to do; they do what I pay them to do." To the extent possible, people involved in the investment process should be able to look forward to rewards for attempts at nonconformity, not just penalties for decisions that don't work. That might be the best response to John Maynard Keynes's observation: **"Worldly wisdom teaches that it is better for reputation to fail conventionally than to succeed unconventionally**."

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Insist on Using Consultants Constructively

Consultants are what you make of them. They can bring expertise and data that only the largest of institutional investors can build internally. They can introduce ideas they're seeing in use elsewhere. They can support investors' efforts to innovate while making sure they don't go so far as to endanger the corpus. Because few institutions can afford to home-grow all of the resources that a good consultant has, consultants truly can be additive.

Or, they can just be used as a source of cover. Their stamp of approval can be sought as protection against potential criticism. They can be used to ensure that the portfolio is never different enough from the herd to stand out. They can be hired – and motivated – to preclude innovation. Frighteningly, a consultant once told me, "I never initiate; if I did, I could be criticized for being wrong. I just opine when asked."

By supplying new ideas and needed data in support of an effort to be great, consultants clearly can add value. But left in bureaucratic mode, it is possible for them to contribute nothing other than protection. The choice – of consultant and *modus operandi* – is up to the client.

Recognize That All Investors Aren't Created Equal

Wouldn't it be great if the rules in Las Vegas were changed so there would be winners but no losers? Can't capitalism allow some businesses to thrive without requiring that some fail? Can't we have survival of the fittest without the demise of the less fit? Wouldn't it be nice?

And wouldn't it be nice if everyone could make an equally positive contribution to investment results? But they can't.

Investment committee decisions can't be improved by members possessing below average skill, experience and expertise. The bottom 50% of the universe may help by giving the top participants a manager median they can beat, but they do not contribute to the pursuit of superior results for themselves or those who employ them.

Some investment organizations are egalitarian and democratic. Participation in the investment process is broad and diffuse. Everyone gets a little money to manage, or everyone gets a vote. This approach doesn't appeal to me, because of my conviction that investment skill isn't distributed evenly.

Every team includes some members who are more skilled than others. It is they who should have greater influence in the decision making process. It's nice to see the junior members developed as professionals and given valuable experience, but bringing more people into the process doesn't necessarily enhance performance in the short run.

I've watched an investment organization at work where the portfolio was divided up among several professionals, each of whom ran his portion separately. It seemed to me that each one engaged in individual stock-picking; no one was responsible for considering the portfolio's overall diversification and risk; and, in fact, each person relied (without justification) on the others to balance out the extremeness of his actions. The resulting portfolios represented little more than a bunch of concentrated bets on personal favorites thought to have home run potential.

Systems do exist in which responsibility for portfolio management is apportioned, and they can work. But they have to incorporate rigorous coordination and overall risk management. They can achieve camaraderie, personnel development and results that are mostly down the middle of the fairway with contributions from several minds – all good things. But I don't believe that broadly sharing or dispersing portfolio management responsibility is likely to lead to highly superior returns.

We get a lot of questionnaires asking, "Which portfolio manager will be assigned to our account? What assurance do we have that our manager won't deviate from your standards?" Our answer is simple: all the portfolios in each Oaktree strategy are managed by a single individual or team. I don't believe in broadly dispersed portfolio management responsibility, and I don't think you should, either.

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Avoid Common Mistakes

Lastly, I want to mention some of what I believe are mistakes I've seen made by investors and investment committees. Hopefully this will help stamp out some of them.

- Over-diversifying – It's common for portfolios to have rules stating that they can't invest more than x% per manager or per fund. However, it's probably only on rare occasions that they approach those limits. In my opinion, most portfolios are spread too thin. **While it's true that only large positions can get you into trouble, it's equally true that only large positions can make a big contribution. (This is one of the great dilemmas in investing.)**

When I see 1% or ½% of portfolio capital invested with a trusted (and diversified) fund or manager, it strikes me as too little. A manager who has earned his clients' confidence should be entrusted with enough money to make a difference in overall portfolio results. One pension plan was bold enough to let Oaktree manage 70% of its alternatives portfolio, and this led to a relationship that was wildly successful for both sides. How many investors would have taken that chance?

- Limiting the percentage of a manager's AUM – As a counterpoint to the above, I've heard committees say, "We don't want to represent more than x% of the manager's assets under management, or of the fund's total capital." But why not? **Is the goal better performance, or is it safety in numbers?** If you're considering investing $10 million with a manager, why does it matter how much money she manages? Why is investing $10 million safe if she manages $1 billion but risky if she manages $50 million? If a manager is unusually skillful, aren't you better off as her client (all else equal) if she manages less money rather than more? And if a manager was really good, wouldn't you prefer that she managed only your money? Wouldn't that be a great way to differentiate your performance (assuming you're right)? The pension client referred to above committed 40% of the capital for the initial fund in a new Oaktree strategy. Mistake? Not with an after-fee gain of 118% over the next three years.

- Moderating – Committees often prefer to take baby steps, go slow, and invest less than the maximum possible. **But in the pursuit of superior investment results, moderation is not a virtue in and of itself**. When you look at the portfolios that do better than others over time, like the Yale and Harvard endowments, you usually see very substantial commitments to individual strategies, managers and funds. In fact, you invariably see commitments that could have gotten the decision makers into trouble if they'd gone wrong.

- Managing toward peer allocations – Finally, I often see investors make reference to their peers' portfolios when setting allocations. It's unlikely that they're looking for the "right" allocation, but rather one ensuring that performance won't be far below the pack. **But if you've mirrored the pack enough to be sure you can't underperform, then it's also likely that you won't outperform**. Like everything else in the investing world (other than "alpha," or genuine personal skill), emulating the pack cuts both ways.

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My most specific and most heartfelt advice is this: The surest way to achieve superior performance is by investing significant amounts with individuals and firms that can be depended on for investment skill, risk control, and fair treatment of clients.

When you're dealing with investments where reliable probabilities can't be assigned to the possible outcomes, or which entail the possibility of significant risk to the corpus (make-it-or-break-it-type risks), failing to diversify can be a big mistake. But when you know of managers and strategies that appear to offer high returns with bearable, controlled risks, and when reasonable judgments can be made about the probable outcomes, it's failing to concentrate that can be the big mistake.

In short, if you can get money to work with people that your experience shows you can rely on, load up!

* * *

The bottom line on striving for superior performance has a lot to do with daring to be great. **Especially in terms of asset allocation, "can't lose" usually goes hand-in-hand with "can't win."** One of the investor's or the committee's first and most fundamental decisions has to be on the question of how far out the portfolio will venture. **How much emphasis should be put on diversifying, avoiding risk and ensuring against below-pack performance, and how much on sacrificing these things in the hope of doing better?**

I learned a lot from my favorite fortune cookie: **The cautious seldom err or write great poetry.** It cuts two ways, which makes it thought-provoking. Caution can help us avoid mistakes, but it can also keep us from great accomplishments.

Personally, I like caution in money managers. I believe that in many cases, the avoidance of losses and terrible years is more easily achieved than repeated greatness, and thus risk control is more likely to create a solid foundation for a superior long-term track record. Investing scared, requiring good value and a substantial margin for error, and being conscious of what you don't know and can't control are hallmarks of the best investors I know.

But in assembling a portfolio of managers and strategies, there has to be an element of boldness if you hope to enjoy superior returns. Too large a dose of caution in asset allocation can keep portfolios from outperforming the norm.

Two additional factors bear on the integration of risk management in asset allocation, with its pivotal role in portfolio construction:

- First, as Professor William Sharpe demonstrated, adding a risky strategy to a portfolio with which it is uncorrelated can reduce the overall riskiness of the portfolio.

- Second, it should be borne in mind that when one portfolio places a greater emphasis than another on managers who lean toward risk control, that portfolio can allocate more of its capital to risky strategies without having a higher overall quantum of risk. Thus, while restricting your total risk to your targeted level, **would you rather allocate more money to the aggressive asset classes via risk-controlling managers, or less money with free-wheeling managers?**

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* * *

I hope this memo won't come across as preachy. The things discussed here are challenging, and I don't claim to be much better at them than anyone else. I've sat on the investor's side of the table. I've been a member of several investment committees. I know it's a tough job. Committee and staff members have to act in what they consider to be the best interests of the beneficiaries, trying for superior returns but avoiding unacceptable losses. They also have to

choose investment managers, separating the ones that sound good and are from the ones that sound good and aren't. (The ones that don't sound good usually aren't let out on the road.) All we can do is our best.

The right approach to portfolio construction has to combine discipline and hard work; skillful, intelligent risk bearing; and insight, flair and talent. In that regard, I'll cite the last three words of Barton Biggs's chapter on groupthink: "It's not easy."

September 7, 2006

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Memo to: Oaktree Clients

From: Howard Marks

Re: You Can't Eat IRR

Until rather recently – certainly up to the early 1980s – "investing" was largely synonymous with "stocks and bonds." And the performance of a stock or bond portfolio was evaluated in terms of its rate of return. You invested a certain amount of capital, and the percentage by which it increased in a given year was its annual return. To quantify performance over a multi-year period, you chained the individual yearly returns to come up with a compound annual return:

	Annual Return	Dollar Gain	Portfolio Value
Initial Investment			$1,000
Year 1	10%	$100	1,100
Year 2	15	165	1,265
Year 3	8	101	1,366
Comp. Ann. Return	11%		

But in the last few decades, buyout and venture capital funds came along, changing things. Funds like these start with capital commitments, call and invest their capital over time, and thereafter manage and liquidate their portfolios. They expand and contract radically, and in assessing their performance, it's clear that a given year's percentage return matters more – and thus should be given more weight – if it was achieved when the fund held a lot of capital (and less if it was not).

Investors wisely concluded that the performance of such funds should be assessed using a measure capable of capturing this phenomenon. They turned to "internal rate of return," the now-ubiquitous "IRR," as the yardstick with which to measure results for portfolios that experience significant cash inflows and outflows.

In mathematical terms, IRR is the discount rate that sets a fund's cash outflows equal to its inflows in present value terms. In other words, you list all of the fund's contributions and distributions and solve for the discount rate that makes them add up to zero. If discounting at 20% accomplishes this, then the amounts received in distributions represent an average advance of 20% per year over the capital contributed, and that's the fund's IRR.

I'll provide a simple example on the next page to illustrate the difference that can arise between compound annual return and IRR.

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Fund A	Annual Return	Dollar Gain	Distribution	Portfolio Value
Initial Investment				$1,000
Year 1	10%	$100	$600	500
Year 2	40	200	650	50
Year 3	100	50	100	--
Comp. Ann. Return	45%			
IRR	21			

The 10% gain in year one, achieved on starting capital of $1,000, produced a $100 gain in the fund's value. The 100% return in year three, on the other hand, was applied to just $50 of capital, producing a gain of $50. Although the percentage return was much higher in year three, it produced just half the dollar gain as the smaller return in year one. Thus, in calculating the fund's overall performance, the 100% return should be accorded much less weight than the 10% return. IRR produces that result (whereas compound annual return does not).

Because a given year's annual result is weighted in the IRR calculation by the number of dollars in the fund that year, and thus counts for more when the fund is larger and less when it's smaller, internal rate of return is referred to as a "dollar-weighted" return. To make the distinction clear, the old compound annual return is now referred to as a "time-weighted" return. This nonsensical term means that every year's individual return is given the same weight in the calculation. It's the same as saying "equal-weighted," or even "unweighted" . . . but "time-weighted" sounds much more scientific. (It's not for nothing that George Bernard Shaw defined professions as "conspiracies against the laity.")

For Fund A, shown above, the three-year IRR is 21%. This is far more reflective of the amount of wealth created than is the 45% time-weighted return. The difference arises because the IRR calculation gives relatively little weight to the 100% return achieved in the third year, whereas the time-weighted return gives it as much weight as the first-year gain of 10%.

To fully understand the importance of this distinction, consider Fund B, which achieves the same annual returns as Fund A – and thus the same compound annual return – but holds on to all of its capital through the end of the third year.

Fund B	Annual Return	Dollar Gain	Distribution	Portfolio Value
Initial Investment				$1,000
Year 1	10%	$ 100	0	1,100
Year 2	40	440	0	1,540
Year 3	100	1,540	$3,080	--
Comp. Ann. Return	45%			
IRR	45			

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The annual returns are the same for Fund B as for Fund A (and thus so is the three-year compound annual return). But Fund B's IRR is 45% (the same as its compound annual return, since there weren't any interim inflows or outflows), while Fund A's is 21%. The difference arises because Fund B achieved its 100% return in year three with beginning capital of $1,540, as compared with just $50 for Fund A. Fund B produced total distributions of $3,080, while Fund A's distributions totaled only $1,350. Certainly Fund B's performance should be considered superior – even though the two funds' time-weighted returns are the same. Fund B's superiority is captured by its higher IRR.

Big Percentage Gains on Small Dollars – Real-Life Example #1

I would find it hard to invent examples as extreme as some of those provided by real life. Let's look at the results for our first distressed debt fund – Special Credits Fund I – in 1996, its last year in business.

This fund was formed in October 1988 with committed capital of $96.5 million, which was fully drawn and invested by the end of 1990. It achieved annual before-fee returns ranging between 29% and 89% in 1991-94 and made large distributions in 1992-93. By the end of 1995, its since-inception time-weighted return had reached 23.7%, its IRR stood at 24.0%, and it was down to one asset carried on the books at $1.9 million. So far, a simple picture.

In the first few weeks of 1996, that sole remaining asset was sold for more than $10 million. On the strength of that sale, the fund reported a 579.1% annual return for 1996. This high annual return (and the very brief period of time it took to achieve it) had the effect of doubling the fund's time-weighted return from 23.7% at the end of 1995 to 46.9% in 1996.

And yet, the $8 million profit realized on the sale of that last asset added just 8% to the fund's total dollar gain, bringing it to $104 million. Properly, the effect on the fund's cumulative IRR of this small-dollar, high-percentage gain was limited to lifting it just from 24.0% at the beginning of 1996 to 25.5% at the end. It goes without saying that, if relied on, the time-weighted return of 46.9% would have presented a highly distorted picture of this fund's achievements. IRR is much better than time-weighted returns because it isn't fooled by high percentage returns achieved with little capital invested.

Time-weighted returns are irrelevant for evaluating the performance of private equity-type funds. IRR is the answer. Or is it?

IRR's Limitations

The good news is that internal rate of return is infinitely better than time-weighted return as a tool with which to evaluate the performance of funds that expand and contract. The bad news is that IRR is far from perfect, far from sufficient, and relied on far too much.

Most of IRR's shortcomings surround the very phenomena it is designed to capture: inflows and outflows. Because private equity funds can expand and contract at widely varying rates, IRR can't tell the whole story. **IRR shows how good a job the manager did with the capital he**

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employed. But it doesn't tell you anything, for example, about how promptly he put the capital to work.

Here are the results for two funds, both of which have committed capital of $1,000:

	Fund X					Fund Y				
Year	Capital Call Jan. 1	Invested Capital Jan. 1	Annual Return (%)	Dollar Gain	12/31 Value	Capital Call Jan. 1	Invested Capital Jan. 1	Annual Return (%)	Dollar Gain	12/31 Value
1	$100	$ 100	10%	$ 10	$ 110	$10	$ 10	10%	$ 1	$ 11
2	200	310	20	62	372	20	31	20	6	37
3	300	672	30	202	874	30	67	30	20	87
4	400	1,274	40	510	1,784	40	127	40	51	178
				$784					$78	
IRR					31%					31%

Because they both made capital calls at the same time and in the same proportions, and they both achieved the same annual returns on their invested capital, Fund X and Fund Y show the same IRR. But Fund X racked up dollar gains totaling $784 on its $1,000 capital commitment, while Fund Y's gains totaled just $78. Even though they had the same IRR, no one would say they performed equally well. Fund X called down all of its capital and invested it profitably, while Fund Y called down and invested only a tenth of its capital. The process through which IRRs are calculated is oblivious to that important difference, since its only inputs are fund contributions and distributions.

The manager of Fund X got the money to work much faster than Fund Y and produced $704 more of gains on the same $1,000 capital commitment. **If two funds can produce the same IRR but such different total profits, IRR simply can't be a perfect yardstick**. **Clearly, the ability of a manager to put capital to work both profitably <u>and</u> promptly has to matter.**

How about funds X and Z? (The data is the same as in the table above, other than the fact that each of Fund Z's annual returns has been increased by ten percentage points versus Fund Y.)

	Fund X					Fund Z				
Year	Capital Call Jan. 1	Invested Capital Jan. 1	Annual Return (%)	Dollar Gain	12/31 Value	Capital Call Jan. 1	Invested Capital Jan. 1	Annual Return (%)	Dollar Gain	12/31 Value
1	$100	$ 100	10%	$ 10	$ 110	$10	$ 10	20%	$ 2	$ 12
2	200	310	20	62	372	20	32	30	10	42
3	300	672	30	202	874	30	72	40	29	101
4	400	1,274	40	510	1,784	40	141	50	70	211
				$784					$111	
IRR					31%					41%

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Now Fund Z's IRR isn't the same as Fund X's – it's higher. But Fund Z produced dollar gains totaling just $111, while Fund X's gains total $782. Fund X – with the lower IRR – has to have done the better job. **Again, evaluation based solely on IRR proves clearly inadequate.**

The Answer (Maybe): Times-Capital-Returned

Because of the shortcomings of IRR – primarily the fact that it tells you what the return was on the capital employed but not how much capital was actually employed – people seeking to measure fund performance have come up with an alternative measurement: times-capital-returned, or TCR (that's my name for it; there are lots of others).

Whereas the calculation of IRR is complicated, for TCR it's simple: How much did you commit to the fund, and how much did it return? If you commit $1 million to a fund and receive distributions totaling $2 million over its life, its times-capital-returned is 2.

TCR solves IRR's problem with undrawn capital. Looking at the table on page 4, Fund X's TCR is 1.78 (ending value of $1,784 divided by committed capital of $1,000), and Fund Y's TCR is 1.08 ($1,078 – the total of the ending value of $178 and the uncalled capital of $900 – divided by committed capital of $1,000). The difference between the two TCR ratios reflects the fact that even though the two funds earned the same return on the money they managed to invest, Fund X did a far better job of putting its capital to work.

Before proceeding, it's important to note that there is considerable unevenness in the way profitability ratios are calculated. Some people don't look at the ratio of ending value to committed capital, but rather at the ratio of ending value to contributed capital or invested cost, sometimes called a "multiple of cost." **I consider this highly inappropriate, as it tells you how much was earned on the capital that was invested but does not deal at all with the fact that capital went undrawn (and as such it shares IRR's great shortcoming).** Certainly managers should be held responsible if they fail to promptly invest the capital commitments they accept. Multiples based on investment rather than commitment don't accomplish this.

Let's calculate the multiple of cost – the ratio of ending value to contributed capital – to the data for Funds X and Y shown on page 4. Fund X's ratio is 1.78 ($1,784 divided by $1,000). So is Fund Y's ($178 divided by $100). But who doesn't think Fund X did the better job?

As opposed to a fund that calls down 10% of its committed capital and achieves a high IRR and multiple of cost, a limited partner would probably prefer a fund that draws down all of its capital and earns even a somewhat lower IRR and multiple of cost. Of course, this ultimately depends on how the limited partner feels about having capital uncalled, and on what he does with it while it is uncalled.

Times-capital-returned (in which committed capital is the divisor) is much better than IRR in that it takes into consideration both how much of the committed capital was called <u>and</u> the return that was earned on it.

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Unfortunately, times-capital-returned isn't perfect either. Simply by holding on to its capital long enough, a low-return fund can produce a higher TCR than a high-return fund. But it may not have done the better job.

Let's consider two more funds: L and M, each with committed capital of $1,000. Fund L calls all of its capital and earns 20% per year for four years (turning the $1,000 into $2,074). Fund M also calls all of its capital, and earns a return of 5% per year, but it goes fifteen years without selling an asset or making a distribution. In this way, Fund M turns its $1,000 into $2,079. According to TCR, they performed the same. But in order to turn $1,000 into $2,070, would you rather give up the use of your money for four years or fifteen? I'd rather be in Fund L.

How Should Performance Be Judged: IRR or TCR?

In comparing two funds, if one has a higher internal rate of return and a higher times-capital-returned, certainly it did the better job.

	Fund G					**Fund H**				
Year	Capital Call Jan. 1	Invested Capital Jan. 1	Annual Return (%)	Dollar Gain	12/31 Value	Capital Call Jan. 1	Invested Capital Jan. 1	Annual Return (%)	Dollar Gain	12/31 Value
1	$300	$ 300	10%	$ 30	$ 330	$300	$ 300	10%	$ 30	$ 330
2	700	1,030	20	206	1,236	700	1,030	20	206	1,236
3	0	1,236	30	371	1,607	-400	836	30	251	1,087
4	0	1,607	40	643	2,250	-400	687	40	275	962
				$1,250					$762	
IRR					28%					25%
TCR					2.25					1.76

Although Funds G and H had the same annual returns, Fund G's IRR is higher because it had more money invested in high-return years three and four. That gave it a higher TCR, at 2.25 (ending value of $2,250 divided by $1,000) as opposed to Fund H's 1.76 (ending value of $962 plus $800 returned, divided by $1,000), as well as a higher IRR. With both a higher IRR and a higher TCR, it's easy to see that Fund G did better.

But it's possible for one fund to have the higher IRR and the other the higher TCR. In the following comparison, the two funds drew down their capital at the same rate and again had the same annual returns, but Fund J held on to its assets while its returns declined, whereas Fund K made significant distributions at the beginning of years three and four.

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	Fund J					Fund K				
Year	Capital Call Jan. 1	Invested Capital Jan. 1	Annual Return (%)	Dollar Gain	12/31 Value	Capital Call Jan. 1	Invested Capital Jan. 1	Annual Return (%)	Dollar Gain	12/31 Value
1	$300	$ 300	30%	$ 90	$ 390	$300	$ 300	30%	$ 90	$ 390
2	700	1,090	20	218	1,308	700	1,090	20	218	1,308
3	--	1,308	10	131	1,439	-400	908	10	91	999
4	--	1,439	5	72	1,511	-400	599	5	30	629
				$511					$429	
IRR					13%					16%
TCR					1.51					1.43

Because Fund J didn't make any distributions, the greater amount of capital it held in low-return years three and four pulled down its IRR even as its times-capital-returned grew past that of Fund K. Fund J's ending value is $1,511, and thus its TCR is 1.51. Fund K had ending capital of $629 and distributed $800, for terminal value of $1,429 and a TCR of 1.43. But if Fund K's investors were able to earn more than $82 in years three and four on the $800 they got back (requiring an average annual return of 6.5%), then Fund K did a better job than Fund J. **So while we know IRR isn't perfect, TCR isn't either, as the fund with the higher TCR may not have been the better performer.** Maybe Fund K, with its lower TCR, did the better job.

How should we judge fund performance? Only thorough evaluation can lead to the right answer. Complex, multi-dimensional analysis is required. No one number can be relied on to produce a proper conclusion. Here's a list of things you have to weigh. There simply is no cookie-cutter method – no single calculation – that considers them all.

- The internal rate of return,
- The times-capital-returned,
- The percentage of the capital that was put to work,
- The speed at which that capital was put to work,
- When investments were harvested and distributions made,
- What the LPs were able to do with capital that remained uncalled and/or was returned,
- What the LPs could have done with the capital that was called and/or not returned.

Finally, it's important – as in all other areas of investing – to consider how much risk a fund took to earn its return. We've become accustomed to evaluating managers of public securities on the basis of risk-adjusted returns, but this approach hasn't equally reached the alternative markets. Part of this is because alternative assets generally haven't been marked to market, and thus there are no meaningful figures for volatility (without those simplistic measurements, risk analysis becomes a real challenge – see "Risk," January 6, 2006).

But clearly, for an oversimplified example, if buyout funds X and Y buy similar kinds of companies and end up with similar IRRs and TCRs, but Fund X uses far less leverage than Fund Y, I would tend to say that Fund X did a superior job. **Their IRRs and TCRs alone tell us nothing about their respective riskiness.**

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How are we to make distinctions when the assets purchased aren't comparable or the differences in leverage and results are less than dramatic? What if one fund buys companies that are more solid than another's? How do we compare a leveraged buyout fund against an unleveraged venture capital fund (with its very low expected batting average)? Which is riskier, a highly leveraged portfolio of safe assets or an unleveraged portfolio of risky assets? It's hard to make these judgments, but that doesn't mean they're unimportant.

And while I'm on the subject of evaluating performance records, I want to raise the subject of unevenness in the quality of performance data. Some managers mark their private holdings to market and others carry them at cost. Some managers are more optimistic than others in marking to market. Some managers discount large holdings of public securities for illiquidity while others do not. And some managers highlight the results on just their realized investments, which invariably are the best. For these and other reasons, IRR or TCR figures simply can't be accepted at face value for funds that are still in operation and thus haven't turned all or almost all of their investments into cash.

Which Return Matters? – Real-Life Example #2

Another look at our real-life experience will give a clear view of the absolute conundrum posed by performance assessment. We held a first closing for Opportunities Fund IVb in May 2002, at which time we drew down $51 million. We averaged down while Enron bonds slid and continued to draw capital and invest it as the whole distressed debt market tanked in June and July, saddling the fund with some very significant mark-to-market losses in percentage terms.

The market bottomed in August-October, by the end of which period we had gotten the fund more than 70% invested. Investor sentiment turned up dramatically in November, giving the fund a 15% gain in that month alone – now with $1 billion invested.

Here are the results:

	Time-weighted Return	Dollar Profit
May - July	-18.6%	($ 33.8)
August - December	22.3	229.2
8-month totals	-0.5%	$195.4

As you can see, the fund had a large percentage loss in the first three months and a large percentage gain in the subsequent five months. As a result, on a time-weighted basis, it showed a small overall loss for the eight months taken together.

But the fund was a lot smaller in its initial down months than it was in the later up months. Thus the LPs made a total of $195 million . . . whereas the time-weighted return says they made no money at all.

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The $195 million dollar profit translates into a 30.7% return on the $640 million of capital employed in the fund on average during the eight months. And that 30.7% return on average capital employed annualizes to 49.4%. Finally, the annualized IRR for the eight months – the proper measure, according to the experts – was 61.4%.

So here are the returns for the fund:

Time-weighted return	-0.5%
On average capital	30.7
On average capital (annualized)	49.4
Internal rate of return	61.4

Was the fund a marginal loser or a booming success? You pay your money and you take your pick, as my mother used to say. But clearly, there's just one conclusion to be drawn with absolute certainty: **no one figure is capable of rendering a precise picture of fund performance, particularly as relates to short periods of time.**

Short-Term Success

Because IRRs are annualized returns, the results for part-year investments can be highly misleading. I feel it is always undesirable to annualize returns on part-year investments, but doing so is an unavoidable aspect of calculating their IRRs.

For me, it was the onset of option trading that first highlighted the folly of annualizing short-term results. Back around 1973, exchange-traded options came into existence (whereas prior to that time, options were an obscure corner of the investment world, traded over the counter among "put-and-call brokers"). This made trading much easier; options attracted a lot of attention; and the "buy/write" strategy became the new "silver bullet."

In a buy/write, you buy stock and write a call option that gives someone else the right to buy the stock from you at a fixed "strike price" for a specified period of time. Suppose you buy 100 shares of XYZ at $40 and for $6 sell a call option that will permit someone else to buy those shares a month later at $35. The total proceeds to you when the option is exercised will be the $6 option premium and the $35 exercise price, for a total of $41. Your investment is $40. The gain of $1 in one month, or 2.5%, annualizes to 30%. So people walked around saying, "I just put on the XYZ buy/write at a 30% return." But at best they would have $41 in their pockets for every $40 they started with, and that doesn't sound like a 30% gain to me.

(As usual, not only were the merits of a would-be silver bullet overstated, but its dangers were often overlooked. Your dollar of profit and that beautiful 30% annualized return were entirely contingent on the stock being above $35 on the option expiration date. If the stock fell, say, from $40 to $30, the option would not be exercised and you would be left with stock worth $30 and the $6 option premium – for a total of $36 and a loss of $4 from the invested cost of $40. And that 10% loss is real, not annualized!)

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It's universally agreed that IRR is the right tool with which to evaluate vehicles like private equity funds. And all approaches to calculating IRR implicitly annualize the returns on investments held for less than a year and on funds that have been in existence for less than a year. There is no alternative, despite the shortcomings of annualizing.

Of course, an investment shouldn't be judged to be successful on the basis of a high IRR alone, especially if the TCR is low. Note, for example, that a 60% IRR on a $10 investment will produce a gain of $16 over two years, but fifty cents if the opportunity lasts just a month. Certainly the two investments cannot be described as having been equally successful.

Now more than at any other time, I hear a lot of clients say their private equity managers are producing ultra-high IRRs over very short periods of time . . . but low times-capital-returned ratios.

Dividend Recap Magic

Whenever a company borrows money, it becomes more risky, everything else being equal. Let's say a company has $200 of debt and $200 of shareholders' equity supporting $400 of assets. If the value of its assets declines 50%, its assets will just equal its debt, and its equity will be gone. Now assume it borrows $100 with which to buy additional assets, giving it $300 of debt and $200 of shareholders' equity supporting $500 of assets. It only takes a decline in asset value of 40% to wipe out its equity. This demonstrates that when a company increases its debt, the impact of subsequent developments is magnified. That's why borrowing is also called leverage . . . and why borrowing makes companies riskier.

But what if it borrows money and gives it to the shareholders? Take the same company with $200 of debt and $200 of equity. Assume again that it borrows $100, but this time, rather than buy assets, it distributes the cash to its equity investors. Now it has $300 of debt and $100 of equity supporting the same $400 of assets, and it takes just a 25% decline in the value of its assets to erase its equity. So whereas all borrowing makes companies riskier, borrowing for dividends greatly amplifies the effect, as the assumption of debt doesn't lead to either the acquisition of productive assets or an increase in cash reserves, but merely a decrease in shareholders' equity.

For this reason, lenders should view borrowing for dividend distributions with extreme skepticism. But it is a feature of the current capital market environment – with its excess of enthusiasm and shortage of caution – that transactions designed to replace equity with debt have become commonplace. According to CSFB, in the 36 months that began April 1, 2003, $68 billion was borrowed through high yield bond issuance or bank loans with the stated purpose of paying dividends or repurchasing stock, whereas deals of this sort were largely unheard of prior to that date. This is a clear sign of imprudence on the part of today's capital markets.

Of course, as they say in golf, "every putt makes somebody happy." The lender's lack of caution can work to the borrower's benefit (assuming he can avoid financial mortality). In the case of dividend recaps, the beneficiaries are buyout funds and their limited partners. Certainly

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companies have appreciated in value in the last few years, but a substantial portion of the high IRRs being reported by buyout funds is due to financial engineering and the availability of equity-replacement debt. Dividend recaps are permitting equity investors to take some or all of their capital off the table, reducing their capital at risk and leveraging up their reported rates of returns. But it should be noted that whereas dividend recaps raise IRRs, they don't necessarily add to investors' dollar profits. (And if they increase the total leverage on portfolio companies, they can jeopardize the recovery of any remaining investment.)

Let's say a fund buys a company for $200 expecting to make $40 in a year, for a 20% IRR. Assume a wacky capital market immediately lets the company borrow and dividend out $180 through a dividend recap. Now the fund's invested capital is down to $20, and the $40 expected profit represents an IRR of 200% instead of 20%. The reported return is beautiful, but the fund's expected gain is still just $40. **Dividend recaps increase fund investors' wealth only if the amounts dividended out can be reinvested profitably. Short of that, they represent financial engineering but not value creation.**

That – among other things – is the reason why I've titled this piece "You Can't Eat IRR." A high internal rate of return does not in and of itself put money in one's pocket. Only when it's applied to a material amount of invested capital for a significant period of time does IRR produce wealth – something which is often (but not always) signified by a high TCR. Investors evaluating fund performance should look at both IRR and TCR . . . and beyond.

<u>So, Bottom Line: Good or Bad? – Real-Life Example #3</u>

Just as this memo was about to go to print, a friend showed me the 2005 report of a fund of funds and asked what I thought of its performance. Here are the facts: The fund was formed in mid-2001 to buy secondary partnership interests (that is, interests in funds that limited partners want to get rid of). My friend committed $750,000. Given the carnage earlier this decade in buyout funds and, especially, venture capital funds, he felt (and still feels) his timing was quite good.

The fund's report consists of financial statements only, without any discussion to help a reader understand the implications or limitations of the figures. As concerns performance, the fund reports a since-inception internal rate of return of 27.1% and a "multiple of cost" of 1.45. So far, pretty good.

But let's go behind the numbers.

- The first thing worth noting is that only $600,000 of my friend's $750,000 capital commitment has been drawn down. He doesn't understand why, given the dislocation of the early 2000s, all of his money hasn't been put to work. He suspects the General Partner may have taken too much in the way of capital commitments. (And he feels particularly badly that even before his fund has become fully invested, the GP has formed a successor fund.)

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- The 27.1% IRR suggests the fund has done a good job with the capital it called down, but $150,000 remains in my friend's money market account. Thus he suspects his effective return on the entire $750,000 is lower because of the fund's slowness in putting his money to work.

- He also suspects that the 1.45x "multiple of cost" is misleading. That is, the $600,000 he contributed has been turned into $873,000, for a gain to date of $273,000. But he set aside $750,000 for this fund, and the $873,000 of current value (distributions plus assets still held), when added to the $150,000 not yet drawn (for a total of $1,023,000), represents a multiple of only 1.36 on his capital commitment.

- As of the end of 2005, the fund was roughly 4½ years old. If it had invested his $750,000 at 27.1% for that entire period, he would have $2,178,000. If it had just earned a 27.1% return on the $600,000 that was actually drawn down, he would have $1,742,000 (plus the undrawn $150,000, for a total of $1,892,000). And yet, he has just $1,023,000.

- The IRR of 27.1%, if applied to his contributed $600,000 (forget his committed $750,000), would have produced $1,142,000 of gains. And yet he sat at the end of 2005 with $273,000 of actual gains. **Simplistically to me, this suggests his contributed $600,000 has been at work earning 27.1% for only about a quarter, on average, of the 4½ years since the fund's inception.** This illustrates the shortcoming of IRR taken alone: its failure to penalize the GP for failing to put the money to work and keep it at work.

- Finally, since the fund has already returned more than half of the $873,000 into which the $600,000 grew, it's extremely unlikely that even further good returns will produce ultimate dollar gains approaching the amount he thinks he should have.

The fund reports an IRR of 27.1 % and a TCR of 1.45. But clearly, my friend doesn't have anything near the profit he would have had if all of the money had been invested promptly and kept invested. And the 1.45x "multiple of cost" is irrelevant to him; he wants to know what the GP made for him on his entire commitment, not just the part it drew down. Using this fund's approach to calculating the multiple, the GP looks better if it makes a few high-return investments, whereas the investor would be better served if it invested the entire committed amount – even at a materially lower return – and kept it out there longer. My friend has $1.36 for every dollar he committed, but a 4½-year return of even 15% on his entire commitment would have given him $1.86.

An IRR of 27.1% sounds impressive. Does it mean the fund has done a good job? It seems to me that the GP accepted more committed capital than it could invest in a timely manner, charged fees on that higher amount, put its capital out very slowly (and not yet in full), and wasn't able to keep it out for long. I doubt the fund's LPs invested to earn 36 cents over 4½ years per dollar they committed. So no, I think, not a good job.

The real bottom line is that my friend committed $750,000 4½ years ago and has $1,023,000 today. That's an average annual advance of 7.3%. As Clara Peller used to say in the burger commercials, "Where's the beef?"

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In this case – as in many, I suspect – both the IRR and the "multiple of cost" are next to useless. It takes thought and insight to figure out how a fund did. As in all things, looking at published figures must be just the first step.

* * *

Making a lot of money with the risks under control isn't easy. It's not even easy to identify the best performing managers. Not only is the quantification of returns themselves subject to debate, but it's often far from obvious whose risk-adjusted-returns are the best. All performance assessment demands quantitative ability tempered by judgment. But there is no alternative. Reliance on a single figure can't possibly provide the answer – not even IRR.

July 12, 2006

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Memo to: Oaktree Clients

From: Howard Marks

Re: Returns, Absolute Returns and Risk

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What's In a Name?

My memos often touch on the subject of investors' foibles, one of the worst of which consists of their tendency to pay too much attention to labels (and too little to substance).

- Enthusiasm for "growth stock investing" carried investors to the ridiculous conclusion that for the stocks of the fastest-growing companies, no price is too high. That was just before the "nifty-fifty" stocks of America's best companies lost up to 90% of their value in 1973-74.

- "Portfolio insurance" assured investors they could participate fully in stock market gains with protection against declines if they would simply commit to automatically enter sell orders pursuant to an algorithm. But in the crash of October 1987, investors found themselves unable to make those sales, and the ineffectiveness of the "insurance" (combined with the outsized positions it had encouraged) cost them dearly. And at any rate, portfolio insurance, like any mechanical risk-limiting device, should have been expected to limit long-term return as well as risk. After all, there rarely is a free lunch.

- "Market neutral" funds were supposed to be insensitive to market fluctuations, but the so-described Granite Fund of mortgage-backed securities melted down in just a few weeks when it turned out not to be insulated from the rapid rise of interest rates in 1994.

- "High yield bonds" drew people in, just as "junk bonds" had scared them away. One of my favorites was the mutual fund investor who said in 1990, "I thought it was a high yield bond fund; I never would have invested if I'd known it was a junk bond fund."

- "Gonna change the world" is what people believed about e-commerce and the Internet. A few of the companies did, as had pioneers in radio and airlines. However, "change the world" proved once again to be far from synonymous with "make money for investors."

- Today, of course, almost everyone wants to invest in "hedge funds" . . . even though almost nobody can define them. In 2005, the average returns for the best and worst performing hedge fund categories were 17.4% and -2.6%. Clearly, then, the term "hedge fund" cannot be much help in the selection of investment vehicles. Economist Brad Setser was quoted in The Wall Street Journal of May 31 as posing and answering his own question: "I thought hedge funds were supposed to be hedged. I fully realize . . . that in many ways the name 'hedge fund' doesn't tell you much about what a fund does."

The bottom line is that, in the world of investing, words mean almost nothing. All that matters is what you're buying, the price you're paying for it, and the risk that it will fail to deliver all you expect. No weight should be attached to what something's called, as labels alone have little significance with regard to risk and return.

Asset Class Returns

Importantly in this connection, I continue to insist that no asset class and no investment technique possesses a natural or embedded rate of return. Fixed income comes closest, with its promise of interest and the repayment of principal. But for the holder of a 20-year bond, most of the total return over its lifetime will come from "interest on interest" – the interest that is earned on interest payments that have been received – and this will vary with rates. Thus, even in fixed income instruments (other than zero-coupon bonds), the return is far from intrinsic.

And from there, the connection between an asset class label and a prospective rate of return grows more and more tenuous. What's the return on S&P 500 stocks? If you had asked 100 institutional investors and consultants in 1999, virtually all of them would have said 9-11%. Ask them today and they're likely to say 5-7%. What changed? Not the asset class itself, but opinions surrounding it. Obviously, meanings ascribed to words alone often fail to hold up.

For a final example, what about the asset-class return on private equity? This strikes me as an even more unreliable concept. The return on a private equity investment will come from the combination of (a) the potential of the underlying company and (b) the ability of the manager to identify the opportunity, buy the company at a good price, make it a better company, and sell it at higher valuation parameters than it was bought for. Certainly all of the elements included in "b" are highly dependent on the manager's skill and have little or nothing to do with the fact that the investment belongs to a given asset class.

Absolute-Return Investing

My memos are often sparked by something I stumble on, and this one is no exception. The prompt came from "The Myth of the Absolute-Return Investor" by M. Barton Waring and Laurence B. Siegel (*Financial Analysts Journal*, March/April 2006).

Many people talk today about absolute-return investing and say they want to put money with absolute-return funds and managers. But as Waring and Siegel indicate, there's no broad agreement on what that means. They start their article by citing a few popular definitions for absolute-return investments, which seem to be distillable to **investments possessing the potential for positive returns regardless of general market conditions.**

In my opinion, if you're interested in absolute return investing, you should be looking for a steady outcome rather than responsiveness to market conditions. In this context, I tend to think of "absolute" along the lines suggested by one of the many definitions in Webster's Dictionary: **"free of external references or relationships."**

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When one of the investment committees I'm on decided to increase the portfolio's commitment to "absolute-return hedge funds" several years ago, the general consensus was that we wanted funds that would reliably deliver 9-10% or so. We wouldn't expect to do much worse regardless of how badly the markets performed, and we wouldn't be surprised if we failed to do much better when the markets rose. In other words: **a steady, healthy return (implying good relative performance in bad times), but consequently with the likelihood of lagging the markets when they do well**. Raise your hand if you agree.

But problems arise. Most hedge funds do better in good years than bad, implying that they're not really insensitive to market developments. Most hedge fund managers would acknowledge that their returns are derived from a combination of beta and alpha (that is, from market return plus the skill they bring to the investment process). And as long as beta plays a meaningful part, an investment's return can't really be described as "absolute."

Waring and Siegel argue that there's no such thing as absolute investing, in that the alpha it aims to capture arises from relative decisions that are the basis for all active management. By this they mean that active management consists of trying to overweight (in relative terms) the things in a benchmark or market that will do better and underweight the things that will do worse, and by having more exposure to the benchmark or market in good times and less in bad times. These, they argue, are relative investing decisions.

> No wonder we could not sensibly define absolute-return investing: There is no such thing. The term is intended to capture investor attention by offering an intuitively appealing alternative to the disciplines required by relative-return investing, but at the end of the day it delivers beta returns plus or minus relative (alpha) returns . . . It may appear to be a distinct type of investing, but if there is a distinction, it is a distinction without a difference.

I think Waring and Siegel go too far, and some of this feels like wordplay. You can call trying to buy the good and avoid the bad "relative investing," because the decisions are made relative to the makeup of a market or benchmark. And it's true, as Sid Cottle (of Graham, Dodd and Cottle) put it to me thirty years ago, that "investment is the discipline of relative selection." But "relative" is just a word. The quest for better portfolios doesn't necessarily make all active investors "relative investors" in the index-centric sense of the term.

Waring and Siegel insist "the notion that every return has a beta component and an alpha component applies to any portfolio." And as they describe Bill Sharpe as saying, "The return on *any*, repeat *any*, portfolio consists of a market part and a nonmarket part." However, there are investors and funds whose goal it is to buy the good and avoid the bad and, <u>at the same time</u>, to minimize the effect of general market fluctuations on their returns. They want to bring that beta term as close as possible to zero, and some are able to pull it off – more or less.

So I think "absolute return" is a relative term, not – pardon me – an absolute one. But it's still potentially useful. **To me absolute-return investing means – perhaps stating the same thing a few different ways – that (a) the contribution to return from alpha should be visibly more pronounced than from beta, (b) the return should be significantly steadier than that of the**

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market, and (c) there should be a relatively low correlation between the fund's return and the relevant market returns. We just shouldn't expect the correlation to be zero.

Hedge Fund = Absolute Return = Market Neutral?

Are hedge funds absolute return vehicles? According to the article that inspired this memo, "Today, the term 'absolute return' seems to be used most often to describe what wealthy individual investors have always called hedge funds." I do hear a lot of people use the terms somewhat interchangeably. For that reason, I'd like to spend a few paragraphs exploring just how "absolute" hedge fund returns really are, with data from Credit Suisse/Tremont.

Here are the average returns on three hedge fund categories:

	Credit Suisse/Tremont Hedge Fund Index		
(total return in %)	Overall Average	Equity Mkt Neutral	Long/Short Equity
1994-2005	10.7%	9.9%	11.9%

Certainly these funds satisfied the 9-10% goal expressed above for absolute returns . . . or did they? A couple of years ago, I had some fun asking how often the annual return on the S&P 500 had fallen within what was then thought to be the "normal" 8-12% range. Now let's do the same for hedge funds: in how many of the last twelve years was the average return on these three hedge fund indices between 8% and 12%? The answer for each index: just once or twice.

Take the "market neutral" sector. Its average return, at 9.9%, was square in the desired range, and its annual returns were the least variable of the three hedge fund sectors, as one would expect. But was it really market neutral? In the period 1995-2000, the average market neutral fund returned 14.3%, with yearly returns ranging from 11.0% to 15.3%. In the slower period 2001-05, the average fund returned 7.3%, with yearly returns ranging between 6.1% and 9.3%. The annual returns within each sub-period were quite steady despite the market's fluctuations (and never negative, which was quite an accomplishment). But certainly the average varied greatly from period to period, and it fell between 8% and 12% only twice in those twelve years. Even the relationship that these funds' returns are supposed to bear to Treasury bill returns (e.g., "T-plus-500") seems to have been achieved on average but not with consistency. Bottom line: the returns on "market neutral" hedge funds are not immune to external developments.

Moving from market neutral funds to equity long-short funds and hedge funds in general, the table below shows returns for two pairs of back-to-back years in which the stock market boomed and busted.

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	Up-and-down		Down-and-up	
(total return %)	1999	2000	2002	2003
Hedge Fund Average	23.4%	4.8%	3.0%	15.4%
Long/Short Equity Avg	47.2	2.1	-1.6	17.3
S&P 500	21.0	-9.1	-22.1	28.7

Investors were glad to be in these funds rather than the S&P 500, as the returns were much steadier for the hedge funds than for the market and higher overall. But does the fact that losses were minimized or avoided in the down years mean that hedge funds provide absolute returns? That depends on your criteria for "absolute." If "insensitive to market movements" or "free of external references or relationships" are among them, they do not meet the standard.

According to The New Yorker of May 22, 2006, "A recent paper by the economists Burton Malkiel and Atanu Saha . . . showed that the range of performance among hedge-fund managers was much wider than among mutual-fund managers . . ." And Dow Jones estimates that the average equity long/short hedge fund lost 5% last month. So not consistent from fund to fund, and not consistent over time. Finally, research has shown that significant beta exposure is embedded in many hedge funds. In the spring 2004 Canadian Investment Review, Dominic Clermont of TD Asset Management reported the following findings:

> Over the 1994-2000 period, the aggregate hedge fund index had a market exposure (beta) of 0.37. Thus, on average, a significant portion of hedge fund managers' returns came from market exposure. Some hedge fund strategies, such as emerging market hedge funds, had a much higher beta of 0.74.

These observations certainly call into question the absoluteness of hedge fund performance.

What Do Investors Want?

That's a trick question, because the answer is usually heavily reliant on investors' recent experience. When market performance has been good, they want participation going forward. But when performance has been bad, they demand protection.

An endowment portfolio that delivered 15% per year in the late 1990s was described as disappointing, because many others made 20%-plus. But a portfolio that made 2% in the first few years of this decade was lauded, because most lost money. So people can feel good about 2% and bad about 15%. That's human nature for you (and it shows why things other than absolute return matter . . . and perhaps why "common sense" is such an oxymoron).

It also shows how danger creeps into markets. When everything's been going swimmingly, investors forget about risk and want a full ride on the bandwagon. Seldom do they express concern about the fact that good past performance implies elevated asset prices, and maybe low returns and high risk going forward. By the same token, on the heels of market losses, investors

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tend to pull in their horns and opt for safety – even though the best buying opportunities usually grow out of market dislocations. In this regard, short-term hindsight is worse than no help – it's a hindrance. And it's what makes contrarian investing effective.

Investors don't want the same thing at all times, fluctuating in their appetites as they do. This tells me they won't always be satisfied with so-called absolute returns, even if they can be achieved.

Maybe they just want it all. In an old commercial, the multi-talented Deion Sanders was asked "Which would you rather play, baseball or football?" and he'd say "Both." "Offense or defense?" "Both." When I ask would-be investors whether they want upside potential or downside protection, they often answer "Both" . . . only half kidding, I think.

What Should Investors Want?

Of course, I think investors should pursue superior risk-adjusted performance. The goal of many investors – higher highs and higher lows – just isn't practical. If you emphasize offense, you're likely to see higher highs and lower lows. And if you choose defense, you should get higher lows but also lower highs. It takes a lot of skill to produce anything else.

The quest for what I think most people mean by absolute investing – decent highs and lows that aren't low – is not unreasonable. But I still think (a) delivering that kind of performance requires a lot of skill, (b) most investors can't do it, and (c) the ones who can won't be found by picking funds according to their labels, but as a result of a thorough and difficult study of managers and their abilities.

At Oaktree, we constantly tell people the following:

- **In good times, it's good enough to be average.** At first glance, that seems like a heretical and far-too-modest goal. But during good times, the average investor makes a lot of money; why shouldn't "average" be good enough?
- While above average returns are always nice, why would anyone put an emphasis on beating the market when the market does well? What makes it worth taking the higher risk – and holding the idiosyncratic portfolio – that's required for outperformance in a rising market?
- On the contrary, in a rising market, mere participation should be good enough; out-performance seems superfluous.
- **There is a time when it's essential that we outperform, and that's in falling markets**. Our clients don't want to bear the full brunt of a market decline, and neither do we.
- In order for outperformance in bad markets to be achieved, a portfolio has to carry so much downside protection that it can render outperformance on the upside hard to achieve. It would be nice to be able to do both, but it's challenging.
- **If we can just accomplish these two goals – market performance (or a bit better) in good times and highly superior performance in bad times – we'll end up with above average performance over full cycles; below average volatility; outperformance in tough times (when it really matters); enough resolve to be able to resist selling out at cyclical lows; and a favorable investing experience overall.**

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These goals may seem modest at first glance, but few investors have been capable of meeting them for periods spanning multiple decades. They're the goals we've set for ourselves, and we're proud to have reached them thus far.

The Role of Risk Management

The key to achieving superior returns in bad times (and especially to doing so without stripping a portfolio of its potential to make money in good times) is found in the ability to control risk. It's not a matter of finding winners, but of building a portfolio where upside potential is accompanied by downside protection – no mean feat.

In the investment world, we hear a lot more about achieving returns than we do about controlling risk. But as you explore the higher reaches of the profession – as you move into the hedge fund world, for example – the latter grows in importance. Ultimately, the key is to be able to manage risk well enough that upside can be attempted without commensurate exposure to downside.

The subject of risk control – and, especially, the process of assessing who does it well – is extremely thorny. When I wrote the memo "Risk" in February, I thought I had hit on something when I observed that risk is not measurable even after the fact. Now I want to take that thought a little further.

Defining "A Good Job"

There are reasons why the headlines each year go to the person who achieved the highest return, not the person who best managed risk. The first is that people care more about return and are more titillated by it. But the second is that it can be far from obvious who did the best job of risk management. Different investors can define investment risk differently, but if it isn't the same as inter-month or inter-year volatility – and I'm convinced it's not – then it can't be easily observed and quantified. This is especially true in good years, when risk remains invisible.

One portfolio manager makes 10% and another makes 15%. Who did the better job? When I attended the University of Chicago in 1967, I was taught that in order to decide how well a portfolio had performed, you have to assess how much return was achieved and how much risk was borne. That still makes sense to me. How much risk did a manager take? Which manager's risk-adjusted return is higher? It can be hard to judge these things, but investors shouldn't wait for a down year to attempt an answer.

Modern portfolio theory and the efficient market hypothesis define risk as volatility and tell us that markets price assets so they'll offer returns that are proportional to their risk, no more and no less. For this reason, they say, superior risk-adjusted returns cannot be achieved. The beauty of inefficient markets – to the extent they exist – lies in the belief that this rule need not hold: that you can get more return than is justified by the risk.

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In efficient markets, all assets line up so that there's a fixed relationship between return and risk, with no outliers. Risk and return are linked, and investors' results invariably fall along the line.

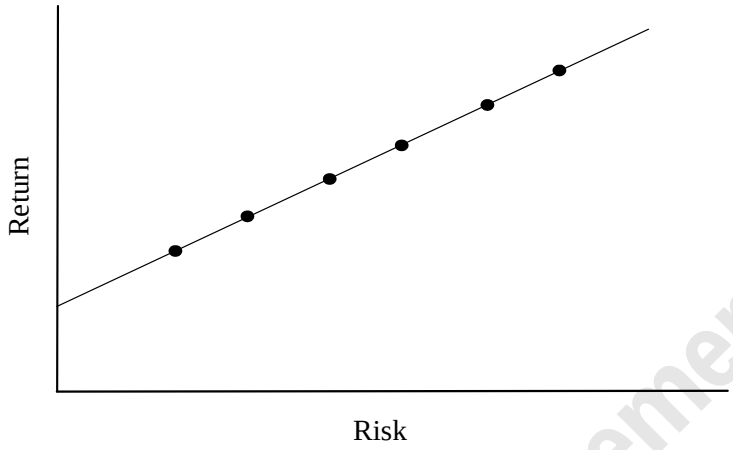

In inefficient markets, mistakes are made, such that risk and return need not be strictly proportional. Some investment merit is overrated, and some opportunities are overlooked. As a result, it becomes possible to achieve superior and inferior risk-adjusted returns.

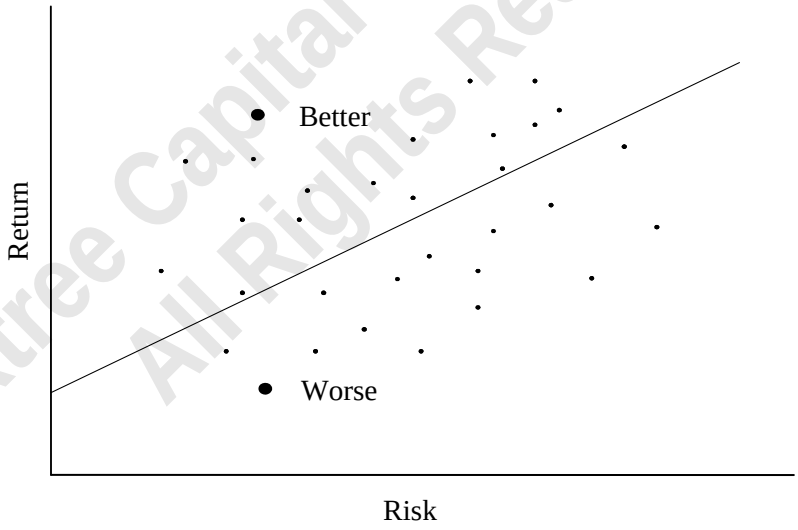

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Not everyone quite understands this point, but I feel even those who do often fail to appreciate all of the implications. Most observers think the advantage of inefficient markets lies in the fact that a manager can take the same risk as a benchmark, for example, and earn a superior rate of return. The following graph presents this idea and depicts the manager's "alpha," or value added through skill.

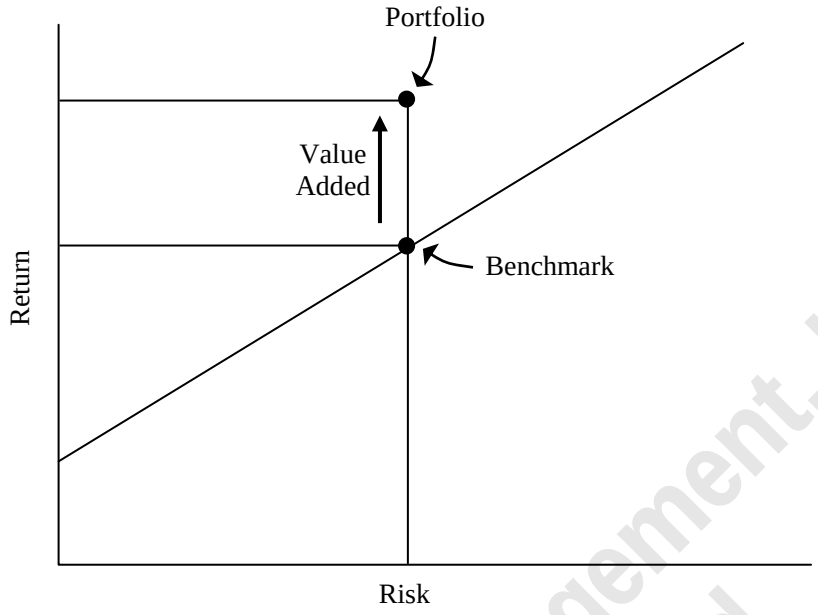

This manager has done a good job, but I think this is only half the story – and for me the uninteresting half. **An inefficient market can also offer the ability to achieve the same return as the benchmark while taking less risk, and I think this is a great accomplishment. It provides the foundation for achieving the performance goals enumerated on page 6.**

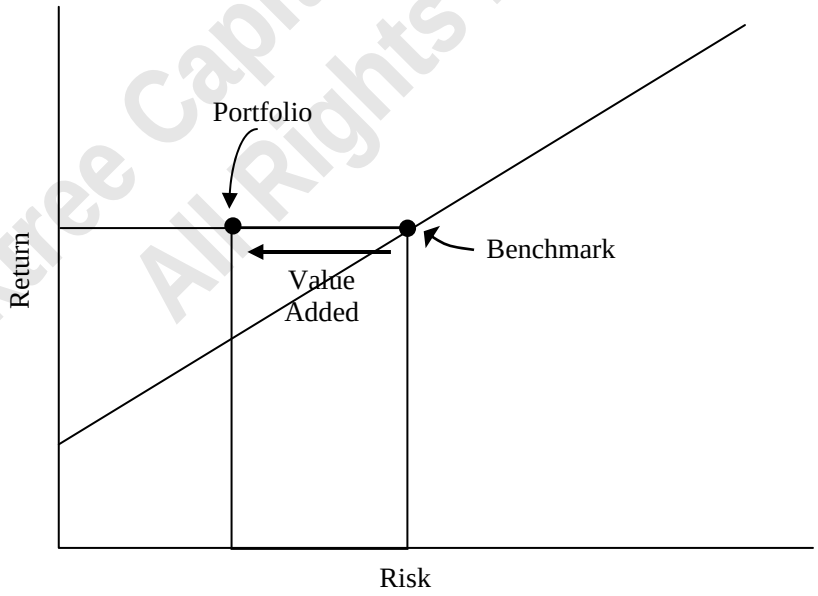

Here the manager's value added comes not through higher return at a given risk, but through reduced risk at a given return. This, too, is a good job – maybe even a better one.

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Some of this is semantic and depends on how you look at the graphs. But because I think fundamental risk reduction can provide the foundation for an extremely successful investing experience, this concept should receive more attention than it does. **How do you enjoy the full gain in up markets while simultaneously being positioned to achieve superior performance in down markets? By capturing the up-market gain while bearing below-market risk.**

The "best investor" profiled by the media each year is usually the one with the highest return. Risk control is rarely lauded, in part because it's often invisible. But that doesn't mean it's unimportant. **Most of the investing careers that produce the best records are notable at least as much for the absence of losses and losing years as they are for spectacular gains.** The challenge is that these virtues usually become apparent only in big downdrafts. But certainly they figure greatly in the long term.

Portable Alpha

Along with absolute-return investing and hedge funds, "portable alpha" is another big deal today. It's often offered up as the next "silver bullet" – a surefire way for investors to achieve their goals without fear of disappointment. So I want to give you my take on this phenomenon – making clear, as usual, that I'm a mere observer, not an expert.

Portable alpha proposes the following: Suppose, for example, you want to invest $100 million in mainstream stocks, and you also want alpha, leading to superior risk-adjusted returns. The problem is that, traditionally, investors wanting to invest in a given asset class have been restricted in their search for alpha to managers operating in that class. But if you acknowledge that alpha is hard to achieve in mainstream stocks given the high degree of market efficiency, you can use portable alpha to "transport alpha" earned in any other asset class to the portion of your portfolio allocated to mainstream stocks.

So you give up on finding your alpha in the mainstream stock market and pursue it by assembling a "value-added" portfolio of funds run by highly skilled managers in a wide variety of markets – probably in alternative investing fields such as hedge funds, private equity, commodities, etc., and probably not in mainstream stocks. Then you assess how much market exposure is embedded in the value-added funds and, using derivatives such as futures, swaps and options, you add market exposure until the beta of the total portfolio equals the beta of $100 million of stocks. In this example, the market exposure implicit in the derivatives plus the funds gives you the return on a $100 million passive portfolio of stocks, and the skillful management of the funds gives you their managers' value added. The sum of the two achieves your goal: a $100 million position in stocks with alpha.

Any time Wall Street packages existing elements to produce a surefire solution, my first thought is "alchemy!" I don't want to be accused of neophobia – fear of anything new – but I also doubt that sure things come along very often.

Do I believe that over time a combination of derivatives plus hedge funds can outperform the same sum invested with traditional managers? Absolutely . . . but not necessarily for the reason advanced by the advocates. And that brings me back to the subject of absolute return.

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Value-added funds that generate alpha clearly are an essential ingredient if portable alpha is going to work. Many managers claim the ability to generate alpha based on their skill, experience and access to alpha-generating strategies. But only the best will prove able to accomplish the difficult task of obtaining true alpha, after returns have been adjusted to recognize embedded beta bets. Thus real alpha may not always be responsible for portable alpha's contribution.

In my opinion, a more common reason for a portable alpha portfolio to deliver higher returns over time may be that it entails leverage. Because the value-added funds may not be as "market neutral" or "absolute return" as is thought – and because portable alpha managers may fail to properly adjust for embedded betas – the market exposure delivered by the total portfolio can end up being more than would be entailed in its benchmark (e.g., a traditional long-only stock portfolio). In that case, the portable alpha portfolio will represent a leveraged position. (That is, the sum of the beta on the derivatives plus the beta on the funds may exceed the beta of a traditional stock portfolio.)

If that's true, the portable alpha portfolio should provide higher returns in up markets than the traditional portfolio. This will be so as long as traditional managers' alphas aren't sufficient to offset both the leverage and the value-added fund managers' alphas (which everyone assumes is out of the question given today's belief in alternative funds and disrespect for traditional investing). **But the portable alpha portfolio may lose more in down markets unless the value-added fund managers' alpha exceeds the traditional managers' alpha by enough to offset the increased losses that can stem from a portable alpha portfolio's leveraged market exposure.**

Now then, if pension funds or endowments aren't permitted to borrow to achieve leverage and want to increase market exposure this way, I say "have at it." But they should call it what it is, rather than insist that they're combining 2 plus 2 and getting 5.

And remember that even after a portable alpha program has been in place for a period of years and produced results ahead of its benchmarks, it may not be possible to accurately assess whether the advantage came from the skill of the value-added managers, the effectiveness of the portable alpha approach, or leveraged market exposure. Because risk often is truly invisible, you can't always tell how much market risk you bore, and thus whether the key was really alpha or beta.

Portable alpha has the potential to improve results – in good markets and generally over time (since markets usually go up). But it won't do so in all markets – or do so on a risk-adjusted basis – unless the person given the job of structuring the portable alpha portfolio can (a) identify and access value-added funds that truly are capable of generating alpha, (b) accurately gauge their embedded risk, and (c) properly structure the overall portfolio.

Outstanding managers may be able to satisfy the criteria for success enumerated just above, but that doesn't mean they'll do it all the time. And there's no assurance that less capable managers will do it even on average. **So, once again, the mere term "portable alpha" doesn't hold the key to success. Success will only be found in execution of the concept by managers**

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possessing rare skill. To think every would-be purveyor of portable alpha will be able to do it consistently is, like so many other things in my investment experience, too good to be true. Without great execution, "portable alpha" is just one more seductive label.

* * *

No market is entirely efficient and none is entirely inefficient. It's all a matter of degree. In the same way, few if any funds are entirely market neutral, and even those that aim for absolute returns will demonstrate considerable susceptibility to market fluctuations.

A lot depends on your preference for offense (which usually leads investors to non-hedged or non-absolute investing) versus defense (for which managers emphasizing risk control – like some hedge funds – may be best suited). In the long run, it comes down to identifying managers who employ the style of investing that appeals to you and are capable of living up to your expectations. Not that complicated, but far from easy.

June 13, 2006

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Memo to: Oaktree Clients

From: Howard Marks

Re: It Is What It Is

My first exposure to the phrase that serves as the title for this memo came in 1995, a few days before Oaktree opened its doors. My partners and I wracked our brains over whether we'd covered every base. We asked our attorney, Peter Ostroff of Sidley & Austin, if he thought we'd missed anything. Peter's answer was succinct and on target as usual: "It is what it is."

In the March 5 edition of The New York Times, William Safire devoted the Sunday Magazine's "On Language" column to "it is what it is." He mentioned that the first use he could find had been in 1949, and that the phrase had been adopted for movie and song titles in the last few years. I was shocked when I checked Google and found 4.2 million references!

According to Safire, there is no one definitive meaning for the phrase. It can serve as the equivalent of the politician's "no comment." It can be used to express "philosophical resignation over a disappointment." Or it can be "a mild put-down, as if to say, 'That's all you can expect.'" Safire concluded his column with another possible meaning: "*que sera sera*" (what will be will be), which was the title of a hit song by Doris Day when I was ten. But that interpretation suggests a fatalism and inability to affect the outcome that I don't associate with the phrase.

I took Peter's use of the phrase in 1995 – and I'm using it in this memo – to mean something very different: recognition and acceptance of today's givens . . . but not necessarily of the end result. What's past is past and can't be undone. It has led to the circumstances we now face. **All we can do is recognize our circumstances for what they are and make the best decisions we can "given the givens."**

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Roots in Philosophy

In the mid-'60s, Wharton students had to have a non-business minor, and I satisfied the requirement by taking five courses in Japanese studies. These surprised me by becoming the highlight of my college career and contributing to my investment philosophy in a major way.

Among the values prized in early Japanese culture was *mujo*. *Mujo* was defined classically for me as recognition of "the turning of the wheel of the law," implying acceptance of the inevitability of change, of rise and fall.

This sense of accepting and "going with" the environment and the changes that take place there – rather than insisting that it stay the same and attempting to impose our will on it – was captured for me in a quotation from Lao-Tzu (I found it in the March letter from Rimrock Capital, which Paul Westhead left Oaktree in 2004 to head):

> To be strong you have to be like water: if there are no obstacles, it flows; if there is an obstacle, it stops; if a dam is broken, then it flows further; if a vessel is square, then it has a square form; if a vessel is round, then it has a round form; because it is so soft and flexible, it is the most necessary and the strongest thing.

In other words, *mujo* means cycles will rise and fall, things will come and go, and our environment will change in ways beyond our control. **Thus we must recognize, accept, cope and respond. Isn't that the essence of investing?**

Coping With Cycles

In the world of investing, (as you've heard me say many times) nothing is as dependable as cycles. Fundamentals, psychology, prices and returns will rise and fall, presenting opportunities to make mistakes or to profit from the mistakes of others. They are the givens.

We cannot know how far a trend will go, when it will turn, what will make it turn, or how far things will then go in the opposite direction. But I'm confident that every trend will stop sooner or later. Nothing goes on forever. Trees don't grow to the sky, and neither do many things go to zero and stay there. Success carries within itself the seeds of failure, and failure the seeds of success.

So what can we do about cycles? If we can't know in advance how and when the turns will occur, how can we cope? On this, I am dogmatic: **We may never know where we're going, but we'd better have a good idea where we are.** That is, even if we can't predict the timing and extent of cyclical fluctuations, it's essential that we strive to ascertain where we stand in cyclical terms and act accordingly.

What Can We Know, and How?

Even without knowing where we're going and when, we can deduce lots of valuable information about our investment environment.

First, where do we stand in the economic cycle? Is the economy several years into a recovery that may be due for a rest? Has it leveled out and begun to weaken? Or has it been weak enough long enough that we can reasonably expect recession to give way to recovery?

Second, how have the markets been performing? Have they been weak for years, possibly pushing prices to bargain basement levels? Or have they been so strong that we should suspect (1) the positives have been fully discounted, (2) several years of potential gains have been accelerated into the returns to date, and (3) assets today are "priced for perfection"?

Finally, and often most important, how are people around us behaving? If they're chastened by losses and afraid of the future, there's reason for us to be optimistic. If they're unworried and complacent, that's something we should worry about. In the words of my favorite Buffettism,

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"The less prudence with which others conduct their affairs, the greater the prudence with which we should conduct our own affairs."

Imagine we ran into a visitor from Mars who observed, "I see your economy and markets have been doing well for years. Everyone's making a ton of money. No one's expressing worry or a desire to avoid risk. P/E ratios, buyout prices and private equity leverage ratios are all high. Stock buybacks and dividend recaps are adding to leverage and reducing creditworthiness. Conferences on hedge funds and private equity are sold out. Top-performing funds are closed to newcomers and new ones start up every day, fully subscribed. The Greenwich Ferrari dealer has a waiting list a year long."

Nothing in our favorite Martian's statements sounds like a prediction. **In fact, he hasn't said one word about the future.** But there's a lot of helpful information there. My guess is valuable inferences could be made about what's likely to happen next. If he can see it, so should we. And having seen it, we should take appropriately cautious action.

And the reverse can also be true (although it's not something I dwell on most of the time or at what I think is today's point in the cycle). If that Martian came down and saw nothing but weak recent returns, widespread disillusionment, disinterest in investing and people waiting for the smoke to clear before they'll commit, we'd probably conclude it's time for us to step on the gas.

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What to Do

There are few fields in which decisions as to strategies and tactics aren't influenced by what we see in the environment. Our pressure on the gas pedal varies depending on whether the road is empty or crowded. The golfer's choice of club depends on the wind. Our decision regarding outerwear certainly varies with the weather. Shouldn't our investment actions be equally affected by the investing climate?

Most people strive to adjust their portfolios based on what they think lies ahead. At the same time, however, most people would admit forward visibility just isn't that great. That's why I make the case for responding to the current realities and their implications, as opposed to expecting the future to be made clear.

In November 2004 I wrote a memo entitled "Risk and Return Today." Its thesis was that in most asset classes, prospective returns were low and risk premiums were skinny. On that basis, I urged investors to act accordingly, hold reasonable expectations and – especially – decline to stretch for higher returns by taking on more risk. The conclusions are just as clear today:

- When high returns are not in prospect, we shouldn't invest as if they are.
- When safe investments appear unlikely to provide the returns we need, we shouldn't rush to riskier investments to get them.
- This is especially true when the reward for taking incremental risk is skimpy.

It's as simple as that. **We can't expect high returns when the market doesn't offer them. Prices won't fall to levels from which high returns can be expected if most investors are**

willing to settle for less. To quote Peter Bernstein, "The market's not a very accommodating machine; it won't provide high returns just because you need them."

My bottom line, as they might say in the self-help books: **Listen to your inner Martian.** What's going on usually isn't that big a mystery. An overheated environment doesn't mean the market's going down tomorrow, just as an excess of risk aversion doesn't signal it's the absolute bottom. But the circumstances should inform our behavior. Simply observing what's going on around you and acting accordingly should improve your investment results.

And the distinctions needn't be cut too fine. There can be lots of room for argument between "undervalued" and "fairly valued," or between "fairly valued" and "overvalued" – that's where most of the uncertainty lies. But it's unlikely that disciplined investors will find it hard to choose between overvalued and undervalued. In my opinion, if you're wracking your brain trying to figure out whether something's overvalued or fairly valued – that is, whether you should sell or continue to hold – it's usually pretty clear that it's not a buy.

What Is Going On Around Us Today?

No one I know thinks investors today are acting out of an excess of caution, and I agree. Investors have forgotten the losses in stocks, corporate bonds and venture capital earlier this decade and consider this a low-risk world (or at least one where risk is clearly worth taking). Mark Cutis of Shinsei Bank sent me his memo entitled, "Market of no fear!" I think that's an apt description.

There's no reason to think today's environment implies high future returns. Whether it's high P/E ratios, high transaction multiples in buyouts, low bond yields or low capitalization rates on real estate (and certainly all of these are interrelated), few markets appear to offer bargains.

People are reporting big gains from private equity and real estate assets they bought cheap in the past, levered up in accommodating capital markets and sold at very high prices (read: low prospective returns). But fewer people can claim to be buying in on the cheap today.

A great deal of what's happening is related to a glut of capital for investment in non-mainstream asset classes. With no one interested in buying more high grade bonds at yields near 5% or U.S. stocks with consensus expected returns of 5-7% or so, capital is bypassing those big markets – or perhaps exiting them – and flocking to the smaller alternative markets, raising prices. I understand why people who need 8% or more are looking there for help, but that doesn't do much for the likelihood they'll get what they're after. (More on this later.)

The skinniness of today's risk premiums can be observed most clearly in the high yield bond market, where prospective returns can be calculated with precision and yield spreads are in the vicinity of historic lows, and in certain real estate markets, where actual cash returns are similarly low. But the difficulty of quantifying prospective returns in public and private equity doesn't mean the offerings there are any less paltry. And, as Alan Greenspan said, **". . . history has not dealt kindly with the aftermath of protracted periods of low risk premiums."**

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This is a time for caution, not aggressiveness. For reaping more than sowing. I said it 16 and 34 months ago, and returns in many US markets have been paltry since. **Some alternative investment returns have been quite good, but high realized returns must never be confused with great opportunities to invest more.** High past returns don't imply high future returns; more likely, they've borrowed from the future.

The Poor Man's Guide to Market Assessment

Here's a simple exercise: I have listed below a number of market characteristics. For each pair, check off the one you think is most descriptive of today. And if you find that most of your checkmarks are in the left-hand column, as I do, hold on to your wallet.

Economy:	Vibrant	Sluggish
Outlook:	Positive	Negative
Lenders:	Eager	Reticent
Capital markets:	Loose	Tight
Capital:	Plentiful	Scarce
Terms:	Easy	Restrictive
Interest Rates:	Low	High
Spreads:	Narrow	Wide
Investors:	Optimistic	Pessimistic
	Sanguine	Distressed
	Eager to buy	Uninterested in buying
Asset owners:	Happy to hold	Rushing for the exits
Sellers:	Few	Many
Markets:	Crowded	Starved for attention
Funds:	Hard to gain entry	Open to anyone
	New ones daily	Only the best can raise money
	GPs hold the cards on terms	LPs have bargaining power
Recent performance:	Strong	Weak
Asset prices:	High	Low
Prospective returns:	Low	High
Risk:	High	Low
Popular qualities:	Aggressiveness	Caution and discipline
	Broad reach	Selectivity
The right qualities:	Caution and discipline	Aggressiveness
	Selectivity	Broad reach
Available mistakes:	Buying too much	Buying too little
	Paying up	Walking away
	Taking too much risk	Taking too little risk

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An Inefficient Market in Investment Advice

Bruce Karsh and I recently had an opportunity to sit down to lunch with Charlie Munger. As usual, our conversation was most enjoyable, straying over a large number of topics. I think a few of them – plus some comments from Warren Buffett's latest annual report – can be woven into something of relevance to this memo and of interest to you.

Bruce started off by observing that with practically everyone able to start up a billion dollar hedge fund, and with the leading private equity managers able to raise funds of $10 to $15 billion, jobs in those fields are in great demand as the way to get rich quick. It occurred to me that **if large numbers of people are convinced that a given field is sure to give them instant wealth, something must be wrong. That's a "bubble expectation."** Getting rich – if it can be accomplished at all – is supposed to come from some combination of proven skill, hard work, risk bearing and luck. No one should be able to count on it, and especially not in the short run. And given the operation of market forces, such an opportunity shouldn't last long.

Then I remembered that for decades I've argued that exceptional risk-adjusted returns can only be achieved in inefficient markets, and even then not all the time or by everyone. And by "inefficient markets," I've always meant markets where mistakes are being made. **So if large numbers of alternative investment managers and would-be managers are planning on getting rich quick, the investment management market must be inefficient: they and/or someone else must be making a mistake.** Who else could it be? **Maybe it's their clients.**

Today, as everyone knows, funds can be raised easily and at sizes no one imagined just three years ago. But assets are no longer as cheap as they used to be, interest rates are no longer as low, and the economic recovery isn't as young. I recently heard a speech in which a top buyout manager said his fund's goal (per my memory) is to buy companies at fair prices and make them worth more. In the past, he might've said they tried to buy companies cheap.

On the plus side of the ledger for private equity, managers think more like owners than do many public company boards; are substantially incentivized to see the funds' assets appreciate; and have the potential to improve their previously undermanaged companies. On the negative side, however, the three of us noted that clients are currently entrusting record amounts of money to these managers, along with management fees big enough to allow the managers to get rich without making successful investments, as well as a share in transaction fees that have the potential to put the interests of fund managers and their clients in conflict.

I believe the investors in these funds feel they'll be happy if they can earn net returns in the very low double digits. The modest nature of their aspirations stems from the juxtaposition of (a) the perceived inadequacy (mentioned earlier) of the prospective returns on mainstream stocks and bonds, (b) the large sums some institutions have to invest, and (c) the 8%-or-better returns that pension funds and endowments must achieve if they are to continue business as usual. This combination makes it imperative that they commit to alternative investments and hedge funds, and thus tilts the balance of bargaining power over fees to the fund managers. This, in turn, decreases the likelihood that terms will be designed to maximize the clients' interests. It also can give the managers amounts of capital that pose a problem.

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In his letter discussing Berkshire Hathaway's 2005 performance, Warren Buffett tells the priceless story of the Gotrocks family, which owns all the corporations in America and earns all the profits. Over time, individual family members are approached by broker-Helpers, manager-Helpers and consultant-Helpers, who promise to help them make money (for a fee) by buying certain pieces of the empire from their relatives and selling them others. Eventually they also hook up with hyper-Helpers, wearing uniforms saying "Private Equity" and "Hedge Fund," who levy success fees on top of their other charges. It's clear that the collective efforts of all the Helpers in shuffling assets among Gotrocks family members are unlikely to increase the family's overall wealth (just as is true when companies are sold from one private equity fund to another). At the same time, whether they're successful or not, the costs involved in trying will cause a substantial transfer of wealth from the Gotrocks to their "Helpers." But that's the way it is.

In April 1998 I observed in "Views on Alternative Investments" that some good performing managers might choose to "appropriate for themselves a bigger portion of their funds' superior returns." This is natural and happens in all businesses where the product is in strong demand. But that doesn't mean buyers should ignore it when it occurs.

I'm not saying alternative investments and hedge funds won't provide the returns clients need, or that people shouldn't invest in them. But realistically assessing the demand for these funds, the amounts of money going into them, the market conditions for the underlying asset classes and the deals the managers are able to cut for themselves might cause would-be investors to conclude the silver bullet still hasn't been invented. **Participate in alternative investments if you want – in fact, Oaktree hopes you'll keep doing so – but do it with your eyes open.**

Charlie ended the lunch by urging us to create reasonable expectations among our clients and treat them well. We promised to try.

* * *

None of us can individually influence economic or market conditions. Neither, I think, can we accurately see what lies ahead. **But it's possible to derive inferences from the recent past and the present that improve our judgments and actions regarding the future. It's simply essential that we be aware of what's going on around us.** After all, who can argue with the statement "it is what it is"?

Facing up to reality is what Warren Buffett's doing when he says "We used to find it easy to buy dollars for fifty cents. Today we're trying hard to find dollars we can buy for eighty cents." (He also told me he has an 800 number for anyone who knows where 80-cent dollars can be found.) **Recognizing and accepting these things when they're true isn't pleasant, but there is no prudent alternative.**

Oaktree tries hard to take note of prevailing market conditions, communicate what's going on and behave as contrarians. We try to raise bigger funds and buy more aggressively when we think others are leaving bargains on the table and do the opposite when they're not. It doesn't always work, but it usually beats the alternative.

March 27, 2006

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Memo to: Oaktree Clients

From: Howard Marks

Re: Risk

The reading materials for a meeting of a corporate board on which I sit – and what turned out to be an eight-hour meeting of the audit committee (thank you, Messrs. Sarbanes and Oxley) – included an article by Rick Funston, a Principal of Deloitte & Touche LLP and its National Practice Leader for Governance and Risk Oversight. The subject of the article was corporate risk, but many of its points were equally applicable to investment risk. It got me thinking.

We're all preoccupied with the quest for excellent investment returns, and most of us understand that risk management has a lot to do with achieving them. From there, investment orthodoxy often takes over, with the discussion turning to the relationship between return and volatility. But I think that tells so little of the story that I've decided to devote an entire memo to the subject of risk.

Why Does Risk Matter?

When I joined the investment management industry at the tail end of the 1960s, everyone talked about returns but few people talked about risk-adjusted returns, or the idea that risk matters. I was fortunate, however, to have attended the University of Chicago in the preceding years, during which Capital Market Theory had begun to be discussed.

Of course, nothing underlies the Capital Market approach as much as the relationship between risk and return. This plays out as follows:

- First, because people are risk averse, riskier investments have to offer higher returns in order to attract capital.
- Second, if investors are skillful, they should be able to capture higher returns on their riskier investments, and thus they should show higher average returns in the long run.
- But investors' returns tell just half the story. We have to know how much risk they took to get those returns before we can judge whether they did a good or a bad job. Thus developed the concept of risk-adjusted returns.

It is from the relationship between risk and return that arises the graphic representation that has become ubiquitous in the investment world. It shows a "capital market line" that slopes upward to the right, indicating the positive relationship between risk and return that is essential.

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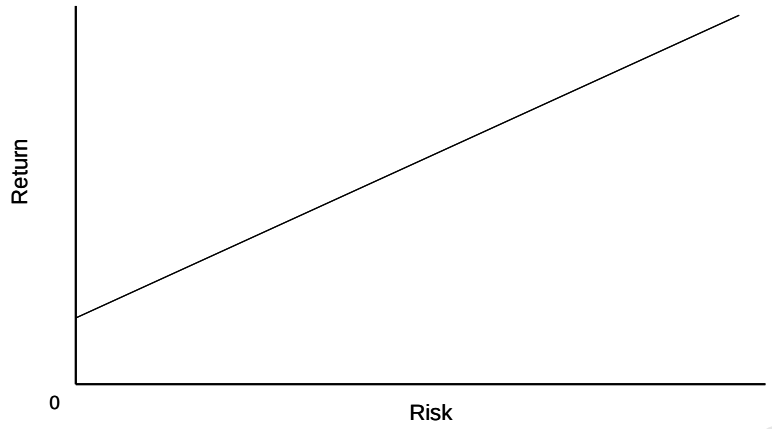

Before going further, I want to stop for a brief tirade. **In my opinion, especially in good times, far too many people can be overheard saying, "Riskier investments provide higher returns. If you want to make more money, the answer is to take more risk." But riskier investments absolutely cannot be counted on to deliver higher returns. Why not? It's simple: if riskier investments reliably produced higher returns, they wouldn't be riskier!**

The correct formulation is that in order to attract capital, riskier investments have to offer **the prospect of higher returns**, or higher promised returns, or higher expected returns. But there's absolutely nothing to say those higher prospective returns have to materialize.

The way I conceptualize the capital market line makes it easier for me to relate to the relationship underlying it all:

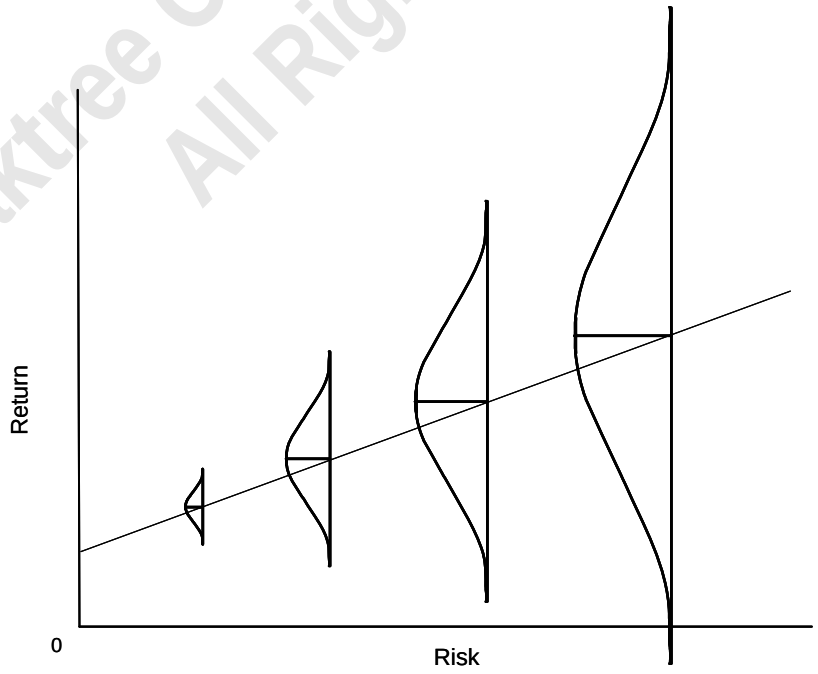

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Riskier investments are those where the outcome is less certain. That is, the probability distribution of returns is wider. When priced fairly, riskier investments should entail:

- higher expected returns,
- the possibility of lower returns, and
- in some cases the possibility of losses.

The traditional graph shown first above is deceptive, because it communicates the positive connection between risk and return but fails to suggest the uncertainty involved. It has brought a lot of people a lot of misery through its unwavering intimation that taking more risk leads to making more money.

I hope my version of the graph is more helpful. It's meant to suggest both the positive relationship between risk and expected return **and** the fact that uncertainty about the return and the possibility of loss increase as risk increases.

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What Is Risk?

According to the academicians who developed Capital Market Theory, risk equals volatility, because volatility indicates the unreliability of an investment. I take great issue with this definition of risk.

It's my view that – knowingly or unknowingly – academicians settled on volatility as the proxy for risk as a matter of convenience. They needed a number for their calculations that was objective and could be ascertained historically and extrapolated into the future. Volatility fits the bill, and most of the other types of risk do not. The problem with all of this, however, is that I just don't think volatility is the risk most investors care about.

There are many kinds of risk, and I'll discuss some of them below. But volatility may be the least relevant of them all. Theory says investors demand more return from investments that are more volatile. **But for the market to set the prices for investments such that more volatile investments will appear likely to produce higher returns, there have to be people demanding that relationship, and I haven't met them yet.** I've never heard anyone at Oaktree – or anywhere else, for that matter – say, "I won't buy it, because its price might show big fluctuations," or "I won't buy it, because it might have a down quarter." Thus it's hard for me to believe volatility is the risk investors factor in when setting prices and prospective returns.

In addition, volatility has a number of shortcomings that aren't often addressed in the literature but are obvious to investment practitioners:

- A stock that meanders from $50 to $80 is likely to have the same statistical volatility as one that goes from $50 to $20. However, most of us would have trouble saying that proves the former was as risky as the latter.

- A stock that over a few years goes from $20 to $80 in a straight line will be described as low in risk, but if it suddenly declines from $80 to $50 it will be said to have become more risky. It's hard to think of a given stock as riskier at $50 than it was shortly before at $80.

- Generally, those who equate volatility with risk look to the historic volatility of an asset as the indicator of its future risk. But most of us know the future will not necessarily be like the past. And one good way to add value in the investment process is by predicting changes in riskiness, whereas no value is ever added through extrapolation.

For all of these reasons, I find it hard to accept volatility as a comprehensive, sufficient or highly useful measure of risk.

If Not Volatility, Then What?

Rather than volatility, I think people decline to make investments primarily because they're worried about a loss of capital or an unacceptably low return. To me, "I need more upside potential because I'm afraid I could lose money" makes an awful lot more sense than "I need more upside potential because I'm afraid the price may fluctuate." **No, I'm sure "risk" is – first and foremost – the likelihood of losing money.**

There are other kinds of risk, most of which affect each of us differently. That means they're subjective and personal – rather than intrinsic to the investment itself – and thus they're unlikely to be behind the market prices set by the consensus of investors. Here are a few:

- Falling short of one's goal – Investors have differing needs, and for each investor the failure to meet those needs poses a risk. A retired executive may need 4% per year to pay his bills, whereas 6% would represent a windfall. But for a pension fund that has to average 8% per year, a prolonged period returning 6% would entail serious risk. Obviously this risk is personal and subjective, as opposed to absolute and objective. A given investment may be risky in this regard for some people but riskless for others. Thus this cannot be the risk for which "the market" demands compensation in the form of higher prospective returns.

- Underperformance – Let's say an investment manager knows she can't get more money from a client no matter how well she does, but she's sure she'll lose the account if she fails to keep up with some index. That's "benchmark risk," and she can eliminate it by emulating the index. But every investor who's unwilling to throw in the towel on outperformance, and who chooses to deviate from the index in its pursuit, will have periods of significant underperformance. In fact, since many of the best investors stick most strongly to their approach – and since no approach will work all the time – the best investors can have some of the greatest periods of underperformance. Specifically, in crazy times, disciplined investors willingly accept the risk of not taking enough risk to keep up. (See Warren Buffett in 1999. That year, underperformance was a badge of courage, because it denoted a refusal to participate in the tech bubble.)

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- Career risk – This is the extreme form of underperformance risk. Dean LeBaron of Batterymarch wrote an article that cited "agency risk," or the risk that arises when the people who manage money and the people whose money it is are different people. In those cases, the managers may not care much about gains, in which they won't share, but may be deathly afraid of losses that could cost them their jobs. The implication is clear: risk that could jeopardize return to an agent's firing point is rarely worth taking.

- Unconventionality – Along similar lines, there's the risk of being different. Everyone who aspires to superior results has to be mindful of John Maynard Keynes's observation: "Worldly wisdom teaches that it is better for reputation to fail conventionally than to succeed unconventionally . . ." Understandably, stewards of other people's money can be more comfortable turning in average performance, regardless of where it stands in absolute terms, than with the possibility that unconventional actions will prove unsuccessful and get them fired. As David Swenson wrote in his excellent book, "Pioneering Portfolio Management,"

  > . . . active management strategies demand uninstitutional behavior from institutions, creating a paradox that few can unravel. Establishing and maintaining an unconventional investment profile requires acceptance of uncomfortably idiosyncratic portfolios, which frequently appear downright imprudent in the eyes of conventional wisdom.

  Concern over this risk keeps many people from superior results, but it also creates opportunities in unorthodox investments for those who dare to be different.

- Illiquidity – If an investor needs money with which to pay for surgery in three months or buy a home in a year, he may be unable to make an investment that can't be counted on for liquidity that meets his schedule. Thus, for him, risk isn't just losing money or volatility, or any of the above. It's being unable when needed to turn an investment into cash at a reasonable price. This, too, is a personal risk. Theoretically, a fund whose life is perpetual and whose liquidity needs are predictable shouldn't be sensitive to this risk and thus should be able to bear it for profit.

The bottom line is that investment risk comes in many forms. Many risks matter to some investors but not to others, and they may make a given investment seem safe for some investors but risky for others. **Rejecting risk as synonymous with volatility, as I do, eliminates the one measure of risk that's entirely quantifiable, objective and absolute. This, in turn, makes it hard to argue that the market's an efficient machine that precisely assesses the risk of each investment and allocates prospective return proportionately.**

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Measuring Risk Prospectively

I'm sure we agree that investors should and do demand higher prospective returns on riskier investments. And hopefully we can agree that losing money is the risk people care about most in demanding prospective returns, and thus in setting prices for investments. An important question remains: How do they measure that risk?

- First, it clearly is nothing but a matter of opinion: hopefully an educated, skillful estimate about the future, but still just an estimate.

- Second, the standard for quantification is nonexistent. With regard to a given investment, some people will think the risk is high and others will think it's low. Some will state it as the probability of not making money, and some as the probability of losing a given fraction of their money (and so forth). Some will think of it as the risk of losing money over one year, and some as the risk of losing money over the entire holding period. Clearly, even if all the investors involved met in a room and showed their cards, they'd never agree on a single number representing an investment's riskiness. And even if they could, that number wouldn't likely be capable of being compared against another number, set by another group of investors, for another investment.

- Third, risk is deceptive. Conventional considerations are easy to factor in, like the likelihood that normally recurring events will recur. But freakish, once-in-a-lifetime events are impossible to quantify or prepare for. The fact that an investment is susceptible to a particularly serious risk that will occur infrequently if at all – what I call the "improbable disaster" – means it can seem safer than it really is. As Nassim Nicholas Taleb wrote in "Fooled by Randomness,"

> Reality is far more vicious than Russian roulette. First, it delivers the fatal bullet rather infrequently, like a revolver that would have hundreds, even thousands of chambers instead of six. After a few dozen tries, one forgets about the existence of a bullet, under a numbing false sense of security. . . . Second, unlike a well-defined precise game like Russian roulette, where the risks are visible to anyone capable of multiplying and dividing by six, one does not observe the barrel of reality. . . . One is thus capable of unwittingly playing Russian roulette – and calling it by some alternative "low risk" name.

The bottom line is that, looked at prospectively, much of risk is subjective, hidden and unquantifiable. **But I think one of the most interesting aspects of risk – and one of the least appreciated – is the fact that it isn't quantifiable <u>even in retrospect</u>.**

<u>Measuring Risk After the Fact</u>

Let's say someone makes an investment that works out as expected (or better). Does that mean it wasn't risky? Or let's say the investment produces a loss. Does that mean it was risky? Or that it should have been perceived as risky at the time it was analyzed and entered into?

If you think about it, the response to these questions is simple: **The fact that something happened doesn't mean it was likely, and the fact that something didn't happen doesn't mean it was improbable. Improbable things happen all the time, just as likely things often fail to occur.**

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Taleb's book is the bible on this subject as far as I'm concerned, and in it he talks about the "alternative histories" that could have unfolded but didn't. Alexander the Great mapped out his battle strategy, and it succeeded under the circumstances that unfolded. But were those circumstances predictable or just a matter of chance? Thus was Alexander wise to count on them or foolhardy? And did he prudently anticipate and plan for them, or did he overlook them and just get lucky? Lastly, was there a much wiser general somewhere else, who more systematically considered the possibilities and whose plan was more likely to work, but who fell victim to bad fortune (and thus anonymity) when random events conspired against him? Which man deserves to be in the history books: Alexander the Great or Bob the Unlucky?

What a wonderful way this is to look at things! How many people do you suspect of having succeeded despite themselves, rather than because of skill? How many bear out the adage "it's better to be lucky than good"? Certainly many in business have derived fame and fortune from being right once in a row. Was it skill or luck? Can they do it again? Did they accurately assess the risk? Who can tell? Who cares?

In the investing world, one can live for years off one great coup or one extreme but eventually accurate forecast. But what's proved by one success? When markets are booming, the best results often go to those who take the most risk. Were they smart to anticipate good times and bulk up on beta, or just congenitally aggressive types who were bailed out by events? **Most simply put, how often in our business are people right for the wrong reason?** These are the people Taleb calls "lucky idiots," and in the short run it's certainly hard to tell them from skilled investors.

The point is that even after an investment has been closed out, it's impossible to tell how much risk it entailed. Certainly the fact that an investment worked doesn't mean it wasn't risky, and vice versa. With regard to a successful investment, where do you look to learn whether the favorable outcome was inescapable or just one of a hundred possibilities (many of them unpleasant)? And ditto for a loser: how do we ascertain whether it was a reasonable but ill-fated venture, or just a wild stab that deserved to be punished?

Did the investor do a good job of assessing the risk entailed? That's another good question that's hard to answer. Need a model? Think of the weatherman. He says there's a 70% chance of rain tomorrow. It rains; was he right or wrong? Or it doesn't rain; was he right or wrong? It's impossible to assess the accuracy of probability estimates other than zero and 100 except over a very large number of trials.

The celebrated investor is one whose actions yielded good results. Was she lucky or good? How much risk did she take? Since it's risk-adjusted return that counts, can we tell whether her return was more than commensurate with the risks borne or less than commensurate? I'm confident that the answers lie in skilled, subjective judgments, not highly precise but largely irrelevant ratios of return to volatility.

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So Is It Risky Or Not?

Casual onlookers rarely see that as a tough question. **But like most aspects of investing, the more obvious the answers seem, the less likely they are to be true.**

Many considerations on the subject of risk are actually paradoxical. Investing requires us to deal with the future, and the difficulty of cracking the future is the source of most of the risk. The actual riskiness of many aspects of investing depends on the extent to which an investor is capable of knowing something about the future, or – perhaps better put – of knowing more than the average investor.

For example, let's consider diversification versus concentration. **Is concentration risky? Not if you know what the future holds.** Diversification by definition implies a willingness to trade off return for safety, motivated by acceptance of the fact that knowledge of the future is imperfect. Most investors rank their stocks by potential return, formally or informally, but no one I know buys just the one they expect to deliver the highest return. Why? Because they know their rankings might be wrong and don't want to bet it all on black and see red come up. Concentration is risky for investors who can't see the future with much clarity, but it wouldn't be for one who can. For the latter, it's the way to maximize performance, and diversification can hold it back.

What about illiquidity? Conventional wisdom says liquid investments are safer than illiquid ones. And small holdings are safer than large blocks. So what's up with Warren Buffett and Charlie Munger? They regularly amass stock positions for which there are no other buyers. And in fact, they seem to be more comfortable owning whole companies than public stocks they could sell off. Yet their record continues to be highly superior. The answer lies in the fact that they know what they're doing. They're able to tell good companies from bad ones, and when the price is right. And given that their portfolios are unlikely to go into forced liquidation (and as far as I know, they don't think about losing their jobs), illiquidity isn't a risk they worry about.

Finally, what about buying risky assets? People ask me all the time to answer a simple question: "Are Bruce Karsh's distressed debt funds risky?" They certainly are, in that he buys the debt of troubled and ultimately insolvent companies; the promises of interest and principal payments on the debt he buys invariably are out the window; the range of possible outcomes is extremely wide; his holdings are often illiquid; and he diversifies far less than Sheldon Stone does in his high yield bond portfolios. On the other hand, Bruce often buys in at extremely low prices; he has a lot of experience and a highly skilled team; and the record suggests that he, too, knows what he's doing. Thus one might conclude Bruce's funds aren't risky, and the results to date support this view: in seventeen years he hasn't had a fund that lost money or a year when the aggregate return of his funds was negative. (Of course, this historic record says nothing about future performance.) You can be the judge, but a lot will depend on your definition of risk.

So my answer's the same here: There's no right answer. No one number can tell you how much risk an investor took, or how much risk a prospective investment entails. Few investment assets, strategies or tools are risky or safe in and of themselves. And no answer on this subject is likely to hold true for every investor and every potential application. That's one of the reasons why investing is never easy . . . but always interesting.

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Complexity in Risk Assessment

It is my purpose in this section to highlight a few reasons why risk assessment is not simply a matter of one number (as implied by the attention paid to volatility), but multi-dimensional instead. Rick Funston of Deloitte pointed out in our board briefing materials that risk assessment requires us to deal with four complicating factors:

- Scenarios
- Offsets
- Correlations
- Domino effects

By "scenarios," Rick refers to alternative or abnormal future scenarios that go beyond the normal range of outcomes – in his words, "the possible but unusual."

"Offsets" translate in the investment world into something very familiar: diversification. Intelligent diversification means not just investing in a bunch of different things, but in things that respond differently to the same factors. In a well-diversified portfolio, something that negatively influences investment A might have a positive and offsetting influence on investment B.

"Correlations" are somewhat the opposite. The term refers to the chance that a number of investments will respond in the same way to a given factor. Be alert, however, to the fact that when things in the environment turn really negative, seemingly unconnected investments can be similarly affected. "In times of panic," they say, "all correlations go to one."

Finally, "domino effects" refer to the likelihood that a given factor will cause trouble for investment A, which will be a problem for investment B, which will hurt investment C, and so on. Obviously, domino effects can result in combinations that are bigger than any one issue alone and quite hard to anticipate.

Clearly, because of these factors among so many others, risk can't be reduced to a single number or handled simplistically. Because of its multi-dimensional nature, it can only be dealt with by skilled and experienced individuals making judgments that are by their nature subjective. And even those individuals must always be conscious of how much they don't know.

When the emerging markets melted down in 1998, accompanied by the collapse of Long Term Capital Management and the crisis in Russia, most investors thought their risk was limited to their holdings of emerging market securities. But they soon saw firsthand the ability to be affected through the stocks of U.S. companies doing business in emerging markets, high yield bond funds that had dabbled in sovereign debt, and private equity investments exposed to the economies in question.

Fault lines run through every portfolio, adding to the complexity of managing risk. It's hard to anticipate all of them, but trying to do so lies at the heart of effective risk management.

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Bring in the Risk Management Professionals

Given the myriad reservations about risk measurement expressed above, I want to inveigh against over-reliance on using outside "experts" to assess the risk the investment people are taking, and on models like VAR (value at risk) to do the assessing.

First of all, given the inextricable linkage between analyzing a potential investment and assessing its risks, I question whether anyone else can know as much about this subject as the investment professionals directly involved. To me, "risk measurement officers" sound like armchair quarterbacks who're brought in to tell the investment pros how they're doing (although I concede that they may be useful in looking across the "silos" in multi-strategy portfolios to aggregate risk and look for fault lines).

Second, I sincerely doubt that the risks that really matter are subject to modeling. Models can tell us what will happen most of the time, and how much risk will be entailed under "normal circumstances." But, as my friend Ric Kayne says, everyone understands the things that happen within two standard deviations, but everything important in financial history takes place outside of two standard deviations.

Rick Funston performs a service by organizing risks into two categories: those that are suitable for probabilistic modeling and those that aren't. He includes among the elements that render a risk suitable for modeling (1) recurring situations, (2) processes that are subject to known rules, (3) conditions that can be counted on to remain stable, (4) controllable environments, (5) a limited range of outcomes, and (6) certainty that combinations of things will lead to known results. **What could be less descriptive of investing?**

Given the non-recurring situations we face, the fact that many of the rules are unknown, and the largely unlimited range of outcomes (among other things), I would argue strongly that models and modelers are of very limited utility in measuring investment risk at the extremes, where it really matters.

Bearing Risk for Profit

A few years ago, one of my memos quoted Lord Keynes as having said, ". . . a speculator is one who runs risks of which he is aware and an investor is one who runs risks of which he is unaware." (I admitted at the time that I'd been unable to verify that he actually said it, but now I've identified the source.) Keynes makes an essential point. **Bearing risk unknowingly can be a huge mistake**, but it's what those who buy the securities that are all the rage and most highly esteemed at a particular point in time – to which "nothing bad can possibly happen" – repeatedly do. **On the other hand, the intelligent acceptance of recognized risk for profit underlies some of the wisest, most profitable investments** – even though (or perhaps due to the fact that) most investors dismiss them as dangerous speculations.

I believe in the principles underlying the Capital Market approach. We are (or should be) risk averse, meaning that, if the prospective returns are equal, we prefer safer investments to the more

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risky. Thus, we must be induced to make riskier investments by the offer of higher prospective returns. We could accept the risk-free rate available on Treasury bills, but most of us choose instead to strive for more by taking on incremental risk. **When you boil it all down, it's the investor's job to intelligently bear risk for profit.** Doing it well is what separates the pros from the rest.

What does it mean to intelligently bear risk for profit? I'll provide an example. In the early 1980s, a reporter asked me, "How can you invest in high yield bonds when you know some of the issuers will go bankrupt?" Somehow, the perfect answer came to me in a flash: "The most conservative companies in America are the life insurance companies. How can they insure people's lives when they know they're all going to die?" Both activities involve conscious risk bearing. Both can be done intelligently (or not). The ability to profit from them consistently depends on the approach employed and whether it's done skillfully. For companies selling life insurance, I said, the keys to survival and profitability are the following:

- **It's risk they're aware of.** They know everyone's going to die. Thus they factor this reality into their approach.
- **It's risk they can analyze.** That's why they have doctors assess applicants' health.
- **It's risk they can diversify**. By ensuring a mix of policyholders by age, gender, occupation and location, they make sure they're not exposed to freak occurrences and widespread losses.
- **And it's risk they can be sure they're well paid to bear.** They set premiums so they'll make a profit if the policyholders die according to the actuarial tables on average. And if the insurance market is inefficient – for example, if the company can sell a policy to someone likely to die at age 80 at a premium that assumes he'll die at 70 – they'll be better protected against risk and positioned for exceptional profits if things go as expected.

We do exactly the same things in high yield bonds, and in the rest of Oaktree's strategies. We try to be aware of the risks, which is essential given how much our work involves assets that some simplistically call "risky." We employ highly skilled professionals capable of analyzing investments and assessing risk. We diversify our portfolios appropriately. And we invest only when we're convinced the likely return far more than compensates for the risk.

We've said for years that risky assets can make for good investments if they're cheap enough. The essential element is knowing when that's the case. That's it: the intelligent bearing of risk for profit, the best test for which is a record of repeated success over a long period of time.

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Risk Management vs. Risk Avoidance

Clearly, Oaktree doesn't run from risk. We welcome it at the right time, in the right instances, and at the right price. We could easily avoid all risk, and so could you. But we'd be assured of avoiding returns above the risk-free rate as well. Will Rogers said, "You've got to go out on a limb sometimes because that's where the fruit is." None of us is in this business to make 4%.

So even though the first tenet in Oaktree's investment philosophy stresses "the importance of risk control," this has nothing to do with risk avoidance.

It's by bearing risk when we're well paid to do so – and especially by taking risks toward which others are averse in the extreme – that we strive to add value for our clients. When formulated that way, it's obvious how big a part risk plays in our process.

Rick Funston said in the article that prompted this memo, **". . . you need comfort that the . . . risks and exposures are understood, appropriately managed, and made more transparent for everyone . . . This is not risk aversion; it is risk intelligence." That's what Oaktree strives for every day.**

January 19, 2006

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Memo to: Oaktree Clients

From: Howard Marks

Re: Hindsight First, Please (or, What Were They Thinking?)

> "The farther backward you can look, the farther forward you can see."
> – Winston Churchill

I often cite John Kenneth Galbraith's observation that one of the outstanding hallmarks of the financial world is "the extreme brevity of the financial memory." Investors lose money over and over because they simply forget that cycles are inevitable and there's no such thing as a free lunch. Now I've found a great quotation from Churchill, also reminding us that foresight comes largely from awareness of history.

Along similar lines, I'm struck by the extent to which a related factor, inadequate skepticism, also contributes to investment losses. Getting the most out of a book, play or movie usually requires "willing suspension of disbelief." We're glad to overlook the occasional plot glitch, historical inaccuracy or physical impossibility because it increases our enjoyment. When we watch Peter Pan, we don't want to hear the person sitting next to us say, "I can see the wires" (even though we know they're there). While we know boys can't fly, we don't care; we're just there for fun.

But our purpose in investing is serious, not fun, and we must constantly be on the lookout for things that can't work in real life. In short, the process of investing requires a strong dose of disbelief. **Time and time again, the post mortems of financial debacles include two classic phrases: "It was too good to be true" and "What were they thinking?" I'm writing to explore why these observations are so often invoked in the past tense.**

The combination of greed and optimism repeatedly leads people to pursue strategies they hope will produce high returns without high risk; pay elevated prices for securities that are in vogue; and hold things after they have become highly priced in the hope there's still some appreciation left. Afterwards, hindsight shows everyone what went wrong: that expectations were unrealistic and risks were ignored.

It is my point that:

- **Investors mustn't dwell excessively on recent experience.**
- **Instead, they must look to the future.**
- **They must consider today's developments critically.**
- **That assessment must take place in the light of history's lessons.**

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All too often, investors' interest in the past is limited to the last few months or perhaps a year or two. They look unskeptically, are dazzled by the high returns they see, and jump aboard for more of the same. But they usually fail to consider longer-term history, which would show that "free lunches" never last forever. When the check ultimately comes in the form of losses, there's surprise and disappointment that could have been avoided.

Time after time when I read about trends being taken to excess – and later, when the painful consequences become clear – I find myself asking what they could have been thinking. **The alpha that's so much in demand today is really the ability to see ahead to things others will see only afterwards, in the rearview mirror.** The people of Oaktree spend a lot of their time figuring out what might be the next mistake and preparing for it. In other words, we try to anticipate – and avoid – pitfalls that others will rue after the fact.

Caveat Emptor

Today's financial *cause célèbre* is the Bayou group of hedge funds. Results were falsified and a lot of money has disappeared. It's easy to make a list of those who deserve blame in this affair, but few of the articles I see focus on the people I think should head the list: the funds' investors.

We live in an age when fingers are pointed at others all the time. Losers feel aggrieved and sue. That's what Bayou's investors will do, and certainly they were defrauded. But what was their part in the process? Where was their disbelief when they swallowed the following:

- They put their trust in a manager who claimed to have been a senior trader at Leon Cooperman's Omega Fund. But Leon – who denies that claim – says he got only one call over the years to verify it, while investors poured hundreds of millions into the fund.

- They invested in funds that executed trades through a brokerage firm owned by the funds' manager. Didn't they worry about the conflict that arises when a manager makes more money when his fund trades more often?

- They invested with managers who were the subject of complaints and lawsuits alleging improper conduct; these things can be checked out but apparently weren't. It seems investors took comfort from the fact that the brokerage affiliate was licensed by the NASD. What they missed, however, was the fact that the NASD would police the conduct of the brokerage arm but not the fund or its management.

- They went into funds whose auditors they'd never heard of. They couldn't have heard of them, because they'd never audited anyone. And if they had asked, they would've learned that the accounting firm's registered principal was the hedge fund's CFO.

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- Some invested on the recommendation of people claiming to be hedge fund consultants. But in many cases these "advisers" disclosed that they were being paid by the funds they recommended. How could investors have relied on what so obviously could be biased advice?

In the case of Bayou – as in other scams before and others to come – it's clear that a drawerful of cash provides a strong incentive to steal. But if that's so obvious today, shouldn't it have been obvious to people before they became investors? Shouldn't that have encouraged caution? As The Wall Street Journal wrote on September 30 regarding Bayou's founders, "Such tidbits from the duo's business backgrounds were easy to find via Internet research and other inquiries." **Thus the bottom line is a simple one, and instructive. Which of Bayou's limited partners would have invested if they had known the above facts? And why didn't they know them?**

Stocks for the Long Run

Going from the micro to the macro, another subject that suddenly looks a lot different in retrospect is the likely return on U.S. stocks. When I was in graduate school at the University of Chicago in 1967-69, I learned that its Center for Research in Security Prices had input the closing price for every stock every day since 1929 and computed that the average yearly return on U.S. equities had been a shade over 9%.

Later, a few more years of good returns had raised the historic figure – and thus expectations for future returns – to the range of 10-11%. **And from the late 1960s through the late 1990s, nothing – and I mean nothing – was more universal than the belief that stocks could be relied on for 9-11% per year. I don't think I've ever seen an assumption that was less questioned than this one.**

The next step in cementing this expectation was the publication of "Stocks For the Long Run" by Wharton's Jeremy Siegel, one of the nation's highest-rated professors. Siegel's message had the effect of minimizing worry about the variability of equity returns. He demonstrated with past data that stocks could be depended on to beat cash, bonds and inflation over the long term. In the popular perception, this morphed into an expectation that stocks could be depended on to beat cash, bonds and inflation . . . period.

Along with the boom in tech/media/telecom stocks and the first-day gains of IPOs, Siegel's data contributed to one of the greatest equity manias of all times. Of course, it evaporated after the TMT stocks collapsed in 2000 and was buried as the major stock averages did the unthinkable, declining for three straight years for the first time since the Great Crash.

So what do people expect from stocks today? Equity investors now realize that p/e ratios are too high for multiple expansion to be counted on, and that dividend yields have declined from 4-7% in 1925-55 and 3-4% in 1955-95 to 1-2% in the last ten years. Thus,

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they conclude they may have to look just to profits growth for their returns, and that's likely to be in the mid-single digits as usual. As a result, in my view, everyone's thinking 6-7%. No one's talking about 9-11% anymore.

What changed? There's nothing new about the argument contained in the paragraph just above. The cautious were making it in the 1990s. When stocks were rolling along, however, it had little persuasive power. **With stocks high, expectations regarding future returns were high.** The S&P 500 is 20% lower today than it was in 2000, on higher earnings, so it's demonstrably cheaper in p/e ratio terms (even if not necessarily cheap). **And with stocks lower, expectations regarding future returns are lower.**

Can there be a more clear-cut case of hindsight prevailing? I don't think so. And by the way, in the late '90s, people were sure stocks held the key to investment performance, and were pushing up their allocations. Some got to 80% just in time for the crash. I may not travel in the right circles, but it's been years since I last heard of an institutional investor that wants to increase its allocation to domestic equities. **If they're correct now, what were they thinking in the late '90s?**

<u>If Not Stocks, Then What?</u>

Since no one wants to increase allocations to U.S. stocks (or high grade bonds, for that matter), where's the money going? The answer is, just about anyplace else. Everyone knows there's too much money looking for a home in buyouts, venture capital, distressed debt, hedge funds, real estate, and on and on. But that isn't keeping more from flowing there.

I love that terrific Yogi-ism: No one goes there anymore; it's too crowded. **But the corollary is appropriate for the alternative investing world of today: Because it's so crowded, everyone wants to go there.**

Buyouts represent a great case in point today. It's a simple business (execution aside). You buy a company with a little equity and a lot of debt. If you buy it right, if you can make it a better company, and if you run into an environment characterized by a strong economy, freely available capital and rising asset prices, you'll be able to sell it for more than you paid for it, pay off the debt and enjoy a leveraged return. The theory is clear, but (like everything else in the investment world) it doesn't always work.

It worked very well from its inception around 1973 to roughly 1985, a period in which it was cheaper to buy a company through the stock market than start it and no one had ever heard of Henry Kravis. Then LBOs became enormously popular in the late 1980s, and companies were bought at ever-higher prices and ever-higher leverage ratios. Many of those went bankrupt in 1990 (causing a boom for distressed debt investors, but that's another story). That's what we call a full cycle.

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Then a new cycle began, as it always will. Because the market was depressed in the early 1990s, as were investors, companies could be bought cheap again. And with both borrowers and lenders chastened, no one had to worry about deals becoming over-leveraged. When a lengthy economic recovery ensued, those deals did well. (Even in the next heyday for distressed debt investors – 2002 – very few buyouts went bad.)

But every trend eventually is carried to excess, and it's absolutely inevitable that "what the wise man does in the beginning, the fool does in the end." So now everyone thinks buyouts hold the answer again. Everyone's emboldened rather than chastened. And everyone's enticed by the recent returns, which in many cases have been eye-popping.

What's been happening? Simply put, the stars have been perfectly aligned for buyout success. In the recession, the scandals and the stock market malaise of the early 2000s, companies could again be bought reasonably. Lenders became motivated to put out capital, so higher leverage could be piled on at low interest rates. The economy turned strong, and business recovered. As increased capital flowed to buyout funds, the competition to buy companies – even from other buyout funds – drove up prices. And most crazily, lenders became willing to extend debt capital so that equity sponsors could take out their investment in short order. Nothing could be better for buyout returns than the ability to minimize your equity investment, increasing the extent to which returns are geared up. Thus the deals made in the last year or two have produced great returns.

But that doesn't mean the returns on deals made today and tomorrow will be similarly high. Will the favorable trends continue, or will they reverse? Will companies be costlier? Will interest rates rise? Will the economic environment continue to be salutary? Will leverage have the effect of magnifying gains or losses? Will the mega-fund managers do as well with $10 billion funds in the environment of tomorrow as they did with $3-6 billion in the past, with the stars aligned beautifully? **No one knows the answers, but investors should be asking these questions.**

I recently had a visit from the head of one of America's largest pension funds. He agreed with me that money is flowing to buyouts (and other forms of alternative investment) mainly because no one wants more mainstream stocks and bonds. He also pointed out that people are making these investments to capture the "illiquidity premium." The illiquidity premium and its cousin, the risk premium, are return increments that illiquid and risky investments should deliver to compensate for their illiquidity and riskiness. If return premiums couldn't be expected, investors wouldn't make those investments. **But the fact that something's illiquid or risky absolutely does not mean that a return premium can be depended on to materialize – and certainly not in short-run periods as brief as 5 or 10 years**.

It seems like a long time ago that people talked about the equity risk premium: the amount of return in excess of bond returns that stocks would deliver to compensate for their riskiness. But, again, the fact that it should have been there doesn't mean it was. In 2000-02, it certainly did not show up.

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Investors should demand return premiums, but they shouldn't count on them. They should try to figure out whether they're in prospect – and as "prospect" implies, that's done by looking forward, not backward. The fact that return was there in the past doesn't mean it'll be there in the future. And, in fact, if too much return was earned in the past, that implies not much may be left for the future.

The Impact of Oil Prices

I'll try to be brief here. If I told you the government had just enacted a $125 billion annual tax increase, you might think consumer purchasing would be crushed, business strangled and stocks beaten down.

Thus I'm incredulous that, with the price of oil (of which we import 12 million barrels a day) having risen from $33/barrel in January 2004 to $62 today, the stock market is still up (albeit not much). What is a price increase on imported oil other than an enormous tax increase, with the proceeds going abroad rather than to Washington?

Maybe I'm just looking for the next thing to worry about (as usual). But if the economy slows in 2006 or 2007 and security prices decline, and people explain it all by citing the increased cost of oil, I hope you'll remember to ask people what they were thinking in 2005.

By the way, I don't include this section because I want to discuss oil prices, but because the recent developments exemplify typical investor behavior. **When investors as a group are feeling upbeat, the market is able to shrug off negatives as isolated and insignificant. When they're depressed, investors generalize individual complications into an insurmountable web of negatives.** I feel it's very important that we be aware of whether the market is giving events their proper weight, versus overlooking or overrating them. When things develop that should be considered, it's a matter of "Pay me now or pay me later."

We're from the Government and We're Here to Help

In 2002, at the height of the Enron/WorldCom corporate scandals, the federal government gazed unerringly into its own rearview mirror and demonstrated its ability to solve the last problem . . . and cause the next one. I've been looking for an opportunity to pop off on the subject of Sarbanes-Oxley, and here it is.

There was little discussion or dissent before Congress passed – and the president signed – this piece of legislation designed to root out corporate corruption and hold executives responsible for future infractions. The vote should tell you something: 423 to 3 in the House and 99 to 0 in the Senate! Any time the Great Deliberators on both sides of the aisle agree on something so overwhelmingly, it's probably being done in the heat of the moment and in response to rampant popular sentiment – and it's probably a mistake.

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Let's look at the law's operation and effects. First, it required enormous one-time expenditures for the scrubbing of corporate books and the creation and assessment of control structures designed to avoid misdeeds. Second, it called for significant incremental ongoing expenditures along these lines.

At a conference I attended recently, a venture capitalist estimated that the average company with revenues of $50-60 million faces increased costs of $1-1½ million per year associated with being public. Larger companies are spending far more. I view this as an enormous tax on American business in perpetuity, and the benefits as far smaller than the cost.

When the hue and cry was at its apex and this law was enacted, a widespread epidemic of corruption was suspected. It turned out that the early reports were the worst, and few additional cases were detected in the mandated examinations that followed. So as a result of about $10 billion in scandals – at Enron, WorldCom, Adelphia, Tyco and a few others – we've ended up with a law that will require the largely unproductive expenditure of many billions every year forever (or until rectified).

And it's not as if we had no laws on fraud before Sarb-Ox. They were there, and they were enforced. It's just that in 2002, citizens, and thus politicians, became frustrated with the fact that the old laws didn't prevent all fraud or keep CEOs from saying, "I had no idea that was going on." Thus the government moved precipitously to enact new laws. It's worth noting in this connection that the executives of Tyco, Adelphia and WorldCom all were successfully prosecuted under the preexisting laws, while the major alleged malefactor targeted under Sarb-Ox – Richard Scrushy of HealthSouth – escaped punishment altogether.

So has Sarb-Ox solved the problem? Mistakes made by generally honest managements will be identified in some cases, as they may have in the past, and some inept fraudsters will be caught. But I doubt the serious crooks will be prevented from taking a crack at robbing the cookie jar. And there is genuine risk that Sarb-Ox's single-minded emphasis on driving out fraud will have negative implications for corporate decision making.

What will be the effect of all of the above on companies' future development, and on the free enterprise system that has done so much for America heretofore? That's what our government should be emphasizing – not an overblown reaction to the scandals of the past. If the shortcomings of regulation can be reduced to one, I think it's the inability to anticipate second-order consequences. My advice to Washington (not that anyone's asking): don't look back at the problems of yesterday, but ahead to the impact of your "solutions."

<u>Saving for Old Age</u>

Henny Youngman used to tell about being stuck up at gunpoint. When asked for "Your money or your life," he answered, "Take my life; I'm saving my money for my old age."

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Well, we rarely hear anymore about saving for old age. That's part of the financial prudence that has become hopelessly passé. After all, saving for later means consuming less today and delaying gratification, and those things are entirely out of style.

But then how do people expect to live in their old age? People seem to be retiring earlier, and certainly they're living longer. Medical advances are prolonging life but not getting any cheaper. With retirement lasting longer and entailing greater costs, how will people pay their bills?

Heretofore, the solution has been a stool with three legs: Social Security, private pensions and personal savings. How solidly constructed is the stool of today?

We've heard a lot about Social Security's woes. The number of active workers supporting each retiree is declining, threatening the system with insolvency a few decades out. After reading (and reviewing for the L.A. Times) Pete Peterson's excellent book "Running on Empty," I'm convinced we'll need some combination of higher taxes, delayed retirement or reduced benefits . . . but equally convinced that few politicians are going to commit career suicide by advocating tough medicine to solve a problem that's decades away. Not having to worry about reelection, President Bush came out of his 2004 victory willing to spend some political capital on his solution: the private retirement account. But no groundswell formed behind it, and other issues have taken center stage, and we haven't heard anything on this subject for months. One way or the other, I think retirees in the future will receive less from Social Security than the system promises today.

So what about private pensions? Defined Benefit plans are declining in popularity among employers, and a not-insignificant number are headed for insolvency. Defined Contribution plans are taking their place in many cases, but some of the bloom is off the rose now that "401-k" and "Acapulco" have ceased to be synonymous. Certainly their benefits are expected to be less lavish and less dependable now than was thought to be the case while the equity bubble of 1998-99 was in full flower.

And that leaves personal savings . . . which as a percent of income just went negative in July. I am amazed when I read about the people who spend all of their income and more on lifestyle. **Maybe they think old age won't come, but that's not a solution I'd be eager to rely on.** What about the millions – with no savings – who each year spend thousands of dollars more on their credit cards than they earn. How do they think this movie will end?

Anyway, early Baby Boomers like myself are probably well taken care of, because we partook of the post-war economic miracle before it had to be shared broadly and heeded the lessons of thrift taught by our Depression-era parents. But I worry deeply that those who retire in the 2020s and thereafter will find themselves without the resources they need. I also worry that the government will write checks to cover the shortfall. Compassion is a good thing, but swollen deficits, higher taxes and the implications of teaching people they don't have to save are all very bad.

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When 2030 rolls around, with the centennial of the Depression, there's likely to be widespread wonder about what the non-savers of 2005 were thinking. I'd rather people started asking the relevant questions today.

You Can Always Live in It

Of course, the solution *du jour* for the question of wealth building is real estate. People are lining up to buy residences – especially condos – that they don't need, don't intend to occupy and can't rent out at prices providing a reasonable return on their investment, all in the expectation that they'll be able to sell them at a profit. That prompts me to coin a Yogi-ism of my own: My condo produces negative cash flow every month, but somebody else will pay me more for it than I paid.

My May memo "There They Go Again" discussed the residential real estate boom in depth, and I'm not going to repeat its message. Suffice it to say that "It can only go up," "It's been rising for months, but it's sure to keep going" and "If it starts to go down, I'll just get out" are routinely scoffed at after the fact.

What I want to review here is the extent to which people are buying highly appreciated properties that they couldn't afford if they had to pay full debt service on them on a current basis. This is entirely analogous to the highly leveraged buyouts of the 1980s that depended on zero-coupon borrowing. This debt was a big red flag: "I'm buying something I can't afford, with debt I can't service on a current basis, hoping positive developments will bail me out." Most of them went bankrupt in 1990 when the economy softened and debt couldn't be refinanced.

Now people are assuming increased financial risk to buy homes, often taking out interest-only loans at artificially low teaser rates. The September 2005 issue of The Gloom, Boom & Doom Report quoted Grant's Interest Rate Observer quoting David Rosenberg of Merrill Lynch:

- An estimated 42% of first-time buyers made no down payment on their home purchase in 2004.
- In the hottest price areas in the U.S.A., ARMs [adjustable rate mortgages] now account for over 50% of new mortgage originations.
- Over 60% of new mortgage loans in California this year have been interest-only loans or option ARMs.

People are stretching to buy the most house they can with the biggest mortgage payment they can afford. But if they can barely cover today's artificially reduced payments, what will they do when interest kicks in and/or rates rise? And what if their incomes fall? Where's the margin for error? When I was young, the rule of thumb was that no more than one-quarter of your paycheck should go for shelter. Today lots of people are paying more than half.

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"Everyone knows" it's better to make tax-deductible mortgage payments than to pay rent. But the beauty of financial puzzles is that there's no answer that's always correct regardless of the circumstances. I'd rather pay a low rent I'll be able to afford even if things get a little worse than a high and possibly rising mortgage payment, on the continuation of which my home ownership is riding.

The old goal was to have the house paid off by retirement, so you could live in it when your paycheck stopped. Now, thanks to the magic of minimal down payments, minimal amortization and adjustable interest rates (starting from historically low levels), payments may well be higher in retirement than during the owners' working years. How will people – possibly with little or no savings – hold onto their properties when their paychecks stop?

We never hear anymore about people "saving for a rainy day" or "saving for their old age." If you do those things, it may be harder to get the house of your dreams . . . but you'll never go broke. I wonder how many of today's home buyers will learn this lesson through painful experience.

Selling Money

If a seller wants to move more of his product, what does he do? Well, that depends on whether the product is capable of being differentiated from its competitors. If it is, he can try making it better, advertising it more or improving distribution. But if it's not differentiable, those things won't work. Can you imagine the success that's likely to come from an ad slogan like "Burn our natural gas; it's better"? Goods that can't be differentiated from their competitors are called commodities. If a seller of a commodity wants to increase market share and thereby sell more of his product, he has only one way to go: price it below the competition.

For the last two years, financial institutions have been able to make money by borrowing at short-term rates held down for stimulative purposes and lending at higher, longer-term rates. Thus, the institutions have battled to increase market share. But how could they do that, given that everyone's money is green (and leaving aside the fact that it makes no sense for all participants to expect to increase market share at once)? The answer's the same as for any other commodity: price it below the competition. In the case of financing, that means offering more of it for a given use, at lower interest rates, with looser terms and covenants.

As The Wall Street Journal of October 7 reported,

> UAL had been shopping for $2.5 billion of financing to fund its exit [from bankruptcy] **before competition among four financial institutions resulted in the larger [$3 billion] loan package on "very competitive" terms**, the company said. . . . This is a very competitive rate in this

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> industry, [J.P. Morgan Vice President James] Lee said, noting that some recent airline financings have carried much higher rates. (Emphasis added)

When suppliers of capital are trying to pump out more money at lower rates, usually they also apply looser credit standards and offer easier terms. When that's the case, it's time to be a taker of capital, not a supplier. Our best investments have been made when suppliers of capital were shrinking from the market, refusing to lend or invest at any price. That means it's important, as in so many things, to look at the behavior occurring around you and ask one simple question: **"What kinds of times are these?"** The answer is usually clear, and thus so are the implications for the future.

<u>But Does It Make Sense?</u>

Ultimately, that's all you have to ask. The same October 7 issue of the Journal carried a story describing the efforts of mutual fund companies to offer "absolute-return" funds.

> The bear market was "a wake-up call" for investors who previously were fixated on trying to earn as much or more as the surging stock market . . . Now, while investors may not recognize the terminology of absolute versus relative investing, "they just know they don't want to lose money."

When the stock market was doing well, investors were pursuing high returns. Now, after some serious losses, they're pursuing safe, dependable returns. Even the Journal, not particularly known for cynicism, points out that, "the recent enthusiasm for absolute-return funds will fall by the wayside whenever the stock market takes off and market benchmarks rise far more than the gains at hedge-like funds." **In other words, investors pursue safety when past results have been poor, but they lose interest in safety when past results have been good for a while. Not exactly contrarian, but the way it's always been. Investors have to learn that last year's return is not an indicator of next year's return, and thus of the appropriate strategy.**

And while I'm asking investors for more insight, I see the Journal goes so far as to point out that "it's also possible that the absolute-return vehicles won't achieve their stated objectives." There's nothing new about investment managers falling short of their goals. Further, managing a portfolio of diverse asset classes and both long and short positions to produce steady returns regardless of the market environment is a particularly challenging task. Few people are able to do it successfully, and someone who can is more apt to work at a hedge fund charging "2-plus-20" than a mutual fund charging 1%.

In other words, I think most investors in these "absolute-return" mutual funds will find a few years from now that they didn't get what they wanted – that their returns were disappointingly low or disappointingly volatile (or both). **It would be great, instead, if they could ask <u>today</u> whether it's reasonable to expect consistent returns in the high**

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single digits after significant fees. Otherwise they're likely to end up asking themselves – once again – "What was I thinking?"

* * *

The philosopher George Santayana is famous for having said, "Those who cannot remember the past are condemned to repeat it." (Most apropos of this memo, but less famously, he also said, "Skepticism is the chastity of the intellect, and it is shameful to surrender it too soon or to the first comer.")

The value of hindsight lies in the fact that lessons learned in the past by others can enable subsequent generations to avoid having to learn them anew. And yet, it seems investors must learn those lessons over and over – and often the hard way. The exact circumstances may not repeat, and the mistakes may not surround the same asset classes, but the general lessons of investing go on having to be learned. To avoid this, we have to improve on the brevity of memory that Galbraith complains about; refuse to surrender our skepticism; and learn to assess market behavior around us and extract the proper inferences for application to our own behavior.

Readers of my memos know I feel awareness and understanding of cycles is an essential tool for investment survival. I always say about cycles, "We may never know where we're going, but we'd better have a good idea where we are." Hindsight is helpful in this regard, not because the future will be exactly like the past, but because by learning the time-honored lessons of the past we can better cope with the uncertain future. Recognizing past patterns permits us to increase our preparedness, the payoff from which can be considerable.

Recent trends must not be counted on to continue unabated; that's one of the main lessons of the long-term history that matters. A better understanding of that history tells us that every day of the recent past – and of current experience – is just another step toward the inevitable next cycle. **A critical analysis of the future will prove far more profitable than will unthinking adherence to the latest trend. But it's the latter that always has dominated market movements, and that we have to watch out for.**

So every day when you read the newspaper, watch your Bloomberg or witness investor behavior, I encourage you to divine what those things say about what's going on. That's one way you can change your investing future for the better.

October 17, 2005

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Memo to: Oaktree Clients

From: Howard Marks

Re: A Case in Point

Last month, my memo "There They Go Again" discussed investors' propensity to repeat certain classic mistakes. The biggest of these mistakes stem from some combination of too much enthusiasm, optimism, naiveté and greed and too little realism and skepticism. Although it comes in a wide variety of forms, the bottom line is usually a belief that the "silver bullet" is at hand: a surefire route to wealth without risk.

In recent years we've seen the elevation of one such particular strategy, and in recent months its defrocking. The subject is convertible arbitrage. Its story is worthy of review.

Background on Convertible Arbitrage (Perhaps More Than You Want)

Properly, arbitrage refers to the simultaneous purchase and sale of the same thing, or of two things that are nearly the same, at different prices so as to lock in a small profit on a highly probable basis. I was introduced to this phenomenon in the 1950s by an old movie about the Rothschild brothers, who spread out to five European cities and used information transmitted by carrier pigeon (at a time when there was no telephone or telegraph) to simultaneously buy and sell currencies in those far-flung cities at different exchange rates. Market opportunities are rarely that glaring nowadays, but they do arise from time to time.

Convertible securities are candidates for arbitrage because one asset (a convertible bond or preferred) is exchangeable for another (the underlying common stock). Thus imperfections in this market can create opportunities to simultaneously buy one asset and sell the other, giving rise to frequent small profits with little risk. Of course, the arbitrageur must be skillful enough to identify the opportunities and take advantage of them.

Time for an aside: Many years ago, Ed Thorp, an MIT professor of mathematics, literally "wrote the book" on blackjack. It's called "Beat the Dealer." Thorp used computers to simulate the play of the cards and codify the "basic strategy" that virtually all serious blackjack players use today to decide when to split, double down, hit or stick. Use of the basic strategy can significantly reduce (but not eliminate) the casino's advantage. From quantifying the basic strategy, Thorp went on to formalize the process of card counting. Because blackjack is dealt from a deck or "shoe" without shuffling after every hand, the cards that have been played determine the cards that remain – in statistical terms, the hands aren't "independent." This means if a player can keep track of the cards that have been played, his knowledge of what remains can give him an advantage over the house. Recently the profitable use of card counting was chronicled in the enjoyable book "Bringing Down the House." Card counting was used to such great advantage that casinos fought for, and won, the right to throw out counters.

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Of course, when the casinos became able to evict card counters, they went straight for Ed Thorp. Needing a new "gig," Thorp turned his attention to another field in which subjective judgment could be improved upon through computer simulation: convertible arbitrage (I'll bet you were wondering what blackjack had to do with the subject of this memo). Thus Thorp pioneered the conversion from art to science of a second potentially profitable field.

In convertible arbitrage, someone buys a security that can be exchanged for common shares, and he sells short some of those same shares. Let's say a bond is convertible into 40 shares and those shares are selling at $20. Thus the value of the stock underlying the bond (the "conversion value") is $800. The bond usually won't sell at $800, but rather at some higher price.

One reason for this is that the bond embodies an option on that $800 worth of stock (plus the means to pay for it by surrendering the bond). This combination is worth more than $800, because an option provides a way to participate in an asset's upside potential but not its downside. In addition, (a) a US convertible is likely to yield more than its underlying common stock, and (b) being senior to the common stock, it will entail less exposure to credit problems. So the bond may sell at $1,000 when the common stock is $20 and the conversion value is $800. That implies a "conversion premium" of $200, or 25% of the $800 conversion value.

The arbitrageur buys the bond and shorts the stock. If the stock goes up (producing a loss in the short position), he expects the bond to go up almost as much (producing a gain in the "long" position). If he has more money invested in the bond than he does in the short position on the stock, the result can be reasonably attractive. If the stock goes down (producing a gain in the short position), he expects the bond – buoyed by the income and the promise of redemption at maturity – to go down substantially less (producing a smaller loss in the long position), for an overall result that is very positive. The arbitrageur hopes for a reasonable mix of appreciating stocks (with decent results on the arb positions) and declining stocks (with highly attractive results), and he has the ability to use leverage to magnify this steady flow of modest profits. In addition, he receives more income on the converts he owns than he owes on the stock he's short. It's hoped that the above elements will combine to produce a consistently positive return.

Obviously, the open question is how many shares to short in order to create the desired performance pattern. Because the relationship between the market price of the convertible and the market price of the shares isn't constant, figuring out how much stock to short against a given bond purchase – the "hedge ratio" – has its vagaries.

Generally, a properly priced convertible will capture a certain percentage of the underlying stock's gains and a somewhat smaller percentage of its losses. That means the percentage of the stock's price movement captured by the bond is variable, rendering imprecise the proper number of shares to short per $1,000 bond. And that number usually is less than the number of shares into which the bond is convertible. This is because convertible bonds are less volatile than the underlying shares, and the arbitrageur wants both sides of the position to be equally volatile. Thus he won't short the full number of shares the bond is convertible into.

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There's no one "right" answer regarding the hedge ratio. Setting it entails estimation regarding the future volatility of the common stock among other things. Thorp's methodology helped him to profitably determine hedge ratios.

The Backdrop

As the interest in hedge funds rose over the last ten years, "convert arb" became the model of an absolute return strategy. It seemed capable of grinding out returns in the teens almost every year. This occurred without significant exposure to market fluctuations, because every position was hedged.

The table below shows the 1995-2003 returns for the market-weighted index of convertible arbitrage funds in the CSFB/Tremont Arbitrage Index.

Year	Annual Return	3-Year Return	5-Year Return	9-Year Return
1995	16.6%			
1996	17.9			
1997	14.5	16.3%		
1998	-4.4	8.9		
1999	16.0	8.3	11.8%	
2000	25.6	11.7	13.5	
2001	14.6	18.6	12.8	
2002	4.0	14.4	10.7	
2003	12.9	10.4	14.4	12.8%

12.8% per year for nine years. Only one down year in nine, and that a loss of just 4.4%. No three-year period with an annualized return worse than 8.3%. No five-year period not in double digits. **What a record!!**

Rule Number One: Money Matters

So what happens? **Money floods in.** Whereas a few smart people had been able to churn out consistently good results with small amounts of capital, now a crowd was fighting over the convert arb ideas, armed with much more money. Increased pursuit of a strategy is sure to drive down prospective returns. If in a less crowded period the process of convertible arbitrage appeared capable of producing an inherent return in the low double digits (or maybe LIBOR plus 5%), it should be expected to produce less after others have flocked to it.

In addition, I feel arbitrage and many other hedge fund activities are best thought of as "piggybacking" strategies, living off some underlying process that has a life of its own (see the big fish/little fish analogy in "Hedge Funds: A Case For Caution"). What I mean is that as long as thousands of investors are setting the prices in the convertible bond and stock markets

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through their buying and selling, a few dozen astute arbitrageurs can dart in on occasion to take advantage of their mistakes. But what if the arbitrageurs come to outnumber the "long-only" convert investors, so that their buying power directly affects (in this case, raises) the prices of convertibles relative to the underlying stocks. That can change the game, and thus the dependability and profitability of convertible arbitrage. This was certainly the case in 2004, when at times 80% of all convertible buying was thought to be from arbitrageurs. They didn't care as much as the long-only crowd about the issuers and the price attractiveness of the underlying securities; rather, they would buy almost anything to put on an arb position.

When I organized Citibank's first convertible fund in 1978, convertibles found few regular buyers and were considered a somewhat disreputable market of last resort for corporate financing. This level of disregard permitted convertible prices to languish. Most of the time I felt the convertibles I bought were considerably cheaper than a corresponding package of more efficiently priced bond plus stock from the same company.

For the next two decades, the same cheapness that had given our portfolios risk-adjusted returns better than stocks made it possible for convert arbitrageurs to buy underpriced convertibles and short fully priced common stocks. This was a formula for steady profits. But if money floods in such that bargains become less widespread among convertibles, it seems reasonable to suspect that convertible arbitrage will become less profitable.

In 2004, the return on the CSFB/Tremont convertible arbitrage index subsided to 2.0%. For the first four months of 2005, it was negative 5.8%. April was the fifth worst month out of the last 136. The index declined in only 14 of the 108 months from 1995 through 2003, but in 9 of the 12 months through April. January, February, March and April were all negative, the first time there have ever been four down months in a row. And May was the fifth – down almost 2% more. What changed? Mostly, I think, the amount of money being managed in the sector.

Bottom line: the returns available from an investment strategy are not independent of the amount of money seeking to be deployed in that strategy. **More simply put: everything else being equal, more money means lower returns**. This seems elementary, but it appears to be ignored every time something does well for a while. I repeat for the umpteenth time: what the wise man does in the beginning, the fool does in the end.

Rule Number Two: There's No Sure Thing

If there's a "kiss of death" in the investment world, it's widespread belief that something can't miss. When people have complete confidence in something, the prices they'll pay for it and the amounts of money they'll try to jam into it will sound an absolute death knell for its profitability. I've seen it in the nifty-fifty stocks, in oil stocks in the post-embargo 1970s, in disc drive companies, in portfolio insurance, in tech stocks and in venture capital.

In recent years, buying convertibles and shorting the underlying common shares came to be accepted as a surefire technique. And what could be better than having a long position in the senior securities of a company heading for trouble and a corresponding short position in its

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common stock, with the likelihood that the stock would decline precipitously: no bet on the direction of the market or the company, and absolute preparedness for negative developments. That's the position the arbs flocked to this year in General Motors. They assumed the debt they were long would hold up much better than the common they were short. What could go wrong?

Well, something can always go wrong, and things are most dangerous when people agree they can't (and price them accordingly). In the case of GM, the arbs got a double whammy:

- Billionaire Kirk Kerkorian stunned the financial world on May 4 by announcing his intention to bid $31 for 28 million shares of GM common stock. This drove the price of the stock from roughly $28 to $32, creating big losses on the arbs'short positions.

- Just the next day, S&P announced its long-expected downgrading of GM's credit rating. This lowered the price of GM debt, giving the arbs losses on their long positions as well.

In this way, something that "couldn't happen" did: the prices of both assets went against the arbs simultaneously. If a company's bonds decline because of deteriorating creditworthiness, can the stock possibly do better? It did this time – for a reason no one would have anticipated. (People are still mystified regarding Kerkorian's motivation.) I don't think a company's stock can do well for long if its bonds don't (given the implication of serious fundamental problems). **But the long run doesn't matter when unexpected difficulties arise in leveraged portfolios. The effect on staying power can be very negative.**

Other things we've seen recently that "couldn't happen": GM and GMAC being downgraded simultaneously, and intermediate and long rates down substantially while short rates rose more than 200 basis points.

As Long-Term Capital Management said in explaining its meltdown, "the convergence trades diverged." In this case, I absolutely am not saying the arbs were foolhardy in putting on their GM positions. I simply want to point out that nothing in the investment world can be counted on to work 100% of the time. Allowance must always be made for the unexpected.

Rule Number Three: Piling In Is Dangerous

One of the phenomena we've witnessed lately – and it was particularly pronounced in the events surrounding Long-Term Capital Management – is the tendency of funds of a given type to flock to the same situations. The General Motors trade described above, for example, was particularly common among arbs. Thus, when it went wrong, they all suffered losses, and they all faced illiquidity when they went to unwind it.

There's little mystery surrounding the reason particular trades become widespread. These days, computers are used universally – especially in the more quantitative fields – to screen for investment opportunities and model their profit potential. Not surprisingly, since they all sift through the same universes and evaluate profitability similarly, they often highlight the same investment opportunities. When everyone tries to pile in, that raises the cost of implementing

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the strategy and thus lowers the prospective return. And when everyone wants to get out, that's costlier too. This is an example of the way in which too many piggybackers – with the same ideas – can overwhelm the underlying markets.

Rule Number Four: A "Virtuous Cycle" Can Turn Vicious

There is a predictable cyclical pattern in these matters, and now we've seen it in convertible arbitrage:

- In the years leading up to 2004, convertibles were available "too cheap," and so arbitrage consistently produced high returns with low risk.
- The results were very attractive, drawing in capital.
- The new capital drove up prices, enhancing returns on existing positions.
- These returns attracted still more capital in a so-called "virtuous cycle."
- When too much money came in, bargains became scarcer, causing the free lunch to be removed. Also, convert arb money altered the terms on new convertible issuance, reflecting the arbitrageurs' preference for call protection over yield.
- Positions put on in the new environment didn't do as well as the old ones.
- Investors' faith weakened in 2004 and largely evaporated in April/May 2005.
- Withdrawals set in for real: $1.7 billion in the fourth quarter of 2004 and $1.8 billion in the first quarter of 2005.
- The withdrawals caused forced selling, and the selling drove down prices, exacerbating the losses – and causing more loss of faith and thus more withdrawals and more forced selling.
- Now we think convertibles are getting cheap again, and we're considering increasing our allocation to them in our discretionary accounts.

* * *

It has always been thus, and it always will. Excessive confidence sets the stage for disappointment, and the loss of confidence creates bargains. It's the job of all investors to maintain their equanimity, buying in panics and selling in bubbles. **That'll be the day!**

Convertible arbitrage isn't "over." The possibility of its application will always exist . . . but the assurance of high returns with low risk will not. They'll only be available when the amounts of money pursuing the strategy are reasonable, so that practitioners can be patient and selective and pick from an attractively priced universe. **And in that way convertible arbitrage isn't any different from any other investment technique.** Anyway, this isn't a memo about convertible arbitrage, but about investors' persistent mistakes. Convertible arbitrage is just a case in point.

June 6, 2005

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Memo to: Oaktree Clients

From: Howard Marks

Re: There They Go Again

> Contributing to . . . euphoria are two further factors little noted in our time or in past times. The first is the extreme brevity of the financial memory. . . . There can be few fields of human endeavor in which history counts for so little as in the world of finance. Past experience, to the extent that it is part of memory at all, is dismissed as the primitive refuge of those who do not have the insight to appreciate the incredible wonders of the present.
>
> John Kenneth Galbraith
> A Short History of Financial Euphoria, Viking, 1990

The above observation has appeared in lots of my memos, second only to Warren Buffett's reminder that our need for prudence in a given situation is inversely proportional to the amount of prudence being displayed by other investors. Neither of these favorite quotations says much for the average investor: Buffett urges us to adopt behavior that is the opposite of John Q. Investor's, and Galbraith points out how prone John Q. is to repeating the mistakes of the past.

It may sound cynical, but most outstanding investors – especially members of the "us school" (see "Us and Them," May 7, 2004) – understand that the path to superior results lies in taking advantage of other people's mistakes. (The alternative is to think everyone can succeed simultaneously.) It's when most investors take a trend to excess, or the price of an asset to an extreme, that the few people smart and resolute enough to abstain from herd behavior can make truly exceptional profits.

I think both Buffett's and Galbraith's dim views of the average investor are well founded. Although there exist a few rules and reminders that can make it easier to avoid the costliest investing mistakes, most investors rarely heed them.

Investors truly do make the same mistakes over and over. It may be different people doing it each time, and usually they do it in new fields and in connection with new assets, but it is the same behavior. As Mark Twain said, "History doesn't repeat itself, but it rhymes."

Rarely is the same error repeated in back-to-back years. Usually enough time passes for the repetitive pattern to go unnoticed and for the lessons to be forgotten. Often it's a new generation repeating the errors of their forefathers. But the patterns are there, if you observe with the benefit of objectivity and a long-term view of history.

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Why do the mistakes repeat? That's a good question, but not much of a mystery. First, few investors have been around long enough to recognize reoccurrence of the errors of twenty or forty years ago. And second, the greed that argues for ignoring "the old rules" easily trumps caution; hope truly does spring eternal. That's especially true when the good times are rolling. The tendency to ignore the rules invariably reaches its apex in periods when following them has cost people money. It is thus, as Galbraith points out, that those who harp on the lessons of the past are dismissed as old fogies. What are some of the recurring mistakes investors make?

- **It's Different This Time** – Trends in investing are carried to their greatest (and most punishing) extremes by the belief that something has changed – that rules that applied in the past have been rendered obsolete by new circumstances. (E.g., the traditional standards for reasonable valuations weren't applicable to shares in tech companies whose products were likely to change the world.)

- **It Can't Miss** – The fact is, anything can miss. There's no asset so good or trend so strong that you can't lose money betting on it. No investment technique is guaranteed to deliver high returns or keep risk low. Smoothly functioning markets don't permit the combination of high return and low risk to persist – **good results bring in buyers who raise prices, lowering future returns and elevating risk**. It'll never be otherwise.

- **The Explanation Couldn't Be Simpler** – By this I mean to poke some fun at investors' tendency to fall for stories that seem true on the surface but ignore the workings of markets. The stage was set for some of the greatest debacles by platitudes that were easy to swallow – but too simplistic and, in the end, just plain wrong. These include "For a company with good enough growth prospects, there's no such thing as too high a price" (1969 and 1999) and "Emerging markets are a sure thing because of the terrific potential for growth in per capita consumption" (1994).

- **This Tree Will Grow to the Sky** – The fact is, no trend will go on unabated forever. Most trends are limited by cycles, which are caused by people's reaction to developments. Buyers, sellers and competitors respond to trends, altering the current landscape and the future.

- **The Positives of Today Will Still Be Positives Tomorrow** – From time to time, some combination of optimism and greed convinces people that the favorable elements in the current environment – responsible for today's high asset prices – will stay that way. **But (a) things usually turn less rosy, and (b) even before they do, investors take prices to levels that are too high even for today's positives.**

- **Past Returns Are a Good Guide to Future Returns** – The greatest bubbles stem from the belief that high returns in the past foretell high returns in the future. The most successful investors – the longest-term survivors – believe in just the opposite: regression to the mean. The things that have appreciated the most will slow down (or

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decline), and those that lagged will catch up or move ahead. **Instead of being encouraged by months or years of price appreciation, investors should be forewarned**.

- **It'll Always Beat the Cost of Borrowing** – Speculative behavior usually features the belief that assets will always appreciate faster than the rate of interest paid on money borrowed to buy them with. We saw a lot of this in the inflationary 1970s. But for the most part, **statements including the words "always" and "never" are usually a sign of trouble ahead**.

- **The Supply/Demand Picture Doesn't Matter** – The relationship between supply and demand determines the price of everything. **The higher the demand relative to the supply, the higher the price for a given asset or strategy. And, the higher the price, the lower the prospective return (all else being equal). Why can't investors remember these two absolute rules?**

- **Higher Risk Means Higher Return** – There are times, especially when the prospective returns on low-risk investments appear inadequate, when people reach for more return by going out further on the risk curve. They forget that riskier investments don't necessarily bring higher returns, just higher projected returns. Forgetting the difference can be fatal.

- **Anything's Better Than Cash** – Because it entails the least risk, the prospective return on cash invariably is lower than all other investments. But that doesn't mean it's the least desirable. There are times when the valuations on other investments are so high that they entail too much risk.

- **It May Be Too Good to Be True, But I Don't Want to Miss Out** – There've been lots of times in my career when people knew something was unlikely to keep working but jumped on the bandwagon anyway. Usually they did so because they thought there was a little bit more left in the trend, or because not being aboard – and watching from the sidelines while others got rich – had become too painful.

- **If It Stops Working, I'll Get Out** – When people invest despite obvious danger signs, they usually do so under the belief that they'll be able to get out when the market turns down. **They rarely ask how it is that they'll know to sell before others do, or to whom they'll sell if everyone else figures it out simultaneously**.

As I sit here in 2005, the picture seems "as plain as the nose on your face." Investors have found new darlings – real estate, private equity, hedge funds and crude oil – to replace the favorites of ancient history (that is 1999) – technology-media-telecom, biotech and venture capital funds. As I read articles about the new favorites, I find myself saying one thing over and over: **"There they go again."**

Is it really that hard to remember the events of six years ago? Or is it just so easy to overlook them for the sake of hoped-for profit? Whichever it is, I'm going to take some

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time below to go through these areas and cite some rule violations I see occurring. (I'm not saying that these investment areas are without merit. It's just that I wince when I see uncritical analysis and unsupported conclusions.)

Let's take the example of **real estate.** Almost twenty years ago, real estate was the site of many classic mistakes, and lots of money lost. In the mid-1980s, institutional investors charged into real estate, under banners like "They're not making it any more" and "It's a good inflation hedge." What they missed was the fact that:

- while it's true that no one's making more land, there's a lot left to develop, and easy access to capital enables market-glutting buildings to be built on it,

- something's only an inflation hedge if bought at a fair price to start with, and

- unlike the 1970s, inflation wouldn't be an issue for the next twenty years, and thus inflation protection wasn't worth paying up for.

Tax reform in 1987 reduced the demand for tax shelter purposes, and the economic slowdown of the early 1990s turned real estate into a basket case. They still weren't making any more land, but that didn't help institutional investors avoid huge losses.

Today, real estate seems to be the site of investing error again – with no one harking back to the last time around. This is especially true in private homes, with individuals rather than professionals doing most of the "investing." They're lining up to buy houses (often before they're built) that they never expect to occupy, for holding periods too short to repay the transaction costs in the absence of substantial appreciation, and they're financing them with maximum floating-rate mortgages, minimum amortization and little or no money down.

On March 25, 2004, The New York Times compared attitudes toward home buying today and the "dot-com frenzy" of the late 1990s:

> . . . perhaps the most troubling similarity, some analysts say, is the claim that the rules have somehow changed. In an echo of the blasé attitude that "new economy" investors took toward unprofitable companies, the growing ranks of real estate investors are buying houses they never expect to be able to rent at a profit. Instead, they think the prices of houses will just keep rising.

This paragraph points up a key error. In 1999, impassioned investors bought dot-com stocks, not to participate in the underlying companies' profit streams, but to sell them at higher prices. But what could be depended on to make their prices go higher, if not favorable trends in profits? In the same way, rational investors won't count on being able to sell a house at a profit because someone else will pay more for it, but rather because of an increase in its economic value (which usually can be seen in the obtainable rent).

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In that vein, The Wall Street Journal of March 22 carried a story comparing the cost of buying and renting. A study of 21 markets by Torto Wheaton Research had found that rent on the average two-bedroom apartment was well below the mortgage payment on the median home. Now certainly the two may not be comparable, and the study ignored such factors as down payments, tax deductions, property taxes, maintenance costs and appreciation. But the most important observation is that, based on national averages, the relationship has changed substantially over the last four years: rent now averages 92% of mortgage payments, down from 102% in 2001.

This relative increase in mortgage payments indicates that today, home prices are based on lower "cap rates." The capitalization rate on a piece of real estate is the yield implicit in the sale price. Thus a cap rate is analogous to the earnings yield on a stock, which in turn is the reciprocal of its p/e ratio. Bottom line: home prices have risen substantially relative to the underlying (or implicit) cash flows. According to another study, by M/PF YieldStar, the price of the average home rose 16.4% in 2003-4, while the average rent was flat. Certainly real estate valuation ratios are up.

Why are homebuyers paying these higher valuations? Here are some answers, in the form of statements quoted in the New York Times article cited above. How many of the investor errors enumerated on pages 2-3 do you see below?

> It's driven by the same forces [as drove the dot-com stocks]: that investments can't go bad; that it has the potential to make you rich; that you'll regret it if you don't do it; that it looks expensive but really is not.
>
> . . . a limited supply of land coupled with demand from baby boomers and foreigners [will] prolong the boom indefinitely.
>
> I don't think prices are going to fall, and I don't think they're even going to be flat.
>
> It really is a very hot real estate market, and I don't know how long it's going to continue. But in the short run, why not profit from it?
>
> I look at this as a short-term investment and plan to unload it as soon as things look dangerous.

I'd bet none of the people quoted above lost money in the last real estate cycle or learned the lessons of the past. **It's for that reason that they're prone to mistake the up-leg of yet another cycle for a new and permanent miracle. And so it goes**.

The commercial, retail and residential properties that professionals buy have escalated also – although not as crazily or with as much disregard for valuation. Nevertheless, cap rates are down in response to the general decline in interest rates, demanded returns and risk premiums. With returns on Treasury bonds at 4-5%, fully leased class "A" office buildings apparently look good at 6-7%.

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As usual, James Grant supplies a trenchant analysis, this time in the April 25 issue of Forbes. His summary of what's going on in real estate highlights time-honored mistakes that are being repeated:

> Markets look forward, except when they look backward. At this moment the real estate market is looking backward. . . .
>
> Mistaking the past for the future, people are pouring money into houses, shopping centers, office buildings, hotels, anything with a front door and a roof. They are paying some of the fanciest prices on record.
>
> Property bulls come in all sizes, shapes and net worths. "We are living with the greatest liquidity ever," an eminent REIT promoter was quoted as saying in March in the New York Sun. "We're not going to have a crash in the real estate market, there is too much liquidity."
>
> Liquidity is a term of art. It means lots of money. It can also mean – and, in 2005, does mean – "low interest rates," "E-Z financing terms," "low dollar exchange rate" and "value investors go away." In an evident state of liquidity-induced euphoria, a Miami Realtor recently proclaimed to The New York Times, "South Florida is working off a totally new economic model than any of us has ever experienced in the past."
>
> Not true. The "South Florida economic model" is the oldest in the book. An excess of dollars leads to a drop in interest rates. And a drop in interest rates to a rise in real estate prices. And a rise in prices to massive new building.
>
> Only later does the same surplus of dollars cause a rise in the inflation rate. This leads to a rise in interest rates. And to a drop in real estate prices, with the market now oversupplied by all that new building.

In other words, we see some instances where investors in real estate are:

- failing to recognize the transitory nature of the factors supporting prices,
- taking comfort from rising prices while they should be alarmed,
- overlooking the lessons of history, and
- declaring "it's different this time."

As Grant points out, "over the last ten years, bricks and mortar had a cash on cash return averaging 3.3 percentage points above the yield on the ten-year Treasury note. . . . Today, the yield is just 1 percentage point more than that not-very-high number (the ten-year is quoted at 4.5%)." In other words, properties used to provide a solid 3.3% spread over perhaps 6% on the ten-year, for a total return approaching 10%. Now there's a narrow 1% spread over a low base rate . . . for a total current return of 5.5%. The bottom

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line is that investors in real estate today have to stress value consciousness and selectivity.

It's not my intention here to pick on real estate in particular or to suggest that it's worse than other markets. It's just that the articles being written about it provide such good examples of some investors' error-proneness.

As I wrote in October, I think we're seeing much of the same in **hedge funds**. Investors here are ignoring price also – this time not relating to the underlying assets, but to fund managers' services. Out of frustration with public, long-only equities (based with the usual hindsight on the 2000-02 debacle), they're looking for the silver bullet in "alpha managers" and "absolute return strategies." And they're suspending disbelief – just like they do at the movies – to accept that it's possible each year to find thousands of new above-average managers who are capable of piloting thousands of new hedge funds to high returns with low risk in increasingly competitive markets.

In recent weeks, **private equity** has shown up as the belle of the ball. Managers who startled the world with $3-6 billion funds a few years ago are pursuing $8-10 billion this time with good success. They're able to get it because of recent performance swollen by generous capital market conditions, aided by the assertion that few funds will be big enough to compete for the mega-deals. I don't say these arguments are invalid, but I wonder if investors are worrying enough about some potentially troubling factors:

- the fact that the funds' managers are targeting their lowest returns ever – even though few of their past funds may have achieved their targets,

- the impact on the market for companies of five new funds with $50 billion to spend – and the possibly underrated likelihood that additional managers will crowd into the "mega" space (I still hold that when the best are closed, the rest will be funded), and

- the effect on the managers themselves of $100-plus million per year in non-performance-based fees.

Lastly, the recent price surge has made **crude oil** fertile ground for simplistic platitudes and the resulting investor error. Not only aren't they making any more, but our consumption increases every day; rapid growth in China and India implies massive further increases in demand; and much of the supply is in unreliable hands. None of these factors can be disputed. The key question is, "What do they make oil worth?"

I think it's important to note that, unlike cash flow-positive companies and profit-producing companies, it's hard to state the intrinsic value of a commodity or currency. Are you persuaded by the arguments above? Sure you are – I am, too. Do they make oil a buy today, at $51 a barrel? Certainly. But weren't they just as true a month ago, when oil hit $58? Didn't they make it a buy then, too? Just as with gold and the Euro, it's hard to say what the right price is to reflect a given set of fundamentals, and whether the

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market price is too high or too low. This inability allows prices to fluctuate much more than fundamentals, and makes profitable investment in these things challenging.

* * *

Lately I've been speaking a lot from my last general memo, "Risk and Return Today" (October 27, 2004). In it I expressed my view that (1) the Capital Market Line today is "low and flat," meaning prospective returns in almost all markets are among the lowest we've ever seen, and risk premiums the narrowest, and (2) if prospective returns should rise, it'll likely happen through price declines. Nobody yet has said they disagree with these statements, and I don't think they're just being polite.

But the hard question is, "What can we do about it?"

- Invest as if it's not true. The trouble with this is that "wishing won't make it so." Simply put, it doesn't make sense to expect traditional returns when elevated asset prices suggest they're not available. I was pleased to get a letter from Peter Bernstein in response to my memo, in which he said something wonderful: "The market's not a very accommodating machine; it won't provide high returns just because you need them."

- Invest anyway – accepting relative returns (and the possibility of capital losses.)

- Invest anyway – ignoring short-run risk and focusing on the long run. This isn't irrational, especially if you accept the notion that market timing and tactical asset allocation are difficult. But before taking this path, I'd suggest that you get a commitment from your investment committee or other constituents that they'll ignore short-term losses.

- Hold cash – but that's tough for people who need to meet an actuarial assumption or spending rate; who want their money to be "fully employed" at all times; or who'll be uncomfortable (or lose their jobs) if they have to watch for long as others make money they don't.

- Concentrate your investments in "special niches and special people," as I've been droning on about for the last couple of years. But that gets harder as the size of your portfolio grows. And identifying managers with truly superior talent, discipline and staying power certainly isn't easy.

The truth is, there's no easy answer for investors faced with skimpy prospective returns and risk premiums. But there is one course of action – one classic mistake – that I most strongly feel is wrong: **reaching for return**.

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Given today's paucity of prospective return at the low-risk end of the spectrum and the solutions being ballyhooed at the high-risk end, many investors are moving capital to riskier (or at least less traditional) investments. But (a) they're making those riskier investments just when the prospective returns on those investments are the lowest they've ever been; (b) they're accepting return increments for stepping up in risk that are as slim as they've ever been; and (c) they're signing up today for things they turned down (or did less of) in the past, when the prospective returns were much higher. This may be exactly the wrong time to add to risk in pursuit of more return. You want to take risk when others are fleeing from it, not when they're competing with you to do so.

"If you can't get the return you need from safe investments, make risky investments." When put that way, it doesn't make much sense. In fact, it reminds me of my father's joke about the inveterate gambler who said, "I hope I break even, because I need the money."

* * *

If you look back at the recurring mistakes listed at the beginning of this memo, you'll see some common threads. They all express wishful thinking, an inevitable part of human nature. They stem from an excessive proclivity to believe the positives – and disregard the negatives – prompted by the desire to make money.

The key ingredients in being able to avoid these mistakes should be pillars in everyone's investment approach:

- awareness of history,
- belief in cycles rather than unabated, unidirectional trends,
- skepticism regarding the free lunch, and
- insistence on low purchase prices that provide lots of room for error.

Adherence to these things – all parts of the canon of defensive investing – invariably will cause you to miss the most exciting part of bull markets, when trends reach irrational extremes and prices go from fair to excessive. **But they'll also make you a long-term survivor. I can't help thinking that's a prerequisite for investment success.**

May 6, 2005

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Memo to: Oaktree Clients

From: Howard Marks

Re: Oaktree at Ten

Oaktree Capital Management, LLC opened its doors ten years ago, on April 10, 1995. That day represented a first step toward the founders' dream, which all of our colleagues embraced and implemented. In what truly feels like the blink of an eye, we've reached our tenth anniversary, and I'm writing to share our view of that first decade.

Priorities – Oaktree didn't start with a budget, a profit projection or a business plan. Rather, it was built on an investment philosophy and a set of business principles. When we started Oaktree, many people asked us about our motivation. We told them it was simple: we wanted a firm that would run our way. The things that constituted "our way" had been rattling around in our heads for many years and were the topic of many shared conversations. All that remained was to write them down and put them to work.

As you've heard *ad nauseum*, we chose to base Oaktree's approach to money management on a simple motto: "if we avoid the losers, the winners will take care of themselves." Thus we've endeavored to build portfolios that would give us acceptable performance if our expectations weren't fully realized, combined with the possibility of surprises on the upside if they were. We've strived to match market returns in good times and do markedly better in bad times – something that may sound simple but isn't. We chose to work in inefficient markets only, with portfolios that stick closely to their charter. Each of our portfolios is staffed by people dedicated to that market sector – who work hard to know more than others about companies, industries and securities, and who realize they can't get an edge with regard to macro forecasts and market timing. Thus our investment philosophy has provided a clear set of guideposts for Oaktree's people.

Equally important have been our business practices. Here the concepts are even simpler, but no less helpful: Portfolio decisions based on substantial investment in proprietary research. Conflicts of interest resolved in favor of the client every time. Compensation arrangements that align our interests with those of our clients. Thoroughly truthful communications and a pronounced refusal to downplay bad news. New strategies added only if they can be executed with risk under control. In 1995, we wrote that "The firm's profitability must stem from doing all the above. . . . Our earnings should grow if we achieve excellence in investing . . . but only then." We've all seen instances in recent years when gathering assets was accorded a higher priority than performing for clients – and headlines that were sad testimony to the result. I'm proud to say Oaktree's single-minded pursuit of its clients' interests has never been questioned.

We published our guiding principles in the spring of 1995 and literally haven't changed a word since (other than to add the criteria for new Oaktree strategies). And as we head into the second decade, we consider them just as applicable to the future as they have been in the past.

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Clients – We felt going in that if we stuck to the rules we'd followed previously and delivered the same level of performance, the rest would come: we'd have a successful business on our hands. Happily, that's what happened.

We are thrilled by the caliber of the investors we're able to call our clients – the term "gilt-edge" seems inescapable: Twenty-four of the fifty largest corporate pension plans as of year-end 2004. The pension funds of twenty-two of the fifty states (plus many counties, cities and police and fire departments). Eighty-one college and university endowments. Many of the world's leading charitable foundations and most sophisticated insurers. A Vanguard mutual fund. And a growing complement of high net worth investors. Here's a fact for you: of the 25 pension plans with the biggest commitments to distressed debt according to Pensions & Investments, (a good indicator of investment sophistication, we think), 23 participate in at least one Oaktree strategy. Oaktree's client roster represents the ultimate validation of our efforts as investment professionals. And it expands every year. In fact, we feel most ten-year-old money management firms would be happy to have a clientele consisting of just the accounts that join Oaktree in a typical year.

Even more important than the number of our clients is the quality of the relationships. Many have become true partners who extend a warm welcome, give our proposals the benefit of the doubt, believe us when we say something is true, provide their valuable counsel, and continue to broaden the list of things they do with us. As a result, on average our twenty largest client relationships encompass more than four of Oaktree's twelve strategies. The reception we receive from our clients is truly one of our greatest sources of satisfaction.

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Performance – Of course, we realize that these relationships stem only in part from the fact that our clients like us as people or share our philosophy. We'd be no place without performance. Thus we're proud to be able to say we've achieved what we set out to do. We'd love to deliver great results every year, but that's simply not possible. Instead, in short, it's our goal to eliminate disasters, so that every year is either good or great. If a money management firm can do nothing other than produce returns that are at least decent every year, it's sure to have an excellent long-term record. I truly can say my colleagues have done so, and that we've made money for our collective clientele every year since Oaktree opened its doors.

Including our time spent at TCW, we have well over 100 full calendar years of AIMR-compliant performance records: 19 years in high yield bonds, 18 years in convertibles, 16 years in distressed debt, and so forth. And of those 100-plus years, you'd have to stretch to find one or two when performance fell short of "at least decent," by which we mean a return that's good or great in either absolute or relative terms.

Likewise, I'm very proud to say that of the 24 closed-end funds we organized between 1988 and 2003, they've all been profitable, with net IRRs to date ranging from 4% to 49%. Again, good or great in every case, with no disasters.

Do we set the bar too low by pursuing performance that's just "at least decent every year"? I don't think so. First, I'm sure results of that sort in every year and every fund will give us one of the best long-term records. Second, I know of very few others operating in our fields who've done it as long without stumbling. And third, as far as I know no client has ever left Oaktree because they found our performance unsatisfactory. It may sound like a modest goal, but continuing to achieve it is one of my greatest aspirations.

Growth – Oaktree began ten years ago with seven "legacy" strategies: high yield bonds; U.S., international and high income convertibles; distressed debt; principal investments for corporate control; and real estate. We managed $7 billion in these seven just before leaving TCW to start Oaktree, and we brought over at least $6 billion. As of year-end 2004 they had grown to $22.5 billion.

[This first mention of asset growth makes this is a good time for a key aside: we feel many of our best decisions have related to limiting the assets under our management. Marketing efforts in all four of the original "marketable securities" strategies have been curtailed from time to time. (In high yield bonds, for example, we've turned away or declined to compete for $14 billion of new assets since November 1998.) All three of the original "private partnership" strategies have restricted the size of their funds to match the available market opportunities, with good results.]

After spending the years 1995-97 developing our infrastructure and attracting clients to the seven original strategies, we turned in 1998 to expanding our "product line." In the seven years since, we've identified five new strategies that met our criteria (inefficient markets that offer the potential for superior risk-adjusted returns; a way to exploit them with risk under control; and people at hand who're capable of doing so). Thus we began to manage assets in emerging market equities (1998), European high yield bonds (1999), buyouts in power infrastructure (1999), mezzanine investments (2001) and a credit-oriented hedge fund (2004), with results we're proud of in every case. It has been our goal to offer helpful new strategies to our clients but not become a "fund-of-the-month club." And we have required that every new strategy adhere to Oaktree's investment philosophy.

The expansion of our offerings overlapped with our decision to look beyond the U.S. Before 1998, we had significantly invested abroad only in convertibles. But early that year we concluded that our strengths could be applied internationally. The steps in our internationalization have included the 1998 creation of a London office for the management of European high yield bond portfolios, which began in 1999; formation of our first emerging markets fund at the end of 1998 (which brought the establishment of our research office in Singapore); the creation of a Tokyo real estate office in 1999, which since has broadened its scope to include investments in Japanese corporations; and the initiation of rest-of-world marketing out of London in 2001. In 2004 we opened a Frankfurt office to pursue opportunities in real estate, private equity and distressed debt, and several of our strategies will see further internationalization in 2005 and beyond. The key is for us to remember that there are differences between these markets and the U.S., and thus to proceed cautiously, with the bar held high in terms of required returns.

Finally, we have responded positively to the growing opportunity available to us in serving high net worth investors. While our approach has never included advertising or promotion, we have benefited from word-of-mouth recommendation and from the prominent individuals who first learned of us through institutional relationships. Thus, from $300 million at the end of 1995, our business with HNW investors has grown to $1.1 billion today.

For us, Oaktree isn't a "growth story." We've never had goals in terms of growth rate or assets under management. Rather, we want to serve our clients where we have an advantage. We've always been certain that prudent expansion would lead to asset growth, and the results have been most positive: Of our year-end 2004 assets, $5.2 billion (or 19%) was in the five new strategies mentioned above. Our investments outside the U.S. total $7.1 billion, and assets managed for clients based abroad stand at $2.5 billion. Thus, adding in the $1.1 billion in high net worth

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accounts (and even after eliminating the significant double counting among these numbers), it's clear that new directions have contributed a lot to Oaktree's growth in these ten years.

People – The irreplaceable element in producing these results has been people, and I couldn't be more proud of my colleagues. Oaktree started with 42 of us who had worked together at TCW, and we were greeted on that first day by the "advance party" consisting of Chief Financial and Administrative Officer David Kirchheimer (employee #1) and his support crew. The biggest surprise upon starting up was the amount of non-investment work there was to do, but David got us rolling and kept us there.

From that beginning we have grown to roughly 300 people. They're tops in terms of intellect, street smarts and character, and a pleasure to be around. The "second generation" both pushes and supports the first, and the "third generation" is right behind them every moment. I'm glad to say that, together, they have created the harmonious environment we wanted, in which team effort leads to excellent results. The investment management industry is full of brilliant people who can make you a lot of money but are tough to work with. I'm happy to say there aren't any at Oaktree.

And speaking of "happy," I think our people are. That's very important – not just because we want happiness for them, but also because it'll make them the best for Oaktree and its clients. Our favorite indicator: we think the 139 babies born to Oaktree employees and their spouses in these ten years attest to a very positive mood.

What's the bottom line? All six of the Principals who started Oaktree with me in 1995 are still here. I've worked with my nine fellow Principals for a total of 127 years (exemplified by Sheldon Stone, with whom I'm about to celebrate my 22nd anniversary). In that time – believe it or not – there hasn't been a heated argument or difficult negotiation among any of the ten of us. In twenty years reaching back to our beginning at TCW, there have been only two departures of senior investment professionals that weren't by mutual agreement (excluding the emerging markets group, which has seen significant turnover). And <u>everyone</u> who managed a legacy strategy when we opened ten years ago still manages it today. Certainly none of this is "par for the course" in the turbulent investment industry.

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Ownership – Initially, Oaktree was 100% owned by the founding Principals. Over the next ten years we sold roughly 25% to key employees at a price equal to one times the coming year's estimated earnings. This sharing of ownership has produced the desired results in terms of teamwork, satisfaction, shared motivation and personnel retention. We feel it's essential that Oaktree's employees work for the good of all clients, not just those in their own strategy. Broad ownership helps us ensure that.

As you know, a year ago we sold roughly 6% of the firm to seven long-term clients at its fair market value. Our objectives were achieved: personal diversification, of course, but – more importantly – demonstration, by posting a real-world price, that the 60 non-Principal owners had done well and been treated fairly. It's working entirely as we had hoped: the new investors are constructive but not intrusive. What could be better? Doubtless you will see further sales of ownership to third parties over time, but never transferring control. And of course ownership among employees will be broadened further. In short, we like the idea of working together, but not of working for someone else.

Plans for the Future – After reaching ten years and $28 billion, we run into a lot of people who speak of Oaktree as an established investment institution. Happily, I can tell you my colleagues and I still think of it as a startup, and nothing could bode better for the future. It means we're still engaged and excited, still worried that being too relaxed or too confident could cause us to fail, and still thinking about rising to meet the challenges ahead.

Our goals for the future are simple: more of the same. Performance that's consistently either good or great. Relationships with terrific clients who always feel they're treated fairly. A harmonious workplace shared by bright, happy colleagues who pull together. And, as a result, prudent growth and continuing profitability. Who could ask for more?

The achievement of these goals will always be dependent on you, our clients. "We couldn't do it without you," may sound hackneyed, but nothing could be more true. For the ability to work for and with you, to visit and call you our clients, the people of Oaktree give their heartiest thanks.

April 11, 2005

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Memo to: Oaktree Clients

From: Howard Marks

Re: Risk and Return Today

A single word is enough to describe the overall investment world today: lackluster. Stock and bond returns thus far in 2004 are quite modest virtually across the board. Candid managers almost everywhere admit there's little to buy. In many areas, especially in non-traditional investments, everyone agrees there's "too much money chasing too few ideas." How can everything be priced to provide low returns? Where does this excess money come from? I'll provide my explanation below. Pardon me if I start with some rudimentary building blocks.

Risk/Return Foundations

The most fundamental assumption underlying investment theory and practice today regards the universality of risk aversion. It is assumed that people dislike risk and prefer safety. The proof is simple: if a safe investment and risky investment – e.g., a 30-day U.S. Treasury bill and a start-up company's 30-year bond – both offer a 5% yield, virtually no one will choose the latter.

Thus, if investors are going to bear risk, they must be induced to do so, with the incentive coming in the form of a higher expected return. In short then, the market must set prices such that investors will expect riskier investments to deliver higher returns. (I have said many times that those higher returns must not be viewed as dependable; if risky investments could be counted on to produce higher returns, they wouldn't be risky. Thus their expected returns must appear to be higher in order to attract capital, but the higher expected return will always be accompanied by a range of possible outcomes that is wider and may include losses.)

Because of the assumed correlation between perceived risk and perceived return potential, the following graphic has come into widespread use to depict the market's basic workings:

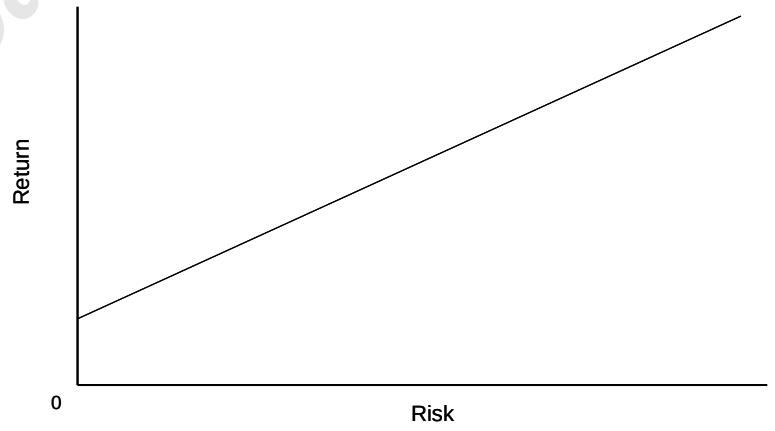

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As the graphic suggests, there is a low return that can be earned on the riskless asset and, from there, prospective return will rise with prospective risk. Thus we have a "capital market line" that, as the academics say, "is upward sloping to the right." (The "riskless asset" is generally felt to be the shortest U.S. Treasury bill, with regard to which investors don't worry about credit risk or the risk that inflation will erode the purchasing power of principal before it's repaid upon maturity.)

The Market at Work

I'll use a "typical" market of a few years back to illustrate how this works in real life: The interest rate on the 30-day T-bill might have been 4%. So an investor says, "If I'm going to go out five years, I want 5%. And to buy the 10-year note I have to get 6%." He demands a higher rate to extend maturity because he's concerned about the risk to purchasing power, a risk that is assumed to increase with time to maturity. That's why the yield curve, which in reality is a portion of the capital market line, normally slopes upward with the increase in asset life.

Now let's factor in credit risk. "If the 10-year Treasury pays 6%, I'm not going to buy a 10-year single-A corporate unless I'm promised 7%." This introduces the concept of credit spreads. Our hypothetical investor wants 100 basis points to go from a "guvvie" to a "corporate." If the consensus of investors feels the same, that's what the spread will be.

What if we depart from investment grade bonds? "I'm not going to touch a high yield bond unless I get 600 over a Treasury note of comparable maturity." So high yield bonds are required to yield 12%, for a spread of 6 percent over the Treasury note, if they're going to attract buyers.

Now let's leave fixed income altogether. Things get tougher, because you can't look anywhere to find the prospective return on investments like stocks (that's because, simply put, their returns are conjectural, not "fixed"). But investors have a sense for these things. "Historically S&P stocks have returned 10%, and I'll only buy them if I think they're going to keep doing so." So in theory, the common stock investor determines earnings per share, earnings growth rate and dividend payout ratio and inputs them into a valuation model to arrive at the price from which S&P stocks will return 10% (although I'm not sure the process is nearly that methodical in actuality). "And riskier stocks should return more; I won't buy on the NASDAQ unless I think I'm going to get 13%."

From there it's onward and upward. "If I can get 10% from stocks, I need 15% to accept the illiquidity and uncertainty associated with real estate. And 25% if I'm going to invest in buyouts . . . and 30% to induce me to go for venture capital, with its low success ratio."

That's the way it's supposed to work, and in fact I think it generally does (although the requirements aren't the same at all times). The result is a capital market line of the sort that has become familiar to many of us, as shown on the next page.

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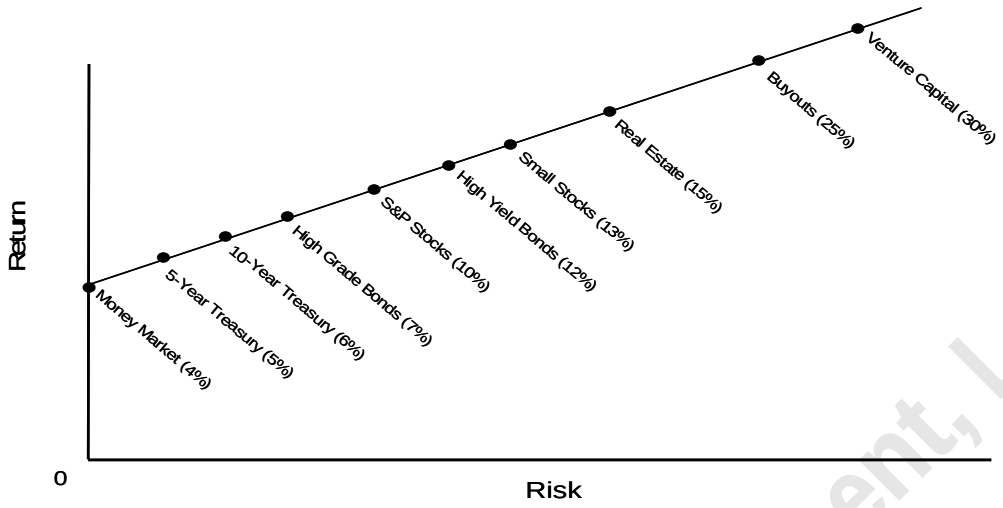

The Market at Work – 2004 Version

A big problem for investment returns today stems from the starting point for this process: The riskless rate isn't 4%; it's closer to 1%. Interest rates reached multi-generational lows in 2004. The Fed kept short rates low for much of the year, although they've been inching up in recent months. This was done (a) to stimulate an economy that has been quite sluggish since the last recession and (b) to protect the economy against negative effects from exogenous shocks, most prominently the corporate scandals of 2001-02 and the terrorist attacks of 9/11 (and the possibility of more); in fact, the low rates have been described as "emergency rates."

Our typical investor still wants more return if he's going to accept time risk, but with the starting point at 1+%, now 4% is the right rate for the 10-year (not 6%). He won't go into stocks unless he gets 6-7%. And junk bonds may not be worth it at yields below 7%. Real estate has to yield 8% or so. For buyouts to be attractive they have to appear to promise 15%, and so on. **Thus we now have a capital market line like the one shown below that is (a) at a much lower level and (b) much flatter**.

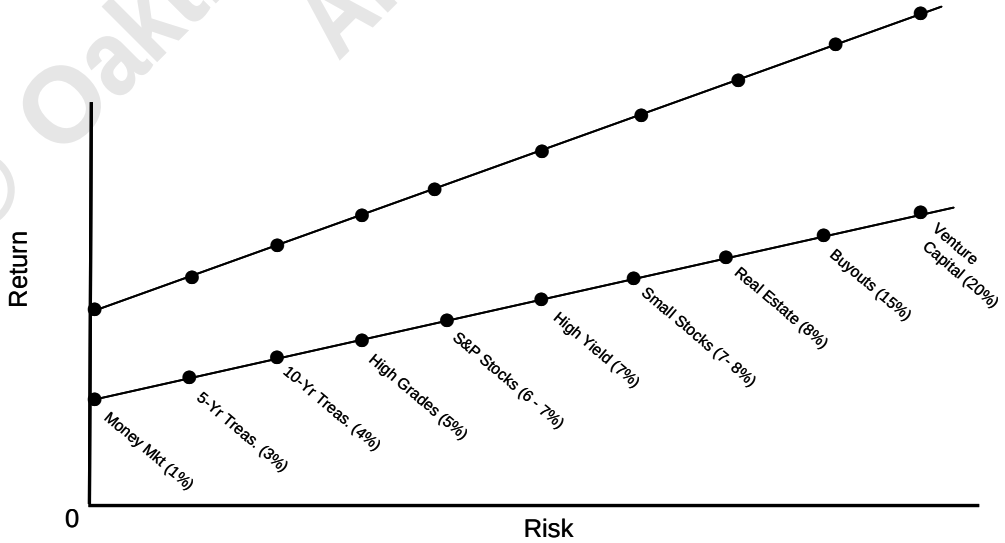

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The lower level of the line is explained by the low interest rates, the starting point for which is the low riskless rate. After all, the investment thought process is a chain in which each investment sets the requirement for the next. Each investment has to compete with others for capital, but this year, due to the low interest rates, the bar for each successively riskier investment has been set lower than at any time in my career.

Why a Flatter Line?

Not only is the capital market line at a low level today in terms of return, but in addition a number of factors have conspired to flatten it. **First, investors have fallen over themselves in their effort to get away from low-risk, low-return investments**. **When you're especially eager not to make safe investment A, it takes less compensation than usual (in terms of prospective return) to get you to accept risky investment B**. Because people today are so motivated to get away from 1% money market investments and 3-4% Treasury notes, they'll accept less risk compensation than usual.

Second, risky investments have been very rewarding for more than twenty years and did particularly well in 2003. With only occasional, easily forgotten exceptions, we've seen high returns from common stocks, low-quality stocks, emerging market stocks, high yield bonds, distressed debt, private equity . . . the list goes on. **Thus investors are attracted more (or repelled less) by risky investments than perhaps might otherwise be the case and require less risk compensation to move to them.**

Third, investors perceive risk as being quite limited today. Because rising inflation isn't seen as a significant risk, bond investors don't require much of a premium to extend maturity. And because the combination of a recovering economy and an accommodating capital market has brought default rates to record lows, investors are unconcerned about credit risk and thus are willing to accept below-average credit spreads. **Prospective return exists to compensate for perceived risk, and when there isn't much perceived risk, there isn't likely to be much prospective return**.

In summary, to use the words of the "quants," risk aversion is down. In May 2003 we at Oaktree began to worry about investors' indiscriminate behavior (of course, we're usually early in worrying about overheated markets). We were struck by the rapidity with which the terrified investors of less than a year earlier had become confident and aggressive. "Stressed" bonds that we had bought at yields of 30% to 70% in the summer of 2002 now could be sold at yields of 6% to 9%. Somehow, in that alchemy unique to investor psychology, "I wouldn't touch it at any price" had morphed into "looks like a solid investment to me." As a result, money was flooding out of low-yielding safe investments and into risky investments that appeared to offer higher returns (although we didn't think the returns were high enough).

In response, I wrote a piece called "The Cat, the Tree, the Carrot and the Stick" as part of my memo "What's Going On?" published on May 6, 2003. I said I thought the combination of low prospective returns on safe investments and recent high returns on risky investments was pushing many investors to dangerously high branches of the investment tree. Those branches are subject to cracking under all that weight. Therefore, until conditions changed, I suggested something closer to the ground.

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Money, Money Everywhere

But how can it be that there's too much capital trying to access so many markets at once? We can understand investor capital flowing from one market to another, but isn't the total amount of investment capital finite? Where does "more money" come from?

I think the amount of investment capital usually is rather fixed, (although many corporations are making pension fund contributions to correct under-funding), and in fact I don't think there's really "more money everywhere." It's just that no one wants to hold more cash at 1%, high grades at 3-5% or stocks at 6-7% (after stocks treated investors so poorly in 2000-02, that's what most people think they're now poised to return).

Thus I think the present situation is as follows:

- There's a given amount of money looking for a home.
- Relatively little of it is going into mainstream stocks and bonds, the two biggest markets.
- The redirection of that capital to the smaller non-traditional markets has given rise to a deluge capable of overwhelming those markets: driving up prices, lowering prospective returns and rendering attractive investments scarce as hens' teeth.

So it's not that there's that much more money around. **It's that would-be buyers are optimistic, unafraid, undemanding in terms of return, and moving *en masse* to small asset classes**. Holders of assets, who play a part in setting market prices by deciding where they'll sell, also are optimistic. The result is an unappetizing, risk-tolerant, high-priced investment landscape. It's for times like this that my favorite Warren Buffett quotation is most appropriate: "**The less prudence with which others conduct their affairs, the greater the prudence with which we must conduct our own affairs**."

Implications for Investing

One way to improve investment results – which we try hard to apply at Oaktree – is to think about what "today's mistake" might be and try to avoid it. There are times in investing when the likely mistake consists of:

- not buying,
- not buying enough,
- not making one more bid in an auction,
- holding too much cash,
- not using enough leverage, or
- not taking enough risk.

I don't think that describes today. I've always heard that no one awaiting heart surgery ever complained, "I wish I'd gone to the office more." Well, likewise I don't think anyone in the next few years is going to look back and say, "I wish I'd invested more in 2004."

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Rather, I think this year's mistake is going to turn out to be:

- buying too much,
- buying too aggressively,
- making one bid too many,
- using too much leverage, and
- taking too much risk in the pursuit of superior returns.

There are times when the investing errors are of omission: the things you should have done but didn't. Today I think the errors are probably of commission: the things you shouldn't have done but did. **There are times for aggressiveness. I think this is a time for caution.**

Not every investor has the option of holding a lot of cash. A pension fund has to pursue its actuarial return, and too many years spent earning money market rates can ensure it won't be achieved. The same can be true for a foundation that has to spend 5% of its assets each year, and for an individual living on his or her investment income. But when I look today at the smart people I know who have the ability to hold cash, I see large balances. As Warren Buffett wrote in his 2003 Annual Report, "Our capital is underutilized now . . . . It's a painful condition to be in – but not as painful as doing something stupid."

There are times when big funds are a good thing – when the market power that comes with more money is a help. I think this is generally a time for moderation in fund raising – a time when the selectivity and agility that come with smallness will prove to be key. Still, some managers are raising ever-larger funds and extending into new strategies on the back of recent strong results. That doesn't mean it's smart to join the herd of participants.

In my memo "What's Your Game Plan" on investing and sports (September 5, 2003), I mentioned the importance of "playing within yourself," or "not trying to do things you're not capable of, or things that can't be accomplished within the environment as it exists."

> We simply cannot create investment opportunities when they're not there. In its first year, our newest distressed debt fund produced a 64% net IRR that's eye-popping . . . and impossible to replicate any time soon. So what should we do now? Rather than take profits and distribute the proceeds, should we prolong our holding periods or try to repeat our gains in new positions? And would it be smart to raise a big new fund? None of these, if the prospective returns on our holdings are inadequate and new investment opportunities are limited. The dumbest thing we could do is to insist on perpetuating our high returns – and give back our profits in the process. If it's not there, hoping won't make it so. **All we ever can do is take what they give us.**

No one wants to throw in the towel with regard to investment returns. No one likes to admit that their intelligence and hard work won't be enough to get them to their target. But at times when the markets are offering paltry absolute returns and inadequate compensation for bearing risk, it's the only thing to do.

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What's the alternative? Deny the facts? Take on more risk in pursuit of high returns? Doing so won't help when prices are high and too much capital is jostling for admittance. **The fact is there are times when you have to stress caution, refuse to stretch for return, moderate your expectations, and keep your head down. I think this is one of those.**

By the way, I'm not saying all investments are priced too high and bound to collapse. I'm saying most aren't priced to give high returns or adequate risk compensation. Whether a strong price correction is coming in a given market depends on the extent and speed with which investors increase their return demands. Remember, there's only one way for prospective returns to increase quickly: through a price correction. On the other hand, a slow and gradual reassertion of prospective return can be accomplished through several years of price stagnation. Neither prospect, however, argues for aggressive investing today.

As for individual asset classes,

- The greatest excesses seem to be centered in some of the **alternative investments** to which people have fled in search of return. Private equity, distressed debt, hedge funds and others of that ilk are unlikely to prove the "silver bullets" that people are hoping for.

- There's no question that **bonds** of all stripes are fated to produce low returns – in fact, the lowest long-term bond returns I've ever seen. When you're talking about a 10% 10-year bond, you can argue about whether the return over the next few years will be 15%, 10%, 5% or zero. But when you're talking about a 5% bond, the range by definition has to be significantly lower.

- Finally, **stocks** are well down from their highs; their valuations have been rendered less excessive by today's generally higher corporate earnings; and they aren't being borne aloft by capital inflows. On the other hand, absolute p/e ratios are still high, supported by the low level of interest rates, and there's the risk of downward valuation when people realize that the long-term return on stocks is likely to be driven by profits growth in mid-single digits.

Taking all of the above into consideration, I feel this is a time when the route to investment success may be via the "least bad" course of action. **For over a year I've been telling the boards on which I serve that I view the solution as "special niches, special people." Because the vast majority of asset classes are high priced and crowded, the key is to find those that are less so. Similarly, it's important to choose managers with enough talent and discipline to make the most of the current situation.**

None of my observations is sure to be right, as always, but I want to share my thinking about what's going on in the investment markets today.

October 27, 2004

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Memo to: Oaktree Clients

From: Howard Marks

Re: Hedge Funds: A Case for Caution

Once upon a time there was an asset class. It was all over the headlines. Its performance was terrific. Some said "too good to be true," but that didn't stanch the flow of money. After all, what other asset class had ever produced returns like these?

The performance brought vast amounts of capital to the sector. Demand exceeded supply, even as funds grew larger. The funds with the best records and discipline saw a deluge of money vastly exceeding their ability to accept it. Investors whose capital they turned away invested with managers who were less disciplined with regard to limits or with new funds. This gave rise to large numbers of start-ups and spin-offs from established firms. Lack of experience didn't prevent anyone from hanging out a shingle – or raising money. Some of the leading managers increased fees in order to appropriate more of their returns for themselves, and this enabled second-tier and new managers to charge fees that used to go only for proven performance.

Everyone agreed there was "too much money chasing too few ideas," but they invested anyway, often based on their managers' supposed skill and the fact that "Everyone's doing it; I can't just stand by and watch while they make money." You could see the end of this tale coming down the track like a locomotive. The perpetual motion machine eventually ground to a halt. **The combination of too much money chasing too few ideas dashed the hopes of those who in 1999-2000 looked for the "silver bullet" in venture capital. "Never again," they grumbled.**

Hope Springs Eternal

Of course, what they meant was, "Never again until next time." The fact is, investors never cease to dream of the silver bullet: the asset class or investment technique that can be counted on for high returns with low risk. Whenever one would-be silver bullet is discredited, investors give up on that irrational dream . . . and go looking for the next.

I say over and over that there's no such thing as a "good" asset class. No asset class or investment technique has the birthright of a particular rate of return, and certainly not of a high return with low risk. No asset can be depended on for good performance irrespective of the price at which it's bought. And no area can be successfully invested in without regard for the balance between the supply of investment ideas in the area and the amount of money investors want to deploy in it.

In fact, if you could ask just one question about a possible investment and be assured of

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one honest answer, I think it should be "what's the relationship between supply and demand?" If there are lots of assets for sale and few takers, those assets can often be bought cheap. If there are few assets offered and many would-be buyers, bargains are usually few and far between.

While no guarantee of a silver bullet, the former can be the source of some good ammunition. With the latter you're more likely to shoot yourself in the foot.

The New Solution

This memo's about hedge funds. They're the hot topic in the investment world today – the latest would-be silver bullet – largely, I think, because most have yet to disappoint performance-wise and because the big asset classes look unappealing.

Common stocks were the big-picture silver bullet in the 1990s. Professor Jeremy's Siegel's "Stocks For the Long Run" assured us there had never been a long period in which stocks didn't beat bonds, cash and inflation. The authors of another book, "Dow 36,000," were given space on The Wall Street Journal's op-ed page. Thus when stocks' popularity – and their representation in portfolios – hit a peak in early 2000, they were ready for a fall. A swoon that included the first three consecutive losing years since the Depression took the S&P 500 down 49% and the NASDAQ down 78%. As a result, stocks receive much less attention today than they did five years ago; less is expected from them in terms of return (even given today's lower prices); and they certainly aren't viewed as the place to put additional capital.

Neither are money market assets (yielding 1%+), Treasury notes and bonds (3-5%) or high-grade corporate bonds (4-6%). Institutional investors find these promised yields unexciting (and far below their portfolio goals of 8%+/-), and the widespread expectation of rising rates makes it seem likely that holding period total returns will be even lower.

With the two biggest markets holding so little appeal – and given the fact that it has to go someplace – money has been flowing to non-mainstream markets such as high yield bonds, buyouts, real estate, oil, timber . . . and hedge funds.

The Hedge Fund Movement

Hedge funds did great in the 1990s, produced moderate gains during the collapse of stocks in 2000-02, and were in double digits in 2003. I think they also exhibit many of the traits associated with the venture capital boom described on page one of this memo, including widespread investor participation. **I don't think hedge funds will bring losses at all comparable to what happened in venture capital at the peak, but I think their popularity is overdone and likely to lead to disappointment**. Given the

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magnitude of the hedge fund movement, a memo on the subject has become inevitable.

First, what are hedge funds? Briefly put, they're unregulated private partnerships that commingle the assets of institutions and wealthy individuals in pursuit of superior investment results. They're evergreen vehicles that offer periodic withdrawal opportunities to their investors, as opposed to closed-end entities such as private equity funds that promise no option to withdraw but begin to liquidate after a certain date and return money as they do.

Except for one other factor, they can have very little else in common. Hedge funds operate in a great many ways. There are arbitrage funds in fixed income, mergers, convertibles and "stat arb"; long/short funds in stocks in general, tech stocks and emerging markets; macro funds which place bets on currencies and world markets; and funds which make mostly-long bets in specialized market niches such as distressed debt. There are small hedge funds and enormous hedge funds. **Some hedge funds hedge – go short or otherwise take offsetting positions designed to reduce risk – and others don't. Thus some aim for steady returns with little volatility and market exposure, and some make massive, unhedged bets in pursuit of massive returns. Some hedge funds can fairly be described as pursuing "absolute return," and in the rest the returns are anything but absolute**.

What's that one remaining thing that hedge funds have in common? It's called **"hedge fund pricing,"** meaning the manager gets an annual management fee of at least 1-2% plus a share – usually 20% – of all profits earned in the portfolio. **In a world where the fees paid to long-only managers in traditional asset classes are a fraction of one percent, hedge fund pricing allows managers to make 3-4% or more and represents the *raison d'etre* for the hedge fund industry.** One of the cleverest observations I've read is from Paul Isaac of Cadogan Management: **"hedge funds are a compensation system often mistaken for an industry."**

From little or nothing a few years ago, many institutional investors now have 5-10% or more invested in hedge funds today. This has given rise to a massive expansion of the hedge fund community. There are estimated to be 7,000 hedge funds today, up from 1,640 a decade ago. Their current capital is estimated at between $850 billion and $1 trillion, up about ten times in ten years and well over 100% since the end of 2000. We read often of pension plans deciding to commit billions of dollars of additional capital to hedge funds. How will it play out?

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Scalability

In my opinion, scalability is the most important issue surrounding hedge funds: can a good little idea become a good big idea? Everyone wonders about the scalability of hedge funds, but I think they're yet another area where most people agree on the existence of the potential problems but invest anyway.

It was in the mid-Seventies that I first began to hear of hedge funds such as Cumberland Partners and Steinhardt, Fine and Berkowitz. **At that time the hedge fund industry consisted of a handful of funds trying to earn superior returns with total capital of a billion dollars or so.** The funds limited their capital; researched smaller companies in greater depth than the mainstream investors; concentrated their portfolios in a handful of good ideas; and used shorting and hedging (but not leverage) to shape the pattern of their returns. For better or worse, their success over the ensuing 30 years led to fame and widespread emulation. **As a result, we now have thousands of funds trying to earn superior returns with roughly a trillion dollars, and with much more on the way.** (On September 13 The Bank of New York predicted that U.S. institutional investors alone would plow an additional $250 billion into hedge funds by 2008.) Can it still work?

I hope you'll permit me one of my tortured analogies. Have you seen the nature film on TV showing big fish eating? One of the big fellows rips a piece from his prey and moves through the water enjoying his dinner. But due to his poor table manners, he spews small crumbs as he goes. It's for this reason that each big fish is trailed by a hundred little fish. They snack on the scraps he drops, enjoying his leavings. He does the hard work, and they get a free lunch.

Well that's the way I've always thought of the investment world. Mainstream institutional investors emphasize the big asset classes and follow the big companies, creating a relatively efficient market and a context for relative valuation. But their attention wanes as the targets shrink, and their hands are tied by constraints on their behavior.

Little guys such as hedge funds operate in the interstices. They take advantage of small inefficiencies and misvaluations that the big guys create, permit or ignore. They pursue things that are unseemly, esoteric or highly labor intensive. And they can employ tactics like leverage and shorting – and live with levels of portfolio concentration and illiquidity – that aren't tolerated in the mainstream investment world. In other words they, too, benefit from the big guys' leavings.

The critical question is obvious: **How many little fish can thrive in the shadow of each big fish?** A hundred little fish trailing each big one all can do well. But those crumbs won't feed five hundred. Not only will the crumbs be insufficient in number, but the crowd will fight over them in a way that's unhealthy for everyone.

Tortured enough? Maybe so, but I think the analogy holds. **In my time in this business, the institutions have been the big fish of the investment world, and the hedge funds and alternative investment specialists have profited from their biases and limitations. But quintuple the number of "little guys" and maybe they'll no longer exhibit the same brilliance and adroitness.**

- How many under-researched stocks are there, and how much can be invested in them?

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- How much of a bargain-priced security can be bought without the price being driven up?
- How big an arbitrage position can be put on without the profit spread shrinking?
- How many shares of an overvalued stock are available for short-sellers to borrow?
- How much of something can the hedge funds collectively own without illiquidity closing their exit window?

When there's an increase in the amount of capital that investors want to put into an area, there's no reason to expect a commensurate increase in the opportunities for good investment. So when the ratio of money to ideas increases, the implications for future performance can't be good.

Now it should be made clear that the venture capital boom, for one example, was based in a very narrow investment segment and dependent on the creation of new companies for the deployment of capital. Hedge funds, on the other hand, collectively are able to invest in any form of asset or security, in all of the world's markets and employing a wide variety of investment techniques, and through shorting they have to ability to profit from "inefficiencies" in overvalued as well as undervalued assets.

Thus the potential universe for hedge fund investments is enormous in the absolute. The real question is whether there are enough inefficiencies in this universe for all of the would-be hedge funds to invest in, and whether the presence of a large and growing number of funds has a deleterious effect on the adequacy of the supply.

Of course, it goes without saying: just as no asset class has the birthright of a given return, giving something the overly broad label of "hedge fund" – and paying its manager "two-plus-twenty" – won't make it a stellar, or even a steady, performer.

The Hedge Fund Manager's Superior Arsenal

A great deal is made of the powerful tools at the hedge fund manager's disposal. The ability to employ leverage – often in unlimited amounts – and the absence of constraints on investment tactics are lauded for their potential to add to results. But no one should forget their potential to do the opposite as well.

Almost every weapon in the investment arsenal is a two-edged sword. The only exception is genuine, sustainable personal skill. Everything else will make you money when it works but lose you money when it doesn't. Leverage and free rein are no exceptions.

Being able to leverage a portfolio means being able to invest a multiple of your equity capital. Why should an investor with $1,000 be content making $100 on a price rise of 10%? Why not borrow another $3,000, invest all $4,000 in the same assets, and make $400 on a 10% rise? All you need is access to 3-to-1 leverage . . . oh yes, and the ability to identify assets that appreciate.

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In Vegas they say, "the more you bet, the more you win when you win." Although the logic of this statement is impeccable, it omits the obvious addendum ". . . and the more you lose when you lose." **Leverage is not a source of alpha; it's a way of increasing your exposure to a given amount of alpha . . . or lack of alpha**. The 3-to-1 leverager described above will lose 40% of his equity if prices go down 10% instead of up. The ability to use leverage – which is high and rising today given the low cost of money and the lure of the "carry trade" – certainly doesn't add asymmetrically to investment results.

Neither does freedom from constraints. Institutional investors usually spend lots of time negotiating what tactics a mainstream investor will be permitted to apply and crafting contracts to keep him from straying afield. Then they turn over a bunch of money to a hedge fund manager and say, "do as you please." (I exaggerate for effect.) Does that make sense? Only in one case: where the manager possesses great skill and discipline.

Investment constraints (1) enable clients to know what style of management they'll be getting and (2) hopefully limit managers to what they're good at. Their absence sets the stage for surprises and permits managers to wander into areas where they may have less skill. Thus the results from unrestrained hedge funds are often unforeseeable, and these vehicles should be handled with care.

I think investors should pay above average fees only for asymmetric value added – that is, for a potential increment to returns that isn't accompanied by a corresponding potential decrement. And I think only genuine skill adds asymmetrically to investment results, not leverage and not the mere ability to use a wide range of investment tactics. The key in hedge fund investing is finding managers who have that skill. It isn't ubiquitous.

A Few Words on Performance

Frankly, I wonder whether the decision to invest in hedge funds today is fully supported by their performance in 2000-04, their period of great popularity.

I've watched institutions decide to join hedge funds. I think most of them invested for "absolute returns" – which I believe were supposed to be in the high single digits after fees – accompanied by low volatility and limited correlation with the mainstream markets. Now most institutions seem to be satisfied with their hedge fund performance and are signing up for more. **But I wonder whether they should be.** For the purposes of the analysis below I'll use the CSFB/Tremont Hedge Fund Index.

- With the S&P 500 down 9%, 12% and 22% in the 2000-02 bear market, investors in the CSFB/Tremont Index's average fund were delighted to make money, with the Index returning 4.9%, 4.4% and 3.0% in those years, respectively.

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- And fund investors who might have expected much less were thrilled to see 15.4% from the Index in 2003.

On the surface, all seems well: small gains when the stock market cratered, and a pleasant surprise in the big year of 2003. But is everything really all right?

- Were the results in 2000-02 all they should have been? Because everyone was understandably thrilled to make money while stocks collapsed, I don't hear anyone grumbling about modest returns. But should they be? Institutional Investor magazine made the point in February 2003:

> Hedge funds had a good year in 2002 – relatively speaking, of course. . . The trouble is, hedge funds are not merely supposed to do better than other investments. They're meant to outperform in absolute terms [I think this should be "perform in absolute terms"]. And most did not do that in 2002.

- Many students of the hedge fund area believe returns should be a function of interest rates, for example "LIBOR plus 500." In the early years of this decade, far less was achieved. Do the negative returns in the stock market fully explain the difference?

With 2003 one of the best years in history in most markets, was 15.4% enough? In 1996, '97 and '99, the Hedge Fund Index captured a very substantial majority of the S&P's return. Why in 2003 did it garner just over half the gain? Obviously the ability of the average hedge fund to beat the booming S&P in 1999 was an outlier, with active flipping of IPOs and other ways to "pick off" feverish retail investors presenting unusual profit opportunities. 1998's negative return was equally aberrant, with the Index return pulled down by a 38% loss on the average emerging market hedge fund. But with these caveats in mind, why was the capture rate in 2003 so tepid?

Year	CSFB/Tremont Long/Short Index Return	S&P 500 Return	Hedge Fund Return as Percentage of S&P Return
1996	22.2%	22.7%	98%
1997	25.9	33.1	78
1998	-0.4	28.3	n/m
1999	23.4	20.9	112
2003	15.4	28.4	54

- Most recently, the CSFB/Tremont Hedge Fund Index is up just 2.8% in the first eight months of lackluster 2004. **Again we must ask whether modest single digit returns are all that can be expected absent a tailwind from a strong stock market. What happened to the absolute return that would be earned with little reference to what went on in the markets? If the low returns are attributable to**

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weak underlying markets, doesn't that suggest more correlation to market movements than was implied by the "absolute return" premise?

In other words, has hedge fund performance since 2000 been good enough? "Single digits in down years and double digits in up years" sounds like a good deal. **"Modest returns in bad years and modest participation in good years" is a little less appealing.**

I can think of four possible explanations for any shortfall from expectations: two benign and two unpleasant:

- If recent returns have been below expectations, this may be attributable to the low level of interest rates. Interest rates influence what funds will earn on their idle balances, proceeds from short sales, and arbitrage positions. So maybe hedge fund returns are due to pick up as short-term rates rise.

- And maybe hedge funds' good returns will be earned on average, rather than every year, and this has just been a below average period.

- But maybe more hungry "fish" with more money crowding into a given market are having the predictable depressant effect on returns. **Maybe there's a fixed amount of excess return available to be earned in a given year, and when it's spread over a lot more capital, the results become less positive. Or, even worse, maybe the combined efforts of all these people make the markets more efficient, reducing the total excess return available for them to share.**

- Perhaps the increase in the number of hedge fund managers has brought a decrease in their average alpha. **Why should we believe the last 20,000 managers to join the sector are as smart as the first 1,000?** One of the rationales for hedge fund investing, as The Wall Street Journal put it on July 7, is that, "Hedge funds still attract the smartest managers, lured by the rich fees." I may be missing something, but why should the appeal of rich fees be limited to smart managers? Can't they attract the not-so-smart as well?

It's my personal guess that there's truth in each of these four possible explanations. But if that's the case, the latter two will have a deleterious effect despite the validity of the former.

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Drawbacks and Pitfalls

There are enough people out there trumpeting the benefits of hedge funds; you don't need me to repeat them. I'll just play my normal worrier's role by listing some caveats:

- The performance data on which investors are making the decision to commit to hedge funds is highly imperfect. It is unsystematic, unscientific and covers a short and not-

necessarily-representative period. In addition, it's weakened by post-selection bias (low-return funds are unlikely to volunteer their performance) and survivorship bias (the estimated 25% of funds that go out of business each year are even less apt to do so). Importantly, holdings of illiquid or infrequently marked securities can cause betas and risk to be understated and thus Sharpe ratios to be overstated (Pensions & Investments, August 19, 2002).

- It is obvious that some of the tactics employed by hedge funds entail considerable volatility and illiquidity. And yet, hedge funds give their investors the periodic right to withdraw. **Thus, it's possible for a hedge fund to offer more liquidity than does its underlying investment portfolio**. This can be a formula for disaster. Given that a lot of the capital now in hedge funds is "hot money" prone to exit given a period of underperformance, it's not hard to envision (and in fact the community has seen) rapid-fire withdrawals that lead to downward spirals and penalize the last investors out the door, who can find themselves owning disproportionate amounts of hard-to-value and hard-to-sell securities.

- In most hedge funds, it's hoped that the managers' actions will neutralize the effect of market fluctuations. In other words, you're betting on the managers' skill, not the market direction. **As in any inefficient, alpha-based market niche, the performance gap between superior and inferior managers can be substantial. Thus you'd better find superior managers, and that's not easy. Also, since many of the best and most disciplined managers have closed their funds, you'd better hope the available funds will be able to replicate the returns that attracted you to the area in the first place.**

- With thousands of hedge funds all using computers to screen investment opportunities, there's a tendency for lots of them to move in the same direction at the same time. **This can shrink purchase opportunities, eat into prospective returns and reduce liquidity**. The Wall Street Journal described the situation on June 30: "Increasingly, the growing group of hedge funds pile into the same trades. With so much money chasing similar strategies, good investment returns become more elusive. Moreover, when an attractive idea turns sour, the rush to the exits gets crowded, exacerbating an already tense investment environment."

- We read often about the migration to the hedge fund world of people from elsewhere in the investment industry. This is the same phenomenon as we saw in the dot-coms in 1998-99. When people flood an area because of the easy money to be made there, the results are usually predictable.

- I'm particularly skeptical of the movement of people from traditional portfolio management to hedge funds. **Stock picking ability isn't sufficient for success in managing a hedged and/or leveraged portfolio -- risk management is at least as important. The two are not the same, and the traditional buyside professional doesn't have much experience in the latter.**

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- As has happened in other alternative investment fields, changes in an industry can expose weaknesses in the compensation arrangements. Originally, management fees were intended primarily to cover operating expenses while incentive fees motivated managers to strive for profits. But as funds grow larger, some are at the point where managers can get rich on management fees alone. Recently we've seen investment celebrities start hedge funds with perhaps $3 billion of capital and management fees of 2% or so. $60 million a year is a pretty good start if you can get it. Fees like these can motivate managers to put a higher priority on perpetuating the management fee machine than on pursuing portfolio gains. Although hedge funds and private equity funds carry similar fee arrangements, the latter have hurdle rates that motivate their managers to try for double-digit returns. Hedge fund managers probably figure they can hold onto their capital and earn 2-4% a year for themselves with returns in moderate single digits. **I'm not sure that warrants the fees.**

- At the other end of the spectrum from managers able to attract billions in capital and massive management fees, the impatient newcomer with access to incentive fee money faces potential temptation that also might trouble investors: It makes perfect sense for him to start a fund and swing for the fences with highly risky securities, leverage and concentration. Hit a homer and he's rich; strike out and he goes back to his old job.

- We know incentive fees can serve to align interests between investors and their managers when profits are in the offing. But what happens when there are losses? When a fund has run up some serious losses and needs to recover to the "high-water mark" before it can generate incentive fees again, its personnel don't stand to share in gains for a while. So what is there to make them stay around to engineer the recovery, rather than move to a new fund where they can profit from dollar one? On July 15 The Wall Street Journal described one such situation: "Rather than try to dig out of the deep hole, while at the same time not getting paid as much as they could earn elsewhere, Mr. James and his team began to contemplate starting out on their own."

- Finally, I'll list a few other topics that may make hedge funds the subject of negative headlines in the future:

  - the risk implicit in the combination of leveraged hedge funds, leveraged funds of funds, and leveraged fund investors;
  - the absence of registration and regulation;
  - the lack of transparency;
  - the potential conflicts that arise when hedge funds are run within an organization that also manages non-hedge fund money in the same markets;
  - hedge funds' involvement in buyouts (do they have the needed skills? will it reduce their liquidity and ability to value the portfolio for subscriptions/redemptions?);
  - buyout firms' growing involvement in hedge funds (still more competitors?);
  - possible improprieties in hedge fund marketing;

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- concern over the impact of hedge fund short selling;
- and, of course, the outright fraud that occasionally arises and always is a threat.

The Outlook for Hedge Fund Investing

As I said earlier, despite the troubling factors enumerated above, I do not envision a boom-bust scenario for hedge fund investors. After all, hedge funds spread their investment over almost all asset classes, and most funds are fairly disciplined in sticking to low-priced investments. So there isn't a single asset or group of assets where we have to worry about hedge funds creating bubble-like appreciation and the usual subsequent collapse.

No, the excesses aren't in the prices of the assets in which hedge funds invest. The excesses are in the trends affecting the industry: too much money coming too fast; too many funds managed by people of uneven skill; and too-high fees relative to the limited excess return the average fund is likely to generate.

I do not expect a debacle, just a disappointing experience. The sad fact is that, on average, hedge funds may go down as just another former silver bullet.

The high single digit return for which I think people invested wasn't a figment of anyone's imagination. It was probably reasonable looking back at the period preceding the current hedge fund boom. After all, in a period when stocks consistently returned double digits, Treasury notes paid 6% and high yield bonds yielded 12%, it's eminently logical that a few highly skilled hedge fund managers could earn 8-9% or more after fees on a low-risk basis.

But that scenario doesn't describe today or tomorrow. There's no reason to expect a near-term repeat of stock and bond returns like those, and certainly the hedge fund arena is far more crowded than it's ever been. So I think the average hedge fund might make 5-6% net of fees in the years just ahead. (That could change after lower prices and higher interest rates re-elevate the prospective returns on stocks and bonds – and after some disappointed capital departs the hedge fund field – but I'm just dealing here with the current environment. And please note that I'm not making a prediction, just a wild guess within a wide range.)

I'll go with 5-6% for the average hedge fund – considerably more from the best managers, less from the worst and, yes, total loss from the occasional risk-management disaster. Is that terrible? No. But the question is whether it will be entirely satisfactory.

- First, I think it may be less than the hedge fund managers and consultants have predicted.
- Second, it will put most institutions further behind their overall investment goals.
- And third, I think it'll look pretty anemic if Treasury note yields return to that range,

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> as they may, or if stocks can get anywhere close to their long-term 10% historic average.

A net return of 5-6% earned with low risk in a low-return world may sound pretty good to lots of people, especially in light of the pain that long-only common stock investors experienced in 2000-02. **I believe a great deal of current hedge fund investment is motivated by a desire for mid-single digit returns with safety, and also that a lot of funds have been designed to deliver them**. Managers are constraining risk; locking in profits at modest levels; dedicating their efforts to avoiding down months and quarters; and refraining from reaching for the stars. Some of this is good.

But I think paying fees of 2-4% to earn net returns of 5-6% may start to get old, especially if and when returns on mainstream stock and bonds get back to more attractive levels. That's why I worry about the potential for disappointment. **Right now, in a world of 1% money market rates and lackluster returns everywhere, that may be sufficient. But sentiment is inherently unstable, and I'm not sure investors will remain content if they begin to miss out on more elsewhere . . . while paying the highest fees in the investment world to do so.**

To start bringing this memo to a close, I'll cite John Moon and Tim Jensen's apt enumeration of the possible outcomes in our Emerging Markets Fund's second quarter letter:

> We have no idea if the hedge fund boom will peter out after several years of mediocre performance, end in another [Long-Term Capital Management] crescendo, or continue until all money is either indexed or run by hedge funds.

In testimony to Congress, Alan Greenspan focused on what I think is the most likely result:

> Hedge funds seek out the abnormal rates of profit often found where markets are otherwise inefficient. But these above-normal profits have attracted a large number of new entrants seeking to exploit a possibly narrowing field of inefficiencies. Not surprisingly the rate of return in this activity is reportedly declining. I would not be surprised if, with time, many of the new entrants exited, some presumably following large losses. (The Wall Street Journal, July 23)

* * *

In my treasury of investment sayings, there's a special section reserved for what I call "the classics." None is more dependable than this: **What the wise man does in the beginning, the fool does in the end.** Intrepid pioneering investors get the underpriced gems. Once something has been discovered and the price bid up, the latecomers who come aboard in ever-increasing numbers – lured by past performance – can look forward to less return and more risk.

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I can't imagine an investment area whose attractiveness can survive the onslaught of an investor herd thinking it constitutes the silver bullet. It wouldn't make sense for one to exist, given that it's the job of a smoothly functioning market to eliminate opportunities for unusual profits. **"Too much money chasing too few ideas" has been the death knell for investment fad after fad. This will never cease to be so.**

Hedge funds are just like any other investment tool. They are neither a good idea nor a bad idea. They have both plusses and minuses. They're subject to market forces capable of altering their attractiveness. And like any other investment that's in vogue, they should be handled with great care, with eyes wide open.

The right hedge funds may be just what the doctor ordered for investors who place a high priority on stable returns and are willing to trade away a lot of their upside potential for that stability. The key will be finding managers who possess skill, discipline and integrity. Doing so won't prove easy; there's no reason why finding superior managers should be any easier than finding superior investments. But as in other quarters of the investing universe, the rewards for success can be substantial.

There's no question that some of the smartest investment managers are gravitating to the hedge fund arena with its out-sized financial rewards. But they're not the only ones being drawn to the money, and some of the rest will turn out to be incompetent or downright unscrupulous. The tools are there for hedge fund managers to use, but all the tools in the world won't produce superior risk-adjusted returns without superior skill. **Just as all managers can't be in the top quartile, all hedge fund managers are unlikely to be smart enough to identify the markets' mistakes; undoubtedly some of them will be the ones making those mistakes**.

Finally, my personal bottom line: the most important element in the decision to invest in a hedge fund shouldn't be the sheer profit potential, but your comfort in entrusting its managers with the combination of potent investment tactics, high-octane fees and the absence of a hurdle rate.

October 6, 2004

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Memo to: Oaktree Clients

From: Howard Marks

Re: The Happy Medium

My second general memo to clients was dated April 11, 1991 and imaginatively titled "First Quarter Performance." It primarily discussed the swing of the market pendulum. I may be biased, but I'm pleased with what it says and, thirteen years later, wouldn't change a word.

> The mood swings of the securities markets resemble the movement of a pendulum. Although the midpoint of its arc best describes the location of the pendulum "on average," it actually spends very little of its time there. Instead, it is almost always swinging toward or away from the extremes of its arc. But whenever the pendulum is near either extreme, it is inevitable that it will move back toward the midpoint sooner or later. In fact, it is the movement toward the extreme itself that supplies the energy for the swing back.
>
> Investment markets make the same pendulum-like swing:
>
> - between euphoria and depression,
> - between celebrating positive developments and obsessing over negatives, and thus
> - between overpriced and underpriced.
>
> This oscillation is one of the most dependable features of the investment world, and **investor psychology seems to spend much more time at the extremes than it does at the "happy medium."** (Emphasis added)

Although I've learned a great deal in the time since that memo was published, I still think the paragraphs excerpted above capture almost the entire essence of market movements.

I continue to believe that cycles are inevitable, often profound, and the most reliable feature of the business and investment worlds. In November 2001 I wrote a memo on this subject entitled "You Can't Predict. You Can Prepare." (It didn't generate any reader reaction, even though I thought its contents were important.) The memo discussed some of the cycles that affect the investor:

- The **economic cycle** evidences **moderate fluctuations** (although their impact can be profound). Viewed on a long-term graph, it looks like a gentle wave.

- The **business cycle** responds to developments in the economy with a **more pronounced effect**, rising and falling as consumers and businesses loosen and tighten their purse strings.

- The **profits cycle** reflects an **exaggerated reaction** to changes in the amount of business companies are doing, primarily because of the twin influences of operating leverage (such that

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operating profits change more than revenues) and financial leverage (such that net income changes more than operating profits).

- The **credit cycle** moves **dramatically**, usually oscillating between periods when the capital markets are wide open and periods when they're slammed shut.

- The **market cycle** reacts **violently**, as investor psychology magnifies all of the above. Security prices yo-yo in what can often be described as extreme over-reaction.

Everyone's aware of these cycles and their influence on the markets, but it's important that their essence and origin be thoroughly understood. For me that means delving into human nature and emotion. The theme of this memo will be that **the cyclical phenomena that so heavily influence our investment outcomes aren't caused by the operation of institutions or physical laws. Rather, they largely result from people's frailties and excesses**. A thorough understanding of these things can increase an investor's ability to achieve gains and avoid losses.

Greed or Fear

When I was a rookie analyst, we heard all the time that "the stock market is driven by greed and fear." When the market environment is in healthy balance, a tug-of-war takes place between optimists intent on making money and pessimists seeking to avoid losses. The former want to buy stocks, even if they have to pay a price a bit above yesterday's close, and the latter want to sell them, even if it's on a downtick.

When the market doesn't go anyplace, it's because the sentiment behind this tug-of-war is evenly divided, and the people – or feelings – on the two ends of the rope carry roughly equal weight. The optimists may prevail for a while, but as securities are bid up they become more highly priced, and then the pessimists gain sway and sell them down. The result is a market that rises or falls moderately if at all – not unlike the experience so far this year. For example, as The Wall Street Journal wrote on May 17,

> The Dow Jones Industrial Average has been down for three weeks in a row, . . . Still, a determined group of optimists has refused to throw in the towel, stepping in to buy what they view as cheap stocks whenever prices began to plummet. On Wednesday, when the Dow Industrials fell as low as 9852.19 during the day, these people began to buy, pushing the blue-chip average back above 10000.
>
> Two forces continue to compete in the market: those who believe that the current skittishness will end once investors get used to the idea of rising interest rates, and those who think further stock declines are inevitable.

It didn't take long in my early days, however, for me to realize that often the market is driven by **greed <u>or</u> fear.** At the times that really count, large numbers of people leave one end of the rope for the other. Either the greedy or the fearful predominate, and they move the market dramatically. **When there's only greed and no fear, for example, everyone wants to buy, no one wants to sell, and few people can think of reasons why prices shouldn't rise.** And so they do – often in leaps and bounds and with no apparent governor.

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Clearly that's what happened to tech stocks in 1999. Greed was the dominant characteristic of that market. Those who weren't participating were forced to watch everyone else get rich. "Prudent investors" were rewarded with a feeling of stupidity. The buyers moving that market felt no fear. "There's a new paradigm," was the battle cry, "get on board before you miss the boat. And by the way, the price I'm buying at can't be excessive, because the market's always efficient." Everyone perceived a virtuous cycle in favor of tech stocks to which there could be no end.

But eventually, something changes. Either a stumbling block materializes, or a prominent company reports a problem, or an exogenous factor intrudes. Prices can even fall under their own weight or based on a downturn in psychology with no obvious cause. Certainly no one I know can say exactly what it was that burst the tech stock bubble in 2000. But somehow the greed evaporated and fear took over. "Buy before you miss out" was replaced by "Sell before it goes to zero."

And thus fear comes into the ascendancy. People don't worry about missing opportunities; they worry about losing money. Irrational exuberance is replaced by excessive caution. Whereas in 1999 pie-in-the-sky forecasts for a decade out were embraced warmly, in 2002 investors chastened by the corporate scandals said, "I'll never trust management again" and "How can I be sure any financial statements are accurate?" Thus almost no one wanted to buy the bonds of the scandal-plagued companies, for example, and they sunk to giveaway prices. **It's from the extremes of the cycle of fear and greed that arise the greatest investment profits, as distressed debt demonstrated last year.**

Risk Tolerance or Risk Aversion

In my opinion, the greed/fear cycle is caused by changing attitudes toward risk. **When greed is prevalent, it means investors feel a high level of comfort with risk and the idea of bearing it in the interest of profit. Conversely, widespread fear indicates a high level of aversion to risk**. The academics consider investors' attitude toward risk a constant, but certainly it fluctuates greatly.

Finance theory is heavily dependent on the assumption that investors are risk-averse. That is, they "disprefer" risk and must be induced – bribed – to bear it. That's the reason why the capital market line slopes upward to the right: investors have to be offered higher expected returns in order to induce them to make investments entailing higher risk. Of course, these higher returns can't be a sure thing, because in that case the investments wouldn't actually be riskier. So the higher expected returns have to be accompanied by greater uncertainty (a broader dispersion of possible outcomes) or higher actual risk of losing money.

But there are times when investors ignore the uncertainty and risk of loss associated with higher possible returns and pursue them too avidly. In 1996, I asked a consultant why his firm was one of the few that didn't recommend Oaktree's high yield bond management. His answer was simple: "We're trying to maximize risk, and we can't do that with you." Of course, that answer was shorthand for something that made a little more sense: that in theory the way to increase return is to bear more risk, and he thought Oaktree's

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portfolios didn't contain enough risk to be top performers. **In other words, he was saying, "risk is our friend."**

It just can't work that way! **Dependably high returns from risky investments are an oxymoron. But there are times when this caveat is ignored; when people get too comfortable with risk; and thus when securities prices incorporate a premium for bearing risk that is inadequate to compensate for the risk that's present.**

The prevalence of risk-tolerance (or risk-obliviousness) in the late 1990s was clear. I personally heard a prominent brokerage house strategist say, "Stocks are overpriced, but not enough to keep them from being a buy." And we all heard the man on the street say "I'm up so much in my 401(k), it wouldn't bother me if it fell by a third." (Where was that guy two or three years later?)

No, those risk-tolerant attitudes will not persist forever. Eventually, something will intrude, exposing securities' imperfections and too-high prices. Prices will decline. Investors will like them less at $60 than they did at $100. Fear of losing the remaining $60 will overtake the urge to make back the lost $40. Risk aversion eventually will reassert itself (and usually go to excess).

How about some quantification of this cycle? In mid-1998, just before the collapse of Long-Term Capital Management brought investors other than techies to their senses, only **$12.5 billion** of non-defaulted bonds yielded more than 20% (one possible threshold for the label "distressed debt"). Because investors weren't very worried about risk, they demanded ultra-high returns from relatively few non-defaulted bonds; the word "blithe" might best describe their attitude.

But Long-Term's demise awakened investors to the existence of risk, and a year later, the amount of bonds yielding more than 20% had more than tripled to **$38.7 billion**. By mid-2002, when the corporate scandals held the debt market in a grip of terror, the 20% yielders had grown to **$105.6 billion**, eight and a half times the level just four years earlier. Risk aversion had come a long way from inadequate and, as later events showed, had become excessive. By March 31, 2004, this figure had fallen 85%, to just **$16.2 billion**; risk aversion had subsided (and possibly had become inadequate again). I'm sure that fundamentals didn't fluctuate anywhere near the degree reflected in prices, yields and thus the distressed debt tally. As usual, reality was greatly exaggerated by swings in psychology.

When investors in general are too risk-tolerant, security prices can embody more risk than they do return. When investors are too risk-averse, prices can offer more return than risk. For me, Warren Buffett's quote best sums up this phenomenon and the contrarian position that is required as a result: **"The less prudence with which others conduct their affairs, the greater the prudence with which we should conduct our own affairs."**

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Full or Empty

One of the most volatile cycles relates to the willingness of investors to interpret events positively or negatively. Forget the traditional half measures; investors see their glass completely full at some times and totally empty at others.

It isn't nonsensical for assets to be viewed differently at different times. After all, almost everything incorporates elements of both good and bad. But there are times when investors seem to look only at the positives or only at the negatives. **As a result, there are times when there seems to be no price so high that investors won't pay it, and these inevitably are followed by times when no price is low enough to convince people to buy.**

This oscillation – from viewing a security, a company or an investment technique as "flawless" to viewing it as "worthless" – has occurred several times during my time in the investment business, with the predictable effect on prices.

This "full-or-empty" phenomenon is particularly apparent in media savants' explanations for each day's market movement. In "up" times, a strong report on consumer income is interpreted as fueling corporate sales and profits, and thus is used to explain rising stock prices. In "down" times, on the other hand, the same report may be cited as a cause of inflationary pressure, rising interest rates, lower p/e ratios, and thus declining stock prices.

"Everything that was good for the market yesterday is no good for it today."

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Valuing the Future – Credence or Skepticism

Some investors spend their time working hard to quantify this year's earnings and the growth thereafter. Others strive to value real assets, intellectual property and business advantages (and predict what others will pay for them). Still others try to deduce the value implications of mergers and acquisitions, balance sheet restructurings and private-to-public transactions. **In all of these ways and many more, it's the job of those in the investment business to predict the future and put a value on it.**

In 2000-01, our distressed debt funds invested a few hundred million dollars in bankrupt telecom companies. In each case, the purchase price implied a value for the company that was a small

fraction of the amounts that had been invested in hard assets such as switching gear or fiber-optic cable. If we could resell the equipment for a higher percentage of its cost than we had paid, the investment would be profitable.

The first sale went well, and we made a quick 50%. But soon thereafter, people stopped showing up to bid on these assets. Whereas the party to whom we had sold the first company thought he had a bargain, in later instances the possible buyers shied away from assets that were turning out to be in heavy oversupply. And that brings me to my point. In 1999, investors accepted at face value their telecom companies' rosy predictions of the future and paid handily for that potential. In 2001, they saw the potential as largely empty and wouldn't pay a dime for it, given that the industry's capacity vastly exceeded its current needs and no one could imagine the excess being absorbed in their lifetime. **This cycle in investors' willingness to value the future is one of the most powerful that exists.**

A simple metaphor relating to real estate helped me to understand this phenomenon: **What's an empty building worth?** An empty building (a) has a replacement value, of course, but it (b) throws off no revenues and (c) costs money to own, in the form of taxes, insurance, minimum maintenance, interest payments, and opportunity costs. In other words, it's a cash drain. When investors are in a pessimistic mood and can't see more than a few years out, they can only think about the negative cash flows and are unable to imagine a time when the building will be rented and profitable. But when the mood turns up and interest in future potential runs high, investors envision it full of tenants, throwing off vast amounts of cash, and thus salable at a fancy price.

Fluctuation in investors' willingness to ascribe value to possible future developments represents a variation on the full-or-empty cycle. Its swings are enormously powerful and mustn't be underestimated.

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Value Investing vs. Growth Investing – (or Value Today vs. Value Tomorrow)

Interest in "value investing" versus "growth investing" is another phenomenon that fluctuates over time, with the relative popularity of growth investing based heavily on investors' willingness to value the future. It's not just a random fad, but a reflection of a cycle in attitudes.

In my view, all investors try to buy value – that is, to buy something for less than it'll turn out to be worth. The difference between the two principal schools of investing can be boiled down to this:

> "Value investors" buy stocks (even those whose intrinsic value may show little growth in the future) out of conviction that the current value is high relative to the current price.
>
> "Growth investors" buy stocks (even those whose current value is low relative to their current price) because they believe the value will grow fast enough in the future to produce substantial appreciation.

Thus, it seems to me, the choice isn't really between value and growth, but between value today and value tomorrow. Growth investing represents a bet on company performance that may or may not materialize in the future, while value investing is based primarily on analysis of a company's current worth.

Certainly much of the fluctuation in the performance of one school versus the other stems from their relative price attractiveness: one group of stocks may be perceived as the cheaper of the two and thus begin to be bought more strongly. This buying makes it appreciate relative to the other until it gets ahead price-wise, and then it declines (or at least pauses) while the other catches up.

But the two schools' relative performance also depends to a great extent on attitudes that fluctuate cyclically. Optimistic growth investors with big dreams for the future bid up the stocks of companies that they expect to exhibit rapid growth, as they did in 1998-99. Eventually their buying power is spent, their hopes are dashed, or their optimism wanes. Then value investors with their more limited expectations regarding the future have their day in less buoyant times, as they did in 2000-01.

Selling Panic (and Its Less-Recognized Brother)

As the pendulum makes its periodic swing from positive to negative, the resurgence of fear, risk aversion, and attention to things missing from the glass combine to bring down prices. Most investors see their resolve evaporate, along with all their reasons for holding the things in their portfolios. They go from being confident partisans, to worriers, eventually to sellers – and sometimes to panic sellers.

In November 2000, I wrote about "A Framework for Understanding Market Crisis," an insightful article by Richard Bookstaber, then of Moore Capital Management, that analyzed the behavior of panic sellers. Rather than reinvent the wheel, I'll excerpt from my earlier memo:

- Most people think security price movements result primarily from the market's discounting of information about corporate, economic or geopolitical events – so-called "fundamentals." If you sit with a trader, however, it's easy to observe that prices are always moving in response to things other than fundamental information.

- Bookstaber says, "the principal reason for intraday price movement is the demand for liquidity . . . . In place of the conventional academic perspective of the role of the market, in which the market is efficient and exists solely for informational purposes, this view is that the role of the market is to provide immediacy for liquidity demanders . . . . **By accepting the notion that markets exist to satisfy liquidity demand and liquidity supply, the framework is in place for understanding what causes market crises, which are the times when liquidity and immediacy matter most."**

- "Liquidity demanders are demanders of immediacy." I would describe them as holders of assets in due course, such as investors and hedgers, who from time to time have a strong need to adjust their positions. When there's urgency, "the defining characteristic is that time is more important than price . . . . **they need to get the trade done immediately and are willing to pay to do so.**"

- Usually when the price of something falls, fewer people want to sell it and more want to buy it. But in a crisis, "market prices become countereconomic," and the reverse becomes true. **"A**

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falling price, instead of deterring people from selling, triggers a growing flood of selling, and instead of attracting buyers, a falling price drives potential buyers from the market (or, even worse, turns potential buyers into sellers.)" This phenomenon can occur for reasons ranging from transactional (they receive margin calls) to emotional (they just get scared). The liquidity demanders increase in number, and they become more highly motivated.

- In times of crisis, liquidity suppliers become scarce. Maybe they spent their capital in the first 10% decline and are out of powder. Maybe the market's increased volatility and decreased liquidity have reduced the price they're willing to pay. And maybe they're scared, too. **"Information did not cause the dramatic price volatility. It was caused by the crisis-induced demand for liquidity at a time that liquidity suppliers were shrinking from the market."**

Speaking of panics, we all recognize the carnage that occurs when the desire to sell far exceeds the willingness to buy. But I think Bookstaber's analysis applies equally to the opposite – times when the desire to buy outstrips the willingness to sell. It amounts to a "**buying panic"** and represents no less of a crisis, even though – because the immediate result is profit rather than loss – it is discussed in different terms. **Certainly 1999 was just as much a year of irrational, liquidity-driven crisis as was 1987.**

And clearly, both selling panics and buying panics have more to do with extreme swings in emotion and urgency than they do with fundamental corporate and economic developments.

The Credit Cycle

I couldn't leave the subject of cycles without touching on one of the most pronounced, the credit cycle. From time to time, providers of capital simply turn the spigot on or off – as in so many things, to excess. There are times when anyone can get any amount of capital for any purpose, and times when even the most deserving borrowers can't access reasonable amounts for worthwhile projects. **The behavior of the capital markets is a great indicator of where we stand in terms of psychology and a great contributor to the supply of investment bargains.**

The level of security issuance varies over time in a wave-like pattern, and the swing from high years to low years can be great. I don't believe a high level of issuance says much about the desire of companies to raise money; usually they'll take all that's available. Rather, a high level of issuance indicates a willingness on the part of investors to buy increased amounts of securities, something that varies greatly depending on their mood.

But equally important is the trend in the quality of new issue securities. **It is my belief that a willingness to buy new securities in greater quantity invariably is accompanied by a willingness to buy securities of lower quality**. Thus lower standards go hand in hand with higher amounts of issuance. When investors are chastened and afraid, they'll buy very few new securities, and only those of high quality. When they're euphoric and confident, they'll buy greater quantities and attend less to matters of quality and downside protection. **In the most overheated markets, when being underinvested is considered the biggest mistake one can make, buyers compete for new issues by paying higher prices and by demanding less in terms of quality and safety.**

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It's in this way that the swing of the capital market pendulum to one extreme provides the energy for the swing back toward the other. For example, with terrified high yield bond investors hugging the sidelines in 1990-91, low issuance and a great degree of investor selectivity set the stage for low subsequent default rates and excellent portfolio performance. Double-digit returns in 1991-97 (save 1994) turned investors from cautious to confident and attracted increased capital for investment in high yield bonds. These conditions led to the issuance of bonds in greater quantity and lower quality in 1997-99. And, of course, that issuance contributed to record default rates in 2001-02, to great portfolio losses, and eventually to enormous returns on the rebound. And so the cycle goes on.

From the depths reached in the summer of 2002, the recovery of investor sentiment has been dramatic in both its extent and its speed. And with that recovery has come yet another dramatic swing of the capital cycle from restrictive to accommodating. Again as seen through the example of high yield bonds, the last eighteen months have witnessed a near-record amount of new bond issuance, including a large number of CCC-rated bonds, bonds with weak covenants, and bonds issued to fund payments to equity holders.

All net debt incurrence adds to a company's riskiness, in that it increases balance sheet leverage. But at minimum the proceeds, or assets bought with the proceeds, should stay within the company. When debt is raised and the proceeds go out the door without enhancing the value of the company, a transaction should be viewed with a particularly critical eye. The fact that a substantial number of bonds-for-dividends deals could be done in recent months says a lot about where we stand in the credit cycle . . . and about the likelihood that some of these deals will be grist for distressed debt investment in the future.

Looking for the cause of a market extreme usually requires rewinding the videotape of the credit cycle a few months or years. Most raging bull markets are abetted by an upsurge in the willingness to provide capital, usually imprudently. Likewise, most collapses are preceded by a wholesale refusal to finance certain companies, industries, or the entire gamut of would-be financers.

The capital market oscillates between wide open and slammed shut. It creates the potential for eventual bargain investments when it provides capital to companies that shouldn't get it, and it turns that potential into reality when it pulls the rug out from under those companies by refusing them further financing. It always has, and it always will.

Just Give Me My 10%

Putting it all together, the fluctuations in attitudes and behavior described above combine to make the stock market the ultimate pendulum. In my 34 full calendar years in the investment business, starting with 1970, the annual returns on the S&P 500 have swung from plus 37% to minus 26%. Averaging out good years and bad years, the long-run return is usually stated as 10% or so. Everyone's been happy with that typical performance and would love more of the same.

But remember, a swinging pendulum may be at its midpoint "on average," but it actually spends very little time there. The same is true of financial market performance. Here's a fun question (and a good illustration): for how many of the 34 years from 1970 through 2003 was the annual return on the S&P 500 within plus or minus 2% of "normal" – that is, between 8% and 12%?

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I expected the answer to be "not that often," but I was surprised to learn that it had happened **only once!** It also surprised me to learn that the return had been more than 20 percentage points away from "normal" – either up more than 30% or down more than 10% – two-thirds of the time: 22 out of the last 34 years. So one thing that can be said with conviction about stock market performance is that **the average certainly isn't the norm.** Market fluctuations of this magnitude aren't nearly fully explained by the changing fortunes of companies, industries or economies. They're largely attributable to the mood swings of investors.

Lastly, the times when return is at the extremes aren't randomly distributed over the years. Rather they're clustered, due to the fact that investors' psychological swings tend to persist for a while – to paraphrase Herb Stein, they tend to continue until they stop. Not one of those 22 extreme up or down years was more than a year away from another year of similarly extreme performance **in the same direction**.

* * *

So from time to time we see rabid buyers or terrified sellers; urgency to get in or to get out; overheated markets or ice-cold markets; and prices unsustainably high or ridiculously low. **Certainly the markets, and investor attitudes and behavior, spend only a small portion of the time at "the happy medium."**

What does this say about how we should act? Joining the herd and participating in the extremes of these cycles obviously can be dangerous to your financial health. **The markets' extreme highs are created when avid buyers are in control, pushing prices to levels that may never be seen again. The lows are created when panicky sellers predominate, willing to part with assets at prices that often turn out to have been grossly inadequate.**

"Buy low, sell high" is the time-honored dictum, but investors who are swept up in market cycles too often do just the opposite. The proper response lies in contrarian behavior: buy when they hate 'em, and sell when they love 'em. "Once-in-a-lifetime" market extremes seem to occur just once in a decade or so – not often enough to build an investment career around capitalizing on them. But attempting to do so should be an important component of any investor's approach.

Just don't think it'll be easy. You need the ability to detect instances in which prices have diverged significantly from intrinsic value. You have to have a strong-enough stomach to defy conventional wisdom (one of the greatest oxymorons) and resist the myth that the market's always efficient, and thus right. You need experience on which to base this resolute behavior. And you must have the support of understanding, patient constituencies. Without enough time to ride out the extremes while waiting for reason to prevail, you'll become that most typical of market victims: the six-foot tall man who drowned crossing the stream that was five feet deep on average. **But if you're alert to the pendulum-like swing of the markets, it's possible to recognize the opportunities that occasionally are there for the plucking.**

July 20, 2004

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Memo to: Oaktree Clients

From: Howard Marks

Re: Us and Them

As a kid, I – and probably you – viewed the world in simple terms. There were good guys and bad guys. Americans and commies. Cops and robbers. Settlers and redcoats. The Dodgers I cheered for and the Yankees who always won. **Over time my view of the investment community has settled into an equally clear distinction: us and them.**

You've heard a lot from me about the difference between the "I know" school and the "I don't know" school, concepts I introduced in "What's It All About, Alpha?" (July 2001) and elaborated on in "The Realist's Creed" (May 2002). In the last few years it has become clear to me that "we" don't differ from "them" just in terms of how much we think we know about the future, but in many other ways as well.

Do You Know or Don't You?

Most of the investors I've met over the years have belonged to the "I know" school. This was particularly true in 1968-78, when I analyzed equities, and even in 1978-95, when I had switched to non-mainstream investments but still worked at equity-centric money management firms.

It's easy to identify members of the "I know" school:

- They think knowledge of the future direction of economies, interest rates, markets and widely followed mainstream stocks is essential for investment success.
- They're confident it can be achieved.
- They know they can do it.
- They're aware that lots of other people are trying to do it too, but they figure either (a) everyone can be successful at the same time, or (b) only a few can be, but they're among them.
- They're comfortable investing based on their opinions regarding the future.
- They're also glad to share their views with others, even though correct forecasts should be of such great value that no one would give them away gratis.
- They rarely look back to rigorously assess their record as forecasters.

"Confident" is the key word for describing members of this school. For the "I don't know" school, on the other hand, the word – especially when dealing with the macro-future – is "guarded." **Its adherents generally believe you can't know the future; you don't have to know the future; and the proper goal is to do the best possible job of investing in the absence of that knowledge.**

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The Benefits of Membership

As a member of the "I know" school, you get to opine on the future (and maybe have people take notes). You may be sought out for your opinions and considered a desirable dinner guest . . . especially when the stock market's going up.

Join the "I don't know" school and the results are more mixed. You'll soon tire of saying "I don't know" to friends and strangers alike. After a while, even relatives will stop asking where you think the market's going. You'll never get to enjoy that 1-in-1,000 moment when your forecast comes true and the Wall Street Journal runs your picture. On the other hand, you'll be spared all those times when forecasts miss the mark, as well as the losses that can result from investing based on over-rated knowledge of the future. **But how do you think it feels to have prospective clients ask about your investment outlook and have to say, "I have no idea"?**

For me, the bottom line on which school is best comes from the late Stanford behaviorist, Amos Tversky: **"It's frightening to think that you might not know something, but more frightening to think that, by and large, the world is run by people who have faith that they know exactly what's going on."**

"A group of related or coincident things, events, actions, etc."

Random House's secondary definition for the word "syndrome," shown above, suggests a set of elements that can be viewed separately but take on greater meaning when considered together. **And the more I think about it, the more I see such a pattern in the contrasting styles of investment industry participants.**

Investors don't just differ in regard to their views on foreknowledge, but in terms of a large number of elements. And the pattern among those elements seems to be consistent – correlated – not random. Ask yourself, for example, whether the "I don't know" school is evenly divided between bulls and bears. Maybe, but in my experience, members of the "I don't know" school tend to trust less in the market than those of the "I know" school. That's an example of the pattern, or syndrome, that I think investors tend to demonstrate in many regards.

In my memo "Returns and How They Get That Way" (November 2002), I gave examples from a brilliant dichotomization propounded by Nicholas Taleeb. His book, "Fooled By Randomness," has as its theme the pervasive role of luck in investing and the tendency of people to overlook its effect. He provides a table that shows a number of things in the first column that can easily be mistaken for things in the second column.

Luck	Skill
Randomness	Determinism
Probability	Certainty
Belief, conjecture	Knowledge, certitude
Theory	Reality
Anecdote, coincidence	Causality, law
Survivorship bias	Market outperformance
Lucky idiot	Skilled investor

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My point here, and my reason for reproducing part of Taleeb's table, is my belief that **there are people who see the things on the left, and there are people who see the things on the right, but few who see some of each**. Some people think their ability to infer causality and analyze data makes them skilled investors capable of producing consistent outperformance. Others understand that luck plays a big part; that a lot of apparent causality is really coincidence; and that the person crowned the most skilled investor in a given year might be nothing more than a "lucky idiot." Very few people mix aspects from both columns.

I can think of many qualities that seem to go together to define one of the two main types of investor but not the other. I'll discuss them below and attribute them to either the "Oaktree-style" investors with whom I tend to associate – "us" – or the other sort of investor – "them."

Personality Type

It would be great to either be middle-of-the-road and dispassionate all the time or, better yet, bullish or bearish at just the right time. But few people can achieve either of those ideals. Most investors are congenitally either bullish or bearish, and I've never seen anyone capable of flipping in an adroit and timely manner from one to the other. For most of us, it's either bullish most of the time or bearish most of the time – right or wrong.

For many of the outstanding investors I've come across, it's the latter. And I shouldn't say bearish – I've just used that word as shorthand for a number of others. But the "us-style" investor tends to be cautious and defensive, while the "they-style" investor tends to be optimistic, confident and aggressive.

And the investors I like most are patient. Because they know they can't be right every time, their real concern is with the long run. On the other hand, the "I know" investor feels he has a good handle on what lies ahead and thus plans to do an above-average job every year – an admirable goal, perhaps, but I don't think highly achievable.

Hunt for Upside or Avoid Downside?

One of the most significant ways in which these differences manifest themselves is in terms of attitude toward risk. If you're confident that you know what the future holds, risk isn't frightening. But if you're convinced that you don't have that good a handle on the future, it's hard to be very cocky.

Our kind of investor is preoccupied by risk, whereas I think the other is often oblivious to it. Our kind worries about what can go wrong, while the other revels in what might go right. Ours tries to avoid mistakes, and the other concentrates on finding winners. **Ours obsesses about the losers he might buy or hold, while the other dwells on the opportunities he might miss.** In short, it's offense versus defense.

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Other Aspects of Investment Style

The optimist tends more often than not to be a growth investor; he's confident that above-average growth can be perpetuated and that he can identify the companies that'll do so. The more cautious investor looks for value – for tangible attributes that can be counted on for price support even if confidence in the company proves to be unwarranted.

Our school of investing puts great emphasis on being a contrarian. If you want to buy something of solid value, and you want to buy it for less than it's worth, you'll have a better chance if you look among assets, companies and markets that are out of favor. Thus we're happiest when we're not part of the herd; we prefer to watch the herd's extreme boom-bust behavior and profit from its mistakes. Most other investors seem to be happy when they're part of the herd and following the trend.

Our kind of investor likes to average down. He holds a firm view of his securities' value and wants to increase his holdings at lower prices. Thus he likes to see prices decline (although he's not cocky enough to completely dismiss the possibility that the market's right rather than him). The trend follower wants to see appreciation and is disheartened by initial declines. In fact, I think he prefers to average up as appreciation validates his thesis.

Certain that his forecasts are right and his portfolio is properly positioned, the "I know" investor wants to let his profits ride. The "I don't know" investor is painfully aware of how much he doesn't know; how much of his performance is beyond his control; that good fortune may have contributed to his results to date; and that events can easily turn against him. Thus he's happy taking profits and banking some of his gains. If appreciation occurs beyond his expectations, it makes him stop and think . . . and maybe sell, not just celebrate.

The "we" investor is comfortable holding cash when he can't find attractive investments. At the present time, a number of the investors I most respect are holding or returning significant amounts of cash, or closing their funds. The confident "them" investor is pained by cash – he thinks he always should be able to find something worth buying. And he tends to be more relative-return oriented, and thus worried that an index or competitor might beat him if he isn't fully invested.

I see an extreme dichotomy in the fact that the "us" investor worries about losing money, while the other worries about underperforming. (I can't claim to be 100% the former, because I – and most of Oaktree's clients – think that in the long run, the best manager is the one who beats the others. That's something that's hard to argue with. But my desire for relative performance doesn't make me comfortable with losses.)

Lastly, because the "I don't know" investor is highly conscious of his limitations, he is likely to aggressively limit his assets under management. Most of the "I know" investors, who tend to work in the more liquid mainstream markets, never met a dollar of AUM they didn't like – or didn't feel they could achieve great things with.

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Attitudes Toward the Market

The actions of "they" investors are often driven by their views regarding the outlook for the market. They invest more aggressively when the outlook's positive than they do when it's negative (although, as I said before, they're usually positive). "We" investors tend to invest from the bottom up, primarily basing investment decisions on whether attractive individual investment opportunities are available.

In fact, I'm often struck by the fact that "they" are preoccupied with studying and assessing the behavior of "the market" – which collectively means studying themselves. My favorite investors – both inside and outside Oaktree – spend their time almost exclusively looking into individual companies and their securities.

One of the greatest dichotomies is that "they" impute intelligence to the market while "we" are highly skeptical of it. Trillions of dollars were lost after 1998-99 because the mass of investors hadn't sufficiently questioned the valuations of tech stocks. They'd been told, "The market's efficient" and assumed that if a stock was selling at a price, that meant the price was justified. **The investors I respect feel the market's often wrong – either underpricing or overpricing securities – and more than anything else, they look for opportunities to profit from those errors. In their view, as Dickens said about the law, "the market's an ass."**

So Where Do We Stand Today?

The market is a big arena where optimists and pessimists engage in a tug of war. When optimism is rising relative to pessimism, meaning more money wants to get put to work than wants to exit, prices rise (and vice versa). The market has been going roughly sideways for the last few months, meaning the two camps are in rough balance. **But that doesn't mean they're not both out there.**

Everyone had a great year in 2003, and "they" seem to think it's going to continue. They're cheered by signs of economic recovery, corporate profit gains and job growth. "We," on the other hand, worry about the things that could result in disappointment, like the lackluster economic and employment gains, and the trade and budget deficits. We also worry about structural issues, such as the US's reliance on foreign capital, the questionable outlook for the dollar, and the consumer's high level of indebtedness and low level of savings. Lastly, we feel the possibility of domestic terrorism hangs out there like a sword of Damocles.

A particularly striking difference can be seen in current attitudes toward interest rates. Rates do a great deal to influence the vitality of the economy and the price and relative attractiveness of market sectors. Today's low rates encourage growth and borrowing. They also reduce the competition to stocks posed by bonds and money market securities. Finally, since interest rates are used in present value calculations to discount future cash flows, lower interest rates result in higher valuations for all assets.

Obviously, then, today's record low rates go a long way to explaining what's going on in the investment world. With money market securities yielding 1% and Treasury notes at 3-4%, yields of 6-8% on high yield bonds look attractive; market-neutral hedge funds look like a bonanza at 9-11%; and expectations of 15-20% are enough to attract money to private equity

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(rather than the old 25-30%). Just as importantly, low interest rates lower the hurdle return for equities and justify p/e ratios in the high 20s.

What sums it up is the line that "stocks aren't overpriced given the current level of interest rates." "They" derive comfort from the fact that today's valuations are consistent with today's rates, while "we" worry about the impact on valuations that a rise in rates would have.

Rates can't go down all that much, but there's plenty of room for them to go up. (I still have the framed notice from 1980 telling me that the rate on my bank loan had reached 22¼%!) **That tells me that p/e ratios can't rationally go up much more but there's plenty of room for them to go down**. And if we ignore the threat of a rate rise and merely assume that rates will hold steady, the resulting return on the average stock would be just in line with normal profits growth in mid-single digits.

So the optimist is cheered by the low rates (and their stimulative power), and the pessimist is concerned about the risk implicit in a possible rate rise. **Or, as it seems to me, "we" worry about valuations and "they" feel comfortable on the subject . . . as usual.**

How About an Example

Rather than hold up my Oaktree colleagues as exemplars of astute "us-style" investors (which I think they are), I'd like to propose an unnamed investor for your consideration. I'll tick off his credentials for inclusion (as I see them) and throw in a few quotes from his recent writings.

- He never bases his investment actions on forecasts for the economy or market. ". . . the cemetery for seers has a huge section set aside for macro forecasters. We have in fact made few macro forecasts . . , and we have seldom seen others make them with sustained success."

- Rather, his actions are strictly determined by the availability of attractive investment opportunities. "Under *any* market or economic conditions, we will be happy to buy businesses that meet our standards."

- He's a solid investor in value – be it derived from current cash flow, unique market position or special human resources.

- Because of his risk awareness and desire to avoid losers, **he always insists on a generous "margin of safety."**

- He is absolutely unconcerned if an index or competitor outperforms him for a year or two, but he insists on avoiding losses. **Losing less than his competitors is not his definition of success.**

- When attractive investment opportunities are few, he's willing to stand at the plate with the bat on his shoulder – something he says he's doing a lot of nowadays. In 2003, that caused his holdings of cash to triple. **"Our capital is underutilized now . . . . It's a painful condition to be in – but not as painful as doing something stupid."**

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- He seems happiest when betting against the herd. For example, on the subject of distressed bonds, he says "yesterday's weeds" (which yielded 30-50% in 2002), are being priced as "today's flowers" (and thus yielding 4-6%). He's written me that he "liked them better when they were weeds."

- Certainly he's a patient long-term investor (and, in fact, not much of a profit taker; he recently expressed some regret about having not sold during The Great Bubble).

- He is very conscious of the effect of increased capital on investment returns. "When [a manager] tells you that increased funds won't hurt his investment performance, step back: His nose is about to grow."

There are lots of ways to skin the cat, and certainly there are successful investors among "them." **But the characteristics enumerated above have provided the foundation for Warren Buffett's incredible record, and that makes them good enough for me.**

* * *

To help you see the picture I'm suggesting and evaluate the investors you come across, I've prepared the quick-and-dirty checklist that appears on the following page. Few people will hit every point on the head, but I think you'll recognize in the list on the left a lot of the "they" school investors you know, and on the right, hopefully, a few from the "us" school. **Each year – especially in good times – the headlines will go to those on the left who guess correctly. But in the long run I think it's people on the right who'll be celebrated most.**

In today's trend toward hedge funds, I see a growing preference – whether conscious or unconscious – for "us" investors over "them." Consistent, risk-conscious, non-market-based investing is enjoying great popularity right now. I've considered it the ticket for almost three decades.

And by the way, I have one last thing to say: **vive la difference!!** In order for us to be contrarians, there has to be someone to be contrary to. If everyone invested our way, the opportunities we prize would be few and far between. **The best opportunities for investment returns aren't created by companies, exchanges or paper securities; they result from the mistakes other investors make. It's Oaktree's job to take advantage of them.**

May 7, 2004

P.s.: As I wrote this memo, one thing pained me, and I want to address it: I found myself constantly writing "he," even though I absolutely do not think investing skill is gender-related. It's just that I hate the thought of using "he/she" each time. (My son Andrew's school uses s/he.) And I find ungrammatical today's popular, gender-neutral formulation that "the top-performing investor finds that their gains come from hard work" – a plural pronoun substituting for a singular noun. So please bear with me; I'm really an equal opportunity memo writer.

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THEM	US
"I know"	"I don't know"
Bullish by nature	Bearish by nature
Aggressive	Defensive
Confident	Guarded
Comfortable with risk	Obsessed with risk
What might go right?	What might go wrong?
Worried about winners missed	Worried about losers bought
Trend followers	Contrarians
Attracted to pretty flowers	Glad to search among the weeds
Comfortable when part of the crowd	Happy when apart from the crowd
Growth/momentum investors	Value investors
"Great things cost a lot"	Insistent on buying cheap
Believers	Skeptics
"We're in a new era"	"Trees don't grow to the sky"
Cheered by appreciation	Frightened by excessive appreciation
Enjoy averaging up	Enjoy averaging down
"Let it ride"	Eager to take profits
Relative return-oriented	Absolute return-oriented
Worried about underperforming	Worried about losing money
Pained by cash	Comfortable with cash
Confident in their powers	Aware that much is beyond their control
Convinced that their good returns are fully deserved	Highly conscious of the role played by luck
Impatient	Patient
Short term-fixated	Long term-oriented
Never worried by large amounts of capital	Aware that it's possible to have too much capital
Engrossed in watching the market	Devoted to watching companies
"The market's efficient"	"The market's an ass"

Everything's okay:	Worries abound:
Economic recovery underway	Movement of jobs overseas
Corporate profit gains	Gaping trade deficit
Increases in productivity	Growing budget deficit
Continuing foreign investment	Reliance on foreign capital
Ability of weak dollar to bolster exports	Threat to value of the dollar
Existence of job growth	Halting nature of job growth
Optimism implied by willingness to borrow	Consumers' high debt/low savings
Strong military capability	Risk of terrorism
Low level of interest rates	Risk of interest rate rise
Today's security prices are justified by low rates	Today's security prices are reliant on rates staying low

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Memo to: Oaktree Clients

From: Howard Marks

Re: Hey, Steward!!

Webster's defines a "steward" as a household manager, union representative, fiscal agent or one who attends passengers while traveling. Some of these concepts have become less relevant in today's world.

- Before World War II, ocean voyage was the main mode of transportation abroad, and the steward was someone passengers depended on for their welfare.

- When plane travel took over from ships, it was the stewardess (and then in the 1980s, the steward again) who played the same essential role. Of course, in the 1990s, political correctness caused "stewardess" and "steward" to disappear in favor of "flight attendant."

- The trade union movement has depended heavily on the work of the shop steward, the union representative closest to the men and women of the rank-and-file.

- And when I started in the investment management business in the 1960s, those who managed money for others thought of themselves – and were thought of – as stewards of their clients' money. They aimed to protect their clients from loss and generate a reasonable – even an attractive – return as long as it could be done with risk in check.

With the passage of time, I find I hear the word "steward" less and less. But in talking about the mutual fund irregularities that have been exposed in the last few months, I cannot help but borrow a phrase from Jack Bogle that employs it. (I wish I could coin the phrases I use in these memos, but usually I find myself relying on the creativity of others. In this case, I absolutely can't improve on Jack's way of putting it.) On November 8, The Economist quoted him as saying, "Amassing assets under management became the [mutual fund] industry's primary goal, and **our focus shifted from stewardship to salesmanship**." (Emphasis added)

That's it. Right there. In a nutshell. Of course some of the late-trading incidents involve individuals who simply took money out of their clients' pockets and put it in their own (metaphorically). **But in case after case – involving late trading and other issues – mutual funds companies forgot their duty as stewards of other people's assets, doing things that disadvantaged clients in order to build assets under management for their own benefit.**

Each of us faces the need to balance our own interests against those of others. The salesman stresses the positives and soft-pedals the negatives to increase his

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commissions. The head of a charity draws a salary that reduces the amount left for the organization's good work. The doctor collects for his services, and the more he charges, the fewer the people who can afford them. And we investment managers charge management fees, and sometimes a percentage of the profits, that cut into our clients' net return. We all want to increase our incomes, but it should be possible to stick to the high road while doing so. The tradeoffs present challenges, but they can be overcome.

I do not argue that mutual fund executives – or investment managers in general – should be expected to serve in an eleemosynary capacity. Certainly Oaktree doesn't run on pure altruism. Vanguard comes close to the ideal, as a non-profit organization owned by its fund owners, but Vanguard's people take compensation, not vows of poverty. **The critical question in my mind isn't whether people make money, or even how much, but what methods they employ to do so, how candid they are about those methods, and how the inevitable conflicts of interest are resolved.**

What's Wrong With a Little Salesmanship?

My October memo "The Feeling's Mutual" argued that late trading wasn't the worst thing going on in the mutual fund industry. Rather, it pointed to questionable long-term practices relating to governance, marketing and compensation.

[Before I go further, I want to do something I failed to do in October: make clear that neither my earlier memo nor this one is intended as a universal indictment of the mutual fund industry. While there are questionable aspects to the industry's general practices and some bad apples, there also are clean operators and even shining examples. I apologize to any of the latter that feel I've treated them like the former. The good news is that the money withdrawn from the bad apples is being reinvested in other mutual funds, meaning the good citizens are being rewarded, as they should be.]

Recent months have brought disclosure of a variety of questionable asset-building practices.

- Revenue sharing – According to the Wall Street Journal of January 9, this is an arrangement through which, in addition to any explicit sales compensation, "fund companies give brokers a cut of their management fees to induce them to sell their products." Many brokerage firms have a list of preferred funds or fund companies, and often the funds pay to be on the list. The Journal reported, for example, that Edward D. Jones & Co. "has selling arrangements with about 100 mutual funds, but 90% to 95% of its fund sales come from the seven preferred companies who engage in revenue sharing." Under revenue sharing, a brokerage firm can get a percentage of the assets invested in the relevant funds or of the management fees (and in some cases, of both).

- Brokerage-for-sales deals – These were described by the Journal (January 13) as

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"arrangements under which fund firms direct trades to . . . brokerages in returns for its (sic) funds staying on their 'preferred list.'" Sometimes funds allocate commissions to brokerage firms in order to pay off the revenue sharing obligations described above.

- Sales incentives – In its article on Jones, the Journal also reported "more than half of the firm's brokers are invited on [Caribbean cruises and African-wildlife tours paid for by fund companies on the preferred list], based on meeting certain overall sales targets." At some brokerage firms, brokers have received higher commission rates for selling funds that generate revenue sharing. Elsewhere, the commissions for selling funds managed by the brokerage's in-house money management arm have been higher than those on third-party-managed funds.

On January 13 the Securities and Exchange Commission said that 14 out of 15 broker-dealers it examined had received cash payments from mutual fund companies. Is it wrong for brokerage firms and/or their brokers to receive compensation for emphasizing a company's funds? After all, supermarkets accept compensation from food companies for giving them more desirable "shelf space." Isn't that a valid analogy?

The answer lies in the significant distinction between an ordinary businessman and a trusted adviser. Supermarkets have no fiduciary duty to their customers, and customers don't expect supermarkets to provide objective, professional advice regarding which brands to buy. The opposite is true for stockbrokers.

> Under securities laws, brokers are held to the high standard of trusted financial advisors – not just salespeople – and must either offer objective advice or properly disclose any serious conflicts. . . . "We recognize there is a conflict of interests between the broker and the mutual fund investor," says Robert Plaze, associate director of the SEC's Division of Investment Management. "That client needs to understand the recommendation of their broker is being affected by these payments." (Wall Street Journal, January 9)

How would you like to learn that the heart surgeon to whom your general practitioner sent you had paid for the referral? That your banker recommended a trust-and-estate lawyer in exchange for a holiday cruise? Or that the broker who suggested you buy a certain fund was paid to do so?

> "The deception is that the broker seems to give objective advice," says Tamar Frankel, a law professor at Boston University who specializes in mutual-fund regulation. "In fact, he is paid more for pushing only certain funds." (Ibid.)

The Los Angeles Times put it another way on January 18:

> There are two ways to describe such payments, and both smell bad, said Don Phillips, a principal at fund research firm Morningstar, Inc. in Chicago: They're either bribes by mutual fund companies to spur sales, or they're blackmail by the

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brokerages to do the same.

In the case of mutual funds that direct brokerage commissions to reward fund sales, there's an additional alarming element: **Not only is the fund company paying for a recommendation, but it's making these payments with its client's money, not its own.** Commissions belong to the client. They should go to pay for things that benefit the client, such as superior research or best execution. When they are used to reward fund sales, their use benefits only the fund company.

Sunlight as Disinfectant

The solution is to inform clients of these practices. Where the interests of client and broker are in conflict, the broker should disclose the conflict. In this case, he should tell clients that he and his firm received special compensation for making the recommendation they've made, or for having sold large amounts of certain funds. Fund companies and brokers would respond that they've done just that.

The problem is that the SEC agreed that disclosure needn't be made directly by each broker to each client. Instead, general disclosure in mutual fund prospectuses is enough. **Unfortunately, "legal disclosure" too often seems to be an oxymoron**, guided primarily by the question "how can we say something so as to minimize the likelihood that the reader will understand what we said?" For example, according to the Journal of January 9, " . . . Putnam typically discloses in its prospectuses that it may 'pay concessions to dealers that satisfy certain criteria established from time to time by Putnam Retail Management relating to increasing net sales of shares of Putnam funds over prior periods, and certain other factors.'" Huh?

How many prospectus readers are capable of extracting the significance from that sentence? How many know the meaning of the word "concession" in this context? How many even read the last dozen "boilerplate" pages of a prospectus?

First, I think regulators should insist not on disclosure, but on **effective disclosure**. Things should be expressed in everyday English, such that laymen can grasp their significance. And the things that matter should be separated from the things that don't.

Second, disclosure of the conflicts between fiduciary and client should be made directly by the fiduciary, and should be made clearly. How about, "The fund's sponsor is paying me extra to recommend this fund to you"?

The Average Common Denominator

As I wrote in "The Feeling's Mutual," I think the most significant failing of the mutual fund industry – and the area where the most sweeping changes hopefully will be seen – relates to the governance responsibilities of fund directors. This can be looked at, for

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example, in terms of the management fees paid by mutual funds.

I believe most of the mutual funds in a given market sector pay management fees (setting aside administrative expenses and marketing charges) significantly above those paid by institutional accounts of comparable size. While the cash inflows and outflows experienced by mutual funds may cause higher turnover – and thus more work for portfolio managers and back office personnel – the successful funds also see asset growth. So I see no justification for higher fee rates.

It's the job of fund directors to police fees and ensure that they're justified and fair. Do they do this? Do they actively resist requests for increases or pursue reductions? Who goes to the mat on behalf of the fund holders to keep down the management fees? With fund boards often headed by current or retired management company executives, how vigorous are the efforts to minimize fees?

Here's what I think is a typical response, from John Hill, independent board chairman for the more than 100 mutual funds operated by Putnam: "We spend a lot of time looking . . . at costs. **We've had a rule for years that fund expenses can't be any higher than the median expenses of comparable funds across the industry**." (WSJ, January 13, emphasis added.)

In other words, **the directors aren't concerned about whether fees are fair or justified. Or whether they're comparable to institutional account fees. They just look at how their funds' fees stack up against those of other funds**. So if the average mutual fund in a given sector pays its management companies a fee well above the institutional rate, they're willing to do so also.

Suppose you wanted to invest $1 million of your own in high yield bonds. If you learned that a high yield mutual fund charges a .65% management fee while institutional managers charge .50%, you'd probably choose the latter. The knowledge that every high yield mutual fund charges .65% likely wouldn't alter your decision. But mutual fund directors seem to derive great comfort from it.

Last week I conducted an empirical study by accessing the websites of the first nine high yield mutual funds that came to mind. The management fees on seven of these multi-billion dollar funds exceeded the institutional norm of .50%, ranging from .58% to .75% and averaging .65%. I wonder what those funds' managers charge institutional accounts of similar size.

I've often heard the rejoinder that the "little guy" with $50,000 to invest can't get into a top institutional manager. And even if he could, he couldn't access the lowest fees. Thus it's reasonable that he pays fees above institutional rates – he can't do any better. But the fund could. **Why shouldn't the aggregation of 1,000 little guys, each with $50,000, pay the same fee as an institution investing $50 million?**

In this year's Berkshire Hathaway annual report, Warren Buffett shares his observations

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regarding mutual funds. "Year after year, at literally thousands of funds, . . . the directors had mindlessly approved fees that in many cases far exceeded those that could have been negotiated." In response, he proposes independent fund directors affirm each year that "we have negotiated a fee with our managers comparable to what other clients with equivalent funds would negotiate." We'll see if they do.

Are fund directors and executives putting their clients' interests first? Are they acting as the stewards of their clients' assets? Is there room for improvement? I feel there'll be a lot of scrutiny on this subject in the months ahead. Hopefully all mutual funds and their directors will end up acting a lot more like stewards.

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The New Math: 4 + (12b-1) = 3

Back in 1980, some genius figured out a way for the mutual fund companies to extract more from their funds: use investors' assets to pay the costs of fund distribution. Rule 12b-1 was adopted, permitting charges against fund assets for this purpose. According to a Morningstar report of January 6, "The rule was introduced following a period of substantial outflows for the fund industry and was intended to help funds grow their assets."

It was felt that asset growth would benefit funds and their investors, and thus it would be proper for investors to bear some of the cost. According to the rule:

> A [mutual fund] company may implement or continue a [12b-1] plan . . . only if the directors who vote to approve such implementation or continuation conclude, in the exercise of reasonable business judgment and in light of their fiduciary duties . . . that there is a reasonable likelihood that the plan will benefit the company [i.e., the fund] and its shareholders.

As Morningstar puts it, "the latter phrase would seem to require that the fee will result in more assets, and ultimately lower costs – otherwise, there is no benefit to the fund" (or its investors). **Of course, fund companies would have a clear conflict: more expense reimbursement for them would translate directly into lower asset values for their investors**. The SEC recognized this conflict and stated in the release accompanying the rule that it remained "generally concerned about (1) the conflicts which may exist between the interests of a fund and those of its investment adviser in deciding whether a fund should pay its distribution costs, (2) the likelihood that the fund will benefit from paying such costs, and (3) fairness to existing shareholders."

Thus the SEC required that 12b-1 fees be approved by majorities of the full board, the disinterested (i.e., independent) directors, and the fund's shares. It went on to state that, "Since rule 12b-1 does not restrict the kinds or amounts of payments which could be made, **the role of the disinterested directors in approving such expenditures is crucial**." (Emphasis added)

Based on data contained in Morningstar's excellent report, the results in this regard are not encouraging:

- Of the 15,774 funds tracked by Morningstar, 9,981, or 63%, charge 12b-1 fees.
- Of 4,556 12b-1 funds for which there is at least five years of data on expense ratios, 66.2% showed an increase in the expense ratio over the last five years.
- The percentage of funds showing expense ratio increases was roughly the same in 12b-1 funds as in non-12b-1 funds, but the average increase for the 12b-1 funds was slightly greater than for the non-12b-1 funds.
- When looked at for nine years, the comparison is more negative. 12b-1 funds showed expense ratio increases more often than non-12b-1 funds, and the differential between the increases in the two groups was more unfavorable.

As Morningstar puts it, "The above data strongly suggest that 12b-1 fees do not help funds materially reduce their expense ratios over time any more than would otherwise be the case, and may, in fact, do the opposite."

The fund companies have successfully transferred some of the costs of distribution to the funds' investors, using 12b-1 fees primarily to pay brokers in order to increase assets and benefit the fund companies. But there is no evidence – certainly not in the form of decreasing expense ratios – that they benefit investors, as they're supposed to. Despite this, Morningstar says, "Even as funds grow, their 12b-1 fees don't usually decrease or go away."

Why are 12b-1 fees so widespread and so persistent? And what's the reasoning of the independent directors who approve them? How do the directors feel about the buy-and-hold investor who invests in fund shares and pays distribution fees for the next twenty years? At best, I'm afraid, the director's answer regarding 12b-1 fees can only be the same as it is on management fees: "Our practices are no worse than those of our competitors."

One gem on which to close: currently, 12b-1 fees are being collected by 227 mutual funds (or classes of multiple-share-class funds) that are closed. How can the directors of funds that aren't trying to attract new investors justify the continuing imposition of fund distribution charges? How can they possibly interpret this as fulfilling their responsibilities to the funds' investors? Who do these directors represent?

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What Else?

I want to make it clear that just as I do not universally indict mutual fund executives and directors, I don't think stewardship problems exist only in the mutual fund industry. Most of the shortcomings disclosed in the corporate scandals of 2001-02 – in Enron, WorldCom, Adelphia, HealthSouth and Tyco – stemmed from the failure of executives to act on behalf of the shareholders who own the companies, and from the

failure of directors to police the executives.

The examples are endless: excessive compensation, unwarranted expenditures, phony accounting, and transactions intended only to deceive or obfuscate. In general, executives forgot that they run companies for their owners and instead tried to turn them into personal piggybanks. Or they decided to eschew honest reporting in order to hype results and thus their own economics. Directors of these companies haven't been accused of wrongdoing, just underachieving. They were too complacent and obliging, and thus asleep at the switch. As Warren Buffett says, "sadly 'boardroom atmosphere' almost invariably sedates their fiduciary genes."

The fundamental questions regarding corporate directors and executives are the same as those I proposed earlier regarding mutual funds: How much ends up in the pockets of the company and its owners, and how much in the pockets of the stewards? What means are used to accomplish this "wealth transfer"? How much is disclosed, and how clearly?

A number of thought-provoking examples were discussed in the Wall Street Journal of December 29, under the headline "Many Companies Report Transactions With Top Officers; 'Related Party' Deals Disclosed By 300 Large Corporations; Potential for Conflict." The article discussed not the headline-grabbing misdeeds of the scandal era, but matters that are routine at America's largest corporations. Often called "related-party transactions," they represent deals through which directors or executives receive benefits beyond their standard compensation. Of course, there's only one possible source for this enrichment: the companies and their shareholders. The Journal and I draw no conclusion about whether these things are proper. But they certainly can serve as fodder for discussing the performance of stewards. Here are a few examples:

- A company employs or has business ties with 17 relatives of senior officials.
- An executive is reimbursed for making business trips on his airplane.
- A company buys "financial advisory services" from a director's company.
- Directors receive hundreds of thousands of dollars in consulting fees, above and beyond their directors' fees. The fees reward the director/consultants for supplying "general information" or "maintaining and enhancing the company's strategic alignment." In the latter case, the recipient happens to be the company's second-biggest shareholder.
- A lawyer serves on a corporate board, and the company gives legal work to his firm.
- The son-in-law of a former board chairman runs a real estate joint venture involving the company, to which the company guarantees a minimum level of profitability.
- A company sells an amusement park to its controlling shareholder, with the buyer paying half the purchase price in the form of passes to the amusement park he just bought.

The Journal put it succinctly. "All these deals present the risk of conflicts between a company official's two roles: representative of the shareholder and individual seeking to get the best deal for himself." They raise significant questions:

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- Are these deals negotiated at arm's length? Are the terms the best the company can get?
- Who negotiates on behalf of the shareholders? How vehemently?
- Where a deal is proposed by a shareholder or shareholder/director with a dominant ownership position, who stands up for the minority shareholders?
- How can we be sure director A won't simply vote for director B's excessive deal in exchange for director B returning the favor?
- As I mentioned above, there has been no allegation – even in Enron, Tyco and Adelphia – of actual director impropriety. Rather, the questions surround the energy put into governance.
- After working together for many years, directors develop congenial relationships with each other and with the executives. How strongly will they then fight to resist questionable transactions between the company and their colleagues?
- Directors' fees can run into the hundreds of thousands, perhaps with stock options and perks in addition. Will a director risk this package to fight for some faceless shareholders?
- In short, can a director who serves at the pleasure of the chairman police the chairman and his other handpicked directors and executives? How can directors be guaranteed the independence that shareholders need them to have?

The industrial economy achieved great strides because of a number of advances, one of which was the separation of management from ownership (and the accompanying development of a class of professional managers). **The caveat, of course, is that managers and directors must serve diligently as stewards, protecting the interests of the firm's absentee owners. The system only works if the stewards – entrusted with responsibility on behalf of others – are up to the task.**

<u>The Bottom Line</u>

As you prepare your estate plan, you count on fiduciaries – lawyers, accountants, executors and trustees – to ensure that your assets will be disposed of as you intend. Would you want one of those fiduciaries to buy assets directly from your estate? Rent office space to your estate? Employ his relatives to serve your estate, for additional fees? Enter into a joint venture with the company you left behind? You'd expect the stewards of your estate to be "purer than Caesar's wife." **Even with motivations that are entirely honorable, it would be impossible for your fiduciaries to simultaneously represent themselves and your heirs on opposite sides of a transaction and still maintain both the fact and the appearance of fairness**. Thus they must content themselves with the compensation they've been assigned by you or by law. They must resist the temptation to do business with your estate in a way that could benefit them further . . . and to possibly move a little from your heirs' pockets to their own. We must expect no less from the stewards that we and our companies do business with every day.

In my memos I try to resist citing Oaktree as the paragon of virtue. But when we founded our company, we established an acid test that we routinely rely on to keep us

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on the right track. It was stated in our original brochure in 1995, and it has served us well ever since.

> **It is our fundamental operating principle that if all of our practices were to become known, there must be no one with grounds for complaint.**

To put it more simply, we assume everything we do will show up on "page one" some day – that nothing will remain a secret. Will there be a negative reaction? Will anyone object? It's a simple test, but it seems every day that the newspapers describe someone whose actions could only have been premised on the assumption that no one – not media, shareholders, clients, auditors or regulators – would learn the truth.

Will directors approve of executives' actions? Will shareholders feel that directors did their job correctly? Will clients conclude that fiduciaries have put responsibility to them ahead of their own interests? We think the standards for stewards' behavior are pretty clear cut, which means making these assessments shouldn't be that hard.

March 16, 2004

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Memo To: Oaktree Clients

From: Howard Marks

Re: The Feeling's Mutual

Throughout the recent, seemingly endless series of scandals, complaints, settlements, indictments and meltdowns involving corporations, auditors, brokerage firms, investment banks and hedge funds, the mutual fund industry remained untouched. That held true until September 3, when the Attorney General of New York State announced that Edward Stern of hedge fund Canary Capital Partners had paid $40 million to settle charges relating to improper dealings between Canary and a number of mutual funds. Since then, sordid disclosures involving mutual funds seem to be emerging on a regular basis.

The Canary That Swallowed the Cat

What did Canary do wrong? It admitted to "mutual fund timing" and "late trading." Both of these tactics take advantage of what I would call "temporal disconnects" in the process through which the price for transactions in mutual fund shares is set. A fund's Net Asset Value is supposed to reflect the per-share value of the assets held in the fund's portfolio, so that people buying or selling fund shares at that NAV pay or receive a fair price for their portion of the fund's portfolio. However, the process is non-dynamic, in that the NAV is set just once a day based on the underlying securities' latest closing prices and isn't updated for events that occur subsequent to the market closings or subsequent to the time of the calculation. Canary acted to profit from instances when security prices used to calculate the NAV had become "stale."

Most forms of market timing consist of people undertaking trades in order to implement their views regarding the future direction of security prices. Mutual fund timing is different, however, because the fund timer acts to profit from events that occurred in the past.

The opportunity for mutual fund timing arises from the fact that every fund's Net Asset Value is calculated as of the close of trading at 4:00 p.m. Eastern Time, and orders for fund shares entered up to that time are executed at that price. (Under the rules, orders placed after 4:00 p.m. are executed at the next day's NAV.) In brief, the mutual fund timer acts to take advantage of knowledge that a security price factored into a fund's NAV is out-of-date and not reflective of recent events. For an example, think of a mutual fund that holds a U.K. stock, the trading of which ceased at 4:30 p.m. London time. Since 4:30 p.m. London time is equivalent to 11:30 a.m. in New York, it's the stock's price at 11:30 a.m. Eastern Time that'll be used to calculate the NAV at 4:00 p.m. Thus a timer has 4½ hours in which to watch for a development rendering the London closing price obsolete, be it a general market movement or a company-specific event. In extreme

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cases involving infrequently traded securities, a timer may gain an advantage from knowledge that security prices haven't been updated for days or weeks.

At first glance, this all appears relatively benign. It is not improper in itself to trade on knowledge that the prices of some fund holdings are stale. All investors have potentially equal access to this information, and they all have the same ability to enter orders for fund shares up to 4:00 p.m. Eastern Time. Further, most of these situations involve small pricing imperfections that relate to a small portion of the fund's portfolio, and trading on them isn't likely to materially change the return on a long-term investment in the fund.

However, these trades can be highly profitable if the impact is magnified through minimization of the holding period. (E.g., taking advantage of a 1¢ error in a $10 NAV will add just .1% to the annual return if the fund shares are held for a year, but taking advantage of a new 1¢ disparity every day will increase the annual return by 25%!) Obviously, then, the key to achieving unusual profits through mutual fund timing lies in rapid-fire trading.

The problem is that "knowledge-advantaged short-term trading" is inimical to the interests of a fund's other holders – **in essence, these tactics permit a bystander to occasionally dart into the game and appropriate for himself some profit that otherwise would accrue to the fund's long-term investors** (and also to run up the fund's costs). There are tools the funds can use to discourage short-term trading: they can impose exit fees, turn away investors based on their past behavior, or revoke trades. Many funds have policies of fighting short-term traders, and those policies and the actions the funds will take are set forth in their prospectuses. That's where the problem comes in.

The complaint against Canary Capital states that, "Canary entered into agreements with dozens of mutual fund families allowing it to time many different mutual funds." Some of these funds ignored or contravened the policies stated in their prospectuses, and some accepted compensation for doing so. It is these actions on the part of the funds – and what Canary did to induce them – that are improper.

Late trading is highly analogous to fund timing – it's another form of "knowledge-advantaged short-term trading." However, in this form it consists of placing a buy or sell order for a mutual fund after the 4:00 p.m. deadline, for execution at the previously set NAV, in contravention of the SEC's "forward pricing rule." This is done in order to profit from developments that have occurred since 4:00 p.m. and thus are not reflected in the security prices underlying the NAV set at that time.

Consider the example of a mutual fund that has 4% of its portfolio in a stock that closed today at $40. An hour after the close, the company announces startlingly good earnings. A "late trader" may conclude that the stock will trade tomorrow at $50, and thus that, everything else being equal, tomorrow's NAV will be higher by 1% (the 25% stock price increase multiplied by the 4% position in the stock). Thus at 5:30 he enters an order to buy the fund at today's NAV, implicitly buying the company's shares at $40 and trusting

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that the NAV will rise tomorrow. On average, these trades can be highly profitable . . . if the holding period is short enough.

Late trading is less ambiguous than fund timing. It's wrong (and illegal), and no one should be able to do it. It, too, takes away some of the profit that should have gone to the fund's long-term holders. Again, Canary made improper arrangements that allowed it to divert those profits to itself.

Eliot Spitzer compared these two tactics to "betting today on yesterday's horse races." **I seem to recall gamblers calling this "past-posting"; see the classic movie "The Sting" for a tutorial. You'd be surprised how easy it is to win when you bet on races that already have taken place.** All you need is a way to get the bet down. And although making the bet may not be illegal in itself, the things you have to do to get someone to take the bet probably will be.

Canary found mutual fund companies that were willing to permit fund timing and late trading in exchange for capital commitments and fees. **In exchange for benefits for themselves, they were willing to assign some of their investors' profits to Canary.** The relatively open manner in which these arrangements were negotiated, documented and communicated to senior managers (who seem not to have taken exception) suggests to me that the people involved were more stupid (and/or ethically tone-deaf) than they were larcenous. Regardless, however, the schemes went forward, and the NY Attorney General says Canary made "tens of millions of dollars" in this fashion. (Two additional examples have come to light this week. A portfolio manager at Alliance Capital was suspended on suspicion of permitting late trading in his mutual fund in exchange for commitments of capital to his hedge fund, perhaps to increase the incentive fees in which he would share. Also, a former trader at hedge fund Millennium Capital pled guilty to engaging in after-hours mutual fund trading.)

Is This A Big Deal?

The money Canary made from these machinations, while very meaningful to Canary, probably represents a "flesh wound" for the funds' investors. Even "tens of millions" wouldn't materially change the investors' return when spread over a number of billion-dollar mutual funds and a three-year period.

Spitzer's complaint cites an academic study estimating that these tactics divert $4 billion of profits per year from their rightful owners, the funds' long-term investors. Again, a large absolute sum but not material in relative terms: $4 billion equates to six one-hundredths of a percent of the $7 trillion total invested in mutual funds – $6 per $10,000. On September 19, the Wall Street Journal cited research estimating that in the fund classes where fund timing might be most profitable, it could reduce investors' annual returns by 1-2%.

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So the damage done to an individual shareholder, or all of them put together, isn't enormously material relative to the amount invested, or even the annual return. And by the time the plaintiff's lawyers subtract their fees, the damages won for the aggrieved parties aren't likely to be noticeable.

It remains to be seen whether these tactics were widespread. In any case, I believe they're likely to be less so hereafter. The bottom line for me is that the Canary case, and the existence of fund timing and late trading, doesn't mean the mutual fund game is stacked against the investor. **So does that mean the mutual fund industry is free from major shortcomings? I don't think so.**

The Client Comes First!

Just as in other corners of the money management industry, mutual fund companies face opportunities to make tradeoffs between their own welfare and the welfare of their clients . . . the two of which are far from identical.

There's no question that the interests of clients should come first. Like lawyers, executors and trustees, money managers are fiduciaries. They hold positions of trust and owe a special duty to their clients. **They are not supposed to "split the loaf" between themselves and their clients. Rather, the whole loaf must go to the client, in whose favor all conflicts of interest should be resolved.** This is different from automobile sales, for instance, where it's completely acceptable – and universally understood – that the salesman will try to negotiate a higher sale price for a car in order to generate more revenue for his employer and more commission dollars for himself. Nobody's surprised to hear that car salesmen aren't fiduciaries.

But besides being fiduciaries, mutual fund companies – like other money management firms – are for-profit organizations and marketing machines whose ultimate goal is to collect assets and make money. (There's at least one conspicuous exception: the Vanguard Group – whose Convertible Securities Fund we run – is a not-for-profit company owned by the investors in its funds). Jack Bogle founded the Vanguard Group and is a constant gadfly on the subject of mutual fund company behavior. In an article in the New York Times of September 14, he put it simply:

> The Investment Company Act says that the interests of fund shareholders must be placed ahead of all others, but the interests of managers have taken precedence.

Who Protects the Clients' Interests?

In theory, a mutual fund is entirely separate and independent from the company that organizes it. The fund company doesn't "own" the fund or have the "right" to be its adviser. The directors of the fund are supposed to supervise the conduct of the fund,

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choose the adviser and revisit their decision annually. **I would characterize this arrangement as largely a legal fiction.**

The website of the Investment Company Institute, an industry lobbying group, states the following:

> The directors or trustees of a mutual fund, as in the case of other types of companies, have oversight responsibility for the management of the fund's business affairs. . . . Under state law, directors . . . are expected to exercise sound business judgment, establish procedures and perform oversight and review functions, including evaluating the performance of the investment adviser . . . Directors also owe a duty of undivided loyalty to the fund.
>
> Overlaying state law duties is the fundamental concept of the 1940 Act that independent fund directors serve as watchdogs for the shareholders' interests and provide a check on the adviser and other persons closely affiliated with the fund.

In my opinion, a number of significant issues surround mutual fund directors:

- **First and foremost, I am highly skeptical of their collective performance, given that it is unheard of for a fund company to be terminated as the investment adviser of one of its funds.** Have you ever heard of fund company XYZ being relieved of its duties as adviser of the XYZ Fund? From the fact that it never happens, we're supposed to believe that **in every case** the independent directors review the award of the management contract and conclude that XYZ continues to be the best possible manager for the fund. Can we possibly believe this process takes place? And that the fund company **never** deserves to be replaced?

- It seems unlikely that some of the directors in big fund families can know enough about all of their funds to make informed decisions. For example, the New York Times mentioned that the chairman of one fund board monitors 191 funds, and that a director oversees 60. How much can these directors know about the operation of each fund?

- There is good reason to question the independence of some of the funds' "independent directors." A good number of them are former employees of the fund companies. How likely are they to take away an advisory contract from their former firms? And how likely is an independent director to remain a director after he votes to fire XYZ as the manager of the XYZ Fund?

- Lastly, as in the case of corporations, there's the paradox of director compensation. Being a good director involves a lot of work, and it probably won't be done without a lot of compensation. But if the compensation is high enough, directors will want the job too badly to allow them to rock the boat. The board chairman referred to above was paid $816,000 last year. How likely is he to vote to fire the management company?

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The September 14 Times article included the following statements from observers of the mutual fund industry:

> Mutual fund directors sit on too many boards, and they are paid too much money for the time they devote to each individual portfolio. Under existing law the investment adviser is able to exercise a pervasive influence over the board. (Lewis D. Lowenfels, a securities lawyer at Tolins & Lowenfels)

> Directors certainly aren't doing much. We don't see much in the way of fee reductions – we see fee increases. When funds do terribly badly we don't see any management changes. We see directors' pay going up every year, and we see some pay that is just beyond the rule of reason, often paid to former executives of the management company. Fund boards only meet four times a year on average and they are still dominated heavily and intellectually by affiliated directors. (John C. Bogle)

There were also a number of quotes from fund management company spokesmen:

> The Putnam trustees have a long record of independence. They were the first to have an independent nominating committee and the first to have an independent chairman. (John A. Hill, Chairman of Putnam's board)

> The Fidelity board always is conscientious and diligent in the service of the fund shareholders. We are proud to have on our board individuals who have the highest standards of integrity and business ethics. (Vincent Loporchio, Fidelity spokesman)

> Our fund directors are without exception distinguished leaders from business and government whose experience and insight serve our fund shareholders well. (Phillip J. Purcell, Morgan Stanley CEO and fund director)

These protestations of diligence and independence would mean a lot more to me if the directors of these funds had a history of occasionally terminating the fund company as investment adviser.

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Issues Regarding Marketing

Ever since I was a teenager, I've heard that "mutual funds aren't bought; they're sold." In this regard they're like many other consumer goods. People don't decide they need them and figure out which one is the best. Often, rather, people are convinced to buy mutual funds through salesmanship.

Mutual fund families are money-raising machines. They include some of the best marketing companies in America. But some of their excellence serves to enhance their treasuries at the possible expense of their clients.

- Of course, the industry stands for the delivery of active investment management to the masses (although some firms also provide passive management through index funds). Sales are achieved on the basis of comparisons against other mutual funds. **Little is said about the long-run ability (or inability) of funds to beat the market.**

- Some mutual fund families offer so many funds, of such an amazing variety, that it's not illogical to wonder whether their motivations don't include a desire to always have **something** in the top quartile, and something to advertise with four stars.

- The funds in the bottom quartile, on the other hand, have a striking tendency to be merged out of existence – causing their performance records to disappear.

- The industry can be criticized for hyping (and selling) funds in whatever market sector is "hot." Certainly we don't see any warning labels to the effect that "hotness" can be synonymous with elevated prices, and thus with the potential for subsequent losses. The mutual funds that were on magazine covers during the tech bubble buried their clients**. It's not a coincidence that the average fund investor does worse than the average fund**; it's because investor money is constantly being lured into the funds that have been performing best, and thus are the most precarious.

- Lastly, compensation arrangements at mutual fund sales organizations can be adverse to the clients' best interests. For example, there may be incentives to steer capital to a brokerage house's in-house-managed funds as opposed to selling competing funds – because a dollar invested in an in-house fund brings the firm more profit. Once I described a fund to a marketer in terms of its current yield, yield to maturity and yield to call. He said, "Forget about that; let's talk about the thing that matters most: YTB" . . . meaning "yield to broker." There was no doubt where his motivation came from.

Issues Regarding Expenses

Most mutual funds operate in "efficient markets," where it's hard for one portfolio manager to get an edge versus the others. It's rare in the long run for any fund to beat its market benchmark or the other funds of similar riskiness in its niche. In efficient markets, expense minimization is the surest route to better net results, and it's for this reason that Jack Bogle pioneered the creation of index mutual funds. The performance of an index fund is certain to mirror that of the market, and expenses truly are minimized.

But almost all mutual funds are actively managed, and their expenses are anything but minimized.

- The average mutual fund carries investment management fees far above those paid by institutional investors, even those investing far smaller amounts of money.

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- The administrative expenses borne by the funds are high and, most significantly, have not demonstrated a tendency to decline in percentage terms as the size of funds has increased. That is, they haven't reflected any economies of scale.

- Many fund shareholders pay continuing marketing charges. Why should the costs of selling funds be borne by the shareholders? The usual response is that a bigger fund benefits its shareholders. But then, shouldn't increasing size result in a declining expense ratio?

- Even as the total assets of the top 25 equity funds were increasing 845 times over the last 51 years, the average expense ratio rose from .64% of assets to 1.50%, **an increase of 134%.** (Source: "The Mutual Fund Industry in 2003: Back to the Future," by John C. Bogle)

As the total assets of the top 25 equity funds grew from $2.2 billion in 1951 to $1.9 trillion in 2002, the charges for managing and administering a dollar of assets more than doubled. One wonders how many of the "diligent, independent" directors resisted those increases.

* * *

Are mutual funds good for America? In delivering market participation to retail investors and capital to America's companies, they're invaluable. In hyping hot investments and charging high fees for modest performance, they provide no great service.

Are mutual funds safe vehicles for investing? They're no safer than the markets in which they invest, or passive funds. But cost aside, they're not much worse.

Are mutual funds scandal-ridden? The Canary Capital incident doesn't worry me, but I think the long-term structural issues discussed above are very troubling.

Mutual funds are a good thing overall, and they could be made even better. But that will require a conscious decision to always place the interests of fund shareholders above those of the fund companies. In many cases, that's going to take a while.

October 2, 2003

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Memo to: Oaktree Clients

From: Howard Marks

Re: What's Your Game Plan?

As the summer ends, my thoughts turn to the tennis game I've been hoping to improve, the baseball season that's moving toward a conclusion, and the football season that's just getting started. It's enough to remind me of the role sports play in our lives . . . and in our thoughts about investing.

How Oaktree Plays the Game

Sometimes I feel I should apologize for the frequency with which I use sports metaphors to express my views on investing. And I worry that they'll fall flat in Europe and Asia. But that doesn't seem to stop me.

"The key to investment success isn't hitting home runs; it's avoiding strikeouts and inning-ending double plays." I say this over and over . . . and over . . . as you've no doubt experienced. But I truly believe it.

Investing is a testosterone-laden world where too many people think about how good they are and how much they'll make if they swing for the fences and connect. Ask some I-know-school investors to tell you what makes them good, and you'll hear a lot about home runs they've hit in the past and the home runs-in-the-making that reside in their current portfolio. How many talk about consistency, or the fact that their worst year wasn't too bad?

One of the most striking things I've noted over the last 35 years is how brief most outstanding investment careers are. Not as short as the careers of professional athletes, but shorter than they should be in a physically non-destructive vocation.

Where are the leading competitors from the days when I first managed high yield bonds 25 or 20 years ago? Almost none of them are around anymore. And astoundingly, not one of our prominent distressed debt competitors from the early days 15 or even 10 years ago remains a leader today.

Where'd they go? Many disappeared because organizational flaws rendered their game plans unsustainable. And the rest are gone because they swung for the fences but struck out instead.

That brings up something that I consider a great paradox: I don't think many investment managers' careers end because they fail to hit home runs. Rather, **they end up out of the**

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game because they strike out too often – not because they don't have enough winners, but because they have too many losers. And yet, lots of managers keep swinging for the fences.

- They bet too much when they think they have a winning idea or a correct view of the future, concentrating their portfolios rather than diversifying.
- They incur excessive transaction costs by changing their holdings too often or attempting to time the market.
- And they position their portfolios for favorable scenarios and hoped-for outcomes, rather than ensuring that they'll be able to survive the inevitable miscalculation or stroke of bad luck.

At Oaktree, on the other hand, we believe firmly that "if we avoid the losers, the winners will take care of themselves." That's been our motto since the beginning, and it always will be. We go for batting average, not home runs. We know others will get the headlines for their big victories and spectacular seasons. But we expect to be around at the finish because of consistent good performance that produces satisfied clients.

For Me, It Started With Tennis

In July, Larry Keele and I met with the Directors of the Vanguard Convertible Securities Fund to report on Oaktree's performance as the fund's manager. I was extremely pleased to see Charles Ellis of Greenwich Associates, one of the great thinkers in the investment field, whom I hadn't come across in many years. I was especially pleased to have a chance to tell him about the seminal part his 1975 article, "The Loser's Game," had played in the development of my thinking. The article employed a metaphor that was simple but profound.

Charley's article described the perceptive analysis of tennis contained in "Extraordinary Tennis for the Ordinary Tennis Player" by Dr. Simon Ramo, the "R" in TRW. Ramo pointed out that professional tennis is a "winner's game," in which the match goes to the player who's able to hit the most winners: fast-paced, well-placed shots that his opponent can't return. But the tennis the rest of us play is a "loser's game," with the match going to the player who hits the fewest losers. The winner just keeps the ball in play until the loser hits it into the net or off the court. **In other words, in amateur tennis, points aren't won; they're lost.** I recognized in Ramo's loss-avoidance strategy the version of tennis I try to play.

Charley took Ramo's idea a step further, applying it to investments. His views on market efficiency and the high cost of trading led him to conclude that the pursuit of winners is unlikely to pay off. Instead, you should try to avoid hitting losers. I found this view of investing absolutely compelling. I can't remember saying, "Eureka; that's the approach for me," but the developments over the last three decades certainly suggest his article was an important source of my inspiration.

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Because of his conviction that markets are efficient, Charley recommended passive investing as the best way to end up the winner – let others try the tough shots and fail. Oaktree's view is a little different. Although we believe in the existence of inefficient markets as well as efficient ones, we still view the avoidance of losers as a wonderful foundation for investment success. Thus we diversify our portfolios, limit the fundamental risk we'll take, try to buy things that provide downside protection, and emphasize senior securities. **We, too, try to win by not losing.**

Which Team Do You Want Out There?

I recently came up with a new sports metaphor that handily illustrates a crucial choice each investor has to make. It goes like this:

Think about a football game. The offense has the ball. They have four tries to make ten yards. If they don't, the referee blows the whistle. Off the field goes the offense and on comes the defense, whose job it is to stop the other team from advancing the ball.

Is football a good metaphor for your view of investing? **Well I'll tell you, it isn't for mine.** In investing there's no one there to blow the whistle; you rarely know when to switch from offense to defense; and there aren't any time-outs during which to do it.

No, I think investing is more like the "football" that's played outside the U.S. – soccer. In soccer, the same eleven players are on the field for essentially the whole game. There isn't an offensive squad and a defensive squad. The same people have to play both ways . . . have to be able to deal with all eventualities. Collectively, those eleven players must have the potential to score goals and stop the opposition from scoring more.

A soccer coach has to decide whether to field a team that emphasizes offense (in order to score a lot of goals and somehow hold the other team to fewer) or defense (hoping to shut out the other team and find the net once), or one that's balanced. **Because the coach knows he won't have many opportunities to switch between offensive and defensive personnel during the game, he has to come up with a winning lineup and stick with it.**

That's my view of investing. Few people (if any) have the ability to switch tactics to match market conditions on a timely basis. So investors should commit to an approach – hopefully one that will serve them through a variety of scenarios. They can be aggressive, hoping they'll make a lot on the winners and not give it back on the losers. They can emphasize defense, hoping to keep up in good times and excel in bad times. Or they can attempt to balance offense and defense, giving up on tactical timing but aiming to win through superior security selection in both up and down markets.

Oaktree's preference for defense is clear. In good times, we feel it's okay if we just keep up with the indices (and in the best of times we may even lag a bit). But even average investors make a lot of money in good times, and I doubt many managers get fired for

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being average in up markets. Oaktree portfolios are set up to outperform in bad times, and that's when we think outperformance is essential. Clearly, if we can keep up in good times and outperform in bad times, we'll have above average results over full cycles with below average volatility, and our clients will enjoy outperformance when others are suffering. We think that's a winning long-term combination.

Our game plan is built around defense. But that's not enough. We still need players with superior skills.

Finding Your Role Model

An article in the Wall Street Journal of August 8, entitled "Greatness in Our Midst," supplied the immediate impetus for this memo. It attempted to determine "who's the greatest living baseball player?" I'm no expert on baseball, but I liked the Journal's analytical approach and loved its conclusions.

Of the five players discussed, Barry Bonds came in fifth. "If you're looking for a peak-value player – a guy to play one season as well as anyone ever has – this is your guy. His past two campaigns have been other-worldly . . ." Bonds has a ton of ability, but he has yet to prove that he's "the greatest." Lots of fence-swinging investors have had otherworldly years, but few have completed outstanding careers.

Stan Musial placed fourth: outstanding at the plate, but below average on defense according to the Journal. It's tough to be the best without strong defense.

The #3 pick was Willie Mays. He ended his career with excellent stats in many offensive categories and he was an outstanding fielder, having made what has to be the most famous catch in baseball history. **Surprisingly, however, "in a career full of milestones, such as 3,000 hits and 600 homers, Mr. Mays doesn't own a single significant major-league record."** Records aren't what it's about; I think its competence, consistency, and an absence of weaknesses.

I like the way Ricky Henderson made it to runner-up. "Walks aren't sexy and steals aren't trendy," but Henderson holds the career record in both, and they positioned him to score. "And no one's done this more often than Mr. Henderson." It's kind of like being a steady performer in an unfashionable niche like convertibles, underdeveloped real estate or power infrastructure.

The Journal's pick for greatest living player: Henry Aaron. Unlike Willie Mays, the Journal says, "Hammerin' Hank holds more important records than any player in history: home runs, runs batted in, total bases, extra-base hits and Aggregate Bases," (which it defines as the sum of hits, extra bases, walks and steals). And I love the way he did it: **"Mr. Aaron's best seasons don't compare with those of Messrs. Bonds, Mays or Musial, but he played at a high level longer than any player in the history of the game."** In my book, that's the definition of #1.

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Few people, in any field, can hope to have talents and abilities like these men. But each of us can try to apply the same work ethic, and we can select our role models and decide how to conduct ourselves professionally. I want an Oaktree that's like Willie and Hank. **An exceptional career, even if it doesn't result in entries in the record books. Or a number of records, but for a lifetime, not a single great year**.

"Steady Eddie" Murray was inducted into the Baseball Hall of Fame just six weeks ago. He drove in at least 75 runs a year for a major league-record 20 consecutive seasons. **I'd like Oaktree's play to be described as "Steady Eddie."**

Sandy Koufax was pretty steady, too. In the six years 1961-66, he was named an All-Star six times and led the league in earned run average five times, in strikeouts per inning five times, in hits allowed per inning five times, in hits and walks allowed per inning four times, in shutouts three times, in innings pitched twice, in won-lost percentage twice, and in complete games twice. He pitched a no-hit game every year from 1962 to 1965, and the last of those was a perfect game. Over that period, he essentially had no weaknesses.

And, of course, I can't fail to mention Cal Ripken, Jr. He played all of his 21 seasons with the Orioles, a great oddity in a time when there's little constancy. And speaking of constancy, Cal is well known for his record of playing in 2,632 consecutive games, spanning a 15-year period. He also played 8,243 innings without missing one. Always there for his teammates and fans, he was chosen to start at shortstop in 17 consecutive All-Star games.

These are my baseball heroes. They personify my aspirations for Oaktree.

Playing Within Yourself

An expression from the broadcasting booth that's relevant to investing relates to the need to avoid pushing too hard. "Playing within yourself," they call it. **It means not trying to do things you're not capable of, or things that can't be accomplished within the environment as it exists.**

When the defenders drop back to cover the deep receivers, the intelligent quarterback throws short passes until they move up. That opens up the downfield routes, enabling him to complete the long bomb. **"He's taking what they give him," the commentators say, approvingly. It's what we all must remember to do.**

We simply cannot create investment opportunities when they're not there. In its first year, our newest distressed debt fund produced a 64% net IRR that's eye-popping . . . and impossible to replicate any time soon. So what should we do now? Rather than take profits and distribute the proceeds, should we prolong our holding periods or try to repeat our gains in new positions? And would it be smart to raise a big new fund? None of these, if the prospective returns on our holdings are inadequate and new investment

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opportunities are limited.

The dumbest thing we could do is to insist on perpetuating our high returns – and give back our profits in the process. If it's not there, hoping won't make it so. **All we ever can do is take what they give us.**

What's Better, Investing or Sports?

When people ask me what I like so much about investing, I usually go to the well for more comparisons to sports.

- It's competitive – some succeed and some fail, and the distinction is clear.
- It's quantitative – you can see the results in black and white.
- It's a meritocracy – in the long term, the better returns go to the superior investors.
- It's team-oriented – an effective group can accomplish more than one person.
- It's satisfying and enjoyable – but much more so when you win.

Many of the things that make sports fun to watch and participate in are the same things that make investing a great area in which to work. However, Warren Buffett came up with one way in which the investor has it better than the athlete.

In Berkshire Hathaway's 1997 Annual Report, Buffett talked about Ted Williams – the "Splendid Splinter" – one of the greatest hitters in history. A factor that contributed to his success was his intensive study of his own game. By breaking down the strike zone into 77 baseball-sized "cells" and charting his results at the plate, he learned that his batting average was much better when he only went after pitches in his "sweet spot." Of course, even with that knowledge, he couldn't wait all day for the perfect pitch; if he let three strikes go by without swinging, he'd be called out.

Way back in the November 1, 1974, issue of Forbes, Buffett pointed out that investors have an advantage in that regard, if they'll just take advantage of it. Because they can't strike out looking, investors needn't feel pressured to act. They can pass up lots of opportunities until they see one that's terrific.

> Investing is the greatest business in the world because you never have to swing. You stand at the plate; the pitcher throws you General Motors at 47! U.S. Steel at 39! And nobody calls a strike on you. There's no penalty except opportunity. All day you wait for the pitch you like; then, when the fielders are asleep, you step up and hit it.

Buffett's approach, like that of Williams, rewards patience, selectivity and a superior understanding of the underlying process. These are some of the things Oaktree likes to emphasize.

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Back to Tennis for the Wrap-up

Just as this memo was going into the home stretch, the Wall Street Journal's Allan Barra greeted the start of the U.S. Open tennis tournament with an article about Pete Sampras. For me, it provided the ultimate investment/sports metaphor.

> Mr. Sampras will need no future historians to make his case as the greatest tennis player of our time. His career credentials – the 14 Grand Slam singles championships; the 63-7 record in Wimbledon and seven Wimbledon titles in eight years; the 71-9 record at the U.S. Open with 87 consecutive service games won there; the six straight seasons of being ranked No. 1 – do that admirably.
>
> . . . Sampras the player wasn't always exciting. Mr. Sampras's outstanding quality was always his uncanny consistency. Was there an athlete of the past 10 to 12 years whose greatness has been harder to capture in highlights? **His highlights were hard to distinguish from his lowlights**. As I wrote in the Wall Street Journal a few years ago: "The definitive book on the man would have to be titled 'Pete Sampras: The Dullness of Excellence.' But who would buy it?" (August 26, 2003; emphasis added)

The sentence I've bolded struck me as particularly thought provoking. You could read it as saying "his best moments weren't much better than his worst moments" – not a very stirring thought. **Alternatively, you could read it as "his worst moments were almost as good as his best." In my view, that would describe a terrific money management career. We hope people will say it about Oaktree.**

* * *

I'm always careful to point out that there are many game plans capable of leading to success. Offense or defense. Home runs or batting average. Go for the long bomb, or pick them apart with short passes. Battle from the baseline or rush the net. There are as many choices as there are sports metaphors. But the best game plan will only take you as far as the starting line or the first pitch. Once the game is underway, it comes down to skillful execution. **The best strategy in the world won't pay off without skillful blocking and tackling.**

And having a talented, disciplined team that stays together – a rarity in sports or investing – doesn't hurt.

September 5, 2003

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Memo to: Oaktree Clients

From: Howard Marks

Re: The Most Important Thing

As I meet with clients and prospects, I repeatedly hear myself say, "the most important thing is x." And then ten minutes later it's, "the most important thing is y" (and then z, and so on). Am I being disingenuous? Am I confusing the unimportant with the important? Is it that I can't make up my mind? Or is memory loss setting in?

I hope (and believe) it's none of these things. If I have to come up with an explanation, maybe it's that I have strong feelings on a lot of subjects. Whatever the reason, I thought I'd collect in one place the precepts that guide Oaktree. Some might be more important than others, but in my view each one qualifies as "the most important thing." The most important thing – **above all** – is the relationship between price and value.

> **For a value investor, price has to be the starting point. It has been demonstrated time and time again that no asset is so good that it can't become a bad investment if bought at too high a price. And there are few assets so bad that they can't be a good investment when bought cheap enough.**
>
> When people say flatly, "we only buy A" or "A is a superior asset class," that sounds a lot like "we'd buy A at any price . . . and we'd buy it before B, C or D at any price." That just has to be a mistake. **No asset class or investment has the birthright of a high return. It's only attractive if it's priced right**.
>
> Hopefully, if I offered to sell you my car, you'd ask the price before saying yes or no. Deciding on an investment without carefully considering the fairness of its price is just as silly. But when people decide without disciplined consideration of valuation that they want to own something, as they did with tech stocks in the late 1990s – or that they simply won't own something, as they did with "junk bonds" in the 1970s and early 1980s – that's just what they're doing.
>
> During the course of my 35 years in this business, investors' biggest losses have come when they bought securities of what they thought were perfect companies – where nothing could go wrong – at prices assuming that degree of perfection . . . and more. They forgot that "good company" isn't synonymous with "good investment." Bottom line: **there's no such thing as a good idea regardless of price!**
>
> On the way to work the other day, I heard an "expert" tell a radio commentator

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how to invest in today's stock market. "Figure out which industries have been doing best, and pick out the leading companies in those industries. The professionals know which they are, so their stocks will sport P/E ratios that are higher than the rest. But that's okay: do you want the best companies or the worst?" **My answer's simple: I want the best buys**.

The most important thing is a solidly based, strongly held estimate of intrinsic value.

To value investors, an asset isn't an ephemeral concept you invest in because you think it's attractive (or think others will find it attractive). It's a tangible object that should have an intrinsic value capable of being ascertained, and if it can be bought below its intrinsic value, you might consider doing so.

Thus intelligent investing has to be built on estimates of intrinsic value. Those estimates must be derived rigorously, based on all of the available information. And the level of belief in estimates of intrinsic value has to be high. Only if the estimate is strongly held will a manager be able to do the right thing.

If there's no conviction, a drop in the price of a holding can weaken the investor's faith in the estimate and make him fail to buy more, or maybe even sell, just when a lower price should lead him to increase his position. And price appreciation, which under most circumstances should prompt a review of a holding's retention, can tend instead to seduce the investor into raising the target price and possibly buying more.

As expressed by David Swensen of Yale, **". . . investment success requires sticking with positions made uncomfortable by their variance with popular opinion. Casual commitments invite casual reversal, exposing portfolio managers to the damaging whipsaw of buying high and selling low."**

You may wonder from time to time about the high level of confidence exhibited by your managers. But bear in mind that the most profitable investments are unconventional, and maintaining unconventional positions can be lonely. When you buy something you think is cheap and then see its price fall, it takes a strong ego to conclude it's you who's right, not the market. So ego strength is necessary if a manager is going to be able to make correct decisions despite Swensen's "variance from popular opinion."

Oh yeah, one last thing: those strongly-held views had better be right. Few things are more dangerous than an incorrect opinion held with conviction and relied on to excess.

The most important thing is investing defensively.

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Oaktree follows a clearly defined route that it trusts will bring investment success: **If we avoid the losers, the winners will take care of themselves.** We think the most dependable way for us to generate the performance our clients seek is by avoiding losing investments. We don't claim that this is the only way to invest well; others may choose more aggressive approaches, and they may work for them. **This is the way for us.**

Investing defensively can cause you to miss out on things that are hot and get hotter, and it can leave you with your bat on your shoulder in trip after trip to the plate. You may hit fewer home runs than another investor . . . but you're also likely to have fewer strikeouts and fewer inning-ending double plays. The ingredients in defensive investing include (a) insistence on solid, identifiable value at a bargain price, (b) diversification rather than concentration, and (c) avoidance of reliance on macro-forecasts and market timing.

Warren Buffett constantly stresses "margin of safety." In other words, you shouldn't pay prices so high that they presuppose (and are reliant on) things going right. Instead, prices should be so low that you can profit – or at least avoid loss – even if things go wrong. Purchase prices below intrinsic value will, in and of themselves, result in larger gains, smaller losses, and easier exits.

"Defensive investing" sounds very erudite, but I can simplify it: **Invest scared!** Worry about the possibility of loss. Worry that there's something you don't know. Worry that you can make high quality decisions but still be hit by bad luck or surprise events. Investing scared will prevent hubris; will keep your guard up and your mental adrenaline flowing; will make you insist on adequate margin of safety; and will increase the chances that your portfolio is prepared for things going wrong. And if nothing does go wrong, surely the winners will take care of themselves.

The most important thing is avoiding bad years.

Preparing for bad times is akin to attempting to avoid individual losers, and equally important. Thus time is well spent making sure the downside risk of our portfolios is limited. **There's no need to prepare for good times; like winning investments, they'll take care of themselves.**

The mantra "beat the market" has been vastly overdone in the last 25 years, when outperforming an index has become the *sine qua non* of good management. But why should this be the case? **Keeping up with the market while bearing less risk is at least as great an accomplishment, although few people talk about it in the same glowing terms.**

At Oaktree we believe strongly that in the good times, it's good enough to be average. In good times, the average investor makes a lot of money, and that

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should suffice. In good times the greatest rewards are likely to go for risk bearing rather than for caution. Thus, to beat the averages in good times, we'd probably need to accept above-average risk . . . risk that could turn around and bite us in a minute.

There is a time when it's essential that we beat the market, and that's in bad times. Oaktree and its clients don't want to succumb to market forces in bad times and participate fully in the losses. And because we don't know when the bad years will come, we insist on investing defensively all of the time.

Our goal is to generate performance that is average in good times (although we'll accept more) and far above average in bad times. If in the long run we can accomplish this simple feat (which time has shown isn't simple at all), we'll end up with (a) above-market performance on average, (b) below-market volatility, (c) highly superior performance in the tough times, helping to combat people's natural tendency to "throw in the towel" at the bottom, and thus (d) happy clients. We'll settle for that combination.

The most important thing is facing up to the limits on your knowledge of the macro-future.

Investing means dealing with the future – anticipating future developments and buying assets that will do well if those developments occur. Thus it would be nice to be able to see into the future of economies and markets, and most investors act as if they can. Thousands of economists and strategists are willing to tell us what lies ahead. That's all well and good, but the record indicates that their insights are rarely superior, and it's never clear why they're willing to give away gratis their potentially valuable forecasts.

One thing each market participant has to decide is whether he (or she) does or does not believe in the ability to see into the future: the "I know" school versus the "I don't know" school. The ramifications of this decision are enormous.

If you know what lies ahead, you'll feel free to invest aggressively, to concentrate positions in the assets you think will do best, and to actively time the market, moving in and out of asset classes as your opinion of their prospects waxes and wanes. If you feel the future isn't knowable, on the other hand, you'll invest defensively, acting to avoid losses rather than maximize gains, diversifying more thoroughly, and eschewing efforts at adroit timing.

Of course, I feel strongly that the latter course is the right one. I don't think many people know more than the consensus about the future of economies and markets. I don't think markets will ever cease to surprise, or thus that they can be timed. And I think avoiding losses is much more important than pursuing

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major gains if one is to achieve the absolute prerequisite for investment success: **survival.**

The most important thing is being mindful of cycles (and where we stand in them).

We must never forget about the inevitability of cycles. Economies and world affairs rise and fall in cycles. So does corporate performance. The reactions of market participants to these developments also fluctuate cyclically. Thus price swings usually overstate the swings in fundamentals. When developments are positive and corporate profits are high, investors feel good and often bid assets to prices that more than reflect their intrinsic value. When developments are negative, on the other hand, panicky investors are prone to sell them down to overly cheap levels. So prices sometimes represent high multiples of peak prospects (as they did with technology stocks in the '90s), and sometimes low multiples of trough prospects.
Ignoring cycles and extrapolating trends is one of the most dangerous things an investor can do. People often act as if companies that are doing well will do well forever, and investments that are outperforming will outperform forever, and vice versa. Instead, it's the opposite that's more likely to be true.

The most important thing is contrarian behavior.

Because of the fluctuation of both fundamental developments and investor behavior, assets are sometimes offered for sale at bargain prices and at other times at prices that are too high. A technique that works most dependably is putting money into things that are out of favor.

Although investors often seem not to grasp it, it shouldn't be hard to understand: **only unpopular assets can be truly cheap. And those that are in favor are likely to be dear.**

For example, one of the best reasons for the profitability of distressed debt over the years is that there's no such thing as a distressed company everybody loves. By the time they've made their way to our arena, distressed debt companies can no longer be on what I call "the pedestal of popularity." **We buy at low dollar prices from depressed owners at a time when corporate performance is well off from the top. Not a bad formula.** Certainly that doesn't have to mean that the investment's cheap enough, but at least there's a low probability it's pumped up on hot air (or investors' ardor).

The momentum player buys what's up and bets that it'll keep going up. The style devotee buys one thing whether it's up or down. But the contrarian, or value investor, buys something that other people aren't interested in, in the belief that it's cheap and will become less cheap someday. There's no sure recipe for profit,

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but I think this one stacks the cards in your favor. **As Sir John Templeton put it, "To buy when others are despondently selling and to sell when others are euphorically buying takes the greatest courage but provides the greatest profit."**

The most important thing is patient opportunism.

At Oaktree we try to sit on our hands. We don't go out with a "buy list"; rather, we wait for the phone to ring (while we do our research and analysis). If we call the owner and say, "You own x and we want to buy it," the price will go up. But if the owner calls us and says, "We're stuck with x and we're looking for an exit," the price will go down. Thus, rather than initiating transactions, we react opportunistically.

One of our mottos is "we don't look for our investments; they find us." In general, that means investing from the bottom up, not from the top down – from the list of things that are available cheap, not in things we think it'd be great to have a position in. When you're a top-down investor, you predetermine that a given percentage of the portfolio should be invested in a certain sector, and then you proceed to look for the best bargains in that sector. The bottom-up investor has no such preconception; he looks for the best bargains, regardless of where they can be found. Sector allocation falls out largely of its own accord (but hopefully with concentrations held to tolerable levels).

The most important thing is saying what you'll do, and doing it.

The world of investing – where we deal with an unknown future – is filled with vagaries. Trying hard will take you only so far; no one is wise enough to get it right every time; and even the most well-intentioned manager will make mistakes on occasion. Therefore, if you're going to have successful relationships, effort, wisdom and good intentions aren't enough. A relationship also needs a solid foundation.

In my opinion, that foundation comes best when managers tell clients exactly what they can do and will do . . . and then do it. Managers should be aware that usually they're not hired to pursue profit any way they can think of. Instead, it's to play a specific role in the client's manager lineup and impart specific attributes to the portfolio. Promising too much, or doing things outside one's charter, are surefire means to unhappiness.

If every manager described his or her activities in explicit terms, and then stuck entirely to what had been described, the vast majority of problems between managers and clients would be avoided.

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The most important thing is preserving investment flexibility.

This sounds like a good idea, but of course it can be the polar opposite of the explicitness recommended above. Given that it's impossible to know what the future will look like, however, it can be unwise to define too narrowly the tactics and strategies you'll apply.

Clients want managers to be specific so that they'll know what to expect and have a high probability of getting what they signed on for. But excessive specificity can hamstring the manager. How can these two points be reconciled?

In our funds over the years, we've made numerous successful investments that weren't foreseen when the funds were formed. **I think the key to bridging this gap is to be very specific about your philosophy, goals and investment style, and to restrict as little as possible the specific strategies and tactics you'll employ.**

Once a manager has earned the trust of his (or her) clients, he may be granted leeway to change tactics so as to be able to adapt to changing market conditions. And clients can be confident that they'll get the investing style they want without limiting the tactics used to get it. **In the end it should be borne in mind that there must be flexibility in order for a manager to be able to act opportunistically, and opportunism (applied skillfully) is an absolute necessity if one expects to keep up with changing market conditions.**

The most important thing is refusing to manage too much money.

The investment management business is plagued by a dilemma: **Good performance can bring more money, and too much money can bring bad performance.**

There, I've said it!! – at the risk of being thrown out of the money managers' union. All managers want to manage more than $1, or $1 million, and so they grow their assets. And certainly the first dollar of growth doesn't doom performance to mediocrity. **But it absolutely cannot be argued that there isn't a point at which incremental capital causes performance to decline.**

One of my favorite incidents occurred when our local charity's investment committee was looking for a new manager. When I asked one candidate whether his firm had a limit on assets under management, he said, "We don't see any reason for a limit." But when I asked why their relative performance had declined precipitously in recent years, he said, "Well, we used to manage a lot less money." Less than insightful, I think (and he didn't get the job).

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I can assure you that turning away money is the hardest thing for a manager to do, but it's also one of the most important. For the last twenty years we've put limits on our strategies and turned away money, and we're extremely glad we did.

The most important thing is understanding the implications of market efficiency.

I believe strongly that some markets are quite efficient, meaning the collective actions of informed, diligent investors tend to make assets in those markets sell where they should. Assets become priced such that their prospective returns are fair relative to the perceived risk – but only fair. Clearly, if assets are priced fairly, it's hard to find bargains. And if it's hard to find bargains, there's no reason to go to the trouble (and expense) of active management. **In efficient markets, few investors are capable of regularly outperforming the benchmarks and each other, and the range of investor performance is quite tight.** In mainstream, large-capitalization stocks, for example, the management fees and transaction costs entailed in active management don't seem to be earned back with any regularity.

But I also believe in the existence of relatively inefficient markets. In these markets, information may not be disseminated evenly; investors may not be objective or many in numbers; and uncommon expertise may be required. Under these circumstances, assets can be mispriced relative to their intrinsic value, relative to their risk, and relative to each other. And discernible mispricings are a necessary condition for profitable active management. **Only if mispricings exist such that they can be exploited by skillful managers can consistent outperformance be possible.**

Finance theory holds that because it takes higher prospective returns to induce investors to make riskier investments, risk and apparent prospective return must be correlated. It also holds that since investors can't add to returns through active management, the only way to increase returns is by accepting more risk. This makes great sense with regard to markets that are efficient. **And it highlights a final attraction of less efficient markets: that risk and return need not be so perfectly correlated. Thus, in inefficient markets, "low risk" doesn't have to mean "low return." In fact, I think our team's greatest accomplishment is having demonstrated over a long period of time that low risk and high returns can go hand in hand (and, in fact, that low risk can lead to higher returns).**

Because of my views on market efficiency and its ramifications, I made a conscious decision 25 years ago to work exclusively in markets I believe are inefficient. It's there that hard work and skill can pay off dependably. Common sense (and the record) suggest that if investors are going to earn superior risk-

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adjusted returns, it's not likely to be by doing the same things everyone else is doing. **The best and most safely earned profits are apt to be found outside the mainstream, not inside.**

The most important thing is being leery of leverage.

The key elements in Oaktree's investment approach include focusing on what's out of favor; ascertaining intrinsic value and trying to buy for less; and adding value by working with assets once we own them. **If done well, these things can simultaneously increase prospective return and reduce risk. Leverage, on the other hand, increases prospective return and <u>increases</u> risk.**

There's nothing magic about leverage. It increases upside potential, but it also reduces or eliminates the margin of safety. Leverage is just an application of the Las Vegas maxim, "The more you bet, the more you win when you win." But I think people tend to omit ". . . and the more you lose when you lose."

As Warren Buffett puts it, "It's a very sad thing. You can have somebody whose aggregate performance is terrific, but they have a weakness – maybe it's alcohol, maybe it's susceptibility to taking a little easy money – it's the weak link that snaps you. And **frequently, in the financial markets, the weak link is borrowed money"** (emphasis added).

At Oaktree we believe it may be okay to use leverage to take advantage of unusually generous profit opportunities, but it's dangerous to use leverage to try to wring big returns out of small profit margins.

The most important thing is acknowledging the impact of uncontrollable factors.

Defensive investing, insistence on value, and shying away from leverage -- they're all important. **And much of the reason they're important stems from the fact that so little of short-term performance is under our control.**

Clients say, "We expect you to be in the top quartile after x years." What can we do to satisfy those marching orders?

- We can try hard, but we don't do any more for the client who wants top quartile performance than we do for the one who wants us to be above the median.

- We can put together the best portfolio we can, but doing so will have only limited impact on our relative performance. How we perform in relative terms will depend largely on what our competitors do.

- We can follow all of our guiding principles and execute with skill, but the

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performance of the portfolio will be highly dependent on the environment that unfolds.

- We can do everything for the best of reasons, but we can get unlucky (or our competitors can get lucky).

And that's my point. **There are a lot of moving parts in this machine, and many of them are beyond our control.**

We build portfolios based on the intrinsic values we see and the developments we think will unfold. But uncontrollable factors will have a profound impact on the results. It's essential to remember that the fact that something's probable doesn't mean it'll happen, and the fact that something happened doesn't mean it wasn't improbable. **So we educate our clients as to what they can fairly expect, and we count on them to bear in mind the difference between probabilities and outcomes.**

If we see that a manager has reported a good year, it's hard to know whether to attribute it to skill, luck, or the fact that the manager's style was the right one for that moment. Additional years of data can reduce the role of random factors, but numbers can never lead to certainty. Thus the matter of choosing managers can't be entirely quantitative; instead, it has to rely heavily on a meeting of the minds.

The most important thing is telling it like it is.

Given the vagaries involved in the investment process – and they are legion – a thorough understanding based on high quality communications is key in client-manager relationships.

The investment management business employs a lot of people whose job it is to communicate with clients and prospects. I've met a lot of them, and they're articulate, intelligent and personable. Their job is to put their firms' best foot forward. But how?

There's a lengthy continuum – or is it a slippery slope? – from candor, through "spin," to gilding the lily, and ending in deceit. And in 35 years I've watched people operate at every point along that continuum.

When Oaktree was formed in 1995, we established constructive communications as one of our key business principles. Among the elements we stress are these:

- **Remember that candor and thorough understanding do more to build a strong, long-term relationship than forcing every development into a positive light.**

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- Don't take credit for things that go right for the wrong reason.
- Admit when things go wrong – without hiding behind excuses.
- Communicate not just the facts, but also an honest interpretation.

As you know, communicating both inside and outside Oaktree constitutes a major part of my job. It's also the source of a great deal of my satisfaction.

The most important thing is maintaining constructive personnel principles.

Personnel turnover is endemic to the investment management industry and poses an enormous threat to long-term excellence. My career got its start at an institution where large numbers of raw recruits were trained each year, under the assumption that there would always be significant attrition. Because any greatness was expected to emanate more from the institution than from the individuals, however, people were considered fungible and turnover was accepted.

But investing greatness, if it is to be attained, must come from people. Investing is an art, not a science, and few people can master that art. Superior investing is not democratic or egalitarian. If an organization is to be the best, it must find, train and retain the best. Not only does turnover drain off your best people, but it also takes their institutional memory and leaves you bogged down in hiring and training their replacements.

We always have placed great emphasis on preventing turnover, and the results are visible – in the very small number of senior professionals who have moved on to other employment in my 25 years in portfolio management, and in the investment performance that my long-term colleagues have produced. The keys have been (a) hiring team-oriented players who care about something other than just making top dollar, (b) creating a collegial environment in which such quality people will want to work, (c) avoiding stifling bureaucracy, internecine office politics, destructive competition, and overemphasis on short-term results, and (d) always sharing the fruits of our success.

This is one of the few areas where there is a magic formula: be fair. Oaktree's founders always say it's our goal to own less and less of a firm that becomes worth more and more. We think sharing ownership with key colleagues – rather than zealously holding onto it – is key in building a great firm.

The most important thing is acknowledging the difficulty inherent in keeping a partnership intact, and going way out of your way to make it work.

The statistics on divorce suggest that successful long-term unions are far from universal. Certainly in the high-octane investment management world, partnerships form and break up with regularity. But it doesn't have to be that way.

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Last month I was privileged to celebrate the twentieth anniversary of my partnership with Sheldon Stone, who joined me as an analyst at Citibank, moved with me to TCW, and has run our high yield bond portfolios since 1985. I found a quote from Andrew Kilpatrick's "Of Permanent Value" with which to mark that occasion, and Shel and I agree it's a pretty good formula for a successful partnership.

> I think you'll probably start looking for the person that you can always depend on; the person whose ego does not get in his way; the person who's perfectly willing to let someone else take credit for an idea as long as it works; the person who essentially wouldn't let you down; who thought straight as opposed to brilliantly.

Our success in retaining 100% of our senior partners since 1983, and in maintaining harmony, is something I think about a lot. In doing so, I've identified some of the major impediments to a smooth-running partnership.

First, conflicts of demeanor or style can have a very negative effect on cohesiveness. In the bull market, the aggressive partner says, "That wet blanket's holding us back." In the bear market, the cautious partner says, "That animal's getting us killed." Many of Wall Street's greatest flare-ups have been attributed to "culture clashes," such as the mid-1980s battle between traders and investment bankers that brought Lehman Brothers' independence to an end. I can honestly say that all of Oaktree's leaders subscribe equally to the principles on which our firm operates.

Second, a partnership is problematic if partners don't respect each other's contribution. "I can handle all I do and all of what he does" is a statement with dire portent. In contrast, our interaction at Oaktree is highly symbiotic, and we're fortunate enough to appreciate that fact. I know my partners do a better job of portfolio management than I ever did. And they're glad to have me out visiting our clients, so they can stay back and manage their portfolios.

Last, any partnership can be imperiled by the wrong kind of partner. There are a lot of people in the investment business about whom we might say, "He's a jerk, but he can make you a lot of money." And those people tend to get hired, because the profits they'll make are so tempting. But the only way to avoid rancor, strife and divisive debate is to work with people you respect and like (and vice versa), and who value working together in harmony above making the most money and winning every argument.

So the recipe's simple: shared values and complimentary skills; mutual respect and an appreciation for each other's contribution; and people with whom you enjoy associating.

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The most important thing is having something you stand for.

> At a recent manager symposium, Roz Hewsenian of Wilshire Associates listed ten things a manager needs in order to survive a period of contracting asset prices and revenues. I've saved one of them for last: **a mission other than Assets Under Management.**
>
> Every day, investment managers are required to:
>
> - negotiate the uncertainties entailed in investing,
> - manage their businesses in a changing environment,
> - deal constructively with talented, aspiring employees, and
> - keep client relationships solid, even though there'll always be unsuccessful investments.
>
> To be able to do all of these things simultaneously, it helps to have a set of guiding principles and a well-thought-out approach. With these you can know how to set your course. You can arrive at decisions that reflect a consistent set of values. And your clients will know what your firm stands for and what to expect from you; **nothing paves the way for a mutually successful relationship better than reasonable and deliverable expectations.**
>
> Here – unlike in personnel policies – there is no magic formula. There are many ways to answer the myriad questions that arise in doing the things a manager has to do. It matters less which answers you arrive at, than that your answers are well thought out, internally consistent, principled, and firmly adhered to. What I've described above are the answers that Oaktree considers "the most important things."

So that's the list. On reviewing it, I find I've touched on all six tenets of Oaktree's investment philosophy, and most of our business principles as well. We're committed to sticking to these eighteen points through thick and thin. **Doing so takes solid commitment applied with a deft touch – not obstinacy, but insight.** This is especially true in negotiating the conflicts: being clear about your investment intentions but not surrendering investment flexibility; holding fast to your views but stopping short of hubris. And maybe that's the nineteenth point: **never think it'll be easy**.

July 1, 2003

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Memo to: Oaktree Clients

From: Howard Marks

Re: What's Going On?

In recent months, a few Oaktree clients have asked me to take part in give-and-take sessions with their investment staffs and other money managers. The discussions have revolved around changes in the investment environment and the implications for the future. The process of thinking about those subjects has given rise to this memo.

A Sweeping Change

In the last three years, there have been massive changes in markets, investment thinking, expectations and behavior. The term "paradigm shift" certainly is overused, but in this case I don't think it's off target.

During the 1990s and for many years prior, institutional investors such as pension funds and endowments targeted returns of 8-10 %. The task of appropriately allocating assets was made easy by the universal expectation (accompanied by sixty-plus years of supporting data) that stocks "normally" return 9-11 % per year. When the main engine of a portfolio's performance can be counted on for returns that exceed what's needed overall, asset allocation is a relatively easy task. Put a substantial majority of the portfolio in stocks, add a few bonds in a nod to conservatism and an allocation to private equity for spice, and the job's done.

The only question was what you wanted your return to be (within the range of 8-10%), and the solution was found in the magnitude of your equity allocation. Certainly, overall portfolio returns in the range of 8-10% were viewed as readily attainable.

But all of a sudden, no one thinks so anymore. Goals at that level (or even a little lower) now seem quite daunting. What has changed is the equity return people feel can be expected. History is out the window, and few people believe any longer in 9-11% from equities. Moderates talk about long-term returns between 4% and 8%, and the bear case is considerably lower (or negative). With high grade bond yields also in the low to mid-single digits, the two biggest asset categories are promising returns that fall short of the overall goal. Thus it's unclear how that goal can be achieved while holding any meaningful amount in stocks and/or high grade bonds – or whether it can be achieved at all.

We all know what happened to prospective bond returns: economic weakness and the Fed's stimulative actions combined to lower prevailing interest rates, and thus promised bond returns, to 40-year lows. But what happened to the prospective return on equities?

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Simply put, people began to search for the elements that would lead to continued lofty equity returns, and they failed to find them. In the 1990s, few people pondered the fact that if corporate profits grow in single digits and "normal" equity performance is 9-11 %, two decades or so of returns almost twice that might be borrowing from the future. Now the future is here and that realization has set in. Those single digit profit increases (accompanied by low dividend yields) are expected to result in mid-single digit equity returns if P/E ratios are unchanged, and less if multiples shrink.

So the question has switched from "How much would you like to make and spend?" to "How much can you make safely, and what will that let you spend?"

Is There No Opportunity in Equities?

It is clear that (a) most people's expectations for equities now are in the mid single digits, and (b) equities are attracting as little interest as at any time in the last 25 years. There are, however, factors supportive of a more positive case:

- The most obvious is the fact that stock prices are off substantially since hitting record highs in early 2000.

- Another positive might be seen in the fact that the curtailing of expectations for equity returns coincided with the incurrence of substantial losses. Thus it's tempting to think that the moderation of expectations may have stemmed from the corrosive emotional effect of recent losses on investor psyches, not from new data or objective analysis.

- In fact, it's comforting to note a hopeful analogy. In August 1979, after a harsh correction in 1973-74 followed by several sluggish years, the cover of Business Week proclaimed "The Death of Equities" . . . just prior to the ignition of the historic bull market that lasted through 1999. As in that case, with attitudes toward equities beaten down so universally, the contrarian position today might be to bet heavily on them. Sentiment toward equities can hardly get worse and, unimaginable as it seems, it just could get better.

At the same time, there are negatives to be dealt with:

- Even though stock prices have come down substantially, the average P/E ratio remains high – in the upper teens or low twenties, depending on whom you ask. In the last major cycle, which bottomed in the 1970s, P/E ratios reached levels like today's at the high and fell to single digits when prices hit bottom. By that standard, today's valuations suggest a high, not a low.

- One reason today's P/E ratios are high in the absolute is that interest rates are so low. Low interest rates justify a high valuation of future cash flows. But what

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does that imply for P/E ratios (and stock prices) if interest rates were to rise from today's historic lows?

- Lastly, we have to wonder where the energy for a more bullish market will come from, and specifically whether a generation of investors who've been burned is lost from the stock market forever.

My own take is that even if the 9-11% historic long-term return on stocks remained relevant with regard to the future, (and certainly that's the best anyone could hope for), the above-average gains of the last two decades have borrowed from the future, and the high resulting P/E ratios imply an average return in single digits over the next few years.

At the same time, I think some good individual opportunities may be found among orphaned small and mid-cap stocks. Because investment banks are no longer supposed to recommend stocks just to get investment banking business, their coverage lists might contract. The financial pressures and resulting layoffs at the big research firms are leaving many companies without coverage. Many un-researched companies will likely emerge from financial restructurings and corporate spin-offs. Put it all together, and expert stock pickers probably will find some good opportunities in the newly less efficient market.

<u>The Market Cycle at Its Wildest</u>

In a memo on cycles entitled "You Can't Predict. You Can Prepare." I discussed the general progression of a market cycle:

- Favorable developments and positive investor psychology cause prices to rise.
- Reports of price appreciation attract momentum players, who shout, "We'd better get in; who knows how far this can go." Their purchases of already-appreciated assets move prices still higher on a trajectory that appears capable of rising forever.
- Eventually, prices get so high that they vastly exceed intrinsic values.
- A few value-conscious investors step into the crowd to sell. Prices turn down, sagging under their own weight or perhaps because fundamental developments begin to be less favorable.
- Less-favorable developments and less-favorable psychology combine to force prices below intrinsic values.
- The pain of losses becomes so great that investors flee and prices reach giveaway levels. This time it's, "We'd better get out; who knows how far this can go."
- The first iron-nerved contrarians recognize that good values are available and start to buy.
- Others soon follow, and eventually the number of new buyers exceeds the number of sellers. Prices stop falling . . . and begin to rise.

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- Reports of rising prices and the bargains obtained by those astute pioneers attract the masses to the marketplace, who shout, "We'd better get in . . . ," and the cycle continues.

I've always known about this cycle. I've seen it at work for decades. **But I've never seen it function – in terms of the extent and swiftness of the fluctuations – as it did with regard to low-grade debt over the last year.** Because the performance of mainstream equities has little direct impact on Oaktree, we remain largely disinterested observers of stock market developments. But we are vitally interested in what happens in credit-related investments, and the change there has been mind-boggling.

The Pricing of Credit Risk in 2002-03

It's hard to believe, but the biggest cycle I've ever seen in distressed debt began just about a year ago.

- With investors softened up by economic sluggishness, depressing world events and the realization of just how wrong they'd been in the 1990s, conditions were ripe for a crisis of confidence. The catalyst came in the form of an incredible series of corporate scandals.

- At first, Enron was viewed as an isolated instance of corporate venality. But then Tyco, Adelphia and Global Crossing began to suggest a pattern. Arthur Andersen was convicted and had to shut down. The capper was the disclosure of massive fraud at WorldCom. Billions were lost, confidence was dashed, and investors – so certain just a year or two earlier – no longer felt they had a foundation on which to base any confidence.
-
- Bond fund managers who thought they had bought money-good securities found themselves holding distressed debt. Bonds they felt good about buying at prices of 90 or 100 turned scary at 20 or 30. High grade bond managers sold down-graded bonds (or bonds expected to be downgraded) as required or to dress up their statements, and everyone sold to reduce concentrations, raise cash to meet withdrawals, or cut risk.
-
- Because of this combination of events, we were able to invest more than $2 billion last summer in distressed debt priced very attractively. We put massive amounts into the public bonds of sizeable corporations – like Tyco, Qwest, Lucent, Nortel and Corning – that we thought might pay interest and principal as promised. In the past, we've always thought our distressed companies were 99% likely to default or go bankrupt. Now we were paying death's-door prices for bonds that we thought had a good chance of escaping that fate.

In this way, the downswing of the distressed debt market cycle gave us unusually good investment opportunities: significant companies that might survive, giveaway prices,

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potentially high prospective returns, in vast quantities. We were buying at yields well above 20%, and total returns that we thought would be far higher if our credit judgments were validated. We felt our purchases in June-September 2002 rivaled those of 1990, which had produced our highest returns to date.

But the most amazing thing is what happened next. The market turned on a dime, and in the next six months it became as strong as it had been weak.

What caused the turn? Maybe it was the fact that scandals stopped erupting. Maybe it was the first few successful sales of assets made to improve balance sheets. Maybe investors realized that distressed debt offered excellent investment opportunities. Maybe distressed debt fund managers regretted having missed a major opportunity to invest during the summer. Or maybe it was Warren Buffett's announcement that Berkshire Hathaway had increased its holdings of lower-rated debt by $6 billion in 2002. Whatever the reason, sentiment turned from negative to positive . . . with a vengeance.

Based on data for the OCM Opportunities Fund IVb, the distressed debt positions we bought in 2002 returned almost 20% in November alone, and 23% in the fourth quarter of the year. They took off again in early 2003, rising 15% in the first quarter and another 10% in April. For the six months from November through April, the total estimated gain has been more than 55% (and more than 41% net of fees and expenses).

This was yet another example of the schizophrenic swing of the investment pendulum: Trust replaced skepticism. Gain replaced loss. Greed replaced fear. And, incredibly, panic buying replaced panic selling. The cycle had swung from morosely negative to ebulliently positive in less than a year. **And thus the Tyco bonds we bought in May 2002 at a 24% yield became gilt-edge securities that could be sold in January 2003 – at yields of 4%-plus.**

We've seen the same cycle in high yield bonds. Last July, because investors had developed allergies to high yield bonds, the average bond had to provide more than 1,000 basis points more yield than a Treasury note of comparable maturity to induce investors to buy it. But now, investors have come to lust after high promised returns, and they are willing to buy the average high yield bond at a spread of just 600 basis points or so. The resulting estimated net return on our high yield bond portfolios: more than 15% for the 6 months November through April.

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<u>But Why?</u>

Most observers are familiar with the returns reported above, and with the changed attitudes toward credit risk that lie behind them. But I think the behavior of distressed debt and high yield bonds should be viewed in a broader context, not in isolation. There are big-picture influences behind these trends.

What happens when people get excited about an asset class?

- capital floods in,
- prices rise,
- current returns soar, and
- prospective returns decline.

But don't forget the significant ramifications. Investors lose interest in other asset classes; thus their prices fall (at least in relative terms) and their prospective returns rise. In other words, the popular asset becomes more expensive and the rest get cheaper.

A powerful cult of equity believers held sway from 1978 – when I started to manage portfolios – through 1999, with only minor interruptions. The average return on the S&P 500 was over 17%. There wasn't a year in which the index declined more than 5%. Equity managers and analysts showed up on magazine covers and TV screens. Equities were fawned over in books ranging from "Stocks for the Long Run" (which explained that stocks could be counted on to beat bonds, cash and inflation in any period, providing it was long enough) to the self-explanatory "Dow 36,000." The man on the street accepted stocks as a sure thing.

What both the man on the street and the investment professional missed was that the appreciation that powered stocks' record returns had borrowed from the future and made them very expensive. And the view that stocks were all you needed also implied that other assets were superfluous. Thus bonds went out of favor, at least in relative terms. In the 1990s, few of the people I met could think of a convincing reason for their fixed income allocations. Maybe that made bond yields and yield spreads more generous than they should have been. **Stocks in favor and rich; bonds out of favor and cheap.**

And since the beginning of 2000? Stock prices are down. Confidence in stocks has been dashed. Equity return expectations have collapsed. Bonds and their contractual returns suddenly seem more attractive. Bond prices are up. Credit spreads have narrowed. The proof is seen in the performance described above.

<u>The Power of Capital Flows</u>

I want to discuss one last element that's been behind the powerful appreciation we've seen recently. I think the explanation's easy.

In the long run, investing is about value and the expectation that, eventually, price will catch up. But in the short run it's about psychology, emotion and popularity. The influence of those three factors comes through their effect on flows of capital, and **in the short run it's capital flows that have the most profound impact of all.**

The equity market is huge: $8.6 trillion in the U.S. alone. The high yield bond universe is about a tenth that size, and distressed debt is a fraction of that tenth. When a few

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billion dollars were withdrawn from stocks, the effect was moderate. But when those same refugee dollars sought deployment in our niche markets, the impact was dramatic.

In the last few months, what had been a buyers' market has become a sellers' market. Last year, especially in distressed debt, it was "the more money, the better." Now it's the opposite.
In the long run the return on an investment will follow the fundamentals, and in that sense I think of it as something approaching a fixed-sum proposition. But market fluctuations will render the receipt of that return highly uneven, as price moves above and then below intrinsic value. **Thus, everything else being equal, a higher return to date means a lower return in the future.** In this way the recent increase in bond prices implies lower bond returns in the future, and the narrowing of yield spreads implies lower relative returns for lower-rated bonds. A manager of lower-rated bonds hates to have to make these admissions, but refusing to make the admissions wouldn't make them any less true.

The Cat, the Tree, the Carrot and the Stick

I hope you'll forgive an incredible mixing of metaphors, but I can't resist using one to sum up on the subject of the current investment environment. As I think about situations like today's, (which, by the way, is not unprecedented), I visualize a cat in a tree. A carrot lures him out onto increasingly higher branches, and a stick prods him from behind.

In my analogy, the cat is an investor, whose job it is to cope with the investment environment, of which the tree is part. **The carrot – the incentive to accept increased risk – comes from the high returns seemingly available from riskier investments. And the stick – the motivation to forsake safety – comes from the modest level of prospective return being offered on safer investments.**

The carrot lures the cat to higher branches – riskier strategies – in pursuit of his dinner (his targeted return), and the stick prods the cat up the tree, because he can't get dinner while keeping his feet firmly on the ground. And that's a pretty good description of today's investment environment.

Today the greatest carrots are perceived to be available in the high yield bond and distressed debt markets. Not only do they make sense as ways to play the economic recovery that is presumed to loom ahead, but also they have provided the best recent results. **Of course, many cat-like investors fail to realize that excellent recent results don't add to an investment's prospective return; rather, they detract from it.** But the carrot of high recent results never fails to attract new followers to a strategy.

And, of course, the stick is extremely powerful today, because any substantial allocations to high grade bonds (with their promised returns of 4-6%) or to equities (whose

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prospective returns aren't perceived to be much higher) seem likely to ensure that a portfolio with a targeted return of 8-10% will fall short.

So investors consistently climb out on the limb of whatever strategy has performed best lately, without noticing their increasing distance from the ground. **Risk never looks like risk when it's generating a high return.**

Today that hungry cat is looking for a free lunch (oh no, not another metaphor!) in high yield bonds and distressed debt. **Those markets may offer the best way to be well-fed today, but they should be pursued only with eyes wide open concerning the altitude to which one is venturing.**

What else is there to do? It may sound like heresy, but what about concluding that (a) under what appear to be today's revised circumstances, pursuing that high-up dinner is just too risky, and (b) investors should content themselves with what's available, with safety, on limbs closer to the ground? Am I being too oblique? Let me stop trying to extend the metaphor and put it simply: investors may have to consider lowering their target returns.

* * *

In recent times we've had several reminders regarding the inevitability of the market pendulum's swing, the propensity of investment popularity to wax and wane, the extremes of fluctuations, and the dramatic influence of cash flows. Some years, these transient influences will benefit us, as they have this year. Other years they're sure to hurt.

We can try to cope by understanding where the pendulum stands at a point in time and striving to anticipate its future swings. Or we can put our energy into emphasizing long-term value under the assumption that we'll be able to ride out the fluctuations if we're right about the values. To help us deal with the short-run developments, we've chosen to do some of each in the affected areas.

- We're being very candid about market conditions.
- We're limiting our assets under management.
- And if market conditions don't take a turn for the better, our clients should expect a reduced ability to profitably employ capital in our markets.

As to the long run, we're confident our adherence to value investing will continue to get us through.

May 6, 2003

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Memo to: Oaktree Clients

From: Howard Marks

Re: Whad'Ya Know?

I always ask Nancy to read my memos before I send them out. She seems to think being my wife gives her license to be brutally frank. "They're all the same," she says, "like your ties. They all talk about the importance of a high batting average, the need to avoid losers, and how much there is that no one can know."

Well, I guess I do tend to go on about everything that investors would like to know but is unknowable . . . and about all the people who claim to know it. But I've saved up some good stuff for a "rant" regarding the "I know" school people who think they know but don't. So here I go again (with apologies for the length).

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The "Jumbo Shrimp" of Investing

One of my favorite oxymorons is "common knowledge." Knowledge just isn't that common, and that which is common often contains little knowledge.

On February 4, USA Today cited a strategist as saying "there might be a silver lining to the current investor backlash, because a lot of cash is piling up on the sidelines, and the heavy selling has wrung out most of the downside." **Everyone knows** the stock market can't stop sliding and begin a new bull phase rally until some cash has piled up on the sidelines. And thus everyone wants to see selling exceed buying. That seems eminently reasonable.

And that's what makes it one of my greatest pet peeves. It makes sense, it's obvious, and people have been saying it for decades, so it has become common knowledge. But it's wrong! **There's no such thing as net selling! And stock market transactions can't cause cash to build up!** Think about it. In every stock trade there's a buyer and a seller. So how can selling exceed buying? And the buyer puts as much money into the market as the seller takes out. So how can selling create cash on the sidelines?

As usual, there is a less simplistic explanation that's closer to the truth:

- While there can't be more selling than buying, there can be more would-be sellers than would-be buyers. And the sellers' desire to sell can be stronger than the buyers' desire to buy. These factors are indicators of negative sentiment, and they can lead to a selling climax that creates a market bottom, so they can presage the (eventual) end of a decline.

- And clearly, uninvested cash equates to potential buying power, and thus potential fuel for a rise. But uninvested cash can't result from selling (which requires a buyer to put in the same amount of previously-uninvested cash as the seller takes out). Rather, a buildup of potentially

investable cash must come from sources that are exogenous to the market, such as household income, savings, tax refunds, and cash contributions to pension funds or endowments.

The bottom line: there's often no wisdom in the stuff that "everyone knows." And nowhere is that more true than in investing.

Toward Understanding Market Movements

One day in early 1995, the dollar made a big move against the yen. On my way to work, my radio station's Tokyo correspondent reported that the Nikkei average of Japanese stocks had been off big that day. He was glad to explain why: investors were worried about the weakness of the yen.

On my way home, the same station reported that the U.S. stock market also had declined a lot. The explanation given: investors were concerned about the strength of the dollar.

Well that just can't be. If one currency moves relative to another, how can companies in both countries be worse off than they were the day before? I think this episode illustrates a few themes. First, the general understanding of economic events and their implications is very poor. Second, everyone wants to explain the movements of the markets, and they'll grasp at any straw with which to do so. Third, much of their commentary is useless. And, of course fourth, **markets often do things that defy logical explanation – but people keep explaining them anyway.**

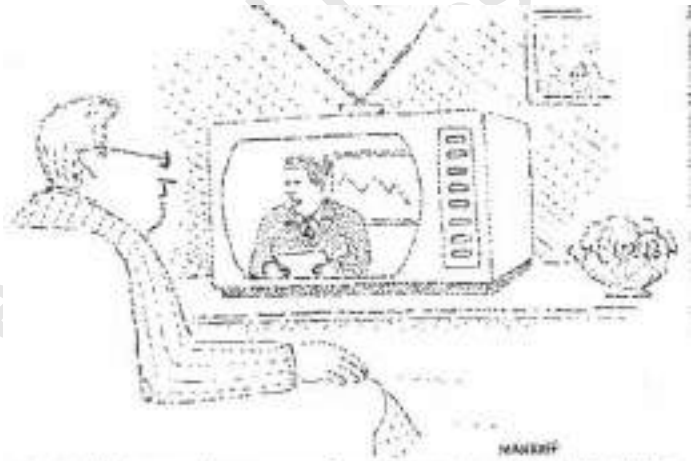

"On Wall Street today, news of lower interest rates sent the stock market up, but then the expectation that these rates would be inflationary sent the market down, until the realization that lower rates might stimulate the sluggish economy pushed the market up, before it ultimately went down on fears that an overheated economy would lead to a reimposition of higher interest rates."

New Yorker Magazine, 1981

Every day we hear or read that "the market rose on hopes that . . ." or ". . . because investors were cheered by the news that . . ." Or perhaps it's "the market fell on fears that . . ." or ". . . because of negative reaction to . . ." How do the commentators know? Where do they look to learn the reason for each day's move? Does there have to be an explanation? **Why don't we <u>ever</u> hear, "The market rose today, but no one knows why"?!**

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So What's The Point?

I don't begrudge people wanting to make money by expressing views that are beyond their ken and of no value. I guess it's human nature. My complaint, however, is that it's misleading and injurious to bystanders when people use serious platforms to state their unfounded views. They make it seem so easy to understand economic and market developments, and thus to profit from them. Just as no one should give legal advice or medical diagnoses on TV, the media should desist from providing economic and market analysis as well.

I think some of the greatest contributors to the 1998-99 bubble were the talking heads of the media. For every event they provided a without-a-doubt explanation and quantified its profit implications. These "experts" were free with recommendations and exuded 100% certainty. As I've said before, there are a few things they **never** said: "darned if I know," "it's hard to predict these things," and "but I could be wrong."

Nobody was well served by the veneration of the "I know" school in the late 1990s: Main Streeters were lured to invest in Wall Street without an understanding of the skills required or the risks entailed. The market and thus the economy were put through an extreme boom-bust cycle. Risk-taking investment gunslingers were anointed, and cautious value seekers were rendered irrelevant. And the oracles themselves eventually were brought low – they seem much less free with gratuitous wisdom and can't-miss buy recommendations today than they were four years ago.

New York Times, March 15, 2001

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Where Were the Strategists?

Another group that's no longer riding quite as tall in the saddle are the brokerage house strategists. They attracted a lot of respect in the '90s, and some even attained "household name" status. But I don't know of any who helped their clients avoid the pain of the last three years.

I think the test is simple: Did they call the TMT bubble? It's obvious in retrospect that many of the tech/media/telecom companies and their strategies were somewhere between fanciful and fictitious; the valuation multiples were ridiculous; investor behavior was nuts; and Wall Street had turned into a machine for short-term appreciation. **If it's so obvious in retrospect, lots of the strategists (whose sole job it is to figure out what's going on and what it means for the future) should have had an inkling at the time.**

Since this was the most extreme event of our investment lifetime thus far, and since it built up in plain sight over a period of years (as opposed to being the result of a sudden and surprising exogenous influence), shouldn't the strategists have seen it? **The emperor was as naked as he's ever been, but the brokerage strategists failed to point it out.**

Abby Joseph Cohen was the most prominent of the strategists, having made a real name for herself by correctly predicting stock price gains for a decade or more. (Or was she simply an unmitigated bull who never changed her tune regardless of the level of stock prices and looked smart in the '90s?) I attended a meeting with her near the top and heard the tortured rationalization that allowed her to stay bullish, something like: "Stocks are overpriced, but not by a lot, so based on our outlook for interest rates and other factors, they're still a buy." My opinion's a little different: When an asset's overpriced, it can't be a buy.

When I think about the events of the past decade, I conclude that the strategists failed to warn about the risk in stocks because of some combination of (a) their congenital bullishness, (b) Wall Street's vested interest in predicting stock price appreciation, and (c) the serious limitations on knowing what the future holds. Rarely have so many been paid so much for contributing so little.

On that note, The New York Times wrote on January 27:

> When Barton Biggs announced last week that he would be leaving his job as Morgan Stanley's chief global strategist, it may have marked the end of a bull market phenomenon – the transformation of market strategists into celebrity gurus. . .
>
> Several Wall Street firms are reassessing the role of the highly paid stock strategist. Under intense pressure to cut staff costs in the bear market, investment banks not only have been downgrading the role of the strategist, but also have been questioning whether the position as it exists is relevant in today's complex market environment. . .
>
> These concerns rarely appeared during the boom years, when Mr. Applegate [late of Lehman Brothers] and Mr. Galvin [ex. Credit Suisse First Boston] became minicelebrities by cultivating hip personas in print and on CNBC. . .
>
> Lehman Brothers and Credit Suisse, which declined to comment on the strategists' departures, have decided that, for now at least, they can make do without well-known prognosticators.

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Perhaps the website FierceFinance summed it up best that same day**: "Now, Wall Street firms are pondering whether [star strategists] have become anachronisms. It reminds me of the perennial debate in Great Britain about the need for royalty in the modern era."**

How Do They Rate?

While we're on the subject of who knows what, we should consider the credit rating agencies. These organizations are dedicated to assessing the quality of debt securities. They've been around for scores of years and are viewed as objective. So highly are they thought of that their ratings are accepted as regulatory standards and incorporated into law; there's even a special SEC label for them: "nationally recognized statistical rating organizations." But do they do any good?

I confess: I love the rating agencies! Oaktree would be lost without them. My whole career and many of Oaktree's activities are based on opportunities created by credit ratings.

First, a digression: In an efficient market, there's no chance for superior returns through active management. Active managers need markets that are inefficient. **What are inefficient markets? They're markets where mistakes are made**; where assets sell for prices different from their fair value and thus can be bought for less (or sold for more) than they're worth. In order for those mistakes to occur, there has to be ignorance, inadvertence, opacity, prejudice, emotion, or some other obstacle to objective, insightful decision making.

The ratings agencies constitute just such an obstacle. My favorite example: literally for decades, Moody's has defined B-rated bonds by saying they "generally lack characteristics of the desirable investment." How can they say that based on the risk alone, without any reference to price or promised return? Once they imply "there's no price at which this bond could be a good buy," people will shun it, making it cheap. That can create an opportunity for a bargain hunter.

And the ratings agencies are wrong a lot. Not in every case, but at the margin where it counts**. The agencies are convinced they do a good job because the bonds they rate low default more often than the bonds they rate high. But the majority of speculative grade bonds never default, and every once in a while an investment grade bond does. Both of these phenomena have significant financial consequences.**

For example, by failing to anticipate a default and thus mistakenly maintaining an investment grade rating, the agencies allow bonds to sell at 80 that should sell at 20. That's an opportunity: for investment grade bond managers to distinguish themselves by getting out before the default, and for hedge funds to profit from selling short. And when the sense of security caused by those high ratings is dashed, investment grade bond managers can be forced to dump these now-nonconforming bonds, creating bargain-priced opportunities for buyers of distressed debt.

If the rating agencies were right every time, the bond market would be efficient; every bond's yield would be just right for its risk, and there would be no free lunch, no excess return. And if there were no rating agencies, there'd be no organized process for us to game against. In either case the opportunities for Oaktree to buy cheap on behalf of its clients would be reduced. But I don't think there's any risk of that. **The concept of accurate ratings is dead; long live the rating agencies!**

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Often Wrong But Never In Doubt (or Hesitant to Share)

The January 6 issue of "Pensions & Investments" contained its 2003 Investment Outlook. Twenty institutional money managers generously provided their views on what the coming year holds. They ranged from cautiously bullish to outright bullish. The headlines on the more restrained forecasts included:

"'Double-Dip' a Possibility,"
"Recovery with Headwinds,"
"International Surprises Likely,"
"Moving Sideways Toward a Bull Market,"
"It Will Be a Stock-Selective Market," and
"Blame Iraq"

The outright optimists said:

"The Worst is Behind Us,"
"Rocking and Rolling Before Long,"
"Healing Process Is Already Well Along,"
"Bullish on Credit,"
"Crisis of Confidence Is Over,"
"Bullish on Equities,"
"We Are . . . in a Recovery," and
"Extraordinarily Bullish for 2003."

The most guarded forecaster said the market could be close to flat; nobody said "down."

One of my greatest complaints about forecasters is that they seem to ignore their own records. I've never heard one say, "I predict such-and-such will happen (and 7 out of my last 10 forecasts were off the mark)" or "I predict such-and-such will happen (and, by the way, I predicted the same thing last year and was wrong)." However, P&I did the unusual by critically reviewing the previous year's forecasts. It poked a little fun at the West Coast manager who predicted the S&P 500 would gain 15% in 2002, whereas it declined 22% instead. (He's again predicting a 15% increase for 2003; if he keeps at it long enough, he's bound to be right someday.) But P&I went one better by pointing out that at the start of 2002, one of the worst years in stock market history, "not a single one of 19 stock managers interviewed . . . predicted a negative return for the U.S. stock market."

The amazing thing to me is that these people will go on making predictions with a straight face, and the media will continue to carry them.

The Value of Predictions II

The P&I survey reminded me of a memo I wrote in 1996 under the above title. It reviewed a few of The Wall Street Journal's semiannual economic surveys and made several key points, not one of which I would alter:

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> The average "expert" added little in terms of predicting the future.
>
> It's not that the forecasters were always wrong; when there was little change, they were often right. It's just that in times of major changes (when accurate forecasts would have helped one make money or avoid a loss), the forecasters completely missed them. In the years reviewed, the expert consensus failed to predict **all** of the major developments.
>
> Where do these forecasts come from? The answer is simple: If you want to see a high correlation, take a look at the relationship between current levels and predicted future levels. . . In general we can say with certainty that these forecasters were much better at telling us where things stood than where they were going.
>
> Every six months, when the Journal reports on a new survey of forecasts, it takes the opportunity to cite the forecaster in the previous survey who came closest . . . And the truth is that the winner's accuracy is often startling. . . . [However,] the important thing isn't getting it right once. It's doing so consistently. . . As the Journal itself pointed out, " . . . by giving up the comfort of the consensus, those on the fringes of the economic prediction game often end up on the winning or losing end. . . the winners of six months and one year ago didn't even get the direction of interest rates right this time."

None of this provides much encouragement for those who would invest based on guesses about the future. **But neither, apparently, does it provide enough discouragement to make them stop.**

<u>Predicting the Events That Move Markets</u>

I often write about how difficult it is to anticipate the things that will determine the direction of the market. Think about it: what events in the last five years do you wish you'd seen coming?

- The meltdown of Long-Term Capital Management in 1998.
- The tech/media/telecom boom in the late 1990s.
- The tech/media/telecom collapse in 2000.
- The terrorist attacks in 2001.
- The corporate scandals in 2001-02.
- The interest rate decline in 2002.

Did you foresee many of these things? Did your money managers? Did anyone? I doubt it.

The market's big moves often come in reaction to surprises like these. But most of the time, the consensus anticipates continuation of the status quo (especially when things are going well). Surprises aren't factored into prices ahead of time (by definition). In the movie that runs inside my head, the members of the "I know" school sagely intone, "We're not expecting any surprises" (without appreciating the irony). **It's when surprises occur that big profits are there for the taking – by anyone capable of foreseeing them. It's just that it's not that easy.**

So, as with economic events, the outlook for profitable market forecasts is bleak:

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- If you make a conventional, status quo-type forecast, you're likely to be right most of the time.
- But since the status quo usually is shared widely and factored into prices, a status quo forecast won't help you beat the market or call its turns (even if it's right).
- The forecasts with real profit potential are the ones that correctly predict unusual events.
- But idiosyncratic forecasts are wrong most of the time (and thereby unlikely to be profitable).

So if (a) conventional forecasts are easy to make correctly but generally lack profit potential, and (b) unconventional forecasts have theoretical profit potential but are hard to make correctly, then (c) it should be clear that forecasts are unlikely to help you know enough about the future to beat the market.

Does Anyone Point Out What The Consensus Doesn't Know?

I feel very strongly that the hundreds of economists and strategists with conventional forecasts add little to the equation. On the other hand, Byron Wein of Morgan Stanley is one of the small group who provide a very valuable service by consciously looking for surprises (and who knowingly accept the risk entailed in talking about things that probably won't happen). At the beginning of each year Byron publishes a list of ten things that most people feel won't happen but he thinks have a 50% or better chance of taking place.

Here are some examples regarding 2003:

- The stock market gains 25%, largely due to foreign support.
- The economy shows 4% real growth, causing the 10-year Treasury yield to jump to 5.5%.
- Japan gets serious about fixing its problems, and the Nikkei soars to 11,000.
- Saddam steps down, Kim Jong Il negotiates, and we avoid major military action.

None of these things seems highly likely. **But that's the point**: if they seemed likely, they wouldn't be on the list of things the consensus has dismissed. And they would be factored into market prices. What Byron does for us is (a) call attention to some things to watch for and (b) perhaps more importantly, remind us that the things that move the market are the surprises . . . although maybe not these. I commend his list to your attention; **it's all about what investors (and certainly the consensus) don't know**.

And by the way, Byron performs an additional service each year: he reprints his year-earlier list and lets us assess which ones came true. Most years, a few have materialized, but there was no way to know in advance which ones. In retrospect, half of his calls regarding 2002 look quite impressive:

- No major terrorist event occurs in the U.S.
- Early strength in the U.S. economy proves short-lived.
- The yield on the 10-year Treasury drops below 4%.
- Japan's recession continues.
- Pension fund solvency becomes a major issue.

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On the other hand, these don't:

- Iraq refuses to admit inspection teams.
- People start traveling again; airlines and hotels prove rewarding investments.
- Technology and telecom equipment orders improve.
- Post-Enron populism sweeps the U.S.; Democrats take control of both houses of Congress.

Byron's list shows us that (a) it is possible to predict some coming surprises, but (b) it isn't possible to do so with high reliability. Thus it's not clear that betting on his list of potential surprises – or any such list – would be profitable.

Here's A Non-Consensus Forecast for You

If you're looking for an idiosyncratic, non-consensus forecast to make some money on, see Robert Prechter. As the February issue of "Bloomberg Markets" magazine stated:

> Forget about the Dow Jones Industrial Average returning to 11,000. Try Depression-era levels of less than 1,000. And don't flock to bonds for safety: Municipalities will default and corporate bonds will be wracked by downgrades. Even the U.S. government's credit status may sink low enough to make Treasury bills shaky.

You've heard of extreme sports; Prechter's recent record probably represents the norm for an extreme forecaster. He joined the pantheon of famous forecasters by being right the obligatory once in a row (but in a big way): he predicted a crash two weeks before October 19, 1987 made him right. Then, according to Bloomberg, "he missed the almost decade-long bull market." And he hasn't changed his spots since. **"I'm once again calling for events that few expect," he says**. "His work is as relevant now as it ever was," says Henry Van der Erb. "A quack," says Michael Thorson.

And that's the point. **His forecast certainly is non-consensus, and if you follow him and he's right, you'll make a fortune (or at least avoid losing one). But who'll follow him?** As I wrote in "The Value of Predictions II,"

> It's difficult with regard to a non-consensus view of the future (1) to believe in it, (2) to act on it, (3) to stand by it if the early going suggests it's wrong, and (4) to be right.

How much do idiosyncratic forecasters like Robert Prechter really know about the future? How much can their forecasts help you to know? And how much are you willing to bet on their being right?

Reliance on Weak Data

Investment experts love to dredge up data supporting their observations, and ever since computers began to be applied to the stock market in the 1960s, a remarkable number of phenomena have been discovered and documented. On December 11, the Wall Street Journal went into detail concerning "the so-called January effect – the tendency of certain stocks to rise in January after money managers tweak their holdings for tax purposes."

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Okay, that makes sense. **Everyone knows** stocks usually do well in January. But since it's no secret, by now people should have learned to buy stocks ahead of the phenomenon, and that should have negated it. As I wrote in "Etorre's Wisdom," if everyone moves into the fast lane, it'll stop being the fast lane.

But let's say there is a January effect. My favorite part of the Journal article was where it suggested that in 2002 people should wait until the end of December to buy, rather than entering the market sooner. The reason: while December's usually a strong month, in 2002 a "statistical wrinkle" had the potential to make it a weak month instead. "In more than half the 21 instances since 1897 when the Dow Jones Industrial Average fell by 10% or more in the first 11 months of the year – it was down 11.2% this year – December was a weak month."

Sounds astute, right? But wait. First, the data reaches back to 1897, and I'm not sure 100-year-old observations are relevant today. Second, this set of facts has applied only 21 times in history, and that's not much of a sample. Third, what's the significance of "more than half"? If I told you a roulette wheel had come up black in 12 or 13 out of 21 spins, would that make you bet the ranch on black? I doubt it. If I told you it was 20 out of 21, that might make you consider it. And if it had been black 60,000 times out of 100,000 spins, you might race to the table (and find me there).

So what did happen to the January effect that "everyone knows about"? On February 3 the Wall Street Journal reported:

> . . . The Dow Jones Industrial Average finished [January] with a 3.5% drop.
>
> That is an inauspicious beginning to the year, doubly so because it follows a 6% decline during December. Historically, December has been the strongest month for stocks, with the industrial average rising in 72% of the Decembers since 1900.
>
> A back-to-back December-January decline is rare; it has happened only 9 times since 1900.
>
> In five of those nine years, the market fell after the January fizzle.

So now the bullish January effect is discarded, and the bearish December-January effect demands our consideration. What has the Journal proved? That we can no longer count on the January effect? That it's bad to hold stocks when both December and January show declines? Neither of these, I think. **What's been proved is that more data doesn't necessarily mean more information.** The Journal suggests the December-January rule as a guideline for managing money, but I wouldn't bet a penny on something because it happened five times out of nine. (After all, if you flip a coin nine times, it has to come up at least five times on one side or the other.)

For another example, my attention was drawn to the graphic accompanying the Journal story, titled "What Happens to Stocks When the U.S. Goes to War." It said, "The stock market has generally weakened while anticipating war, but rebounded strongly when fighting proceeded." Do you really think a meaningful inference can be drawn from something that's happened four or five times in a century? Should people trade on it? And if not, why run the story? Who's helped?

I think statistics are like matches – the unsophisticated shouldn't play with them. When shown to the public, they tend to produce confusion between possibility, probability and a sure thing, and between random occurrence and cause-and-effect.

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I Know a Good Thing When I See It

In "Lessons from Distressed Debt" I referred to Warren Buffett's observation that, in the short run, the market's a popularity contest. And since anyone can tell a good company from a bad one, it should be easy to predict the winners of the popularity contest and rack up above average gains.

The CFA Digest is a publication of the Association for Investment Management and Research that provides two-page summaries of scholarly articles, and one-paragraph summaries of the two-page summaries (making it very useful for busy people). The November 2002 issue reviewed an article from the Journal of Financial Research entitled "Are the Best Small Companies the Best Investments?" It cited eleven annual surveys of the "best" small companies that ran in Business Week from 1985 to 1995.

As the article shows, these surveys were of absolutely no value – check that; negative value – in the search for stock market profits. Whereas the stocks of the chosen companies had far outperformed a couple of stock indices in the three years prior to the surveys, they underperformed in the three years following publication.

> In sum, the authors show that investing in stocks subsequent to their appearance in Business Week's "100 Best Small Companies," on average, provides negative excess returns relative to the benchmarks. The authors identify mean reversion of corporate operating performance, overly optimistic growth projections, and the bidding up of the prices of growth stocks to unrealistic levels as potential factors in this underperformance. The authors conclude that "any attempt to find winning investments from a 'hot growth' listing . . . appears futile."

So, I ask: what do you know about which companies are the best, and what does that tell you about your ability to profit from that knowledge?

Help Is On the Way (Or Is It?)

For several months now, investment forecasters have been in the news – but not in a favorable sense. The New York Attorney General, the SEC and the NASD have been all over Wall Street brokerage firms and their analysts for their part in the tech/media/telecom craze of the late 1990s.

As everyone now knows, there was little or no "information" in many leading analysts' profit forecasts, target prices and buy/sell recommendations. Profit forecasts often represented little more than regurgitation of what management said. Target prices tended to be the levels analysts thought stocks might reach (as opposed to what they thought was merited). And many of the "buy" recommendations turned out to have been made to garner investment banking business, not to make money for brokerage clients.

The remedies that prosecutors and regulators have arrived at are (a) to further separate the firms' research function from investment banking and (b) to require brokerage firms to buy independent research for their retail customers. I have some serious questions about whether the latter will produce the hoped-for result:

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- Will research boutiques with the best information provide it to retail investors? Will the top research shops want to communicate their information via the massive brokerages (and thereby sacrifice its uniqueness, and their relationships with institutional investors)?
- Will retail investors (or the brokerages on their behalf) be willing to pay top dollar for the best research? Or will it continue to go to institutional investors, with individuals getting the dregs?
- If independent research providers earn big dollars by selling their research to the Wall Street giants, will they remain insulated from the investment banking considerations that affect their new customers?
- The regulators want brokers to provide independent buy-hold-sell advice. Can a blanket recommendation be right for everyone?
- What chance is there that individual investors will gain access to and read the analysis behind the buy-sell recommendations? And make sense of it?
- **Can anyone really produce research capable of helping investors achieve stock market profits?**

As one observer noted in The New York Times of December 23, "What's amazing about this settlement is that the investor will continue to get something for nothing, which is why we had these scandals in the first place." In other words, **investment research stopped being about investors when commissions became unfixed and providing research became unprofitable**. It was when commissions became negotiable and payments for research dried up that the firms started thinking less about their brokerage customers and more about investment banking. What's changed?

How Might the Regulators Help?

There are numerous obstacles to equipping retail investors with the tools they need to invest safely and well. I feel most strongly that the answer doesn't lie in giving them "independent research" that has been blessed and thus is likely to once again be overly depended on and just a new source of pain. **Instead, the regulators should make sure investors are educated as to (a) the requirements for successful investing and (b) the severe limitations on forecasts and recommendations**. Brokerage firms are aided when investing is made to look easy and safe, but their customers certainly are not.

On December 21, The New York Times carried an article about Jack Grubman, who seems to be the poster boy for analyst malfeasance. What caught my eye, however, was the quote from Henry Hochman, 88, who lost almost $10.7 million on WorldCom. "I'm broke. I have to start saving pennies now. I can't live the way I was accustomed to living. It has affected my health. Smith Barney told me this was the best of the telecom companies. Whatever Grubman wrote sounded very good."

Of course, Grubman and Smith Barney are far from without fault in this matter, but Mr. Hochman made his own mistake (although likely not unaided). From the fact that he had $10.7 million to lose, we might guess that he had been an astute businessman. So what was he doing, in his late eighties, investing enough in growth stocks – and in a single stock – to wreck his financial world? If he didn't know this was a dangerous course of action, someone should have told him so.

I'm not saying it's the regulators' job to provide this education. But if they're going to get tangled up in the investment process, **I'd rather see them talk about what you can't know than what you**

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can. In other words, don't give investors new forecasts that they'll count on to lead them to sure profits. Tell them there's no such thing. That would be a public service! Most thoughtful, unconflicted observers think the average individual investor is better served through long-term investment in mutual funds, and index funds at that. That's the message he or she should be given.

Hey, Get Yer Free Information!

I've talked about the strategists, economists, analysts and money managers whose views are available free in brokerage house reports and in the media. The bottom line for me is that on balance they don't contribute much. Some are right in a big way once in a while, but not often enough to be dependable. Others are a little right a lot of the time, but they usually agree with the consensus and extrapolate current conditions, and thus they add little value.

The statistics are clear. There just isn't any evidence that many managers can beat the market in the long run, or that many of the professionals who profess to know the future actually do.

But there's another test that's even easier: **if the forecast is correct, why is it being given away?** Nothing could be more valuable than correct information about the future. Given the leveraging power of futures and options, anyone who saw the future correctly could become a billionaire in no time. So when you see a forecast available gratis, I suggest you ask yourself, "Why is it being given to me?" Having made that inquiry, I doubt you'll end up doing what the pundit said to do. As usual, Warren Buffett has put it clearly:

> There's no reason in the world you should expect some broker to tell you whether you can make money on index futures or options or some stock in two months. If he knew how to do that, he wouldn't be talking to investors. He'd have retired long ago. (Money, Fall 1987)

Or, putting it a little more bluntly:

> Wall Street is the only place that people ride to in a Rolls-Royce to get advice from those who take the subway. (Los Angeles Times Magazine, April 7, 1991)

* * *

I guess I've made it obvious how little I think of the "I know" school. Its members simply do not know all they think they do.

Most congenital bulls – who seem to be the norm among big-stock devotees – make a ton when the market soars but give it back in the bad years. The few congenital bears avoid participating fully in down markets . . . and up markets as well. And most active managers buy and sell at a furious clip, implying they know a lot. Yet I'm aware of few people who have beaten the market consistently by correctly timing its ups and downs, or by picking among the stocks that everyone follows.

It might be exciting to manage money by adroitly timing exposure to the stock market, predicting which industries will do best, and holding only the stocks that will go up the most. But my ten years in equity research (and 25 years since as an observer) have taught me it's a fool's game. Massive

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amounts of brainpower and computer power have been devoted to the task, but **there's no evidence it can be done.** (In that connection, you might be interested to know how many profitable funds there were in 2002 among the 100 equity funds that P&I says are most used by defined contribution plans: **none!**) It wasn't for nothing that when I left equity research in 1978, I told Citibank "I would do anything but spend the rest of my life choosing between Merck and Lilly."

So I'm a card-carrying member of the "I don't know school." Not because it makes life more fun, but because it provides guidelines for working within the limitations of an intelligent, highly competitive market.

When I was a kid, my mother often taught me through adages. One of the best went this way:

> He who knows not and knows not he knows not is a fool; shun him.
> He who knows not and knows he knows not is hungry; teach him.
> He who knows and knows not he knows is asleep; wake him.
> But he who knows and knows he knows is wise; follow him.

Overestimating what you're capable of knowing or doing can be extremely dangerous – in brain surgery, cross-ocean racing or investing. As Dirty Harry said, "A man should know his limitations." **Acknowledging the boundaries of what you can know – and working within those limits rather than venturing beyond – can give you a great advantage.**

At Oaktree, we believe that because there's so much we can't know about the future, we should invest only where our analysis tells us the worst case is tolerable. We try to avoid situations that entail high expected returns but also a meaningful chance of being wiped out. Peter Bernstein put it simply but elegantly in "Economics and Portfolio Strategy," January 1, 2003:

> In making decisions under conditions of uncertainty, the consequences must dominate the probabilities. We never know the future.

Or perhaps Blondie's take was the most profound:

circa 1973

March 11, 2003

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Memo to: Oaktree Clients

From: Howard Marks

Re: Returns and How They Get That Way

"Where do babies come from?" When I was a kid, this was the subject of a great many jokes, and the answer was always the same: "The stork brings them." Now it's fifty years later, and no one jokes about the stork any more. Maybe that's because today's kids learn the real answer so much sooner than we did.

Where do equity returns come from? Fewer people ask this question than asked about the stork fifty years ago, . . . and even fewer have the answer. I'll give you one hint: **it's not from the stork.**

The Source of Equity Returns

In the late 1990s, stock prices exploded upward, along with the number of people buying them. And as long as stock prices rose, the new investors felt they knew all they had to about where equity returns came from: They came from rising prices. And surely you could depend on prices to rise.

What was it that investors thought would cause a given stock's price to rise?

- It's been performing like a rocket.
- It's the subject of a brokerage house recommendation, a TV or magazine story, or some chat room hype.
- Someone (I don't remember who) is recommending it.
- It's selling below an analyst's target price.
- Other people can be counted on to buy it, taking it ever higher.
- In fact, investors have to buy it, because money will keep flowing to stocks and people can't risk omitting this one from their portfolios.
- Or maybe it'll become part of the S&P 500, and indexers and closet indexers will have to add it to their portfolios.

As always, however, the post mortem is more thorough than the simplistic thought process that preceded it, and the results are a lot less pleasant. Dreams of ever-rising prices aren't enough. Now we know there has to be a reason why prices should rise.

Today, cooler heads point out that long-term equity returns are driven by dividends and earnings growth. "Huh?" say the people who entered the market in the late '90s.

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I remember having a spirited discussion on this topic with my father in the late 1960s. I came home from the University of Chicago filled with the notion that the value of a share of stock is the present value of its future dividends. "Baloney," my father said, "no one buys stocks for the dividends; they buy them for appreciation." "But what makes them appreciate?" I asked. We never have reached agreement on this matter.

I think we were both right and both wrong. Certainly in a real-world sense, people don't buy stocks for dividends. Dividends provided a small portion of the total return on stocks in the 1960s and far less in the 1990s. Yes, most people buy stocks for appreciation. **But what causes appreciation? There has to be an underlying process at work. We're in trouble if all we can say is "we buy stocks in the hope they'll go up, and they'll go up if new buyers are willing to pay more than the last price."** To explain what'll make the buyers pay more than the last price, we either have to (1) identify what I call an underlying process or (2) fall back on the bromides listed above that led investors off the cliff in the 1990s.

The "underlying process" has to be related to financial parameters. By that I mean the asset values and/or cash flows must be recognized as being worth more than the last price paid. That's what causes appreciation.

Because so few stocks are bought today for asset values, we essentially can disregard them. The vast majority of stocks are bought for the stream of earnings the companies produce.

But how do those earnings affect investors – get through to investors – if not in the form of dividends? That's the question that drove me in the 1960s. It almost verges on metaphysical. If a company has great earnings but those earnings aren't ever paid out in dividends, are they still of value to investors? If it makes a bunch of money but just hoards it, or reinvests it in new products and facilities that generate future earnings that also are not paid out, in what way are its profits of value to investors? That's kind of like the old question, "if a tree falls in the forest but there's no one around to hear it, does it still make noise?"

There are two possible answers:

- Eventually, earnings must be paid out. Common sense tells us that, sooner or later, every company will run out of good reinvestment opportunities, and the cash will then go to dividends, or to stock buy-backs, which have the same effect but better tax treatment. (Of course, the record suggests that when they run out of good reinvestment opportunities, companies often prefer bad reinvestment opportunities to giving the money to the shareholders.)

- Alternatively, if cash builds up in a company and its stock doesn't rise to reflect the buildup but instead languishes "too cheap," someone will bid the stock up in order to take over the company. This is economics at work: the value of every asset is the

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present value of the cash flows it will produce in the future, and eventually the market will price the asset to reflect that value, because there are ways to reap it.

So What Makes Stocks Worth More?

The equation defining the price of a share of stock is a very simple one:

$$P = E \times P/E$$

The price of a share of stock is equal to the earnings per share times the ratio of the stock price to the earnings. On one hand this explains how prices are set, and on the other hand it's just tautological: divide both sides of the equation by E and you get P/E = P/E. Even I can't argue with that one.

This gives rise to another simple equation:

$$\Delta P = \Delta E + \Delta P/E$$

Change in price is powered by one or more of the following factors:

- increased earnings eventually are turned into increased dividends,
- the undistributed earnings are reinvested to power future earnings growth, and/or
- the likely stream of future earnings comes to be viewed as being worth more than the last price paid, causing an increase in the P/E ratio.

"Growth investors" pursue companies whose earnings are growing the fastest. As per the equation, if the P/E ratio holds, earnings growth will be translated directly into stock price appreciation. And if there's an increase in investor recognition of the company's growth potential, the P/E ratio can expand as well, producing appreciation at a rate that exceeds the rate of earnings growth.

"Value investors," on the other hand, invest primarily in companies where (1) earnings, while perhaps lacking rapid trendline growth potential, are temporarily depressed and likely to rebound, and/or (2) the stock's price is unduly low relative to even the low-growth earnings, and thus the P/E ratio can be expected to expand.

Any way you slice it, the truth is that changes in a stock's price will be determined by changes in the earnings per share and changes in the multiple at which investors value those earnings. So those who want to predict the movement of a stock's price, or of the whole market, have to predict those two things. To get to total return, you simply add the dividend yield to the rate of price appreciation.

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The Outlook for Equity Returns

Clearly, equity returns primarily come from price appreciation. And the dominant consideration in long-term appreciation is earnings growth. Why do I say "long term appreciation"? Because even though P/E ratios jump around much more in the short run than do earnings, they tend to move within relatively fixed boundaries and, in the long run, their fluctuations should cancel out.

The simple view – which I tend to take – is that P/E ratios reached ridiculous levels in the 1990s and now, even after significant price declines, still are higher in absolute terms than they were at many previous market **tops**. Thus, you can assume that P/E ratios will stay where they are, and thus that earnings growth will translate into parallel price appreciation. Or you can assume multiple contraction, in which case appreciation will lag earnings gains. But I doubt that a prudent investor can count on P/E ratio expansion as a source of future stock price appreciation. Thus, any positive returns will be determined primarily by the rate of earnings growth.

Over the years I've quoted Warren Buffett as saying something like "people get into trouble when they forget that corporate profits tend to grow at 9% a year." In September I had a chance to ask him if he actually said that. "No," he said, "what I said is 'people get into trouble when they forget that in the long run, stocks won't appreciate faster than the growth in corporate profits.'" Other people spend a lot more time than me studying how fast corporate profits have grown and will grow. However, the evidence I'm familiar with suggests a figure somewhere in mid-single digits.

So with dividends minimal and multiples unlikely to expand (at best), normal historic profit growth seems like a reasonable starting point for equity returns in the long-term future. (Of course, extrapolating historic corporate profit growth implies extrapolating the historic price increases and profit margins. Neither of these is assured, but why go there?) What I'm left with is trendline price appreciation somewhere in mid-single digits. Where in that range, I'll leave to others.

Adding to Returns Through Active Management

I have written a great deal on the subject of active management (see especially "Safety First . . . But Where?," April 2001) and have no interest in reiterating. But I will discuss the active management industry.

An enormous infrastructure has been built up over the last century for the purpose of beating the stock market. Fifty or seventy-five years ago, that sentence would have read," . . . for the purpose of managing stock market investments." However, the index fund industry has grown up in the last thirty years and made it clear that average performance can be accessed much more cheaply and dependably through passive management than through active management. Thus the *raison d'etre* of the active managers became beating the market.

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To do so, the investment management industry invests in analysts, portfolio managers and traders, not to mention accountants, salespeople and risk managers – plus wood paneling, oriental rugs and seascapes. All of this costs money, and the management firms want a return on their spending. So they charge healthy fees. The people whose money the firms manage also bear other costs entailed in active management, such as commissions, market impact, and taxes on short-term gains caused by active trading. The question is, "What are they getting for their money?"

The problem is that there has been no documentation that active equity management consistently provides an edge in the mainstream stock market. Some individuals never beat the market, but even those who do usually see their success limited to brief periods of time. A given strategy works for a while and then stops. It's usually a matter of being patient and waiting until your ship comes in. Very few people are skillful enough to outperform through thick and thin. As I've said before, the attention paid to people like Warren Buffett and Peter Lynch is a tribute to their uniqueness and demonstrates the meaning of the phrase, "it's the exception that proves the rule." The rule is that few people can beat the market for long.

We've already established that equity returns primarily come from appreciation. When seeking appreciation, you can look for one or more of the following:

1. increases in an asset's intrinsic value (earnings or asset values),
2. movement of the asset's price from a discount toward its intrinsic value (that is, from undervaluation to fair value), and/or
3. movement of the price from intrinsic value toward a premium (that is, from fair value to overvaluation).

In my opinion, superior returns come most dependably from buying things for less than they're worth and benefiting from the movement of price from discount to fair value. Making money this way doesn't require increases in intrinsic value, which are uncertain, or the attainment of prices above intrinsic value, which is irrational.

The attractiveness of buying something for less than it's worth makes eminent sense. However, doing so requires cooperation from someone who's willing to sell it for less than it's worth. It's the SEC's goal to make sure that everyone has the same corporate information. So how is one to find bargains in efficient markets? You must bring exceptional analytical ability, insight or foresight. But because it's exceptional, few people have it. Once in a while someone will find an undervalued stock or guess right about the direction of the market, but very few people are able to do those things consistently over time.

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So What's To Do?

You can try harder, but everyone's already trying their hardest. Or you can ratchet up the risk level of your portfolio – counting on the long-run relationship between risk and return – but once in a while that'll get you killed. Or you can look for inefficient markets.

In inefficient markets, not everyone has the same access to information. I feel bargains are found most consistently among the things that are not widely known, not understood, or considered to be risky, complex, unfashionable, controversial, or unseemly. When you combine unequal access to information, uneven ability to analyze that information, and the effects of negative biases, it's possible for things to sell for less than they're worth. In inefficient markets, it's possible for a superior investor to consistently identify those bargains, and thus to beat the other players consistently. It's also possible to achieve risk-adjusted returns above those available in other market niches. All it takes is hard work and superior skill.

However, it makes sense to assume that since the greatest reward for active management is found in the inefficient markets (along with incentive fees for the successful managers), that's also where sharp-eyed specialists will focus their efforts. (Think of card counting in blackjack versus betting on the spin of a roulette wheel; where do you think you'll find the Ph.D.s?)

In addition, it must be borne in mind that few sectors remain so inefficient that they can be counted on to provide a free lunch for long. Over the years, many strategies have been thought to represent a sure thing, but most fizzled out. Computer software stocks, the nifty-fifty, oil stocks, emerging markets, and most recently tech-media-telecom – all of these groups have in turn been deified and decimated. Likewise, a number of investment techniques have had their day in the sun and then been eclipsed: covered call writing, portfolio insurance and "market neutral" funds are just a few. **Nothing can be relied on for high risk-adjusted returns just because of what it's called. No investment area has that birthright. It's all a matter of the ability to identify bargain-priced opportunities and implement with skill.**

The bottom line might be that inefficient markets can be the source of superior returns and can be less heavily populated, but the players there are, on average, more competent. Because returns in inefficient markets are more dependent on investors' individual skill (which is highly variable) than they are on the market's overall return, there'll be a greater dispersion of results there. And that means lesser investors should be expected to underperform greater investors by a wide margin.

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Sources of Return for Active Managers

The best way to look at portfolio return (y) is as follows:

$$y = \alpha + \beta x$$

In this simple equation, α is the symbol for alpha, β represents beta, and x is the return of the market. Alpha is best thought of as a portfolio manager's differential skill or value added. **It is the ability to generate performance unrelated to movement of the market.** Index funds don't aspire to alpha. They're managed by people who know they don't have alpha (actually, most believe no one has any), and they simply strive to reflect the market's movements – no better and no worse. Active managers manage actively because they think they have alpha. They charge for it, and they should be able to demonstrate it. However, many without it seem to have gotten away with charging for it over the years.

Beta is the extent to which a portfolio reflects the return of the market. A portfolio with a beta of 1 and no alpha will move up and down exactly as does the market. A beta of 2 means it will move twice as fast in both directions. A beta of .5 means it'll move half as fast. A beta of zero means a total lack of correlation – the much sought-after "market neutral" fund, where all of the return comes from investor skill. A negative beta means an inverse correlation (a short position on an index fund is the best example).

I believe the alpha/beta model is an excellent way to assess portfolios, portfolio managers, investment strategies and asset allocation schemes. **It's really an organized way to think about the question, "how much of the return comes from what the environment provides, and how much from the manager's value added?"** When one considers these things, some relevant inquiries are:

- Where did the return come from in the past?
- Where is the return expected to come from in the future?
- How exposed is a given strategy (or my overall portfolio) to market movement or dependence on claims of alpha? How much of my future return am I betting on the direction of the market, and how much on manager skill?
- What assumptions am I willing to make about the outlook for those two things?

A lot is written about the tyranny of benchmarks. Excessive benchmarking (and an overemphasis on minimizing tracking error) can force managers to migrate toward benchmark asset weightings in order to reduce their risk of negative performance comparisons. Clearly, if a manager has real skill, this process can suppress it.

However, there are very valid roles for benchmarking. Perhaps the best is in helping to attribute performance between market impact and the manager's value added. In fact, this can't be done without reference to an effective benchmark.

It's obvious that this manager doesn't have any skill:

Period	Benchmark Return	Portfolio Return
1	10	10
2	6	6
3	0	0
4	-10	-10
5	20	20

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But neither does this manager (he just moves half as much as the benchmark):

Period	Benchmark Return	Portfolio Return
1	10	5
2	6	3
3	0	0
4	-10	-5
5	20	10

Or this one (he moves twice as much):

Period	Benchmark Return	Portfolio Return
1	10	20
2	6	12
3	0	0
4	-10	-20
5	20	40

This one has a little:

Period	Benchmark Return	Portfolio Return
1	10	11
2	6	8
3	0	-1
4	-10	-9
5	20	21

While this one has a lot:

Period	Benchmark Return	Portfolio Return
1	10	12
2	6	10
3	0	3
4	-10	2
5	20	30

This one has a ton, if you can live with the volatility.

Period	Benchmark Return	Portfolio Return
1	10	25
2	6	20
3	0	-5
4	-10	-20
5	20	25

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Chasing Alpha

There are people who seem able to make money or beat the market year in and year out. It's not certain, however, that they'll manage portfolios long enough to convince the statisticians that alpha exists and that they have it. They might make so much money that they'll stop managing portfolios for others, and thus their performance will cease to be public. Or they might not live long enough for their records to attain statistical significance. (At the University of Chicago they told me it takes 64 years to be sure someone is good rather than lucky; more on this later.) But I know managers, including those I work with every day, who I'm convinced can add to return without adding commensurately to risk – and in fact while reducing risk.

How do these "alpha managers" do it? As I described in "The Realist's Creed," the alpha managers I know come from the "I don't know" school. They don't expect to know more than others about the future direction of economies and markets, and thus they eschew market timing and other forms of macro decision-making. They just try to gain an edge by knowing more than others do about micro matters. As contrarians, they prefer to buy things that are out of favor. They invest defensively, thinking more about what they don't know than about what they do, and worrying more about losing money than about missing winners. They build their records on high batting averages and the absence of losers, rather than on occasional homeruns within a hit-or-miss pattern of returns.

Most of them are hard working and driven. They take their jobs very seriously and think about their portfolios night and day. They tend to talk investments with each other, not football or movies. Many are "early adapters" who use technology to access diverse information sources in order to gain a knowledge advantage. They look for hard asset values or under-appreciated situations. They buy with confidence in their analysis, and if the price of the asset falls, they tend to like it more – and buy rather than sell. **Most important is that intangible something – they just "get it" better than others.**

While going over this list of the characteristics I'd look for in a manager, I want to take a moment for an essential caveat. One thing these criteria guarantee is that there'll be times when investors from the "I don't know" school will look terrible. In times of euphoria, qualities like emphasis on value, contrarianism, skepticism and defensiveness are guaranteed to produce performance that sorely lags the hot sectors and the risk takers. This was amply demonstrated in 1998-99, when the best managers I know watched from the sidelines as others got rich . . . temporarily. People who employ alpha managers might feel pangs of regret over what they pass up in boom times, but they should know the route to performance they've chosen is far more reliable.

Clearly, managers with alpha, **once identified**, can be depended on to a much greater extent than those whose returns are generated primarily by market movements. Having said that, however, I don't want to appear to underestimate the difficulty of finding managers with alpha. I've been on the receiving end of many presentations from managers pursuing foundation business, and I can certify that it's not easy to distinguish

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those who sound good and are from those who sound good but aren't. (People who don't sound good usually aren't allowed out to make presentations.)

Certainly the search for alpha managers is a tough one. Not only is it hard to know which managers have it, but:

- The search for them will be littered with mistakes and losses.
- Good managers are likely to close their funds before their limits are exceeded.
- Managers talented enough to exploit inefficiencies will be able to appropriate a fair bit of the excess return for themselves in the form of fees.
- The limited size of inefficient markets and the limited capacity of the managers probably mean very large investment pools can't expect to invest enough with alpha managers to greatly affect their results. And their attempts to pump in large amounts of capital can ruin the opportunity for everyone.

There certainly are stumbling blocks in the search for alpha managers, but it's worth trying. If you aren't satisfied with doing average in efficient markets, what else is there? Invest with managers who claim they know what the future holds and can otherwise out-invest everyone else in the same mainstream stocks? I doubt that's the way. To paraphrase Professor James Lorie of the University of Chicago (circa 1970), I'd rather "index the core of a portfolio and manage the heck out of the periphery" – hopefully with help from managers with alpha.

The Role of Luck

To end this memo on returns, I want to spend a few pages discussing the part played by randomness (or luck or chance). A new book on this subject is being passed around the alpha manager world more than Playboy was passed around when I was in the ninth grade. It's "Pooled By Randomness" by Nassim Taleb, a Ph. D. hedge fund manager and self-described aesthete.

My "Realist's Creed" list of required ingredients for intelligent investing started with membership in the "I don't know" school; progressed through contrarianism, humility and skepticism; and ended with awareness of prevailing investor psychology. **Taleb's book reminded me of one other essential: being conscious of the role of luck.**

This book can be difficult to read. Here are just two examples:

> Popper believed that any idea of Utopia is necessarily closed in the fact that it chokes its own refutations.
>
> . . . to be technical, these "randomizations" are frequently done during optimization problems, when one needs to perturbate a function.

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Nevertheless, I found its contents profound. In "Investment Miscellany" I discussed an article by Richard Bookstaber of Moore Capital and stated that, "What smart people do is put into logical words the thoughts we may have had but never formulated or expressed." Taleb is such an individual. As I did with Bookstaber's article, I will attempt below to communicate and explain some of his salient points, supported by excerpts from the book.

Randomness (or luck) plays a huge part in life's results, and outcomes that hinge on random events should be viewed as different from those that do not.

Thus, when considering whether an investment record is likely to be repeated, it is essential to think about the role of randomness in the manager's results, and whether the performance resulted from skill or simply being lucky.

> $10 million earned through Russian roulette does not have the same value as $10 million earned through the diligent and artful practice of dentistry. They are the same, can buy the same goods, except that one's dependence on randomness is greater than the other. To your accountant, though, they would be identical. . . . Yet, deep down, I cannot help but consider them as qualitatively different. (p. 28)

Every record should be considered in light of the other outcomes – Taleb calls them "alternative histories" – that could have occurred just as easily as the "visible histories" that did.

> Clearly my way of judging matters is probabilistic in nature; it relies on the notion of what could have probably happened. (p.29)
>
> If we have heard of [history's great generals and inventors], it is simply because they took considerable risks, along with thousands of others, and happened to win. They were intelligent, courageous, noble (at times), had the highest possible obtainable culture in their day – but so did thousands of others who live in the musty footnotes of history. (p. 35)

Think about the aggressive backgammon player who can't win without a roll of double sixes. He accepts the cube – doubling the stakes – and then gets his "boxcars." It might have been an unwise bet, with its one-in-36 chance of success, but because it succeeded, everybody considers him brilliant. We should think about how probable it was that something other than double sixes would materialize, and thus how lucky the player was to have won. **This says a lot about his likelihood of winning again**.

As my friend Bruce Newberg says over our backgammon games, "there are probabilities, and then there are outcomes." **<u>The fact that something's improbable doesn't mean it won't happen. And the fact that something happened doesn't mean it wasn't improbable</u>. (I can't stress this essential point enough.) Every once in a while, someone makes a risky bet on an improbable or uncertain outcome and ends up**

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looking like a genius. But we should recognize that it happened because of luck and boldness, not skill.

In the short run, a great deal of investment success can result from just being in the right place at the right time. I always say the keys to profit are aggressiveness, timing and skill, and if you have enough aggressiveness at the right time, you don't need that much skill. My image is of a blindfolded dart thrower. He heaves it wildly just as someone knocks over the target. His dart finds the bulls-eye and he's proclaimed the champ.

> . . . at a given time in the markets, the most profitable traders are likely to be those that are best fit to the latest cycle. This does not happen too often with dentists or pianists – because of the nature of randomness. (p.74)

The easy way to see this is that in boom times, the highest returns often go to those who take the most risk. That doesn't say anything about their being the best investors.

Warren Buffett's appendix to the fourth revised edition of "The Intelligent Investor" describes a contest in which each of the 225 million Americans starts with $1 and flips a coin once a day. The people who get it right on day one collect a dollar from those who were wrong and go on to flip again on day two, and so forth. Ten days later, 220,000 people have called it right ten times in a row and won $1,000. "They may try to be modest, but at cocktail parties they will occasionally admit to attractive members of the opposite sex what their technique is, and what marvelous insights they bring to the field of flipping." After another ten days, we're down to 215 survivors who've been right 20 times in a row and have won $1 million. They write books on "How I Turned a Dollar into a Million in Twenty Days Working Thirty Seconds a Morning" and sell tickets to seminars. Sound familiar?

Thus randomness contributes to (or wrecks) investment records to a degree that few people appreciate fully. As a result, the dangers that lurk in thus-far-successful strategies often are under-rated.

> Reality is far more vicious than Russian roulette. First, it delivers the fatal bullet rather infrequently, like a revolver that would have hundreds, even thousands of chambers instead of six. After a few dozen tries, one forgets about the existence of a bullet, under a numbing false sense of security. . . . Second, unlike a well-defined precise game like Russian roulette, where the risks are visible to anyone capable of multiplying and dividing by six, one does not observe the barrel of reality. . . . One is thus capable of unwittingly playing Russian roulette – and calling it by some alternative "low risk" name. (p. 28)

Perhaps a good way to sum up Taleb's views is by excerpting from a table found on page 3 of his book. He lists in the first column a number of things that easily can be mistaken for the things in the second column.

Luck	Skill

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Randomness	Determinism
Probability	Certainty
Belief, conjecture	Knowledge, certitude
Theory	Reality
Anecdote, coincidence	Causality, law
Survivorship bias	Market outperformance
Lucky idiot	Skilled investor

The table reminds me of a key difference between the "I know" and "I don't know" schools. "I don't know" investors are acutely conscious of the things in the first column; "I know" investors routinely mistake them for things in the second.

I think Taleb's dichotomization is sheer brilliance. We all know that when things go right, luck looks like skill. Coincidence looks like causality. A "lucky idiot" looks like a skilled investor. Of course, knowing that randomness can have this effect doesn't make it easy to distinguish between lucky investors and skillful investors. But we must keep trying.

I find that I agree with essentially all of Taleb's important points.

- **Investors are right (and wrong) all the time for the "wrong reason."** Someone buys a stock because he expects a certain development; it doesn't occur; the market takes the stock up anyway; he looks good (and invariably accepts credit).

- **The correctness of a decision can't be judged from the outcome.** Nevertheless, that's how people assess them. A good decision is one that's optimal at the time it's made, when the future is by definition unknown. **Thus correct decisions are often unsuccessful, and vice versa.**

- **Randomness alone can produce just about any outcome in the short run.** The effect of random events is analogous to the contribution from beta discussed on page six. In portfolios that are allowed to reflect them fully, market movements can easily swamp the skillfulness of the manager (or lack thereof). But certainly market movements cannot be credited to the manager (unless he's the rare timer who's capable of getting it right repeatedly).

- **For these reasons, investors often receive credit they don't deserve.** One good coup can be enough to build a reputation, but clearly a coup can arise out of randomness alone. Few of these "geniuses" are right more than once or twice in a row.

- **Thus it's essential to have a large number of observations – lots of years of data – before judging a given manager's ability.**

* * *

The bottom line for me is as follows:

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Equity returns should be expected to average in single digits at best for the next few years. This is because dividends will be moderate and P/E ratio expansion can't be counted on.
Most investors are unlikely to find this market return satisfactory, and thus they will continue to try for more through active management. However, because of the great deal of attention paid to them, most mainstream markets are efficient. This means very few investors there will dependably achieve superior risk-adjusted returns or consistently beat the other market participants.

To be able to earn better risk-adjusted returns and beat the market and the competition, one had better look in less thoroughly explored, inefficient markets. Even there, however, it's essential that one be, or employ, a superior manager possessing "alpha."

It's hard to separate good managers from not-so-good managers, and to do so it's essential that we identify returns earned through genuine, repeatable skill, not just good fortune. In that regard, records that have been rendered above average by occasional flashes of greatness tell us much less than records that consistently have been even modestly superior over long periods of time, and those that demonstrate a dependable ability to avoid losses in tough markets.

November 11, 2002

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Memo to: Oaktree Clients

From: Howard Marks

Re: Etorre's Wisdom

My memos evoke a wide variety of reactions. One I hear most often is "where do these ideas come from?" This memo will serve as a good example: it was inspired by a ride I took this summer with my son Andrew. That, in turn, reminded me of a clipping that's been sitting in my files since the early 1970s.

The newspaper article, entitled "The laws that rule frustrating lives," enumerates a dozen principles that we suspect are at work on our bad days. Here are a few examples:

- Everyone knows the first, Murphy's Law: If anything can go wrong, it will.
- Fewer people, however, are conversant with O'Toole's Commentary: Murphy was an optimist.
- There's a lot of truth in The Unspeakable Law: As soon as you mention something, if it's good, it goes away; if it's bad, it happens.
- Every parent of a toddler has seen The Law of Selective Gravity in action: An object will fall so as to do the most damage.
- But the one that's least controvertible is Etorre's Observation: **The other line moves faster.**

While I was driving with Andrew he asked, as fifteen-year-olds are prone to, "Dad, why do you always have to drive in the slow lane? Why don't you switch to that one; it's moving faster?" As I wound up for a lengthy explanation, **I recognized in his comment the greatest imaginable metaphor for investor behavior.**

What is it like to drive on our crowded highways?

- We often sit there, frustrated, watching cars whiz by in the adjacent lane.
- However, if we change to the faster lane, it slows down just as the one we left speeds up.
- Sometimes a lane-jumper shoots past us, but we know deep down that drivers who constantly shift from one lane to another are unlikely to reach a given point much before we do.

I think there are many ways in which the experience of drivers on a crowded highway is similar to that of investors. I'll touch on them below, and on what I see as the reasons (and the lessons).

<u>Finding Your Way on an Efficient Highway</u> – Some people find it difficult to understand the concept of efficient markets, and how efficiency makes it hard for investors to outperform. It's really for this that a crowded highway is the perfect metaphor.

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Most drivers share the same goal: we want to get there as quickly as possible, with safety. A few people drive like slowpokes, sacrificing speed for excessive safety, and a few others are maniacs who keep the pedal down without a care. The vast majority of us, however, conduct ourselves reasonably but really would like to cut our travel time.

As we drive along, we see from time to time that another lane is moving faster than ours. Just as obviously, however, we know that jumping to that lane is unlikely to bring much net improvement.

And that's where the metaphor comes in. If I could switch to the faster lane while everything remained unchanged, doing so would cut my travel time. **But everyone sees which lane is moving fastest, and if everyone switches into that lane, that will make it the slow lane.** Thus the collective actions of drivers alter the environment. In fact, they create the environment.

In April 2001, I wrote the following in "Safety First . . ."

> Over the years, performance has constantly improved in areas like golf. That's because while the participants develop new tools and techniques, the ball never adjusts and the course doesn't fight back. But investing is dynamic, and the playing field is changing all the time. The actions of other investors will affect the return on your strategy. Just as nature abhors a vacuum, markets act to eliminate an excessive return.

What I meant is that, unless the Greens Committee changes the layout, a golf course is a static environment. The actions of golfers don't change the game. If I try a certain approach to a hole – or even if everyone does – that won't alter the effectiveness of the approach.

In contrast, highways – like markets – are dynamic environments. What the other participants do on a given day goes a long way toward determining what will and will not work for us. When people flock to the fast lane, they slow it down. And with the lane they left suddenly less crowded, it speeds up. **This is how the "efficient market" in travel acts to equalize the speed of the various lanes, and thus to render ineffective most attempts at lane-picking. Efficient securities markets work the same way to eliminate excess returns**.

Everyone knows what has worked well to date. Just as they know which lane has been moving fastest, they know which securities have been performing best. Most people also understand there is no guarantee that past performance will continue. **What is a little less widely understood, however, is that past returns influence investor behavior, which in turn alters future performance.**

While investors have the option of switching into the securities that have been performing best, most know the outperformance isn't likely to last forever. It takes a little more

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insight, however, for them to comprehend that their switching will be, in itself, among the things that change performance. When people switch to the better-performing group, their buying bids up the prices of those securities. That bidding-up prolongs the outperformance somewhat, but it also reduces the prospective return and increases the probability of a correction. (The higher the price you pay, the worse your prospects for profit. This seems like a simple concept, but it's forgotten once in a while – as it was in the tech bubble.)

At the same time, the switchers will sell worse-performing securities to finance their move into the hot group. That will lower the prices of the laggards, and at some point they'll be so cheap that they become destined to outperform.

For How Long Will the Fast Lane Go Fast? – The pedal-to-the-metal momentum crowd saw the tech and telecom stocks moving fastest in 1999 and extrapolated their outperformance to infinity. In essence, they assumed one lane could go faster forever. Of course, they ignored the fact that the stocks were being bid up to prices from which collapse would be inevitable. They also failed to notice that the "slow lane" value stocks they were selling would eventually become primed for acceleration.

How long can outperformance continue? How long can one lane be the fastest, one strategy be the best? Clearly, there's no rule. The momentum players behind the bubble proved with certainty that fast rising stocks will keep rising until they stop. They also proved, to their surprise, that few people are capable of getting off just as the upward trajectory peaks out.

As I've said many times, anything can work for a while, but nothing can work forever. Sometimes large cap works, and sometimes small cap works. Sometimes domestic works, and sometimes international works. Sometimes buying leaders works, and sometimes buying laggards works. Wall Street has pushed out some incredible gibberish over the years, but nothing quite like that embodied in another yellowed clipping from 1976 (maybe this is why there's no more Loeb, Rhoades):

> A continuing pattern of consolidation and group rotation suggests that increasing emphasis should be placed on buying stocks on relative weakness and selling them on relative strength. This would be a marked contrast to some earlier periods where emphasizing relative strength proved to be effective.

I guess that's a fancy way to say that sometimes the stocks that have been doing best continue to do best, and sometimes the stocks that have been doing worst start to do best. (Really, I don't make this stuff up.)

The Tactics Others Adopt – The fact that crowded highways are efficient allocators of space doesn't mean people don't try to beat them. How often do we see the guy in the souped-up '67 Mustang careen back and forth just in front of us, changing lanes every minute and cutting off half the cars on the road? But does he get there any faster? Should he expect to?

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Of course, the analogy to investing holds beautifully. Knowing which lane to drive in has nothing to do with which lane **has been going fastest**. To chart the best course, one must know which one **will go fastest**. As usual, outperforming comes down to seeing the future better than others, which few drivers on crowded highways can do.

So half the time the lane-jumper moves into a fast-moving lane that keeps going fast, and half the time into one that's just about to slow down. And the slow lane he leaves is as likely to speed up as it is to stay slow. Thus the "expected value" of his lane changing is close to zero. And he uses extra gas in his veering and accelerating, and he bears a higher risk of getting into an accident. Thus the returns from lane changing appear modest and undependable – even more so in a risk-adjusted sense.

There are lots of investors in our heavily populated markets who believe (erroneously, in my opinion) they can see the future, and thus that they can get ahead through market timing and short-term trading. Most markets prove to be efficient, however, and most of the time these machinations don't work.

Still, investors keep guessing at which lane on the investment highway will go fastest. They are encouraged by the successes they recall and the gains they dream of. But their recollection tends to overstate their ability by exaggerating correct moves and ignoring mistakes. Or as Don Meredith once said on Monday Night Football, "they don't make them the way they used to, but then again they never did."

So most investors go on trying to time markets and pick stocks. When it works, they credit the efficacy of their strategy and their skill in executing it. When it doesn't, they blame exogenous variables and the foolishness of other market participants. And they keep on trying.

In the ultimate form of capital punishment, the hyper-tactician – on the road or in the market-stands a good chance of repeatedly jumping out of the thing that hasn't worked just as it's about to start working, and into the thing that has been working moments before it stops.

This is why it's often the case that the performance of investors in a volatile fund is worse than the performance of the fund itself. On its face this seems illogical . . . until you think of the unlucky lane-jumper described just above. People often jump into a hot fund toward the end of a period of good performance, when overvaluation in the market niche (or hubris on the manager's part) has set the stage for a fall, and when the great results have brought in so much money that it's impossible to keep finding enough attractive investments. By the time a hot fund falls, it's usually much larger than it was when it rose, and thus a lot more money is lost on a 10% drop than used to be made on a 10% rise. It's in this way that the collective performance of a fund's investors can be worse than that of the fund.

There are prominent examples of money managers who started small, made 25% a year for 25 years, got famous and grew huge, and then took a 50% loss on $20 billion. I often

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wonder whether their investors enjoyed any cumulative profit over the funds' entire lives. Just as lane-jumping is risky on the road, following the hot trend is risky in the investment world.

Isn't There a Way to Make Good Time? – If crowded highways are truly efficient, and the fast lane is destined to slow down, is there no way to do better than others?

My answer is predictable: find the inefficiencies. Go where others won't. Do the things others avoid. We all have our tricks on the road. We'll take the route with the hazards that scare away others – after we've made sure we know the way around them. Or we'll take the little-known back road. We'll go through the industrial area, leaving the beautified route to the masses. Or we'll drive at night, while others prefer the daylight.

All of these things are analogous to the search for inefficiency in investment markets. At Oaktree we invest in things that others find frightening or unseemly – like junk bonds, bankruptcies and non-performing mortgages. We spend our time in market niches that others ignore – like busted and international convertibles, and distressed debt bought for the purpose of obtaining control over companies. We try to identify opportunities before others do – like European high yield bonds and power infrastructure. And we do things that others find perilous, but we approach them in ways that cut the risk – like investing in emerging markets without making sink-or-swim bets on the direction of individual countries' economies and stock markets.

I continue to believe there are ways to earn superior returns without commensurate risk, but they're usually found outside the mainstream. **A shortcut that everyone knows about is an absolute oxymoron**, as is one that's found where the roads are well marked and mapped. The route that's little known, unattractive or out of favor may not be the one that's most popular or least controversial. But it's the one that's most likely to help you come out ahead.

September 4, 2002

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Memo to: Oaktree Clients

From: Howard Marks

Re: Quo Vadis?

Leon Uris turned the question "Quo Vadis?" into a book title. Everyone wants to know. **Where do we go from here?** What's in store for the market?

> . . . for all the drama, yesterday's seesaw trading failed again to give investors the one thing they needed most: a clear picture of where the stock market is headed. Many on Wall Street had been hoping for some kind of resolution yesterday – either a significant drop that would wash out the selling, or a significant recovery. Instead, stocks bounced in both directions, as optimists battled the pessimists. (Wall Street Journal, July 24, 2002)

I include this paragraph because it communicates a great deal in just a few words. It makes clear how much investors hunger for an indication of what lies ahead. It shows how inconclusive anyone day's evidence can be. And, most importantly, to me it hints at the sheer folly of this quest for an omen. **There's no such thing as a conclusive sign, and there never will be. The future will always remain a mystery – and this is even more true for short-term fluctuations than for long-term trends. Nothing in the market's movement one day tells us anything about what it'll do the next. Most of the time people will conclude that they have no idea what lies ahead. And once in a while they'll feel they do (as in 1999) and likely be wrong.**

I know my views on the market's direction aren't worth betting on. But while I can't tell you what lies ahead, perhaps I can be of service in my usual way, by marshalling the arguments on both sides and giving you my take on them.

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Starting Point

This attempt to provide insight into the market's future course should be understood in light of a few caveats. The most important are these:

First, we are living through the most extreme boom-bust episode of my 33-year investment career and, I think, the most extreme since the Roaring Twenties and subsequent market crash. The magnitude and craziness of the bull market and tech-media-telecom bubble of the 1990s dwarfed every up-leg I've seen, and the correction that started 28 months ago already ranks with the greatest down-legs. Thus all bets for "normalcy" are off. A huge decline like we've had doesn't necessarily create bargains if preceded by a huge advance.

Second, no one knows what the future holds, especially in the short term. **The movements of markets are primarily determined not by physical laws, but by the reaction of emotional humans to developments in their environment. These reactions are well beyond accurate prediction**. The fraternity of would-be forecasters consists of people who've been right once or twice, giving them credibility, and people who've never been right. None of them has a high probability of being right this time.

Third, the market's "observable historic patterns" (a) are very inconsistent and (b) have been derived from a small number of observations over a period of just a century or so under widely varying circumstances. Thus these historic patterns are of very limited relevance in predicting this market's next move.

Last, I want to admit that, as usual, my analysis is likely to overweight the negatives and the rebuttals to the positives. I've been cautious for a long time – in fact, I don't remember ever having written a bullish piece on stocks – and this memo is unlikely to be any different. There are "horses for courses," and I admit it: I'm usually going to cost you money on the upside.

Taken together these caveats mean that very little trust, if any, should be put in any market prediction – especially mine.

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Positive Arguments

One of the strongest arguments for buying now cites the market's departure from one of those historic patterns referred to above. The New York Times stated it clearly on July 21:

> Using history as a guide, the stock market should be higher now than it was a year ago. Since 1948, six months after a recession's trough, stocks have jumped an average of 24 percent from the previous year. But at the end of June, six months from the recession's probable end, stocks were down 18% from last year. **That means the market has underperformed its typical post-recessionary move by 40 percentage points**. [Emphasis added]

Supporting this is the widespread and not unreasonable belief that the economy is no longer in decline and a modest recovery is underway. While it is difficult to identify many pockets of great strength in the economy, there is no evidence that the aggregates are still trending down.

Buttressing the economic outlook are recent movements in currency exchange rates. The dollar has stopped appreciating relative to other currencies and in fact has moved 10% lower. This means, for example, that it now takes fewer euros to buy a dollar and more dollars to buy a euro. Thus, everything being equal, U.S. goods are now cheaper than foreign goods. This should serve to increase U.S. manufacturers' sales to Americans and foreigners alike.

The improving environment seems to have taken the downward pressure off profits and slowed the flow of earnings disappointments. As reported by the Wall Street Journal on July 22, "Nobody wants to hear it, but companies are beating their numbers again . . . Of the 208 companies from the S&P 500 that have reported [midyear results] so far, 58%, or 120 companies, earned more per share than analysts had estimated . . . Only 14%, or 29 companies, have missed estimates." (Bear in mind, however, that "earnings ahead of estimates" is not necessarily the same thing as "earnings ahead of last year." This data could simply mean that the comparisons are against estimates that had become too pessimistic.)

I see technical indicators that are encouraging. There are a number of signs that optimism is being wrung out of the market and fear is replacing greed. For example, when the Dow fell 390 points on Friday, July 19, the NYSE saw:

- new lows outnumber new highs by almost fourteen to one (386 vs. 28),
- more than three times as many stocks decline as advance (2,467 vs. 766),
- all of the 30 Dow Industrial stocks decline, and
- an all-time record number of shares change hands (2.63 billion shares, only to be exceeded in the rally of July 24).

In addition, there have been several days this year when 80% or 90% of the trading volume took place on downticks, and cash outflows from equity mutual funds have been substantial.

Certainly investor behavior has turned bearish. Selling sometimes seems indiscriminate. Every better performing group gets its turn in the barrel. The value stocks that outperformed for the last two years are sharing the pain of the growth stocks. It seems there's no place to hide. Investors complain that they can't take it and have started to throw in the towel. **Maximum panic usually coincides with minimum prices**. Thus these may be signs that capitulation, the exhaustion of selling, and a bottom are near.

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Negative Arguments

On the other hand – as any good politician would say – there are counter-arguments to many of the above, and a large number of additional negatives to be considered.

In my opinion, just as the strongest positive is seen in the failure of the market to reflect the ending of the recession, I think the counter to that – and the strongest negative – lies in the matter of valuation. **In short, the fact that stocks are down since the end of the recession, and down a great deal from their peak, doesn't mean they're cheap**. In fact, most rumination on the market's future direction touches on the correction, investor psychology and the economy, but not whether stocks are rich or cheap, always a difficult subject to plumb.

The impact of a decline must be gauged in light of its starting point. Stocks ended up cheap after the S&P's 1973-74 decline of 48%, but that's because the average P/E ratio started in the high teens and ended in single digits. Thus this correction's 45% decline doesn't necessarily have equal import, given that it started **and ended** with an average P/E ratio above 20!

Of course, a case continues to be made that stock valuations are attractive (or, more typically, "are not unattractive") because of the low level of interest rates. Low rates raise the discounted present value of a given stream of future cash flows, and they reduce the competition that stocks face from bonds. **As I see it, much of the case for the fairness of valuations today rests on the view that low prospective returns on stocks are reasonable given the low prospective returns on fixed income instruments. Maybe this makes stocks cheap at today's P/E ratios, but I don't consider it much of a positive.** Further, in order for interest rates to continue to render stocks attractive, they must stay low. But low rates presuppose low levels of economic growth, demand for capital, and inflation. Are these the arguments on which to build a bullish case?

There's also a strong counter-argument regarding economic recovery. As stated by Jan Hatzius, the senior economist at Goldman Sachs, it goes as follows:

> Unfortunately, the effect [on the economy] of the stock market's sorry performance has yet to be felt. . . Normally, when you get a big stock market setback, consumers have a harder time getting credit. But there are more alternative sources of credit for consumers now and the Fed is very eager to keep access to credit good. . . Once consumers realize that the stock market will no longer bolster their savings, they will rein in spending and start setting aside more income. That will be a big negative for consumer spending, the only area of the economy that has been strong. (NY Times, July 21, 2002)

Certainly with about $7 trillion of equity value having been erased since the market's peak in March 2000, investors are sure to be feeling a lot poorer, and thus there is reason to question the longevity of strong consumer spending. Bulls often touted the "wealth effect" in 1998-99, but we hear much less about it these days. Yet concern that consumers will cut spending is one of the reasons there is fear of a double-dip recession.

And the negative ramifications aren't likely to be limited to consumers. Corporations will feel their share of pain from the market's decline. First, they may have to come up with cash for contributions to pension funds, and there may come a time when they will no longer be able to augment income with "actuarially assumed" investment returns that aren't occurring. Second, lower asset values may shed doubt on the billions of dollars of acquisition goodwill now present on balance sheets. Third, the prevalence of out-of-the-money options – and the negative recent experience with them – may make employees clamor for cash compensation, with negative implications for net income and cash flow. In this environment, corporations may have a lower propensity toward capital spending.

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Governments at all levels also are likely to see their revenues decline. The Federal government will run deficits, (the end of which was one of the factors lifting the market in the late 1990s), and the states and cities will cut back on spending, with a retarding effect on the economy.

If both individuals and institutions have less cash to invest and less willingness to part with it, our reliance on foreign capital is likely to become clearer. But with foreign investors no longer feeling they can count on the dollar to be worth ever-increasing amounts of yen or euros, inflows of those currencies for dollar investments are less dependable. The implications for security prices and capital formation are obviously negative. And questions about our system's integrity and transparency can't help.

Beyond the fundamentals of economy and valuation, there are a vast number of psychological factors to be considered:

- Of course, cynicism prompted by corporate misdeeds tops the list. Who'll invest in the face of the corruption at "all these companies"? How many investors realize that the dishonest acts have been limited to a handful of firms? Or that there is a difference between aggressive accounting and fraud? Who'll believe even the simplest of management's statements about cash in the bank or the next quarter's earnings? (By the way, I think the recent exposure itself can be counted on to produce better corporate behavior. Already companies are scrambling to show they're clean in terms of accounting, governance, and executive compensation.)

- Certainly the belief in the inevitability of stock market profits has been dispelled. Who still believes that "stocks can be counted on to beat bonds and cash"? (Okay, nothing has changed regarding the long run, but investors have learned that living through a negative short run isn't that much fun.) And who still believes that the "efficient market" can be relied on to price stocks right? For these reasons, I think millions who were suckered into investing without the necessary expertise or awareness of risk will drop out for a while.

- Likewise, the 1999 mantra of buying on dips has been laid to rest. Those who tried it in the last 28 months have paid a high price for investing on autopilot, and they are unlikely to rise up and counter the bears' selling any time soon. Sure, stocks will rise again, but few of the burned investors are worried about missing the first ten percent.

- The leaders that people counted on to make them rich in 1998-99 are gone from the scene, and no one's likely to win investors' confidence anytime soon. Alan Greenspan's words no longer have the same soothing effect; now he's blamed for fostering too much liquidity, too great a market bubble, and then too-high interest rates. Likewise, investors have learned painfully that bullish statements from analysts and strategists precede up markets <u>and</u> down markets alike. Without "trusted advisers" they can count on, investors won't be as quick to jump aboard the next bandwagon.

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- Macro fears still loom in the background, and they gain more credence when people feel less good about things. The threat of further terrorism, unending violence in the Middle East, nuclear and biological weapons in the hands of rogue states, and even Japanese-style deflation – none of these fears can be put to rest conclusively.

Of course, like almost everything else, these psychological factors have two sides. They're negatives to the extent they contribute to fear and skepticism and thus discourage buyers. But they're positives if they induce panic selling and take prices low enough to form a bottom.

Lastly, I think we all should worry about Washington. Where's the political payoff today? It lies in decrying corruption and calling for extreme reforms. The backlash against corporate malfeasance I cited in "Learning From Enron" certainly threatens to become a witch-hunt, raising great risk of tampering with a system that's essentially sound. Regardless of whether properly motivated or not, the government should not be in the business of codifying rules in areas such as accounting and compensation.

Foreseeing second-order consequences is difficult, and particularly so for politicians and regulators. Not only are they often unknowable, but also they exist in the long term, whereas people in politics are governed by short-term considerations – like getting re-elected. Capping the price of natural gas was popular, but we saw too late that it keeps people from drilling. Controlling rents seemed desirable, but no one foresaw that it would discourage landlords from building housing and renters from moving out. There's little I'm sure of, but I do believe that if the government establishes rules and procedures in areas that should be the province of the market, (a) there will be unintended consequences, and (b) the rules will be much harder to correct than they were to enact.

* * *

I believe strongly that things will not get worse forever. We'll muddle through. Given the retarding effects of lobbyists and competing political interests, the government probably won't do anything terribly destructive. The economy will come back. Most companies will be shown to make real profits, and their securities will turn out to have value. **In other words, the financial world won't come to an end**.

As for short-term direction, no one knows which way the market's going to go, or whether the declines to date are enough to offset the negatives and make this a bottom. Do the declines to date and the economic recovery that's underway mean we're at the bottom? Or do the abject disillusionment that investors have suffered and the still-high P/E ratios mean it won't be reached for a while? The answer rests on the actions of investors in the coming weeks and months, and that truly defies prediction.

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When I think about whether the brouhaha over corporate misdeeds will soon die down, I worry about the following:

- When the replacement auditors show up at each former Arthur Andersen client, they'll be bringing their fine-tooth combs. They'll have every incentive to find something wrong in the previous accounting and absolutely no incentive to say, "Everything was just fine."

- With or without suggestions from new auditors, every management team will be motivated to amend its accounting. First, they'll want to join the holier-than-thou parade. Second, they know choosing a more aggressive accounting treatment will leave them open to criticism or worse. Last, they are likely to engage in the usual deck clearing to put costs and restatements behind them, prodded, in particular, by the requirement that they certify financial statements starting in mid-August. The sum of this may result in months of additional disclosures and restatements.

- More virtuous accounting practices, including specifics like the expensing of option grants, are sure to mean lower reported profits than otherwise would have been reported. You might say investors will look beyond these numbers and perceive the lower quantity of earnings to be offset by the higher quality. I doubt it. I think the first-year shift to this new regime could make companies seem generally less profitable.

- Politicians will keep battling to show who's less tolerant of corruption. Democrats will pick on Republicans for their closeness to business, and Republicans will strive to show they're just as tough as Democrats. I think this is overwhelmingly likely to last through the November elections.

- The media will throw gasoline on the fire as always, rising up in indignation whenever they detect a sensational story. The stories are too good, the targets are too rich and attractive, and the rewards for resisting sensationalism are few and far between. Reporters who were pro-investment and pro-free market just a few years ago now see the greatest gains in calling for scalps. And I can just hear the talking heads on CNN and MSNBC saying, "I never liked the stock market anyway."

When I put it all together, I come down, as usual, on the cautious side. I'm not confident that the excesses of the bull market of 1982-1999 and the enormous tech bubble could have been corrected in just 28 months. Stocks' current swoon need not go on without end, but I see fundamental, valuation and psychological problems that will take time to fix. Maybe there'll be some lackluster years rather than a continuous collapse. It's said the investors who were burned in the excesses of the 1920s didn't return to the market until 1955 – or was it their kids?

I doubt there'll be a massive revival of the popularity of stocks any time soon, and thus I wouldn't count on a quick return to performance in line with history. **More than ever, I think non-market-derived, skill-based value added – that is, alpha, not beta – will**

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hold the key to investment performance. Because owners of capital may not be able to count on a tailwind like we enjoyed in the 1980s and 1990s, managers with great skill remain the strongest hope. And in this climate, I'd rather bet on risk control than risk bearing as the route to superior results.

July 26, 2002

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Memo to: Oaktree Clients

From: Howard Marks

Re: The Realist's Creed

Early this year, I was asked to write an article for "Trusts & Estates" magazine. Here it is, in part cobbled together from things I've written in the past, and slightly changed from the version that was published in April.

The editors wanted me to recommend a course of investment action for beneficiaries and their fiduciaries. To most people that means deciding how much to put into stocks and bonds (and which ones), and whether private equity and hedge funds should be included. It usually sounds easy: all you have to do is make a few simple judgments about the future. I decided to write a very different article: it's going to tell you how hard investing is, and how you can best equip yourself for the task.

First, I think investing must be based on a firmly held belief system. What do you believe in, and what do you reject? Put another way, what are the principles that will guide you?

For me, the starting point consists of deciding which approach to take in dealing with the future. That decision primarily revolves around choosing between two polar opposites: what I call the "I know" school and the "I don't know" school.

Most of the investment professionals I've met over my 33 years in the industry fall squarely into the "I know" school. These are people who believe they can discern what the future holds, and in their world investing is a simple matter:

- First you decide what the economy is going to do in the period under consideration.
- Then you figure out what the impact will be on interest rates.
- From this you infer how the securities markets will perform.
- You choose the industries that will do best in that environment.
- You make judgments about how the industries' companies will fare in terms of profits.
- Based on all of this information, you pick stocks that are bound to appreciate.

End of story. Of course, the usefulness of this approach depends entirely on people's ability to make these decisions correctly. What if you're wrong about the economy? What if you're right about the economy but wrong about its impact on a company's profits? Or what if you're right about profits but the valuation parameters contract, and thus the price? The bottom line is that the members of this school think these things are knowable. I know lots of people who are perpetually and constitutionally optimistic about both the long-term future for stocks and their ability to make these judgments correctly.

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On the other hand, I and most of the investors with whom I feel an affinity belong to the "I don't know" school. In short, (1) we feel it's impossible for anyone to know much about a vast number of things, (2) we consider it especially difficult to outperform by guessing right about the direction of the economy and the markets, (3) we spend our time trying to know more than the next person about specific micro situations, and (4) we think more about what can go wrong than about what can go right. In contrast to the "I know" school, people in this group are more cautious and feel a strong need for downside protection.

Sticking to this approach requires some solid building blocks. One of those is **contrarianism**. Basically that means leaning away from the direction chosen by most others. Sell when they're euphoric, and buy when they're afraid. Sell what they love, and buy what they hate. In general, I think you'll find few bargains among the investments that everyone knows about, understands, feels comfortable with, is impressed by and is eager to own. Instead, the best bargains usually lie among the things people aren't aware of, don't fully understand, or consider arcane, unseemly or risky.

Closely related to contrarianism is **skepticism**. It's a simple concept, but it has great potential for keeping investors out of trouble: **If it sounds too good to be true, it probably is**. That phrase is always heard after the losses have piled up – be it in portfolio insurance, "market neutral" funds, dot-coms, or Enron. My career in money management has been based on the conviction that free lunches do exist, but not for everyone, or where everyone's looking, or without hard work and superior skill. Skepticism needn't make you give up on superior risk-adjusted returns, but it should make you ask tough questions about the ease of accessing them.

Thus I also advocate **modest expectations**. To shoot for top-quartile performance every year, you have to hold an idiosyncratic portfolio that exposes you to the risk of being outside the pack and dead wrong. It's behavior like that that leads to managers being carried off the field when things go poorly – and to clients losing lots of money. It's far more reasonable just to try for performance that's consistently a little above average. Even that's not easy to achieve, but if accomplished for a long period it will result in an outstanding track record.

I think **humility** is essential, especially concerning the ability to know the future. Before acting on a forecast, we must ask whether there's good reason to think we're more right than the consensus view already embodied in prices. I think it's possible to get a knowledge advantage with regard to under-researched companies and securities, but only through hard work and skill.

Finally, I'm a strong believer in **investing defensively**. That means worrying about what one may not know, about what can go wrong, and about losing money. If you're worried, you'll tend to build in greater margin for error. Worriers gain less when everything goes right, but they also lose less – and stay in the game – when things return to earth. All of Oaktree' s activities are guided more by one principle than any other: **if we avoid the losers, the winners will take care of themselves**. We're much more concerned about

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participating in a loser than we are about letting a winner get away. In my experience, long-term investment success can be built much more reliably on the avoidance of significant losses than it can on the quest for outsized gains. A high batting average, not a swing-for-the-fences style, offers the most dependable route to success.

<u>Second</u>, I'd advise you to approach the entire subject of forecasts and forecasters with extreme distrust. Reduced to the absolute minimum, investing consists of just one thing:

Making judgments about the future. And the future is inherently uncertain. Everyone looks for help in dealing with this uncertainty, and their usual recourse is to put faith in forecasters. How could they not? Most forecasters are highly articulate, represent prestigious institutions, and exude total confidence in their knowledge of the future.

The problem, however, is that they're not often right, or at least not consistently more right than others. And almost never do they (or anyone else) record and assess their accuracy over time. Here's the way I view the forecasting game.

- There are hundreds, or more likely thousands, of people out there trying to predict the future, but no one has a record much better than anyone else. **Given how valuable superior forecasts can be, recipients should wonder why anyone who was capable of consistently making them would distribute them gratis**.

- Market prices for assets already incorporate the views of the consensus of forecasters. Thus holding a consensus view, even if it's right, can't help you make above-average returns.

- Non-consensus views can make you a lot of money, but to do so they must be right. Because the consensus reflects the forecasting efforts of a large number of intelligent and informed people, however, it's usually the closest we can get to right. In other words, I doubt there's anyone out there with non-consensus views that are right routinely.

- Most of the time, the consensus forecast extrapolates current observations. Predictions for a given parameter usually bear a strong resemblance to the level of the parameter prevailing at the time they're made. Thus predictions are often close to right when nothing changes radically, which is the case most of the time, but they can't be counted on to foretell the important sea changes. And as my friend Ric Kayne says, "everything important in financial history has taken place outside of two standard deviations." It's in predicting radical change that extraordinary profit potential exists. In other words, **it's the <u>surprises</u> that have profound market impact (and thus profound profit potential), but there's a good reason why they're called surprises: it's hard to see them coming!**

- Each time a radical change occurs, there's someone who predicted it, and that person gets to enjoy his fifteen minutes of fame. Usually, however, he wasn't right because

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of a superior ability to see the future, but rather because he regularly holds extreme positions (or perhaps he's a dart thrower) and this time the phenomenon went his way. Rarely if ever is that person right twice in a row.

So forecasts are unlikely to help us gain an advantage, but that doesn't make people stop putting their faith in them. It's unsettling to realize how much in the dark we investors are concerning future developments. But there's one thing worse: to ignore the limits of our foresight. The late Stanford behaviorist Amos Tversky put it best: **"It's frightening to think that you might not know something, but more frightening to think that, by and large, the world is run by people who have faith that they know exactly what's going on."**

<u>Third</u>, I think it's essential to remember that just about everything is cyclical. There's little I'm certain of, but these things are true: Cycles always prevail eventually. Nothing goes in one direction forever. Trees don't grow to the sky. Few things go to zero. **And there's little that's as dangerous for investor health as insistence on extrapolating today's events into the future.**

The economy will not rise forever. Industrial trends won't continue indefinitely. The companies that succeed for a while often will cease to do so. Company profits won't increase without limitation. Investor psychology won't go in one direction forever, and thus neither will security prices. An investment style that does best (or worst) in one period is unlikely to do so again in the next.

That was really the problem with the technology bubble. Investors were willing to pay prices that assumed success forever. They ignored the economic cycle, the credit cycle and, most importantly, the corporate life cycle. They forgot that profitability would bring imitation and competition, which would cut into – or eliminate – profitability. They overlooked the fact that the same powerful force that made their companies attractive – technological progress – could at some point render them obsolete. And they failed to consider that the investing fads in favor of these technologies, companies and stocks could reverse, with dire consequences.

<u>Fourth</u>, investors should bear in mind the role played by timeframe. It seems obvious, but long-term trends need time in order to work out, and time can be limited. Or as John Maynard Keynes put it, "Markets can remain irrational longer than you can remain solvent." Whenever you're tempted to bet heavily on your conviction that a given phenomenon can be depended on in the long run, think about the six-foot tall man who drowned crossing the stream that was five feet deep on average.

One of the great delusions suffered in the 1990s was that "stocks always outperform." I agree that stocks can be counted on to beat bonds, cash and inflation, as Wharton's Prof. Jeremy Siegel demonstrated, but only with the qualification "in the long run." If you have thirty years, it's reasonable to expect equity returns to be superior to those on bonds. For someone with a thirty-year timeframe, the NASDAQ's decline since 2000 may turn out to be a matter of indifference. But it hasn't felt that way to the people holding the stocks.

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The need for time came into play in another way for the technology and telecommunications entrepreneurs. Many raised the money they needed for a year or two and proceeded to burn it up. They counted on being able to raise more later, but in 2000-02 capital has been denied even to worthwhile ideas. Lots of companies never got the chance to reach profitability. They simply ran out of time.

Fifth, you must never forget the key role played by valuation. Investment success doesn't come primarily from "buying good things," but rather from "buying things well" (and the difference isn't just grammatical). **It's easy for most people to tell the difference between a good company and a bad one, but much harder for them to understand the difference between a cheap stock and an expensive one**. Some of the biggest losses occur when people buy the stocks of great companies at too-high prices. In contrast, investing in terrible companies can produce huge profits if it's done at the right price. Over time, investors may shift their focus from dividend yield to p/e ratio, and they may stop looking at book value, but that doesn't mean valuation can be considered irrelevant.

In the tech bubble, buyers didn't worry about whether a stock was priced too high because they were sure someone else would be willing to pay them more for it. Unfortunately, this "greater fool theory" only works until it doesn't. They also thought the technological developments were so great that the companies' stocks could be bought regardless of price. In the end, though, when newness becomes old, flaws appear and investor ardor cools, the only thing that matters is the stock's price . . . and it's usually much lower.

Most shortages – whether of commodities or securities – ease when high prices inevitably cause supply to rise and satisfy the demand. And no fad lasts forever. Thus valuation eventually comes into play, and those who are holding the bag when it does are forced to face the music.

Sixth, beware the quest for the simple solution. Two important forces drive the search for investment options: the urge to make money and the desire for help in negotiating the uncertain future. When a market, an individual or an investment technique produces impressive returns for a while, it generally attracts excessive (and unquestioning) devotion. I call this solution-du-jour the "silver bullet."

Investors are always looking for it. Call it the Holy Grail or the free lunch, but everyone wants a ticket to riches without risk. **Few people question whether it can exist, or why it should be available to them**. At the bottom line, hope springs eternal. Thus investors pursued Nifty-Fifty growth stock investing in the 1970s, portfolio insurance in the '80s, and the technology boom of the '90s. They aligned themselves with "geniuses" they thought would make investing easy – be it Joe Granville, Elaine Garzarelli or Henry Blodgett.

But the silver bullet doesn't exist. No strategy can produce high rates of return without risk. And nobody has all the answers; we're all just human. **Markets are highly dynamic and, among other things, they function over time to take away the**

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opportunity for unusual profits. Unskeptical belief that the silver bullet is at hand eventually leads to capital punishment.

<u>Seventh</u>, you must be aware of what's going on around you in terms of investor psychology. I don't believe in the ability of forecasters to tell us where prices are going, but an understanding of where we are in terms of investor psychology can give us a hint. When investors are exuberant, as they were in 1999 and early 2000, it's dangerous. When the man on the street thinks stocks are a great idea and sure to produce profits, I'd watch out. When attitudes of this sort make for stock prices that assume the best and incorporate no fear, it's a formula for disaster.

I find myself using one quote, from Warren Buffett, more often than any other: **"The less prudence with which others conduct their affairs, the greater prudence with which we should conduct our own affairs."** When others are euphoric, that puts us in danger. When others are frightened and pull back, their behavior makes bargains plentiful. In other words, what others are thinking and doing holds substantial ramifications for you. And that brings us full circle to the importance of contrarianism.

* * *

I've cataloged above the "mental arsenal" I feel is needed in the battle for investment success. I'll proceed below to illustrate the application of some of these concepts to two key asset classes: **common stocks**, the grand-daddy of all active investments, and **hedge funds**, a much smaller area that is in the process of attracting a lot of attention (and capital).

<u>Common stocks</u> – Among the mantras that were repeated in the past decade, few received as much credence as "stocks outperform." Wharton's Professor Jeremy Siegel documented in his book, "Stocks for the Long Run," that equities have beaten bonds, cash and inflation over almost all long periods of time. In fact, his graph of the movements of the stock market since 1800 looks like a straight line rising from lower left to upper right. Evidence like this allowed people to invest heavily in the stock market while continuing to sleep well. Little did they know that the price gains that made them feel so sanguine about their positions were dramatically increasing their risk.

I am a great believer in common stock investing, but I hold tight to a few caveats:

- Return expectations must be reasonable.
- The ride won't be without bumps.
- It's not easy to get above-market returns.

We live in the world's most productive economy, under a very effective capitalist system, at a wonderful point in time. In general, it's great to own productive assets like companies and their shares. **But occasionally, people lose track of the fact that in the long run, shares can't do much better than the companies that issue them**. Or to

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paraphrase Warren Buffett, when people forget that corporate profits grow at 8 or 9% per year, they tend to get into trouble.

It's never clear what base period makes for a relevant comparison, but between 1930 and 1990, annual returns from stocks averaged about 10% year. Periods when they did better were followed by periods when they did worse. The better periods were usually caused by the expansion of p/e ratios, but valuations tended to return from the stratosphere, and in the long run, returns roughly paralleled profit growth.

There always will be bull markets and bear markets. The bull markets will be welcomed warmly and unskeptically, because people will be making money. These markets will be propelled to great heights, usually by the rationalization that "it's different this time"; that productivity, technology, globalization, lower taxation – something – has permanently elevated the prospective return from stocks.

The bear markets will come as a shock to the unsuspecting, demonstrating that, most of the time, the world doesn't change that much. For example, when you look at Siegel's 200-year straight-line stock market graph, no hiccup is visible in 1973-74. Try telling that to the average equity investor, who lost half his money.

The bottom line is that risk of fluctuation always is present. Thus stocks are risky unless your time frame truly allows you to live through the downs while awaiting the ups. Remember what Lord Keynes said about the ability of markets to remain irrational for long periods of time. And remember that it's possible for you to be forced to sell at the bottom – by emotions, competitive pressure or the need for liquidity – turning temporary volatility (the theoretical definition of risk) into very real permanent loss.

In order to get more out of the ups of stocks and try to lessen the pain of the downs, most people turn to active management via market timing, group rotation, industry emphasis and stock selection. But it's just not that easy. The American Way – earnestly applying elbow grease – doesn't often payoff. **For a model, don't think about the diligent paperboy on his route; think about trying to profit from flipping a coin**.

I say that because I believe most markets are relatively "efficient," and that certainly includes the mainstream stock market. Where large numbers of investors are aware of an asset's existence, have roughly equal access to information and are diligently working to evaluate it, the market operates to incorporate their collective interpretation of the information into a market price. While that price is often wrong, very few investors are capable of consistently knowing when it is, and by how much, and in which direction.

The evidence is clear: most investors underperform the market. They (a) can't see the future, (b) make mistakes that keep them at a disadvantage, (c) accept high risk in their effort to distinguish themselves, and (d) spend money trying (in the form of market impact and transaction costs).

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Of course, there are individuals who beat the market by substantial margins, and they become famous. The mere fact that they attract so much attention proves how rare they are. (That's the meaning of the adage "it's the exception that proves the rule.") Adding to return without adding commensurately to risk requires rare understanding of how money is made and what constitutes value. Far more managers promise it than deliver.

Most active managers go through times when their biases or their guesses lead them to do things that beat their assigned benchmark, which they attribute to their skill, and times that are the opposite, which they attribute to being blindsided by the unforeseeable (or to some defect in the benchmark). But these are two sides of the same coin, and in the long run the average manager adds little. Usually, active management will not allow you to beat the stock market, or to enjoy the fruits of the market without fully bearing its risk.

How do I view the outlook for stocks? The period since I started managing money in 1978 has been incredible. There were a few bad days and quarters, but through 1999 there wasn't a single year when the S&P 500 lost 5%. From 1978 through 1999, the return on the S&P 500 averaged 17.6% per year. That rose to 20.6% for 1991-99 and 28.3% for 1995-99. I doubt there's ever been a better 22-year run; to ask for more would be just plain piggish. But I don't think it'll be anything like that in the years just ahead, and of course there's been a considerable correction already.

The observers I most respect foresee single digit average returns for common stocks, and I agree. Equity returns have three components: profit increase, multiple expansion and dividend yield. The last is minimal and the second can't be counted on from here. So that means we're down to the rate of increase in corporate profits, which is likely to be in single digits. Single digit returns would be below the historic average, but after such a great 22-year run, a little less wouldn't be unreasonable.

Hedge Funds – Perhaps because they were new to the market, many who participated in the equity boom of the late 1990s were surprised by the suddenness with which their profits evaporated in the subsequent correction. Now they're looking for a new path to profit without risk, and many think they've found it in hedge funds. Their reasons for migrating include the good performance of hedge funds, especially amid the recent chaos, and the modest prospective returns available in the mainstream stock and bond markets.

First, how about a definition. Generally speaking, a hedge fund is an unregulated, private investment partnership whose manager receives a percentage of the profits. To "hedge" is to intentionally include positions that can be depended on to move counter to each other under most circumstances, and thereby to mitigate exposure to developments in the environment. "Hedge fund" is a misnomer for many of today's funds, however, because unlike the days when the term first arose, hedging has become far from universal.

The funds I'm interested in do hedge. They're designed to systematically take advantage of market inefficiencies and to capture managers' skill while limiting susceptibility to market fluctuations. Arbitrage, long/short, hedge and market-neutral strategies fall into

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this category. Most strive to earn returns in the teens on a consistent basis, with relative indifference and insensitivity to the performance of the mainstream markets. If they can do it, they're a great idea.

Today, hedge funds, also sometimes called "absolute return" funds, are being promoted heavily by brokerage firms, mutual fund organizations and investment advisers and popularized by the media. They are in the process of becoming the next investment fad. And there's good reason why they should. Especially given the weak competition I see coming from mainstream investment media like stocks, an appropriate mantra for the coming decade might be "low double digits ain't bad." If you can identify investment managers who possess enough skill to consistently deliver such returns, you should hire them. And there's a better-than-average chance they'll be found in the hedge fund arena, where the managers get to share in the profits.

However, a few caveats are in order:

- **Expectations still must be reasonable**. Investors must realize that very few managers are truly capable of earning before-fee returns of 12% or 15% steadily and with low correlation to the mainstream markets. Anything approaching 20% is Herculean.

- **Most returns really won't be "absolute."** I have seen lots of "hedge funds" and "market neutral funds" drop precipitously. That's because it's unusual for portfolio returns to be entirely divorced from their environment. "Zero correlation" with the market is rarely attainable; "low correlation" may have to suffice.

- **Money flows will play a big role**. In general, the good records have been built on small amounts of money. And those records will attract large amounts of money. There are several consequences.

  First, records simply may not be capable of extrapolation. **To handle more money, a manager may have to invest faster, reduce selectivity, put more dollars into each position, put on a larger number of positions, broaden the fund's range of activities, and/or add new staff members. All of these can have negative implications for returns.**

  Second, many of the best managers with skill <u>and</u> discipline are already closed to new money, or will reach the point when they are. Thus in the extreme, as Groucho Marx would have put it, "I would never invest my money with anyone who'd take it."

  And third, when there's too much money in an area, even funds that are closed can be affected. Long-Term Capital Management found others emulating its trades and eventually lost its opportunity because too much money had piled into its niches.

- **The wrong people will get money**. The rush to invest in an area gives money to managers who shouldn't get it. **When the best are closed, the rest will be funded**.

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Second-string managers will split off from established groups and get money based on their old fund's record (regardless of how much of it they were responsible for). Thus, as the amount of money in the area rises, the average quality of the managers may fall.

- **Fees can eat up skill**. When the demand for funds outstrips supply, fund managers have the ability to raise fees and thereby appropriate for themselves a larger portion of their funds' returns.

- **Disappointments will be many**. Due to the factors enumerated above, the next few years will see many investors fail to get what they hoped for . . . as usual. One of my favorite sayings is **"what the wise man does in the beginning, the fool does in the end."** Over the last 20-30 years, a few talented hedge fund managers built successful records with relatively small amounts of capital. I believe the period ahead will see lots of people raise more than they should; thus it will have to be navigated with care.

All investment trends run a high risk of being carried to extremes. (For a shining example, take a look at venture capital in 2000.) Despite this, I think absolute return investing deserves your attention. But you should commit only after a lot of investigation and with your eyes wide open. Remember, there is no such thing as a silver bullet.

* * *

The main thing I've tried to indicate here is that investing isn't easy. Or better put, superior investing isn't easy. It's easy to do average. In fact, there are vehicles – index funds – that exist for the explicit purpose of delivering average performance at low cost, and they are completely capable of doing so.

But most people want to do better than the average. They want higher returns, and achieving higher returns without assuming commensurately higher risk is the hard part.

It's easy to make guesses about the future but hard to be consistently more right in those guesses than your fellow investor, and thus hard to consistently outperform. Doing the same thing others do exposes you to fluctuations that in part are exaggerated by their actions and your own. It's certainly undesirable to be part of the herd when it stampedes off the cliff, but it takes rare skill, insight and discipline to avoid it.

The thing I'm surest of is that the solution doesn't lie in making guesses about the big-picture future. Rather, it lies with investors who possess skill, insight and discipline. There are times when they'll underperform – times like 1998-99, when aggressiveness was rewarded far more than caution. But if you can find those people, you should stick with them. For me, the laundry list of their desired characteristics is clear:

- adherence to the "I don't know" school of thought
- contrarianism, skepticism, modest expectations, humility and defensiveness
- eschewing of macro forecasts

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- attention to the cyclical nature of things
- consciousness of timeframe
- concentration on valuation
- disdaining the hunt for the silver bullet
- awareness of prevailing investor psychology

You can go with opinions about the future. Everyone's got them, and what they call for in terms of investment behavior usually is obvious. In other words, the "I know" school makes investing sound easy – although in my opinion it's not often right.

Or you can join me in the "I don't know" school, where you must:

- face up to the uncertainty that surrounds the macro future;
- concentrate on avoiding pitfalls;
- invest in a few areas of specialization based on in-depth analysis, conservatively estimated tangible values and modest purchase prices; and
- be prepared for returns that trail the risk-takers when markets are hot.

This may be the less common path, and certainly the less rosy, but it's the one I'd much rather count on for success in the long run.

May 31, 2002

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Memo to: Oaktree Clients

From: Howard Marks

Re: Learning From Enron

> The investigation was not completed until June . . . The testimony had brought to light a shocking corruption, . . . a widespread repudiation of widespread standards of honesty and fair dealing . . . and a merciless exploitation of the vicious possibilities of intricate corporate chicanery. The public had been deeply aroused by the spectacle of cynical disregard of fiduciary duty . . .

Part of a draft post-mortem for Enron? Could be, but it's not. It's a passage from one of my favorite books, "Wall Street Under Oath." The book was written in 1939 by Ferdinand Pecora, who served as Counsel for the Senate Committee on Banking and Currency investigating the Crash of '29 and went on to become a Justice of the Supreme Court of New York. It recounts the outrageous 1920s conduct of commercial/investment bankers that inspired the creation of the Securities and Exchange Commission and the enactment of securities laws that govern our industry to this day. The bankers' conduct was rife with self-dealing, conflicts of interest and gross dishonesty.

In other words, reviewing the 1920s reminds us of history's tendency to repeat.

What Can We Learn From Enron?

An article about Enron in the December 5 Wall Street Journal made a big impression on me. Headlined "Behind Enron's Fall, a Culture of Operating Outside the Public's View," it read in part as follows:

> It was vintage Enron: minimal disclosure of financial information that, in retrospect, was central to understanding the complex company . . . . virtually unseen until the end was an Enron culture that contained the seeds of its collapse, a culture of highly questionable financial engineering, misstated earnings and persistent efforts to keep investors in the dark.
>
> Senior Enron executives flouted elementary conflict-of-interest standards. The company hired legions of lawyers and accountants to help it meet the letter of Federal securities laws while trampling on the intent of those laws. It became adept at giving technically correct answers rather than simply honest ones.

The article, and particularly the last sentence quoted above, prompted me to write a year-end memo to Oaktree' s staff stressing the importance of taking "the high road" and describing Enron as "a pretty good example of what Oaktree doesn't want to be."

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What we knew about Enron in December was a fraction of what we know today. It's now clear that there are many lessons to be learned from it.

Questionable Transactions – Form Over Substance

As little as six months ago, Enron was considered an exemplar of corporate growth and ingenuity. Little did we know, however, that its inventiveness had been directed not at developing highly profitable businesses, but rather transactions that could be used to paint an inaccurate picture of Enron and still squeak by under Generally Accepted Accounting Principles. Some of these transactions were breathtaking in their duplicity and chutzpah.

The most notorious examples relate to the creation of **off-balance sheet partnerships**. These "special-purpose entities" were used to hide debt and pump profits. As our analysts studied Enron, they couldn't believe the lengths to which its management had gone.

When Enron wanted to increase its debt to an extent that would have jeopardized the credit rating that was so essential to its business, it formed partnerships to do the borrowing away from Enron's balance sheet. Off-balance sheet partnerships are common, but for their debt not to be consolidated with that of the parent, outsiders must provide at least 3% of their equity capital. The self-interest of the providers of this risk capital, it is thought, will serve to keep the entities independent.

But Enron had a problem. It wanted to avoid consolidation with its own financial statements, but it feared that vigilance on the part of outside investors would prevent Enron from doing all it wanted in the partnerships. Investors with capital at risk would care about how much debt was taken on, what the partnerships bought with the borrowed money, and at what prices. They might even worry about having Enron executives running the partnerships, which did business with Enron. So outside equity capital had to be attracted to satisfy GAAP, but truly self-interested investors had to be avoided if Enron was to maintain its flexibility.

How could outsiders be enticed to invest capital without caring? Simple: guarantee the results. The key was for Enron, not the investors, to absorb the risk. This is accomplished by promising a full return of capital, and returns up to 30% a year in some cases, and backing the promise with Enron stock. Certainly the security provided by this investment-grade company's soaring stock would be solid. Enron also guaranteed some of the loans to these entities.

So with the "outside" investors' risk covered by Enron and the "independent" partnerships squarely under its control, they could be used any way Enron chose. When assets declined in value, the partnerships would buy them at Enron's cost, hiding the losses. When profits seemed likely to disappoint in a quarter, assets could be sold to the partnerships at inflated prices, covering the shortfall. And with investors insulated from the impact, there was no one to question the prices at which these trades took place and

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supply the "arms-length" aspect that would be present in dealings with a truly independent entity.

Less often discussed, but equally questionable, were the transactions that gave Enron **mark-to-market profits**. For example, Enron Energy Services was a highly-touted division that contracted to deliver electricity, gas and energy management services to commercial customers, sometimes for periods of up to a decade. Under mark-to-market accounting, anticipated profits from those contracts were reflected immediately.

Mark-to-market accounting is based on the view that because contracts signed today can greatly influence a company's value, the future profits or losses they imply should be recognized. Based on the terms of the contracts and the likely cost of fulfilling them, management projects the profit that will arise and runs it through the income statement. Obviously, the appropriateness of these profit projections depends on the reasonableness of the cost estimates. If I have agreed to supply gasoline six months from now at $2 per gallon, you can probably depend on the profits I say I'll make. But the accuracy of profit figures for supplying electricity in 2010 is another story.

> Although that technique is standard in commodities trading, problems emerge when there is no liquid market that can establish with a degree of certainty what future market values will be. (Los Angeles Times, February 12, 2002)

At Enron, we're told, the "reliable source" for documenting the future value of contracts – and thus their contribution to the current year's profits – was the company's own models. That's the equivalent of letting ballplayers call the game and keep their own scores.

The last type of transaction I'll discuss are **derivative trades** that made loans look like sales. Again, the amounts of money Enron needed to fund its perpetual motion machine exceeded the amounts that could be borrowed without causing its credit to be downgraded and bringing the motion to a halt. So Enron found a way to enter into "swap" transactions using derivative contracts that in effect were loans but could be accounted for in other ways.

In a normal swap transaction, party A pays party B a premium to exchange one flow of funds for another. For example, if party A holds a floating-rate loan but doesn't want to bear interest rate uncertainty, he might offer party B a fee plus the stream of payments on that loan in exchange for the payments on a hypothetical fixed-rate loan of the same amount and maturity.

In Enron's transactions, a financial institution agreed to accept one stream of payments in exchange for another <u>and then</u> paid Enron the estimated present value of the stream it had agreed to pay over time. Trades like these are called "prepaid swaps," because the financial institution agrees to pay immediately for the stream of future payments to which it becomes entitled. Thus Enron got a lump sum from the financial institution in exchange for the promise of payments in the future.

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That sounds like a loan to me. However, Enron's balance sheet told a different story. Because the derivatives related to commodities, the receipts usually were shown as "assets from price risk management" and the payments that it was obliged to make as "liabilities from price risk management." No loan transaction; just money in Enron's till and an obligation to make payments that amounted to interest and principal.

There's nothing wrong *per se* with off-balance sheet partnerships, mark-to-market accounting or swap transactions, or with the standard methods of accounting for them. They're engaged in many times a day, and almost always benignly. The problem arises when these transactions are entered into and accounted for so as to fool, misrepresent and obscure.

Among the common threads running through Enron's financial practices is the fact that (1) they had been designed for uses other than those to which Enron put them, and (2) Enron's accounting for them provided a distorted picture of what was actually going on.

<u>What Was Wrong With Enron's Accounting?</u>

The principal problem was that the transactions represented an effort to use accounting as a weapon against investors, rating agencies, counterparties and regulators.

Although the opponents of gun control like to say that "guns don't kill people; people kill people," I think it's people misusing guns who kill people. By the same token, it's not accounting that creates abuses, but people misusing accounting.

Like most things, transactions like those described above can be abused and misused. At their best they allow companies to accomplish legitimate goals and communicate them clearly. At their worst they can be used to circumvent their normal purposes and avoid apprehension (certainly as in "understanding," but perhaps as in "arrest" as well).

It seems clear that Enron's executives didn't say "What transaction is in the best interest of Enron and its shareholders, and what's the clearest way to account for it?" Rather, they tried to come up with a form of transaction that could be described so as to convey the desired impression – even if the transaction served no valid business purpose for Enron and the accounting for it was misleading.

While failings on the part of its executives, directors and outside auditors certainly contributed, Enron was able to do this in large part because the accounting profession had set out numerical rules that could serve as a roadmap for duplicity, rather than principles that would set standards for the intent and effect of financial reporting. The Wall Street Journal of February 12 explained the distinction:

> Auditors who issue clean bills of health are required to certify that a company's financial statements fairly represent the client company's financial performance.

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> But critics of the accounting profession today say that over the past three decades the standard setters have moved away from establishing broad accounting principles aimed at insuring that companies' financial statements are fairly presented.
>
> Instead, they have moved toward drafting voluminous rules that may shield auditors and companies from legal liability if technically followed in check-box fashion. That can result in companies creating complex structures that technically comply with GAAP but hide billions of dollars of debt or other corporate obligations.

As the Wall Street Journal wrote on February 1 and 8,

> . . . sometimes persnickety rules can become a license for larger dishonesty.
>
> This new environment's two highest values are tolerance and proceduralism. That doesn't encourage good judgment; it suppresses it.

So the lessons regarding accounting are simple:

- **We need accounting standards that are set and enforced in terms of principles, not just technical rules.**
- **Accounting is like any other tool; the results will depend on whose hands it's in.**

<u>The Origins of Corporate Corruption</u>

For those seeking an explanation for fortuitous outcomes, luck has been described as "what happens when preparation meets opportunity." I think Enron inspires a similar explanation for corruption: **it's what happens when exigency meets moral weakness**.

If Oaktree got into a bind, I hope we would admit that performance wasn't measuring up to expectations, that things weren't going our way, or that we simply had made mistakes. I hope we would accept the consequences and try to remedy the situation.

Unfortunately, however, not everyone works that way. Some people are less eager to face the music. If the high road doesn't work out and doing the right thing isn't of great concern, there are people who will cut a few corners or look for a "creative" way out.

I have no reason to believe Enron was formed in 1985 to be the Potemkin village it became, with the intention of misrepresenting results and profiting executives rather than shareholders. And I doubt if anyone said, "Who cares if we hire executives that are morally soft?" I think Ken Lay once had a dream that truly included new ways to profit in a changing energy industry. But when things didn't go according to plan and

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maintaining a lofty stock price became a challenging obsession, the people who mattered most either engaged in corrupt practices or failed to blow the whistle on them.

Corporate Rot Can Spread From the Executive Suite

In fact, Enron's culture in recent years seems to have encouraged doing the **wrong** thing. Certainly, the jury is still out regarding Ken Lay. Was he the oblivious dreamer who couldn't understand the details, trusted the wrong people and was duped? Or was he the manipulative master criminal we've heard vilified in Congress?

Whichever was the case, right now we only know the results. It certainly appears that Enron was a company where:

- hubris was encouraged,
- schemers rose to the top,
- people were rewarded for ends, not means, and
- **no one ever asked "but is it right?"**

Whistleblower Sherron Watkins has said that questioning CEO Jeff Skilling about the propriety of the partnerships would have been "job suicide." CFO Andrew Fastow is said to have cursed at the Enron representatives who negotiated against the partnerships he ran and to have tried to get one fired. Lawyers will argue the specifics, and judges and juries will decide, but it seems clear that there were bad guys at Enron, and that nothing in the climate there encouraged doing the right thing.

And encouraging moral behavior, perhaps above all else, is the responsibility of top management. One thing I'm convinced of is that you can't have a great organization without someone at the top setting the tone. The Chairman and CEO can't know everything that goes on in a company, can't be conversant with the details and merits of every transaction, and can't participate in any but the most senior hires. **But they can create a climate where expectations are high and the emphasis is on means, not just ends**.

When I get through telling prospective clients how well my partners manage Oaktree's portfolios, some ask, "Then what do you do?" In addition to communicating with clients and managing the business, I tell them, I try to provide leadership. You can't see it around the office or quantify its effect on the results, but it's what makes a company what it is.

That Depends on the Meaning of the Word "True"

I've seen organizations where, it seemed to me, the standard for truth was that "if something cannot definitively be proved to be a lie, we can say it's the truth." That standard, at best, appears to be what guided Enron.

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No one in control at Enron seems to ever to have said "Wait a minute! That's not what's really happening here" or "That description is too unclear to be useful." Enron appears to have used a very special dictionary. Its key verbs were "mislead," "obfuscate," "manipulate" and "disguise." Its adjectives were "opaque," "Byzantine" and "technically correct." And they had no need for "straightforward," "arms-length" or "candid." Much of the disclosure that did take place seems to have been arranged so that, if need be, Enron executives could say "if you looked in the right place and read it the way we intended, you couldn't say it's not there."

For example, if it was the number of words that counted, this paragraph from a much longer Enron footnote might pass for full disclosure.

> In 2000, Enron entered into transactions with the Related Party to hedge certain merchant investments and other assets. As part of the transactions, Enron (i) contributed to newly-formed entities (the Entities) assets valued at approximately $1.2 billion, including $150 million in Enron notes payable, 3.7 million restricted shares of outstanding Enron common stock and the right to receive up to 18.0 million shares of outstanding Enron common stock in March 2003 (subject to certain conditions) and (ii) transferred to the Entities assets valued at approximately $309 million, including a $50 million note payable and an investment in an entity that indirectly holds warrants convertible into common stock of an Enron equity method investee. In return, Enron received economic interests in the Entities, $309 million in notes receivable, of which $259 million is recorded at Enron's carryover basis of zero, and a special distribution from the Entities in the form of $1.2 billion in notes receivable, subject to changes in the principal for amounts payable by Enron in connection with the execution of additional derivative instruments. Cash in these Entities of $172.6 million is invested in Enron demand notes. In addition, Enron paid $123 million to purchase share-settled options from the Entities on 21.7 million shares of Enron common stock. The Entities paid Enron $10.7 million to terminate the share-settled options on 14.6 million shares of Enron common stock outstanding. In late 2000, Enron entered into share-settled collar arrangements with the Entities on 15.4 million shares of Enron common stock. Such arrangements will be accounted for as equity transactions when settled.

Could anyone tell what these 260 words meant? There's a lot of ink there, not much information. **Disclosure doesn't mean putting facts out there indecipherably, but rather in a way that lets people discern their significance**.

Obviously, Enron's communication was the opposite of truthful and complete. Equally obviously, Enron didn't want people to know what was going on. Truth was scarce at Enron, and something to be toyed with. The examples ranged from ridiculous to extremely serious. We can chuckle at the thought of Enron building a sham trading floor and coaching secretaries on how to sound like traders when analysts walked through. But there's nothing funny about the money people lost because, as the February 4 issue of Business Week reported,

> In September, Lay told employees: "Talk up the stock and talk positively about Enron to your family and friends." The company's upcoming financial report, he said, was "looking great."

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This was a few weeks after Jeffrey Skilling resigned and Lay was told by Sherron Watkins of her concerns, while he was actively selling his stock, and a few weeks before a $1.2 billion downward restatement of Enron' s net worth.

And it seems old habits die hard. Just a week or so ago, in defending the juxtaposition of negative developments at Enron and Ken Lay's stock sales, a spokesperson pointed out that Lay had bought stock last summer. True as far as it goes, it's my belief that he sold or otherwise disposed of more shares than he bought. It's funny how someone might take "he bought stock" to mean, "he bought stock on balance." To paraphrase a former world leader, it all depends on the meaning of the word "true."

The acid test for the truth is really quite simple: If everyone got a chance to knowledgeably compare reality against what we say about it, what would they think? Enron wouldn't have done very well under that standard.

Conflicts of Interest

It's an old-fashioned question, but one that seems to have been forgotten at Enron: **Whose interests come first?**

Each of us encounters this question daily, having to balance the interests of others against our own. Should I slow down for the driver signaling to change lanes? Can I take the last piece on the platter? The biggest one? If I'm late for a flight, is it okay to push through the security line? Is it fair to just pick out the cashews and almonds, or must I eat my share of filberts and peanuts too? Is it okay to break a date when a better offer comes along?

These decisions aren't easy. Rabbi Hillel described the dilemma two thousand years ago: "If I am not for myself, who will be? And if I am not for others, what am I?" Despite the difficulty, most of us were taught by our parents to do a decent job of balancing self-interest and the interests of others.

For people in positions as fiduciaries, the law makes it a lot simpler: the other guy comes first. It's obvious that an executor can't buy assets from the estate at bargain prices. Likewise, company managers and directors owe their first loyalty to shareholders, pension plan beneficiaries and, in insolvency, to creditors.

Like the test for truth, the test on handling conflicts seems pretty simple: **If everything we do ends up in the headlines, will anyone have grounds for complaint?** Well, no one seems to have applied that test at Enron. It all made it to the headlines, and Enron flopped.

The most egregious instance involves executives like Chief Financial Officer Andrew Fastow and Managing Director Michael Kopper who (1) set up off-balance sheet entities that did business with Enron, (2) assumed control of those entities, (3) negotiated on

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behalf of the entities with Enron subordinates whose compensation they determined, and (4) profited fabulously. Fastow is famous for having made $30 million from the entities, and Kopper made at least $10 million. Given that the partnerships are generally not believed to have served valid business purposes, those profits represent a direct transfer from Enron's coffers to those of the employees for which Enron received no legitimate *quid pro quo*.

By the way, Enron had an ethics policy, and it probably would have prohibited these things. So the directors voted to waive the policy. But that vote didn't make the actions right.

Neither was it a good idea for Ken Lay's sister to be Enron's travel agent, or for Enron to contract with and invest in companies owned by Lay and his son. Each of these might have had a valid business purpose. **But it's essential to avoid both conflicts and the appearance of conflicts**. We all might like to use employer dollars to benefit our relatives, our friends, and even ourselves, but the temptation must be resisted. If top executives engage in transactions that suggest self-dealing, even if they might be capable of tortuous rationalization, it makes a statement that fiduciary duty and moral behavior are dispensable. What could be worse?

In the business world, potential conflicts of interest arise all the time. We can't avoid them, but our goal must be to deal with them honorably. Clients, shareholders and others who depend on us must come first.

Whose Company Is It, Anyway?

When a public company is involved, an important question is whether management acts like the company belongs to them or to the shareholders.

As part of my business education I learned that America's commercial progress took a big step forward when management was separated from ownership. About a century ago, companies began to be turned over to hired managers. Because company owners aren't necessarily the best managers, it followed that the emergence of a professional manager class would, on balance, enhance the quality of management.

This made great sense to me. Certainly this separation is one of the things that made America the world leader in business. But now I think it has gone too far in some cases. Alan Greenspan said recently, "There has been a severance, in my judgment, of the interests of the chief executive officer in many corporations from those of the shareholders, and that should be pulled together." (Los Angeles Times, February 28, 2002)

Enron's managers didn't act like paid caretakers of other people's company, but rather as if they owned it. Of course, Ken Lay *et al*. would argue that everything they did was done to create value for the shareholders. But is there any reason to believe they acted the way the shareholders would have wanted them to act? Certainly they can't

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argue that they had the shareholders' blessing, given that they never let on what they were really doing.

Of course, executives defend their actions by invoking the cloak of shareholder governance: that shareholders elect the directors, and it's the directors who choose and direct the CEO. We've seen hundreds of times, however, how hard it is for the company-proposed slate of directors to lose an election or for a dissident proposal to be passed.

Acting in the interests of shareholders is just one option for management today, and clearly it wasn't the one chosen at Enron.

Aligning Interests

About a decade ago, Forbes published a special issue on executive compensation. In it, a sage, experienced director said of managers, "I've given up on getting them to do what I tell them to do; they do what I pay them to do." I've never forgotten that statement.

When individual compensation gets into the tens or even hundreds of millions of dollars per year (including stock and options), managers profit as if they owned the company and took the risk. They appropriate a major share of profits for themselves in the good years, even though they lose nothing (other than perhaps potential or previously-accrued profits) in the bad ones.

Set up this way, management has lots of incentive to take risk and cut corners. It sure worked that way at Enron. The executives can point out that the board approved the key elements in the compensation program. But once again, I say the board's control over management is limited.

Options have played a major part in the trend toward outsized compensation. Early on, when their use began, it was felt that options would align the interests of management with those of the shareholders by (1) interesting management in how the stock did, and (2) tying compensation to the company's long-term performance.

As with so many things, however, the negatives have been found out through experience:

- Options focus attention on short-term performance, not long-term.
- Options focus attention on the performance of the stock, not the company (and those are two very different things).
- Options give management a skewed interest in the company. It was thought that they would make managers into stockholders, but this is rarely the case. Employees usually sell very soon after exercising, often simultaneously. This is because they either don't have enough capital to hold or don't want to bear the downside risk. Thus executives profit from share appreciation but rarely hold shares. That's very different from the lot of the company's owners.

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- Because the cost of option programs never shows up in the income statement, their cost is considered in a distorted way. Option grants amount to giving a portion of the company to the employees, but no net income effect is ever seen under current GAAP.
- Stock price declines introduce the unattractive dilemma of option repricing. When a stock falls precipitously, management often proposes a commensurate reduction of the exercise price on options. With shareholders having taken a big loss, it seems unfair to exempt executives from the pain. But it is true that old options that are way out of the money won't serve to retain and motivate employees. And with option grants "free," repricing often is irresistible.

It seems obvious that the option culture, the stock market bubble and the advent of mega-compensation have combined in the worst of cases to encourage short-term fixes and artful – even fraudulent – accounting. I think it's no coincidence that our high yield bond portfolios encountered two examples of accounting fraud in February 2001 alone, more than in the previous twenty years put together.

Moving away from the subject of options, the New York Times of March 1 indicated another way in which compensation incentives can be counterproductive. Early in 2001, the Times reported, Enron executives and other employees received hundreds of millions of dollars in bonuses tied to earnings and stock price performance.

> . . . executives received large bonuses . . . with the amount based in large part on the earnings of the company – figures that investigators for a special committee of the Enron board have concluded were inappropriately inflated by company executives . . .
>
> Legal experts said that the payments could provide strong evidence of a motive for the financial machinations that investigators think distorted the company's reported performance and ultimately led to its demise. Without those efforts, the profits and stock price levels required to obtain the money certainly would not have been reached . . .
>
> Almost every decision that ultimately led to the company's collapse – including the establishment of a series of partnerships . . . which an investigating committee of the board concluded were used to bolster earnings improperly – was made during the time frame [when the earnings test for bonus purposes was underway] . . .
>
> [According to a former federal prosecutor,] **"The level of compensation that we are talking about here would certainly seem to be a powerful incentive for anyone to do anything."** [Emphasis mine]

Management should be incentivized, but constructively. Excessive, short-term focus on stock price performance is not in shareholders' long-term interest and, in egregious cases like Enron, obviously can bring disastrous results.

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I also want to touch on the issue of stock sales by executives. Perhaps because it's an issue with so much visceral appeal, the headlines are full of "Executives Sold While Company Crumbled; Employees and Small Investors Lost Everything."

But I don't think there's anything inherently wrong with executives selling stock. They buy it to profit, and they should be expected to reap that profit at some point in time. If the company and the stock do well, appreciation can create a position too large to hold prudently. So selling's okay; the issue is when.

Clearly, managers mustn't sell when they know things others don't. When that's true is a tough question and often a matter of degree; no shareholder can ever know as much as the CEO does. Selling while saying "the company's doing great" probably isn't a terrific idea – especially if it's not. And the number of shares it's proper to sell probably is a function of the absolute dollar amounts involved and the number of shares retained.

One last note: I have absolutely no sympathy for managers who are renegades, like Enron's seem to have been, but they're not the only ones at fault here. **Every investor who's complaining about the stock sales made by Enron executives could have learned about most of them from government filings and sold alongside. In fact, the onus is on investors who hold or buy while insiders are announcing massive sales.** Investors must accept responsibility for their actions; Enron's faulty transactions might have been covert, but most of the stock sales took place in plain sight.

Where Does the Buck Stop?

While we're on the subject of responsibility, who else should accept it in the case of Enron? (So far I haven't seen many hands going up.)

The little guys are employing **the Nuremberg defense**: "I only did what I was told." And they're right most of the time. It's true they could have objected to what they saw, but that would be asking a lot. The combination of certitude, principles, career alternatives and/or financial resources needed to create a whistleblower occurs only rarely.

Sherron Watkins might be the closest thing thus far, and she certainly did raise red flags in her memo of August. She was brave and stepped forward when few others did, but I'm not ready to canonize her yet. Before I do so, I'll have to get over the large number of references in her memo not to what was right or wrong, but to what might be found out. In August she wrote:

- Skilling's abrupt departure will raise suspicions,
- we will have to pony up Enron stock, and that won't go unnoticed,
- I am incredibly nervous that we will implode in a wave of accounting scandals,
- we are under too much scrutiny and there are probably one or two 'redeployed' employees who know enough about the 'funny' accounting to get us into trouble,
- too many people are looking for a smoking gun,

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- we do not have a fact pattern that would look good to the SEC or investors, and
- best case: clean up quietly if possible.

These quotations certainly suggest a preoccupation with perception. Did Watkins truly worry about right and wrong and choose her mode of expression to make an impact on Lay and company? Did she write to complain about wrongdoing or just to push for damage control? And are they two different things or the same?

Unlike the little guys, the top execs are employing what I call **the Geneva defense**: "I was in Switzerland during the war." Nobody ordered the misdeeds or even knew about them. Either they were out of the room or the lights went off. Control freaks with great memories left things to others or can't remember what happened. And, ultimately, they claim the directors and auditors approved everything.

The Role of the Auditors

Why do companies have auditors? So the owners can be sure that (1) they know what management is doing and (2) the financial statements accurately reflect what's going on. As such, auditors play an absolutely essential role in the corporate governance process.

In addition to checking the numbers and opining on the reasonableness of the financial statements, it's their job to tell directors, through the audit committee, when something's amiss. Every audit committee meeting should include some time when no management representatives are present. This is the auditors' chance to tell the directors about things they feel are wrong.

Did Arthur Andersen fulfill its responsibilities at Enron? They say yes and management says no. Surprise!! Certainly, at minimum, the picture is less than ideal.

- First, there's no getting around the fact that Andersen certified financial statements about which no one has a kind word to say. If they had misgivings, they weren't sufficient to make Andersen send up a red flag. We haven't seen any record of Andersen expressing misgiving to the audit committee.

- Andersen received $52 million in fees from Enron in 2000, less than half of which was for auditing. Auditors' compensation can be so great that keeping the job becomes too high a priority.

- Roughly $5 million of the total was for Andersen's help in structuring some of the complained-of transactions. When management says, "we'll pay you to think of a creative solution to our problem," there's a lot of incentive to come up with something that accomplishes the company's objectives in terms of effect and optics. And there's little likelihood that the same firm will disapprove it on audit. It's kind of like paying your IRS agent to design a tax shelter.

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- Finally, Andersen served Enron for nineteen years, and maybe things got too comfortable. While SEC rules require that the audit partner be rotated, they don't limit the tenure of the firm.

On the other hand, in Andersen's defense:

- It's hard for auditors to know more than management will tell them. (It is their job, however, to tell the audit committee when they don't feel they're getting complete information and to check matters independently where they can.) There's just too much evidence to the contrary for anyone to believe that honest auditors will always sniff out dishonest management.

- All of the details of the financial statements Andersen certified, and of their engagement at Enron, may have met the letter – if not the spirit – of the rules.

- As in any other field, the rotten apple - the dishonest auditor, or even the incompetent one – can do a lot of damage. We don't know yet what the real role of Andersen's David Duncan was in the Enron debacle, but we may find out if he receives immunity as seems to be under discussion.

Auditors are one of the shareholders' last bastions of protection. The Enron example shows us two things: their essential nature and their fallibility. We still need more help.

<u>So Who's Left?</u>

The shareholders' ultimate protection comes from the board of directors. The directors are the representatives of the shareholders and the bosses of the CEO. They are in position to hire and fire, and to approve and disapprove. Sounds like there's no one for them to pass the buck to.

But the truth is, the directors don't work at the company, aren't involved in its day-to-day affairs, and know little that they don't learn from management. I'm a corporate director, and I get my information from management and the auditors (who get much of theirs from management). If they're criminal or uninformed, I'm powerless to protect the shareholders. Bottom line: we can't prevent all fraud and misrepresentation. At best we can discourage it, and at worst we can punish it. We usually assume people are telling the truth, and I would hate to work in a place where I can't.

The contribution of directors can be increased greatly if a few standards are adhered to. The failure to do so may have been one of the major problems at Enron:

First, **independent directors must be independent**. That means they should be aware that they work for the shareholders – not the company or the management – and act like

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it. If directors derive unreasonable benefits from the company, they can lose their objectivity, become beholden or grow afraid of losing the job. For just one example in the case of Enron, the chairman of the board's investigating committee testified that all of the directors flew around on company jets. Would they have been willing to give that up to take a stand?

Second, **independent directors have to be hard-working people who will attend meetings diligently, ask tough questions and challenge management**. We're in the process of looking for directors for one of our companies. Someone I asked about a prospect said, "He'll be a pain in the ass to management." Within reason, that's what I want to hear. Relaxed attitudes negate the concept of independence. Directors who serve in perpetuity also should be looked at. After enough years, they can conclude their loyalty is to management.

Third, **at least some of the independent directors must be financially astute enough to fully understand what's going on**. There are valid reasons to include financial novices for knowledge they may have in areas like technology, law or the environment. But there should be enough financial experts to understand management's actions and question them when necessary.

Lastly, **having friends of management as directors can't help the board's independence**. (Although they are the CEO's bosses, directors often get their jobs through the CEO; how's that for a paradox?)

When, for example, you look down the list of the six directors on Enron's audit committee – probably the most important body in terms of protecting the shareholders – you see that at least five fail to satisfy all of these criteria:

- RJ chaired the audit committee for 15 years.
- RC missed more than 25% of the board and committee meetings.
- Enron has given $1.5 million to the cancer center JM headed.
- JW got an additional $72,000 a year as a consultant.
- WG's university program received $50,000 in Enron donations.

Getting highly competent and truly independent directors isn't easy. If the job pays too little, nobody qualified will take it. If it pays too much, independence can be compromised. And if Enron's board is stripped of indemnification and sued, it may become hard for companies to find independent directors at all.

Ultimately, it must be borne in mind that, under the current system, it's tough for shareholders to get boards other than those proposed by management. But as in many of the issues under discussion here, that doesn't mean they should stop pushing for boards that represent their interests.

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Don't Expect Much Help From the Analysts

On February 27, the Senate Governmental Affairs Committee held hearings regarding sell-side analysts who covered Enron. Its data showed that as late as November 8, weeks after the SEC had announced its probe of possible irregularities, 10 out of 15 analysts who covered Enron still rated it as a "buy" or "strong buy." (The stock, then around $9, is now worth roughly zero.) Enron's debt was selling at roughly 60 cents on the dollar at that time. The analysts may have thought the stock was a great buy, but debt investors apparently considered it unlikely that the creditors would be paid – in which case the stock would be worthless.

The analysts told the Senators their failure was attributable to the inaccuracy of the Enron financial statements on which they had relied. Certainly, analysts' starting point has to be the financial statements, and if they're fraudulent, accurate analysis is rendered very difficult. But still, an insightful analyst can call attention to poor earnings quality and inadequate or unclear reporting. In the case of Enron, none of the prominent sell-side analysts seems to have made a peep.

Thus Enron represents another instance, like the dot-coms, where **(a) most benignly, we'd have to say brokerage house analysts possess little insight and their opinions are of no value, and (b) most cynically, it seems they're not there to help investors as much as their companies' investment banking efforts**.

When I started off as an analyst in the 1960s, per-share commissions were high and it was the job of brokerage house analysts to generate them. They accomplished this by providing superior research. (Outright "sell" recommendations were rare nevertheless, perhaps because "buy" recommendations had a much bigger potential audience.) The process through which commissions were whittled down and analysts became driven by investment banking considerations instead built gradually since then.

The truth of the matter is that a hard-nosed analyst with a "sell" recommendation is likely to generate little in the way of commissions but certain to become *persona non grata* and assure that his employer won't get investment banking business from the subject company. Thus, as Sen. Joseph Lieberman said, "These influences compromise an analyst's objectivity and mean that the average investor should take their bottom-line recommendations with at least a grain of salt, if not a whole bucket."

Lack of objectivity isn't the only reason why analysts aren't much help. First, it's hard to develop superior information; in fact, SEC regulations require companies to give everyone the same data at the same time. Second, analysts often develop a closeness with companies and their executives that clouds their objectivity. And third, of course, any insight analysts may have is distributed widely so as to enter the public domain and quickly be reflected in market prices.

My bottom line on research (as you know): the average analyst isn't much help, and only a few are far above average – by definition. If you find an astute and independent

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analyst, stick with him (or her). Many sophisticated investors have learned to supplement brokerage house analysis with input from independent research organizations.

Where Does the Buck Stop?

Ours is a free market. **If undeserving (or crooked) companies get capital they shouldn't, the responsibility ultimately falls to the providers of equity capital**. I've read everything I could on Enron, and yet there's almost no mention that shareholders may have been remiss.

Sure, the shareholders were victims of what appears to have been organized and pervasive fraud. But no one can say there weren't warning signs. Shareholders held and bought Enron stock although they couldn't possibly have thought they understood the financial statements, or where the profits came from. They held while the top executives were selling. And they remained unperturbed when the CEO quit without explanation.

And I'm not just talking about individual investors. Al Harrison of Alliance, Enron's biggest holder, has been quoted as saying he bought on "faith." He even admits, "The company seemed to be on a deliberate path not to give full information. Shame on me for not doing something about it." (New York Times, March 3, 2002) Good marks for candor; not so good for due diligence.

I believe many investors underestimate the difficulty of investing, the importance of caution and risk aversion, and the need for their active, skeptical involvement in the process. *Caveat emptor*. Or as they say on TV, "don't try this at home."

Recap, Ramifications and Reform

As Enron's board committee concluded,

> The tragic consequences of the related-party transactions and accounting errors were the result of failures at many levels and by many people: a flawed idea, self-enrichment by employees, inadequately designed controls, poor implementation, inattentive oversight, simple (and not-so-simple) accounting mistakes, and overreaching in a culture that appears to have encouraged pushing the limits. (New York Times, February 3, 2002)

These transactions were just one element in the overall Enron picture, but they typify the malfeasance, laxness, and dereliction of duty that were widespread. I have listed some of the failings that have been laid to executives, accountants, auditors, directors and analysts. Fingers also are being pointed at commercial bankers, investment bankers, rating agencies, lawyers, politicians and regulators. Virtually no one has come away unscathed.

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Around the time the Enron disclosures reached their peak, contagion seemed ready to sweep the market. Tyco and other companies with "accounting issues" saw their stocks collapse. Whereas investors generally placed too much faith in companies in the late 1990s, now they have become highly skeptical, perhaps unduly so. As a friend described it, "A few years ago, if management said 'we'll make $5 billion,' investors swallowed it whole. Today if a CFO says 'we have $175 million in cash,' investors ask 'how do we know that's true?'"

We've read about the risk of a widespread loss of investor confidence. Allusions have been made to the corrupt practices of the 1920s and the fact that the resulting disillusionment had a lot to do with the stock market's doldrums in the following decade. Arthur Levitt, the last SEC Chairman, testified on Enron that, "What has failed is nothing less than the system for overseeing our capital markets." (Newsweek, February 4, 2002)

As The New York Times wrote on February 10, "The outcome will depend largely on how long the Enron collapse holds the attention of Washington and the public, and on whether once-elevated companies also come to be seen as houses of cards kept standing by financial sleight of hand." The good news is that no epidemic seems to have taken hold. People have been willing thus far to view Enron as an isolated example of management run wild.

That doesn't mean there won't be a spate of regulation and reform. That's what Pecora's disclosures produced, and there's no reason it won't happen again. The Enron story remains telegenic and political, and that makes it grist for Washington's mill. And I certainly don't mean to suggest that some reform isn't needed.

Here are just a few of the ideas that have surfaced (their presence here absolutely does not indicate my endorsement of them):

On the accounting process: regulate "special-purpose entities" and "off-balance sheet partnerships"; require that option grants be an expense against profits; specify broad principles for disclosure, not just technical rules; let the federal government set accounting standards.

On auditors: prohibit or limit non-audit work; make auditor hiring, firing and compensation the province of the board, not management; require increased commentary in auditors' opinion letters; enact term limits for auditing firms; restrict the movement of personnel from audit firm to client; end self-policing by the profession, substituting an outside body; increase "teeth" in disciplinary process regarding auditors; consider restoring civil liability for auditors (and lawyers) who "aided or abetted" a violation of securities law (eliminated by Supreme Court in 1994).

On banks: revive the Glass-Steagall Act separating commercial banking and investment banking (ironically, this law was one of the prime outgrowths of Pecora's investigations, and its key provisions were repealed just over two years ago); require disclosure of contingent liabilities and reserves against them (banks that had committed to lend to

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Enron while it was rated investment grade were taken up on their offer when the credit rating collapsed).

On brokerage house analysts: prohibit compensation tied to investment banking business; require disclosure of the derivation of analysts' pay, and of all fees received from the subject company; restrict analysts' trading in recommended stocks; require full disclosure of firms' and analysts' holdings and trading in those stocks; separate brokerage and research activities from investment banking.

On 401 (k) plans: limit investment in company stock; ease restrictions on sales of company stock; require notice before a moratorium on participants' changes goes into effect; improve reporting and participant counseling.

On companies, executives and directors: impose penalties for misleading financial statements; punish carelessness, not just fraud; require increased disclosure, especially regarding transactions with affiliates and insiders; put controls on the use of "creative" accounting concepts such as adjusted pro forma earnings; eliminate personal indemnification in cases of misleading financial statements.

On the SEC: review disclosure regulations; increase power to suspend or bar unethical executives or directors from working at public companies; require quicker, perhaps on-line reporting of insider trades (now not required until month-end), including sales back to the company (now not required until the next year); increase the SEC's budget so that it can hire and retain staff and increase enforcement activity.

On politicians: enact campaign finance reform (it might be on the way); require reporting of lobbyists' contacts; limit lobbyists' role in drafting legislation.

This vast laundry list of possible solutions suggests (a) the magnitude of the problem indicated by Enron and (b) the eagerness of government to ride to the rescue. Some changes will be made, but the belief that the problem isn't widespread should limit their scope.

What's the bottom line, then? The real lessons from Enron, in my opinion, are these:

- As long as there are disclosure rules – and that's forever – there'll be "technically correct" statements that leave investors in the dark. In order to get numbers with integrity, you need people with integrity.

- Rules are just the first building block in creating a safe market. We also need compliance and enforcement, neither of which will ever be 100%. Even though it’s the best in the world, our system for corporate oversight is far from perfect. The collective power of directors, auditors and regulators to protect shareholders withers in the face of serious corporate corruption. It's amazing what con men can get away with for a while.

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- As Enron's complex, questionable transactions indicate, the people looking for holes in the rules are often highly motivated, well financed and well advised. Those whose job it is to plug the loopholes are often over-matched, and their efforts to do so usually amount to a holding action. The furor over Enron's accounting shows that we need the ability to insist on adherence to general principles and punish those who violate them.

- Security analysis and knowledgeable investing aren't easy. Investors must be alert for fuzzy or incomplete information, and for companies that don't put their interests first. They must invest only when they know what they don't know, and they must insist on sufficient margin for error owing to any shortcomings.

- We all must watch out for unintended consequences, and that's especially true when promulgating regulations. Accounting rules and option programs were created with the best of intentions, but in the extreme they led to Enron's noxious transactions and counterproductive incentives. It'll be no less true the next time around.

I apologize for the length of this memo, but the Enron matter is so sweeping and multi-faceted that I found it inescapable. It is my aim here to shed light, not to recount events. I hope you'll find it interesting and of use.

March 14, 2002

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Memo to: Oaktree Clients

From: Howard Marks

Re: You Can't Predict. You Can Prepare.

Those who have been readers of my memos for any meaningful period of time know there are a few things I dismiss and a few I believe in thoroughly. The former include economic forecasts, which I think don't add value, and the list of the latter starts with cycles and the need to prepare for them.

"Hey," you might say, "that's contradictory. The best way to prepare for cycles is to predict them, and you just said it can't be done." That's absolutely true, but in my opinion by no means debilitating. All of investing consists of dealing with the future, as I've written before, and the future is something we can't know much about. But the limits on our foreknowledge needn't doom us to failure as long as we acknowledge them and act accordingly.

In my opinion, the key to dealing with the future lies in knowing where you are, even if you can't know precisely where you're going. **Knowing where you are in a cycle and what that implies for the future is very different from predicting the timing, extent and shape of the next cyclical move**. And so we'd better understand all we can about cycles and their behavior.

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Cycles in General

I think several things about cycles are worth bearing in mind:

- Cycles are inevitable. Every once in a while, an up-or down-leg goes on for a long time and/or to a great extreme and people start to say "this time it's different." They cite the changes in geopolitics, institutions, technology or behavior that have rendered the "old rules" obsolete. They make investment decisions that extrapolate the recent trend. And then it turns out that the old rules do still apply, and the cycle resumes. In the end, trees don't grow to the sky, and few things go to zero. Rather, most phenomena turn out to be cyclical.

- Cycles' clout is heightened by the inability of investors to remember the past. As John Kenneth Galbraith says, "extreme brevity of the financial memory" keeps market participants from recognizing the recurring nature of these patterns, and thus their inevitability:

> . . . when the same or closely similar circumstances occur again, sometimes in only a few years, they are hailed by a new, often youthful, and always supremely self-confident generation as a brilliantly innovative discovery in the financial and

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For the title of this memo I've borrowed the tagline from Mass Mutual's advertising campaign.

larger economic world. There can be few fields of human endeavor in which history counts for so little as in the world of finance. Past experience, to the extent that it is part of memory at all, is dismissed as the primitive refuge of those who do not have the insight to appreciate the incredible wonders of the present.

- Cycles are self-correcting, and their reversal is not necessarily dependent on exogenous events. The reason they reverse (rather than going on forever) is that trends create the reasons for their own reversal. Thus I like to say **success carries within itself the seeds of failure, and failure the seeds of success.**

- Seen through the lens of human perception, cycles are often viewed as less symmetrical than they are. Negative price fluctuations are called "volatility," while positive price fluctuations are called "profit." Collapsing markets are called "selling panics," while surges receive more benign descriptions (but I think they may best be seen as "buying panics"; see tech stocks in 1999, for example). Commentators talk about "investor capitulation" at the bottom of market cycles, while I also see capitulation at tops, when previously-prudent investors throw in the towel and buy.

I have views on how these general observations and others apply to specific kinds of cycles, which I will set forth below.

The Economic Cycle

Few things are the subject of more study than the economy. There's a whole profession built around doing so. Academics try to understand the economy, and professionals try to predict its course. Personally, I'd stick to the former. I think we can gain a good grasp of how the economy works, but I do not think we can predict its fluctuations.

I have written *ad nauseam* on this subject, but I will repeat a few of the observations I consider relevant:

- There are hundreds, or more likely thousands, of people out there trying to predict the movements of the economy, but no one has a record much better than anyone else. Certainly no one who was consistently capable of accurately predicting the economy's movements would be among those distributing their forecasts gratis.

- The markets already incorporate the views of the consensus of economists, and thus holding a consensus view can't help you make above-average returns (even if it's right).

- Non-consensus views can make money for you, but to do so they must be right. Because the consensus reflects the efforts of a large number of intelligent and informed people, however, it's usually the closest we can get to right. In other words, I doubt there's anyone out there with non-consensus views that are right routinely.

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- Most of the time, the consensus forecast extrapolates current observations. Most predictions for growth, inflation and interest rates bear a strong resemblance to the levels prevailing at the time they're made. Thus they're close to right when nothing changes radically, which is the case most of the time, but no prediction can be counted on to foretell the important sea changes. And it's in predicting radical changes that extraordinary profit potential exists. In other words, **it's the <u>surprises</u> that have profound market impact (and thus profound profit potential), but there's a good reason why they're called surprises: it's hard to see them coming**!

- Each time there's a radical change, there's an economist who predicted it, and that person gets to enjoy his fifteen minutes of fame. Usually, however, he wasn't right because of a superior ability to see the future, but rather because he tends to hold extreme positions (or perhaps he's a dart thrower) and this time the phenomenon went his way. Rarely if ever is that economist right twice in a row.

So forecasts are unlikely to help us foresee the movements of the economic cycle. Nevertheless, we must be aware that it exists and repeats. The greatest mistakes with regard to the economic cycle result from a willingness to believe that it will not recur. But it always does – and those gullible enough to believe it won't tend to lose money.

When we marketed our first distressed debt fund in 1988, most of the resistance came from people who said, "maybe there won't be a recession, and thus nothing for you to buy." Of course, we were deep into a recession within two years, and our 1988-92 distressed debt funds found lots to buy and produced excellent returns.

Eminent observers concluded again in the 1990s that the cycle had been eliminated and there would be no recession. In 1996, the Wall Street Journal wrote:

> From boardrooms to living rooms and from government offices to trading floors, a new consensus is emerging: The big, bad business cycle has been tamed.

Top business leaders were quoted as saying "There is no natural law that says we have to have a recession" and "I don't see what could happen to make a cyclical downturn." (These quotes are reminiscent of – and look no less silly than – some of my favorites from 1928: "There will be no interruption of our present prosperity" and "I cannot help but raise a dissenting voice to the statements that . . . prosperity in this country must necessarily diminish and recede in the future.")

Those quoted in 1996 might insist they weren't saying there would never be another recession, but rather that the tendency toward cyclical fluctuation had been dampened and there wouldn't be a recession soon. And they might say they were right in 1996, because there wasn't one until 2001. If managers had feared a recession in 1996, they might have pulled in their horns and missed some of the profits of the late 1990s. But they also might have avoided over-expanding and participating fully in the recession of 2001.

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The important thing is to recognize that cycles reverse, and to allow for it. I described in my last memo, "What Lies Ahead?," the manner in which a recession continues until, at the margin, a few participants stop cutting back and decide instead to act in anticipation of better times. I believe this process, and the reverse process that eventually causes growth to stall out, will go on forever. No one knows when the turn will occur, or how far the correcting leg will go, but the odds are against anyone who says, "the business cycle is dead."

How can non-forecasters like Oaktree best cope with the ups and downs of the economic cycle? I think the answer lies in knowing where we are and leaning against the wind. For example, when the economy has fallen substantially, observers are depressed, capacity expansion has ceased and there begin to be signs of recovery, we are willing to invest in companies in cyclical industries. When growth is strong, capacity is being brought on stream to keep up with soaring demand and the market forgets these are cyclical companies whose peak earnings deserve trough valuations, we trim our holdings aggressively. We certainly might do so too early, but that beats the heck out of doing it too late.

The Credit Cycle

The longer I'm involved in investing, the more impressed I am by the power of the credit cycle. It takes only a small fluctuation in the economy to produce a large fluctuation in the availability of credit, with great impact on asset prices and back on the economy itself.

The process is simple:

- The economy moves into a period of prosperity.
- Providers of capital thrive, increasing their capital base.
- Because bad news is scarce, the risks entailed in lending and investing seem to have shrunk.
- Risk averseness disappears.
- Financial institutions move to expand their businesses – that is, to provide more capital.
- They compete for market share by lowering demanded returns (e.g., cutting interest rates), lowering credit standards, providing more capital for a given transaction, and easing covenants.

At the extreme, providers of capital finance borrowers and projects that aren't worthy of being financed. As The Economist said earlier this year, "the worst loans are made at the best of times." This leads to capital destruction – that is, to investment of capital in projects where the cost of capital exceeds the return on capital, and eventually to cases where there is no return of capital.

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When this point is reached, the up-leg described above is reversed.

- Losses cause lenders to become discouraged and shy away.
- Risk averseness rises, and along with it, interest rates, credit restrictions and covenant requirements.
- Less capital is made available – and at the trough of the cycle, only to the most qualified of borrowers.
- Companies become starved for capital. Borrowers are unable to roll over their debts, leading to defaults and bankruptcies.
- This process contributes to and reinforces the economic contraction.

Of course, at the extreme the process is ready to be reversed again. Because the competition to make loans or investments is low, high returns can be demanded along with high creditworthiness. Contrarians who commit capital at this point have a shot at high returns, and those tempting potential returns begin to draw in capital. In this way, a recovery begins to be fueled.

I stated earlier that cycles are self-correcting. The credit cycle corrects itself through the processes described above, and it represents one of the factors driving the fluctuations of the economic cycle. **Prosperity brings expanded lending, which leads to unwise lending, which produces large losses, which makes lenders stop lending, which ends prosperity, and on and on**.

In "Genius Isn't Enough" on the subject of Long-Term Capital Management, I wrote "Look around the next time there's a crisis; you'll probably find a lender." **Overpermissive providers of capital frequently aid and abet financial bubbles**. There have been numerous recent examples where loose credit contributed to booms that were followed by famous collapses: real estate in 1989-92; emerging markets in 1994-98; Long-Term Capital in 1998; the movie exhibition industry in 1999-2000; venture capital funds and telecommunications companies in 2000-01. In each case, lenders and investors provided too much cheap money and the result was over-expansion and dramatic losses. In "Fields of Dreams" Kevin Costner was told, "if you build it, they will come." **In the financial world, if you offer cheap money, they will borrow, buy and build – often without discipline, and with very negative consequences.**

The credit cycle contributed tremendously to the tech bubble. Money from venture capital funds caused far too many companies to be created, often with little in terms of business justification or profit prospects. Wild demand for IPOs caused their hot stocks to rise meteorically, enabling venture funds to report triple-digit returns and attract still more capital requiring speedy deployment. The generosity of the capital markets let companies sign on for huge capital projects that were only partially financed, secure in the knowledge that more financing would be available later, at higher p/e's and lower interest rates as the projects were further along. This ease caused far more capacity to be built than was needed, a lot of which is sitting idle. Much of the investment that went into it may never be recovered. Once again, easy money has led to capital destruction.

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In making investments, it has become my habit to worry less about the economic future – which I'm sure I can't know much about – than I do about the supply/demand picture relating to capital. Being positioned to make investments in an uncrowded arena conveys vast advantages. Participating in a field that everyone's throwing money at is a formula for disaster.

We have lived through a long period in which cash acted like ballast, retarding your progress. **Now I think we're going into an environment where cash will be king**. If you went to a leading venture capital fund in 1999 and said, "I'd like to invest $10 million with you," they'd say, "Lots of people want to give us their cash. What else can you offer? Do you have contacts? Strategic insights?" I think the answer today would be different.

One of the critical elements in business or investment success is staying power. I often speak of the six-foot-tall man who drowned crossing the stream that was five feet deep on average. Companies have to be able to get through the tough times, and cash is one of the things that can make the difference. Thus all of the investments we're making today assume we'll be going into the difficult part of the credit cycle, and we're looking for companies that will be able to stay the course.

The Corporate Life Cycle

As indicated above, business firms have to live through ups and downs. They're organic entities, and they have life cycles of their own.

Most companies are born in an entrepreneurial mode, starting with dreams, limited capital and the need to be frugal. `Success comes to some. They enjoy profitability, growth and expanded resources, but they also must cope with increasing bureaucracy and managerial challenges. The lucky few become world-class organizations, but eventually most are confronted with challenges relating to hubris; extreme size; the difficulty of controlling far-flung operations; and perhaps ossification and an unwillingness to innovate and take risks. Some stagnate in maturity, and some fail under aging products or excessive debt loads and move into distress and bankruptcy. The reason I say failure carries within itself the seeds of success is that bankruptcy then permits some of them to shed debt and onerous contracts and emerge with a reborn emphasis on frugality and profitability. And the cycle resumes . . . as ever.

The biggest mistakes I have witnessed in my investing career came when people ignored the limitations imposed by the corporate life cycle. In short, investors did assume trees could grow to the sky. In 1999, just as in 1969, investors accepted that ultra-high profit growth could go on forever. They also concluded that for the stocks of companies capable of such growth, no p/e ratio was too high. People extrapolated earnings growth of 20%-plus and paid p/e ratios of 50-plus. Of course, when neither the growth nor the valuations turned out to be sustainable, losses of 90%-plus became the rule. As always, the folly of projecting limitless growth became obvious in retrospect.

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The exigencies of the corporate life cycle usually render ultra-high growth rates unsustainable. Regardless of the improbability, however, investors indulge in "the willing suspension of disbelief" (which I always bring to the movies but check at the door when I come to work). They assume that successful companies will be able to attract enough talent, develop enough new products, access enough new markets, fend off competition while protecting high profit margins, and correctly make the strategic adaptations needed to keep growing . . . but it rarely works that way.

In February an article in Fortune magazine, covering 1960-80, 1970-90 and 1980-99, showed that out of 150 candidates among large companies, only four or five in each period were able to grow earnings per share at 15% per year on average. Only one, Philip Morris, grew at that rate for all three periods. The key for Philip Morris wasn't a technological miracle or a fabulous new growth product; it was solid blocking and tackling in areas of stable consumer demand. So the latest "wonder-company" with a unique product rarely possesses the secret of rapid growth forever. I think it's safer to expect a company's growth rate to regress toward the mean than it is to expect perpetual motion.

Business Fads and Fancies

We all laugh about hemlines, which fluctuate from year to year and add nothing to society but cost. The truth is, there's no place for them to go but up and down . . . and so they do. Likewise, there are business trends that have nowhere to go but back and forth . . . and so they do.

Take corporate diversification, for example. As a new equity analyst in 1970, one of my first assignments was to study conglomerates, starting with Litton, ITT, Whittaker, Teledyne and City Investing. It was widely held that their diversification and synergies (along with the magic of acquisition accounting and high p/e "funny money") could produce rapid growth forever. They pursued large numbers of acquisitions (ITT made 52 one year) and were rewarded with very high p/e ratios (which enabled them to prolong their growth for a while through further anti-dilutive acquisitions).

It wasn't long, however, before their dependence on sky-high multiples was recognized and difficulties surfaced in connection with the management of their diverse organizations. Their managers switched to stressing the benefits of specialization (as opposed to diversification), and the head of Whittaker wrote a paper extolling the virtues of a process he called "distillation of the product centroid." Units began to be sold off and the companies deconglomerated. It's interesting to note that none of those five companies exists today.

Diversification or specialization? Centralization or decentralization? Savings through just-in-time inventories or protection from stockpiles and redundancy? Tough goal-oriented management or warm-and-fuzzy work environments? Leverage on the upside through maximum debt or the safety that comes from a large equity cushion? The

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pendulum in each of these continua can do nothing but swing back and forth, and so it does. The answer is that there is no perfect answer. Companies move toward one extreme as it becomes more popular. Then the drawbacks surface and they move back toward the other. There's no place else for companies to move with regard to each of these questions, and so they cycle from one extreme to the other.

Likewise, there are cyclical fluctuations in how business phenomena are viewed. People move *en masse* toward one view, and when it turns out that no view can hold the answer, they move away from it.

For example, in the 1990s, information technology was thought to hold the answer to increased corporate efficiency. A great deal of the decade's bull market was fed by gains in productivity, which contributed greatly to both earnings and the p/e ratios investors applied to them. Technology-derived gains in productivity were embraced as having fundamentally altered the growth potential of companies and the economy. In testimony to the House of Representatives on February 23, 2000, Alan Greenspan said:

> . . . there are few signs to date of slowing in the pace of innovation and the spread of our newer technologies that, as I have indicated in previous testimonies, have been at the root of our extraordinary productivity improvement. Indeed, some analysts conjecture that we still may be in the earlier stages of the rapid adoption of new technologies and not yet in sight of the stage when this wave of innovation will crest.

Well, I know what did crest within 30 days: the stock market. And on October 24, 2001, just twenty months later, a less expansive Mr. Greenspan was quoted in the Wall Street Journal as saying:

> What the events of September 11 did was to introduce a whole new set of uncertainties which information technology is not going to improve our insight into. And so it is a reversal of some of the forces that engendered the productivity acceleration of the last five years.

In other words, what had been thought to be a fundamental and durable change has proved to be one more development whose ability to wax and wane has to be acknowledged and watched. The gains from productivity are proving to be cyclical, and the cycle shorter than had been expected.

The Market Cycle

At the University of Chicago, I was taught that the value of an asset is the discounted present value of its future cash flows. If this is true, we should expect the prices of assets to change in line with changes in the outlook for their cash flows. But we know that asset prices often rise and fall without regard for cash flows, and certainly by amounts that are entirely disproportionate to the changes in cash flows.

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Finance professors would say that these fluctuations reflect changes in the discount rate being applied to the cash flows or, in other words, changes in valuation parameters. Practitioners would agree that changes in p/e ratios are responsible, and we all know that p/e ratios fluctuate much more radically than do company fundamentals.

The market has a mind of its own, and its changes in valuation parameters, caused primarily by changes in investor psychology (not changes in fundamentals), that account for most short-term changes in security prices. This psychology, too, moves in a highly cyclical manner.

For decades – literally – I've been lugging around what I thought was a particularly apt enumeration of the three stages of a bull market:

- **the first, when a few forward-looking people begin to believe things will get better,**
- **the second, when most investors realize improvement is actually underway, and**
- **the third, when everyone concludes everything will get better forever.**

Why would anyone waste time trying for a better description? This one says it all.

Stocks are cheapest when everything looks grim. The depressing outlook keeps them there, and only a few astute and daring bargain hunters are willing to take new positions. Maybe their buying attracts some attention, or maybe the outlook turns a little less depressing, but for one reason or another, the market starts moving up.

After a while, the outlook seems a little less poor. People begin to appreciate that improvement is taking place, and it requires less imagination to be a buyer. Of course, with the economy and market off the critical list, they pay prices that are more reflective of stocks' fair values.

And eventually, giddiness sets in. Cheered by the improvement in economic and corporate results, people become willing to extrapolate it. The masses become excited (and envious) about the profits made by investors who were early, and they want in. And they ignore the cyclical nature of things and conclude that the gains will go on forever. That's why I love the old adage "What the wise man does in the beginning, the fool does in the end." Most importantly, in the late stages of the great bull markets, people become willing to pay prices for stocks that assume the good times will go on *ad infinitum*.

But they cannot. When the tech bubble was roaring ahead in late 1999, no one could think of any development that might be capable of bringing it to an end. Technology was certain to revolutionize everyday life, creating a new investment paradigm. Revenue growth (or at least the growth in "eye-balls") was strong. Capital was freely available, enabling expansion to continue and new, innovative companies to be formed. Cash flows into mutual funds and 401(k)s guaranteed steady demand for the stocks. Each time another tech stock was added to an index, a whole new group of forced buyers was created among index funds and the active managers benchmarked against that index. No

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portfolio manager could take the risk of under-owning these stocks; **they had to buy them regardless of price**! Eureka! There was no way they could stop going up. The perpetual motion machine had been built.

But somehow, the stocks did stop going up. And then they started going down. I don't think anyone can say just what it was that caused the tech bubble to burst. Certainly I can't think of any one thing – even in hindsight, which is usually 20:20. Maybe the groundwork was laid for declines when it was shown merely that the rise could slow. Maybe a few smart people, to paraphrase the third of the three stages, concluded that everything wouldn't get better forever. The best explanation probably is that the prices just collapsed under their own weight.

Anyway, the market proved – once again – that it can't move in one direction forever. **It has to be appreciated in cyclical terms, with increases followed by decreases, and in fact with increases causing decreases**.

In April 1991 , in just my second general memo to clients, I described the market as follows:

> The mood swings of the securities markets resemble the movement of a pendulum. Although the midpoint of its arc best describes the position of a pendulum "on average," it actually spends very little of its time there. Instead, it is almost always swinging toward or away from the extremes of its arc. But whenever the pendulum is near either extreme, it is inevitable that it will move back toward the midpoint sooner or later. In fact, it is the movement toward an extreme itself that supplies the energy for the swing back.
>
> Investment markets make the same pendulum-like swing:
>
> - between euphoria and depression,
> - between celebrating positive developments and obsessing over negatives, and thus
> - between overpriced and underpriced.

The swing of the pendulum? The oscillation of the cycle? Either way's fine – just don't tell me it'll be a straight line.

In 1999, the Wall Street Journal ran a number of OpEd pieces by James Glassman and Kevin Hassett trumpeting the theory behind the book "Dow 36,000." I couldn't think of anything that made less sense. By last month, it seemed the Journal's story had changed:

> With economic conditions turning downward so quickly, pushed along by the events of Sept. 11, a lot of business books have been rendered irrelevant, even silly. Anyone remember "Dow 36,000"?

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How quickly views change, and how quickly the logical-sounding rationale for lofty or depressed prices is shown in retrospect to have been "silly."

* * *

The risks entailed in ignoring the inherently cyclical nature of things are manifold, and the various cycles interact, often in ways that surprise the optimists. On October 26 the beautifully written (but inaptly-titled) "Grant's Interest Rate Observer" described the situation at a fallen telecommunications giant as follows:

> In the New Economy, the front office seemed persuaded, there would be no recession (let alone a global recession) and no bear market (especially one concentrated in technology). There would be no pause in the growth of the demand for broadband, no collapse in the price of broadband access and no credit contraction. What we are looking at . . . is compressed cash flow at the trough in a cyclical business so new that its proponents have yet to discover that it is, in fact, cyclical.

This example represents a four-bagger. It seems the company's management ignored the cyclicality of (l) the economy, (2) the stock market, (3) the availability of credit, and (4) the demand and price for its product. As in this case, the failure to prepare for cycles usually leads to what later are perceived as obvious, easily-avoided mistakes.

Cycles and How To Live With Them

No one knew when the tech bubble would burst, and no one knew what the extent of the correction could be or how long it would last. But it wasn't impossible to get a sense that the market was euphoric and investors were behaving in an unquestioning, giddy manner. That was all it would have taken to avoid a great deal of the carnage.

Having said that, I want to point out emphatically that many of those who complained about the excessive market valuations – including me – started to do so years too soon. And for a long time, another of my old standards was proved true: "being too far ahead of your time is indistinguishable from being wrong." Some of the cautious investors ran out of staying power, losing their jobs or their clients because of having missed the gains. Some capitulated and, having missed the gains, jumped in just in time to participate in the losses.

So I'm not trying to give the impression that coping with cycles is easy. But I do think it's a necessary effort. We may never know where we're going, or when the tide will turn, but we had better have a good idea where we are.

November 20, 2001

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Memo to: Oaktree Clients

From: Howard Marks

Re: What Lies Ahead?

Writing my client memos gives me great satisfaction. I appreciate the opportunities to share my views with you as well as your receptivity to them. Setting down my "Notes from New York" did me a lot of good as my way of dealing with post-attack issues outside the investment arena.

I must admit that I haven't been looking forward to writing a memo about the economic and investment implications of the attacks. Many of my views are negative, and I'm no economist. But I want to give you the benefit of my thinking, such as it is.

Looking to the Future – All of economics, business and investing entails dealing with the future. Economists predict future conditions. Businesspeople build and manage organizations so as to profit in the coming environment. And, of course, investors try to figure out what things will come to be worth in the years ahead and act accordingly. Other professions deal more with the past (e.g., accountants and historians) or the present (doctors and lawyers), but it is our job to cope with the future.

That's what makes investing interesting, challenging and occasionally lucrative. If it didn't require us to reach conclusions about the future, or if the future wasn't uncertain, then everyone's returns would be the same – but not very high. We achieve high returns on occasion because we deal with an uncertain future, and it's because the future is uncertain that superior investors can get an edge.

The process of investing consists entirely of divining the future – in terms of profits and values – and translating that future into prices that should be paid today. Obviously, doing so requires a view of what the world will look like tomorrow and how businesses and their products will fare in that world.

We each make thousands of judgments a day based on our understanding of what's normal. We turn the right faucet for a drink because that's where the cold water always has been. We tend to buy another car – or another tube of toothpaste – of the same brand because we were happy with the last one. We cross the street on a green light because we trust on-coming drivers to stop on red.

We must make assumptions like these, even though we know they won't hold true all the time. If we had to start from scratch every time we faced a decision, the result would be paralysis. Thus we start by assuming that the things that worked in the past are likely to work in the future, but we also make allowances for the possibility that they won't.

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We do the same in our roles as investors. We expect well-managed companies with good products to make money and be valued accordingly. We assume companies that have the money will service their bonds. We count on the economy to recover from slowdowns and grow over time.

So most of our actions depend on extrapolation. Certainly in investing, we rely on forecasts that assume the future will look a lot like the past. And most of the time they're right. My main quibbles with forecasters are two:

1. While most forecasts call for a future that's a lot like the past, the truly valuable forecasts are those that call for radical change. Forecasters rarely make such forecasts, however, and those who do are rarely right.

2. Most forecasters present their work as deserving more credence than it does. In short, they rarely say, "Here's my forecast, and if I were you, I'd take it with a grain of salt."

Even today, forecasters are out there with predictions for the economy and the market that are based primarily on history. And yet it seems to me that the future may be less likely to look like the past than it has until now, and that things we've never even considered before have a chance of happening.

Immediately after the attacks, there began to appear articles citing how long it has taken the market to recover after past crises. But who's to say those precedents are at all relevant? For example, I read that the market sagged for five months after Iraq's invasion of Kuwait but made up all of that ground, and then some, soon thereafter. But that experience had a very favorable outcome. We all want this one to be as good and as quick, but are we willing to bet that it will?

We all want a feeling of assurance. We want to live in a world where the future seems knowable and decisions that extrapolate normalcy can be depended on. We want to believe life in this country will return to the carefree days pre-September 11. We want to believe our leaders will be able to keep the ship upright and manage their way out of problems. So I think we're eager to embrace predictions that these things will hold true. **But is it prudent today in making decisions regarding the future to assume a return to the status quo?**

<u>The New Future</u> – It seems to me that today we know even less about the future than we usually do, and that's never a lot.

1. About terrorism. How much of what we have to worry about stems from Osama bin Laden and al Qaeda, and how much relates to other groups? How much of bin Laden's plans and resources went into the September 11 attacks, and how much remains on tap? Is bin Laden a diabolical genius against whom we're powerless, or a paper tiger who got lucky? Are there additional shoes left to drop? Will there be a high-profile attack once a year? Or will Middle East-style violence

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intrude into our regular existence? Are chemical and biological weapons a real threat?

2. About our response. Can we find bin Laden? Can we capture him and his henchmen? Will our military actions be successful, and can they be undertaken without extensive collateral damage? Can we pursue justice without alienating people and nations? Will terrorists move to punish our actions? Will their doing so shake our resolve, or that of our allies?

3. About the economy. How deep a recession are we in for? How long will it last? What will prompt a recovery, and what shape will it take? Will industries like airlines and hotels be permanently depressed, or will they return to pre-9/11 normalcy? When will liquidity and a desire to buy things return? Can we rely on normal cyclical patterns in these things? Will these elements be set back again if there is further terrorism?

Who among us can say he knows the answers to these questions? And who can say the future is foreseeable without those answers?

Many of these questions take us into uncharted territory where no one can say what will happen. The possible answers include some that could profoundly affect the economy and the markets, and they worry me. **Some of the greatest dilemmas in investing surround highly unlikely events with highly negative implications**. It's hard to know what to do about them, but we should at least be aware of their existence.

We have no alternative to assuming that the future will look mostly like the past, but we also must allow for the fact that we face a range of possible futures today that is wider than usual. In other words, I feel we must allow for greater-than-normal uncertainty.

The Role of Confidence – The basic building block underlying all economic activity is the individual spending unit, be it a business or a household. Each of these units builds into its decisions expectations regarding the future. And those expectations are shaped to a great extent by the data, opinions and emotions that add up to **confidence**. Sometimes I think in the economy, confidence is all there is.

When people are confident, they extrapolate prosperity and borrow and buy. They assume an upward-sloping future and want to jump on board. They worry that if they don't buy something today, it'll cost them more tomorrow. That is, they are concerned about the cost of inaction.

When their confidence fades, they worry about losing jobs and defer purchases. They may prefer to build cash or pay down debt. They're willing to wait before buying, and they assume there'll be another chance to buy cheaper. In other words, they figure that if they don't act, they won't miss out on much. Opportunity costs just don't seem that important.

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Who would say that confidence wasn't shaken by the events of September 11? Words we would have applied to our domestic security before, like insulated, invulnerable and impregnable, now seem to be out the window. Who doesn't feel at least a little less safe than a month ago? Thus most people are less full of the positive feelings that are required for a purchasing or investing decision, and on average they may "hunker down."

Many economic units have concluded that in this more uncertain world, greater cash reserves are in order – for rational as well as emotional reasons. Individuals fear that jobs will be lost, hiring will be slow, and bonuses and raises will be less generous – and they know they've saved too little and tapped their home equity to keep spending. Home and car purchases will be deferred. Business investment will be slow, especially given that capacity utilization was low and falling even prior to September 11. Each of these decisions will take away a potential source of growth from the economy and contribute to a slowdown. That's what makes for the down-leg of the economic cycle (and we believe one has been well under way for several months).

And when every expenditure that can be delayed has been delayed, the decline will slow and then stop. Then one person will conclude it's not going to get any worse, or prices any lower. One potential buyer will come off the sidelines and place an order; one worker will be hired to fill that order; and one manufacturer will buy a new machine in anticipation of increased business. And one person will decide to buy a share in a business, or even try to start one. And that's what gets the up-leg going.

It's all based on the ebb and flow of psychology. In my opinion, the key question is "How long will it take to restore confidence?" I don't claim to have the answer, but I think it may be a while.

Stimulative Actions – The federal government has acted boldly to combat economic weakness, as it has been doing all year. All economic trends start at the margin, and that's where the government's actions can help. They can keep things from getting as bad as they otherwise would have gotten – but they cannot call the tune.

Immediately providing a record amount of liquidity to the financial system prevented some problems that otherwise would have arisen given the damage to our infrastructure. Difficulties in the movement of funds and settlement of securities transactions were avoided, enabling the system to work and Americans to maintain faith in it. Prompt monetary action worked again to avert a potential crisis, as it did in 1987 and 1998.

Fiscal policy, which relates to taxing and spending, also will have an impact. Government spending is stimulative, in that it uses money to purchase goods or to pay people who may turn around and spend it. Deficits put more money into the economy than they take out in taxes. (This is unlike the surpluses we thought we were heading for, which are restrictive because the government takes out more than it puts back.) In the weeks since the terrorist attacks, the administration has announced programs sufficient to consume the surplus that had been projected for the current fiscal year. These include $40 billion in emergency funds, $15 billion in subsidies and loans for the airlines, and

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$60-$75 billion for "economic revival." In the short run, as CSFB says, this will "create a buffer to the slowdown in activity." (The long-term effects may be less positive, in that deficits and the Treasury borrowing required to support them can lead to inflation, higher interest rates and crowding out of non-government borrowers).

Interest rate reductions also can help ease the contraction, and we may see more of them. They will work at the margin, but I don't expect them to give the economy much of a boost in the short run. One of the most vivid phrases in the business vocabulary is "pushing on a string," and that's what rate reductions can amount to in a hunkered-down world. Will low interest rates get people to buy homes and cars if they've lost their willingness to spend? Will they work with people who realize they have inadequate savings and are overly indebted? Will they cause businesses to invest in expansion if they already have capacity sitting idle?

No one knows the answers to these questions, but they should not be assumed to be overwhelmingly positive. A discouraging analogy can be seen in Japan's decade-long doldrums. The government has pushed interest rates nearly to zero and keeps pumping money into the system. But every time the cautious Japanese citizen gets a few yen he puts it in the bank, and economic growth fails to revive. Hopefully, a difference may lie in Americans' higher propensity to spend.

So in the end, I feel it all goes back to confidence. Consumer and business spending will pick up at some point, and the government can encourage it, but it can't make it happen.

Investor Reaction – On September 17, after a four-day hiatus, the nation's financial markets reopened, with the Dow falling 685 points, or 7%. When I heard about that first day's loss, my reaction was immediate: "That's not so bad – just a quarter of the percentage decline in the crash of 1987." And after declining further in that first week of trading, stocks have recovered most of their losses.

Clearly, the interest rate cuts are helping stock prices. They make investors feel the Fed is doing something to improve the outlook. They contribute to economic activity at the margin. By reducing floating-rate mortgage payments they leave people with more spending money. And by lowering fixed income returns they reduce the competition that comes from cash and bonds, thus making stocks more attractive in relative terms.

But no one knows what the economic future will look like. No one knows what corporate earnings will be in 2001 or 2002, although they appear likely to decline. In addition, geopolitical uncertainties dot the horizon. Thus with the Dow off less than 6% from its September 10 pre-attack close, I wonder whether investors weren't shaken enough, or whether complacency has returned too quickly.

The Dow has risen 10% since the start of the recovery on September 24, including 200+ points this week. The stock market seems to be saying "Well, I'm glad that's over." Frankly, I worry about attitudes like those displayed in an article in yesterday's Wall Street Journal:

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> Stock Investors Show a "Comfort" Level; Rate Cut Spurs 113.76-Point Rise
>
> . . . the Fed said the Sept. 11 terrorist attacks "have significantly heightened" uncertainty in an already weak economy. Yet despite the Fed's concern, signs are spreading that some professional investors are gradually putting money back into stocks. "The market has reached a level that makes people feel a lot more comfortable that we have seen the worst of what could happen," . . .

I can't tell you how much I hope we've seen the worst, both in terms of world events and in the markets. But I am not willing to bet heavily on that assumption. And if I'm supposed to be more afraid when others are less afraid, articles like this one tell me there's plenty to worry about.

I always stress that investments must leave a substantial margin for error and allow for the possibility that negatives will arise. The terrorist attacks, while certainly not imaginable, show the importance of allowing for adverse surprises. Only when asset prices are clearly at irrationally low levels can this caution be ignored. In my view, with investors' sangfroid having bounced back so strongly, most stocks aren't at such levels.

So What Do We Do Now? – We could assume that the combination of further weakening of the already-weak economy plus continued terrorism will make for a very difficult environment. If we then based our investment process on that assumption, we would hold cash and make very few commitments. I call this "single scenario investing." The problem, obviously, is that arranging our portfolio so that it will succeed under a scenario as negative as that means setting it up to fail under most others. We do not believe in basing our actions on macro-forecasts, as you know, and we certainly don't think we could ever be that right.

Thus Oaktree will continue to invest under the assumption that tomorrow will look a lot like yesterday – an assumption that to date has always proved correct.

At the same time, we will continue to insist on an investment process that anticipates things not always going as planned, and on selections that can succeed under a wide variety of scenarios. As long-term clients know, this part of the story never changes. **In the current environment, we will allow a very substantial margin for error.**

We will continue to work only in inefficient markets, because we feel it's there that low risk needn't mean low returns, and upside potential can coexist with downside protection.

And we will continue to strive for healthy returns in good markets and superior returns in bad markets. We do not promise to beat the markets when they do well, but we also don't think that's an essential part of excellence in investing.

Will I Ever Drop My Cautionary Stance? – On September 24 the Los Angeles Business Journal printed excerpts from an interview with me (and a pretty accurate one

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overall) under the title "A Bear's Eye View." Because I wasn't crazy about that title, I was glad soon thereafter to receive the following e-mail from my partner Steve Kaplan:

> I have never viewed you as, nor do I believe you are, a pessimist. To the contrary, I think you have an optimistic view when it comes to things you believe you can control. . . . Your caution revolves around the uncontrollable, for which you recognize that a lot of the judgments of the so-called experts are in large part pure guesswork.

I greatly appreciate Steve's comments, and I think – and hope – he got it right. I have no interest in being a pessimist or a bear, and I don't like to think of myself that way. I just may be more impressed by the unknowability of the future than most people. When I reflect on all of the mottoes I use, it seems half of them relate to how little we can know about what lies ahead.

Am I right or wrong in being this cautious? No one can say. Does my mindset, and Oaktree's resultant approach to investing, cost us profits in good years? Probably. Are we well prepared for bad times and untoward developments, and are we happy with that? Absolutely. **If we insist on a degree of defensiveness that turns out to be excessive, the worst consequence should be that your profits will be a little lower than they otherwise might have been. I don't think that's the worst thing in the world**. And in the end, I think the skill, experience and discipline of Oaktree's people will continue to make up for its lower risk profile and keep our long-term returns more than competitive.

The longer I'm in this business, the less I believe in investor agility. Most people seem stuck in positions as bulls, bears or something in between. Most are always aggressive or always defensive. Most either always feel they can see the future or never feel they can see the future. Most always prefer value or always prefer growth. Few people's psyches are flexible enough to allow them to switch from one way of thinking to another, even if they theoretically possessed the needed perspicacity. Rather, most people have a largely fixed style and point of view, and the most they can hope for is skill in implementing it – and I don't exempt Oaktree and myself from that observation.

But that's not so bad. It's my conclusion that if you wait at a bus stop long enough, you're sure to catch your bus, while if you keep wandering all over the bus route, you may miss them all. **So Oaktree will adhere steadfastly to its defensive, risk-conscious philosophy and try to implement it with skill and discipline. We think that's the key to successful long-term investing – especially in today's uncertain environment**.

October 4, 2001

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Memo to: Oaktree Clients

From: Howard Marks

Re: Notes from New York

Maybe you've already read enough about last week's events, in which case you should feel free to discard this memo. There is no moral obligation to keep reading when doing so brings pain. Each of us can decide when enough is enough.

By now most of us know all we need to about Tuesday's events at the World Trade Center and the Pentagon. I will not recount the facts relating to these events, but rather the thoughts they have left me with.

I spent Tuesday through Friday in New York – like so many, against my will. I had no plans for a memo on this subject. But when I woke up Saturday, at home for the first time in a week, thoughts of New York monopolized my mind. My way of dealing with them is to turn them into sentences and paragraphs.

This memo may not include much that is new to you but, as usual, I will attempt to pull together my own thoughts and what I've heard and read elsewhere. It won't touch on recommendations for investing or predictions for economies and markets. Its contents will range from trivial descriptions of New York after the attack to hopefully-meaningful observations on the big-picture ramifications that have been seen and that may follow.

Lastly, I certainly do not wish to write anything that offends. But nerves are frayed, and unintended offense might be taken, for which I apologize. I mean only the best, and I hope it comes out that way.

My Role – I was merely a bystander at the events of last week. I was affected emotionally and logistically, but not involved. My father and daughter, both of whom live in New York, were safe. I had no friends or colleagues at the World Trade Center. As for me, I had arrived at midnight Monday after a dinner in Cleveland. I planned to speak to a Pensions East forum on Tuesday morning and then fly to Berlin to participate in an Institutional Investor conference.

The Events – The crashing of planes into the WTC and the Pentagon represented the first large-scale foreign attack on continental United States soil. It was daring, well planned, coordinated and startlingly successful. It showed how the fruits of progress – the world's great airliners – can be used against us. It showed how, in this age, a handful of men from a smallish, amorphous enemy can cause destruction totally disproportionate to their number or materiel.

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I was struck by a New York Times article saying these terrorists are not insane. They are extremists who follow a dogma that most Muslims do not. They are highly indoctrinated and perhaps brainwashed. But they are intelligent, highly trained soldiers who will carry out orders to destroy what they believe is their enemy. We count on others to act in their own self-interest; this makes them predictable and helps us know how to deal with them. It is not there in the case of the terrorists, in that they care little about their own survival. This adds greatly to the danger they pose.

Reaction – I left Oaktree's New York office Tuesday afternoon to collect my daughter and the children of friends in a natural desire to assure safety and feel the sorely-missed ability to create order. I walked north through streets that were strangely normal but not quite. The tourists were there, with their cameras and maps. There was no smoke and no ash. There were a few more people than usual, and almost all were moving in one direction: north, away from the WTC. There was no screaming or crying, no running or panic, just occasional knots of people gathered around radios.

Only knowledgeable onlookers would have detected the differences. Few people were talking. Eyes didn't meet – which is not unusual in New York. There clearly were no smiles. The words that came to mind were "subdued," "somber" and "enervated," and they stayed with me all week. Stress and tension were everywhere.

Some things were very different, and some that were the same felt different. The absence of airliners overhead was obvious, and the effect was dramatic when fighter jets replaced them. Sirens were heard more clearly in the absence of competing noise, and they seemed more ominous – as was the case in Los Angeles during the riots and earthquakes.

Pedestrian and vehicular traffic was light the first night, and it grew only gradually. Grocery stores were crowded; sidewalk restaurants were populated; it was clear life would go on.

Each of us found his or her individual limit on how much we wanted to read, watch and talk about these events. At the same time, however, it seemed inappropriate to talk about or do anything else. In my limited sample, the kids found it easier to move on to other topics – and I was so glad to see that their lives, albeit probably changed forever, would rebound.

Communication – My cell phone and Blackberry wireless e-mail device were absolutely essential. I was again reminded to ask "How did we ever get along without these things?" It was very hard to make phone calls on Tuesday, but that, too, got a little better each day. My Blackberry always worked and made it possible for me to keep in contact with my Oaktree colleagues.

Spam e-mail was absent that first day, but it also came back. Resumes, start-up business proposals and offerings of money management firms for sale seemed incredibly inappropriate on the one hand, but I guess they, too, are part of the return to normalcy.

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Retaliation – Armed response was, of course, one of the first issues to arise after the crashes. The President promised it Tuesday evening, and it is on the minds of us all. But no one should underestimate the challenges involved. The terrorists are amorphous, as I said, and pervasive. They exist everywhere but have no headquarters. They are dedicated but wear no uniform and fly no flag. They will not be easy to find or deal with. In the past we believed in the invincibility of the U.S., and thus in our ability to root out evil and prevail. There is still positive evidence on this subject, but also evidence to the contrary.

The Gulf War was one of our swiftest and most decisive triumphs. We were also able to calm the hostilities in the Balkans. On the other hand, Vietnam showed how hard it is to deal with a guerilla enemy who melts into the scenery, and last week's events strongly call into question the efficacy of our intelligence effort.

The nations of the world – even most of those in Middle East – have been quick to express horror and swear their support of the U.S. How many mean it, and how many have done it falsely to avoid our wrath? I certainly hope it's the former.

The swiftness and forcefulness of our response will depend to a great deal on how willing we are to diverge from some American ideals, and thus will require some difficult decisions. How sure will we have to be before we take action? Will we accept the risk of losing world support if we make mistakes? Are we willing to kill non-combatants? Are we willing to bear casualties among our own servicemen and women?

Centuries of immunity from attack on our soil, and decades of relative safety in a world in turmoil, have allowed Americans to enjoy the luxuries of moral certitude, personal freedom and safety. With our apparent wall of invulnerability penetrated, we will have to debate the extent to which these luxuries will be dispensed with.

Our Tactics – There is bound to be review and debate regarding the tactics we will employ in pursuit of safety and justice. In the recent past, there has been a rise in the position I paraphrase as "we will do no evil, even in the interest of doing good." Thus it was decided that the CIA would not perform assassinations or employ "intelligence assets" with records of crimes or human rights violations.

These principled stances may come to be viewed as luxuries we can no longer afford. When prosecutors obtain cooperating testimony, it is usually from criminals – because that's who the targets of prosecution associate with, and that's who can be turned against them. It is now clear that we need intelligence regarding upcoming terrorist operations, and that intelligence must come from inside terrorist cells. People we might not wish to associate with – perhaps only terrorists themselves – can best gain that access. They may be the ones most able to penetrate the obstacles posed by language and the close-knit nature of the cells. Can we afford not to employ them?

Civil Liberties and Scapegoating – These events and their aftermath may make us conclude that full civil liberties and full domestic security may be mutually exclusive.

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Over the last eight years, Mayor Giuliani cut New York's murder rate by two-thirds using tactics that eroded civil liberties in high-crime areas. People were stopped and frisked on the street, and there were roving squads of undercover policemen – including those who mistakenly killed Amadou Diallo. Giuliani was assailed as a fascist, especially by the high-minded New York Times. But I detected two common threads last week: "his emergency preparations were appropriate, not excessive," and "he's the kind of mayor we'll need in the years ahead."

Depending on how far and in what ways the terrorist campaign spreads, we might begin to see armed personnel where people gather. And they might need to be able to search those they suspect. We may see surveillance cameras, computer facial and fingerprint recognition and the use of profiling. Internet and telephone privacy may be abridged. Travel will be less convenient, and our borders may be made less porous. These subjects are likely to be hotly debated, but the debate is certain to be conducted from a new perspective. **And I think the answers are likely to be different from what they would have been a week ago**.

One of my reflexes on Tuesday was to think about a recent movie, "The Siege." In it, a New York police detective tries to cope with a Muslim reign of terror in New York. At the same time, members of an outraged populace pursue vigilante justice against Middle Easterners, and the President sends in the army, led by an all-business general. He declares martial law, suspends civil liberties and rounds up New Yorkers based on ethnicity. It's not a great movie, but it is as relevant as "Wag the Dog" was to Bill Clinton's impeachment-eve bombing raids. You'll be glad to know it ends with the threat defused and American ideals preserved.

There will be – already has been – violence against Americans of Middle Eastern origin. But know this: **People say that if we let stocks fall, if we don't rebuild the Towers, or if we don't return to normalcy, then our enemies will have won. All of this is true, but if the events of the week are able to turn Americans against Americans and erode the values that have made this country great, they also will have won**.

<u>Hysteria and Miscommunication</u> – I witnessed, first-hand, the ability of emotion and fragmentary information to combine for error. On Thursday afternoon, I heard that three or four men in pilots' uniforms had been stopped trying to board planes. By early evening it had grown to seven. But on Friday it turned out to have been one.

I actually listened as the existence of a recent government report on terrorism was interwoven with thoughts that it might be unsafe for President Bush to visit New York, as well as a few other elements, to support a warning that chemical or biological weapons would be unleashed on Friday. Hysteria is natural in crises, but hopefully it will subside – while hopefully vigilance will remain.

<u>Heroism</u> – As Dickens suggested, the worst of times can bring out the best. I am incredibly moved by the accounts of people in careers based on bearing risk to help others, and of everyday people who rose to great heights.

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Friday's Wall Street Journal carried an incredible, eloquent tribute to the bravery of New York's firemen. It said "**In the academy, recruits learn that a firefighter performs but one act of bravery in his career, and that's when he takes the oath of office. Everything after that, it is said, is simply in the line of duty.**" I cannot read this without being moved profoundly.

Last week proved that America is rich in heroes: The man who carried a woman he didn't know down fifty flights of WTC stairs. The people who drove hundreds of miles to offer their services in the rescue and cleanup effort. And the ultimate heroes, the passengers who crashed United flight 93 in Pennsylvania rather than let it be used as another terrible bomb. Who among us could crash the plane we're on to save hundreds or thousands of strangers?

Loss – As I wrote last week, Oaktree was fortunate in having no losses. Teresa O'Hagan's husband and his four brothers are New York firemen; some were missing or incommunicado for periods of time, but all turned up safe. I lost it when I spoke with her and felt the emotion flowing through both of us. Noreen Keegan and Zenobia Walji have husbands who are policemen, and they, too, are fine. It took a while longer, but Eric Livingstone's girlfriend and Nilsa Veras's mother also proved to be safe.

Most of us, however, knew someone who was not as lucky, and that brings it home. For me it was David Alger, head of Fred Alger Management Inc., with whom I shared a podium in March. I have read only good things about him.

These events clearly prove that "random violence" does not mean "spread evenly." I am struck by the incredible pockets of loss. Some WTC tenant firms had no losses, but Cantor Fitzgerald and Fred Alger lost huge percentages of their employees. More than 300 New York firemen are missing and presumed dead, including entire fire companies.

Oaktree's Kevin Clayton lives in an area from which many people commute to lower Manhattan. Thus ten people are missing from his parish, and well more than 100 from the nexus of towns that includes his. The loss of thousands of people in a few minutes – and the localized, concentrated losses – are things I hope never to live through again.

The Results – They say every cloud has a silver lining, but it's hard to see the good in this one. The tales of heroism and sacrifice have been wonderful, but I'd rather not have had occasion to read them.

At the same time, and equally incredibly, these events have brought the worst of Americans out from under their rocks. I am sickened to hear of the copycat bomb scares, phone calls designed to pry the social security numbers of the missing from their grieving families, and phony contribution scams.

The loss of life has been massive. The financial cost – to rebuild New York and the Pentagon, to the airlines, for stepped-up security, and for business lost – will be enormous.

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The wonderful feeling that the U.S. was insulated and impregnable has been breached. The vulnerability to attack of our everyday life has been made clear. Life here may never seem as carefree. Last week I told my son Andrew that, incredibly, the Berlin conference was still going on as usual. He said "What's so incredible? Each time there's been a bombing somewhere in the world, life here has gone on without skipping a beat." In many ways, we now have been dragged into a reality that is commonplace throughout the world – which may well have been one of the terrorists' objectives.

Last week's events proved that money, position and technology are not the most powerful or important things in our lives. **The cornerstones of our lives were shown to be family, faith and principle, friends and colleagues we know we can count on, and the American spirit. These are the things we have to be thankful for . . . maybe now, we realize, more than ever.**

September 16, 2001

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Memo to: Oaktree Clients

From: Howard Marks

Re: What's It All About, Alpha?

With apologies to Burt Bacharach and Dionne Warwick, whose 1966 rendition for the movie "Alfie" was much more artistic, I couldn't resist adapting their title for a memo on investment theory.

What's it all about, indeed? Everyone talks about alpha . . . and beta, risk and return, and efficiency and inefficiency. But I believe few people use them to mean the same thing, or correctly. Thus the thinking I did about alpha while writing "Safety First" in April has convinced me to set out my views on all of these subjects.

In this connection, my 1967-69 attendance at the University of Chicago Graduate School of Business was pivotal. I had previously been at a non-theoretical Wharton, where I learned investment practice à la Graham and Dodd but not one word on what I'm about to discuss. At Chicago I found a new theory of investments that would revolutionize the field. My exposure to it was eye-opening and kept me from becoming an unquestioning member of what I call the "I know" school of investing (where people think a little effort is all it takes to know the future direction of any stock or market). The 32 years since Chicago have given me enough time to forget a lot of the theory I learned . . . but also, most importantly, the real-world experience needed to leaven it, leading to my own synthesis of theory and practice.

Market efficiency – A great deal of how one views the investment world depends on one's position on the subject of market efficiency. Rather than reinvent my own wheel, I'll lift parts of my memo "Irrational Exuberance" from May 2000. (Thankfully, when you copy from yourself it's not plagiarism.)

First, I'll provide my take on the efficient marketeers' view. Then, I'll describe my own version of market efficiency. I'll admit again that academicians don't share my view and theory says I'm wrong. But my approach works for me, and I'll restate it below.

While at Chicago, one of the first things I studied was the Efficient Market Hypothesis, which states:

- There are many participants in the markets, and they share roughly equal access to all relevant information. They are intelligent, highly motivated and hard working. Their analytical models are widely known and employed.

- Because of the collective efforts of these participants, **information is reflected fully and immediately in the market price of each asset.**

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- Thus, market prices provide accurate estimates of assets' intrinsic value, and no participant can consistently identify and profit from instances when they are wrong.

- Assets therefore sell at prices from which they can be expected to deliver risk-adjusted returns that are "fair" relative to other assets. Riskier assets must offer higher returns in order to attract buyers. The market will set prices so that appears to be the case, but it won't provide a "free lunch." That is, there will be no incremental return that is not related to (and compensatory for) incremental risk.

I believe strongly that some markets are quite efficient, including those for the world's leading stocks and bonds. Take international fixed income, for instance. Here, people try to decide whether British, French or German government bonds are the cheapest at a given time and establish portfolio weightings accordingly. The primary differences between these bonds, it seems to me, relate to their issuing countries' rates of economic growth and inflation. But it's to make allowance for those differences that there exist differential interest rates and floating exchange rates. And aren't those some of the world's most closely watched phenomena, with hundreds of sophisticated financial institutions on both sides of every question? Can any one participant realistically expect to be able to do a superior job in such a market?

Stocks are less homogenous, and there's more to choose between them, but I still think the market for popular stocks is efficient. That's the reason why, when I left equity research in 1978, I told Citibank I would "do anything other than spend the rest of my life choosing between Merck and Lilly." I believed in efficient markets then, and I believe in them now. But what do I mean?

When I say efficient, I mean it in the sense of "**speedy**," not "right." I agree that because investors work hard to evaluate every new piece of information, asset prices immediately reflect the **consensus view** of the information's significance. I do not, however, believe the consensus view is necessarily correct. In January 2000, Yahoo! sold at $237. In April 2001 it was at $11. Anyone who argues that the market was right both times has his head in the clouds; it has to have been wrong on at least one of those occasions. But that doesn't mean many investors were able to detect and act on the market's error.

If prices in efficient markets already reflect the consensus, then sharing the consensus view will make you likely to earn just an average return. To beat the market you must hold an idiosyncratic, or non-consensus, view. But because the consensus view is as close to right as most people can get, a non-consensus view is unlikely to make you more right than the market (and thus to help you beat the market).

The bottom line for me is that, **although the more efficient markets often misvalue assets, its not easy for anyone person – working with the same information as everyone else and subject to the same psychological influences – to consistently hold views that are different from the consensus <u>and</u> closer to being correct**. That's what makes the mainstream markets awfully hard to beat – even if they aren't always right.

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Inefficiency – Although I spent a lot of time last year discussing efficiency, I didn't touch on inefficiency. This is a word I've heard misused terribly, usually as a synonym for "cheap," as in "the oils were fully priced last year but now they're really inefficient." First of all, inefficiency doesn't come and go in quick bursts. Markets are inefficient for longer-term structural reasons relating primarily to shortcomings on the part of their participants and infrastructure. Second, "inefficient" absolutely does not mean "cheap" (or "dear").

To me, an inefficient market is one that is marked by at least one (and probably, as a result, by all) of the following characteristics:

- Market prices are often wrong. Because access to information and the analysis thereof is highly imperfect, market prices are often far above or far below intrinsic values.

- The risk-adjusted return on one asset class can be far out of line with others. Because assets are often valued at other-than-fair prices, an asset class can deliver a risk-adjusted return that is significantly too high (a free lunch) or too low relative to other asset classes.

- Some investors can consistently outperform others. Because of the existence of (a) significant misvaluations and (b) differences between participants in terms of skill, insight and information access, it is possible for misvaluations to be identified and profited from with regularity.

This last point is very important in terms of what it does and does not mean. **Inefficient markets do not necessarily give their participants generous returns. Rather, it's my view that they provide the raw material – mispricings – that can allow some people to win and others to lose on the basis of differential skill**. If prices can be very wrong, that means it's possible to find bargains or overpay. For every person who gets a good buy in an inefficient market, someone else sells too cheap. One of the great sayings about poker is that, "In every game there's a fish. If you've played for 45 minutes and haven't figured out who the fish is, then it's you." The same is certainly true of inefficient market investing.

In inefficient markets, then, it's essential that a manager have superior personal skill, or "alpha" (see below). It's actually far more important than in efficient markets, where prices are so well aligned that it's hard to perform far off the average. Good evidence on this subject is found in the table on the next page, from "Pioneering Portfolio Management" by David Swenson of Yale.

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Dispersion of Active Management Returns
Identifies Areas of Opportunity
Asset Returns by Quartile, Ten Years Ending December 31, 1997

Asset Class	First Quartile	Median	Third Quartile	Range
U.S. fixed income	9.7%	9.2%	8.5%	1.2%
U.S. equity	19.5	18.3	17.0	2.5
Int'l equity	12.6	11.0	9.7	2.9
Real estate	5.9	3.9	1.2	4.7
Leveraged buyouts	23.1	16.9	10.1	13.0
Venture capital	25.1	12.4	3.9	21.2

As the table shows, the range between the 25th percentile and the 75th percentile of investors in what I think are relatively inefficient markets (venture capital and leveraged buyouts) is much broader than it is in more efficient markets (mainstream stocks and bonds). This supports the belief that in inefficient markets, either (a) prices diverge more from intrinsic values, (b) there's more variation among investors in terms of skill, (c) that variation has more impact, or (d) all of the above. Any way you slice it, hiring a superior manager is more crucial in the inefficient markets.

Return – The terms alpha and beta are derived from the basic form of an algebraic equation, which is:

$$y = a + bx$$

Thus in investments we say a portfolio's result can be predicted by the equation:

return = alpha + (beta x the market's return)

Beta is a coefficient equal to the proportion of the market's return that the portfolio can be expected to capture. It can best be described as "degree of responsiveness" to the market, or "relative volatility." An S&P index fund will have a beta of 1.0 relative to the S&P 500 (that is, it will go up and down at the same rate as the S&P). An S&P index fund leveraged two to one would have a beta of 2.0 (i.e., it will have twice the response). A portfolio consisting of half S&P index fund and half cash will have a beta of .5. A defensive equity portfolio might be expected to have a beta of .7.

Turning up your beta, whether through the use of leverage or by emphasizing more volatile holdings, is certainly one way to try to add to your return. Under investment theory it's the only way, since "beta x the market's return" is the only non-zero term in the above equation (more on this later). The trouble with relying on a high beta to enhance your return is that it's entirely symmetrical. It cuts both ways, subtracting as much when it's wrong as it adds when it's right, which means that it does nothing to increase your expected return unless the underlying decisions are right. It epitomizes the Las Vegas

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saying that "the more you bet, the more you win when you win" (but also, as I like to point out, the more you lose when you lose).

Alpha is a variable equal to the contribution resulting from the skill of the portfolio manager. As I wrote in "Safety First," alpha is the ability to profit consistently from things other than the movements of the market, to add to return without adding proportionately to risk, and to be right more often than is called for by chance. Examples of its ingredients include superiority in (a) collecting and analyzing information, (b) discerning which factors are most important in determining future value, and (c) resisting the market's manic-depressive fluctuations.

Alpha is what's lacking when a market is efficient. But just as I believe there are some relatively efficient markets, I'm also sure people with alpha exist, as well as less efficient markets where it can be put to good use.

It's essential to recognize that investment skill isn't distributed evenly – that the investment world isn't democratic or egalitarian. That's why Peter Vermilye, the Citibank boss who steered me toward convertibles and high yield bonds, says only the top 10% of analysts contribute anything. It's also why I think so little of investment management firms that describe their edge in terms of head count; an army of average analysts will do you no good.

That's because, in my view, alpha is best thought of as "differential advantage," or skill that others don't possess. Alpha isn't knowing something, **it's knowing something others don't know**. If everyone else shares a bit of knowledge, it provides no advantage. It certainly won't help you beat the market, given that the market price embodies the consensus view of investors – who on average know what you know.

Alpha is entirely personal. It's idiosyncratic, an art form. It's superior insight; some people just "get it" better than others. Some of them are mechanistic quants; others are entirely intuitive. Hard work is a common thread among the best investors I know, but hard work alone is absolutely insufficient to explain their superior performance.

Alpha is zero for someone with no skill (i.e., a dart thrower). Warren Buffett, on the other hand, seems to have lots of alpha – even in a market most people think of as efficient. It's possible to have negative alpha if you're wrong more often than not. Someone who's always wrong would have lots of negative alpha, but he'd be a great guy to know (since you could be right all the time by doing the opposite of what he says).

Everyone knows it's a cornerstone of investment theory that there's no such thing as alpha . . .

> Clearly this underlies the Efficient Market Hypothesis. The market is more right than any investor. No investor is better than any other. No one is capable of consistently outperforming. Anecdotal evidence of superior performance is dismissed by academicians who attribute it to luck or a too-short trial period.

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. . . but there's something of an oxymoron afoot. Even though thousands of people expect to make a living from active investment management, much of traditional investment thinking is built on the realization that alpha is severely limited (even though the practitioners don't state it that way).

Why do I say that? Most investors claim they can outperform the market – that is, can see, assess and understand better than the average investor – because of superior intelligence and hard work. Doesn't everyone think he can beat the market? But much of what's actually practiced, even by Oaktree, subtly acknowledges that the ability to know more – and if you think of it, that's a lot of what alpha really is – is quite limited.

It's a common assumption that if an investor's portfolios are highly concentrated, they're risky. But that assumes he can't see the future. If he could, it would be perfectly safe to have a low level of diversification. In fact, if his foresight were perfect, then the safest portfolio would hold only one asset, because that's the one he would think of most highly (and, since he could see the future, he would of course be right). Thus diversification, which is widely practiced even in the "I know" school of investing, represents a tacit acknowledgement that there's a lot that investors don't know.

Investors' strong preference for liquidity is another indicator that this limitation is accepted. Even the "I know" investors, who buy on the assumption they're right, insist on liquidity – because they know there's a good chance they'll be wrong and need to beat a retreat. But the more you can see the future, the less likely you'll be wrong, and the less risk there is that exiting could be difficult.

In reality, then, not just investment theory, but also a great deal of everyday practice, is built around the acknowledgement that alpha – skill and foresight – is a scarce commodity.

<u>Risk</u> – It's essential that investors consider risk. In the time since I entered the investment field, return has increasingly come to be evaluated in risk-adjusted terms. Everyone knows that if two portfolios return 8% a year for five years, the two managers didn't necessarily do an equally good job of investing. If one did it with T-bills and the other with emerging market stocks, the first manager almost certainly did a better job – since he earned the same return with far less risk. That's real added value, just like earning more return with the same or less risk. **To know how good a job a manager did, then, you have to have a good idea how much risk he took**.

Yet I think risk may be the area where both theory and many aspects of practice are furthest from right. The first thing you learn in investment theory, and one of the most widely agreed-on assumptions in practice, is that "volatility equals risk." This premise underlies a great deal of portfolio theory, asset allocation, portfolio optimization and performance assessment. But what are its merits?

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I believe the academicians of the 1950s and '60s were influenced to accept volatility as the measure of investment risk by its two outstanding virtues: it is (a) absolute and (b) quantifiable. They can tell you precisely what the standard deviation of a stock or a portfolio's return was in the past, and thus it only takes a little extrapolation to project what it's going to be in the future.

I will suggest some other ways to think about risk, but (a) they will vary from person to person and from situation to situation, and/or (b) they will not be easily quantified. Thus they won't permit you to say that one asset or portfolio would be riskier than another (other than possibly in a given application). You won't even be able to say how risky an asset or portfolio was in the past.

What is risk? First of all, I don't think risk is synonymous with volatility. And second, the indicia of risk vary by asset class.

At Oaktree, when we think about adding an asset to a portfolio, we ask whether the risk entailed is tolerable (i.e., within our charter from our clients) and offset by the likely return. And by risk we mean the chance of losing our clients' money.

In high yield bonds we concentrate on the risk of default and how much principal would likely be unrecoverable. In distressed debt we wonder whether the company's assets will turn out to be worth less than we think or the reorganization will go against us. In convertibles and emerging market equities we worry about the chance a stock will decline and the likelihood that our protective efforts will fail to insulate us.

We do not think about volatility. With our capital in either locked-up funds or long-term relationships, we worry only about whether the ultimate result, perhaps years down the road, will be positive or negative, and by how much. We think this is what our clients pay us to do.

But we make no claim that this approach to risk is subject to quantification or numerical manipulation. Bruce Karsh probably couldn't have quantified the riskiness of Conseco bonds at the time we bought them last June. Richard Masson and Matt Barrett probably wouldn't have agreed with him, or with each other, on the probability of loss. Any figure they settled on probably wouldn't have been in a form that could be equated with risk. **And even today, a year later and after having sold the bonds, we still can't quantify the risk we took**. It's a concept, a notion, a worry . . . but not a number.

This might be the right way to think about risk – it's certainly how we do it – but it wouldn't work at all for a "quant." He'd have no way to state our portfolio's risk, or its risk-adjusted return, or tell whether our performance was superior or inferior.

Will an investment lose money? Will a pension fund fail to earn its actuarial assumption? Will an endowment be unable to cover its spending rate? Will a retiree have less than he needs to live on? Will a manager lose an account? These are the risks – the perils – that we think matter.

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Most pension funds have a very long time horizon, and for a university endowment it's theoretically infinite. Volatile quarterly returns wouldn't be a meaningful source of risk for them as they would be for a retiree scraping by. But once you say a given portfolio is risky for one investor but not another, there ceases to be a unique number that measures its absolute riskiness. In that case, how can you talk about its risk, or its risk-adjusted return?

Correlation – The final analytical element to be considered when assembling securities into portfolios is their degree of connectedness, or **correlation**. As discussed above, a one-asset portfolio would be optimal for someone who can see the future. The main reason for holding more than one asset is diversification. But the principal virtue of diversification, protection from catastrophic error, is wiped out if the underlying assets will react the same to environmental change and move together.

Thus it's not enough to be able to estimate return and risk in isolation; we must understand correlation. Even if we can estimate the separate potential of two assets, we cannot know how a portfolio combining them will behave unless we know how they will move relative to each other. Two stocks in the same industry may be highly correlated, but two companies whose products compete directly may not (that is, whichever one wins, the other is likely to lose).

Let's say there are two assets with high prospective return and risk. A portfolio consisting of the two can have high risk if they are correlated but low risk if they are not. Thus adding an uncorrelated, high-risk asset can reduce the overall riskiness of a portfolio. This understanding revolutionized investing by enabling risk-averse investors to hold high-return, high-risk assets as long as they are uncorrelated with the rest of their portfolio. Certainly Oaktree owes much of its very existence to the understanding of how assets behave in combination.

Tracking error, which lately has been of increased interest, refers to a specific type of connectedness: that between a portfolio and a benchmark. More and more, clients are asking about managers' tracking error in the past and monitoring it after hiring them.

A client hires managers to play specific roles in its portfolio, and it wants to be sure they will do so. In considering whether to include high yield bonds in its portfolio, for example, the client may model the performance of the portfolio incorporating the Salomon Cash-Pay Index as a proxy for the high yield bond component. Then if the client hires a manager, it wants to be sure the manager will track the Salomon Index closely (of course while outperforming!)

Thus clients have reason to want low tracking error. But if you think about it, the two principal sources of tracking error are (a) over- and under-weightings of the securities in the index and (b) inclusion of off-index securities. So it's obviously possible for tracking error to be too low; an index fund would have zero tracking error, but that's not what clients hire active managers to create. Thus we have a client who monitors our tracking error and complains when it's too low, because they want to see active bets being made.

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* * *

This last point illustrates what I think should be the role of theory in our industry. In short, I think, **theory should <u>inform</u> our decisions but not dominate them.**

If we entirely ignore theory, we can make big mistakes. We can fool ourselves into thinking it's possible to know more than everyone else and regularly beat heavily populated markets. We can buy securities for their returns but ignore their risk. We can buy fifty correlated securities and mistakenly think we've diversified. When I think of the impact of being blind to theory, I flash back to 1970 and the frighteningly simplistic rationale behind my colleagues' expectation of 12% a year from stocks: if they could emulate the historic 10% return with ease through indexing, it should be a snap to add a couple of percent with just a little effort.

But swallowing theory whole can make us turn the process over to a computer and miss out on the contribution skillful individuals can make. The image here is of the efficient-market-believing finance professor who takes a walk with a student. "Isn't that a $10 bill lying on the ground?" asks the student. "No, it can't be a $10 bill," answers the professor. "If it were, someone would have picked it up by now." The professor walks away, and the student picks it up and has a beer.

So how do we balance the two? By applying informed common sense. At Chicago, I spent a wonderful semester with Professor James Lorie. Students loved his anecdote-filled course, which we nicknamed "Lorie's Stories," and its visits from active investors. True-believing theorists may have sneered at it, but it was this class that inspired me to integrate my practical Wharton foundation and the Chicago theory, rather than stick exclusively to either one.

A year after graduating, I had lunch with Jim Lorie and asked – off the theoretical record – how he would manage a portfolio. His simple advice was informed by theory but realistic: "I would index the core and manage the hell out of the periphery."

* * *

The key turning point in my investment management career came when I concluded that hard work and skill would pay off best in inefficient markets. Theory informed that decision and prevented me from wasting my time elsewhere, but it took an understanding of the limits of the theory to keep me from completely accepting the arguments against active management. Theory and practice have to be balanced in this way. Certainly neither alone is enough.

July 11, 2001

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Memo to: Oaktree Clients

From: Howard Marks

Re: Safety First . . . But Where?

Are you from the old school? Do the following terms sound familiar?

- fiduciary duty
- preservation of capital
- risk aversion
- dividend yield

Although in common use prior to the 1980s, they've been heard less and less since then. For this reason, a score of zero means you are completely modern, two means you're so-so, and four means you are far behind the times. I fall solidly into the last category. That means much of what I heard and read in the late 1990s made absolutely no sense to me.

Of course, just as momentum investing eventually gives way to contrarianism (and vice versa), periods when carefree investing is highly rewarded eventually come to an end, as happened in 2000. I am writing to explore the question of where to look for successful investments when sheer aggressiveness stops paying off.

"A-B-C," my Uncle Jack used to say when he taught me how to cross the street, "always be careful. Stop and look both ways." Most of us start off that way, but after a period when few cars come and the people who rush headlong get there fastest, caution sometimes is cast aside.

Just as standing frozen with fear is no way to move ahead, investors occasionally are issued a reminder that not worrying about danger can be just as foolish. Pursuit of return must be balanced against aversion to risk. The latter came to be accorded far too little attention as the 1990s wore on, but that seems to have been corrected. Where can we look now for good risk-adjusted returns?

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What's Been Tried?

Common stocks – Among the mantras that were repeated in the past decade, few received as much credence as "stocks outperform." Wharton's Professor Jeremy Siegel documented in his book, "Stocks for the Long Run," that equities have beaten bonds, cash and inflation over almost all long periods of time. In fact, his graph of the movements of the stock market over the last 200 years looks like a straight line from lower left to upper right. Evidence like this convinced people to increase their equity allocations while continuing to sleep well. Little did they know that the price gains that made them feel so sanguine about their positions were dramatically increasing their risk.

I am a great believer in common stock investing, but I hold tight to a few caveats:

- Return expectations must be reasonable.
- The ride won't be without bumps.
- It's not easy to get above-market returns.

We live in the world's most productive economy, under a very effective capitalist system, at a wonderful point in time. In general, it's great to own productive assets like companies and their shares. But occasionally, people lose track of the fact that in the long run, shares can't do much better than the companies that issue them. Or to paraphrase Warren Buffett, when people forget that corporate profits grow at 8 or 9% per year, they tend to get into trouble.

It's never clear what base period makes for a relevant comparison, but between 1930 and 1990, annual returns from stocks averaged about 10% per year. Periods when they did better were followed by periods when they did worse. The better periods were usually caused by the expansion of p/e ratios, but valuations tended to return from the stratosphere, and returns roughly paralleled profit growth in the long run.

There always will be bull markets and bear markets. The bull markets will be welcomed warmly and unskeptically, because people will be making money. They will be propelled to great heights, usually by the rationalization that "it's different this time; productivity, technology, globalization, lower taxation – something – has permanently elevated the prospective return from stocks."

The bear markets will come as a shock to the unsuspecting, demonstrating that, most of the time, the world doesn't change that much. For example, when you look at Siegel's 200-year straight-line stock market graph, no hiccup is visible in 1973-74. Try telling that to the equity investors who lost half their money.

The bottom line is that risk of fluctuation is always present. Thus stocks are risky unless your time frame truly allows you to live through the downs while awaiting the ups. Lord Keynes said "markets can remain irrational longer than you can remain solvent," and being forced to sell at the bottom – by your emotions, your client or your need for money – can turn temporary volatility (the theoretical definition of risk) into very real permanent loss. Your time frame does a lot to determine what fluctuations you can survive.

<u>Active management</u> – In order to get more out of the ups and try to lessen the pain of the downs, most people turn to active management via market timing, group rotation, industry emphasis and stock selection. But it's just not that easy. The American Way – earnestly applying elbow grease – doesn't often payoff.

As you know, I believe most markets are relatively efficient, and that certainly includes the mainstream stock market. Where lots of investors are aware of an asset's existence, feel they understand it, are comfortable with it, have roughly equal access to information and are diligently working to evaluate it, the market operates to incorporate their

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collective interpretation of the information into a market price. While that price is often wrong, very few investors can consistently know when it is, and by how much, and in which direction.

The evidence is clear: most investors underperform the market. They (a) can't see the future, (b) make mistakes that keep them at a disadvantage, (c) accept high risk in their effort to distinguish themselves, and (d) spend money trying (in the form of market impact and transaction costs).

Of course, there are individuals who beat the market by substantial margins, and they become famous. The mere fact that they attract so much attention proves how rare they are. (That's the meaning of the adage "it's the exception that proves the rule.") Adding to return without adding commensurately to risk requires rare understanding – of how money is made and what constitutes value – and far more managers promise it than have it. I was recently on a panel that was asked what gave our firms their edge. One panelist responded "we have 160 analysts around the world." To me, that response demonstrated a total lack of insight. Unless those 160 analysts are more astute than the average investor, they'll contribute nothing. Certainly another 160 wouldn't double the manager's ability to add value. (If they could, everyone would be an analyst.)

Most active managers go through times when their biases or their guesses lead them to do things that beat their assigned benchmark, which they attribute to their skill, and times which are the opposite, which they attribute to being blindsided by the unforeseeable (or to some defect in the benchmark). But these are two sides of the same coin, and in the long run the average manager adds little. Usually, active management will not allow you to beat the stock market, or to enjoy the fruits of the market without fully bearing its risk.

Indexed equities – Thirty years or so ago, investors began to concede that while it was desirable to participate in the stock market, it wasn't worth trying to beat it. Under prodding from academics at the University of Chicago and practitioners such as John Bogle of Vanguard, there began a trend toward index funds, with their low costs and assured inability to underperform.

The essence of index investing was a "passive portfolio" that represented a relatively unbiased sample of the universe of stocks. The Standard and Poors' 500 was the immediate choice and quickly became synonymous with "stocks" and "the market."

With every period in which active managers underperformed, the trend toward indexing got another boost. The percentage of equities held via index funds rose. In the mid-to-late 1990s, when large-cap growth stocks hogged the spotlight, passive investing outperformed. (That's an oxymoron, isn't it?) But as the groups most heavily represented in the S&P did best, indexation was in fact looked at as an offensive weapon.

As the tech stock boom reached its apex in 1999, even the keepers of the S&P 500 succumbed to the trend. In order to stay "modern" and "representative," they threw out low-priced Old Economy stocks that had lagged and substituted hot tech names such as Yahoo!, Broadcom, JDS Uniphase and Palm. The effect – the error – was classic.

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Adding a fast-rising tech stock to the S&P made index funds buy it, as well as active managers measured against the S&P. This added further to the stock's momentum, in a self-fulfilling cycle.

By the end of 1999, technology stocks constituted roughly 40% of the S&P, and thus it no longer delivered "unbiased" participation in equities. Prudent index investors looked for alternatives like the Russell 5000, while trend-followers threw more and more money into the S&P. As usual, investors got carried away with the simplistic solution; in some people's minds, index funds' infallibility was transmuted from "incapable of failing to capture the gains of stocks" into "incapable of performing poorly." Of course, money flooded in.

The cycle turned, as it inevitably does. The recently added tech stocks hurt the S&P in 2000, and indexers underperformed active managers. On March 30, 2001, The Wall Street Journal wrote: "For investors with index-fund holdings, the market downturn makes the forget-about-it approach a much less appealing strategy then when stocks are climbing." As the kids say, "Duh!"

Stocks of great companies – Over the years, buying and holding the stocks of leading companies has been a favorite way to strive for high return and low risk. In 1999 I heard lots of people say they were buying Microsoft, Intel and Cisco because they were sure to lead the technology miracle. They still are, and yet their stocks are now down 53%, 68% and 83%, respectively, from their highs.

People too easily forget that in determining the outcome of an investment, what you buy is no more important than the price you pay for it. As Oaktree consistently demonstrates, we'd much rather buy a so-so asset cheap than a great asset dear.

The stocks of great companies often sell at prices that assume their greatness can be perpetuated, and usually it cannot. While in business school in the 1960s, I read a brochure from Merrill Lynch introducing a novel concept called growth stock investing. Many of the stocks it profiled went on to be pillars of the Nifty-Fifty by the time I joined the First National City Bank in 1969. It was the party line that if the company you invest in is good enough and growing fast enough, there's no such thing as too high a price. Along with lots of companies that are still considered great, the Nifty-Fifty included such average companies of today as Avon, Kodak and Polaroid. Starting from their 1973 highs, we estimate these stocks' respective annual returns at .4%, (.4%) and (10.4%)! **"Great company today" doesn't mean "great company tomorrow," and it certainly doesn't mean "great investment."**

On February 7, 2001, the Wall Street Journal carried "Unsafe Harbors: Folks Who Like To Buy A Stock and Forget It Face Rude Awakening." It said,

> Big, industry-leading companies are being rocked by everything from deregulation to cutthroat competition to fast-changing technology that can shift an industry's balance overnight. The speed of change today is changing the concept

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of a few safe stocks, which you can just buy and sock away, into almost an investment relic.

The Journal supplied lots of evidence showing how risky it can be to buy and hold stocks thought to be great:

- Among the 50 largest stocks in the S&P 500, almost half lost 20% of their value last year; . . . even in 1999' s bull market 10 of these top 50 stocks fell by that much.
- Ten of the 50 biggest stocks lost 20% in a single day last year.
- In each of the past three years, an average of eight of the 50 stocks in the S&P 500 sporting the highest dividend [yields] dropped 20% or more in a month.

A February article in Fortune magazine, covering 1960-80, 1970-90 and 1980-99, showed that out of 150 candidates among large companies, only four or five in each period were able to grow earnings per share at 15% per year on average. Can you guess the only company that did it in all three periods? It was Philip Morris. And yet despite that unequalled record, its stock rose only 7.6% per year in 1991-99, (13.0% per year behind the S&P 500), because of concern over tobacco litigation.

Pursuing quality regardless of price is, in my opinion, one of the riskiest – rather than the safest – of investment approaches. Highly respected companies invariably fall to earth. When investors' hopes are dashed, the impact on price is severe. For example, if a high p/e ratio is attached to earnings that are expected to grow rapidly, an earnings shortfall will cause the p/e ratio to be reduced, bringing about a double-barreled price decline.

Lord Keynes wrote "speculators accept risks of which they are aware; investors accept risks of which they are unaware." As Keynes's definition makes clear, investing in the stocks of great companies that "everyone" likes at prices fully reflective of greatness is enormously risky. We'd rather buy assets that people think little of; the surprises are much more likely to be favorable, and thus to produce gains. No, great companies are not synonymous with great investments . . . or even safe ones.

<u>High-grade bonds</u> – After several years in investment exile, traditional fixed income instruments racked up good absolute returns and super relative returns in 2000. (For example, the Lehman Brothers Government/Credit Index was up 11.9%.) But don't bet on a repeat.

First, I don't believe bonds should be bought with an expectation that their returns will exceed their promised yields. That means 4-6% on governments and 6-8% on high-grade corporates.

Second, government bonds are quite highly priced today, thanks to:

- the flight to quality that resulted from the pain in the stock and high yield bond markets,

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- the current low level of inflation, and
- the looming scarcity of Treasury securities as budget surpluses erase the Federal debt (I'm not quite sure I buy that one).

Third, high-grade corporates have not been an unfailing source of safety. The February 7 Journal story referenced above included the observation that "of corporate bonds rated investment grade, an unprecedented 3% fell 30% or more in price last year, according to Merrill Lynch & Co."

The pundits - As usual, the cresting of stocks in 1999/early 2000 was caused and/or accompanied by the vesting of special powers in "experts." I have previously railed against the brokerage house analysts who set price targets based on where they guessed a stock could sell and gave out "buy" ratings to drum up corporate finance business.

The current targets for my wrath are the talking heads from CNBC and its competitors. I resent the role they played in the popularization of equity investing, in the bubble that developed, and in the debacle that followed. They're glad to opine on what stocks are worth, why they went up or down yesterday, and what they're going to do tomorrow. But the more I listen, the more I feel the absence of a few key phrases like "beats the heck out of me" and "darned if I know." I think one of the elements that roped in so many people and convinced them they could invest safely despite their lack of expertise was the media's repeated message that these things were knowable. Some of the confidence of these personalities has evaporated of late.

The Fed – The trend of personalizing described above reached its apogee in the deification of Alan Greenspan. For almost fourteen years, Greenspan has done an excellent job at the Fed. He kept a weather eye out for signs of inflation and took steps to avert it when needed. He wisely injected liquidity into the financial system in times of crisis. And he made every effort to keep a steady hand on the economy, trying to avoid sudden moves that could unsettle the participants.

He has presided over a terrific economy; I can't imagine a better one. I phrase that carefully, because it will be debated whether he made it great or it made him great. People who know things I don't will decide the question.

In January, the markets demonstrated their great faith in Greenspan by leaping forward when the first interest rate cut was announced. "Surely Greenspan will be able to avoid a cessation of growth." Investors were highly confident that he would be able to save them. Yet in 1998-9, when he as good as said "I'm going to slow the economy and rein in this irrational exuberance," no one acted as if he could, and the market continued to roar.

That is, investors first disregarded his power to throw cold water on the party but later had great faith that he could keep it going. I think this demonstrates their lack of objectivity and the selectiveness of their perception. No one can build the perpetual motion machine investors hope for, but that doesn't mean they'll stop hoping.

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The sure thing – In fact, that brings me to the bottom line. Even though people have always looked for the silver bullet, the easy answer and the free lunch, there is no such thing. "Hope springs eternal," they say, or is it greed? Everyone wants the riskless route to riches, but markets exist to make sure it can't exist for long.

No one has all the answers. Lots of people can guess the direction of the market once or twice, or pick the right stock or group, but very few can do it consistently. That doesn't keep investors from following the latest Messiah who's been right once in a row. But no one seems to ask "if he knows what's going to happen, why is he telling me?"

No rule is valid all the time. Buy growth; buy value. Buy large-cap; buy small-cap. Buy domestic; buy international. Buy developed; buy emerging. Buy momentum; buy weakness. Buy consumer; buy tech. I've seen them all.

There is no perfect strategy. People flocked in droves to growth stock investing, real estate, portfolio insurance, Japanese stocks, emerging market stocks, tech stocks, dot-corns and venture capital. Each worked for a while and sucked in more and more investors. But in each case, success eventually pulled in enough money to guarantee failure.

Over the years, performance has constantly improved in areas like golf. That's because while the participants develop new tools and techniques, the ball never adjusts and the course doesn't fight back. But investing is dynamic, and the playing field is changing all the time. The actions of other investors will affect the return on your strategy. Just as nature abhors a vacuum, markets act to eliminate an excessive return.

So Then What Do We Do Now?

I have a few things to suggest that may help in the years that lie ahead. None of them will prove easy to implement, however. None will give you that sure thing.

Accept change – Among the important elements that clients, consultants and managers must possess is adaptability. The only thing you can count on is change. Even if the fundamental environment were to remain unchanged – which it won't – risk/return prospects would change because (a) investors will move the prices of assets, certainly in relative terms, and (b) investor psychology will change. That's why no strategy, tactic or opinion will work forever. It's also why we have to work with cycles rather than ignore or fight them.

Search for alpha – In doing so, however, it's essential to understand:

- what alpha is,
- what markets permit it, and
- who has it.

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To me, **alpha is skill**. It's the ability to profit from things other than the movements of the market, to add to return without adding proportionately to risk, and to be right more often than is called for by chance.

More important, **alpha is differential advantage**; it's skill that others don't possess. That's why knowing something isn't alpha. If everyone else knows it, that bit of knowledge gives you no advantage.

Lastly, **alpha is entirely personal**. It's an art form. It's superior insight; some people just "get it" better than others. Some of them are mechanistic quants; others are entirely intuitive. But all those I've met are extremely hard working.

You want managers who have alpha, and you want them to be working in markets that permit it to be put to work. Only in markets that are not efficient can hard work and skill pay off in consistently superior risk-adjusted returns. I always say if you gave me 20 Ph.D.s and a $100 million budget, I still couldn't predict the coin-toss before NFL games. That's because it's something into which no one can gain superior insight. When someone says "my market is inefficient" or "I have alpha," make him prove it.

You want to be sure the claimed alpha is there. Just about everyone in this business is intelligent and articulate. It's not easy to tell the ones with alpha from the others. Track record can help but (a) it has to be a long one and (b) it's still possible to play games.

My advice to you is that when you find managers who do what they promise and seem to do it well, stick with them. Even the best manager won't be infallible, but staying with those who've demonstrated skill and reliability will reduce the probability of disappointment. I don't expect much out of market returns in the years ahead, so alpha will be more important than it was in the 1990s.

Pursue non-market-based returns – The period since I started managing money in 1978 has been incredible. There were a few bad days and quarters, but through 1999 there wasn't a single year with a return on the S&P 500 worse than minus 4.8%. From 1978 through 1999, the return on the S&P 500 averaged 17.6% per year. 111at rose to 20.6% for 1991-99 and 28.3% for 1995-99. I doubt there's ever been a better 22-year run; to ask for more would be just plain piggish. But I don't think it'll be anything like that in the years just ahead.

The observers I most respect foresee single digit returns. Stock market returns have three components: profit increase, multiple expansion and dividend yield. The last is minimal and the second can't be counted on from here. So that means we're down to the rate of increase in corporate profits, which is likely to be in single digits. Returns like that would be somewhat below the historic average, but after such a great 22-year period, a little correction wouldn't be unreasonable.

So if stocks are poised for unexciting single-digit returns, (and if the period ahead may be marked by more negative surprises than the recent past, which I believe), what looks promising? I suggest you search for returns that are not predicated on market advances.

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Coupon interest provides a good start, so high yield bonds and convertibles are likely candidates. Distressed debt is an example of a non-prosperity-oriented strategy that should work well.

Lastly, I would take a good look at "absolute return-type" strategies. These are designed to systematically take advantage of market inefficiencies and to capture managers' alpha while limiting susceptibility to fluctuations. Arbitrage, long/short, hedge and market-neutral strategies fall into this category. Most strive to earn returns in the teens on a consistent basis, with relative indifference to the performance of the mainstream markets.

I think investors are about to move into these areas en masse for a number of reasons:

- because they did well in recent years, and especially well amid the chaos of 2000,
- because of the pain inflicted by stocks over the last twelve months, and
- because of the modest prospects in the mainstream markets.

I expect hedge funds and absolute return funds to be promoted heavily by brokerage firms, mutual fund organizations and investment advisers and to become the next investment fad. And there's good reason why they should. Especially given the competition from the mainstream, an appropriate mantra for the 2000s might be "low double digits ain't bad." If you can identify managers who possess enough alpha to consistently deliver such returns, you should hire them. And there's a better-than-average chance they'll be found in the hedge fund arena, where managers get a share of the profits.

However, that doesn't mean a few caveats aren't in order:

- **Expectations must be reasonable**. Investors must realize that very few managers are truly capable of earning 12% or 15% steadily and with low correlation to the mainstream markets. Anything approaching 20% is Herculean.

- **Most returns really won't be "absolute."** I have seen lots of "hedge" and "market neutral" funds drop precipitously. That's because it's unusual for portfolio returns to be entirely divorced from their environment. For example, one of the things currently attracting attention is the excellent performance of risk arbitrage last year. But something systematically favorable may have occurred in 2000, and thus it could turn systematically unfavorable in some future year. I've often said "zero correlation" may not be attainable; "low correlation" may have to suffice.

- **Money flows will playa big role**. In general, the good records have been built on small amounts of money. And those records will attract large amounts of money. There are several consequences.

  First, records simply may not be capable of extrapolation. To handle more money, a manager may have to invest faster, put more dollars into each position, put on a larger number of positions, broaden the fund's range of activities, add new staff members

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and/or reduce selectivity. All of these can have negative implications. George Soras and Julian Robertson had terrific records, but they eventually reached $20 billion and lost their specialness.

Second, many of the best managers with alpha and discipline are already closed to new money, or will reach the point when they are. Thus in the extreme, as Groucho Marx would have put it, "I would never invest my money with anyone who'd take it."

And third, when there's too much money in an area, even funds that are closed can be affected. Long-Term Capital found others emulating its trades and eventually lost its opportunity because too much money had piled into its niches.

- **The wrong people will get money**. The rush to invest in an area gives money to managers who shouldn't get it. **When the best are closed, the rest will be funded**. Second-string managers will split off from established groups and get money based on their old fund's record (regardless of how much of it was theirs). Thus, as the amount of money in the area rises, the average quality of the managers may fall.

- **Fees can eat up alpha**. When the demand for funds outstrips supply, fund managers have the ability to raise fees and thereby appropriate for themselves a larger portion of their funds' returns.

- **Disappointments will be many**. Due to the factors enumerated above, the next few years will see many investors fail to get what they hoped for . . . as usual. One of my favorite sayings is "what the wise man does in the beginning, the fool does in the end." Over the last 20-30 years, a few talented managers built successful hedge funds on relatively small amounts of capital. I believe the period ahead will see lots of people raise more than they should; thus it will have to be navigated with care.

Investment trends certainly run the risk of being carried to extremes. (For an example, take a look at venture capital in 2000.) Despite this, I think absolute return investing deserves your attention. But you should commit only after a lot of investigation and with your eyes wide open. No process, no label, no strategy will deliver performance in and of itself. Exceptional low-risk performance requires a partnership between skillful, disciplined money managers and insightful, hard-working clients.

April 10, 2001

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Memo to: Oaktree Clients

From: Howard Marks

Re: We're Not In 1999 Anymore, Toto

In "The Wizard of Oz," a tornado carried Dorothy and her dog, Toto, to a land ruled by a mysterious despot in whom people had vested extraordinary powers. In the investment world of 1999, similarly, the promise of easy money powered a wild ride into a world in thrall to high tech investing. Both of these seemingly omnipotent forces were eventually exposed as vulnerable, however, and the spells surrounding Oz and the stock market were broken.

* * *

In my favorite commercial of 1999, Stuart, the cyber-geek from the mailroom, exhorted his boss to make his first on-line stock purchase, saying, "Let's light this candle!" When Mr. P. protested that he didn't know anything about the stock, Stuart suggested, "Research it." Mr. P. pushed a button on his keyboard and a few seconds later, suddenly wiser, proceeded to buy his first hundred shares. Like many, he demonstrated how easy it is to feel smart in a bull market.

In 2000, on the other hand, on-line brokerage commercials were different. When the little boy asked his father what he was doing at the computer, the father said he was investing for his college education. Looking over his dad's shoulder, the boy was curious about the on-screen data. "Five-year earnings, p/e ratio . . ." the father enumerated. "A p/e ratio of 23," the son asked, "is that good?" The father's dumbfounded silence clearly reflected his sudden realization that he knew less than he had thought.

Obviously, in 2000, millions of investors across the board realized that they knew less than they thought they did, and that lots of what they had been sure of was wrong.

* * *

A year ago, I wrote in "bubble. com" that tech stocks had benefited in 1999 from a boom of colossal proportions. They exhibited all of the elements of a market bubble, with an attractive story providing the foundation for a gravity-defying escalation of prices far beyond reason, and for manic behavior on the part of investors. I urged readers to view the tech stocks skeptically, but I also acknowledged that it's possible for overpriced assets

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to remain so for a long time. **I certainly had no idea that the excesses I saw in the market would be remedied as quickly as they have.**

The Bubble Bursts

In every regard enumerated in "bubble. com" and more, the tech-media-telecom extremes of 1999 were reversed in 2000. I must say I've never seen anything quite like it.

Business models questioned – A year ago, I went to great lengths criticizing dot-com business models that valued eyeballs over profits and viewed operating losses as a good investment. This year, investors realized that the emperor was naked. The first signs came in articles like "Burning Up" (Barron's, March 20), which cited the rate at which Internet companies were using their finite cash to fund operating losses. More recently, "The Giveaway Is Going Away On Web Sites" (Wall Street Journal, December 4) stated that "many of the online companies that are in a sad state today can blame their woes on the cornucopia of free stuff and services they have been doling out to build market share." So now it's "p-to-p," or path-to-profit . . . just a little late. Technology entrepreneurs went through their cash, secure in the expectation that they could always raise more by selling shares to eager buyers. In today's market, as the British say, that's simply not on.

Technology firms disrespected – Prospective investors (not to mention bankers, suppliers and landlords) now want to see profit potential. The laws of business are being enforced, meaning that money-losing companies can't attract additional capital. Scores of firms have closed, and tens of thousands of employees have lost their jobs. In perhaps the height of indignity, the Internet has been turned against its own, as dot-coms have been formed to chronicle the collapse of dot-coms. Log on to dotcomfailures.com for a list of more than eighty.

Tech/media/telecom stocks brought low – Of course, the stocks that soared in 1999 tanked in 2000. The 86% gain of the **NASDAQ** Composite in 1999 was the greatest in history for any major average. Its 39% loss in 2000 was the greatest in its history and, in terms of major averages, trailed only the 1931 drops in the Dow and S&P.

Throughout my 30-plus years in the investment business, I have seen one localized boom after another. Each time, the end was marked by a Wall Street Journal table cataloging once-hot stocks that had fallen more than 90% from their highs. Conglomerates (late 1960s), computer software and services (1969-70), the Nifty-Fifty (1973-4), oil stocks (early '80s) and biotech (early '90s) – they've all been there, and I felt certain that TMT stocks would join them sooner or later. The only difference is that in 2000, the top ten losers on the NASDAQ all declined **more than 99%!**

The 14 stocks mentioned a year ago in "bubble.com" provide a pretty good sample; they're down 82% on average from their year-end 1999 prices and 87% from their highs in 2000. Eight of the fourteen are down 96% or more from the top (see the table on the last page for the details).

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IPOs no longer a sure thing – If you ask me, the most important single contributor to the tech stock bubble was the mania for Initial Public Offerings. When new issues began to double, triple and more on their first day of trading - and then triple again from there - a gold rush started. When the stock market valued profitless new ventures, only months after their formation, at multiples of their sales (and, illogically, at multiples of the price at which founders were gladly to sell), anything was possible. The lottery was on, and the improbable but huge payoffs going to the winners made every ticket valuable. Later, investors ignored the odds against success and acted as if all of the companies - even head-to-head competitors-would be winners. The perpetual motion machine eventually lost its momentum, of course, and it turned out that there's no sure thing. Although the IPOs of 2000 averaged a first-day gain of 55%, about two-thirds of them are now trading below their issue price.

Venture capital rendered mortal – 1999 witnessed the wildest single market phenomenon I've ever seen: an asset class with a triple-digit annual return. The overheated IPO market provided an exit for the venture capitalists and contributed greatly to their fabulous profits. The model was simple: create a business plan (on the proverbial napkin), raise a little money, staff up and open the doors, spend wildly to build demand for products sold at a loss and go public at a hundred - or a thousand - times invested cost. In contrast to last year's banner headlines, 2000's venture capital stories are a little murkier. How did the funds do in 2000? Given the vagaries of pricing and the lags in reporting, no one has a good reading on performance yet.

I want to highlight one thing, though: venture capital funds often distribute shares to investors and reckon the amount distributed based on the market price of the stock at the time. But if investors don't realize that price, their actual returns may be far lower than those claimed by the funds. If the subsequent declines are charged to the investors' public stock portfolios, we may never know what venture capital returns really were.

Analysts defrocked – I think one of the usual hallmarks of a market mania is personification. This time around, the heroes included brokerage firm analysts like Mary Meeker and Henry Blodget, who were lionized in Internet chat rooms and whose target prices for stocks were given great credence by investors. It turns out, though, that many analysts weren't basing their targets on analytically-derived profit and p/e estimates but, in a stunning circularity, on what they thought investors might pay. It's now clear the analysts added little insight in terms of either fundamentals or valuation.

The December **18** Wall Street Journal revisited six price targets. On average, the analysts predicted a **64%** gain, but the stocks declined **88%** instead. For me, the most telling thing was one analyst's alibi: "By setting [the target] only about 25% higher. . . we were indicating there was only a little more upside in the stock." I seem to remember when calling for a 25% gain was a bullish statement, not a warning. But then again, all kinds of nutty behavior typified this bubble.

Odds and ends at the extreme - Numerous other elements, large and small, captured the excesses of the tech stock mania and their reversal.

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- In 1999, incubators (CMGI and Internet Capital Group), technology industry participants (Intel and Amazon) and outsiders (Starbucks) were piling up profits in venture investments. This year, of course, it was losses that fell to the bottom line.
- The potential for stock option profits made dot-com jobs compellingly attractive last year, and old economy firms had no way to compete. This year, employees wanted cash instead, and what we read about is the negative effect of stock options on companies' finances.
- Last year, the media told of executives jumping from the old economy to dot-coms. This year's stories described surprise firings and careers left in the lurch.
- In 1999, brokerage house Internet conferences drew big crowds. 2000 saw conferences postponed and cancelled.
- Whereas tech stocks commonly reached triple-digit prices in 1999, now they're falling below $1 and being delisted by NASDAQ.
- Instead of experiencing dramatic capital inflows and perhaps closing to new investors, tech and Internet mutual funds are diversifying into other areas, merging with other funds or shutting down.
- Finally, in the most visible indicator, we'll see on January 28 that dot-coms will run only about 10% of the commercials during the Superbowl, down from 50% last year.

Of course, the bottom line is that lots of things people considered eminently logical in 1999 – like low-risk triple-digit gains – are now being shown to have been far too good to be true. The headlines of 1999 look silly now, and the debunking in 2000 seems obvious (e.g., "What Are Tech Stocks Worth, Now That We Know It Isn't Infinity?" in the Wall Street Journal on April 17). But that's a juxtaposition that marks the end of every market boom.

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How'd We Get Here?

In the 1990s, positive macro forces contributed to an extremely benign environment and steadily reinforced each other:

- low inflation,
- the shift of the federal budget from deficit to surplus,
- easy money at low interest rates,
- technological gains, and
- a high degree of risk tolerance.

These things gave rise, in turn, to the elements of economic and investor prosperity:

- strong corporate and individual borrowing, leading to leveraged balance sheets,
- aggressive buying by businesses, consumers and investors,
- massive gains in productivity,

- unusually rapid growth in corporate profits, and
- strong appreciation in asset prices.

Now, with some of the props removed or in question, we are seeing:

- retail and auto sales down,
- consumer and investor confidence off,
- factory orders falling and layoffs on the rise,
- profit warnings everywhere,
- risk aversion that has reasserted itself (or should we call it fear?),
- rising defaults, bankruptcies and troubled bank loans, and
- significantly lower stock and corporate bond prices.

All of this is normal cyclical behavior. Cycles are one of the few things we can rely on, as you have heard me say repeatedly, and this downswing is moving along familiar lines. What surprised even me this time around is the rapidity and severity of these developments. Given the extreme nature of the ascent, though, I guess an equally extreme reversal is not unreasonable.

Of course, former bulls will say this downturn was initiated/accelerated/exacerbated by unforeseen developments that blindsided them: skyrocketing prices for oil, gas and electric power; rising tensions in the Middle East; and the bizarre post-election chaos. But the important point is that something eventually derails every Pollyanna scenario. In 1998, I criticized the oxymoronic attitude exemplified by "we're not expecting any surprises." Somehow, surprises always seem to occur. Expectations (and stock prices) that assume there won't be any are dashed sooner or later, and optimism turns to disappointment.

I date this cycle's turning point in investor psychology to the third quarter of 1998, with the Russian default and the collapse of Long-Term Capital Management. Before that, investors seemed to consider risk their friend. They blithely interpreted the upward-sloping path of the Capital Market Line to mean that bearing more risk would reliably bring more return. (For example, one consultant told me his firm wouldn't recommend Oaktree's high yield bond management because they "wanted to maximize risk" and knew they couldn't accomplish that with us.) But the Russia and Long-Term fiascoes popped that balloon and reminded participants that risk-taking isn't always profitable.

Here's an illustration of the impact of these events on psychology. According to CSFB, from the end of 1996 to the middle of 1998, the face amount of "distressed" bonds yielding more than 20% (and thus indicating grave concern over credit) grew just $6 billion per year on average. But in the 2-1/3 years following Russia and Long-Term, from mid-l998 through October 31, 2000, the amount increased by an average of $38 billion per year. Actual defaults grew only half as much over that period, ($18 billion per year), but investors' sharply reduced willingness to bear risk caused the distressed bond count to explode upward.

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(If I'm right in saying risk tolerance turned to risk aversion in 1998, you might ask how the tech/media/telecom boom could have continued into 1999 and early 2000. The answer: it's the exception that proves the rule. Even as investors were turning more conservative and capital was being withdrawn from hedge funds and banks' and brokers' proprietary portfolios, the crowd took to TMT investing in a way that ignited the IPO boom and everything that followed. It's often said that at the end of a bull market the vast majority of stocks weaken while one popular sector goes on to a highly extended extreme before collapsing. Certainly that's what happened in 1999, when the tech-dominated NASDAQ rose 86% at the same time that the S&P 500 excluding technology was up only ***3%*** (Wall Street Journal, December 21).

In 2000, the last holdouts – the TMT aficionados – finally realized that they had overstated their companies' potential, ignored their dependence on a benign environment, understated the danger implied by the market's manic volatility and paid too much for their stocks. All of the positives of 1999 turned into negatives, with catastrophic results.

The declines in the TMT stocks in 2000 provide a tangible reminder that psychology can change much faster than fundamentals. A little fundamental deterioration, when mixed with increased pessimism, can wreak absolute havoc with asset prices.

Now What?

I see little chance that the boom-creating factors enumerated above – the hallmarks of the 1990s – will characterize the next few years. In particular, I see higher risk aversion and tighter credit. But, of course, the prices of many stocks and bonds in the tech sector have undergone serious corrections. So the question to ask is "Have they fallen enough?"

The answer is simple: I don't know. Nokia is down 55% from its high but still trades at 61 times earnings (New York Times, December 2l). Qualcomm fell 53% but is still at 65 times expected earnings (Los Angeles Times, December 31). Overall, the NASDAQ Composite, which includes many profitless companies, is valued at 90 times its companies' total earnings (Wall Street Journal, December 20).

No one can know which way a market's going to go, but a few eternal truths and the right mindset – the significance of which has been reinforced by the experience of the last few years – can best prepare us to handle the inevitable uncertainty.

Beware of generalizations – Most of the time, and especially at the extremes, markets over-generalize. Last year, investors acted as if all of the telecom companies would succeed; this year, investors seem to think they're all losers. In 1996 and 1997, financial institutions would lend to anyone; now, even strong companies have trouble getting capital. When the market "throws the baby out with the bathwater," as we believe it's doing now, gems can often be found among the wreckage. As a result, for example, our Distressed Debt and Principal groups are prospecting for overlooked values in telecom. Also flawed are many of the broad rules that investors invoke. In 1999, no cry was heard more often than "buy the dips." Each time the market dropped a bit, buyers stepped in.

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Anyone who bought in those declines benefited from the rallies that surely followed. Of course, that didn't work quite so well in 2000. The dips in March-April, May and July were all followed by rallies, but they were traps for unsuspecting buyers. Only "sell the rallies" proved correct.

Respect cycles – There's little I'm certain of, but these things are true: Cycles always prevail eventually. Nothing goes in one direction forever. Trees don't grow to the sky. Few things go to zero.

That was really the problem with the bubble. Investors were willing to pay prices that assumed success forever. They ignored the economic cycle, the credit cycle and, most importantly, the corporate life cycle. They forgot that profitability will bring imitation and competition, which will cut into – or eliminate – profitability. They overlooked the fact that the same powerful force that made their companies attractive, technological progress, could at some point render them obsolete.

Worry about time – Another element that investors ignore in their optimism is time. It seems obvious, but long-term trends need time in order to work out, and time can be limited. Or as John Maynard Keynes put it, "Markets can remain irrational longer than you can remain solvent." Whenever you're tempted to bet everything on a long-run phenomenon, remember the six-foot tall man who drowned crossing the stream that was five feet deep on average.

One of the great delusions suffered in the 1990s was that "stocks always outperform." I agree that stocks can be counted on to beat bonds, cash and inflation, as Wharton's Prof. Jeremy Siegel demonstrated, but only with the qualification "in the long run." If you have thirty years, you can rest assured that equity returns will be superior. For someone with a thirty-year time frame, the decline of the NASDAQ in 2000 may have been a matter of indifference. But it didn't feel that way to most people.

Time came into play in another way for the TMT entrepreneurs. Many raised the money they needed for a year or two and proceeded to burn it up. They counted on being able to raise more later, but in 2000 capital was denied even to worthwhile ideas. Lots of companies never got the chance to reach profitability. More important than money, they ran out of time.

Remember that, for the most part, things don't change – The five most dangerous words in our business aren't "The check's in the mail" but "This time it'll be different." Most bubbles proceed from the belief that something has changed permanently. It may be a technological advance, a shortage or a new fad, but what all three have in common is that they're usually short-lived.

Most "new paradigms" turn out to be just a new twist on an old theme. No technological development is so significant that its companies' stocks can be bought regardless of price. Most shortages – whether of commodities or securities – ease when supply inevitably rises to meet demand. And no fad lasts forever.

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Never forget valuation – The focus may shift from dividend yield to p/e ratio, and people may stop looking at book value, but that doesn't mean valuation is irrelevant. In the tech bubble, buyers didn't worry about whether a stock was priced too high because they were sure someone else would be willing to pay them more for it. Unfortunately, the "greater fool theory" only works until it doesn't. Valuation eventually comes into play, and those who are holding the bag when it does are forced to face the music.

Be conscious of investor psychology – I don't believe in the ability of forecasts or forecasters to tell us where prices are going, but I think an understanding of investor psychology can give us a hint. When investors are exuberant, as they were in 1999 and early 2000, it's dangerous. When the man on the street thinks stocks are a great idea and sure to produce profits, I'd watch out. When attitudes of this sort make for stock prices that assume the best and incorporate no fear, it's a formula for disaster.

I find myself using one quote, from Warren Buffett, more often than any other: "The less prudence with which others conduct their affairs, the greater prudence with which we should conduct our own affairs." When others are euphoric, that puts us in danger. When others are terrified, the prices they set are low, and we can be aggressive. On December 22, in "Consumer Mood Swings to Angst," the New York Times employed a new phrase: "irrational anxiety." If that sentiment does come to be widespread, replacing irrational exuberance, it can signal a buying opportunity.

Check your own mindset – For me, mindset holds many of the keys to success. We at Oaktree believe strongly in **contrarianism**. As suggested in the paragraph above, that means leaning away from the direction chosen by most others. Sell when they're euphoric, and buy when they're afraid. Sell what they love, and buy what they hate.

Closely related to contrarianism is **skepticism**. It's a simple concept, but it has great potential for keeping us out of trouble. If it sounds too good to be true, it probably is. That phrase is always heard after the losses have piled up – be it in dot-coms, portfolio insurance, "market neutral" funds or the "Asian miracle." Oaktree was founded on the conviction that free lunches do exist, but not for everyone, or where everyone's looking, or without hard work and superior skill. Skepticism needn't make you give up on superior risk-adjusted returns, but it should make you ask tough questions about the ease of accessing them.

We think **humility** is essential, especially concerning the ability to know the future. Before we act on a forecast, we ask if there's good reason to think we're more right than the consensus view already embodied in prices. As to macro projections, we never assume we're superior. About under-researched companies and securities, we think it's possible to get an edge through hard work and skill.

Finally, we believe in **investing defensively**. That means worrying about what we may not know, about what can go wrong, and about losing money. If you're worried, you'll tend to build in more margin for error. Worriers make less when everything goes right, as in the tech bubble, but they also lose less – and stay in the game – when things return

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to earth. At Oaktree, we're guided more by one principle than any other: **if we avoid the losers, the winners will take care of themselves.**

These are the things that Oaktree is built on, and that got our clients through 2000 in one piece. We can't promise that all of our investment decisions will be correct, but we can assure you they will embody these crucial ingredients for success in 2001 and beyond.

December 31, 2000

Stocks Mentioned In "bubble.com" – January 1, 2000

Company	Ticker Symbol	Price 12/31/99	2000 High	Price 12/31/00	% Chng. 12/31/99 to 12/31/00	% Chng. 2000 high to 12/31/00
Akamai Tech.	AKAM	$328	$346	$ 21	-94%	-94%
Amazon.com	AMZN	76	92	16	-80	-83
America Online	AOL	76	83	35	-54	-58
Charles Schwab	SCH	26	45	28	+11	-37
CMGI	CMGI	138	164	6	-96	-97
E*Trade	EGRP	26	33	7	-72	-78
Egreetings Network	EGRT	10	13	#	-97	-98
Etoys	ETYS	26	28	#	-99	-99
Priceline.com	PCLN	47	104	1	-97	-99
Red Hat	RHAT	106	148	6	-94	-96
Theglobe.com	TGLO	8	10	#	-96	-97
VA Linux Sys	LNUX	207	208	8	-96	-96
Webvan	WBVN	17	19	#	-97	-97
Yahoo!	YHOO	216	250	30	-86	-88
Average					-82%	-87%

= below 50¢

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Memo to: Oaktree Clients

From: Howard Marks

Re: Investment Miscellany

Because I've been encouraged by the response to my “bubble. com” and venture capital memos, I'm going to keep writing. Over time, I collect ideas that I'm tempted to pass on to you - nothing major, but miscellany that may be of interest. Sharing them might become a habit; let me know if you think it should.

Can't Get Any Respect

The behavior of IPOs and hot tech stocks in the last few years perverted everything that traditionally had held true. The episode that crested in March must have been the greatest bubble of all times. Certainly money was made in amounts and at speeds never seen before. Companies went from business plan to IPO in a year or two, with billions of dollars assigned to them in market capitalizations or bestowed on their founders and venture capital backers.

In the last twelve months, technology entrepreneurs and investors on both coasts bought homes costing several tens of millions of dollars. The line of eager buyers pushed up prices for private planes, yachts and beachfront homes. The market for art and antiques grew white hot. In short, as a friend of mine says, “money was disrespected.”

Traditional investing values were equally disrespected. Risk was viewed as the investor's friend, and caution as unnecessary and unavailing. Profits - and even profit projections - were considered superfluous. The slow and steady ways of making money came in last, and the riskiest schemes paid off best. Venture capital funds produced triple-digit returns in a year, and profitless technology company IPOs did so in a day.

On the other hand, investors seemed incapable of remembering why they had fixed income allocations, and value stocks and absolute return strategies weren't far behind in terms of disregard. In May of 1999, I heard John Angelo of Angelo Gordon put it brilliantly:

> Twenty years ago, when I told people I could make them 15% a year, year in and year out, they said “That's impossible.” Today, when I tell people I can make them 15% a year, year in and year out, they say “Who cares?”

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To illustrate, take the case of high yield bonds, whose prices have been sagging, partly because of steady capital flows out of high yield mutual funds (for redeployment in equity funds). I was asked the other day when flows into high yield bonds would resume. My answer: When people realize once again that 11 % is a good return.

But this disrespect for traditional investment thinking shall pass--and in fact it appears to be in the process of doing so. In general, the portfolios that did best last year have done worst so far this year, and vice versa. Traditional investing values will be respected again. I can even imagine a day when words like "prudence" return to investors' everyday speech.

It Restores Your Faith

If common sense and logic don't work, how are we to run our lives? In "bubble.com" I battologized (look that up in your Funk & Wagnall's) regarding the dot-coms' divergence from the old-fashioned notion that only if revenues exceed expenses is a business attractive. Instead, in 1999 business models were based on giving away products as a way to get ads in front of eyeballs, or on selling things for less than they cost.

WebHouse Club is a poster child for failed giveaways. A spin-off of Priceline.com, it let customers name their own price for groceries and gas. There was a problem: manufacturers were unwilling to supply goods at the prices customers wanted to pay, so WebHouse made up the difference. In "bubble. com" I related several old jokes about the businessman who sells below cost, but I never expected to see life imitate art so precisely. Anyway, WebHouse's backers lost their enthusiasm for absorbing the losses (the fall of their Priceline stock from $170 to $3 may have had something to do with it), and the company ceased doing business on October 5.

I find it reassuring that entrepreneurs (and, more significantly, the investors expected to fund them) are realizing that profitless "business models" are untenable. Internet retail firms are shutting down, especially those in overpopulated "spaces." Now, I'm told, the newest "b-to-c" among Silicon Valley employees is "back to consulting." Last year, Goldman Sachs had trouble recruiting the **MBA** it needed; this year the interview rooms are overcrowded again.

What Can Reasonably Be Expected from Equities?

In a little drama that I'm sure has played out at thousands of organizations in the last year, a charitable organization investment committee that I chair began to question its conservative portfolio and ask whether it should have more in equities. As a result, we commissioned some bond/stock allocation work from our consultants. Its conclusions were most curious.

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Their model called for higher equity allocations, predicting that they would lead to higher overall returns on the portfolio and lower risk. Why? Because equities were projected to return 14% and risk was defined as the probability of failing to average 8% over a five-year period.

First, I said, I would never have any part in a process that equated higher equity allocations with lower risk. I suggested that risk be defined as overall portfolio volatility, and that took care of that.

But second, I questioned the 14% projected return from equities. Equities returned 28% in 1995-99, I said; did someone think halving that made for a conservative projection? No, I was told, the support mostly came-from the 13% long-run return on equities:--(I always thought it was 10% or so, but it seems the last five years have changed all that.)

I could only think of one way to respond: I offered to put up my money against that of the consultant's researchers and "take the under." I doubt strongly that equities will return 14% or anything like it in the next decade. Corporate earnings have traditionally grown at single-digit rates, and I don't feel that's about to change substantially. With p/e ratios unlikely to rise further and dividends immaterial, single-digit earnings growth should translate into single-digit average equity performance at best for the foreseeable future.

In the end, I feel there has been unreasonable reliance on the average historic return from equities, be it 10% for 1929-92 or 13% for 1940-99. What's been lost track of is the fact that p/e ratios were much lower when these periods began and since then have risen substantially. I just don't believe that further p/e expansion can be counted on. How do I view the issue? I ask the bulls one question: **What's been the average performance of stocks bought at p/e ratios in the twenties?** I don't think the return has been in double digits. I'm not even sure it's been positive.

A Framework for Understanding Market Crisis

I want to call your attention to an excellent paper with the above title written by Richard Bookstaber, head of risk management for Moore Capital Management. It was published in the proceedings of an AIMR seminar on "Risk Management: Principles and Practices" (August, 1999). What smart people do is put into logical words the thoughts we may have had but never formulated or expressed. In his article, Bookstaber has done a great job of explaining the forces behind market crisis.

I'll try to summarize his analysis, borrowing extensively from his words but adding my own interpretation **and** emphasis, there'll be some slow going, but I think you'll find it worthwhile.

- Most people think security price movements result primarily from the market's discounting of information about corporate, economic or geopolitical events - so-called "fundamentals." If you sit with a trader, however, it's easy to observe that prices are always moving in response to things other than fundamental information.

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- Bookstaber says “the principal reason for intraday price movement is the demand for liquidity .... In place of the conventional academic perspective of the role of the market, in which the market is efficient and exists solely for informational purposes, this view is that the role of the market is to provide immediacy for liquidity demanders.....**By accepting the notion that markets exist to satisfy liquidity demand and liquidity supply, the framework is in place for understanding what causes market crises, which are the times when liquidity and immediacy matter most.”**

- “Liquidity demanders are demanders of immediacy.” I would describe them as holders of assets in due course, such as investors and hedgers, who from time to time have a strong need to adjust their positions: When there's urgency, “the defining characteristic is that time is more important than price .... they need to get the trade done immediately and are willing to pay to do so.”

- “Liquidity suppliers meet the liquidity demand.” They may be block traders, hedge fund managers or speculators with ready cash and a strong view of an asset's value who “wait for an opportunity when the liquidity demander's need for liquidity creates a divergence in price [from the asset's true value]. Liquidity suppliers then provide the liquidity at that price.” What they offer is liquidity; providing liquidity entails risk to them (which increases as the market's volatility increases and as its liquidity decreases); and the profit they expect to make is their price for accepting this risk. “To liquidity suppliers, price matters much more than time.”

- Usually when the price of something falls, fewer people want to sell it and more want to buy it. But in a crisis, “market prices become countereconomic,” and the reverse becomes true. “A falling price, instead of deterring people from selling, triggers a growing flood of selling, and instead of attracting buyers, a falling price drives potential buyers from the market (or, even worse, turns potential buyers into sellers.)” This phenomenon can occur for reasons ranging from transactional (they receive margin calls) to emotional (they get scared). The number of liquidity demanders increases, and they become more highly motivated. “Liquidity demanders use price to attract liquidity suppliers, which sometimes works and sometimes does not. In a high-risk or crisis market, the drop in prices actually reduces supply [of liquidity] and increases demand.”

- In times of crisis, liquidity suppliers become scarce. Maybe they spent their capital in the first 10% decline and are out of powder. Maybe the market's increased volatility and decreased liquidity have reduced the price they're willing to pay. And maybe they're scared, too. Bookstaber recalls the Crash of 1987. After the first leg down, liquidity suppliers “had already ‘made their move,’ risking their capital at much lower levels of volatility, and now were stopped out of their positions by management or, worse still, had lost their jobs. Even those who still had their jobs kept their capital on the sidelines. Entering the market in the face of widespread destruction was considered imprudent ... Information did not cause the dramatic price volatility. It was caused by the crisis-induced demand for liquidity at a time that liquidity suppliers were shrinking from the market.”

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- "One of the most troubling aspects of a market crisis is that diversification strategies fail. Assets that are uncorrelated suddenly become highly correlated, and all positions go down together. The reason for the lack of diversification is that in a [volatile] market, all assets in fact ***are*** the same. The factors that differentiate them in normal times are no longer relevant. What matters is no longer the economic or financial relationship between assets but the degree to which they share habitat. What matters is who holds the assets." In recent years, the "habitat" in which most investors feel comfortable has expanded. Barriers to entry have fallen, access to information has increased and, perhaps most importantly, most investors' forays abroad have been rewarded. Thus "market participants become more like one another, which means that liquidity demanders all [hold] pretty much the same assets and grab whatever sources of liquidity are available." If they **are held by the same-traders, "two types of unrelated-assets will become highly correlated because a loss in the one asset will force the traders to liquidate the other."** That's not a bad explanation for the fact that when Long-Term Capital and the emerging markets crashed in September 1998, high yield bonds and other unrelated asset classes fell with them.

I hope you'll recognize in the above some of the elements behind the Oaktree approach, as exemplified by our work with distressed debt.

- We look for Bookstaber's "liquidity demanders," with their exogenous motivations. We call them forced sellers, and they provide our best bargains.

- We take advantage when "noneconomic" market conditions increase the pressure to sell even as asset prices move lower.

- And we rarely approach holders to buy, preferring to wait until they call us. In that way we are "liquidity suppliers" rather than eager buyers. Take it from me, the latter pay more.

Many of us may have had thoughts like Bookstaber's, and in my 30+ years in money management I've had plenty of chances to watch liquidity demand **soar,** liquidity supply dry up**,** prices collapse and diversification fail. But I respect someone who can put into a rigorous framework that which "everybody knows."

Speaking of panics, we all recognize the carnage that occurs when the desire to sell far exceeds the willingness to buy. But I think Bookstaber's analysis applies equally to the opposite - times when the desire to buy outstrips the willingness to sell. It's called a buying panic and represents no less of a crisis, even though - because the immediate result is profit rather than loss - it is discussed in different terms. Certainly 1999 was just as much of an irrational, liquidity-driven crisis as 1987. While some of the ramifications have been seen thus far this year, I think there's more to come.

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Knowledge Versus Information

If Bookstaber's article made brilliant sense of a market phenomenon, what's the opposite? For an example, I would look to "Stock Hoax Should Affirm Faith in Markets" by James K. Glassman (Wall Street Journal, August 30). Glassman's name may be familiar to you, because my memo of May 1, 2000 took issue with "Dow 36,000," a book he co-authored. Now it's a pleasure to take issue with him again.

Glassman's book said the Dow should be at 36,000 because stocks' multiples should be much higher than they are. Multiples should be higher because there's so little risk in stocks, and thus investors needn't incorporate a risk premium. I didn't think that argument made any sense, and I don't think the recent article makes any, either. This time, Glassman argues that one of the things greatly reducing the riskiness of stocks is the technology being employed in the markets, most notably the Internet. Because information is disseminated so rapidly and thoroughly, investing entails less risk, so stocks are a better place to be. As he puts it, "The Internet - simply as a tool to get financial information out speedily - has had the effect of raising stock prices, perhaps permanently. In that way, the new technology has added hundreds of billions of dollars to the wealth of U.S. investors."

Paradoxically, Glassman finds proof of this in the Emulex incident. On August 25, 2000, a false press release was picked up on the Internet, taking Emulex stock from $103 to **$45** within twenty minutes. After a few-hour trading halt, corrected information took it back above $100. Glassman's term for the markets: "dazzling in their efficiency."

He finds comfort in the fact that both the falsified data and the correction were disseminated so quickly. I feel the rapid and universal distribution of information - often at speeds and in amounts that make it impossible to verify, distill and understand - does nothing to make the markets safer *per se*. For proof, look at the trend in volatility. It seems inescapable that media hype and other short-term oriented developments have made the markets more treacherous.

Looking at today' s mass market and the associated flood of information, my partner Sheldon Stone sees investors as passengers on a boat, running back and forth *en* masse -to one side in response to new information, and then back to the other. That makes for a rocky crossing.

Where does Glassman go wrong? To me, his error is obvious in the following sentence:

> Markets know so much more about companies, and know it so quickly, that their assessments of worth have an up-to-the-minute efficiency and accuracy.

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The bottom line for me: **Efficiency and accuracy are two very different things.** As I wrote in my May memo, investors rapidly incorporate new information into their estimates of security values, and the market rapidly reflects the consensus view of values,...but that doesn't mean the consensus is right. **Information isn't knowledge.** The mere fact that investors have data doesn't mean they understand its significance. If investors' knowledge was really growing, stock volatility wouldn't be increasing as dramatically as it is. As the adage says of the fool, “he knows the price of everything and the value of nothing.”

November 16, 2000

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Memo to: Oaktree Clients

From: Howard Marks

Re: Irrational Exuberance

Recent years have witnessed great excesses in the stock market. The postmortems have begun to be written, and I'm determined not to lag. Thus I will attempt below to combine a number of ideas and bits of empirical data I've stored up over recent weeks in a memo which expresses my views and hopefully is of value to you. My ideas are disjointed, but I hope to be able to fashion a common thread.

Postmortem? Do I mean to say the market's rise is over? You know I don't make predictions of that sort. **I am not ringing the bell on stock prices, but hopefully on a style of investing without reason.**

The stock market's record-breaking rise through March 10 was driven by the tech stocks. The tech stocks, in turn, were driven by optimistic, get-rich-quick buying that was totally lacking in skepticism and caution. What I think may (and should) be on the wane is the belief that it is perfectly reasonable:

- to borrow in order to buy stocks that have already risen 500% and are selling at infinite P/E ratios,
- to rely exclusively on advice from friends, **CNBC** and Internet bulletin boards when investing in companies whose business you know nothing about, and
- for companies valued at billions of dollars to lose tens of millions per year, because investors can be counted on to give them more.

These attitudes have certainly signaled **irrational exuberance.**

* * *

On December 5, 1996, with the Dow at **6,437,** Alan Greenspan coined that phrase, of which we're unlikely to have heard the last. Acting in the classic role of a central banker trying to jawbone against trends inimical to economic health, he asked:

> How do we know when irrational exuberance has unduly escalated asset values, which then become subject to unexpected and prolonged contractions?

Did Greenspan want to stop people from having fun and making money? No. He wanted to keep stocks from running too far too fast and thus avoid an excessive wealth effect.

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“Wealth effect” is the term used to describe the impact on the economy of major increases in the prices of stocks or other assets. When asset prices rise, people feel richer and spend more. When the resulting demand outstrips supply, inflation heats up. Further, when the upward trend of asset prices inevitably turns down, the wealth effect works in reverse, putting a damper on economic growth (although Greenspan is more likely to have been worried about inflation than economic softness).

Prior to expressing his concern about exuberance, Greenspan was credited with the power and wisdom needed to keep the economy rising forever. So how did investors react to his remark? In the first half-hour of trading the next day, they took the Dow down by 145 points (which used to be considered a big move). But the exuberance of which he had warned soon reasserted itself, with the Dow closing the year virtually unchanged from its pre-critique level and moving 1000 points higher over the next six months.

If it was irrational exuberance that had taken the Dow to 6,437 in late 1996, what would describe the rise to 7,437, and eventually to 11,497, in relatively short order? And what accounts for Greenspan's two subsequent years of silence on the subject? My guess is that he was feeling pressure from people – perhaps with a political stake in the continuing rise of the stock market-who castigated him for being a wet blanket.

* * *

At any rate, Greenspan's warning receded into memory without meaningfully slowing the market's rise, and his place in the pantheon of popular heroes appeared diminished. After all, a record 49% of Americans now had a stake in the stock market, and their heroes were people who helped them make money, not scolds warning about excess and pushing prices lower. Having voiced concerns and diminished confidence, Greenspan was no longer the day trader's pin-up.

When Greenspan began to raise rates on June 30, 1999, no one seemed to care. The Nasdaq Composite rose practically unabated from 2,686 at the time of the first of five rate increases to 5,049 just 8% months later. Thus Greenspan joined the roster of those whose genius was downgraded in recent times - almost comically, I think (unless you're one of the people so affected).

Another prime example is Julian Robertson, who compiled an incredible record through mid-1998, with a return averaging 31.7% a year for 18 years. Then losses and capital withdrawals knocked his Tiger Fund from $22.8 billion to $5.2 billion over the next 18 months. Every day the stock market was ridiculing both value investors like Robertson and the Old Economy companies they specialized in. Robertson announced a few weeks ago that he was closing up shop, saying, “we are in a market where reason does not prevail” and “there is no point in subjecting our investors to risk in a market which I frankly do not understand.”

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In a supreme irony, the April week in which Robertson announced his departure turned out to be one of the best of his career, but the damage had already been done. I often think about the corrosive effect of being on the wrong side of a market judgment for prolonged periods, and the phenomenon through which those who resist trends the longest can finally capitulate at just the wrong time. Robertson, 67, had an approach that failed to work for two painful years and enough wealth to allow him to say "why put up with this?" The pressure to quit obviously hit its apex just as his timing in quitting was at its worst.

Last week saw a pullback from risk on the part of George Soros, head of the remarkable Quantum Fund (up 32%/year after fees for 30 years), and the resignation of Stanley Druckenmiller, its portfolio manager since 1989. Why? Druckenmiller had resisted tech stocks until mid-1999, but then he invested and made a bundle in the second half. When he held on to most of them in 2000, they brought him heavy losses. The New York Times reported, "... he had known by December that the explosion in technology stock prices had gone beyond reason. But he expected it would go longer than it did ... 'We thought it was the eighth inning, but it was the ninth.'" Or as Soros admitted, "Maybe I don't understand the market. Maybe the music has stopped but people are still dancing."

An analyst who dealt with both Robertson and Soros summed up aptly for the Times:

> **The moral of this story is that irrational markets can kill you.** Julian said, "This is irrational and I won't play," and they carried him out feet first. Druckenmiller said "This is irrational and I will play," and they carried him out feet first. (Emphasis added)

And what about Gary Brinson, another top value stock investor? After he sold his firm to Swiss Bank Corp. and SBC merged with Union Bank of Switzerland, the combined firms had $920 billion under management and Brinson appeared well on his way to becoming the world's first trillion-dollar money manager. But either Brinson or his constituents lacked the resolve needed to hang in when his approach was out of fashion, and he announced his resignation on March 2. It was probably one more case of a wealthy man who saw no good reason to continue subjecting himself to the market's insults. Brinson became yet one more stellar investor who was kept from going out on top.

By the mid-1990s, Warren Buffett had become a household name and a role model for millions of American investors. He is absolutely unique in that he became one of the world's richest men by investing in common stocks. All it took was a return averaging 25% a year for 30 years. But his portfolio was flat in the raging bull market of 1999, and the stock price of his Berkshire Hathaway lost 49% from its 1998 high to its 2000 low. Buffett certainly has been treated with less awe in the last couple of years.

Jeremy Siegel also came to be ignored. Who's Siegel? This Wharton professor was voted the best in the country, and his book "Stocks for the Long Run" contributed greatly to the bull market's middle years. He reported that there had been very few long periods of time in which stocks had lost money or underperformed bonds or cash, and this greatly

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buttressed investor confidence. But when his article "Big-Cap Tech Stocks Are a Sucker Bet" ran in the Wall Street Journal on March 14, 2000, it seemed to have no immediate effect on stock prices – the Nasdaq Composite was 5% higher ten days later.

If these genuine geniuses have been dissed of late, who was elevated? Take the case of James Glassman and Kevin Hassett, **the** authors of "Dow 36,000." Utilizing Siegel's research, they concluded that because stocks are so low in risk, they should not provide a premium return versus bonds; thus, their return in the past was far higher than it should have been. In order for stocks to offer a prospective return that is appropriately low - say 6% - their current price should be higher. The broad market's P/E ratio should be 100, and the Dow should be at 36,000 **now**. Glassman and Hassett got a lot of ink in the Wall Street Journal in 1999, but I couldn't get past one question: Who's going to buy stocks to make 6% a year?

And lastly, what about Frank P. Slattery, V, age 27, who entered the investment business in 1996. His smallish PBHG New Opportunities Fund was up 533% in 1999 and another 96% in the first 70 days of 2000. Now that's genius! (However, in the new market environment, the fund was down 57% between March 10 and April 14, wiping out all of 2000' s gain and more. Slattery has resigned to pursue other opportunities.)

In the choice of who should be canonized and who downgraded, the late 1990s were certainly a time when reason was turned upside down.

* * *

Speaking of the 1990s, I was recently asked to compare the 1980s' "Decade of Greed" with the latest iteration. In the 1980s, a few financially astute leveraged buyout operators attained prominence while trying to take over some of America's leading companies without much capital of their own. In the 1990s, in contrast, it seemed everyone in America tried to get rich quickly by jumping on a perpetual motion machine.

One of the greatest irrationalities of the last few years has been the declining role of reason and fundamental business analysis in the setting of stock prices.

First, a look at trading volume convinces me that the retail investor - acting either directly or through mutual funds - increasingly became the marginal transactor setting stock prices. I doubt institutional trading could have increased enough to account for 1.5 billion shares a day on the NYSE and 2.0 billion shares a day on Nasdaq. (Circa 1980, when I bought Oppenheimer junk bonds whose interest was indexed to NYSE volume, the benchmark was the then-current average of 49 million shares a day.)

Second, with the enormous popularization of stocks in the '90s, rank amateurs were pulled in, diluting the expertise of even the retail investment community. Many of these new investors were ignorant of the process through which stock prices historically have been based on earnings and dividends. They knew only that stocks went up and tech

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stocks went up faster. Valuation didn't matter: if you bought a stock with a good enough "story," someone else would pay you more for it.

Third, the role of the brokerage house analyst changed. When I started doing equity research 31 years ago, the sell-side analyst tried to serve investors so as to attract trading and generate commissions. In the 1990s, with commission rates so low and the big money being made in investment banking, it became the sell-side analyst's job to generate capital market deal flow. The analyst tried to become influential with investors in order to endear himself to company management. Serious valuation work dwindled and "sell" recommendations became even more scarce: why antagonize a company whose investment banking business you're trying to attract? A recent Wall Street Journal quote from Morgan Stanley's Cisco analyst is emblematic of the analyst's new dog-chasing-its-own-tail role:

> We have to accept the facts of life. If investors want to buy these high growth companies, we are just trying to take what they are willing to pay and translate it into a target price and therefore a stock recommendation.

In other words, it wasn't the analyst's job to throw cold water on the investor's party by pointing out that the target price had been reached or the price was too high. He just moved the target price up. And investment newcomers, unaware of how superficial this all was, actually attached some importance to the target prices assigned by analysts.

Fourth, with reason lacking, the retail investor's approach came to be based on extremely simplistic thought processes.

- When momentum investing was working, the mantra was "buy stocks that have done well - they'll keep going up."
- When the inevitable pause in the rise swept the market - as it did in August **1998**, when Long-Term Capital and the emerging markets stumbled - the cry of "buy the dips" took hold, and it worked every time.
- On bad days recently, with the confidence behind the rise deflated (and with no reserve of reason there to back it up), I think it's been "sell before it goes down more."

Investors with no knowledge of (or concern for) profits, dividends, valuation or the conduct of business simply cannot possess the resolve needed to do the right thing at the right time. With everyone around them buying and making money, they can't know when a stock is too high and therefore resist joining in. And with a market in free fall, they can't possibly have the confidence needed to hold or buy at severely reduced prices.

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And that brings me back to one of my favorite quotations from Warren Buffett:

> The less prudence with which others conduct their affairs, the greater the prudence with which we should conduct our own affairs.

Unless reversed, the damage of the last few weeks clearly demonstrates the extent to which the risky behavior of others can create peril for you. **If it has taught another generation that stock ownership is not a riskless one-way street, that's a healthy development that should render such imprudent behavior less likely to reappear.**

* * *

While on the subject of investors' analytical capabilities, I want to take a look at stocks' failure for so long to respond to the Fed's rate increases. In earlier times, the market would decline as soon as a rate increase was hinted at, no less implemented. This time around, the Fed raised rates five times and Chairman Greenspan essentially came out and said the market was too high and he would bring it down. How can we explain the fact that there was no reaction (until recently, if that in fact did contribute to the correction)? I attribute this, also, to failings on the part of those setting stock prices.

There are two main reasons why stocks fall when rates rise. I'll discuss them below and offer my explanation for their failure to gain traction this time:

First, stocks dip because higher interest rates mean stiffer competition from fixed income investments. No one cared in 1999, however, because 6½% wasn't any more tempting than 6¼% to someone expecting a sure 20% from stocks.

Second, higher rates make it more expensive for consumers to buy houses and cars and for businesses to hold inventories, invest in machinery and build buildings. This puts a crimp in the pace of business and can lead to recession. But if the investors setting stock prices don't know (or care) how the economy and business cycle work, policy increases can be slow to impact the equity market.

Rate increases depress stocks in the short run when people understand how they work and anticipate the longer-term effects described above. That is, they work because people agree they will work. If this requirement isn't met, then rate rises deserve the description that First Boston's Al Wojnilower ("Dr. Doom") applied in the 1970s to manipulating the money supply: "turning on and off a light switch to which no wires are attached."

* * *

Why did stocks rise so rapidly in 1999? Because people were rabid to buy and no one wanted to sell to them. The result was explosive appreciation. Those gains actually signaled great illiquidity (which is measured as the percentage price change that results from buying or selling a certain dollar value of stock). However, an imbalance of buyers over sellers is never <u>called</u> illiquidity; it's called profit and doesn't worry anyone.

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In the last six weeks, however, the imbalance has been on the sell side. This time, investors' inability to find others willing to trade with them has forced prices down drastically, and they are calling it illiquidity. In other words, radical upward movement was greeted warmly, but radical downward movement is being attributed somewhat to a failing on the part of the market.

Certainly the behavior of stocks in 1999 was viewed more benignly than it should have been. Momentum investors irrationally planned to get out when the music stopped, but the market wasn't able to accommodate all of them.

* * *

I want to turn now to the subject of market efficiency, something that's very important to us at Oaktree and that I have been looking for a chance to discuss.

In recent weeks I've heard good things about a new book, fittingly titled "Irrational Exuberance." Its author, Robert J. Shiller, a Yale economist, has taken on the theory that the stock market is efficient, saying stocks' swings are too violent to suggest that they are always accurately valued. On that famous Tuesday four weeks ago, the Nasdaq Composite traded at both 3,649 and 4,138 within seventy minutes. It's certainly hard to believe the underlying stocks were fairly valued at both levels. No, says Shiller, the stock market is not efficient; stock prices are set irrationally. Or as George Gilder recently wrote in the Wall Street Journal:

> Stock markets are world-wide webs of information. So why half the time do they behave like members of some candy mountain mystical sect, torn between dreams of eternal wealth and horror of a bottomless pit?

In response, I want to give my view of market efficiency. I want to say up front that academics don't share my view and theory says I'm wrong. But my approach works for me, and I want to share it with you.

In my opinion, the market for many stocks is highly efficient. That's what I was taught at the University of Chicago in the mid-'60s, when capital market theory was being developed. And in 1978, when I left equity research, I told Citibank I'd do anything but "spend the rest of my life choosing between Merck and Lilly." I believed in market efficiency then and I believe in it now. But what does that mean?

When I say efficient, I mean "**speedy**," not "right." My formulation is that analysts and investors work hard to evaluate all of the available information such that:

- the price of a stock immediately incorporates that information and reflects the consensus view of its significance, and

- thus, it is unlikely that anyone can regularly outguess the consensus and predict a stock's movement.

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That is, the market may often misvalue stocks, but it's not easy for anyone person - working with the same information as everyone else and subject to the same psychological influences - to consistently know when and in which direction. That's what makes the mainstream stock market awfully hard to beat - even if it isn't always right.

* * *

Lastly, I want to share what I told the board of a charity whose Investment Committee I chair. I listed some of the elements that have been at the foundation of prudent investing during my time in the business and more:

- pursuing both appreciation and income,
- balancing growth and value investments,
- balancing the desire for gain and the fear of loss,
- buying companies with a history of profitability,
- caring about valuation parameters,
- emphasizing cheap stocks,
- taking profits and reallocating capital,
- rotating industries, groups and themes,
- diversifying,
- hedging,
- owning some bonds, and
- holding some cash.

How did this list do in 1999? **It was a recipe for disaster!** Every one of these elements would have caused you to underperform. What should you have done? Just two things:

- bought growth and technology stocks that had already appreciated, and
- held them as they rose further, refusing to sell at any price.

Thus in one more way, wisdom was turned on its ear in this period.

* * *

Robertson, Soros, Druckenmiller, Brinson and Buffett succeeded for decades because the markets they worked in (1) were driven by <u>both</u> fear and greed, (2) responded eventually to reason, and (3) rewarded disciplined analysis more than they did naked aggressiveness. That's the kind of climate we at Oaktree prefer. In the late 1990s, markets were propelled (and the big money was made) by people who, in my opinion, substituted optimism, risk tolerance and love of a good story for reason, caution and skepticism. If investors have been chastened by the events of the last few weeks, I think we'll see more of the latter in the future.

May 1, 2000

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P.S.: I've learned the hard way that it's not easy to be right about the future, as I've been complaining about market excesses for far too long. That being the case, I'm not going to miss the opportunity to celebrate the correctness to date of my last memo, “bubble. com.” The table below lists the stocks mentioned in that memo and their declines from its publication at year end, and from the highs reached since then, to the April trough.

Company	**Ticker**	**12/31/99**	**2000 high**	**4/14/00**	**%Chg 12/31/99 to 4/14/00**	**% Chg 2000 high to 4/14/00**
Akamai Tech.	AKAM	$328	$321	**$ 65**	-80%	-80%
Amazon.com	AMZN	76	89	47	-38	-48
America Online	AOL	76	83	**55**	-28	-34
Charles Schwab	SCH	38	65	41	6	**-38**
CMGI	CMGI	138	163	52	-62	-68
E*Trade	EGRP	26	33	19	-27	-41
Egreetings Network	EGRT	10	12	3	-68	-74
Etoys	ETYS	26	26	5	-82	-81
Priceline.com	PCLN	47	96	59	24	**-39**
Red Hat	RHAT	106	141	24	-77	**-83**
theglobe.com	TGLO	**8**	9	3	-64	-67
VA Linux Sys	LNUX	207	193	29	-86	**-85**
Webvan	WBVN	17	18	6	-66	-69
Yahoo!	YHOO	216	238	116	-46	**-51**
Average					-50%	-61%

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Memo to: Oaktree Clients

From: Howard Marks

Re: bubble.com

The book "Devil Take the Hindmost" by Edward Chancellor does an excellent job of chronicling the history of financial speculation. In doing so, it recounts the story of "the South Sea Bubble" and provides a backdrop against which I'd like to examine some of the events of today.

The South Sea Company was formed in 1711 to help deleverage the British government by assuming some of the government's debt and paying it off with the proceeds of a stock offering. In exchange for performing this service for the Crown, the company received a monopoly for trading with the Spanish colonies in South America and the exclusive right to sell slaves there. Demand for the company's stock was strong due to the expectation of great profits from these endeavors, although none ever materialized. In 1720, a speculative mania took flight and the stock soared.

Sir Isaac Newton, who was the Master of the Mint at the time, joined many other wealthy Englishmen in investing in the stock. It rose from £128 in January of l720 to £1,050 in June. Early in this rise, however, Newton realized the speculative nature of the boom and sold his £7,000 worth of stock. When asked about the direction of the market, he is reported to have replied “I can calculate the motions of the heavenly bodies, but not the madness of the people.”

By September 1720, the bubble was punctured and the stock price fell below £200, off 80% from its high three months earlier. It turned out, however, that despite having seen through the bubble earlier, Sir Isaac, like so many investors over the years, couldn't stand the pressure of seeing those around him make vast profits. He bought back the stock at its high and ended up losing £20,000. Not even one of the world's smartest men was immune to this tangible lesson in gravity!

* * *

It's obvious from “Devil Take the Hindmost” that many elements of speculative behavior were present during the South Sea Bubble. I'll cite some of its passages below and point out the parallels to today that I see:

> “The ideology of self-interest had recovered after the battering it received after the crisis of the mid-1690s ... its thesis [was] that private vices - avarice, prodigality, pride and luxury - produced public benefits.” [Sounds like the "greed is good" rationalization of the 1980s.]

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The success of South Sea spawned talk of any number of speculative schemes, some of which was probably apocryphal. “The most famous of the legendary bubble companies was that ‘for carrying on an undertaking of great advantage but no one to know what it is.’” [I can't understand what it does, but that's okay; just tell me the name, ▮▮▬ or maybe the symbol's enough.]

Despite their lack of profits, companies like South Sea were able to finance their operations by issuing stock at higher and higher prices. “The circularity inherent in the scheme made a rational calculation of the shares' fair value difficult to compute. Some argued that the higher the shares rose, the more they were actually worth .... ‘Was there ever such a delusion from the beginning of the world ... according to this Way of Computing, no Person can Purchase at too high a Rate, since his Profit will increase in Proportion to the Price he gives.’” [There's no such thing as too high a price if the concept is right, and the ability to issue stock at rising prices will lead to profitability.]

"Adam Anderson, a former cashier of the South Sea Company, later claimed that many purchasers of shares ... bought knowing that their long-term prospects were hopeless, since they aimed to get 'rid of them in the crowded alley to others more credulous than themselves.'" [The greater fool theory is nothing new.]

“As Edward Ward observed in his poem ‘A South Sea Ballad’:

> Few Men who follow Reason's Rules,
> Grow fat with South-Sea Diet,
> Young Rattles and unthinking Fools
> Are those that flourish by it.”
> [The profits went to those unrestrained by reason or experience.]

Robert Digby wrote “The South Sea Company is continually a source of wonderment. The sole topic of conversation in England revolves around the shares of the Company, which have produced vast fortunes for many people in such a short space of time. Moreover it is to be noted that trade has completely slowed down, that more than one hundred ships moored along the river Thames are for sale, and that the owners of capital prefer to speculate on shares than to work at their normal business.” [The name of the company was on everyone's lips, the fortunes it created were front-page news, and the average Joe was willing to give up his day job to participate ... sound familiar?]

* * *

I will devote the rest of this memo to what certainly seems to me to be another market bubble. Before doing so, however, I must point out a few things: First, as usual, little that I will write will be original; instead, I hope to add value by pulling together ideas from a number of sources. Second, a single word suffices to describe my recent caution regarding the stock market: wrong. Nevertheless, I'll admit my negative bias and

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the fact that I have found the bears convincing and the bulls Pollyanna, and then move on to discuss the effect on the market of technology as we move into a new millennium. In short, I find the evidence of an overheated, speculative market in technology, Internet and telecommunications stocks overwhelming, as are the similarities to past manias.

- **<u>Changing the world</u>** -- Of course, the entire furor over technology, e-commerce and telecom stocks stems from the companies' potential to change the world. **I have absolutely no doubt that these movements are revolutionizing life as we know it, or that they will leave the world almost unrecognizable from what it was only a few years ago. The challenge lies in figuring out who the winners will be, and what a piece of them is really worth today.**

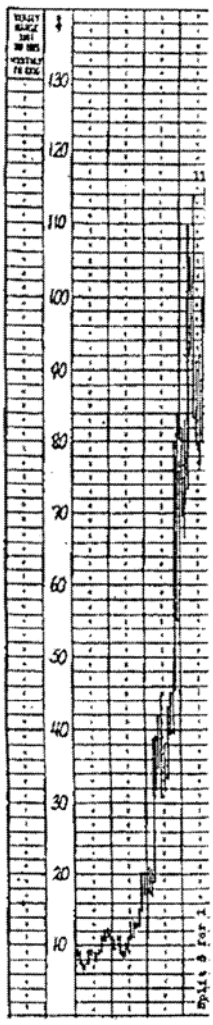

The graph at the left shows the stock price performance of the leading company in an industry that was thought capable of changing the world. For that reason, the stock followed the explosive price pattern that has become typical for technological innovators. The predictions were correct: the industry did change the world, and the company was its big winner.

The industry was radio. In the 1920s it was expected to change the world, and it did. Its ability to communicate without wires created entertainment in the home, electronic advertising and the live delivery of events. The company was RCA, and as the industry leader its stock rose from $8 in mid-1927 to $114 in mid-1929.

While part of the stock's appreciation was due to the market boom in which it shared, certainly part was also due to an overvaluation of its potential. After the onset of the Great Crash, RCA's stock fell from that high of $114 to $2½ within three years. The Depression can be blamed for some of this decimation, but it is worth noting that even 25 years after the 1929 peak, when the Depression and World War II were well over and the post-war recovery was underway, RCA's stock had yet to get back to <u>a third</u> of its earlier high. The times, the industries and the companies are certainly different today, but it makes one wonder whether investors aren't again overpaying for the ability to change the world.

Similarly, a recent article in Fortune reported Warren Buffet's observation that airplanes and automobiles had been expected to change the world and did ... and almost all of the manufacturers of both are now gone. Few things have had the impact on the world that aviation did, but from its founding through 1992, the cumulative profit of the airline industry was zero!

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As usual, Buffet puts it as succinctly as anyone could: **"The key to investing is not assessing how much an industry is going to affect society, or how much it will grow, but rather determining the competitive advantage of any given company and, above all, the durability of that advantage.** The products or services that have wide, sustainable moats around them are the ones that deliver rewards to investors." (Emphasis added) (Three years ago, everyone wanted to be Warren Buffet, or at least read books about him. Now, appearing to have missed out on the technology movement, he and his investment approach are dismissed as passe by the dot-com gang.)

- **Altered lives** -- During the South Sea bubble, as described above, boats were put up for sale and people with capital shifted from being workers to being investors. In a striking parallel, the Internet-commerce revolution is also changing lives. Of course, we know that thousands of Americans have become on-line traders either full- or part-time. Articles describe people who are trying to "ride the trend" of hot stocks and benefit from their momentum, but there's little indication that they have any idea what makes companies do well or stocks go up (or even what some of their companies do). The Wall Street Journal of December 7 cited an individual who has spent his full time in the prior five months trading the stock of one company, CMGI, which invests in Internet ventures; he doesn't know the CEO's name.

  Also striking is the effect this is having on business education and young careers. A front-page article in the New York Times of November 28 reported that applications at many business schools were flat or down, the number of Americans taking the GMAT exam was down sharply, and not-insignificant numbers of MBA students were dropping out after the first year to join the hot fields. As a professor of entrepreneurship told me, all of the e-commerce claims will be staked out in the next year or two; students can't risk staying in school and seeing someone else act on their ideas. Five years ago, the hot area for new MBAs was investment banking. Now, I hear, investment banks can't get the top students to sign up for interviews and are having trouble meeting their recruiting goals.

  The pressure to move toward the high-change areas is great, and people are succumbing. Everyone in the investment profession knows (or knows of) somebody who has made hundreds of millions (or a billion) this year on a dot-com investment. One can imagine that this makes the buyout specialists who built fortunes over a lifetime feel like underachievers. Private equity firms are getting involved in companies at earlier stages, and with the dot-coms. On November 30, a Wall Street Journal article about defections of buyout specialists to venture capital firms cited a KKR partner who had resigned to do just that.

  Venture capitalists and technologists, in turn, are moving to Internet firms. As a sign that it's even becoming hard for more mature technology firms to hold onto people, the CFO of Microsoft recently quit to join a fiber-optic company. Remember, Microsoft has already been public 17 years; the gold-rush is over at the established firms, and the overnight fortunes have been made. Even investment bankers are in transit; on December 14, a New York Times article on the subject was headlined "Wall St. Is Flush With Cash But Also Green With Envy." A Harvard Business

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School professor aptly mixes his metaphors, likening the rush of executives to Internet-related ventures to “a tsunami of people chasing a pot of gold.”

- **<u>The lure of venture capital</u>** - I recently presented the case for distressed debt to three classes in entrepreneurial finance at the University of Chicago Graduate Business School. The response of half the students was simple: Why settle for 20-25% per year when you can make 100% in venture capital?

  Just as venture capital is attracting young businesspeople, it is also turning heads in the investment community. One university treasurer told me his school's $29,000 investment in Yahoo! via a venture fund grew to $54 million (and would be more than twice that today if it hadn't been sold). Why do anything else, indeed?!

  Before we succumb to this reasoning, however, (and run out to start the OCM Venture Capital Fund), we should first review the data concerning venture capital's brief history.

  - For funds raised between 1984 and 1989, the median return to Limited Partners ranged from 7.5% to 15.1%. For funds raised between 1990 and 1994, it ranged from 20.4% to 29.7%. These are healthy returns, but certainly the typical v.c. investor enjoyed no bonanza in that period. A quarter or more of the funds raised in almost every year provided returns ranging downward from 10% to negative territory.

  - It's only for funds started in the mid-to-late 1990s that the returns have been so eye-popping. For each vintage year beginning in 1994, there has been at least one fund with a return above 200%/year. And yet, the median returns thus far for vintage years between 1994 and 1999 range only from zero to 33.7% (although it can be argued that it's still early).

  - While it's hard to settle on a "typical" vintage year for venture capital, 1994 is a reasonable candidate. Its funds are five years old, so there has been time to bring companies to fruition and to market. And certainly, the environment has been positive. In fact, 1994's top fund has returned 235%/year so far, and the average fund has returned 45%/year, an impressive figure. But averages can be deceiving, and this one has certainly been pulled up by the best performers. The median fund is up only 22.5%/year. Half the funds have annual returns below that (by definition), and the returns in the bottom quartile range from 6.4% to minus 13.2%.

  - The recent years all show similar patterns (although it's too early for meaningful results to be in): phenomenal for the big winners, good on average, but certainly not universally successful yet.

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Having reviewed the historic data, what can we say about the future? Certainly, the venture capital funds are "where it's at": the toll bridge through which world-changing companies are likely to pass. Does that mean they're a good investment today?

I feel strongly that no investment opportunity is so good that it can't be screwed up by the wrong relationship between supply and demand. Too much money for too few ideas can mean ruinous terms and purchase prices that are too high. To my mind, the immediate outlook for venture capital is called into question by:

- the ardor that has been ignited by recent "headline" returns,
- thus the huge amount of money looking for a home in ventures,
- the expanded amounts that v.c. firms are accepting in their new funds,
- the strengthened negotiating position of entrepreneurs relative to venture capitalists,
- thus the need among v.c. firms to compete in haste to make investments,
- the ease with which junior members can leave v.c. firms to start their own funds,
- the strengthened negotiating position of venture capitalists relative to their investors, and
- thus the ability of v.c. firms to raise their incentive fee percentage.

In my experience, the big, low-risk profits have usually come from investments made at those times when recent results have been poor, capital is scarce, investors are reticent and everyone says "no way!" Today, great results in venture capital are in the headlines, money is everywhere, investors are emboldened and the mantra is "of course!"

In this context, it's very much worth noting that in 1994, someone looking at venture funds formed from 1981 to 1992 would have seen only one vintage year with an average net return above 12%, and nine out of twelve years with single digit average returns. Despite the lukewarm results as of that date, a few forward-looking investors were willing to commit $7.8 billion to venture capital funds, and it is they who are earning the returns we see. In 1998, on the other hand, the 200%+ results on the top funds formed in recent years egged investors on to commit more than three times that amount: $26.1 billion. Today one hears only that investors want to put more into venture capital but can't get access to the most desirable funds. I'll leave it to you to deduce the implications for future returns.

- **<u>The role of the IPO</u>**: A "mania-within-a-mania" has taken flight in the high-tech investment world, and it surrounds Initial Public Offerings. In years past, new issues had to be priced to sell, and companies accessing the public equity market for the first time had to hope they could get investors to pay a fair price. Now, investors are sure that buying stock on a new issue - at the price the founders are willing to sell at - is the ticket to easy money. And to date it has been.

  It is reported that the average new issue of 1999, which on average is probably about six months old, is selling roughly 160% above its issue price (for four times the average gain in the next-best year). For an example, The Wall Street Journal of December 8 described the case of Akamai, which went public on October 29 at a price of $26. It closed that day at $145, for an equity market value of $13 billion. "Fourteen months earlier, ... it could never have gotten such a reception," The Journal added. "It didn't exist." Akamai's price

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is $328 today, bringing its market capitalization to $29 billion. (By the way, in the first nine months of 1999, Akamai lost $28 million on $1.3 million of sales.)

The ability to participate in IPOs has become a major perk. Investment banks compete with other money managers by promising wealthy individuals allocations in their IPOs. Technology companies allocate IPO shares to their customers as a way to cement business relationships.

As usual, I don't think investors are thinking this through. The Akamai IPO was priced at 18% of the first day's closing price. So either (a) the founding entrepreneurs and investors sold it 82% below its fair price (and who would know better than they would?) or (b) the market's wrong. It may well be that issuers intentionally underprice their offerings so that the first day's rise will create the "buzz" that will enable (1) the companies to finance their losses and their expansion through additional stock issuance and (2) the founders to sell their remaining shares. I'm sure some of that is at work here, but how much? If the closing price of $145 was "right," Akamai left almost $1 billion on the table in the IPO by selling eight million shares at $26.

Further, how much due diligence is being done on each new issue? How experienced are the people doing it? How strict are the valuation parameters they're using? How will the post-deal prices hold up when the lock-up periods end and the founding entrepreneurs and venture capitalists start selling the 80-90% of the stock that they still own? And what will happen when the options used to attract employees - and to pay service providers - begin to be exercised and the shares sold? What price will supply/demand dictate when the supply of stock increases five or ten times?

Today, it seems companies are formed and start-up financing is raised not through discussions of the companies' profit potential, but with reference to the possible timing and pricing of an IPO. The recent book "The New, New Thing" by Michael Lewis, about the career of venture capitalist Jim Clark (Silicon Graphics, Netscape, Healtheon), makes it clear that in many cases, today's entrepreneur isn't thinking idea/startup/company as might have been the case in the past; rather, it's idea/startup/IPO. Cashing in used to be the result of successful company-building. Now it's often the end in itself. It's the IPO that's “the thing.”

- **<u>How will the companies make money?</u> --** Many of the new firms have great ideas for making money, but it's appropriate to wonder whether they'll work, how the competition in each “space” (that's the dot-com term for a business niche) will develop, whether profits will materialize, and whether they'll be sufficient to justify today's stock prices.

  I don't think anyone would disagree that it's one thing to innovate and change the world and another thing entirely to make money. Business will be different in the future, meaning that not all of the old rules will hold. On the other hand, profits come from taking in more in revenue than you payout in expense, and I don't think that's going to change. I'll highlight below just three of the areas in which I have questions about profitability.

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First, will the Internet and dot-com companies be able to charge enough for their products to make money? Front page articles in The New York Times (October 14) and The Wall Street Journal (July 28) discussed the fact that many of the Internet's offerings are free. Decades ago, merchants discovered that they could sell more if they cut prices. The Internet firms have taken that one step further: they can move even more merchandise if they give it away. As the CEO of Egreetings Network says, "Charging for [greeting] cards was a small idea. Giving them away is a really big idea." Says a venture capitalist, ".... it's a fact of life on the Internet: People expect a lot of things for free. And if you don't give it away, some other start-up will."

Internet firms are giving away faxes, long-distance phone calls, music, web browsers and even Internet service itself. "The marginal cost of adding another user is practically zero," says one venture capitalist. The trouble as I see it is that the marginal revenue is exactly zero. Obviously, these firms are giving their services away in order to build traffic, tie up market share early and/or sell advertising space. It's far from clear that profits will follow.

As I read the articles mentioned above I was reminded of a great series of jokes my father told when I was young:

"I lose money on everything I sell."
"Then how do you stay in business?"
"I make it up on volume."

"I lose money on everything I sell."
"Then how do you stay in business?"
"I'm closed Sundays."

"I sell everything at cost."
"Then how do you stay in business?"
"I buy below cost."

The riddle of profitability is very much present in this area. I'm sure some firms will solve it - but far from all of them.

Second, how practical are the business models of the dot-com firms? It seems like ancient history, but I seem to remember that doing business in cyberspace was going to eliminate the need for conventional advertising, and "virtual inventories" were expected to replace brick-and-mortar warehouses filled with merchandise. Now we read about the huge sums Amazon.com is spending on warehouses, and media advertising is sold out at high prices because the Internet firms are bidding for it so aggressively. EToys will do business without stores and will just own warehouses, but what is a Toys 'R' Us store other than a warehouse with the front prettied up? Webvan Group sell groceries over the Internet, saving on store costs but providing free delivery. According to the December 15 Journal, however, "as of Sept. 30, Webvan's average order size was $72 -too small to absorb the costs of home delivery. For the first nine months of 1999, in fact, Webvan

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had a $95 million loss on revenue of just $4.2 million."

Lastly, what will be the effect of competition? It will take time, and there will be big cannibalization issues, but eventually the incumbents in each area will move to defend their businesses against the e-commerce firms. Merrill Lynch bit the bullet and decided to enable customers to trade on line as a response to E*Trade. Albertson's and Kroger have announced that they'll mount experimental home delivery systems rather than let firms like Webvan have the grocery business. The December l7 L.A. Times reported that Toys 'R' Us and Walmart had opened online shopping sites in competition with EToys. (EToys' stock is now off 70% from its high three months ago, wiping out $7.1 billion of market value). Dot-com companies will get there early, make inroads and drive up costs for the conventional firms, but they will face determined competition from incumbents fighting for their lives.

Even among just the dot-coms, competition is bound to delay and limit profitability. Most of today's e-commerce companies can, at best, boast of early entry and leading market share (the so-called "first-mover advantage"). Rarely is there patent protection, meaningful product differentiation or other substantial barriers to entry. The companies can't count on brand loyalty, because it's all just about low price. There'll always be someone waiting in the wings to cut price (perhaps to zero) for market share, and given the ease of gathering information on the Web, consumers will always be able to immediately find the lowest price. Location won't matter, because in cyberspace, everyone is everywhere. I think factors like these are likely to render profitability elusive and transitory.

- **What are the companies worth?** - Eventually, this is what it comes down to. It's not enough to buy a share in a good idea, or even a good business. You must buy it at a reasonable (or, hopefully, a bargain) price.

  Vast amounts of ink have been devoted to the valuations being put on the new companies. For The New York Times's time capsule, David Letterman compiled a list of The Top 10 Things People in the Year 3000 Should Know About Us. As a sign of the times, he included "If you wanted a billion dollars, all you had to do was think of a word and add dot com."

  - Priceline.com, which auctions off discount air tickets, (September quarter sales of $152 million, net loss of $102 million) has a market capitalization of $7.5 billion, while United and Continental Airlines ($7.1 billion sales, $469 million earnings) are worth a combined $7.3 billion.

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- Webvan Group, which started up in business in 1999, had sales of $3.8 million and a $350,000 profit in the September quarter. The stock market currently values it at $7.3 billion.

- On December 9, VA Linux went public at $30 and soared 698% that day to $239, for a market value of $9.5 billion, half that of Apple. To that date, the company's 1999 sales were $17.7 million and it had lost $14.5 million (versus Apple's profit of $600 million in the most recent twelve months). (VA Linux broke the record for an opening day rise. It had been held since November 1998 by theglobe.com, whose stock rose 606% on the first day, from $4½ to almost $32. Now it's at $8.)

Among non-Internet tech companies, Yahoo! is worth $119 billion, more than General Motors and Ford together. At the current stock price of $432, its p/e ratio on 1999 estimated earnings is just over 1,000. America Online trades at almost 250 times projected earnings for the June year currently underway, and Cisco trades above 100 times. Charles Schwab, the apparent winner among brokers in the new era, trades at 54 times estimated 1999 earnings, triple the multiple for Goldman Sachs. According to Barron's, the price/earnings ratio of the Nasdaq crossed 170 in November and may have reached 200 at year-end ... and that's the <u>average</u>.

An analysis by Sanford Bernstein shows that on September 30, you could have bought America Online and Microsoft for $625 billion and gotten $25 billion of sales and $7 billion of earnings. Alternatively, for $635 billion you could have bought 70 industrial, financial, transportation and utility companies including Bank of America, Chubb, Federated Department Stores, Litton, Philip Morris, Ryder and Whirlpool and gotten $747 billion of sales and $43 billion of earnings. The future certainly looks better for AOL and Microsoft than for those other companies, but does the differential warrant a p/e ratio 6 times as high (89 versus 15)?

And that's for “established” companies. Because the price/earnings ratios of Internet companies are so outlandish - usually negative - one may be forced to look to the price/sales ratio in order to speak about valuation. Red Hat, for example, sells at about 1,000 times its annualized revenues in the August quarter. Many of the Internet and tech companies are just concepts, and their stocks have truly slipped the valuation moorings.

Under these unusual circumstances, The Journal wrote on December 10, “stock valuations take on an unusually large importance in gauging a business's performance.” In other words, in the absence of other signs, people must look to the share price for an indication of how the company is doing. Isn't that backwards? In the old days, investors figured out how the business was doing and then set the share price.

In this valuation parameter vacuum, a “lottery ticket mentality” seems to govern the purchase decision. The model for investments in the tech and dot-com companies isn't the likelihood of a 20% or 30% annual return based on projected earnings and p/e ratios, but a shot at a 1,000% gain based on a concept. The pitch might be “We're looking for first-round financing for a company valued at $30 million that we think we can IPO in two years at $2 billion.” Or maybe it's “The IPO will be priced at $20. It may end the

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day at $100 and be at $200 in six months." Would you play? Could you stand the risk of saying no and being wrong? The pressure to buy can be immense.

There have always been ideas, stocks and IPOs that produced great profits. Yet the pressure to participate wasn't as great as it is today because in the past the winners made millions, not billions, and it took years, not months. The upside in the deals that've worked so far has been 100-to-l (give or take a zero). With that kind of potential, (a) the upside becomes irresistible and (b) it doesn't take a very high probability of success to justify the investment. I have said in the past that while the market is usually driven by fear and greed, sometimes the strongest motivator is the fear of missing out. Never was that as true as today. This only intensifies the pressure to join in and crawl further out on that limb of risk.

With broader relevance than just the dot-com stocks, the relative performance chart below from Barron's of September 27 (already quite outdated) shows two things:

1. over the last two decades, technology stocks have had periods of both underperformance and overperformance relative to the large-cap universe, and
2. the recent outperformance is unparalleled even in this bullish period.

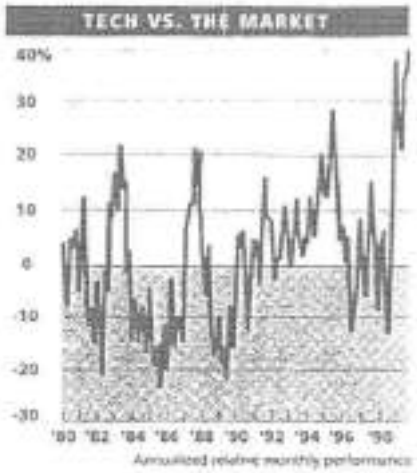

Nothing in this chart suggests that it'll be easy money in technology from here. As Alan Abelson wrote when he ran the graph, "Our reservation here is that (a) technology, like everything else in life, is cyclical; and (b) **there's something *goofy* about the price of a stock discounting as much as a century of earnings for a company in a field where change is the only constant and where the pace of change is constantly quickening**." (Emphasis added)

In September Steve Ballmer, President of Microsoft, said he thought tech stocks were overvalued. The stocks are much higher today, and his own is up more than 20%. Whose opinion matters? Is there a price that's too high?

Barton Biggs, Chairman of Morgan Stanley Dean Witter Asset Management, is a well-respected observer who has been somewhat cautionary to date (and wrong). His November 29 strategy piece was without equivocation. I'll let him sum up.

> **The technology, Internet and telecommunication craze has gone parabolic in what is one of the great, if not the greatest, manias of all time** ... The history of manias is that they have almost always been solidly based on revolutionary developments that *eventually* change the world. Without fail, the bubble stage of these crazes ends in tears and massive wealth destruction ... Many of the professional investors involved in these areas know that what is going on today is madness. However, they argue that the right tactic is to stay invested as long as the price momentum is up. When momentum begins to ebb, they will sell their positions and escape the carnage. Since they have very large positions and since they all follow the same momentum, I suspect they are deluded in thinking they will be able to get out in time, because all other momentum investors will be doing the same thing. (Emphasis added)

* * *

I am convinced that a few essential lessons are involved here.

1. The positives behind stocks can be genuine and still produce losses if you overpay for them.

2. Those positives - and the massive profits that seemingly everyone else is enjoying - can eventually cause those who have resisted participating to capitulate.

3. A "top" in a stock, group or market occurs when the last holdout who will become a buyer does so. The timing is often unrelated to fundamental developments.

4. "Prices are too high" is far from synonymous with "the next move will be downward." Things can be overpriced and stay that way for a long time ... or become far more so.

5. **Eventually, though, valuation has to matter.**

To say technology, Internet and telecommunications stocks are too high and about to decline is comparable today to standing in front of a freight train. To say they have benefited from a boom of colossal proportions and should be examined very skeptically is something I feel I owe you.

January 2, 2000

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P.s.: The apocalyptic view of the current situation states that the world economy is dependent on the prosperity of the United States; the prosperity of the United States is based on the health of its stock market; the performance of the stock market is being driven by gains in a relatively small number of tech, Internet and telecommunications stocks; and therefore, when the inevitable correction comes in those few stocks, the ramifications will be worldwide. No one knows the extent to which this hypothesis will be proved correct. The column below, from The New York Times of January 1, 2000, presents a more benign and enjoyable view.

L.P.

FLOYD NORRIS

Remembering Wealth: Life in Post-Crash Silicon Valley

My New Year's resolution is to file my columns early. This one was written 39 years before deadline.

SAN JOSE, Calif., Dec. 30, 2009

ONE Y a decade ago, the Silicon Valley of California was viewed as technology's promised land, a place where bungalows cost $1 million and even the youngest computer programmer had stock options that seemed likely to be worth millions soon.

But now, years after the Internet crash of 2003, it has become a region of jealousies and recriminations. Working relationships were poisoned when employees learned that top executives secretly hedged their positions, and thus did not suffer. Banks sued formerly wealthy entrepreneurs, saying they hid assets to avoid paying their debts.

All that has happened even though many of the Valley's technology companies remain very successful, and the Internet-based economy continues to gain at the expense of the older bricks-and-mortar economy. But few of the companies have lived up to the high expectations that were factored into stock prices before they fell. Many of the highest fliers have vanished from the landscape, either going out of business or being acquired by competitors for a fraction of the prices their shares once fetched.

Among the survivors, employees scarred by the collapse; value of their stock options now prefer the certainty of higher salaries.

It is the fate of the once-bountiful stock options that has most determined the current pecking order in Silicon Valley. At the top are those who cashed in their options before the fall. Next come those who worked for companies that prospered. Their salaries have helped to offset the paper losses, and many companies repriced their options after prices fell, thus saving some value for the employees, before angry shareholders forced a halt to that practice.

At the bottom, and perhaps the largest group, are those who did not cash out and whose companies were not among the winners. While many of them landed jobs at other companies, their wealth has vanished and some have lost their homes. Housing prices fell sharply after the options lost value, and have only recently begun to recover.

Some financial institutions were severely damaged when loans secured by stock options became uncollectible.

The inevitable jealousies reflect the seeming randomness of success and failure. There are tales of employees who did poor jobs but ended up rich, while their more competent and creative neighbors went bankrupt. Younger engineers are angry that they have no chance for the quick wealth their elders gained, and scornful of those who lost it.

Nationally, the effect on the economy has not been as great as was feared. While some other regions with big stakes in the Internet economy were hurt, most notably Seattle and New York City, the effect on most of the country was limited. Consumers cut back, but not by as much as was expected considering the declining value of investment portfolios. Growth since 2000 has been far higher than it was in Japan in the years after that country's bubble burst in 1990. In part, that was because American non-technology stocks were not nearly as overvalued.

Investors have grown much more cautious. That is reflected in the diminished amount of capital available for start-ups, and in other ways as well. Even Microsoft, which became the world's most valuable company long before it paid its first dividend in 2004, now finds that it must raise its payout every year to attract investors.

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Memo to: Oaktree Clients

From: Howard Marks

Re: How's the Market?

April 5 was just another ordinary day in the market, with big gains achieved and records broken. The Wall Street Journal article about it on April 6 was ordinary too, like hundreds that have been written in this bull market. I was struck, though, by the way it told in just a few paragraphs the whole story of what's been going on.

Just another day - On the surface, the aggregate stock market numbers continued to be very positive, with the Dow up 175 points, or 1.8%, to a new record. The S&P 500 was up 2.1% and the Nasdaq Composite Index was up 2.7%.

Even on this day of huge aggregate gains, however, participation was still relatively narrow. Almost as many stocks were down (1,318) as up (1,695). Moreover, more stocks set new 52-week lows (81) than set new highs (73).

This reminded me about the reliance of the market on just a few issues: In the first quarter of this year, 18 stocks accounted for all of the 5% rise in the S&P 500, (that's right, the other 482 stocks averaged a zero return). 55% of the stocks in the S&P lost money, and the Russell 2000 index of second tier stocks declined 5.4%.

Follow the leader -- So the leadership continued to be concentrated, as everyone knows, in just a few stocks. Yahoo gained 22% on the day, and Amazon.com was up 9%. Although IBM rose 4%, it was overshadowed by America Online, which gained 11% and became the more valuable of the two companies for the first time.

Illustrating the mania for things Internet, an article in the next day's New York Times reported on . . .

> . . . last week's initial offering of Priceline.com, which allows customers to name their own price for airline tickets on the Web. After less than a year in business, during which it lost $114 million selling $35 million worth of tickets, Priceline.com is valued at $10 billion, more than the combined net worth of UAL's United Airlines, Northwest Airlines and Continental Airlines.

Indifference to valuation - The entire bullish article - 22 column inches long - omitted all mention of valuation parameters such as P/E ratio, EBITDA multiple or dividend yield. The bottom line is that many of the investors setting the prices in today's market don't care about valuation. I get no sense at all that the analysts and portfolio managers

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backing the large-cap growth stocks and Internet high flyers can imagine prices at which they would be mere "holds" or (heaven forbid) "sells."

Looking on the bright side - The bulls - who are firmly in control - have joined with the media to interpret things in a positive light. I got a chuckle out of the article's description of investor reaction to the jobs data released on April 2:

> Those showed low unemployment, which was good for consumer spending; low wage increases, which implies weak inflation; and mild job creation, which implies a growing but not overheating economy.

I'm sure that in other times and climes, it would have come out this way instead:

> Those showed low unemployment, which carries a threat of renewed inflation; low wage increases, which implies an anemic economy; and mild job creation, which presages weak consumer spending.

Of course, economic developments are always subject to varying interpretation. The above passage sent me to the archives for one of the absolute classic cartoons:

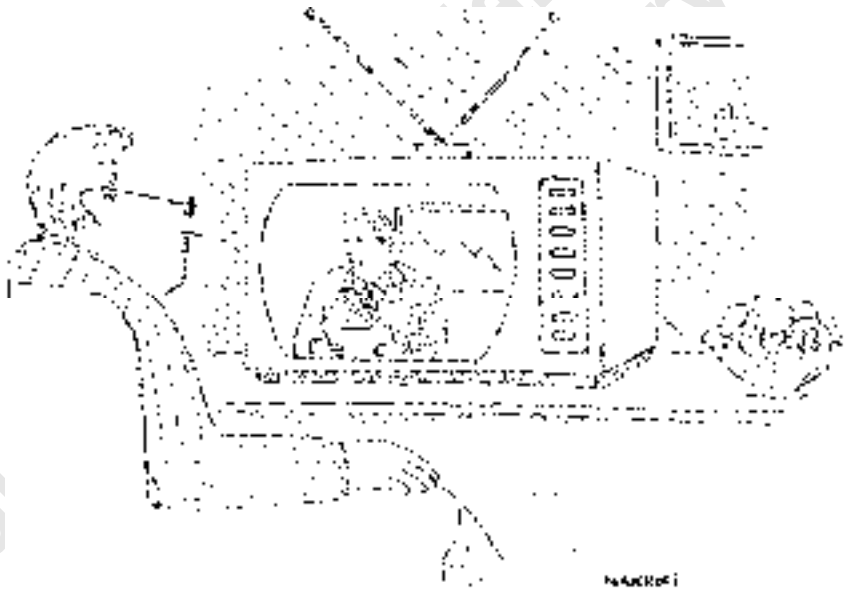

"On Wall Street today, news of lower interest rates sent the stock market up, but then the expectation that these rates would be inflationary sent the market down, until the realization that lower rates might stimulate the sluggish economy pushed the market up, before it ultimately went down on fears that an overheated economy would lead to a reimposition of higher interest rates."

Drawing by Mankoff: @ 1981
The New Yorker Magazine, Inc.

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Something for everyone (but little genuine debate) -- As the article reported,

> Wells Capital last week urged clients to move money into stocks from bonds, shifting holdings to 70% stocks and 30% bonds, from 65% and 35% . . .
>
> Taking the opposite approach to Wells Capital, . . . Bear Stearns urged clients to cut their stock exposure to 55% from 60% of their portfolio, moving the money into short-term cash accounts.

As for me, I'm certain one of them will be proved right.

Weak underpinnings - The article reflected the bulls' preoccupation with things that either don't really matter in any fundamental sense . . .

> . . . people are buying cars, they are buying houses, they are spending money. . . I think the wind is still at the market's back.

. . . or say absolutely nothing about long-term value:

> The whisper today was that the online firms are going to have very strong earnings.

Gobbledegook -- Lastly, some of what's going on just makes no sense at all.

> People are very comfortable that the earnings projections are going to be hit, but the expectations are higher than that.

I have no idea what that means, but I'm sure it'll be good for a few hundred points on the indices.

* * *

Lots of sound and fury, signifying nothing. There's a lot said, in the article I'm writing about and in the media generally, but not a lot of insight. And a lot of money being made, but most of it by the few most optimistic and aggressive investors.

The "rational" value investors have been decrying the excesses of the market for years – myself included. I've never felt more strongly the truth of the saying I picked up in the 1970s: "being too far ahead of your time is indistinguishable from being wrong." But as they say, "that's my story and I'm stickin' with it."

April 15, 1999

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P.s.: Another Journal story on April 9 was equally illustrative of the times, but with regard to the flip side. Rather than describe the great success of the few on-line stocks, it recounted the tribulations of a more typical company without ".com" in its name.

It told the story of Computer Outsourcing Services, Inc. In the six years since it went public, its revenues have tripled and its earnings have quadrupled. But its stock has risen only 60%, less than a fourth of the gain in the Nasdaq Composite over that period.

In the quarter ended January 31, 1999, earnings rose 14% on a similar gain in revenues. In response, Computer Outsourcing's stock was down 23% for the year to date, versus a 17% rise for the Nasdaq index.

The result: difficulty in hiring "whiz kids" who want options on a soaring stock, trouble having acquisition bids taken seriously, and a dispirited CEO. Let's ask him "How's the market?"

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Memo to: Oaktree Clients and Friends

From: Howard Marks

Re: Who Knew?

For years, I've railed against people who claim they know what the future holds. And yet, in my last memo on September 3, 1997, I may actually have made a correct prediction, as follows:

> What could cause a market decline? A drop in investor confidence -- perhaps the commodity that's most freely available today -- would likely be the key, but the reason is hard to foresee…. The next surprise might be geopolitical (oil embargo, war in Korea), economic (tight money, slowing profit growth) or internal to the market (competition from bonds at higher interest rates, discovery of a fraud), but it's most likely to be something that no one has anticipated -- including us.

Just the next month, the "Asian meltdown" came into full bloom, with profound ramifications for stock and bond markets all around the world.

What this shows is that it's easy to be right about the future . . . if you restrict your predictions to two: (1) something significant is bound to happen eventually, and (2) we never know what it'll be.

* * *

Speaking of what we can know, I was in a client's office in December, cautioning that I thought we would never reside for long in the investment nirvana of the new paradigm where inflation, interest rates, economic growth, expanding profits and rising stock prices stay properly aligned. He said, "I'd think a self-professed non-forecaster like you would never say, 'never'."

My response was, "Maybe it's a result of my sobering experience in the 1970s, but there are plenty of things I'll say "never" to ... on the negative side: Things will **never** go right forever. Investors' fondest hopes will **never** fail to be dashed eventually. Some unpleasant surprises will **never** fail to arise."

This sounds terribly negative, as if I think good things are rare and only bad things are bound to happen. But if you think it over, I hope you'll conclude I'm not what our Kevin Clayton calls a "Negative Ned."

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I read decades ago that every bull market has three stages:

> The first, when a few far-sighted people begin to believe that some improvement is possible,
>
> the second, when most investors come to agree that improvement is actually underway, and
>
> the third, when everyone believes everything will get better forever.

If you're going to succeed at all in timing cycles, the only possible way is to act as a contrarian: catch some opportunities at the bottom, let your optimism abate as prices rise, and hold relatively few exposed positions when the top is reached. To find bargains at the bottom, you don't have to think that things will get better forever; you just have to remember that every cycle will turn up eventually, and that prices are lowest when it looks like it won't. But it's just as important to avoid holding at (and past) the top, and the key is not to succumb to the popular delusion that "trees will grow to the sky."

What I think is important is that, although markets can be underpriced or overpriced and yet go on for months or years to become even more so, **it's most prudent to be optimistic when no one else is, and it can be highly profitable. But it can be dangerous to be optimistic when everyone else is, and very costly.**

* * *

All of the above might be interesting, but of course the crucial question is "Where do we stand today?"

Certainly, the secret's out: something bad can happen -- and has. We see Asian currencies, economies and perhaps social orders in free-fall. But what strikes me is the fact that the major U.S. equity indices are just about where they were when I wrote in September. Our market justifiably benefits from a flight to quality, and it is true that many of our companies may not be directly affected by the Asian turmoil. **But are the people pricing stocks near all-time highs too optimistic, too pessimistic, or just right?**

What amazes me is that even though people say "the market abhors uncertainty," it has been doing rather well despite the large number of things that no one can pretend to fully understand.

1) How bad will the Asian crisis get, how far will it spread, what solution is possible, and what will be the second- and third-order ramifications on our economy and companies? Will governments topple? Will contracts be abrogated? How many people who are sanguine about U.S. equities today can answer these questions concerning Asia (and how can you be the former if you can't do the latter)?

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2) Most accounts of the developments in Asia touch on overcapacity, on stiffened competition from Asian exporters whose prices are now lower in dollar terms because of devaluations, and on the possibility of deflation in the U.S. Even Chairman Greenspan thought enough of deflation to mention it last Saturday. And yet, who really knows what these things might mean for economies and companies around the world? In short, is deflation good or bad? How can you feel comfortable if you can't answer these questions?

3) A reading of the newspapers in the last few months discloses a steady drumbeat of earnings disappointments and revived restructurings and layoffs. How strong is our economy? Are cost increases putting pressure on profits? How much will earnings growth slow down?

These are all questions that indicate that negatives are present in our investment environment. But they're always there -- sometimes obvious and sometimes not.

Prices near highs and optimism in bloom -- that's a dangerous combination, especially with perceived risk on the rise. Peter Bernstein wrote around 1979 that "The great buying opportunities ... are never made by investors whose happiest hopes are daily being realized." And yet many of today's investors have only known success, and few appear seriously chastened by recent developments. This permits me to conclude that **this is not a buying opportunity and, although no collapse need be imminent, the stock market's best days are behind it for a while.**

Or as our client, Mike Herman, wrote in the annual report of the Kaufman Foundation, the Investment Committee of which he chairs: "It truly doesn't get much better than this -- a statement which in and of itself should inspire caution, not complacency. If things can't get much better, logic suggests they can only stay the same or get worse."

My bottom line is that while the best bargains are found when it looks like things can't get better, bargains are hard to find when things can only get worse -- especially if few people seem to know it. That's why Oaktree always tries to keep in mind where we stand, to buy avidly only when fear is at a high level, and to utilize asset classes, strategies and tactics that prepare us for the negatives that are always lurking out there somewhere.

January 8, 1998
DJIA = 7,802

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Memo to: Oaktree Clients and Friends

From: Howard Marks

Re: Genius Isn't Enough (and Other Lessons from Long-Term Capital Management)

On September 24, The Wall Street Journal carried an excellent front-page article regarding the inability of the "crack team" of economic policy makers led by Messrs. Rubin and Summers to halt the slide of the emerging markets' economies and currencies. Heading the column was a quotation from David Halberstam's account of the U.S. involvement in Vietnam, The Best and The Brightest:

> If there was ever anything that bound men ... together, it was the belief that sheer intelligence and rationality could answer and solve everything.

Across the page -- just a few columns away -- was another excellent article, this time on the subject of Long-Term Capital Management. I think the Halberstam quotation is just as relevant to this one.

The saga of Long-Term Capital is well known by now. My purpose here is not to discuss the facts, although I'll do so briefly, but rather the lessons to be learned. Long-Term was the creation of former Salomon Brothers vice chairman John Meriwether, along with several other well-respected ex-Salomon Partners, a former vice chairman of the Federal Reserve, and a pair of Nobel prize winners. It was formed to engage in bond arbitrage, the systematic exploitation of bond mispricings. By purchasing undervalued bonds and selling short overvalued bonds affected by similar factors, gains would be earned consistently and without exposure to market risk. The intellect and accomplishments of Long-Term's managers, and its strong annual returns, compelled investors to invest and freed them from feeling they had to understand exactly what the fund did. The fund's approach may not have been fully delineated to investors, its portfolio was never disclosed, and the managers' actions were not even reported after the fact; 40% annual returns were enough to keep investors satisfied.

You've probably heard us say that bond investing is a game of inches. So then how was Long-Term able to earn returns of 40% or more most years? The answer was leverage: they borrowed enough money to buy bonds worth many times their equity. It is now known that Long-Term's general partners' cash equity was increased through borrowings to roughly $1.5 billion and paired with $3.1 billion of limited partners' capital. This $4.6 billion of equity was somehow sufficient to enable Long-Term to hold investments totaling about $150 billion and long and short positions in derivatives believed to have had an aggregate "notional value" of $1.25 trillion!

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When your investments so greatly exceed your equity, it doesn't take a big drop in security prices to wipe out that equity. Between August 1 and late September, price declines on all bonds other than Treasurys, appreciation on Treasury bonds (which Long-Term had shorted to offset its exposure to interest rates on "long" positions), and declines on equities (it had invested heavily in takeover stocks) were sufficient to erase 90% of Long-Term's equity. Further, if margin calls had caused its vast positions to be dumped on the world's unsteady markets, the proceeds might have been less than the amounts borrowed, causing write-offs at the banks and brokers that had provided Long-Term's credit and perhaps destabilizing them. Incredibly, articles about Long-Term describe its possible forced liquidation with phrases like "threat to the stability of the world financial system ... " (The Wall Street Journal, September 29). These conditions gave rise to the restructuring and additional investment agreed to by 14 financial institutions. That's the background; now for the lessons.

The techniques employed at Long-Term have been variously described as "rocket science" or "black box." Computers were used to scan thousands of securities to detect instances where historic relationships had been violated and profit could be earned on the return to the norm; these are referred to as "convergence trades." Assumedly, Long-Term used models to assess the probability of history reasserting itself and the risk to the overall portfolio of individual relationships going the wrong way. Thus would they determine the amount of risk and leverage that could safely be taken on.

In his wonderful book, Against the Gods, Peter Bernstein shows how development of the study of probability made possible both informed gambling and informed investing (along with other forms of decision making concerning the future). But the products of this pursuit remain mere probabilities, or reasonable expectations. Likely events sometimes fail to occur, and unlikely events sometimes do. Or, as my friend Bruce Newberg says when I get the one improbable roll of the dice needed to beat him in backgammon, "there can be a big difference between probability and outcome." If you are conscious of the difference between a likely outcome and a certain one, you may not want to bet the ranch.

The same is true in the world of investments; put simply, relationships that are supposed to hold sometimes fail to do so. This may happen because markets and systems don't work (in the Crash of 1987, portfolio insurers couldn't get their stop-loss sales off), because external events aren't fully anticipated (inverse floaters tanked in 1994 because interest rates rose at annual rates of 600 or 700 basis points that had been considered impossible), or simply because of the unreliability of the human participants (scared people often fail to step forward with cash at the times that matter most). A relationship's failure to hold often comes just when faith in it has reached an excessive level and huge sums have been bet on it. **For whatever reason, we have seen many instances when probabilistic models turned out not to have made sufficient allowance for an "improbable disaster."**

As Long-Term's Meriwether wrote in his September 2 letter to investors, "the Fund added to its positions in anticipation of convergence, yet ... the trades diverged dramatically." In other words, sometimes things that are cheap just get cheaper and things that are dear get dearer.

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For free markets to operate at equilibrium, there must be healthy tension between two motivating factors: fear and greed. If a participant feels both, greed will push him to take chances but fear will put limits on the risk he assumes. However, the two are not always in balance -- one or the other is often in the ascendancy. For the last few years, too little fear has been present, and greed and risk-taking have dominated. Long-Term's managers' brainpower may have let them consider their process foolproof, so that they felt too little fear and took on too much risk. In every era, one prominent participant becomes emblematic, and Long-Term is likely to be known for a long time as the "poster boy" of the 1990s.

I think investors are always looking for “the silver bullet.” They seek a course of action that will lead to large profits without risk -- and thus they pursued Nifty-Fifty investing in the 1970s, portfolio insurance in the '80s and market-neutral strategies in the '90s. Often, they align themselves with "geniuses" who they hope will make it easy for them -- be it Joe Granville, Elaine Garzarelli, David Askin or John Meriwether.

But the silver bullet doesn't exist. No strategy can produce high rates of return without some risk. And nobody has all of the answers; we’re all just human. **Brilliance, like pride, often goes before the fall**. Not only is it insufficient to enable those possessing it to control the future, but awe of it can cause people to follow without asking the questions they should and without reserving enough for the rainy day that inevitably comes. This is probably the greatest lesson of Long-Term Capital Management. There are others, which I'll review below.

1) As I've written before, **"volatility + leverage = dynamite."** The main cause of Long--Term's collapse probably wasn't its security selection, or the declines in its markets, but rather its leverage. On average, its positions may have declined just a few percent. But when your assets exceed 25 times your equity, even a 4% price decline is enough to wipe you out.

Nowadays, most people use the word "leverage" interchangeably with "debt." But it's better understood in the sense I first learned: the extent to which a change in the top line is magnified by the time it reaches the bottom line. That's why the British call it "gearing." In Las Vegas they say “the more you bet, the more you win when you win.” They never add "… and the more you lose when you lose.” Leverage is just a way to let you bet more than your capital, and it exposes you to more of the good and more of the bad. Leverage can truly be dynamite.

None of Oaktree's portfolios use leverage to invest more than our capital (although our Emerging Markets Fund will be able to do so to a limited extent). We have reviewed several opportunities for leverage, but in the risk-tolerant climate prevailing until recently, we didn't find base returns worth leveraging up. For example, despite repeatedly being invited to do so over the last five years, we declined to organize CBOs (leveraged high yield bond portfolios). This followed from our conviction that **leverage should never be used in an attempt to turn low spreads into wide ones, only to take advantage of already-wide spreads**. The managers of Long-Term used enormous leverage in an attempt to profit hugely from minute spreads, and it eventually did them in.

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2) **Hedge funds offer no magic per se**. As we described in our April piece on alternative investments, hedge funds carry only two common threads: private partnership status and a fee mechanism through which general partners share in net gains. The hedge fund investor's birthright certainly does not include either high returns or low risk.

But the hedge fund structure can have ramifications which investors (such as Long-Term's) seem to recognize only after problems arise. Our memo entitled "Risk In Today's Markets" (February 17, 1994) asked the following about 'til-then successful hedge funds:

> With the average stock or bond returning 10-15% last year, how did some hedge funds make 70% or more? It was through bold and heavily-leveraged plays ...What would have happened if the managers' calculations had proved wrong? ... Do the hedge fund aficionados know how much risk they are taking? For how long are they tying up their money? How much do they know about the strategies being employed?

We never hope that our warnings will turn out to be needed, but we usually feel it is inevitable. The case of Long-Term demonstrates that hedge funds represent no panacea and often hold significant drawbacks. The c1osed-end structure should be entered into only after the underlying strategy has been reviewed in depth and confidence in the managers has been fully justified.

3) **"If it seems too good to be true, it probably is."** This old saw goes out of style from time to time, but it makes a comeback each time a get-rich-quick scheme is exposed. Many "riskless" arbitrage, hedge and market-neutral strategies have turned out to involve more risk than was let on.

When I was a kid, I saw in a 1930s movie that the Rothschilds built their fortune because their exclusive use of carrier pigeons allowed them to simultaneously buy a currency at one rate in London and sell it at a different rate in Paris. That's pure arbitrage: trading the same asset at different prices at the same time.

But as soon as you deal in different assets that have less than a 100% probability of moving in tandem, you introduce "basis risk," or the risk that the assets being arbitraged won't go in the anticipated directions. That's what killed Long-Term; their bonds' yields diverged when they were supposed to converge. Historic relationships proved to be less dependable than had been thought.

4) **"It's always something."** That's what Roseanne Rosanadana used to say on Saturday Night Live, and it's very true -- eventually, something always goes awry. Any course of action which depends on everything going right is unsafe, but such an expectation has to have been behind Long-Term's 25-plus times leverage. Warren Buffet, with his insistence on "margin for error," would never make such a bet (although he was willing in the hours just before the restructuring to join Goldman Sachs and AIG in a low-ball bid of $250 million for Long-Term at a time when its net worth is thought to have been $600 million).

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In “Are You an Investor or a Speculator” (September 3, 1997), we wrote:

> What could cause a market decline? A drop in investor confidence -- perhaps the commodity that's most freely available today -- would likely be the key, but the reason is hard to foresee. **“We're not expecting any surprises,”** people say, and that has become our new favorite oxymoron. Surprises are never expected -- by definition -- and yet they're what move the market….The next surprise could be geo-political (oil embargo, war in Korea), economic (tight money, slowing profit growth), or internal to the market (competition from bonds at higher interest rates, discovery of a fraud), but it's most likely to be something that no one has anticipated -- including us.

When I was a kid, my dad used to joke about the habitual gambler who finally heard about a race with only one horse in it. He bet the rent money on it, but he lost when the horse jumped over the fence and ran away. **There is no sure thing**, only better and worse bets, and anyone who invests without expecting something to go wrong is playing the most dangerous game around.

5) **“Never confuse brains with a bull market.”** When the 1990s began, the economy and the stock market were at very low levels. As a result, success came easily, risk-bearing paid off and the highest returns often went to those who took the most risk. They and their strategies were accepted as the best.

In my opinion, (a) the three ingredients behind success are timing, aggressiveness and skill, and (b) if you have enough aggressiveness at the right time, you don't need that much skill. But those who have attained their success primarily through well-timed aggressiveness can't be depended on to repeat it -- especially in tough times. When an investment track record is considered, it's essential that the relative roles of these three factors be assessed.

6) **Change in the availability of credit is a powerful force**, and the longer I'm in the investment business, the more I respect the role of the credit cycle. For example, although we hope we added value through our implementation, our 1990 distressed debt funds earned their 50% gross returns largely because (a) fear and the government's actions closed the credit window, (b) the LBOs of the 1980s couldn't refinance their debt and defaulted in droves, and (c) that debt could therefore be bought for a song. A significant recession contributed to the conflagration, but whereas a generous capital market would have let companies finance their way out of trouble (as they did from 1993 through mid-1998), a tight one brought them down in 1990-92.

The product of lenders is money, and it's their job to move it off the shelves. Because money is the ultimate undifferentiable commodity, lenders can compete for market share in boom times only by taking on bigger risks than the next guy, charging less interest or accepting looser terms. All of these tactics turn on a dime when things get tough, inflicting great pain and causing lending to contract.

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In times of easy money, companies prosper that should not, just as deserving companies fail when money's tight. Easy money was key in Long-Term's early success and later collapse. The bankers and brokers let the General Partners lever up their equity capital and take on far out-sized positions. They loaned amounts of money that were unsafe both for Long-Term Capital and for themselves. I assume that, seduced by Long-Term's brilliance, they did so without knowing how much it had borrowed in total or what its portfolio looked like.

The violent swings of the credit cycle -- usually far more volatile than the underlying economy -- are behind many of the extreme occurrences in the business and investment world. Excessive lending contributed greatly to booms preceding the collapses in real estate in 1989-92 and emerging markets in 1997-98, just as tight lending added to the bankruptcies of 1990-92. Look around the next time there's a crisis; you'll probably find a lender.

7) **"How Quickly They Forget."** While it would be great (and very profitable) to be able to see the future, the truth is that few of us can. But you don't have to be prescient to be able to invest intelligently while avoiding the most dangerous hazards. Knowledge of the past will get you a good part of the way there.

The relevance of the lessons of Long-Term has nothing to do with knowledge of the future. Leverage is always dangerous. Something always goes wrong eventually. Those who see high returns often mistake risk bearing for genius. The swings of the credit cycle can overwhelm all other factors. Every boom carries within itself the seeds of decline (just as every bust lays the groundwork for recovery). Forget forecasting -- you'll be well ahead if you simply bear in mind the lessons of the past.

We've all heard George Santayana's famous observation that "Those who cannot remember the past are condemned to repeat it." And yet, how many of today's mistakes are just replays of the past? Thirty years ago, the stocks of "the best companies" reached P/Es of fifty and more from which they eventually collapsed. Ten years ago, highly leveraged investments were financed with bridge loans which investment bankers were stuck with when the financing window closed. Five years ago, banks got into big trouble with derivatives. All of these are causing problems again in 1998 for those who forgot history or rationalized its irrelevance in the "new paradigm."

I've previously recommended John Kenneth Galbraith's excellent little book, A Short History of Financial Euphoria. Although I don't appreciate its swipes at high yield bonds, I consider it must reading for anyone who wants to think and invest against the grain. Galbraith says:

> Contributing to ... euphoria are two further factors little noted in our time or in past times. The first is **the extreme brevity of the financial memory.** In consequence, financial disaster is quickly forgotten. In further consequence, when the same or closely similar circumstances occur again, sometimes in only a few years, they are hailed by a new, often youthful, and always supremely self-confident generation as a brilliantly innovative discovery in the financial and larger economic world. There can be few fields of human endeavor in

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> which history counts for so little as in the world of finance. Past experience, to the extent that it is part of memory at all, is dismissed as the primitive refuge of those who do not have the insight to appreciate the incredible wonders of the present. [Emphasis added]

Amen. People who acknowledge no limits on their ability to know and control the future have no need to study history. For the rest of us, it's one of the best tools we've got.

* * *

Inability to remember that you can't know what the future holds is a common failing and the cause of some of the biggest financial difficulties. It's one of the greatest contributors to hubris -- the over-estimation of what you can know and do.

General Motors's Charles Froland says the people of Long- Term Credit developed "too much conviction." Henry Kaufman was recently quoted on the subject as saying "there are two kinds of people who lose money: those who know nothing and those who know everything." Dirty Harry weighed in, saying "a man has to know his limitations." I actually think my mother had it best: "He who knows not and knows not he knows not is a fool; shun him."

Oaktree is built on the following axioms (among many others):

-- We can't know everything about the future, and the “bigger picture” the question, the less we can know the answer.

-- We must always expect that something will go wrong and build in margin for error.

-- When the market embodies too much greed, we must be conscious of the risk that's present. When it swings too far toward fear, we should take advantage of the bargains that result.

-- We must constantly remind ourselves of our limitations and dedicate ourselves to the avoidance of hubris. If our methodologies are valid and our people are talented, hubris is one of the few things that could make us fail.

The applicability of the lessons of Long-Term is not limited to that company alone. Instead, they illustrate several of the universal truths in investing. You won't see them forgotten here.

October 9, 1998

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Memo to: Oaktree Clients and Friends

From: Howard Marks

Re: Are You An Investor or a Speculator?

All of Oaktree's activities follow from our conviction that what matters most in determining the success or failure of an investment isn't whether it's in a fast-growing company, a desirable asset or a highly-rated security, but rather the relationship between the price you pay and what the asset is worth. We think no asset is so bad that there's not a price at which it's attractive for purchase, and no asset is so good that it can't be overpriced.

Thus, we think in order to invest successfully you have to know both the value of the asset and how the price relates to that value. The relationship in the marketplace of price to value is highly dependent on how things are being viewed at the time -- on the attitudinal factors determining investor behavior. We spend a lot of our time thinking (and some time writing) about the investor behavior embedded in asset prices, as we feel this will prove highly determinative of the success of the investments we make.

In an April 1991 memo entitled "The Pendulum," we discussed the market's usual oscillation between euphoria and depression, and thus between overpriced and underpriced. We think this swing, like other forms of cyclical fluctuation, is one of the few things in the investment world on which we can depend. And it's essential that we keep in mind where we stand in regard to that arc.

In short, we believe (and have witnessed many times over) that the easiest way to make unusually high risk-adjusted returns is to buy from depressed sellers and sell to euphoric buyers...thus to buy when assets are underpriced and sell when they're overpriced. The opposite is a nightmare. The greatest extremes in our experience include 1970, when the New York banks believed the Nifty-Fifty companies were so good that it essentially didn't matter what price you paid for their stocks (subsequent declines of 70% to 90% soon became common among the stocks of America's greatest companies), and 1990, when investors acted as if any company experiencing an iota of difficulty was practically worthless (the distressed debt funds we created that year returned about 50% per annum).

John Maynard Keynes said (roughly) that "a speculator is someone who takes risks of which he is aware, and an investor is someone who takes risks of which he is unaware." We think speculating, according to this definition, is more prudent than investing. It makes a lot of sense to purchase unpopular assets that promise excessive compensation for knowingly bearing risk. Buying high-priced, popular assets which "everyone knows have no risk" often proves terribly dangerous. Here's a case in point:

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Earlier this year, our distressed debt fund bought a troubled company's commercial paper at 77 cents on the dollar. It was scheduled to mature later that month, but we thought there was little chance it would be paid off then. There appeared to be, however, a variety of other ways we could turn a profit. On the day we started buying, everyone assumed there would be no way out of a morass of overstated earnings, possible fraud, a resulting short-term cash squeeze and a likely bankruptcy filing. The issuer's common stock fell 86% that day. This confluence of circumstances presented an excellent opportunity for intelligent speculation under Keynes's definition -- we were buying into a company **everyone** considered highly risky.

It was reported the next day that a money market fund's management company had bought that same commercial paper from its fund's portfolio at par in order to keep the fund from reporting a principal loss. The article said "money market funds...traditionally invest in only the safest government and corporate bond securities." In other words, when the paper was considered to be among "the safest," the money market fund bought it at a 6% yield which incorporated no compensation for bearing the credit risk which subsequently proved to have been present. But after the scandal became common knowledge and the risks were on the table, we got to buy the money market fund's former holding at a price which we felt could give us an annual return of 20% or more. Bought when "riskless," this paper proved to be a disaster; purchased off the trash heap, we found it very attractive.

That leads us to the $64,000 question (although many of you already know my answer): Where do we currently stand? What attitudes and behavior characterize today's investors?

We think many "investors" have been buying with euphoria and belief rather than hesitance and skepticism. Many investors seem to be most afraid of being uninvested and missing out on the gains others are enjoying; that is, they're most worried about the risk of not taking enough risk.

Although many valuation indicators are at all-time highs and price gains in July set record after record, investors are quite willing to accept platitudinous rationalizations like "technology has brought a new era," "globalization offers unlimited opportunities for growth" and "we have nothing to worry about from the business cycle." Some analyses suggest that prices are fair today, implying that future returns will be proportional to the risks involved; by many other standards, prices are too high. **We find it very difficult, however, to conclude that stocks are underpriced, and thus that the potential exists for high and dependable returns from here**.

We find particularly troubling the oft-repeated mantra that "because the outlook continues to call for low inflation and stable interest rates, stocks can continue to rise." This statement was made at 6,000 and 7,000 on the Dow, and it was made in July at 8,200. But it can't be right regardless of the level of stock prices. Inflation is important because it determines interest rates, and rates are important because they determine valuation multiples for stocks. Thus, for every level of inflation and interest rates, there's a "right" level for stocks. What's the right level for stocks given today's conditions? Might it be below the current level?

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It's worth noting in this connection, thinking back fifteen or twenty years to ancient history, that this bull market got its start because companies could be bought cheaper through the stock market than they could be created -- this fact kicked off the LBO boom that powered the stock market throughout the 1980s. Today, many companies' stocks have reached prices that no value-conscious entrepreneur would pay for the entire company.

The market seems extremely comfortable with the proposition that as long at the macro-environment remains benign, stocks prices can continue to appreciate at rates that far outstrip the growth of their issuers' profits, and thus the growth of their intrinsic value. Few market participants seem concerned about appropriate valuation levels -- the relationship between assets and their prices -- and this is a condition that we think must eventually have negative consequences. We are incredulous when, each day there's more news of economic equilibrium and stable rates, the market goes up another percent or so. We believe strongly that with corporate profits growing in the vicinity of their normal 10% or so, stable rates are not in themselves a reason why stock prices should rise at 20%-plus forever.

Today's combination of a stable economy, low interest rates, enormous cash flows and strong investor optimism has created a climate in which capital is available for both good investments and bad, and in which risk is rarely seen as something to be shunned. We see this in aggressive lending by banks; in the popularity of leveraged structures in many areas of investing; in the strong flow of equity IPOs (and their strong after-market performance); in the explosive issuance of high yield securities (including payment-in-kind preferreds and calamity-linked bonds); and in the massive amounts of capital available for every form of alternative investing. Each of these activities is appropriate at the right time and price, but each can be overdone. We feel the simplest adages remain the best, and few are better than "**what the wise man does in the beginning, the fool does in the end**." Every cycle eventually proves the wisdom of this old saw.

Are we "ringing the bell" on this bull market? Absolutely not; we've learned the folly of attempting to do so. We are not calling for a market collapse, but we do want to recap a few things that we feel are obvious:

> The market may be either fairly- or over-valued, but it is not under-valued. The best most bulls can say is that the extent of the current over-valuation isn't extreme.
>
> With valuations having reached full levels, no one should expect stock prices to continue to out-pace company profits. It is certainly true that there are favorable developments in technology, productivity, taxation, inflation, monetary policy, geo-politics, demographics and labor tractability. These advances justify high multiples, **but not ever-higher multiples**. Valuations shouldn't be expected to expand ad infinitum just because the environment is benign and cash is flowing in; at some point, valuation has to matter.
>
> In fact, as the above litany of favorable developments suggests, **everything has gone about as well as it could over the last fifteen years, making for a most atypical period in the market**. Unemployment and interest rates have halved, the index of consumer confidence has doubled, and the population of investors has exploded. But we think the

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easy money has been made, and the improvement in these parameters is bound to subside. Anyone who thinks equity returns over the next fifteen years will look anything like the last fifteen is certainly bucking the odds.

It is still important to look for what's relatively cheap. For example, the fact that big stocks have recently been beating small stocks by the widest margins in history means small stocks are likely to have their day in relative terms. This was shown in August, when the Dow was down 7% and small stocks rose.

The possibility of a market decline certainly exists, and while "everyone" says a 5%, 10% or 15% dip would just be a buying opportunity, we wonder how investors would feel about a rerun of the 1973-74 experience, in which stocks declined an average of 2% a month for 24 months. At 8,200, we heard people say a 25% decline would only take the market back to the level of a year earlier -- implying that it wouldn't hurt. We doubt many investors who've never seen even a 10% "correction" would come through such a period with their equanimity unscathed.

What could cause a market decline? A drop in investor confidence -- perhaps the commodity that's most freely available today -- would likely be the key, but the reason is hard to foresee. **"We're not expecting any surprises,"** people say, and that has become our new favorite oxymoron. Surprises are never expected -- by definition -- and yet they're what move the market. (If they were expected, their effects would already be priced into the market, rendering a price reaction unnecessary.) The next surprise might be geo-political (oil embargo, war in Korea), economic (tight money, slowing profit growth) or internal to the market (competition from bonds at higher interest rates, discovery of a fraud), but it's most likely to be something that no one has anticipated -- including us.

What does all of this tell us? That we must return yet again to what may be the greatest Warren Buffet quote: **The less prudence with which others conduct their affairs, the greater the prudence with which we should conduct our own affairs**. Prudence is in short supply today, along with skepticism and disbelief. Thus we must be disciplined and selective in our investing today, and postpone our greatest enthusiasm for the bargains which are likely to be found in the months and years ahead.

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Here at Oaktree, we continue to recommend that clients think about downside as well as upside and adopt protective strategies:

In **convertibles**, we continue to emphasize securities that are likely to fall much less than their underlying stocks and that are convertible into stocks that haven't soared, and we continue to take profits aggressively as prices increase (aren't we supposed to like things less, not more, as their prices rise?)

Our **high yield bond portfolios** continue to hold only the obligations of creditworthy U.S. and Canadian companies and emphasize cash-paying securities. Our bonds may have limited potential for price appreciation, but we think they're overwhelmingly likely to pay interest and principal as promised.

> In **distressed debt, real estate and control equity**, we continue to buy things that are found outside the mainstream sources of supply, that are as depressed in price as can be found in this environment, and that protect against losses through a call on strong asset values.

We have been privileged to read a recent letter from Julian Robertson to his investors. In it, Robertson compares today's fund managers to the Phoenician sea captains of thousands of years ago who were paid a percentage of the value of the goods they transported and thus were incentivized to design boats which emphasized speed over safety. This worked as long as the weather was good, but the storms that eventually came consigned the less safe ships to the bottom of the sea. He goes on as follows:

> The last several years have been a great period for the audacious captains with their fleets of fair-weather ships. There has not been a storm for years; perhaps climatic conditions have changed and there will never be another storm. In this scenario the audacious crew with its fleet of swift but flimsy ships is the cargo carrier of choice.
>
> [Robertson's ship] will continue to be run as it has in the past; conservatively, making sure its crew and merchandise are safe.

This metaphor suits Oaktree exactly; we couldn't say it better. Being prepared for stormy weather, even if it could cost us some of the easy money in good times, is certainly the course for us.

September 3, 1997

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Memo To: Oaktree Clients

From: Howard Marks

Re: The Value of Predictions II (or "Give That Man a Cigar")

Date: July 22, 1996

In a February 1993 memo entitled "The Value of Predictions," I expressed my negative opinion of attempts to predict the macro-future. Now, to follow up, I've examined a handful of semi-annual Wall Street Journal economic surveys I've been stashing away. Please note that this was not a scientific study; my sample was limited to the contents of my desk drawer. The conclusions are interesting nevertheless.

First, can accurate forecasts be made? The record shows the predictions of the Journal's average "expert" to have added little value in terms of predicting the future. The table below shows the wide margin by which the consensus missed the mark.

	90-day bill rate	30-year bond rate	Yen/$
December '93			
12-Month Prediction	3.7%	6.4%	115
December '94 Actual	5.7	7.9	100
December '94			
6-Month Prediction	6.5	7.9	104
June '95 Actual	5.4	6.6	85
December '94			
12-Month Prediction	6.4	7.6	107
December '95 Actual	5.1	5.9	103
June '95			
6-Month Prediction	5.4	6.6	89
December '95 Actual	5.1	5.9	103
June '95			
12-Month Prediction	5.3	6.6	92
June '96 Actual	5.2	6.9	110
December '95			
6-Month Prediction	4.9	6.0	105
June '96 Actual	5.2	6.9	110

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On average, these predictions were off by 15%. **In the three sets of half-year data I had available, the average expert forecaster couldn't even get closer than 96 basis points when attempting to predict the level of long rates six months out!** And missing long rates by 96 basis points implies missing the price of the $1000 long bond by $120.

Second, are these forecasts of any value? My limited survey shows the average forecast published by the Journal has not been helpful. The key isn't whether the forecasters accurately predicted the **level** of the parameters but, (since you make money by anticipating change), whether they were right about the **likelihood** of significant change and its **direction**. That these forecasts weren't of value can be seen clearly in the following table, which looks at changes rather than levels.

	90-day bill rate	30-year bond rate	Yen/$
December '93 12-Month			
Predicted Change	+ 60 b.p.	+ 10 b.p.	+3
Actual Change	+260 b.p.	+160 b.p.	-12
December '94 6-Month			
Predicted Change	+ 80 b.p.	--0--	+4
June '95 Actual	- 30 b.p.	-130 b.p.	-15
December '94 l2-Month			
Predicted Change	+ 70 b.p.	- 30 b.p.	+7
December '95 Actual	- 60 b.p.	-200 b.p.	+3
June '95 6-Month			
Predicted Change	--0--	--0--	+4
December '95 Actual	- 30 b.p.	- 70 b.p.	+18
June '95 l2-Month			
Predicted Change	- 10 b.p.	--0--	+7
June '96 Actual	- 20 b.p.	+ 30 b.p.	+25
December '95 6-Month			
Predicted Change	- 20 b.p.	+ 10 b.p.	+1
June '96 Actual	--0--	+100 b.p.	+7

As the table shows, it's not that the forecasters were always wrong; when there was little change, they were often right. It's just that in times of major changes, (when accurate forecasts would've helped one make money or avoid a loss), the forecasters completely missed them. In the years reviewed, the expert consensus failed to predict **all** of the major developments. Included here are interest rate increases of 1994 and 1996, the rate decline of 1995, and the massive gyrations of the dollar/yen relationship. In summary, there simply hasn't been much correlation between predicted changes and actual changes.

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Third, where do these forecasts come from? The answer is simple: If you want to see a high correlation, take a look at the relationship between current levels and predicted future levels. The table below, which does just that, shows a remarkably better "fit."

	90-day bill rate	30-year bond rate	Yen/$
December '93 Actual	3.1%	6.3%	112
12-Month Prediction	3.7	6.4	115
December '94 Actual	5.7	7.9	100
6-Month Prediction	6.5	7.9	104
December '94 Actual	5.7	7.9	100
12-Month Prediction	6.4	7.6	107
June '95 Actual	5.4	6.6	85
6-Month Prediction	5.4	6.6	89
June '95 Actual	5.4	6.6	85
l2-Month Prediction	5.3	6.6	92
December '95 Actual	5.1	5.9	103
6-Month Prediction	4.9	6.0	105

Now that's a correlation! On average, the predictions were within 5% of the levels which prevailed at the time they were made. When rates were low, the experts predicted that they would stay low; after rates rose, they were expected to stay high. High dollar/yen exchange rates brought high dollar/yen forecasts, and vice versa. There's no question about it: each consensus forecast represented a near-extrapolation of then-current levels. Like many forecasters, these economists were driving with their eyes firmly fixed on the rearview mirror.

On the one occasion, in 1994, when the consensus of forecasters was bold enough to venture a prediction for short rates which differed substantially from the then-current levels, they got even the **direction** of the subsequent change wrong. The problem is that, rather than extrapolate the year-end 1994 level, they extrapolated the 1994 trend, which reversed in 1995.

In general, we can say with certainty that these forecasters were much better at telling us where things stood than where they were going. This bears out the old adage that **"it's difficult to make accurate predictions, especially with regard to the future**." The corollary is also true: predicting the past is a snap.

And using the prevailing levels to predict the future would have been just about as effective as the average forecast. The prevailing levels differed from the future levels by 16% on average, while the consensus prediction erred by 15%.

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Fourth, can't anyone get it right? It is absolutely not true that nobody makes accurate forecasts. Every six months, when the Journal reports on a new survey of forecasts, it takes the opportunity to cite the forecaster in the previous survey who came closest to accurately predicting the three financial indicators shown above plus the change in GNP and CPI. It prints the winner's picture and lauds the unique insights which led to the accurate forecasts.

And the truth is that the winner's accuracy is often startling, as shown in the following table with regard to what we consider the most important of the indicators, the interest rate on the 30-year Treasury bond. Each time, the winner's forecast was quite close to the actual and much more accurate than the consensus.

	Susan Sterne Economic Anal. Assoc. December 1994	James Smith Univ. of No. Caro. June 1995	Michael Cosgrove The Econoclast December 1995
Winner's Prediction	6.80%	6.05%	6.90%
Subsequent Actual	6.62	5.94	6.89
Consensus Prediction	7.92	6.60	6.00

Looking at the winning forecasters' results shown above, one might even be tempted to conclude that accurate predictions are in fact achievable.

Fifth, then why do I remain so negative on forecasters' ability? The important thing isn't getting it right once. It's doing so consistently.

The table below shows two things that might make you think twice about heeding the winners' forecasts. First, they generally failed to make accurate predictions in surveys other than the one they won (shown in bold). And second, in the surveys they didn't win, their forecasts were much more wrong than even the inaccurate consensus half the time.

	December 1994	June 1995	December 1995
Susan Sterne	**6.80%**	6.00%	5.00%
James Smith	7.40	**6.05**	5.55
Michael Cosgrove	7.50	7.70	**6.90**
Consensus Prediction	7.92	6.60	6.00
Subsequent Actual	6.62	5.94	6.89

As the Journal itself pointed out in reviewing the results of the December 1995 survey:

> . . .by giving up the comfort of the consensus, those on the fringes of the economic prediction game often end up on the winning or losing end. James Smith of the University of North Carolina and Susan Sterne of Economic Analysis Associates, the winners six months and one year ago, respectively, **didn't even get the direction of interest rates right this time**. The same happened last year to

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Wayne Angell of Bear, Stearns Securities Corp., the winner before them ....
(Emphasis added)

An interesting pattern emerges from the data shown above. In all three surveys, Ms. Sterne's prediction was the lowest of the three experts and Mr. Cosgrove's was the highest. One way to get to be right is to always be bullish or always be bearish -- if you hold a fixed view long enough, you may be right sooner or later. And if you're always an outlier, you're likely to eventually be applauded for an extremely unconventional forecast that correctly foresaw what no one else did. But that doesn't mean your forecasts are regularly of any value.

A lot of adages fit this data. I've heard it said that "even a blind squirrel occasionally finds an acorn," "a stopped clock is right twice every day" and "if you put enough monkeys in a room with typewriters, eventually one of them will write the Bible."

I feel the sum of this data shows that it's possible to be right about the macro-future once in a while, but not on a regular basis. It doesn't do any good to possess a survey of 64 forecasts that includes a few which are accurate; you have to know which ones they are. And if the accurate forecasts each six months are made by different economists, it's hard to believe there's much value in the collective forecasts.

By the way, there's an important analogy to be drawn here: Efficient market advocates don't say it's impossible to beat the market; lots of people do it every year. (Remember, half the observations in any sample are above the median.) They only assert that no one can consistently do so in risk-adjusted terms.

Finally, can macro-forecasts be used to gain an advantage? I pointed out in my 1993 memo that most of the time, you can't get superior results with inaccurate forecasts **or** with accurate forecasts that reflect the consensus. (This is because the consensus view of the future is already embedded in the price of an asset at the time you buy it). To bring above average profits, a forecast generally must be different from the consensus **and** accurate.

But, as I described in 1993, it's difficult with regard to a non-consensus view of the future (1) to believe in it, (2) to act on it, (3) to stand by it if the early going suggests it's wrong, and (4) to be right. Those who invest based on fringe predictions are often wrong to an embarrassing and costly extent.

At Oaktree, we don't spend our time attempting to guess at the future direction of economies, rates and markets, things about which no one seems to know more than anyone else. Rather, we devote ourselves to specialized research in market niches which others find uninteresting, unseemly, overly complicated, beyond their competence or not worth the effort and risk. These are the inefficient markets in which it is possible to gain a "knowledge advantage" through the expenditure of time and effort. They also happen to be markets in which micro factors relating to companies, assets and securities matter the most. This is where it's possible to find bargains, and only bargain purchases can be counted on to dependably lead to returns which are above-average relative to the risk entailed. We say "**we try to know the knowable" -- and that doesn't include the macro-future**.

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Memo to: Oaktree Clients and Friends

From: Howard Marks

Re: Will It Be Different This Time?

One of my favorite articles, "Why This Market Cycle Isn't Different" by Anise C. Wallace, appeared in the New York Times. It skeptically recounted the rationale being advanced why a traditional correction of the stock market's meteoric rise need not take place. Among the reasons cited were (1) the outlook for continued economic growth, given that the economy had learned how to correct itself painlessly, (2) hope for return to a gold standard, (3) optimism regarding world peace, (4) the likelihood of continued buying of U.S. stocks by foreign investors piling up dollars with no better place to go, and (5) the fact that stocks were not overvalued compared to other assets, which had also appreciated.

This was the optimists' argument. But its flaws became apparent almost immediately after the article was published ... **on October 11, 1987**. By the close on October 19, the market had fallen by 30%. So much for the bulls' predictions!!

And so much for predicting a future markedly different from the past. The article pointed out that some of the arguments did have some truth to them, but it also cited John Templeton's assessment that people who say things will be different are right only one time out of five. The hard part is knowing which times those are.

All of this was called to mind ten days ago by an article on the front page of the Wall Street Journal. Entitled "The Business Cycle is Tamed, Many Say, Alarming Others," it recounts the case currently being made for this remaining a continuous, recession-free economic expansion. As its lead paragraph says,

> From boardrooms to living rooms and from government offices to trading floors, a new consensus is emerging: The big, bad business cycle has been tamed.

The current expansion, at 67 months, has already far exceeded the postwar average. Nevertheless, 51 of the 53 "top economists" surveyed by Blue Chip newsletter (my favorite experts and the subject of my July 22, 1996 memo) predict growth next year of 1.5% or more. And the University of Michigan survey finds that among consumers, more expect five more good years than expect bad times to emerge.

The Chairman of Sears states "There is no natural law that says we have to have a recession." According to Amoco's Chairman, "I don't see any reason to believe [the recovery] can't go on until the turn of the century." Sara Lee's CEO says "I don't know what could happen to make a cyclical downturn." (For a few more quotes like these, see page three.)

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The article goes on to cite the arguments behind this year's version of "this time it'll be different." First, because the recovery has been wishy-washy to date, there is no "boom" to "bust." Second, today's enhanced pace of business has been accommodated more through flexibility and efficiency than through brick-and-mortar expansion and inventory building. Third, the service economy has largely supplanted the more cyclical manufacturing sector. Fourth, globalization of the economy will enhance geographic diversification and provide new sources of demand for goods.

Similarly, we all hear lots of reasons why today's high stock market valuations aren't dangerous and no correction is required. These include the inevitability of 401(k) inflows; the steadfastness of mutual fund investors; the shortage of stocks which will result from corporate buybacks (in 1987, the shortage was going to result from the privatization of companies via leveraged buyouts); the vast opportunities presented by technology and the Internet; the improved profit stance of business after years of downsizing and cost-cutting; the fiscal responsibility imposed on government and the resulting favorable outlook for the deficit; and the irrelevance of dividend yield and other traditional valuation parameters. As always, the list appears to grow longer as higher levels are reached on the Dow.

But I recoil any time I hear a prediction that trees will grow to the sky, or that centuries of history are irrelevant. When I hear people say the valuation measures of the past no longer matter, I think John Kenneth Galbraith put it well, stating that in a speculative episode,

> Past experience, to the extent that it is part of memory at all, is dismissed as the primitive refuge of those who do not have the insight to appreciate the incredible wonders of the present. (A Short History of Financial Euphoria, Viking, 1990)

And I feel cyclicality is one of the few constants in the economy and markets. Cycles are the result of human behavior, herd instinct and the tendency to psychological excesses, and these things are unlikely to evaporate. Galbraith cites "the extreme brevity of the financial memory" in explaining why markets are able to move to extremes of euphoria and panic. And few adages have been borne out as often as "What the wise man does in the beginning, the fool does in the end." It is rare for trends to be curtailed at a reasonable point before swinging to the excesses from which they invariably correct.

Today, there are some signs just as worrisome as the bullish arguments are constructive. We detect the decline of skepticism and discipline and the aggressive extension of credit which regularly precede corrections. Capacity expansion has been strong in some industries, and construction seems about to resume. Consumer debt, default and bankruptcy are all at high levels. Prices being paid in acquisitions are once again high. There's too much money chasing too few deals. The stock market is exhibiting unusually narrow "breadth" (e.g., with the Dow up 76 points today to 6547, another record, half of all stocks were unchanged or down). Every cocktail party guest and cab driver just wants to talk about hot stocks and funds.

And there's a final factor I want to mention: capitulation. This is the word I use to describe investor behavior late in cycles. Investors hold to their convictions as long as they can, but when the economic and psychological pressures become irresistible, they surrender and jump

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on the bandwagon. Given years of above-average performance by stocks, many investors are now increasing their commitments to equities. A few weeks ago, we learned of an extreme example, a foundation whose long-term 80% allocation to bonds had been shown to be sorely out of step, so it threw in the towel and went **100% to equities.** Capitulation like this adds to the strength of the trend (for a while), but it also increases the level of danger. First, it indicates the advanced age of the cycle; second, it can cause investors to take positions for which they are unsuited; and third, when the last investor has taken his or her maximum equity position, who's left to power a subsequent rise?

As you know, we don't consider ourselves good macro-forecasters (or even people who believe in forecasting). So we certainly are in no position to say when the recession or market pullback will start, how bad it will be...or even that there definitely will be one. But we think we're unlikely to be proved wrong if we say cyclicality is not at an end but rather is endemic to all markets, and that every up leg will be followed by a down leg.

In 1988, when we marketed our first distressed debt fund, the greatest obstacle we faced was a somewhat widespread belief that there would be no recession and we'd have nothing to do. The theory then was that because of "rolling corrections" of individual industries and regions, the entire economy would never again decline all at once. The Times's 1987 article said that according to some investors, "the prolonged slow-growth environment would not necessarily be followed by a recession." But, of course, a recession did develop in 1990 (one of the worst since the Depression), we got very busy in distressed debt, and that 1988 fund produced a gross return of 29% per year.

So we conclude that most of the time, the future will look a lot like the past, with both up cycles and down cycles. There is a right time to argue that things will be better, and that's when the market is on its backside and everyone else is selling things at giveaway prices. It's dangerous when the market's at record levels to reach for a positive rationalization that has never held true in the past. But it's been done before, and it'll be done again.

> "There will be no interruption of our present prosperity."[1]
>
> "I cannot help but raise a dissenting voice to the statements that ... prosperity in this country must necessarily diminish and recede in the future."[2]
>
> "We are only at the beginning of a period that will go down in history as the golden age."[3]
>
> "The fundamental business of the country ... is on a sound and prosperous basis."[4]

---

[1] Myron E. Forbes, President, Pierce Arrow Motor Car Co., January 1, 1928
[2] E.H.H. Simmons, President, New York Stock Exchange, January 12, 1928
[3] lrving T. Bush, President, Bush Terminal Co., November 15, 1928
[4] President Herbert Hoover, October 25, 1929

source: Oh Yeah?, Viking Press, 1932

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* * *

In the interest of full disclosure, I want to mention here that I've been contemplating the possibility that my views on these matters are too cautious and short-sighted. My conclusion is that I am a product of my experience.

Many of us were raised by parents whose views were heavily influenced by living through the Depression. Likewise, I was baptized under fire during my first five years in the investment industry, when the shares of the best companies in America -- the "nifty-fifty" -- dropped 70% to 90% in the early 1970s and then the entire market lost roughly half its value in 1973-74.

You have to be more than forty-five years old to have been in the business during that last real bear market in 1973-74. I've heard it said that today "everyone over forty is terrified by the market, but most of the people running money are under forty." There's a lot of truth to this, and it's interesting to note that relatively few of today's investment professionals are in their mid-to-late forties, a scarcity caused by the tough times in the industry in the 1970s and the resultant lack of hiring.

Maybe I spend too much of my time worrying about the next bear market; I've been conditioned to do that. And maybe I'm wrong. But Oaktree's clients needn't worry that we'll manage their portfolios based on the assumption that a correction is imminent. We believe strongly that "it's one thing to have an opinion but quite another thing to act as if it's right." So while we take some defensive steps in portfolios as our caution grows, we're always fully invested and just as ready for a market rise as we are for a decline.

The bottom line for us is that **if Oaktree can continue to match and beat the indices in our inefficient markets despite an overlay of protection against risk that could prove unneeded, I think we're adding real value**. That has been our history, and it certainly remains our goal.

November 25, 1996

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Memo to: Oaktree Clients and Friends

From: Howard Marks

Re: How the Game Should Be Played

One of the questions asked most often in connection with our leaving to form Oaktree -- perhaps second only to "where'd the name come from?" -- is “why did you do it?"

The answer is that we concluded we had an opportunity to create our own investment management firm, all of which would run our way, according to our philosophies, beliefs and standards.

But what do we mean when we say "our way?"

Well, an article about sports in the April 2 New York Times Sunday Magazine provided an excellent metaphor through which to illustrate the point. In it, the author wrote of Babe Ruth that he represented

> . . . The Credo of the Home Run: A man can never be faulted, even if he's wrong, for the bold, aggressive action in pursuit of victory; a real man must be willing to strike out, to go down swinging.

I believe this is the way much of the investment world thinks, but it's the opposite of what we believe in. In fact, I wrote a memo in 1990 to take issue with a money manager who justified his poor recent performance by saying "If you want to be in the top 5% of money managers, you have to be willing to be in the bottom 5%, too."

"Our way" is never to tolerate poor performance, and certainly not to consider it an acceptable side-effect of swinging for the fences. While we strive to be somewhat above average each year, our philosophy mandates that we put the greatest emphasis on trying to avoid losing our clients' money.

And that brings me to what I feel is a much more appealing sports metaphor, which I clipped from the Wall Street Journal in 1992 but never had occasion to cite until now: the story of golfer Tom Kite. The article was about Kite's having won a major tournament, but the part that interested me dealt with his record up to that time:

> The bespectacled 42-year-old had won ... over the past 20 seasons some $7.2 million in official prize money, more than any other golfer -- ever. But [he had never before won] one of the sport's "majors" (the U.S. and British Opens, Masters and PGA Championship).

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That's the way we think it should be done: by consistently finishing in the money, but with no need for headline-grabbing victories. What we think matters isn't whether you hit a home run or win the Masters on any given day, but rather what your long-term batting average is.

Many money managers, it appears, believe either (a) that they really can predict what's in store for the markets and which issues will do best, or (b) that their clients expect them to be able to, and to act as if they can. Thus they swing for the fences each year with a portfolio which will earn big rewards if their forecasts are right ... and vice versa.

The record suggests very few managers truly know what the future will bring, and yet many keep trying to make money through stock picking and market timing in even the most efficient markets. When their holdings appreciate, they recount their insights and take credit, never admitting when they've been right for unforeseen reasons. When they're wrong, they complain about the circumstances that conspired against them and explain that they were fundamentally right but just off in terms of timing or betrayed by chance. Then they go on espousing new predictions without ever publishing a scorecard from which to judge their record as forecasters.

Our response on this subject is simple:

(1) We accept that we're among the many who do not know what the big-picture future holds.
(2) It is for this reason that we choose to work in inefficient markets where specialization, skill and hard work can add value and lead to above-average performance over time.
(3) Lastly, we feel that because we're not clairvoyant, it's important to acknowledge our limitations and <u>put the highest priority on avoiding losses,</u> not executing bold strategies.

I was raised on an adage which had good things to say for "he who knows and knows he knows" but warned about the danger of following "he who knows not but knows not he knows not." Or, as expressed in my favorite quotation, from Stanford behaviorist Amos Tversky,

> . . . It's frightening to think that you might not know something, but more frightening to think that, by and large, the world is run by people who have faith that they know exactly what's going on.

We never forget how risky it is to join that group. Thus our "game plan" is directed at avoiding strikeouts and building a high batting average over time, not at hitting a home run each trip to the plate.

May 26, 1995

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Random Thoughts on the Identification of Investment Opportunities

Howard S. Marks -- January 24, 1994

1. **No group or sector in the investment world enjoys as its birthright the promise of consistent high returns.**

   There is no asset class that will do well simply because of what it is. An example of this is real estate. People said, "You should buy real estate because it's a hedge against inflation," and "You should buy real estate because they're not making any more." But done at the wrong time, real estate investing didn't work.

2. **What matters most is not what you invest in, but when and at what price.**

   There is no such thing as a good or bad investment idea per se. For example, the selection of good companies is certainly not enough to assure good results -- see Xerox, Avon, Merck and the rest of the "nifty fifty" in 1974.

   Any investment can be good or bad depending on when it's made and what price is paid. It's been said that "any bond can be triple-A at a price."

   There is no security that is so good that it can't be overpriced, or so bad that it can't be underpriced.

3. **The discipline which is most important in investing is not accounting or economics, but psychology.**

   The key is who likes the investment now and who doesn't. Future prices changes will be determined by whether it comes to be liked by more people or fewer people in the future.

   Investing is a popularity contest, and the most dangerous thing is to buy something at the peak of its popularity. At that point, all favorable facts and opinions are already factored into its price, and no new buyers are left to emerge.

   The safest and most potentially profitable thing is to buy something when no one likes it. Given time its popularity, and thus its price, can only go one way: up.

   Watch which asset classes they're holding conferences for and how many people are attending. Sold-out conferences are a danger sign. You want to participate in auctions where there are only one or two buyers, not hundreds or thousands.

   You want to buy things either before they've been discovered or after there's been a shake-out.

4. **The bottom line is that it is best to act as a contrarian.**

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An investment that "everyone" knows to be undervalued is an oxymoron. If everyone knows it's undervalued, why haven't they bought it and driven up its price? And if they have bought, how can the price still be low?

Yogi Berra said, "nobody goes to that restaurant; it's too popular." The equally oxy-moronic investment version is "Everybody likes that security because it's so cheap."

5. **Book the bet that no one else will.**

If everyone likes the favorite in a football game and wants to bet on it, the point spread will grow so wide that the team -- as good as it is -- is unlikely to be able to cover the spread. Take the other side of the bet -- on the underdog.

Likewise, if everyone is too scared of junk bonds to buy them, it will become possible for you to buy them at a yield spread which not only overcompensates for the actual credit risk, but sets the stage for their being the best performing fixed income sector in the world. That was the case in late 1990.

The bottom line is that one must try to be on the other side of the question from everyone else. If everyone likes it, sell; if no one likes it, buy.

6. **As Warren Buffet said, "the less care with which others conduct their affairs, the more care with which you should conduct yours." When others are afraid, you needn't be; when others are unafraid, you'd better be.**

It is usually said that the market runs on fear and greed. I feel at any given point in time it runs on fear <u>or</u> greed.

As 1991 began, everyone was petrified of high yield bonds. Only the very best bonds could be issued, and thus buyers at that time didn't have to do any credit analysis -- the market did it for them. Its collective fear caused high standards to be imposed. But when investors are unafraid, they'll buy anything. Thus the intelligent investor's workload is much increased.

7. **Gresham's Law says "bad money drives out good." When paper money appeared, gold disappeared. It works in investing too: bad investors drive out good.**

When undemanding investors appear, they'll buy anything. Underwriting standards fall, and it gets hard for demanding investors to find opportunities offering the return and risk balance they require, so they're forced to the sidelines.

Demanding investors must be willing to be inactive at times.

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Memo To: Clients

From: Howard S. Marks, TCW

Re: Risk in Today's Markets

The ability of the stock market to react so harshly on February 4 to a small, Fed-mandated rise in interest rates, pushing the Dow down 96 points, suggests a lack of preparedness for negative developments. This prompts me to write to you about certain risks I feel may be present in the markets today.

There are plenty of bullish arguments to be made about the prospects for the economy and corporate profits, and pundits to make them. While I will not devote space or time to them, I don't pretend they are nonexistent. And I won't deny the possibility that as an inherently cautious investor, I sometimes tend to overstate the negatives. What I want to do, however, is point out the degree to which I feel investors are behaving in a risk-tolerant manner today, and the implications for all of us.

Two very powerful trends are at work, and have been for the last few years. The first is the decline in interest rates, which has carried rates to the lowest levels of the last thirty years and brought on great dissatisfaction with the returns available from low-risk fixed income investments. The second is the fabulous performance which was produced by virtually all investments in securities from 1991 to 1993. This was a period in which risk-taking was rewarded, and almost without exception very high returns went to those who took great risk.

Put these two phenomena together and what do you have? I think the answer is an environment in which risk-taking is greatly encouraged.

It is often said that the market runs on fear and greed, but I believe it usually runs on fear or greed; that is, at most points in time, one or the other predominates. Right now, because of the two trends cited above, greed is greatly elevated and, perhaps more importantly, fear is in short supply. Thus,

- the money market investor, not content to earn 3% per year, (a negative return after taxes and inflation), turns to notes and bonds,

- the bond investor, unhappy with returns at the shorter (read "low-risk") end of the curve, extends maturities,

- the high grade bond investor drops down in quality,

- the fixed income investor turns to equities,

- the equity investor joins a hedge fund,

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- the domestic investor looks overseas,

- the international investor emphasizes emerging markets, and

- the traditional bond-and-stock investor searches for "alternative investments" likely to repeat the success of the LBO and bankruptcy funds.

And why shouldn't they? The "stick" is the low prospective return offered in each investor's traditional bailiwick, and the "carrot" is the high returns earned recently in the riskier sectors. In brief, "why should I settle for 3% in T-bills when I can get double-digit returns in stocks?"

There are numerous signs of infatuation with -- or non-questioning acceptance of -- the pursuit of high returns. The torrential inflow of dollars to mutual funds is one; I recently attended a conference at which a fund group representative said they were taking in $100 million a day, 90% of it for foreign funds. The rising level of margin debt is another. Books on investing are reaching the best-sellers list. The names of hedge fund managers are almost household words.

And that brings me, for purposes of illustration, to the subject of hedge funds. When I first got to know the money management community twenty years ago, only a handful of managers were good enough to command a share of the profits as compensation. Today, according to a recent article in Forbes, there are 800 hedge funds, and some people think being accepted by one of the big names is the chance of a lifetime.

I think it's important to remember, though, the symmetrical nature of most investments: almost every sword is two-edged, and he who lives by a risky strategy may die by it. Investments which will make you a great deal of money when things go well but not lose you a lot when things go poorly are very rare, and their existence must presuppose extremely inefficient markets. With the average stock or bond returning 10-15% last year, how did some hedge funds make 70% or more? It was through bold and heavily-leveraged plays on macro-developments such as currency movements. What would have happened if the managers' calculations had proved wrong? The hedge fund manager I know with the best performance last year, up more than 100%, is said twice in his life to have lost 30% in one day! Do the hedge fund aficionados know how much risk they are taking? For how long are they tying up their money? How much do they know about the strategies being employed? As the Forbes article pointed out, the sum of the "information" most hedge fund investors receive is a quarterly paragraph reporting the rate of return.

I am not complaining about the fact that there are hedge funds, or about their popularity. My point is simply that the level of risk borne by investors is being systematically raised, often unknowingly and at a time when many valuations are quite high.

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Comparison against low interest rates makes low earnings yields and dividend yields seem tolerable. Likewise, low rates increase the discounted present value of companies' future earnings as calculated by valuation models. For these reasons and others, many valuation indicators are at levels today which have proved dangerous and unsustainable in the past. Just as today's low interest rates are pushing investors toward riskier securities all along the "food chain" described above, however, this sword can also cut the other way.

Warren Buffet said, in one of my favorite adages, "The less prudence with which others conduct their affairs, the greater the prudence with which we should conduct our own affairs." Another adage I'm fond of is, "What the wise man does in the beginning, the fool does in the end." No course of investment action is either wise or foolish in and of itself. It all depends on the point in time at which it is undertaken, the price that is paid, and how others are conducting themselves at that moment.

When everyone shrinks from a security because it's "too risky," the few who will buy it can do so with confidence, secure in the knowledge that the price has not been bid up, and in the likelihood that others will eventually outgrow their fear and jump on the bandwagon. Today, many prices have been bid up, and the bandwagon is already crowded with wild-eyed investors.

It is my view that, first, few of the trends being pursued are at their beginnings; money has been flowing to today's popular sectors for at least a year or two. Second, while some may argue that prices are not forbiddingly high, it's almost impossible to argue that they're very low (or that the easy money hasn't already been made). Third, it seems to me that investors are accepting higher levels of risk throughout the system.

Here's one illustration: Our cautious high yield investing saved clients a lot of money and heartache in 1989 and 1990. Because we apply in-depth, downside-conscious credit analysis to the high yield segment of the bond market, and define it narrowly, investors who were chastened by the last decline and don't want to bear the full brunt of the next one have hired us repeatedly in the years since. Now, however, we detect increased interest in more "eclectic" managers who will buy cash-paying or non-cash-paying bonds, going concerns or bankruptcies, convertible or straight bonds, and U.S. or foreign debt. This is just one example, near to us, of the new acceptability of risk -- at what just might be the wrong time.

Too-low interest rates and too-high prices may prove at some point to have set the stage for a correction. If so, many of the riskier tactics to which recent trends are pushing investors will increase the extent to which that correction is felt. What course of action, then, would we argue for?

We do not preach risk-avoidance. In fact, the knowing acceptance of risk for profit is at the core of much of what we do, and we feel there is an important role today for investing which is creative and adaptable. But we would take this opportunity to exhort you to review most critically the risk associated with your current and contemplated

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investments, and not to be among those who uncritically joined the trend toward risk. Whatever investment opportunities you decide on, we would encourage you to stress thorough appraisal of the risks entailed and cautious implementation.

What is it that distinguishes the investment opportunities we'd suggest you pursue today? Not just the offer of high returns, but of returns which are more than proportionate to the risk entailed. The reason we champion inefficient markets (such as the high yield bonds, convertibles and distressed debt we're involved with) is that there exists by definition the potential, if exploited correctly, for an uncommonly favorable ratio of return to risk.

Exploitation of opportunities in inefficient markets; insistence on preserving capital; refusal to pursue maximum return at the cost of maximum risk; specialization rather than dabbling; heavy emphasis on careful analysis; use of less-risky senior securities -- these themes have been the cornerstones of our approach over the years. They remain highly relevant and should continue to be pursued by all of us, especially at this point in the cycle.

February 17, 1994

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Memo To: Clients

From: Howard S. Marks, TCW

Re: "Risk in Today's Markets" Revisited

Seven weeks ago, we put out a memorandum entitled "Risk in Today's Markets." Its essence was that the excellent returns earned in risky strategies through 1993 had eroded the fear factor in many markets and, coupled with the low yields available on conservative fixed income investments, had caused many investors to take "one giant step forward" on the risk curve. It also pointed out that just as declining rates had acted to raise prices and generate good returns, rate movements could cut the other way too. Lastly, it cautioned that when others are acting imprudently, driven by greed and without much fear, it is important that we raise our level of prudence.

Unfortunately, the events of the intervening seven weeks have shown these observations to be in order. It is the purpose of this follow-up memo to review the developments of the intervening time period, attempting to make sense out of what has happened and searching for lessons that can be drawn. It's about understanding basics of investing which don't come and go.

The current "correction" dates from February 4, when the Federal Reserve Bank raised short term interest rates a small amount in order to choke off inflationary thought and action. The air quickly came out of the bond markets, and the decline has been swift and deep. Although there were good days for a while as well as bad, the bond market never did recover its equilibrium once the rate rise had begun. The yield on the 30-year Treasury bond rose from 6.21% on January 28 to 7.40% on April 4, with its price falling 14%, from 100.41 to 86.22. The decline spread quickly to other asset classes, and many investors in riskier strategies suffered harsh consequences.

Some observers protest that economic and industry fundamentals continue to be favorable. But those positive developments had come to be valued too highly, and the resulting correction of valuations has been painful. It's important to note the first lesson, then: successful investing has at least as much to do with what you pay for an asset as it does with what that asset's fundamentals are.

But why did the Fed's half-point bump up in short rates cause such devastation? First, of course, even a small step in terms of policy-related tightening implies there may be much more to come. More importantly though, the move suddenly took a big bite out of investors' optimism and reawakened their fear. Through January, investors acted as if nothing could go wrong. That first rate rise served to remind them that something could go wrong -- and had. Thus there has been a swing back from a euphoric extreme.

After the Fed's raising of rates opened their eyes to the negatives, investors also took notice of the tensions with Korea, Japan and China, the strength of the yen, and

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uncertainty over Whitewater. At the same time, Mexico's stock market had its own correction, in reaction to the assassination of the leading presidential candidate. The important lesson to be learned here is that whenever market participants act as if nothing can go wrong (or right), that represents an extreme swing of psychology -- of the pendulum we wrote about in April 1991 -- that must be recognized for what it is and acted on. As Roseanne Rozanadana used to say on Saturday Night Live, "it's always something." Investment actions predicated on everything continuing to go well are bound to fail.

If the spark that set off the decline in bond prices was the rate increase, why did the slump spread to so many other markets, including equities, foreign bonds, and commodities? Where were the benefits of strategic diversification? I would respond citing the following factors:

- First, interest rates affect the value of everything. Investing consists of putting out money today in order to get more back at a later date. The "discounted present value" of the projected future proceeds varies inversely with the current level of interest rates. Simply put, when rates rise, the present value of a future dollar declines.

- Another reason the impact of rates is broad stems from the fact that, as I was once told by sid Cottle (of Graham, Dodd and Cottle fame), "Investing is the discipline of relative selection." That is, the attractiveness of x is in part a function of the price of y. If bonds cheapen and thus come to promise higher prospective returns, stocks (or any other asset) will appear relatively less attractive at their old prices and thus must cheapen as well in order for their prospective returns to regain competitiveness versus those of bonds.

- Further, it used to be, for example, that Americans determined the prices of U.S. stocks based on U.S. economic developments and Europeans determined the prices of European stocks based on European developments. These were local markets then, and they behaved differently. Today, investing is more globalized, and the prices of assets in different countries are determined by many of the same people, who may respond in common to fundamentals and psychology.

- The last reason many assets have moved together is that in this particular episode, many hedge funds managers (who, as we will discuss later, appear to have had a disproportionate impact on recent events) were forced by their increased capital to invest aggressively in macro-trends spanning national borders. This small group of hyper-active investors may have hooked markets up to an unusual degree.

For these reasons and others, asset prices may prove more highly interconnected than one had expected.

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* * *

The most noteworthy feature of the recent correction may be the role of some prominent hedge fund managers. It was reported on February 25 that George Soros's Quantum Fund had lost $600 million on its yen position in one day. On April 1, we read that Michael Steinhardt had lost $1 billion of his $5 billion under management, due largely to the drop in bond prices, and that in the last two months, investors in Askin Capital Management's Granite Funds may have lost 100% of their $600 million capital in mortgage backed securities.

Hedge funds occupied a meaningful part of our February 17 memo because they were felt to exemplify (to a power of ten) the risk-tolerant behavior of investors in general. Thus their subsequent experience can offer us some valuable and highly magnified insights. The important observations, applicable to all investment behavior, are as follows:

- **Words alone mean very little**. Just as "portfolio insurance" turned out in the 1987 Crash not to insure much, today's startling losses indicate that many "hedge funds" don't really hedge enough to make a difference, and that the Granite Fund, which described itself as "market neutral," was anything but.

- Following from the above, we are reinforced in the belief that some investors don't know what their managers are doing, or how much risk they're taking. As one "fund of funds" which had invested in the Granite Fund told the Wall Street Journal, "It's unbelievable. This was touted as a low-risk, low-volatility, market-neutral investment. We were clearly misled." **Only by really knowing what a manager does can you be sure he is right for you**, but this often comes down to whether the manager truly understands his market, describes it accurately and does what he says he will -- things that can't be assessed from a marketing brochure.

- **Investment strategy really is a two-edged sword**, and he who lives by an aggressive strategy usually can die by it. It proved possible for investors to become too comfortable with volatility -- when it was on the upside and called "profit." Volatility is a lot less enjoyable when it turns to the downside, but it's the flip side of the same coin.

- The outcome can actually be worse than symmetrical when incentive fees are involved, as Jan Greer of William Simon & Sons points out. That's because while hedge fund managers took 20% of last year's big profits, they won't replace a like percentage of subsequent losses. Usually, due to the peculiarities of the math, if a portfolio is up 50% one year and down 33% the next, it's back to where it started. But if the manager takes a fifth of the 50% gain in year 1, a 33% decline in year 2 will leave it 7% under water.

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- As an experienced corporate director told Forbes a few years ago, "I no longer expect people to do what I tell them to do; I've learned they only do what I pay them to do." But while a hedge fund manager may have his reputation and some capital at stake, as to fees he is in a heads-we-win-tails-you-lose position. For a manager who is paid a percentage of the profits on a one-year-at-a-time basis, a single year of investing aggressively enough at the right time can make him rich for life. Thus **managers should be entrusted with incentive fee arrangements only if they can truly be counted on to add significant value which is <u>not</u> accompanied by proportionate risk**.

- **Volatility + leverage = dynamite**. Only now do we see articles pointing out (after the fact) that if a hedge fund borrows short to buy long Treasury bonds with 6% "down," a 1% rise in the bonds' yield will wipe out 100% of the equity in the position.

- **When volatile securities have been bought on margin, sale may be forced if the investor can't come up with more capital during a decline**. This is a big part of what put the Granite Fund under. If you own securities without borrowing, you may experience a price drop -- which will hopefully prove temporary -- but you can't be put out of the game.

- One characteristic of many inefficient markets is some measure of illiquidity. Thus when sales are forced in a chaotic market -- whether by margin calls, client withdrawals or cold feet -- they can have the effect of contributing to or exacerbating the decline. Often in this environment, the manager's choices for liquidation will be limited to his highest quality and most marketable holdings. In this way, **forced sales can easily contribute to a deterioration of portfolio quality**. When the Granite Fund received margin calls, its manager could only get reasonable bids for securities which perform well when rates rise. Selling them cost the fund its hedge.

The prominent hedge funds that attracted the recent attention -- favorable in 1993 and less so this year -- are multi-billion-dollar entities which, because of their size, often invest not in the undervalued micro-situations on which their early records were built, but in macro-phenomena all around the world. Thus they provide an important object lesson to which we want to point.

These funds are run by managers who pursue aggressive returns through the use of highly leveraged and thus volatile positions in large markets, some of which, such as Treasury bonds, are relatively efficient. **In this sense, they represent the opposite of what we espouse**.

Our approach emphasizes the low-risk exploitation of inefficient markets, as opposed to aggressive investment in efficient ones. We restrict ourselves to markets where it is possible to know more than other investors. We put avoiding losses ahead of the pursuit of profits. And we do not seek to employ leverage.

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Inefficient markets must by definition entail illiquidity and occasional volatility, but we feel unleveraged and expert investment in them offers investors with staying power the best route to high returns without commensurately high risk.

And we also feel investors who are capable of observing clinically can learn some valuable lessons from the current episode. We look forward to learning along with you.

April 11, 1994

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To: Clients

From: Howard Marks

Date: July 15, 1994

Subject: "How Does an Inefficient Market Get That Way?"

In an efficient market, the actions of intelligent, informed, diligent and objective investors cause assets to be priced fairly based on the available information such that their prospective returns are in proportion to their risk. No bargains are available, and the only way to increase expected return is to take on more risk.

But **in an inefficient market**, this process breaks down. The prerequisites for efficiency are not fully satisfied, and thus prices are able to diverge from what they "should" be. Some assets become overpriced and others underpriced. Profits can be earned by applying skill, not just for bearing risk. It becomes possible to consistently achieve superior risk-adjusted returns.

But how does a market get that way? There are many possible reasons. Maybe most investors ignore the market niche because it is little known. Perhaps information is skimpy or unevenly disseminated. Market infrastructure may be under-developed, so trading difficulties scare investors away. Maybe there's no trade reporting, so Seller A doesn't know what B got just a few minutes earlier and settles for less. The list of possible reasons goes on and on, but we have our own favorite: **Investors fail to act objectively and dispassionately**.

An efficient market must be unbiased. That is, the participants must be motivated just by economics and willing to either buy or sell depending on price. If every owner wants to (or must) sell a given good and won't become a buyer no matter how low the price goes, the price of that good can fall below the "fair" level and it will become possible to find bargains. Conversely, prices can go too high when everyone wants to own something . . . whether it's tulip bulbs, South Sea pearls or nifty-fifty stocks.

And that brings us to the high yield bond market which remains, in our opinion, decidedly inefficient. High yield bonds continue to offer 350-400 basis points more yield than "riskless" Treasury bonds to compensate for the risk of losing 50-150 basis points per year to credit problems. And high yield bonds have the best performance record of any major sector of the fixed income universe for virtually every period through today. One would certainly expect these facts to attract buyers and raise prices.

In 1984, I was sure this market would become efficient in five years. But it hasn't done so ten years later, despite the high historic and prospective returns. **Why haven't enough buyers stepped forward to eliminate the excessive risk premium, render these bonds fairly priced and correct the inefficiency?**

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The answer, we feel, is simple: **investors continue to be unfairly prejudiced against them**. Not every investor, clearly, but enough big players to create a buyers' market and tilt the opportunity in favor of those who are willing to participate.

Prove it, you say? Well, this memo was occasioned by an article in "Pensions & Investments" reporting consultant SEI's recommendation that pension plan sponsors invest 10% to 30% of their fixed income portfolios in high yield bonds. As I went through the article, my reaction was that it was a great selling piece for our market sector -- not just SEI's recommendation, but what the article demonstrated about investor attitudes.

According to the article, SEI feels "a sponsor could add about 20 basis points of return without adding risk by putting 10% of its fixed income portfolio in high yield, or junk, bonds." And that's after SEI "tried to be as conservative as possible in its assumptions." I'm sold! But the article goes on to show how a market can be biased against an asset class:

> . . . High yield is perceived as a way to add diversification, but is not well-received by clients. "Not a lot of our clients are opting to use them . . . . We work with some clients who just plain don't want them in their portfolio." (Callan)
>
> Because of the negative publicity surrounding high yield bonds around the turn of the decade, plan sponsors either are wary of investing in them, or are afraid of being associated with them. (Pensions & Investments)
>
> Some plan sponsors may be limited by plan guidelines to investment-grade securities, . . . Other sponsors may be wary of junk bonds because of the market's well-publicized collapse in 1989 and 1990, and the securities' association with Michael Milken and the now-defunct bond house Drexel Burnham Lambert. (SEI)

If we're going to worry about a collapse, I hope it'll be one looming ahead, not one which occurred five years ago. The asset class that collapsed in the past is likely to be cheap, not to be riding a crest of popularity and thus heading for a fall.

But too many investors drive looking in the rear-view mirror. As someone at my former place of employment once told clients, "We're buying the oils; they've been good to us." We'd rather buy what has performed badly or is the subject of negative bias and thus is cheap. We feel strongly that high yield bonds qualify today, and we'd be glad to talk more about them, or about the opportunities in other areas.

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Memo to: Clients

From: Howard Marks, TCW

Re: The Value of Predictions, or Where'd All This Rain Come From?

Anyone who has been my client for long has heard from me on many occasions with negative comments about market forecasts. Now, I have decided to say at once all of the bad things I can think of about predictions.

The Expected Value of a Forecast = Value of Correct Forecast x Probability of Being Correct

The motivation for trying to guess the direction of stocks or bonds is easy to understand. Observers have for years noted the wide price swings, calculated the value of a dollar invested at the bottoms and disinvested at the tops and compared the result against the value of a dollar invested under a "buy-and-hold" strategy. The difference is always temptingly large.

The problem, however, comes from the fact that none of the forecaster's attempts to capture the swings have any value unless his or her predictions are right.

But It's Hard to be Right

I agree with John Kenneth Galbraith. He said "We have two classes of forecasters: Those who don't know -- and those who don't know they don't know." If it was easy to predict the future, it would be easier to attain excellent investment results -- then maybe everyone could have above-average performance.

Being Right With Average Consistency Doesn't Help

Let's face it: most of us have roughly the same ability to predict the future. And the trouble is that being right as often as the average forecaster won't produce superior results.

Every investor wants results which are above average. In the institutional world, relative performance is the Holy Grail. Even elsewhere, the objective is to be the first to see the future -- and take the appropriate route to profit. It obviously doesn't help in these pursuits to be right only as often as others are.

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An Average Forecast Doesn't Help Even If It's Correct

Being "right" doesn't lead to superior performance if the consensus forecast is also right. For example, if the consensus forecast for real GNP growth is 5%, then stock prices will come to reflect that expectation. If **you** then conclude that GNP will grow at 5% and your expectation of rapid growth motivates you to buy stocks, the stocks you buy will be at prices which already anticipate such growth. If actual GNP growth at 5% is subsequently announced, stock prices probably will not jump -- because their reaction to 5% growth took place when the consensus forecast was arrived at. Instead, the best guess is that you will earn the normal risk-adjusted return for equities over your holding period. Bottom line: **correct forecasts do not necessarily translate into superior investment results**.

Above-Average Profits Come From Correctly Forecasting Extreme Events

At least twenty-five years ago, it was noted that stock price movements were highly correlated with changes in earnings. So people concluded that accurate forecasts of earnings were the key to making money in stocks.

It has since been realized, however, that it's not earnings changes that cause stock price changes, but earnings changes **which come as a surprise**. Look in the newspaper. Some days, a company announces a doubling of earnings and its stock price jumps. Other earnings doublings don't even cause a ripple -- or they prompt a decline. The key question is not "What was the change?" but rather "Was it anticipated?" Was the change accurately predicted by the consensus and thus factored into the stock price? If so, the announcement should cause little reaction. If not, the announcement should cause the stock price to rise if the surprise is pleasant or fall if it is not.

This raises an important Catch 22. Everyone's forecasts are, on average, consensus forecasts. If your prediction is consensus too, it won't produce above-average performance even if it's right. Superior performance comes from accurate non-consensus forecasts. But because most forecasters aren't terrible, the actual results fall near the consensus most of the time -- and non-consensus forecasts are usually wrong. The payoff table in terms of performance looks like this:

		Forecast	
		Consensus	**Non-Consensus**
Accurate?	**Yes**	**Average**	**Above Average**
	No	**Average**	**Below Average**

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The problem is that extraordinary performance comes only from correct non-consensus forecasts, but <u>non-consensus forecasts are hard to make, hard to make correctly and hard to act on</u>.

When interest rates stood at 8% in 1978, most people thought they'd stay there. The interest rate bears predicted 9%, and the bulls predicted 7%. Most of the time, rates would have been in that range, and no one would have made much money.

The big profits went to those who predicted 15% long bond yields. But where were those people? **Extreme predictions are rarely right, but they're the ones that make you big money.**

<u>Most Forecasts are Extrapolations</u>

The fact is, most forecasters predict a future quite like the recent past. One reason is that things generally continue as they have been; major changes don't occur very often. Another is that most people don't do "zero-based" forecasting, but start with the current observation or normal range and then add or subtract a bit as they think is appropriate. Lastly, real "sea changes" are extremely difficult to foretell.

That's why some of the best-remembered forecasts are the ones that extrapolated current conditions or trends but were wrong. Business Week may never live down "The Death of Equities" and "The Death of Bonds." At the mid-1990 lows, the press suggested that no one would ever buy a high yield bond again. In 1989, nobody thought the Cowboys would ever win without Tom Landry, or that the Lakers or 49ers would ever lose. Six years ago, the growth of both coasts' economies was considered assured, and the Rustbelt's suffering was expected to continue forever. Only two years ago, George Bush was a shoe-in.

And that brings me to my subtitle: Where'd All This Rain Come From? The motivation for this memo came as I considered the extraordinary amount of precipitation the West has experienced this year -- and newspaper articles of a couple of months ago. According to the articles, the rings on old trees suggested that fifty year droughts might be the norm and the five year drought to date just the beginning.

No one predicted the drought before it began -- when such a forecast might have helped. But just as it may have been about to end, the possibility of its long-term continuation was unveiled.

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Forecasters are Usually Most Wrong at the Extremes

It's at just such times --- such inflection points -- when accurate forecasts of change would be the most valuable but are the hardest to make.

Take high yield bonds, for instance. In 1989 and 1990 they absorbed a continual beating as a series of negative developments came together. There was the recession, the failure of a number of the leveraged buyouts of the 1980s, enactment of excessively stringent regulation and the collapse of Drexel Burnham, Columbia Savings and Executive Life. All of this was tied together -- and accentuated -- by lots of overly negative publicity.

Each development was another drip of "Chinese water torture." Each one put an end to some investor's ability to remain optimistic. And so each one eliminated a potential buyer, created a seller and moved prices lower.

And after all, what is a market bottom? It's that moment when the last holder who will become a seller actually does so -- and thus the moment when prices hit levels that will prove to have been the lows. From that point on, with no one left to turn negative, a few pieces of good news or the arrival of a few buyers with belief in values are enough to turn a market.

So you can see that the crescendo of negativism, the lowest prices and the greatest difficulty in predicting a rise all occur simultaneously. No wonder it's hard to profit from forecasting.

Extreme Forecasts are Hard to Believe and Act On

Let's say the average investor was approached in October 1990 by someone who had enough imagination and courage (because that's what was needed) to make a positive case for high yield bonds. Would the investor have believed and bought? Probably not.

Potentially-profitable non-consensus forecasts are very hard to believe and act on **for the simple reason that they are so far from conventional wisdom**. If a forecast was totally logical and easily accepted, then it would **be** the consensus forecast (and its profit potential would be much less).

So if someone told you the U.S. auto makers' share of domestic market was going back to 100% in five years, that would be a forecast with enormous implications for profit. But could you possibly believe it? Could you act on it?

The more a prediction of the future differs from the present, (1) the more likely it is to diverge from the consensus forecast, (2) the greater the profit would be if it's right, and (3) the harder it will be to believe and act on it.

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You Have to Be Right About Timing Too

Not only must a profitable forecast have the event or direction right, but it must be correct as too timing as well.

Let's say you accepted the forecast that the Big Three would come to again own 100% of the U.S. market, and you bought the stocks in response. What if a year later their share was lower (and their stocks too)? Could you continue to hold out for the long term, or would your resolve weaken? What if their shares (and stocks) were unchanged five years later? Wouldn't you give up? And wouldn't that be just in time to see the prediction come true?

In poker, "scared money never wins." In investing, it's hard to hold fast to an improbable, non-consensus forecast and do the right thing…especially if the clock is telling you the forecast is off base. As I was told years ago, **"being too far ahead of your time is indistinguishable from being wrong."**

Incorrect Forecasts Can Cost You Money

As you know, we run our portfolios without reference to what we think the broad markets will do. An observer might think such behavior exposes us unduly to the fluctuations of the markets, and that to protect our clients we should actively go in and out of the markets based on what we think will happen.

But remember, that will work only if our forecasts are right (and right more often than the consensus is right). I would argue that because forecasting is uncertain, it's safer **not** to try.

For example, people hold equities because they find prospective long-term equity returns attractive. The average annual return on equities from 1926 to 1987 was 9.44%. But if you had gone to cash and missed the best 50 of those 744 months, you would have missed **all** of the return. This tells me that **attempts at market timing are a source of risk, not protection**.

It would be nice in anticipation of subsequent performance to be able to vary the amount invested, but I think it's just too risky to try.

It Costs Money to Make Forecasts

As suggested above, the best thing might just be to settle for average long-term performance in markets that are hard to predict.

Efficient marketeers think stock market forecasts are about as good as coin tosses. If you're right half the time **without bias**, your forecasts won't help or hurt versus buy-and-hold. But

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forecasts are implemented through transactions which cost money. If you're right half the time **and spend money to try**, your performance will fall further below buy-and-hold results the more trading you do.

Few People Revisit Their Forecasts

We always read "I think the stock market's going to go up." We never read "I think the stock market's going to go up, (and 8 out of my last 30 predictions were right)" or "I think the stock market's going to go up (and by the way I said the same thing last year and was wrong)." Can you imagine deciding which baseball players to hire without knowing their batting averages? When did you ever see a market forecaster's track record?

Most Forecasts Don't Allow for Alternative Outcomes

I imagine that for most money managers, the process goes like this: "I predict the economy will do A. If A happens, interest rates should do B. With interest rates of B, the stock market should do C. Under that environment, the best performing sector should be D, and stock E should rise the most." The portfolio expected to do best under that scenario is then assembled.

But how likely is E anyway? Remember that E is conditioned on A, B, C and D. Being right two-thirds of time would be a great accomplishment in the world of forecasting. But if each of the five predictions has a 67% chance of being right, then there is a 13% probability that all will be correct and the portfolio will perform as expected.

And what if some other scenario unfolds? How will the portfolio do? How do the forecaster/investors make allowances in their portfolios for the likelihood that their predictions will prove incorrect?

Lastly, Ask Yourself "Why Me?"

By this I mean "if someone has made a potentially valuable forecast with a high probability of being right, why is it being shared with you?"

Think how profitable a correct market forecast could be. With very little capital, a good forecaster could make many times more in the futures market than in salary from an employer. Okay, let's say he likes to work for other people -- than why does his employer give his forecasts away rather than sell them? Maybe the thing to ask yourself is whether you would write out a check to buy the forecast you're considering acting on.

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Groucho Marx said "I wouldn't join any club that would have me as a member." Another formulation may be "I would never act on any forecast that someone would share with me." I'm not saying that no one has above-average forecasting ability. Rather, 'as one University of Chicago professor wrote in a paper years ago, such forecasters are more likely to be sunning themselves in Saint Tropez than going around entreating people to borrow their forecasts.

* * *

There is a bottom line for us on the subject of predictions regarding macro-scale events and widely-followed markets about which information is rather evenly disseminated (so-called efficient markets). In sum, we feel that:

most forecasters have average ability

consensus forecasts aren't helpful

correct non-consensus forecasts are potentially very profitable but are also hard to make consistently and hard to bring yourself to act on

forecasts cost money to implement and can be a source of risk rather than return

The implications for us are clear. We will continue to eschew portfolio management based on forecasts of market trends, about which we think neither we nor anyone else knows much.

Instead, we will continue to try to "know the knowable" -- that is, to work in markets which are the subject of biases, in which non-economic motivations hold sway, and in which it is possible to obtain an advantage through hard work and superior insight. We will work to know everything we can about a small number of things…rather than a little bit about everything.

Convertible securities, high yield bonds and distressed company debt are all markets in which market inefficiencies give rise to unusual opportunities in terms of return and risk. We will continue to exploit these opportunities in a manner which is risk-averse **and non-reliant on macro-forecasts**.

February 15, 1993

. . . [predictions] ought to serve but for winter talks by the fireside.
Sir Francis Bacon

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Memo to: Clients

From: Howard Marks

Re: Microeconomics 101: Supply, Demand and Convertibles

Two principal factors determine whether an investment will be successful. The first is the intrinsic quality of the underlying entity being invested in. In short, how good is the venture you are buying a piece of or lending money to? It's better to invest in a good company than a bad one, ceteris paribus,

[Ceteris paribus is a favorite term of economists. It means "everything else being equal," and yes, at a given price, it's smarter to invest in a better company than a worse one. Of course, "everything else" never is equal, and you're not likely to be asked to choose between two assets of obviously different quality at the same price.]

The second factor determining whether something will be a good investment is price. Ceteris paribus, given two assets of similar quality, it's better to pay less than more.

Lots of investors take the approach of searching out companies with better products, managements, balance sheets and prospects. Many say they will only buy top quality assets.

Our group does not have that luxury and, at any rate, pursuing museum quality assets would be antithetical to our philosophy. In convertibles, as in high yield bonds and certainly in distressed debt, our companies generally are not widely applauded or atop the ratings heap. Instead, they fall within a broad range in terms of quality.

We are less concerned with the absolute quality of our companies than with the price we pay for whatever it is we're getting. In short, we feel "everything is triple-A at the right price". We have many reasons for following this approach, including the fact that relatively few people compete with us to do so. But we feel buying any asset for less than it's worth virtually assures success. Identifying top quality assets does not; the risk of overpaying for that quality still remains.

What does all of this have to do with microeconomics? Well microeconomics is the study of the price-setting process, and much of price comes down to a matter of supply and demand.

Ceteris paribus -- in this case, holding the level of supply constant -- price will be higher if there is more demand and lower if there is less. And that's why buying when everyone else is can, in and of itself, doom an investment. Many real estate investments made in the 1980s were ill-fated because excess demand from investors and too-easy credit induced builders to erect structures for which there are no tenants. Many of the later LBOs failed because excessive demand pushed prices for companies to levels which were

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too high given their prospects.

Conversely, buying what no one else will buy at any price almost assures eventual success, and that leads to a discussion of the current level of demand for convertibles and its impact on their prices.

I wrote this summer that convertibles tend to capture most of the upside performance of stocks while being significantly insulated from declines, and that such performance characteristics should be attractive given the high level of uncertainty today. What I didn't mention -- and what I want to point out now -- is that one of the factors contributing to the availability of bargains among convertibles is the relatively low level of demand for them.

Here in 1992, strong demand has supported stock prices. Important among the components of that demand is the heavy flow into mutual funds of cash fleeing from low-yielding short term investments. But flows into convertible funds have been low, as indicated by the following clipping from Barron's. The figures are worth reviewing.

Convertible securities funds don't get much respect. They had a great 1991, when they rose *30%*, matching the S&P 500, and so far this year, they're up 3.5%, while the S&P is down a fraction. This showing is impressive since convertibles, bond-equity hybrids, are usually a more conservative choice than stocks, trailing the S&P in bull markets and falling less than stocks in down markets.

Yet investors, normally quick to snap up anything offering better yields than CDs and money-market funds are staying away. Assets of convertible funds stood at $2.36 billion on June 30, up just $100 million since the start of the year, and way below their peak of $5.3 billion just before the 1987 crash.

Between 1977 and 1984, the number of convertible mutual funds was constant at seven, and at the end of that period their total assets stood at the princely sum of $452 million. By the end of 1987 there were thirty funds with assets of $5.8 billion, for a thirteen-fold increase. It can clearly be seen in retrospect that the strong flow of capital into convertibles in 1985-87 “poisoned the well” and led to a loss of price discipline, to purchases of over-priced securities, and to poor performance.

Reaction was negative, and convertible mutual fund assets dropped to $3.2 billion at year-end 1989 and only $2.2 billion today, down 62% from the 1987 level. If strong inflows are, as I believe, a precursor of poor performance (and vice versa), then the outlook today should be excellent. Convertibles are getting no respect and attracting no inflows. That leaves bargains for those willing to act as contrarians. We hope you will consider convertibles an attractive way to hold an increased portion of your commitment to equities.

October 8, 1992

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Memo to: Clients

From: Howard Marks
Trust Company of the West

Re: First Quarter Performance

The mood swings of the securities markets resemble the movement of a pendulum. Although the midpoint of its arc best describes the location of the pendulum "on average," it actually spends very little of its time there. Instead, it is almost always swinging toward or away from the extremes of its arc. But whenever the pendulum is near either extreme, it is inevitable that it will move back toward the midpoint sooner or later. In fact, it is the movement toward an extreme itself that supplies the energy for the swing back.

Investment markets make the same pendulum-like swing:

- between euphoria and depression,
- between celebrating positive developments and obsessing over negatives, and thus
- between overpriced and underpriced.

This oscillation is one of the most dependable features of the investment world, and investor psychology seems to spend much more time at the extremes than it does at a "happy medium."

In late 1990, the securities markets were at a negative extreme as concerns about the economy and Iraq produced exaggerated risk aversion and thus drastic under-valuation of all securities considered to be of less than "gilt-edge" quality. The subsequent first quarter swing toward more reasonable valuations imparted to our portfolios some of the best quarterly performance in our history.

With investors worrying less about default rates and forced selling, our high yield bonds returned more than at any time since the second quarter of 1980. The rebirth of interest in smaller and second-tier stocks produced a quarterly return for our convertibles above any since the fourth quarter of 1982. Lastly, suspension of "end-of-the-world" thinking and an increased willingness to envision possible solutions caused our distressed-debt Special Credits portfolios to gain even more than either high yield bonds or convertibles.

It would be wonderful to be able to successfully predict the swings of the pendulum and always move in the appropriate direction, but this is certainly an unrealistic expectation. We consider it far more reasonable to try to (1) stay alert for occasions when a market has reached an extreme, (2) adjust our behavior slightly in response and, (3) most importantly, refuse to fall into line with the herd behavior which renders so many investors dead wrong at tops and bottoms.

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The first quarter's swing back from the negative extreme has been rapid and impressive. No one can say whether it came too soon or went too far, and we are cautious that these dramatic results may have been realized without great improvement in the fundamental economy. However, we feel "fair" does a much better job of describing the prices which resulted than would "excessive." That is, the pendulum is closer to the midpoint at this time than to an extreme.

The bargains which were so readily available in the fourth quarter of 1990 are no longer there to the same extent, and we are not acting as if they were. And we certainly are not planning on a continuation of the first quarter's performance. Instead, from today's more reasonable prices, we consider our three areas to be poised for a continuation of their "normal" above-average risk-adjusted performance.

April 11, 1991

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Addendum to Third Quarter Client Letter

From: Howard S. Marks

Re: The Route to Performance

We all seek investment performance which is above average, but how to achieve it remains a major question. My views on the subject have come increasingly into focus as the years have gone by, and two events in late September -- and especially their juxtaposition -- made it even clearer how (and how not) to best pursue those superior results.

First, there was an article in the Wall Street Journal about a prominent money management firm's lagging performance. Its equity results were 1,840 basis points behind the S&P 500 for the twelve months through August, and as a result its five-year performance had fallen behind the S&P as well. The president of the firm explained that its bold over- and under-weightings weren't wrong, just too early. Here is his explanation, with which I strongly disagree:

> If you want to be in the top 5% of money managers,
> you have to be willing to be in the bottom 5%, too.

The above calls to mind a convertible mutual fund I discussed in my second quarter 1988 letter to convertible clients. The fund held large amounts of common stock in the first eight months of 1987 and cash after that. As a result, its return was more than 1,600 basis points better than the average convertible fund for the year, and 945 b.p. ahead of the second-place fund. In the next half year, its tactics were equally divergent ... but wrong this time, producing performance which was far enough behind to negate the majority of its 1987 achievement and pull its 18-month results well back into the pack. My observation at that time mirrored the fund manager quoted above, but from a negative viewpoint:

> . . . in order to strive for performance which
> is far different from the norm and better, you
> must do things which expose you to the possibility
> of being far different from the norm and worse.

These cases illustrate that bold steps taken in pursuit of great performance can just as easily be wrong as right. Even worse, a combination of far above-average and far below-average years can lead to a long-term record which is characterized by volatility <u>and</u> mediocrity.

As an alternative, I would like to cite the approach of a major mid-West pension plan whose director I spoke with last month. The return on the plan's equities over the last

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fourteen years, under the direction of this man and his predecessors, has been way ahead of the S&P 500. He shared with me what he considered the key:

> We have never had a year below the 47th percentile over that period or, until 1990, above the 27th percentile. As a result, we are in the fourth percentile for the fourteen year period as a whole.

I feel strongly that attempting to achieve a superior long term record by stringing together a run of top-decile years is unlikely to succeed. Rather, striving to do a little better than average every year -- and through discipline to have highly superior relative results in bad times -- is:

- less likely to produce extreme volatility,
- less likely to produce huge losses which can't be recouped and, most importantly,
- more likely to work (given the fact that all of us are only human).

Simply put, what the pension fund's record tells me is that, in equities, if you can avoid losers (and losing years), the winners will take care of themselves. I believe most strongly that this holds true in my group's opportunistic niches as well -- that the best foundation for above-average long term performance is an absence of disasters. It is for this reason that a quest for consistency and protection, not single-year greatness, is a common thread underlying all of our investment products:

> <u>In convertibles</u>, we insist that our call on potential appreciation be accompanied by above average resistance to declines.
>
> <u>In high yield bonds</u>, we strive to raise our relative performance by avoiding credit losses, not by reaching for higher (but more uncertain) yields.
>
> <u>In distressed company debt</u>, we buy only where we believe our cost price is fully covered by asset values.

There will always be cases and years in which, when all goes right, those who take on more risk will do better than we do. In the long run, however, I feel strongly that seeking relative performance which is just a little bit above average on a consistent basis -- with protection against poor absolute results in tough times -- will prove more effective than "swinging for the fences."

October 12, 1990

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